Analytical Resources, LLC
Analytical Chemists and Consultants

12 April 2023

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

RE: AOC5 MR Phase 1

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

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

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

Associated Work Order(s)	Associated SDG ID(s)
23A0171	N/A

Susan Dunnihoo

Digitally signed by Susan Dunnihoo
Date: 2023.04.13 09:53:16 -07'00'

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

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

Analytical Resources, LLC

Susan Dunnihoo, Director, Client Services

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

ACCREDITED IN ACCORDANCE WITH nelac
Cert# 100006-012

Relog WO: 23A0171

__ of __

CHAIN-OF-CUSTODY/TEST REQUEST FORM

NS 3897

Project/Client Name: AOCS ME Phase 1
Project Number: 21075-002
Contact Name: Amara Vandervort
Sampled By: Windward

Ship to: ARL
Attn: Sediment
Shipper: Courier
Form filled out by: A. Vandervort, K. McPeek

Shipping Date: 12/8/22
Airbill Number:
Turnaround requested: Results by 12/28/22

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) PCBs	SemiVOCs	SVOCs metals	TBT Total Solids	DIE	Archive		Comments / Instructions [Jar tag number(s)]
12/8/22	0816	LDW23-551253	3	Sediment	X	NA	NA	X	NA	X		NA=archive
	0839	LDW23-551254	3		X	NA	NA	X	NA	X		
	0857	LDW23-551255	3		X	NA	NA	X	NA	X		Results by 12/28/22
	0916	LDW23-551257	3		X	NA	NA	X	NA	X		
	0935	LDW23-551258	3		X	NA	NA	X	NA	X		
	0954	LDW23-551259	3		X	NA	NA	X	NA	X		
	1036	LDW23-551262	3		X	NA	NA	X	NA	X		
	1012	LDW23-551260	3		X	NA	NA	X	NA	X		
	1054	LDW23-551263	3		X	NA	NA	X	NA	X		
	1114	LDW23-551245	3		X	NA	NA	X	NA	X		
					12/8/22							
		Total Number of Containers	30	Purchase Order / Statement of Work # ARS-110222-AOCS-ARL								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Amara Vandervort	YARED	YARED	
Signature:			
Company: Windward	YA YA SAFETY	YA YA SAFETY	ARL
Date/Time: 12/8/22 4:38	12/8/22 4:38	12/8/22 5:18AM	12/9/22 1717

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

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

To be completed by Laboratory upon sample receipt:

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

23A0171

Fw: Additional AOC5 Analyses

Sue Dunnihoo <limsadm@arilabs.com>
Tue 1/10/2023 9:56 AM

To: **Sample Receiving <sample-receiving@arilabs.com>**

Please pull volume for listed analyses on new workorder. Don't log with anything else (as suggested by client).

Will need to log on own work order, use 'from fridge or freezer' for 'shipped by', please.

Thanks!
Sue

I will be working remotely Jan 13th.

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

Susan D. Dunnihoo
She/her/hers

Analytical Resources, LLC

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

www.arilabs.com

From: Amara Vandervort <amarav@windwardenv.com>
Sent: Monday, January 9, 2023 9:21 PM
To: Sue Dunnihoo <limsadm@arilabs.com>
Cc: Ali Judkins <ajudkins@anchorqea.com>; Anastasia Barr <anastasiab@windwardenv.com>
Subject: Additional AOC5 Analyses

Hi Sue,
There are a handful of samples from SDG 22L0198 that need additional analyses, please. Feel free to log these in with one of the grab sample batches collected today or tomorrow. Thank you! -Amara

Sample ID	Date Collected	ARI Login WO ID	ARI Analysis WO ID	PCBs	Other Benthic Risk Drivers (PAHs, SVOCs, HCB)	All Metals/ Mercury	TOC/Percent Solids	Dioxins/ Furans
LDW23-SS1245	12/8/22 1114	22L0198-10		-	X	X	-	X
LDW23-SS1254	12/8/22 0839	22L0198-02		-	X	X	-	-
LDW23-SS1257	12/8/22 0916	22L0198-04		-	X	X	-	X
LDW23-SS1262	12/8/22 1036	22L0198-07		-	X	X	-	-

23A0171

Analytical Resources, LLC
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Windward

Project Name: Ag's MR Phase I

COC No(s): _____ NA

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: 23A0171

Tracking No: _____ NA

Preliminary Examination Phase:

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

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

Time: 1615 — 2.1 | 3.0 | 4.8 | 4.9 | 4.8 | 5.1

If cooler temperature is out of compliance fill out form 00070F — Temp Gun ID#: 47

Cooler Accepted by: _____ Date: 12/6/22 Time: 1713

Complete custody forms and attach all shipping documents

Log-In Phase:

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

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

22L0198: 23A0171: PIB 1/10/23 13:38

Samples Logged by: [illegible] Date: 12/09/22 Time: 8:16 Labels checked by: [illegible]

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

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

Additional Notes, Discrepancies, & Resolutions:

Relog of samples from 22L0198, samples pulled from freezer.

By: PIB Date: 1/10/23

Anchor QEA, LLC	Project: AOC5 MR Phase 1	
1201 3rd Ave, Suite 2600	Project Number: 210075-01.02	**Reported:**
Seattle, WA 98101	Project Manager: Ali Judkins	04/12/2023 17:12

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID	Sample ID	Matrix	Date Sampled	Date Received
23A0171-01	LDW23-SS1254	Solid	12/08/22 08:39	12/08/22 17:18
23A0171-02	LDW23-SS1257	Solid	12/08/22 09:16	12/08/22 17:18
23A0171-03	LDW23-SS1262	Solid	12/08/22 10:36	12/08/22 17:18
23A0171-04	LDW23-SS1245	Solid	12/08/22 11:14	12/08/22 17:18

Anchor QEA, LLC	Project: AOC5 MR Phase 1	
1201 3rd Ave, Suite 2600	Project Number: 210075-01.02	**Reported:**
Seattle WA, 98101	Project Manager: Ali Judkins	12-Apr-2023 17:12

Case Narrative

Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Work Order: 23A0171

Sample receipt

Samples as listed on the preceding page were received 08-Dec-2022 17:18 under ARI work order 22L0198. For details regarding sample receipt, please refer to the Cooler Receipt Form. Samples were frozen on receipt to preserve holding times.

Selected samples were pulled from frozen archive and logged under work order 23A0171 for analysis.

Semivolatiles - EPA Method SW8270E

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

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

Extracts with the internal standard d4-di-n-octylphthalate low due to matrix effect were reanalyzed and both sets of data submitted here.

The surrogate percent recoveries were within control limits.

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

The batch BLA0339 blank spike and blank spike duplicate (BS/LCS and BSD/LCSD) spike recoveries and relative percent difference (RPD) were within control limits, reported under work order 23A0100.

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

Semivolatiles - EPA Method SW8270E-SIM

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

Initial and continuing calibrations were within method requirements, with accepted excursions outside the 20% window for d14-p-Terphenyl in SLB0335-ICV1. Associated positive results have been "Q"-flagged.

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

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

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

The batch BLA0339 matrix spike/matrix spike duplicate (MS/MSD) percent recoveries were within advisory control limits. The relative percent difference (RPD) for 2,4-dimethylphenol was high of advisory control limits and flagged on the summary sheet, reported under work order 23A0100.

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

Anchor QEA, LLC	Project: AOC5 MR Phase 1	
1201 3rd Ave, Suite 2600	Project Number: 210075-01.02	**Reported:**
Seattle WA, 98101	Project Manager: Ali Judkins	12-Apr-2023 17:12

Case Narrative

Pesticides - EPA Method SW8081B (Hexachlorobenzene)

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

Initial and continuing calibrations were within method requirements.

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

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

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

The batch BLA0340 matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent difference (RPD) were within advisory control limits, reported under work order 23A0100.

Total Metals - EPA Method 6020B

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

Calibrations SLC0028-CCB3 and SLC0028-CCB4 were noted with high response for chromium-53 and SLC0028- IFA1 with chromium-53 high. SLC0078-CAL6 scandium and the associated element group were noted to be slightly noisy, with intensities, R-values, and QC passing. SCL0078-IFA chromium was high so was rerun with passing results. SLC0078-IFA chromium-53 was noted high.

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

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

The batch BLB0518 matrix spike (MS) percent recoveries and the duplicate (DUP) relative percent difference (RPD) were within advisory control limits.

The batch BLB0518 matrix spike (MS) percent recoveries for lead and zinc were high of advisory control limits. and the matrxi spike duplicate (MSD) percent recovery for copper was low of advisory limits. The relative percent difference (RPD) was outside advisory limits for lead. Post spikes for all elements were in control, reported under work order 23A0032.

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

The analyst noted some analytes and internal standards were noisy, as well as internal standards high of limits, attributed to the matrix and noted in the run logs.

Total Mercury - EPA Method 7471B

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

Initial and continuing calibrations were within method requirements.

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

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

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

Anchor QEA, LLC	Project: AOC5 MR Phase 1	
1201 3rd Ave, Suite 2600	Project Number: 210075-01.02	**Reported:**
Seattle WA, 98101	Project Manager: Ali Judkins	12-Apr-2023 17:12

Case Narrative

The batch BLB0517 matrix spike/matrix spike duplicate (MS/MSD) percent recoveries were within advisory control limits, reported under work order 23A0032.

The batch BLB0517duplicate (DUP) relative percent difference (RPD) were outside advisory control limits, reported under work order 23A0032.

Dioxin/Furans - EPA Method 1613

The sample(s) were extracted and analyzed within the recommended holding times for samples stored frozen. Analysis was performed using an application specific column developed by Restek. The RTX-DIoxin2 column has unique isomer separation for the 2378-TCDF, eliminating the need for confirmation analysis.

Initial and continuing calibrations were within method requirements.

Labeled internal standard areas were within limits.

The cleanup surrogate percent recoveries were within control limits.

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

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

The batch BLC0136 duplicate (DUP) relative percent difference (RPD) were outside advisory control limits for several targets flagged on the summary sheet, reported under work order 23A0158.

The reference material (SRM) percent recovery for 2,3,7,8-TCDF (49.9%) was outside control limits (50-150%) and flagged on the summary sheet.

Revised to clarify metals narrative 03/31/2023
Revised to update SVOA, SVOA-SIM batch QC reference 04/12/2023

QUALIFIERS AND NOTES

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

LDW23-SS1254

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-01 A	SDG:	23A0171
Sampled:	12/08/22 08:39	Prepared:	01/18/23 13:47	File ID:	NT1423021730.D
% Solids:	42.83	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/18/23 04:06
Batch:	BLA0339	Sequence:	SLB0251	Initial/Final:	23.8 g Wet / 1 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	GB00046
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	424		4.3	19.6
106-44-5	4-Methylphenol	1	23.0		7.2	19.6
91-20-3	Naphthalene	1	12.9	J	4.2	19.6
91-57-6	2-Methylnaphthalene	1	8.6	J	4.4	19.6
208-96-8	Acenaphthylene	1	19.6	U	6.1	19.6
131-11-3	Dimethylphthalate	1	19.6	U	4.3	19.6
83-32-9	Acenaphthene	1	6.7	J	5.1	19.6
132-64-9	Dibenzofuran	1	19.6	U	13.9	19.6
86-73-7	Fluorene	1	19.6	U	14.3	19.6
85-01-8	Phenanthrene	1	53.5		8.6	19.6
120-12-7	Anthracene	1	21.2		7.1	19.6
206-44-0	Fluoranthene	1	130		6.0	19.6
129-00-0	Pyrene	1	121		5.6	19.6
85-68-7	Butylbenzylphthalate	1	19.6	U	9.2	19.6
56-55-3	Benzo(a)anthracene	1	69.3		5.8	19.6
218-01-9	Chrysene	1	117		5.9	19.6
117-81-7	bis(2-Ethylhexyl)phthalate	1	105	Q	5.4	49.1
	Benzofluoranthenes, Total	1	182		9.8	39.2
50-32-8	Benzo(a)pyrene	1	62.1		4.1	19.6
193-39-5	Indeno(1,2,3-cd)pyrene	1	30.6		14.4	19.6
53-70-3	Dibenzo(a,h)anthracene	1	19.6	U	16.9	19.6
191-24-2	Benzo(g,h,i)perylene	1	30.1	Q	13.3	19.6

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	735.76	511	69.5	27 - 120	
Phenol-d5	735.76	480	65.2	29 - 120	
2-Chlorophenol-d4	735.76	498	67.7	31 - 120	
1,2-Dichlorobenzene-d4	490.51	290	59.0	32 - 120	
Nitrobenzene-d5	490.51	321	65.4	30 - 120	
2-Fluorobiphenyl	490.51	369	75.2	35 - 120	

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1254

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-01 A	SDG:	23A0171
Sampled:	12/08/22 08:39	Prepared:	01/18/23 13:47	File ID:	NT1423021730.D
% Solids:	42.83	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/18/23 04:06
Batch:	BLA0339	Sequence:	SLB0251	Initial/Final:	23.8 g Wet / 1 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	GB00046
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	735.76	532	72.3	24 - 134	
p-Terphenyl-d14	490.51	399	81.4	37 - 120	

Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021730.D

Page 1

Date : 18-FEB-2023 04:06

Client ID:

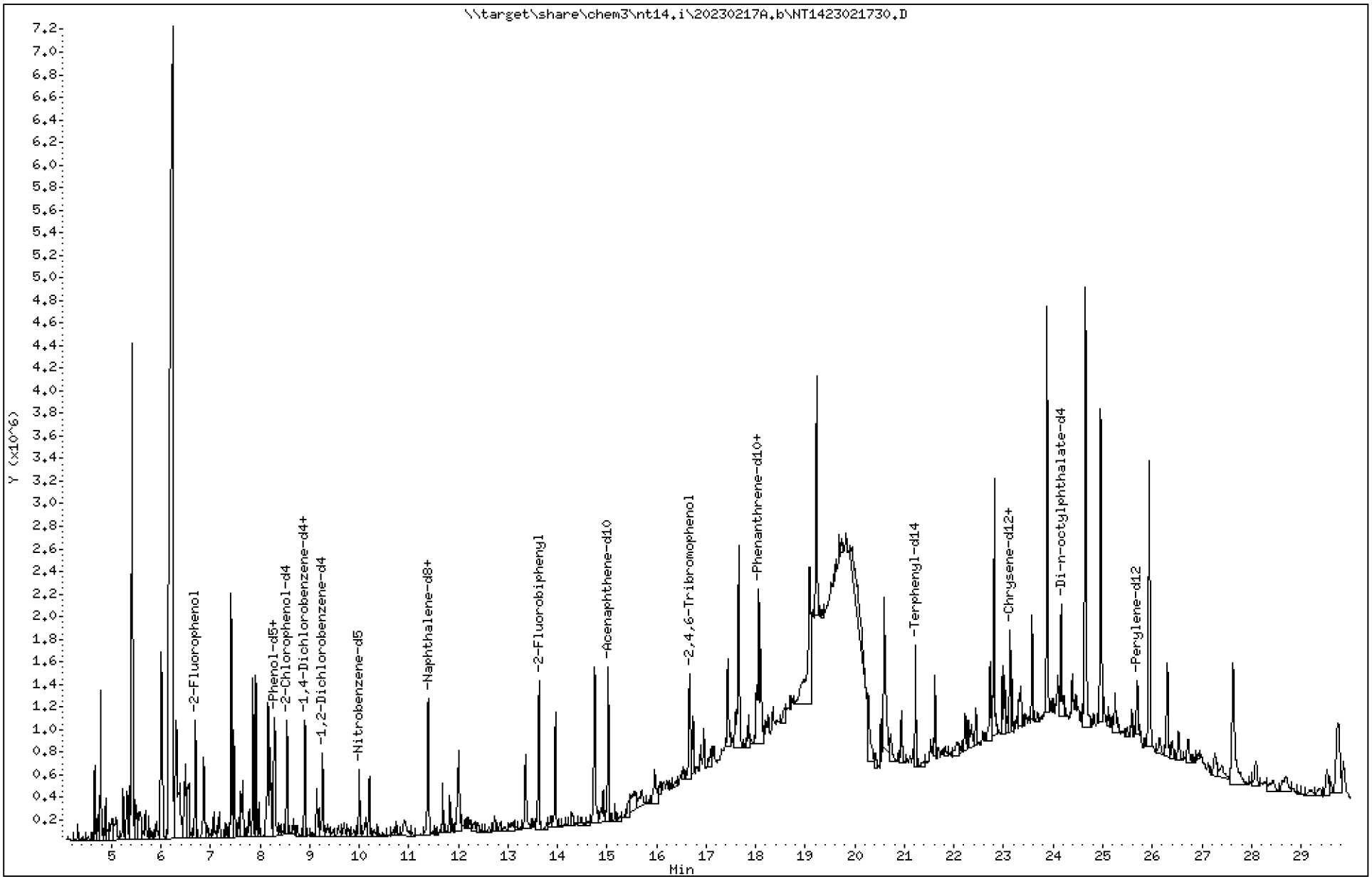
Instrument: nt14.i

Sample Info: 23A0171-01

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

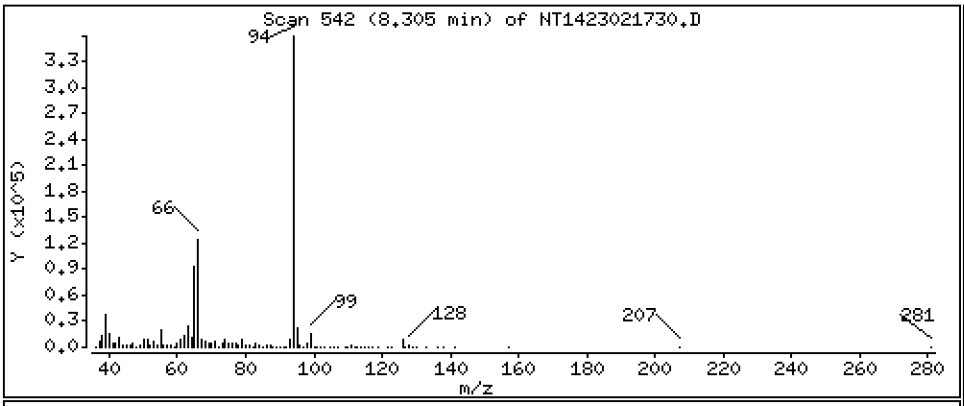
Operator: DSD

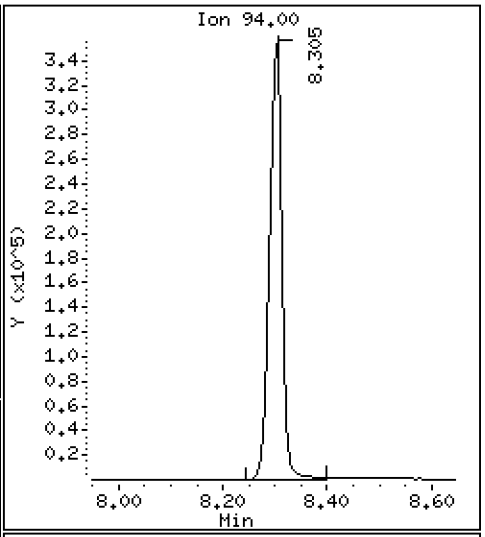
Column phase: ZB-5msi

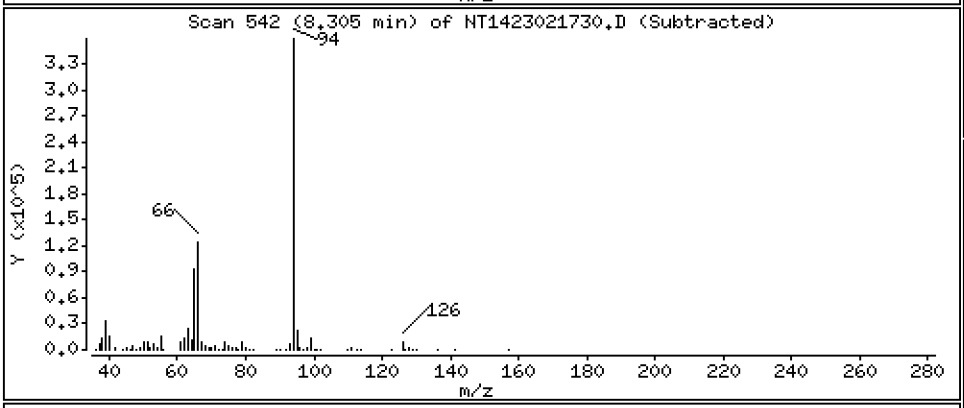
Column diameter: 0.25

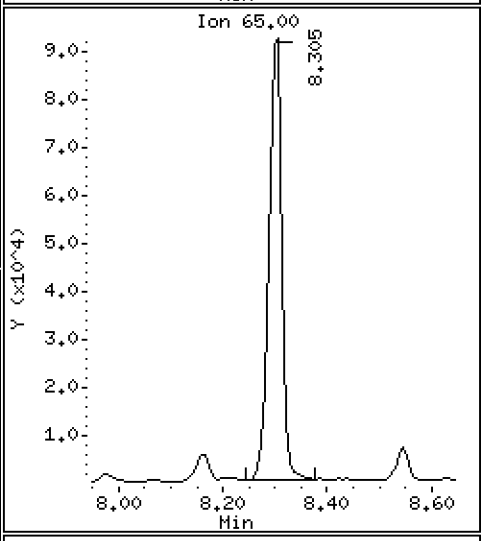
3 Phenol

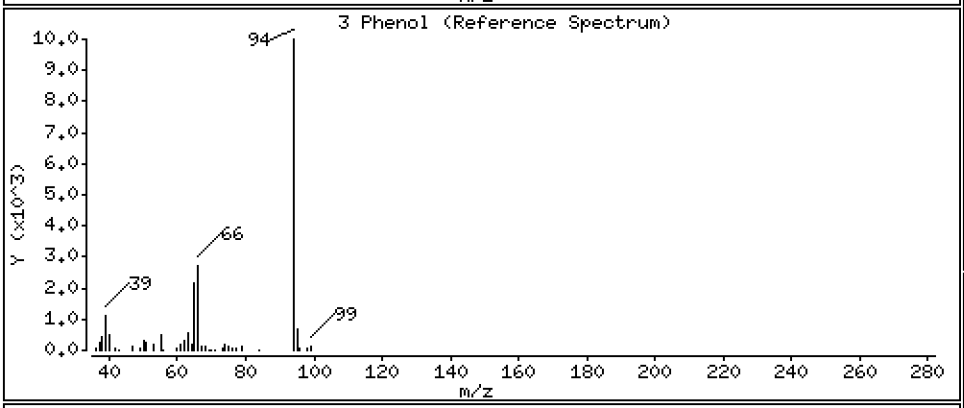
Concentration: 4.320 ug/mL

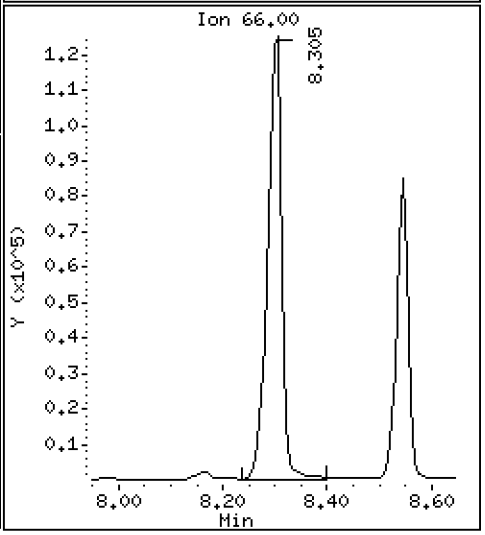


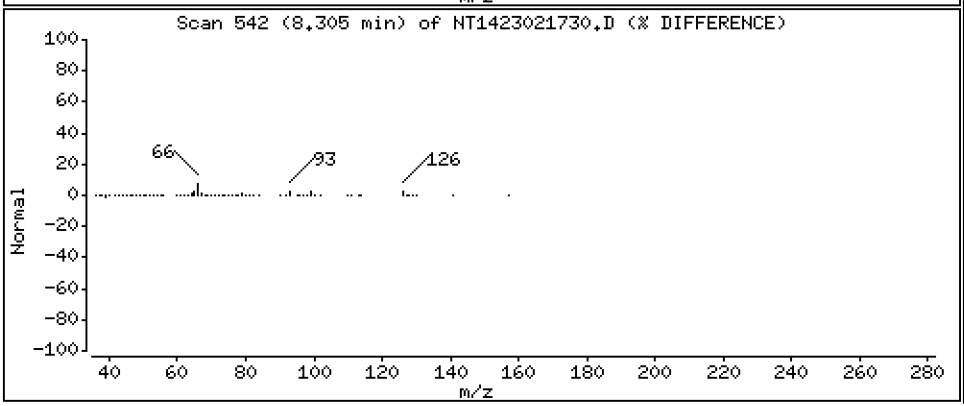












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021730.D

Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

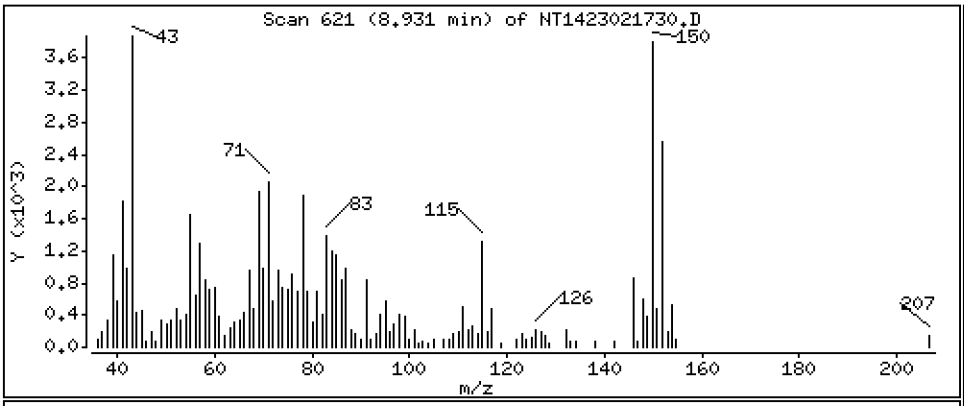
Operator: DSD

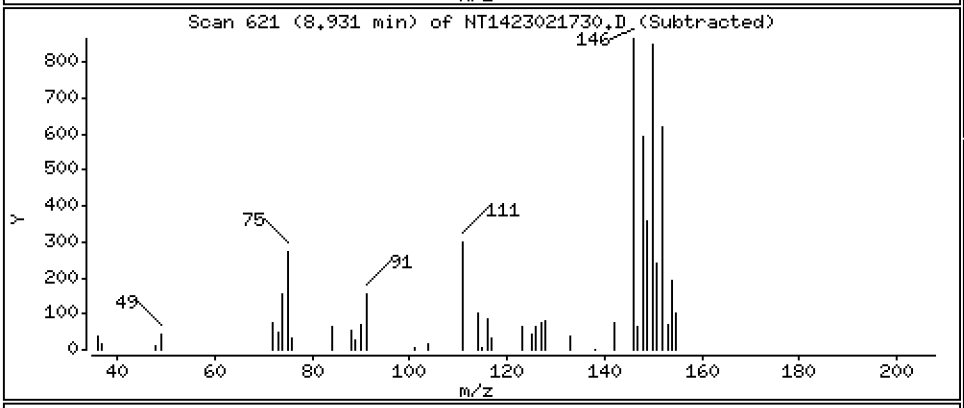
Column phase: ZB-5msi

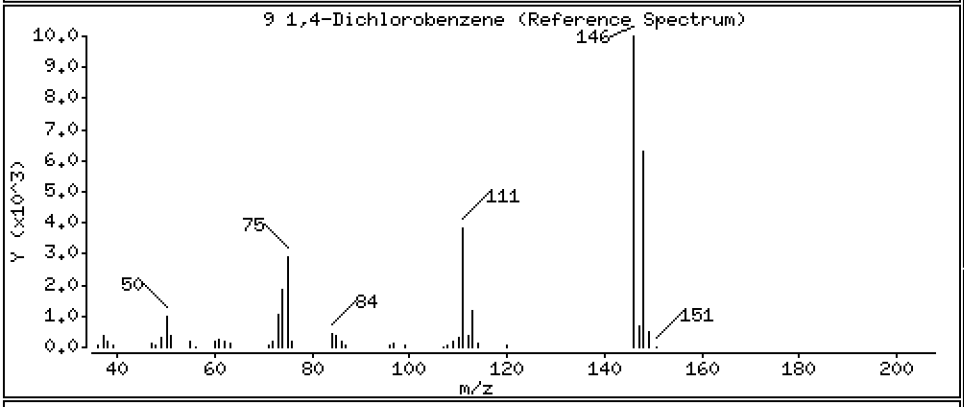
Column diameter: 0.25

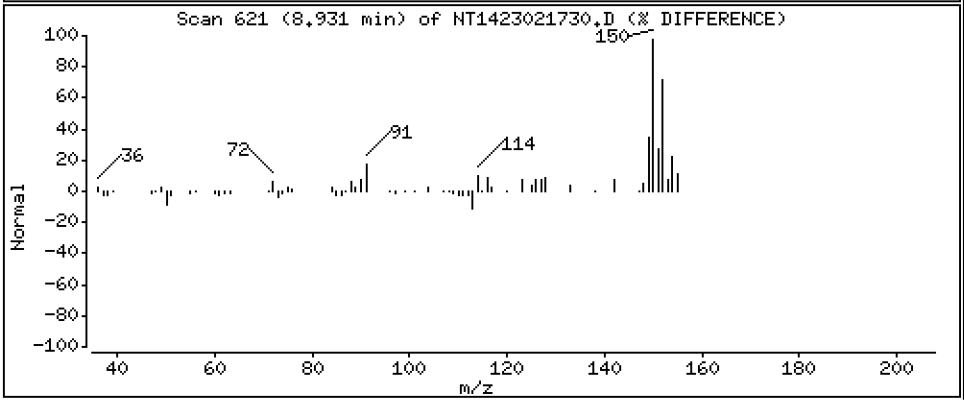
9 1,4-Dichlorobenzene

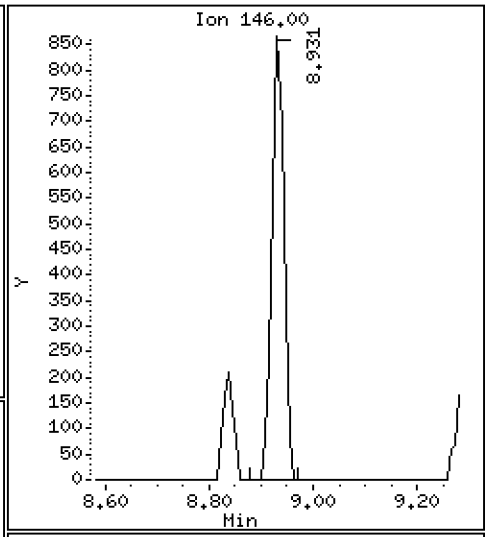
Concentration: 0.01360 ug/mL

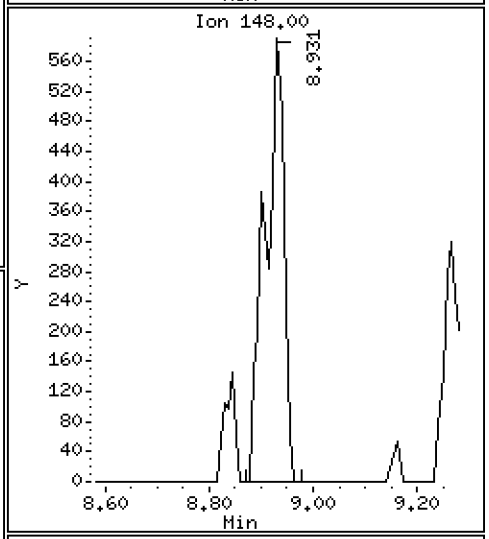


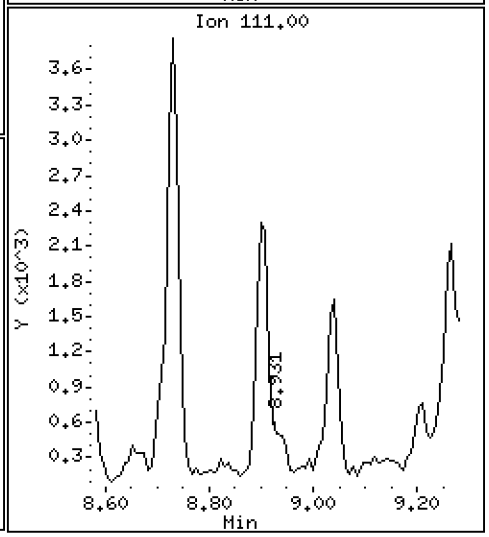












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021730.D

Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

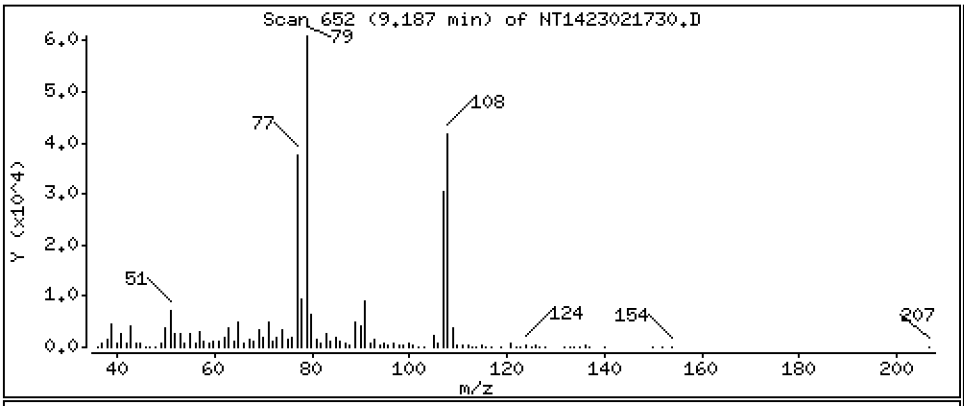
Operator: DSD

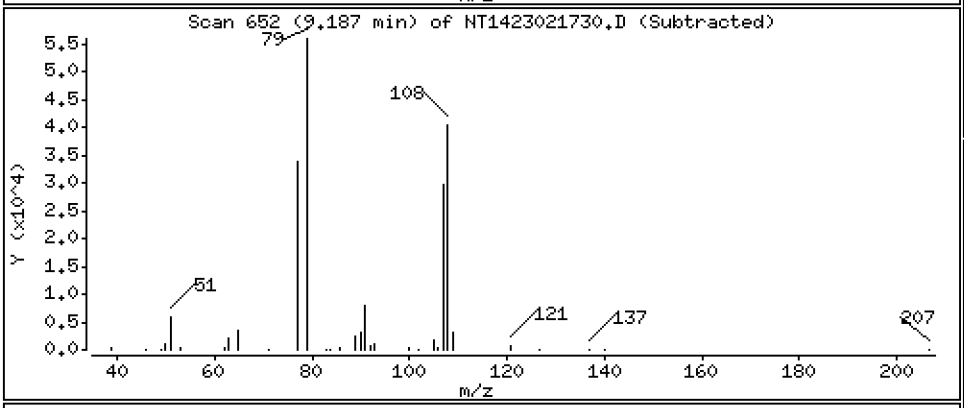
Column phase: ZB-5msi

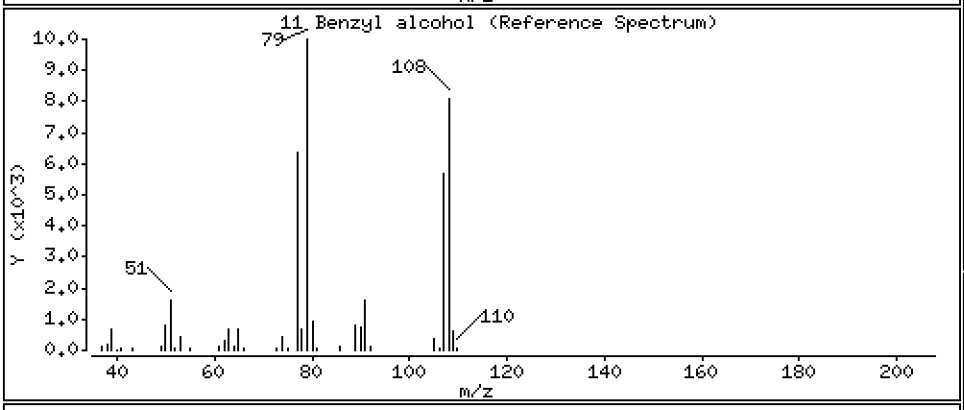
Column diameter: 0.25

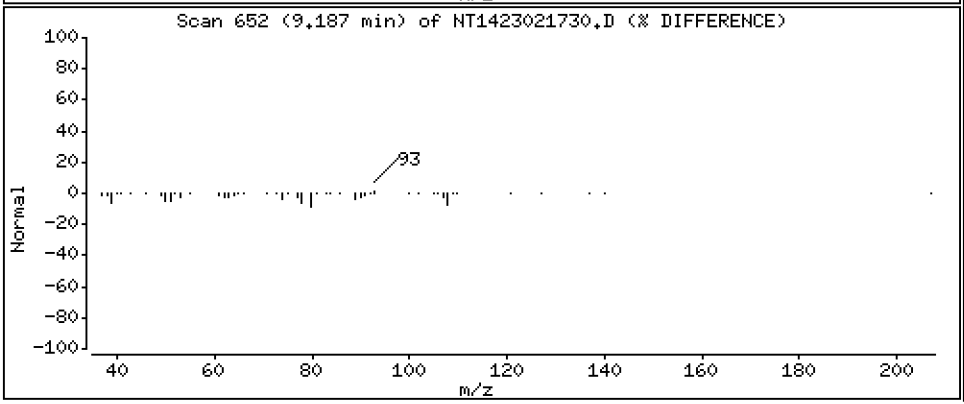
11 Benzyl alcohol

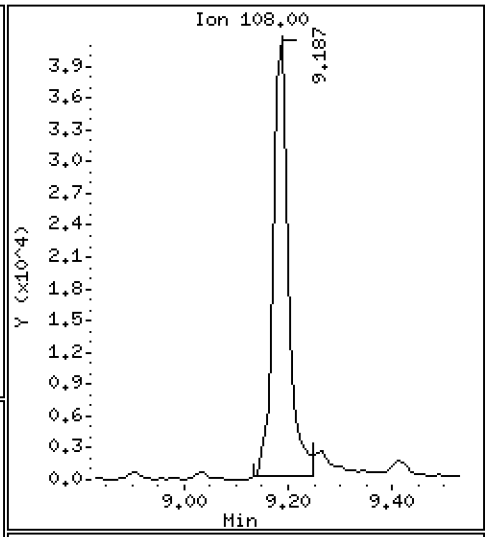
Concentration: 1.221 ug/mL

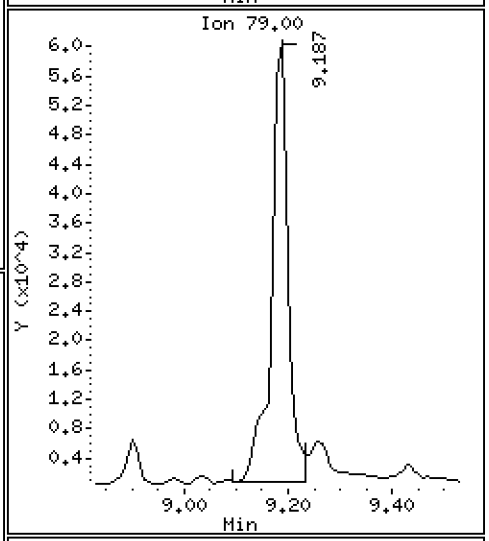


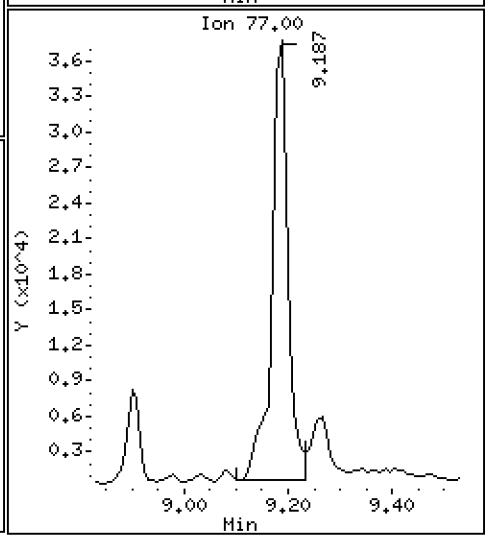












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

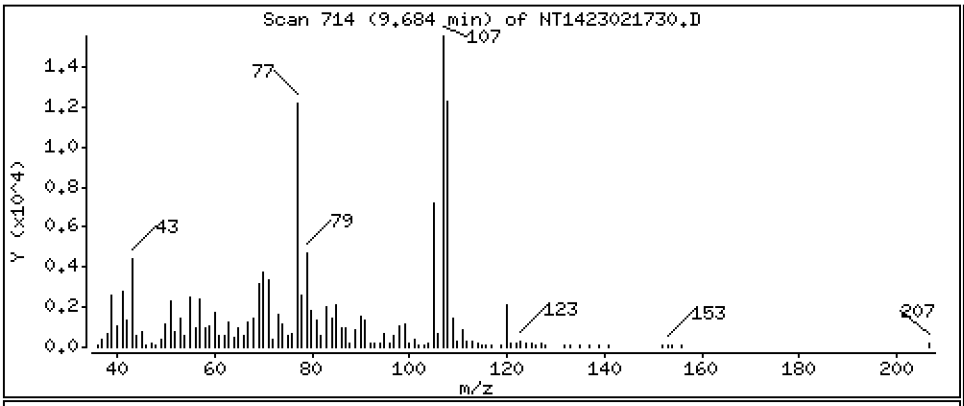
Operator: DSD

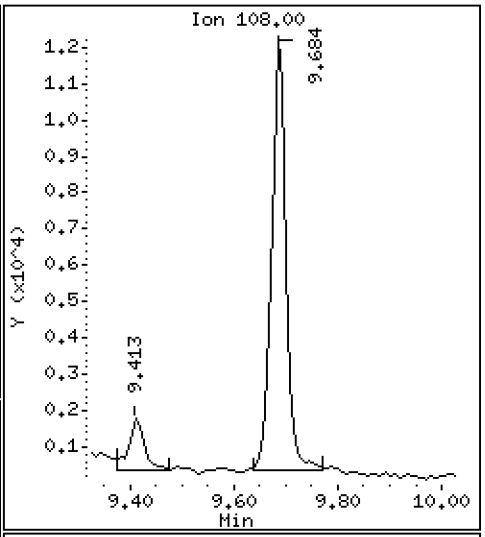
Column phase: ZB-5msi

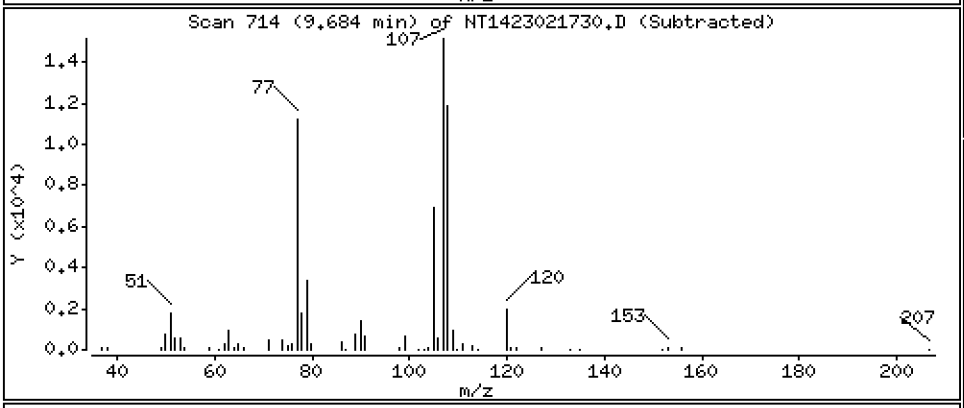
Column diameter: 0.25

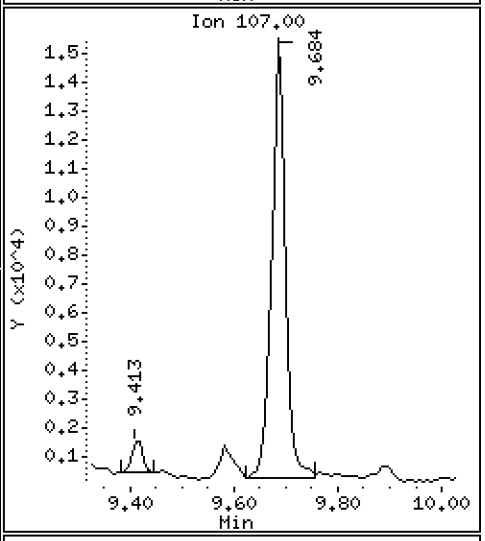
15 4-Methylphenol

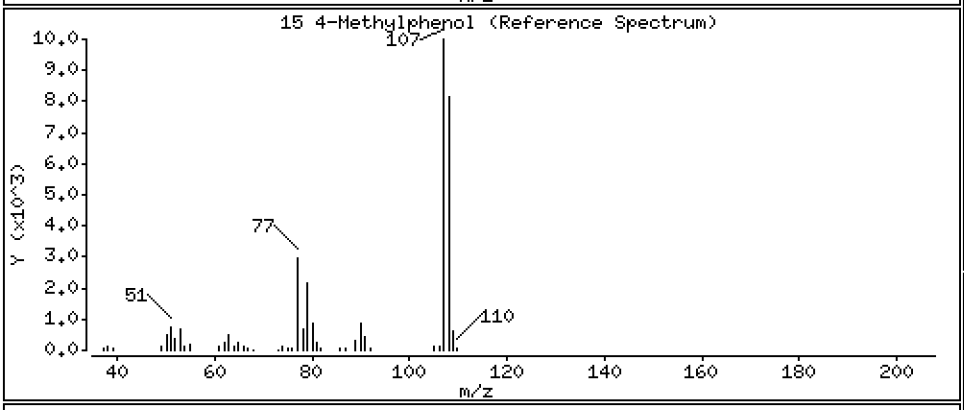
Concentration: 0.2344 ug/mL

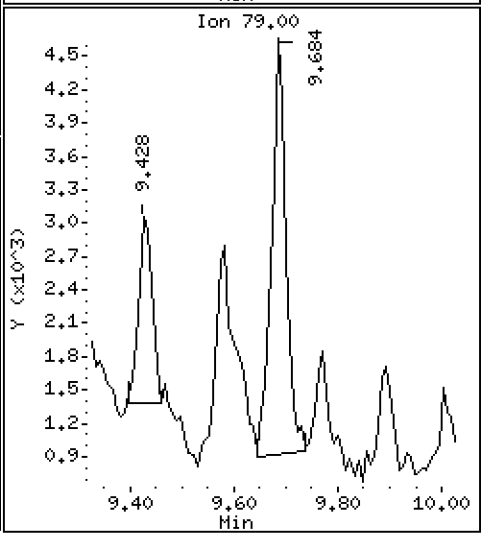


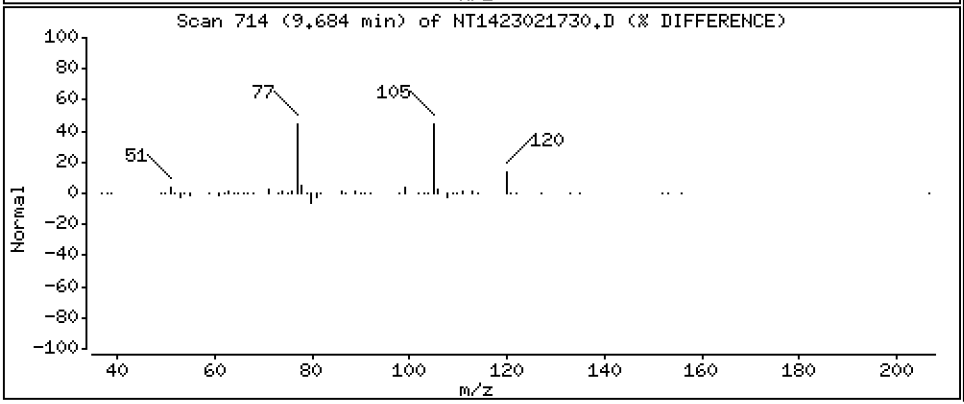












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

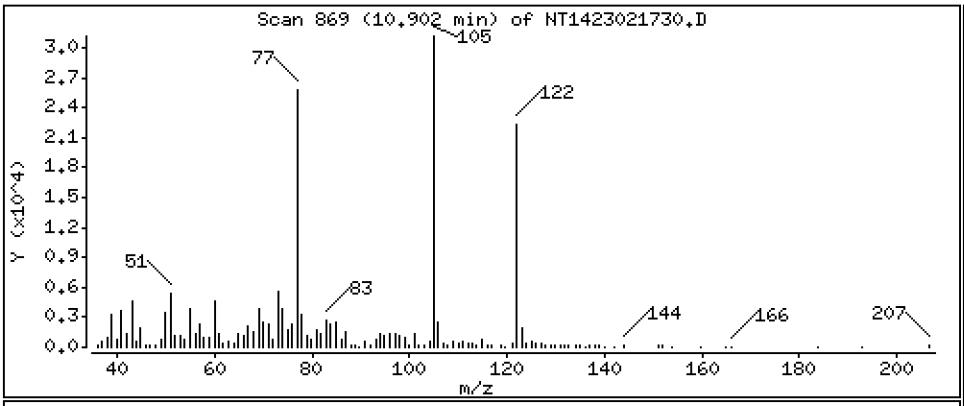
Operator: DSD

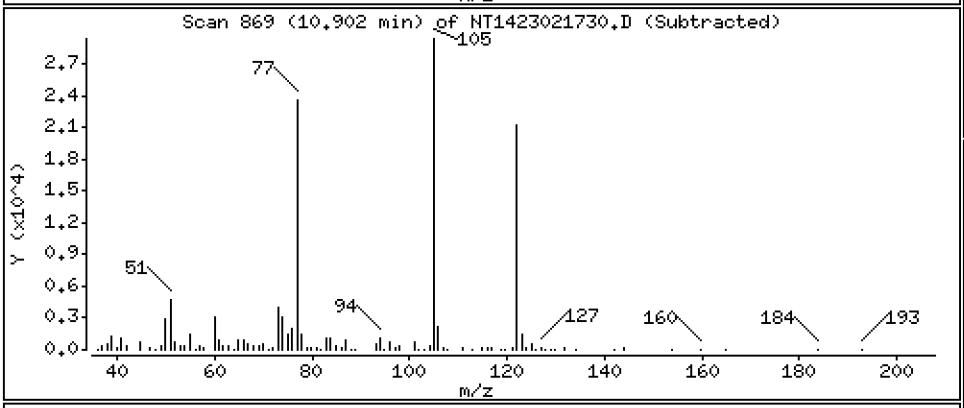
Column phase: ZB-5msi

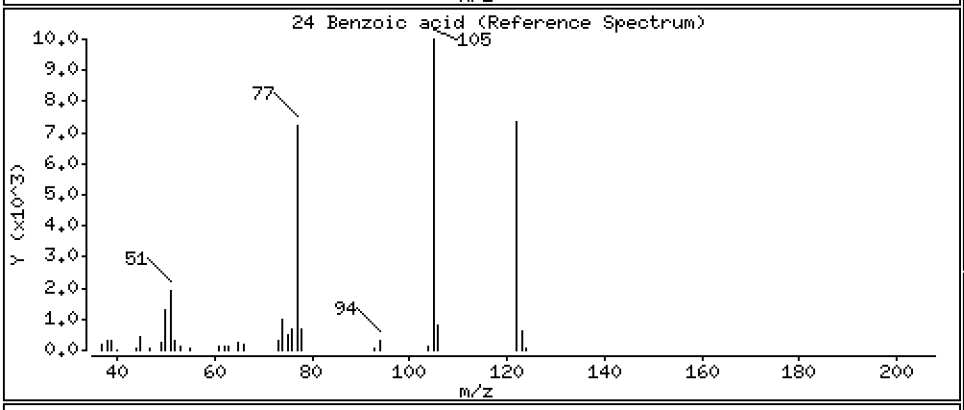
Column diameter: 0.25

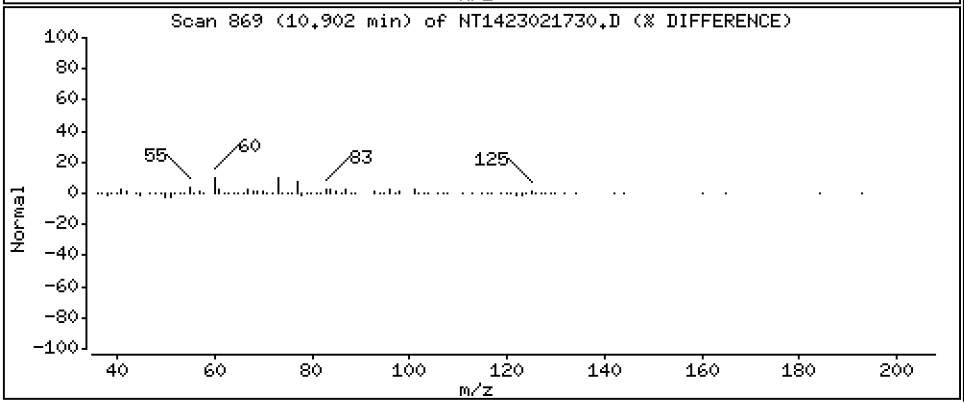
24 Benzoic acid

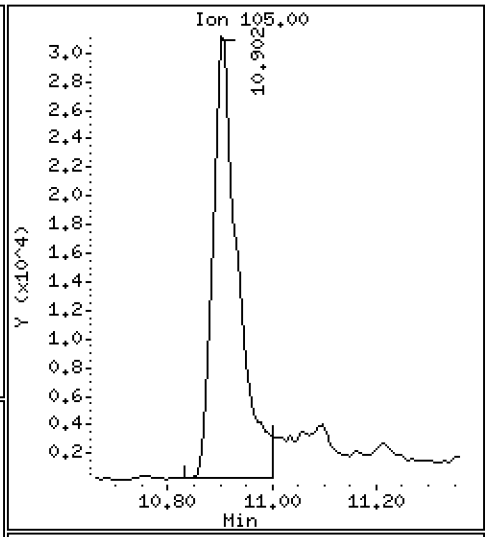
Concentration: 1.851 ug/mL

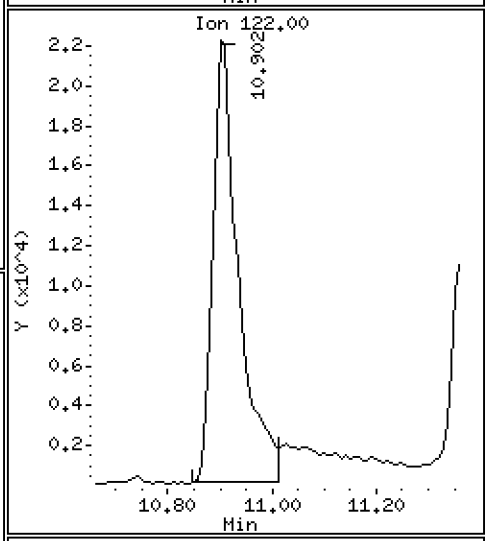


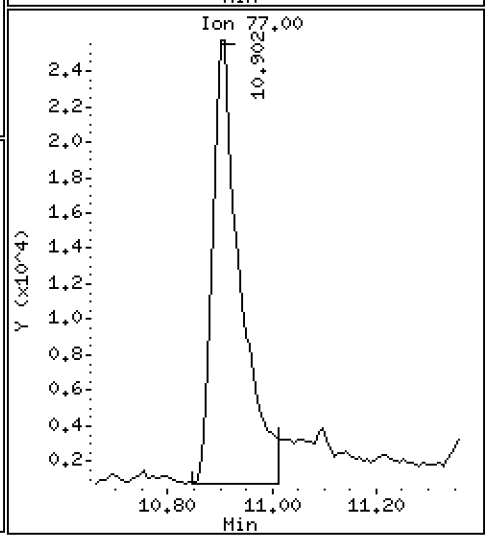












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

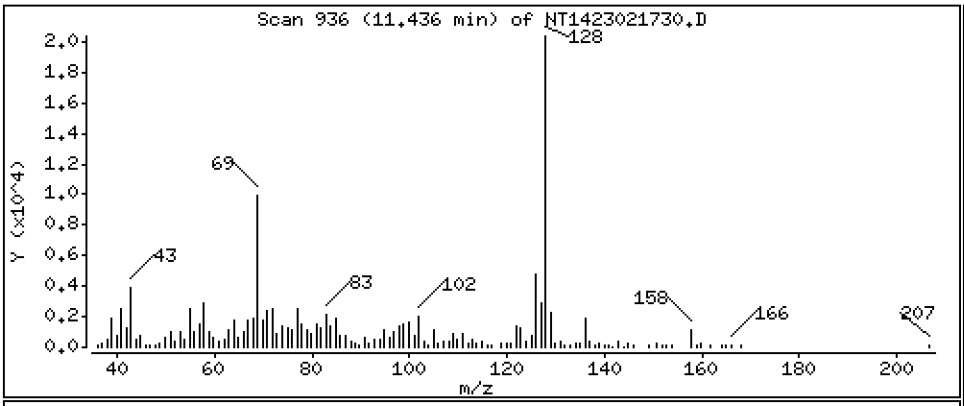
Operator: DSD

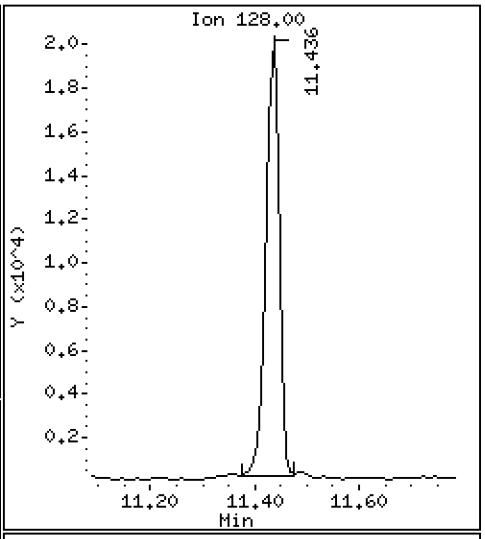
Column phase: ZB-5msi

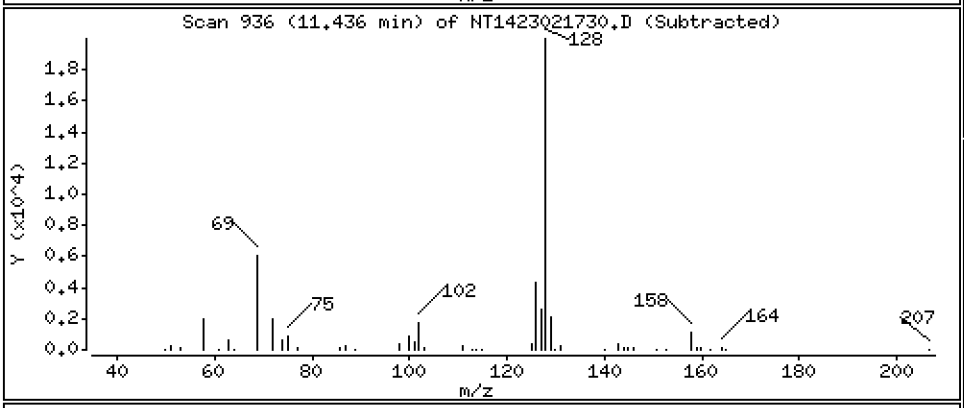
Column diameter: 0.25

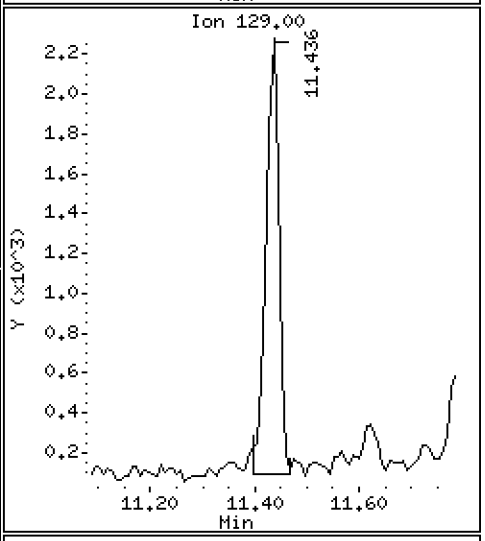
28 Naphthalene

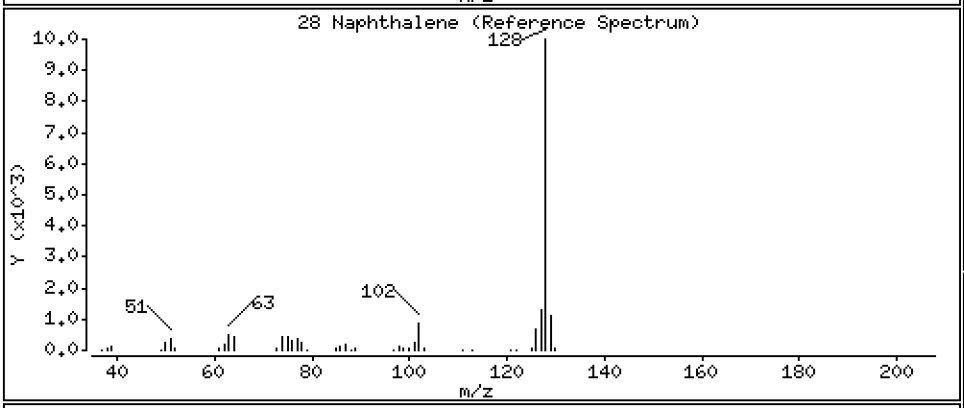
Concentration: 0.1312 ug/mL

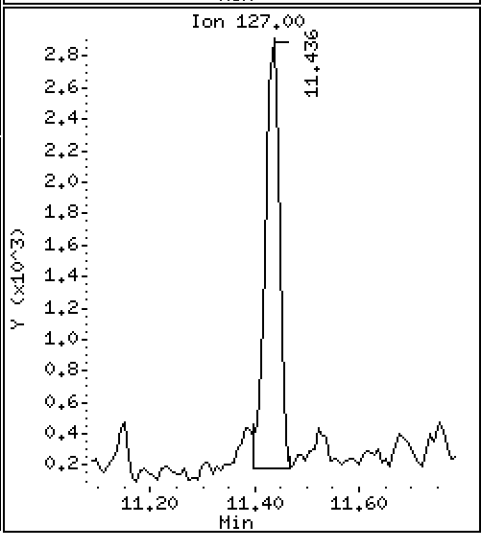


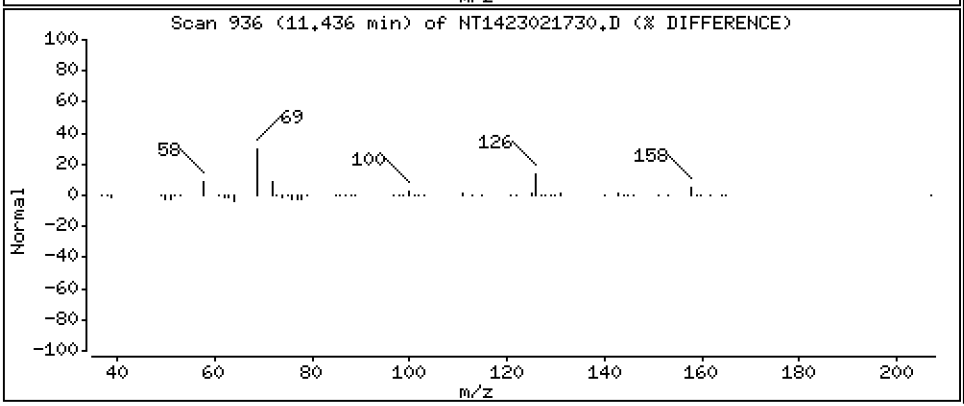












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

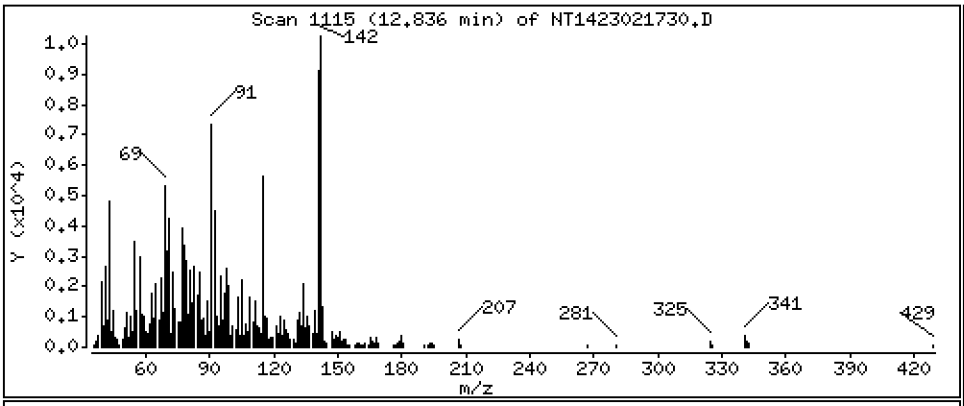
Operator: DSD

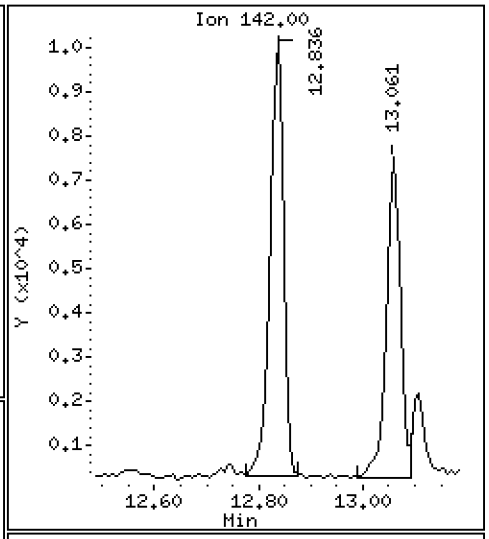
Column phase: ZB-5msi

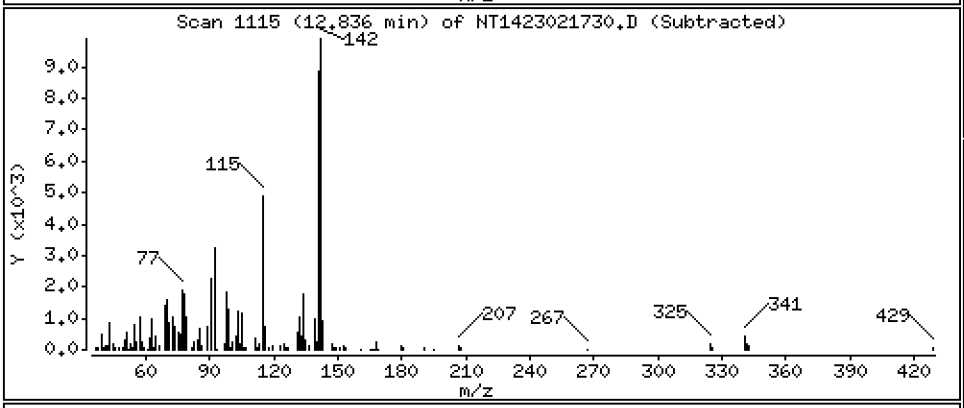
Column diameter: 0.25

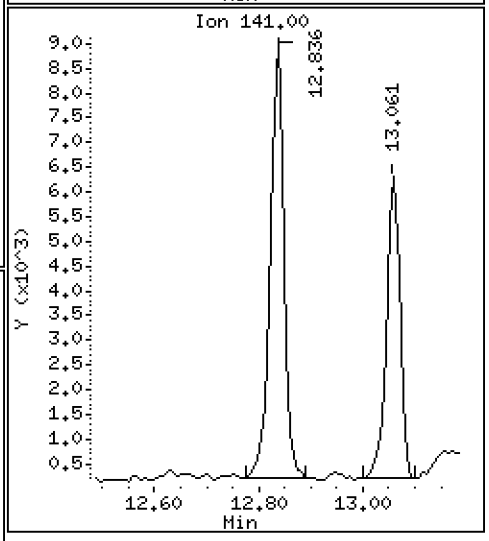
32 2-Methylnaphthalene

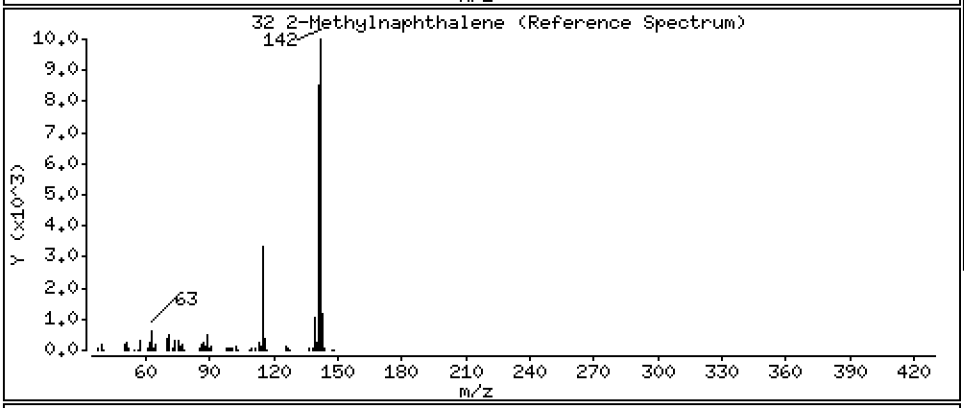
Concentration: 0.08792 ug/mL

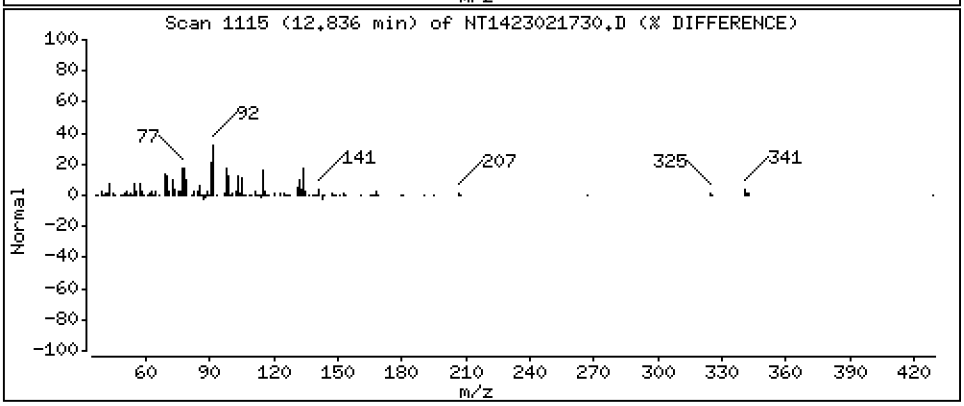












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

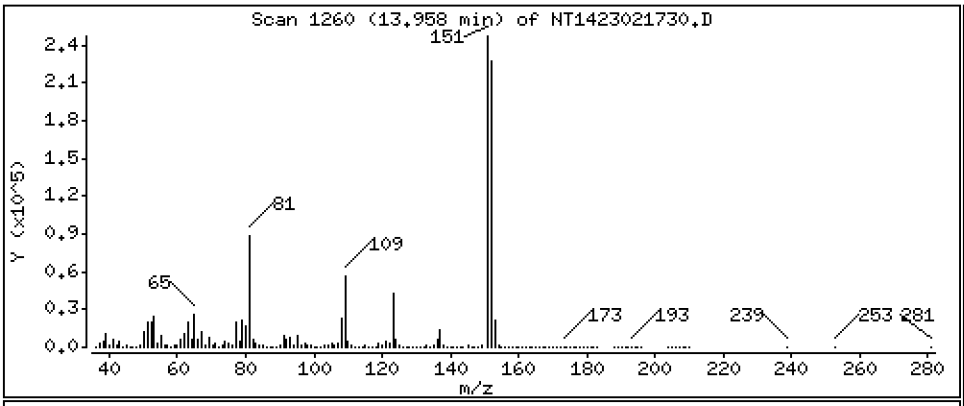
Operator: DSD

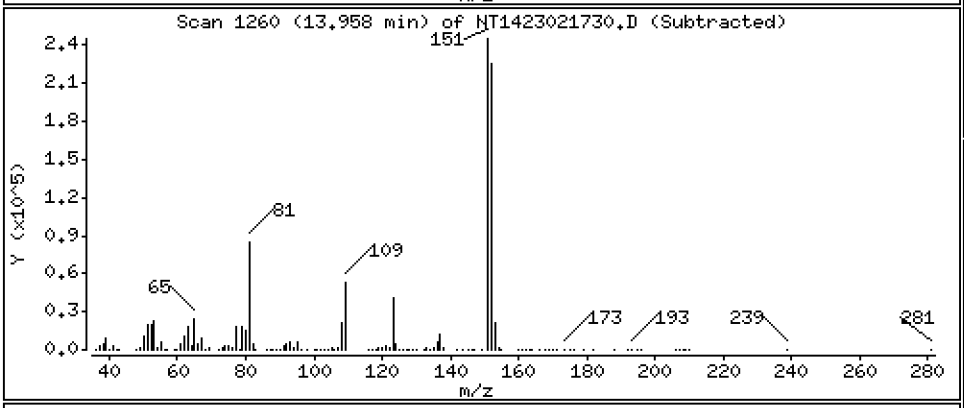
Column phase: ZB-5msi

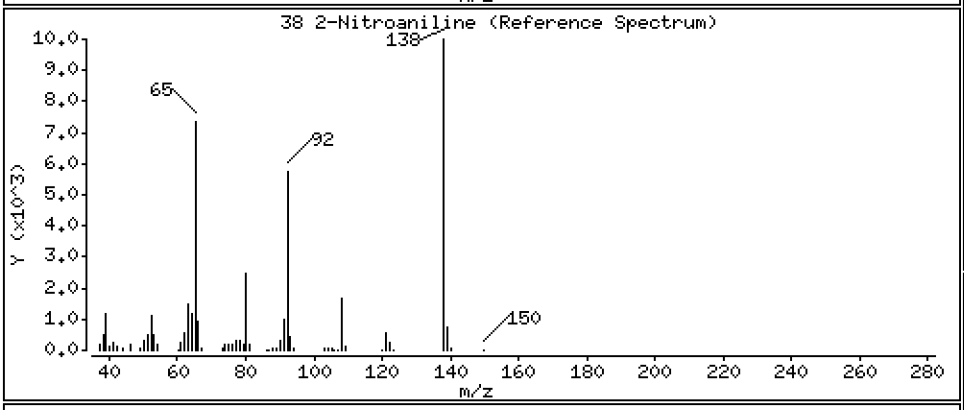
Column diameter: 0.25

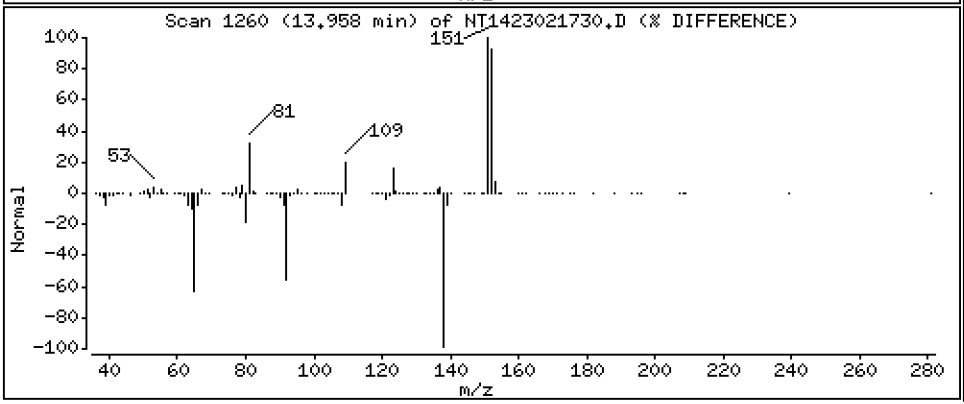
38 2-Nitroaniline

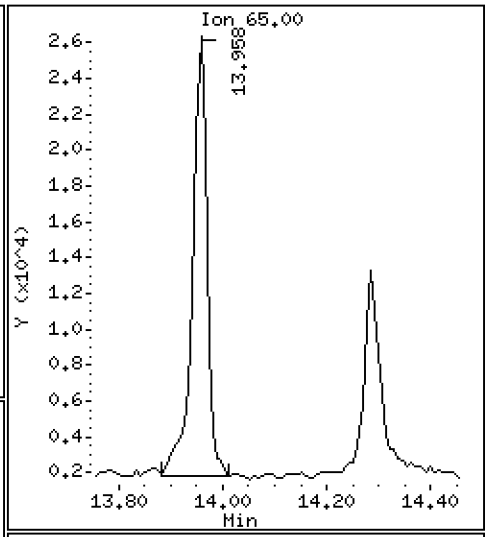
Concentration: 0.8007 ug/mL

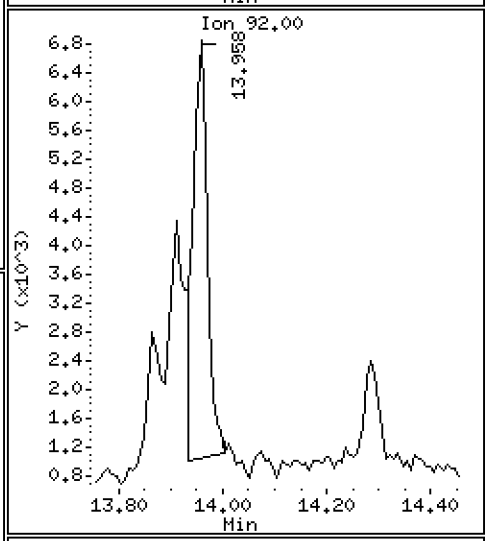


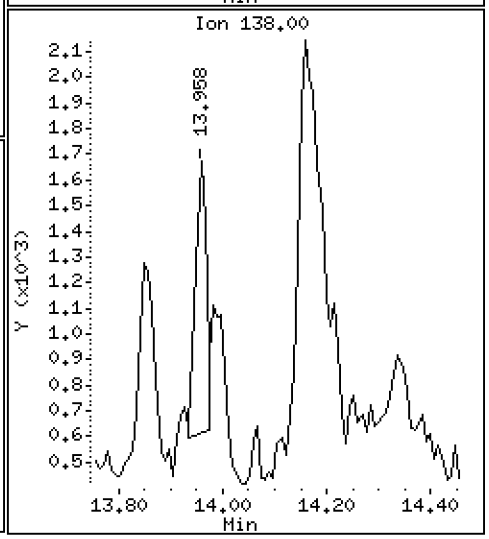












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

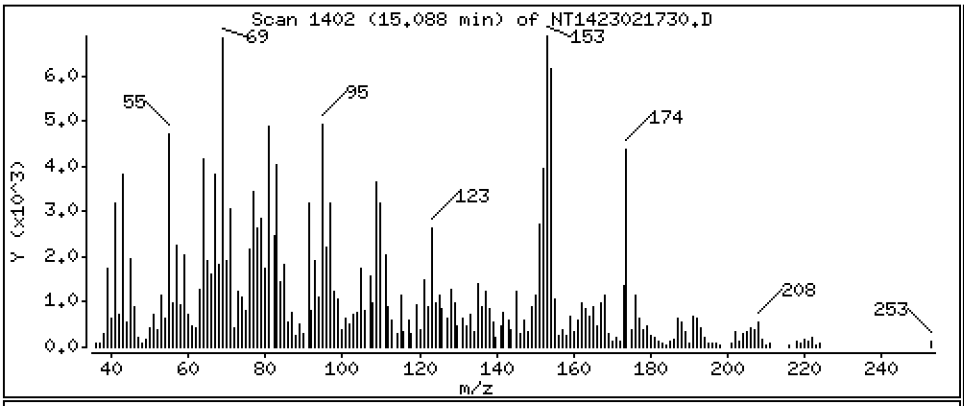
Operator: DSD

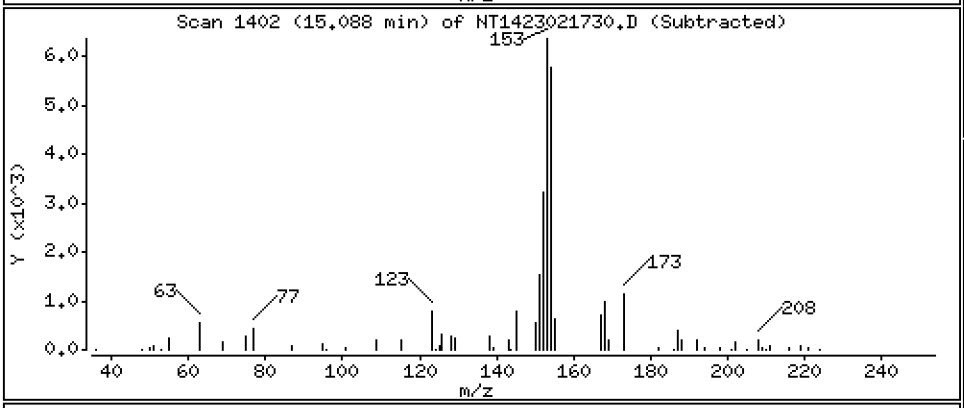
Column phase: ZB-5msi

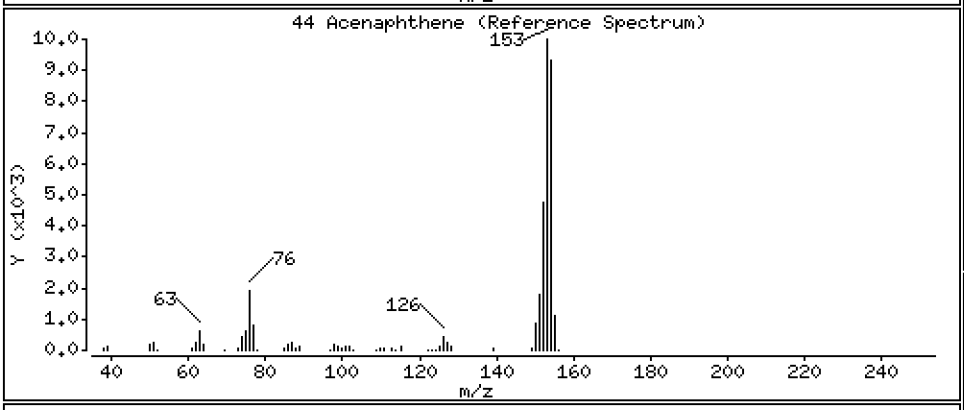
Column diameter: 0.25

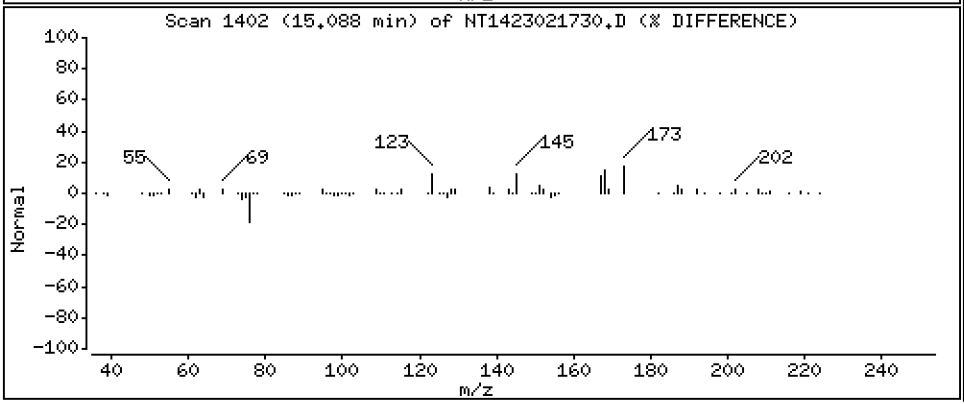
44 Acenaphthene

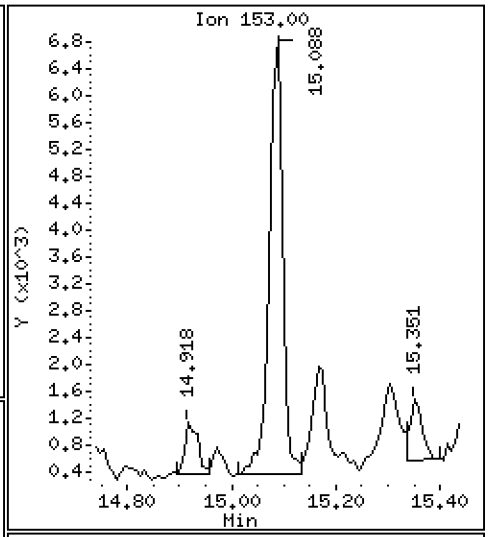
Concentration: 0.06866 ug/mL

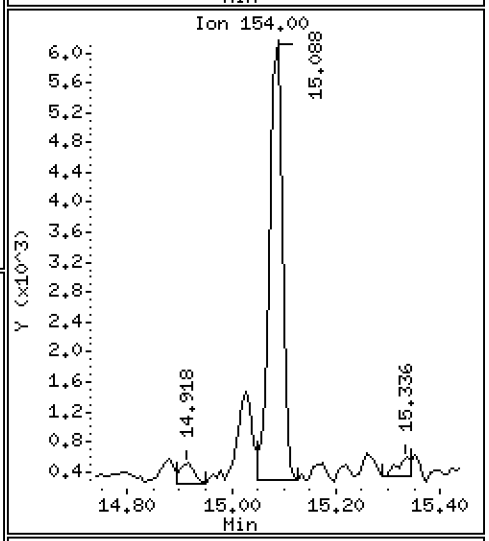


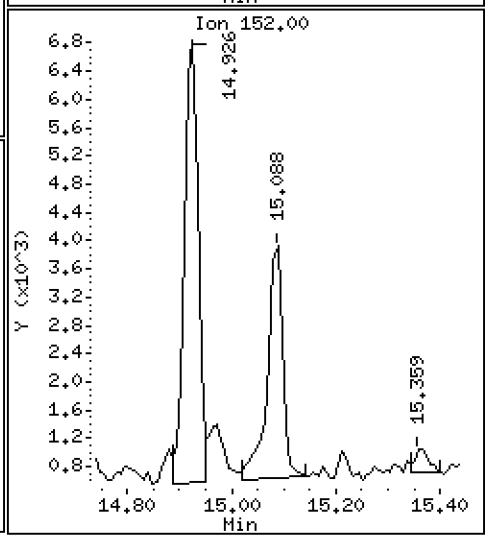












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021730.D

Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

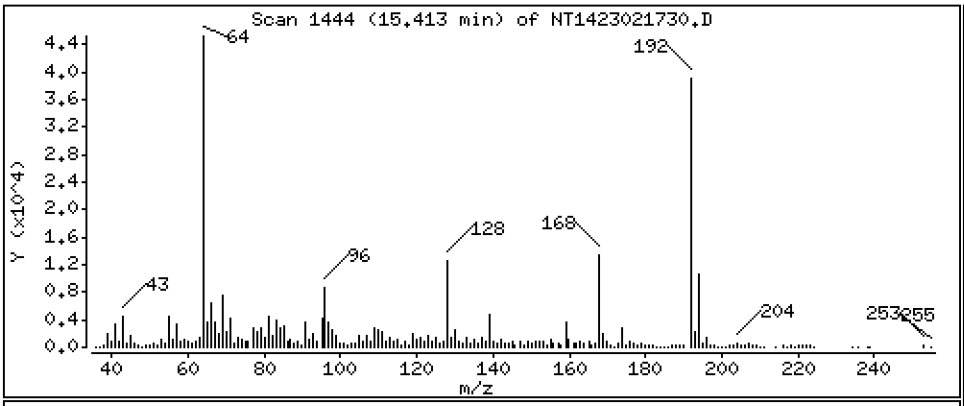
Operator: DSD

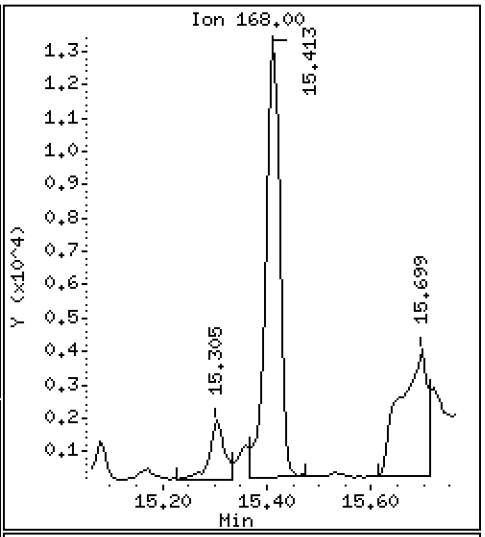
Column phase: ZB-5msi

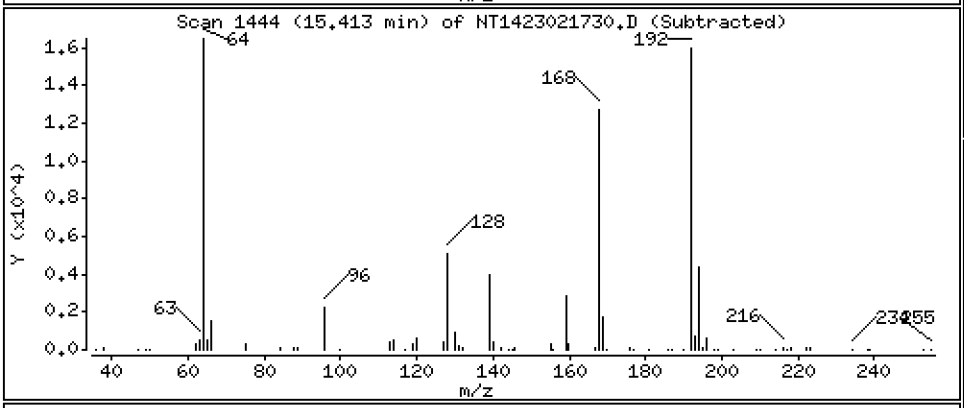
Column diameter: 0.25

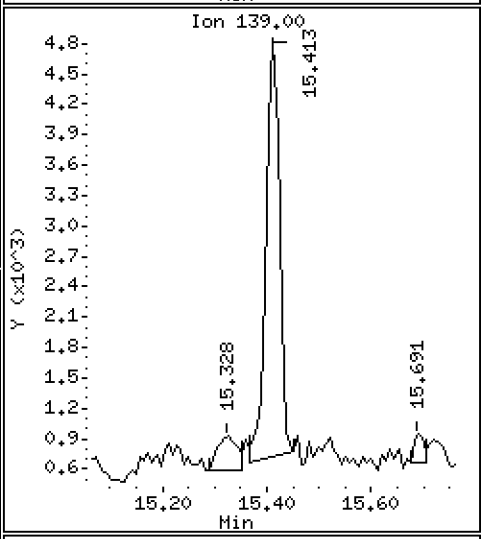
46 Dibenzofuran

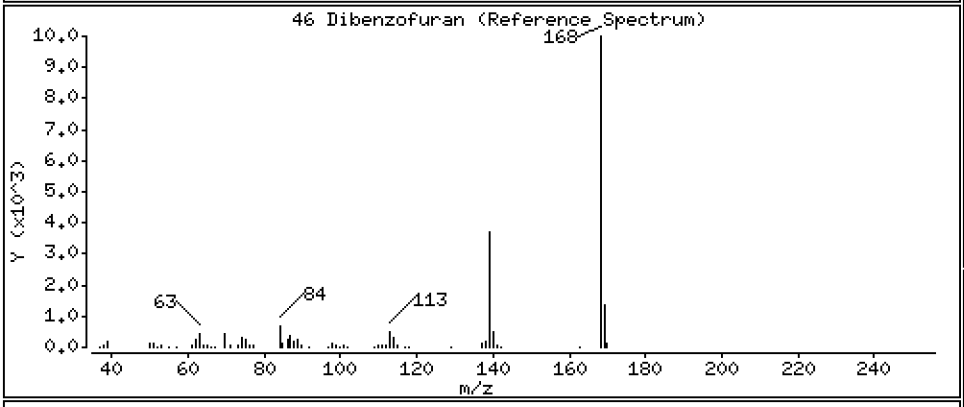
Concentration: 0.09009 ug/mL

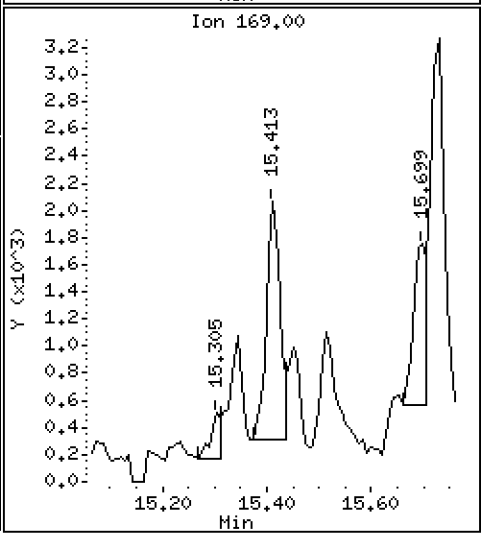


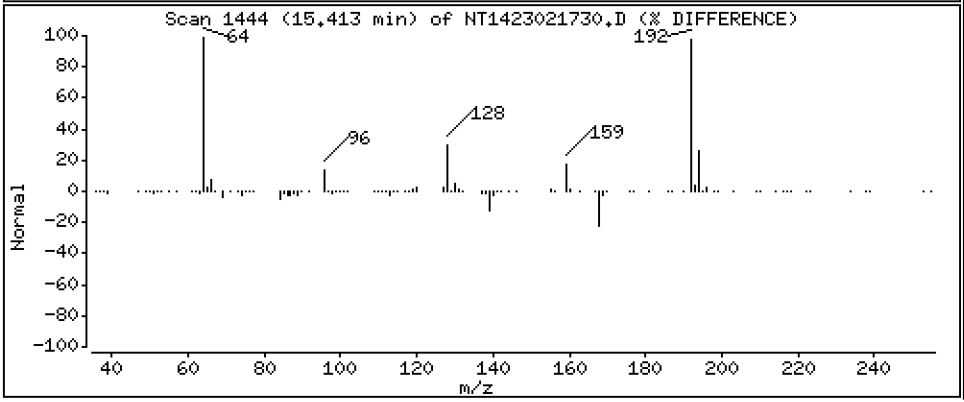












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

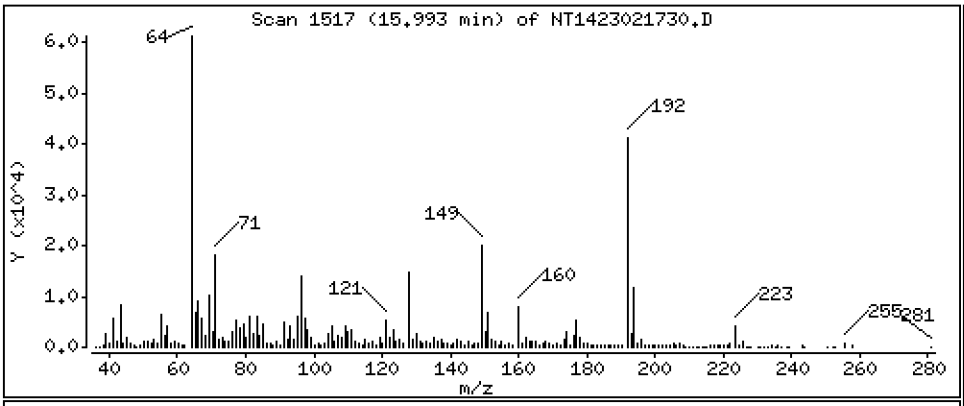
Operator: DSD

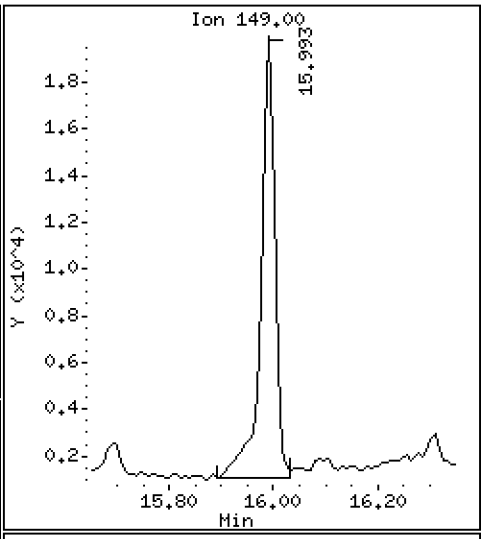
Column phase: ZB-5msi

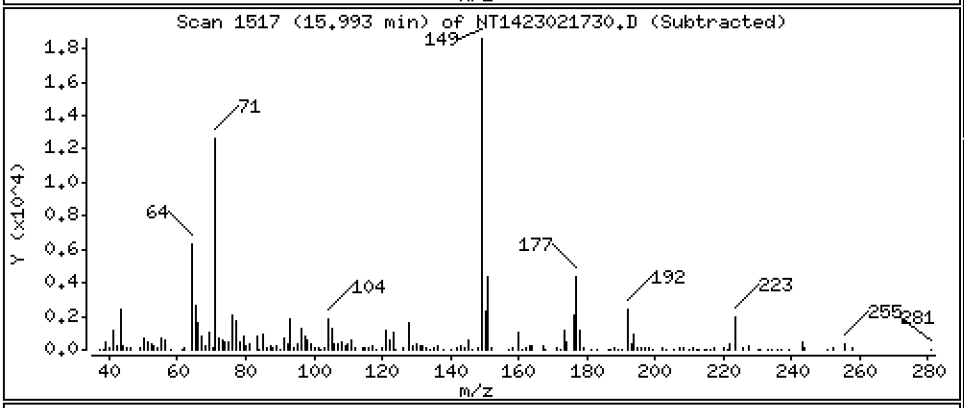
Column diameter: 0.25

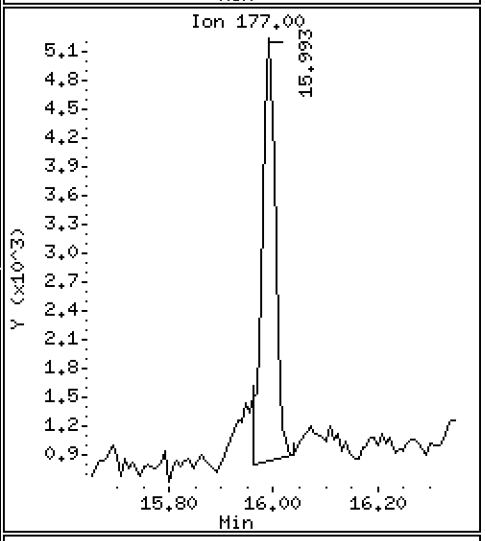
50 Diethylphthalate

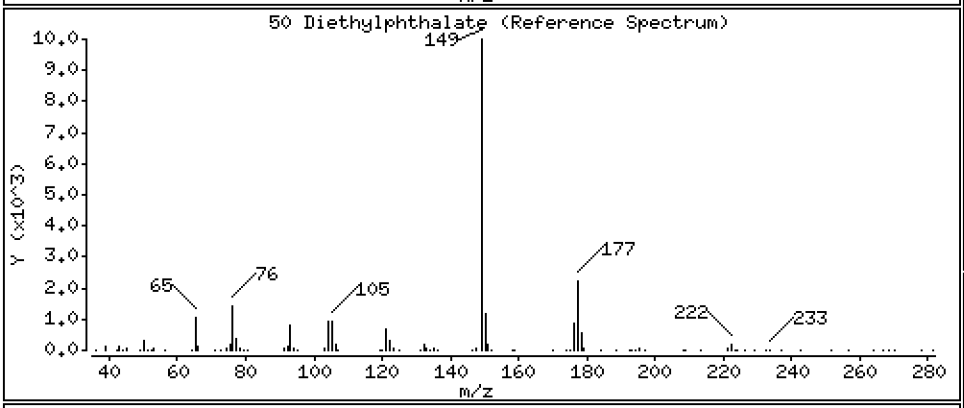
Concentration: 0.1541 ug/mL

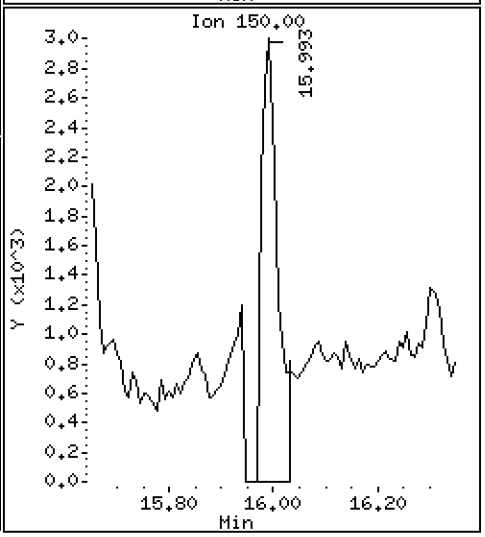


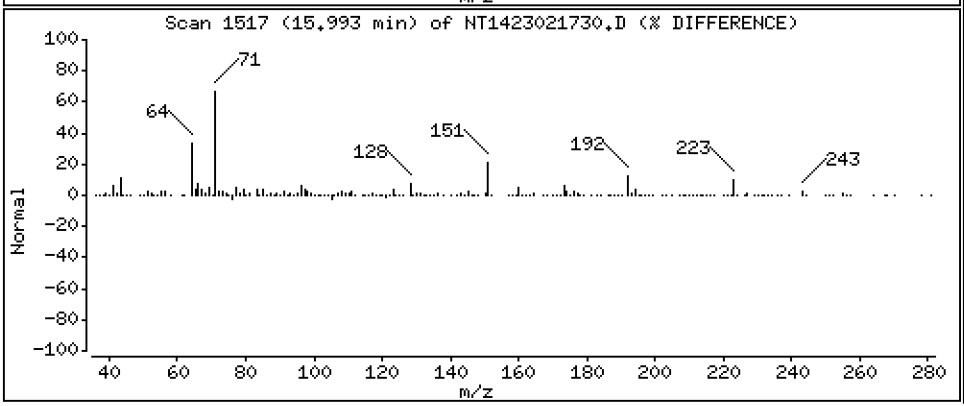












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

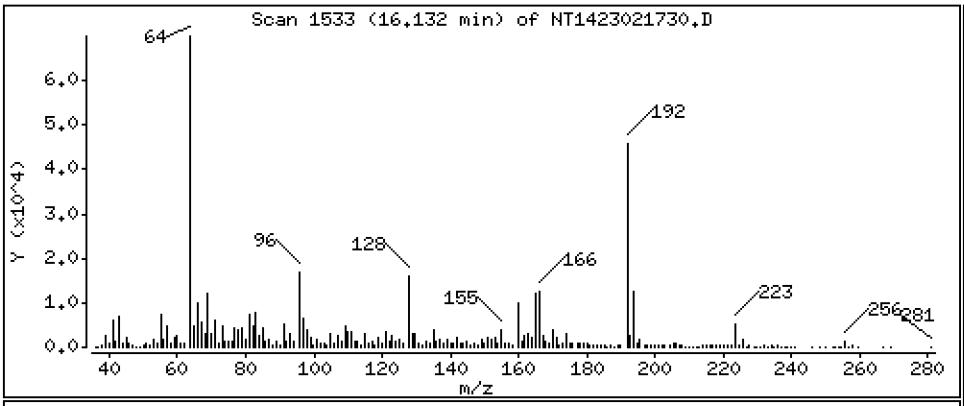
Operator: DSD

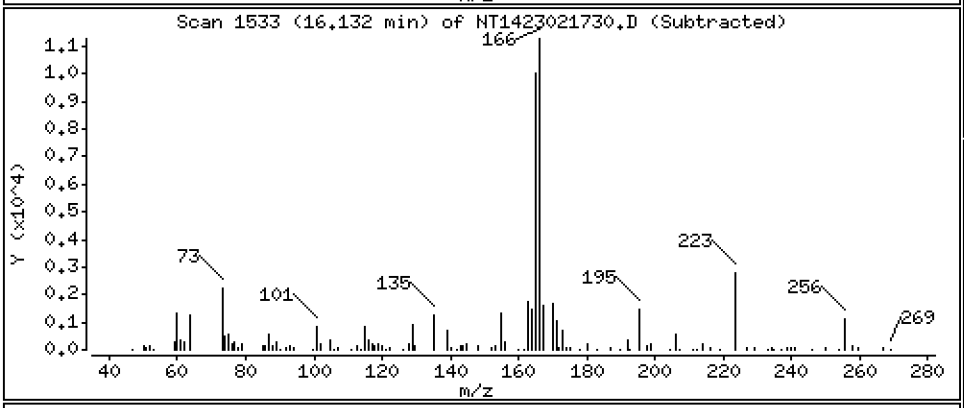
Column phase: ZB-5msi

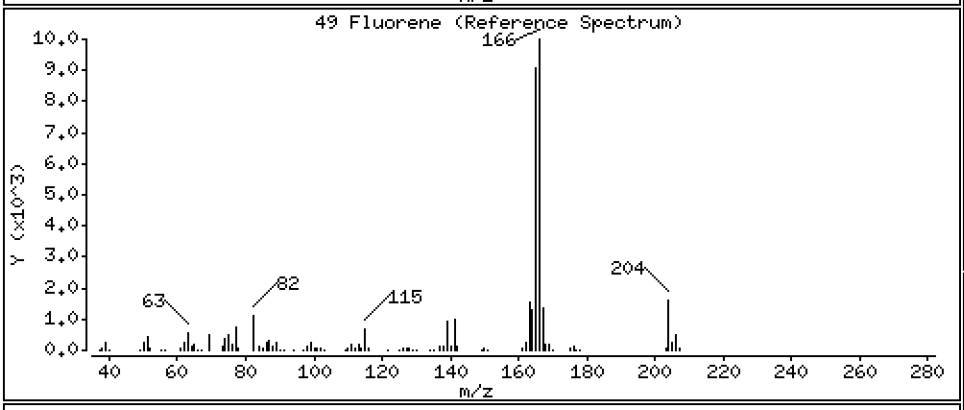
Column diameter: 0.25

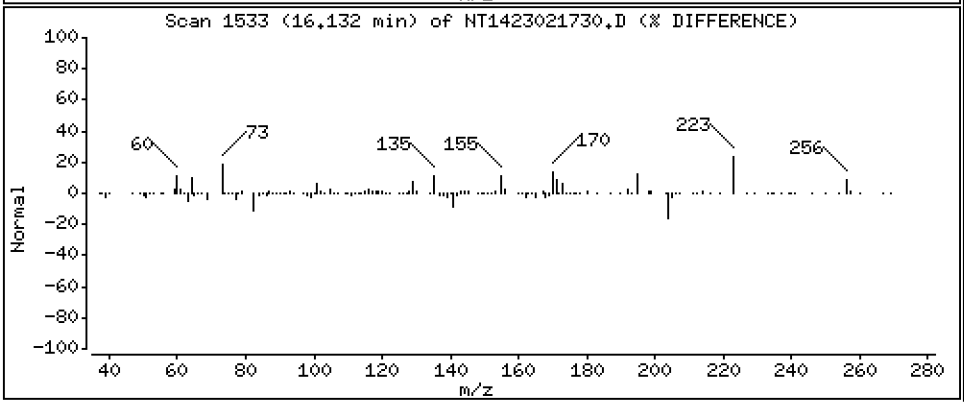
49 Fluorene

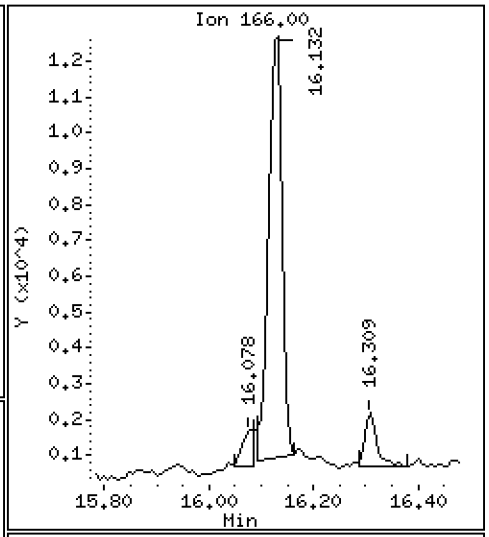
Concentration: 0.07506 ug/mL

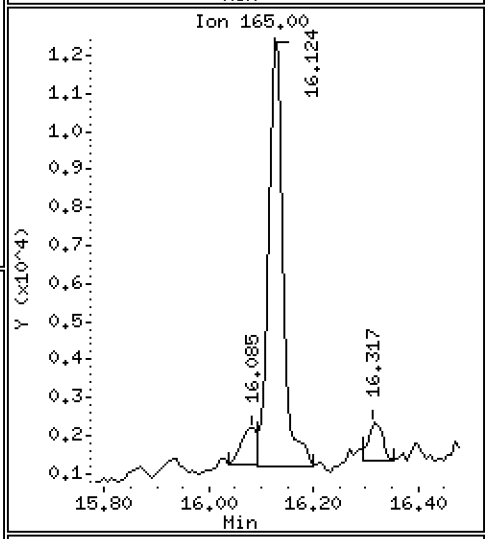


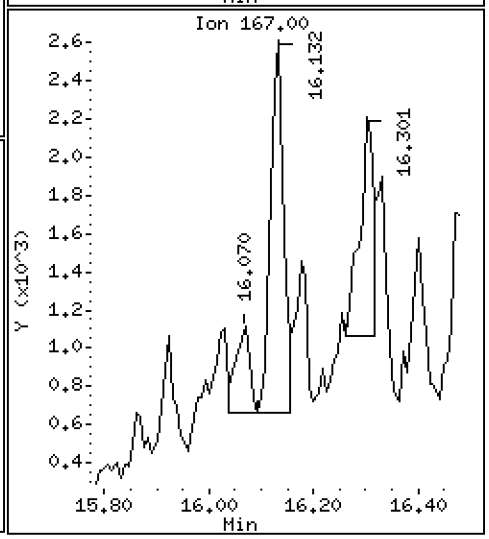












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

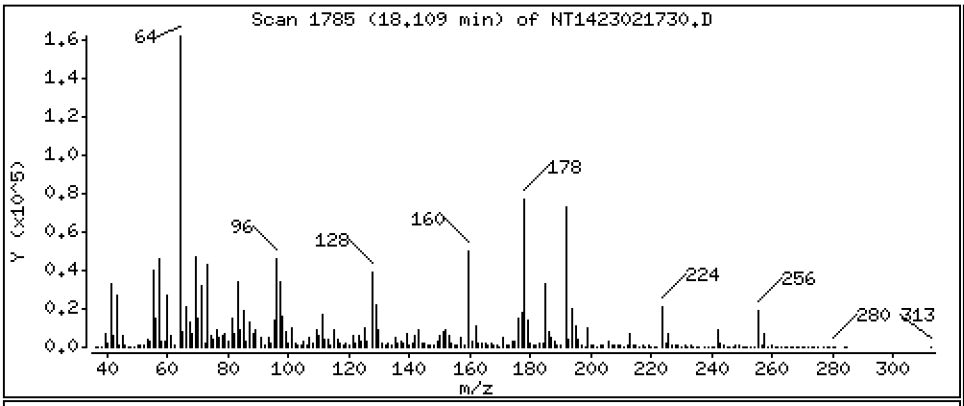
Operator: DSD

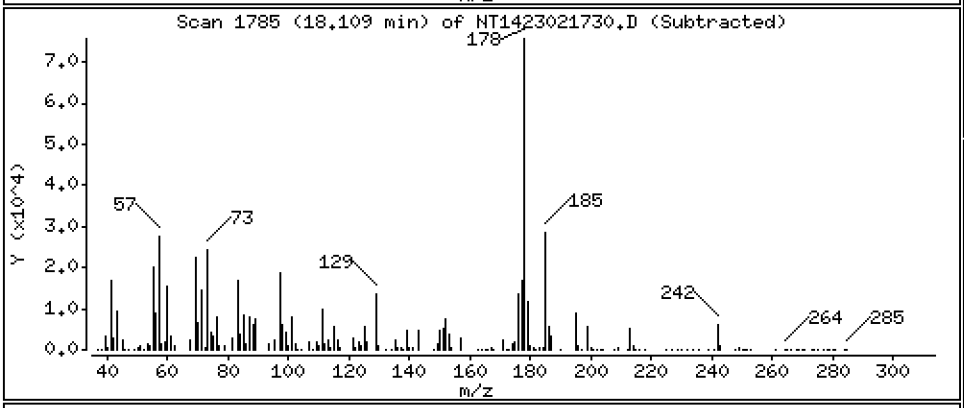
Column phase: ZB-5msi

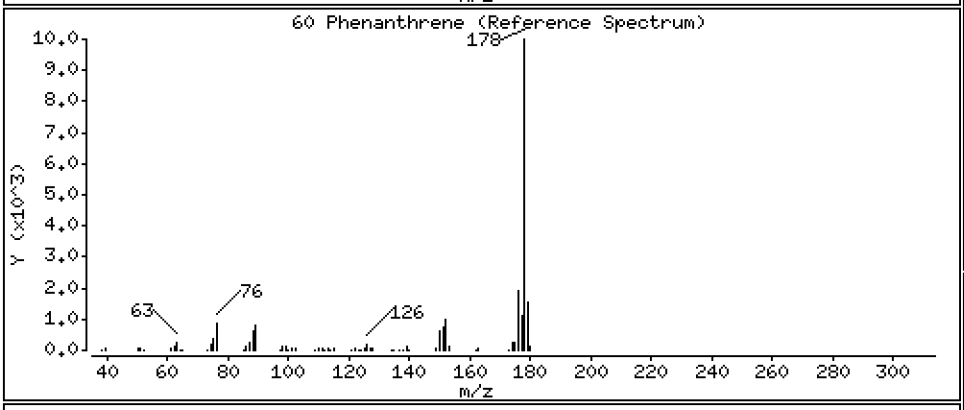
Column diameter: 0.25

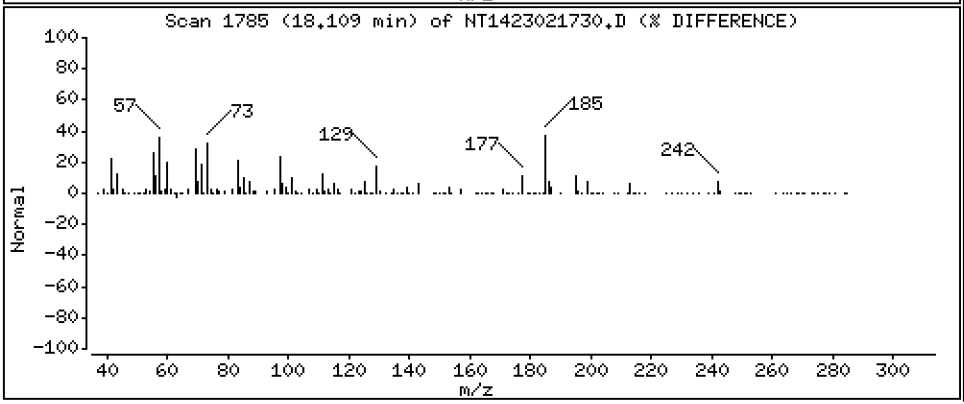
60 Phenanthrene

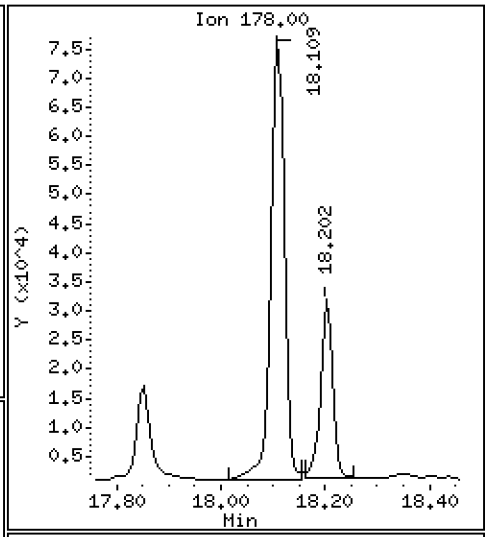
Concentration: 0.5457 ug/mL

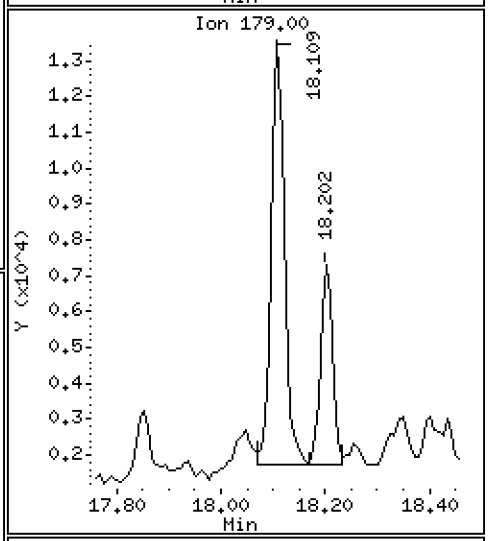


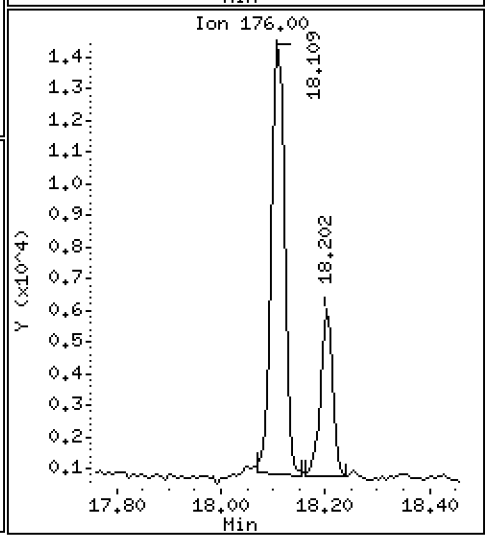












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

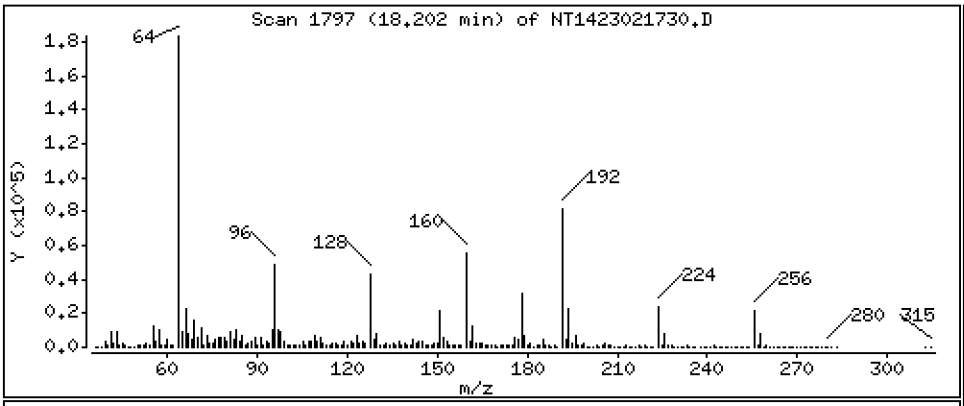
Operator: DSD

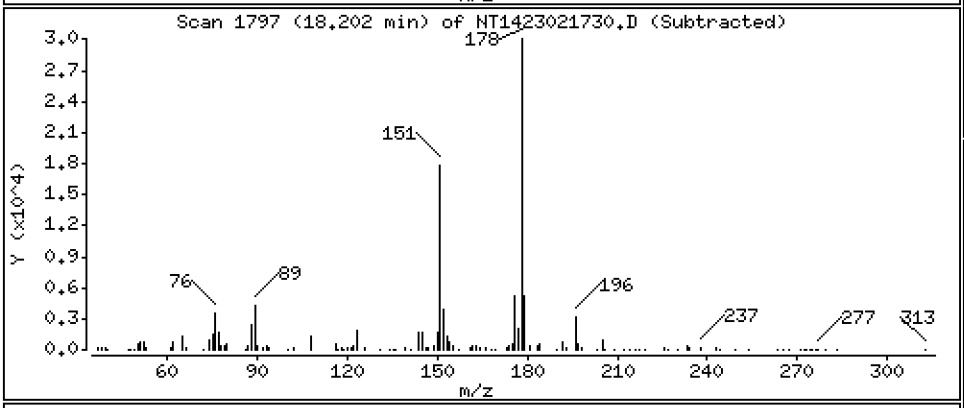
Column phase: ZB-5msi

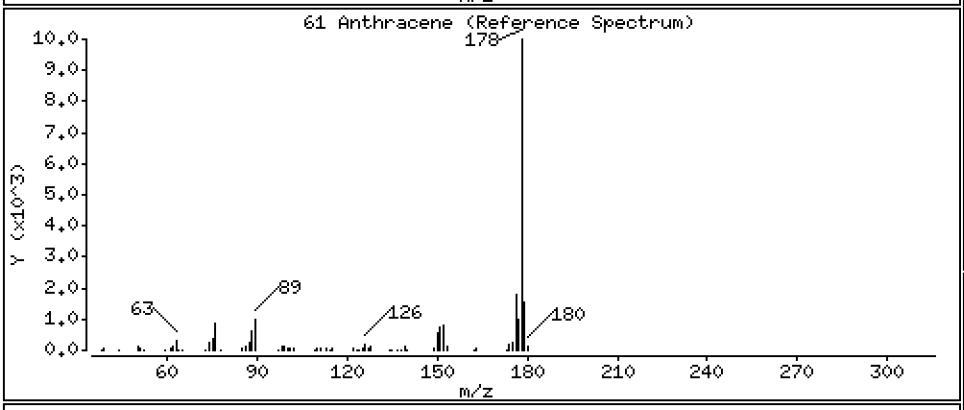
Column diameter: 0.25

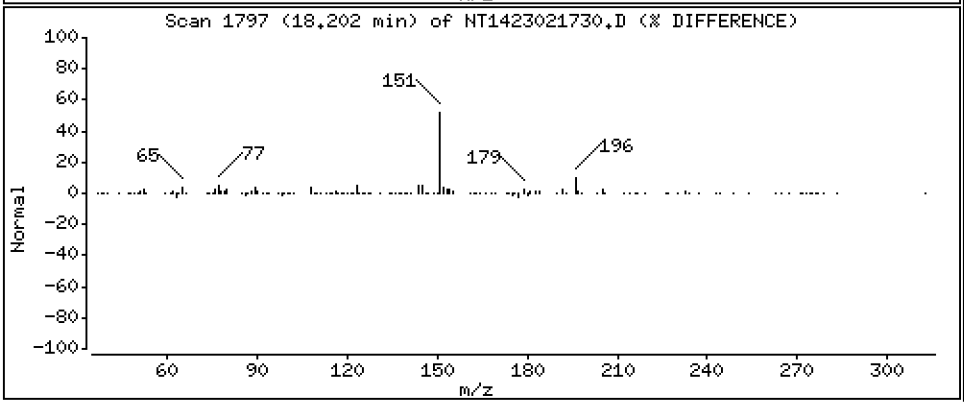
61 Anthracene

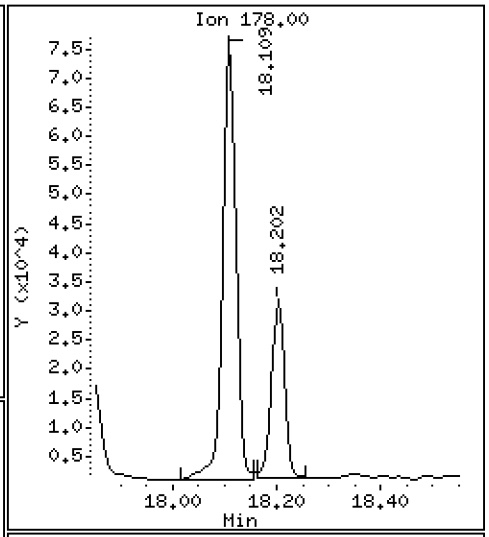
Concentration: 0.2158 ug/mL

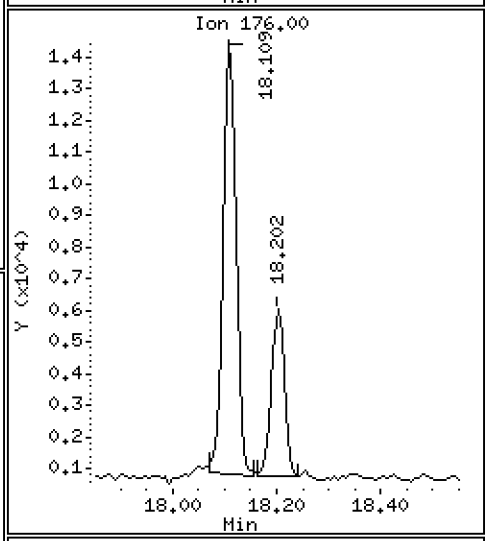


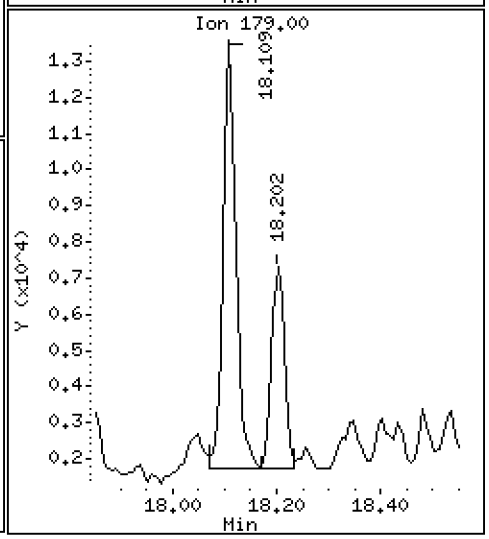












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

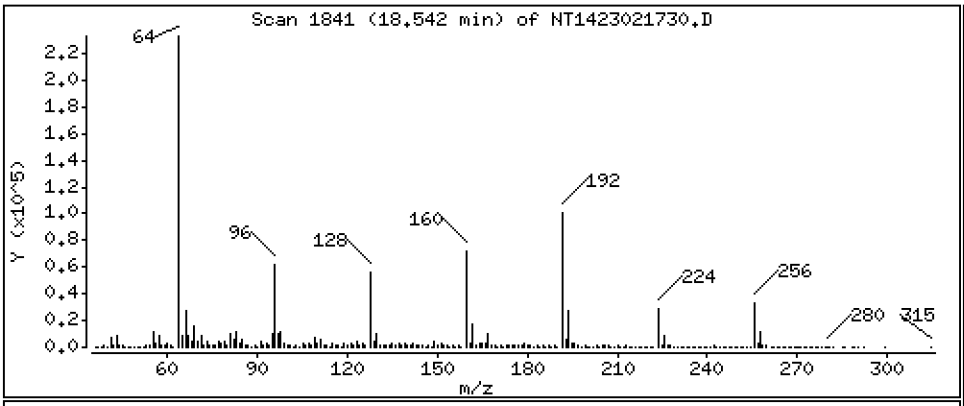
Operator: DSD

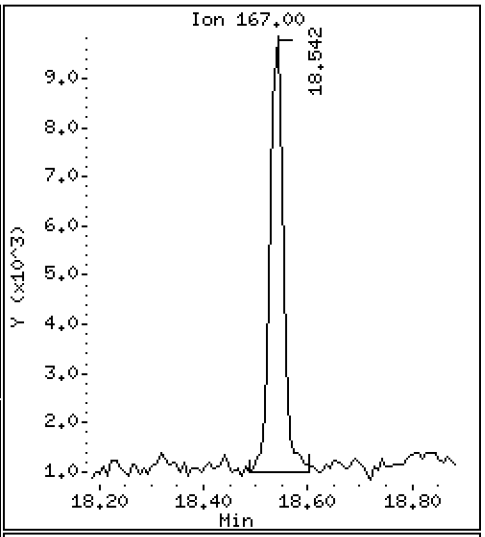
Column phase: ZB-5msi

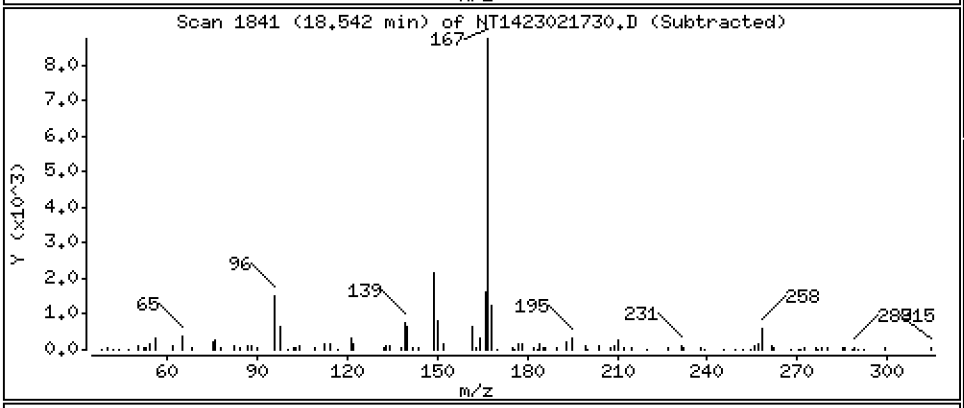
Column diameter: 0.25

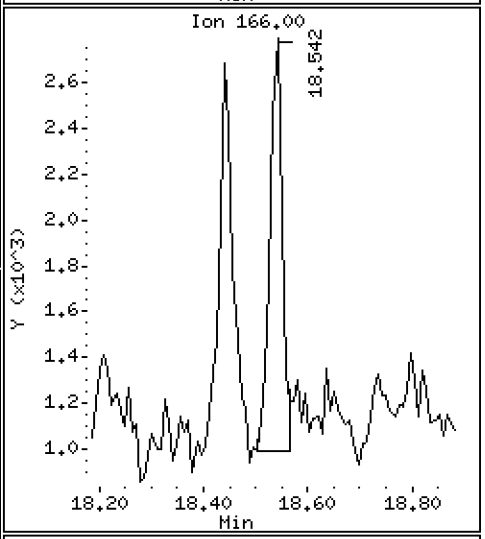
62 Carbazole

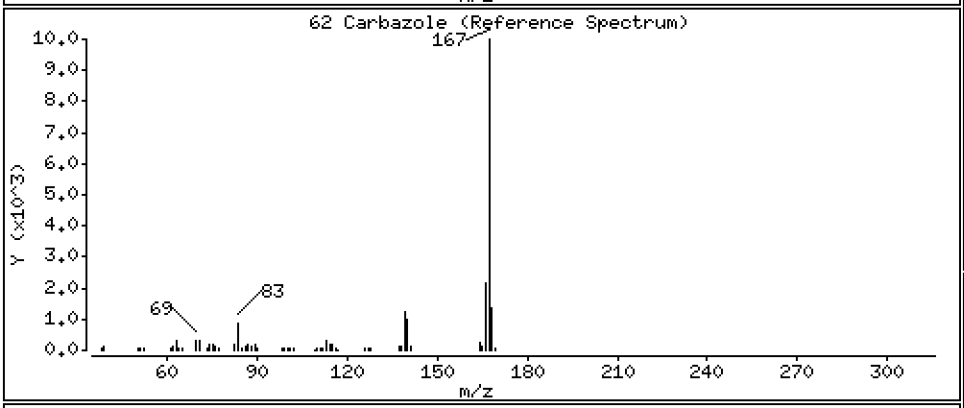
Concentration: 0.06963 ug/mL

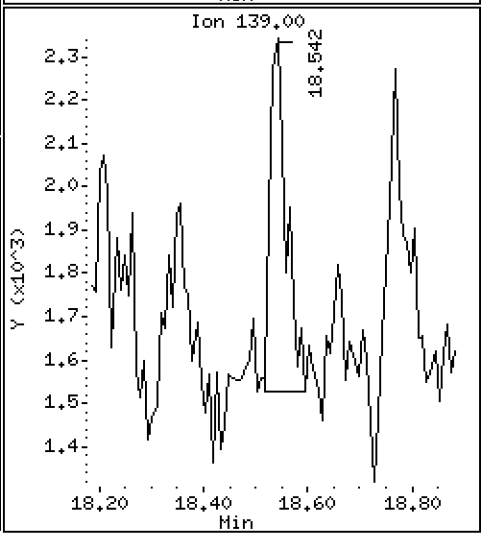


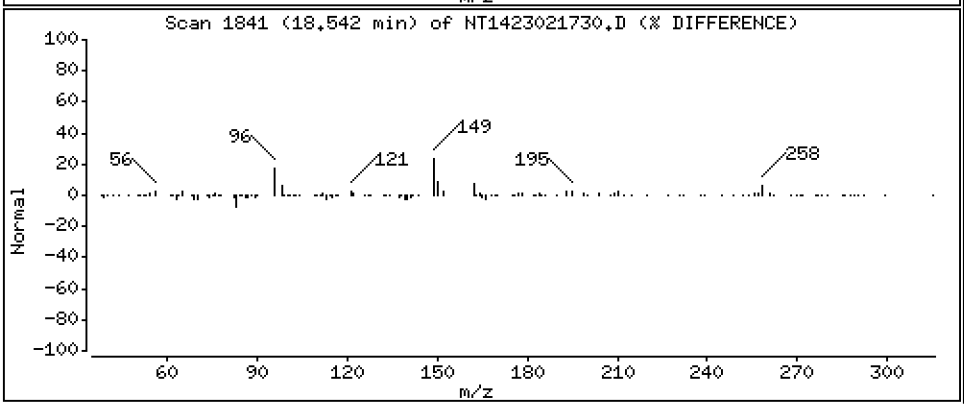












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

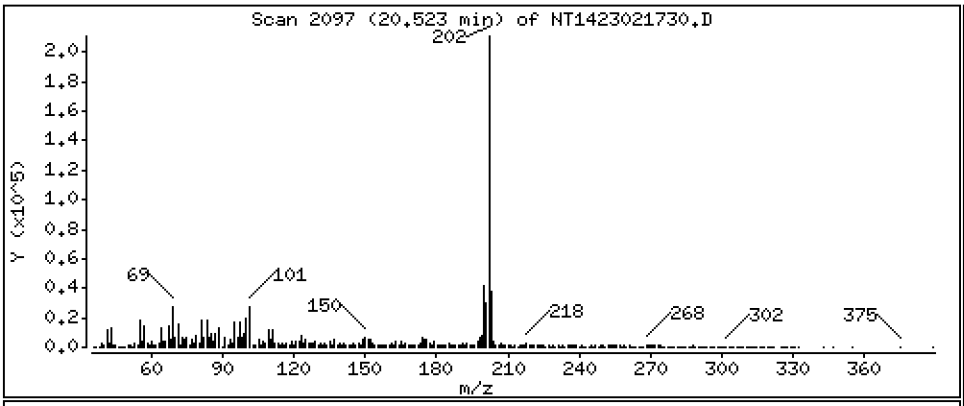
Operator: DSD

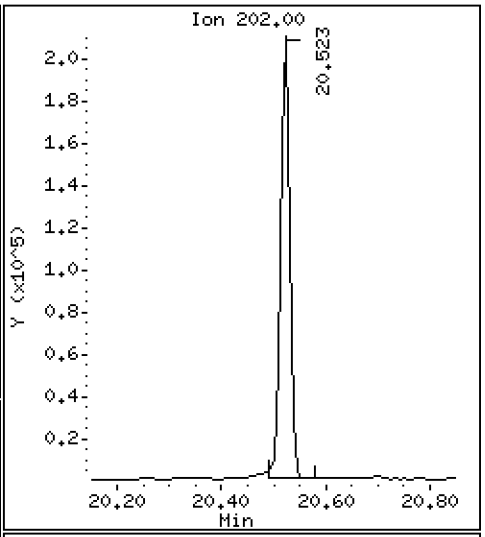
Column phase: ZB-5msi

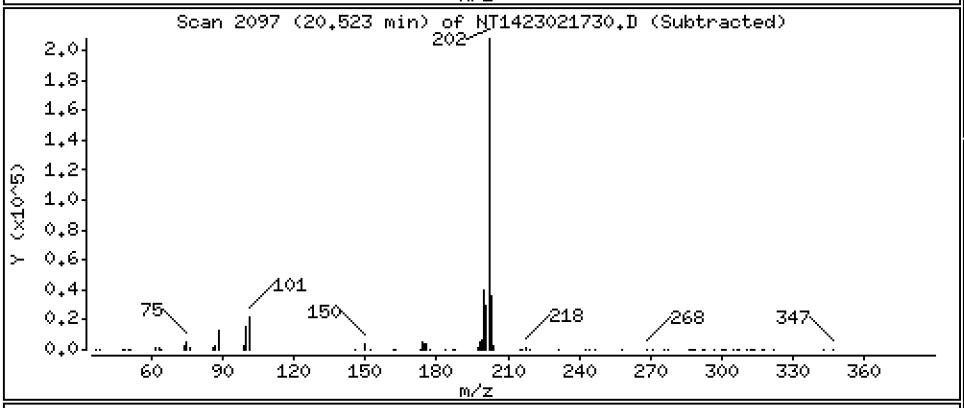
Column diameter: 0.25

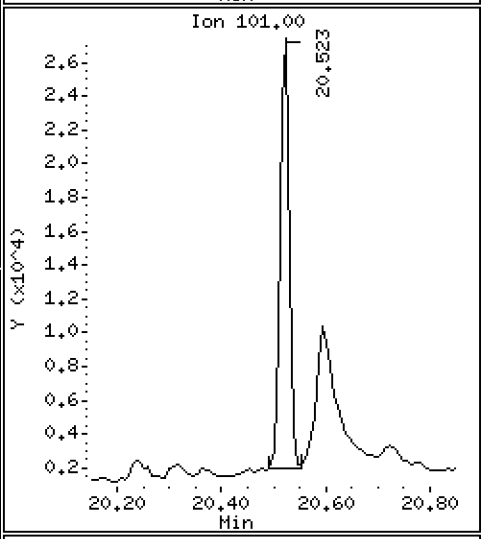
64 Fluoranthene

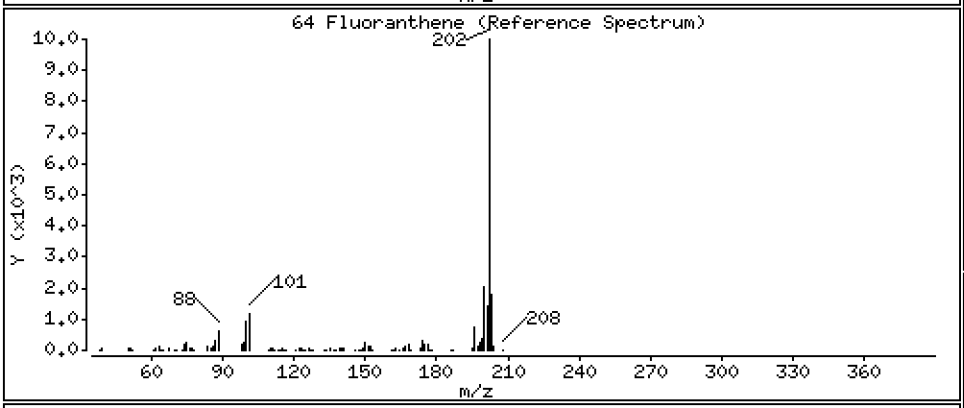
Concentration: 1.321 ug/mL

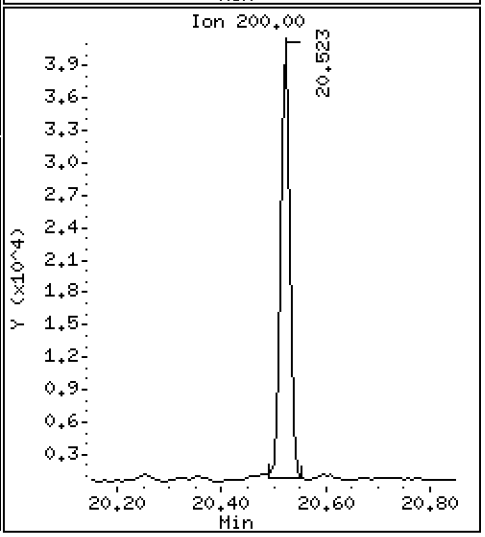


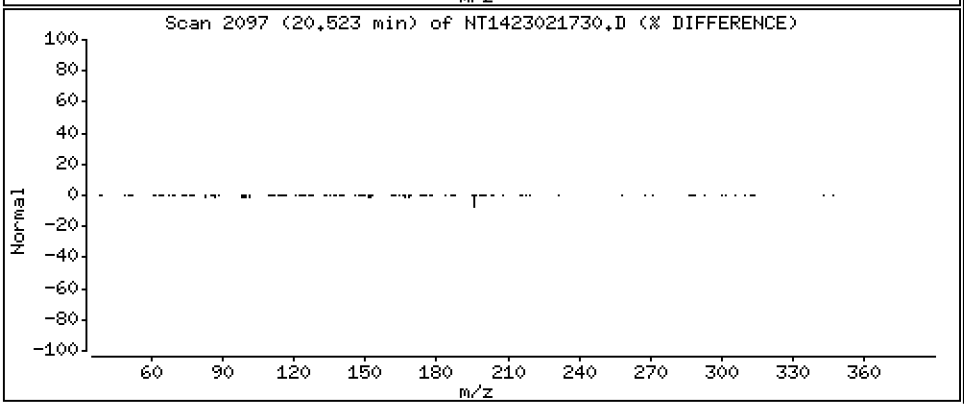












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021730.D

Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

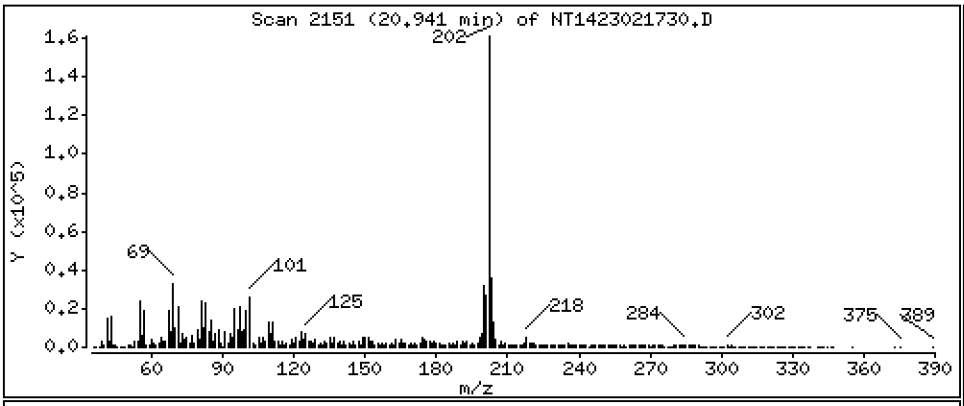
Operator: DSD

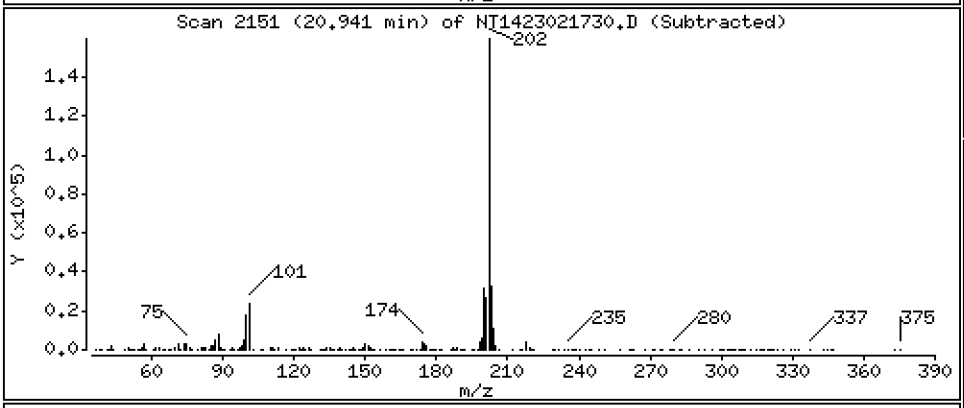
Column phase: ZB-5msi

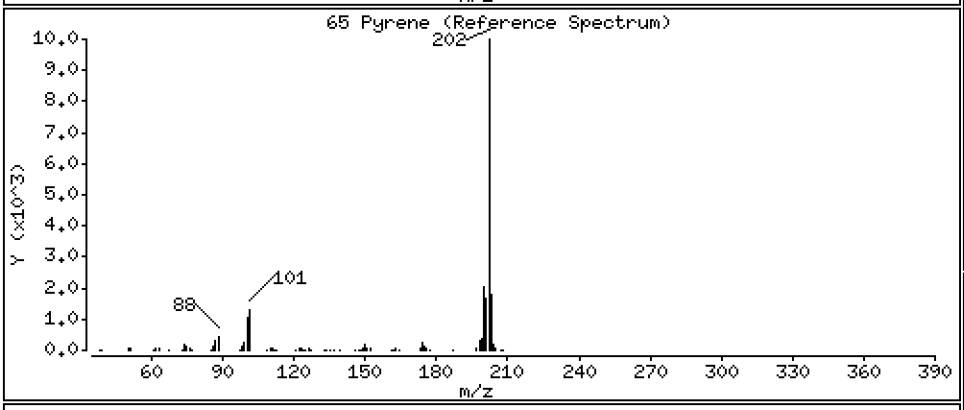
Column diameter: 0.25

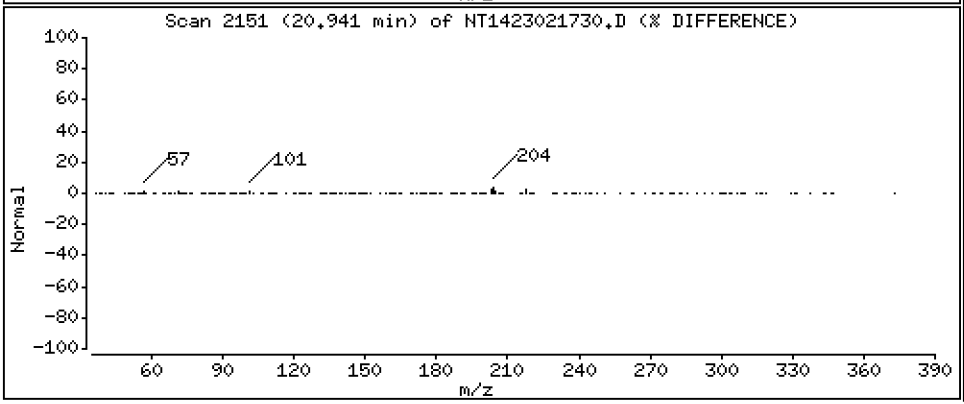
65 Pyrene

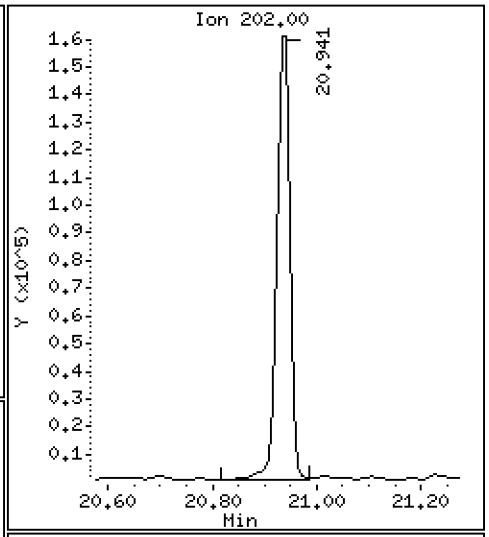
Concentration: 1.234 ug/mL

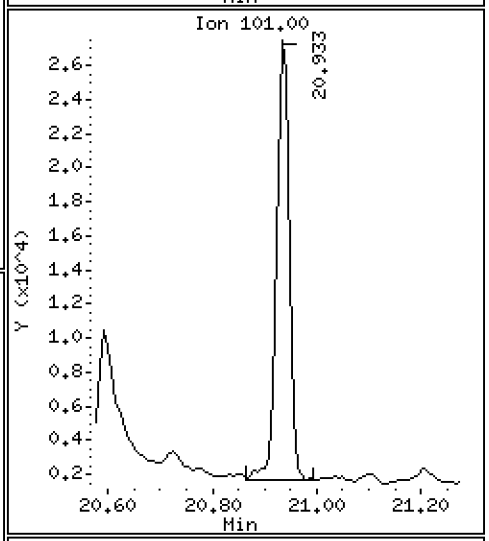


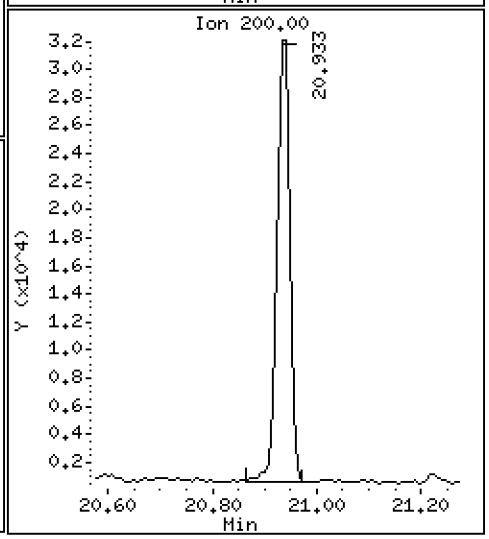












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

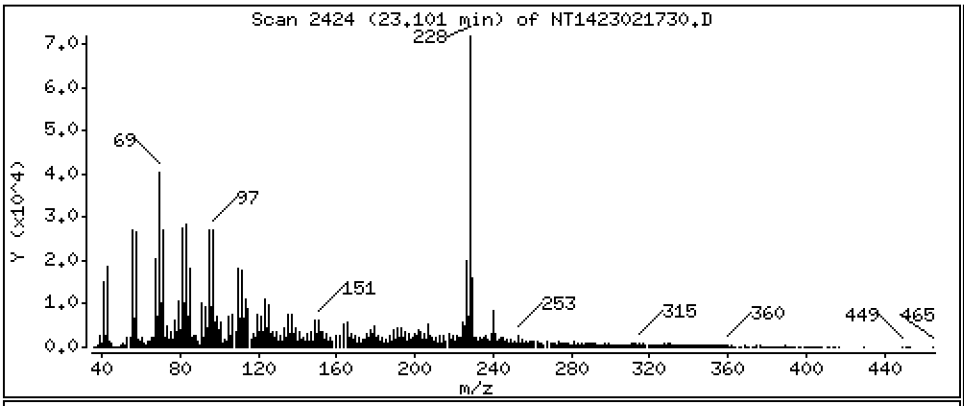
Operator: DSD

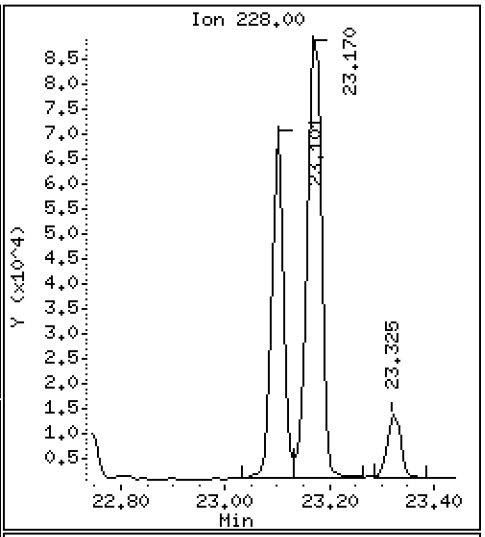
Column phase: ZB-5msi

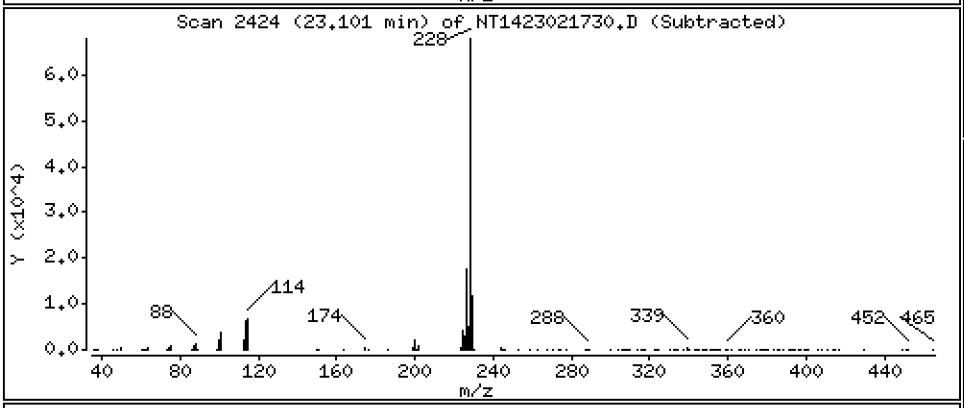
Column diameter: 0.25

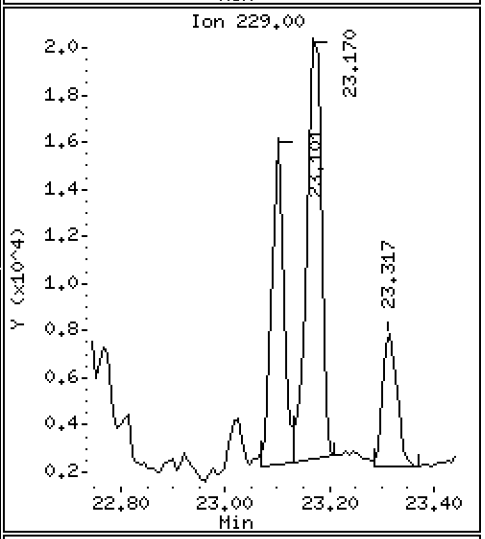
68 Benzo(a)anthracene

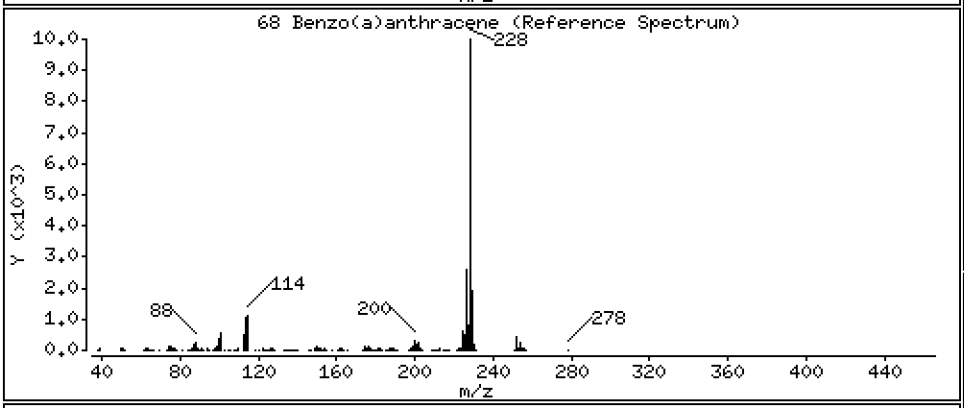
Concentration: 0.7068 ug/mL

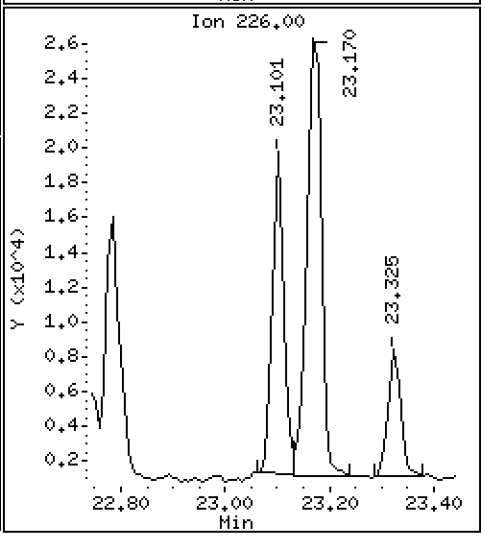


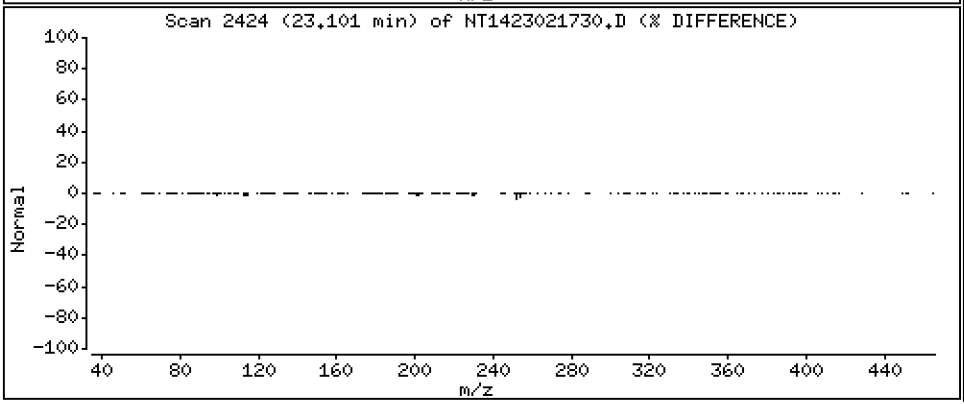












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

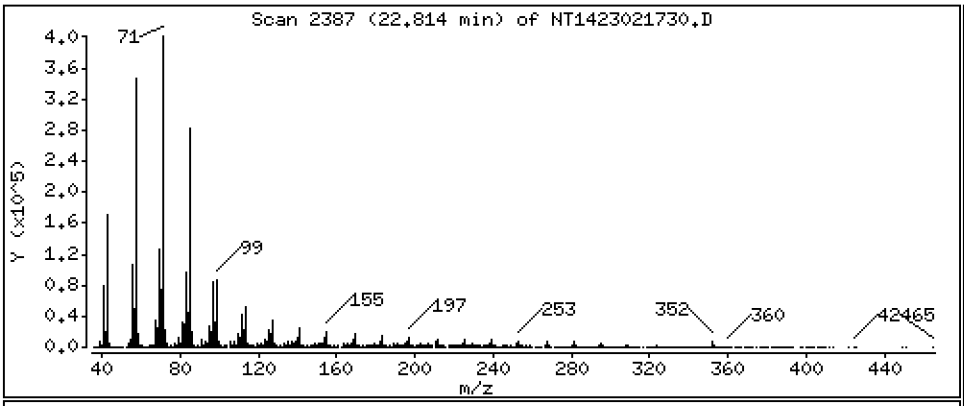
Operator: DSD

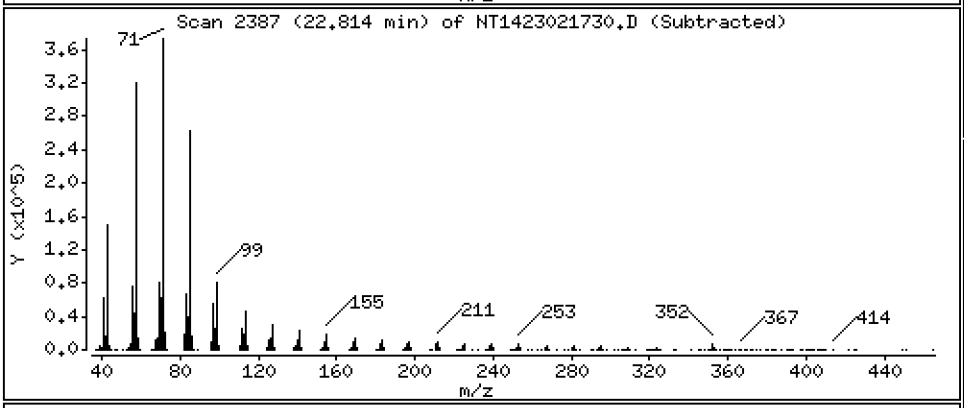
Column phase: ZB-5msi

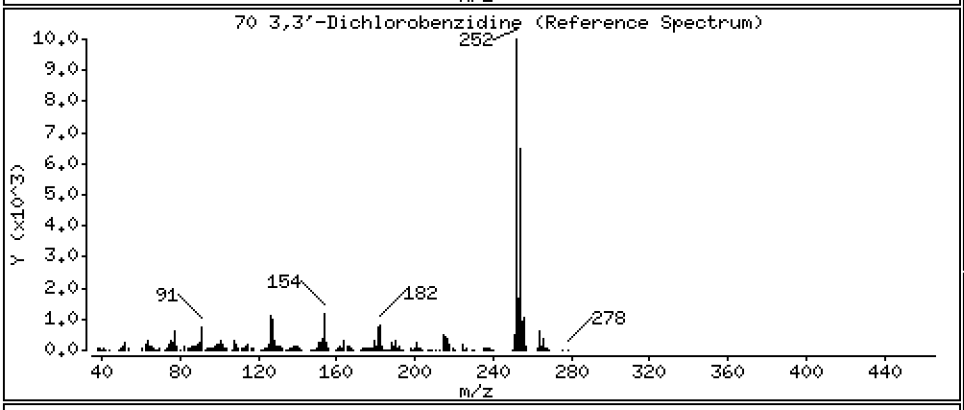
Column diameter: 0.25

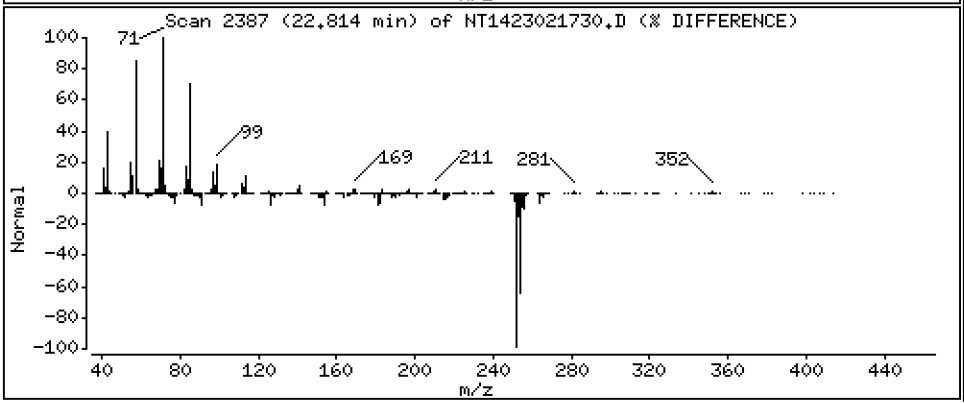
70 3,3'-Dichlorobenzidine

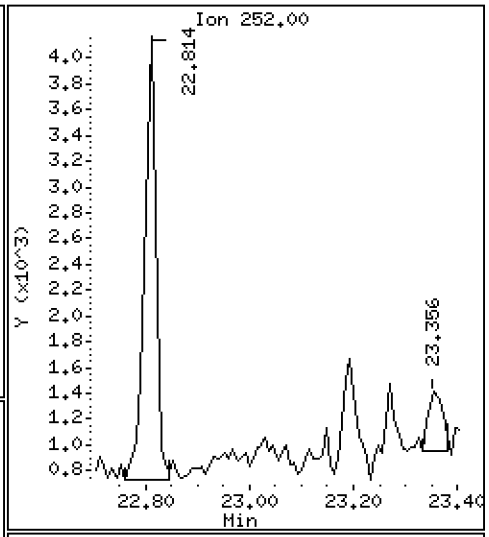
Concentration: 0.08026 ug/mL

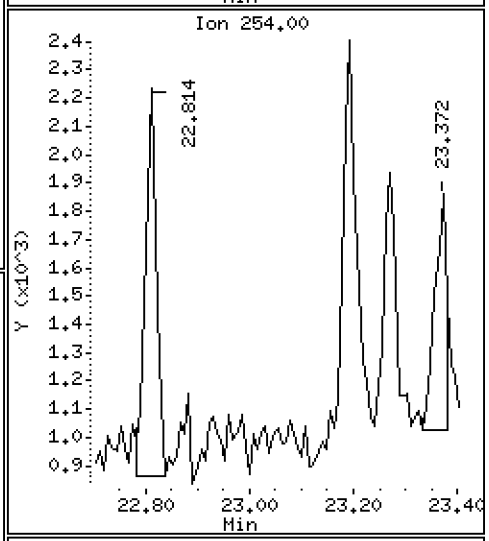


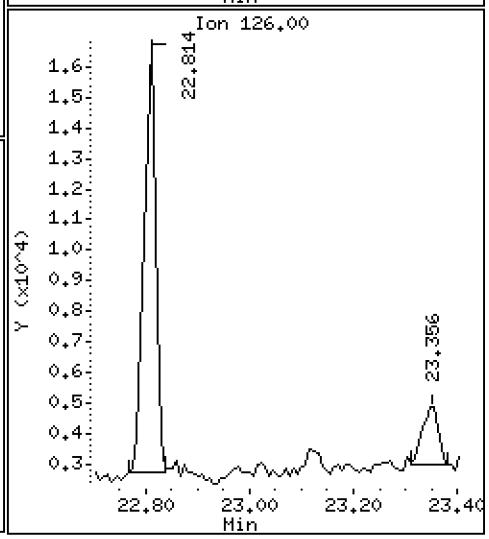












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

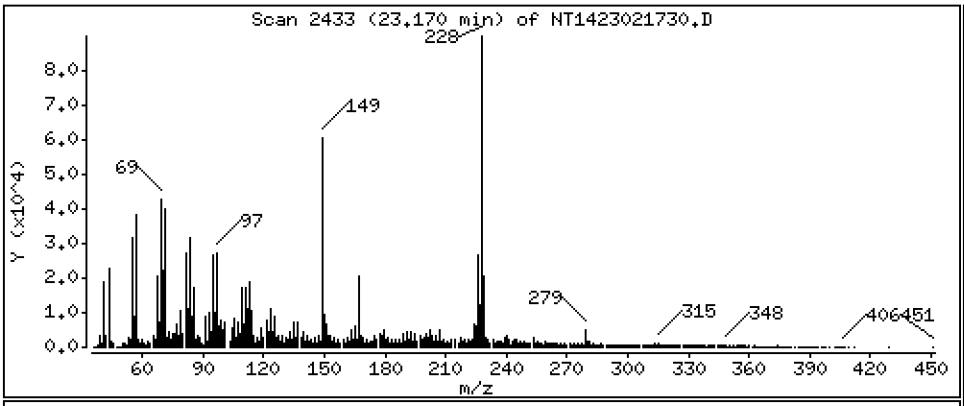
Operator: DSD

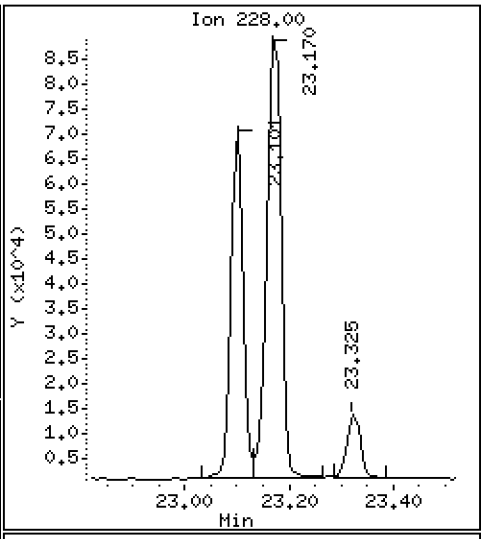
Column phase: ZB-5msi

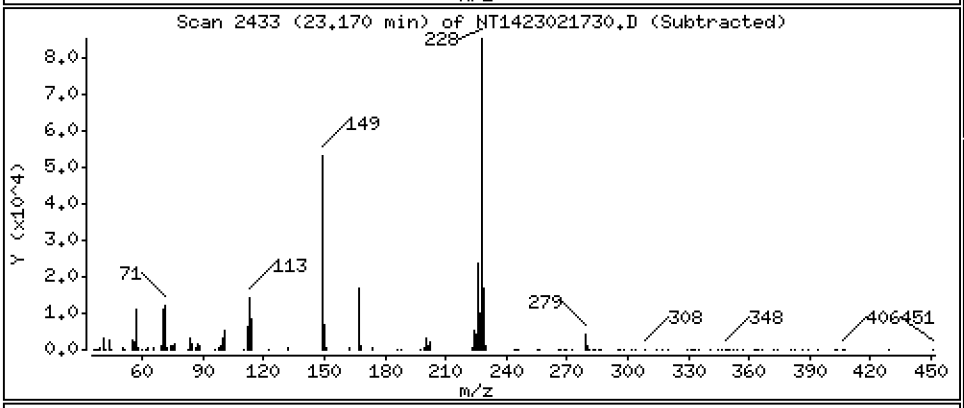
Column diameter: 0.25

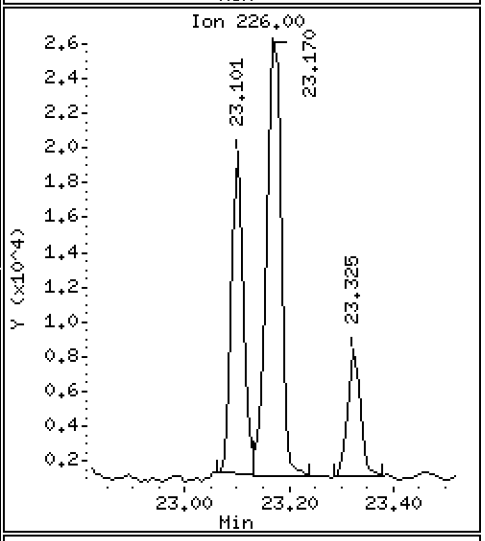
71 Chrysene

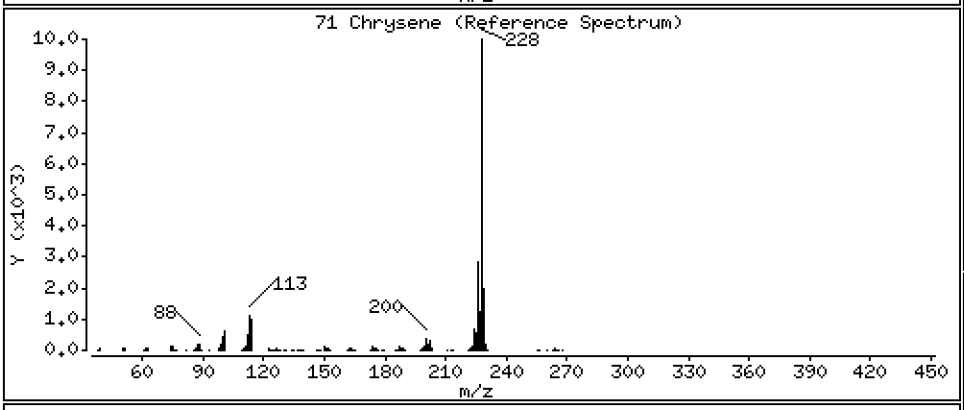
Concentration: 1.196 ug/mL

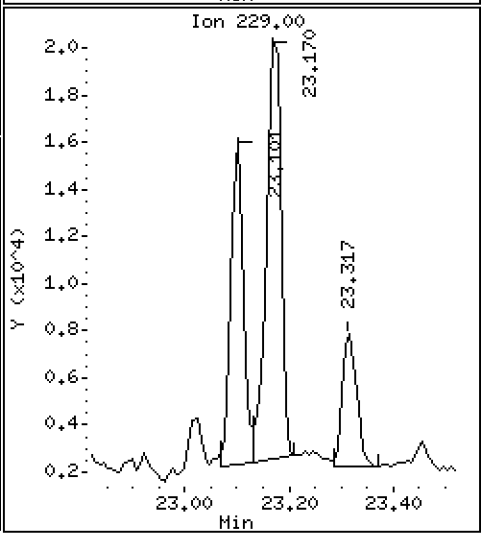


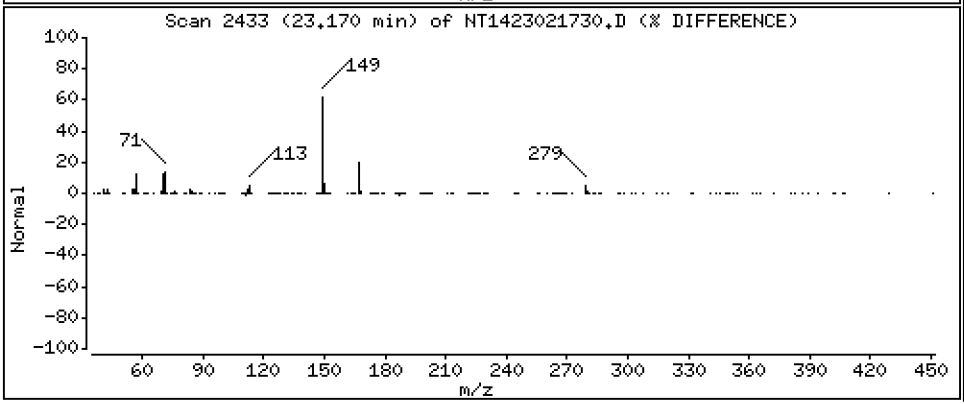












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

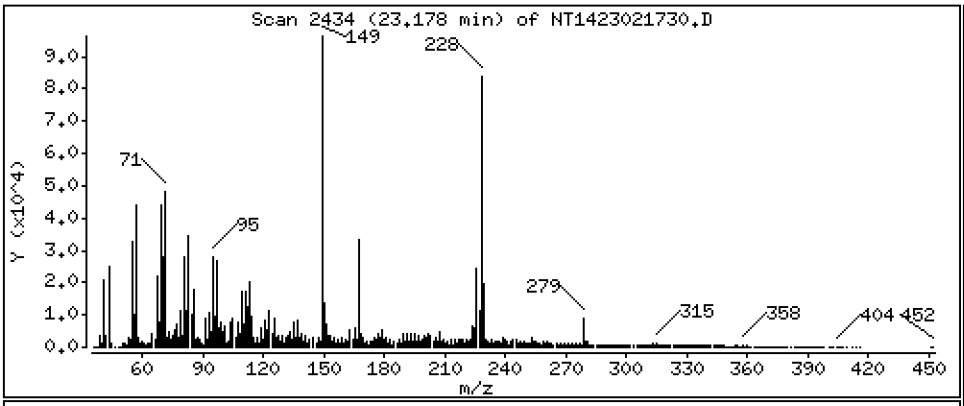
Operator: DSD

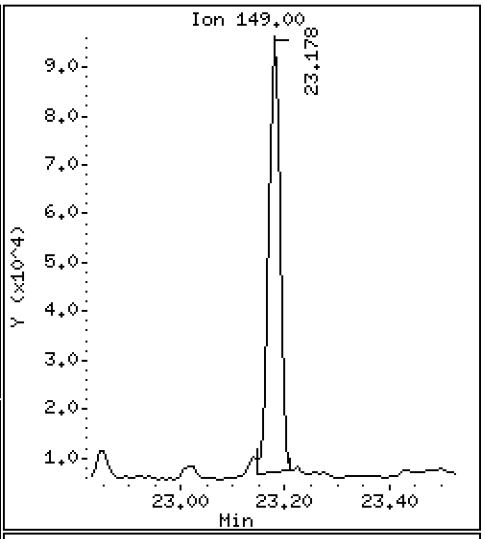
Column phase: ZB-5msi

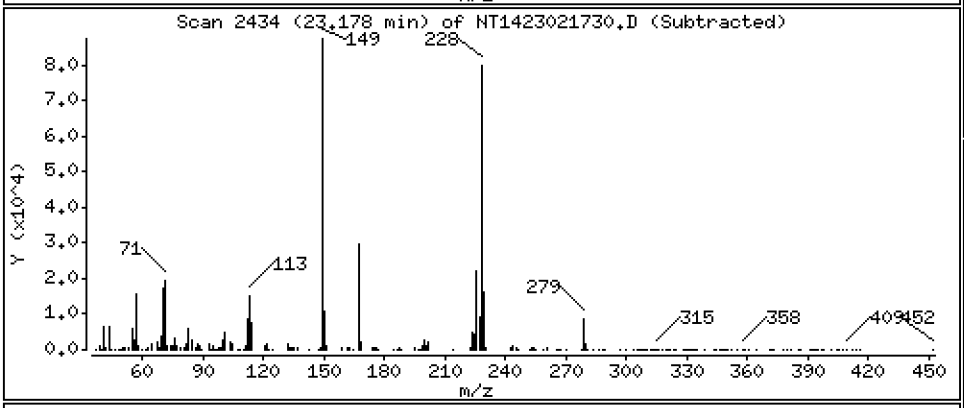
Column diameter: 0.25

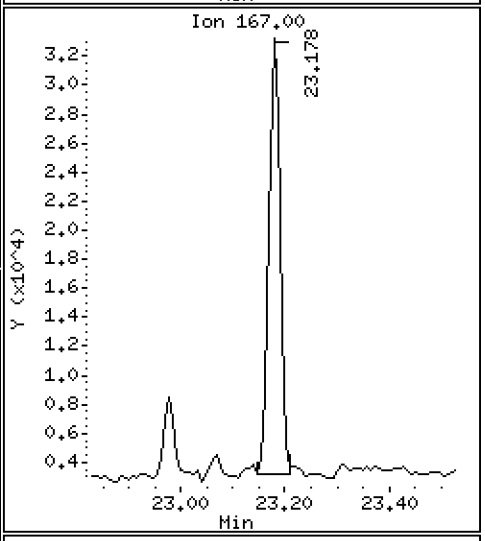
72 bis(2-Ethylhexyl)phthalate

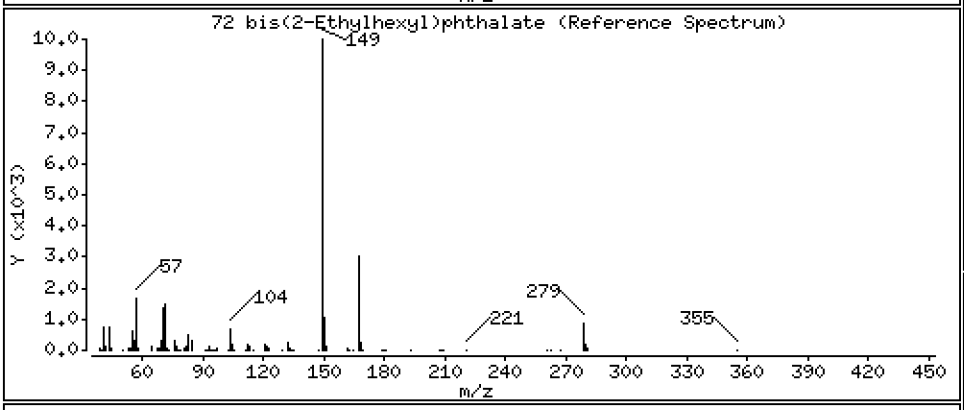
Concentration: 1.075 ug/mL

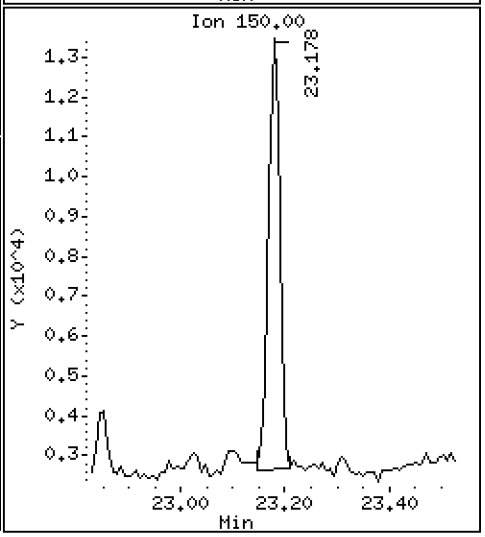


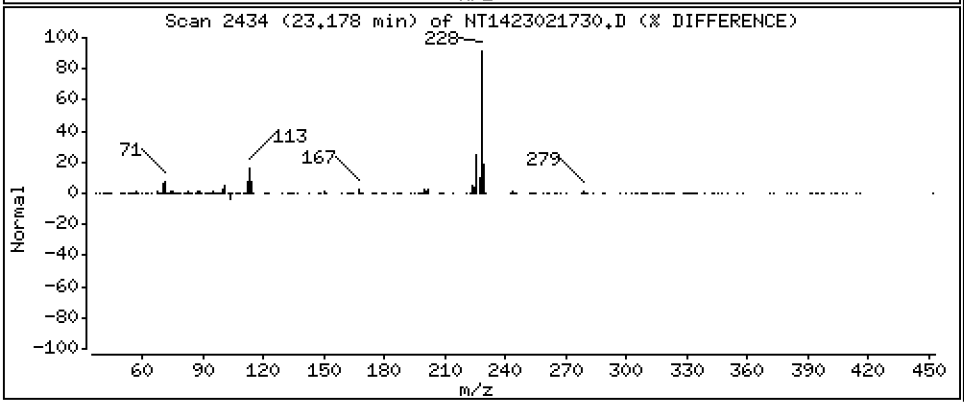












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

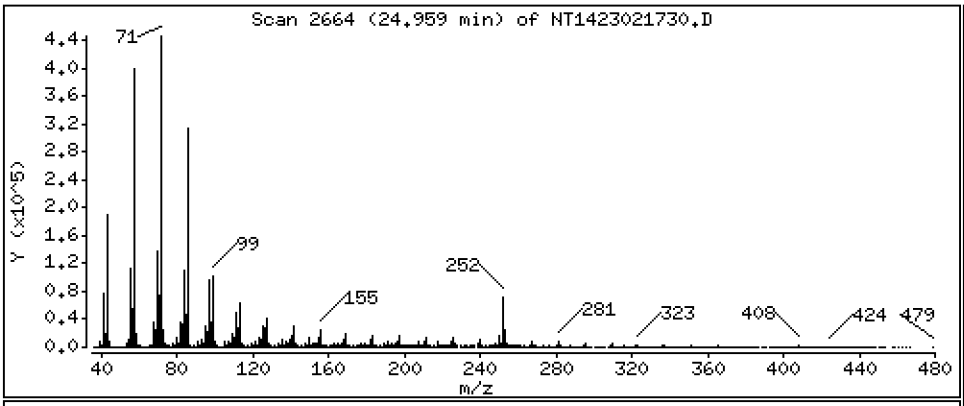
Operator: DSD

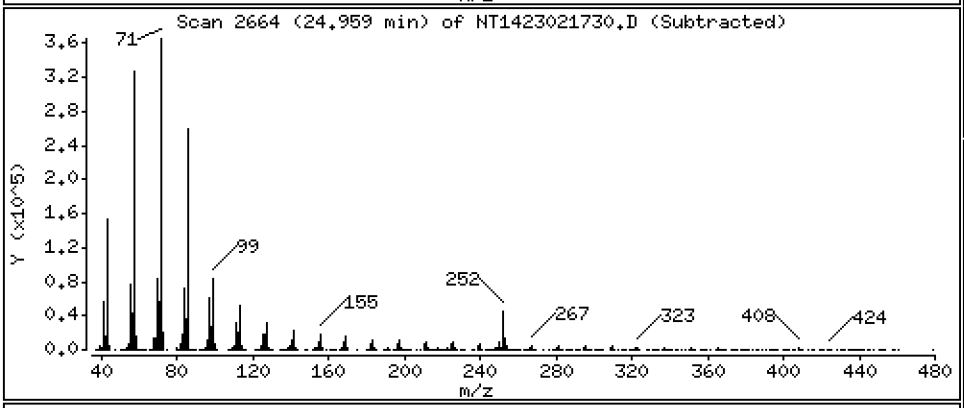
Column phase: ZB-5msi

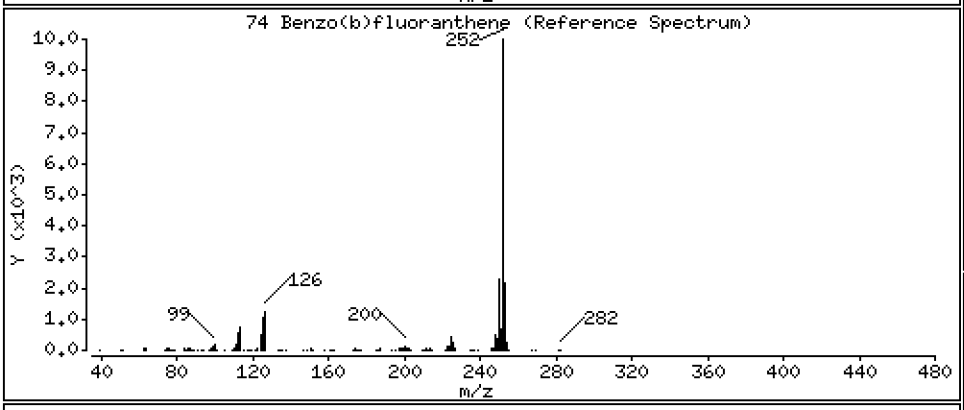
Column diameter: 0.25

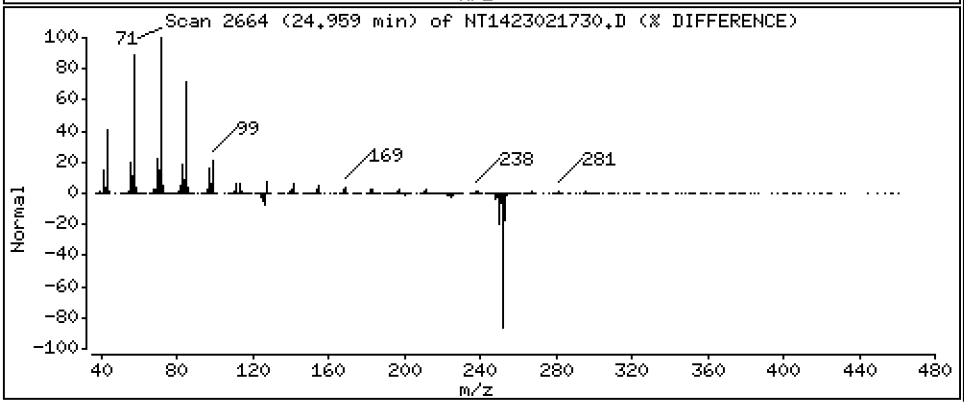
74 Benzo(b)fluoranthene

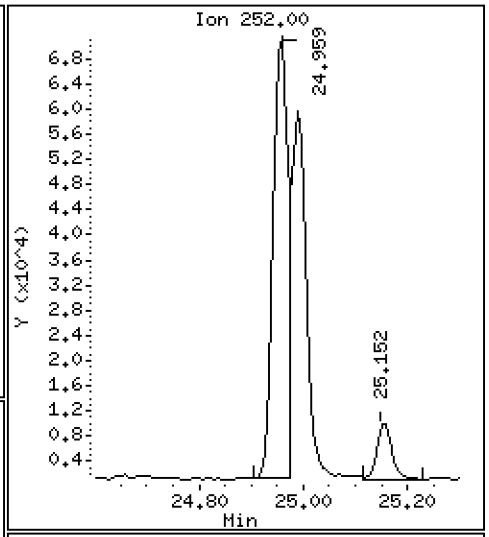
Concentration: 1.013 ug/mL

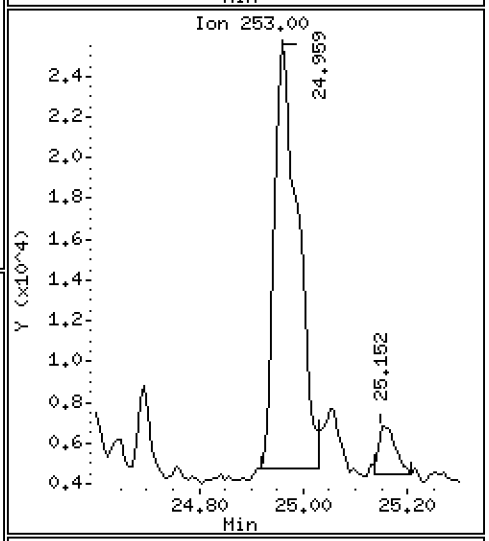


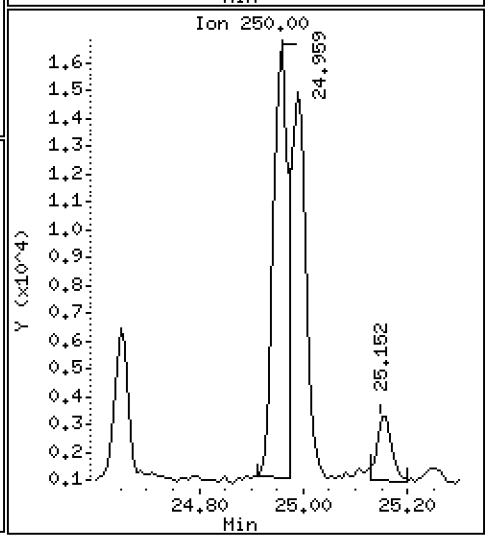












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

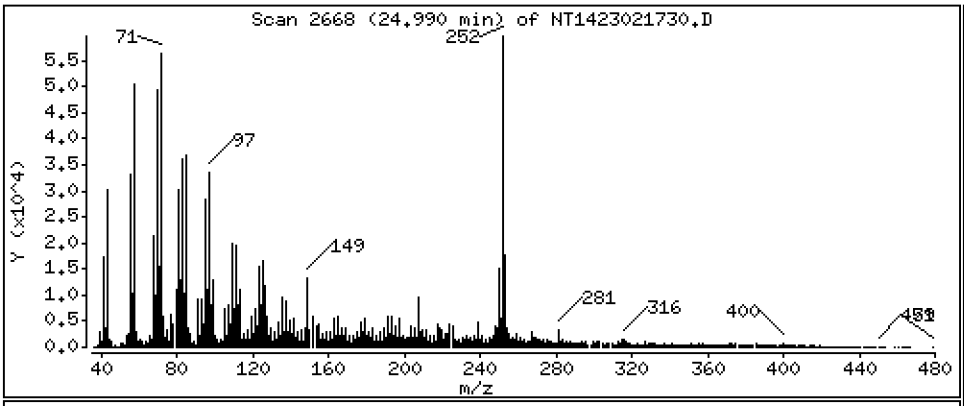
Operator: DSD

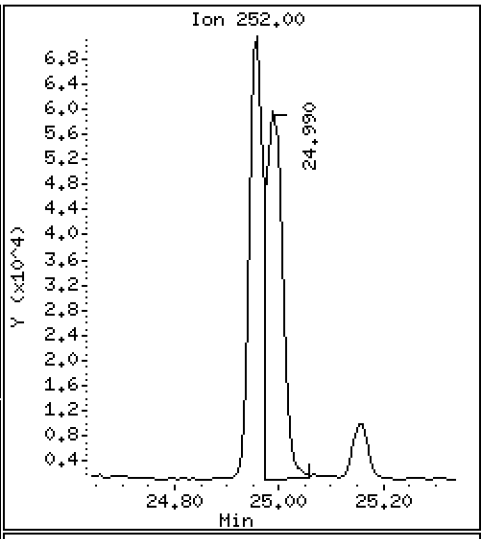
Column phase: ZB-5msi

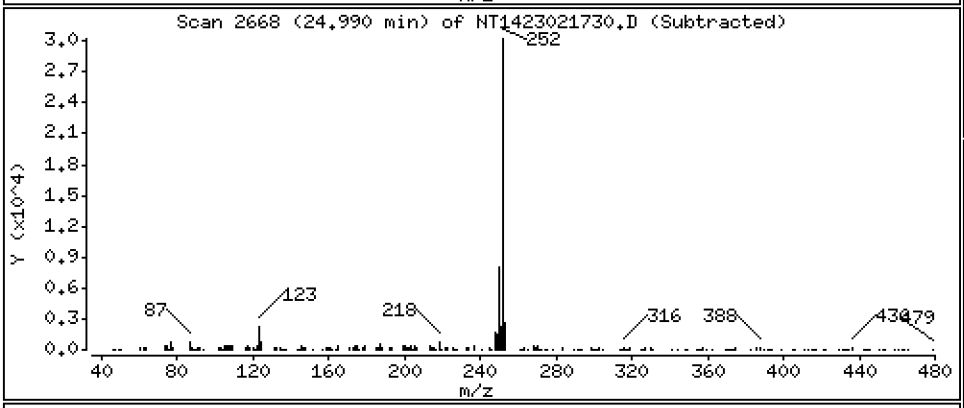
Column diameter: 0.25

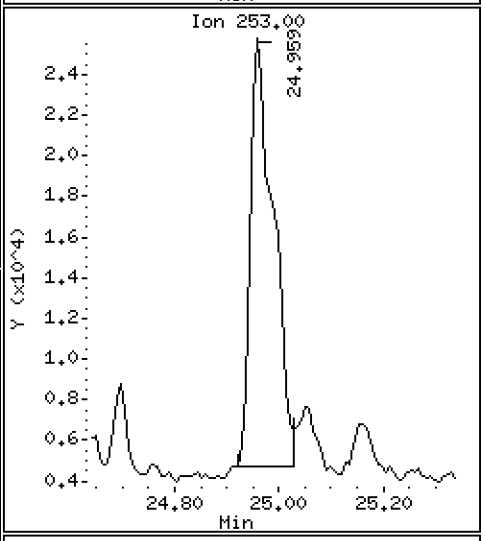
75 Benzo(k)fluoranthene

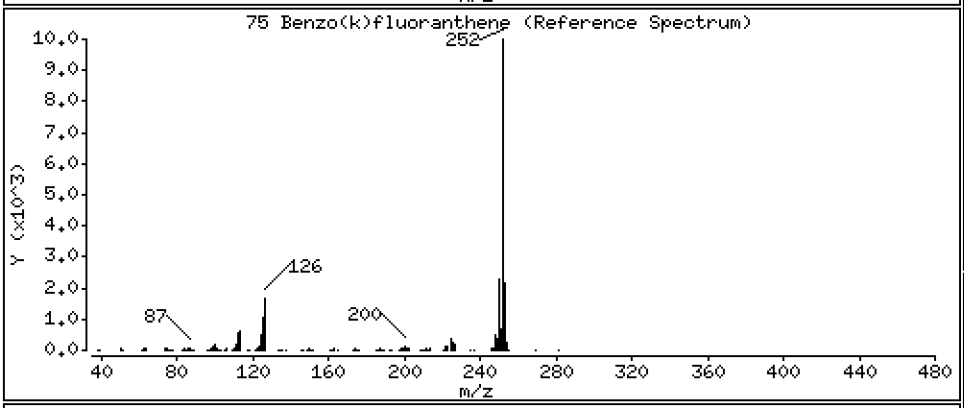
Concentration: 0.8833 ug/mL

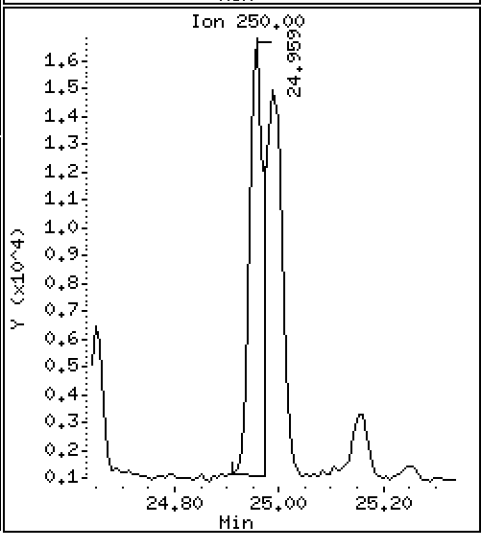


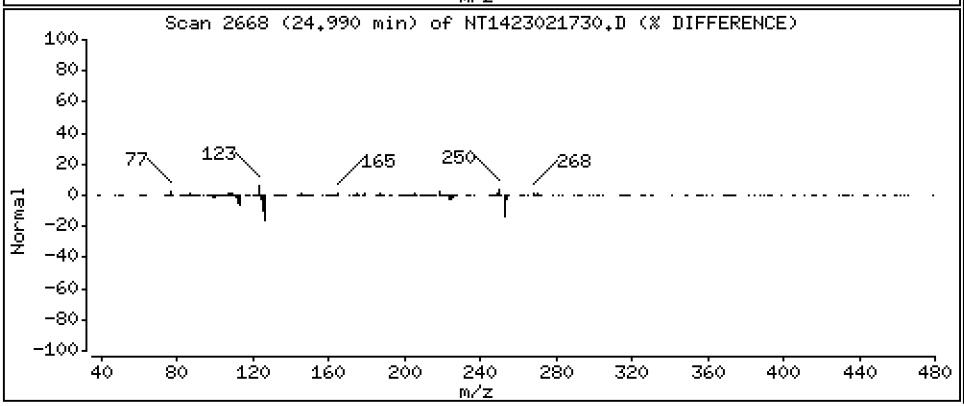












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

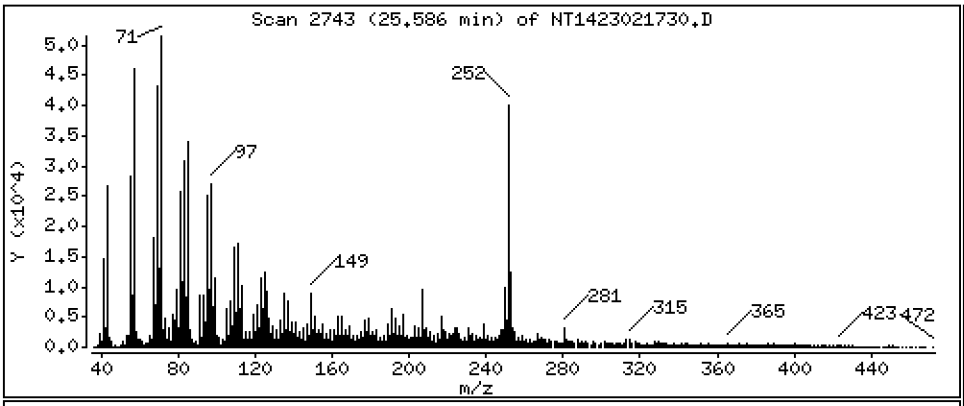
Operator: DSD

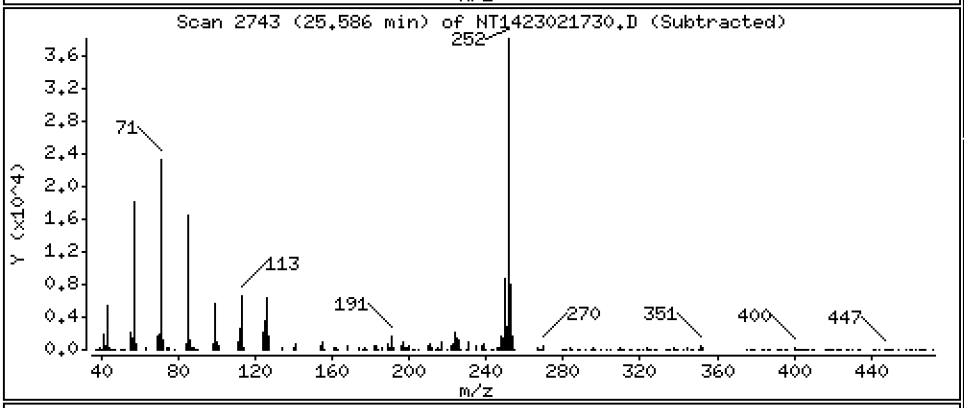
Column phase: ZB-5msi

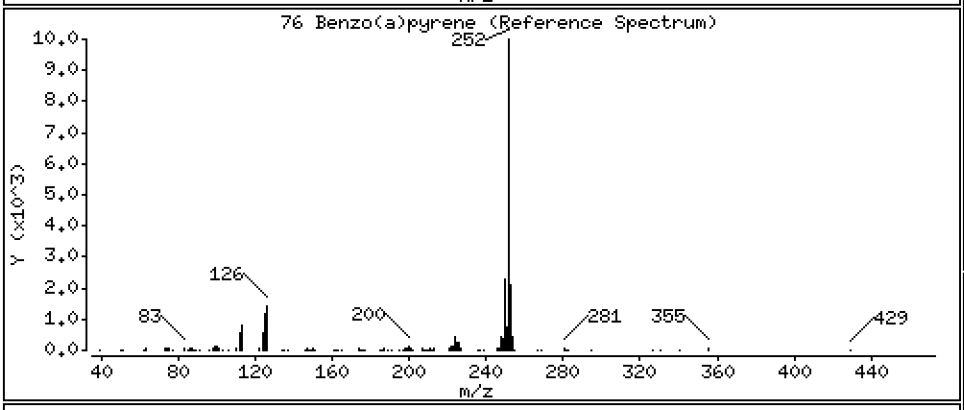
Column diameter: 0.25

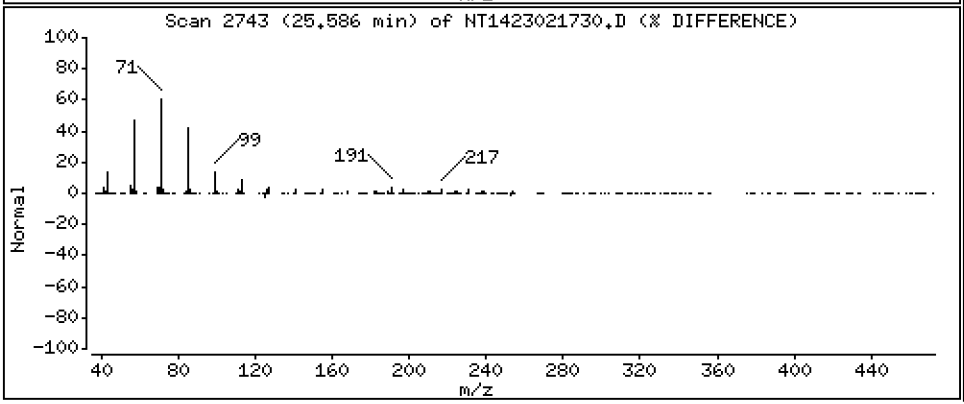
76 Benzo(a)pyrene

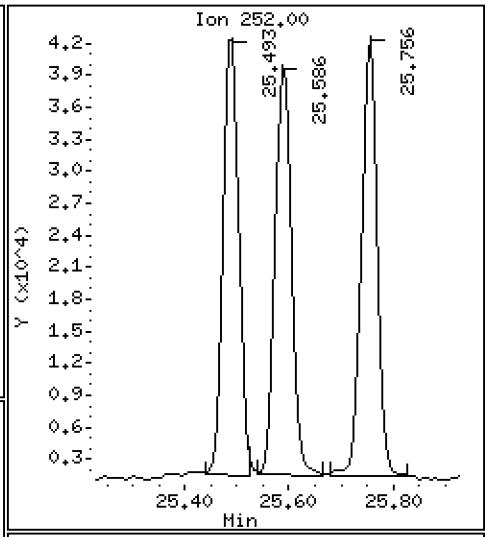
Concentration: 0.6329 ug/mL

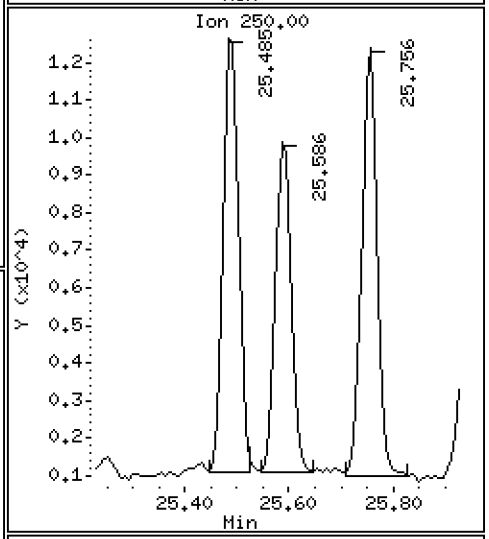


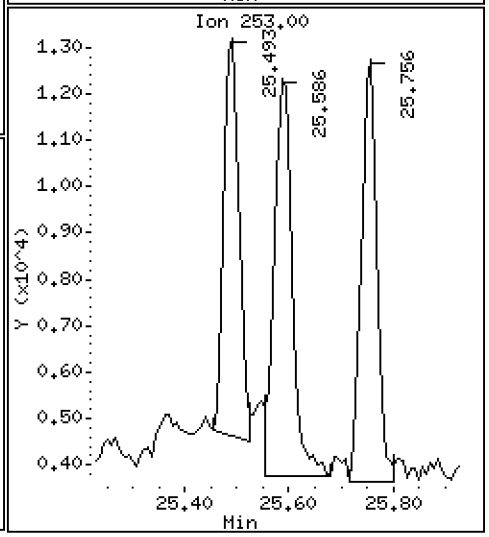












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

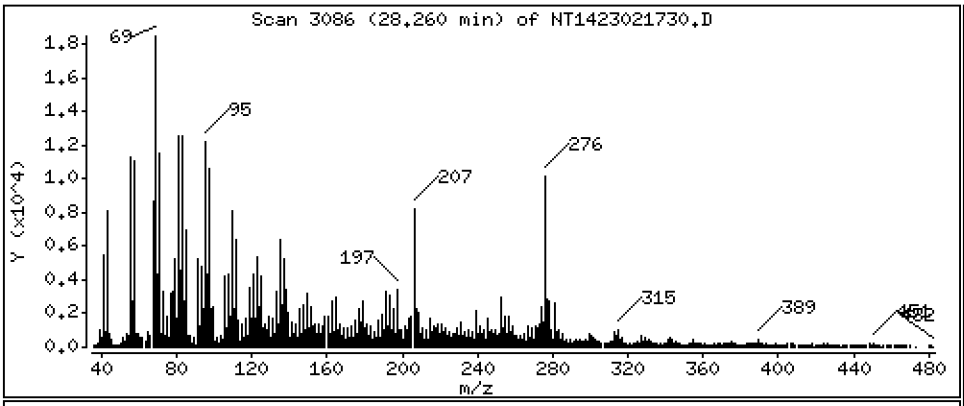
Operator: DSD

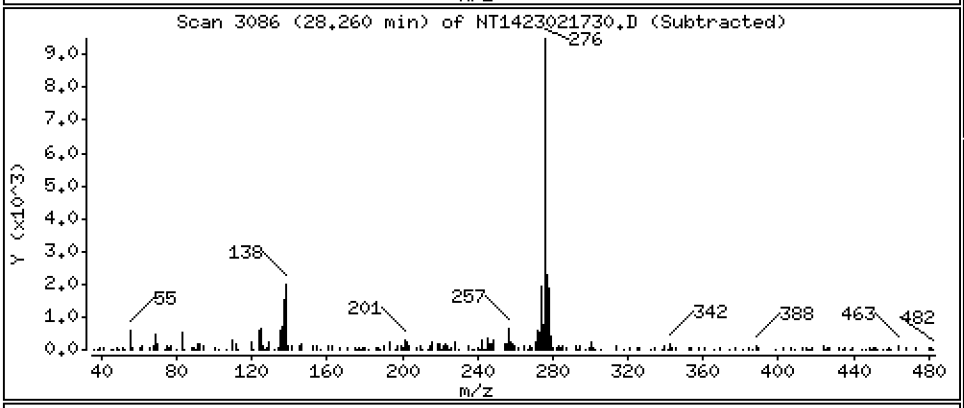
Column phase: ZB-5msi

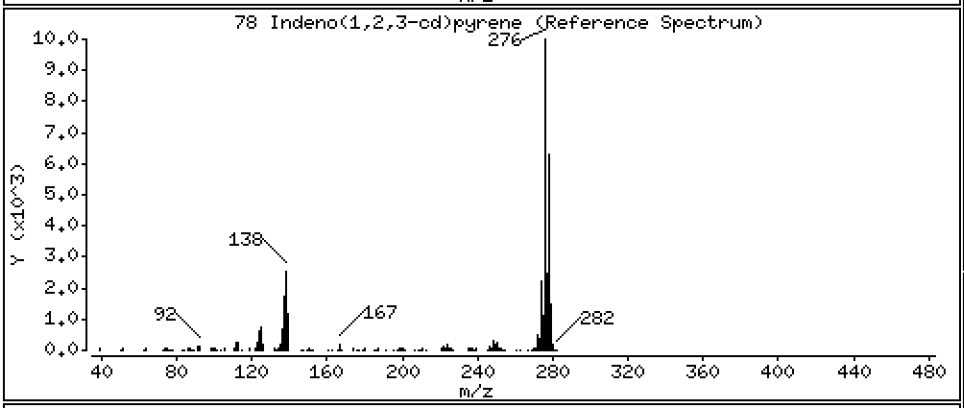
Column diameter: 0.25

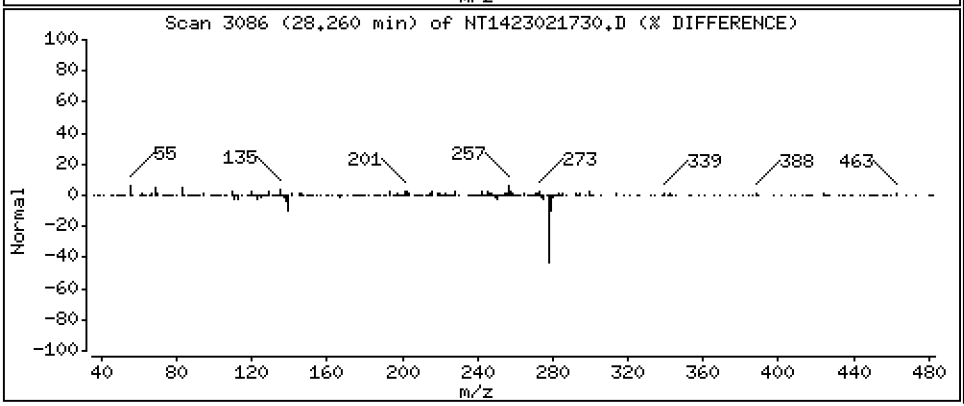
78 Indeno(1,2,3-cd)pyrene

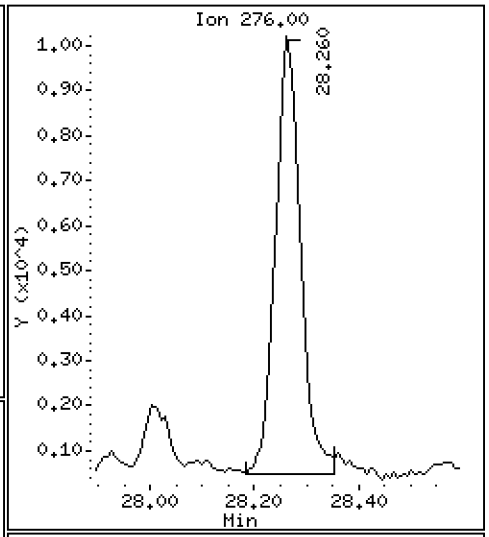
Concentration: 0.3115 ug/mL

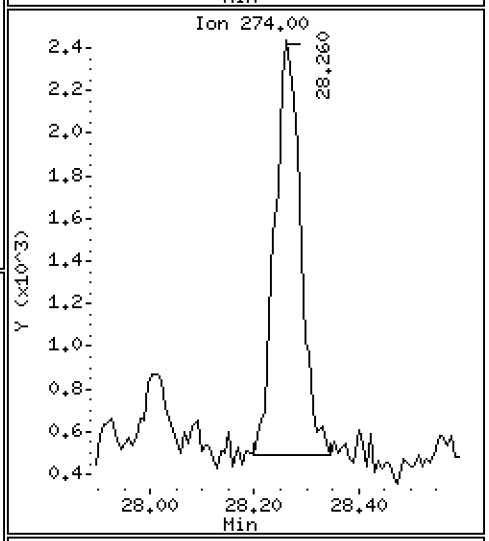


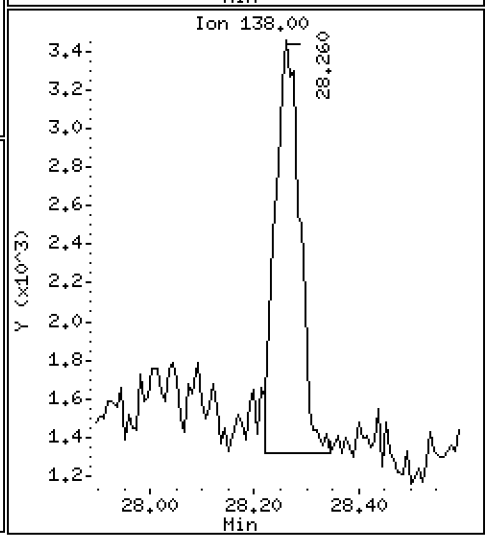












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

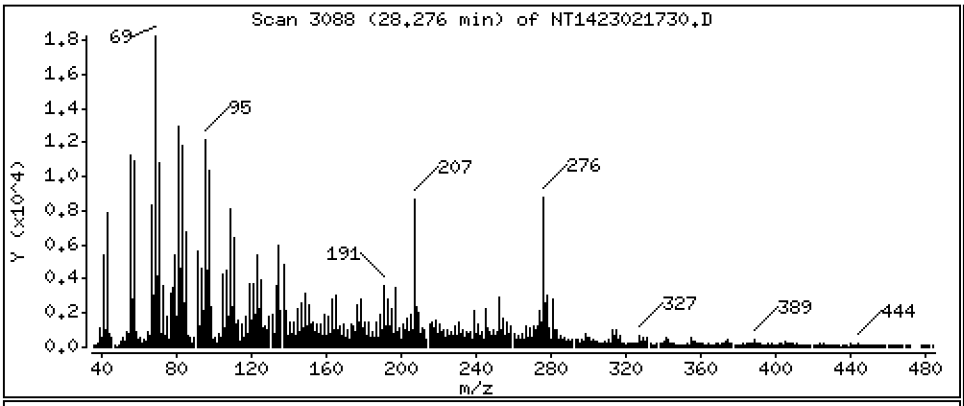
Operator: DSD

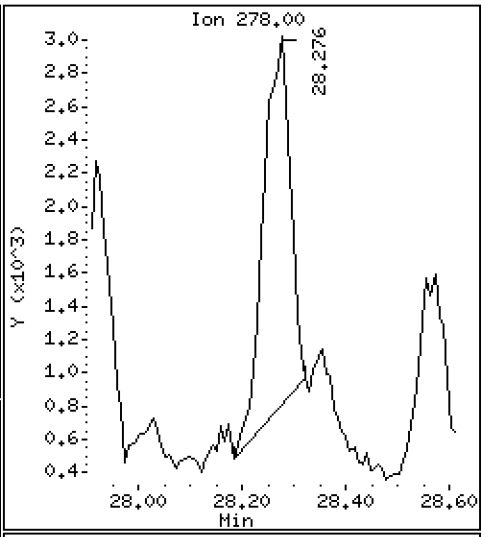
Column phase: ZB-5msi

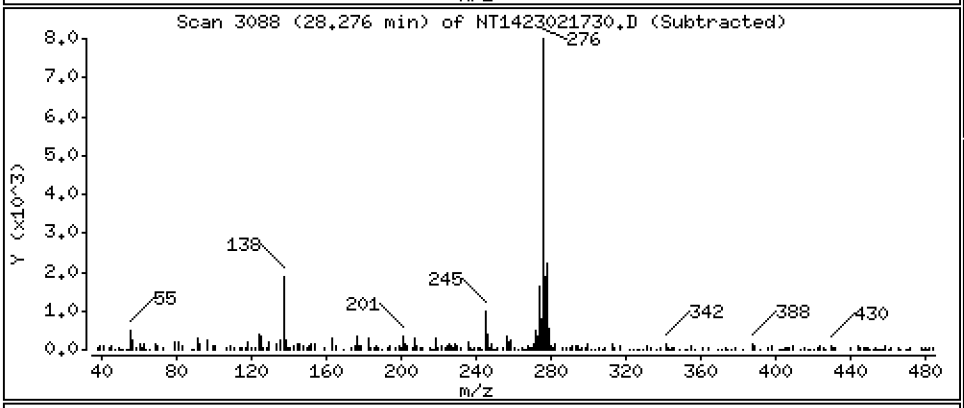
Column diameter: 0.25

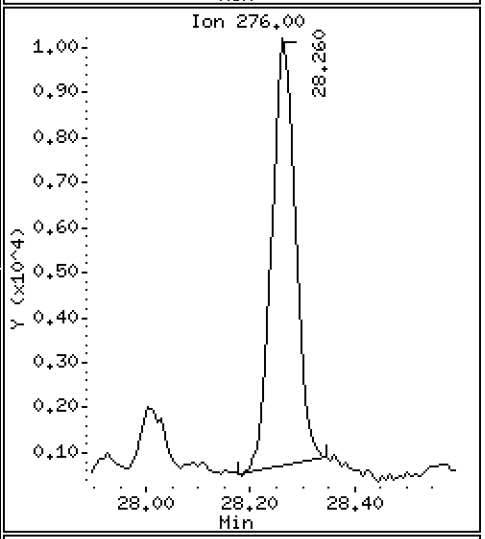
79 Dibenzo(a,h)anthracene

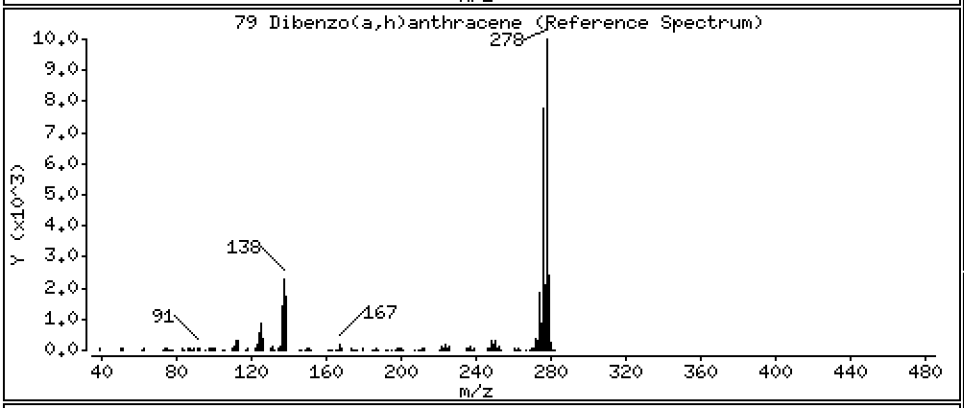
Concentration: 0.09047 ug/mL

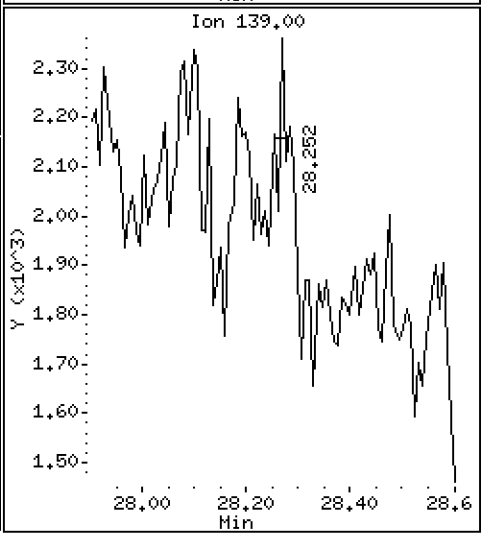


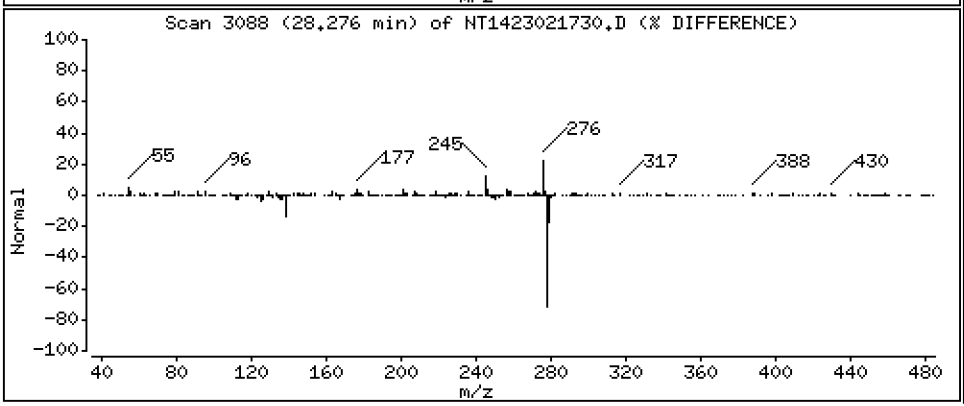












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

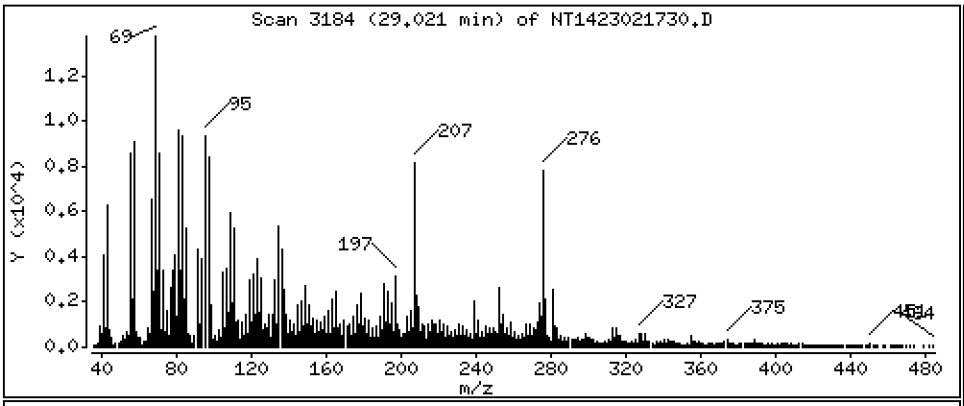
Operator: DSD

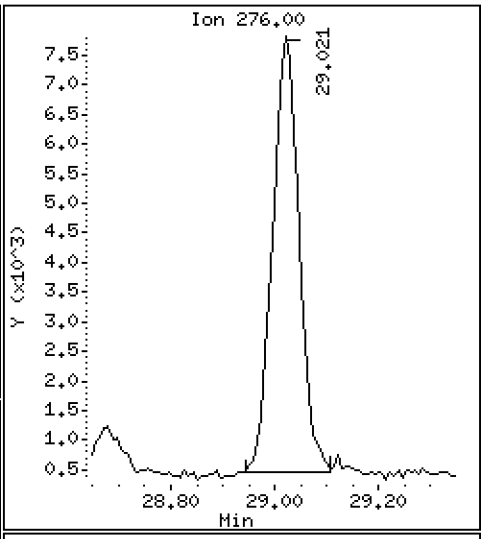
Column phase: ZB-5msi

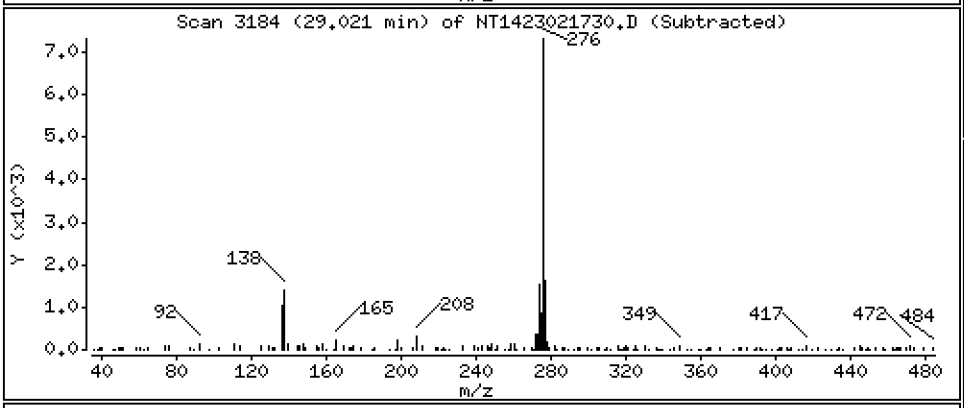
Column diameter: 0.25

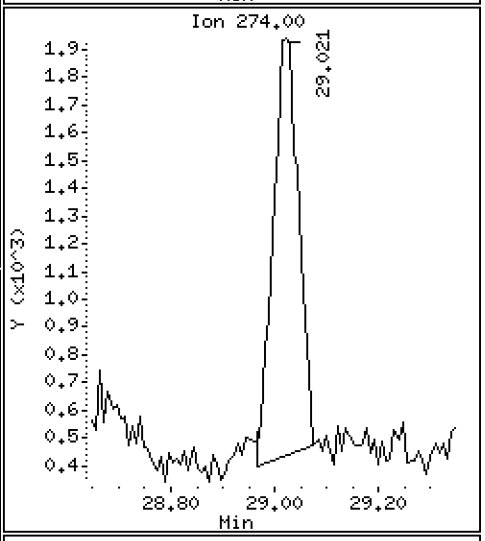
80 Benzo(g,h,i)perylene

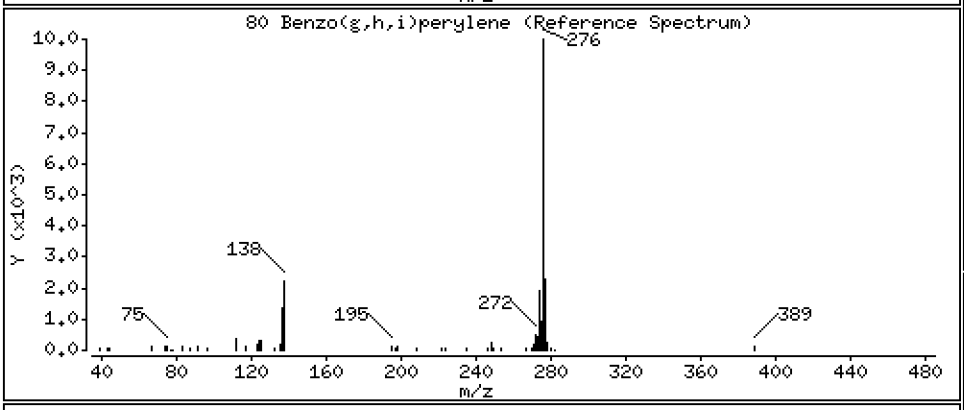
Concentration: 0.3066 ug/mL

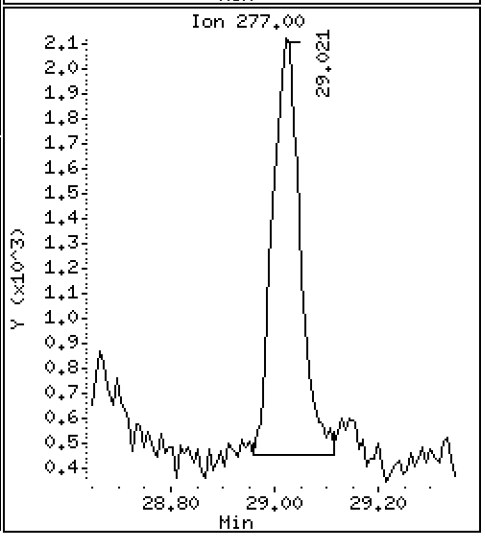


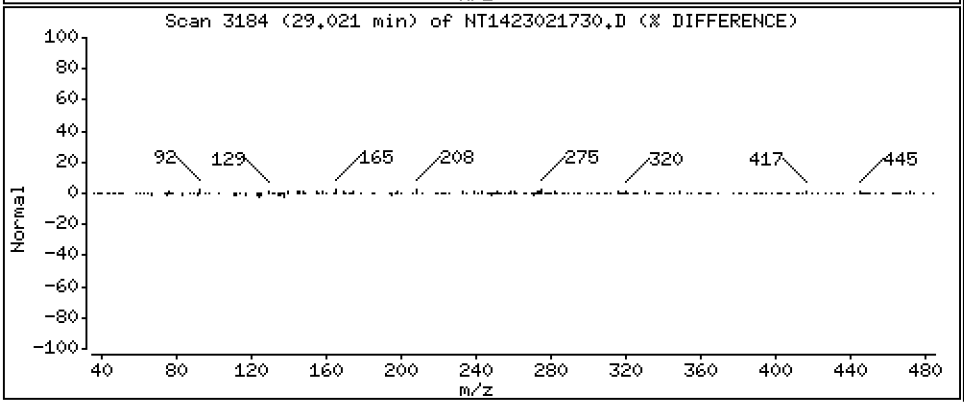












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

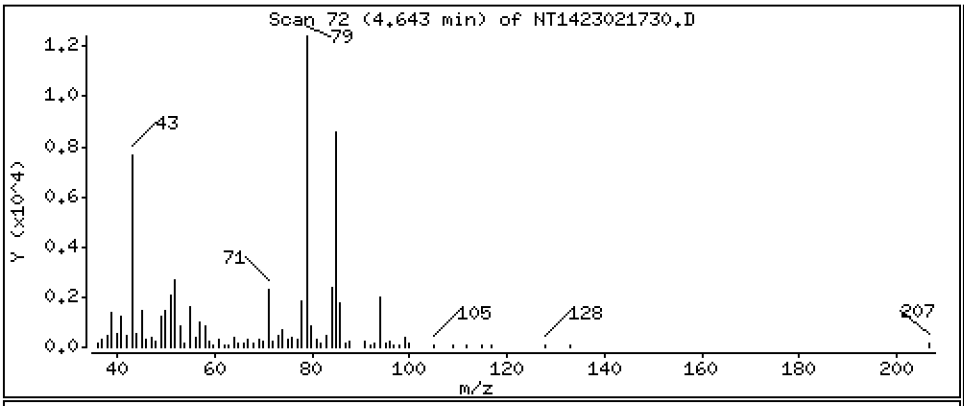
Operator: DSD

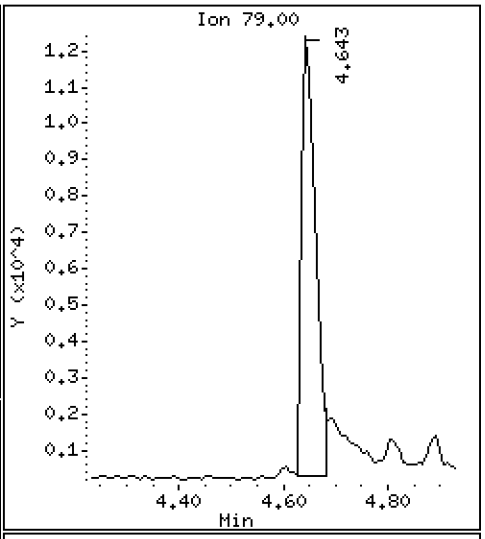
Column phase: ZB-5msi

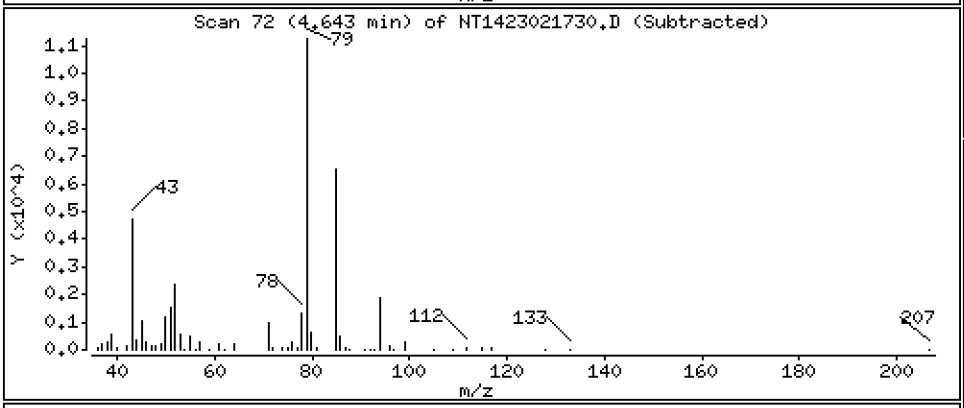
Column diameter: 0.25

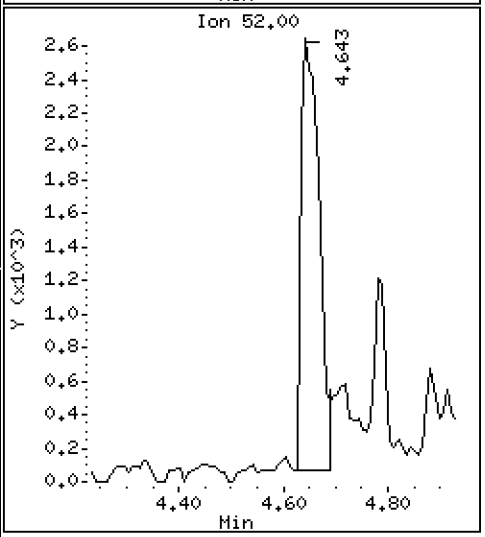
103 Pyridine

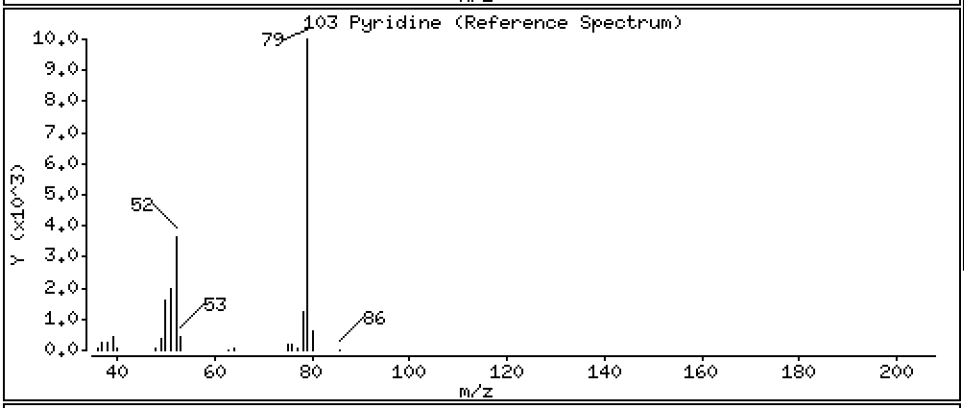
Concentration: 0.2365 ug/mL

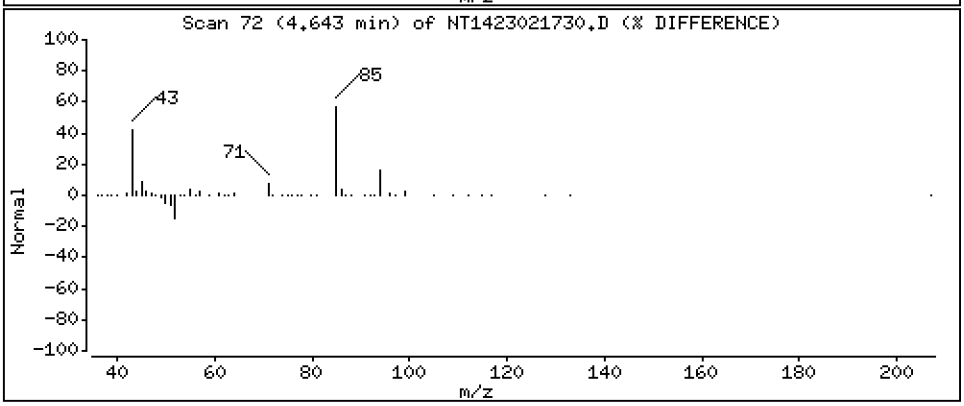












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

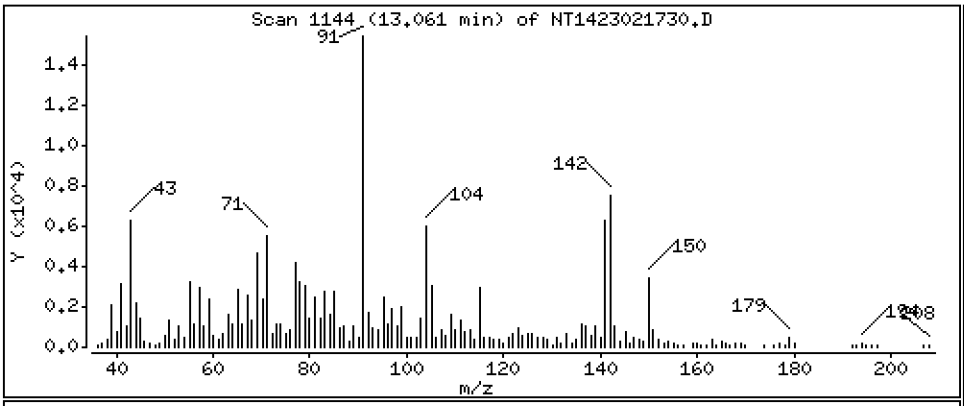
Operator: DSD

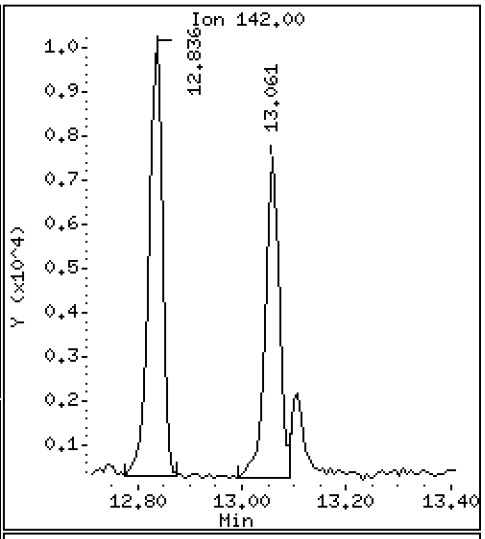
Column phase: ZB-5msi

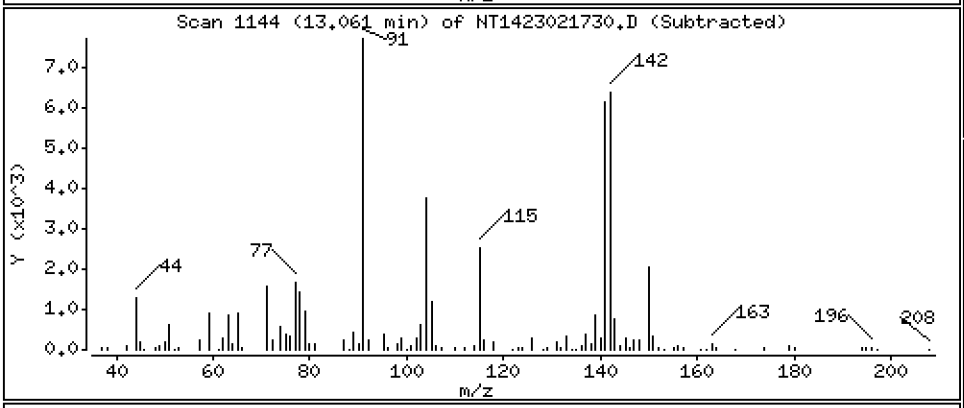
Column diameter: 0.25

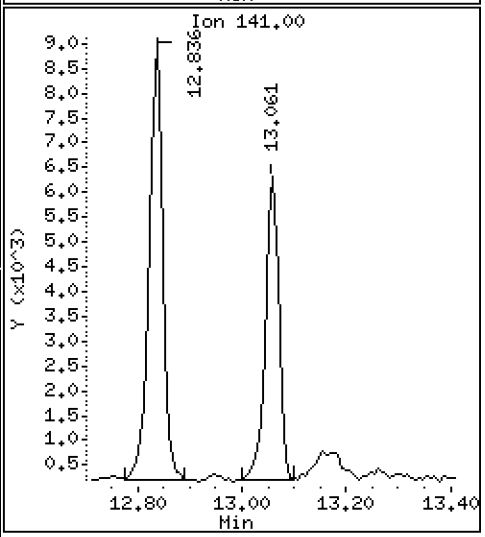
105 1-methylnaphthalene

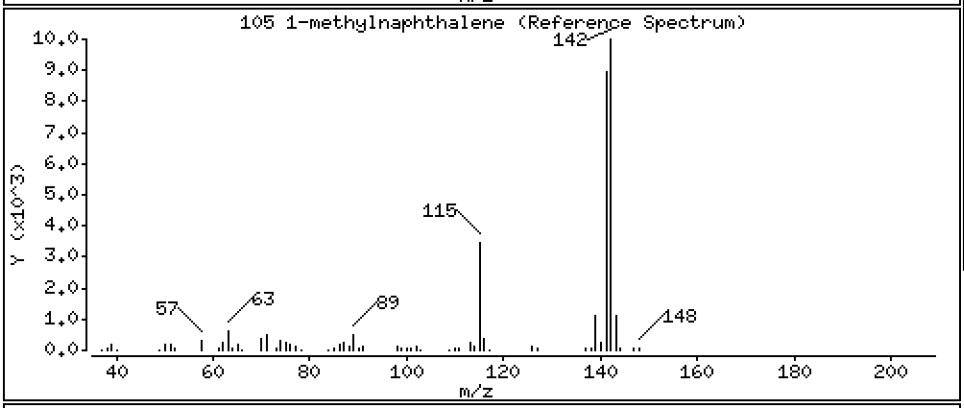
Concentration: 0.07333 ug/mL

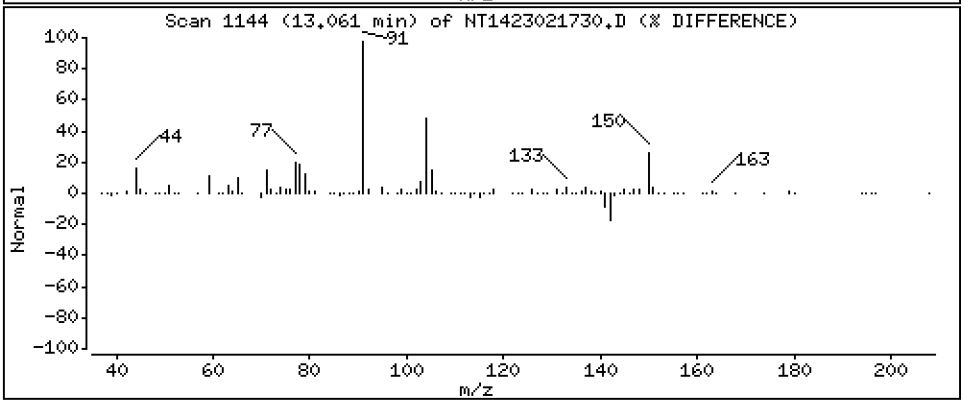












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

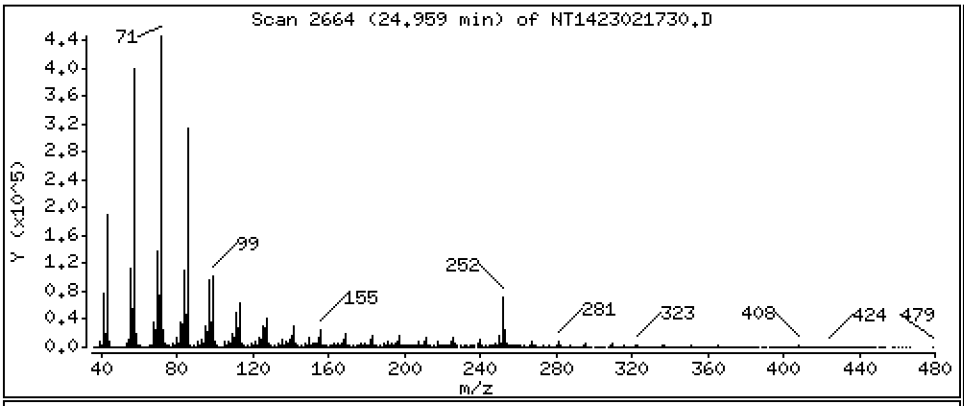
Operator: DSD

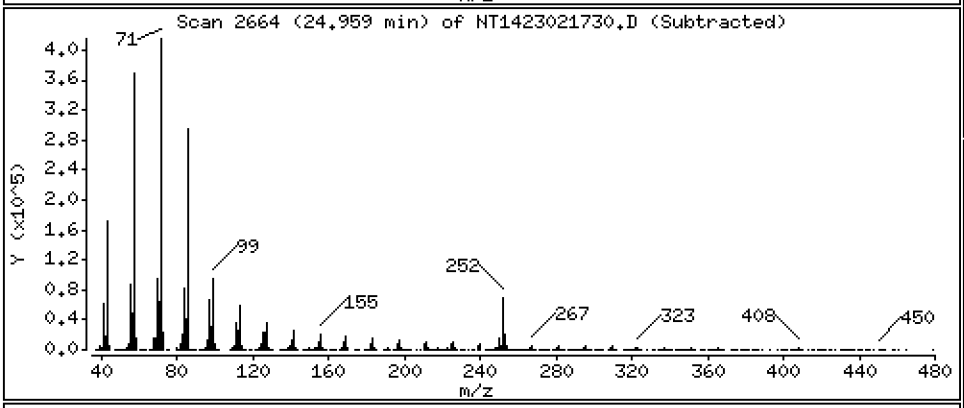
Column phase: ZB-5msi

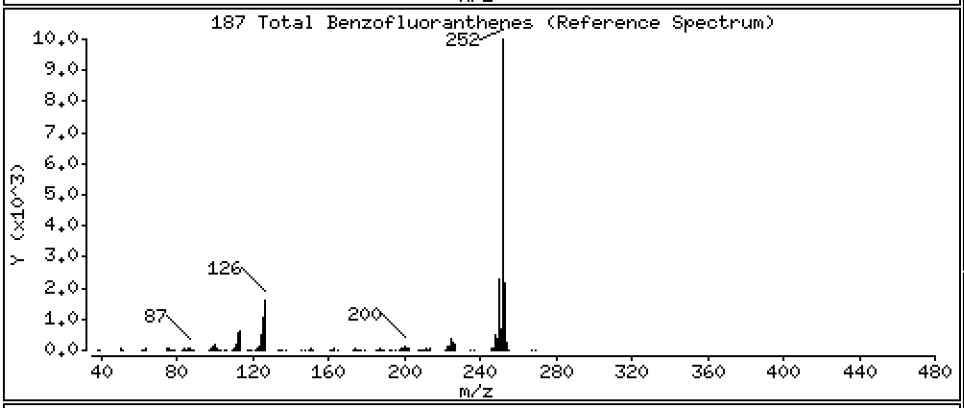
Column diameter: 0.25

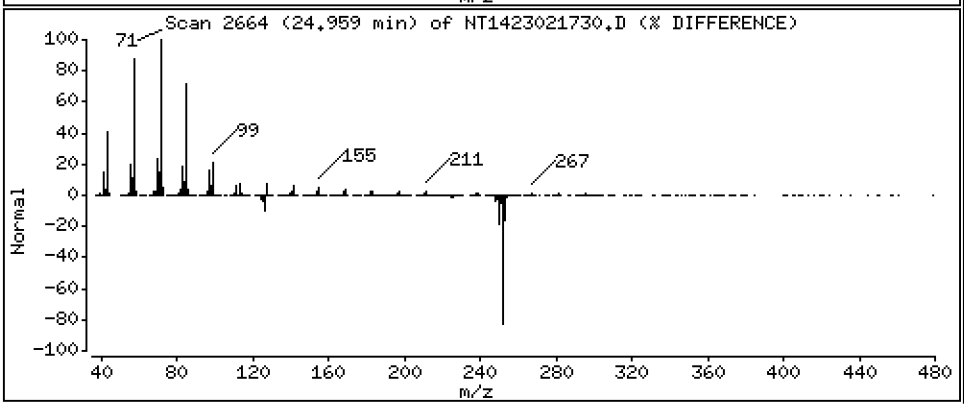
187 Total Benzofluoranthenes

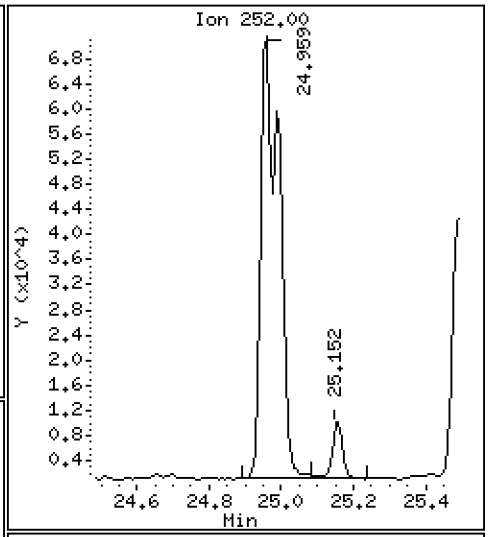
Concentration: 1.855 ug/mL

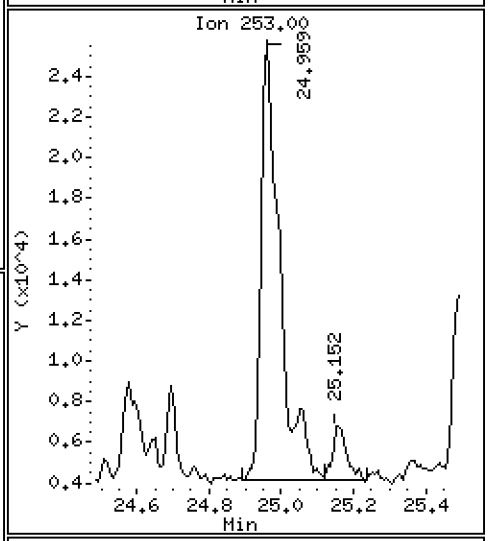


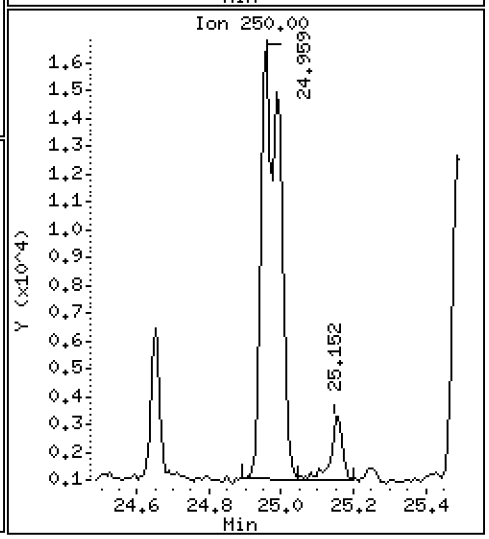












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230217A.b\NT1423021730.D
Lab Smp Id: 23A0171-01
Inj Date : 18-FEB-2023 04:06 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : 23A0171-01
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230217A.b\ABN.m
Meth Date : 01-Mar-2023 13:20 van Quant Type: ISTD
Cal Date : 16-FEB-2023 19:30 Cal File: NT1423021610.D
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$ 1	2-Fluorophenol	112	6.697	6.674	(0.752)	403373	5.21321	5.213
$ 2	Phenol-d5	99	8.281	8.273	(0.930)	600560	4.89280	4.893
3	Phenol	94	8.304	8.296	(0.933)	561309	4.31976	4.320
$ 5	2-Chlorophenol-d4	132	8.544	8.536	(0.960)	444384	5.07397	5.074
4	Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
6	2-Chlorophenol	128	Compound Not Detected.					
7	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 8	1,4-Dichlorobenzene-d4	152	8.900	8.900	(1.000)	289436	4.00000	
9	1,4-Dichlorobenzene	146	8.931	8.931	(1.003)	1315	0.01360	0.01360(M)
$ 10	1,2-Dichlorobenzene-d4	152	9.264	9.264	(1.041)	193796	2.95206	2.952
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	108	9.187	9.179	(1.032)	89244	1.22142	1.221
14	2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
13	2-Methylphenol	108	Compound Not Detected.					
17	Hexachloroethane	117	Compound Not Detected.					
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
15	4-Methylphenol	108	9.684	9.676	(1.088)	22456	0.23438	0.2344
$ 18	Nitrobenzene-d5	82	10.002	10.002	(0.878)	390301	3.27191	3.272
19	Nitrobenzene	77	Compound Not Detected.					
20	Isophorone	82	Compound Not Detected.					
21	2-Nitrophenol	139	Compound Not Detected.					
22	2,4-Dimethylphenol	107	Compound Not Detected.					
23	Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
24	Benzoic acid	105	10.902	11.010	(0.957)	105413	1.85051	1.851
25	2,4-Dichlorophenol	162	Compound Not Detected.					
26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
* 27	Naphthalene-d8	136	11.397	11.397	(1.000)	1032547	4.00000	
28	Naphthalene	128	11.436	11.436	(1.003)	33415	0.13125	0.1312
29	4-Chloroaniline	127	Compound Not Detected.					
30	Hexachlorobutadiene	225	Compound Not Detected.					
31	4-Chloro-3-methylphenol	107	Compound Not Detected.					
32	2-Methylnaphthalene	142	12.836	12.836	(1.126)	16765	0.08792	0.08792
33	Hexachlorocyclopentadiene	237	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$ 36	2-Fluorobiphenyl	172	13.625	13.625	(0.907)	803066	3.75850	3.759
37	2-Chloronaphthalene	162	Compound Not Detected.					
38	2-Nitroaniline	65	13.958	14.105	(0.929)	45399	0.80066	0.8007
39	Dimethylphthalate	163	Compound Not Detected.					
40	Acenaphthylene	152	Compound Not Detected.					
41	2,6-Dinitrotoluene	165	Compound Not Detected.					
* 42	Acenaphthene-d10	164	15.018	15.018	(1.000)	597209	4.00000	
43	3-Nitroaniline	138	Compound Not Detected.					
44	Acenaphthene	153	15.088	15.088	(1.005)	10935	0.06866	0.06866
45	2,4-Dinitrophenol	184	Compound Not Detected.					
46	Dibenzofuran	168	15.412	15.412	(1.026)	23558	0.09009	0.09009
47	4-Nitrophenol	109	Compound Not Detected.					
48	2,4-Dinitrotoluene	165	Compound Not Detected.					
50	Diethylphthalate	149	15.992	16.000	(1.065)	37372	0.15410	0.1541
49	Fluorene	166	16.131	16.131	(1.074)	20525	0.07506	0.07506
51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
52	4-Nitroaniline	138	Compound Not Detected.					
53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$ 55	2,4,6-Tribromophenol	330	16.663	16.663	(1.110)	188736	5.42545	5.425
56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
57	Hexachlorobenzene	284	Compound Not Detected.					
58	Pentachlorophenol	266	Compound Not Detected.					
* 59	Phenanthrene-d10	188	18.062	18.062	(1.000)	995420	4.00000	
60	Phenanthrene	178	18.108	18.108	(1.003)	130525	0.54568	0.5457
61	Anthracene	178	18.201	18.201	(1.008)	51151	0.21585	0.2158
62	Carbazole	167	18.542	18.534	(1.027)	14975	0.06963	0.06963
63	Di-n-butylphthalate	149	Compound Not Detected.					
64	Fluoranthene	202	20.522	20.499	(0.887)	270246	1.32141	1.321
65	Pyrene	202	20.940	20.924	(0.905)	266897	1.23417	1.234
$ 66	Terphenyl-d14	244	21.226	21.218	(0.918)	624782	4.06896	4.069
67	Butylbenzylphthalate	149	Compound Not Detected.					
68	Benzo(a)anthracene	228	23.100	23.092	(0.999)	107218	0.70680	0.7068
* 69	Chrysene-d12	240	23.131	23.123	(1.000)	474035	4.00000	
70	3,3'-Dichlorobenzidine	252	22.814	23.054	(0.986)	3727	0.08026	0.08026
71	Chrysene	228	23.170	23.170	(1.002)	163251	1.19646	1.196
72	bis(2-Ethylhexyl)phthalate	149	23.178	23.177	(0.959)	126212	1.07503	1.075
* 134	Di-n-octylphthalate-d4	153	24.161	24.153	(1.000)	686890	4.00000	
73	Di-n-octylphthalate	149	Compound Not Detected.					
74	Benzo(b)fluoranthene	252	24.958	24.950	(0.971)	138868	1.01296	1.013
75	Benzo(k)fluoranthene	252	24.989	24.989	(0.972)	129387	0.88326	0.8833(M)
76	Benzo(a)pyrene	252	25.585	25.577	(0.995)	82259	0.63294	0.6329
* 77	Perylene-d12	264	25.701	25.694	(1.000)	432041	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	28.260	28.244	(1.100)	33300	0.31148	0.3115
79	Dibenzo(a,h)anthracene	278	28.275	28.259	(1.100)	7960	0.09047	0.09047(M)
80	Benzo(g,h,i)perylene	276	29.021	28.997	(1.129)	26583	0.30661	0.3066
90	N-Nitrosodimethylamine	74	Compound Not Detected.					
91	Aniline	93	Compound Not Detected.					
93	Benzidine	184	Compound Not Detected.					
103	Pyridine	79	4.643	4.581	(0.522)	22421	0.23653	0.2365
105	1-methylnaphthalene	142	13.060	13.060	(1.146)	13127	0.07333	0.07333
111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.958	24.989	(0.971)	248329	1.85537	1.855
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021730.D
Lab Smp Id: 23A0171-01
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230217A.b\ABN.m
Misc Info:

Calibration Date: 17-FEB-2023
Calibration Time: 20:19
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT				
	COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF	
8	1,4-Dichlorobenze	351756	175878	703512	289436	-17.72	
27	Naphthalene-d8	1299383	649692	2598766	1032547	-20.54	
42	Acenaphthene-d10	808045	404023	1616090	597209	-26.09	
59	Phenanthrene-d10	1607740	803870	3215480	995420	-38.09	
69	Chrysene-d12	876381	438191	1752762	474035	-45.91	
134	Di-n-octylphthala	1545452	772726	3090904	686890	-55.55	<-
77	Perylene-d12	639717	319859	1279434	432041	-32.46	

		RT LIMIT				
	COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8	1,4-Dichlorobenze	8.90	8.40	9.40	8.90	0.00
27	Naphthalene-d8	11.40	10.90	11.90	11.40	0.00
42	Acenaphthene-d10	15.02	14.52	15.52	15.02	0.00
59	Phenanthrene-d10	18.06	17.56	18.56	18.06	0.00
69	Chrysene-d12	23.12	22.62	23.62	23.13	0.03
134	Di-n-octylphthala	24.15	23.65	24.65	24.16	0.03
77	Perylene-d12	25.69	25.19	26.19	25.70	0.03

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

REVIEW SUMMARY FOR FILE - NT1423021730.D

Lab ID: 23A0171-01
nt14.i, ABN.m, 18-FEB-2023 04:06

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.957	0.966	-0.0095	Benzoic acid
0.929	0.939	-0.0098	2-Nitroaniline
0.986	0.997	-0.0107	3,3'-Dichlorobenzidine
0.522	0.515	0.0070	Pyridine

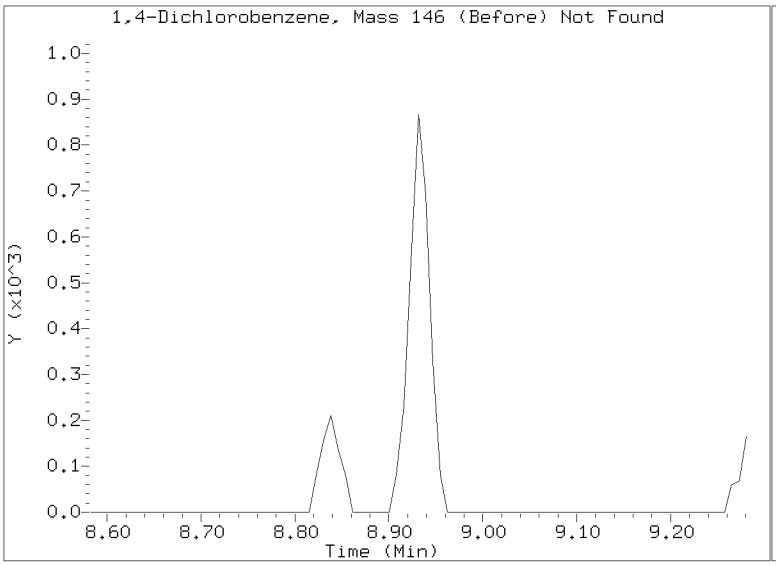
RRT check based on Ccal File: NT1423021717.D

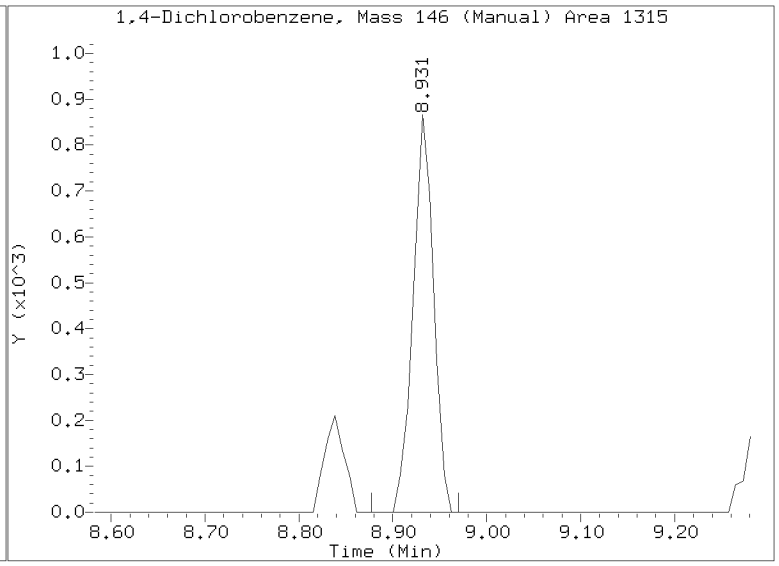
On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

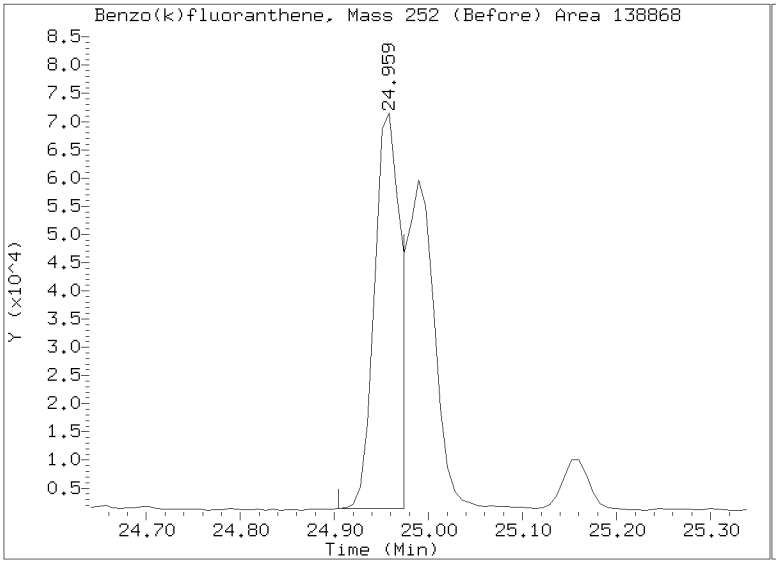
* Only compounds listed in the work order have been verified by the analyst *

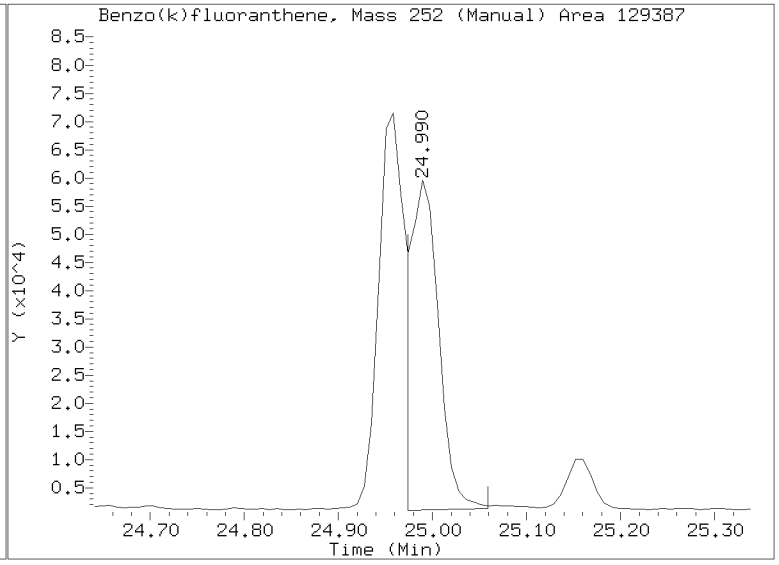
Quant Ion Manual Peak Adjustment Report

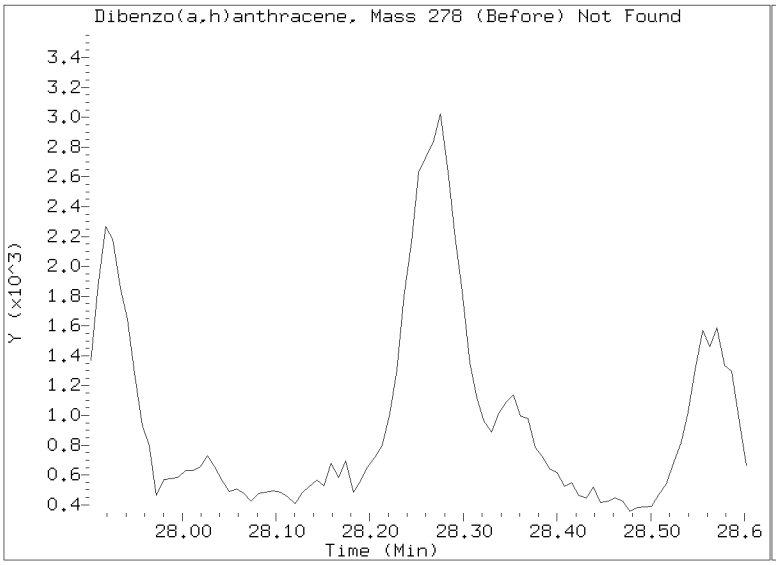
Datafile: //target/share/chem3/nt14.i/20230217A.b/NT1423021730.D
Injection Date: 18-FEB-2023 04:06
Lab ID:23A0171-01 Client ID:
Report Date: 03/01/2023 13:23

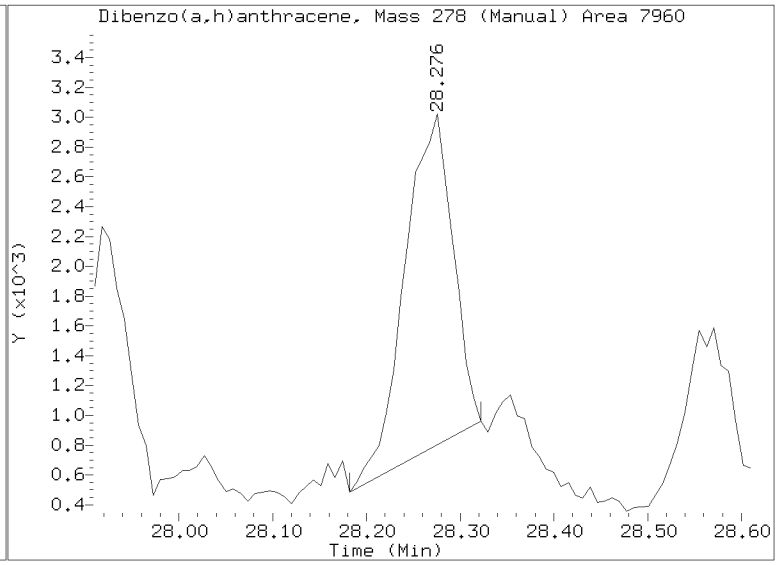












Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1254

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-01RE1 A	SDG:	23A0171
Sampled:	12/08/22 08:39	Prepared:	01/18/23 13:47	File ID:	NT1423022127.D
% Solids:	42.83	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/22/23 05:07
Batch:	BLA0339	Sequence:	SLB0291	Initial/Final:	23.8 g Wet / 1 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	GB00046
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	419		4.3	19.6
106-44-5	4-Methylphenol	1	25.5		7.2	19.6
91-20-3	Naphthalene	1	13.1	J	4.2	19.6
91-57-6	2-Methylnaphthalene	1	8.2	J	4.4	19.6
208-96-8	Acenaphthylene	1	19.6	U	6.1	19.6
131-11-3	Dimethylphthalate	1	19.6	U	4.3	19.6
83-32-9	Acenaphthene	1	6.8	J	5.1	19.6
132-64-9	Dibenzofuran	1	19.6	U	13.9	19.6
86-73-7	Fluorene	1	19.6	U	14.3	19.6
85-01-8	Phenanthrene	1	56.5		8.6	19.6
120-12-7	Anthracene	1	21.0		7.1	19.6
206-44-0	Fluoranthene	1	125		6.0	19.6
129-00-0	Pyrene	1	120		5.6	19.6
85-68-7	Butylbenzylphthalate	1	12.4	J	9.2	19.6
56-55-3	Benzo(a)anthracene	1	72.3		5.8	19.6
218-01-9	Chrysene	1	117		5.9	19.6
117-81-7	bis(2-Ethylhexyl)phthalate	1	121	Q	5.4	49.1
	Benzofluoranthenes, Total	1	183		9.8	39.2
50-32-8	Benzo(a)pyrene	1	61.1		4.1	19.6
193-39-5	Indeno(1,2,3-cd)pyrene	1	42.0		14.4	19.6
53-70-3	Dibenzo(a,h)anthracene	1	19.6	U	16.9	19.6
191-24-2	Benzo(g,h,i)perylene	1	49.9		13.3	19.6

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	735.76	486	66.1	27 - 120	
Phenol-d5	735.76	461	62.7	29 - 120	
2-Chlorophenol-d4	735.76	471	64.0	31 - 120	
1,2-Dichlorobenzene-d4	490.51	271	55.3	32 - 120	
Nitrobenzene-d5	490.51	332	67.7	30 - 120	
2-Fluorobiphenyl	490.51	354	72.2	35 - 120	

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1254

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-01RE1 A	SDG:	23A0171
Sampled:	12/08/22 08:39	Prepared:	01/18/23 13:47	File ID:	NT1423022127.D
% Solids:	42.83	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/22/23 05:07
Batch:	BLA0339	Sequence:	SLB0291	Initial/Final:	23.8 g Wet / 1 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	GB00046
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	735.76	584	79.4	24 - 134	
p-Terphenyl-d14	490.51	422	85.9	37 - 120	

Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022127.D

Date : 22-FEB-2023 05:07

Client ID:

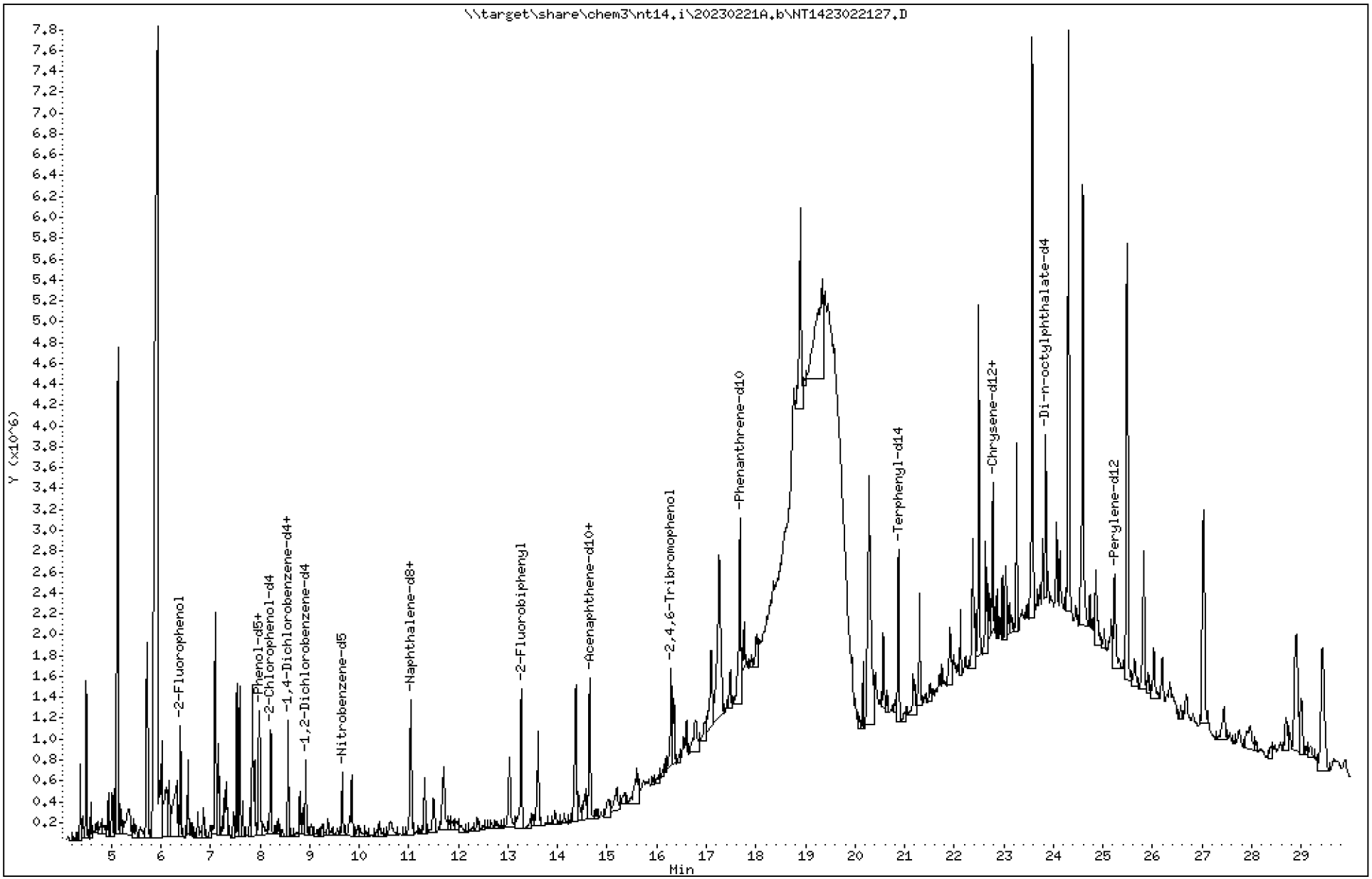
Instrument: nt14.i

Sample Info: 23A0171-01RE1

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022127.D

Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

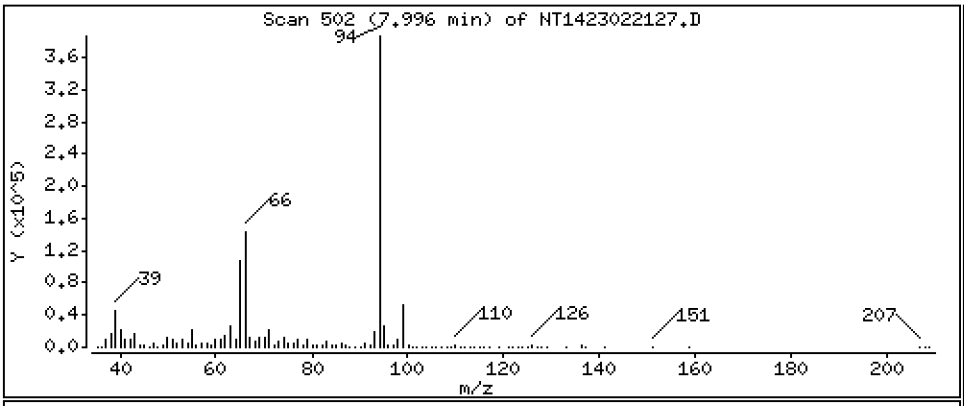
Operator: DSD

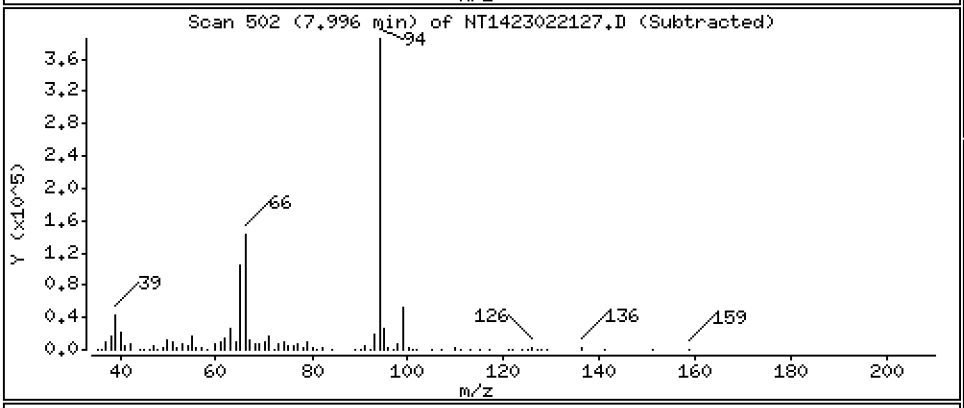
Column phase: ZB-5msi

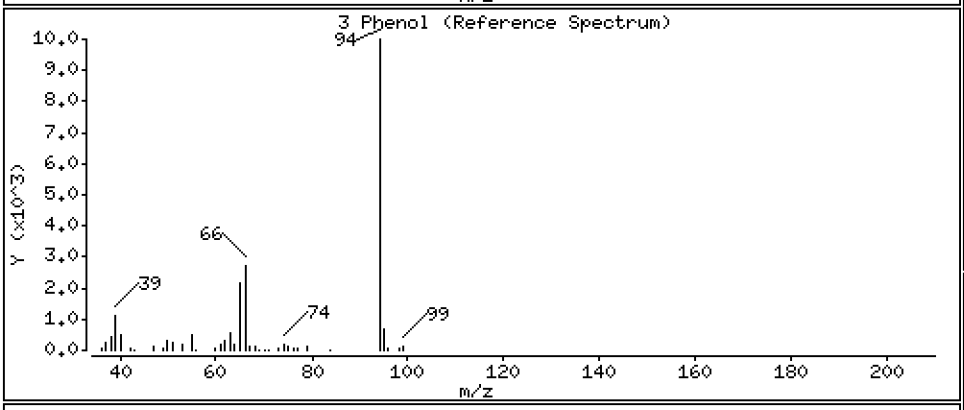
Column diameter: 0.25

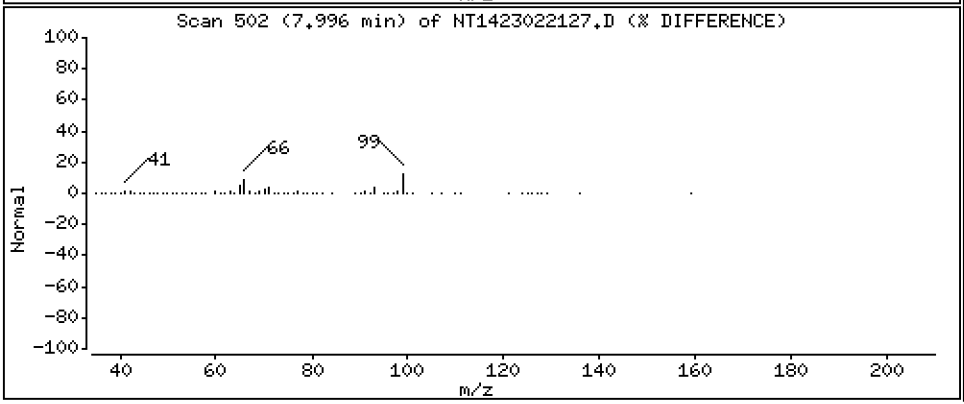
3 Phenol

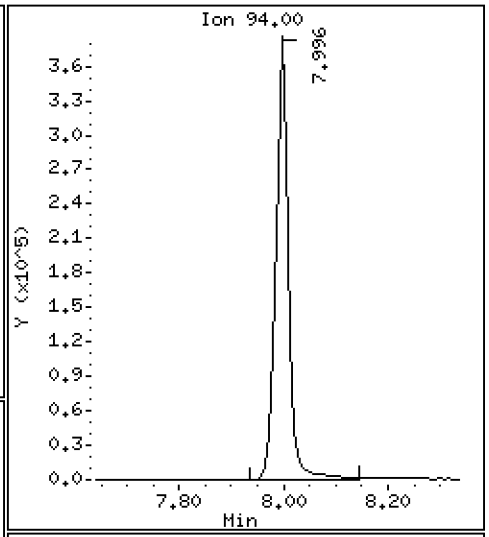
Concentration: 4.269 ug/mL

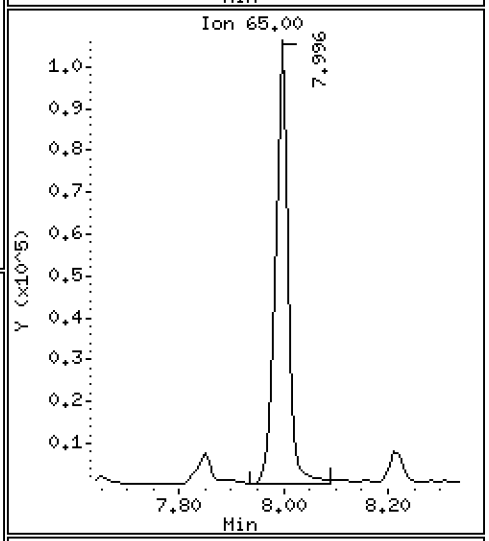


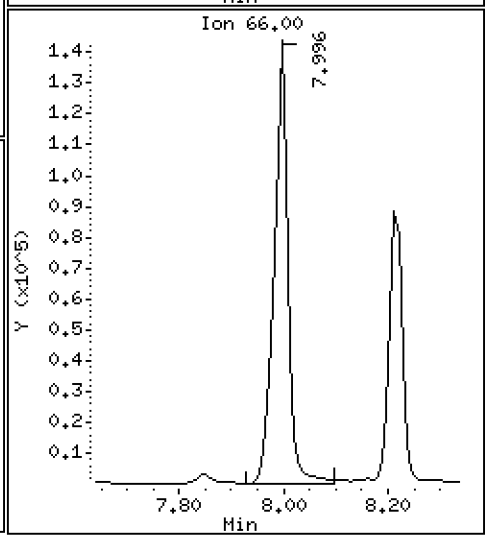












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

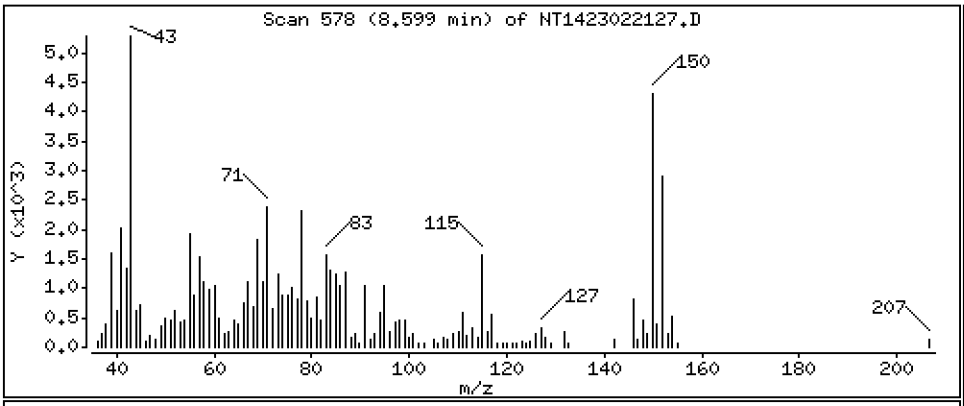
Operator: DSD

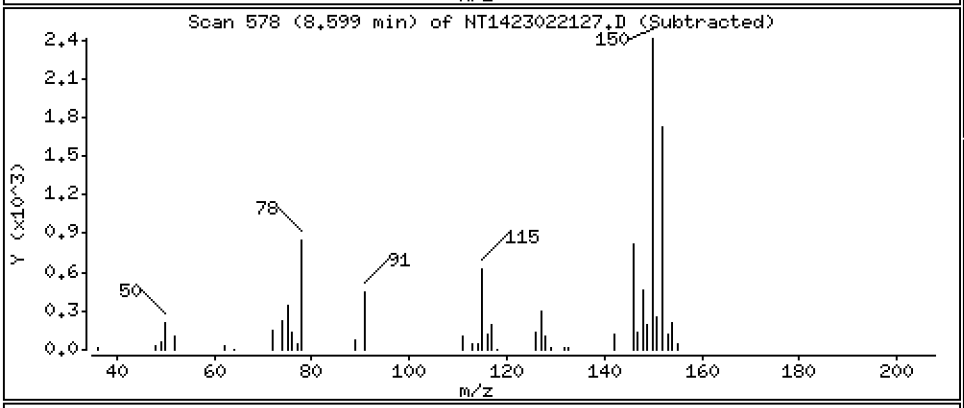
Column phase: ZB-5msi

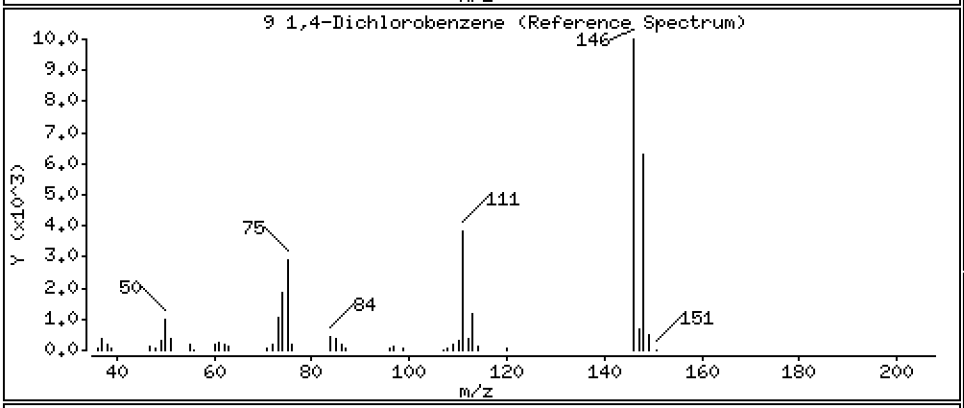
Column diameter: 0.25

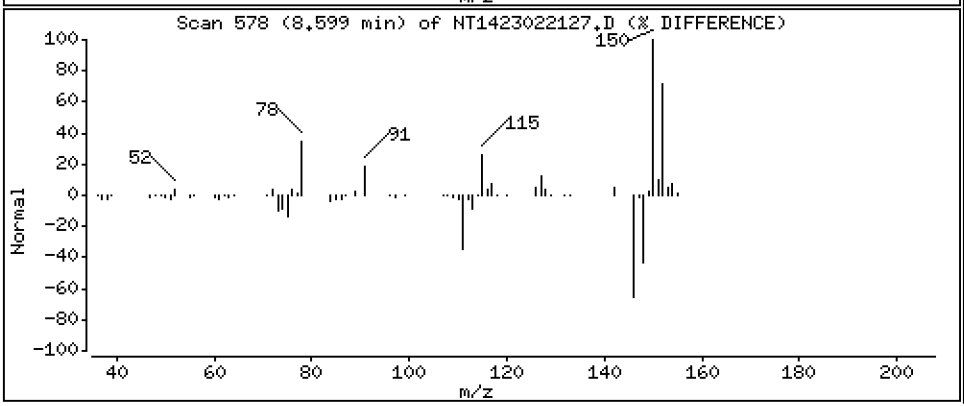
9 1,4-Dichlorobenzene

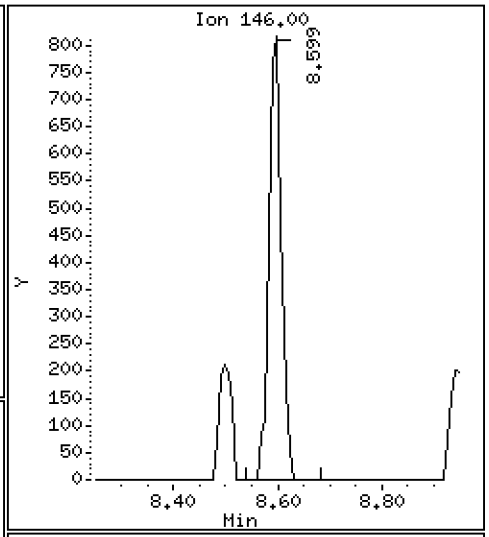
Concentration: 0.01239 ug/mL

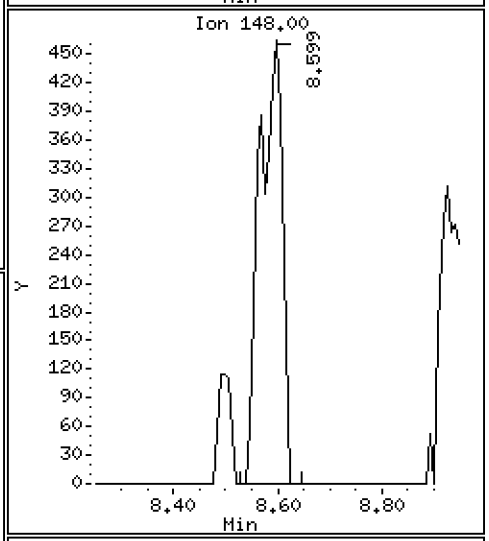


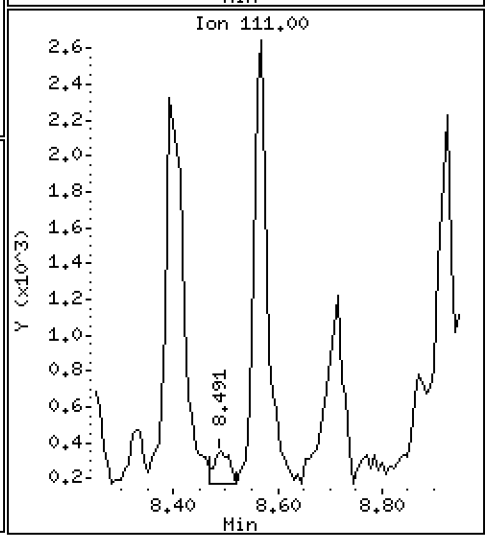












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

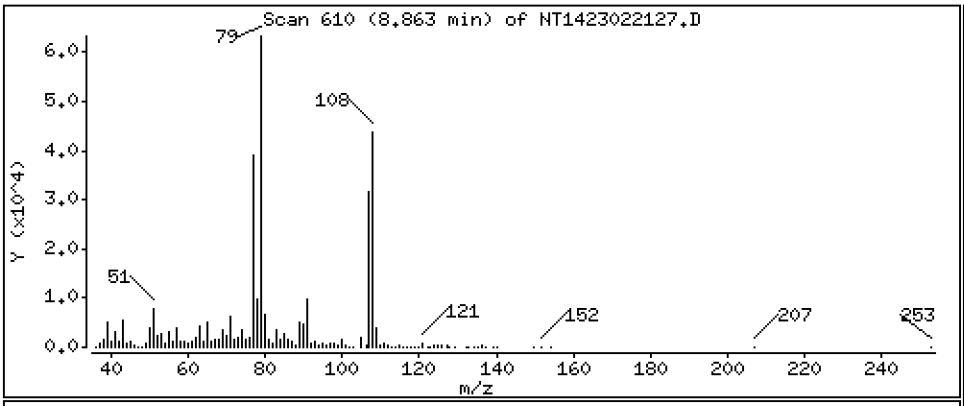
Operator: DSD

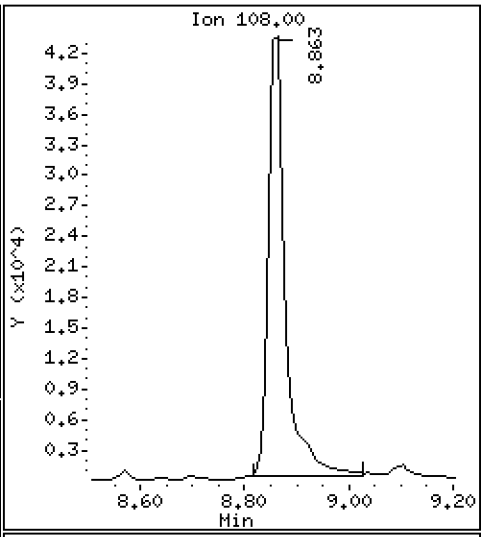
Column phase: ZB-5msi

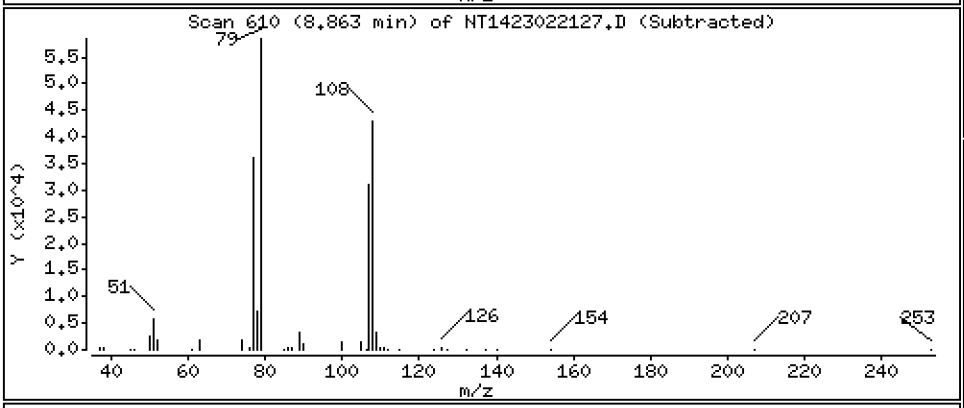
Column diameter: 0.25

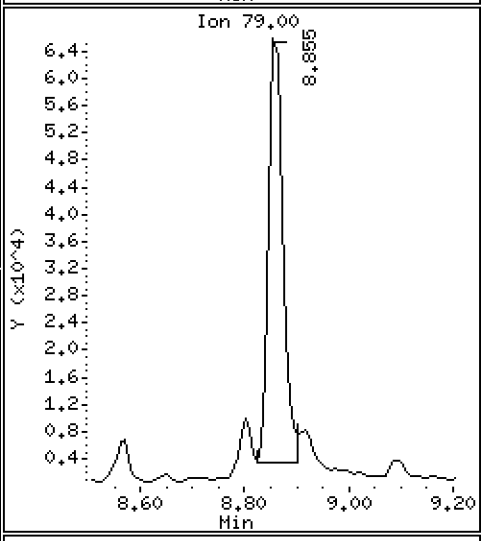
11 Benzyl alcohol

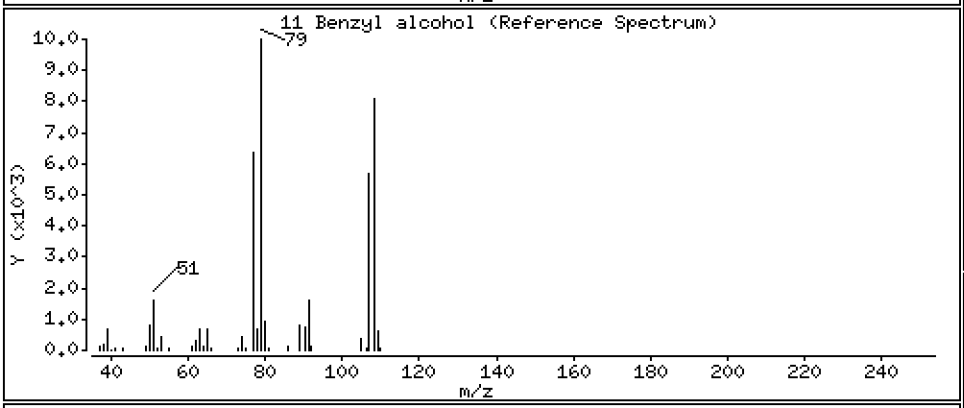
Concentration: 1.139 ug/mL

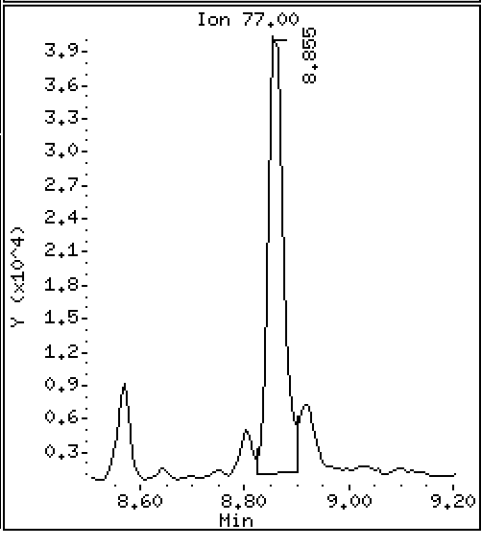


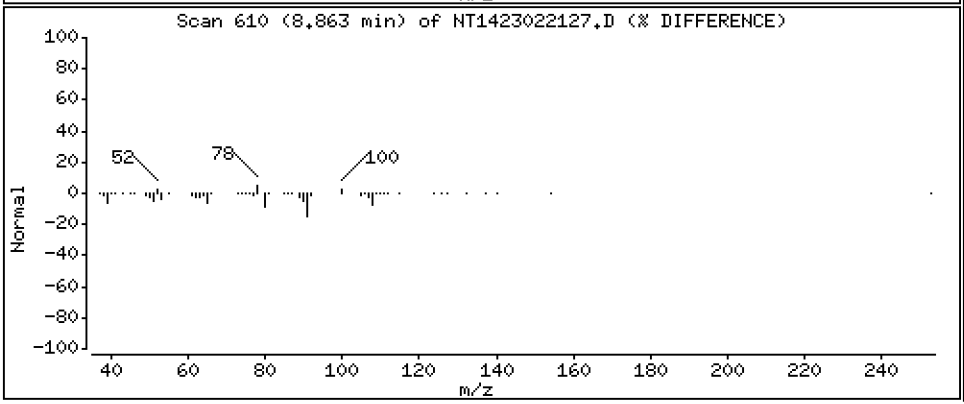












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

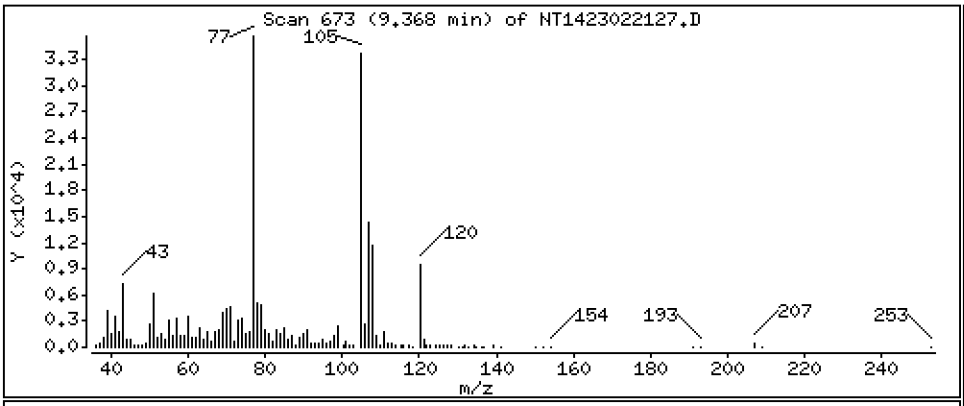
Operator: DSD

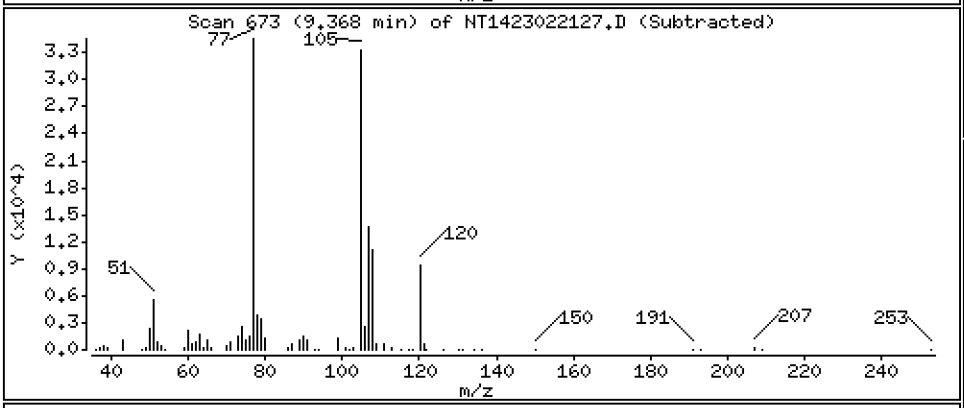
Column phase: ZB-5msi

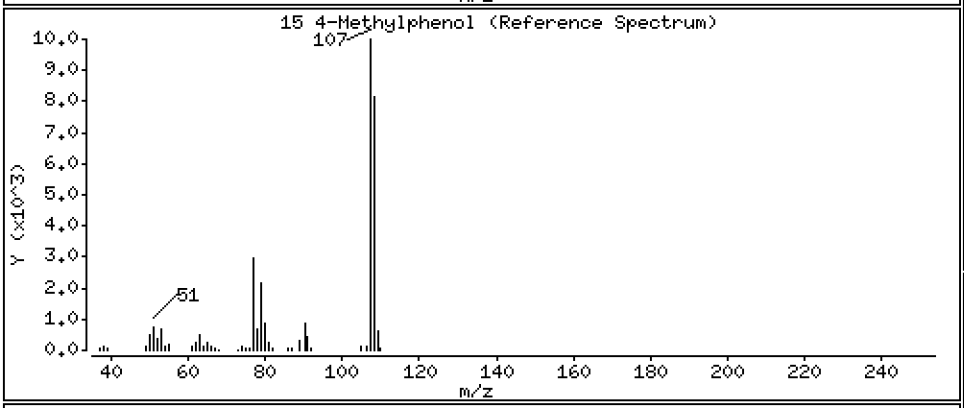
Column diameter: 0.25

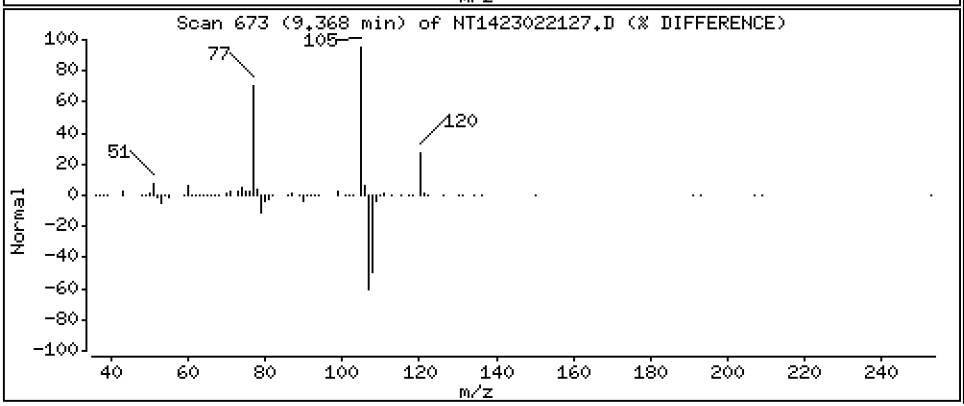
15 4-Methylphenol

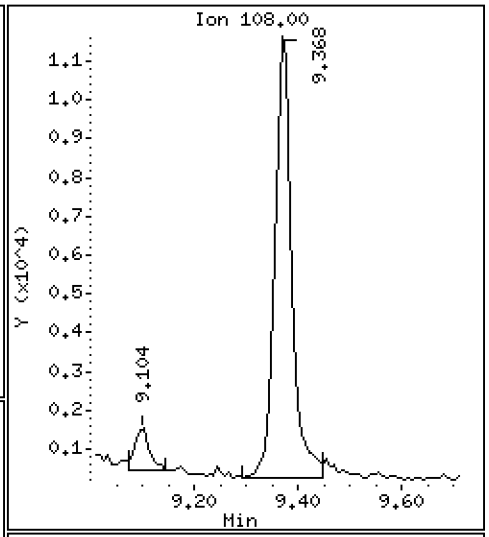
Concentration: 0.2597 ug/mL

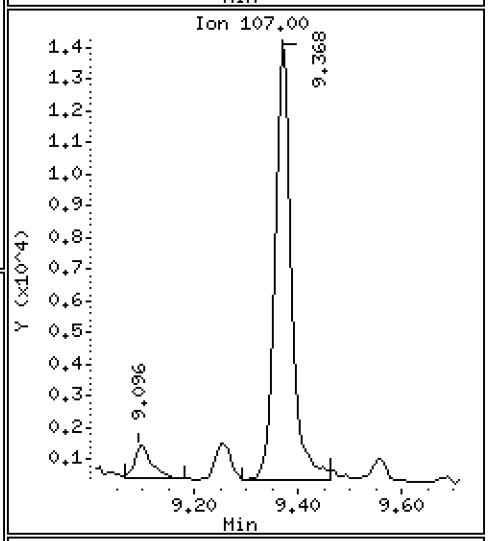


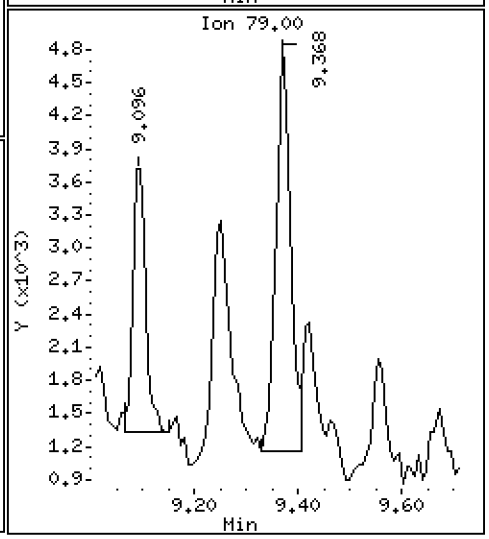












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

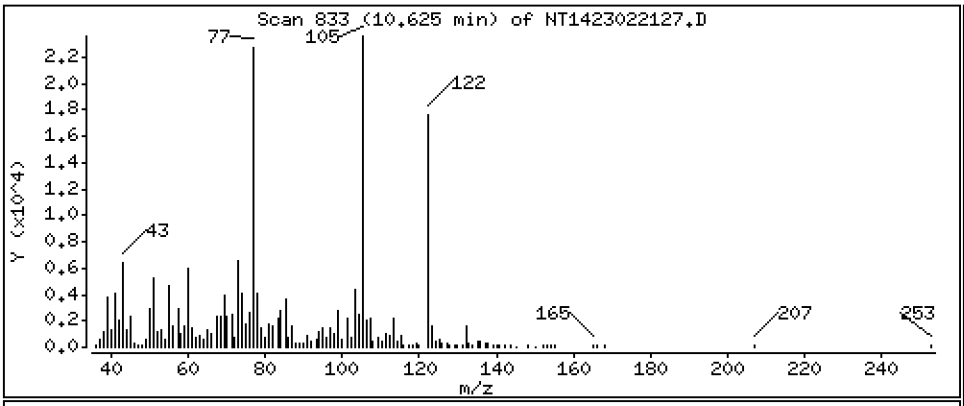
Operator: DSD

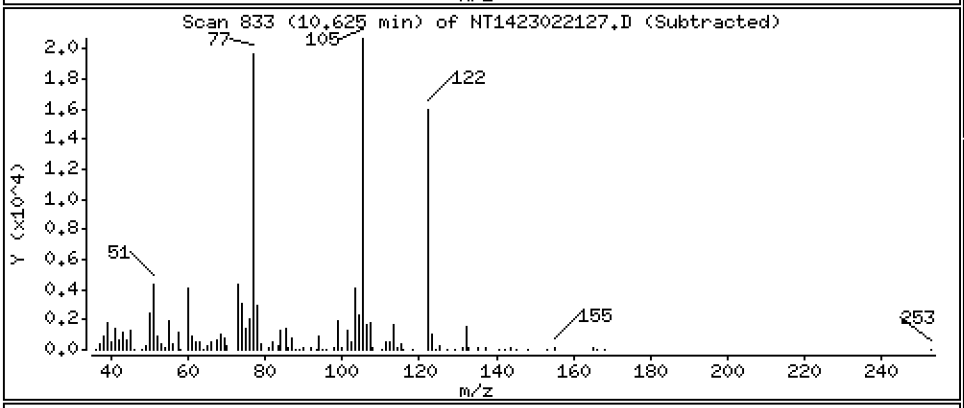
Column phase: ZB-5msi

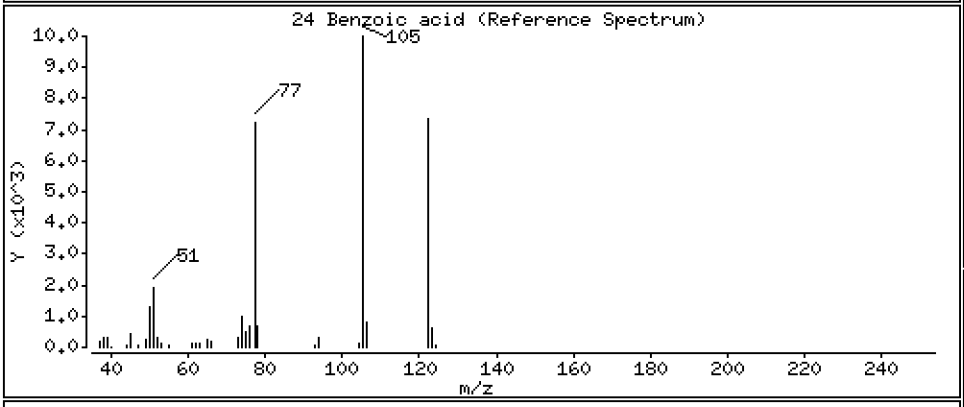
Column diameter: 0.25

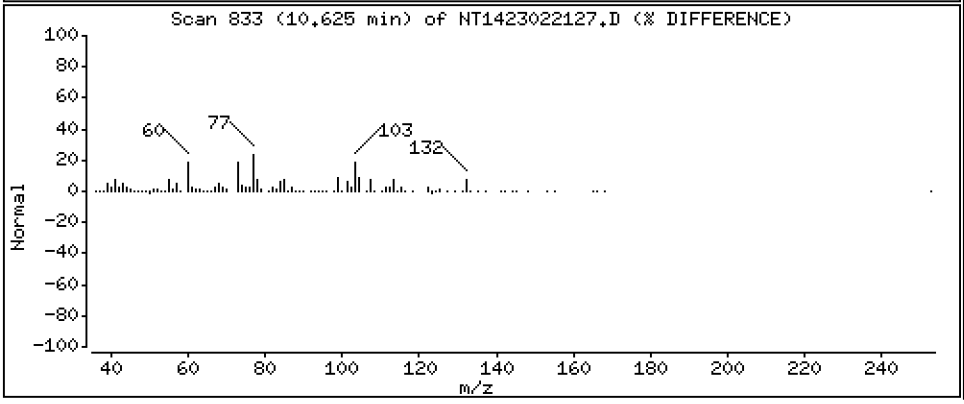
24 Benzoic acid

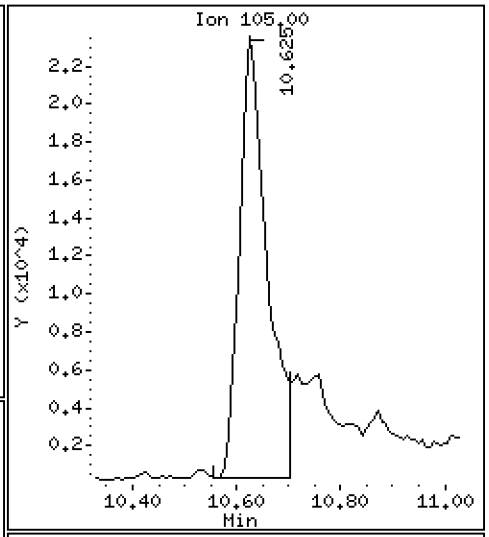
Concentration: 1.419 ug/mL

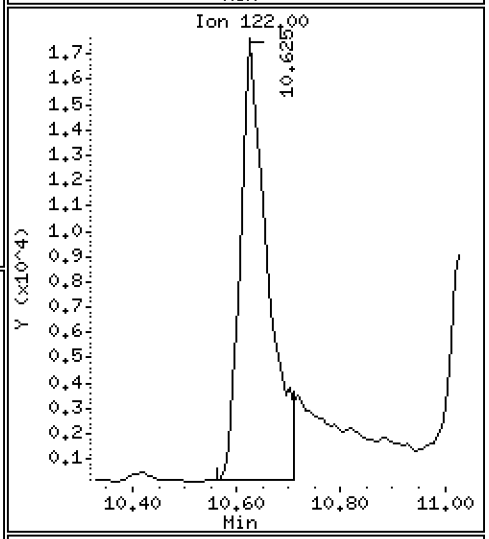


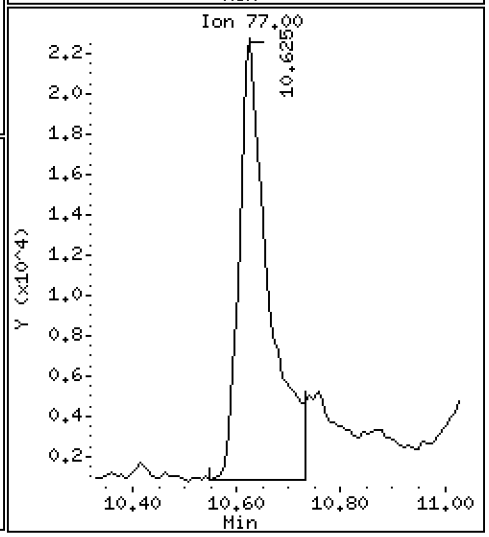












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

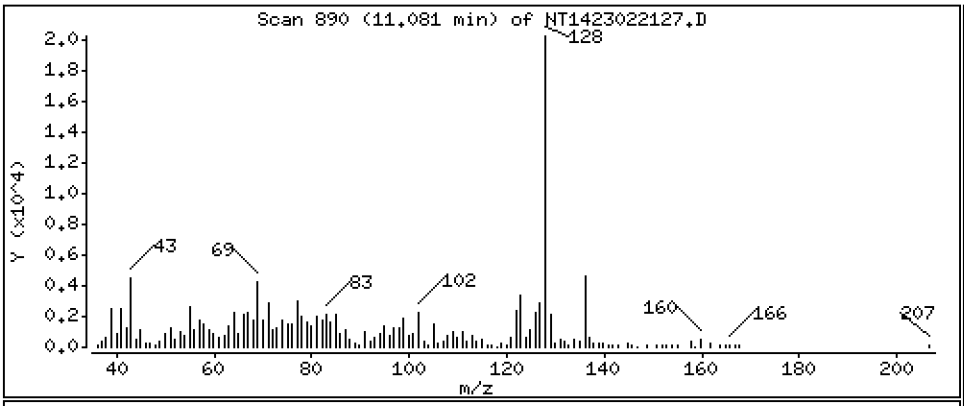
Operator: DSD

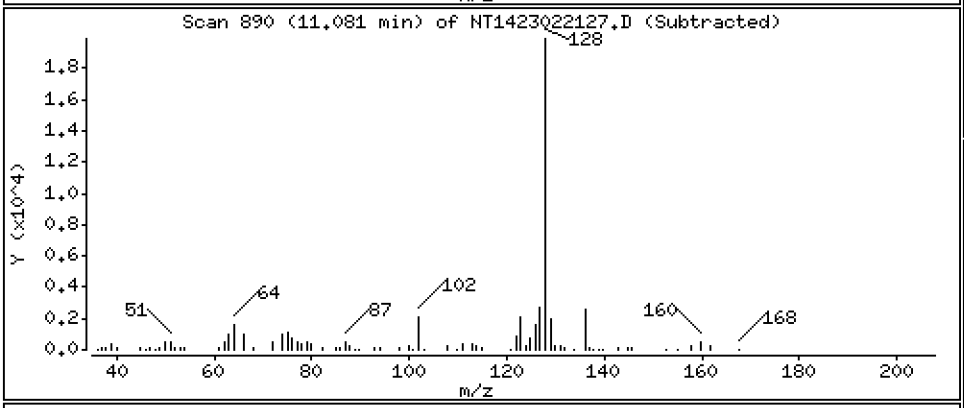
Column phase: ZB-5msi

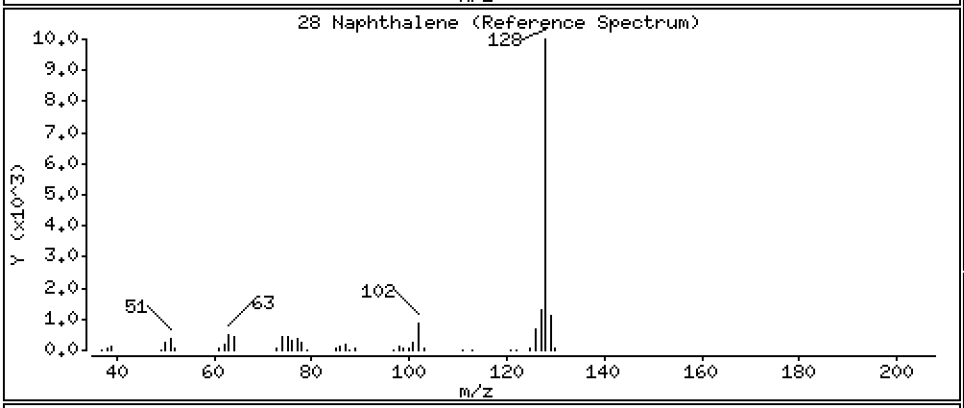
Column diameter: 0.25

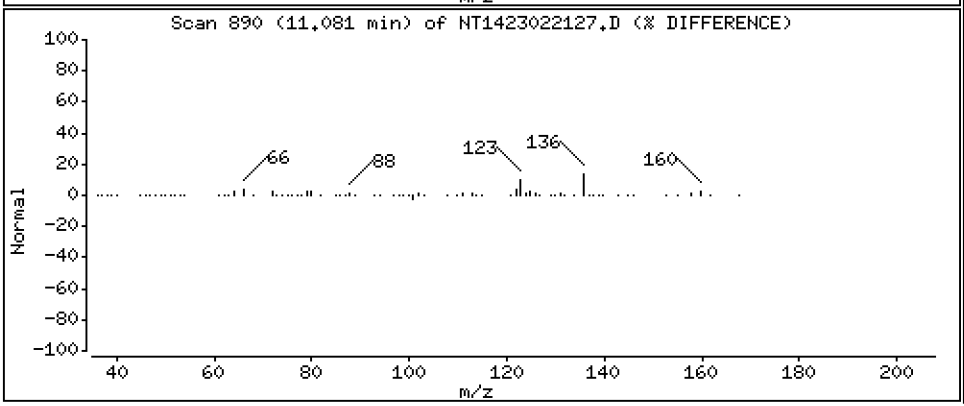
28 Naphthalene

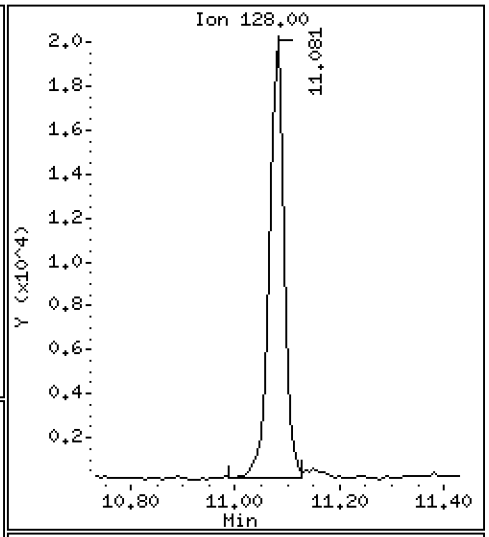
Concentration: 0.1340 ug/mL

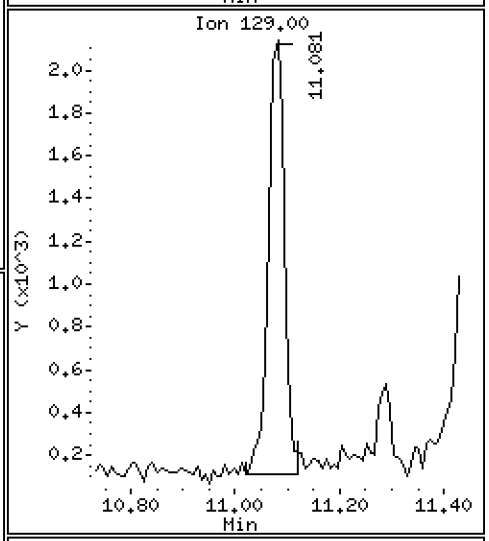


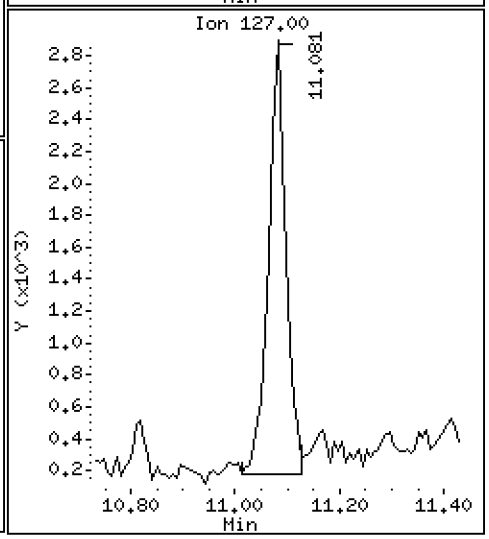












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

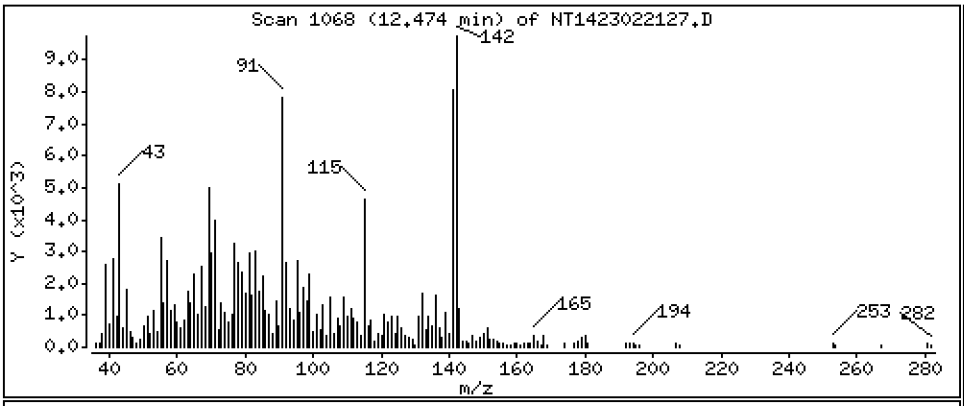
Operator: DSD

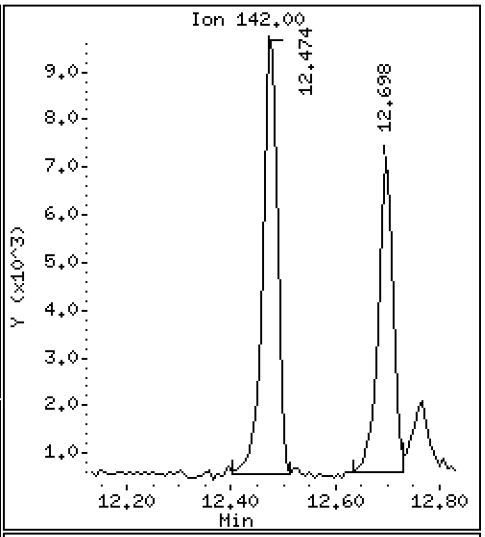
Column phase: ZB-5msi

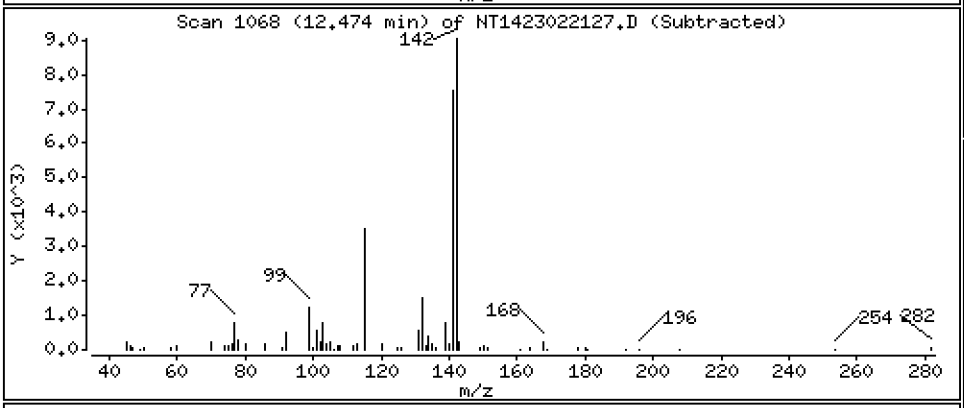
Column diameter: 0.25

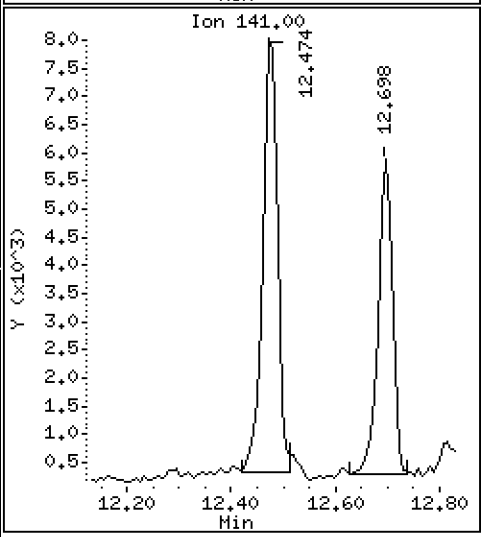
32 2-Methylnaphthalene

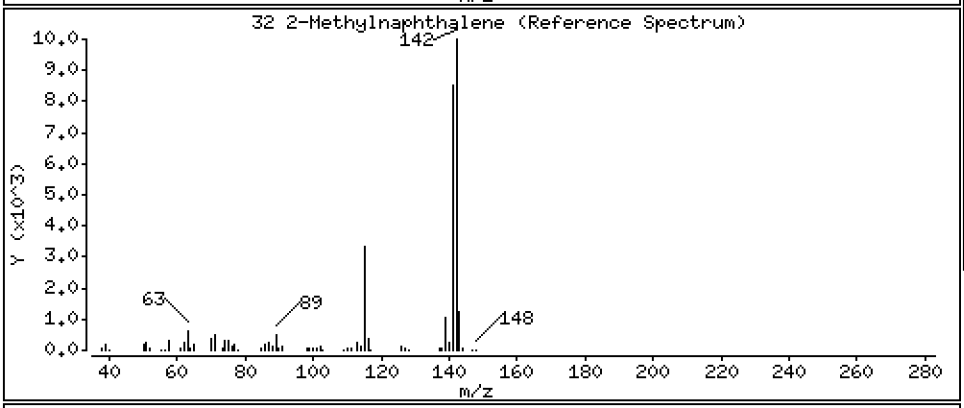
Concentration: 0.08405 ug/mL

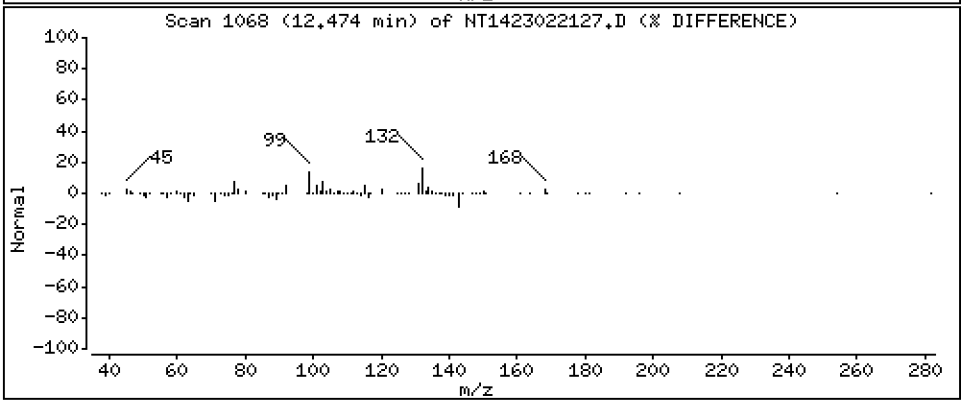












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

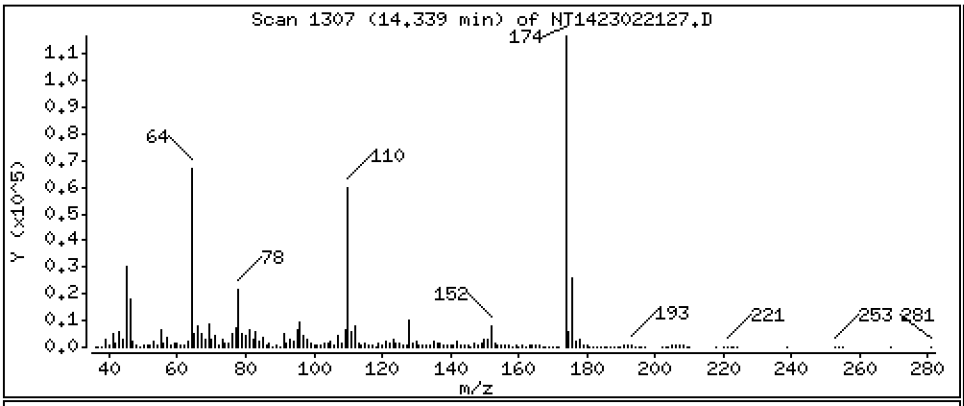
Operator: DSD

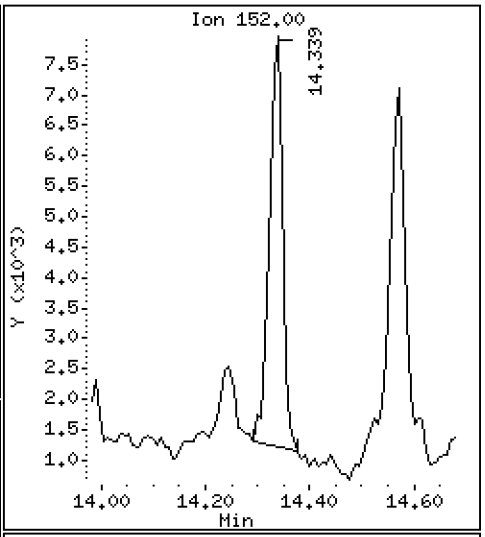
Column phase: ZB-5msi

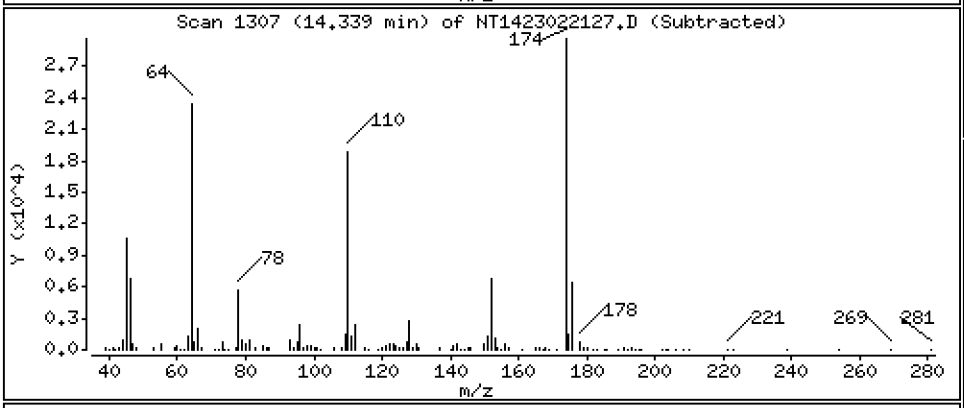
Column diameter: 0.25

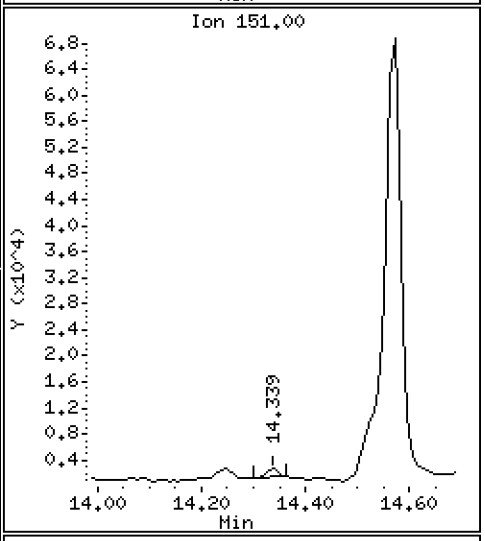
40 Acenaphthylene

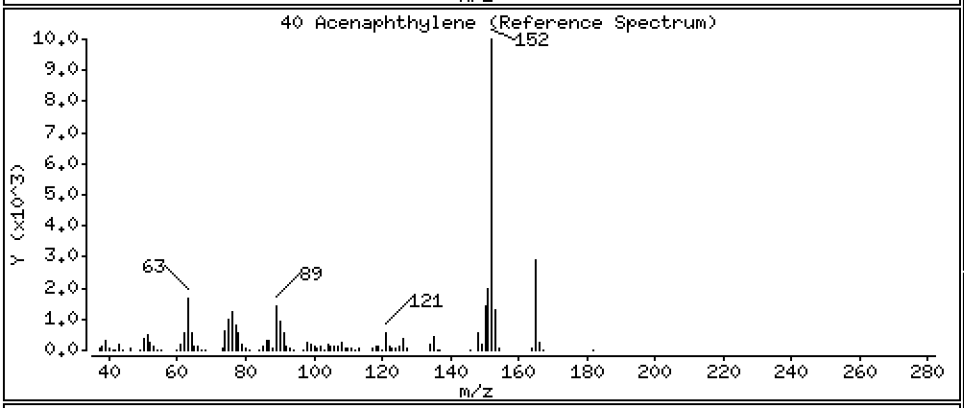
Concentration: 0.03897 ug/mL

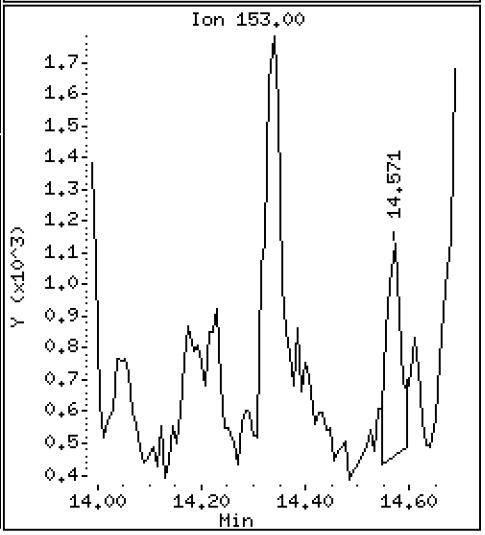


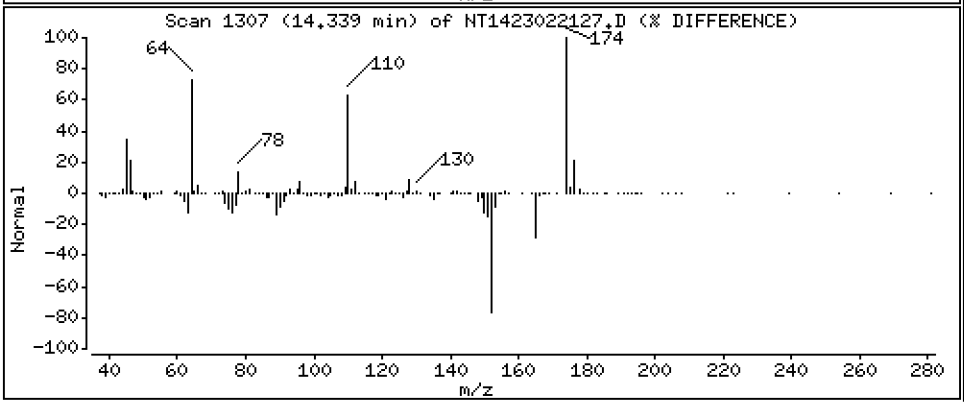












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

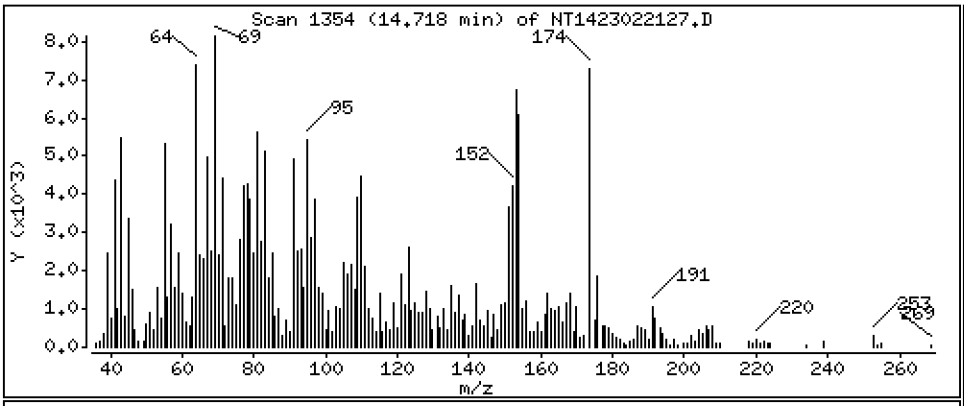
Operator: DSD

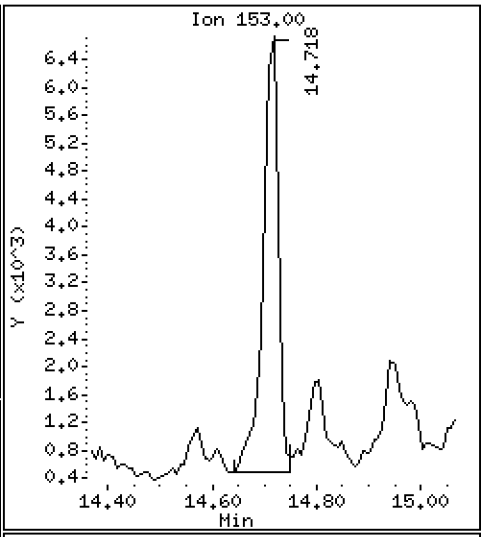
Column phase: ZB-5msi

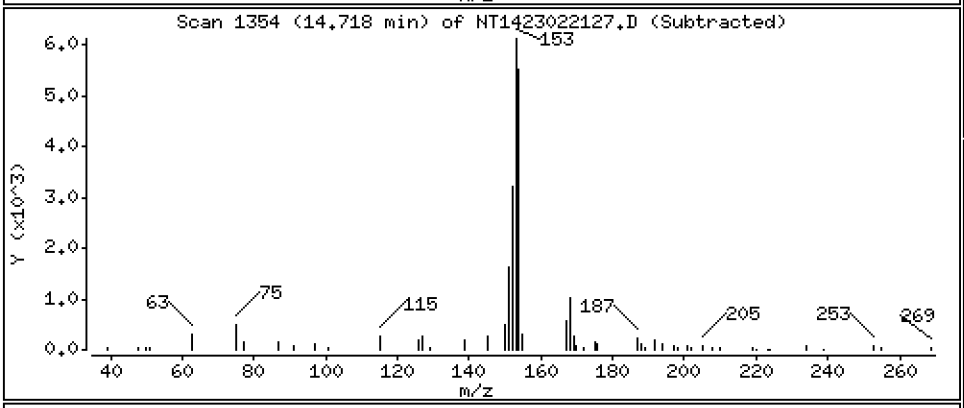
Column diameter: 0.25

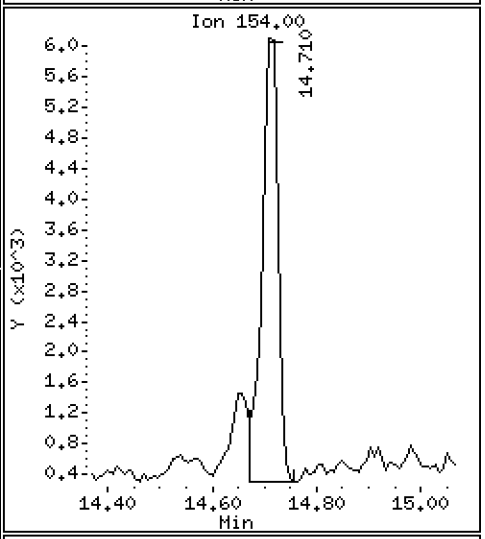
44 Acenaphthene

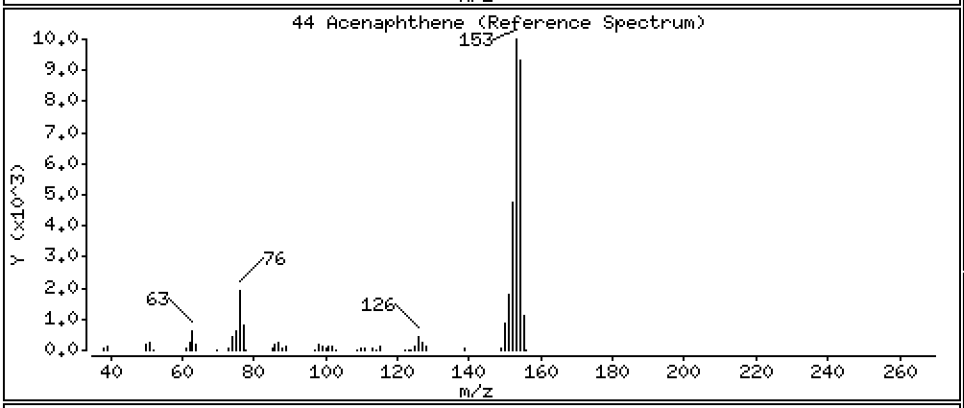
Concentration: 0.06912 ug/mL

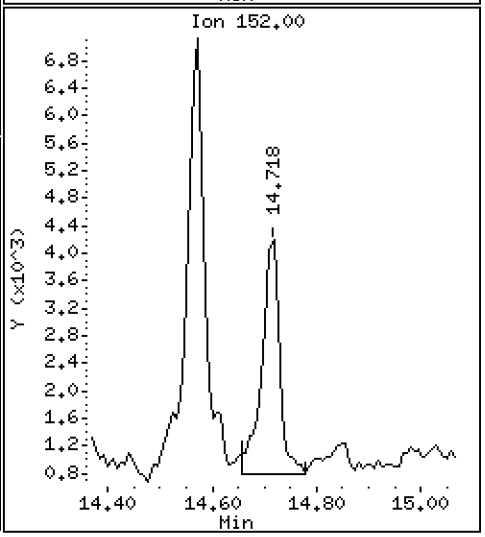


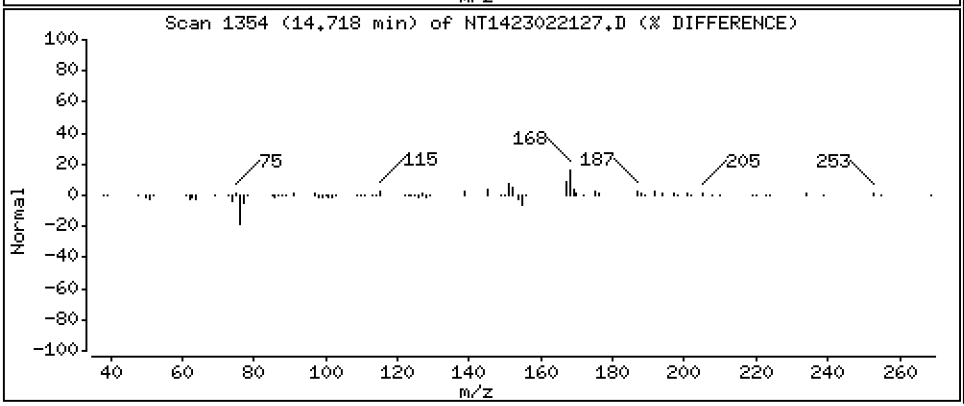












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

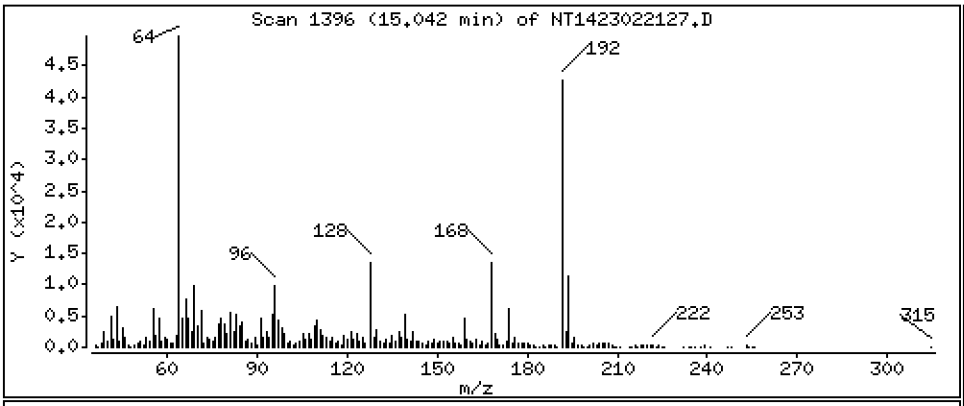
Operator: DSD

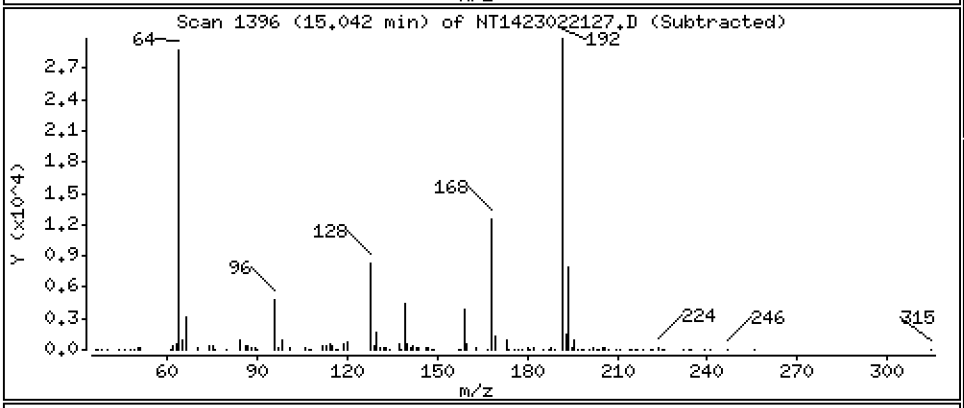
Column phase: ZB-5msi

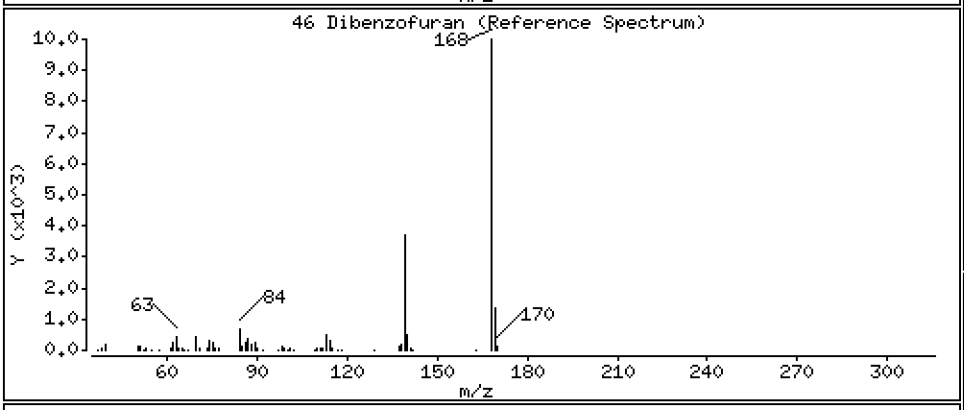
Column diameter: 0.25

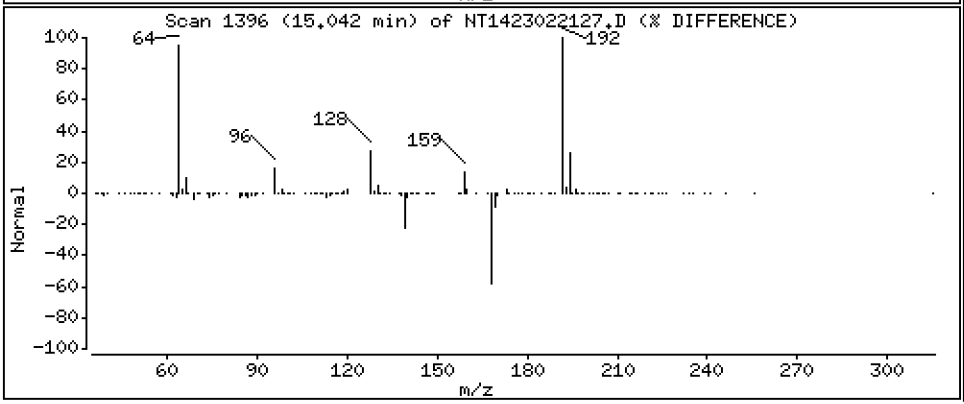
46 Dibenzofuran

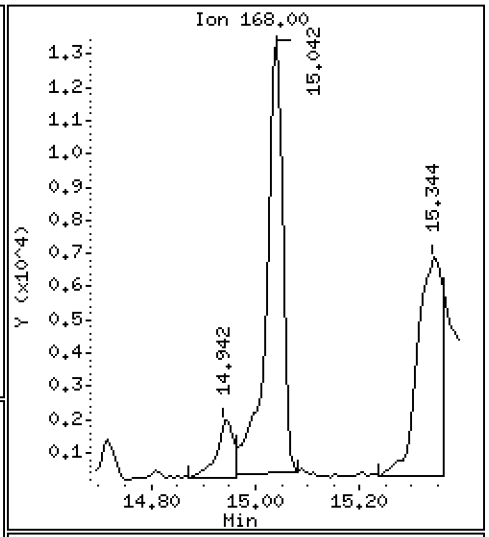
Concentration: 0.09410 ug/mL

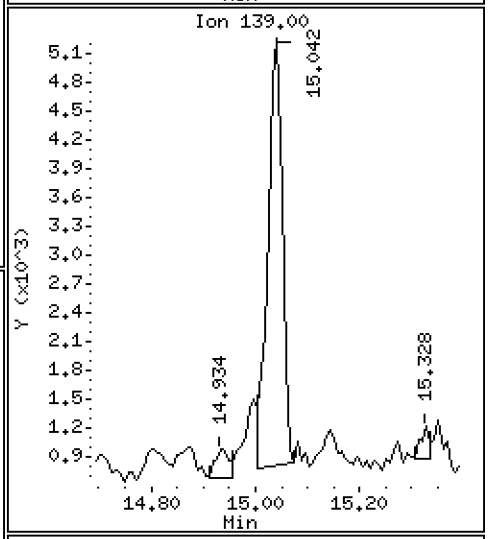


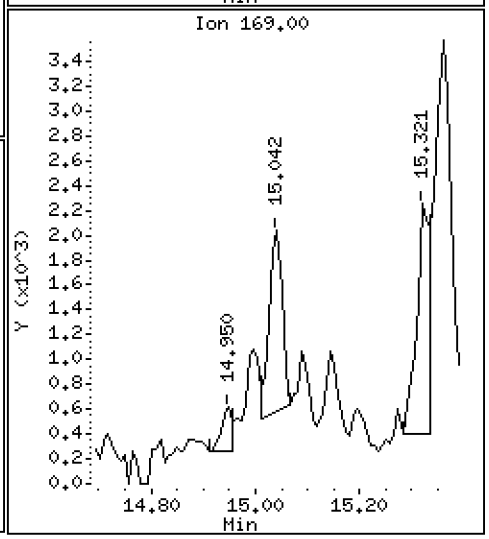












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

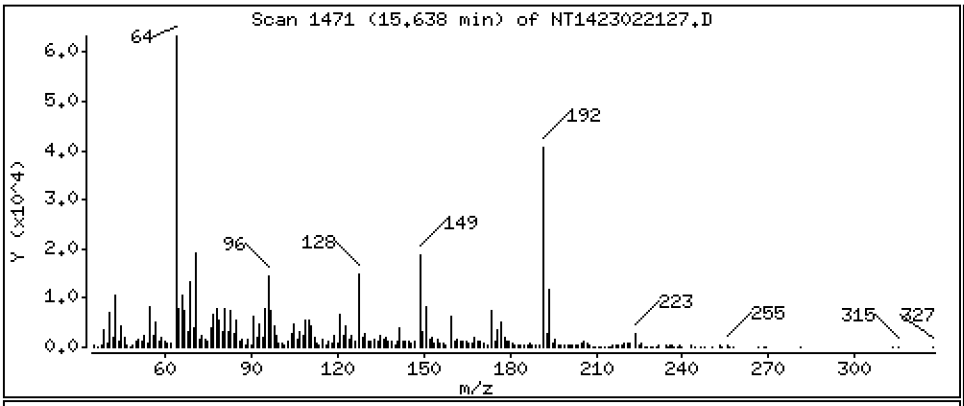
Operator: DSD

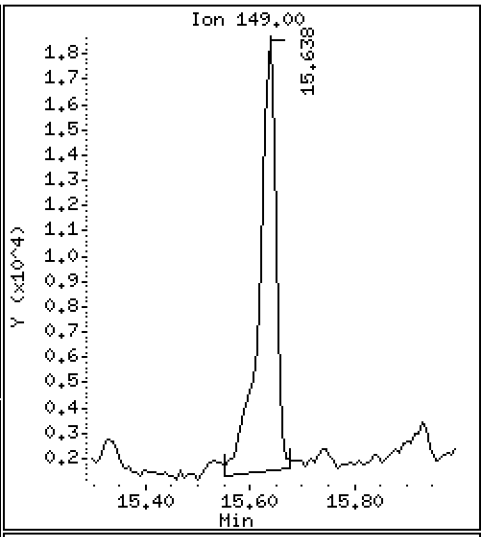
Column phase: ZB-5msi

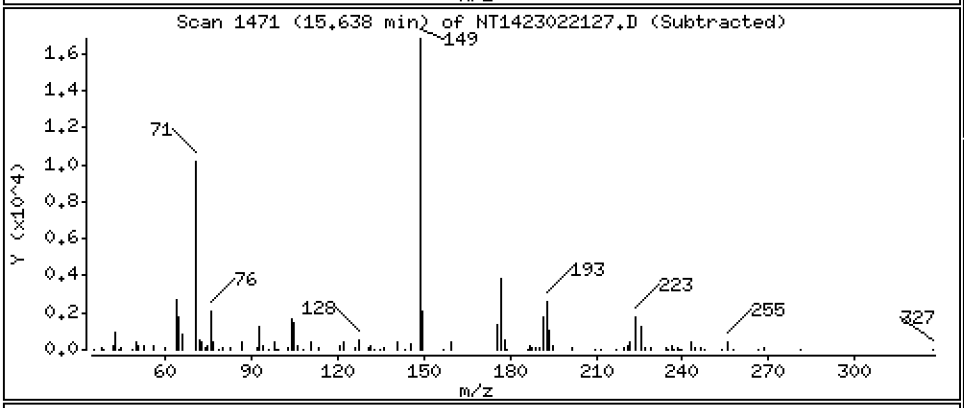
Column diameter: 0.25

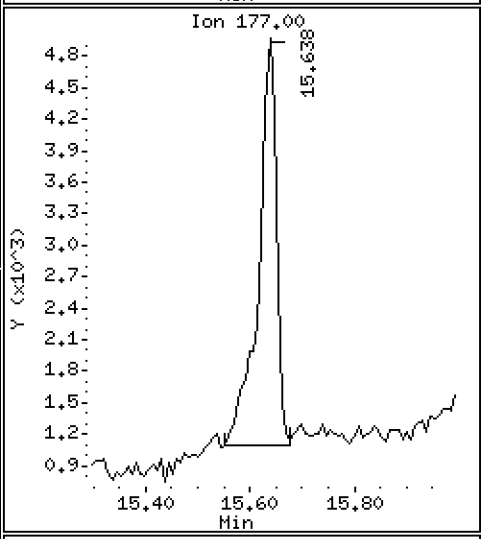
50 Diethylphthalate

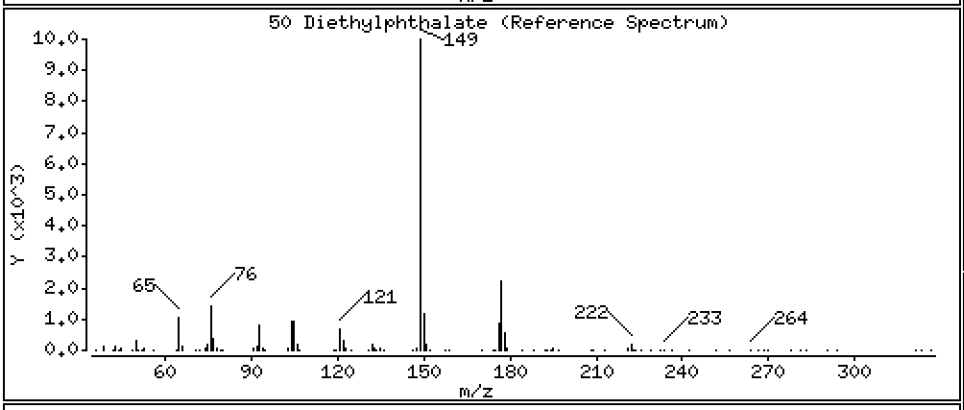
Concentration: 0.1365 ug/mL

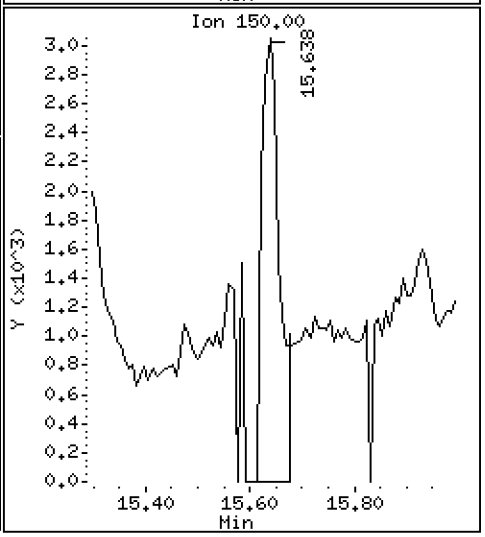


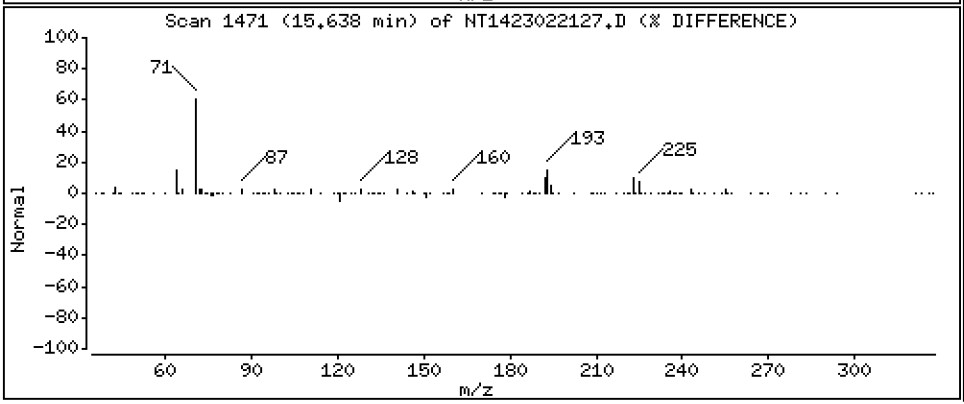












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

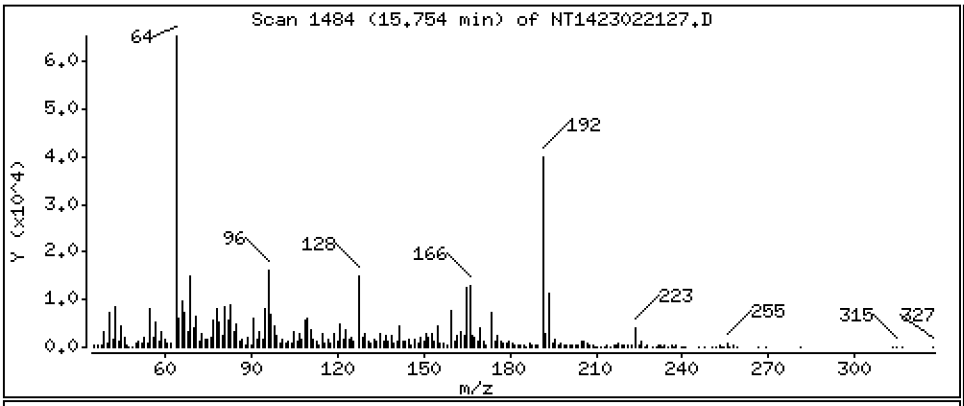
Operator: DSD

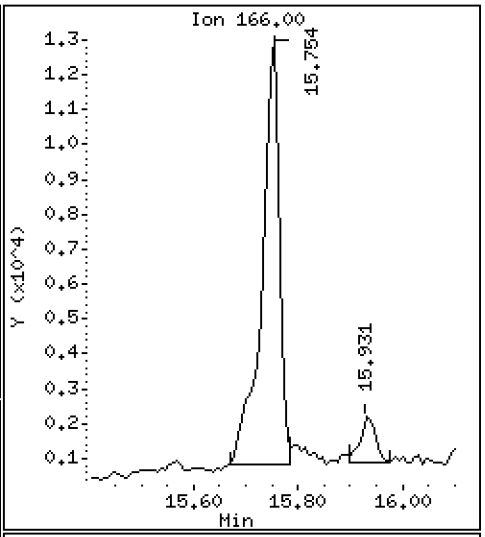
Column phase: ZB-5msi

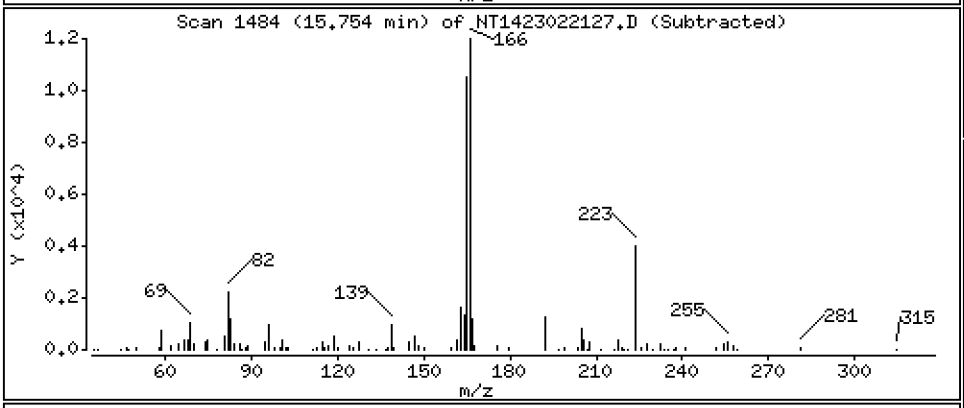
Column diameter: 0.25

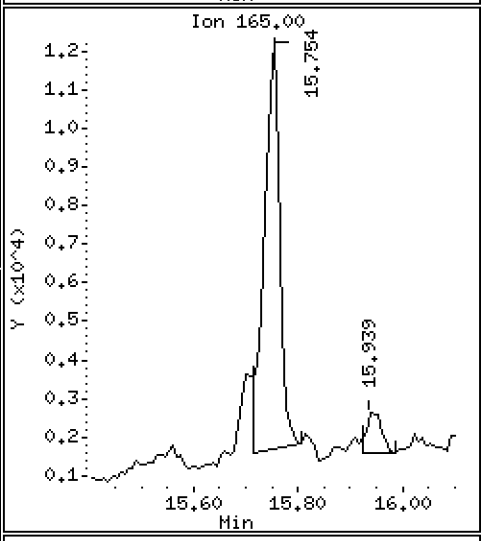
49 Fluorene

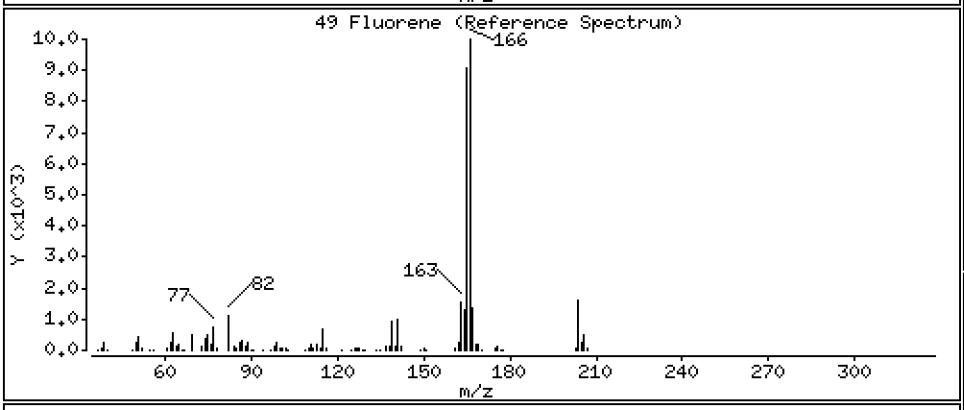
Concentration: 0.1011 ug/mL

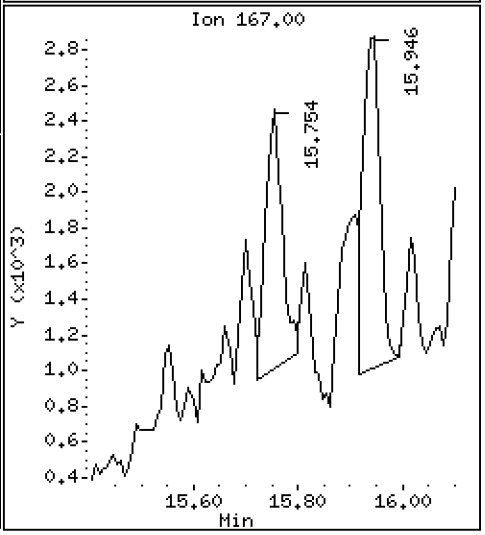


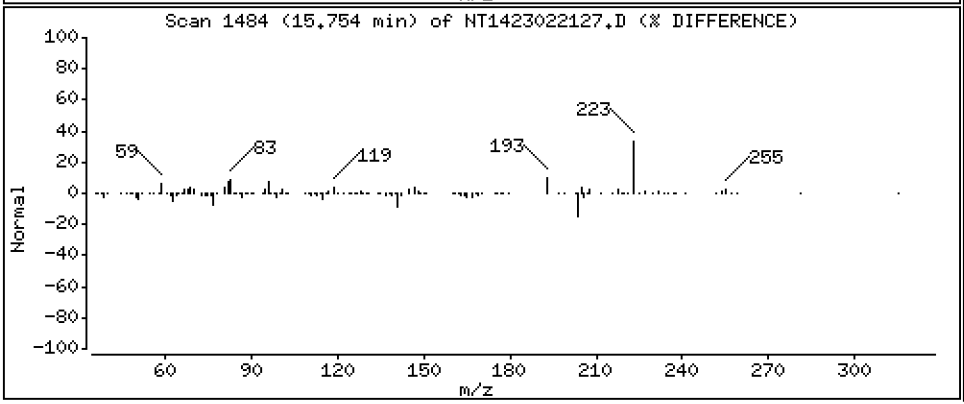












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

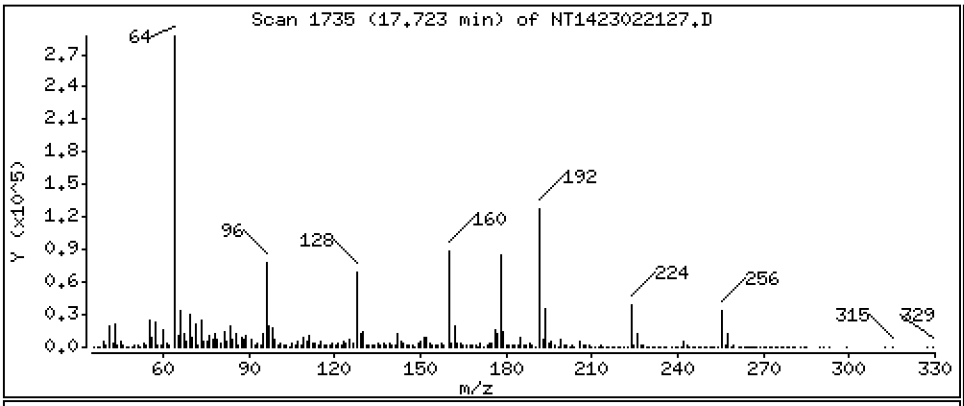
Operator: DSD

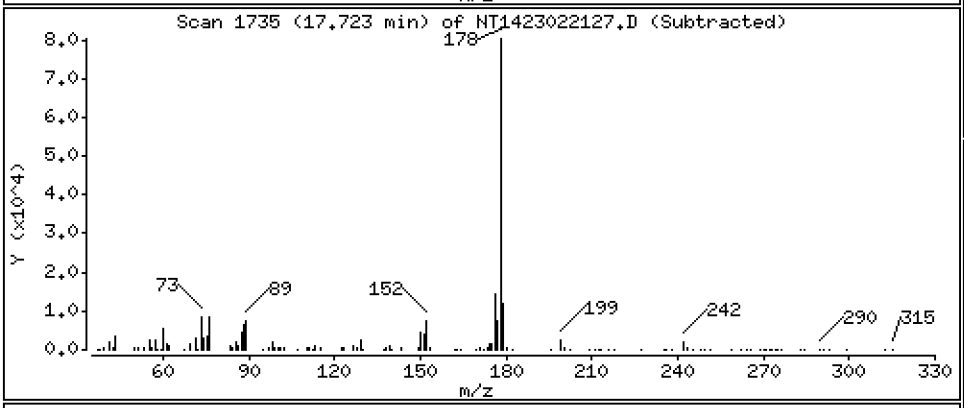
Column phase: ZB-5msi

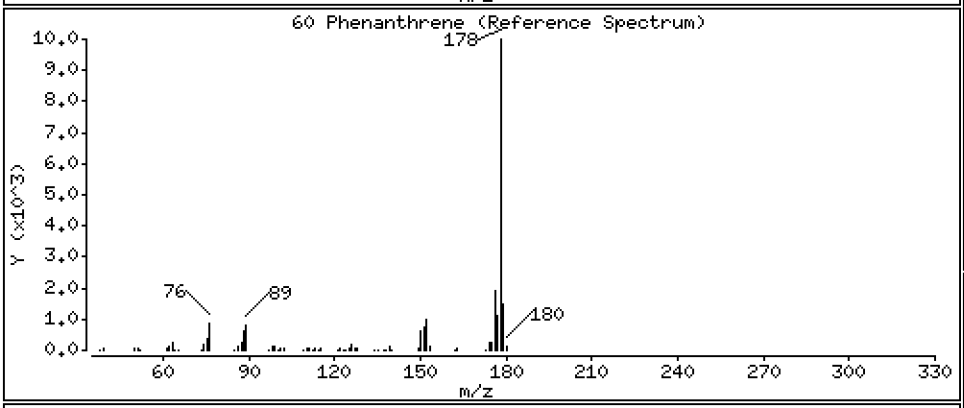
Column diameter: 0.25

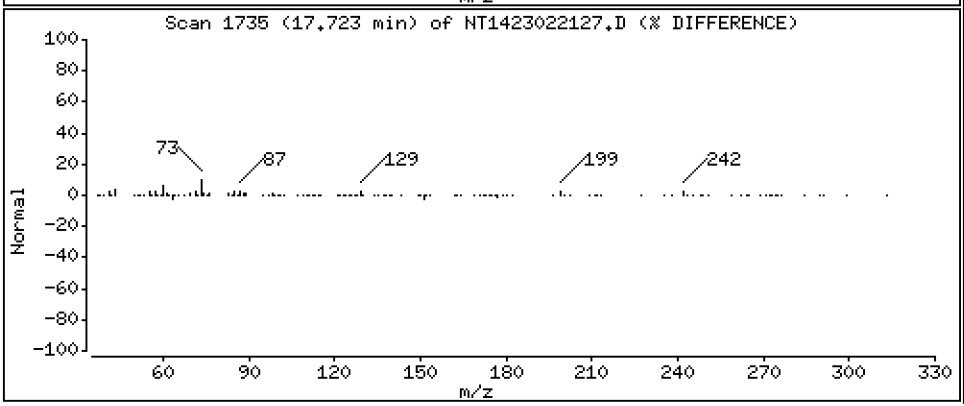
60 Phenanthrene

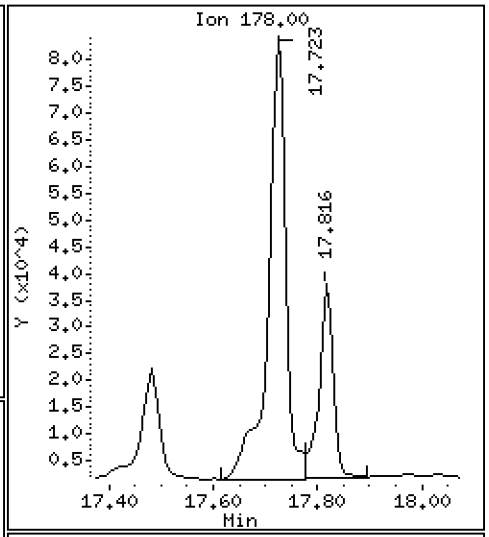
Concentration: 0.5760 ug/mL

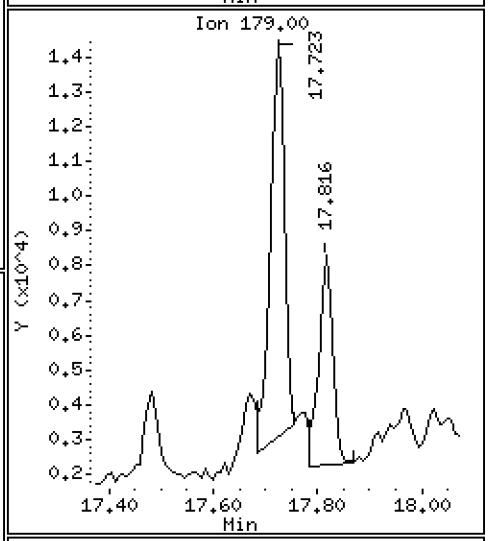


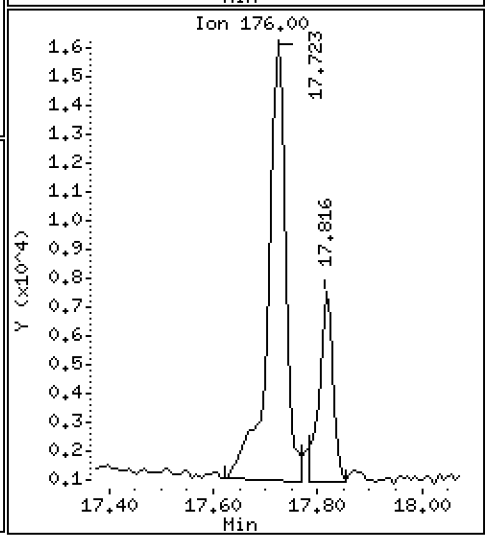












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

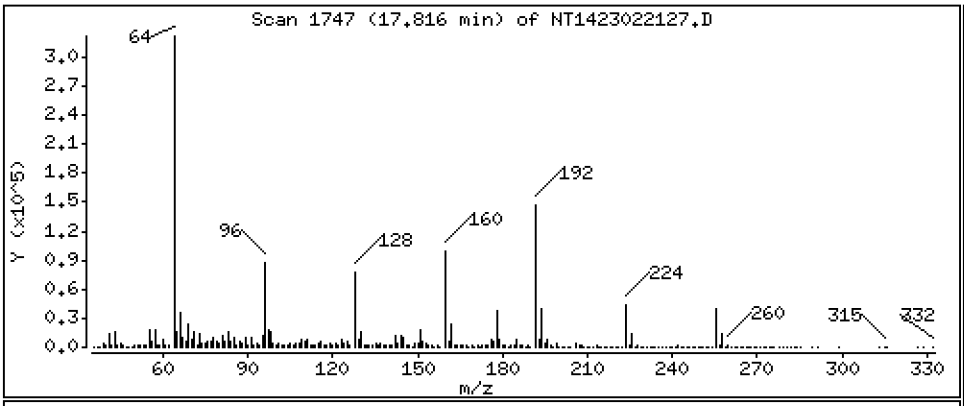
Operator: DSD

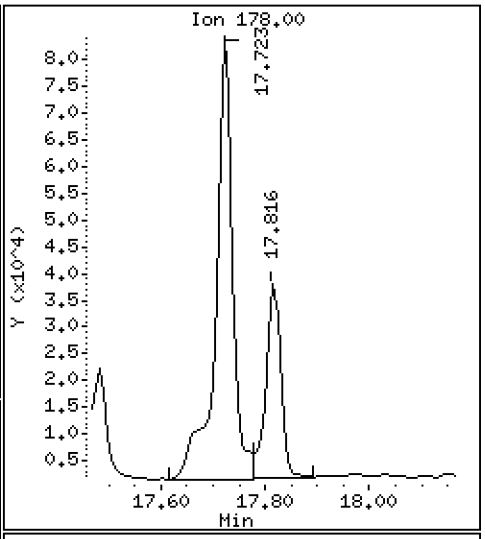
Column phase: ZB-5msi

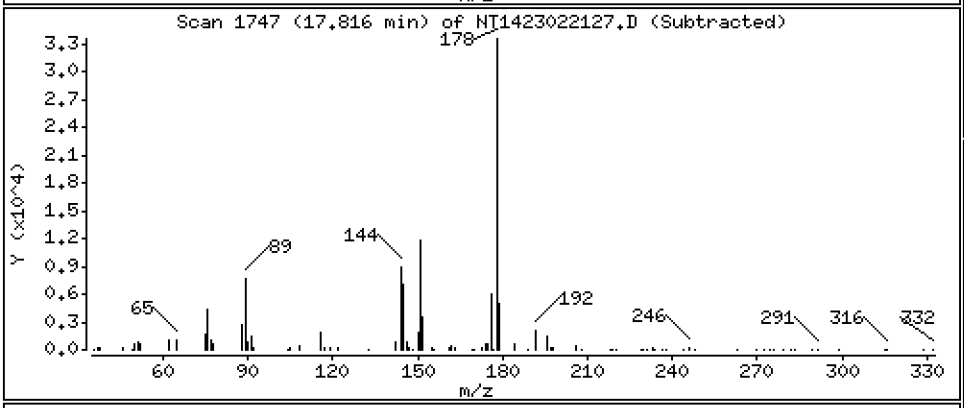
Column diameter: 0.25

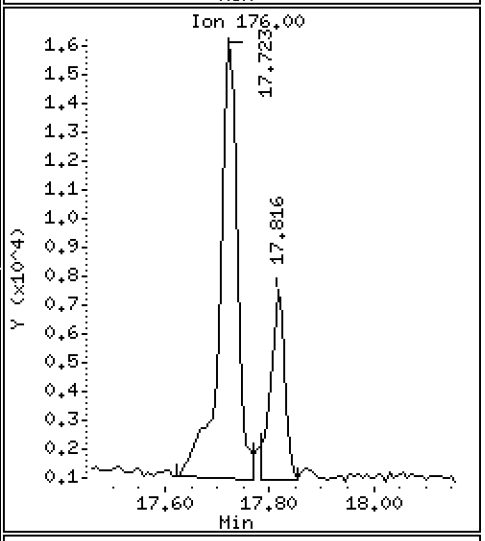
61 Anthracene

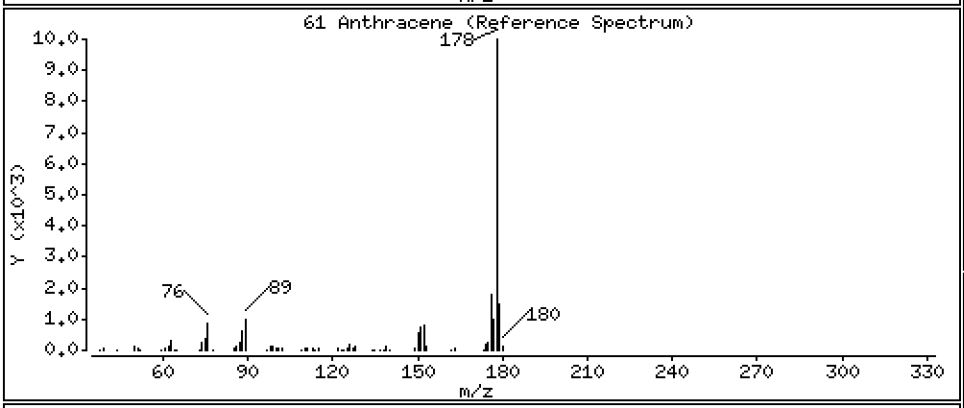
Concentration: 0.2145 ug/mL

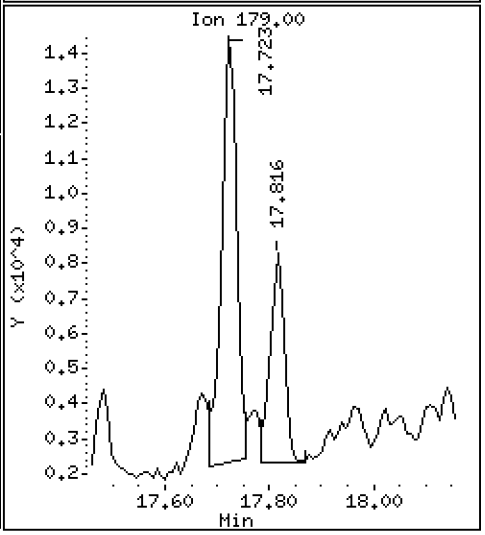


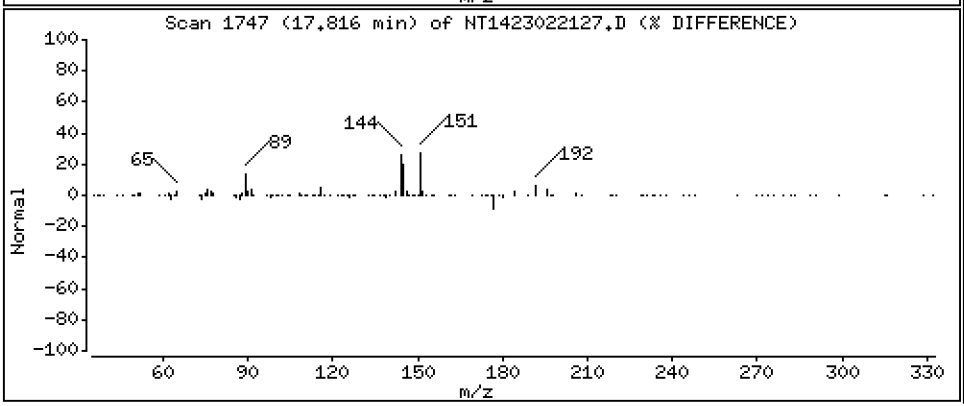












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

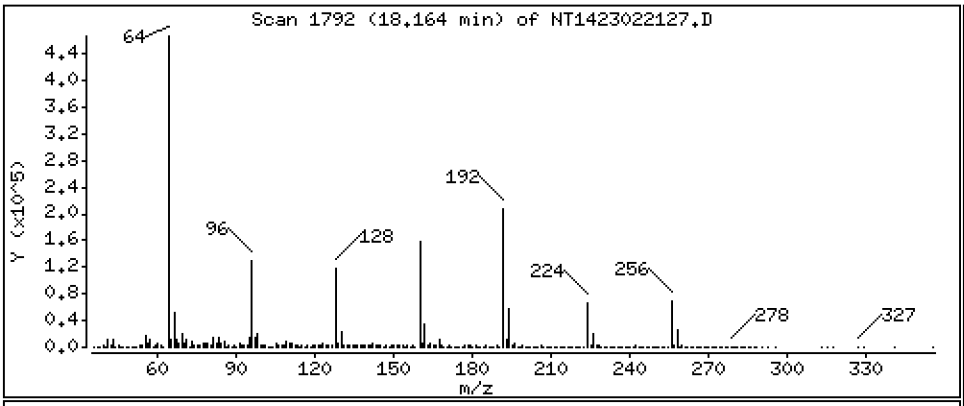
Operator: DSD

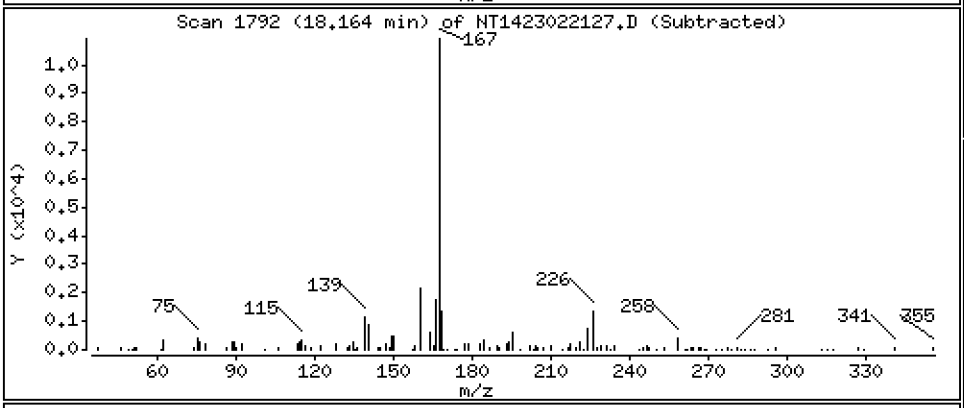
Column phase: ZB-5msi

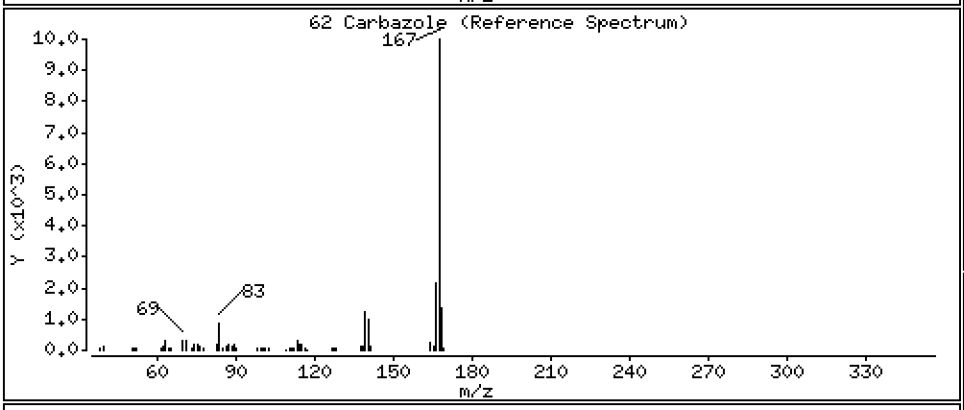
Column diameter: 0.25

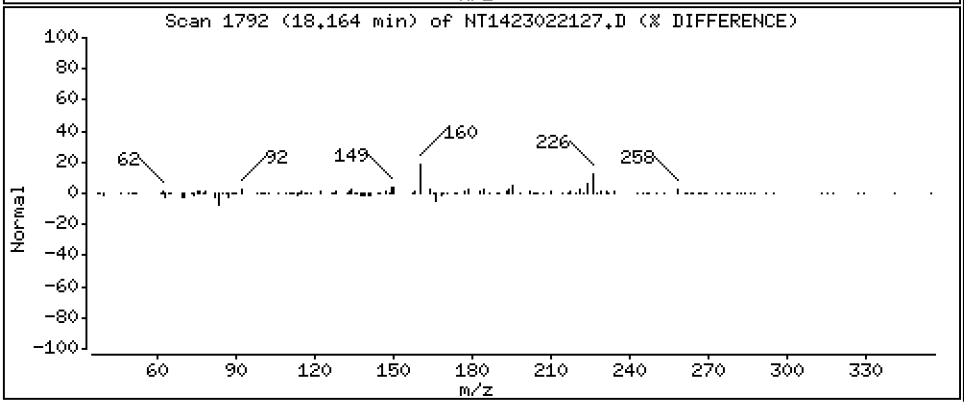
62 Carbazole

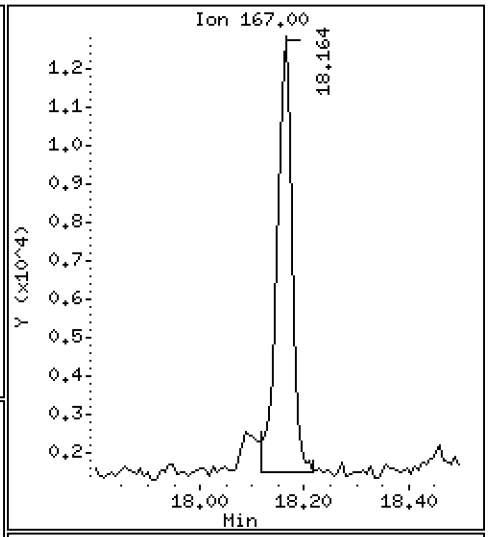
Concentration: 0.07614 ug/mL

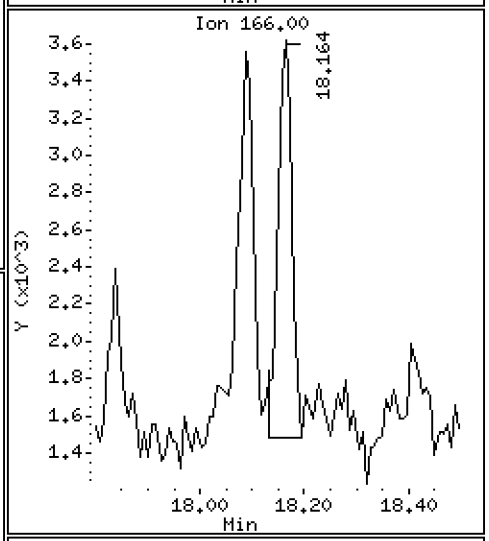


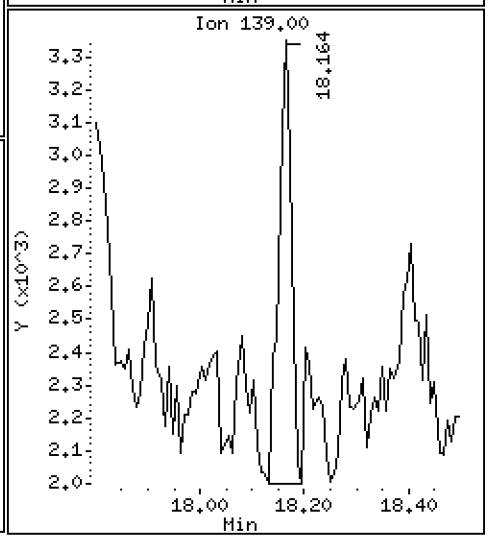












Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022127.D

Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

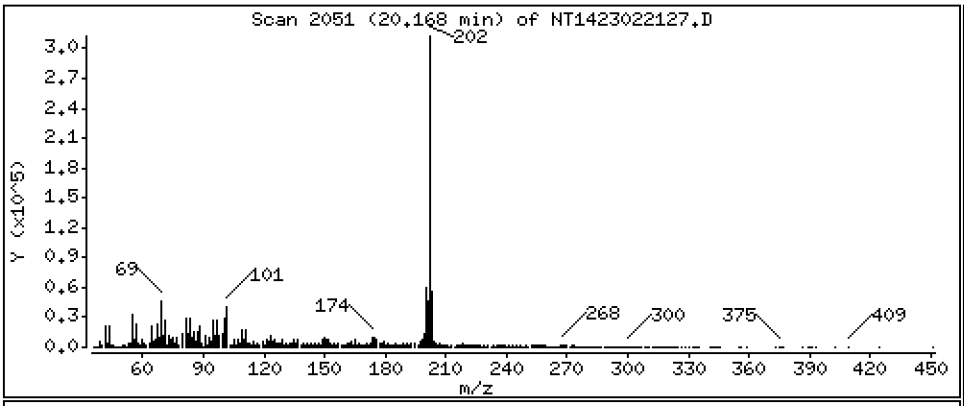
Operator: DSD

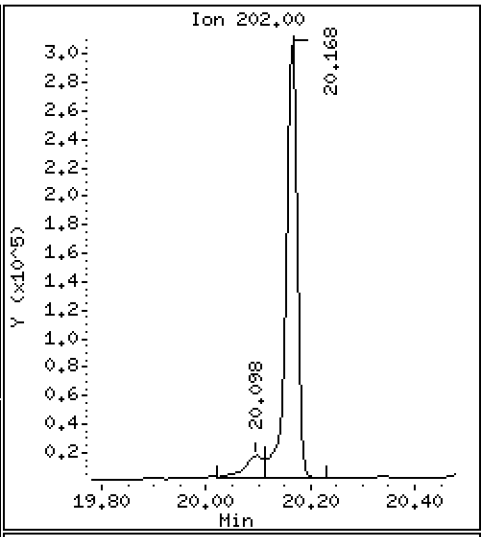
Column phase: ZB-5msi

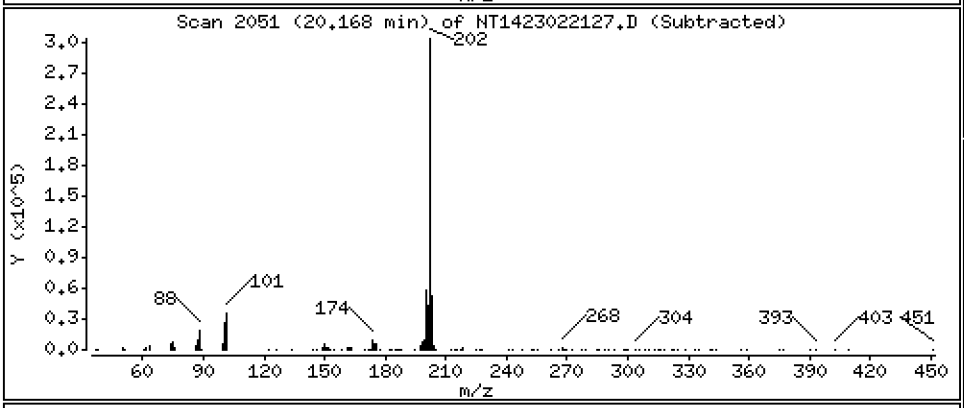
Column diameter: 0.25

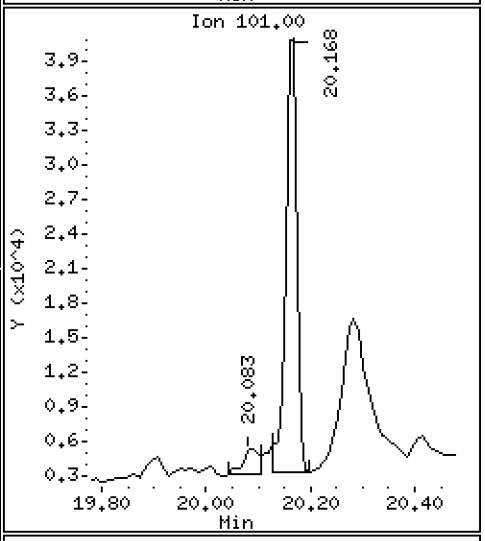
64 Fluoranthene

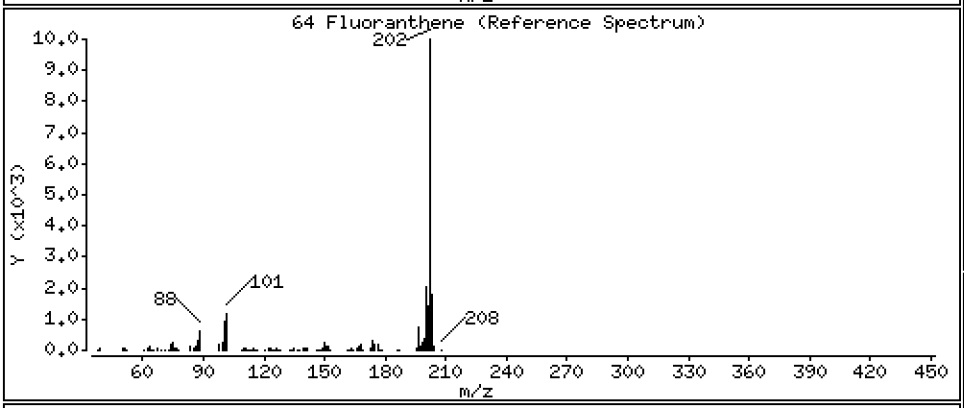
Concentration: 1.269 ug/mL

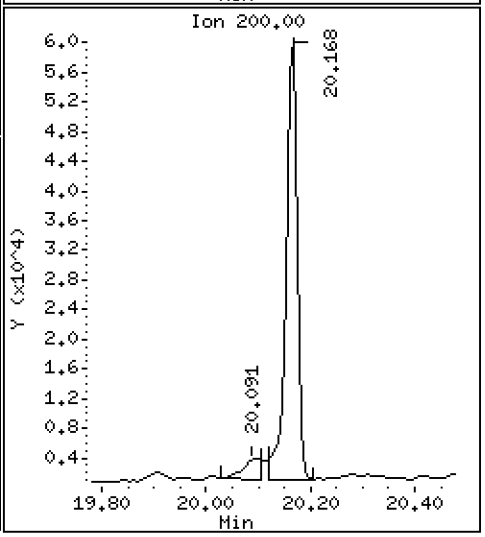


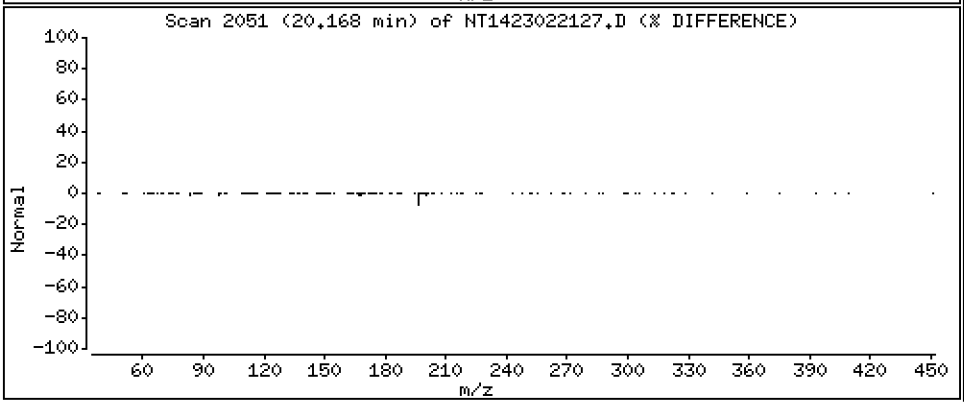












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

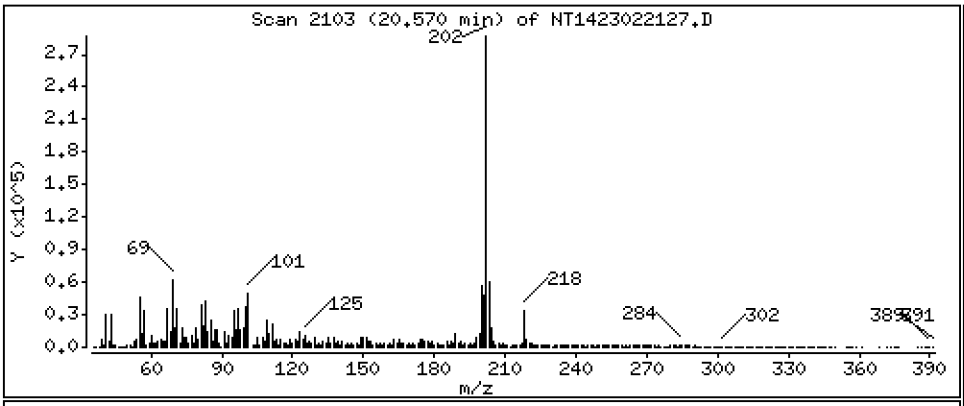
Operator: DSD

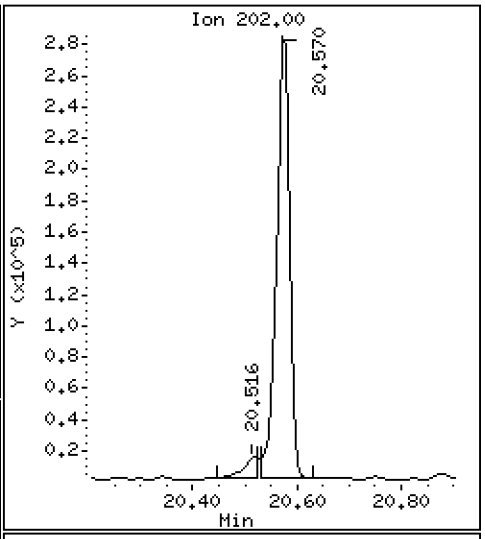
Column phase: ZB-5msi

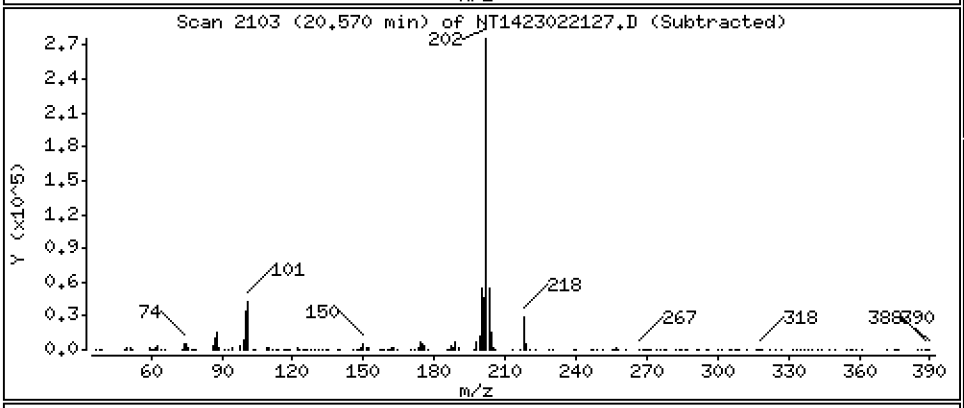
Column diameter: 0.25

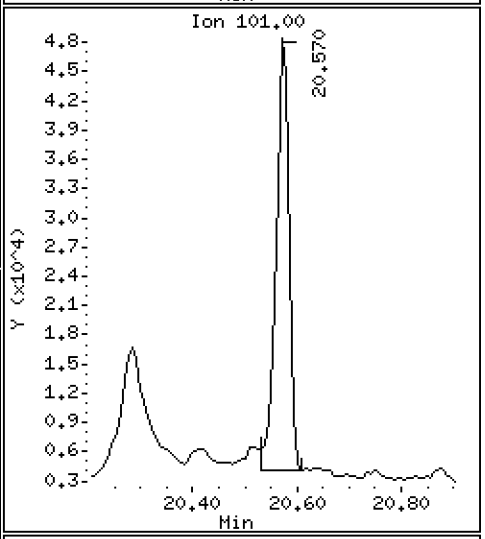
65 Pyrene

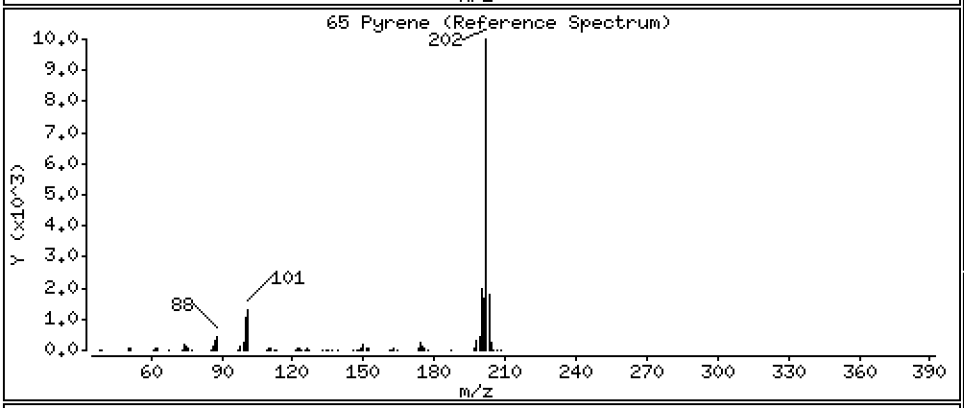
Concentration: 1.223 ug/mL

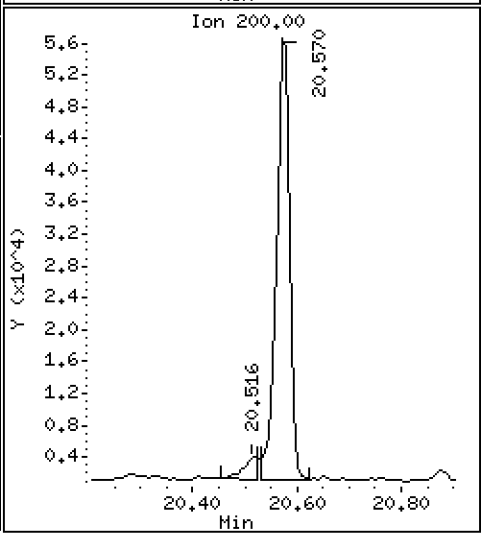


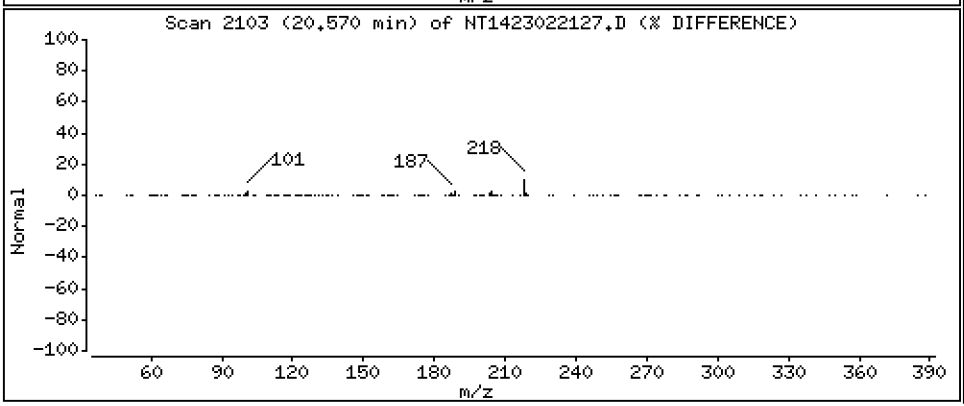












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

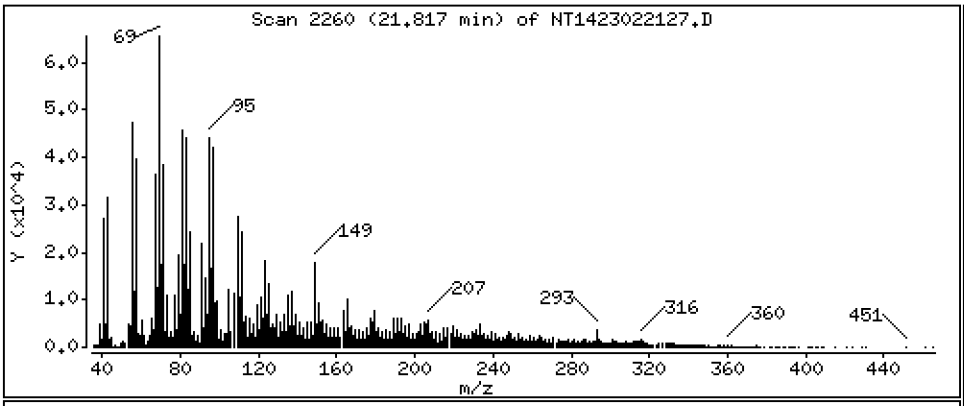
Operator: DSD

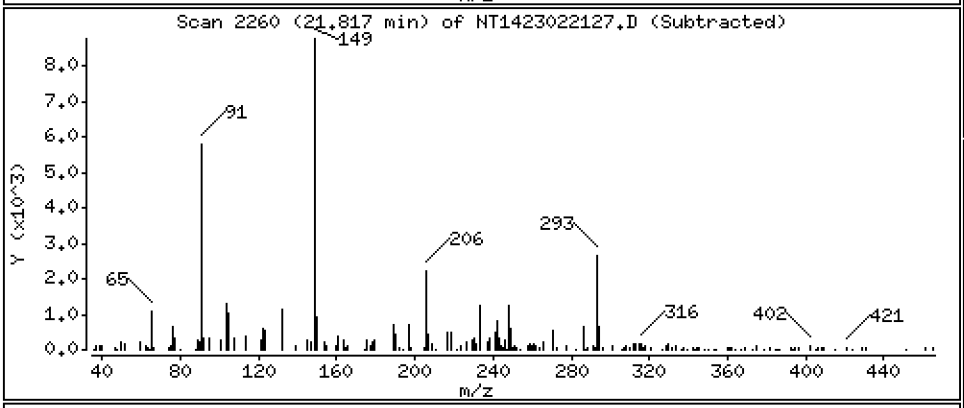
Column phase: ZB-5msi

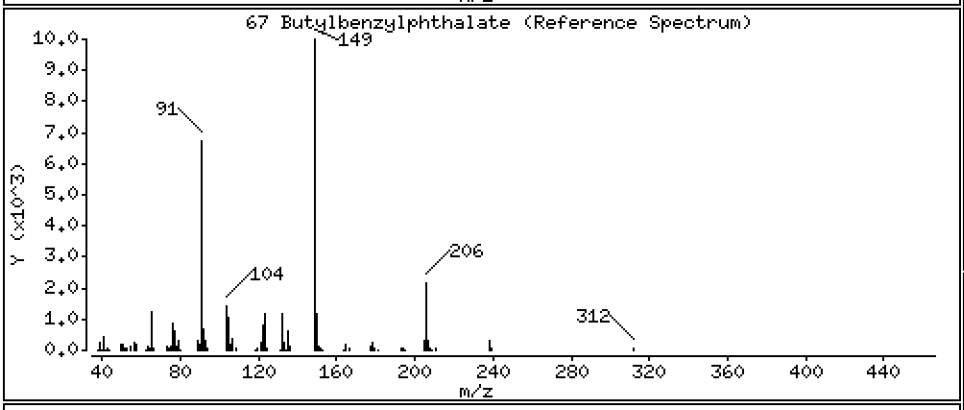
Column diameter: 0.25

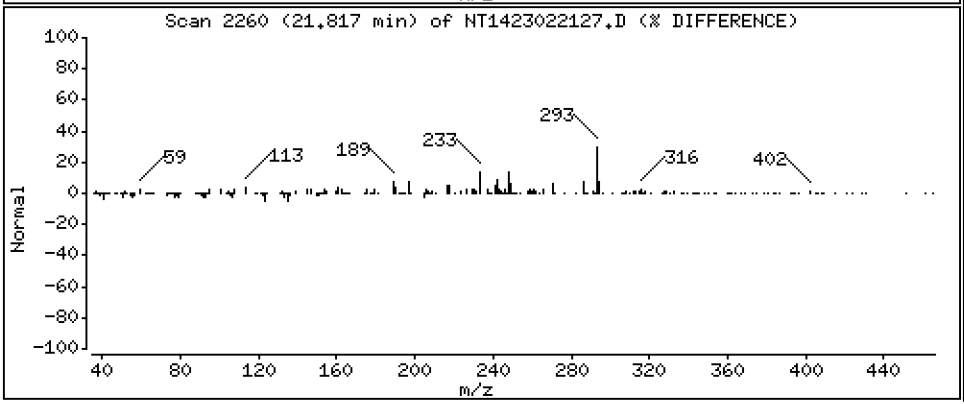
67 Butylbenzylphthalate

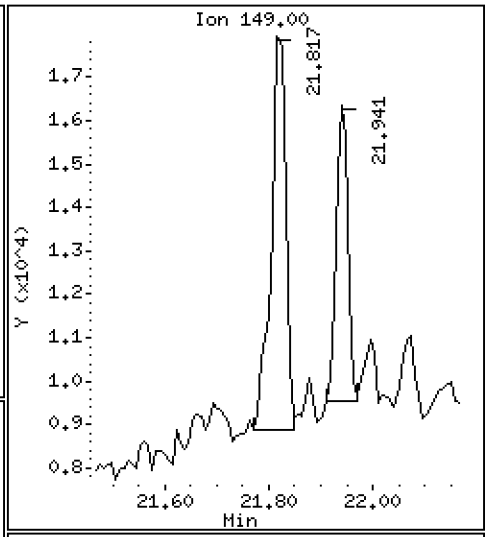
Concentration: 0.1260 ug/mL

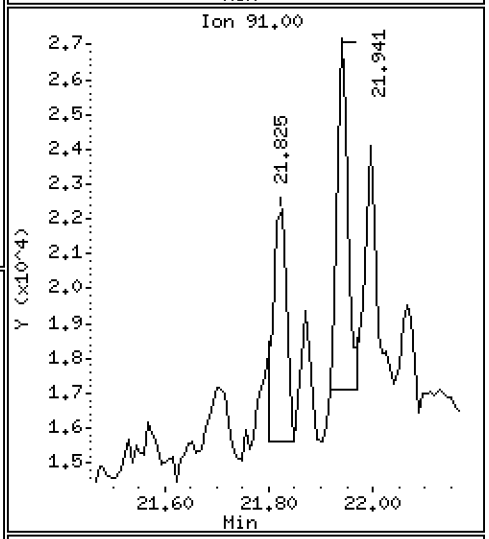


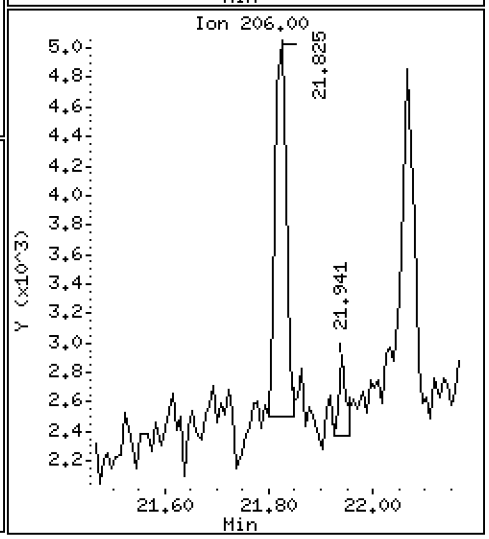












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

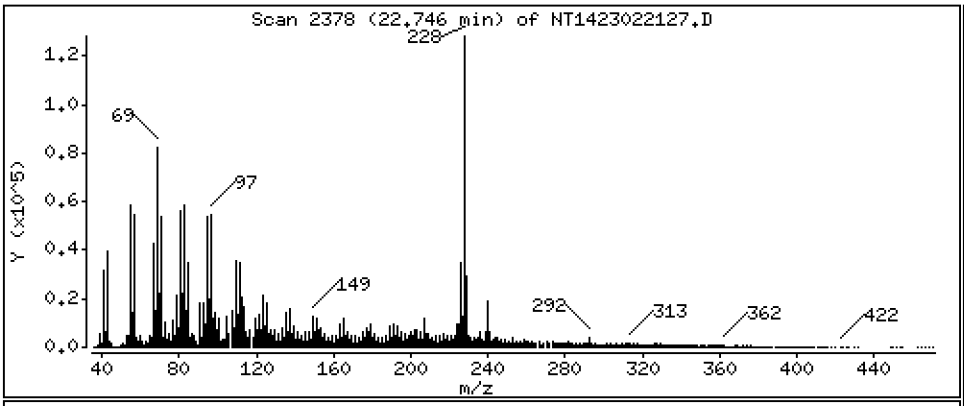
Operator: DSD

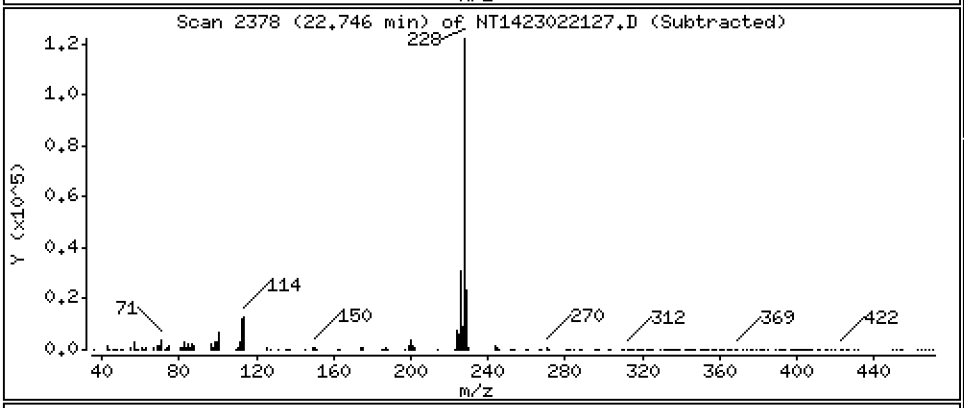
Column phase: ZB-5msi

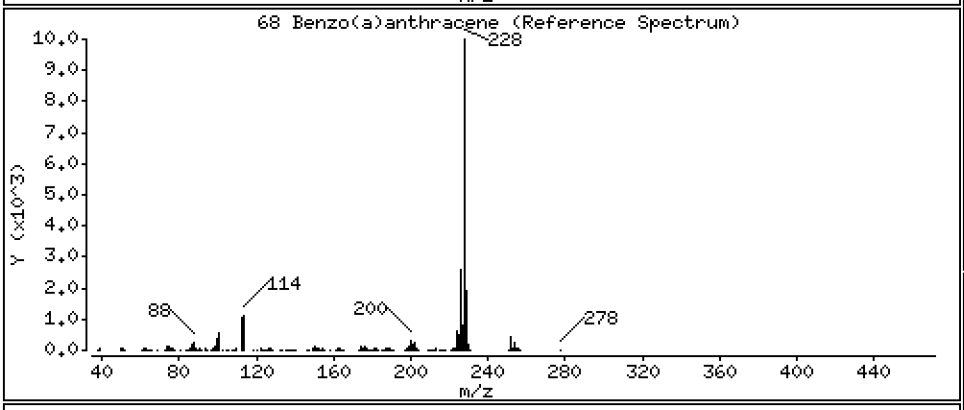
Column diameter: 0.25

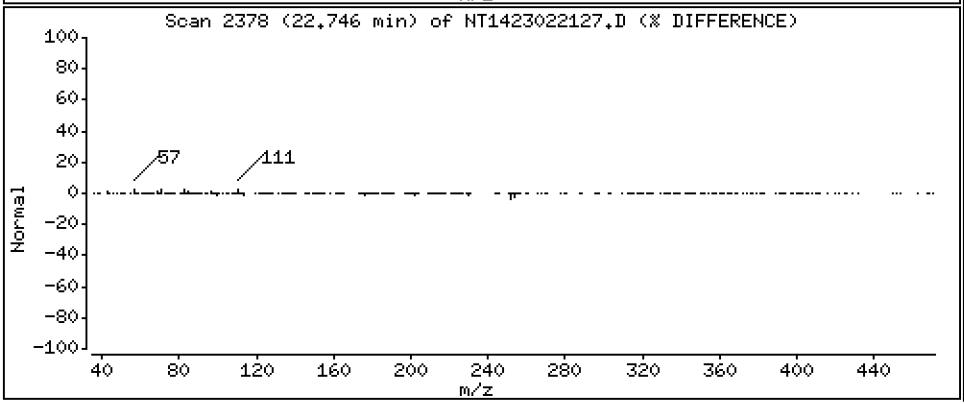
68 Benzo(a)anthracene

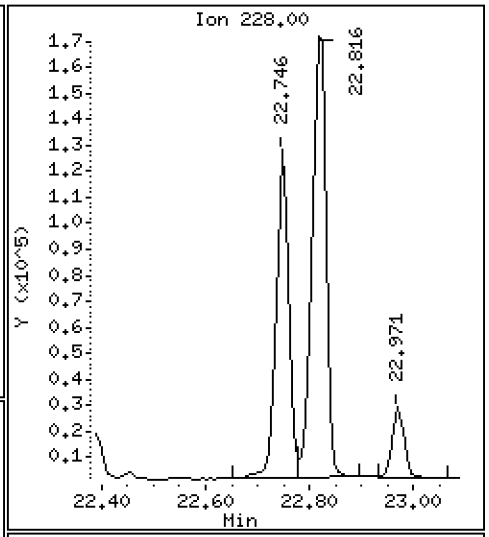
Concentration: 0.7368 ug/mL

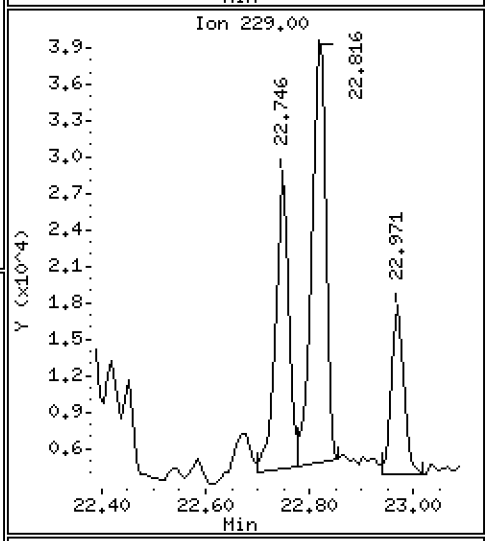


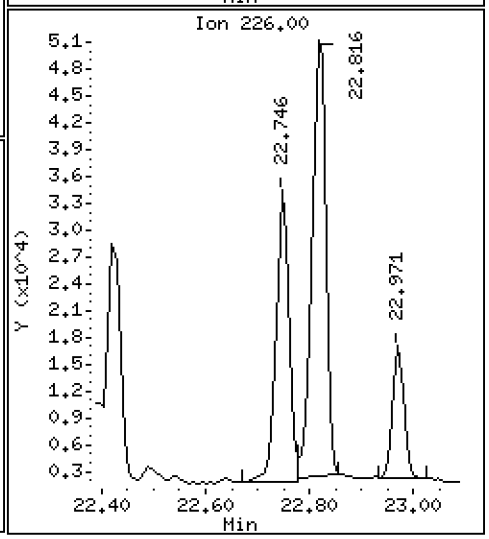












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

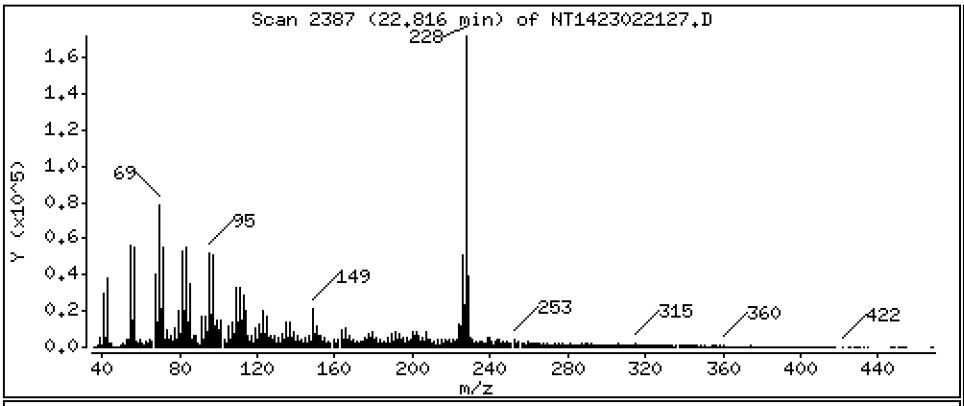
Operator: DSD

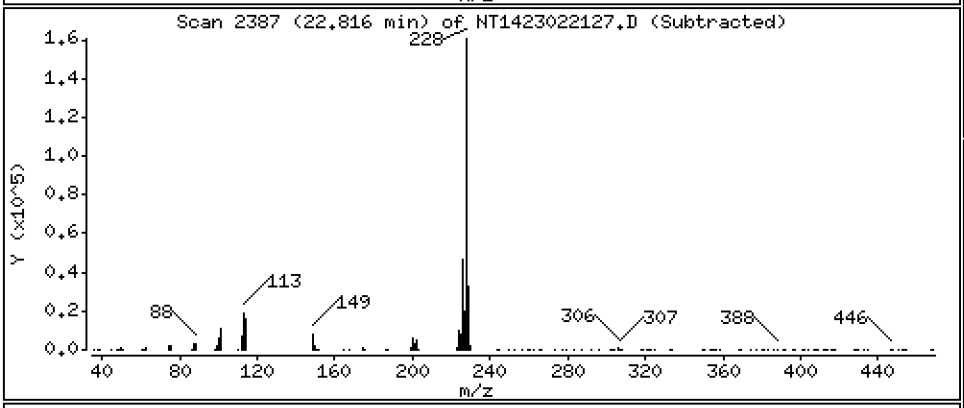
Column phase: ZB-5msi

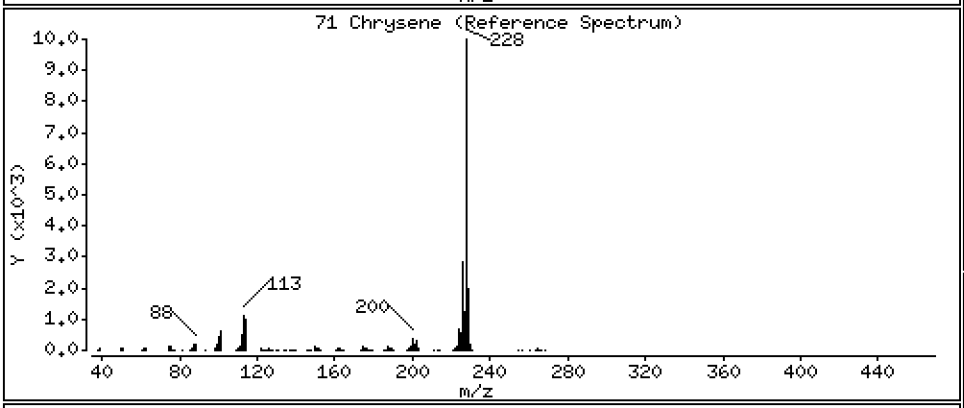
Column diameter: 0.25

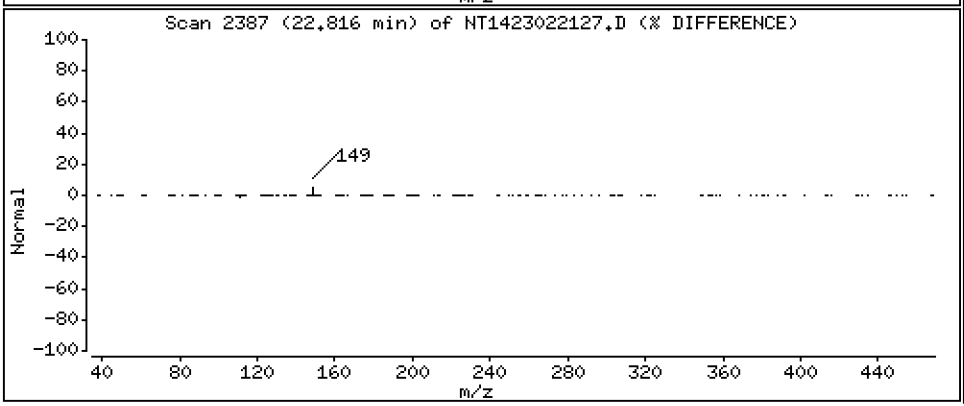
71 Chrysene

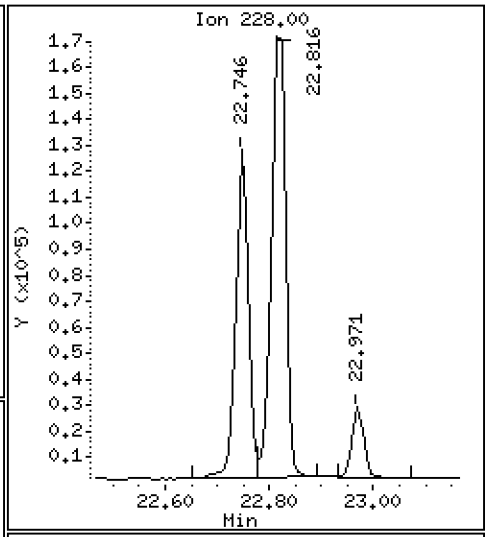
Concentration: 1.196 ug/mL

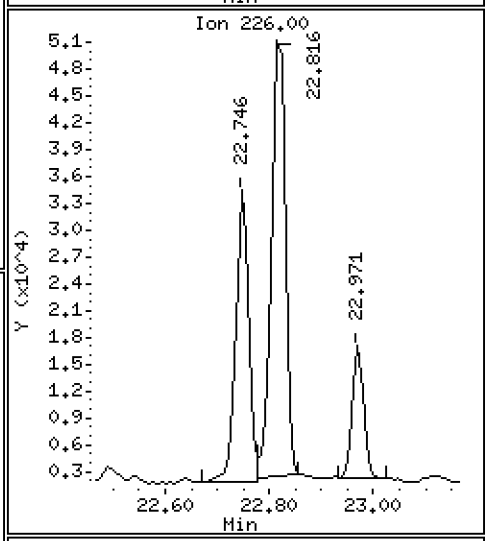


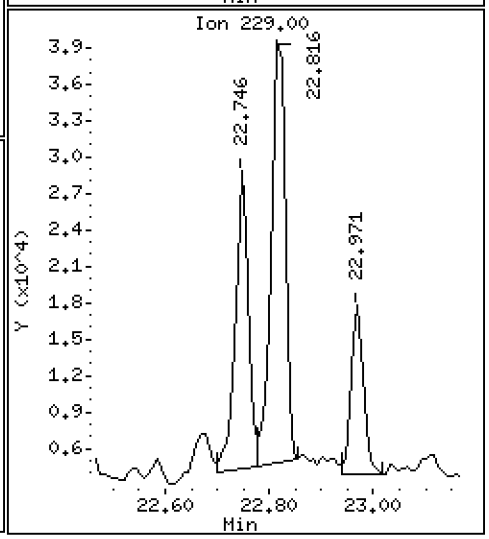












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

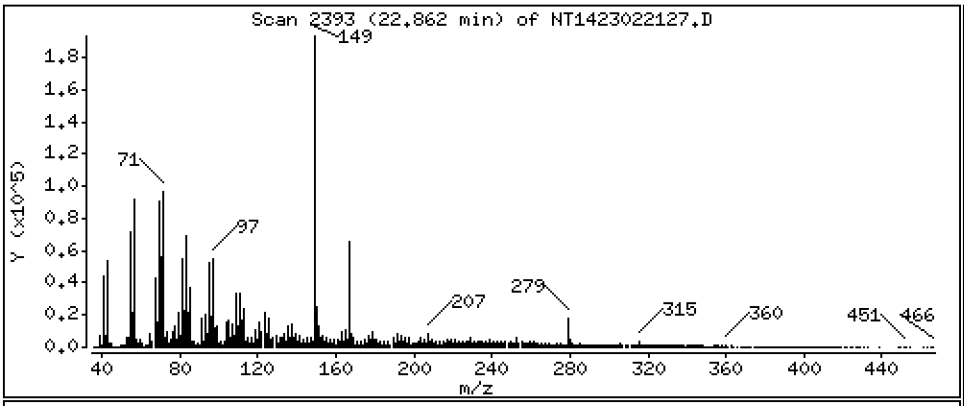
Operator: DSD

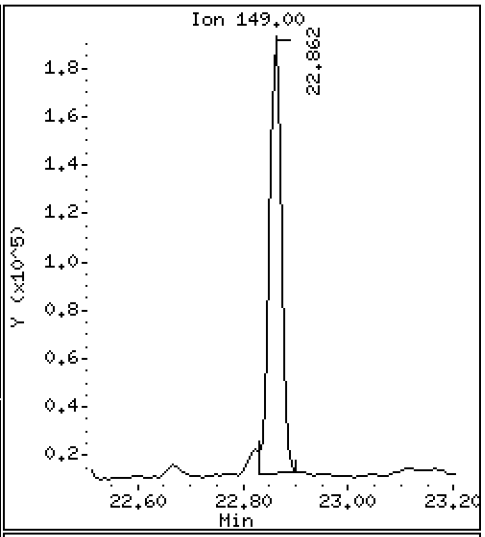
Column phase: ZB-5msi

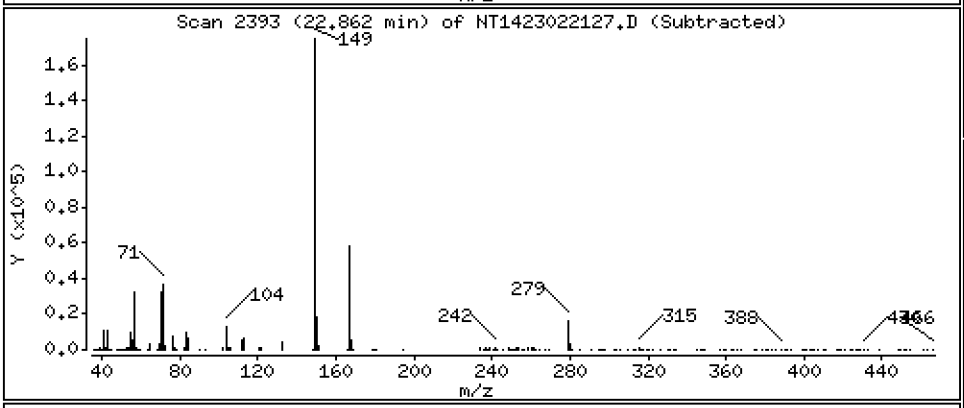
Column diameter: 0.25

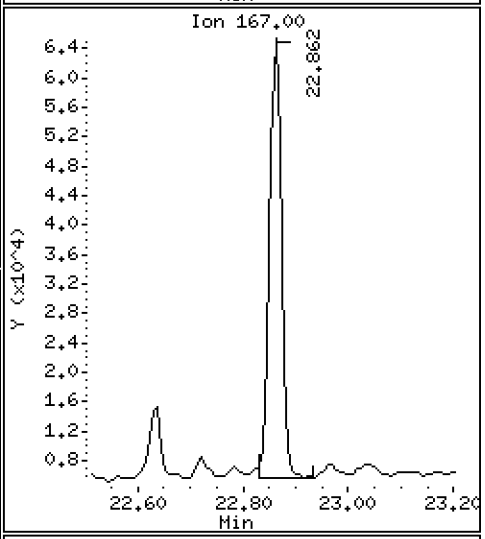
72 bis(2-Ethylhexyl)phthalate

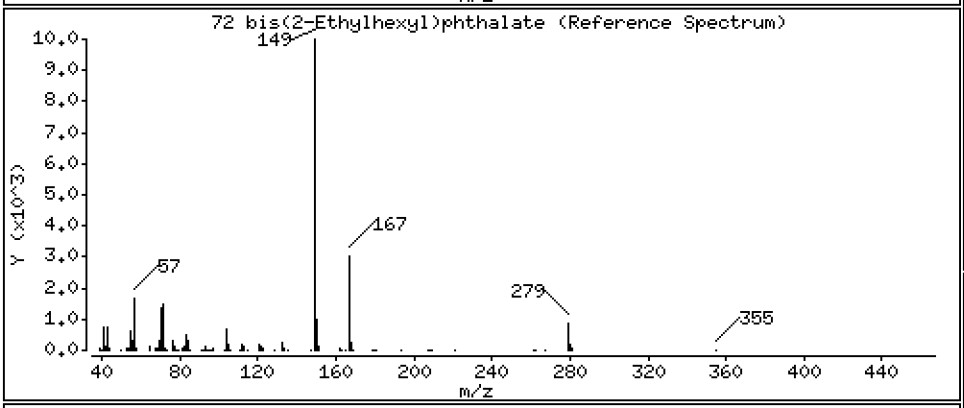
Concentration: 1.231 ug/mL

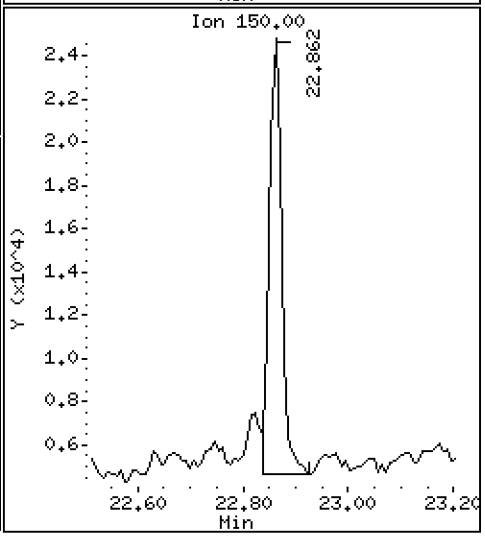


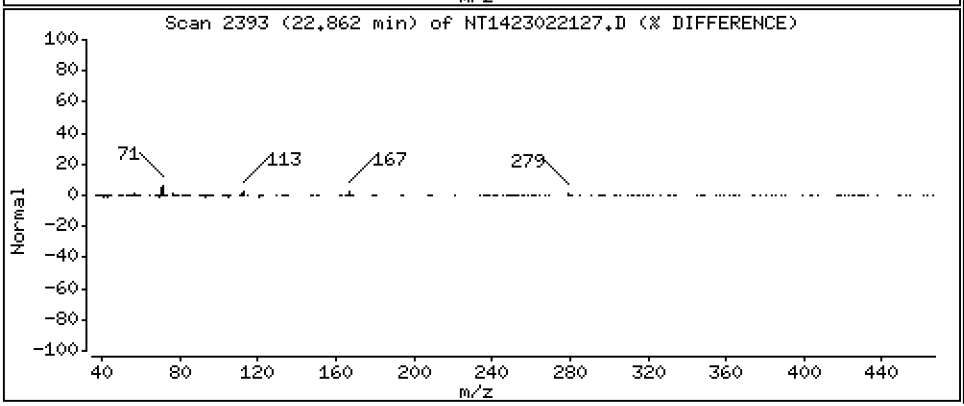












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

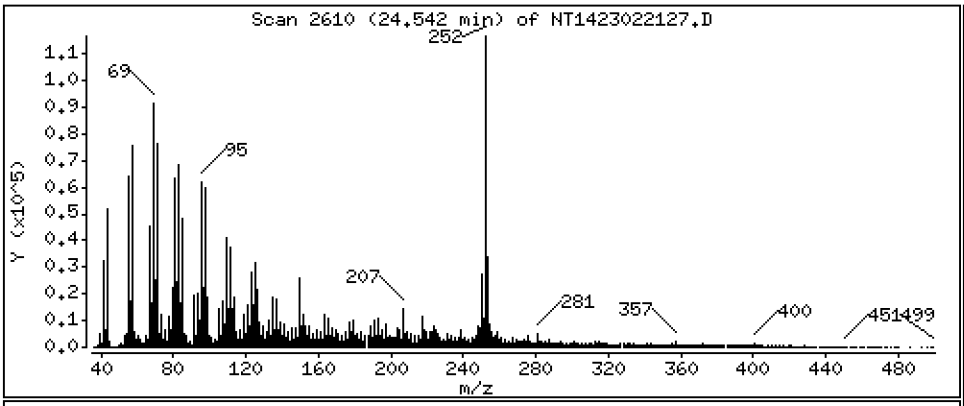
Operator: DSD

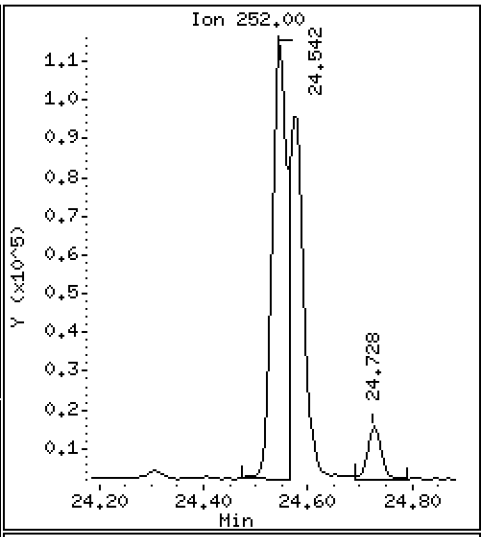
Column phase: ZB-5msi

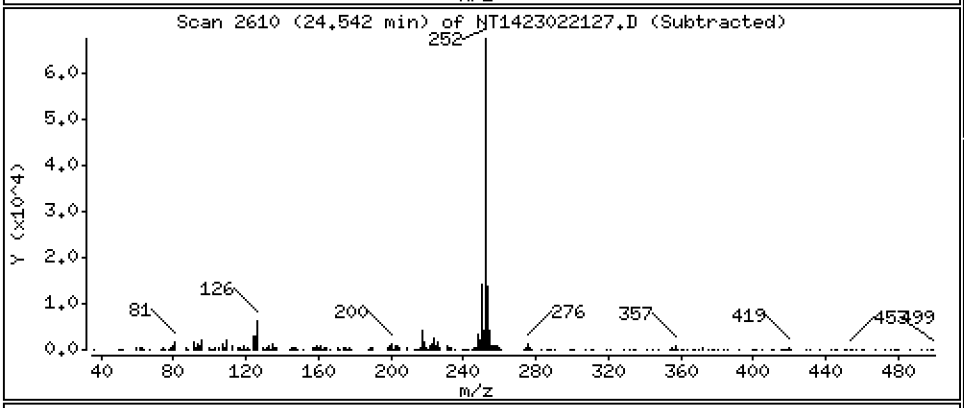
Column diameter: 0.25

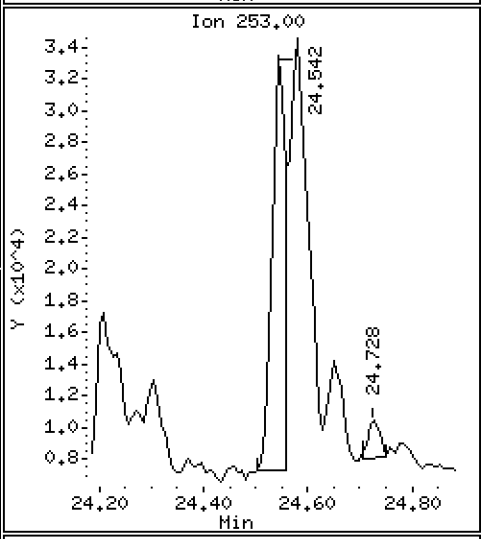
74 Benzo(b)fluoranthene

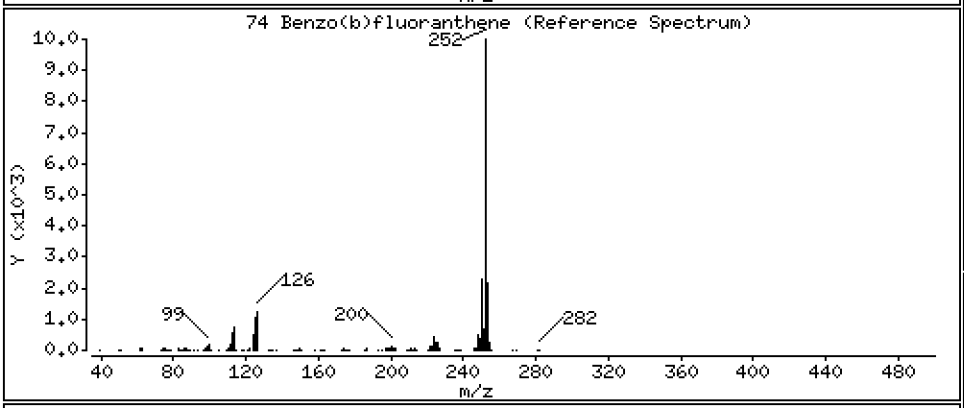
Concentration: 1.123 ug/mL

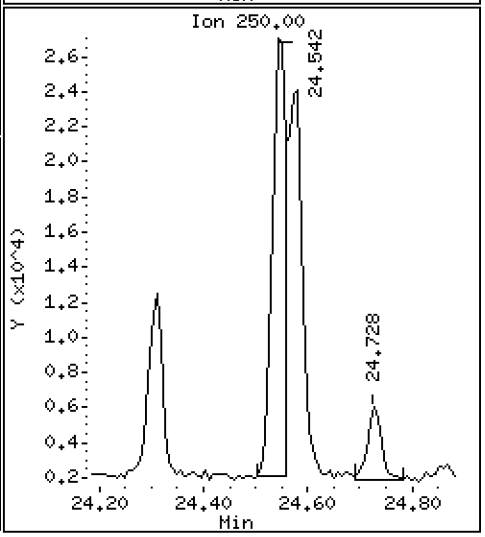


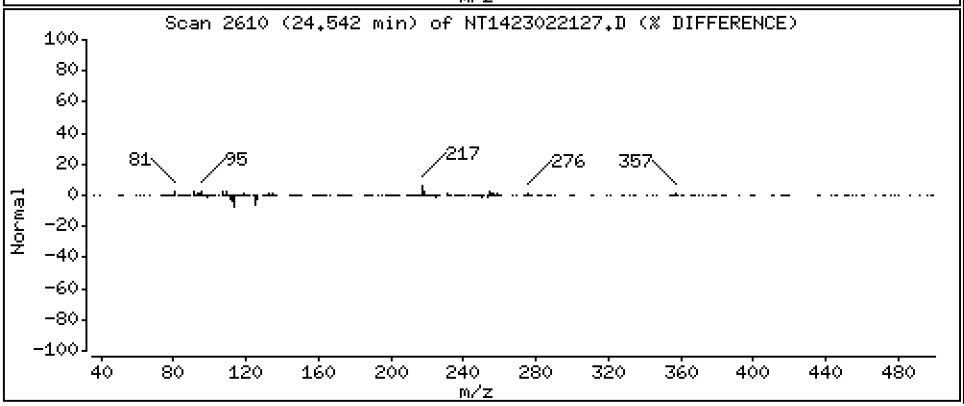












Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022127.D

Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

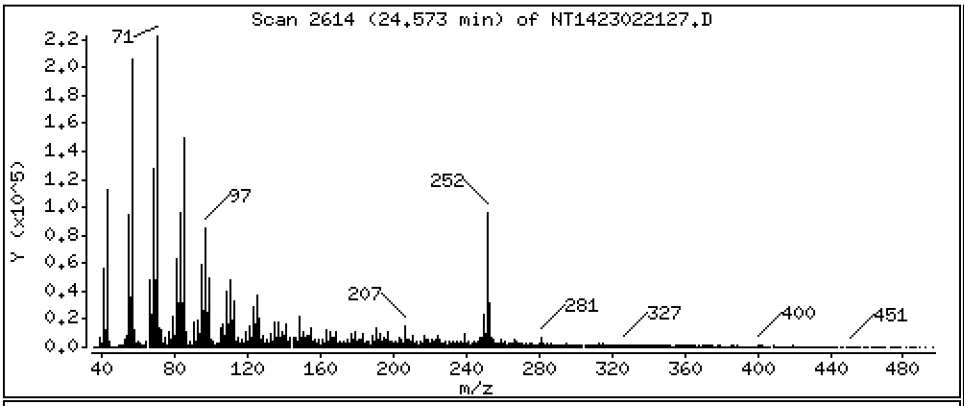
Operator: DSD

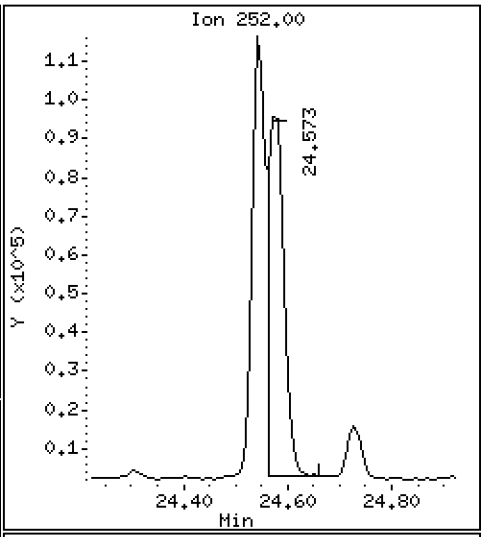
Column phase: ZB-5msi

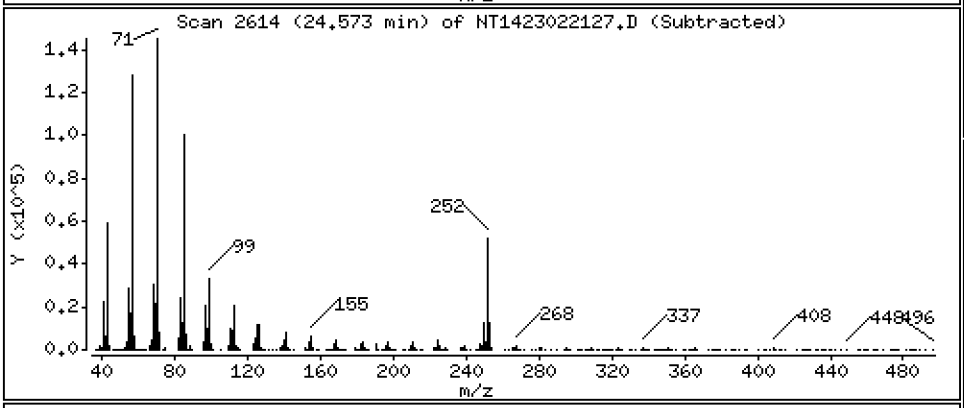
Column diameter: 0.25

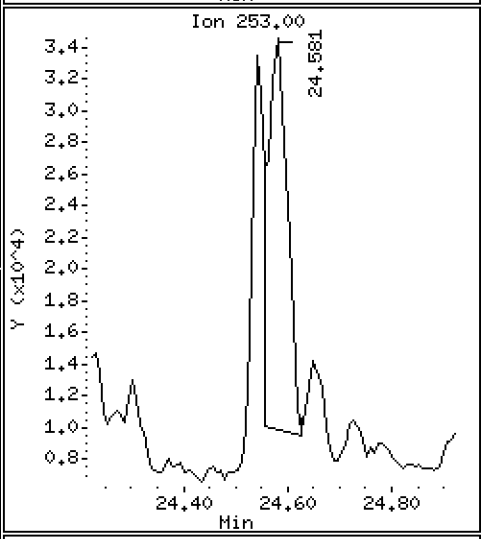
75 Benzo(k)fluoranthene

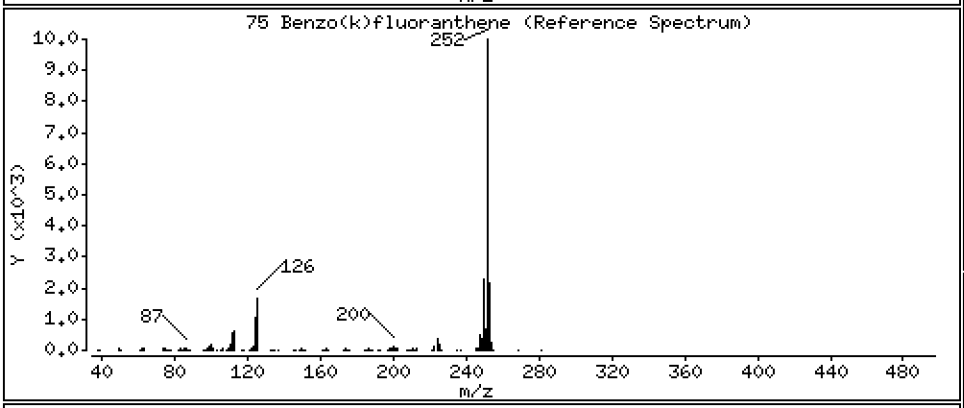
Concentration: 0.8071 ug/mL

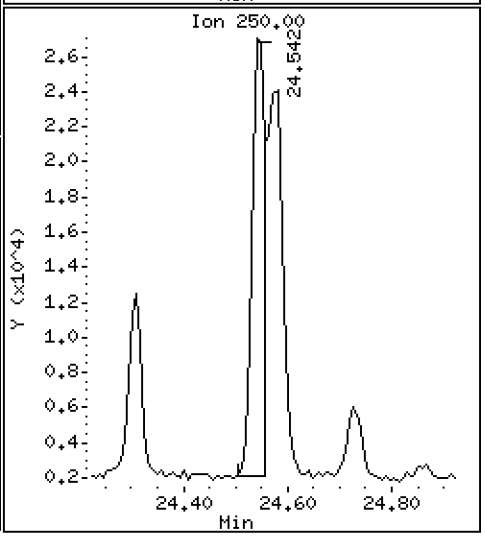


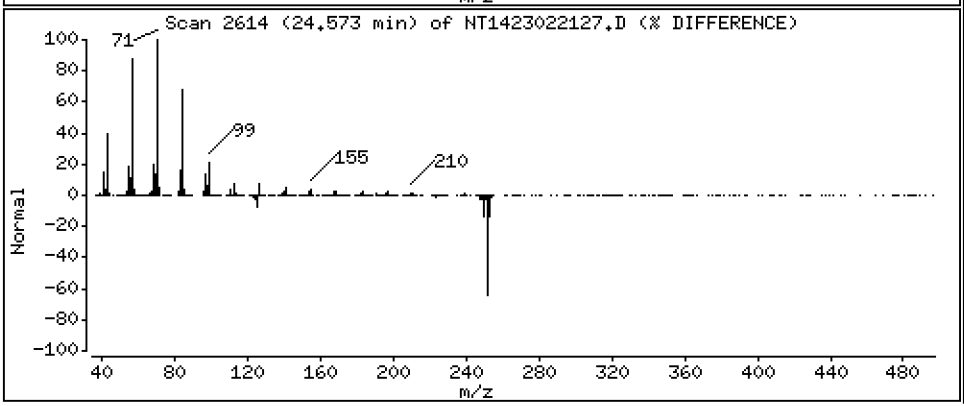












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

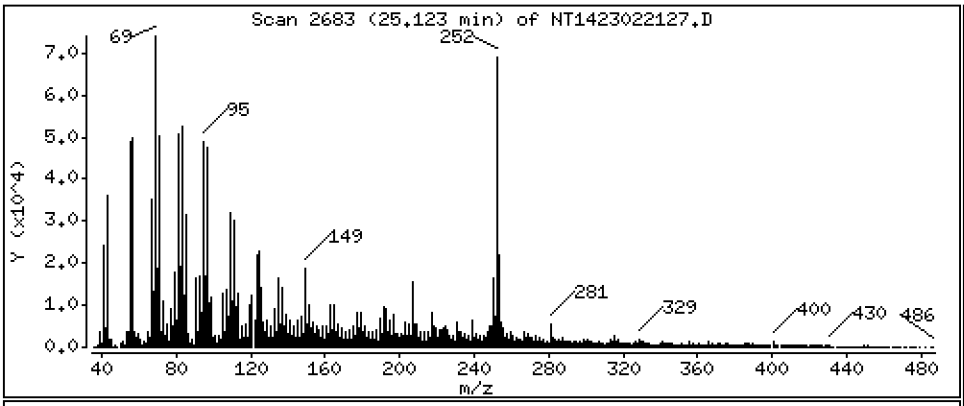
Operator: DSD

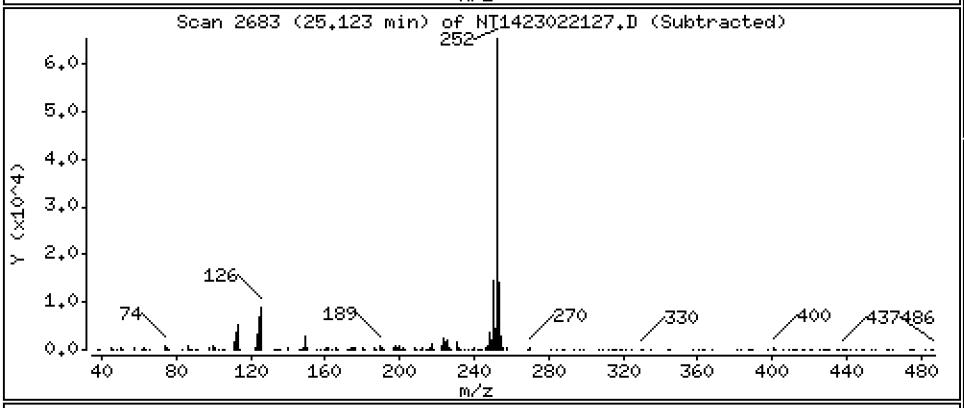
Column phase: ZB-5msi

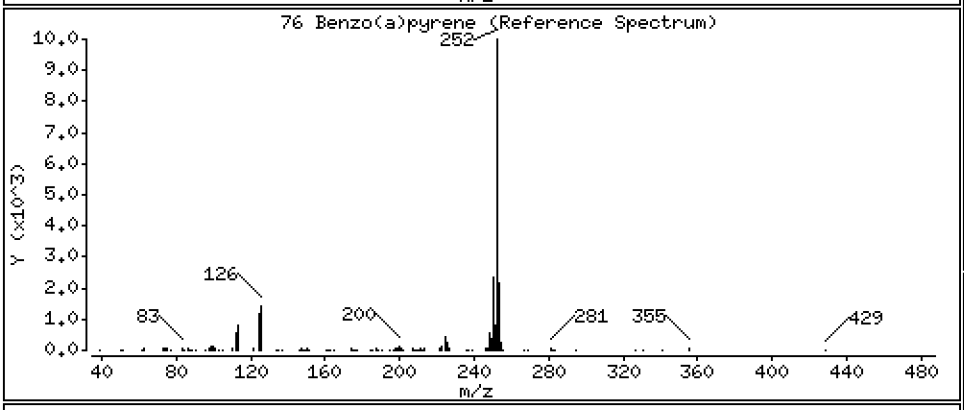
Column diameter: 0.25

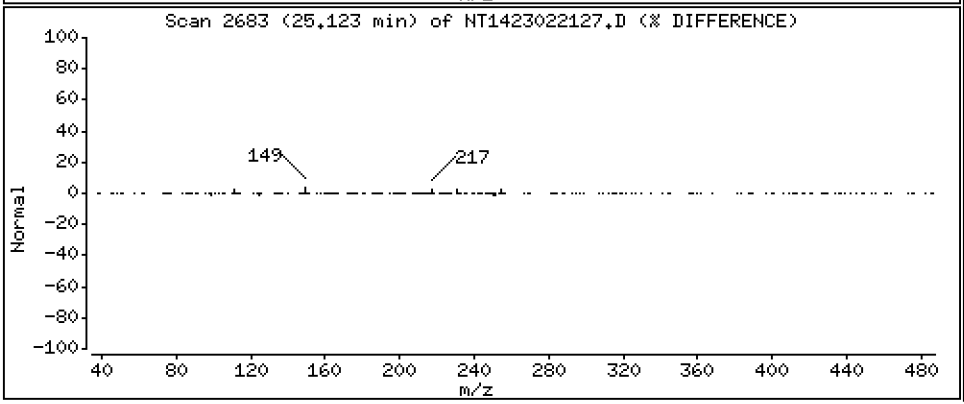
76 Benzo(a)pyrene

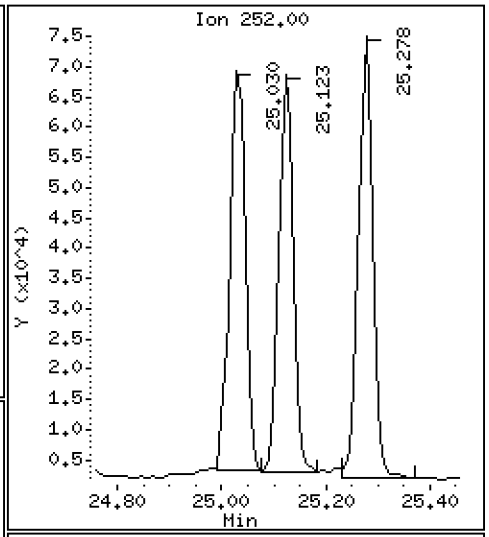
Concentration: 0.6223 ug/mL

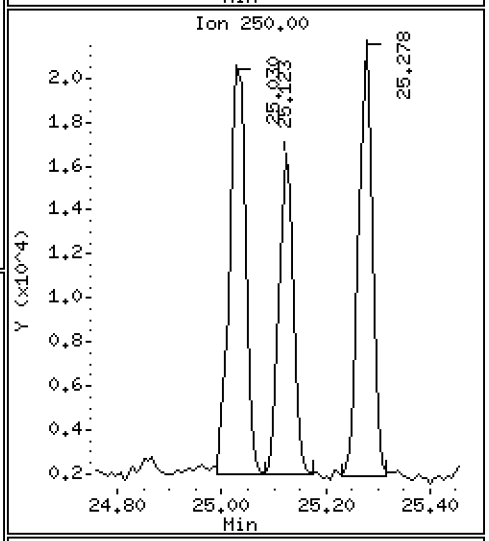


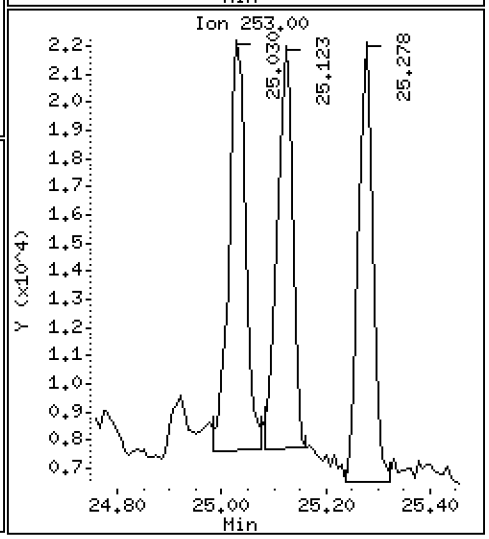












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

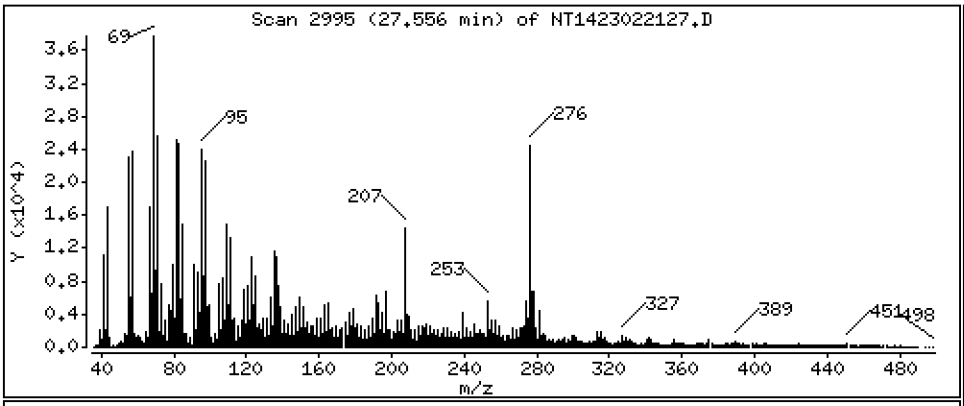
Operator: DSD

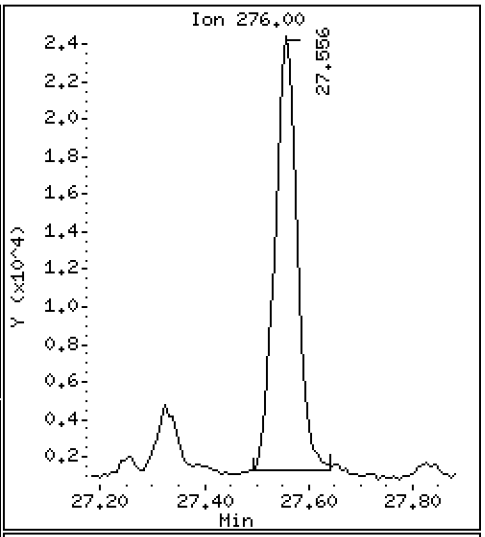
Column phase: ZB-5msi

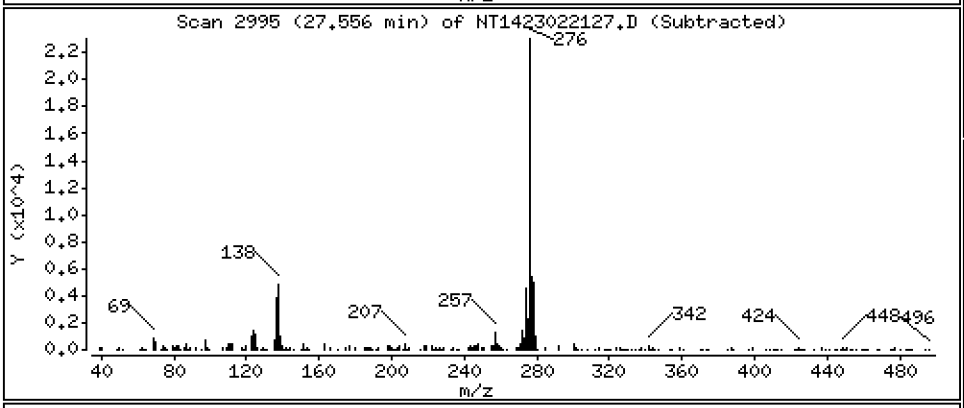
Column diameter: 0.25

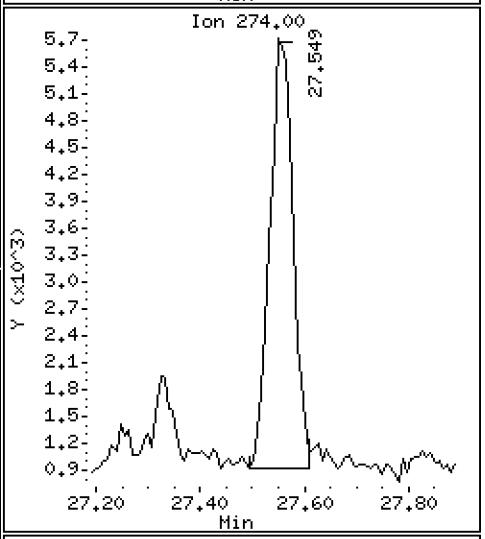
78 Indeno(1,2,3-cd)pyrene

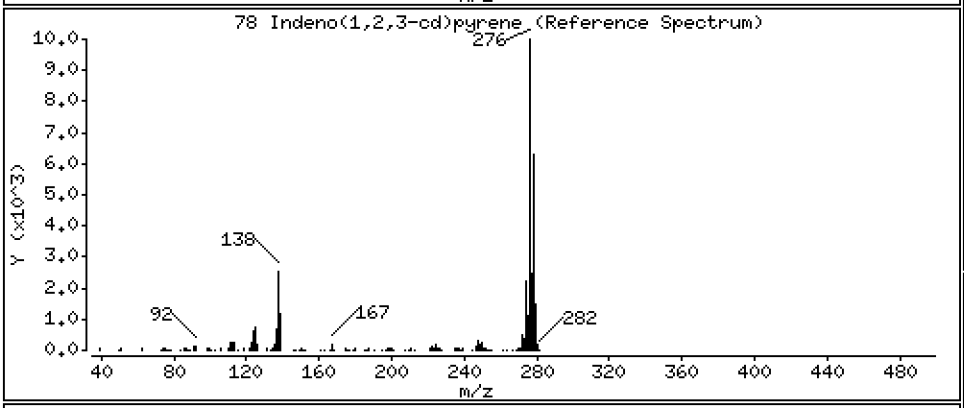
Concentration: 0.4283 ug/mL

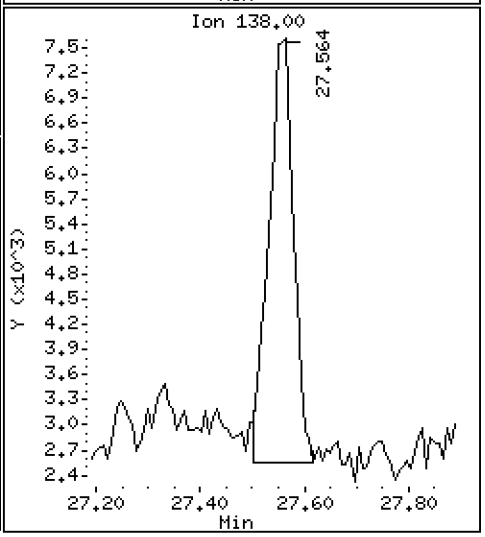


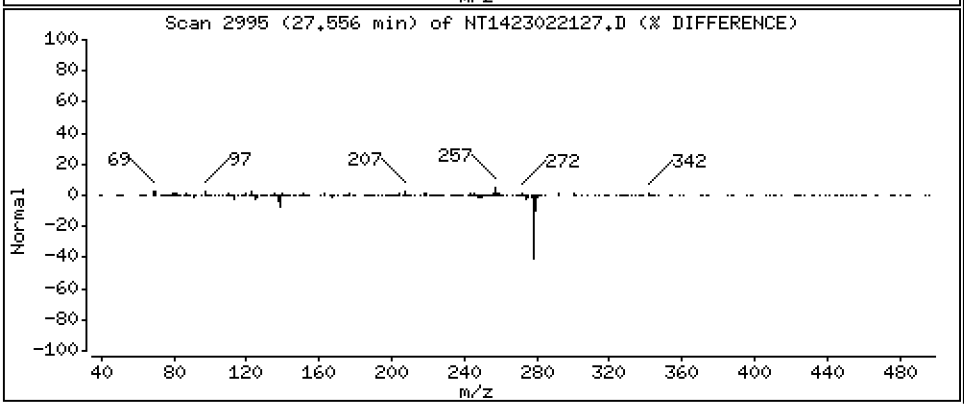












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

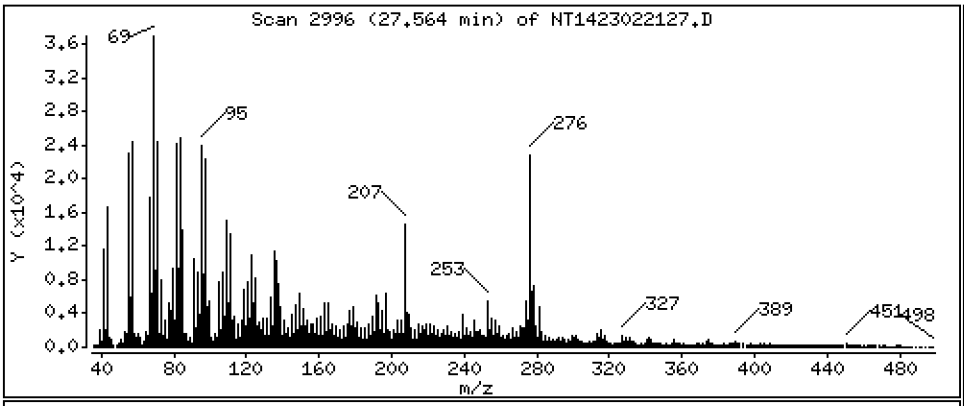
Operator: DSD

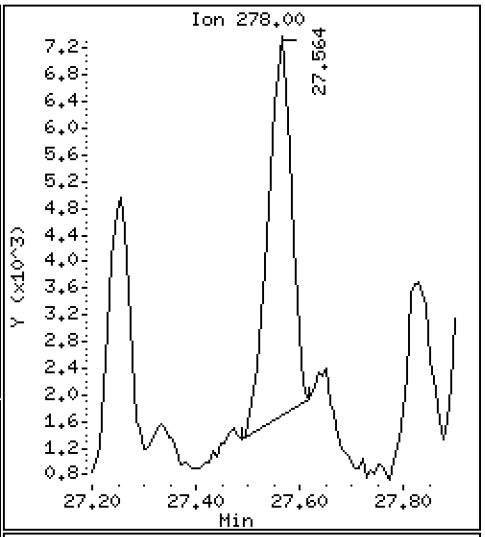
Column phase: ZB-5msi

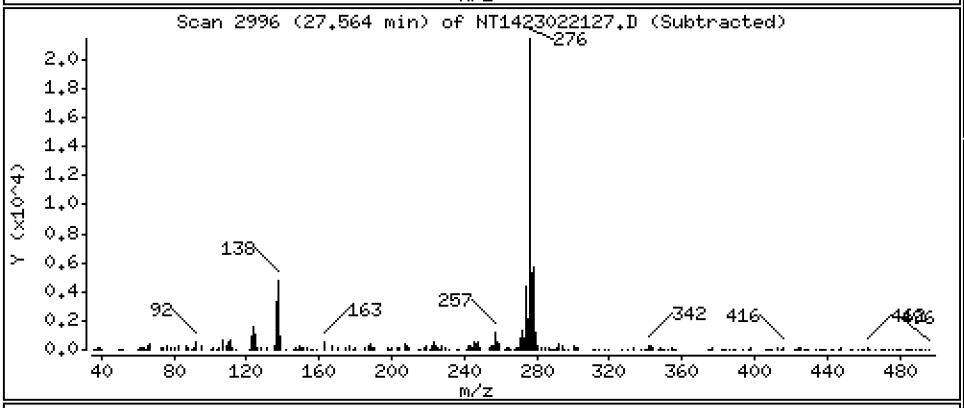
Column diameter: 0.25

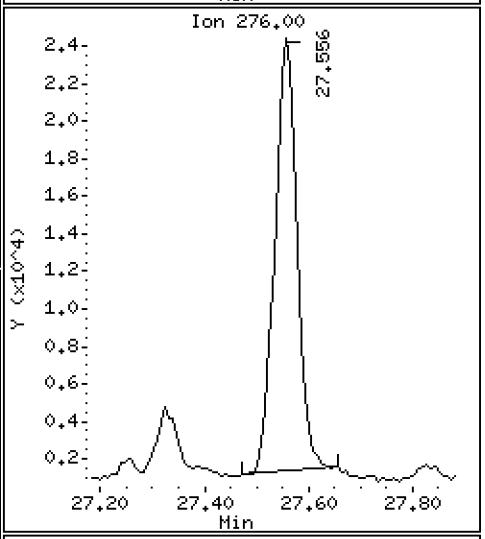
79 Dibenzo(a,h)anthracene

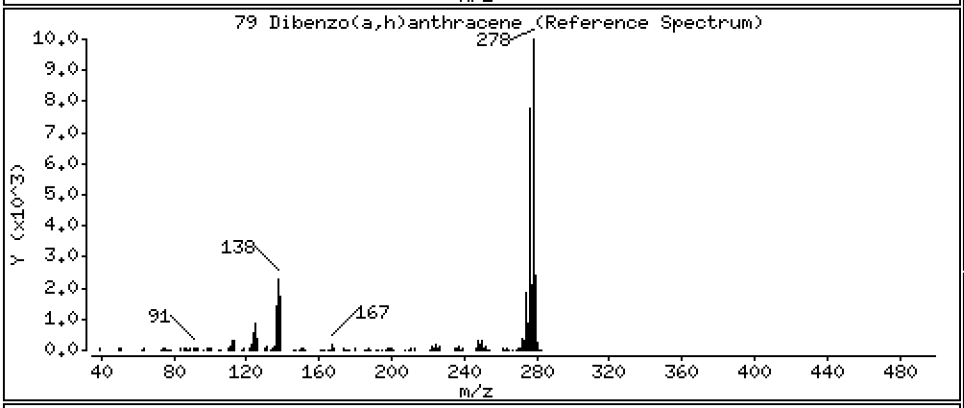
Concentration: 0.1317 ug/mL

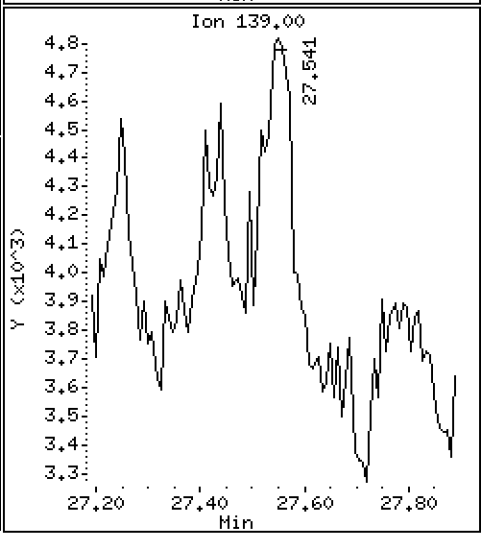


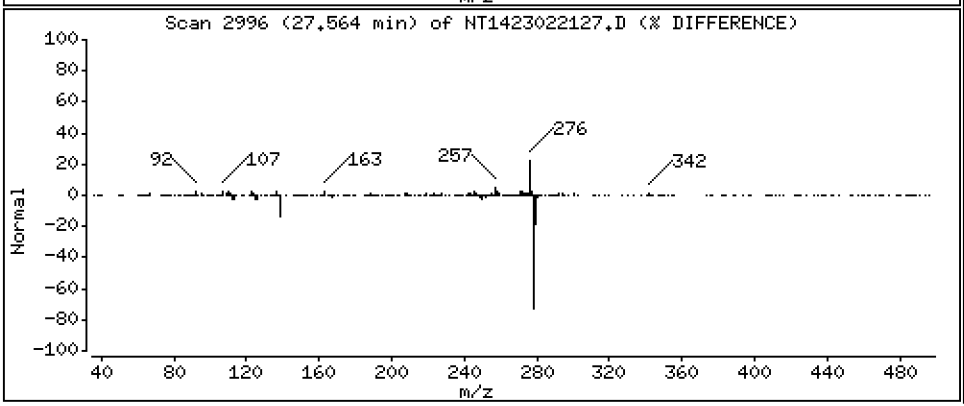












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

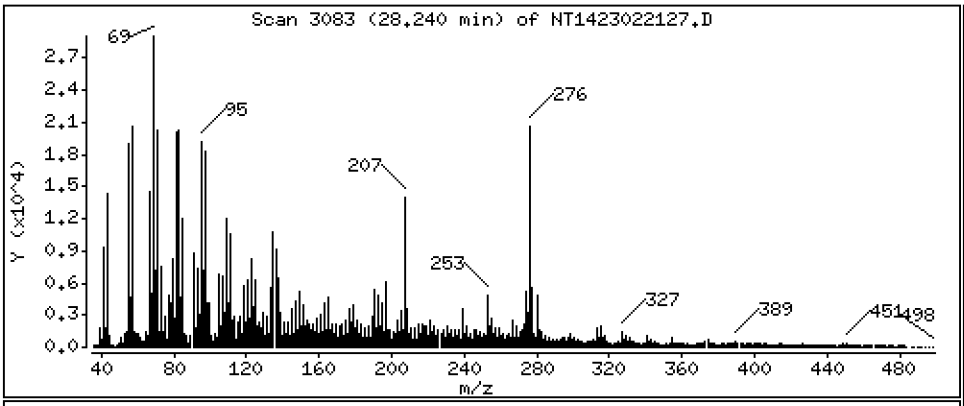
Operator: DSD

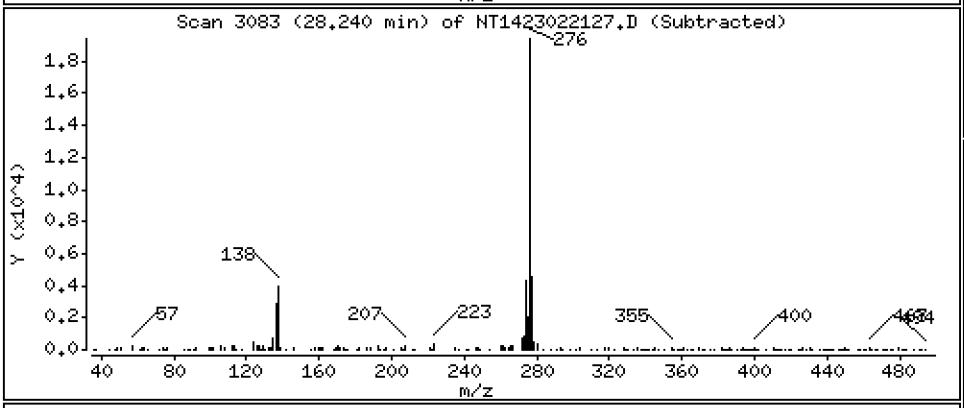
Column phase: ZB-5msi

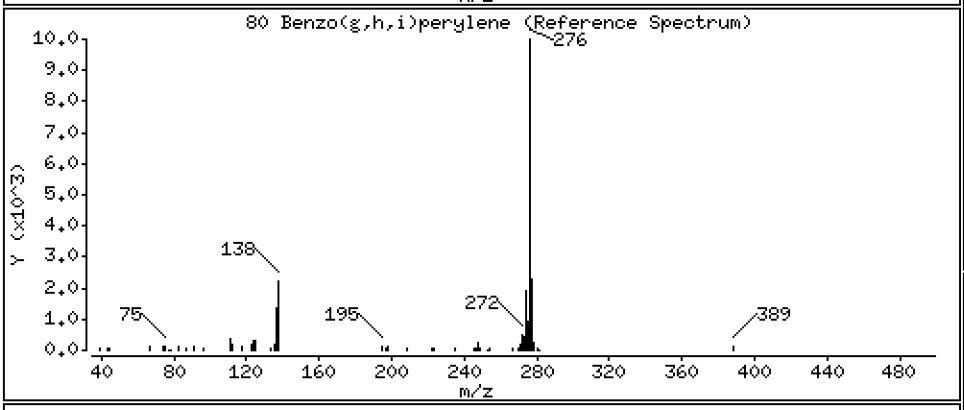
Column diameter: 0.25

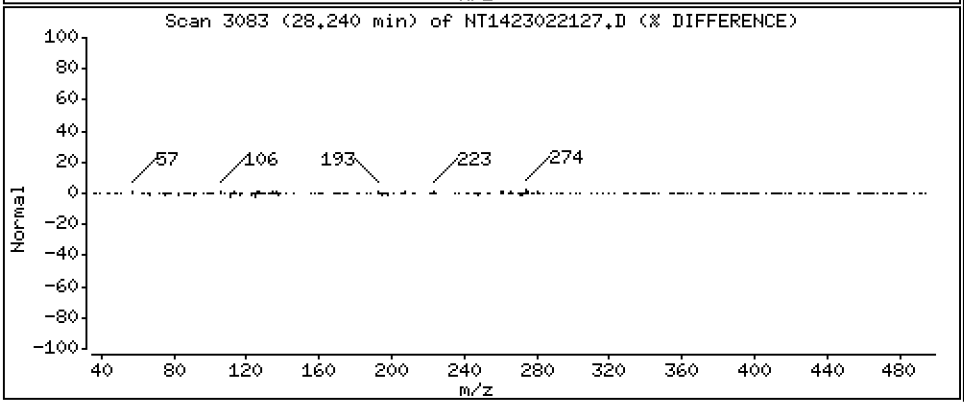
80 Benzo(g,h,i)perylene

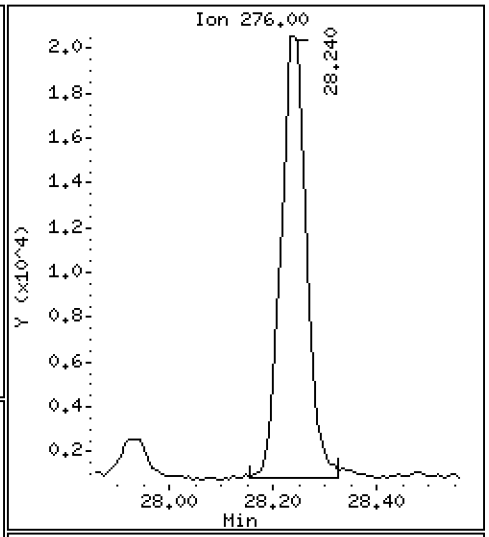
Concentration: 0.5084 ug/mL

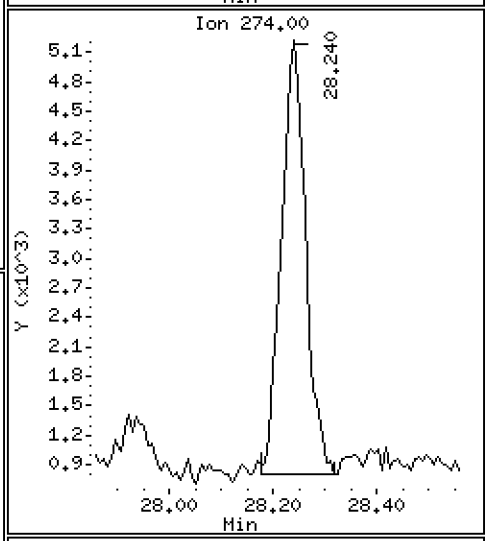


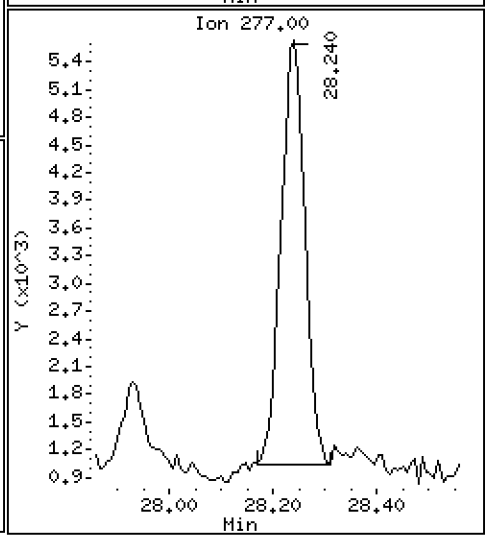












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

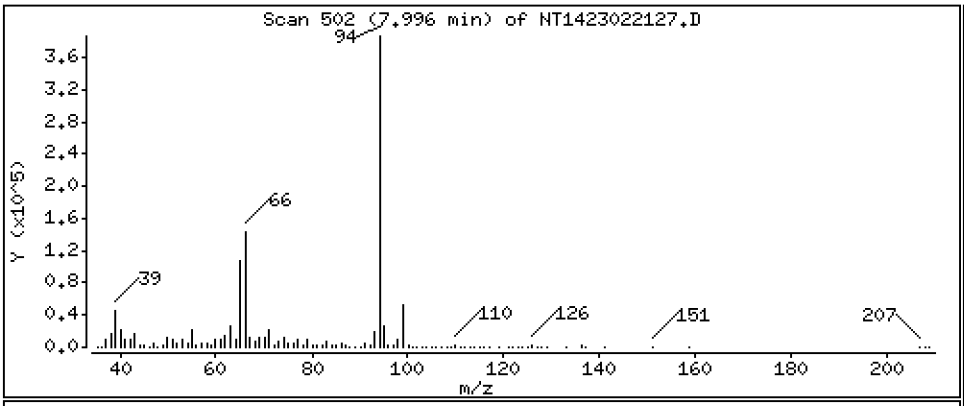
Operator: DSD

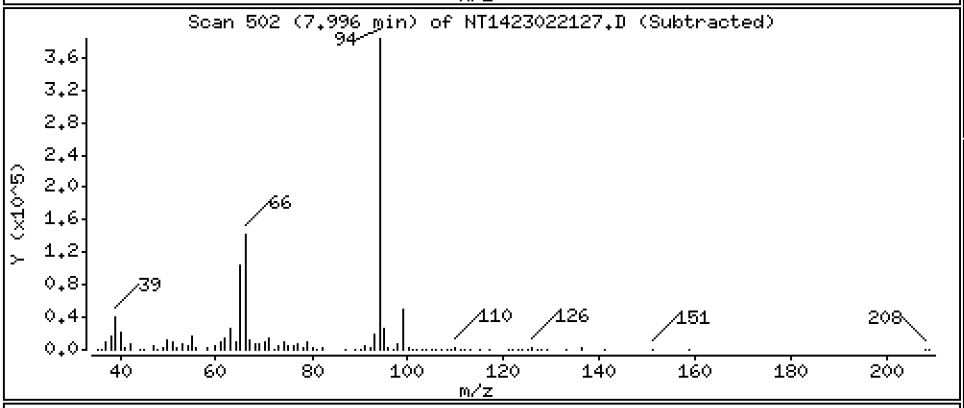
Column phase: ZB-5msi

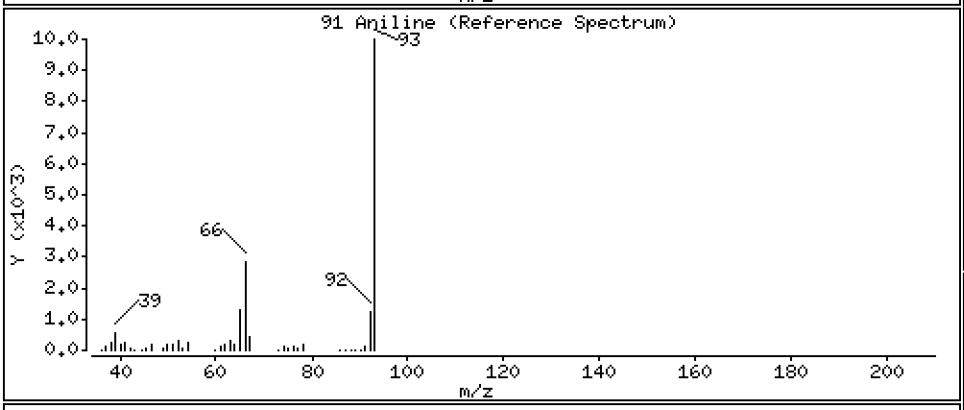
Column diameter: 0.25

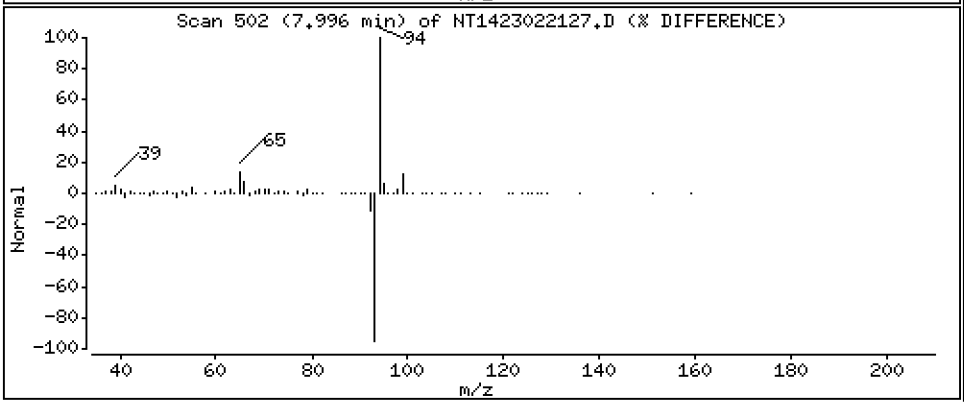
91 Aniline

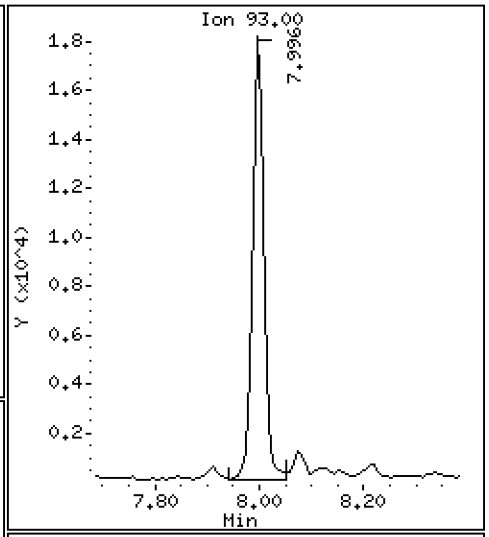
Concentration: 0.1802 ug/mL

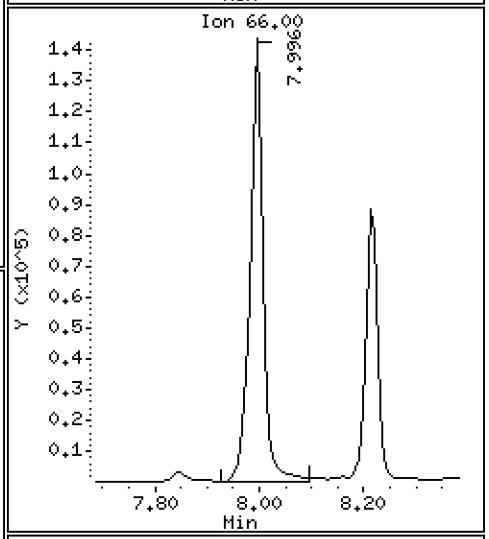


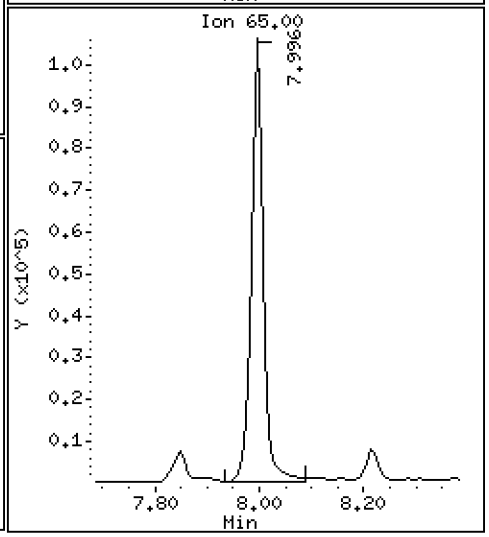












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

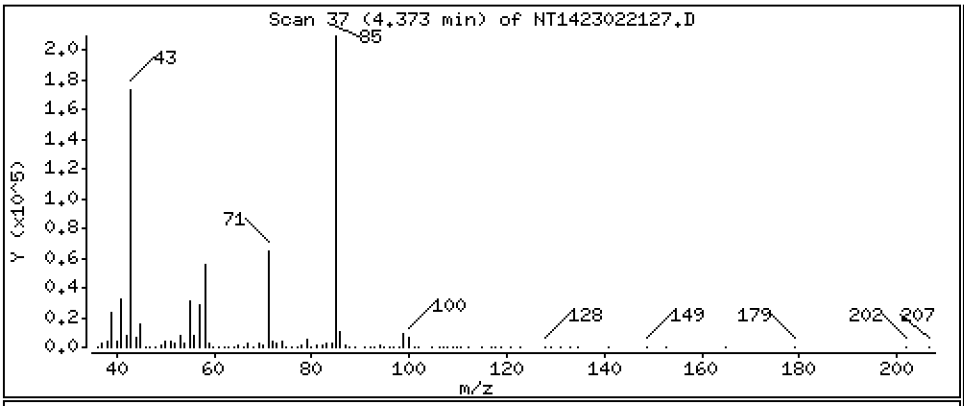
Operator: DSD

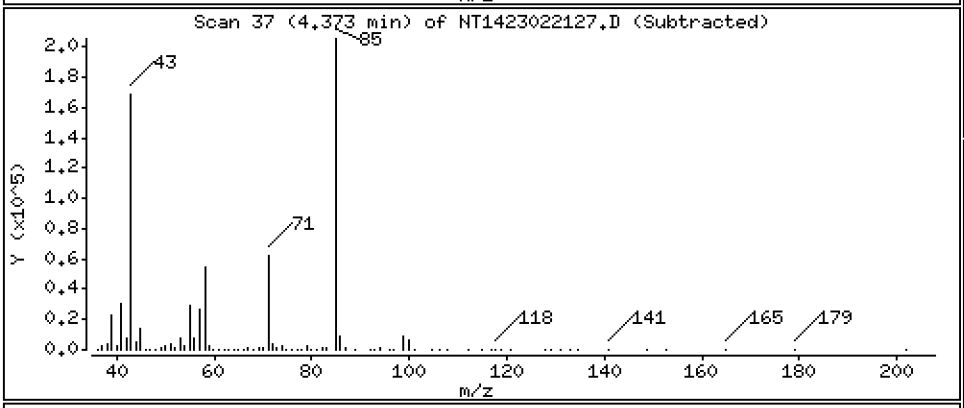
Column phase: ZB-5msi

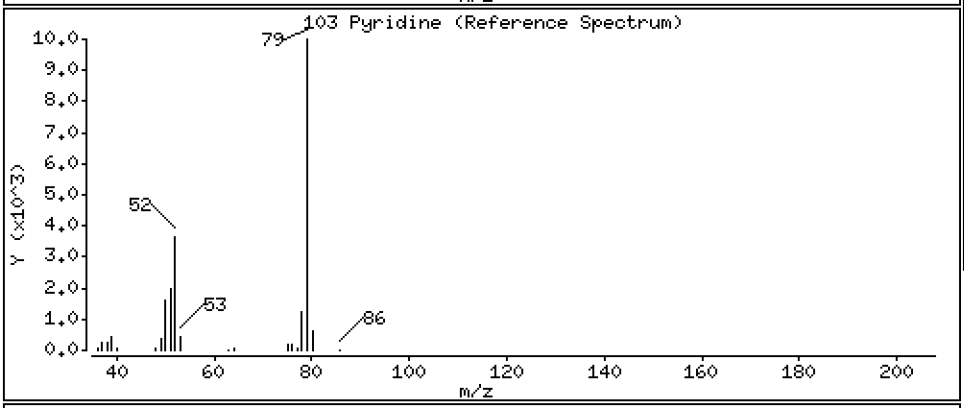
Column diameter: 0.25

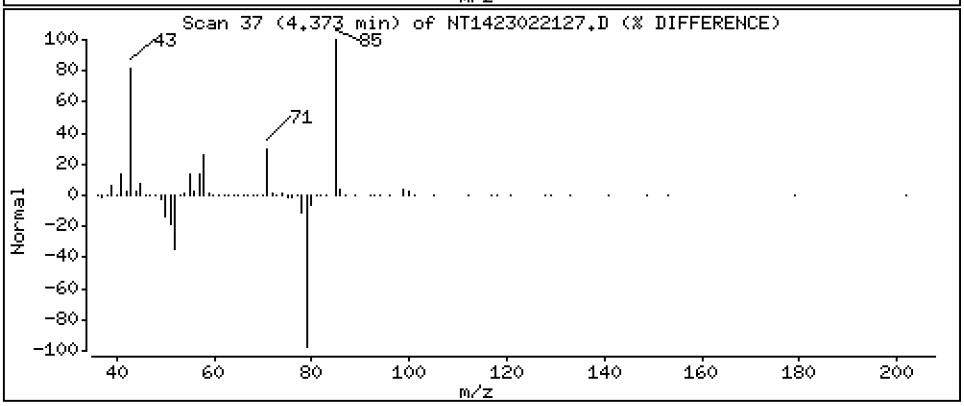
103 Pyridine

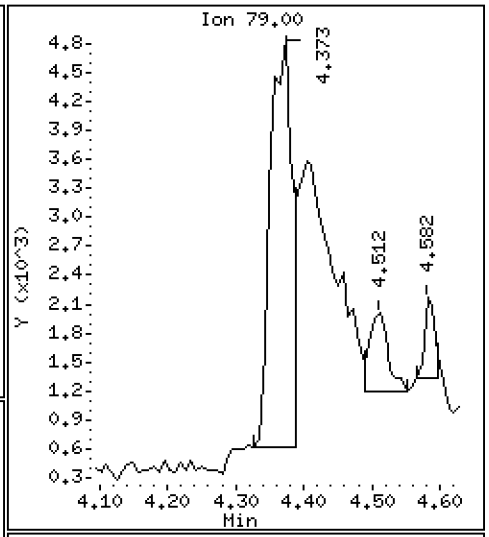
Concentration: 0.09168 ug/mL

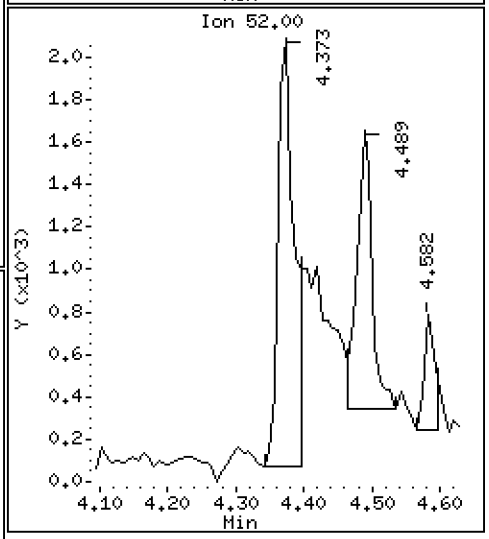












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

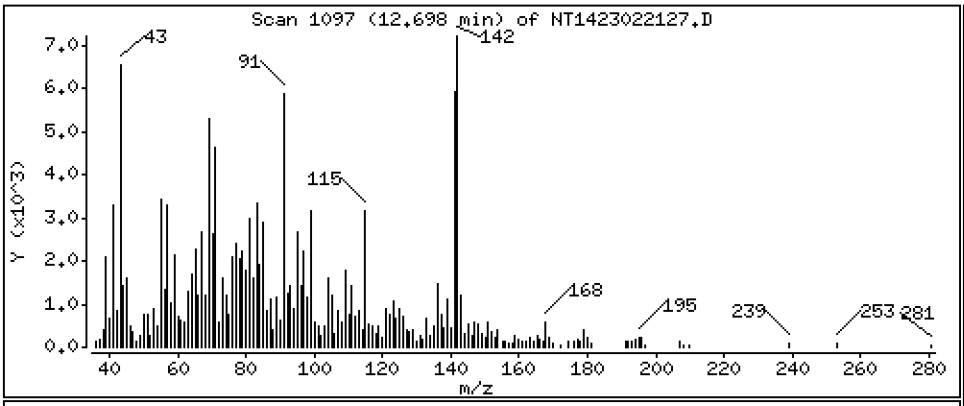
Operator: DSD

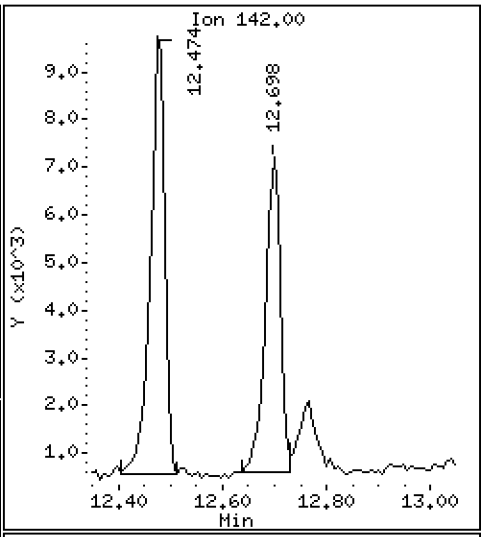
Column phase: ZB-5msi

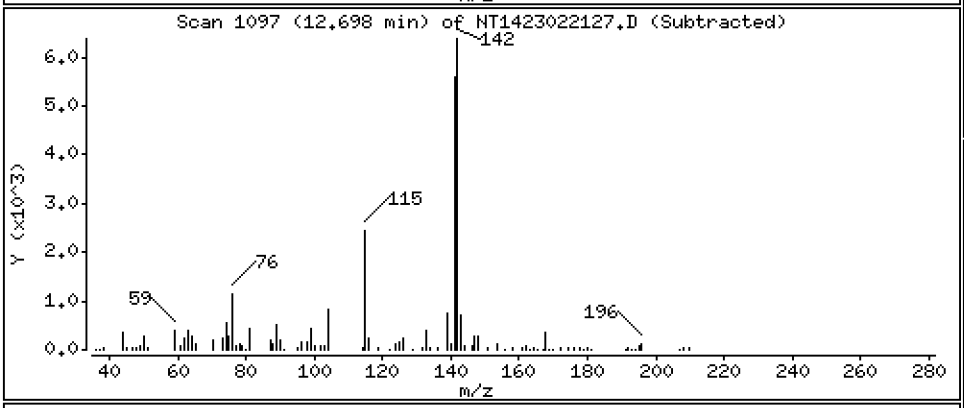
Column diameter: 0.25

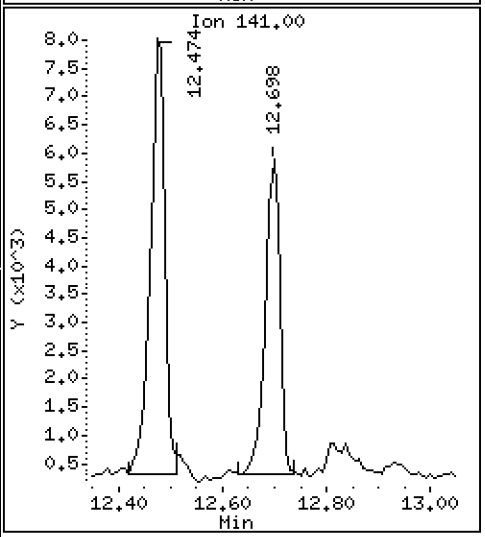
105 1-methylnaphthalene

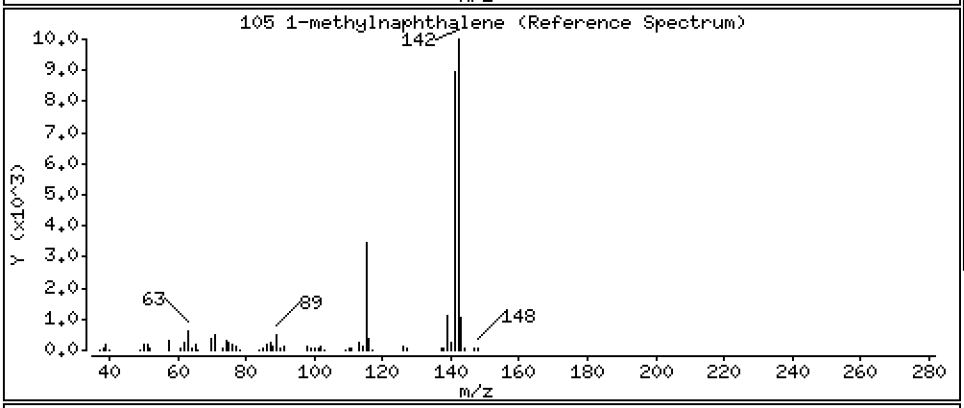
Concentration: 0.06509 ug/mL

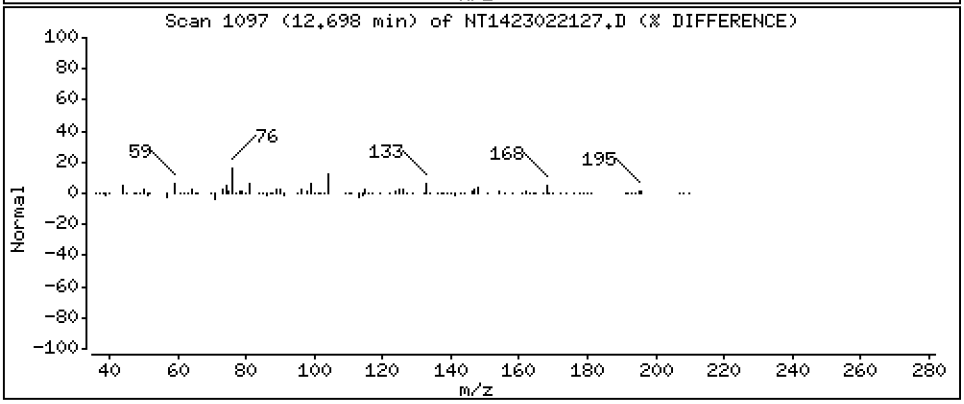












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Date : 22-FEB-2023 05:07

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01RE1

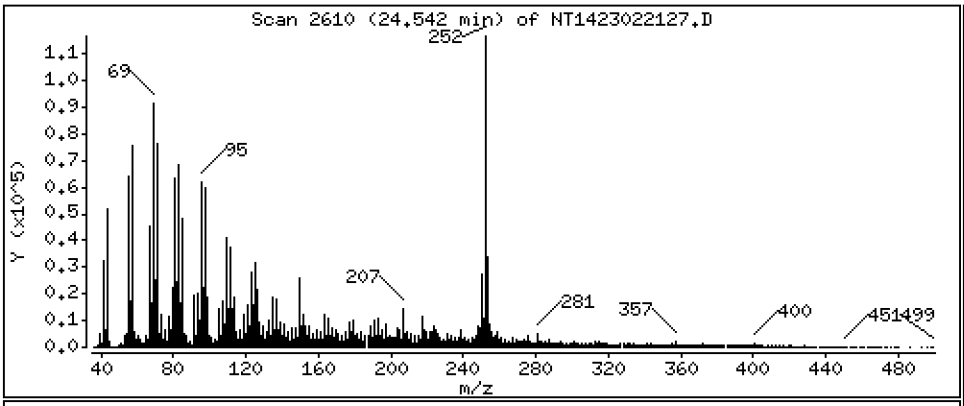
Operator: DSD

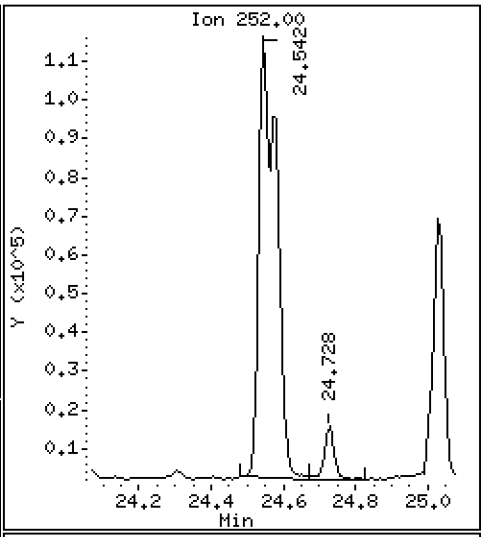
Column phase: ZB-5msi

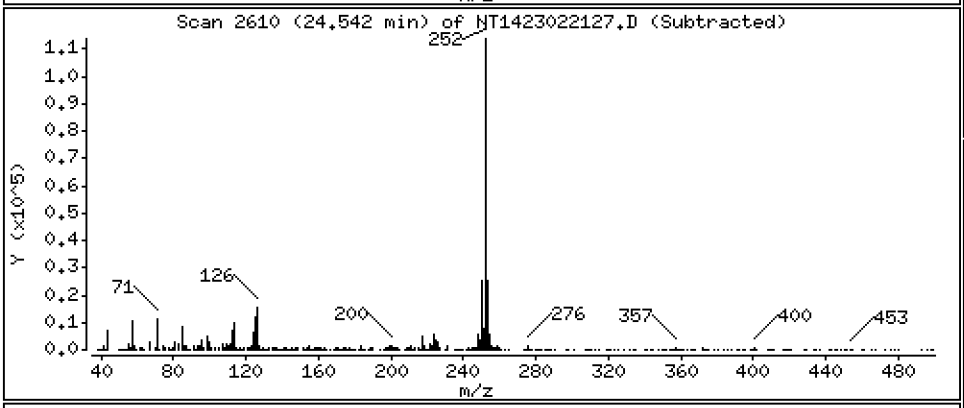
Column diameter: 0.25

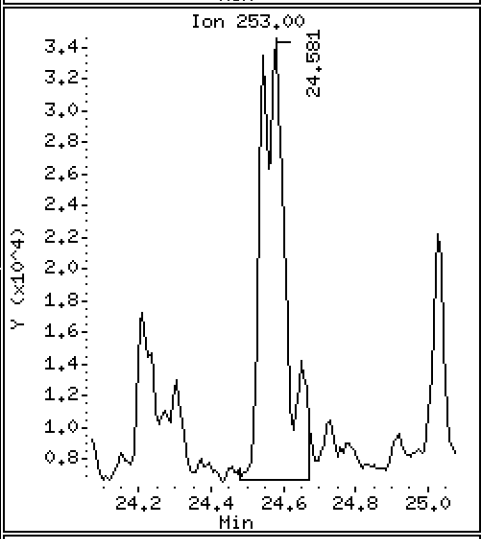
187 Total Benzofluoranthenes

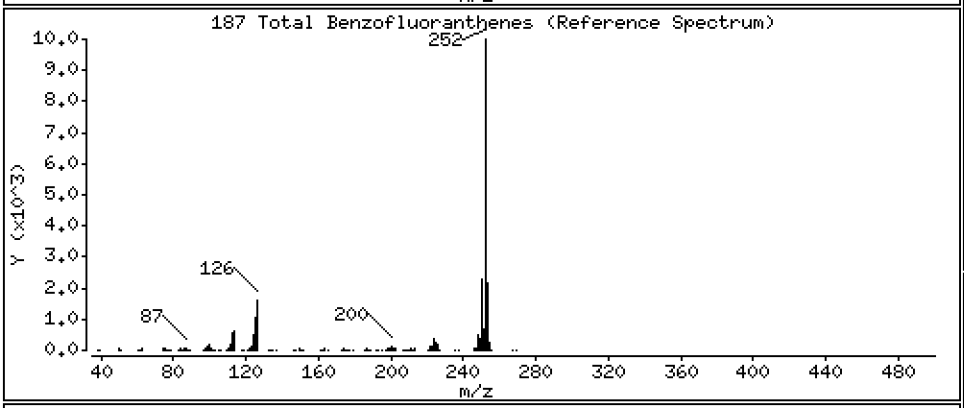
Concentration: 1.870 ug/mL

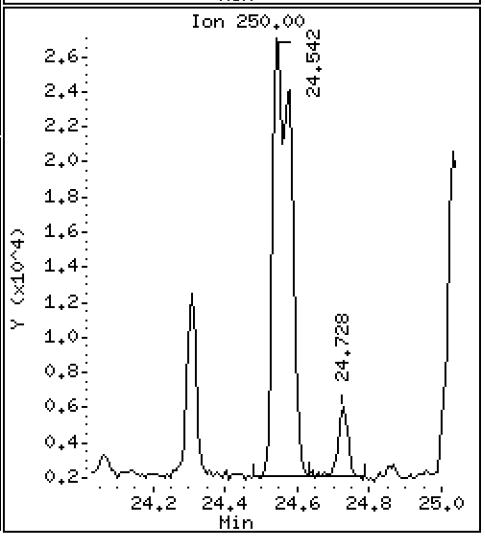


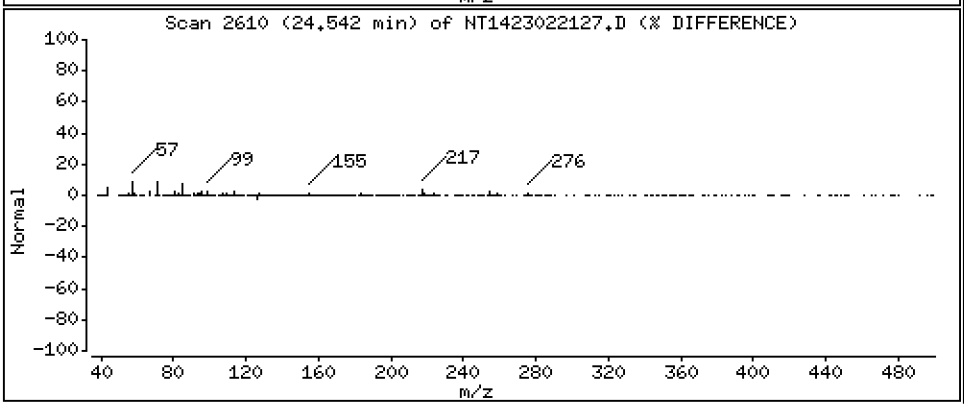












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230221A.b\NT1423022127.D
Lab Smp Id: 23A0171-01RE1
Inj Date : 22-FEB-2023 05:07 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : 23A0171-01RE1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230221A.b\ABN.m
Meth Date : 22-Feb-2023 13:34 deenayd Quant Type: ISTD
Cal Date : 16-FEB-2023 19:30 Cal File: NT1423021610.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: DEENAY-201905

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.396	6.373	(0.747)	435252	4.95716	4.957
$	2 Phenol-d5	99	7.972	7.965	(0.930)	654729	4.70063	4.701
	3 Phenol	94	7.996	7.988	(0.933)	629541	4.26948	4.269
$	5 2-Chlorophenol-d4	132	8.212	8.212	(0.958)	476959	4.79915	4.799
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.568	8.568	(1.000)	328442	4.00000	
	9 1,4-Dichlorobenzene	146	8.599	8.599	(0.992)	1359	0.01239	0.01239(MH)
$	10 1,2-Dichlorobenzene-d4	152	8.925	8.925	(1.042)	205804	2.76266	2.763
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	8.863	8.855	(1.034)	94413	1.13883	1.139
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	9.367	9.360	(1.093)	28235	0.25970	0.2597
$	18 Nitrobenzene-d5	82	9.662	9.662	(0.875)	439416	3.38509	3.385
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	10.624	10.678	(0.962)	87842	1.41855	1.419(H)
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.042	11.042	(1.000)	1123613	4.00000	
	28 Naphthalene	128	11.081	11.081	(1.003)	37121	0.13399	0.1340
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	12.473	12.481	(1.130)	17440	0.08405	0.08405
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36 2-Fluorobiphenyl	172	13.270	13.270	(0.906)	863335	3.61208	3.612
	37 2-Chloronaphthalene	162	Compound Not Detected.					
	38 2-Nitroaniline	65	Compound Not Detected.					
	39 Dimethylphthalate	163	Compound Not Detected.					
	40 Acenaphthylene	152	14.338	14.330	(0.979)	11596	0.03897	0.03897(MH)
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	14.648	14.648	(1.000)	668055	4.00000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	14.717	14.717	(1.005)	12313	0.06912	0.06912
	45 2,4-Dinitrophenol	184	Compound Not Detected.					
	46 Dibenzofuran	168	15.042	15.042	(1.027)	27524	0.09410	0.09410
	47 4-Nitrophenol	109	Compound Not Detected.					
	48 2,4-Dinitrotoluene	165	Compound Not Detected.					
	50 Diethylphthalate	149	15.637	15.645	(1.068)	37041	0.13654	0.1365
	49 Fluorene	166	15.753	15.753	(1.075)	30914	0.10107	0.1011
	51 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55 2,4,6-Tribromophenol	330	16.293	16.285	(1.112)	232175	5.95724	5.957
	56 4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	17.676	17.676	(1.000)	1356225	4.00000	
	60 Phenanthrene	178	17.723	17.723	(1.003)	187709	0.57598	0.5760
	61 Anthracene	178	17.816	17.816	(1.008)	69251	0.21448	0.2145
	62 Carbazole	167	18.164	18.148	(1.028)	22310	0.07614	0.07614
	63 Di-n-butylphthalate	149	Compound Not Detected.					
	64 Fluoranthene	202	20.168	20.129	(0.885)	488688	1.26922	1.269
	65 Pyrene	202	20.570	20.554	(0.903)	498008	1.22320	1.223
$	66 Terphenyl-d14	244	20.880	20.864	(0.917)	1242127	4.29683	4.297
	67 Butylbenzylphthalate	149	21.816	21.816	(0.958)	16905	0.12597	0.1260
	68 Benzo(a)anthracene	228	22.746	22.738	(0.999)	210421	0.73679	0.7368
*	69 Chrysene-d12	240	22.777	22.769	(1.000)	892448	4.00000	
	70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71 Chrysene	228	22.815	22.815	(1.002)	307279	1.19619	1.196
	72 bis(2-Ethylhexyl)phthalate	149	22.862	22.854	(0.959)	269753	1.23132	1.231
*	134 Di-n-octylphthalate-d4	153	23.845	23.837	(1.000)	1283143	4.00000	
	73 Di-n-octylphthalate	149	Compound Not Detected.					
	74 Benzo(b)fluoranthene	252	24.542	24.534	(0.973)	237907	1.12340	1.123
	75 Benzo(k)fluoranthene	252	24.573	24.573	(0.974)	182636	0.80709	0.8071(M)
	76 Benzo(a)pyrene	252	25.122	25.107	(0.996)	124937	0.62232	0.6223
*	77 Perylene-d12	264	25.231	25.215	(1.000)	667405	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	27.556	27.532	(1.092)	70779	0.42830	0.4283
	79 Dibenzo(a,h)anthracene	278	27.564	27.548	(1.092)	17907	0.13172	0.1317(M)
	80 Benzo(g,h,i)perylene	276	28.239	28.208	(1.119)	68192	0.50844	0.5084
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					
	91 Aniline	93	7.996	8.034	(0.933)	28422	0.18021	0.1802
	93 Benzidine	184	Compound Not Detected.					
	103 Pyridine	79	4.373	4.280	(0.510)	9862	0.09168	0.09168
	105 1-methylnaphthalene	142	12.697	12.697	(1.150)	12680	0.06509	0.06509
	111 Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.542	24.573	(0.973)	386601	1.86983	1.870
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423022127.D
Lab Smp Id: 23A0171-01RE1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230221A.b\ABN.m
Misc Info:

Calibration Date: 21-FEB-2023
Calibration Time: 23:06
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	247721	123861	495442	328442	32.59
27 Naphthalene-d8	862325	431163	1724650	1123613	30.30
42 Acenaphthene-d10	519526	259763	1039052	668055	28.59
59 Phenanthrene-d10	1059882	529941	2119764	1356225	27.96
69 Chrysene-d12	930840	465420	1861680	892448	-4.12
134 Di-n-octylphthala	1343425	671713	2686850	1283143	-4.49
77 Perylene-d12	746835	373418	1493670	667405	-10.64

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.57	8.07	9.07	8.57	0.00
27 Naphthalene-d8	11.04	10.54	11.54	11.04	0.00
42 Acenaphthene-d10	14.65	14.15	15.15	14.65	0.00
59 Phenanthrene-d10	17.68	17.18	18.18	17.68	0.00
69 Chrysene-d12	22.77	22.27	23.27	22.78	0.03
134 Di-n-octylphthala	23.84	23.34	24.34	23.85	0.03
77 Perylene-d12	25.22	24.72	25.72	25.23	0.06

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

REVIEW SUMMARY FOR FILE - NT1423022127.D

Lab ID: 23A0171-01RE1
nt14.i, ABN.m, 22-FEB-2023 05:07

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.992	1.004	-0.0118	1,4-Dichlorobenzene
0.510	0.500	0.0108	Pyridine

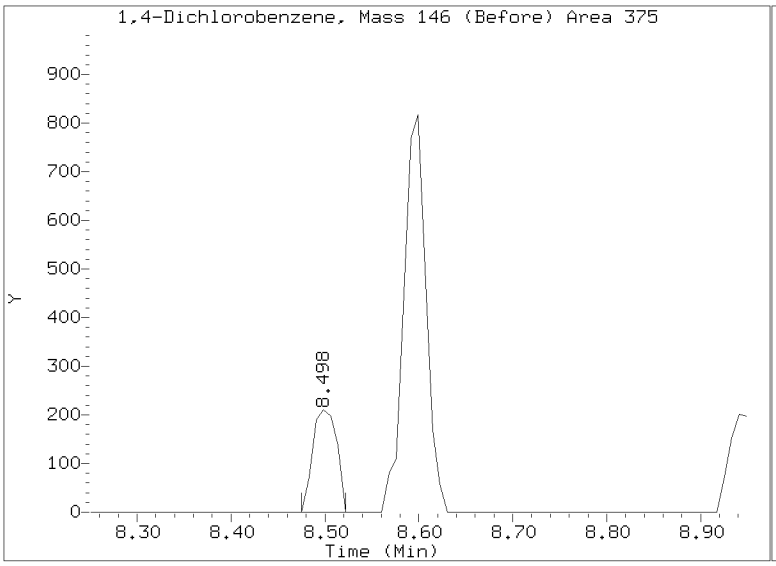
RRT check based on Ccal File: NT1423022117.D

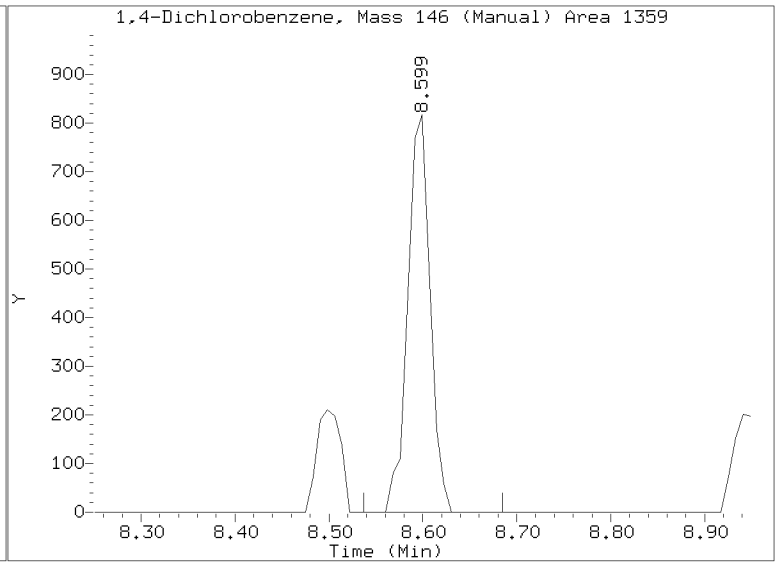
On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

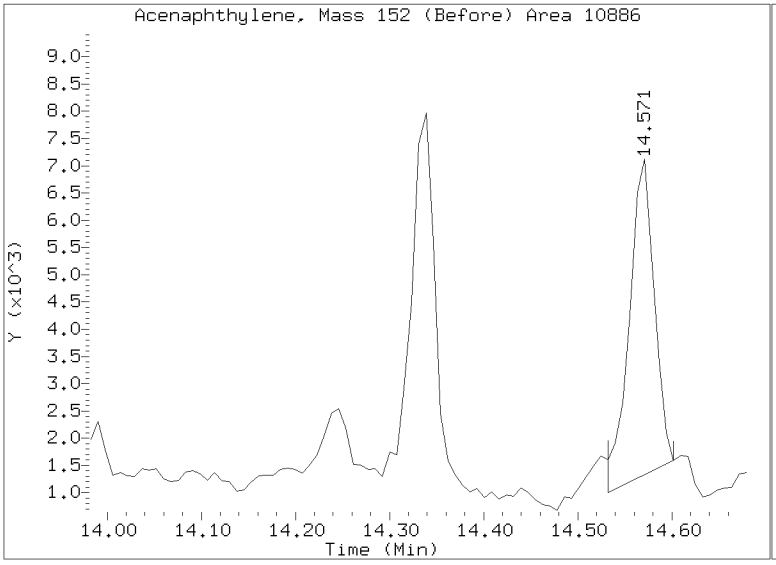
* Only compounds listed in the work order have been verified by the analyst *

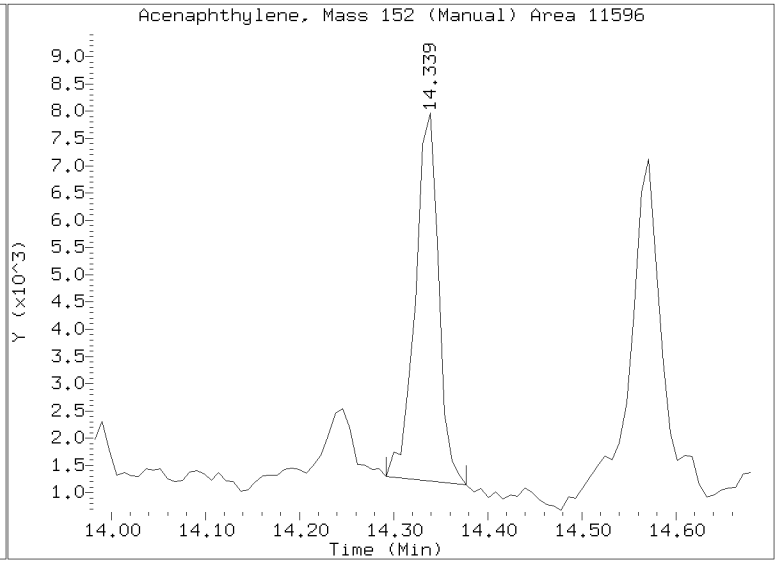
Quant Ion Manual Peak Adjustment Report

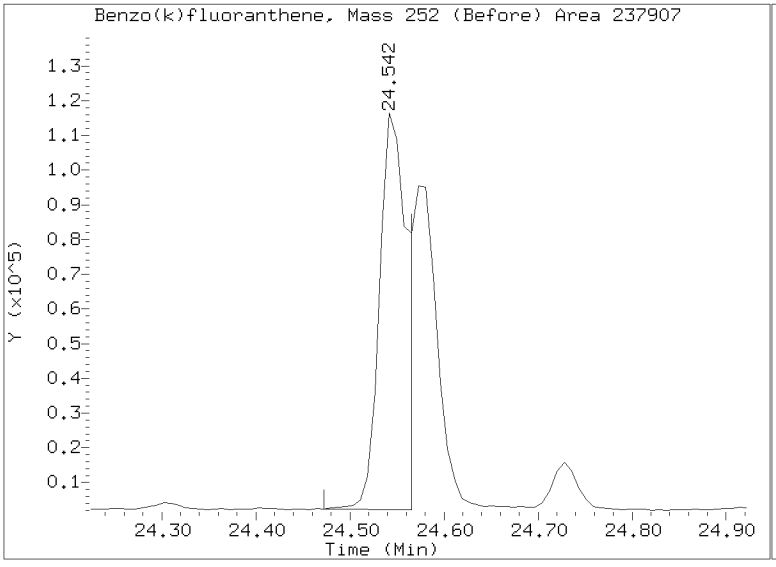
Datafile: //target/share/chem3/nt14.i/20230221A.b/NT1423022127.D
Injection Date: 22-FEB-2023 05:07
Lab ID:23A0171-01RE1 Client ID:
Report Date: 02/23/2023 12:11

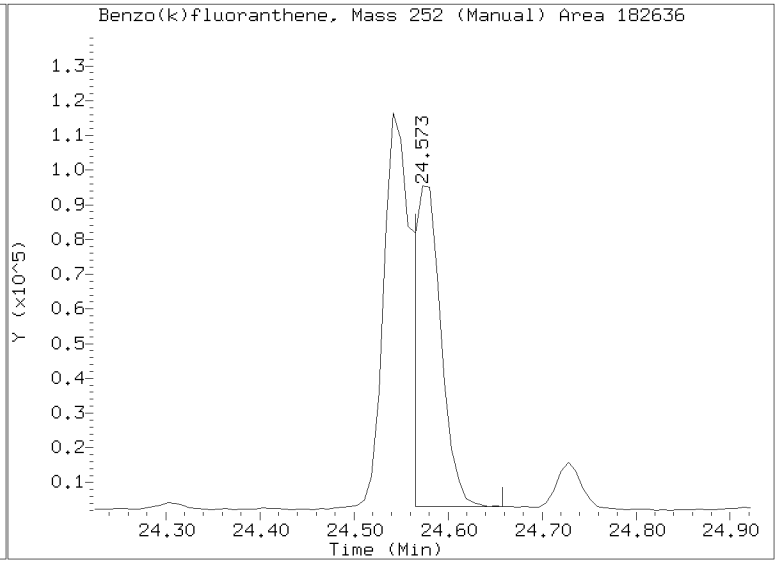












Quant Ion Manual Peak Adjustment Report

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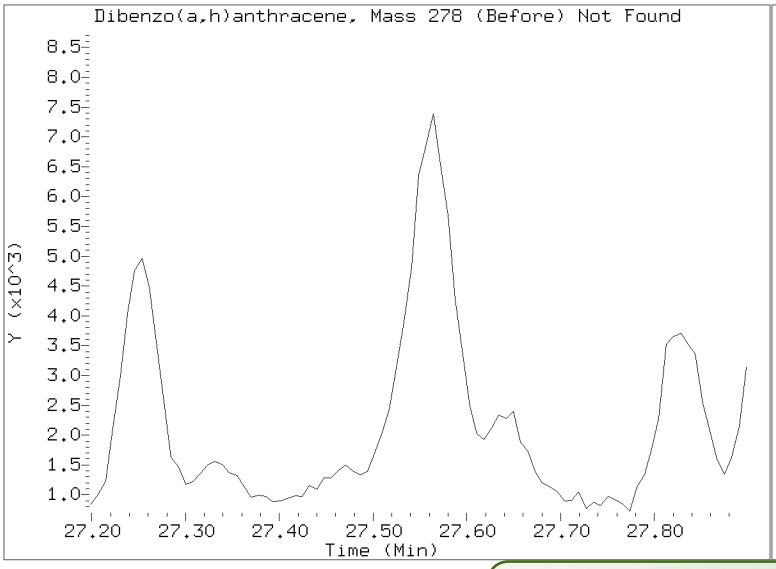
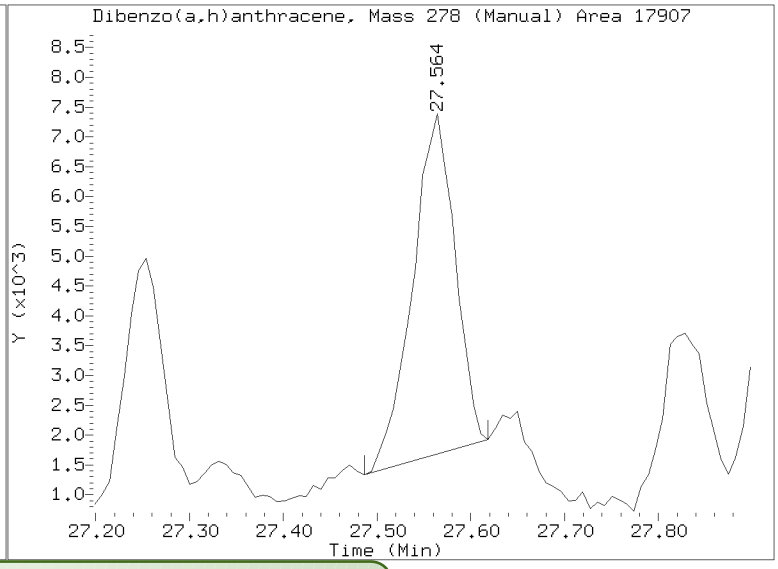
Lab ID:23A0171-01RE1 Client ID:
Report Date: 02/23/2023 12:11





APPROVED

By Deenay Dunmore at 12:18 pm, Feb 23, 2023

LDW23-SS1257

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-02 A	SDG:	23A0171
Sampled:	12/08/22 09:16	Prepared:	01/18/23 13:47	File ID:	NT1423021731.D
% Solids:	41.72	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/18/23 04:42
Batch:	BLA0339	Sequence:	SLB0251	Initial/Final:	24.37 g Wet / 1 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	GB00046
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	237		4.3	19.7
106-44-5	4-Methylphenol	1	19.7	U	7.3	19.7
91-20-3	Naphthalene	1	19.7	U	4.2	19.7
91-57-6	2-Methylnaphthalene	1	19.7	U	4.4	19.7
208-96-8	Acenaphthylene	1	19.7	U	6.1	19.7
131-11-3	Dimethylphthalate	1	19.7	U	4.3	19.7
83-32-9	Acenaphthene	1	19.7	U	5.1	19.7
132-64-9	Dibenzofuran	1	19.7	U	13.9	19.7
86-73-7	Fluorene	1	19.7	U	14.3	19.7
85-01-8	Phenanthrene	1	14.7	J	8.6	19.7
120-12-7	Anthracene	1	19.7	U	7.1	19.7
206-44-0	Fluoranthene	1	46.3		6.0	19.7
129-00-0	Pyrene	1	40.2		5.6	19.7
85-68-7	Butylbenzylphthalate	1	19.7	U	9.3	19.7
56-55-3	Benzo(a)anthracene	1	21.5		5.9	19.7
218-01-9	Chrysene	1	33.9		6.0	19.7
117-81-7	bis(2-Ethylhexyl)phthalate	1	24.0	J	5.4	49.2
	Benzofluoranthenes, Total	1	43.8		9.8	39.3
50-32-8	Benzo(a)pyrene	1	16.9	J	4.2	19.7
193-39-5	Indeno(1,2,3-cd)pyrene	1	19.7	U	14.4	19.7
53-70-3	Dibenzo(a,h)anthracene	1	19.7	U	16.9	19.7
191-24-2	Benzo(g,h,i)perylene	1	19.7	U	13.4	19.7

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	737.67	582	78.9	27 - 120	
Phenol-d5	737.67	523	71.0	29 - 120	
2-Chlorophenol-d4	737.67	550	74.5	31 - 120	
1,2-Dichlorobenzene-d4	491.78	328	66.7	32 - 120	
Nitrobenzene-d5	491.78	350	71.2	30 - 120	
2-Fluorobiphenyl	491.78	374	76.0	35 - 120	

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1257

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-02 A	SDG:	23A0171
Sampled:	12/08/22 09:16	Prepared:	01/18/23 13:47	File ID:	NT1423021731.D
% Solids:	41.72	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/18/23 04:42
Batch:	BLA0339	Sequence:	SLB0251	Initial/Final:	24.37 g Wet / 1 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	GB00046
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	737.67	560	75.9	24 - 134	
p-Terphenyl-d14	491.78	520	106	37 - 120	

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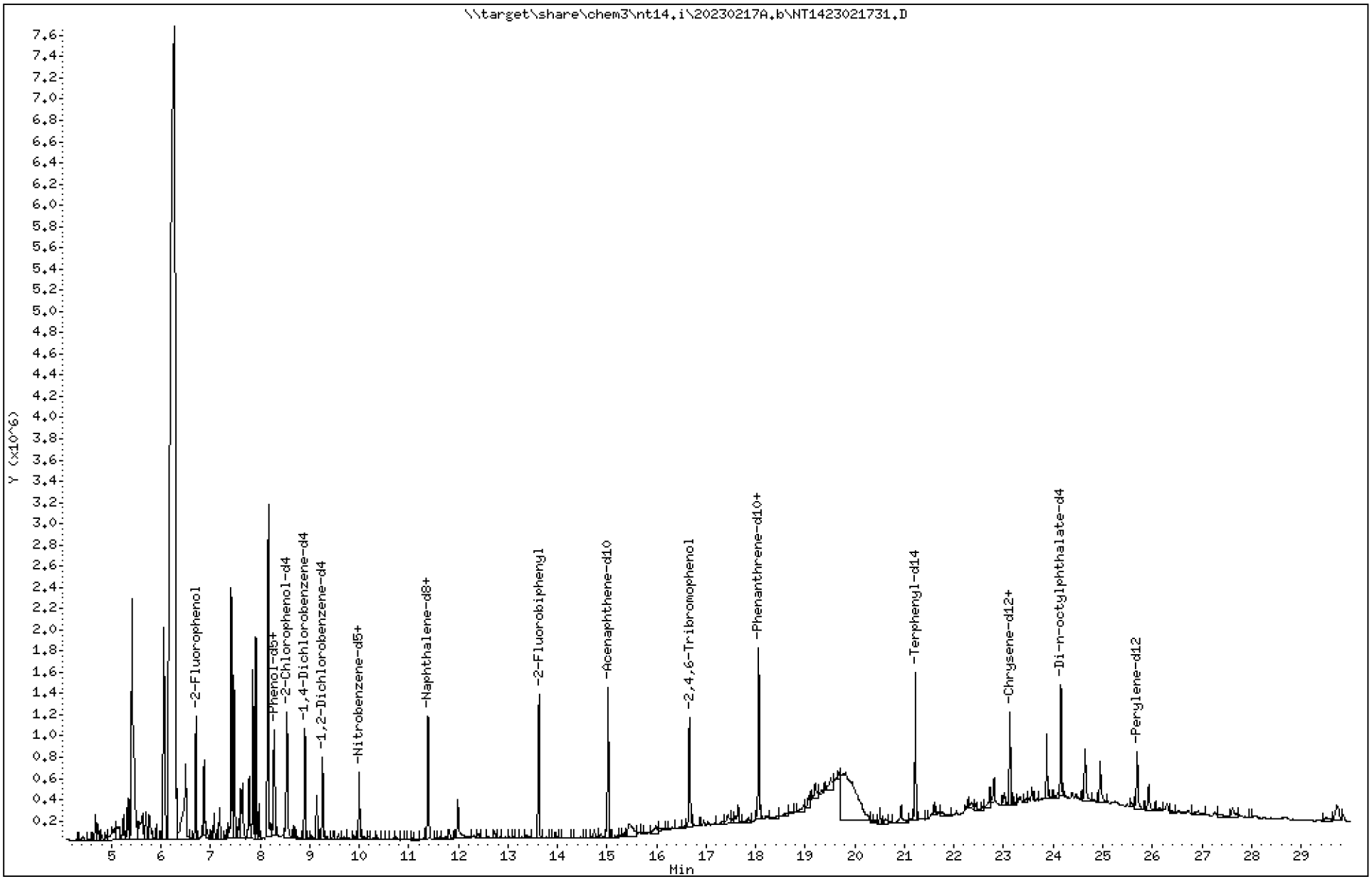
Date : 18-FEB-2023 04:42
Client ID:
Sample Info: 23A0171-02

Instrument: nt14.i
Operator: DSD
Column phase: ZB-5msi
Column diameter: 0.25



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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

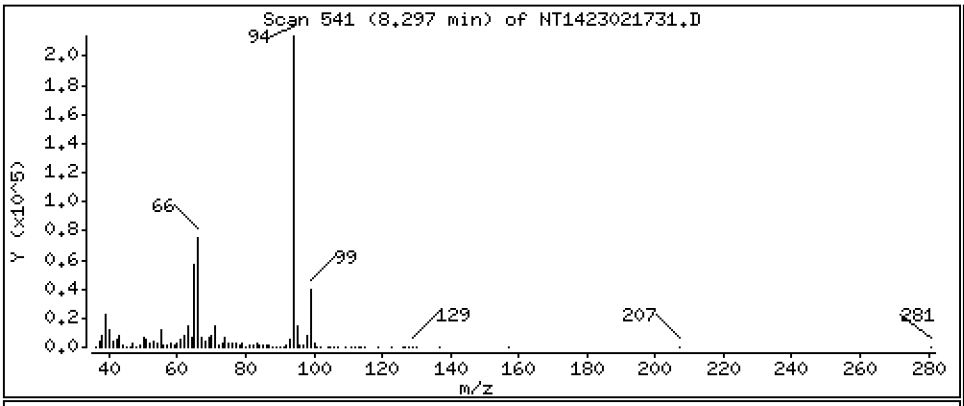
Operator: DSD

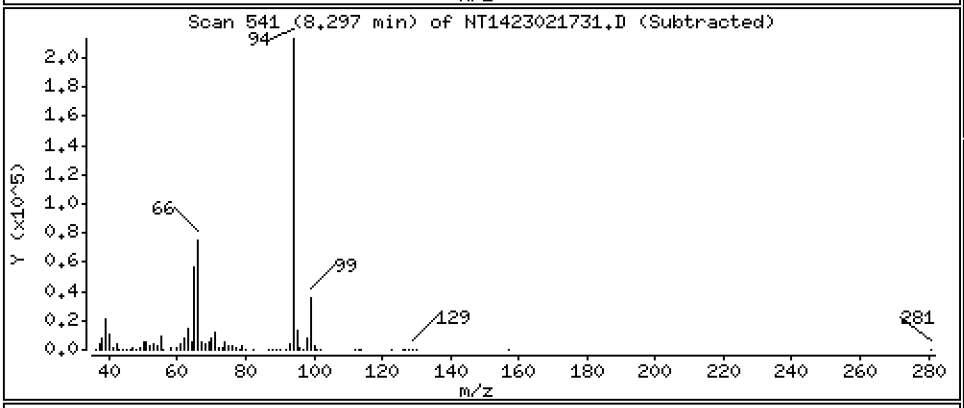
Column phase: ZB-5msi

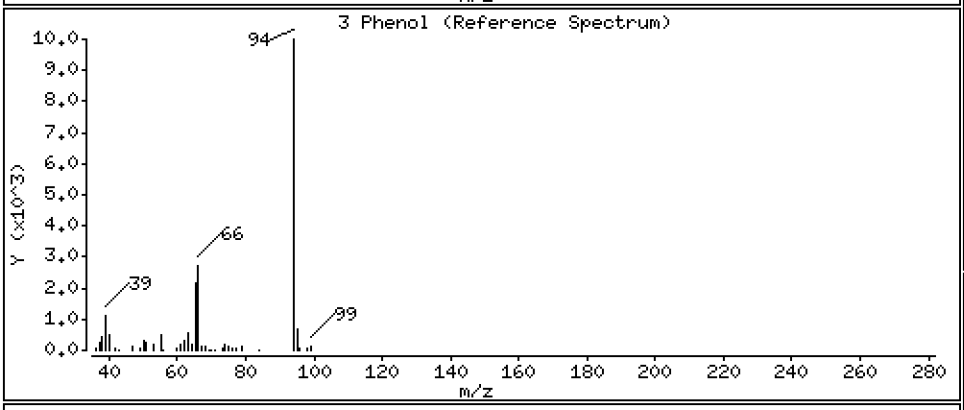
Column diameter: 0.25

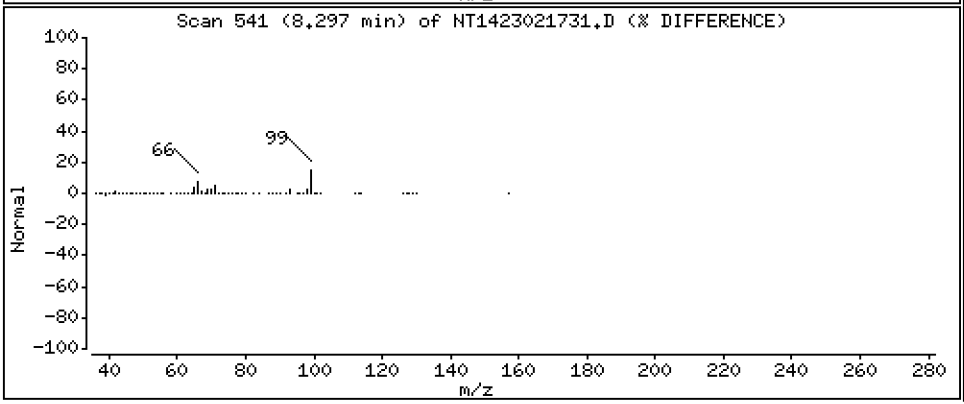
3 Phenol

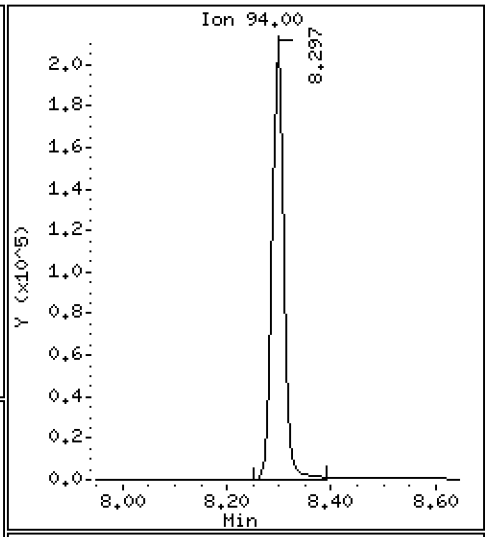
Concentration: 2.406 ug/mL

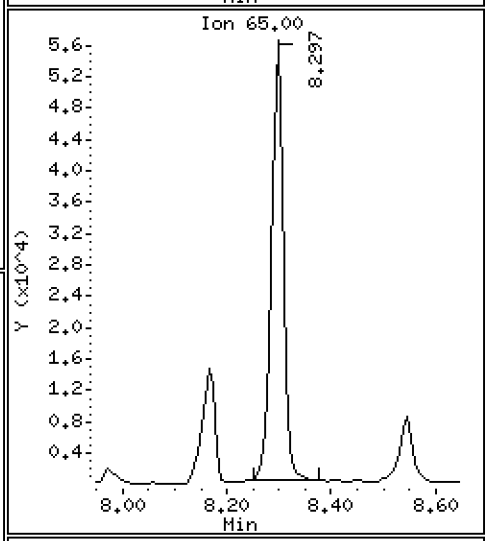


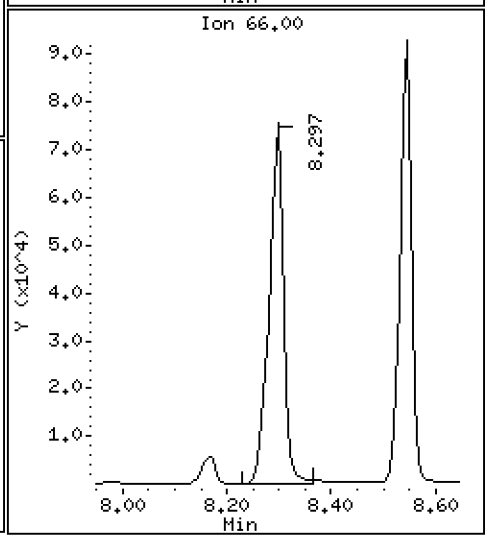












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

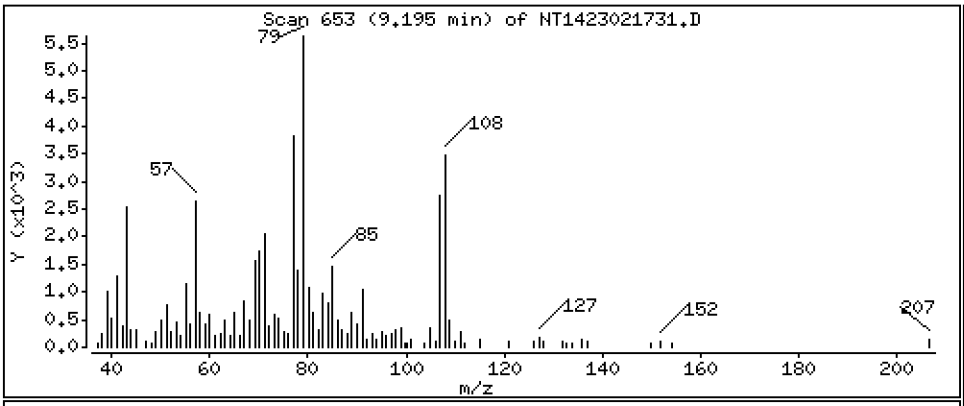
Operator: DSD

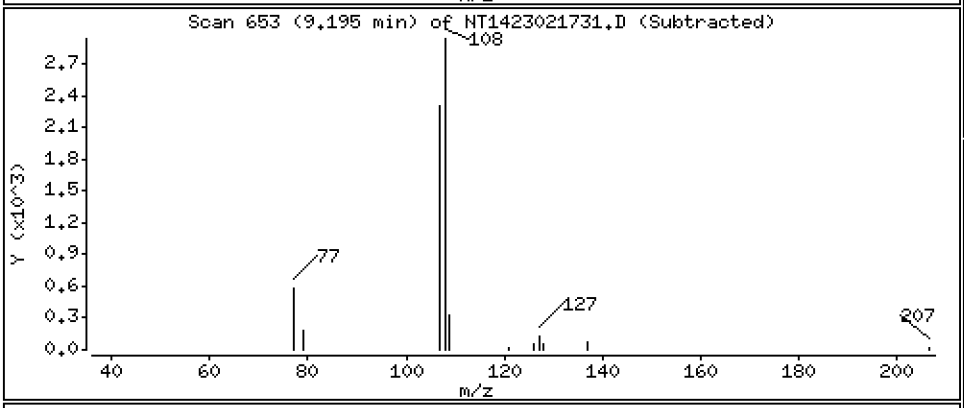
Column phase: ZB-5msi

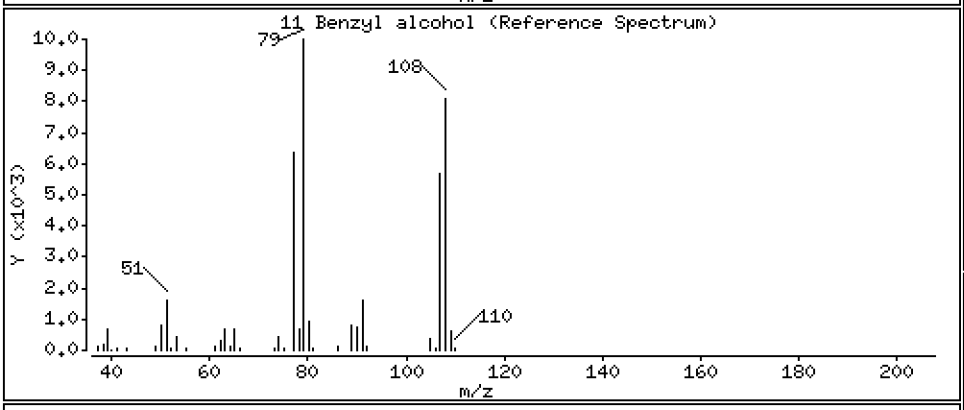
Column diameter: 0.25

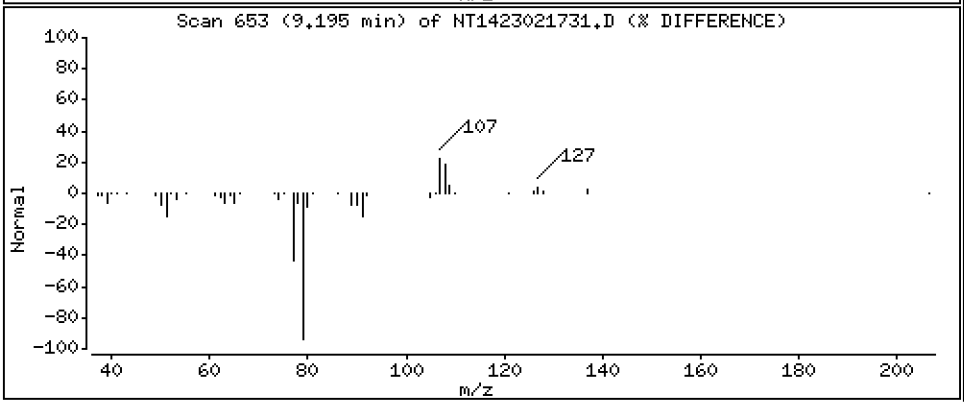
11 Benzyl alcohol

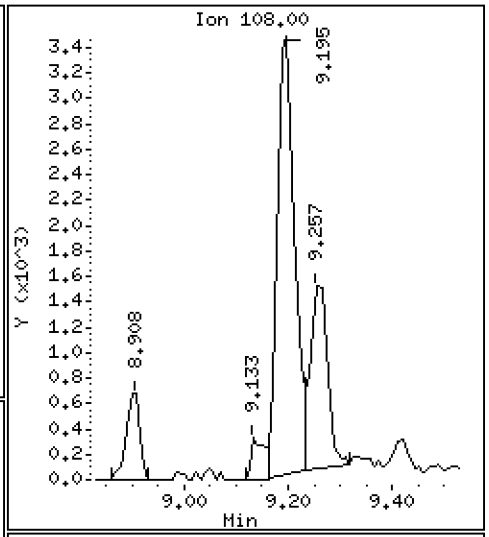
Concentration: 0.1110 ug/mL

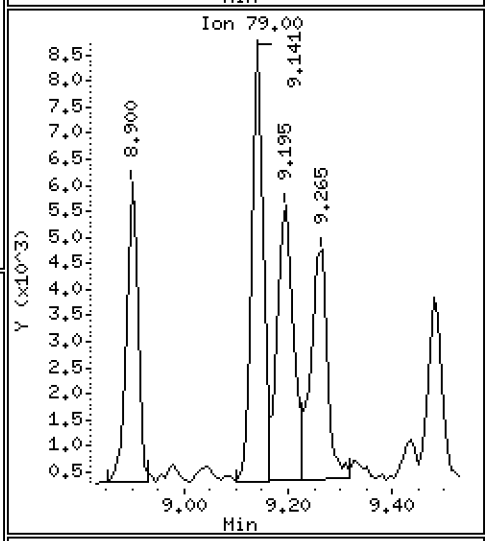


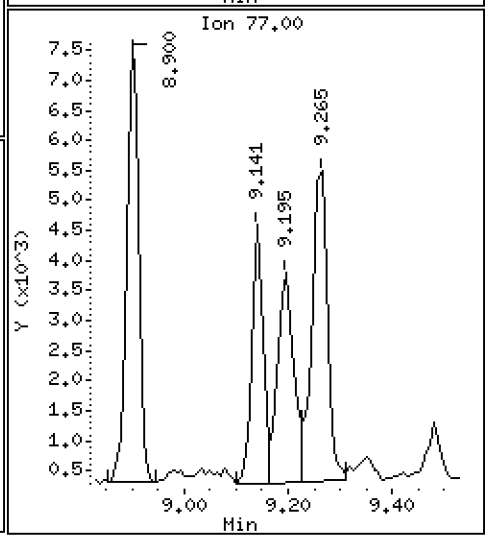












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

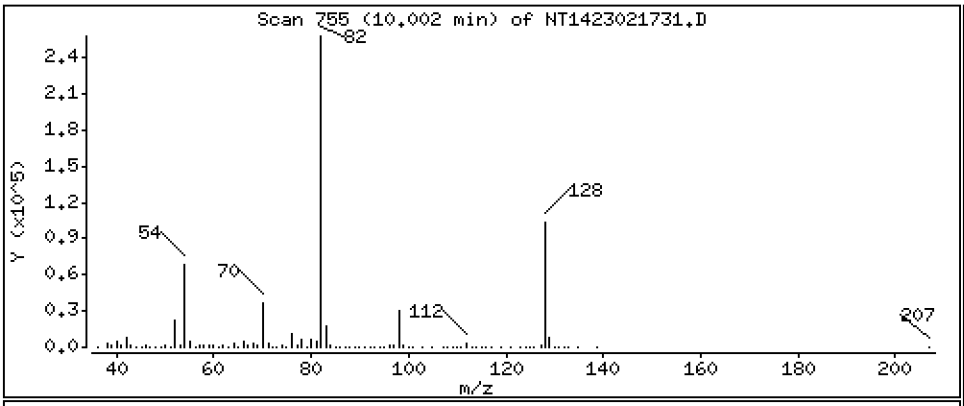
Operator: DSD

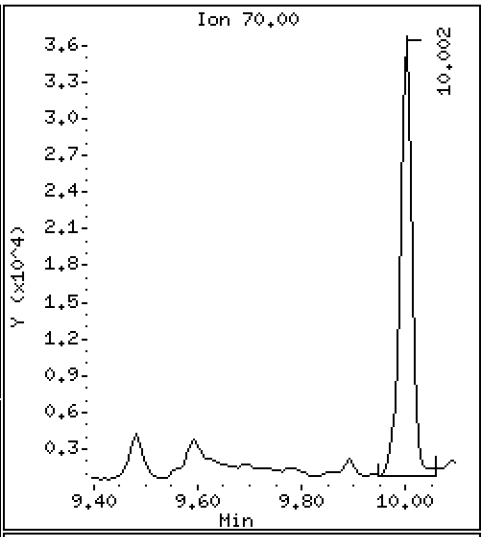
Column phase: ZB-5msi

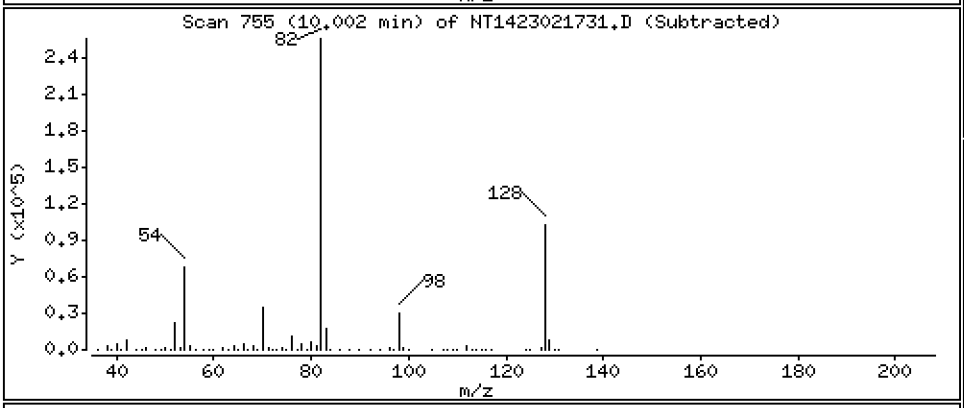
Column diameter: 0.25

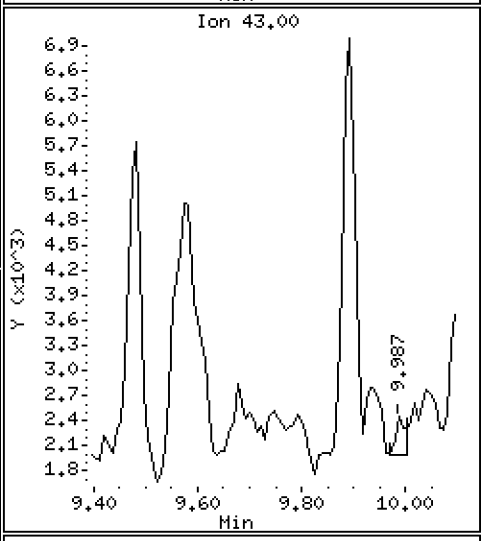
16 N-Nitroso-di-n-propylamine

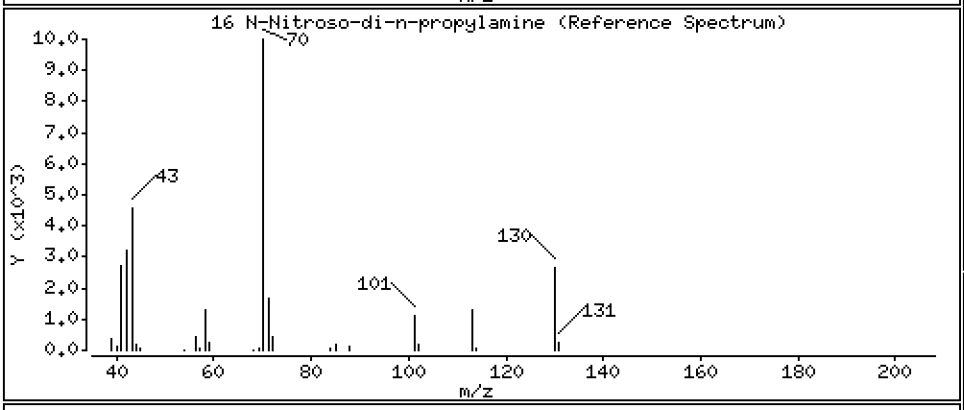
Concentration: 0.7279 ug/mL

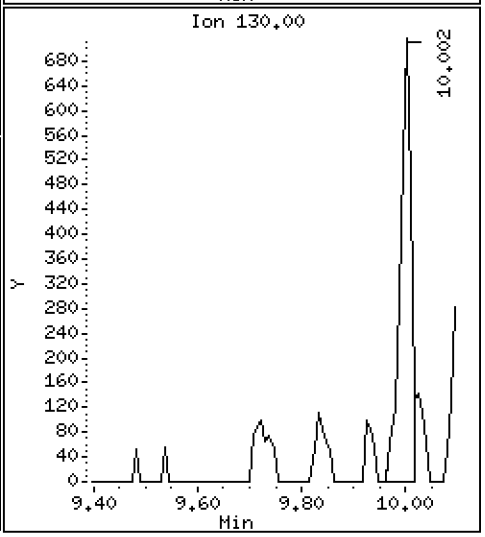


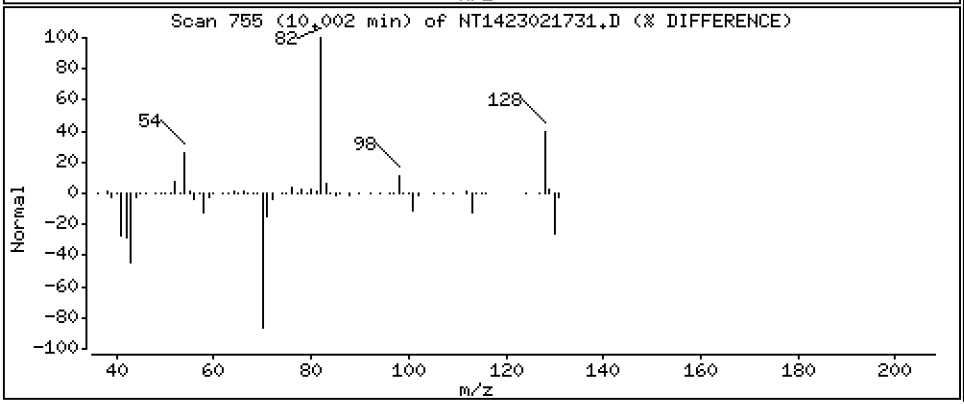












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

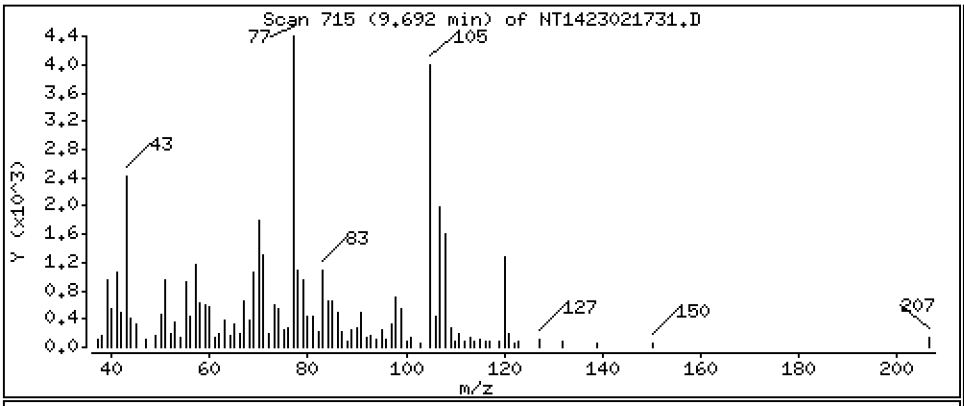
Operator: DSD

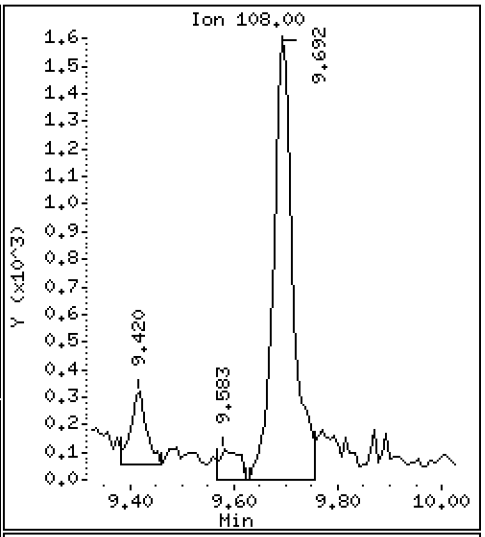
Column phase: ZB-5msi

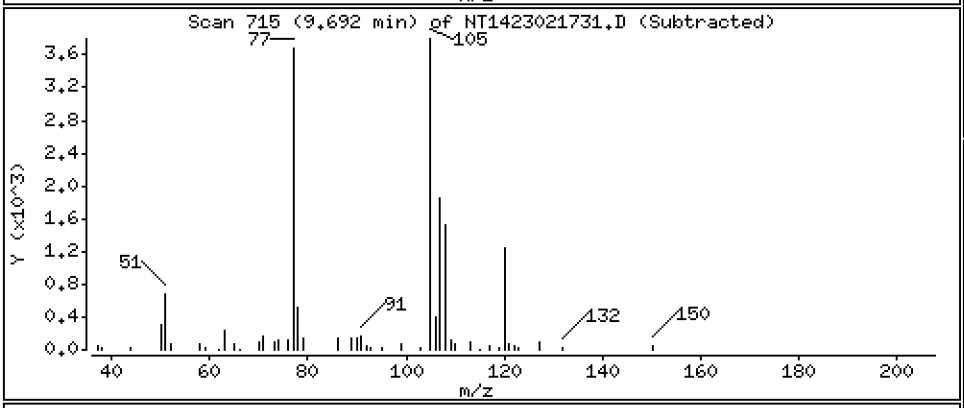
Column diameter: 0.25

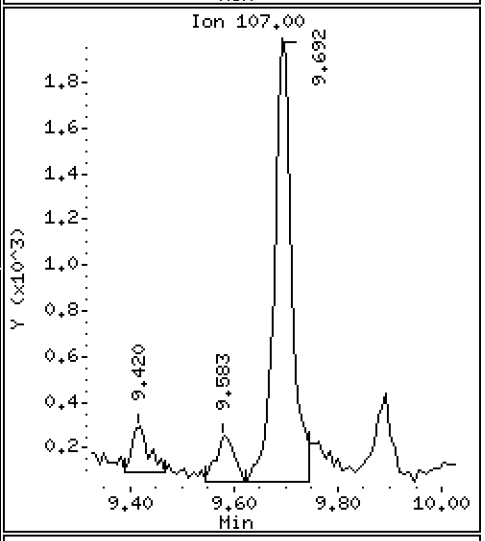
15 4-Methylphenol

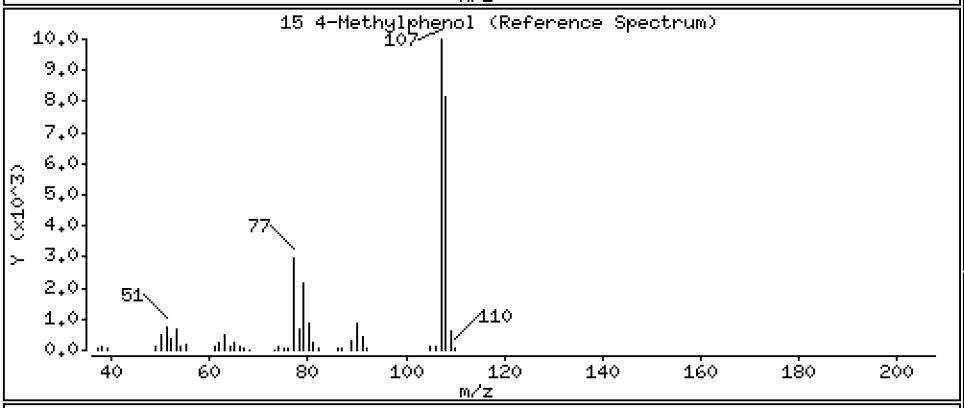
Concentration: 0.04550 ug/mL

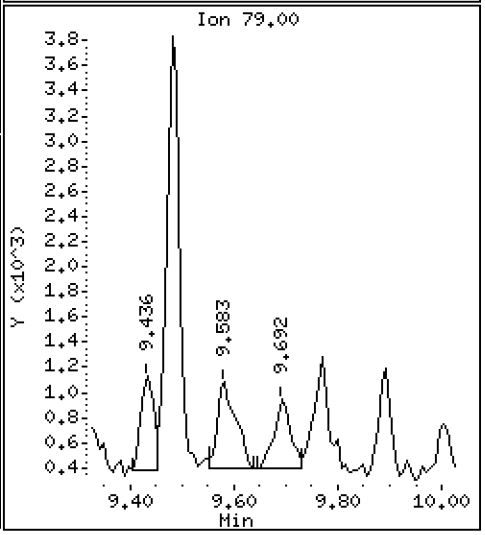


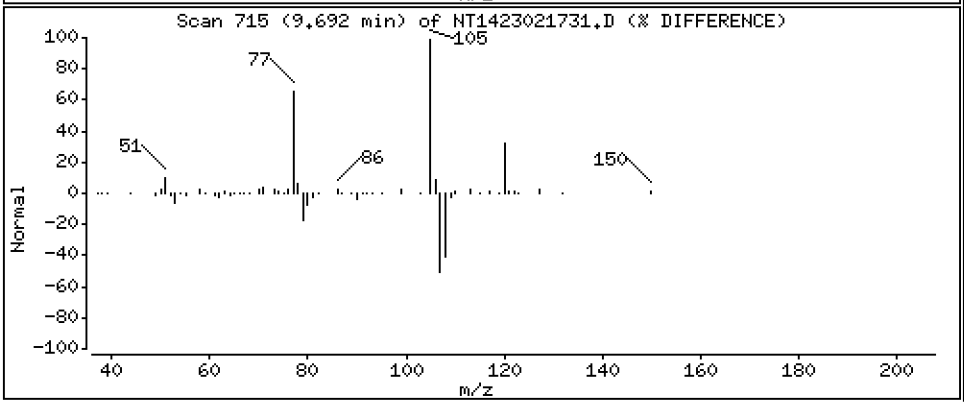












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

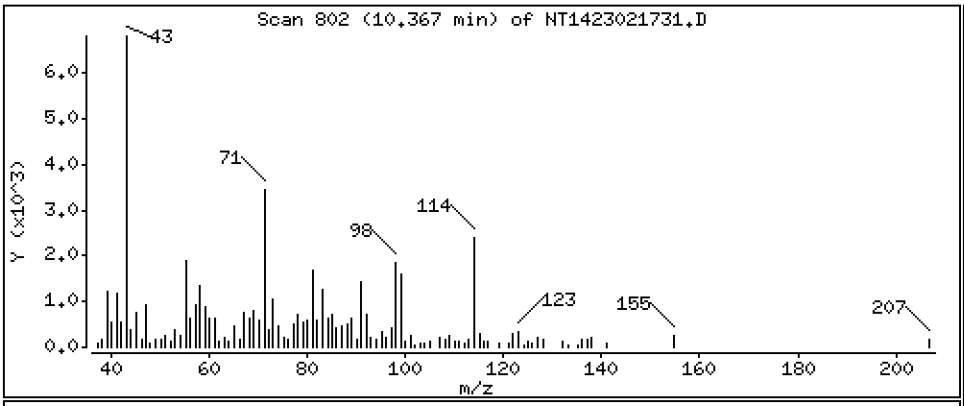
Operator: DSD

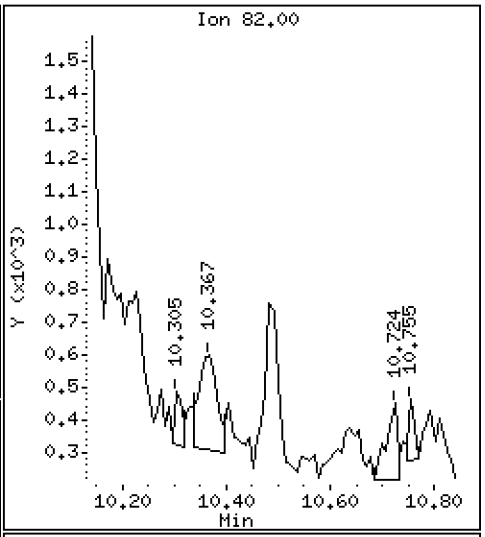
Column phase: ZB-5msi

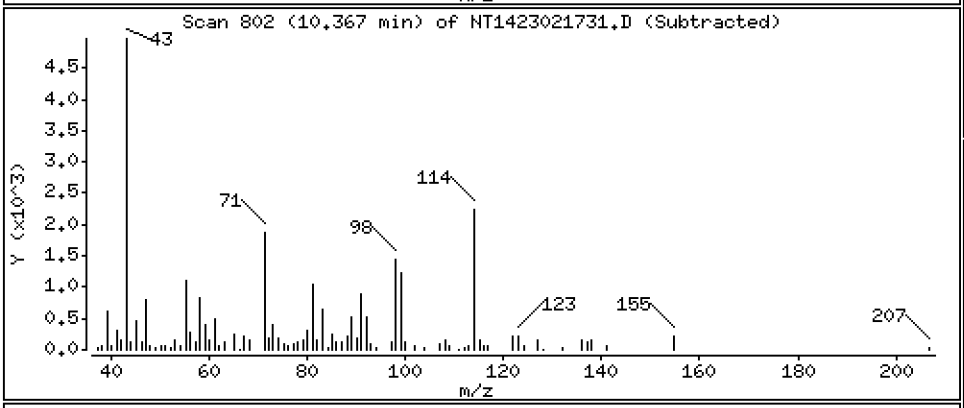
Column diameter: 0.25

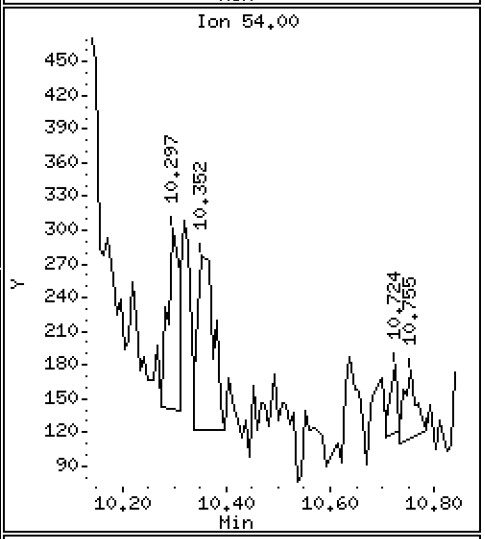
20 Isophorone

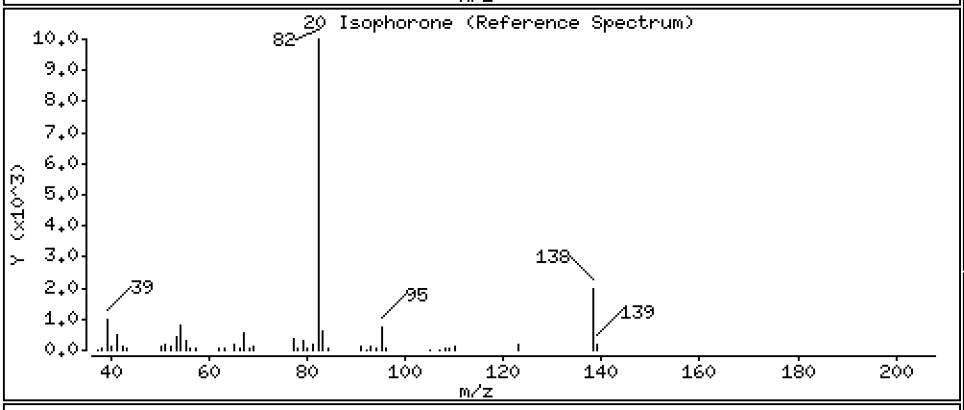
Concentration: 0.004994 ug/mL

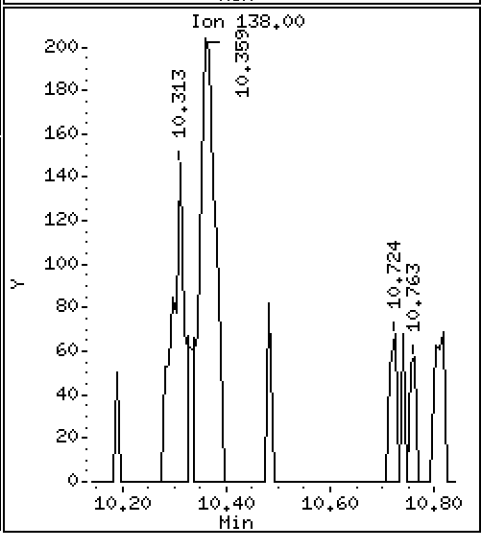


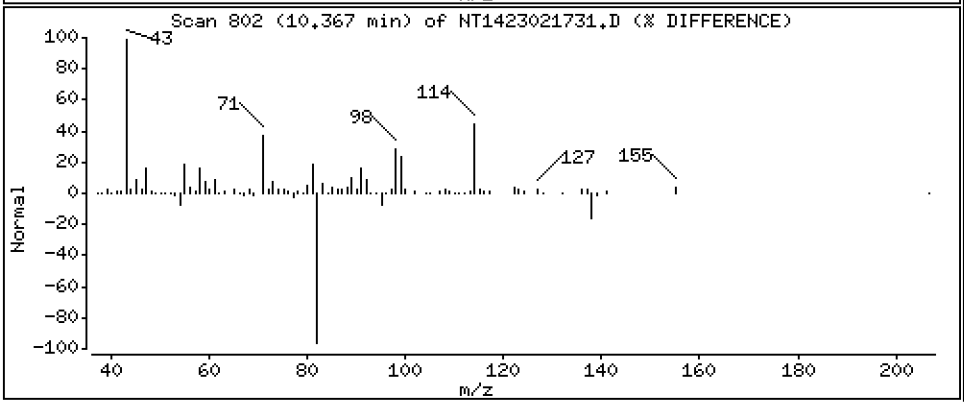












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021731.D

Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

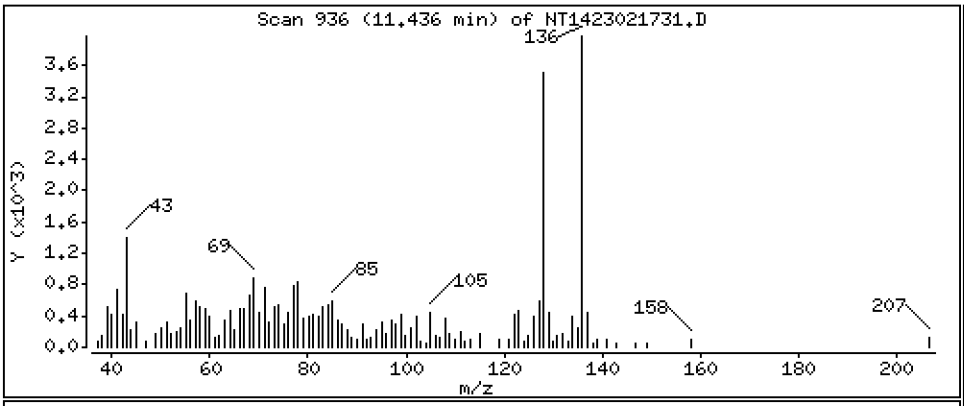
Operator: DSD

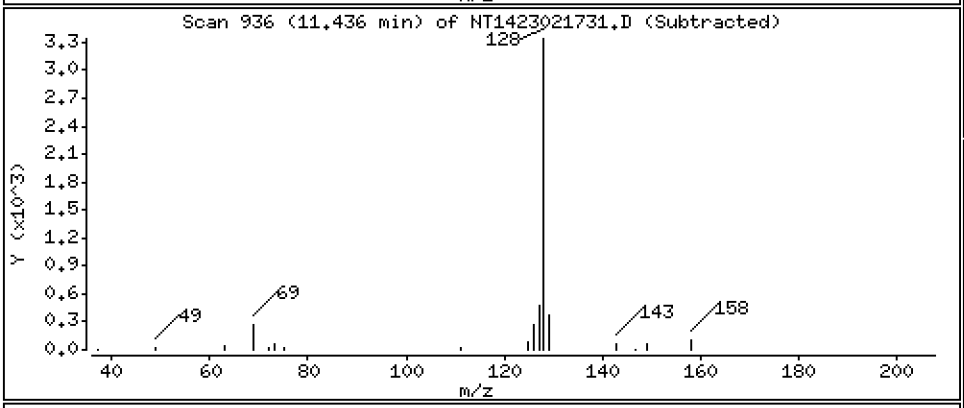
Column phase: ZB-5msi

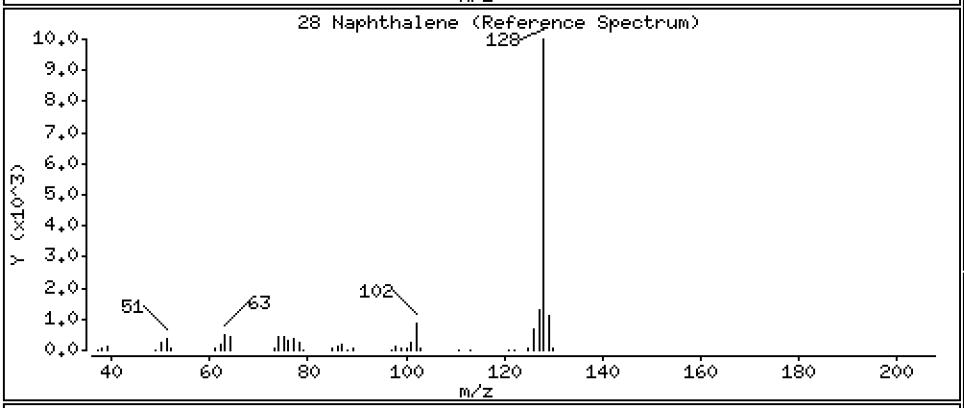
Column diameter: 0.25

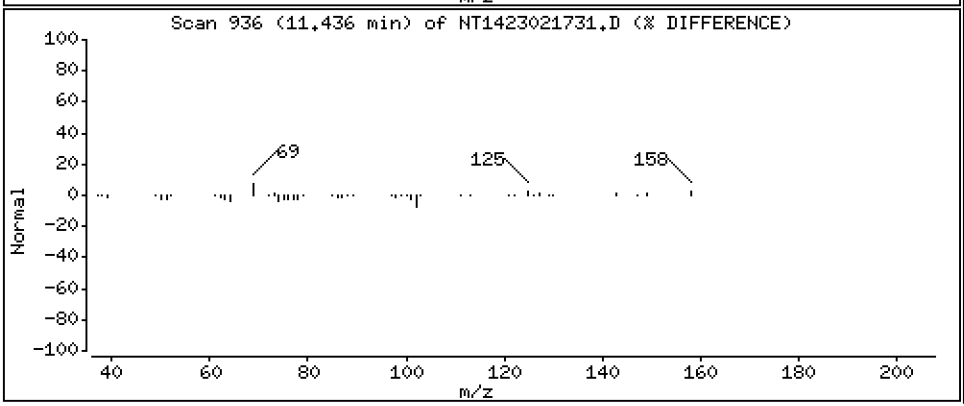
28 Naphthalene

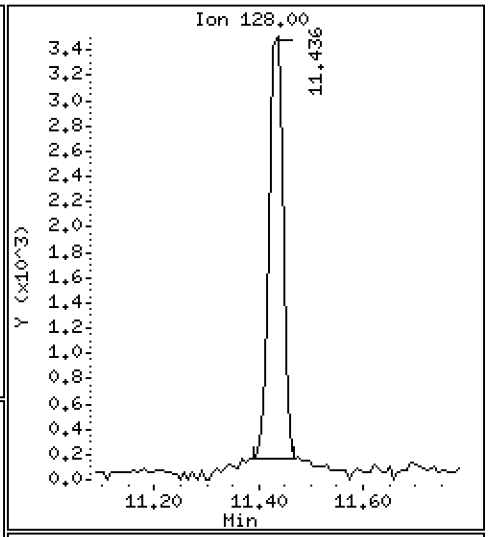
Concentration: 0.02297 ug/mL

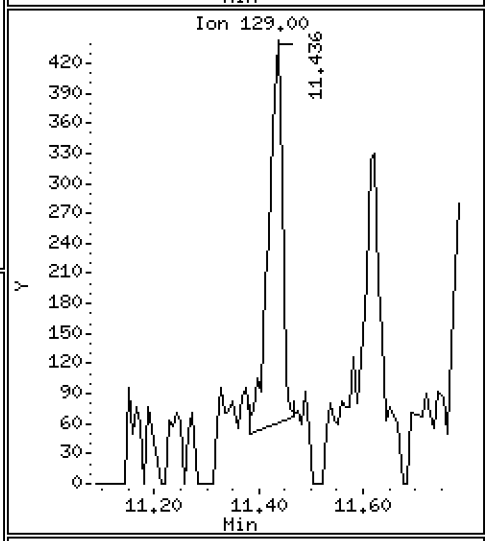


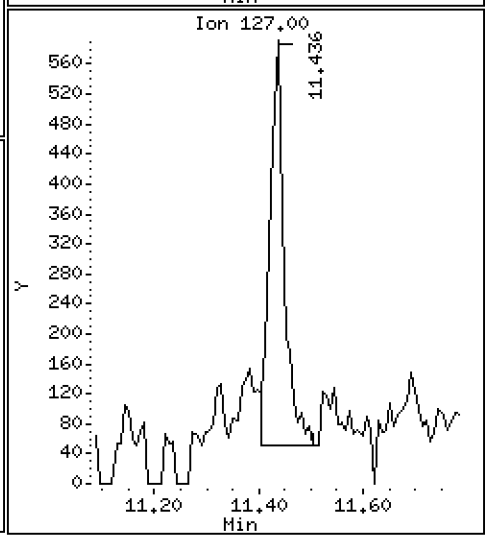












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021731.D

Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

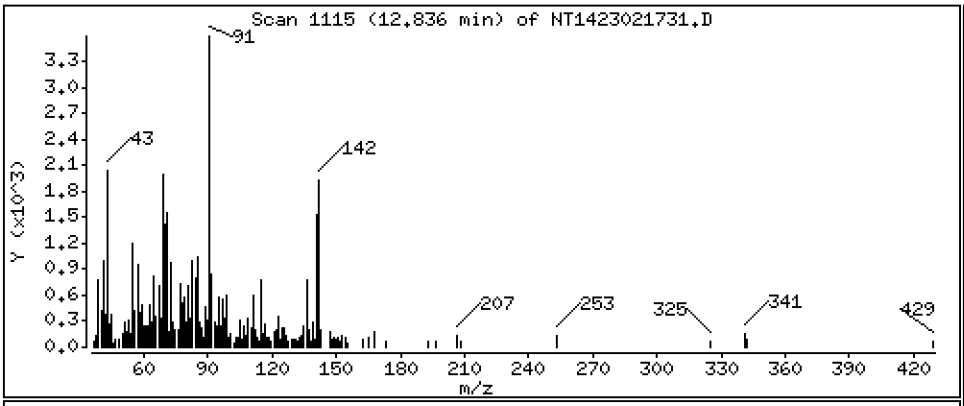
Operator: DSD

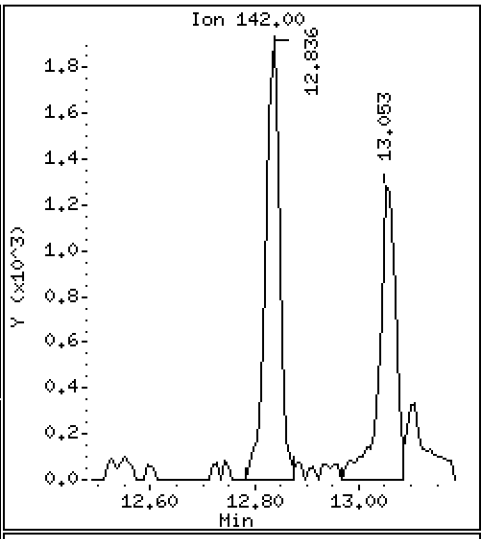
Column phase: ZB-5msi

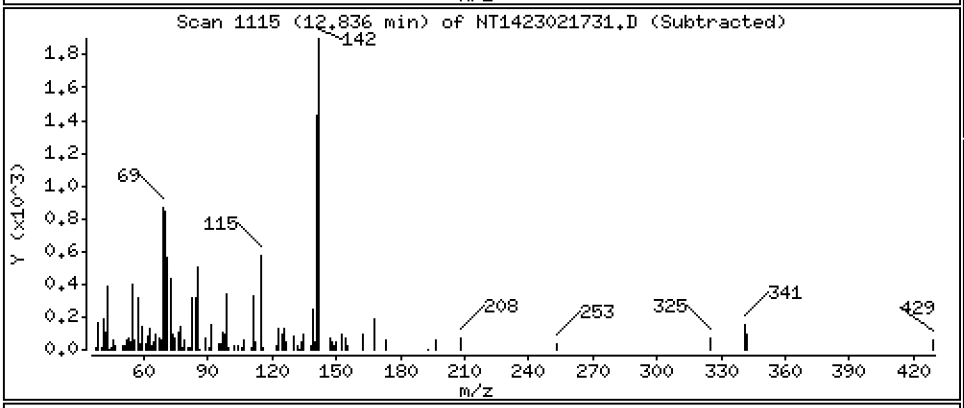
Column diameter: 0.25

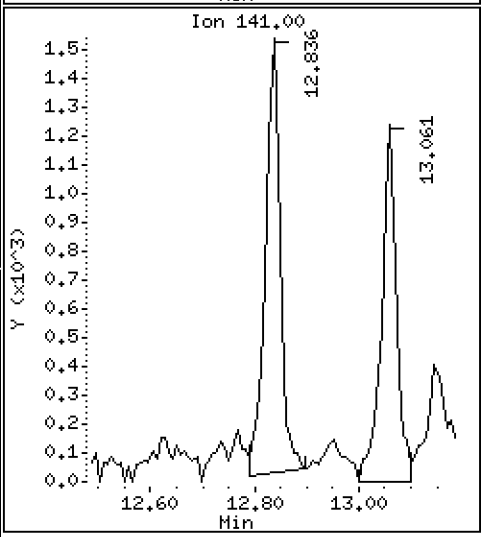
32 2-Methylnaphthalene

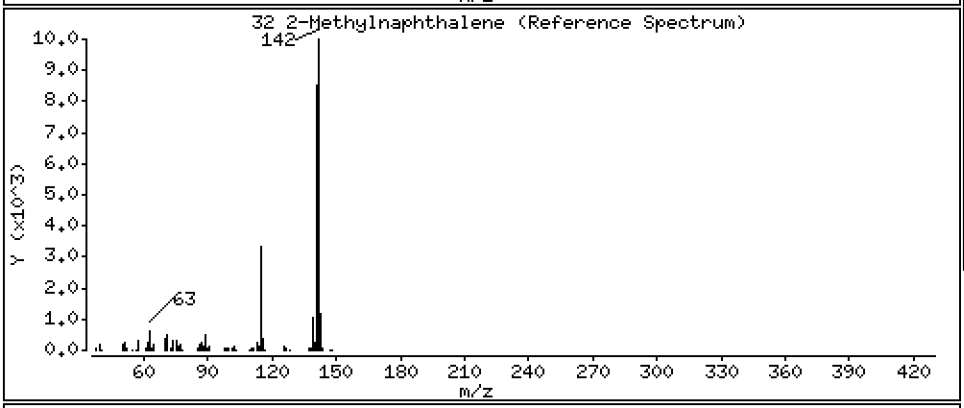
Concentration: 0.01805 ug/mL

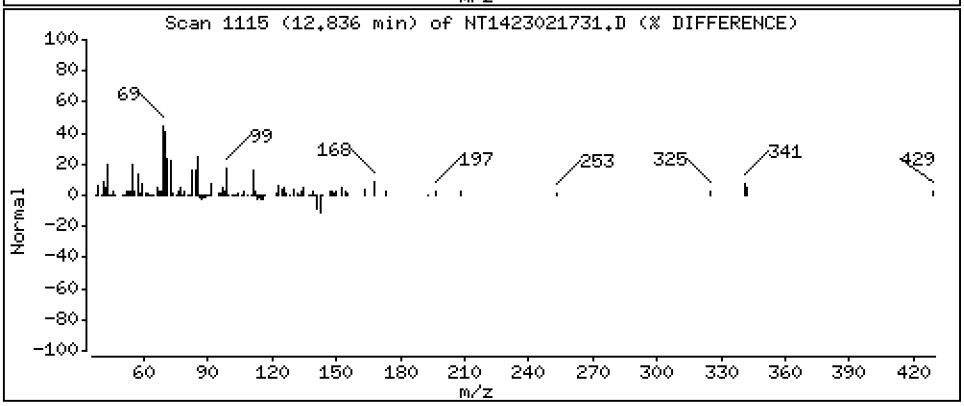












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021731.D

Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

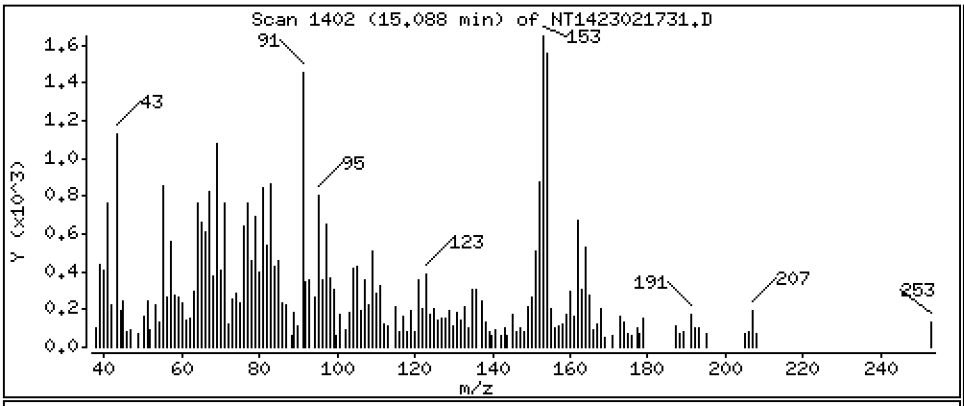
Operator: DSD

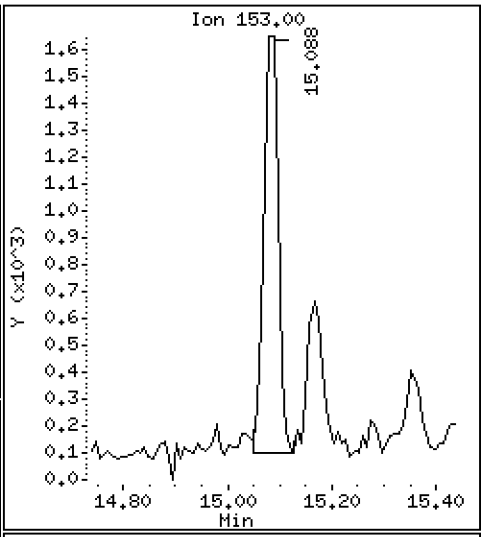
Column phase: ZB-5msi

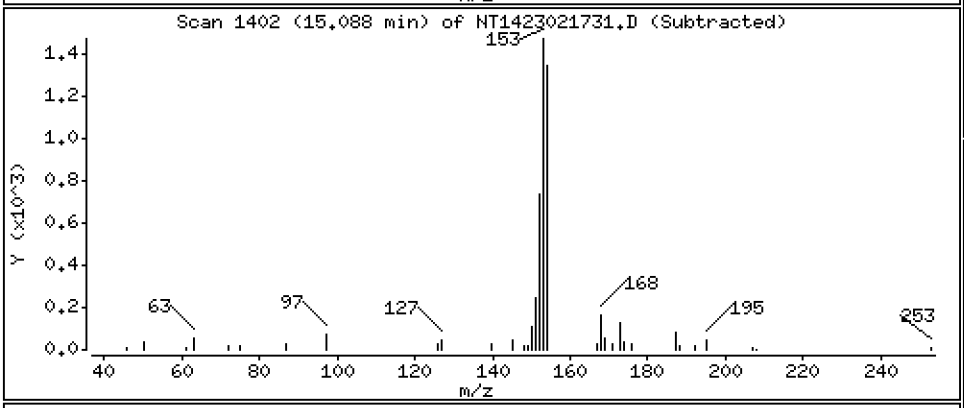
Column diameter: 0.25

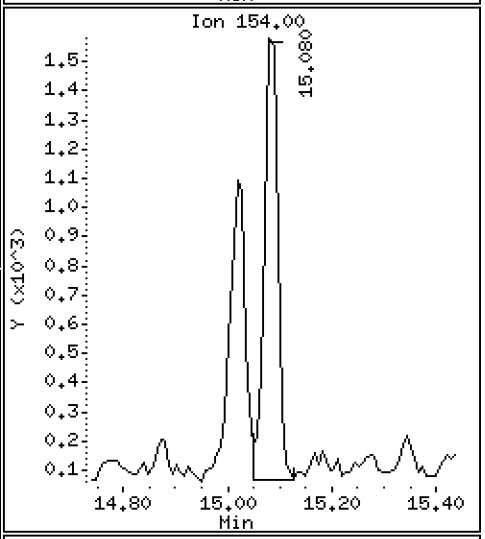
44 Acenaphthene

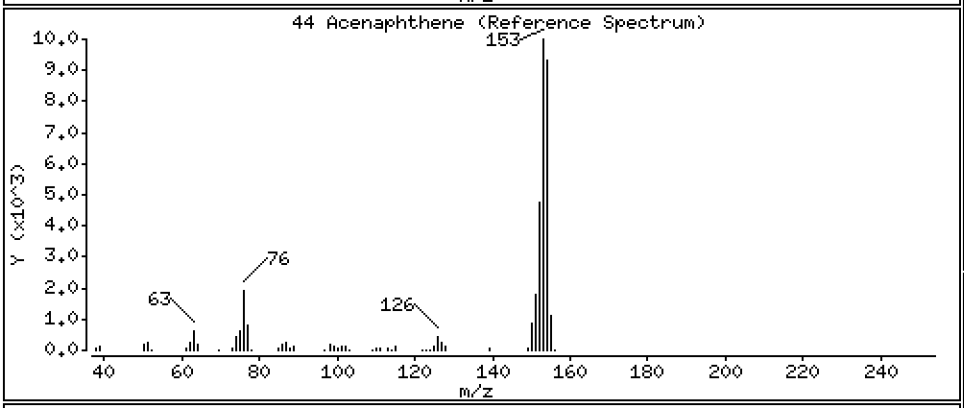
Concentration: 0.01743 ug/mL

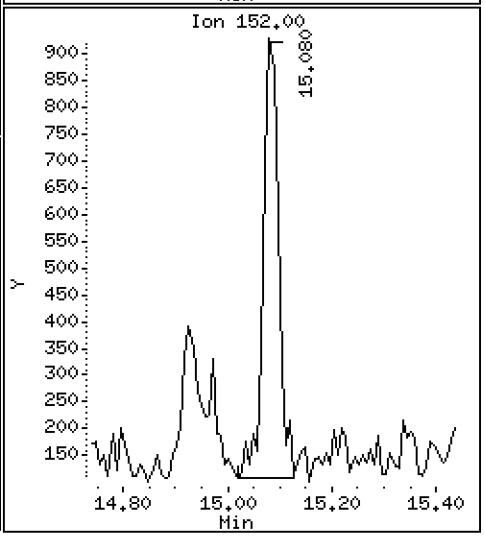


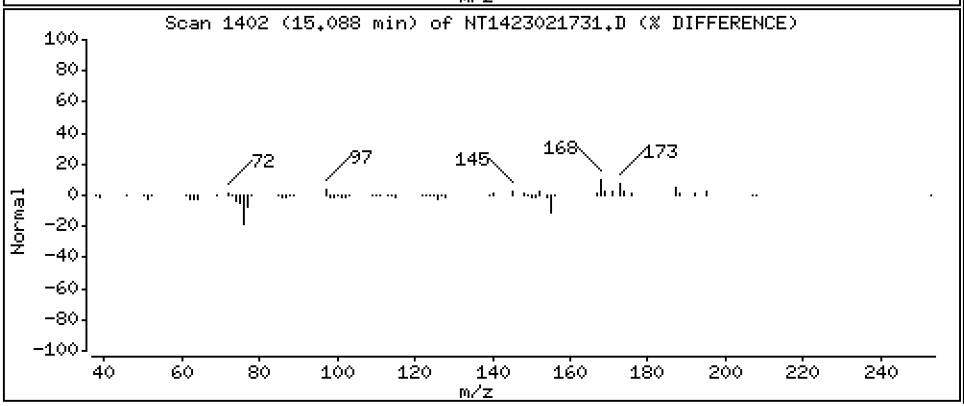












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021731.D

Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

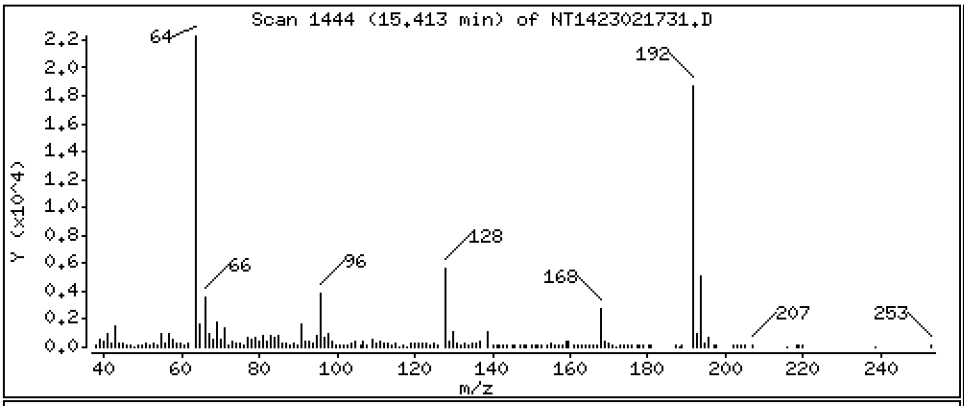
Operator: DSD

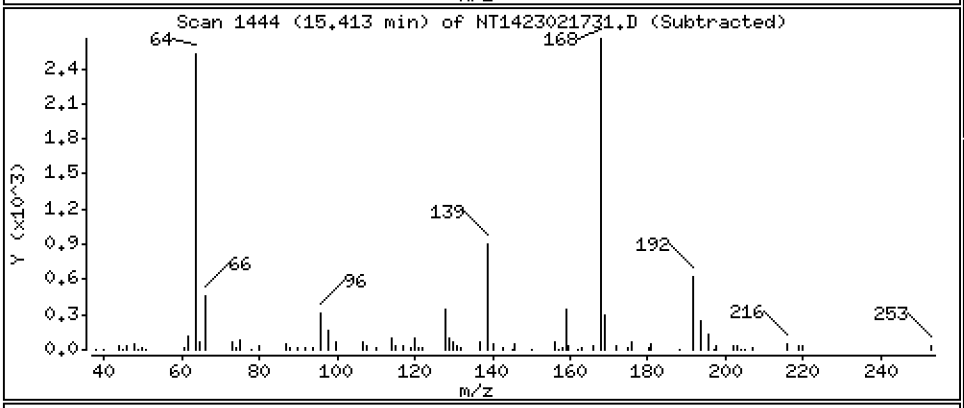
Column phase: ZB-5msi

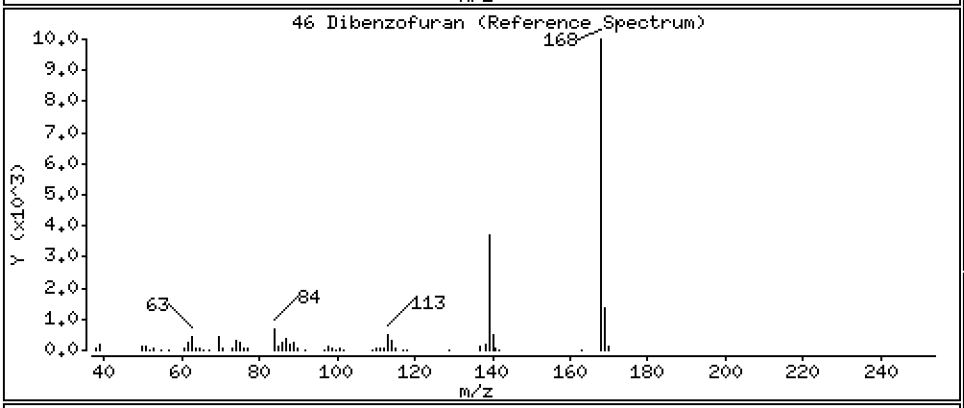
Column diameter: 0.25

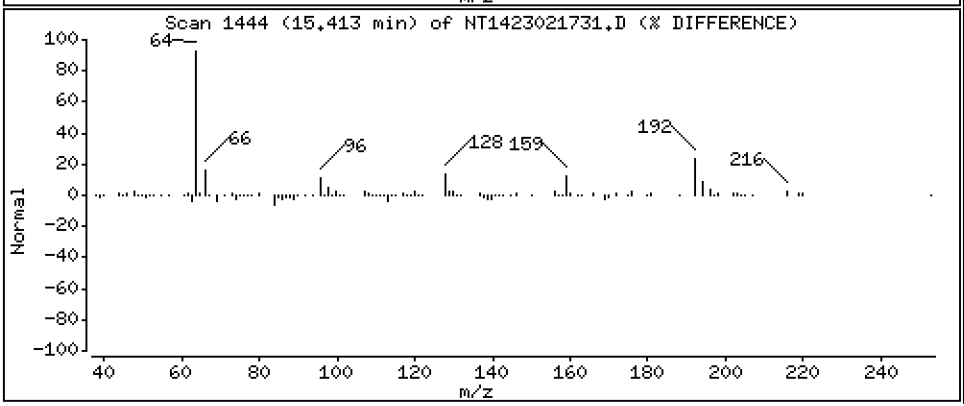
46 Dibenzofuran

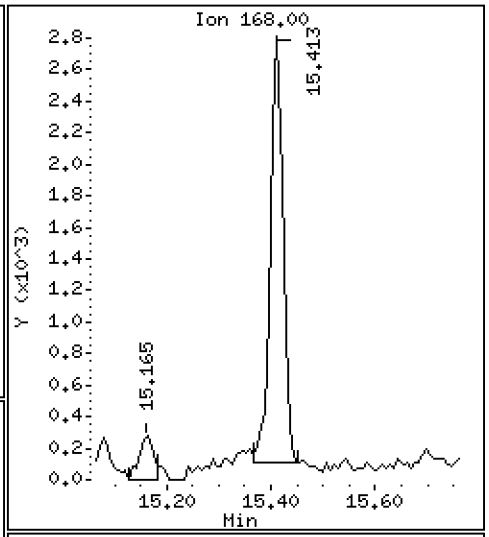
Concentration: 0.01618 ug/mL

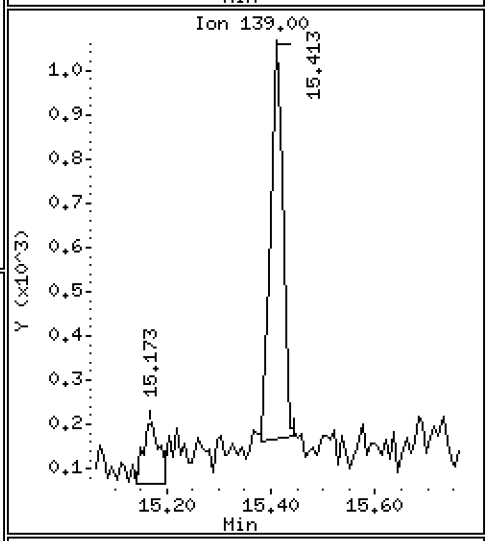


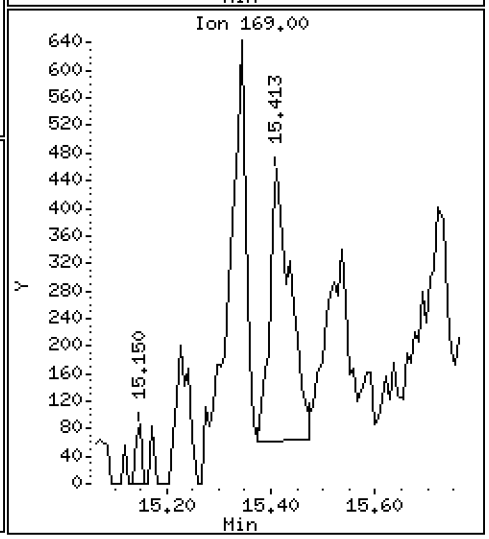












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

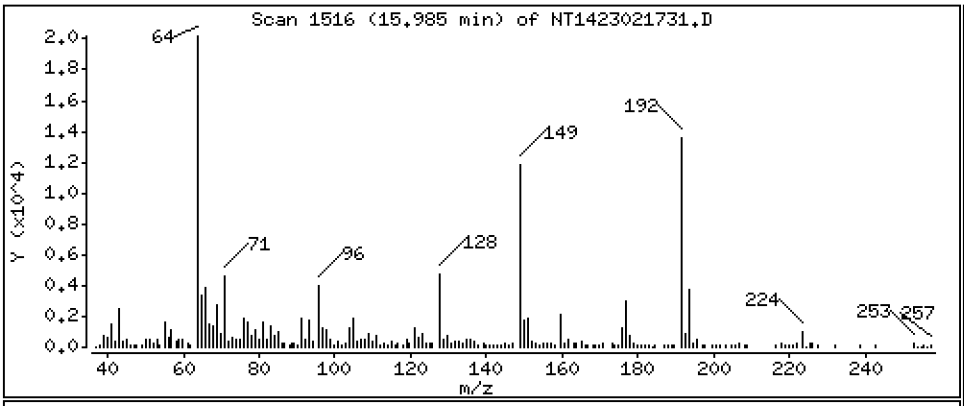
Operator: DSD

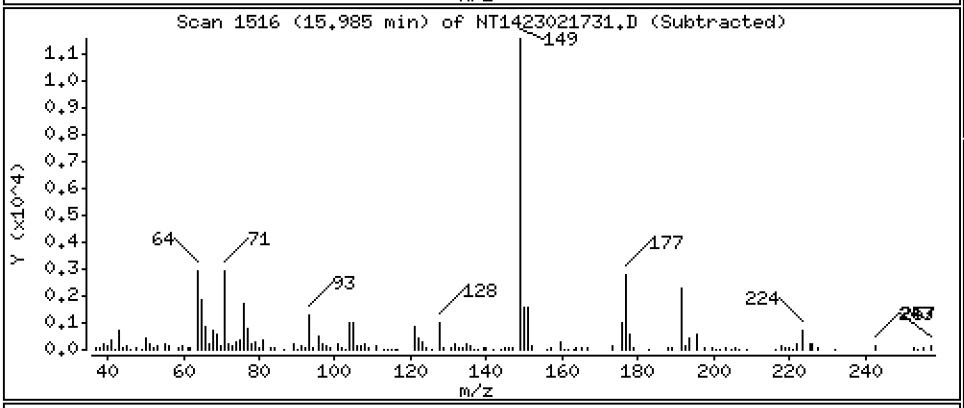
Column phase: ZB-5msi

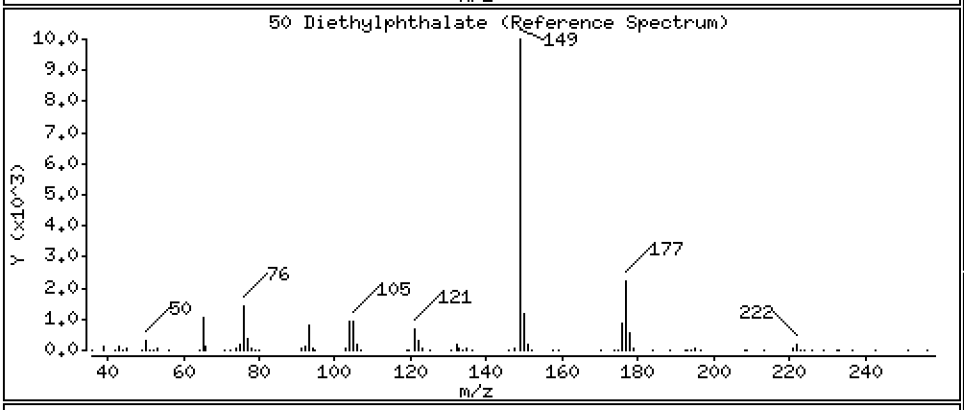
Column diameter: 0.25

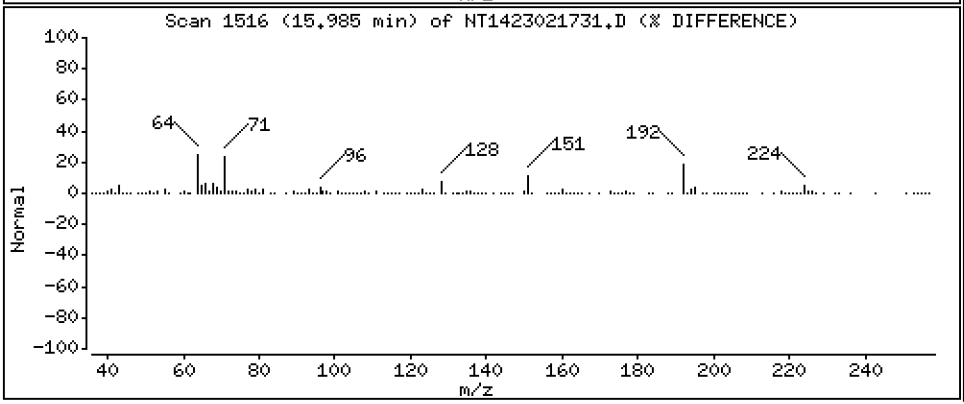
50 Diethylphthalate

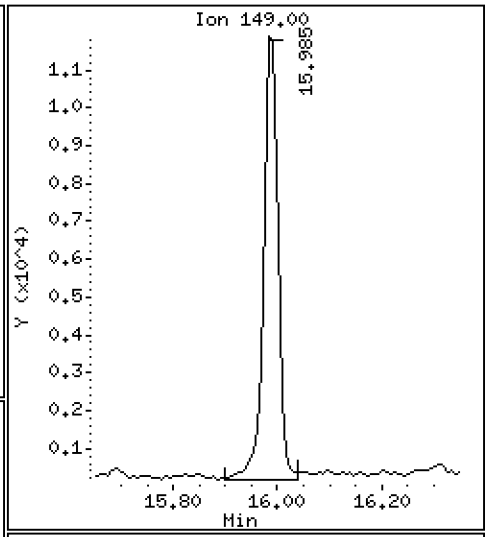
Concentration: 0.09837 ug/mL

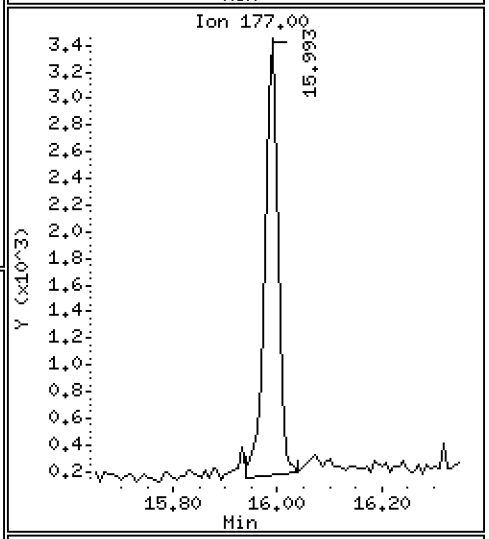


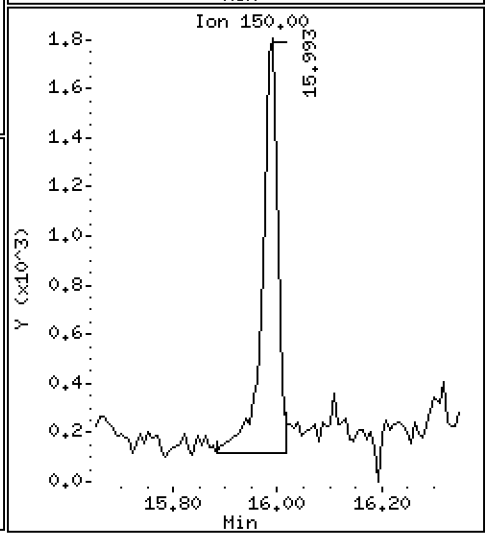












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

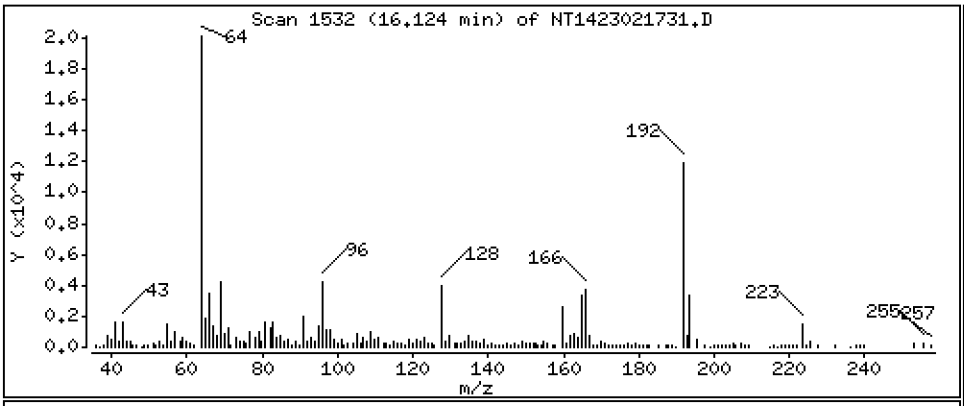
Operator: DSD

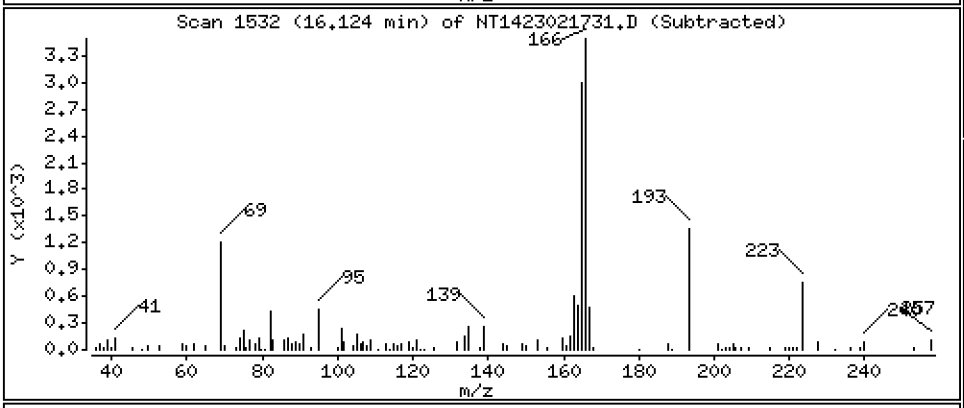
Column phase: ZB-5msi

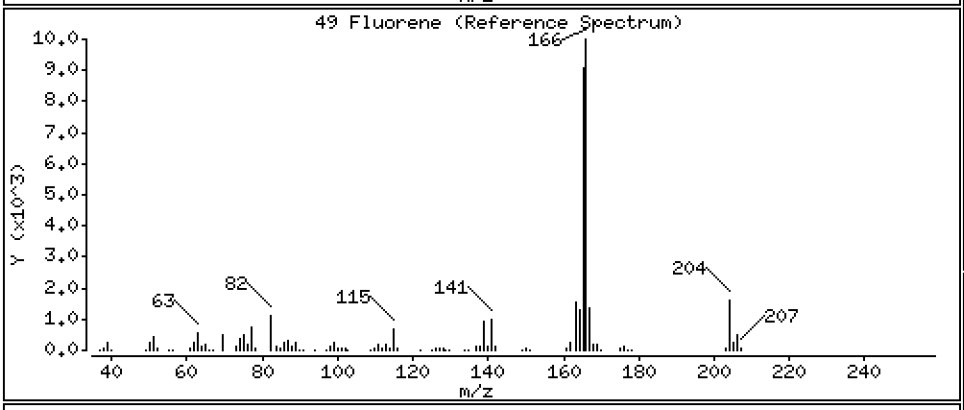
Column diameter: 0.25

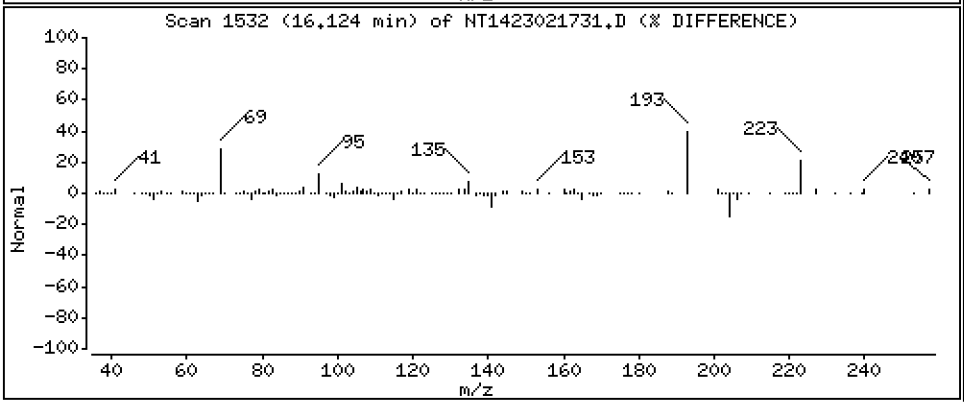
49 Fluorene

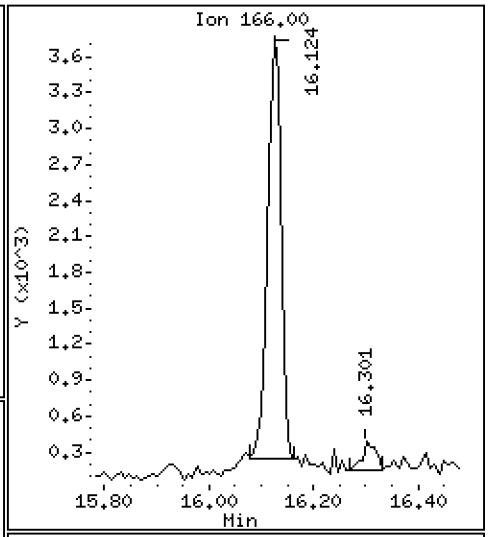
Concentration: 0.02136 ug/mL

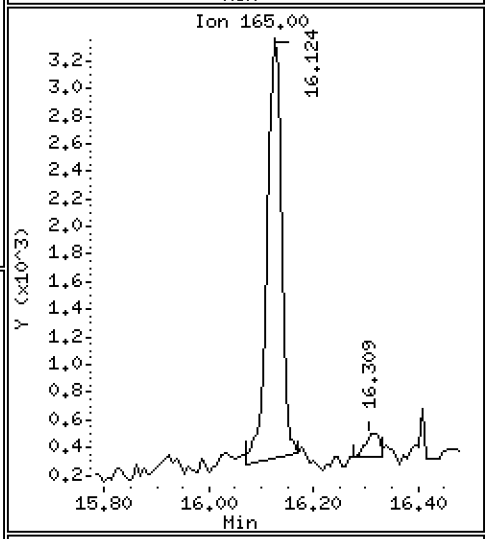


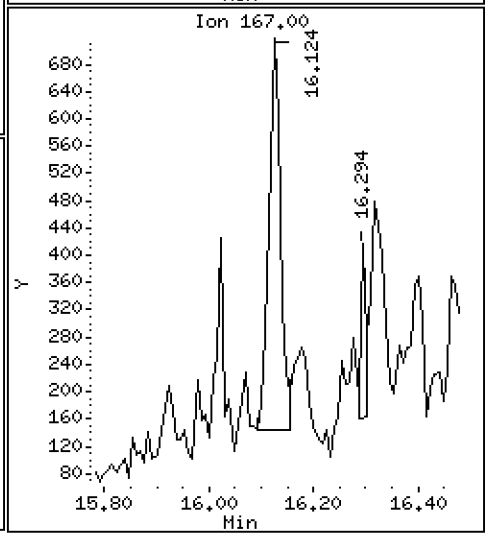












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

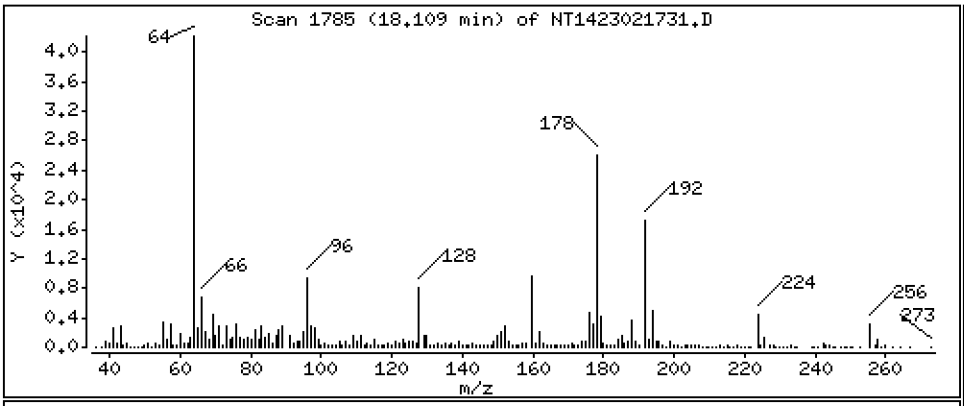
Operator: DSD

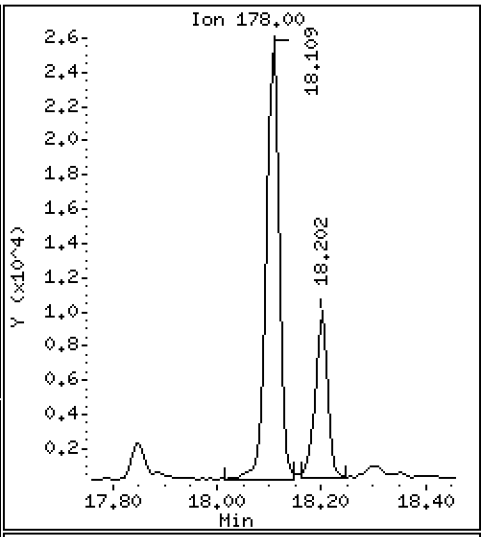
Column phase: ZB-5msi

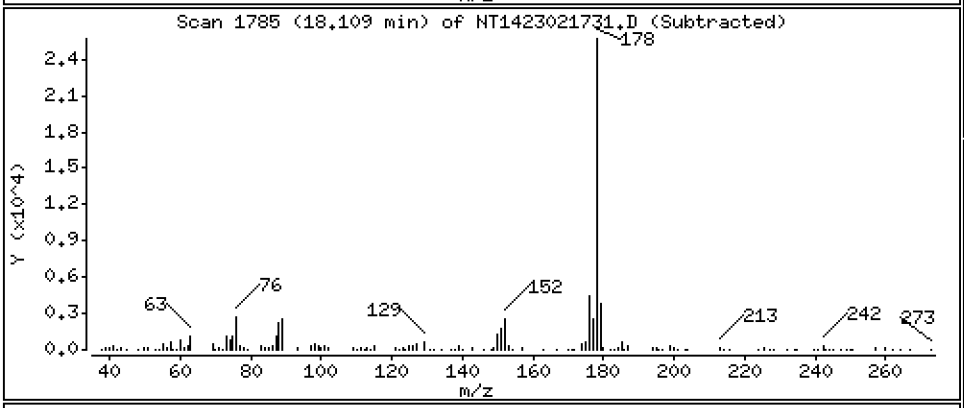
Column diameter: 0.25

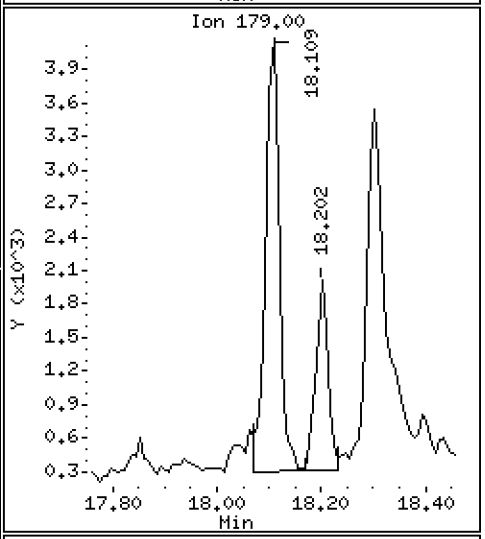
60 Phenanthrene

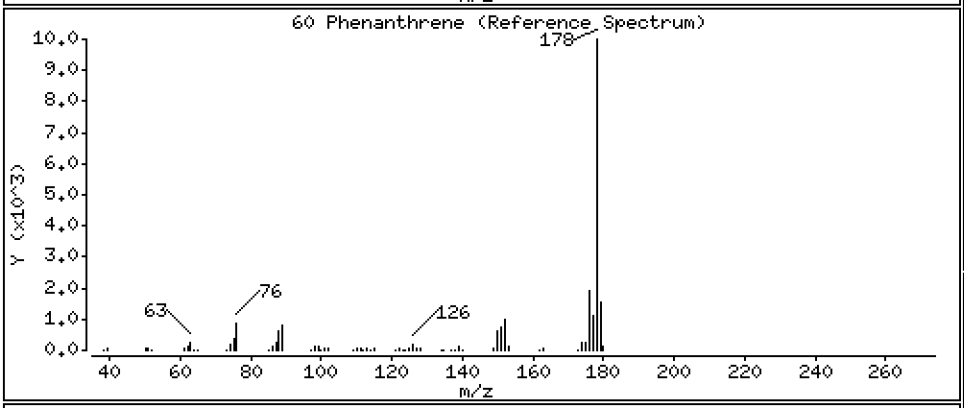
Concentration: 0.1499 ug/mL

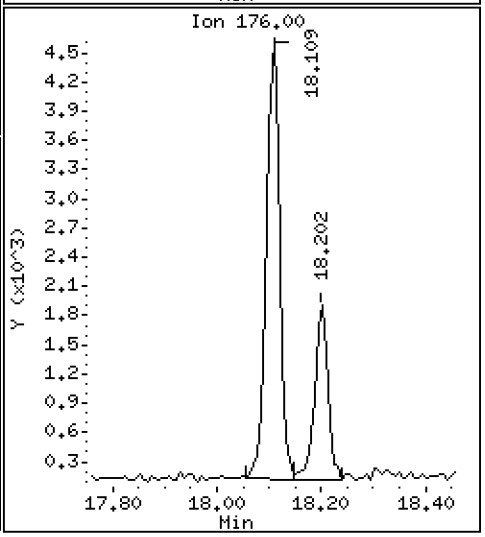


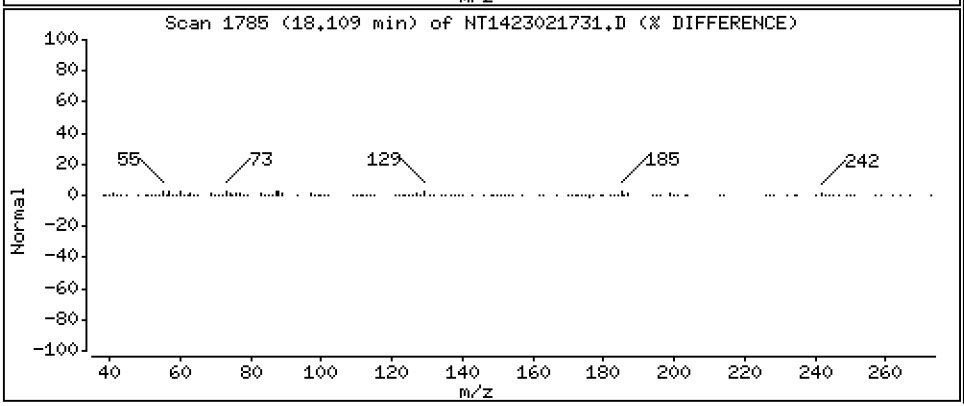












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

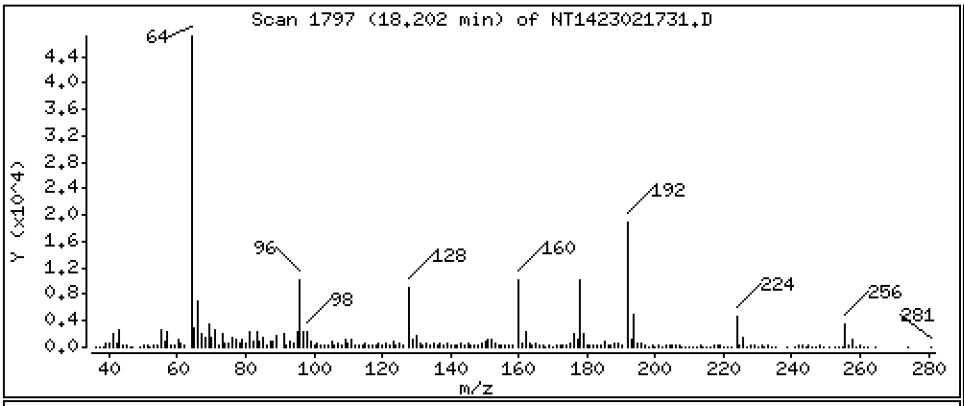
Operator: DSD

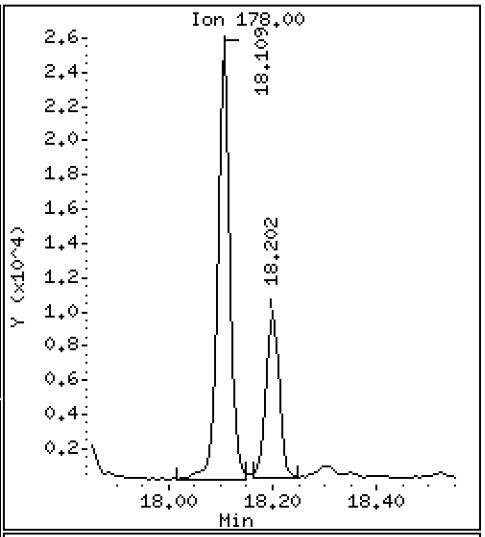
Column phase: ZB-5msi

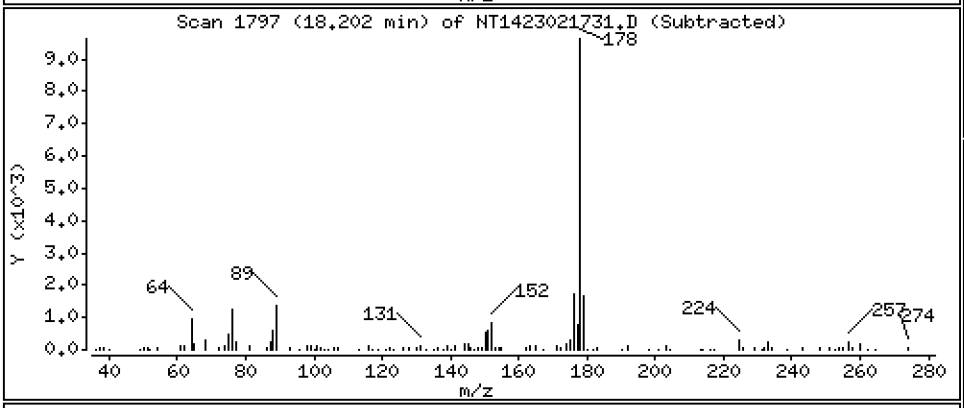
Column diameter: 0.25

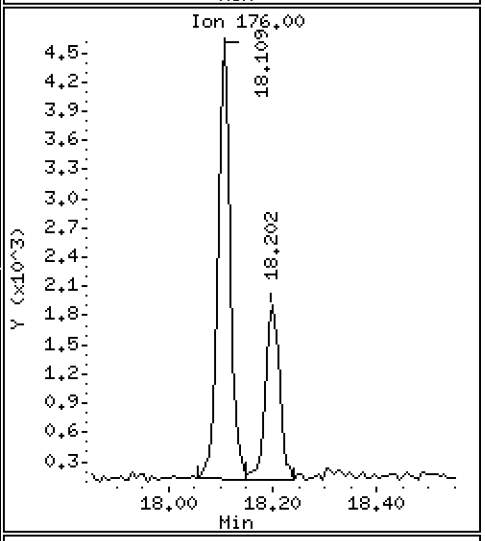
61 Anthracene

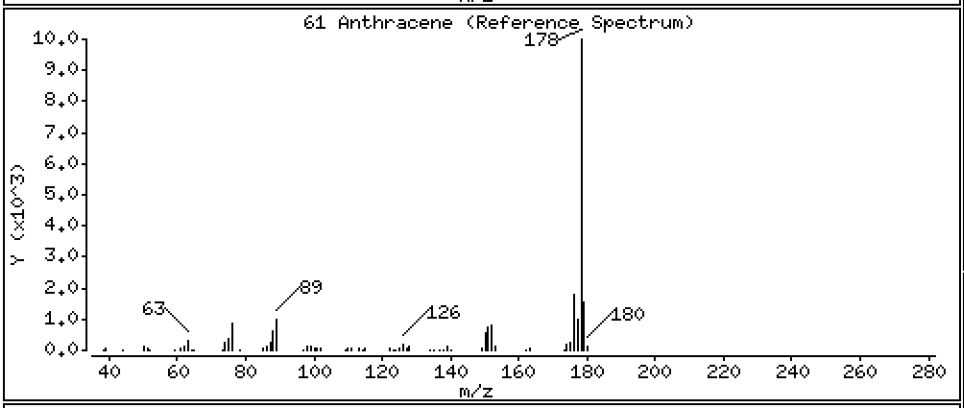
Concentration: 0.05862 ug/mL

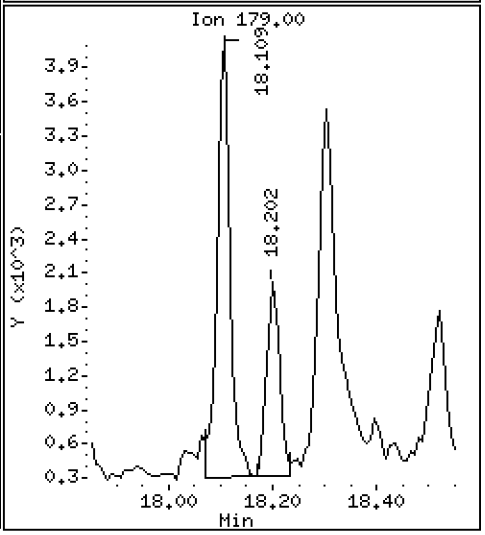


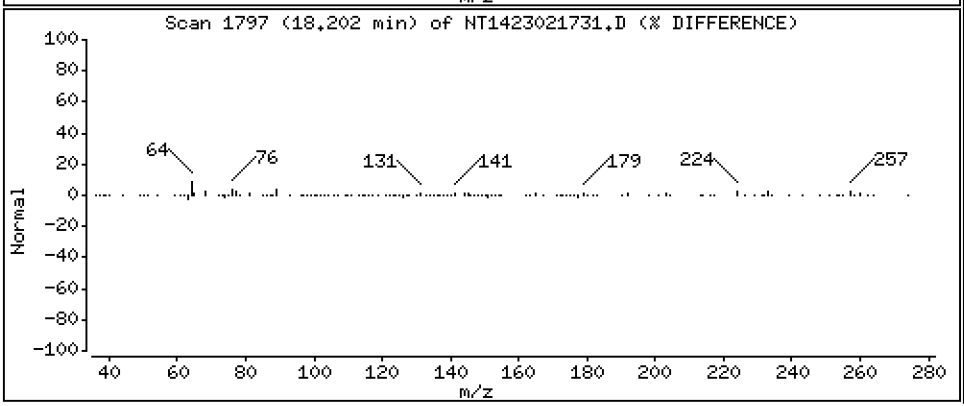












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021731.D

Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

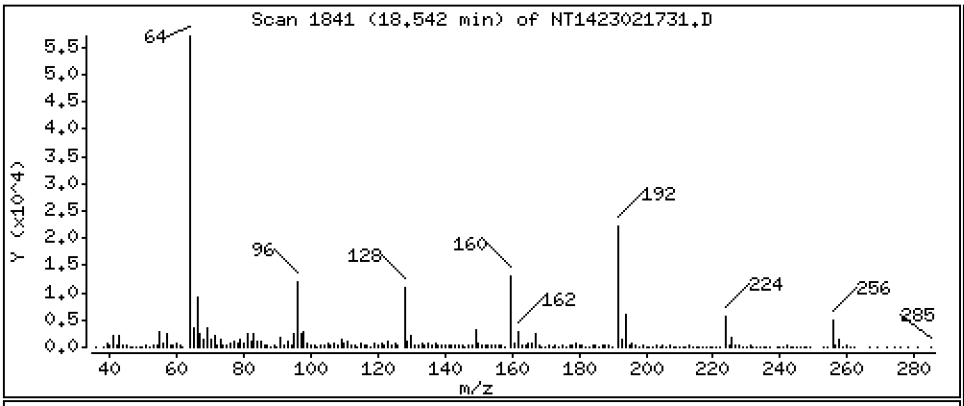
Operator: DSD

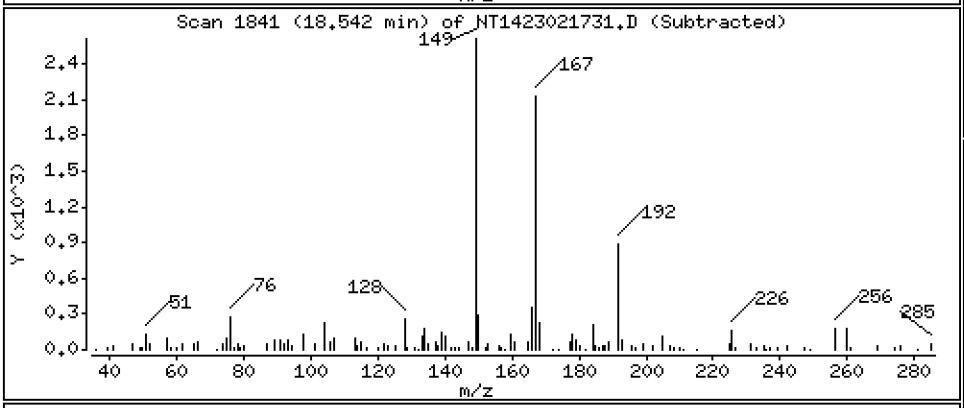
Column phase: ZB-5msi

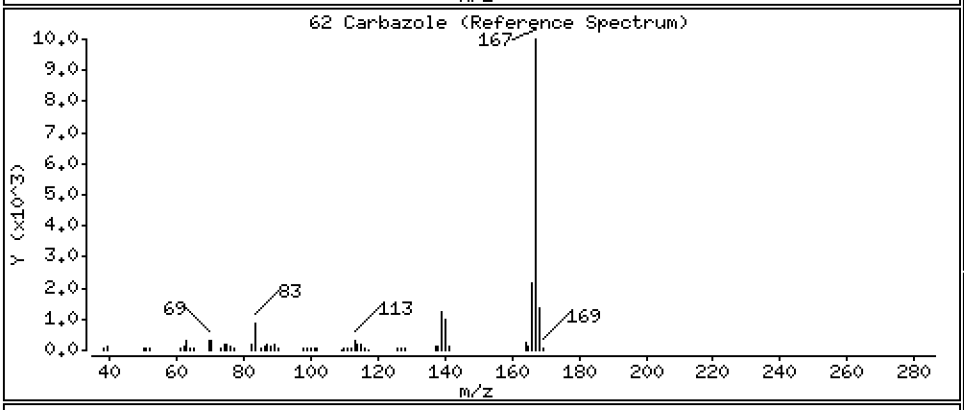
Column diameter: 0.25

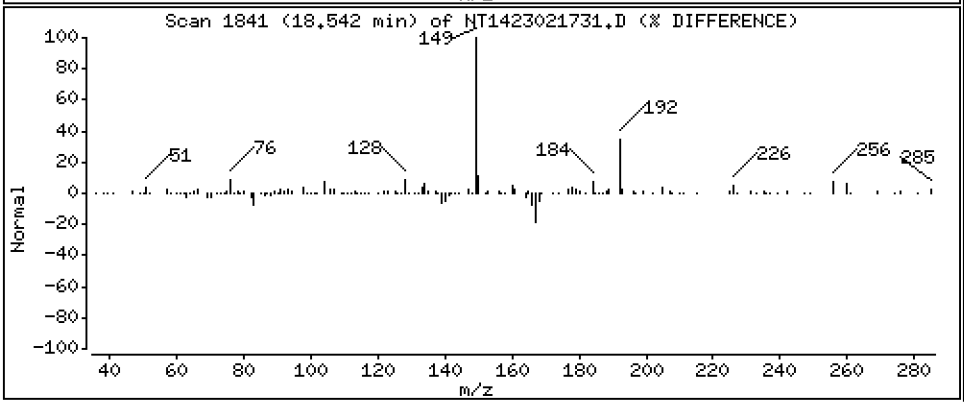
62 Carbazole

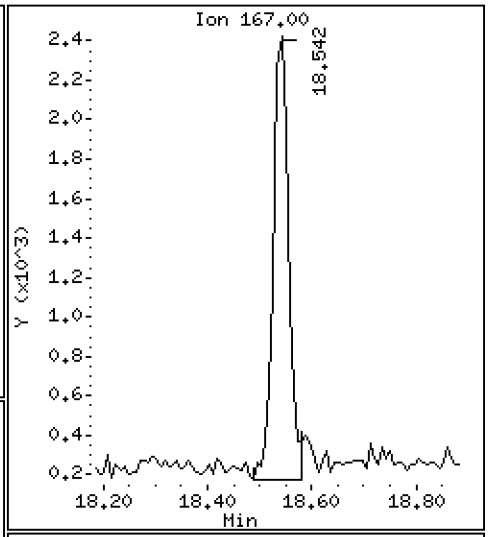
Concentration: 0.01797 ug/mL

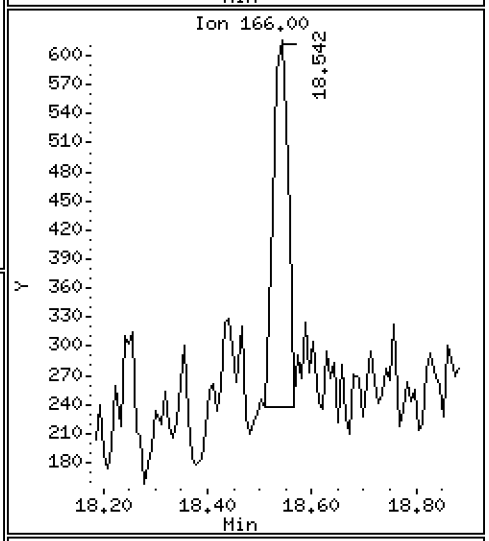


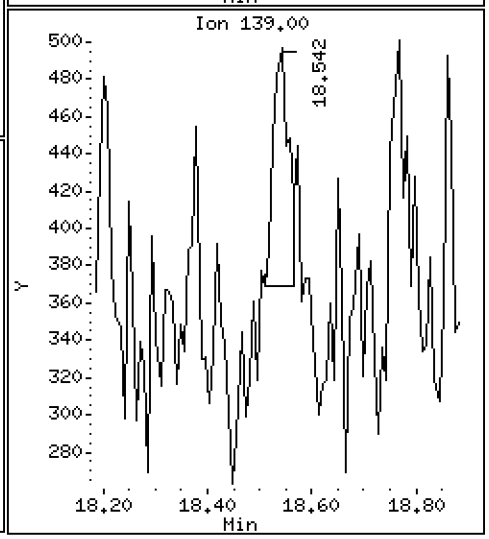












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

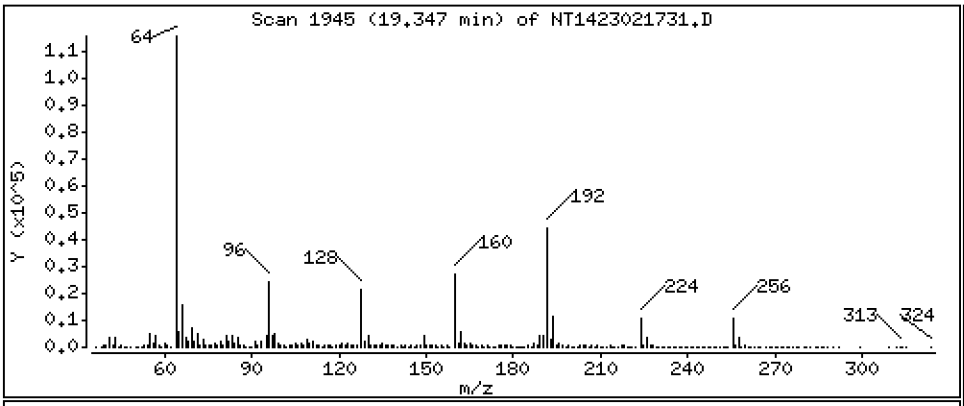
Operator: DSD

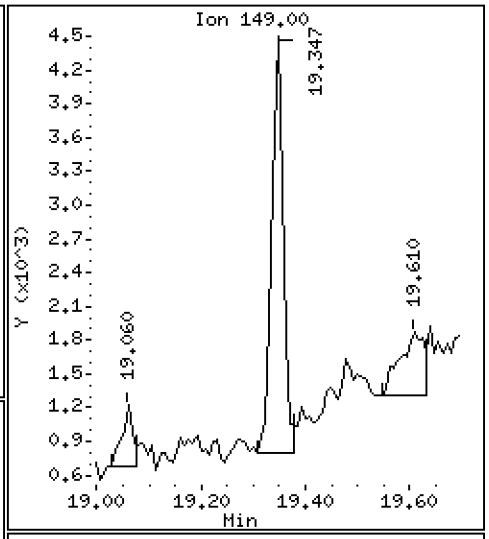
Column phase: ZB-5msi

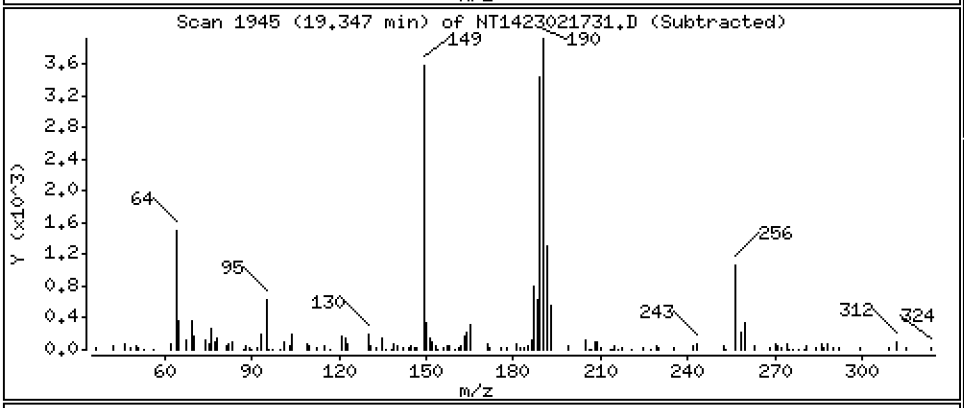
Column diameter: 0.25

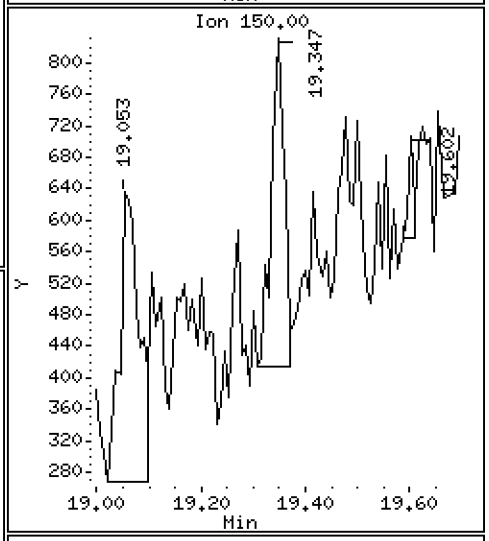
63 Di-n-butylphthalate

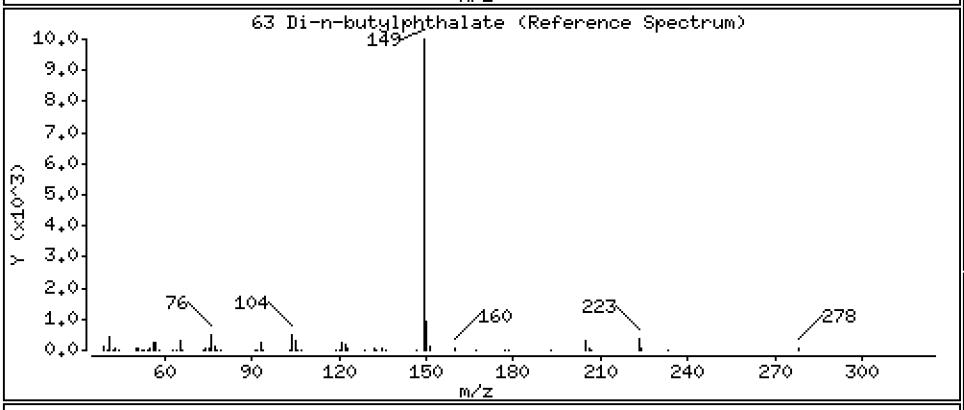
Concentration: 0.01935 ug/mL

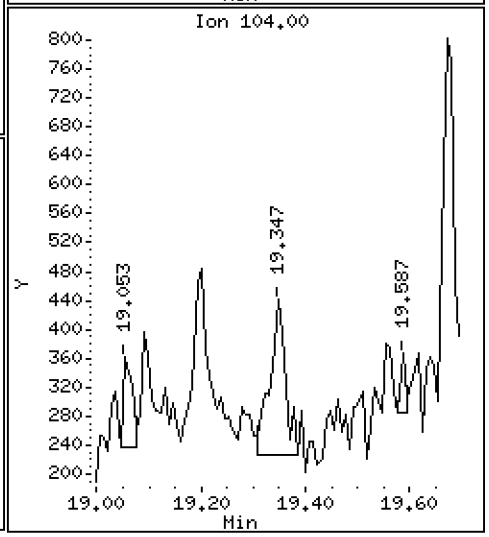


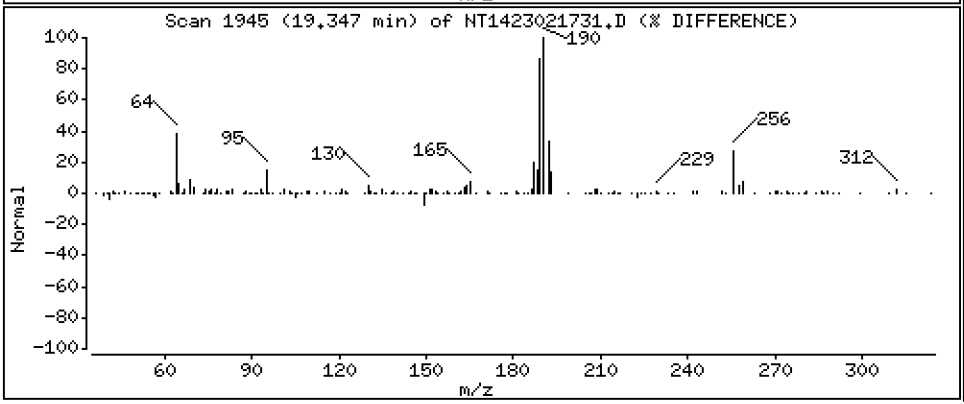












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

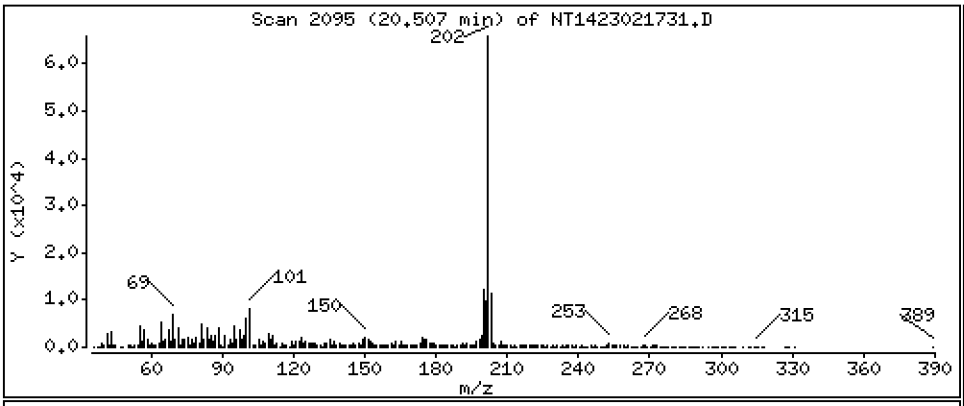
Operator: DSD

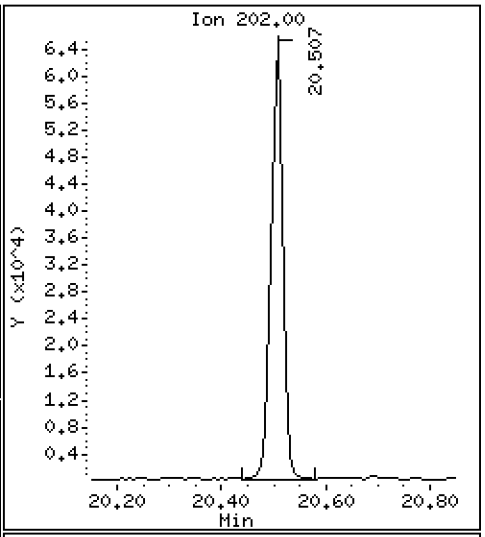
Column phase: ZB-5msi

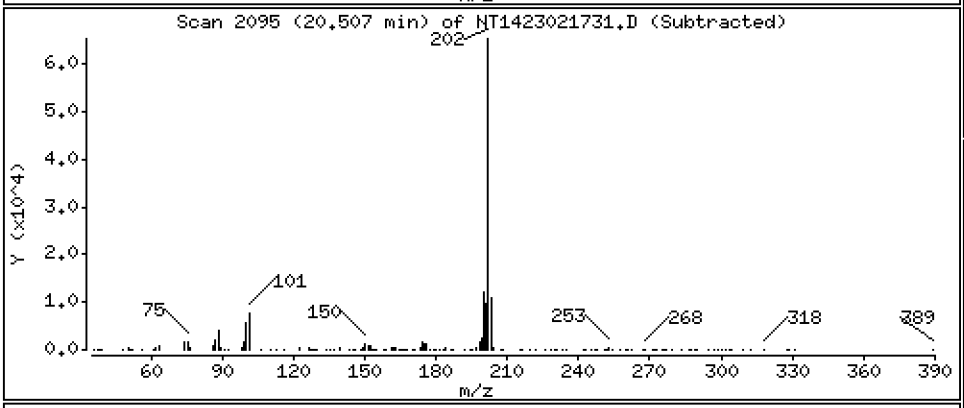
Column diameter: 0.25

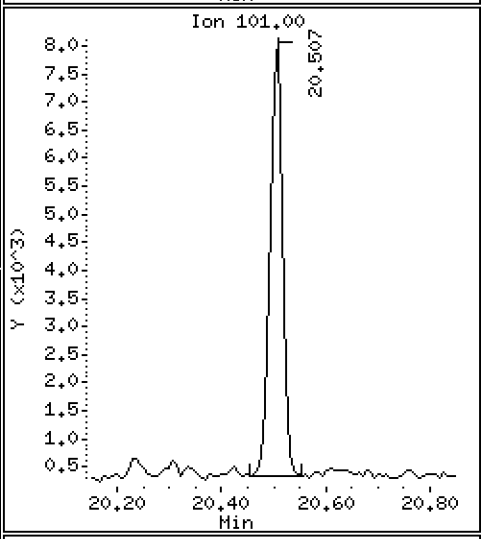
64 Fluoranthene

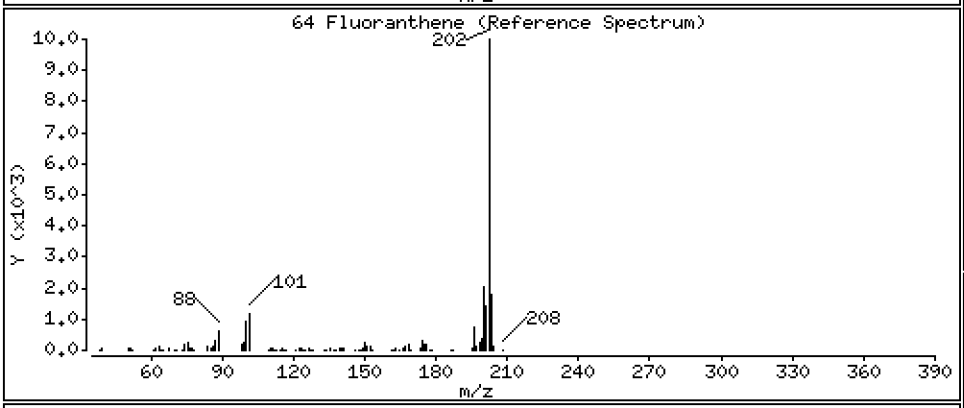
Concentration: 0.4708 ug/mL

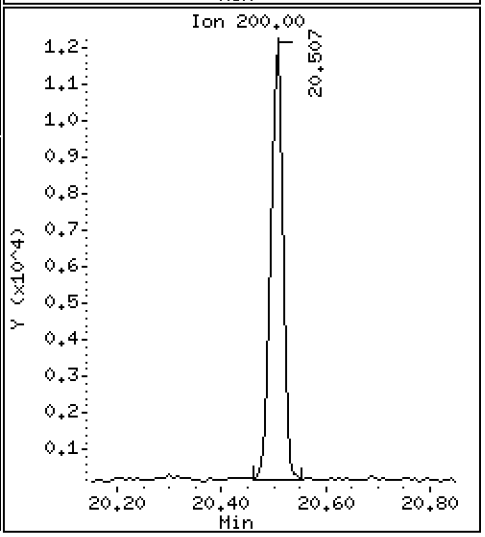


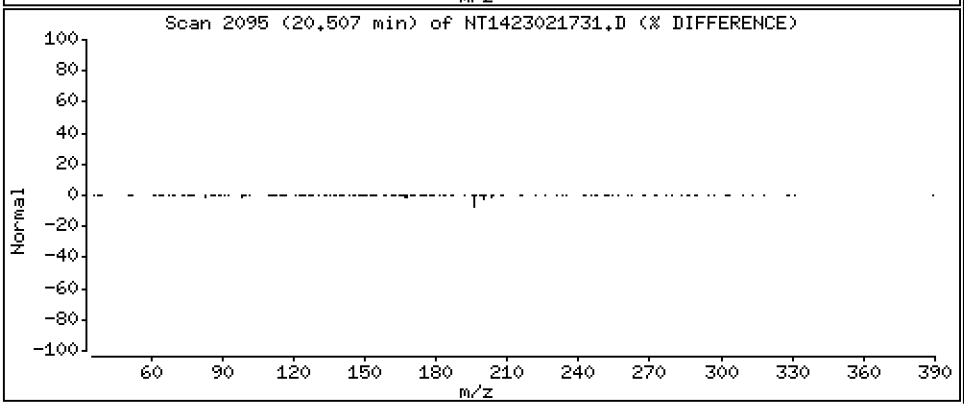












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

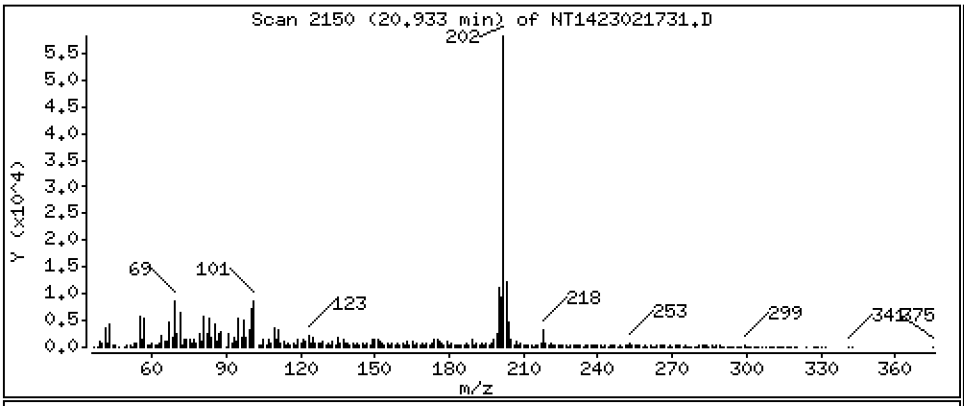
Operator: DSD

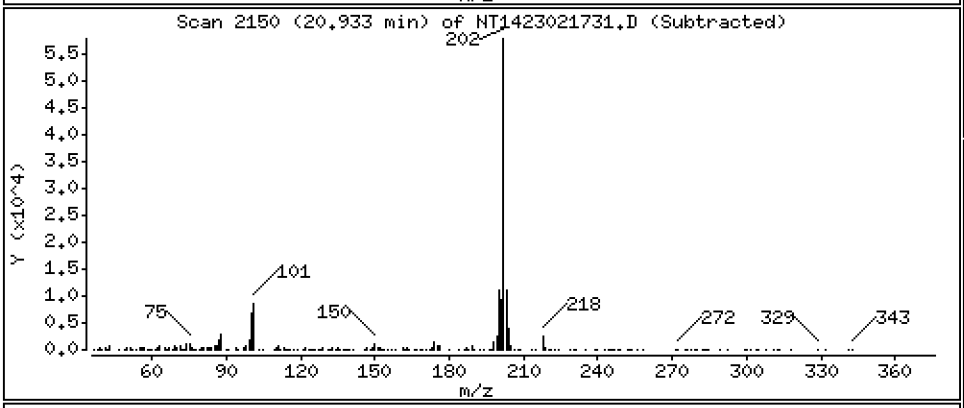
Column phase: ZB-5msi

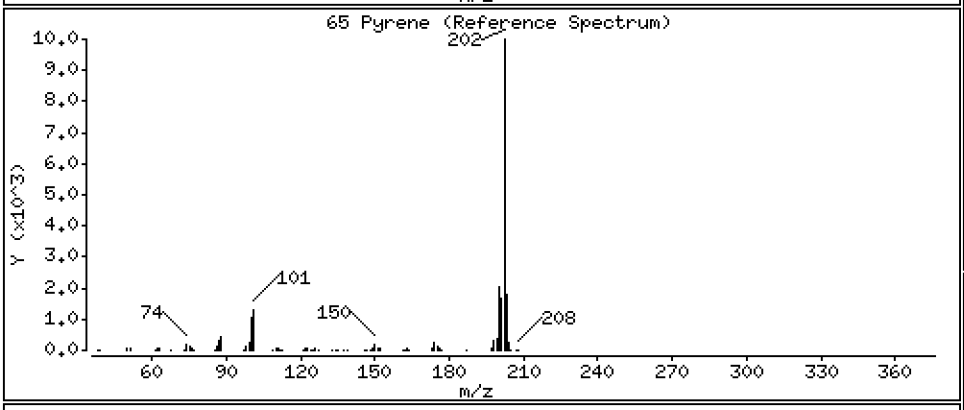
Column diameter: 0.25

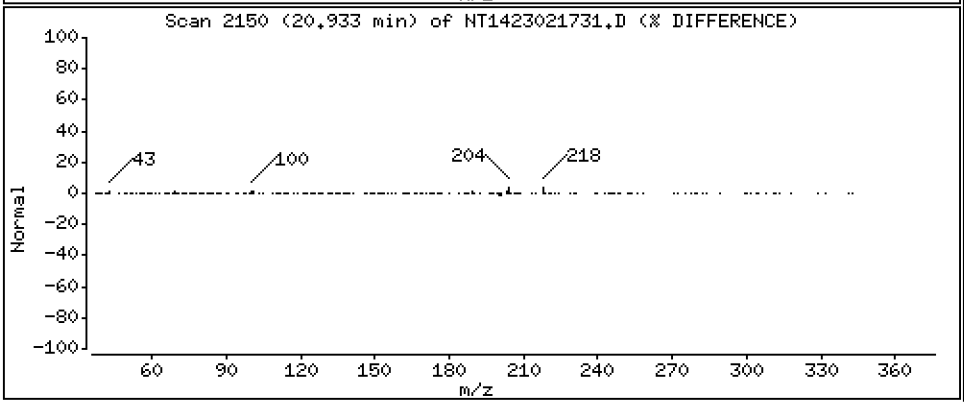
65 Pyrene

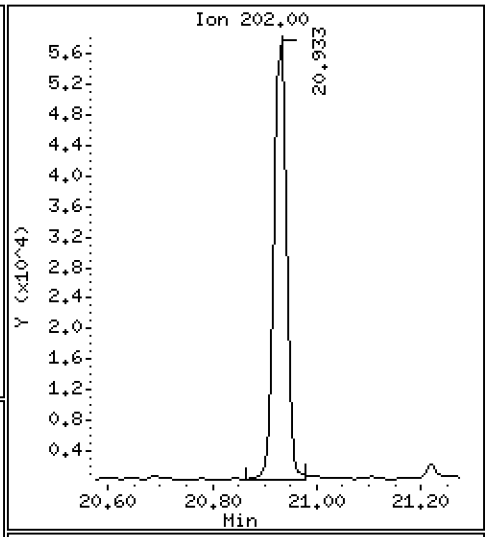
Concentration: 0.4083 ug/mL

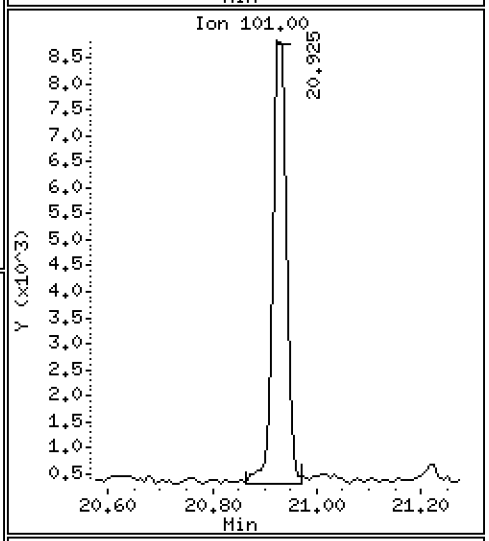


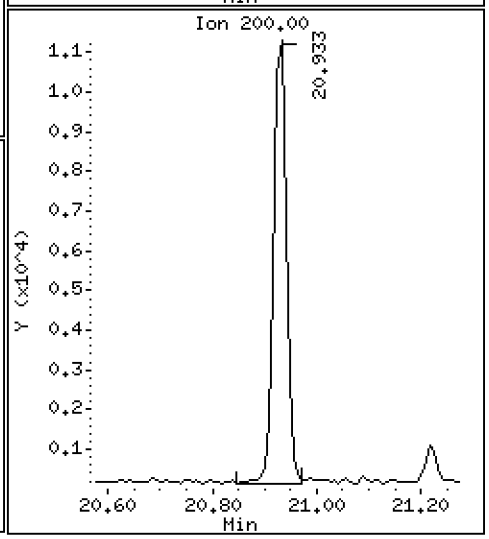












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

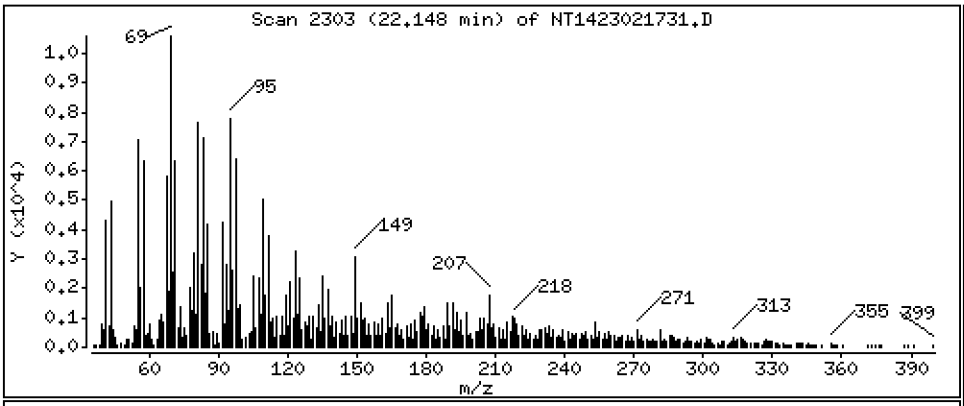
Operator: DSD

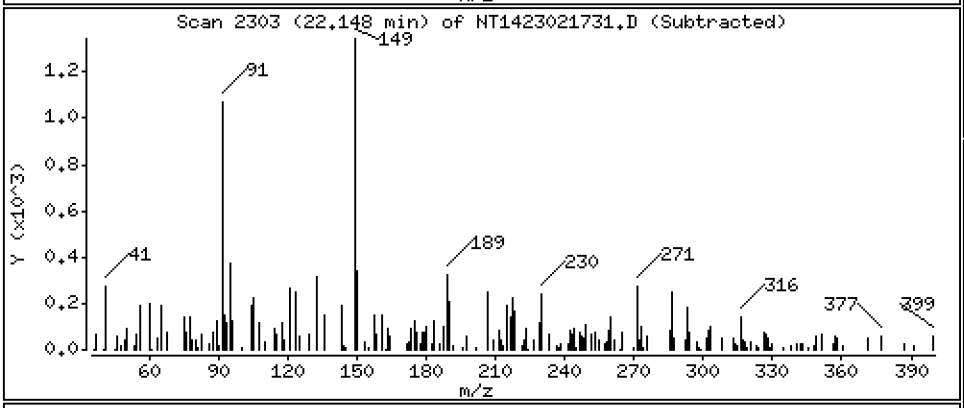
Column phase: ZB-5msi

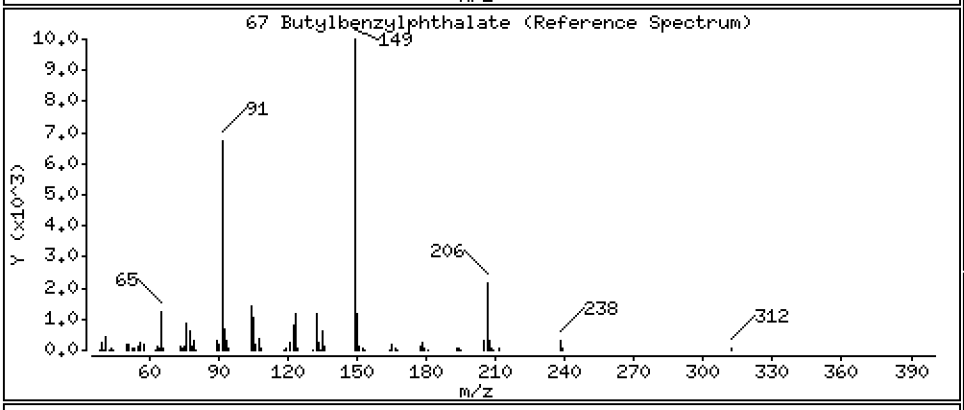
Column diameter: 0.25

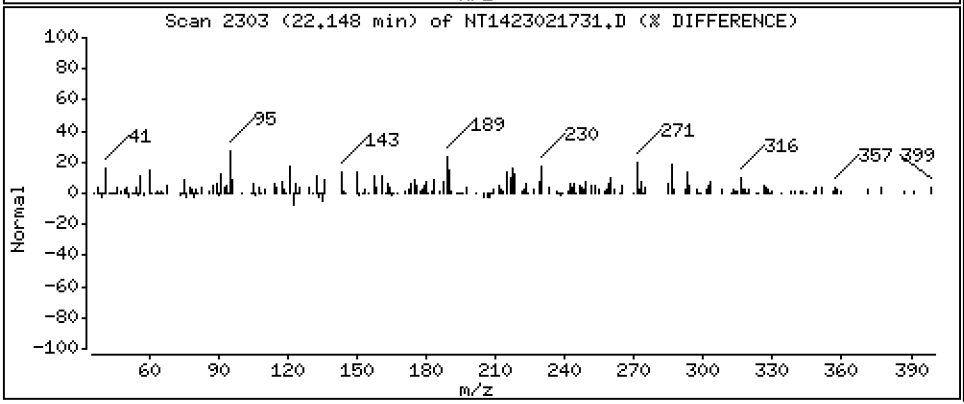
67 Butylbenzylphthalate

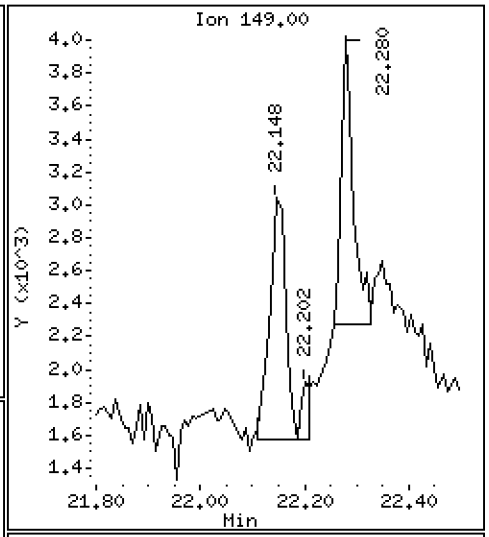
Concentration: 0.04131 ug/mL

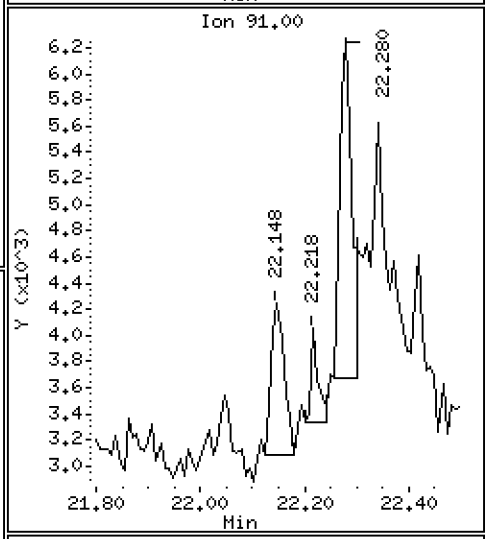


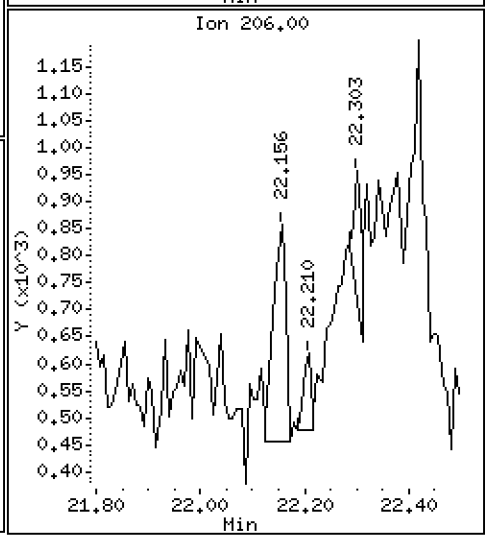












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

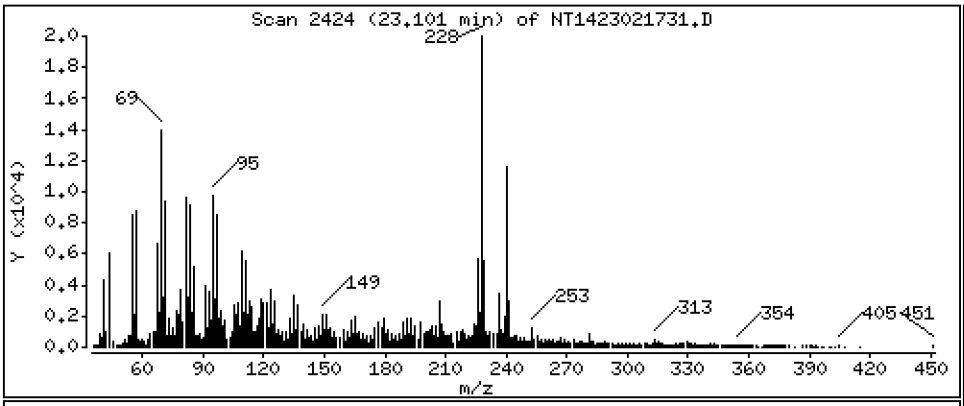
Operator: DSD

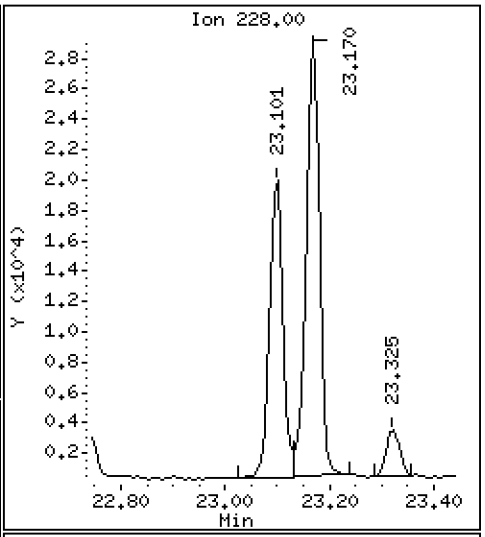
Column phase: ZB-5msi

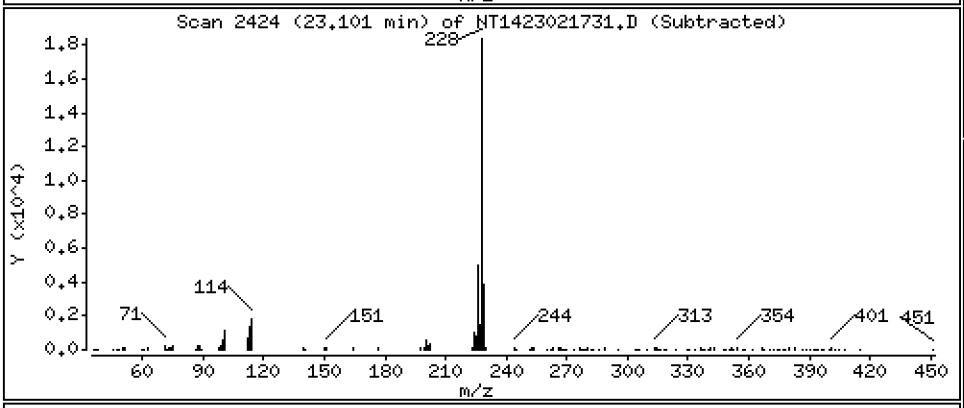
Column diameter: 0.25

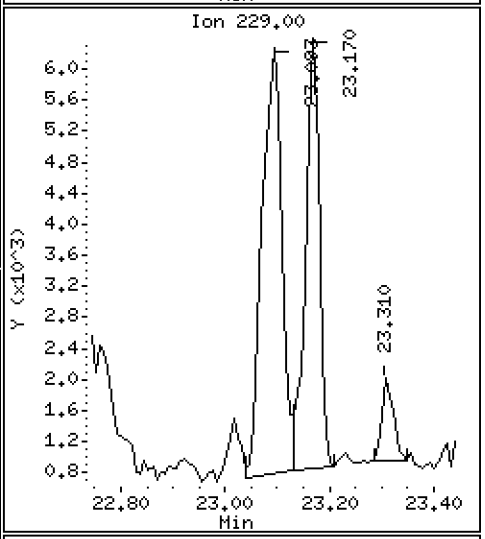
68 Benzo(a)anthracene

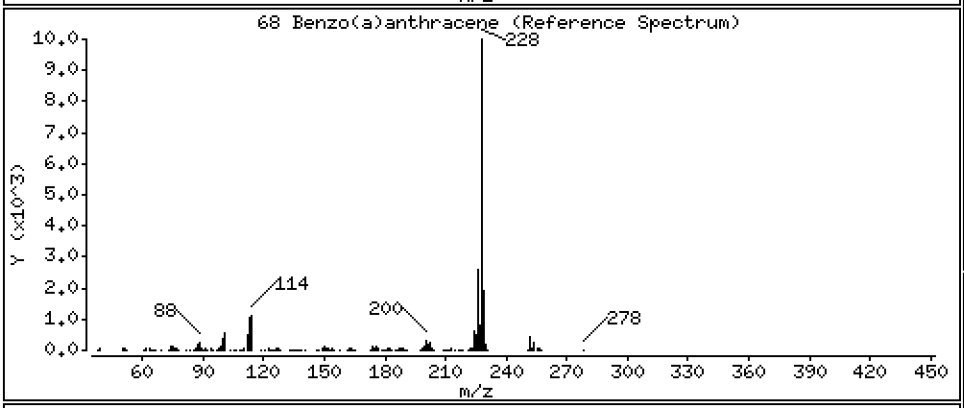
Concentration: 0.2190 ug/mL

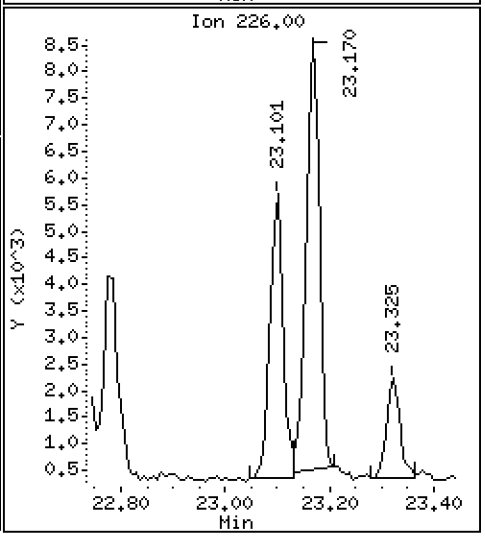


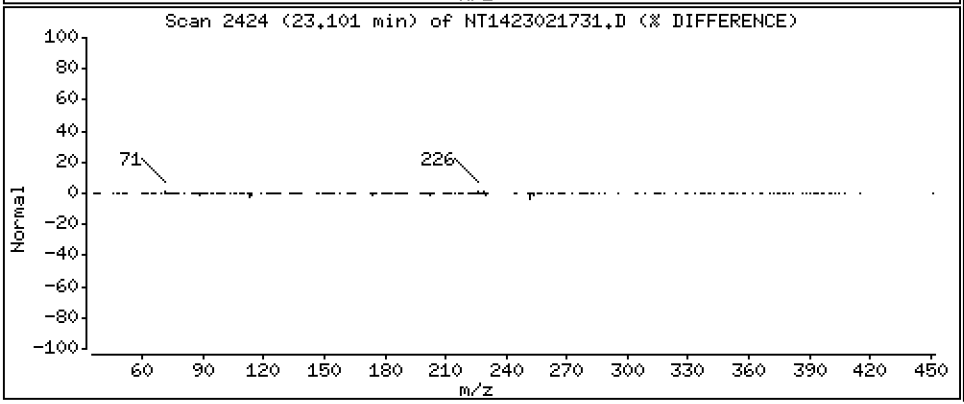












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

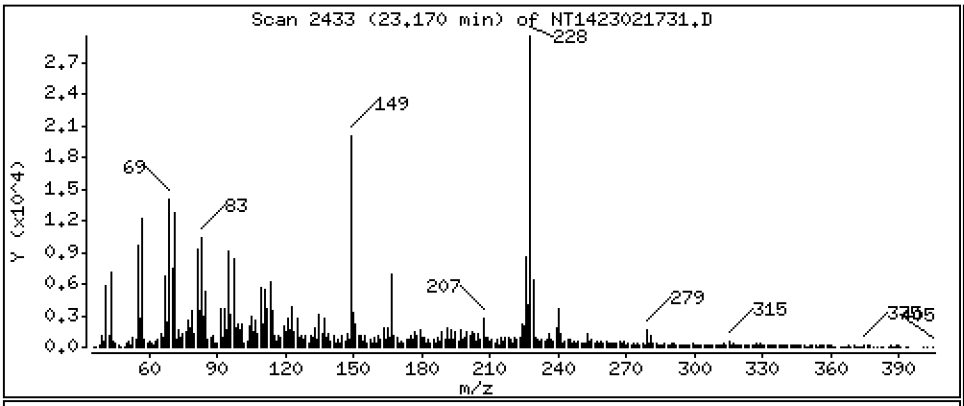
Operator: DSD

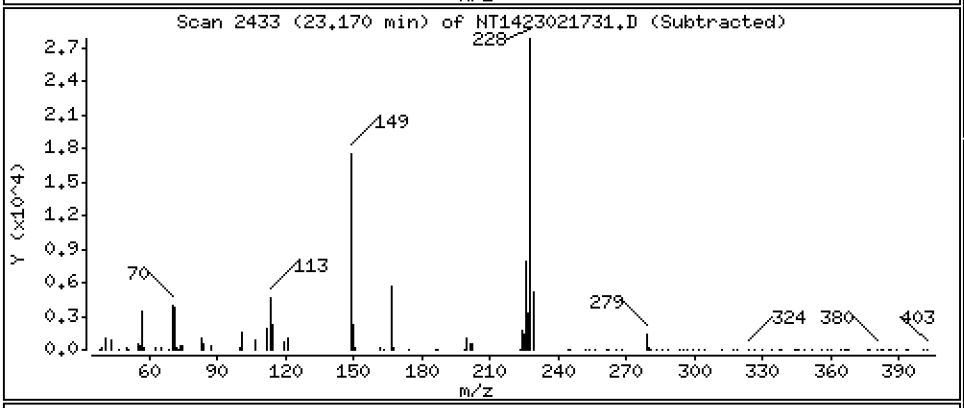
Column phase: ZB-5msi

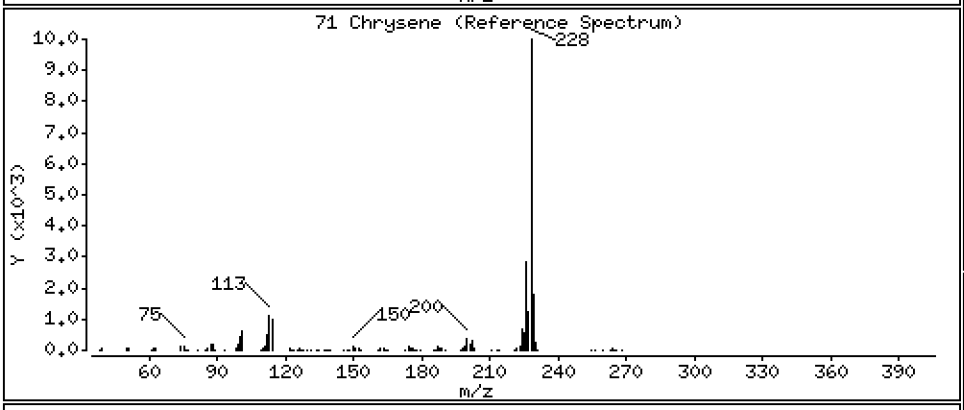
Column diameter: 0.25

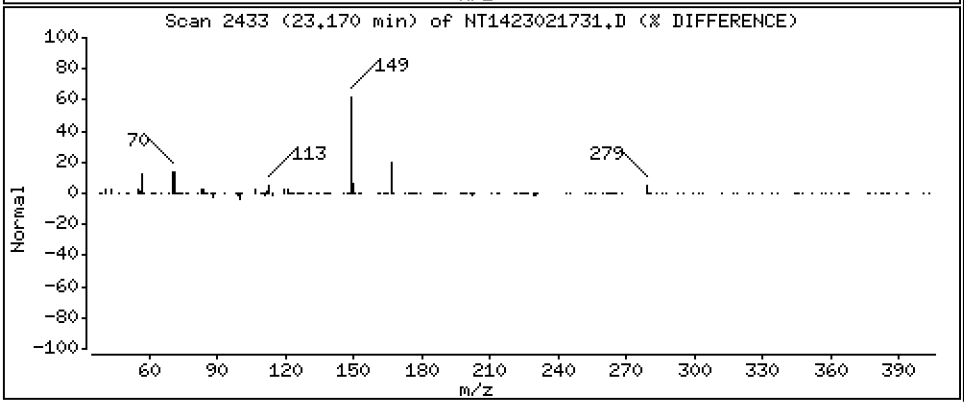
71 Chrysene

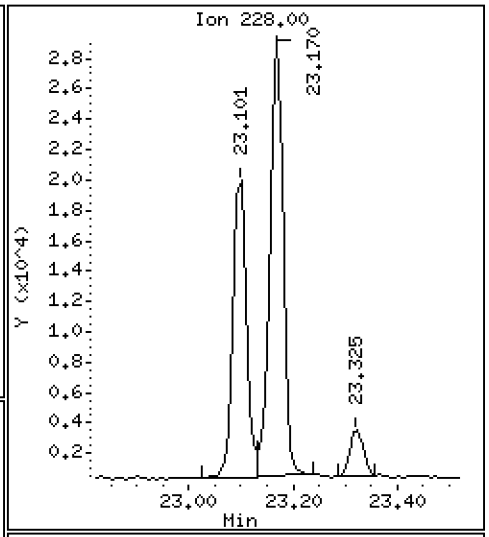
Concentration: 0.3448 ug/mL

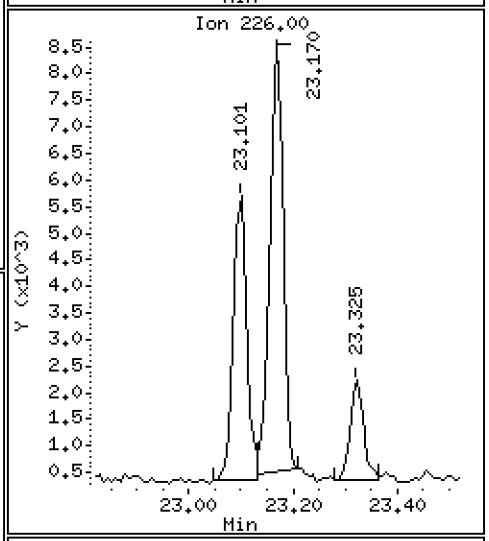


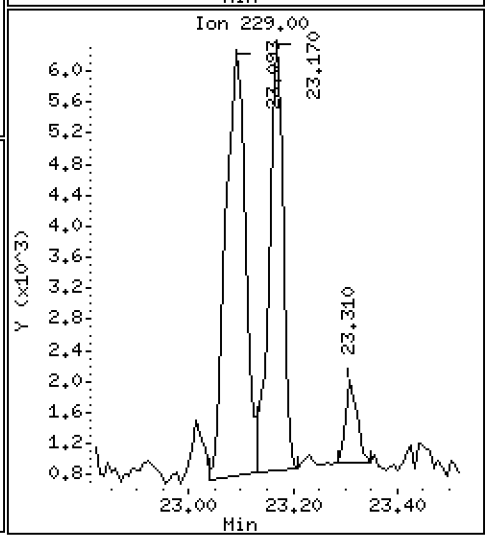












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

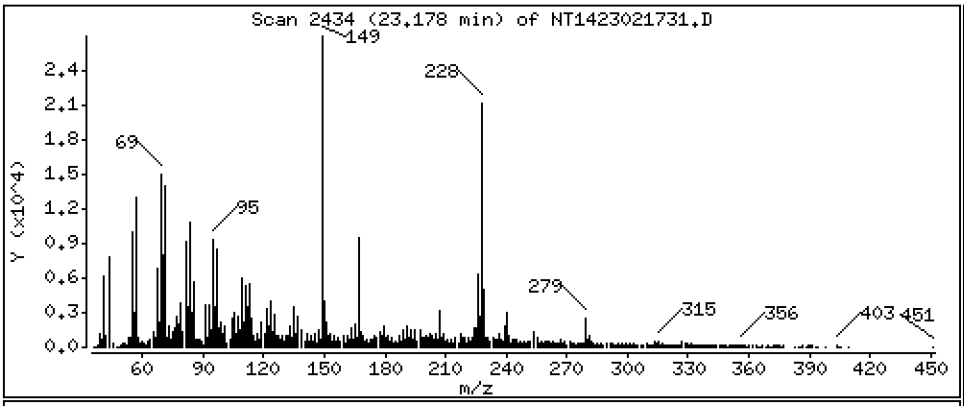
Operator: DSD

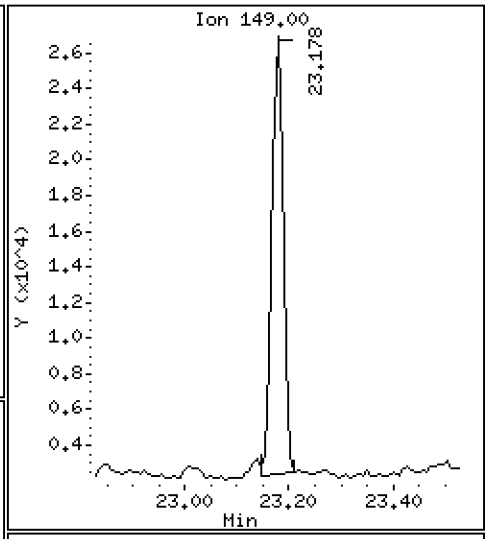
Column phase: ZB-5msi

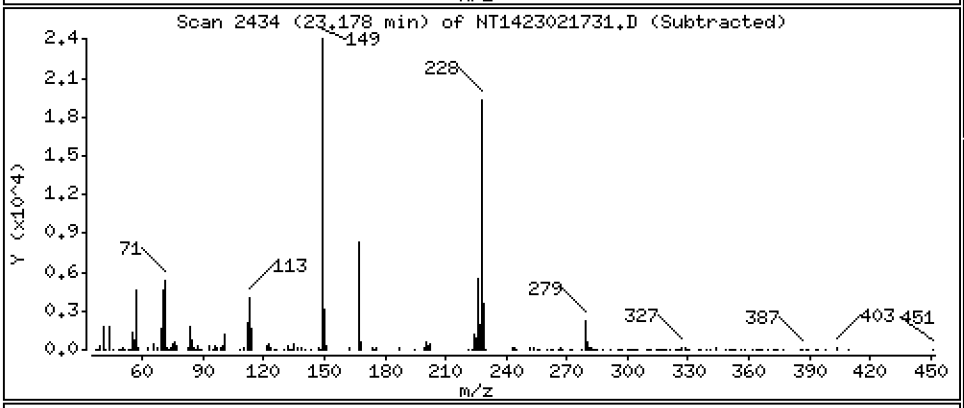
Column diameter: 0.25

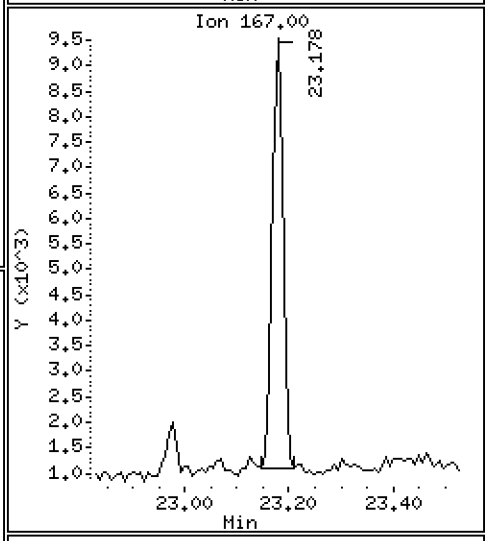
72 bis(2-Ethylhexyl)phthalate

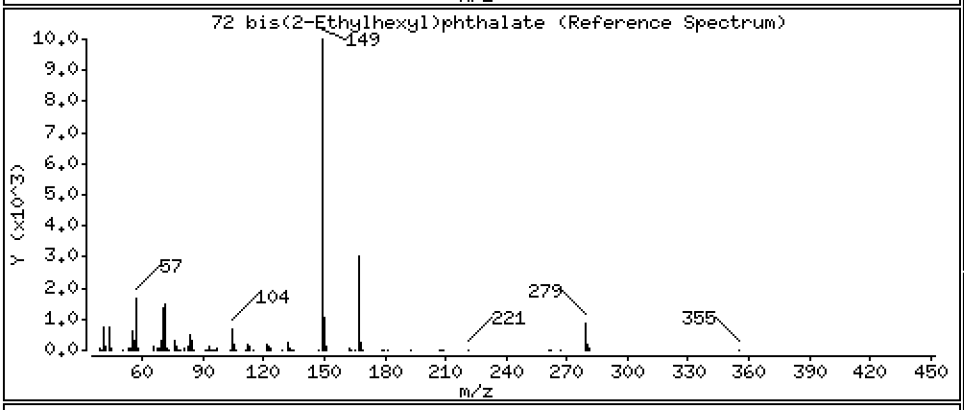
Concentration: 0.2439 ug/mL

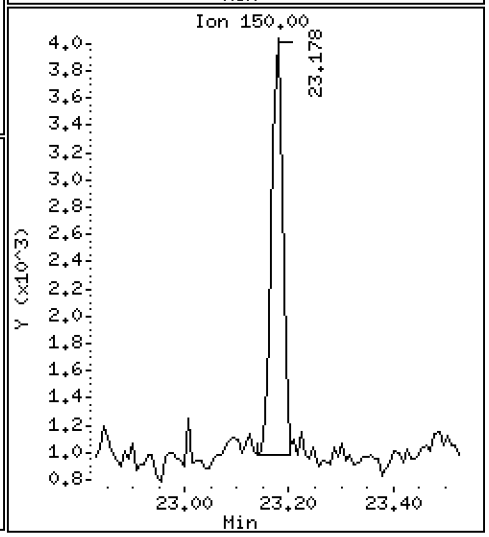


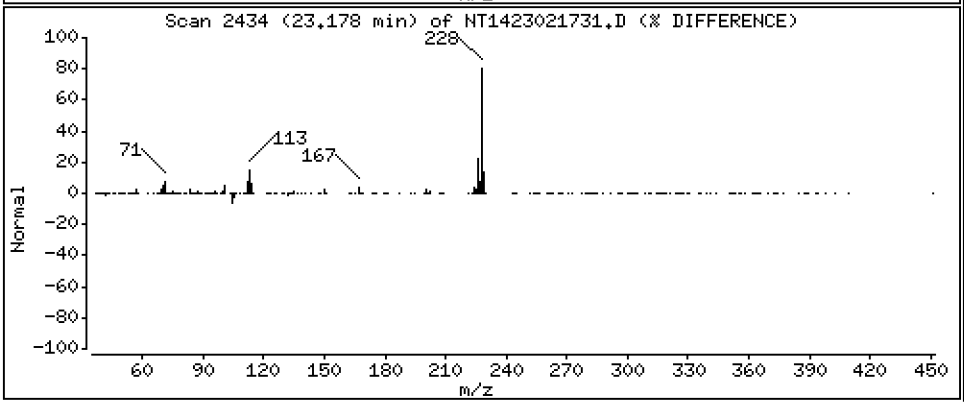












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

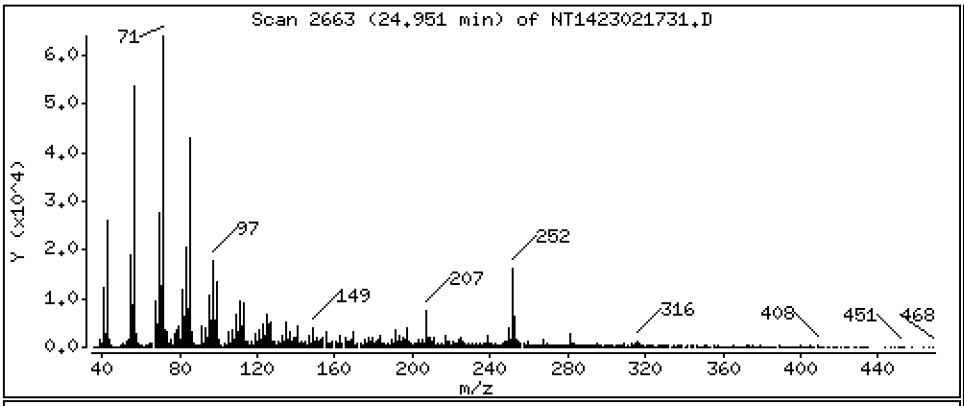
Operator: DSD

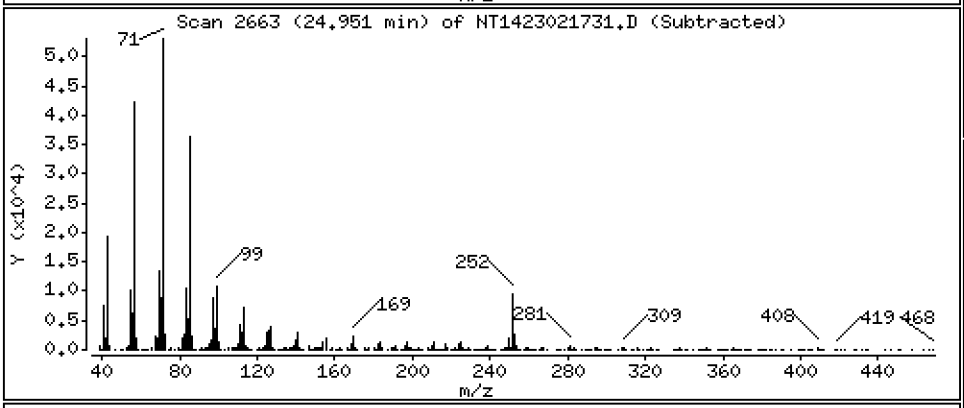
Column phase: ZB-5msi

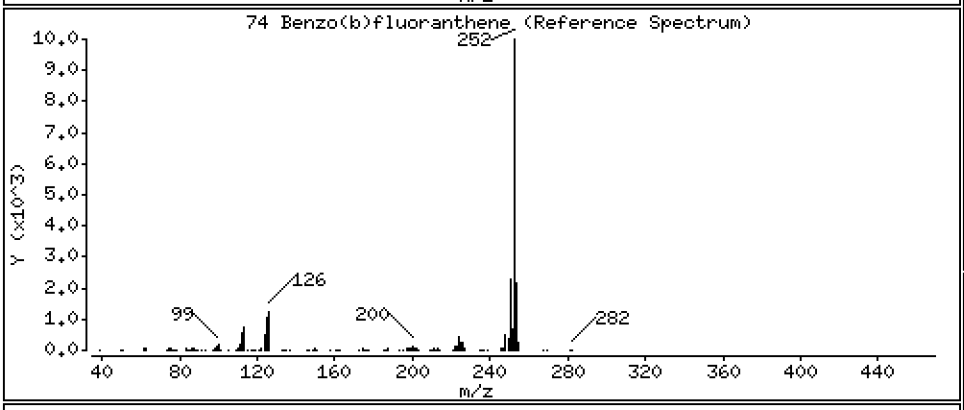
Column diameter: 0.25

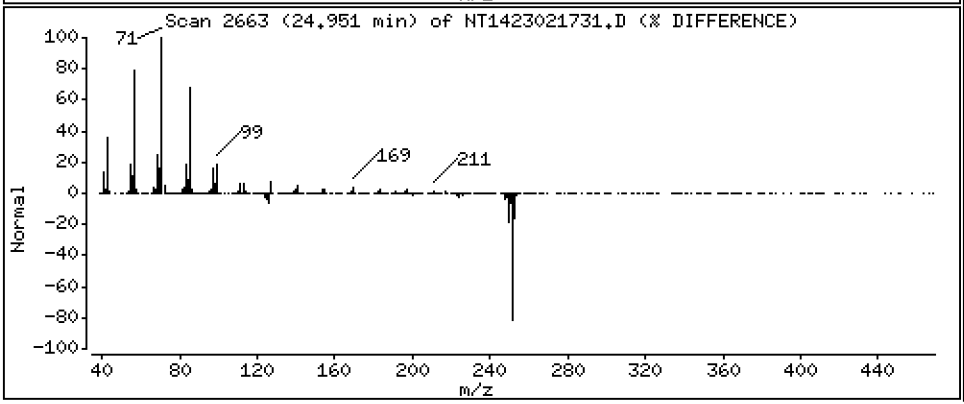
74 Benzo(b)fluoranthene

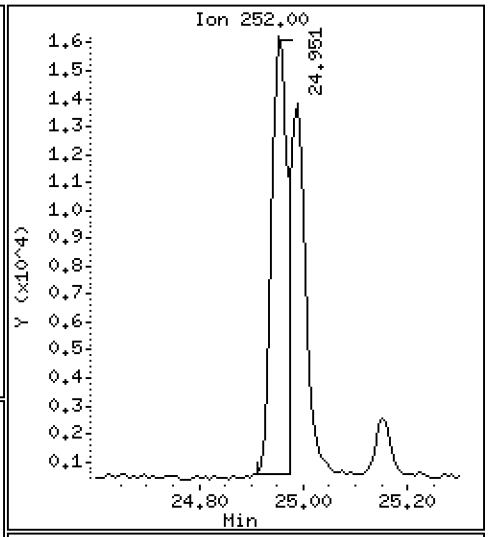
Concentration: 0.2448 ug/mL

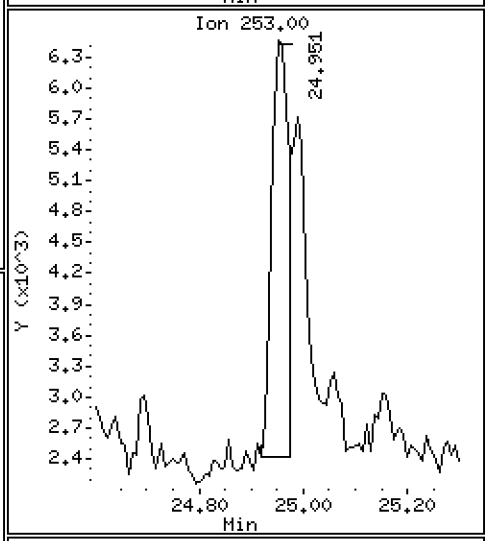


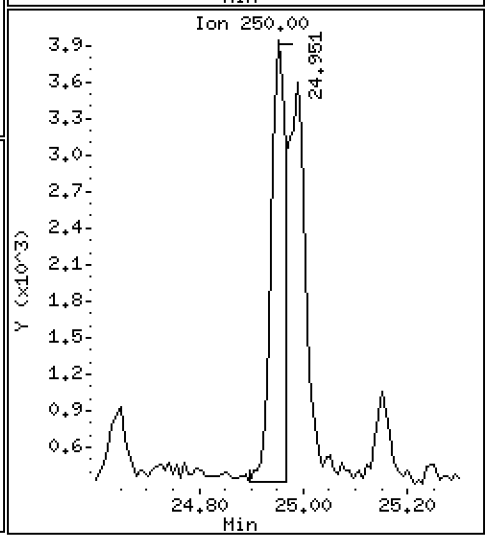












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

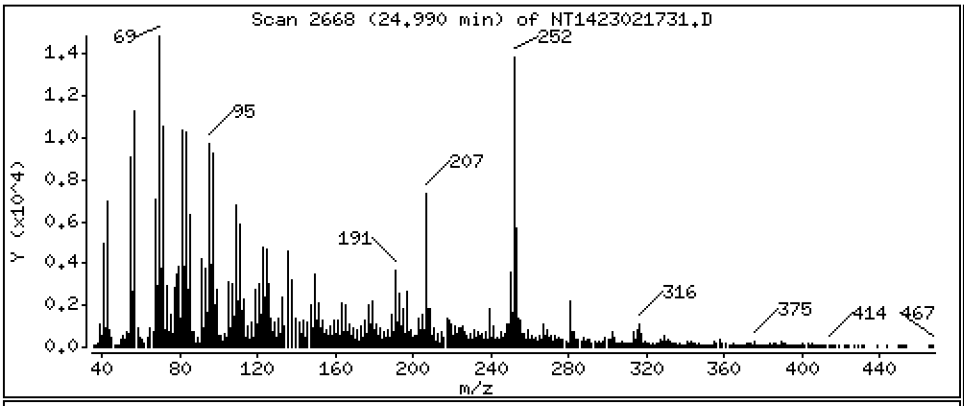
Operator: DSD

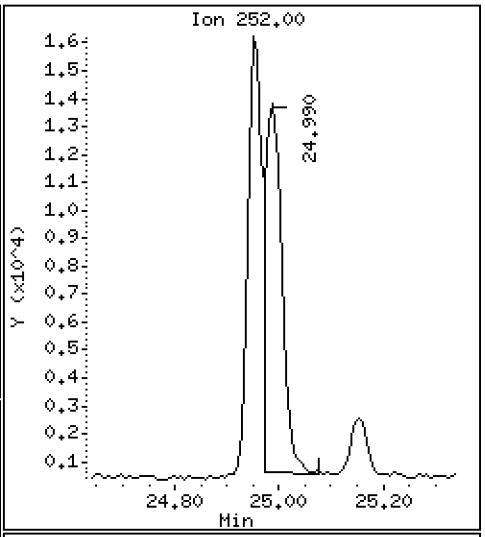
Column phase: ZB-5msi

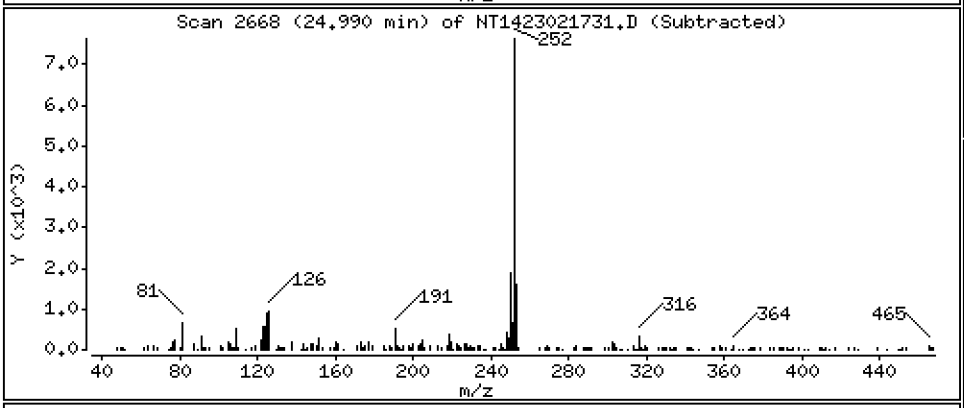
Column diameter: 0.25

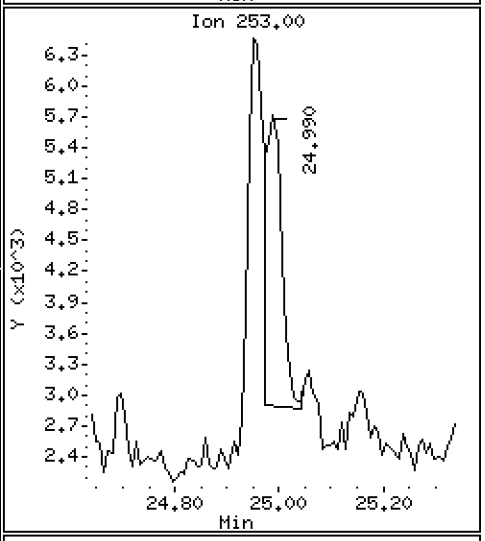
75 Benzo(k)fluoranthene

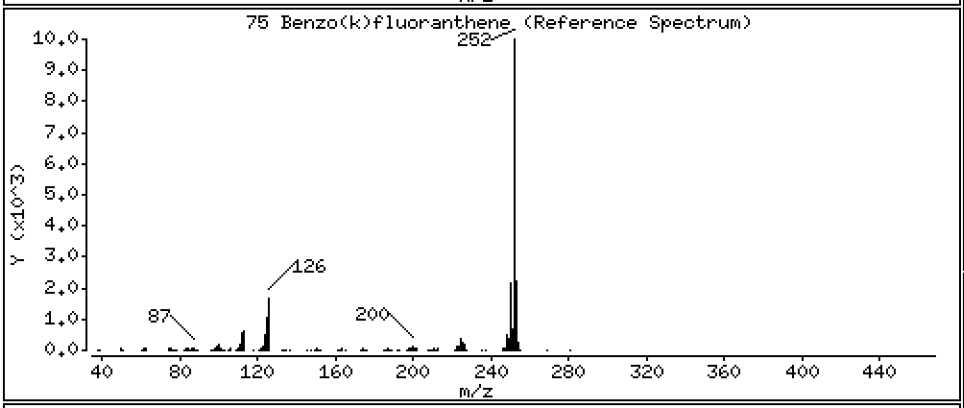
Concentration: 0.1994 ug/mL

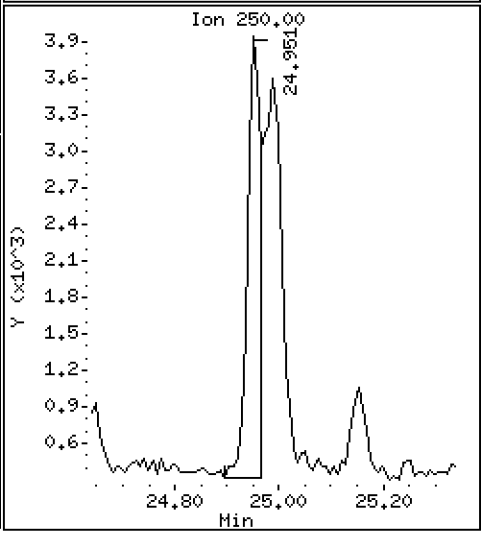


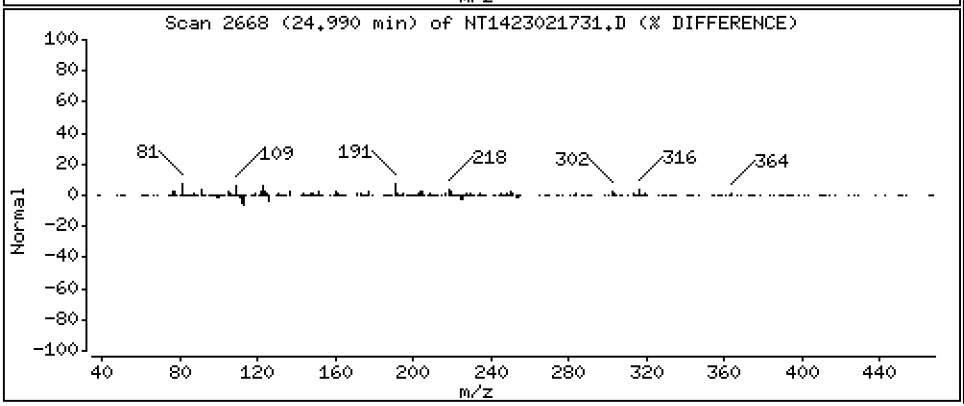












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

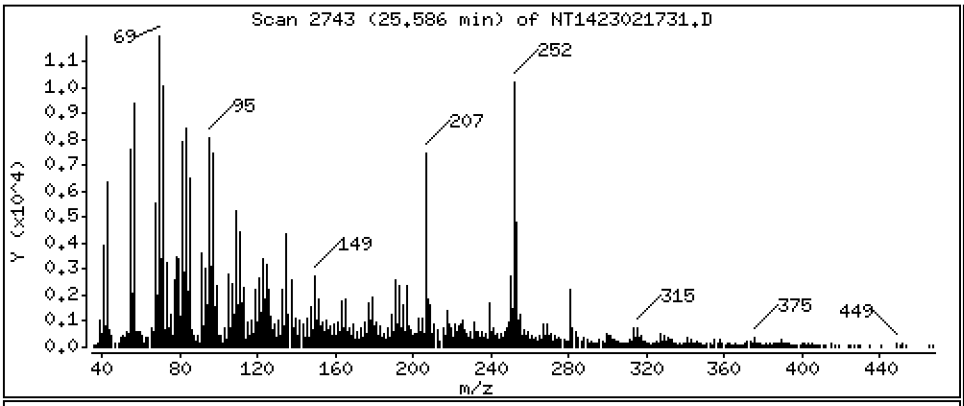
Operator: DSD

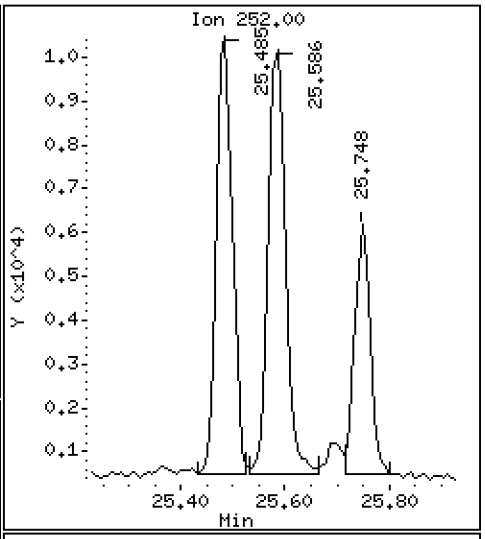
Column phase: ZB-5msi

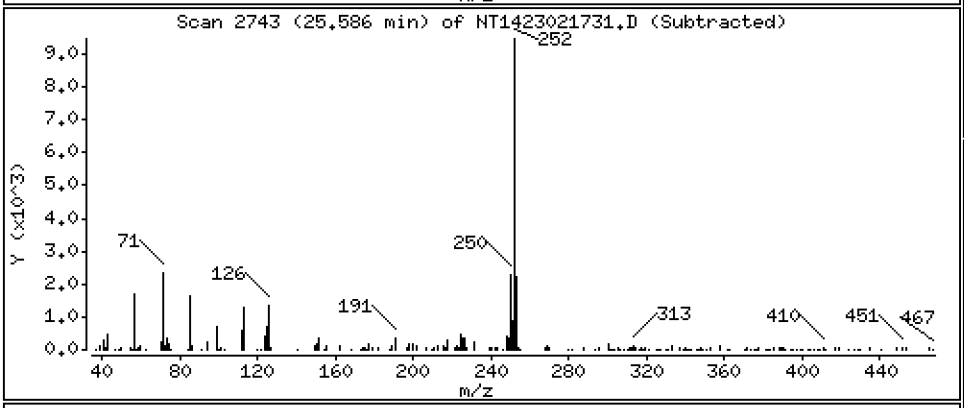
Column diameter: 0.25

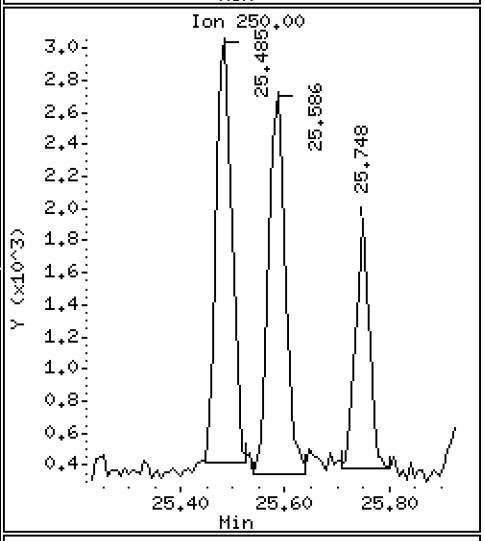
76 Benzo(a)pyrene

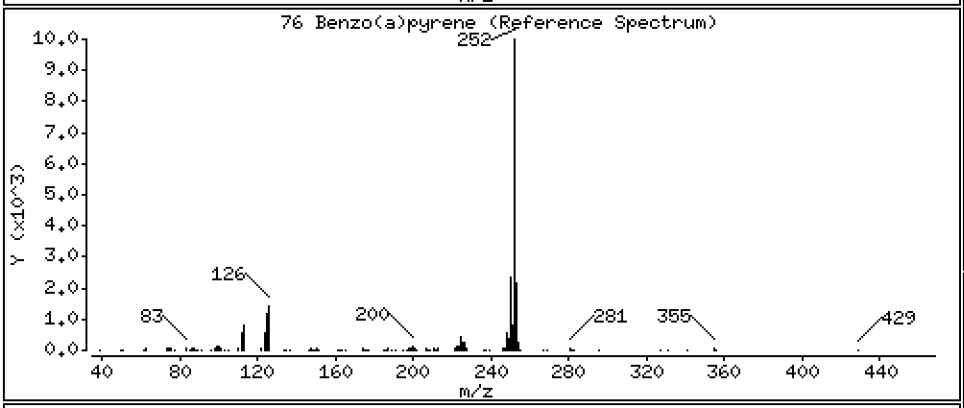
Concentration: 0.1722 ug/mL

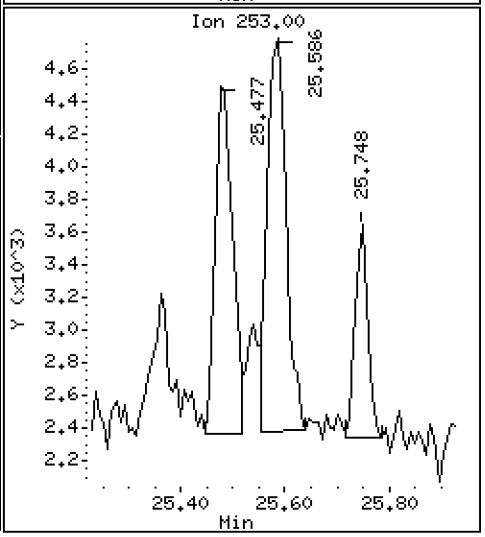


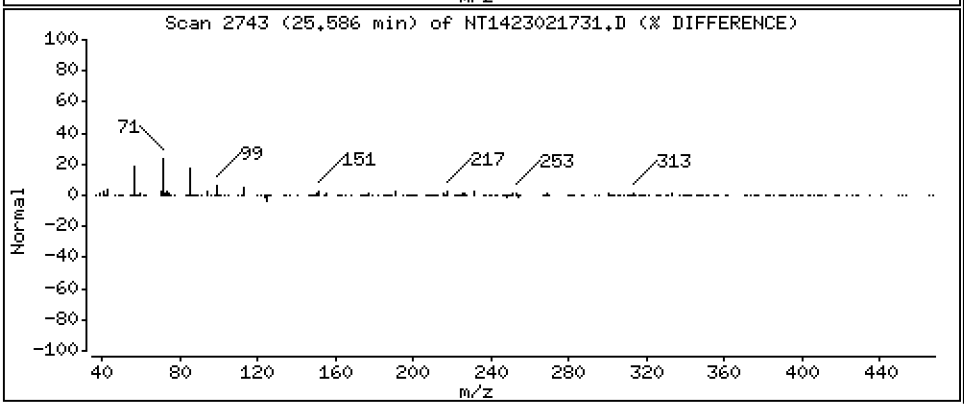












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

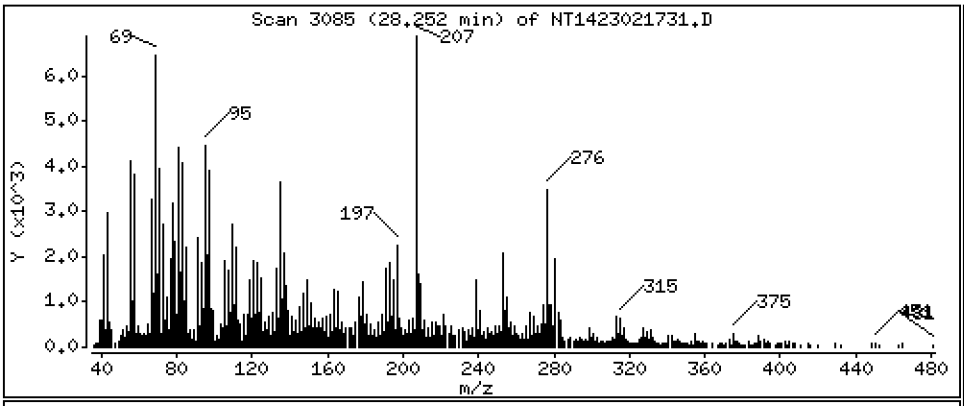
Operator: DSD

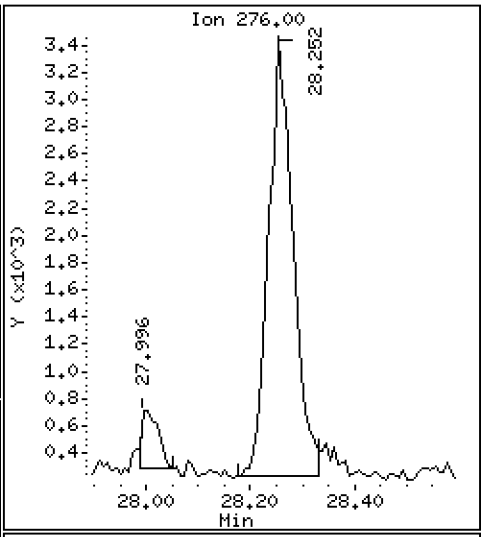
Column phase: ZB-5msi

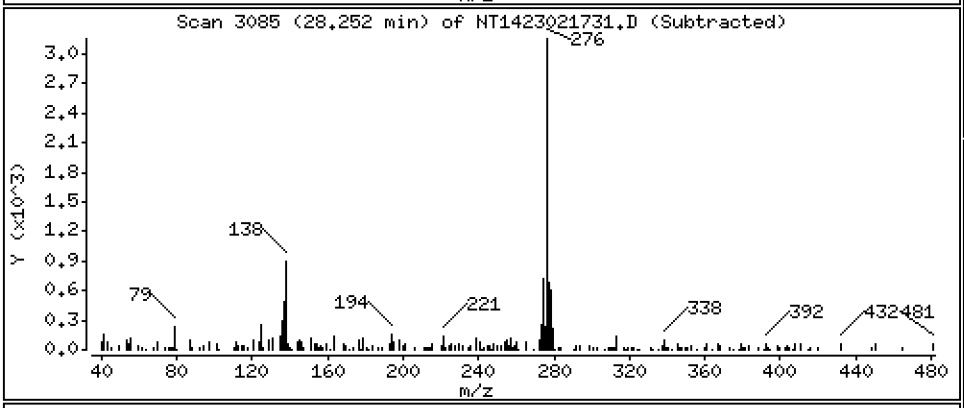
Column diameter: 0.25

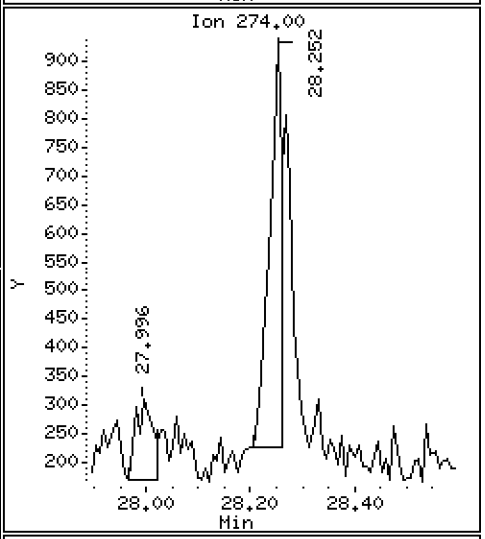
78 Indeno(1,2,3-cd)pyrene

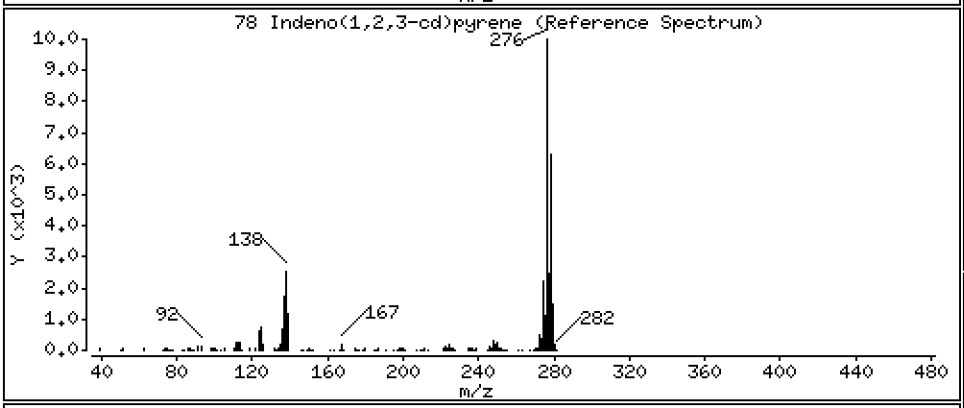
Concentration: 0.1007 ug/mL

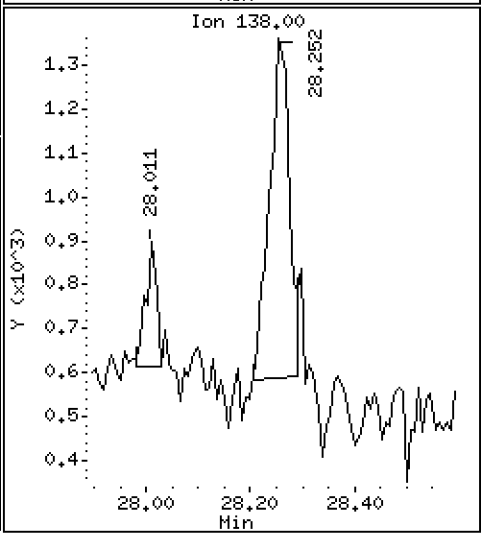


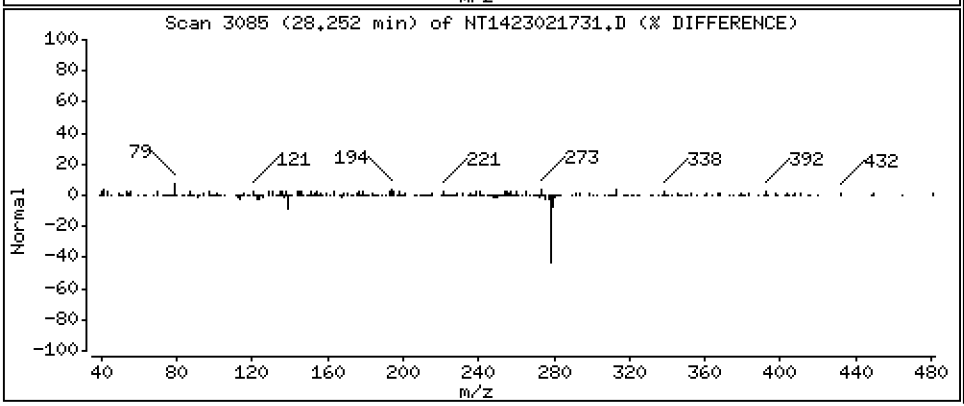












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

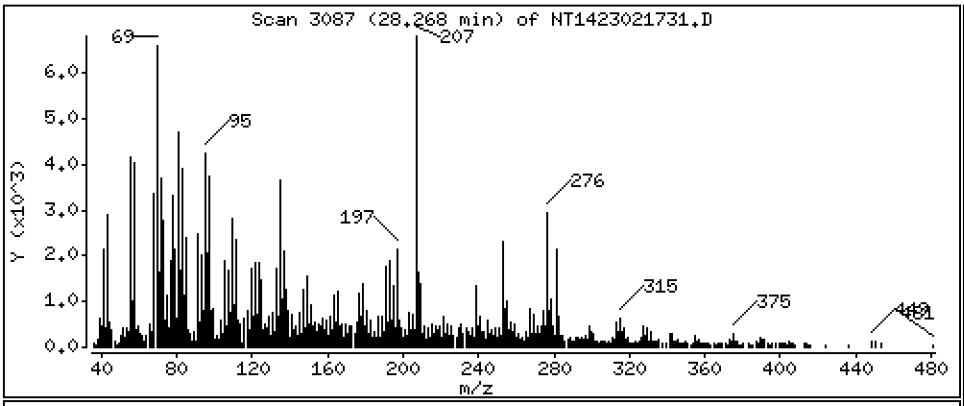
Operator: DSD

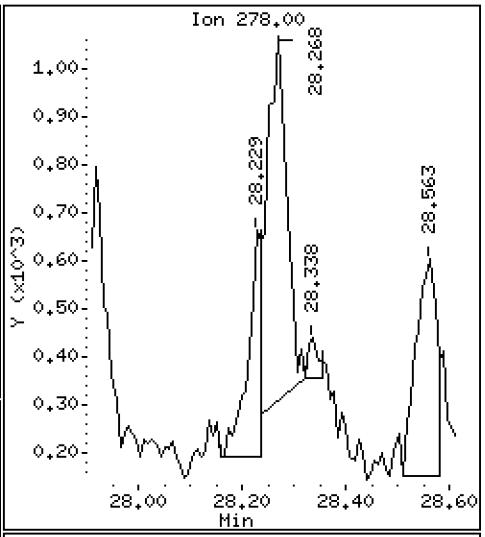
Column phase: ZB-5msi

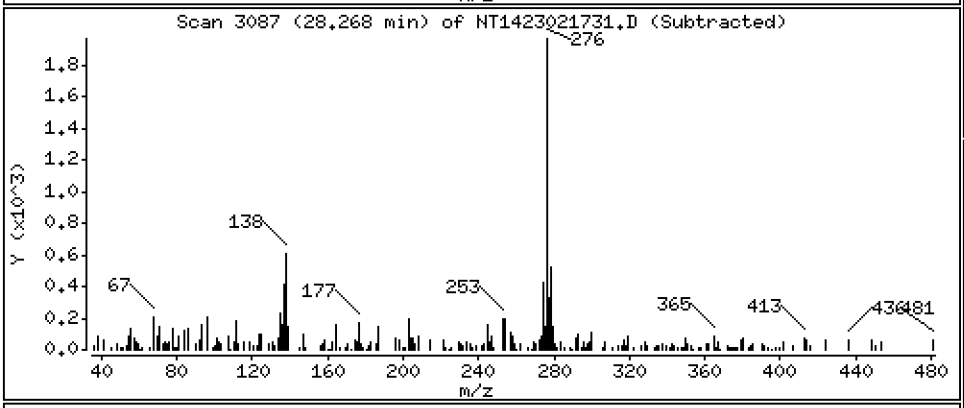
Column diameter: 0.25

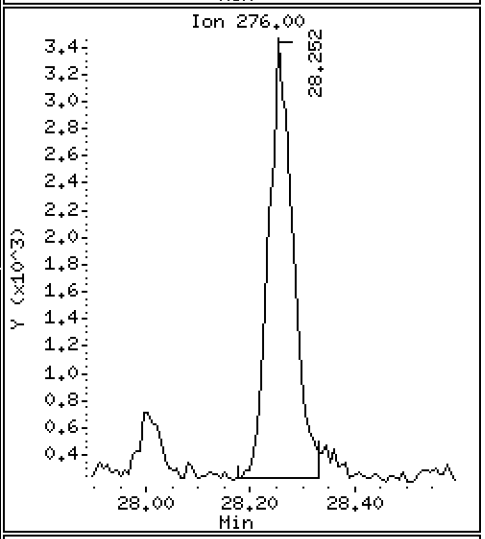
79 Dibenzo(a,h)anthracene

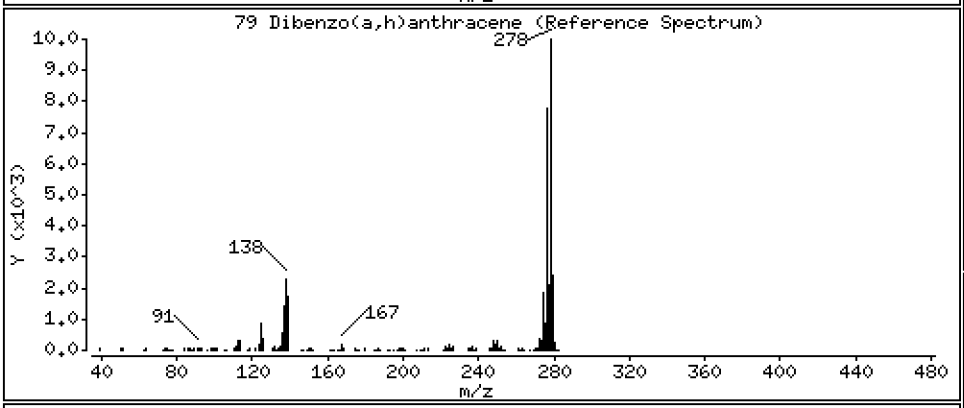
Concentration: 0.02356 ug/mL

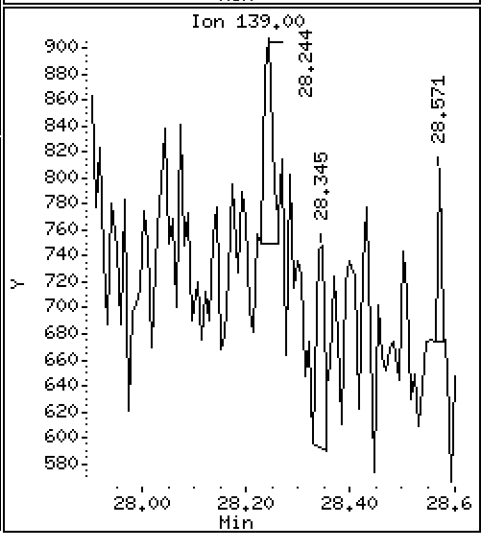


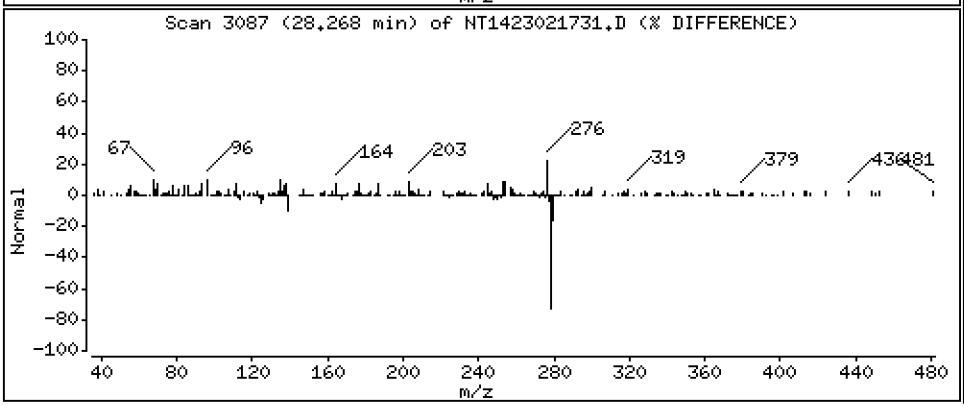












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

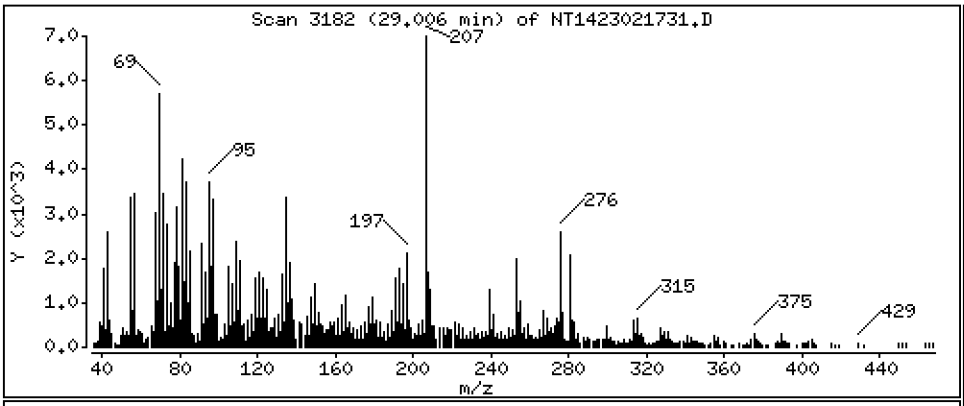
Operator: DSD

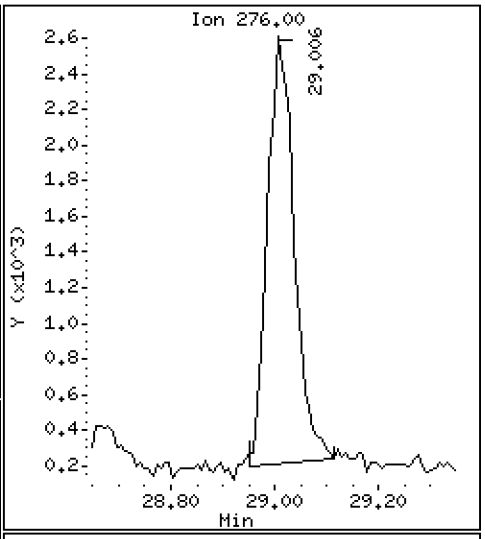
Column phase: ZB-5msi

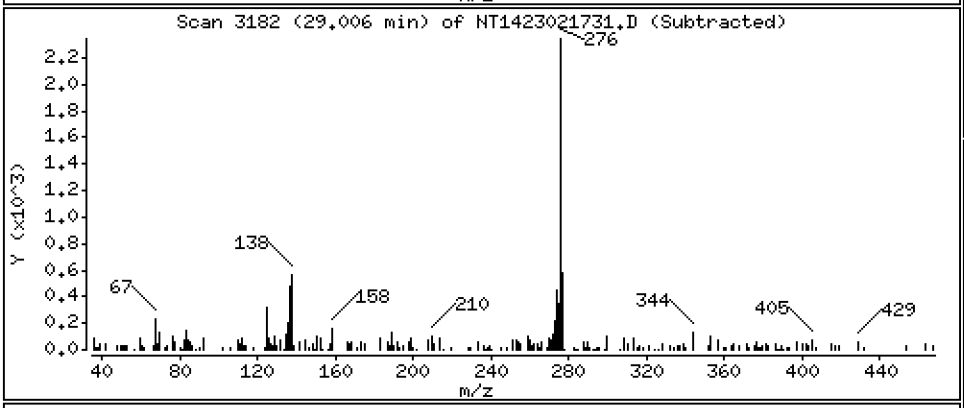
Column diameter: 0.25

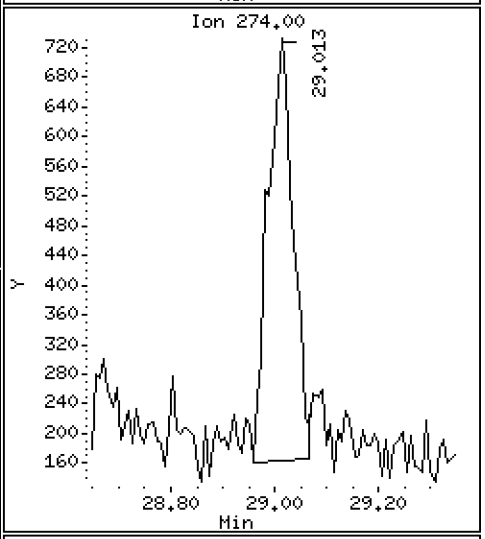
80 Benzo(g,h,i)perylene

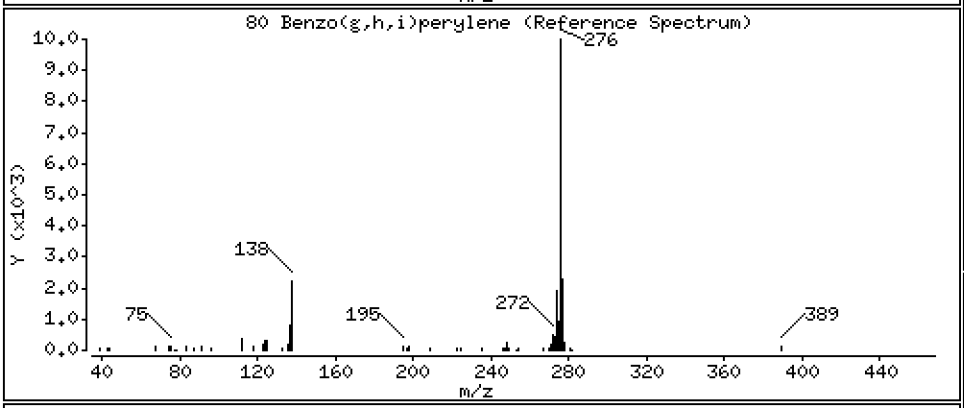
Concentration: 0.1016 ug/mL

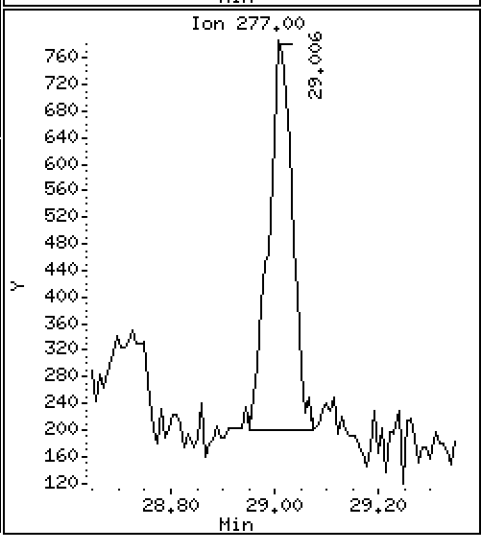


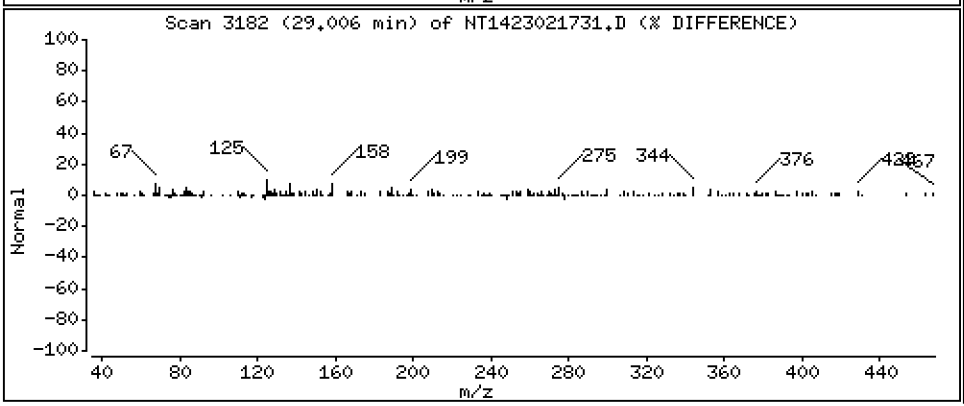












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021731.D

Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

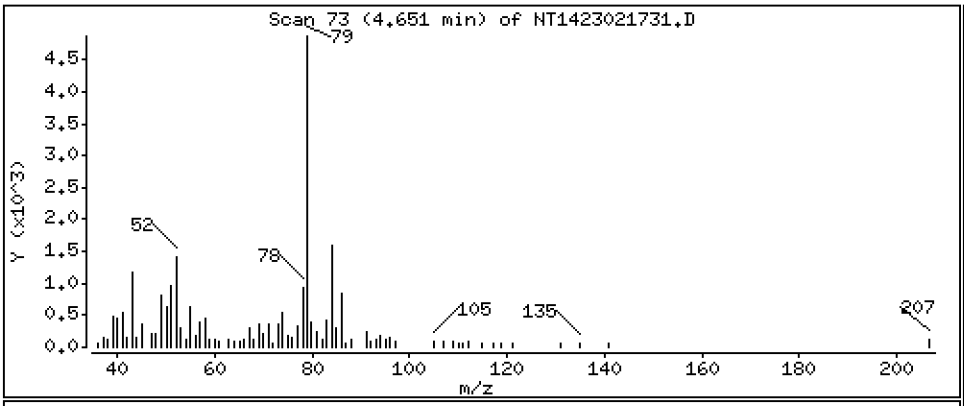
Operator: DSD

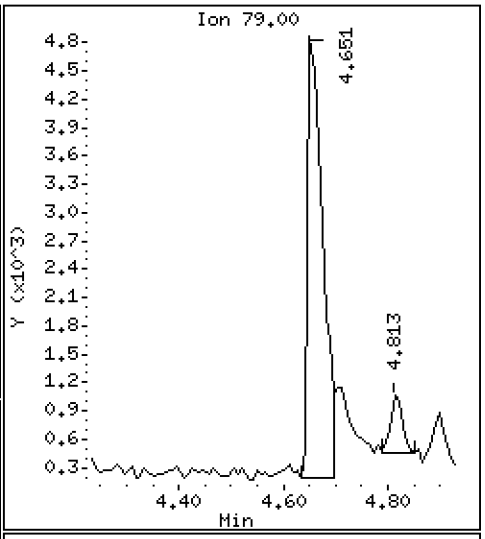
Column phase: ZB-5msi

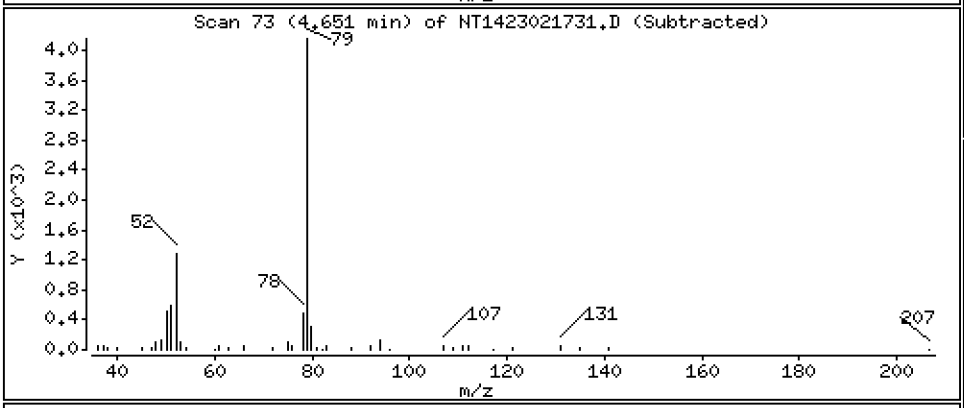
Column diameter: 0.25

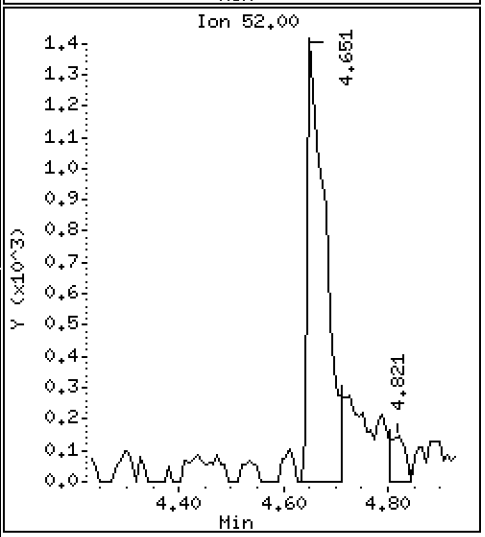
103 Pyridine

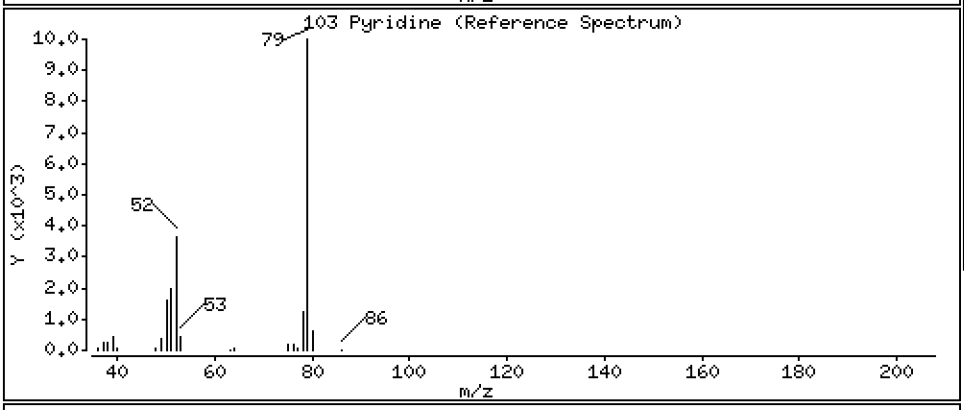
Concentration: 0.09685 ug/mL

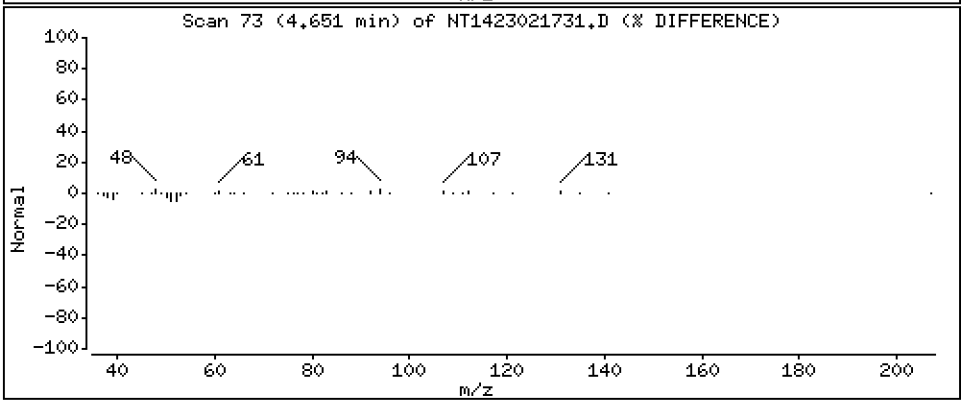












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

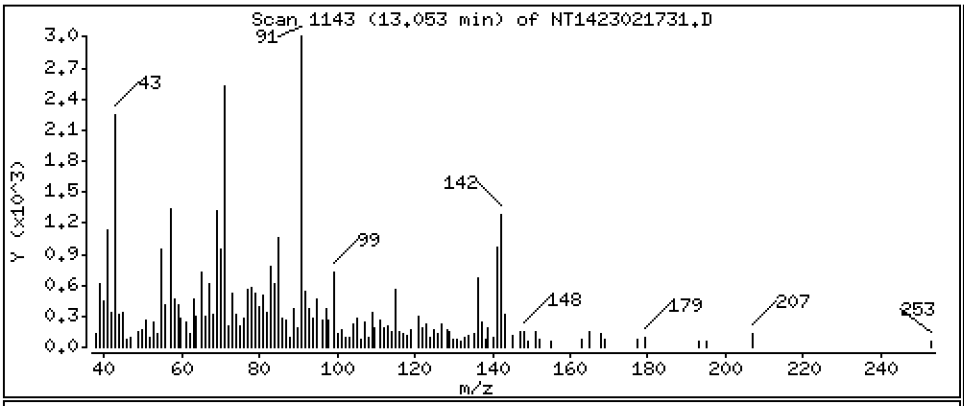
Operator: DSD

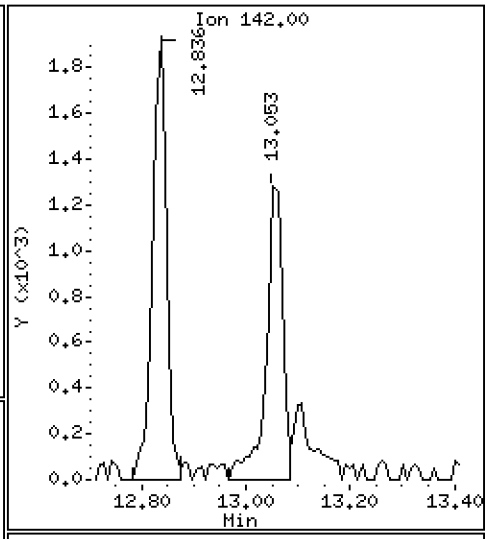
Column phase: ZB-5msi

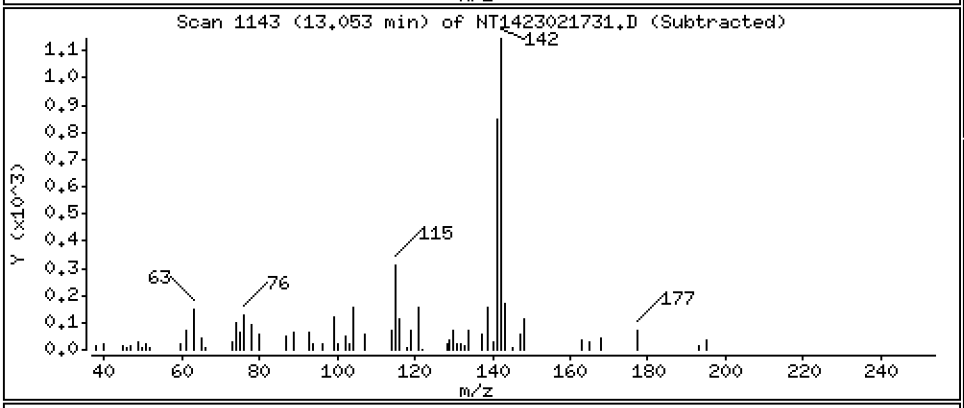
Column diameter: 0.25

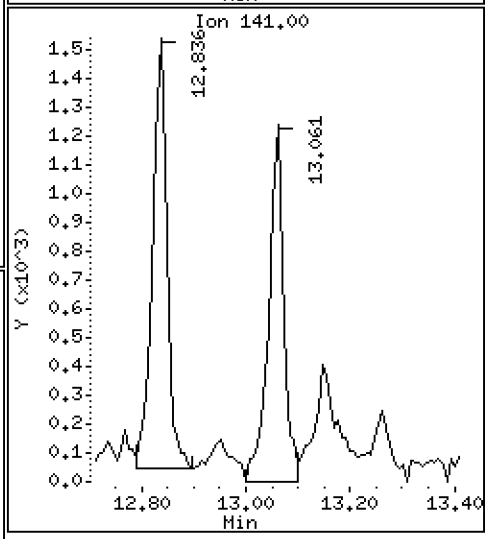
105 1-methylnaphthalene

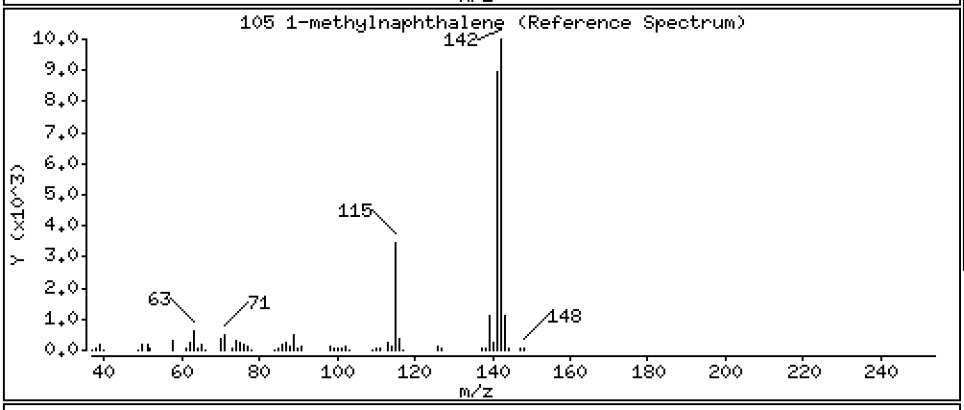
Concentration: 0.01523 ug/mL

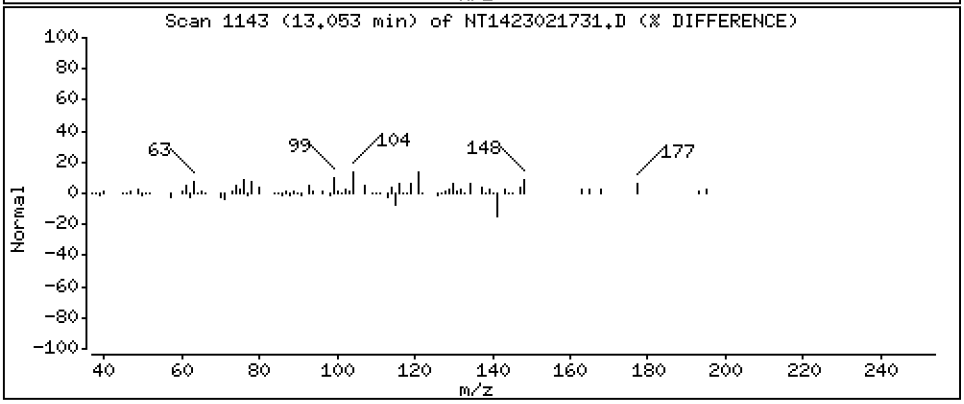












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021731.D

Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

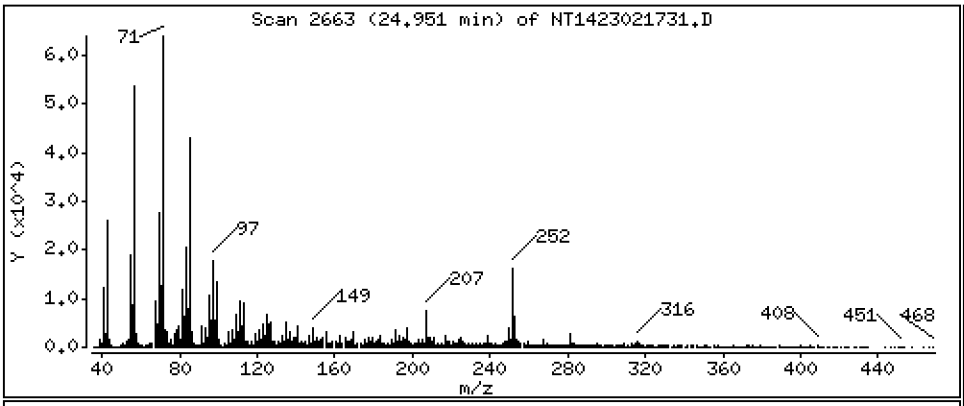
Operator: DSD

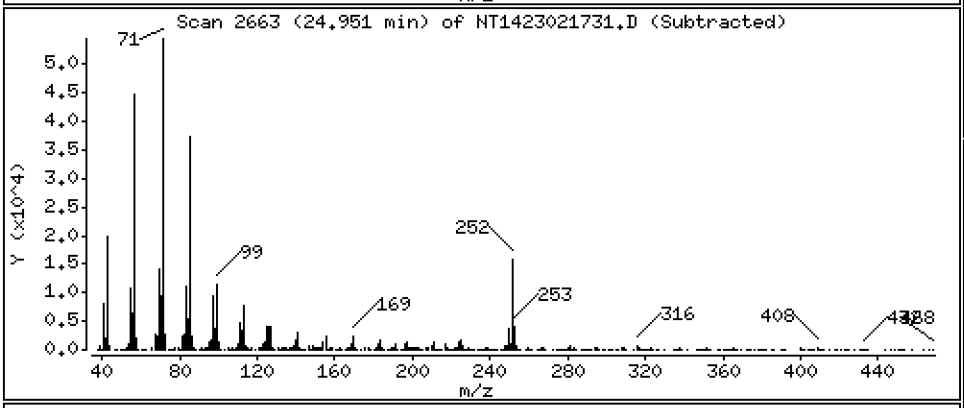
Column phase: ZB-5msi

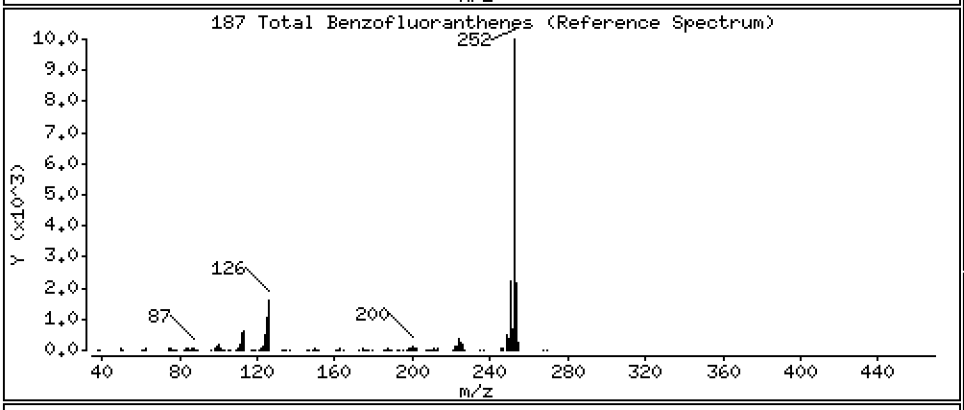
Column diameter: 0.25

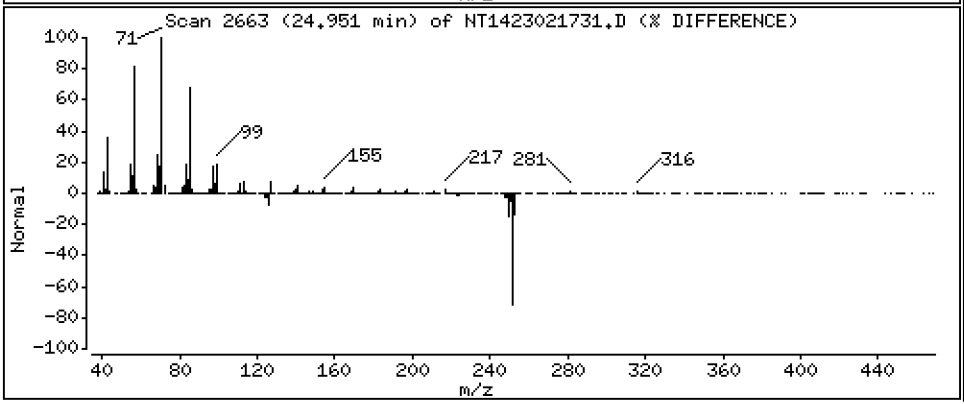
187 Total Benzofluoranthenes

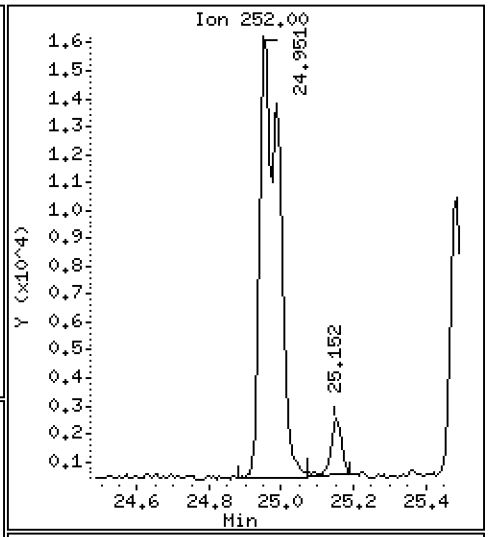
Concentration: 0.4458 ug/mL

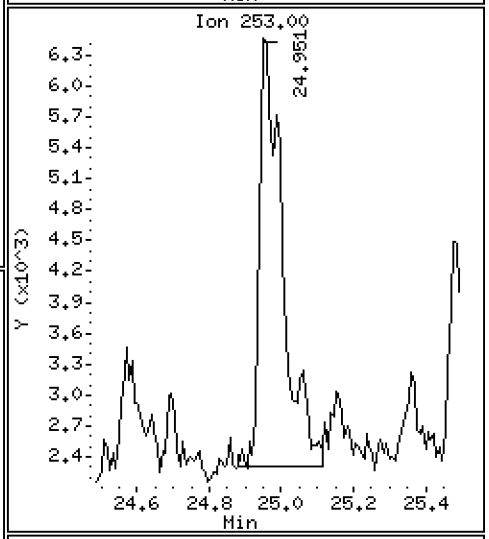


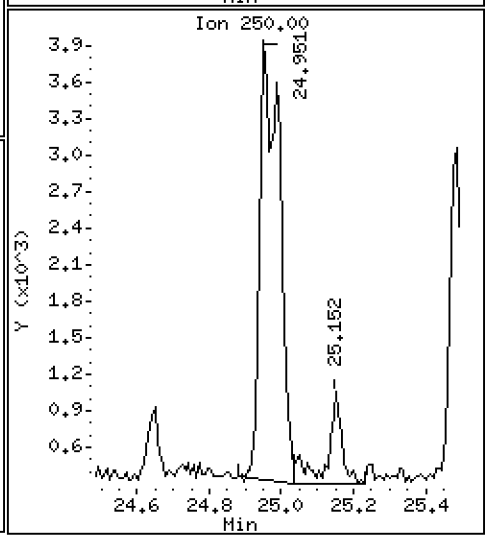












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230217A.b\NT1423021731.D
Lab Smp Id: 23A0171-02
Inj Date : 18-FEB-2023 04:42 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : 23A0171-02
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230217A.b\ABN.m
Meth Date : 01-Mar-2023 13:20 van Quant Type: ISTD
Cal Date : 16-FEB-2023 19:30 Cal File: NT1423021610.D
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.705	6.674	(0.753)	448952	5.91659	5.917
$	2 Phenol-d5	99	8.273	8.273	(0.930)	640583	5.32169	5.322
	3 Phenol	94	8.297	8.296	(0.932)	306593	2.40598	2.406
$	5 2-Chlorophenol-d4	132	8.544	8.536	(0.960)	480159	5.59045	5.590
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.900	8.900	(1.000)	283844	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.264	9.264	(1.041)	214725	3.33530	3.335
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	9.195	9.179	(1.033)	7943	0.11101	0.1110(H)
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	10.002	9.746	(1.124)	58955	0.72786	0.7279
	15 4-Methylphenol	108	9.691	9.676	(1.089)	4275	0.04550	0.04550
$	18 Nitrobenzene-d5	82	10.002	10.002	(0.878)	426897	3.55931	3.559
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	10.367	10.491	(0.910)	793	0.00499	0.004994
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.397	11.397	(1.000)	1038171	4.00000	
	28 Naphthalene	128	11.436	11.436	(1.003)	5881	0.02297	0.02297
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	12.836	12.836	(1.126)	3461	0.01805	0.01805
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					

		QUANT SIG					CONCENTRATIONS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36 2-Fluorobiphenyl	172	13.625	13.625	(0.907)	832851	3.79770	3.798
	37 2-Chloronaphthalene	162	Compound Not Detected.					
	38 2-Nitroaniline	65	Compound Not Detected.					
	39 Dimethylphthalate	163	Compound Not Detected.					
	40 Acenaphthylene	152	Compound Not Detected.					
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	15.018	15.018	(1.000)	612966	4.00000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	15.088	15.088	(1.005)	2849	0.01743	0.01743
	45 2,4-Dinitrophenol	184	Compound Not Detected.					
	46 Dibenzofuran	168	15.412	15.412	(1.026)	4343	0.01618	0.01618
	47 4-Nitrophenol	109	Compound Not Detected.					
	48 2,4-Dinitrotoluene	165	Compound Not Detected.					
	50 Diethylphthalate	149	15.984	16.000	(1.064)	24485	0.09837	0.09837
	49 Fluorene	166	16.124	16.131	(1.074)	5995	0.02136	0.02136
	51 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55 2,4,6-Tribromophenol	330	16.663	16.663	(1.110)	203477	5.69443	5.694
	56 4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.062	18.062	(1.000)	1153670	4.00000	
	60 Phenanthrene	178	18.108	18.108	(1.003)	41546	0.14986	0.1499
	61 Anthracene	178	18.201	18.201	(1.008)	16099	0.05862	0.05862
	62 Carbazole	167	18.542	18.534	(1.027)	4479	0.01797	0.01797
	63 Di-n-butylphthalate	149	19.346	19.346	(1.071)	5388	0.01935	0.01935
	64 Fluoranthene	202	20.507	20.499	(0.887)	99200	0.47085	0.4708
	65 Pyrene	202	20.932	20.924	(0.905)	90970	0.40834	0.4083
$	66 Terphenyl-d14	244	21.219	21.218	(0.918)	836332	5.28718	5.287
	67 Butylbenzylphthalate	149	22.148	22.148	(0.958)	3033	0.04131	0.04131
	68 Benzo(a)anthracene	228	23.100	23.092	(0.999)	34226	0.21902	0.2190
*	69 Chrysene-d12	240	23.123	23.123	(1.000)	488337	4.00000	
	70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71 Chrysene	228	23.170	23.170	(1.002)	48459	0.34475	0.3448
	72 bis(2-Ethylhexyl)phthalate	149	23.178	23.177	(0.960)	34822	0.24388	0.2439
*	134 Di-n-octylphthalate-d4	153	24.153	24.153	(1.000)	830512	4.00000	
	73 Di-n-octylphthalate	149	Compound Not Detected.					
	74 Benzo(b)fluoranthene	252	24.950	24.950	(0.971)	32992	0.24478	0.2448
	75 Benzo(k)fluoranthene	252	24.989	24.989	(0.973)	28718	0.19940	0.1994(M)
	76 Benzo(a)pyrene	252	25.585	25.577	(0.996)	21988	0.17224	0.1722
*	77 Perylene-d12	264	25.694	25.694	(1.000)	424759	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	28.252	28.244	(1.100)	10567	0.10065	0.1007
	79 Dibenzo(a,h)anthracene	278	28.267	28.259	(1.100)	2037	0.02356	0.02356
	80 Benzo(g,h,i)perylene	276	29.005	28.997	(1.129)	8651	0.10164	0.1016
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					
	91 Aniline	93	Compound Not Detected.					
	93 Benzidine	184	Compound Not Detected.					
	103 Pyridine	79	4.651	4.581	(0.523)	9003	0.09685	0.09685
	105 1-methylnaphthalene	142	13.052	13.060	(1.145)	2741	0.01523	0.01523
	111 Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.950	24.989	(0.971)	58657	0.44576	0.4458
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021731.D
Lab Smp Id: 23A0171-02
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230217A.b\ABN.m
Misc Info:

Calibration Date: 17-FEB-2023
Calibration Time: 20:19
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	351756	175878	703512	283844	-19.31
27 Naphthalene-d8	1299383	649692	2598766	1038171	-20.10
42 Acenaphthene-d10	808045	404023	1616090	612966	-24.14
59 Phenanthrene-d10	1607740	803870	3215480	1153670	-28.24
69 Chrysene-d12	876381	438191	1752762	488337	-44.28
134 Di-n-octylphthala	1545452	772726	3090904	830512	-46.26
77 Perylene-d12	639717	319859	1279434	424759	-33.60

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.40	0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.00
59 Phenanthrene-d10	18.06	17.56	18.56	18.06	0.00
69 Chrysene-d12	23.12	22.62	23.62	23.12	0.00
134 Di-n-octylphthala	24.15	23.65	24.65	24.15	0.00
77 Perylene-d12	25.69	25.19	26.19	25.69	0.00

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

REVIEW SUMMARY FOR FILE - NT1423021731.D

Lab ID: 23A0171-02
nt14.i, ABN.m, 18-FEB-2023 04:42

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.124	1.095	0.0288	N-Nitroso-di-n-propylamine
0.910	0.920	-0.0109	Isophorone
0.523	0.515	0.0078	Pyridine

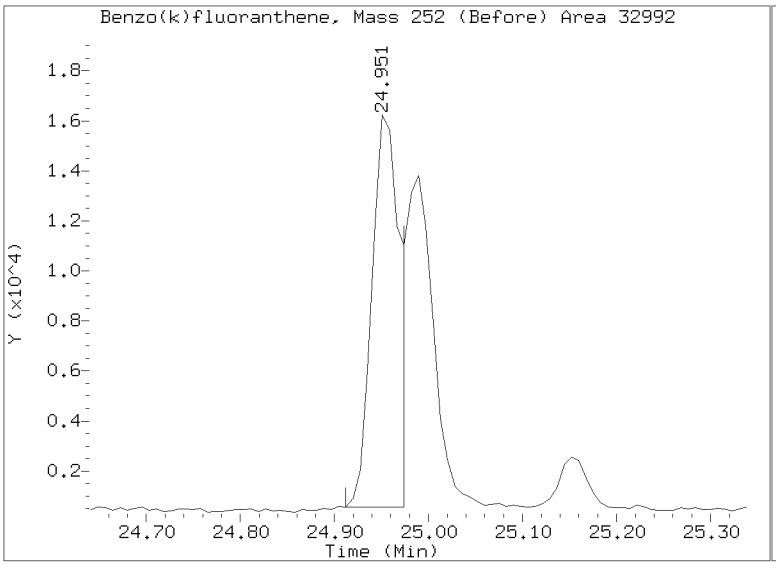
RRT check based on Ccal File: NT1423021717.D

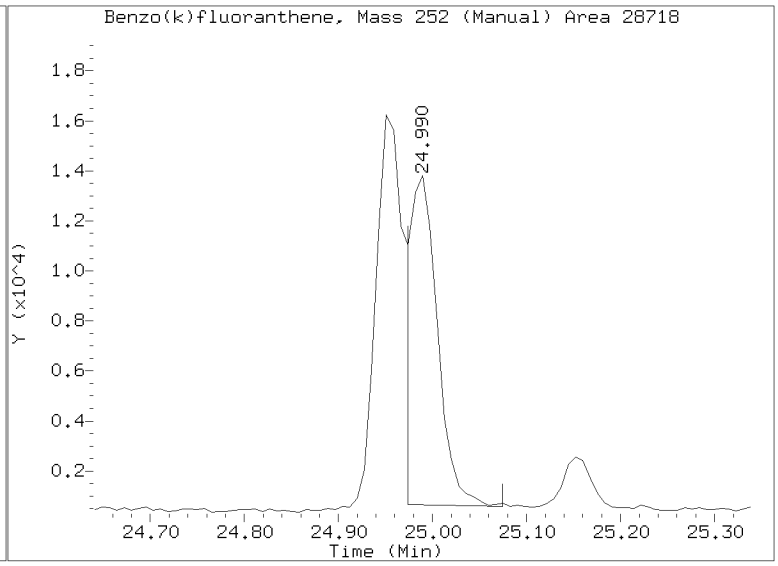
On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230217A.b/NT1423021731.D
Injection Date: 18-FEB-2023 04:42
Lab ID:23A0171-02 Client ID:
Report Date: 03/01/2023 13:23





LDW23-SS1262

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-03 A	SDG:	23A0171
Sampled:	12/08/22 10:36	Prepared:	01/18/23 13:47	File ID:	NT1423021732.D
% Solids:	43.54	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/18/23 05:18
Batch:	BLA0339	Sequence:	SLB0251	Initial/Final:	23.27 g Wet / 1 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	GB00046
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	286		4.3	19.7
106-44-5	4-Methylphenol	1	23.8		7.3	19.7
91-20-3	Naphthalene	1	10.3	J	4.2	19.7
91-57-6	2-Methylnaphthalene	1	9.3	J	4.5	19.7
208-96-8	Acenaphthylene	1	19.7	U	6.2	19.7
131-11-3	Dimethylphthalate	1	13.2	J	4.3	19.7
83-32-9	Acenaphthene	1	6.3	J	5.2	19.7
132-64-9	Dibenzofuran	1	19.7	U	13.9	19.7
86-73-7	Fluorene	1	19.7	U	14.4	19.7
85-01-8	Phenanthrene	1	55.6		8.6	19.7
120-12-7	Anthracene	1	20.4		7.1	19.7
206-44-0	Fluoranthene	1	155		6.0	19.7
129-00-0	Pyrene	1	136		5.6	19.7
85-68-7	Butylbenzylphthalate	1	16.0	J	9.3	19.7
56-55-3	Benzo(a)anthracene	1	66.9		5.9	19.7
218-01-9	Chrysene	1	127		6.0	19.7
117-81-7	bis(2-Ethylhexyl)phthalate	1	164	Q	5.4	49.3
	Benzofluoranthenes, Total	1	188		9.9	39.5
50-32-8	Benzo(a)pyrene	1	64.3		4.2	19.7
193-39-5	Indeno(1,2,3-cd)pyrene	1	33.1		14.5	19.7
53-70-3	Dibenzo(a,h)anthracene	1	19.7	U	17.0	19.7
191-24-2	Benzo(g,h,i)perylene	1	34.3	Q	13.4	19.7

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	740.25	548	74.0	27 - 120	
Phenol-d5	740.25	501	67.7	29 - 120	
2-Chlorophenol-d4	740.25	521	70.3	31 - 120	
1,2-Dichlorobenzene-d4	493.50	297	60.1	32 - 120	
Nitrobenzene-d5	493.50	328	66.5	30 - 120	
2-Fluorobiphenyl	493.50	368	74.6	35 - 120	

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1262

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

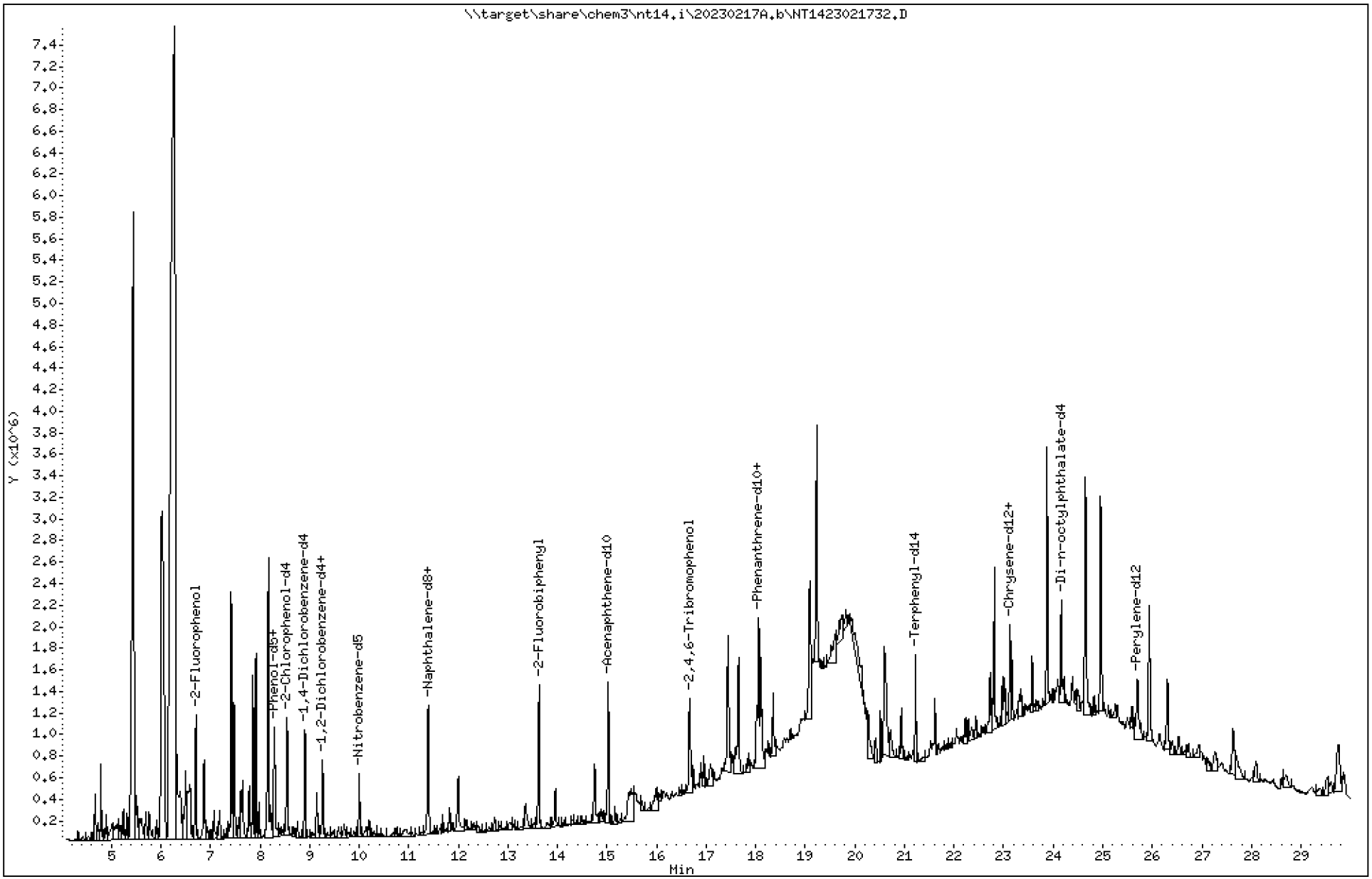
Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-03 A	SDG:	23A0171
Sampled:	12/08/22 10:36	Prepared:	01/18/23 13:47	File ID:	NT1423021732.D
% Solids:	43.54	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/18/23 05:18
Batch:	BLA0339	Sequence:	SLB0251	Initial/Final:	23.27 g Wet / 1 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	GB00046
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	740.25	522	70.5	24 - 134	
p-Terphenyl-d14	493.50	387	78.4	37 - 120	

Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021732.D
Date : 18-FEB-2023 05:18
Client ID:
Sample Info: 23A0171-03

Instrument: nt14.i
Operator: DSD
Column phase: ZB-5msi
Column diameter: 0.25



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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

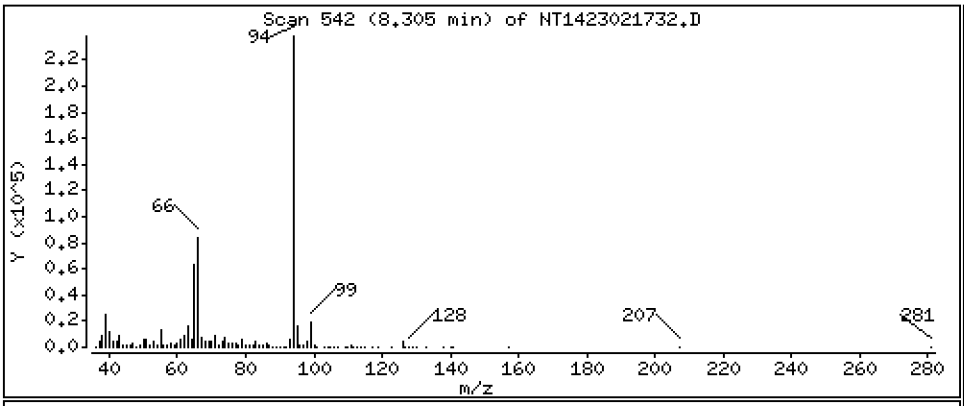
Operator: DSD

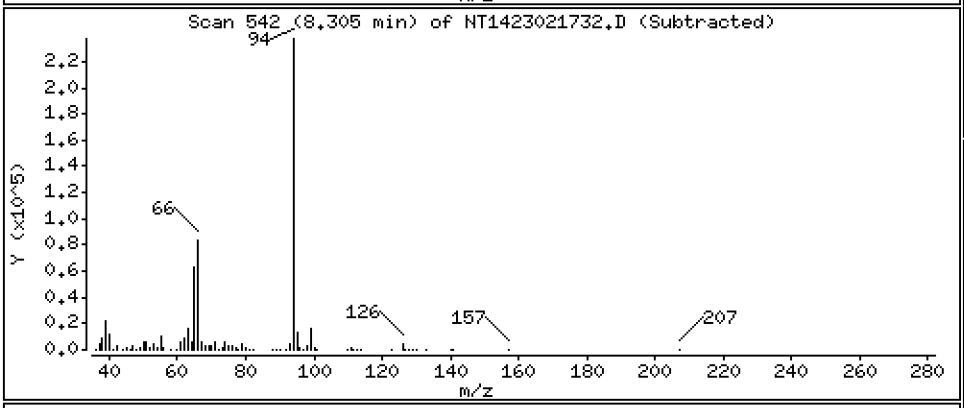
Column phase: ZB-5msi

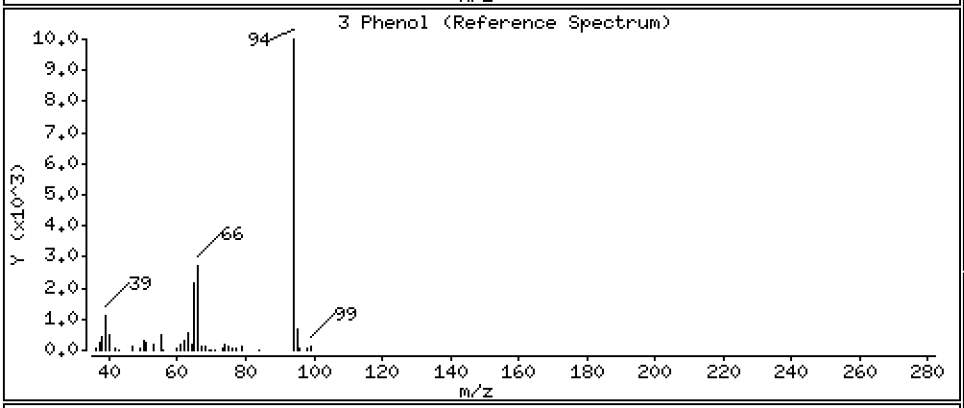
Column diameter: 0.25

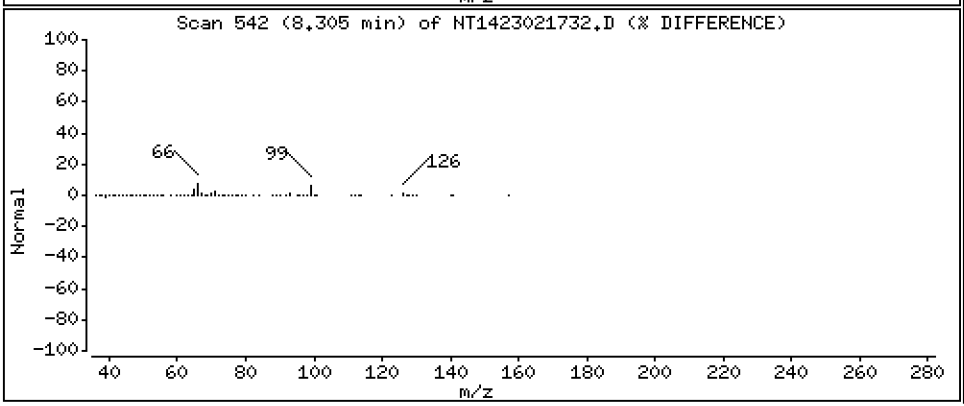
3 Phenol

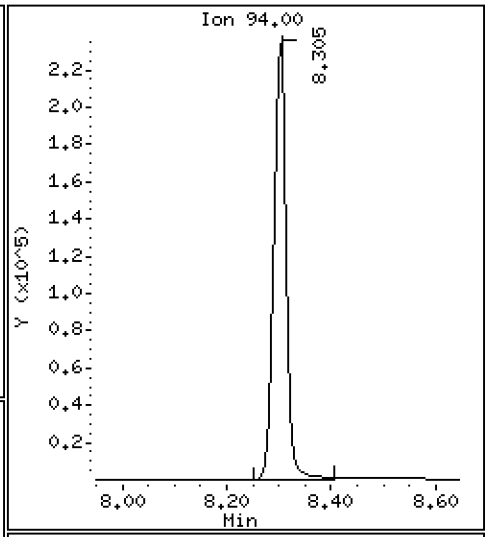
Concentration: 2.901 ug/mL

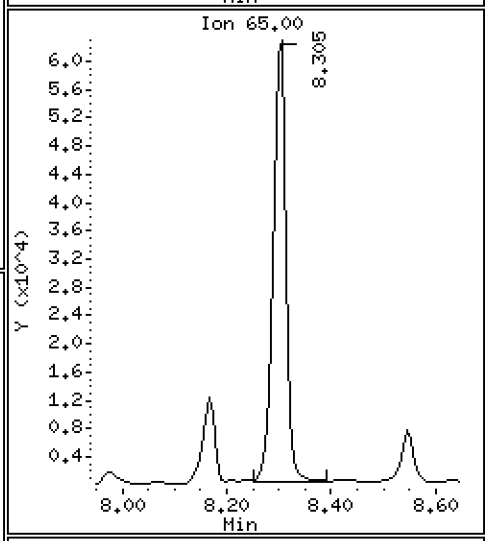


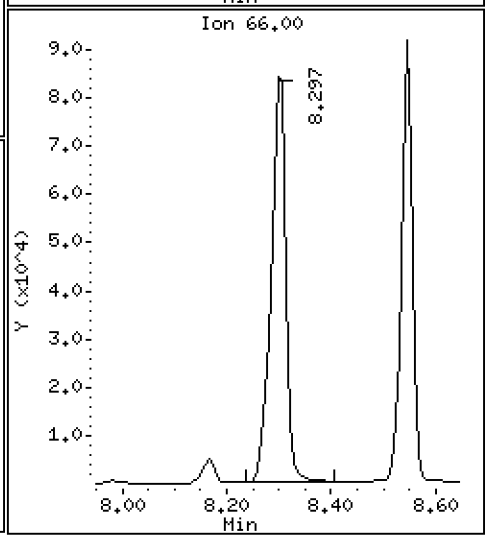












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

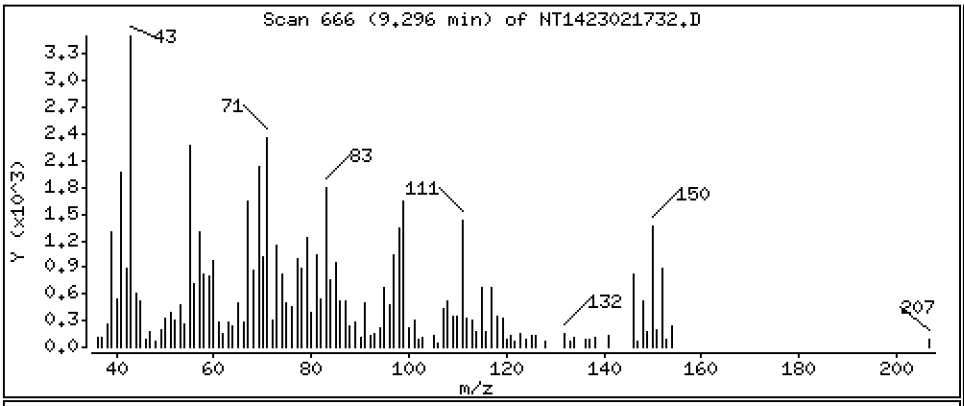
Operator: DSD

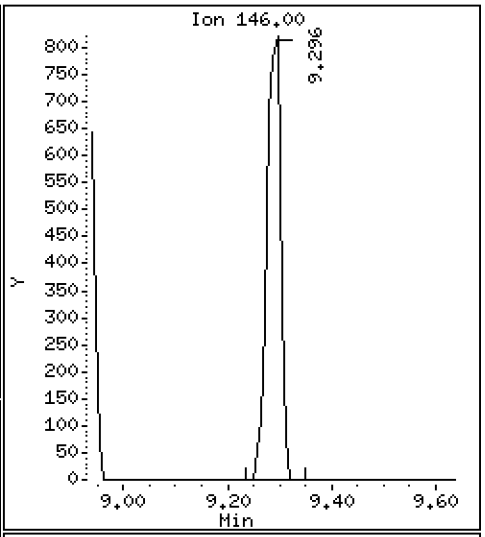
Column phase: ZB-5msi

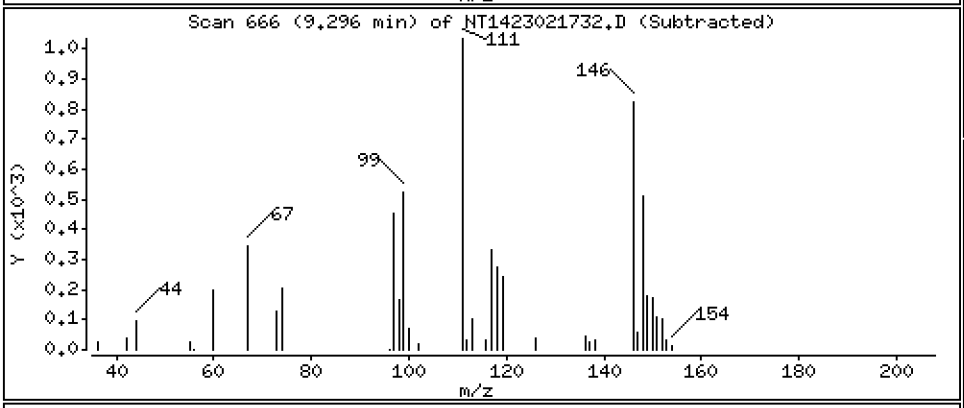
Column diameter: 0.25

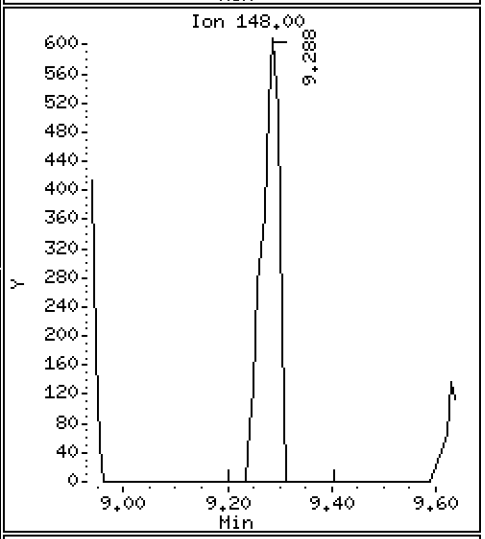
12 1,2-Dichlorobenzene

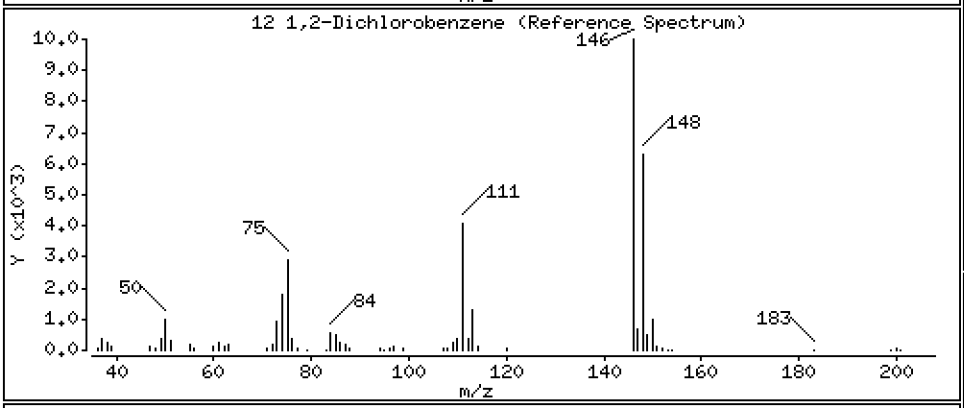
Concentration: 0.01533 ug/mL

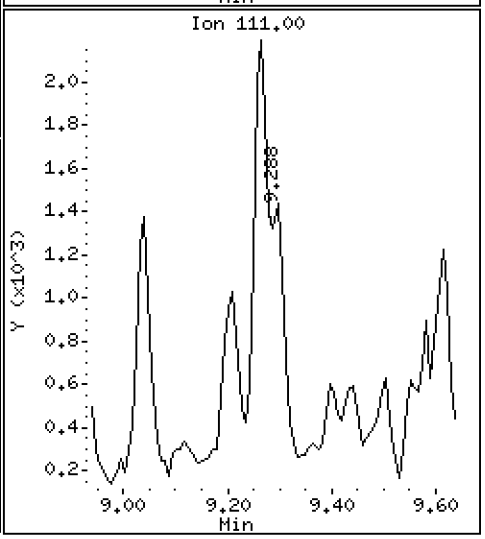


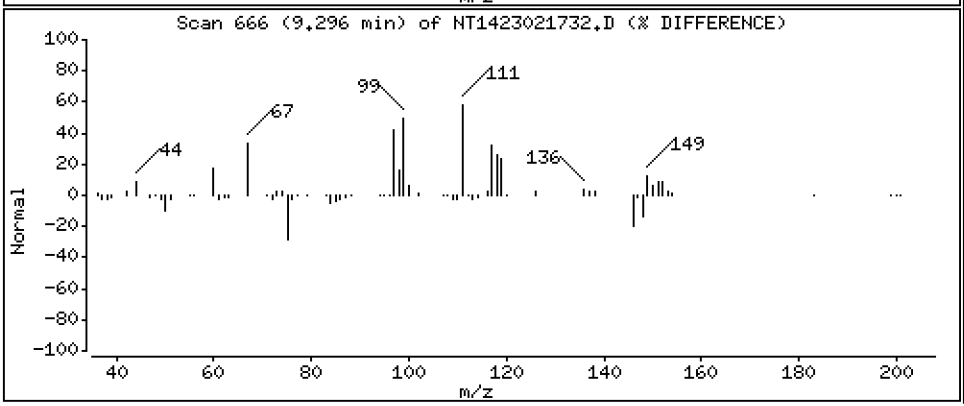












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

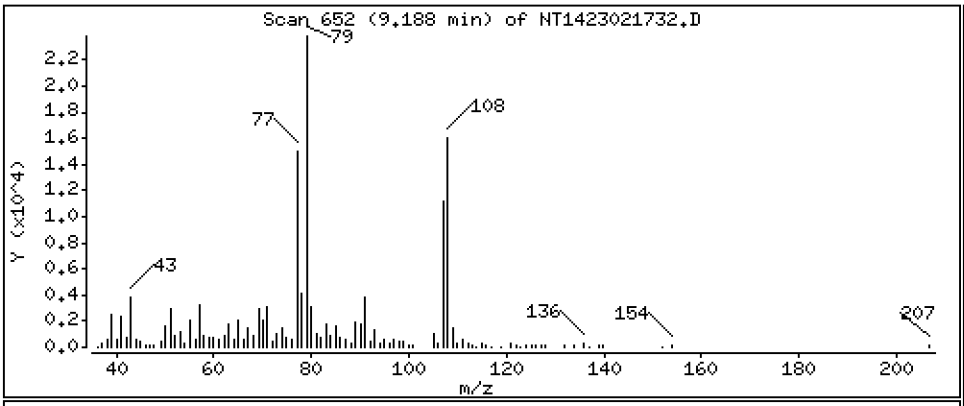
Operator: DSD

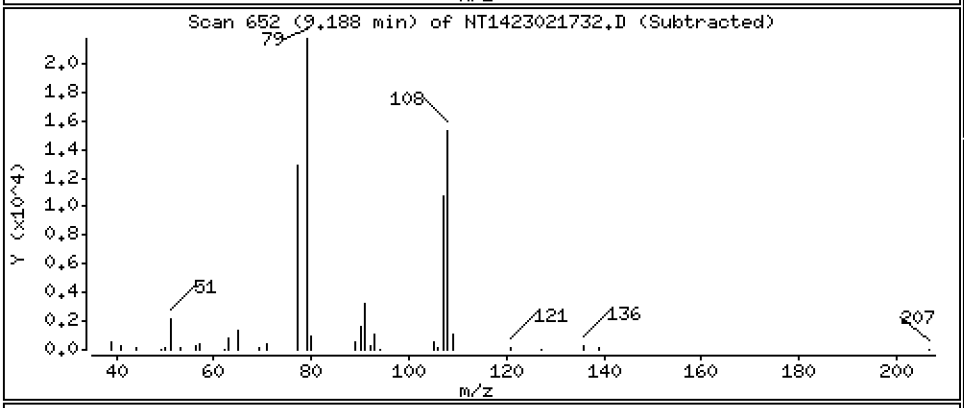
Column phase: ZB-5msi

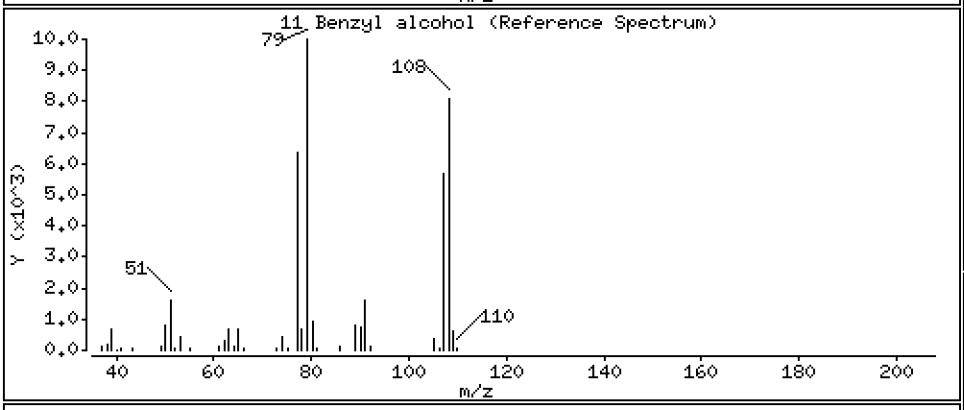
Column diameter: 0.25

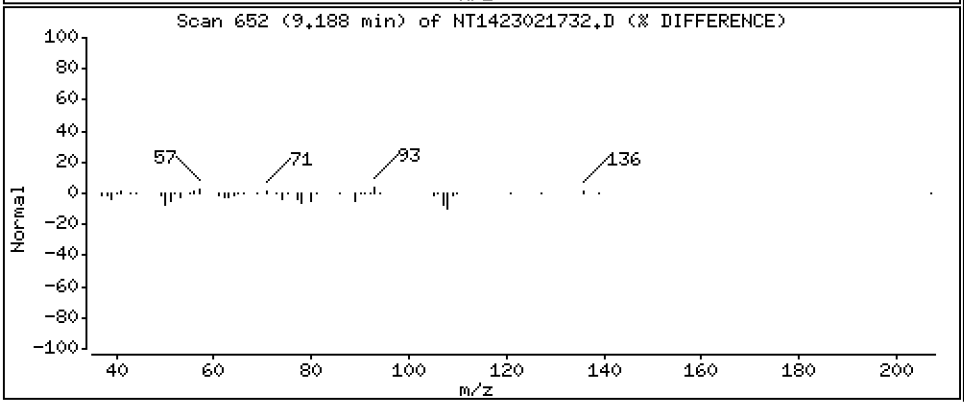
11 Benzyl alcohol

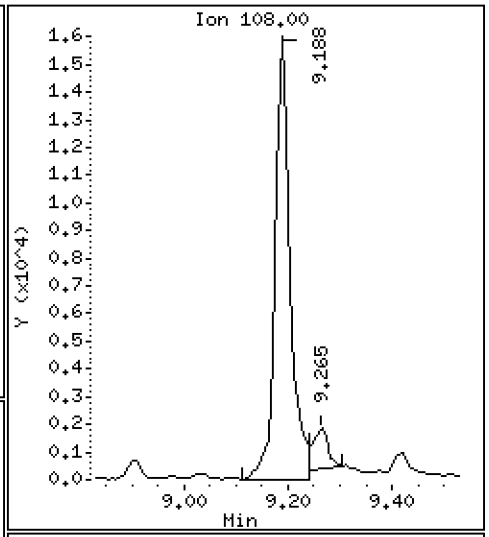
Concentration: 0.4759 ug/mL

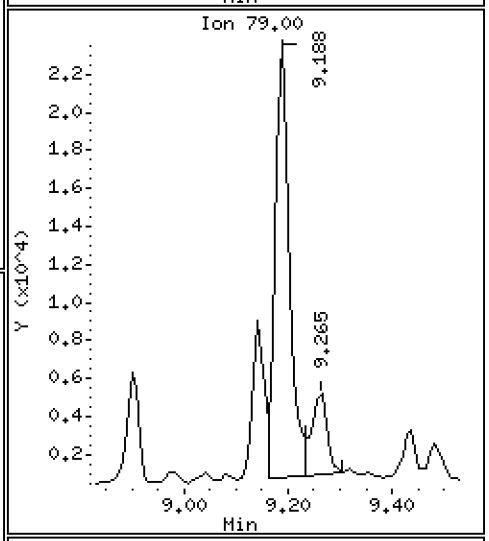


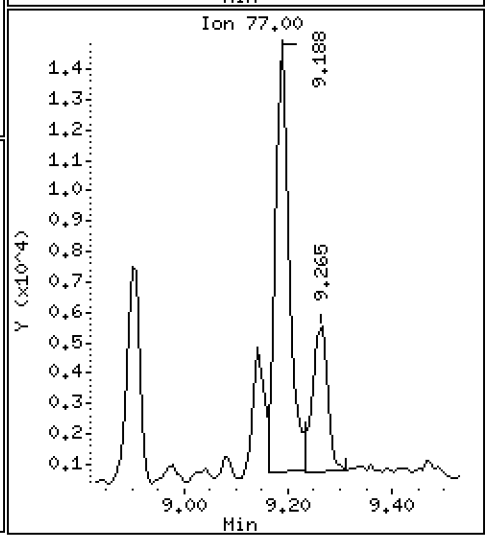












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

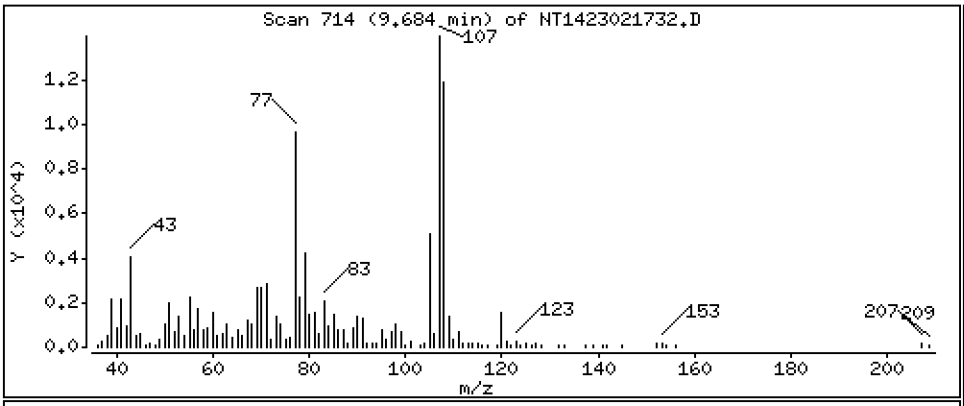
Operator: DSD

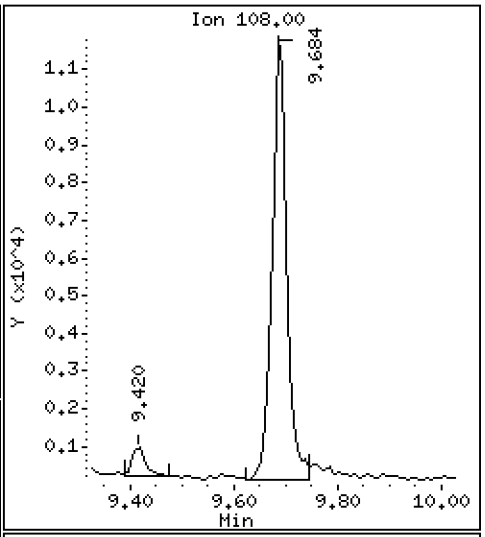
Column phase: ZB-5msi

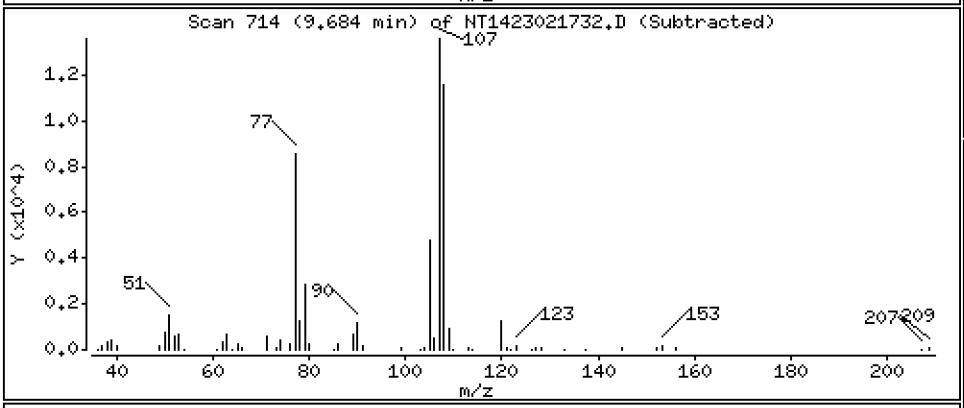
Column diameter: 0.25

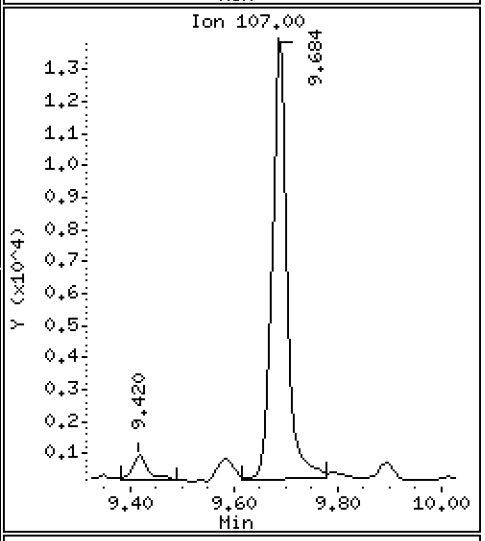
15 4-Methylphenol

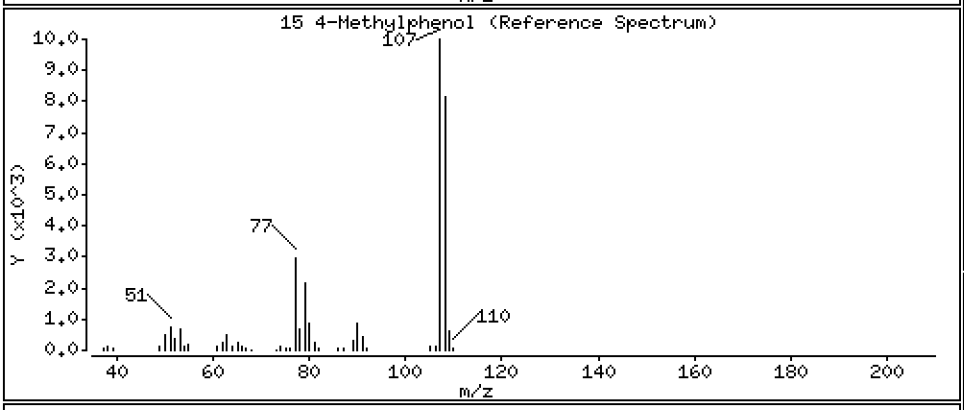
Concentration: 0.2410 ug/mL

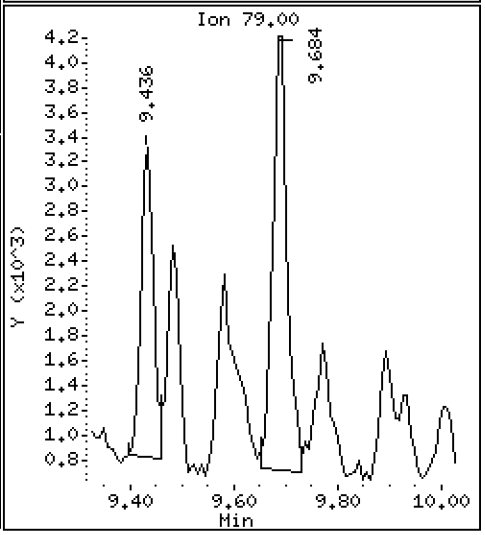


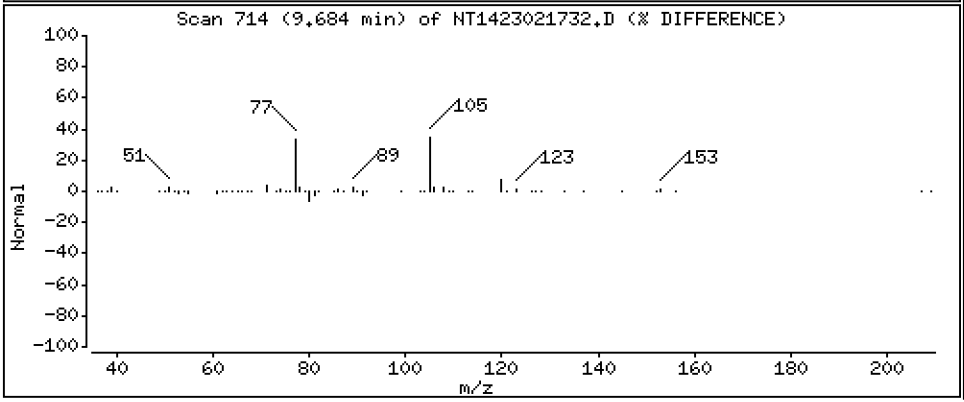












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021732.D

Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

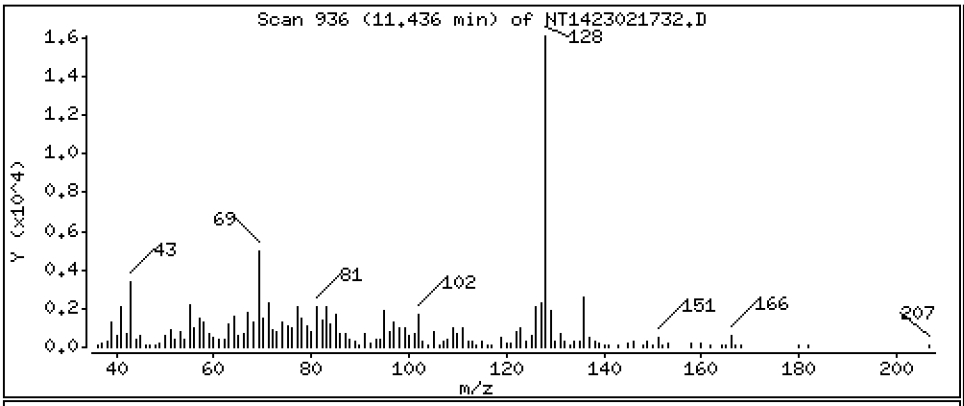
Operator: DSD

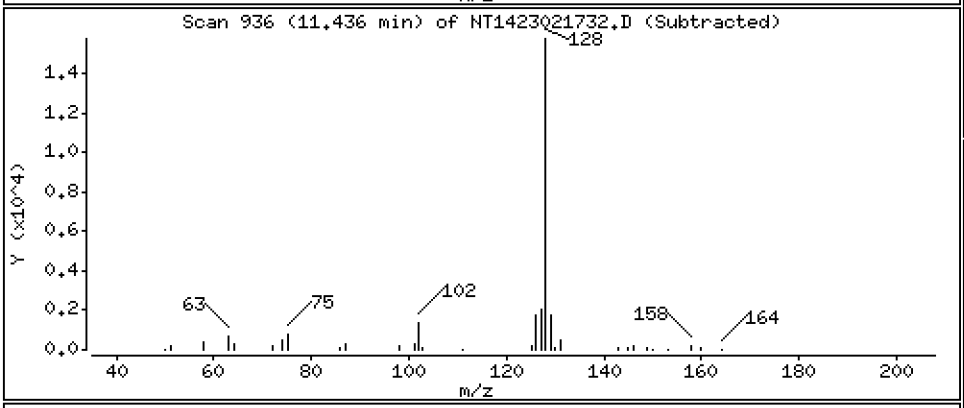
Column phase: ZB-5msi

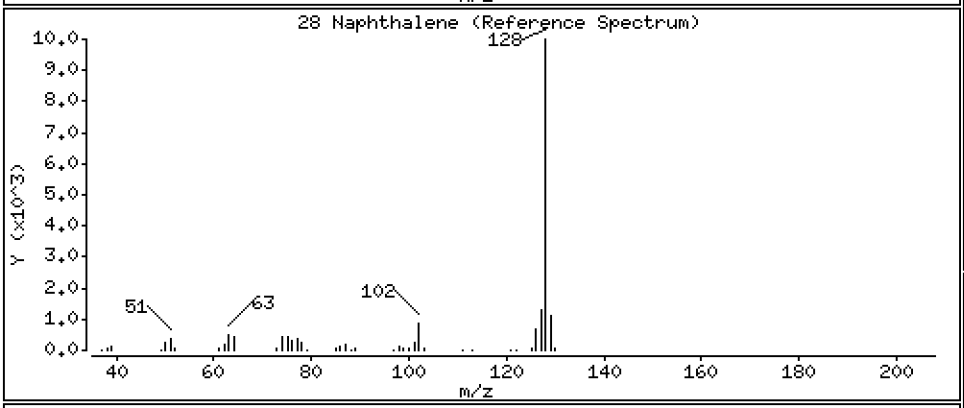
Column diameter: 0.25

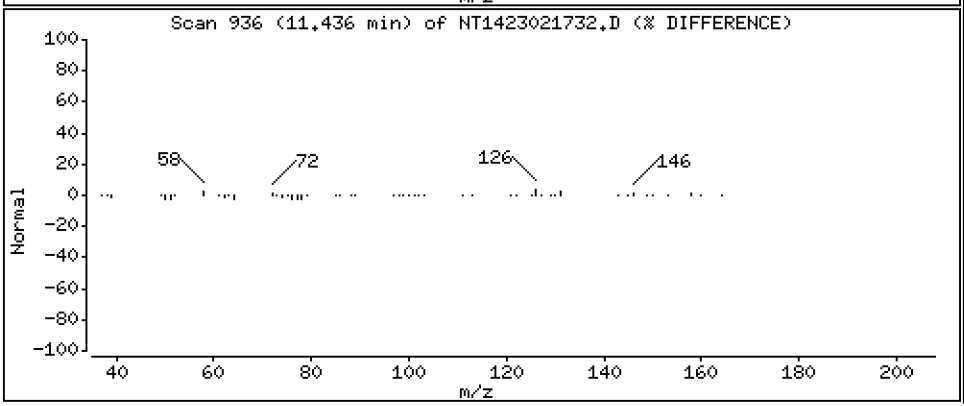
28 Naphthalene

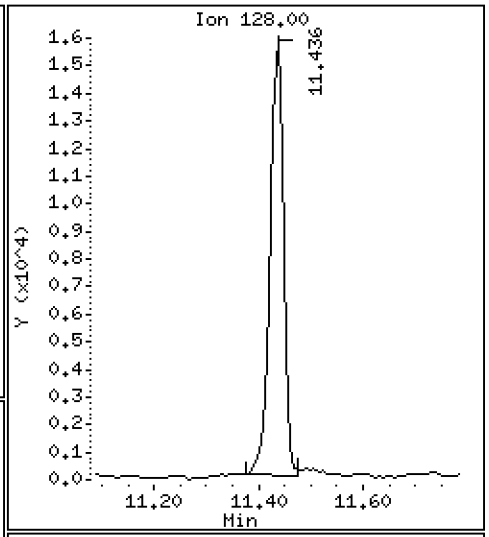
Concentration: 0.1045 ug/mL

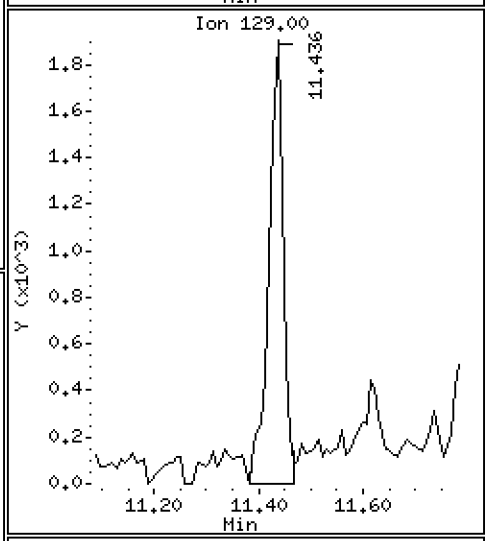


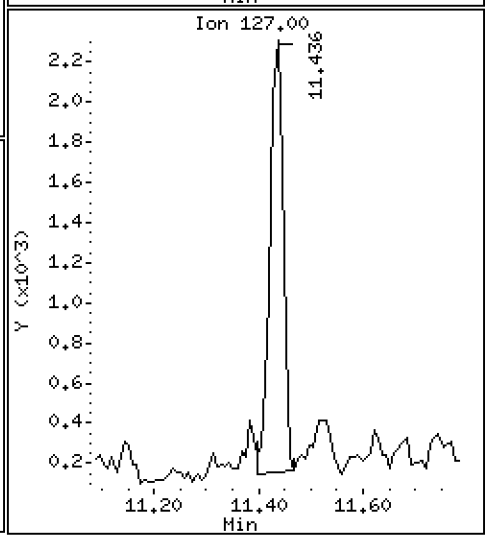












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021732.D

Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

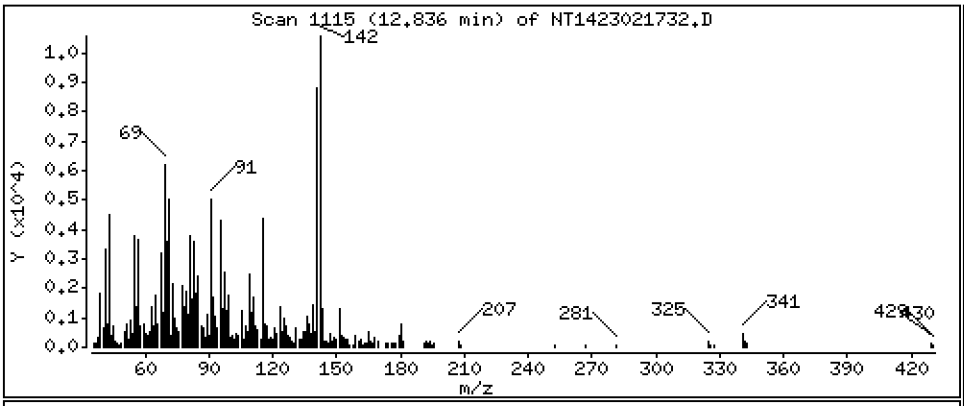
Operator: DSD

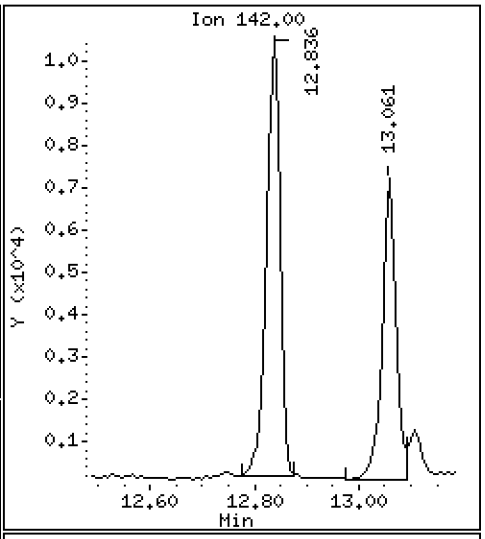
Column phase: ZB-5msi

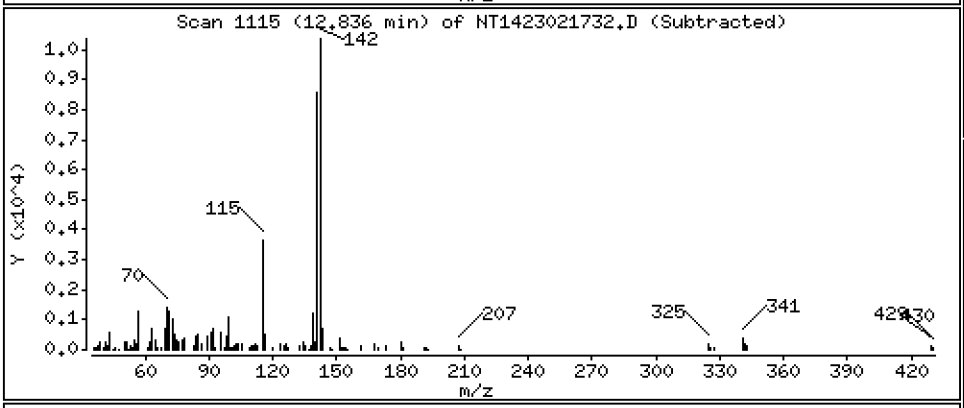
Column diameter: 0.25

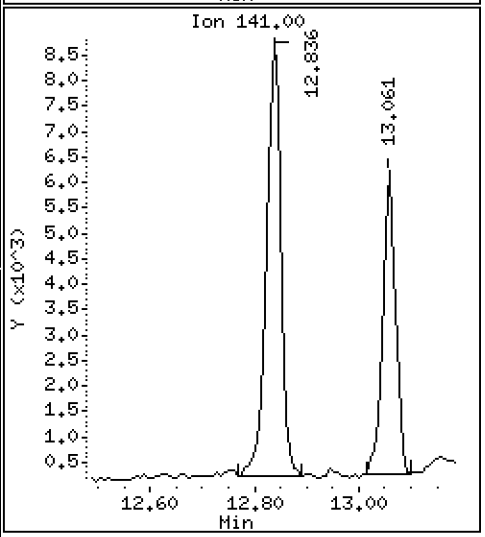
32 2-Methylnaphthalene

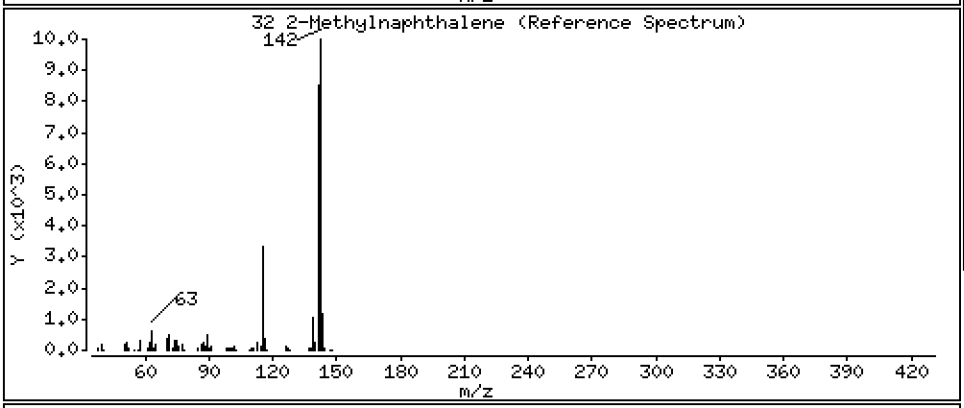
Concentration: 0.09403 ug/mL

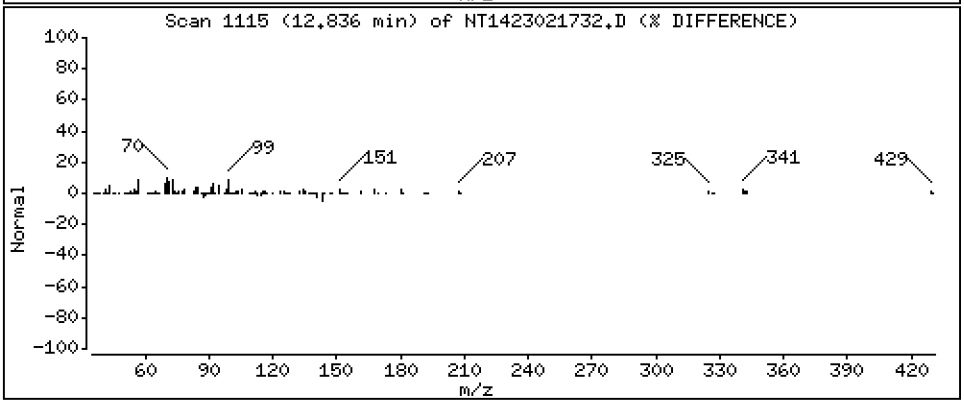












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021732.D

Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

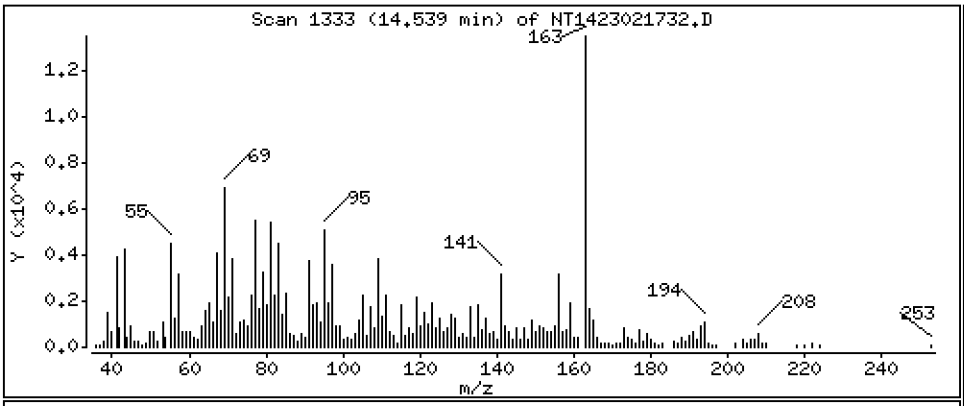
Operator: DSD

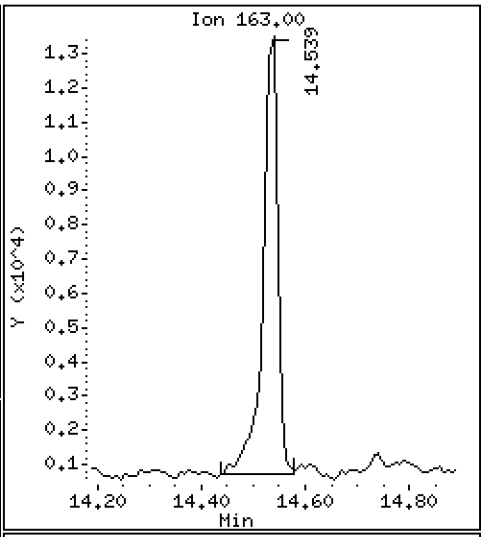
Column phase: ZB-5msi

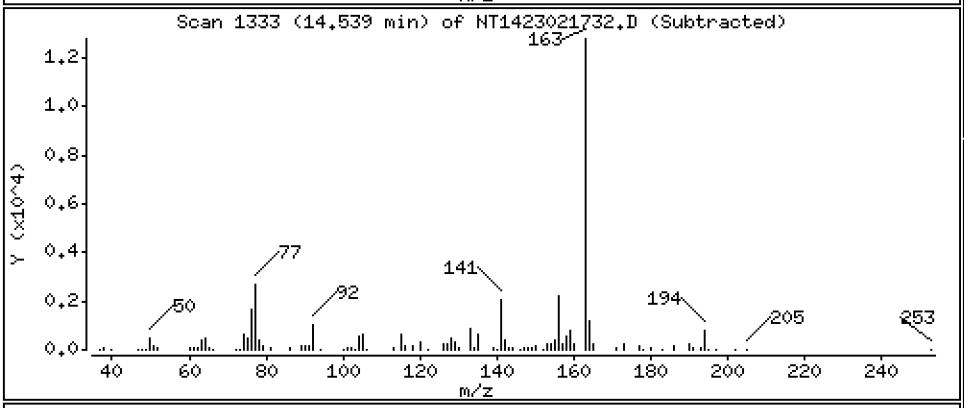
Column diameter: 0.25

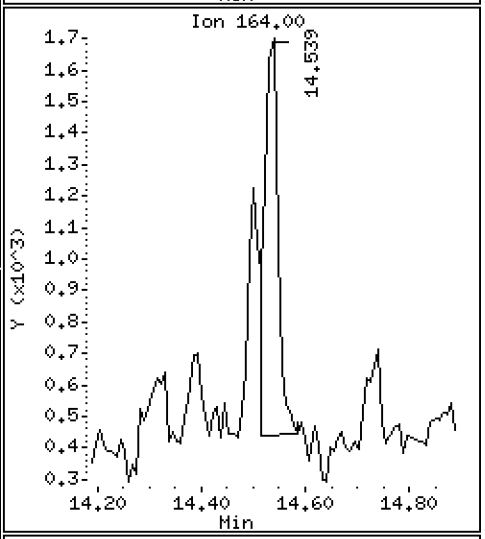
39 Dimethylphthalate

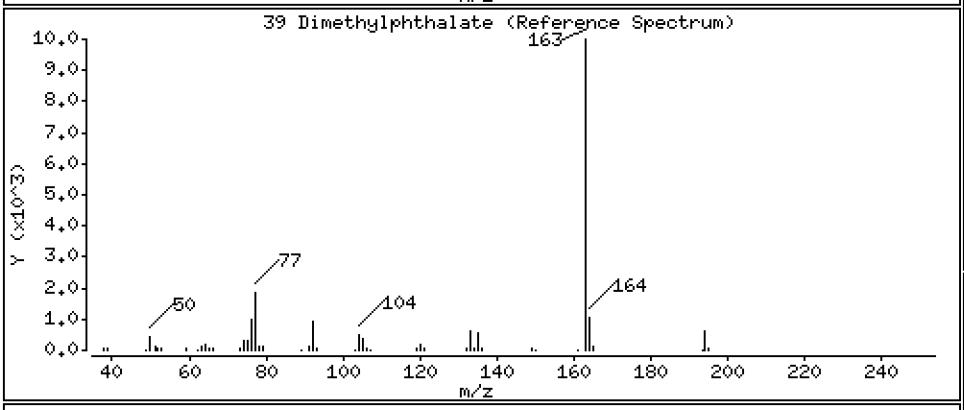
Concentration: 0.1342 ug/mL

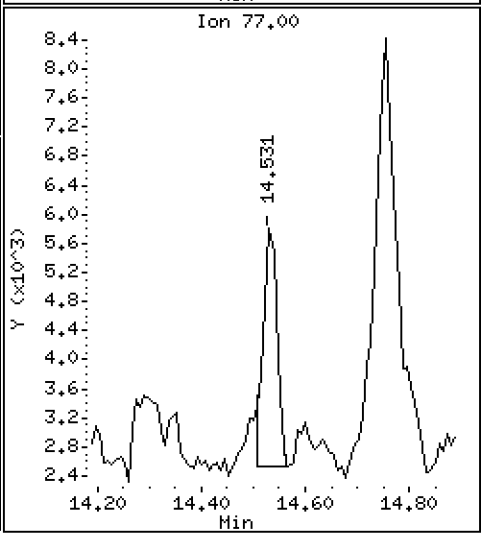


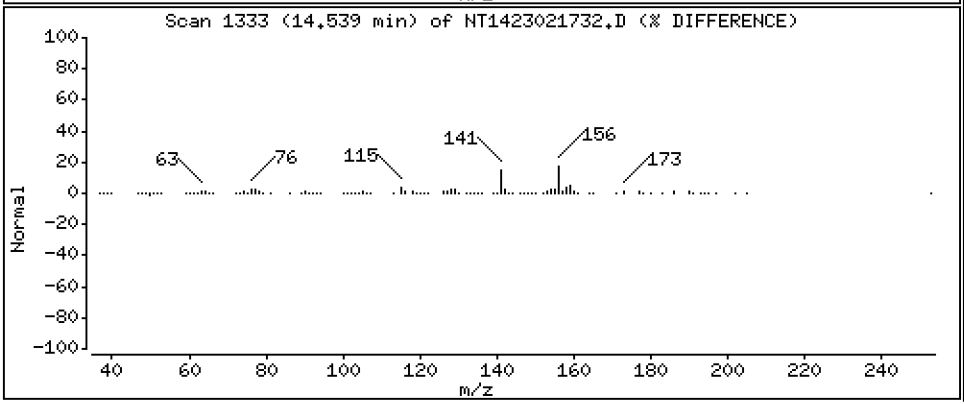












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

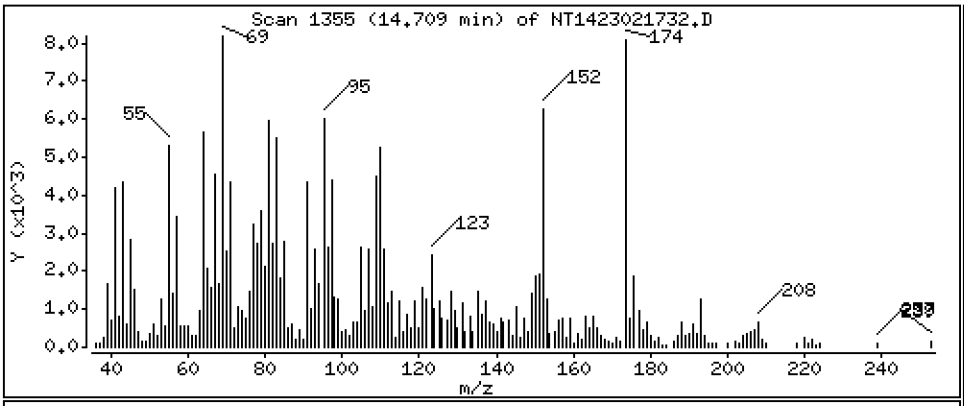
Operator: DSD

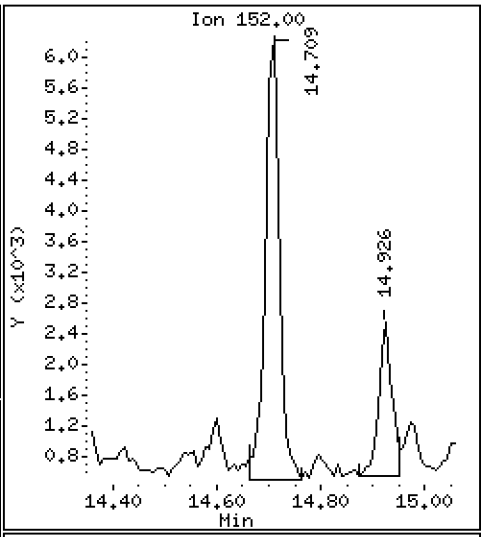
Column phase: ZB-5msi

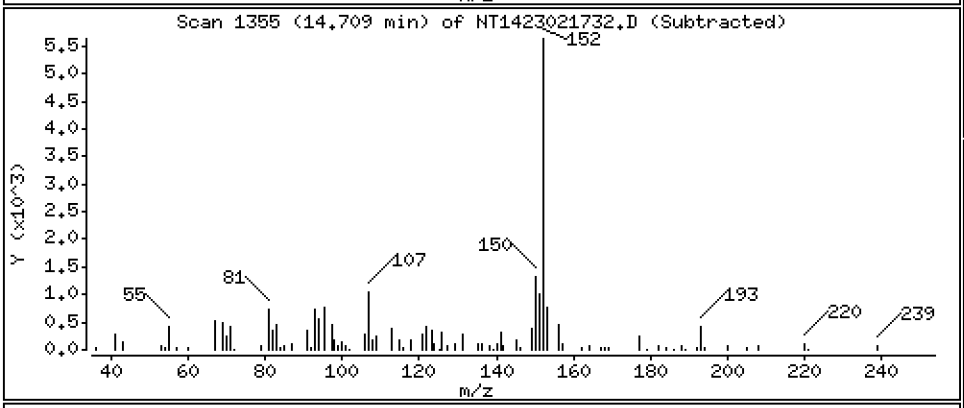
Column diameter: 0.25

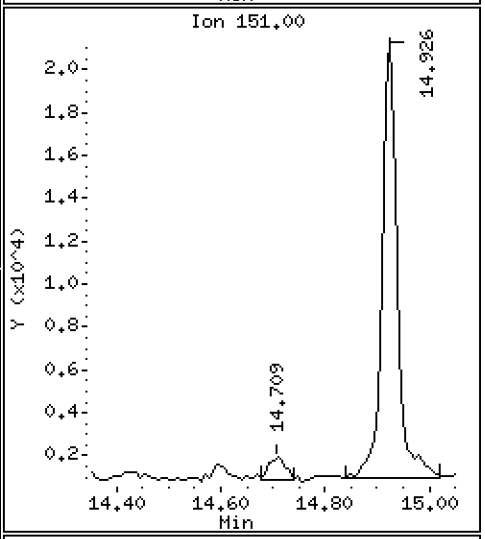
40 Acenaphthylene

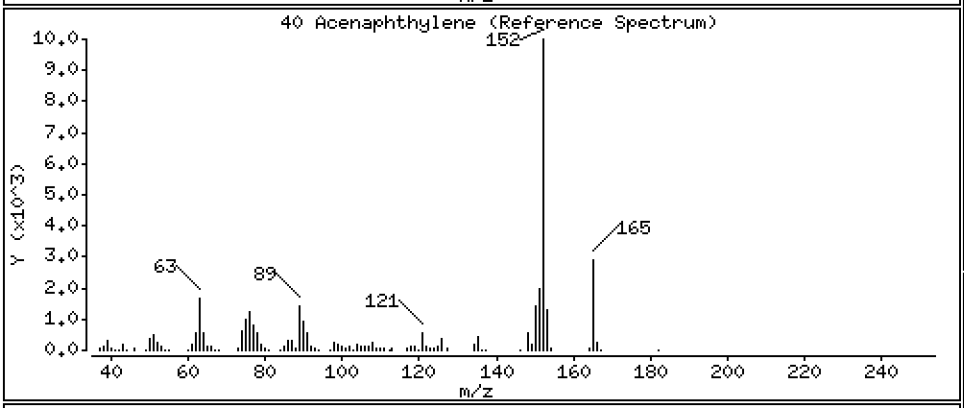
Concentration: 0.03965 ug/mL

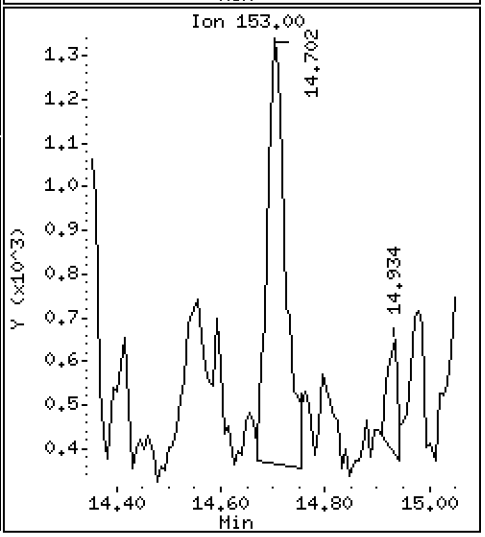


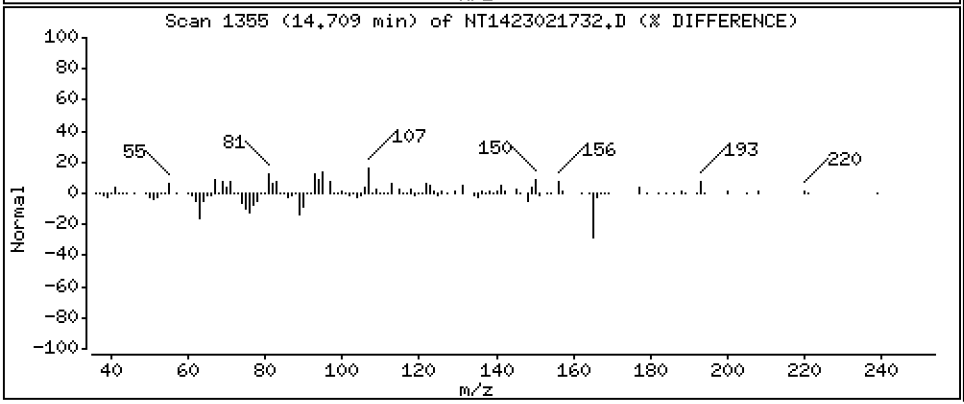












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

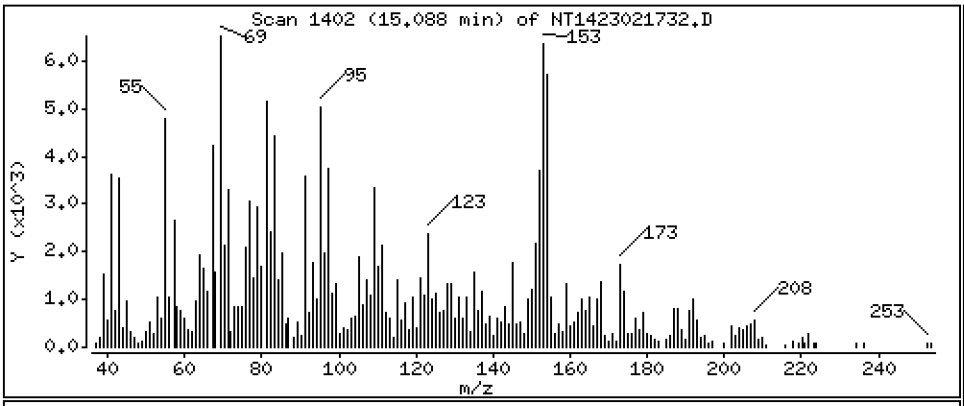
Operator: DSD

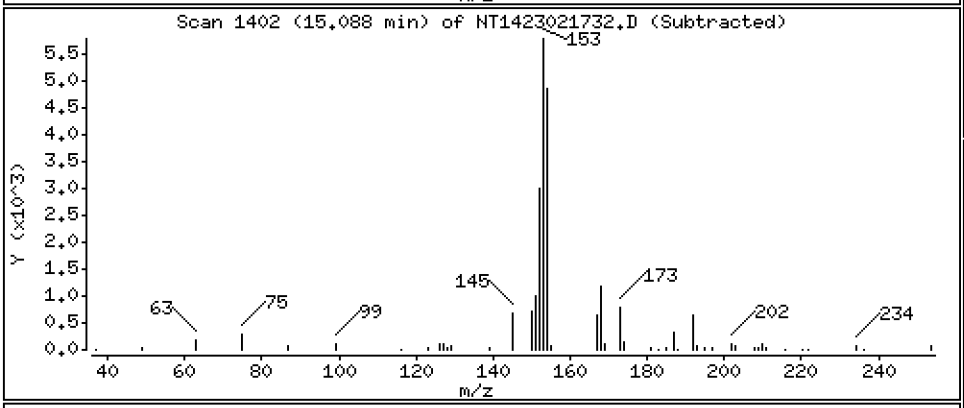
Column phase: ZB-5msi

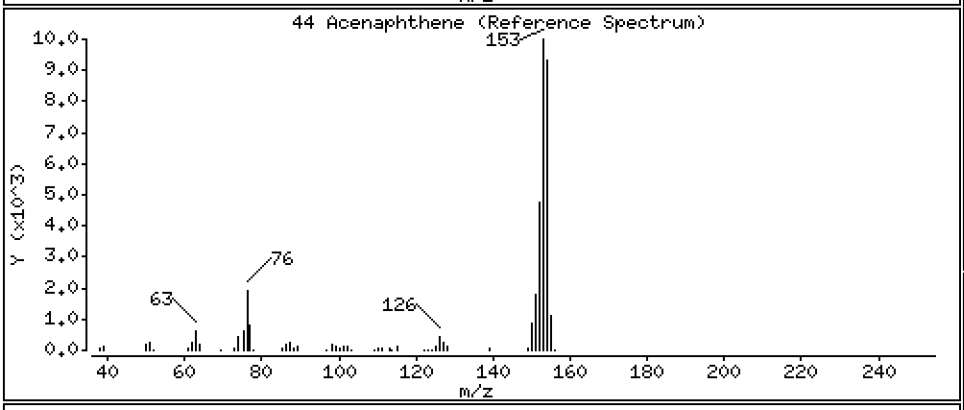
Column diameter: 0.25

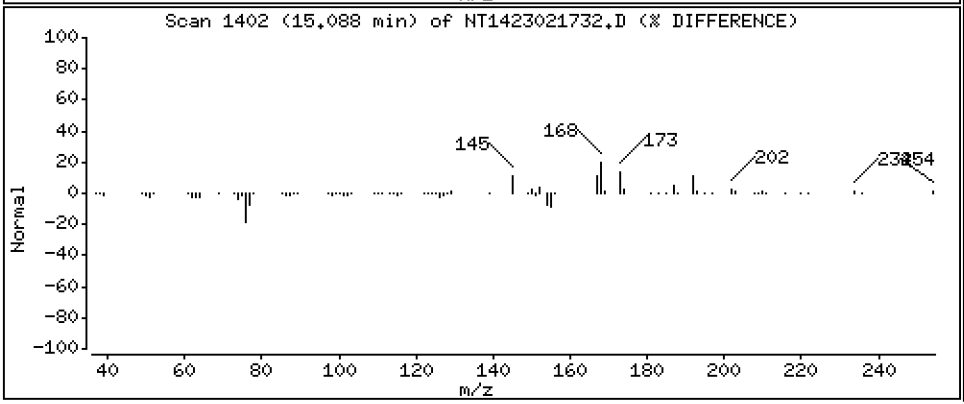
44 Acenaphthene

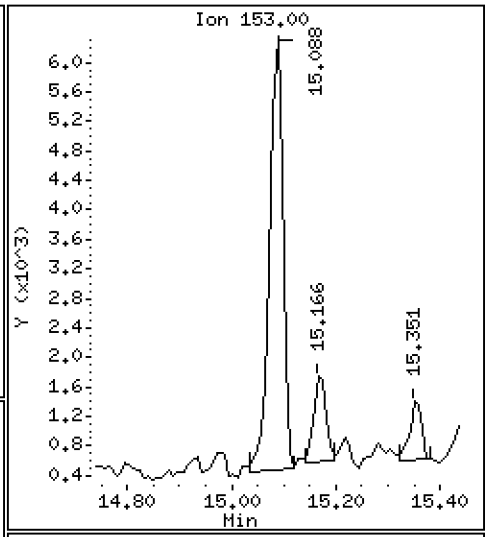
Concentration: 0.06372 ug/mL

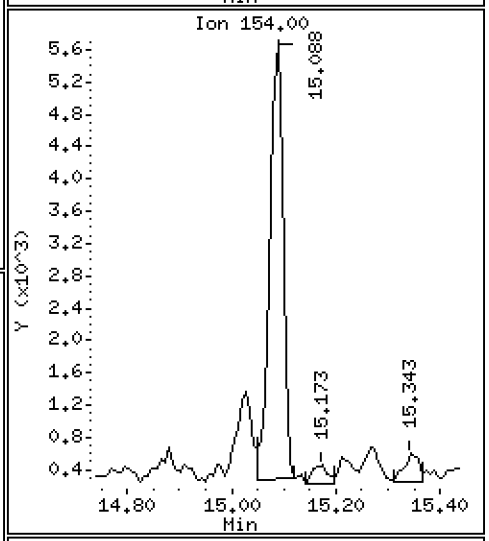


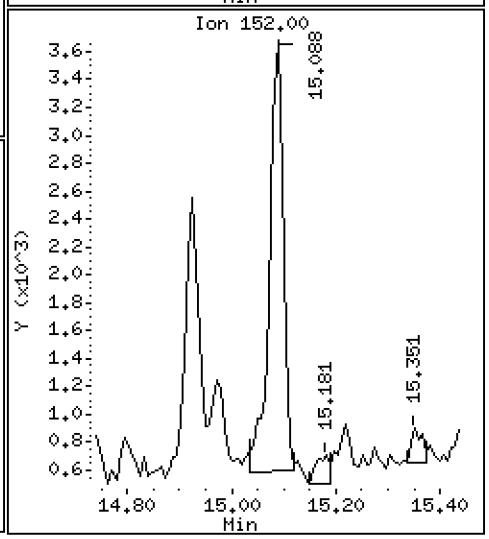












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

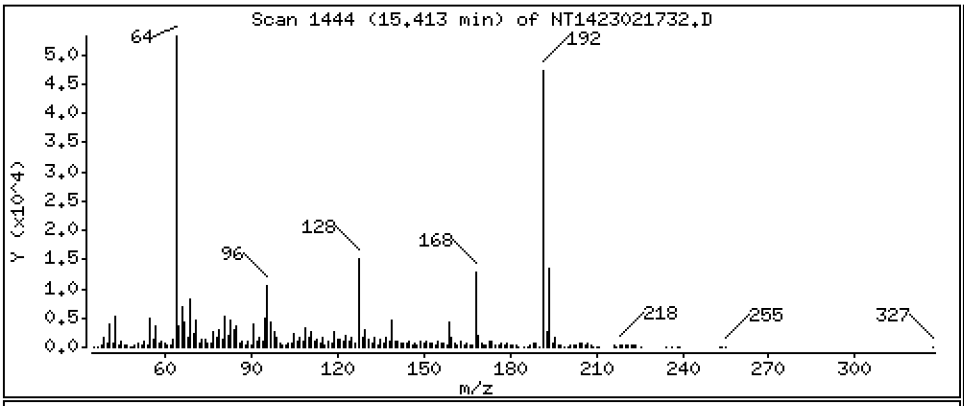
Operator: DSD

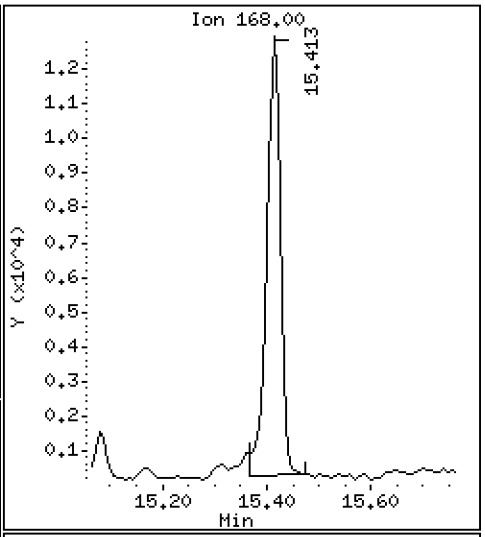
Column phase: ZB-5msi

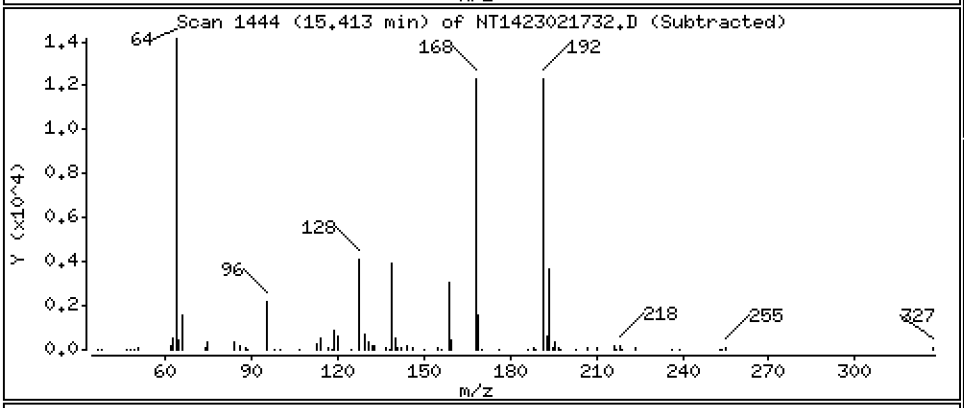
Column diameter: 0.25

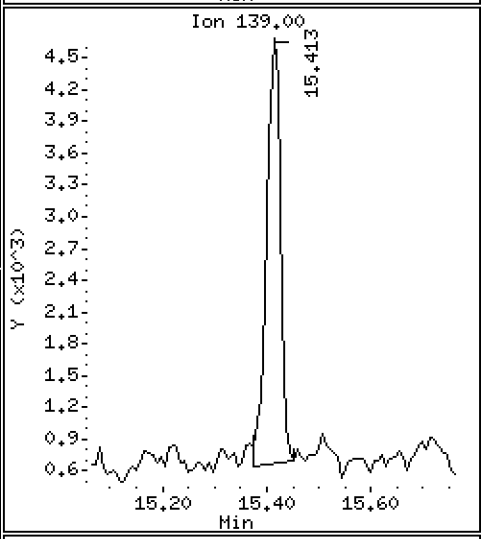
46 Dibenzofuran

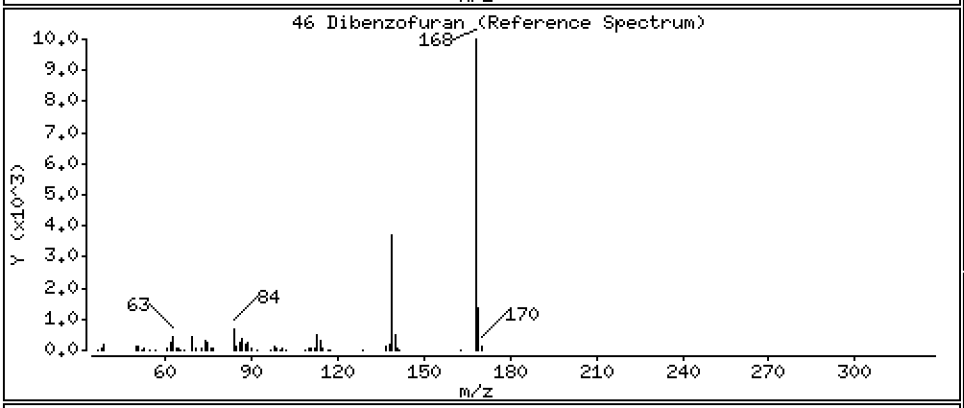
Concentration: 0.08628 ug/mL

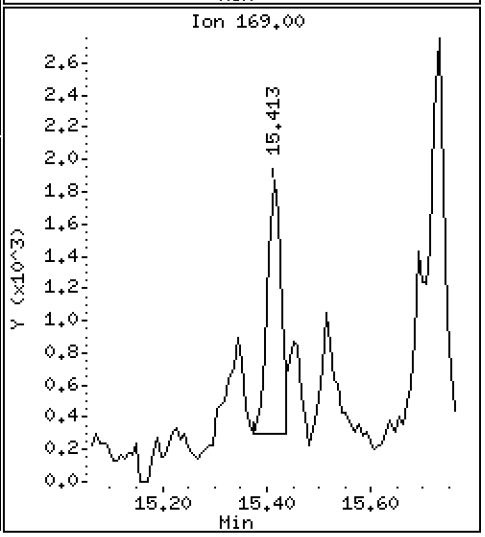


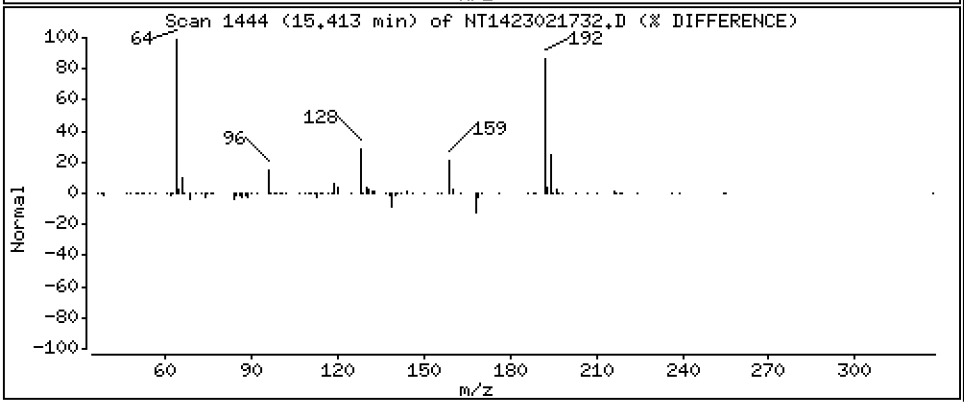












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

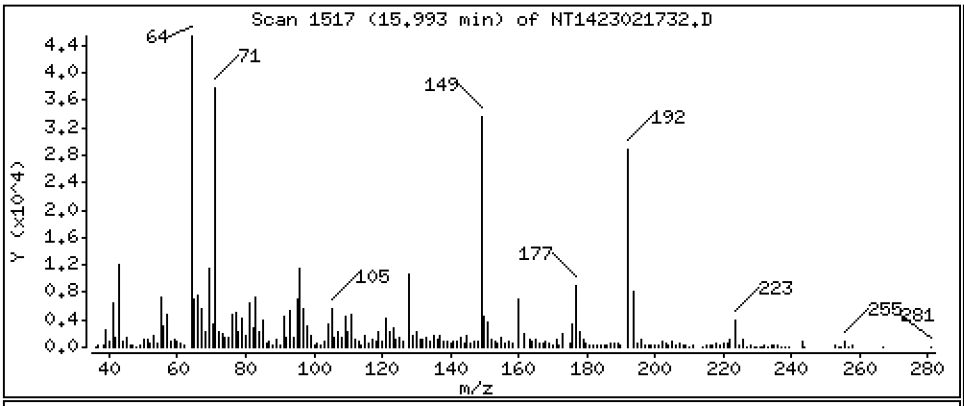
Operator: DSD

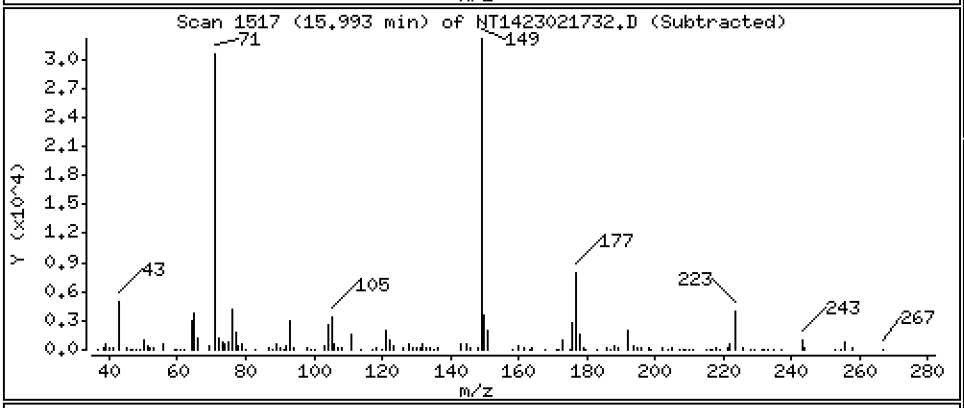
Column phase: ZB-5msi

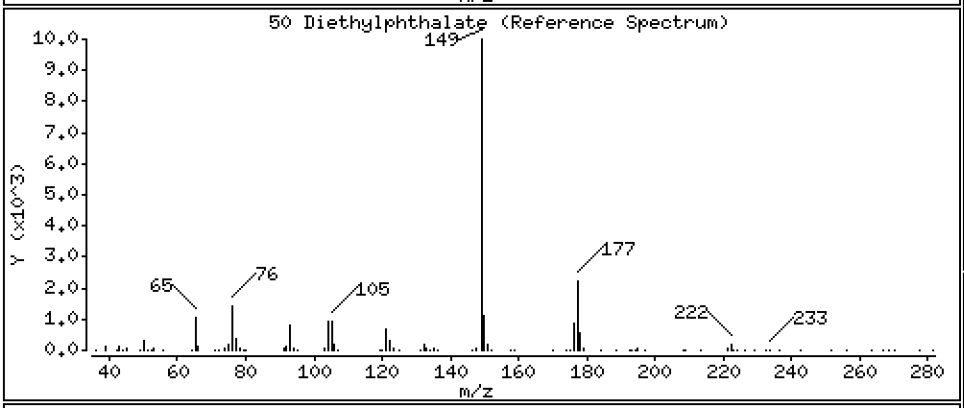
Column diameter: 0.25

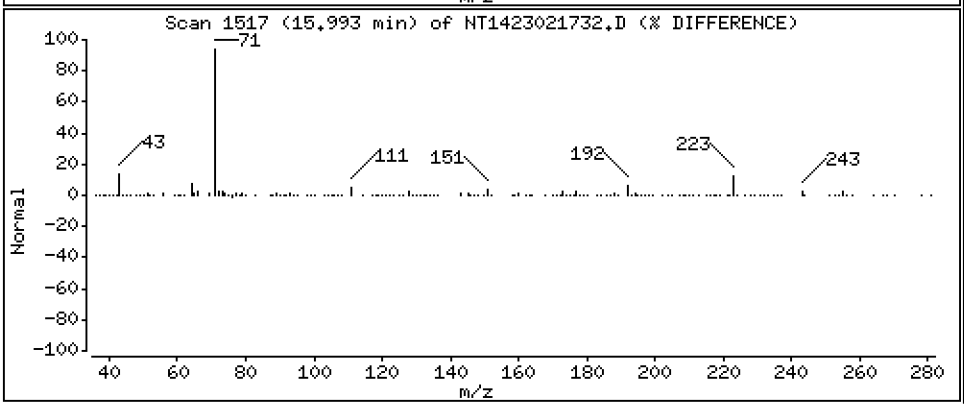
50 Diethylphthalate

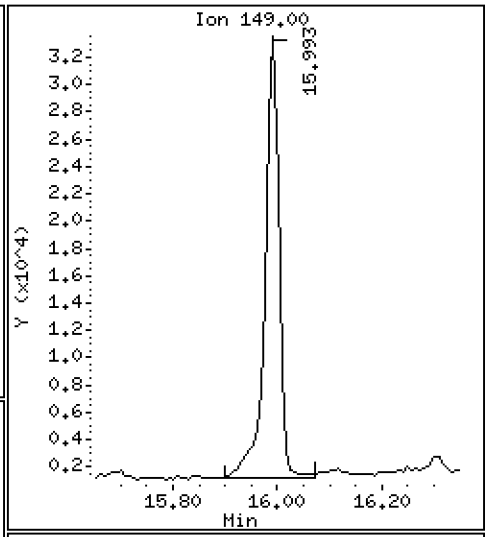
Concentration: 0.2943 ug/mL

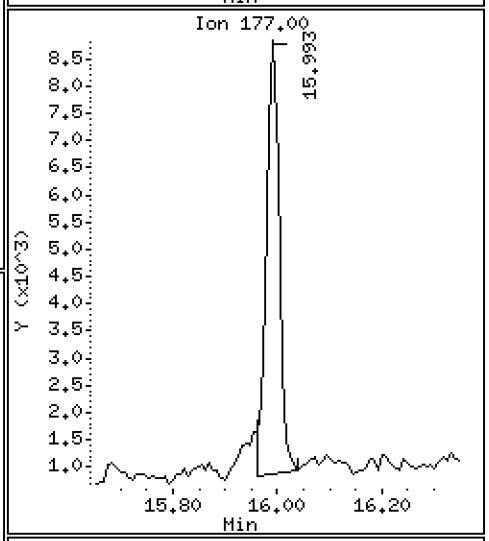


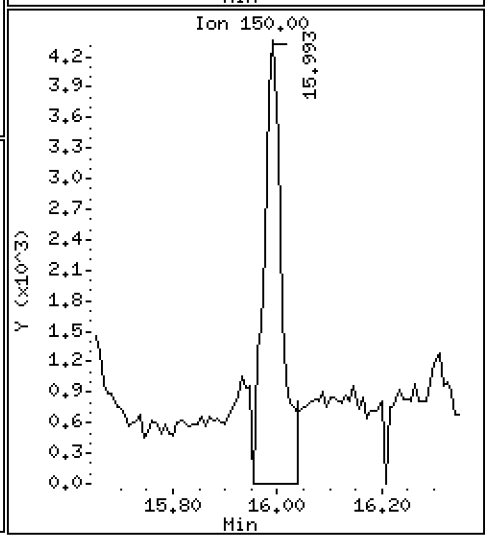












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

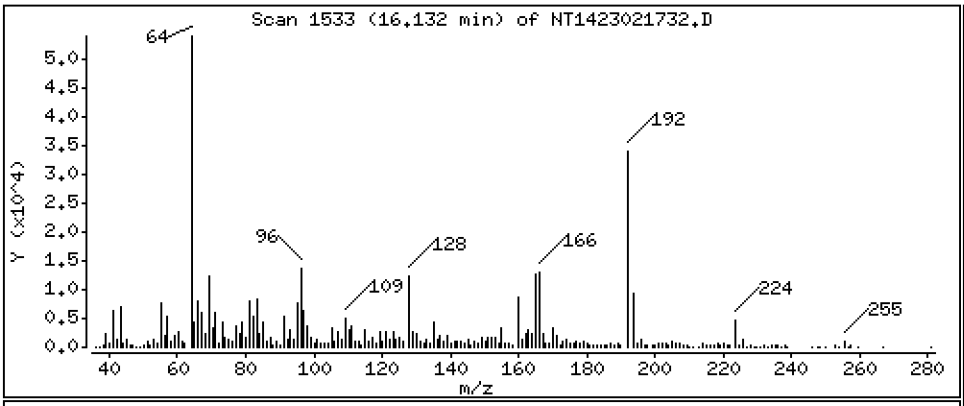
Operator: DSD

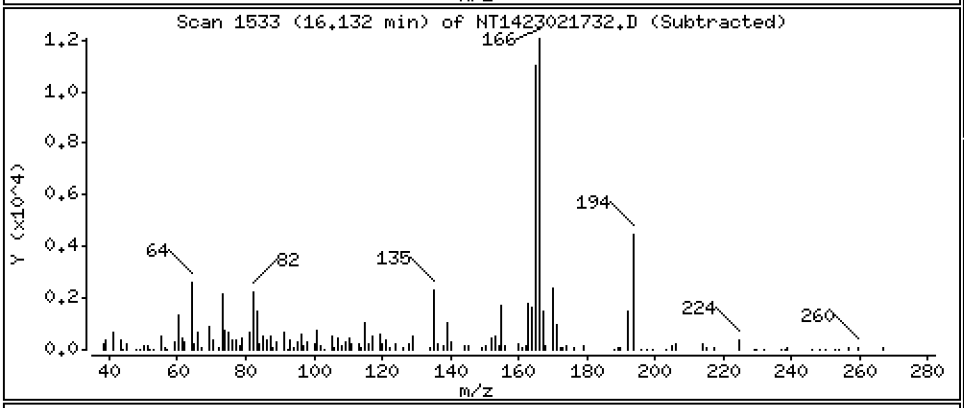
Column phase: ZB-5msi

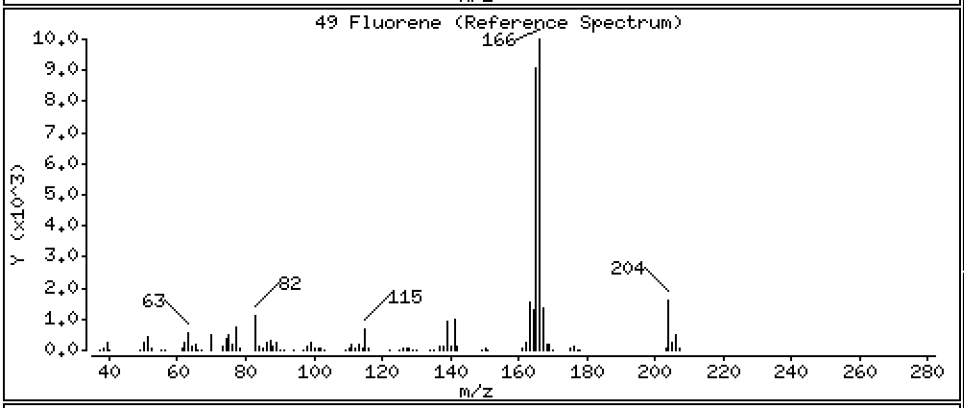
Column diameter: 0.25

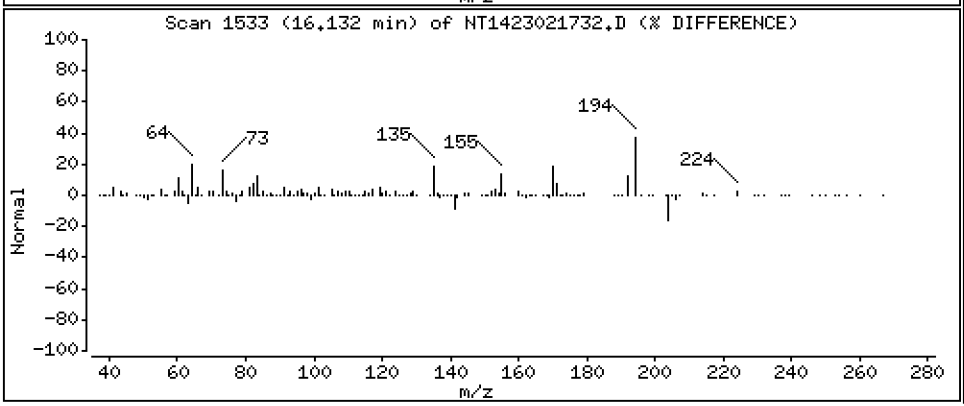
49 Fluorene

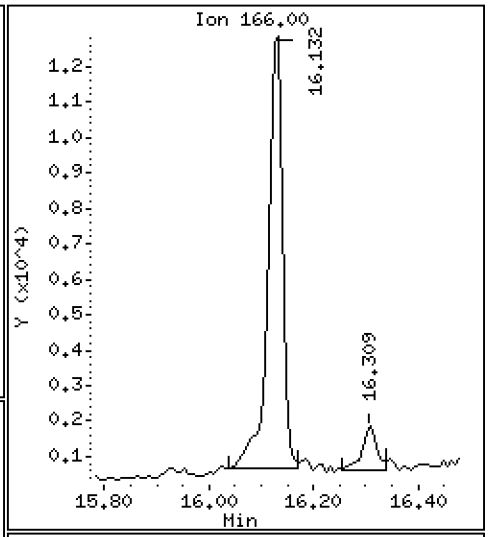
Concentration: 0.09532 ug/mL

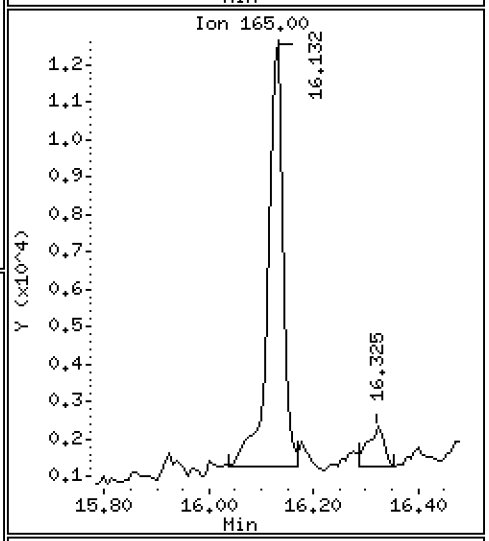


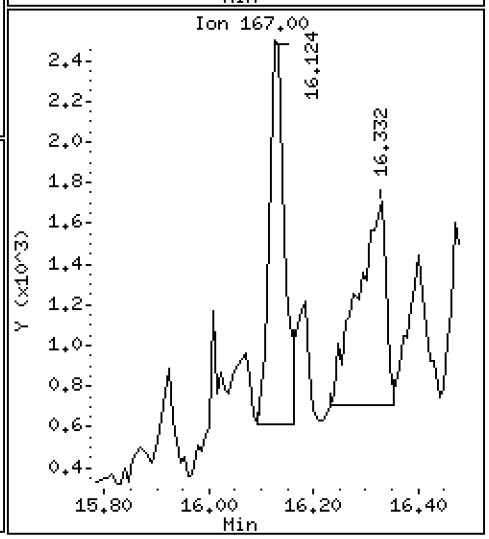












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

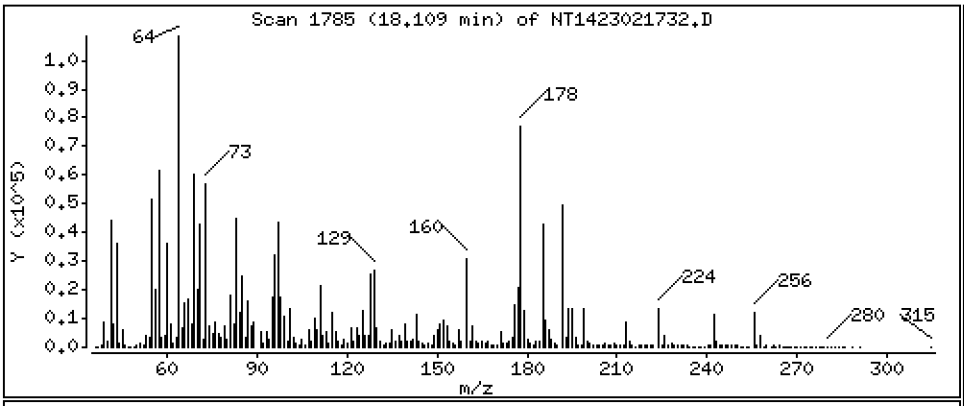
Operator: DSD

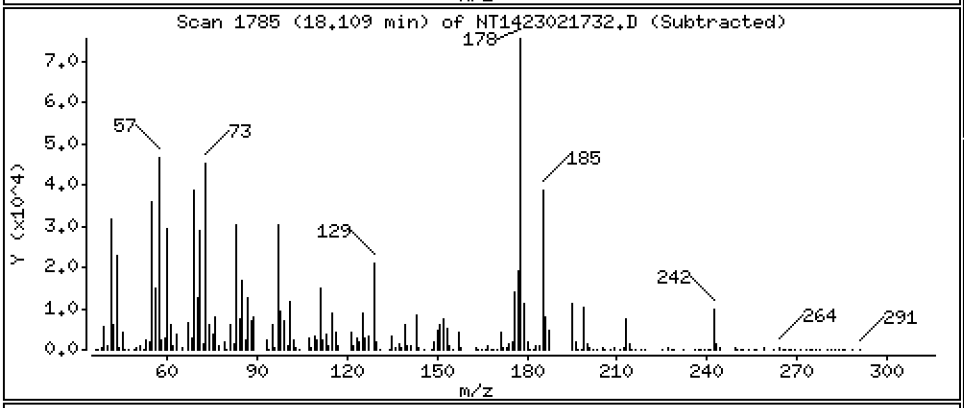
Column phase: ZB-5msi

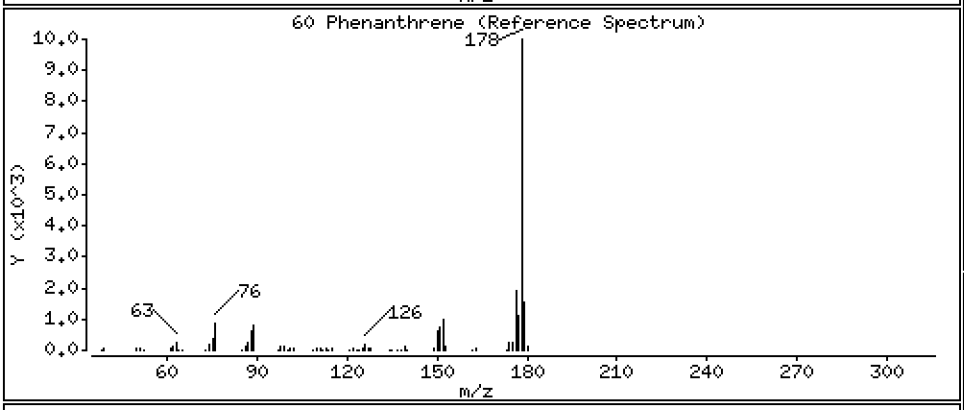
Column diameter: 0.25

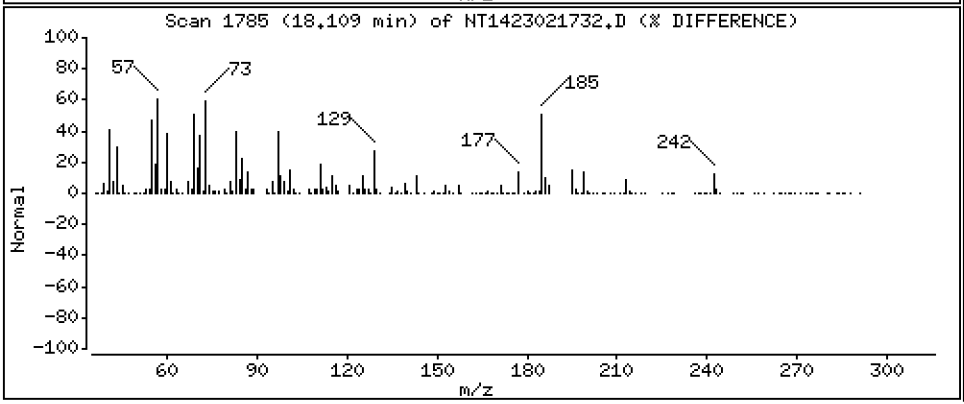
60 Phenanthrene

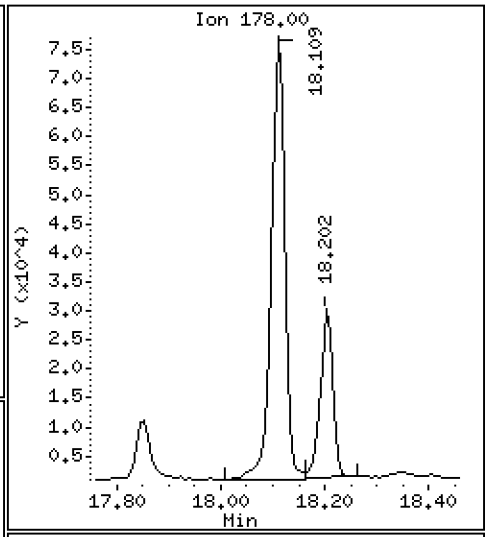
Concentration: 0.5630 ug/mL

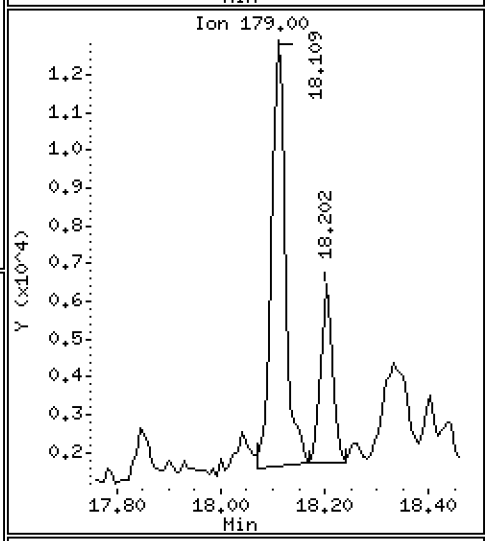


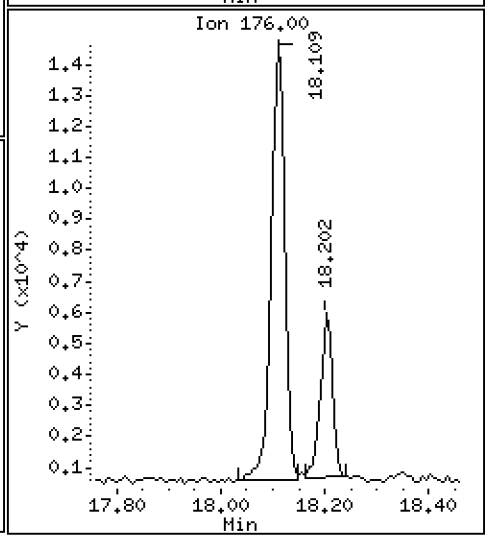












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021732.D

Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

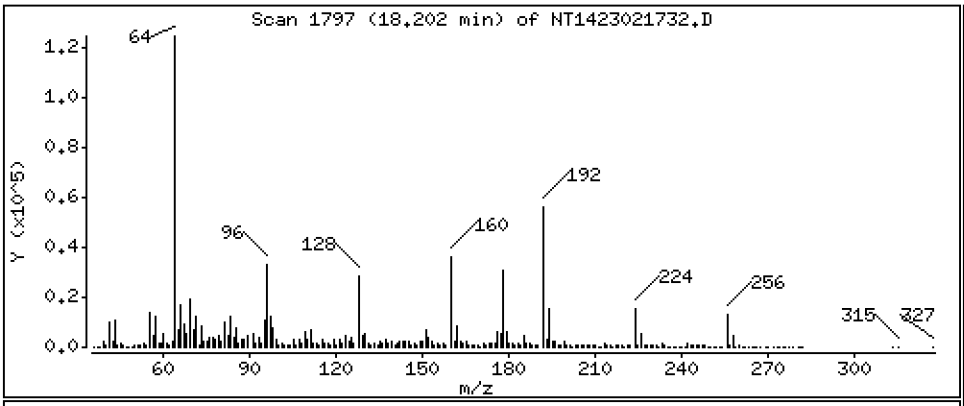
Operator: DSD

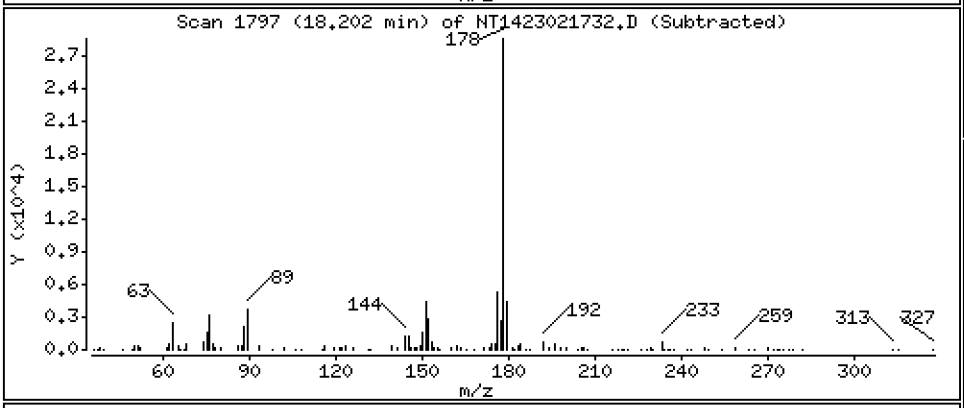
Column phase: ZB-5msi

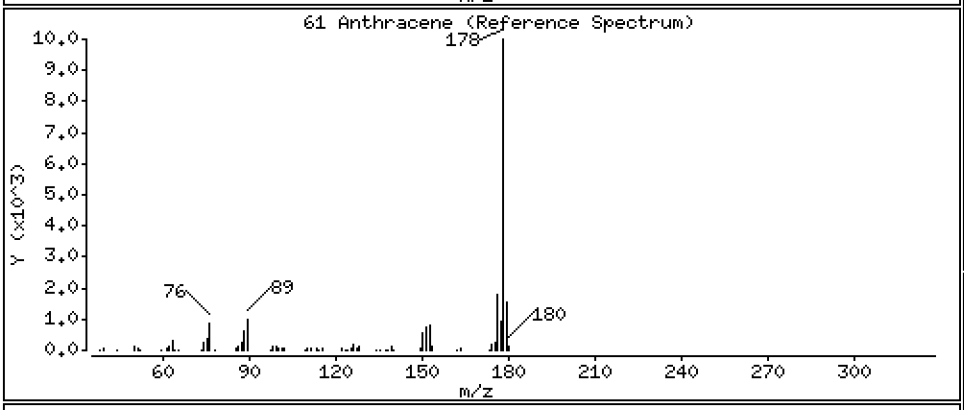
Column diameter: 0.25

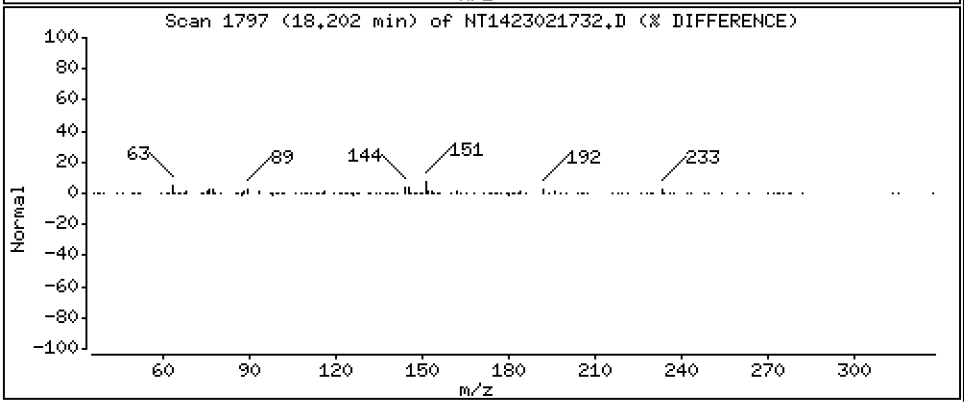
61 Anthracene

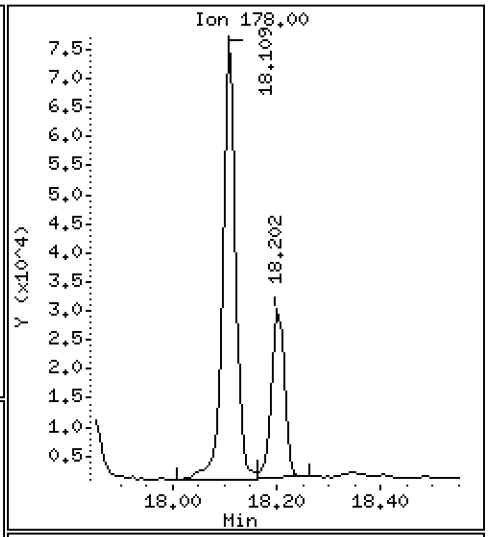
Concentration: 0.2066 ug/mL

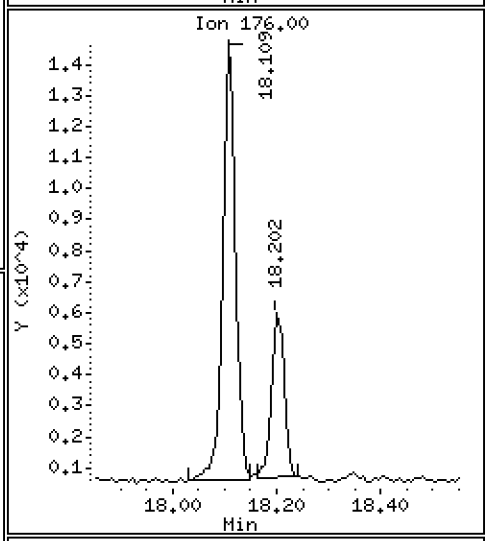


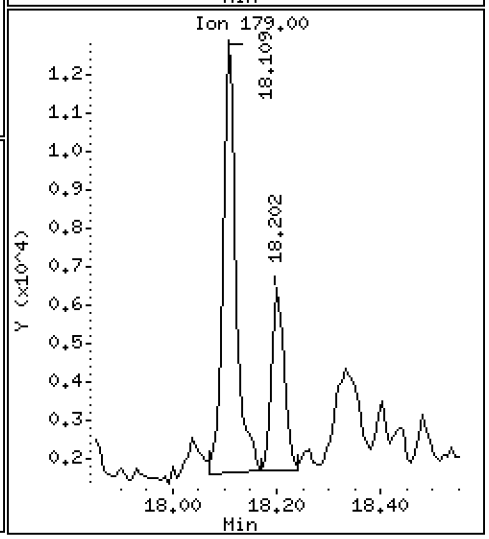












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

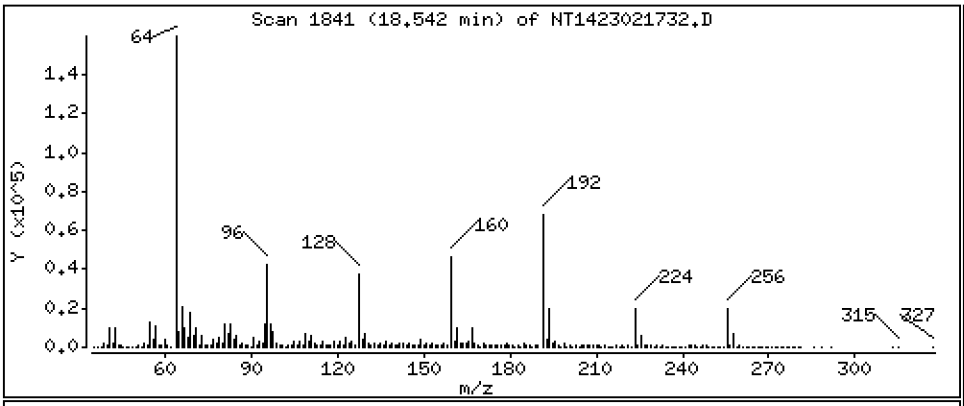
Operator: DSD

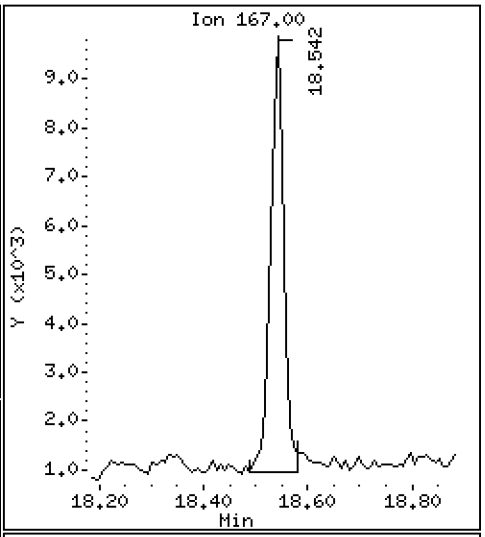
Column phase: ZB-5msi

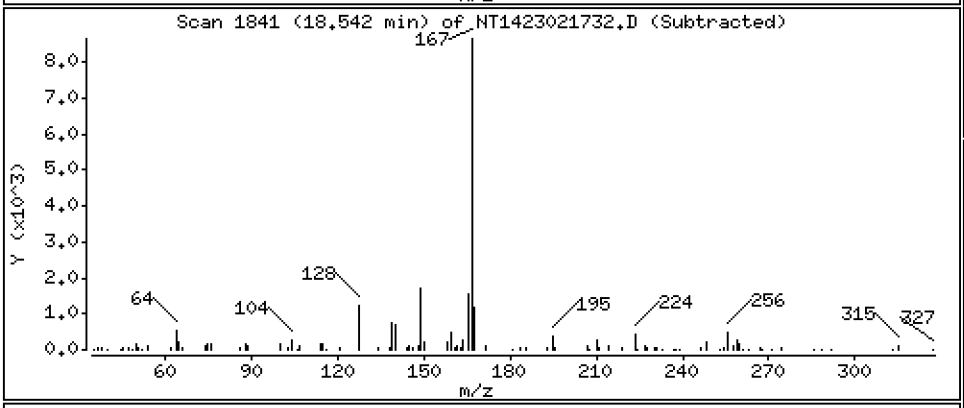
Column diameter: 0.25

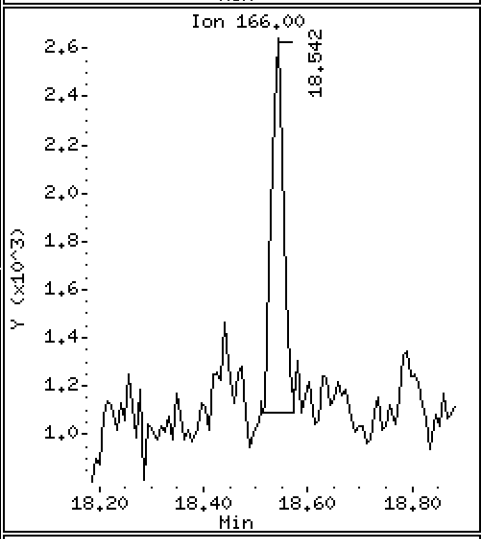
62 Carbazole

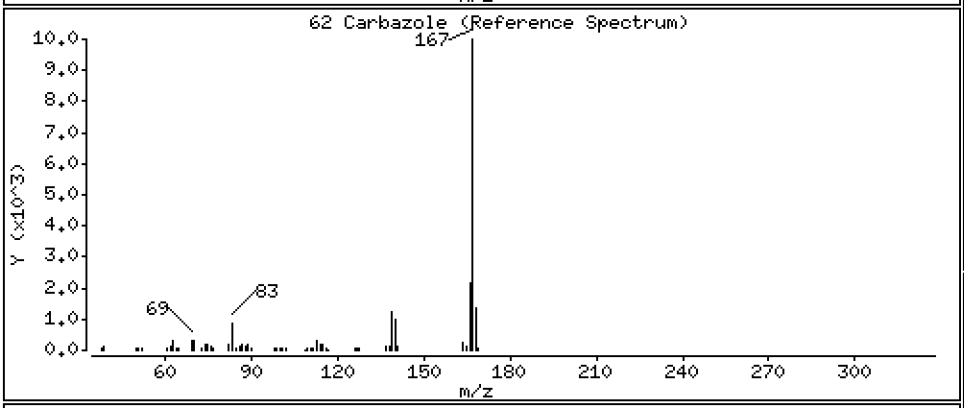
Concentration: 0.07423 ug/mL

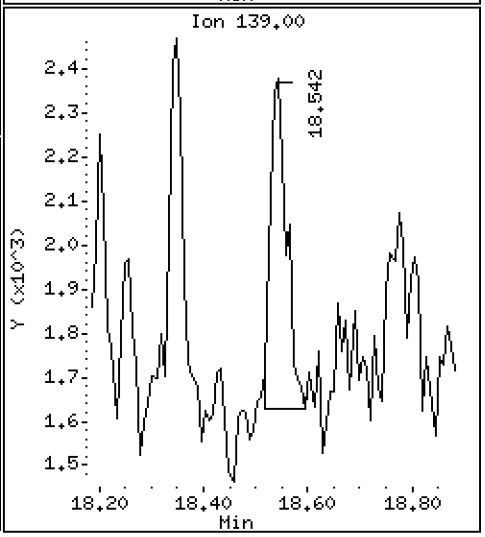


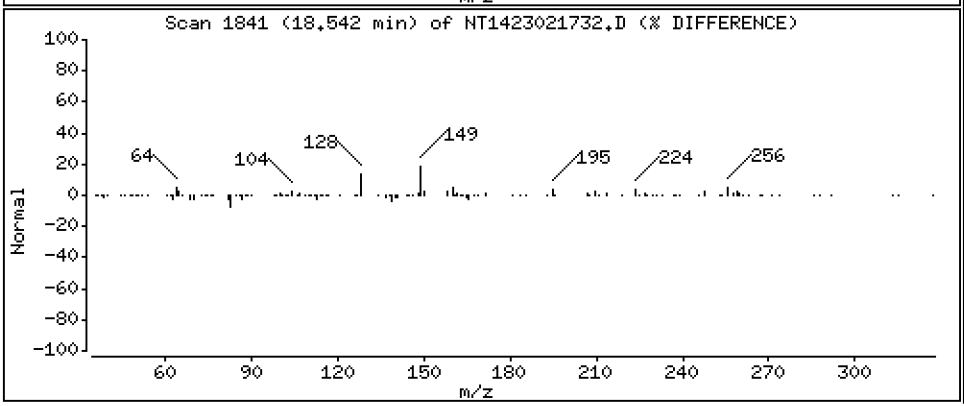












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

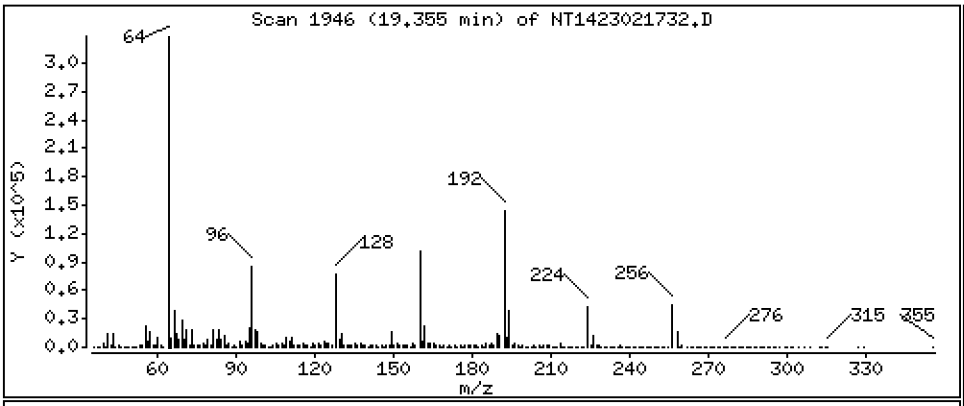
Operator: DSD

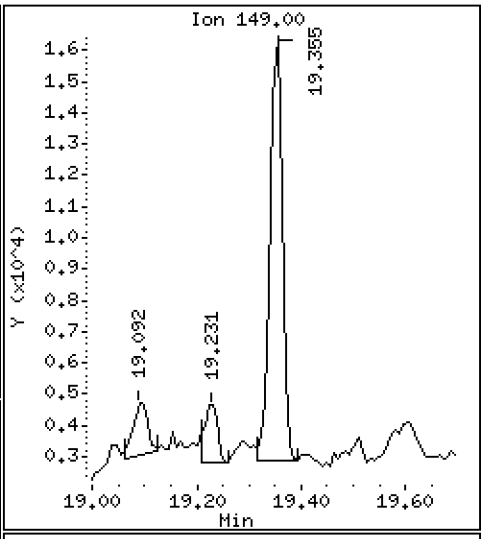
Column phase: ZB-5msi

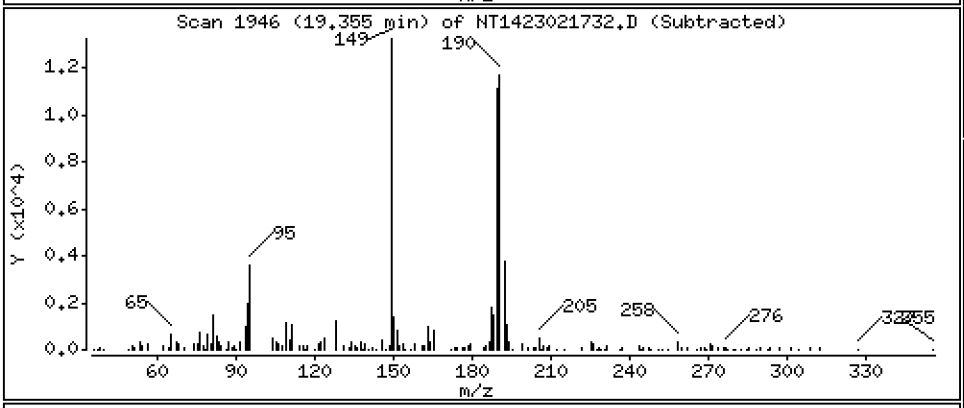
Column diameter: 0.25

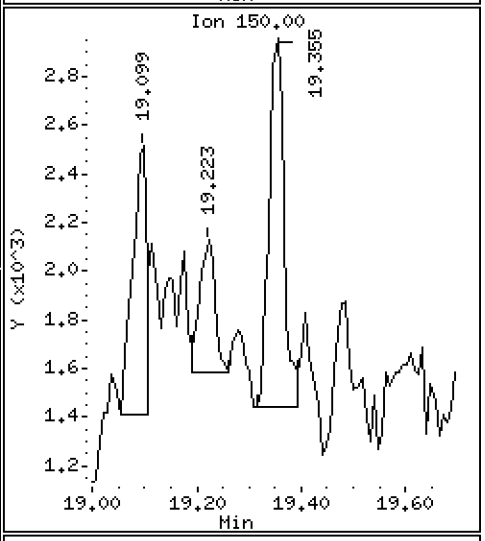
63 Di-n-butylphthalate

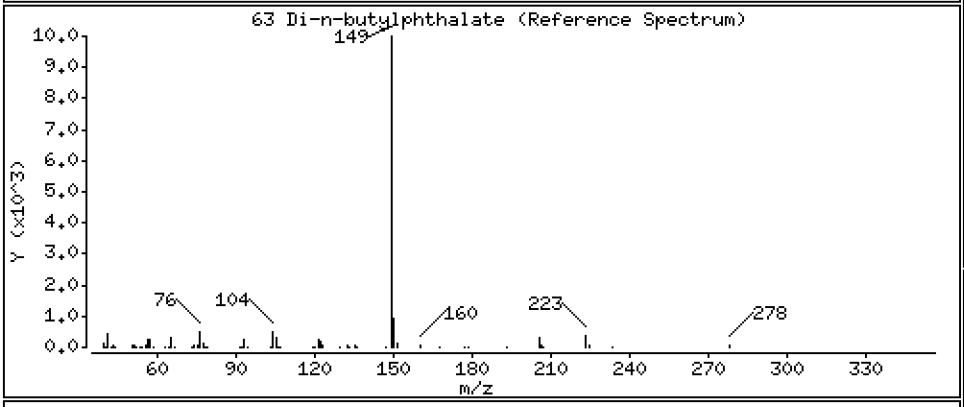
Concentration: 0.09048 ug/mL

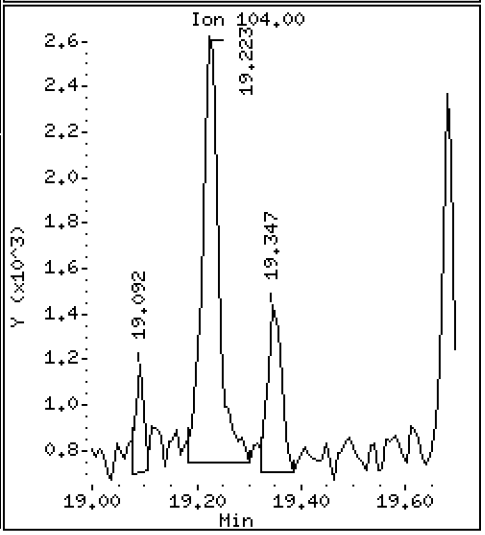


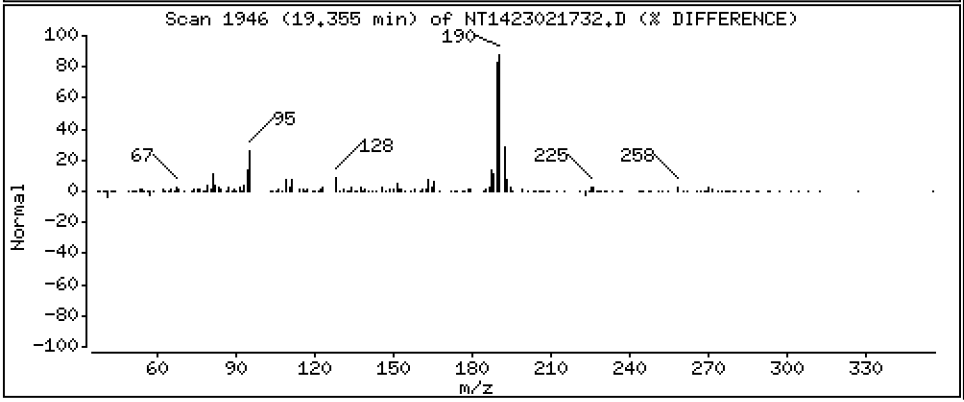












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

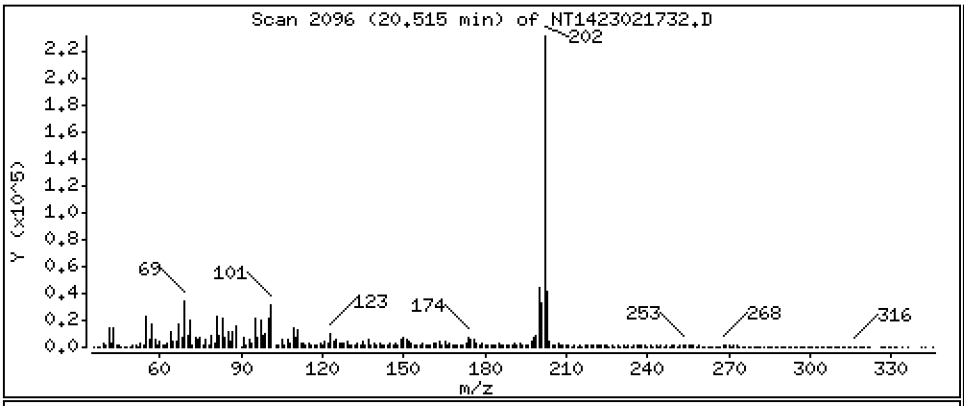
Operator: DSD

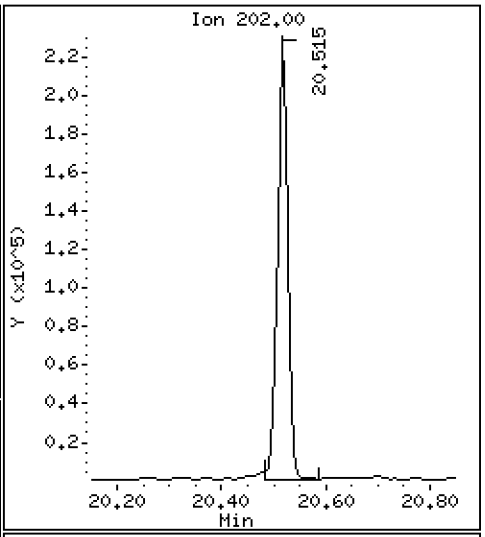
Column phase: ZB-5msi

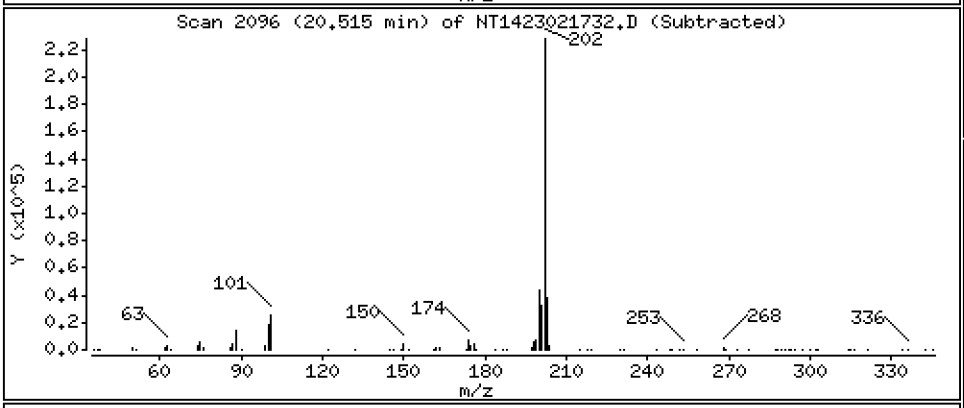
Column diameter: 0.25

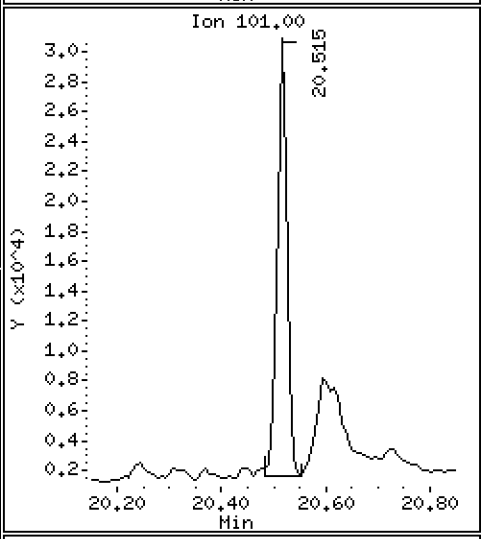
64 Fluoranthene

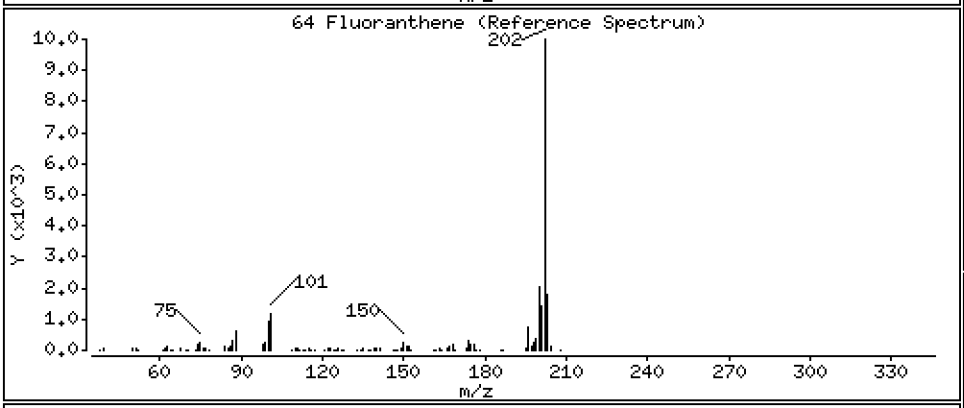
Concentration: 1.571 ug/mL

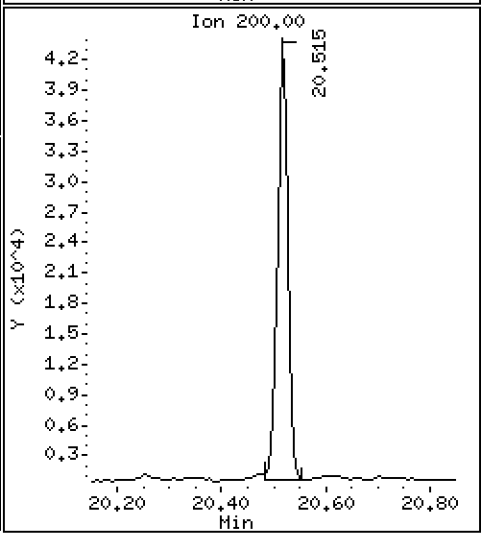


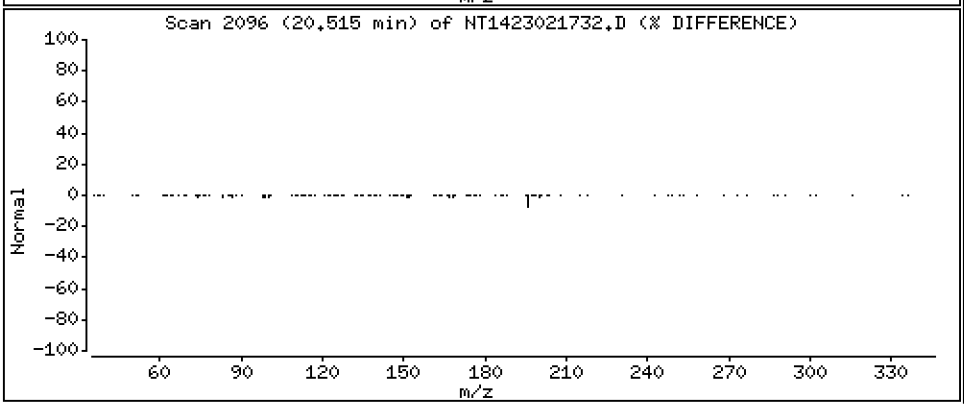












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

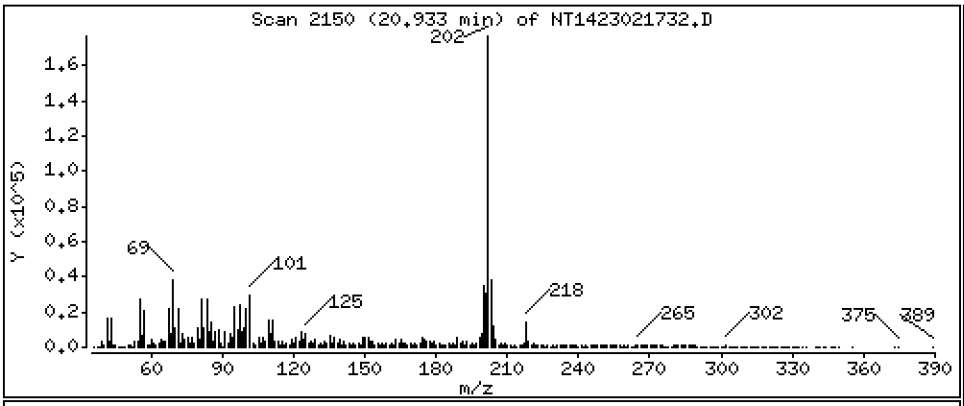
Operator: DSD

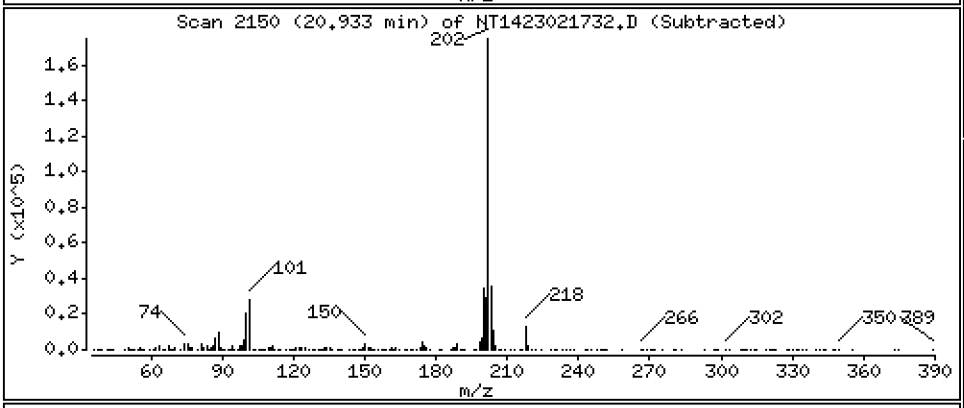
Column phase: ZB-5msi

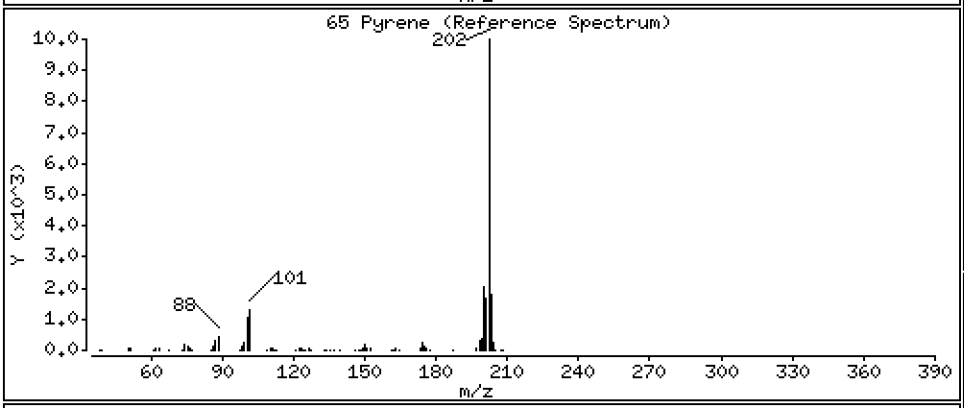
Column diameter: 0.25

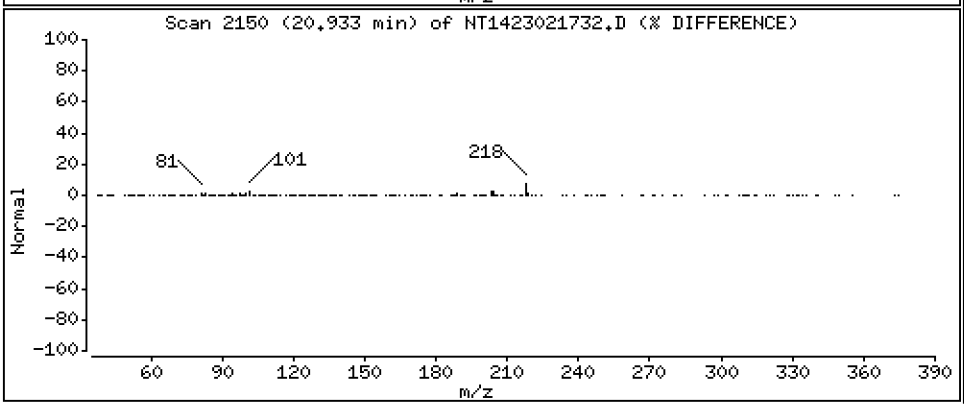
65 Pyrene

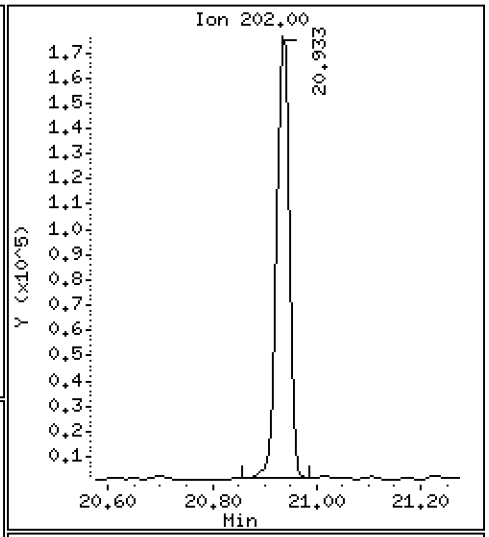
Concentration: 1.382 ug/mL

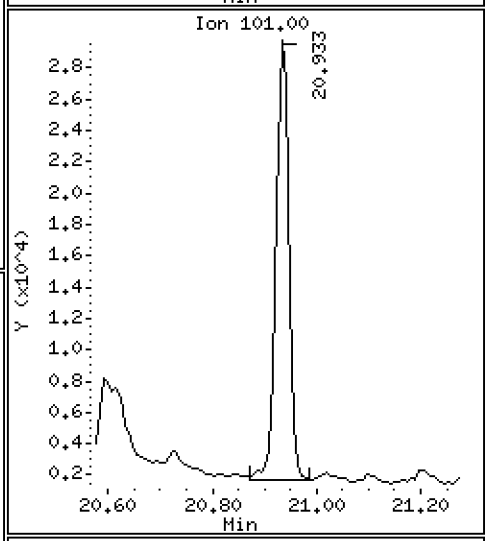


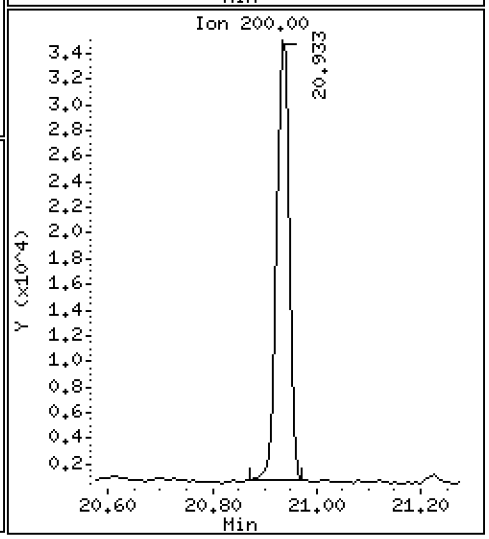












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

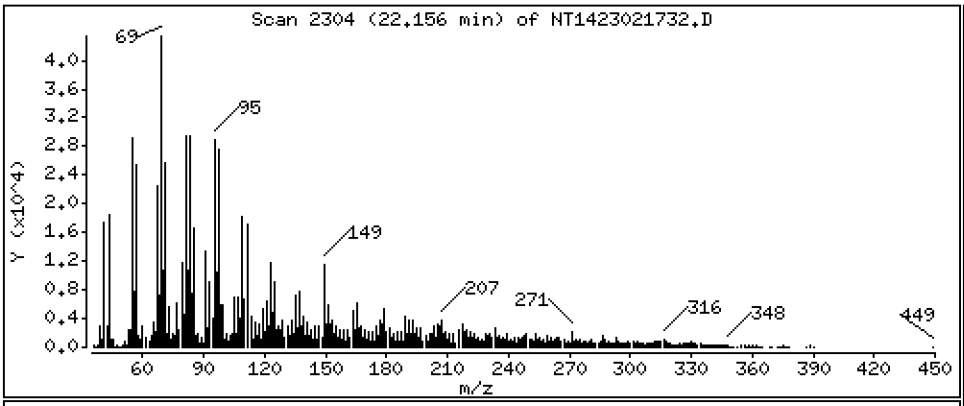
Operator: DSD

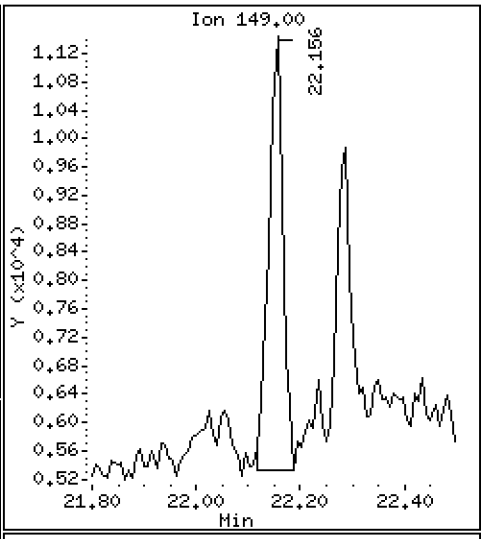
Column phase: ZB-5msi

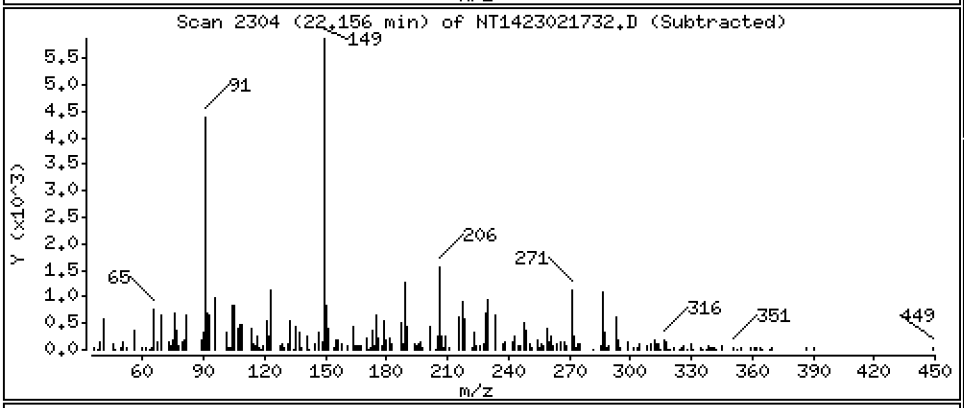
Column diameter: 0.25

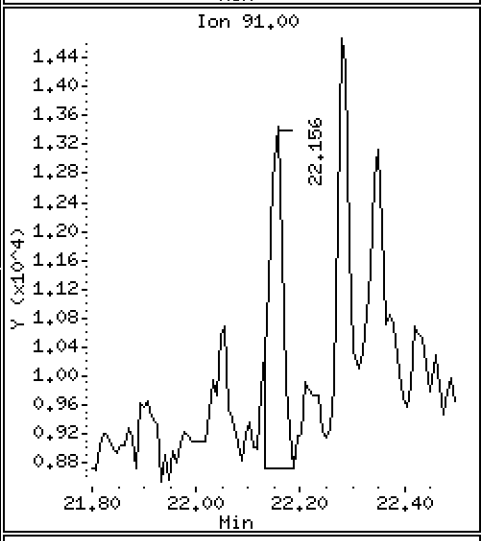
67 Butylbenzylphthalate

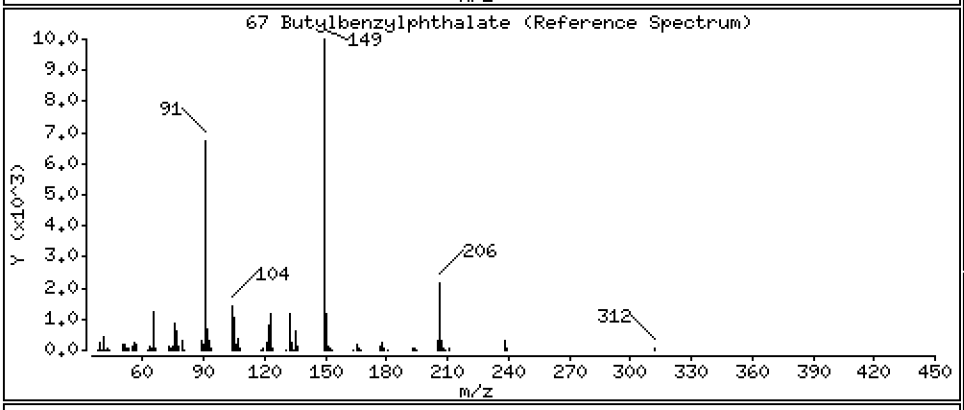
Concentration: 0.1626 ug/mL

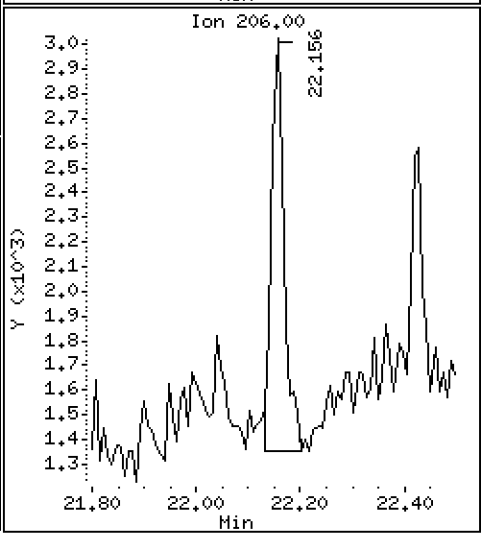


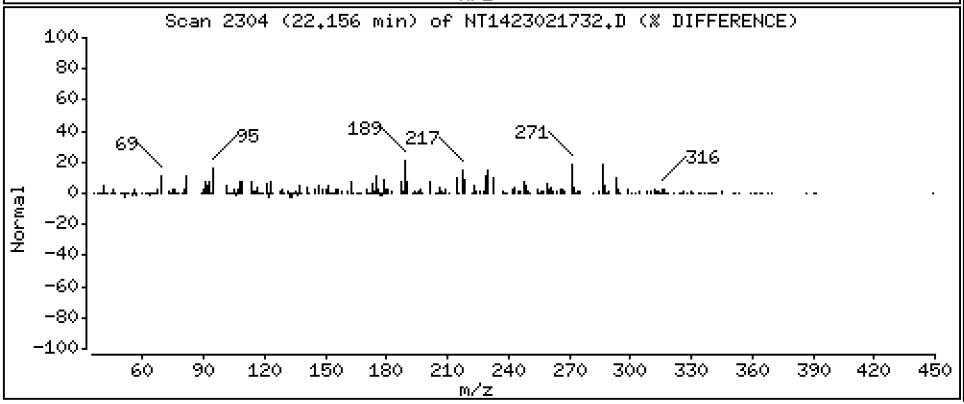












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

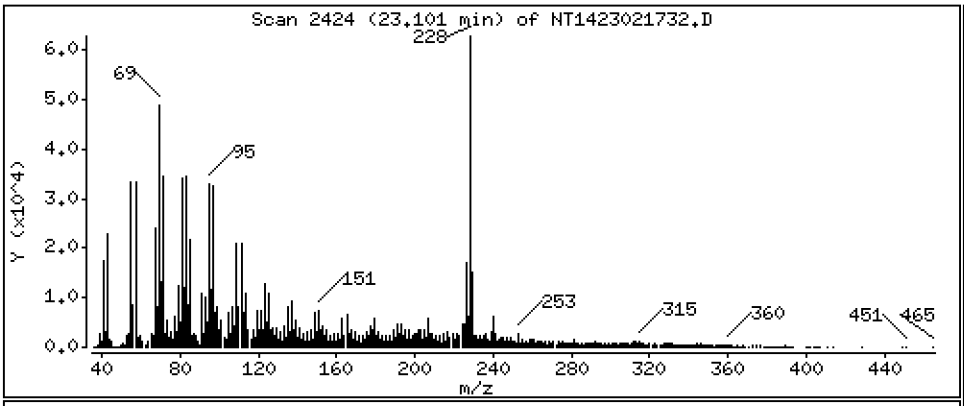
Operator: DSD

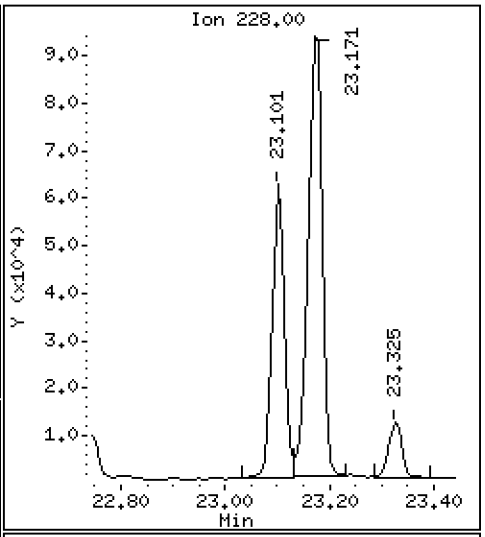
Column phase: ZB-5msi

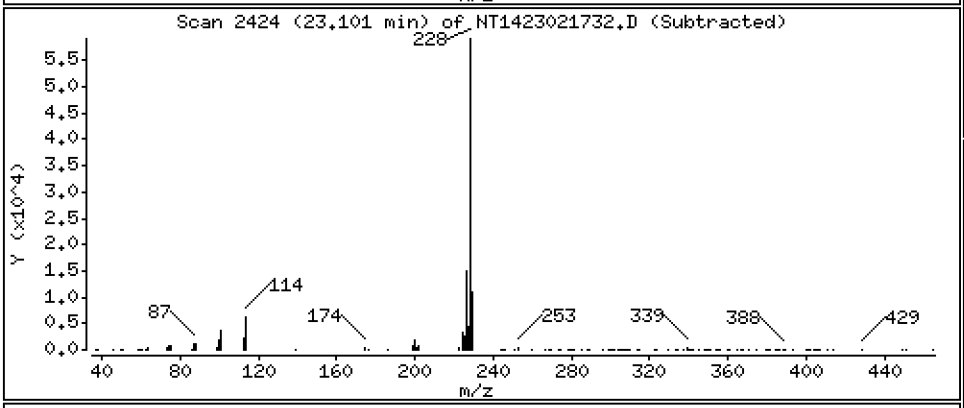
Column diameter: 0.25

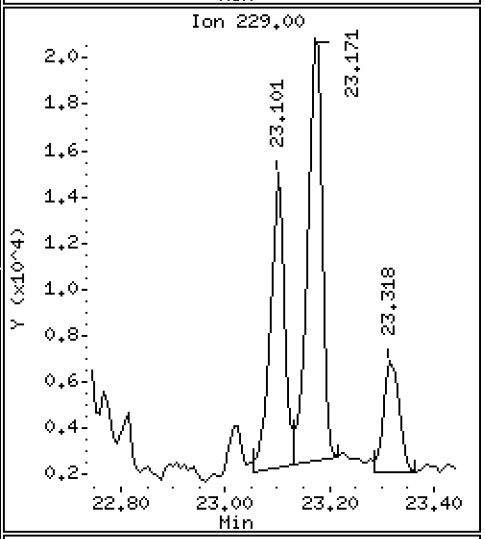
68 Benzo(a)anthracene

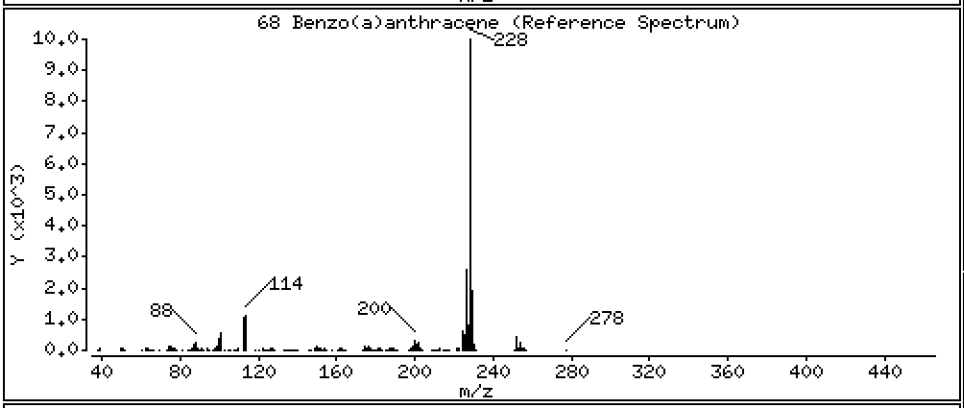
Concentration: 0.6776 ug/mL

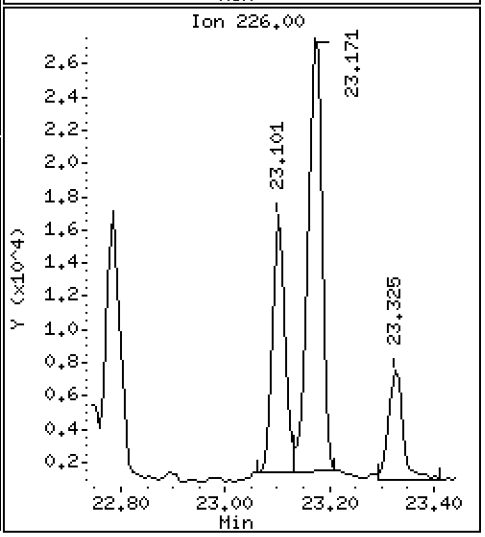


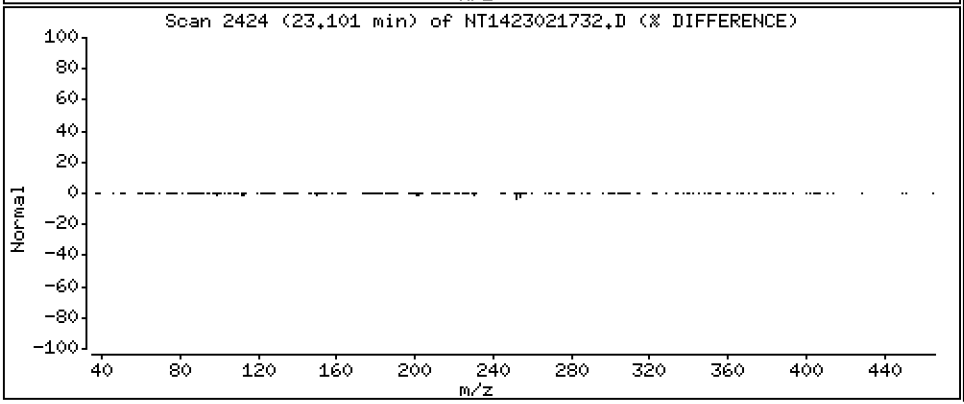












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

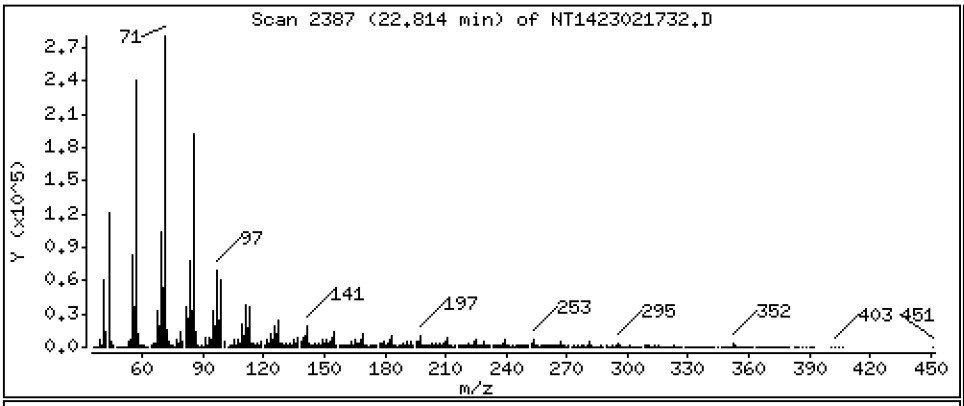
Operator: DSD

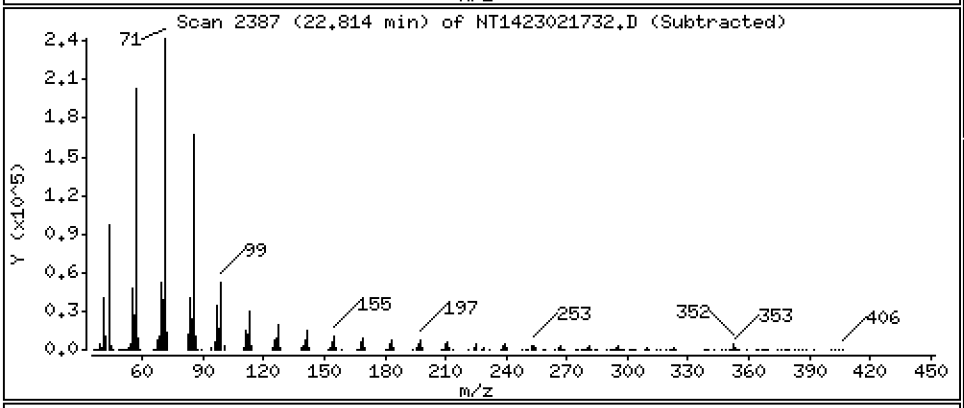
Column phase: ZB-5msi

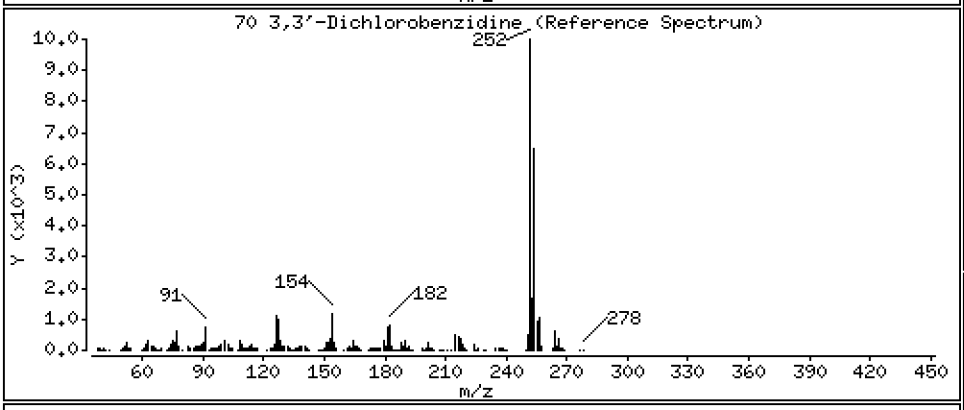
Column diameter: 0.25

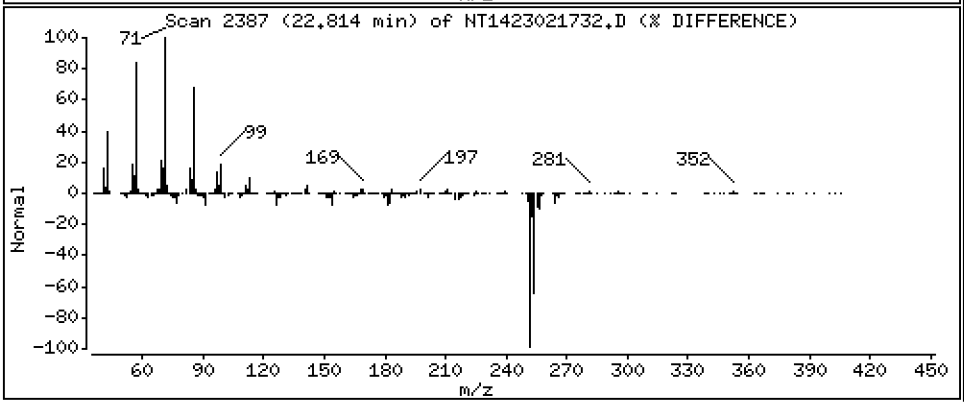
70 3,3'-Dichlorobenzidine

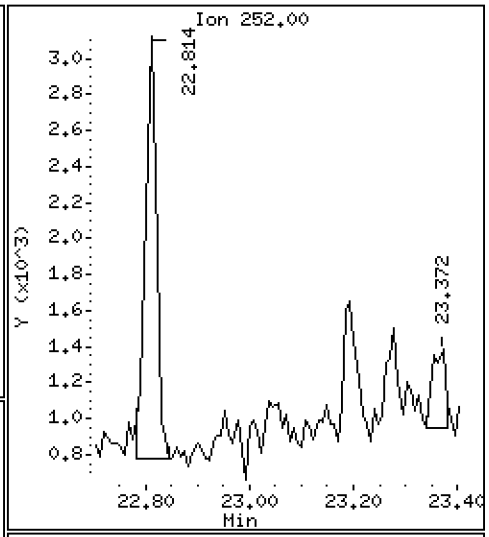
Concentration: 0.06183 ug/mL

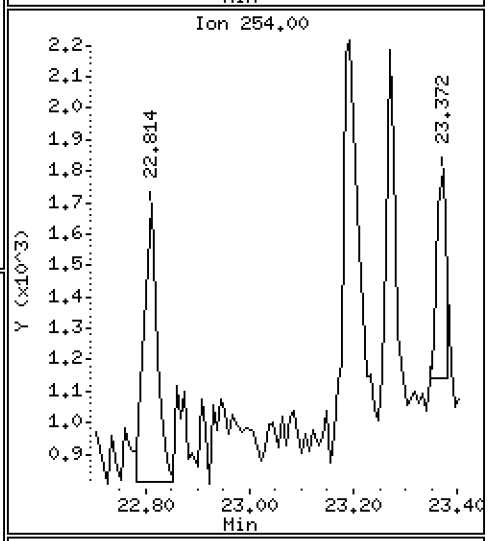


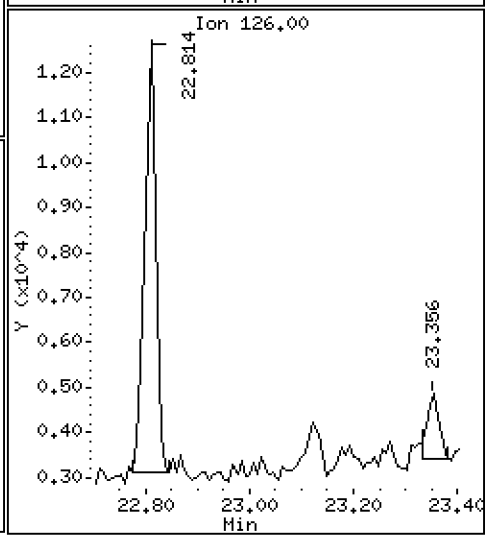












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

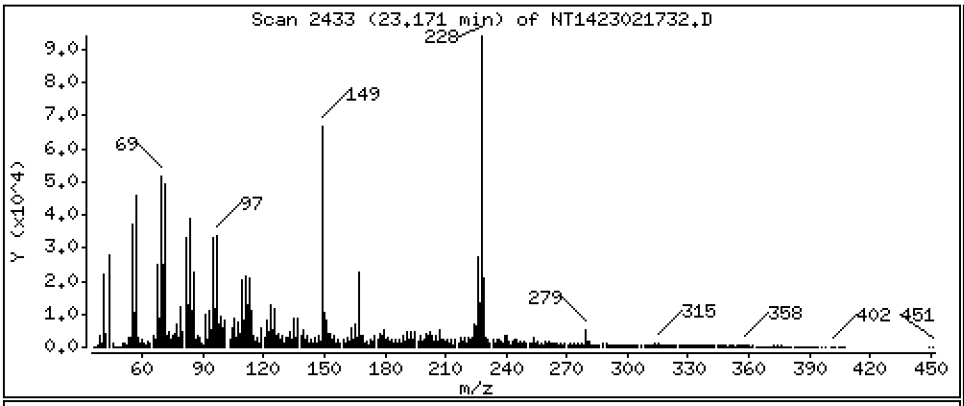
Operator: DSD

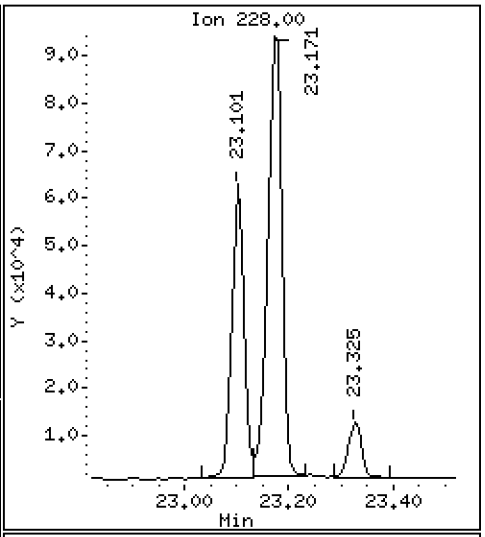
Column phase: ZB-5msi

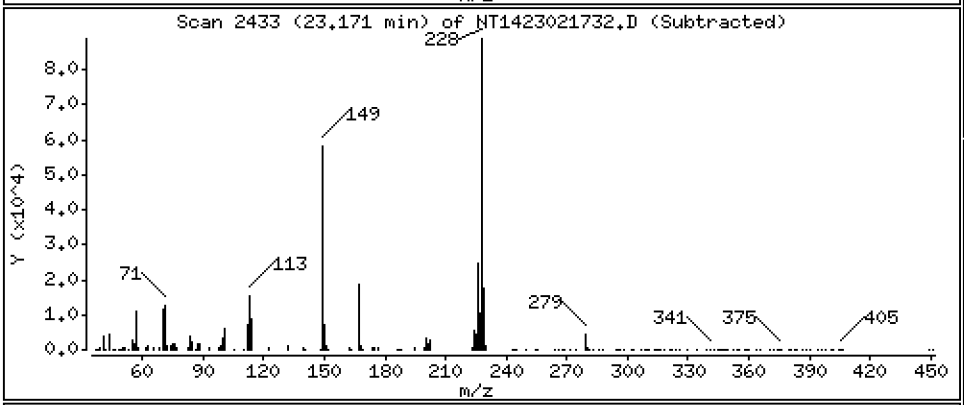
Column diameter: 0.25

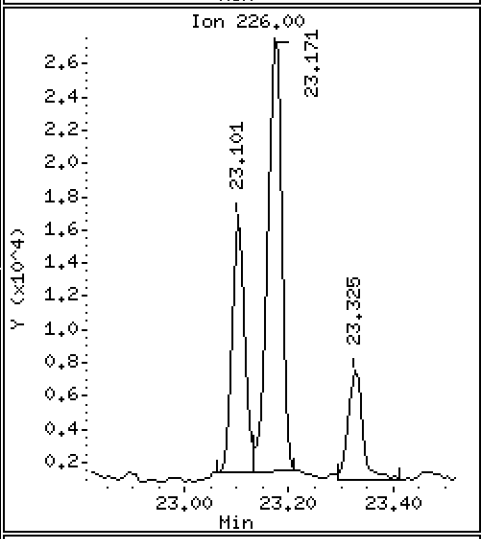
71 Chrysene

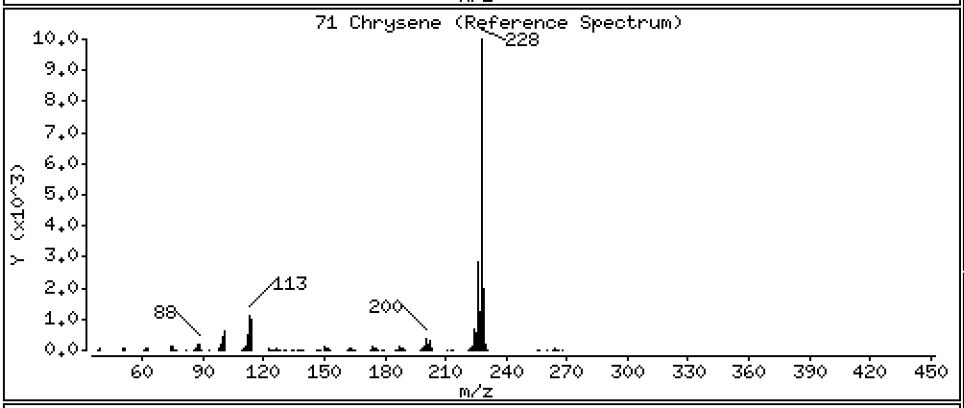
Concentration: 1.282 ug/mL

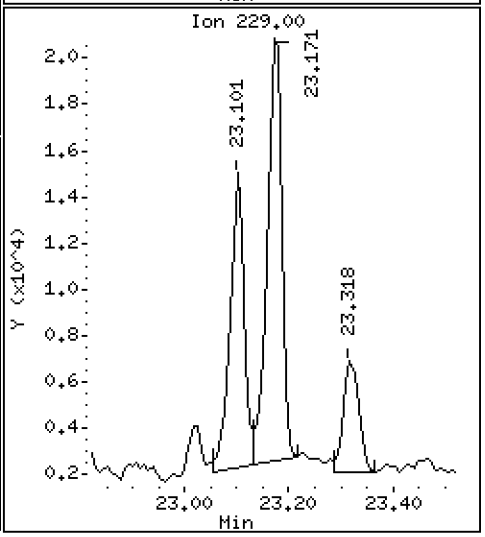


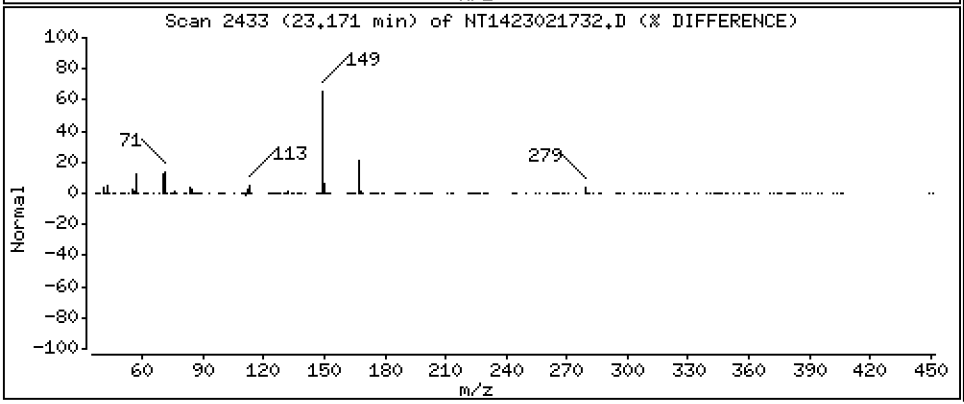












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

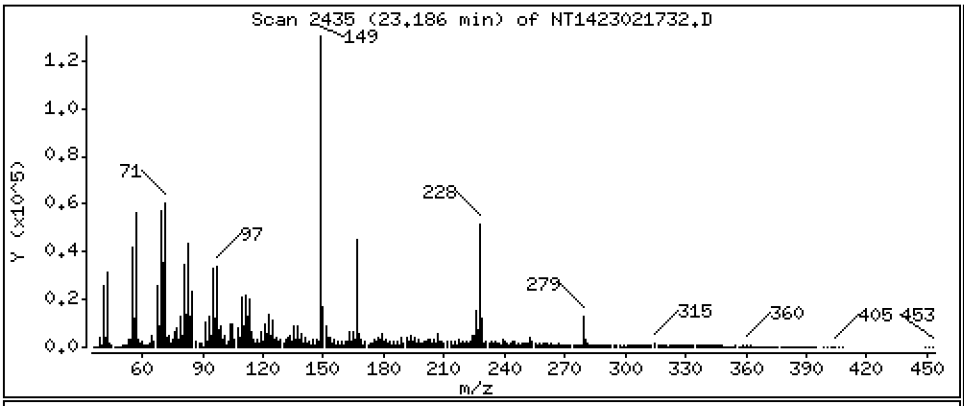
Operator: DSD

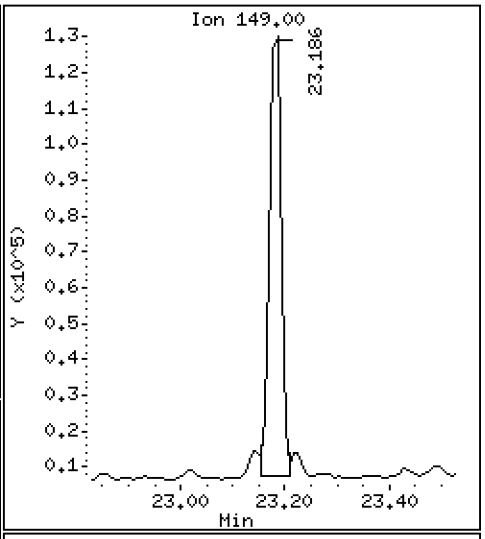
Column phase: ZB-5msi

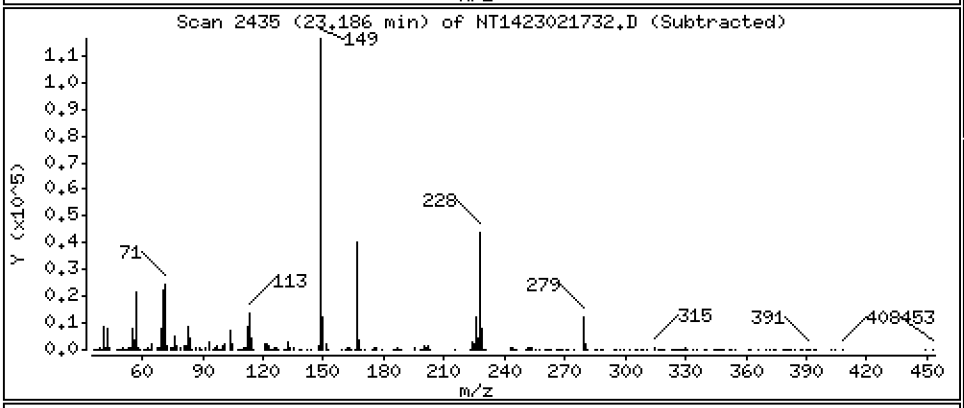
Column diameter: 0.25

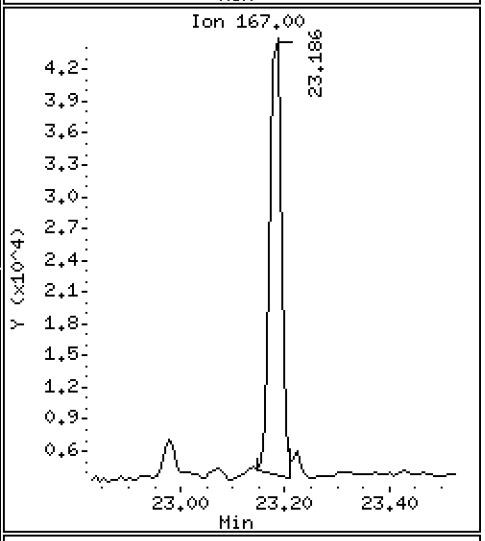
72 bis(2-Ethylhexyl)phthalate

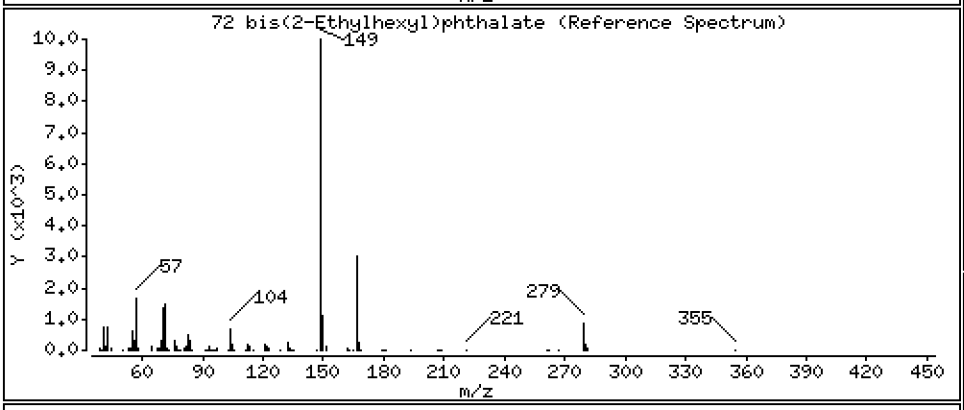
Concentration: 1.657 ug/mL

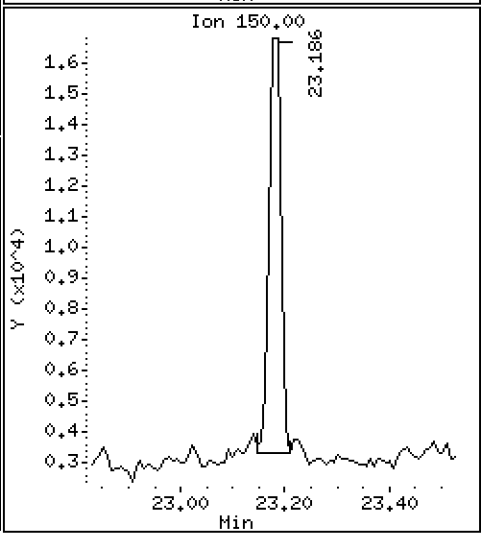


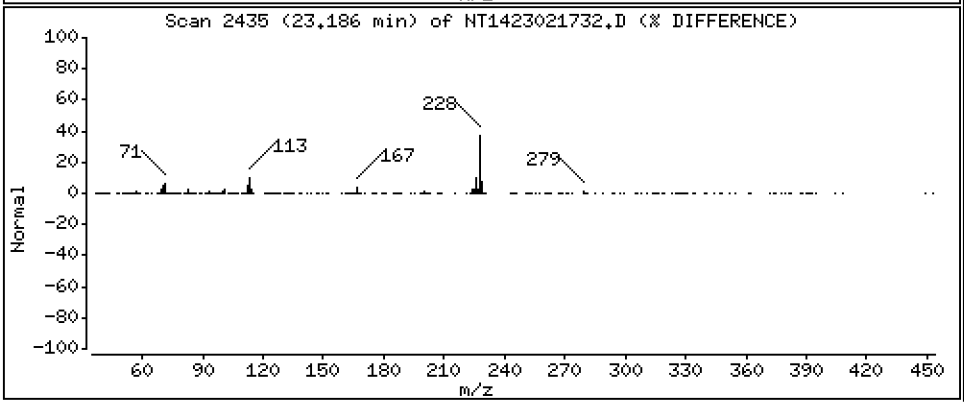












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

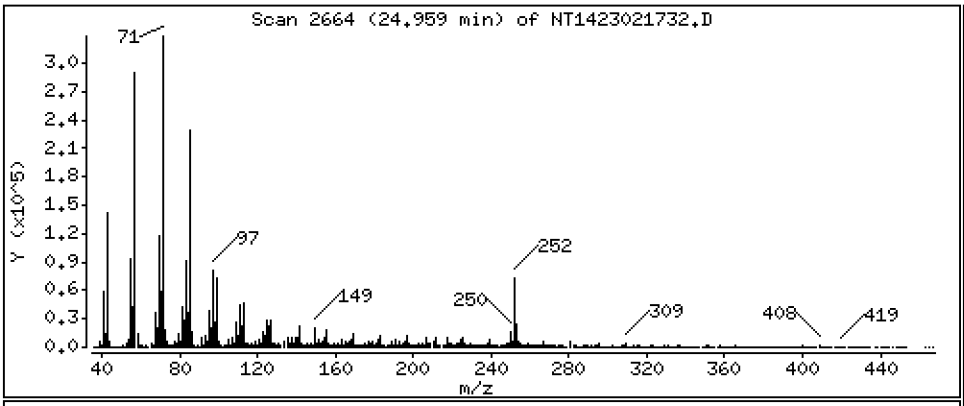
Operator: DSD

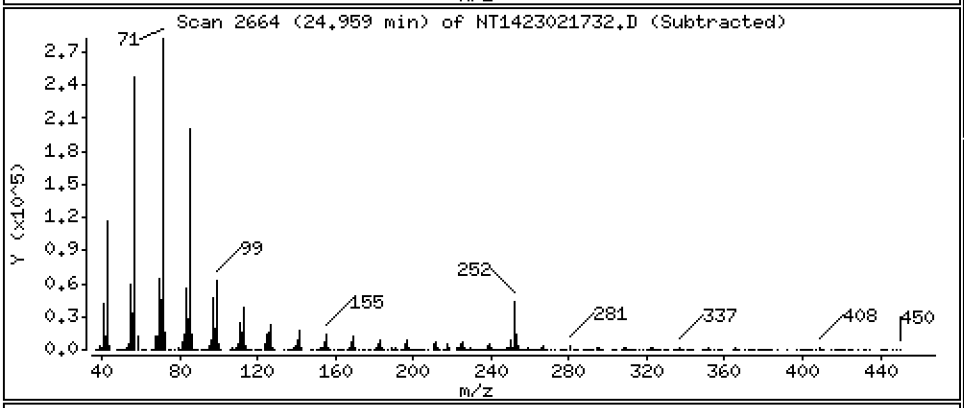
Column phase: ZB-5msi

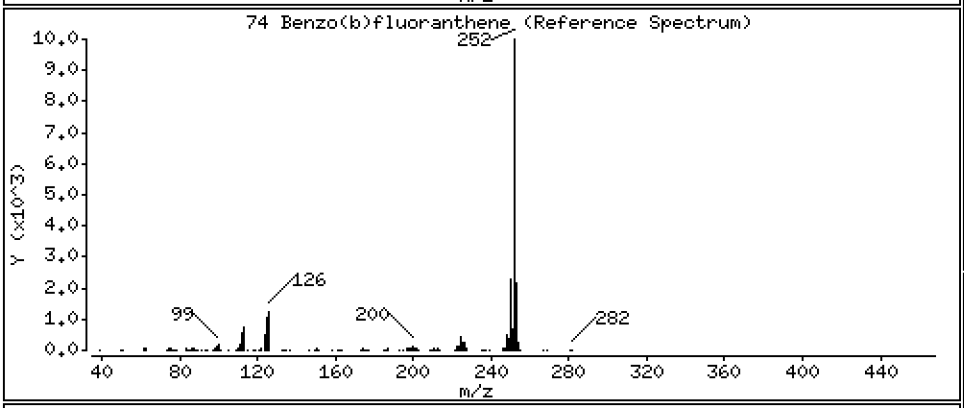
Column diameter: 0.25

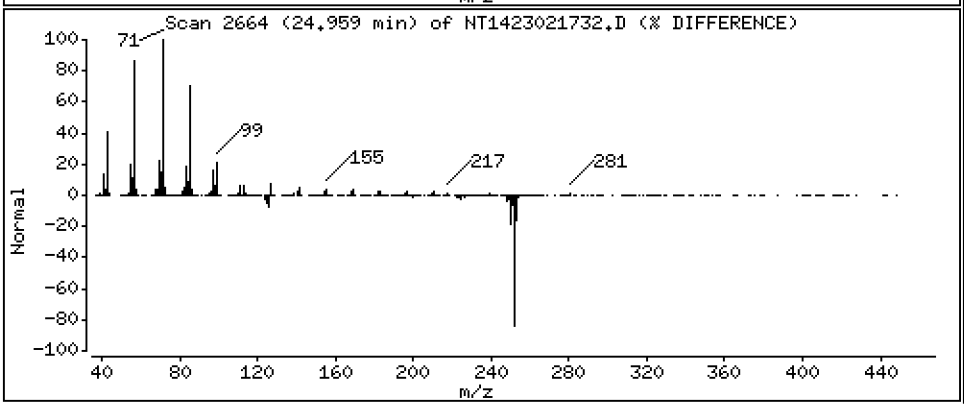
74 Benzo(b)fluoranthene

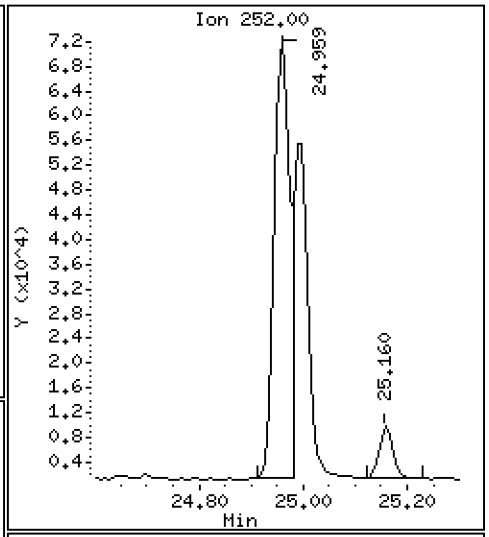
Concentration: 1.163 ug/mL

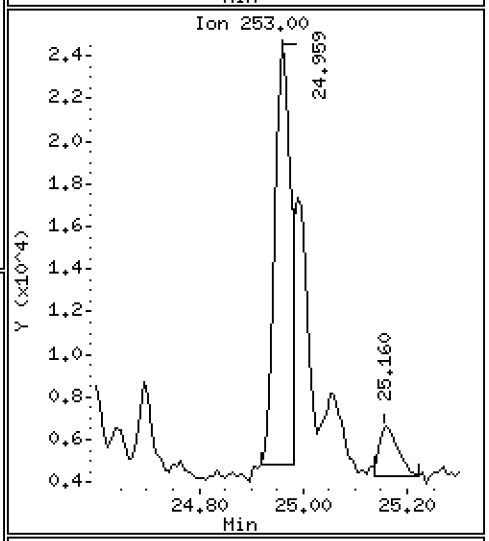


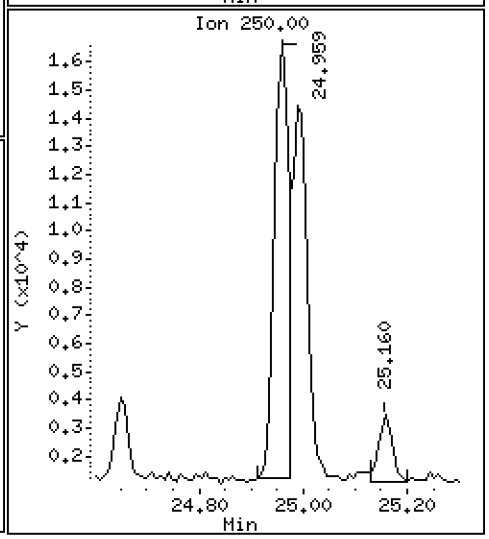












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

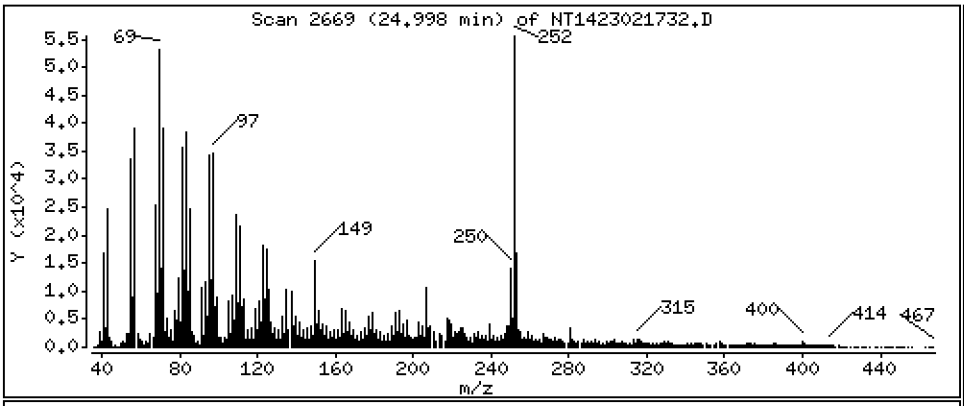
Operator: DSD

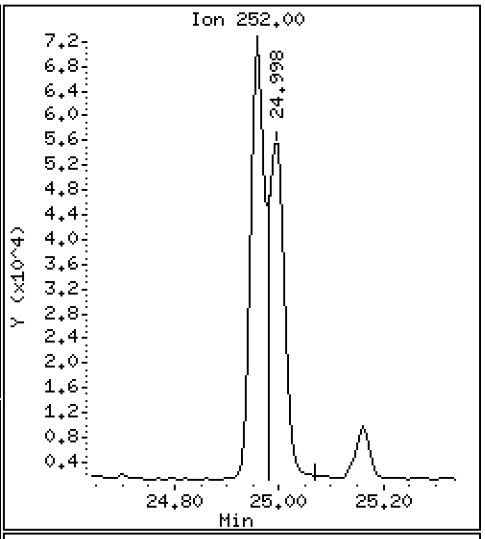
Column phase: ZB-5msi

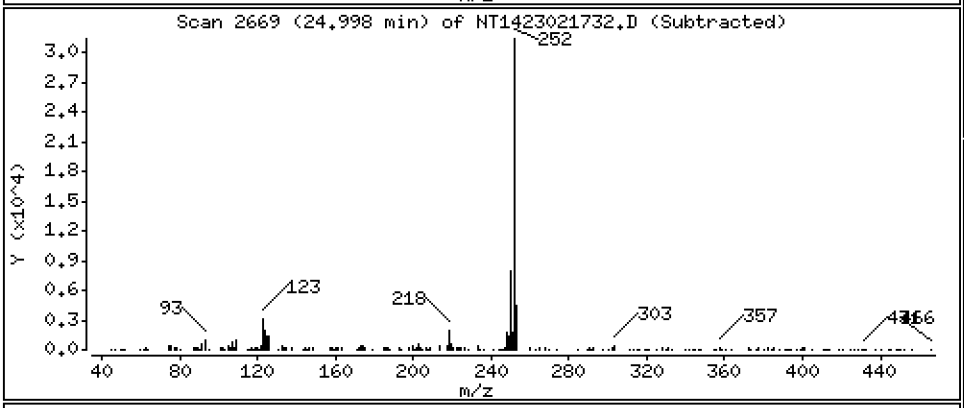
Column diameter: 0.25

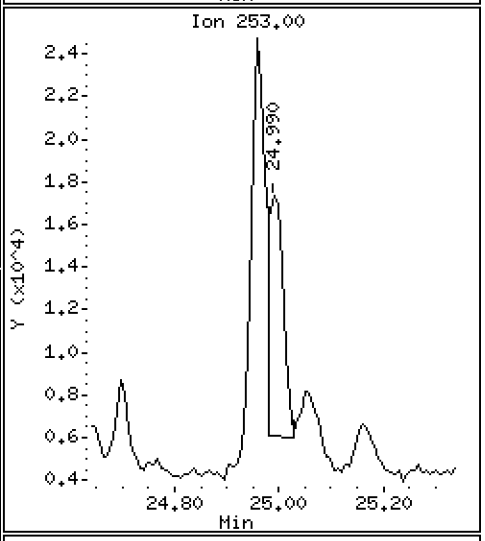
75 Benzo(k)fluoranthene

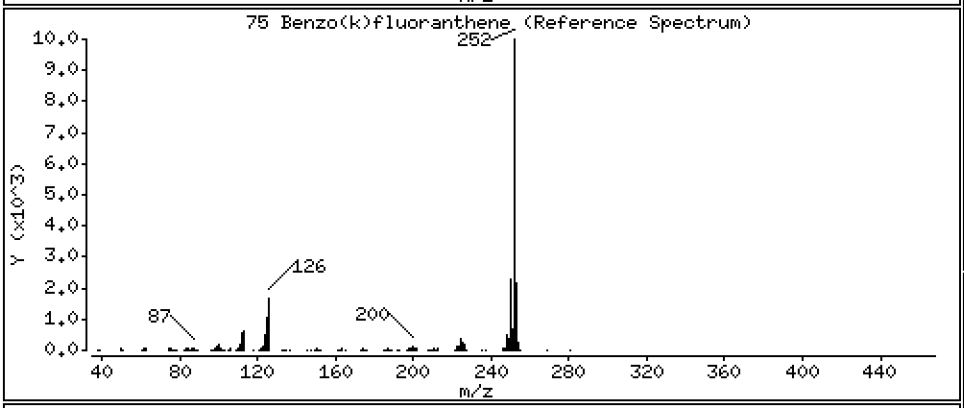
Concentration: 0.8072 ug/mL

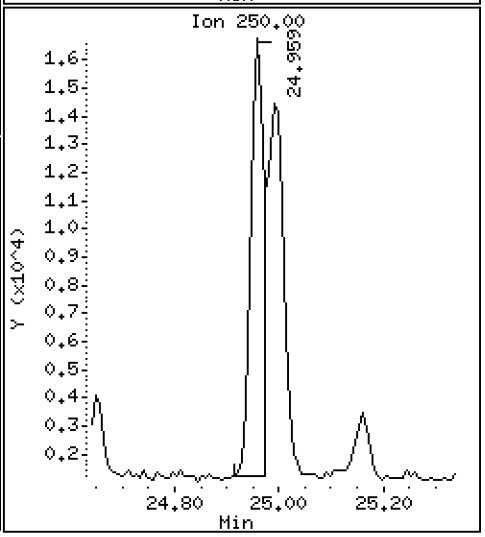


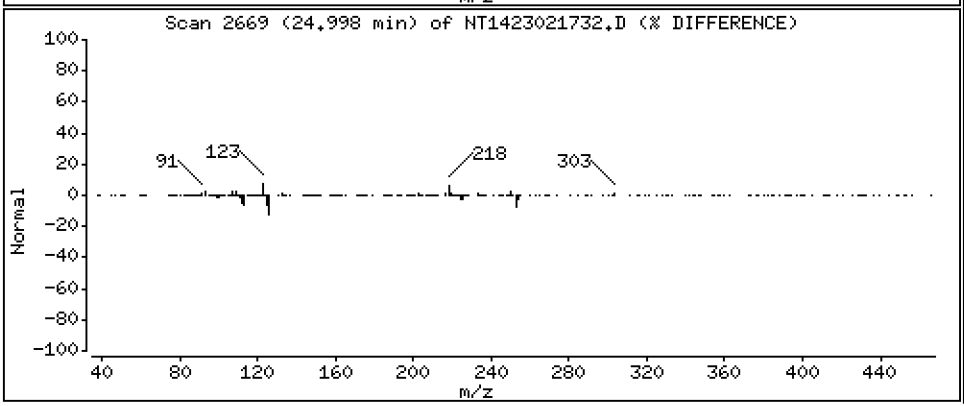












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

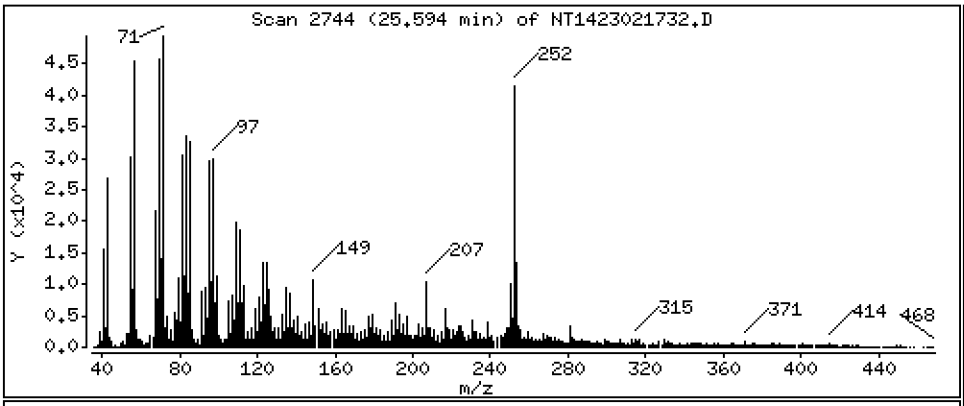
Operator: DSD

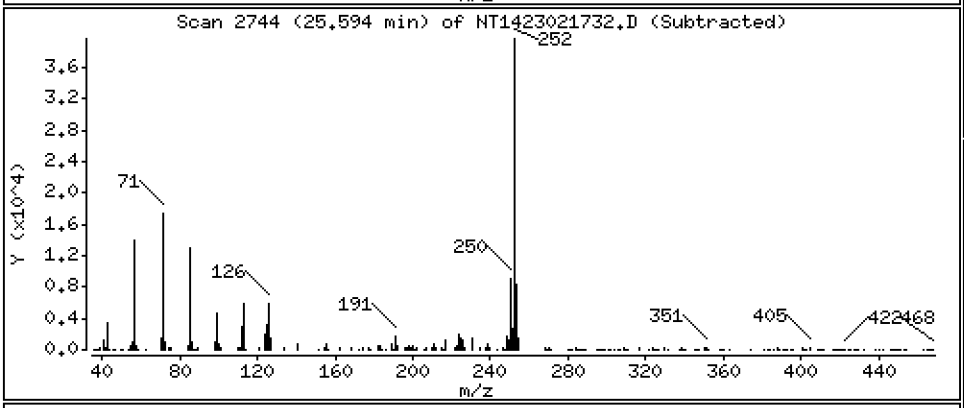
Column phase: ZB-5msi

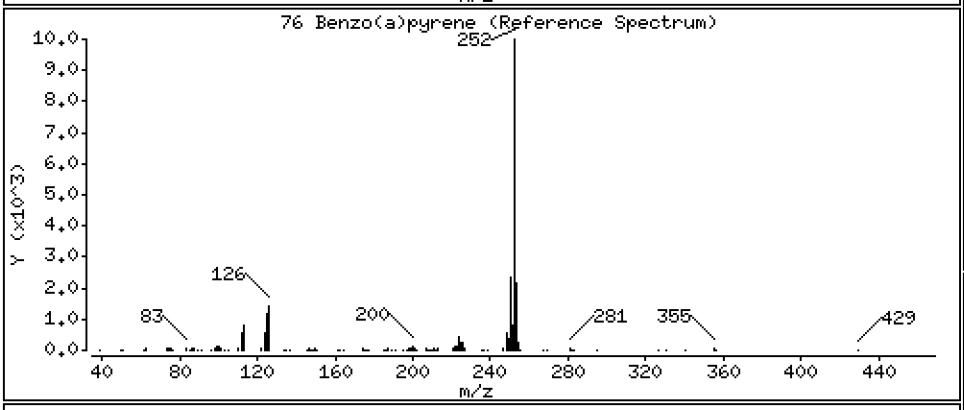
Column diameter: 0.25

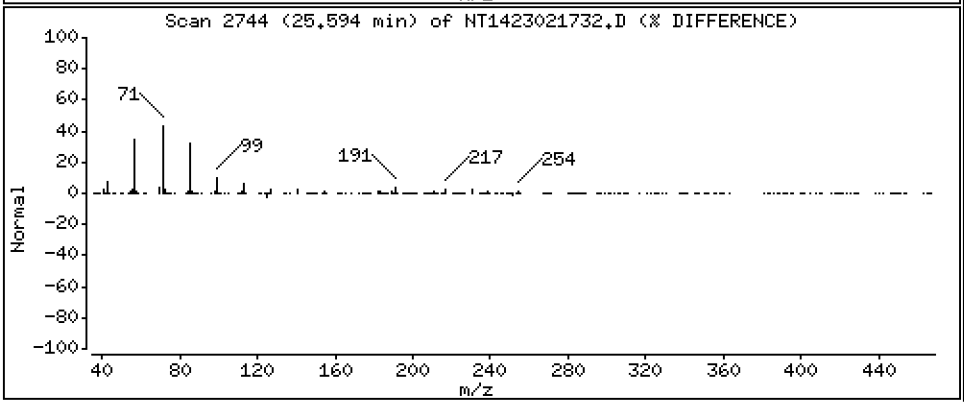
76 Benzo(a)pyrene

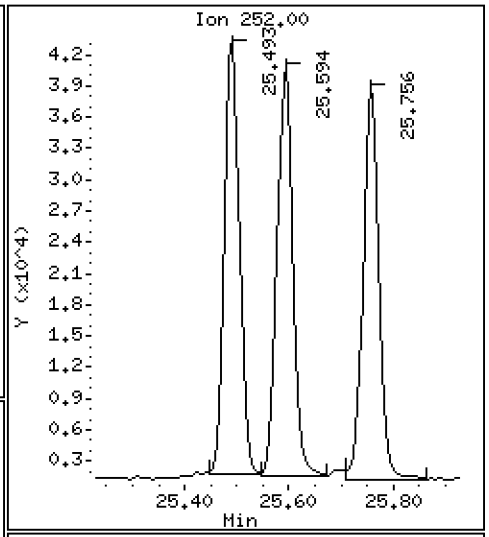
Concentration: 0.6519 ug/mL

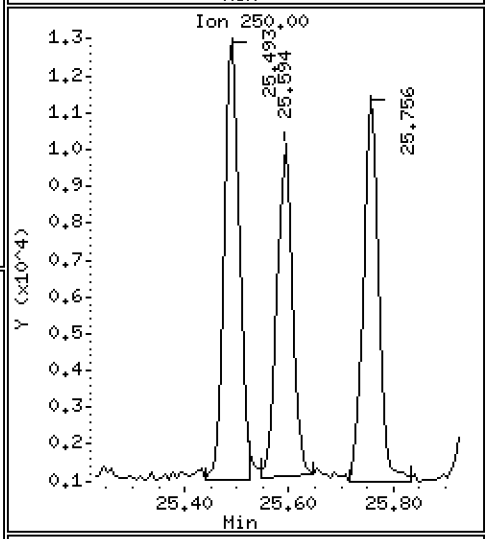


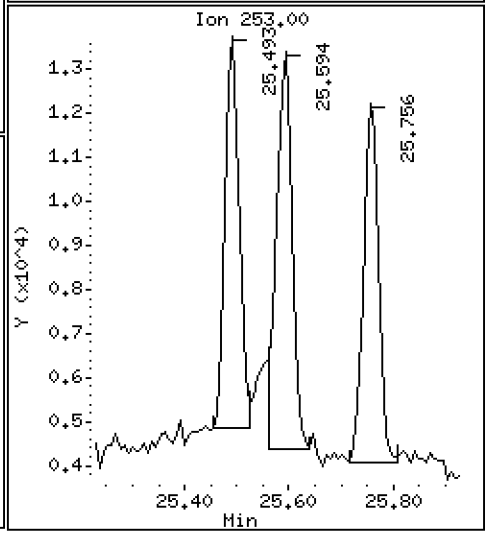












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

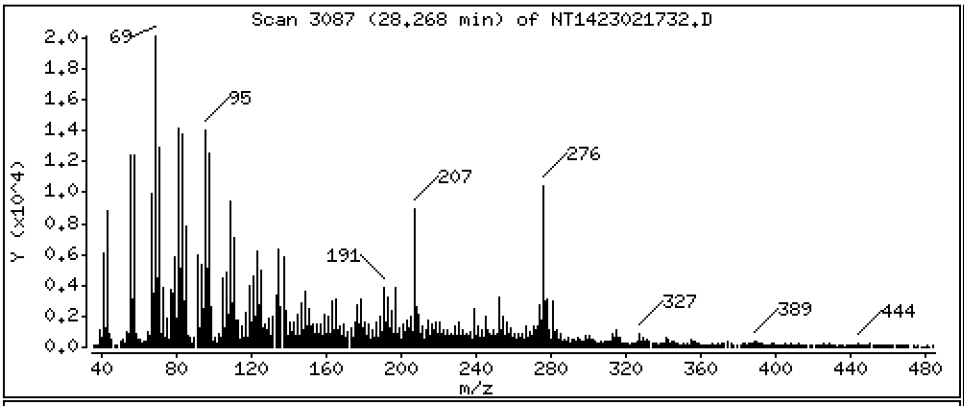
Operator: DSD

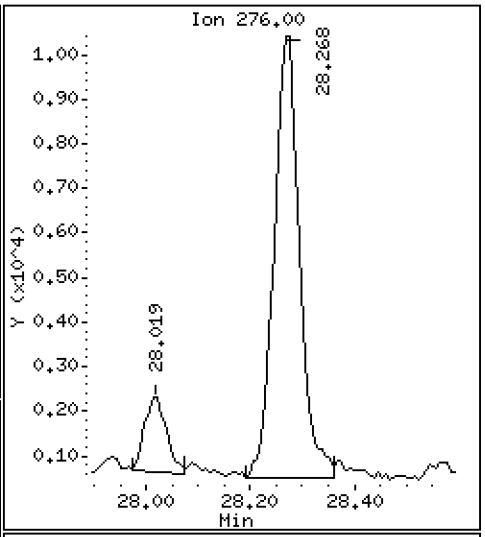
Column phase: ZB-5msi

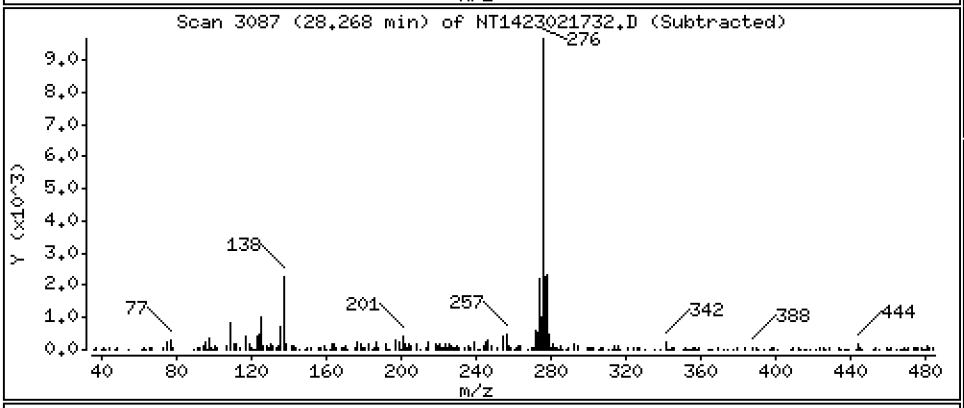
Column diameter: 0.25

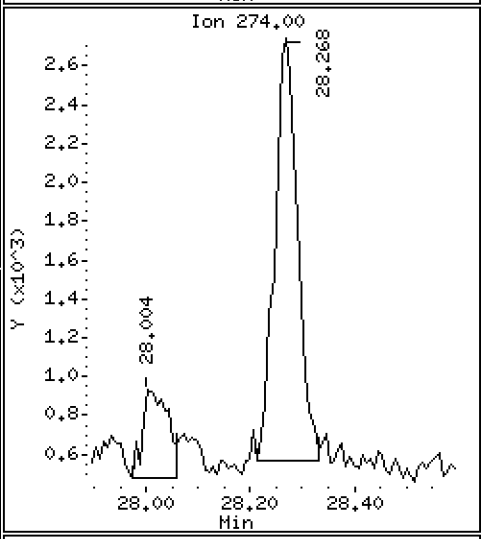
78 Indeno(1,2,3-cd)pyrene

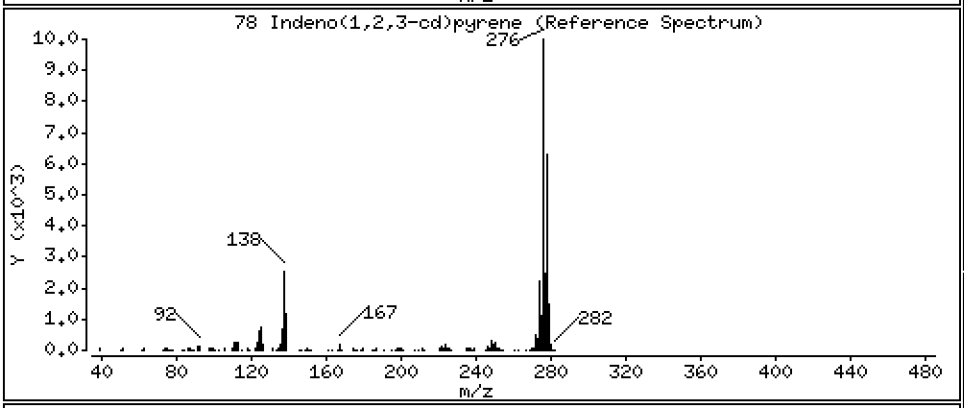
Concentration: 0.3353 ug/mL

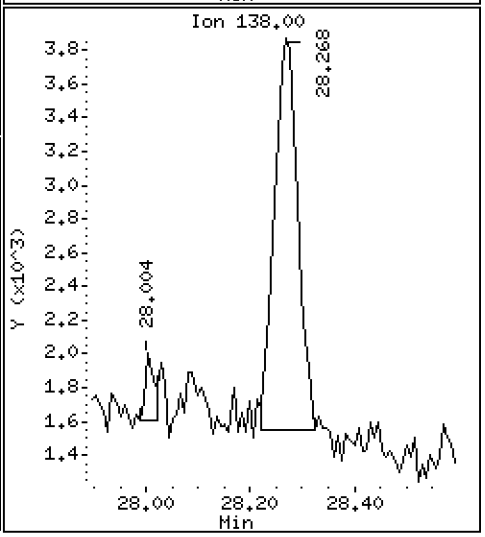


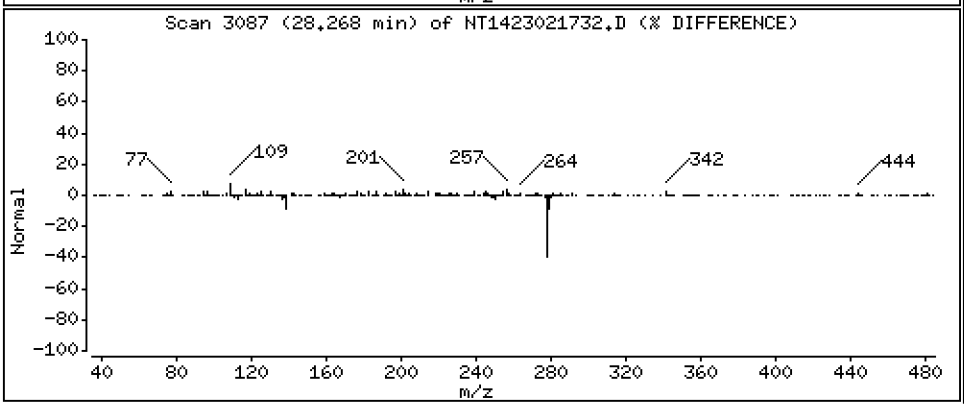












Date : 18-FEB-2023 05:18

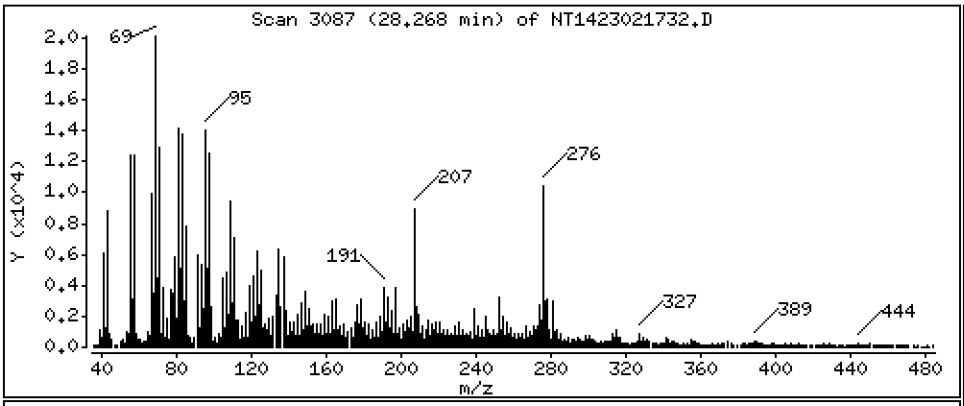
Client ID: Instrument: nt14.i

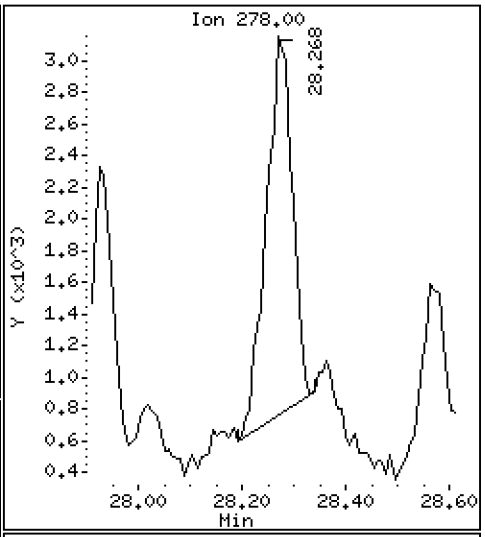
Sample Info: 23A0171-03

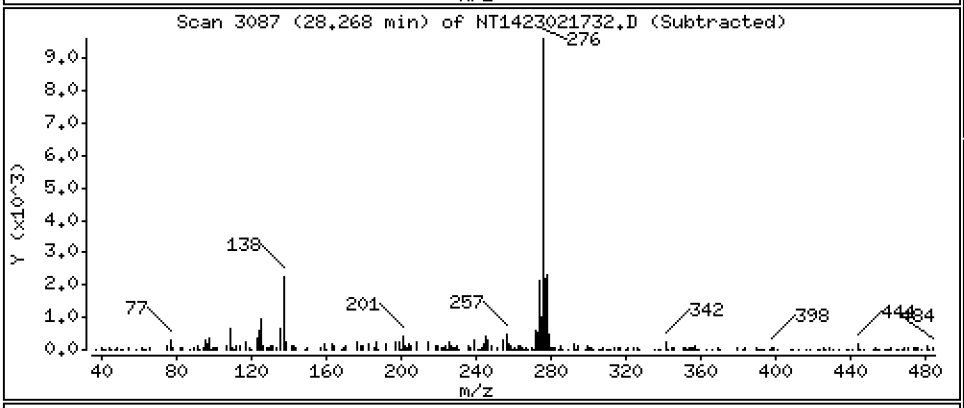
Operator: DSD

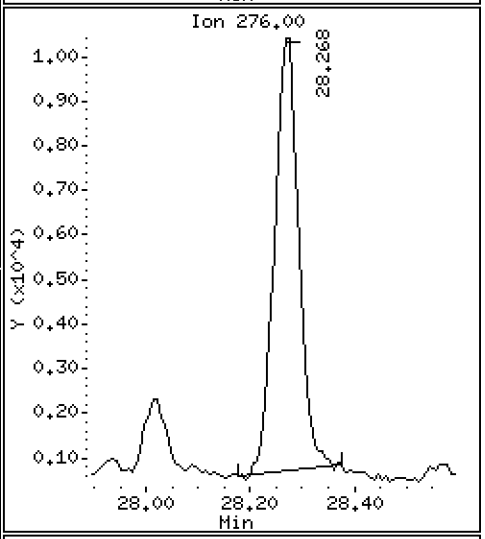
Column phase: ZB-5msi Column diameter: 0.25

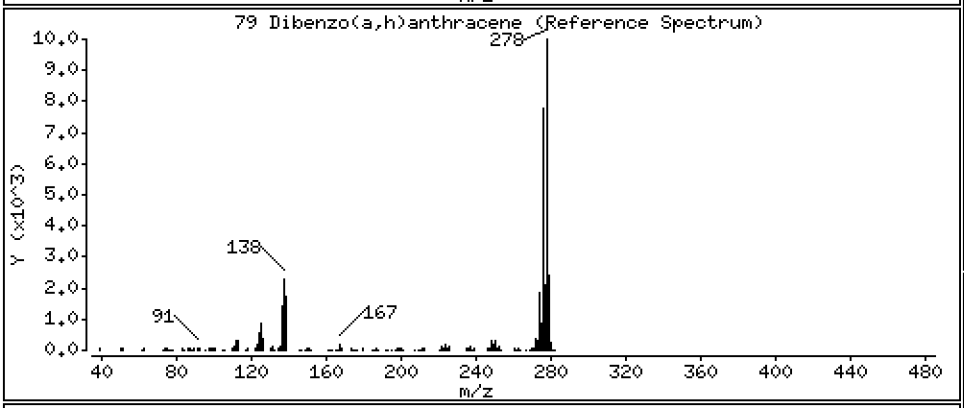
79 Dibenzo(a,h)anthracene Concentration: 0.09997 ug/mL

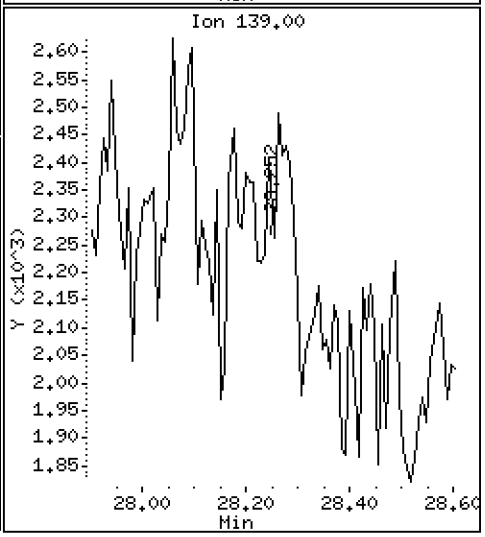


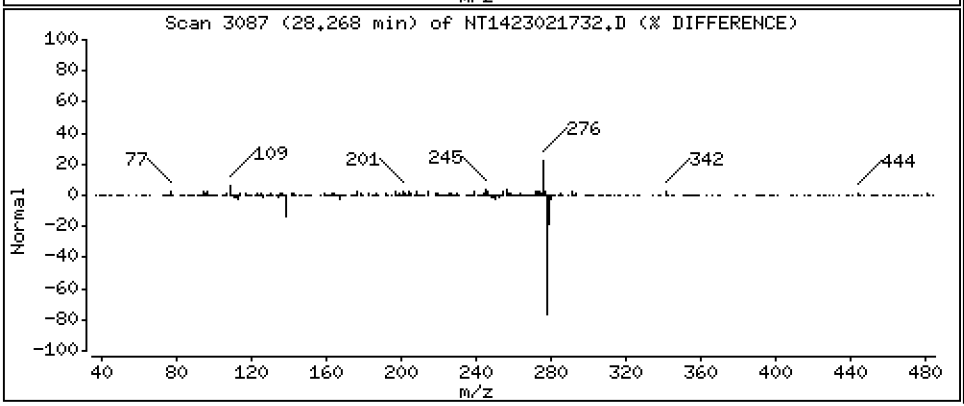












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

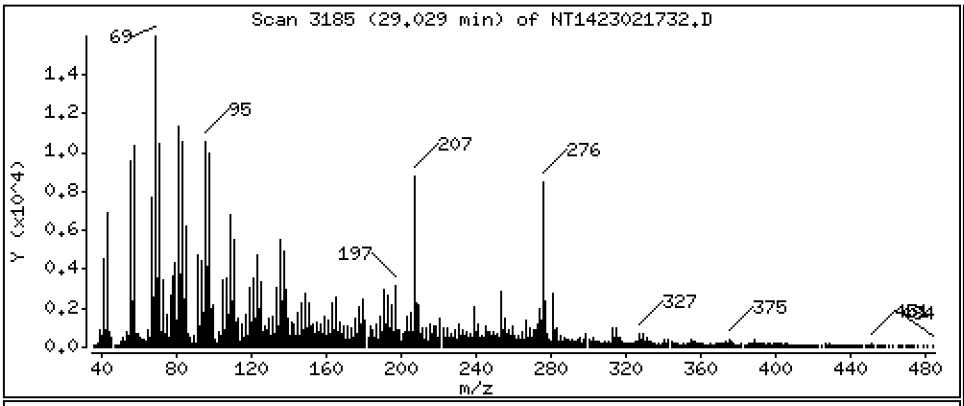
Operator: DSD

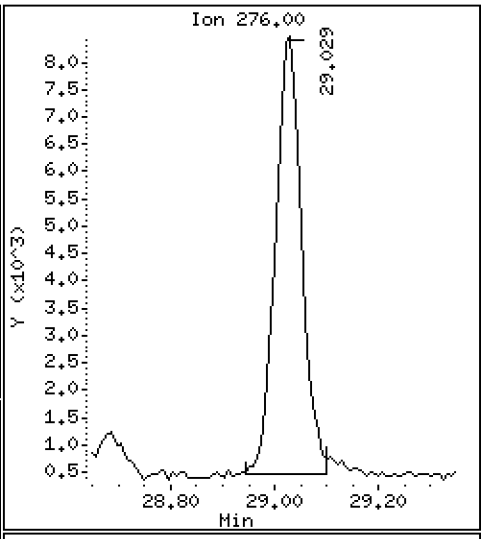
Column phase: ZB-5msi

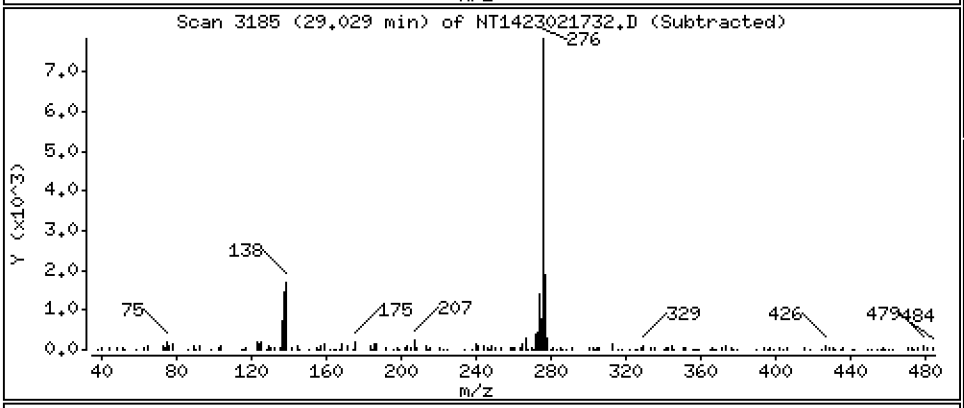
Column diameter: 0.25

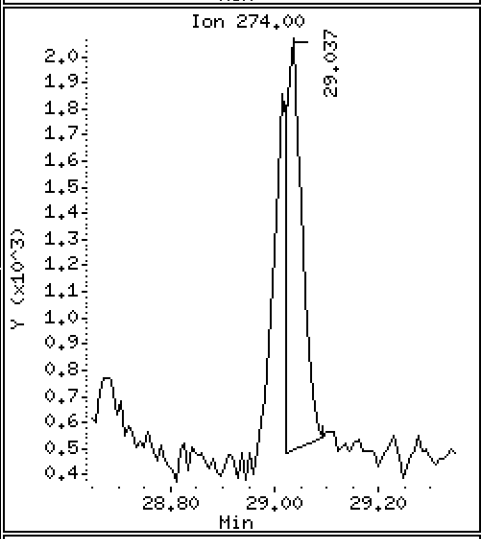
80 Benzo(g,h,i)perylene

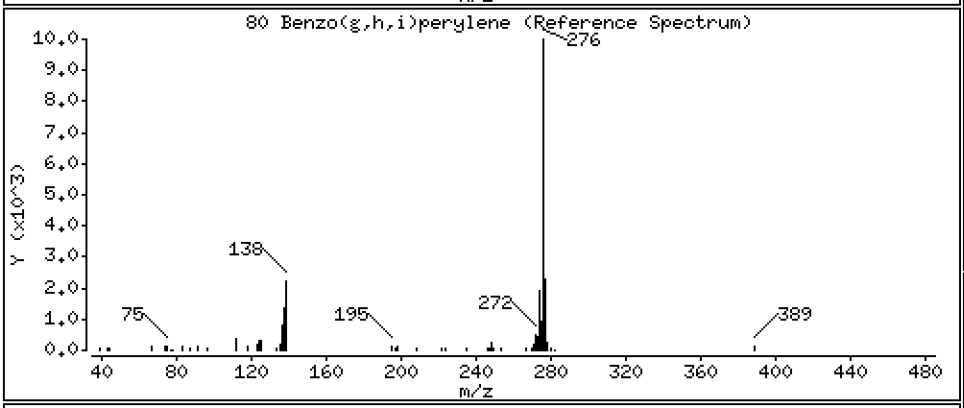
Concentration: 0.3477 ug/mL

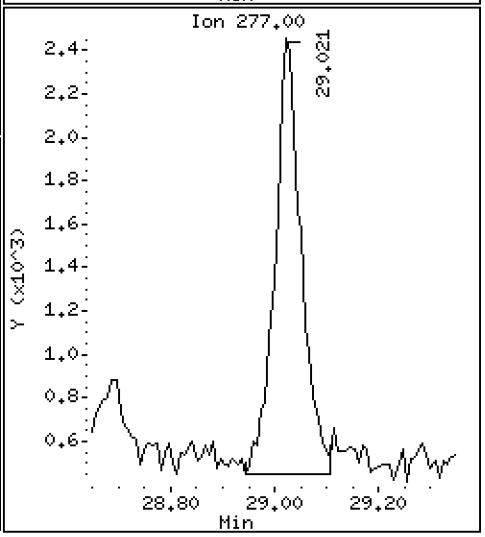


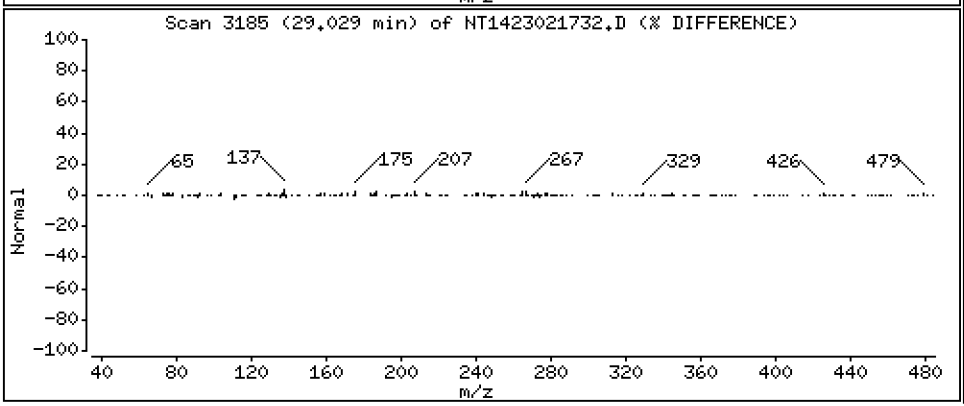












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

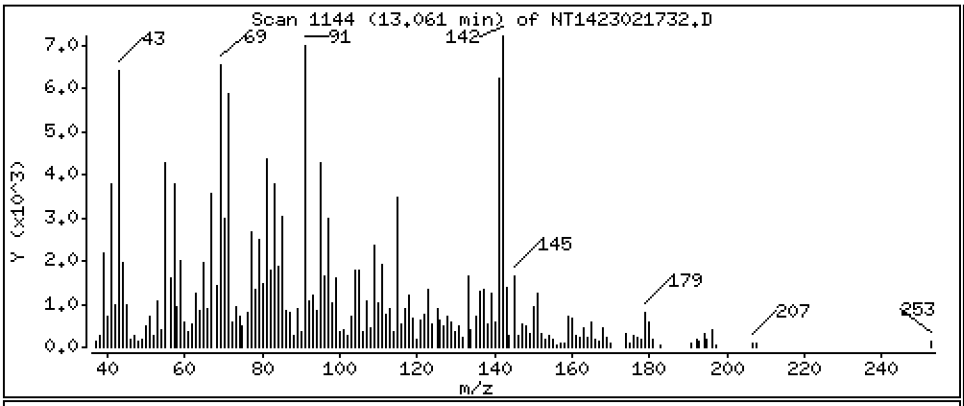
Operator: DSD

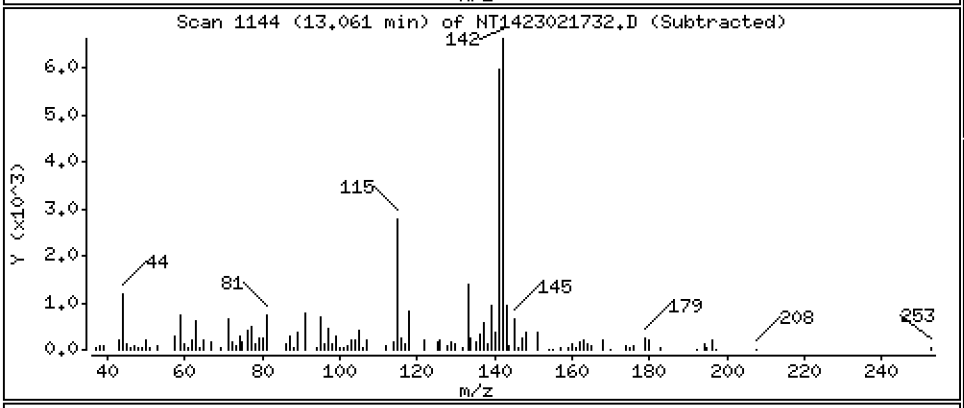
Column phase: ZB-5msi

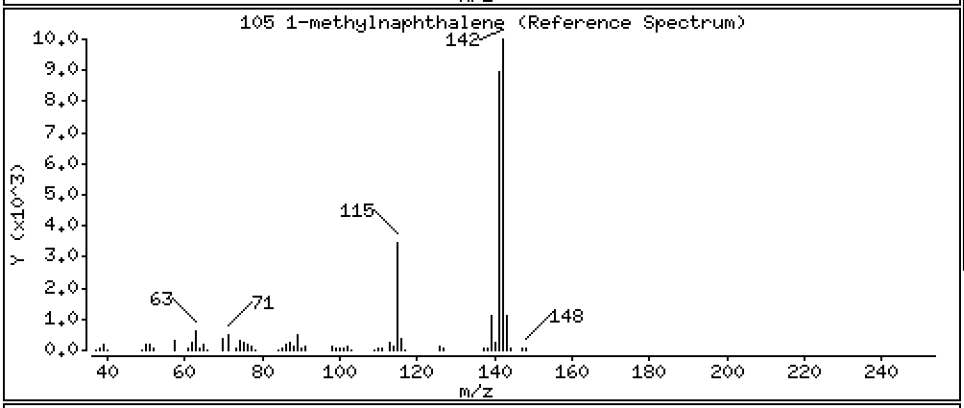
Column diameter: 0.25

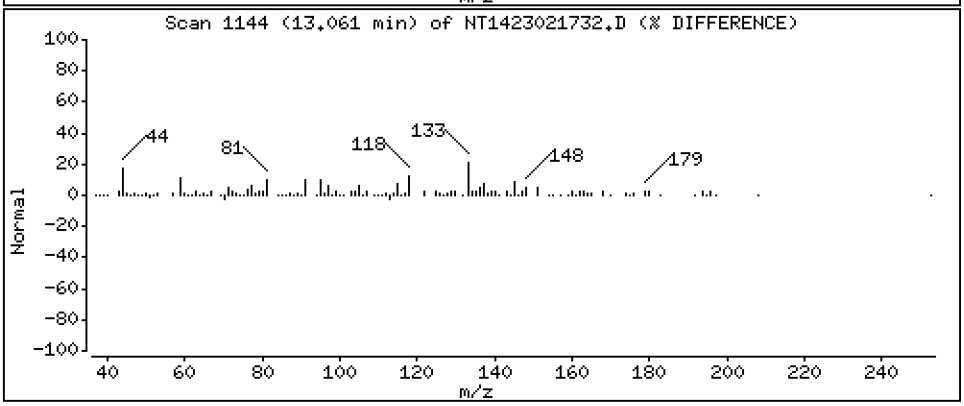
105 1-methylnaphthalene

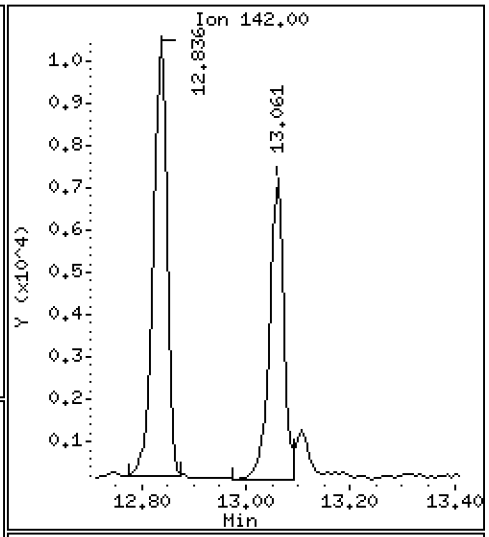
Concentration: 0.07223 ug/mL

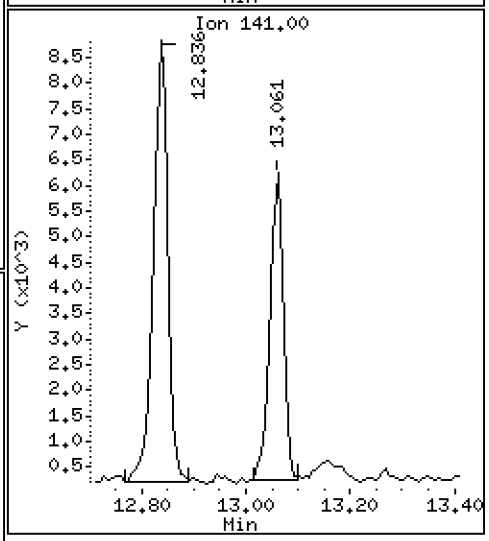












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

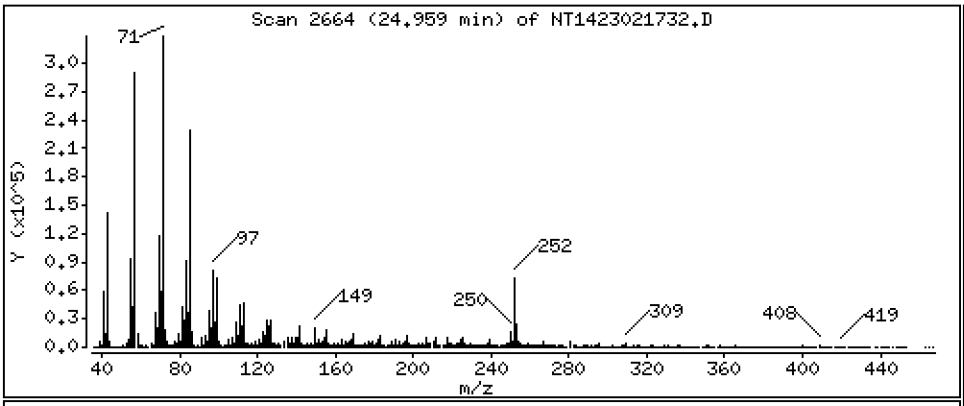
Operator: DSD

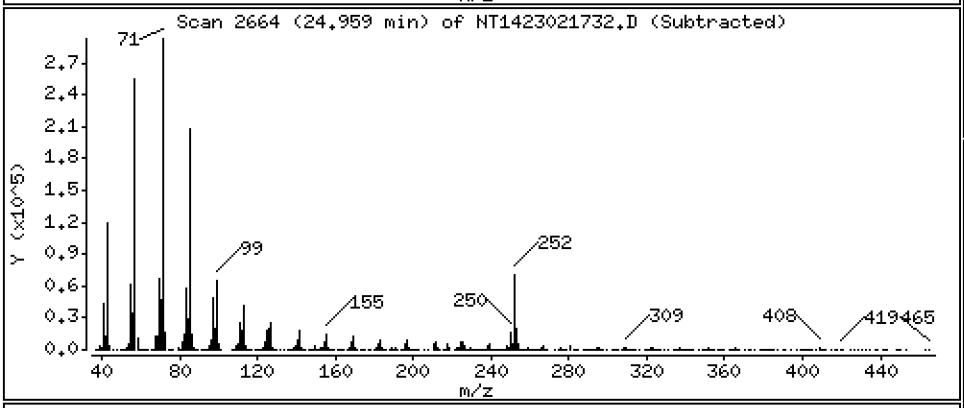
Column phase: ZB-5msi

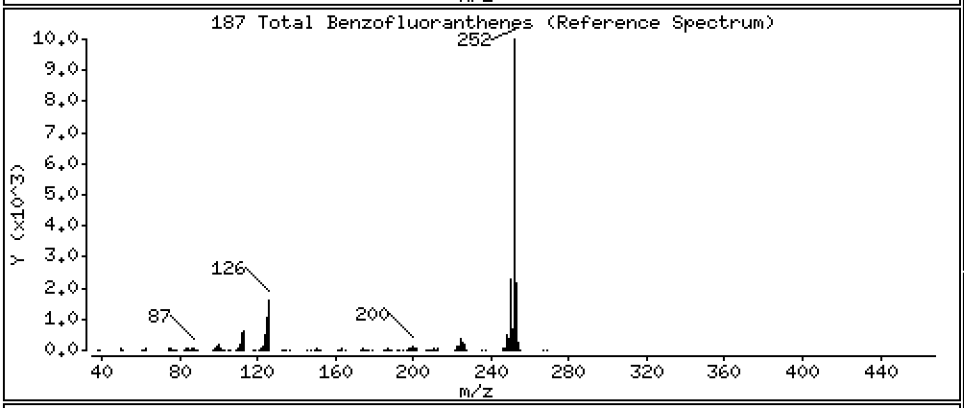
Column diameter: 0.25

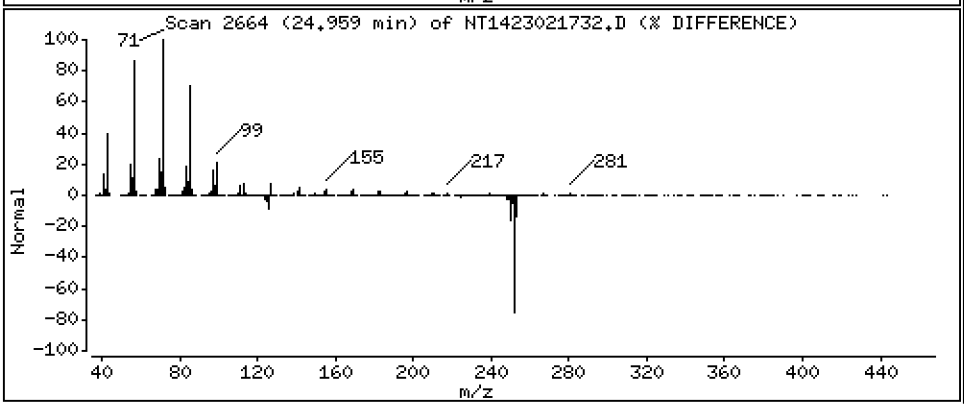
187 Total Benzofluoranthenes

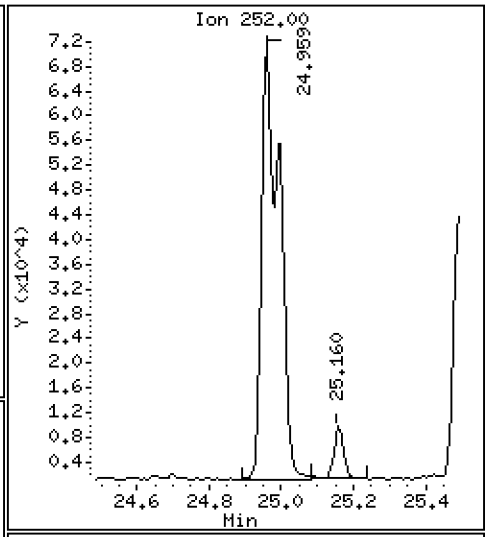
Concentration: 1.904 ug/mL

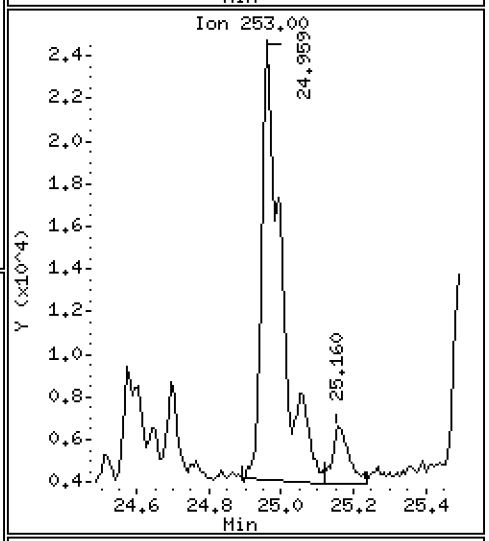


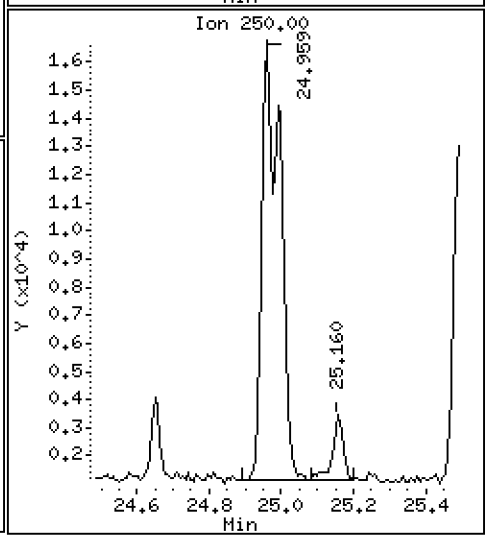












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230217A.b\NT1423021732.D
Lab Smp Id: 23A0171-03
Inj Date : 18-FEB-2023 05:18 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : 23A0171-03
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230217A.b\ABN.m
Meth Date : 01-Mar-2023 13:20 van Quant Type: ISTD
Cal Date : 16-FEB-2023 19:30 Cal File: NT1423021610.D
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.705	6.674	(0.753)	423476	5.55246	5.552
$	2 Phenol-d5	99	8.281	8.273	(0.930)	614414	5.07833	5.078
	3 Phenol	94	8.304	8.296	(0.933)	371598	2.90128	2.901
$	5 2-Chlorophenol-d4	132	8.544	8.536	(0.960)	455379	5.27498	5.275
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.900	8.900	(1.000)	285295	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.265	9.264	(1.041)	194473	3.00537	3.005
	12 1,2-Dichlorobenzene	146	9.296	9.288	(1.044)	1460	0.01533	0.01533(M)
	11 Benzyl alcohol	108	9.187	9.179	(1.032)	34238	0.47586	0.4759
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	9.684	9.676	(1.088)	22757	0.24097	0.2410
$	18 Nitrobenzene-d5	82	10.002	10.002	(0.878)	397832	3.32253	3.323
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.397	11.397	(1.000)	1036434	4.00000	
	28 Naphthalene	128	11.436	11.436	(1.003)	26713	0.10453	0.1045
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	12.836	12.836	(1.126)	17997	0.09403	0.09403
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$ 36	2-Fluorobiphenyl	172	13.625	13.625	(0.907)	786481	3.73071	3.731
37	2-Chloronaphthalene	162	Compound Not Detected.					
38	2-Nitroaniline	65	Compound Not Detected.					
39	Dimethylphthalate	163	14.539	14.538	(0.968)	24151	0.13419	0.1342
40	Acenaphthylene	152	14.709	14.709	(0.979)	10407	0.03965	0.03965
41	2,6-Dinitrotoluene	165	Compound Not Detected.					
* 42	Acenaphthene-d10	164	15.018	15.018	(1.000)	589233	4.00000	
43	3-Nitroaniline	138	Compound Not Detected.					
44	Acenaphthene	153	15.088	15.088	(1.005)	10012	0.06372	0.06372
45	2,4-Dinitrophenol	184	Compound Not Detected.					
46	Dibenzofuran	168	15.413	15.412	(1.026)	22259	0.08628	0.08628
47	4-Nitrophenol	109	Compound Not Detected.					
48	2,4-Dinitrotoluene	165	Compound Not Detected.					
50	Diethylphthalate	149	15.992	16.000	(1.065)	70423	0.29432	0.2943
49	Fluorene	166	16.131	16.131	(1.074)	25717	0.09532	0.09532
51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
52	4-Nitroaniline	138	Compound Not Detected.					
53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$ 55	2,4,6-Tribromophenol	330	16.663	16.663	(1.110)	181389	5.28694	5.287
56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
57	Hexachlorobenzene	284	Compound Not Detected.					
58	Pentachlorophenol	266	Compound Not Detected.					
* 59	Phenanthrene-d10	188	18.062	18.062	(1.000)	967672	4.00000	
60	Phenanthrene	178	18.108	18.108	(1.003)	130909	0.56298	0.5630
61	Anthracene	178	18.201	18.201	(1.008)	47585	0.20656	0.2066
62	Carbazole	167	18.542	18.534	(1.027)	15518	0.07423	0.07423
63	Di-n-butylphthalate	149	19.354	19.346	(1.072)	21128	0.09048	0.09048
64	Fluoranthene	202	20.515	20.499	(0.887)	308500	1.57144	1.571
65	Pyrene	202	20.932	20.924	(0.905)	286914	1.38213	1.382
$ 66	Terphenyl-d14	244	21.227	21.218	(0.918)	577870	3.92057	3.921
67	Butylbenzylphthalate	149	22.156	22.148	(0.958)	11127	0.16260	0.1626
68	Benzo(a)anthracene	228	23.100	23.092	(0.999)	98670	0.67761	0.6776
* 69	Chrysene-d12	240	23.131	23.123	(1.000)	455036	4.00000	
70	3,3'-Dichlorobenzidine	252	22.814	23.054	(0.986)	2756	0.06183	0.06183
71	Chrysene	228	23.170	23.170	(1.002)	167947	1.28226	1.282
72	bis(2-Ethylhexyl)phthalate	149	23.186	23.177	(0.960)	182611	1.65733	1.657
* 134	Di-n-octylphthalate-d4	153	24.161	24.153	(1.000)	647250	4.00000	
73	Di-n-octylphthalate	149	Compound Not Detected.					
74	Benzo(b)fluoranthene	252	24.958	24.950	(0.971)	151723	1.16265	1.163
75	Benzo(k)fluoranthene	252	24.997	24.989	(0.973)	112561	0.80722	0.8072(M)
76	Benzo(a)pyrene	252	25.593	25.577	(0.996)	80646	0.65185	0.6519
* 77	Perylene-d12	264	25.702	25.694	(1.000)	411263	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	28.267	28.244	(1.100)	34126	0.33529	0.3353
79	Dibenzo(a,h)anthracene	278	28.267	28.259	(1.100)	8373	0.09997	0.09997(M)
80	Benzo(g,h,i)perylene	276	29.029	28.997	(1.129)	28705	0.34771	0.3477
90	N-Nitrosodimethylamine	74	Compound Not Detected.					
91	Aniline	93	Compound Not Detected.					
93	Benzidine	184	Compound Not Detected.					
103	Pyridine	79	Compound Not Detected.					
105	1-methylnaphthalene	142	13.060	13.060	(1.146)	12978	0.07223	0.07223
111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.958	24.989	(0.971)	242521	1.90352	1.904
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021732.D
Lab Smp Id: 23A0171-03
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230217A.b\ABN.m
Misc Info:

Calibration Date: 17-FEB-2023
Calibration Time: 20:19
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT				
	COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF	
8	1,4-Dichlorobenze	351756	175878	703512	285295	-18.89	
27	Naphthalene-d8	1299383	649692	2598766	1036434	-20.24	
42	Acenaphthene-d10	808045	404023	1616090	589233	-27.08	
59	Phenanthrene-d10	1607740	803870	3215480	967672	-39.81	
69	Chrysene-d12	876381	438191	1752762	455036	-48.08	
134	Di-n-octylphthala	1545452	772726	3090904	647250	-58.12	<-
77	Perylene-d12	639717	319859	1279434	411263	-35.71	

		RT LIMIT				
	COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8	1,4-Dichlorobenze	8.90	8.40	9.40	8.90	0.00
27	Naphthalene-d8	11.40	10.90	11.90	11.40	0.00
42	Acenaphthene-d10	15.02	14.52	15.52	15.02	0.00
59	Phenanthrene-d10	18.06	17.56	18.56	18.06	0.00
69	Chrysene-d12	23.12	22.62	23.62	23.13	0.04
134	Di-n-octylphthala	24.15	23.65	24.65	24.16	0.03
77	Perylene-d12	25.69	25.19	26.19	25.70	0.03

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

REVIEW SUMMARY FOR FILE - NT1423021732.D

Lab ID: 23A0171-03
nt14.i, ABN.m, 18-FEB-2023 05:18

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

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.986	0.997	-0.0107	3,3'-Dichlorobenzidine

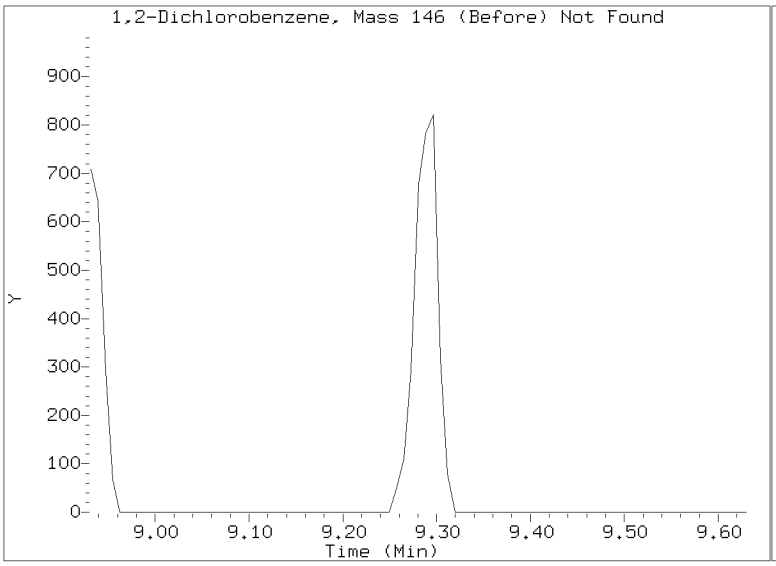
RRT check based on Ccal File: NT1423021717.D

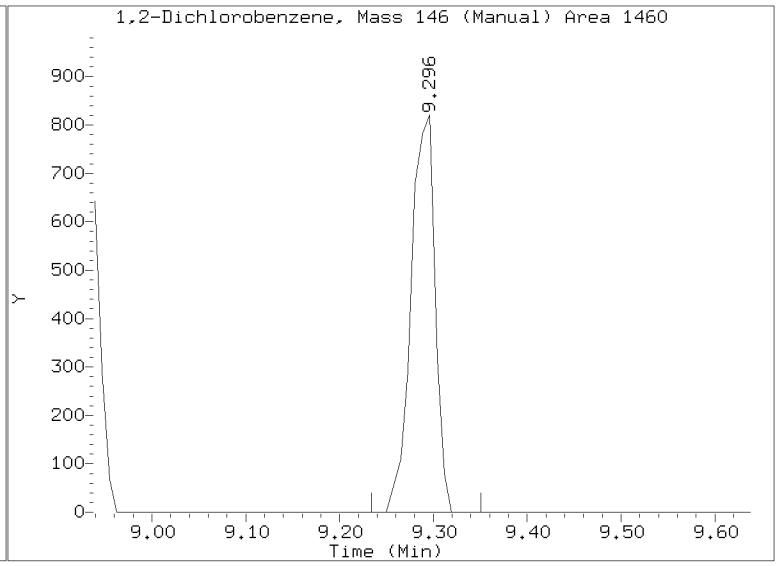
On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

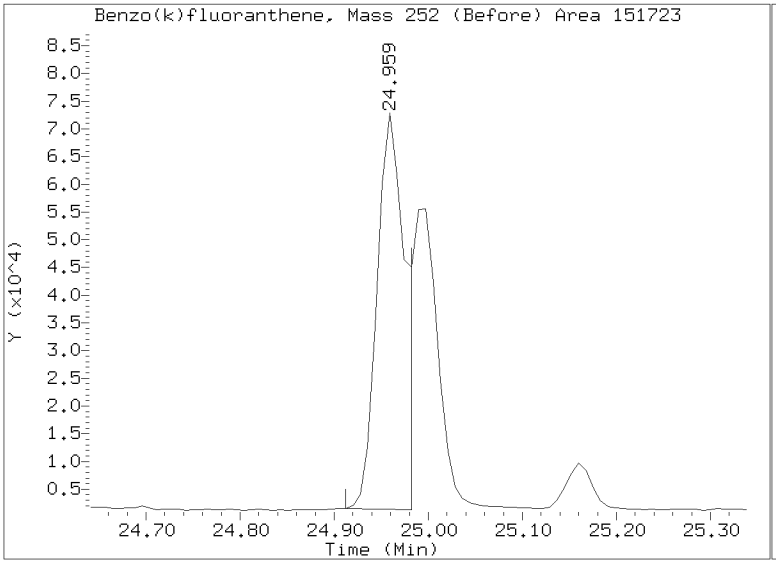
* Only compounds listed in the work order have been verified by the analyst *

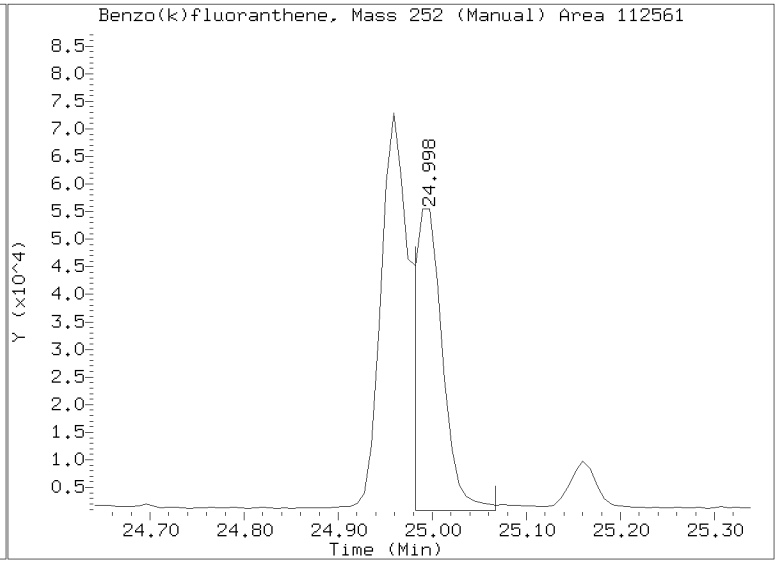
Quant Ion Manual Peak Adjustment Report

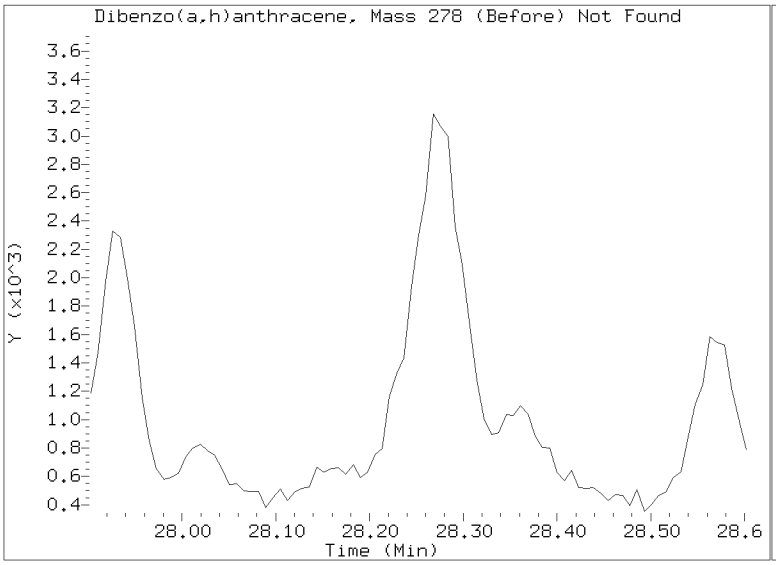
Datafile: //target/share/chem3/nt14.i/20230217A.b/NT1423021732.D
Injection Date: 18-FEB-2023 05:18
Lab ID:23A0171-03 Client ID:
Report Date: 03/01/2023 13:23

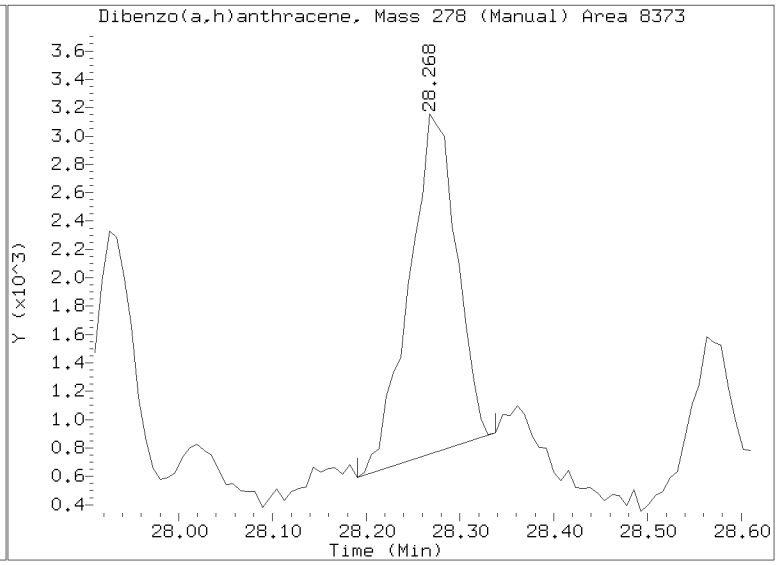












Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1262

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-03RE1 A	SDG:	23A0171
Sampled:	12/08/22 10:36	Prepared:	01/18/23 13:47	File ID:	NT1423022128.D
% Solids:	43.54	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/22/23 05:43
Batch:	BLA0339	Sequence:	SLB0291	Initial/Final:	23.27 g Wet / 1 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	GB00046
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	300		4.3	19.7
106-44-5	4-Methylphenol	1	26.1		7.3	19.7
91-20-3	Naphthalene	1	10.4	J	4.2	19.7
91-57-6	2-Methylnaphthalene	1	8.7	J	4.5	19.7
208-96-8	Acenaphthylene	1	19.7	U	6.2	19.7
131-11-3	Dimethylphthalate	1	11.8	J	4.3	19.7
83-32-9	Acenaphthene	1	6.8	J	5.2	19.7
132-64-9	Dibenzofuran	1	19.7	U	13.9	19.7
86-73-7	Fluorene	1	19.7	U	14.4	19.7
85-01-8	Phenanthrene	1	56.3		8.6	19.7
120-12-7	Anthracene	1	21.0		7.1	19.7
206-44-0	Fluoranthene	1	147		6.0	19.7
129-00-0	Pyrene	1	145		5.6	19.7
85-68-7	Butylbenzylphthalate	1	19.7	U	9.3	19.7
56-55-3	Benzo(a)anthracene	1	69.7		5.9	19.7
218-01-9	Chrysene	1	128		6.0	19.7
117-81-7	bis(2-Ethylhexyl)phthalate	1	193	Q	5.4	49.3
	Benzofluoranthenes, Total	1	187		9.9	39.5
50-32-8	Benzo(a)pyrene	1	66.3		4.2	19.7
193-39-5	Indeno(1,2,3-cd)pyrene	1	47.3		14.5	19.7
53-70-3	Dibenzo(a,h)anthracene	1	19.7	U	17.0	19.7
191-24-2	Benzo(g,h,i)perylene	1	56.3		13.4	19.7

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	740.25	560	75.6	27 - 120	
Phenol-d5	740.25	518	70.0	29 - 120	
2-Chlorophenol-d4	740.25	568	76.8	31 - 120	
1,2-Dichlorobenzene-d4	493.50	298	60.5	32 - 120	
Nitrobenzene-d5	493.50	337	68.3	30 - 120	
2-Fluorobiphenyl	493.50	353	71.6	35 - 120	

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1262

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

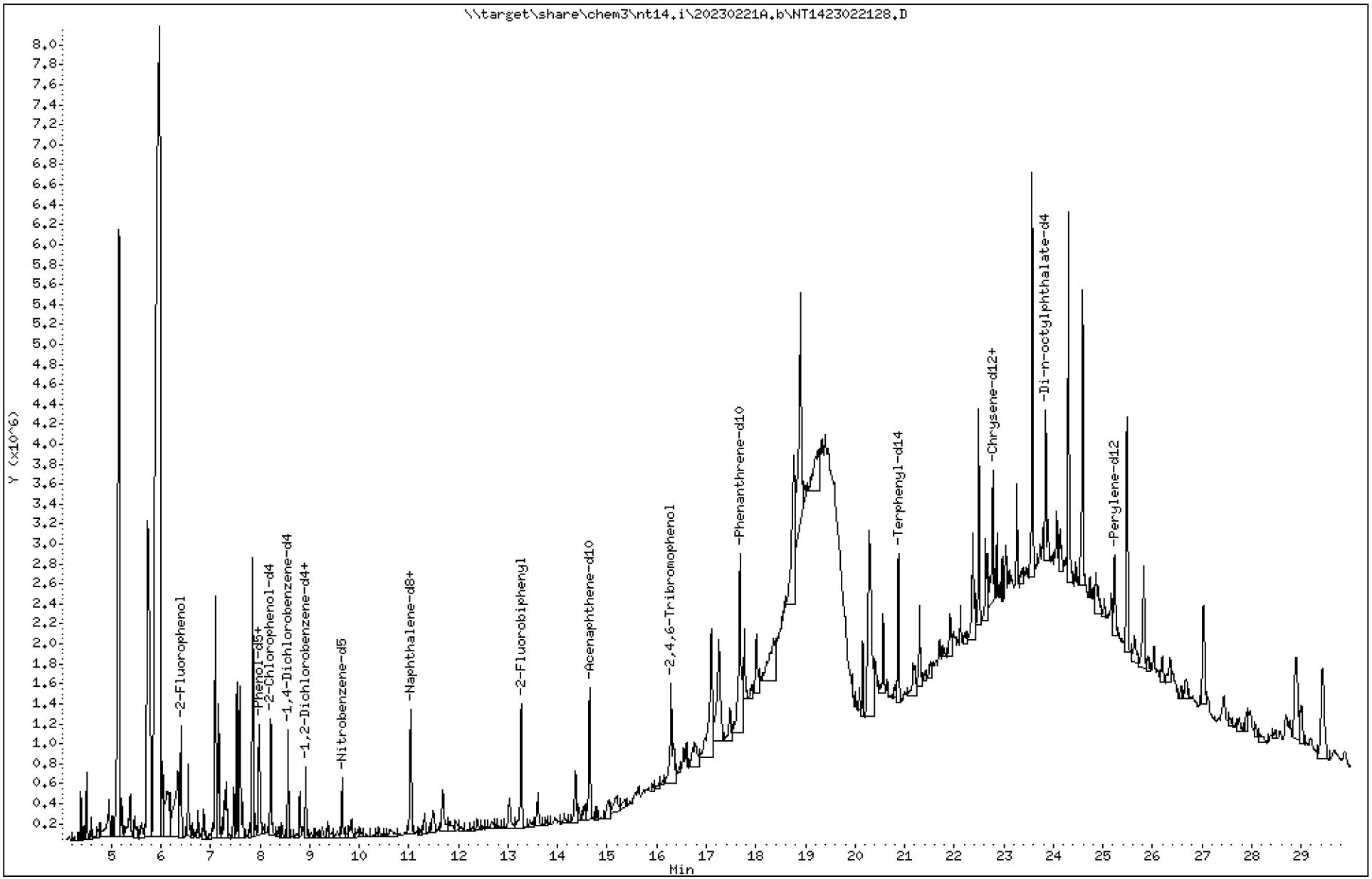
Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-03RE1 A	SDG:	23A0171
Sampled:	12/08/22 10:36	Prepared:	01/18/23 13:47	File ID:	NT1423022128.D
% Solids:	43.54	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/22/23 05:43
Batch:	BLA0339	Sequence:	SLB0291	Initial/Final:	23.27 g Wet / 1 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	GB00046
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	740.25	586	79.2	24 - 134	
p-Terphenyl-d14	493.50	420	85.1	37 - 120	

Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022128.D
Date : 22-FEB-2023 05:43
Client ID:
Sample Info: 23A0171-03RE1

Instrument: nt14.i
Operator: DSD
Column diameter: 0.25

Column phase: ZB-5msi



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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

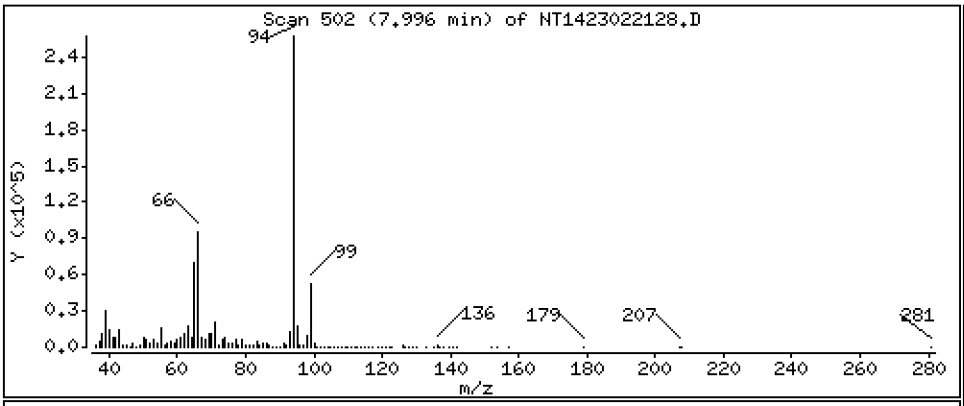
Operator: DSD

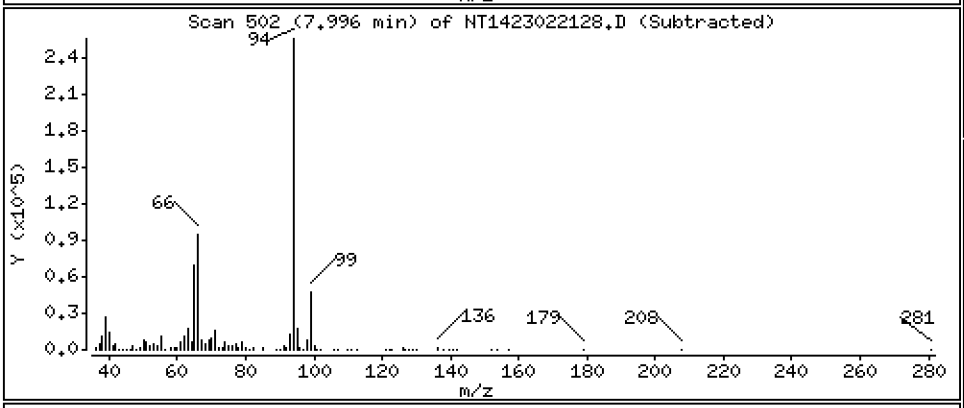
Column phase: ZB-5msi

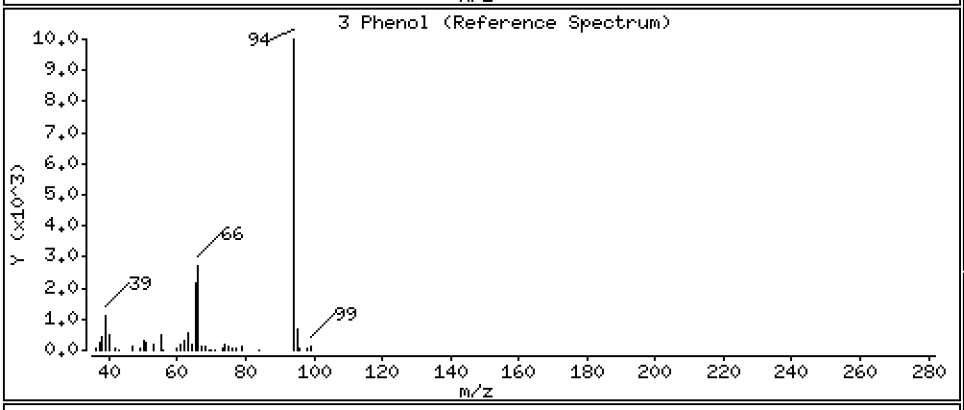
Column diameter: 0.25

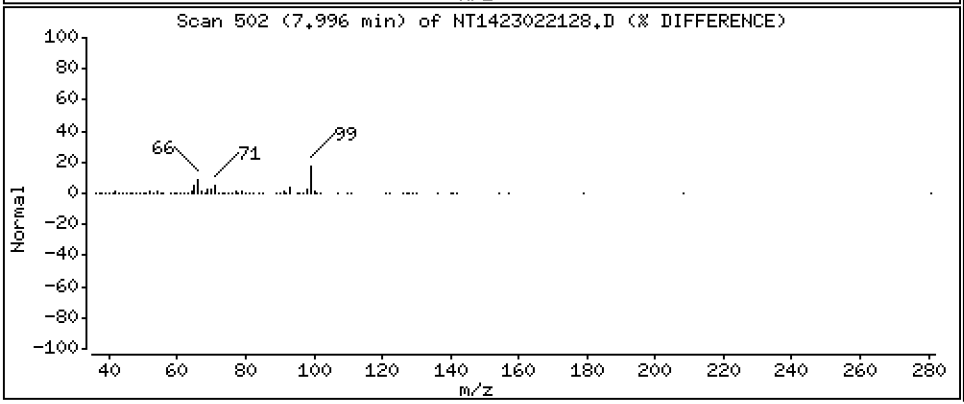
3 Phenol

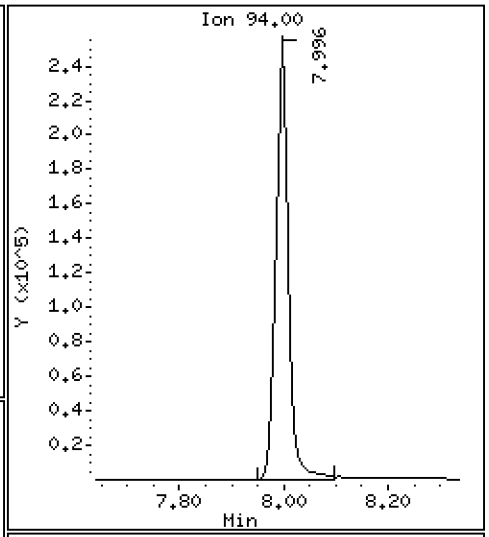
Concentration: 3.035 ug/mL

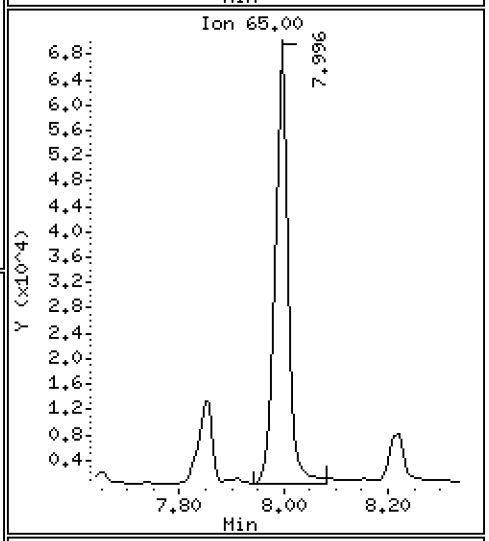


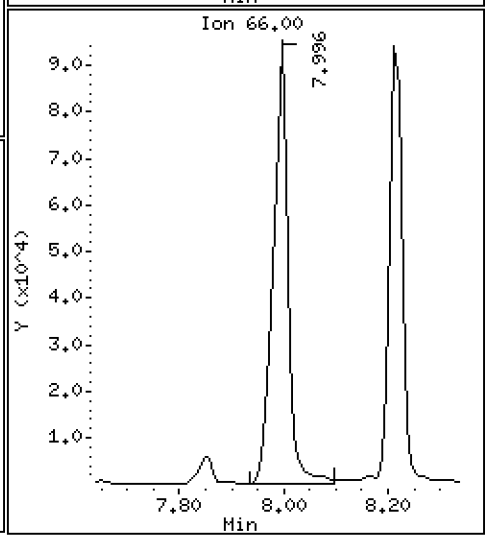












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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

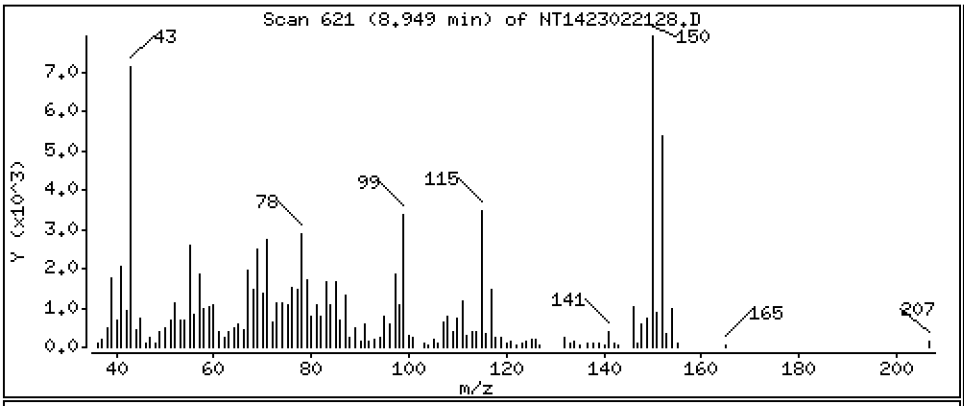
Operator: DSD

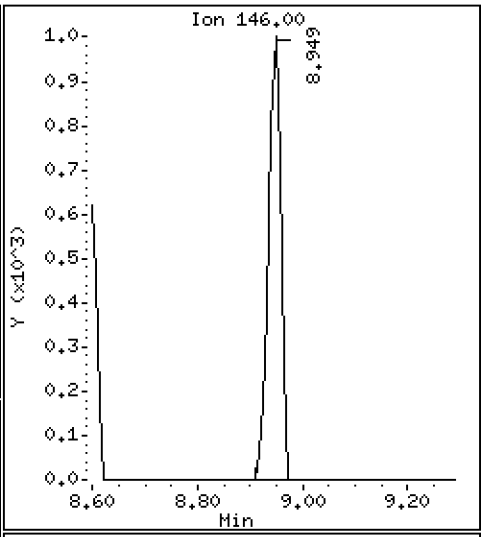
Column phase: ZB-5msi

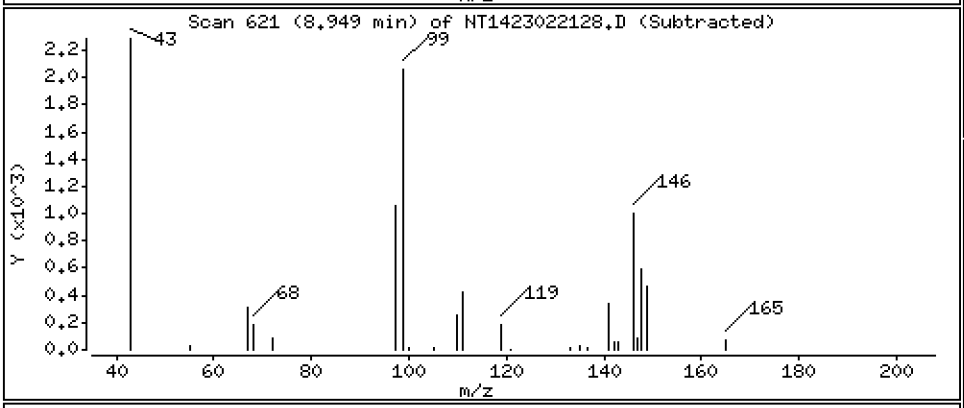
Column diameter: 0.25

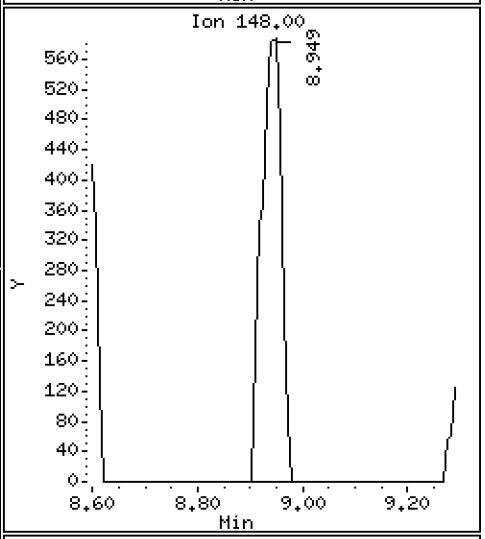
12 1,2-Dichlorobenzene

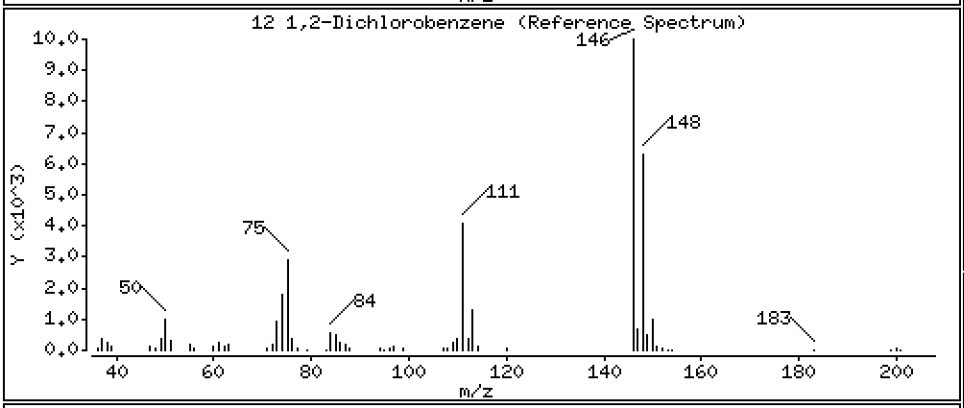
Concentration: 0.01569 ug/mL

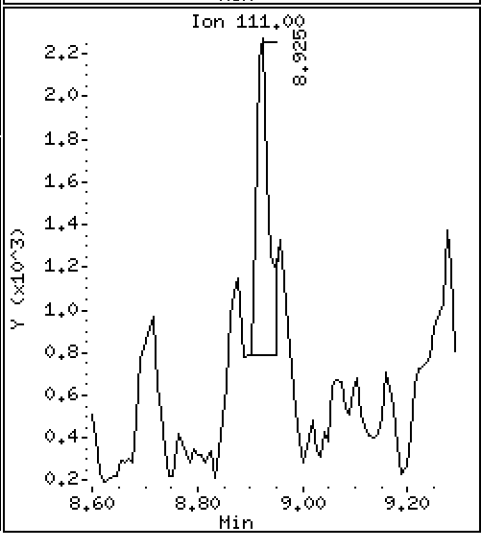


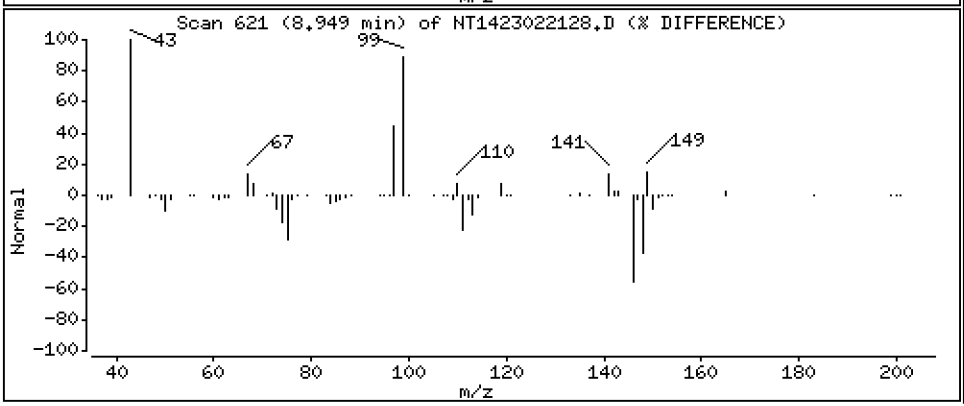












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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

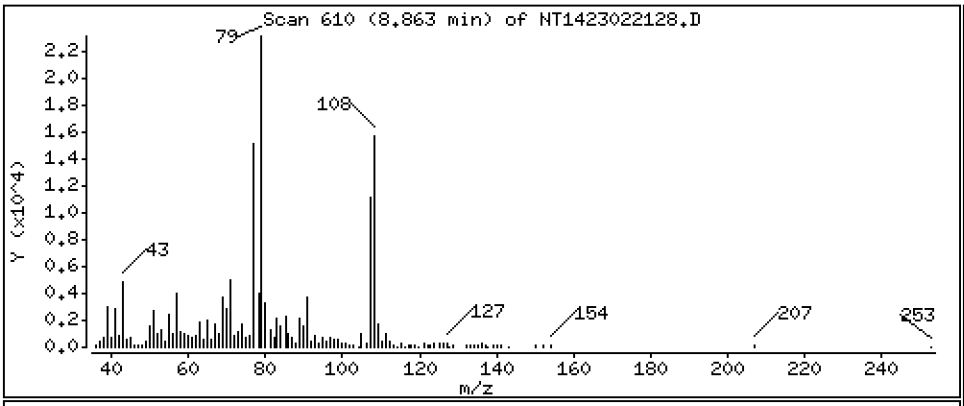
Operator: DSD

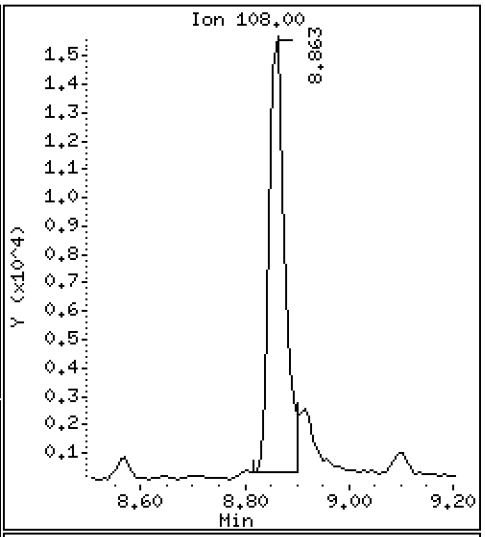
Column phase: ZB-5msi

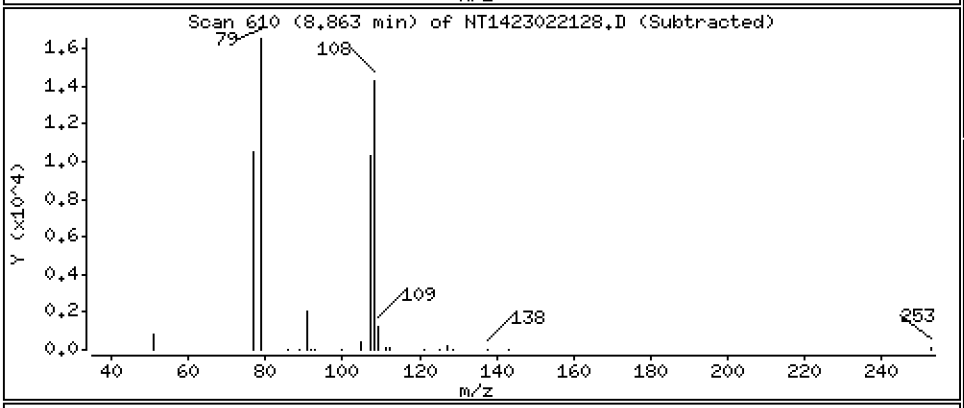
Column diameter: 0.25

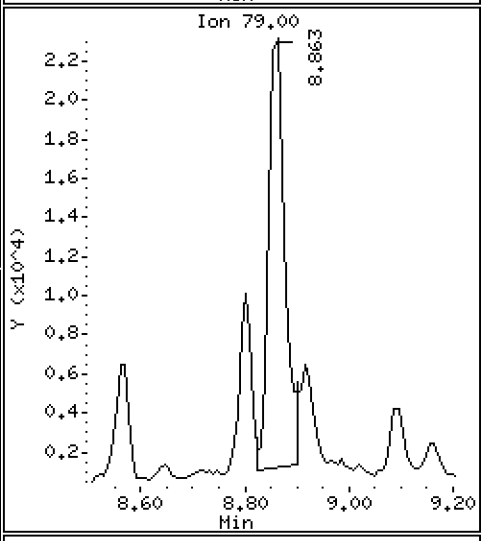
11 Benzyl alcohol

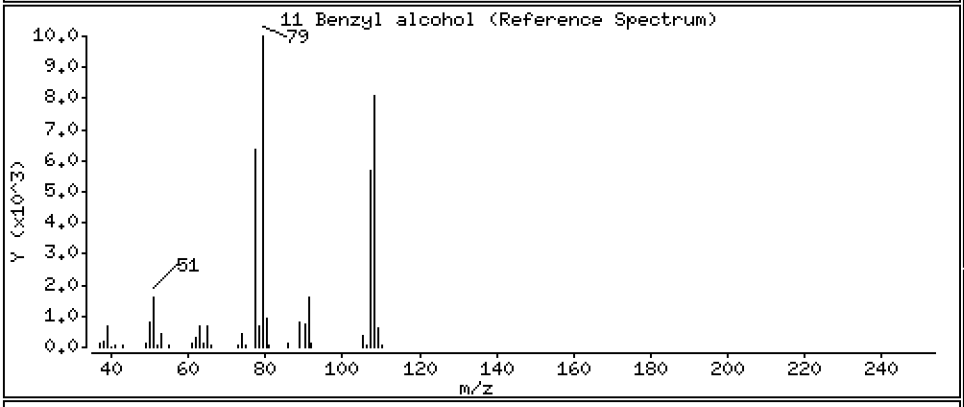
Concentration: 0.4076 ug/mL

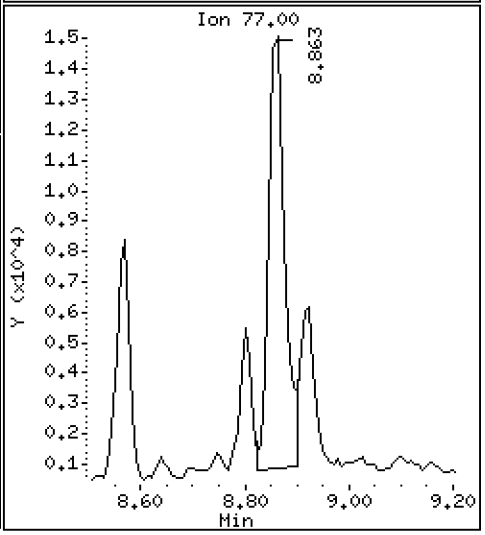


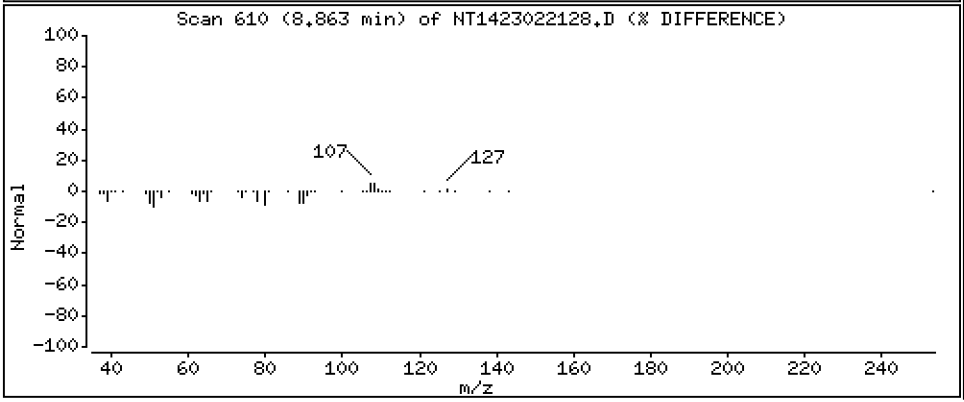












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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

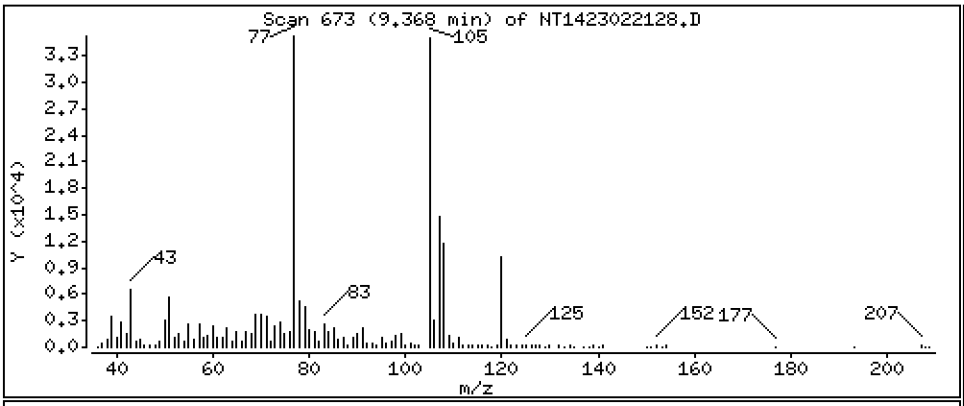
Operator: DSD

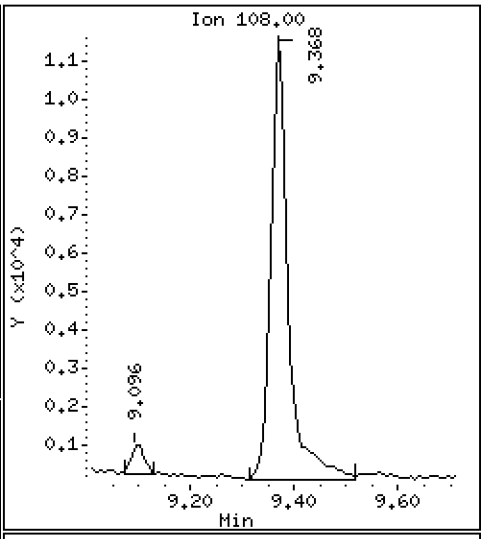
Column phase: ZB-5msi

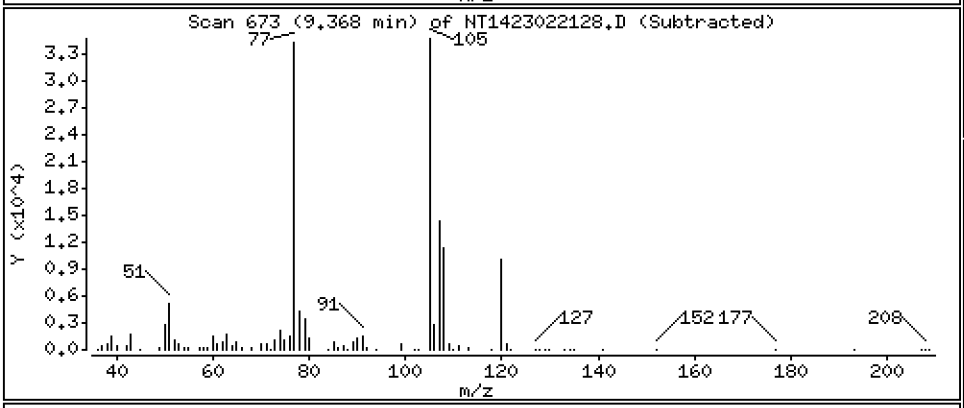
Column diameter: 0.25

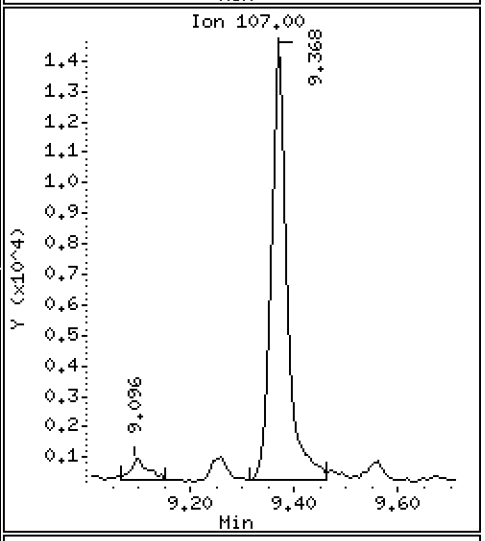
15 4-Methylphenol

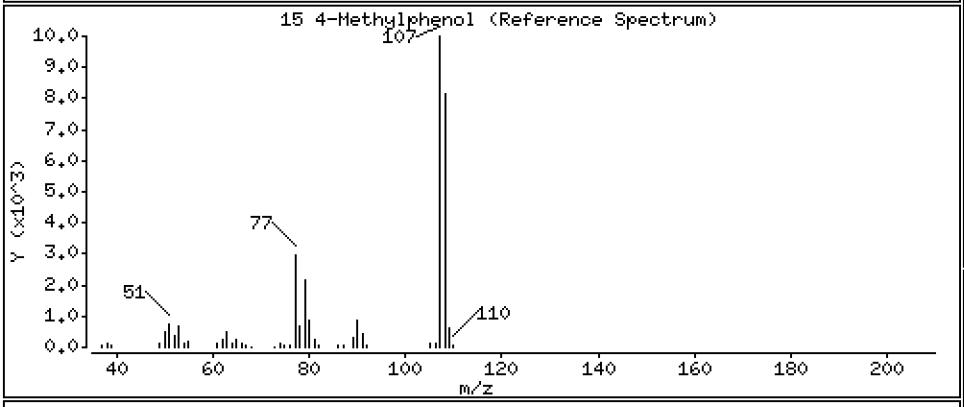
Concentration: 0.2647 ug/mL

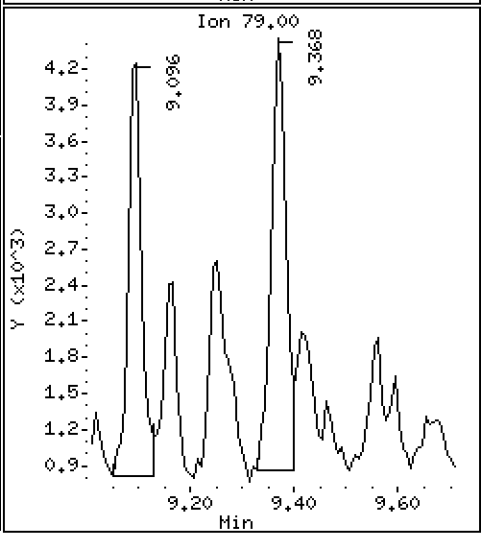


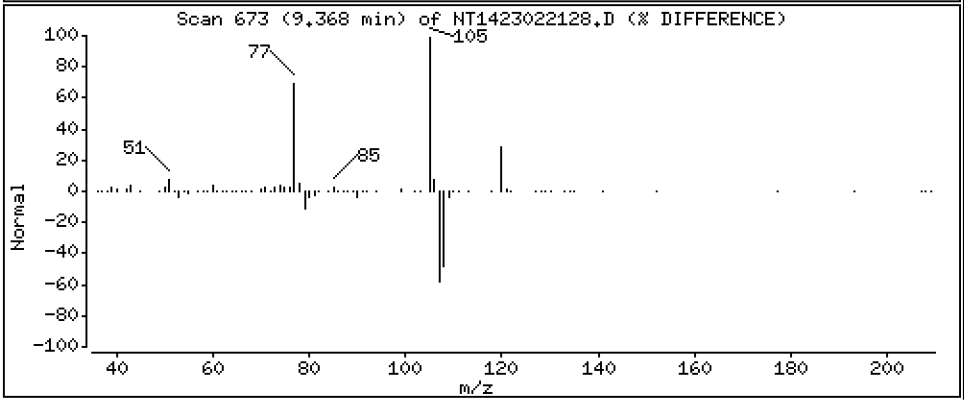












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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

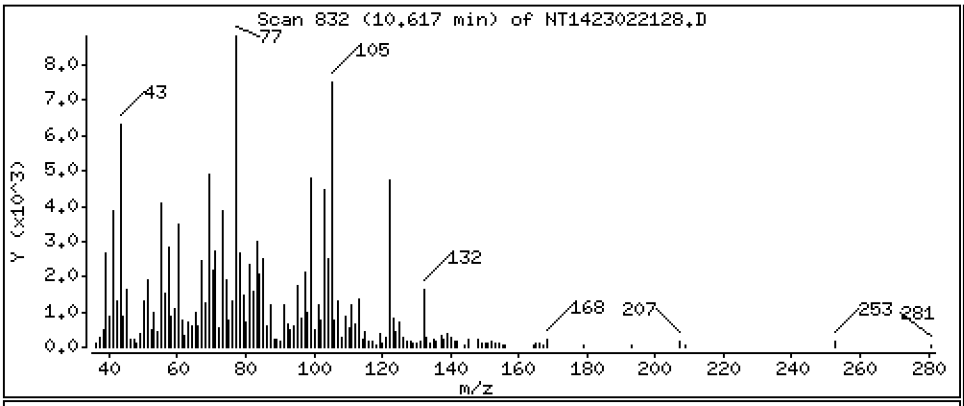
Operator: DSD

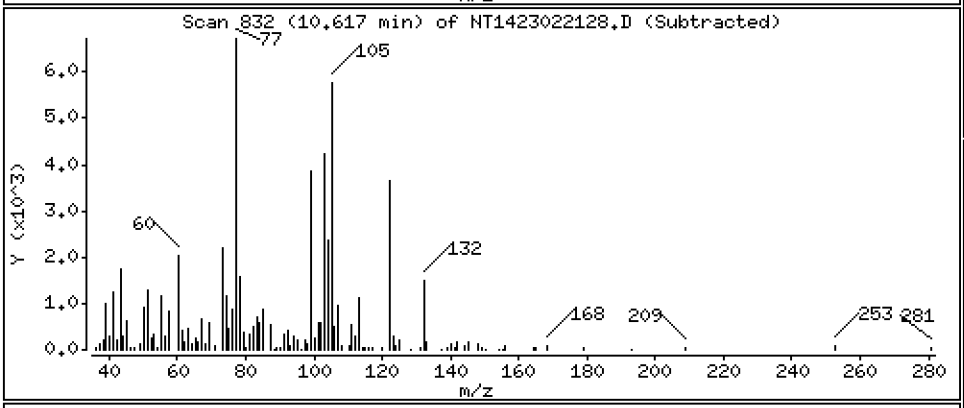
Column phase: ZB-5msi

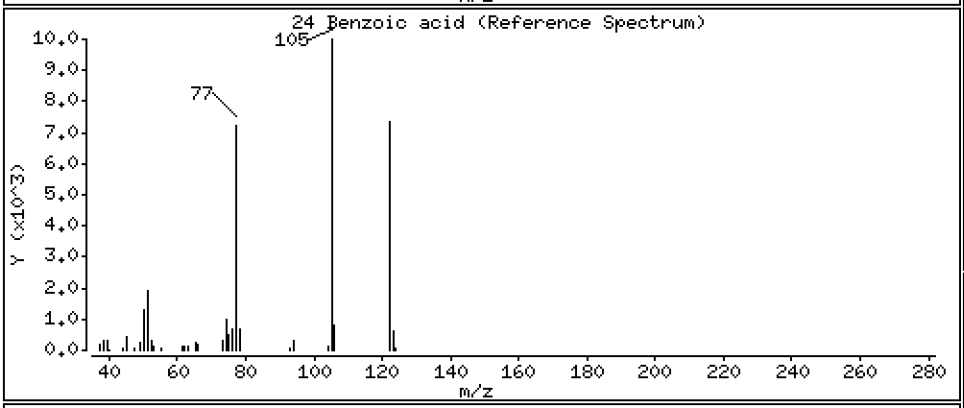
Column diameter: 0.25

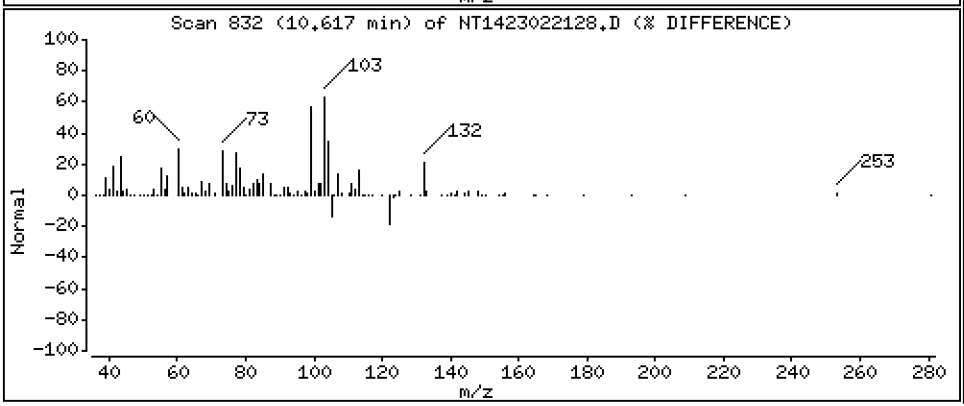
24 Benzoic acid

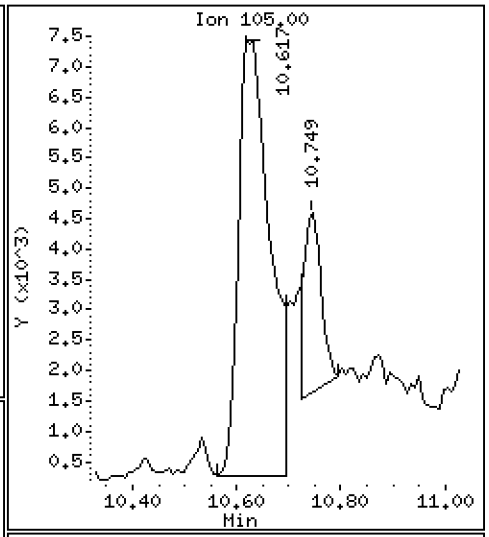
Concentration: 0.4993 ug/mL

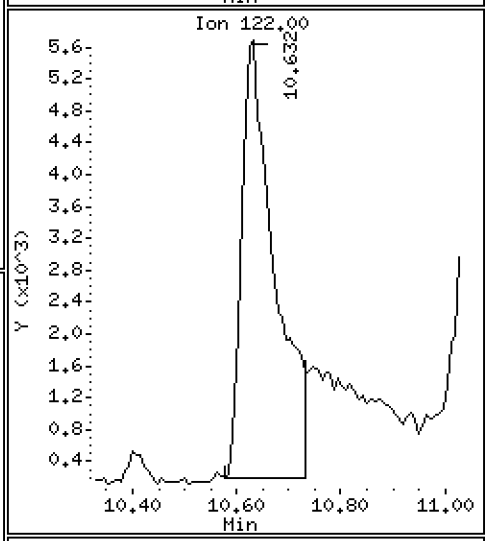


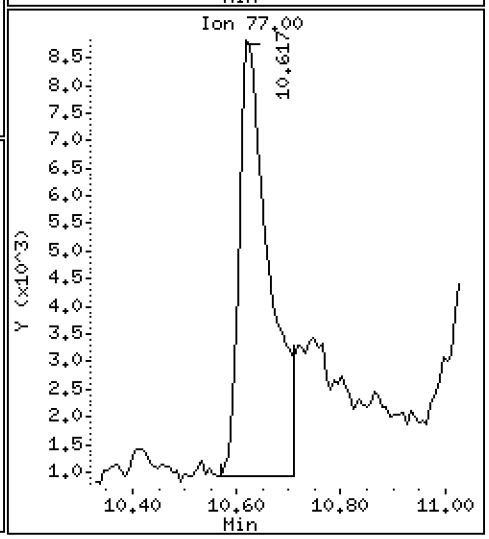












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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

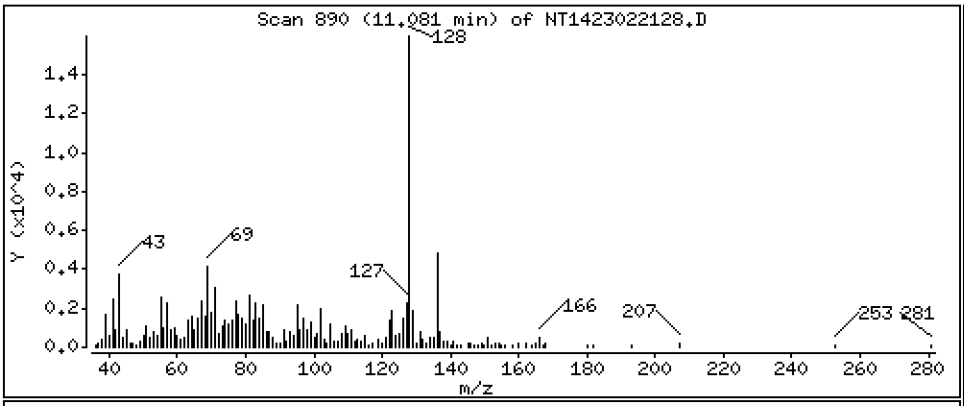
Operator: DSD

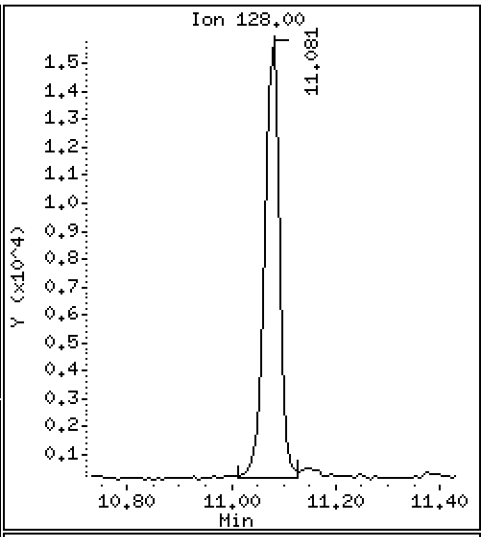
Column phase: ZB-5msi

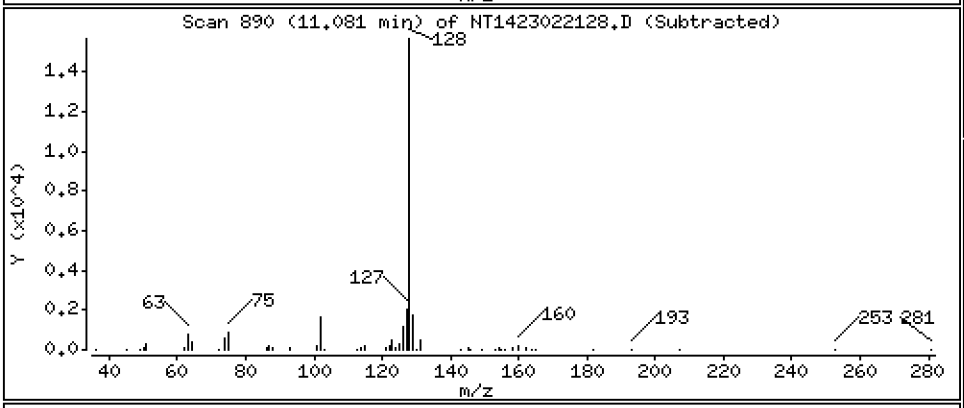
Column diameter: 0.25

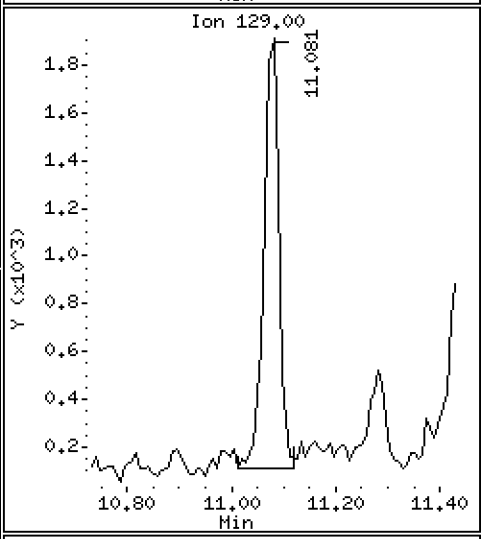
28 Naphthalene

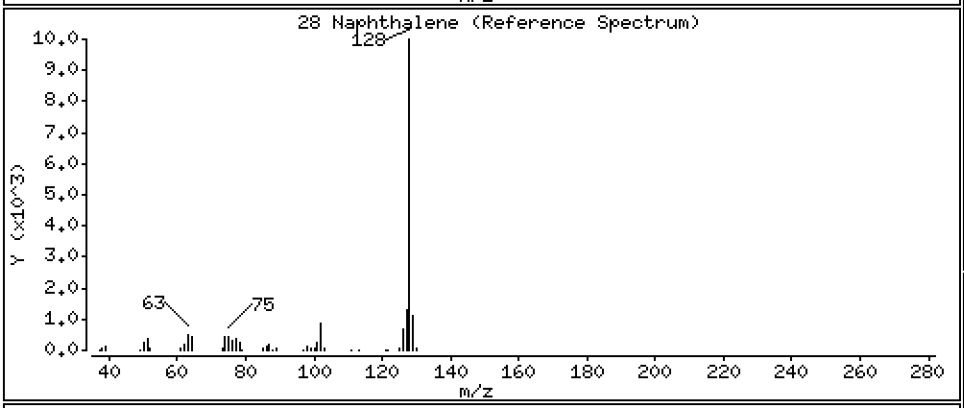
Concentration: 0.1056 ug/mL

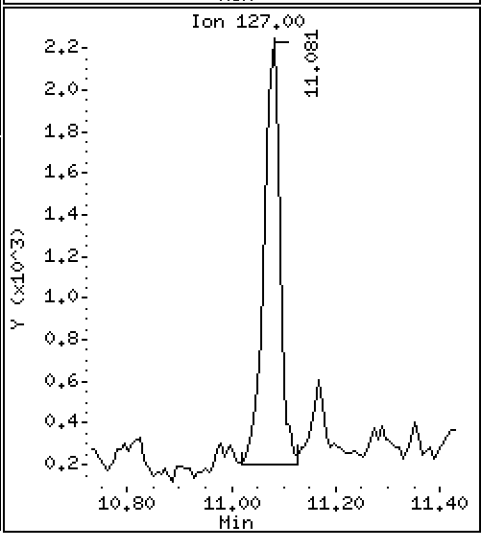


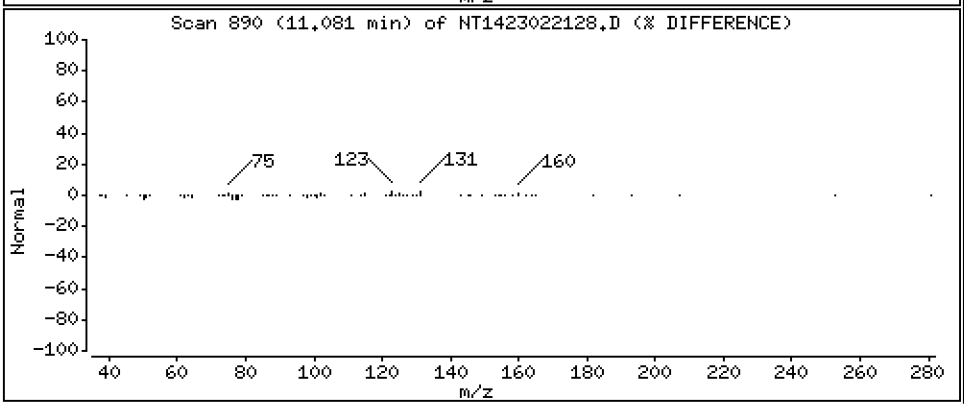












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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

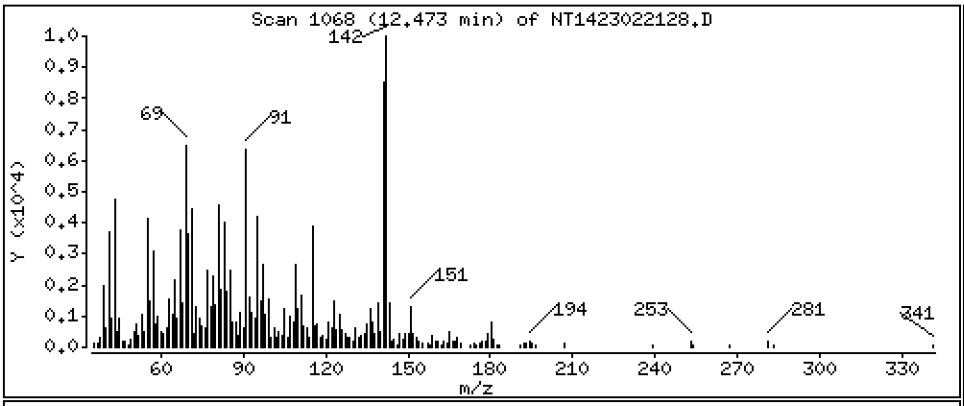
Operator: DSD

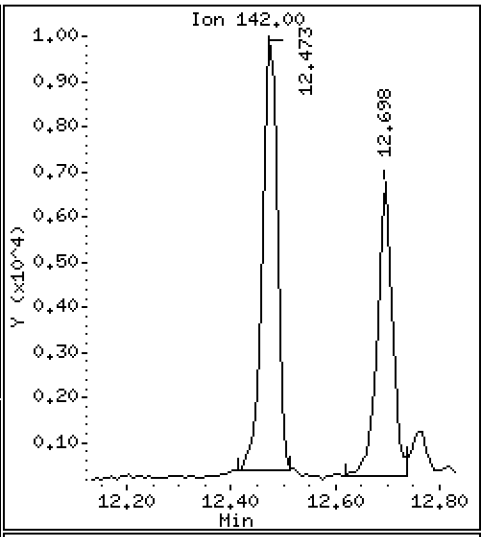
Column phase: ZB-5msi

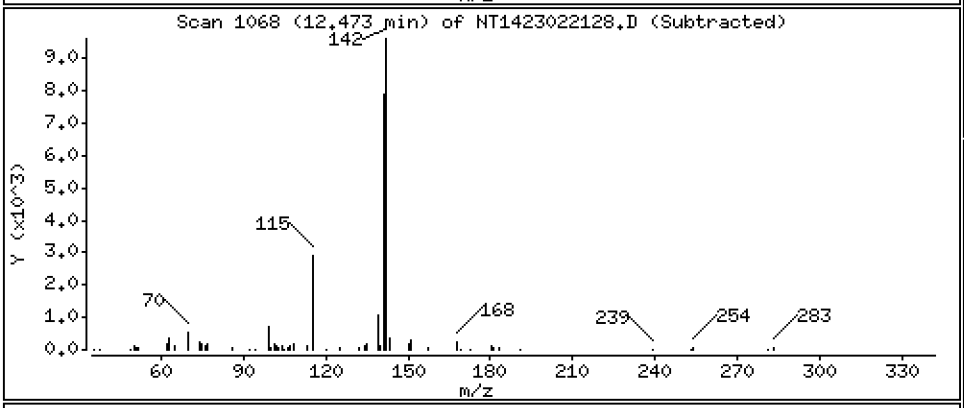
Column diameter: 0.25

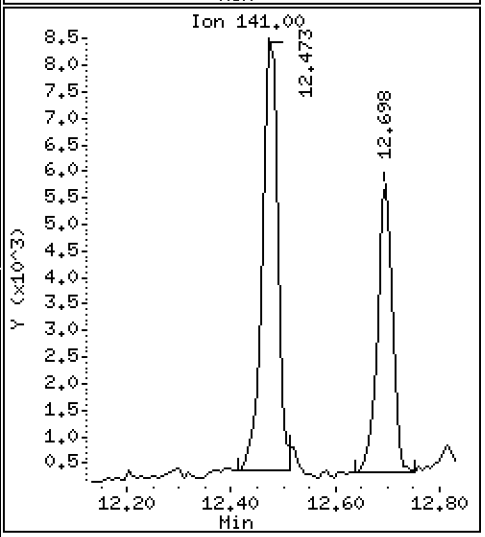
32 2-Methylnaphthalene

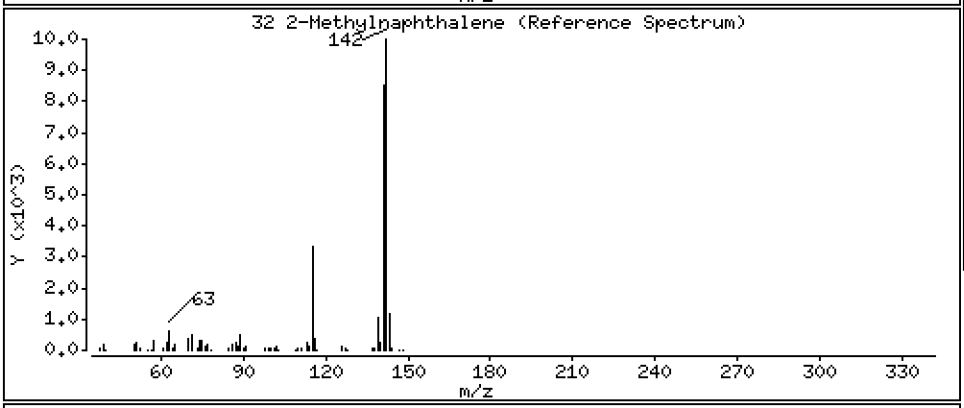
Concentration: 0.08789 ug/mL

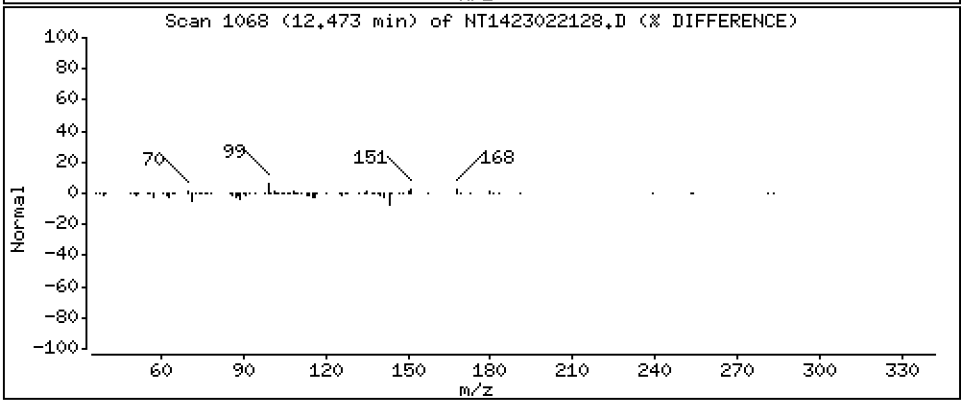












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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

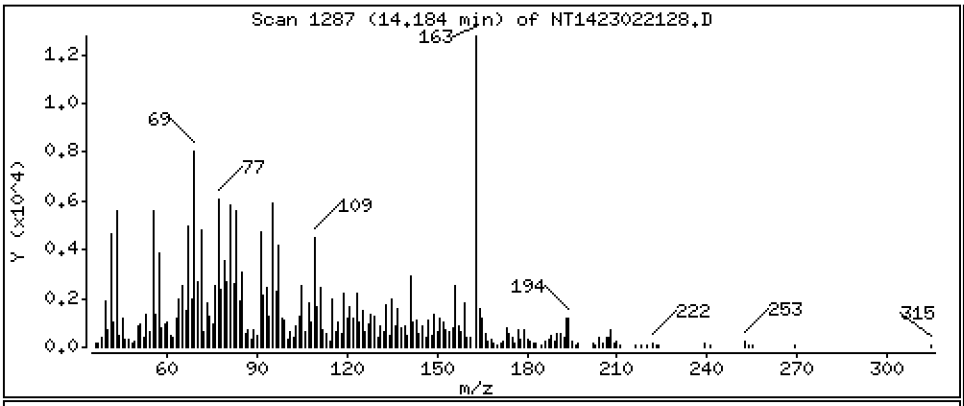
Operator: DSD

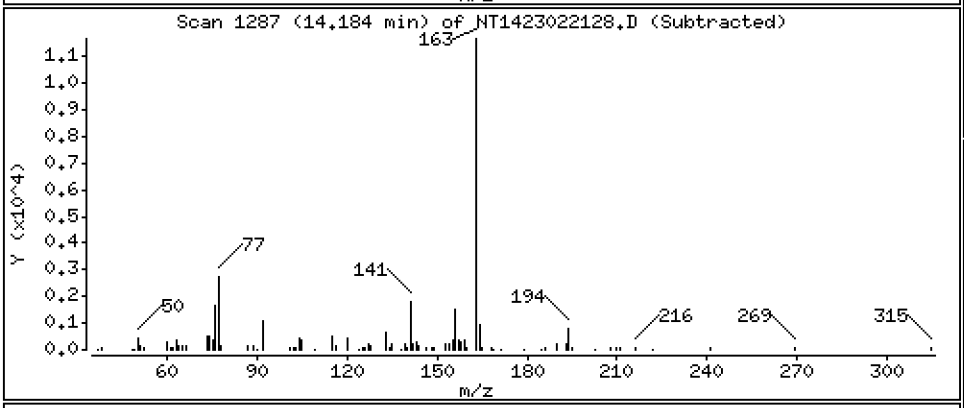
Column phase: ZB-5msi

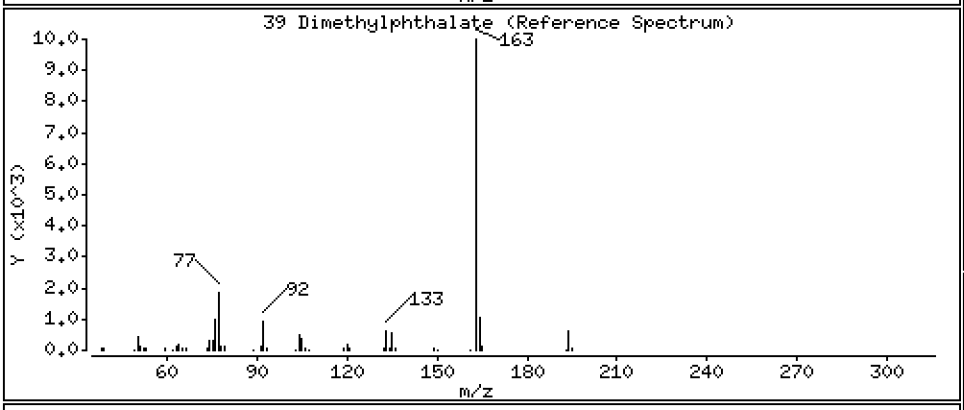
Column diameter: 0.25

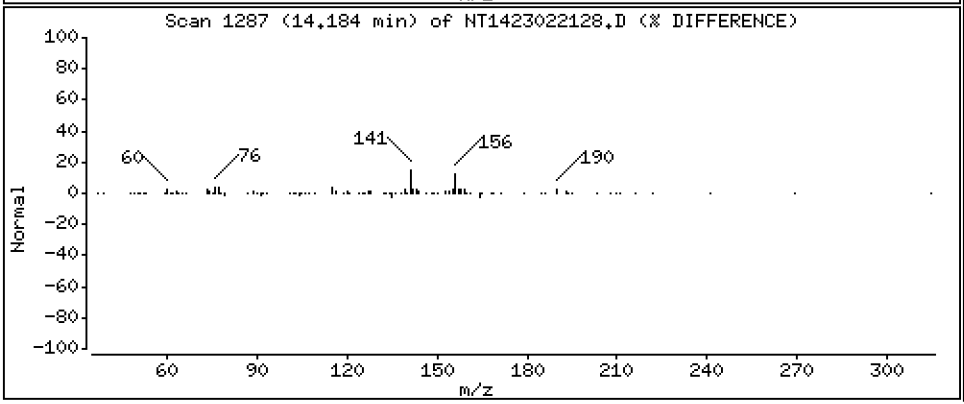
39 Dimethylphthalate

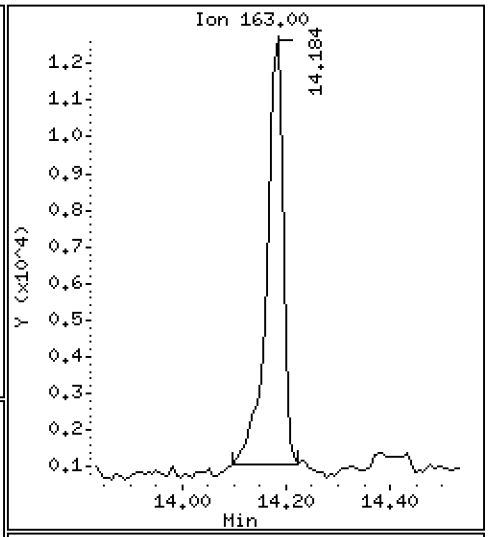
Concentration: 0.1194 ug/mL

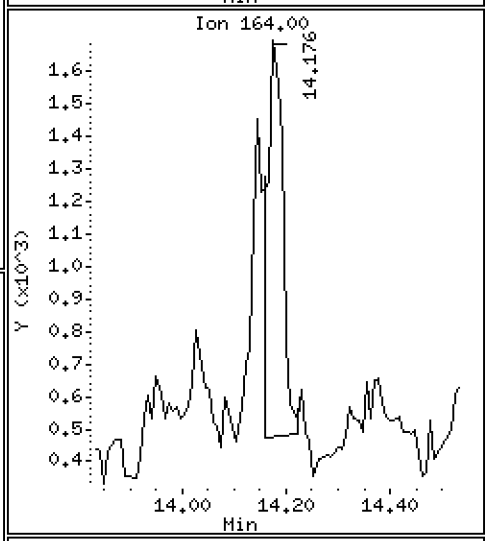


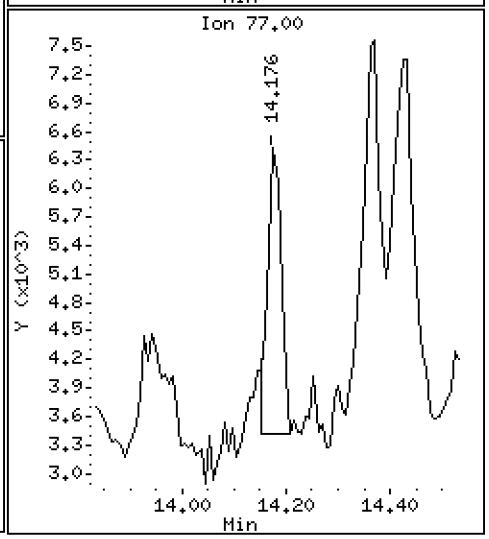












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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

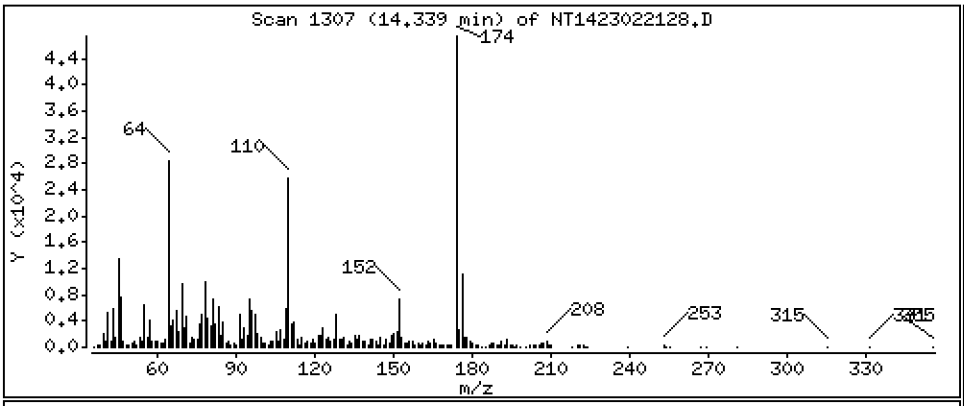
Operator: DSD

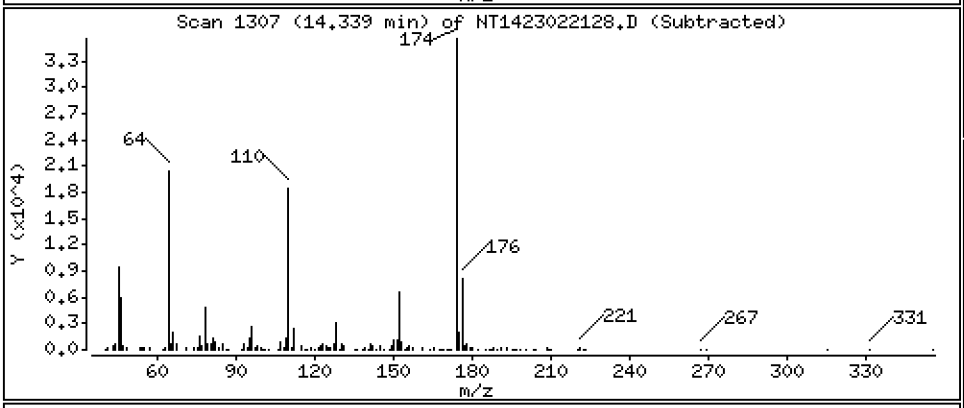
Column phase: ZB-5msi

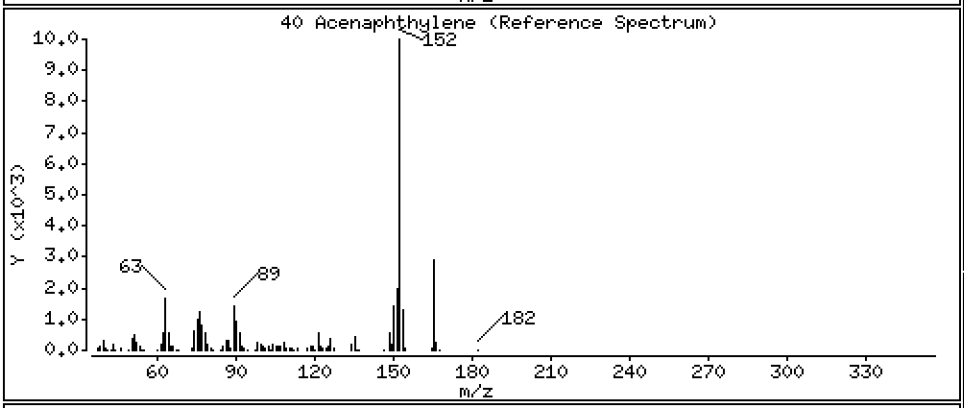
Column diameter: 0.25

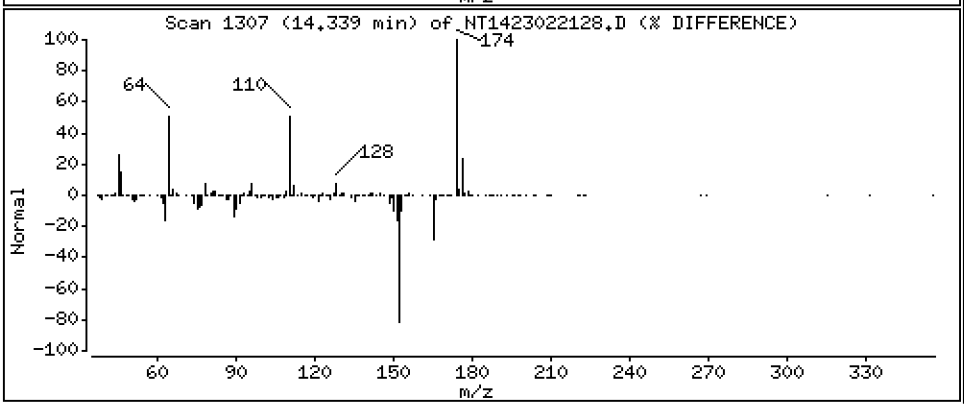
40 Acenaphthylene

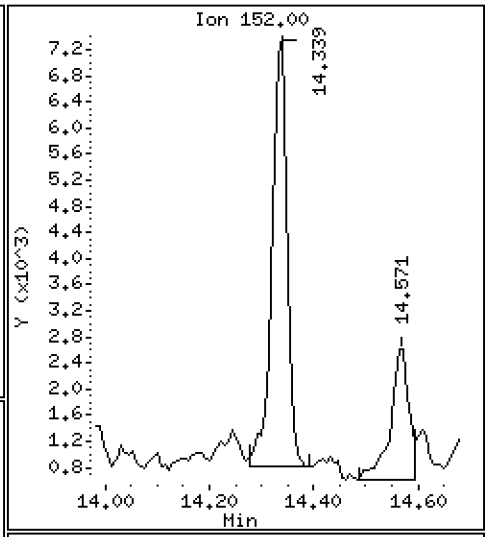
Concentration: 0.04354 ug/mL

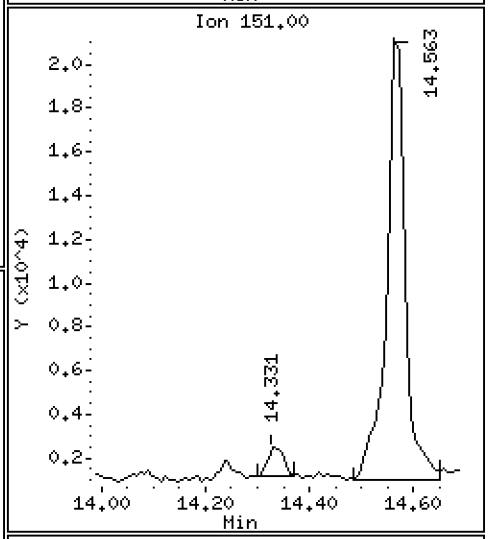


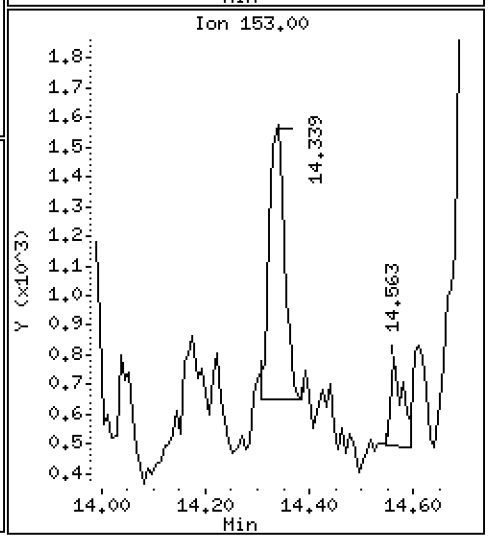












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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

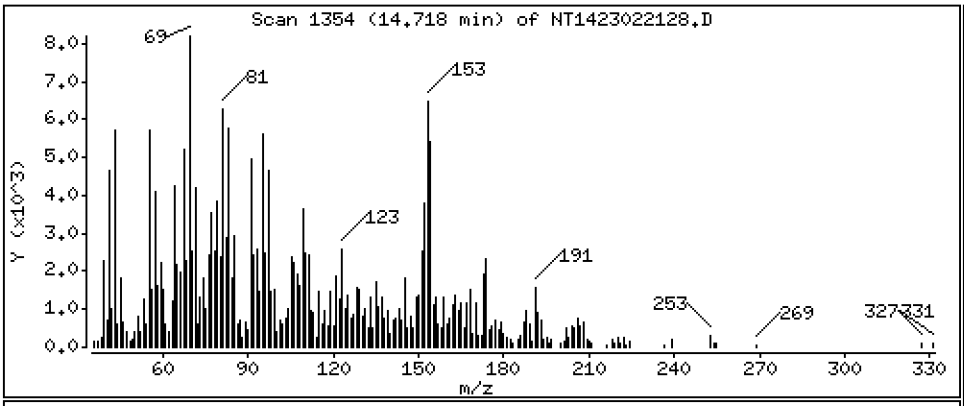
Operator: DSD

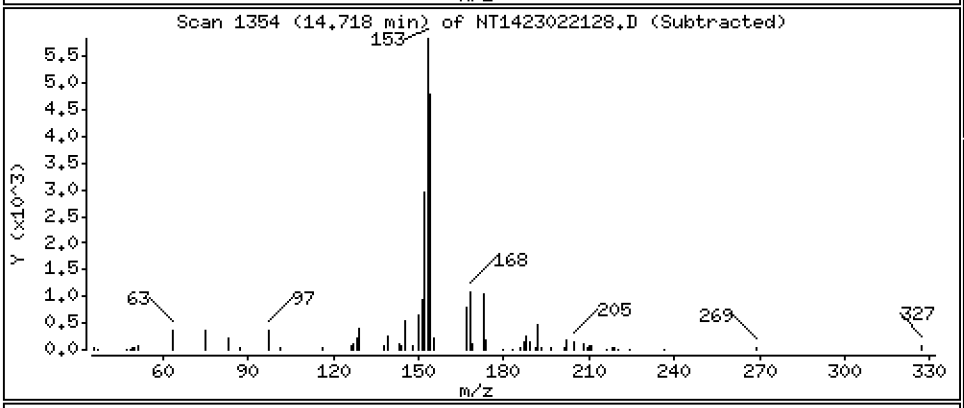
Column phase: ZB-5msi

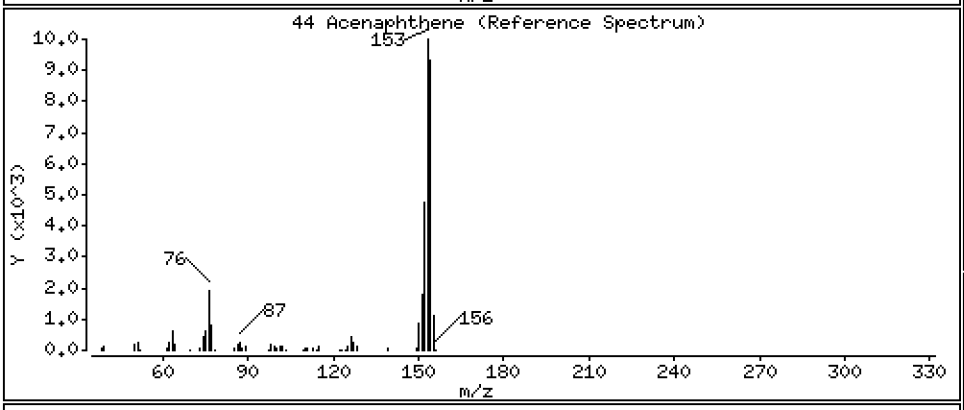
Column diameter: 0.25

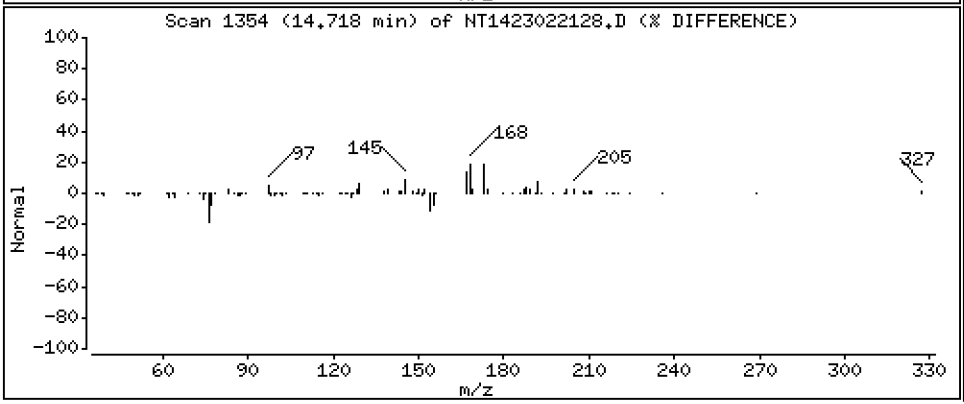
44 Acenaphthene

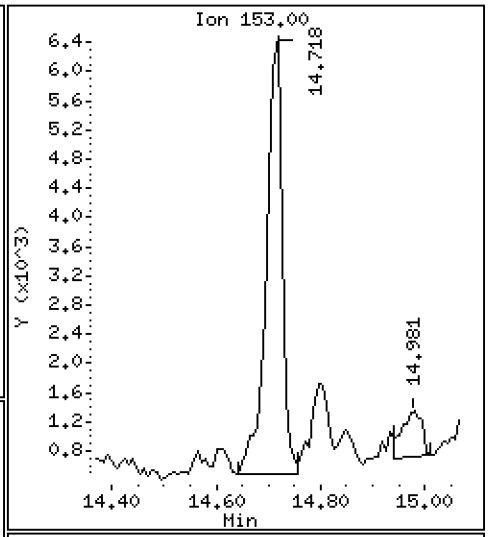
Concentration: 0.06865 ug/mL

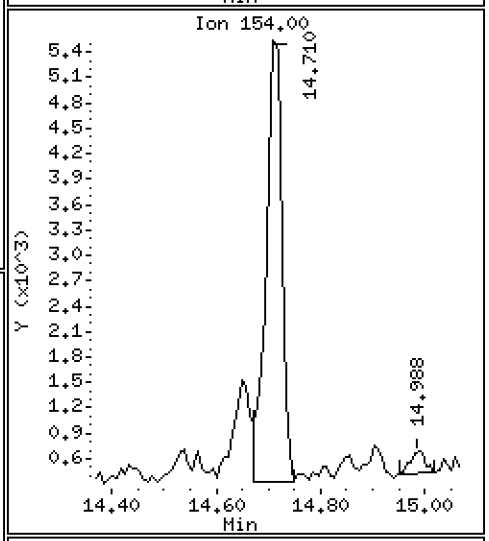


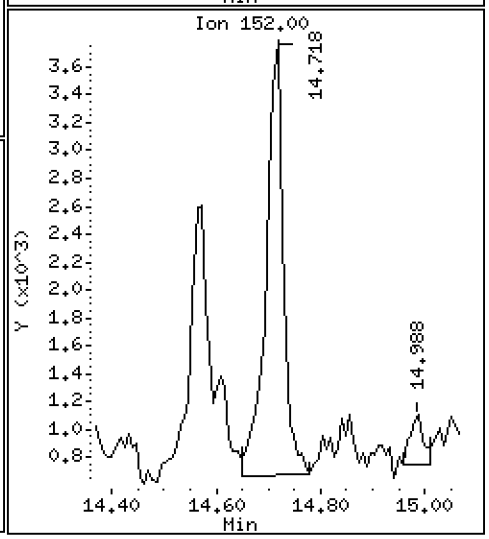












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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

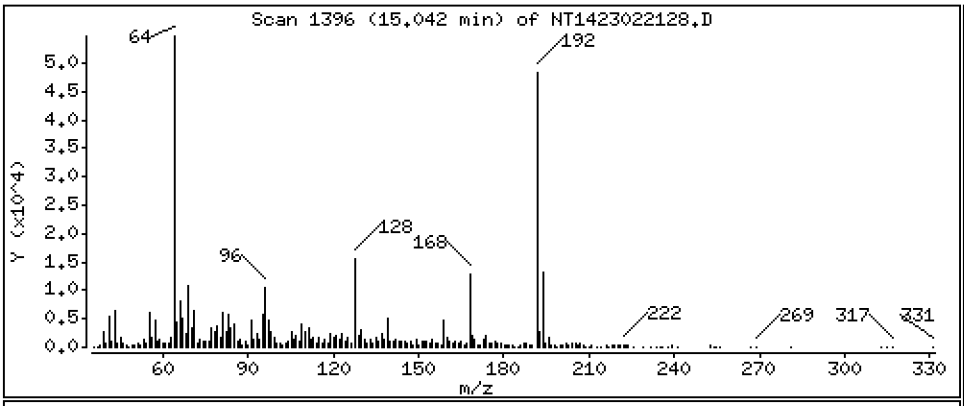
Operator: DSD

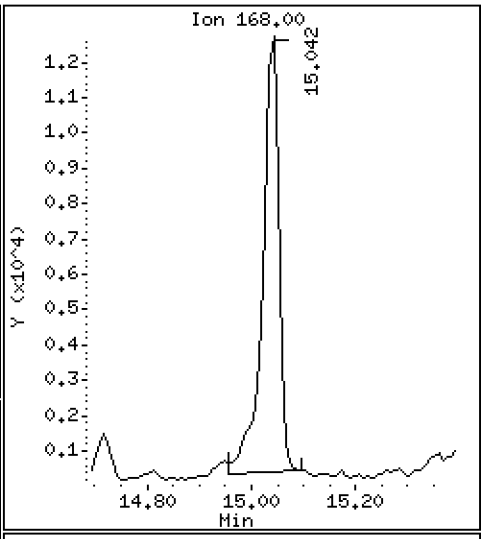
Column phase: ZB-5msi

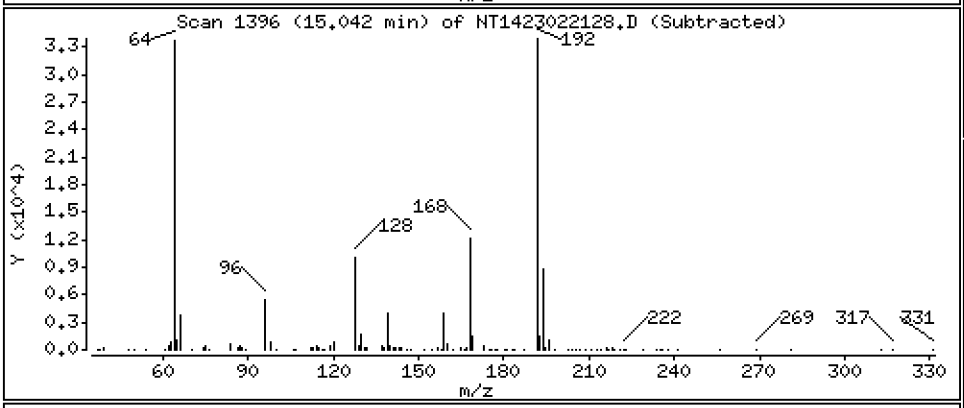
Column diameter: 0.25

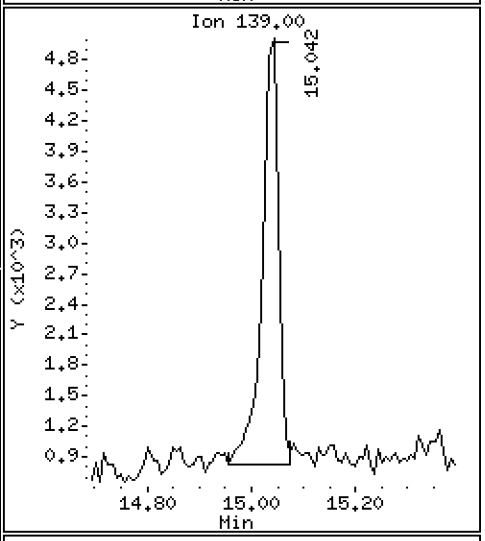
46 Dibenzofuran

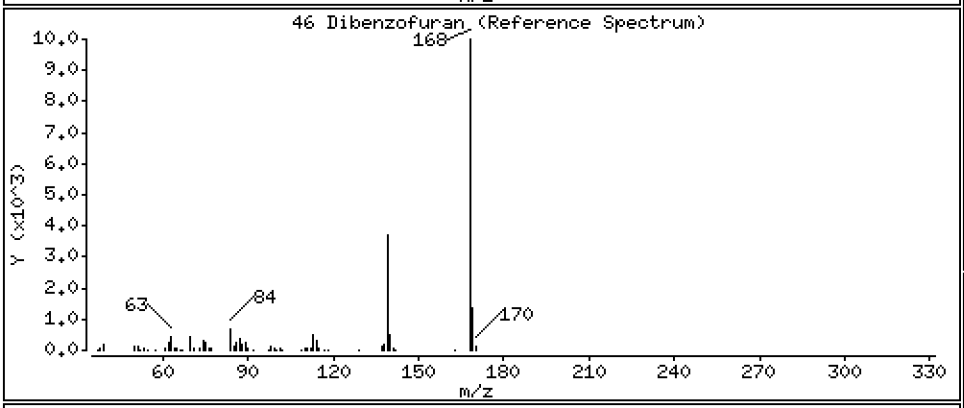
Concentration: 0.08890 ug/mL

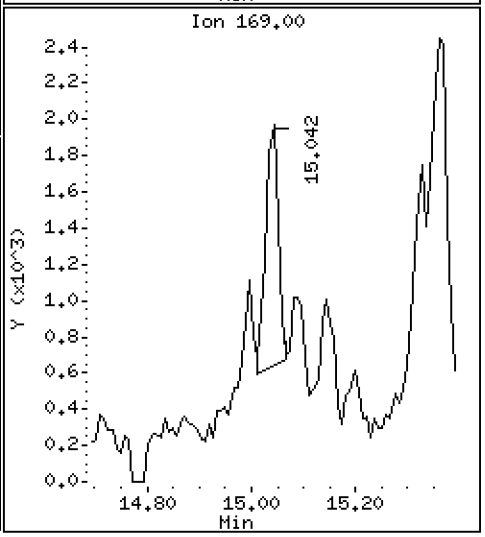


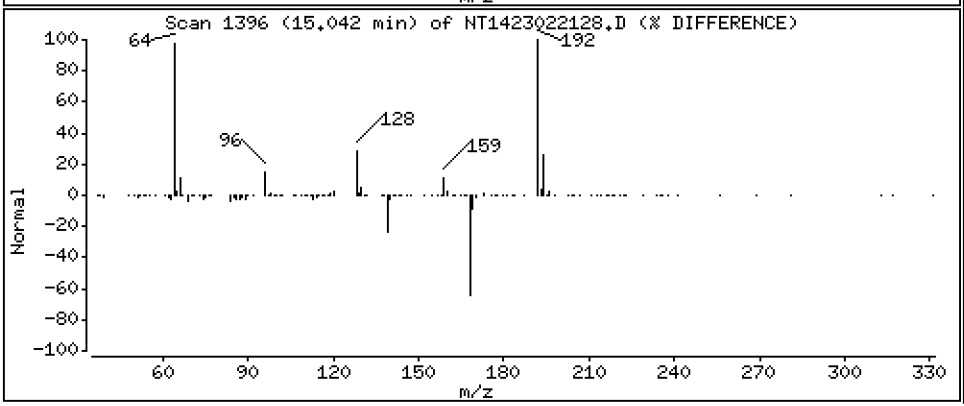












Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022128.D

Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

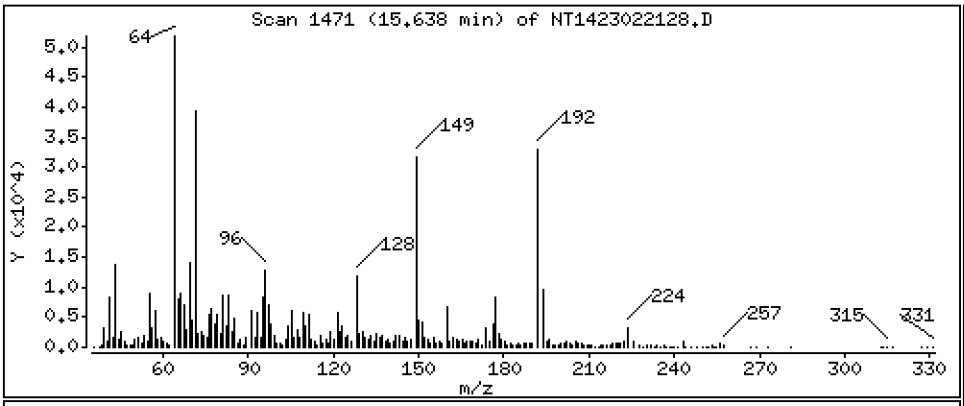
Operator: DSD

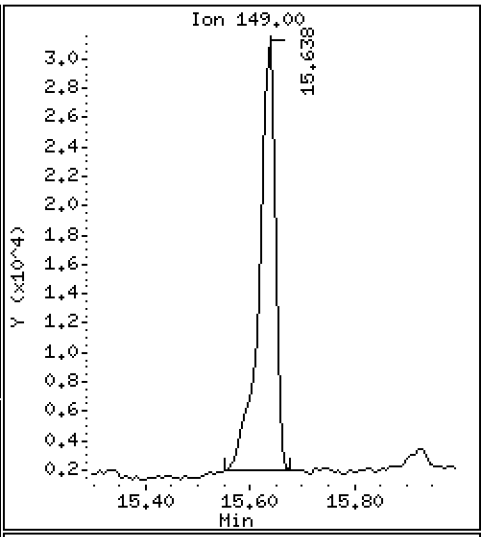
Column phase: ZB-5msi

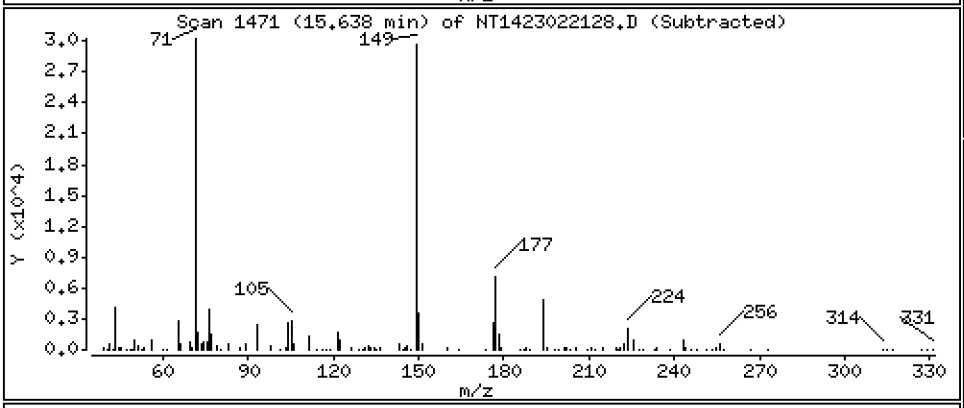
Column diameter: 0.25

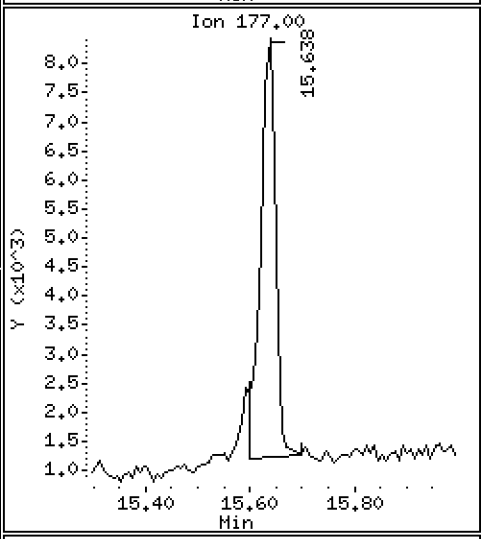
50 Diethylphthalate

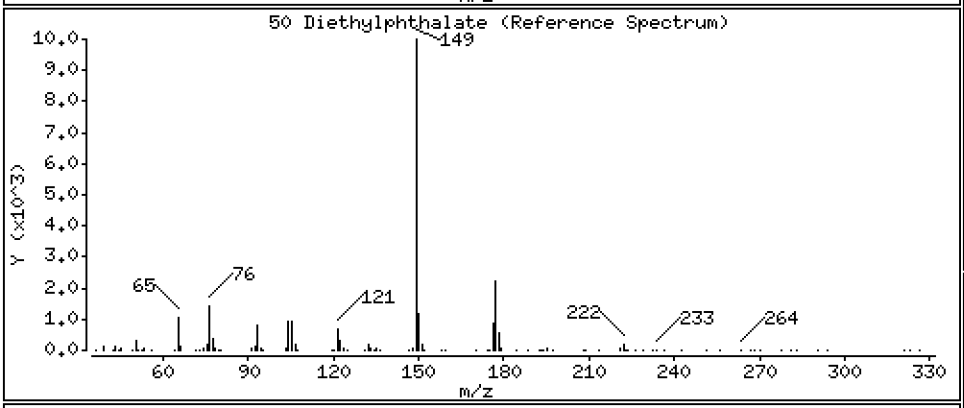
Concentration: 0.2242 ug/mL

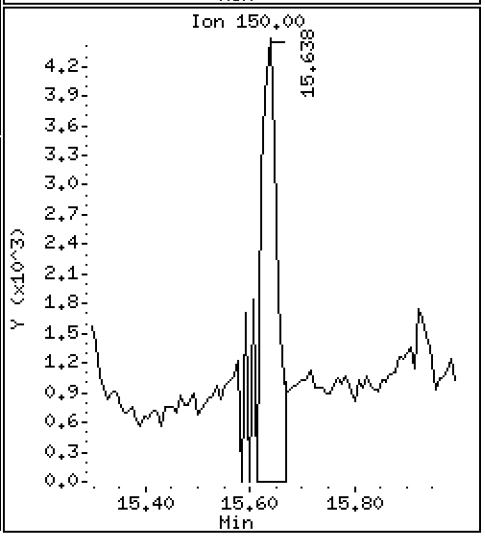


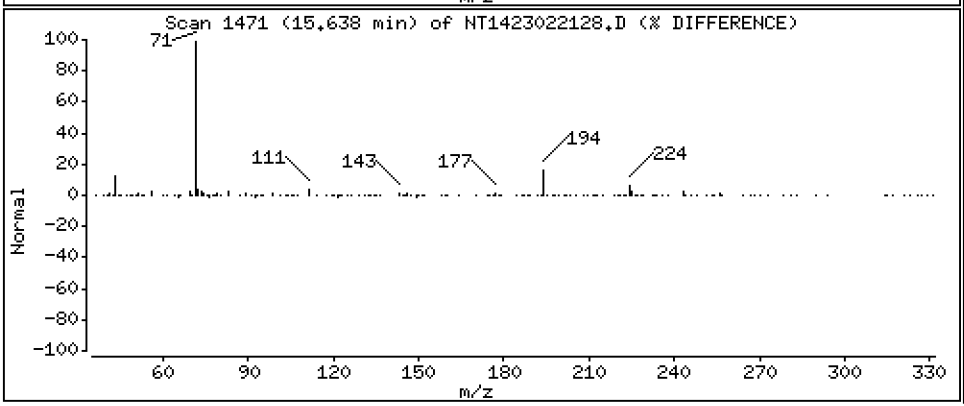












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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

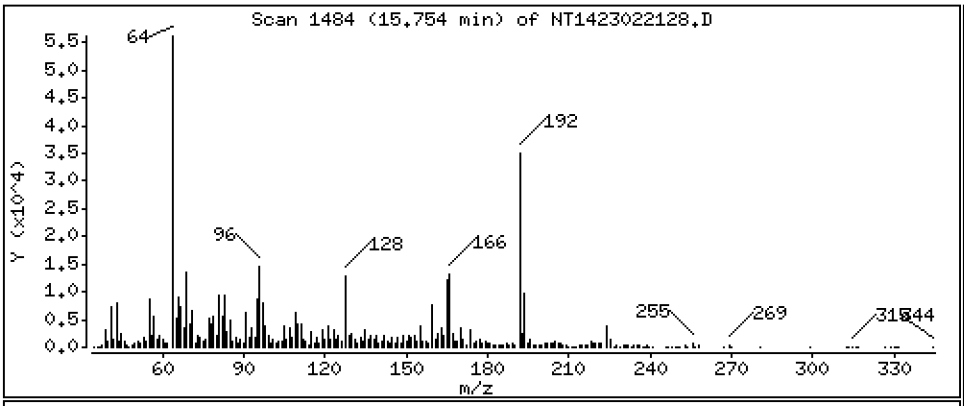
Operator: DSD

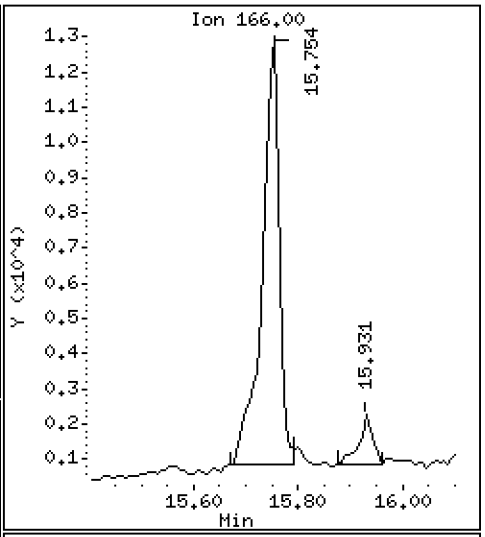
Column phase: ZB-5msi

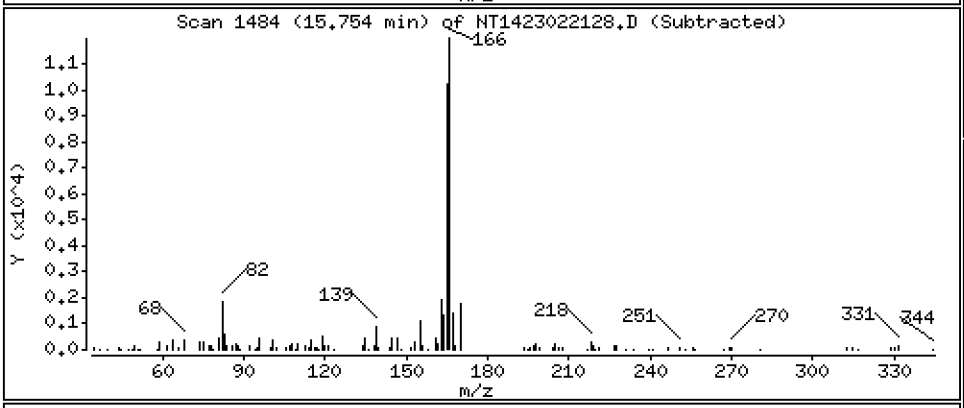
Column diameter: 0.25

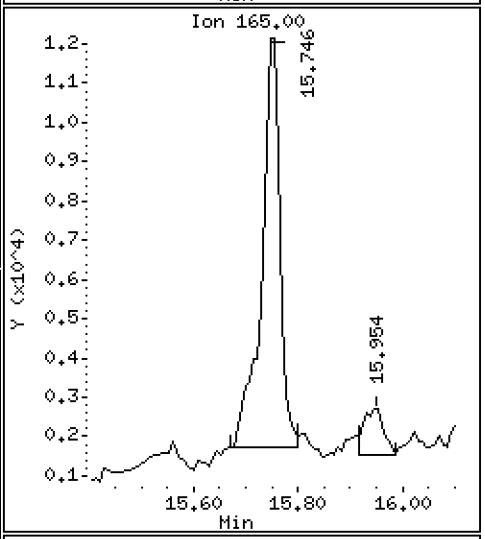
49 Fluorene

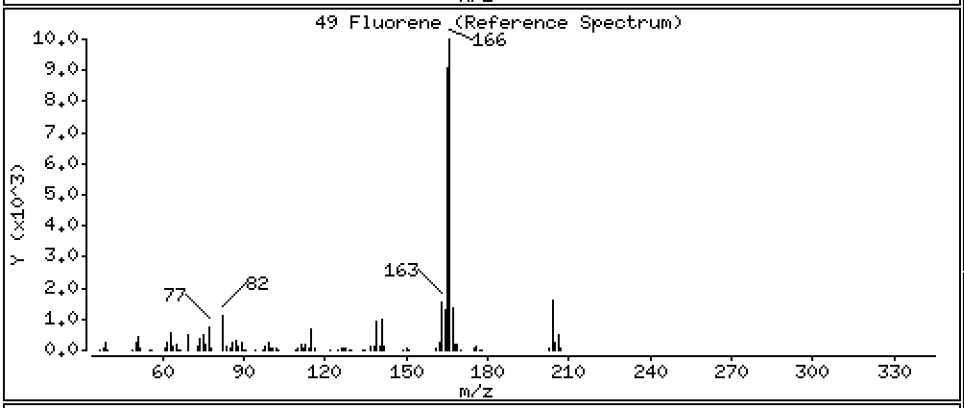
Concentration: 0.09771 ug/mL

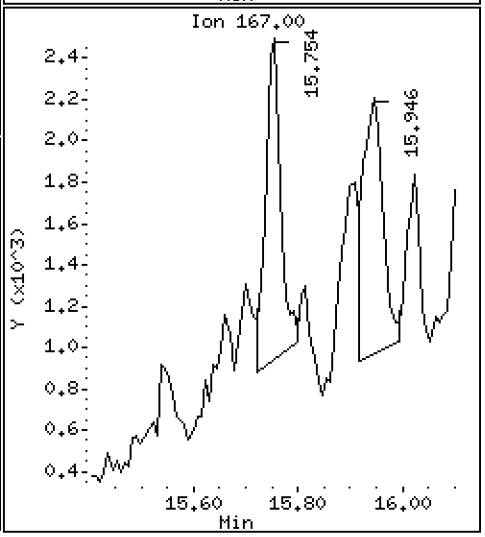


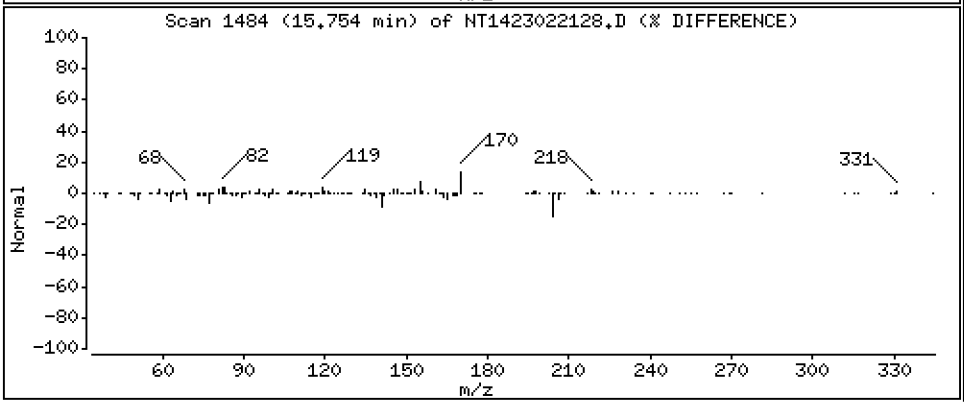












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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

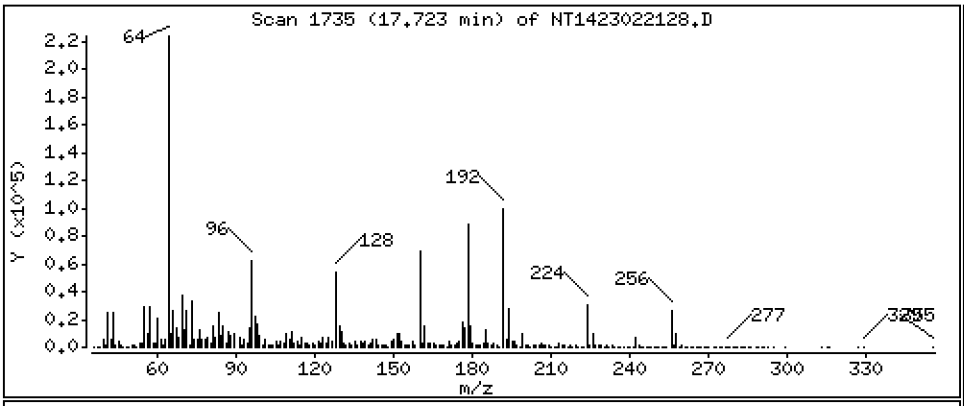
Operator: DSD

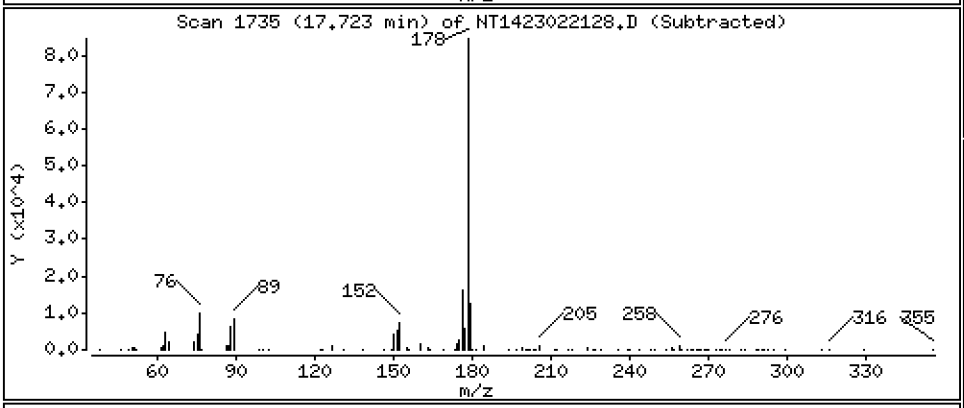
Column phase: ZB-5msi

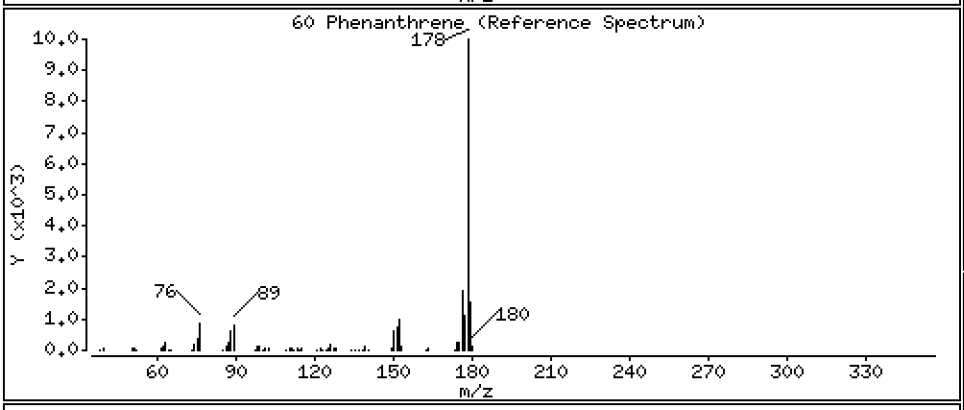
Column diameter: 0.25

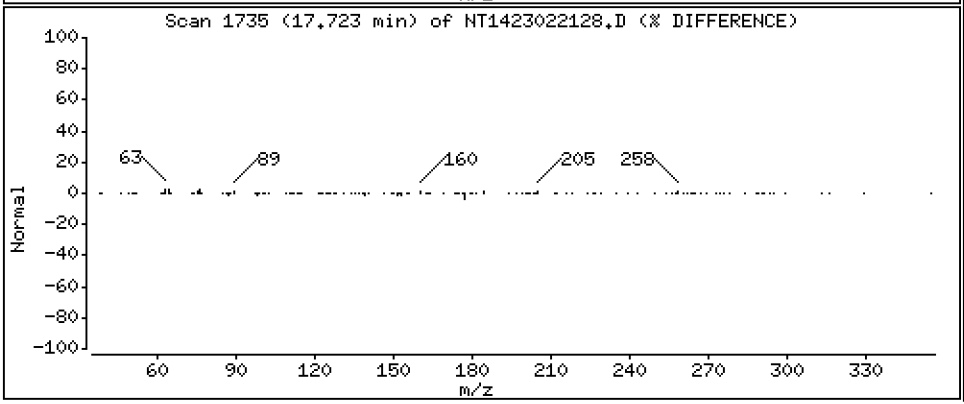
60 Phenanthrene

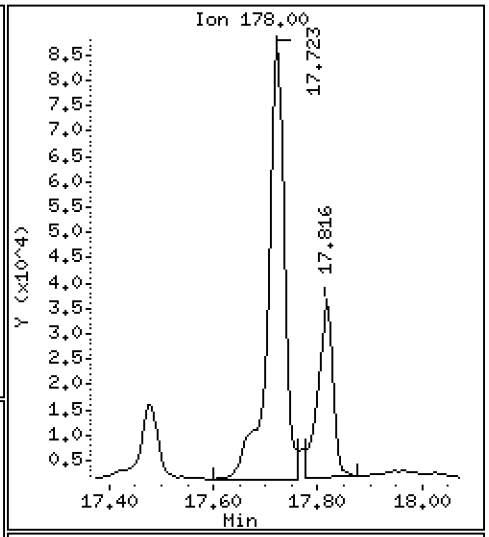
Concentration: 0.5709 ug/mL

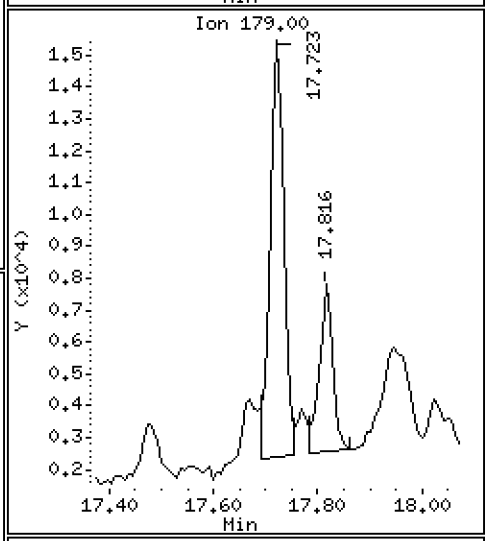


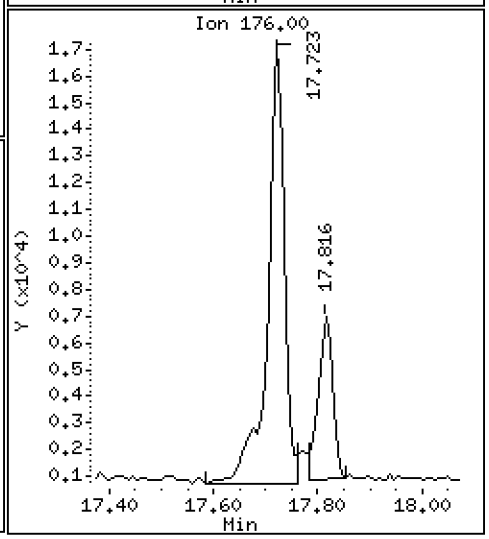












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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

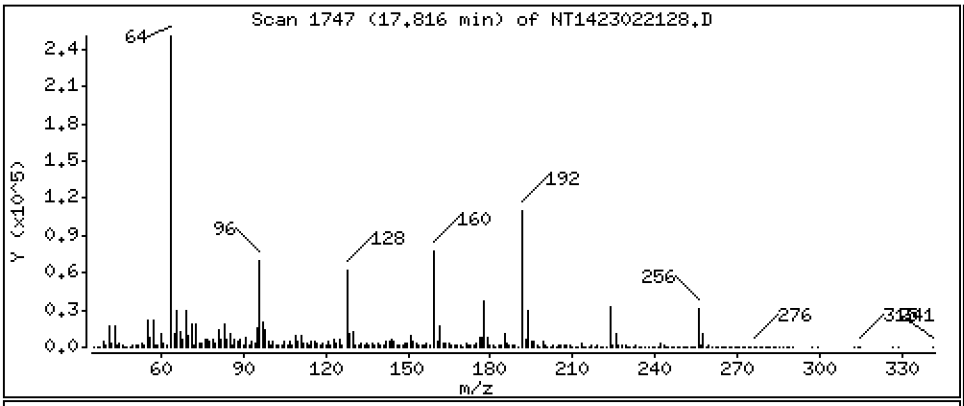
Operator: DSD

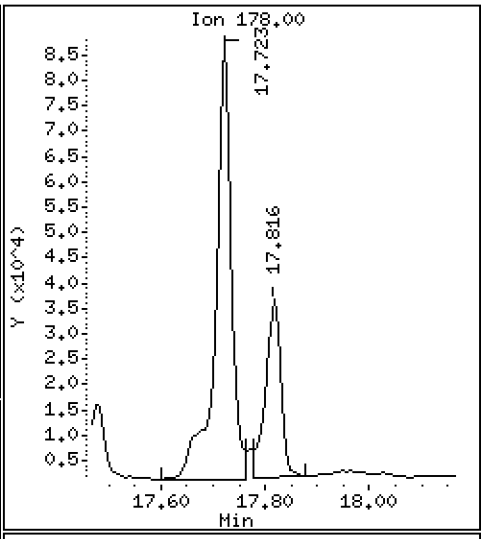
Column phase: ZB-5msi

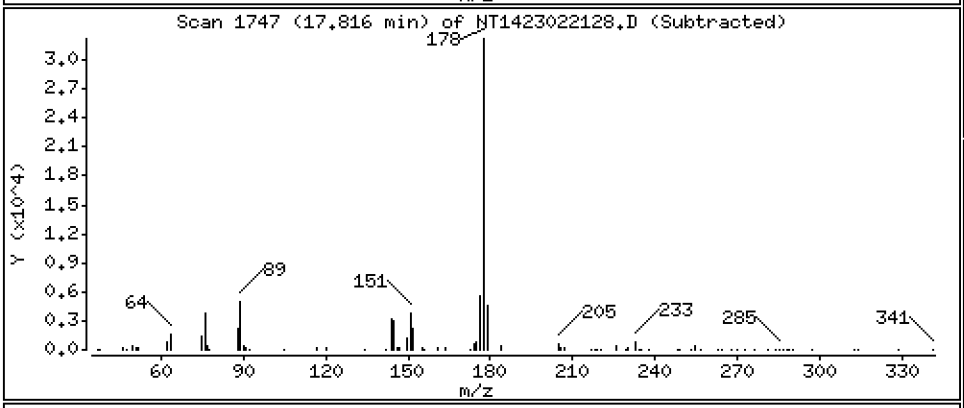
Column diameter: 0.25

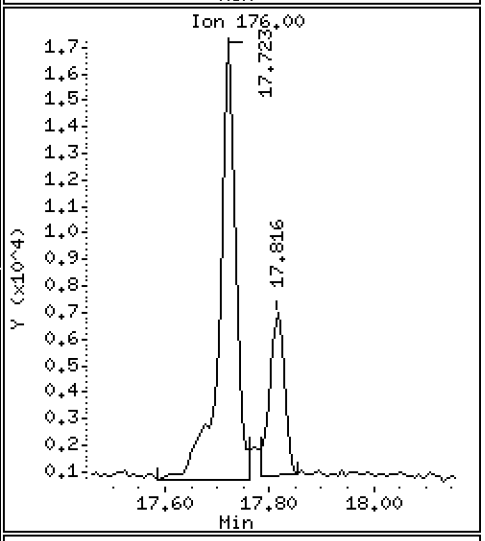
61 Anthracene

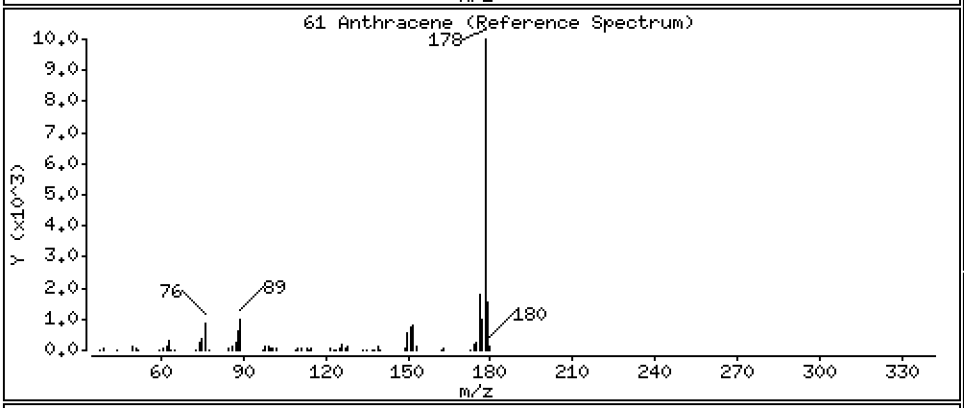
Concentration: 0.2126 ug/mL

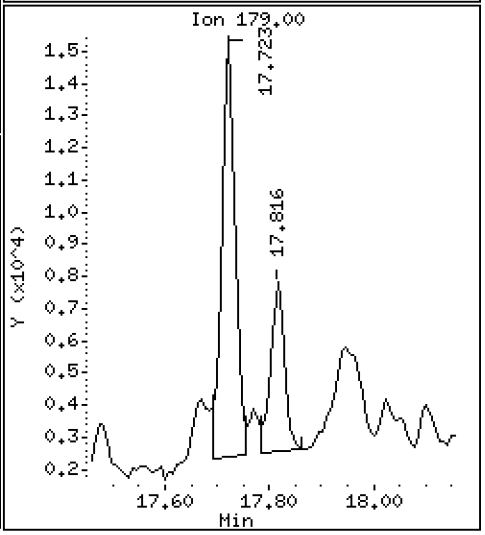


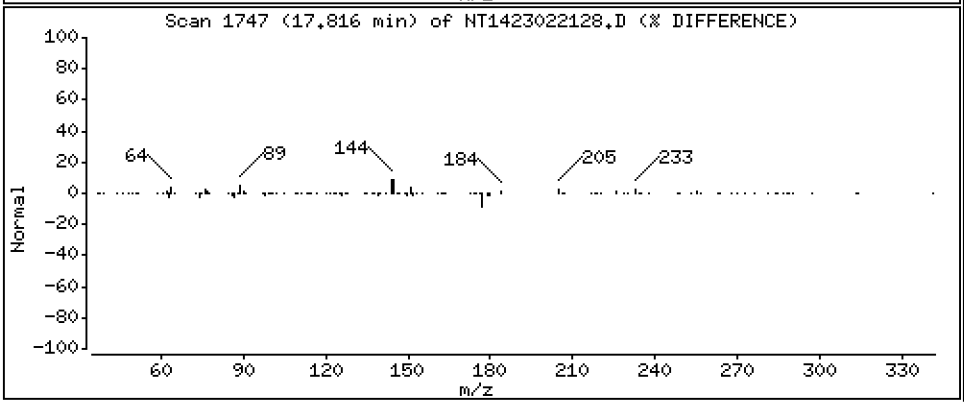












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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

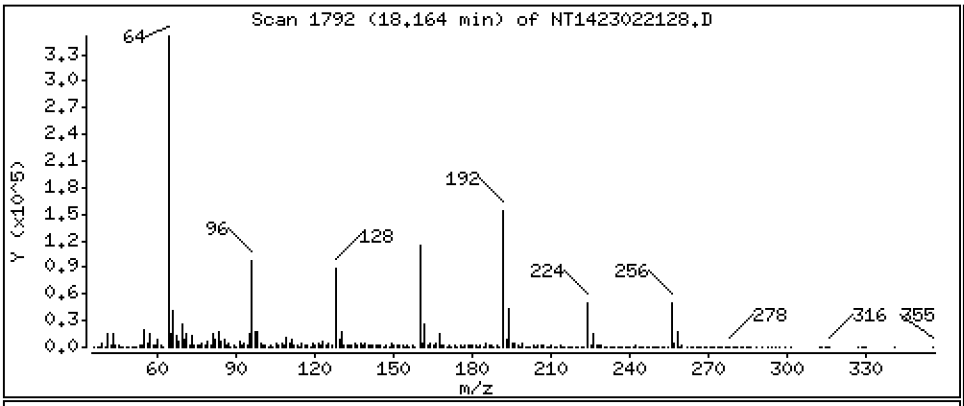
Operator: DSD

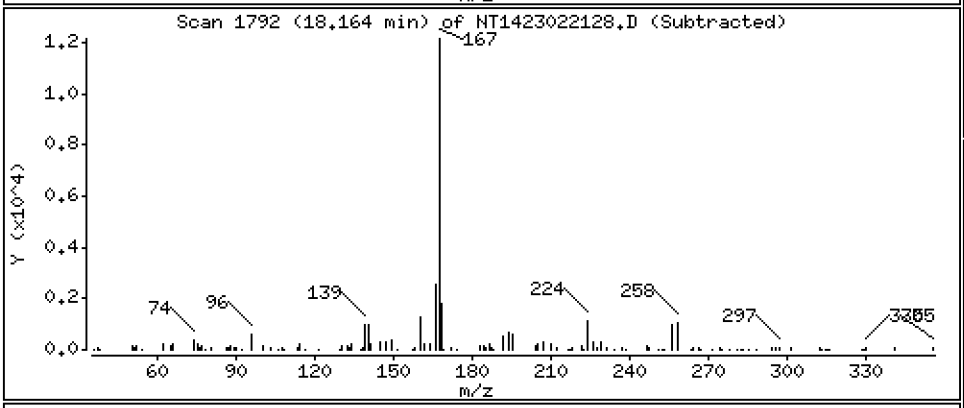
Column phase: ZB-5msi

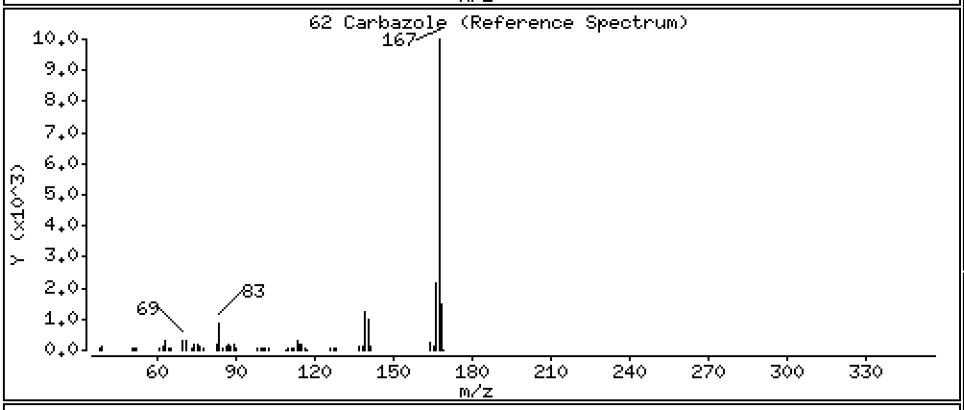
Column diameter: 0.25

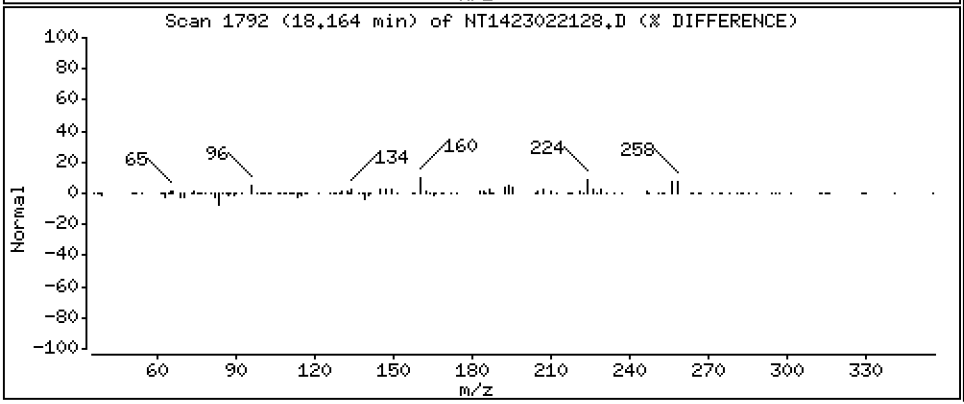
62 Carbazole

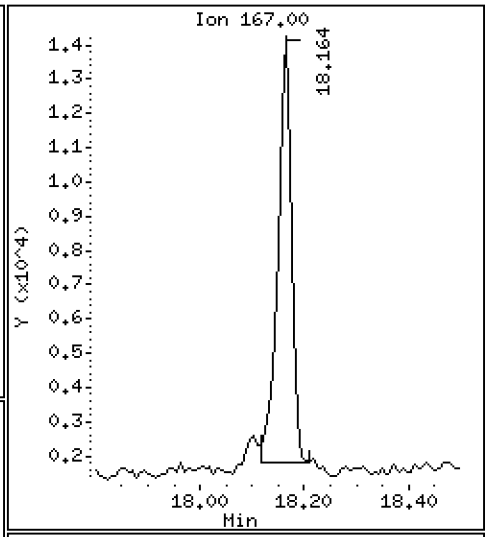
Concentration: 0.07736 ug/mL

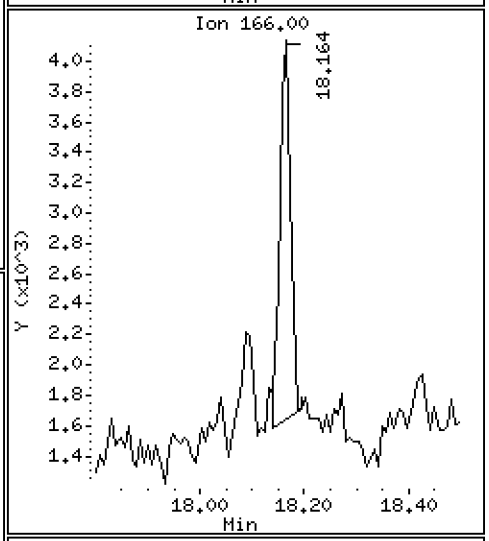


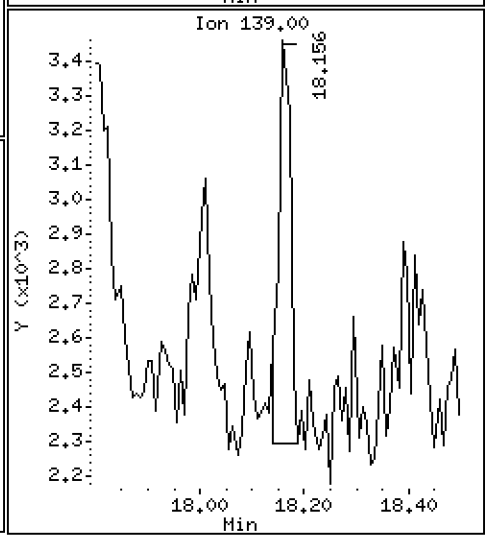












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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

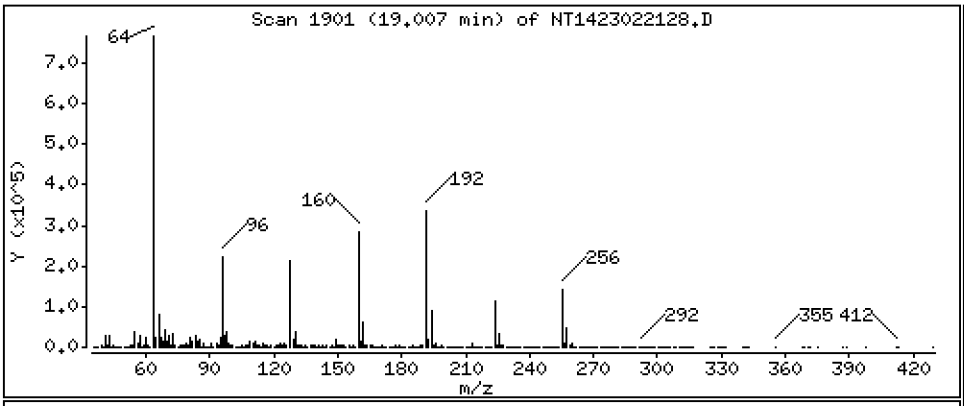
Operator: DSD

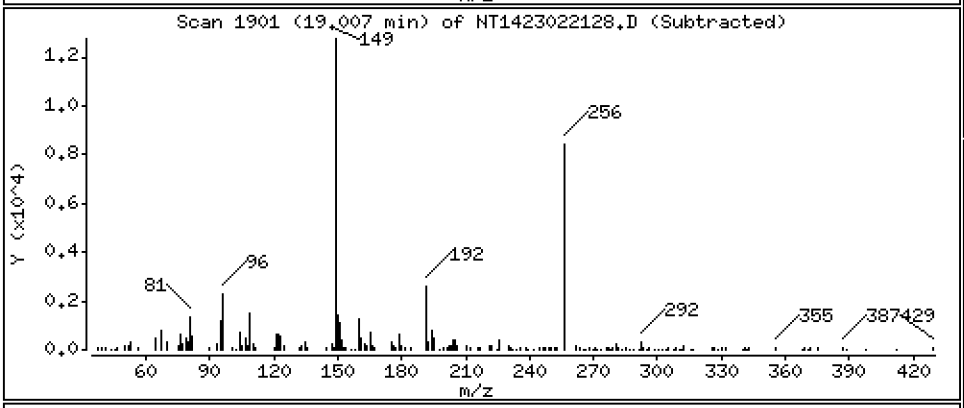
Column phase: ZB-5msi

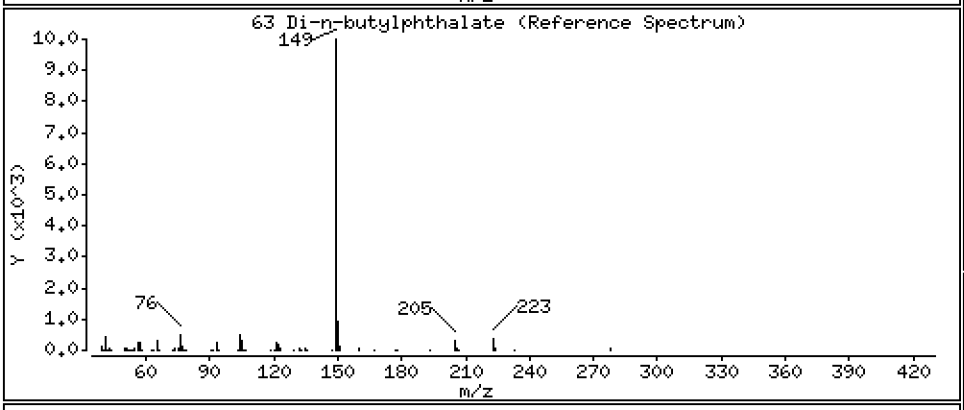
Column diameter: 0.25

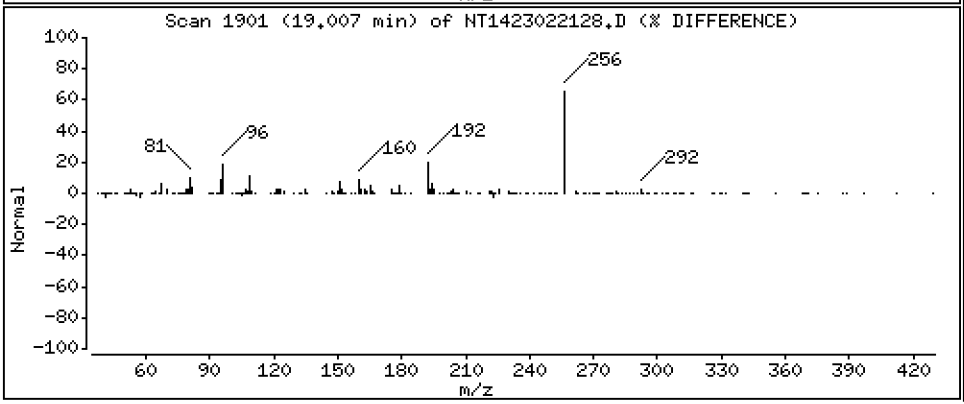
63 Di-n-butylphthalate

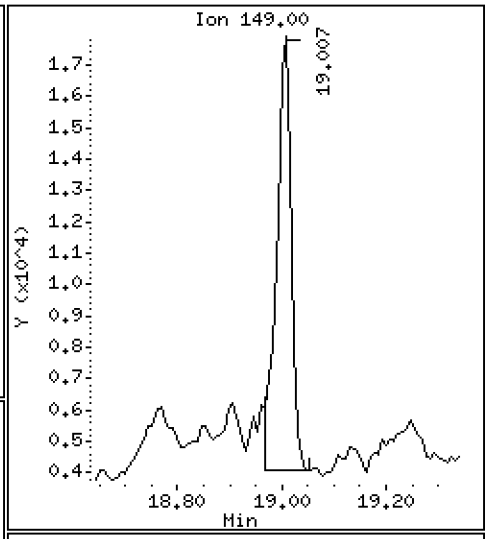
Concentration: 0.08335 ug/mL

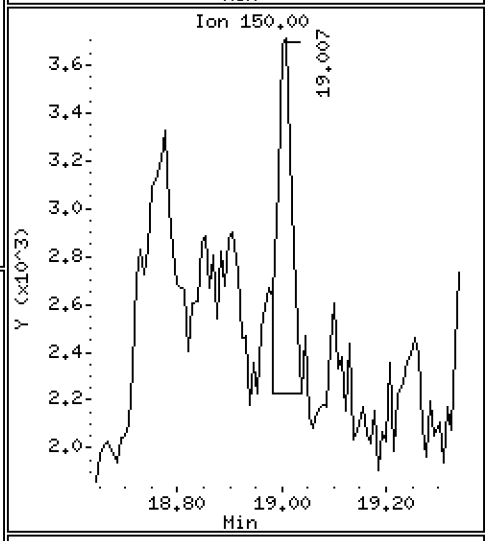


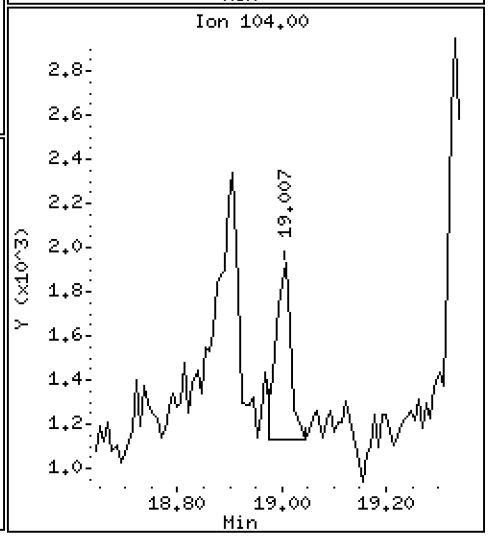












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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

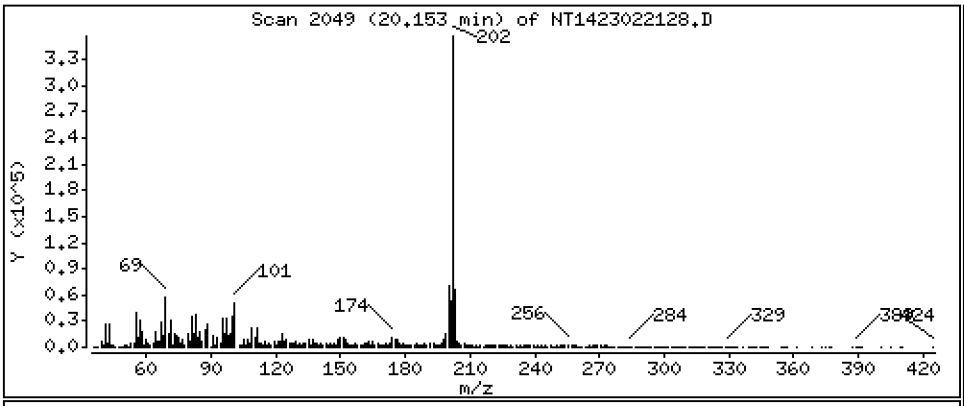
Operator: DSD

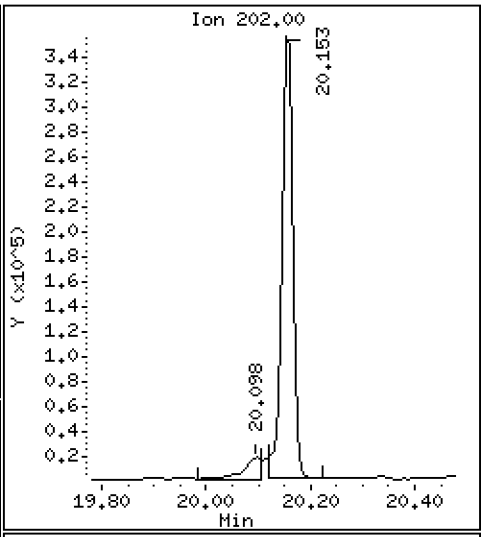
Column phase: ZB-5msi

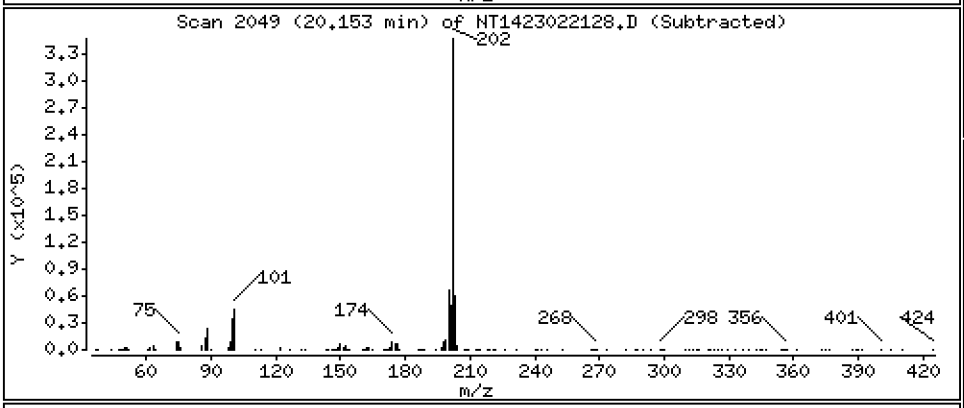
Column diameter: 0.25

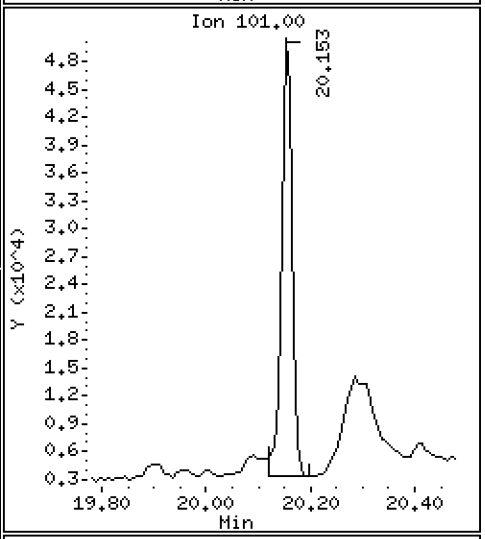
64 Fluoranthene

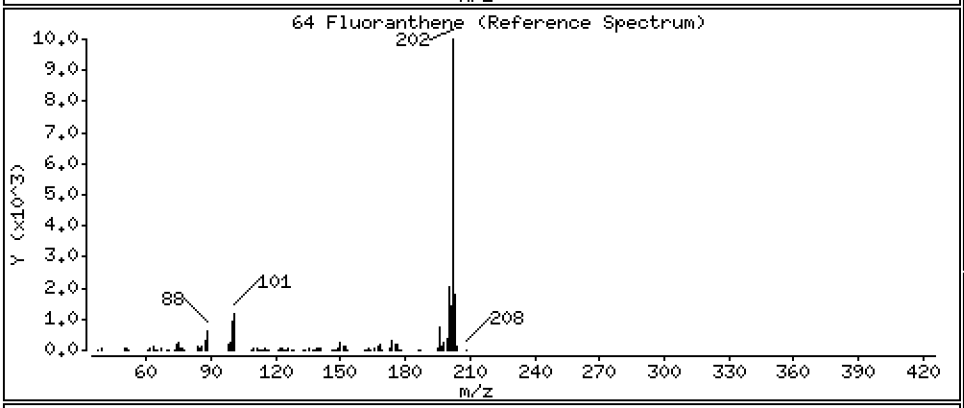
Concentration: 1.490 ug/mL

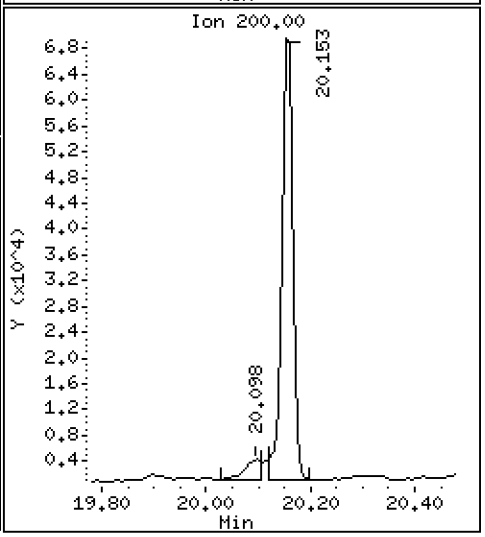


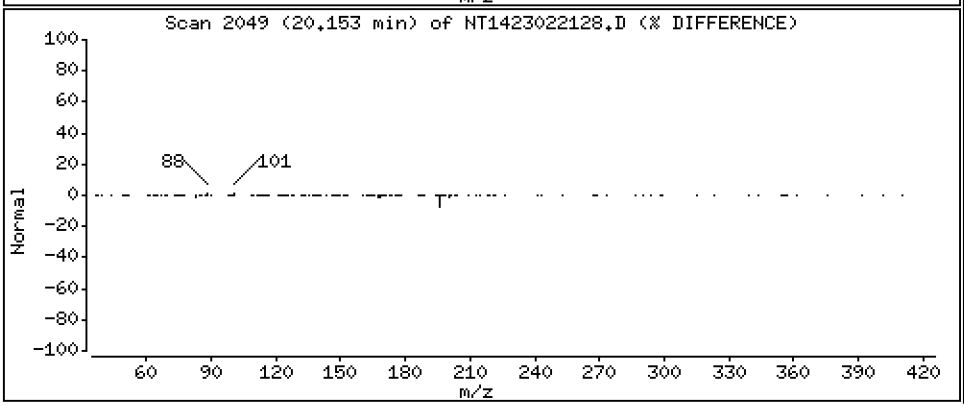












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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

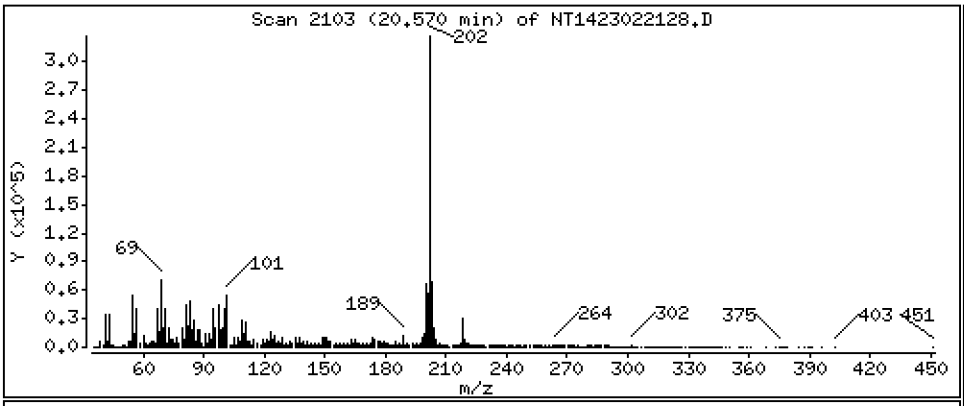
Operator: DSD

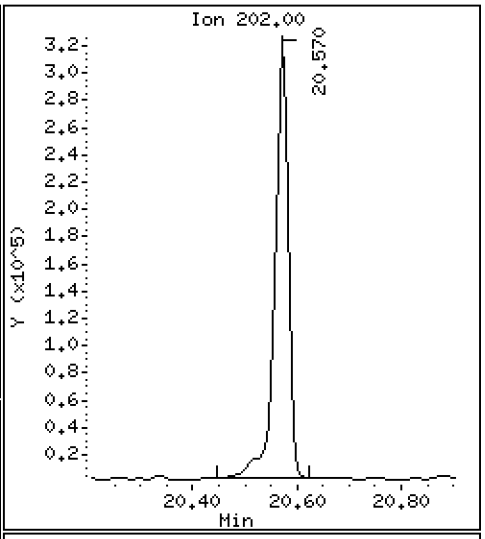
Column phase: ZB-5msi

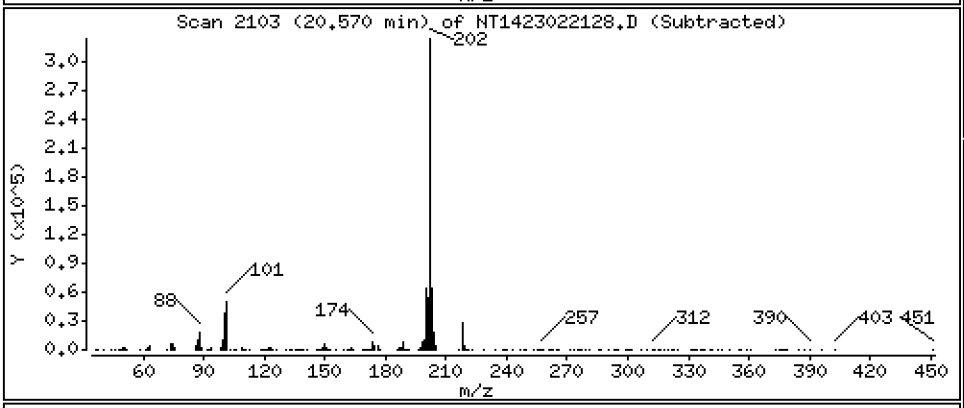
Column diameter: 0.25

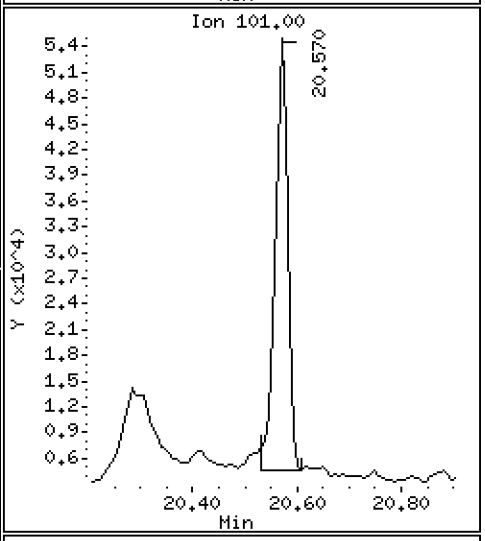
65 Pyrene

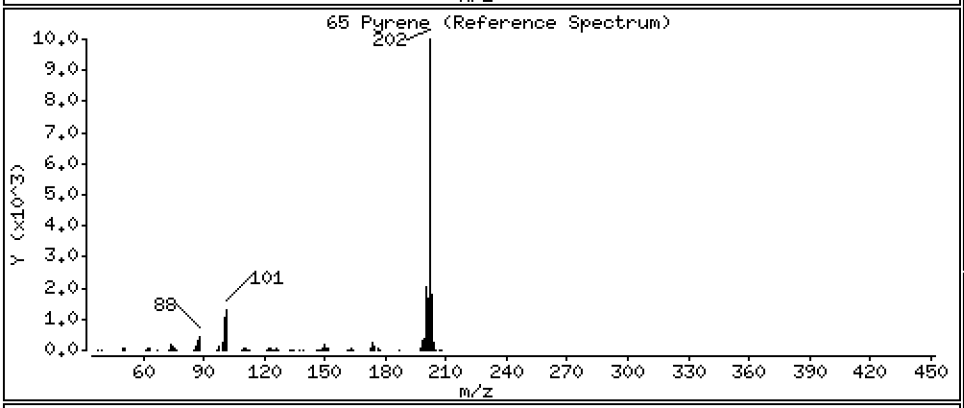
Concentration: 1.472 ug/mL

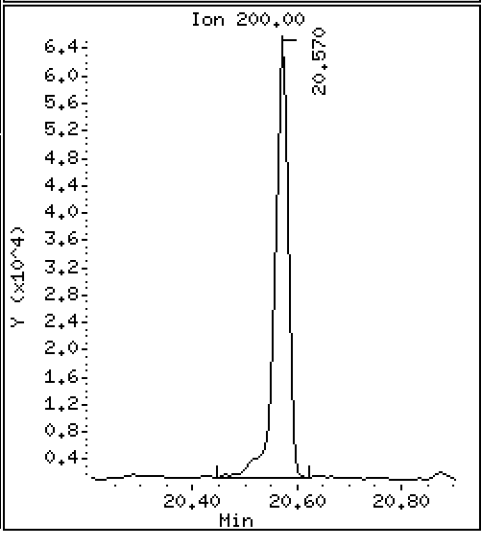


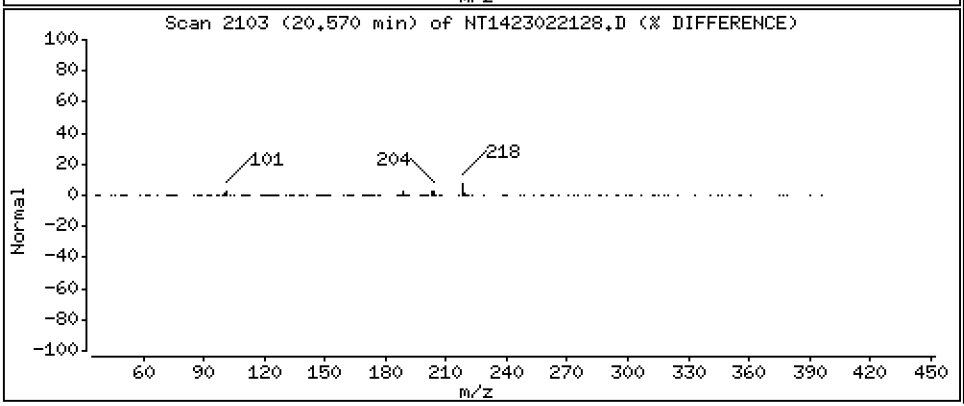












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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

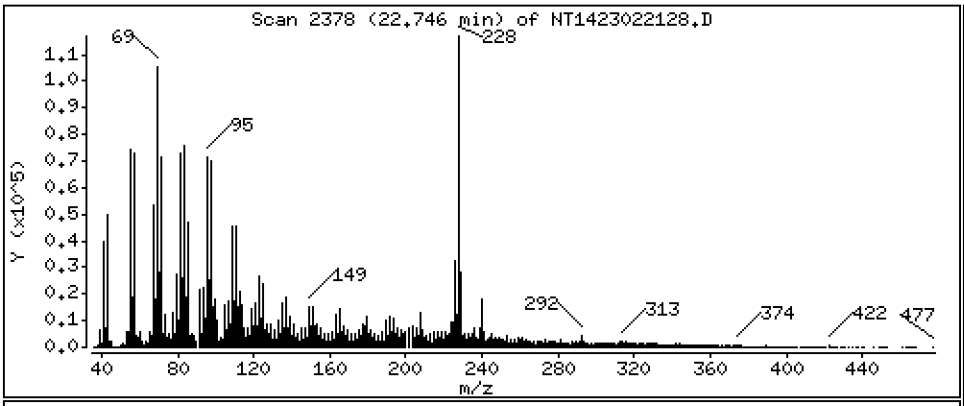
Operator: DSD

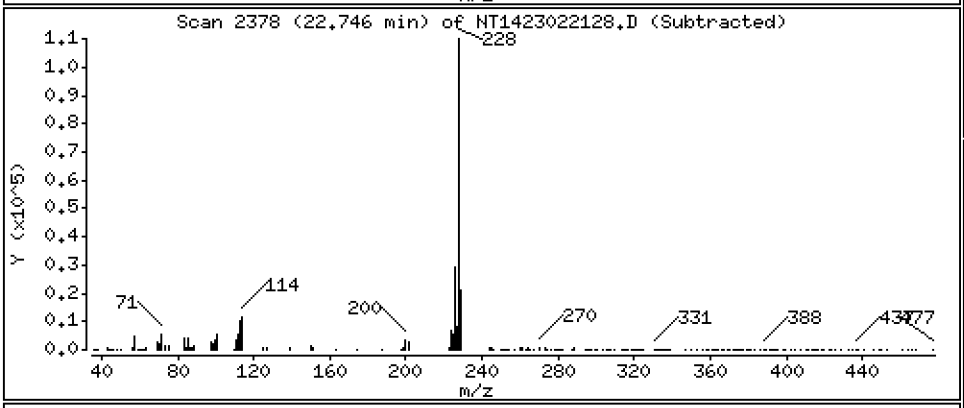
Column phase: ZB-5msi

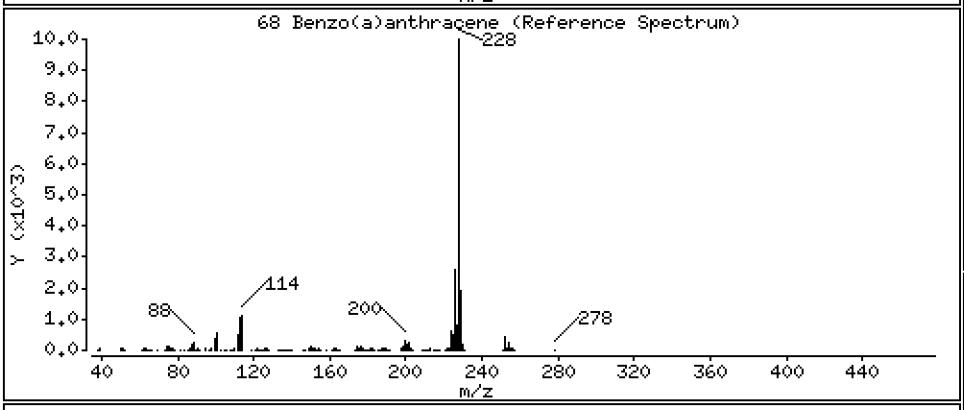
Column diameter: 0.25

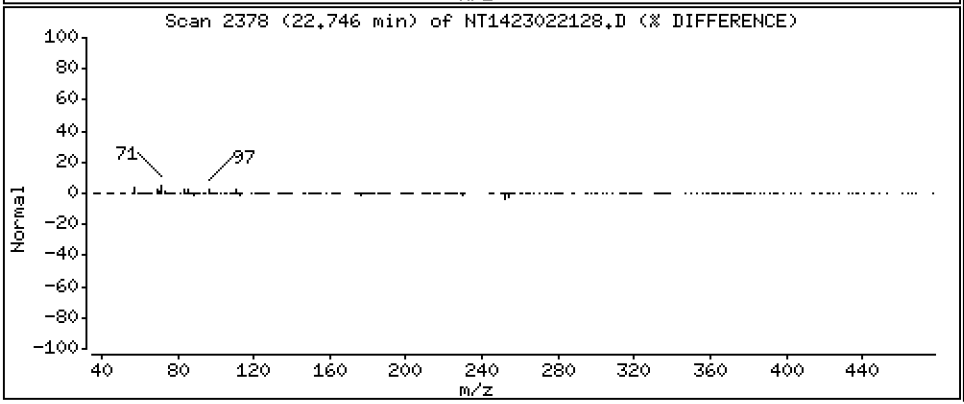
68 Benzo(a)anthracene

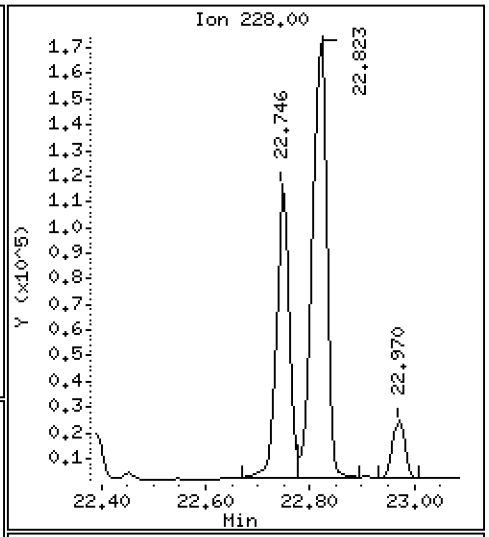
Concentration: 0.7057 ug/mL

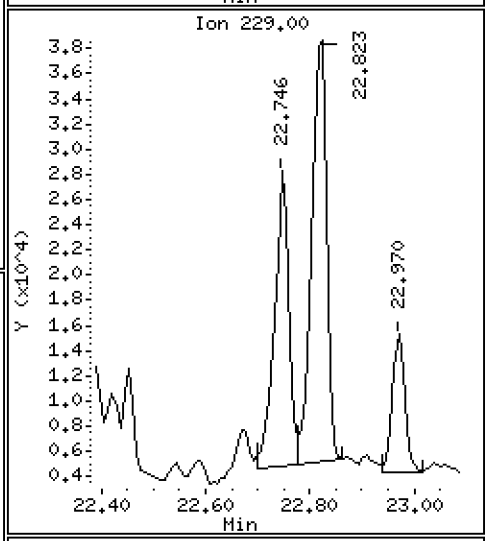


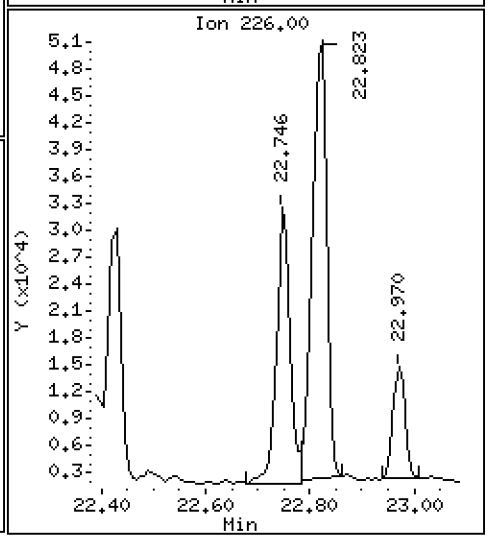












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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

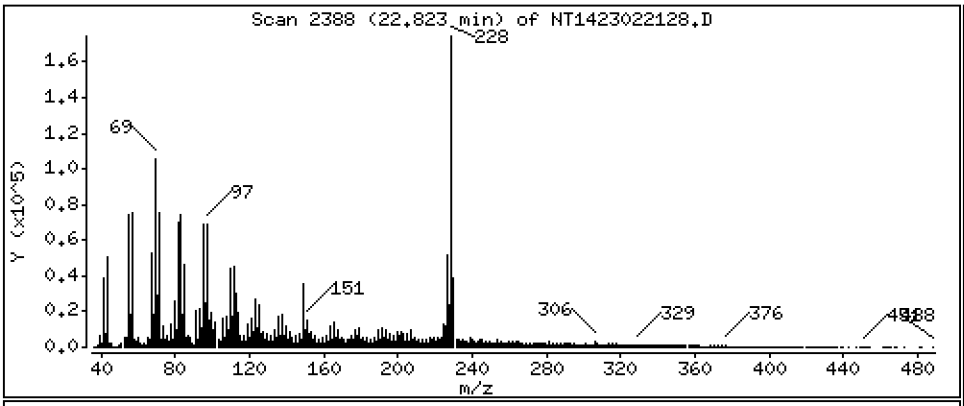
Operator: DSD

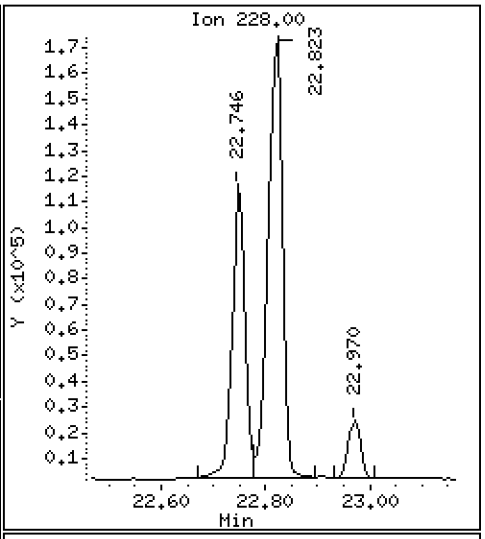
Column phase: ZB-5msi

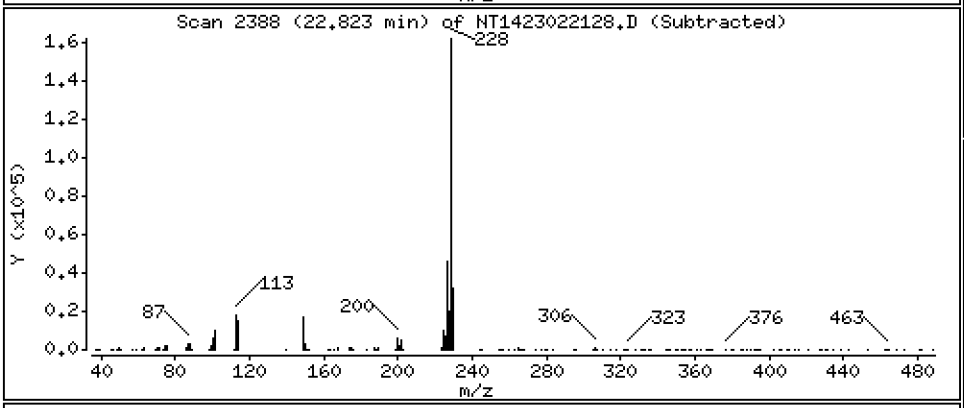
Column diameter: 0.25

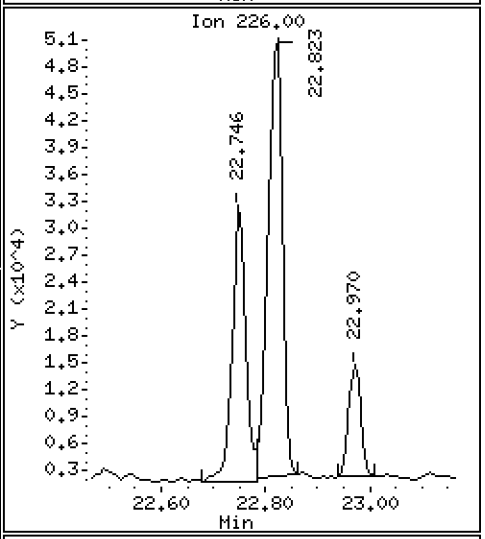
71 Chrysene

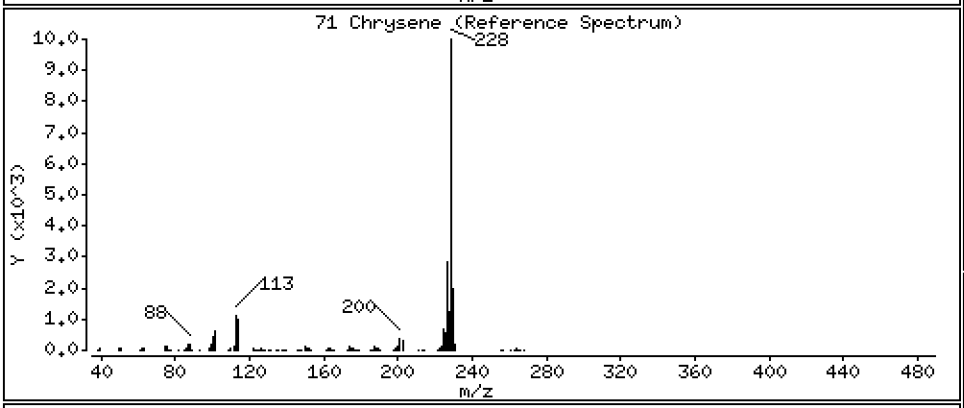
Concentration: 1.295 ug/mL

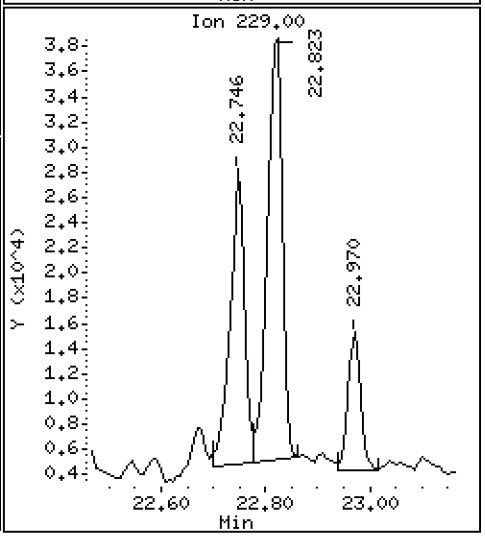


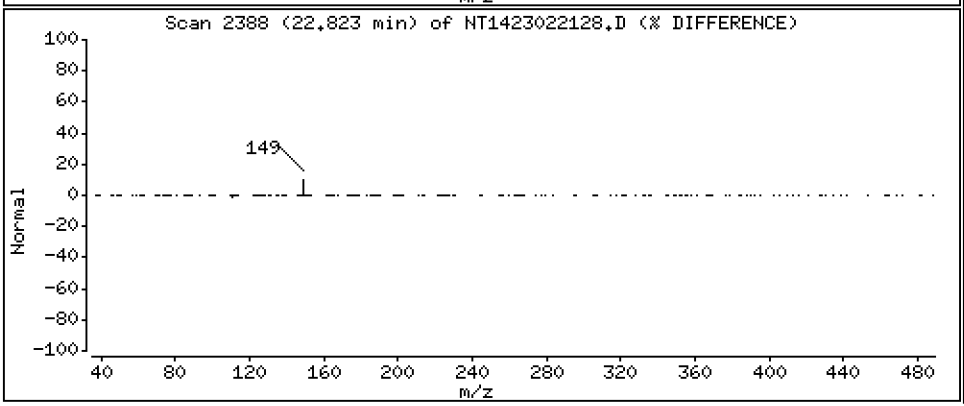












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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

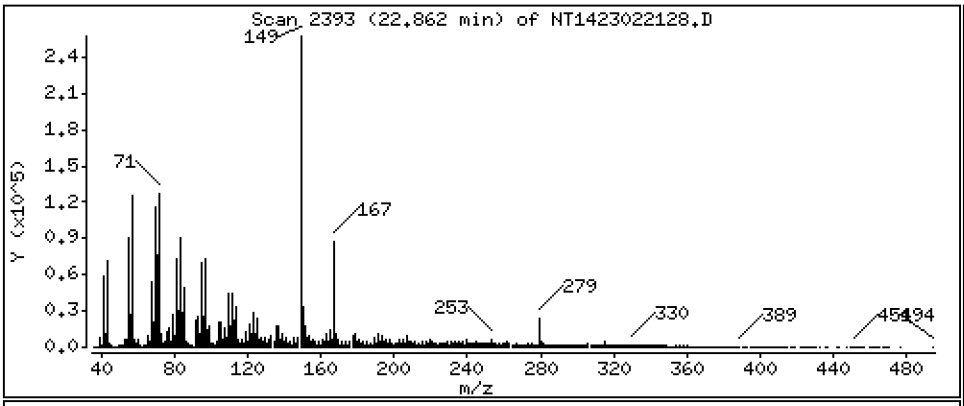
Operator: DSD

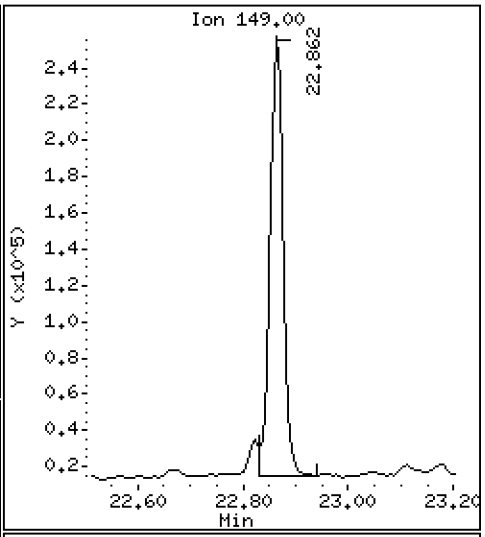
Column phase: ZB-5msi

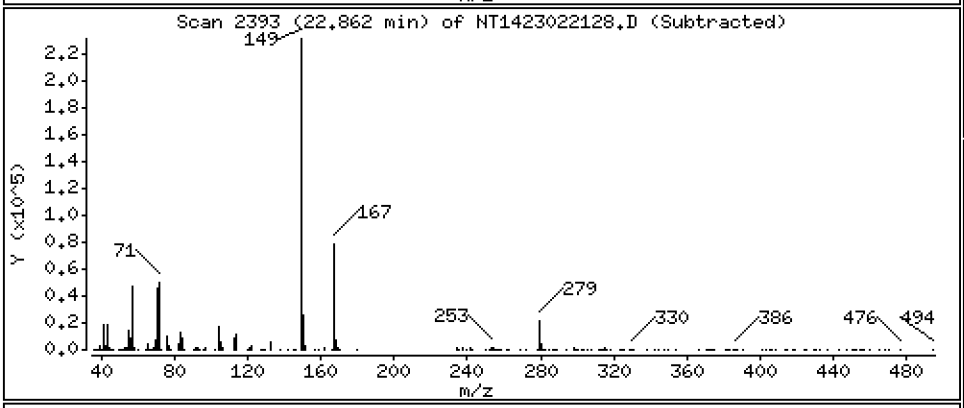
Column diameter: 0.25

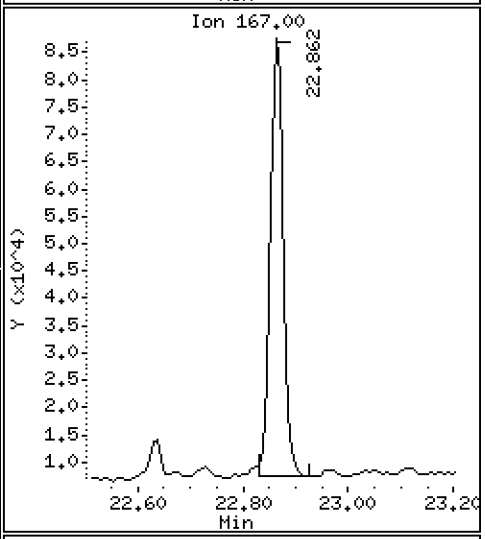
72 bis(2-Ethylhexyl)phthalate

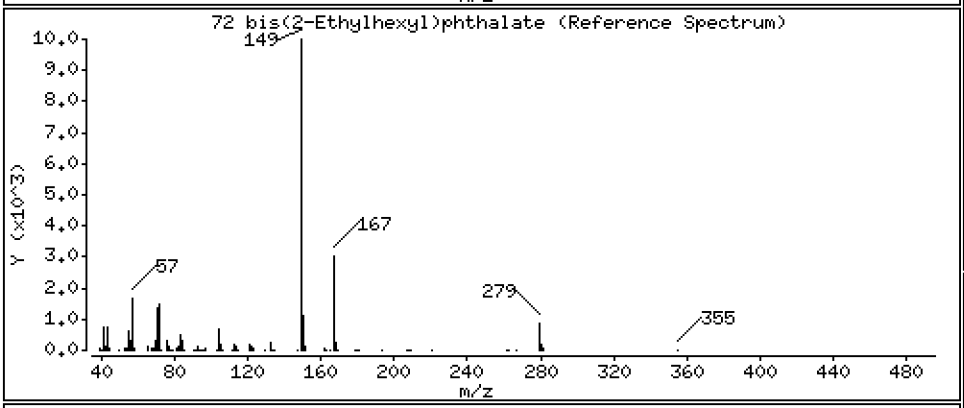
Concentration: 1.951 ug/mL

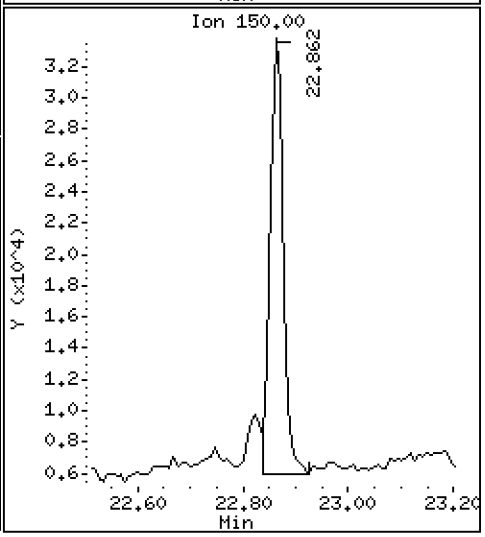


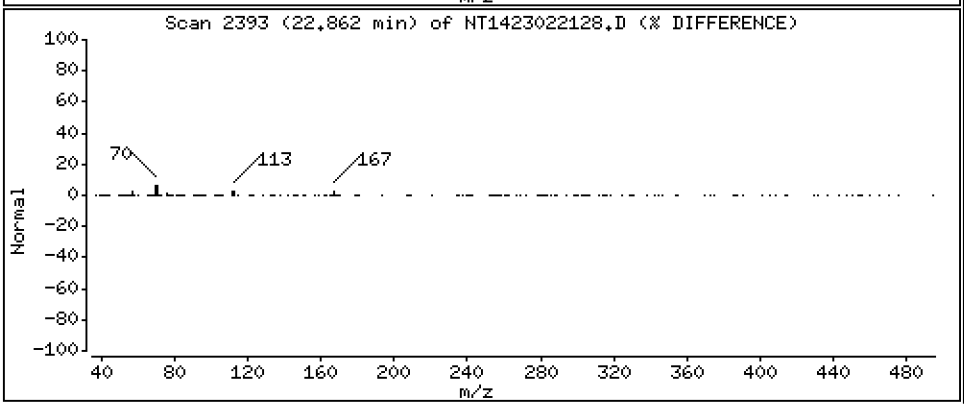












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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

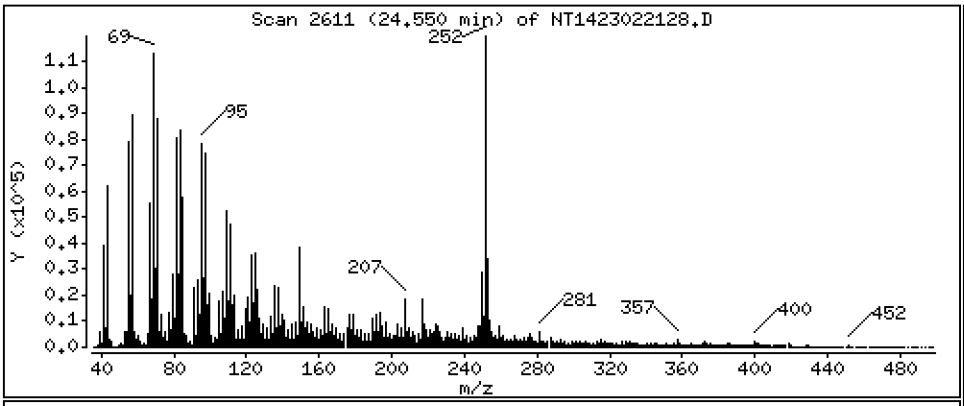
Operator: DSD

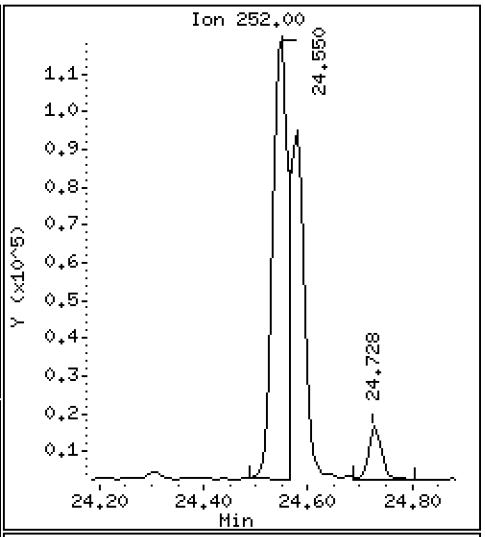
Column phase: ZB-5msi

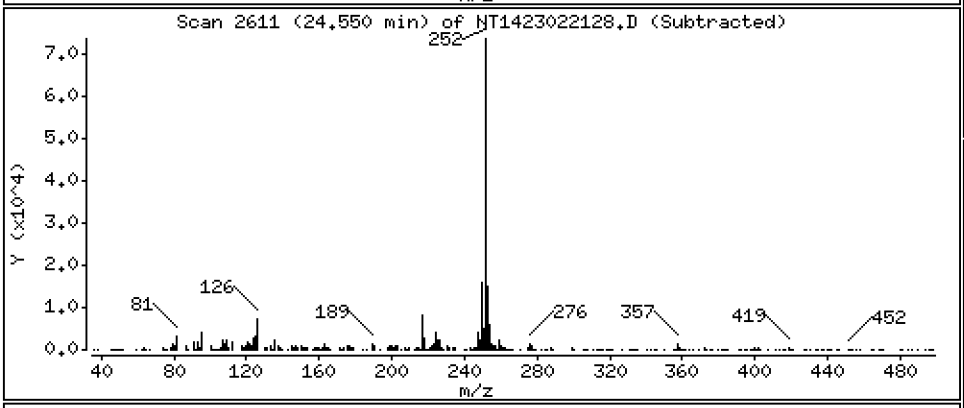
Column diameter: 0.25

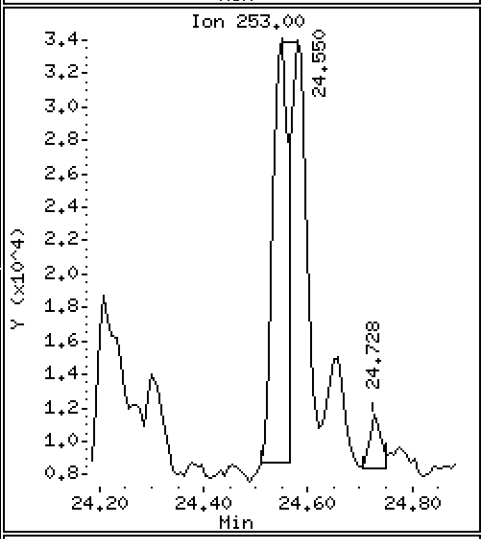
74 Benzo(b)fluoranthene

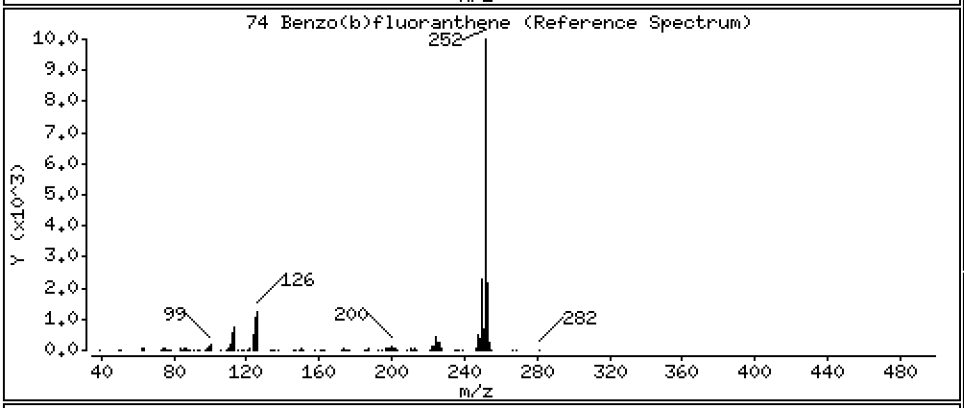
Concentration: 1.120 ug/mL

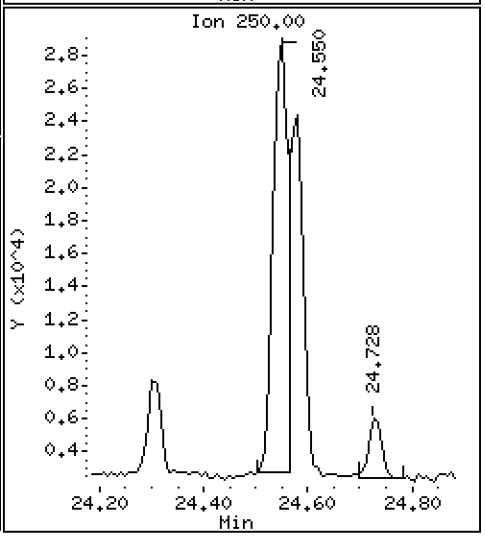


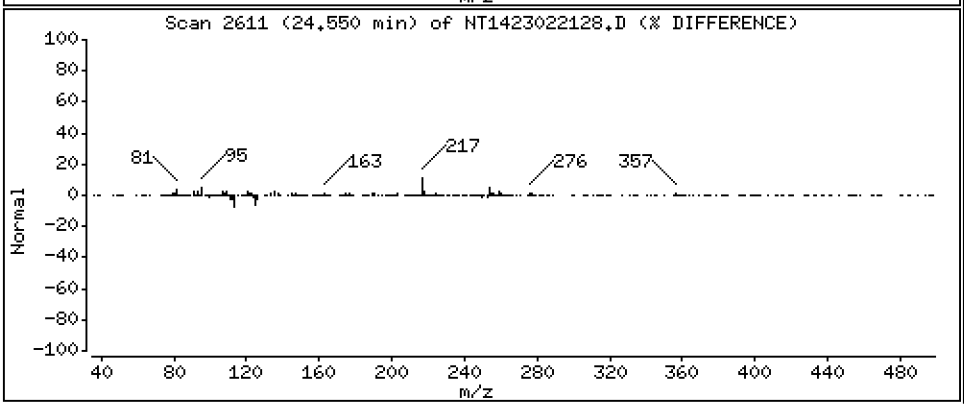












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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

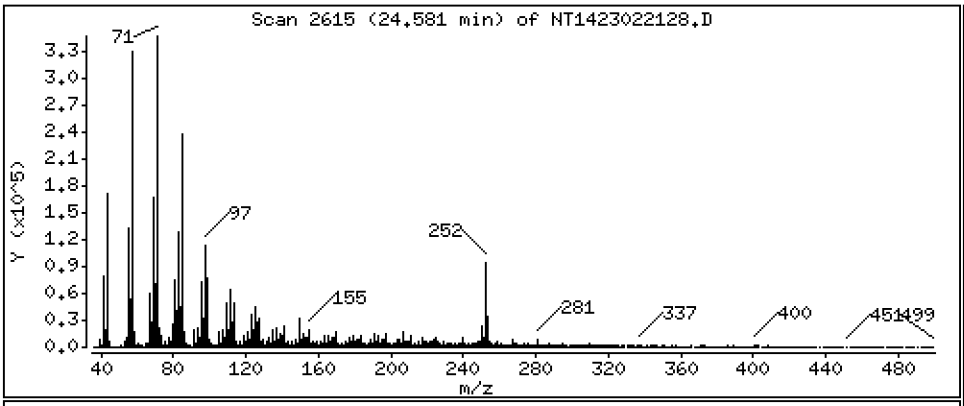
Operator: DSD

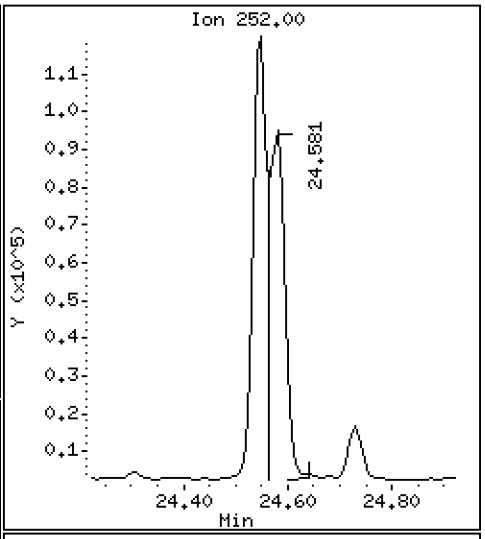
Column phase: ZB-5msi

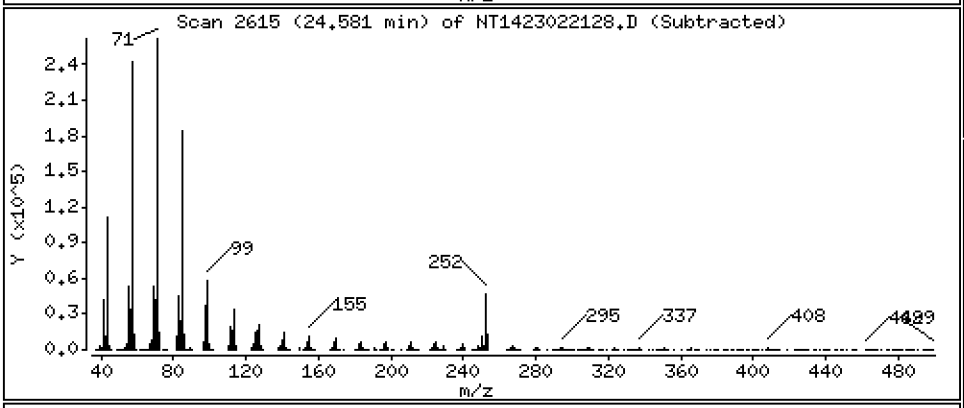
Column diameter: 0.25

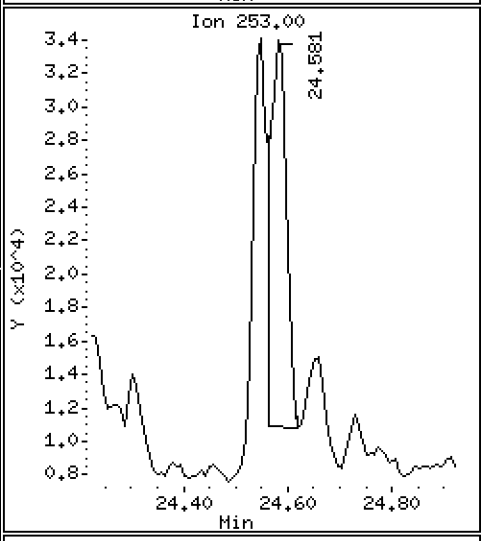
75 Benzo(k)fluoranthene

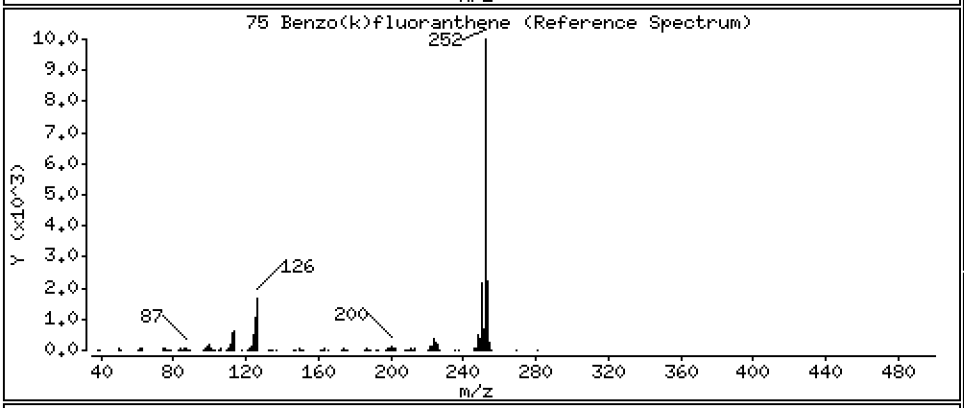
Concentration: 0.8525 ug/mL

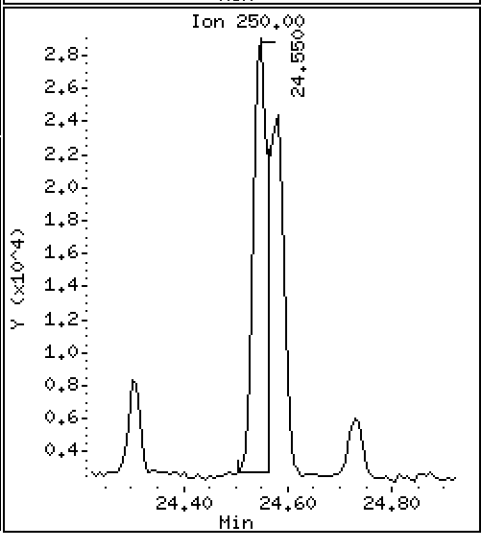


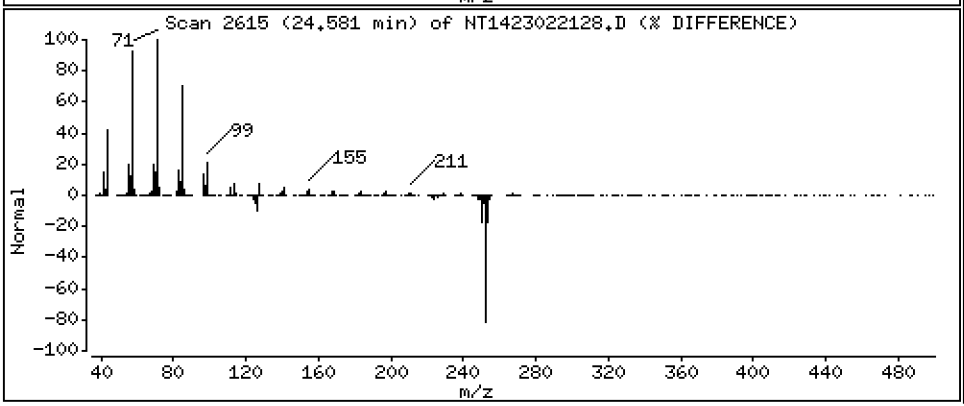












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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

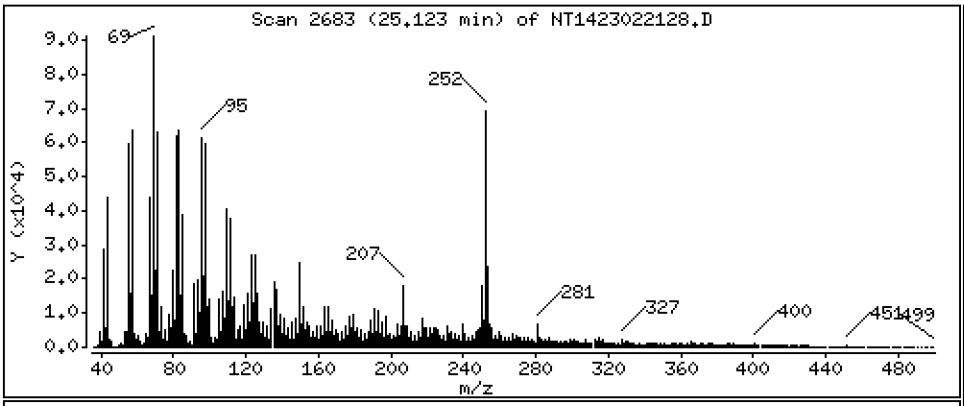
Operator: DSD

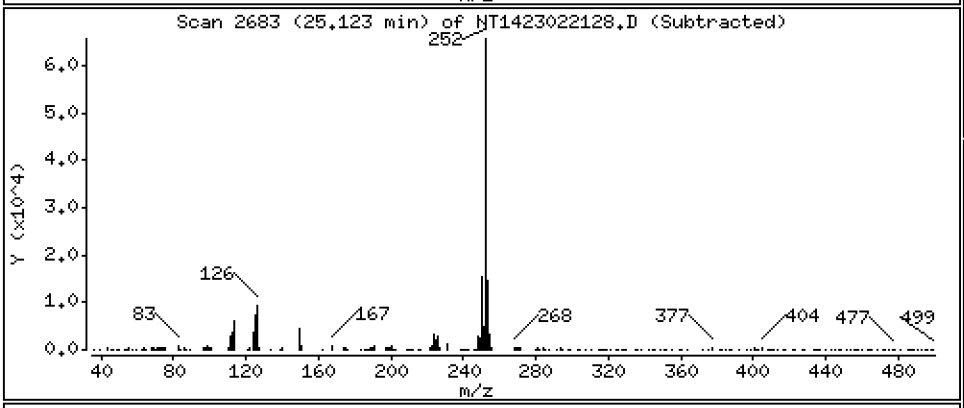
Column phase: ZB-5msi

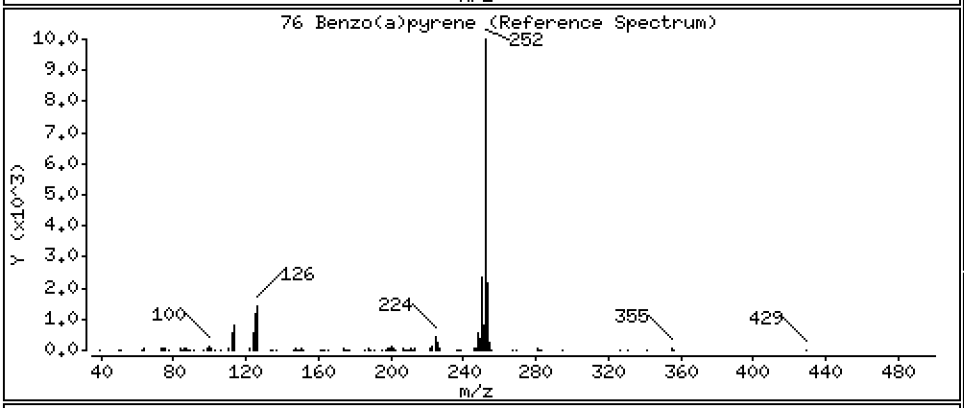
Column diameter: 0.25

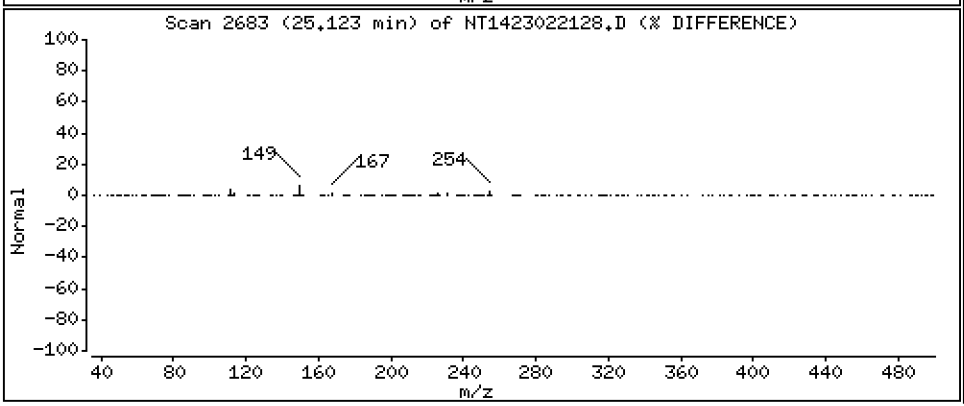
76 Benzo(a)pyrene

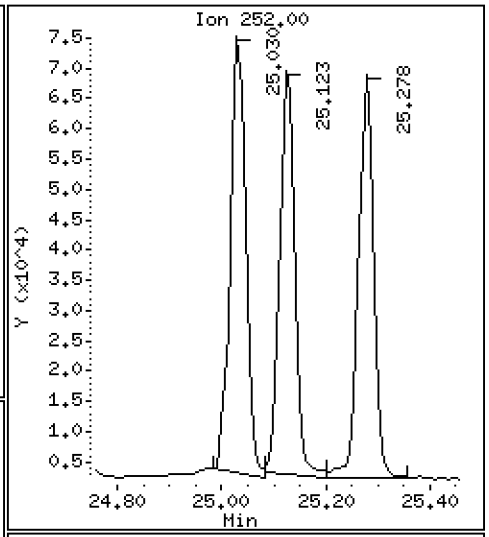
Concentration: 0.6721 ug/mL

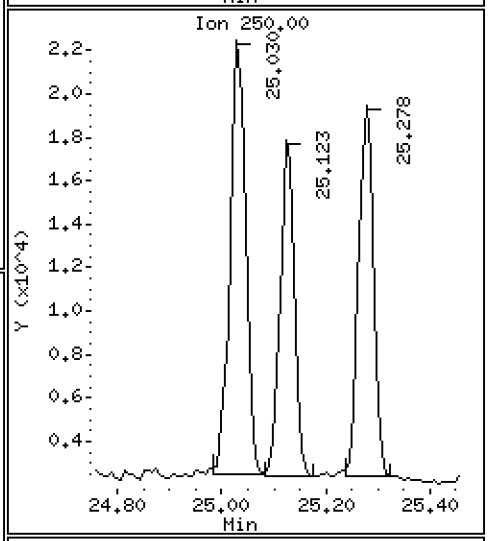


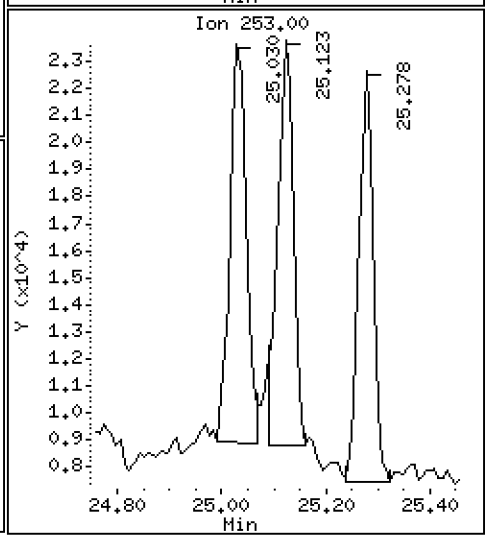












Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022128.D

Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

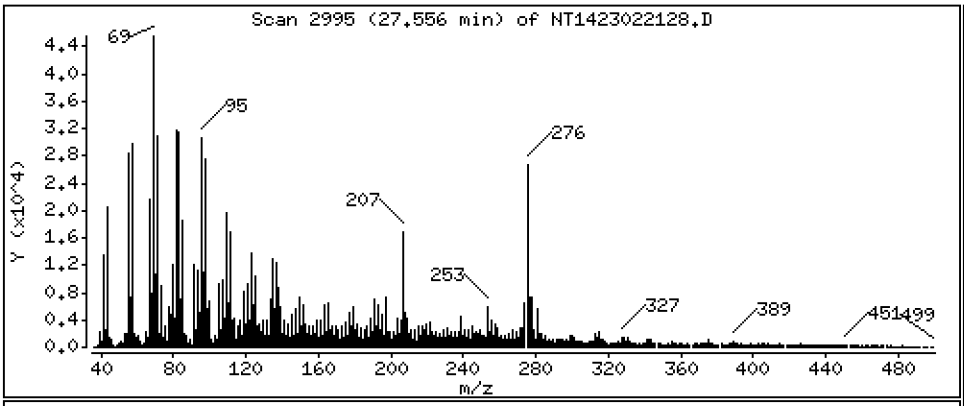
Operator: DSD

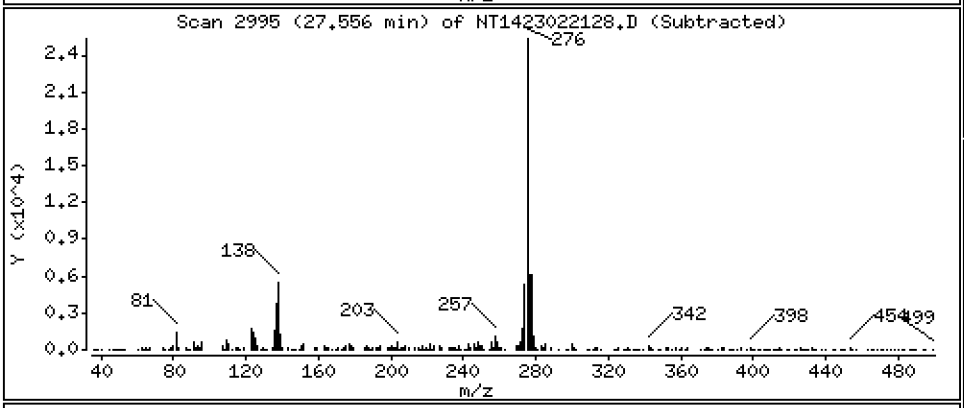
Column phase: ZB-5msi

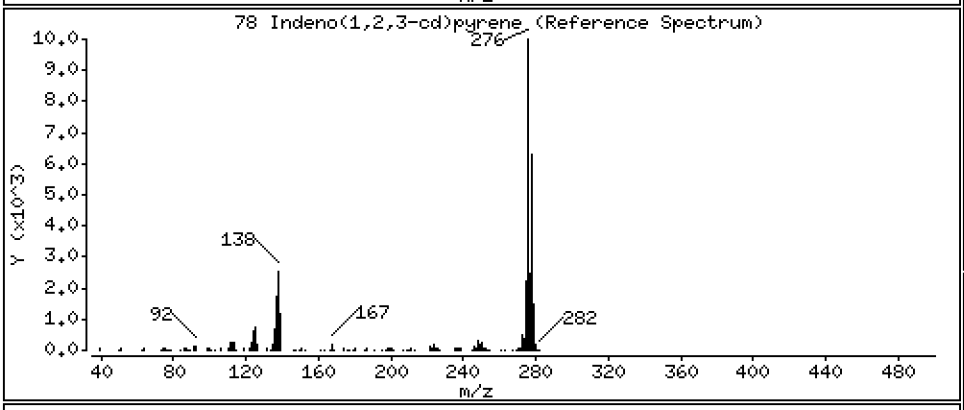
Column diameter: 0.25

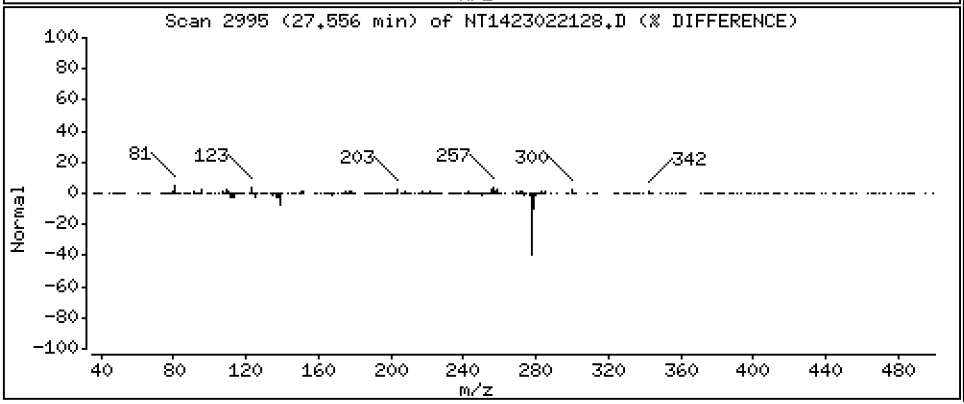
78 Indeno(1,2,3-cd)pyrene

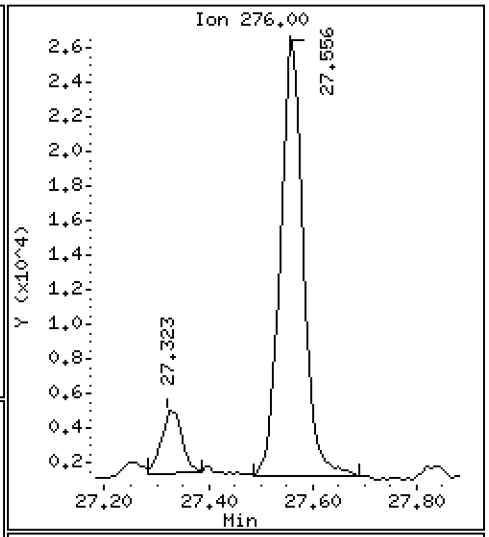
Concentration: 0.4789 ug/mL

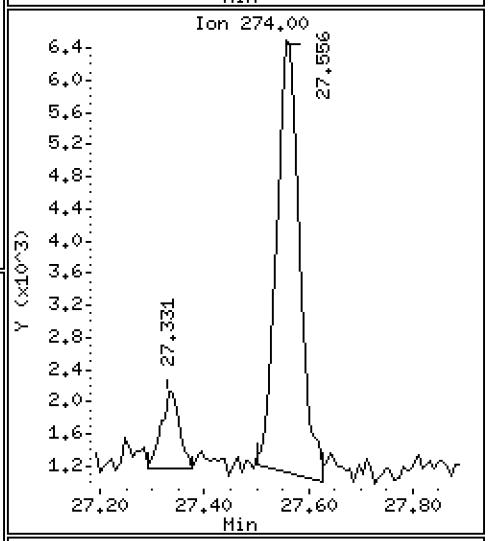


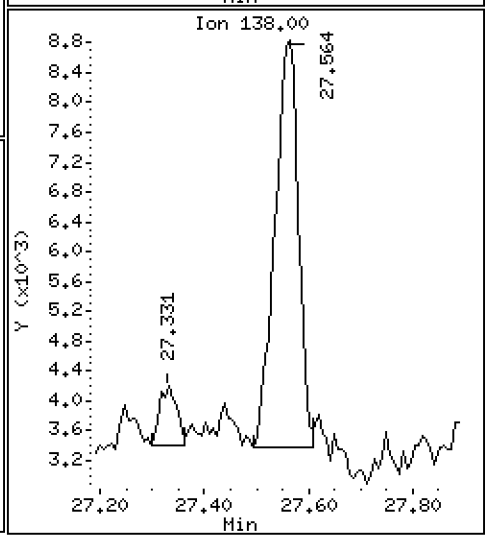












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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

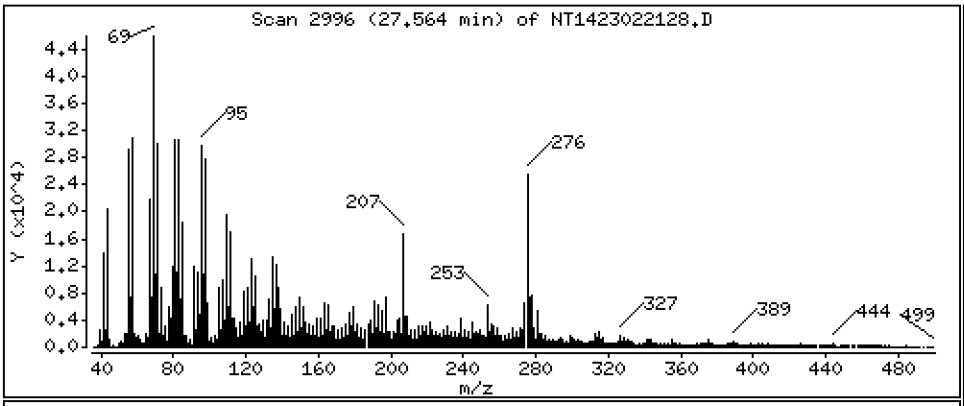
Operator: DSD

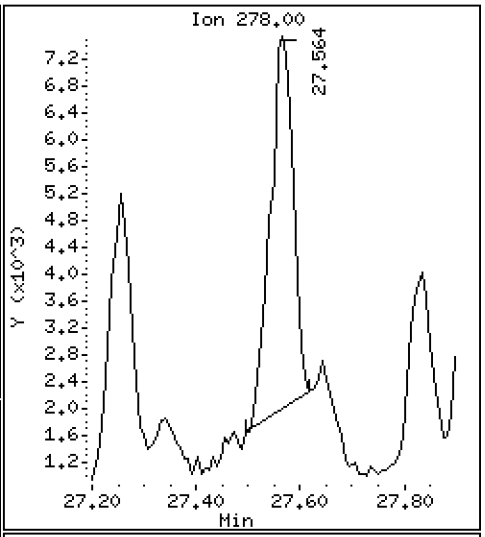
Column phase: ZB-5msi

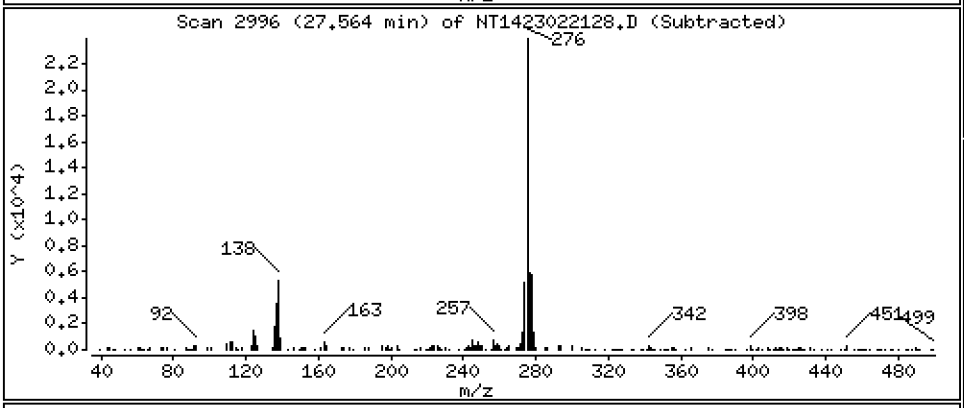
Column diameter: 0.25

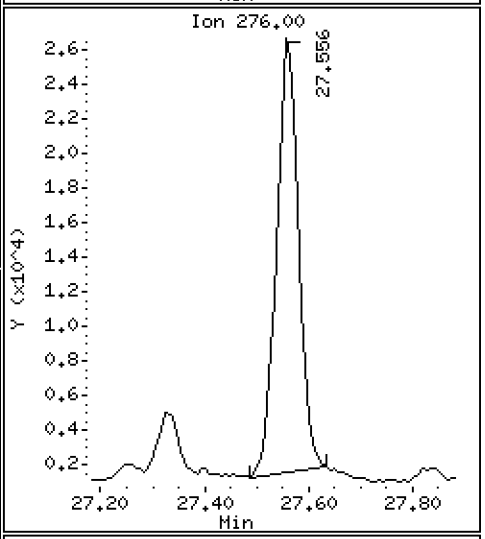
79 Dibenzo(a,h)anthracene

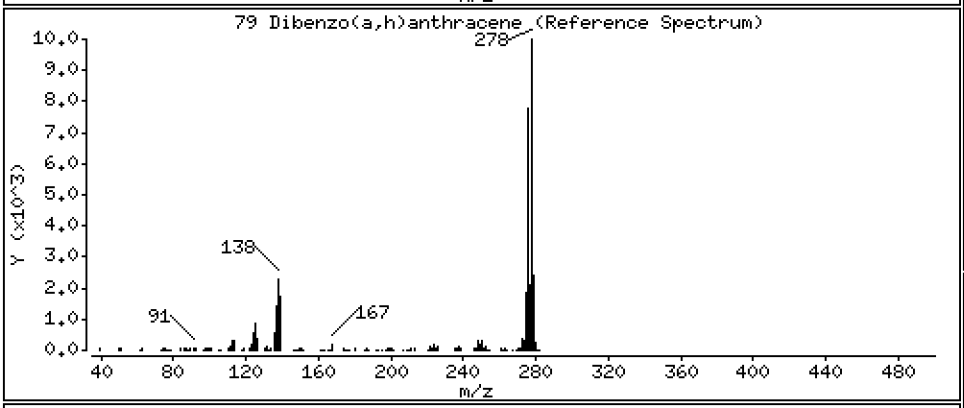
Concentration: 0.1276 ug/mL

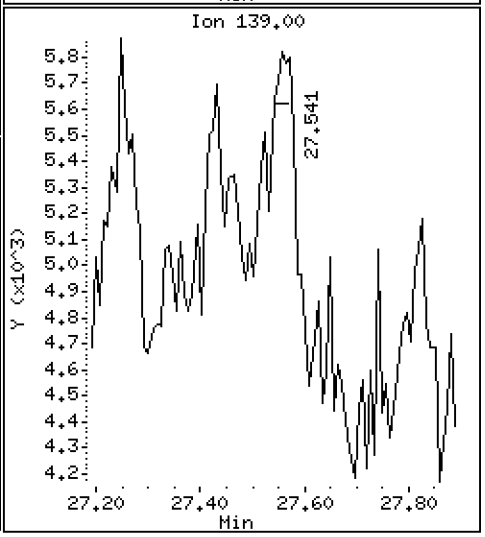


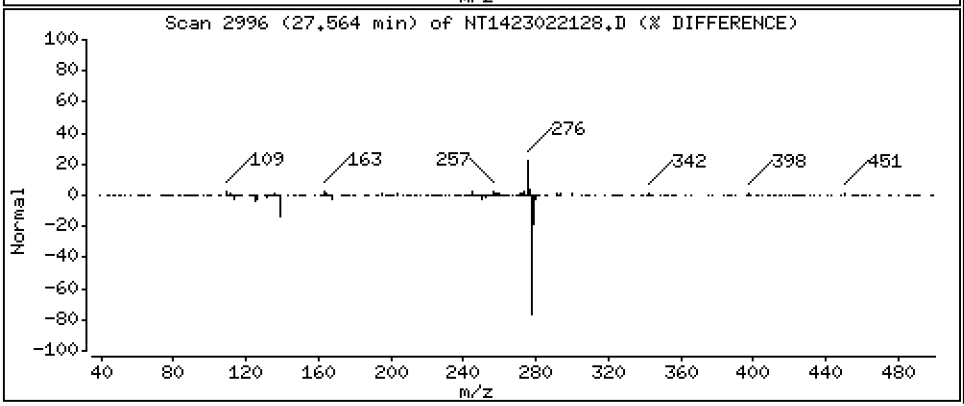












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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

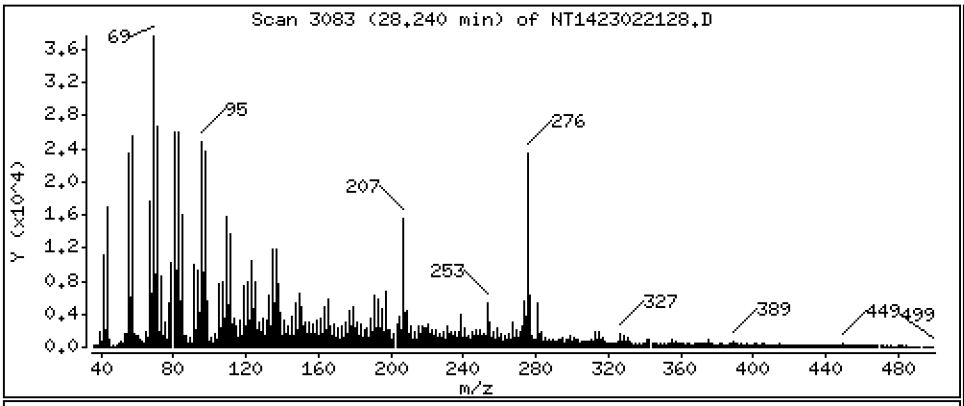
Operator: DSD

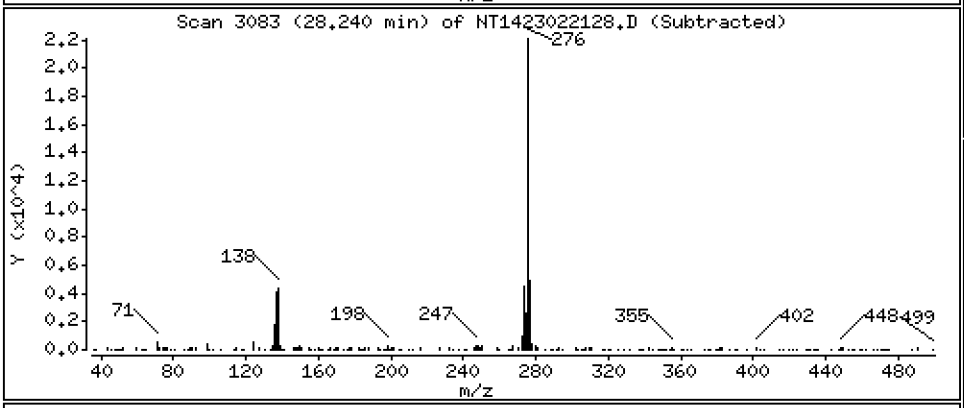
Column phase: ZB-5msi

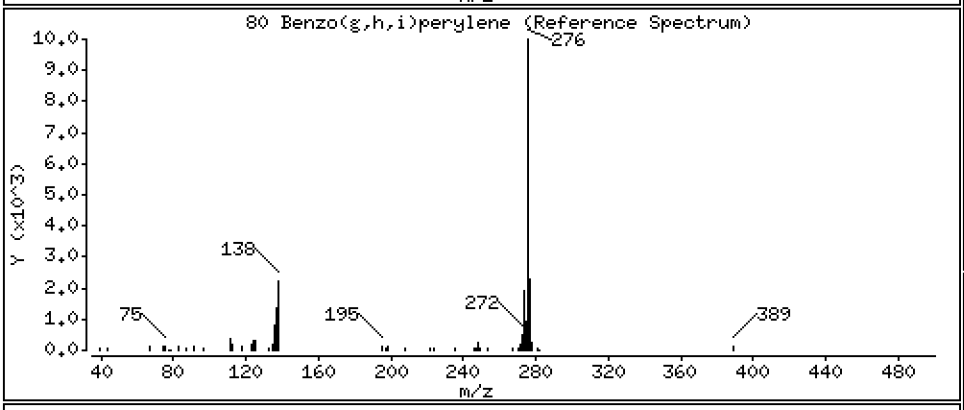
Column diameter: 0.25

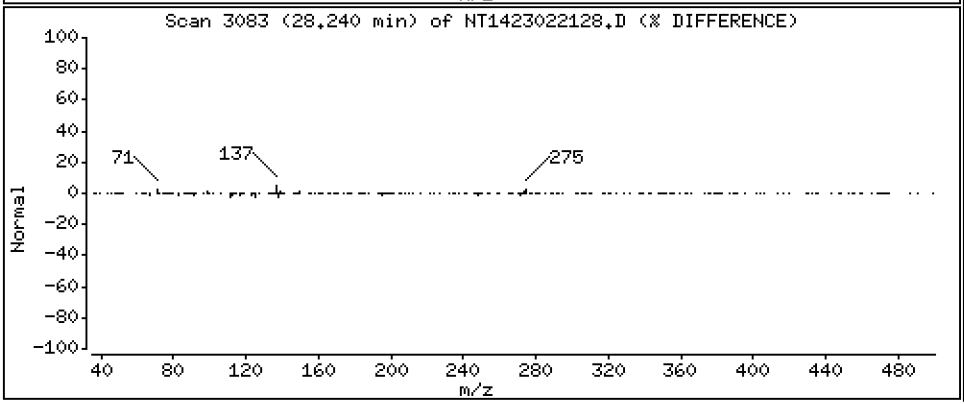
80 Benzo(g,h,i)perylene

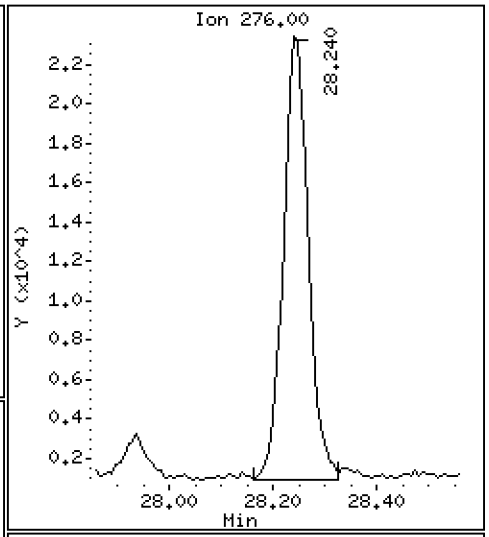
Concentration: 0.5701 ug/mL

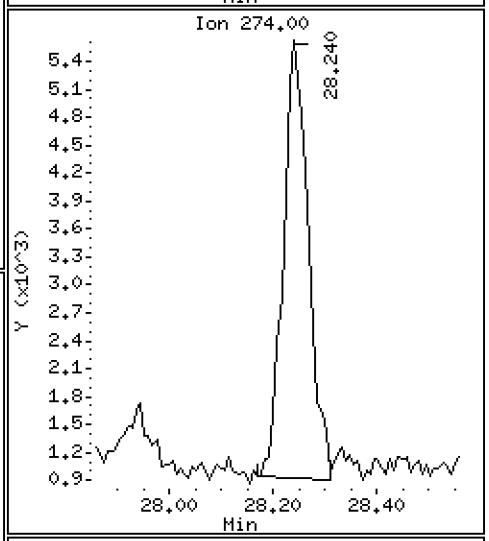


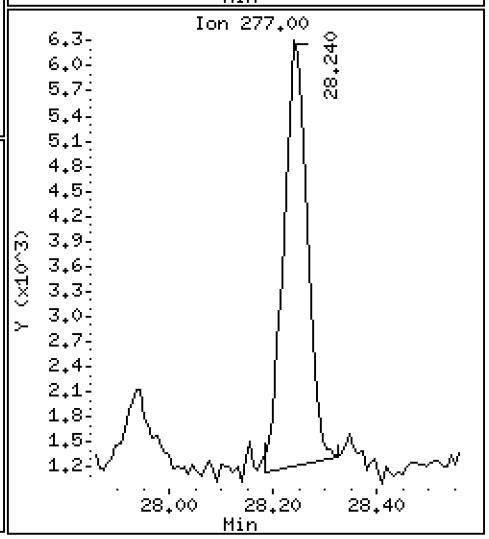












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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

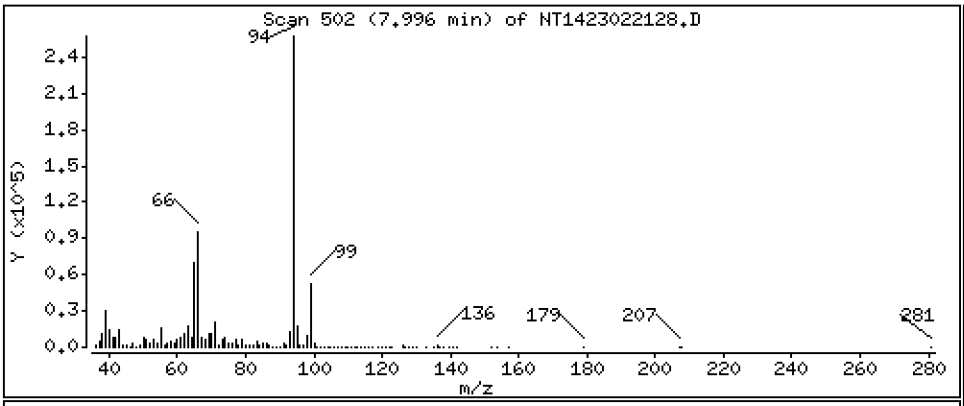
Operator: DSD

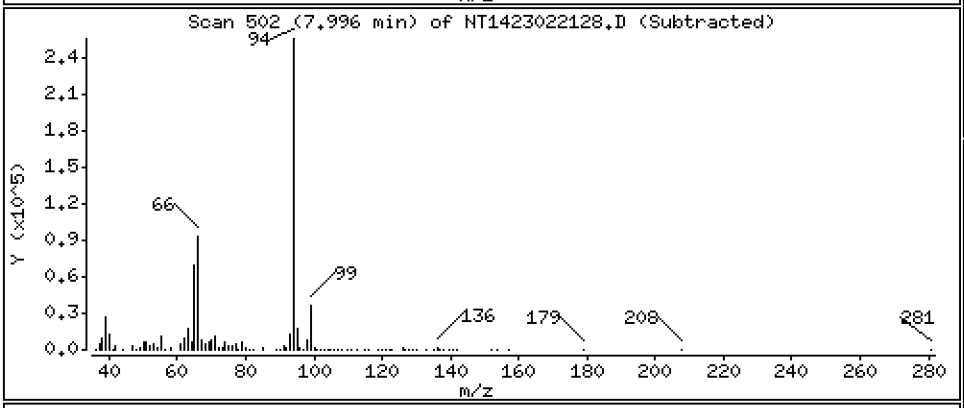
Column phase: ZB-5msi

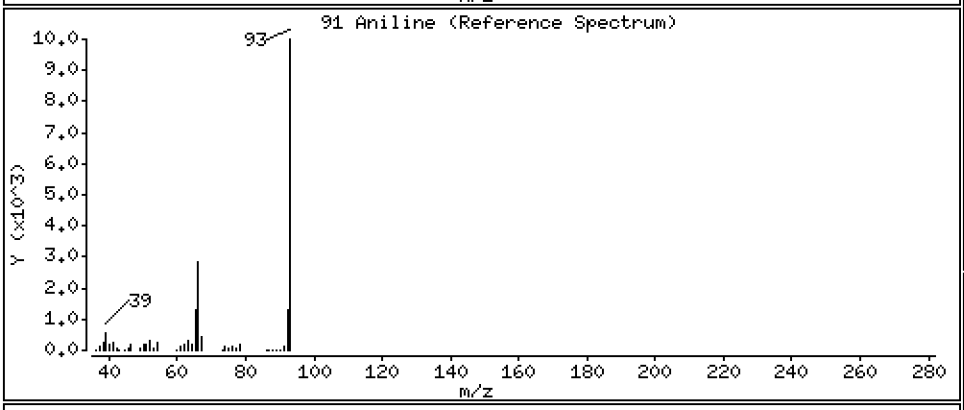
Column diameter: 0.25

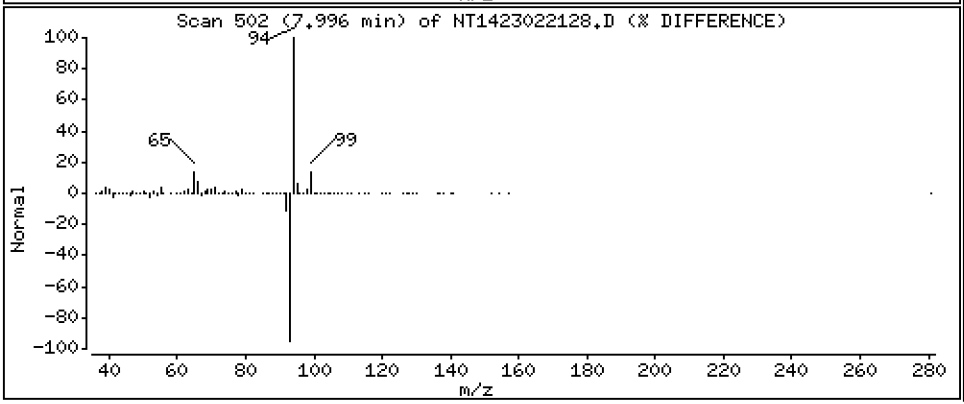
91 Aniline

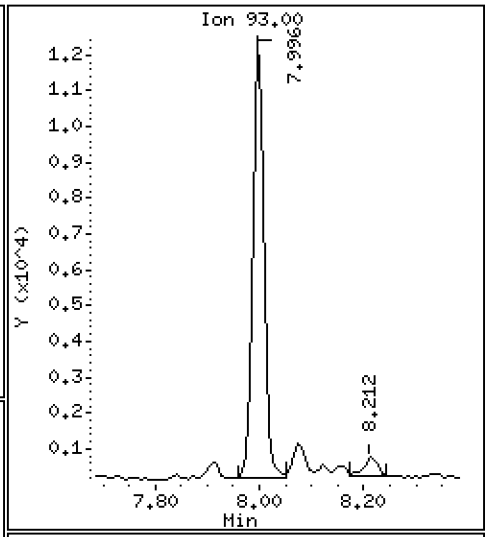
Concentration: 0.1322 ug/mL

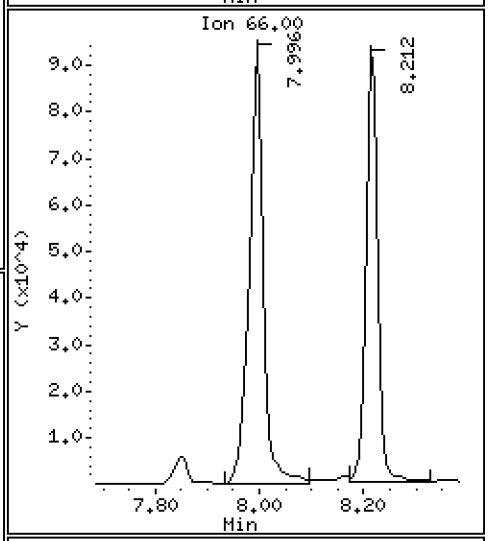


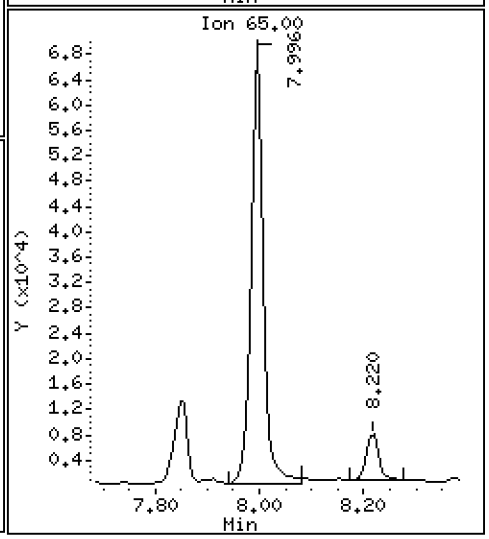












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Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

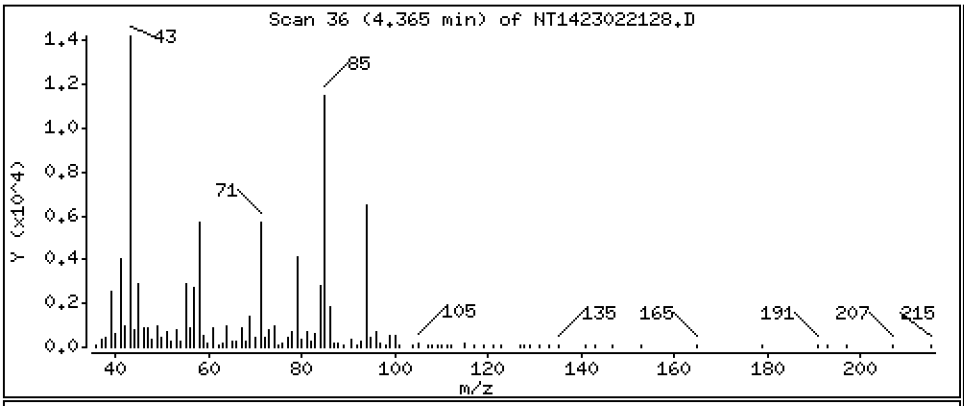
Operator: DSD

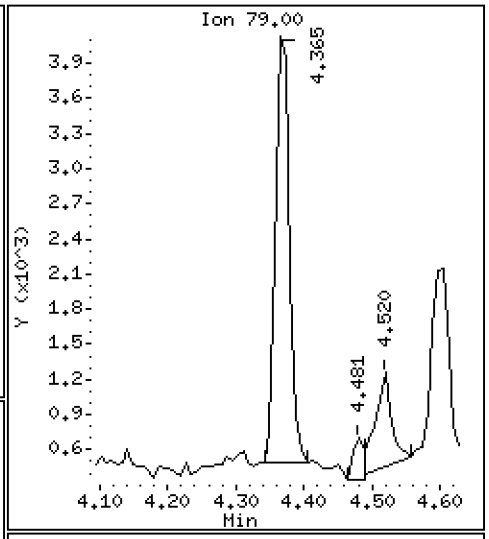
Column phase: ZB-5msi

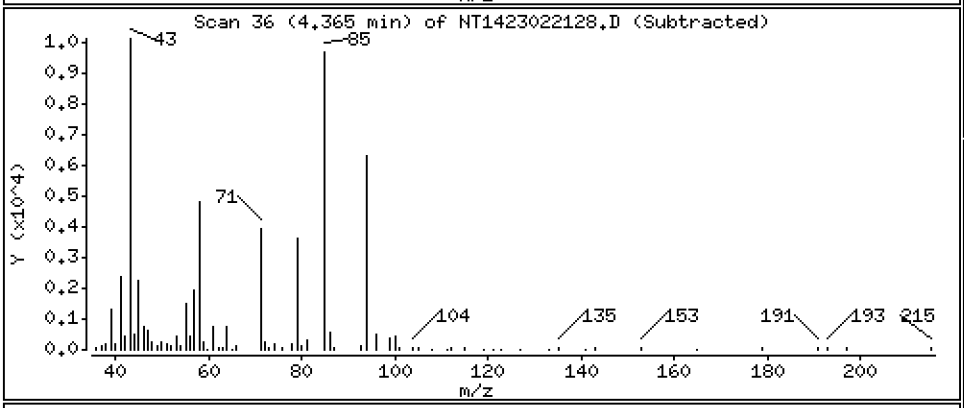
Column diameter: 0.25

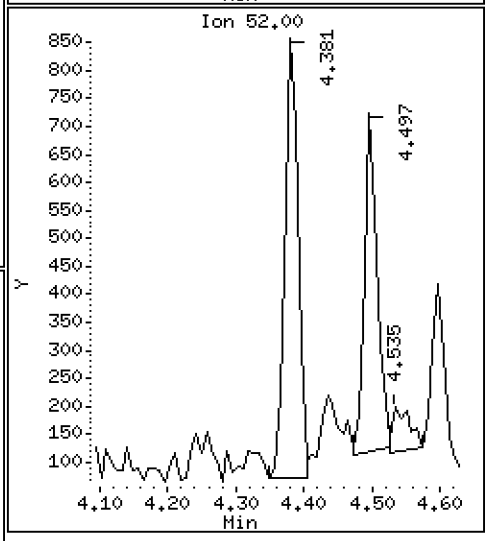
103 Pyridine

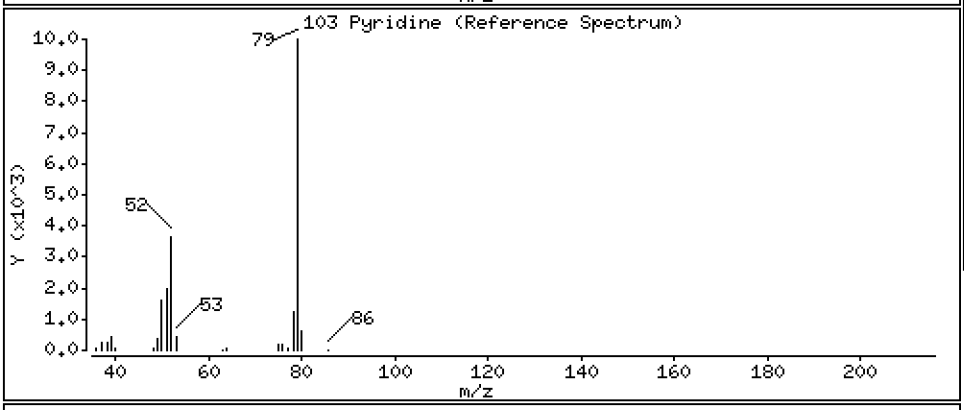
Concentration: 0.05218 ug/mL

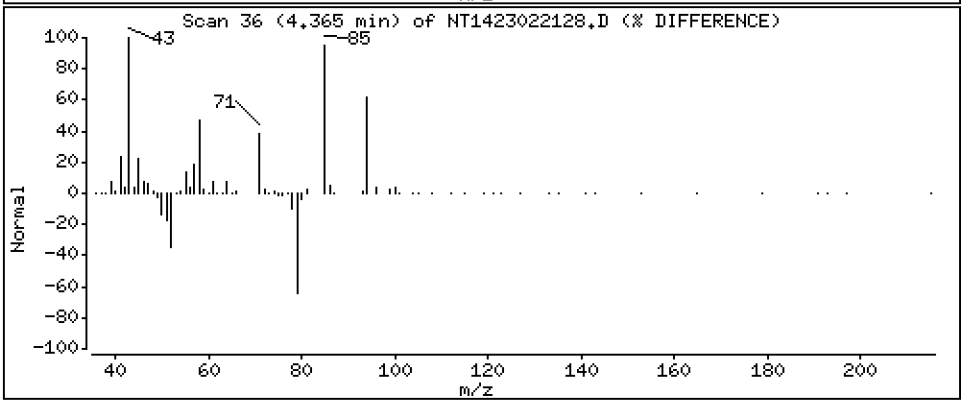












Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022128.D

Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

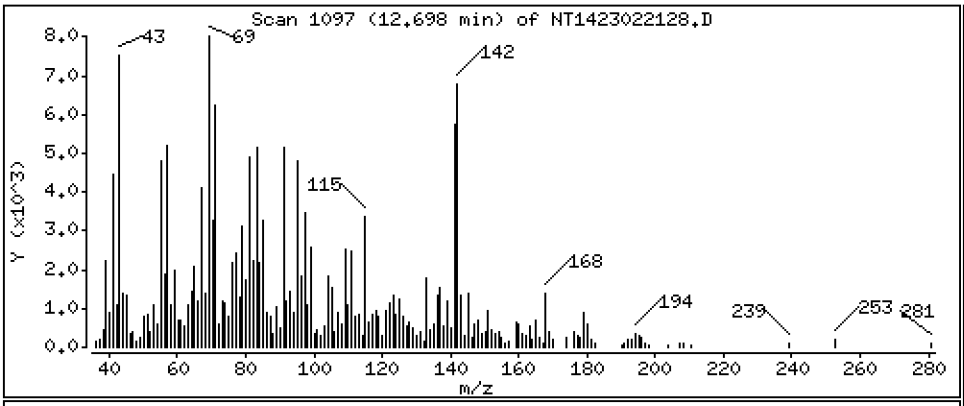
Operator: DSD

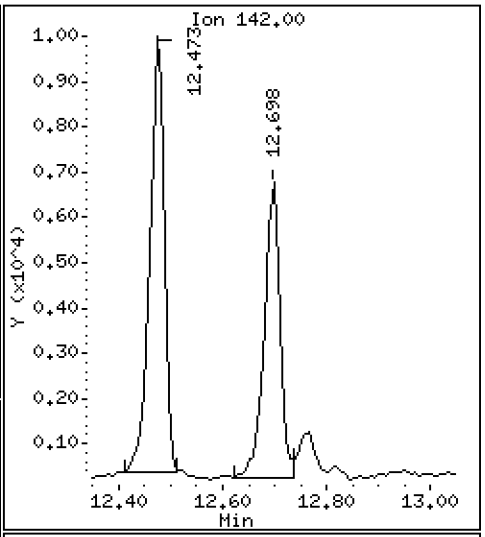
Column phase: ZB-5msi

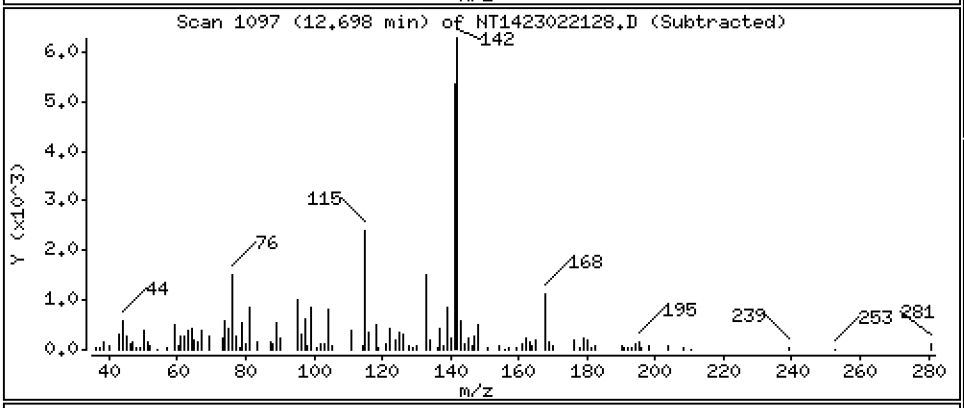
Column diameter: 0.25

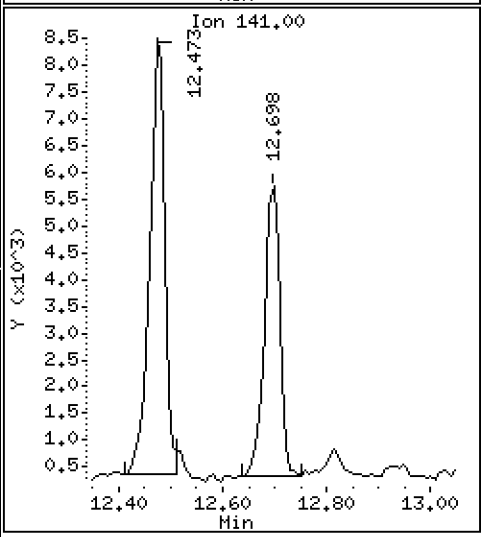
105 1-methylnaphthalene

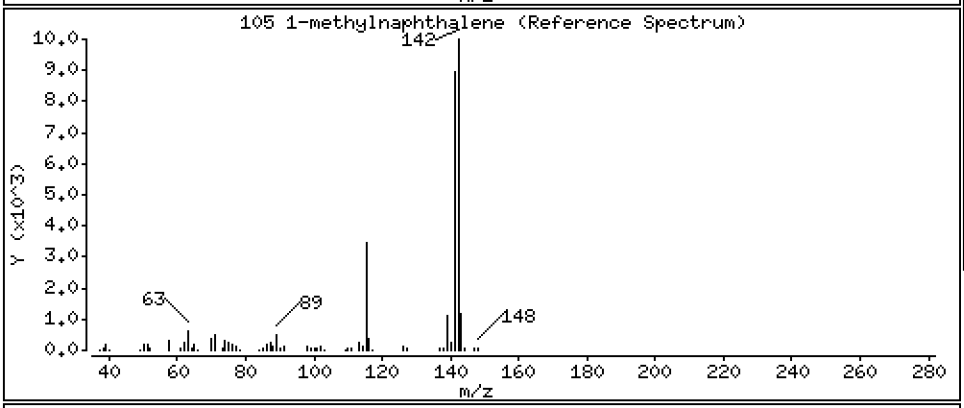
Concentration: 0.06731 ug/mL

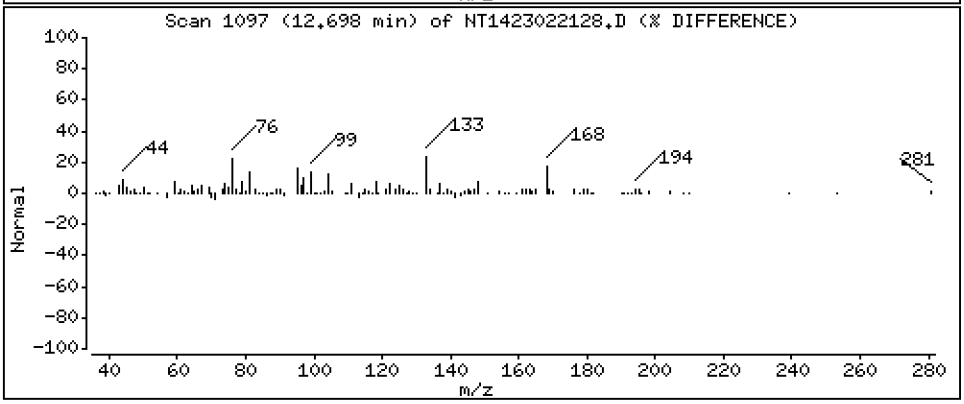












Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022128.D

Date : 22-FEB-2023 05:43

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03RE1

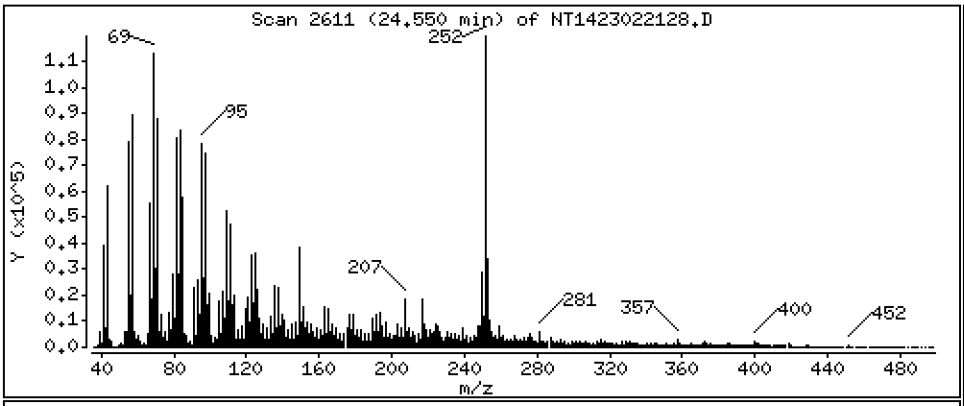
Operator: DSD

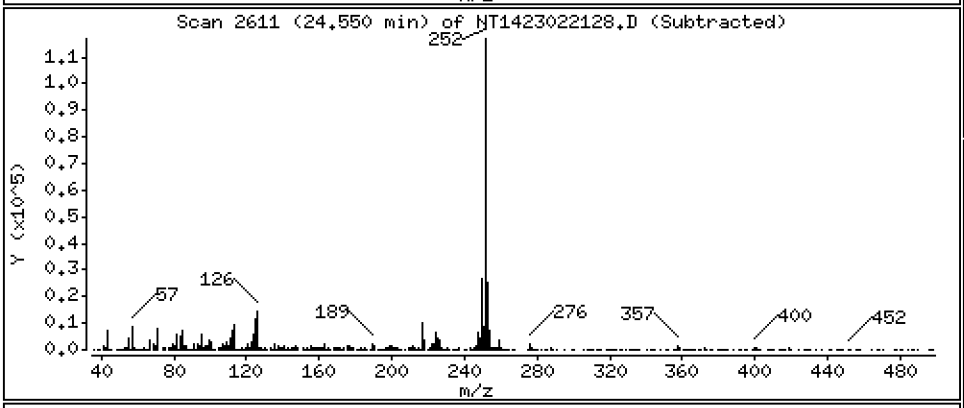
Column phase: ZB-5msi

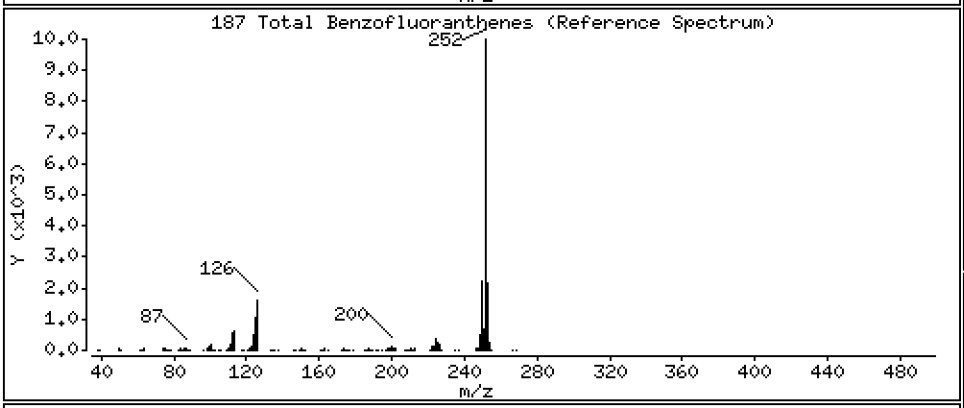
Column diameter: 0.25

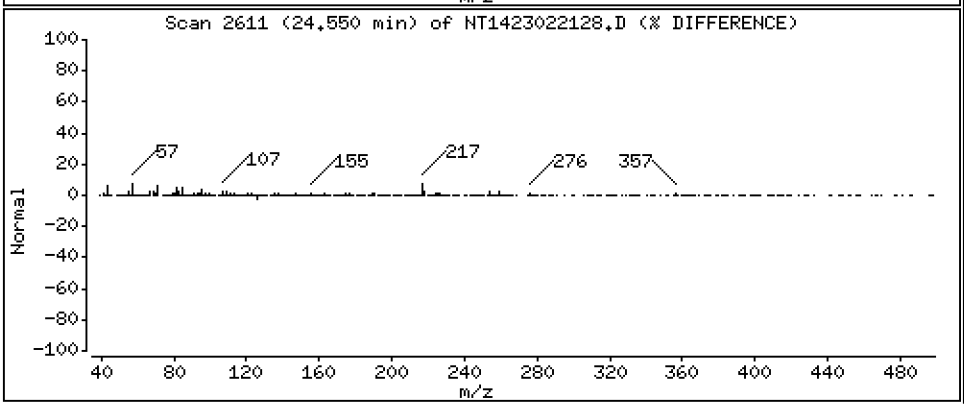
187 Total Benzofluoranthenes

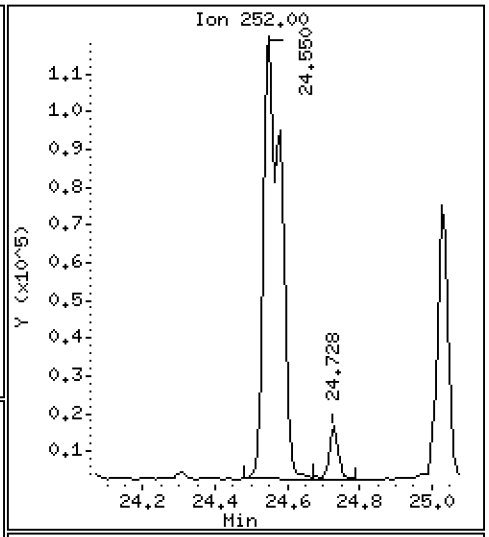
Concentration: 1.898 ug/mL

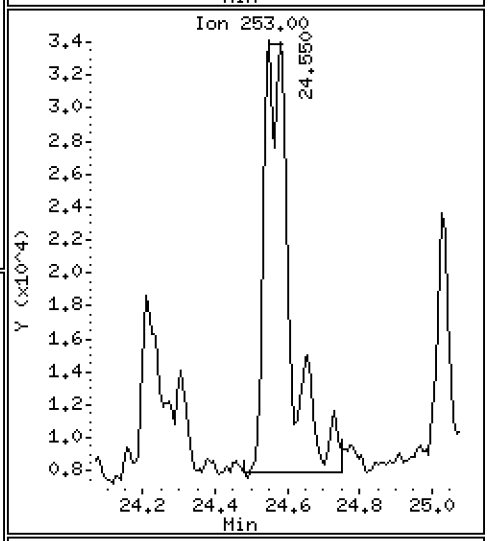


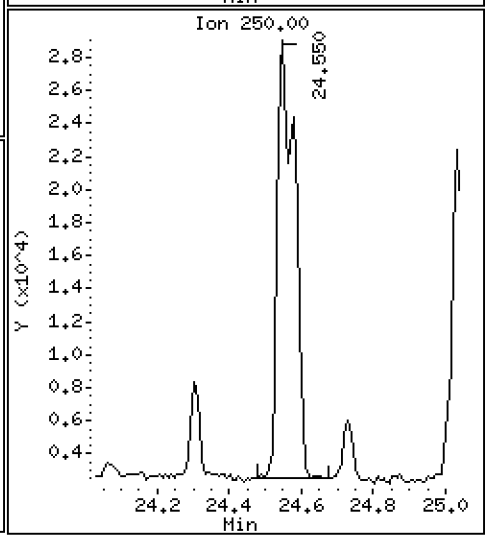












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230221A.b\NT1423022128.D
Lab Smp Id: 23A0171-03RE1
Inj Date : 22-FEB-2023 05:43 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : 23A0171-03RE1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230221A.b\ABN.m
Meth Date : 22-Feb-2023 13:34 deenayd Quant Type: ISTD
Cal Date : 16-FEB-2023 19:30 Cal File: NT1423021610.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: DEENAY-201905

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.404	6.373	(0.747)	457382	5.67177	5.672
$	2 Phenol-d5	99	7.972	7.965	(0.930)	671574	5.24971	5.250
	3 Phenol	94	7.995	7.988	(0.933)	411035	3.03513	3.035
$	5 2-Chlorophenol-d4	132	8.212	8.212	(0.958)	525547	5.75760	5.758
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.568	8.568	(1.000)	301656	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	8.925	8.925	(1.042)	206838	3.02309	3.023
	12 1,2-Dichlorobenzene	146	8.948	8.948	(1.044)	1580	0.01569	0.01569
	11 Benzyl alcohol	108	8.863	8.855	(1.034)	31009	0.40764	0.4076
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	9.367	9.360	(1.093)	26432	0.26470	0.2647
$	18 Nitrobenzene-d5	82	9.662	9.662	(0.875)	444400	3.41397	3.414
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	10.616	10.678	(0.961)	30934	0.49926	0.4993
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.042	11.042	(1.000)	1126744	4.00000	
	28 Naphthalene	128	11.081	11.081	(1.003)	29342	0.10562	0.1056
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	12.473	12.481	(1.130)	18287	0.08789	0.08789
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					

			QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36	2-Fluorobiphenyl	172	13.270	13.270	(0.906)	852856	3.58010	3.580
	37	2-Chloronaphthalene	162	Compound Not Detected.					
	38	2-Nitroaniline	65	Compound Not Detected.					
	39	Dimethylphthalate	163	14.183	14.183	(0.968)	24292	0.11944	0.1194
	40	Acenaphthylene	152	14.338	14.330	(0.979)	12914	0.04354	0.04354
	41	2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42	Acenaphthene-d10	164	14.648	14.648	(1.000)	665841	4.00000	
	43	3-Nitroaniline	138	Compound Not Detected.					
	44	Acenaphthene	153	14.717	14.717	(1.005)	12189	0.06865	0.06865
	45	2,4-Dinitrophenol	184	Compound Not Detected.					
	46	Dibenzofuran	168	15.042	15.042	(1.027)	25918	0.08890	0.08890
	47	4-Nitrophenol	109	Compound Not Detected.					
	48	2,4-Dinitrotoluene	165	Compound Not Detected.					
	50	Diethylphthalate	149	15.637	15.645	(1.068)	60614	0.22418	0.2242
	49	Fluorene	166	15.753	15.753	(1.075)	29788	0.09771	0.09771
	51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52	4-Nitroaniline	138	Compound Not Detected.					
	53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55	2,4,6-Tribromophenol	330	16.285	16.285	(1.112)	230713	5.93972	5.940
	56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	Compound Not Detected.					
*	59	Phenanthrene-d10	188	17.676	17.676	(1.000)	1357380	4.00000	
	60	Phenanthrene	178	17.723	17.723	(1.003)	186203	0.57087	0.5709
	61	Anthracene	178	17.815	17.816	(1.008)	68713	0.21263	0.2126
	62	Carbazole	167	18.164	18.148	(1.028)	22686	0.07736	0.07736
	63	Di-n-butylphthalate	149	19.007	18.992	(1.075)	27300	0.08335	0.08335
	64	Fluoranthene	202	20.152	20.129	(0.885)	550635	1.49029	1.490
	65	Pyrene	202	20.570	20.554	(0.903)	575234	1.47233	1.472
$	66	Terphenyl-d14	244	20.879	20.864	(0.917)	1179935	4.25345	4.253
	67	Butylbenzylphthalate	149	Compound Not Detected.					
	68	Benzo(a)anthracene	228	22.745	22.738	(0.999)	193404	0.70570	0.7057
*	69	Chrysene-d12	240	22.776	22.769	(1.000)	856411	4.00000	
	70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71	Chrysene	228	22.823	22.815	(1.002)	319218	1.29496	1.295
	72	bis(2-Ethylhexyl)phthalate	149	22.862	22.854	(0.959)	402044	1.95059	1.951
*	134	Di-n-octylphthalate-d4	153	23.845	23.837	(1.000)	1213206	4.00000	
	73	Di-n-octylphthalate	149	Compound Not Detected.					
	74	Benzo(b)fluoranthene	252	24.549	24.534	(0.973)	235858	1.12001	1.120
	75	Benzo(k)fluoranthene	252	24.580	24.573	(0.974)	191823	0.85247	0.8525(M)
	76	Benzo(a)pyrene	252	25.122	25.107	(0.996)	134182	0.67208	0.6721
*	77	Perylene-d12	264	25.231	25.215	(1.000)	663661	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	27.556	27.532	(1.092)	78714	0.47887	0.4789
	79	Dibenzo(a,h)anthracene	278	27.563	27.548	(1.092)	17245	0.12757	0.1276(M)
	80	Benzo(g,h,i)perylene	276	28.239	28.208	(1.119)	76063	0.57008	0.5701
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					
	91	Aniline	93	7.995	8.034	(0.933)	19154	0.13223	0.1322
	93	Benzidine	184	Compound Not Detected.					
	103	Pyridine	79	4.365	4.280	(0.509)	5155	0.05218	0.05218
	105	1-methylnaphthalene	142	12.697	12.697	(1.150)	13149	0.06731	0.06731
	111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.549	24.573	(0.973)	390201	1.89789	1.898
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423022128.D
Lab Smp Id: 23A0171-03RE1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230221A.b\ABN.m
Misc Info:

Calibration Date: 21-FEB-2023
Calibration Time: 23:06
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	247721	123861	495442	301656	21.77
27 Naphthalene-d8	862325	431163	1724650	1126744	30.66
42 Acenaphthene-d10	519526	259763	1039052	665841	28.16
59 Phenanthrene-d10	1059882	529941	2119764	1357380	28.07
69 Chrysene-d12	930840	465420	1861680	856411	-8.00
134 Di-n-octylphthala	1343425	671713	2686850	1213206	-9.69
77 Perylene-d12	746835	373418	1493670	663661	-11.14

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.57	8.07	9.07	8.57	-0.00
27 Naphthalene-d8	11.04	10.54	11.54	11.04	-0.00
42 Acenaphthene-d10	14.65	14.15	15.15	14.65	-0.00
59 Phenanthrene-d10	17.68	17.18	18.18	17.68	-0.00
69 Chrysene-d12	22.77	22.27	23.27	22.78	0.03
134 Di-n-octylphthala	23.84	23.34	24.34	23.85	0.03
77 Perylene-d12	25.22	24.72	25.72	25.23	0.06

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

REVIEW SUMMARY FOR FILE - NT1423022128.D

Lab ID: 23A0171-03RE1
nt14.i, ABN.m, 22-FEB-2023 05:43

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.961	0.967	-0.0056	Benzoic acid
0.509	0.500	0.0099	Pyridine

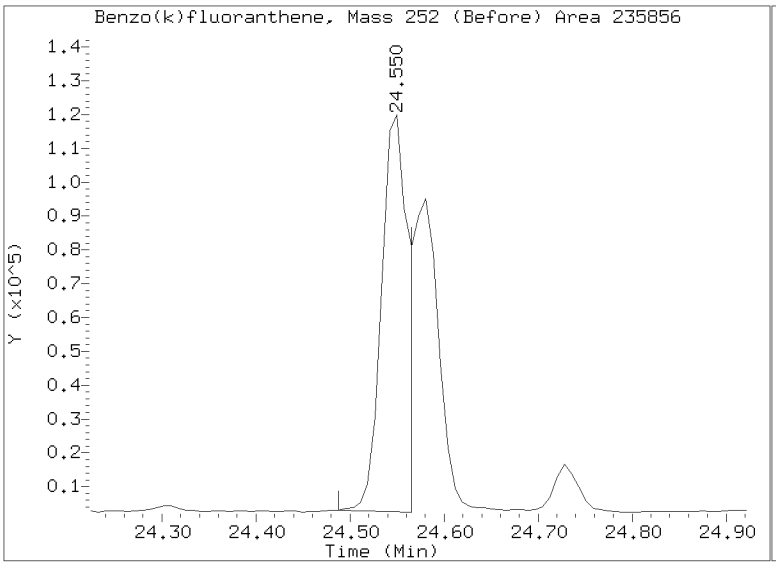
RRT check based on Ccal File: NT1423022117.D

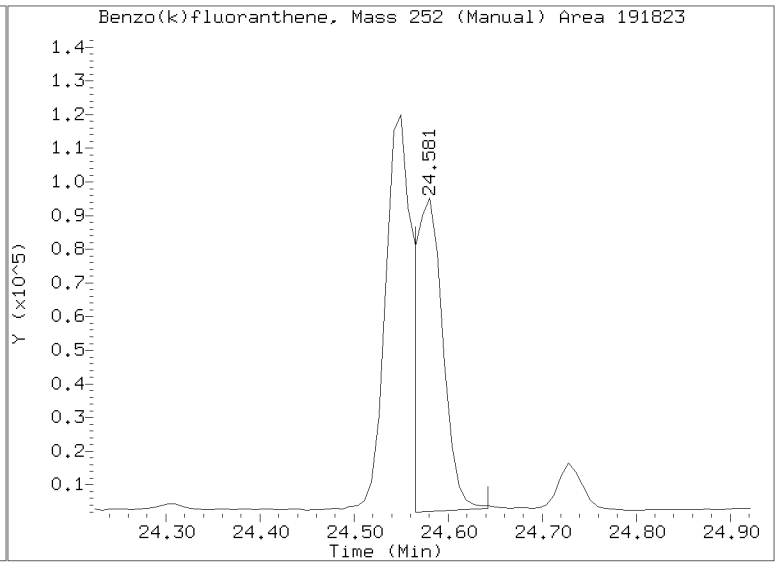
On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

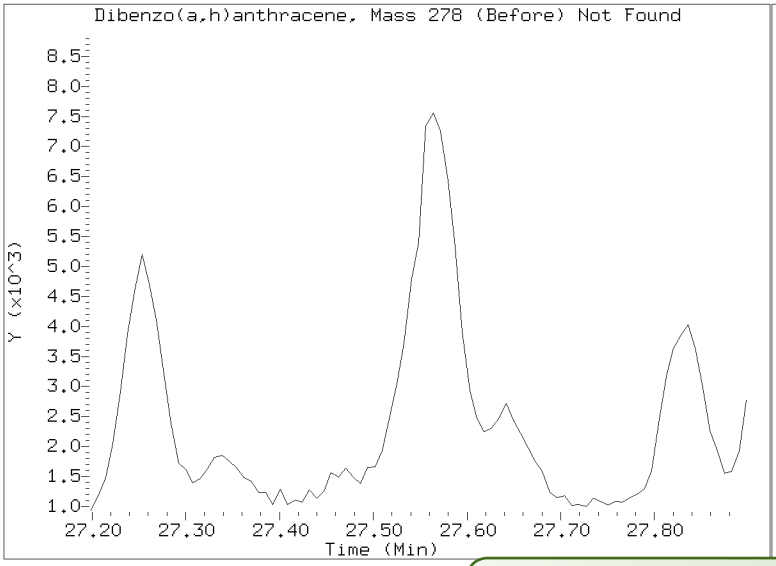
* Only compounds listed in the work order have been verified by the analyst *

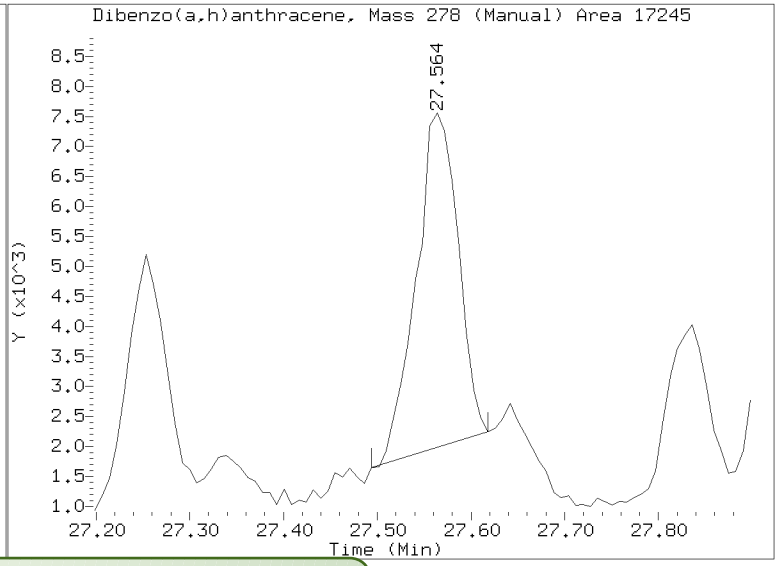
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230221A.b/NT1423022128.D
Injection Date: 22-FEB-2023 05:43
Lab ID:23A0171-03RE1 Client ID:
Report Date: 02/23/2023 12:11









APPROVED

By Deenay Dunmore at 12:18 pm, Feb 23, 2023

LDW23-SS1245

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-04 A	SDG:	23A0171
Sampled:	12/08/22 11:14	Prepared:	01/18/23 13:47	File ID:	NT1423021733.D
% Solids:	48.44	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/18/23 05:54
Batch:	BLA0339	Sequence:	SLB0251	Initial/Final:	20.89 g Wet / 1 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	GB00046
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	521		4.3	19.8
106-44-5	4-Methylphenol	1	13.0	J	7.3	19.8
91-20-3	Naphthalene	1	11.1	J	4.2	19.8
91-57-6	2-Methylnaphthalene	1	8.0	J	4.5	19.8
208-96-8	Acenaphthylene	1	19.8	U	6.2	19.8
131-11-3	Dimethylphthalate	1	19.8	U	4.3	19.8
83-32-9	Acenaphthene	1	11.7	J	5.2	19.8
132-64-9	Dibenzofuran	1	19.8	U	14.0	19.8
86-73-7	Fluorene	1	19.8	U	14.4	19.8
85-01-8	Phenanthrene	1	69.0		8.6	19.8
120-12-7	Anthracene	1	26.3		7.1	19.8
206-44-0	Fluoranthene	1	178		6.0	19.8
129-00-0	Pyrene	1	159		5.6	19.8
85-68-7	Butylbenzylphthalate	1	19.8	U	9.3	19.8
56-55-3	Benzo(a)anthracene	1	73.0		5.9	19.8
218-01-9	Chrysene	1	119		6.0	19.8
117-81-7	bis(2-Ethylhexyl)phthalate	1	85.9	Q	5.4	49.4
	Benzofluoranthenes, Total	1	186		9.9	39.5
50-32-8	Benzo(a)pyrene	1	67.2		4.2	19.8
193-39-5	Indeno(1,2,3-cd)pyrene	1	28.5		14.5	19.8
53-70-3	Dibenzo(a,h)anthracene	1	19.8	U	17.0	19.8
191-24-2	Benzo(g,h,i)perylene	1	30.5	Q	13.4	19.8

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	741.17	562	75.8	27 - 120	
Phenol-d5	741.17	513	69.2	29 - 120	
2-Chlorophenol-d4	741.17	531	71.7	31 - 120	
1,2-Dichlorobenzene-d4	494.11	310	62.7	32 - 120	
Nitrobenzene-d5	494.11	339	68.6	30 - 120	
2-Fluorobiphenyl	494.11	371	75.1	35 - 120	

LDW23-SS1245

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-04 A	SDG:	23A0171
Sampled:	12/08/22 11:14	Prepared:	01/18/23 13:47	File ID:	NT1423021733.D
% Solids:	48.44	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/18/23 05:54
Batch:	BLA0339	Sequence:	SLB0251	Initial/Final:	20.89 g Wet / 1 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	GB00046
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	741.17	568	76.6	24 - 134	
p-Terphenyl-d14	494.11	430	86.9	37 - 120	

Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021733.D

Date : 18-FEB-2023 05:54

Client ID:

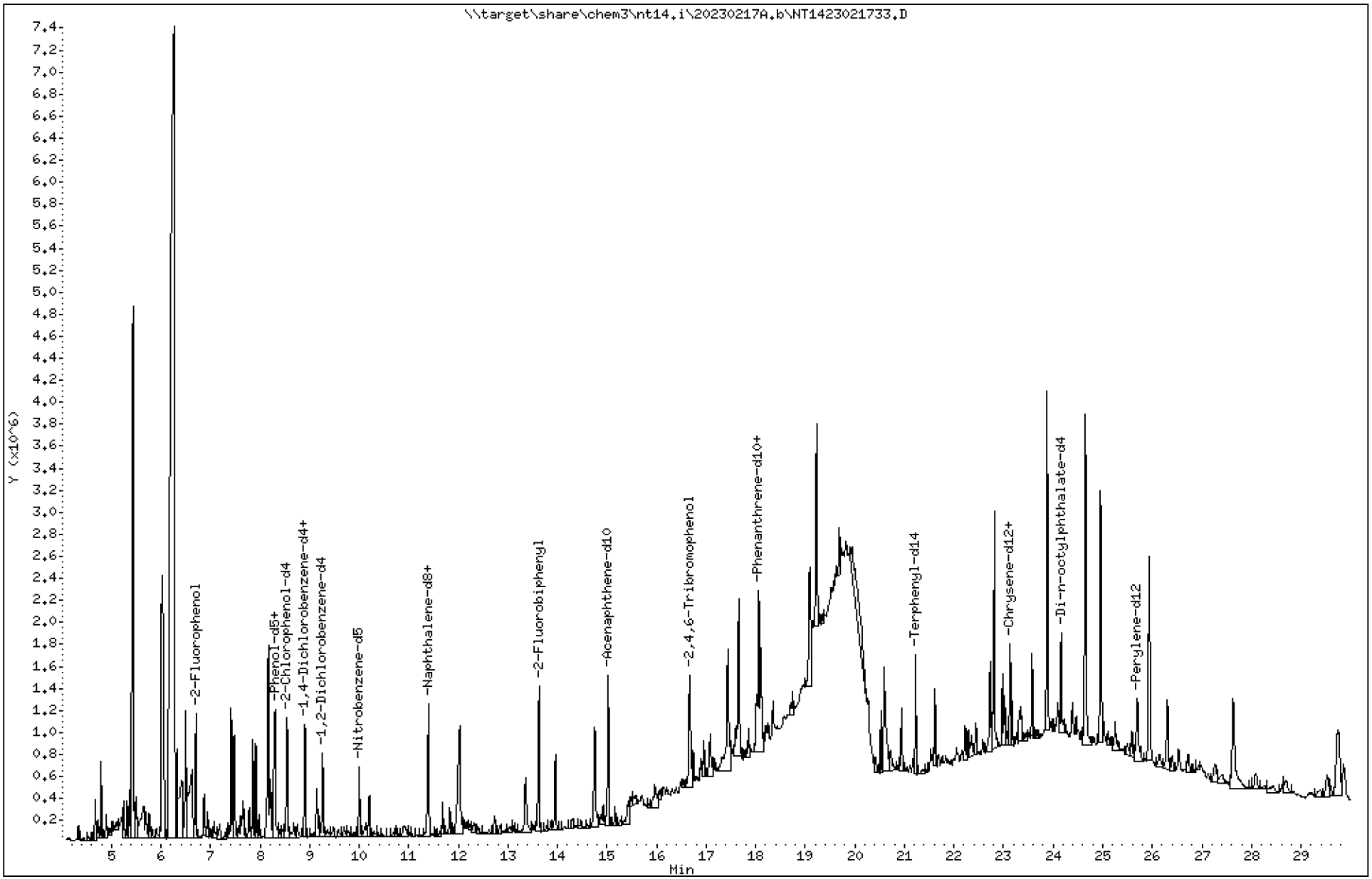
Instrument: nt14.i

Sample Info: 23A0171-04

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

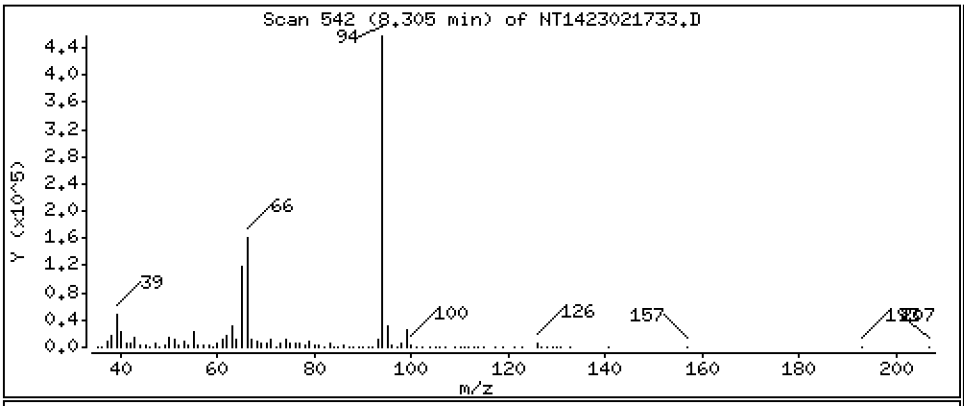
Operator: DSD

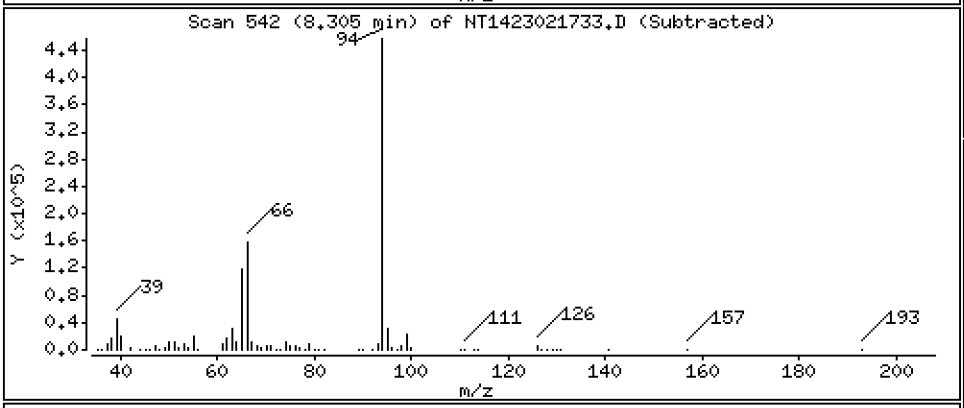
Column phase: ZB-5msi

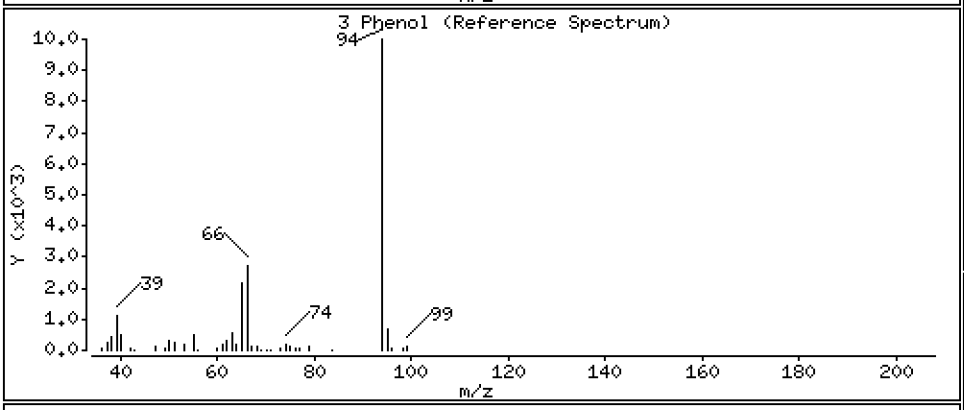
Column diameter: 0.25

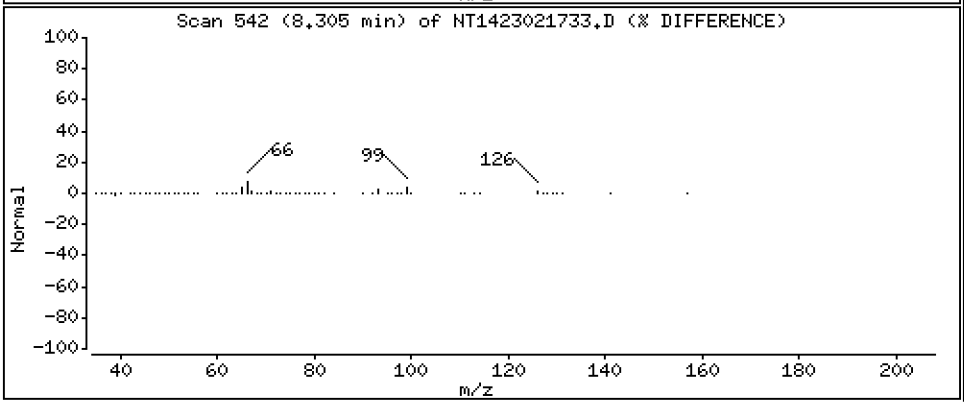
3 Phenol

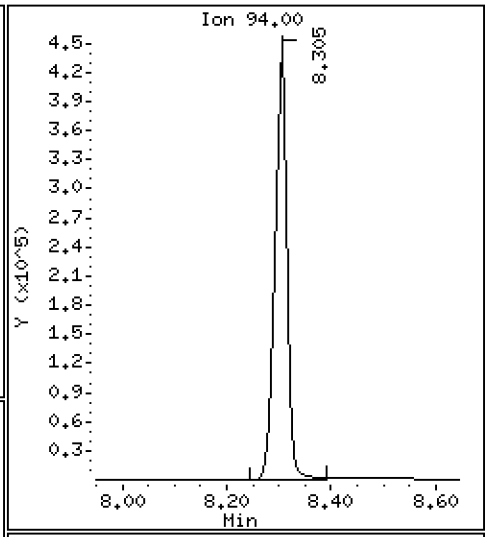
Concentration: 5.271 ug/mL

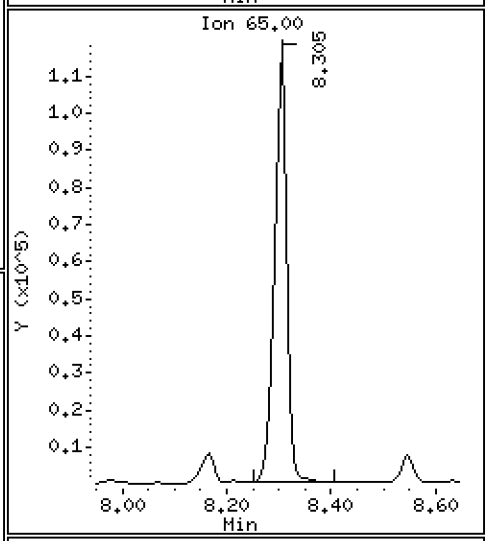


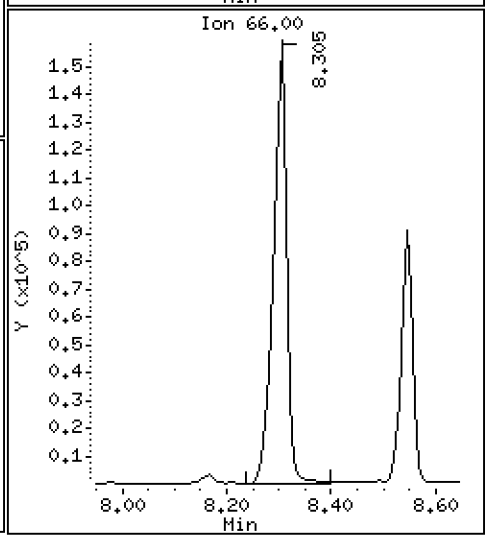












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021733.D

Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

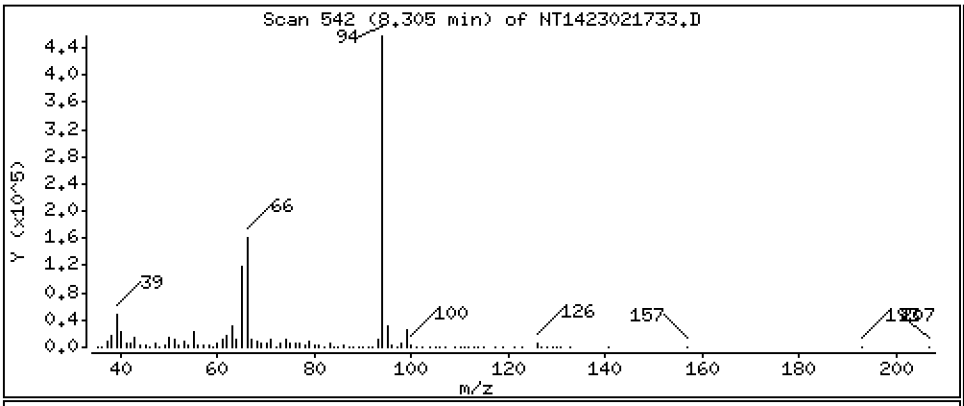
Operator: DSD

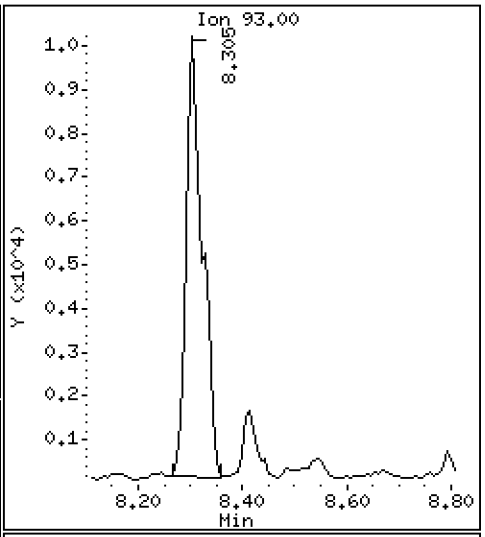
Column phase: ZB-5msi

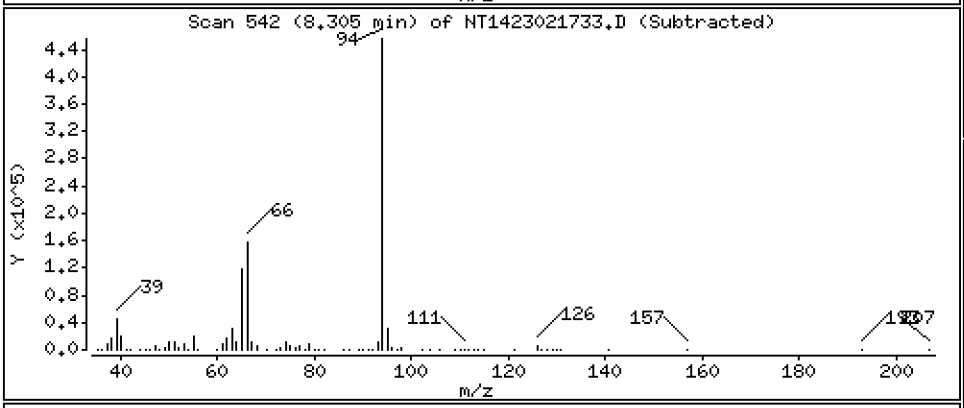
Column diameter: 0.25

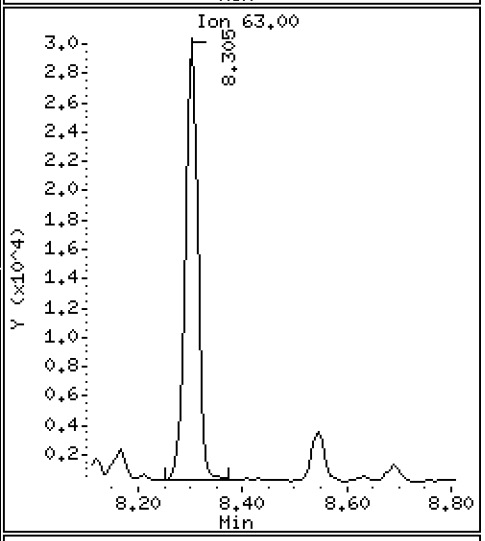
4 Bis(2-Chloroethyl)ether

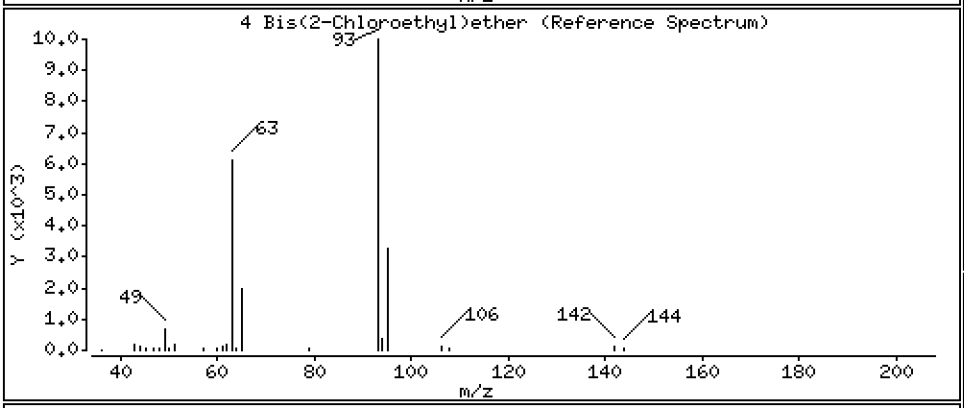
Concentration: 0.2097 ug/mL

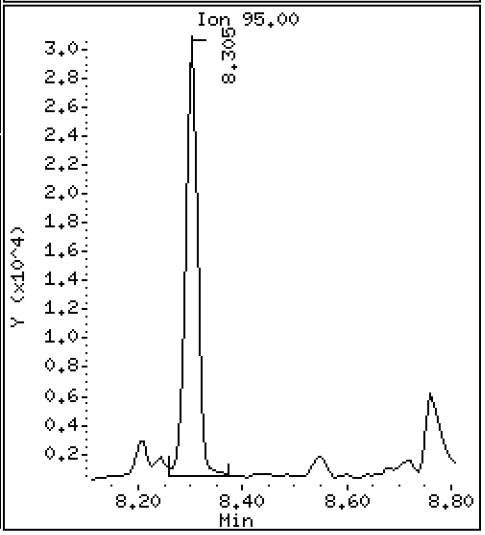


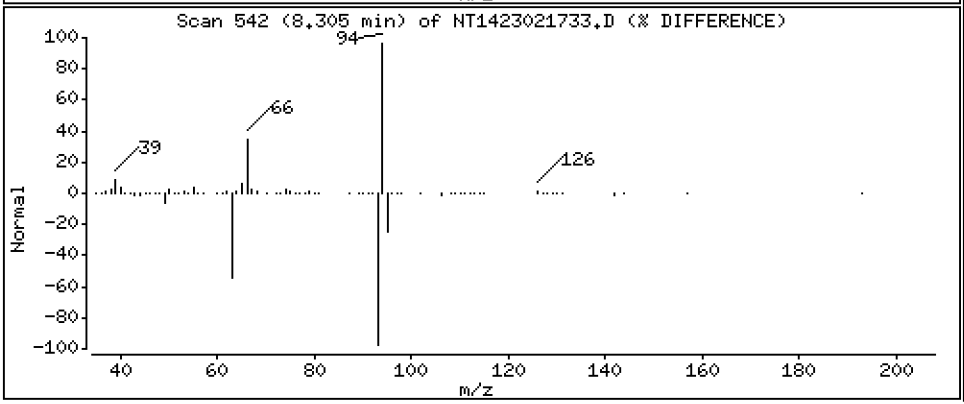












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

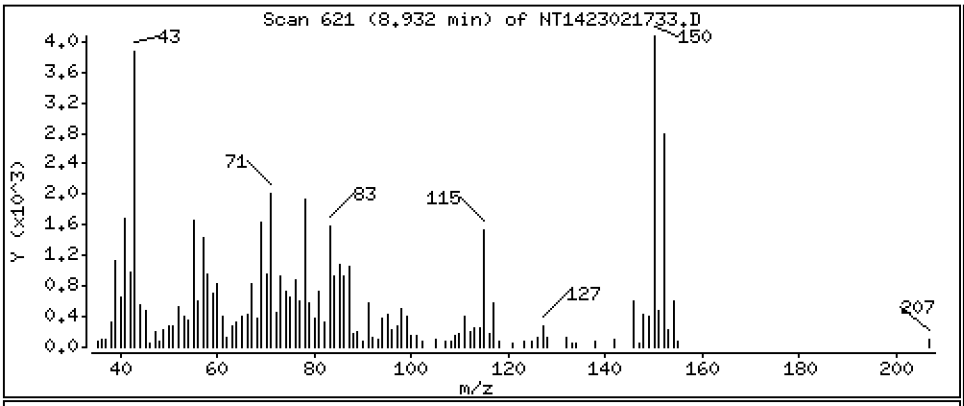
Operator: DSD

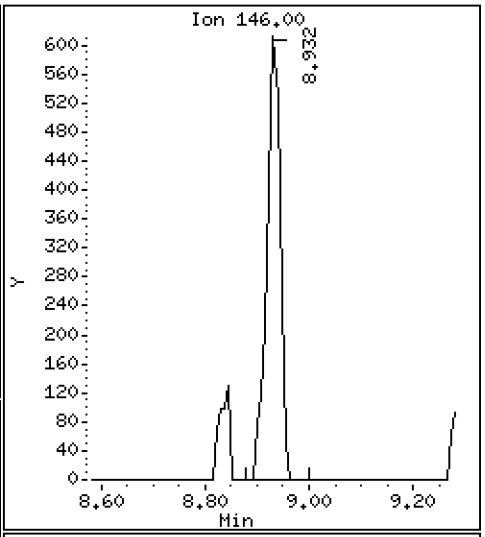
Column phase: ZB-5msi

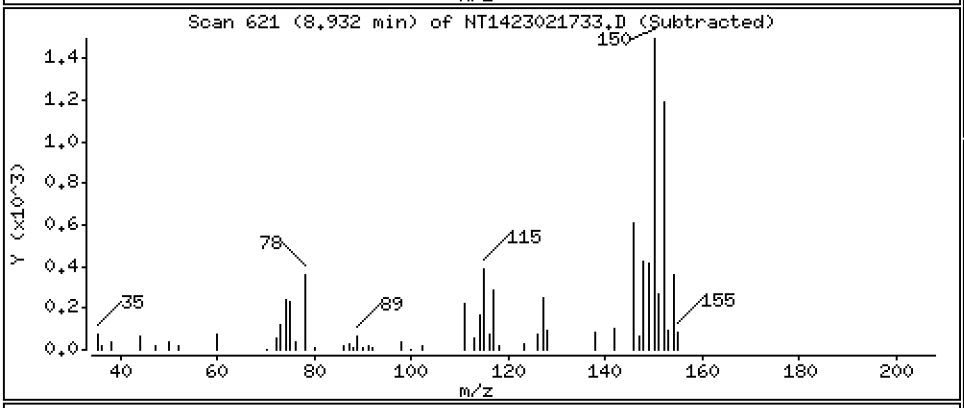
Column diameter: 0.25

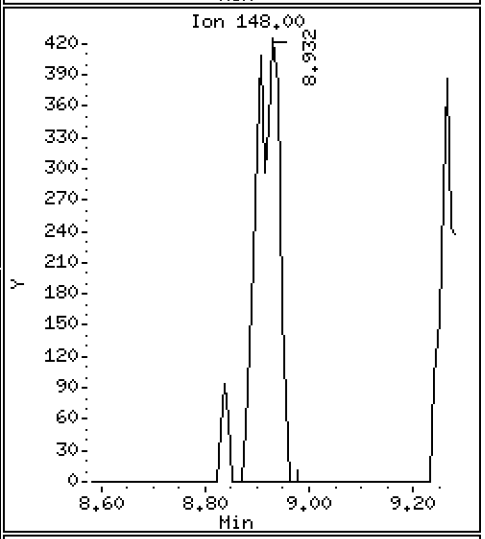
9 1,4-Dichlorobenzene

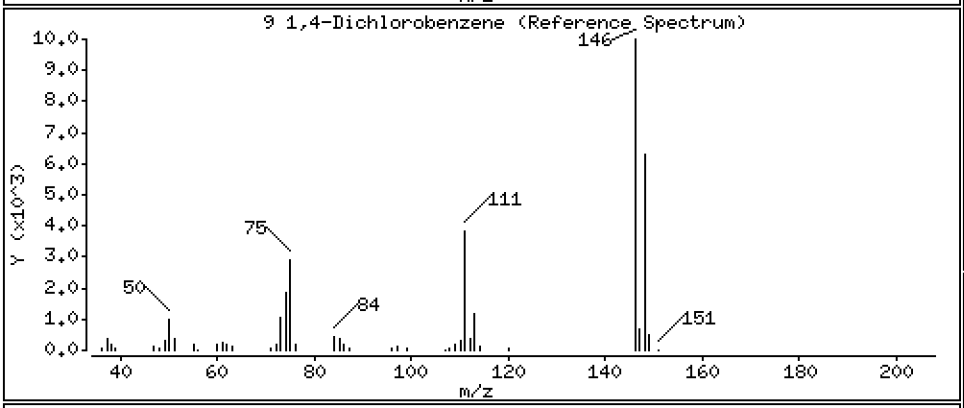
Concentration: 0.01079 ug/mL

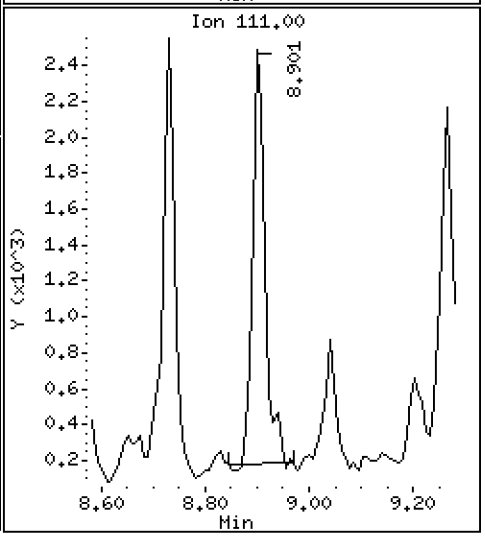


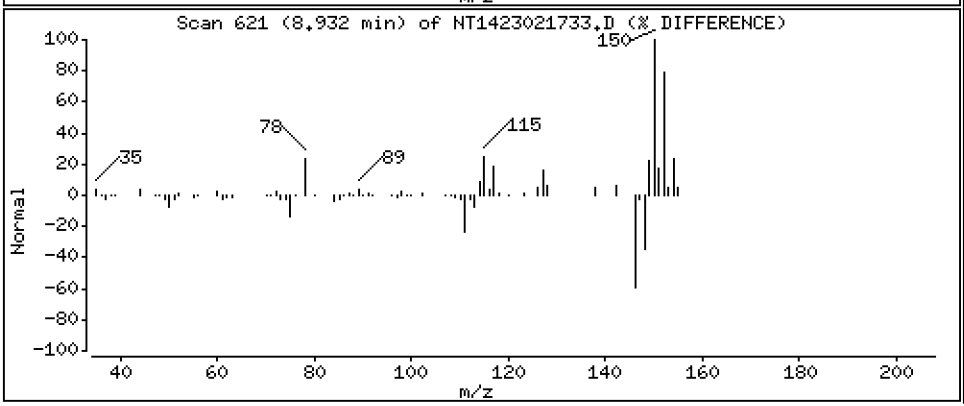












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

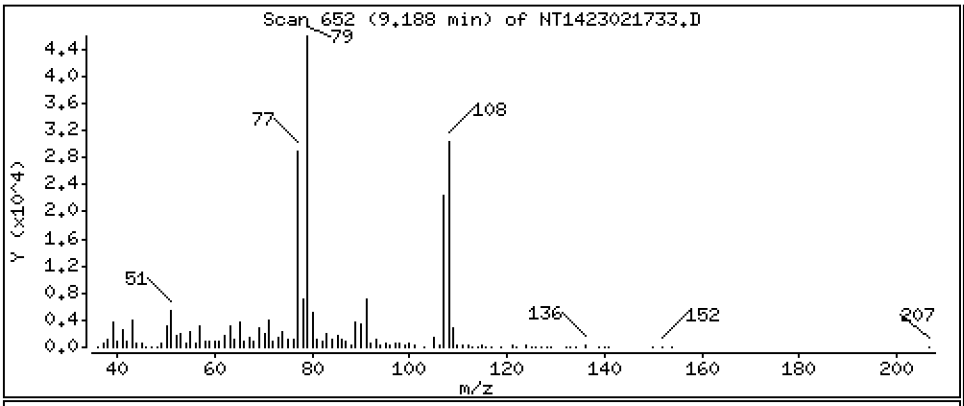
Operator: DSD

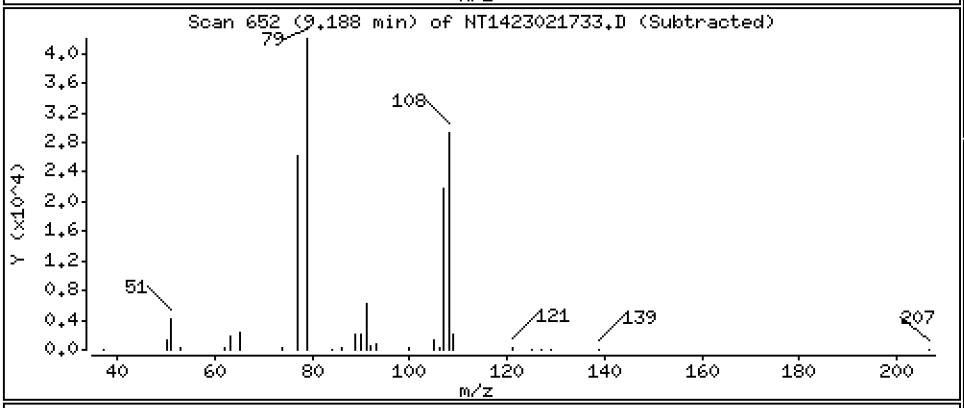
Column phase: ZB-5msi

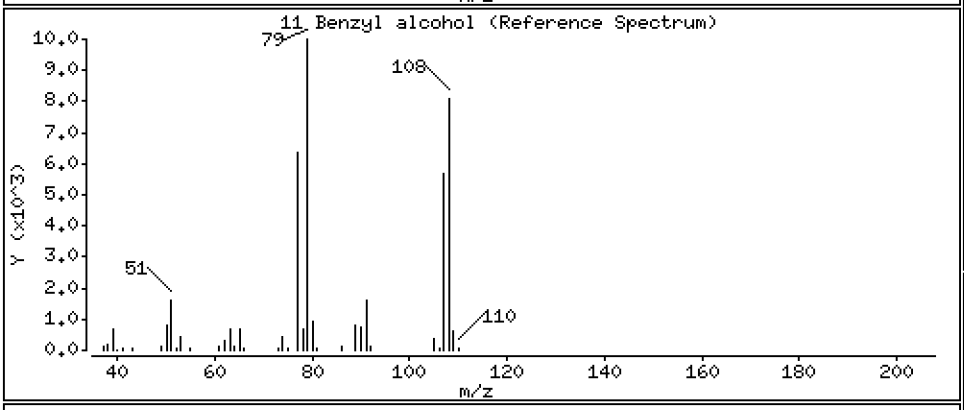
Column diameter: 0.25

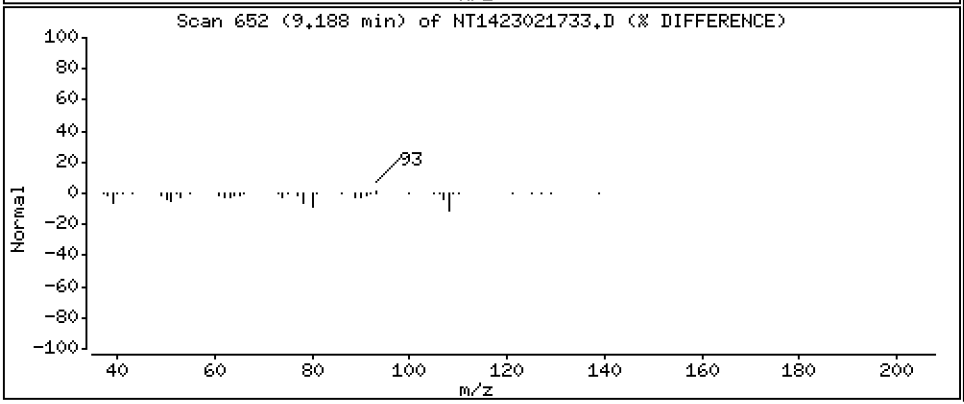
11 Benzyl alcohol

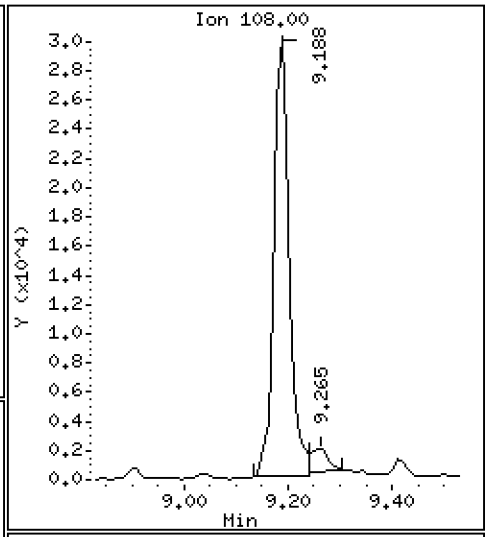
Concentration: 0.9048 ug/mL

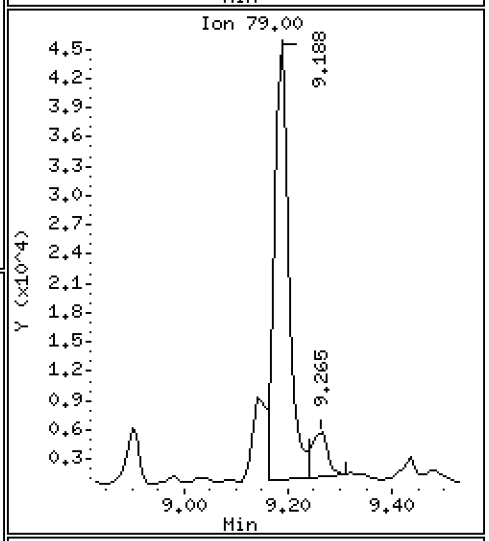


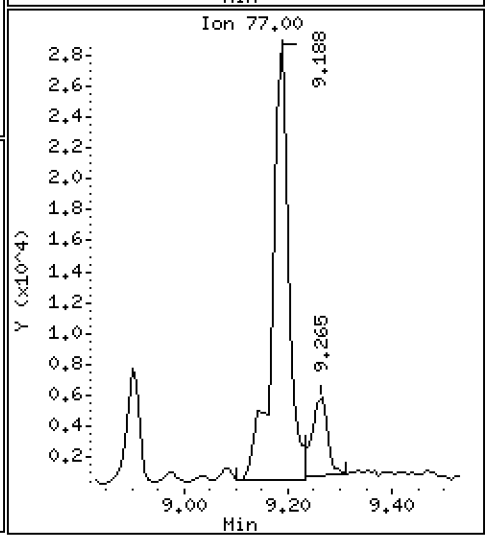












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

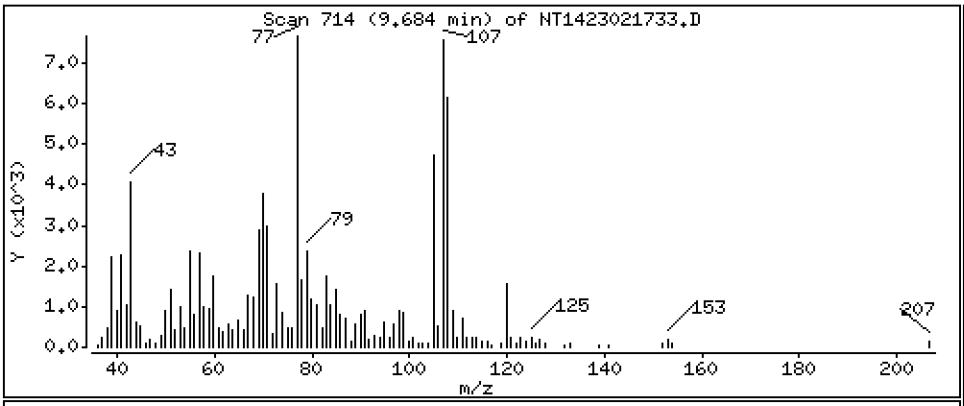
Operator: DSD

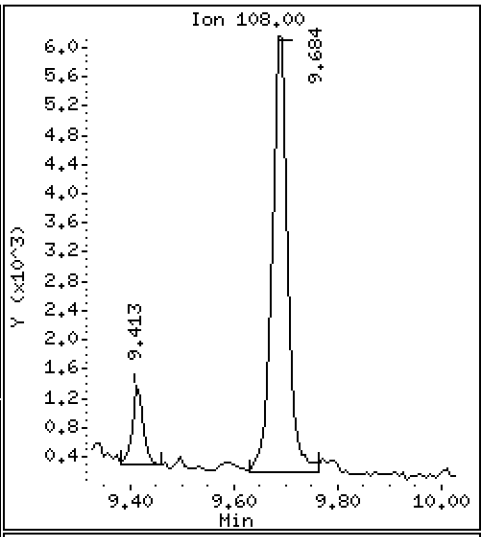
Column phase: ZB-5msi

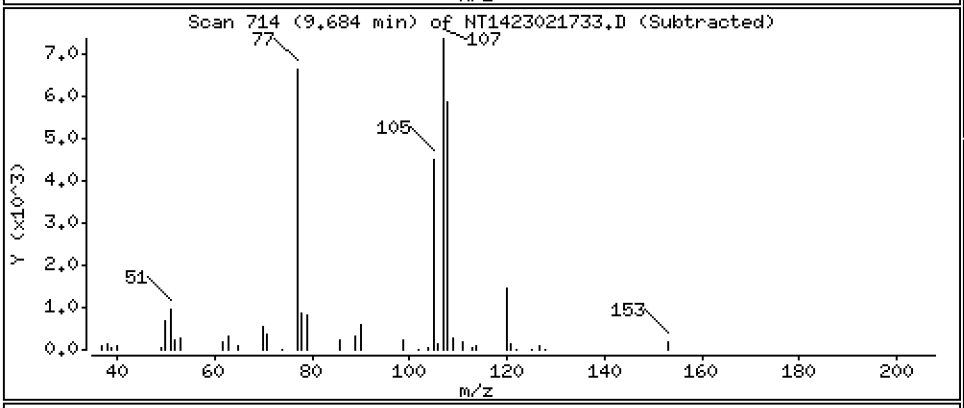
Column diameter: 0.25

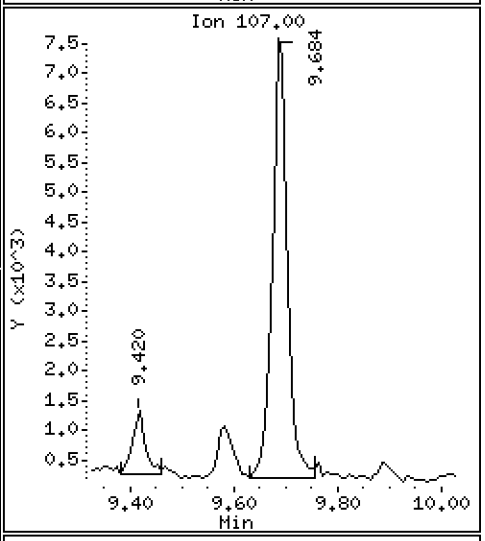
15 4-Methylphenol

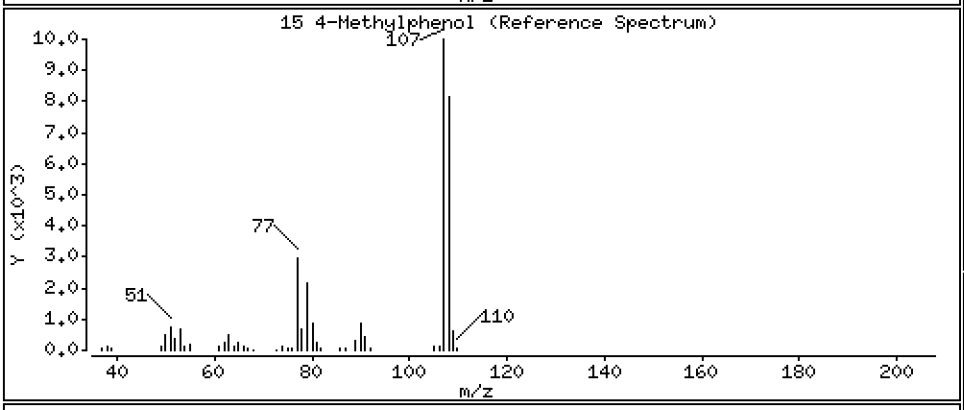
Concentration: 0.1312 ug/mL

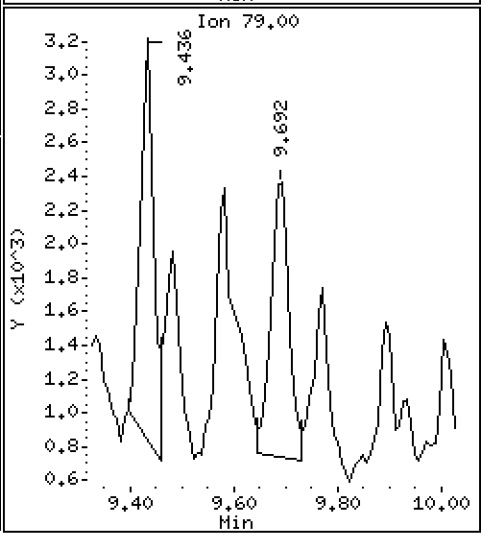


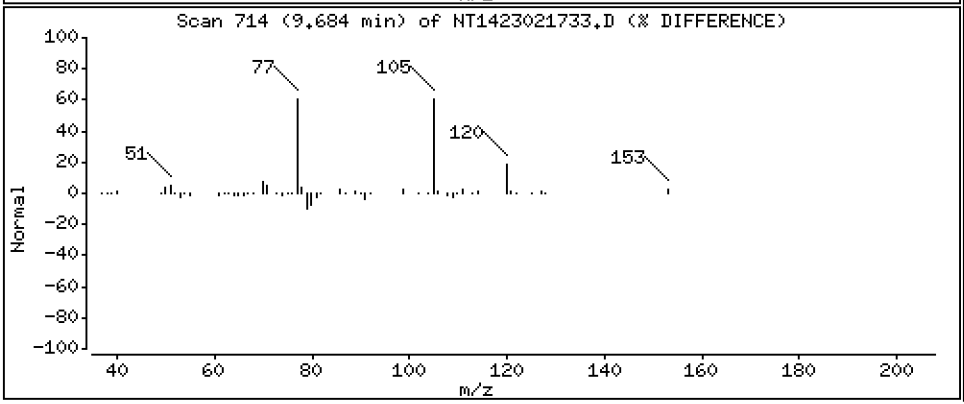












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

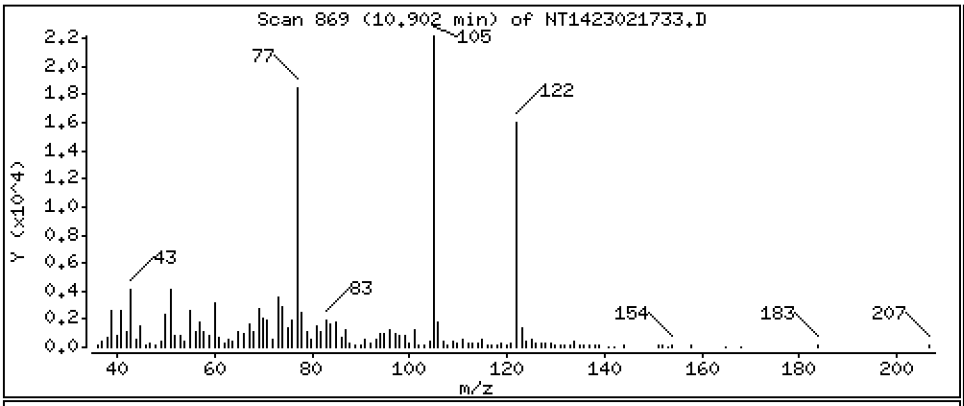
Operator: DSD

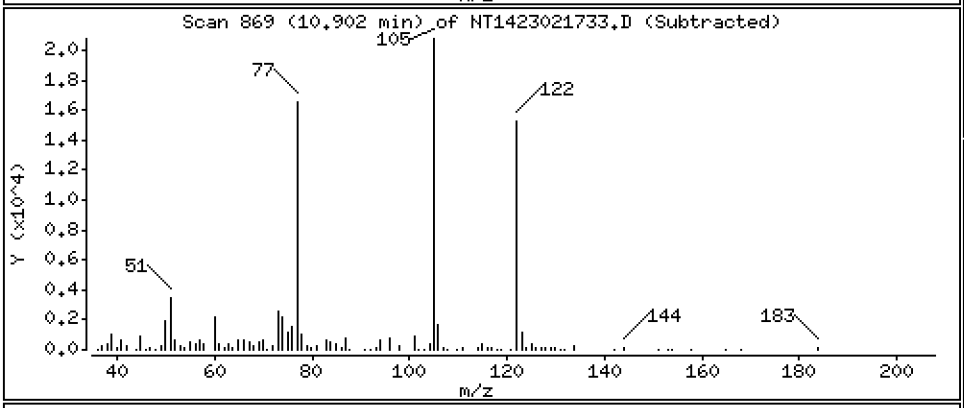
Column phase: ZB-5msi

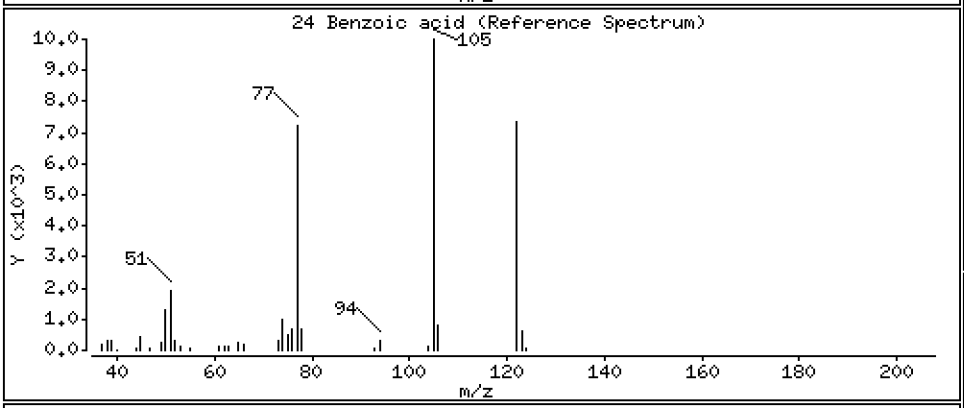
Column diameter: 0.25

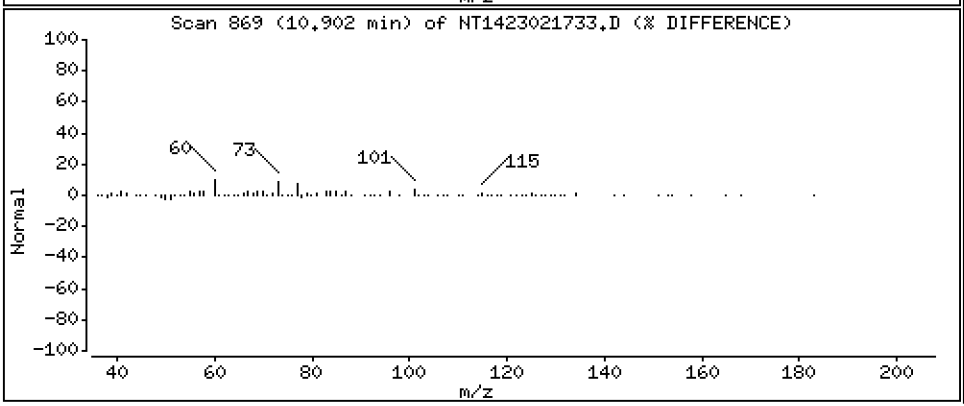
24 Benzoic acid

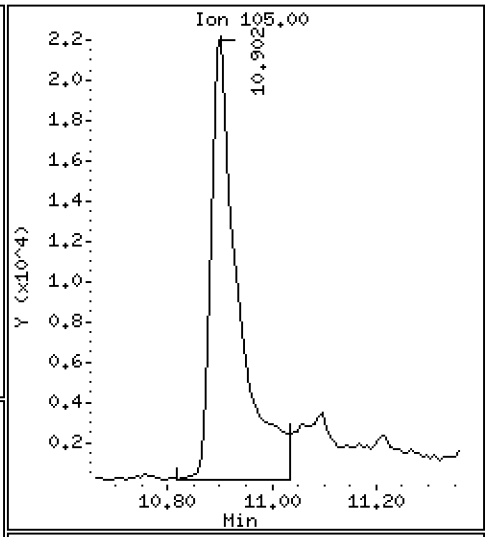
Concentration: 1.392 ug/mL

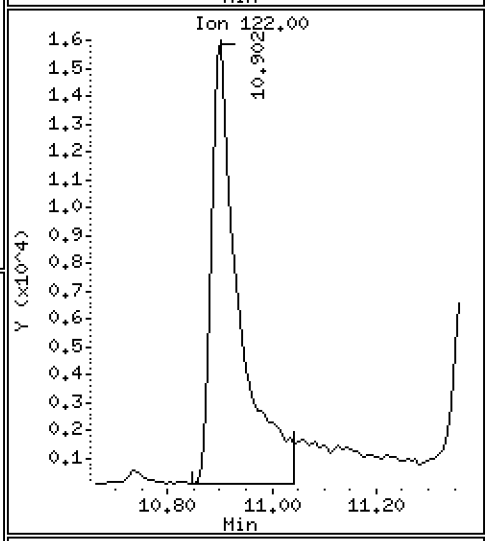


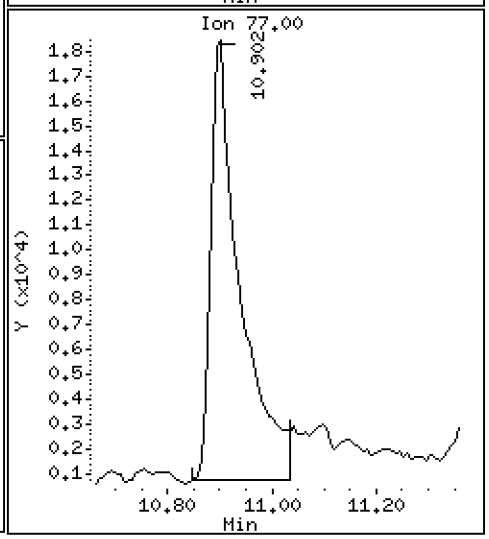












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

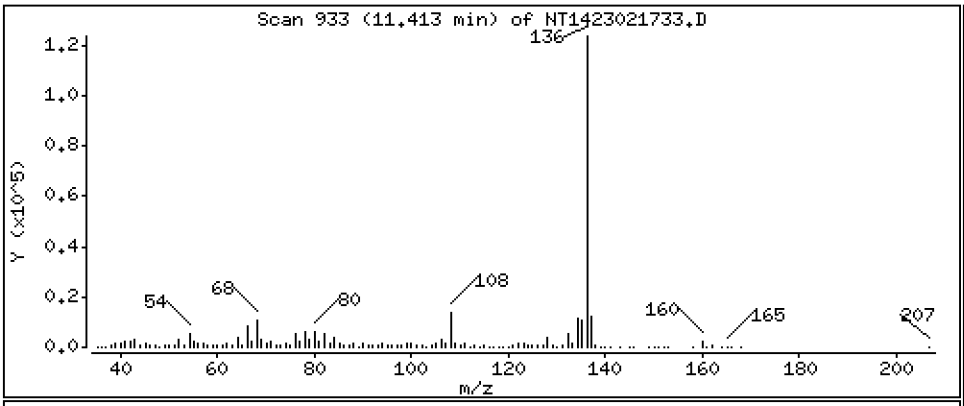
Operator: DSD

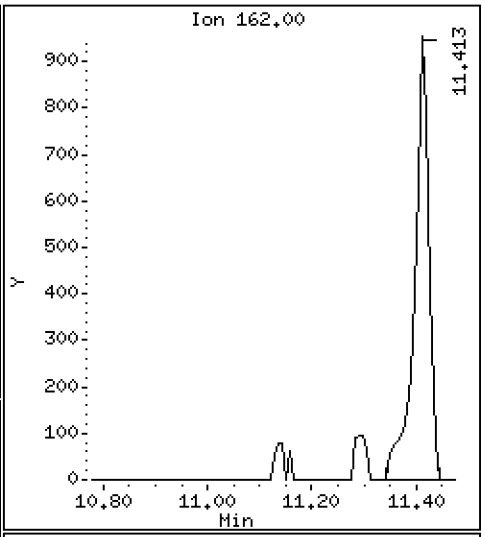
Column phase: ZB-5msi

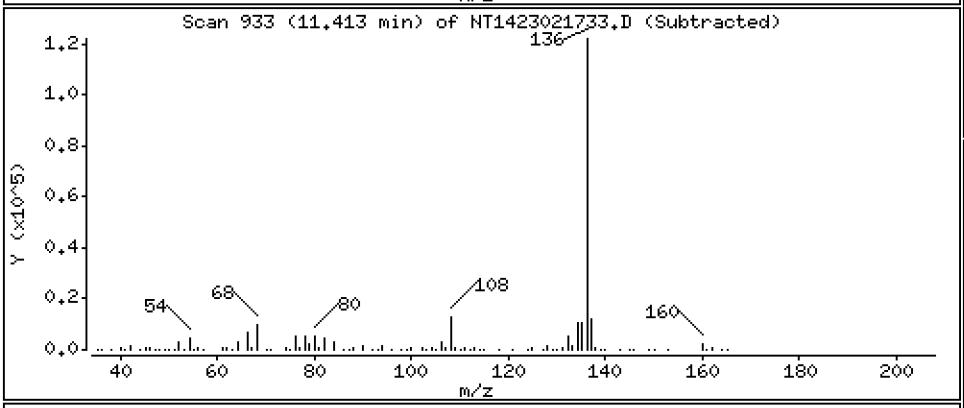
Column diameter: 0.25

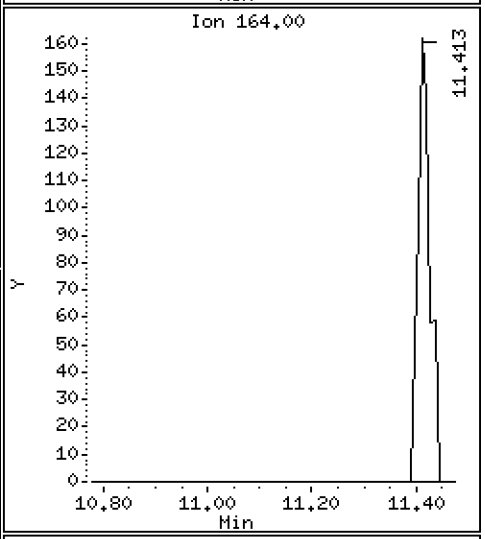
25 2,4-Dichlorophenol

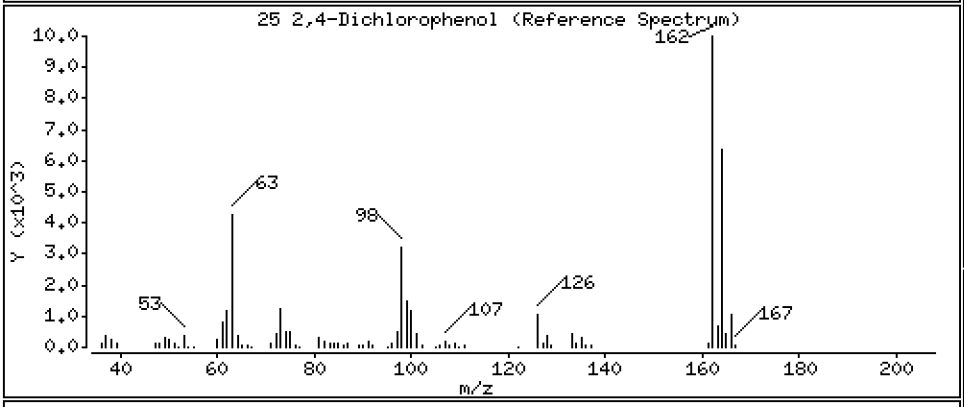
Concentration: 0.02337 ug/mL

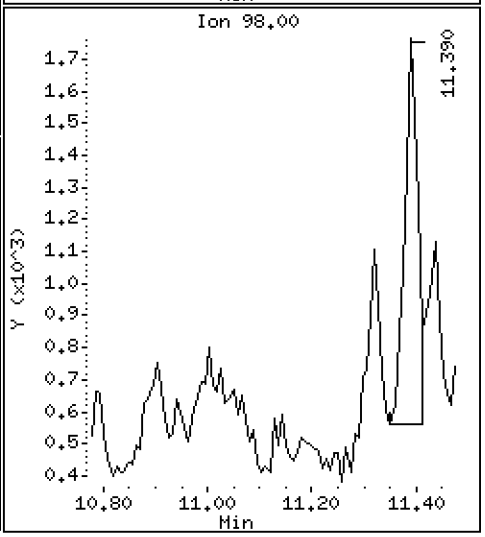


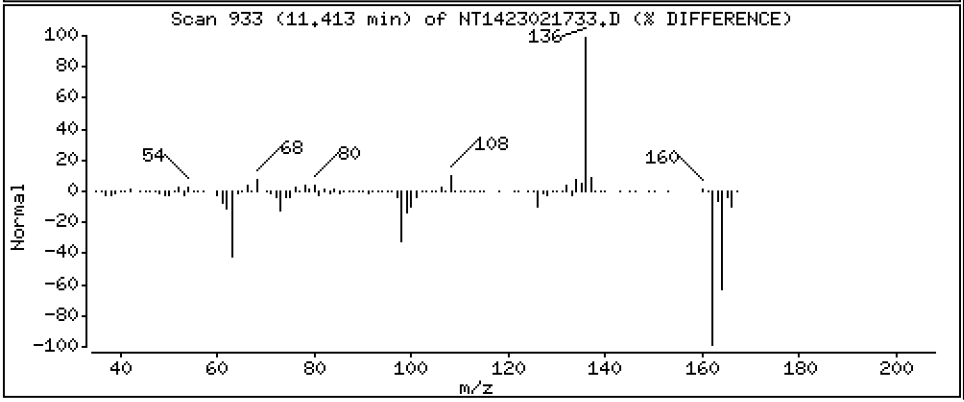












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

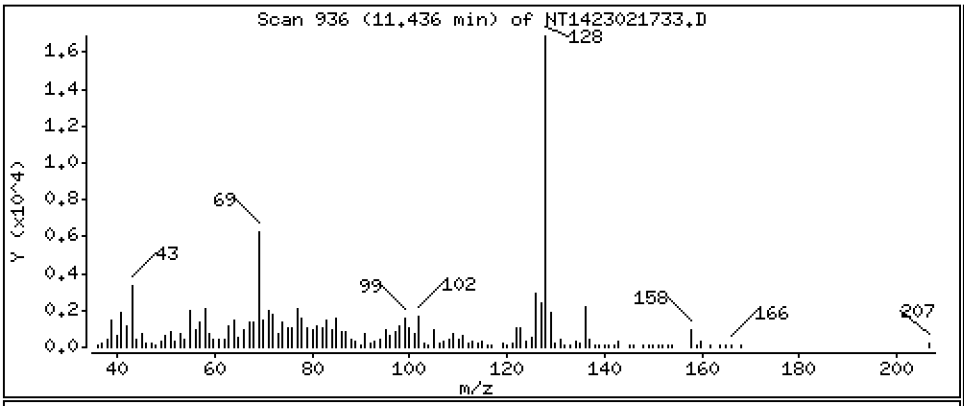
Operator: DSD

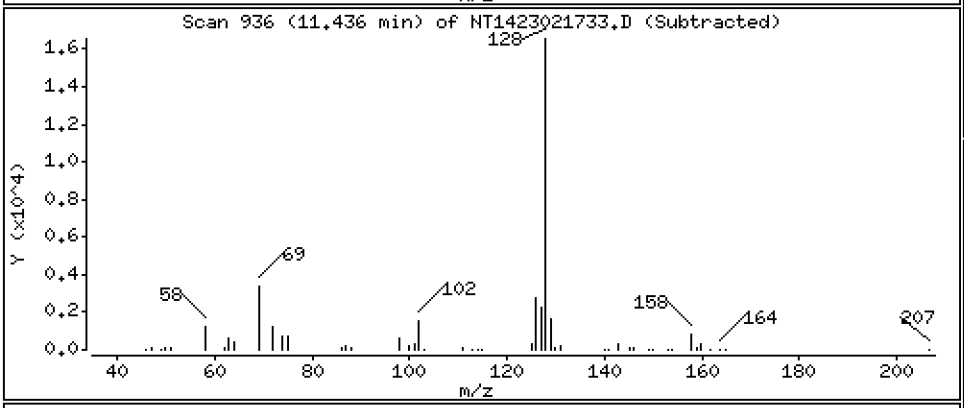
Column phase: ZB-5msi

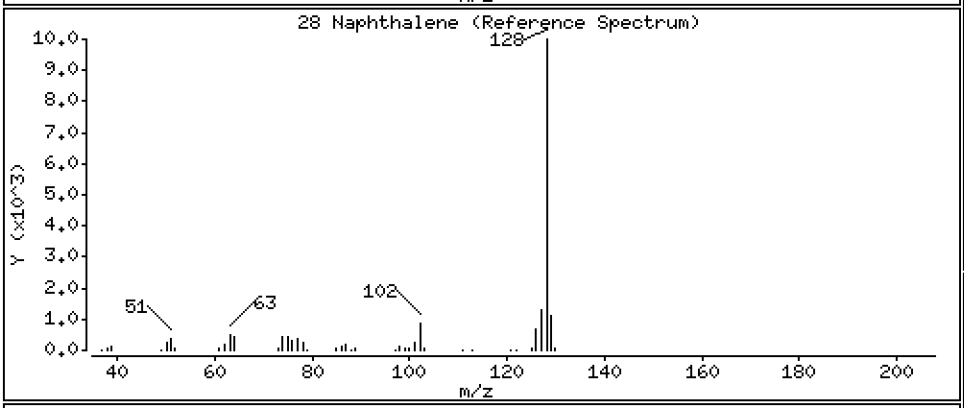
Column diameter: 0.25

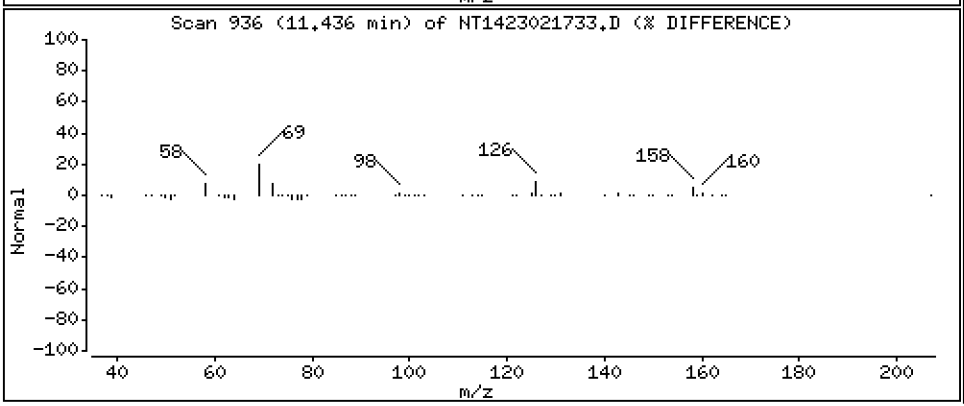
28 Naphthalene

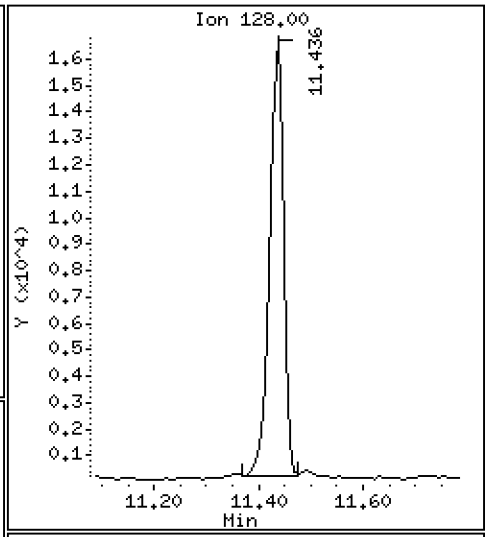
Concentration: 0.1119 ug/mL

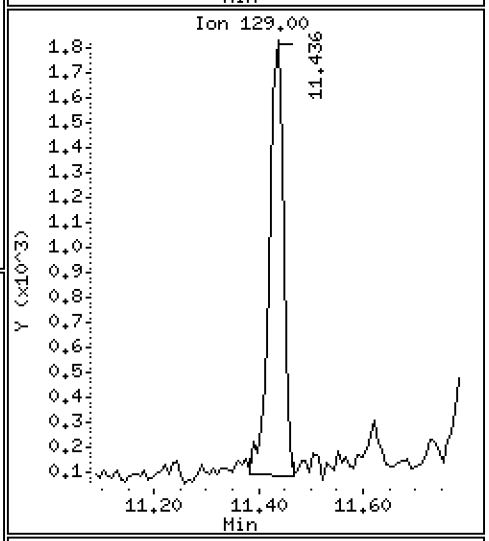


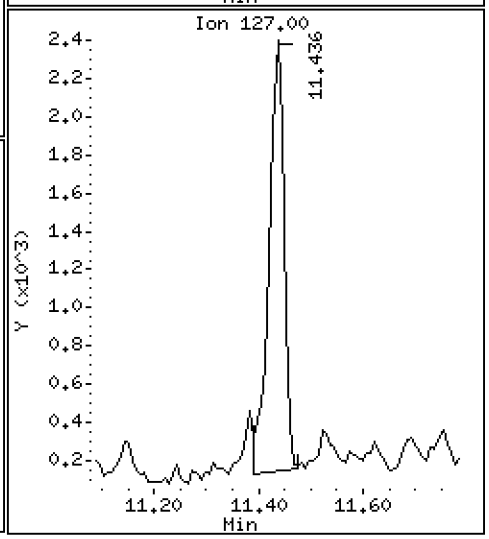












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021733.D

Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

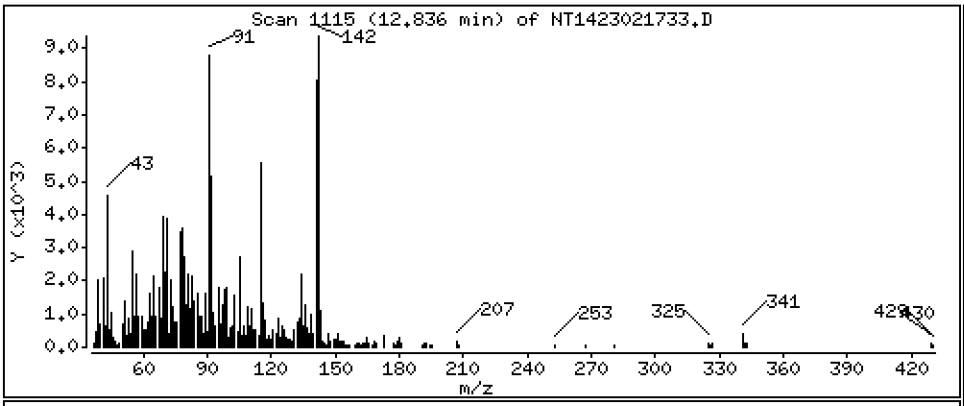
Operator: DSD

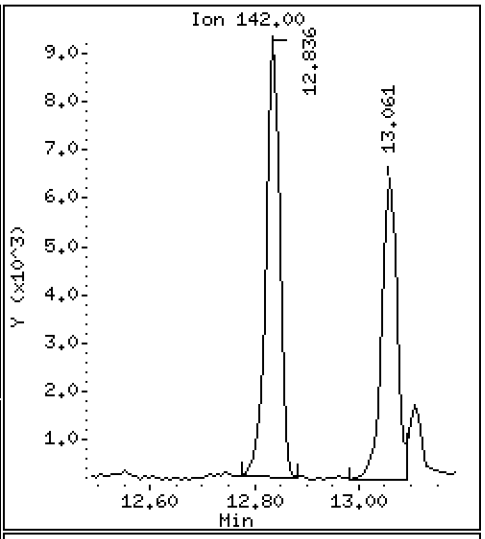
Column phase: ZB-5msi

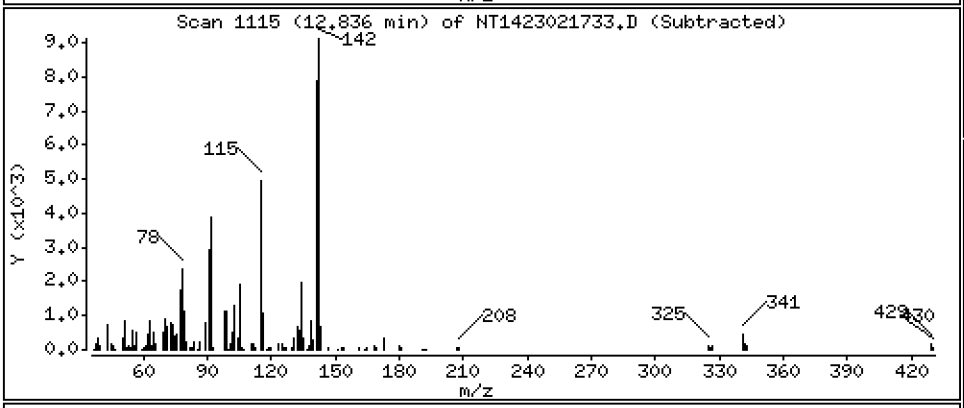
Column diameter: 0.25

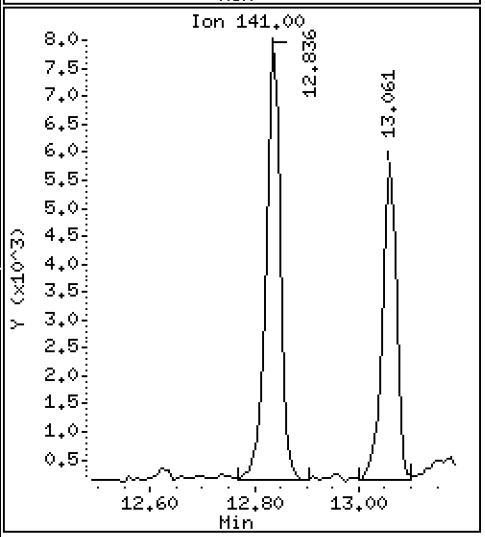
32 2-Methylnaphthalene

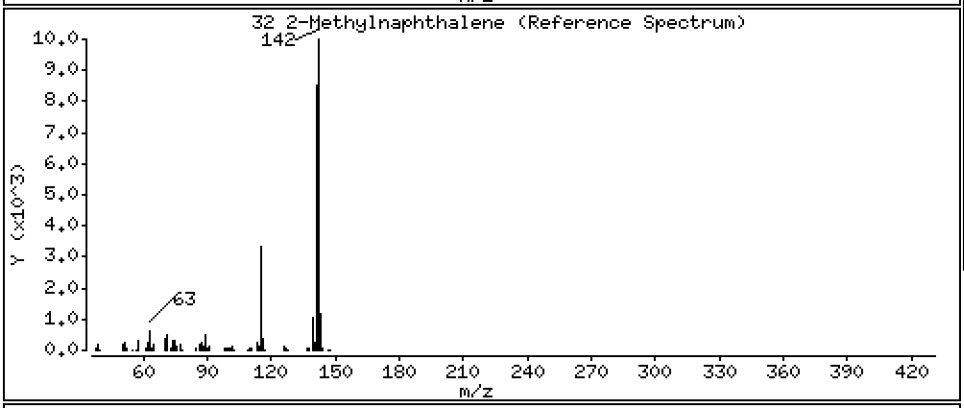
Concentration: 0.08127 ug/mL

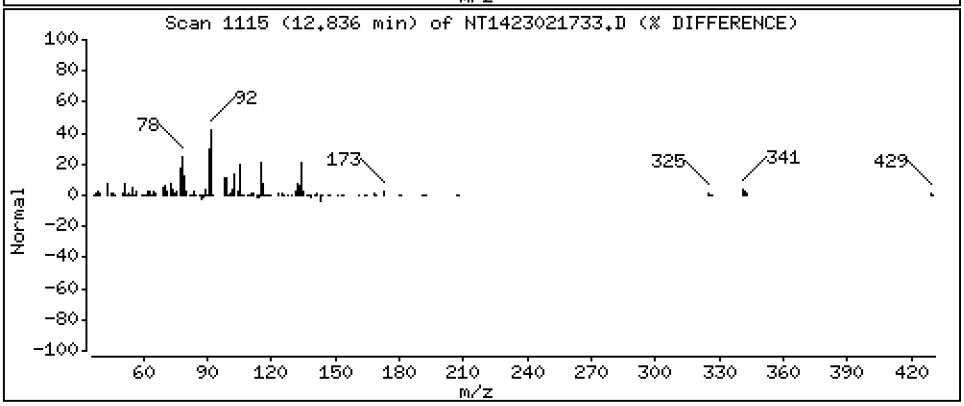












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021733.D

Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

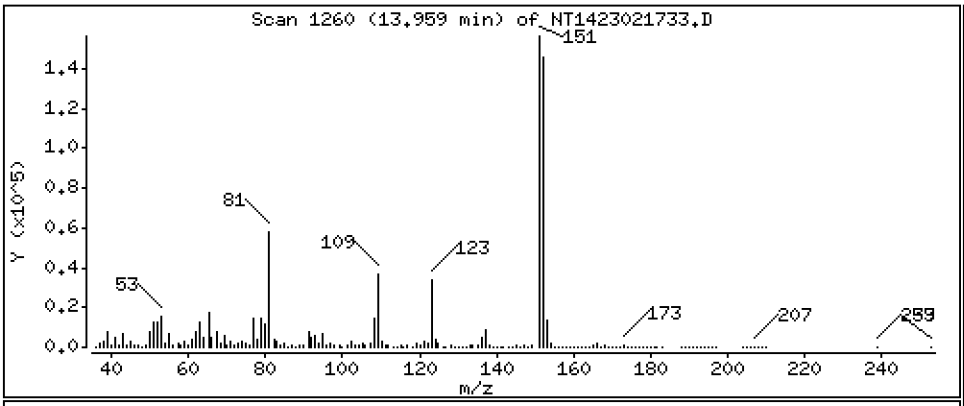
Operator: DSD

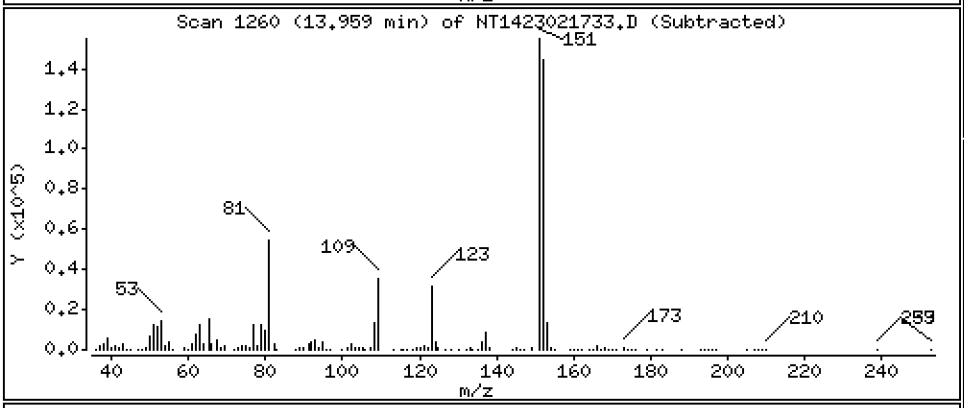
Column phase: ZB-5msi

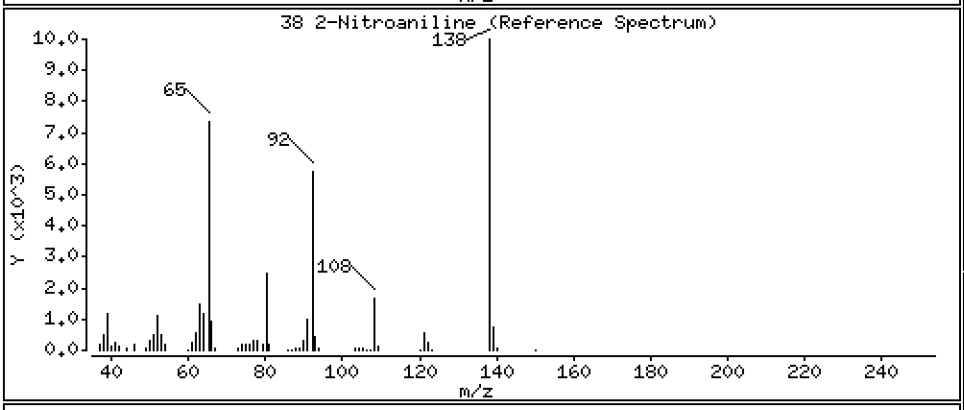
Column diameter: 0.25

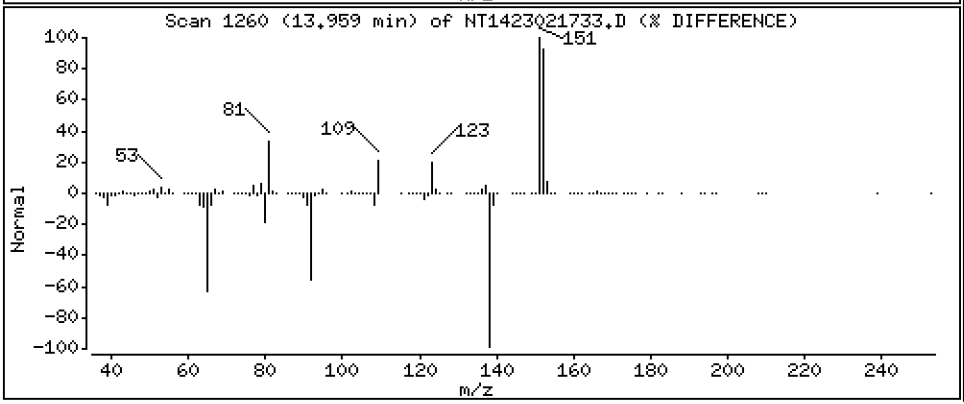
38 2-Nitroaniline

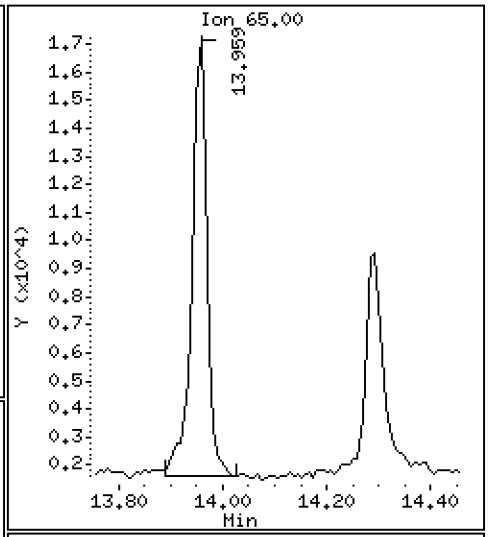
Concentration: 0.5121 ug/mL

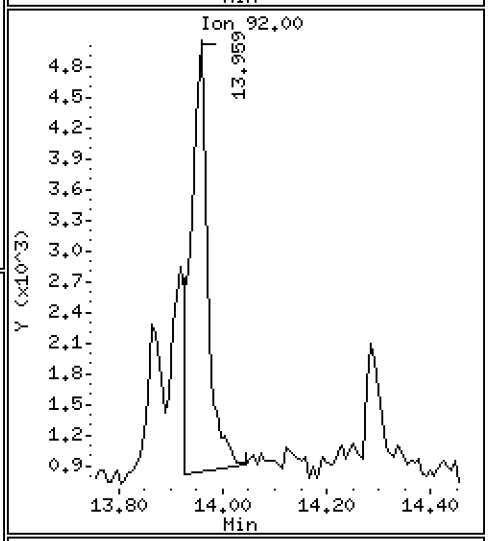


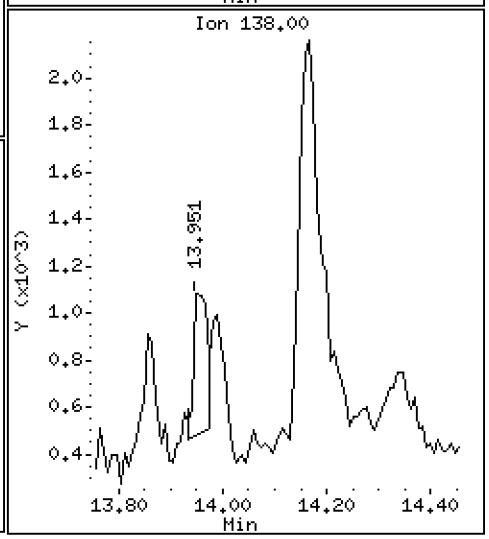












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021733.D

Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

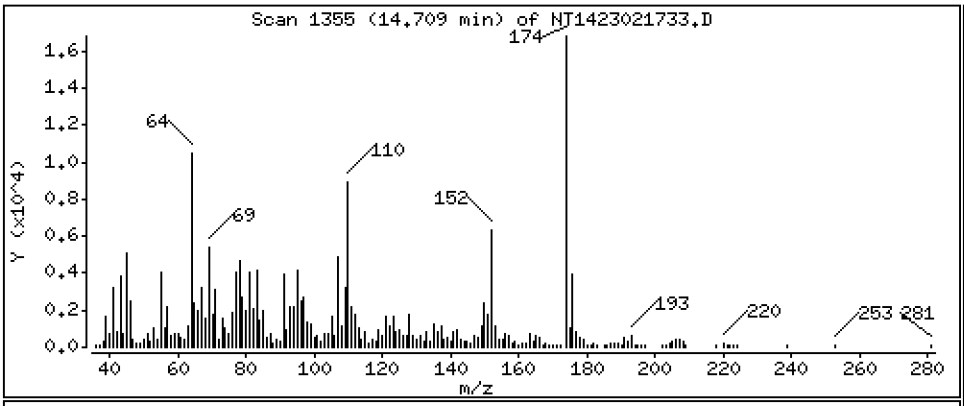
Operator: DSD

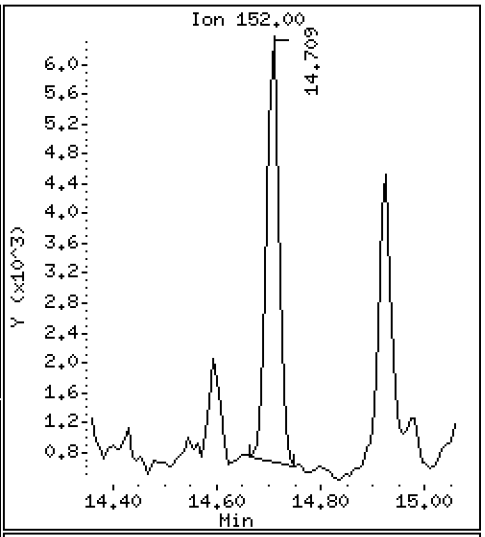
Column phase: ZB-5msi

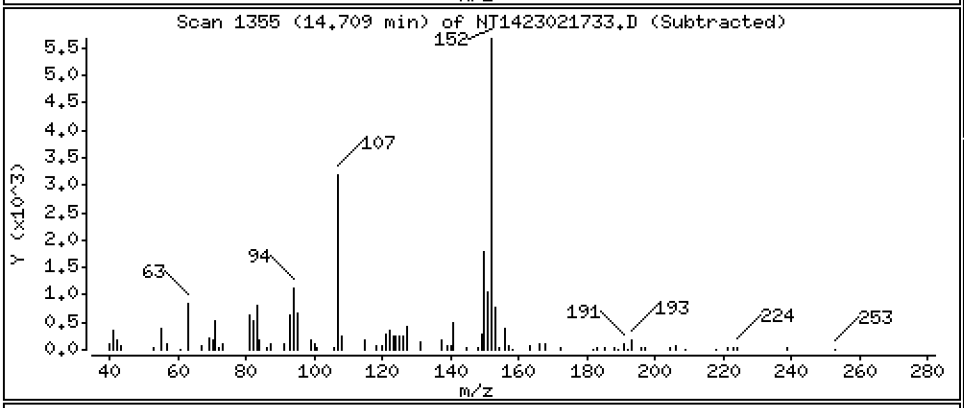
Column diameter: 0.25

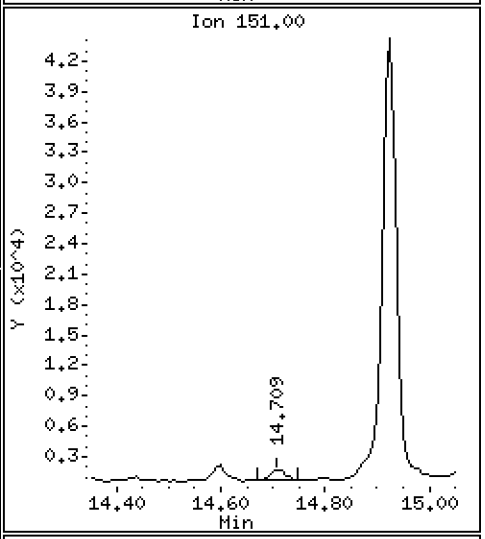
40 Acenaphthylene

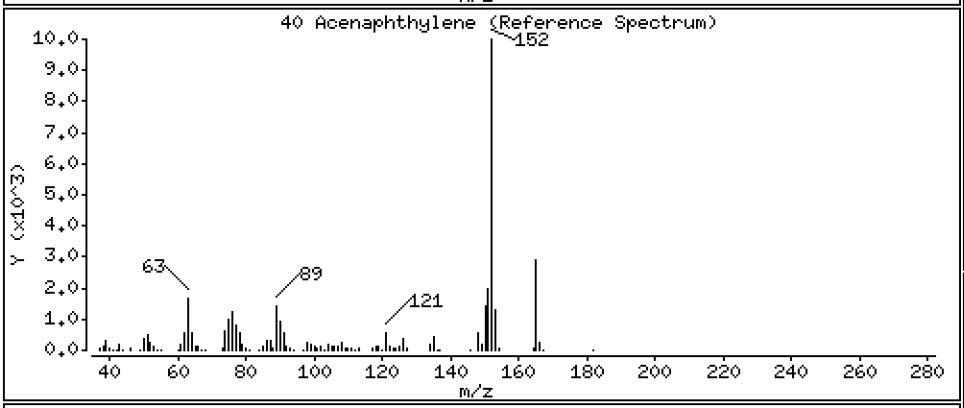
Concentration: 0.03307 ug/mL

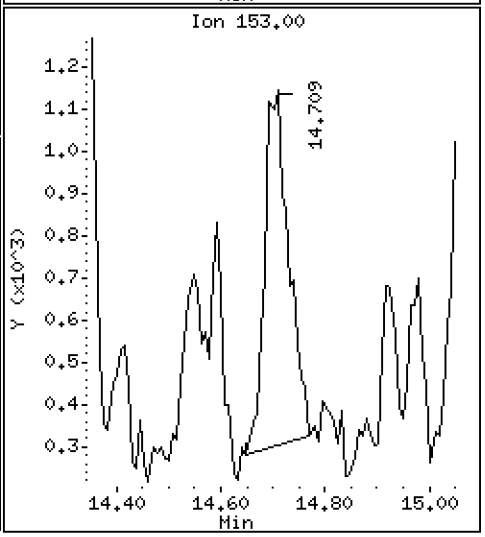


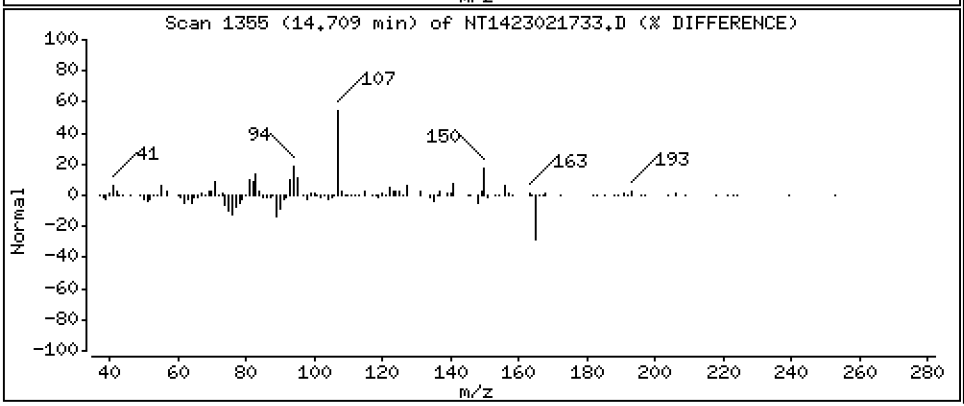












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

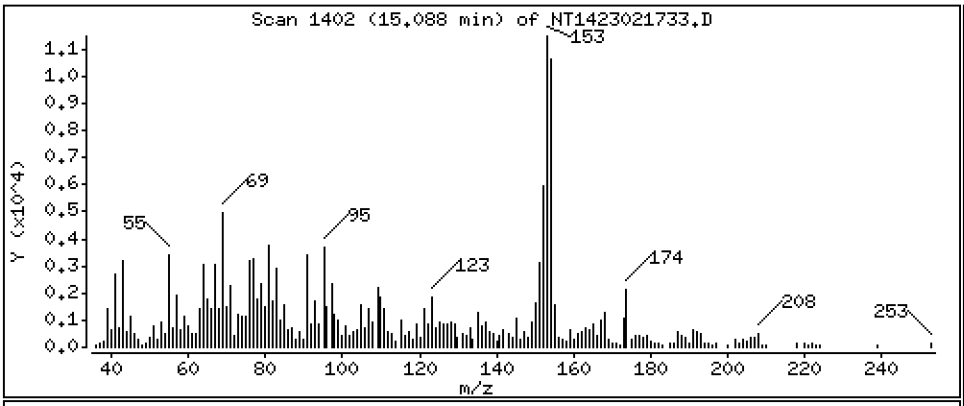
Operator: DSD

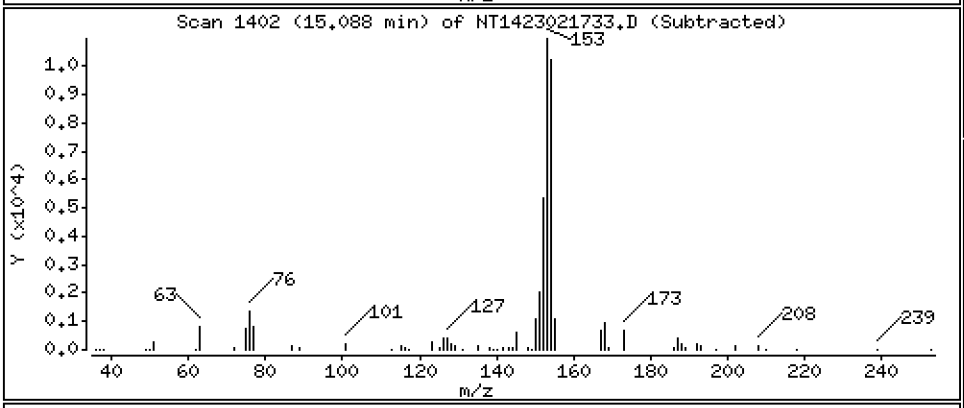
Column phase: ZB-5msi

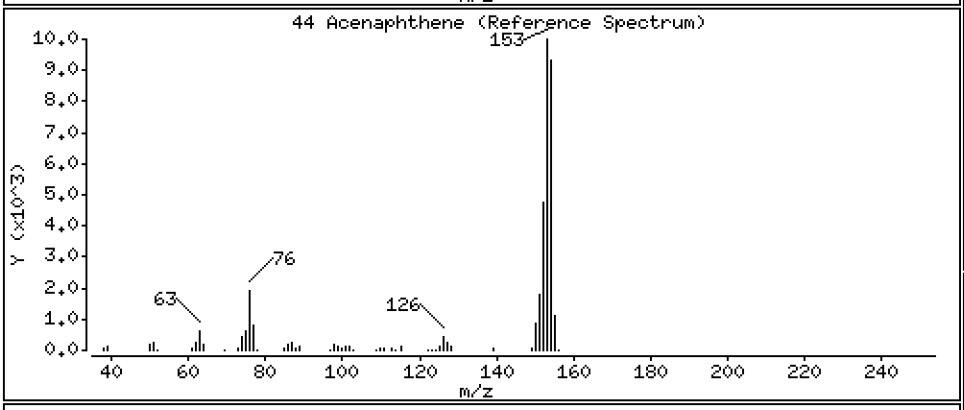
Column diameter: 0.25

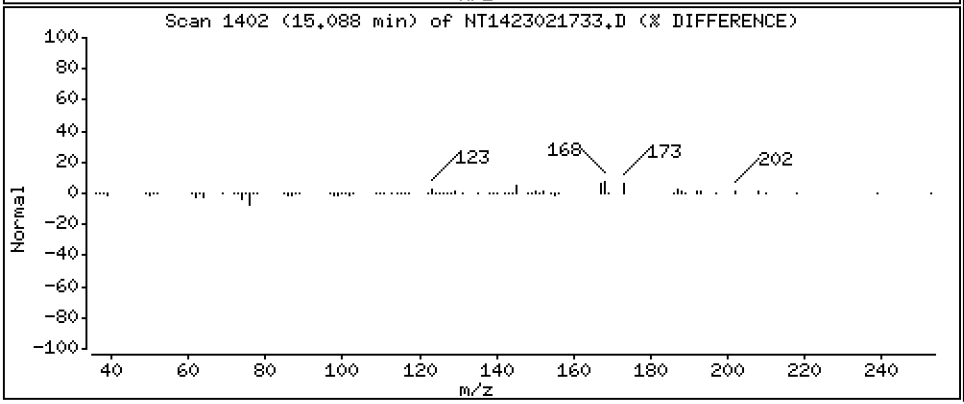
44 Acenaphthene

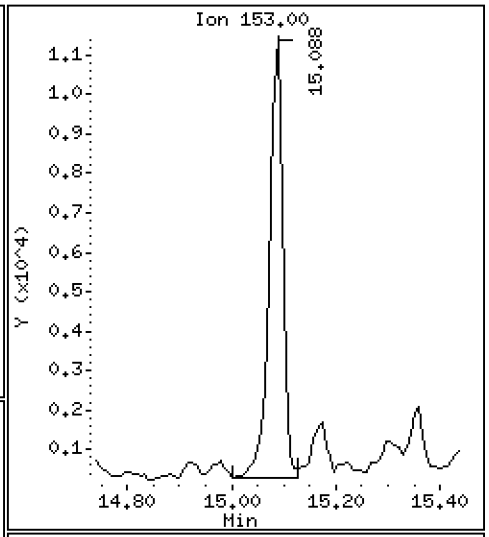
Concentration: 0.1180 ug/mL

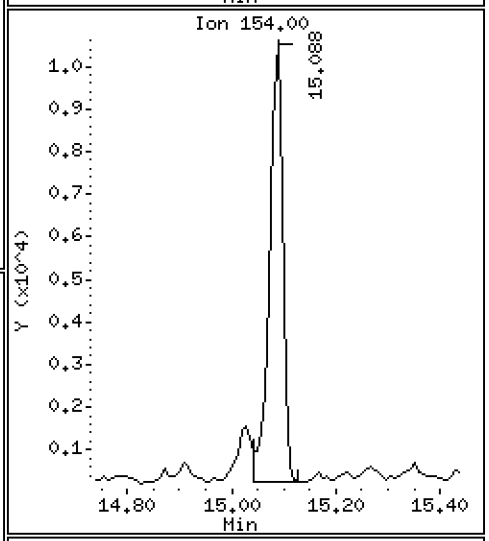


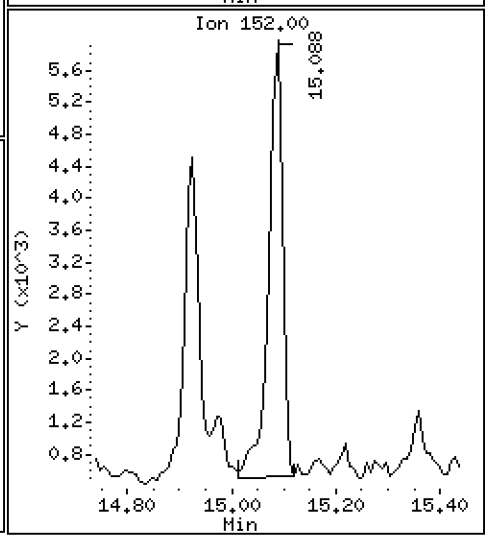












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

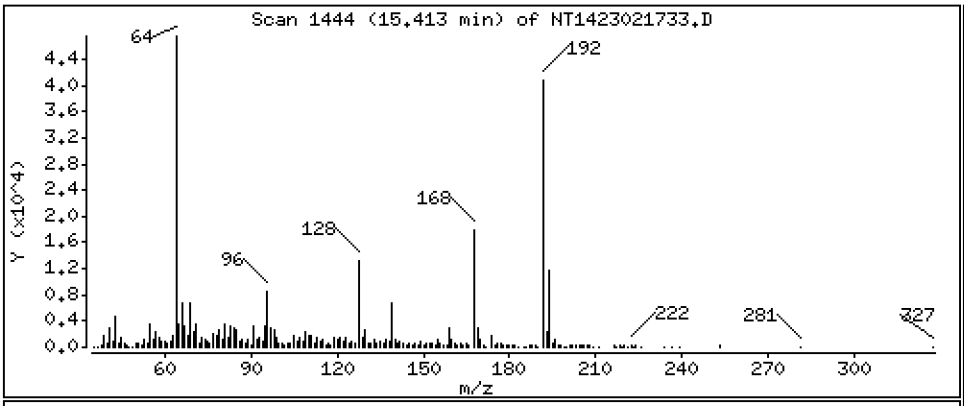
Operator: DSD

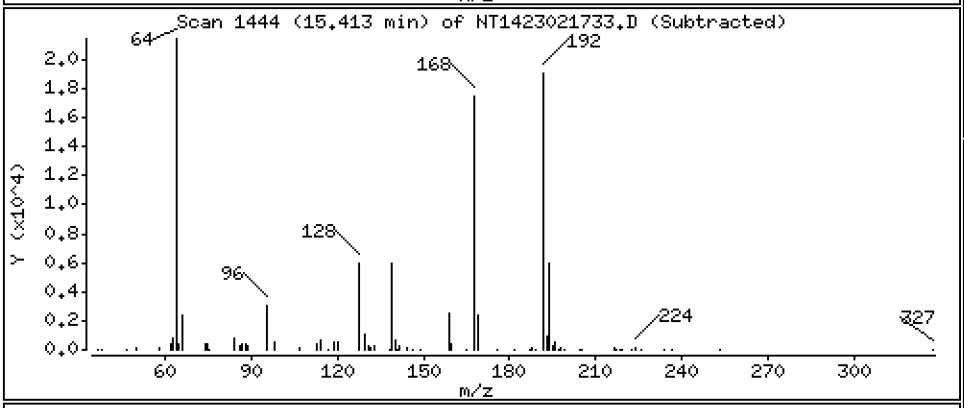
Column phase: ZB-5msi

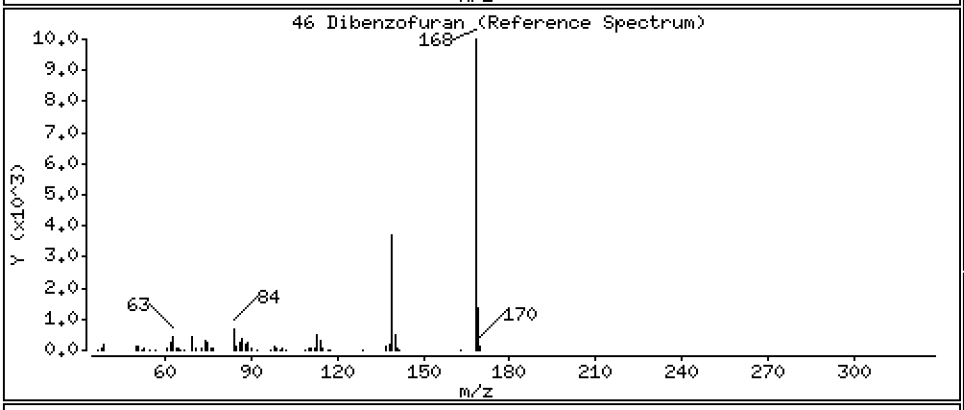
Column diameter: 0.25

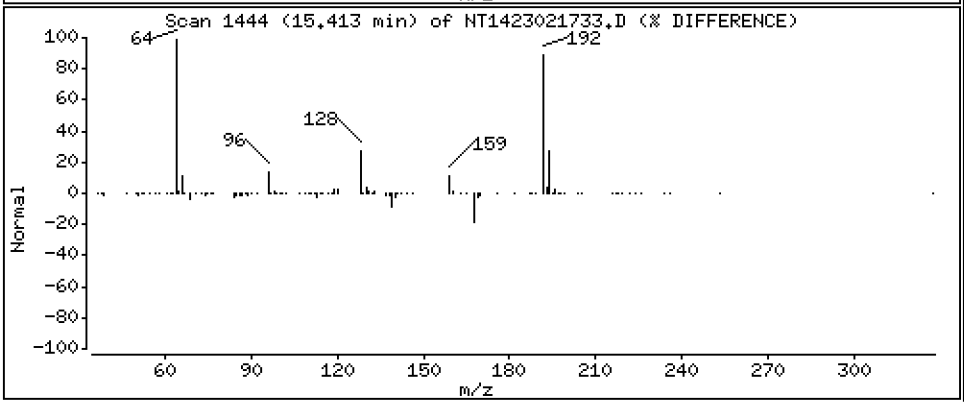
46 Dibenzofuran

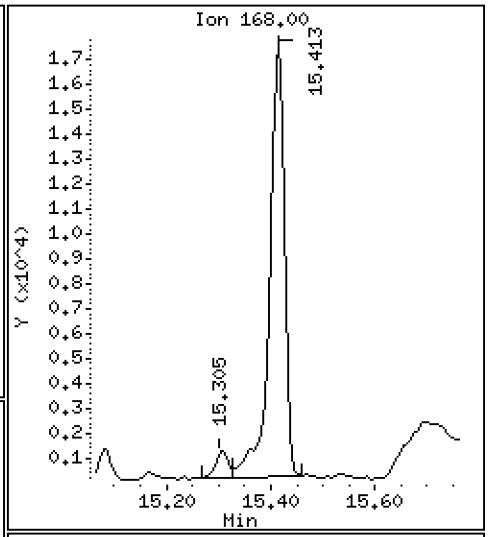
Concentration: 0.1224 ug/mL

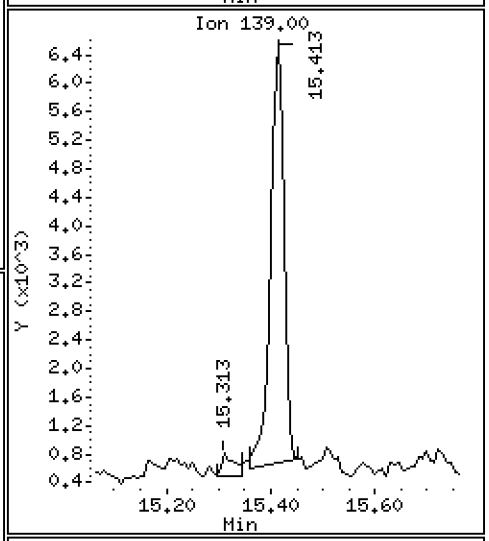


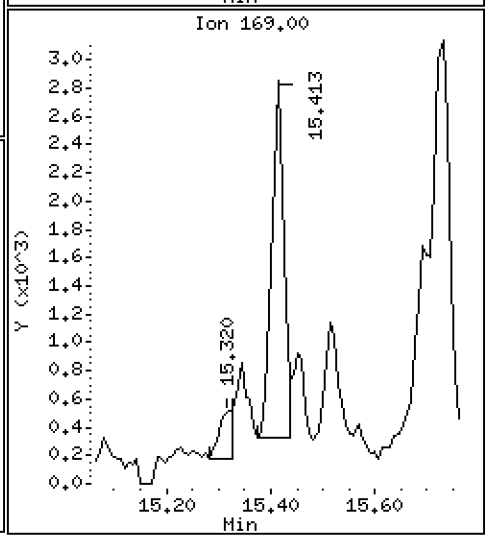












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

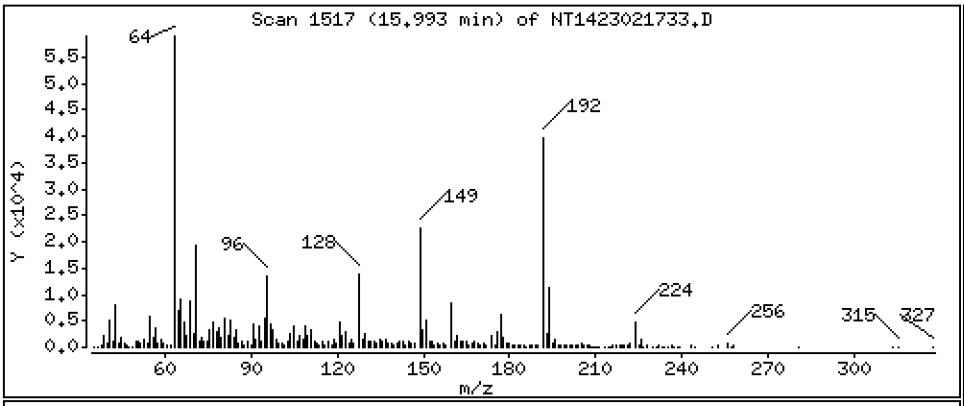
Operator: DSD

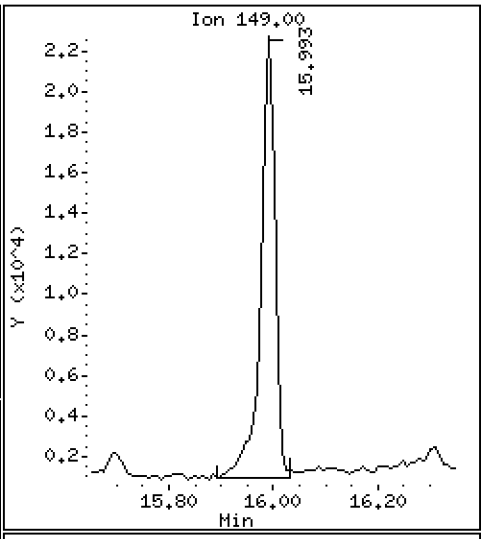
Column phase: ZB-5msi

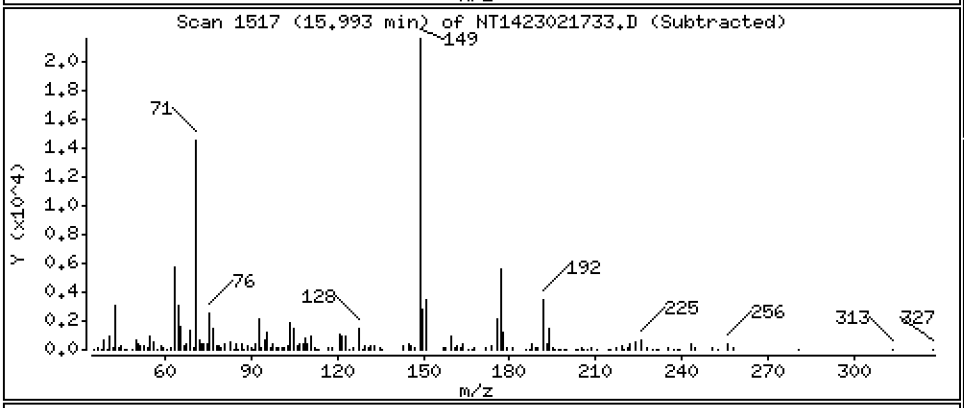
Column diameter: 0.25

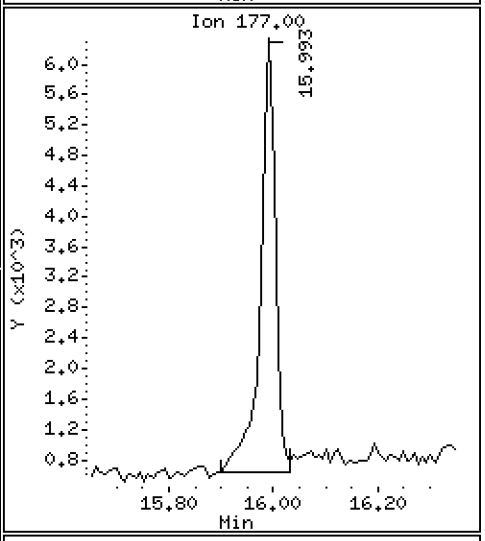
50 Diethylphthalate

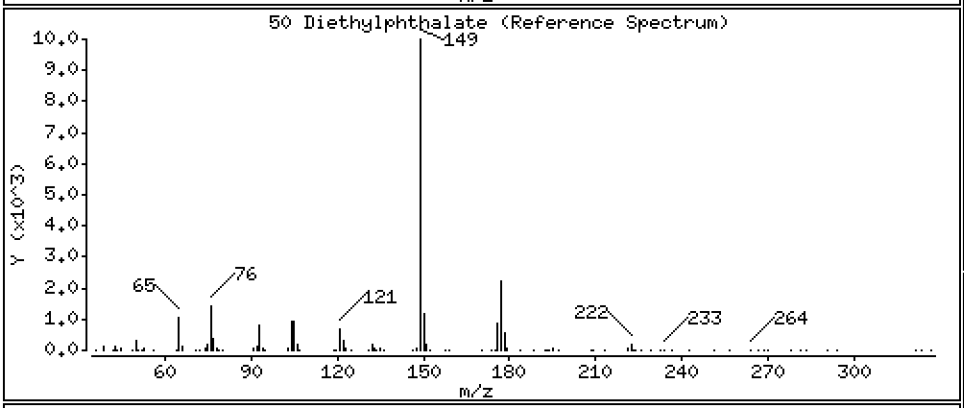
Concentration: 0.1807 ug/mL

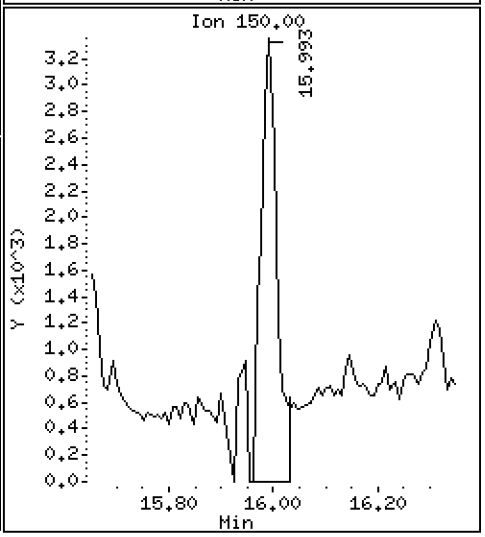


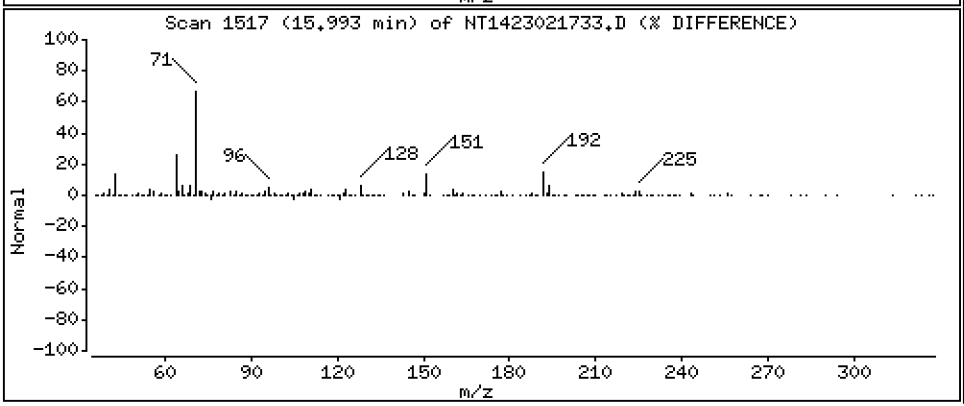












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

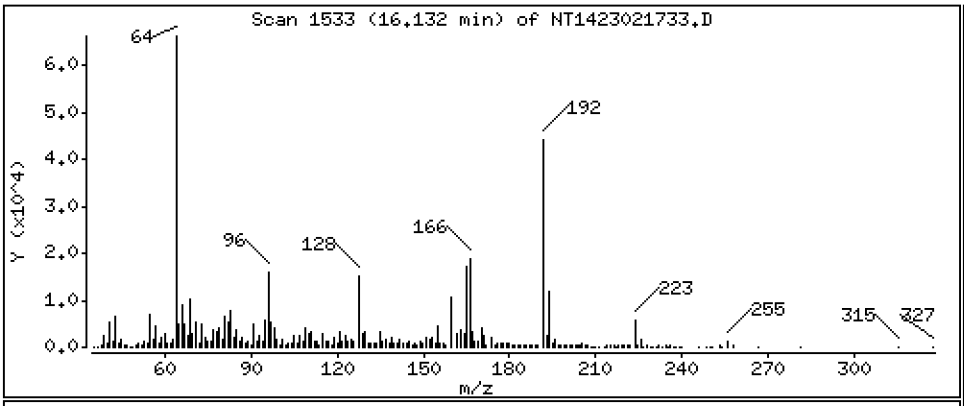
Operator: DSD

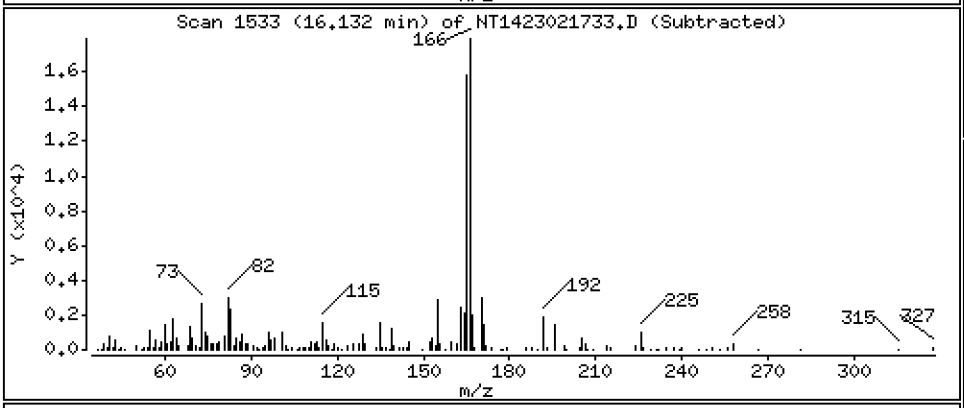
Column phase: ZB-5msi

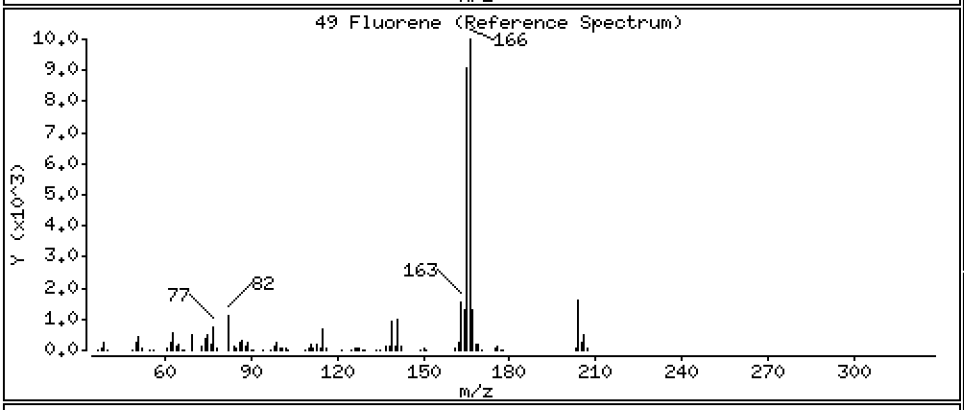
Column diameter: 0.25

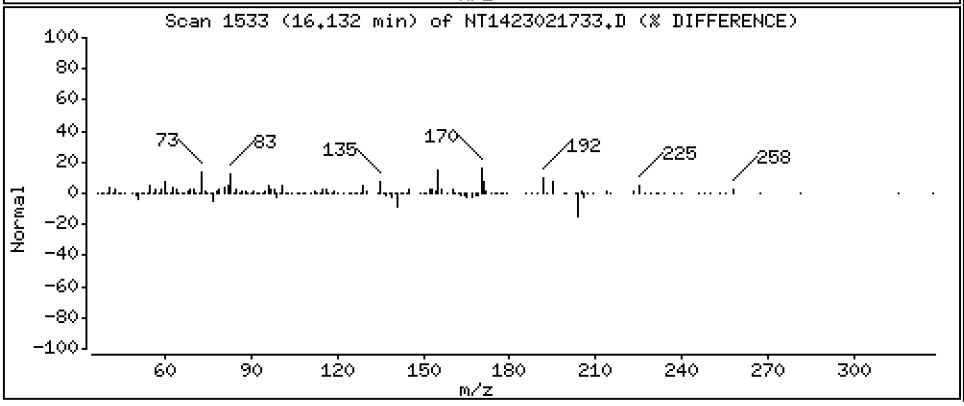
49 Fluorene

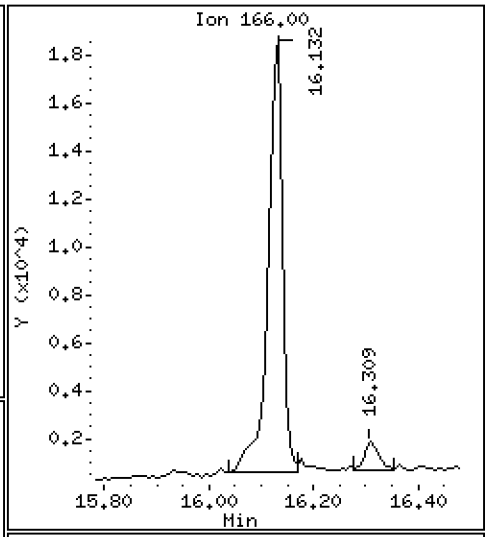
Concentration: 0.1355 ug/mL

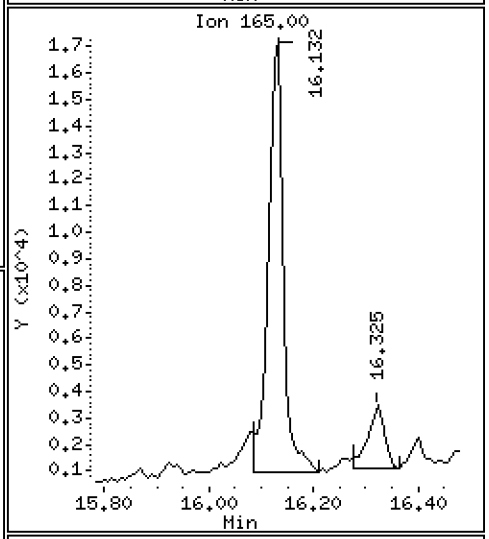


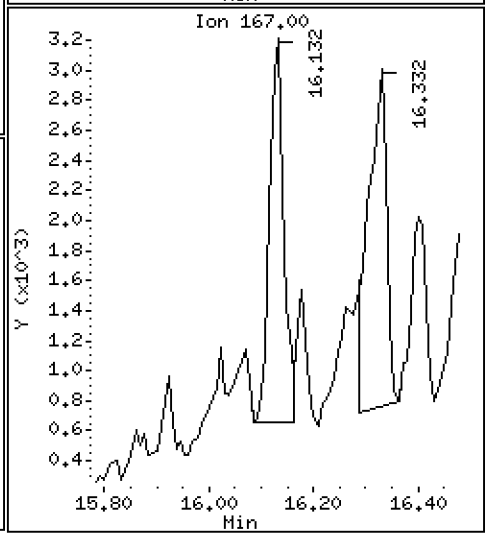












Date : 18-FEB-2023 05:54

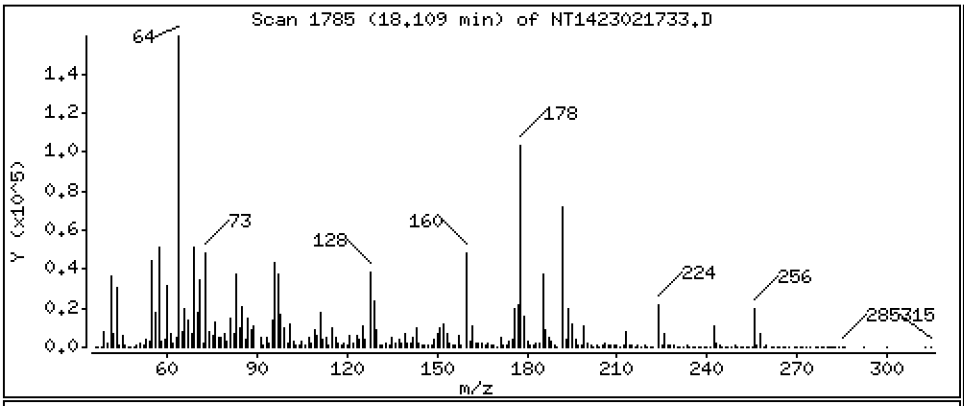
Client ID: Instrument: nt14.i

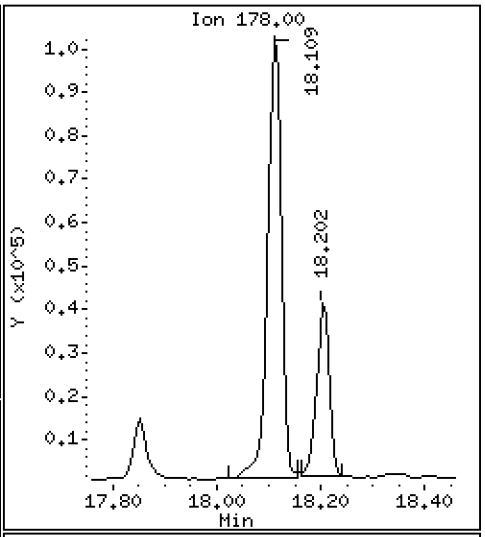
Sample Info: 23A0171-04

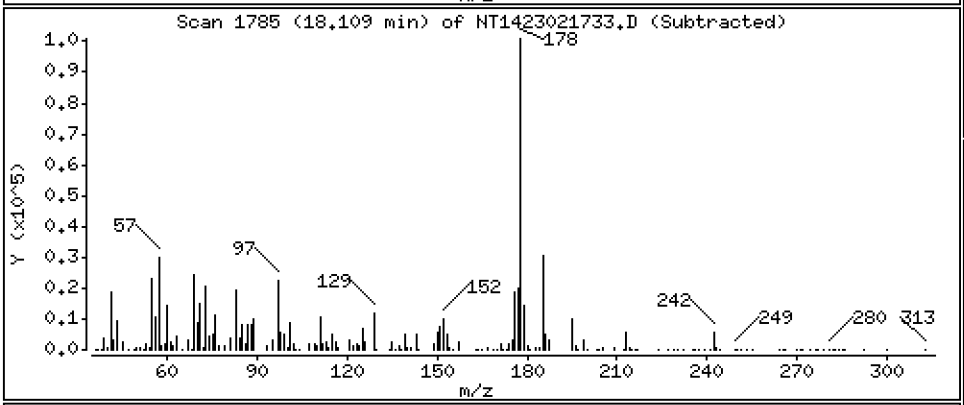
Operator: DSD

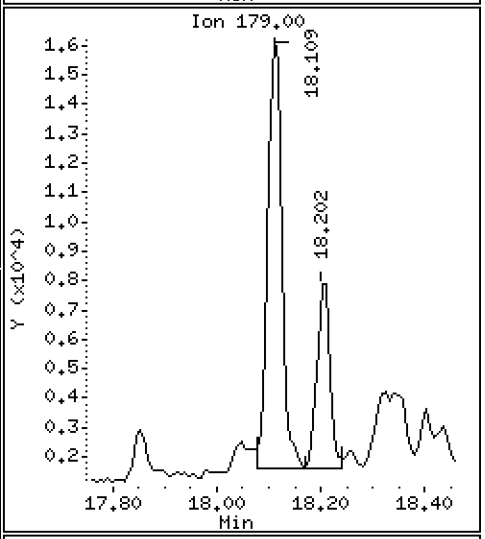
Column phase: ZB-5msi Column diameter: 0.25

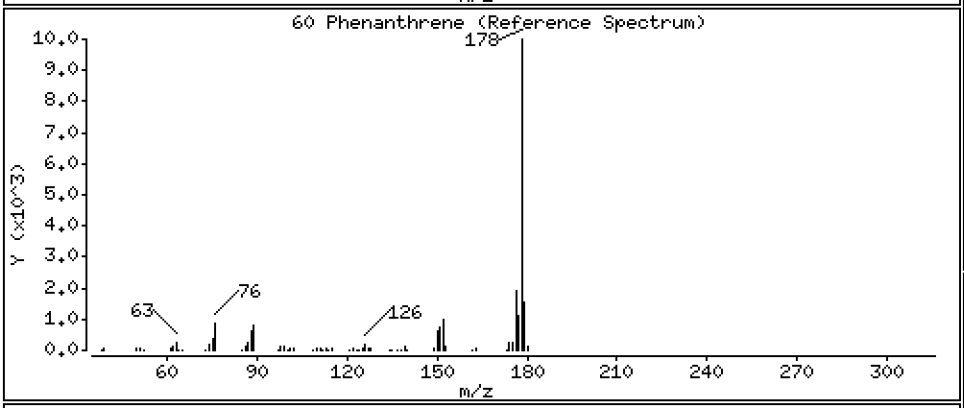
60 Phenanthrene Concentration: 0.6984 ug/mL

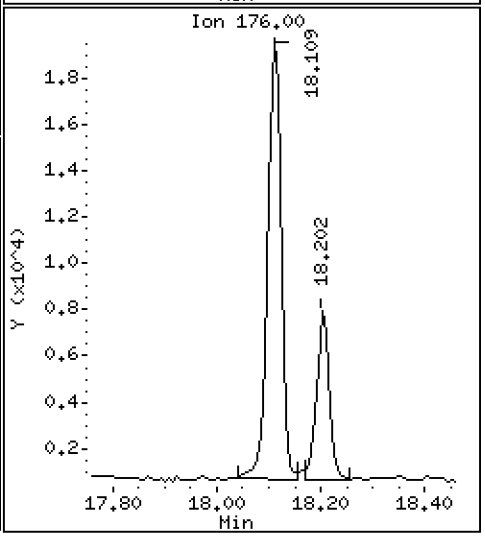


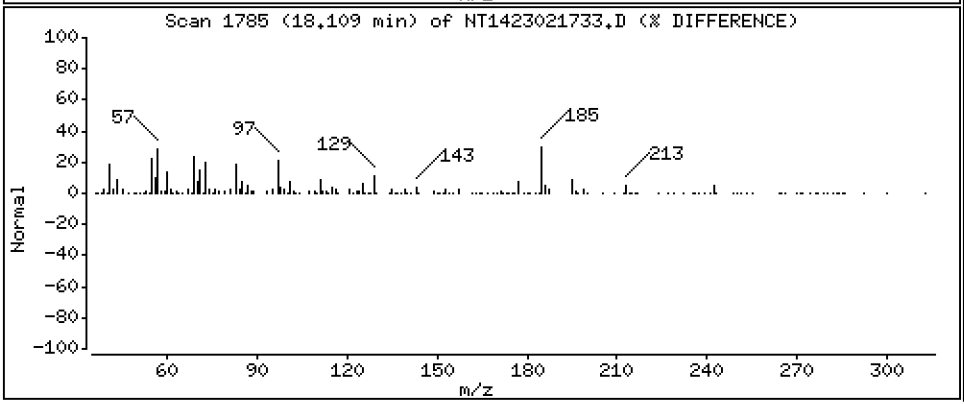












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

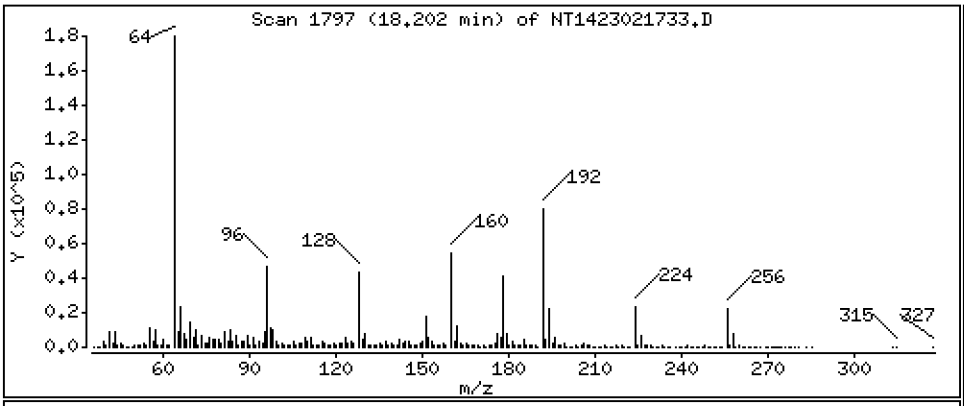
Operator: DSD

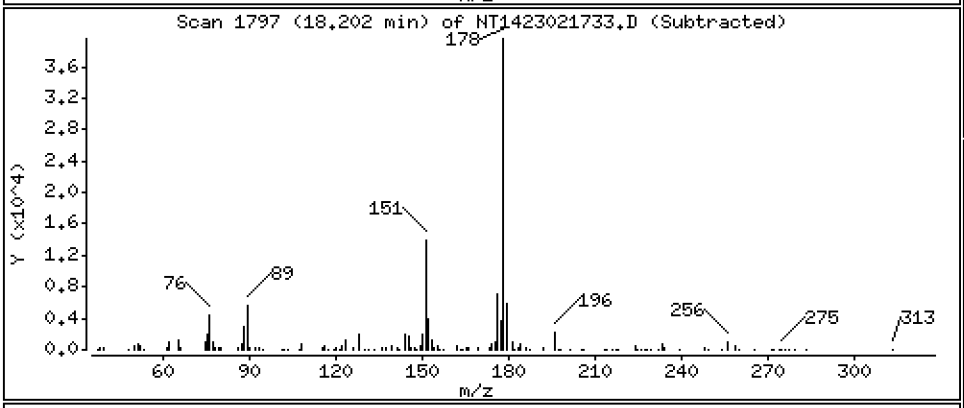
Column phase: ZB-5msi

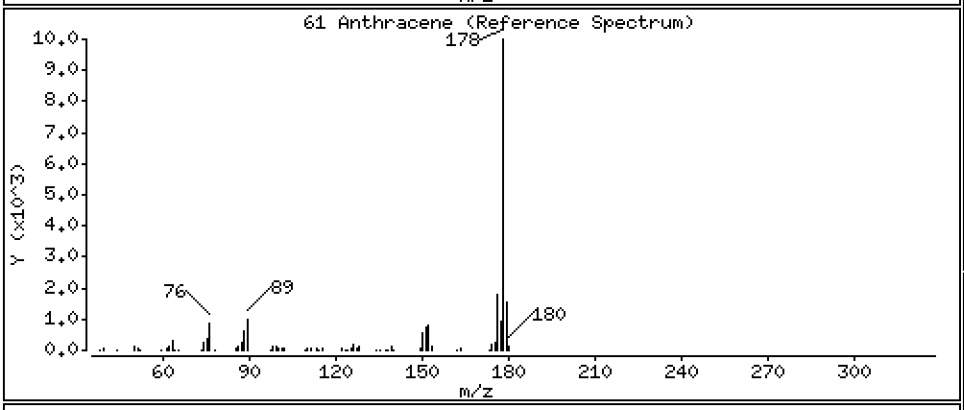
Column diameter: 0.25

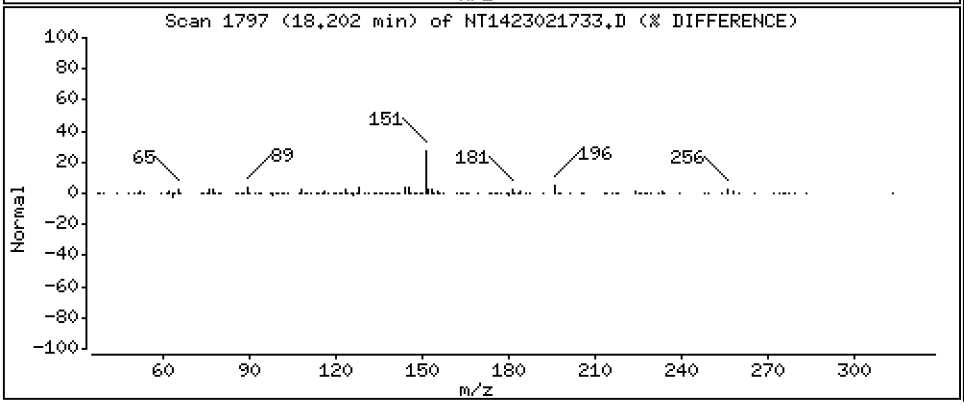
61 Anthracene

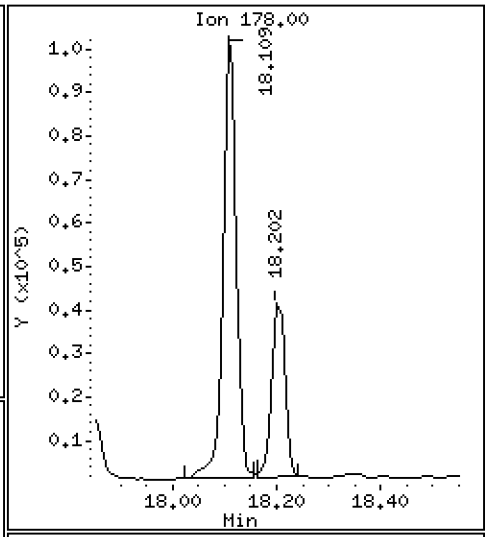
Concentration: 0.2666 ug/mL

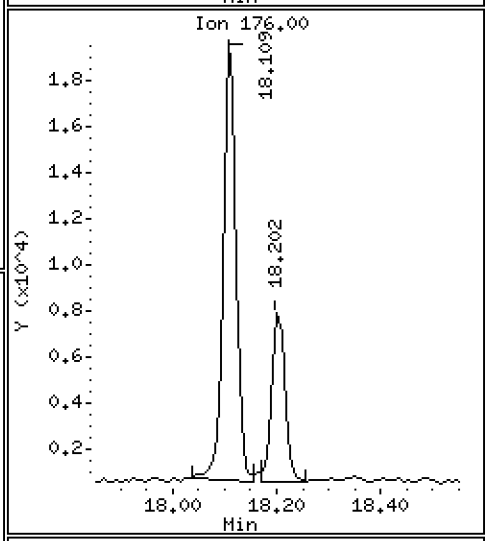


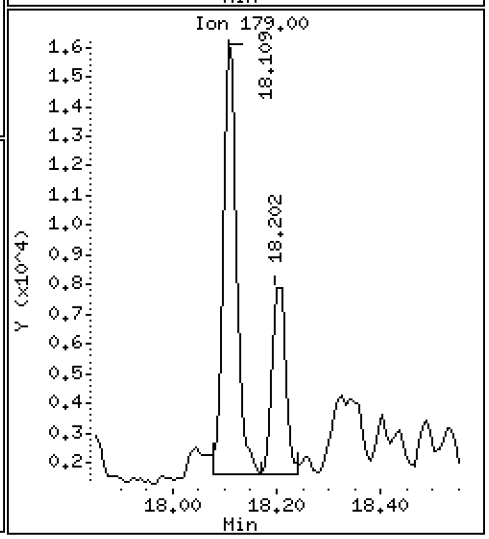












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

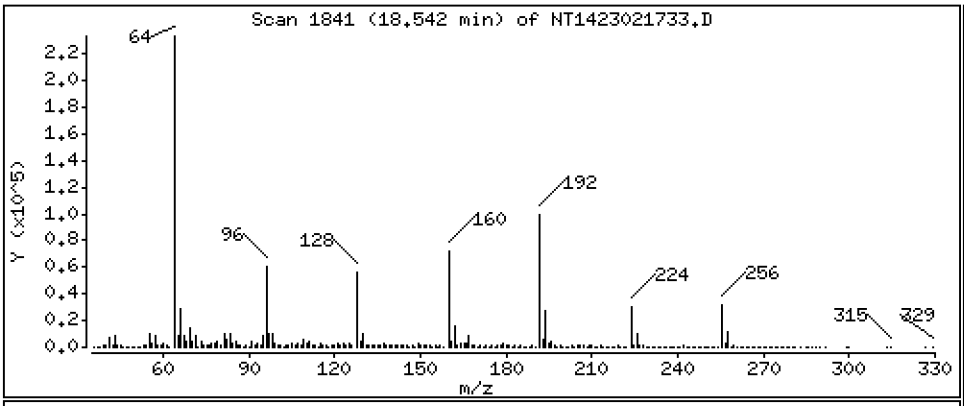
Operator: DSD

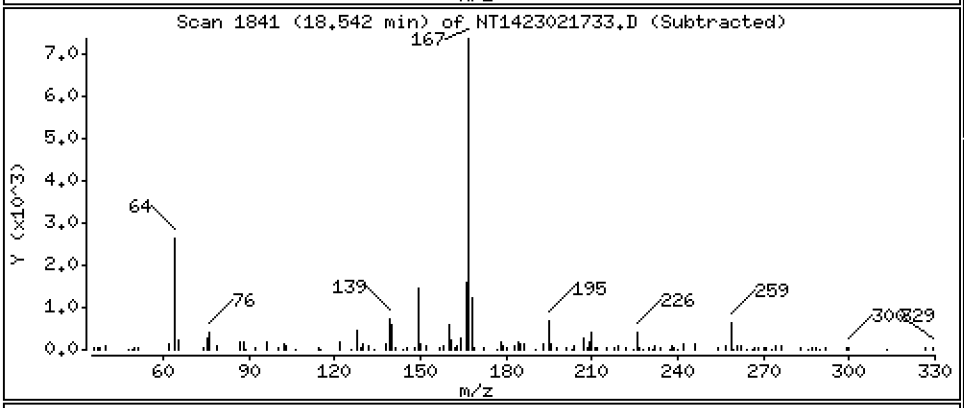
Column phase: ZB-5msi

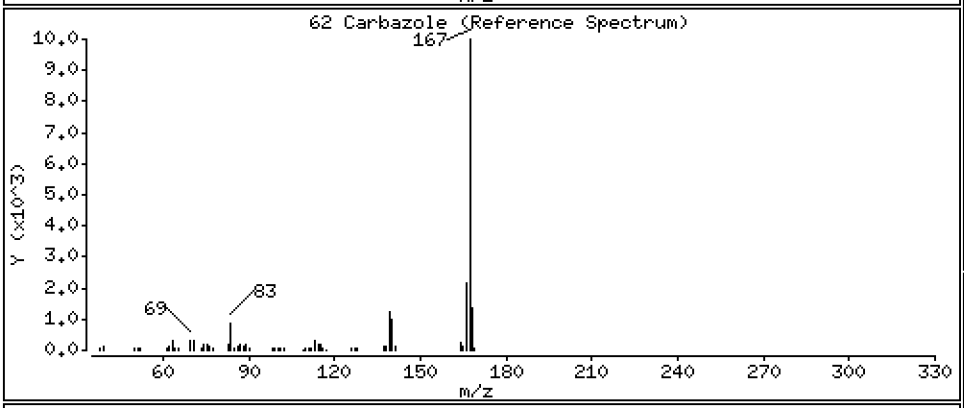
Column diameter: 0.25

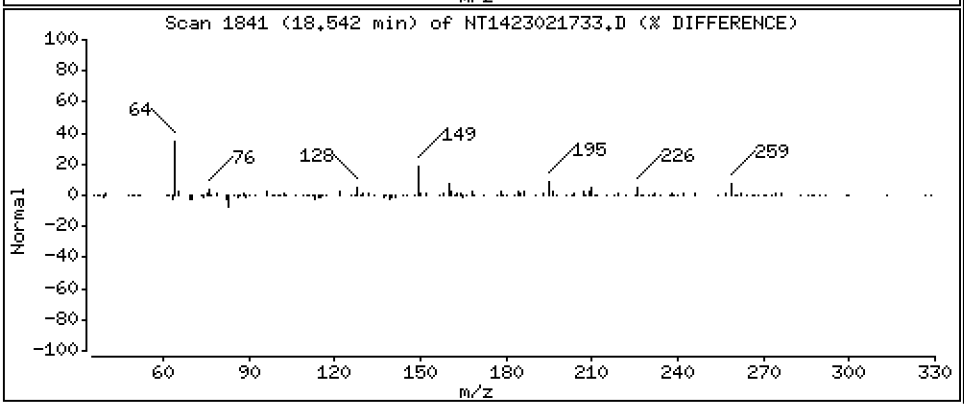
62 Carbazole

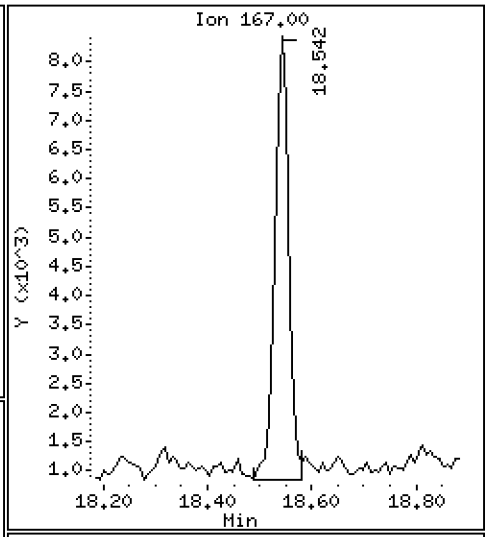
Concentration: 0.06058 ug/mL

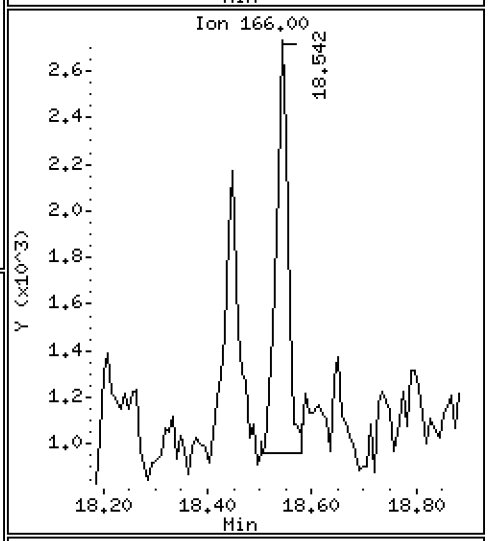


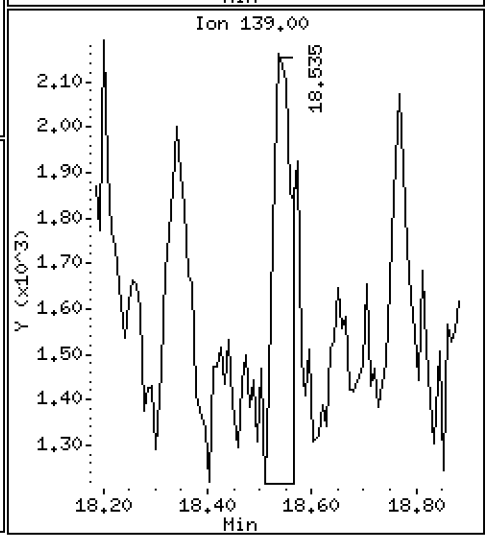












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

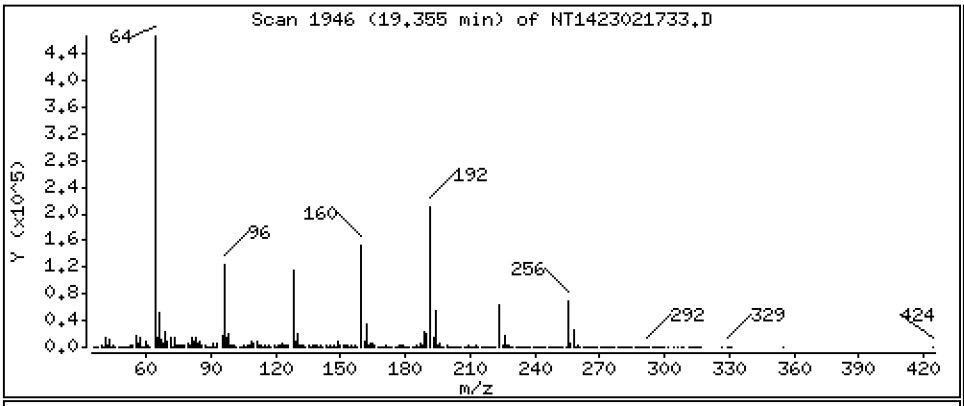
Operator: DSD

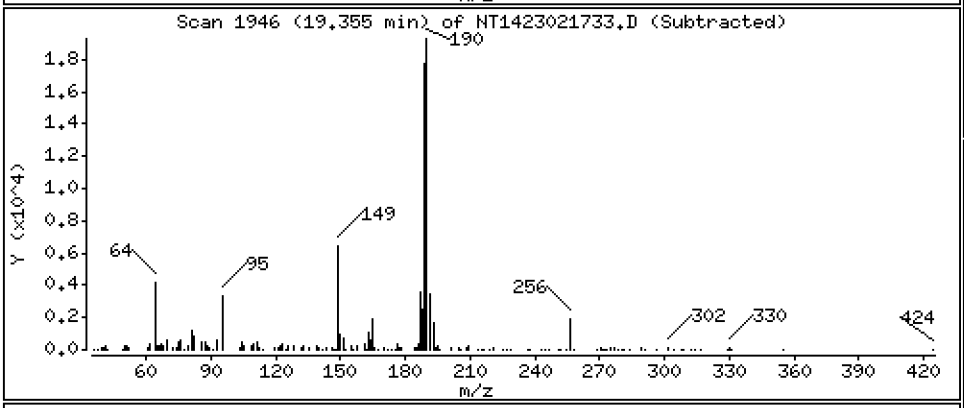
Column phase: ZB-5msi

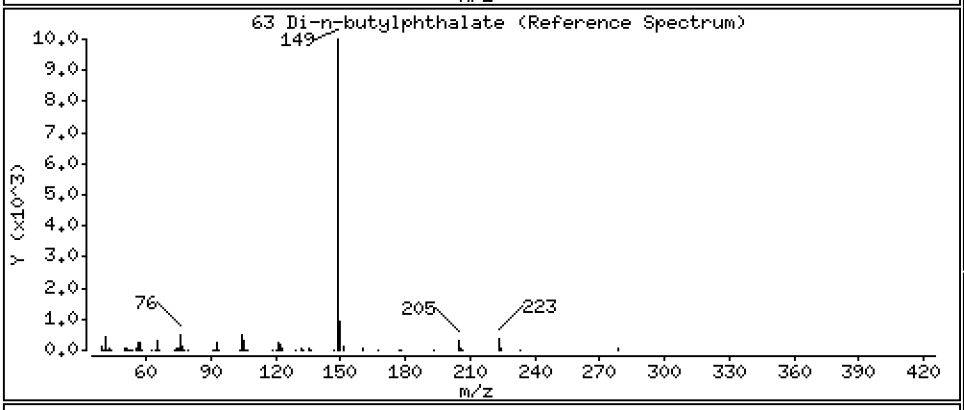
Column diameter: 0.25

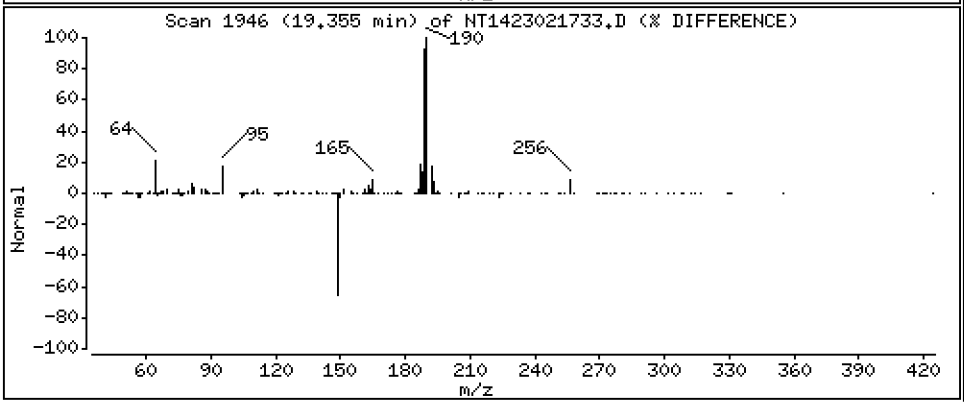
63 Di-n-butylphthalate

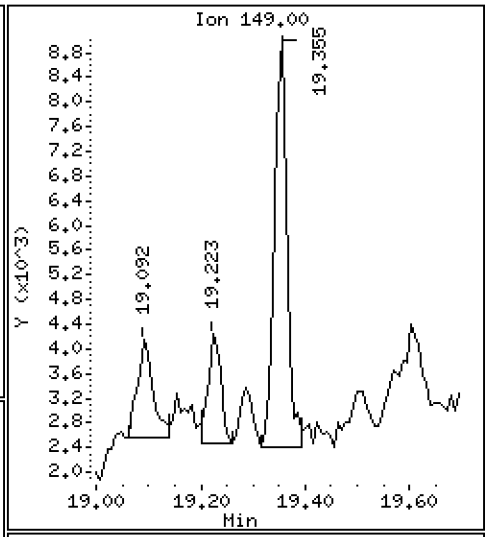
Concentration: 0.04073 ug/mL

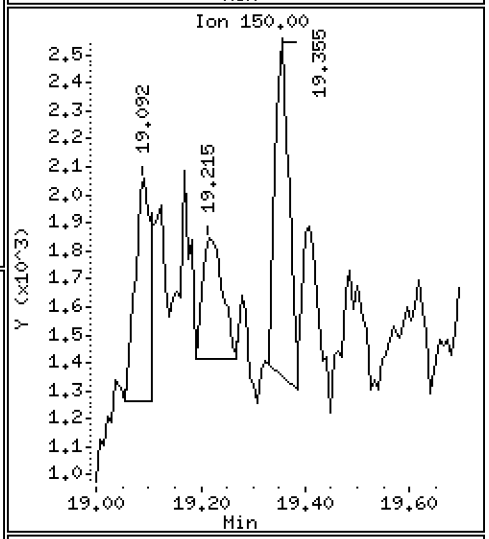


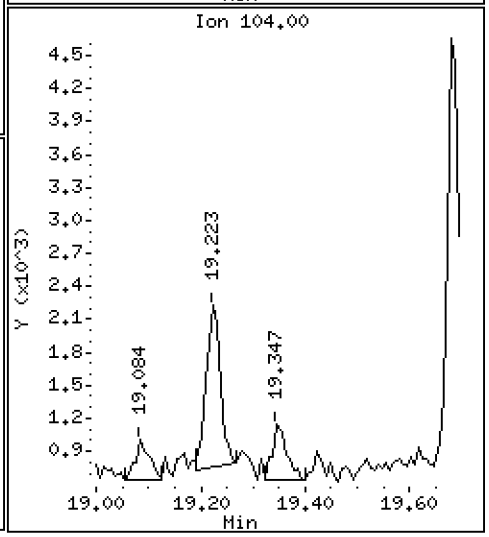












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

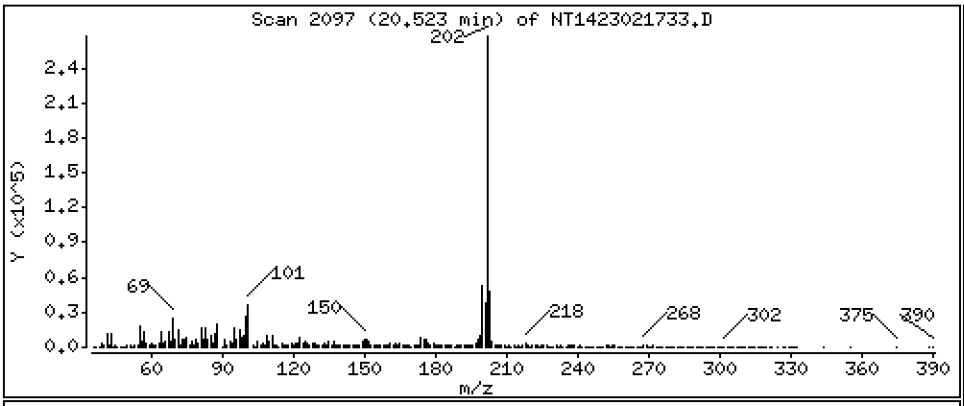
Operator: DSD

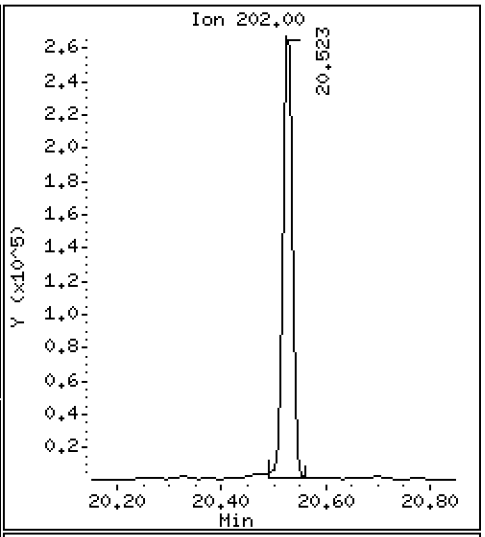
Column phase: ZB-5msi

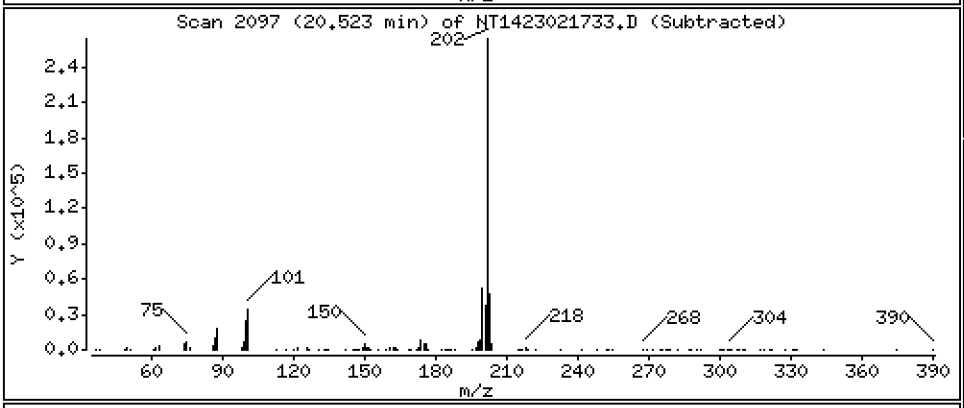
Column diameter: 0.25

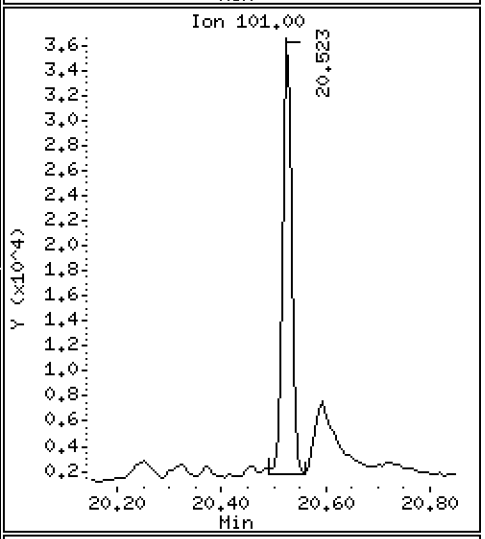
64 Fluoranthene

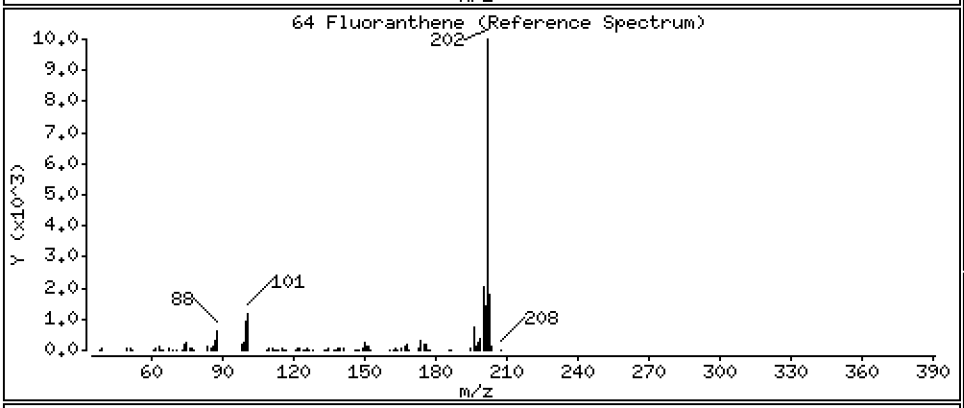
Concentration: 1.805 ug/mL

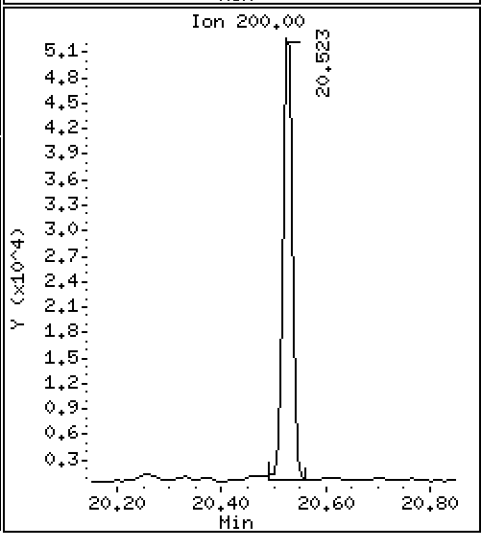


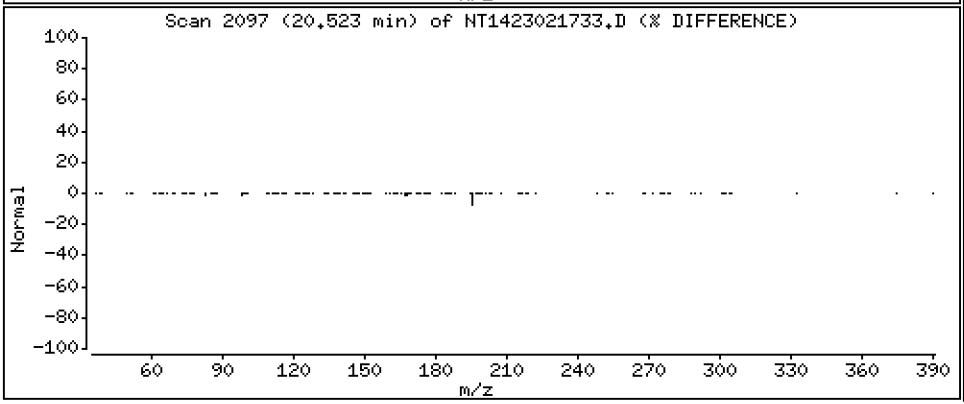












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

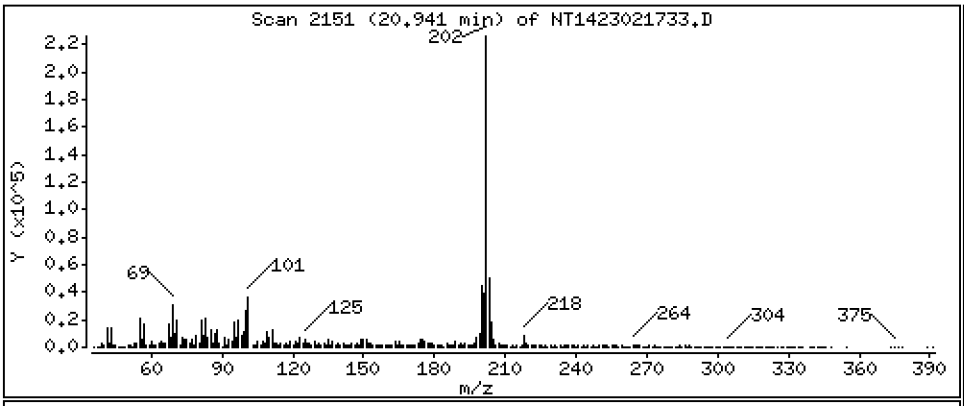
Operator: DSD

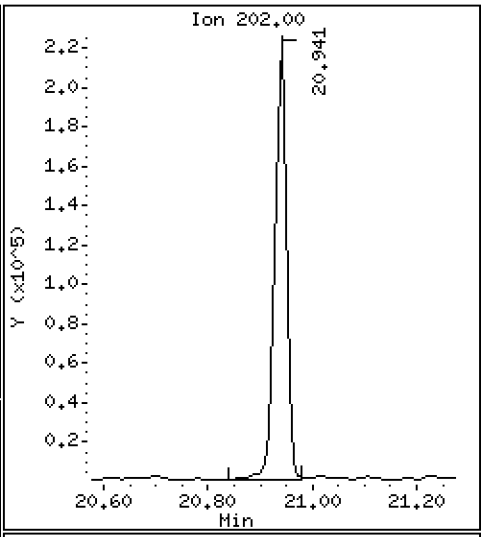
Column phase: ZB-5msi

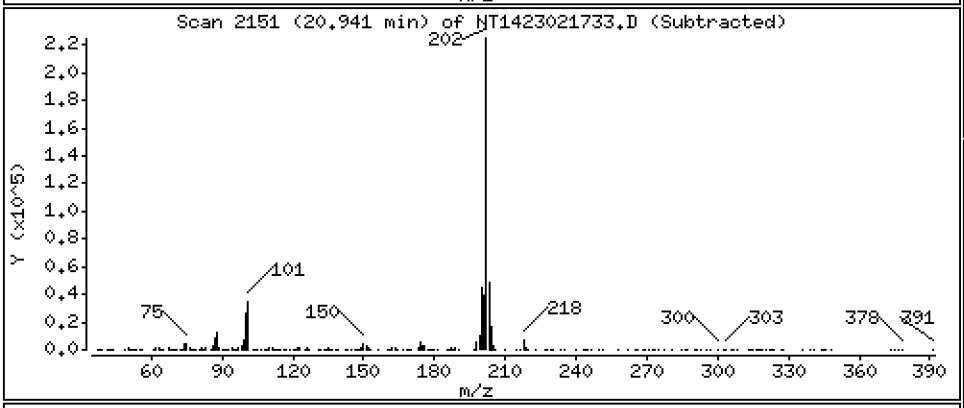
Column diameter: 0.25

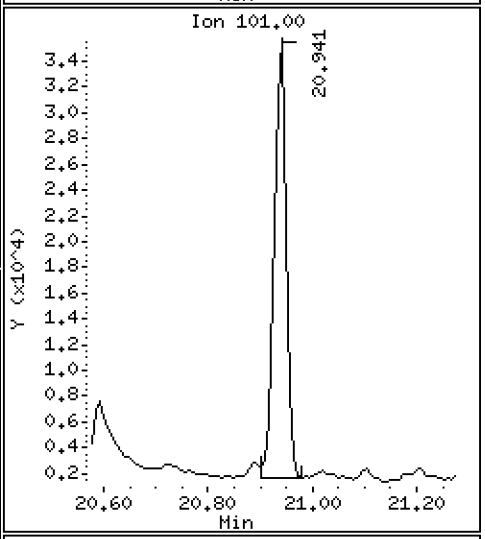
65 Pyrene

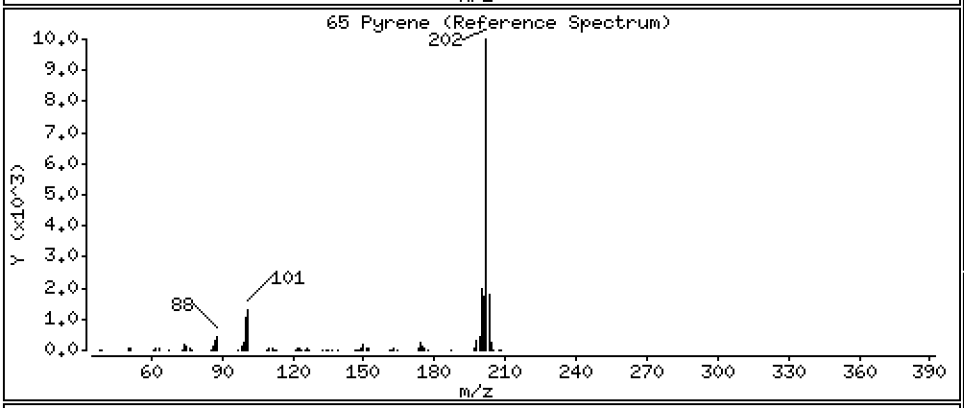
Concentration: 1.612 ug/mL

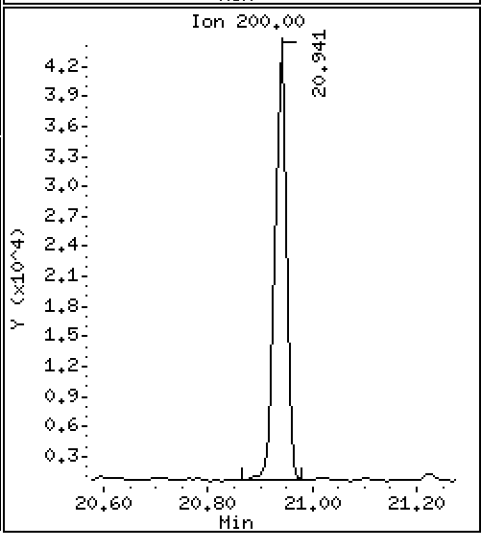


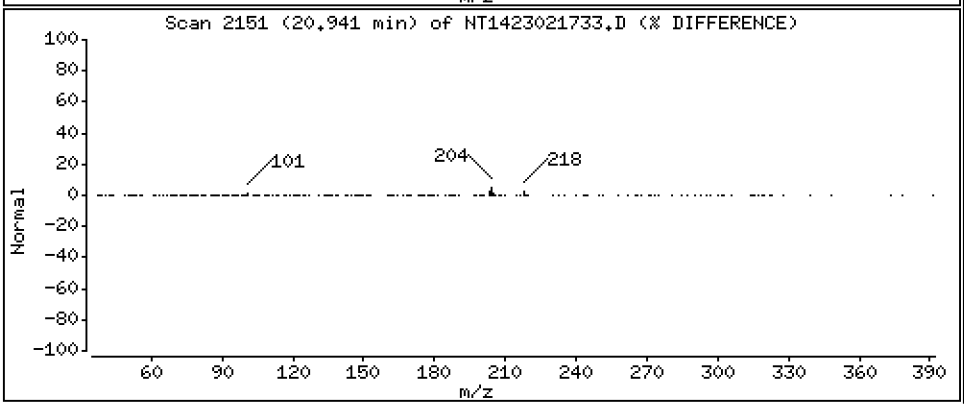












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

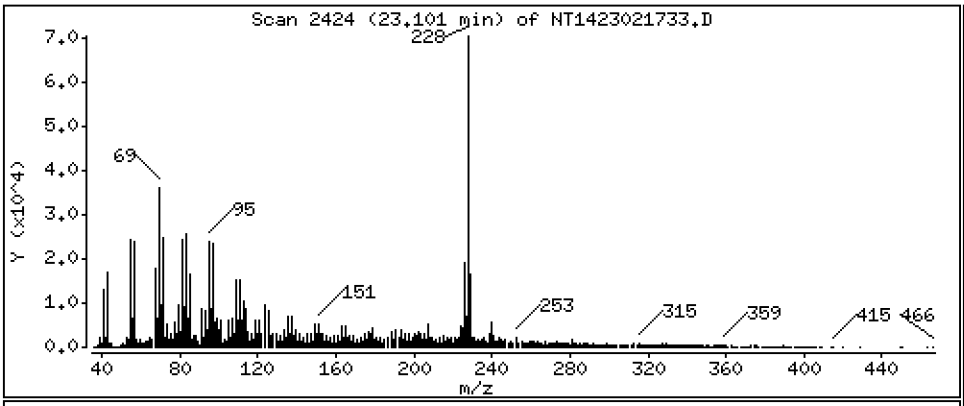
Operator: DSD

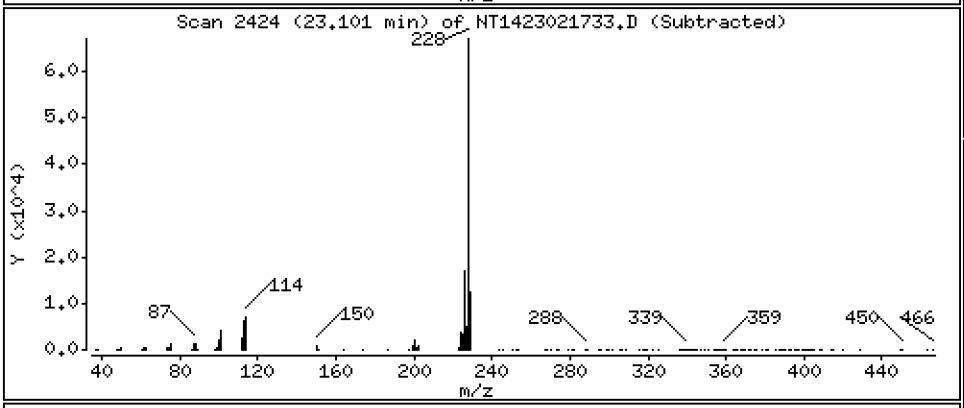
Column phase: ZB-5msi

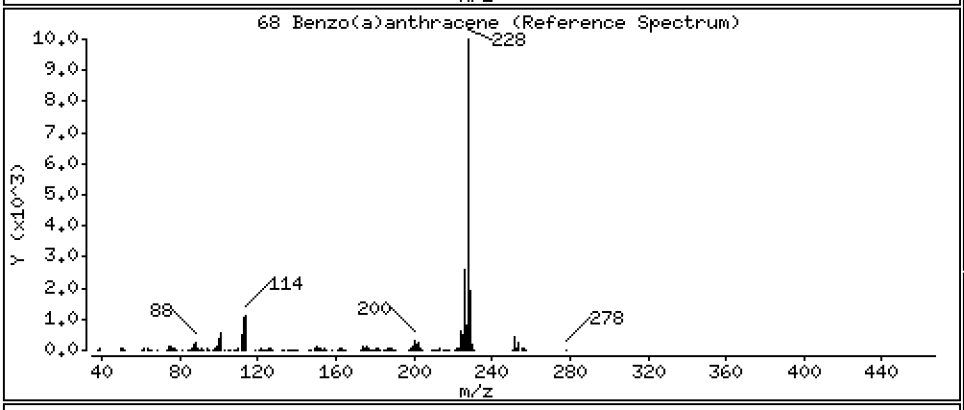
Column diameter: 0.25

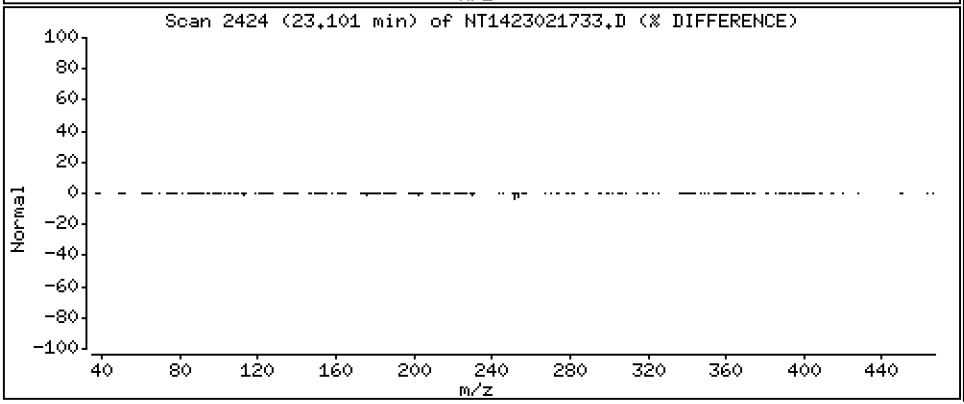
68 Benzo(a)anthracene

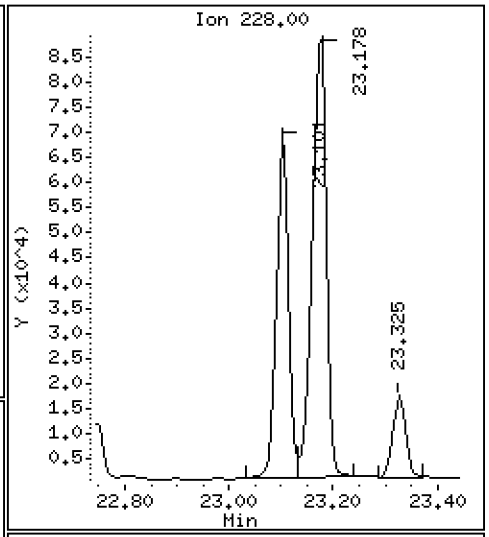
Concentration: 0.7386 ug/mL

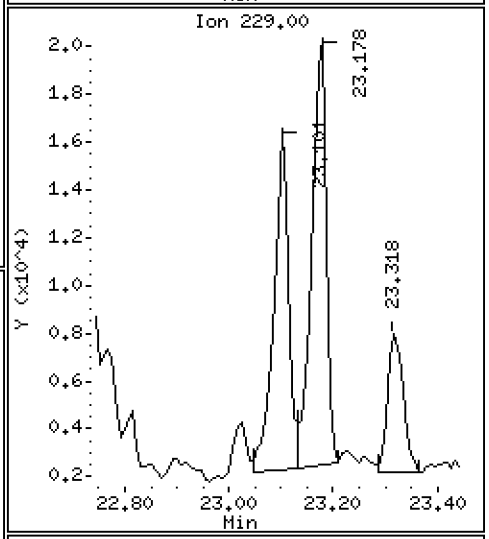


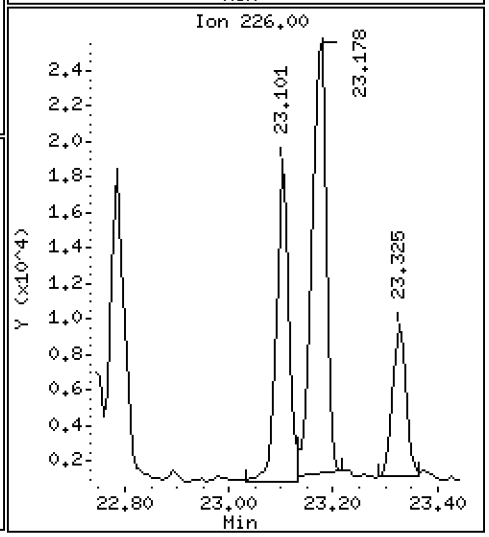












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021733.D

Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

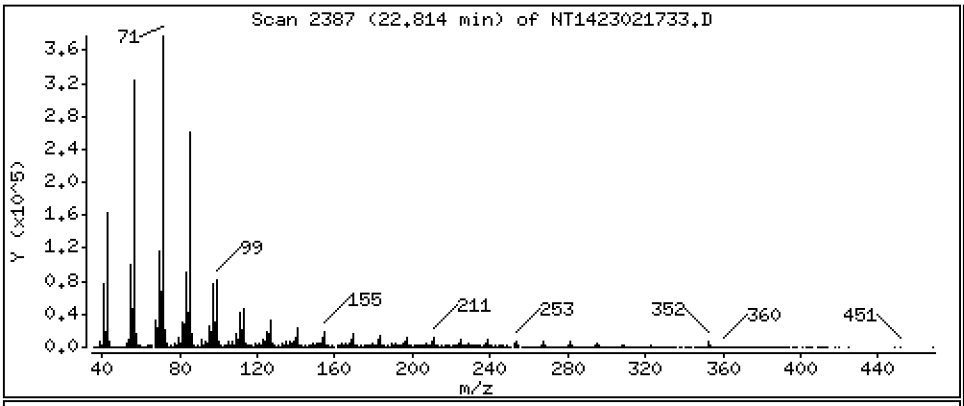
Operator: DSD

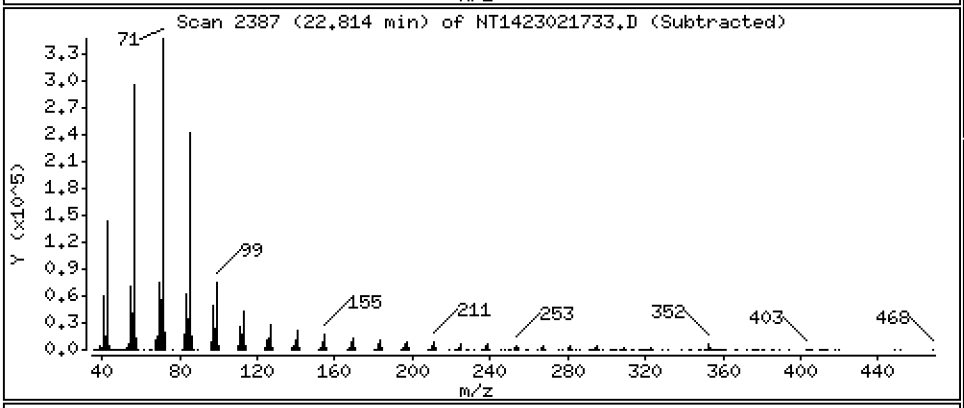
Column phase: ZB-5msi

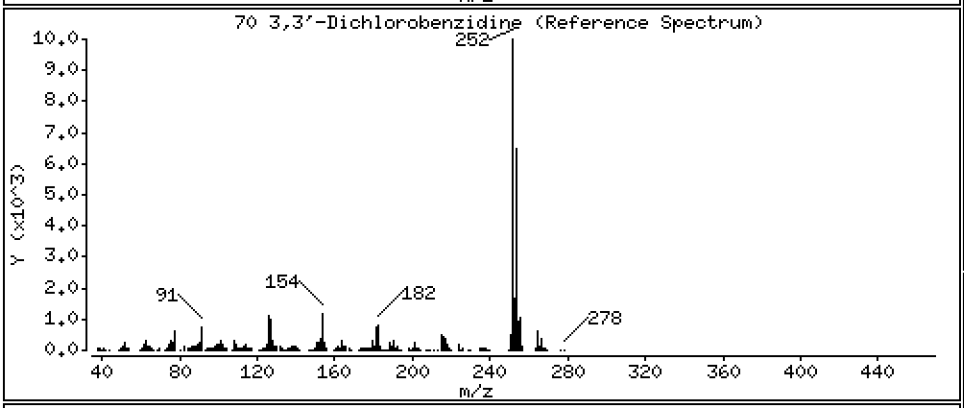
Column diameter: 0.25

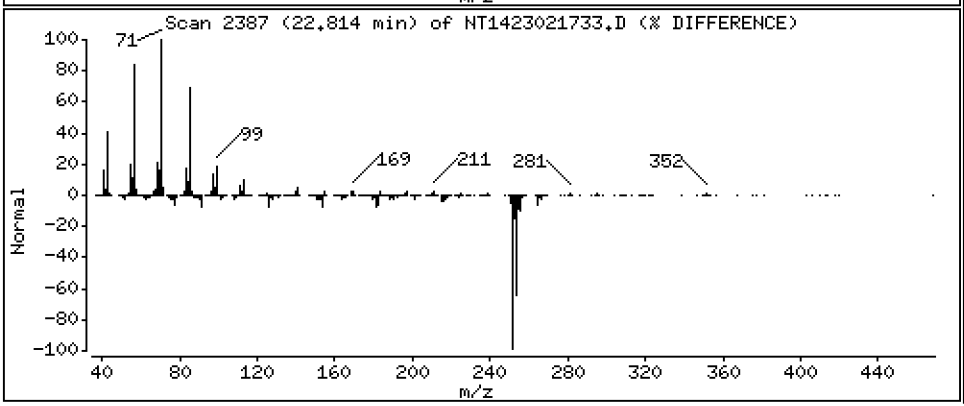
70 3,3'-Dichlorobenzidine

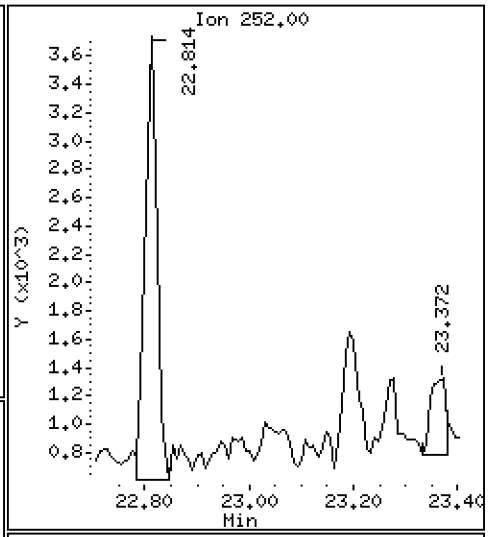
Concentration: 0.08765 ug/mL

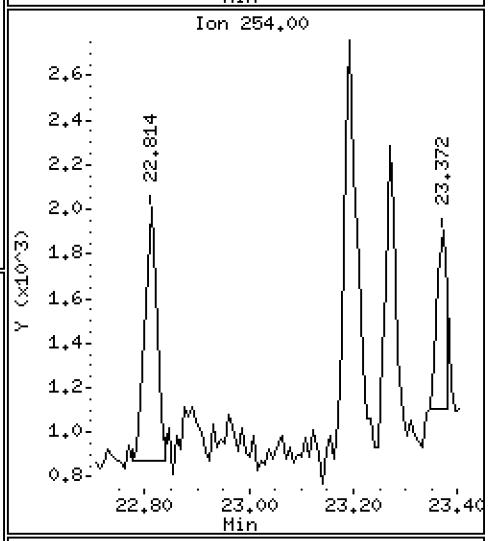


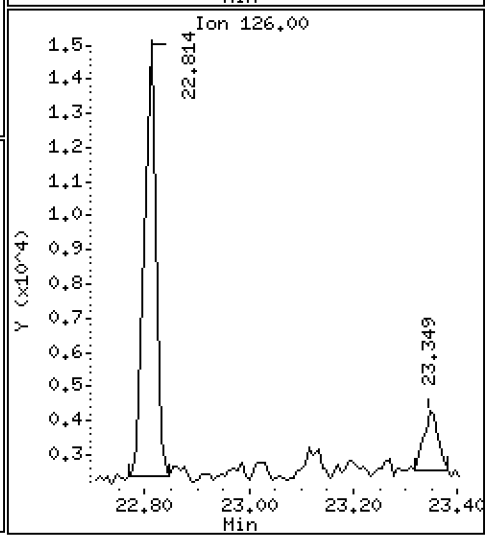












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

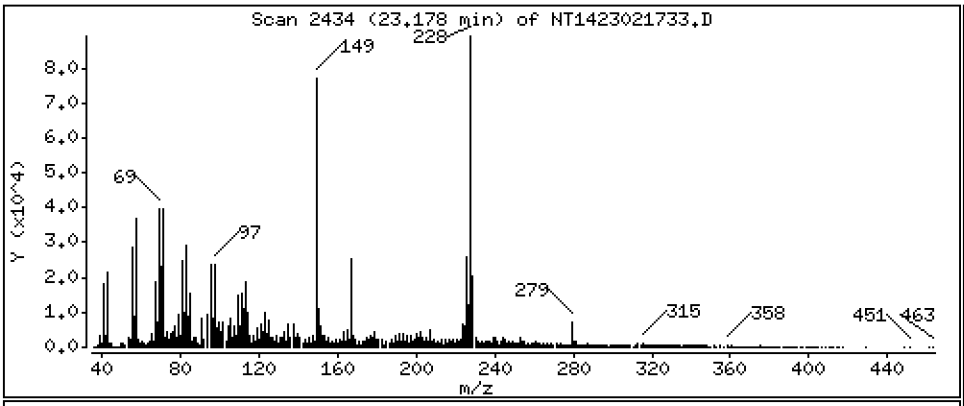
Operator: DSD

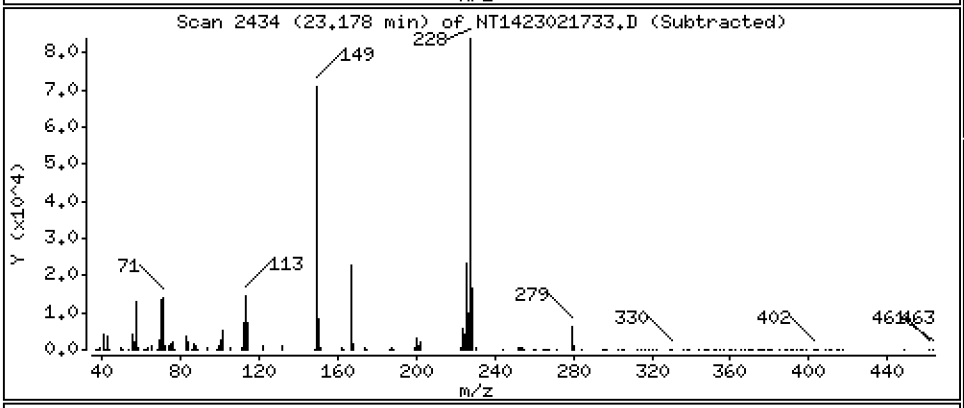
Column phase: ZB-5msi

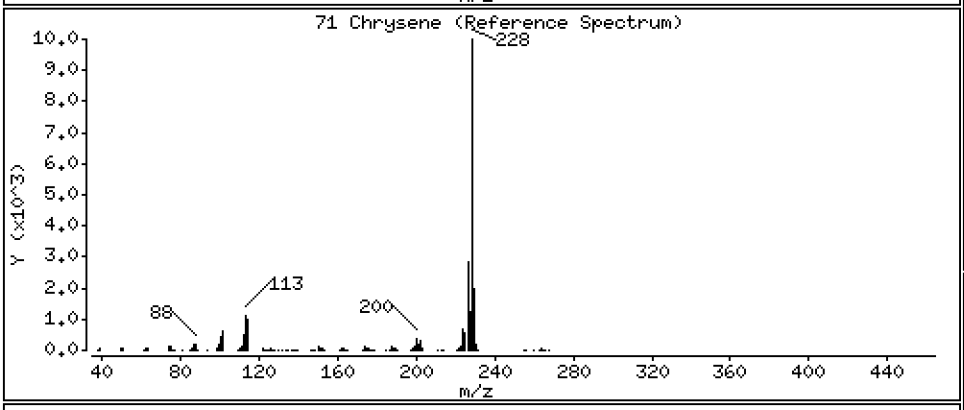
Column diameter: 0.25

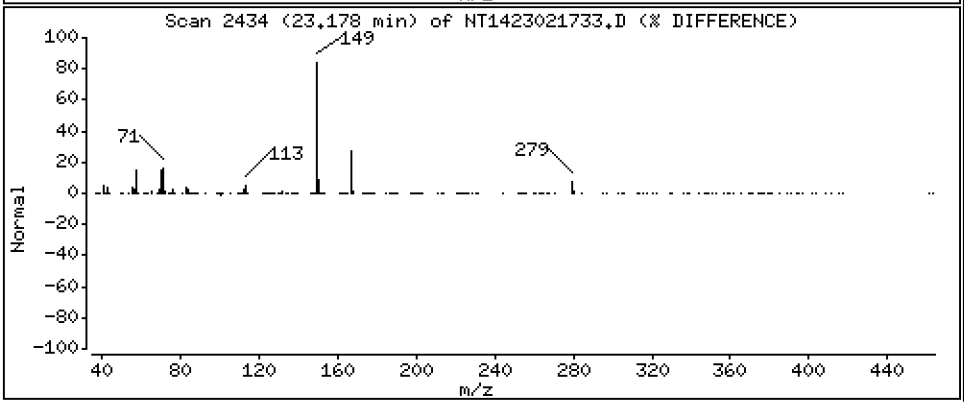
71 Chrysene

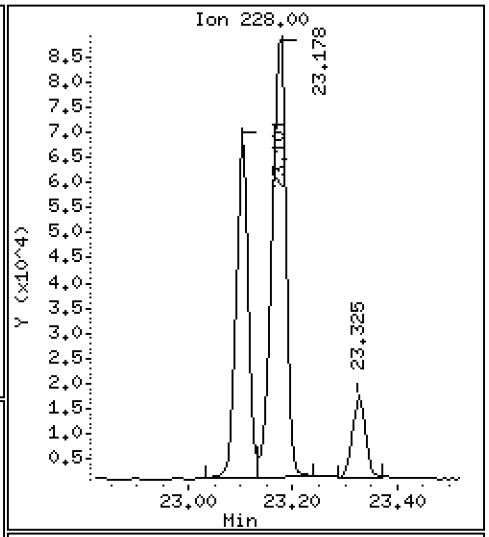
Concentration: 1.201 ug/mL

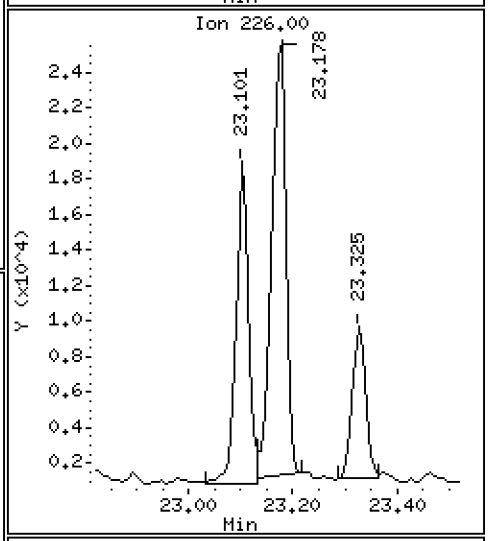


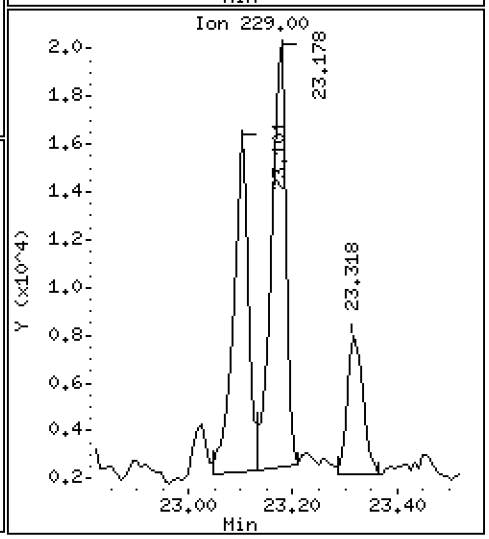












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

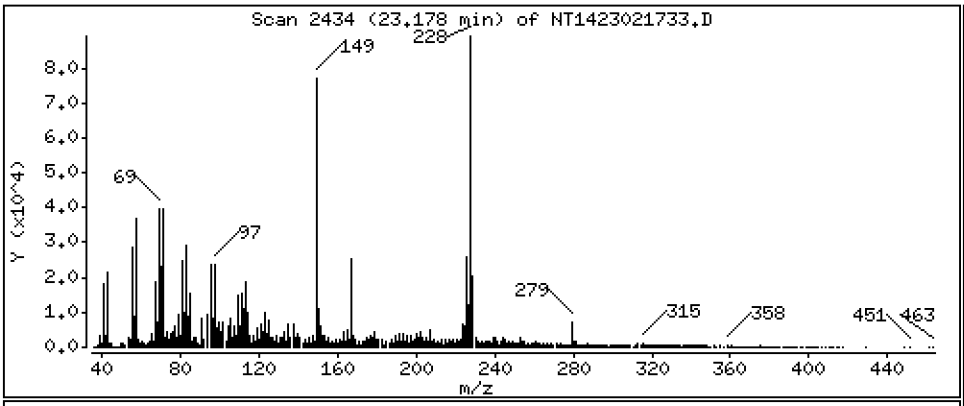
Operator: DSD

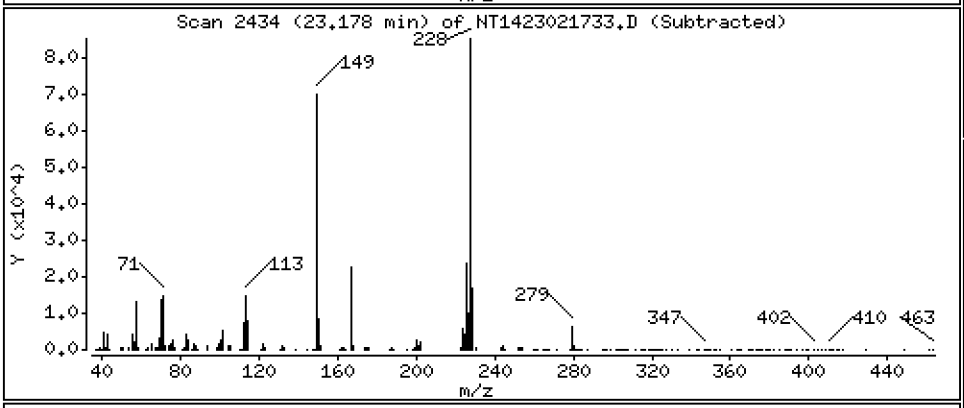
Column phase: ZB-5msi

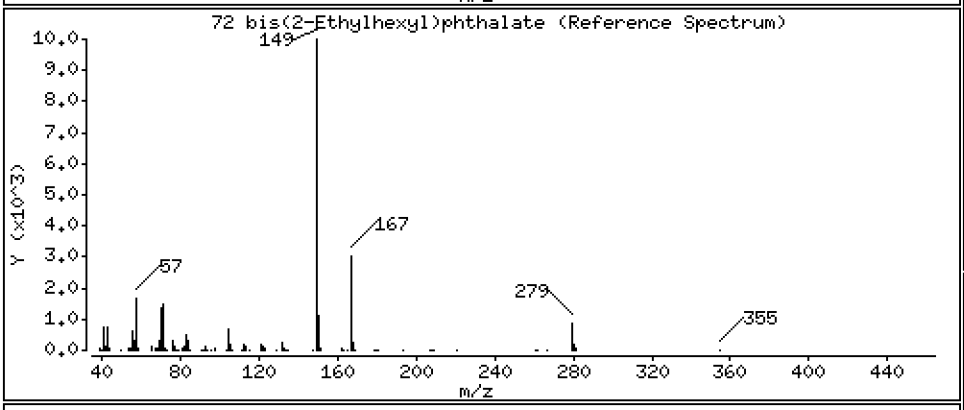
Column diameter: 0.25

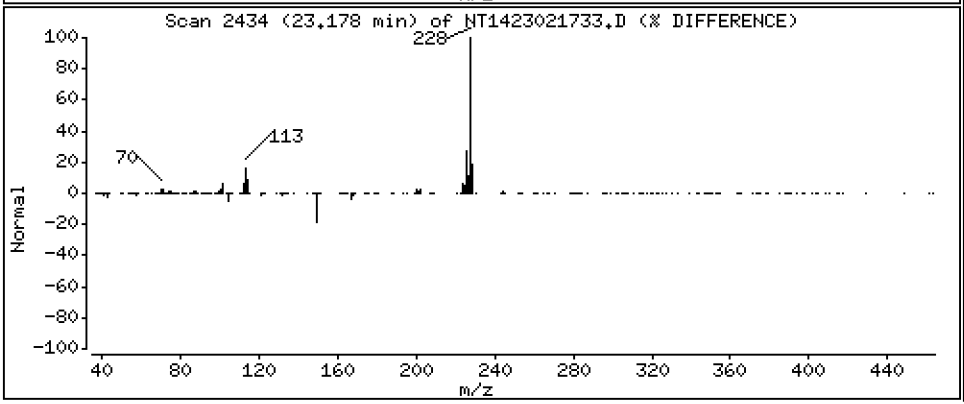
72 bis(2-Ethylhexyl)phthalate

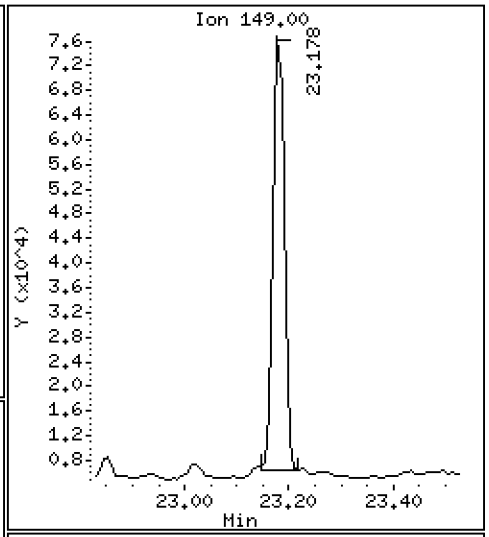
Concentration: 0.8693 ug/mL

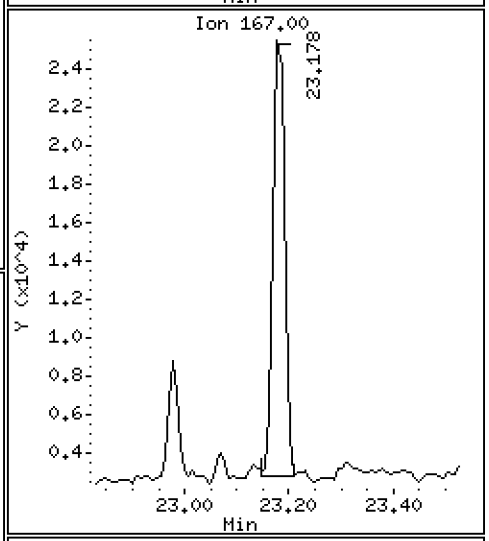


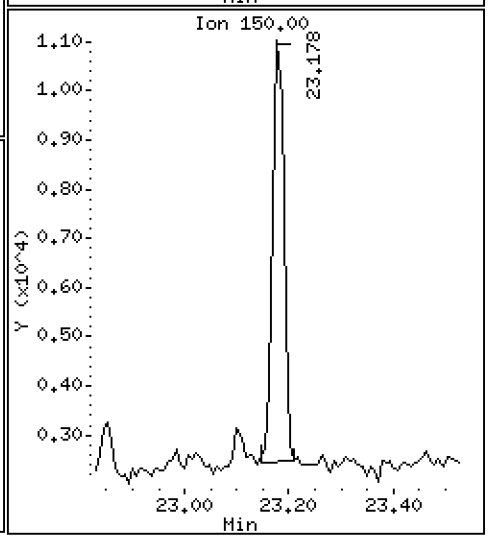












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

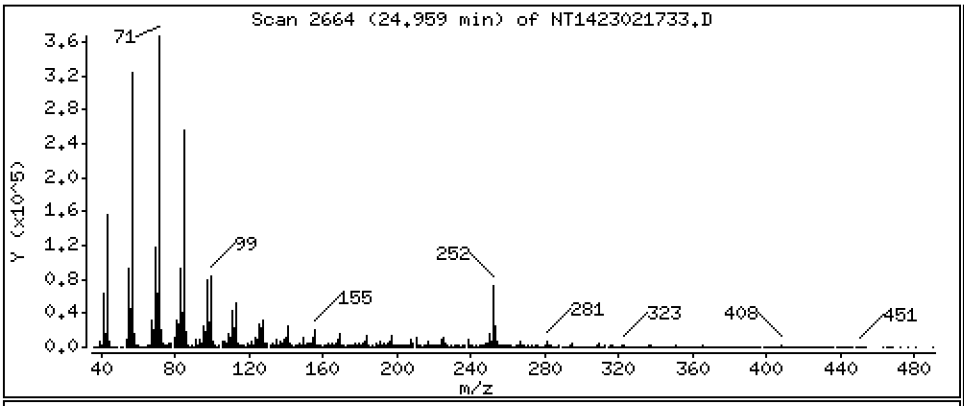
Operator: DSD

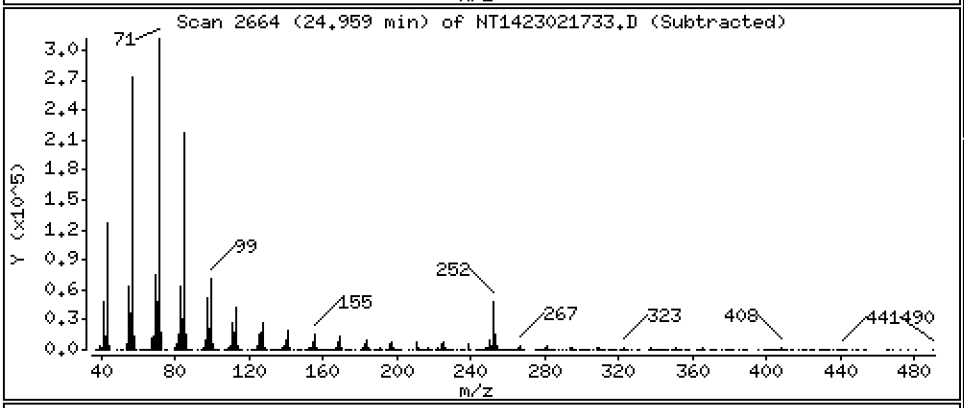
Column phase: ZB-5msi

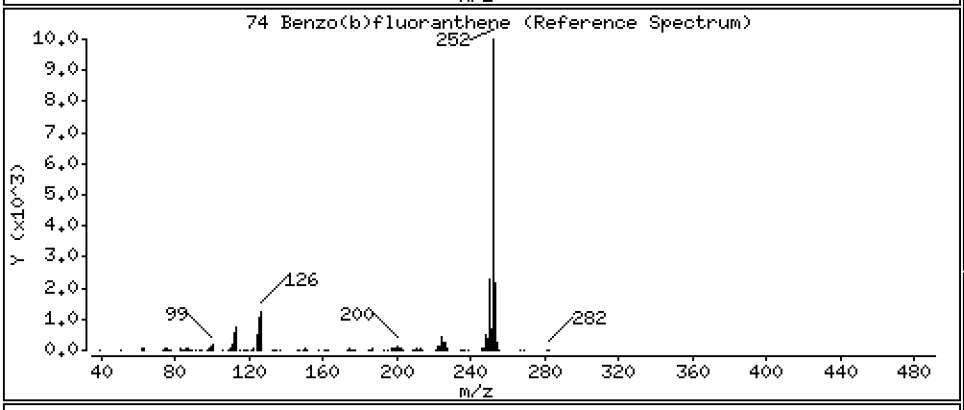
Column diameter: 0.25

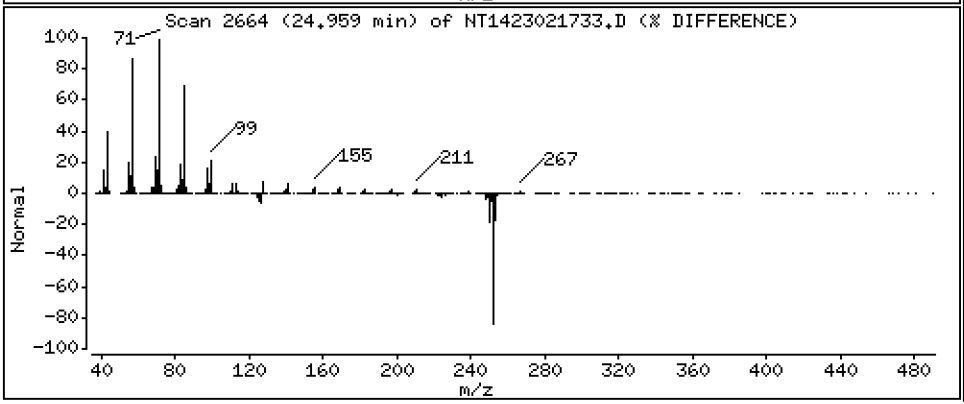
74 Benzo(b)fluoranthene

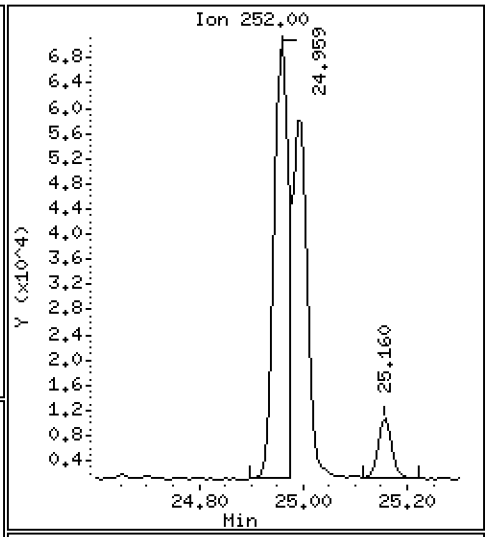
Concentration: 0.9808 ug/mL

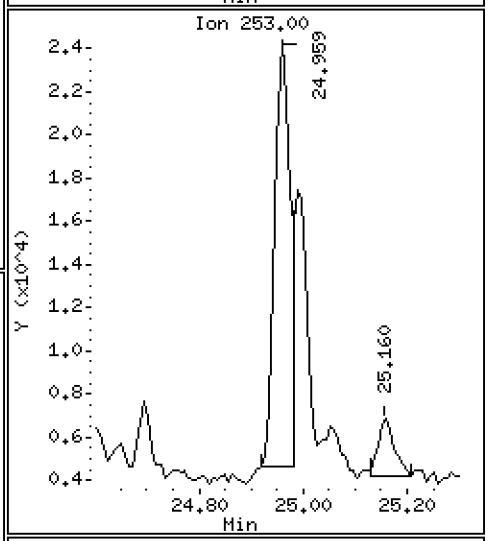


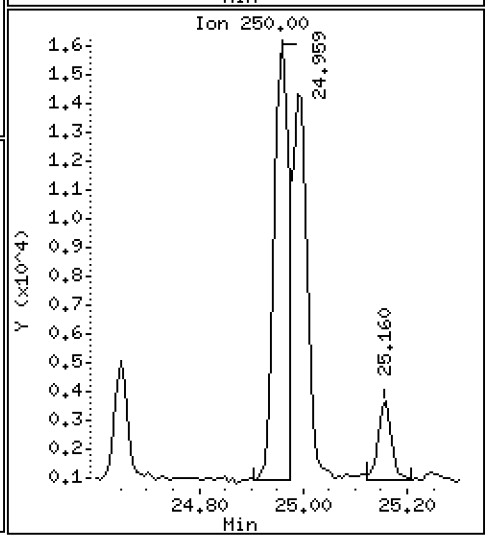












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

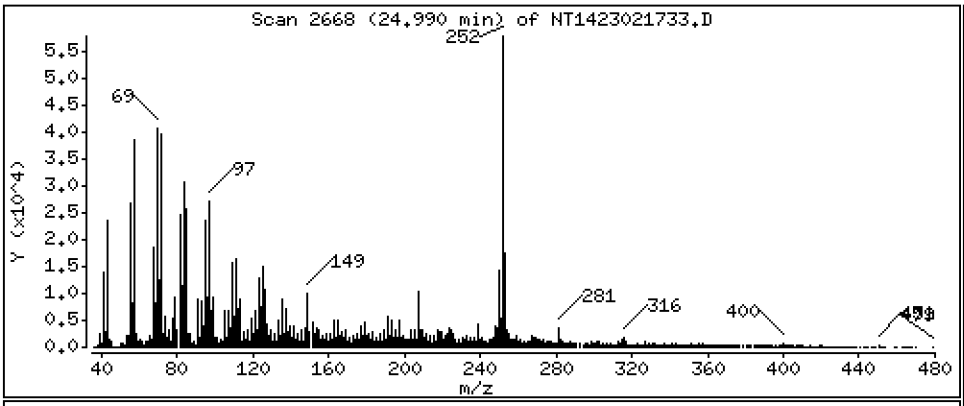
Operator: DSD

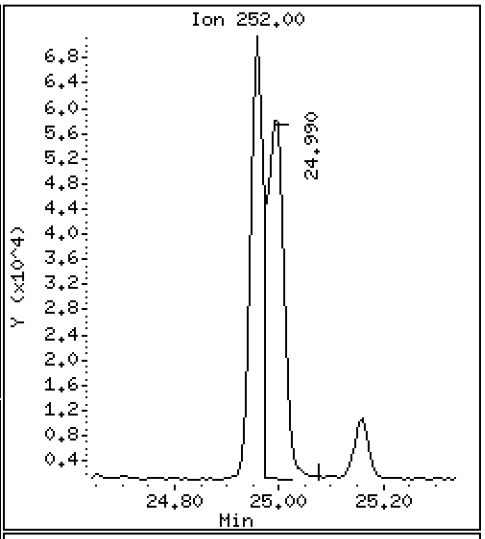
Column phase: ZB-5msi

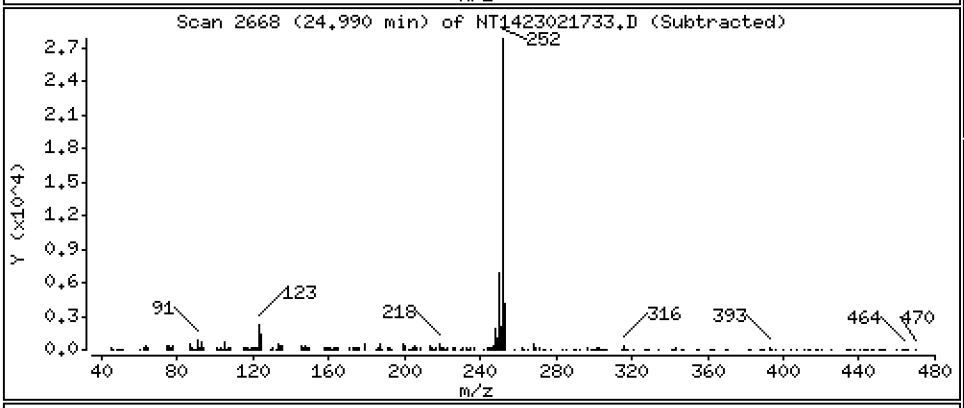
Column diameter: 0.25

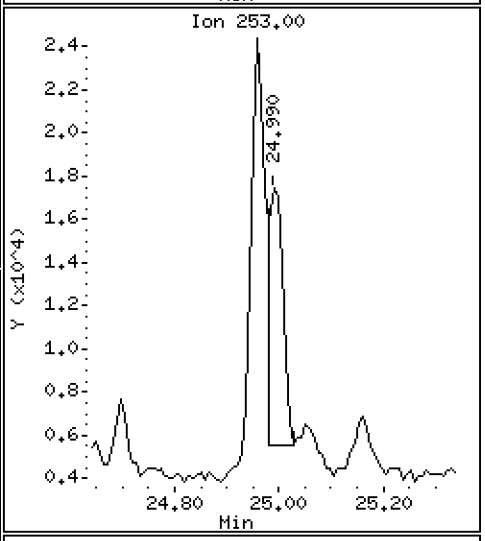
75 Benzo(k)fluoranthene

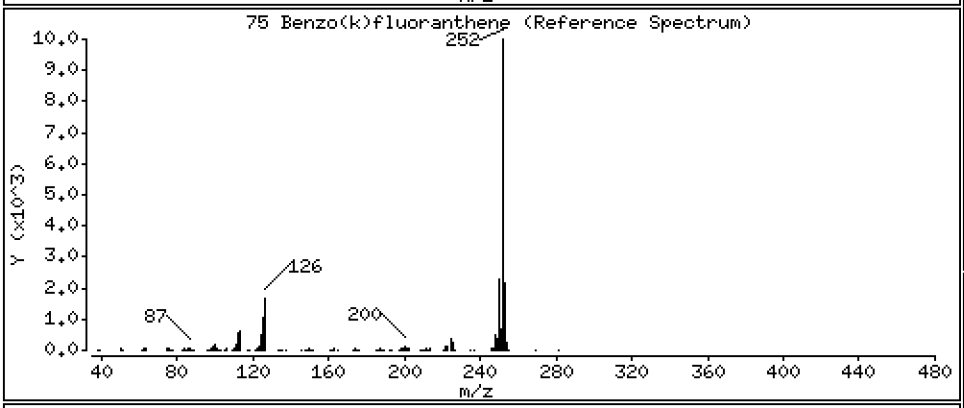
Concentration: 0.9481 ug/mL

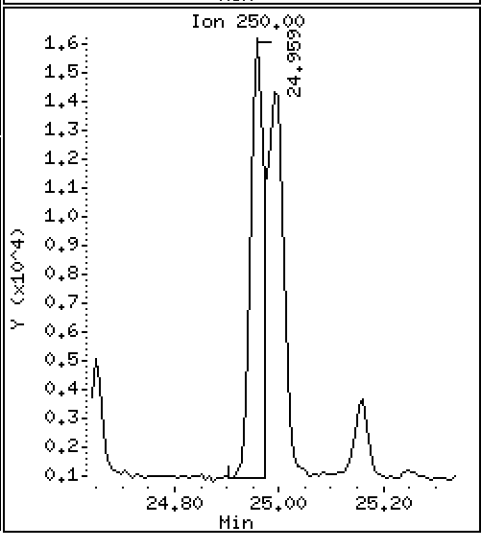


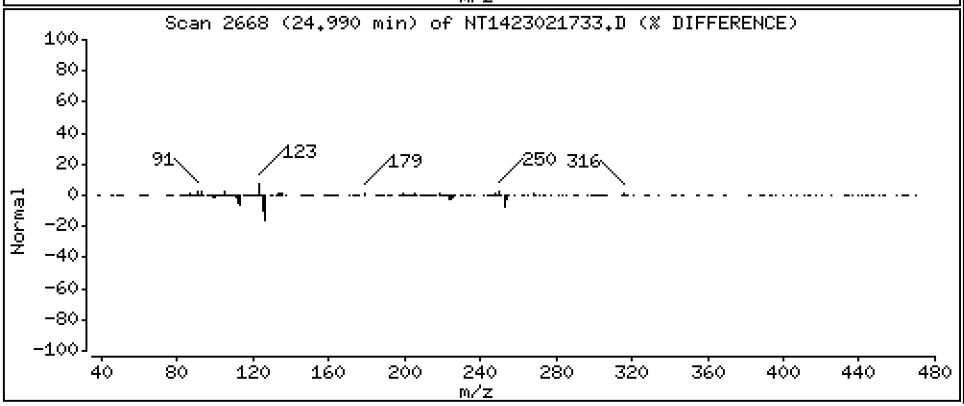












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

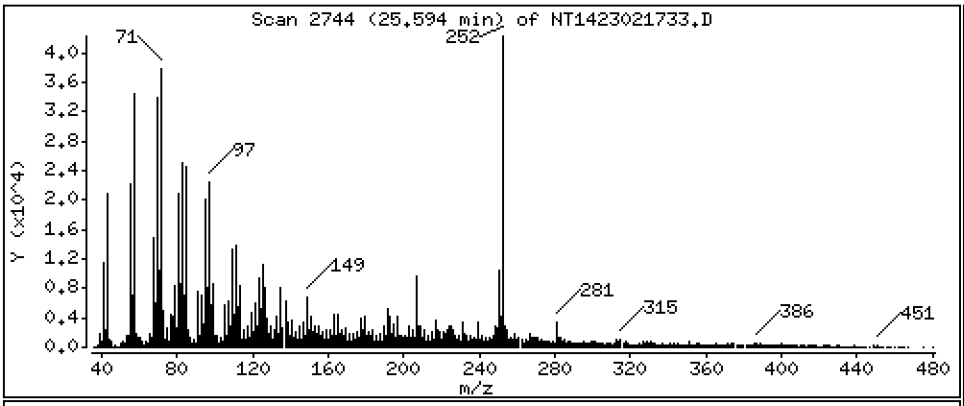
Operator: DSD

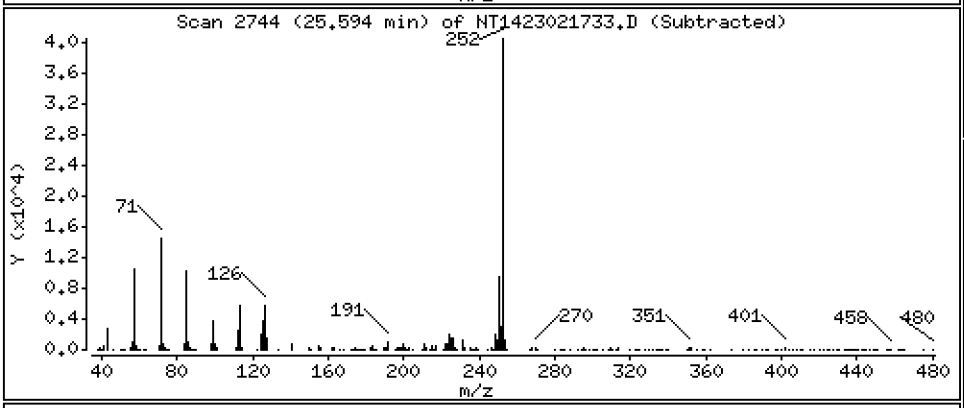
Column phase: ZB-5msi

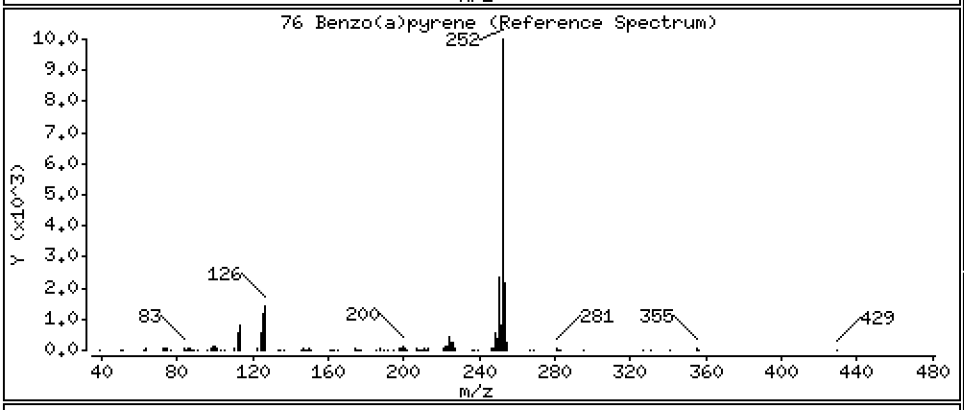
Column diameter: 0.25

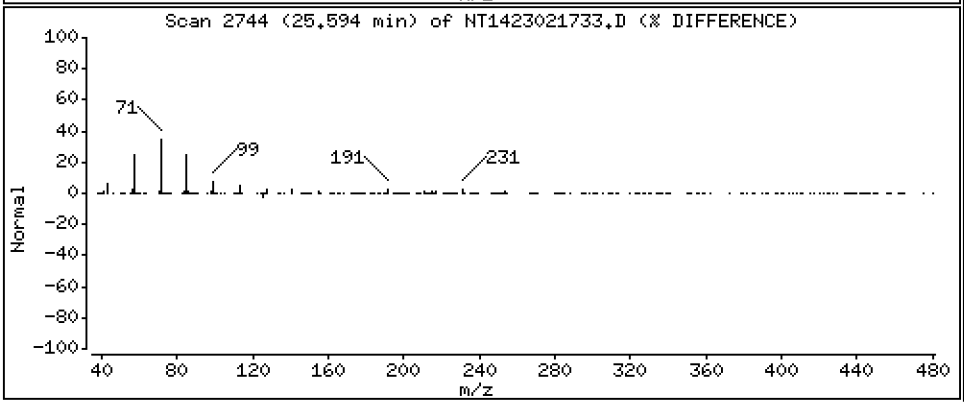
76 Benzo(a)pyrene

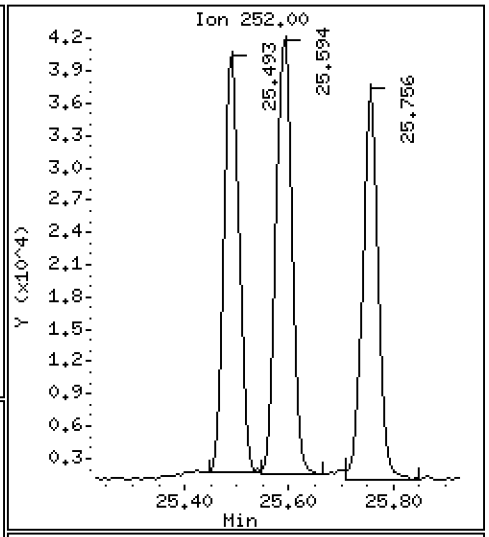
Concentration: 0.6800 ug/mL

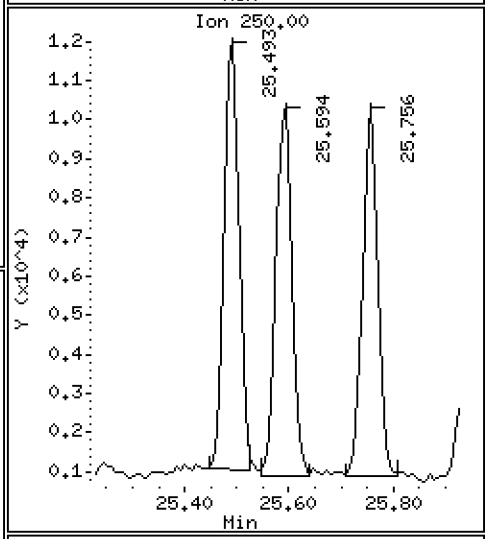


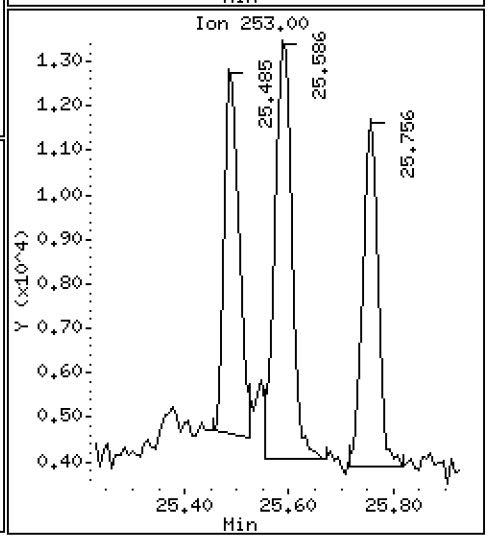












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

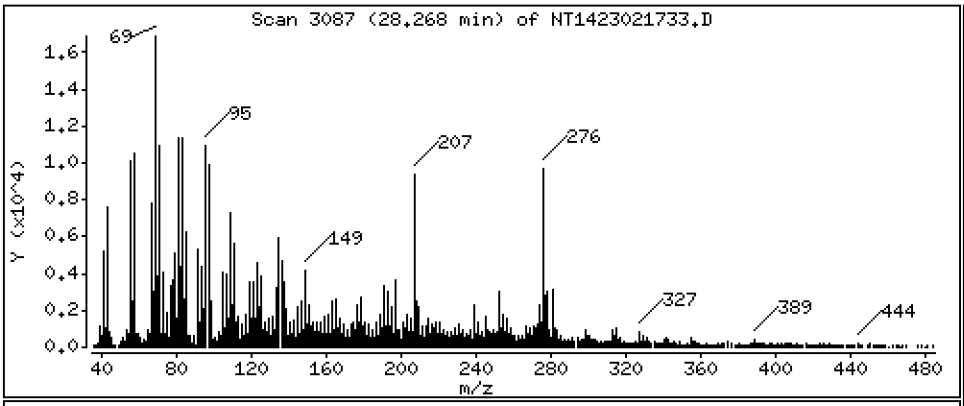
Operator: DSD

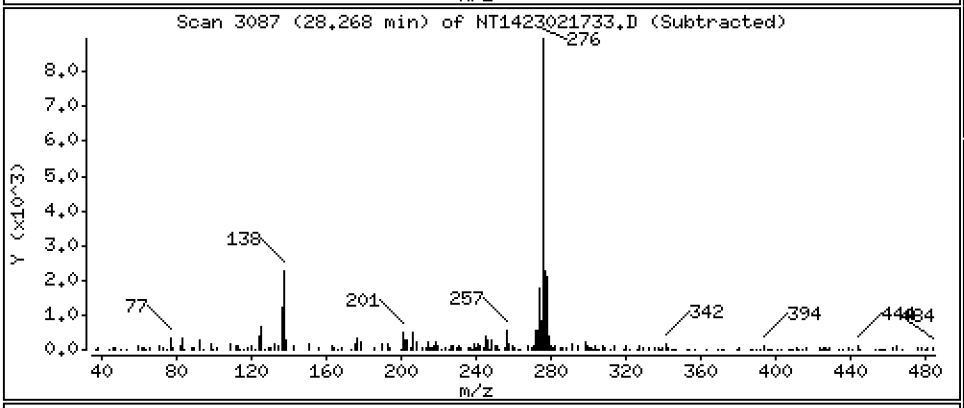
Column phase: ZB-5msi

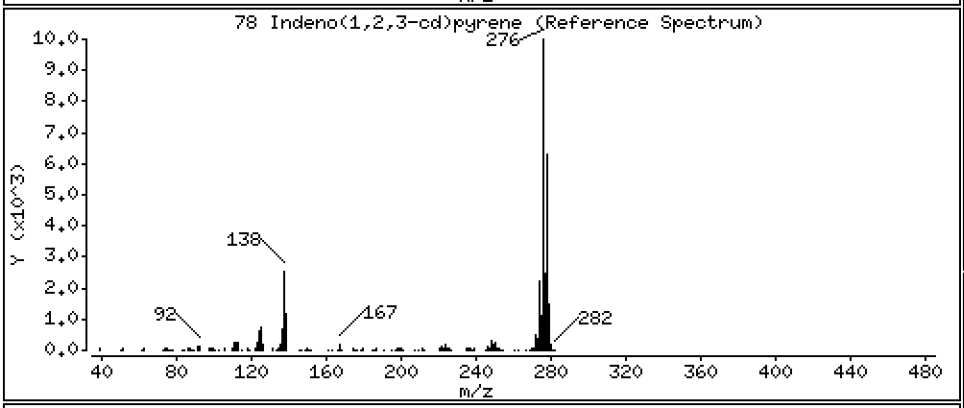
Column diameter: 0.25

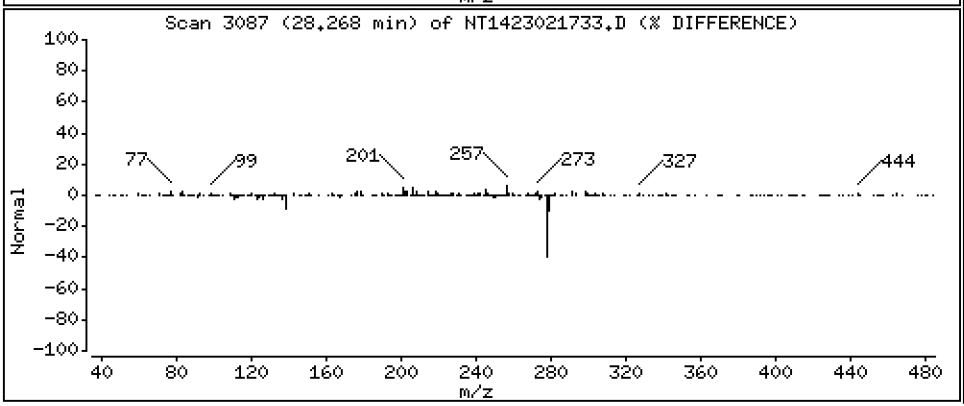
78 Indeno(1,2,3-cd)pyrene

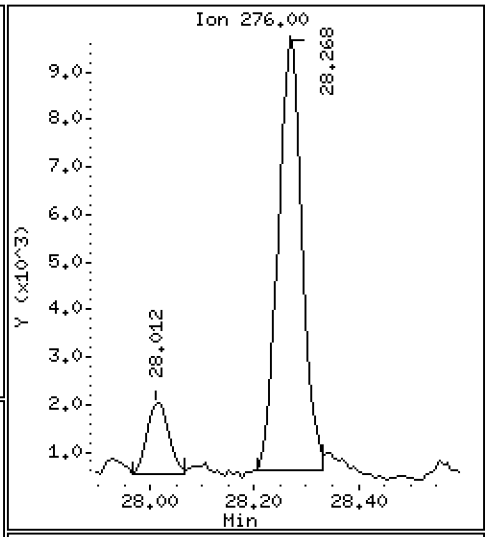
Concentration: 0.2882 ug/mL

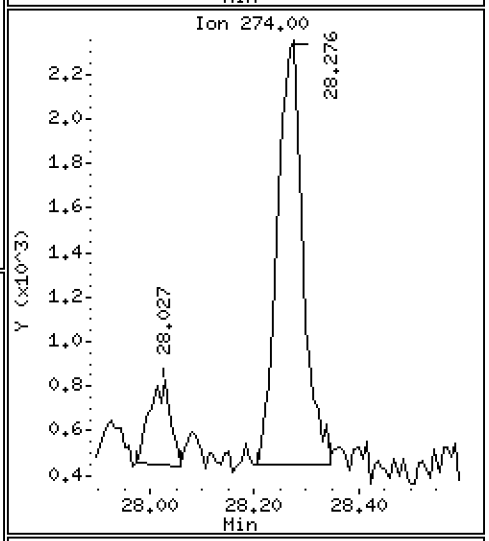


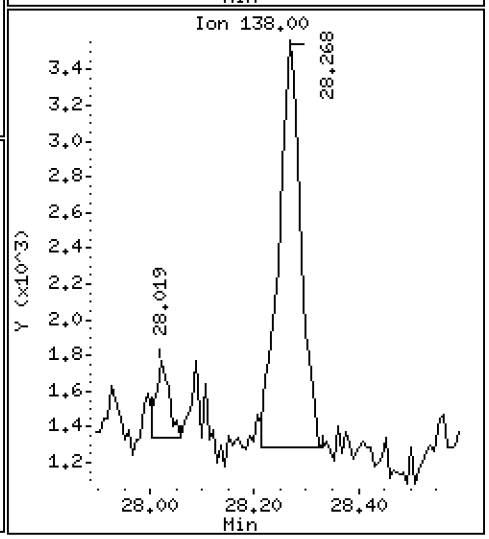












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

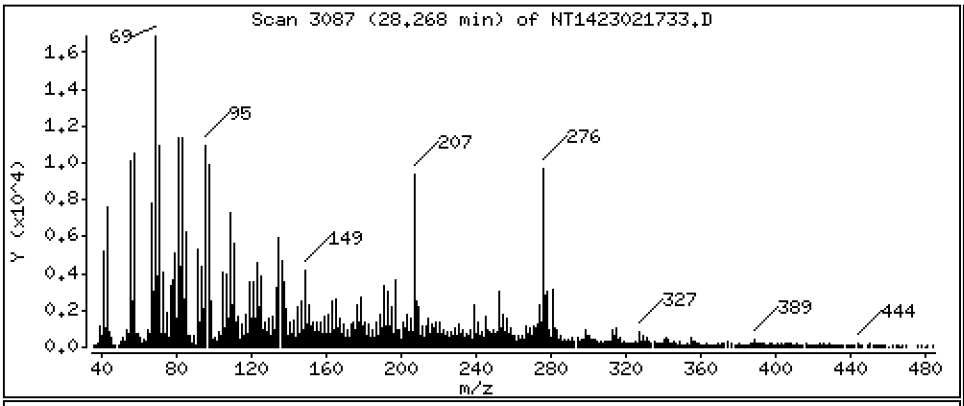
Operator: DSD

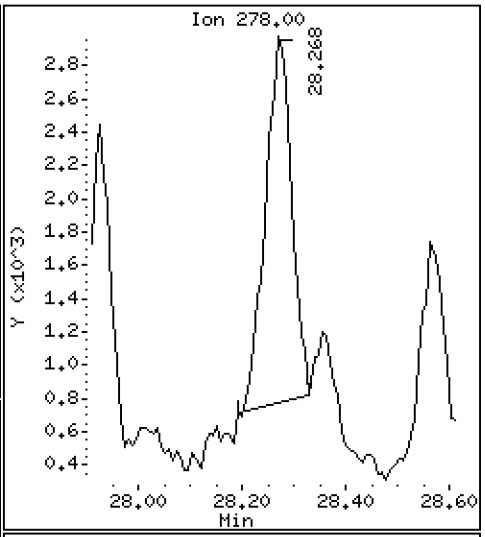
Column phase: ZB-5msi

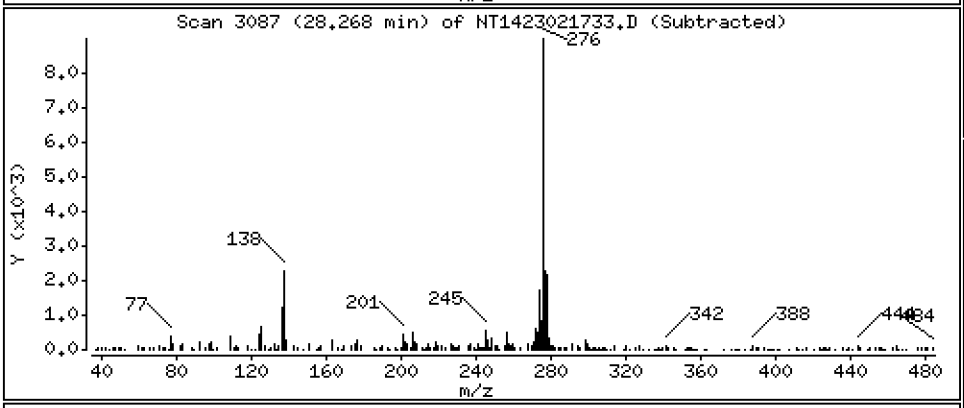
Column diameter: 0.25

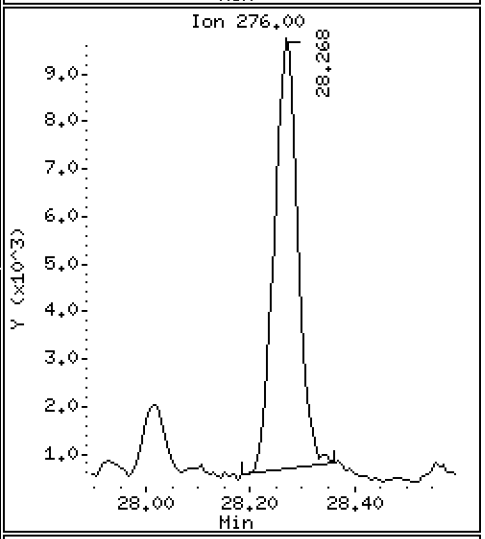
79 Dibenzo(a,h)anthracene

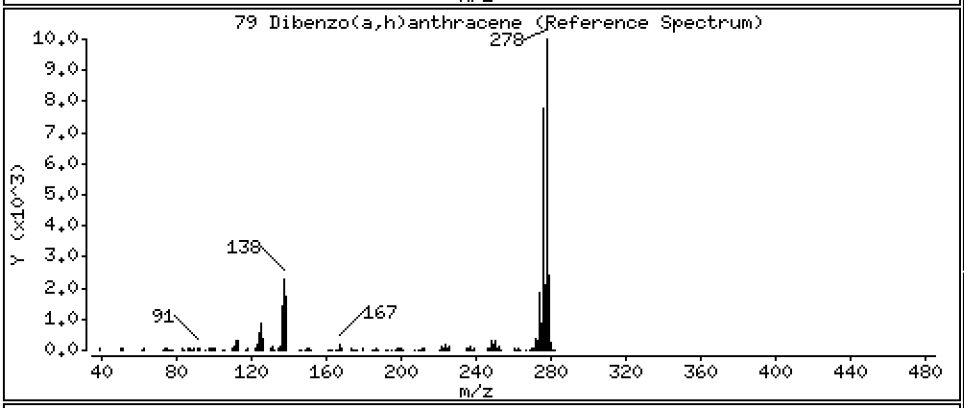
Concentration: 0.09115 ug/mL

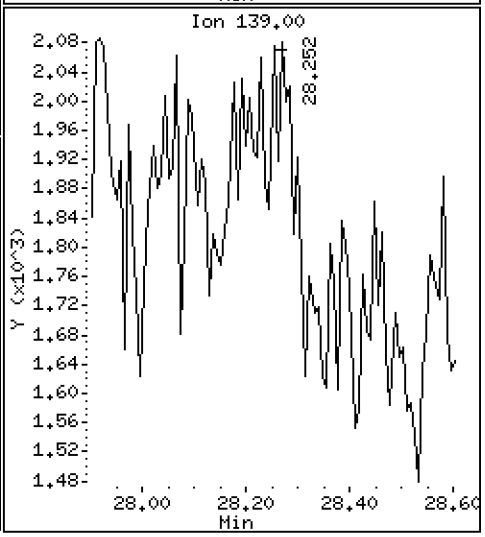


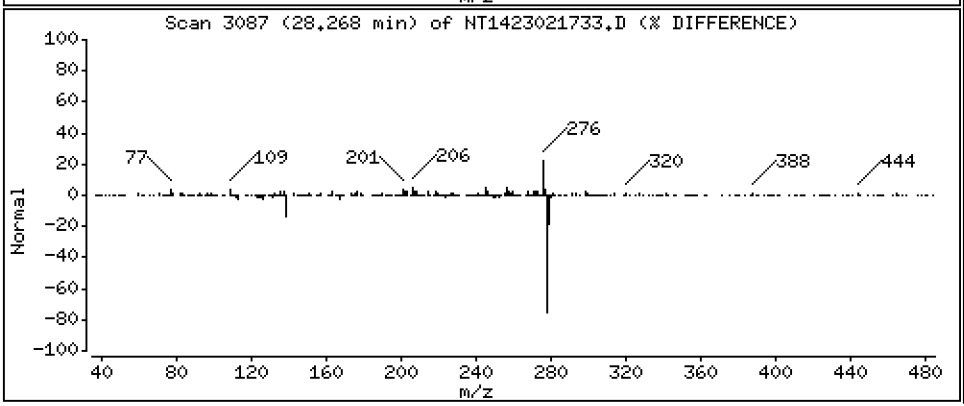












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

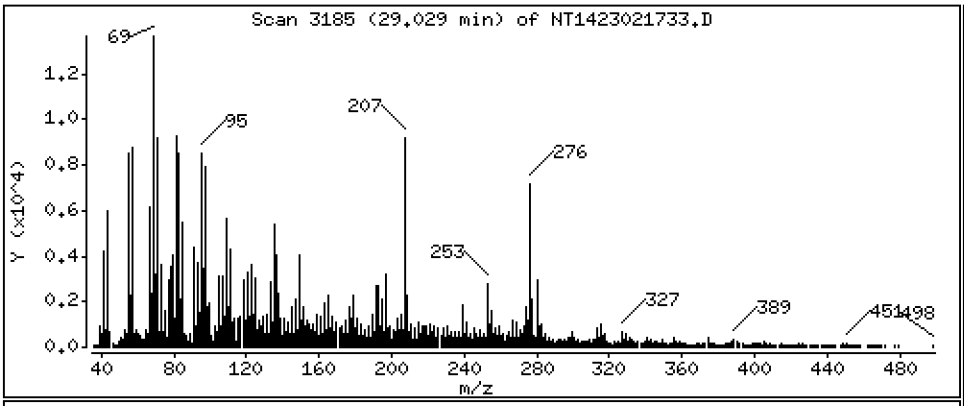
Operator: DSD

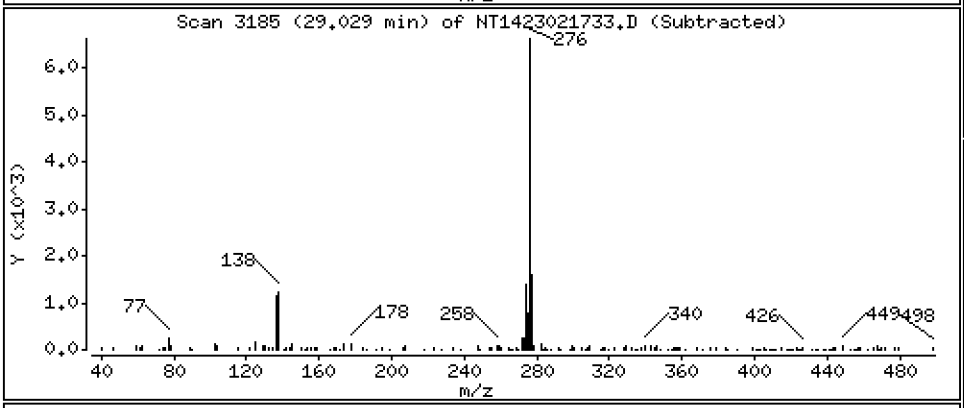
Column phase: ZB-5msi

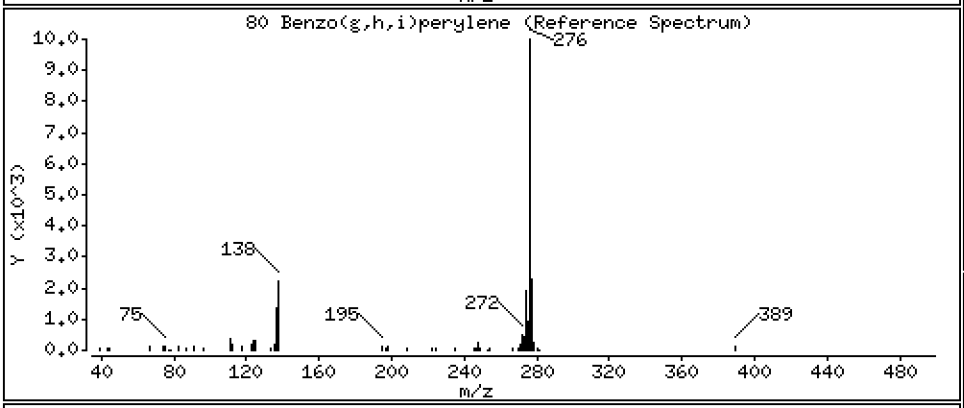
Column diameter: 0.25

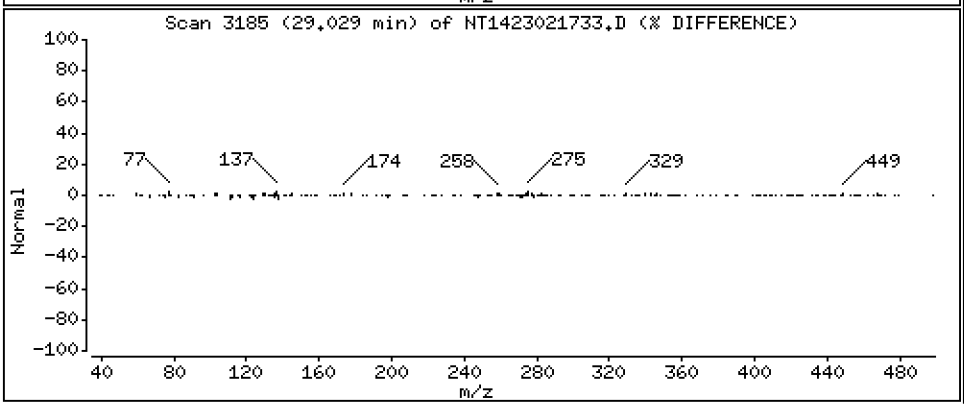
80 Benzo(g,h,i)perylene

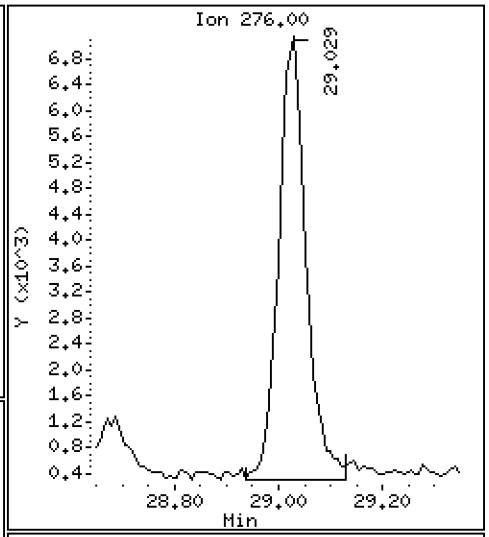
Concentration: 0.3086 ug/mL

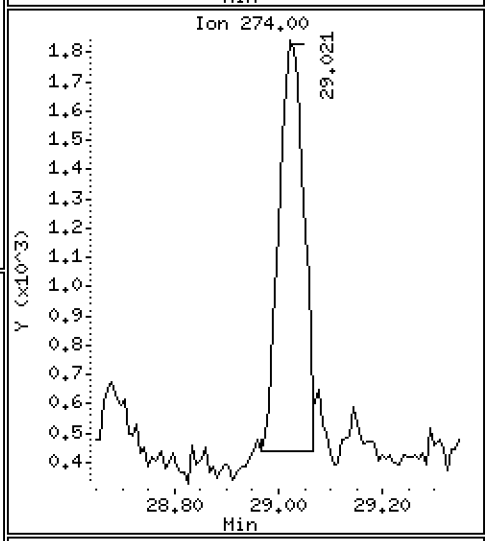


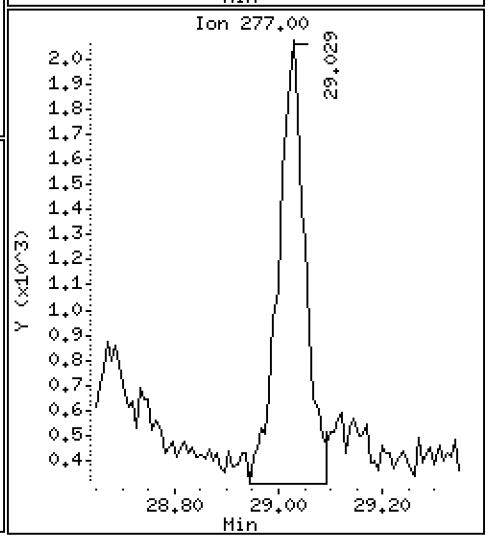












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

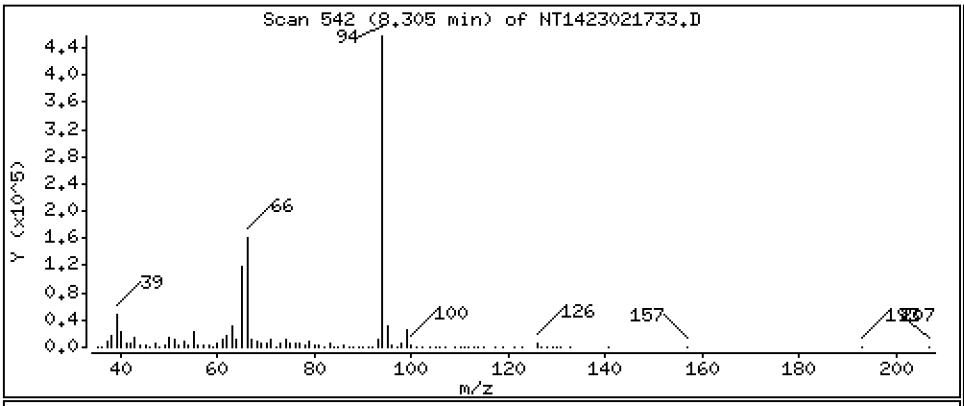
Operator: DSD

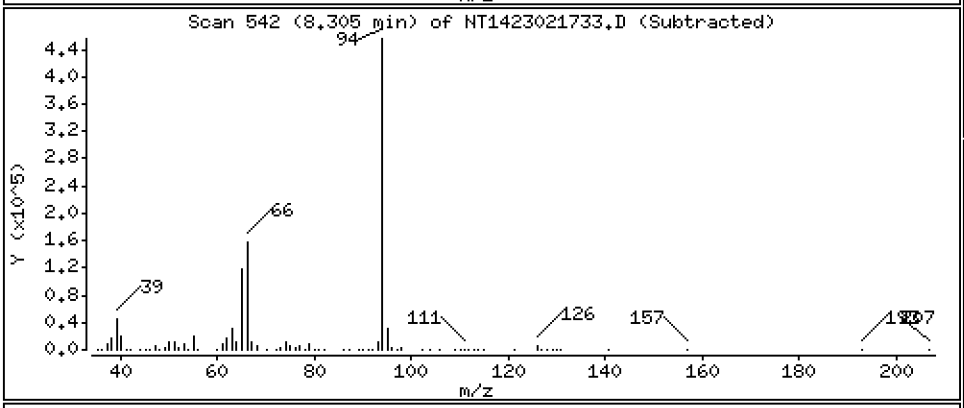
Column phase: ZB-5msi

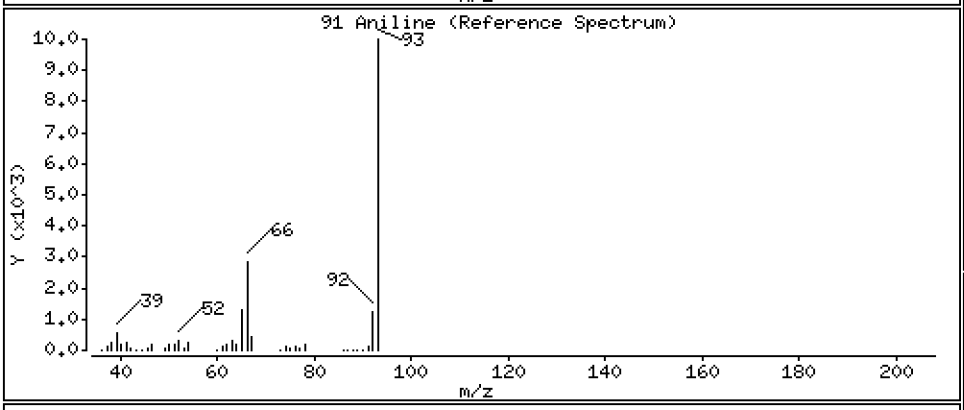
Column diameter: 0.25

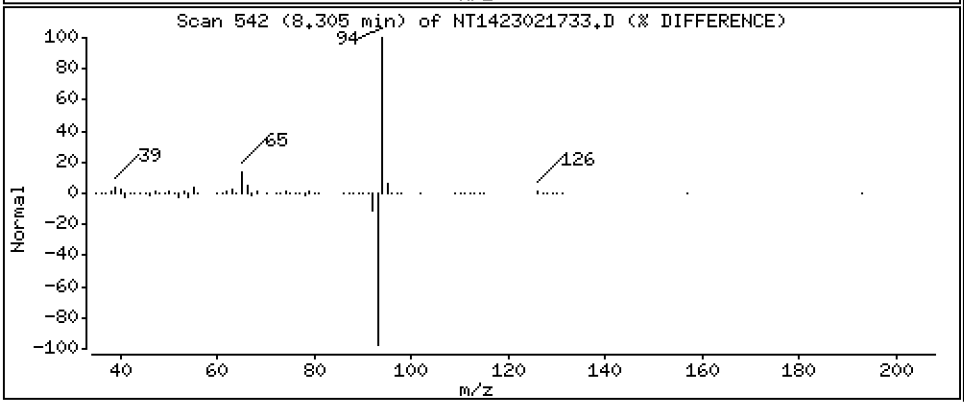
91 Aniline

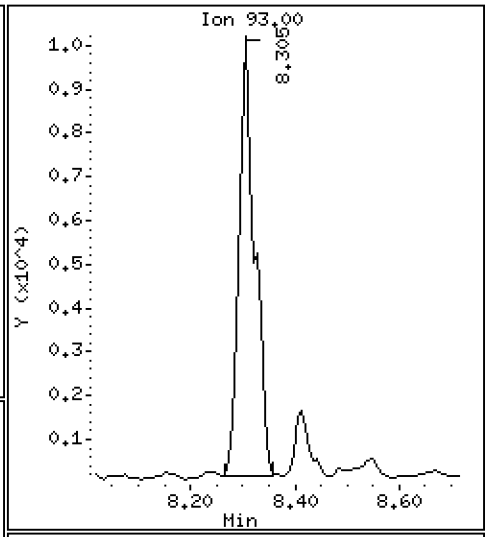
Concentration: 0.1498 ug/mL

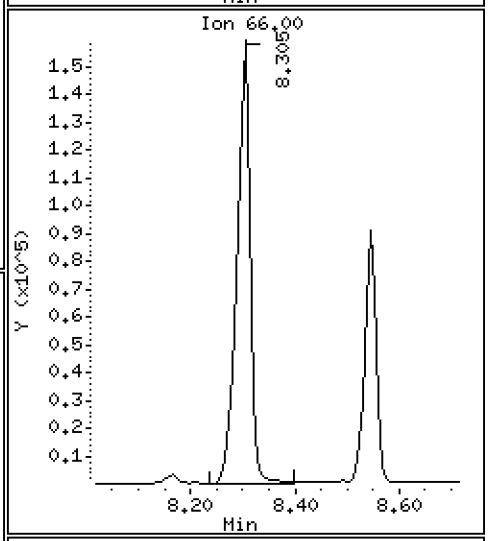


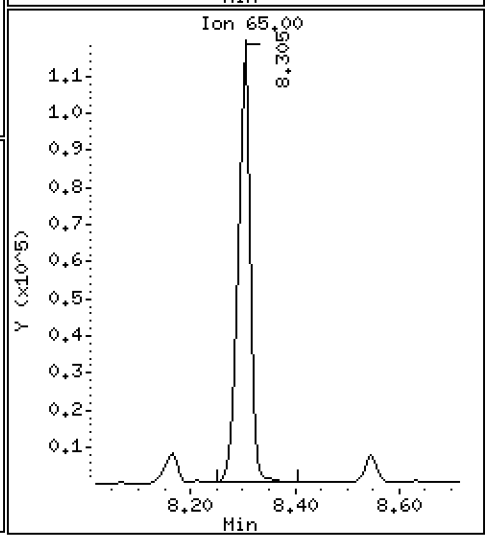












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

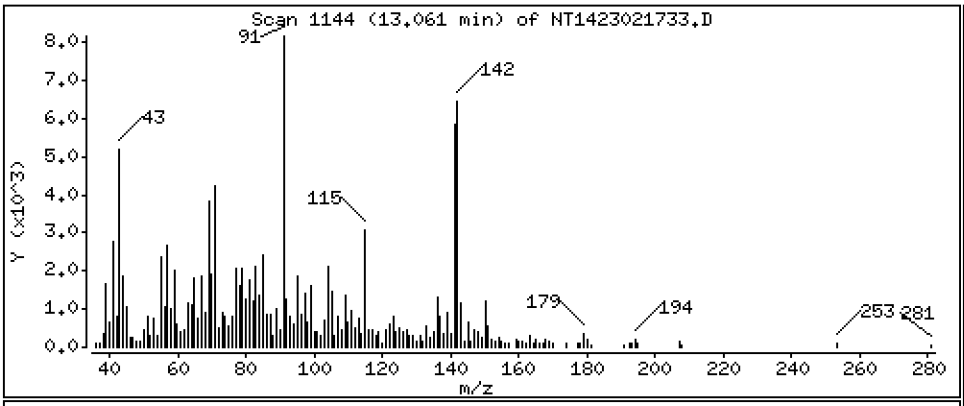
Operator: DSD

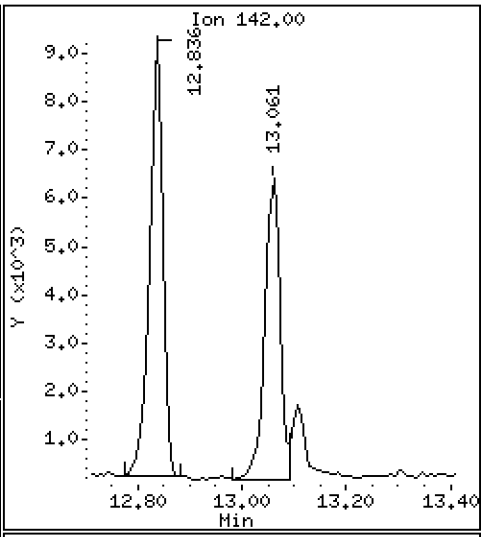
Column phase: ZB-5msi

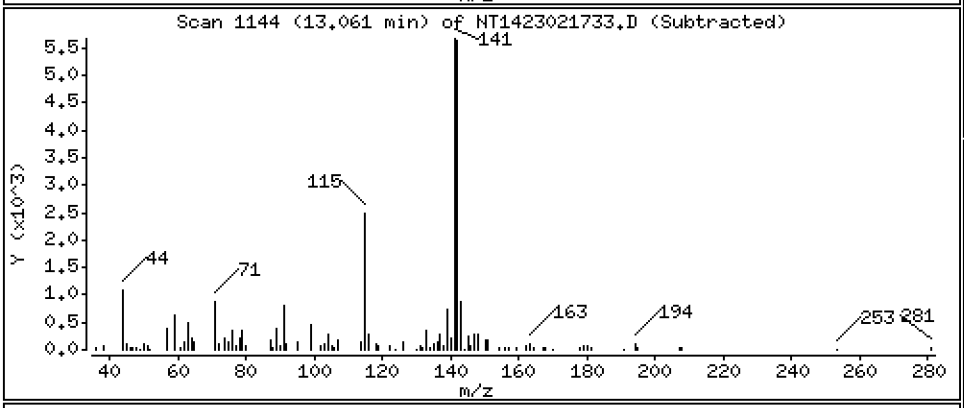
Column diameter: 0.25

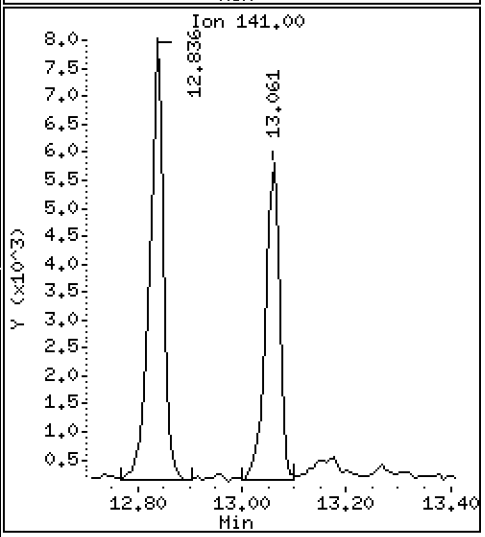
105 1-methylnaphthalene

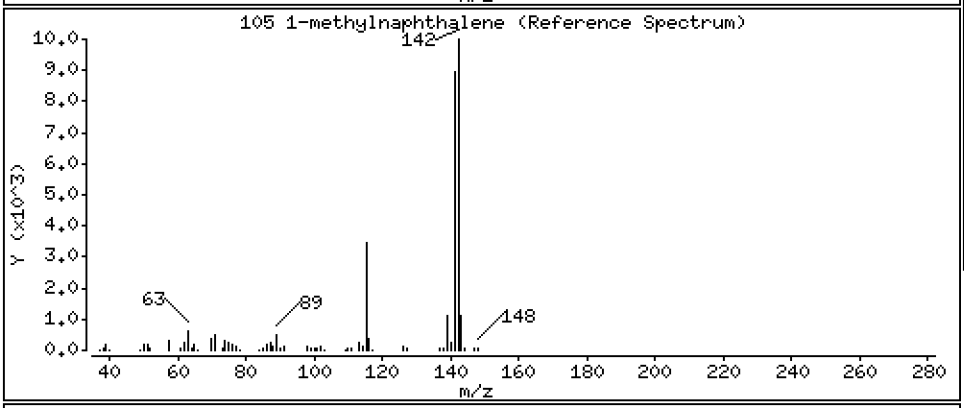
Concentration: 0.06776 ug/mL

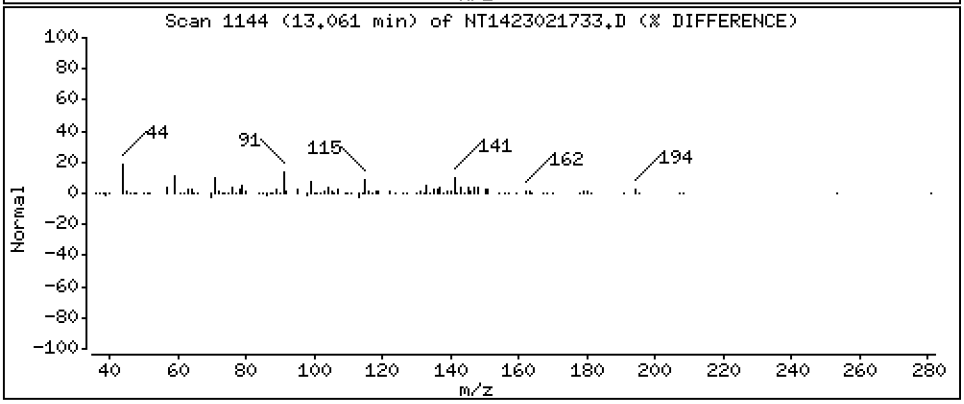












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

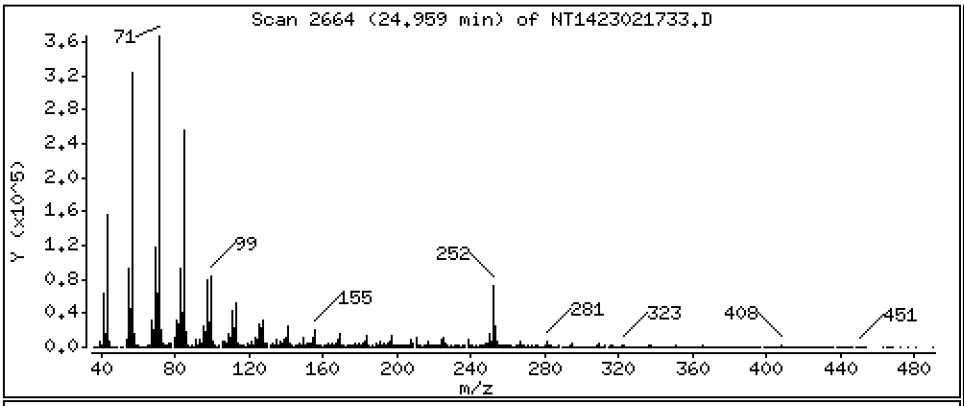
Operator: DSD

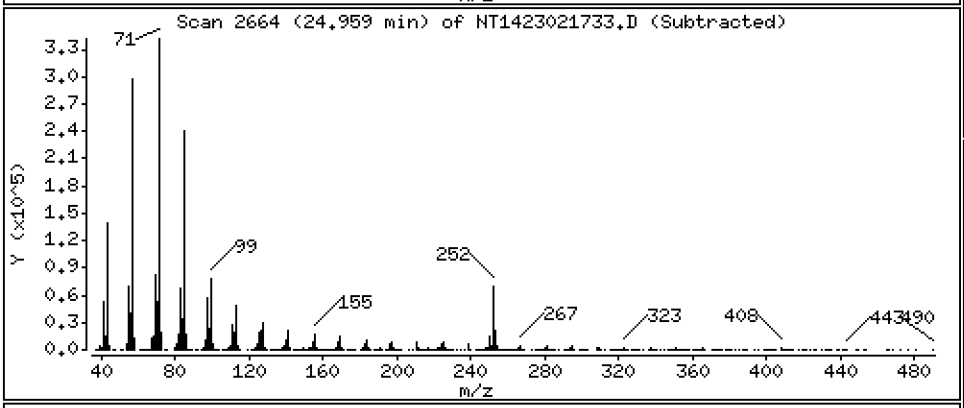
Column phase: ZB-5msi

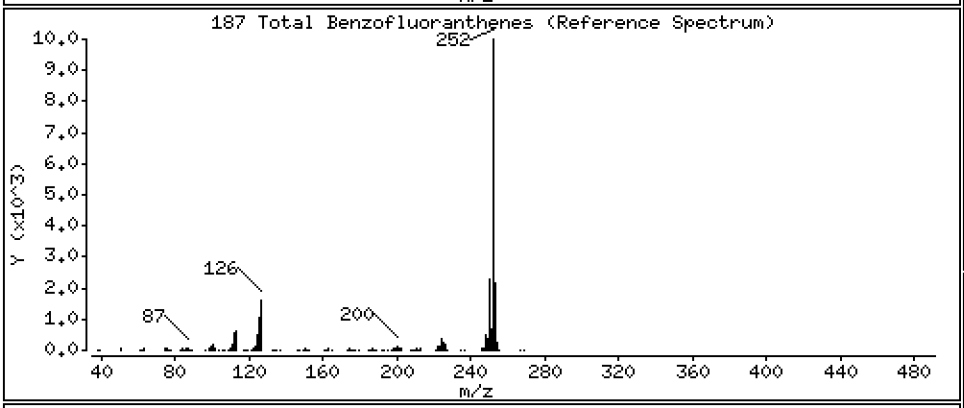
Column diameter: 0.25

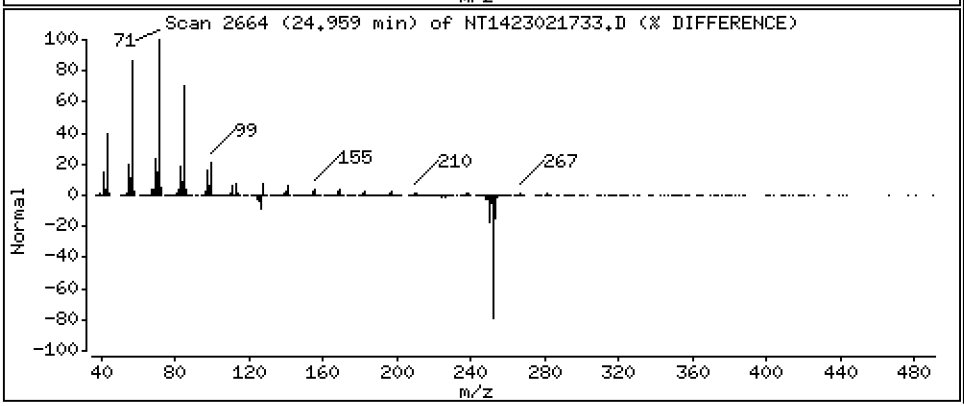
187 Total Benzofluoranthenes

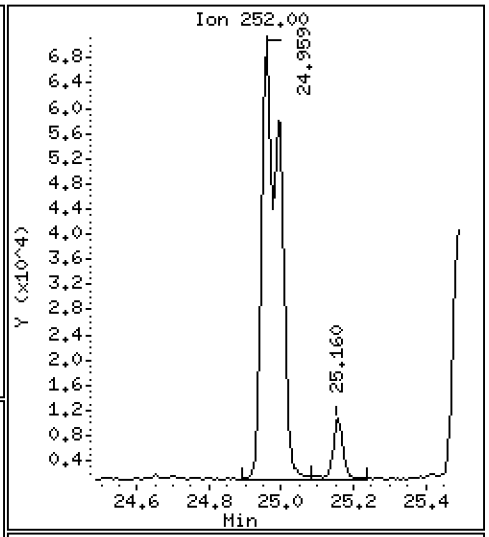
Concentration: 1.883 ug/mL

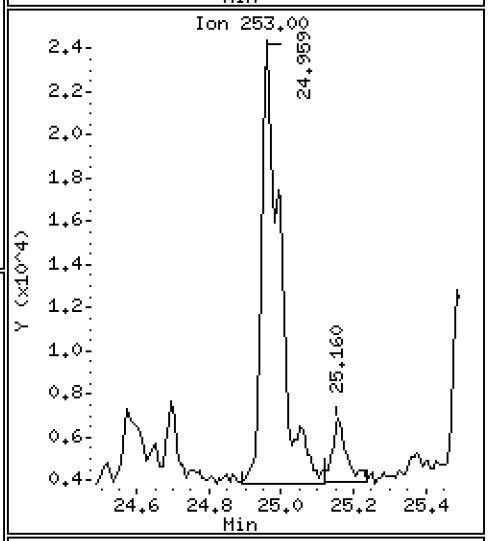


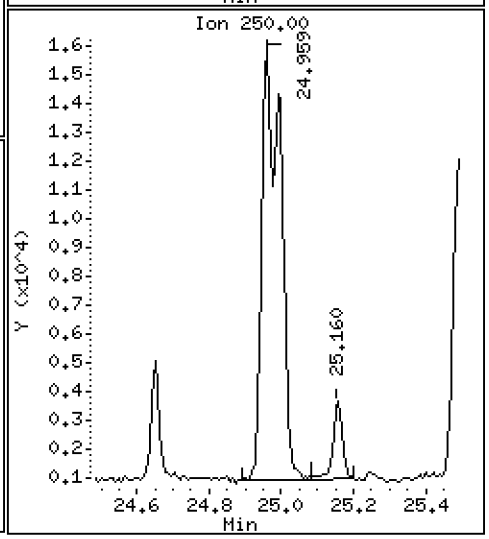












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230217A.b\NT1423021733.D
Lab Smp Id: 23A0171-04
Inj Date : 18-FEB-2023 05:54 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : 23A0171-04
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230217A.b\ABN.m
Meth Date : 01-Mar-2023 13:20 van Quant Type: ISTD
Cal Date : 16-FEB-2023 19:30 Cal File: NT1423021610.D
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.705	6.674	(0.753)	440632	5.68273	5.683
$	2 Phenol-d5	99	8.281	8.273	(0.930)	637958	5.18652	5.187
	3 Phenol	94	8.305	8.296	(0.933)	686369	5.27106	5.271
$	5 2-Chlorophenol-d4	132	8.544	8.536	(0.960)	471869	5.37642	5.376
	4 Bis(2-Chloroethyl)ether	93	8.305	8.459	(0.933)	20859	0.20970	0.2097
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.900	8.900	(1.000)	290048	4.00000	
	9 1,4-Dichlorobenzene	146	8.931	8.931	(1.003)	1045	0.01079	0.01079(MH)
$	10 1,2-Dichlorobenzene-d4	152	9.265	9.264	(1.041)	206173	3.13397	3.134
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	9.187	9.179	(1.032)	66220	0.90478	0.9048
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	9.684	9.676	(1.088)	12594	0.13117	0.1312
$	18 Nitrobenzene-d5	82	10.002	10.002	(0.878)	416467	3.42999	3.430
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	10.902	11.010	(0.957)	80626	1.39208	1.392
	25 2,4-Dichlorophenol	162	11.413	11.126	(1.001)	1840	0.02337	0.02337
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.397	11.397	(1.000)	1050990	4.00000	
	28 Naphthalene	128	11.436	11.436	(1.003)	28988	0.11186	0.1119
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	12.836	12.836	(1.126)	15773	0.08127	0.08127
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					

		QUANT SIG					CONCENTRATIONS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36 2-Fluorobiphenyl	172	13.625	13.625	(0.907)	820978	3.75732	3.757
	37 2-Chloronaphthalene	162	Compound Not Detected.					
	38 2-Nitroaniline	65	13.958	14.105	(0.929)	29693	0.51208	0.5121
	39 Dimethylphthalate	163	Compound Not Detected.					
	40 Acenaphthylene	152	14.709	14.709	(0.979)	8996	0.03307	0.03307(M)
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	15.026	15.018	(1.000)	610722	4.00000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	15.088	15.088	(1.004)	19221	0.11802	0.1180
	45 2,4-Dinitrophenol	184	Compound Not Detected.					
	46 Dibenzofuran	168	15.413	15.412	(1.026)	32736	0.12242	0.1224
	47 4-Nitrophenol	109	Compound Not Detected.					
	48 2,4-Dinitrotoluene	165	Compound Not Detected.					
	50 Diethylphthalate	149	15.992	16.000	(1.064)	44805	0.18067	0.1807
	49 Fluorene	166	16.131	16.131	(1.074)	37884	0.13548	0.1355
	51 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55 2,4,6-Tribromophenol	330	16.663	16.663	(1.109)	204547	5.74458	5.745
	56 4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.062	18.062	(1.000)	1063529	4.00000	
	60 Phenanthrene	178	18.109	18.108	(1.003)	178497	0.69845	0.6984
	61 Anthracene	178	18.201	18.201	(1.008)	67491	0.26656	0.2666
	62 Carbazole	167	18.542	18.534	(1.027)	13919	0.06058	0.06058
	63 Di-n-butylphthalate	149	19.354	19.346	(1.072)	10452	0.04073	0.04073
	64 Fluoranthene	202	20.522	20.499	(0.887)	357381	1.80510	1.805
	65 Pyrene	202	20.940	20.924	(0.905)	337498	1.61211	1.612
$	66 Terphenyl-d14	244	21.227	21.218	(0.918)	646154	4.34693	4.347
	67 Butylbenzylphthalate	149	Compound Not Detected.					
	68 Benzo(a)anthracene	228	23.100	23.092	(0.999)	108472	0.73865	0.7386
*	69 Chrysene-d12	240	23.131	23.123	(1.000)	458901	4.00000	
	70 3,3'-Dichlorobenzidine	252	22.814	23.054	(0.986)	3940	0.08765	0.08765
	71 Chrysene	228	23.178	23.170	(1.002)	158687	1.20136	1.201
	72 bis(2-Ethylhexyl)phthalate	149	23.178	23.177	(0.959)	99407	0.86932	0.8693
*	134 Di-n-octylphthalate-d4	153	24.161	24.153	(1.000)	668073	4.00000	
	73 Di-n-octylphthalate	149	Compound Not Detected.					
	74 Benzo(b)fluoranthene	252	24.958	24.950	(0.971)	128677	0.98078	0.9808
	75 Benzo(k)fluoranthene	252	24.989	24.989	(0.972)	132918	0.94812	0.9481(M)
	76 Benzo(a)pyrene	252	25.593	25.577	(0.996)	84584	0.68000	0.6800
*	77 Perylene-d12	264	25.702	25.694	(1.000)	413471	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	28.267	28.244	(1.100)	29478	0.28815	0.2882
	79 Dibenzo(a,h)anthracene	278	28.267	28.259	(1.100)	7675	0.09115	0.09115(M)
	80 Benzo(g,h,i)perylene	276	29.029	28.997	(1.129)	25603	0.30857	0.3086
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					
	91 Aniline	93	8.305	8.366	(0.933)	20859	0.14976	0.1498
	93 Benzidine	184	Compound Not Detected.					
	103 Pyridine	79	Compound Not Detected.					
	105 1-methylnaphthalene	142	13.060	13.060	(1.146)	12347	0.06776	0.06776
	111 Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.958	24.989	(0.971)	241205	1.88308	1.883
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021733.D
Lab Smp Id: 23A0171-04
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230217A.b\ABN.m
Misc Info:

Calibration Date: 17-FEB-2023
Calibration Time: 20:19
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT				
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF	
8 1,4-Dichlorobenze	351756	175878	703512	290048	-17.54	
27 Naphthalene-d8	1299383	649692	2598766	1050990	-19.12	
42 Acenaphthene-d10	808045	404023	1616090	610722	-24.42	
59 Phenanthrene-d10	1607740	803870	3215480	1063529	-33.85	
69 Chrysene-d12	876381	438191	1752762	458901	-47.64	
134 Di-n-octylphthala	1545452	772726	3090904	668073	-56.77	<-
77 Perylene-d12	639717	319859	1279434	413471	-35.37	

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.40	0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.03	0.05
59 Phenanthrene-d10	18.06	17.56	18.56	18.06	0.00
69 Chrysene-d12	23.12	22.62	23.62	23.13	0.04
134 Di-n-octylphthala	24.15	23.65	24.65	24.16	0.03
77 Perylene-d12	25.69	25.19	26.19	25.70	0.03

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

REVIEW SUMMARY FOR FILE - NT1423021733.D

Lab ID: 23A0171-04
nt14.i, ABN.m, 18-FEB-2023 05:54

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

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.933	0.950	-0.0173	Bis(2-Chloroethyl)ether
1.001	0.976	0.0251	2,4-Dichlorophenol
0.957	0.966	-0.0095	Benzoic acid
0.929	0.939	-0.0103	2-Nitroaniline
0.986	0.997	-0.0107	3,3'-Dichlorobenzidine
0.933	0.940	-0.0069	Aniline

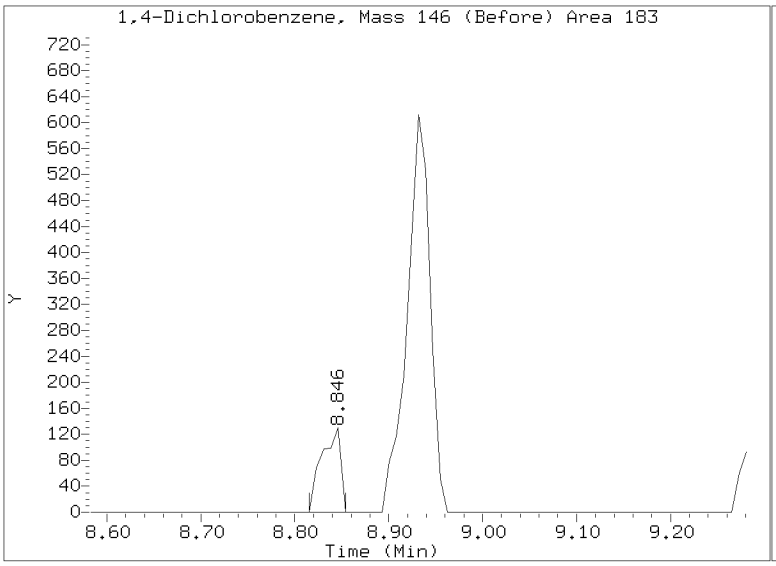
RRT check based on Ccal File: NT1423021717.D

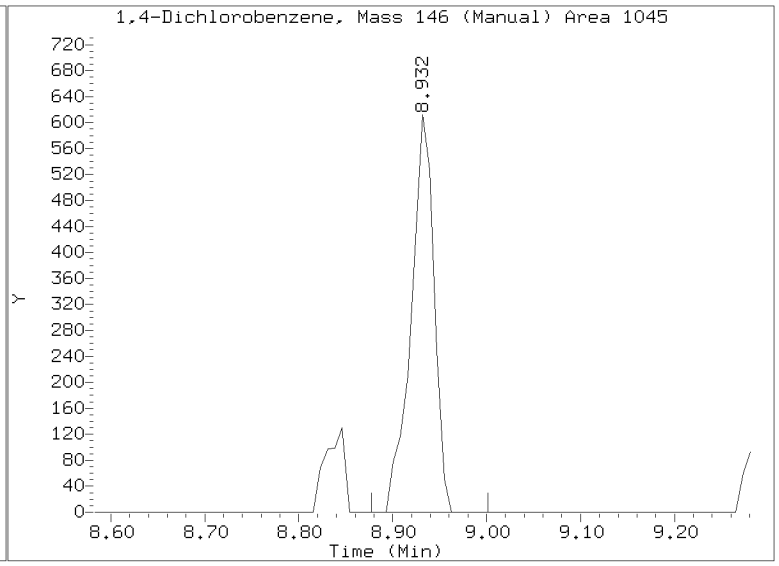
On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

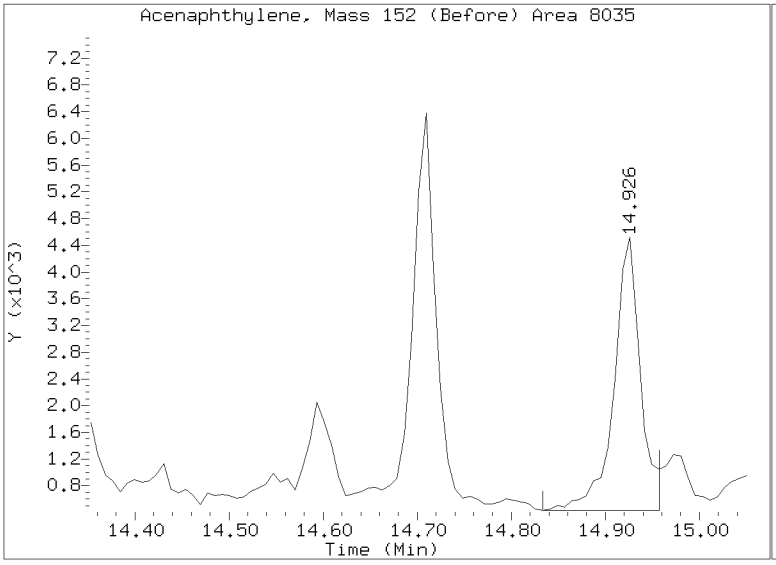
* Only compounds listed in the work order have been verified by the analyst *

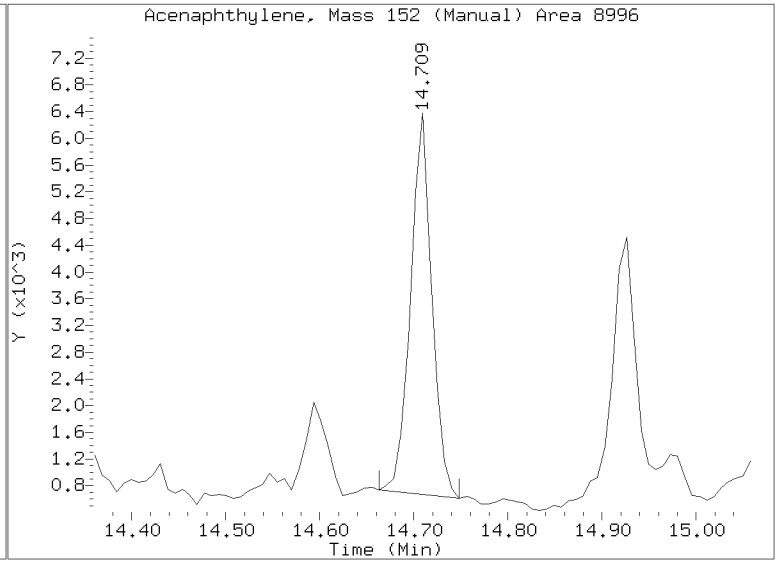
Quant Ion Manual Peak Adjustment Report

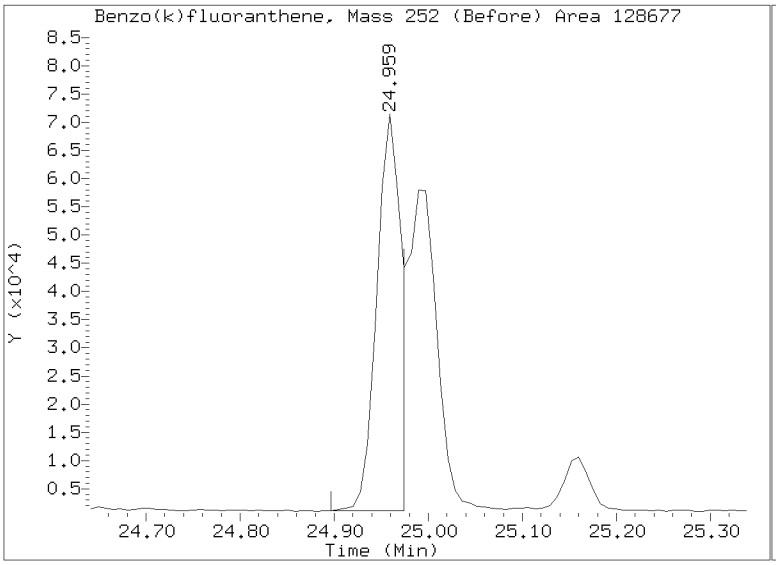
Datafile: //target/share/chem3/nt14.i/20230217A.b/NT1423021733.D
Injection Date: 18-FEB-2023 05:54
Lab ID:23A0171-04 Client ID:
Report Date: 03/01/2023 13:56

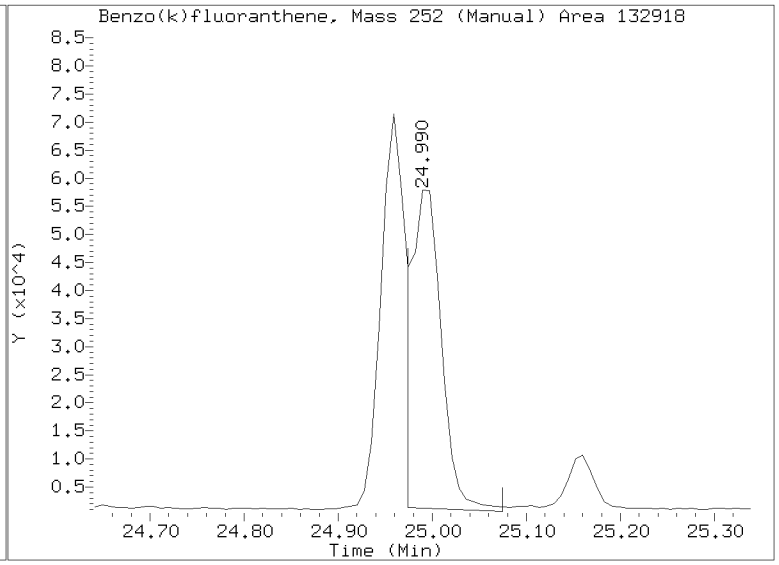












Quant Ion Manual Peak Adjustment Report

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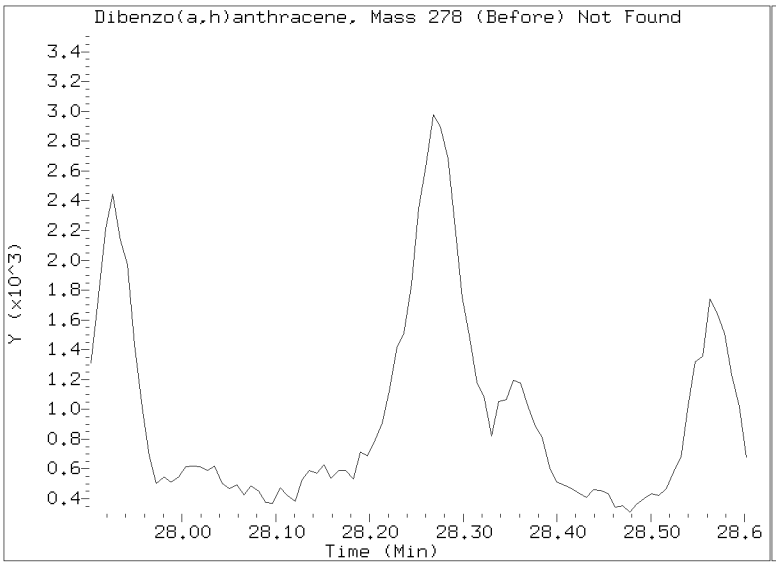
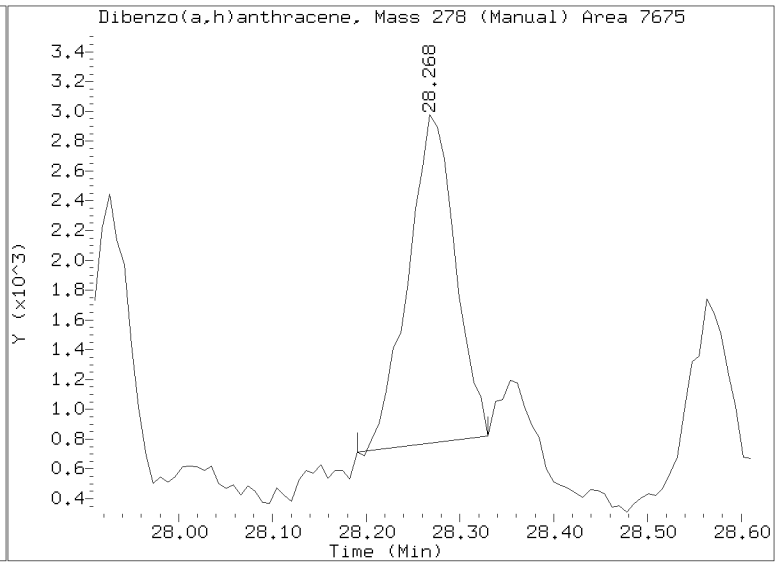
Injection Date: 18-FEB-2023 05:54
Lab ID:23A0171-04 Client ID:
Report Date: 03/01/2023 13:56





Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1245

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-04RE1 A	SDG:	23A0171
Sampled:	12/08/22 11:14	Prepared:	01/18/23 13:47	File ID:	NT1423022129.D
% Solids:	48.44	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/22/23 06:19
Batch:	BLA0339	Sequence:	SLB0291	Initial/Final:	20.89 g Wet / 1 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	GB00046
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	542		4.3	19.8
106-44-5	4-Methylphenol	1	15.3	J	7.3	19.8
91-20-3	Naphthalene	1	11.3	J	4.2	19.8
91-57-6	2-Methylnaphthalene	1	8.1	J	4.5	19.8
208-96-8	Acenaphthylene	1	19.8	U	6.2	19.8
131-11-3	Dimethylphthalate	1	19.8	U	4.3	19.8
83-32-9	Acenaphthene	1	11.6	J	5.2	19.8
132-64-9	Dibenzofuran	1	19.8	U	14.0	19.8
86-73-7	Fluorene	1	19.8	U	14.4	19.8
85-01-8	Phenanthrene	1	65.2		8.6	19.8
120-12-7	Anthracene	1	25.7		7.1	19.8
206-44-0	Fluoranthene	1	160		6.0	19.8
129-00-0	Pyrene	1	155		5.6	19.8
85-68-7	Butylbenzylphthalate	1	9.5	J	9.3	19.8
56-55-3	Benzo(a)anthracene	1	77.3		5.9	19.8
218-01-9	Chrysene	1	122		6.0	19.8
117-81-7	bis(2-Ethylhexyl)phthalate	1	89.9	Q	5.4	49.4
	Benzofluoranthenes, Total	1	188		9.9	39.5
50-32-8	Benzo(a)pyrene	1	69.9		4.2	19.8
193-39-5	Indeno(1,2,3-cd)pyrene	1	40.8		14.5	19.8
53-70-3	Dibenzo(a,h)anthracene	1	19.8	U	17.0	19.8
191-24-2	Benzo(g,h,i)perylene	1	44.2		13.4	19.8

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	741.17	571	77.0	27 - 120	
Phenol-d5	741.17	529	71.3	29 - 120	
2-Chlorophenol-d4	741.17	538	72.6	31 - 120	
1,2-Dichlorobenzene-d4	494.11	310	62.7	32 - 120	
Nitrobenzene-d5	494.11	352	71.3	30 - 120	
2-Fluorobiphenyl	494.11	363	73.4	35 - 120	

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1245

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

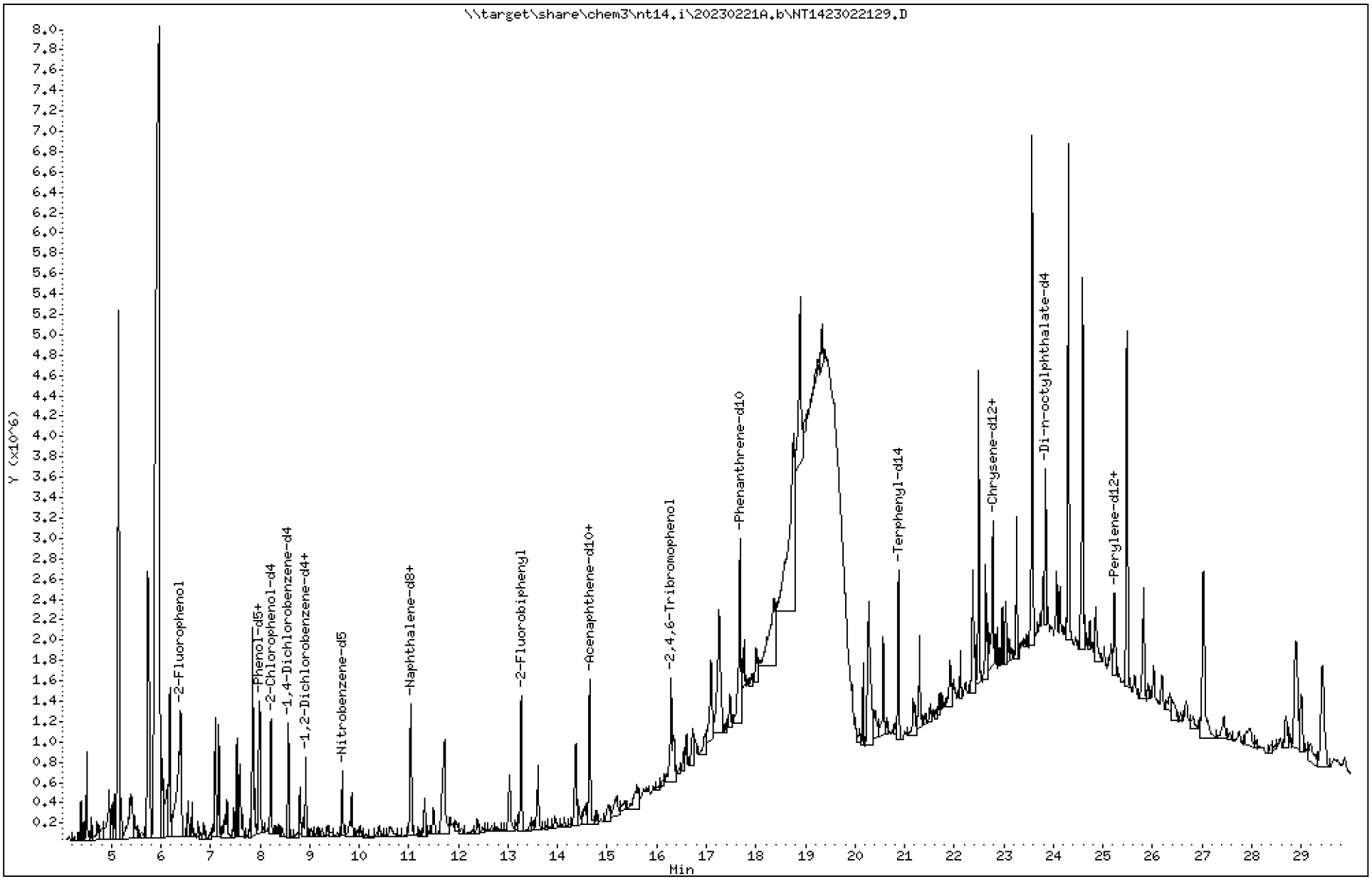
Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-04RE1 A	SDG:	23A0171
Sampled:	12/08/22 11:14	Prepared:	01/18/23 13:47	File ID:	NT1423022129.D
% Solids:	48.44	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/22/23 06:19
Batch:	BLA0339	Sequence:	SLB0291	Initial/Final:	20.89 g Wet / 1 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	GB00046
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	741.17	554	74.8	24 - 134	
p-Terphenyl-d14	494.11	431	87.2	37 - 120	

Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022129.D
Date : 22-FEB-2023 06:19
Client ID:
Sample Info: 23A0171-04RE1

Instrument: nt14.i
Operator: DSD
Column diameter: 0.25

Column phase: ZB-5msi



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Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

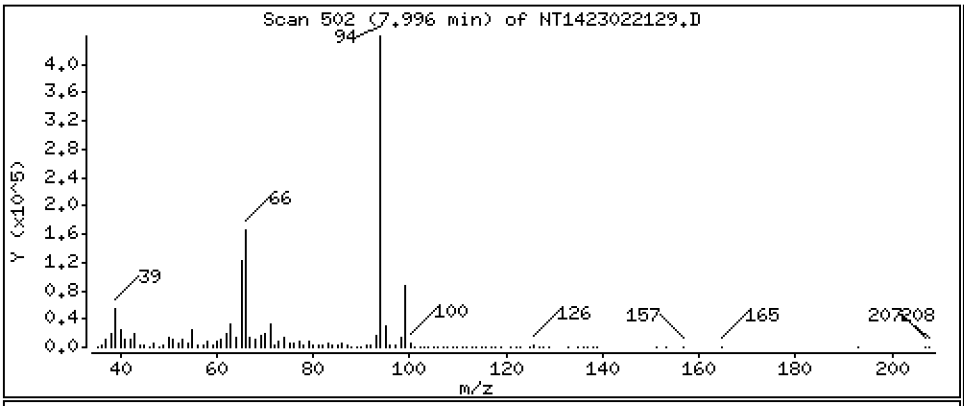
Operator: DSD

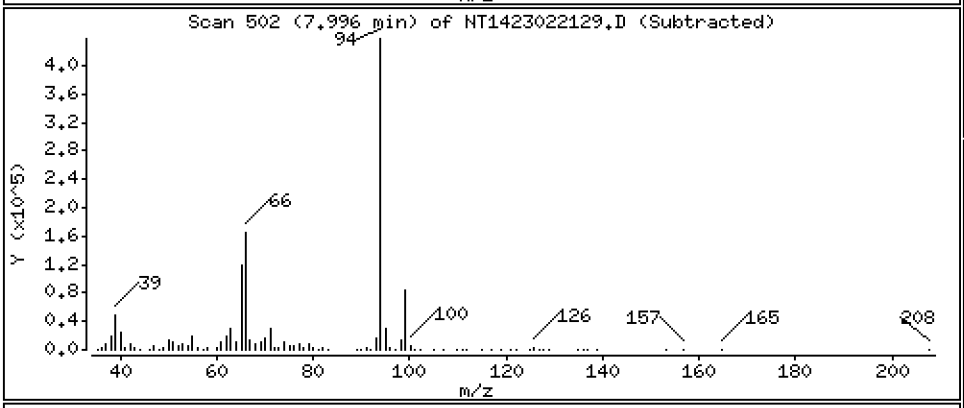
Column phase: ZB-5msi

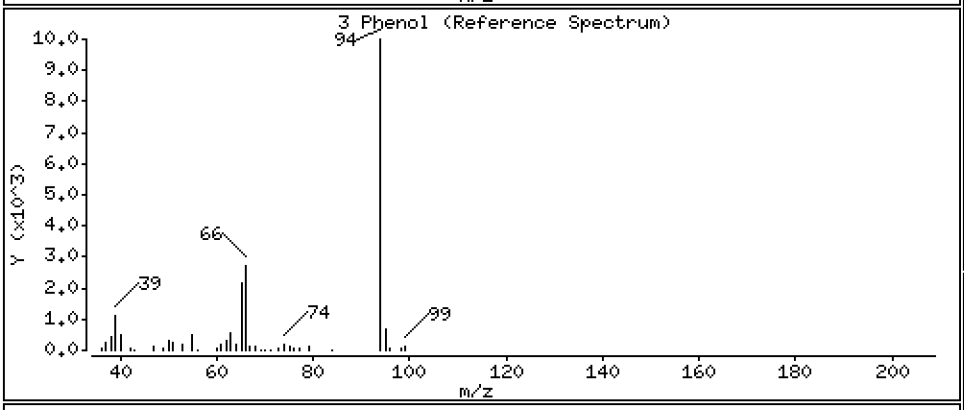
Column diameter: 0.25

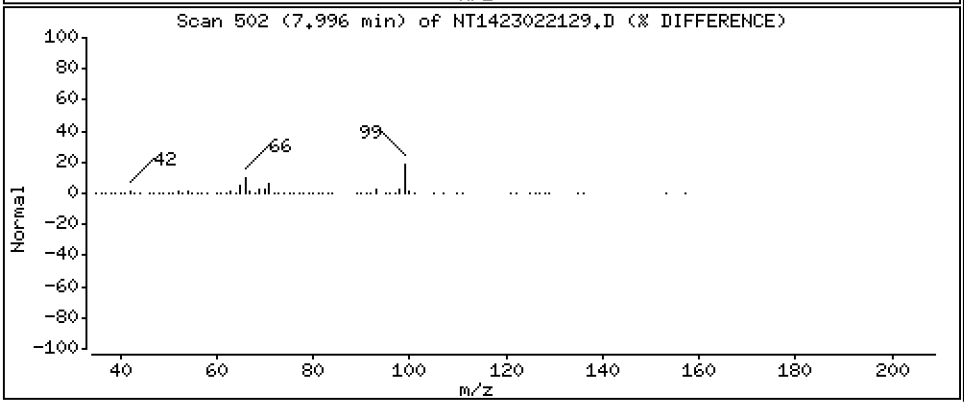
3 Phenol

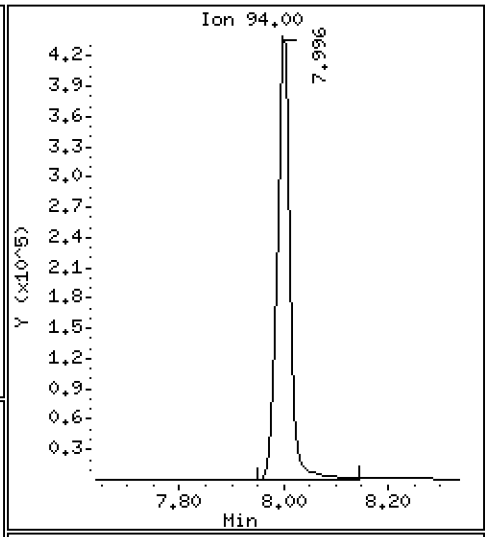
Concentration: 5.481 ug/mL

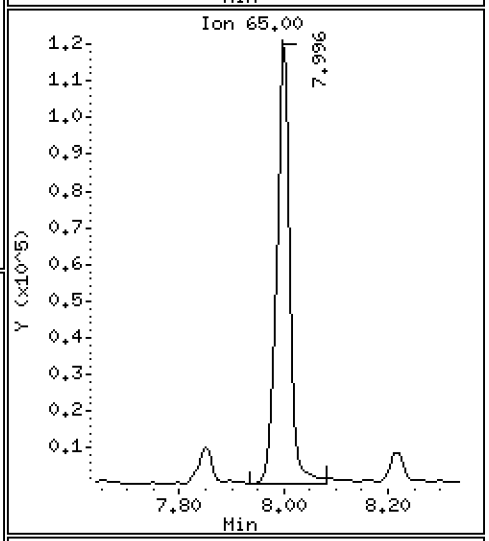


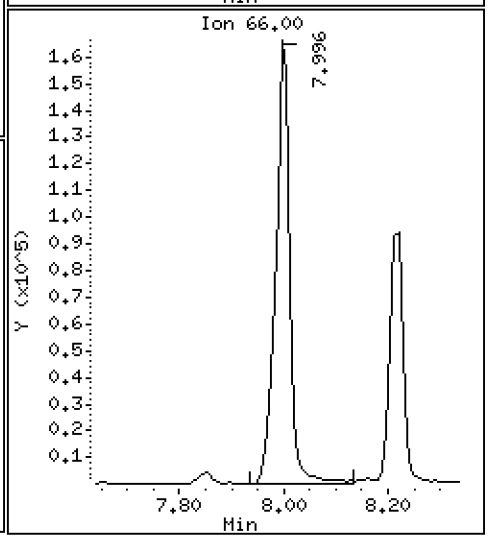












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Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

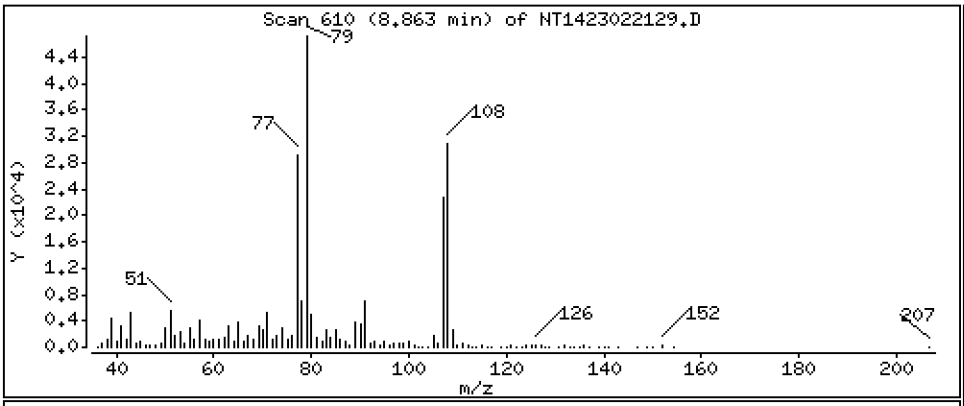
Operator: DSD

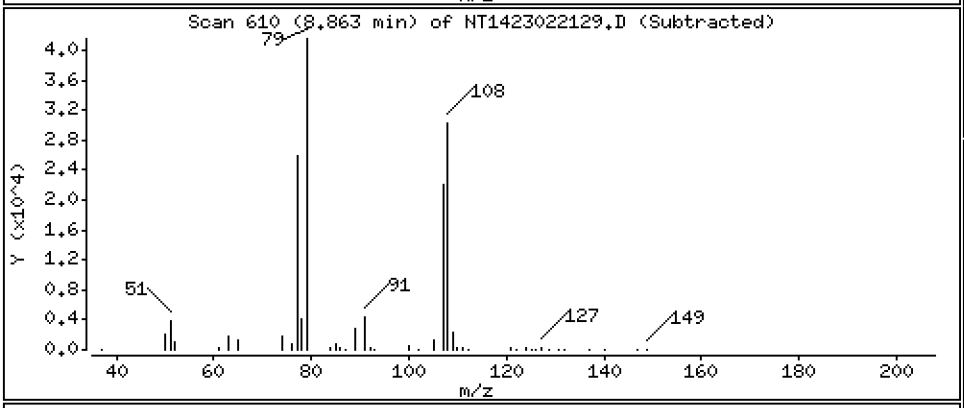
Column phase: ZB-5msi

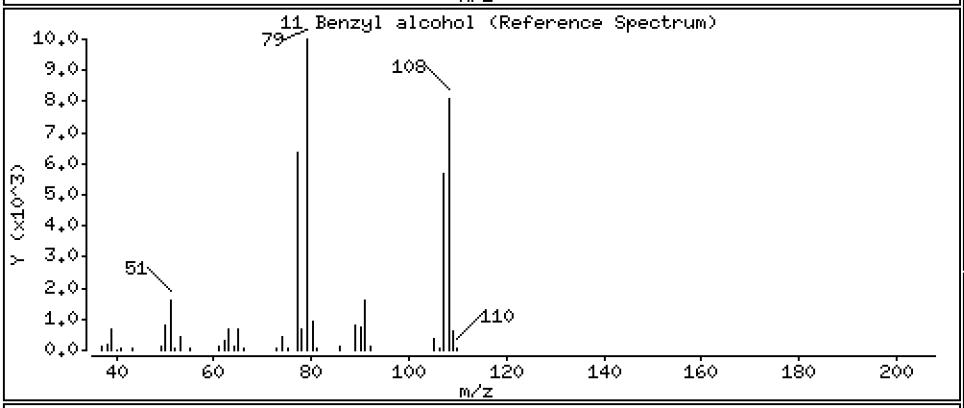
Column diameter: 0.25

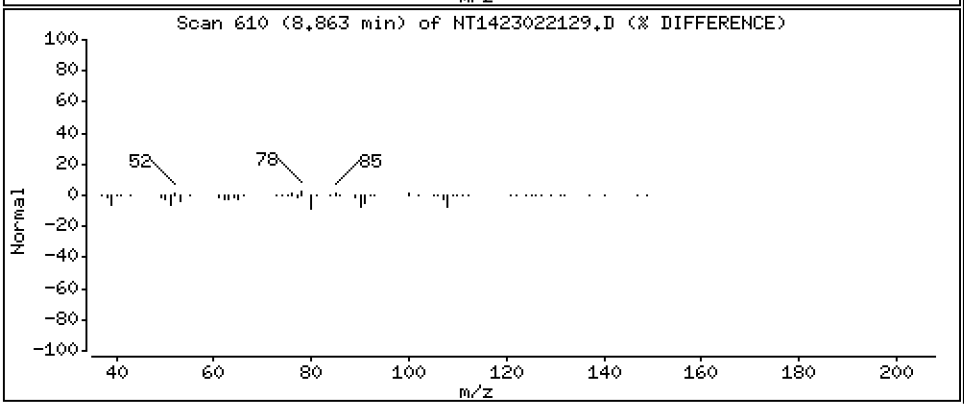
11 Benzyl alcohol

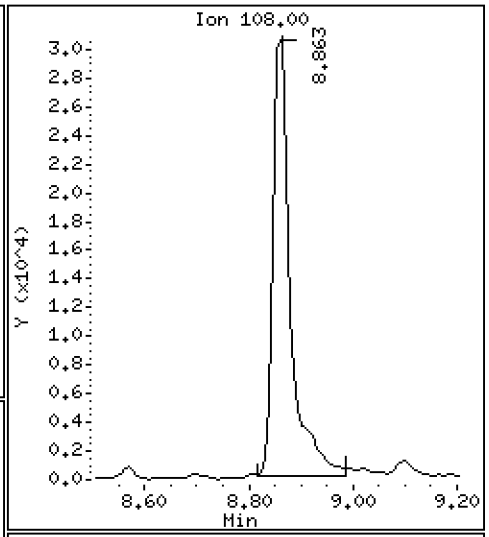
Concentration: 0.8917 ug/mL

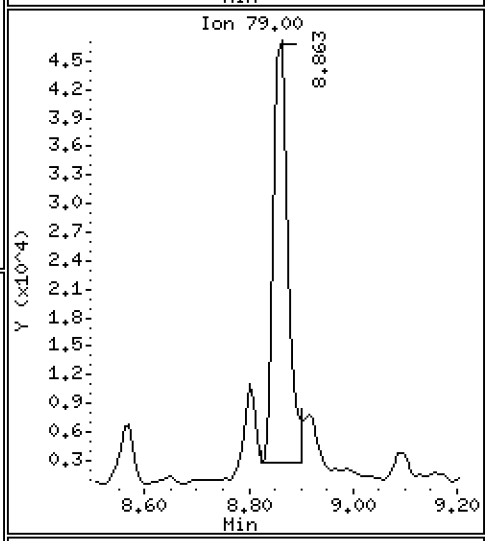


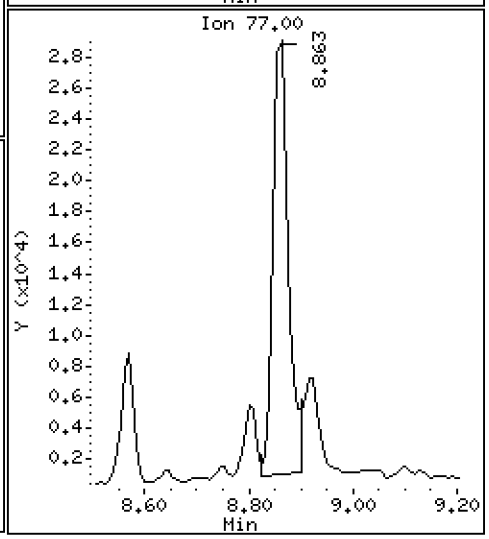












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Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

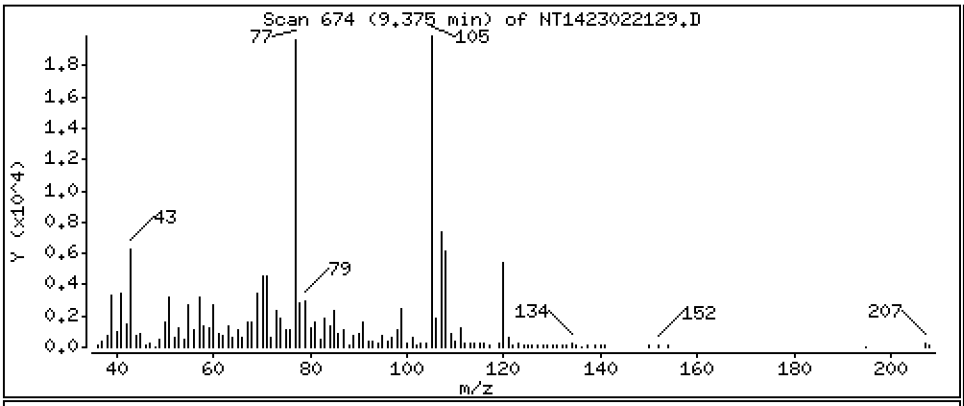
Operator: DSD

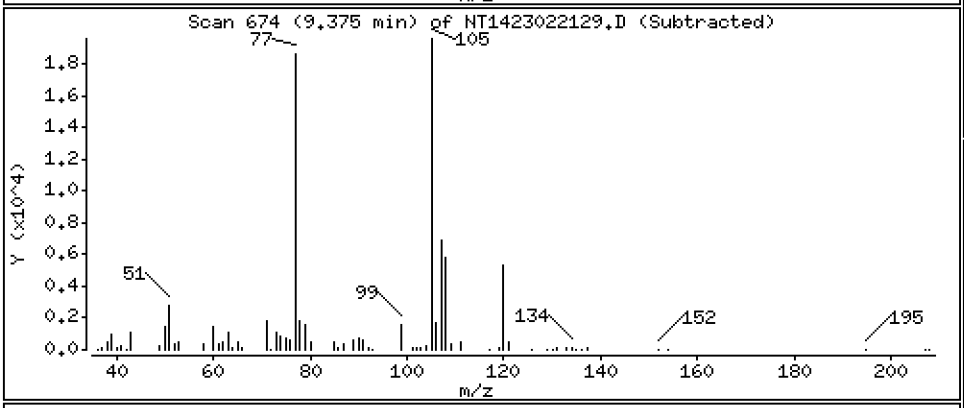
Column phase: ZB-5msi

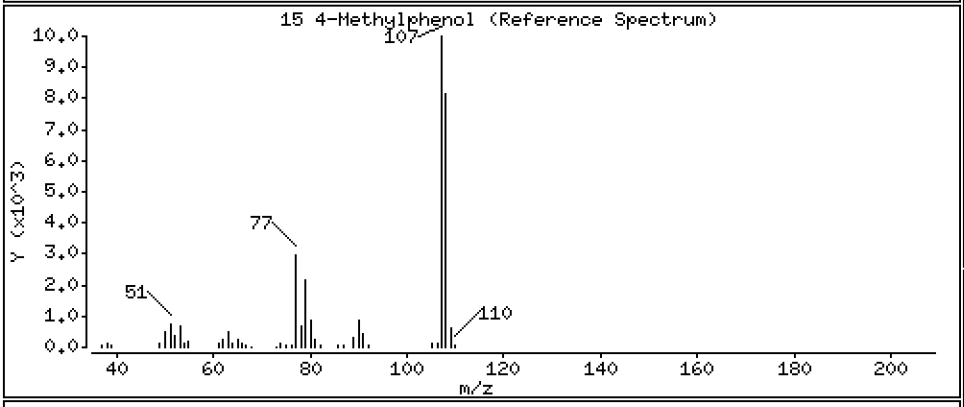
Column diameter: 0.25

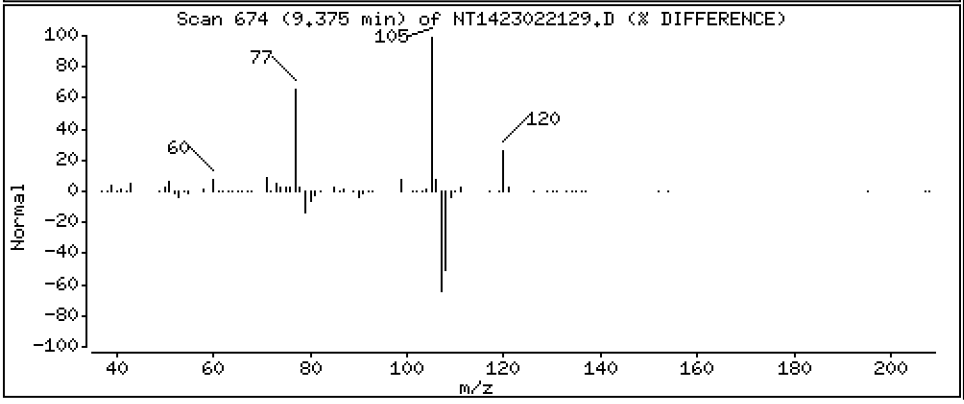
15 4-Methylphenol

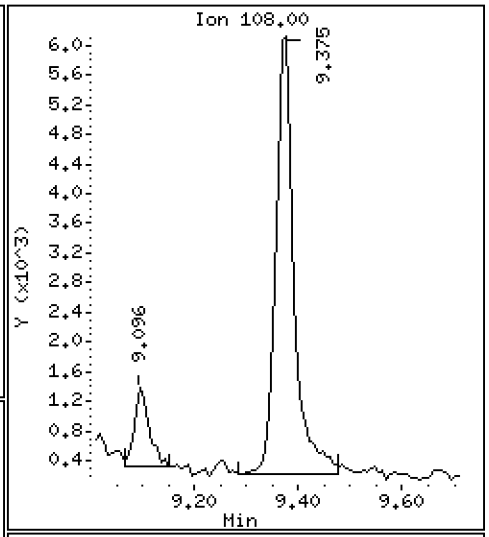
Concentration: 0.1553 ug/mL

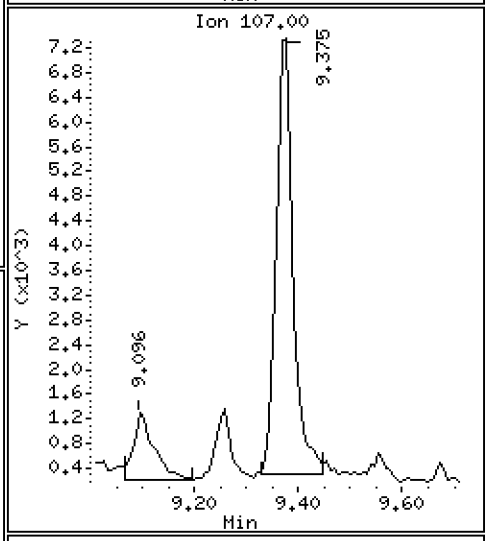


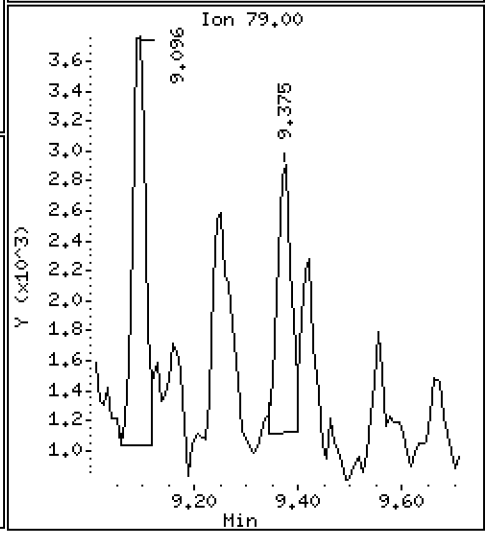












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Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

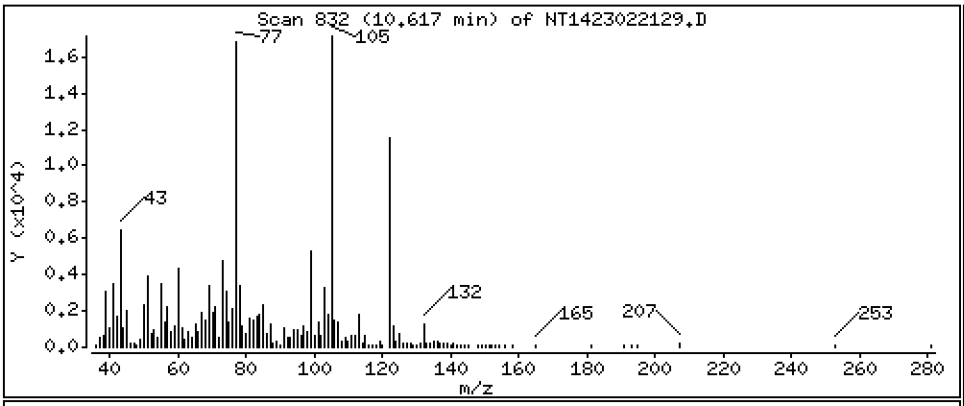
Operator: DSD

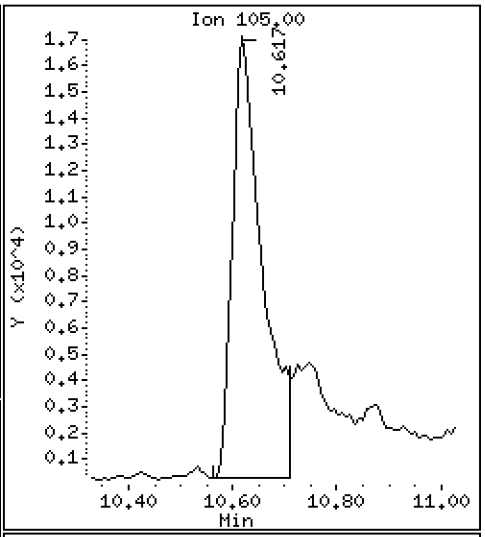
Column phase: ZB-5msi

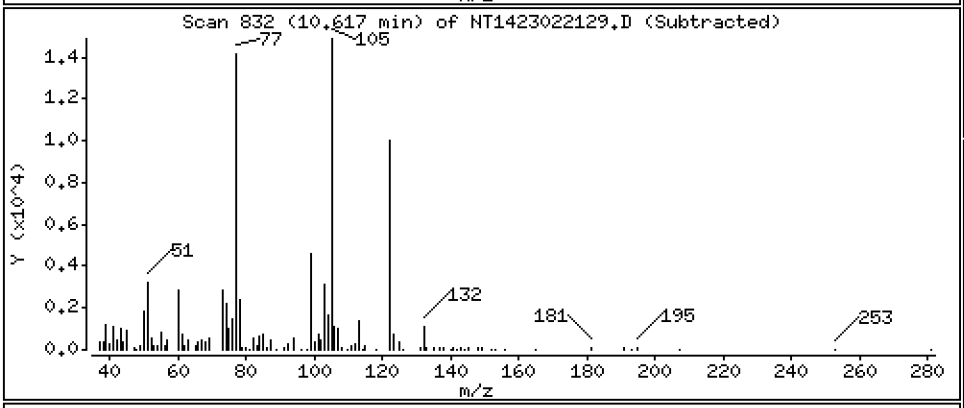
Column diameter: 0.25

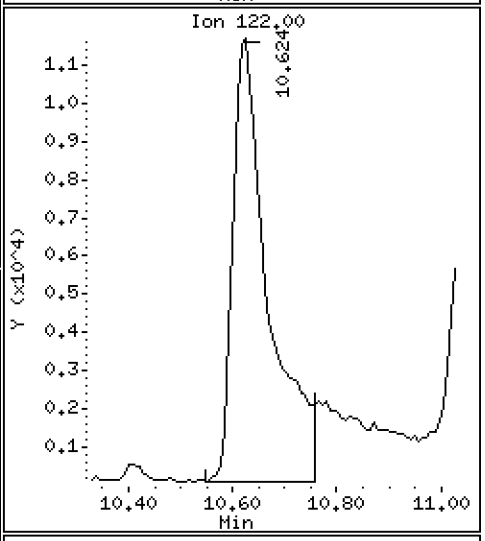
24 Benzoic acid

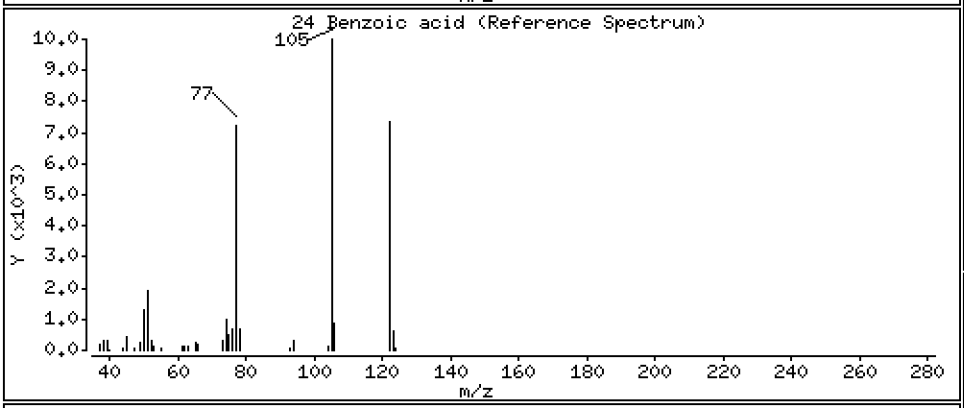
Concentration: 1.090 ug/mL

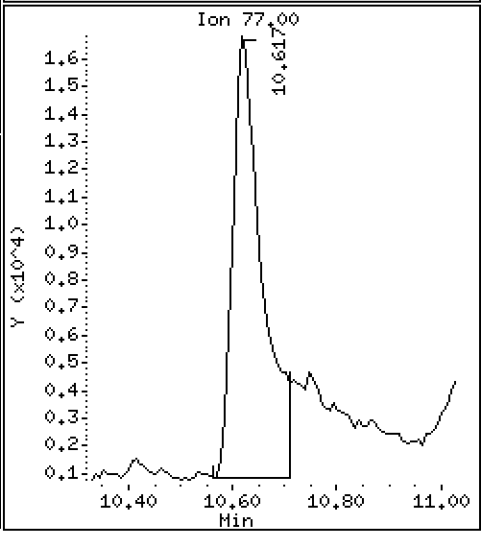


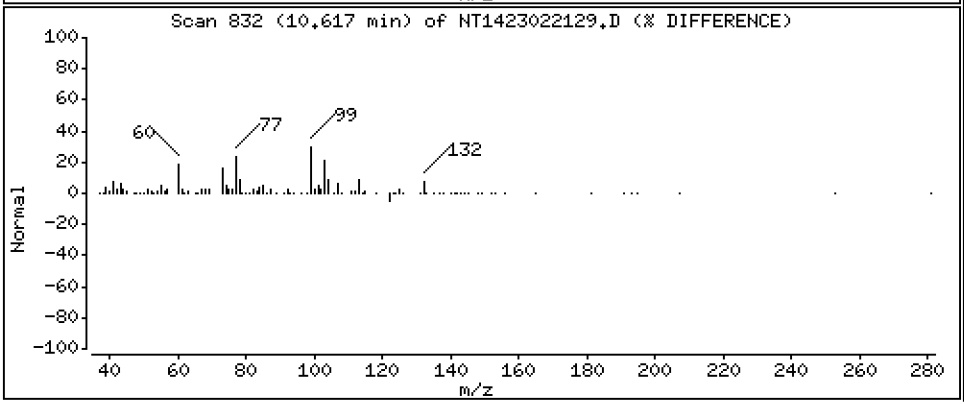












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Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

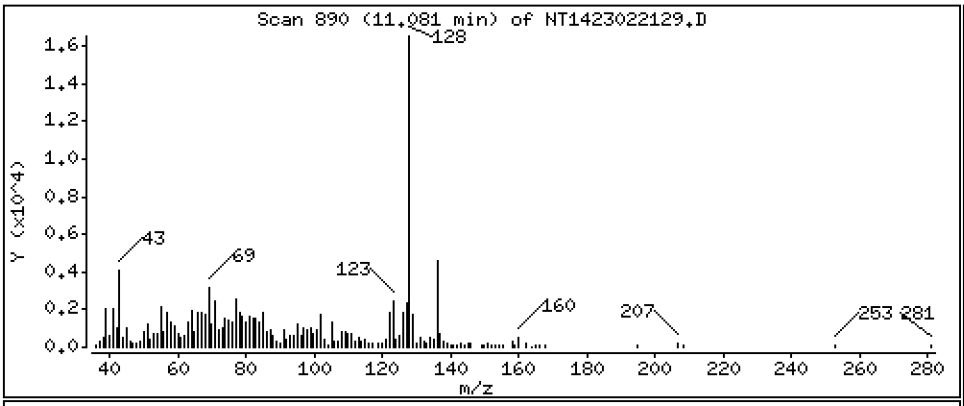
Operator: DSD

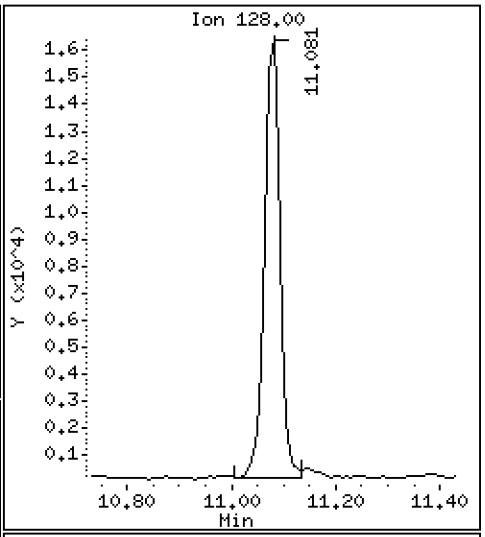
Column phase: ZB-5msi

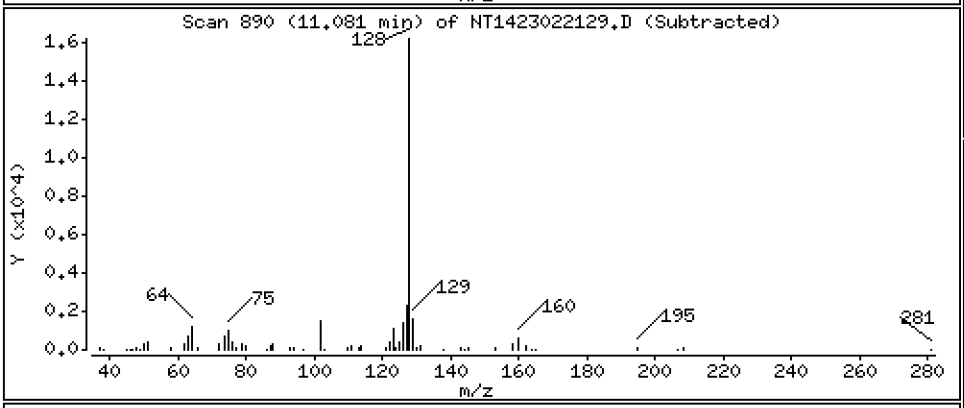
Column diameter: 0.25

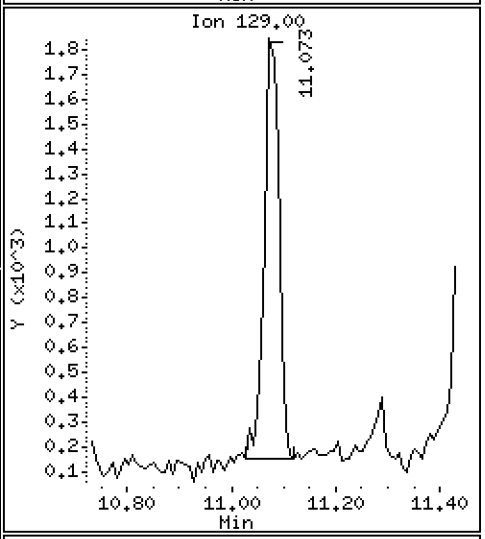
28 Naphthalene

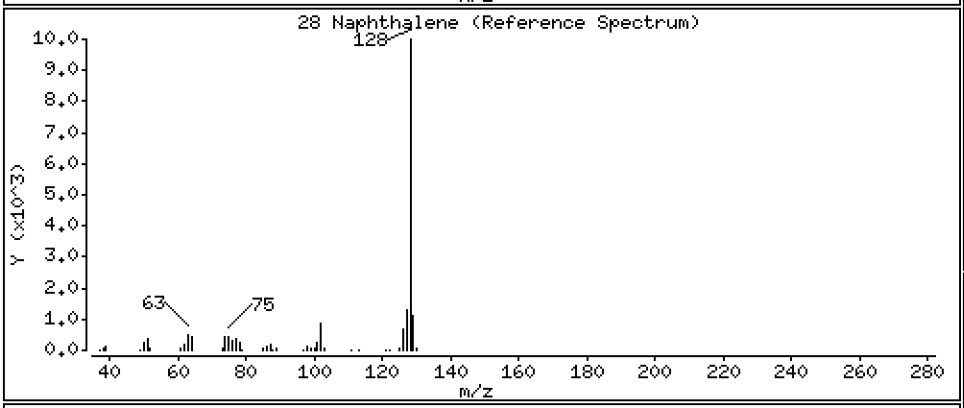
Concentration: 0.1143 ug/mL

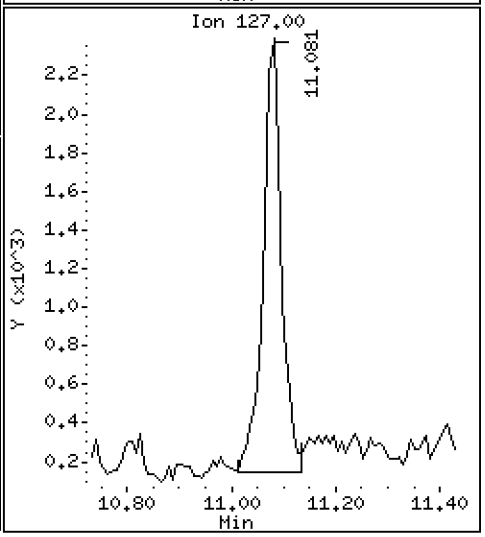


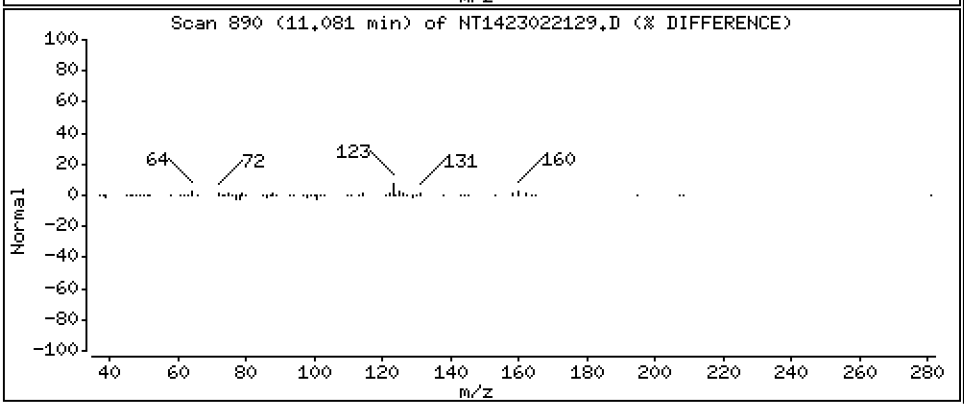












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Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

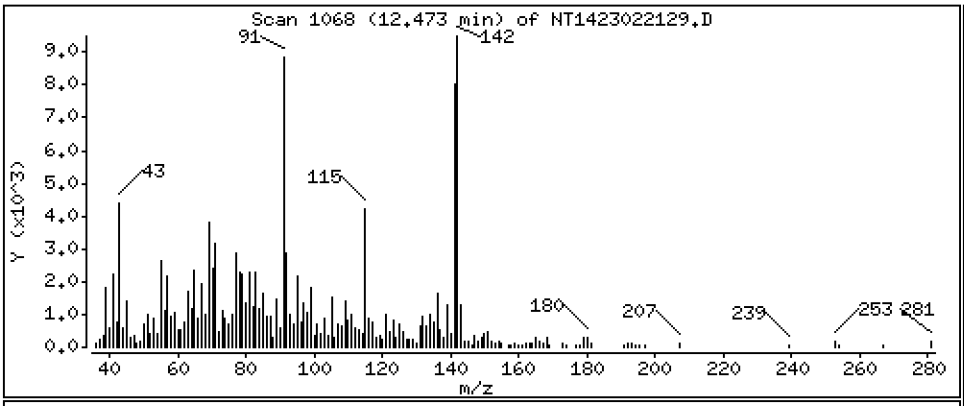
Operator: DSD

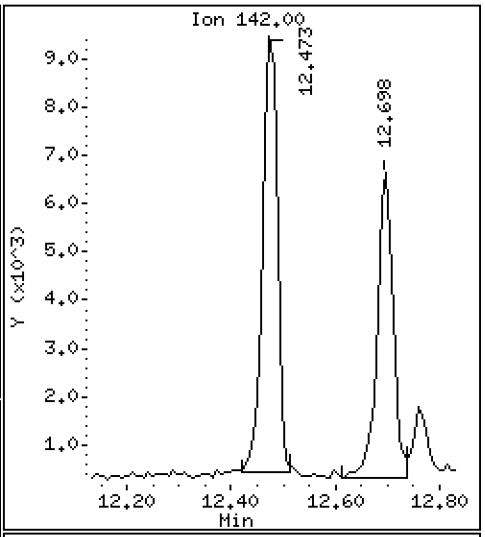
Column phase: ZB-5msi

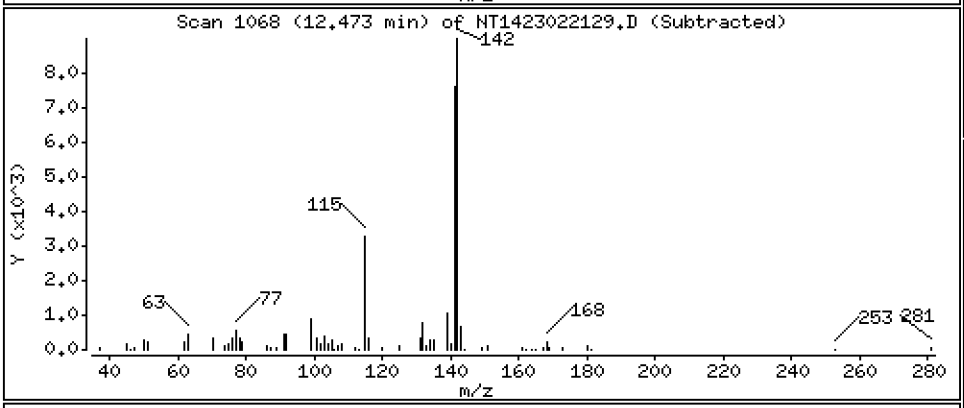
Column diameter: 0.25

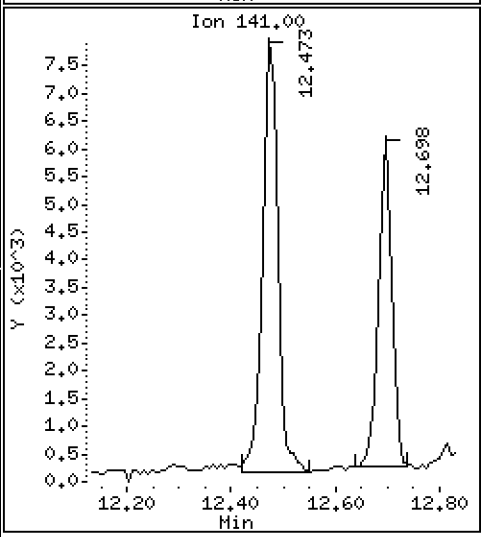
32 2-Methylnaphthalene

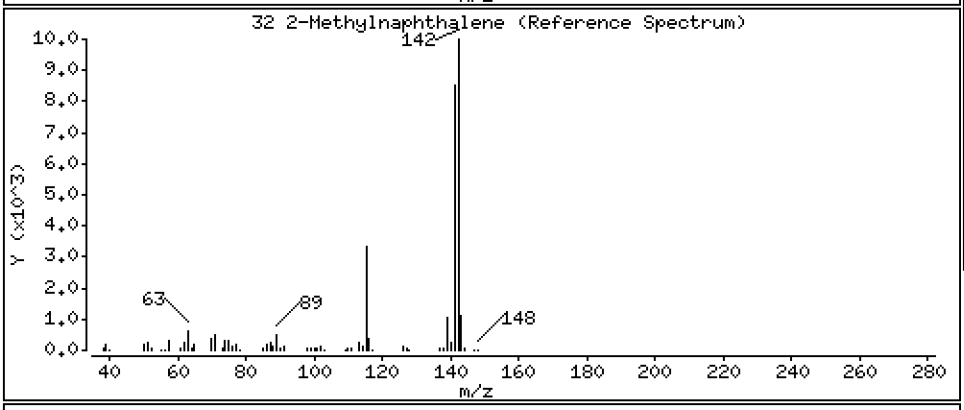
Concentration: 0.08153 ug/mL

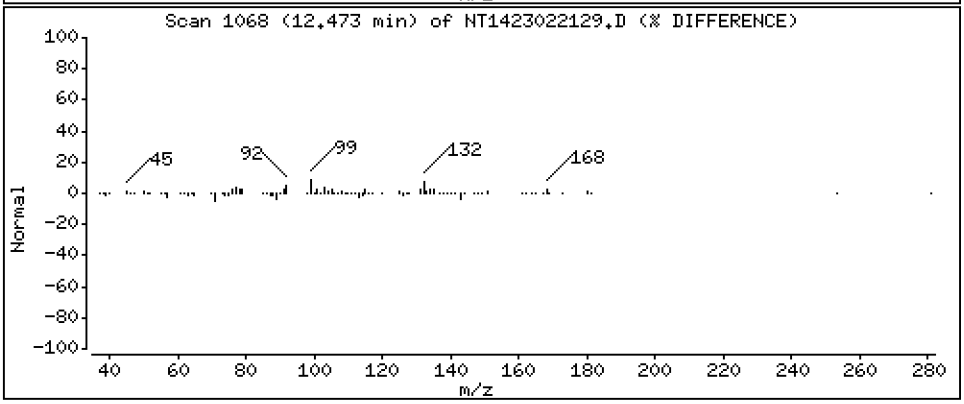












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Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

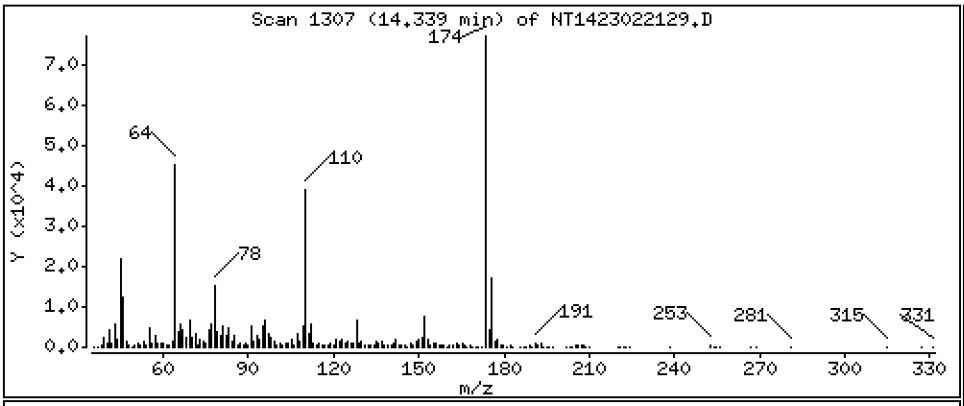
Operator: DSD

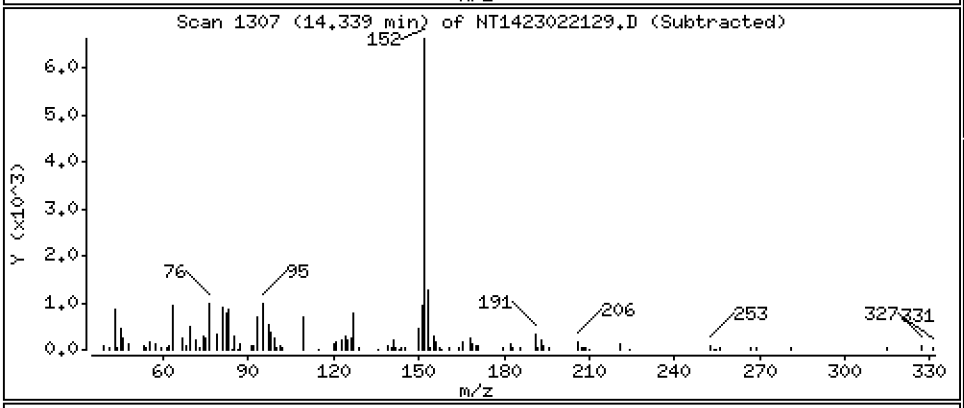
Column phase: ZB-5msi

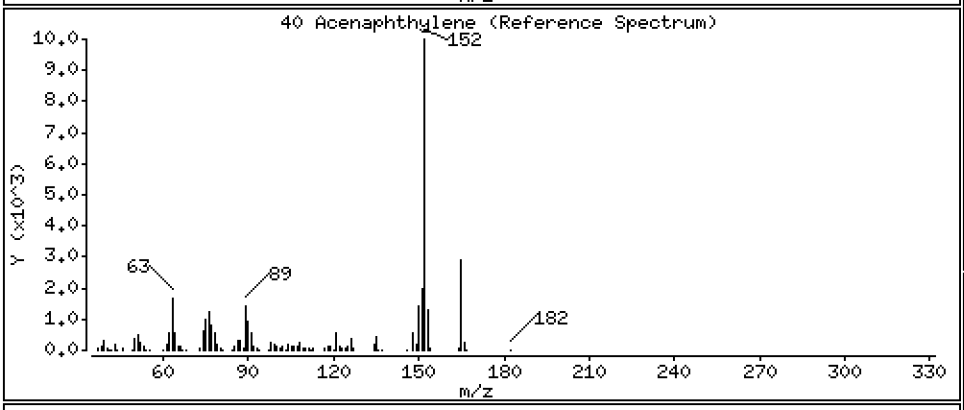
Column diameter: 0.25

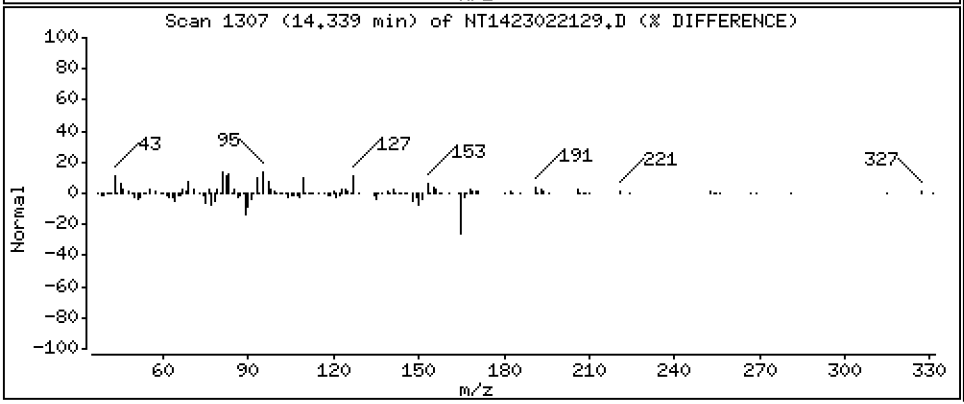
40 Acenaphthylene

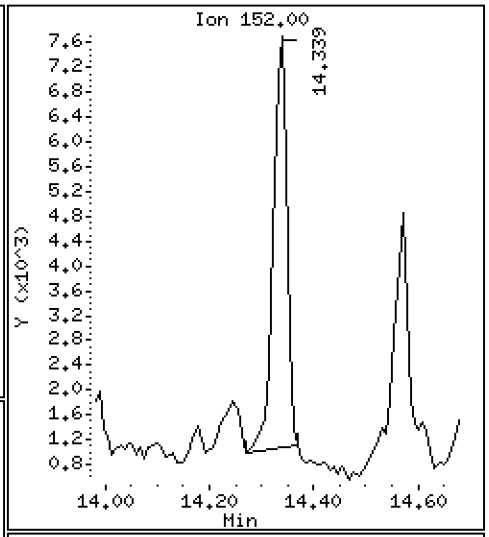
Concentration: 0.03895 ug/mL

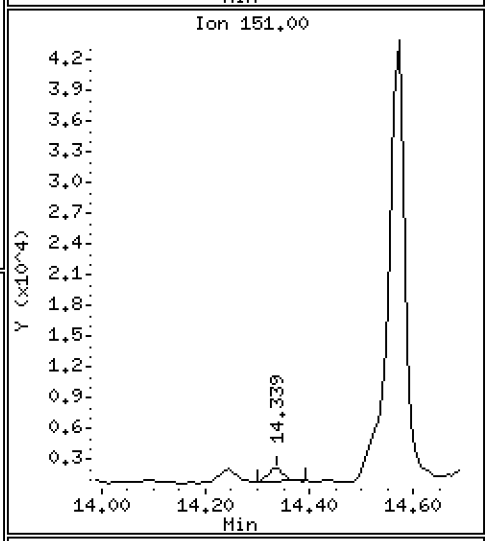


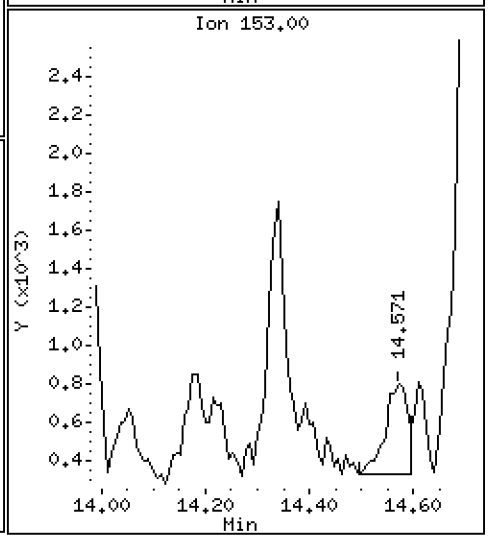












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Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

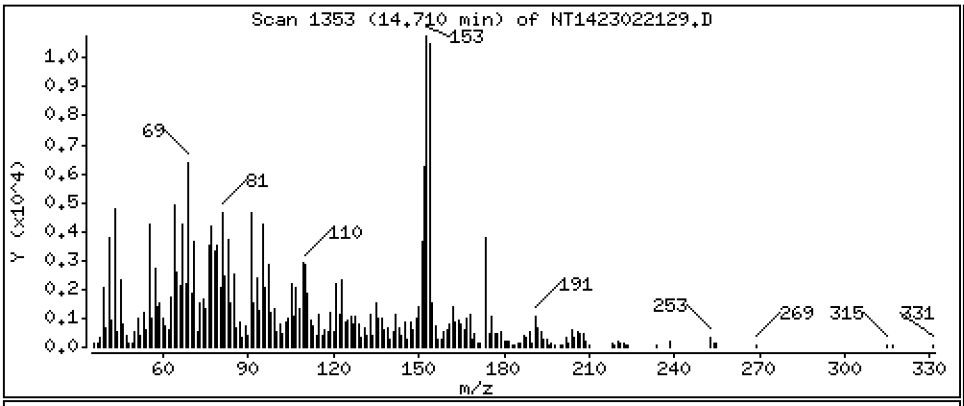
Operator: DSD

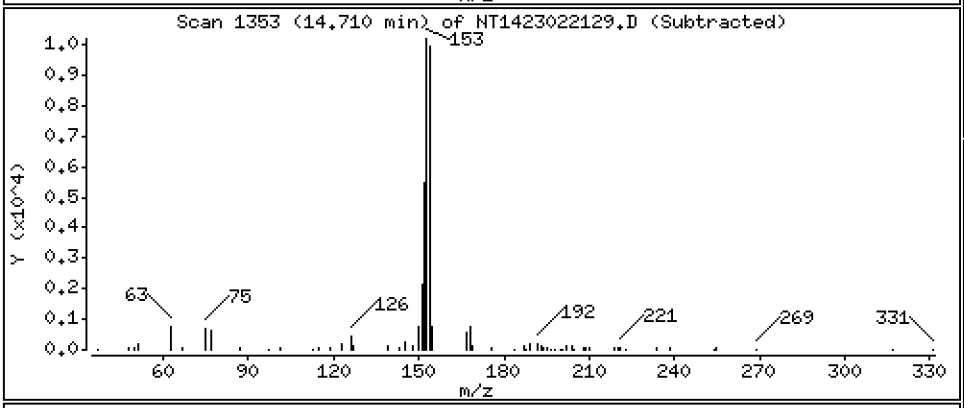
Column phase: ZB-5msi

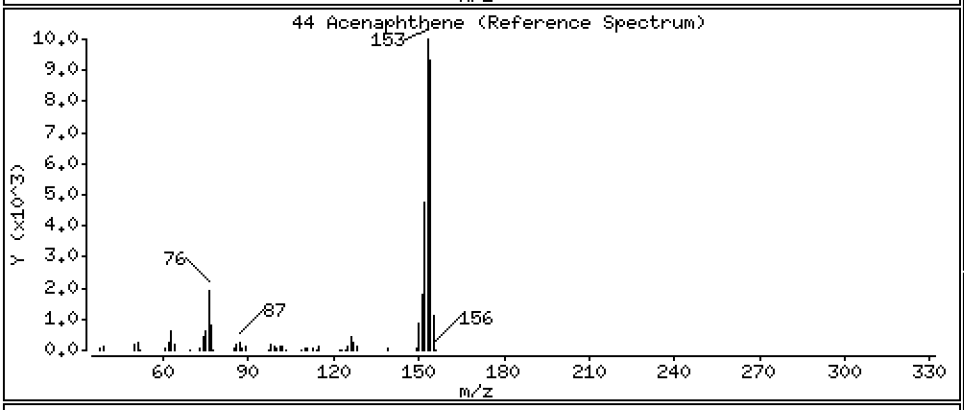
Column diameter: 0.25

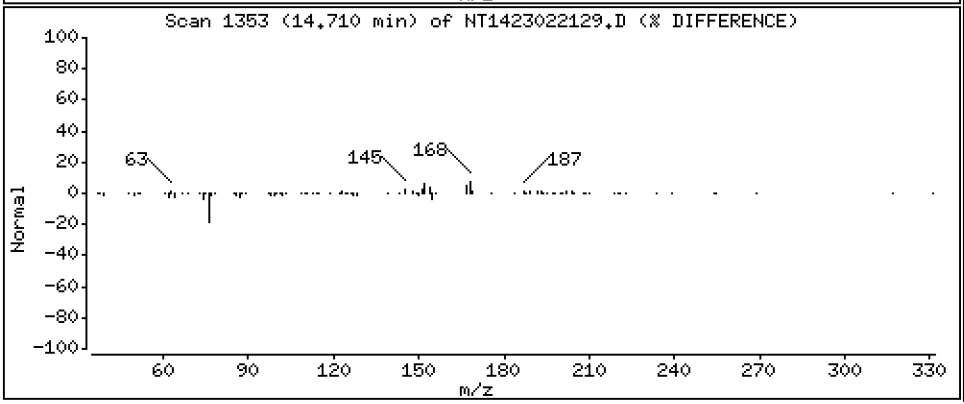
44 Acenaphthene

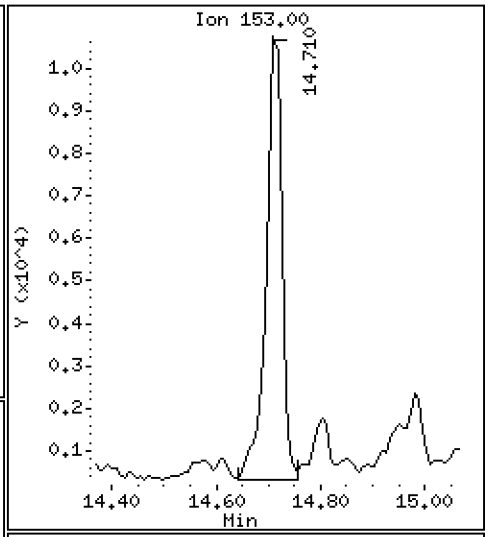
Concentration: 0.1172 ug/mL

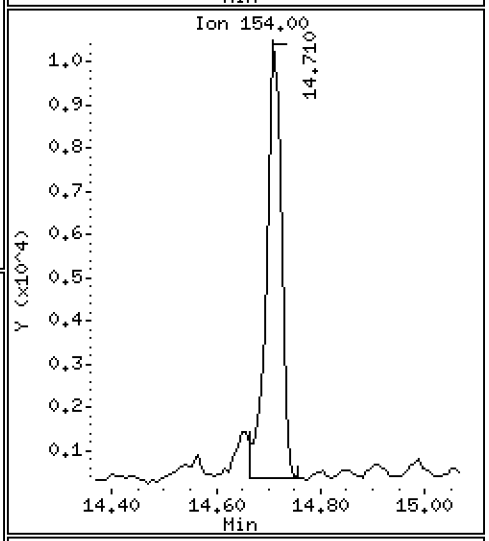


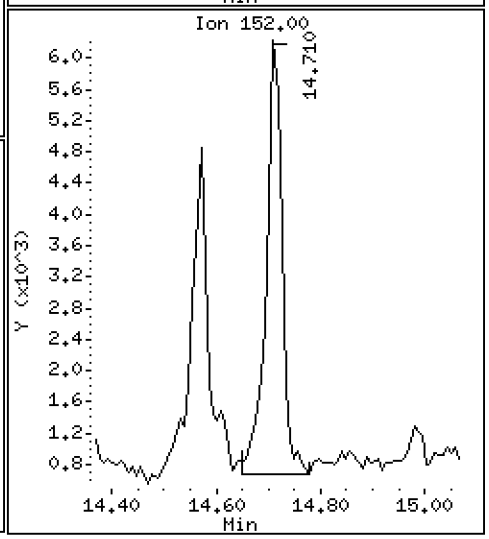












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Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

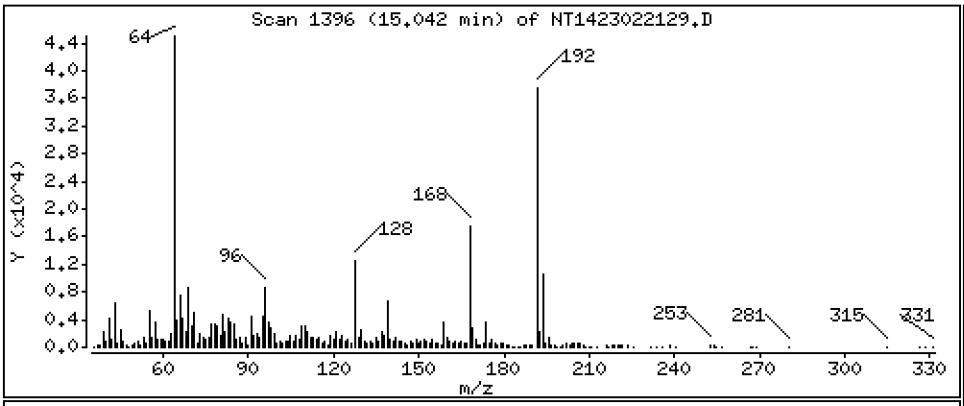
Operator: DSD

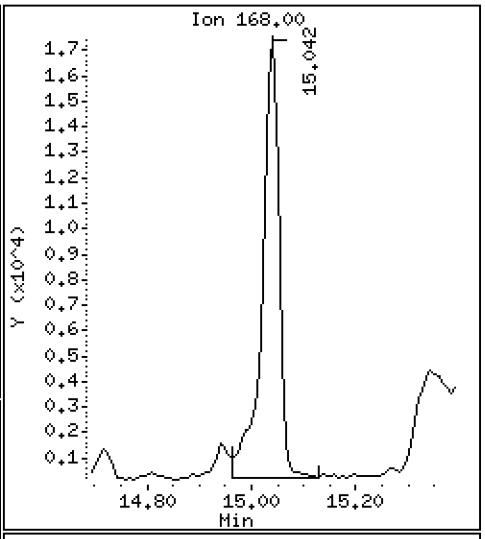
Column phase: ZB-5msi

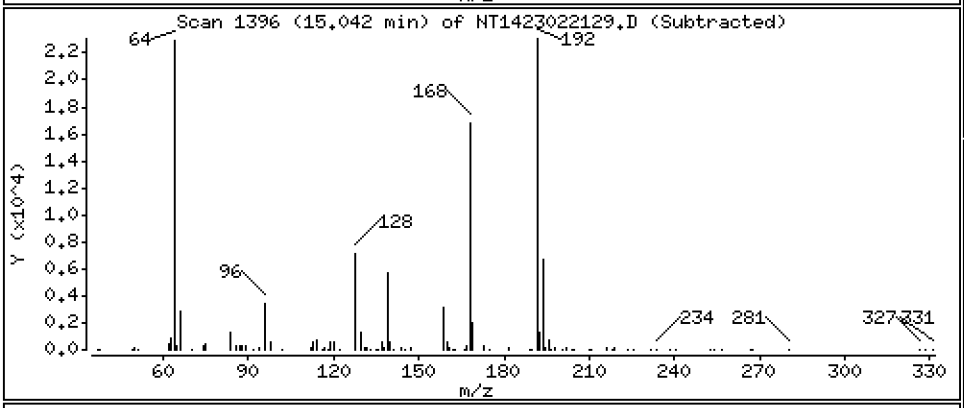
Column diameter: 0.25

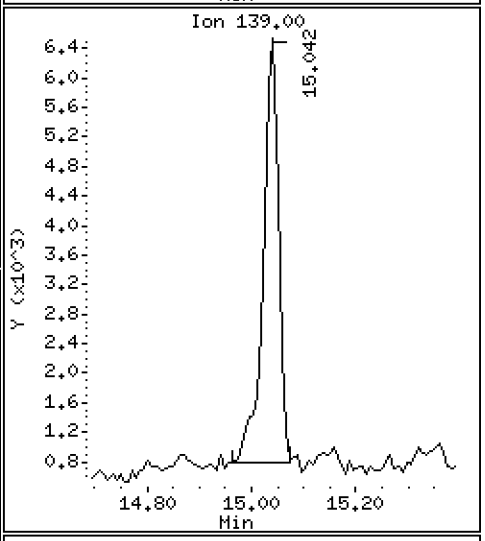
46 Dibenzofuran

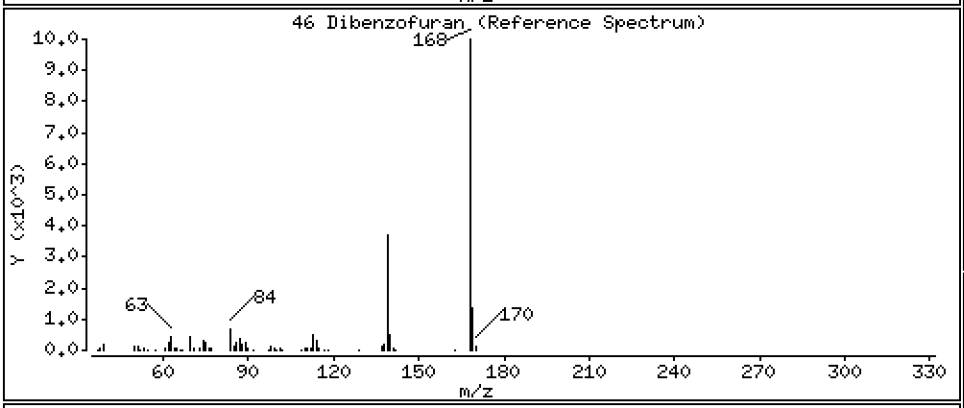
Concentration: 0.1269 ug/mL

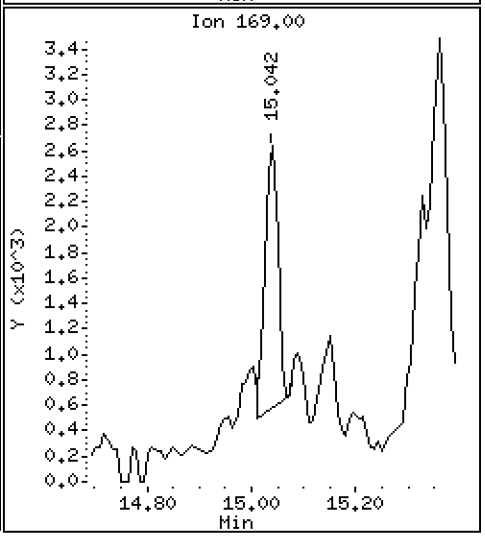


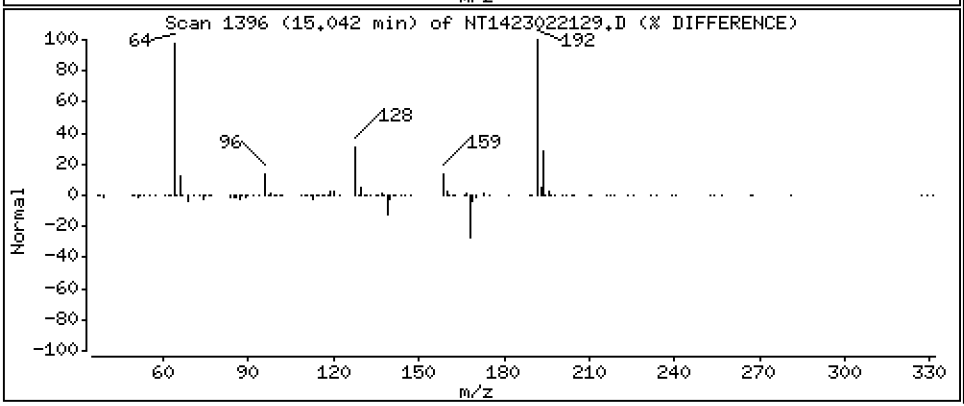












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Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

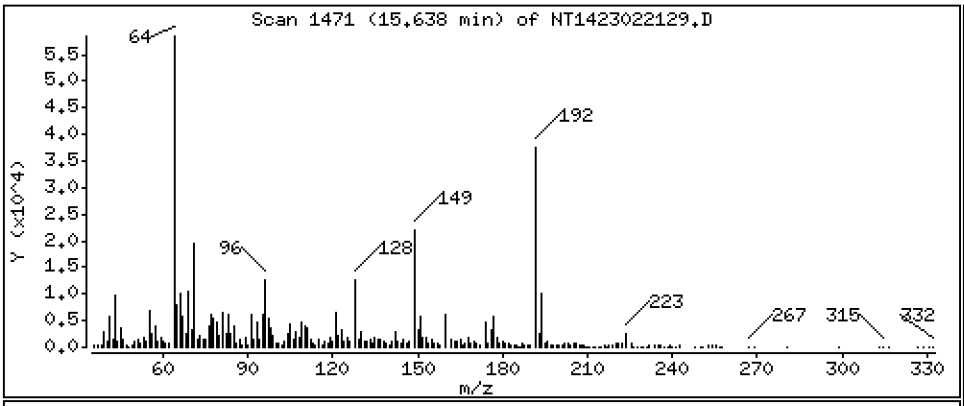
Operator: DSD

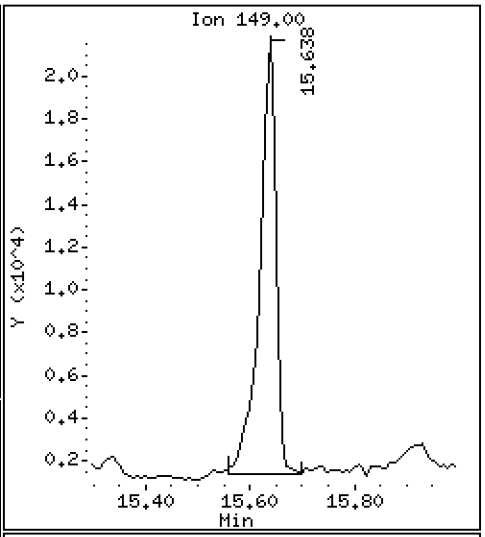
Column phase: ZB-5msi

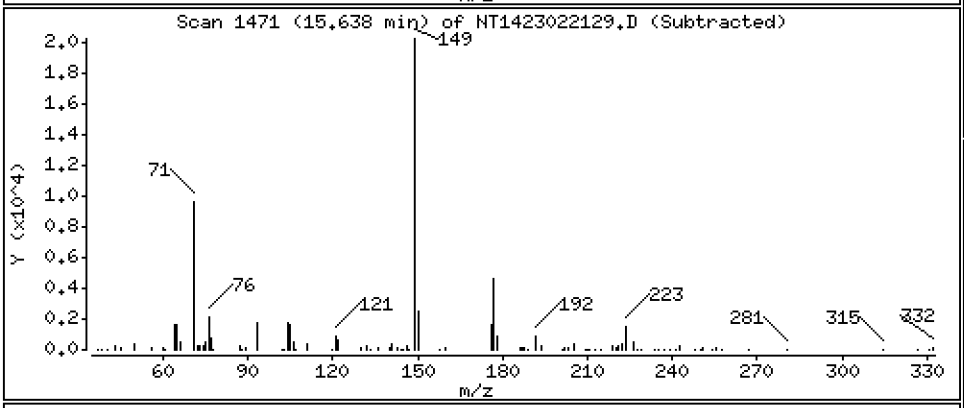
Column diameter: 0.25

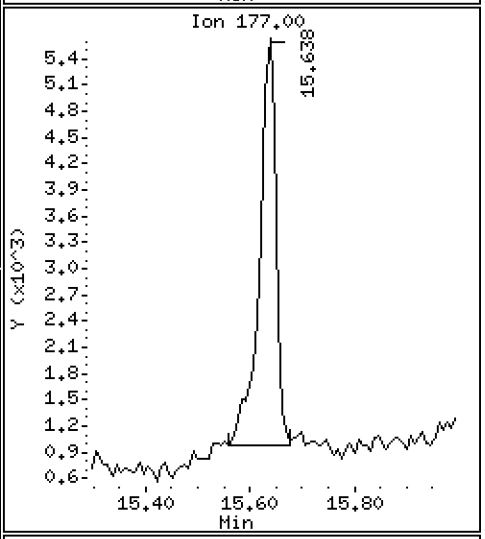
50 Diethylphthalate

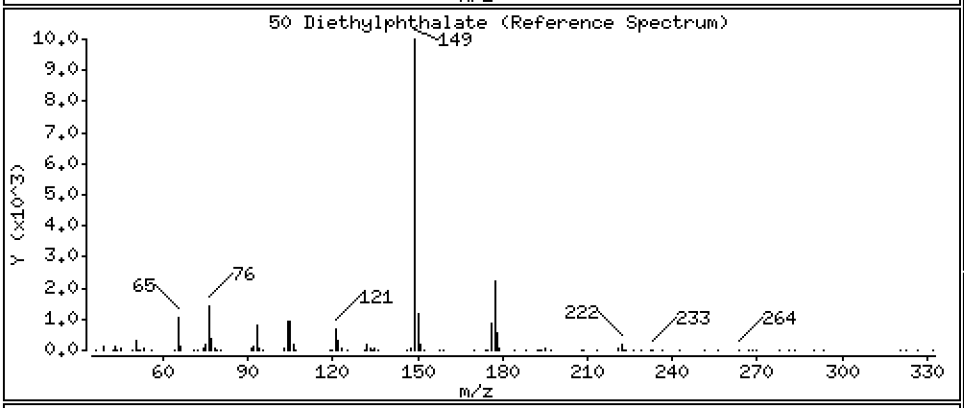
Concentration: 0.1728 ug/mL

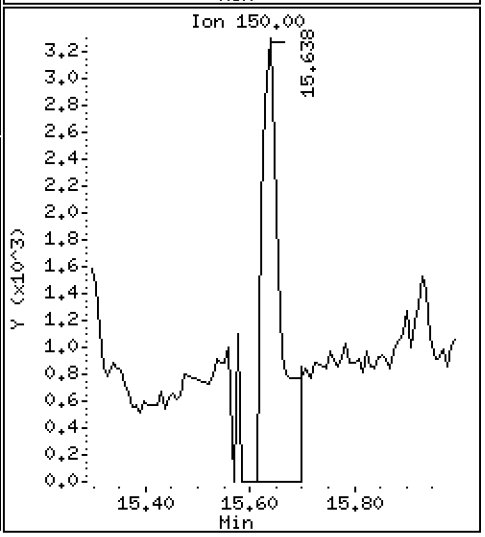


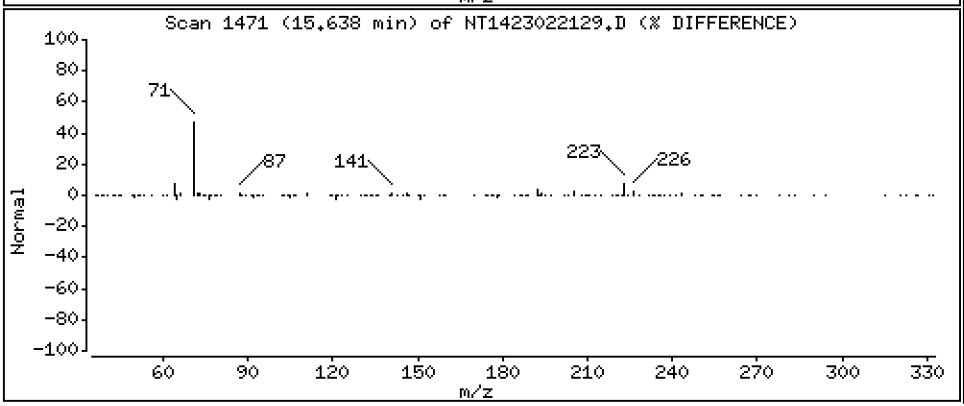












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Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

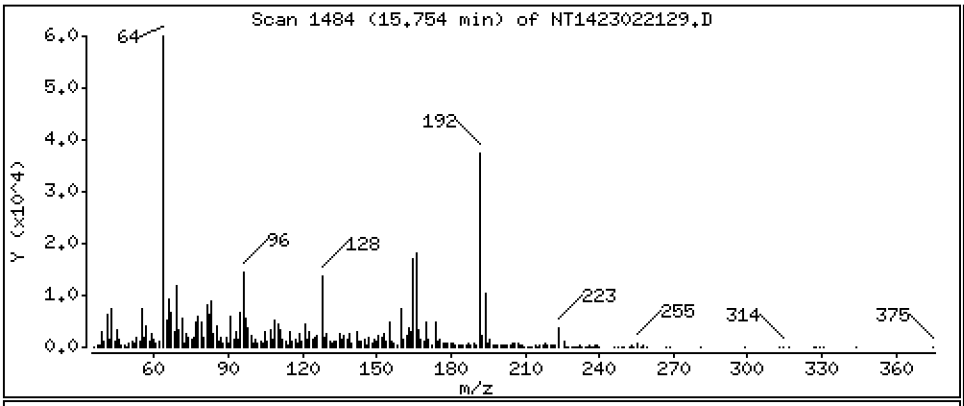
Operator: DSD

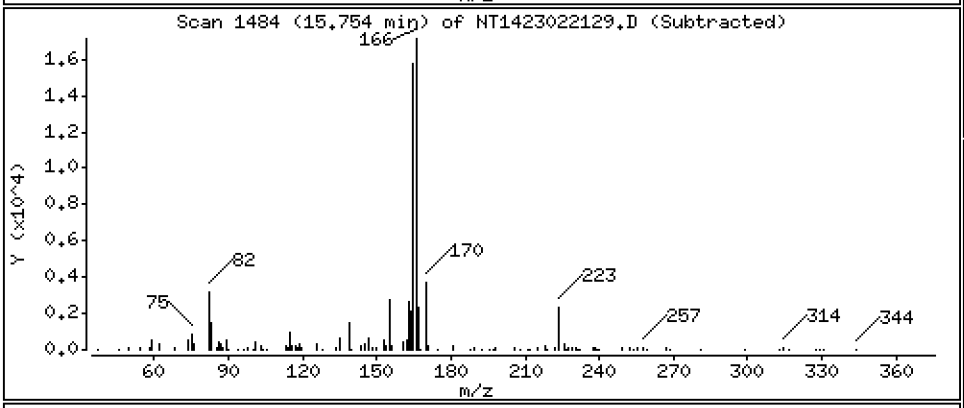
Column phase: ZB-5msi

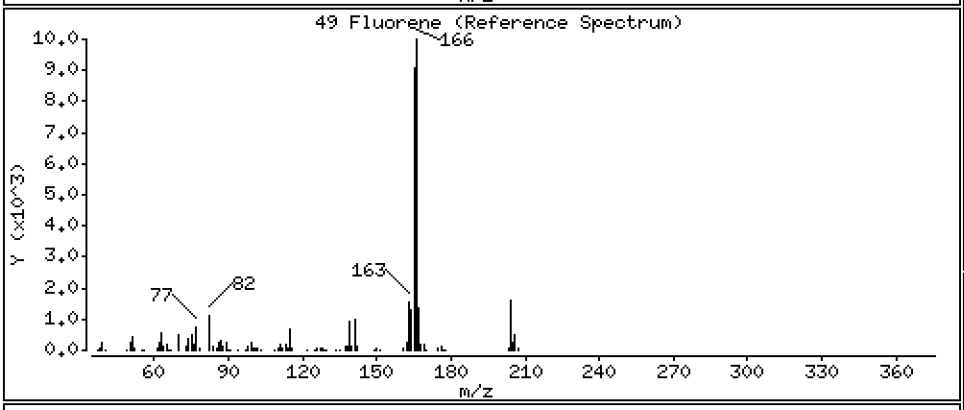
Column diameter: 0.25

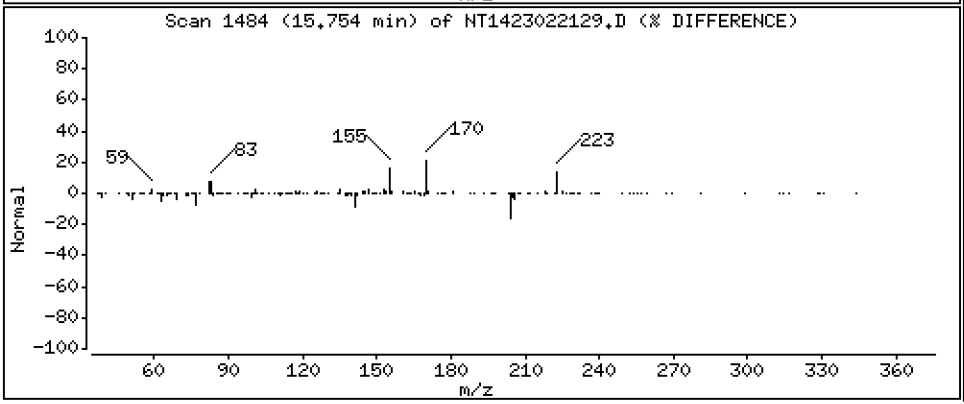
49 Fluorene

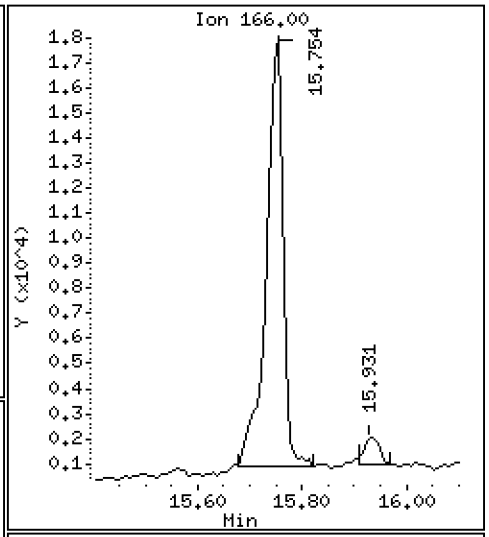
Concentration: 0.1312 ug/mL

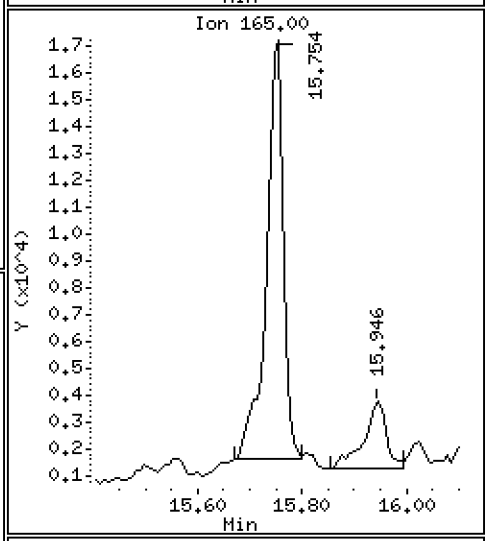


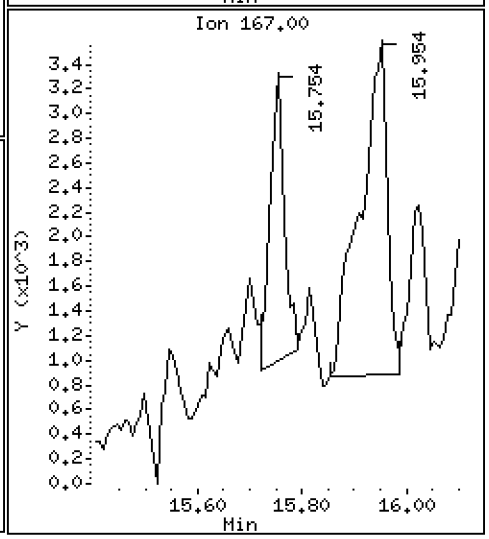












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Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

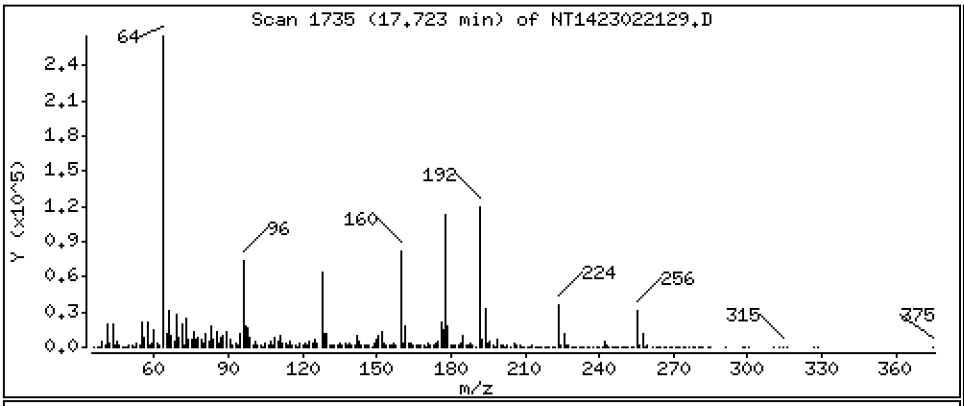
Operator: DSD

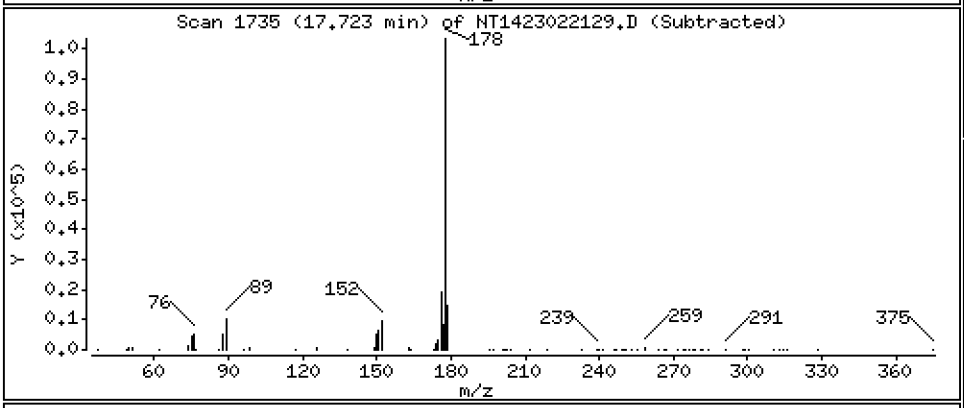
Column phase: ZB-5msi

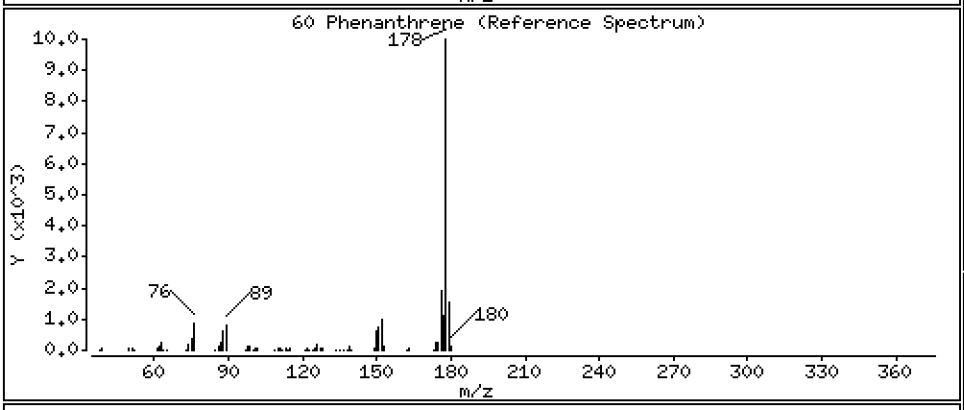
Column diameter: 0.25

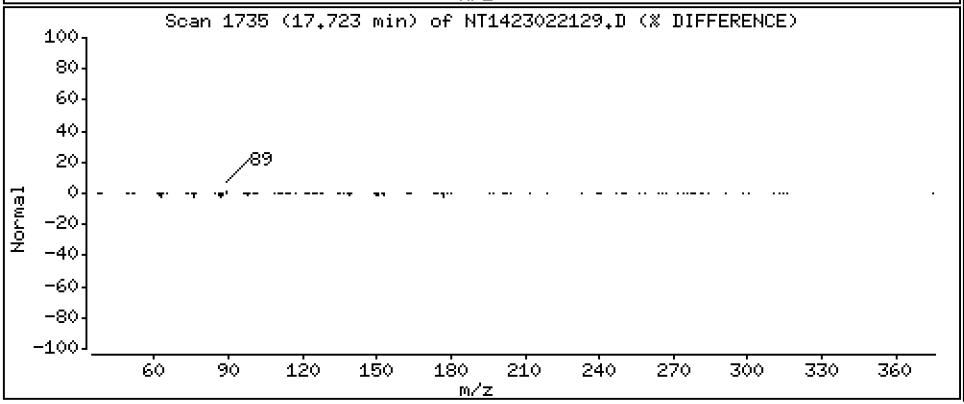
60 Phenanthrene

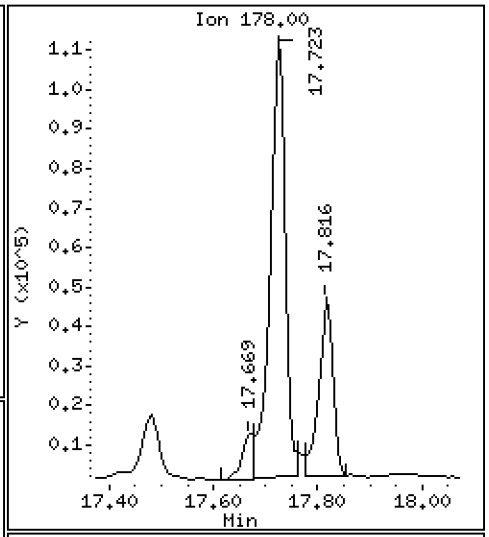
Concentration: 0.6598 ug/mL

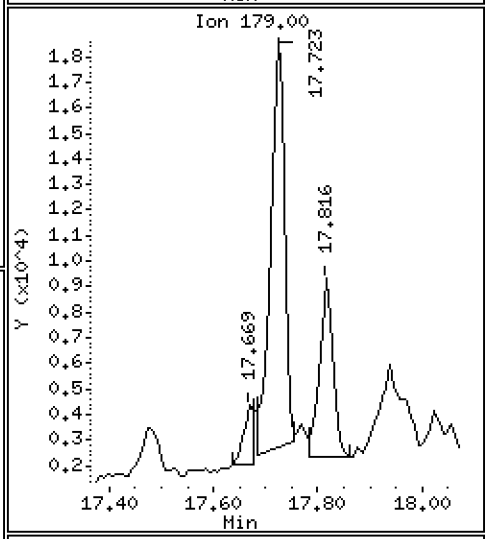


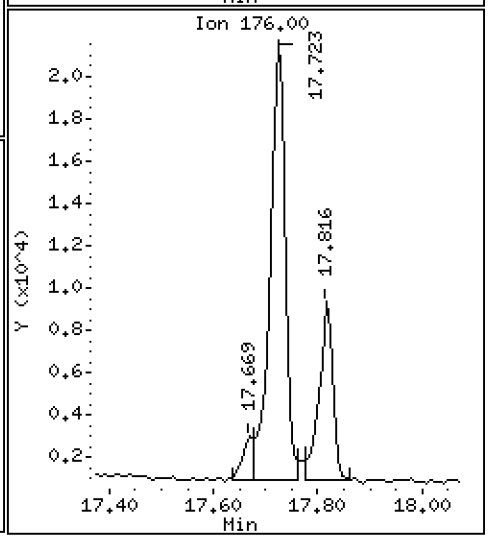












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Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

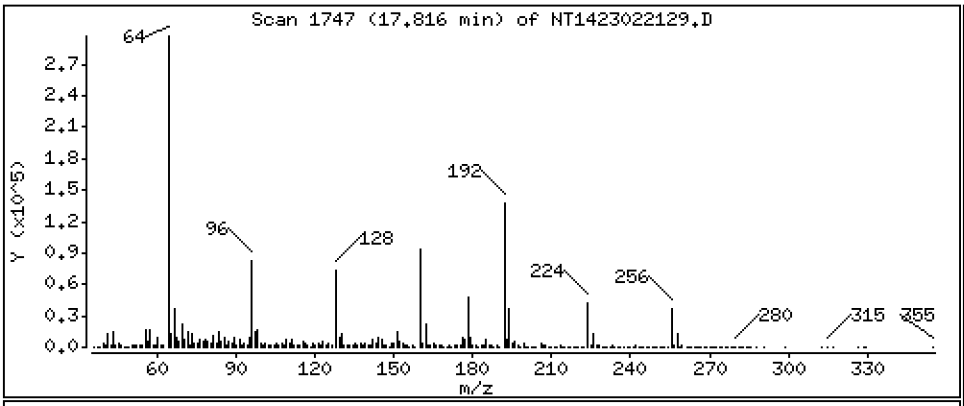
Operator: DSD

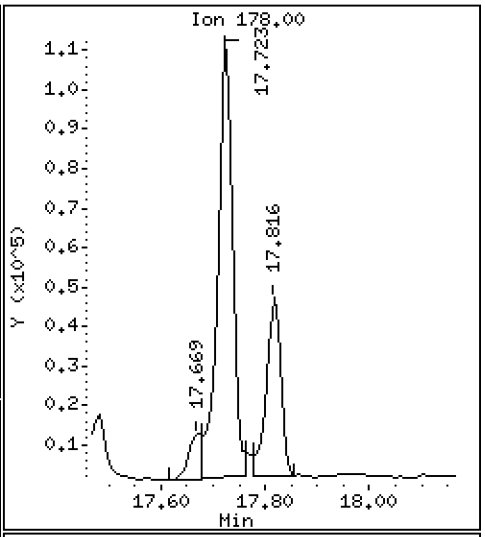
Column phase: ZB-5msi

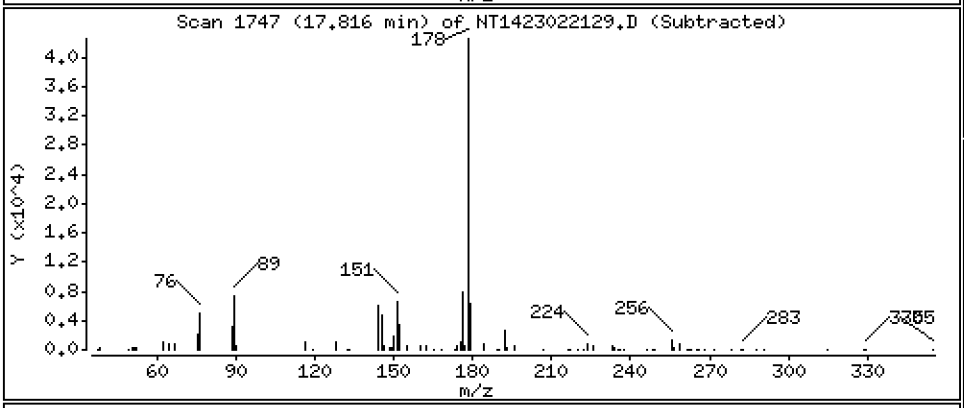
Column diameter: 0.25

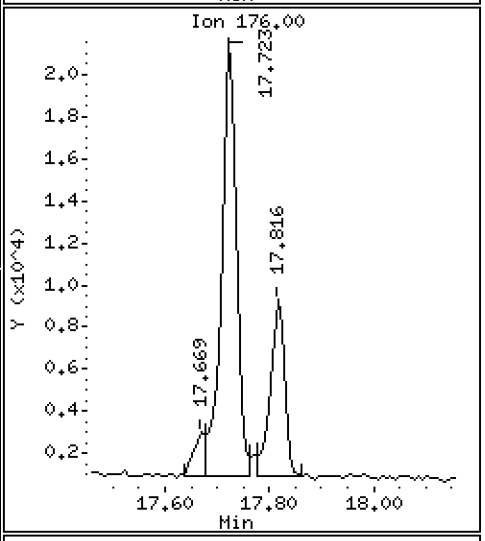
61 Anthracene

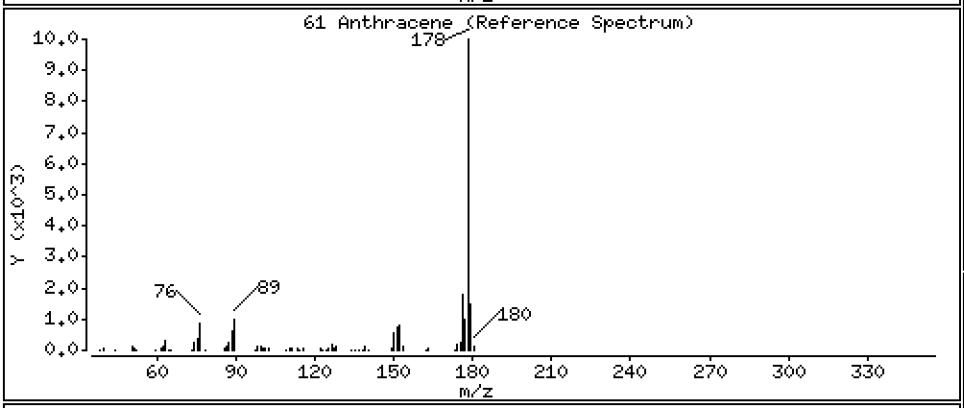
Concentration: 0.2603 ug/mL

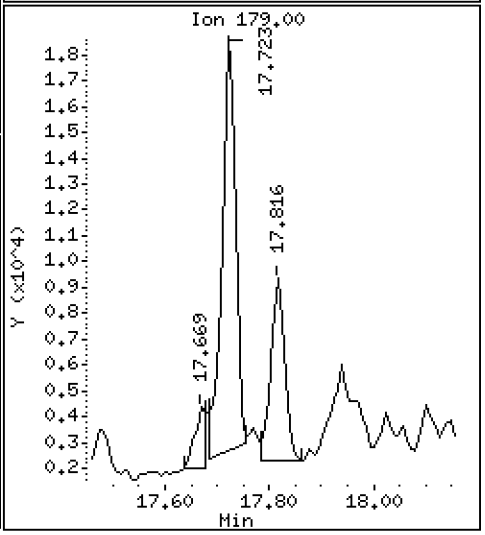


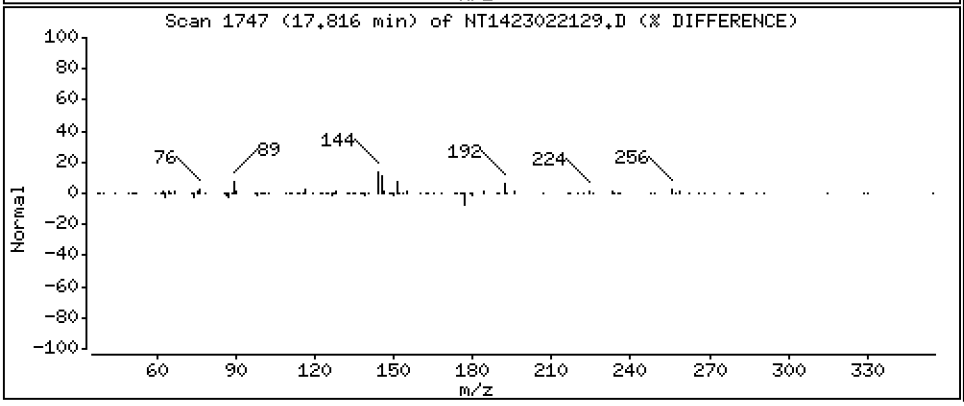












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Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

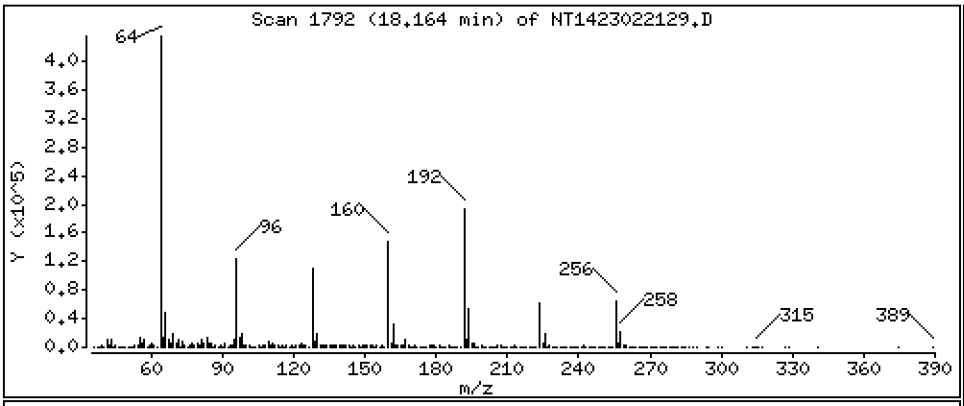
Operator: DSD

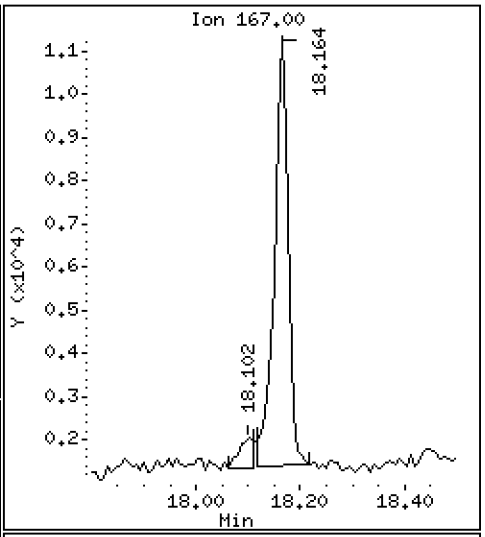
Column phase: ZB-5msi

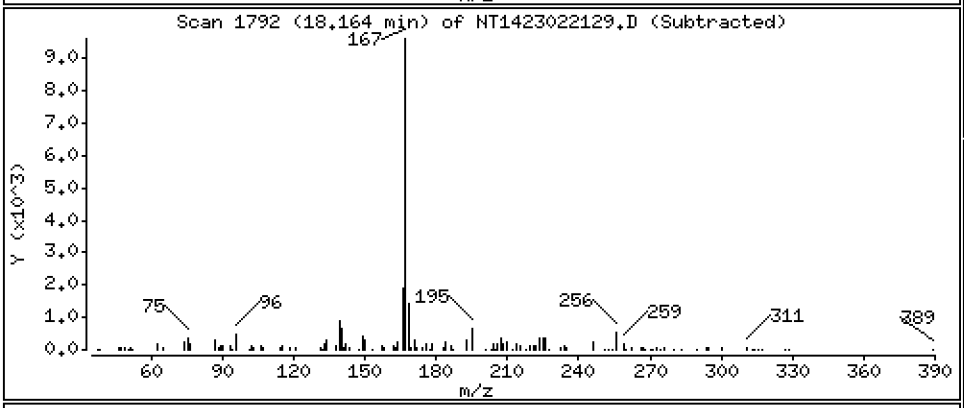
Column diameter: 0.25

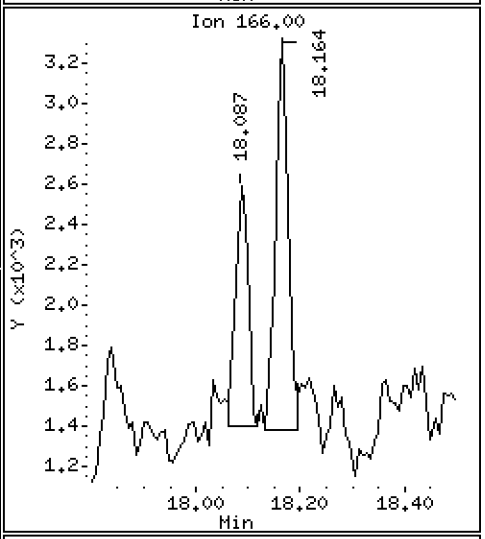
62 Carbazole

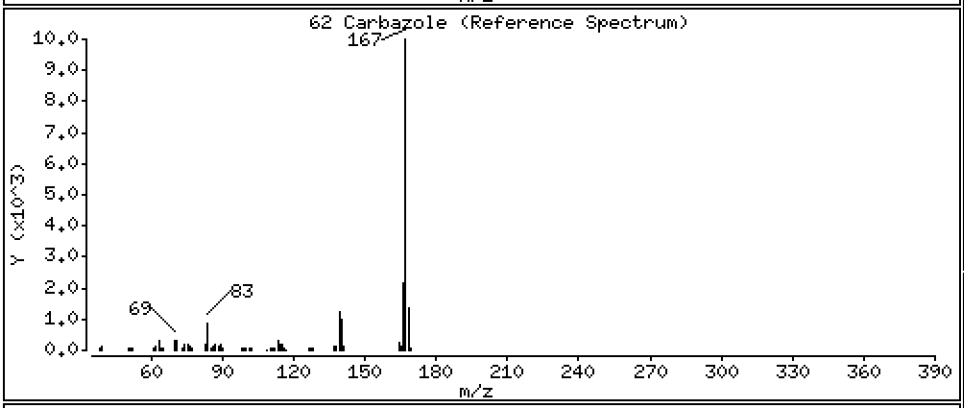
Concentration: 0.06355 ug/mL

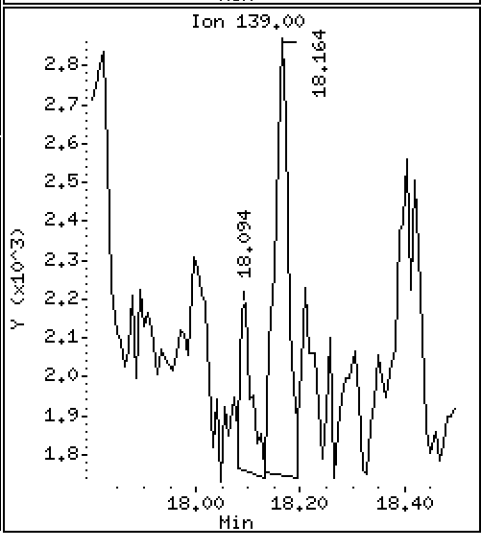


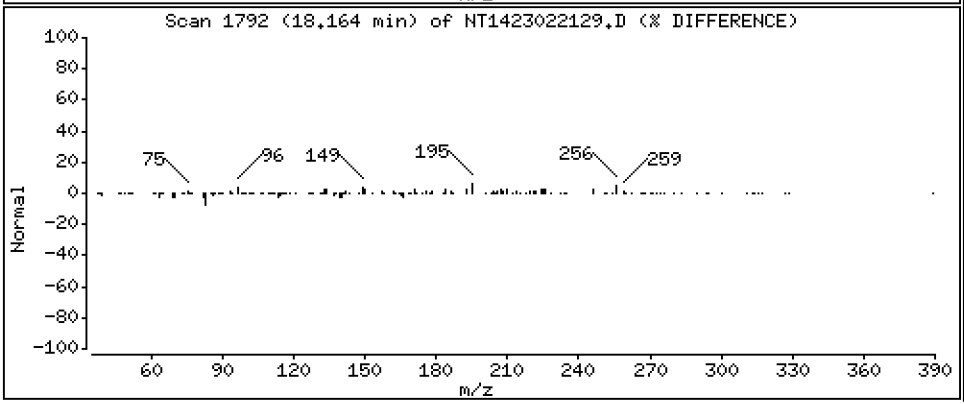












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Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

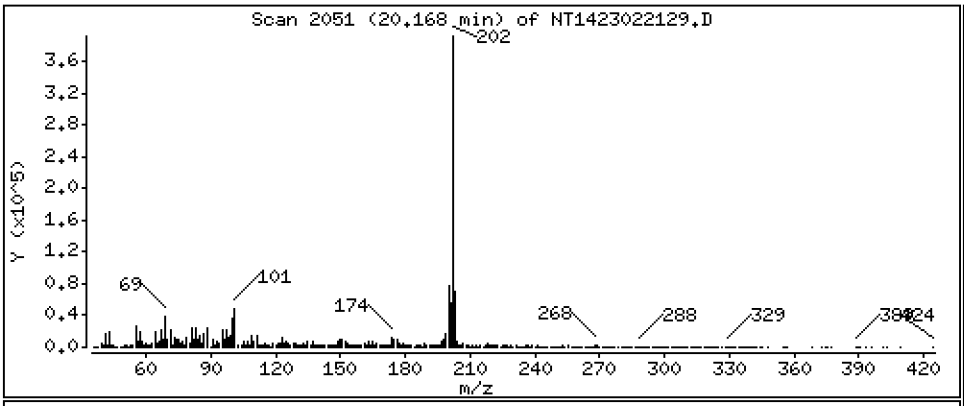
Operator: DSD

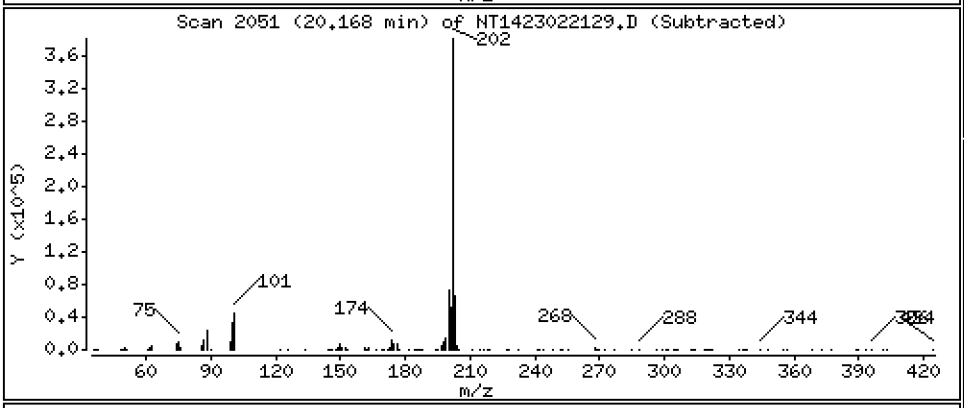
Column phase: ZB-5msi

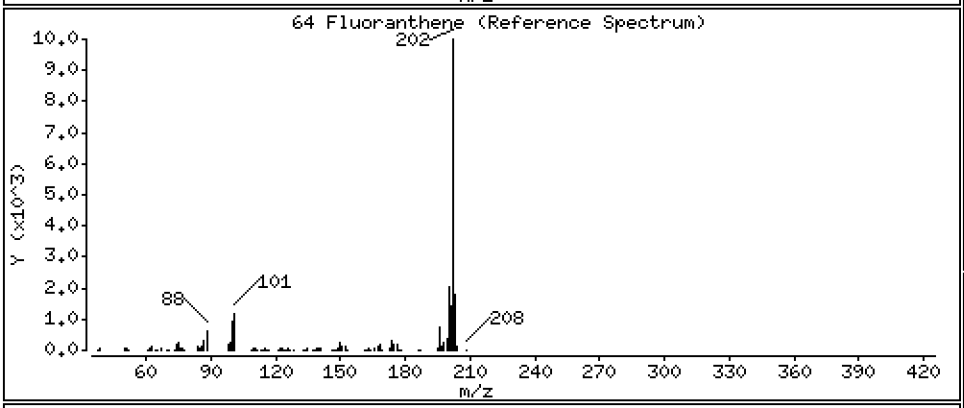
Column diameter: 0.25

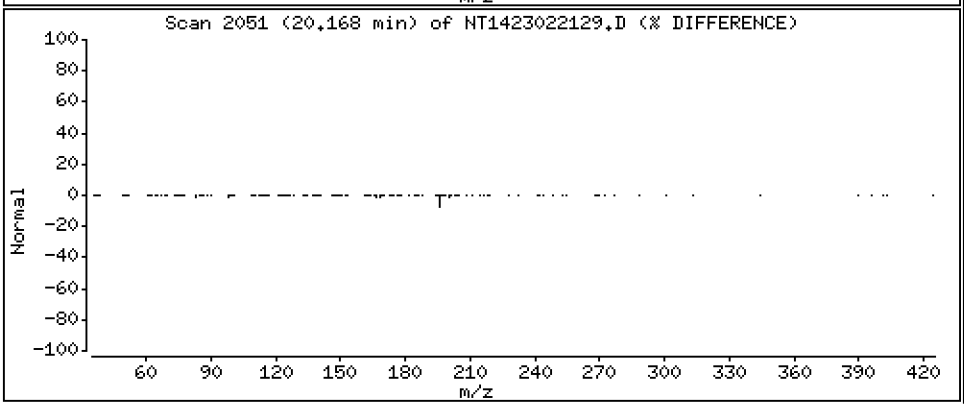
64 Fluoranthene

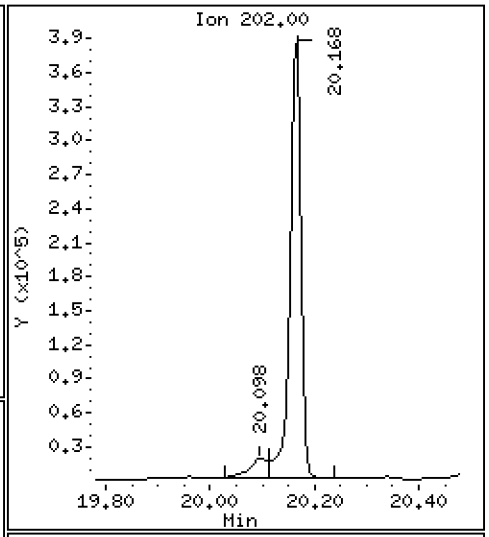
Concentration: 1.621 ug/mL

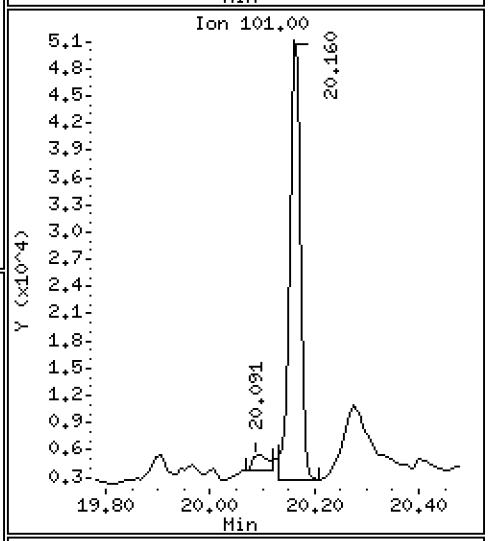


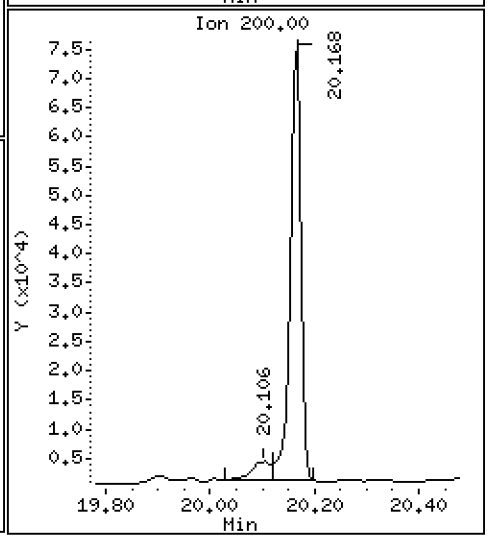












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Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

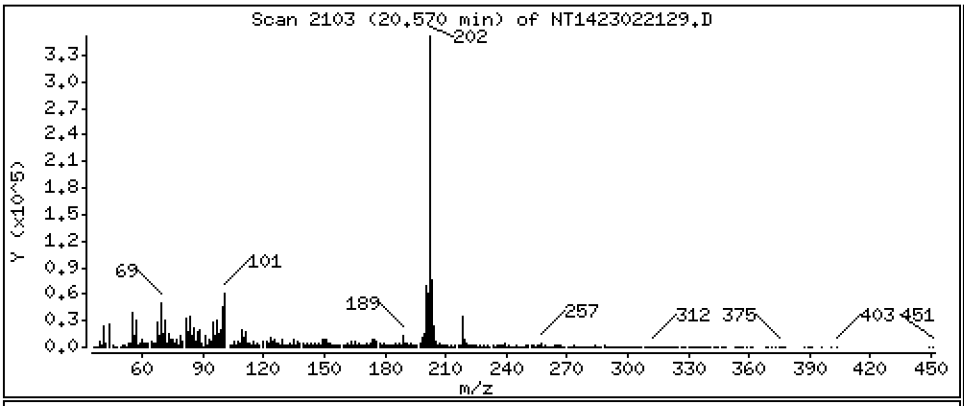
Operator: DSD

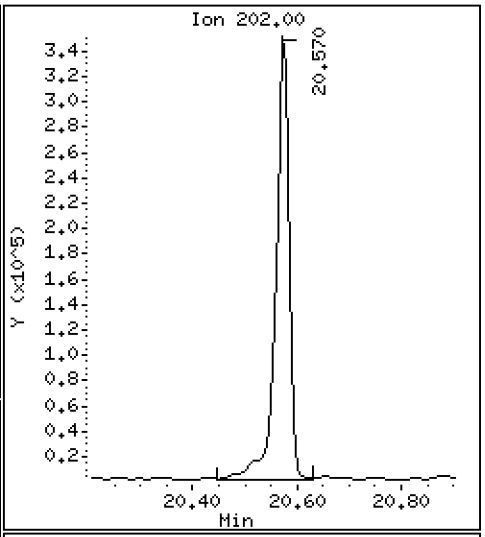
Column phase: ZB-5msi

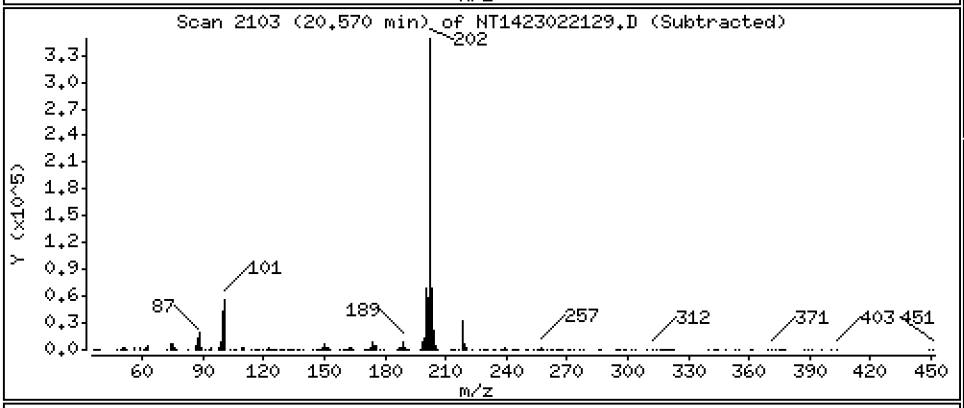
Column diameter: 0.25

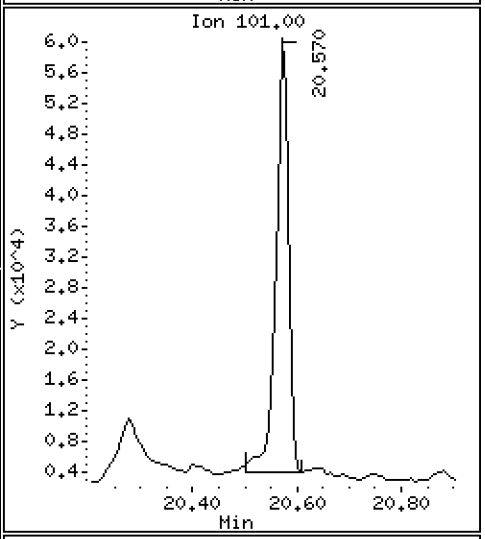
65 Pyrene

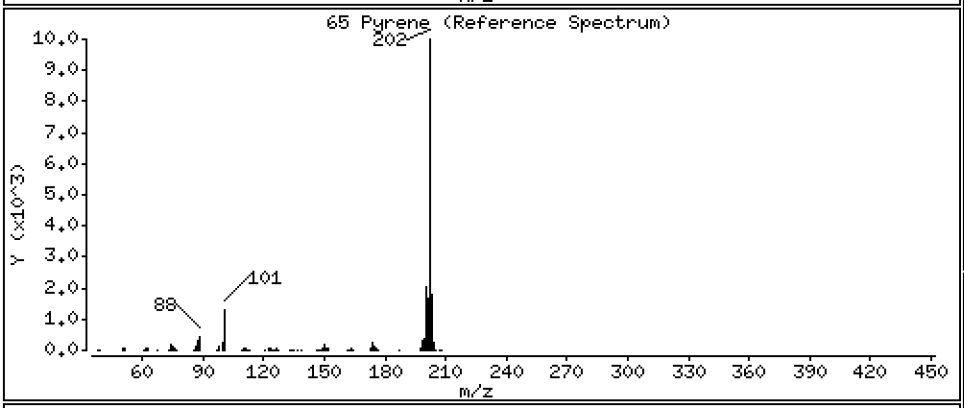
Concentration: 1.573 ug/mL

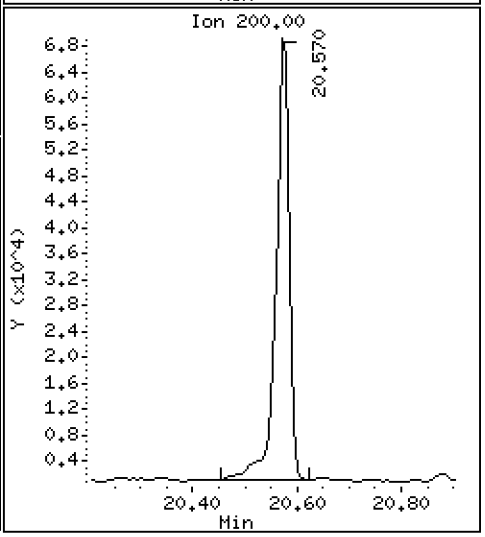


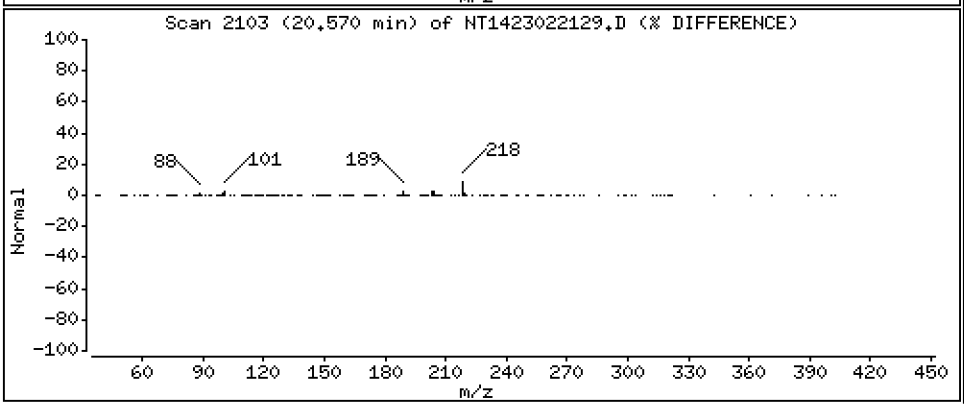












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Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

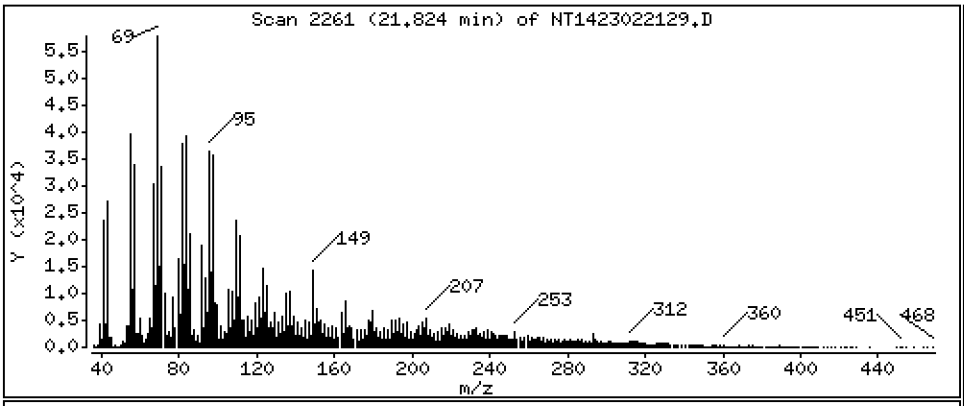
Operator: DSD

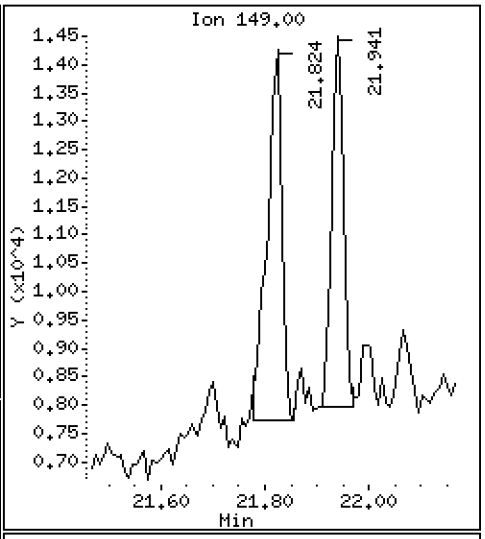
Column phase: ZB-5msi

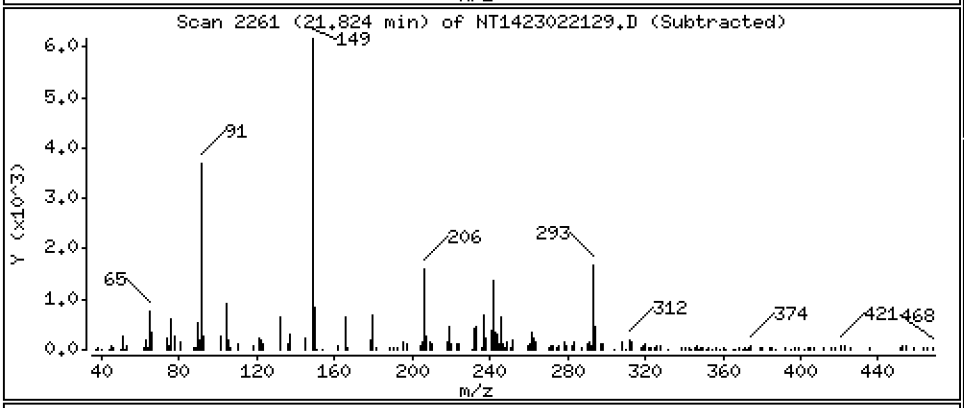
Column diameter: 0.25

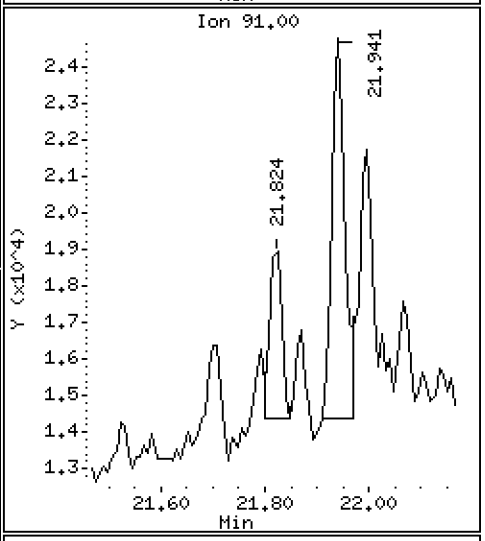
67 Butylbenzylphthalate

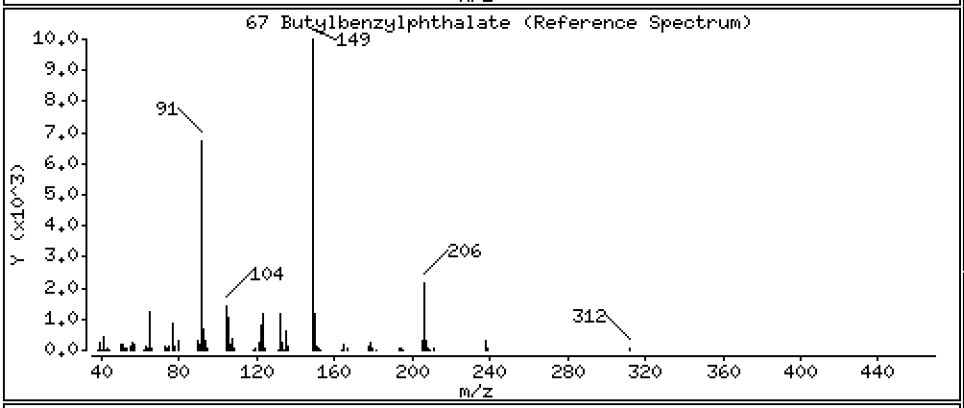
Concentration: 0.09652 ug/mL

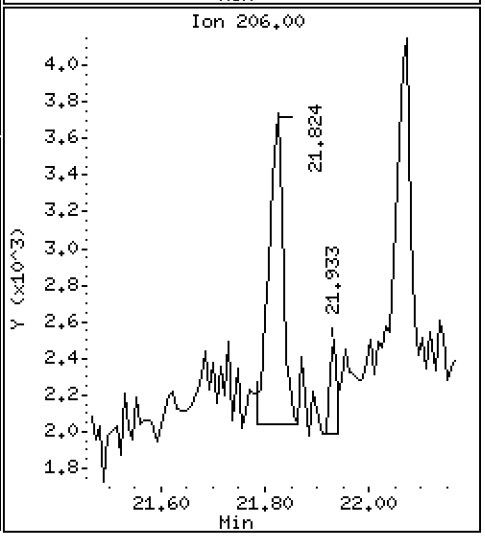


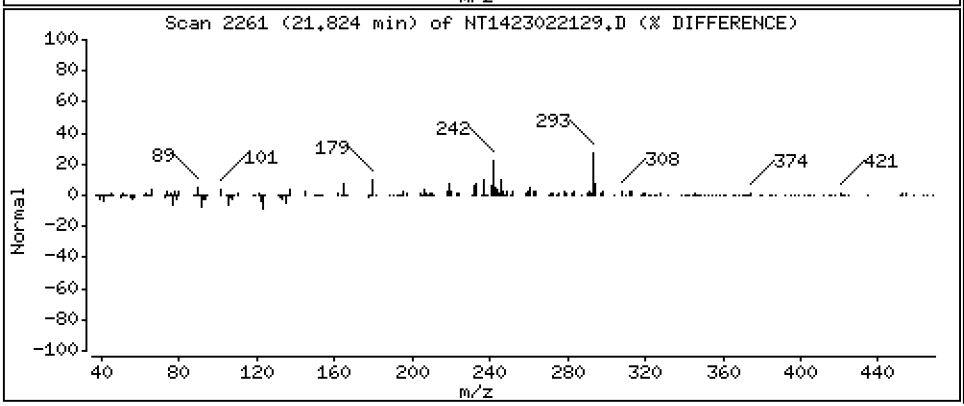












Date : 22-FEB-2023 06:19

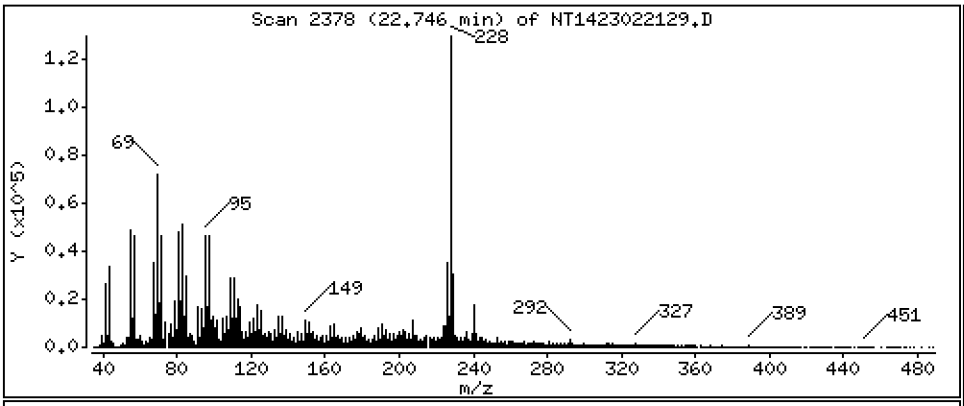
Client ID: Instrument: nt14.i

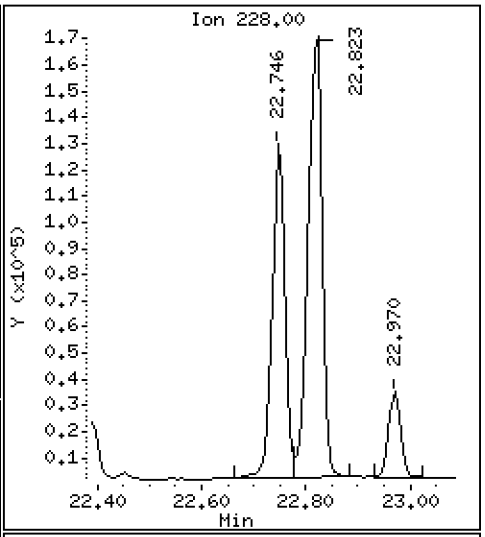
Sample Info: 23A0171-04RE1

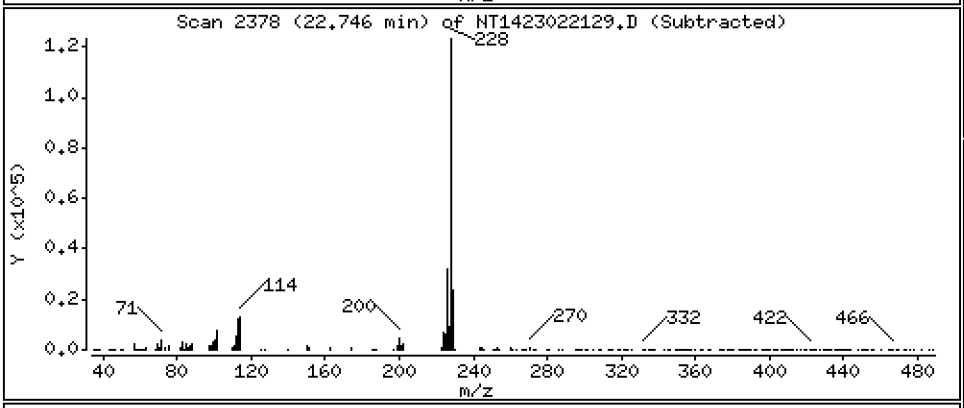
Operator: DSD

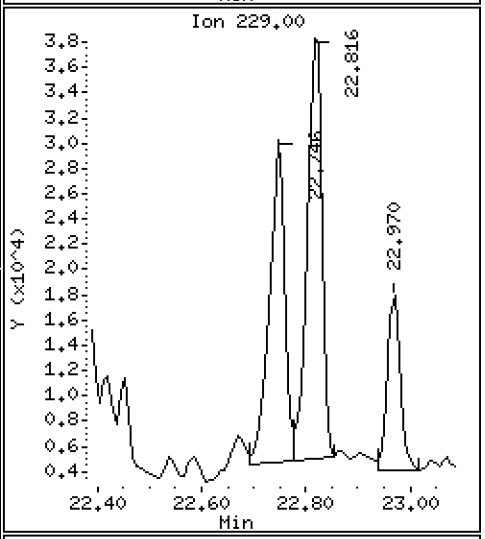
Column phase: ZB-5msi Column diameter: 0.25

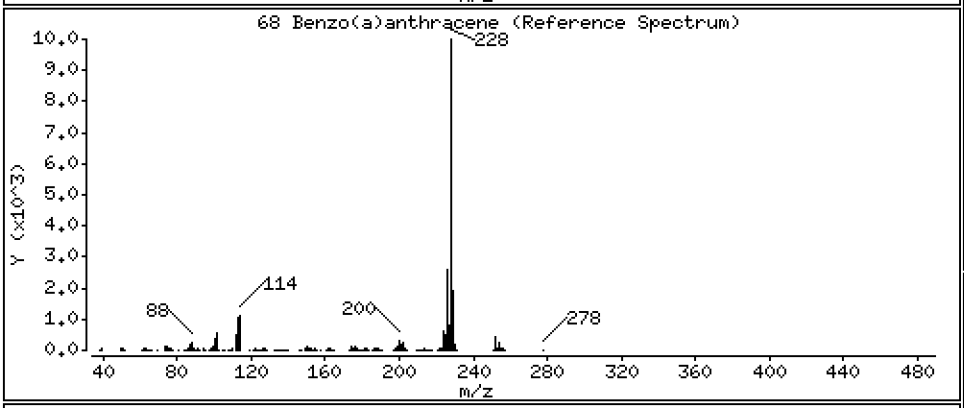
68 Benzo(a)anthracene Concentration: 0.7823 ug/mL

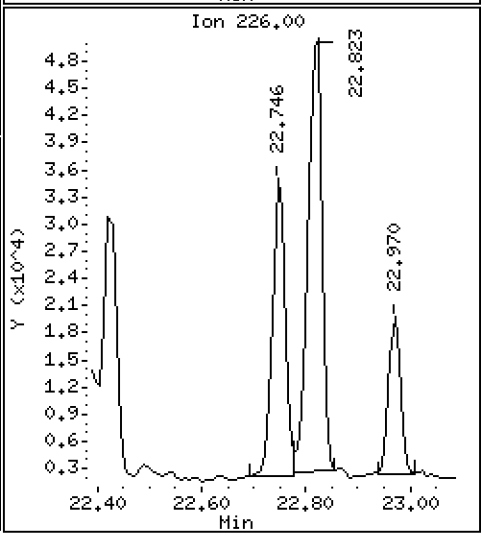


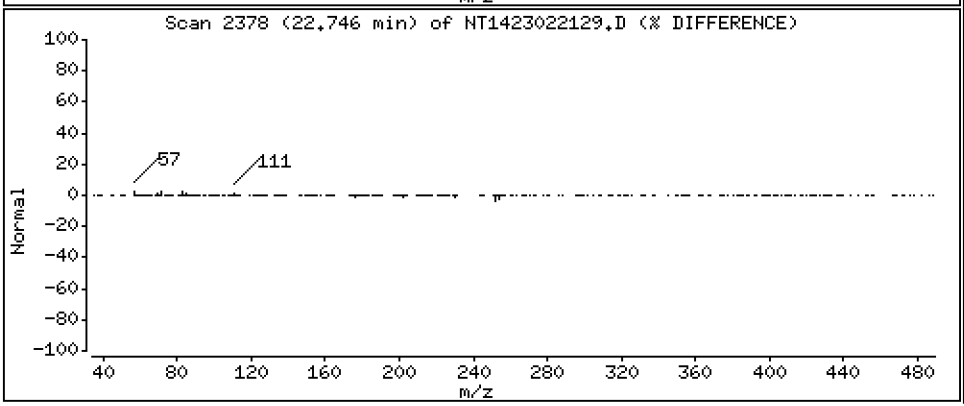












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Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

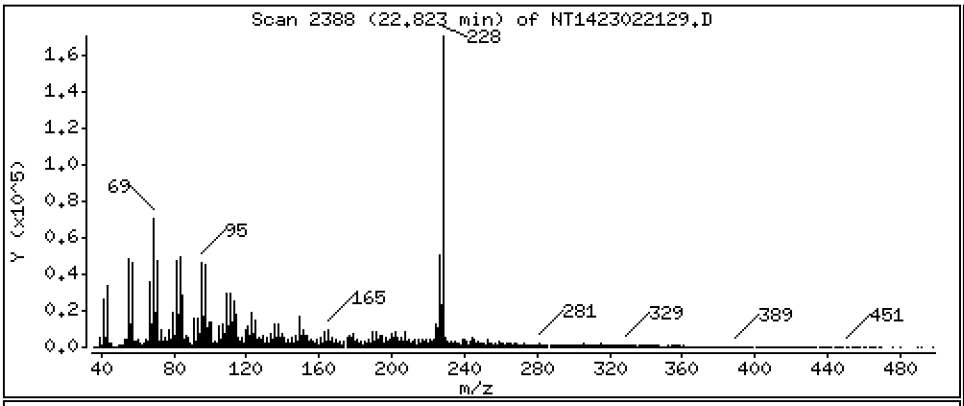
Operator: DSD

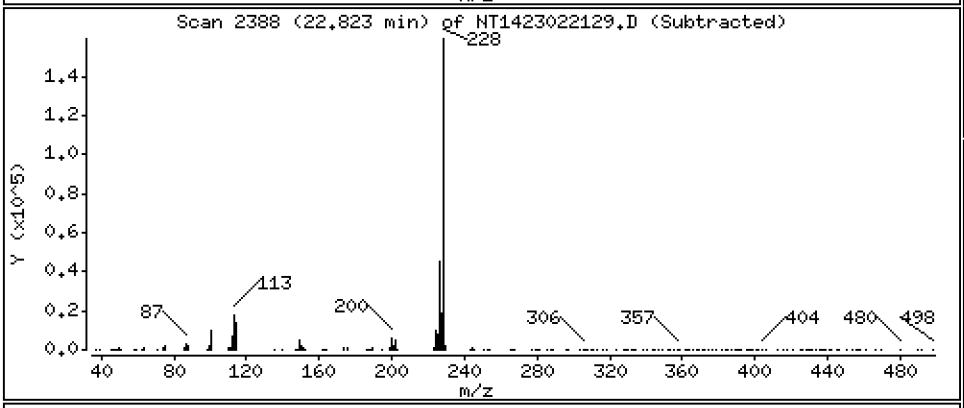
Column phase: ZB-5msi

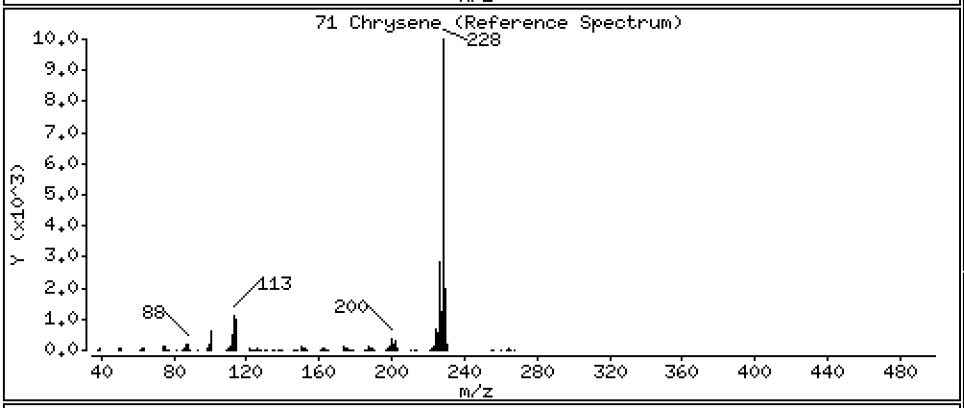
Column diameter: 0.25

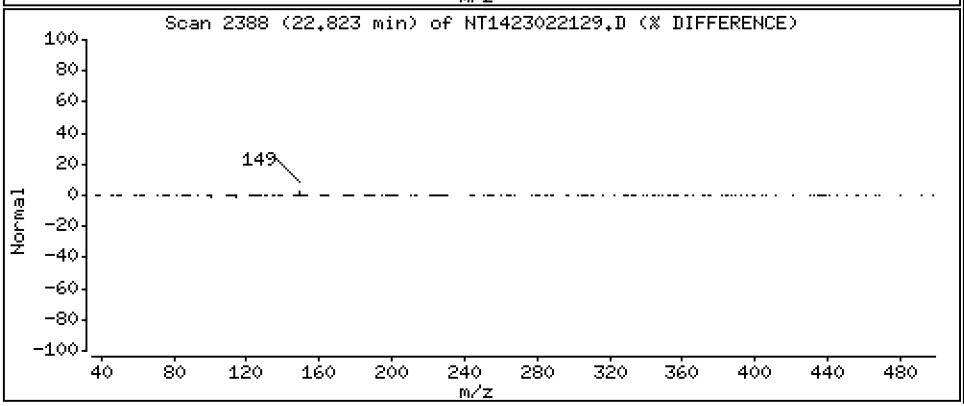
71 Chrysene

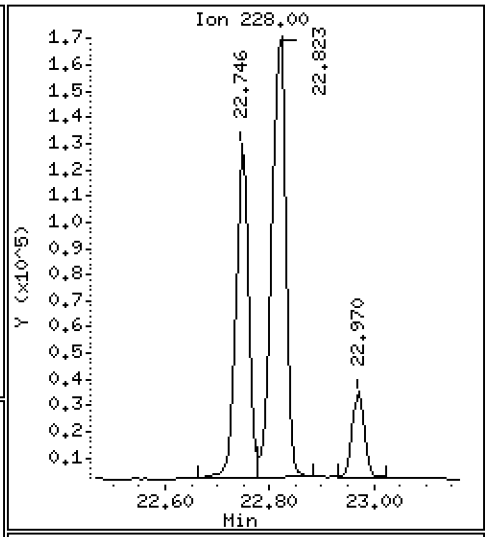
Concentration: 1.237 ug/mL

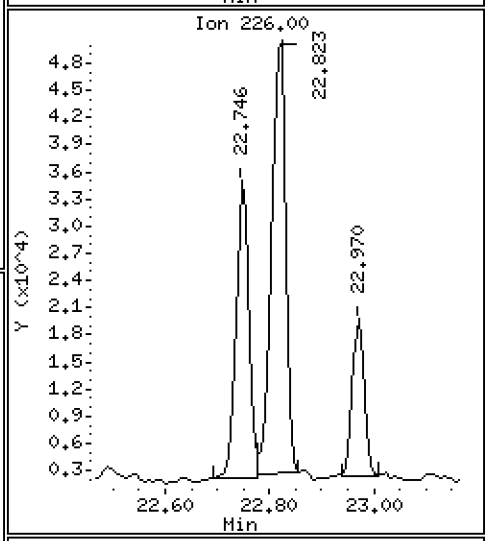


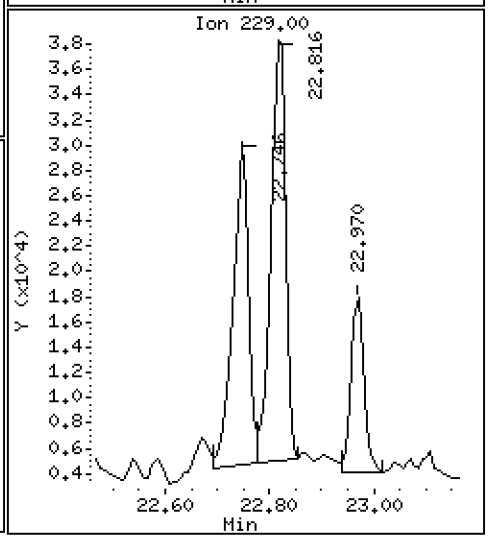












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Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

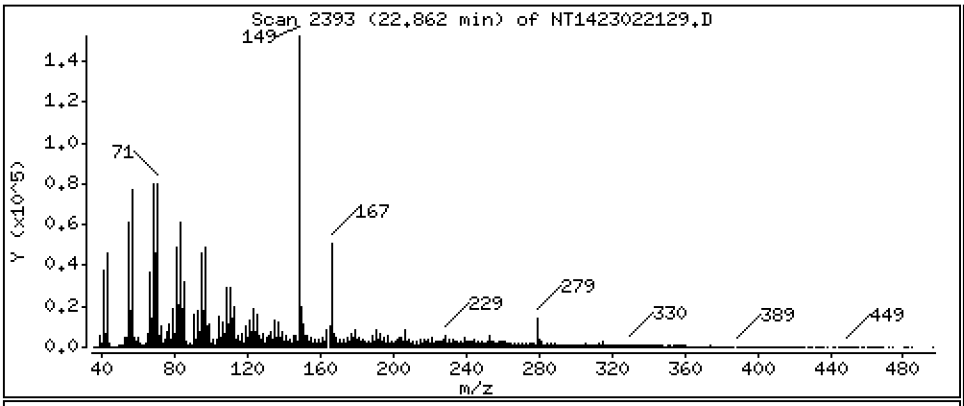
Operator: DSD

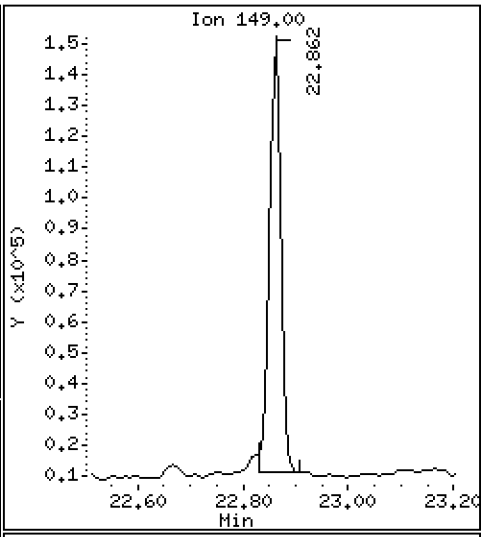
Column phase: ZB-5msi

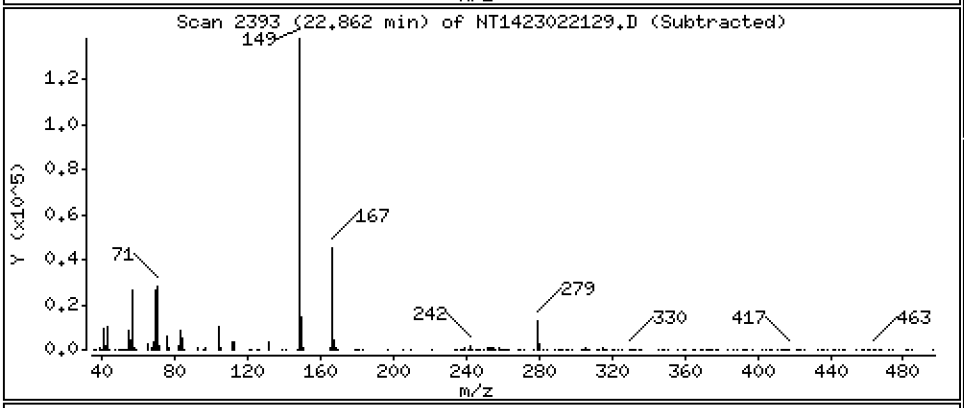
Column diameter: 0.25

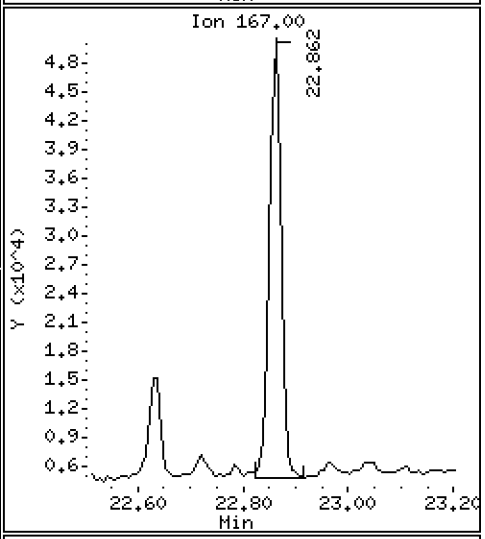
72 bis(2-Ethylhexyl)phthalate

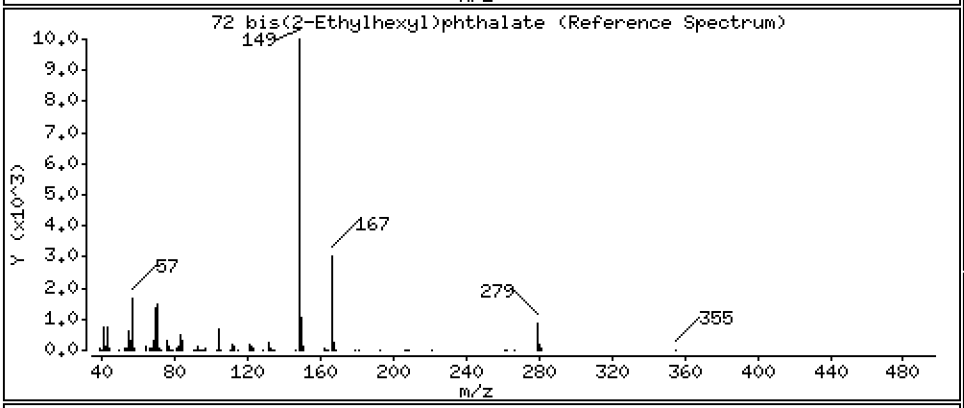
Concentration: 0.9096 ug/mL

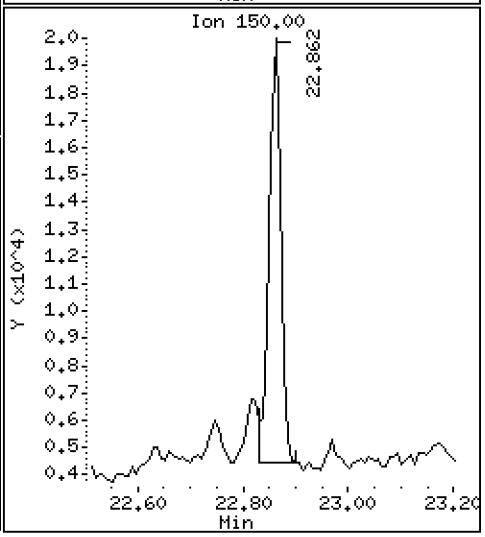


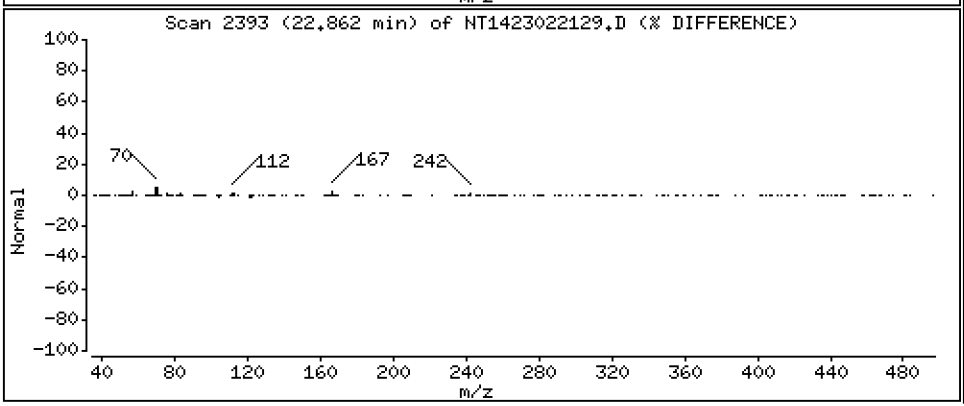












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Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

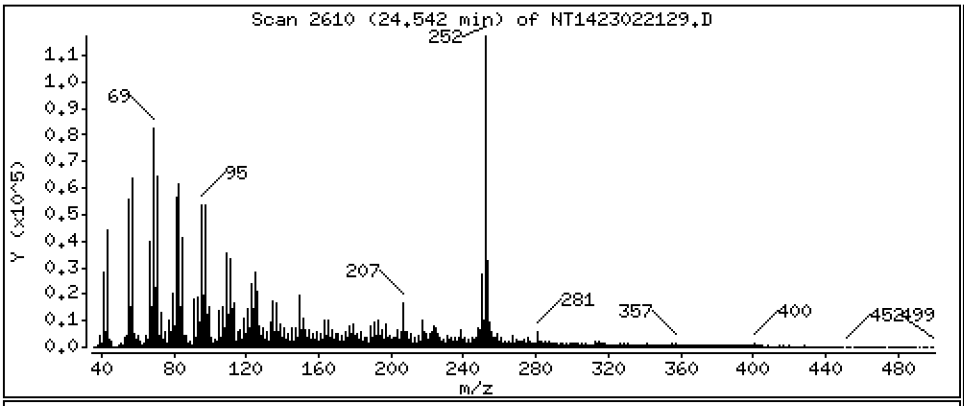
Operator: DSD

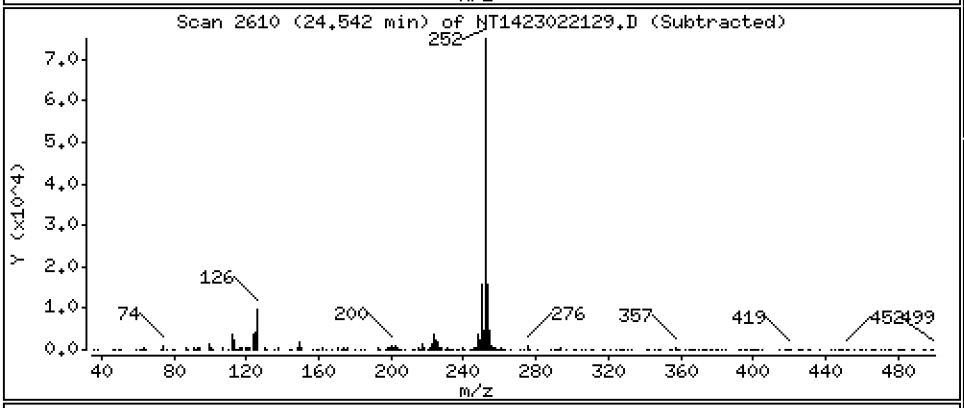
Column phase: ZB-5msi

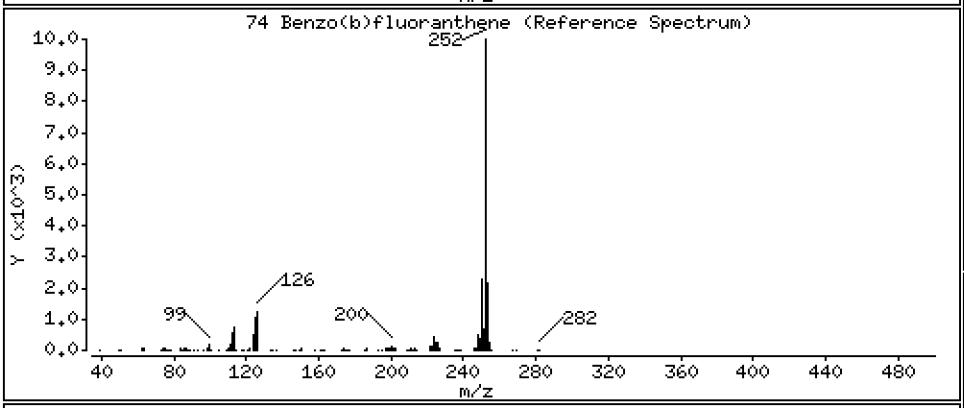
Column diameter: 0.25

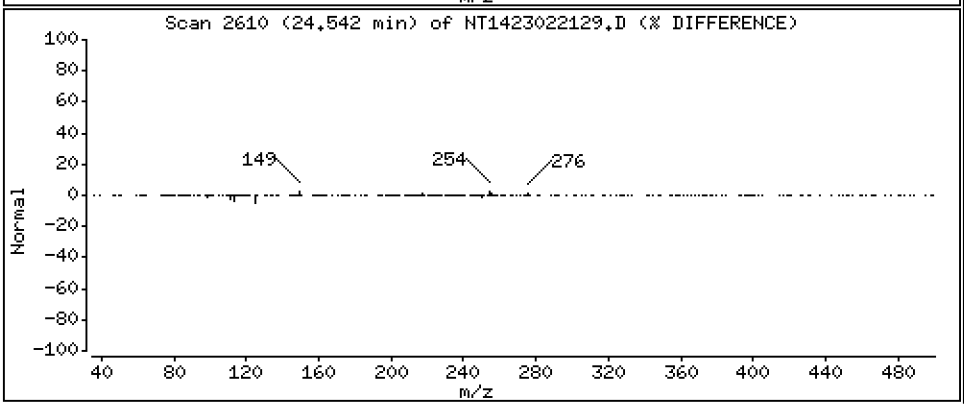
74 Benzo(b)fluoranthene

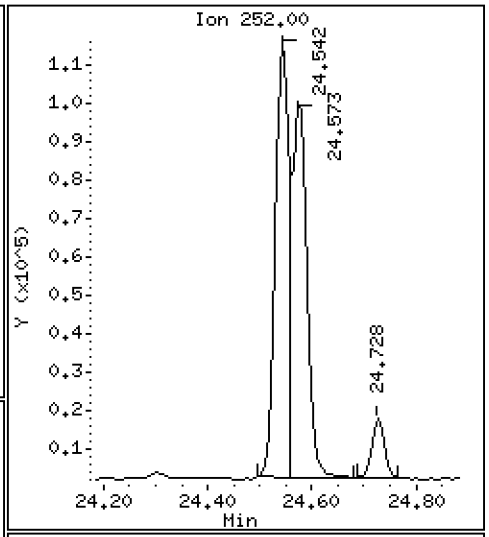
Concentration: 0.9490 ug/mL

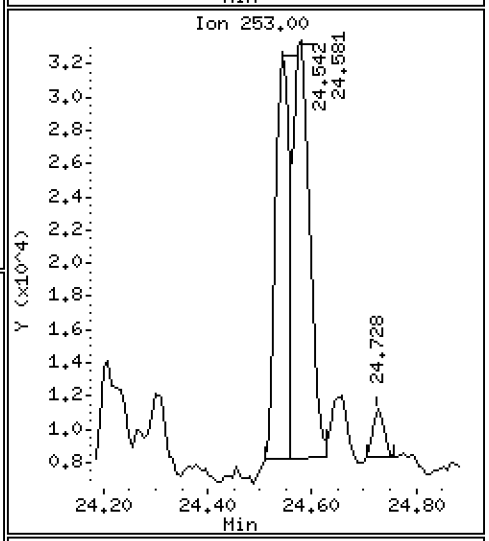


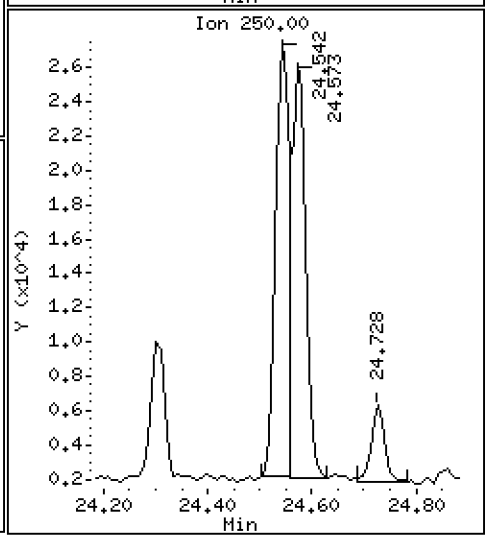












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Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

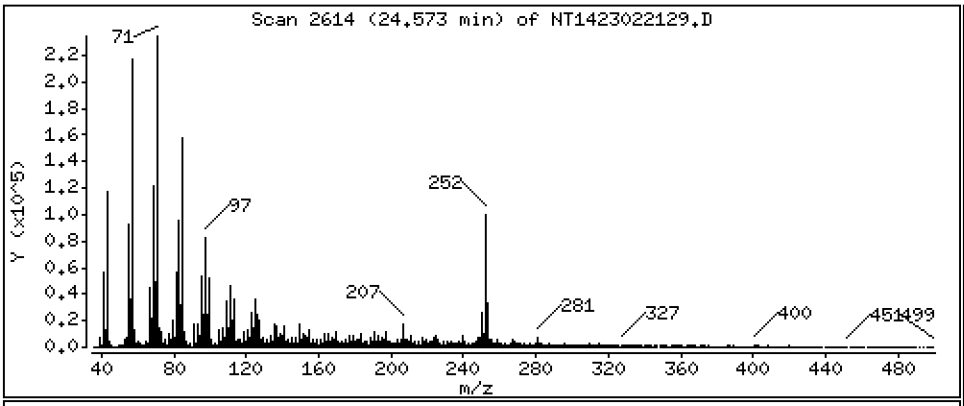
Operator: DSD

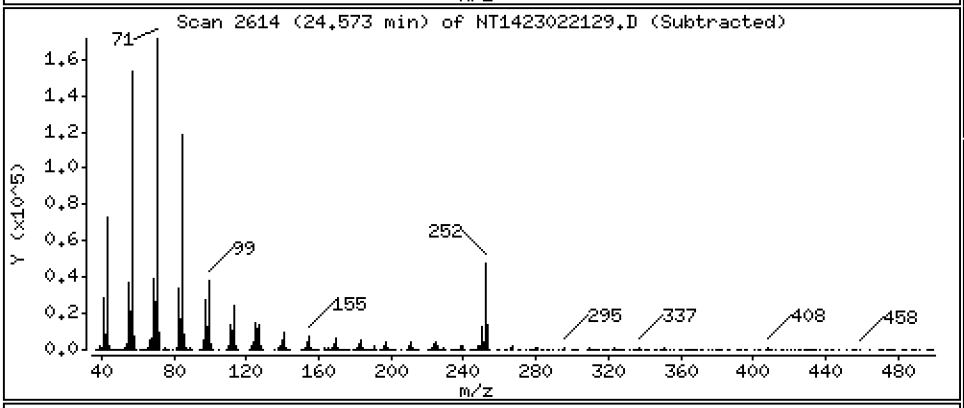
Column phase: ZB-5msi

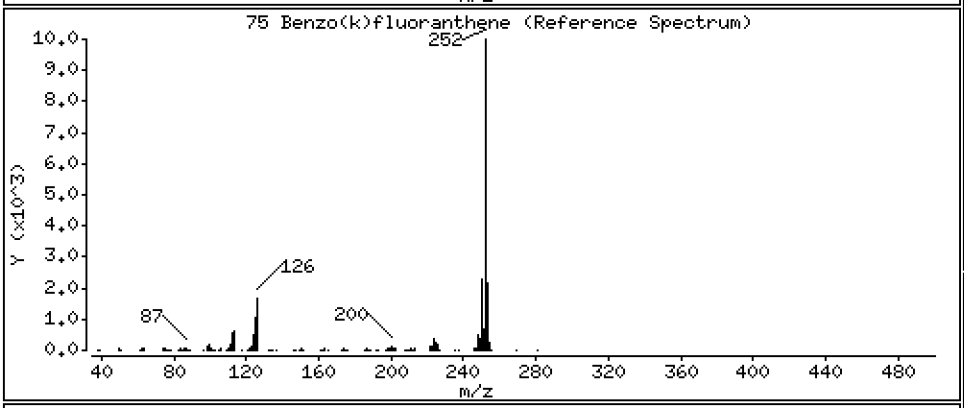
Column diameter: 0.25

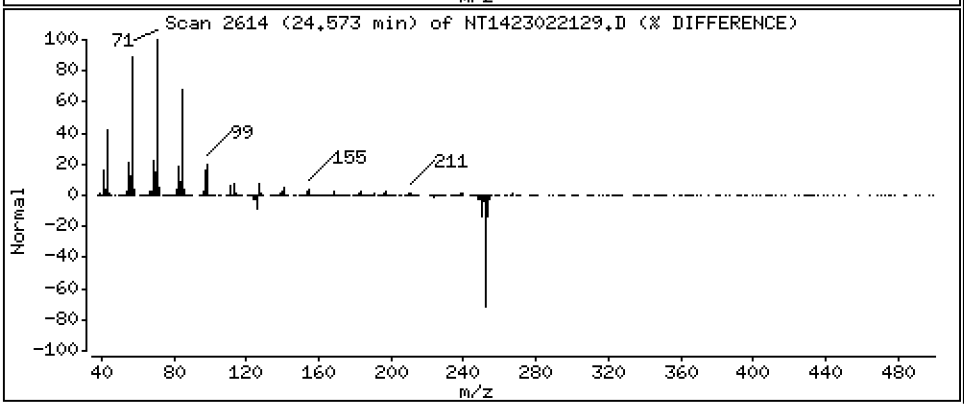
75 Benzo(k)fluoranthene

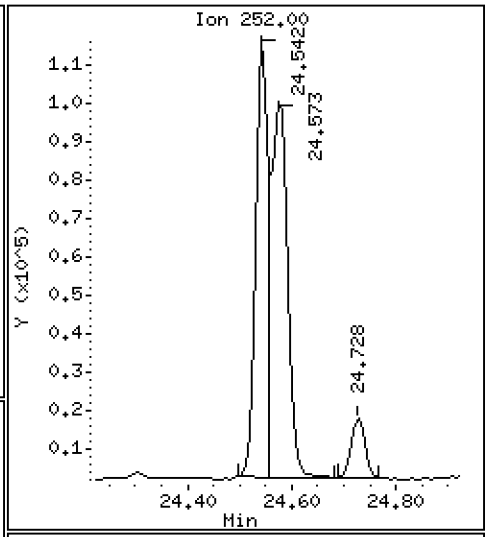
Concentration: 0.9965 ug/mL

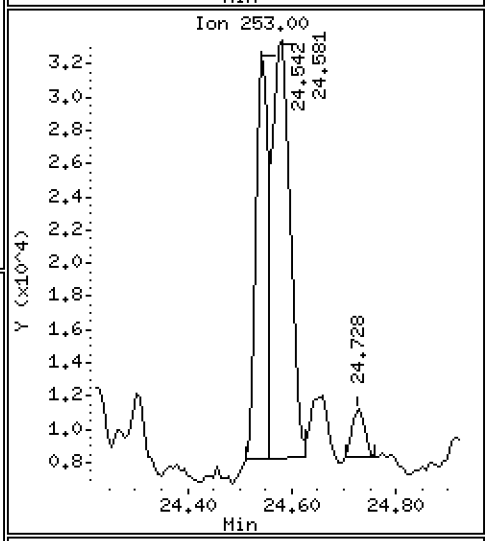


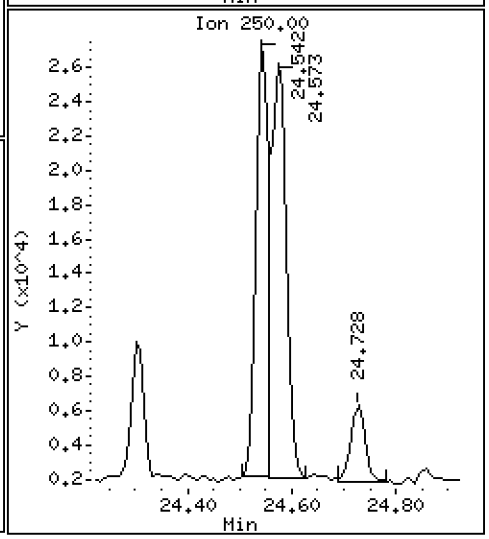












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Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

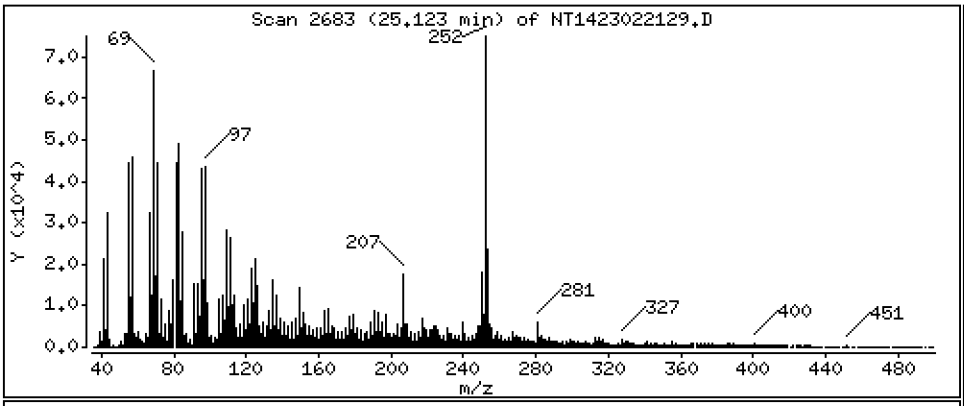
Operator: DSD

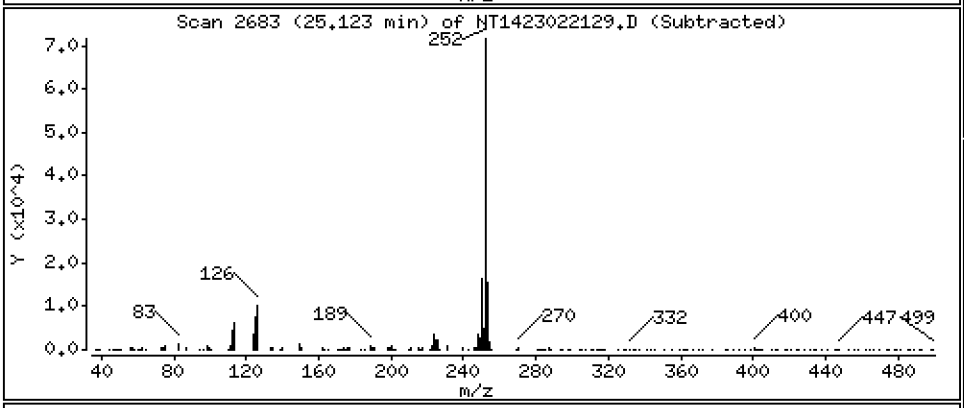
Column phase: ZB-5msi

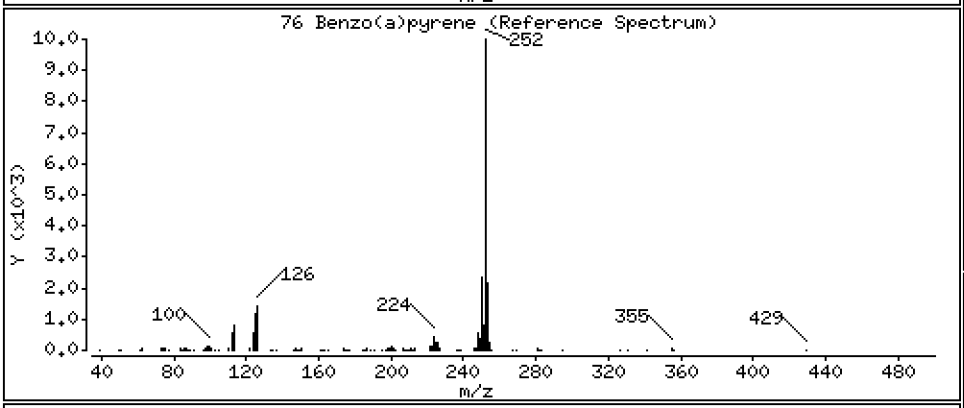
Column diameter: 0.25

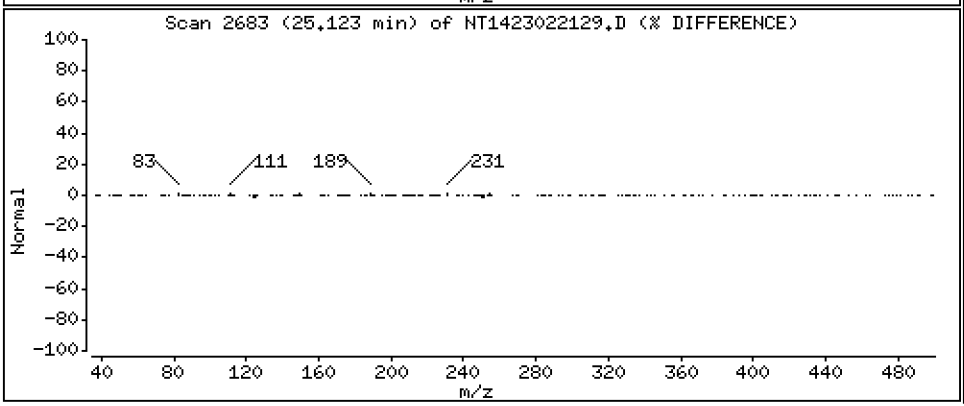
76 Benzo(a)pyrene

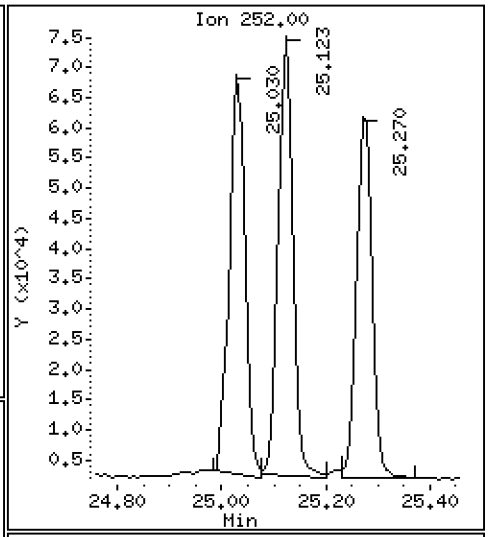
Concentration: 0.7072 ug/mL

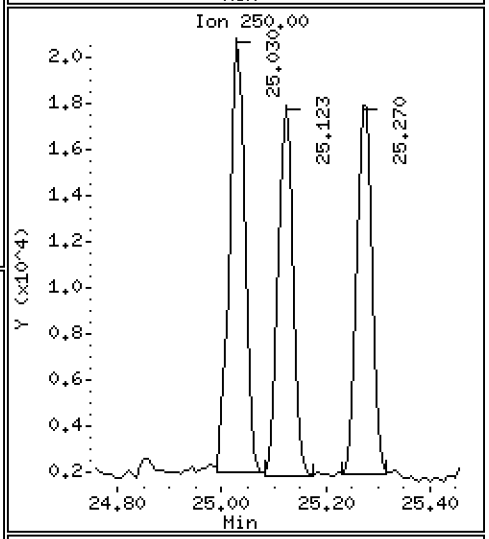


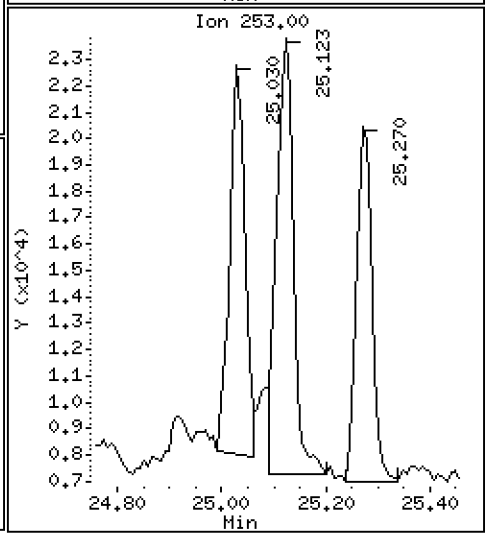












Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022129.D

Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

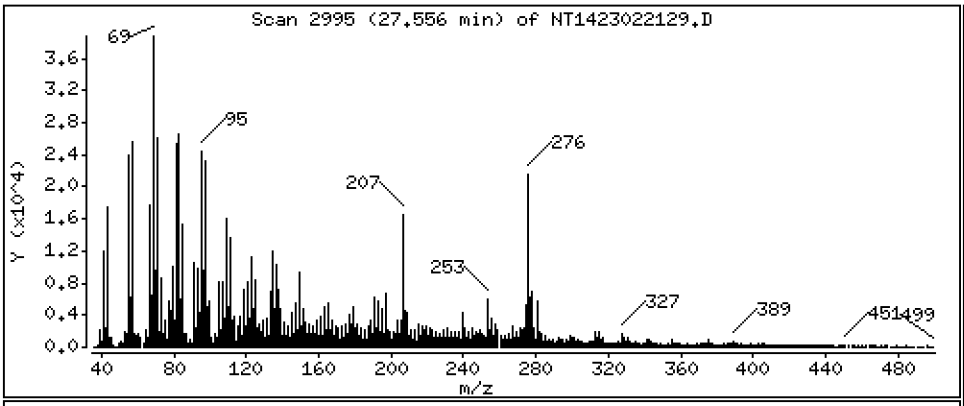
Operator: DSD

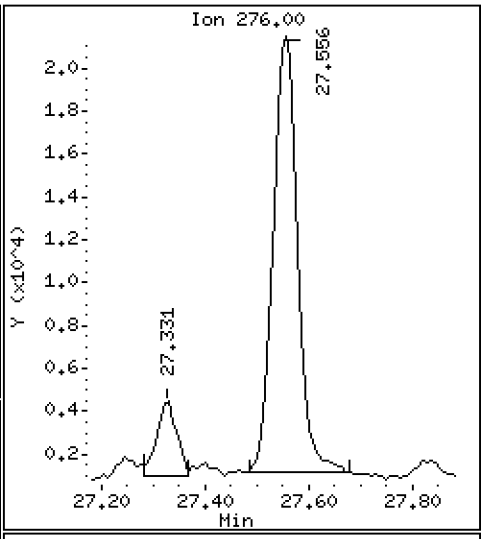
Column phase: ZB-5msi

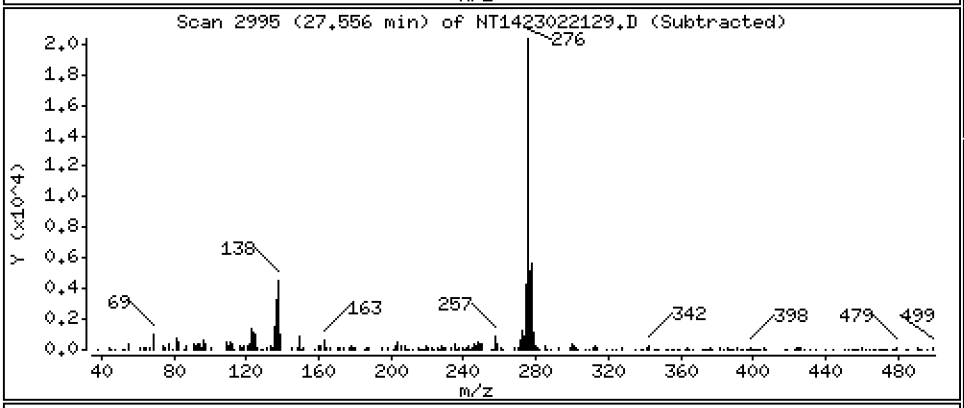
Column diameter: 0.25

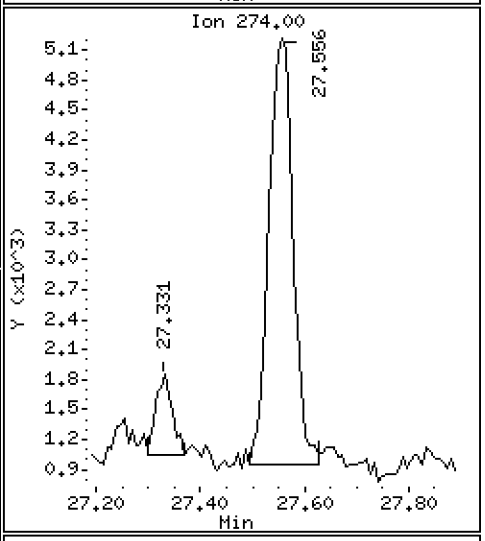
78 Indeno(1,2,3-cd)pyrene

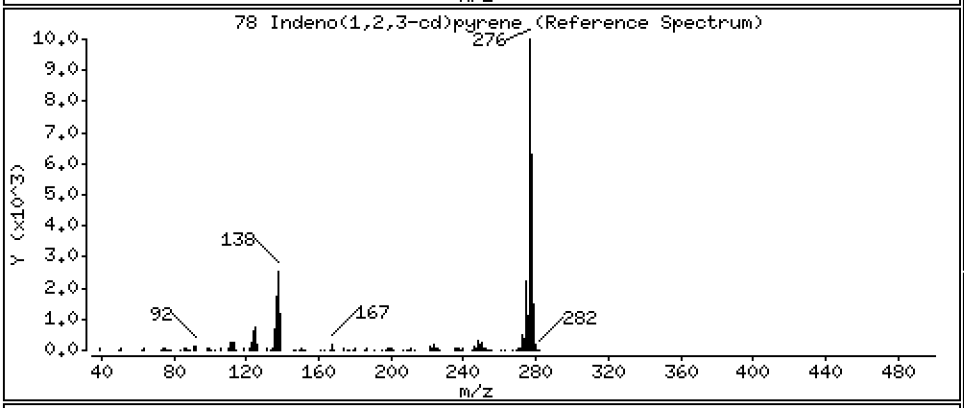
Concentration: 0.4128 ug/mL

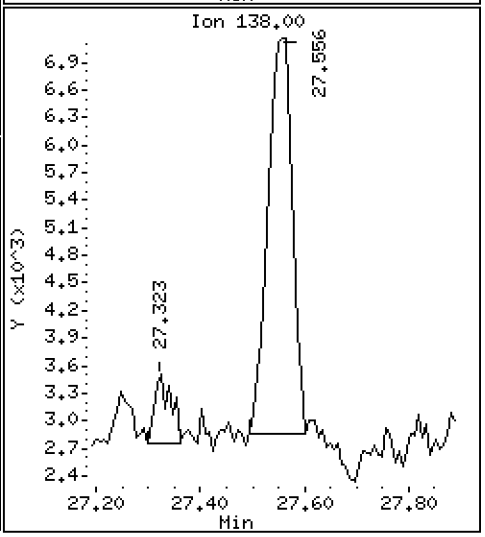


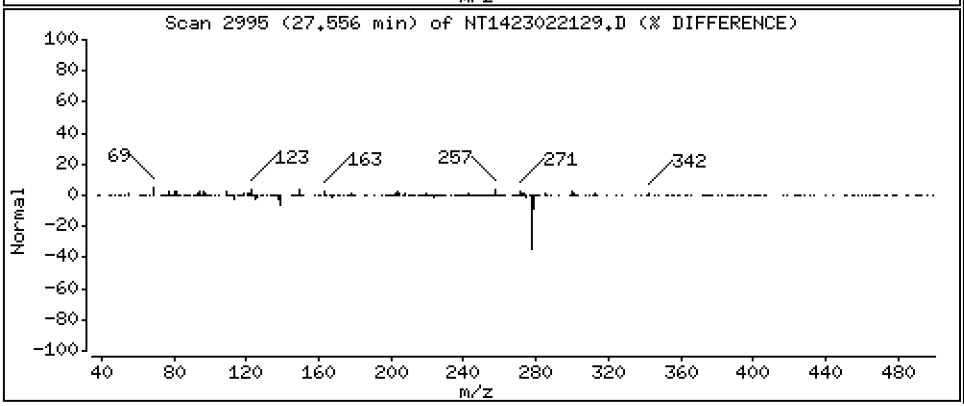












Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

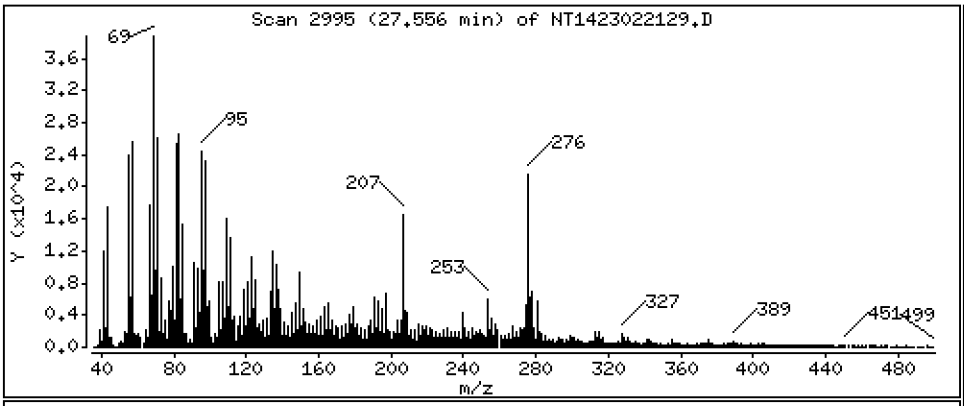
Operator: DSD

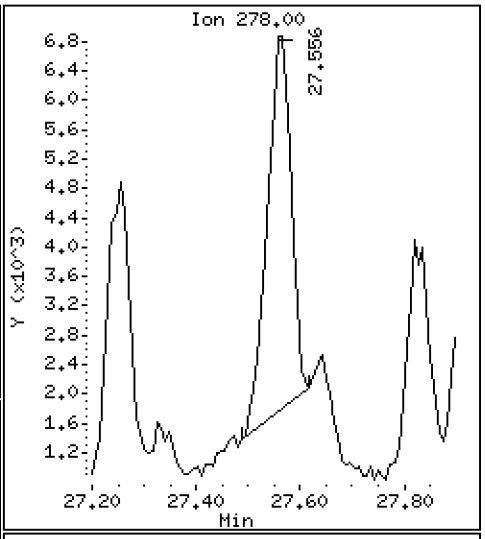
Column phase: ZB-5msi

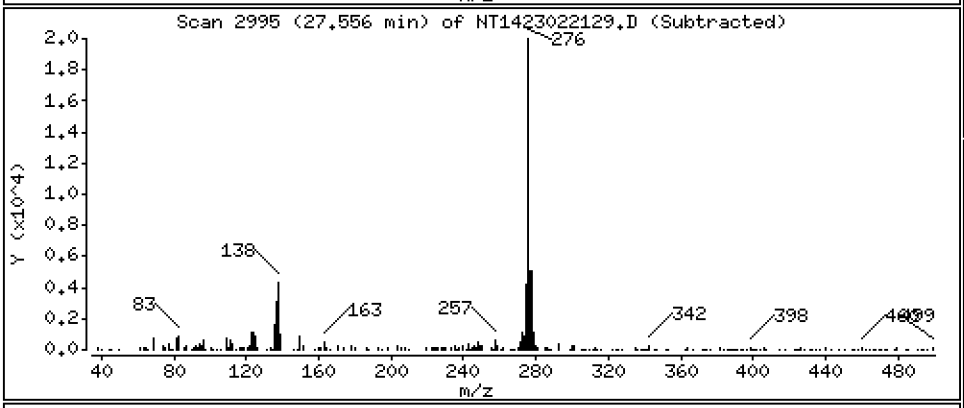
Column diameter: 0.25

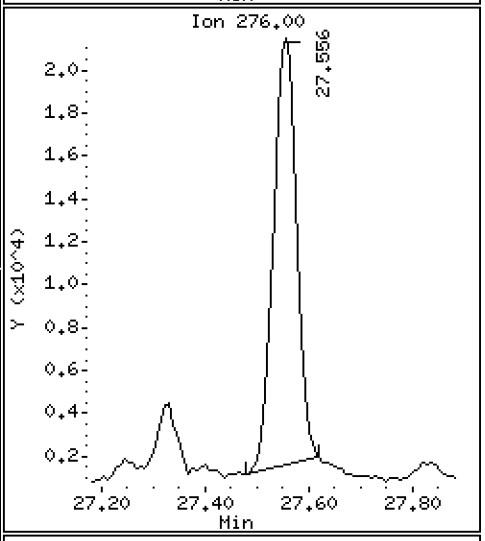
79 Dibenzo(a,h)anthracene

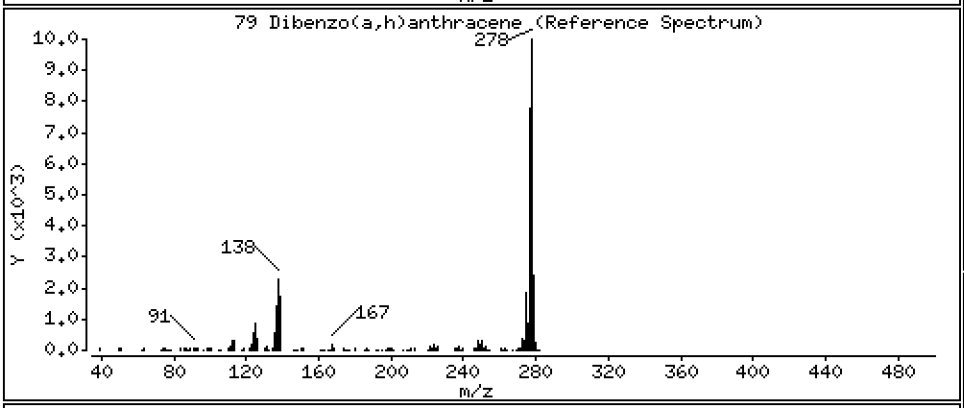
Concentration: 0.1206 ug/mL

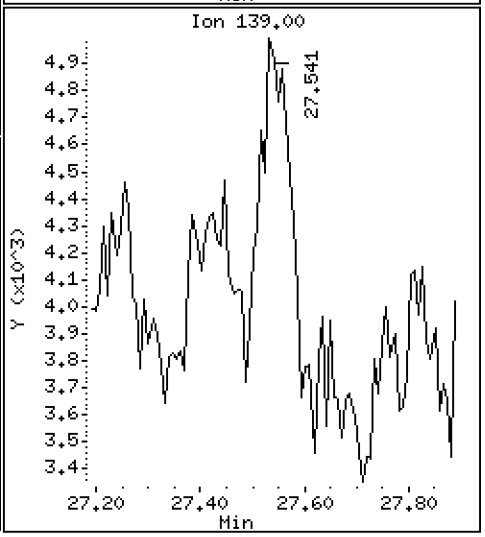


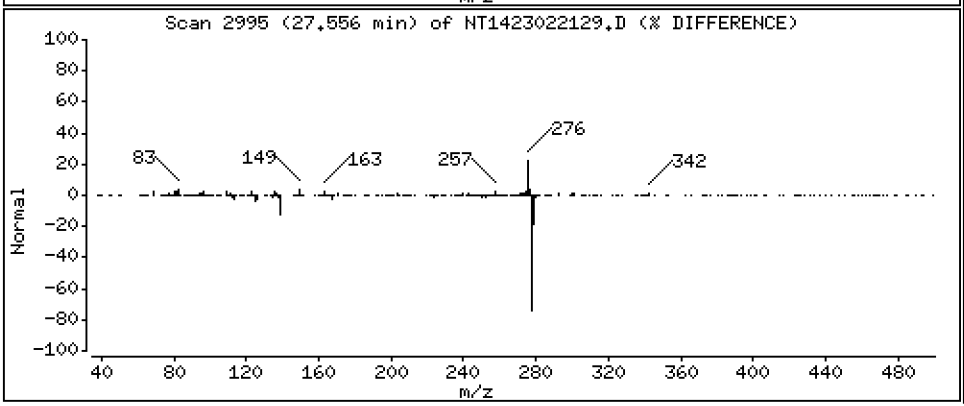












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Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

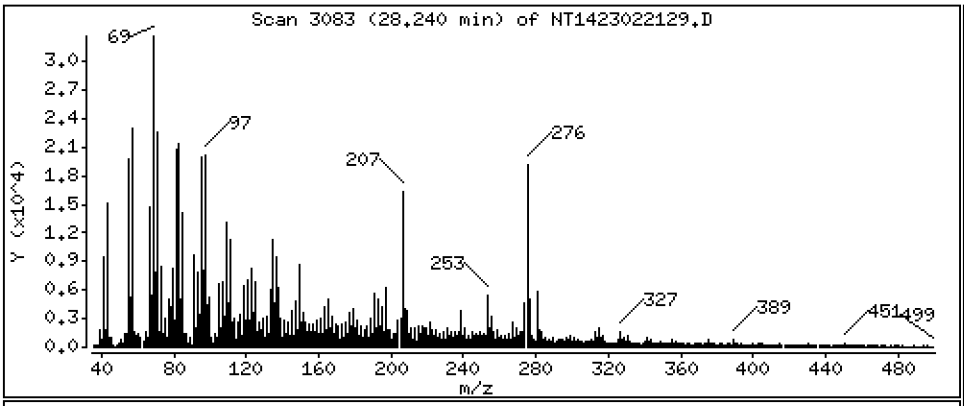
Operator: DSD

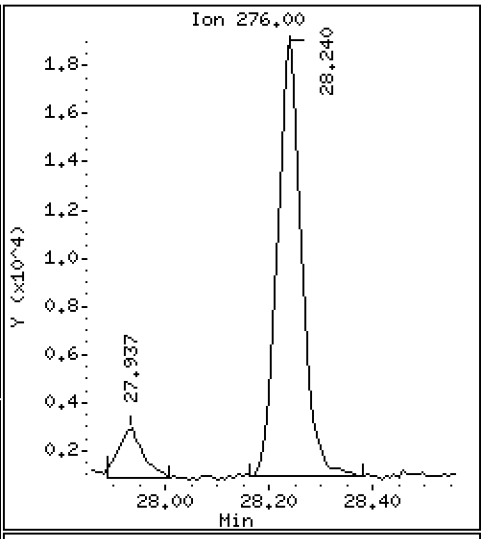
Column phase: ZB-5msi

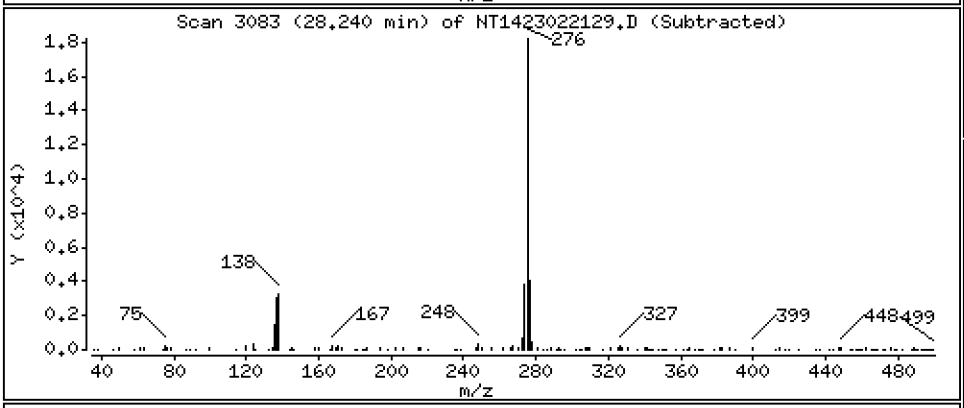
Column diameter: 0.25

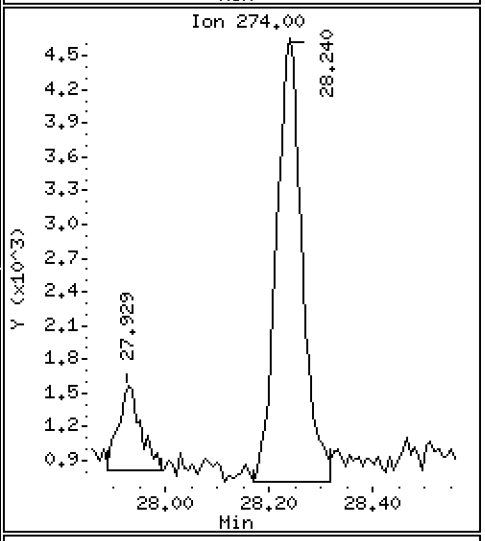
80 Benzo(g,h,i)perylene

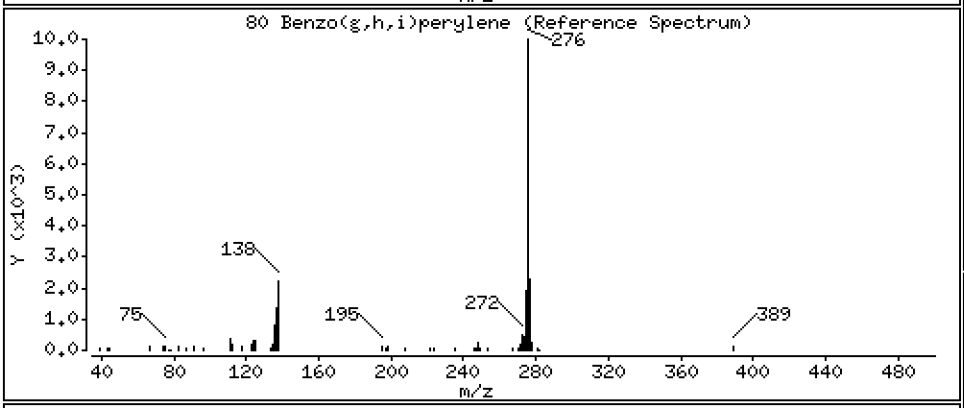
Concentration: 0.4475 ug/mL

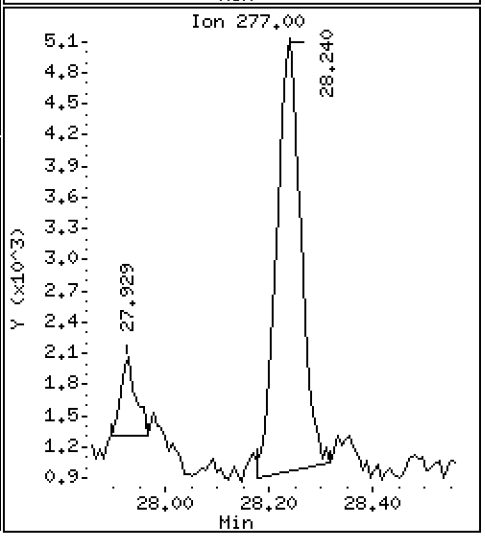


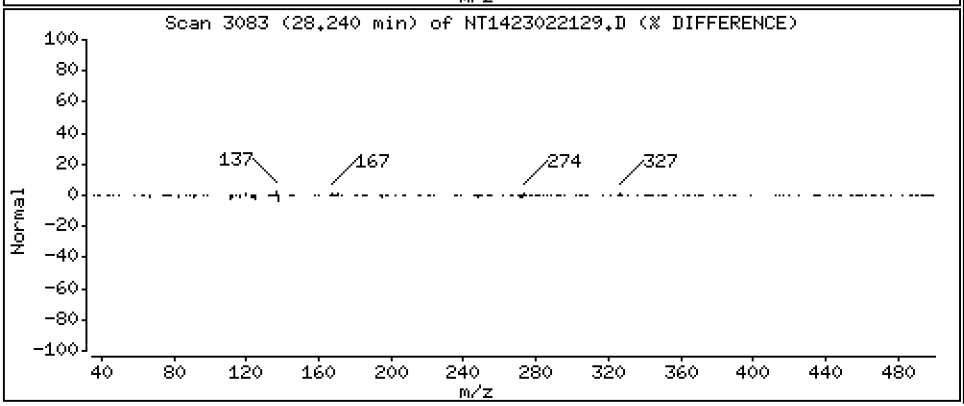












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Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

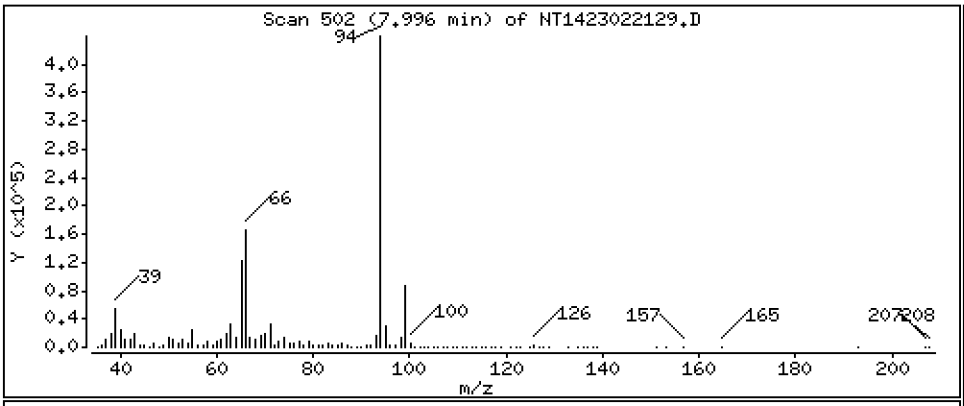
Operator: DSD

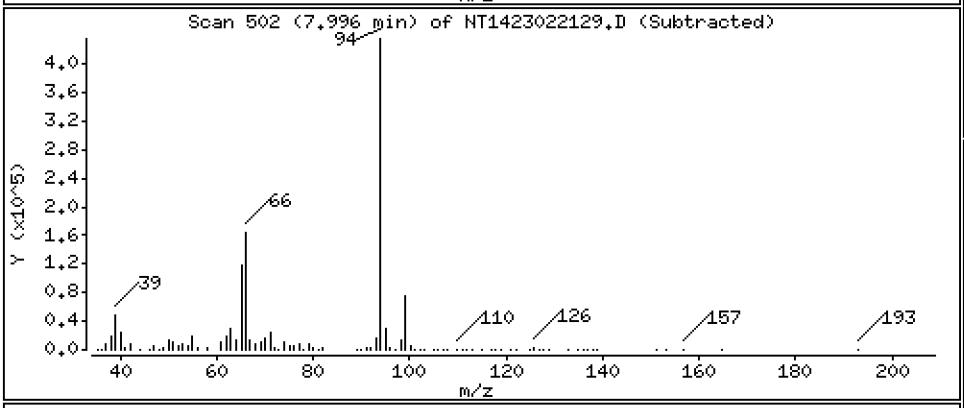
Column phase: ZB-5msi

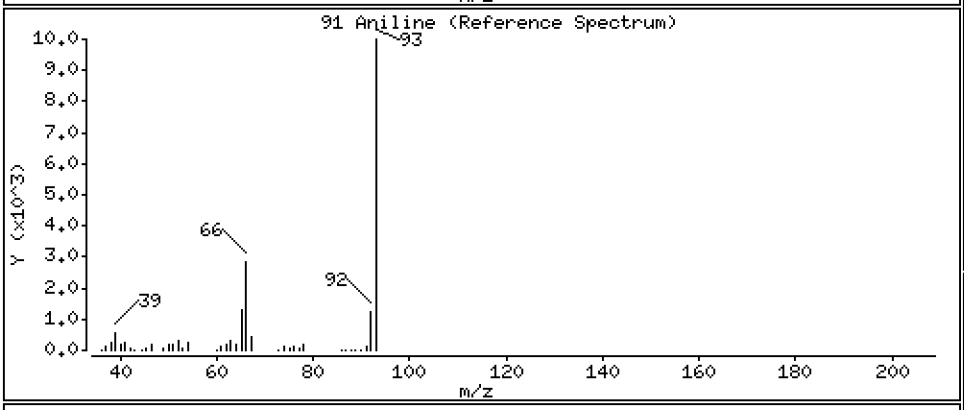
Column diameter: 0.25

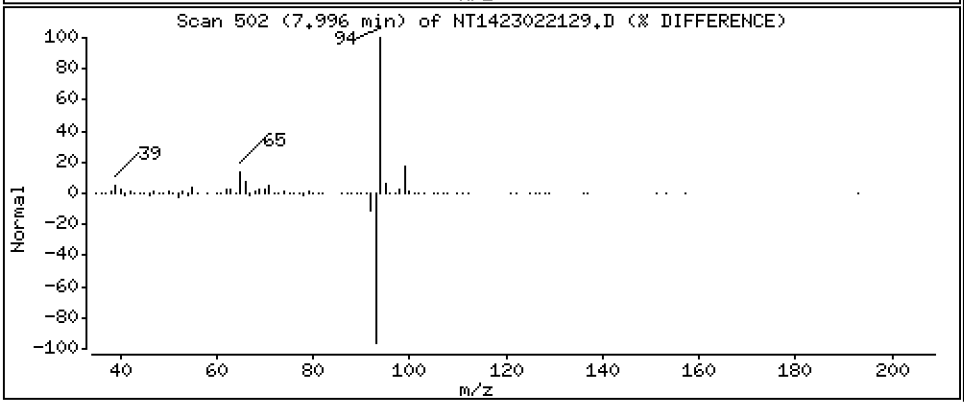
91 Aniline

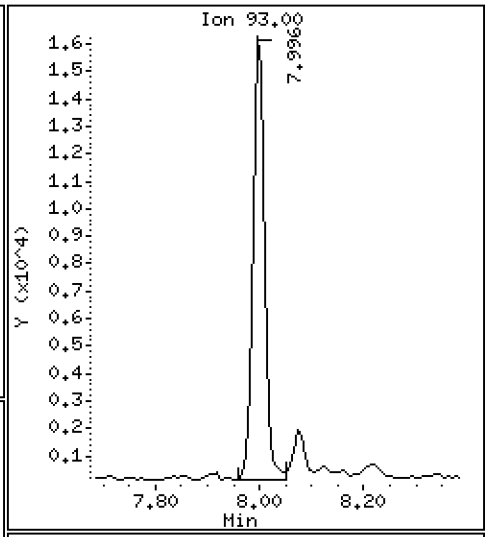
Concentration: 0.1767 ug/mL

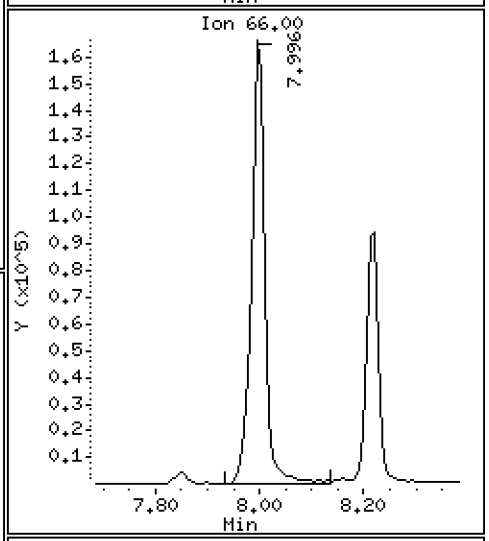


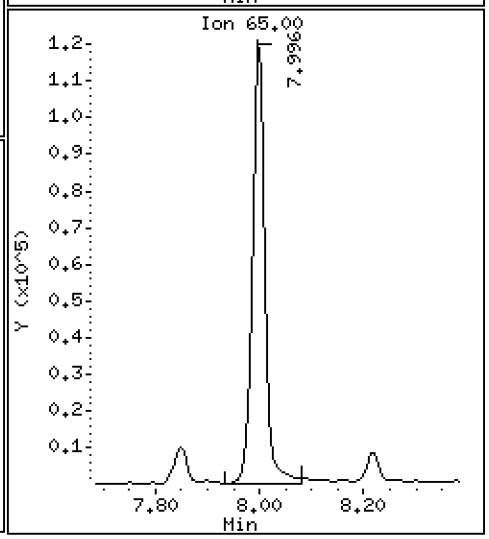












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Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

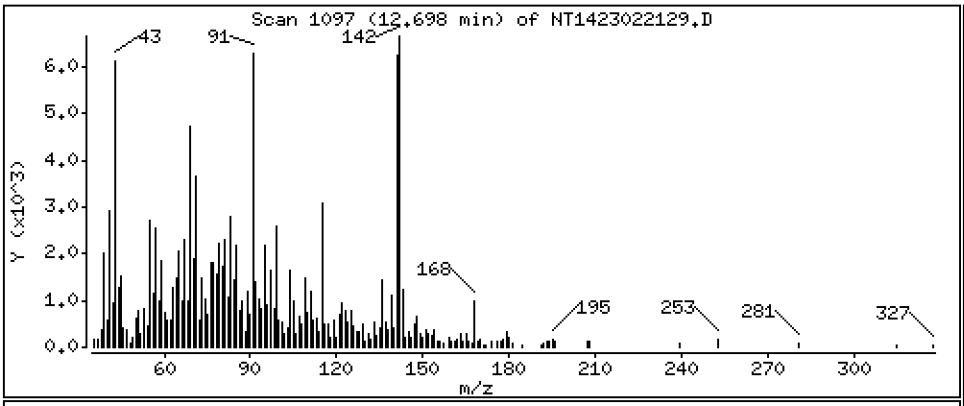
Operator: DSD

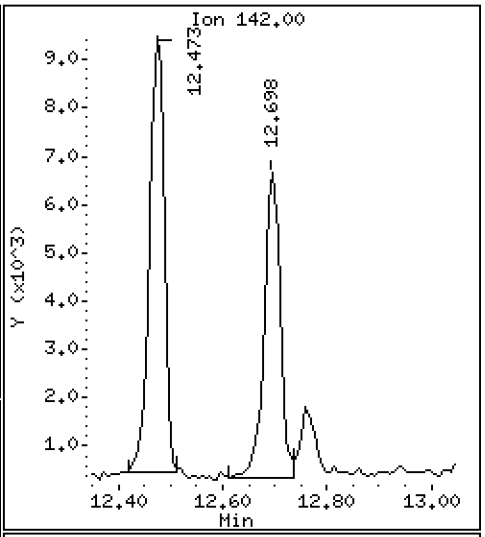
Column phase: ZB-5msi

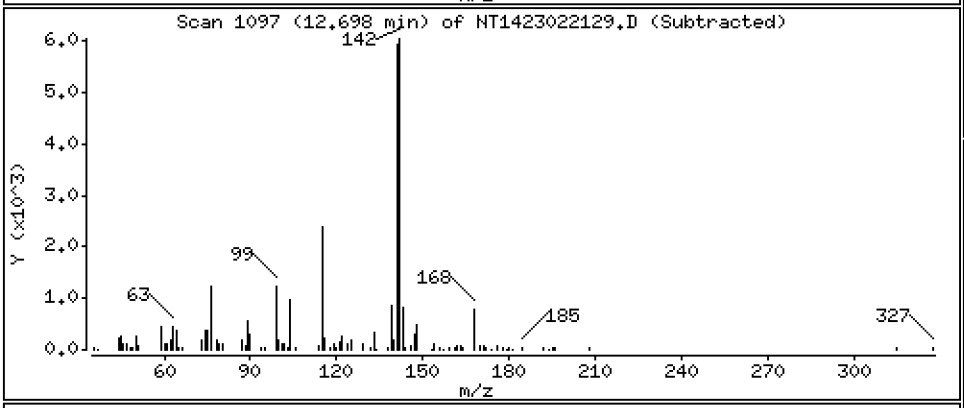
Column diameter: 0.25

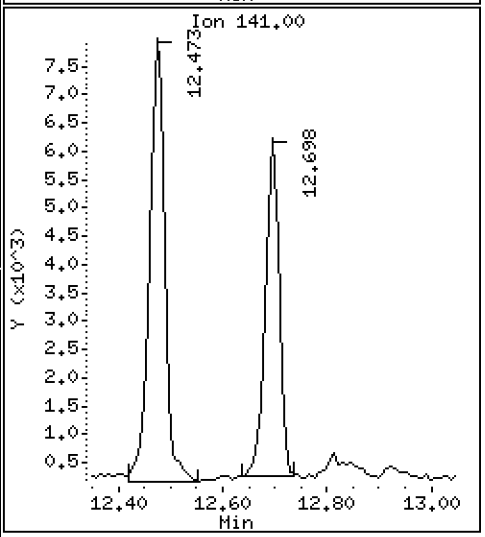
105 1-methylnaphthalene

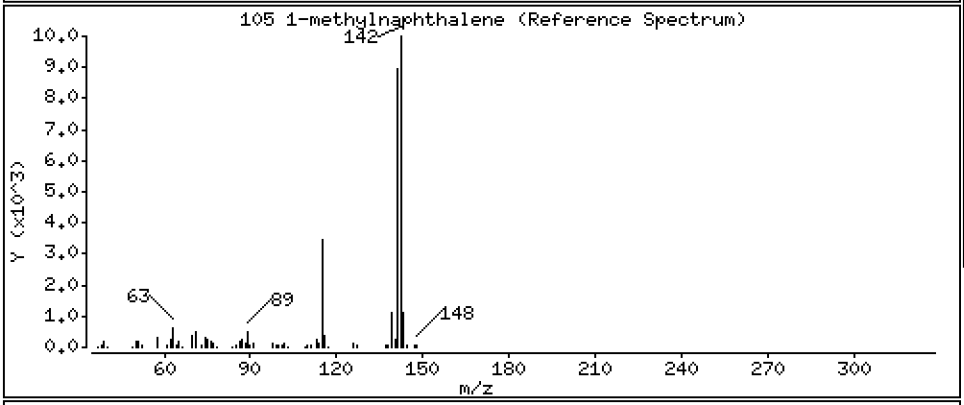
Concentration: 0.06725 ug/mL

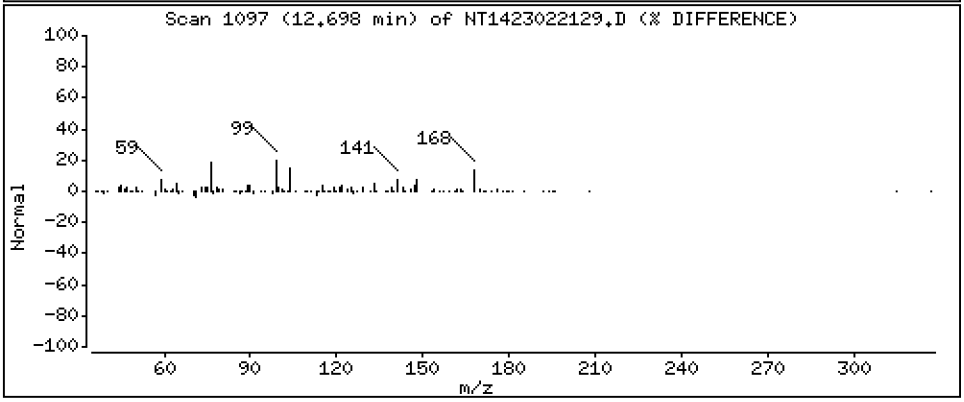












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Date : 22-FEB-2023 06:19

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04RE1

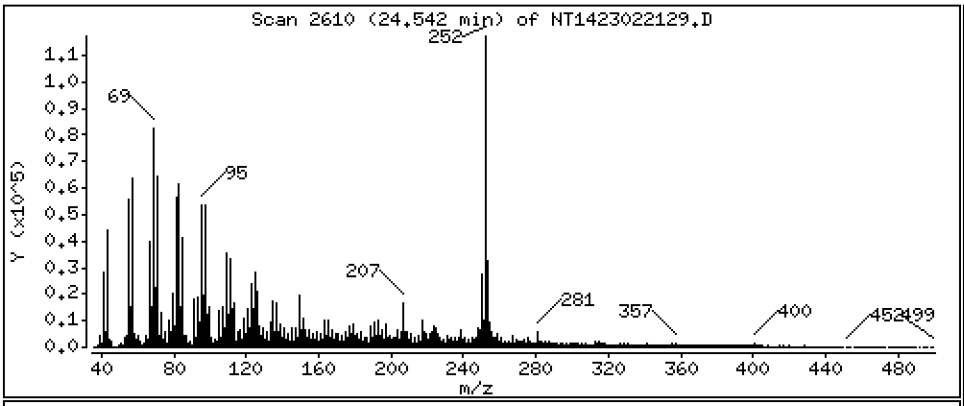
Operator: DSD

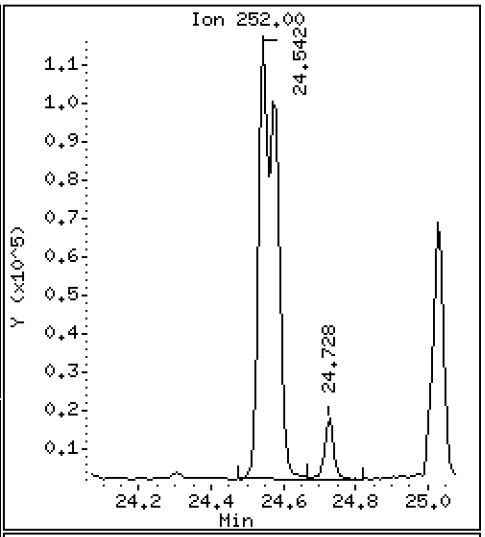
Column phase: ZB-5msi

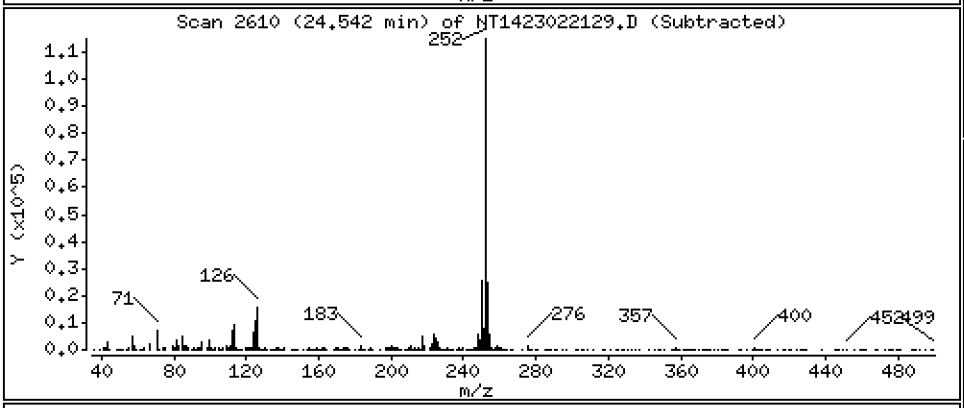
Column diameter: 0.25

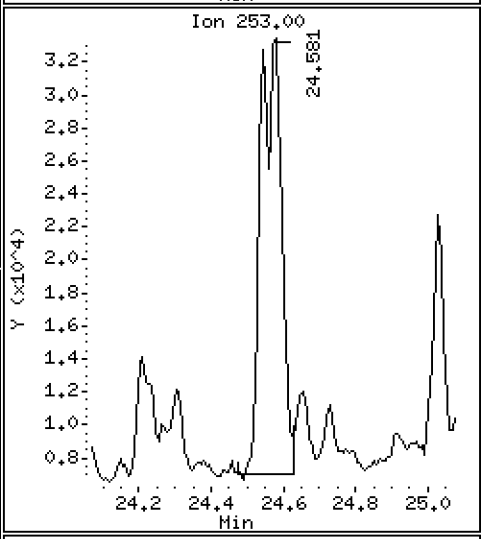
187 Total Benzofluoranthenes

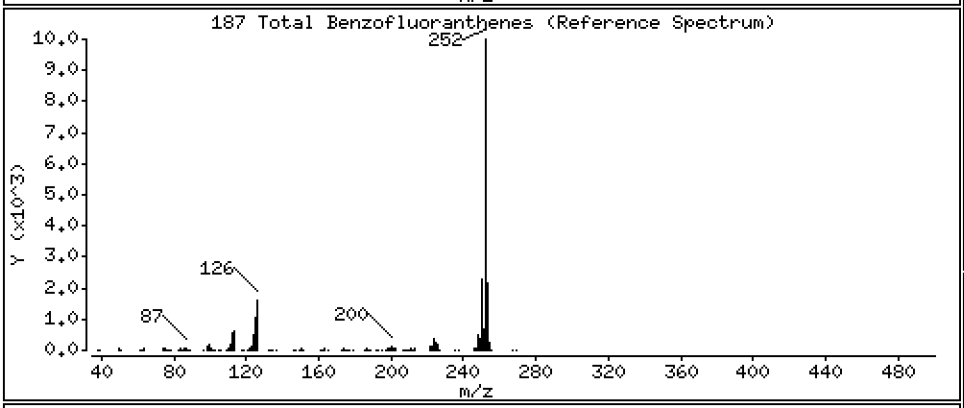
Concentration: 1.901 ug/mL

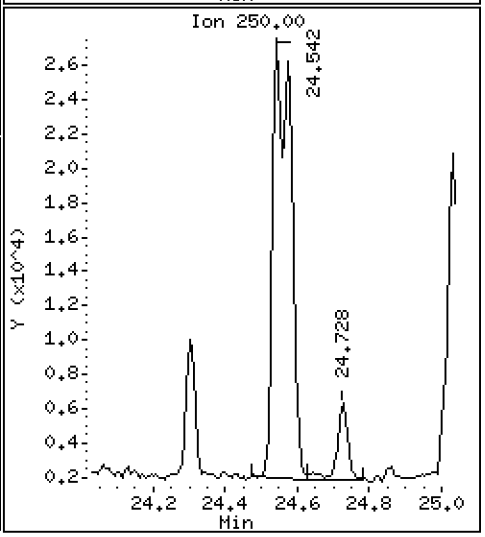


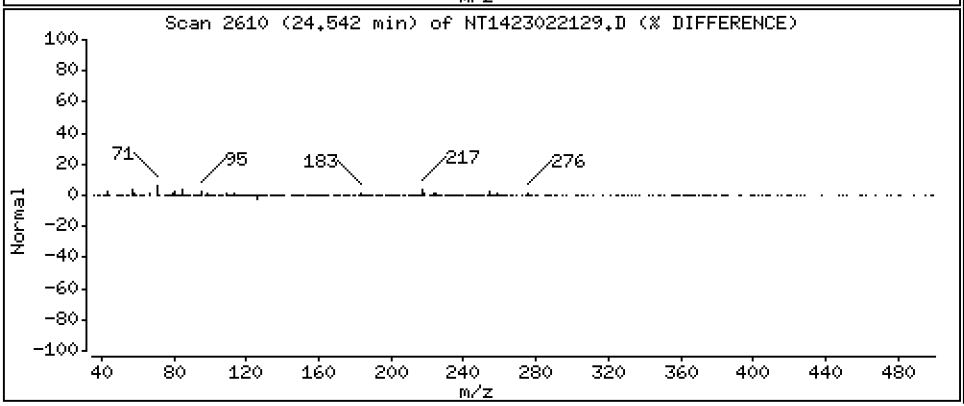












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230221A.b\NT1423022129.D
Lab Smp Id: 23A0171-04RE1
Inj Date : 22-FEB-2023 06:19 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : 23A0171-04RE1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230221A.b\ABN.m
Meth Date : 22-Feb-2023 13:34 deenayd Quant Type: ISTD
Cal Date : 16-FEB-2023 19:30 Cal File: NT1423021610.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: DEENAY-201905

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.404	6.373	(0.747)	474750	5.77845	5.778
$	2 Phenol-d5	99	7.980	7.965	(0.931)	697149	5.34902	5.349
	3 Phenol	94	7.995	7.988	(0.933)	756276	5.48132	5.481
$	5 2-Chlorophenol-d4	132	8.219	8.212	(0.959)	506513	5.44662	5.447
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.568	8.568	(1.000)	307330	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	8.925	8.925	(1.042)	218523	3.13491	3.135
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	8.863	8.855	(1.034)	69154	0.89175	0.8917
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	9.375	9.360	(1.094)	15798	0.15529	0.1553
$	18 Nitrobenzene-d5	82	9.662	9.662	(0.875)	468410	3.56653	3.567
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	10.616	10.678	(0.961)	68253	1.09026	1.090
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.042	11.042	(1.000)	1136818	4.00000	
	28 Naphthalene	128	11.081	11.081	(1.003)	32030	0.11427	0.1143
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	12.473	12.481	(1.130)	17115	0.08153	0.08153
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
	34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36	2-Fluorobiphenyl	172	13.270	13.270	(0.906)	887318	3.67202	3.672
	37	2-Chloronaphthalene	162	Compound Not Detected.					
	38	2-Nitroaniline	65	Compound Not Detected.					
	39	Dimethylphthalate	163	Compound Not Detected.					
	40	Acenaphthylene	152	14.338	14.330	(0.979)	11717	0.03895	0.03895(MH)
	41	2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42	Acenaphthene-d10	164	14.648	14.648	(1.000)	675404	4.00000	
	43	3-Nitroaniline	138	Compound Not Detected.					
	44	Acenaphthene	153	14.709	14.717	(1.004)	21102	0.11716	0.1172
	45	2,4-Dinitrophenol	184	Compound Not Detected.					
	46	Dibenzofuran	168	15.042	15.042	(1.027)	37527	0.12690	0.1269
	47	4-Nitrophenol	109	Compound Not Detected.					
	48	2,4-Dinitrotoluene	165	Compound Not Detected.					
	50	Diethylphthalate	149	15.637	15.645	(1.068)	47404	0.17284	0.1728
	49	Fluorene	166	15.753	15.753	(1.075)	40559	0.13116	0.1312
	51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52	4-Nitroaniline	138	Compound Not Detected.					
	53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55	2,4,6-Tribromophenol	330	16.293	16.285	(1.112)	220695	5.60673	5.607
	56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	Compound Not Detected.					
*	59	Phenanthrene-d10	188	17.676	17.676	(1.000)	1364570	4.00000	
	60	Phenanthrene	178	17.723	17.723	(1.003)	216356	0.65982	0.6598
	61	Anthracene	178	17.815	17.816	(1.008)	84577	0.26035	0.2603
	62	Carbazole	167	18.164	18.148	(1.028)	18734	0.06355	0.06355
	63	Di-n-butylphthalate	149	Compound Not Detected.					
	64	Fluoranthene	202	20.167	20.129	(0.885)	599265	1.62094	1.621
	65	Pyrene	202	20.570	20.554	(0.903)	614998	1.57317	1.573
$	66	Terphenyl-d14	244	20.879	20.864	(0.917)	1210219	4.36001	4.360
	67	Butylbenzylphthalate	149	21.824	21.816	(0.958)	12437	0.09652	0.09652
	68	Benzo(a)anthracene	228	22.745	22.738	(0.999)	214512	0.78225	0.7823
*	69	Chrysene-d12	240	22.776	22.769	(1.000)	856924	4.00000	
	70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71	Chrysene	228	22.823	22.815	(1.002)	305114	1.23700	1.237
	72	bis(2-Ethylhexyl)phthalate	149	22.862	22.854	(0.959)	200351	0.90963	0.9096
*	134	Di-n-octylphthalate-d4	153	23.837	23.837	(1.000)	1287157	4.00000	
	73	Di-n-octylphthalate	149	Compound Not Detected.					
	74	Benzo(b)fluoranthene	252	24.541	24.534	(0.973)	198812	0.94901	0.9490
	75	Benzo(k)fluoranthene	252	24.572	24.573	(0.974)	223072	0.99651	0.9965
	76	Benzo(a)pyrene	252	25.122	25.107	(0.996)	140475	0.70722	0.7072
*	77	Perylene-d12	264	25.223	25.215	(1.000)	660217	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	27.556	27.532	(1.092)	67476	0.41279	0.4128
	79	Dibenzo(a,h)anthracene	278	27.556	27.548	(1.092)	16219	0.12061	0.1206(M)
	80	Benzo(g,h,i)perylene	276	28.239	28.208	(1.120)	59343	0.44747	0.4475
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					
	91	Aniline	93	7.995	8.034	(0.933)	26075	0.17668	0.1767
	93	Benzidine	184	Compound Not Detected.					
	103	Pyridine	79	Compound Not Detected.					
	105	1-methylnaphthalene	142	12.697	12.697	(1.150)	13254	0.06725	0.06725
	111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

						CONCENTRATIONS	
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.541	24.573	(0.973)	388780	1.90084	1.901
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423022129.D
Lab Smp Id: 23A0171-04RE1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230221A.b\ABN.m
Misc Info:

Calibration Date: 21-FEB-2023
Calibration Time: 23:06
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	247721	123861	495442	307330	24.06
27 Naphthalene-d8	862325	431163	1724650	1136818	31.83
42 Acenaphthene-d10	519526	259763	1039052	675404	30.00
59 Phenanthrene-d10	1059882	529941	2119764	1364570	28.75
69 Chrysene-d12	930840	465420	1861680	856924	-7.94
134 Di-n-octylphthala	1343425	671713	2686850	1287157	-4.19
77 Perylene-d12	746835	373418	1493670	660217	-11.60

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.57	8.07	9.07	8.57	-0.00
27 Naphthalene-d8	11.04	10.54	11.54	11.04	-0.00
42 Acenaphthene-d10	14.65	14.15	15.15	14.65	-0.00
59 Phenanthrene-d10	17.68	17.18	18.18	17.68	-0.00
69 Chrysene-d12	22.77	22.27	23.27	22.78	0.03
134 Di-n-octylphthala	23.84	23.34	24.34	23.84	-0.00
77 Perylene-d12	25.22	24.72	25.72	25.22	0.03

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

REVIEW SUMMARY FOR FILE - NT1423022129.D

Lab ID: 23A0171-04RE1
nt14.i, ABN.m, 22-FEB-2023 06:19

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

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.961	0.967	-0.0056	Benzoic acid

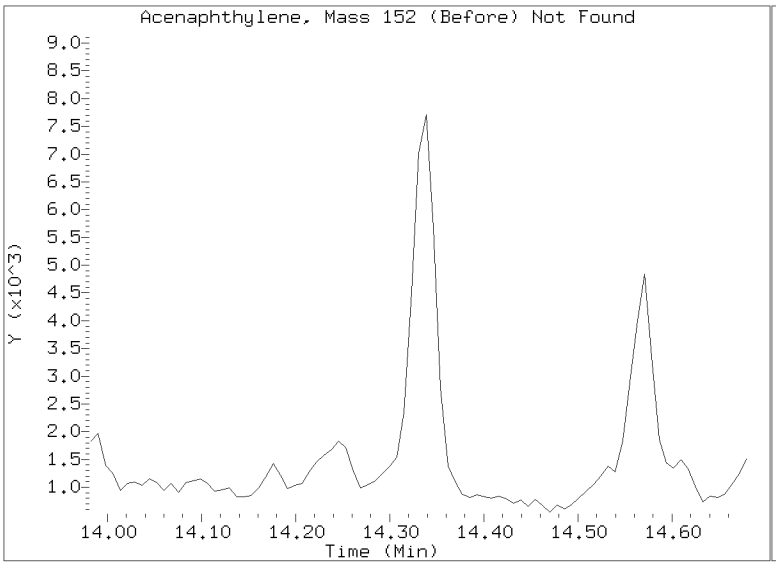
RRT check based on Ccal File: NT1423022117.D

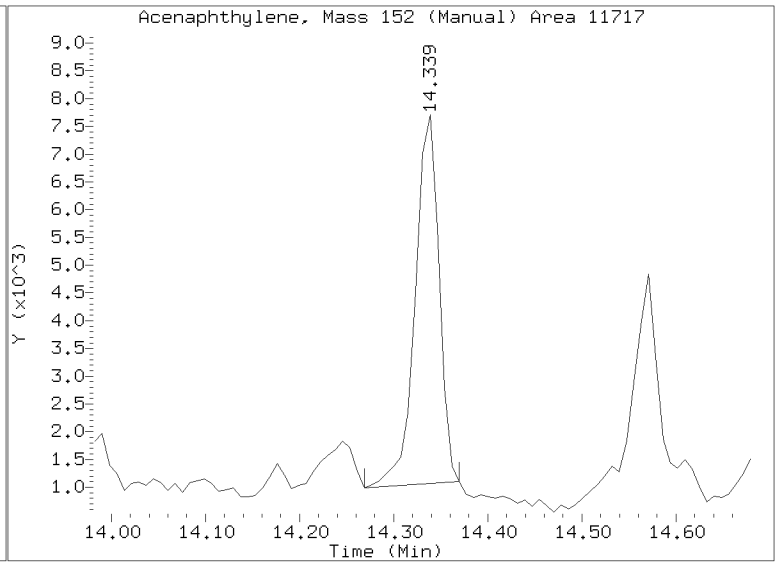
On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

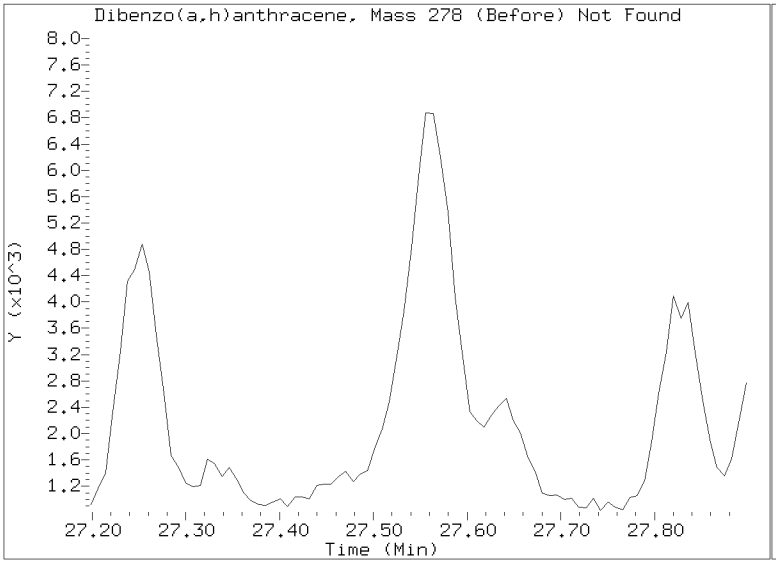
* Only compounds listed in the work order have been verified by the analyst *

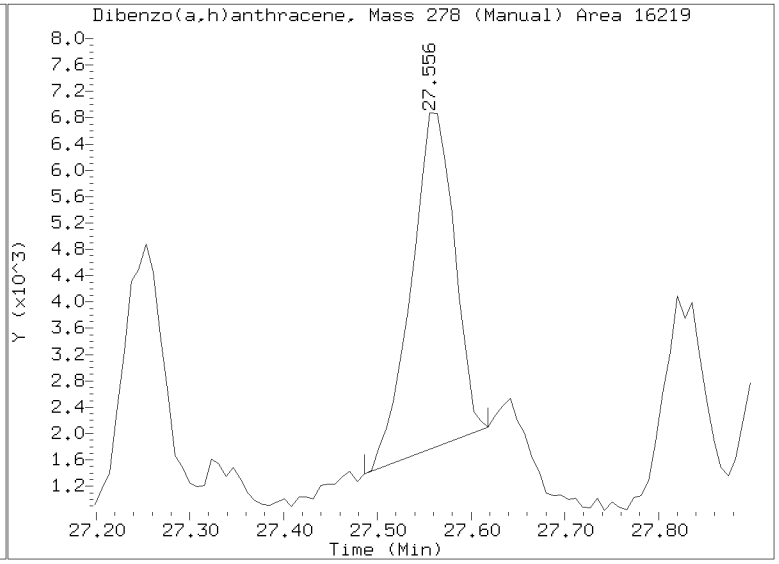
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230221A.b/NT1423022129.D
Injection Date: 22-FEB-2023 06:19
Lab ID:23A0171-04RE1 Client ID:
Report Date: 02/23/2023 12:11









APPROVED

By Deenay Dunmore at 12:17 pm, Feb 23, 2023

PREPARATION BATCH SUMMARY

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLA0339 Batch Matrix: Solid
Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1254	23A0171-01	NT1423021730.D	01/18/23 13:47	
LDW23-SS1254	23A0171-01RE1	NT1423022127.D	01/18/23 13:47	Added 2/18/2023 by DSD
LDW23-SS1257	23A0171-02	NT1423021731.D	01/18/23 13:47	
LDW23-SS1262	23A0171-03	NT1423021732.D	01/18/23 13:47	
LDW23-SS1262	23A0171-03RE1	NT1423022128.D	01/18/23 13:47	Added 2/18/2023 by DSD
LDW23-SS1245	23A0171-04	NT1423021733.D	01/18/23 13:47	
LDW23-SS1245	23A0171-04RE1	NT1423022129.D	01/18/23 13:47	Added 2/18/2023 by DSD
Blank	BLA0339-BLK1	NT1423021721.D	01/18/23 13:47	
LCS	BLA0339-BS1	NT1423021722.D	01/18/23 13:47	
LCS Dup	BLA0339-BSD1	NT1423021723.D	01/18/23 13:47	
Reference	BLA0339-SRM1	NT1423021724.D	01/18/23 13:47	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0339

Prepared using: EPA 3546 (Microwave)

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

Matrix: Solid **Date Prepared:** 01/~~18~~ 19/23 **Balance ID:** B14646264 **Set Up By:** QB 1/13/23

1/12/23

WO Comments

23A0100: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0171: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0175: Please log with project number. DWs need 200.8 and 245.1 and will usually have a supplemental form. <G>double check analyses for preserved for delivery to the labs. Spectra usually provides HCl for Dx and FOG and H2SO4 for Phenolics</G>

The following standards may be missing from this batch!

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

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

Lab Number & Container	% Solids	Initial (g) Target Dry: 10 (Wet) Actual	(REQ) GPC C/U (1:1) 1 (2) 3	Water Wash 1mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
23A0100-21 A	51.8	(19.31) 19.72	(1:1)	1mL	1	0.5	
23A0100-22 A	80.3	(12.45) 12.45	(1:1)	1mL	1	0.5	
23A0100-23 A	53.4	(18.73) 18.95	(1:1)	1mL	1	0.5	
23A0171-01 A	42.8	(23.35) 23.80	(1:1)	1mL	1	0.5	
23A0171-02 A	41.7	(23.97) 24.37	(1:1)	1mL	1	0.5	
23A0171-03 A	43.5	(22.97) 23.27	(1:1)	1mL	1	0.5	
23A0171-04 A	48.4	(20.64) 20.89	(1:1)	1mL	1	0.5	
23A0175-01 A	92.5	(10.81) 11.01	(1:1)	1mL	1	0.5	
23A0175-02 A	89.6	(11.16) 11.68	(1:1)	1mL	1	0.5	
23A0175-03 A	89.5	(11.17) 11.78	(1:1)	1mL	1	0.5	
23A0175-04 A	88.9	(11.25) 11.97	(1:1)	1mL	1	0.5	
23A0175-05 A	90.0	(11.11) 11.64	(1:1)	1mL	1	0.5	

Batch QC

Lab Number	% Solids	Initial (g) Target Dry: 10 (Wet) Actual	(REQ) GPC C/U (1:1) 1 (2) 3	Water Wash 1mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
BLA0339-BLK1	100.0	(10.00) 10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLA0339-BS1	100.0	(10.00) 10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLA0339-BSD1	100.0	(10.00) 10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLA0339-MS1	80.3	(12.45) 12.45	(1:1)	1mL	1	0.5	Use 23A0100-22
BLA0339-MSD1	80.3	(12.45) 12.45	(1:1)	1mL	1	0.5	Use 23A0100-22
BLA0339-SRM1	100.0	~~(10.00)~~ (1.00) 1.00	(1:1)	1mL	1	0.5	Use K003477

+1g DI WATER

Client ID Verified By — 01/~~18~~ 19/23 (1/12/23) Date — NKh 1/23/23 Preparation Reviewed By Date — 01 1/19/23 13:47 Extraction Date and Time

Printed: 1/13/2023 1:33:59PM

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0339

Prepared using: EPA 3546 (Microwave)

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

WO Comments

23A0100: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
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<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0175: Please log with project number. DWs need 200.8 and 245.1 and will usually have a supplemental form. <G>double check analyses for preserved for delivery to the labs. Spectra usually provides HCl for Dx and FOG and H2SO4 for Phenolics</G>

Prep Steps	Reagents Used	
Microwave (1) 2 3 CR 1/18 Analyst/Date	**Station/Reagent**	**Standard ID**
	Microwave **Analyst:** CR **Date:** 1/18/23	
	Anhydrous Sodium Sulfate	I0000092
	1:1 Methylene Chloride/Acetone	K011507
	Methylene Chloride	K005942
	Pre-Deactivated Glass Wool	K010195
Pre-GPC KD **100°C** **Exchange to Hexane** **(add 10 mL to KD)** (0) 2 4 5 6 NRS 1/18/23 Analyst/Date	**Pre GPC KD** **Analyst:** NRS **Date:** 1/18/23	
	Pre-Deactivated Glass Wool	N/A
	Anhydrous Sodium Sulfate	K011285
TurboVap **Pre GPC** 1 2 3 (4) 5 NRS 1/18/23 Analyst/Date	Methylene Chloride	K005942
	Hexane	K008310
	GPC Filter Prep **Analyst:** TWC **Date:** 1/20/23	
Post GPC KD **80-85°C** (1) 0 (2) 4 5 6 TWC 1/21/23 Analyst/Date	Methylene Chloride	K005942
	GPC **Analyst:** TWC **Date:** 1/20/23	
	Methylene Chloride	K005158
TurboVap 1 2 3 (4) 5 NRS 1/23/23 Analyst/Date	GPC Calibration File	CLA0166 - GPC2
	Post GPC KD **Analyst:** TWC **Date:** 1/21/23	
	Methylene Chloride	K005942
Water Wash NRS 1/23/23 Analyst/Date	**Vialing** **Analyst:** NRS **Date:** 1/23/23	
	Methylene Chloride	K010561

Surrogates & Spike Standards Used

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

MANUALLY ENTER EXPIRATION DATES!

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

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

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0339

Prepared using: EPA 3546 (Microwave)

8270E SVOC (20ug/kg solid or 0.2ug/L low H2O Sepf) in Solid (Version:AOC4 List)
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<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0175: Please log with project number. DWs need 200.8 and 245.1 and will usually have a supplemental form. <G>double check analyses for preserved for delivery to the labs. Spectra usually provides HCl for Dx and FOG and H2SO4 for Phenolics</G>

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

Analytical Resources, Incorporated
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Organic Extractions Laboratory Analyst Notes

Extraction Parameter: SVOA Extraction Batch: BLA0339

Total Solids Batch: BLA0260 Work Order(s): 23A0100 21-23

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
[X] No Anomalies (standard soil/wet sediment/sand/gravel)= 21-23	CR 1/12/23
[X] Standing Water Decanted (Not shared)= 21-23	CR 1/12/23
[ ] Standing Water Homogenized (Shared samples)=	
[ ] Clay/Clumps (Difficult to homogenize)=	
[ ] Rocks (%+size)?	
[ ] Organics (Leaves/sticks/grass)=	
[ ] Oily, obvious fuel/sulfur odors=	
[ ] Received in 32oz jar(s)=Homogenized in Pyrex dish=	
[X] Previously Frozen = 21-23	CR 1/12/23
[ ] Other (Details)=	
Aqueous:	
[ ] No Anomalies	
[ ] Turbid/Color=	
[ ] Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
[ ] Emulsions (%)=	
[ ] Oily, obvious fuel/sulfur odors=	
[ ] Other (Details)=	
[ ] Received in 1.0L Bottle(s)=No Bottle Rinse=	
[X] Other Notes/Comments= (Note problems, concerns, corrective actions). Breaker was shut off while Blk was being collected - GPC was turned back on, the remainder of the Blk was collected from waste line, re-labeled and put back on GPC2	Thu 1/20123
[X] Share Samples Y / (N)	CR 1/12/23
[X] Multiple Jars Y / (N)	CR 1/12/23
[ ] Sample Pre-Screens indicate analyte activity=	
[ ] Sample weights/volumes reduced based on Pre-Screen=	

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Organic Extractions Laboratory Analyst Notes

Extraction Parameter: SVOA Extraction Batch BLA0379

Total Solids Batch: BLA0262 Work Order(s): 23A0171 01-04

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☐ No Anomalies (standard soil/wet sediment/sand/gravel)=	
☒ Standing Water Decanted (Not shared)= 01-04	CR 1/12/23
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☒ (Oily), obvious fuel/sulfur odors= 01-04	CR 1/12/23
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☒ Previously Frozen = 01-04	CR 1/12/23
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples (Y) / N	CR 1/12/23
☒ Multiple Jars Y / (N)	CR 1/12/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

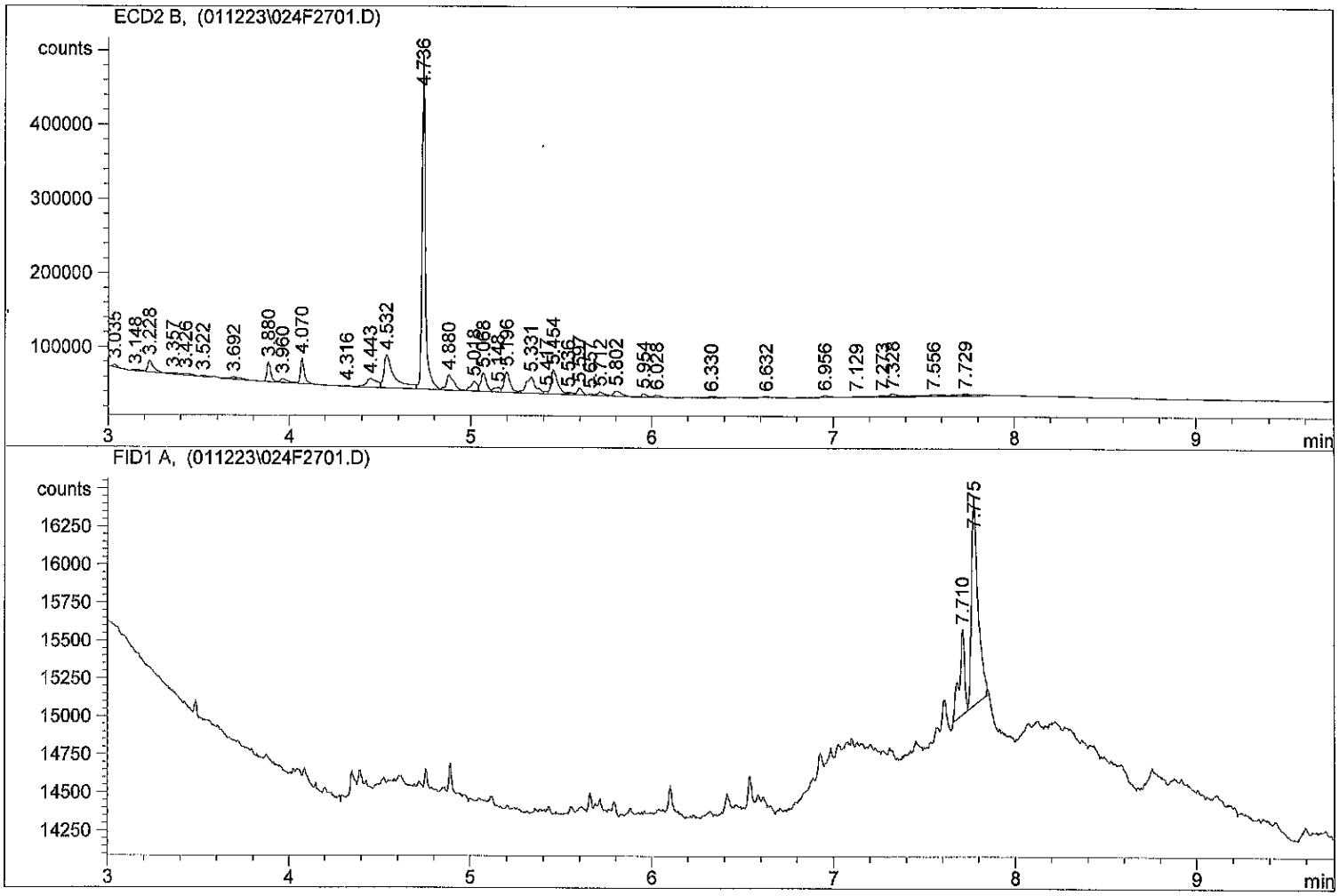
Extraction Parameter: SVOA Extraction Batch BLA0339

Total Solids Batch: BLA0269 Work Order(s): 23A0175 01-05

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= 01-05	CR 1/12/23
☐ Standing Water Decanted (Not shared)=	
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☐ Previously Frozen =	
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples Y / (N)	CR 1/12/23
☒ Multiple Jars Y / (N)	CR 1/12/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

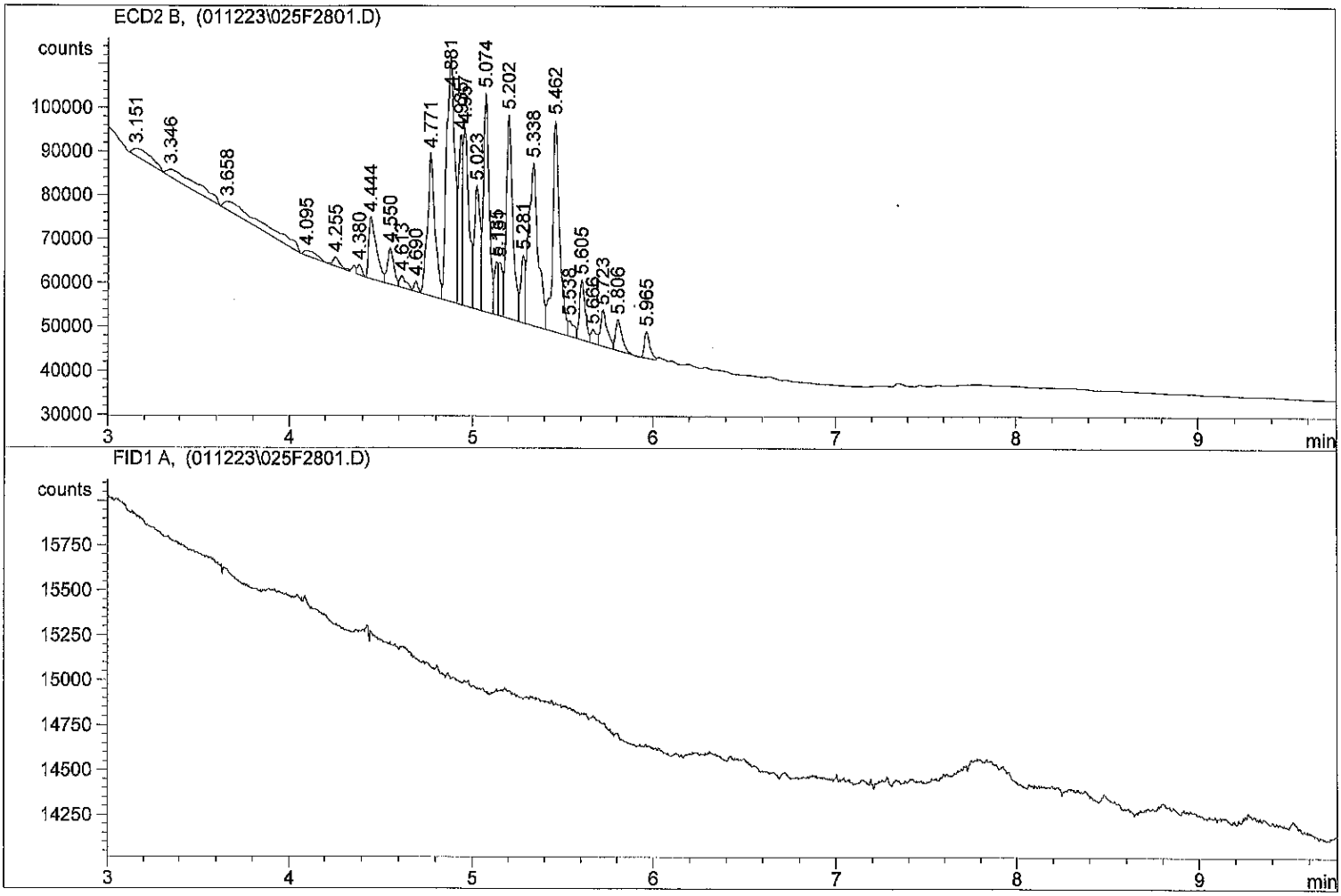
Injection Date : 1/12/2023 11:08:21 PM Seq. Line : 27
Sample Name : 23A0100 21 Location : Vial 24
Acq. Operator : CRR Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\011223.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



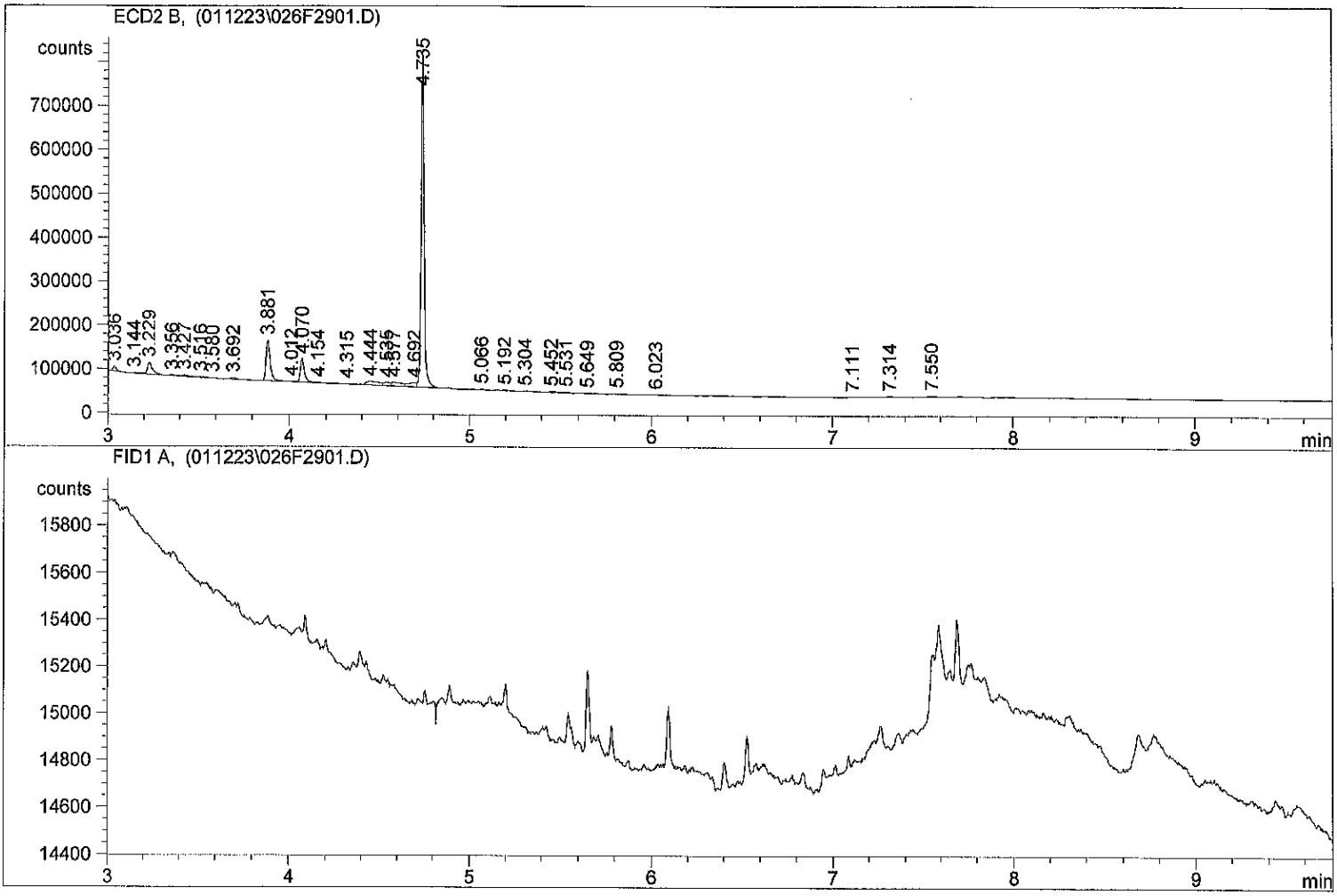
*** End of Report ***

Injection Date	: 1/12/2023 11:22:54 PM	Seq. Line	: 28
Sample Name	: 23A0100 22	Location	: Vial 25
Acq. Operator	: CRR	Inj	: 1
		Inj Volume	: 1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\011223.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		
SCREEN METHOD			



*** End of Report ***

Injection Date	: 1/12/2023 11:36:55 PM	Seq. Line	: 29
Sample Name	: 23A0100 23	Location	: Vial 26
Acq. Operator	: CRR	Inj	: 1
		Inj Volume	: 1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\011223.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		
SCREEN METHOD			



*** End of Report ***

```
==========================================================================
Injection Date  : 1/12/2023 9:42:53 PM          Seq. Line :  21
Sample Name     : DCM RINSE                      Location : Vial 1
Acq. Operator   : CRR                               Inj :   1
                                                Inj Volume : 1 µl

Sequence File   : C:\HPCHEM\1\SEQUENCE\011223.S
Method          : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed    : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD
==========================================================================
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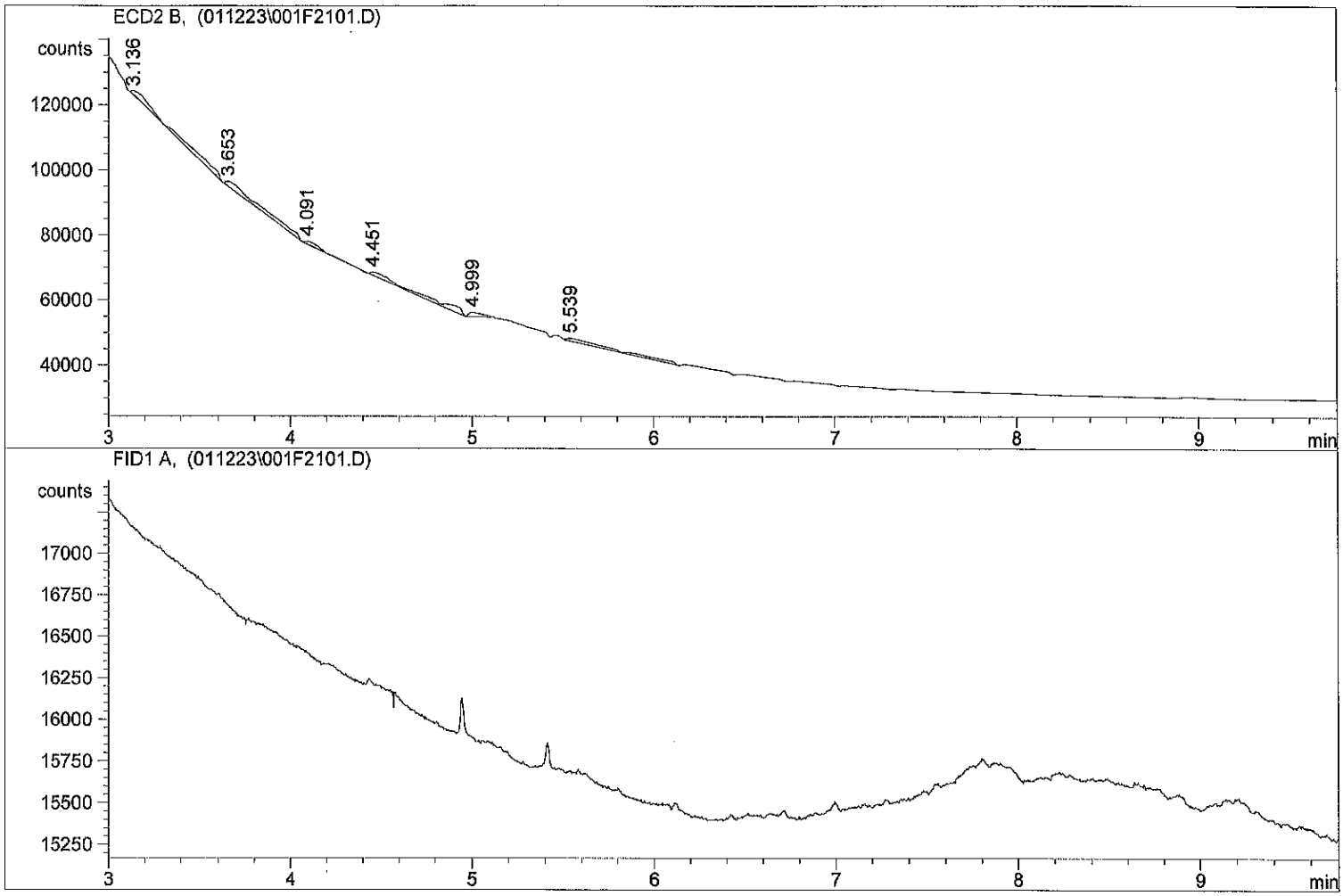
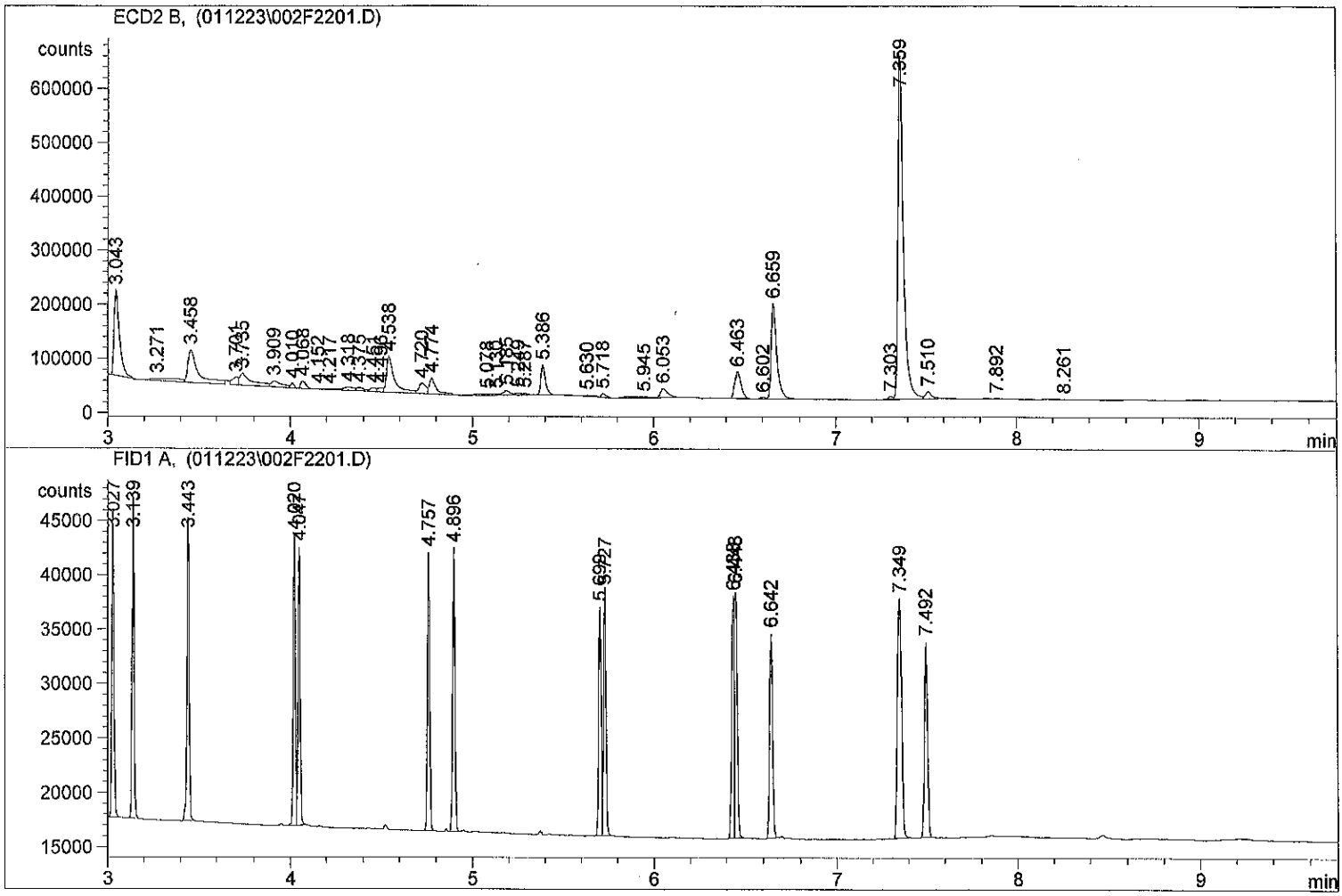


*** End of Report ***

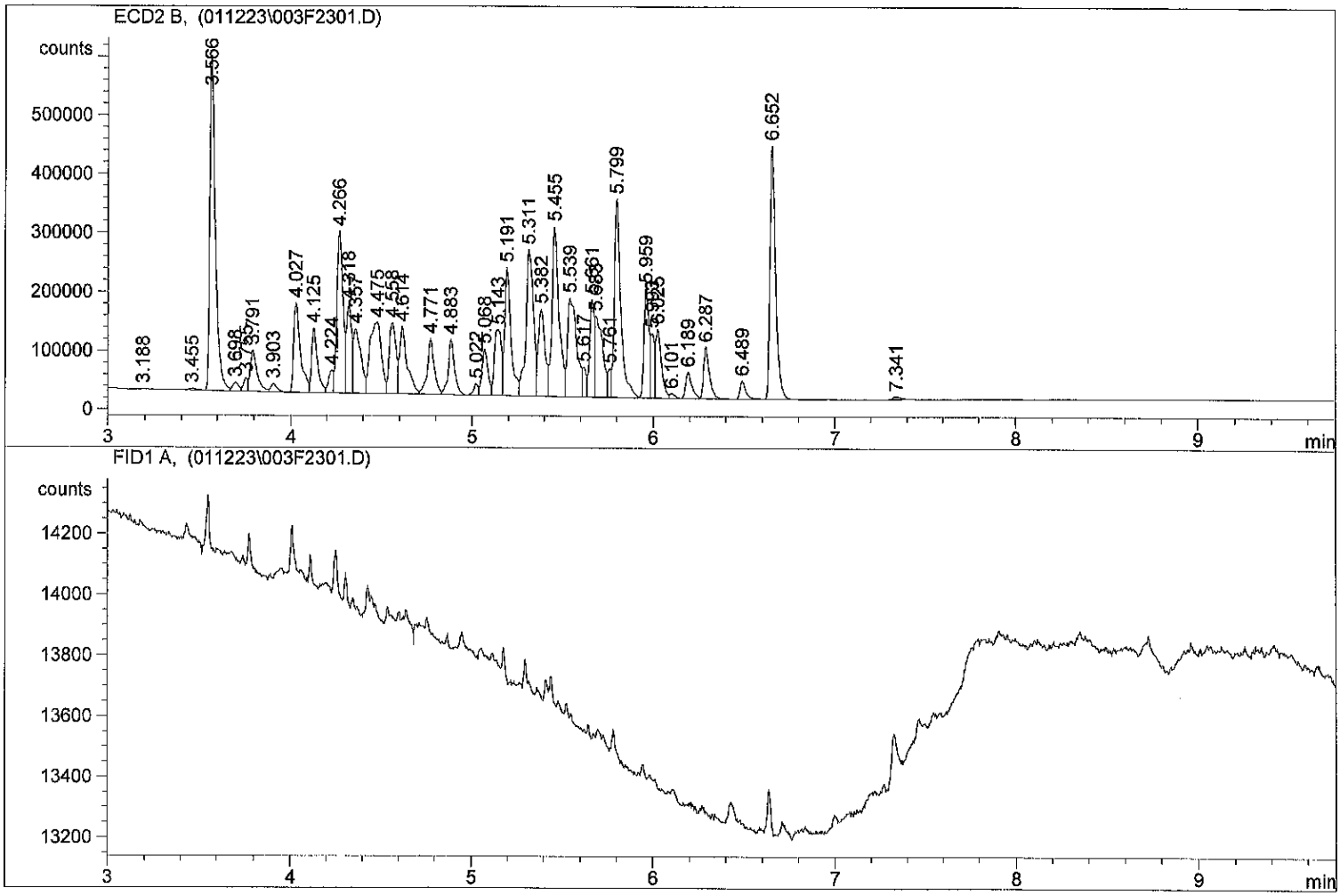
Injection Date	: 1/12/2023 9:57:26 PM	Seq. Line	: 22
Sample Name	: PNA STD 10PPM	Location	: Vial 2
Acq. Operator	: CRR	Inj	: 1
		Inj Volume	: 1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\011223.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		
SCREEN METHOD			



*** End of Report ***

Data File C:\HPCHEM\1\DATA\011223\003F2301.D Sample Name: AR1660 1PPM

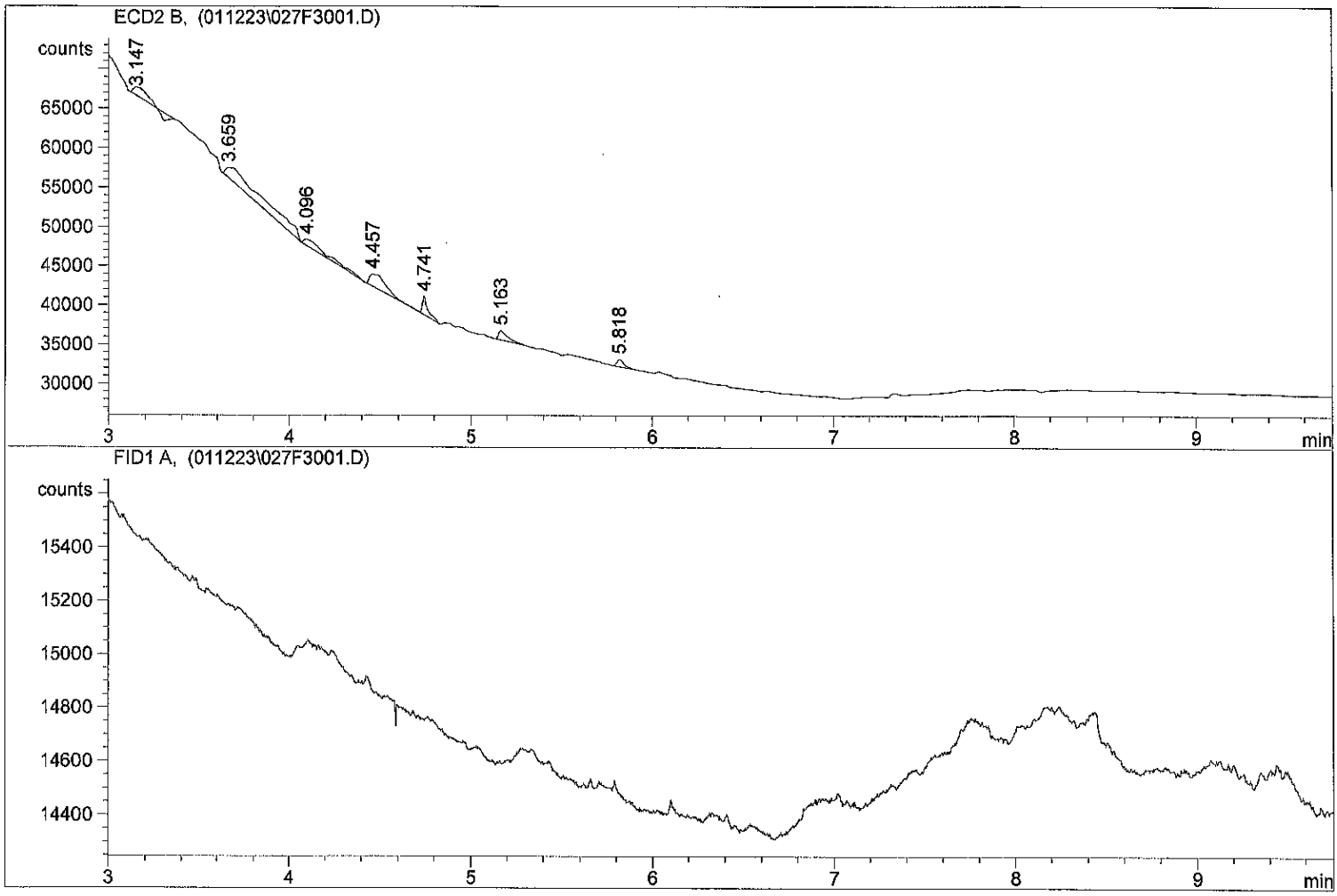
Injection Date	: 1/12/2023 10:11:26 PM	Seq. Line	: 23
Sample Name	: AR1660 1PPM	Location	: Vial 3
Acq. Operator	: CRR	Inj	: 1
		Inj Volume	: 1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\011223.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		
SCREEN METHOD			



*** End of Report ***

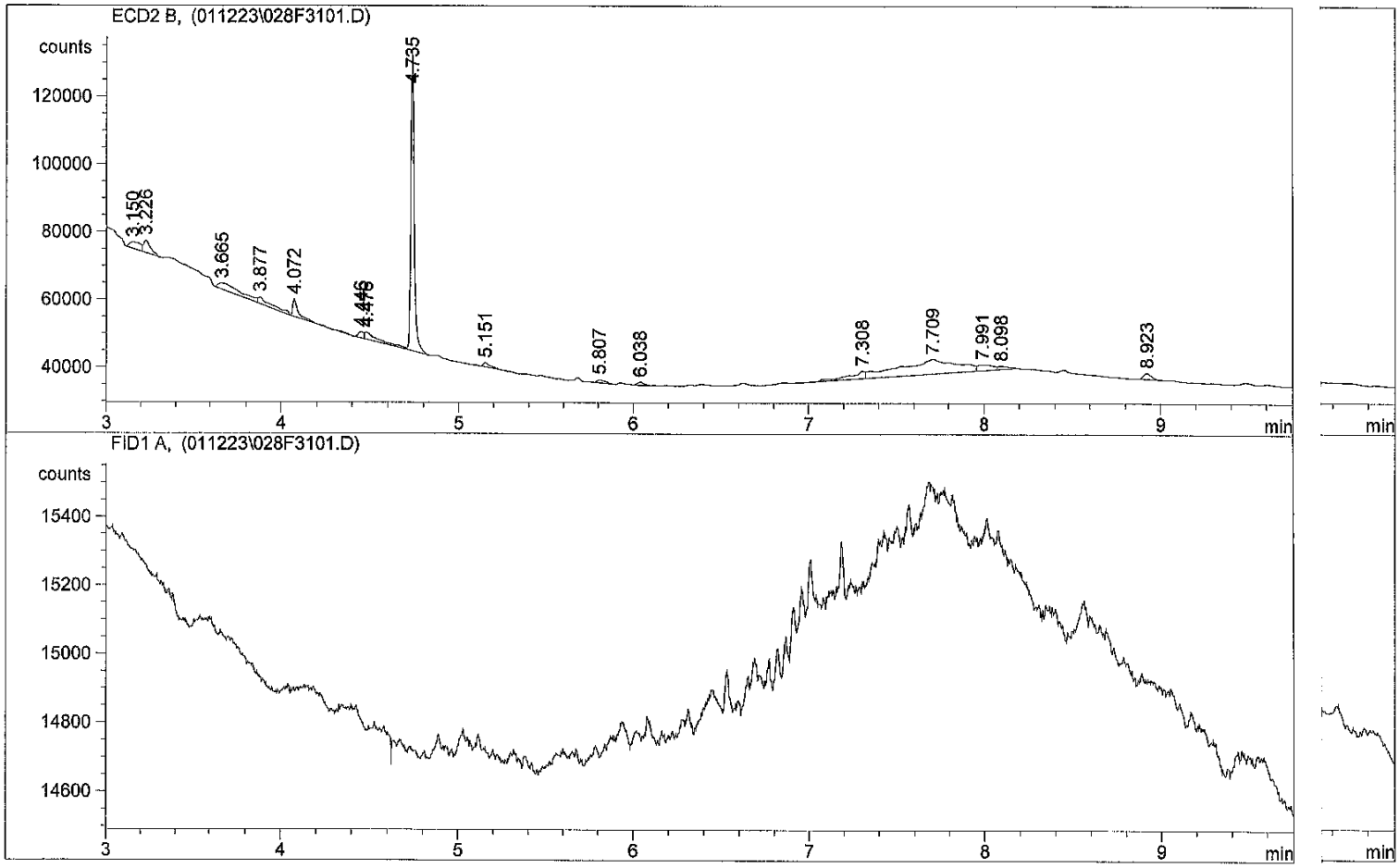
Data File C:\HPCHEM\1\DATA\011223\027F3001.D Sample Name: 23A0175 01

Injection Date	: 1/12/2023 11:51:23 PM	Seq. Line	: 30
Sample Name	: 23A0175 01	Location	: Vial 27
Acq. Operator	: CRR	Inj	: 1
		Inj Volume	: 1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\011223.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		
SCREEN METHOD			



*** End of Report ***

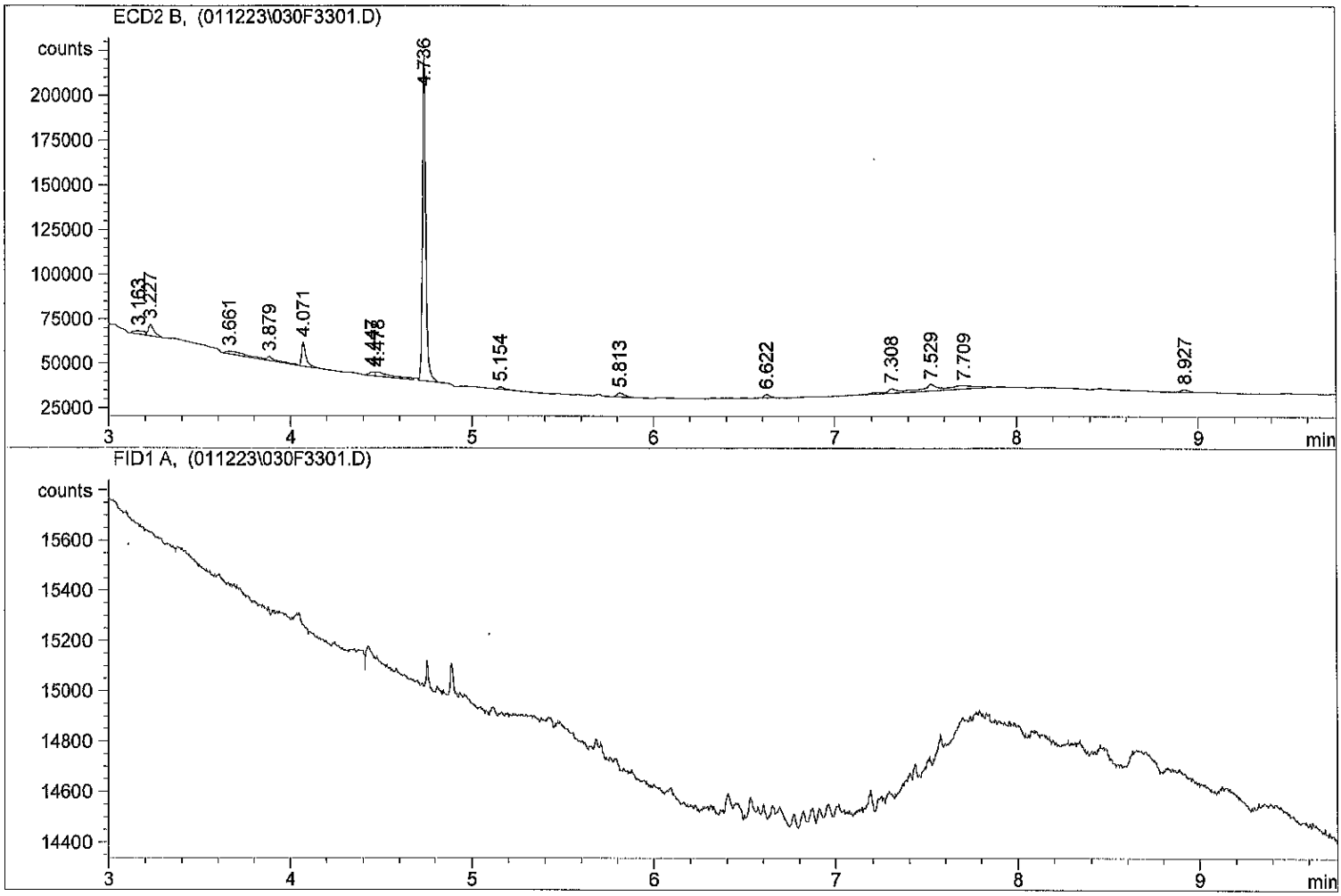
Injection Date	: 1/13/2023 12:05:19 AM	Seq. Line	: 31
Sample Name	: 23A0175 02	Location	: Vial 28
Acq. Operator	: CRR	Inj	: 1
		Inj Volume	: 1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\011223.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		
SCREEN METHOD			



*** End of Report ***

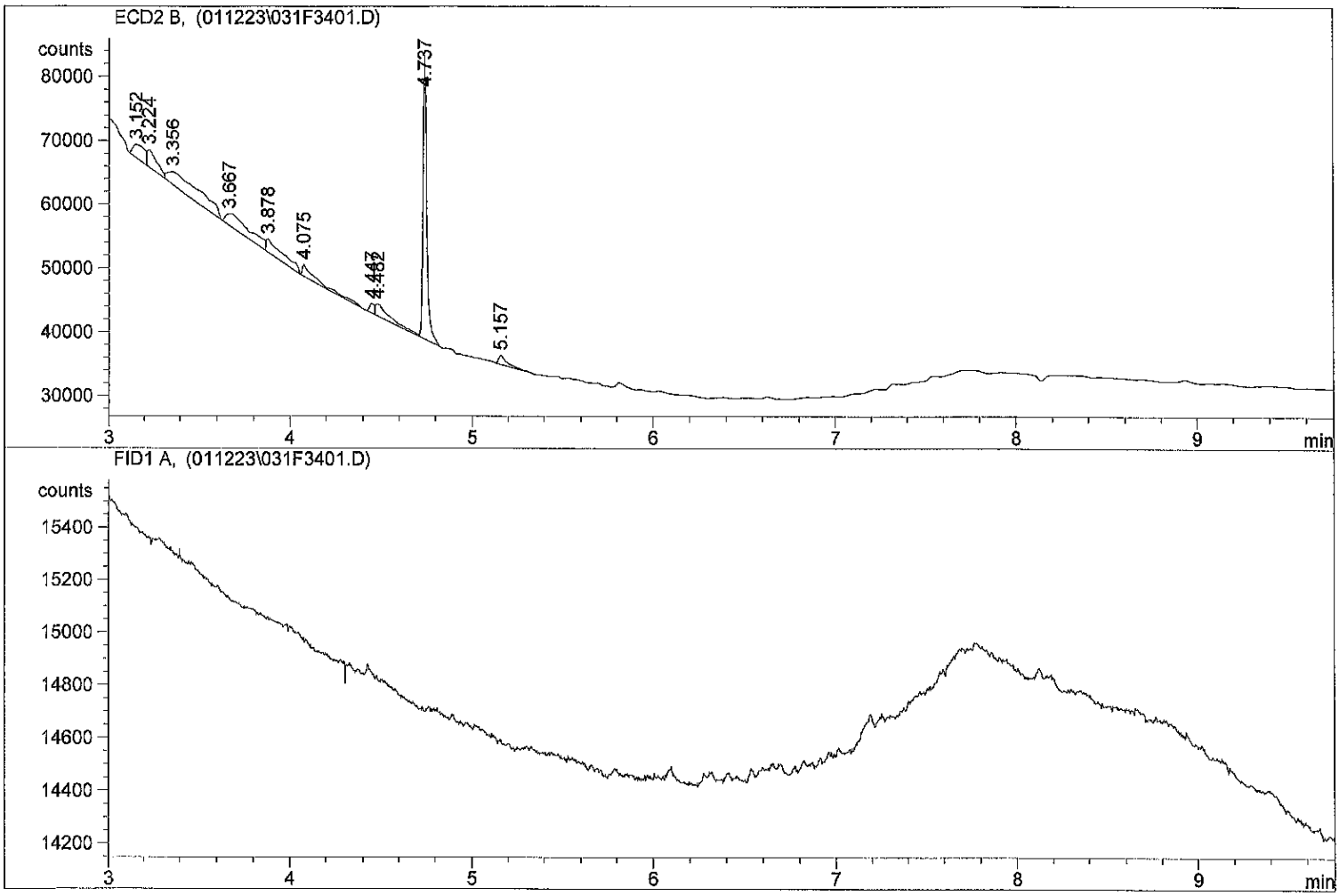
Injection Date : 1/13/2023 12:33:53 AM Seq. Line : 33
Sample Name : 23A0175 04 Location : Vial 30
Acq. Operator : CRR Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\011223.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



*** End of Report ***

Injection Date	: 1/13/2023 12:48:22 AM	Seq. Line	: 34
Sample Name	: 23A0175 05	Location	: Vial 31
Acq. Operator	: CRR	Inj	: 1
		Inj Volume	: 1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\011223.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		
SCREEN METHOD			

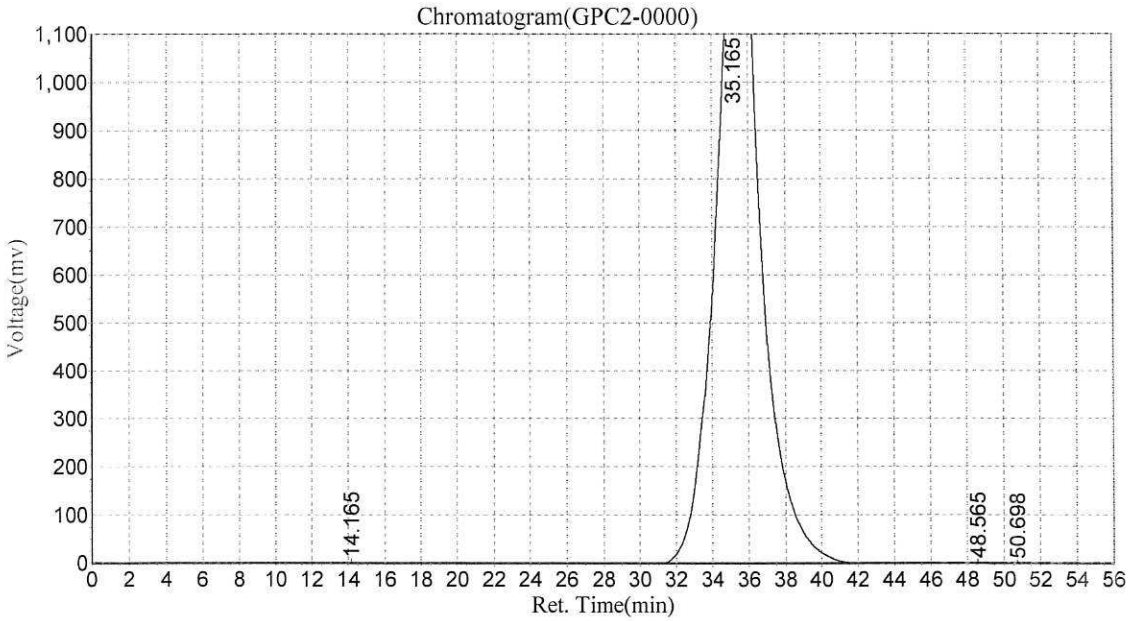


*** End of Report ***

BLA0339 23A0100/171/175 SVOC

Date:2023-01-20,6:25:05 PM
Data File:c:\n2000\data\gpc2\012023C\GPC2-0000
Method File:E:\GPC2_InHouse.mtd

Analyst£ºTWC
Date/Time2023-01-20,6:25:06 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		14.165	2355.821	129866.203	0.0526
2		35.165	1380618.375	246027616.000	99.7265
3		48.565	2928.625	405561.531	0.1644
4		50.698	1912.125	139330.469	0.0565
Total			1387814.946	246702374.203	100.000

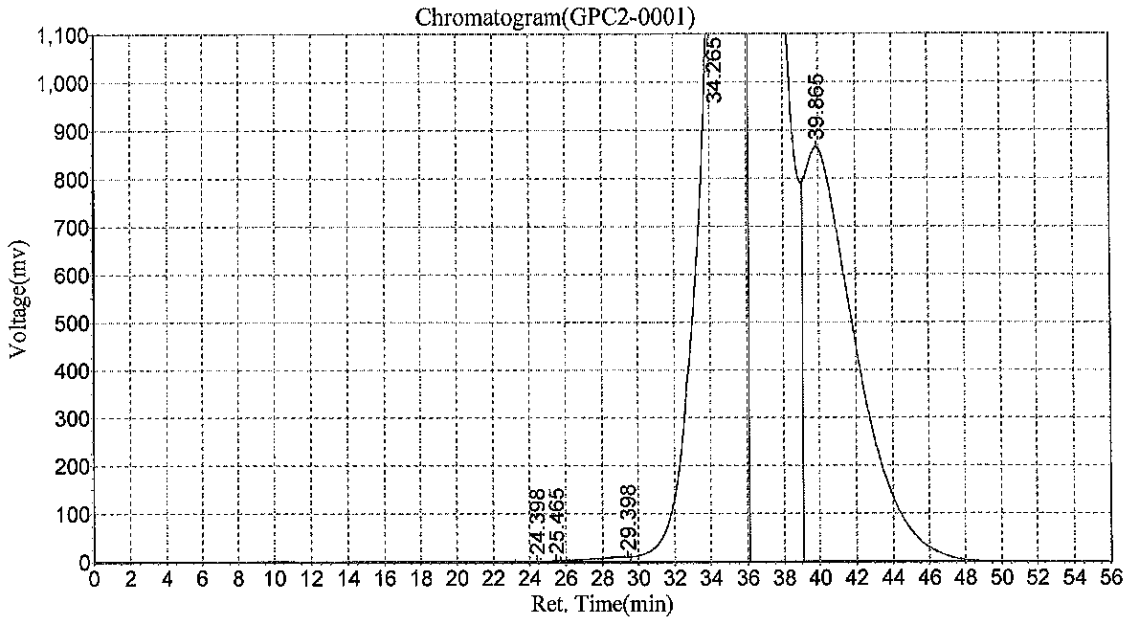
Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

Date:2023-01-20,7:22:50 PM
Data File:c:\n2000\data\gpc2\012023C\GPC2-0001
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-20,7:22:50 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		24.398	3082.843	161776.141	0.0380
2		25.465	4841.332	265272.375	0.0623
3		29.398	12859.758	2165019.250	0.5087
4		34.265	1376746.875	250336096.000	58.8195
5		39.865	867144.938	172672544.000	40.5715
Total			2264675.746	425600707.766	100.000

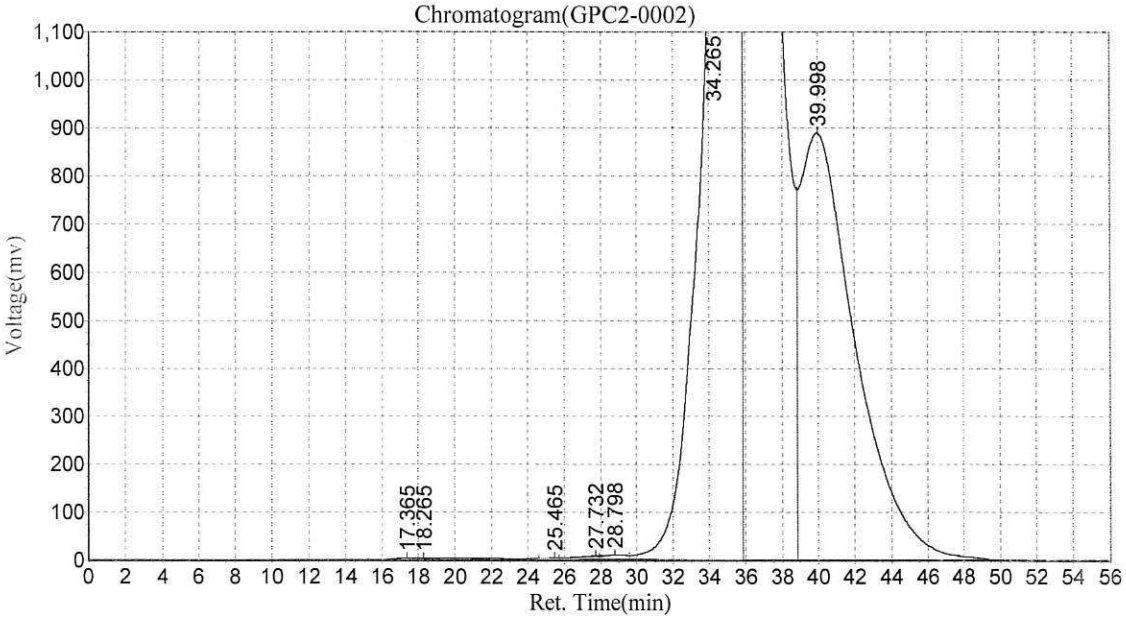
Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

Date:2023-01-20,8:20:31 PM
Data File:c:\n2000\data\gpc2\012023C\GPC2-0002
Method File:E:\GPC2_InHouse.mtd

Analyst£ºTWC
Date/Time2023-01-20,8:20:32 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.365	5878.328	502761.094	0.1214
2		18.265	4504.448	164075.000	0.0396
3		25.465	3353.584	170344.141	0.0411
4		27.732	7886.658	752541.188	0.1817
5		28.798	10172.752	927116.813	0.2238
6		34.265	1374446.125	222966464.000	53.8221
7		39.998	891644.250	188782048.000	45.5703
Total			2297886.145	414265350.234	100.000

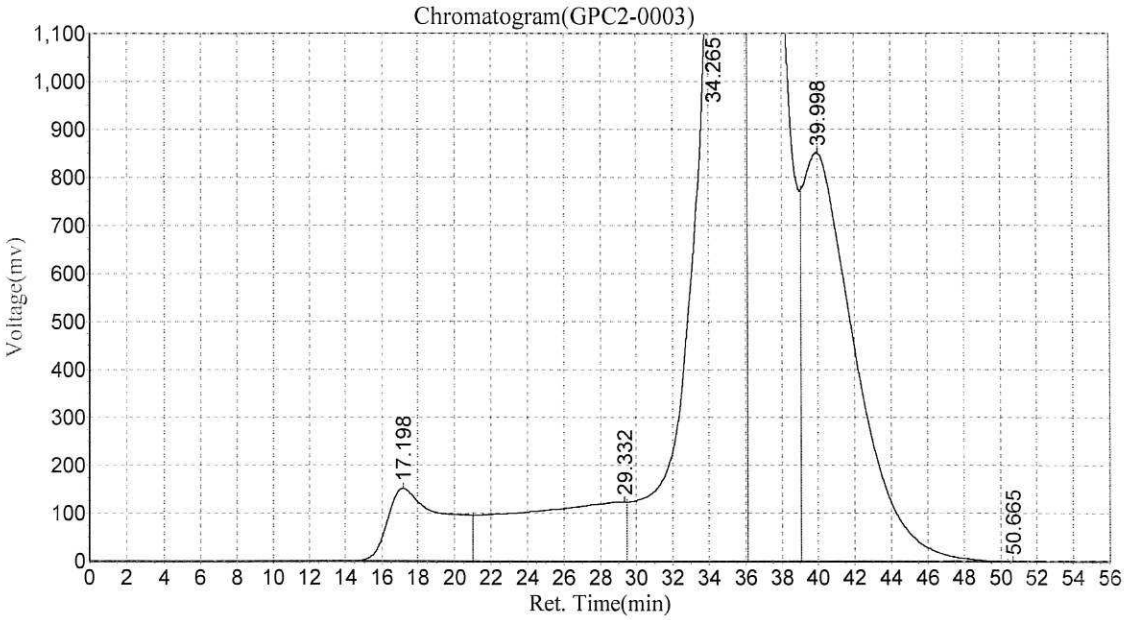
Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

Date:2023-01-20,9:18:15 PM
Data File:c:\n2000\data\gpc2\012023C\GPC2-0003
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-20,9:18:15 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.198	156825.906	36315072.000	6.6984
2		29.332	129843.258	57815964.000	10.6643
3		34.265	1379522.500	276161824.000	50.9388
4		39.998	856471.125	171607648.000	31.6535
5		50.665	4136.930	243422.797	0.0449
Total			2526799.719	542143930.797	100.000

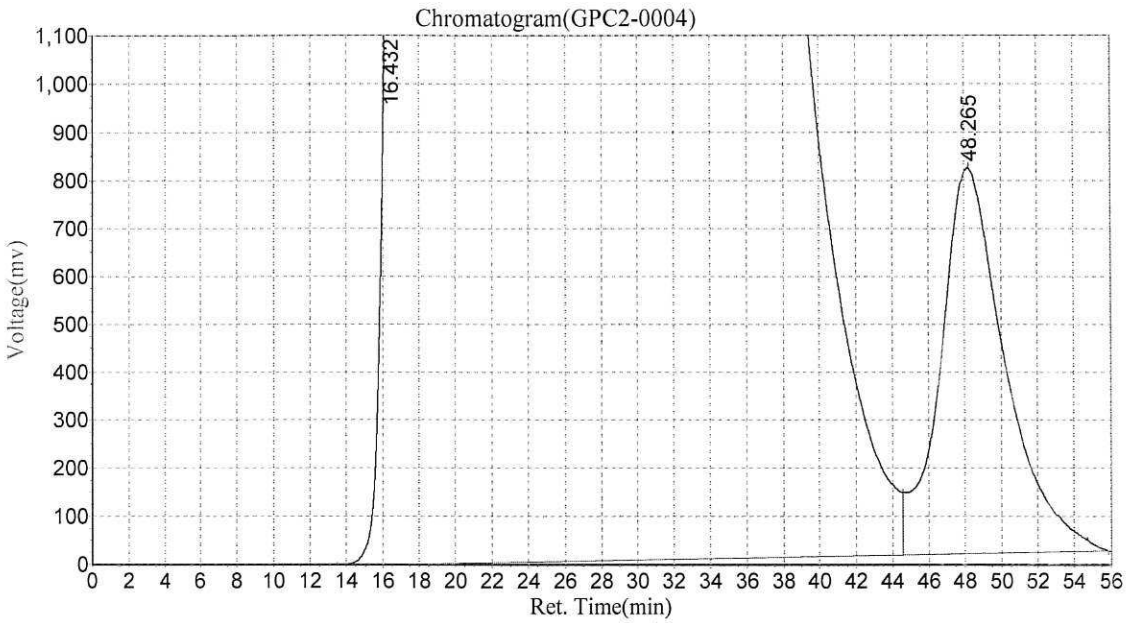
Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

Date:2023-01-20,10:15:56 PM
Data File:c:\n2000\data\gpc2\012023C\GPC2-0004
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-20,10:15:57 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.432	1379648.000	2066226944.000	91.2135
2		48.265	802961.250	199036640.000	8.7865
Total			2182609.250	2265263584.000	100.000

Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

Date:2023-01-20,11:13:40 PM
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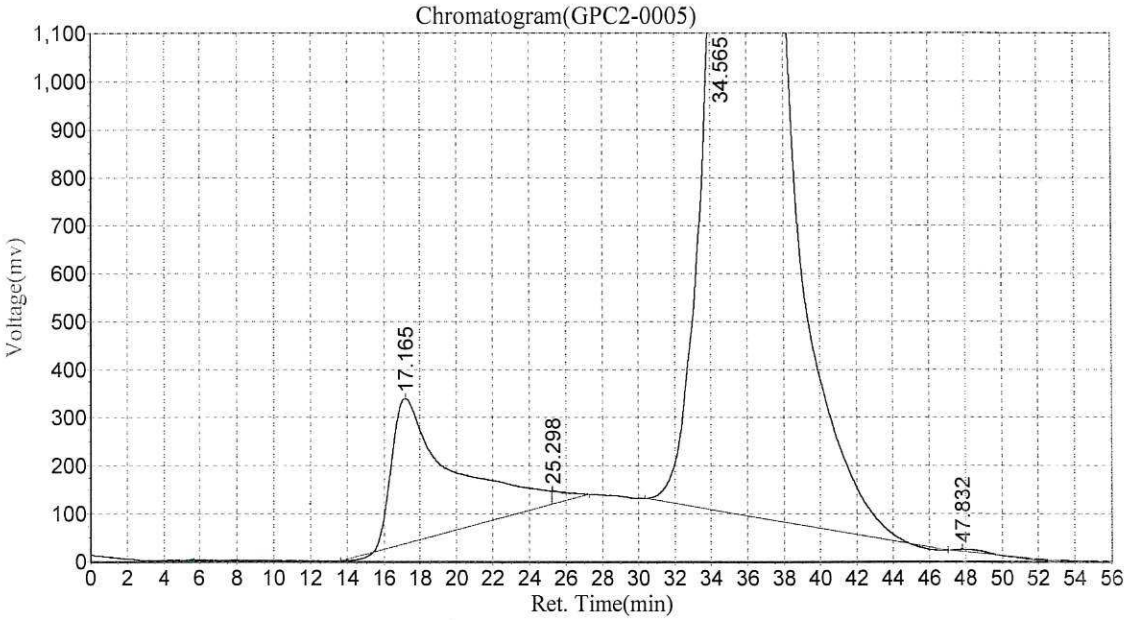
Method File:E:\GPC2_InHouse.mtd

Analyst£ºTWC
Date/Time2023-01-20,11:13:40 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.165	300971.875	69998656.000	12.9410
2		25.298	27046.807	1662958.375	0.3074
3		34.565	1271107.000	468854592.000	86.6795
4		47.832	4826.182	389502.344	0.0720
Total			1603951.863	540905708.719	100.000

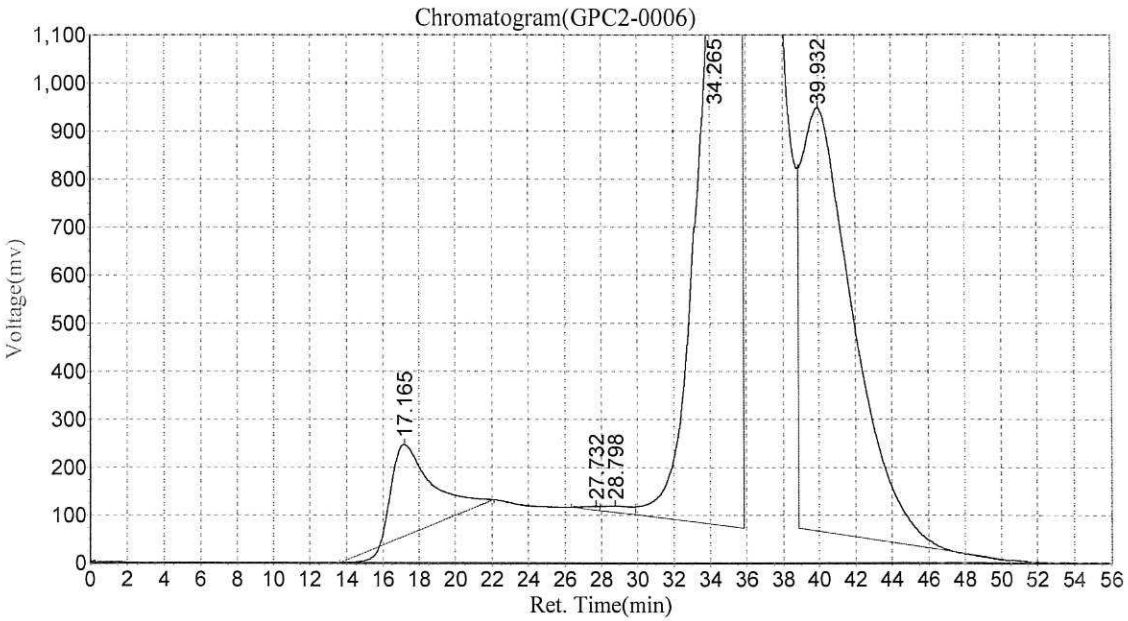
Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

Date:2023-01-21,12:11:21 AM
Data File:c:\n2000\data\gpc2\012023C\GPC2-0006
Method File:E:\GPC2_InHouse.mtd

Analyst£ºTWC
Date/Time2023-01-21,12:11:22 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.165	192509.578	27834004.000	6.5111
2		27.732	10428.657	642641.188	0.1503
3		28.798	16083.603	1793864.875	0.4196
4		34.265	1294846.875	217890784.000	50.9702
5		39.932	894712.750	179325216.000	41.9487
Total			2408581.463	427486510.063	100.000

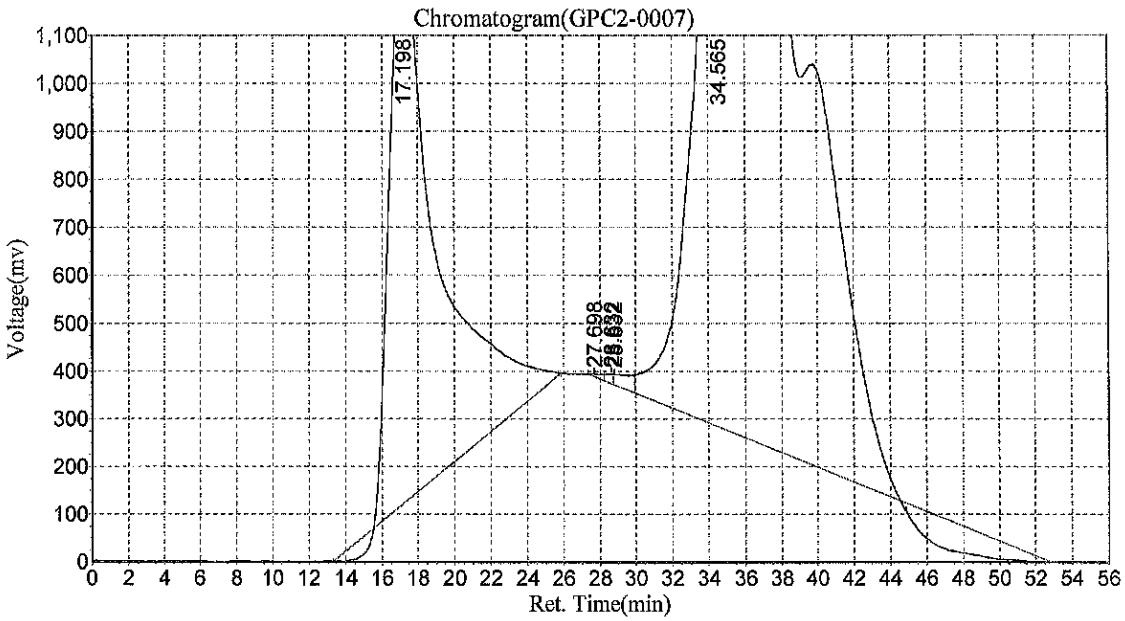
Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

Date:2023-01-21,1:09:09 AM
Data File:c:\n2000\data\gpc2\012023C\GPC2-0007
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-21,1:09:09 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.198	1182877.750	217554256.000	28.8674
2		27.698	5818.384	355312.250	0.0471
3		28.632	19946.258	558526.500	0.0741
4		28.832	22879.088	1985031.250	0.2634
5		34.565	1091588.875	533179840.000	70.7479
Total			2323110.354	753632966.000	100.000

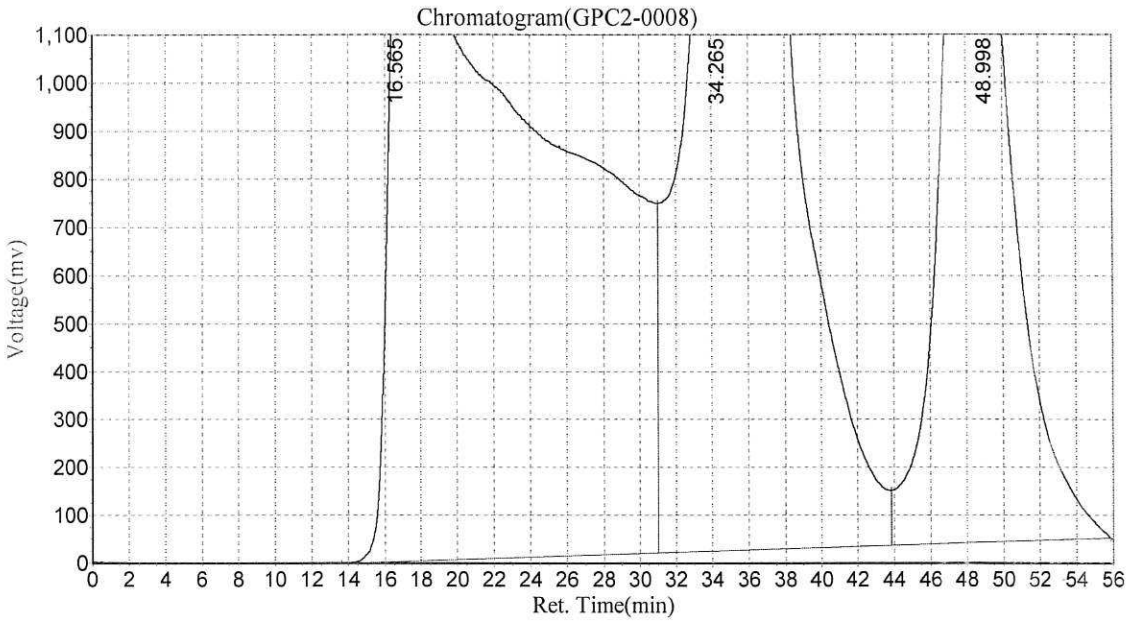
Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

Date:2023-01-21,2:06:50 AM
Data File:c:\n2000\data\gpc2\012023C\GPC2-0008
Method File:E:\GPC2_InHouse.mtd

Analyst£ºTWC
Date/Time2023-01-21,2:06:51 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.565	1377167.375	885329344.000	45.3285
2		34.265	1348821.375	663522432.000	33.9721
3		48.998	1333331.125	404289376.000	20.6994
Total			4059319.875	1953141152.000	100.000

Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

Date:2023-01-21,3:04:38 AM
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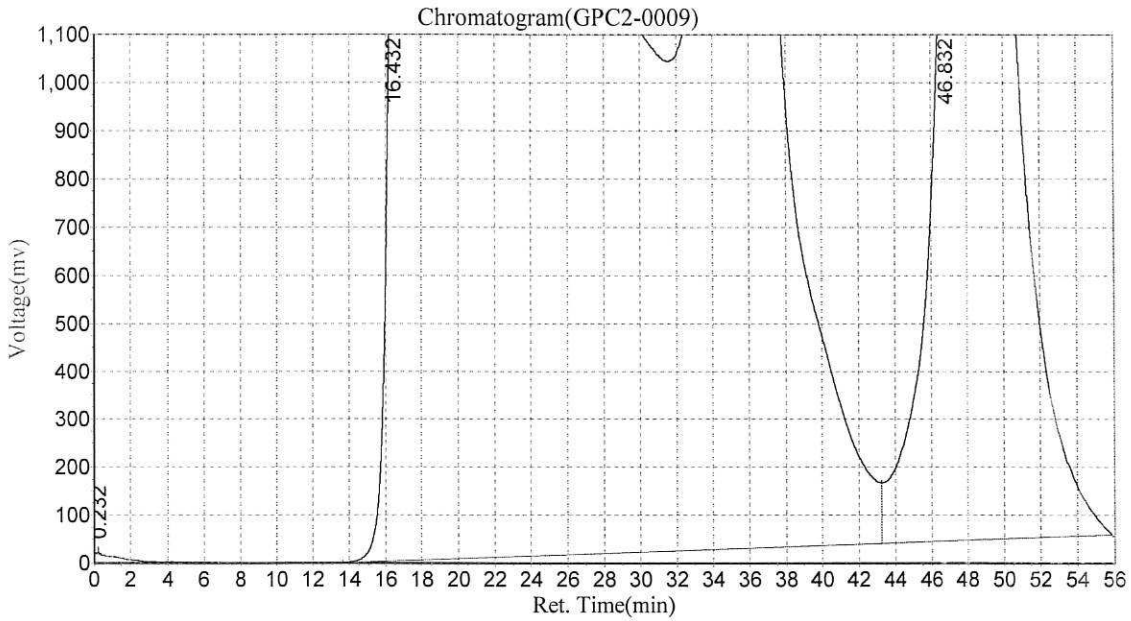
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-21,3:04:39 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		0.232	4864.000	105691.500	0.0046
2		16.432	1374903.750	1790510080.000	78.3346
3		46.832	1329911.250	495105952.000	21.6608
Total			2709679.000	2285721723.500	100.000

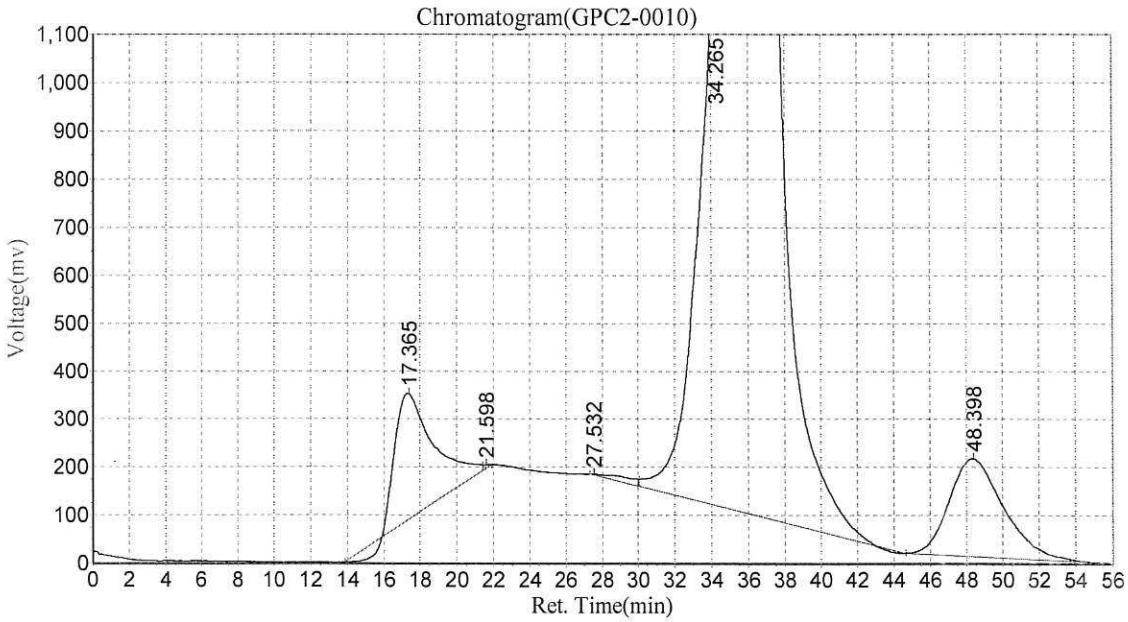
Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

Date:2023-01-21,4:02:20 AM
Data File:c:\n2000\data\gpc2\012023C\GPC2-0010
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-21,4:02:20 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.365	263447.094	37416400.000	7.7267
2		21.598	9207.936	192966.688	0.0398
3		27.532	2137.169	1346051.375	0.2780
4		34.265	1254070.250	402599680.000	83.1386
5		48.398	203122.875	42695984.000	8.8169
Total			1731985.323	484251082.063	100.000

Ingredient Table

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

-03

BLA0339 23A0100/171/175 SVOC

Date:2023-01-21,5:00:03 AM
Data File:c:\n2000\data\gpc2\012023C\GPC2-0011
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
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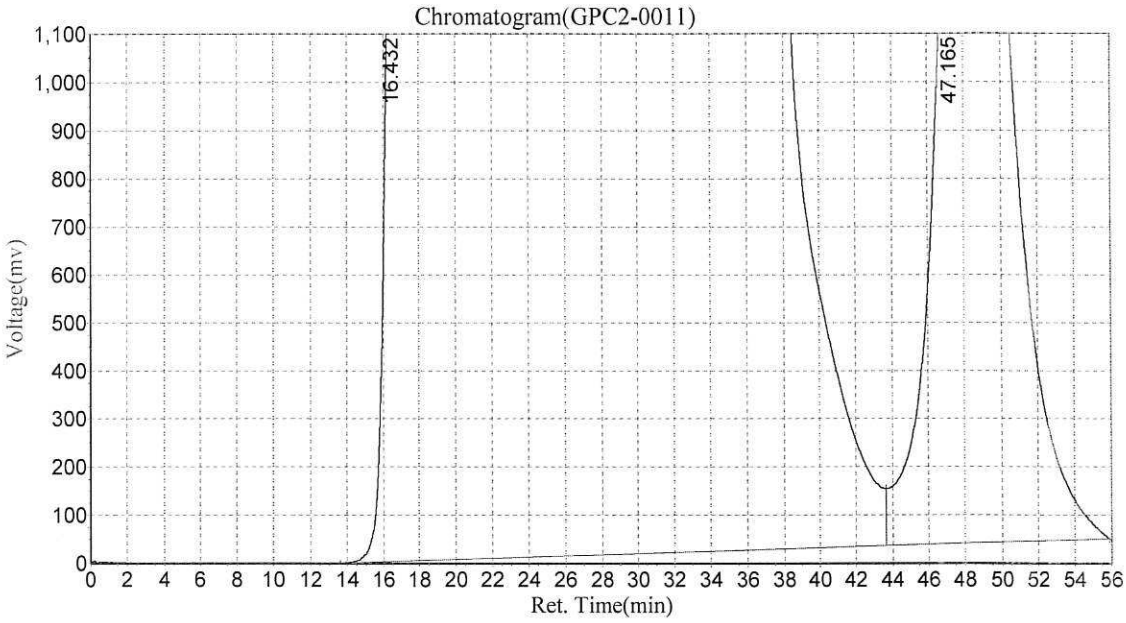


Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.432	1375903.375	1937832576.000	81.0795
2		47.165	1335798.500	452206304.000	18.9205
Total			2711701.875	2390038880.000	100.000

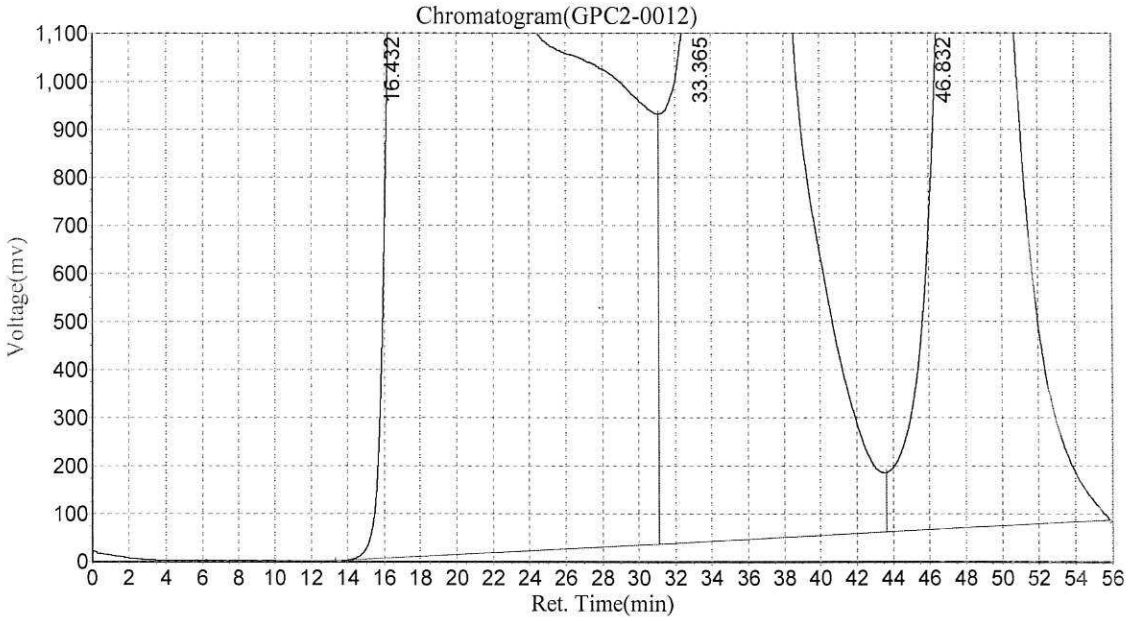
Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

Date:2023-01-21,5:57:44 AM
Data File:c:\n2000\data\gpc2\012023C\GPC2-0012
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-21,5:57:45 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.432	1371419.000	1041449216.000	47.2922
2		33.365	1331511.750	688033280.000	31.2436
3		46.832	1307420.625	472673760.000	21.4641
Total			4010351.375	2202156256.000	100.000

Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

Date:2023-01-21,6:55:27 AM
Data File:c:\n2000\data\gpc2\012023C\GPC2-0013
Method File:E:\GPC2_InHouse.mtd

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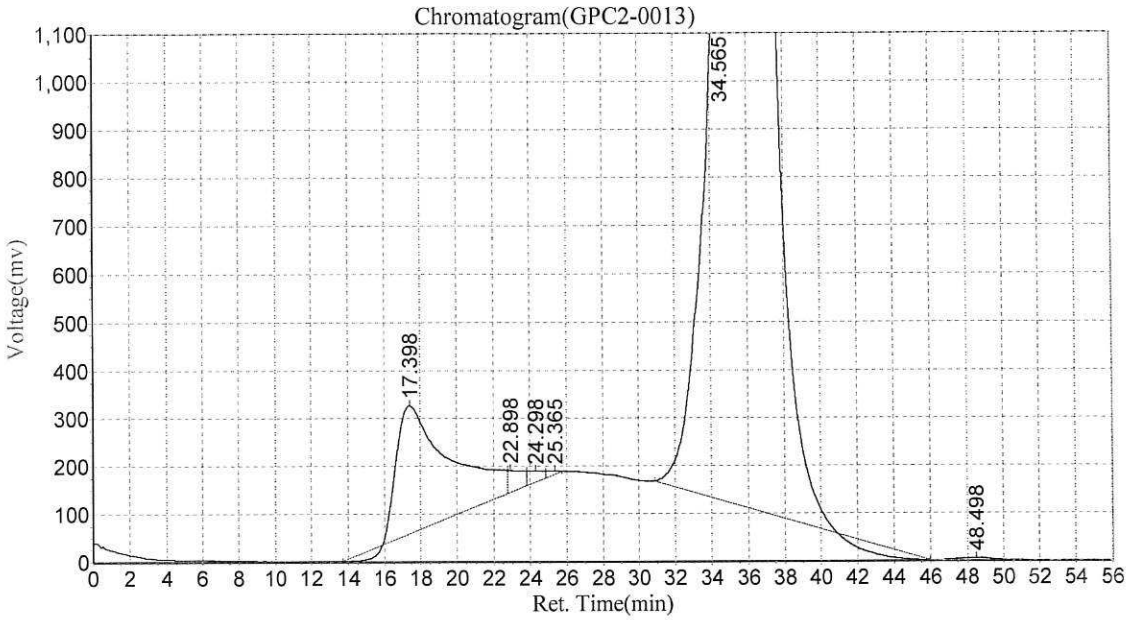

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.398	268616.563	52454260.000	12.6611
2		22.898	46727.918	2535821.750	0.6121
3		24.298	24125.773	1387161.250	0.3348
4		25.365	7505.756	448476.625	0.1083
5		34.565	1246506.250	356417568.000	86.0300
6		48.498	5759.373	1051160.625	0.2537
Total			1599241.633	414294448.250	100.000

Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

Date:2023-01-21,7:53:09 AM
Data File:c:\n2000\data\gpc2\012023C\GPC2-0014
Method File:E:\GPC2_InHouse.mtd

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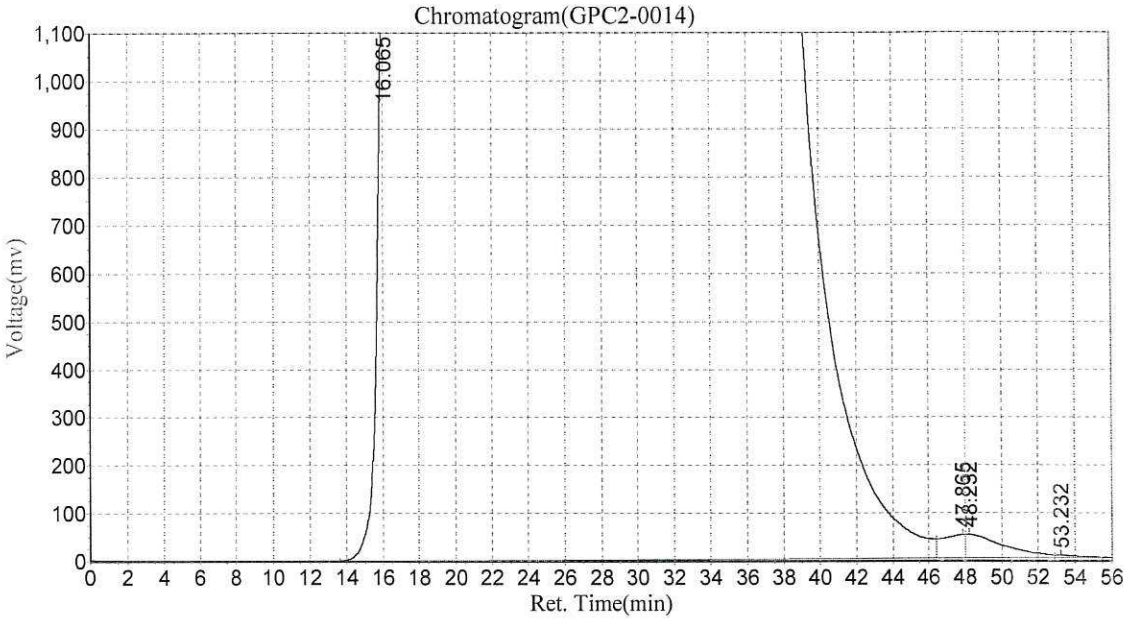
Date/Time2023-01-21,7:53:09 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.065	1379516.250	2050428288.000	99.4301
2		47.865	48926.121	4151270.500	0.2013
3		48.232	49040.906	7214381.500	0.3498
4		53.232	5067.695	387461.938	0.0188
Total			1482550.973	2062181401.938	100.000

Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

Date:2023-01-21,8:50:53 AM
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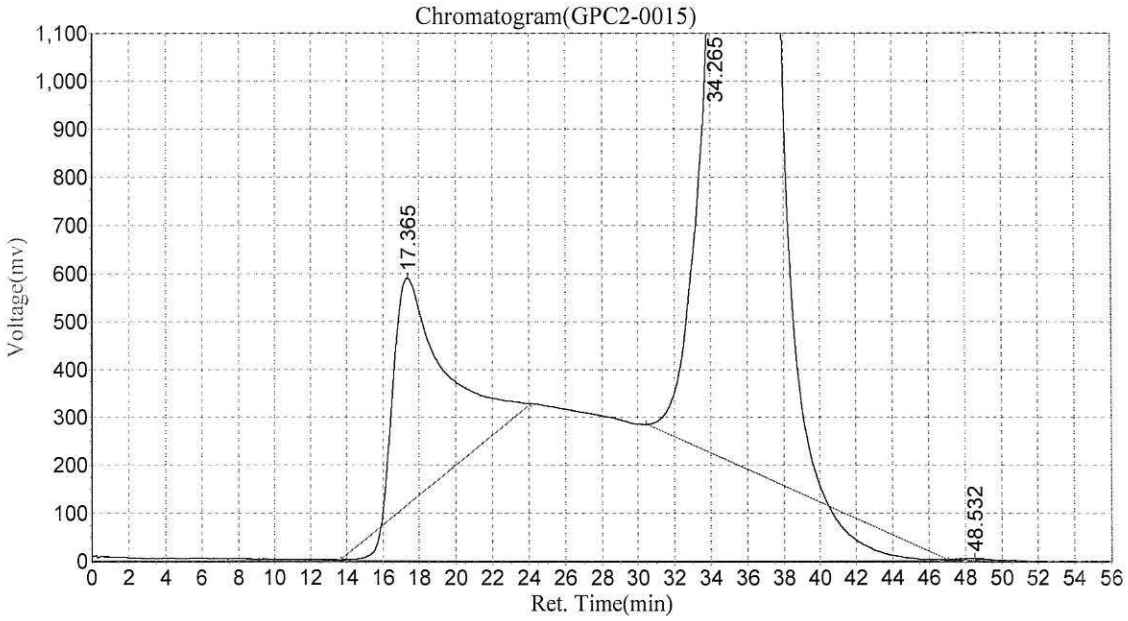
Date/Time2023-01-21,8:50:53 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.365	471208.625	87936352.000	19.8310
2		34.265	1153346.500	354968768.000	80.0509
3		48.532	3364.561	523539.719	0.1181
Total			1627919.686	443428659.719	100.000

Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

Date:2023-01-21,9:48:34 AM
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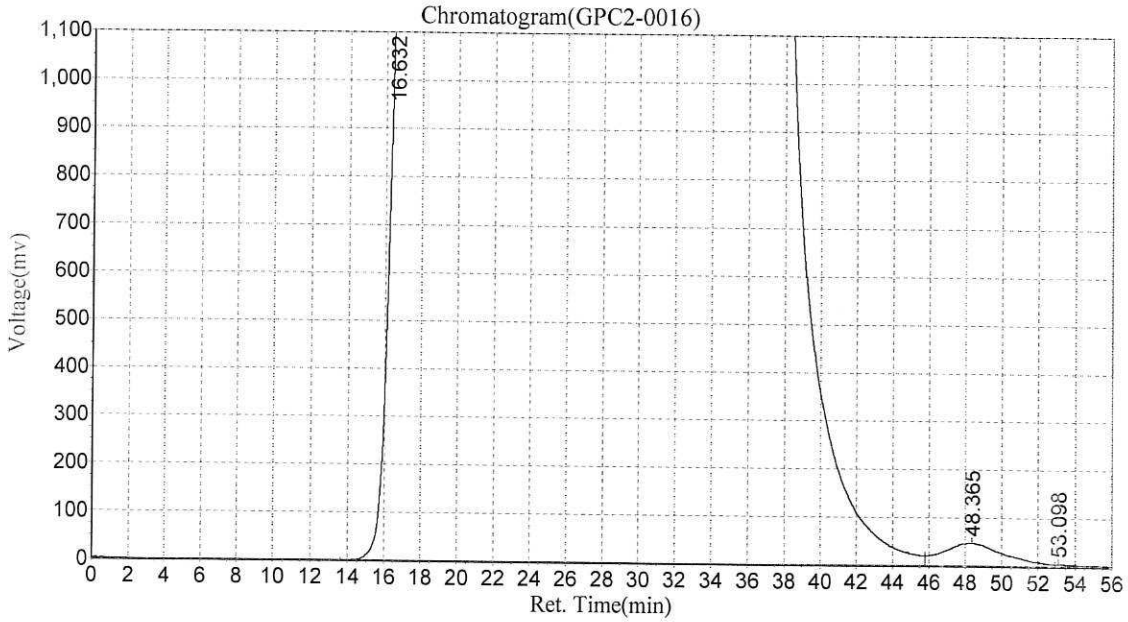
Method File:E:\GPC2_InHouse.mtd

Analyst£ºTWC
Date/Time2023-01-21,9:48:34 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.632	1379896.000	1918036864.000	99.4152
2		48.365	46587.324	11001886.000	0.5702
3		53.098	4165.492	281130.594	0.0146
Total			1430648.816	1929319880.594	100.000

Ingredient Table

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

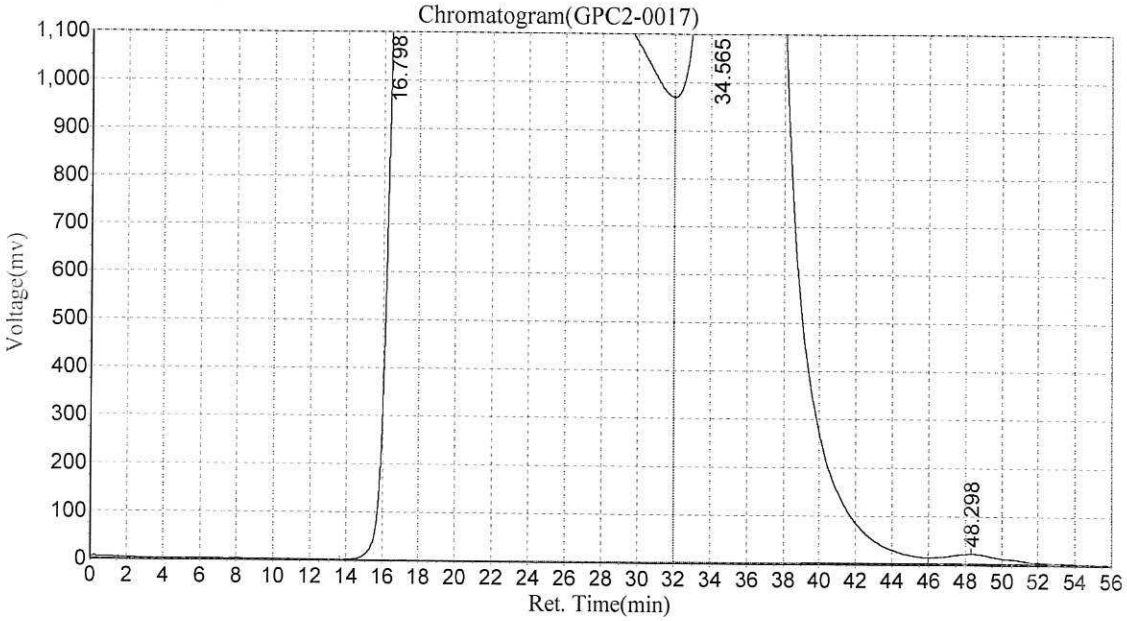
2023-01-21

Analytical Resources, Inc.

BLA0339 23A0100/171/175 SVOC

Date:2023-01-21,10:46:17 AM
Data File:c:\n2000\data\gpc2\012023C\GPC2-0017
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-21,10:46:18 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.798	1378280.875	1172357504.000	67.3789
2		34.565	1372150.875	563236608.000	32.3709
3		48.298	19545.408	4353855.000	0.2502
Total			2769977.158	1739947967.000	100.000

Ingredient Table

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

2023-01-21

Analytical Resources, Inc.

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLA0198	Cleanup Type:	GPC
Cleanup Method:	EPA 3640A GPC Cleanup 1:1	Analysis:	EPA 8270E

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	BLA0339-BLK1	NT1423021721.D	01/23/2023	
Reference	BLA0339-SRM1	NT1423021724.D	01/23/2023	
LCS	BLA0339-BS1	NT1423021722.D	01/23/2023	
LDW23-SS1245	23A0171-04	NT1423021733.D	01/23/2023	
LDW23-SS1254	23A0171-01	NT1423021730.D	01/23/2023	
LDW23-SS1257	23A0171-02	NT1423021731.D	01/23/2023	
LDW23-SS1262	23A0171-03	NT1423021732.D	01/23/2023	
LCS Dup	BLA0339-BSD1	NT1423021723.D	01/23/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLA0198

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Check Standard: CLA0166-GPC1** **Printed: 1/23/2023 1:41:33PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0100-21	A	LDW23-SS1154	A 04	1	1	8270E-SIM Dual Scan SVOC	1/23/2023	NRB	
23A0100-21	A	LDW23-SS1154	A 01	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/23/2023	NRB	
23A0100-22	A	LDW23-SS1149	A 04	1	1	8270E-SIM Dual Scan SVOC	1/23/2023	NRB	
23A0100-22	A	LDW23-SS1149	A 01	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/23/2023	NRB	
23A0100-23	A	LDW23-SS1130	A 04	1	1	8270E-SIM Dual Scan SVOC	1/23/2023	NRB	
23A0100-23	A	LDW23-SS1130	A 01	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/23/2023	NRB	
23A0171-01	A	LDW23-SS1254	A 03	1	1	8270E-SIM Dual Scan SVOC	1/23/2023	NRB	
23A0171-01	A	LDW23-SS1254	A 01	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/23/2023	NRB	
23A0171-02	A	LDW23-SS1257	A 01	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/23/2023	NRB	
23A0171-02	A	LDW23-SS1257	A 03	1	1	8270E-SIM Dual Scan SVOC	1/23/2023	NRB	
23A0171-03	A	LDW23-SS1262	A 03	1	1	8270E-SIM Dual Scan SVOC	1/23/2023	NRB	
23A0171-03	A	LDW23-SS1262	A 01	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/23/2023	NRB	
23A0171-04	A	LDW23-SS1245	A 03	1	1	8270E-SIM Dual Scan SVOC	1/23/2023	NRB	
23A0171-04	A	LDW23-SS1245	A 01	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/23/2023	NRB	
23A0175-01	A	305233-01	A 01	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/23/2023	NRB	
23A0175-02	A	305233-02	A 01	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/23/2023	NRB	
23A0175-03	A	305233-03	A 01	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/23/2023	NRB	
23A0175-04	A	305233-04	A 01	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/23/2023	NRB	
23A0175-05	A	305233-05	A 01	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/23/2023	NRB	
BLA0339-BLK1	-	Blank	-	1	1	-	1/23/2023	NRB	
BLA0339-BLK2	-	Blank	-	1	1	-	1/23/2023	NRB	
BLA0339-BS1	-	LCS	-	1	1	-	1/23/2023	NRB	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLA0198

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Check Standard: CLA0166-GPC1** **Printed: 1/23/2023 1:41:33PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
BLA0339-BS2	-	LCS	-	1	1	-	1/23/2023	NRB	
BLA0339-BSD1	-	LCS Dup	-	1	1	-	1/23/2023	NRB	
BLA0339-BSD2	-	LCS Dup	-	1	1	-	1/23/2023	NRB	
BLA0339-MS1	-	Matrix Spike	-	1	1	-	1/23/2023	NRB	
BLA0339-MS2	-	Matrix Spike	-	1	1	-	1/23/2023	NRB	
BLA0339-MSD1	-	Matrix Spike Dup	-	1	1	-	1/23/2023	NRB	
BLA0339-MSD2	-	Matrix Spike Dup	-	1	1	-	1/23/2023	NRB	
BLA0339-SRM1	-	Reference	-	1	1	-	1/23/2023	NRB	
BLA0339-SRM2	-	Reference	-	1	1	-	1/23/2023	NRB	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I

METHOD BLANK DATA SHEET

EPA 8270E

Blank

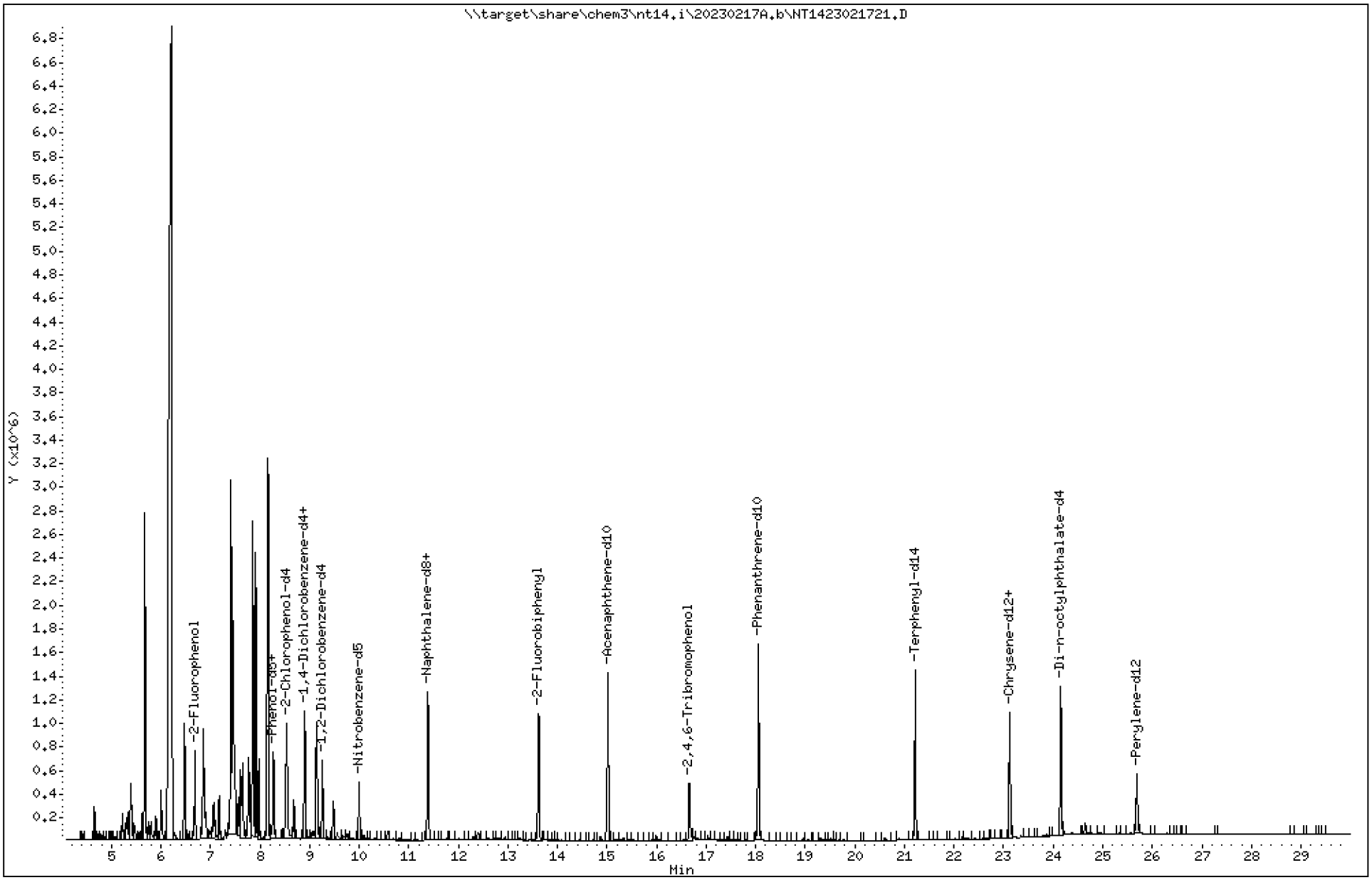
Laboratory:	Analytical Resources, LLC			SDG:	23A0171
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLA0339-BLK1	File ID:	NT1423021721.D
Sampled:	N/A	Prepared:	01/18/23 13:47	Analyzed:	02/17/23 22:43
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	10 g / 1 mL
Batch:	BLA0339	Sequence:	SLB0251	Calibration:	GB00046
Instrument:	NT14	Column:	ZB-5MS	Cleanups:	GPC

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

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
2-Fluorophenol	750.00	391	52.2	27 - 120	
Phenol-d5	750.00	372	49.6	29 - 120	
2-Chlorophenol-d4	750.00	419	55.9	31 - 120	
1,2-Dichlorobenzene-d4	500.00	272	54.3	32 - 120	
Nitrobenzene-d5	500.00	284	56.7	30 - 120	
2-Fluorobiphenyl	500.00	299	59.9	35 - 120	
2,4,6-Tribromophenol	750.00	288	38.4	24 - 134	
p-Terphenyl-d14	500.00	421	84.2	37 - 120	

Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021721.D
Date : 17-FEB-2023 22:43
Client ID:
Sample Info: BLA0339-BLK1

Instrument: nt14.i
Operator: DSD
Column phase: ZB-5msi
Column diameter: 0.25



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Date : 17-FEB-2023 22:43

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BLK1

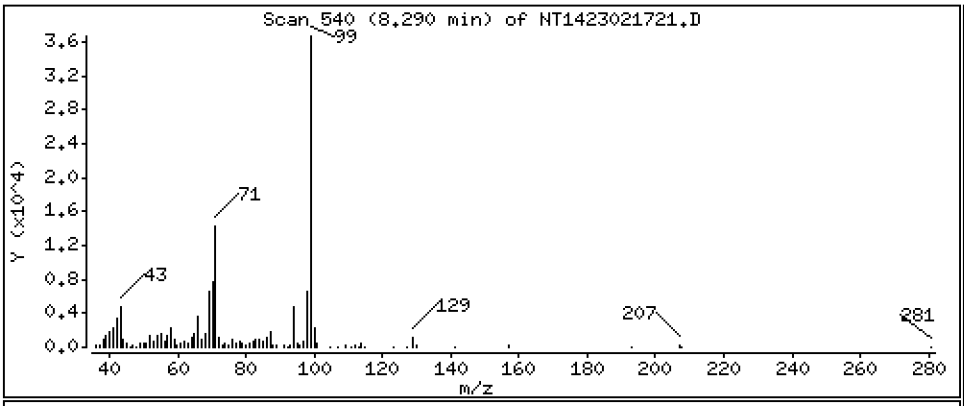
Operator: DSD

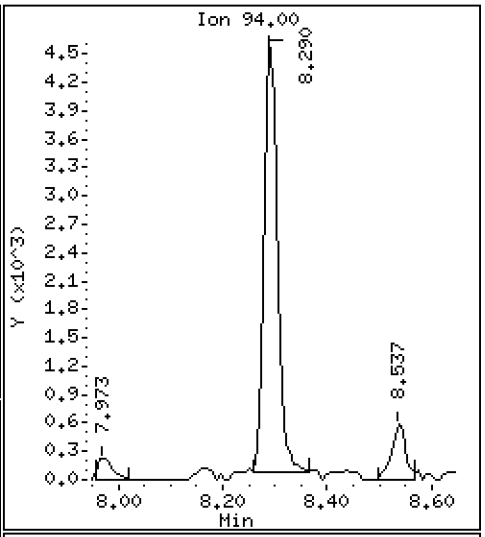
Column phase: ZB-5msi

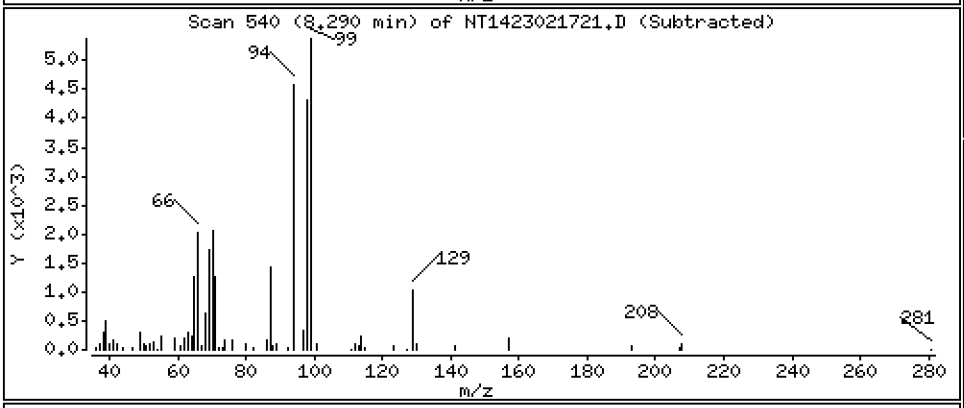
Column diameter: 0.25

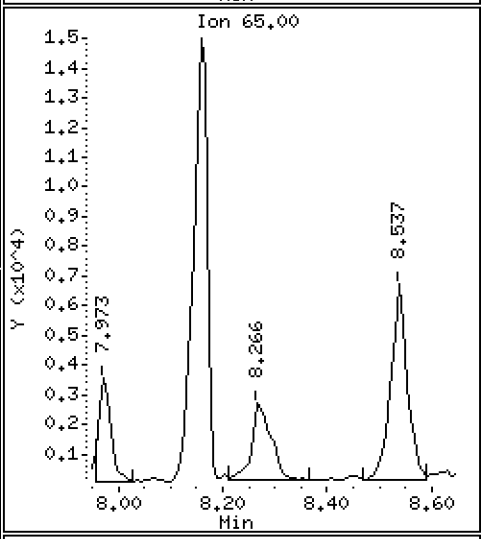
3 Phenol

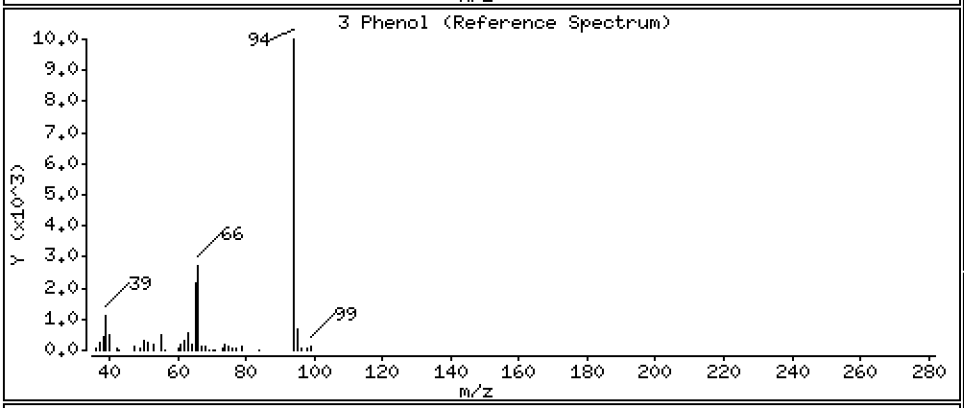
Concentration: 0.05715 ug/mL

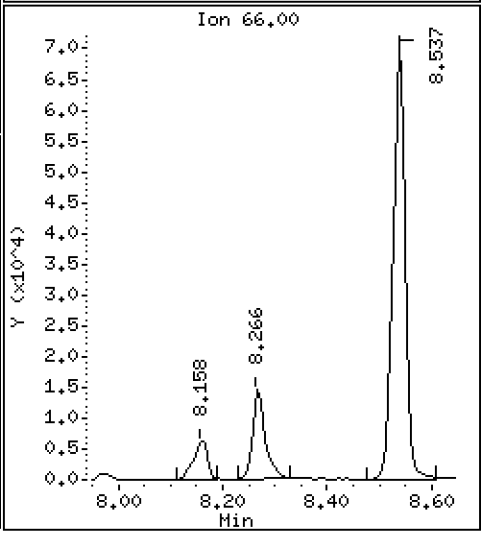


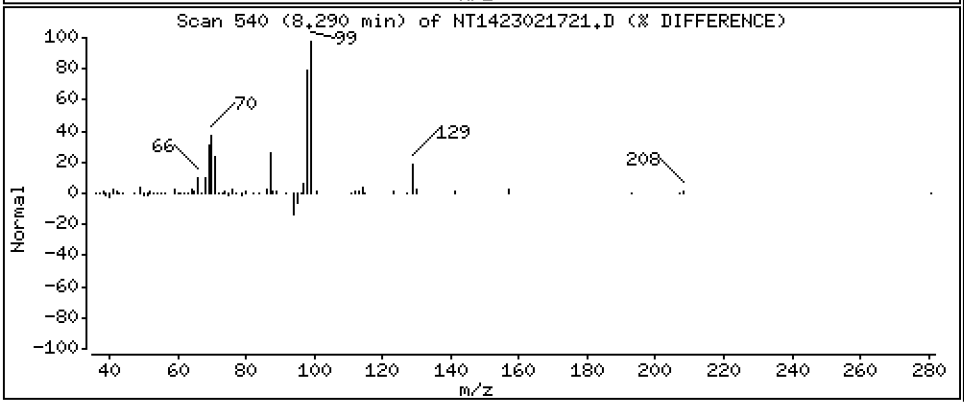












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Date : 17-FEB-2023 22:43

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BLK1

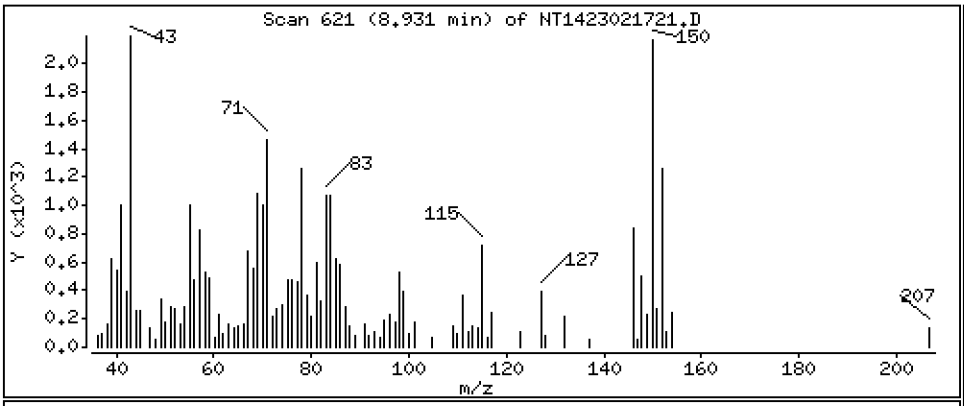
Operator: DSD

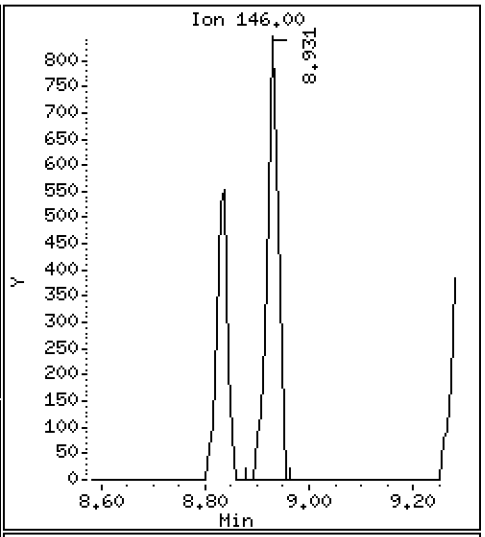
Column phase: ZB-5msi

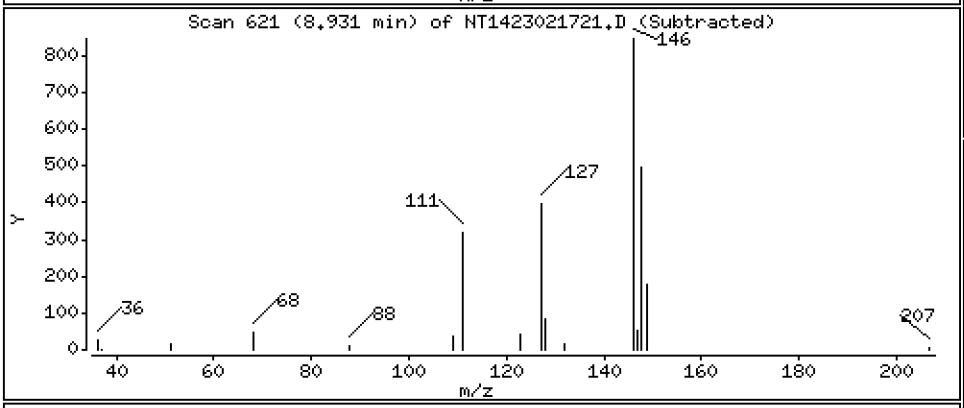
Column diameter: 0.25

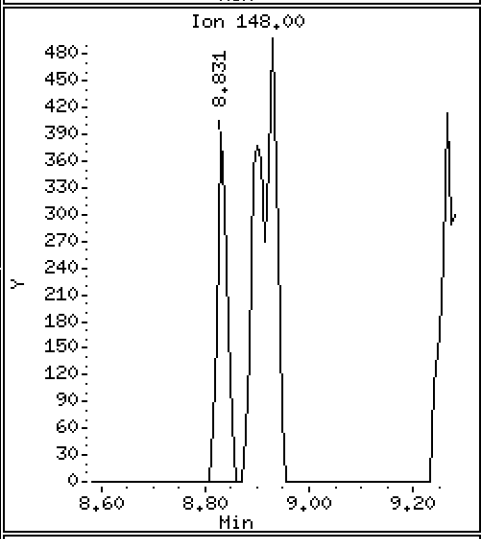
9 1,4-Dichlorobenzene

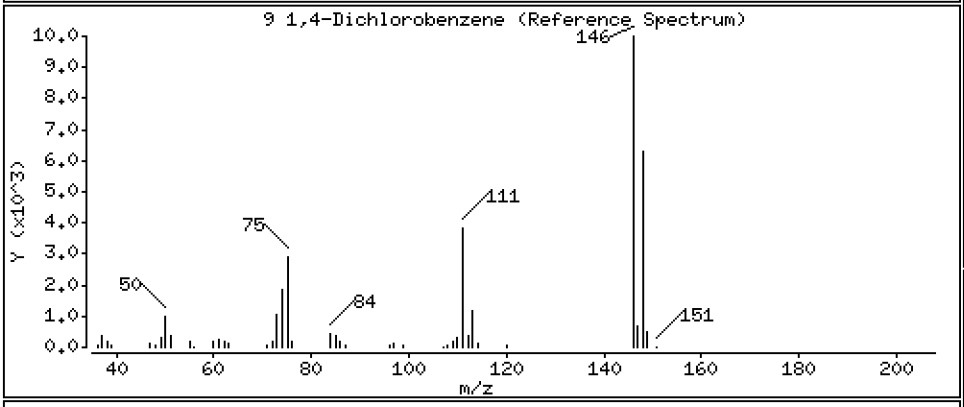
Concentration: 0.01214 ug/mL

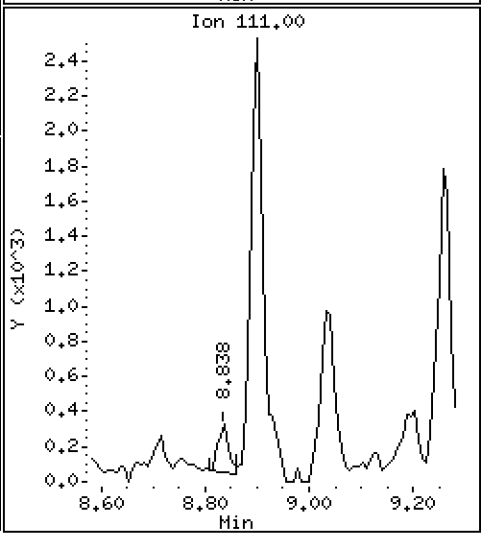


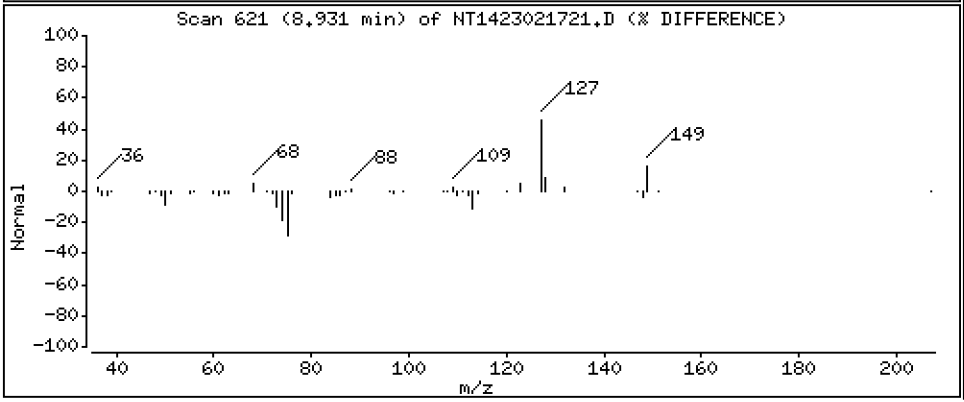












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Date : 17-FEB-2023 22:43

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BLK1

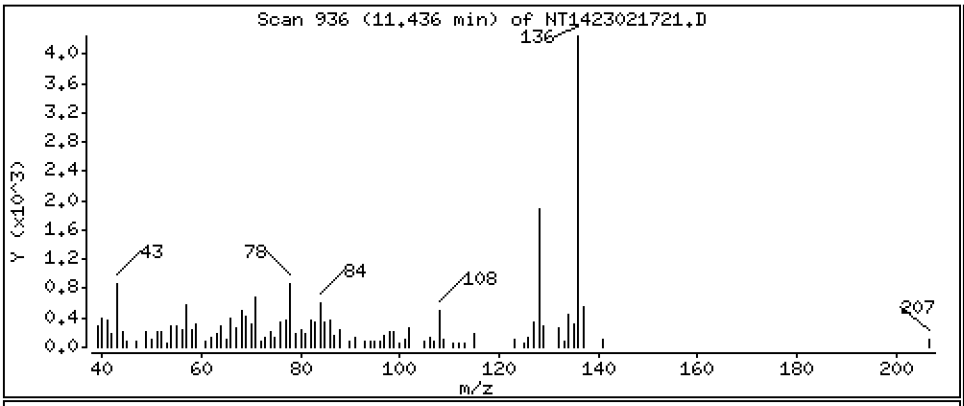
Operator: DSD

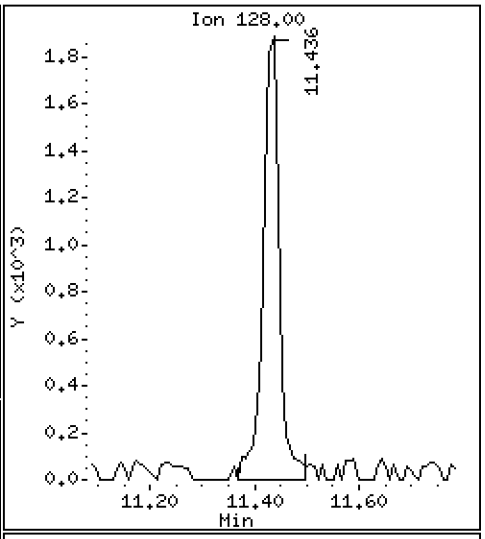
Column phase: ZB-5msi

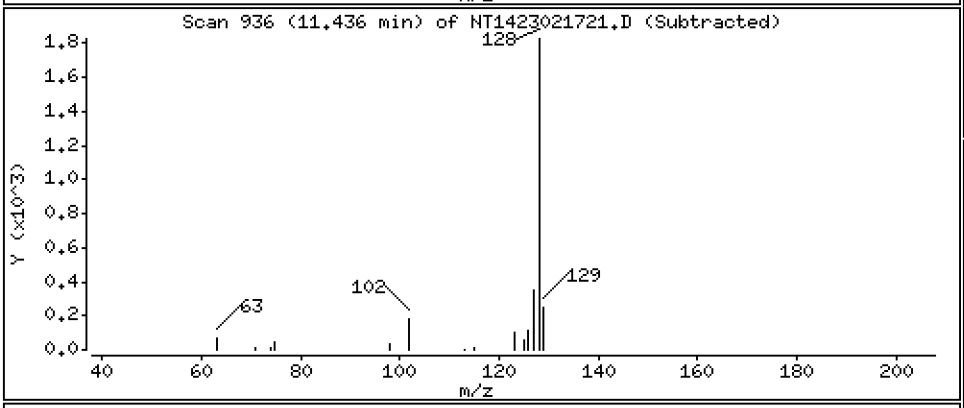
Column diameter: 0.25

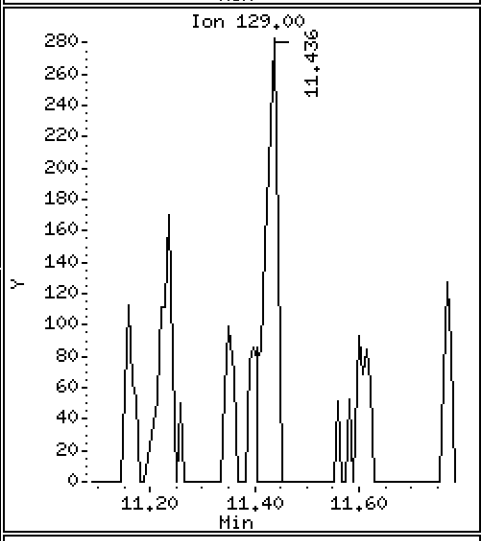
28 Naphthalene

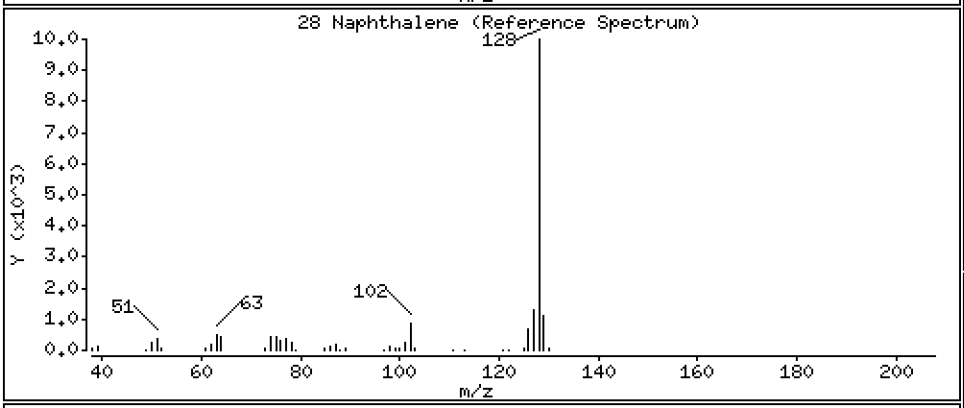
Concentration: 0.01487 ug/mL

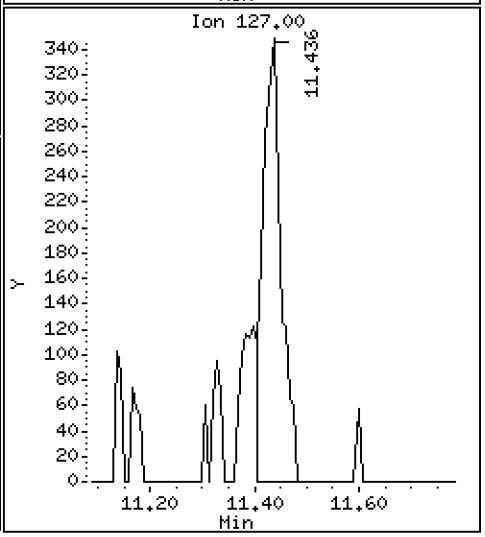


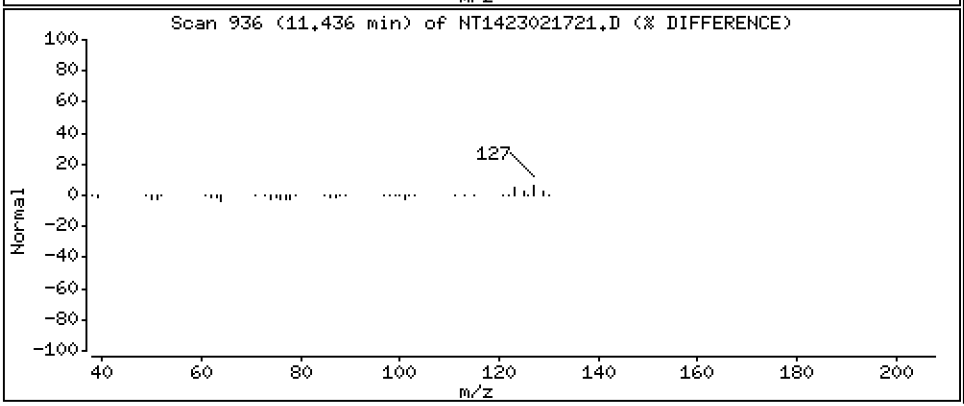












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Date : 17-FEB-2023 22:43

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BLK1

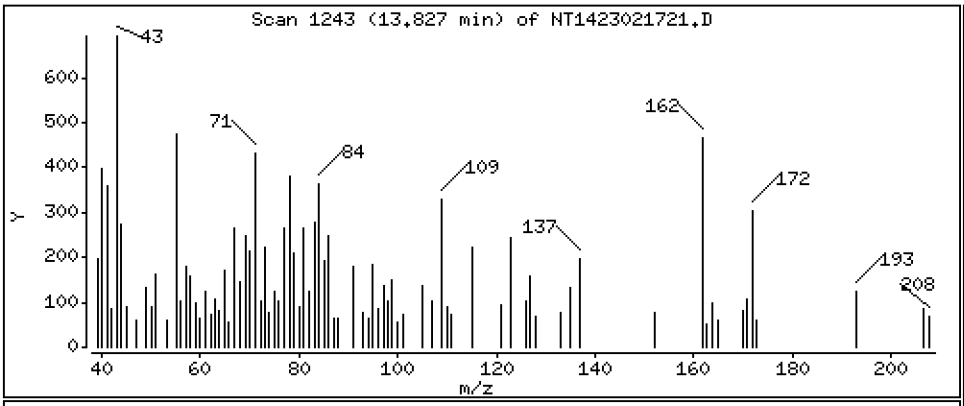
Operator: DSD

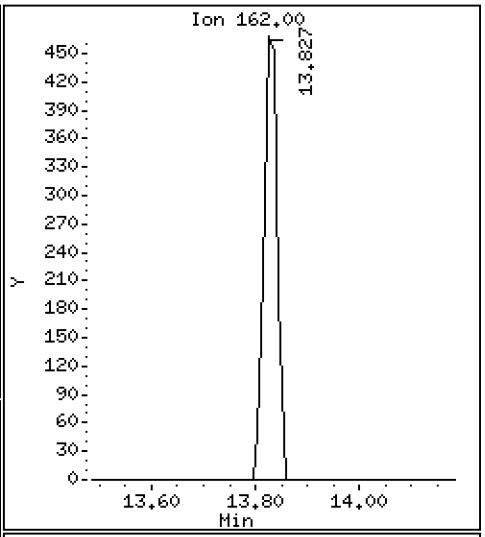
Column phase: ZB-5msi

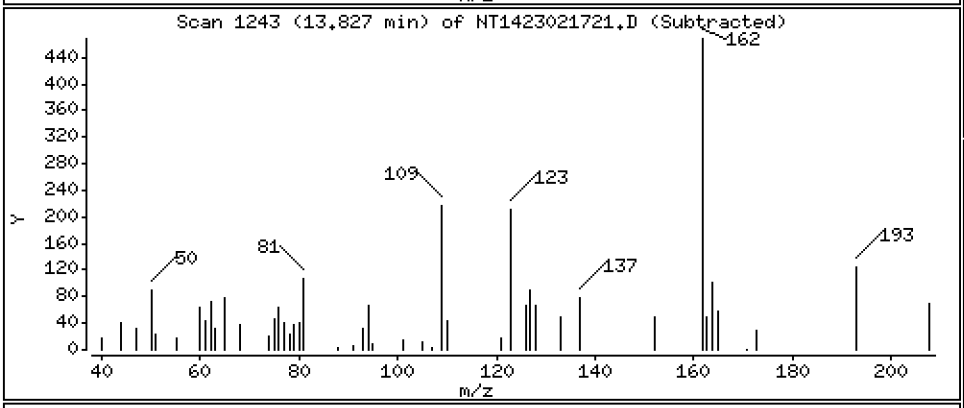
Column diameter: 0.25

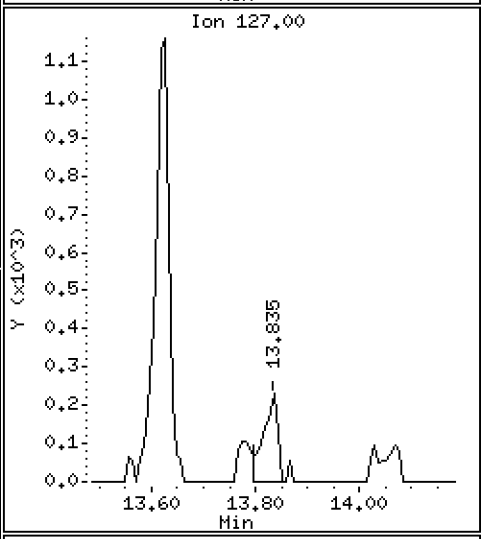
37 2-Chloronaphthalene

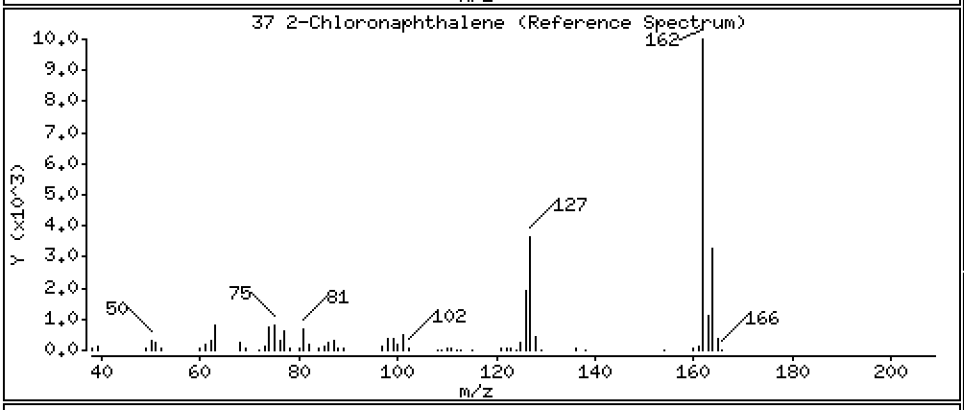
Concentration: 0.004319 ug/mL

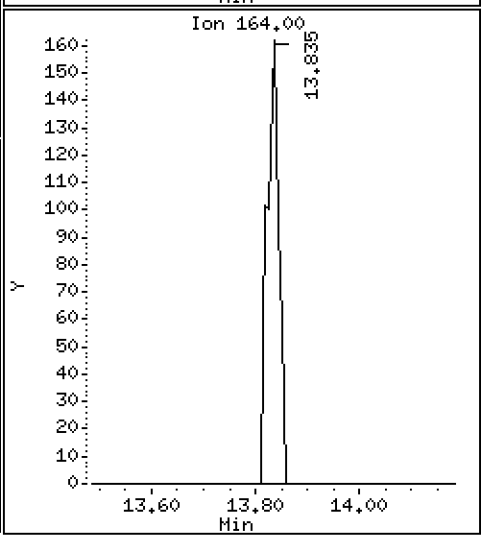


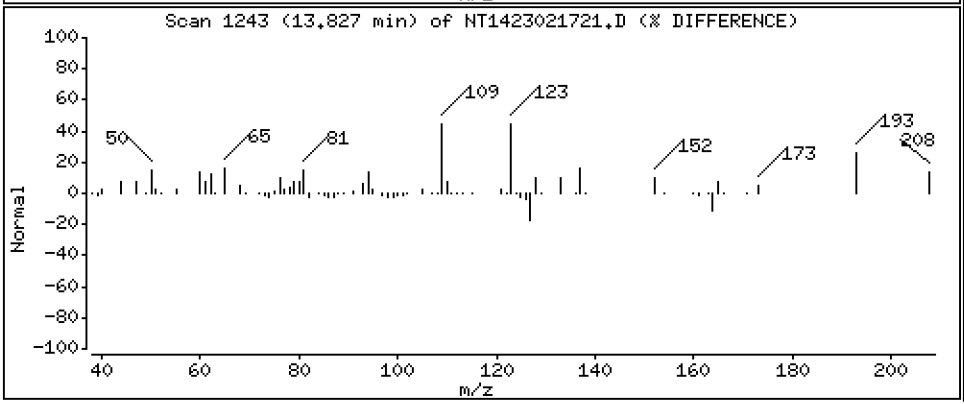












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021721.D

Date : 17-FEB-2023 22:43

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BLK1

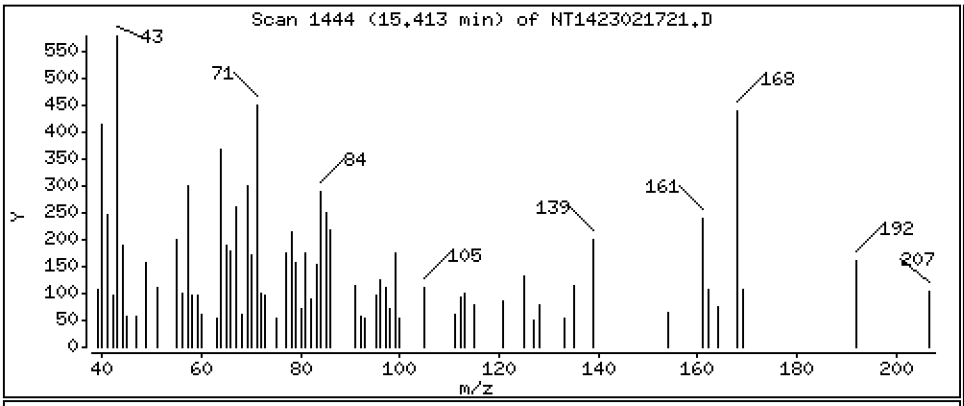
Operator: DSD

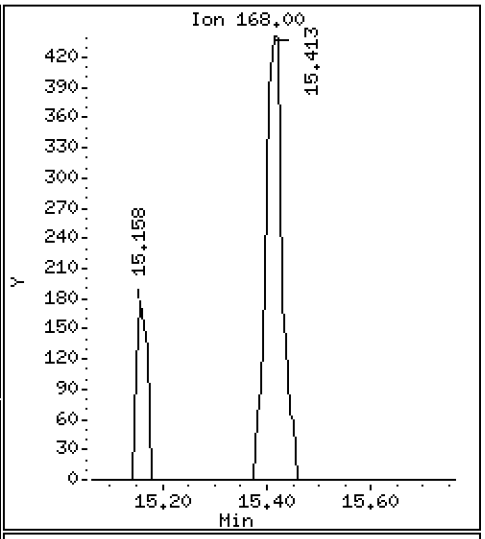
Column phase: ZB-5msi

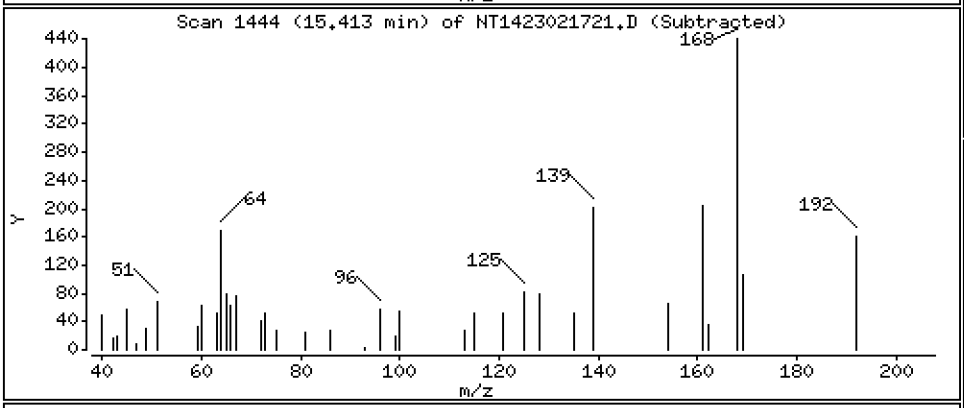
Column diameter: 0.25

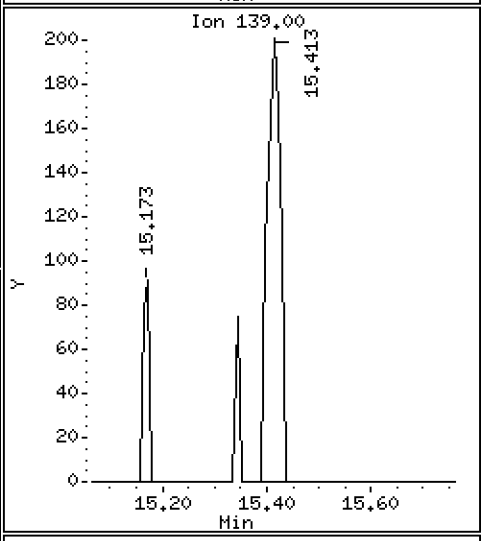
46 Dibenzofuran

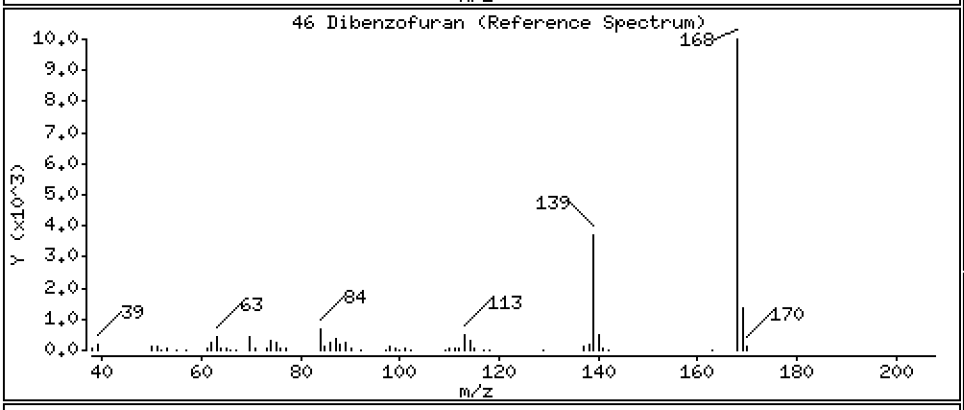
Concentration: 0.003471 ug/mL

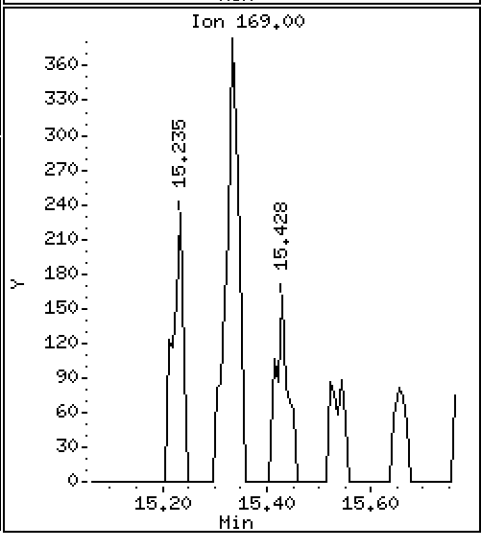


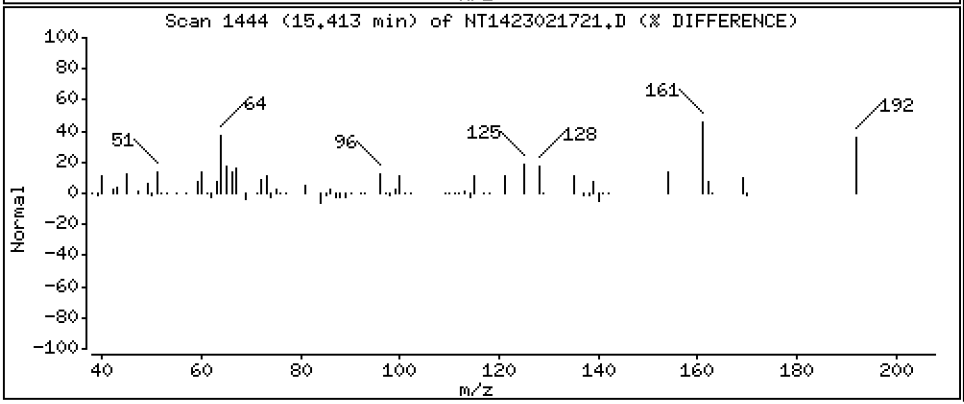












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021721.D

Date : 17-FEB-2023 22:43

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BLK1

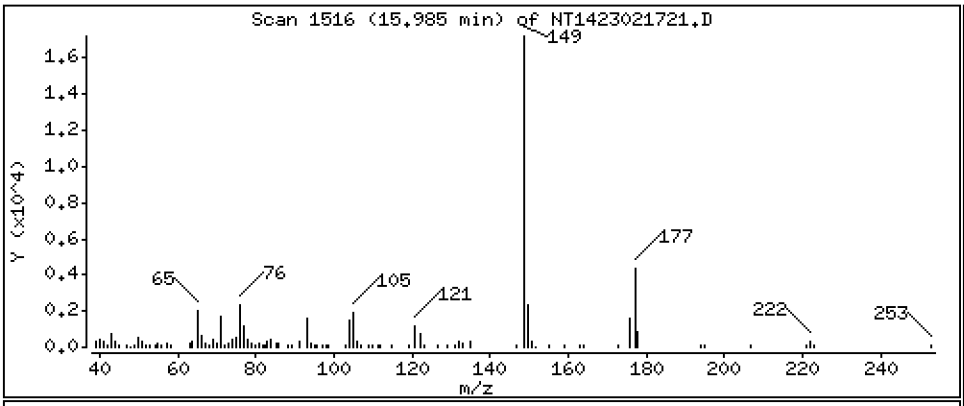
Operator: DSD

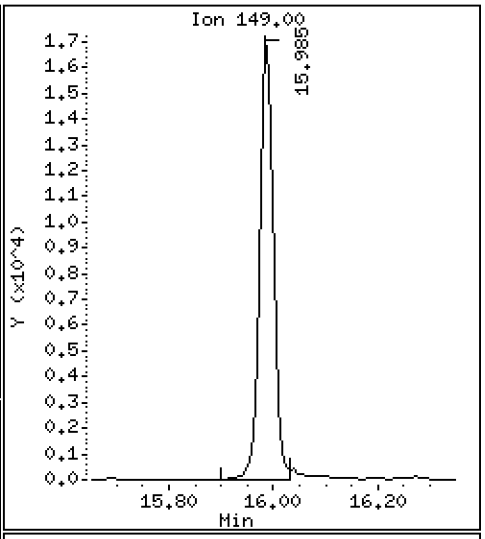
Column phase: ZB-5msi

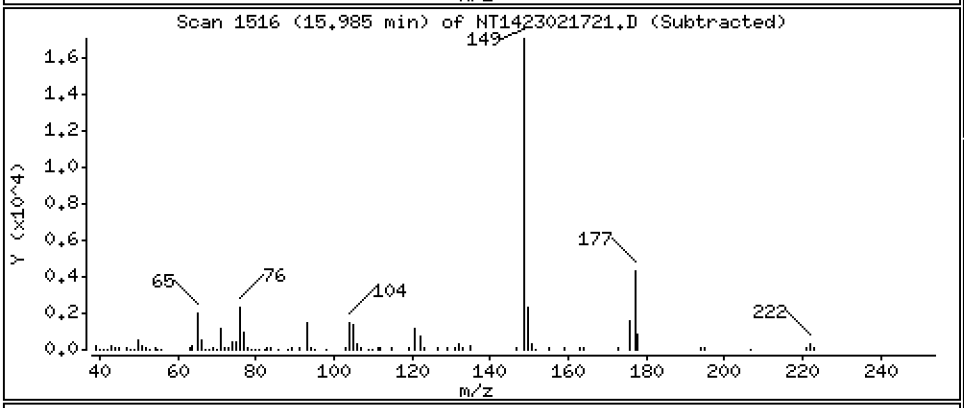
Column diameter: 0.25

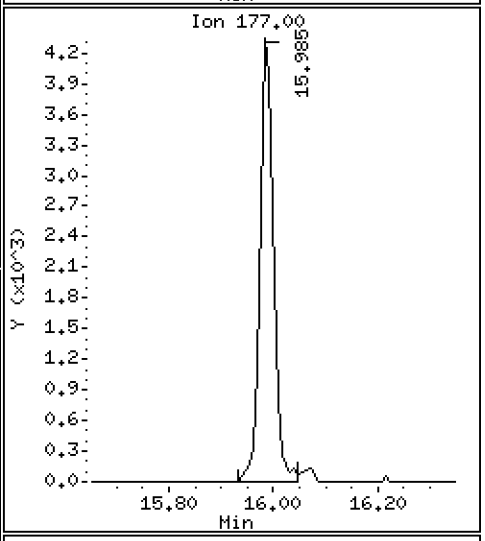
50 Diethylphthalate

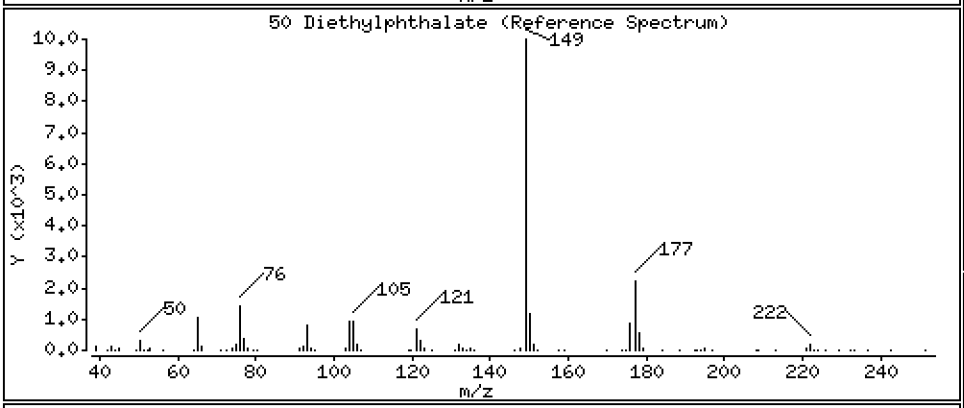
Concentration: 0.1353 ug/mL

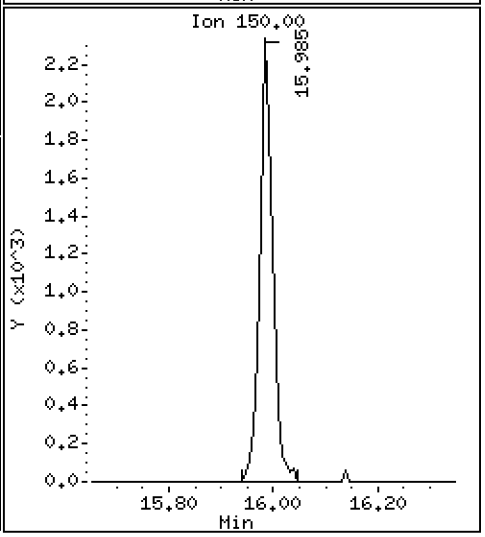


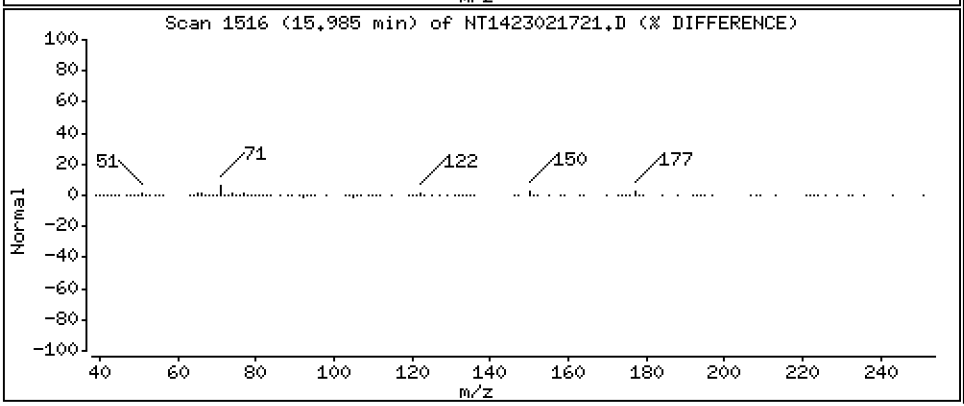












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021721.D

Date : 17-FEB-2023 22:43

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BLK1

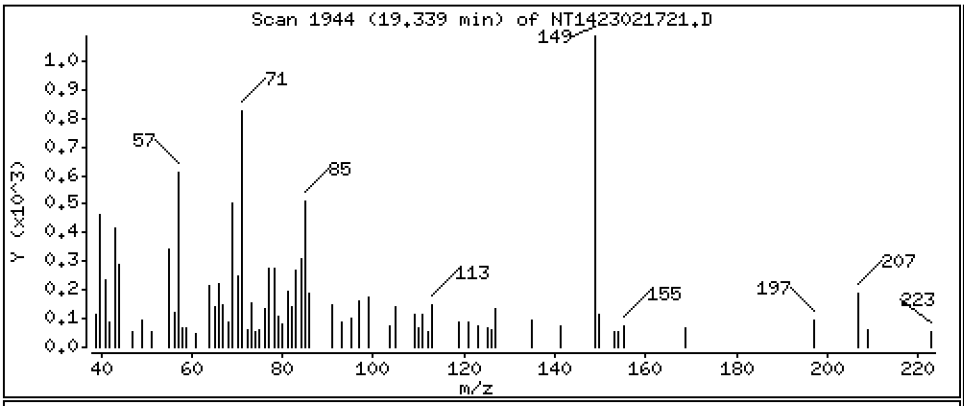
Operator: DSD

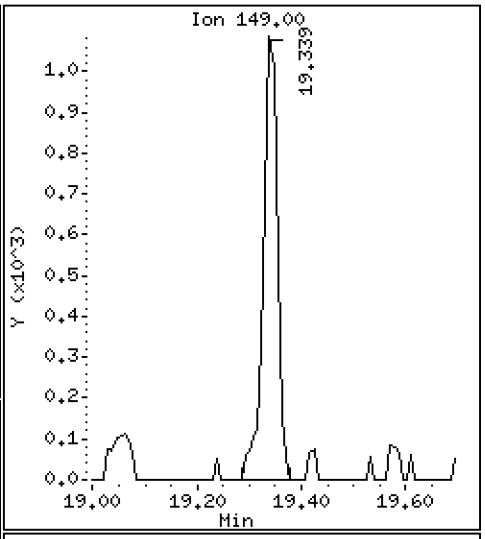
Column phase: ZB-5msi

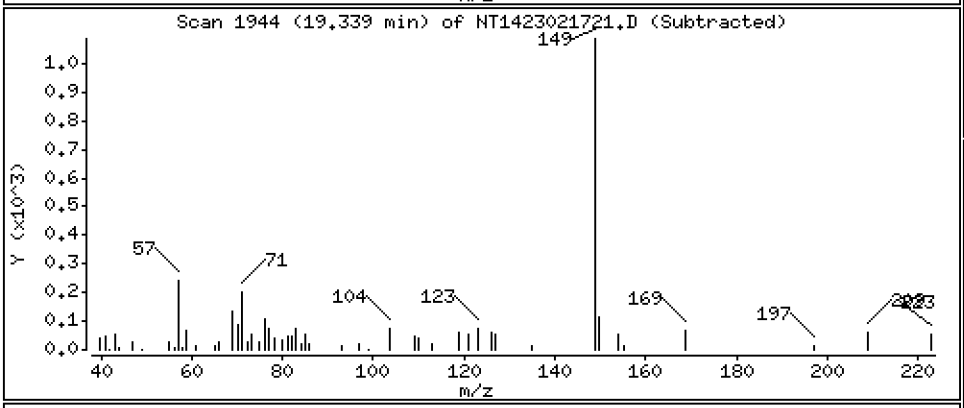
Column diameter: 0.25

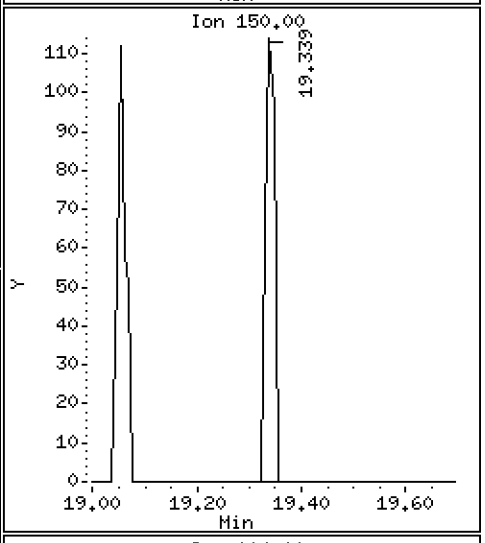
63 Di-n-butylphthalate

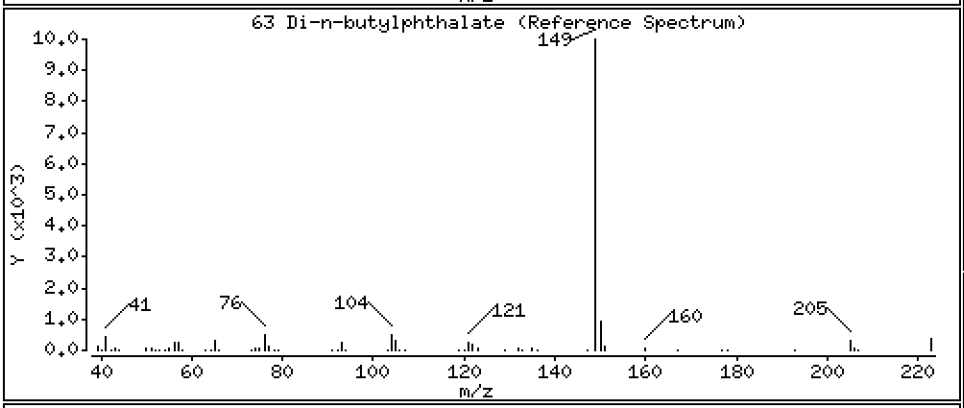
Concentration: 0.006722 ug/mL

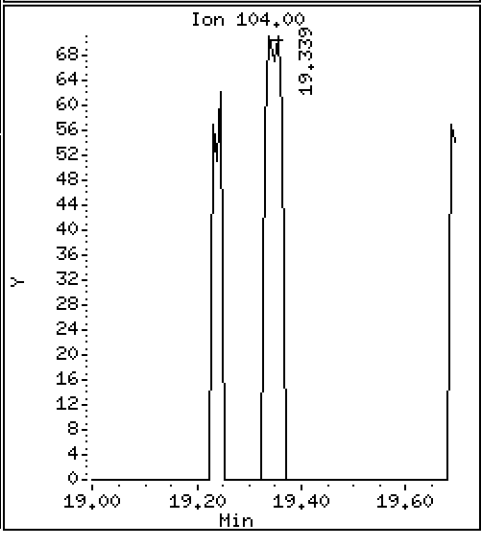


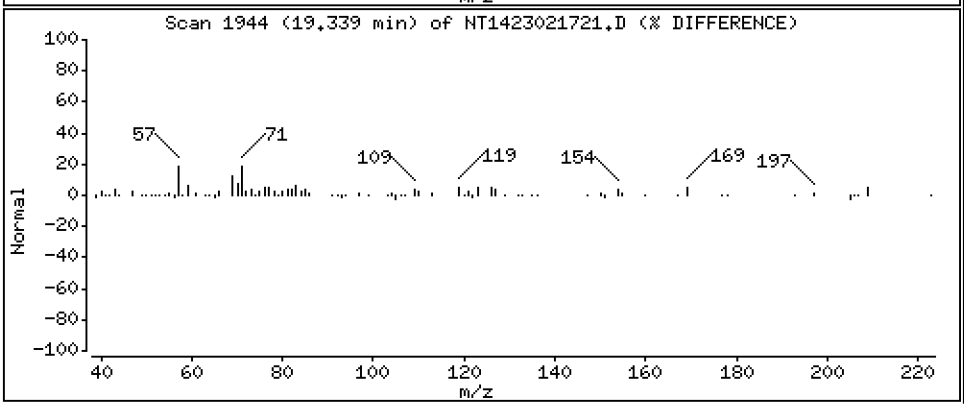












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021721.D

Date : 17-FEB-2023 22:43

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BLK1

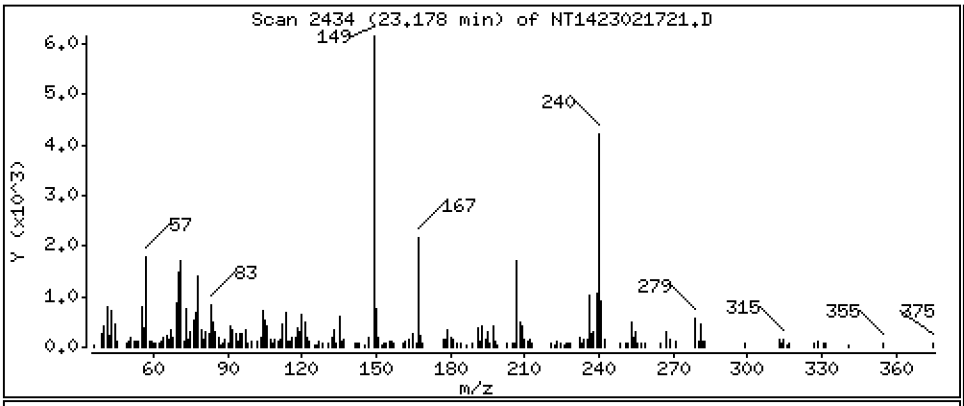
Operator: DSD

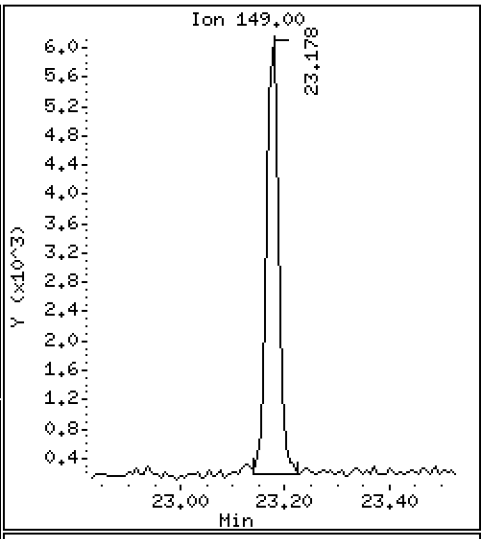
Column phase: ZB-5msi

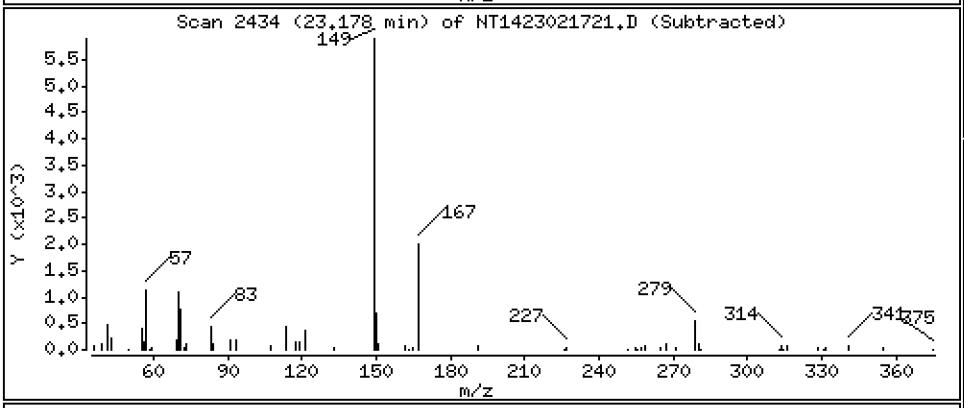
Column diameter: 0.25

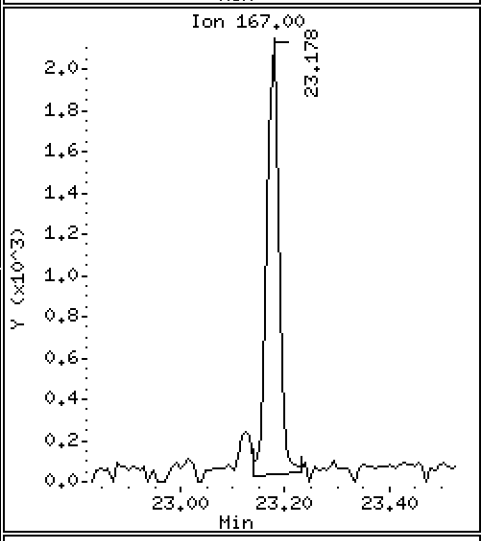
72 bis(2-Ethylhexyl)phthalate

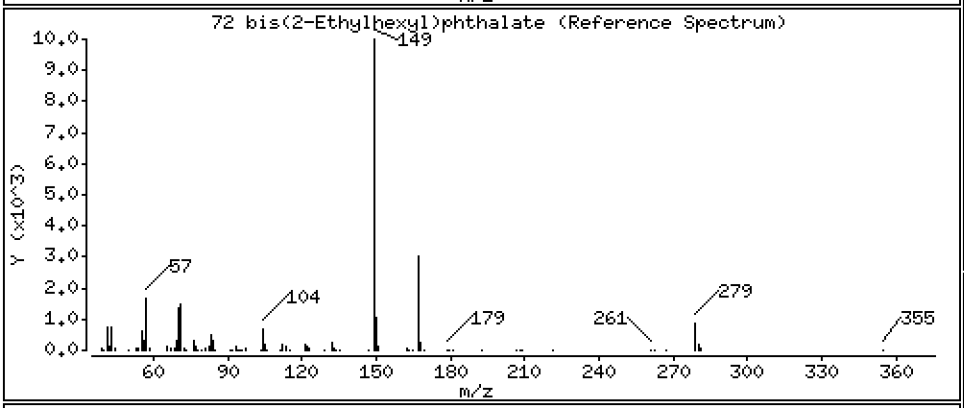
Concentration: 0.05101 ug/mL

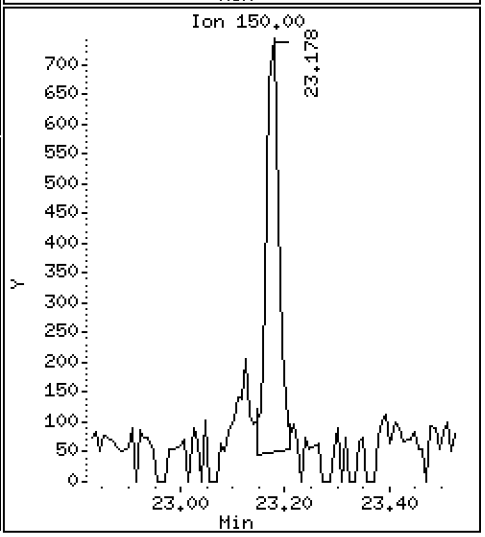


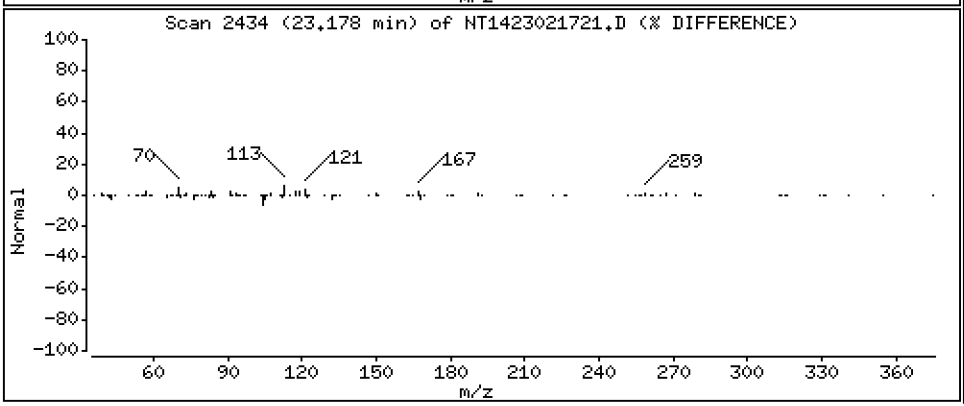












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230217A.b\NT1423021721.D
Lab Smp Id: BLA0339-BLK1
Inj Date : 17-FEB-2023 22:43 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : BLA0339-BLK1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230217A.b\ABN.m
Meth Date : 01-Mar-2023 13:20 van Quant Type: ISTD
Cal Date : 16-FEB-2023 19:30 Cal File: NT1423021610.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.682	6.674	(0.751)	309051	3.91224	3.912
$	2 Phenol-d5	99	8.266	8.273	(0.929)	466590	3.72334	3.723
	3 Phenol	94	8.289	8.296	(0.931)	7581	0.05715	0.05715
$	5 2-Chlorophenol-d4	132	8.536	8.536	(0.959)	374668	4.19018	4.190
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.900	8.900	(1.000)	295499	4.00000	
	9 1,4-Dichlorobenzene	146	8.931	8.931	(0.993)	1198	0.01214	0.01214(MH)
$	10 1,2-Dichlorobenzene-d4	152	9.257	9.264	(1.040)	182018	2.71576	2.716
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	Compound Not Detected.					
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	Compound Not Detected.					
$	18 Nitrobenzene-d5	82	10.002	10.002	(0.878)	351947	2.83616	2.836
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.390	11.397	(1.000)	1074132	4.00000	
	28 Naphthalene	128	11.436	11.436	(1.004)	3939	0.01487	0.01487
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	Compound Not Detected.					
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$ 36	2-Fluorobiphenyl	172	13.618	13.625	(0.907)	670879	2.99374	2.994
37	2-Chloronaphthalene	162	13.827	13.834	(0.921)	790	0.00432	0.004319
38	2-Nitroaniline	65	Compound Not Detected.					
39	Dimethylphthalate	163	Compound Not Detected.					
40	Acenaphthylene	152	Compound Not Detected.					
41	2,6-Dinitrotoluene	165	Compound Not Detected.					
* 42	Acenaphthene-d10	164	15.018	15.018	(1.000)	626355	4.00000	
43	3-Nitroaniline	138	Compound Not Detected.					
44	Acenaphthene	153	Compound Not Detected.					
45	2,4-Dinitrophenol	184	Compound Not Detected.					
46	Dibenzofuran	168	15.412	15.412	(1.026)	952	0.00347	0.003471
47	4-Nitrophenol	109	Compound Not Detected.					
48	2,4-Dinitrotoluene	165	Compound Not Detected.					
50	Diethylphthalate	149	15.985	16.000	(1.064)	34423	0.13534	0.1353
49	Fluorene	166	Compound Not Detected.					
51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
52	4-Nitroaniline	138	Compound Not Detected.					
53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$ 55	2,4,6-Tribromophenol	330	16.663	16.663	(1.110)	104343	2.88066	2.881
56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
57	Hexachlorobenzene	284	Compound Not Detected.					
58	Pentachlorophenol	266	Compound Not Detected.					
* 59	Phenanthrene-d10	188	18.054	18.062	(1.000)	1201624	4.00000	
60	Phenanthrene	178	Compound Not Detected.					
61	Anthracene	178	Compound Not Detected.					
62	Carbazole	167	Compound Not Detected.					
63	Di-n-butylphthalate	149	19.339	19.346	(1.071)	1949	0.00672	0.006722
64	Fluoranthene	202	Compound Not Detected.					
65	Pyrene	202	Compound Not Detected.					
$ 66	Terphenyl-d14	244	21.219	21.218	(0.918)	825562	4.20800	4.208
67	Butylbenzylphthalate	149	Compound Not Detected.					
68	Benzo(a)anthracene	228	Compound Not Detected.					
* 69	Chrysene-d12	240	23.124	23.123	(1.000)	605674	4.00000	
70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
71	Chrysene	228	Compound Not Detected.					
72	bis(2-Ethylhexyl)phthalate	149	23.178	23.177	(0.960)	8984	0.05101	0.05101
* 134	Di-n-octylphthalate-d4	153	24.153	24.153	(1.000)	1023141	4.00000	
73	Di-n-octylphthalate	149	Compound Not Detected.					
74	Benzo(b)fluoranthene	252	Compound Not Detected.					
75	Benzo(k)fluoranthene	252	Compound Not Detected.					
76	Benzo(a)pyrene	252	Compound Not Detected.					
* 77	Perylene-d12	264	25.686	25.694	(1.000)	412528	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80	Benzo(g,h,i)perylene	276	Compound Not Detected.					
90	N-Nitrosodimethylamine	74	Compound Not Detected.					
91	Aniline	93	Compound Not Detected.					
93	Benzidine	184	Compound Not Detected.					
103	Pyridine	79	Compound Not Detected.					
105	1-methylnaphthalene	142	Compound Not Detected.					
111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

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

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021721.D
Lab Smp Id: BLA0339-BLK1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230217A.b\ABN.m
Misc Info:

Calibration Date: 17-FEB-2023
Calibration Time: 20:19
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	351756	175878	703512	295499	-15.99
27 Naphthalene-d8	1299383	649692	2598766	1074132	-17.34
42 Acenaphthene-d10	808045	404023	1616090	626355	-22.49
59 Phenanthrene-d10	1607740	803870	3215480	1201624	-25.26
69 Chrysene-d12	876381	438191	1752762	605674	-30.89
134 Di-n-octylphthala	1545452	772726	3090904	1023141	-33.80
77 Perylene-d12	639717	319859	1279434	412528	-35.51

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.39	-0.06
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.00
59 Phenanthrene-d10	18.06	17.56	18.56	18.05	-0.04
69 Chrysene-d12	23.12	22.62	23.62	23.12	0.00
134 Di-n-octylphthala	24.15	23.65	24.65	24.15	0.00
77 Perylene-d12	25.69	25.19	26.19	25.69	-0.03

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

REVIEW SUMMARY FOR FILE - NT1423021721.D

Lab ID: BLA0339-BLK1
nt14.i, ABN.m, 17-FEB-2023 22:43

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.993	1.003	-0.0105	1,4-Dichlorobenzene

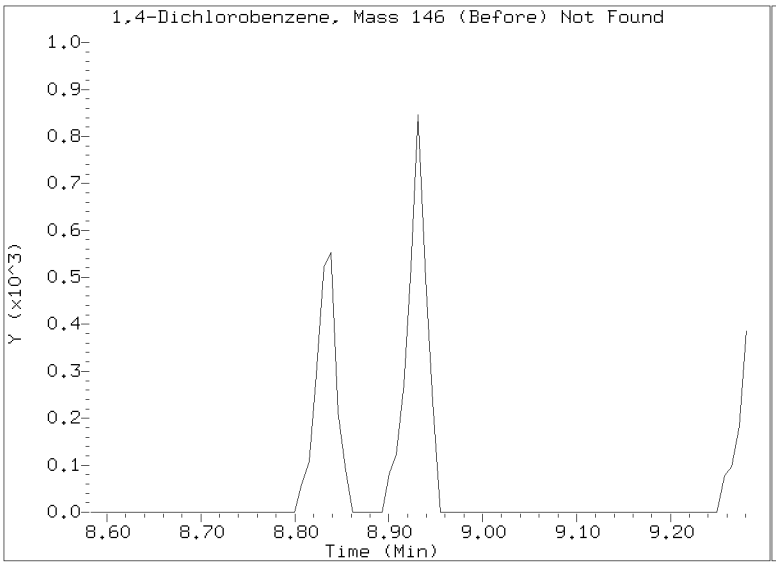
RRT check based on Ccal File: NT1423021717.D

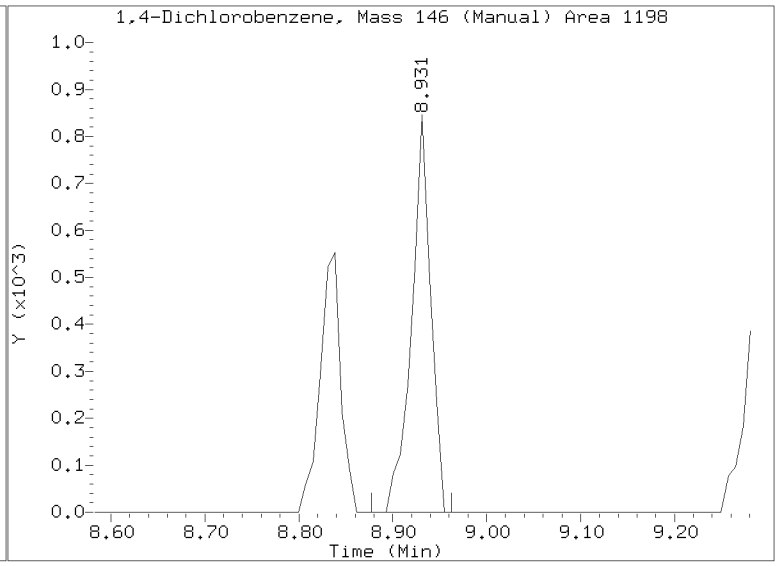
On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230217A.b/NT1423021721.D
Injection Date: 17-FEB-2023 22:43
Lab ID:BLA0339-BLK1 Client ID:
Report Date: 03/01/2023 13:21





LCS / LCS DUPLICATE RECOVERY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	02/17/23 23:19
Batch:	BLA0339	Laboratory ID:	BLA0339-BS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS
Initial/Final:	10 g / 1 mL		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Phenol	500	328		65.5	34 - 120
4-Methylphenol	500	314		62.8	29 - 120
Naphthalene	500	351		70.1	43 - 120
2-Methylnaphthalene	500	342		68.5	43 - 120
Acenaphthylene	500	353		70.5	42 - 120
Dimethylphthalate	500	397		79.4	43 - 120
Acenaphthene	500	365		73.0	45 - 120
Dibenzofuran	500	362		72.5	43 - 120
Fluorene	500	366		73.2	45 - 120
Phenanthrene	500	382		76.4	49 - 120
Anthracene	500	332		66.4	45 - 120
Fluoranthene	500	485		97.1	53 - 145
Pyrene	500	468		93.7	52 - 134
Butylbenzylphthalate	500	513		103	45 - 132
Benzo(a)anthracene	500	395		79.0	49 - 120
Chrysene	500	399		79.8	47 - 120
bis(2-Ethylhexyl)phthalate	500	378	Q	75.6	34 - 130
Benzofluoranthenes, Total	1000	810		81.0	30 - 160
Benzo(a)pyrene	500	360		72.0	42 - 120
Indeno(1,2,3-cd)pyrene	500	354		70.7	42 - 163
Dibenzo(a,h)anthracene	500	365		73.1	30 - 133
Benzo(g,h,i)perylene	500	301	Q	60.2	46 - 148

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	500	356		71.2	8.33	30	34 - 120
4-Methylphenol	500	356		71.3	12.7	30	29 - 120
Naphthalene	500	371		74.2	5.67	30	43 - 120
2-Methylnaphthalene	500	365		73.1	6.50	30	43 - 120
Acenaphthylene	500	374		74.9	6.00	30	42 - 120
Dimethylphthalate	500	427		85.4	7.28	30	43 - 120
Acenaphthene	500	394		78.8	7.59	30	45 - 120

* Indicates values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	02/17/23 23:55
Batch:	BLA0339	Laboratory ID:	BLA0339-BSD1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS Dup
Initial/Final:	10 g / 1 mL		

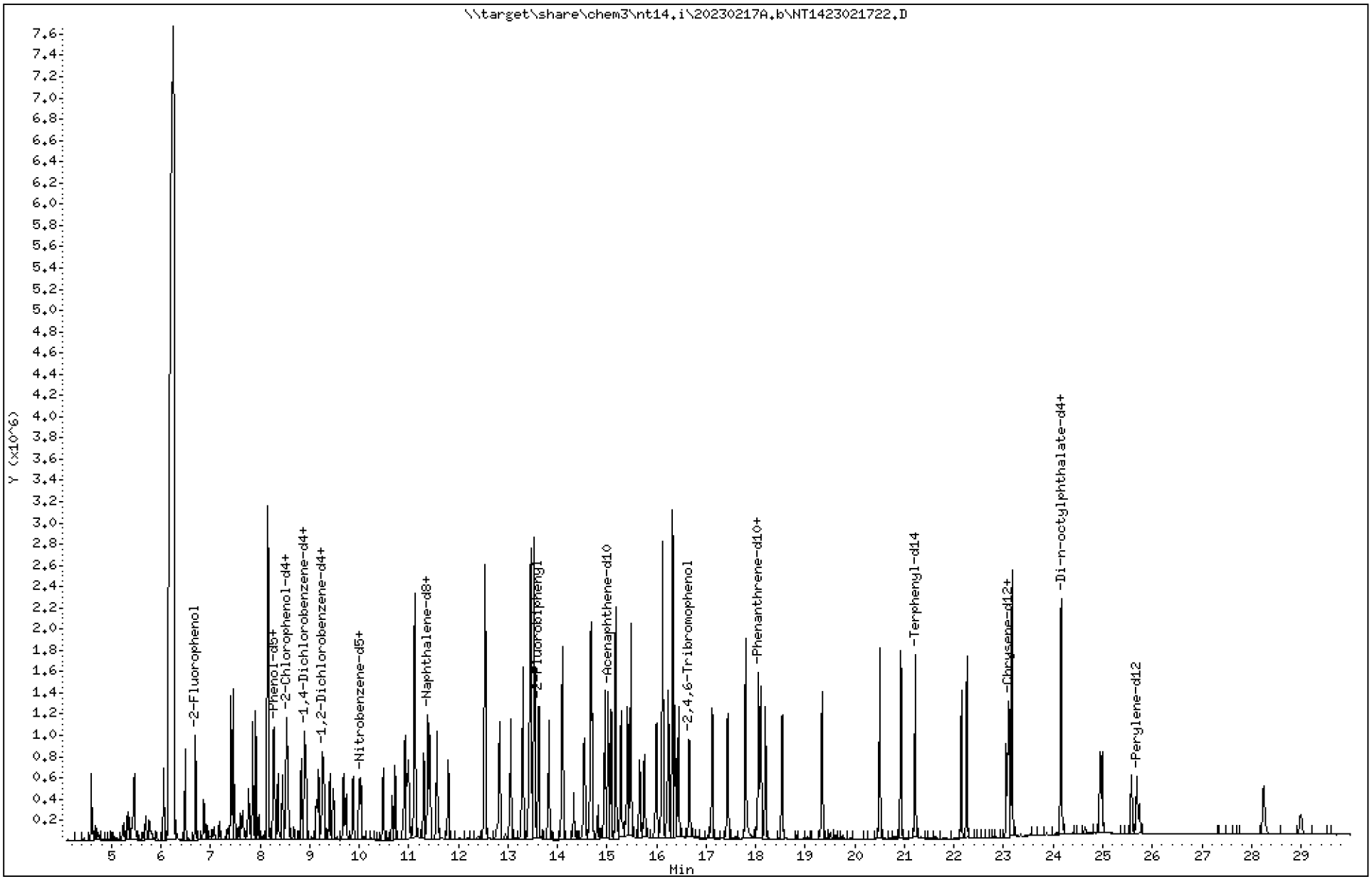
COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Dibenzofuran	500	390		78.0	7.34	30	43 - 120
Fluorene	500	395		79.0	7.60	30	45 - 120
Phenanthrene	500	405		80.9	5.77	30	49 - 120
Anthracene	500	350		70.1	5.39	30	45 - 120
Fluoranthene	500	498		99.6	2.58	30	53 - 145
Pyrene	500	489		97.9	4.42	30	52 - 134
Butylbenzylphthalate	500	534		107	4.06	30	45 - 132
Benzo(a)anthracene	500	416		83.2	5.29	30	49 - 120
Chrysene	500	417		83.4	4.40	30	47 - 120
bis(2-Ethylhexyl)phthalate	500	395	Q	79.0	4.35	30	34 - 130
Benzofluoranthenes, Total	1000	857		85.7	5.71	30	30 - 160
Benzo(a)pyrene	500	374		74.8	3.73	30	42 - 120
Indeno(1,2,3-cd)pyrene	500	365		73.1	3.30	30	42 - 163
Dibenzo(a,h)anthracene	500	380		76.1	3.99	30	30 - 133
Benzo(g,h,i)perylene	500	318	Q	63.5	5.35	30	46 - 148

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021722.D
Date : 17-FEB-2023 23:19
Client ID:
Sample Info: BLA0339-BS1

Instrument: nt14.i
Operator: DSD
Column diameter: 0.25

Column phase: ZB-5msi



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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

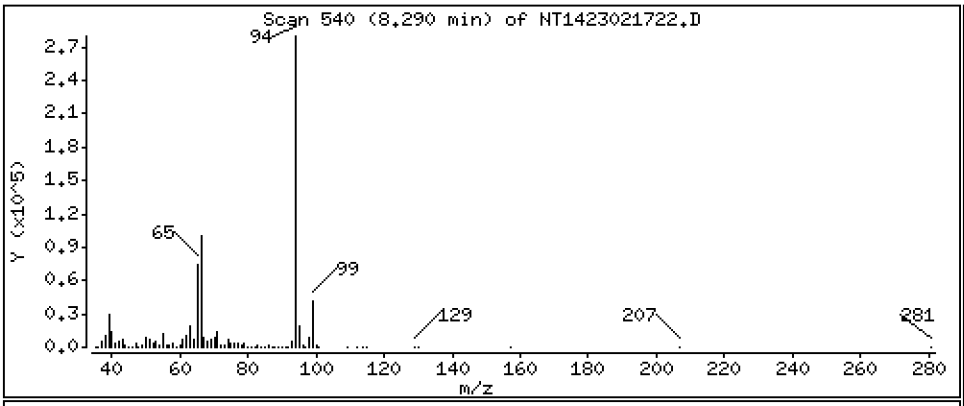
Operator: DSD

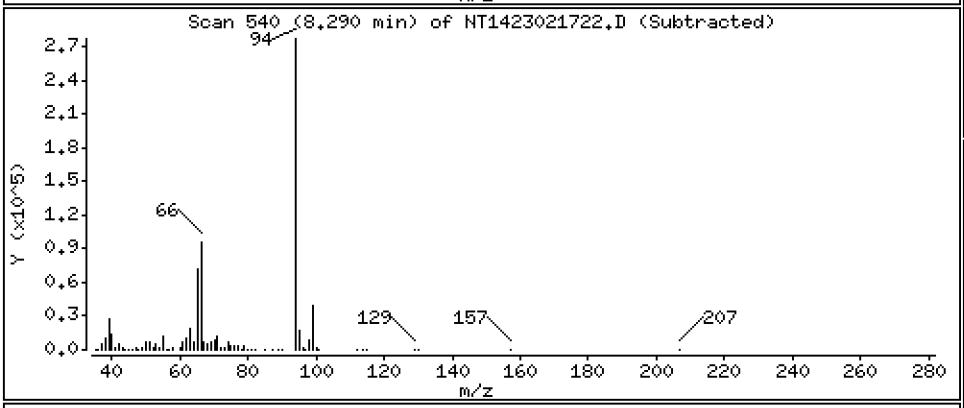
Column phase: ZB-5msi

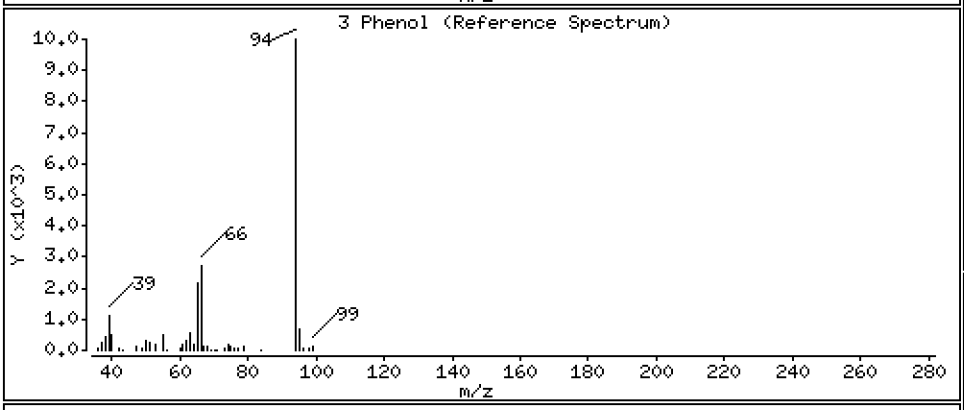
Column diameter: 0.25

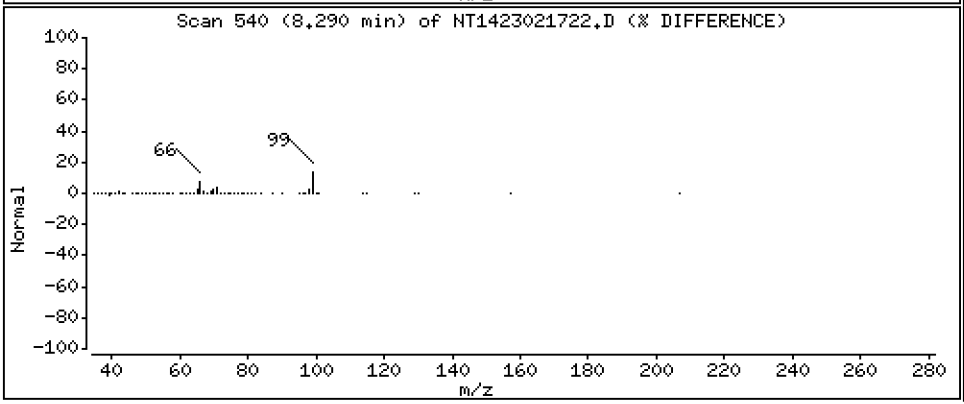
3 Phenol

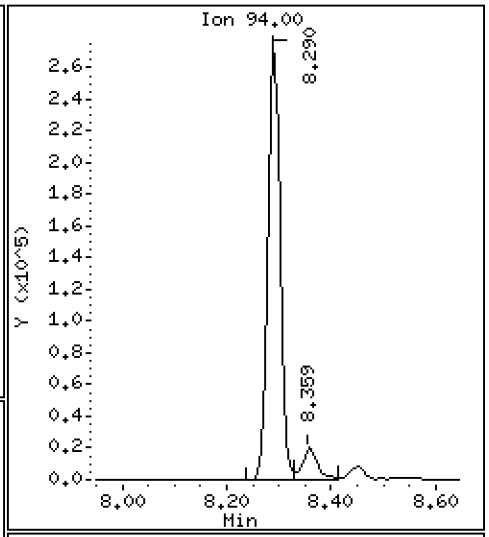
Concentration: 3.276 ug/mL

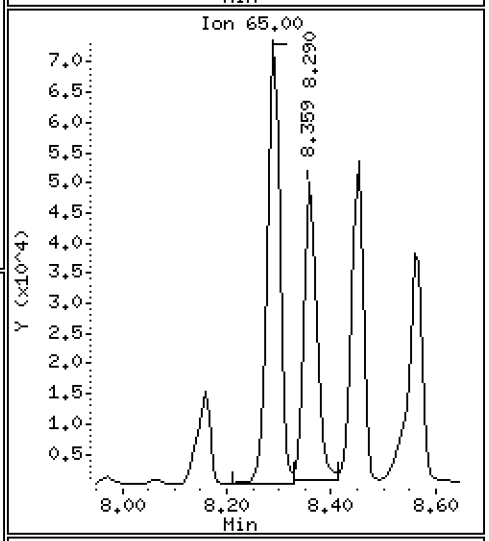


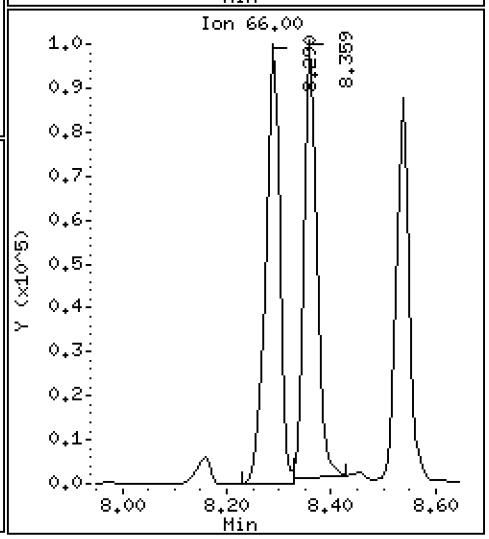












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

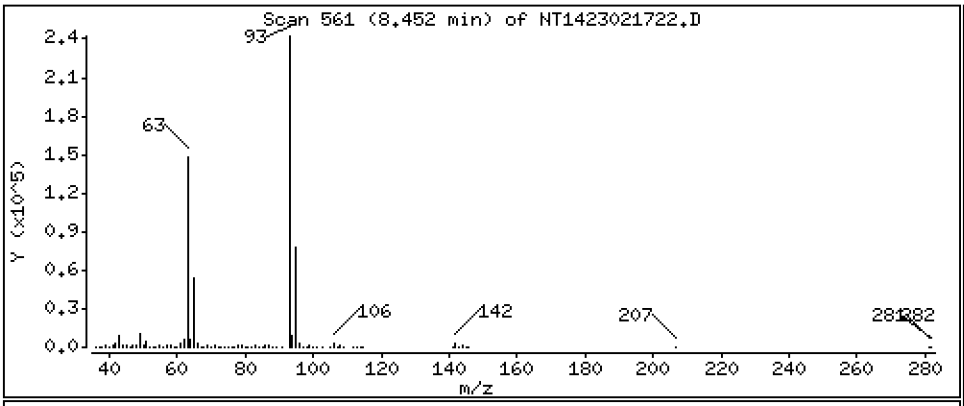
Operator: DSD

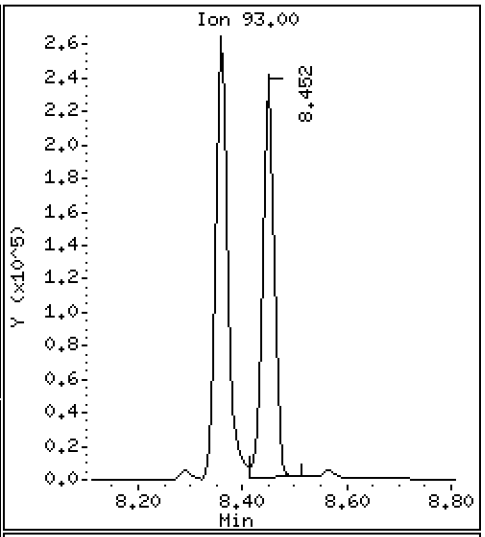
Column phase: ZB-5msi

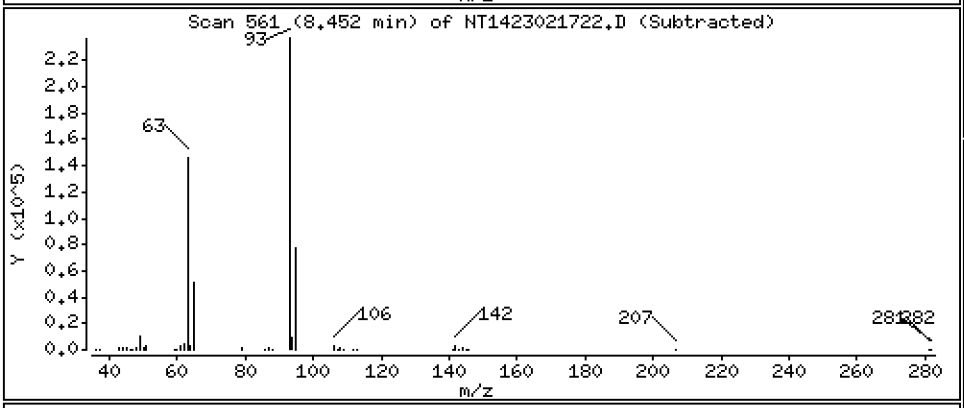
Column diameter: 0.25

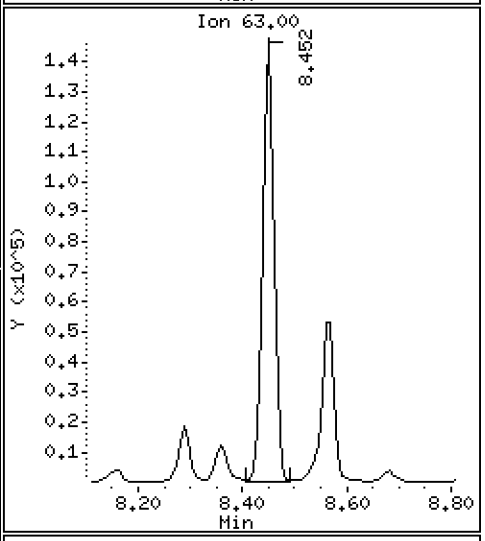
4 Bis(2-Chloroethyl)ether

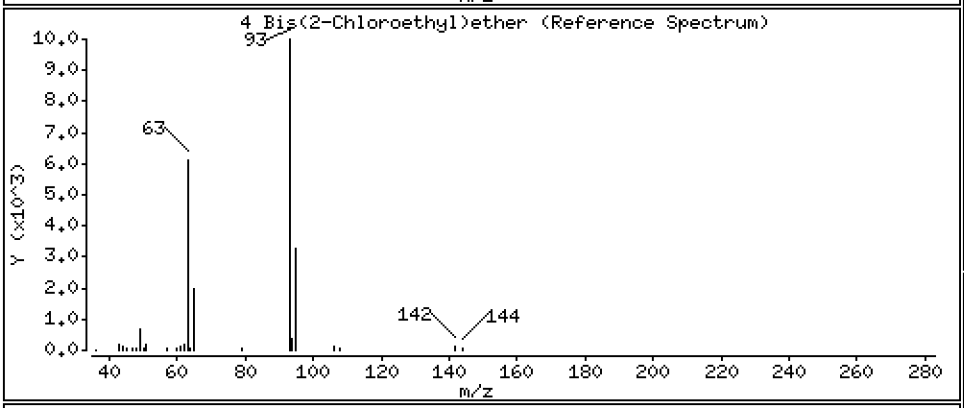
Concentration: 3.692 ug/mL

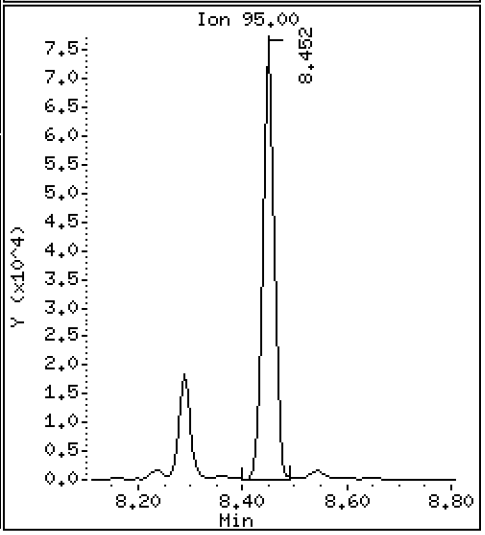


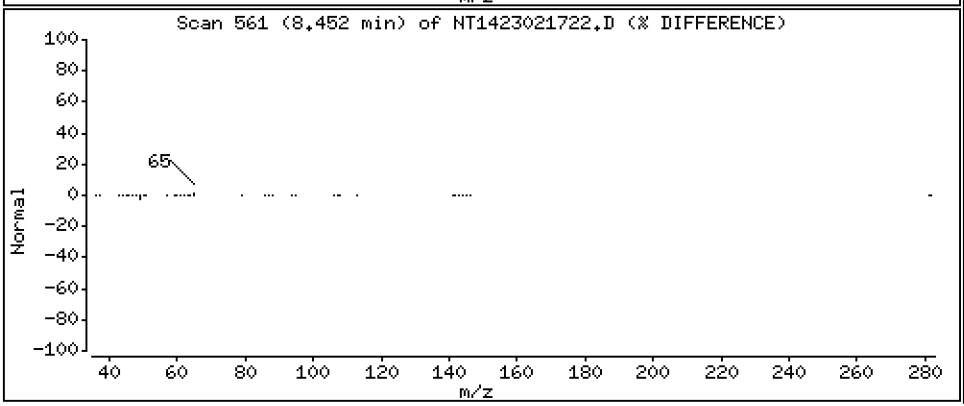












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021722.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

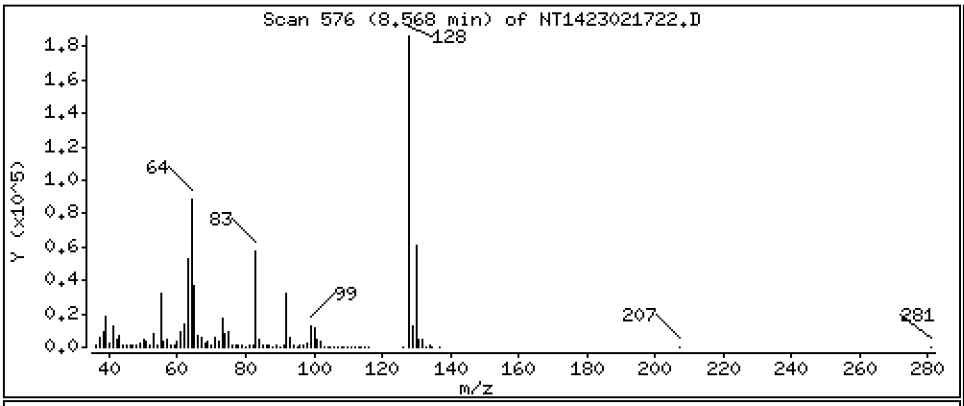
Operator: DSD

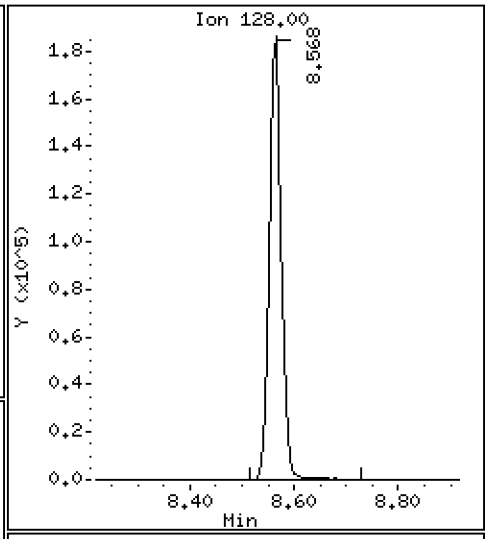
Column phase: ZB-5msi

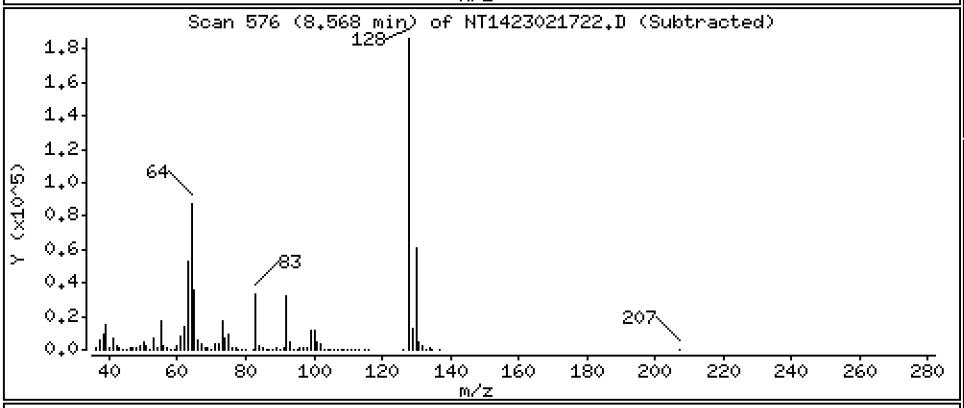
Column diameter: 0.25

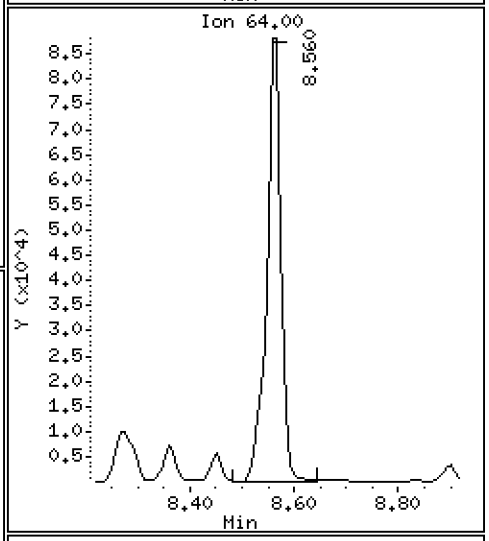
6 2-Chlorophenol

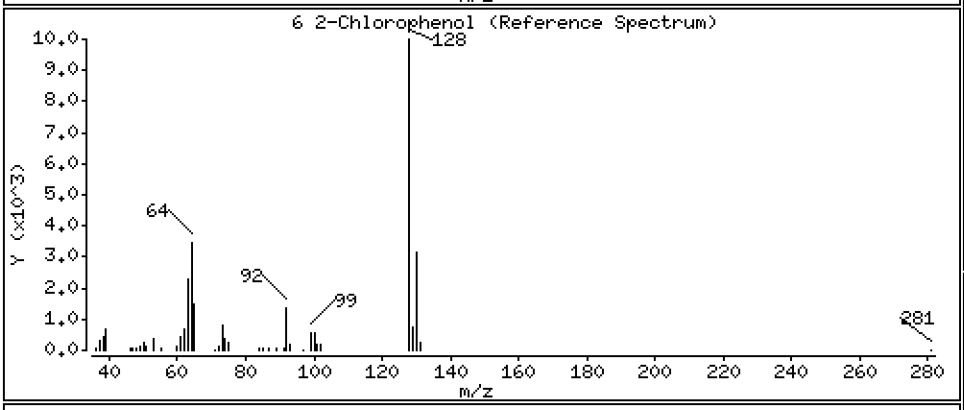
Concentration: 3.540 ug/mL

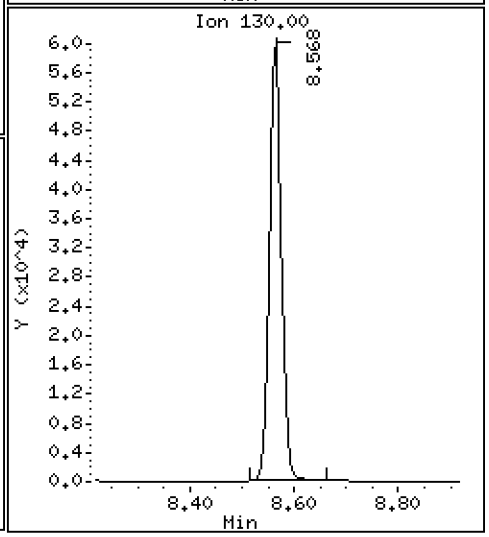


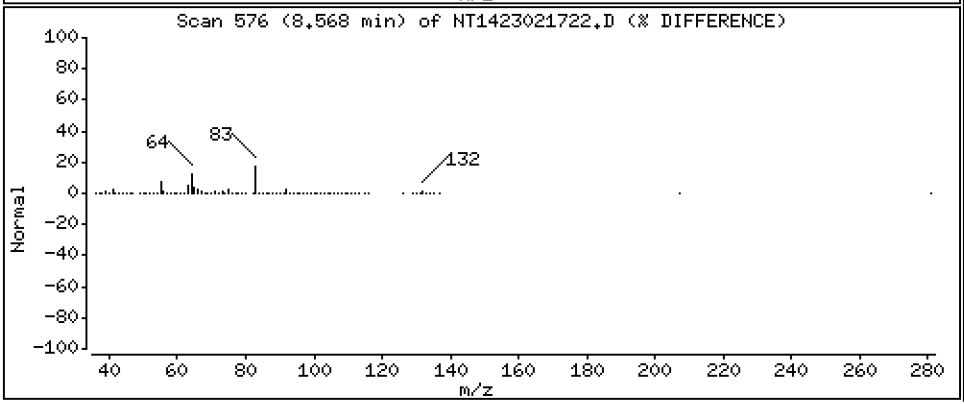












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

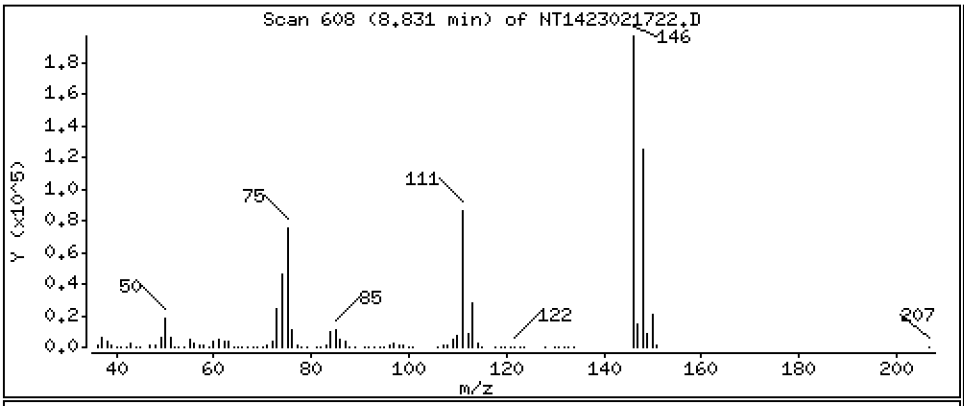
Operator: DSD

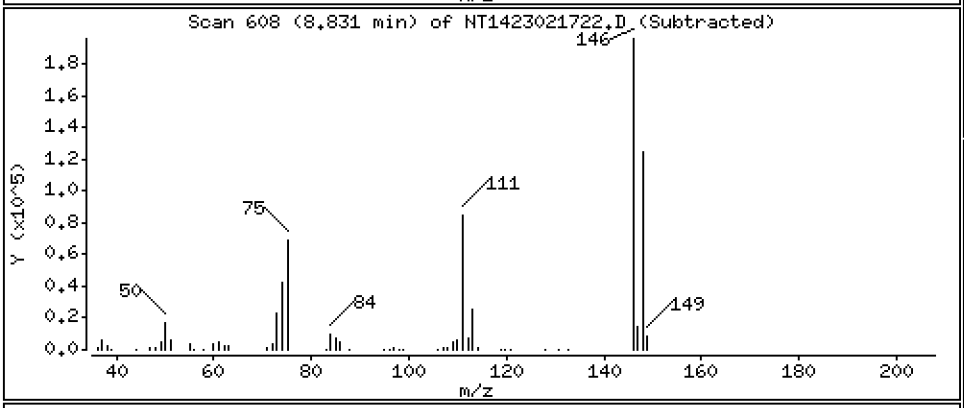
Column phase: ZB-5msi

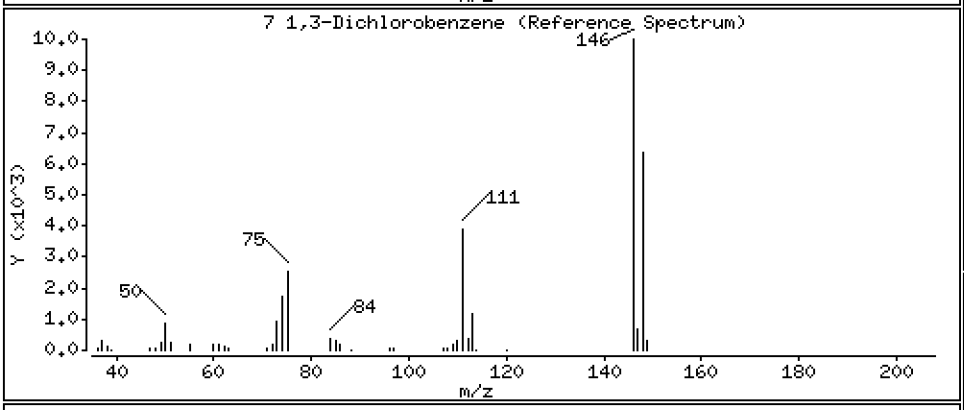
Column diameter: 0.25

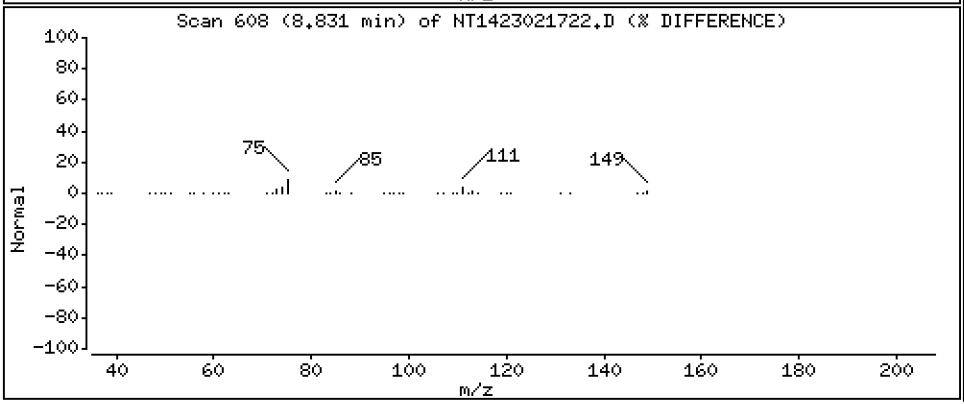
7 1,3-Dichlorobenzene

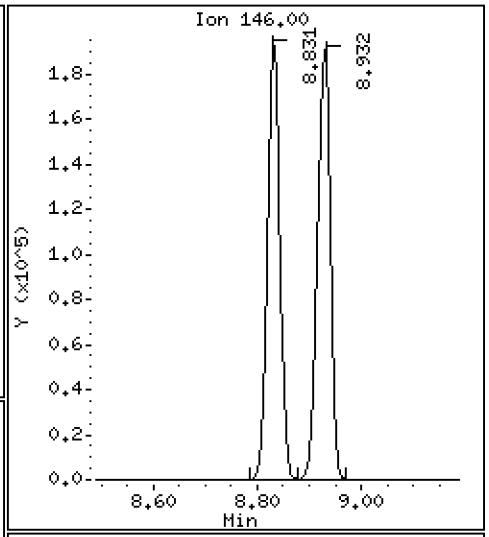
Concentration: 3.260 ug/mL

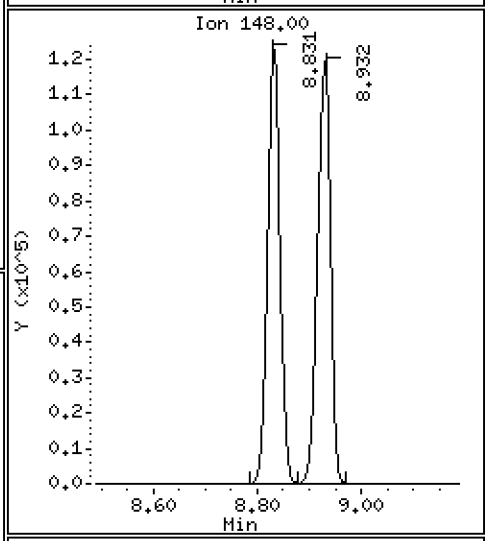


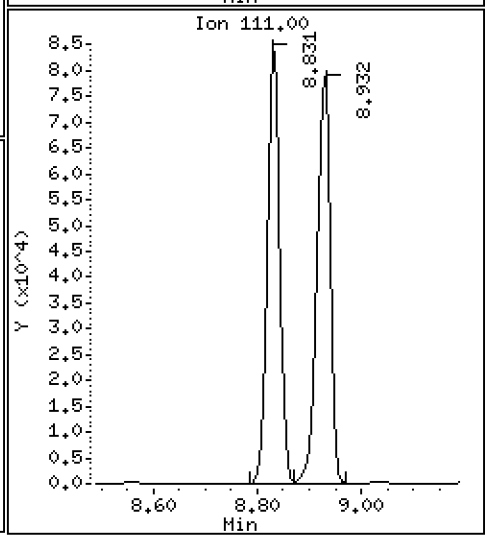












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

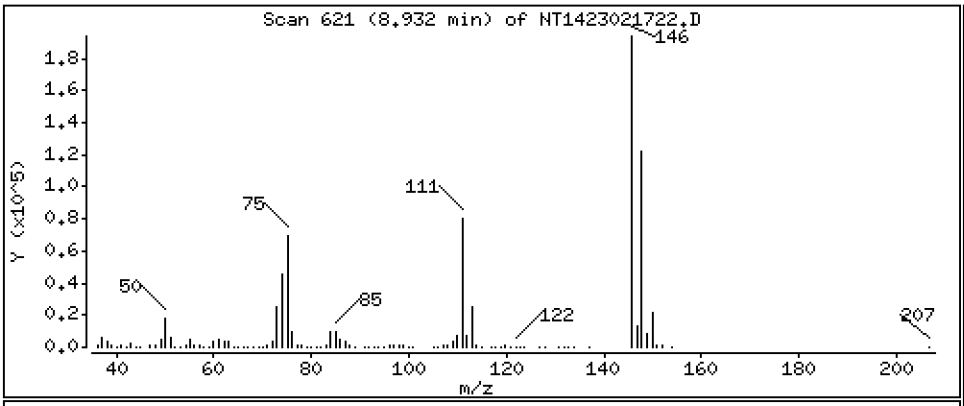
Operator: DSD

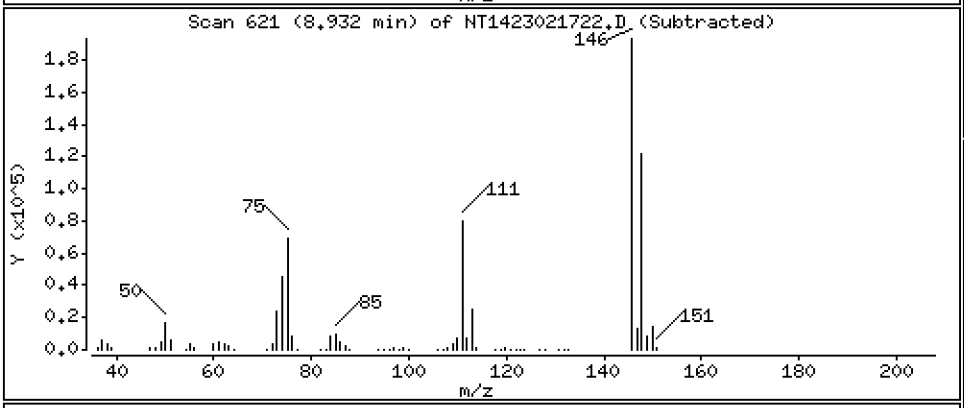
Column phase: ZB-5msi

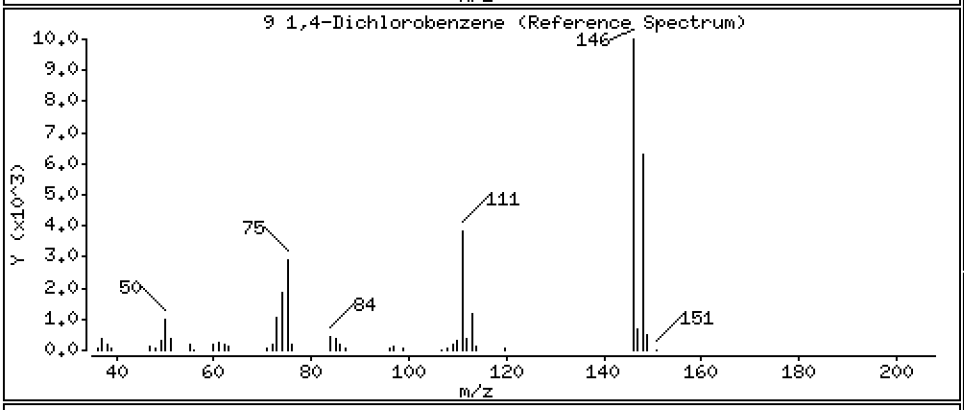
Column diameter: 0.25

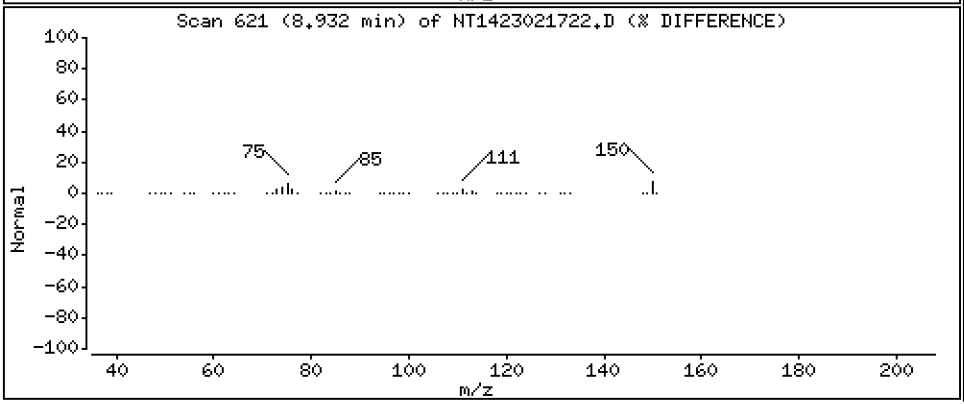
9 1,4-Dichlorobenzene

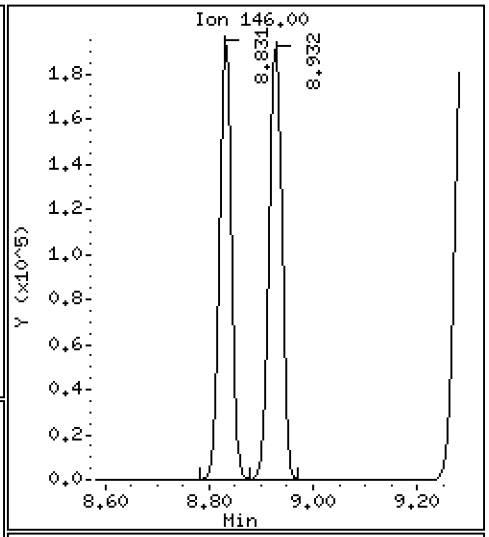
Concentration: 3.343 ug/mL

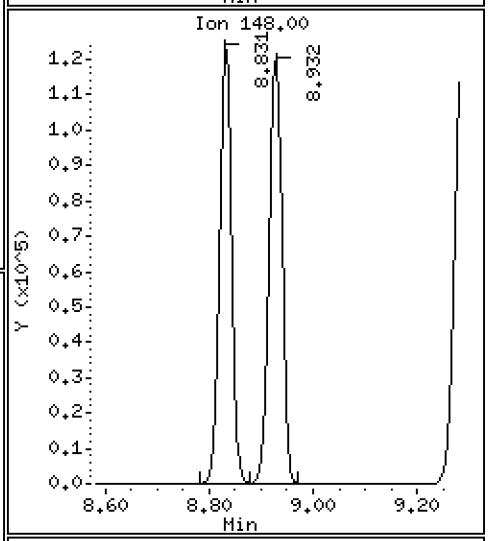


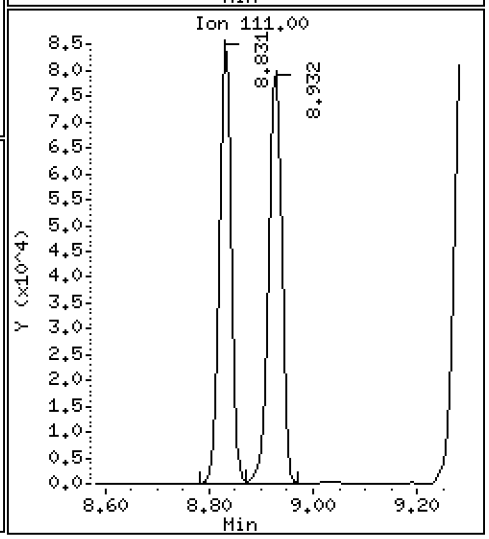












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

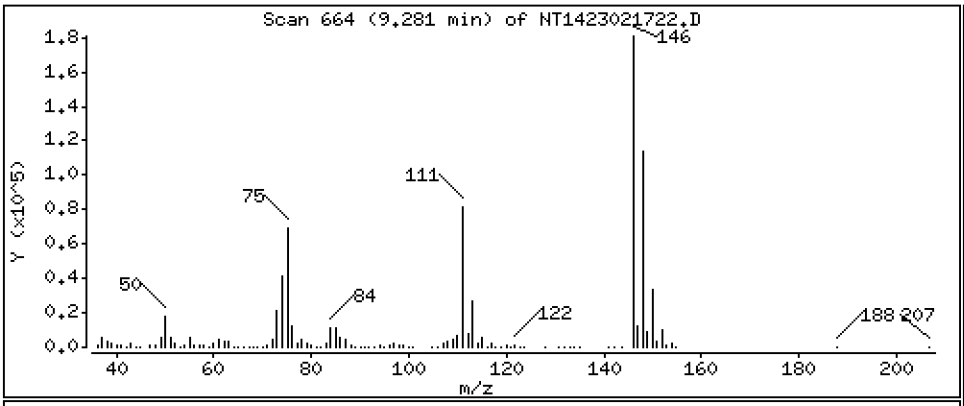
Operator: DSD

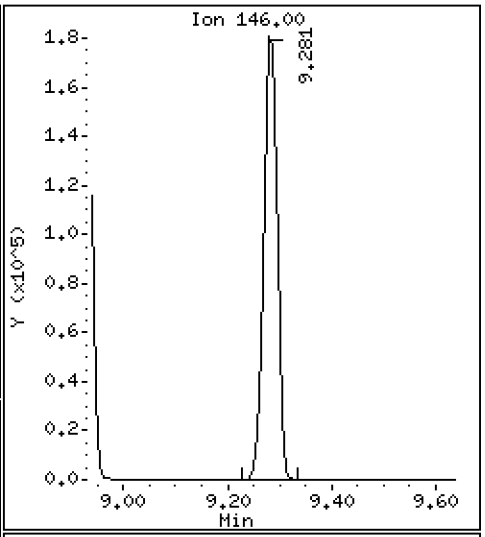
Column phase: ZB-5msi

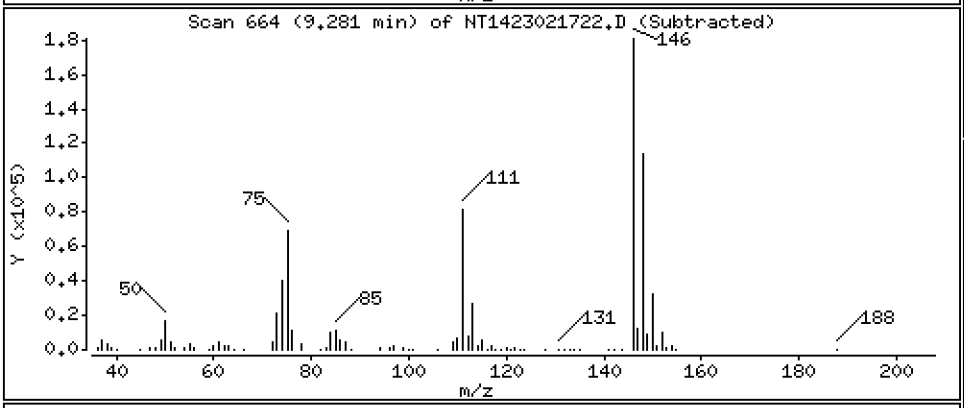
Column diameter: 0.25

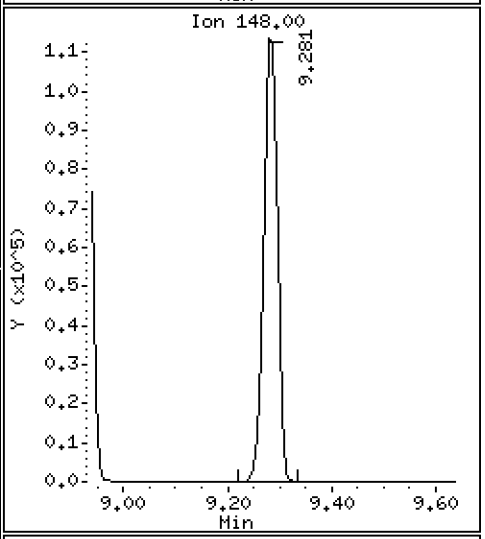
12 1,2-Dichlorobenzene

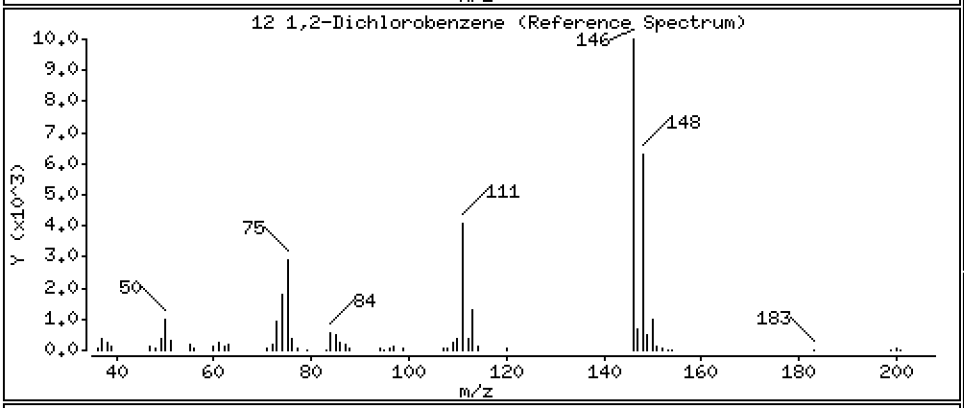
Concentration: 3.328 ug/mL

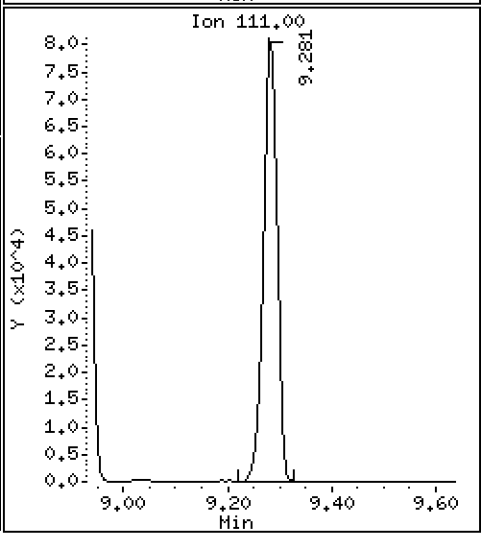


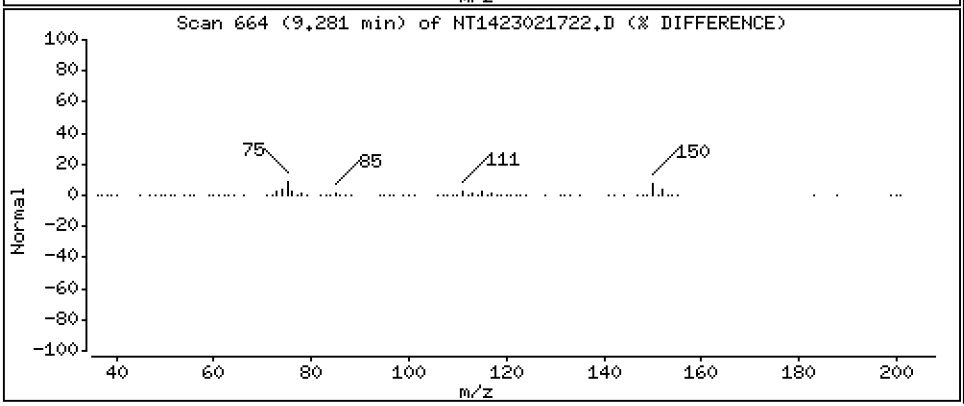












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

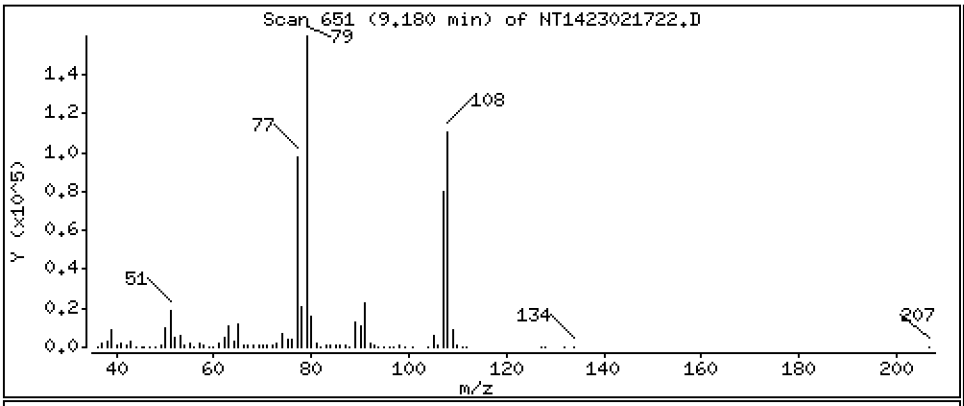
Operator: DSD

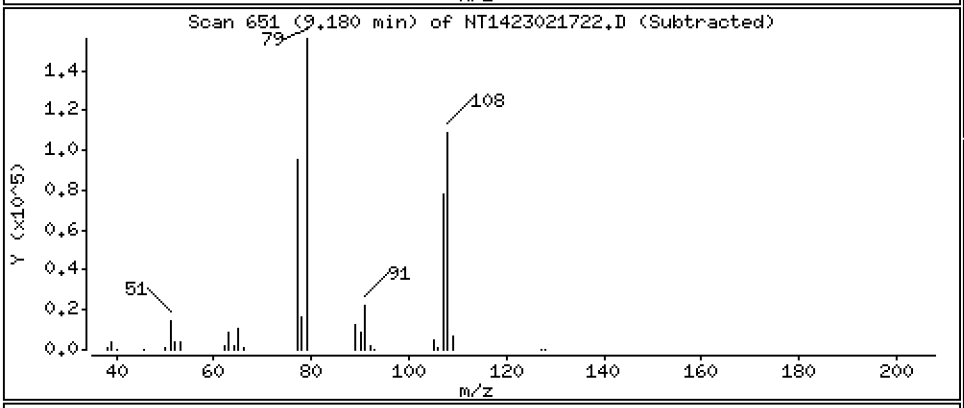
Column phase: ZB-5msi

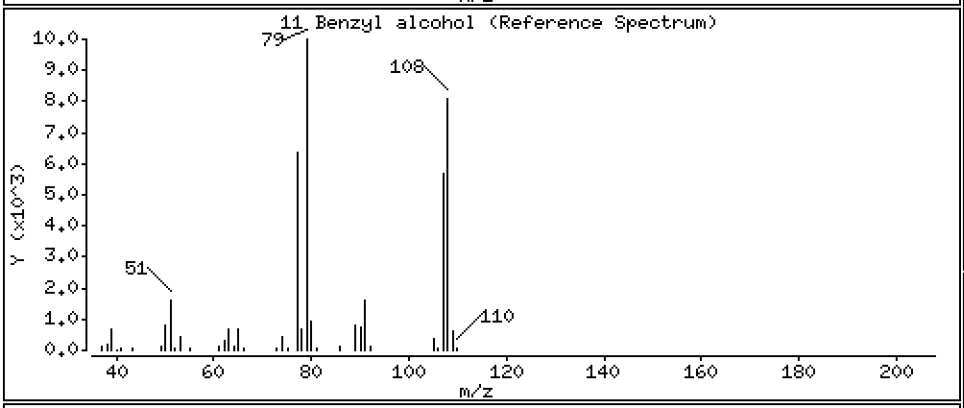
Column diameter: 0.25

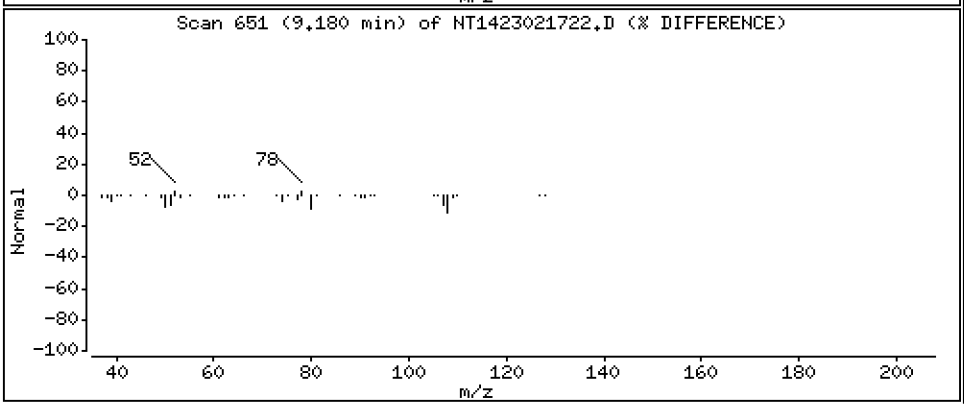
11 Benzyl alcohol

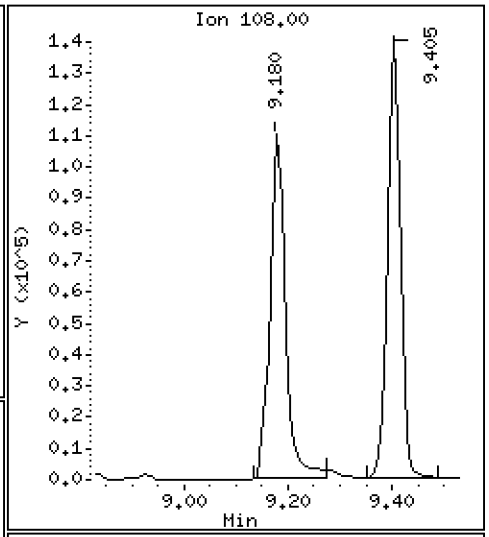
Concentration: 3.138 ug/mL

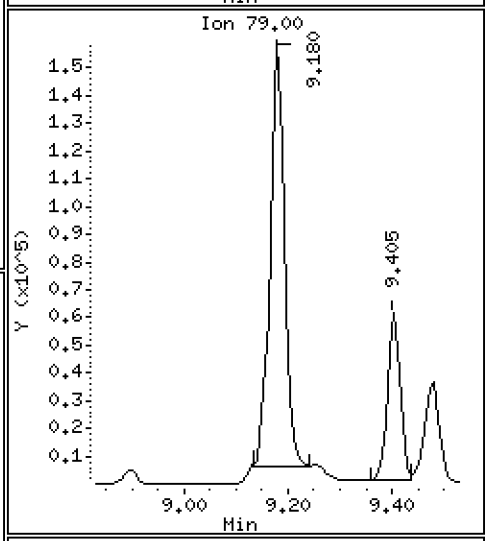


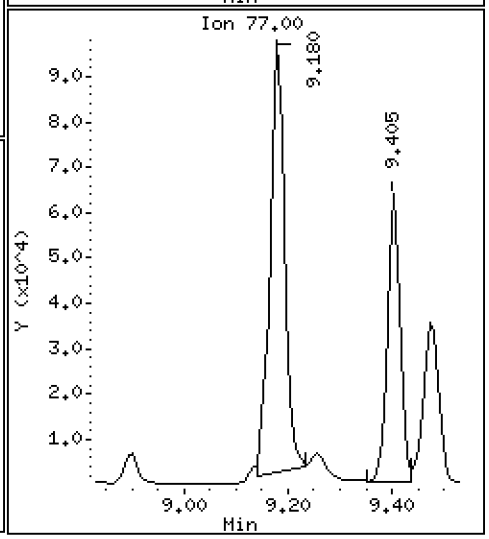












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021722.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

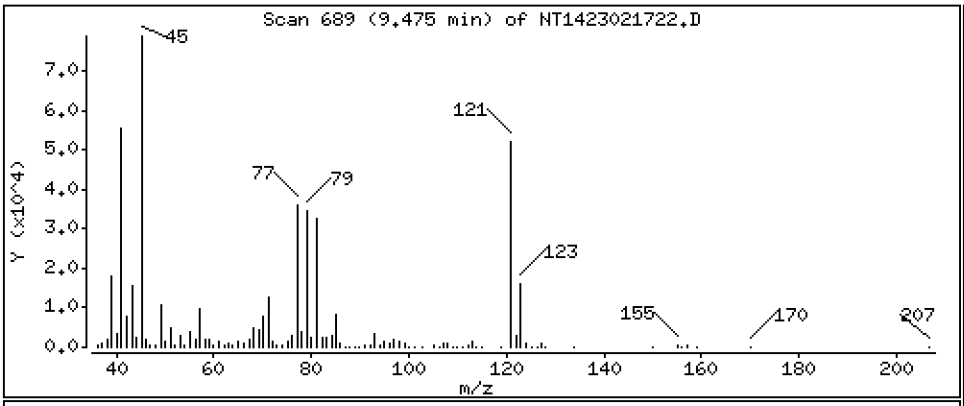
Operator: DSD

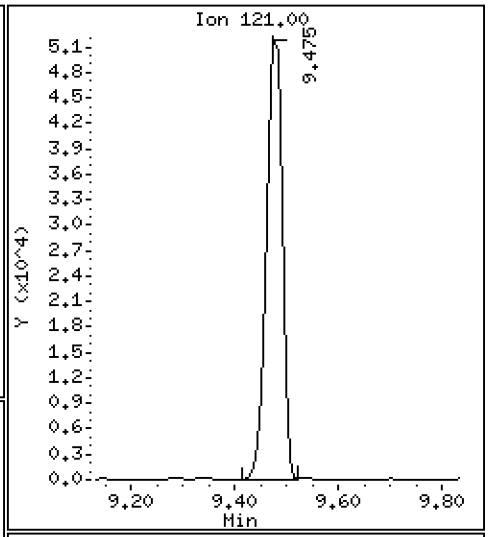
Column phase: ZB-5msi

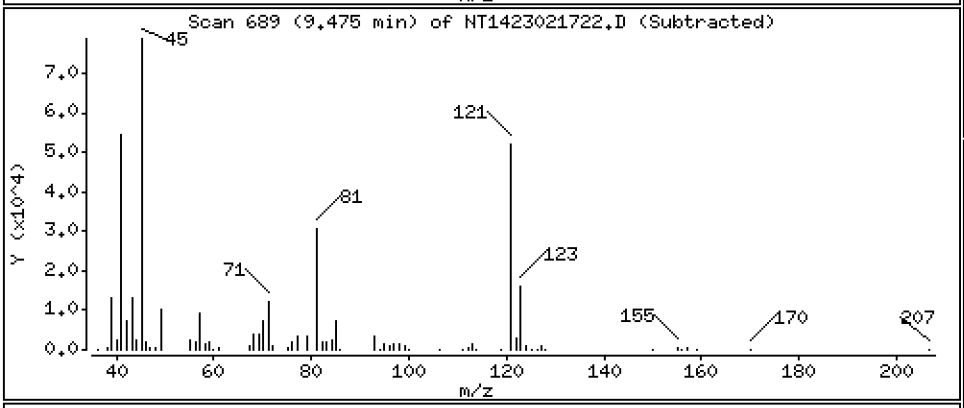
Column diameter: 0.25

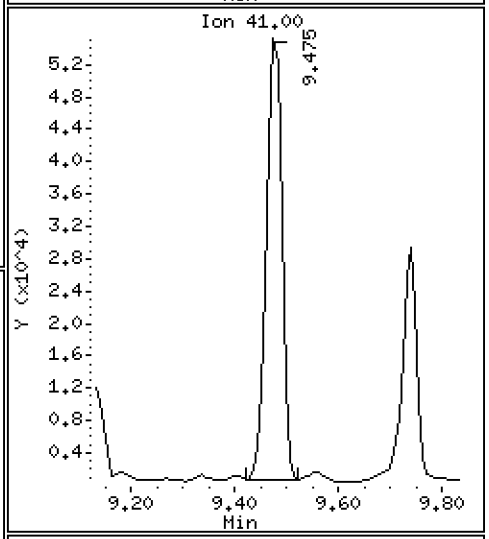
14 2,2'-oxybis(1-Chloropropane)

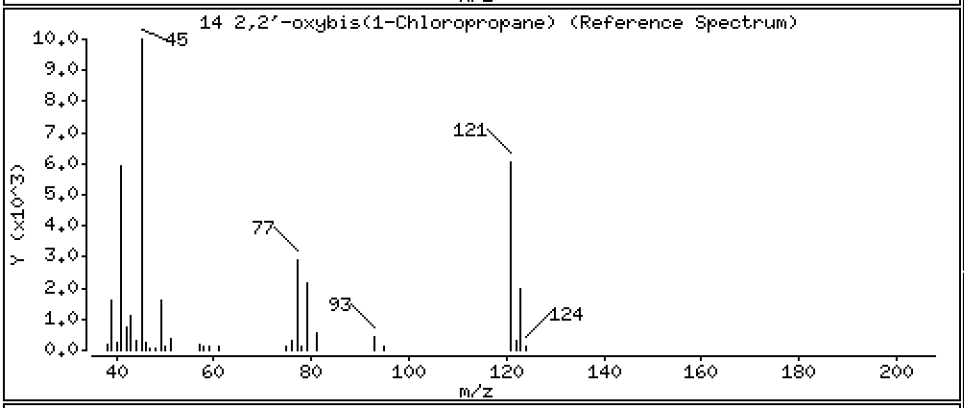
Concentration: 3.907 ug/mL

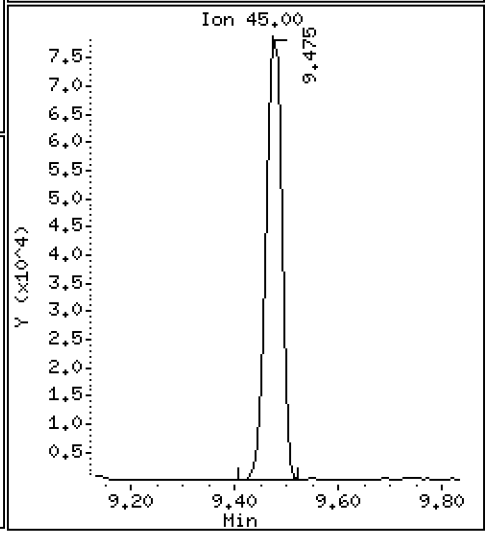


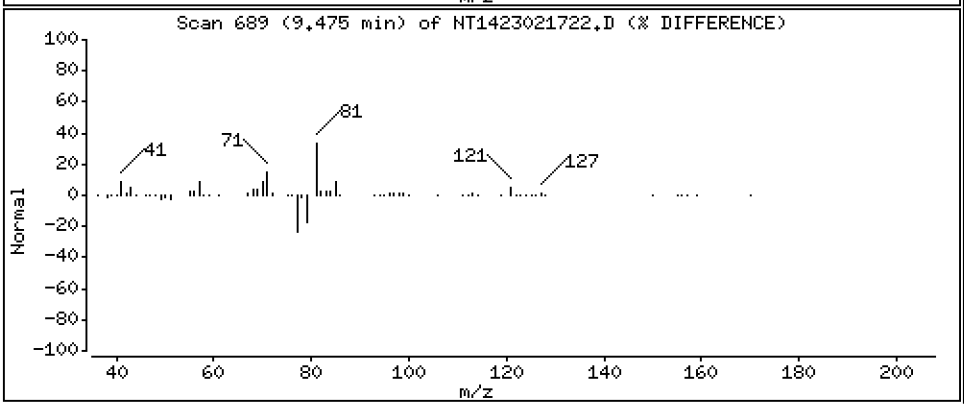












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

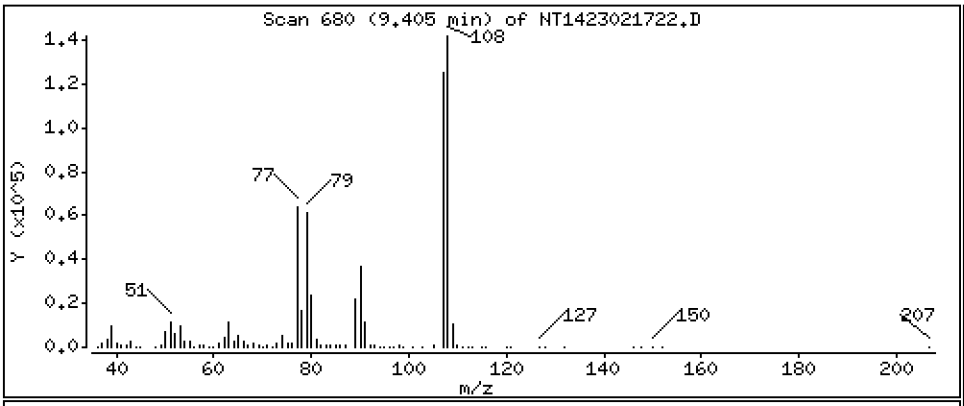
Operator: DSD

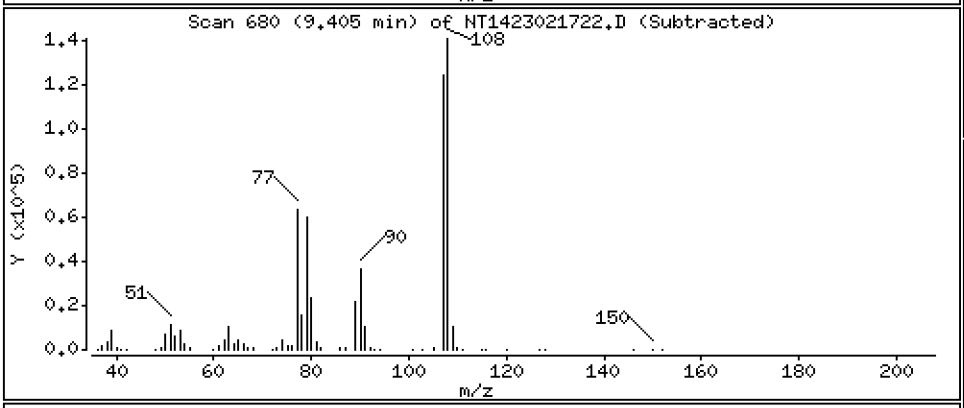
Column phase: ZB-5msi

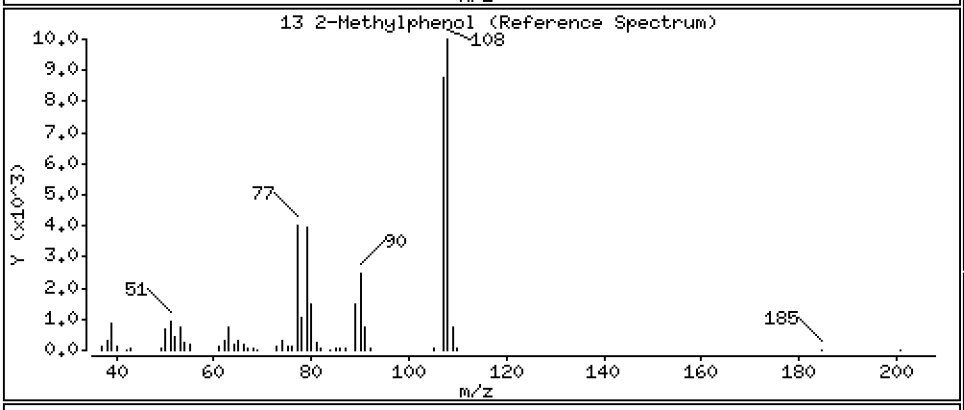
Column diameter: 0.25

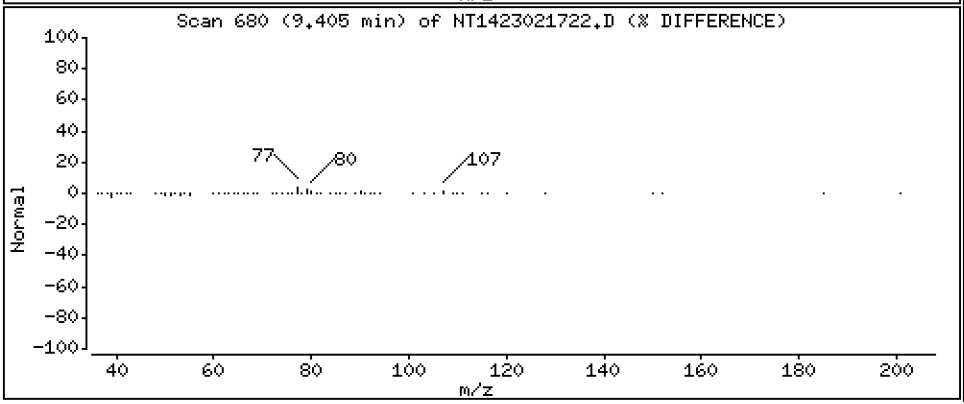
13 2-Methylphenol

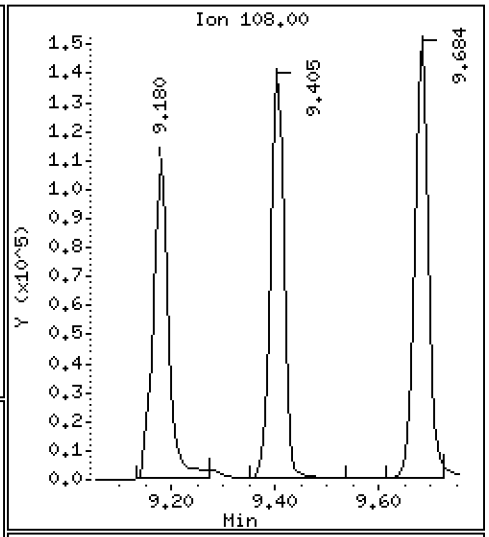
Concentration: 2.693 ug/mL

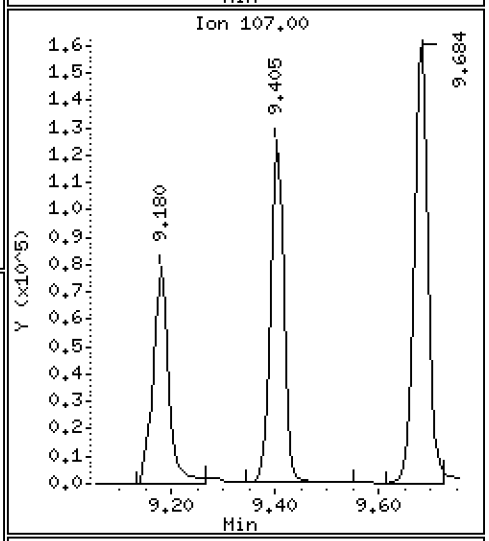


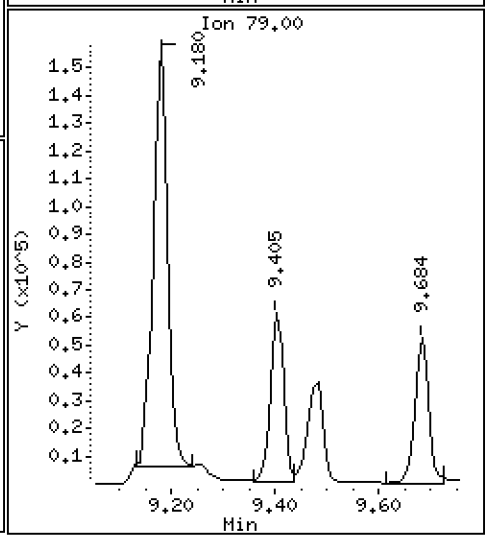












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

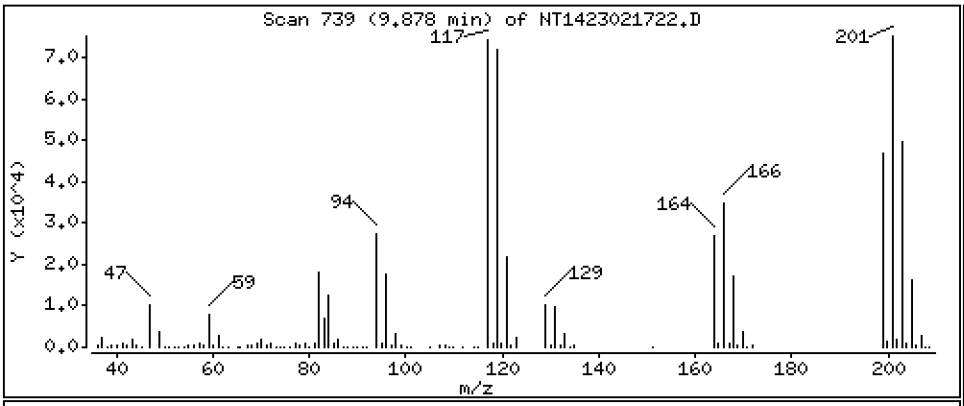
Operator: DSD

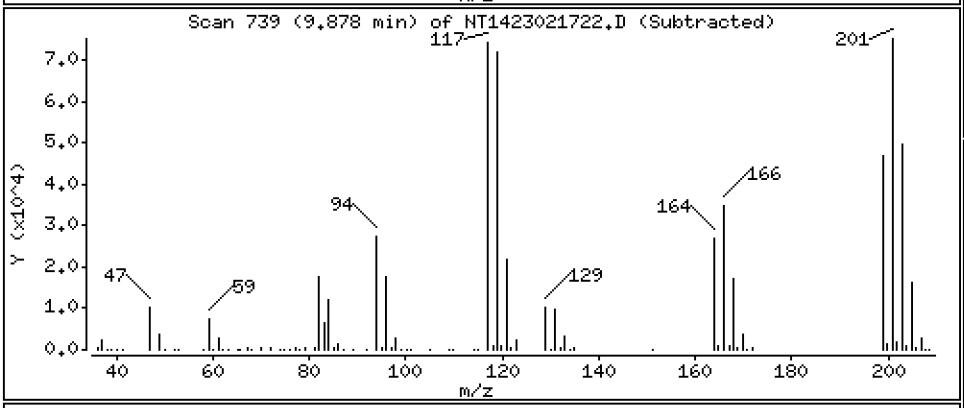
Column phase: ZB-5msi

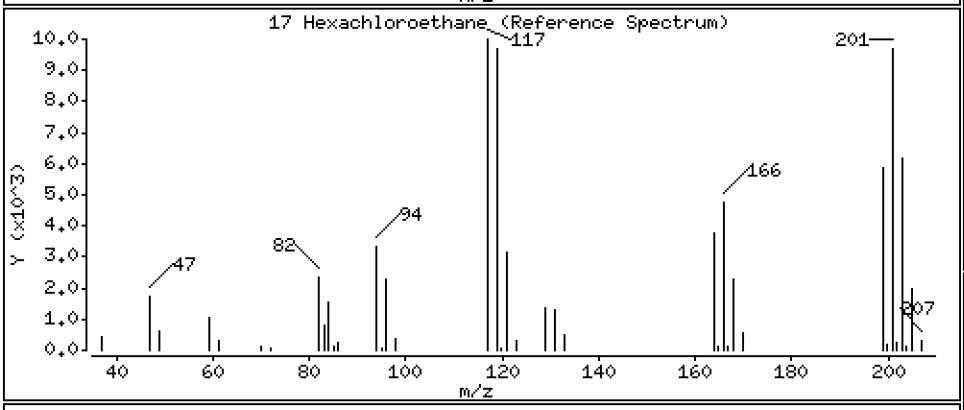
Column diameter: 0.25

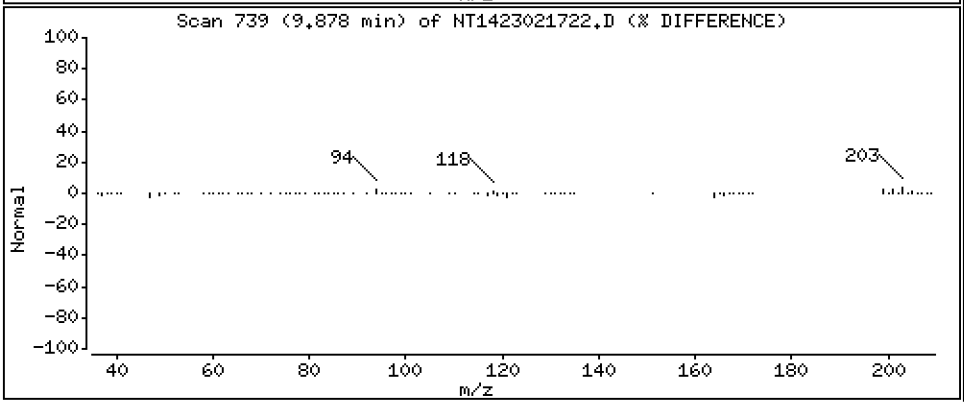
17 Hexachloroethane

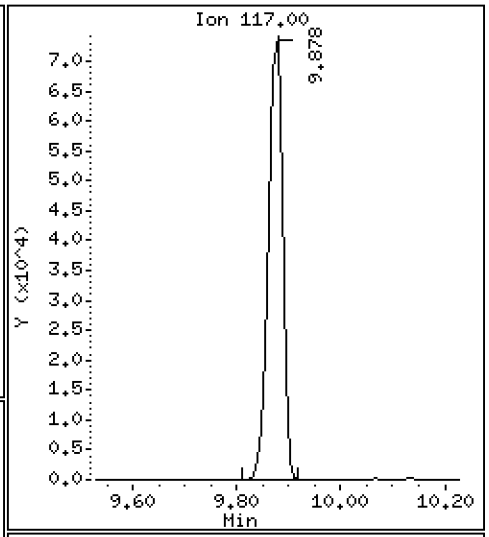
Concentration: 3.284 ug/mL

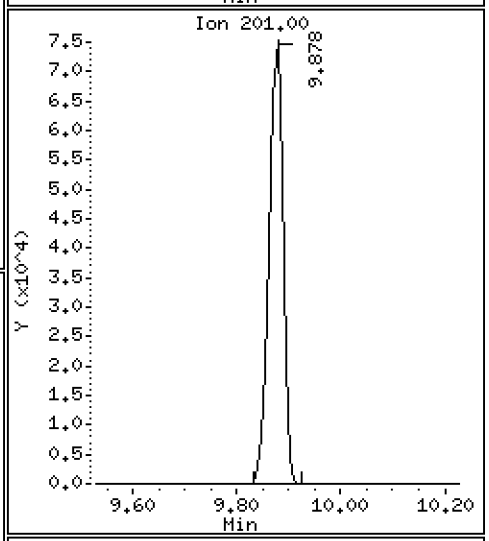


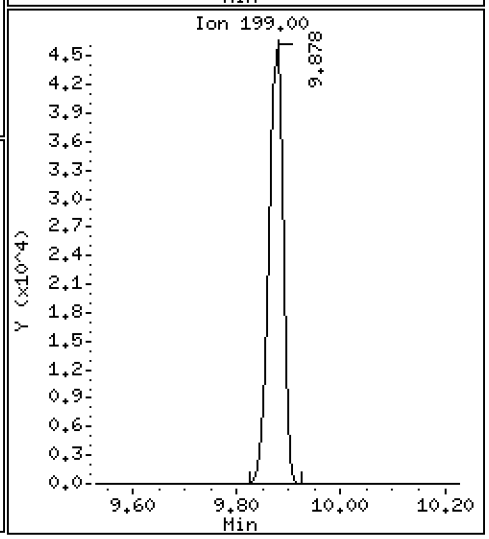












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

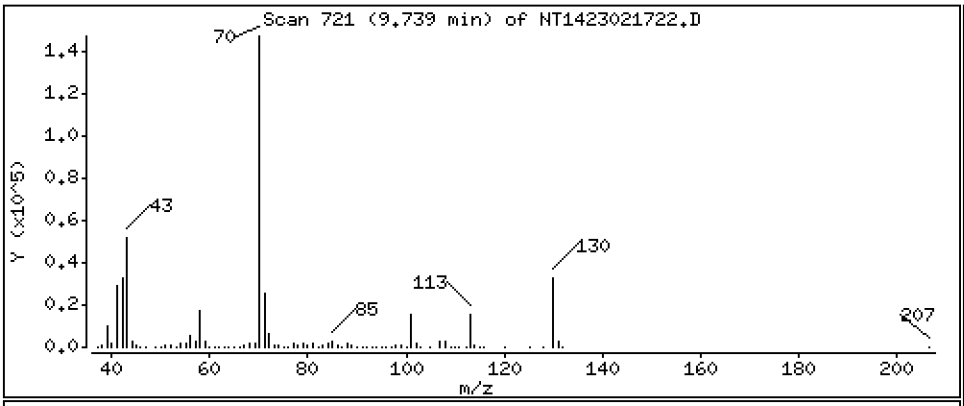
Operator: DSD

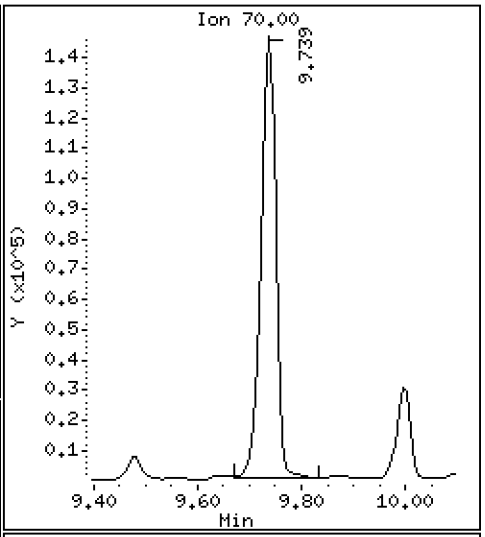
Column phase: ZB-5msi

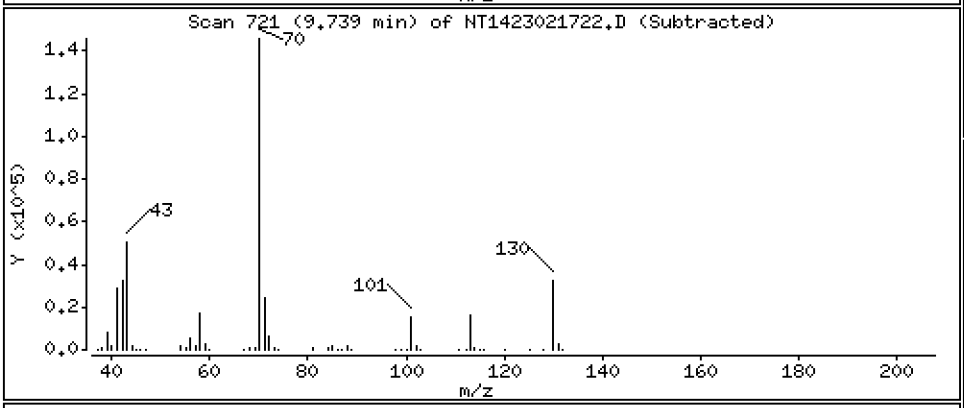
Column diameter: 0.25

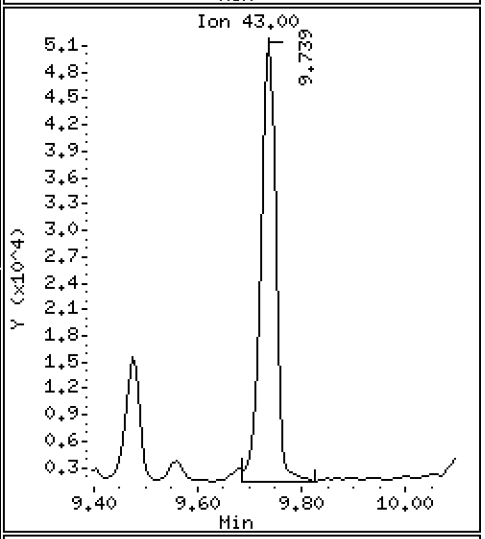
16 N-Nitroso-di-n-propylamine

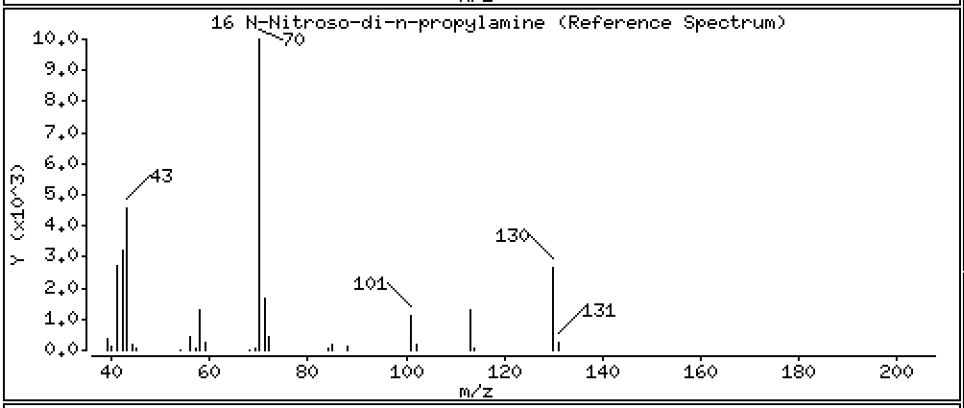
Concentration: 3.418 ug/mL

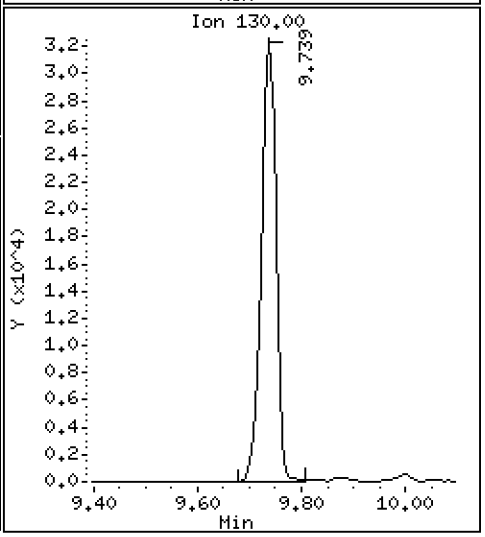


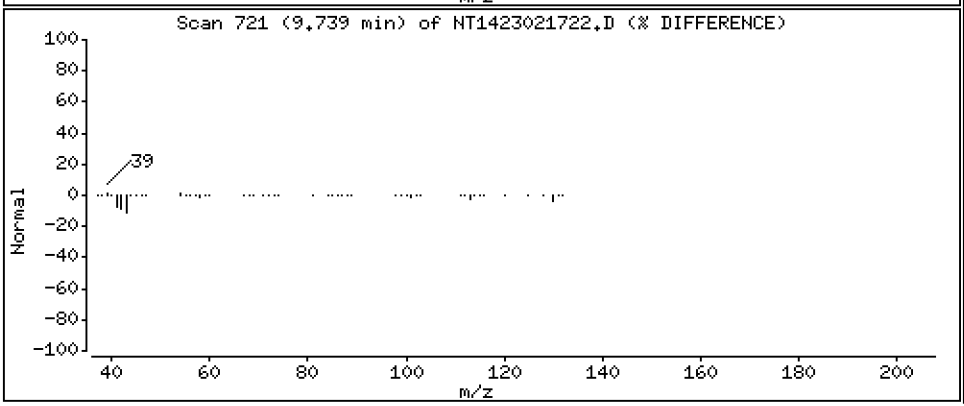












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

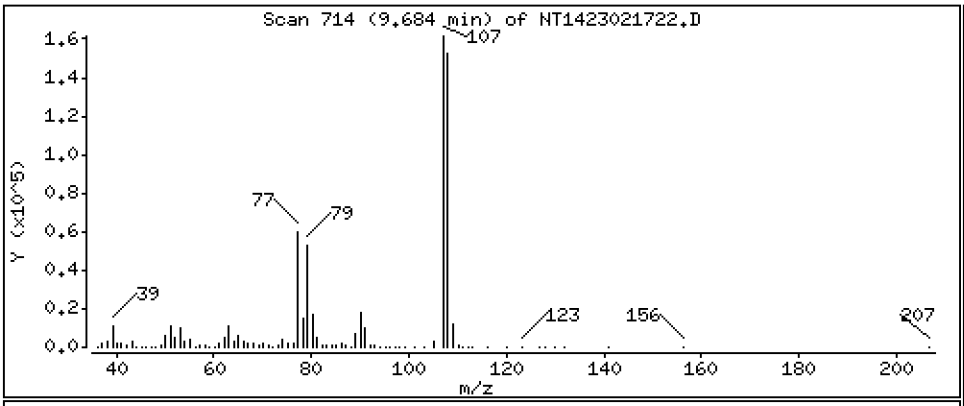
Operator: DSD

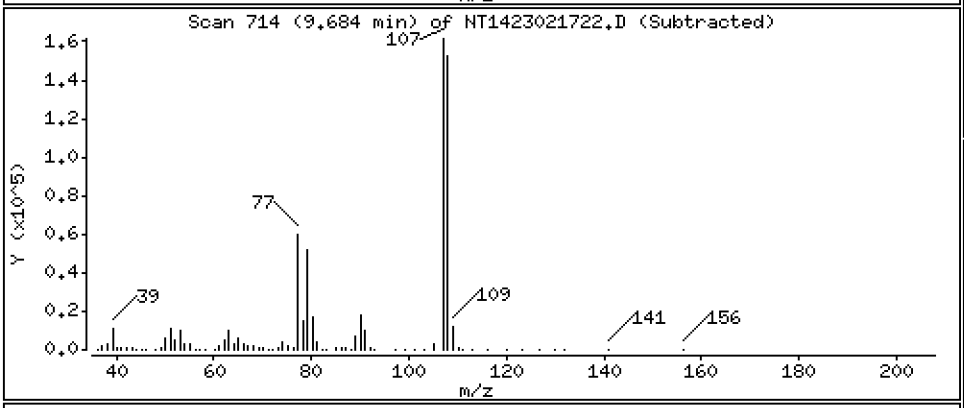
Column phase: ZB-5msi

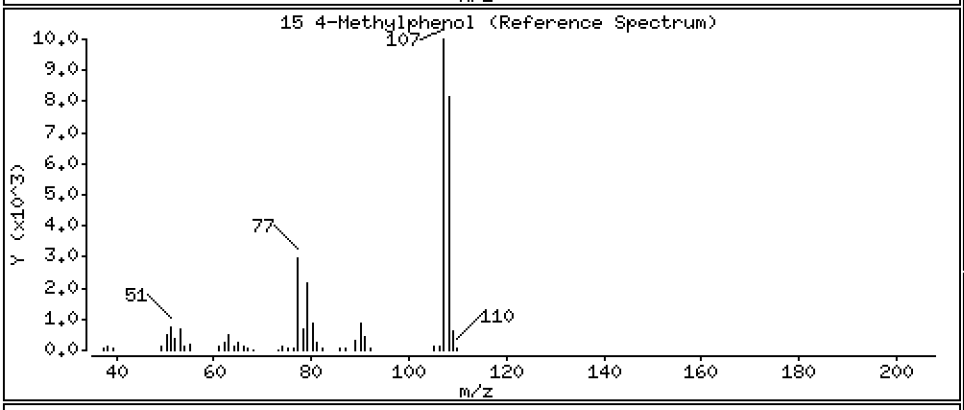
Column diameter: 0.25

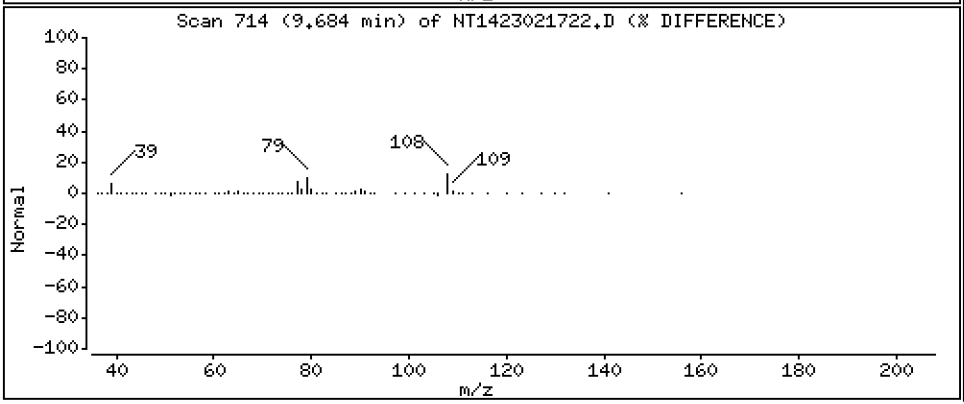
15 4-Methylphenol

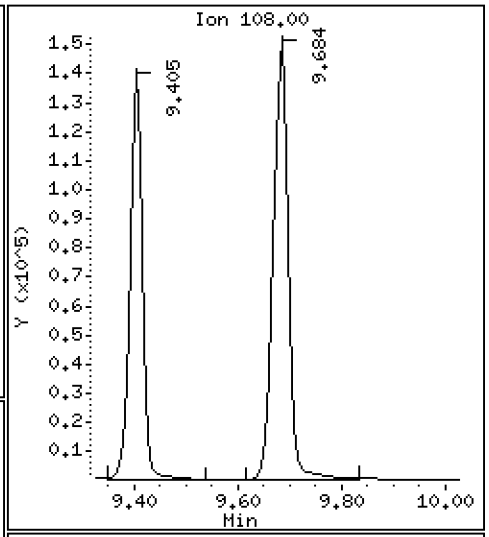
Concentration: 3.140 ug/mL

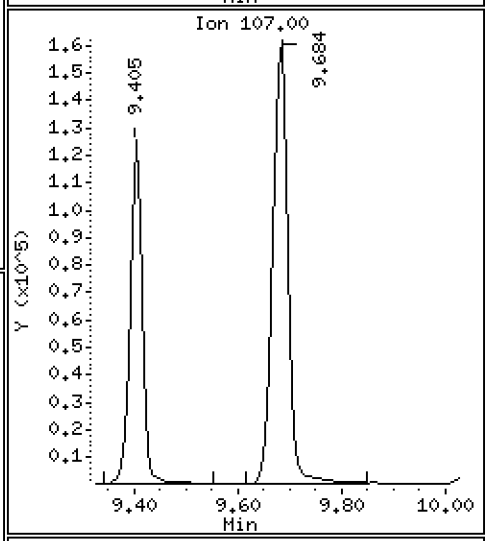


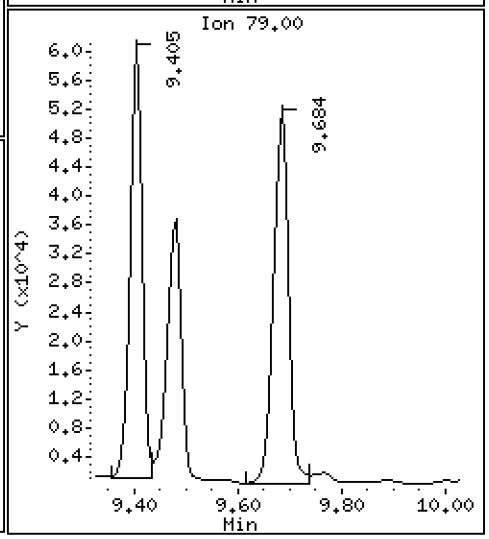












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

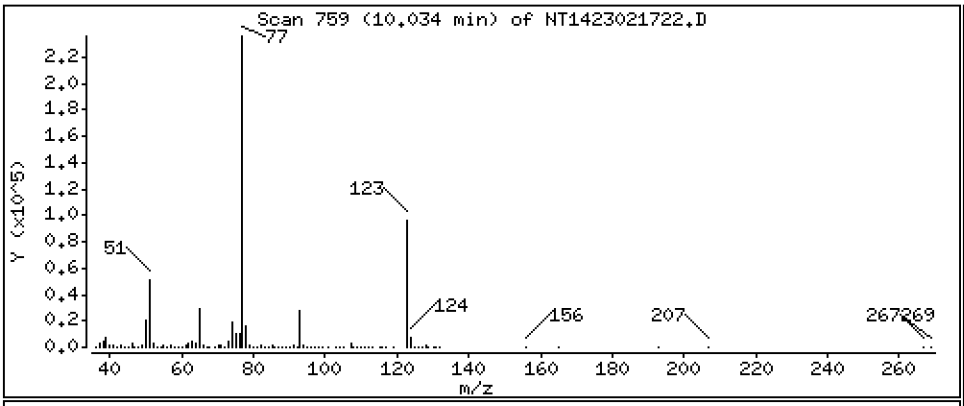
Operator: DSD

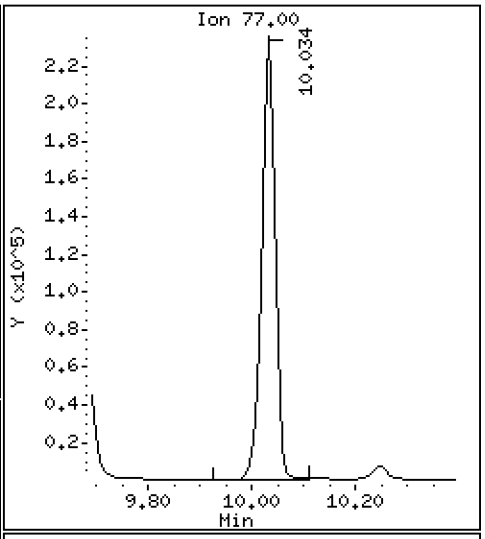
Column phase: ZB-5msi

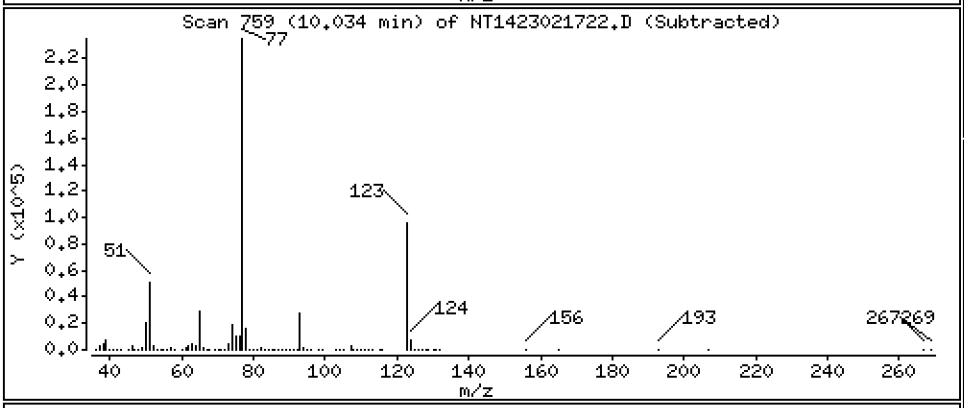
Column diameter: 0.25

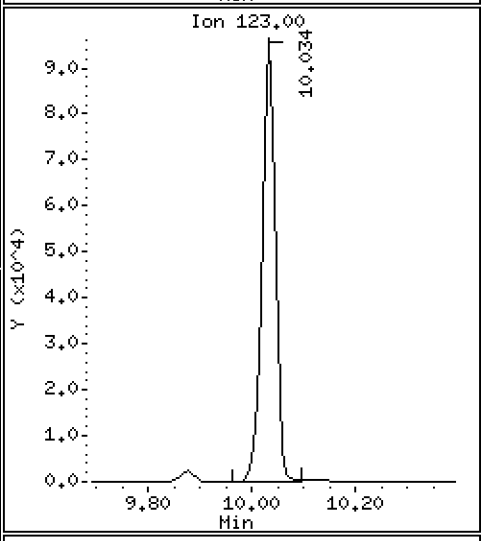
19 Nitrobenzene

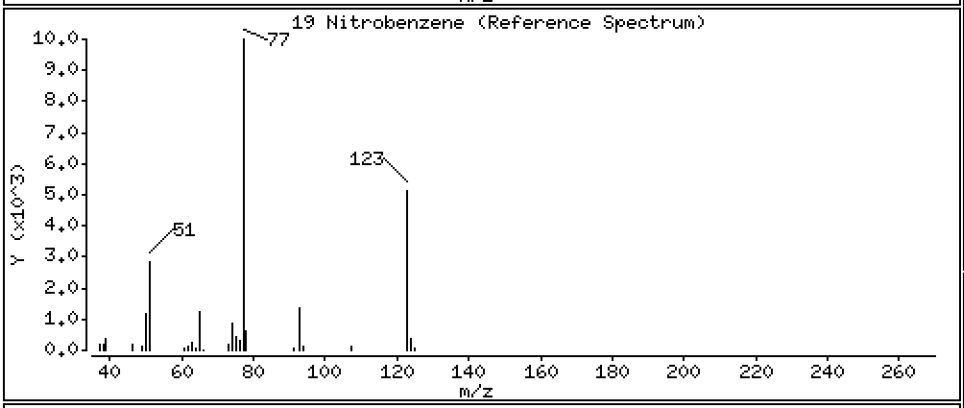
Concentration: 3.474 ug/mL

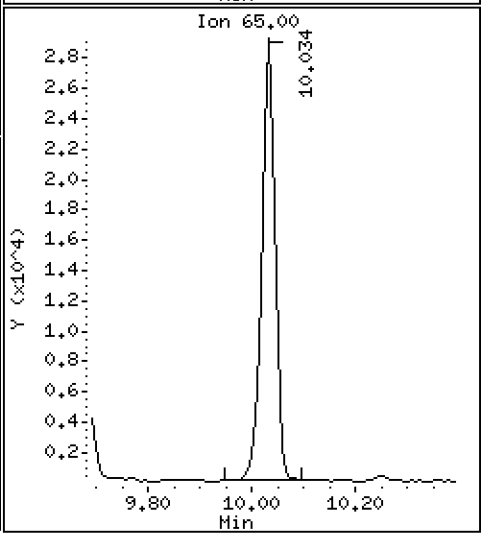


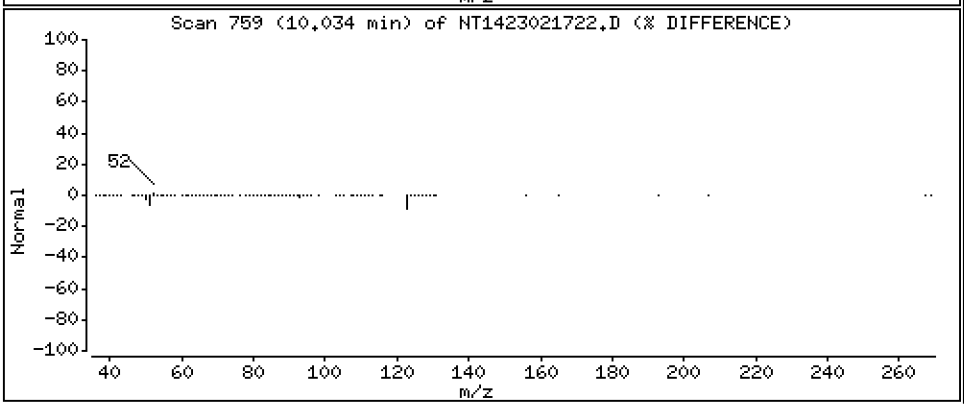












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

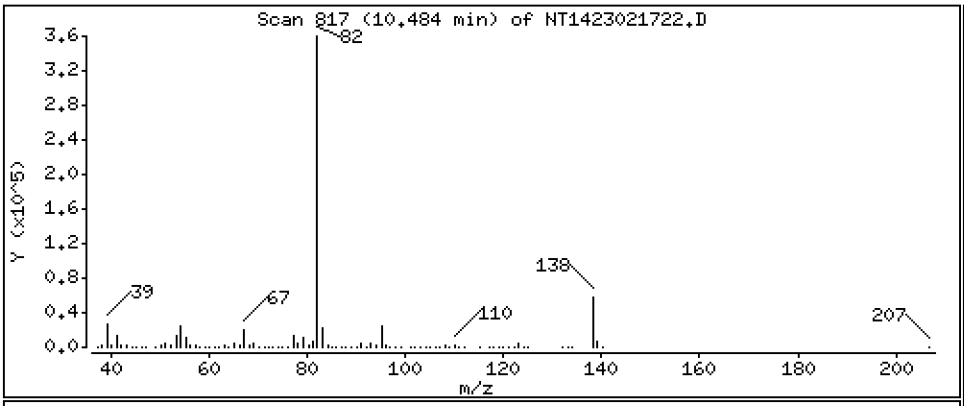
Operator: DSD

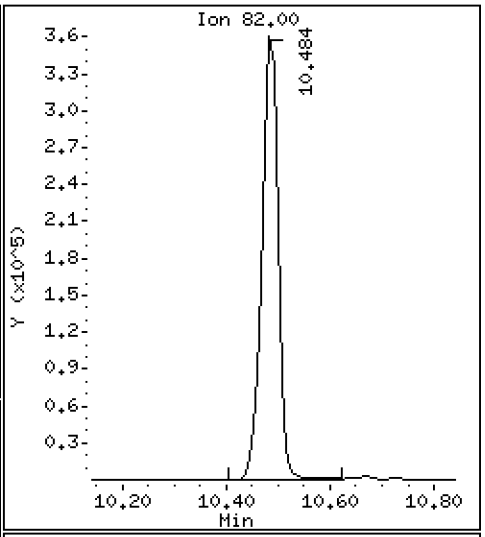
Column phase: ZB-5msi

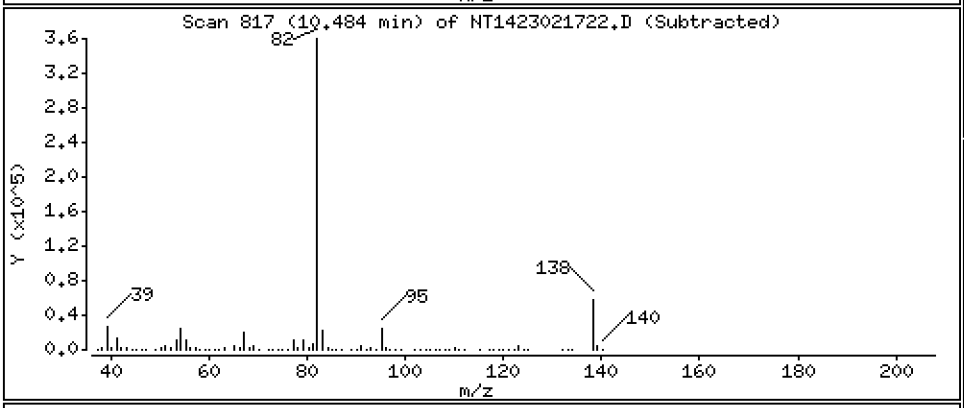
Column diameter: 0.25

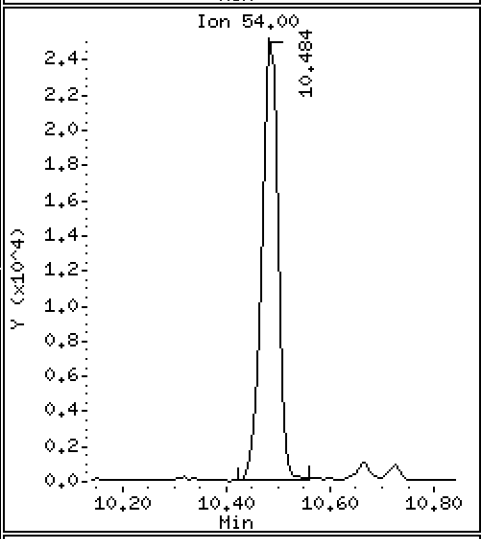
20 Isophorone

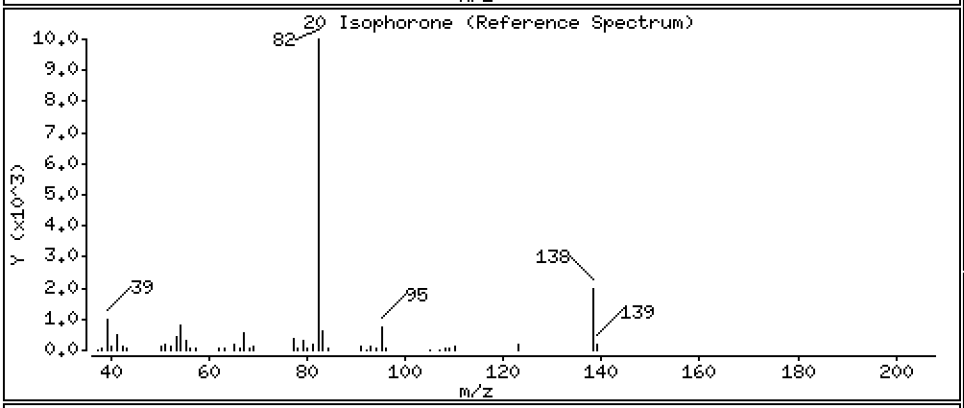
Concentration: 5.141 ug/mL

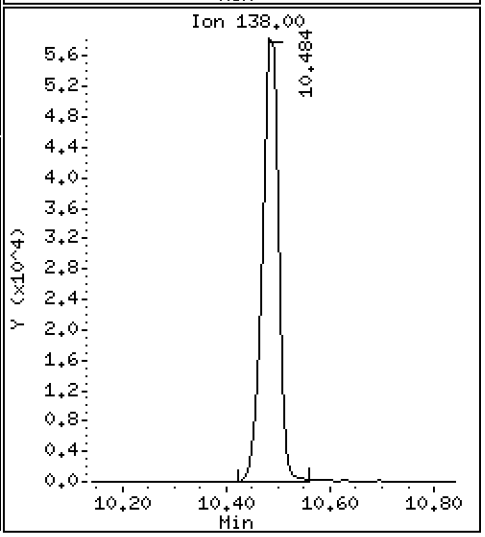


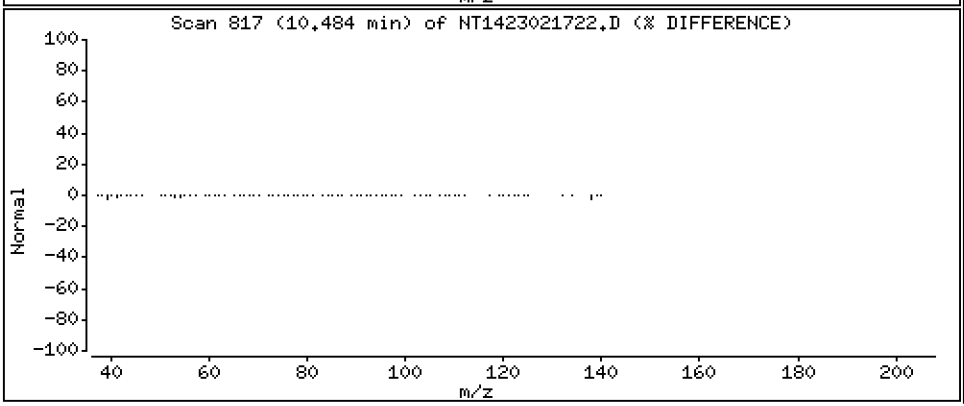












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

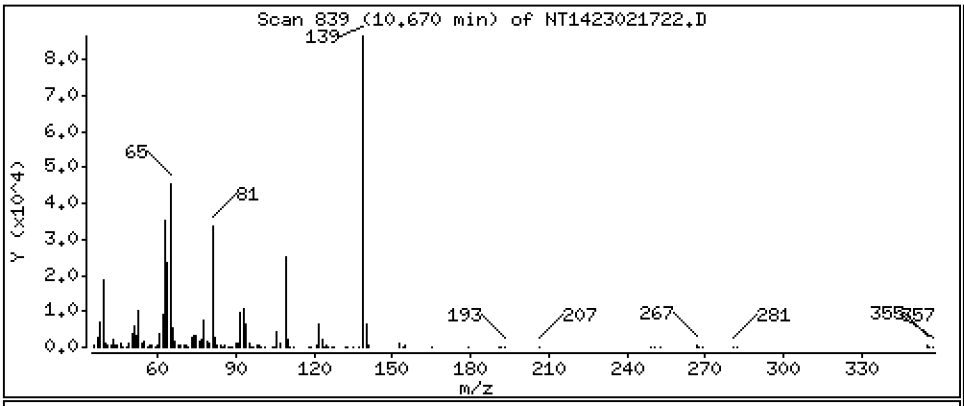
Operator: DSD

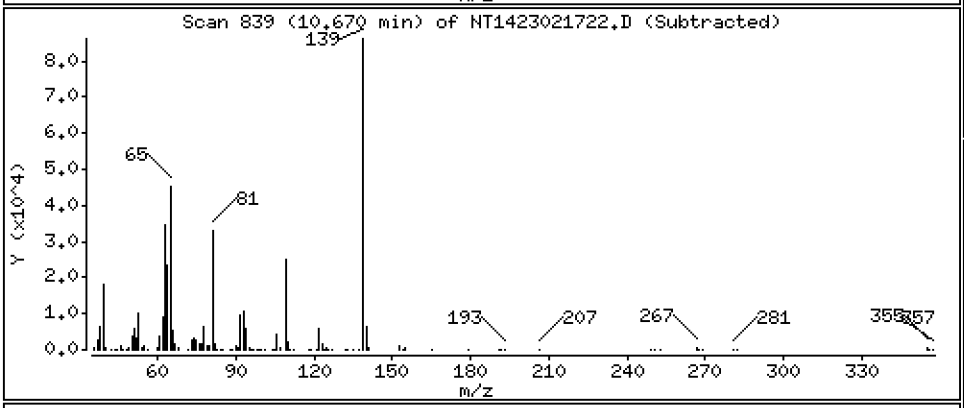
Column phase: ZB-5msi

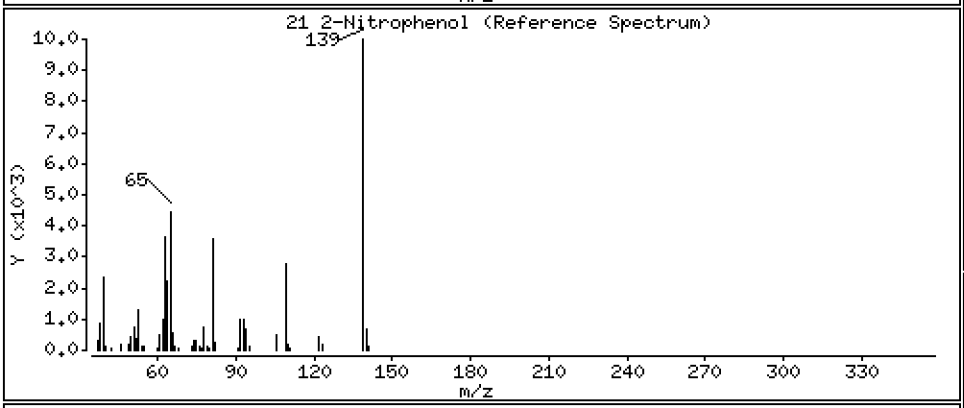
Column diameter: 0.25

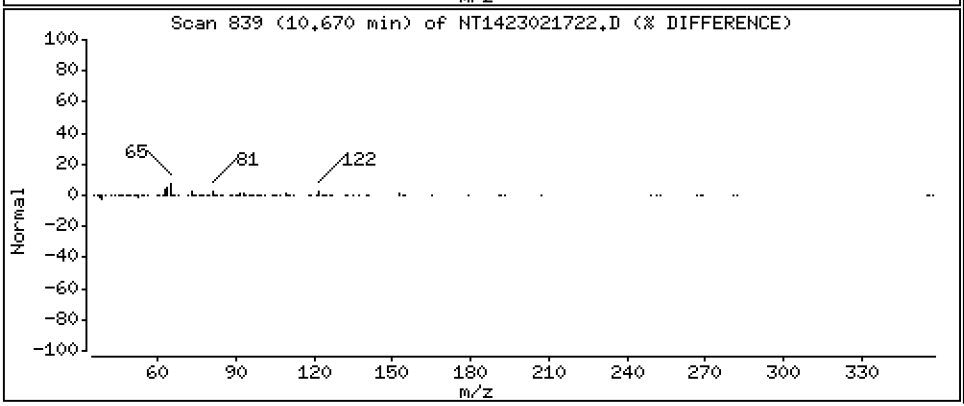
21 2-Nitrophenol

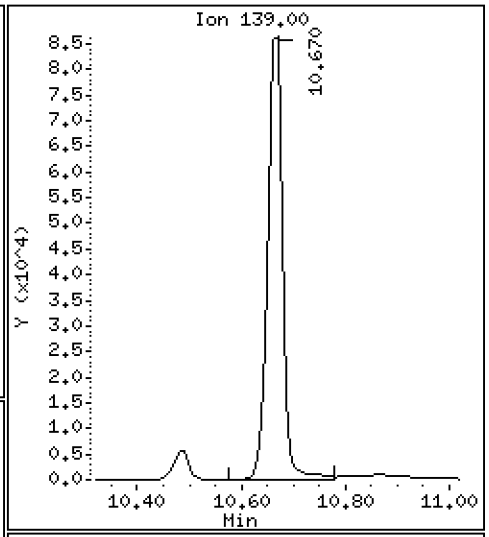
Concentration: 3.272 ug/mL

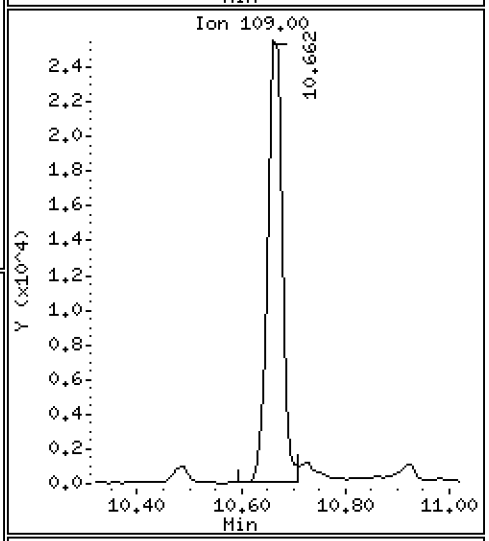


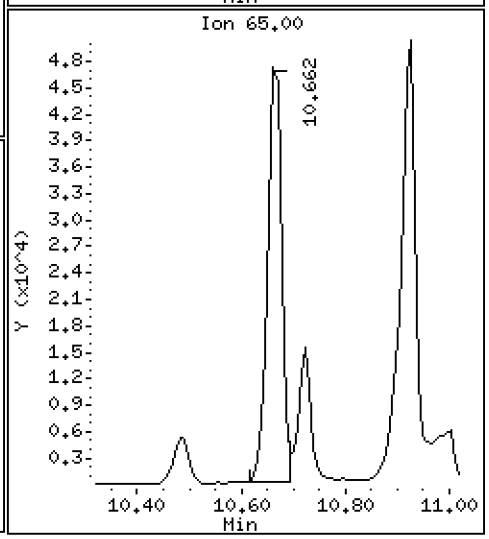












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

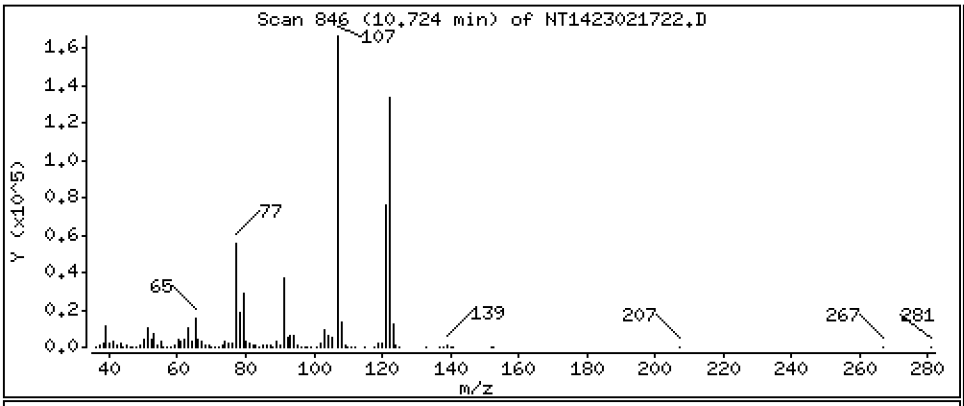
Operator: DSD

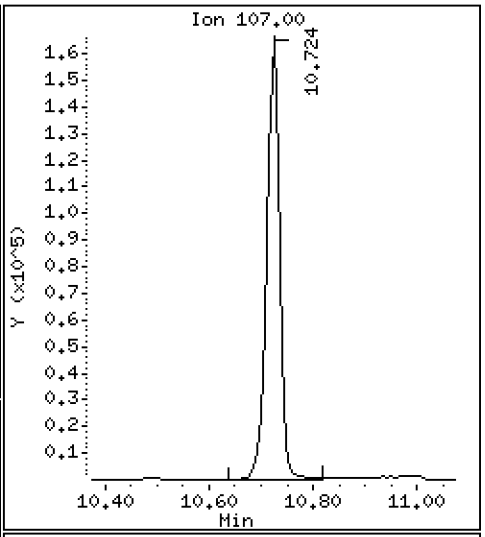
Column phase: ZB-5msi

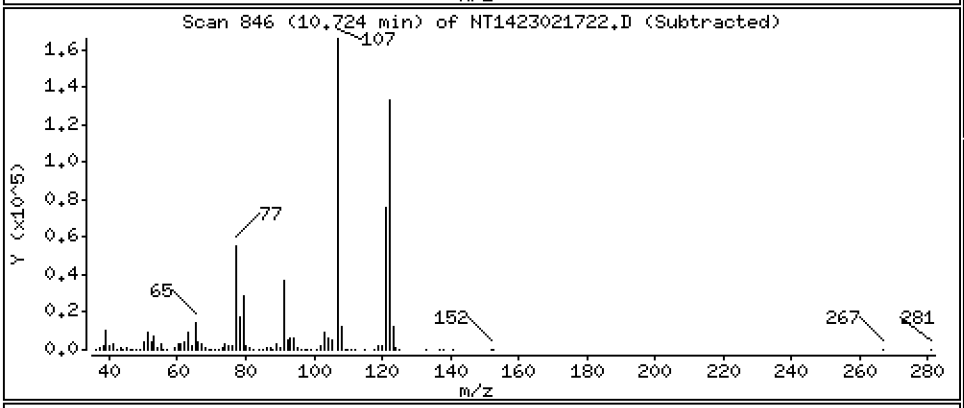
Column diameter: 0.25

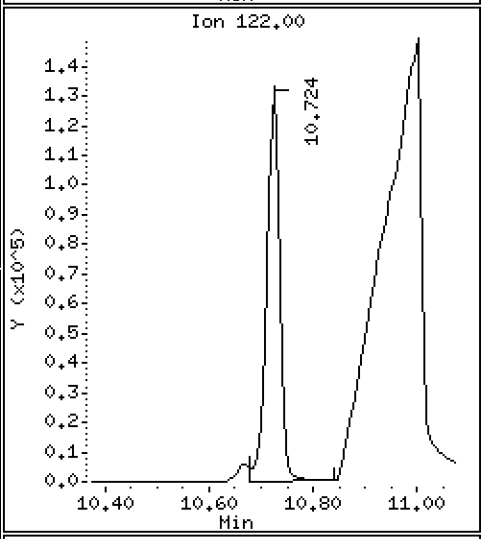
22 2,4-Dimethylphenol

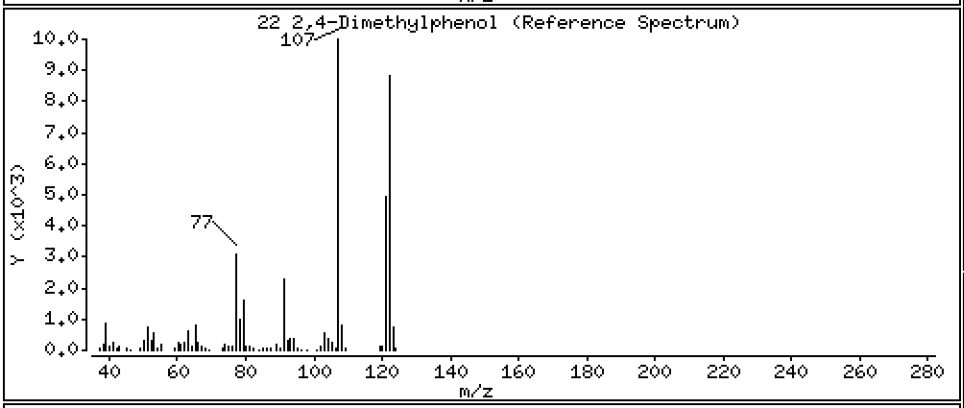
Concentration: 2.974 ug/mL

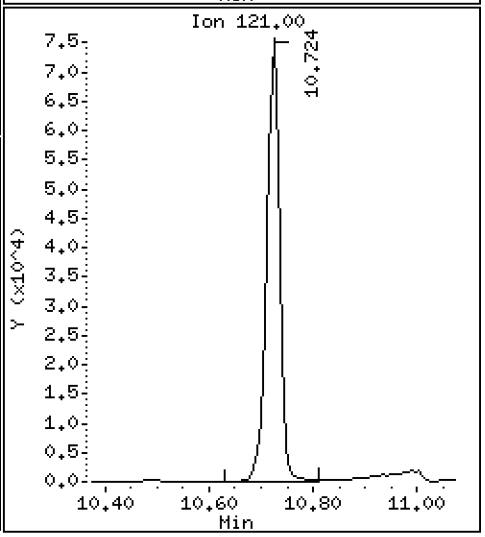


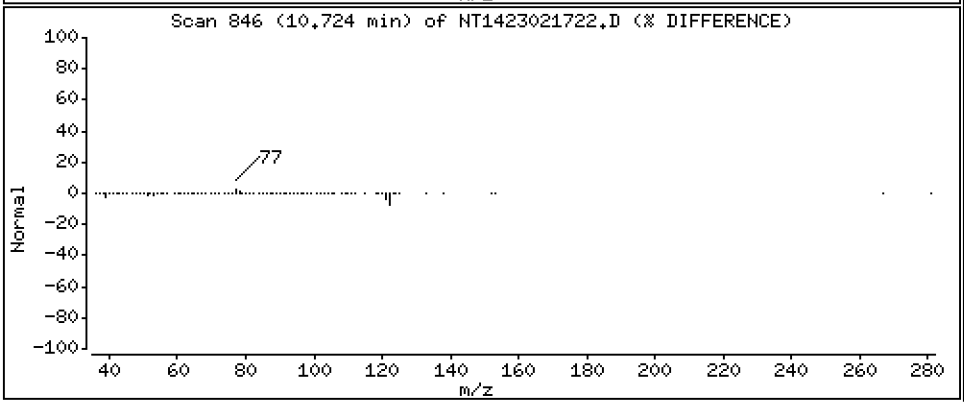












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

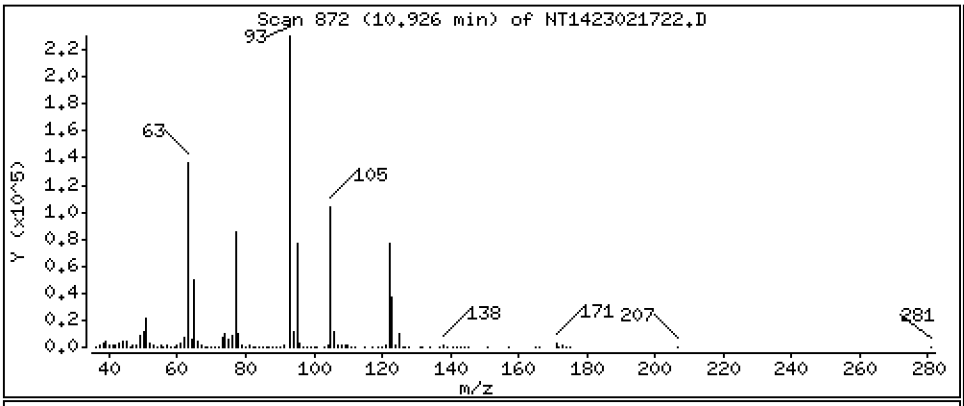
Operator: DSD

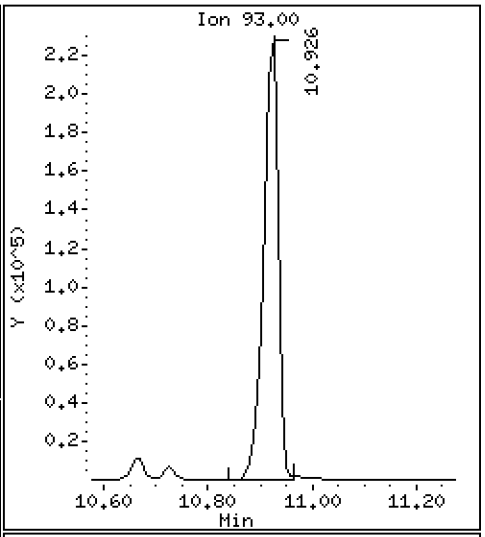
Column phase: ZB-5msi

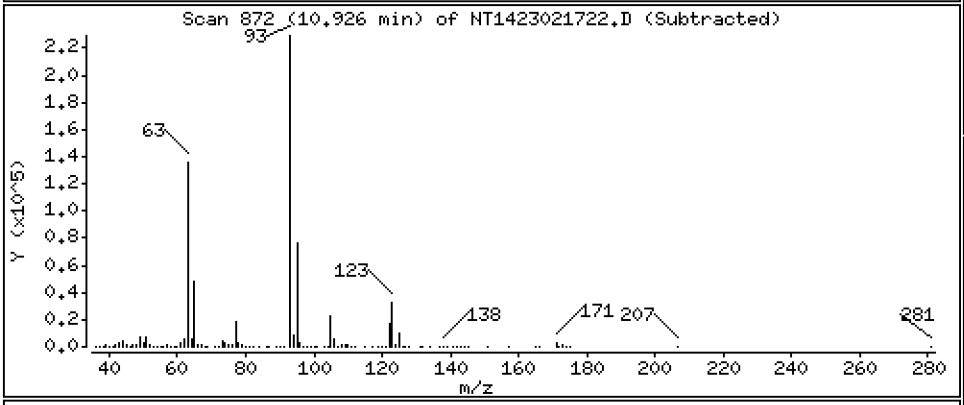
Column diameter: 0.25

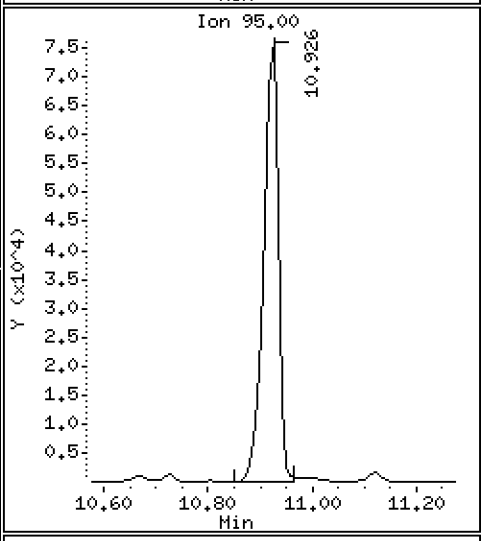
23 Bis(2-Chloroethoxy)methane

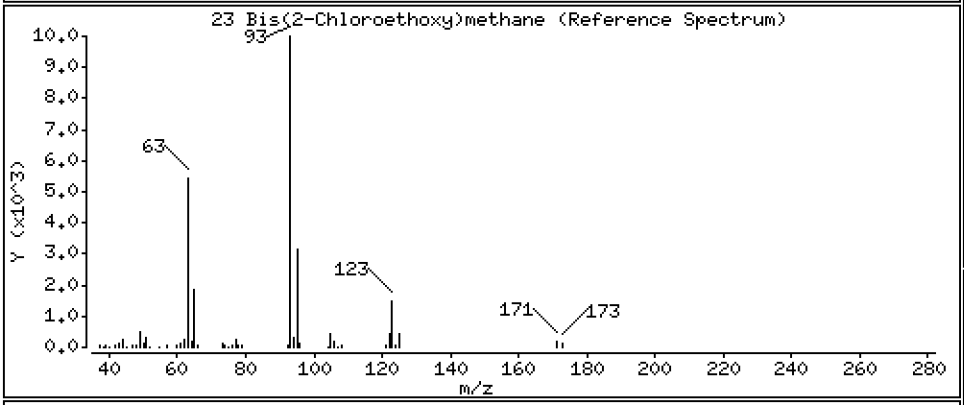
Concentration: 4.181 ug/mL

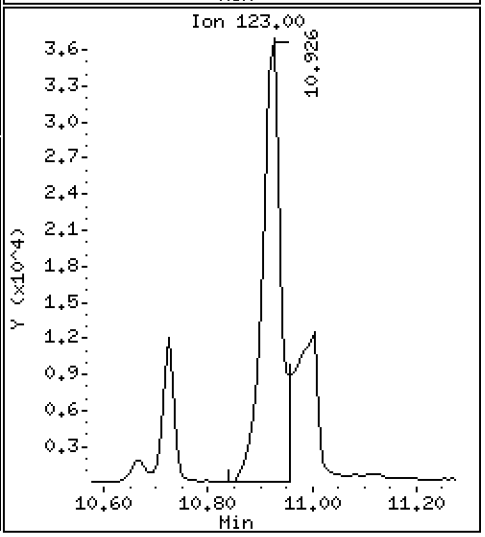


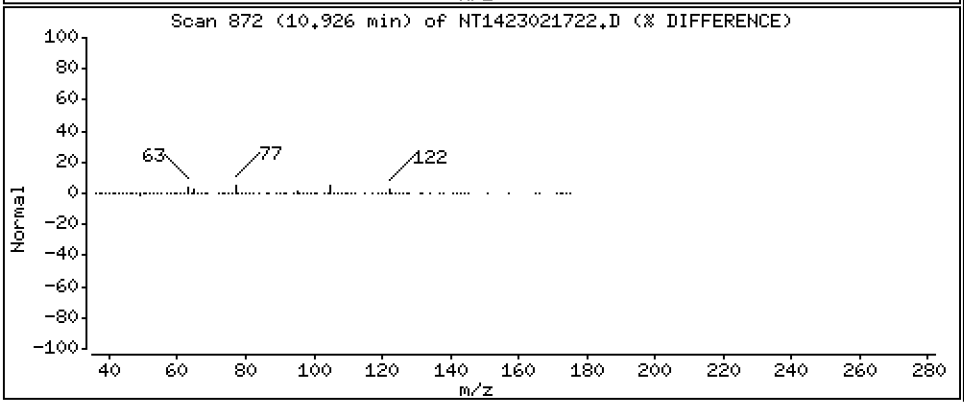












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

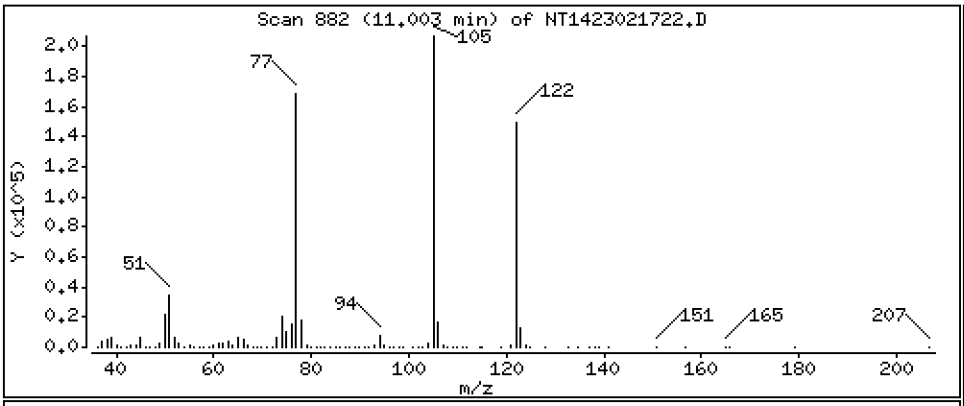
Operator: DSD

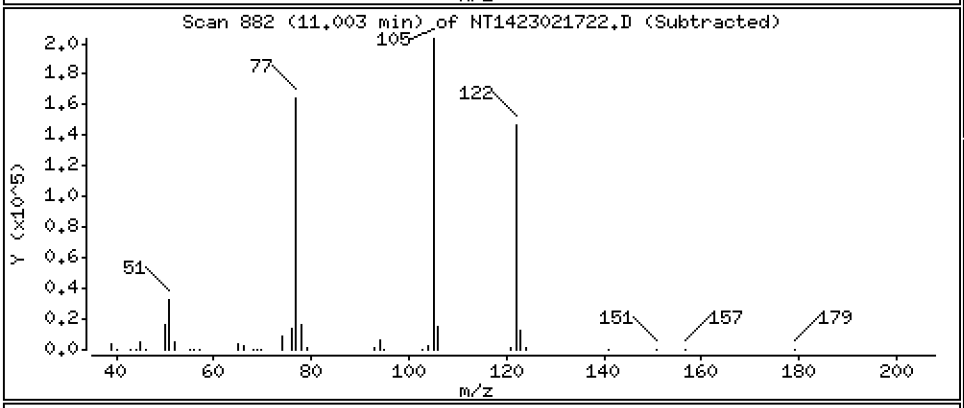
Column phase: ZB-5msi

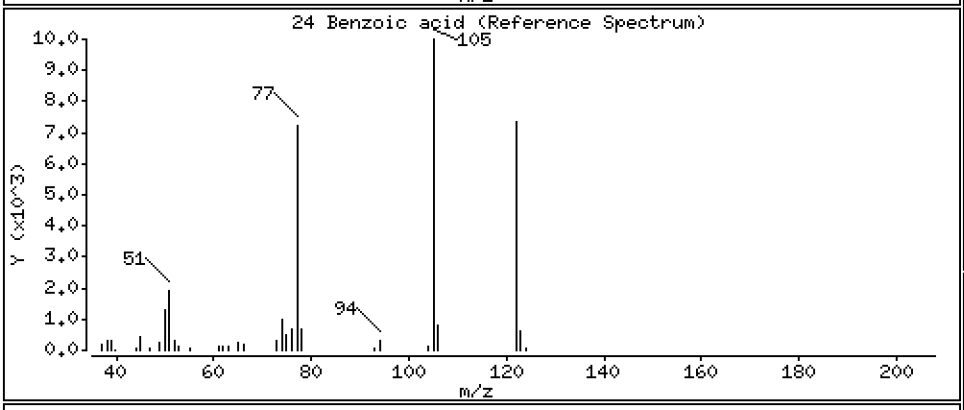
Column diameter: 0.25

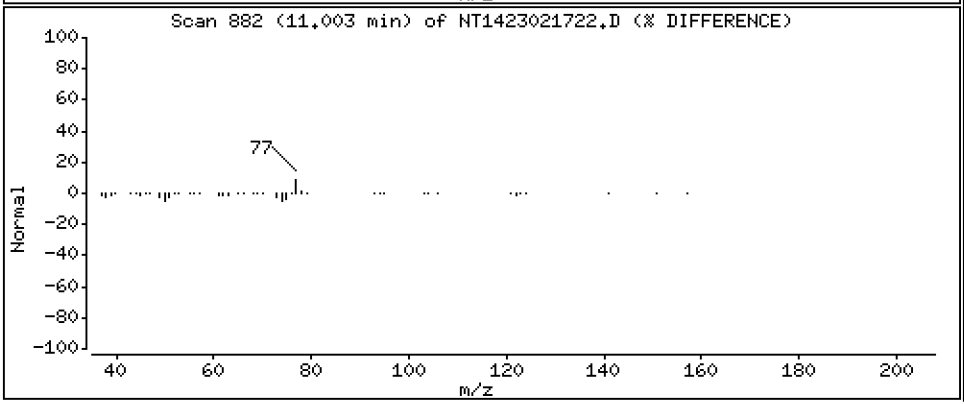
24 Benzoic acid

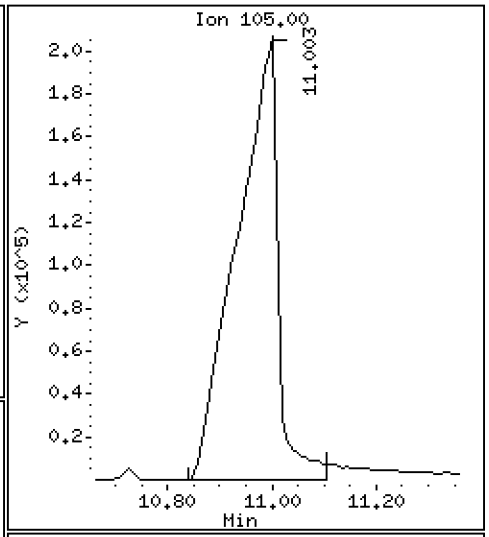
Concentration: 18.91 ug/mL

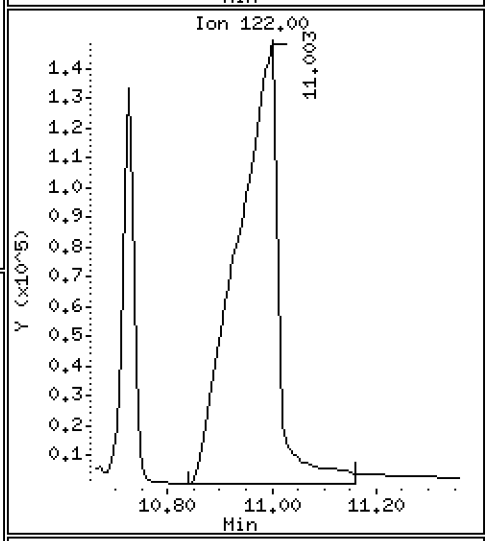


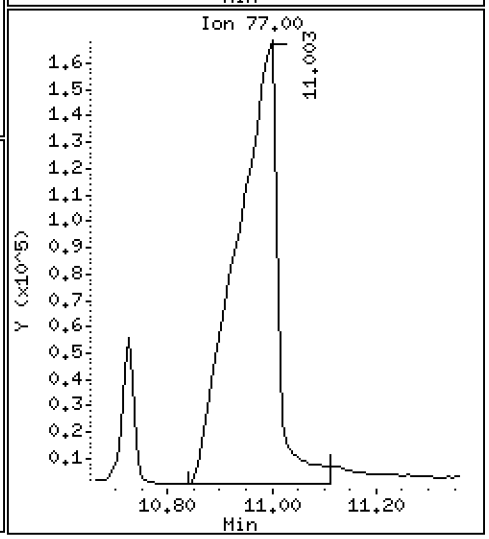












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

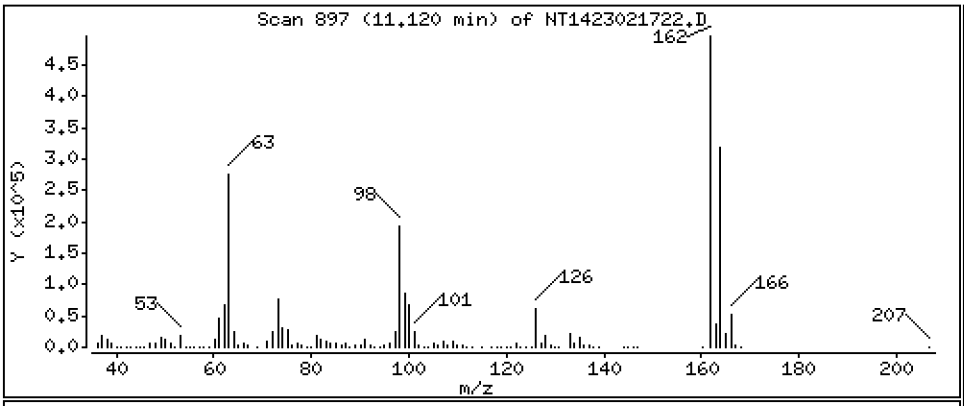
Operator: DSD

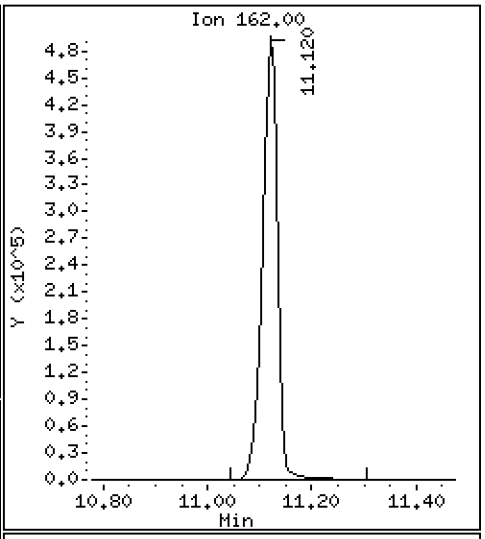
Column phase: ZB-5msi

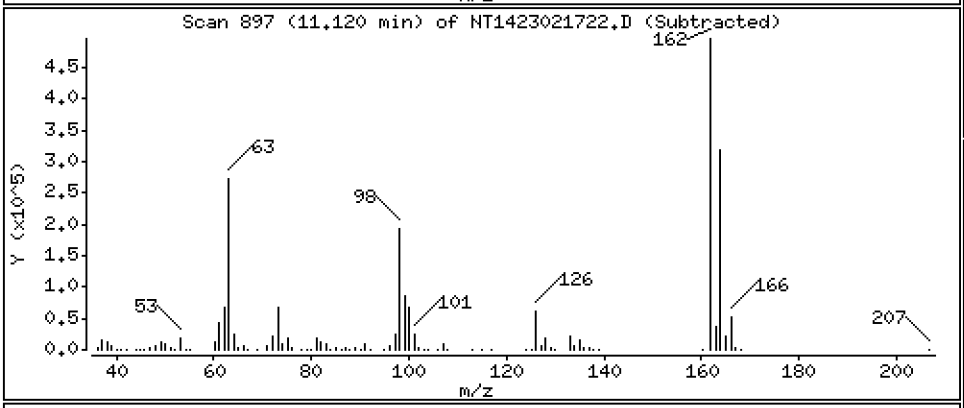
Column diameter: 0.25

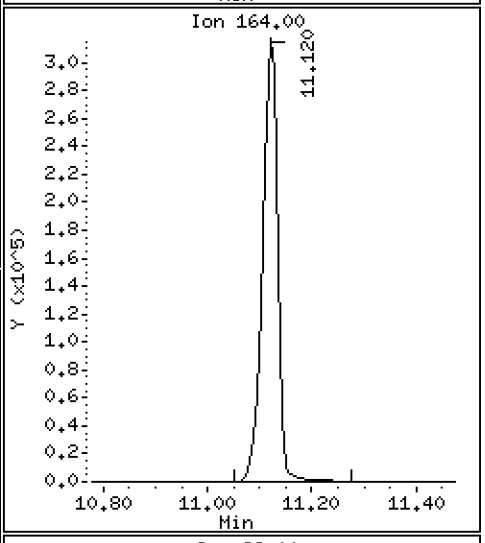
25 2,4-Dichlorophenol

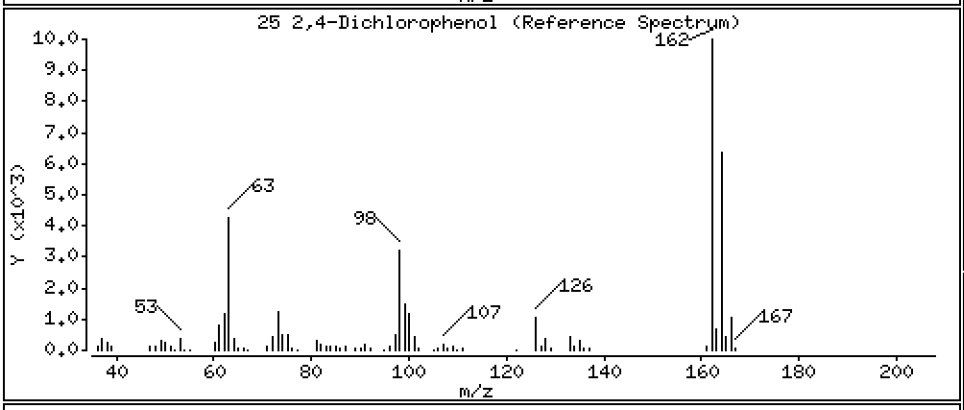
Concentration: 13.06 ug/mL

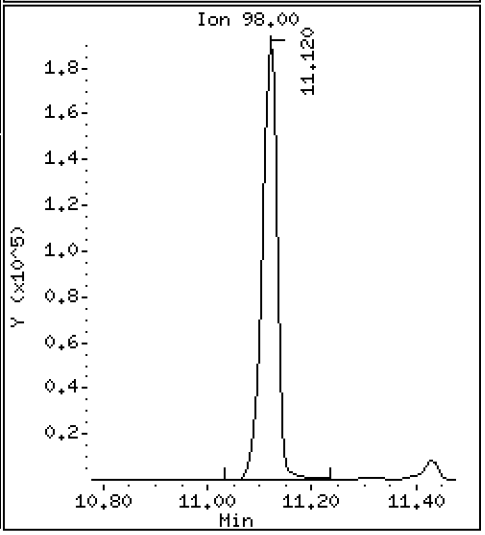


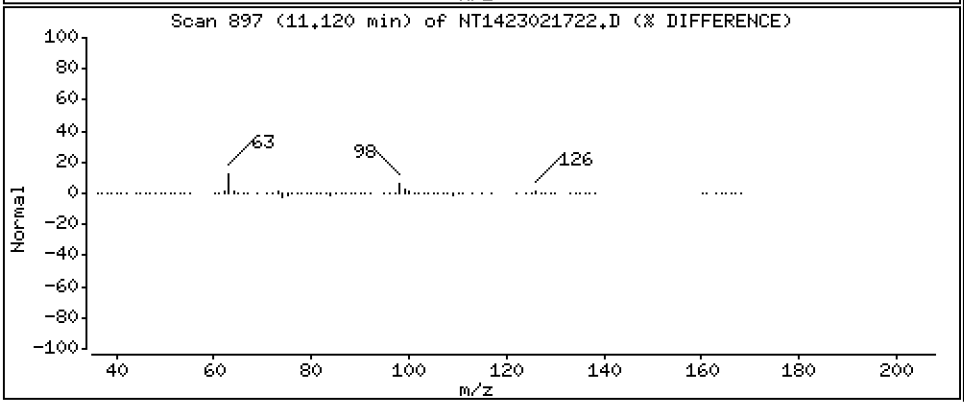












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

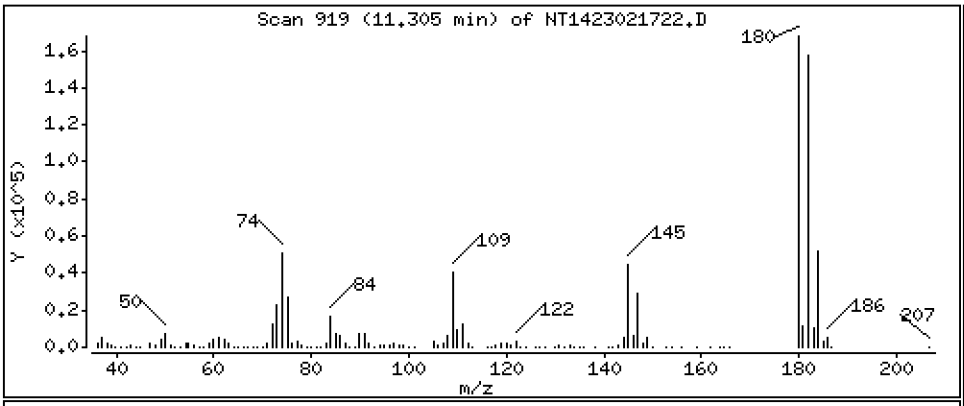
Operator: DSD

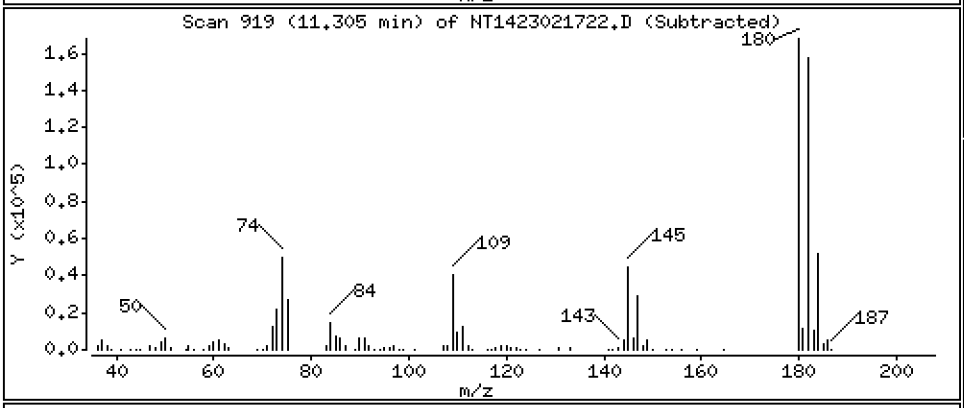
Column phase: ZB-5msi

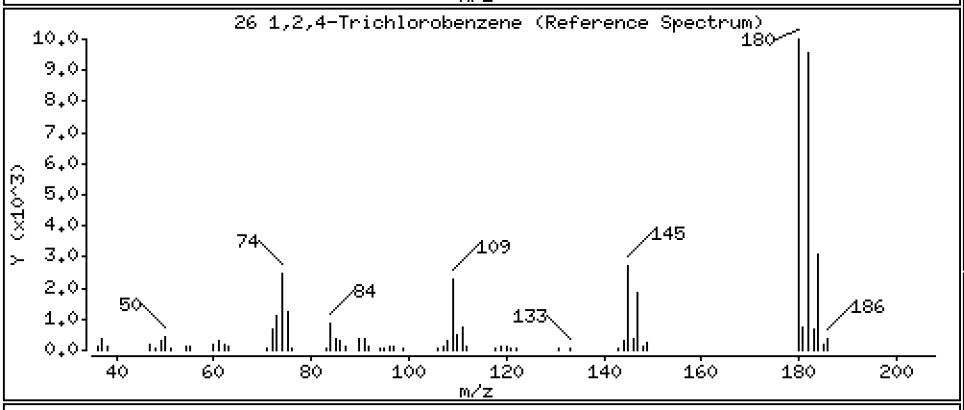
Column diameter: 0.25

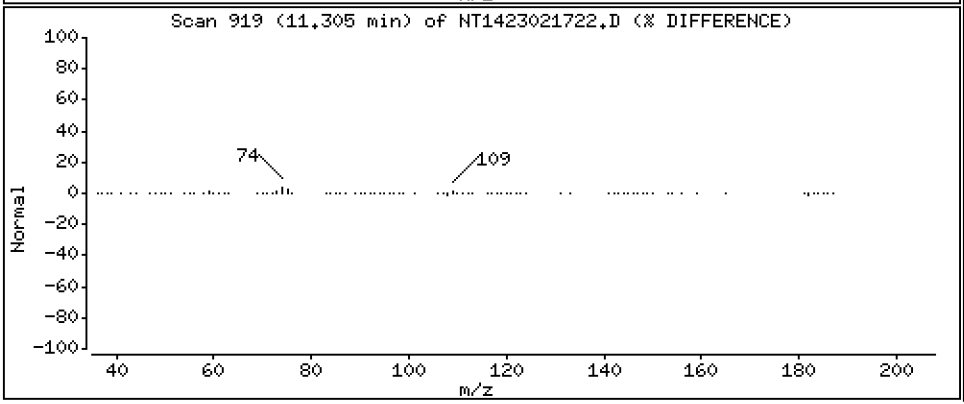
26 1,2,4-Trichlorobenzene

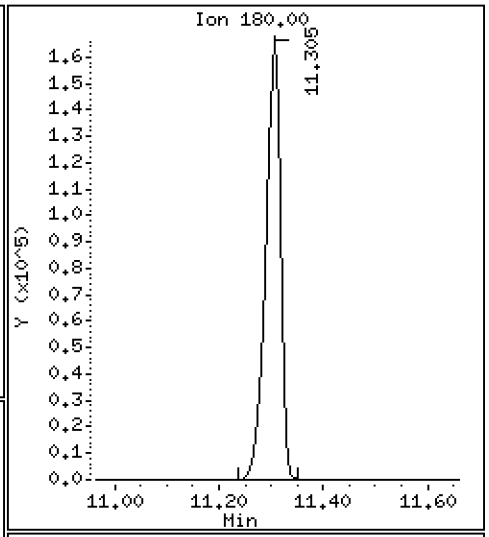
Concentration: 3.350 ug/mL

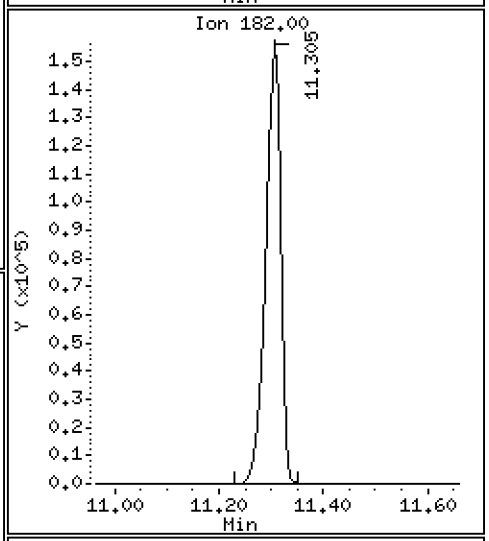


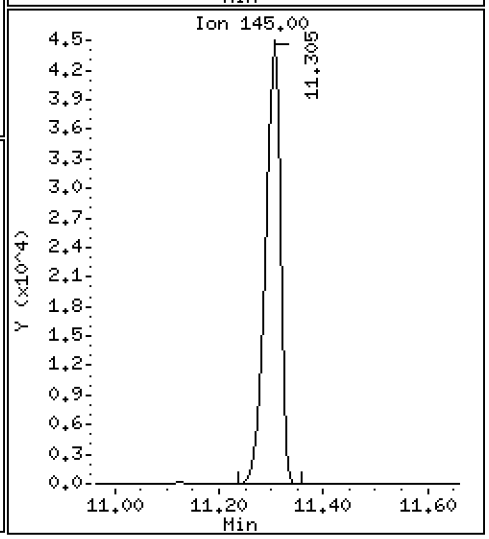












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

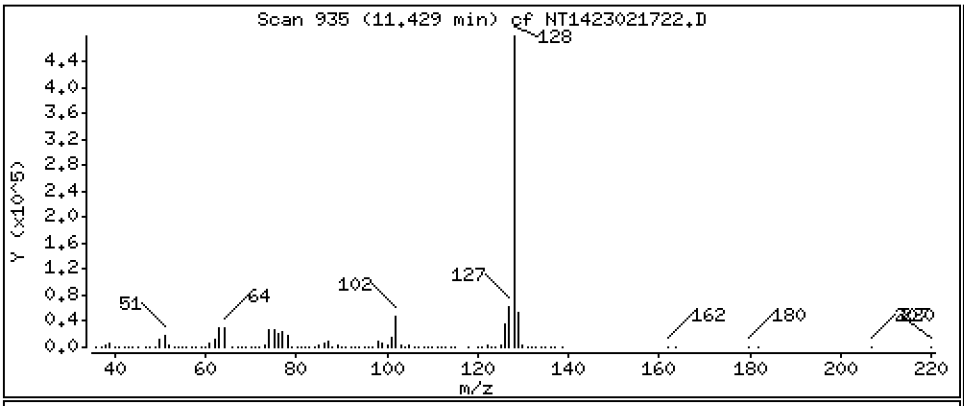
Operator: DSD

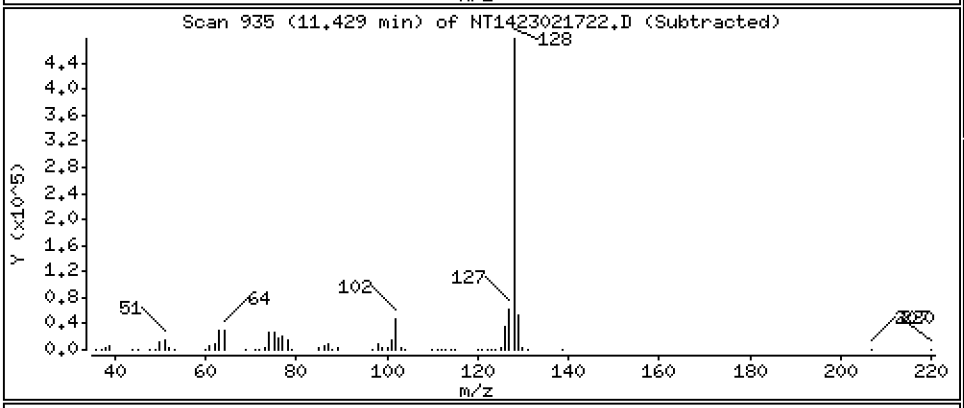
Column phase: ZB-5msi

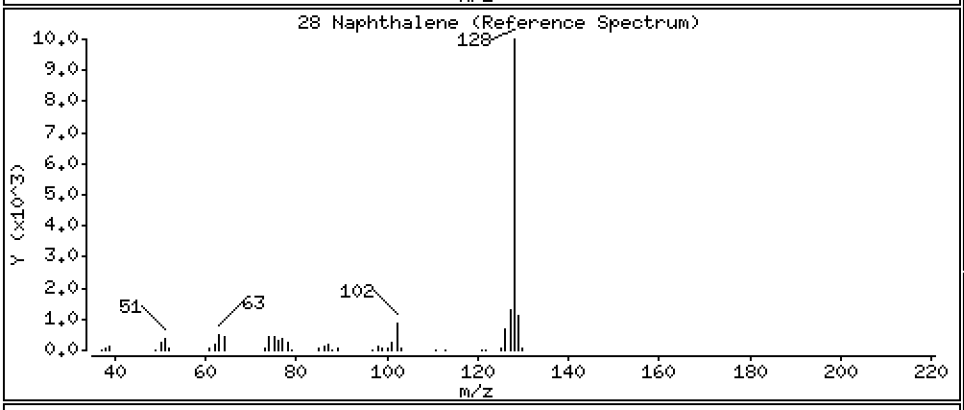
Column diameter: 0.25

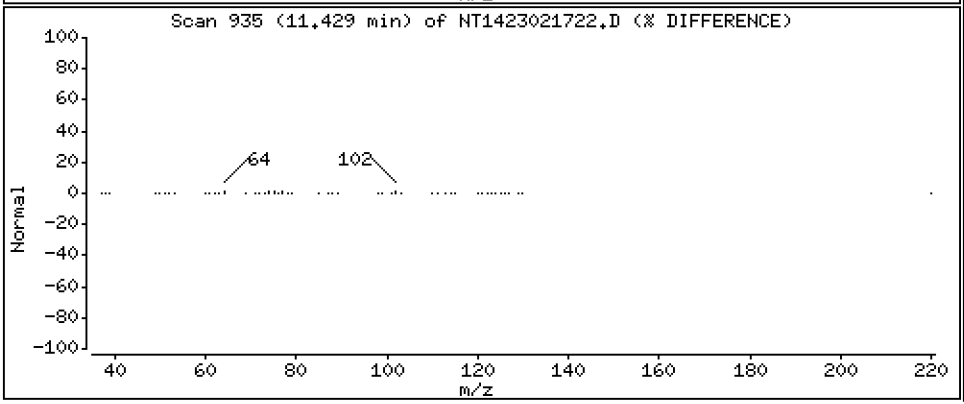
28 Naphthalene

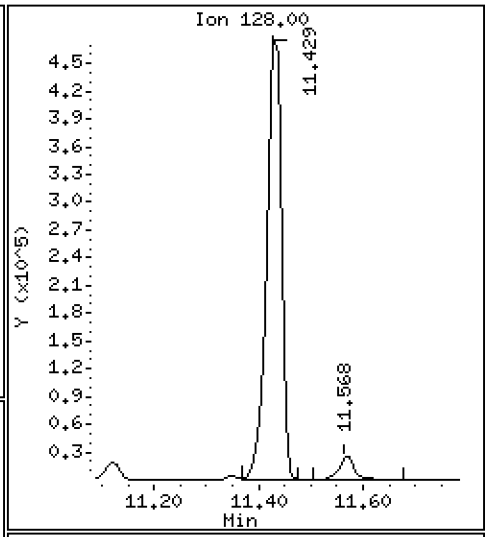
Concentration: 3.506 ug/mL

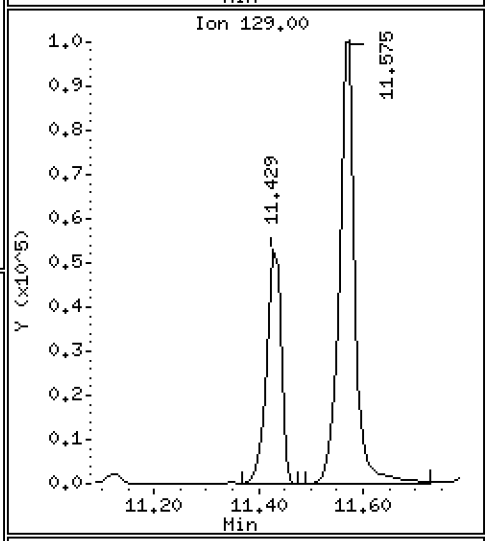


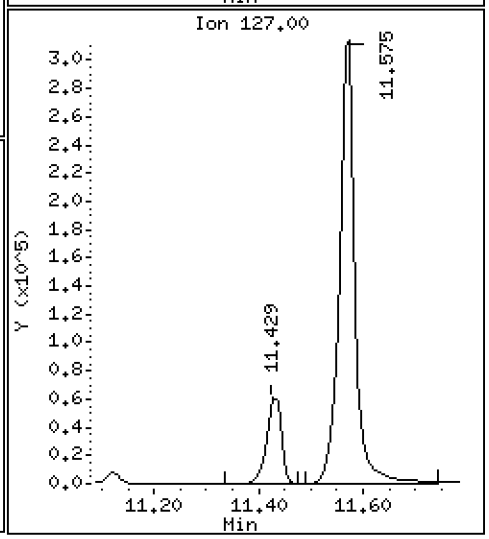












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021722.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

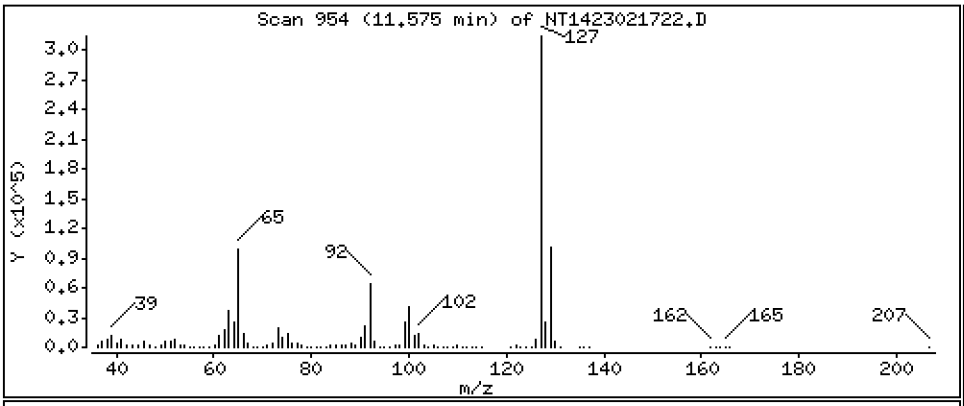
Operator: DSD

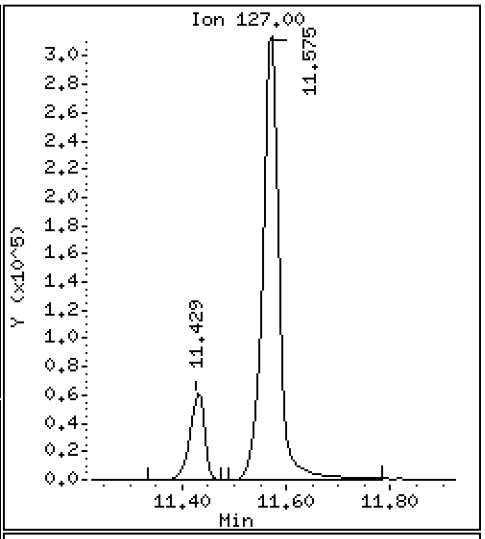
Column phase: ZB-5msi

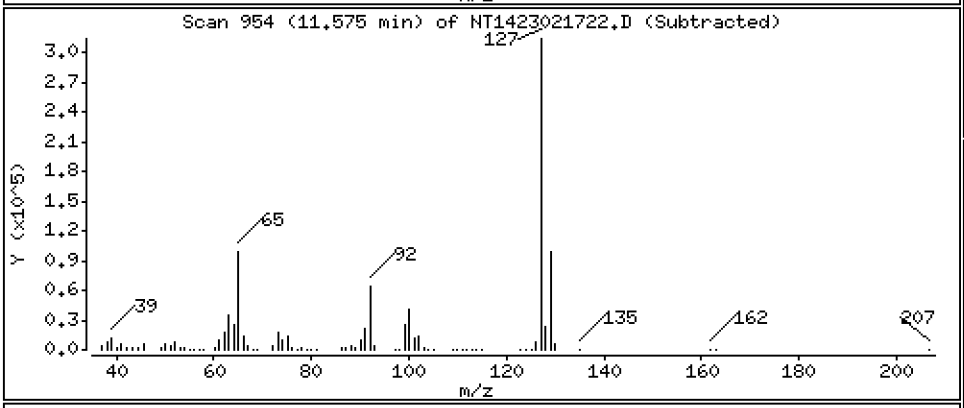
Column diameter: 0.25

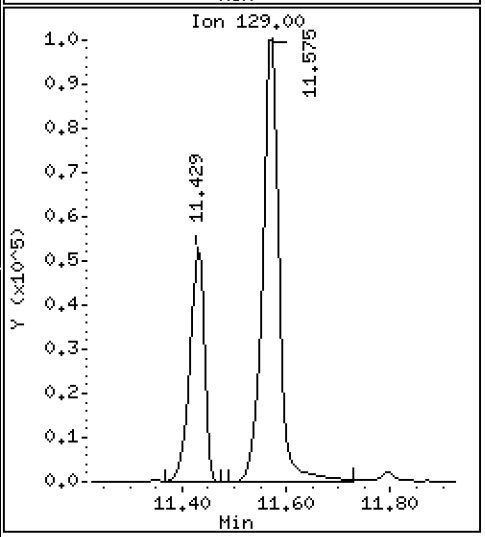
29 4-Chloroaniline

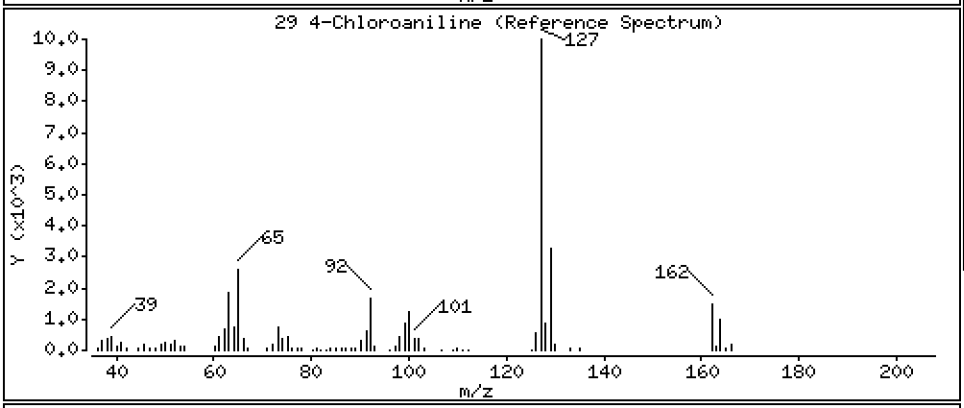
Concentration: 6.501 ug/mL

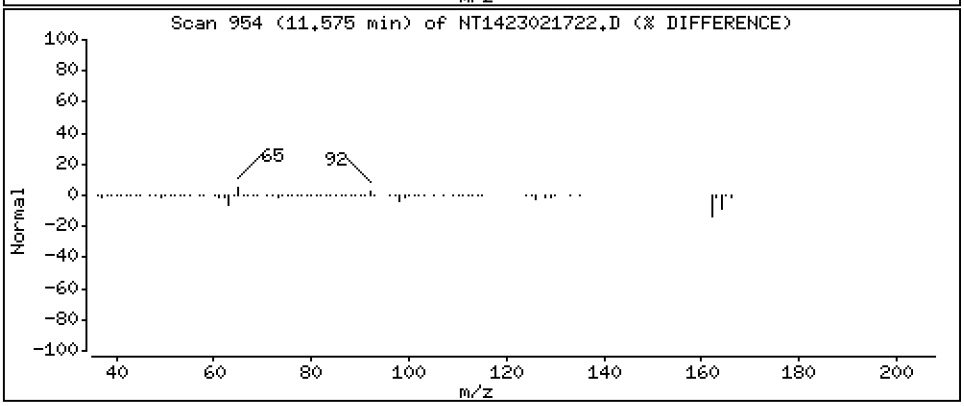












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

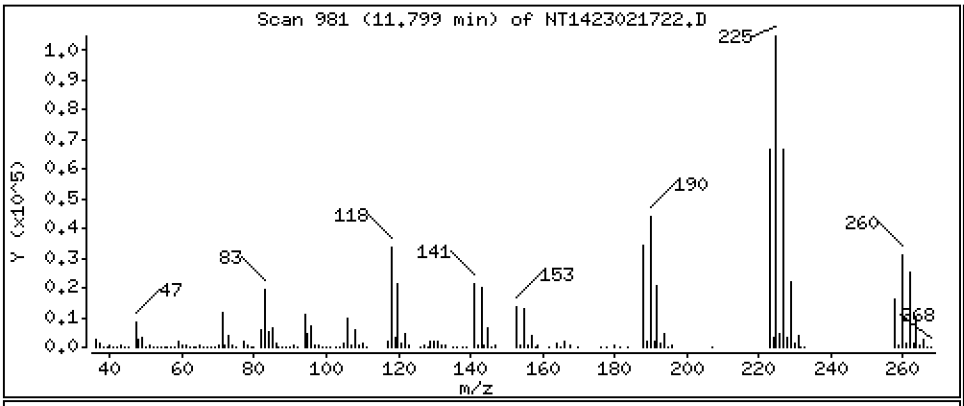
Operator: DSD

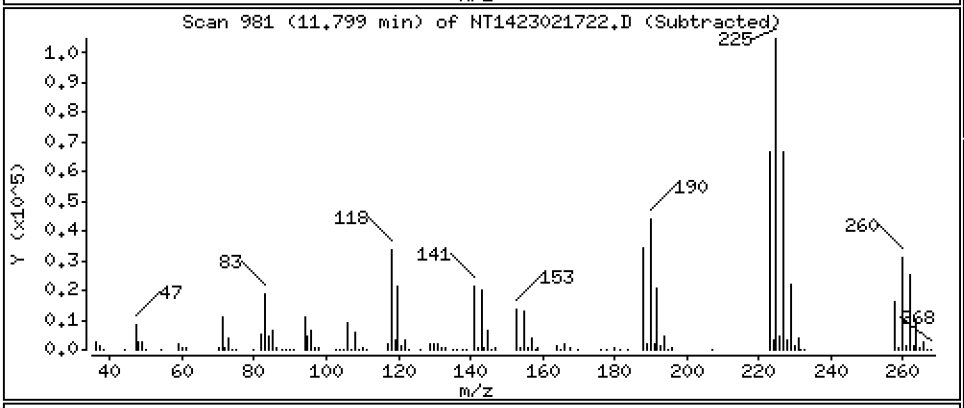
Column phase: ZB-5msi

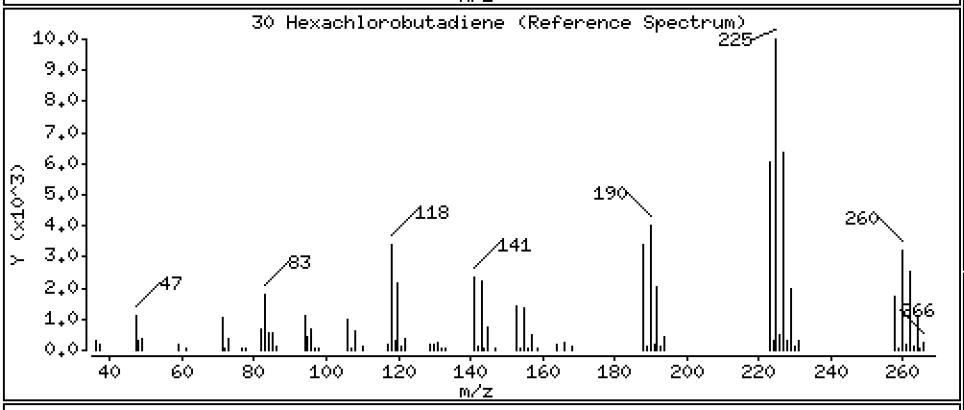
Column diameter: 0.25

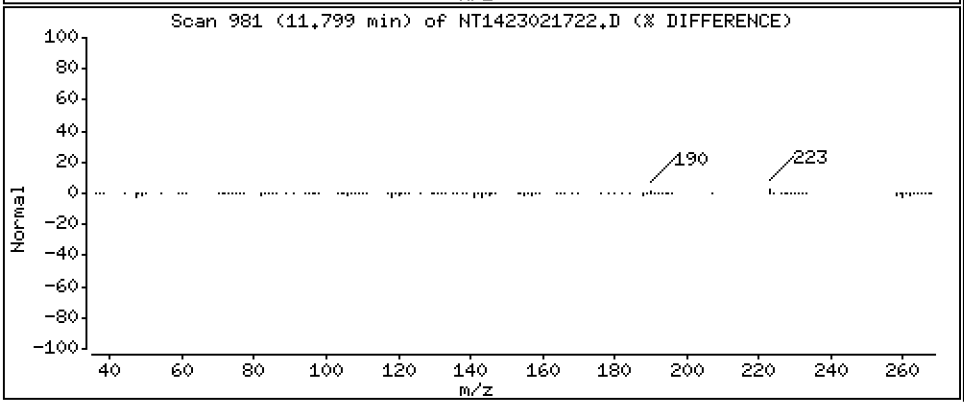
30 Hexachlorobutadiene

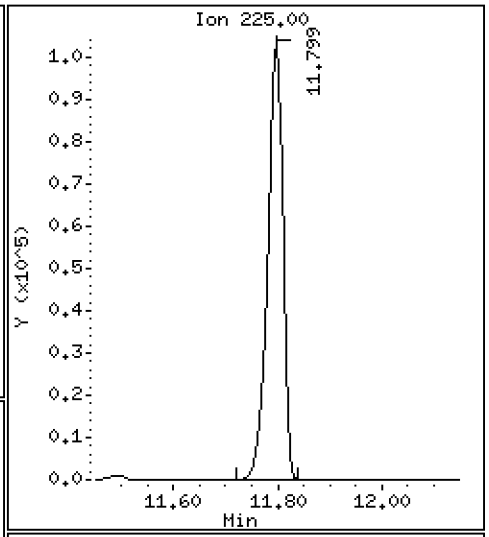
Concentration: 3.499 ug/mL

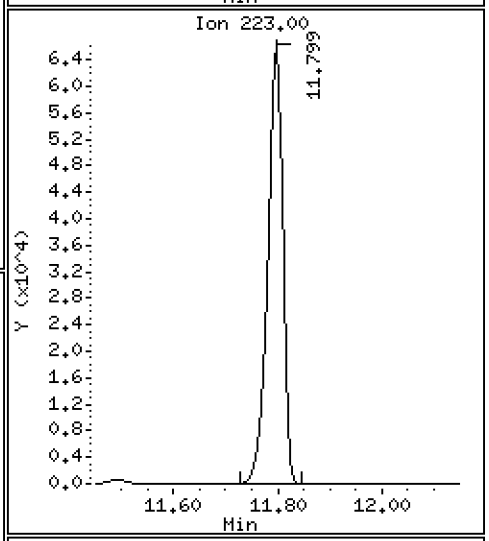


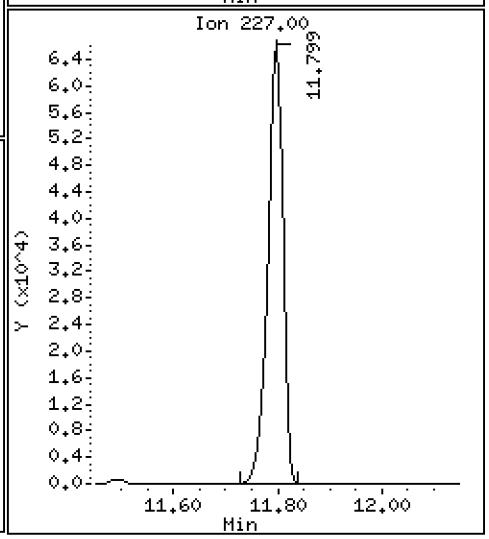












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021722.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

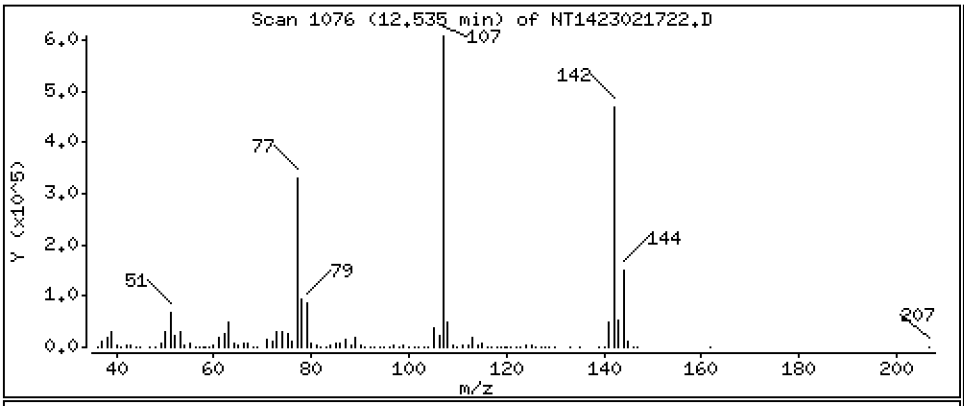
Operator: DSD

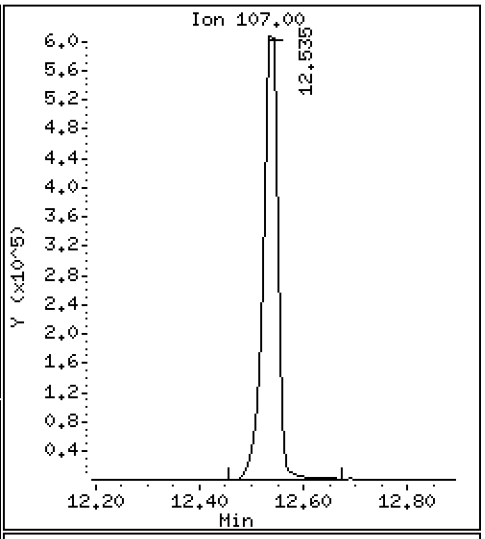
Column phase: ZB-5msi

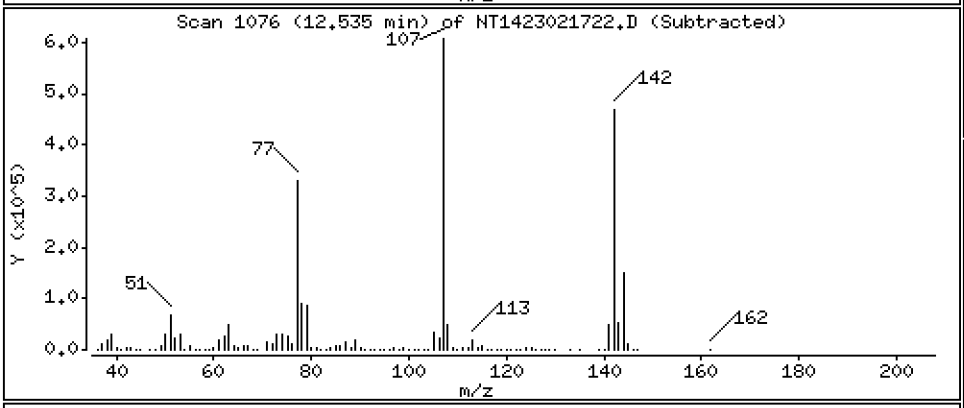
Column diameter: 0.25

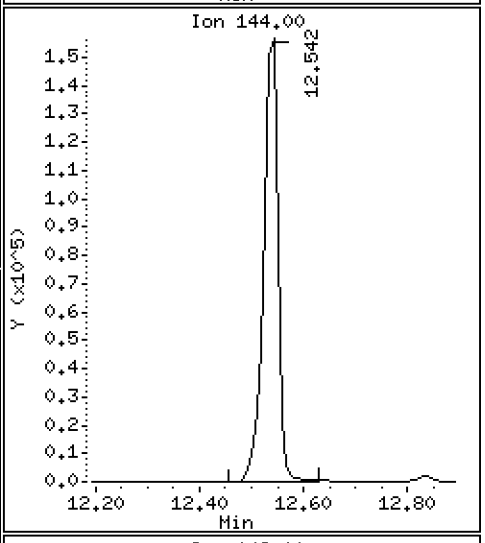
31 4-Chloro-3-methylphenol

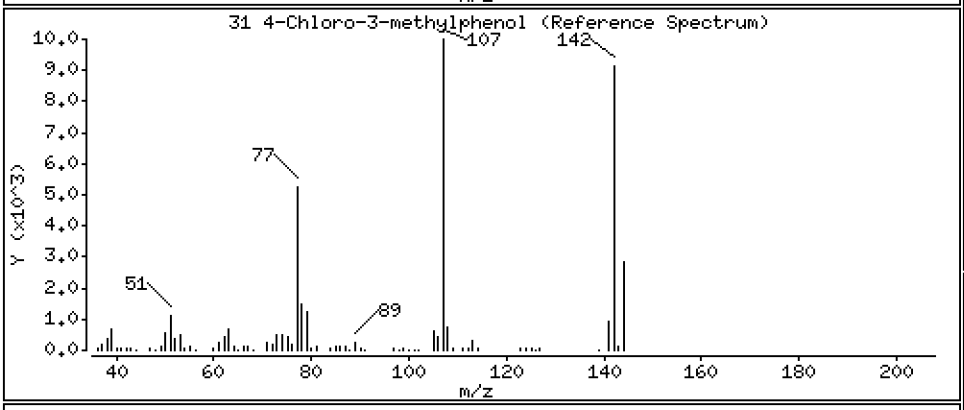
Concentration: 13.63 ug/mL

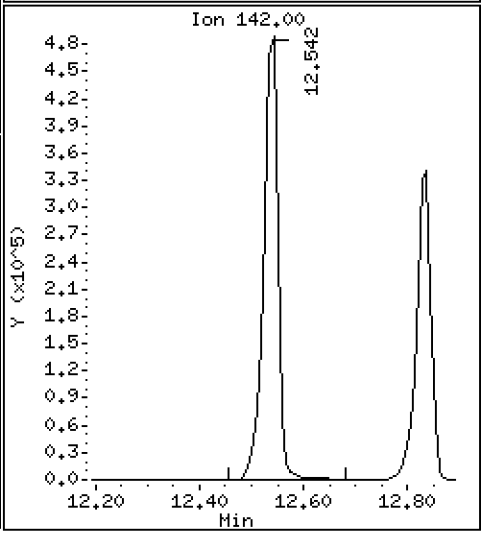


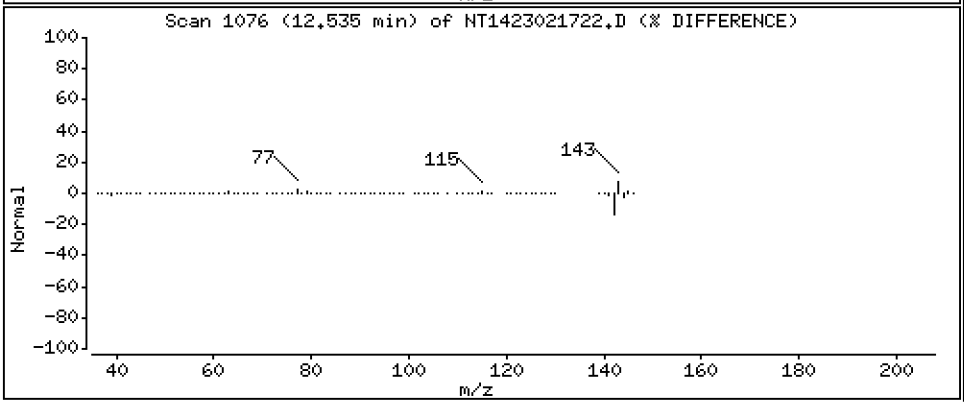












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

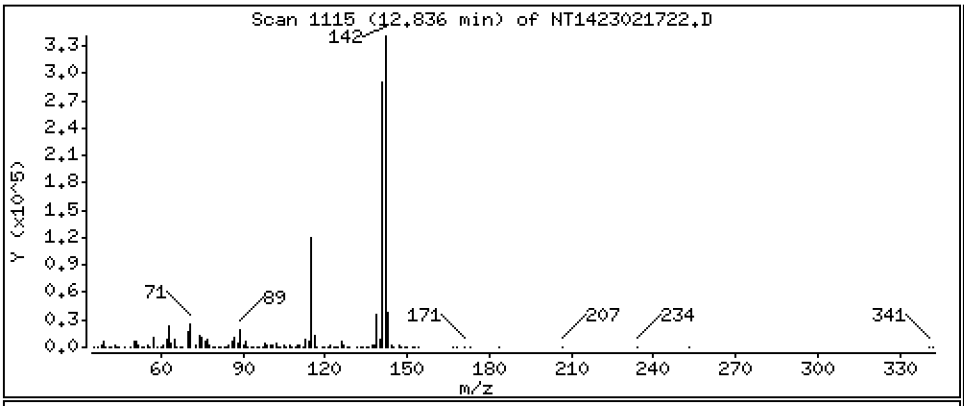
Operator: DSD

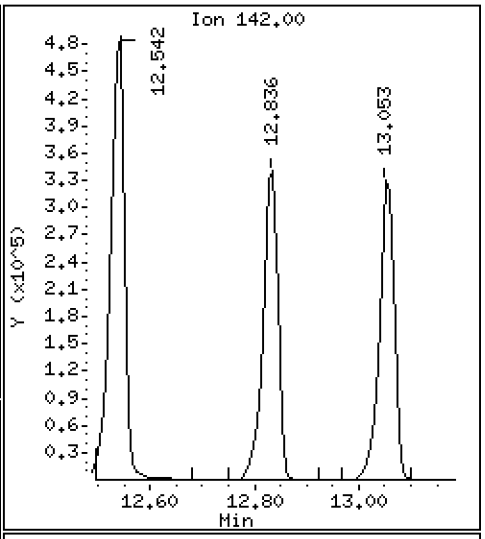
Column phase: ZB-5msi

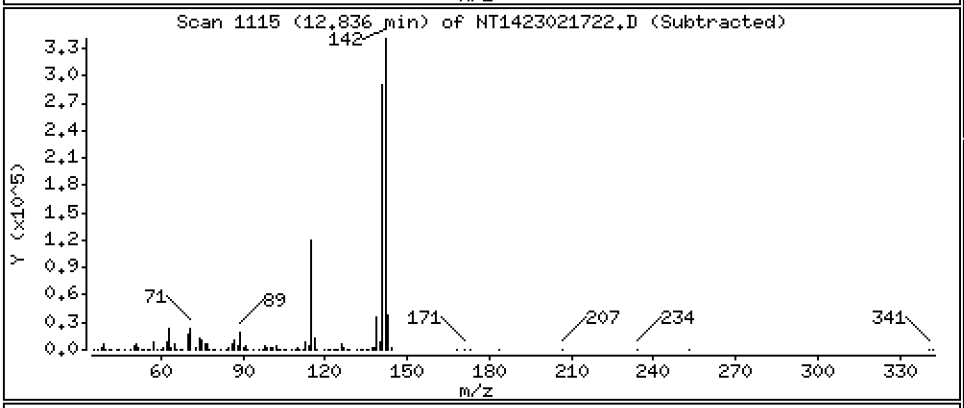
Column diameter: 0.25

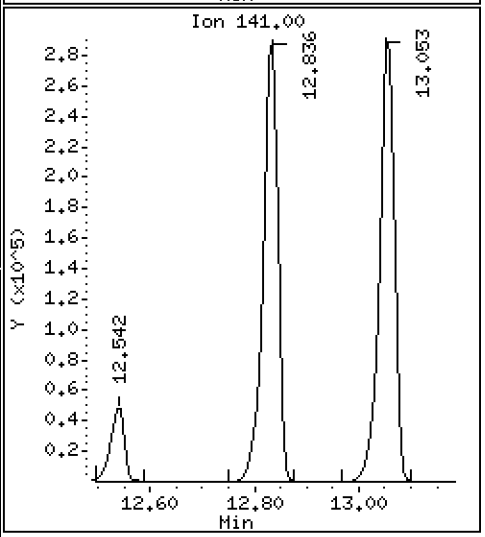
32 2-Methylnaphthalene

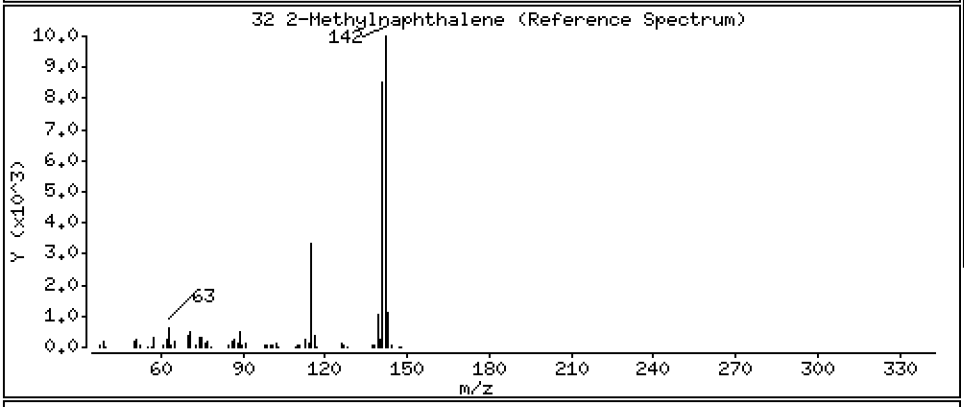
Concentration: 3.425 ug/mL

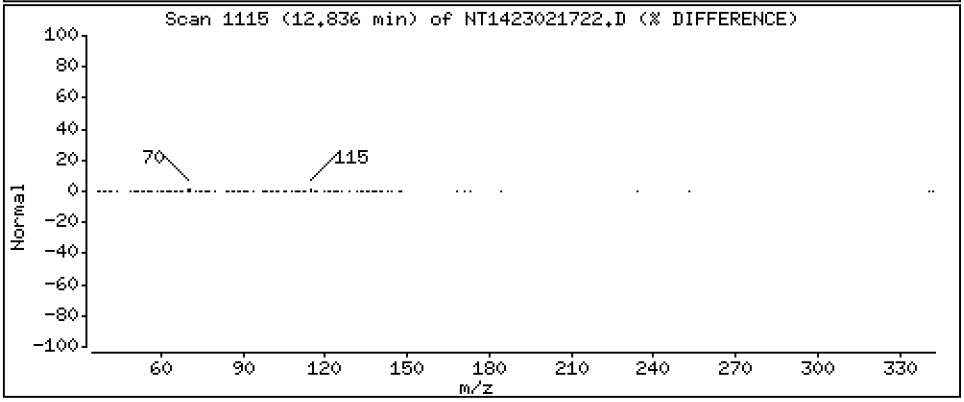












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021722.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

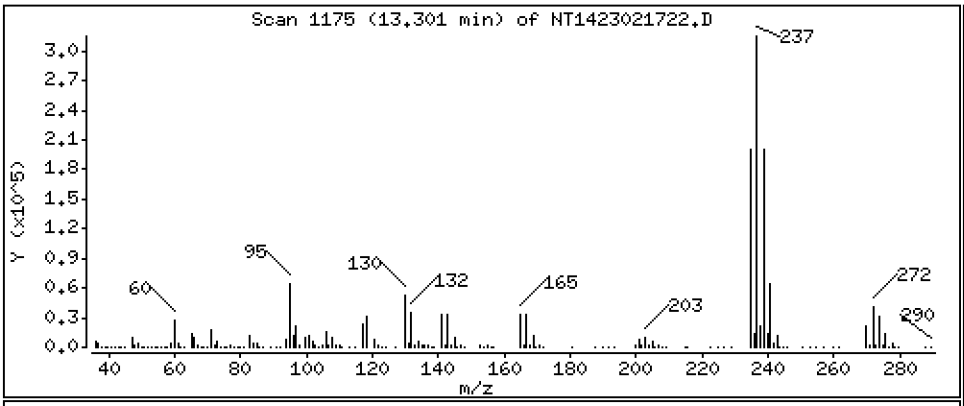
Operator: DSD

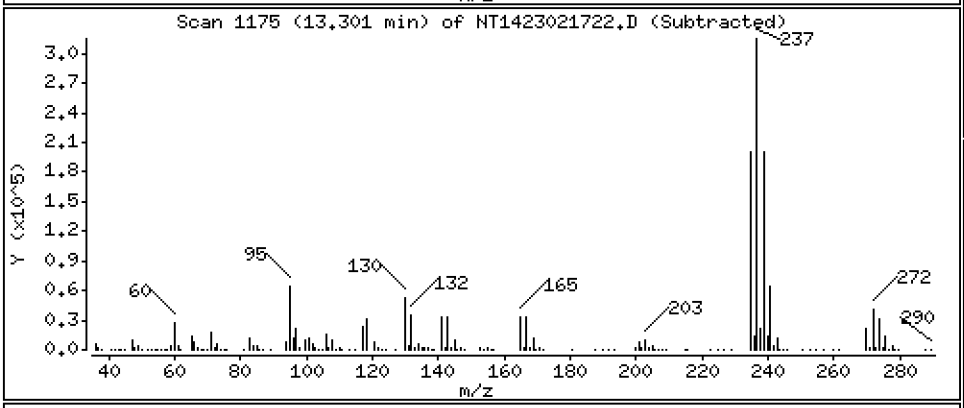
Column phase: ZB-5msi

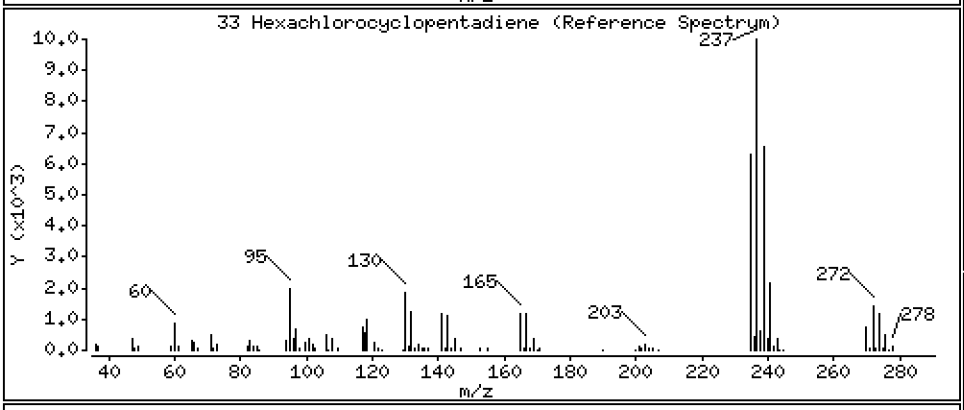
Column diameter: 0.25

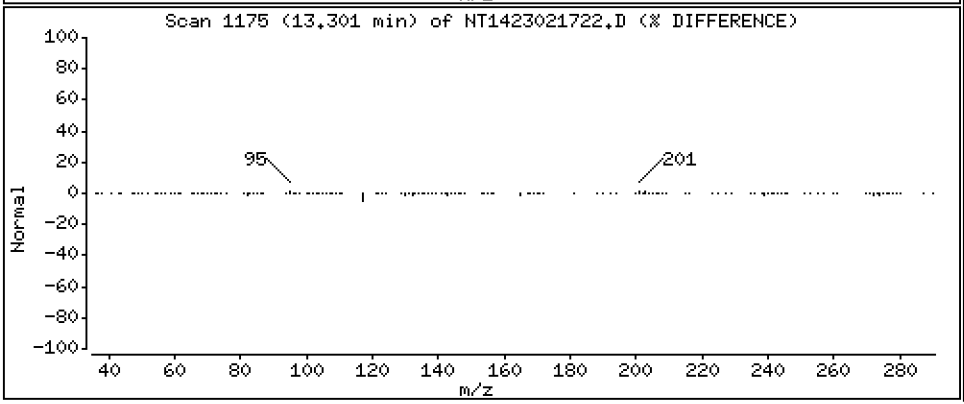
33 Hexachlorocyclopentadiene

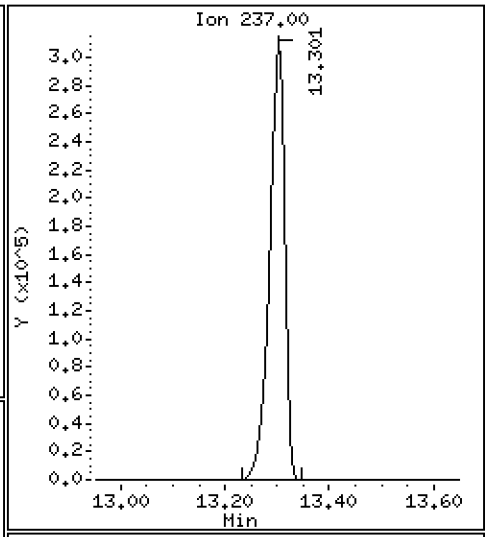
Concentration: 9.900 ug/mL

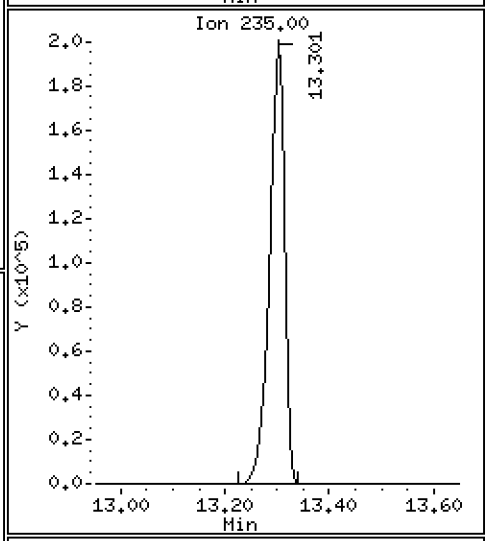


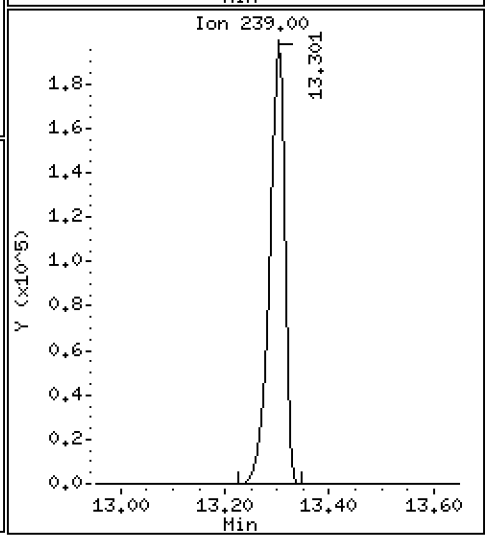












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

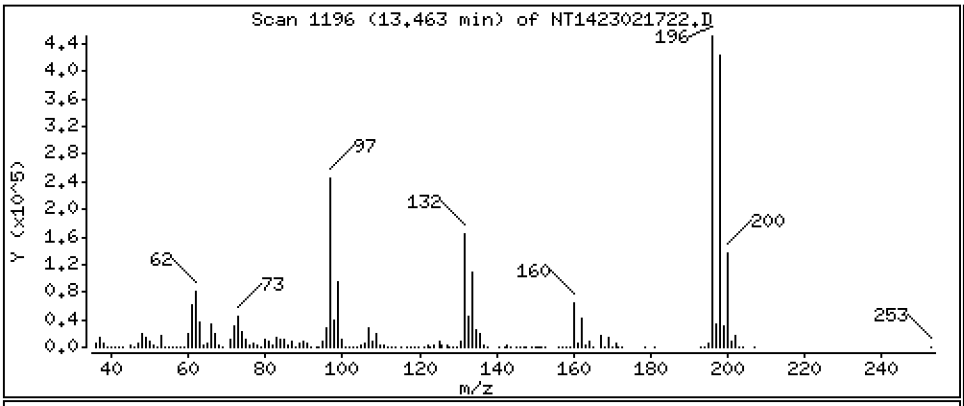
Operator: DSD

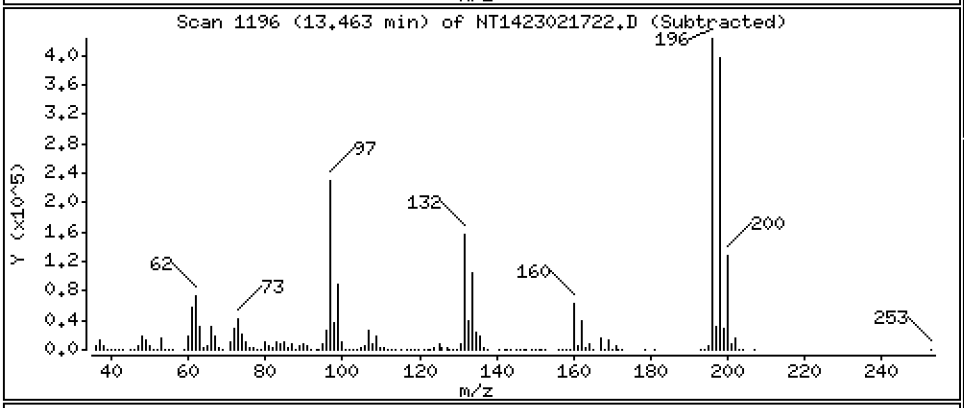
Column phase: ZB-5msi

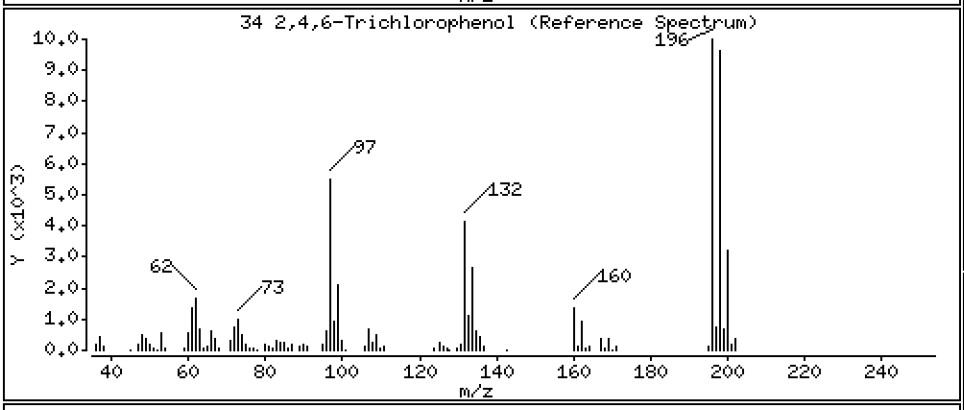
Column diameter: 0.25

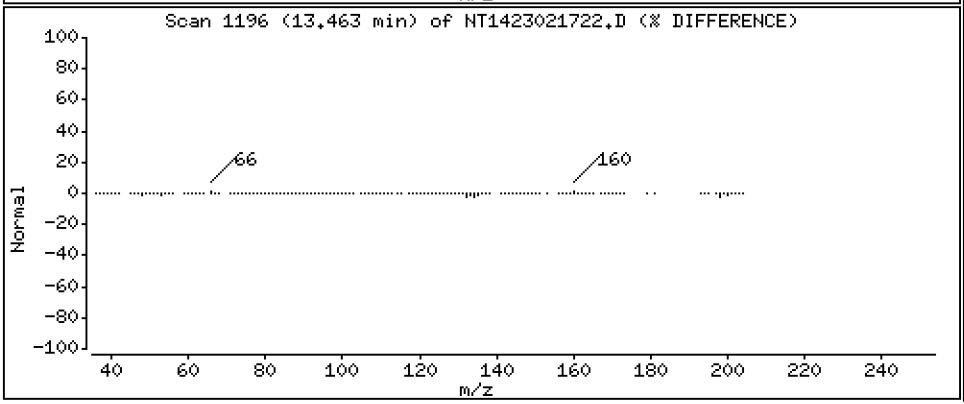
34 2,4,6-Trichlorophenol

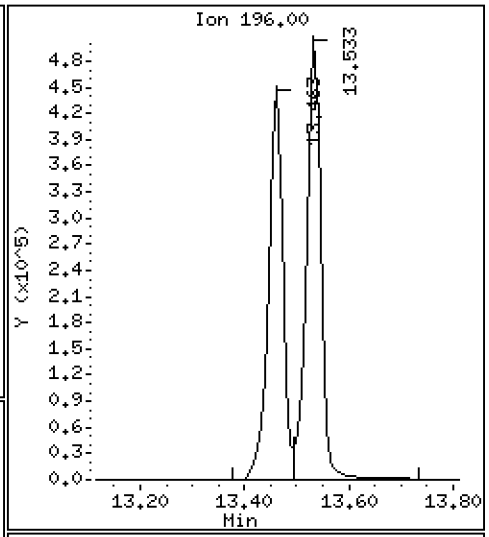
Concentration: 13.52 ug/mL

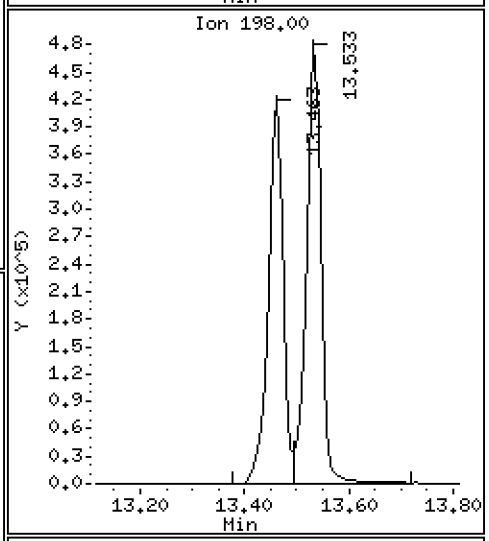


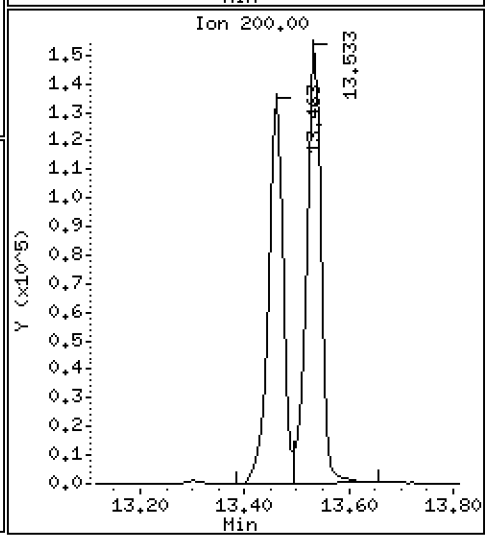












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021722.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

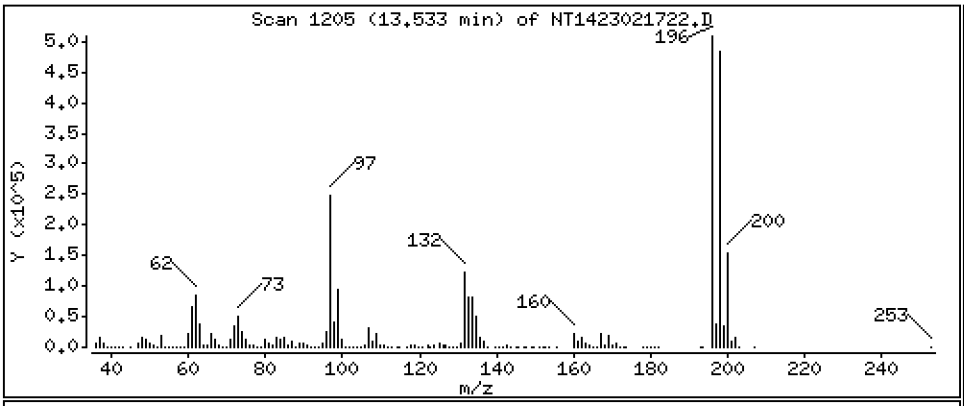
Operator: DSD

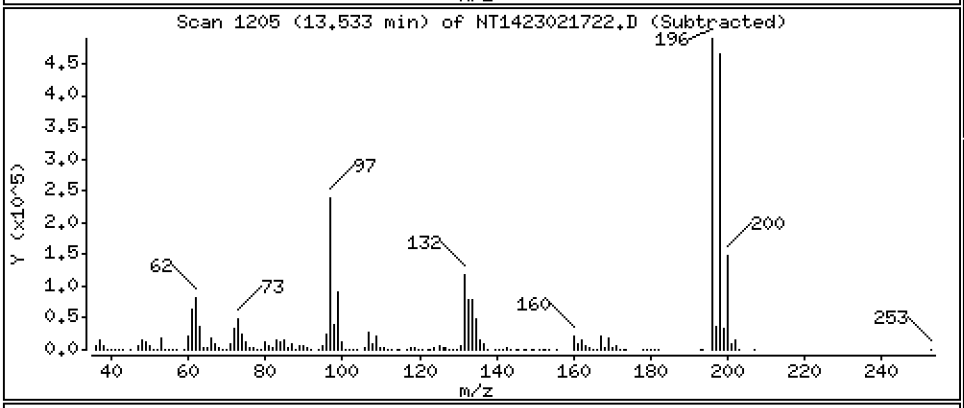
Column phase: ZB-5msi

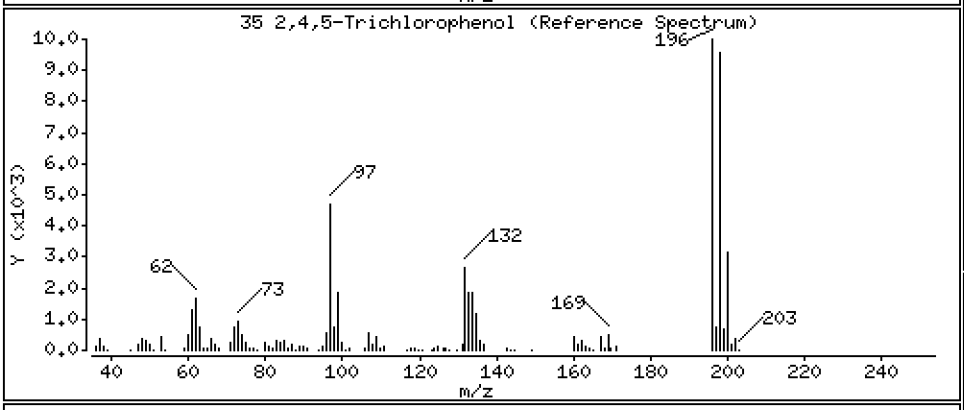
Column diameter: 0.25

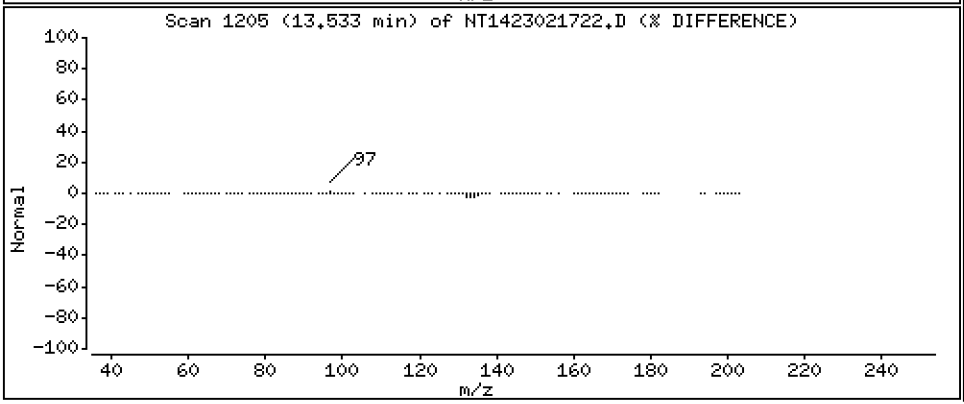
35 2,4,5-Trichlorophenol

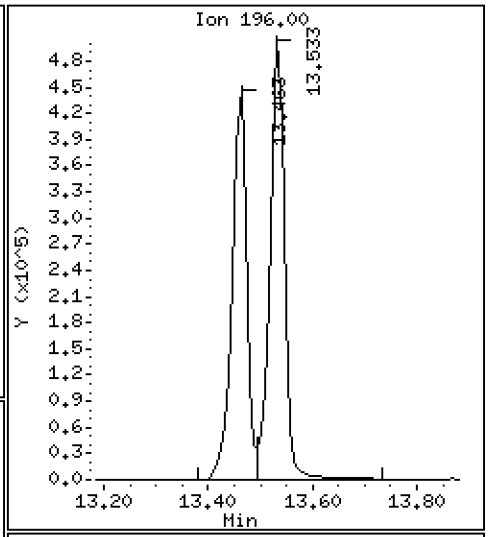
Concentration: 13.99 ug/mL

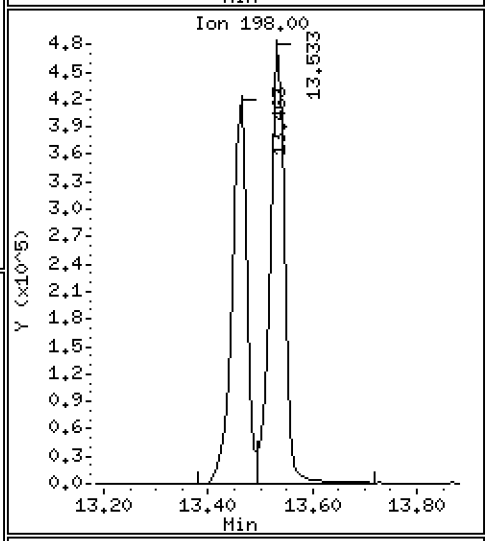


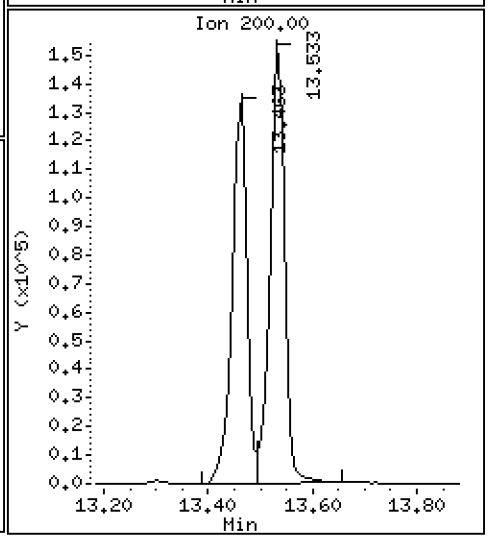












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021722.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

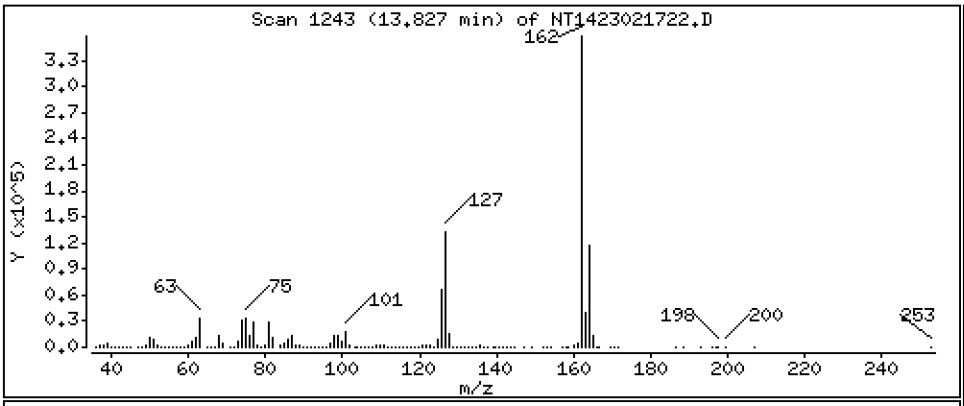
Operator: DSD

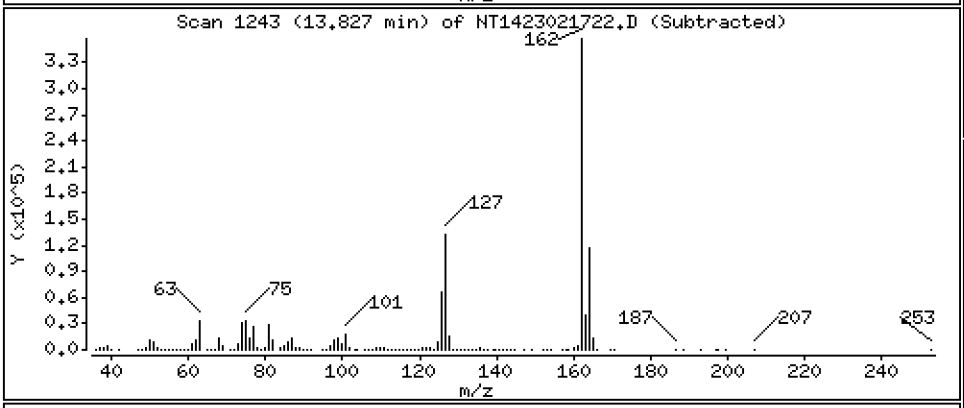
Column phase: ZB-5msi

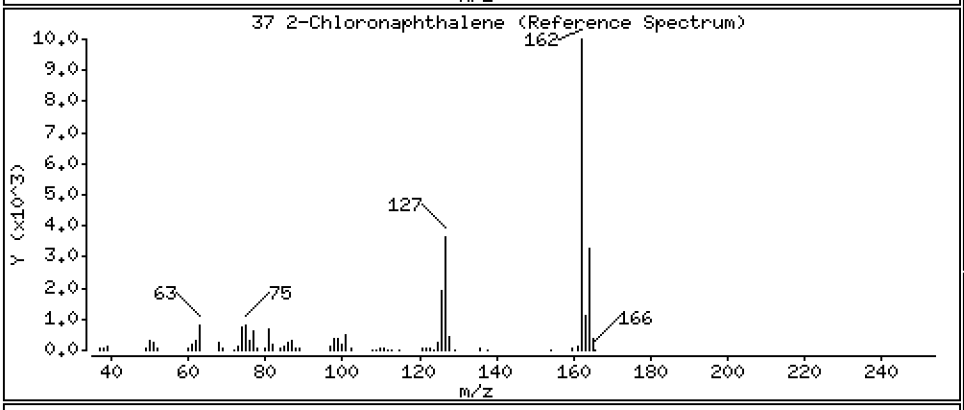
Column diameter: 0.25

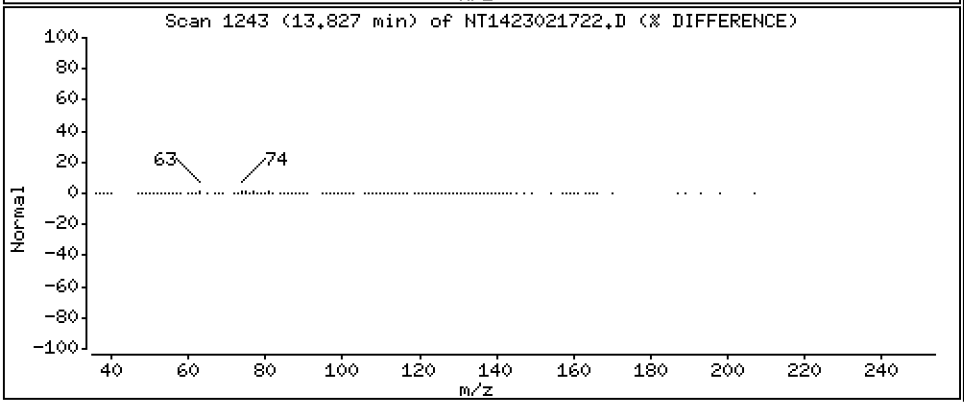
37 2-Chloronaphthalene

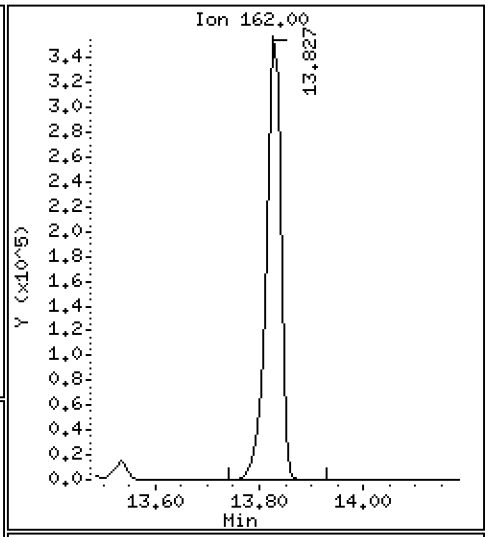
Concentration: 3.624 ug/mL

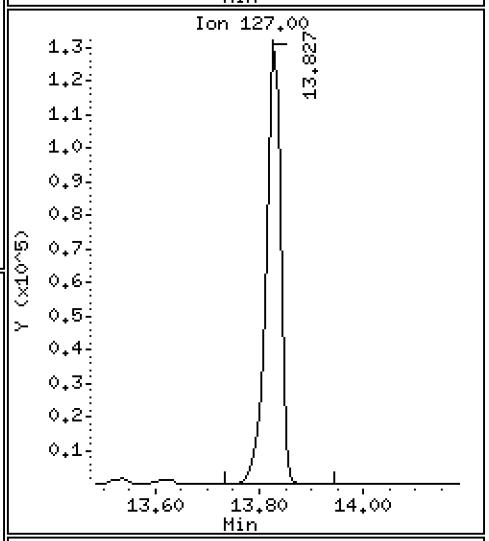


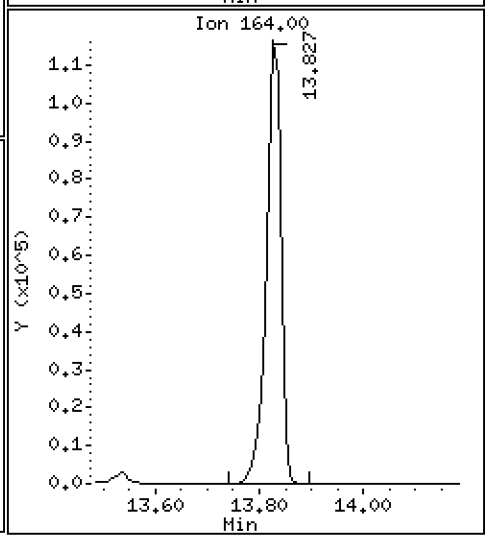












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

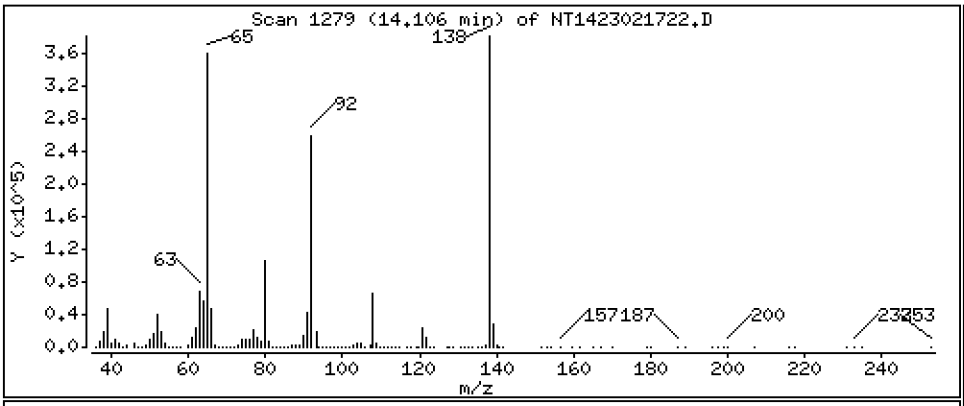
Operator: DSD

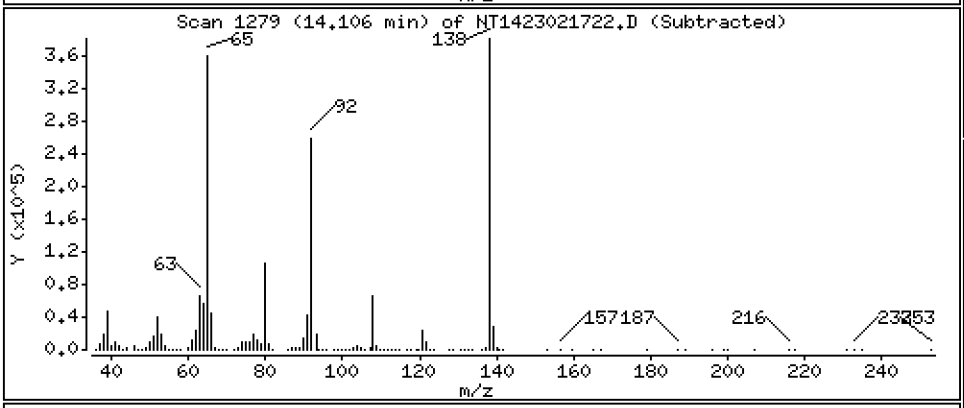
Column phase: ZB-5msi

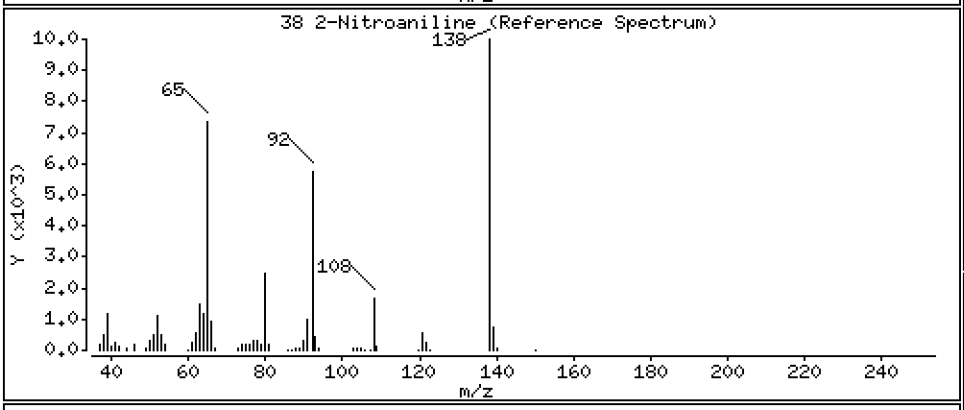
Column diameter: 0.25

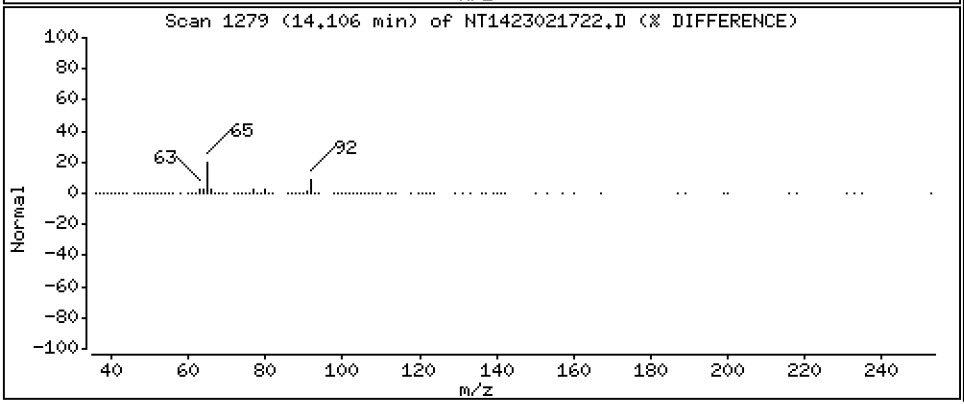
38 2-Nitroaniline

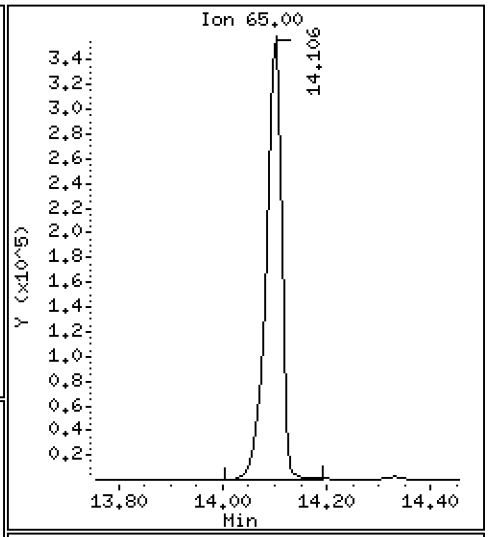
Concentration: 12.04 ug/mL

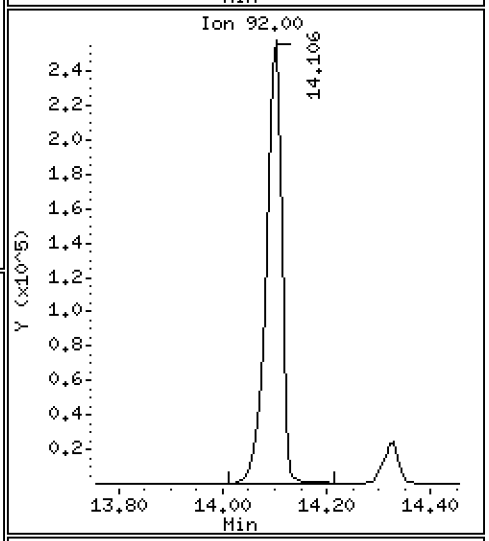


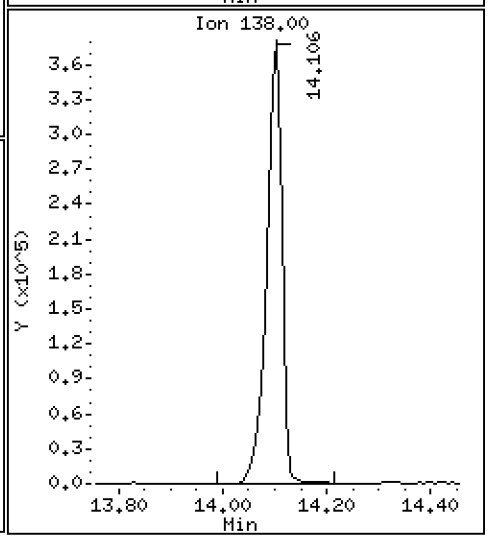












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

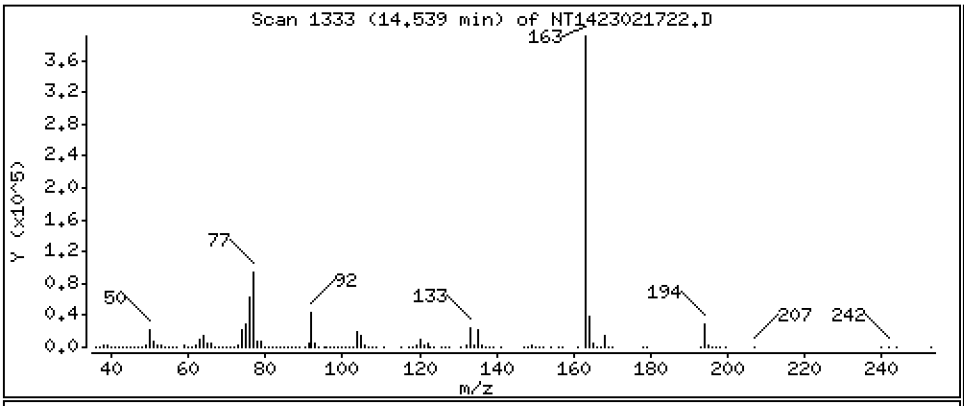
Operator: DSD

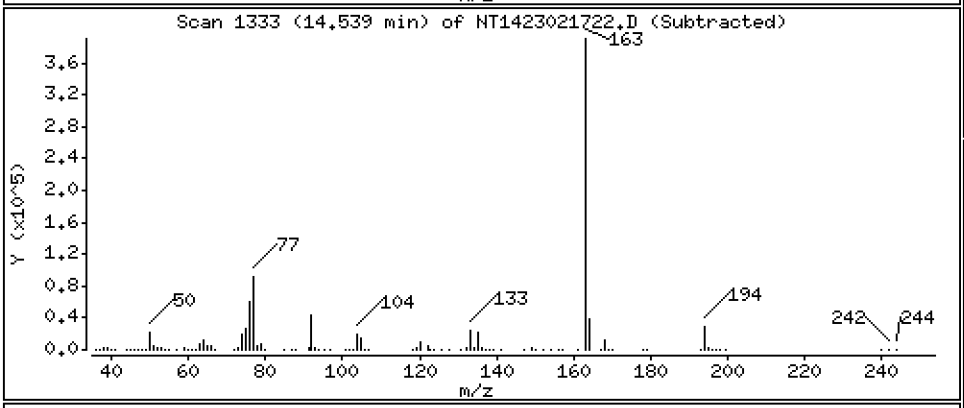
Column phase: ZB-5msi

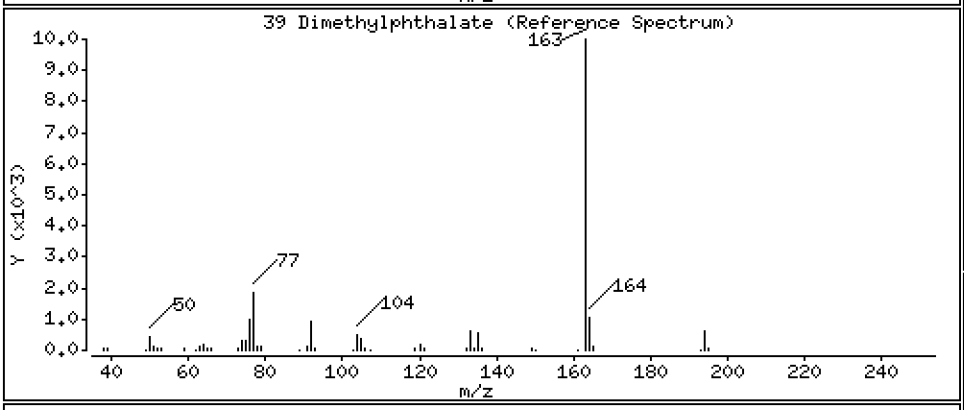
Column diameter: 0.25

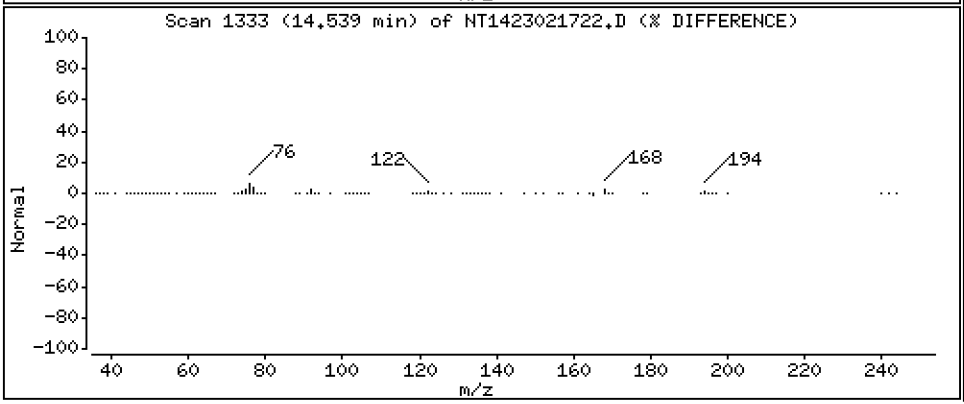
39 Dimethylphthalate

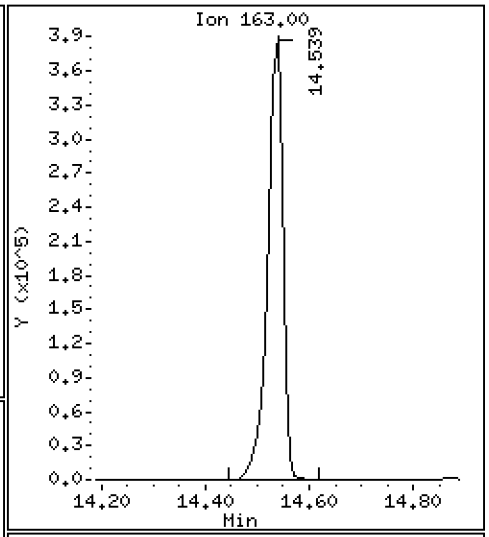
Concentration: 3.970 ug/mL

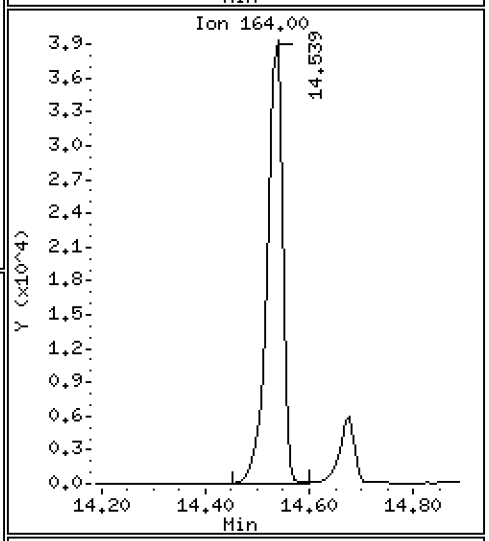


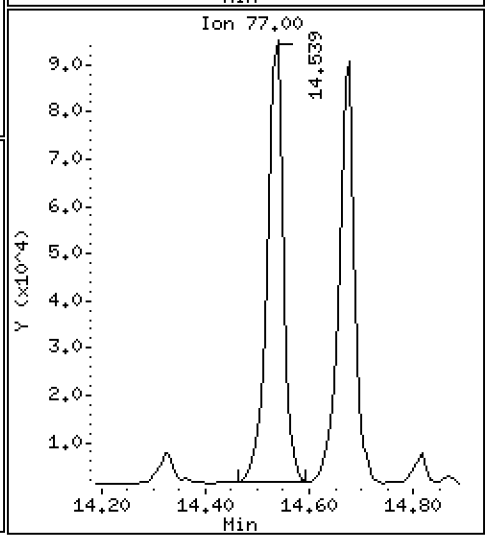












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

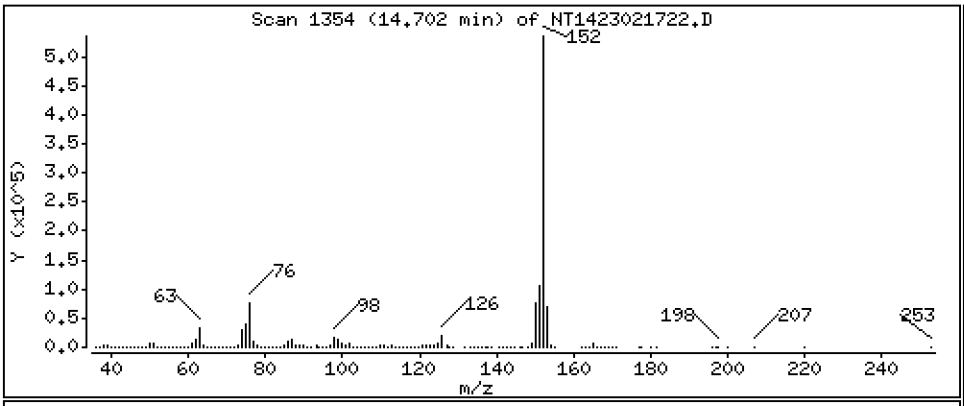
Operator: DSD

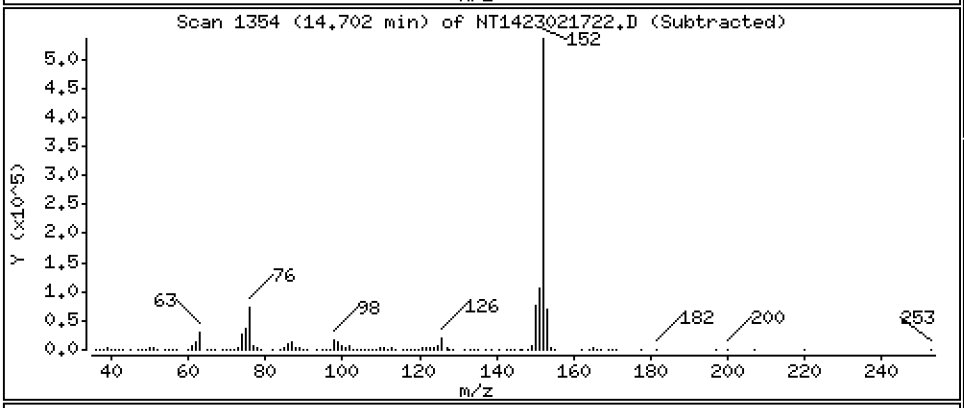
Column phase: ZB-5msi

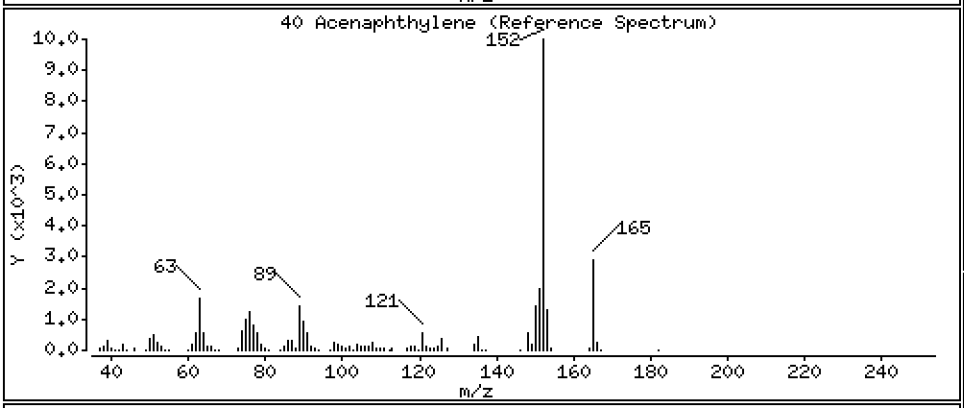
Column diameter: 0.25

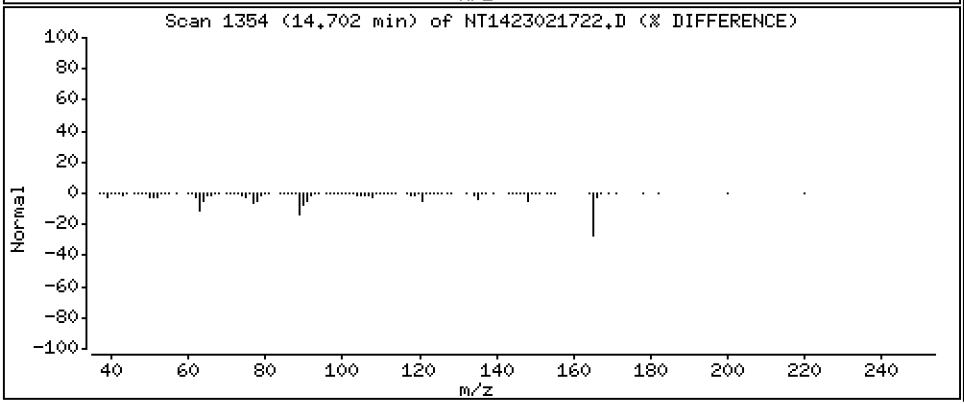
40 Acenaphthylene

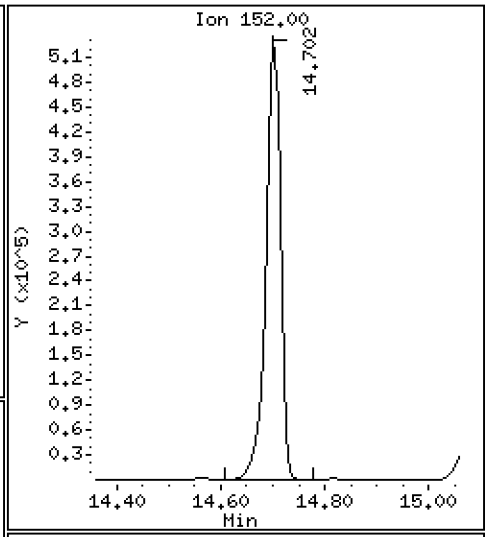
Concentration: 3.525 ug/mL

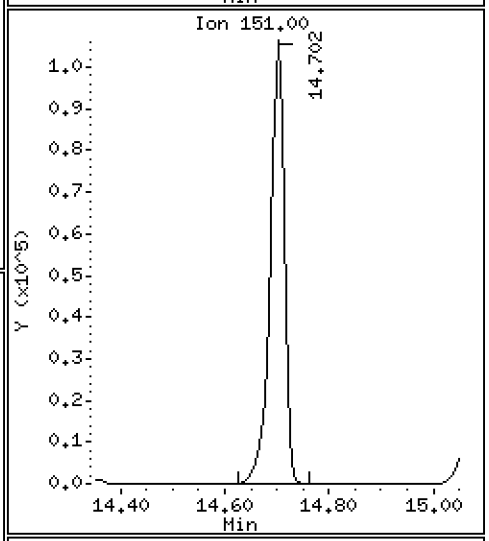


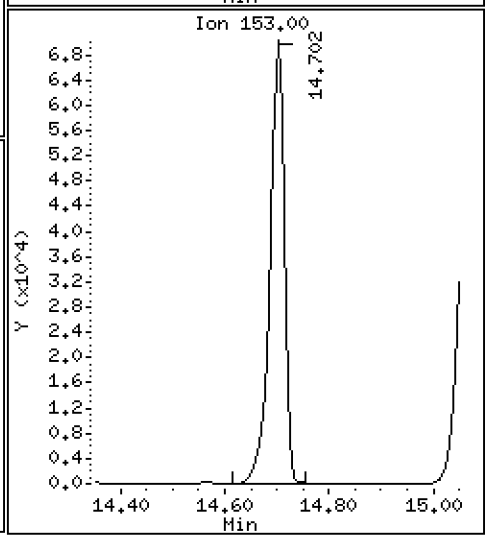












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

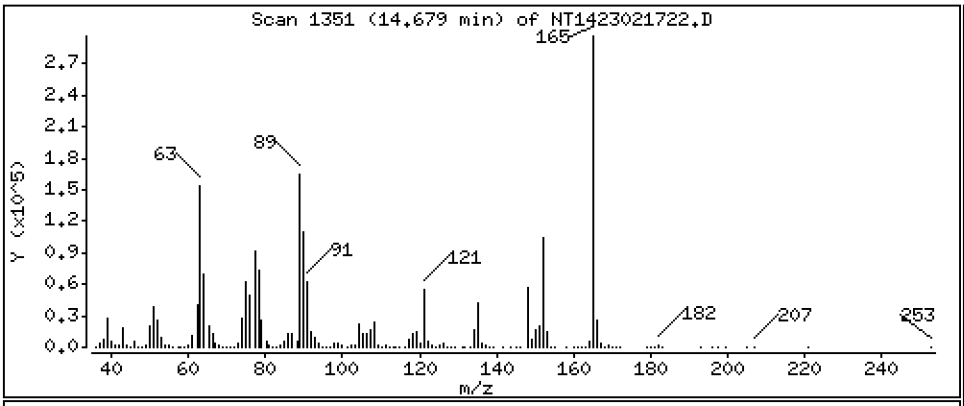
Operator: DSD

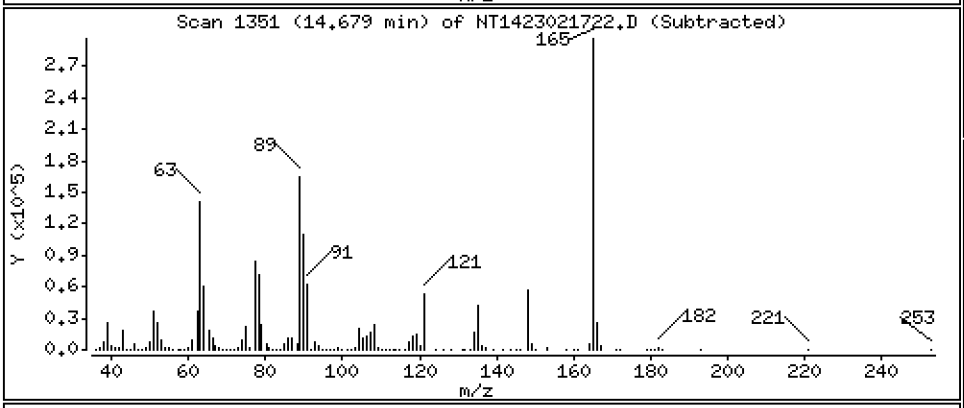
Column phase: ZB-5msi

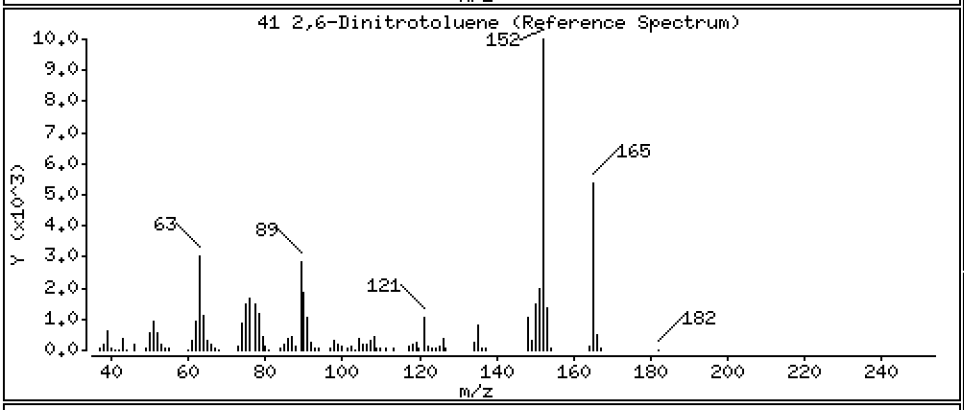
Column diameter: 0.25

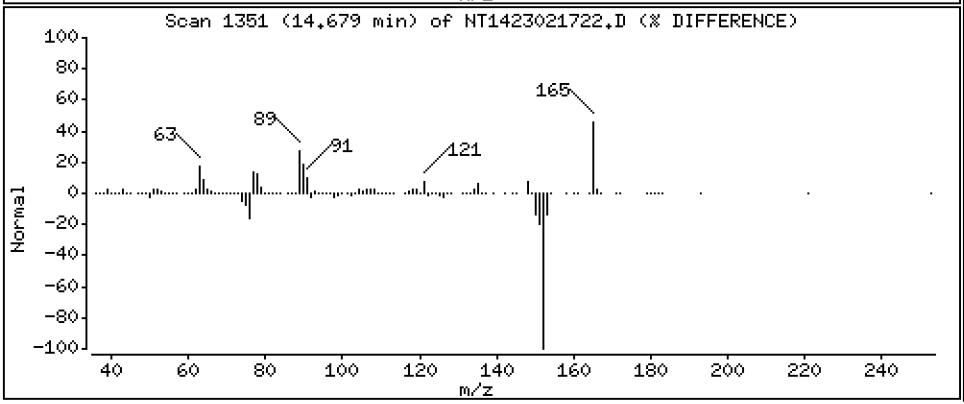
41 2,6-Dinitrotoluene

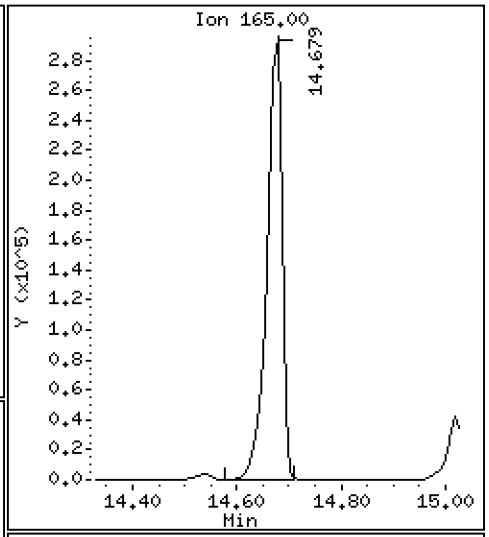
Concentration: 12.64 ug/mL

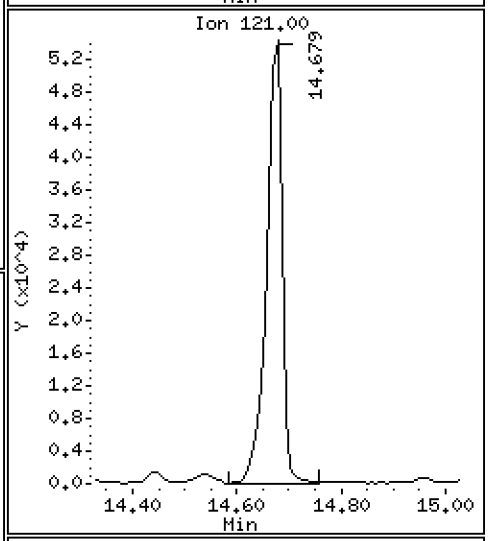


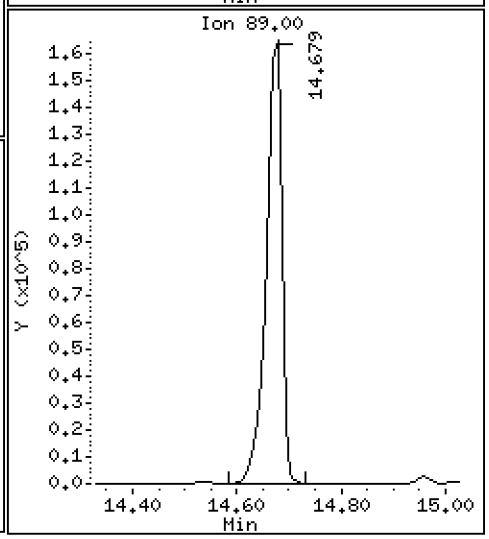












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

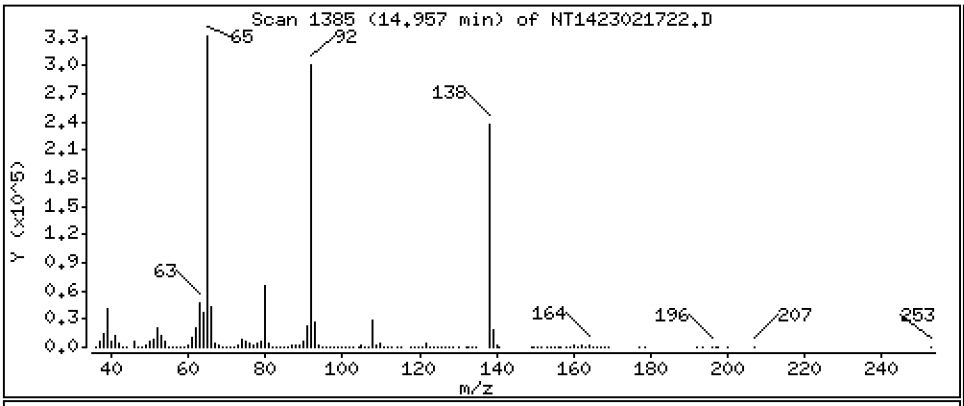
Operator: DSD

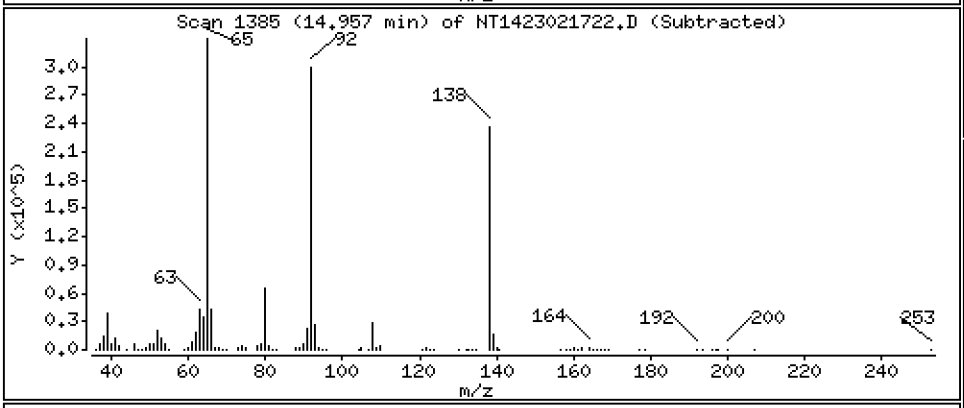
Column phase: ZB-5msi

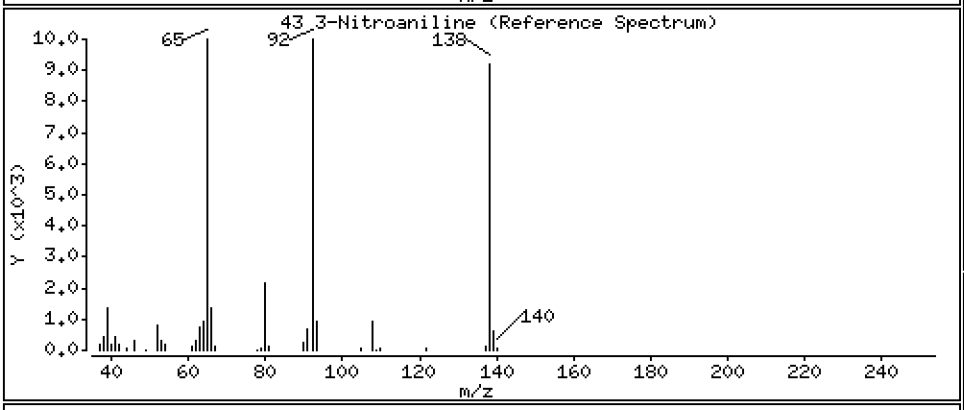
Column diameter: 0.25

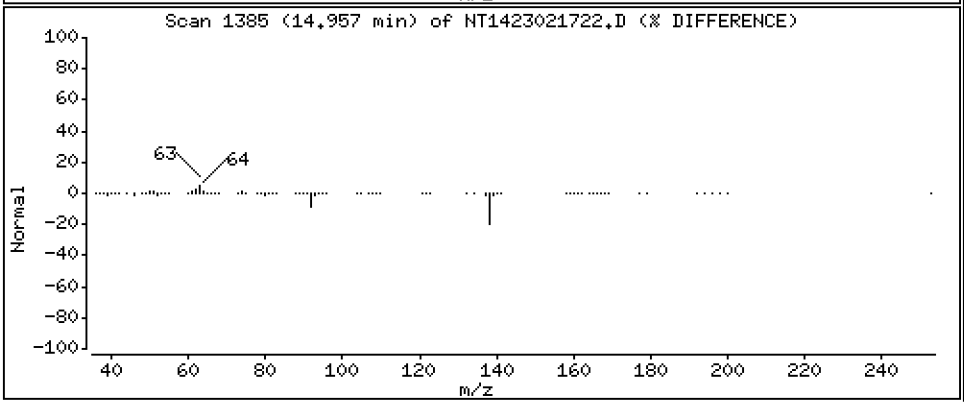
43 3-Nitroaniline

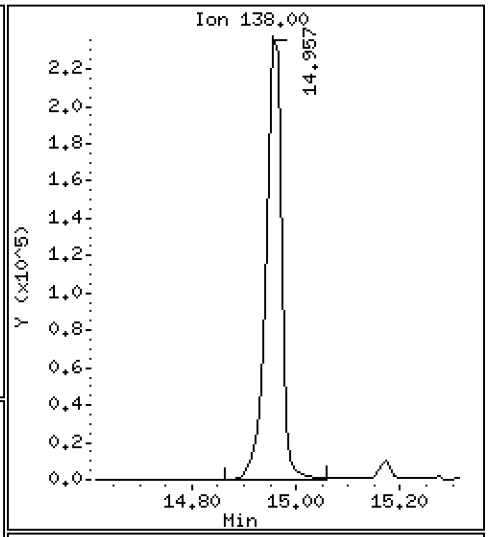
Concentration: 9.855 ug/mL

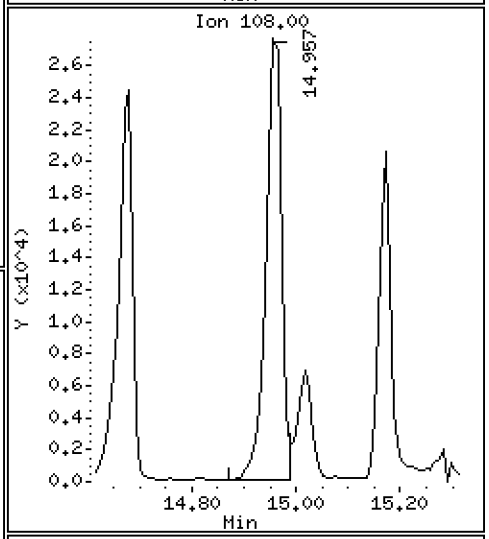


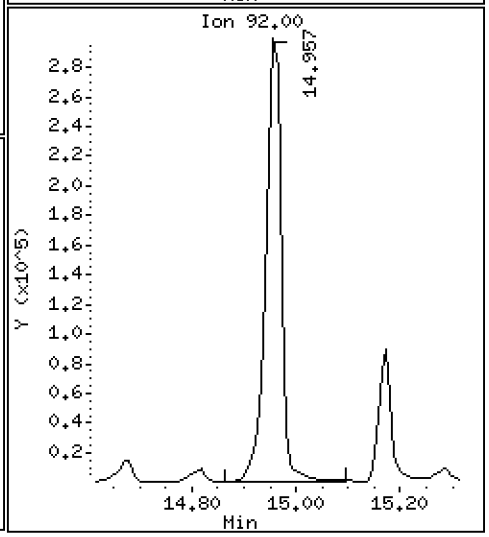












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

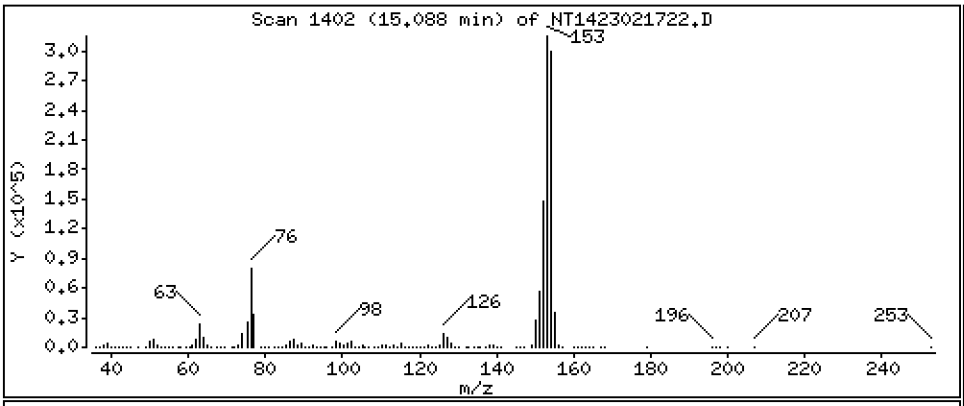
Operator: DSD

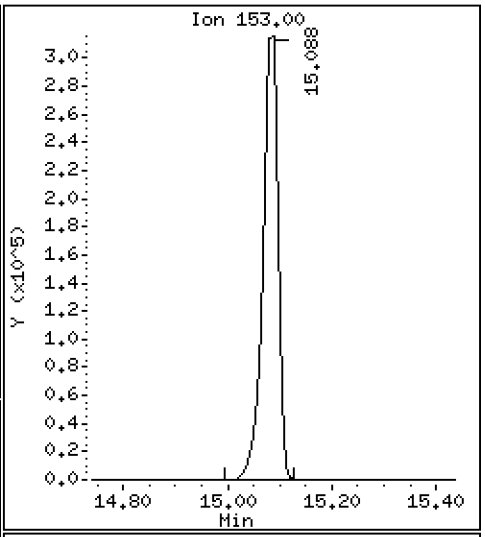
Column phase: ZB-5msi

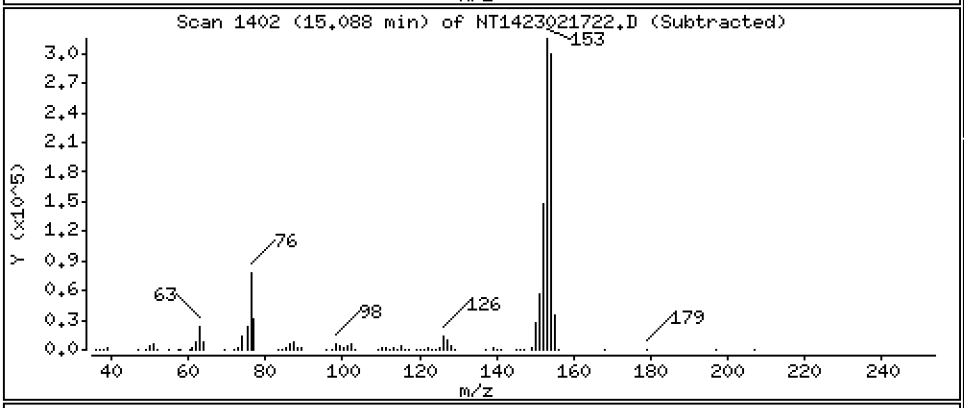
Column diameter: 0.25

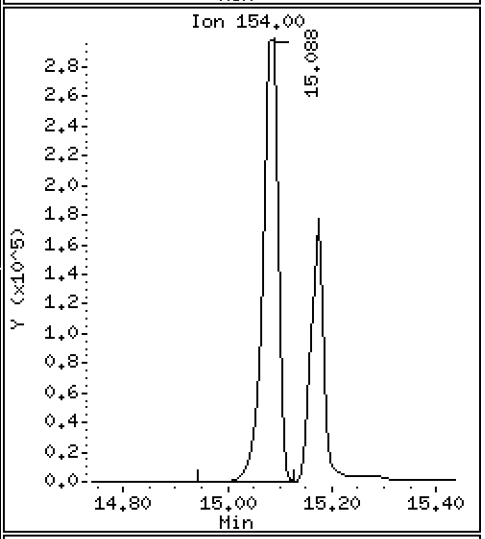
44 Acenaphthene

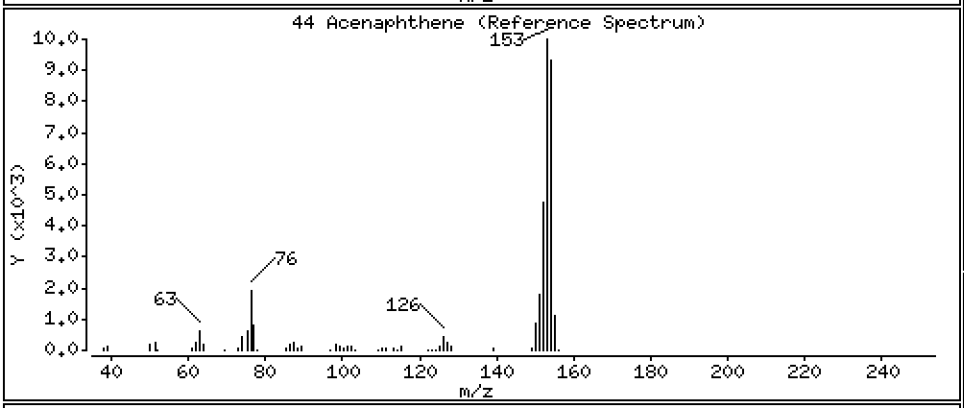
Concentration: 3.652 ug/mL

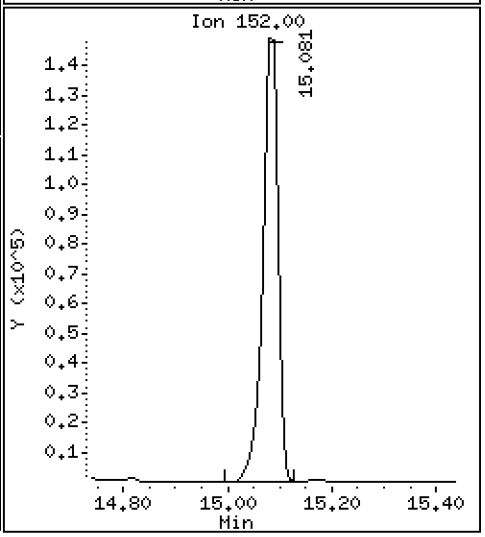


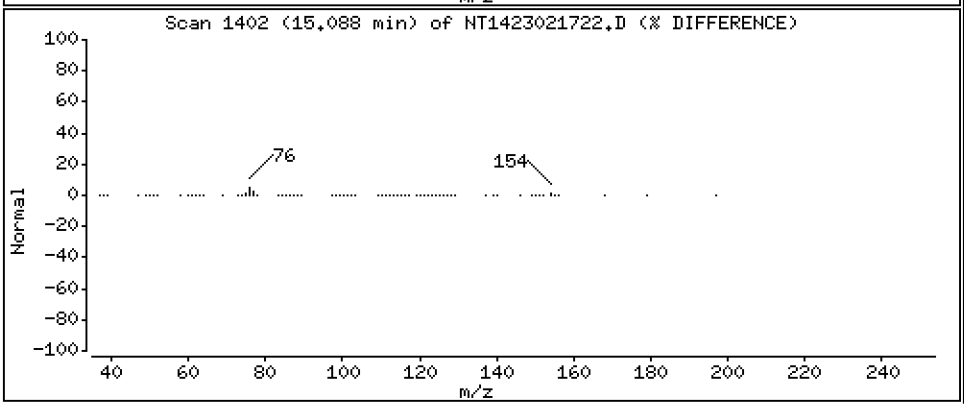












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

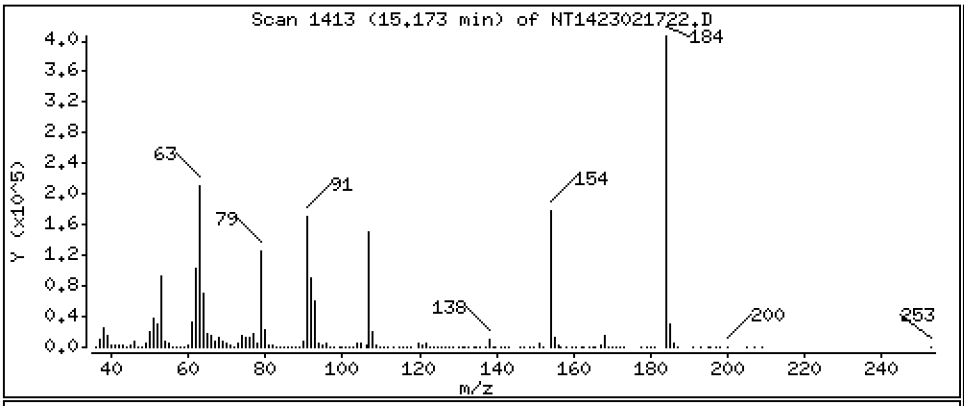
Operator: DSD

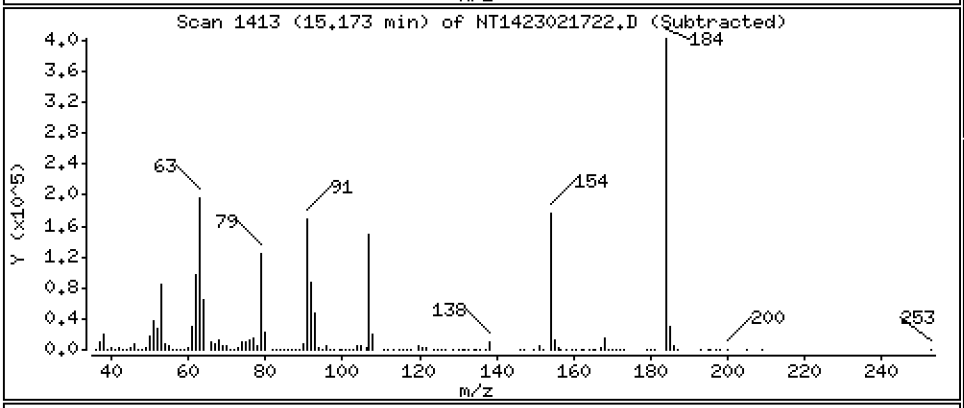
Column phase: ZB-5msi

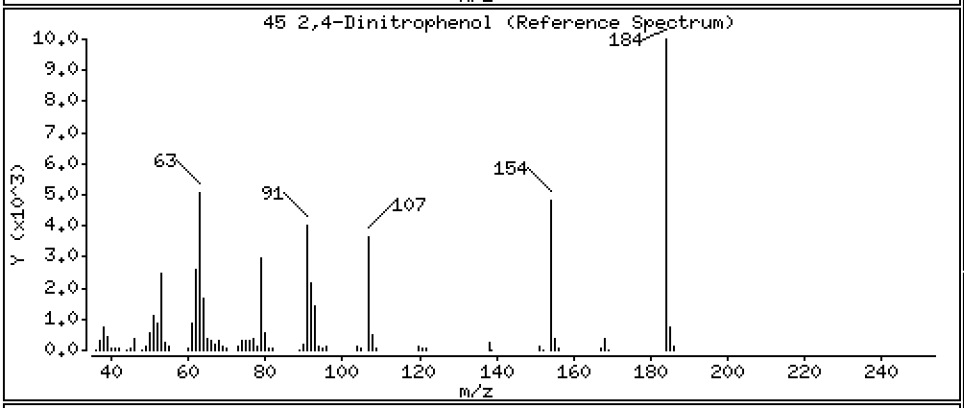
Column diameter: 0.25

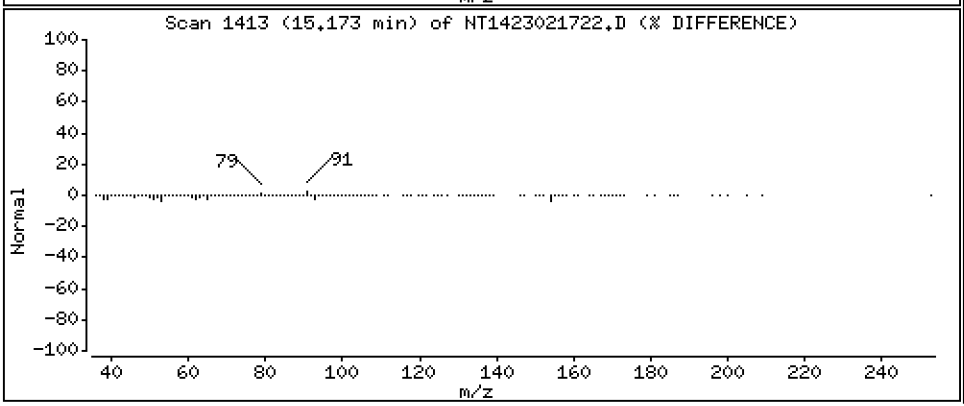
45 2,4-Dinitrophenol

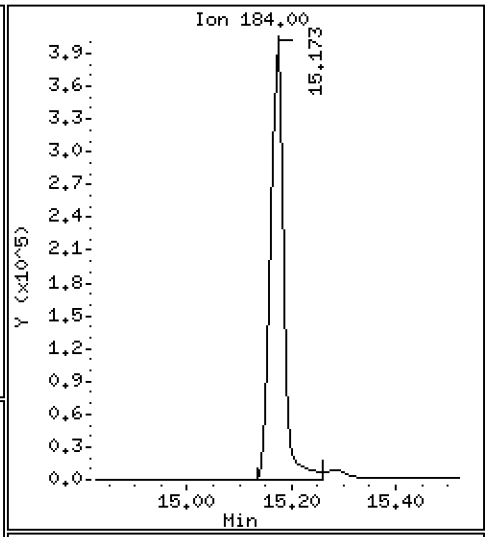
Concentration: 21.49 ug/mL

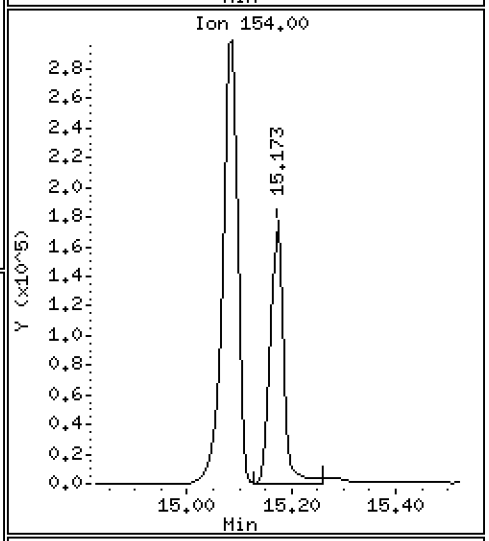


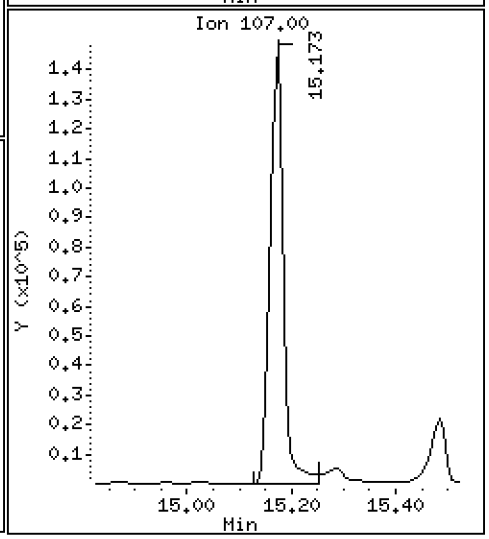












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

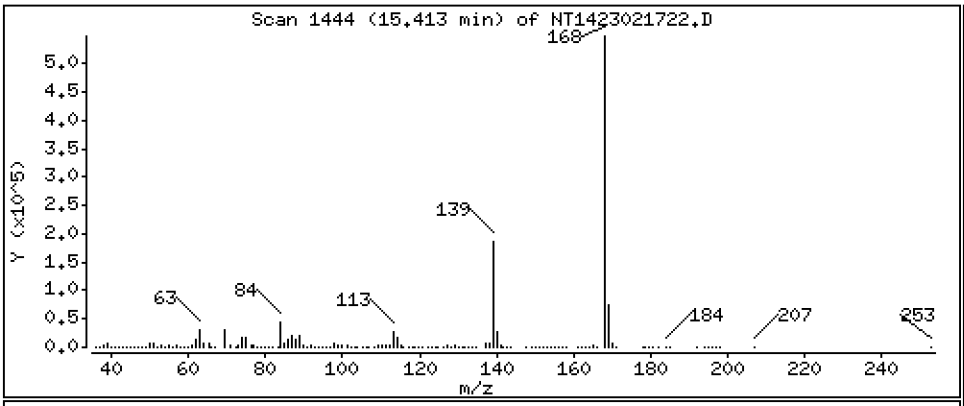
Operator: DSD

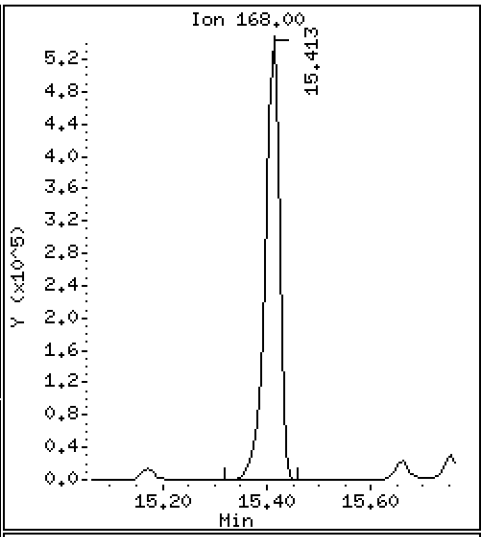
Column phase: ZB-5msi

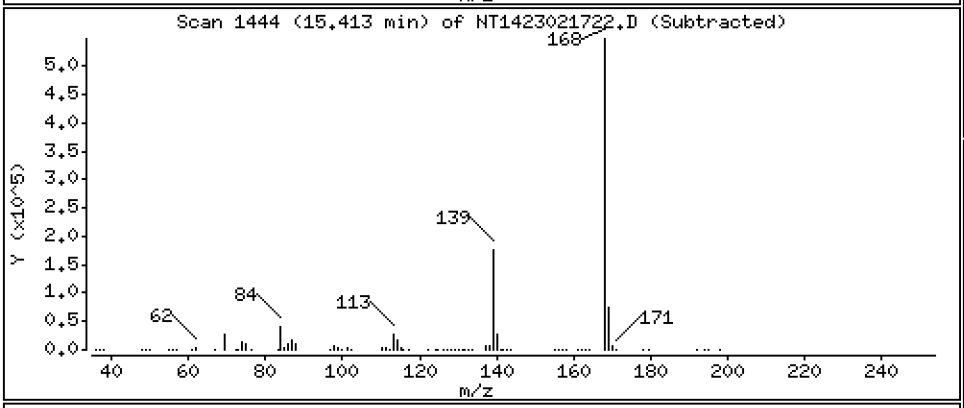
Column diameter: 0.25

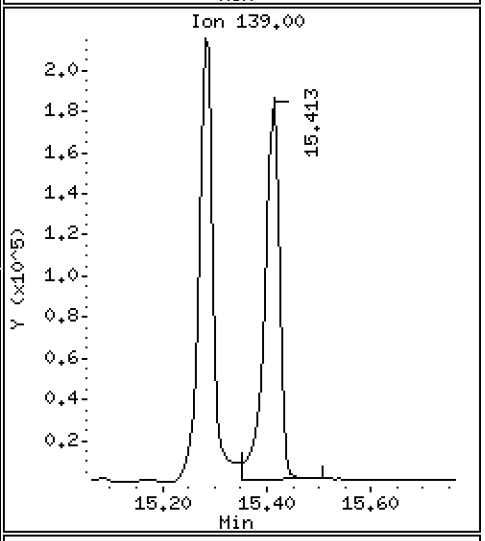
46 Dibenzofuran

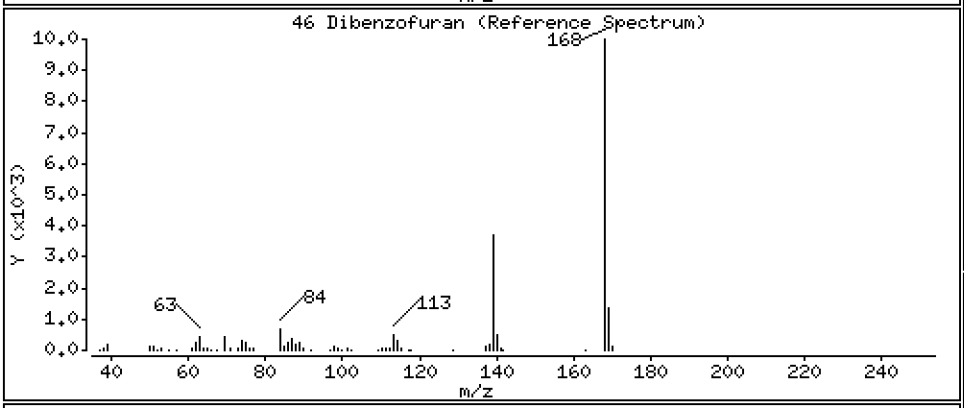
Concentration: 3.623 ug/mL

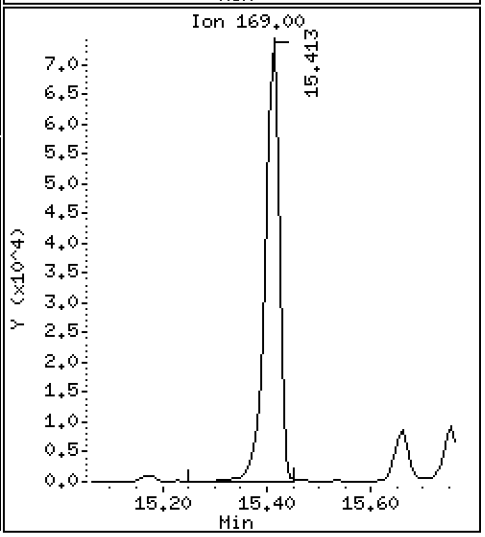


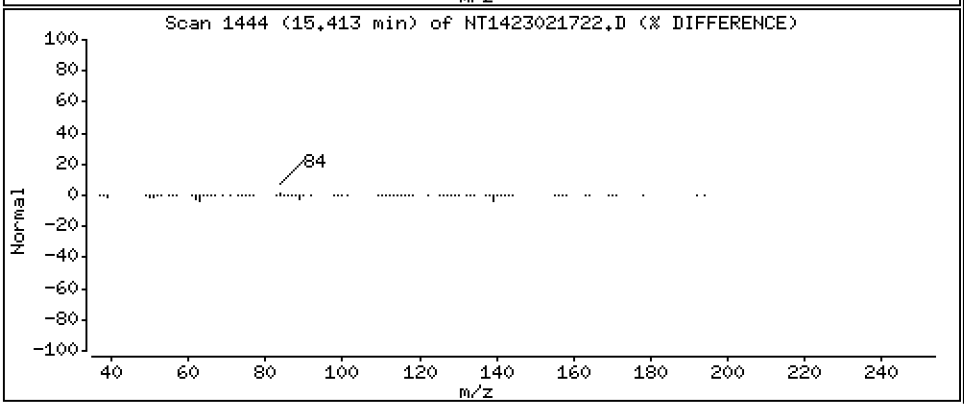












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

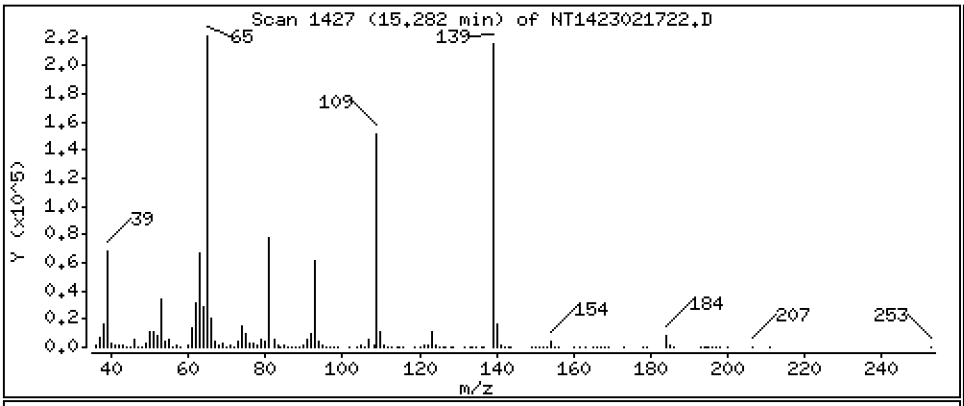
Operator: DSD

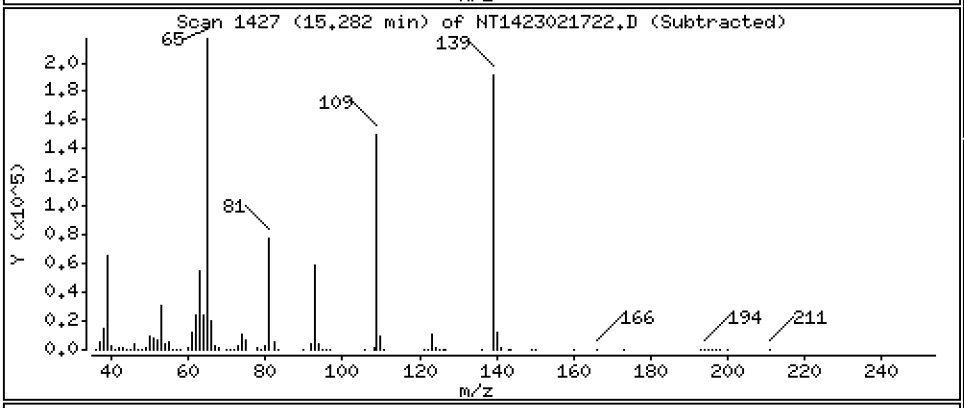
Column phase: ZB-5msi

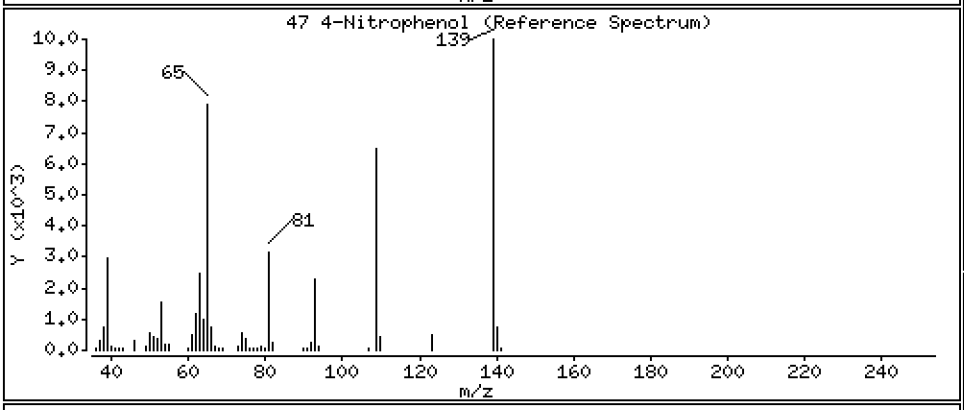
Column diameter: 0.25

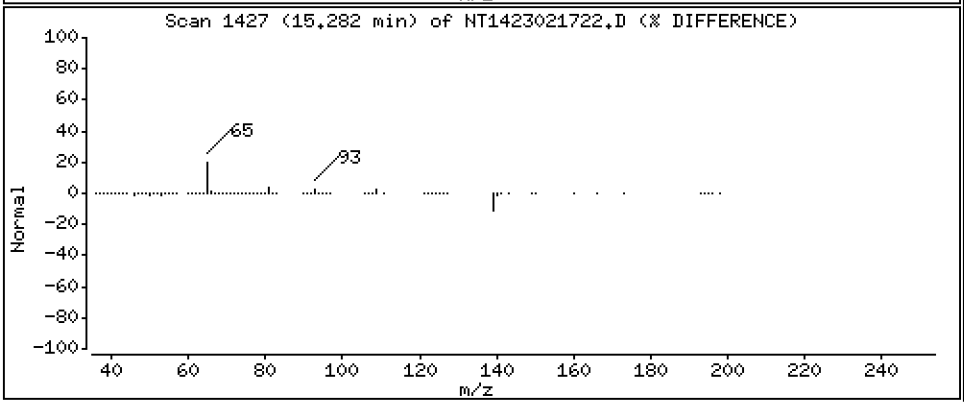
47 4-Nitrophenol

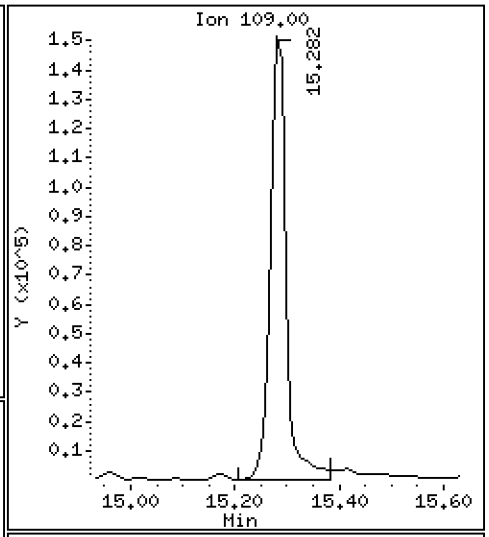
Concentration: 10.90 ug/mL

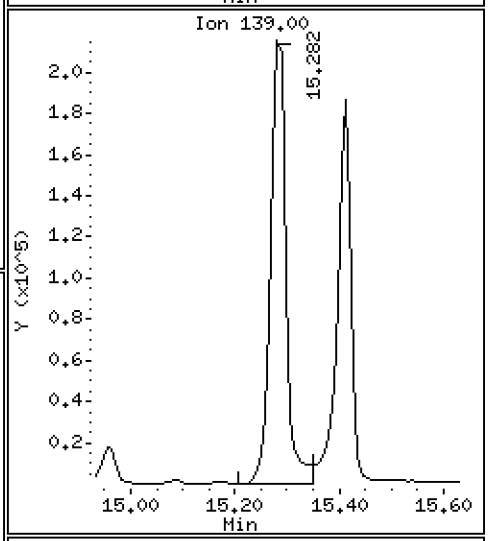


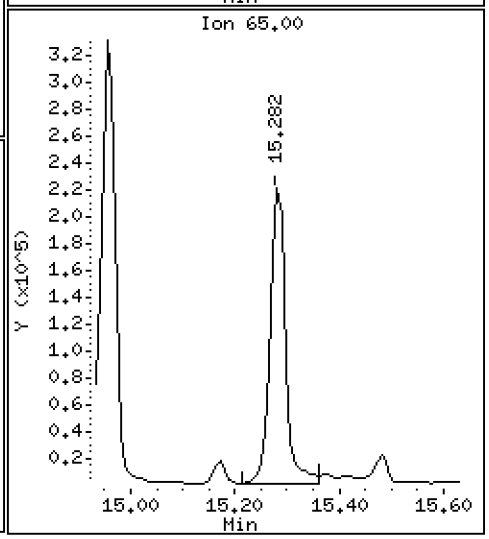












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

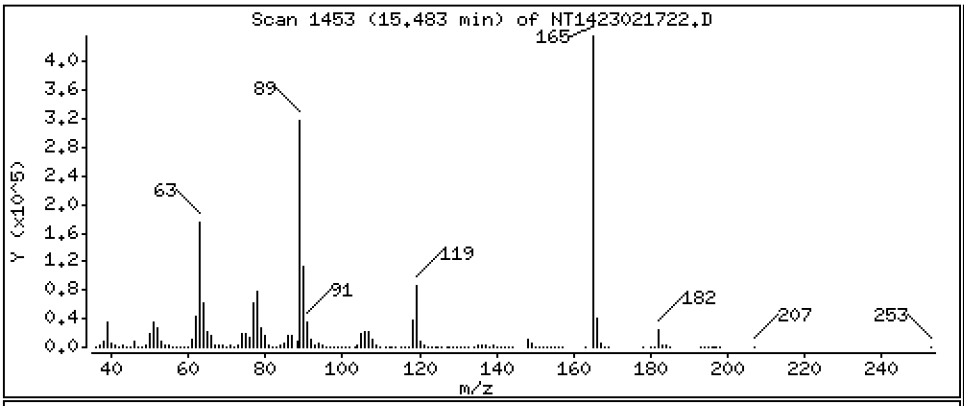
Operator: DSD

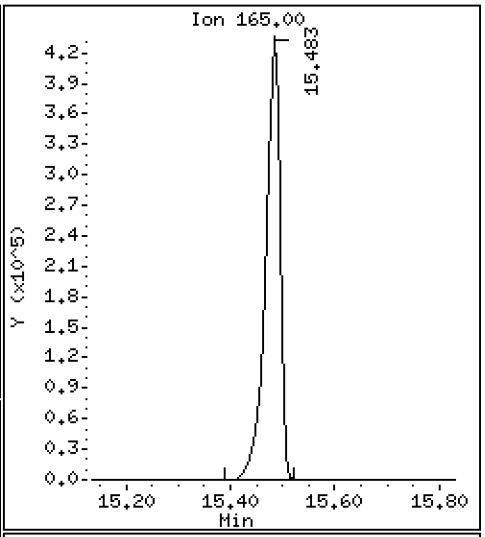
Column phase: ZB-5msi

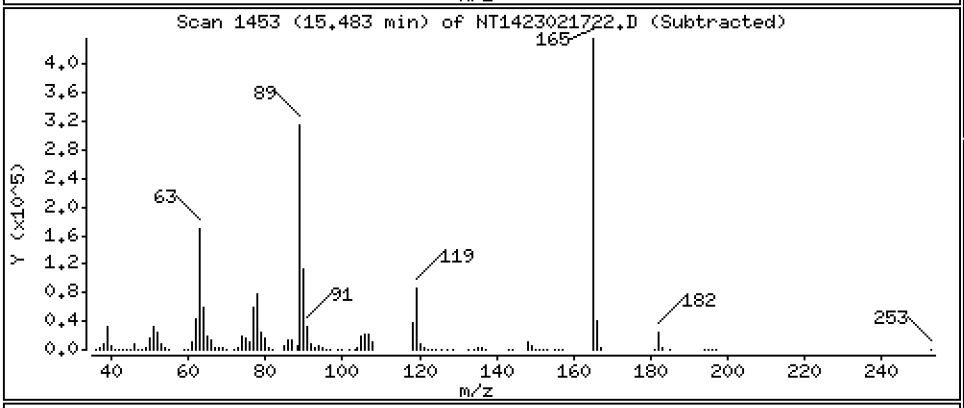
Column diameter: 0.25

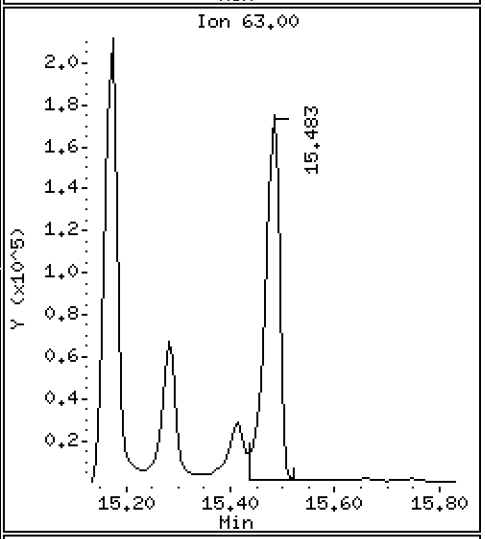
48 2,4-Dinitrotoluene

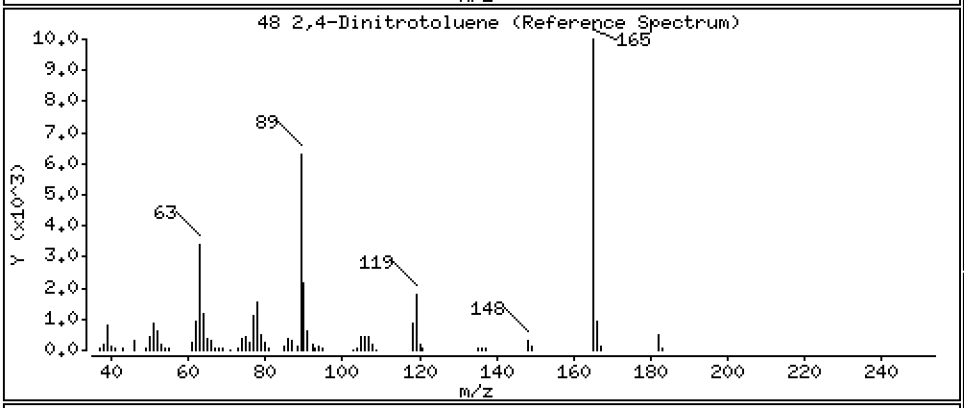
Concentration: 12.52 ug/mL

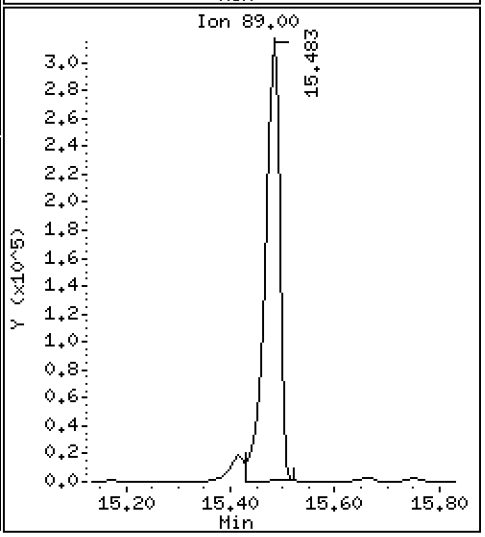


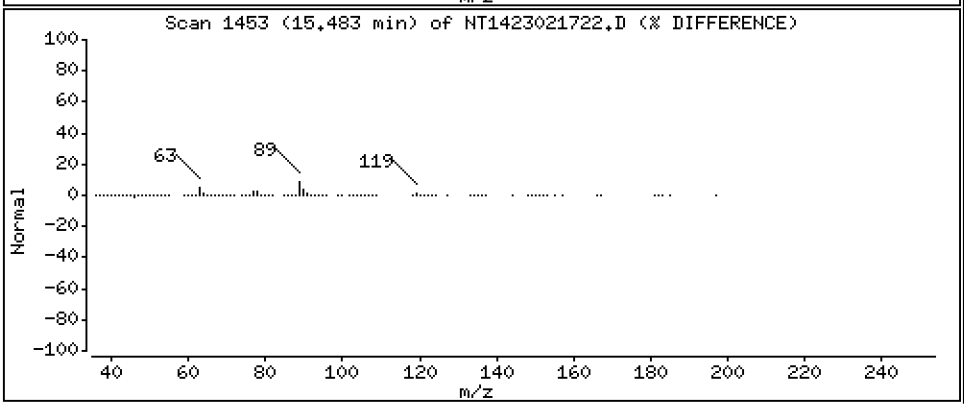












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

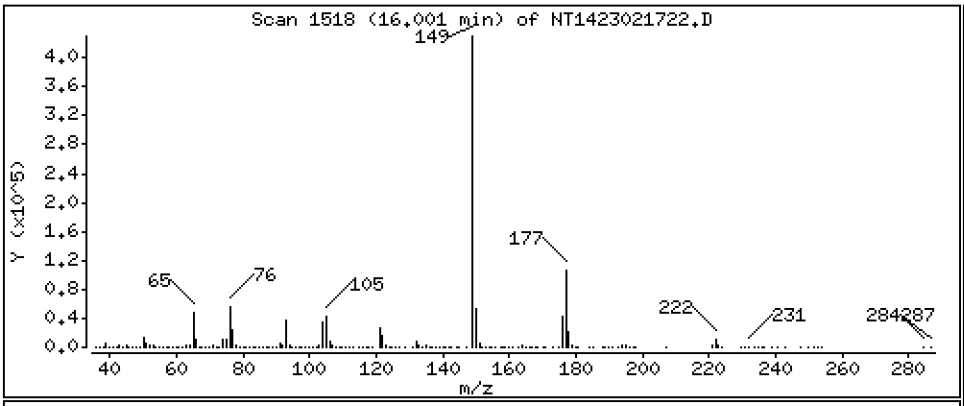
Operator: DSD

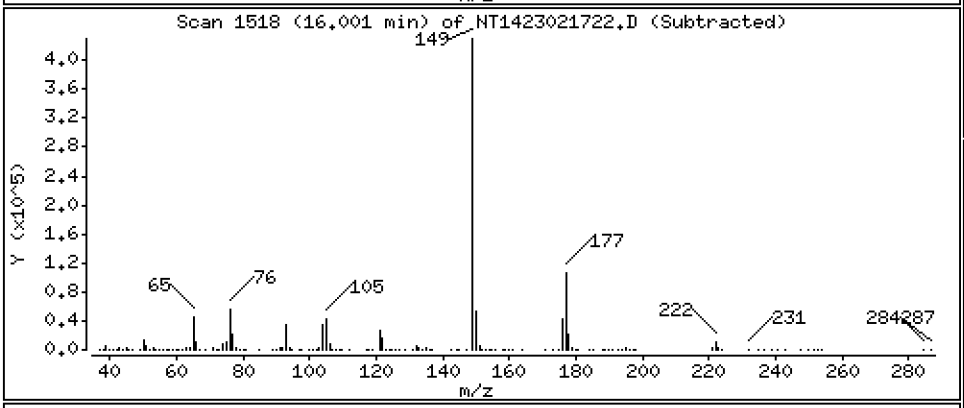
Column phase: ZB-5msi

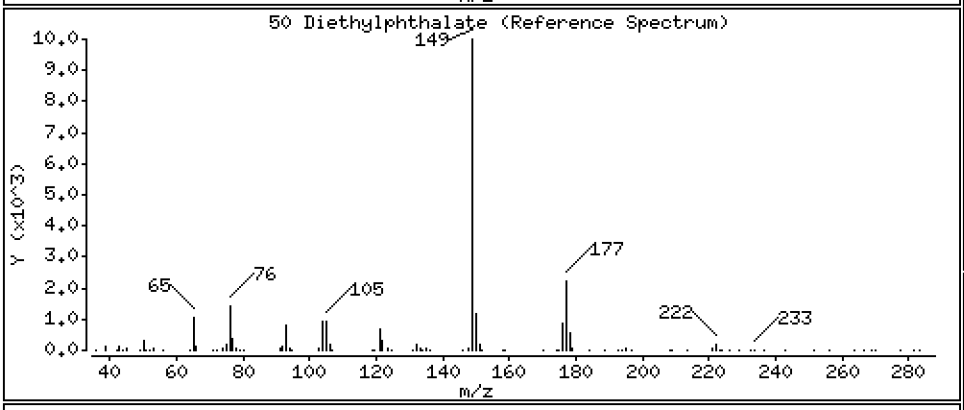
Column diameter: 0.25

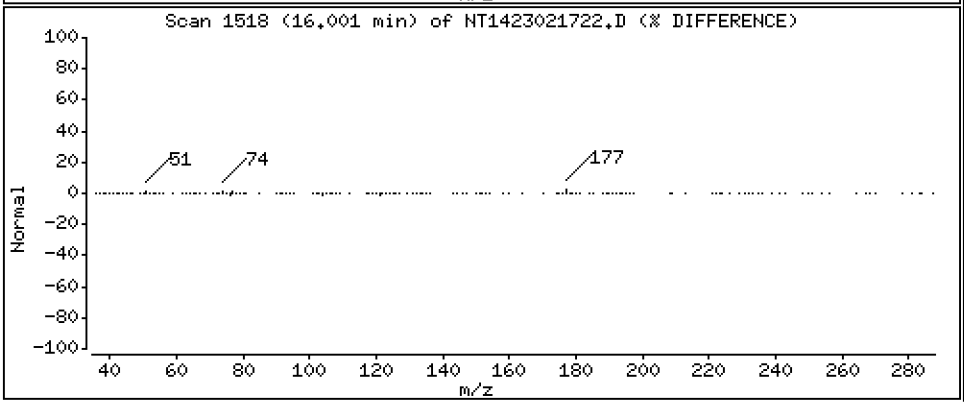
50 Diethylphthalate

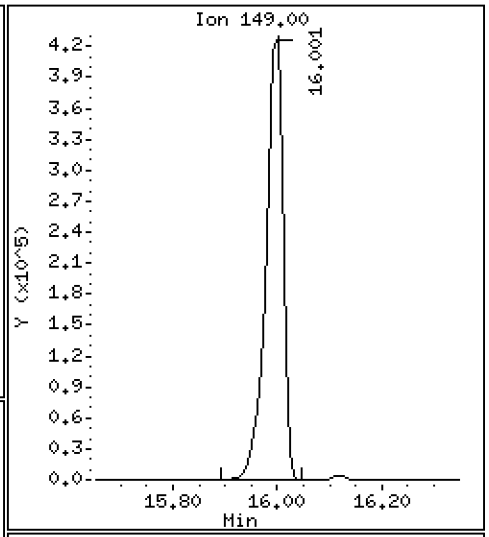
Concentration: 4.139 ug/mL

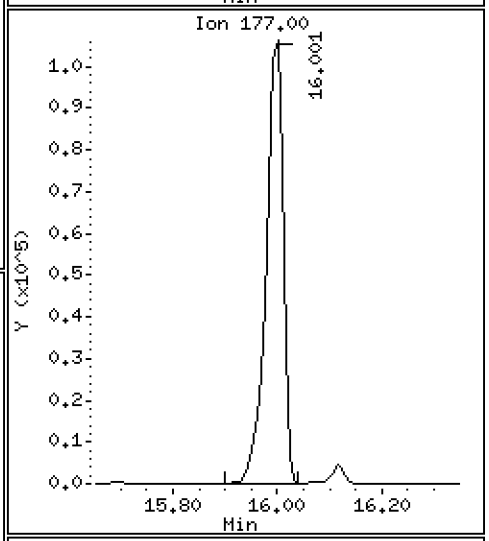


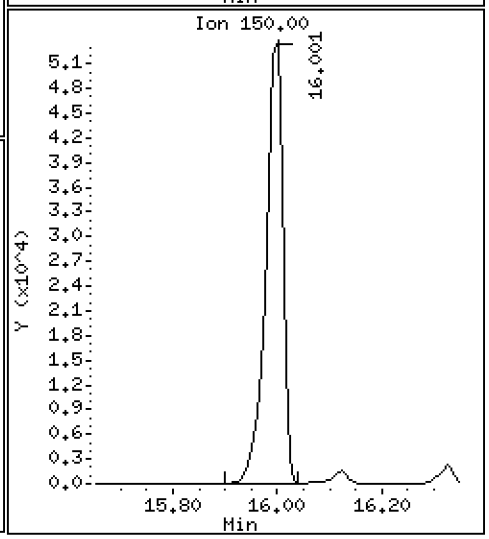












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

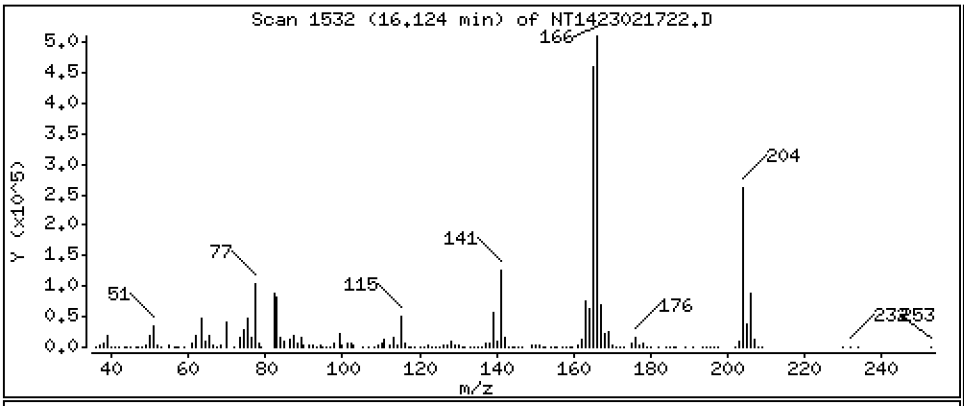
Operator: DSD

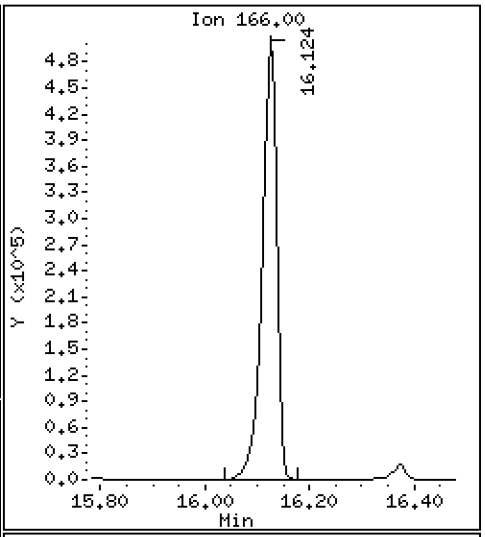
Column phase: ZB-5msi

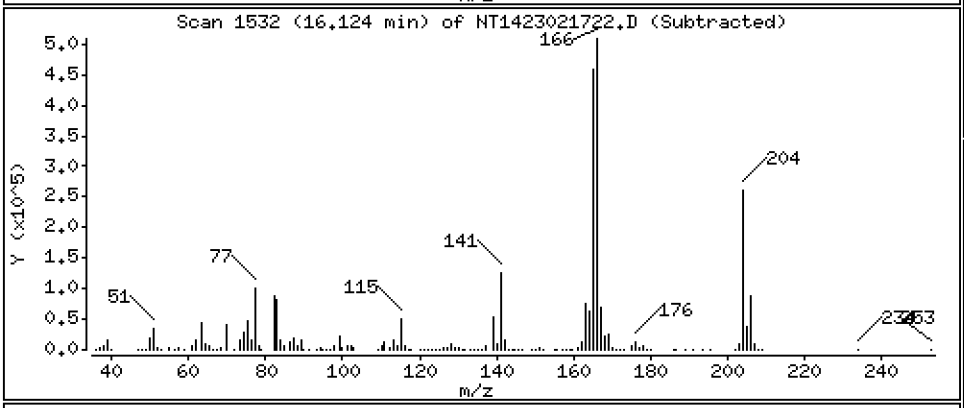
Column diameter: 0.25

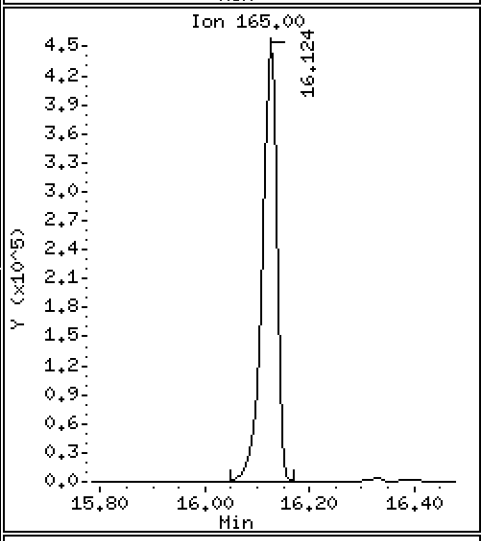
49 Fluorene

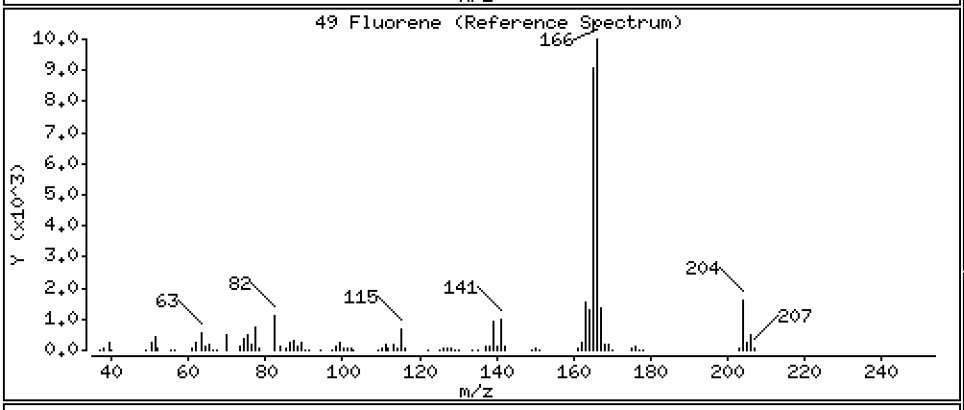
Concentration: 3.661 ug/mL

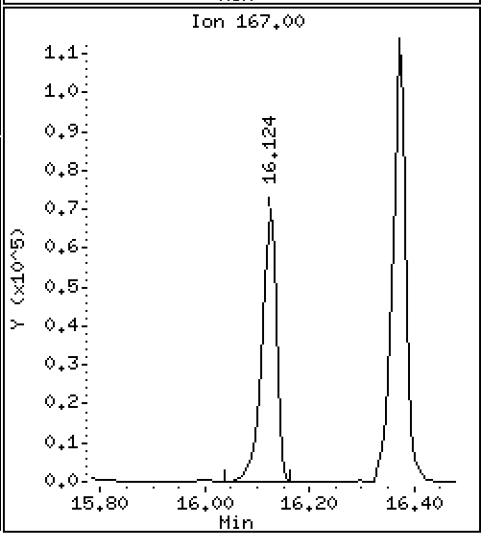


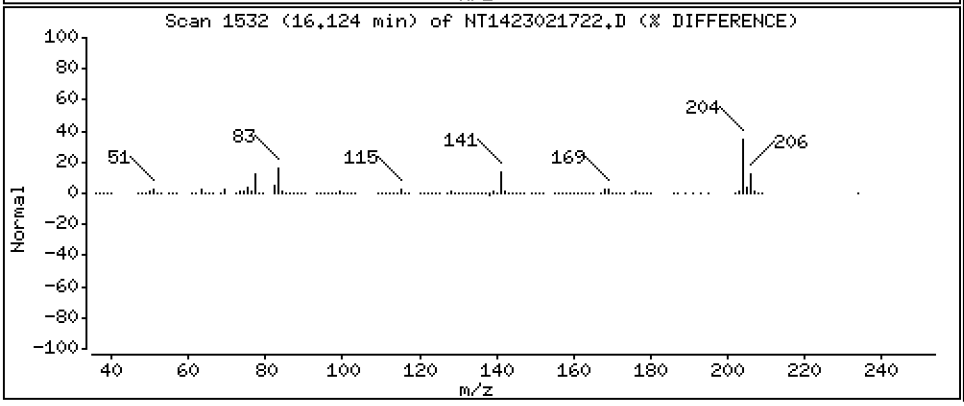












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

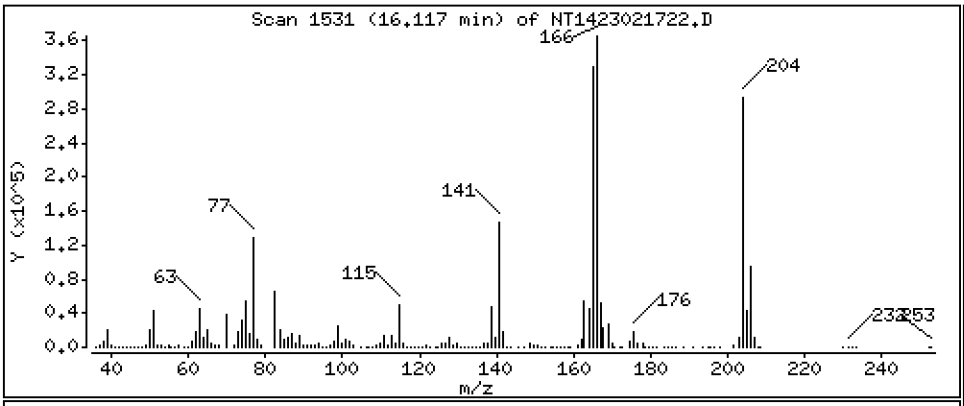
Operator: DSD

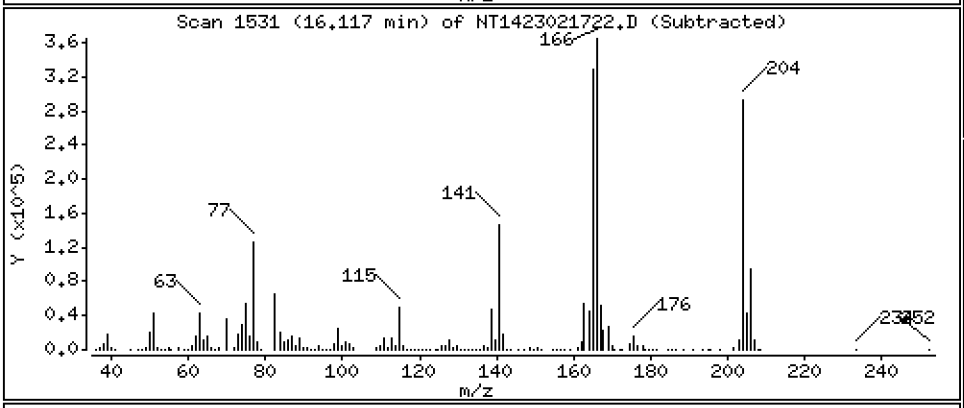
Column phase: ZB-5msi

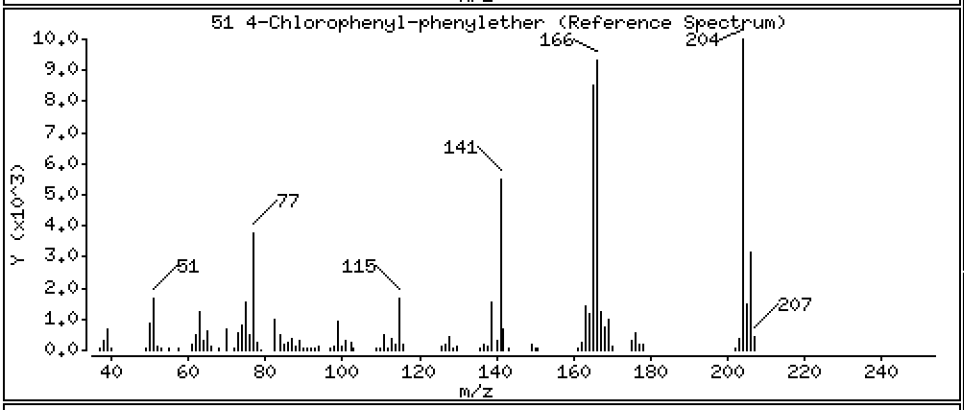
Column diameter: 0.25

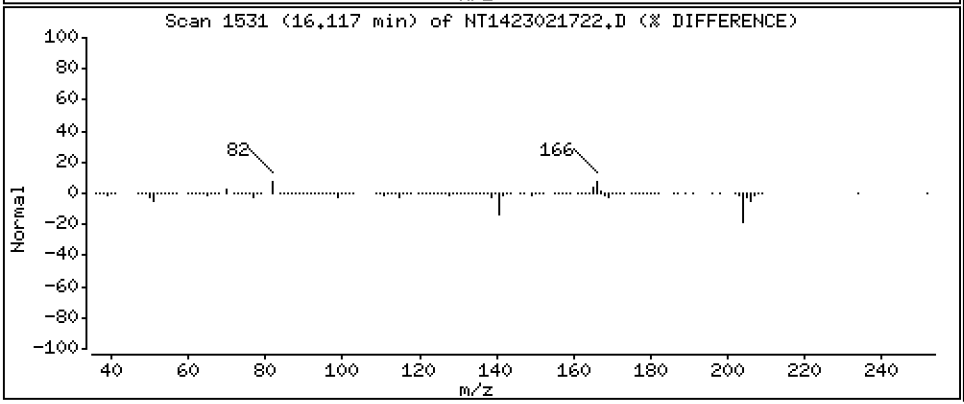
51 4-Chlorophenyl-phenylether

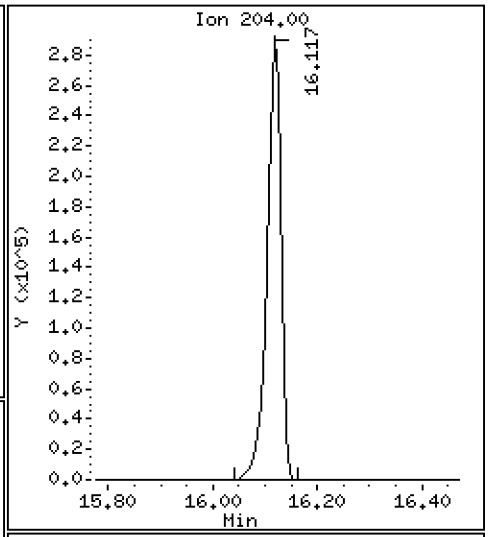
Concentration: 3.823 ug/mL

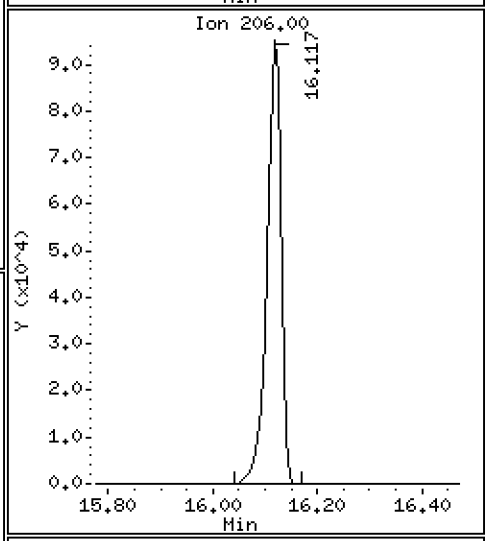


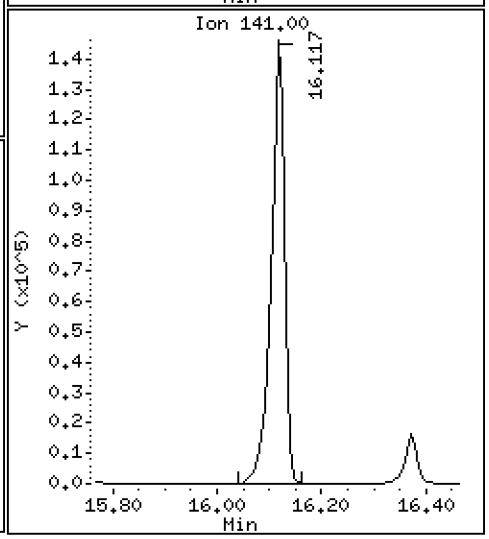












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

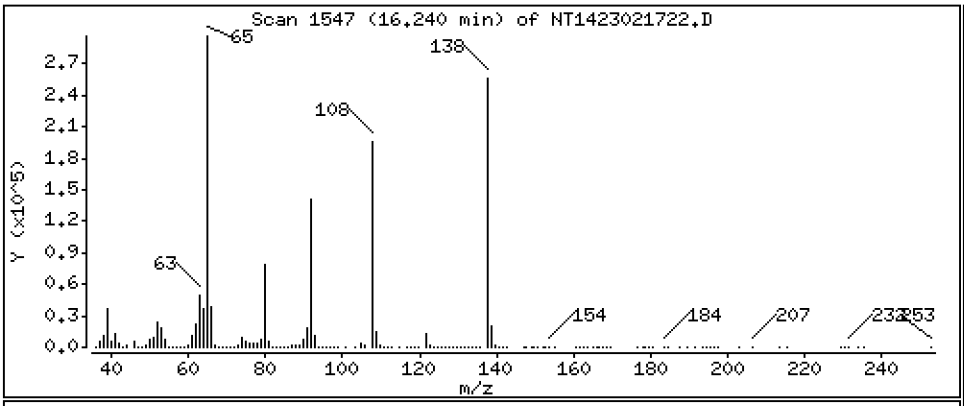
Operator: DSD

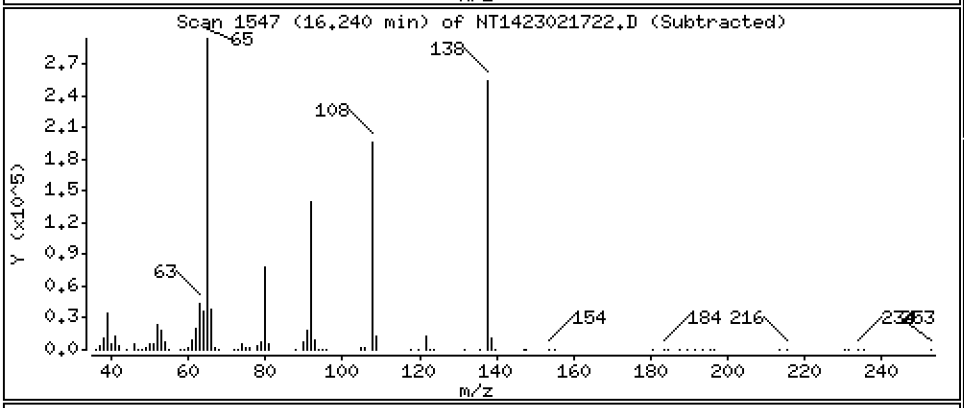
Column phase: ZB-5msi

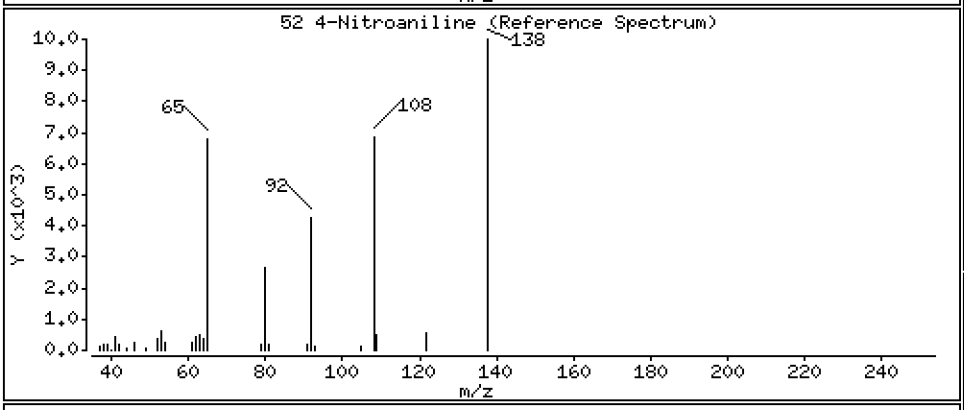
Column diameter: 0.25

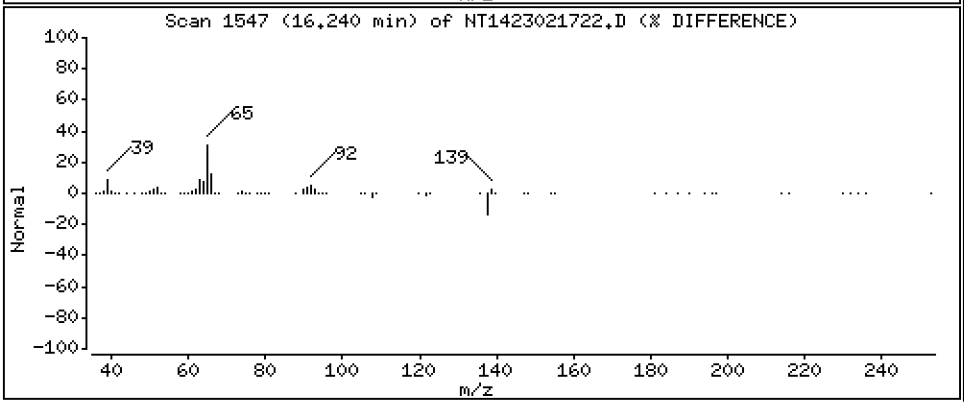
52 4-Nitroaniline

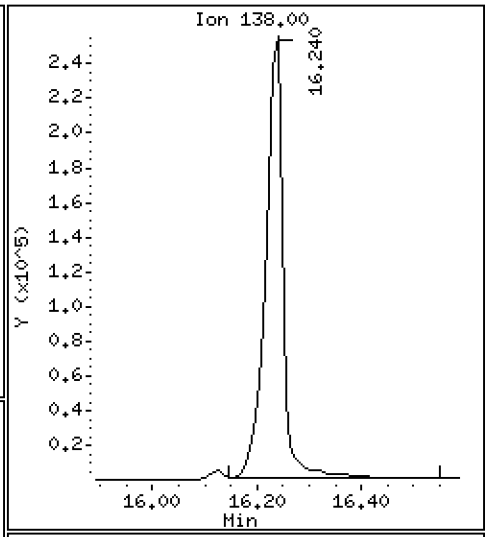
Concentration: 10.50 ug/mL

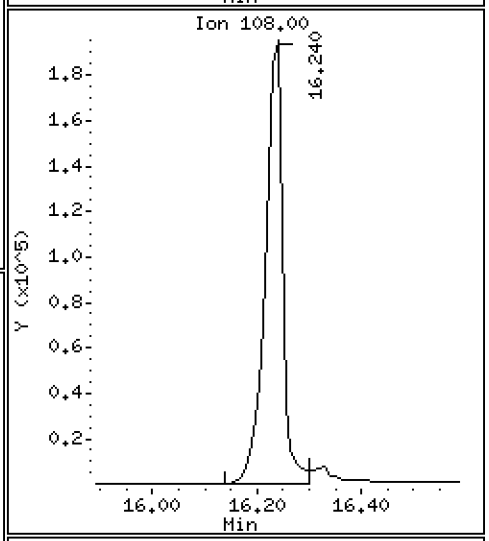


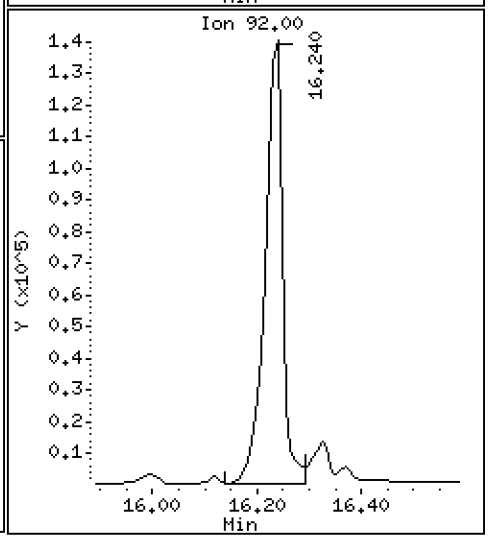












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

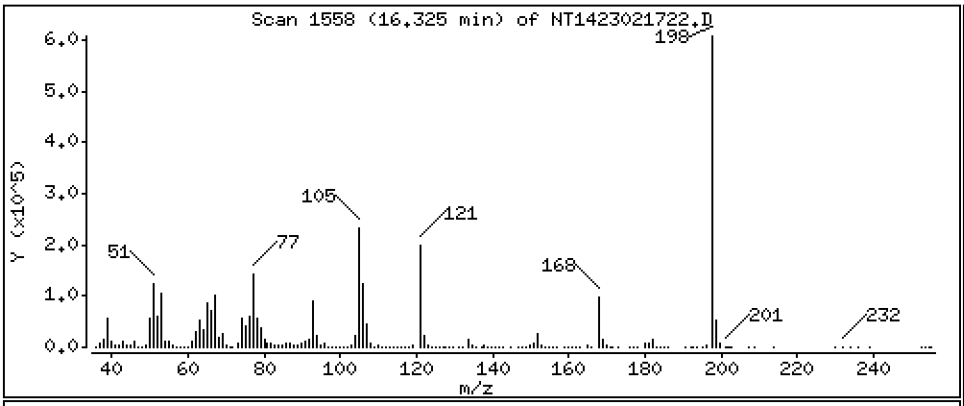
Operator: DSD

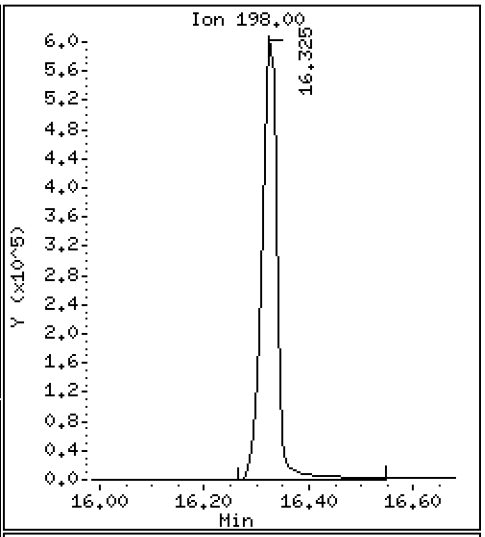
Column phase: ZB-5msi

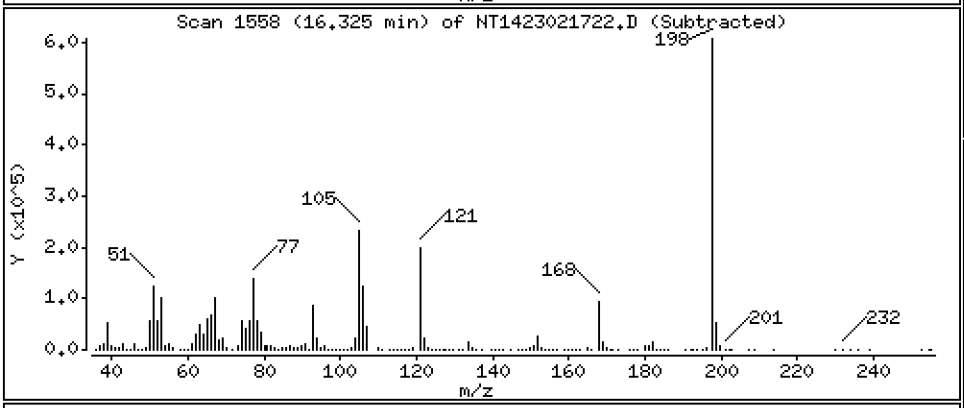
Column diameter: 0.25

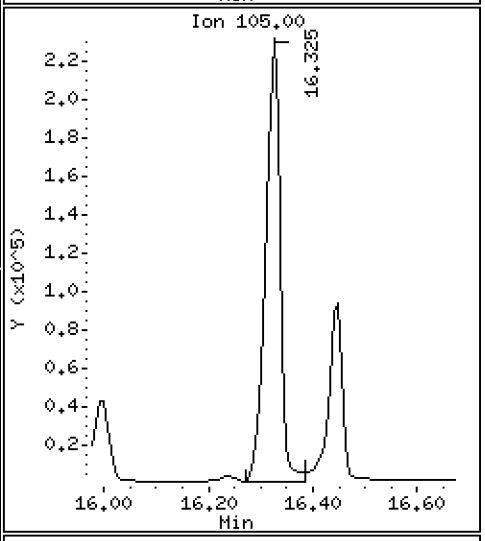
53 4,6-Dinitro-2-methylphenol

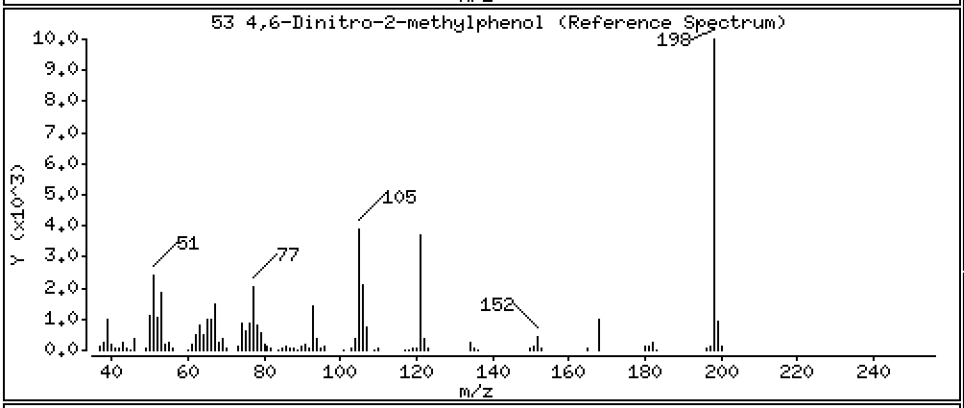
Concentration: 25.80 ug/mL

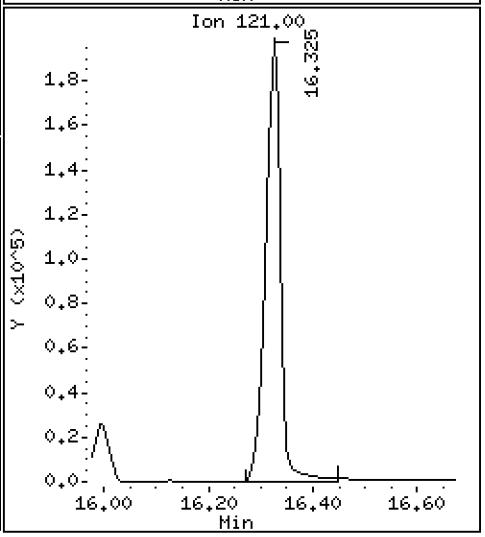


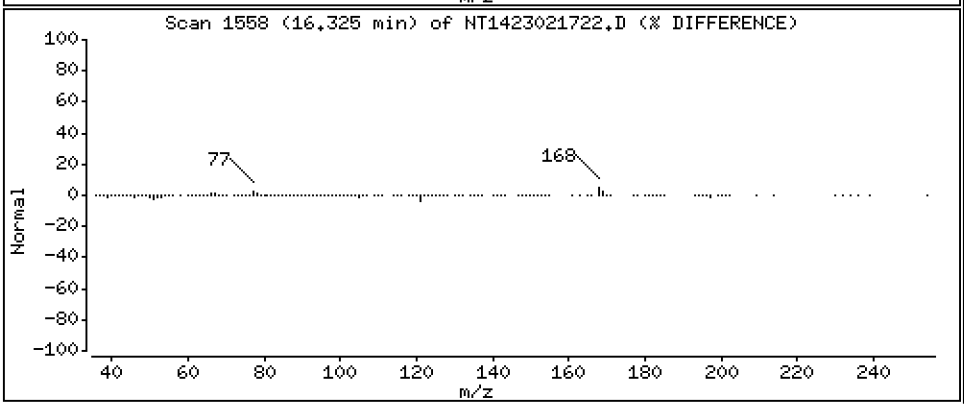












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

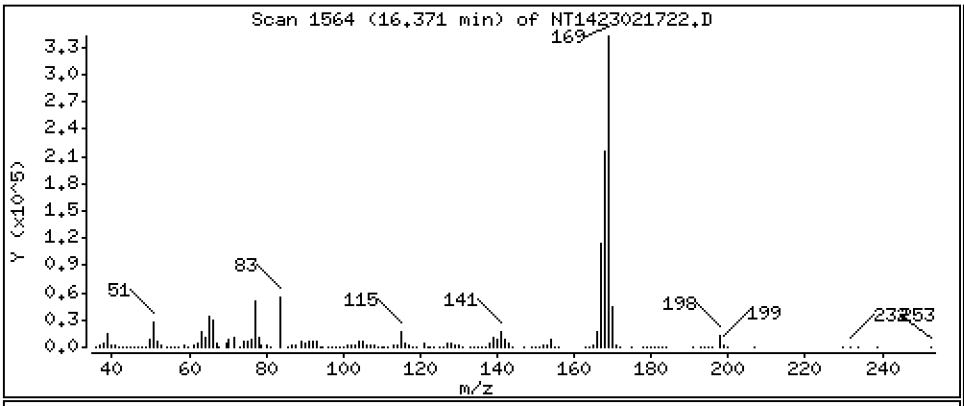
Operator: DSD

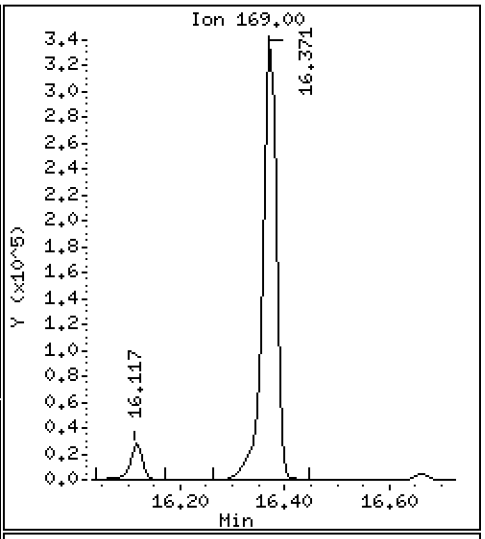
Column phase: ZB-5msi

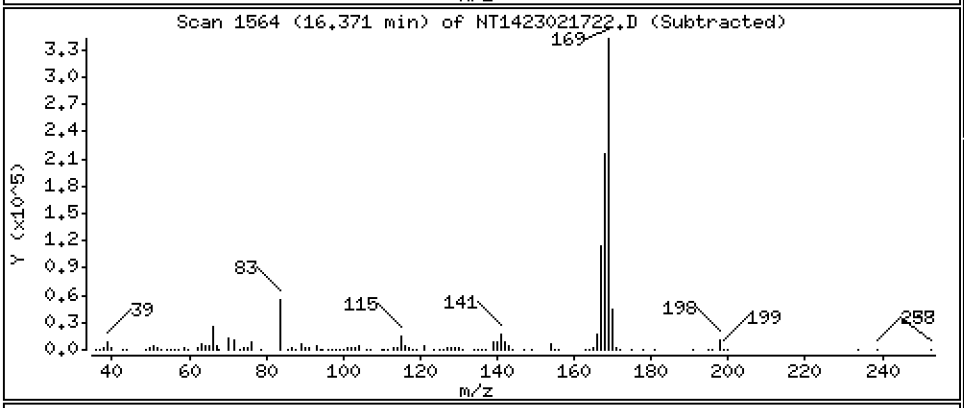
Column diameter: 0.25

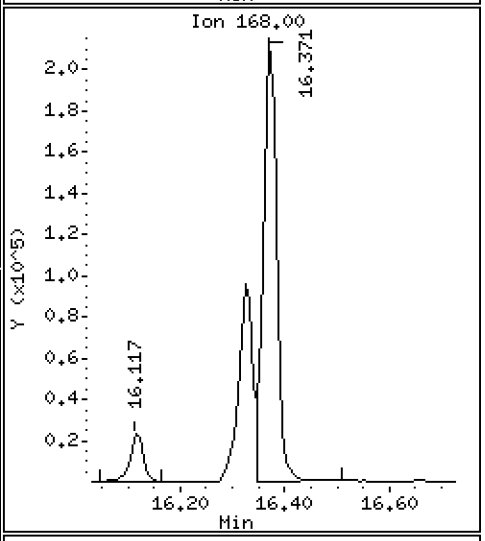
54 N-Nitrosodiphenylamine

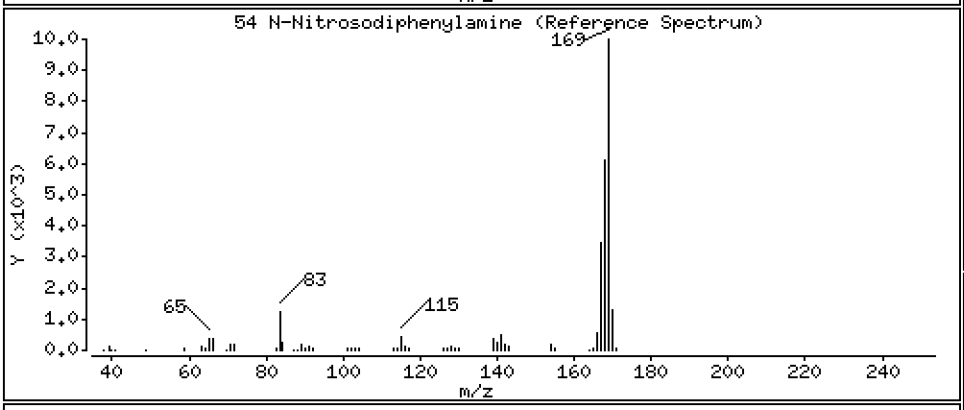
Concentration: 3.394 ug/mL

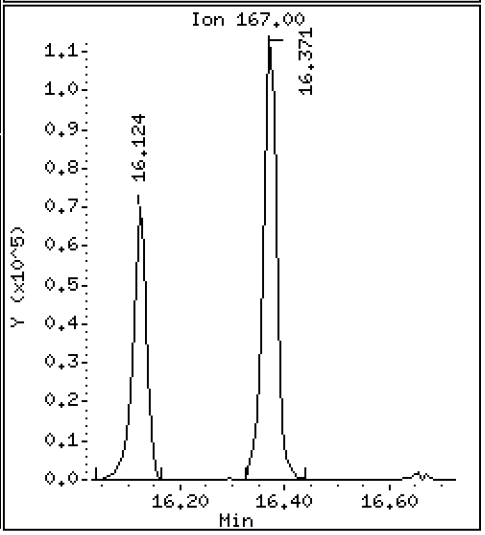


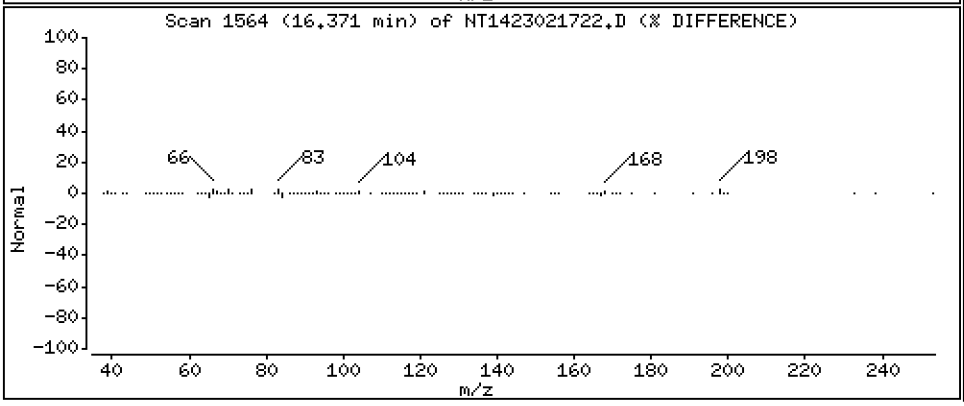












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

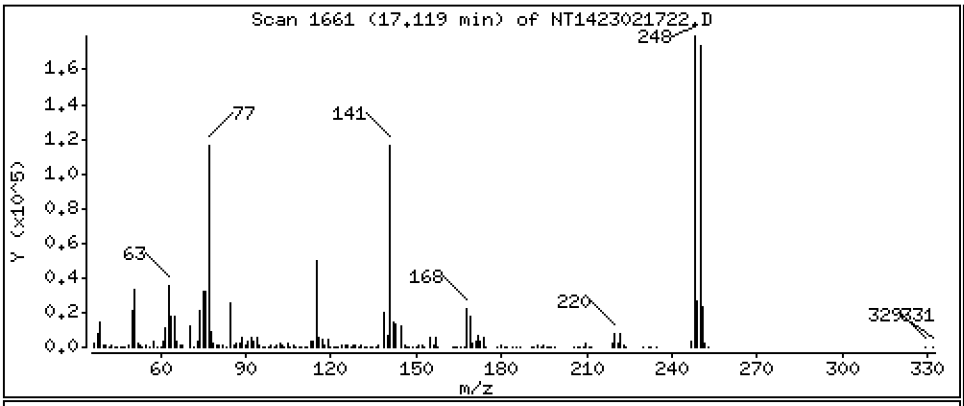
Operator: DSD

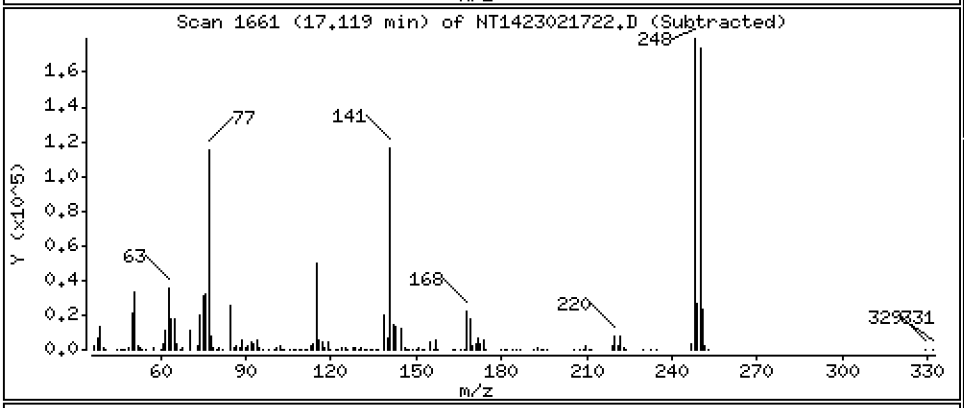
Column phase: ZB-5msi

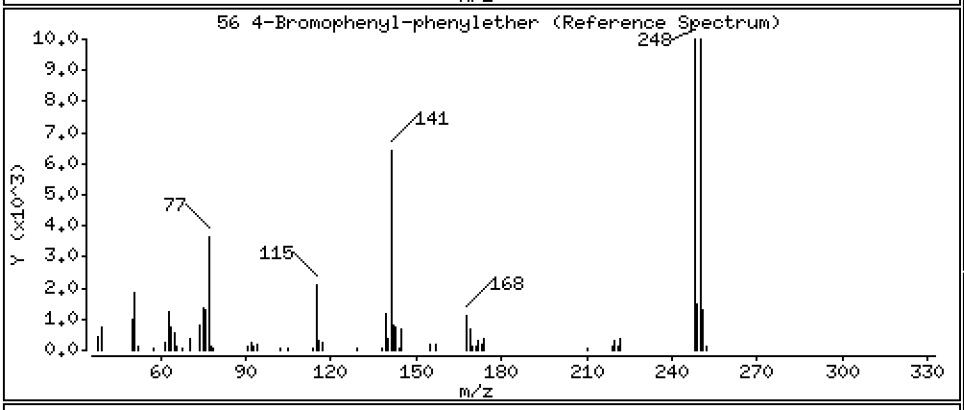
Column diameter: 0.25

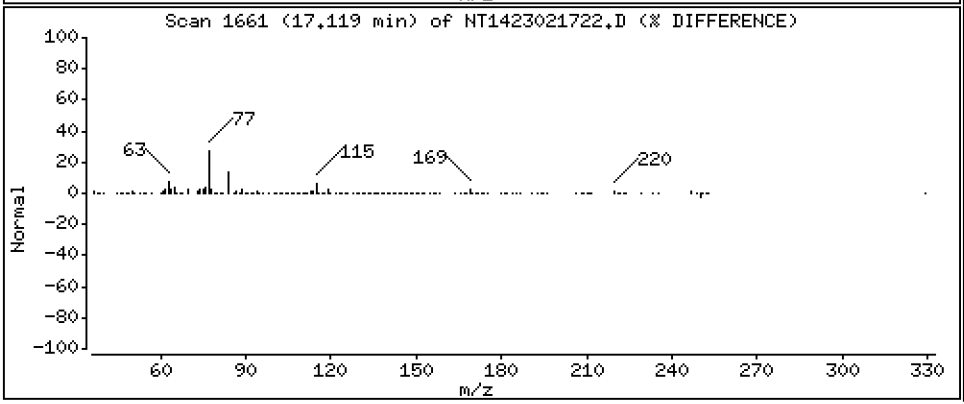
56 4-Bromophenyl-phenylether

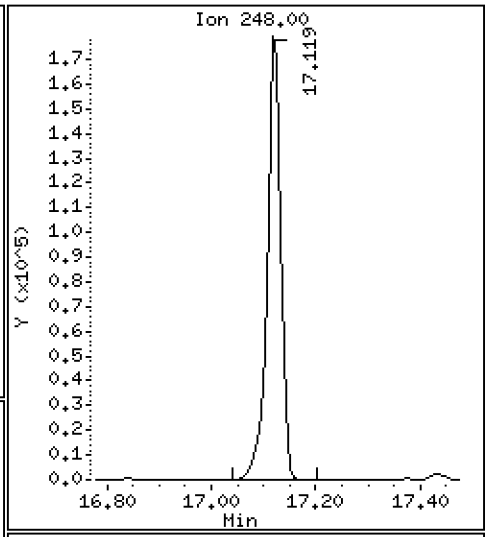
Concentration: 4.186 ug/mL

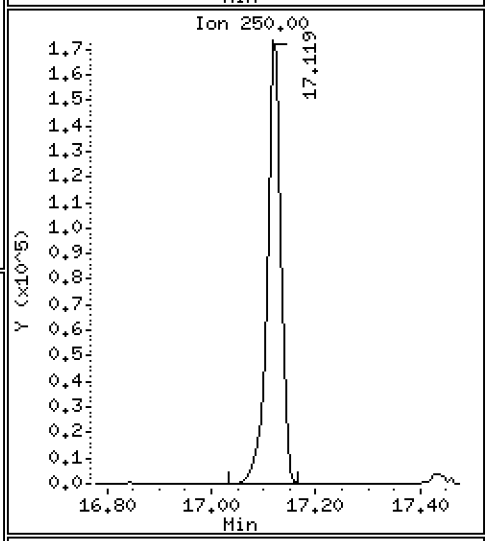


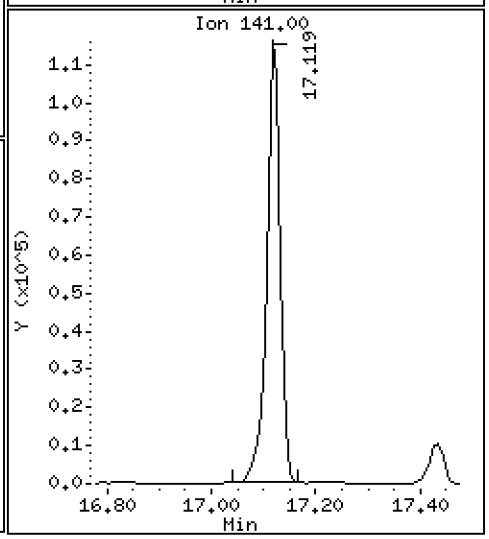












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

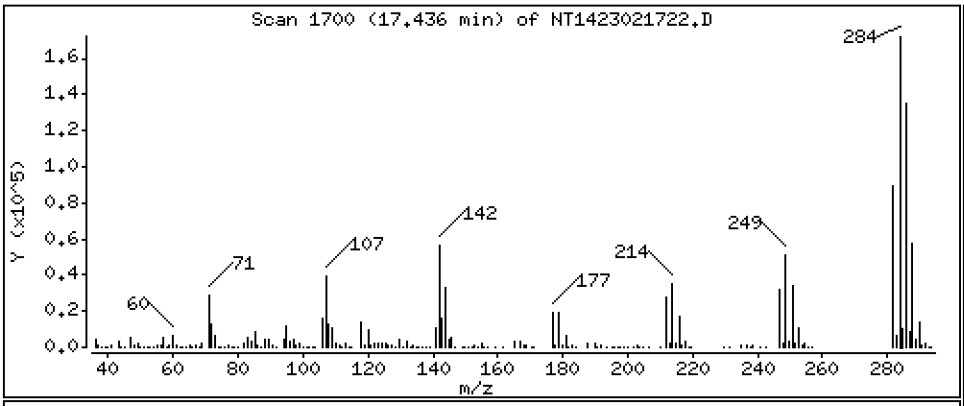
Operator: DSD

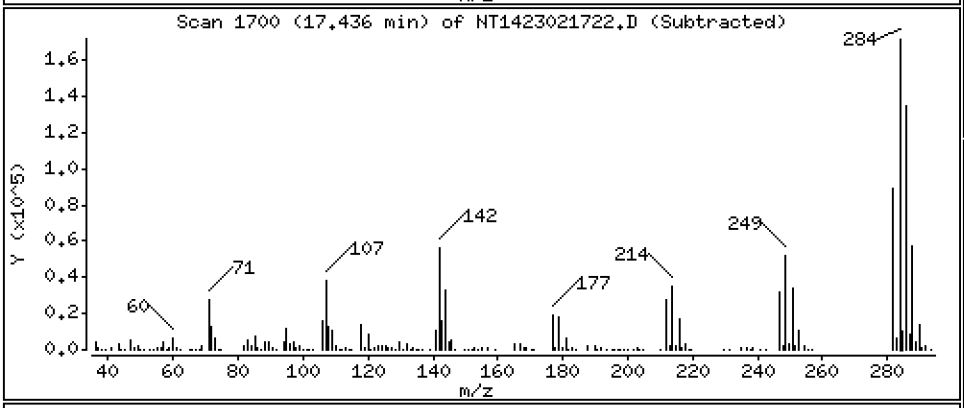
Column phase: ZB-5msi

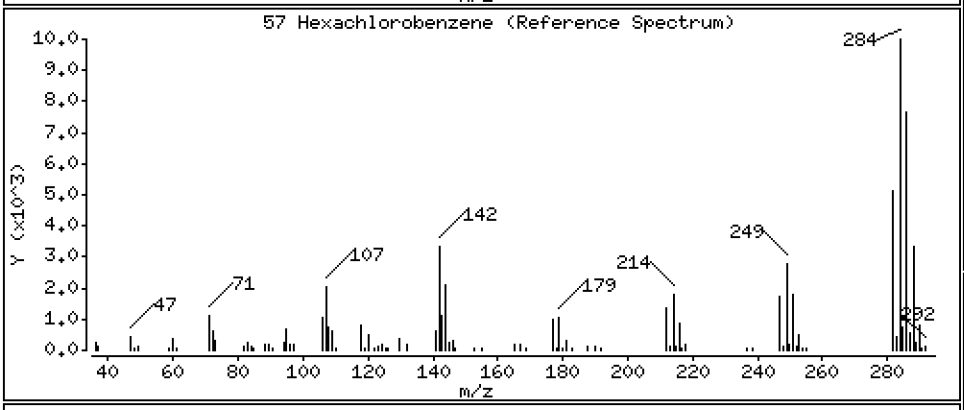
Column diameter: 0.25

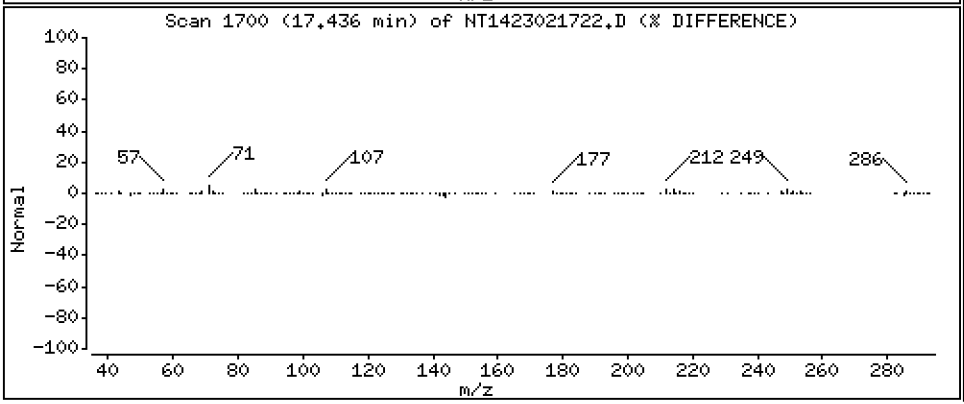
57 Hexachlorobenzene

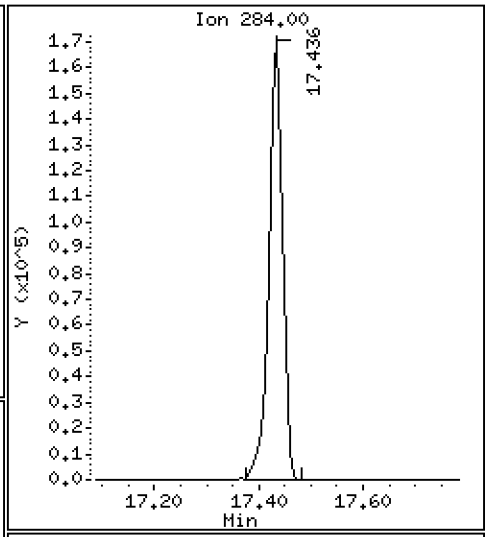
Concentration: 3.913 ug/mL

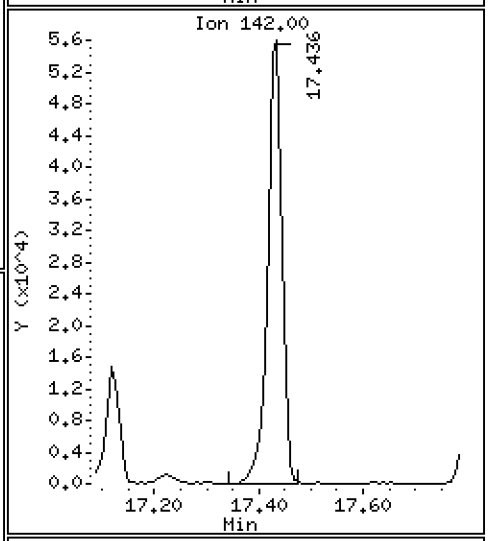


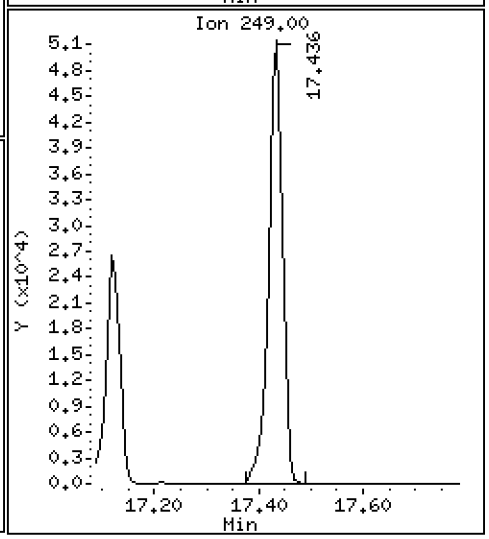












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

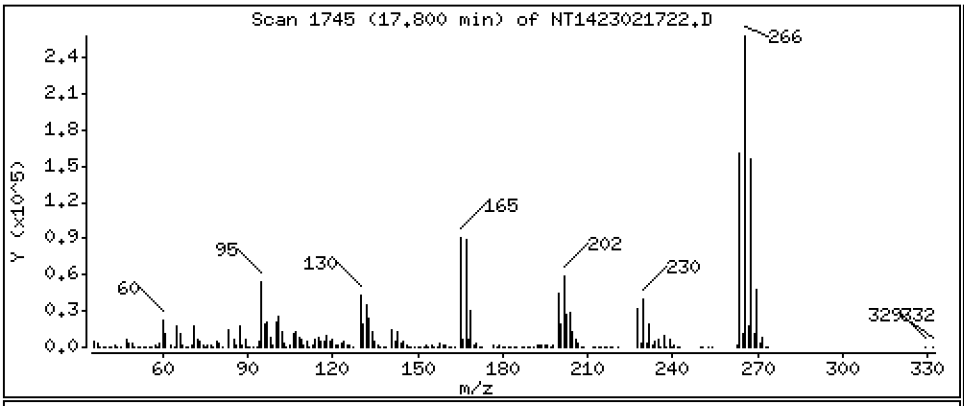
Operator: DSD

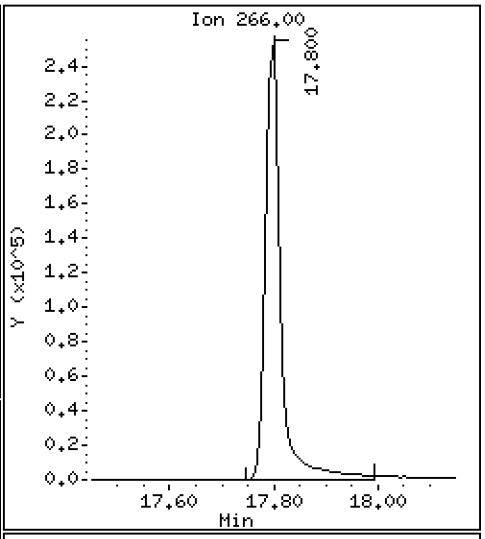
Column phase: ZB-5msi

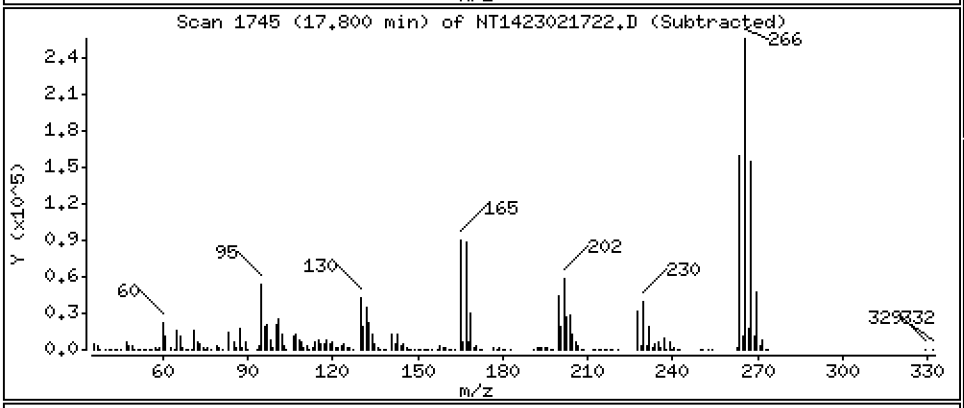
Column diameter: 0.25

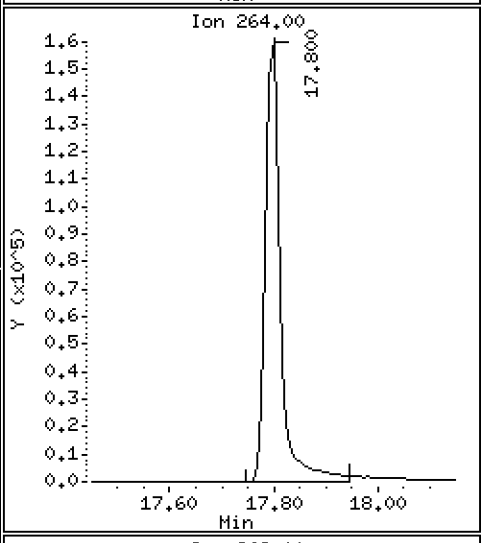
58 Pentachlorophenol

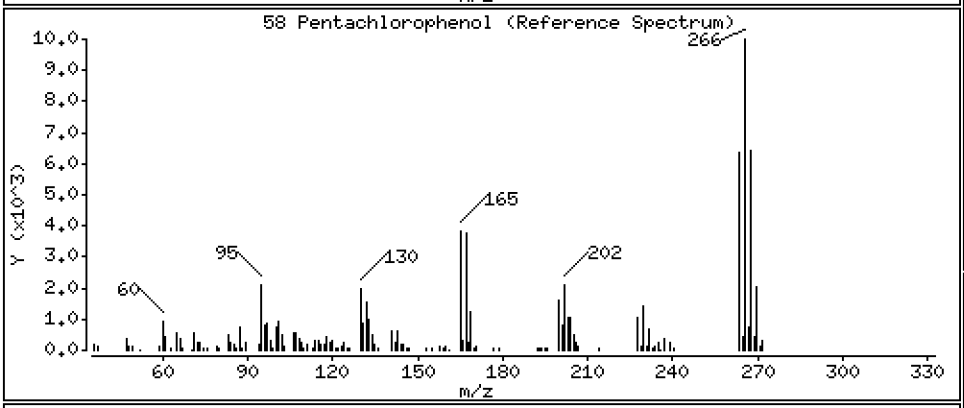
Concentration: 12.46 ug/mL

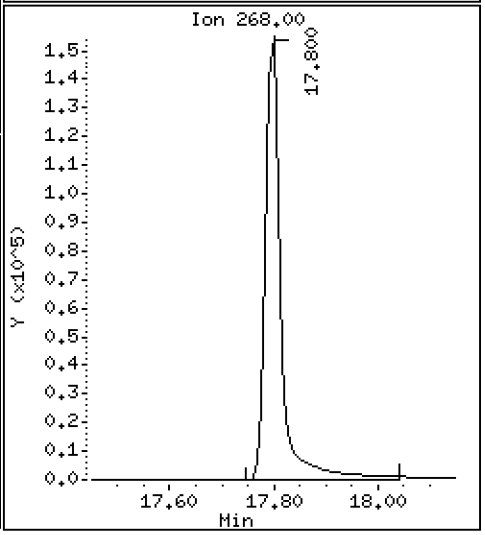


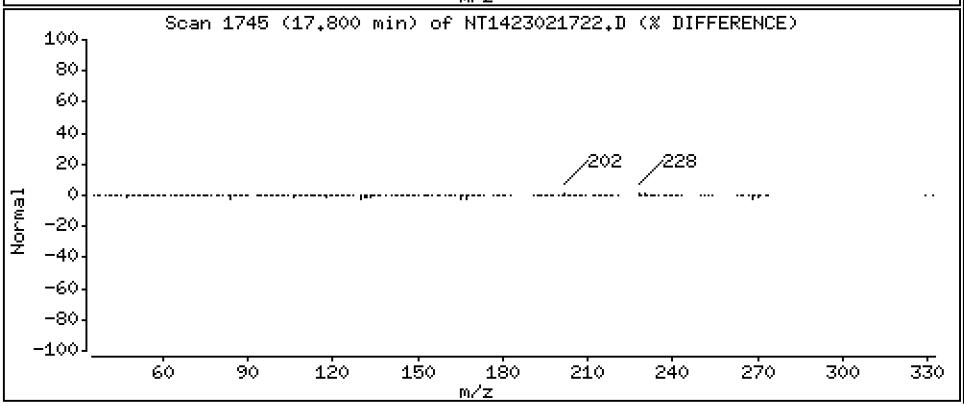












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

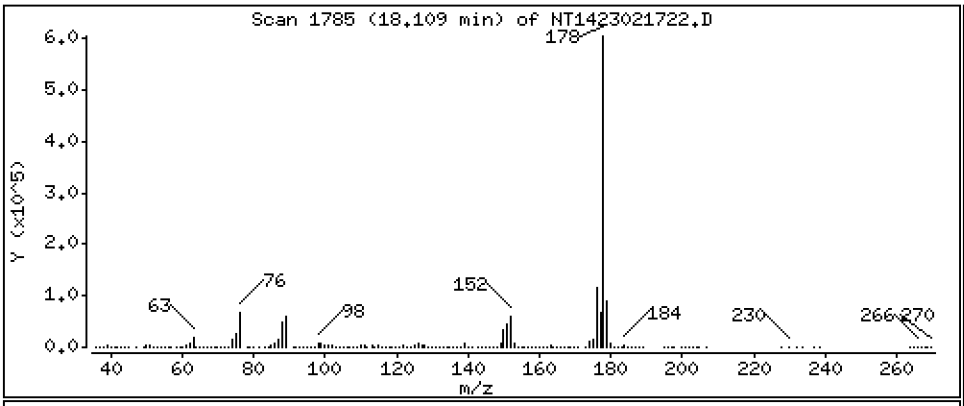
Operator: DSD

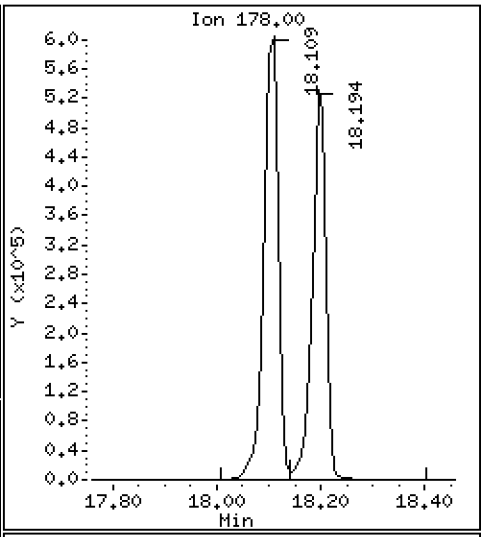
Column phase: ZB-5msi

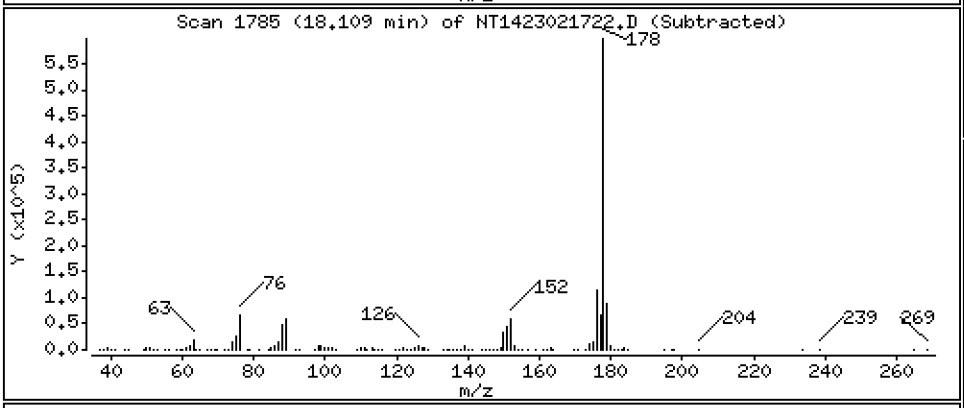
Column diameter: 0.25

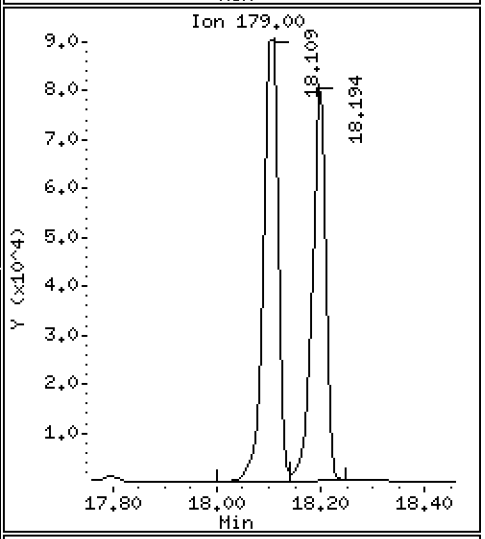
60 Phenanthrene

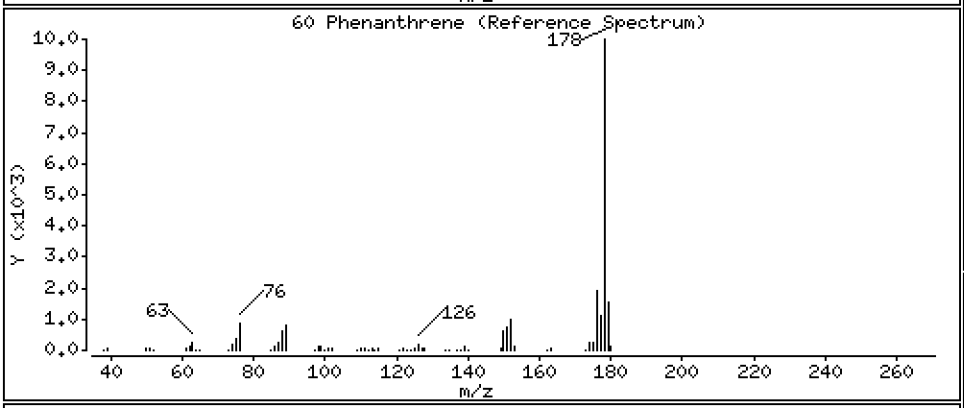
Concentration: 3.820 ug/mL

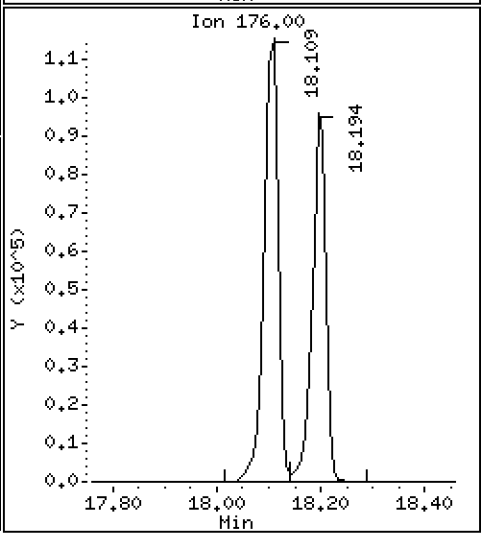


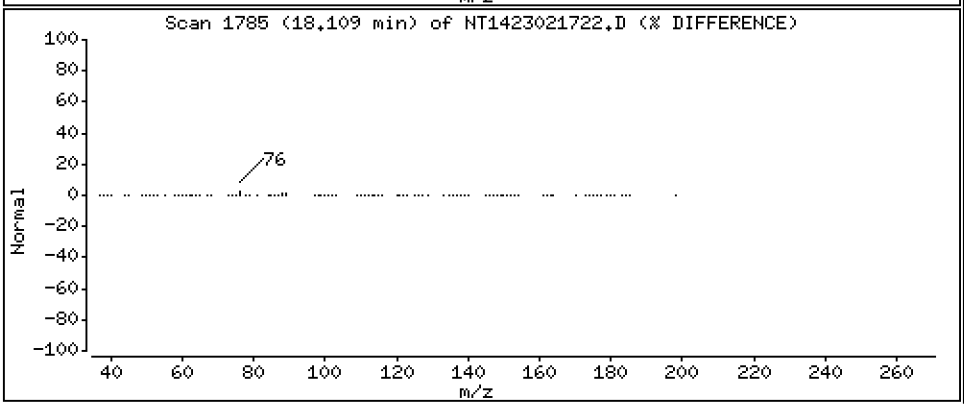












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021722.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

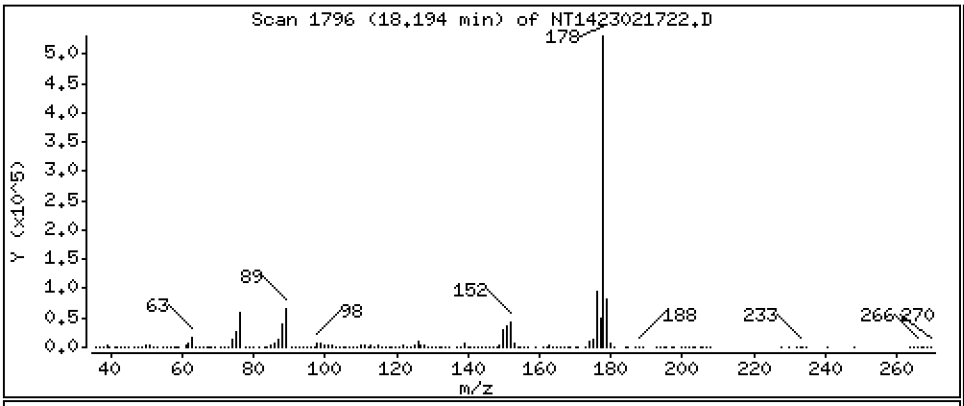
Operator: DSD

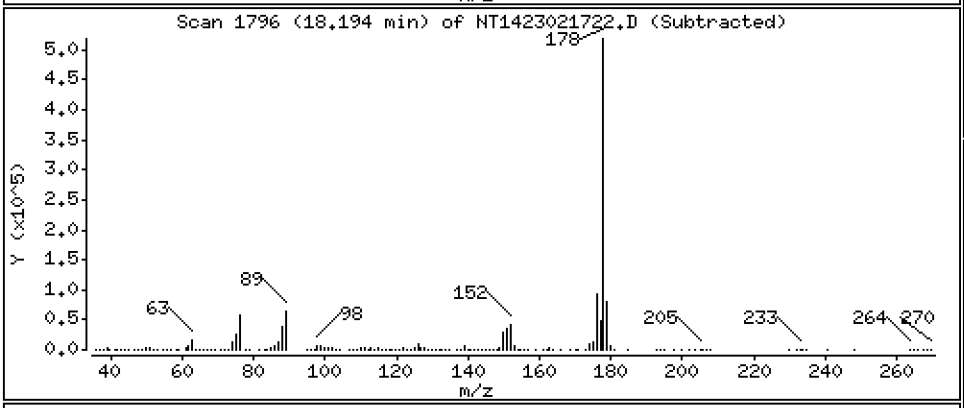
Column phase: ZB-5msi

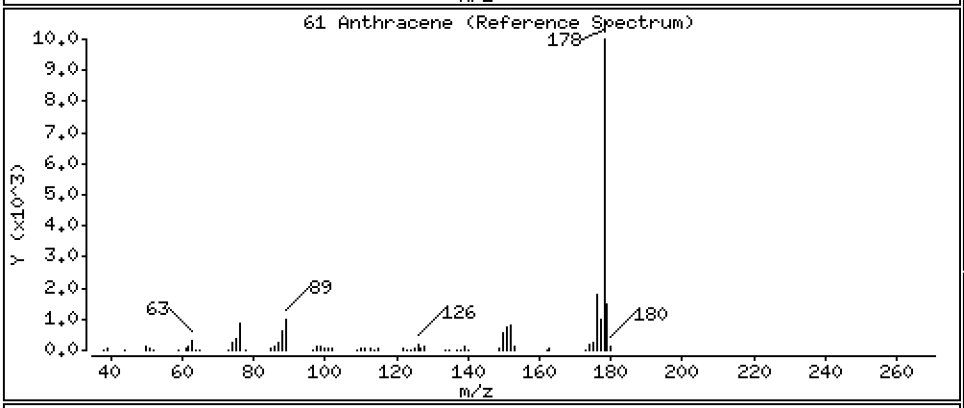
Column diameter: 0.25

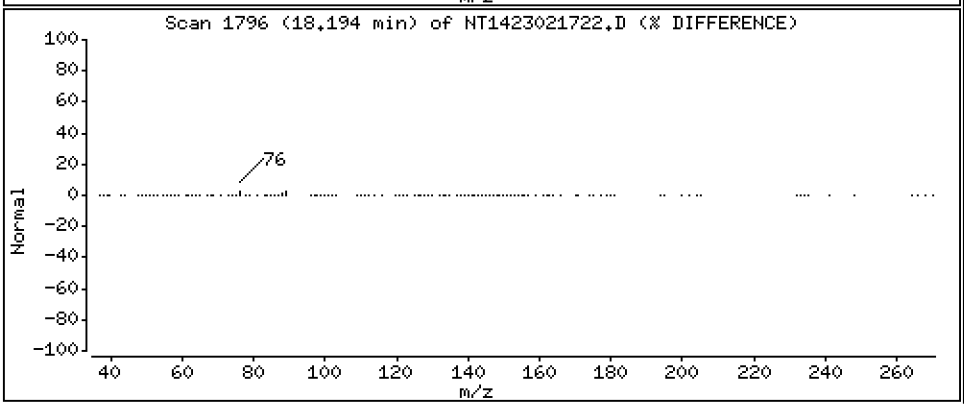
61 Anthracene

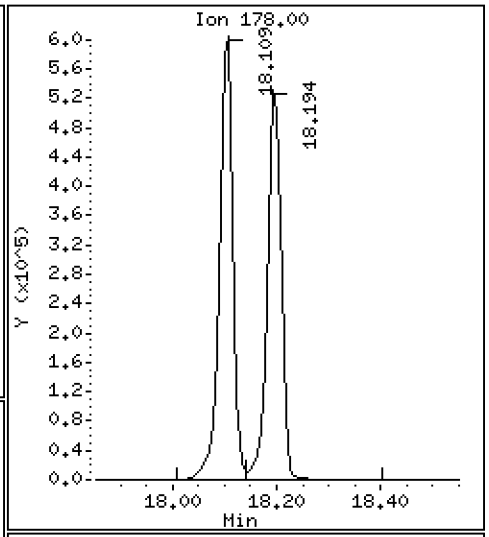
Concentration: 3.319 ug/mL

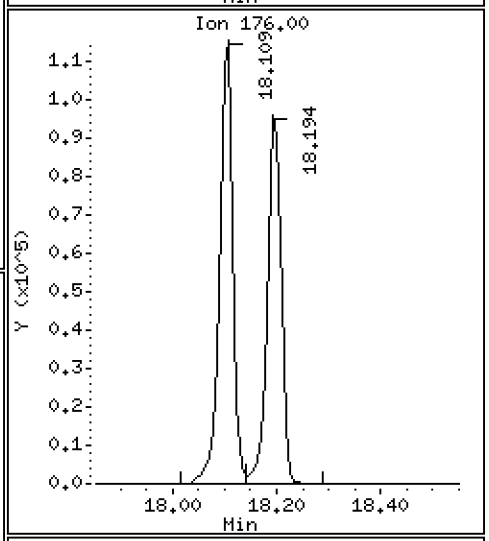


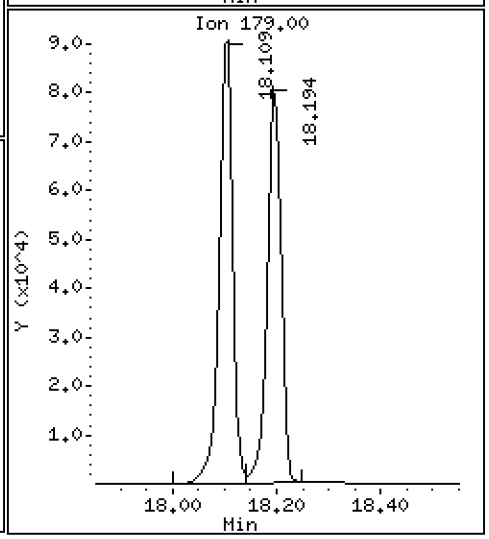












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

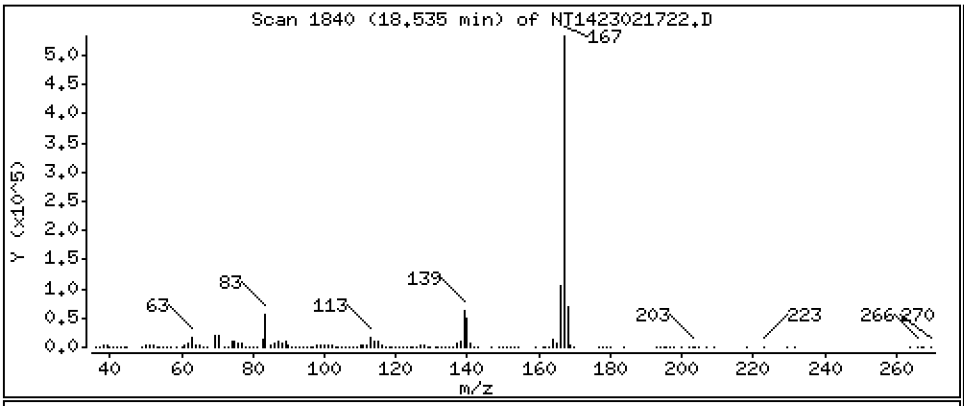
Operator: DSD

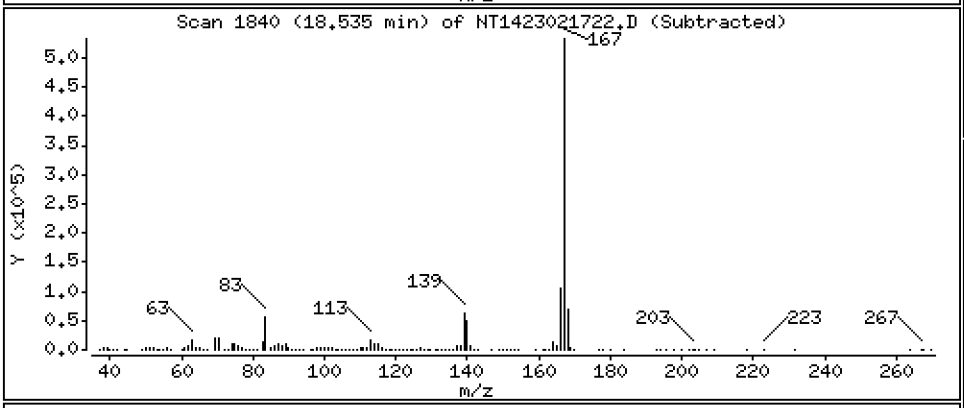
Column phase: ZB-5msi

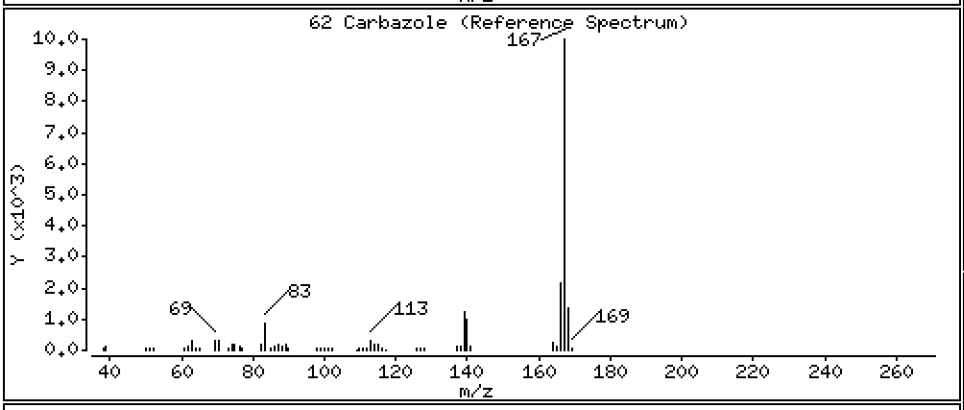
Column diameter: 0.25

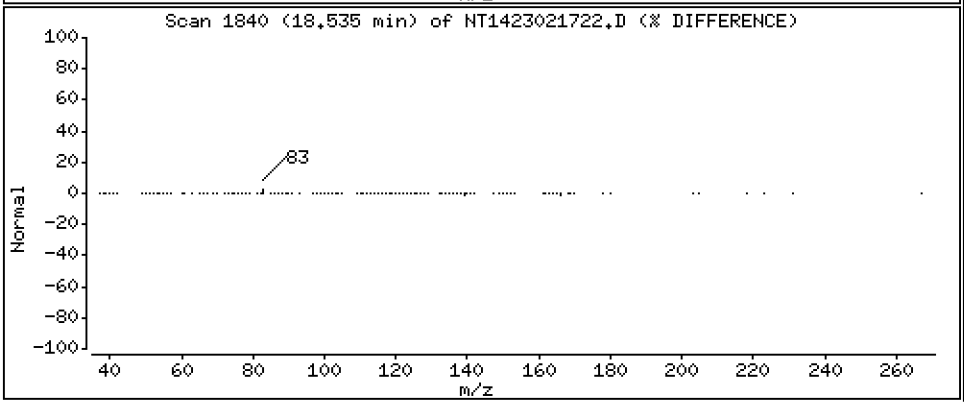
62 Carbazole

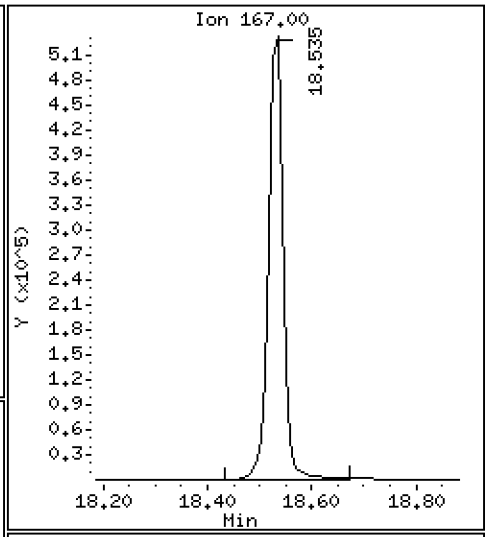
Concentration: 3.794 ug/mL

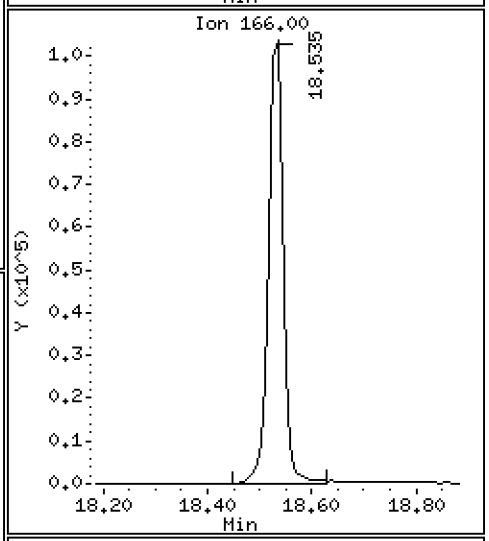


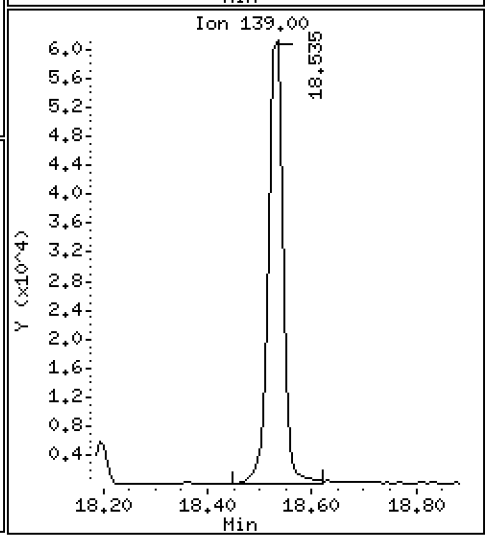












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021722.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

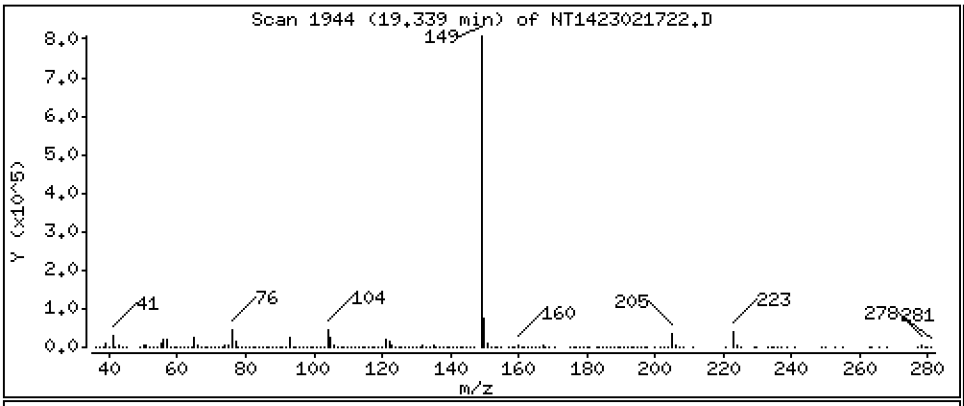
Operator: DSD

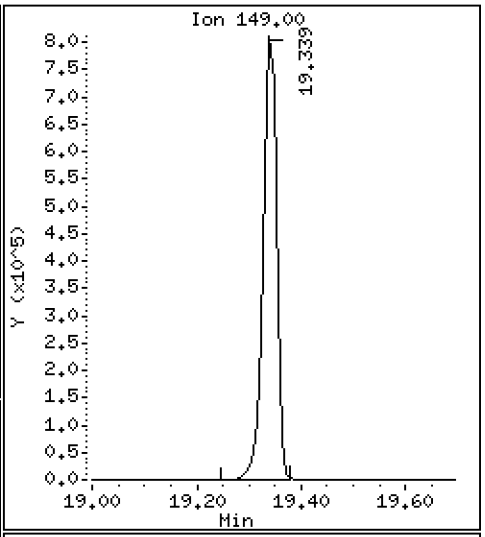
Column phase: ZB-5msi

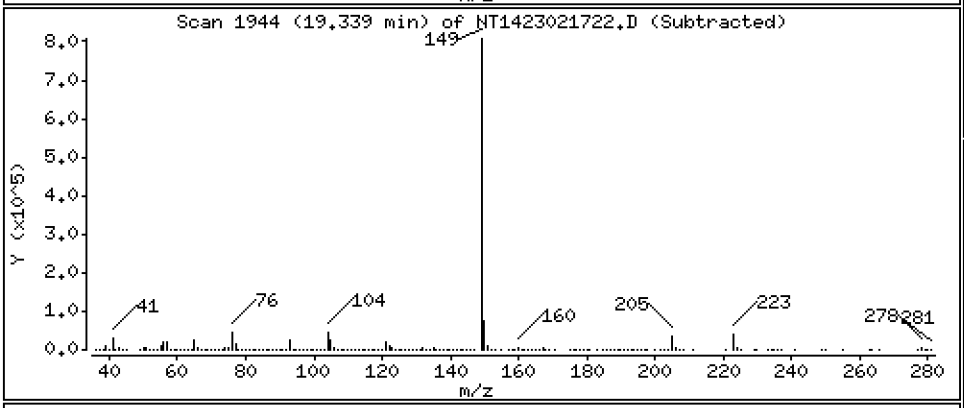
Column diameter: 0.25

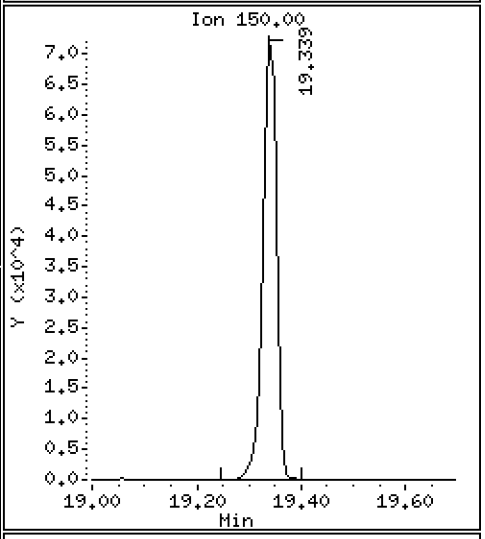
63 Di-n-butylphthalate

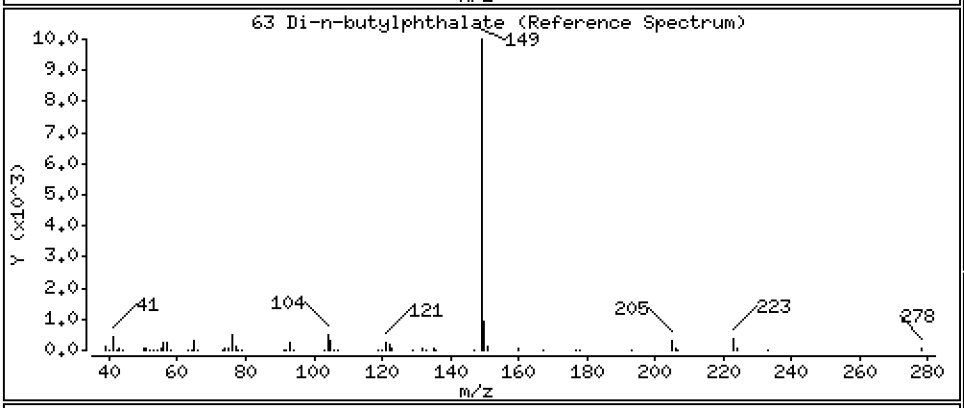
Concentration: 4.712 ug/mL

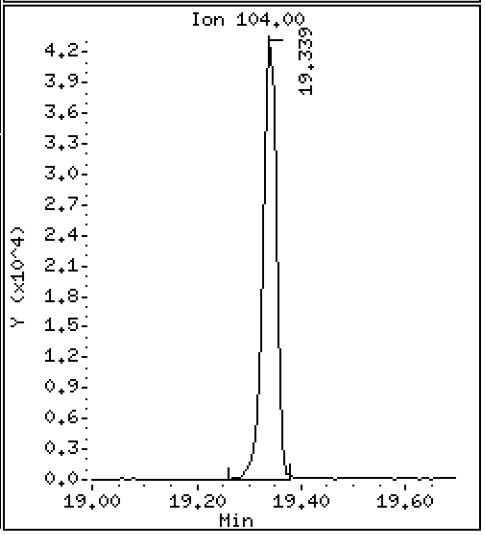


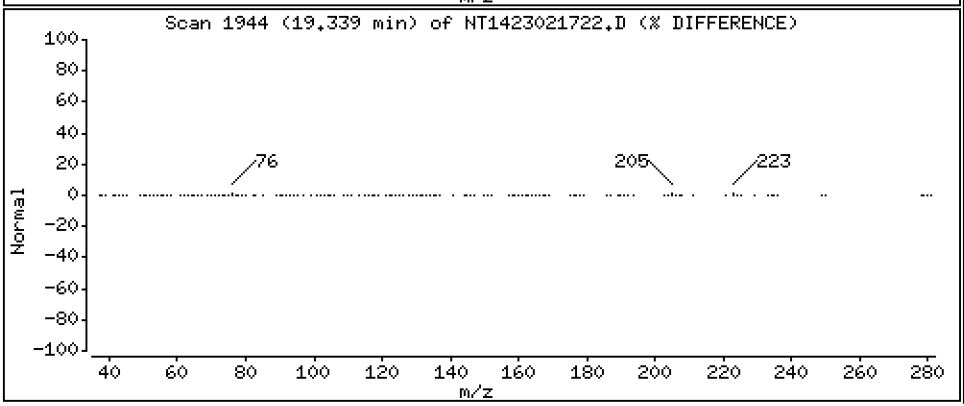












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

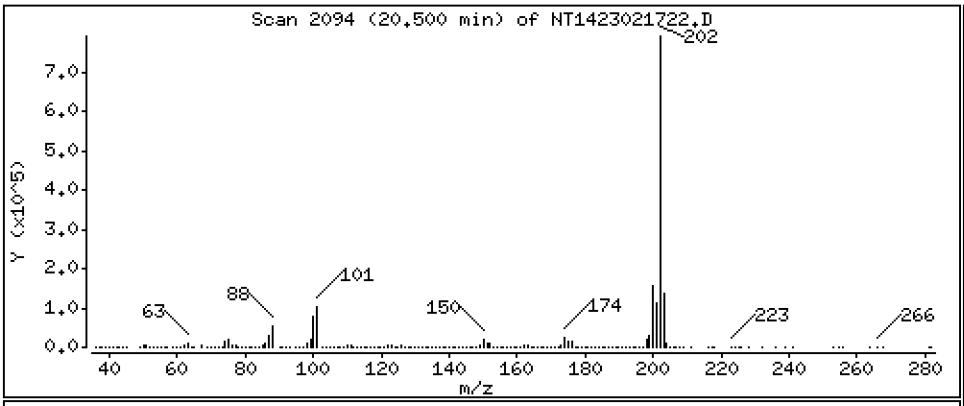
Operator: DSD

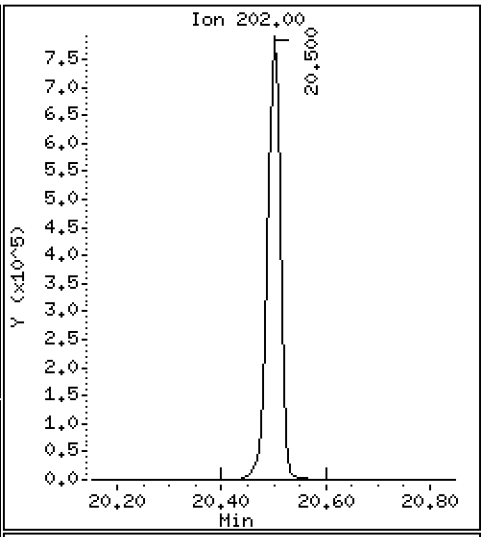
Column phase: ZB-5msi

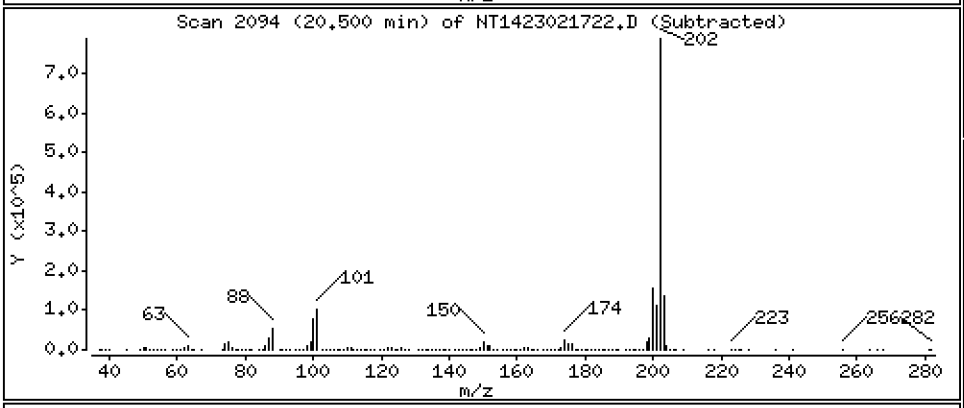
Column diameter: 0.25

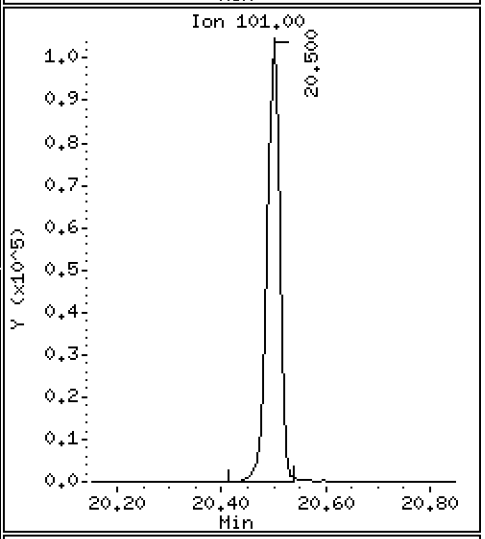
64 Fluoranthene

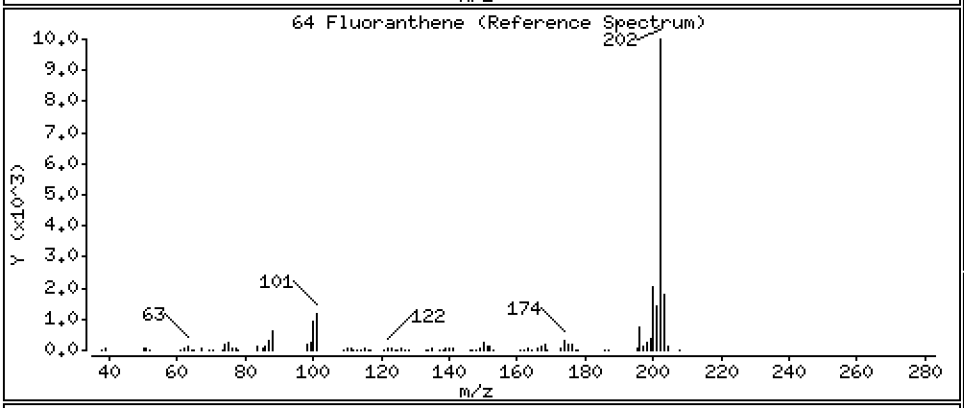
Concentration: 4.854 ug/mL

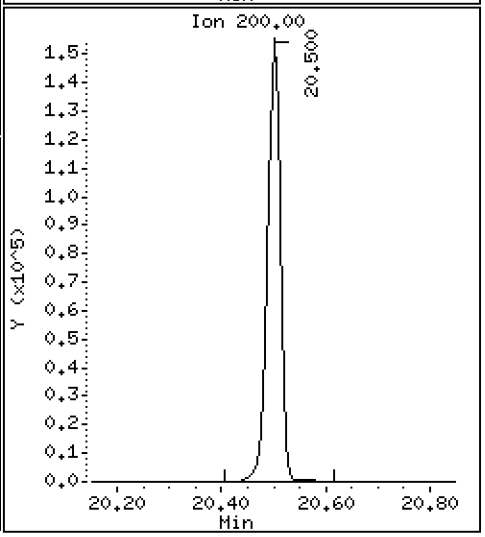


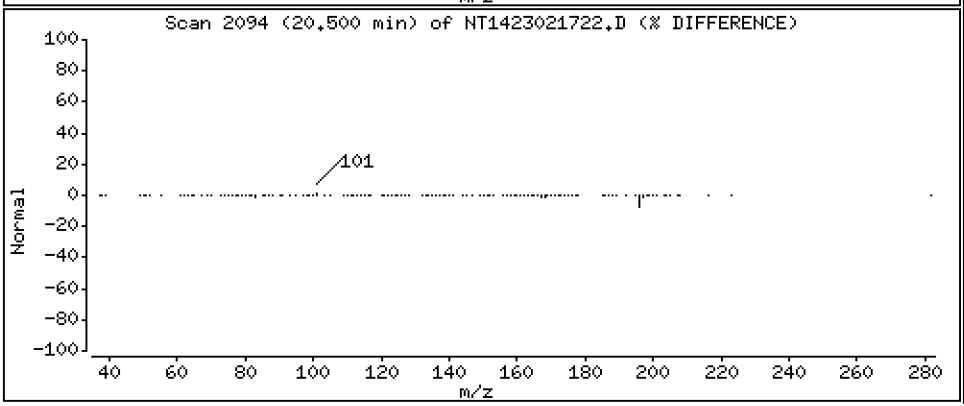












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

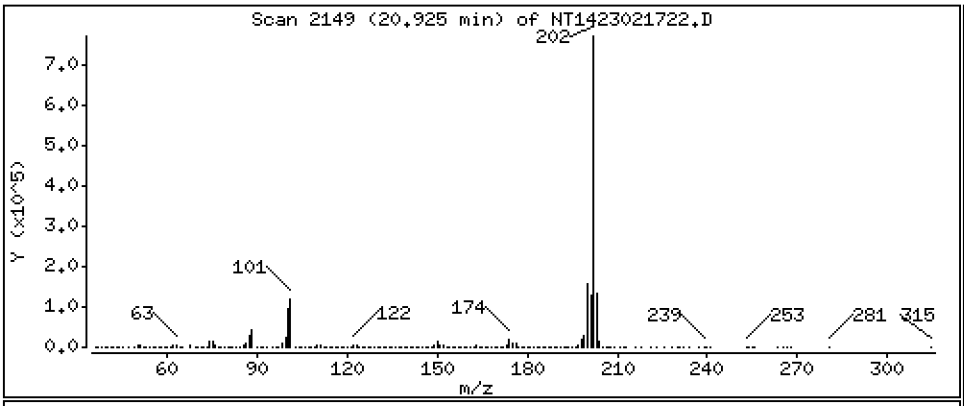
Operator: DSD

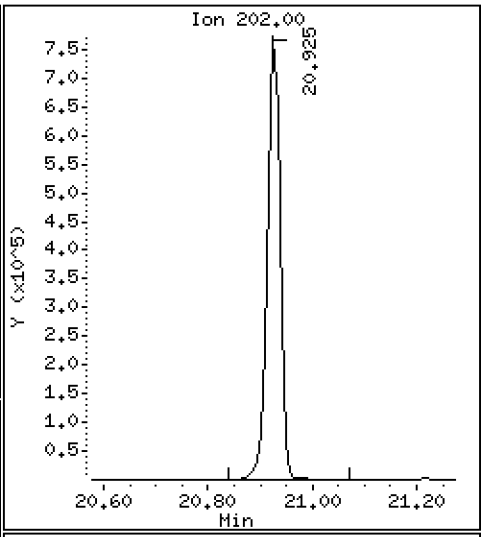
Column phase: ZB-5msi

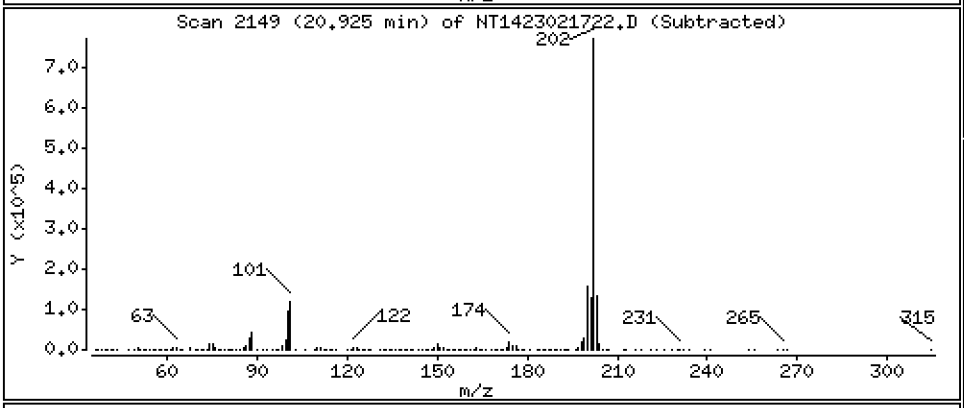
Column diameter: 0.25

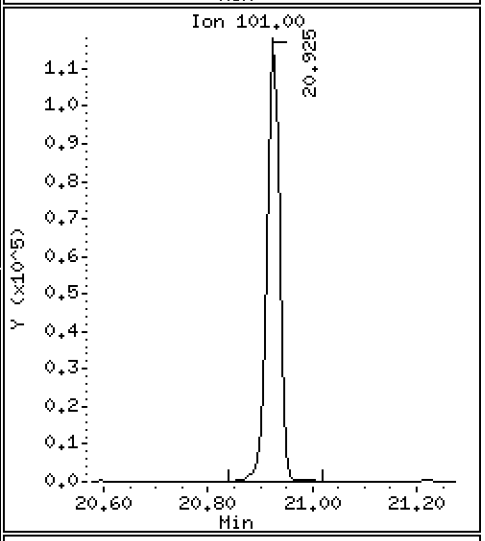
65 Pyrene

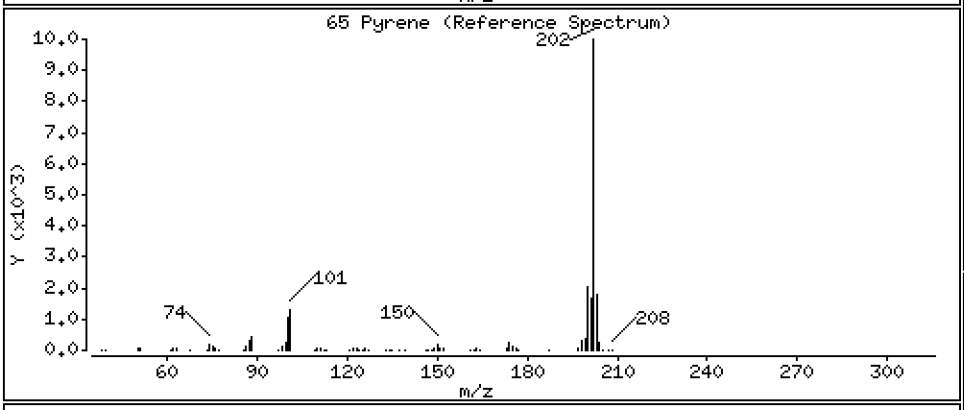
Concentration: 4.683 ug/mL

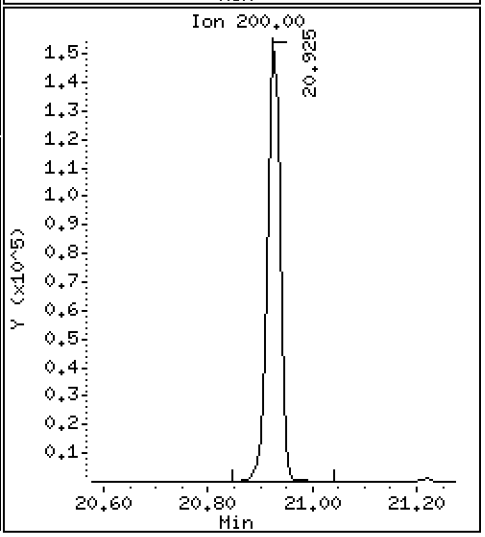


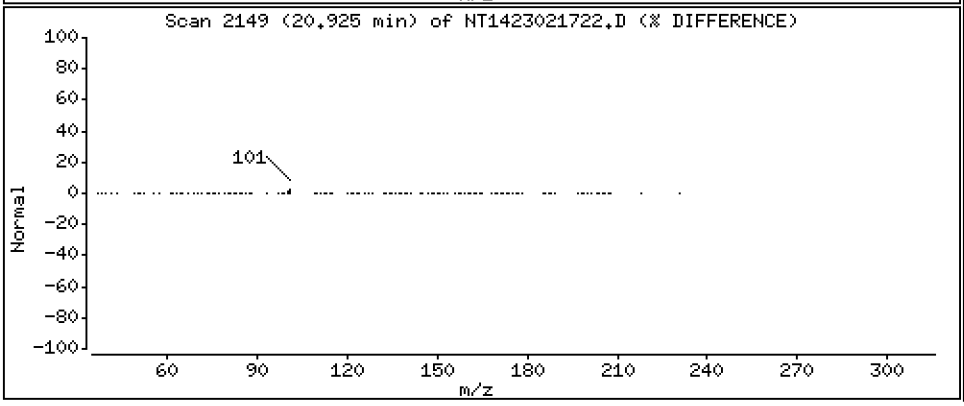












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

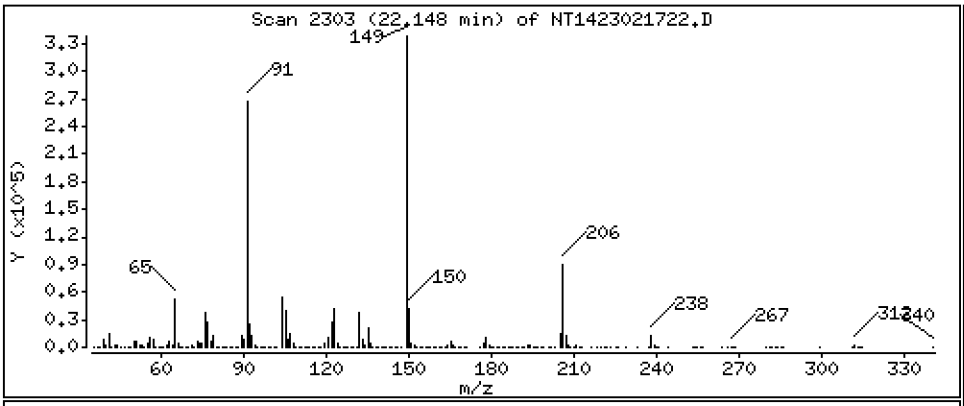
Operator: DSD

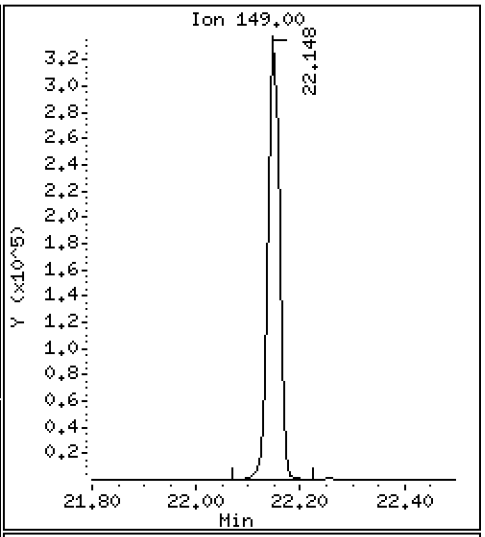
Column phase: ZB-5msi

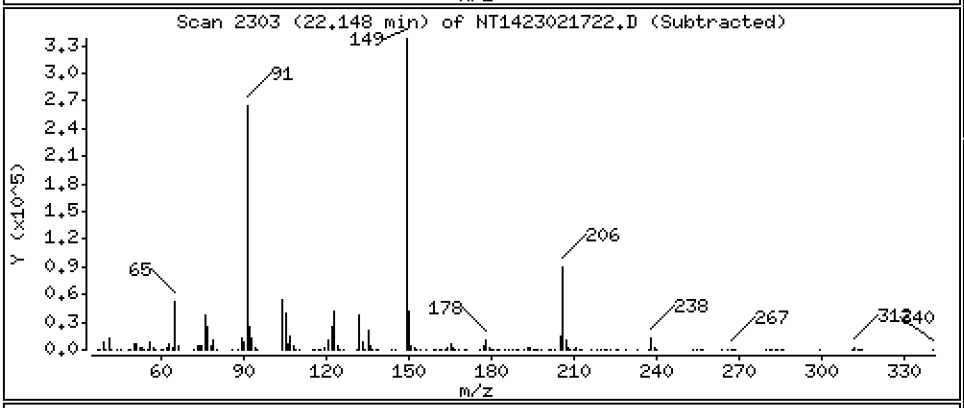
Column diameter: 0.25

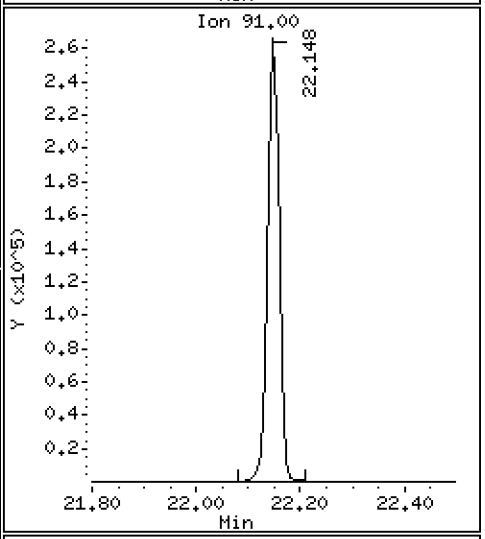
67 Butylbenzylphthalate

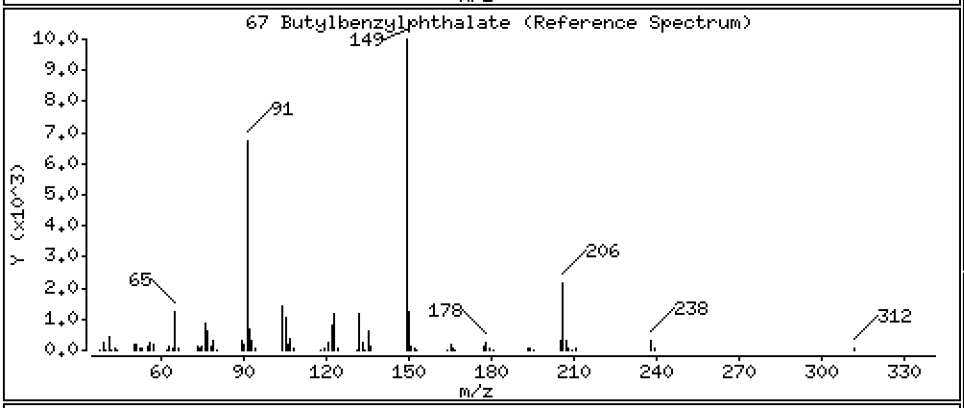
Concentration: 5.132 ug/mL

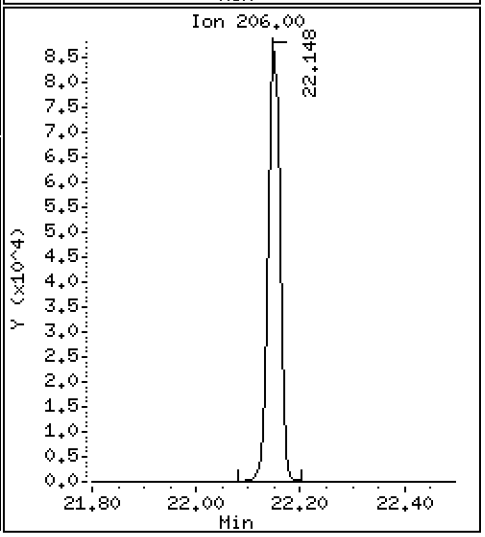


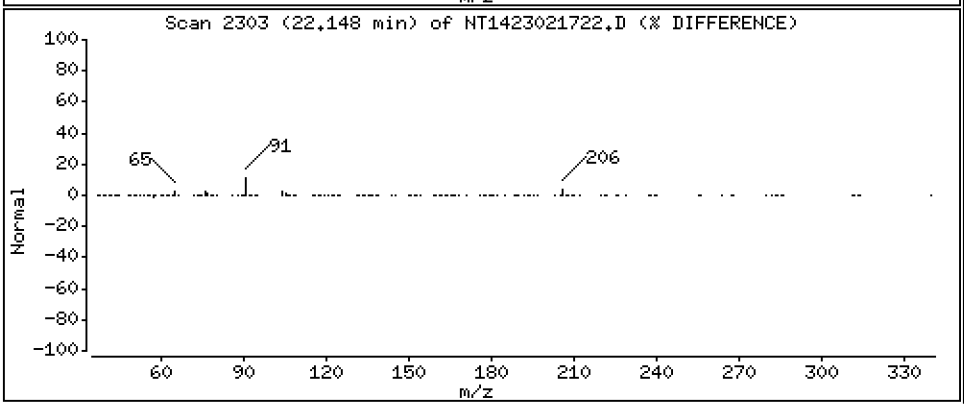












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

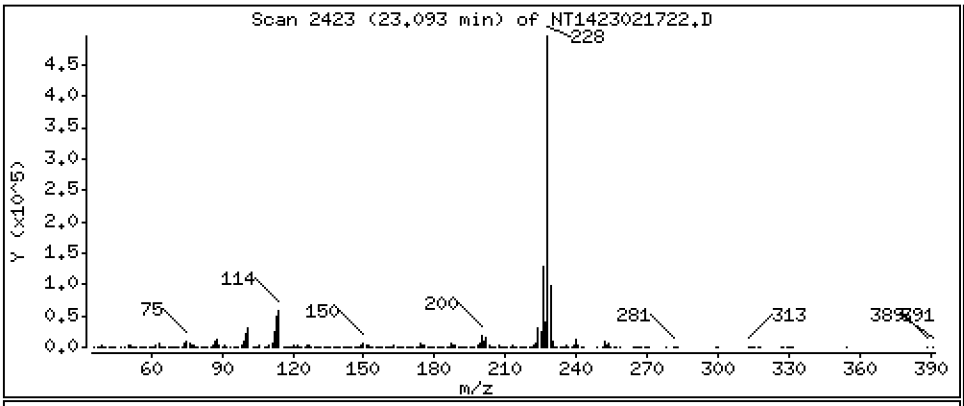
Operator: DSD

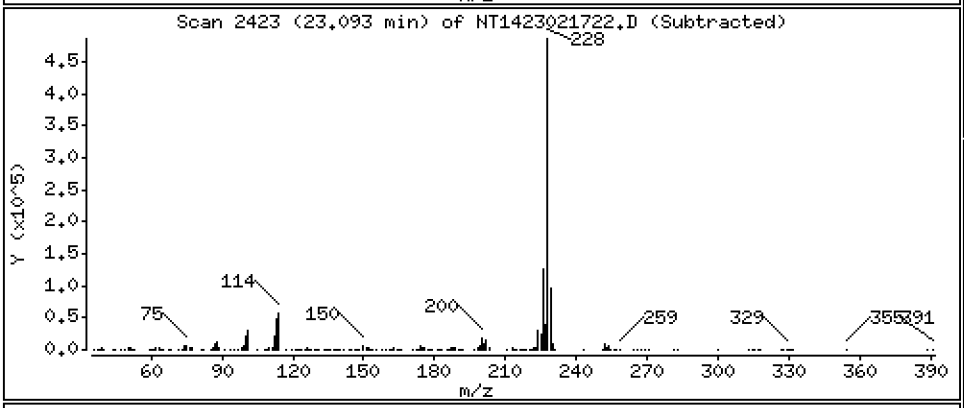
Column phase: ZB-5msi

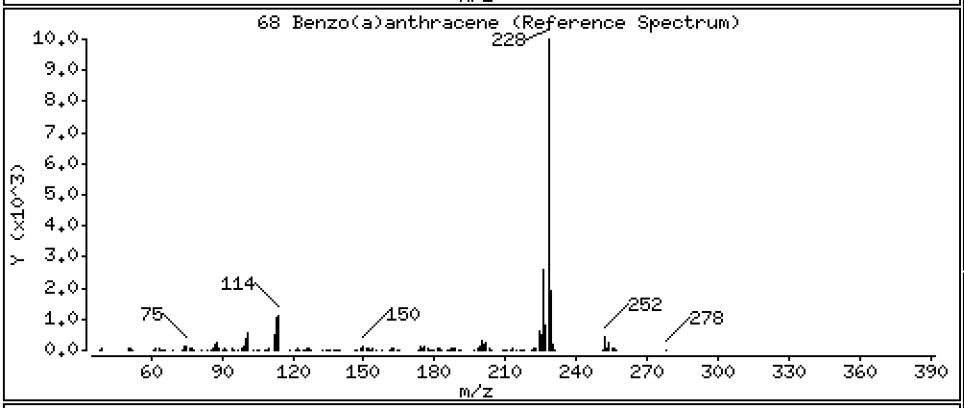
Column diameter: 0.25

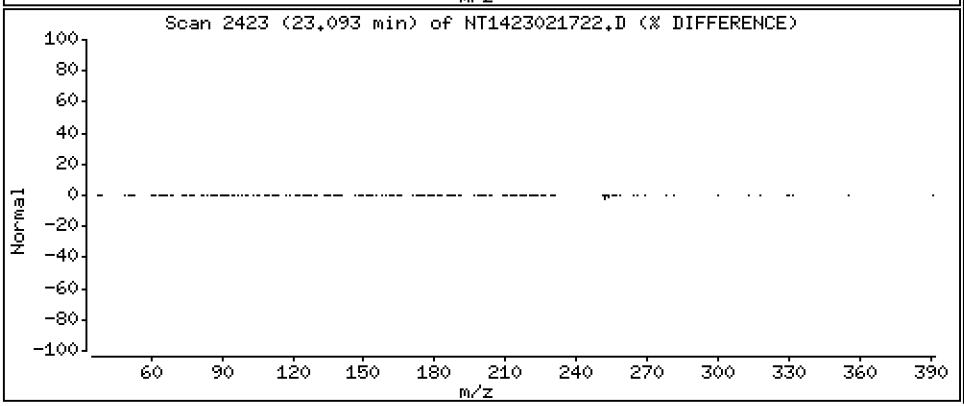
68 Benzo(a)anthracene

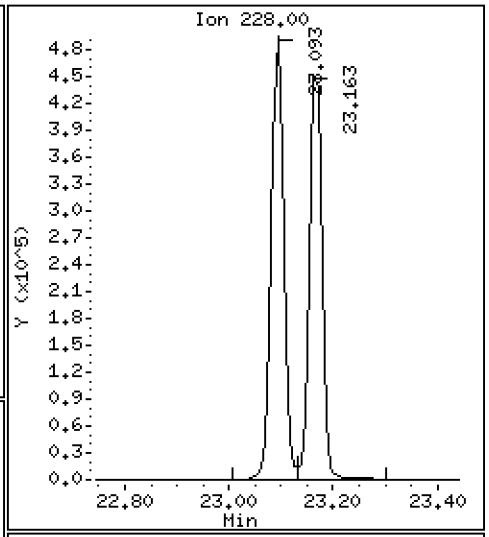
Concentration: 3.948 ug/mL

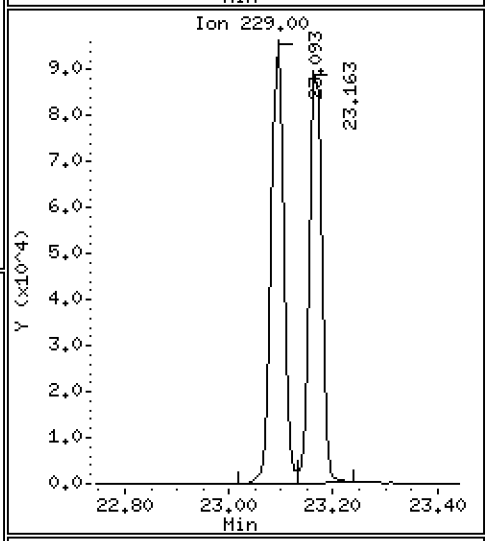


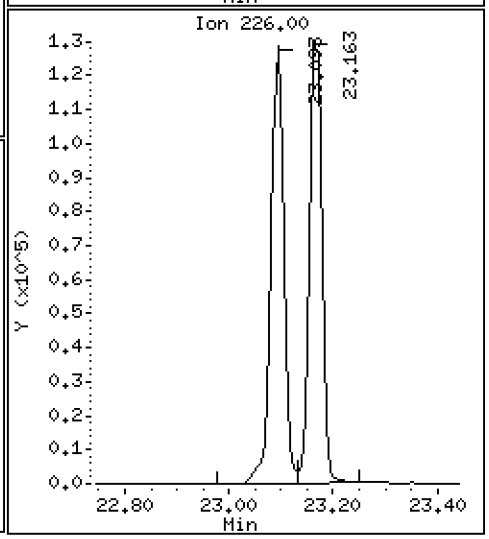












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

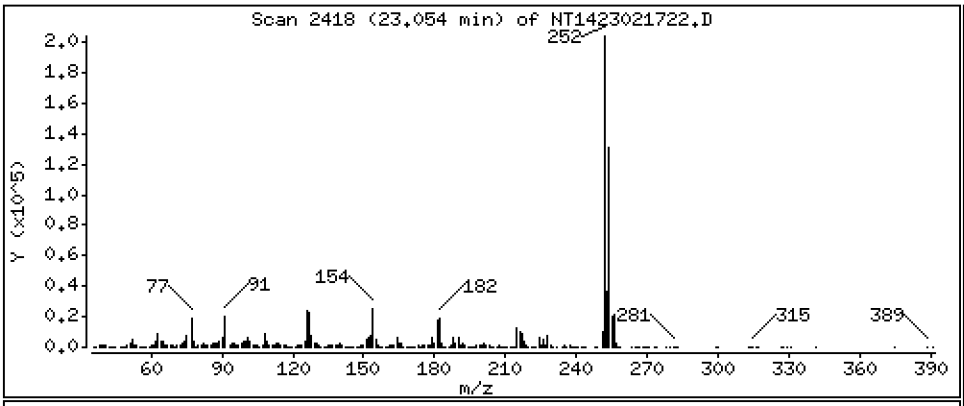
Operator: DSD

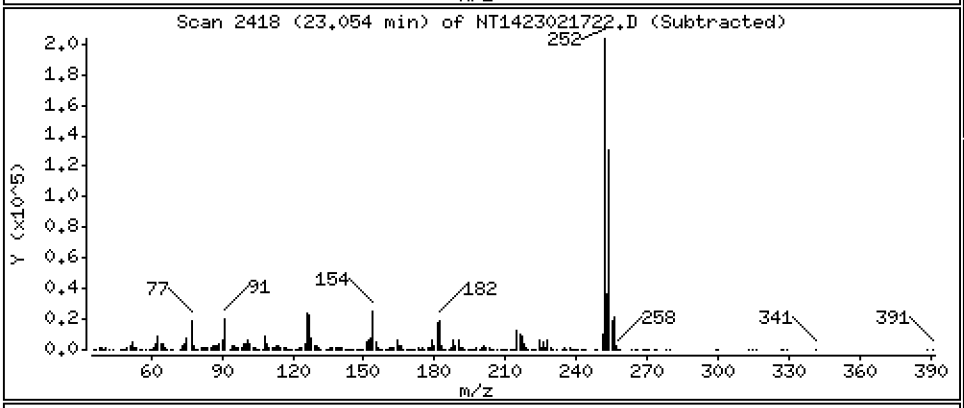
Column phase: ZB-5msi

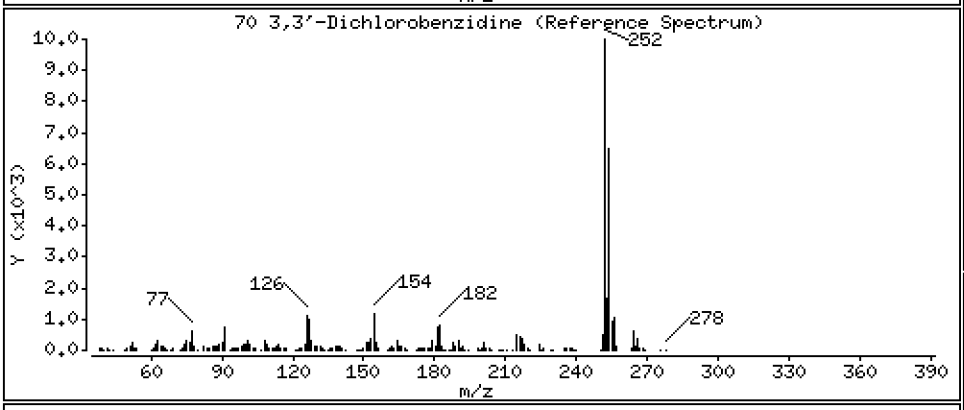
Column diameter: 0.25

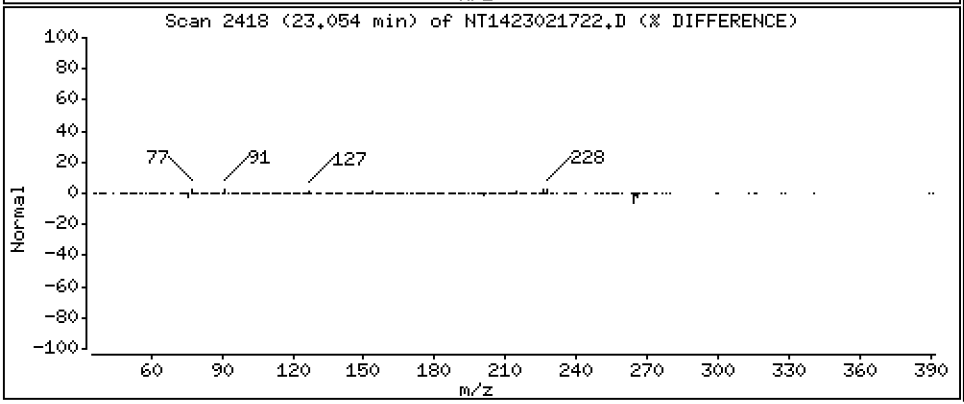
70 3,3'-Dichlorobenzidine

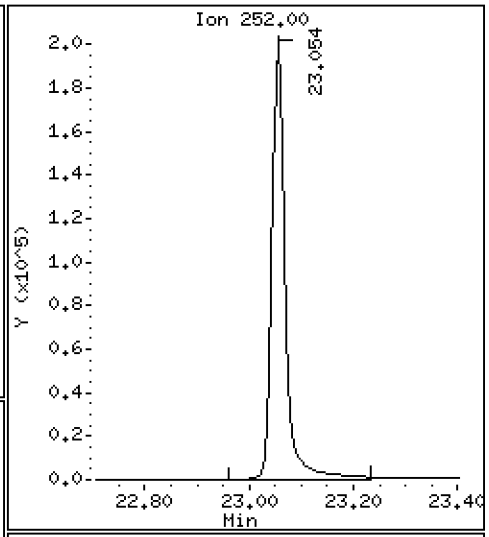
Concentration: 5.601 ug/mL

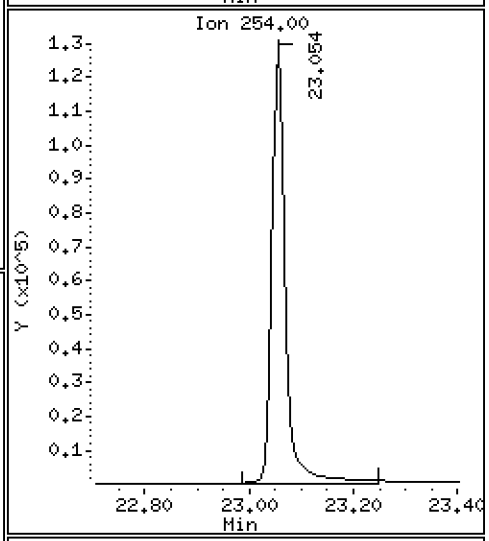


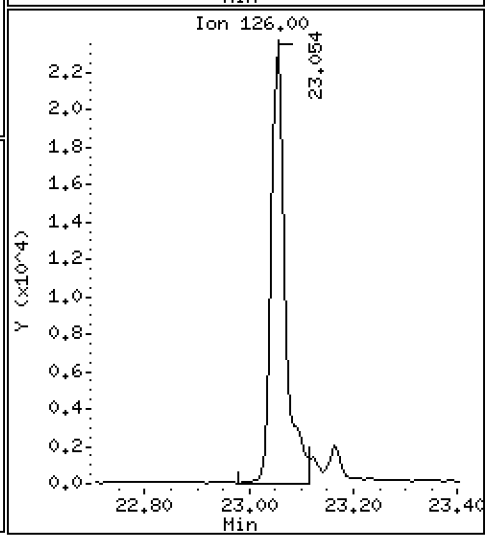












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

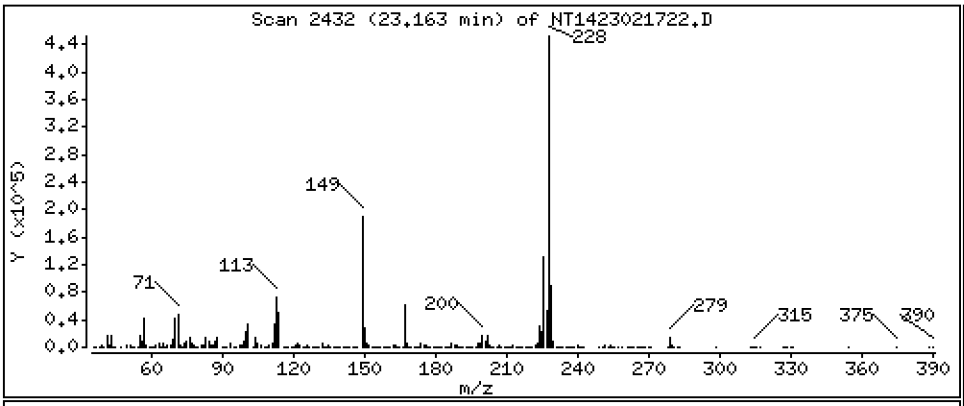
Operator: DSD

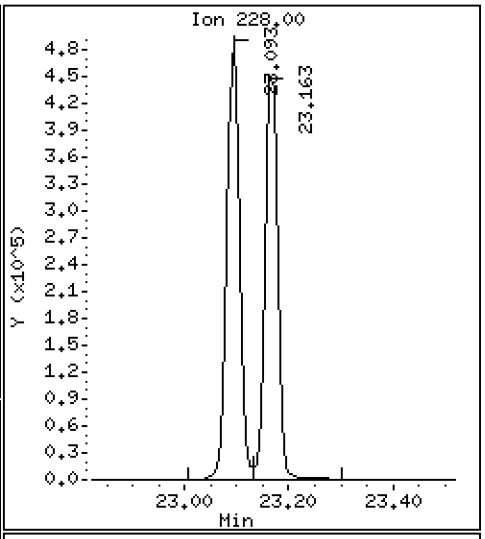
Column phase: ZB-5msi

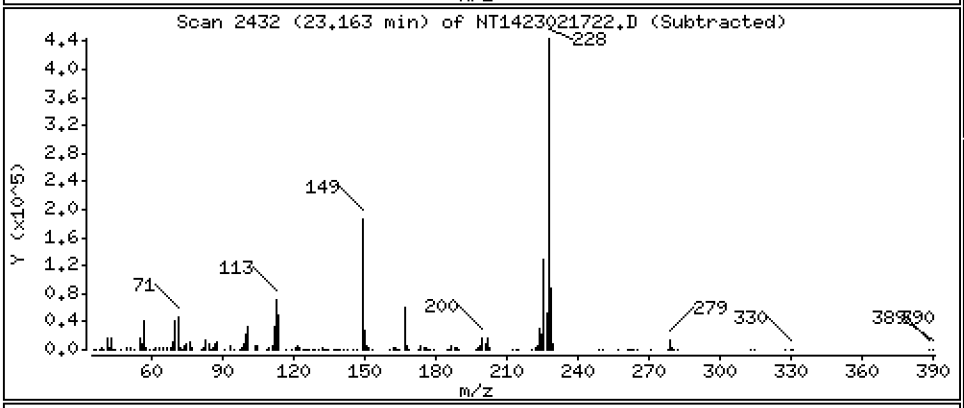
Column diameter: 0.25

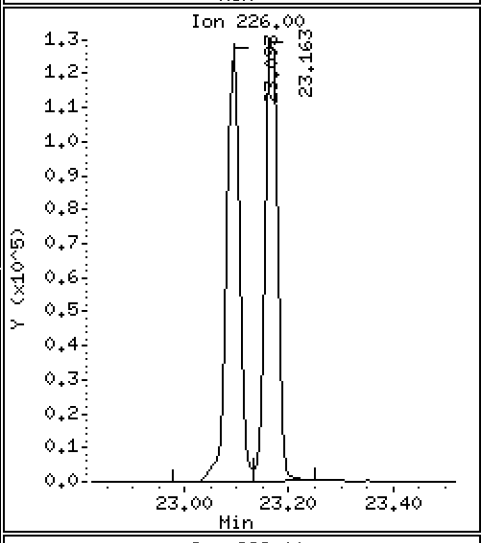
71 Chrysene

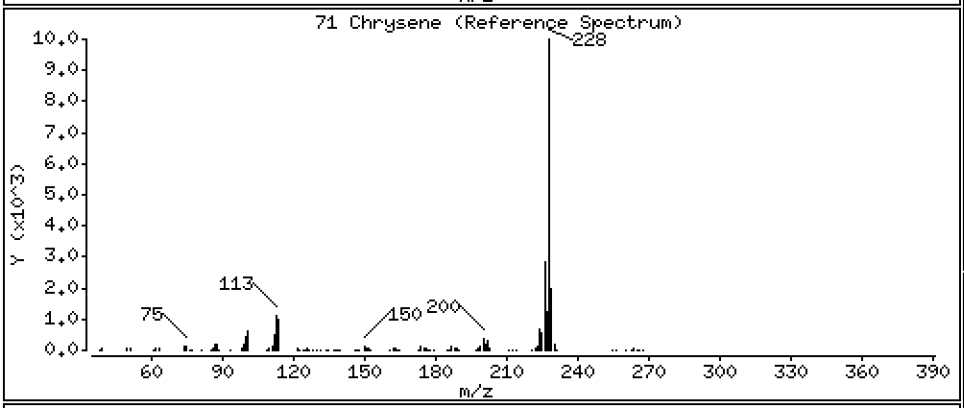
Concentration: 3.990 ug/mL

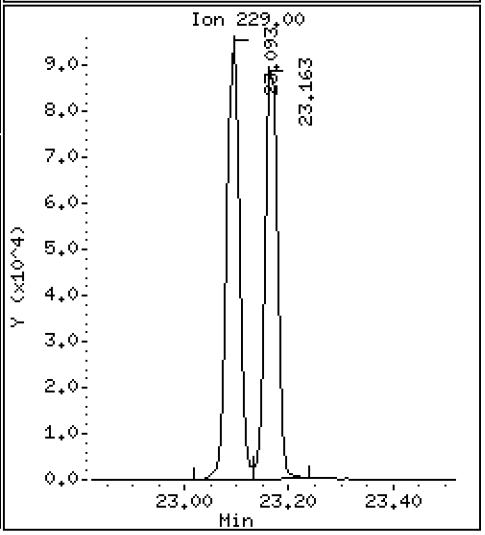


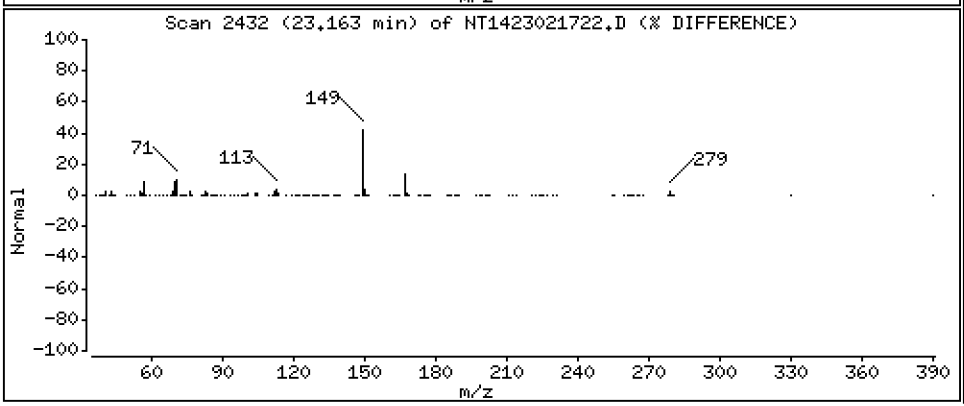












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021722.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

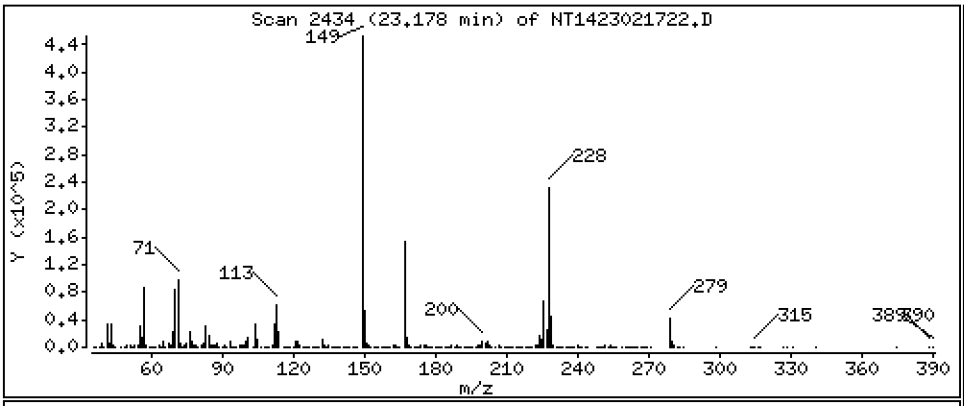
Operator: DSD

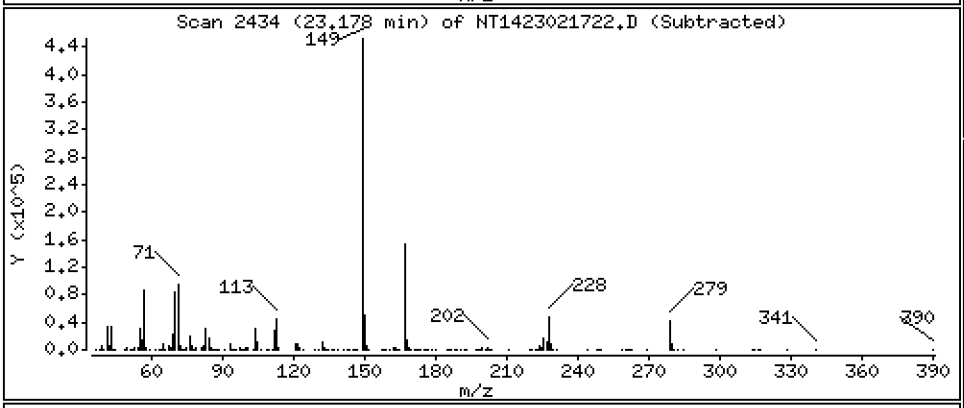
Column phase: ZB-5msi

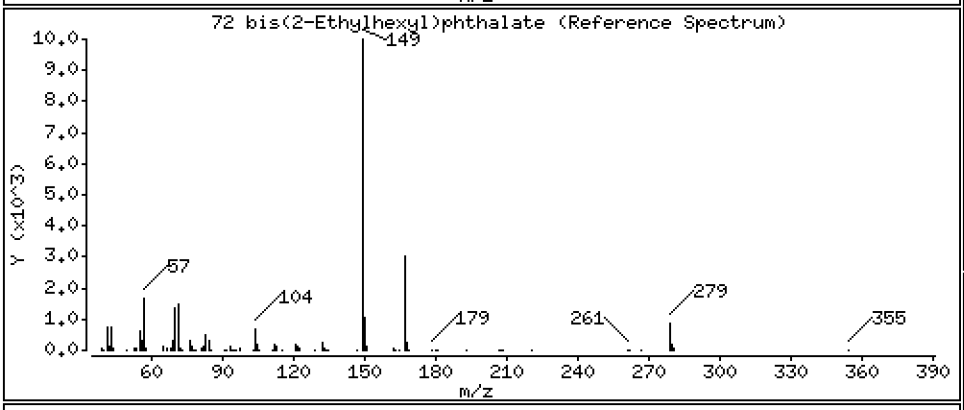
Column diameter: 0.25

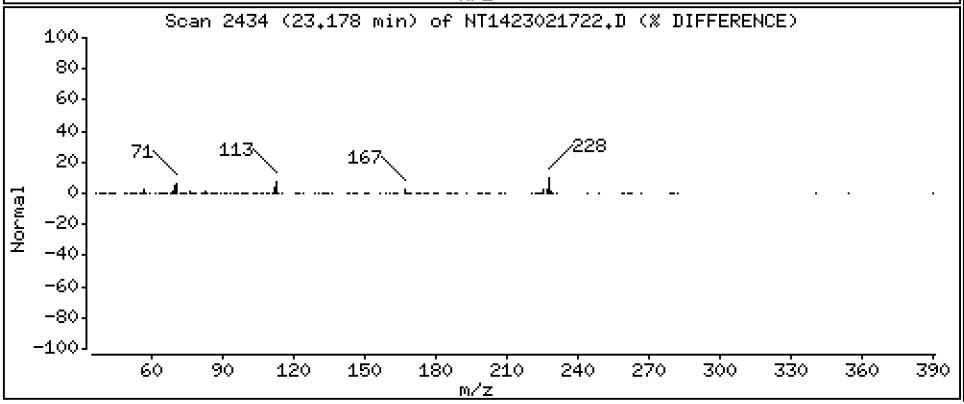
72 bis(2-Ethylhexyl)phthalate

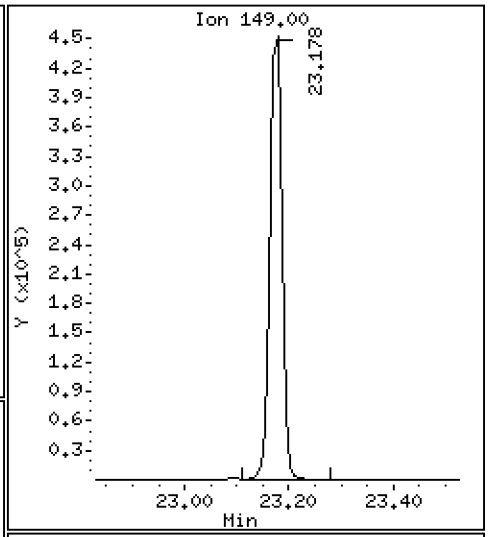
Concentration: 3.781 ug/mL

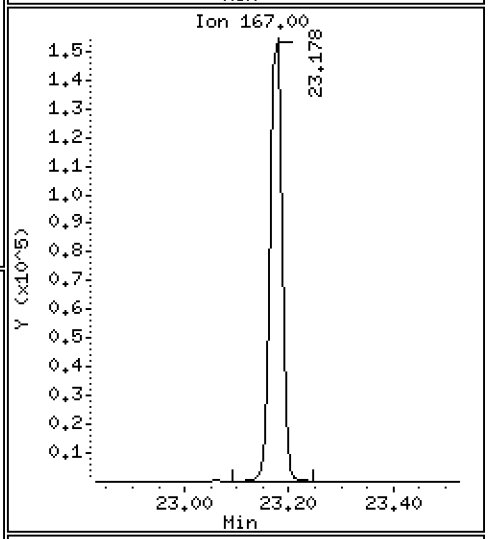


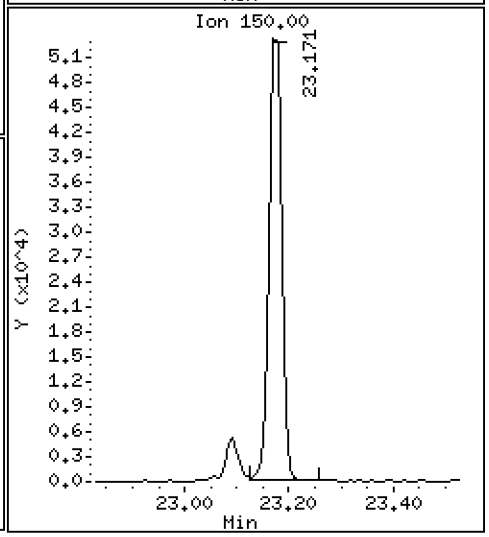












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

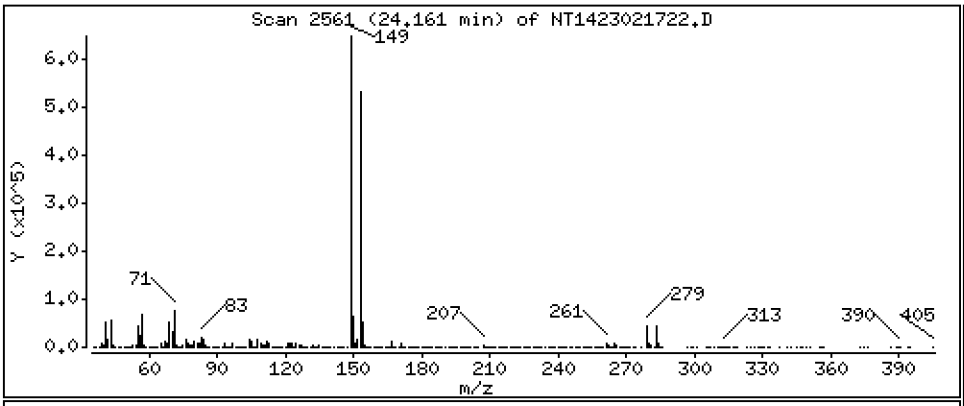
Operator: DSD

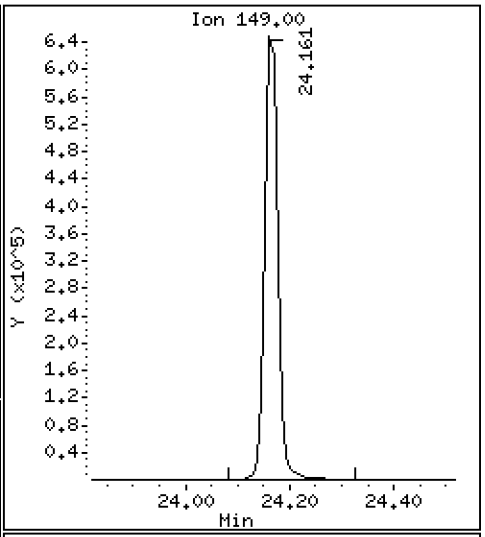
Column phase: ZB-5msi

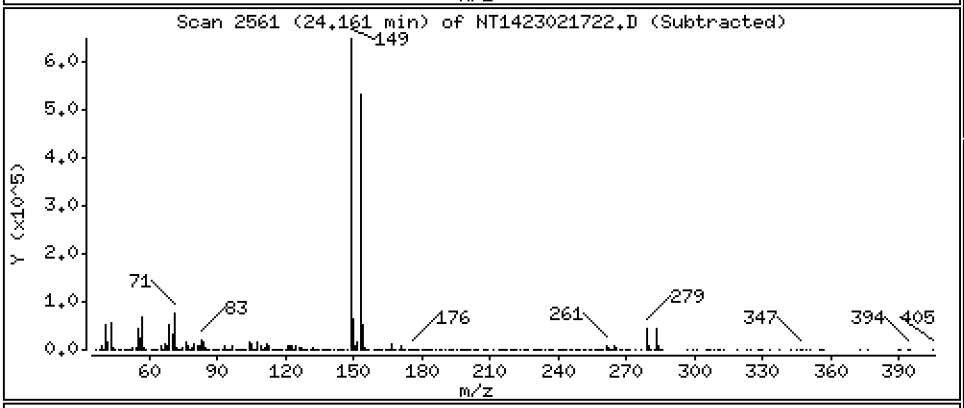
Column diameter: 0.25

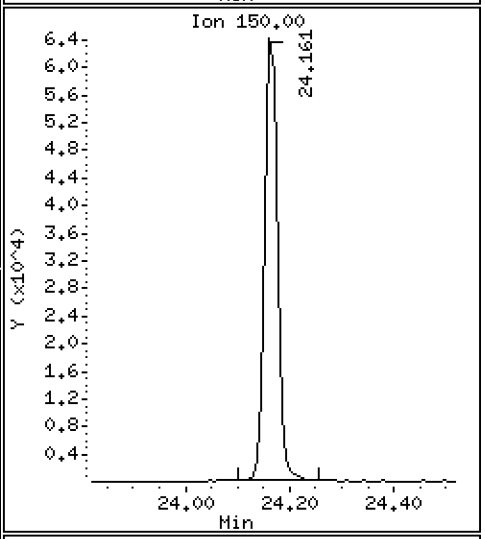
73 Di-n-octylphthalate

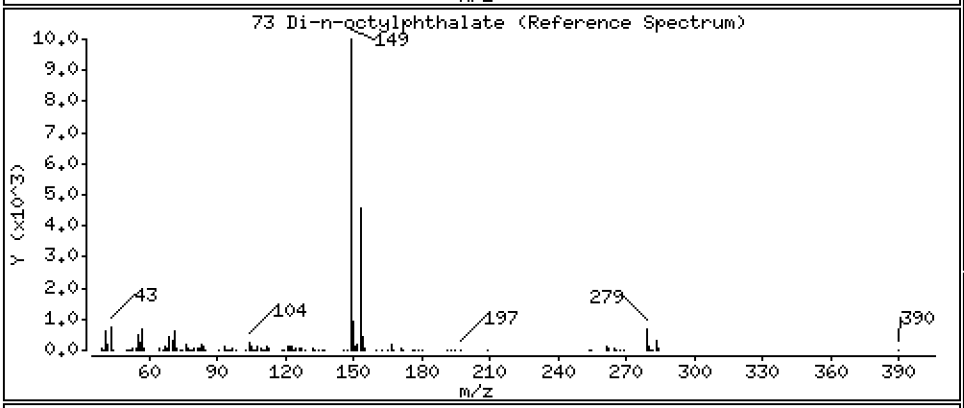
Concentration: 4.241 ug/mL

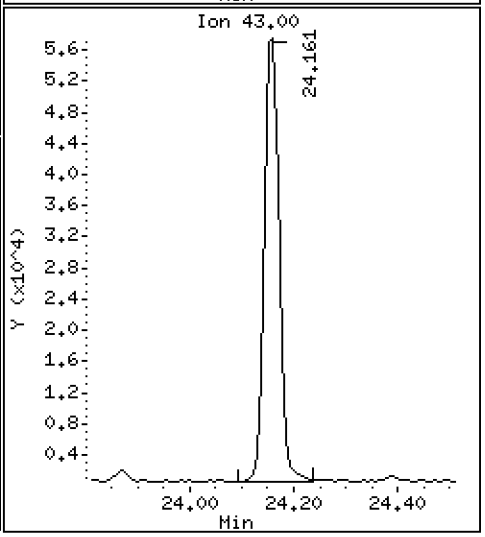


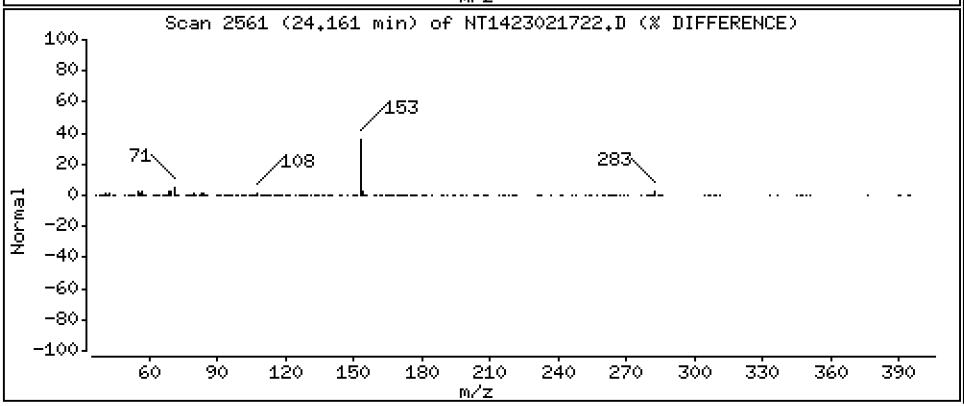












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

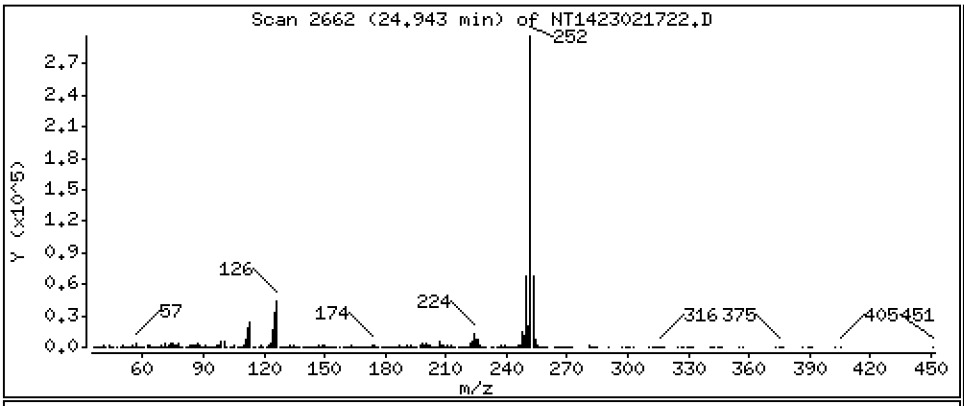
Operator: DSD

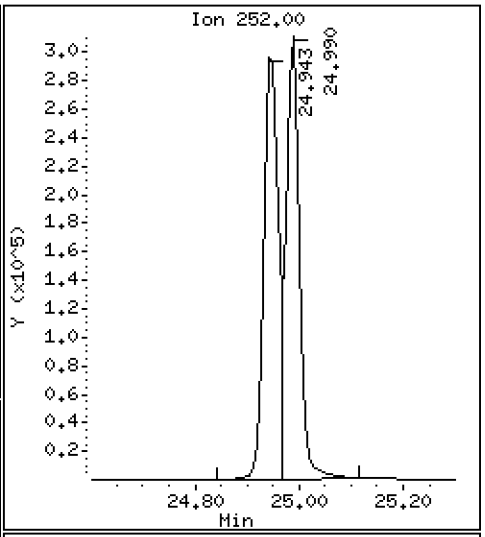
Column phase: ZB-5msi

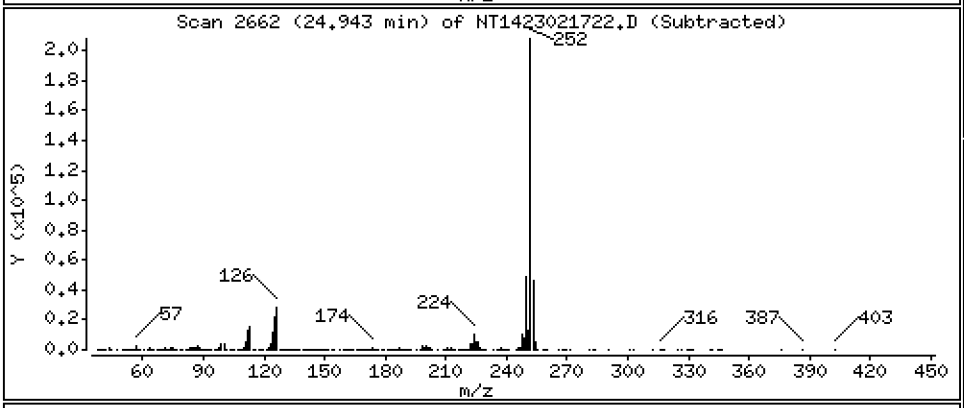
Column diameter: 0.25

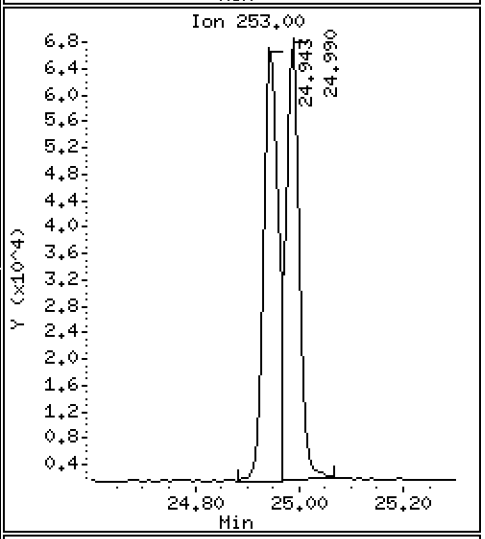
74 Benzo(b)fluoranthene

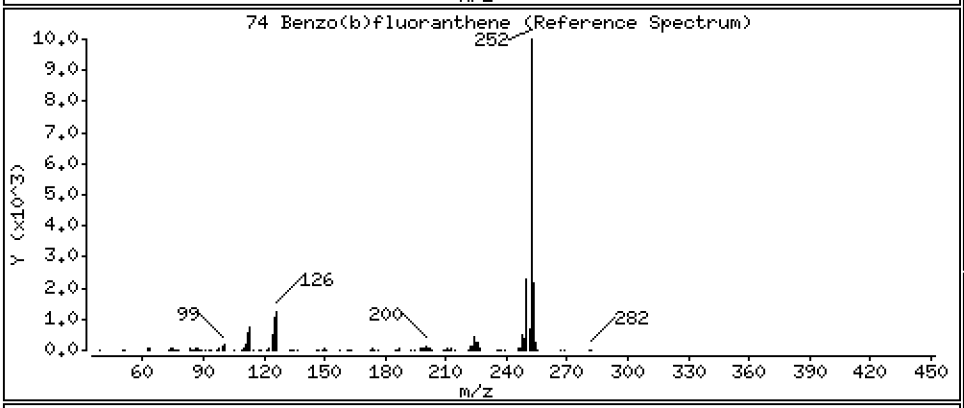
Concentration: 4.045 ug/mL

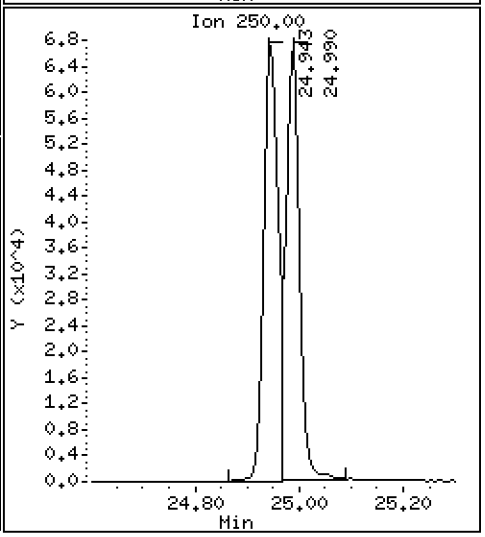


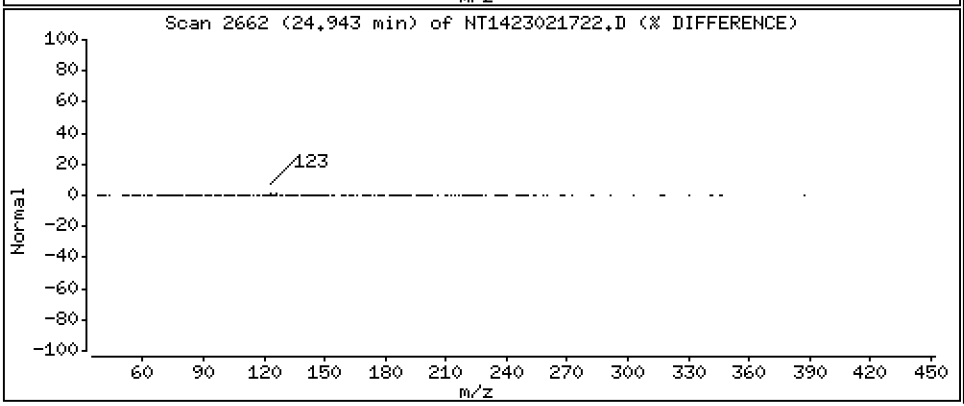












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

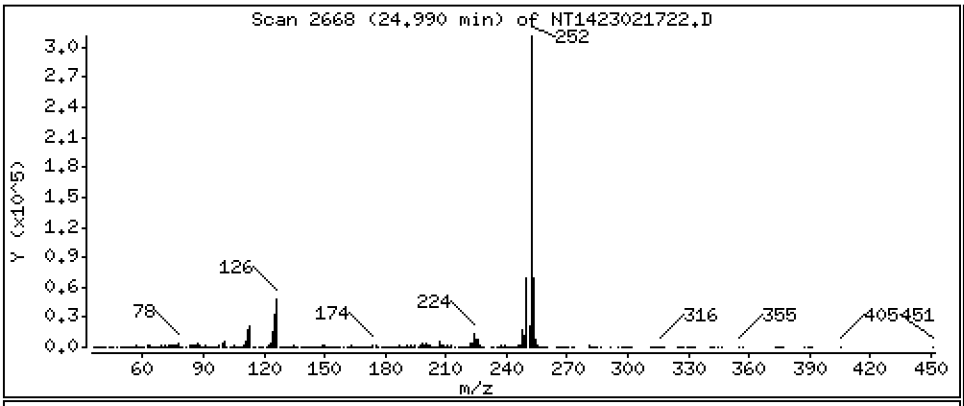
Operator: DSD

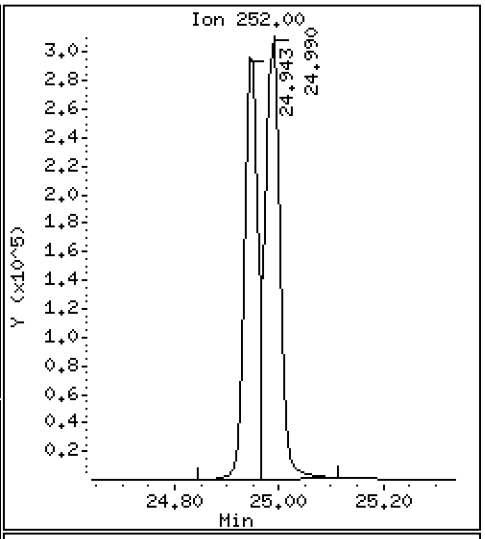
Column phase: ZB-5msi

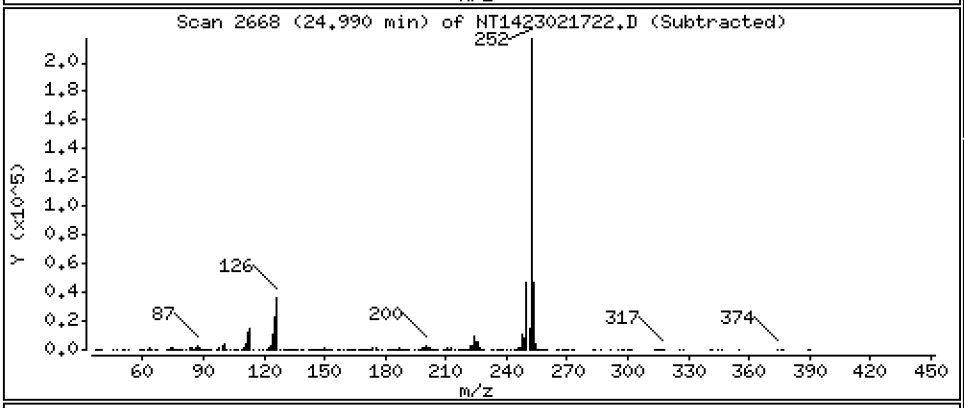
Column diameter: 0.25

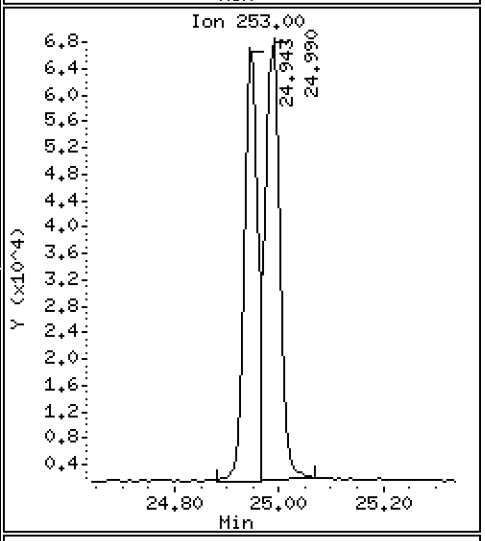
75 Benzo(k)fluoranthene

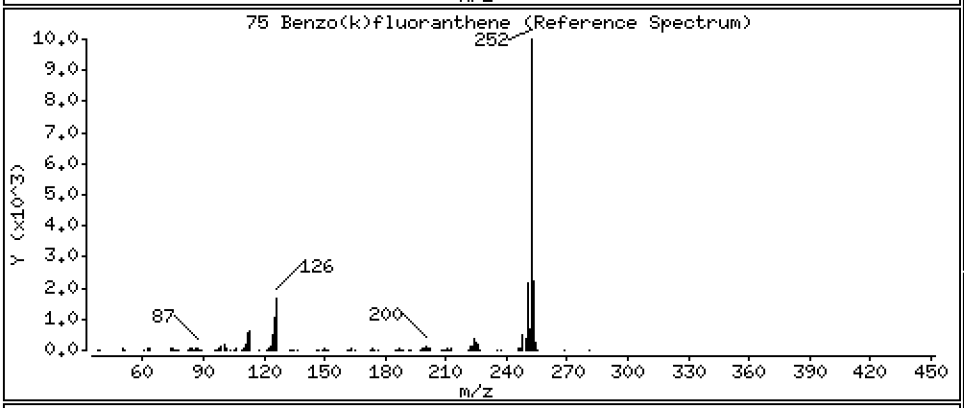
Concentration: 4.022 ug/mL

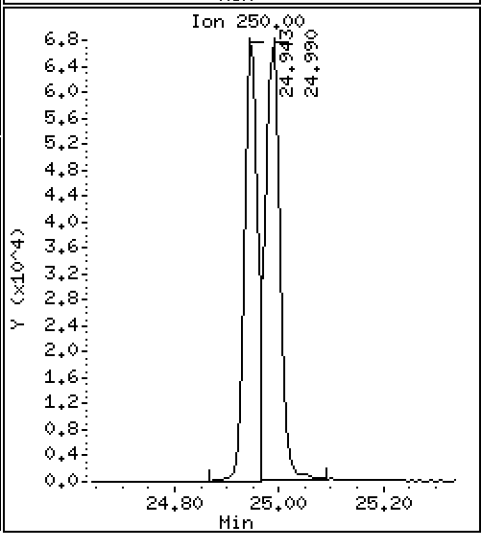


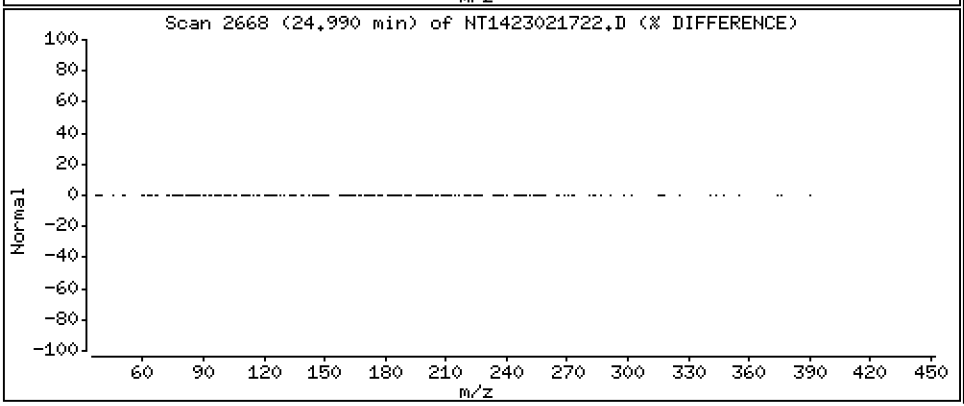












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

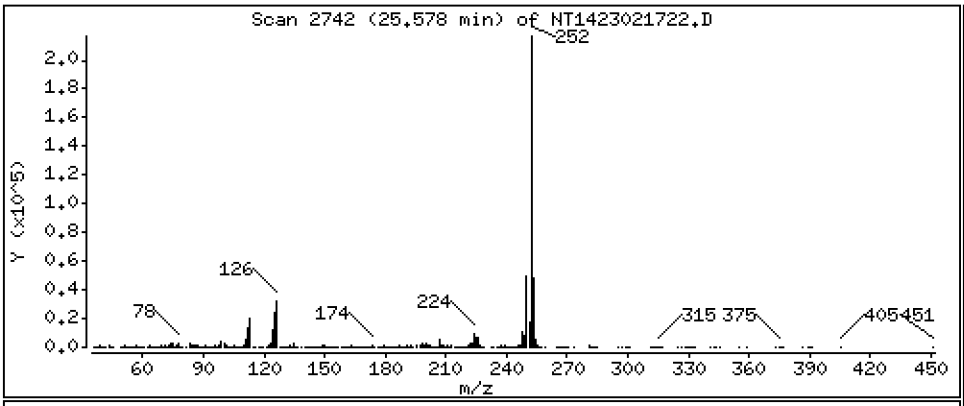
Operator: DSD

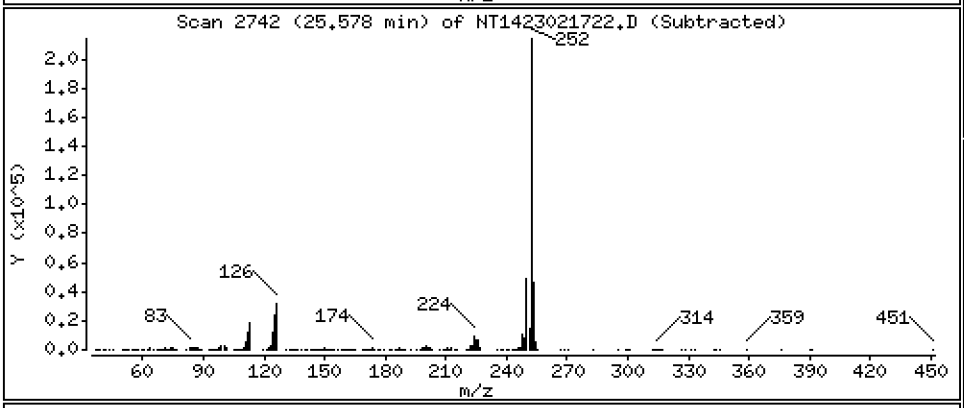
Column phase: ZB-5msi

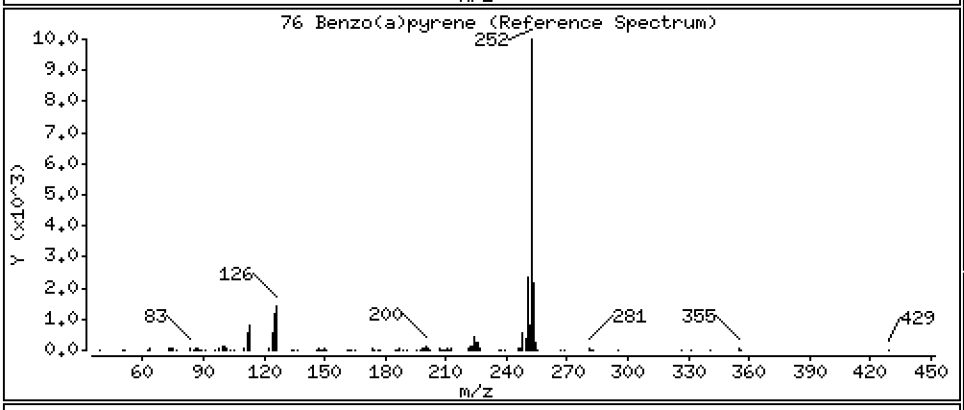
Column diameter: 0.25

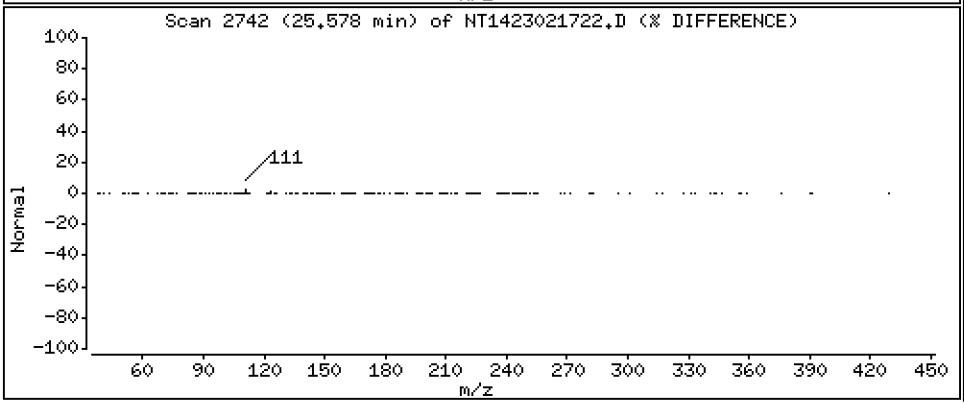
76 Benzo(a)pyrene

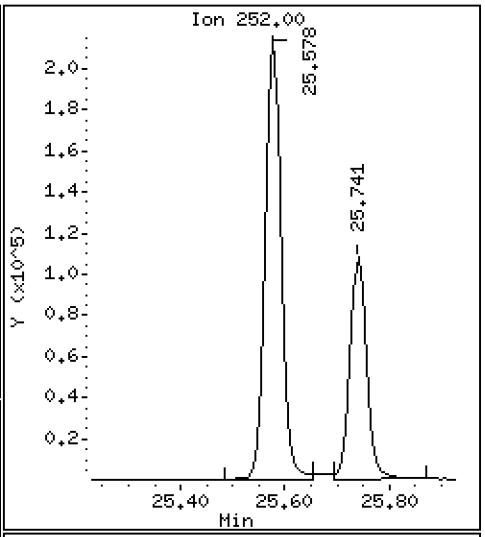
Concentration: 3.601 ug/mL

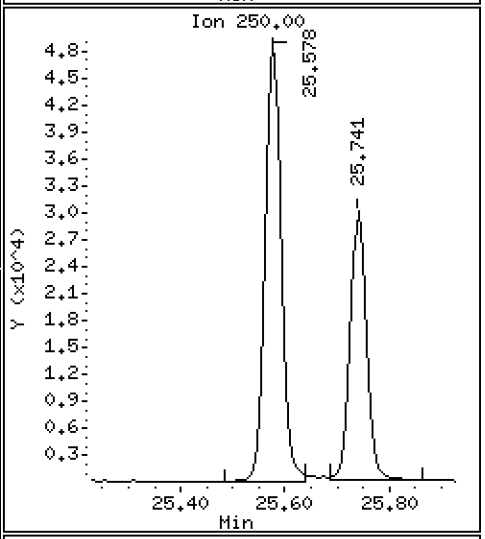


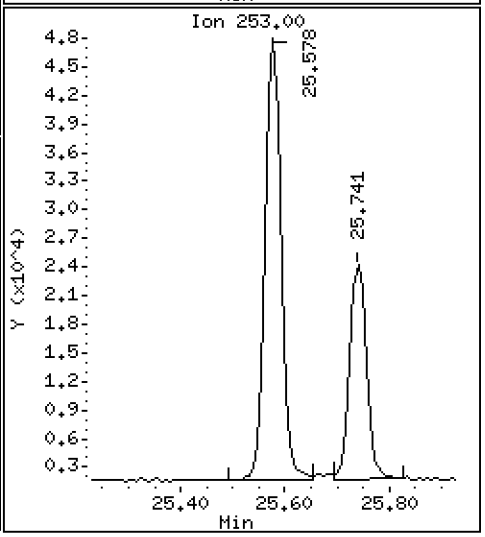












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021722.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

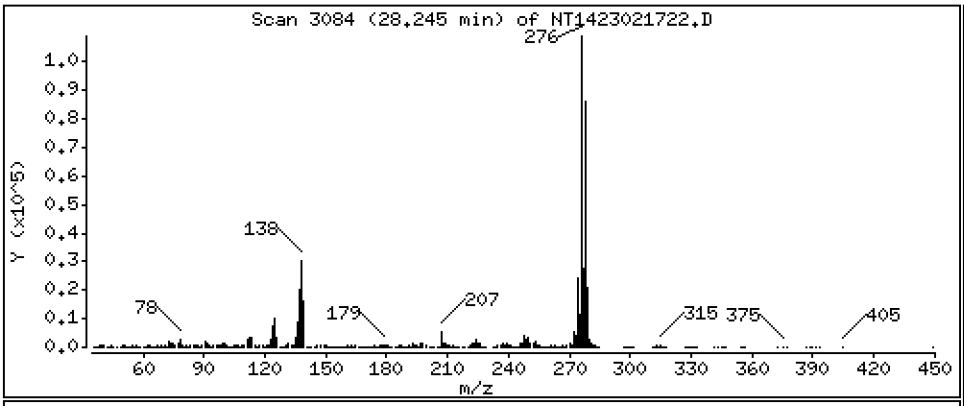
Operator: DSD

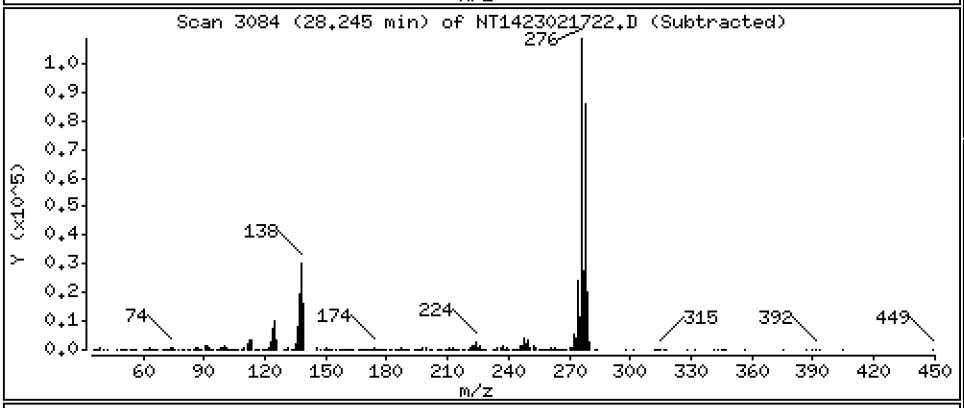
Column phase: ZB-5msi

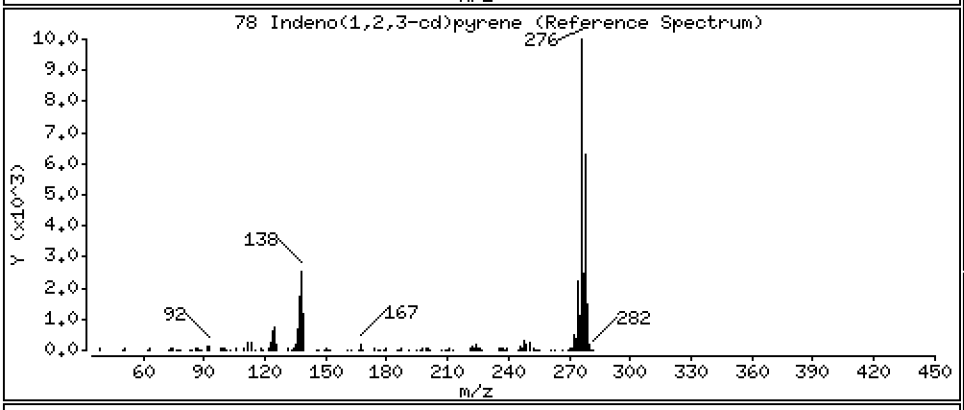
Column diameter: 0.25

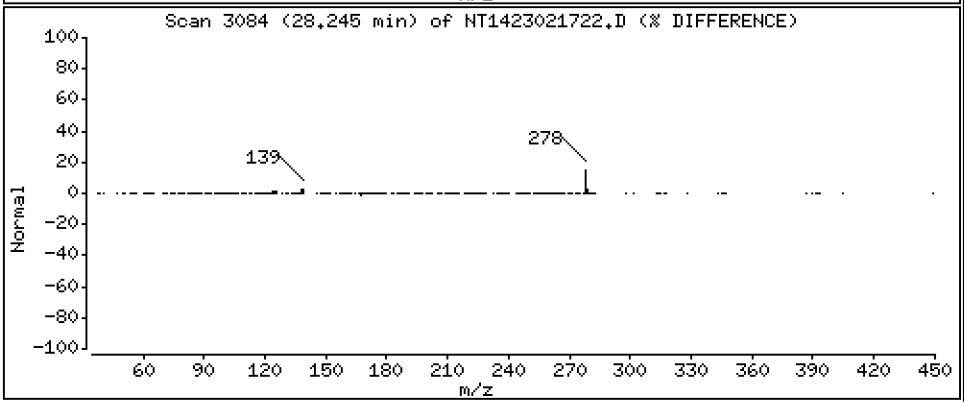
78 Indeno(1,2,3-cd)pyrene

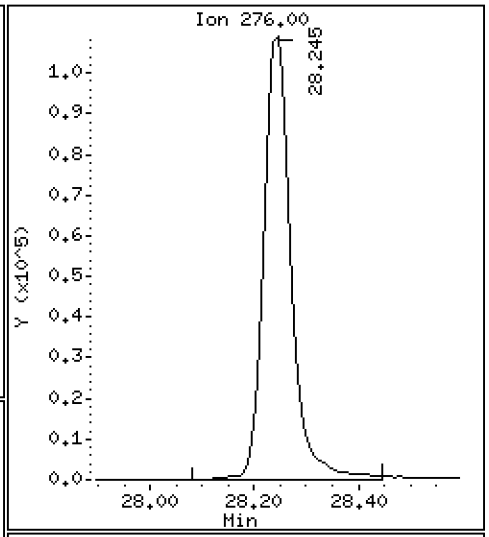
Concentration: 3.536 ug/mL

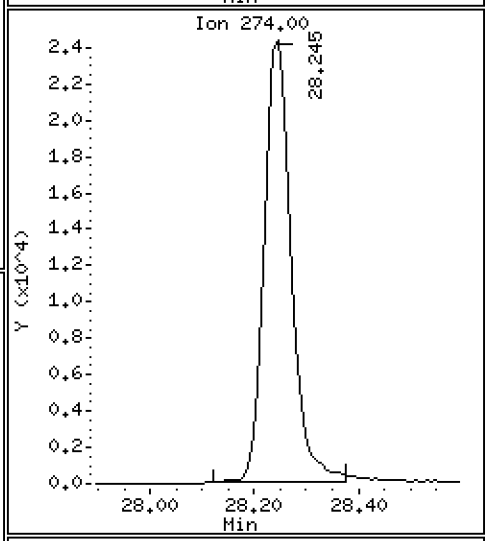


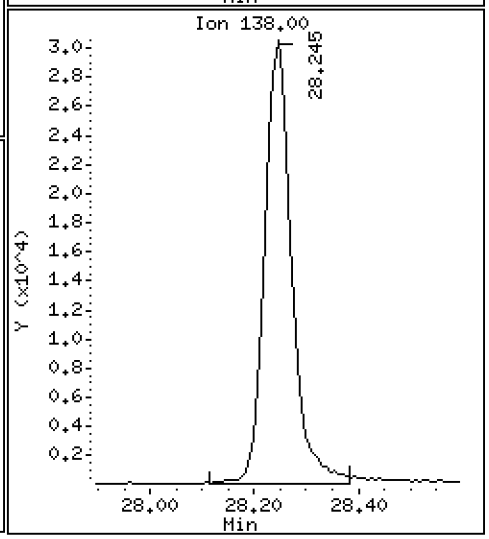












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

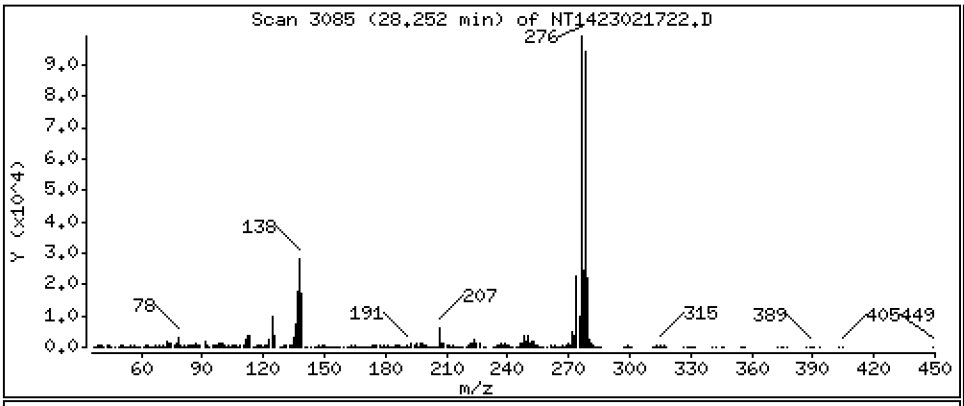
Operator: DSD

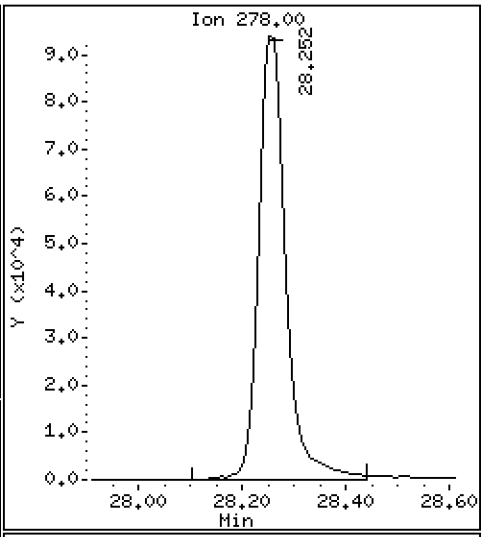
Column phase: ZB-5msi

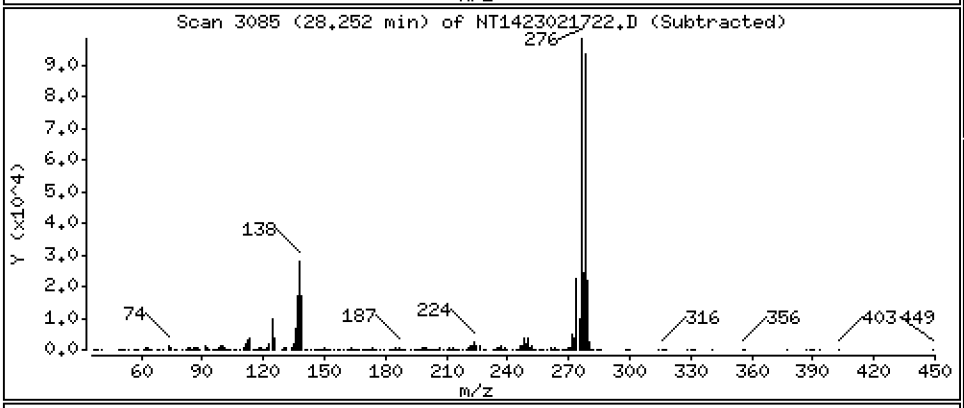
Column diameter: 0.25

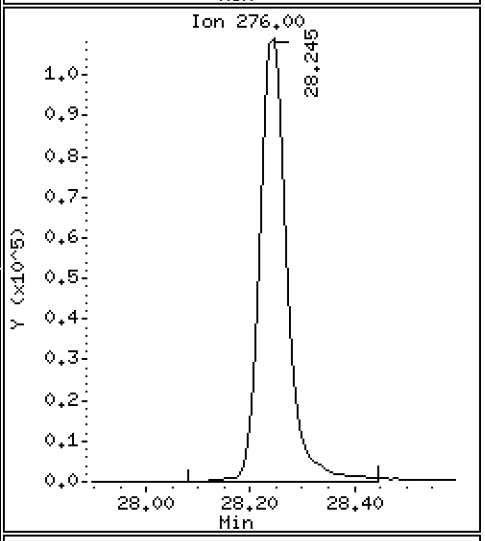
79 Dibenzo(a,h)anthracene

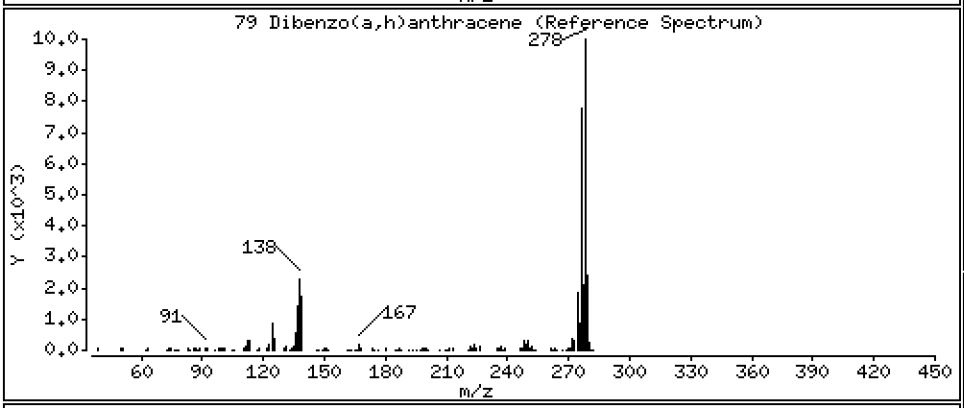
Concentration: 3.654 ug/mL

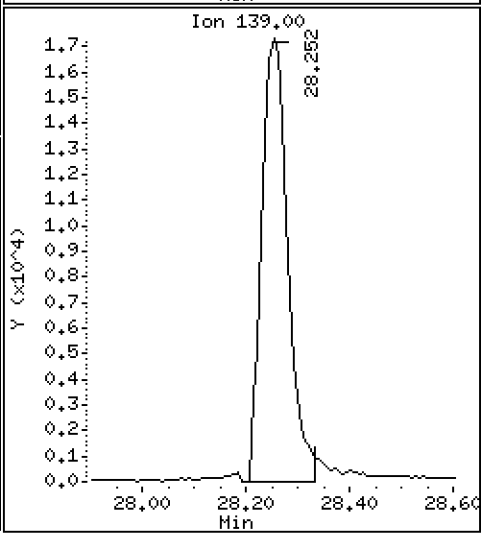


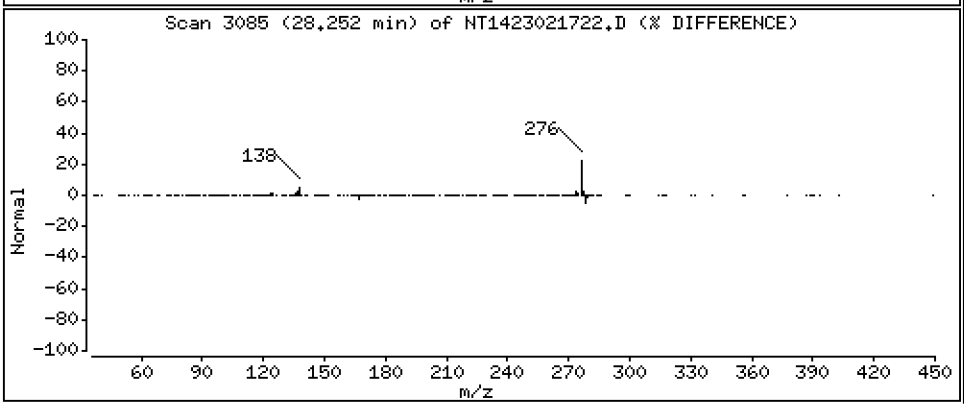












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021722.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

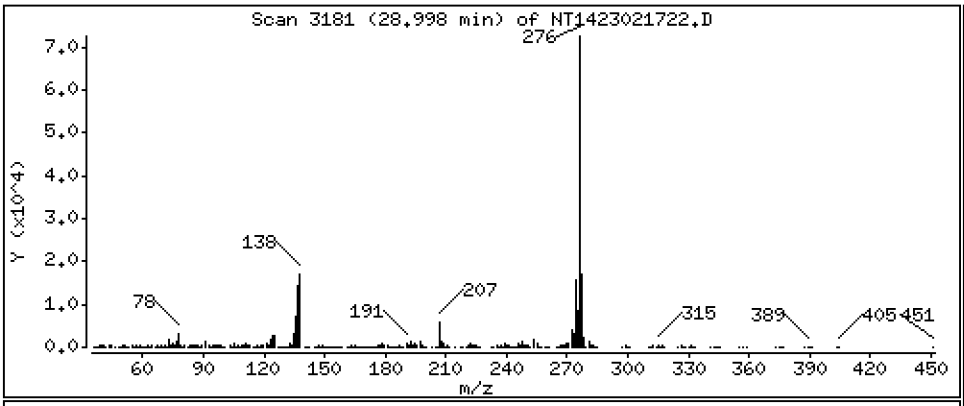
Operator: DSD

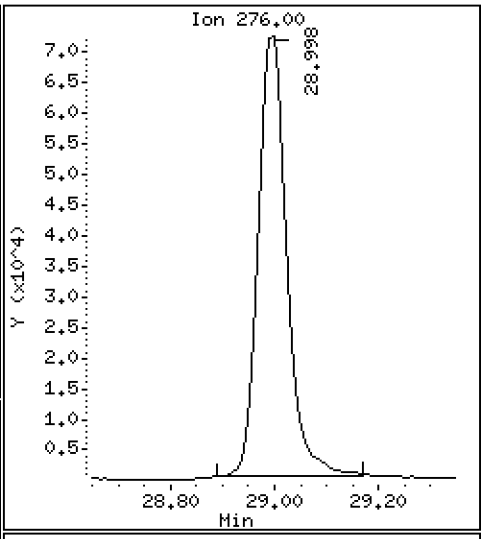
Column phase: ZB-5msi

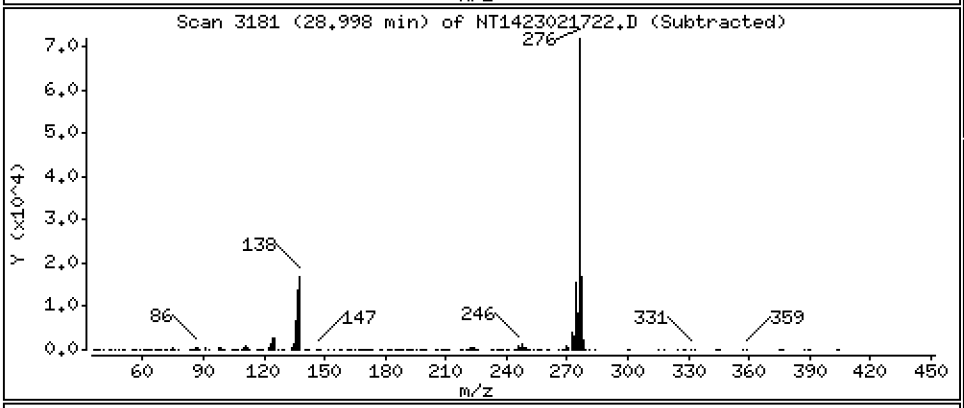
Column diameter: 0.25

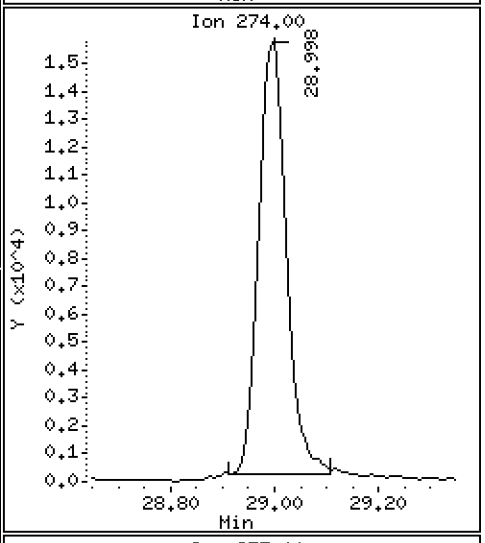
80 Benzo(g,h,i)perylene

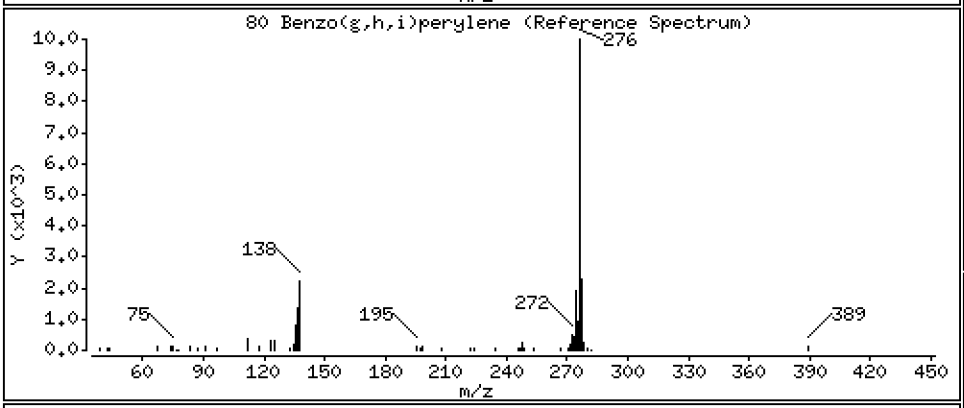
Concentration: 3.012 ug/mL

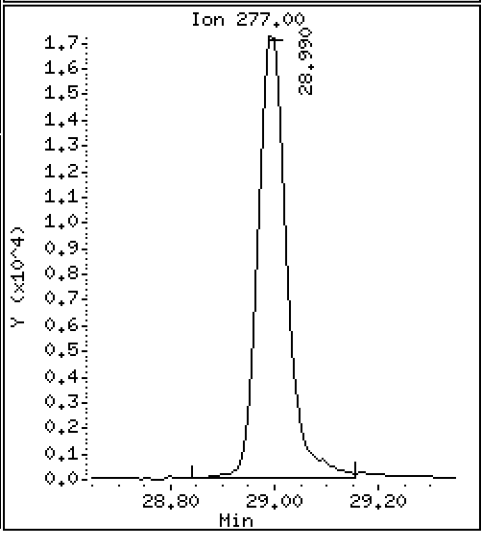


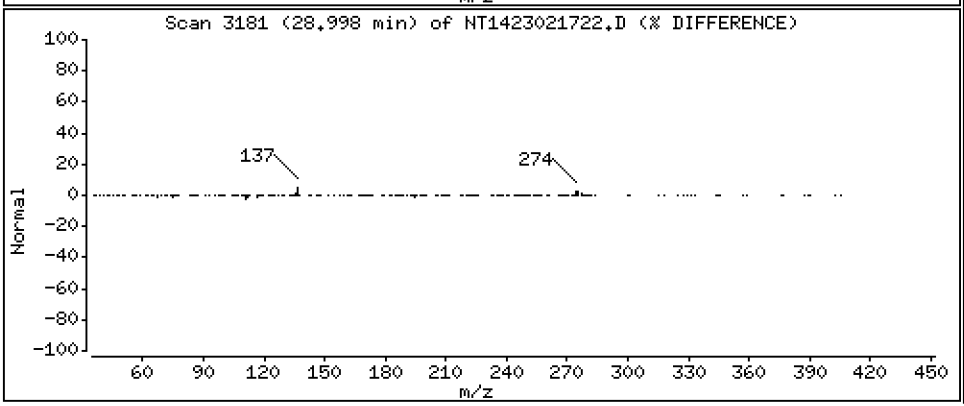












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

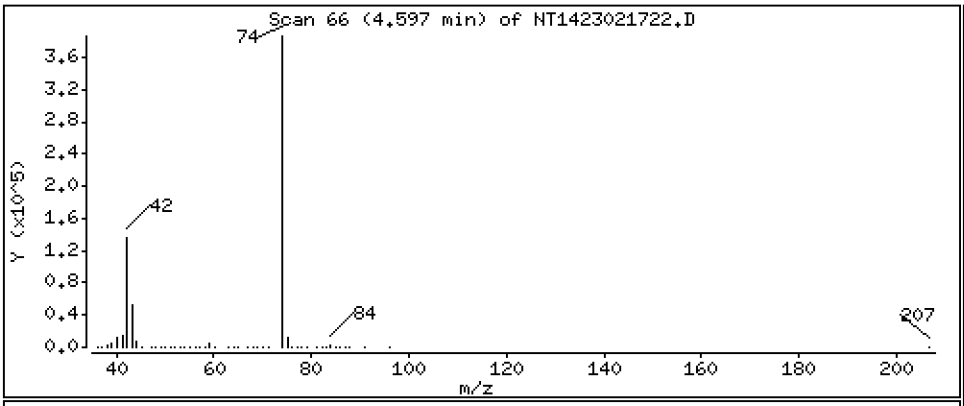
Operator: DSD

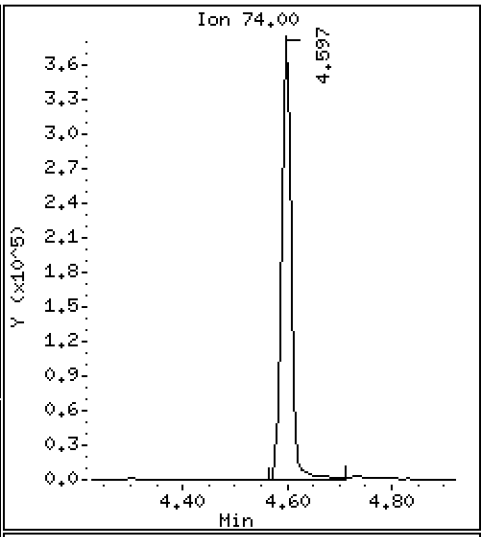
Column phase: ZB-5msi

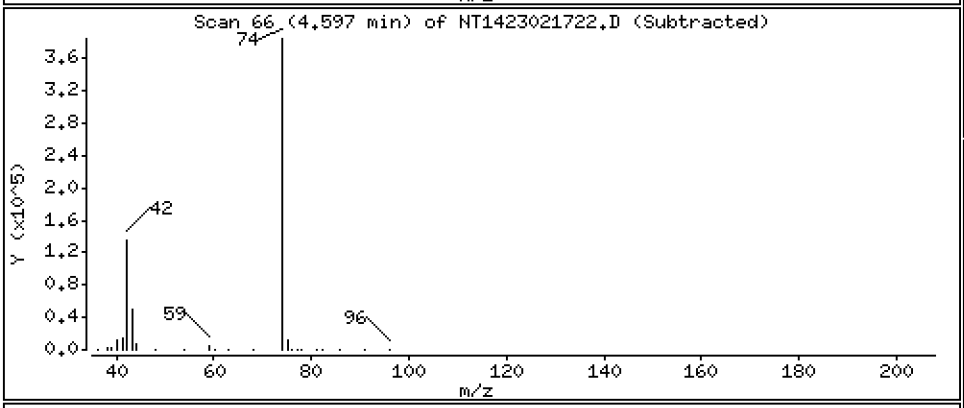
Column diameter: 0.25

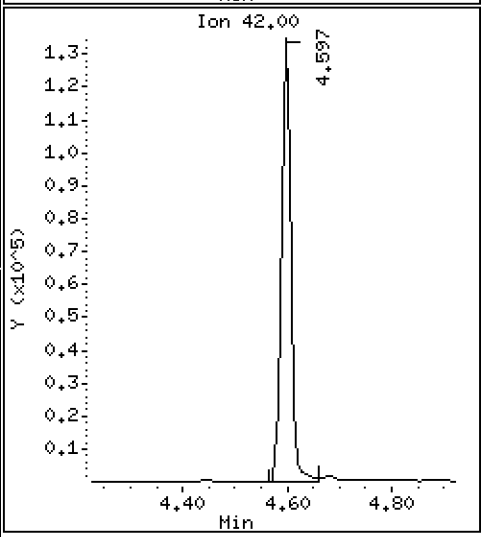
90 N-Nitrosodimethylamine

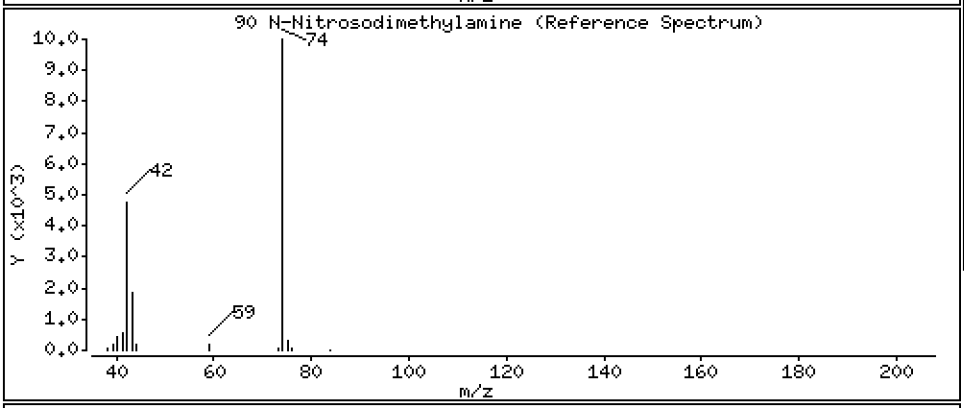
Concentration: 8.752 ug/mL

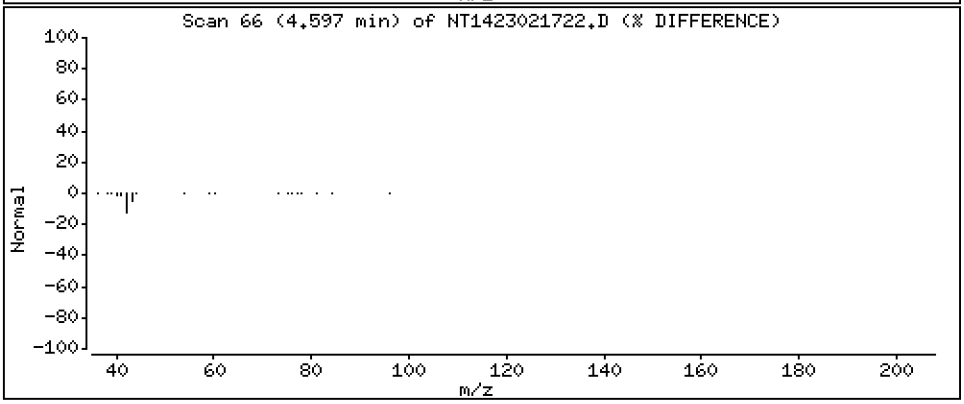












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

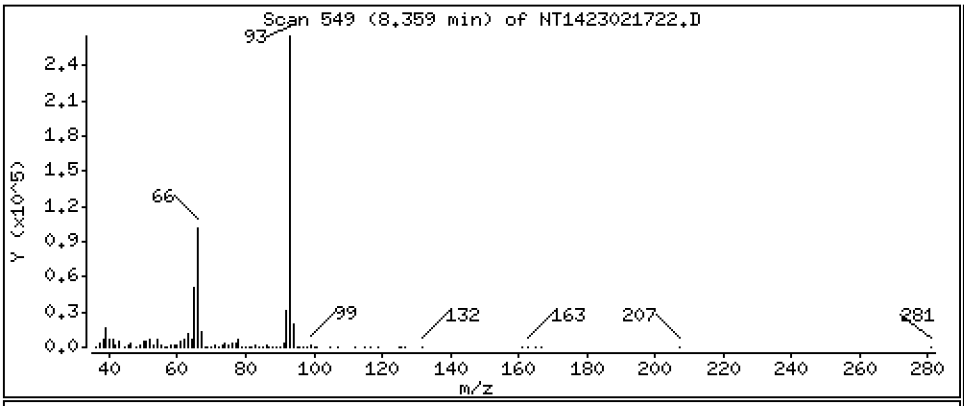
Operator: DSD

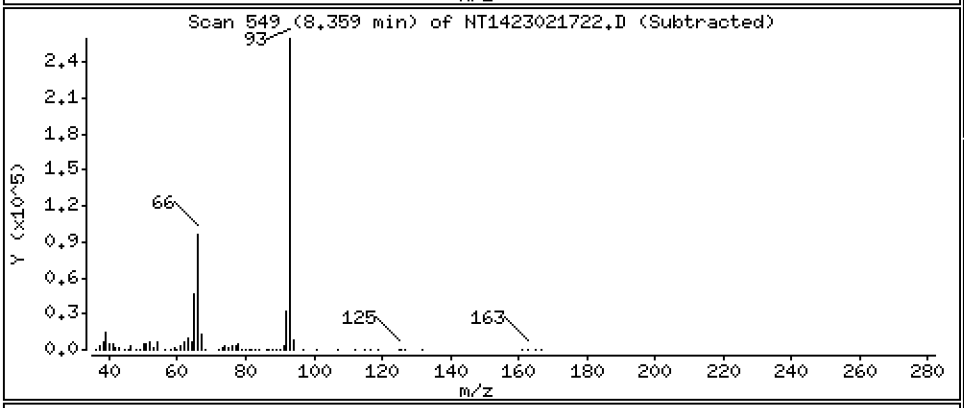
Column phase: ZB-5msi

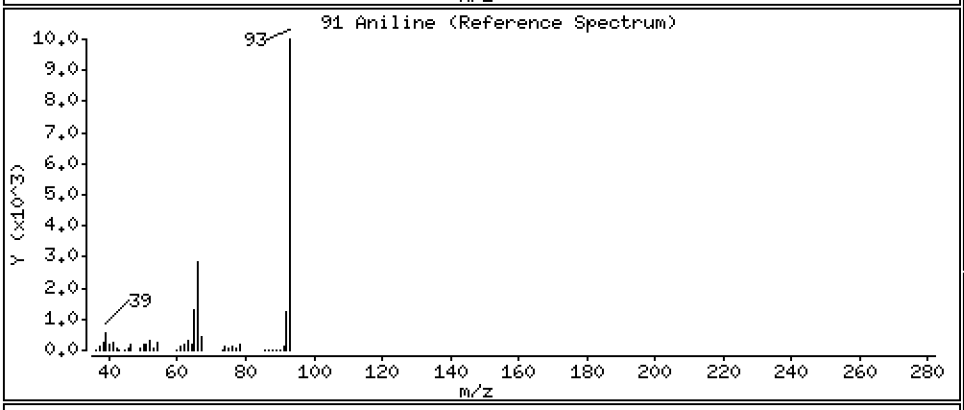
Column diameter: 0.25

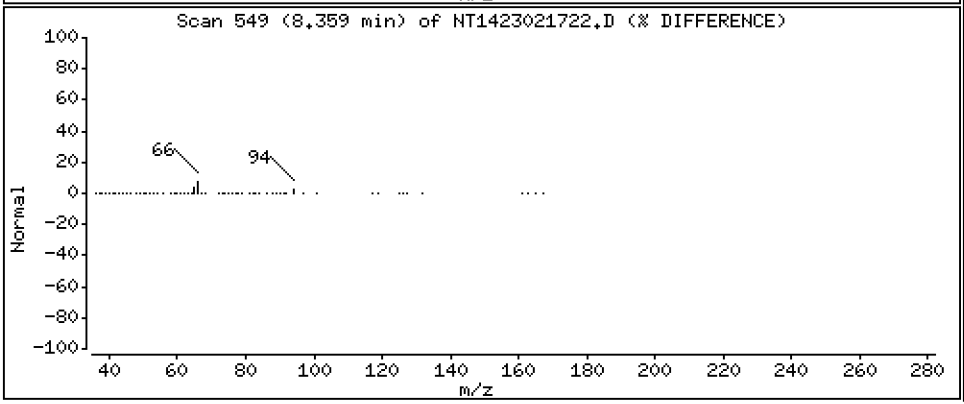
91 Aniline

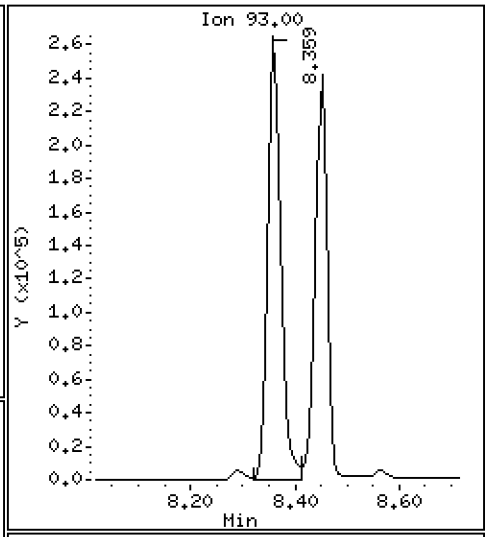
Concentration: 3.267 ug/mL

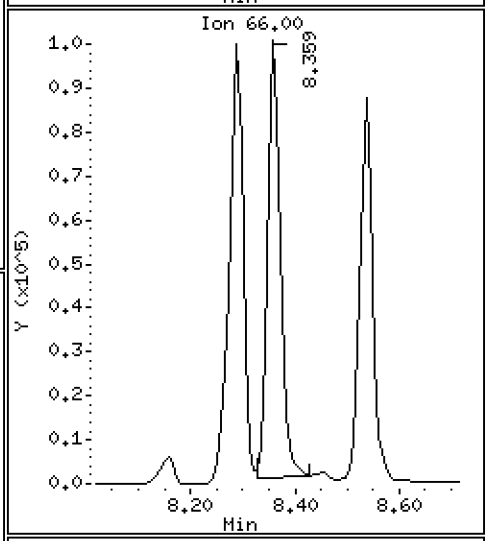


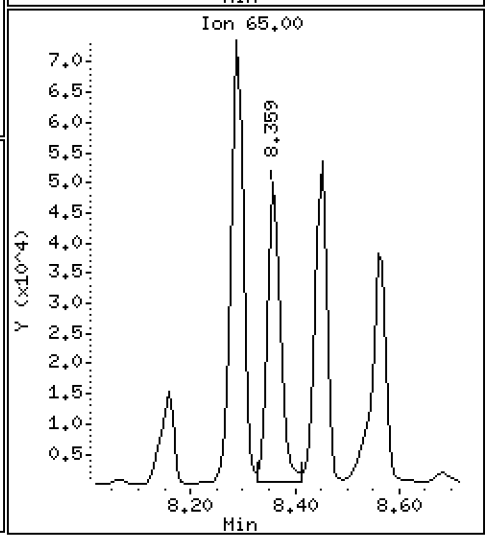












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

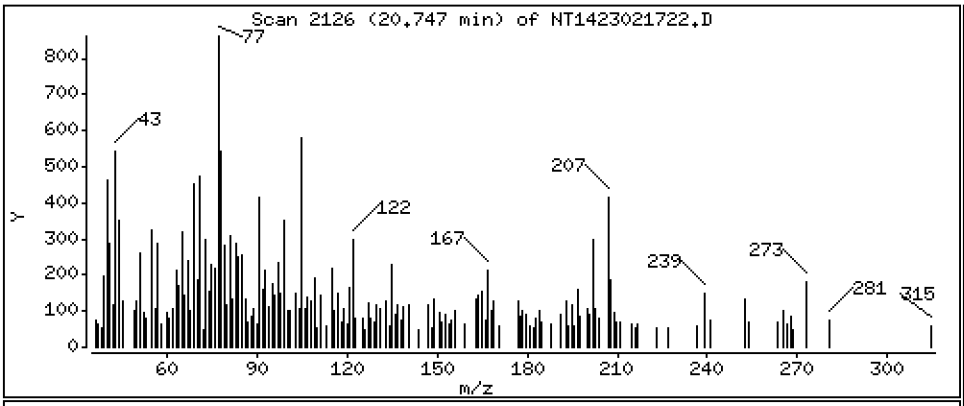
Operator: DSD

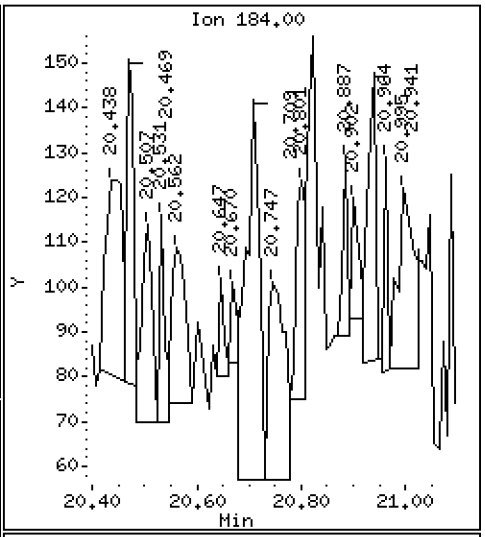
Column phase: ZB-5msi

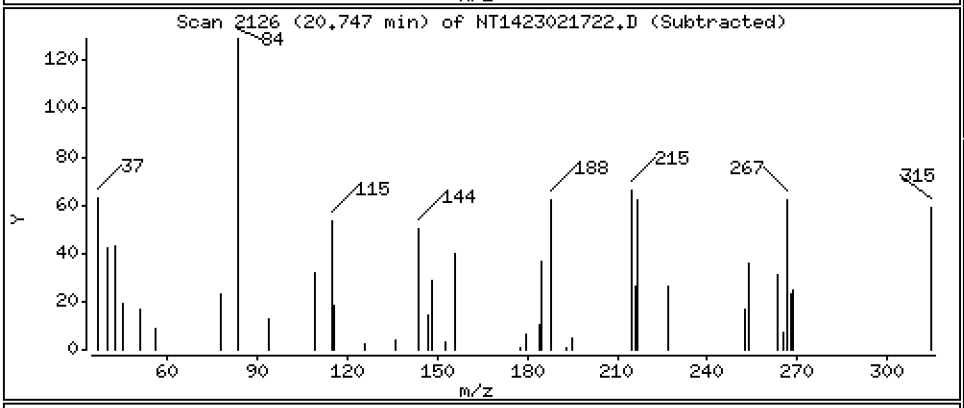
Column diameter: 0.25

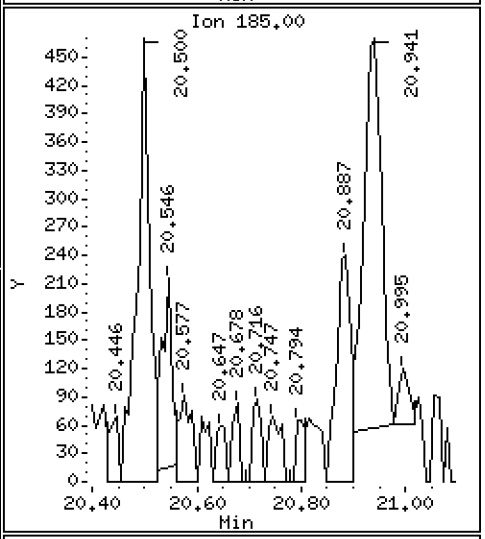
93 Benzidine

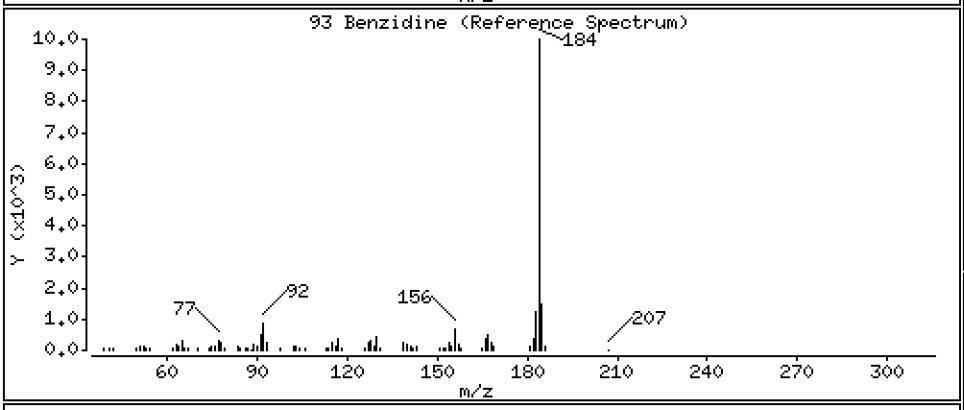
Concentration: 0.001304 ug/mL

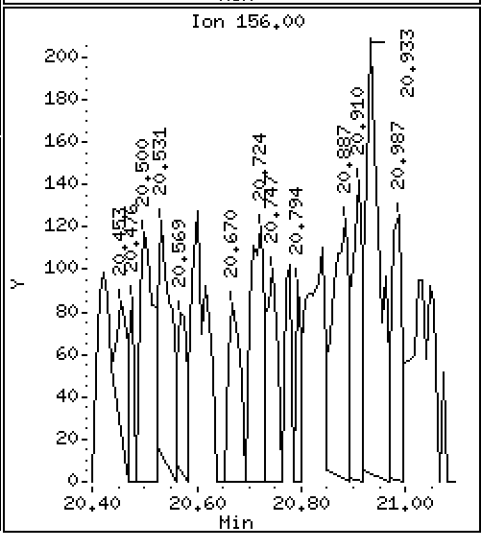


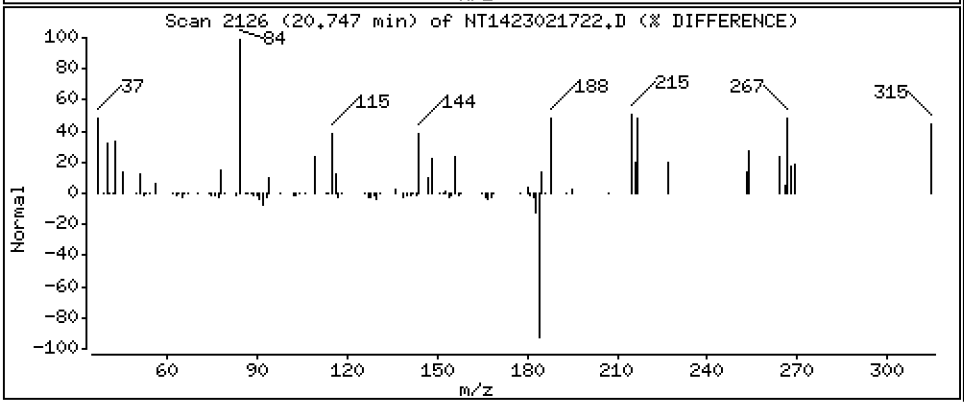












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021722.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

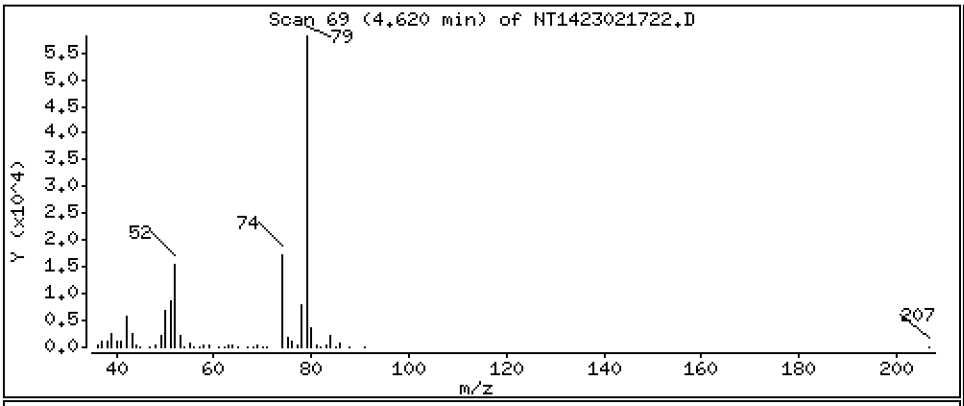
Operator: DSD

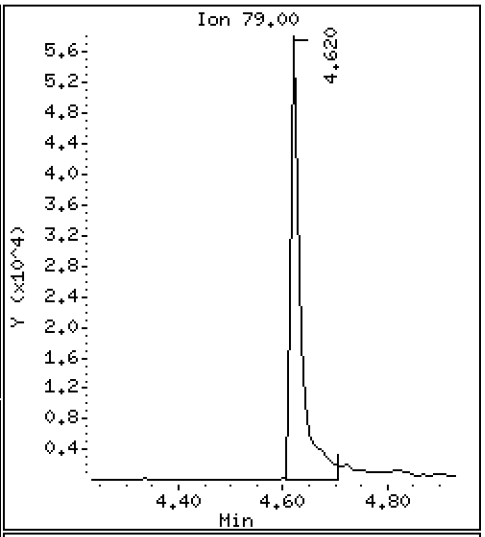
Column phase: ZB-5msi

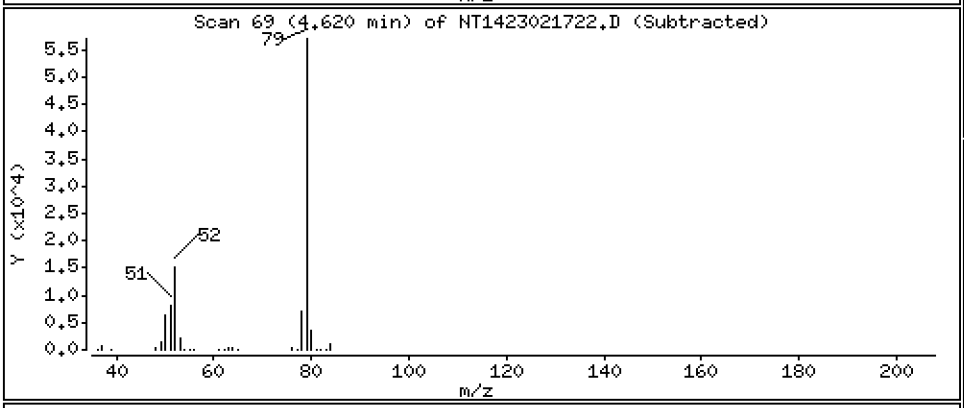
Column diameter: 0.25

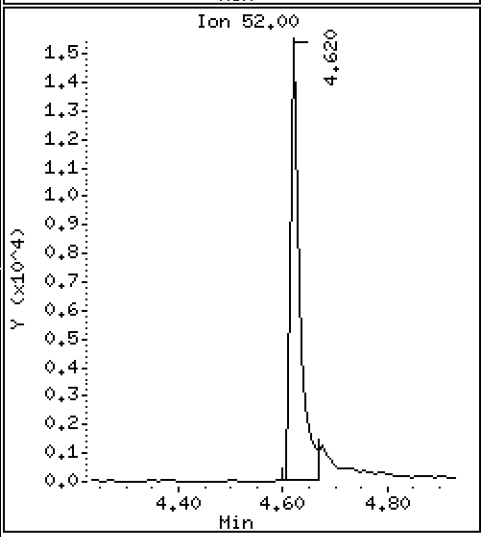
103 Pyridine

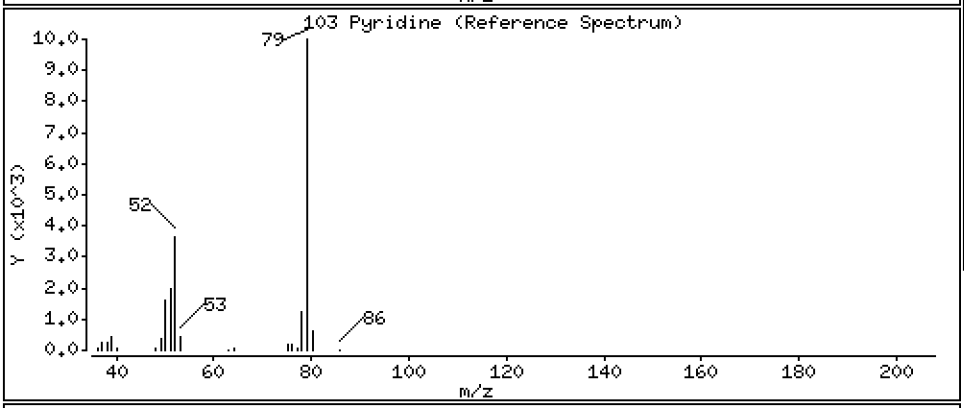
Concentration: 0.8585 ug/mL

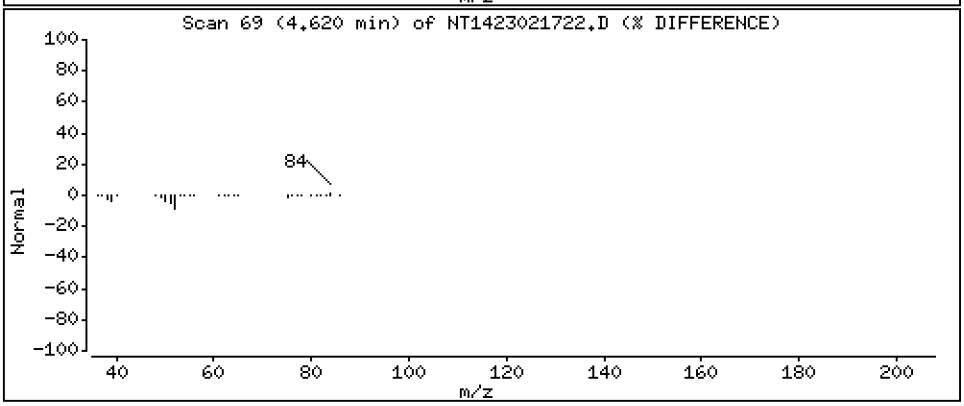












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

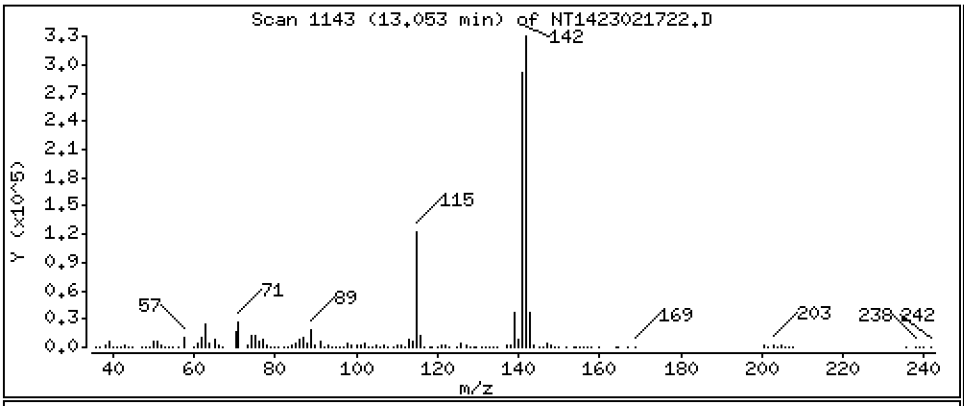
Operator: DSD

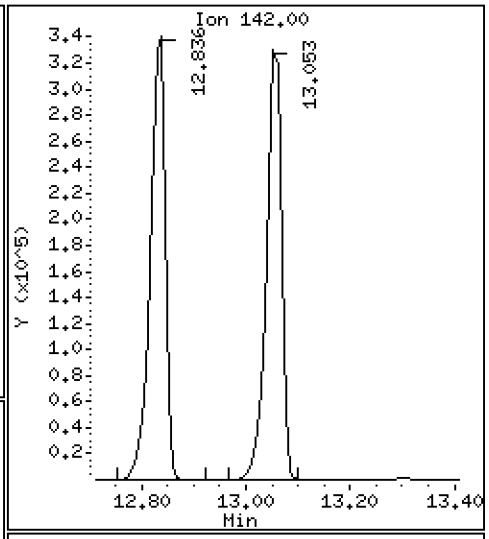
Column phase: ZB-5msi

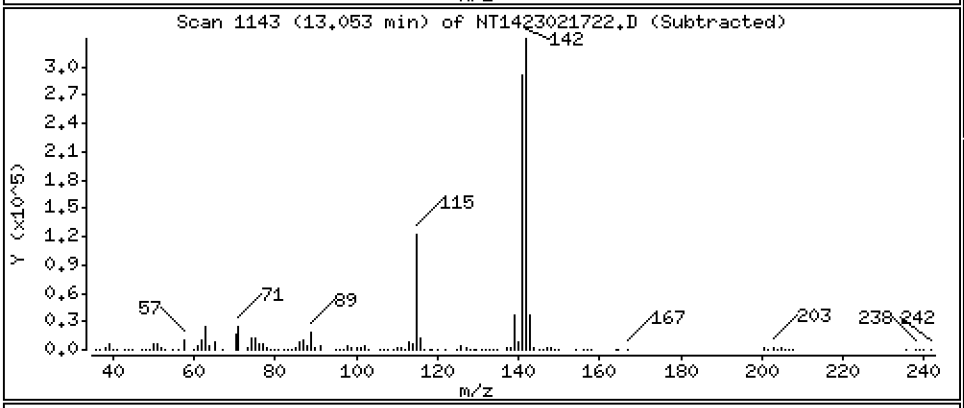
Column diameter: 0.25

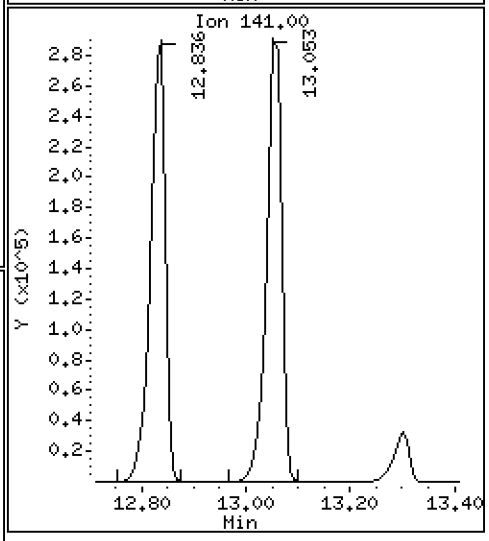
105 1-methylnaphthalene

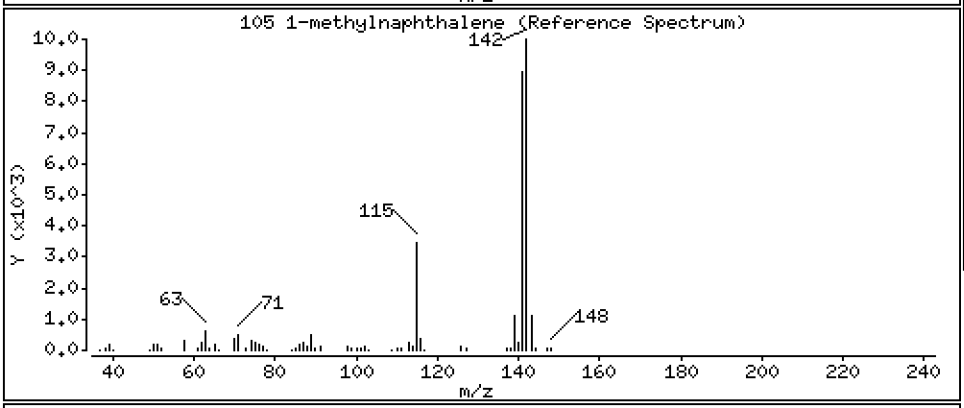
Concentration: 3.547 ug/mL

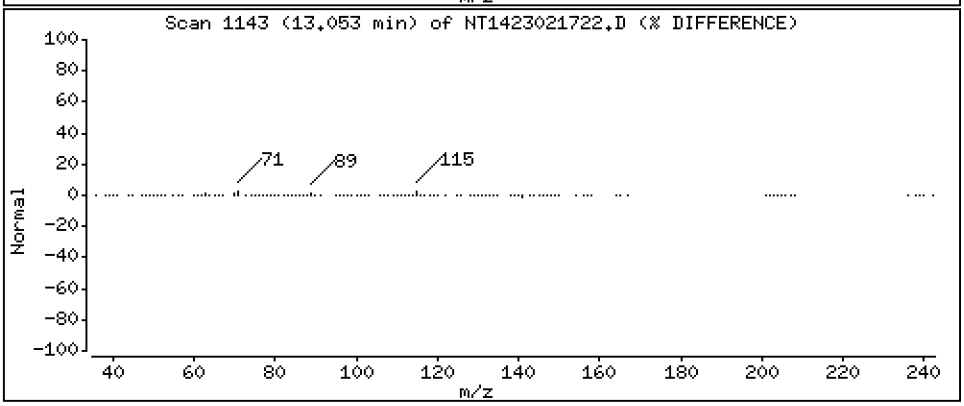












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

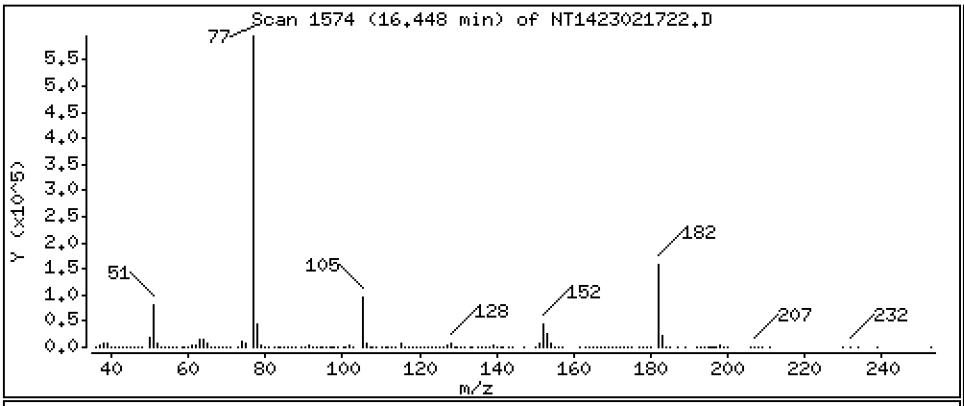
Operator: DSD

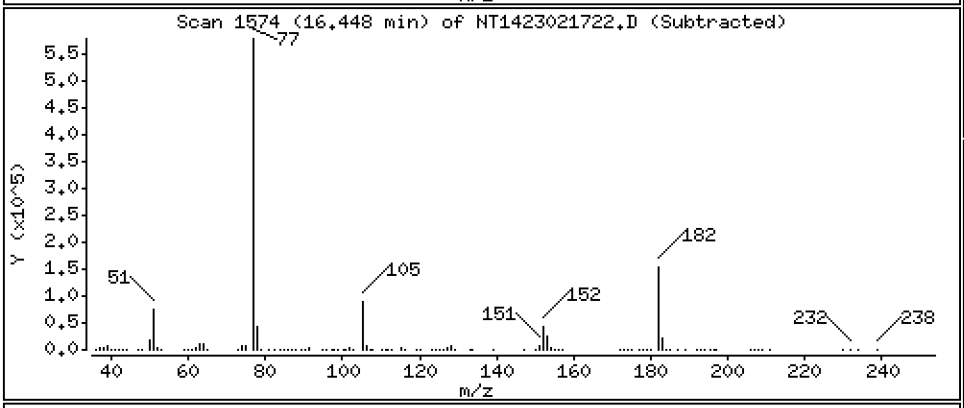
Column phase: ZB-5msi

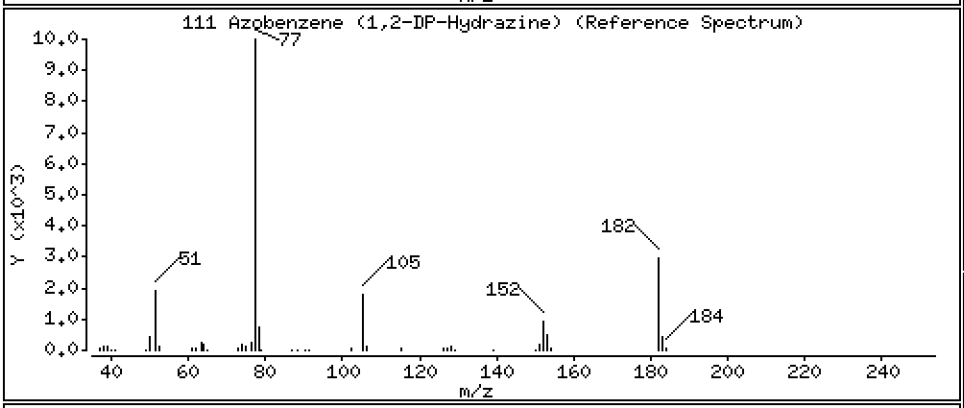
Column diameter: 0.25

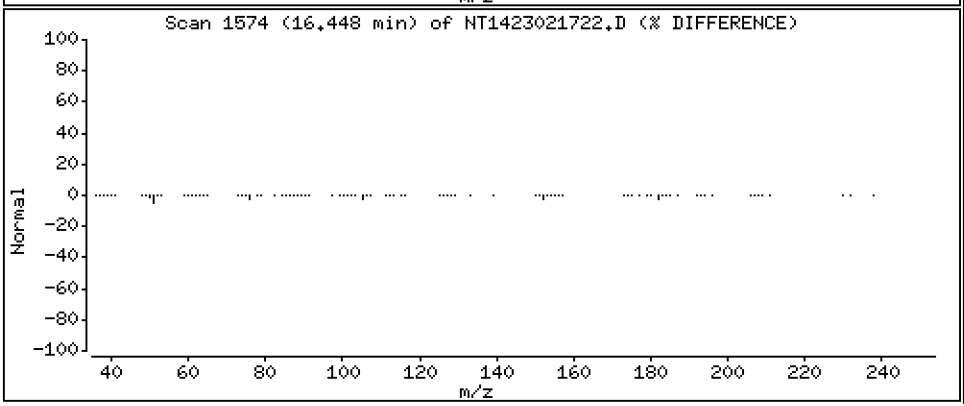
111 Azobenzene (1,2-DP-Hydrazine)

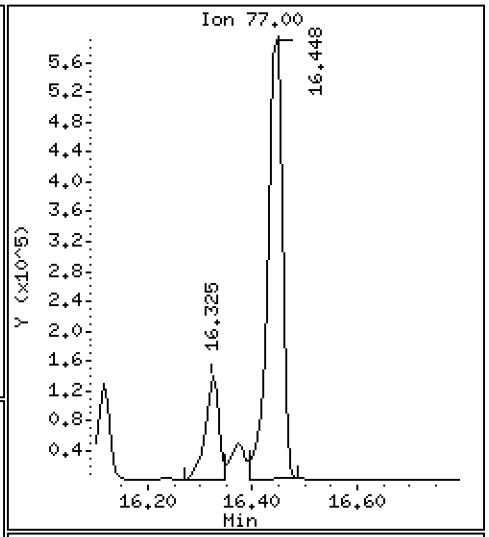
Concentration: 3.540 ug/mL

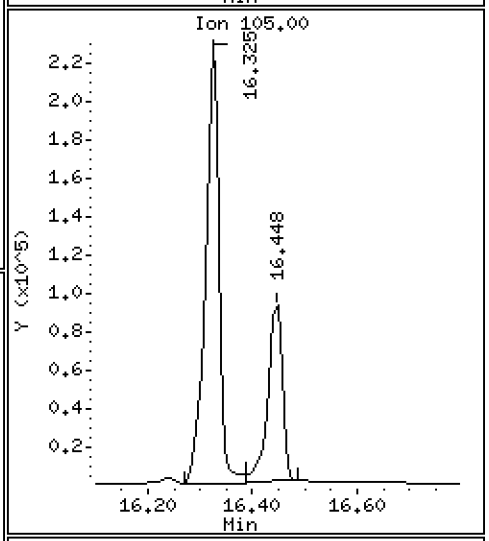


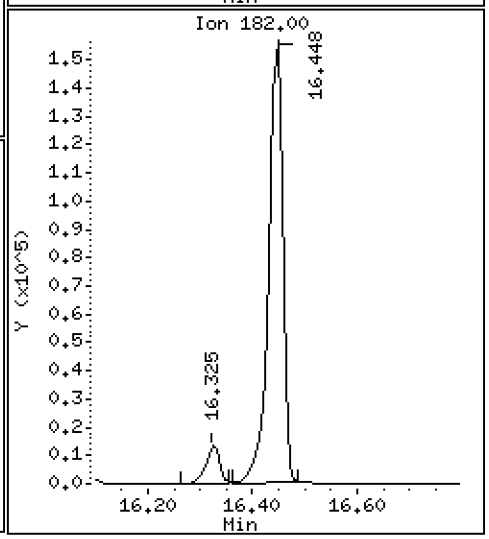












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

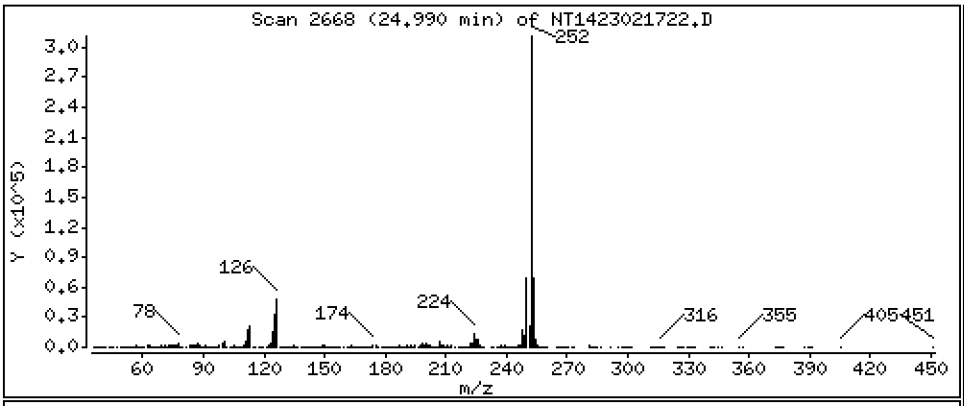
Operator: DSD

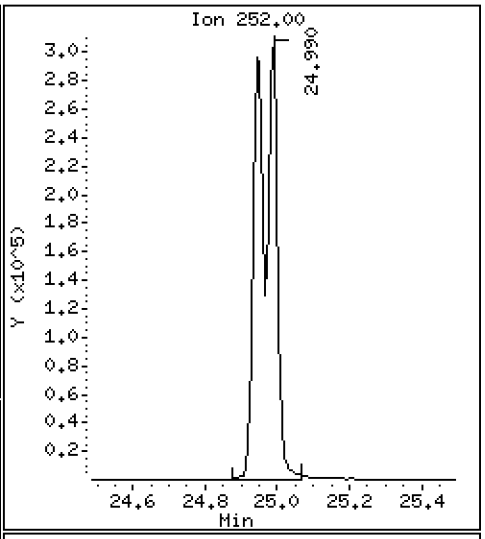
Column phase: ZB-5msi

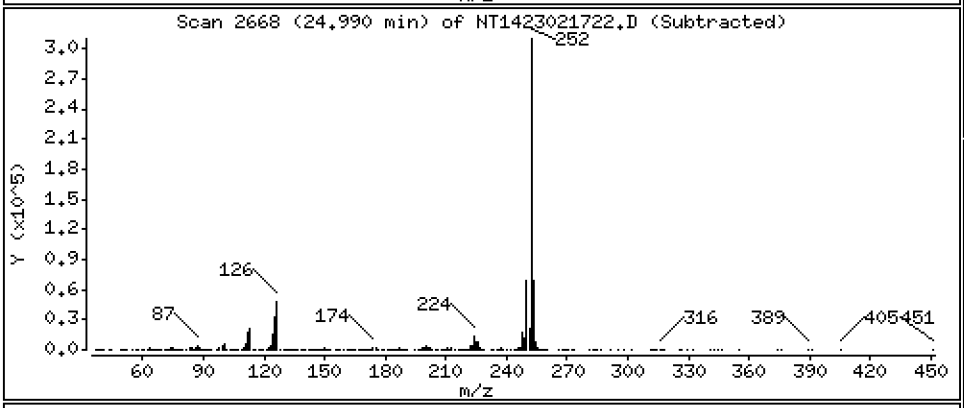
Column diameter: 0.25

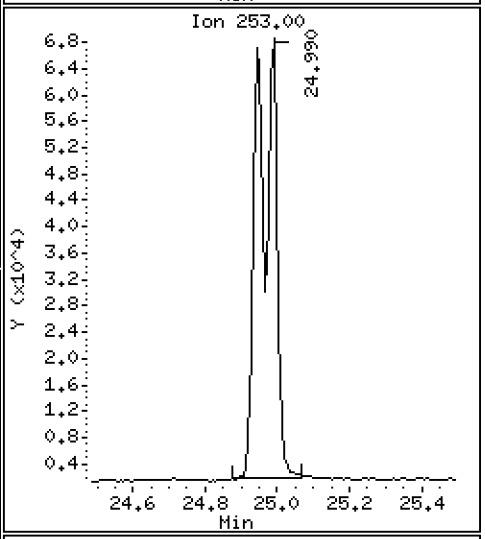
187 Total Benzofluoranthenes

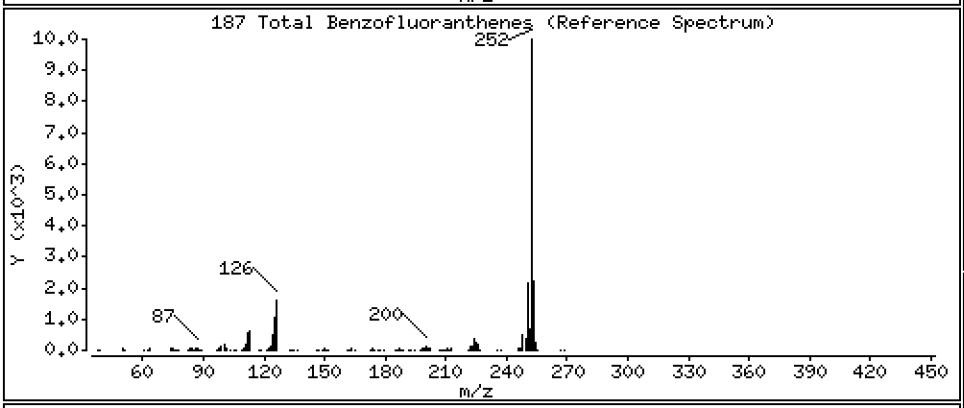
Concentration: 8.097 ug/mL

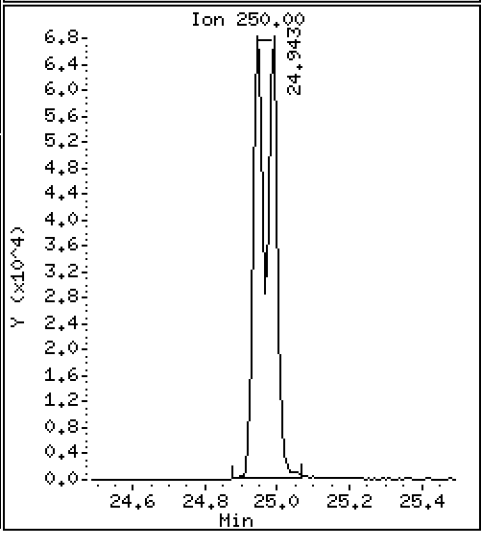


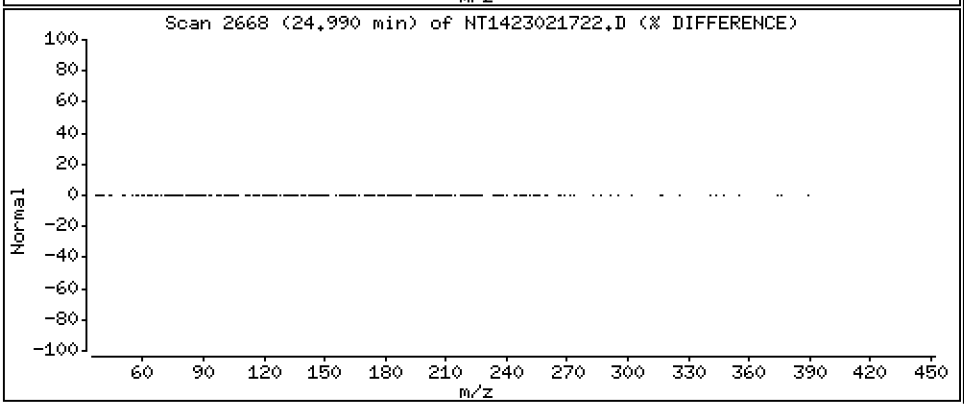












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS1

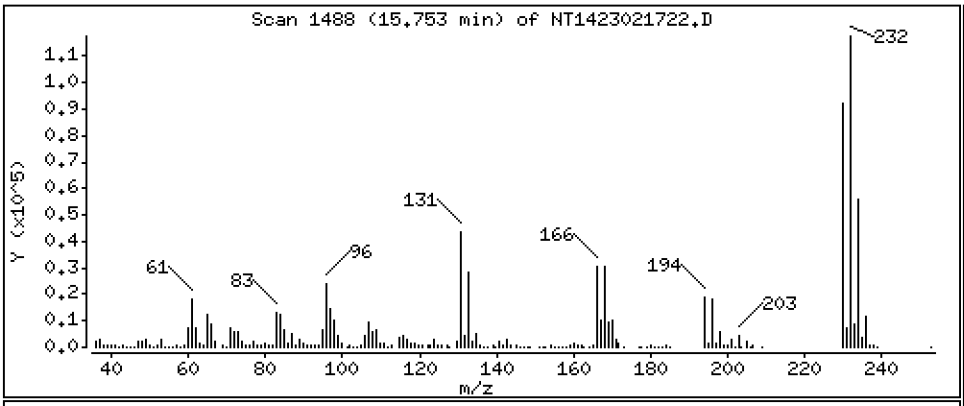
Operator: DSD

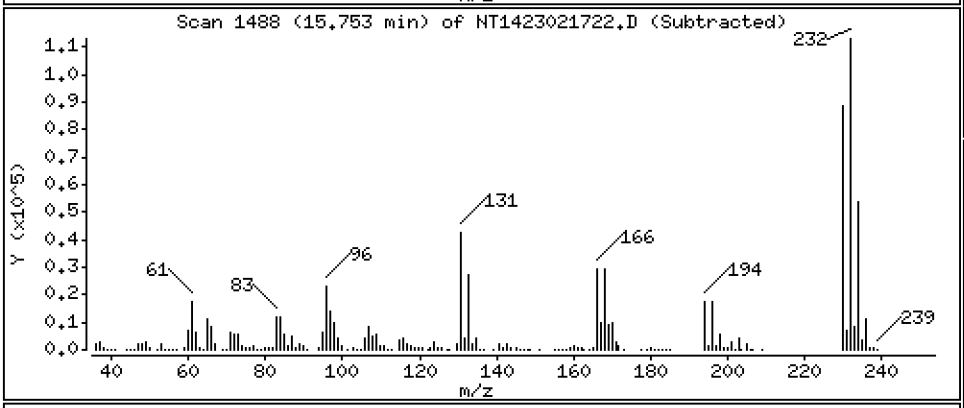
Column phase: ZB-5msi

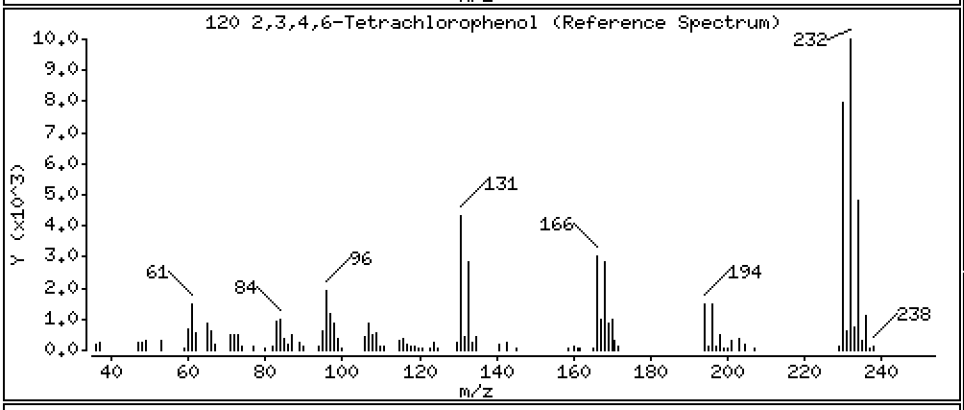
Column diameter: 0.25

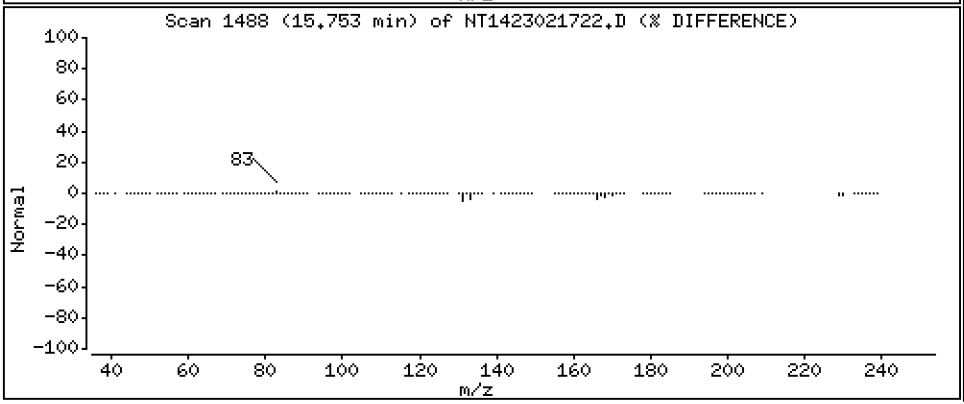
120 2,3,4,6-Tetrachlorophenol

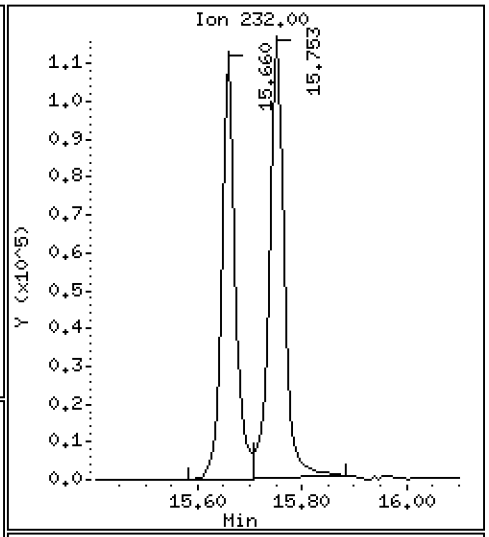
Concentration: 3.074 ug/mL

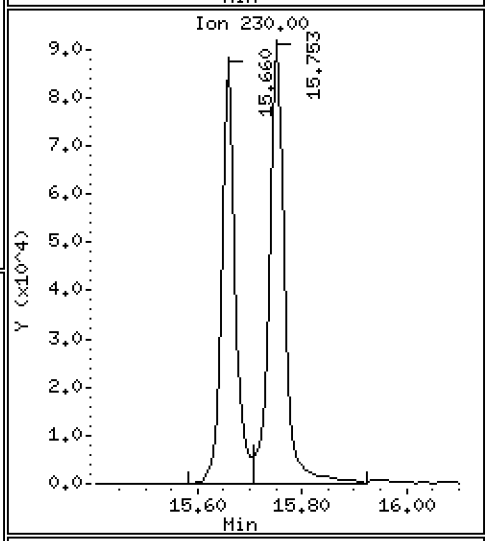


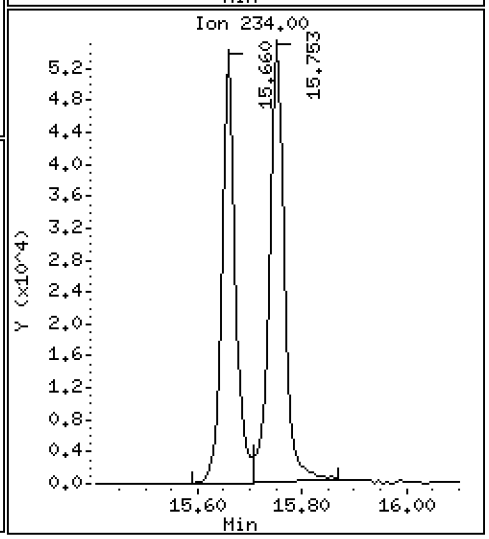












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

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Lab Smp Id: BLA0339-BS1
Inj Date : 17-FEB-2023 23:19 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : BLA0339-BS1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230217A.b\ABN.m
Meth Date : 01-Mar-2023 13:20 van Quant Type: ISTD
Cal Date : 16-FEB-2023 19:30 Cal File: NT1423021610.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.697	6.674	(0.752)	420951	5.54619	5.546
$	2 Phenol-d5	99	8.266	8.273	(0.929)	646476	5.36930	5.369
	3 Phenol	94	8.289	8.296	(0.931)	417524	3.27569	3.276
$	5 2-Chlorophenol-d4	132	8.536	8.536	(0.959)	459521	5.34883	5.349
	4 Bis(2-Chloroethyl)ether	93	8.451	8.459	(0.950)	359473	3.69189	3.692
	6 2-Chlorophenol	128	8.567	8.567	(0.963)	317759	3.54007	3.540
	7 1,3-Dichlorobenzene	146	8.830	8.838	(0.992)	325799	3.26038	3.260
*	8 1,4-Dichlorobenzene-d4	152	8.900	8.900	(1.000)	283915	4.00000	
	9 1,4-Dichlorobenzene	146	8.931	8.931	(1.003)	317041	3.34308	3.343
$	10 1,2-Dichlorobenzene-d4	152	9.257	9.264	(1.040)	208485	3.23757	3.238
	12 1,2-Dichlorobenzene	146	9.280	9.288	(1.043)	315477	3.32757	3.328
	11 Benzyl alcohol	108	9.179	9.179	(1.031)	225464	3.13779	3.138
	14 2,2'-oxybis(1-Chloropropane)	121	9.474	9.482	(1.065)	105966	3.90698	3.907
	13 2-Methylphenol	108	9.404	9.404	(1.057)	239716	2.69335	2.693
	17 Hexachloroethane	117	9.878	9.878	(1.110)	135391	3.28386	3.284
	16 N-Nitroso-di-n-propylamine	70	9.738	9.746	(1.094)	276939	3.41823	3.418
	15 4-Methylphenol	108	9.684	9.676	(1.088)	295102	3.13998	3.140
$	18 Nitrobenzene-d5	82	9.994	10.002	(0.878)	415178	3.48782	3.488
	19 Nitrobenzene	77	10.033	10.040	(0.881)	415004	3.47414	3.474
	20 Isophorone	82	10.483	10.491	(0.920)	810233	5.14098	5.141
	21 2-Nitrophenol	139	10.669	10.669	(0.937)	177302	3.27238	3.272
	22 2,4-Dimethylphenol	107	10.724	10.723	(0.942)	268234	2.97369	2.974
	23 Bis(2-Chloroethoxy)methane	93	10.925	10.925	(0.959)	428674	4.18125	4.181
	24 Benzoic acid	105	11.003	11.010	(0.966)	1122980	18.9063	18.91
	25 2,4-Dichlorophenol	162	11.119	11.126	(0.976)	1008208	13.0597	13.06
	26 1,2,4-Trichlorobenzene	180	11.305	11.312	(0.993)	313276	3.34992	3.350
*	27 Naphthalene-d8	136	11.390	11.397	(1.000)	1030366	4.00000	
	28 Naphthalene	128	11.428	11.436	(1.003)	890697	3.50591	3.506
	29 4-Chloroaniline	127	11.575	11.574	(1.016)	705578	6.50062	6.501
	30 Hexachlorobutadiene	225	11.799	11.799	(1.036)	201707	3.49886	3.499
	31 4-Chloro-3-methylphenol	107	12.534	12.542	(1.100)	1138506	13.6250	13.63
	32 2-Methylnaphthalene	142	12.836	12.836	(1.127)	651633	3.42471	3.425
	33 Hexachlorocyclopentadiene	237	13.300	13.300	(0.886)	600647	9.89961	9.900

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.463	13.462	(0.896)	833694	13.5159	13.52
	35	2,4,5-Trichlorophenol	196	13.532	13.532	(0.901)	934733	13.9928	13.99
$	36	2-Fluorobiphenyl	172	13.625	13.625	(0.907)	822618	3.67128	3.671
	37	2-Chloronaphthalene	162	13.827	13.834	(0.921)	662717	3.62360	3.624
	38	2-Nitroaniline	65	14.105	14.105	(0.939)	715741	12.0368	12.04
	39	Dimethylphthalate	163	14.539	14.538	(0.968)	759513	3.97028	3.970
	40	Acenaphthylene	152	14.701	14.709	(0.979)	983369	3.52526	3.525
	41	2,6-Dinitrotoluene	165	14.678	14.678	(0.977)	568905	12.6385	12.64
*	42	Acenaphthene-d10	164	15.018	15.018	(1.000)	626282	4.00000	
	43	3-Nitroaniline	138	14.956	14.964	(0.996)	470841	9.85471	9.855
	44	Acenaphthene	153	15.088	15.088	(1.005)	609965	3.65225	3.652
	45	2,4-Dinitrophenol	184	15.173	15.173	(1.010)	665483	21.4939	21.49
	46	Dibenzofuran	168	15.413	15.412	(1.026)	993578	3.62343	3.623
	47	4-Nitrophenol	109	15.281	15.281	(1.017)	304111	10.8959	10.90
	48	2,4-Dinitrotoluene	165	15.482	15.482	(1.031)	797114	12.5245	12.52
	50	Diethylphthalate	149	16.000	16.000	(1.065)	1052582	4.13885	4.139
	49	Fluorene	166	16.124	16.131	(1.074)	1049773	3.66091	3.661
	51	4-Chlorophenyl-phenylether	204	16.116	16.123	(1.073)	586154	3.82286	3.823
	52	4-Nitroaniline	138	16.239	16.239	(1.081)	575467	10.4981	10.50
	53	4,6-Dinitro-2-methylphenol	198	16.324	16.332	(0.904)	1177958	25.7997	25.80
	54	N-Nitrosodiphenylamine	169	16.370	16.378	(0.907)	591254	3.39377	3.394
$	55	2,4,6-Tribromophenol	330	16.663	16.663	(1.110)	205435	5.62806	5.628
	56	4-Bromophenyl-phenylether	248	17.118	17.126	(0.948)	324855	4.18647	4.186
	57	Hexachlorobenzene	284	17.435	17.435	(0.966)	308529	3.91294	3.913
	58	Pentachlorophenol	266	17.799	17.799	(0.986)	495969	12.4622	12.46
*	59	Phenanthrene-d10	188	18.054	18.062	(1.000)	1212335	4.00000	
	60	Phenanthrene	178	18.109	18.108	(1.003)	1112720	3.81957	3.820
	61	Anthracene	178	18.194	18.201	(1.008)	957938	3.31903	3.319
	62	Carbazole	167	18.534	18.534	(1.027)	993743	3.79414	3.794
	63	Di-n-butylphthalate	149	19.339	19.346	(1.071)	1378606	4.71244	4.712
	64	Fluoranthene	202	20.499	20.499	(0.887)	1307230	4.85397	4.854
	65	Pyrene	202	20.925	20.924	(0.905)	1333603	4.68302	4.683
$	66	Terphenyl-d14	244	21.219	21.218	(0.918)	1012968	5.00976	5.010
	67	Butylbenzylphthalate	149	22.148	22.148	(0.958)	486696	5.13162	5.132
	68	Benzo(a)anthracene	228	23.093	23.092	(0.999)	788597	3.94774	3.948
*	69	Chrysene-d12	240	23.124	23.123	(1.000)	624229	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.054	23.054	(0.997)	343483	5.60123	5.601
	71	Chrysene	228	23.162	23.170	(1.002)	716960	3.99027	3.990
	72	bis(2-Ethylhexyl)phthalate	149	23.178	23.177	(0.960)	684882	3.78090	3.781
*	134	Di-n-octylphthalate-d4	153	24.153	24.153	(1.000)	1079392	4.00000	
	73	Di-n-octylphthalate	149	24.161	24.168	(1.000)	1070438	4.24133	4.241
	74	Benzo(b)fluoranthene	252	24.943	24.950	(0.971)	570853	4.04526	4.045
	75	Benzo(k)fluoranthene	252	24.989	24.989	(0.973)	606480	4.02203	4.022
	76	Benzo(a)pyrene	252	25.578	25.577	(0.996)	484505	3.60112	3.601
*	77	Perylene-d12	264	25.686	25.694	(1.000)	444728	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.244	28.244	(1.100)	396333	3.53595	3.536
	79	Dibenzo(a,h)anthracene	278	28.252	28.259	(1.100)	337802	3.65422	3.654
	80	Benzo(g,h,i)perylene	276	28.998	28.997	(1.129)	274075	3.01191	3.012
	90	N-Nitrosodimethylamine	74	4.597	4.573	(0.517)	514328	8.75240	8.752
	91	Aniline	93	8.359	8.366	(0.939)	445453	3.26733	3.267
	93	Benzidine	184	20.747	20.746	(0.897)	95	0.00130	0.001304
	103	Pyridine	79	4.620	4.581	(0.519)	79827	0.85849	0.8585
	105	1-methylnaphthalene	142	13.053	13.060	(1.146)	633677	3.54736	3.547
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.448	16.447	(1.095)	1094123	3.53995	3.540

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.989	24.989	(0.973)	1115522	8.09677	8.097
120 2,3,4,6-Tetrachlorophenol	232	15.753	15.752	(1.049)	221609	3.07399	3.074

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021722.D
Lab Smp Id: BLA0339-BS1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230217A.b\ABN.m
Misc Info:

Calibration Date: 17-FEB-2023
Calibration Time: 20:19
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	351756	175878	703512	283915	-19.29
27 Naphthalene-d8	1299383	649692	2598766	1030366	-20.70
42 Acenaphthene-d10	808045	404023	1616090	626282	-22.49
59 Phenanthrene-d10	1607740	803870	3215480	1212335	-24.59
69 Chrysene-d12	876381	438191	1752762	624229	-28.77
134 Di-n-octylphthala	1545452	772726	3090904	1079392	-30.16
77 Perylene-d12	639717	319859	1279434	444728	-30.48

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.39	-0.06
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.00
59 Phenanthrene-d10	18.06	17.56	18.56	18.05	-0.04
69 Chrysene-d12	23.12	22.62	23.62	23.12	0.00
134 Di-n-octylphthala	24.15	23.65	24.65	24.15	0.00
77 Perylene-d12	25.69	25.19	26.19	25.69	-0.03

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

REVIEW SUMMARY FOR FILE - NT1423021722.D

Lab ID: BLA0339-BS1
nt14.i, ABN.m, 17-FEB-2023 23:19

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: NT1423021717.D

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

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

Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021723.D

Date : 17-FEB-2023 23:55

Client ID:

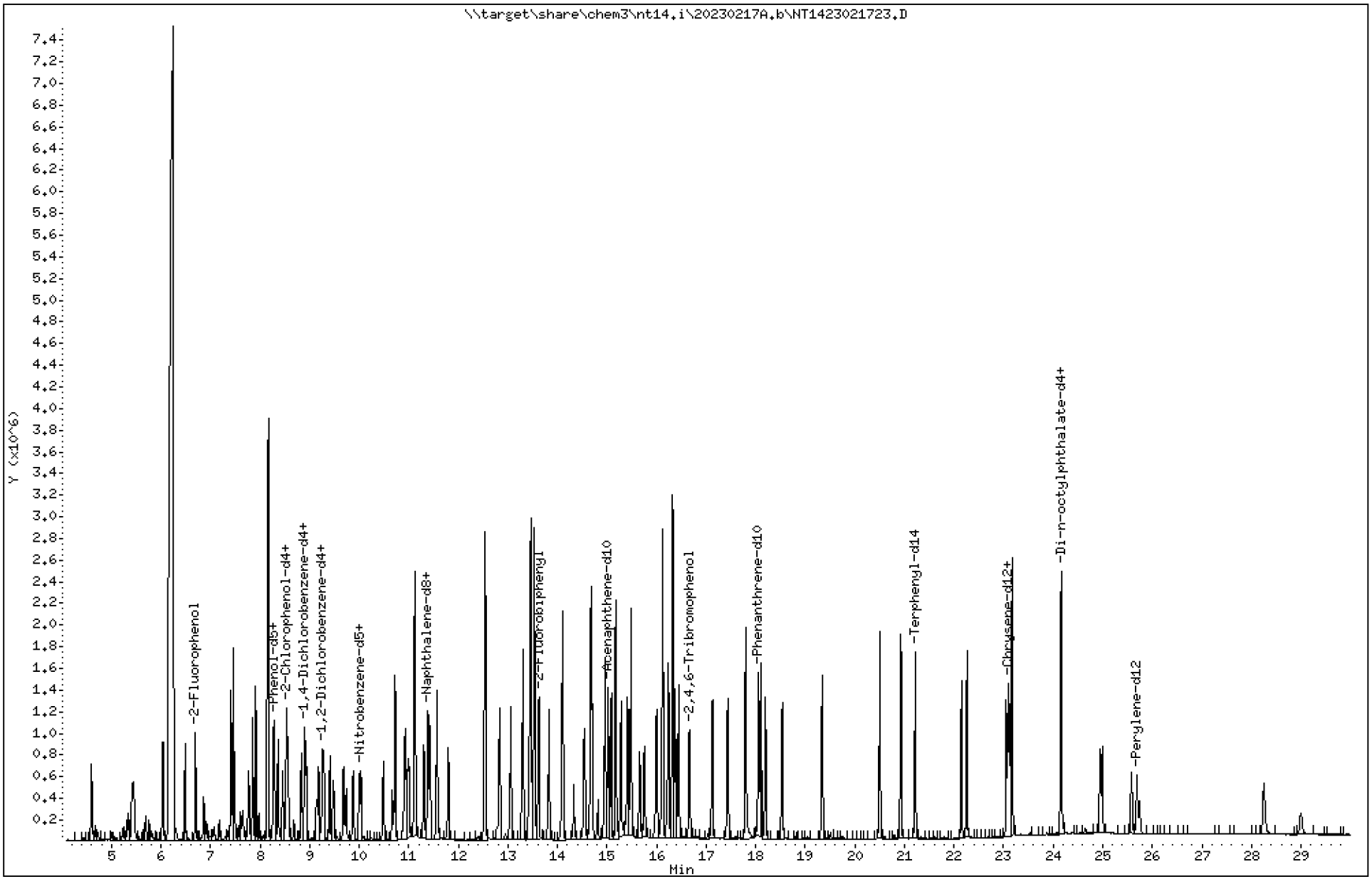
Instrument: nt14.i

Sample Info: BLA0339-BSD1

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

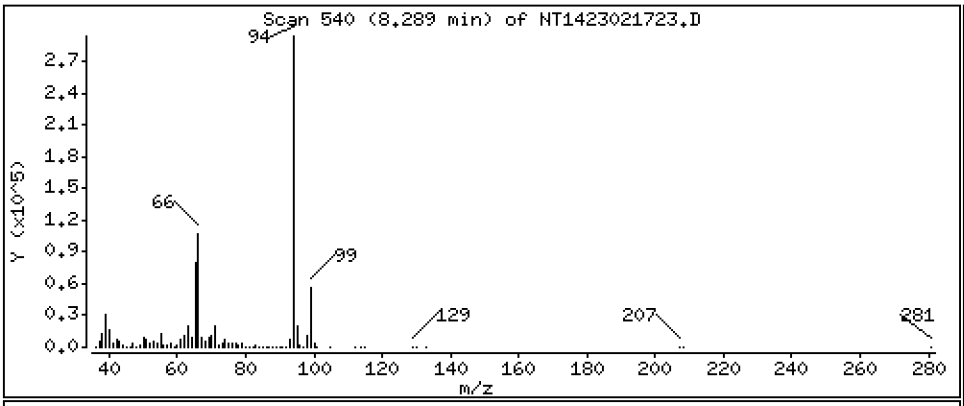
Operator: DSD

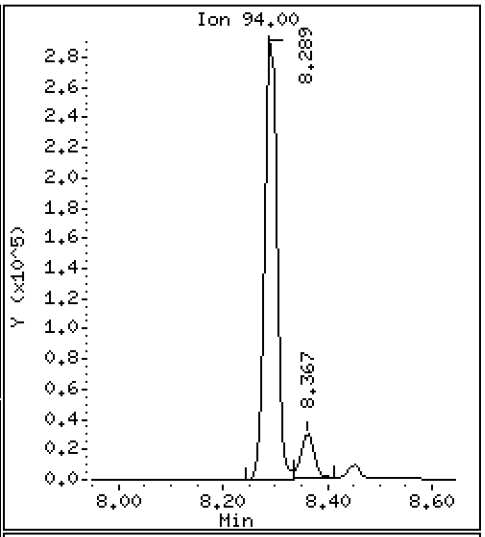
Column phase: ZB-5msi

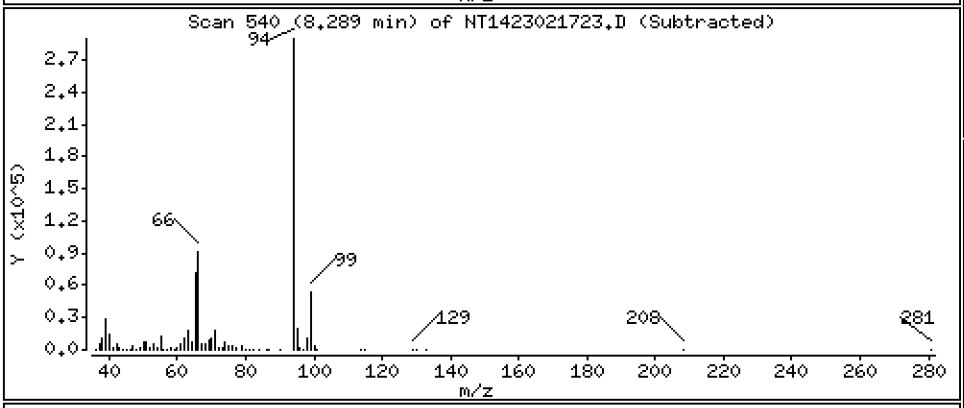
Column diameter: 0.25

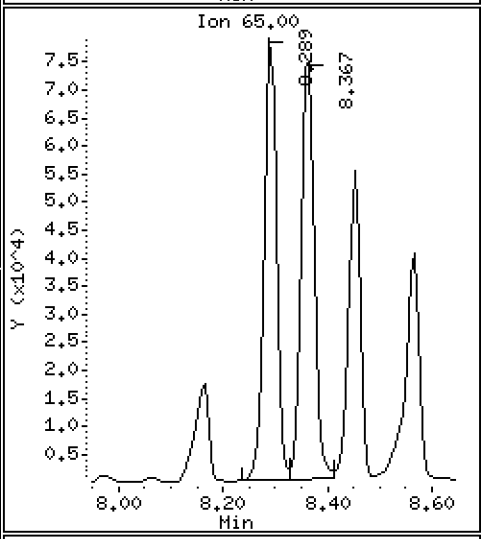
3 Phenol

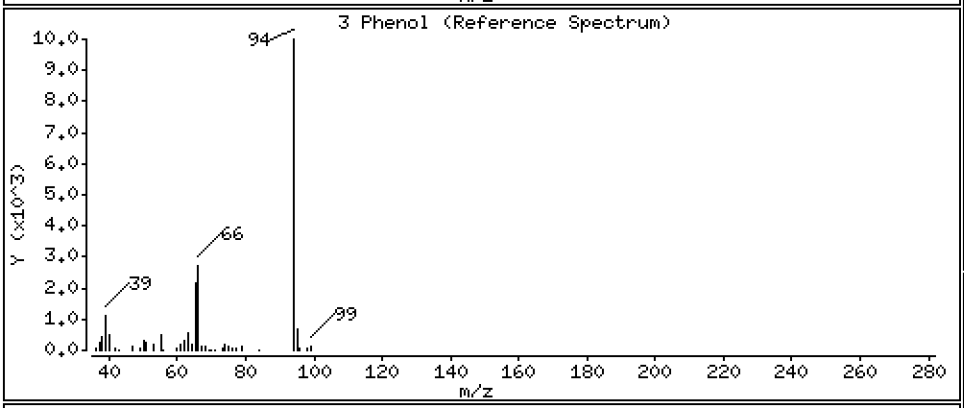
Concentration: 3.560 ug/mL

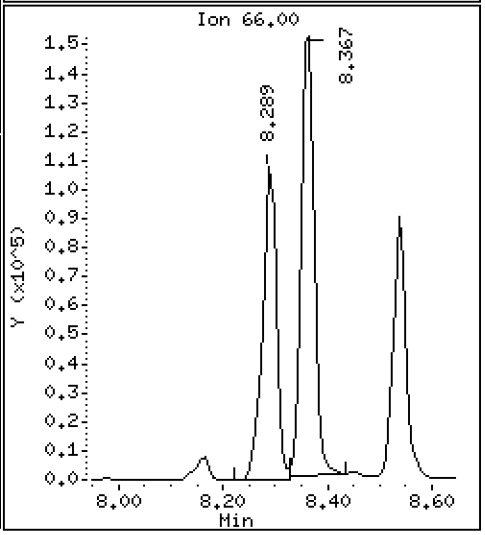


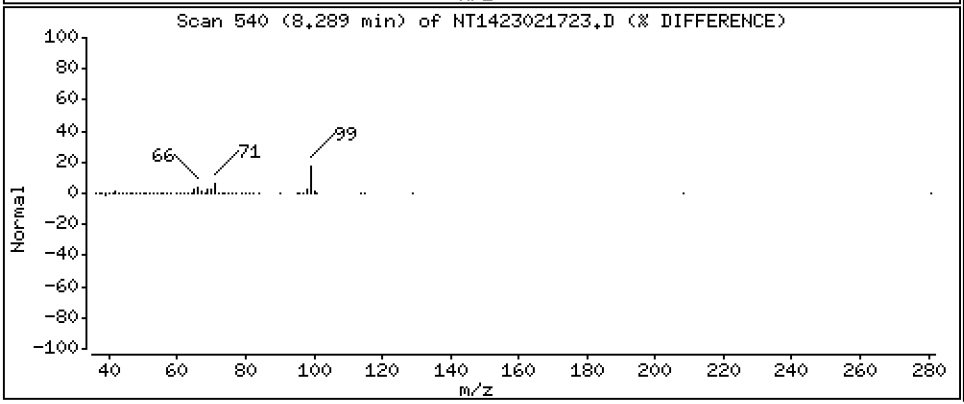












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021723.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

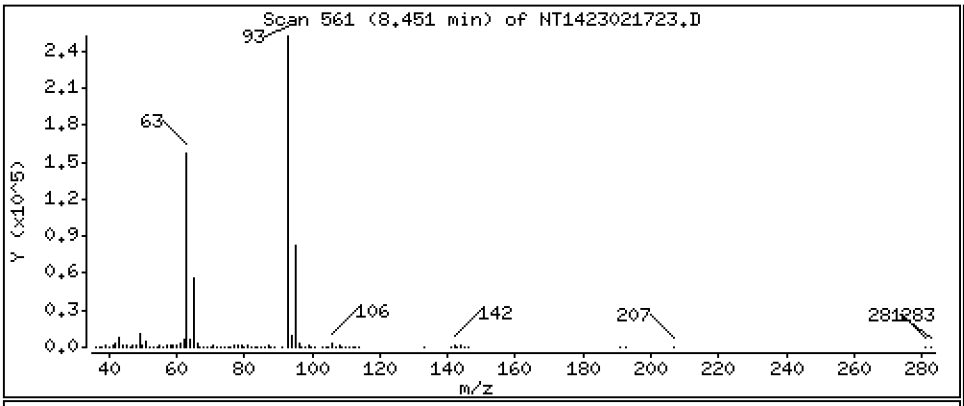
Operator: DSD

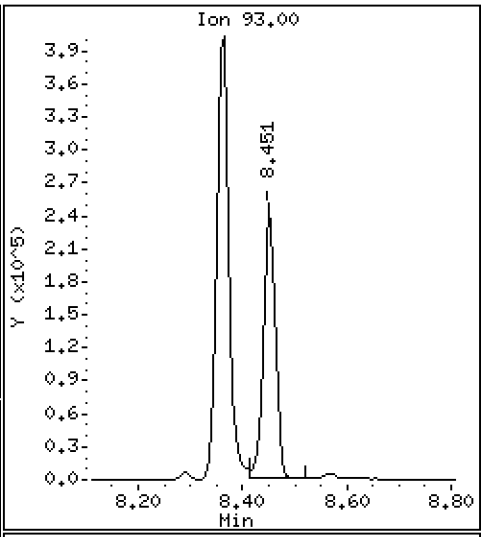
Column phase: ZB-5msi

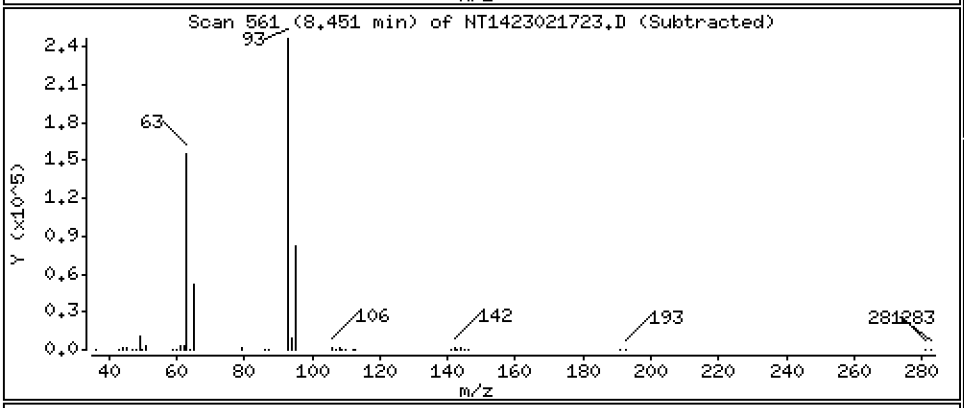
Column diameter: 0.25

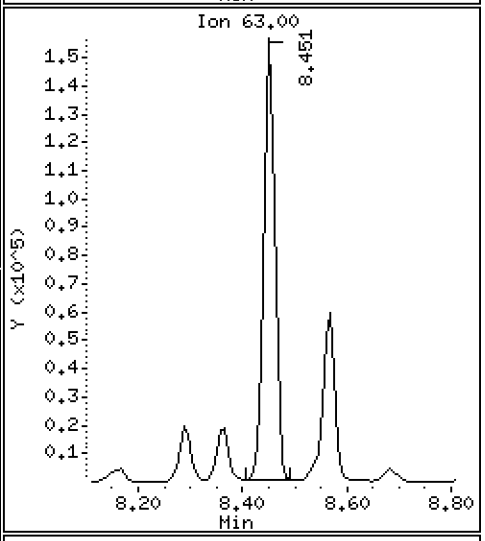
4 Bis(2-Chloroethyl)ether

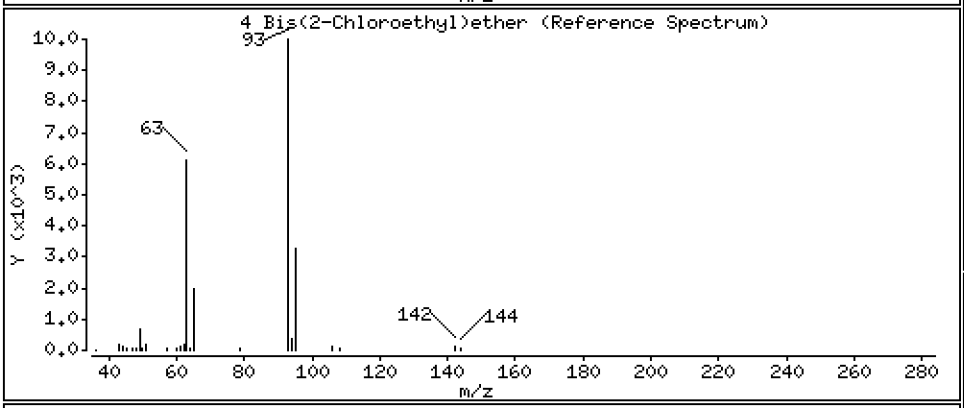
Concentration: 3.908 ug/mL

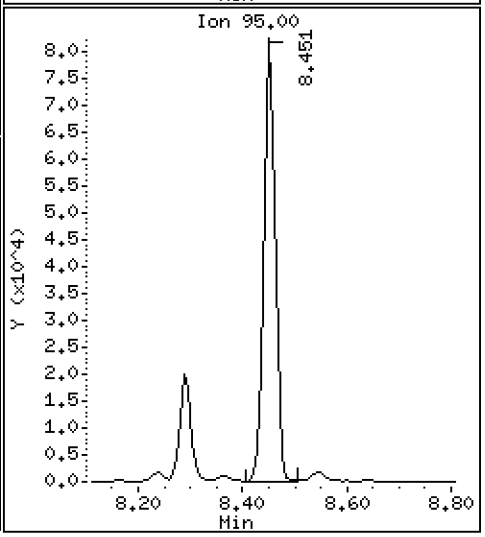


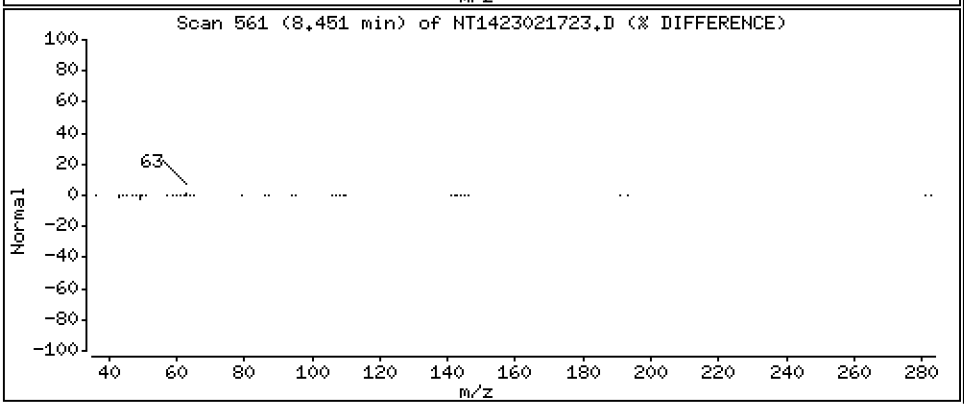












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021723.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

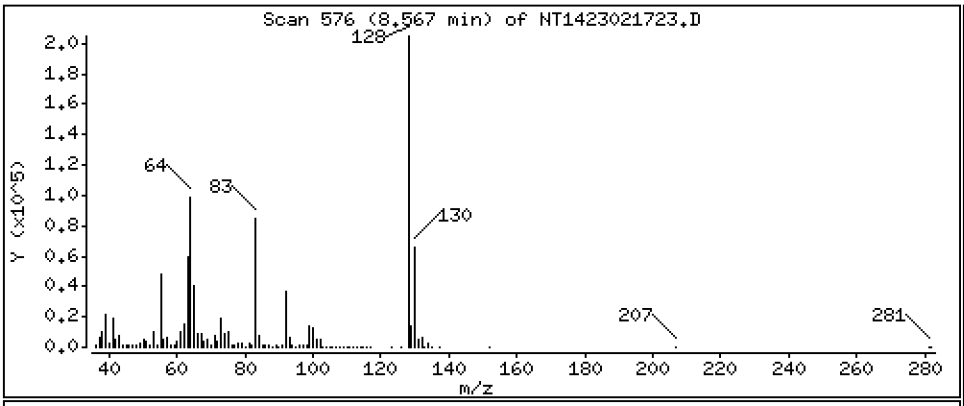
Operator: DSD

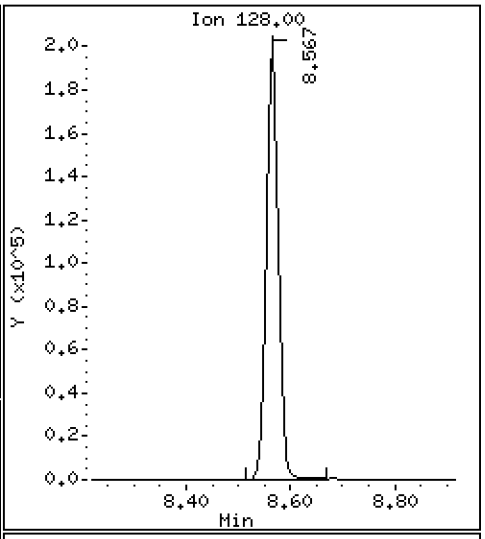
Column phase: ZB-5msi

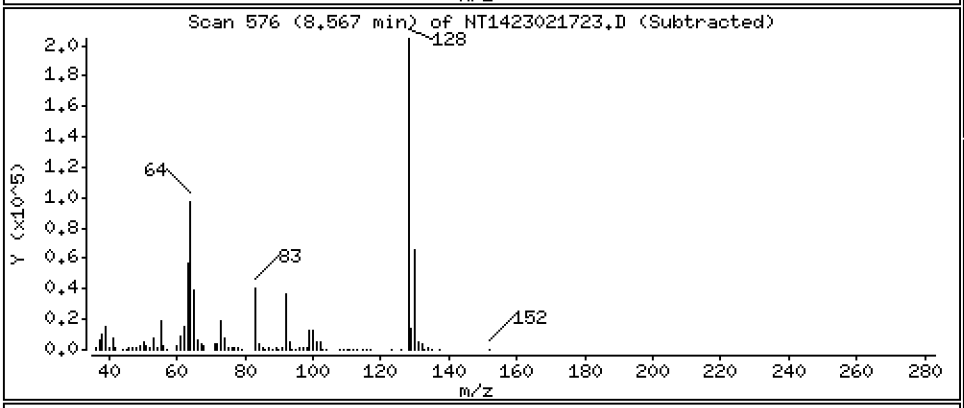
Column diameter: 0.25

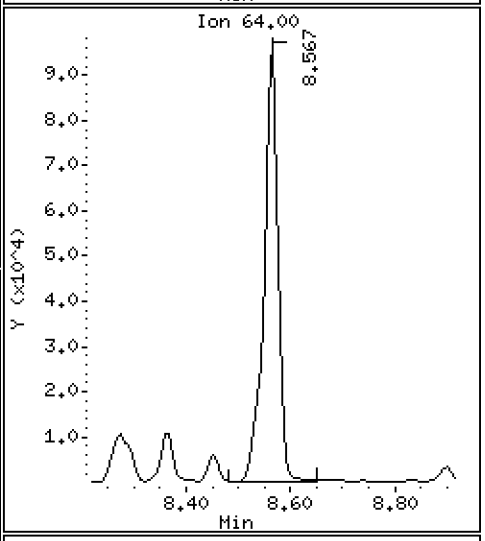
6 2-Chlorophenol

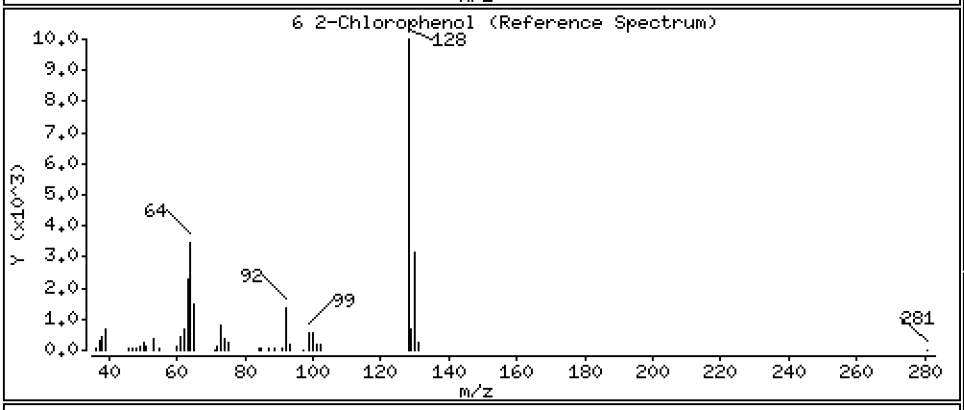
Concentration: 3.563 ug/mL

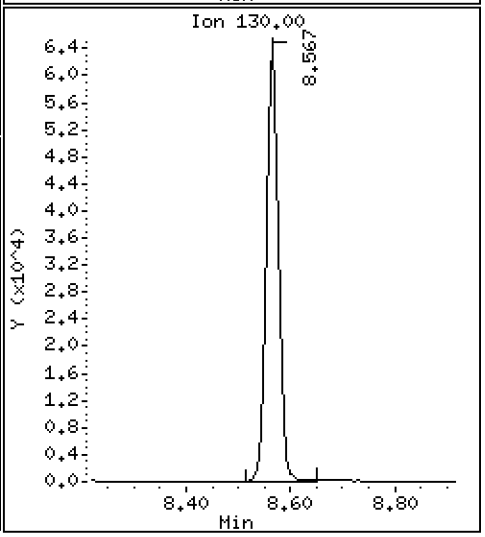


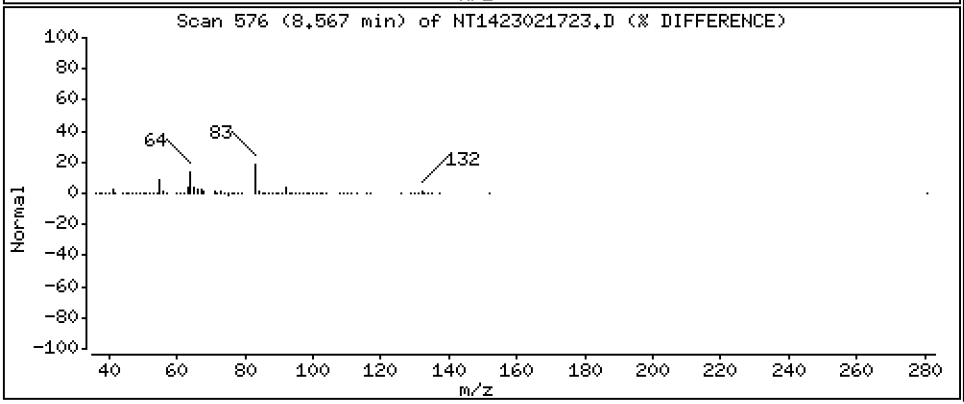












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

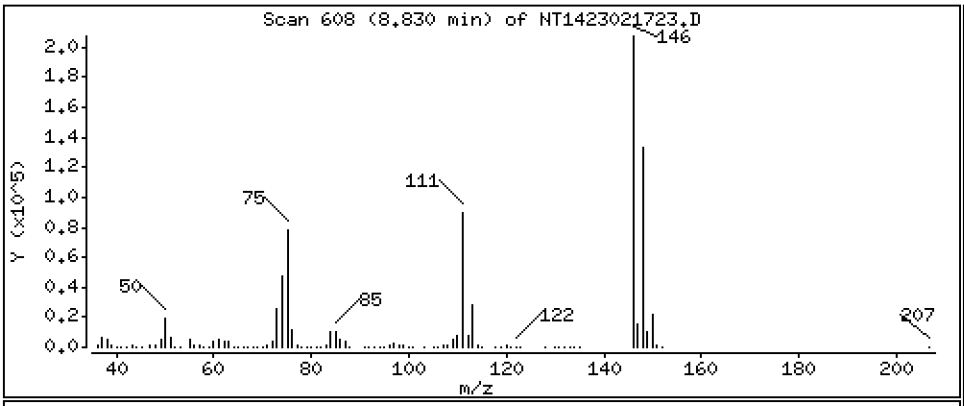
Operator: DSD

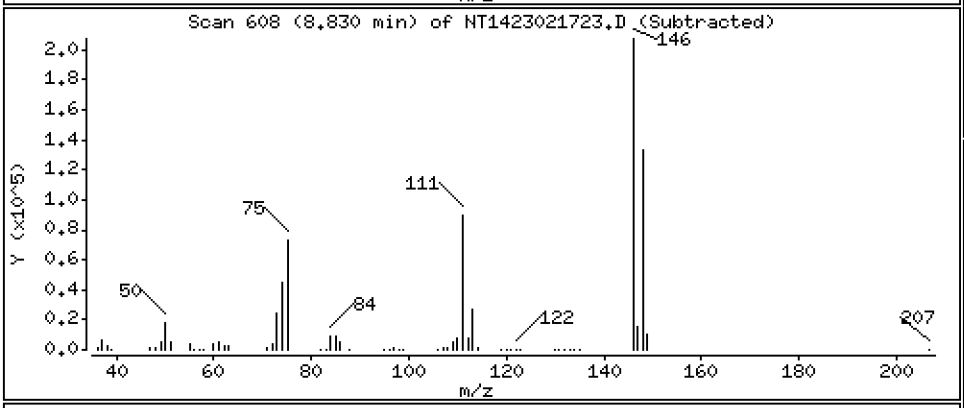
Column phase: ZB-5msi

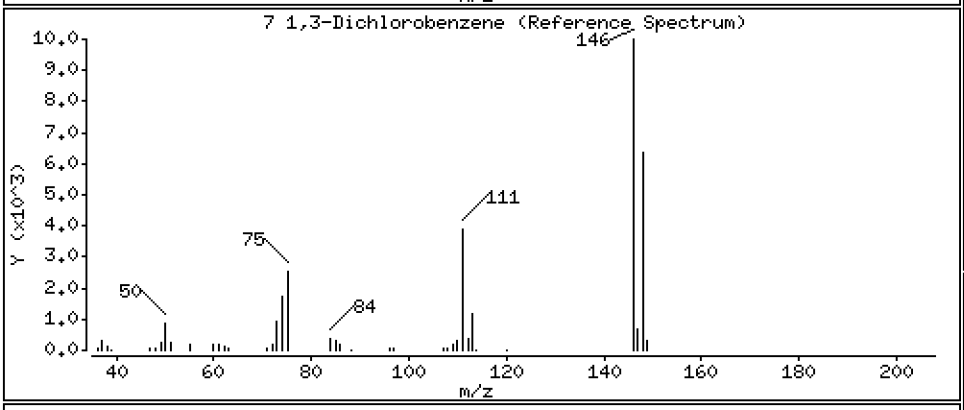
Column diameter: 0.25

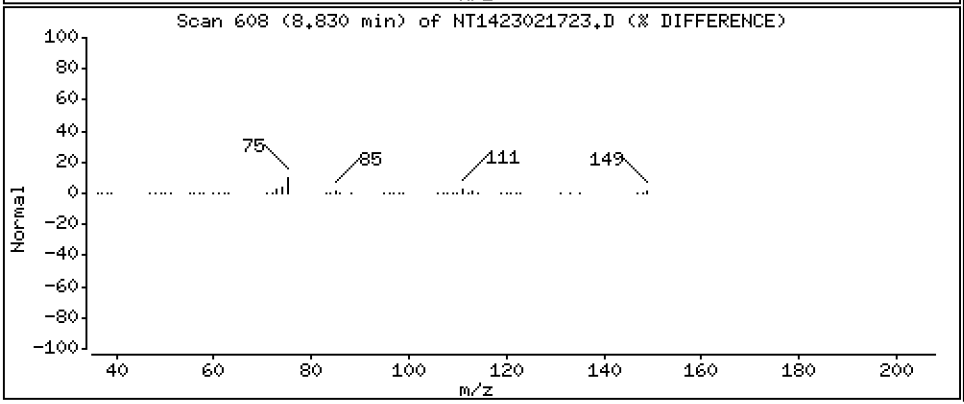
7 1,3-Dichlorobenzene

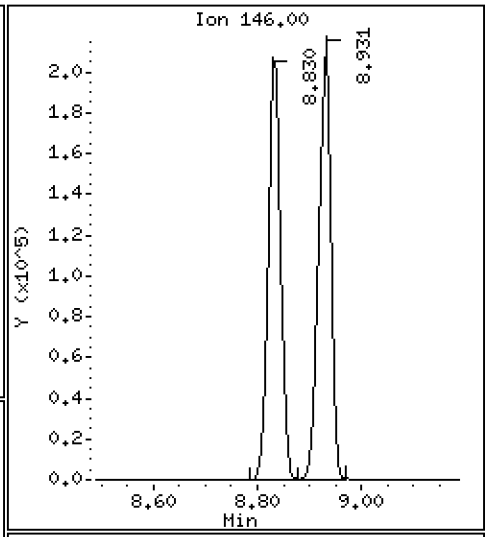
Concentration: 3.490 ug/mL

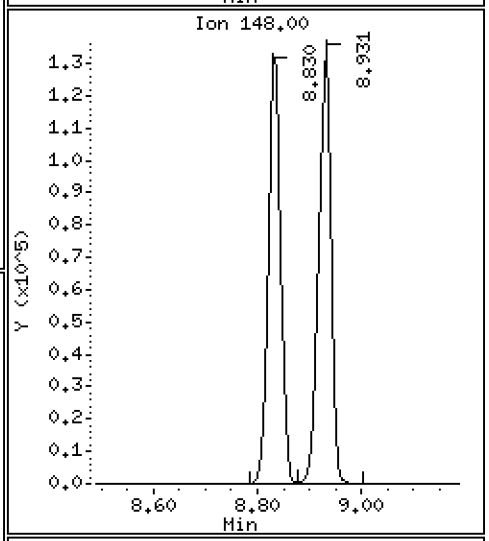


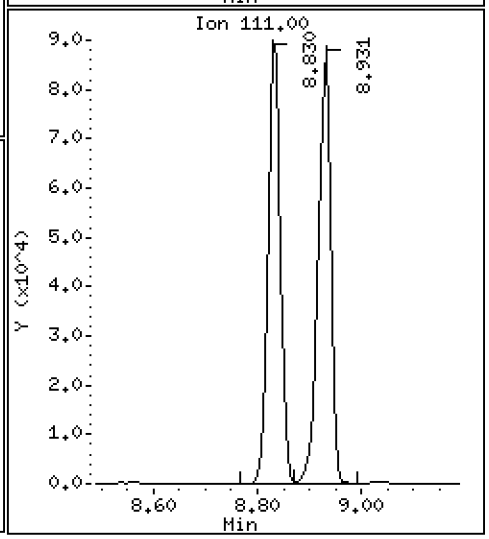












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

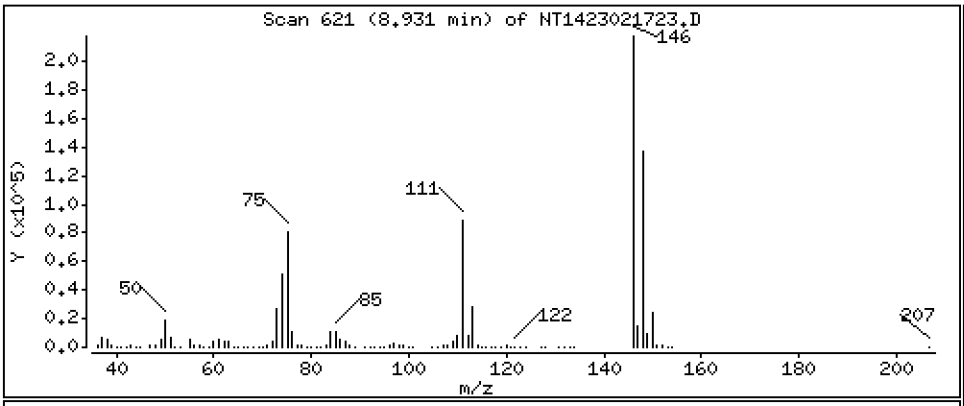
Operator: DSD

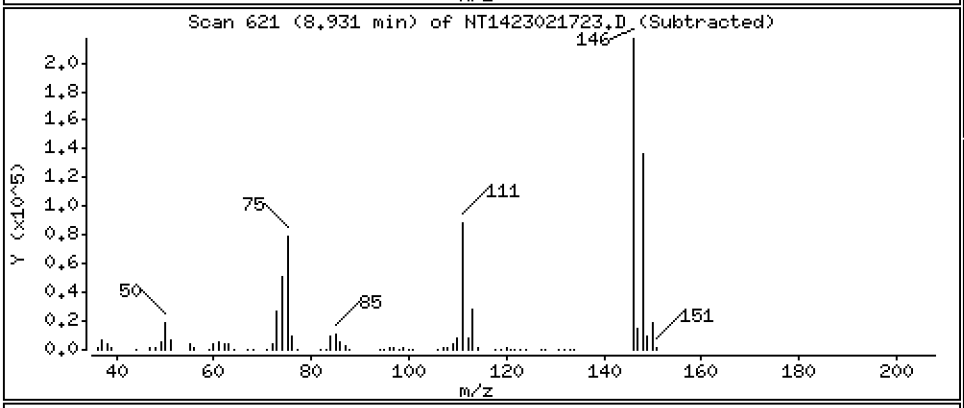
Column phase: ZB-5msi

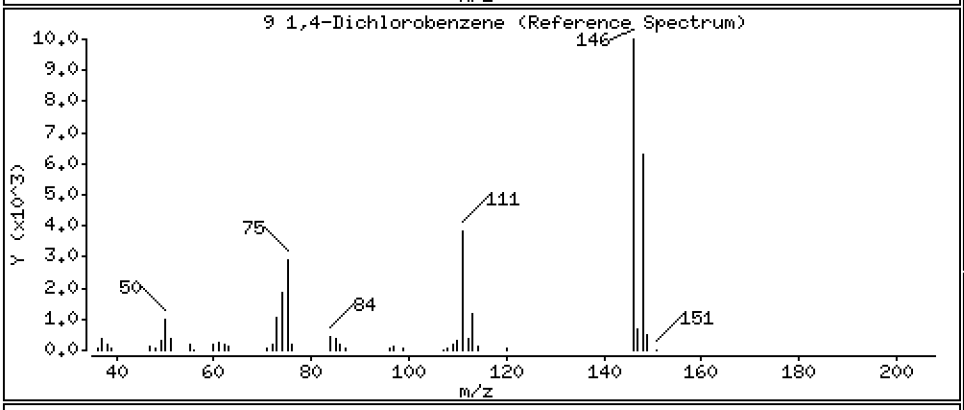
Column diameter: 0.25

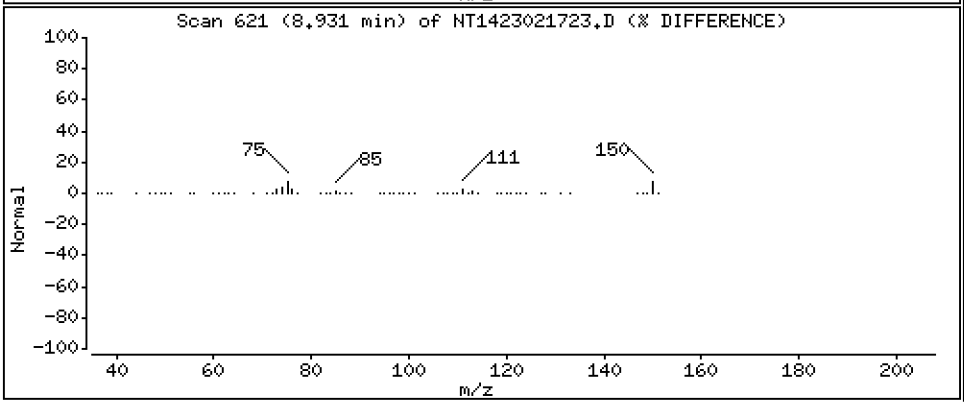
9 1,4-Dichlorobenzene

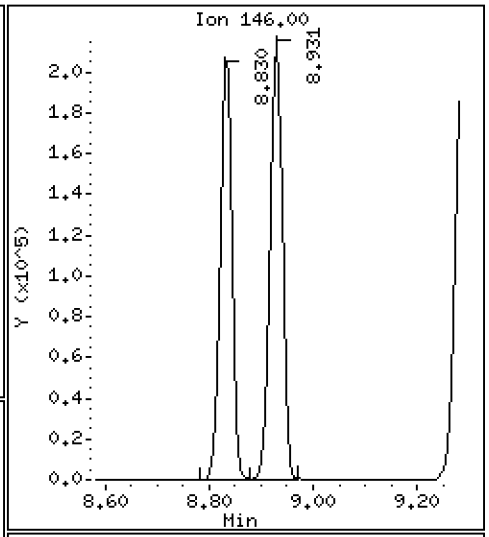
Concentration: 3.577 ug/mL

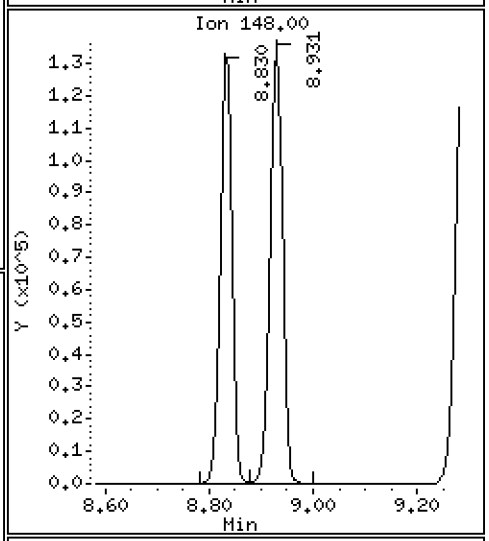


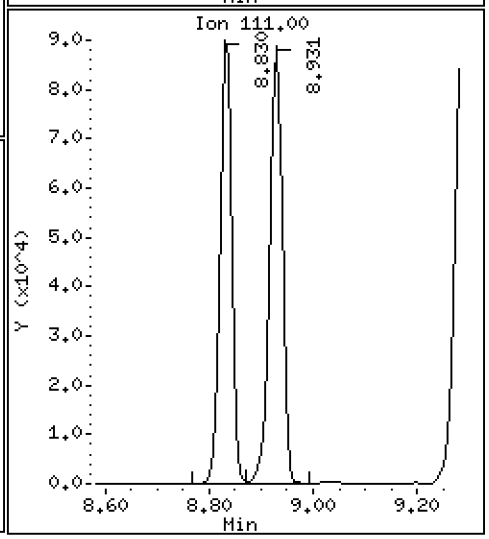












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

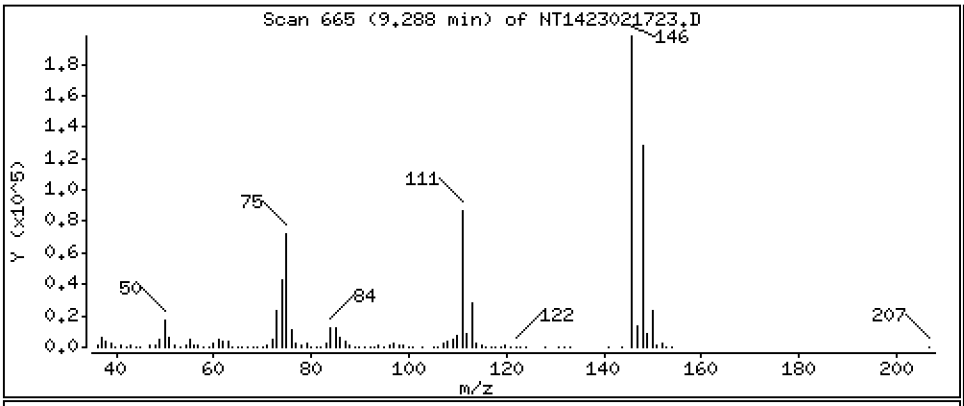
Operator: DSD

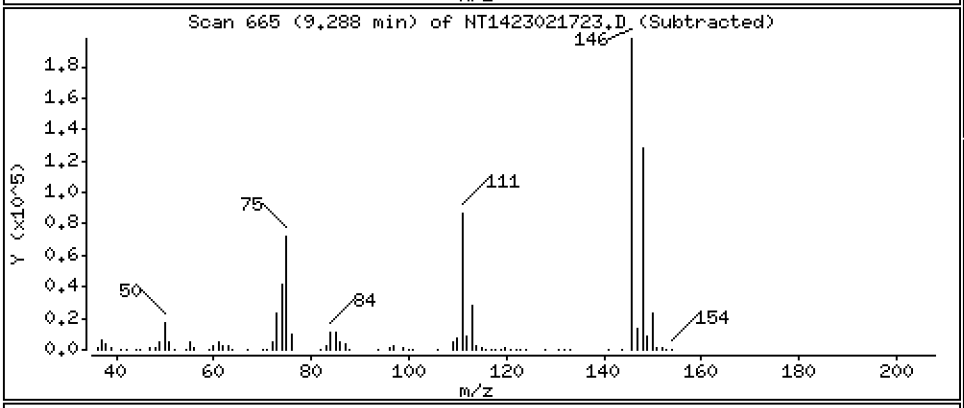
Column phase: ZB-5msi

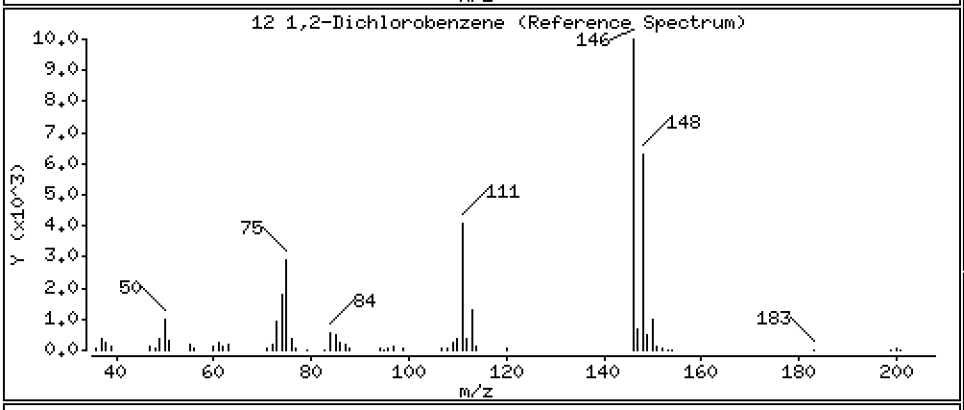
Column diameter: 0.25

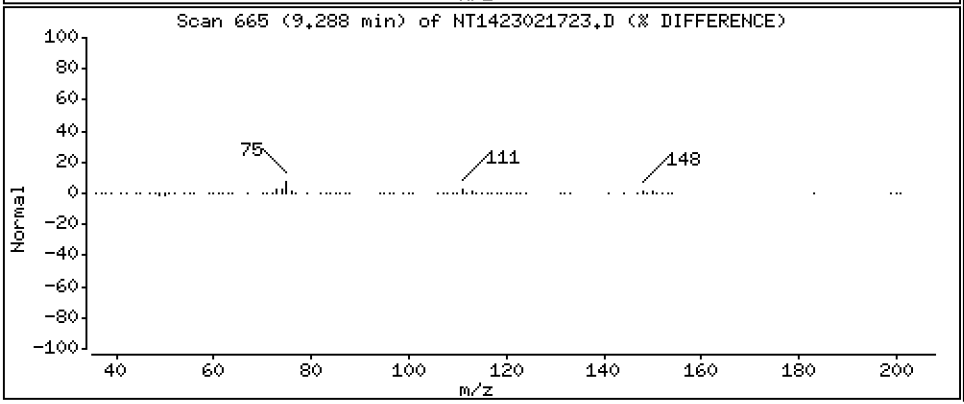
12 1,2-Dichlorobenzene

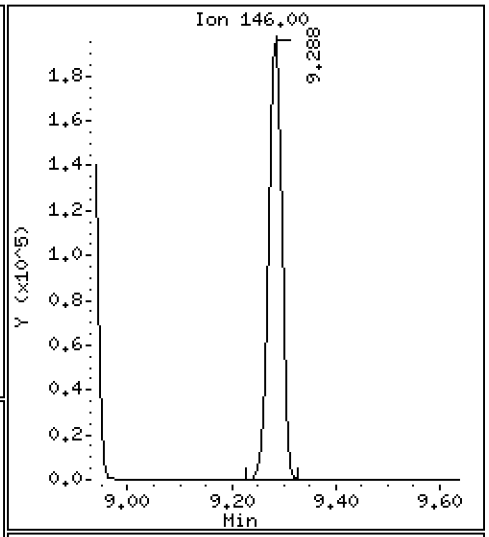
Concentration: 3.563 ug/mL

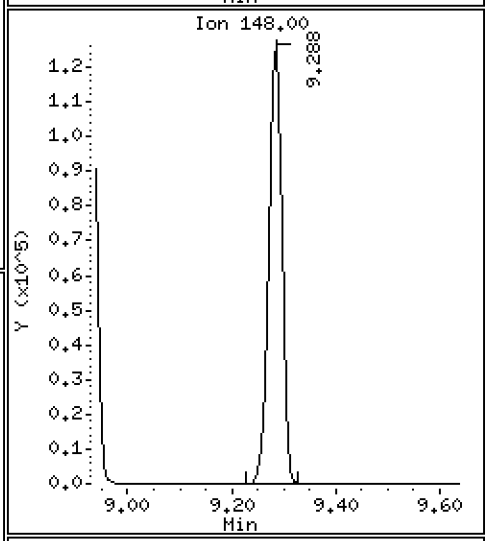


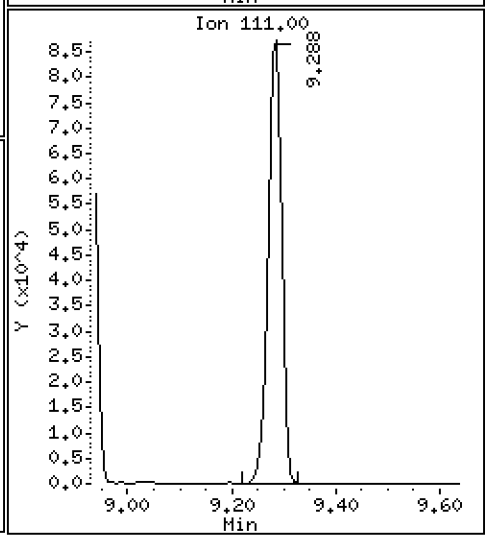












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

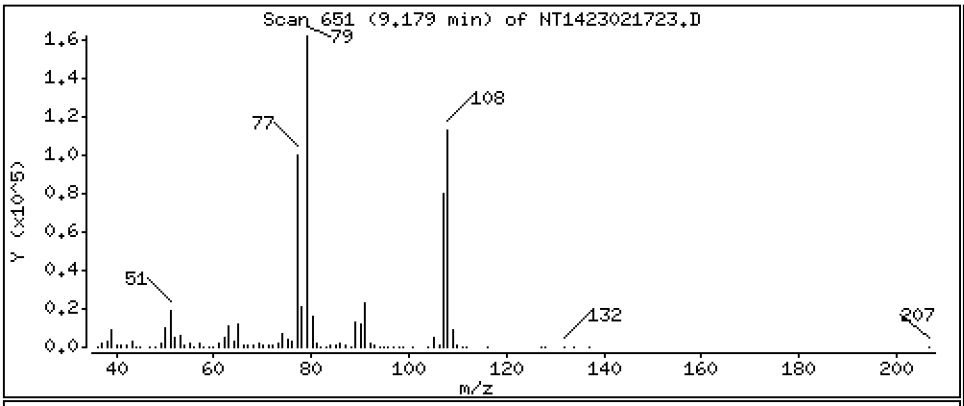
Operator: DSD

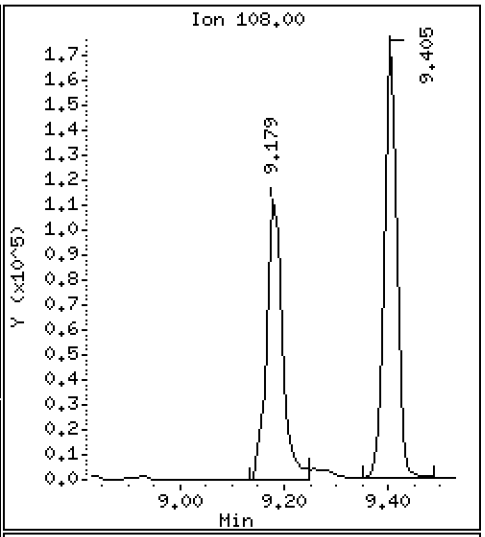
Column phase: ZB-5msi

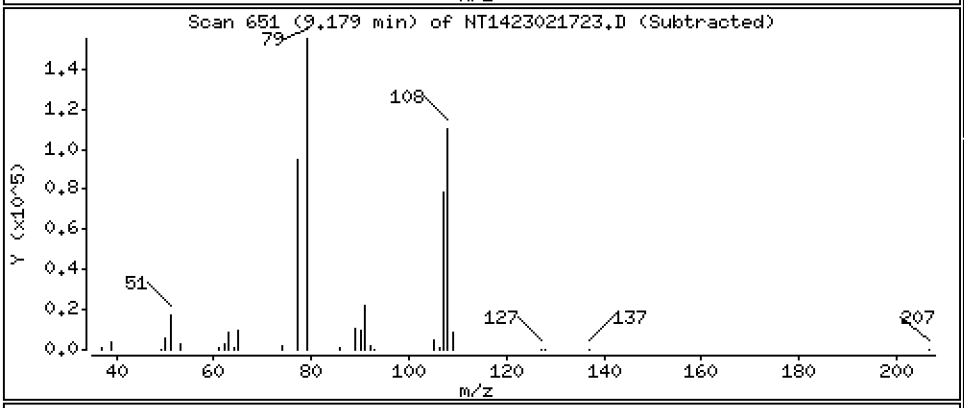
Column diameter: 0.25

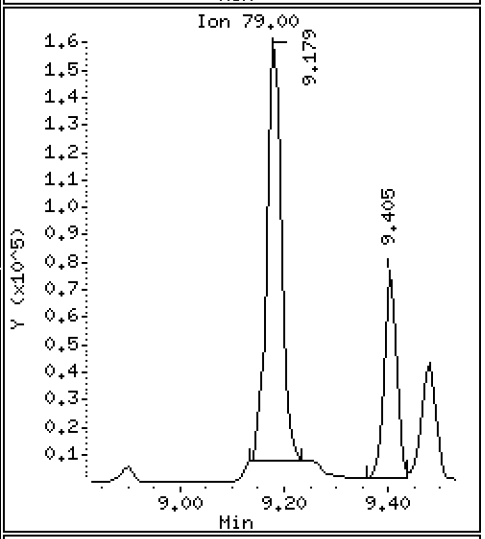
11 Benzyl alcohol

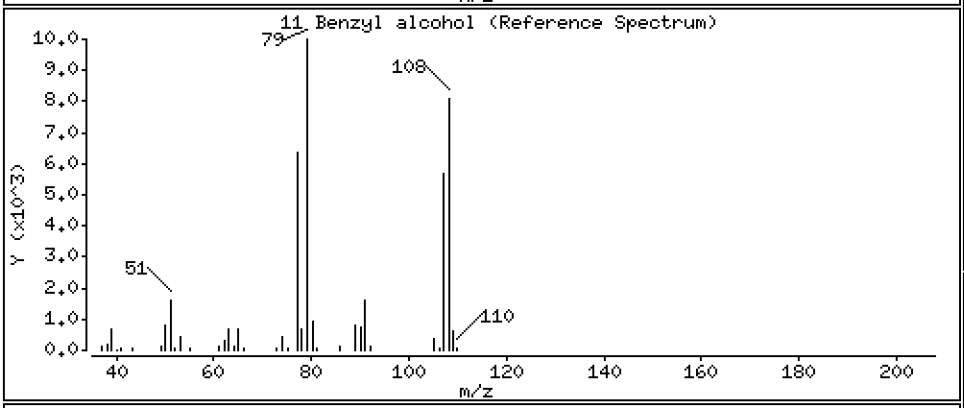
Concentration: 3.425 ug/mL

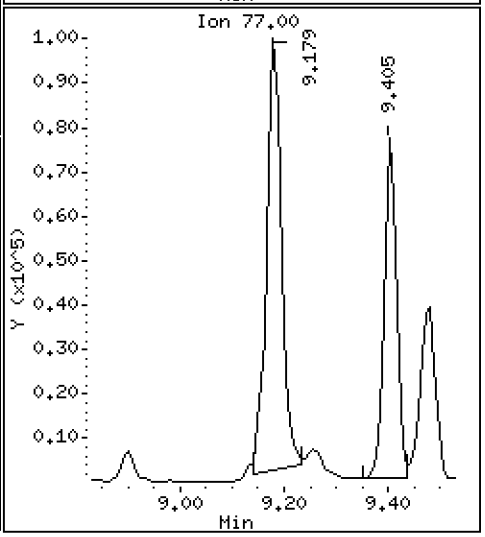


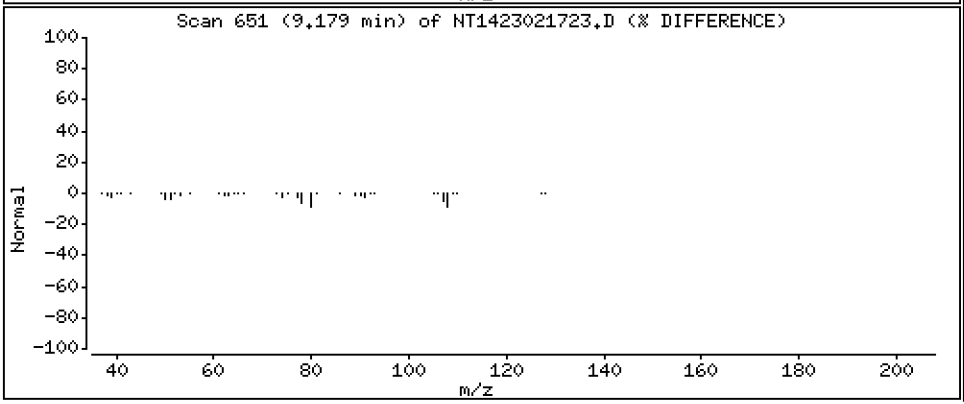












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

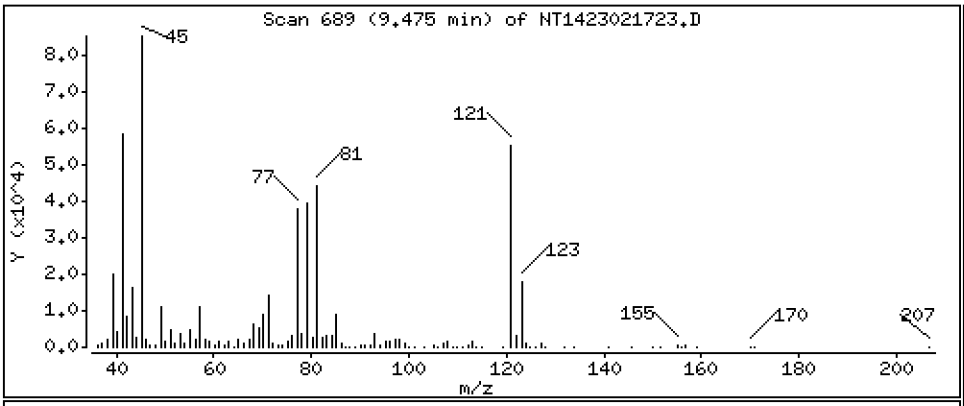
Operator: DSD

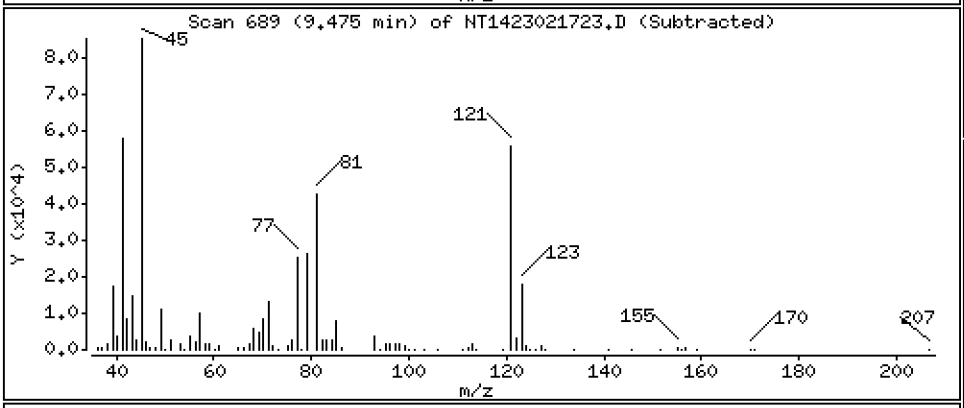
Column phase: ZB-5msi

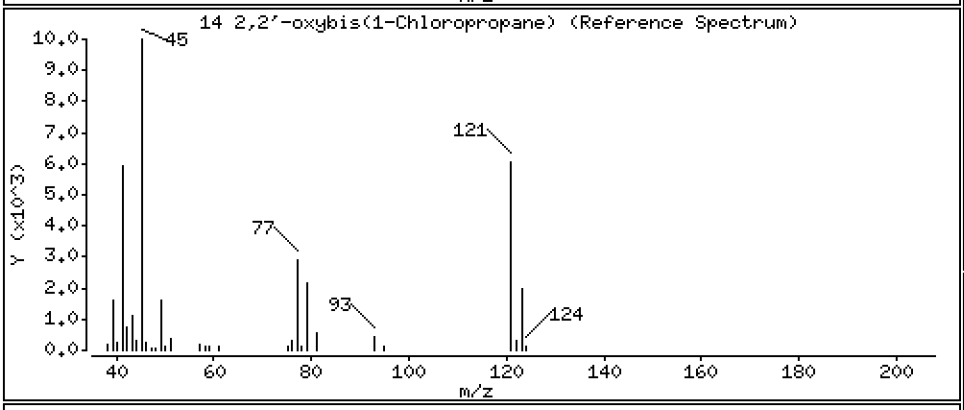
Column diameter: 0.25

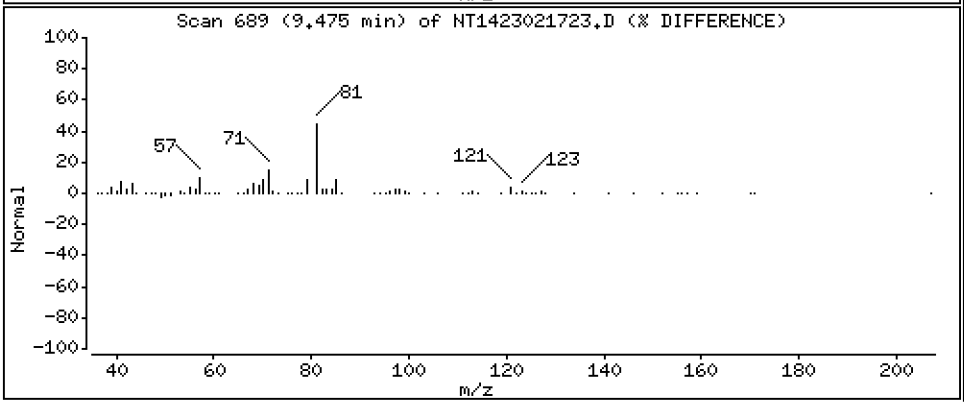
14 2,2'-oxybis(1-Chloropropane)

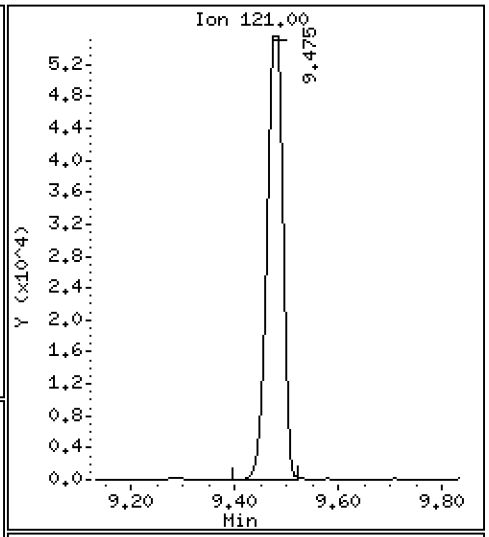
Concentration: 4.237 ug/mL

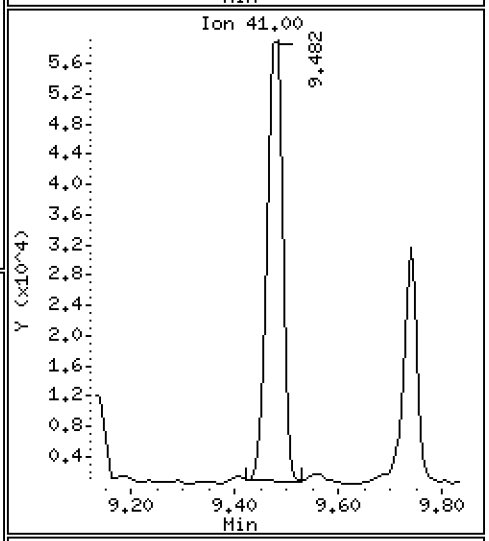


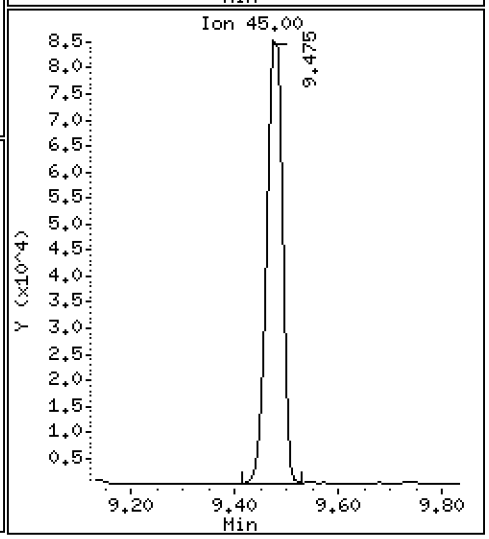












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

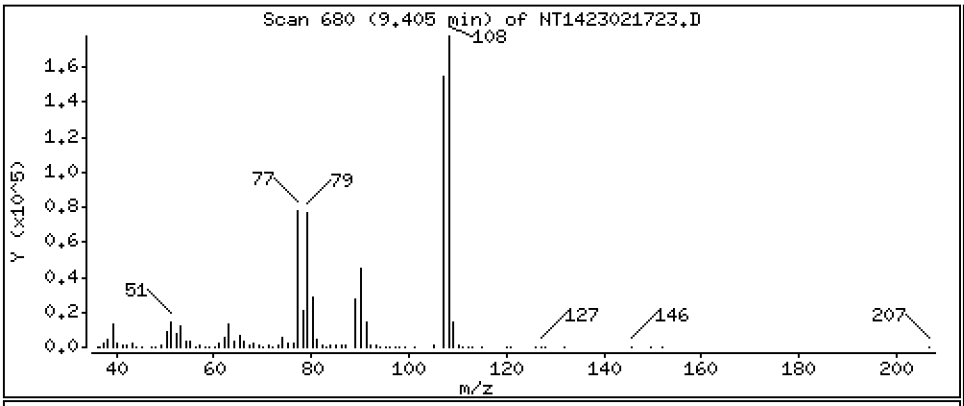
Operator: DSD

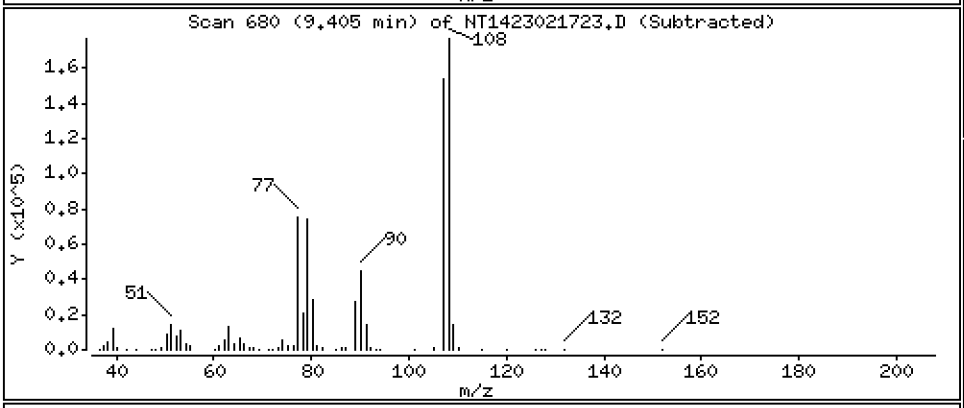
Column phase: ZB-5msi

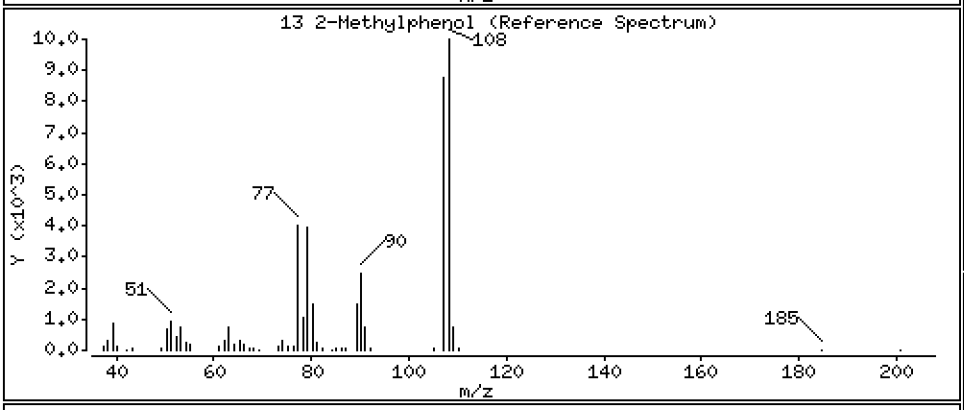
Column diameter: 0.25

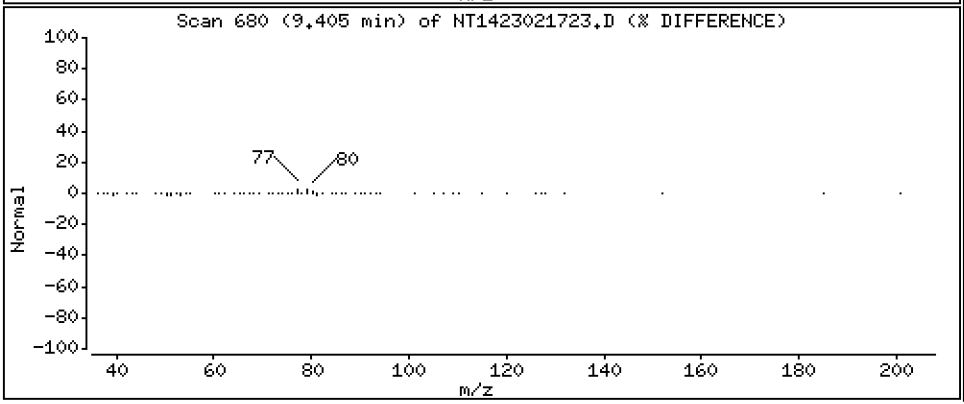
13 2-Methylphenol

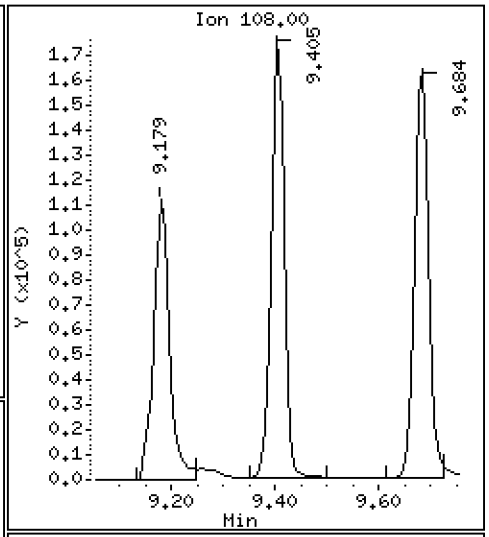
Concentration: 3.227 ug/mL

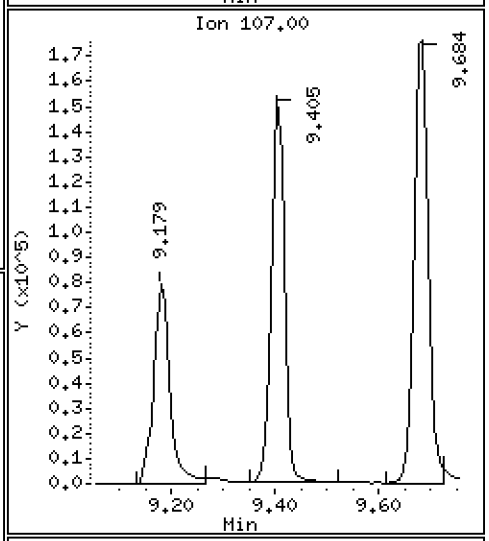


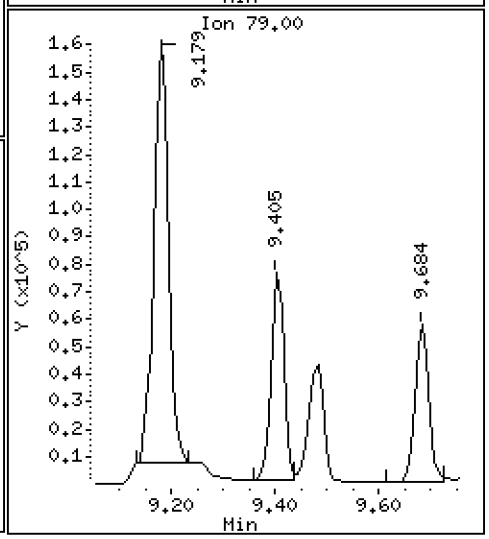












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

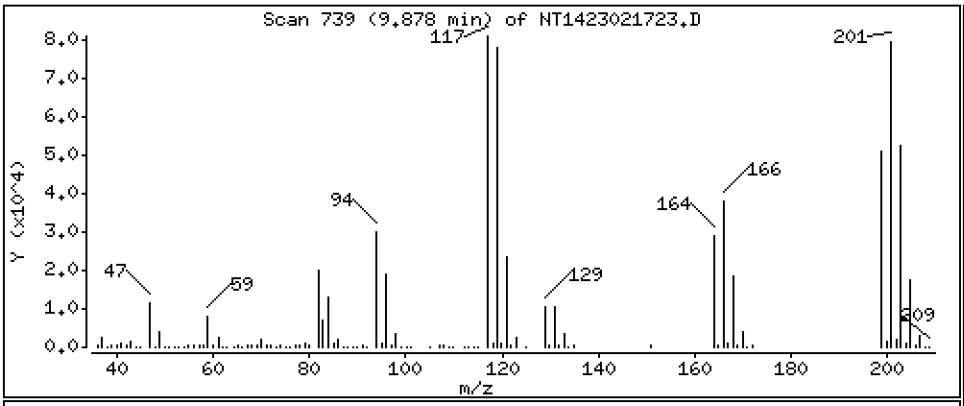
Operator: DSD

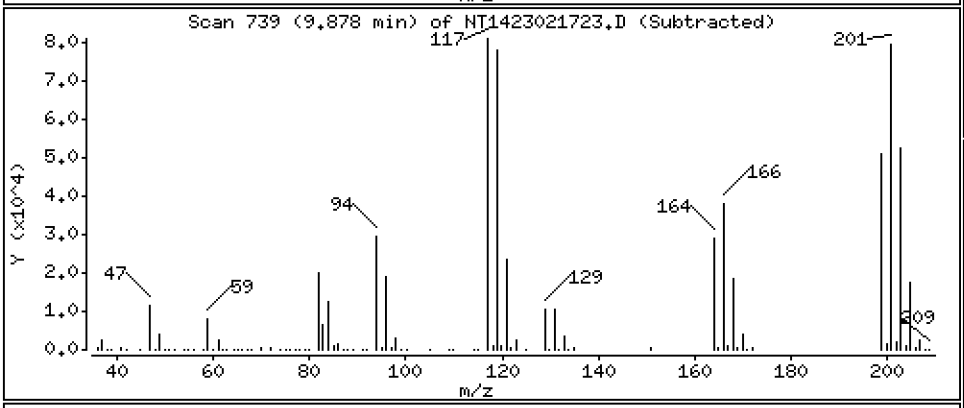
Column phase: ZB-5msi

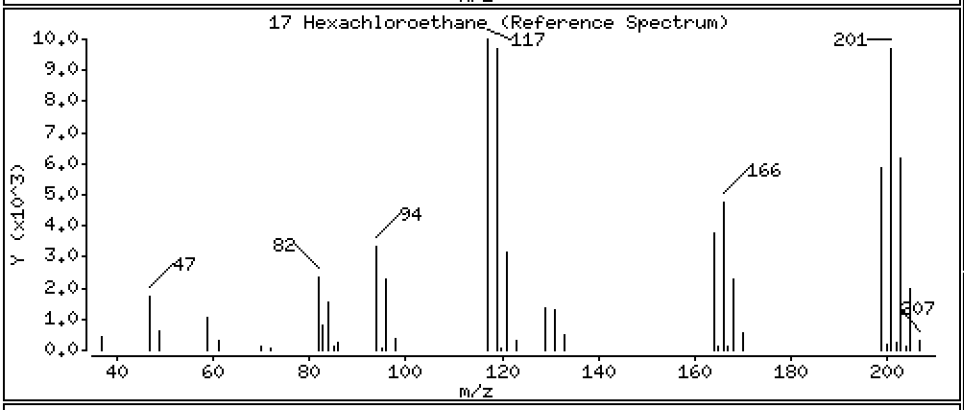
Column diameter: 0.25

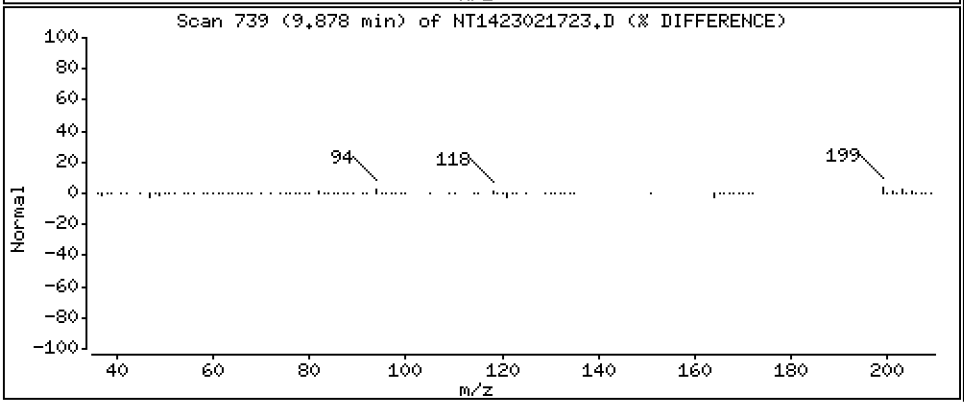
17 Hexachloroethane

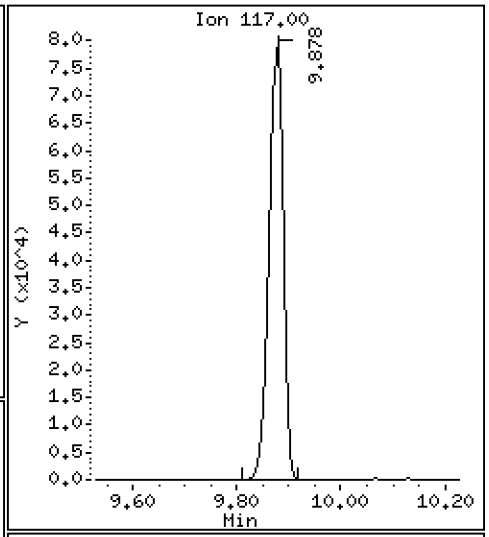
Concentration: 3.554 ug/mL

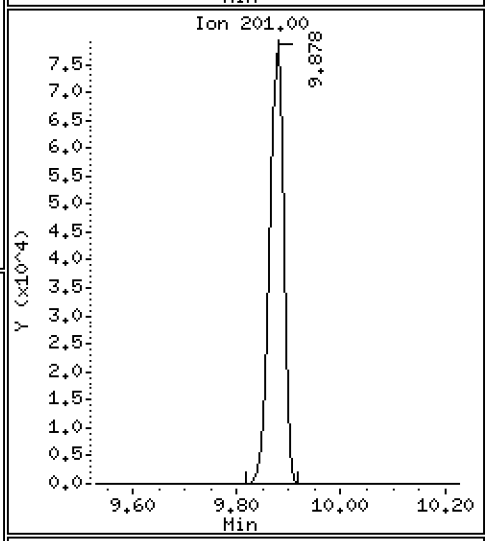


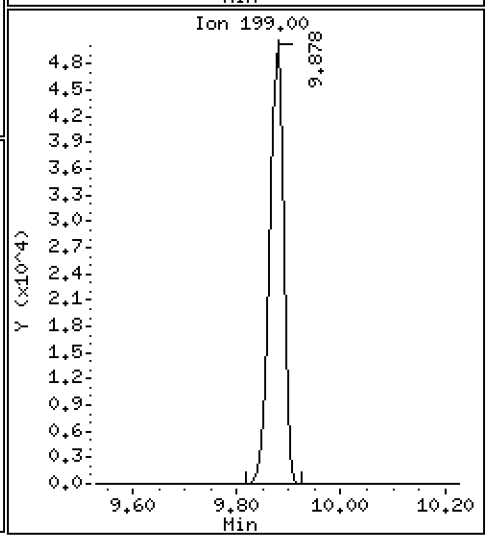












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

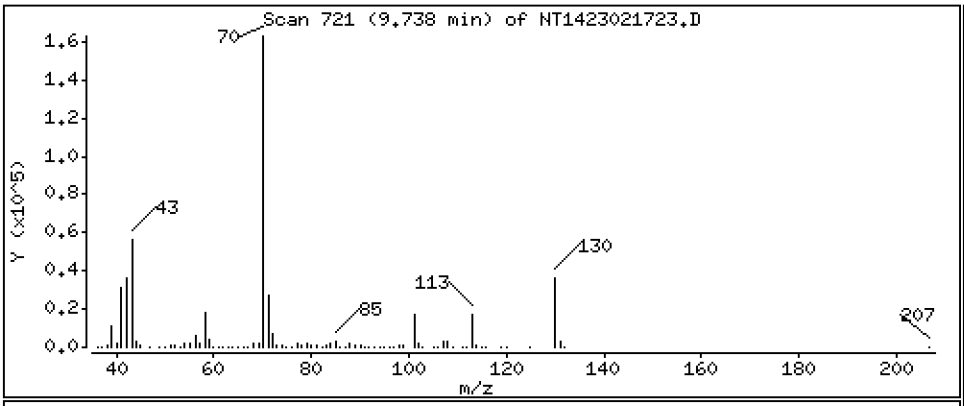
Operator: DSD

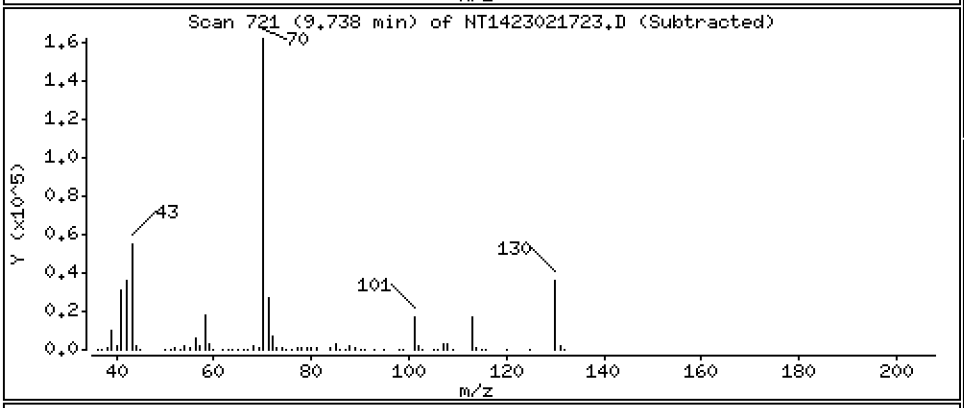
Column phase: ZB-5msi

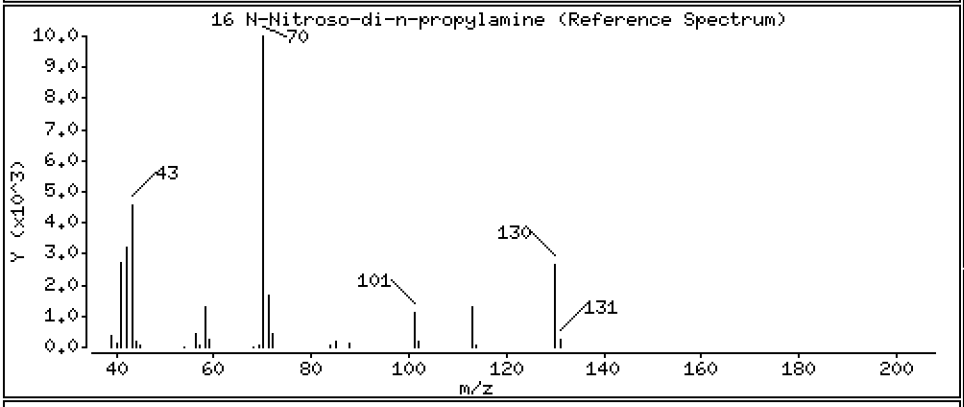
Column diameter: 0.25

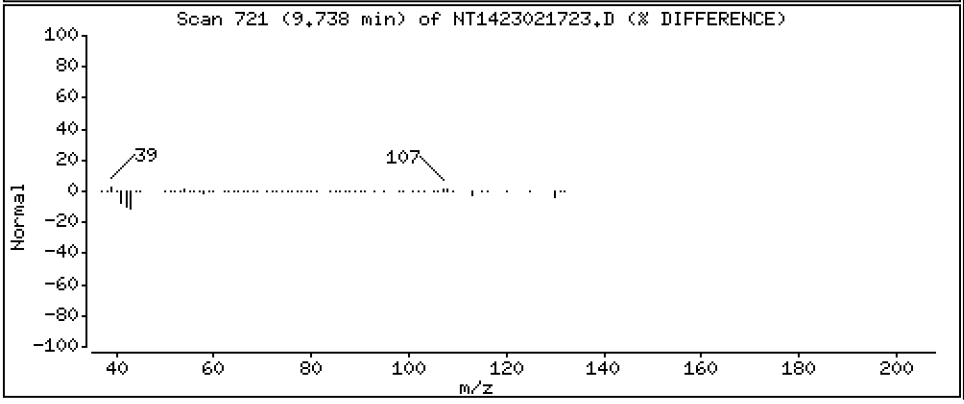
16 N-Nitroso-di-n-propylamine

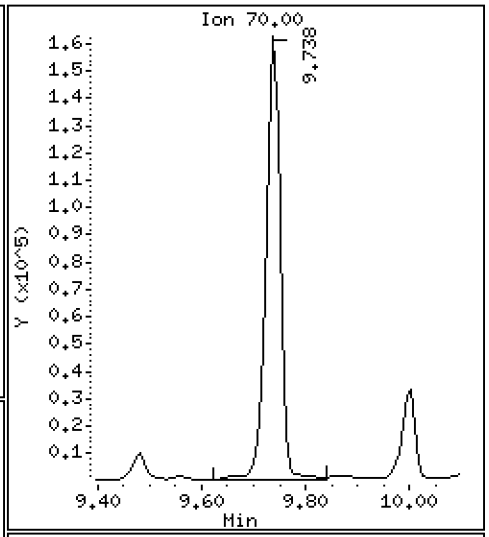
Concentration: 3.706 ug/mL

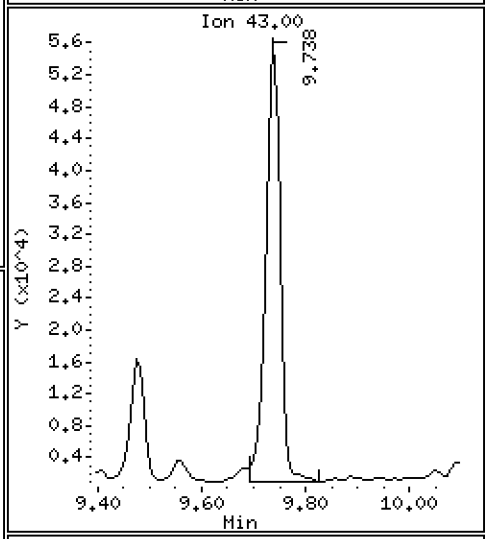


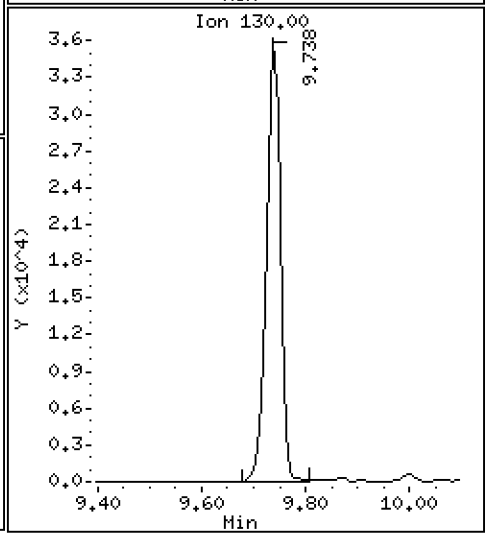












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

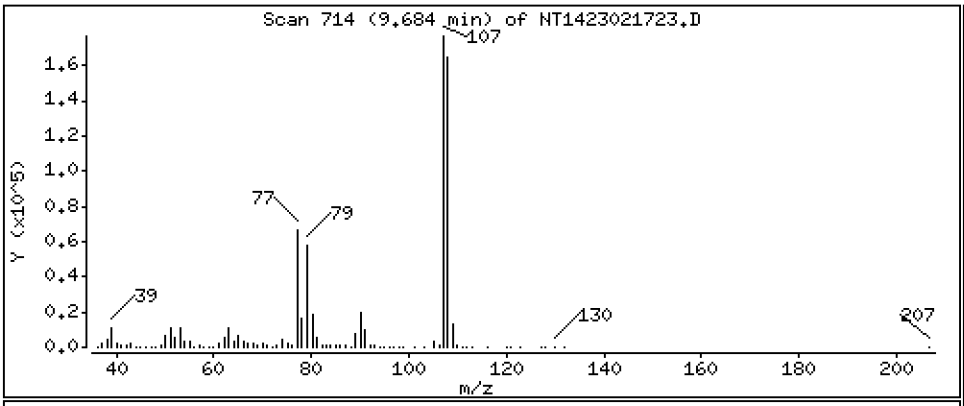
Operator: DSD

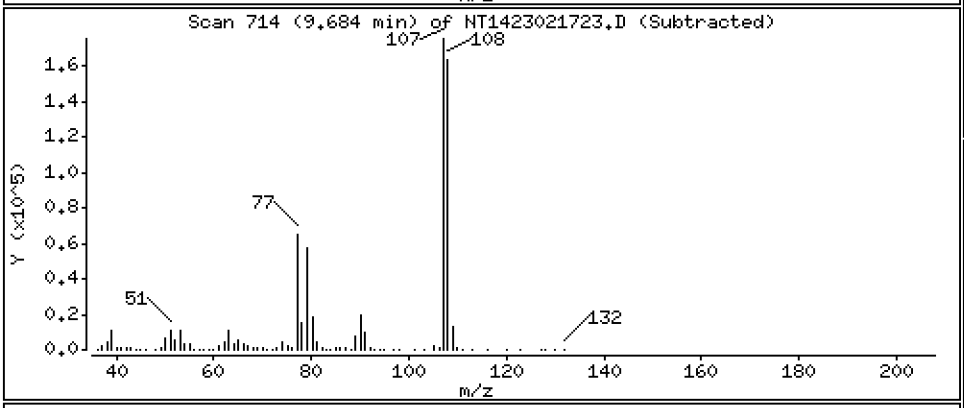
Column phase: ZB-5msi

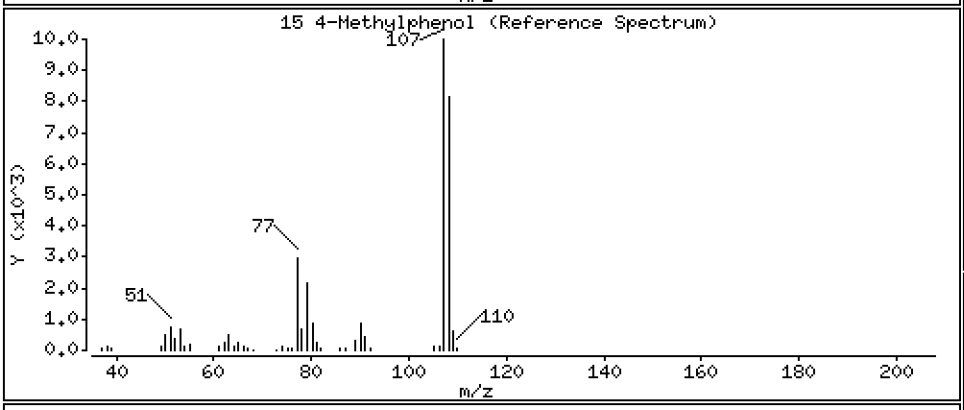
Column diameter: 0.25

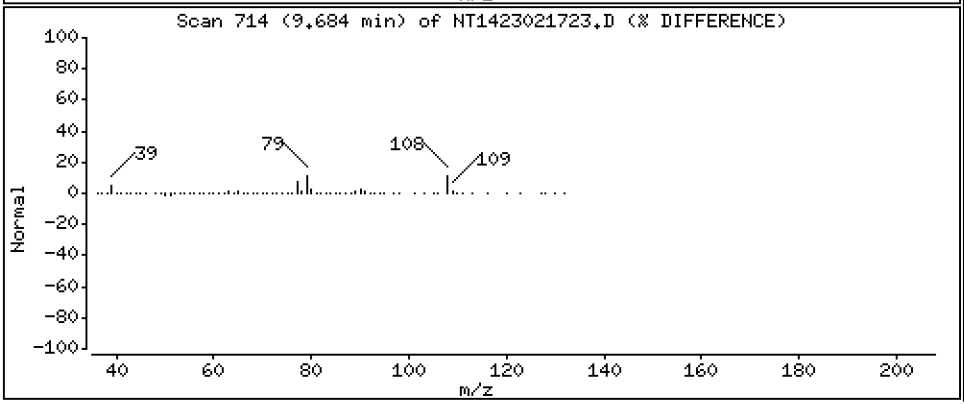
15 4-Methylphenol

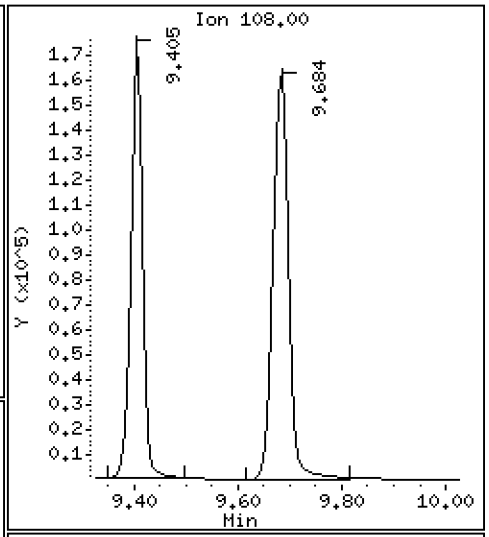
Concentration: 3.565 ug/mL

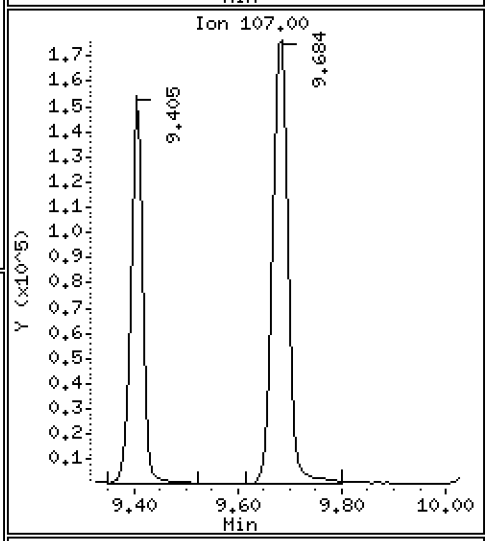


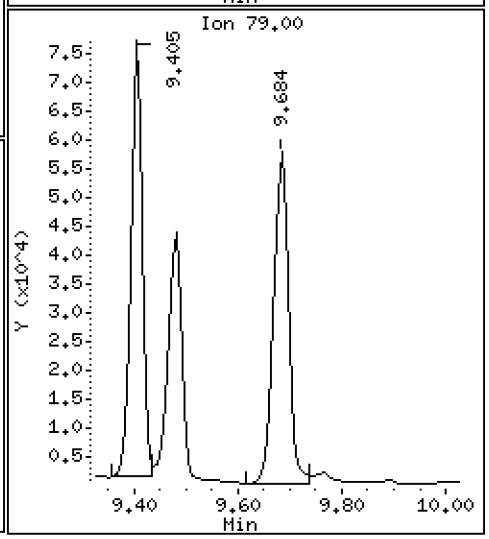












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

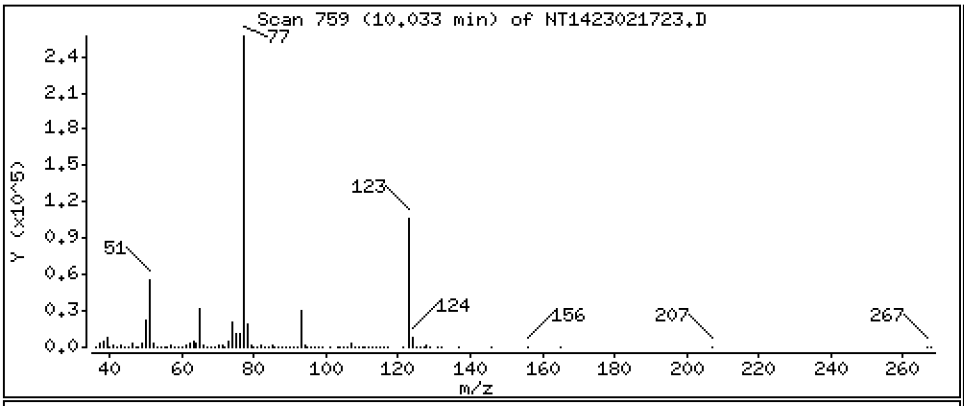
Operator: DSD

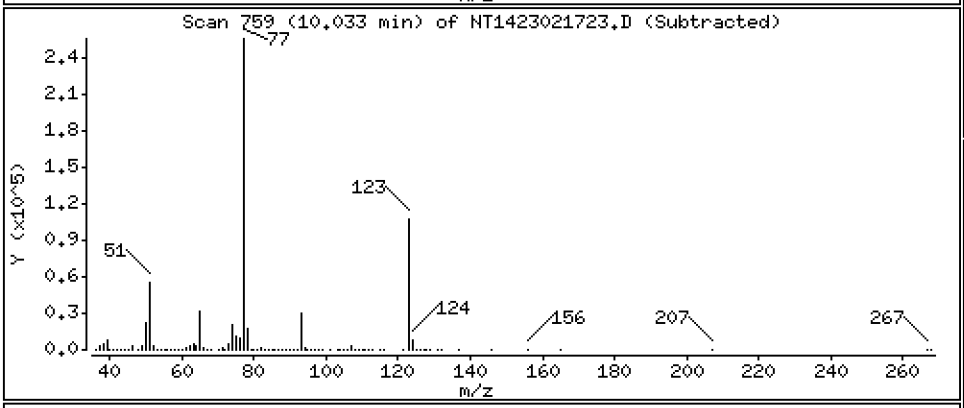
Column phase: ZB-5msi

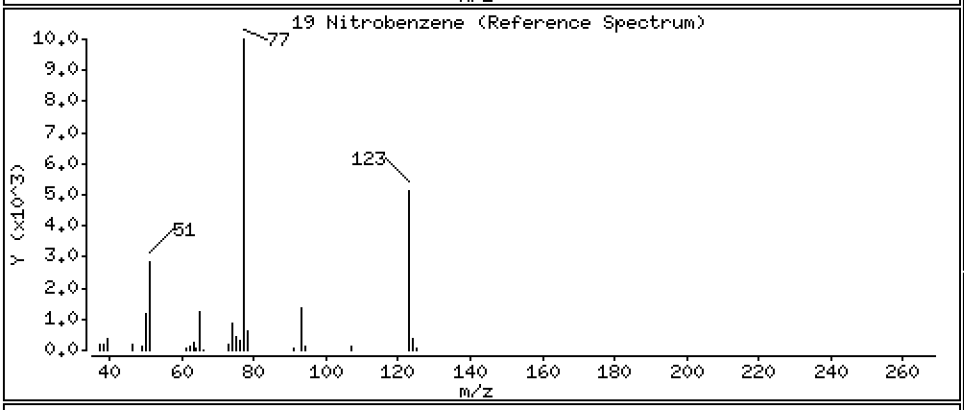
Column diameter: 0.25

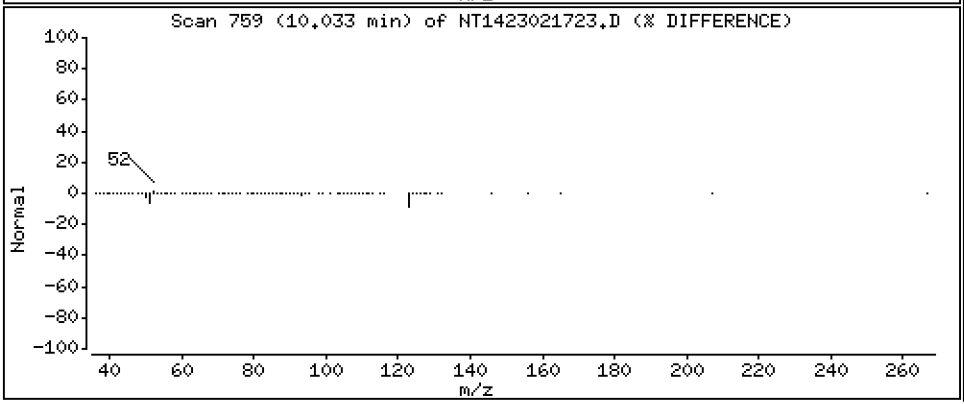
19 Nitrobenzene

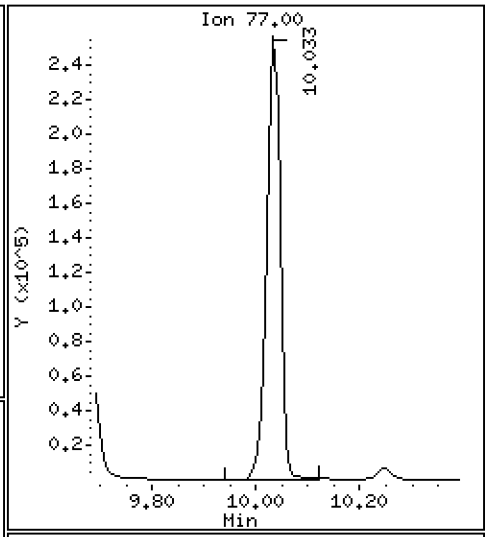
Concentration: 3.704 ug/mL

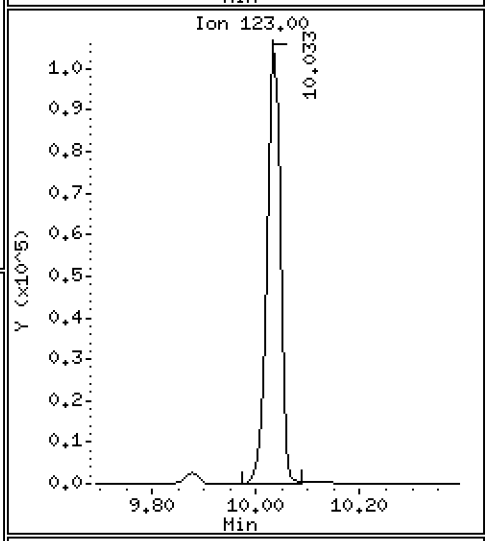


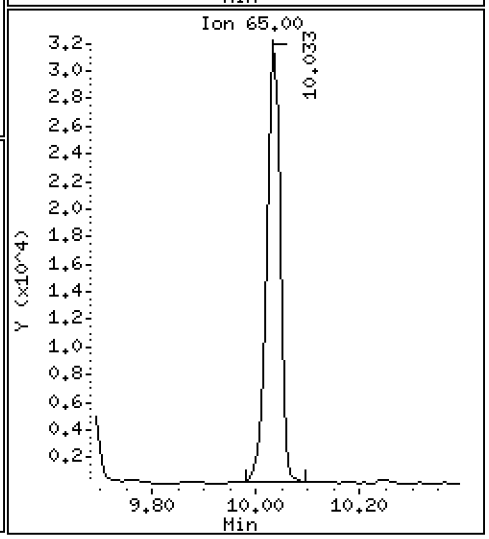












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

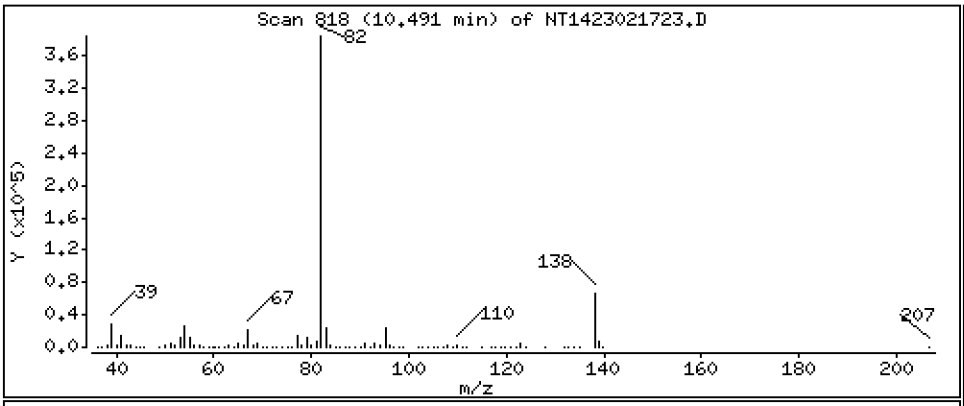
Operator: DSD

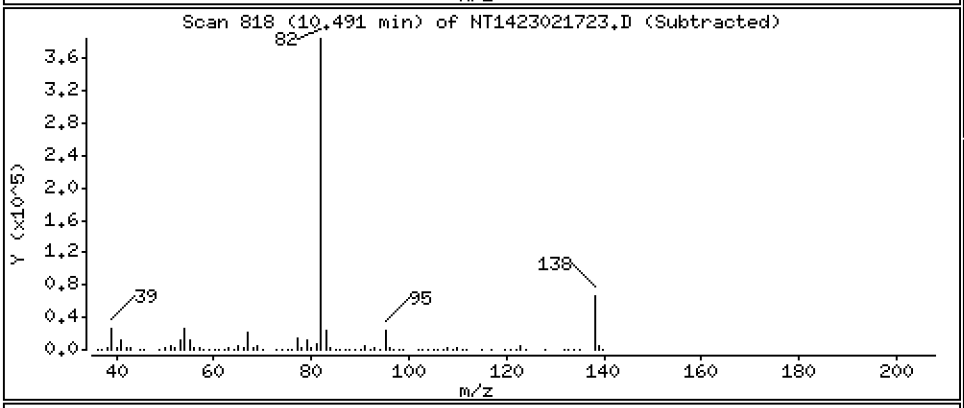
Column phase: ZB-5msi

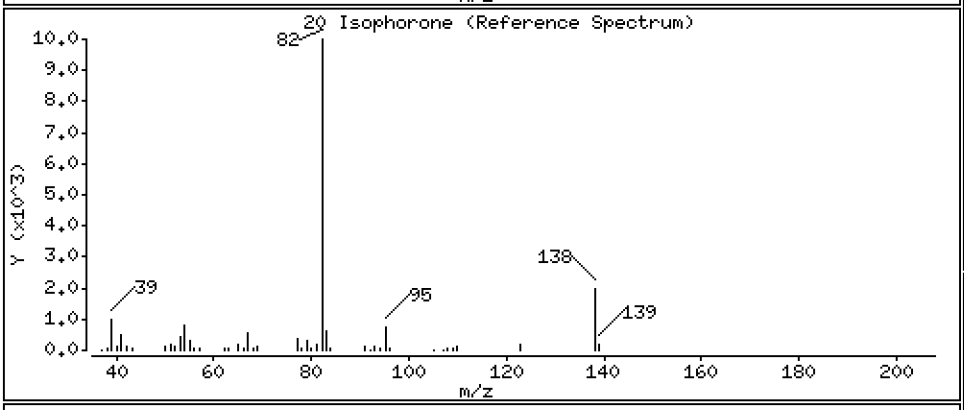
Column diameter: 0.25

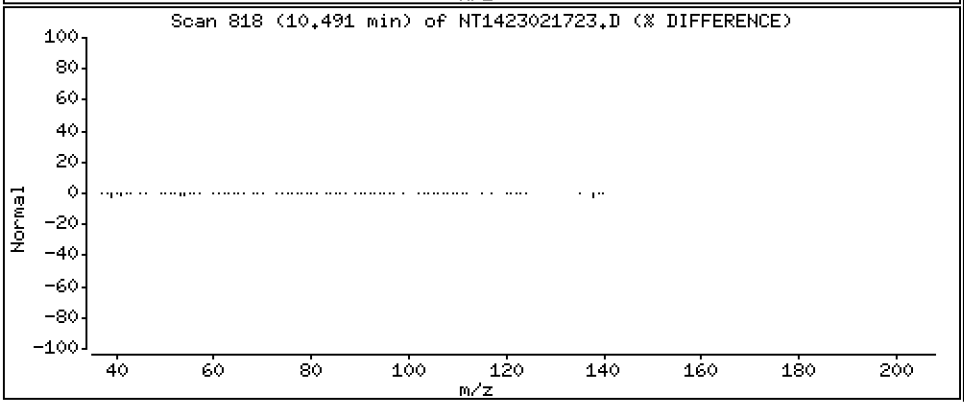
20 Isophorone

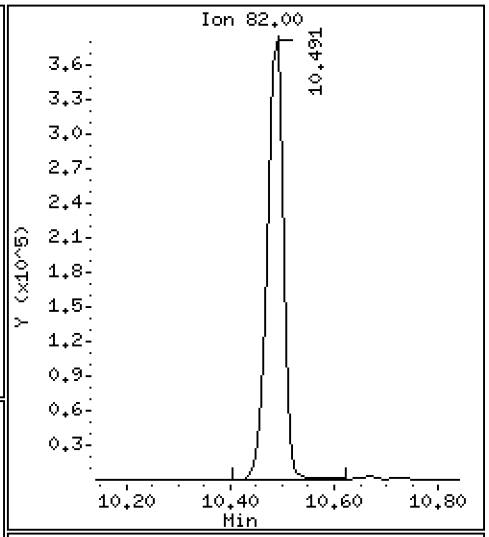
Concentration: 5.451 ug/mL

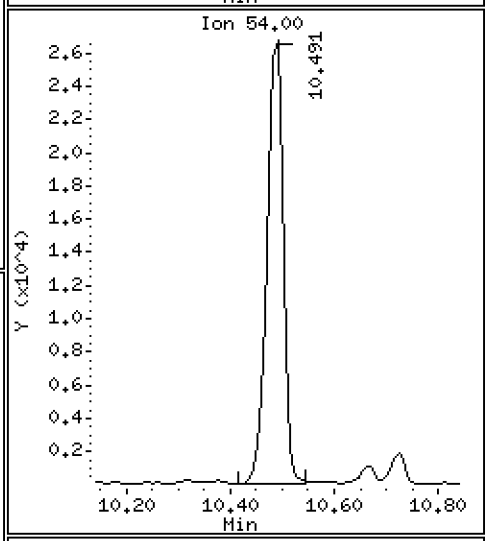


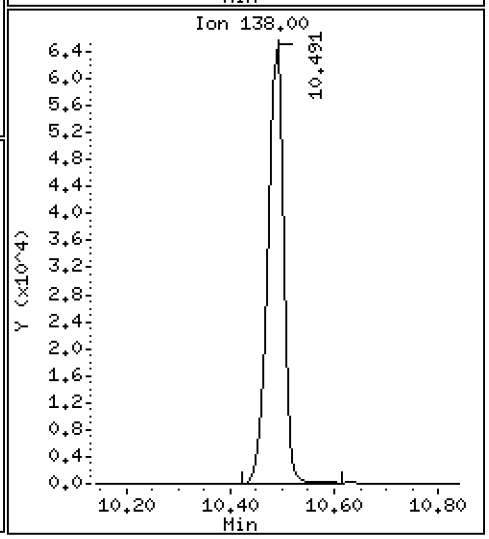












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

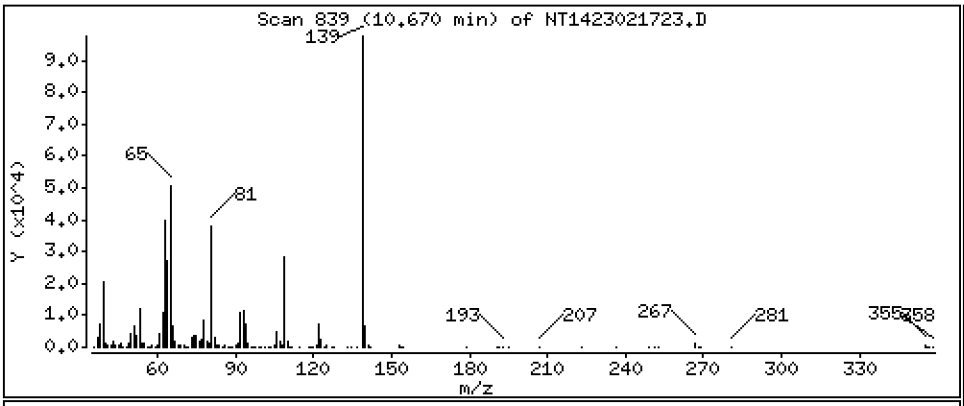
Operator: DSD

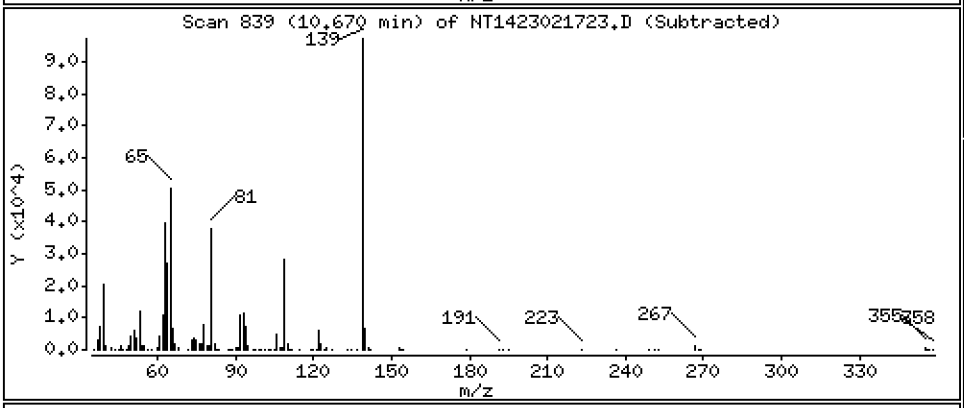
Column phase: ZB-5msi

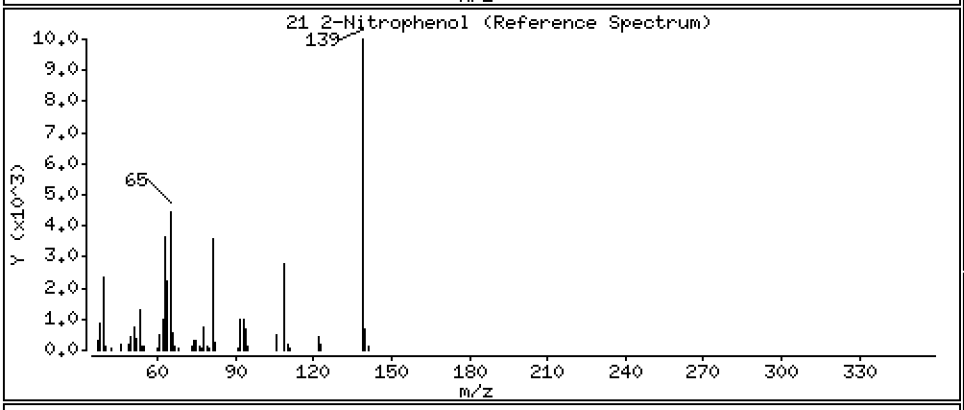
Column diameter: 0.25

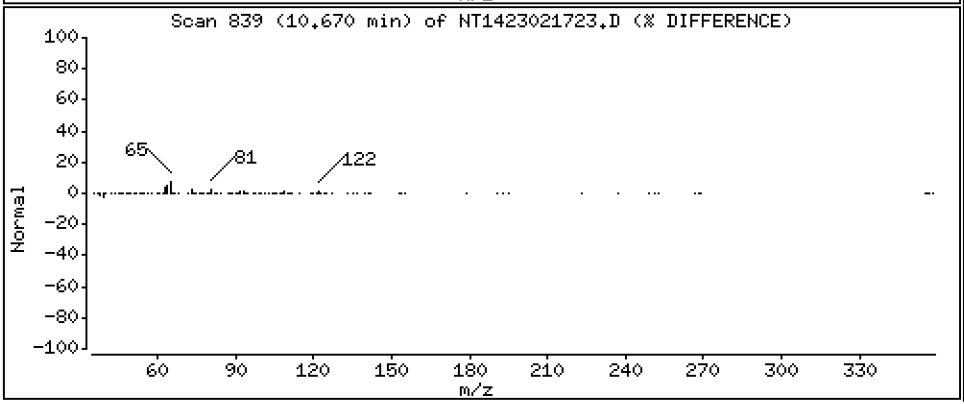
21 2-Nitrophenol

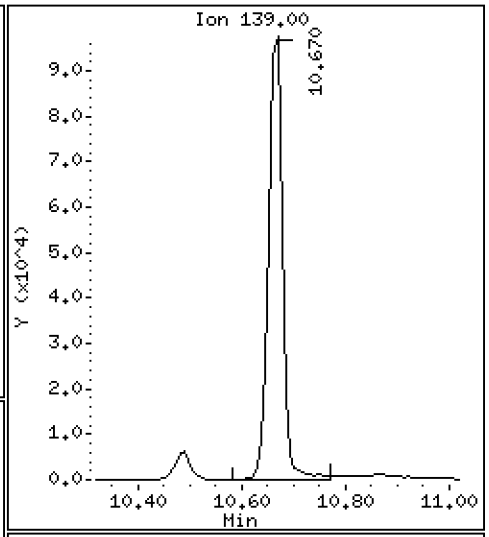
Concentration: 3.530 ug/mL

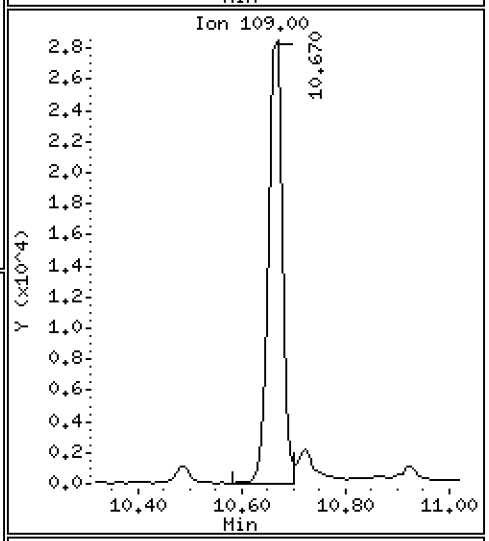


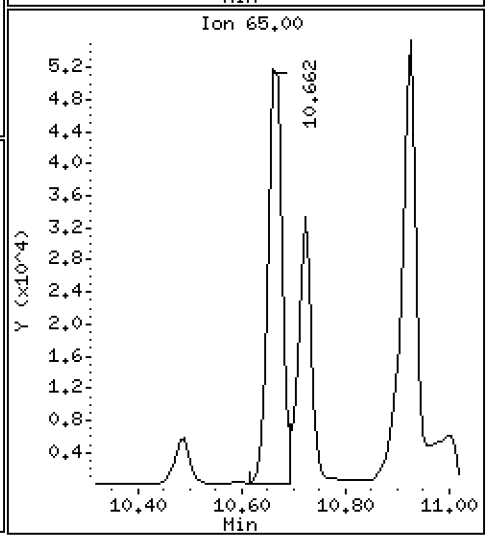












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

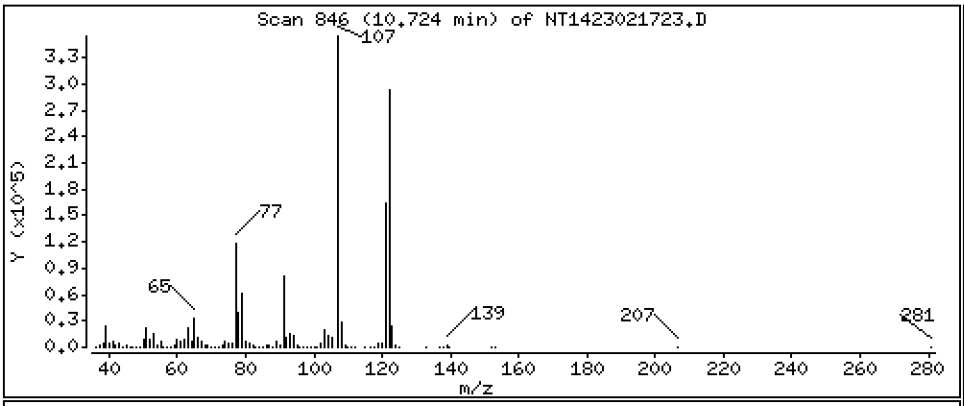
Operator: DSD

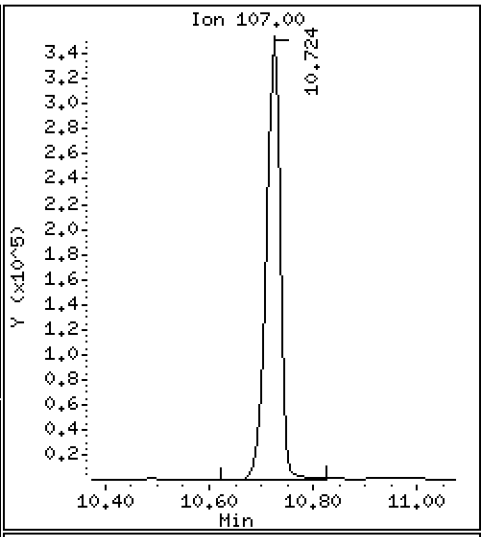
Column phase: ZB-5msi

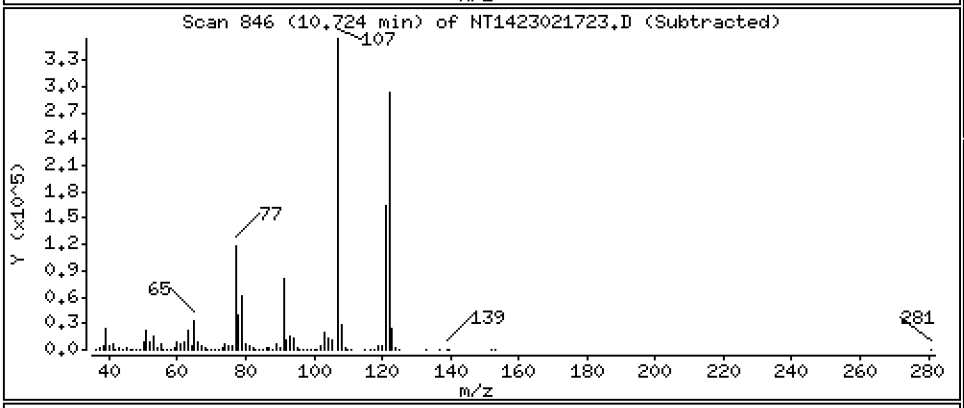
Column diameter: 0.25

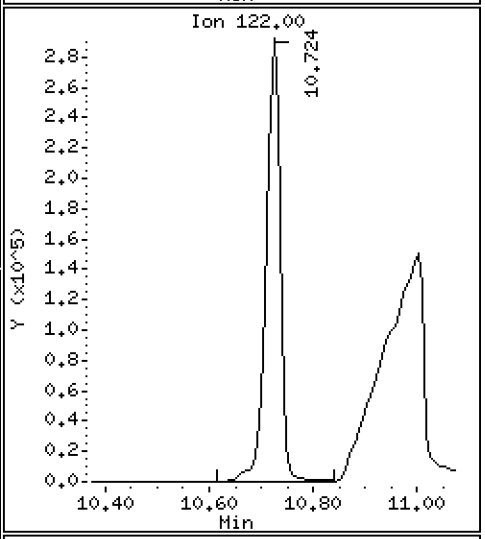
22 2,4-Dimethylphenol

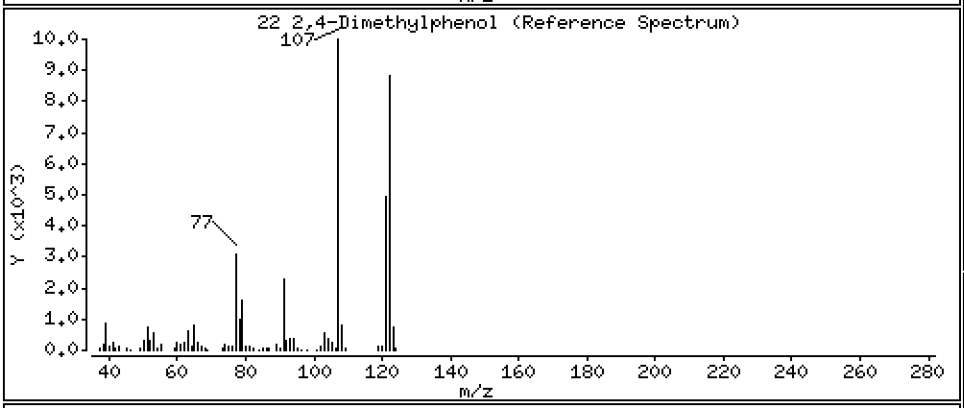
Concentration: 6.993 ug/mL

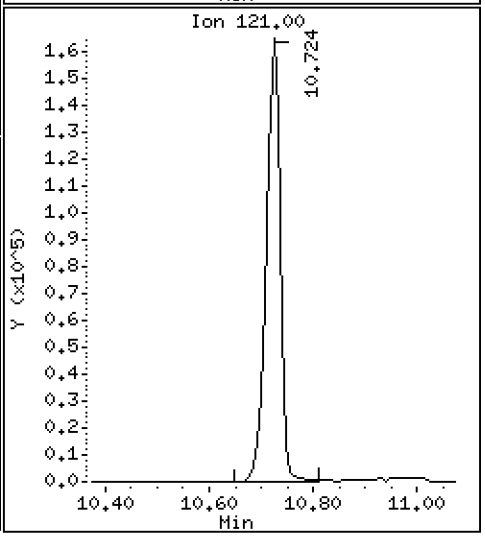


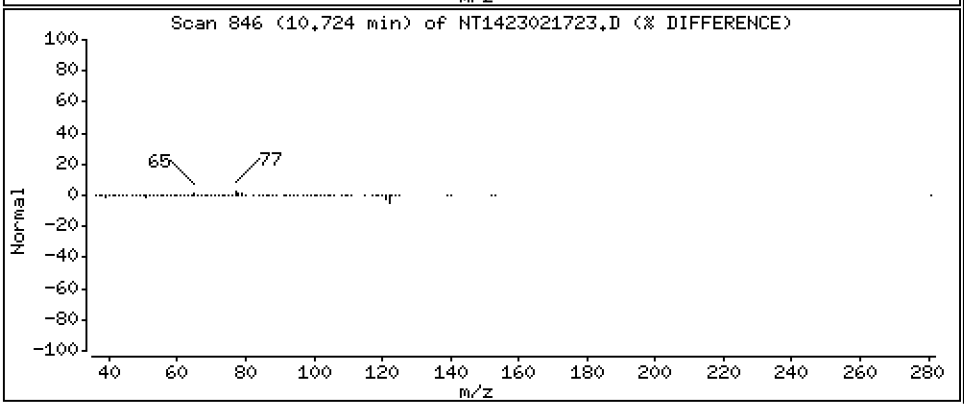












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

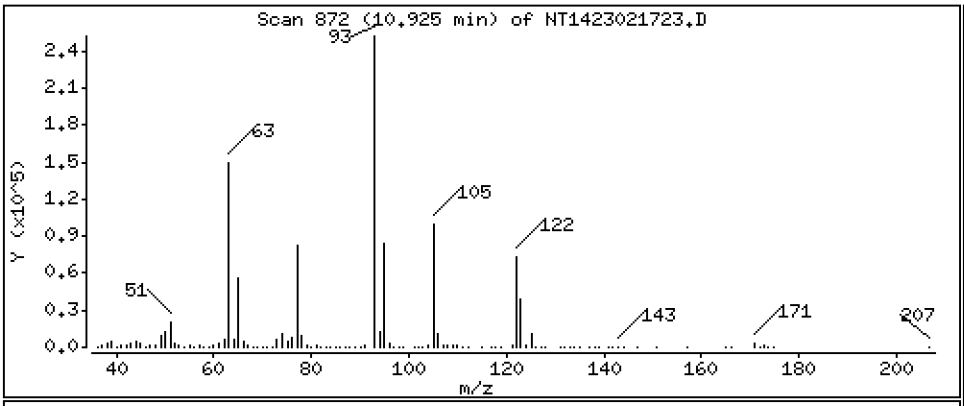
Operator: DSD

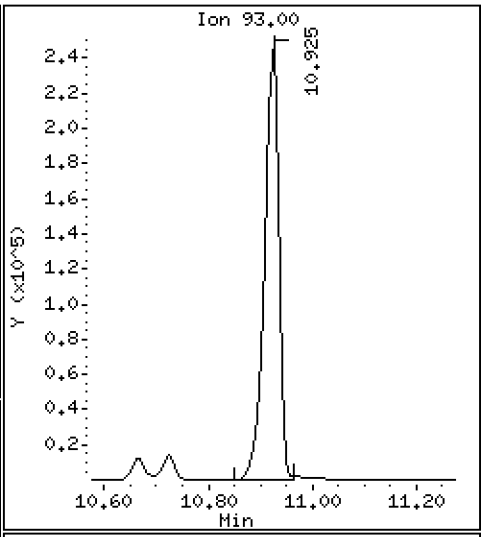
Column phase: ZB-5msi

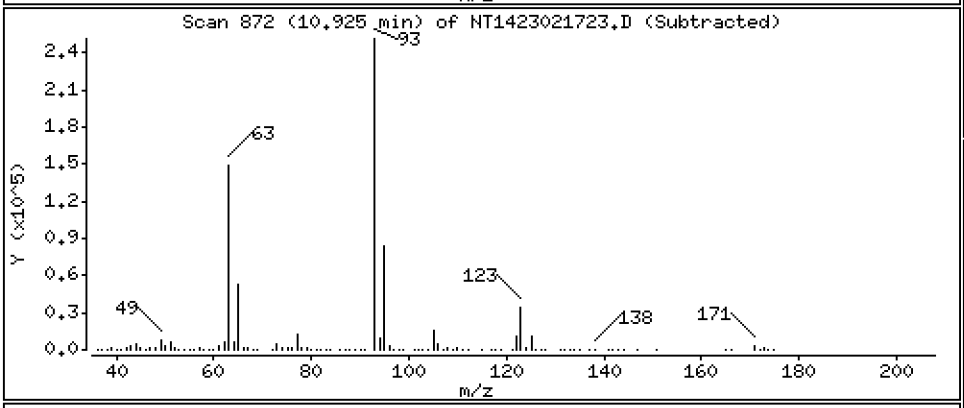
Column diameter: 0.25

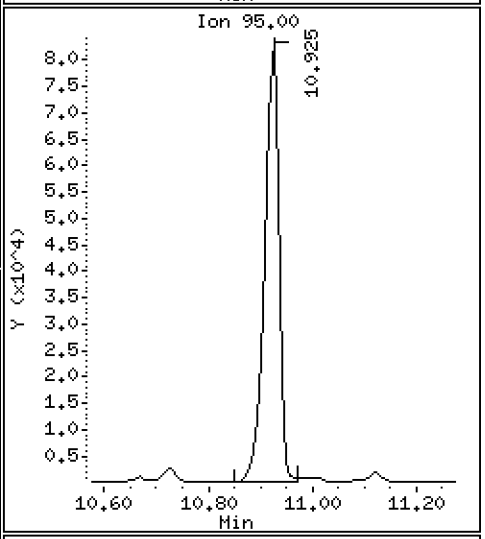
23 Bis(2-Chloroethoxy)methane

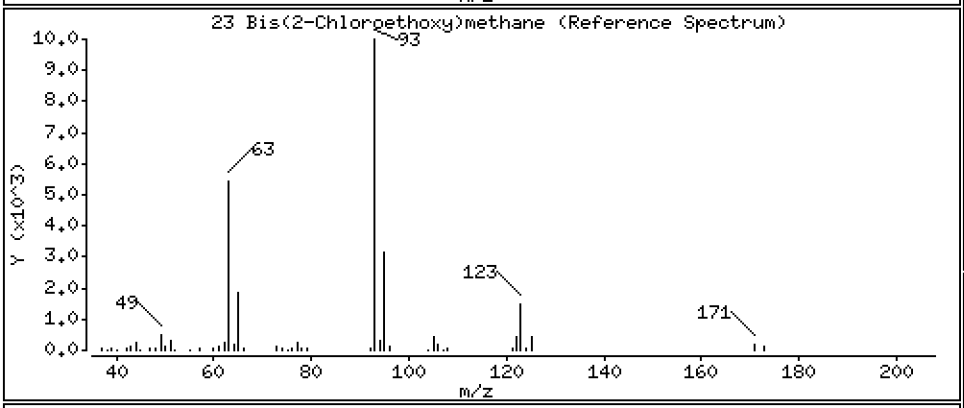
Concentration: 4.388 ug/mL

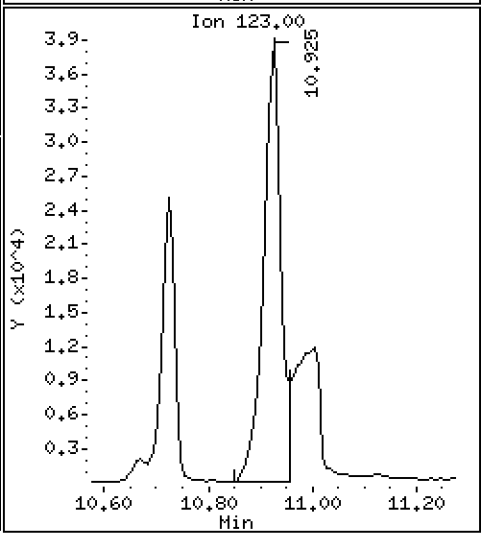


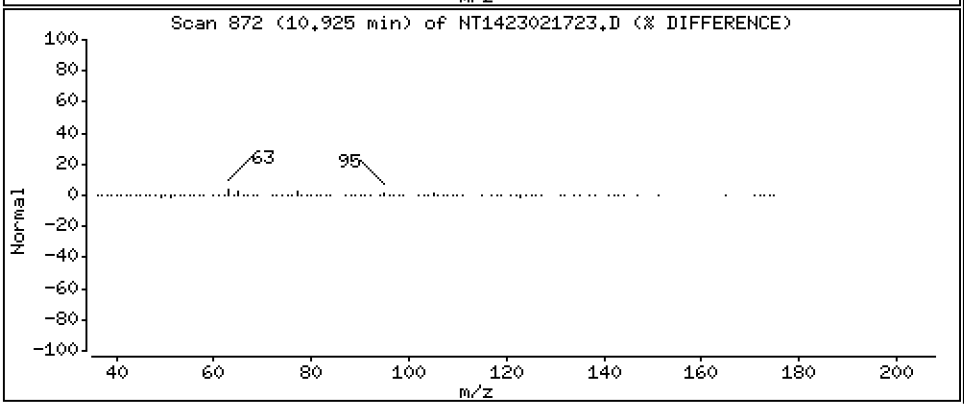












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

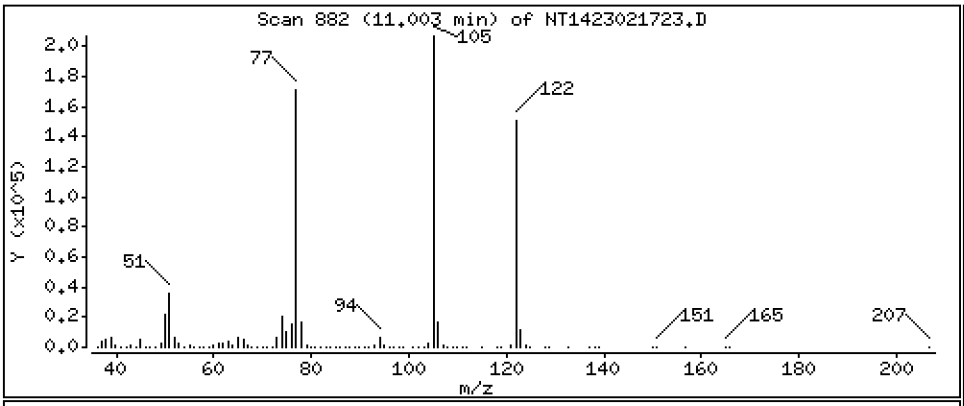
Operator: DSD

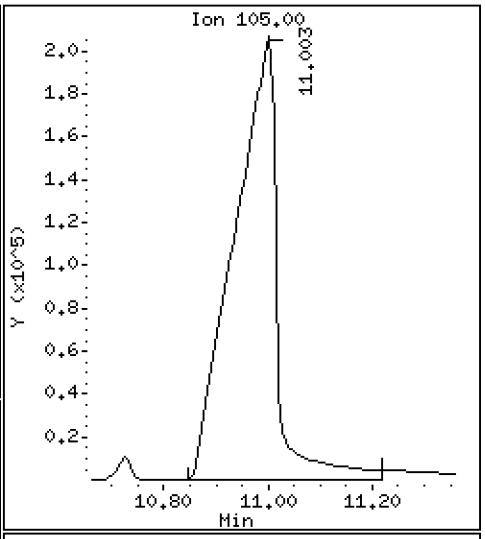
Column phase: ZB-5msi

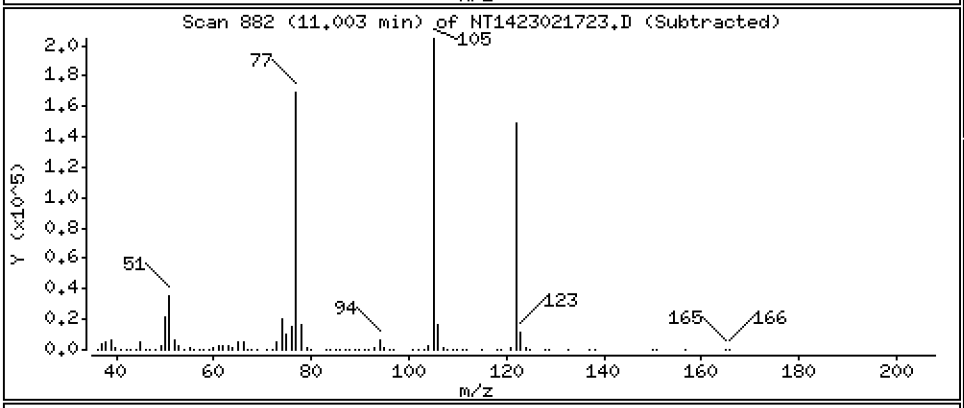
Column diameter: 0.25

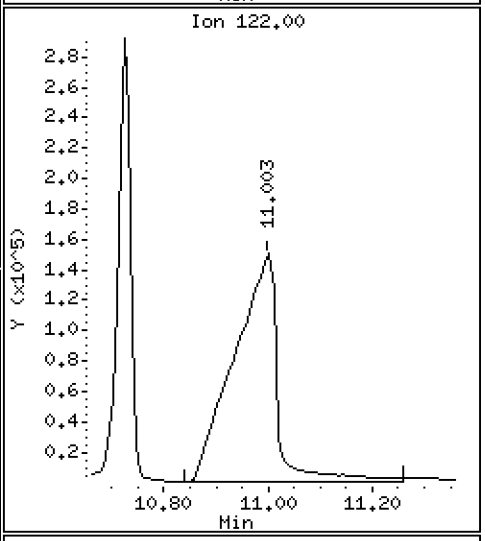
24 Benzoic acid

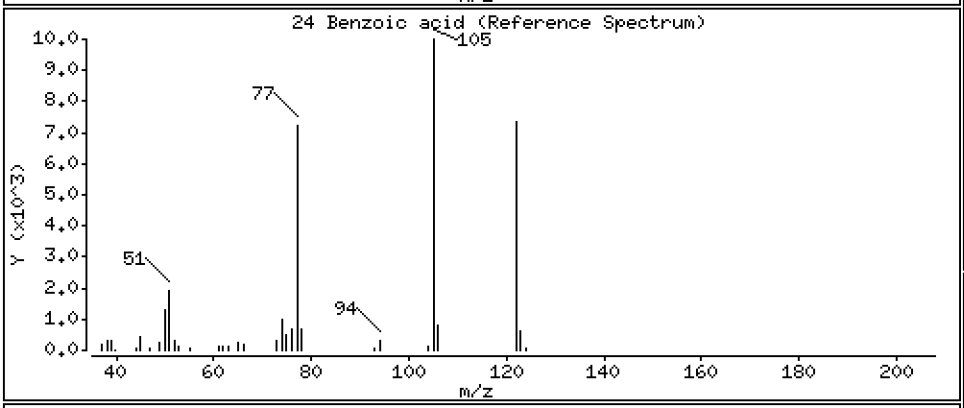
Concentration: 20.70 ug/mL

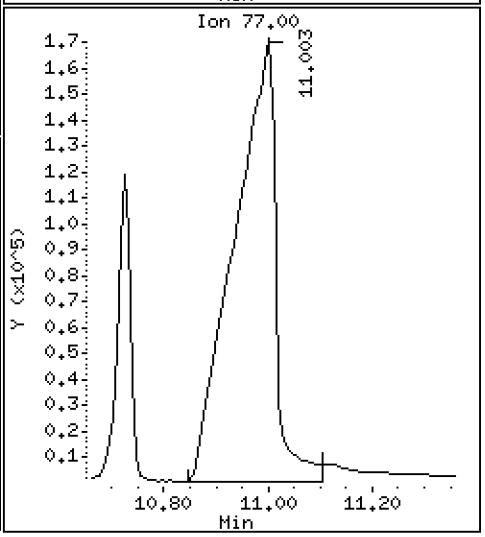


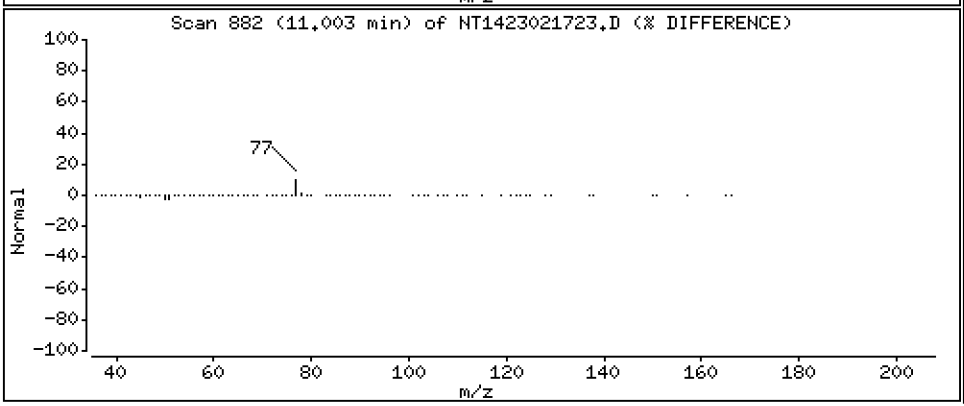












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

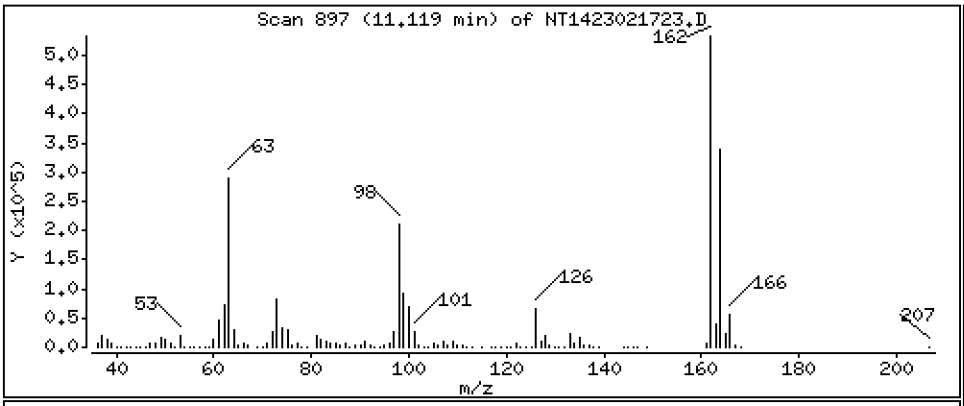
Operator: DSD

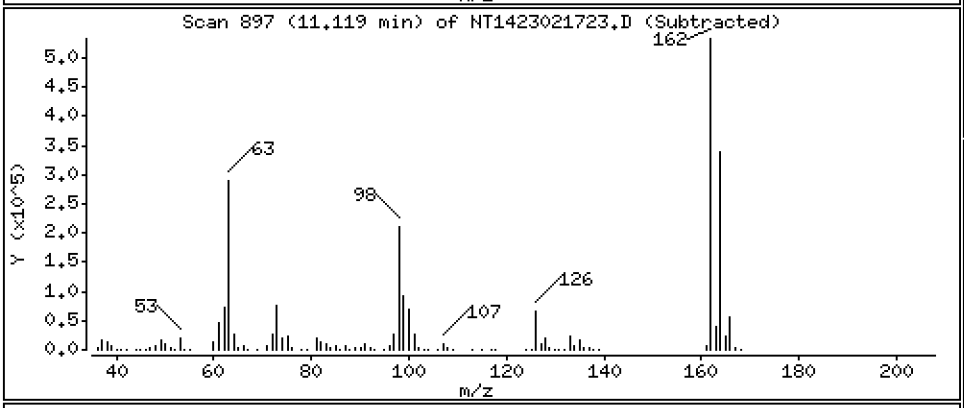
Column phase: ZB-5msi

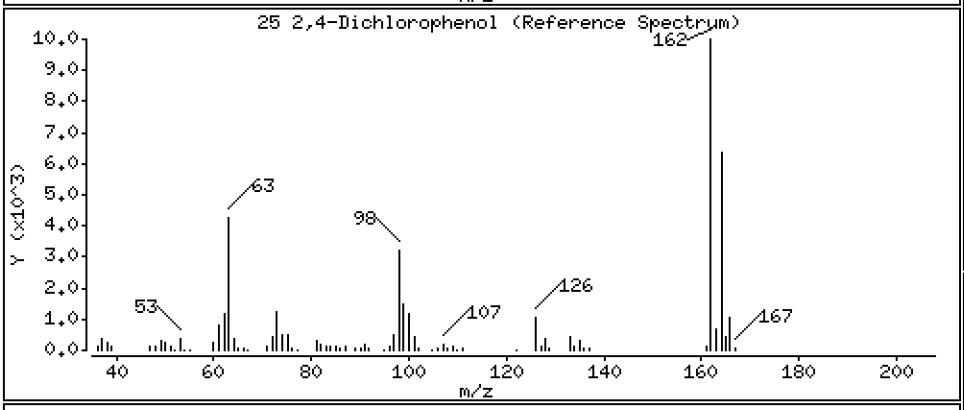
Column diameter: 0.25

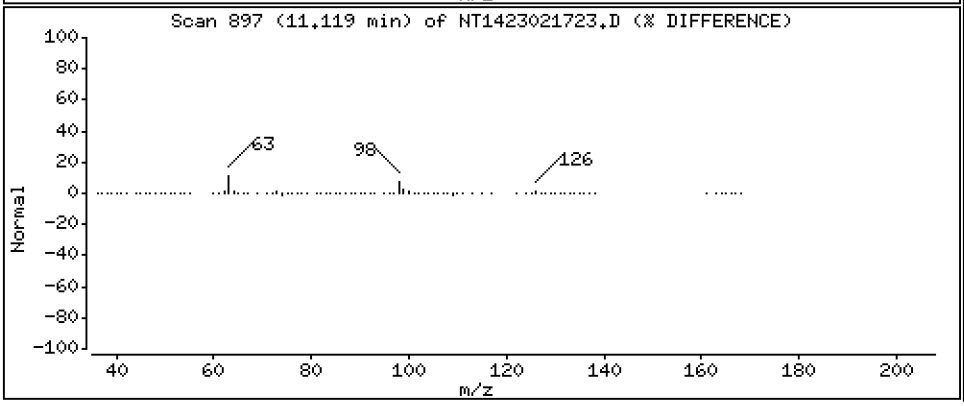
25 2,4-Dichlorophenol

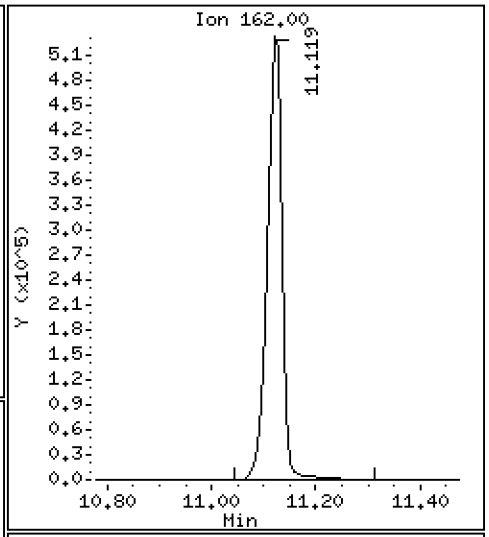
Concentration: 13.80 ug/mL

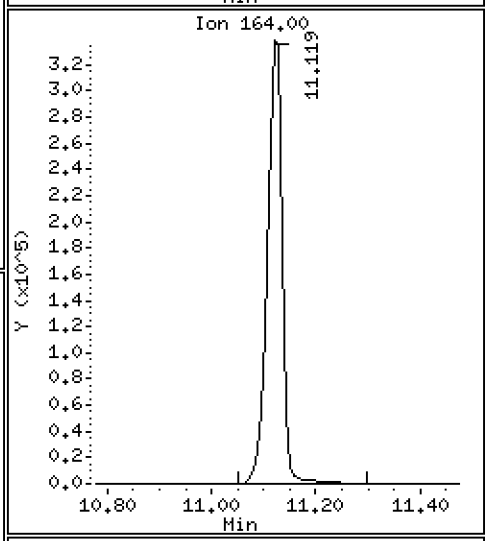


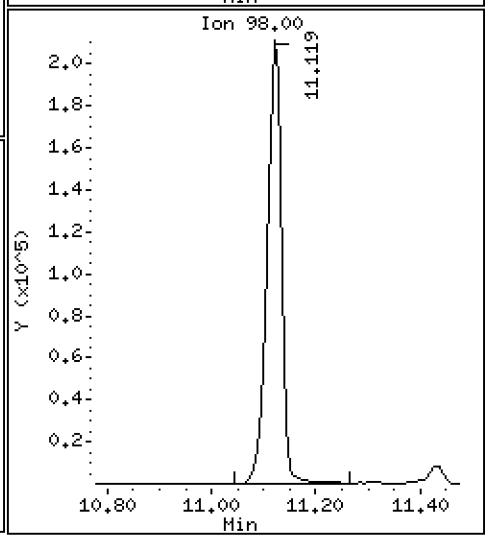












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

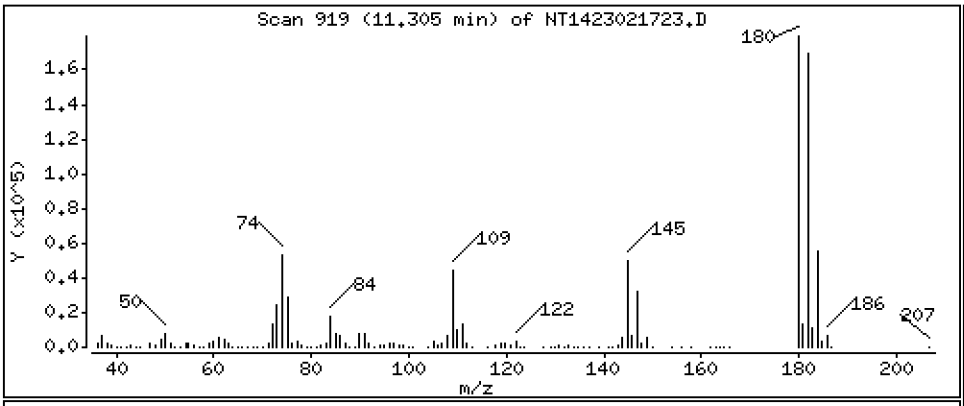
Operator: DSD

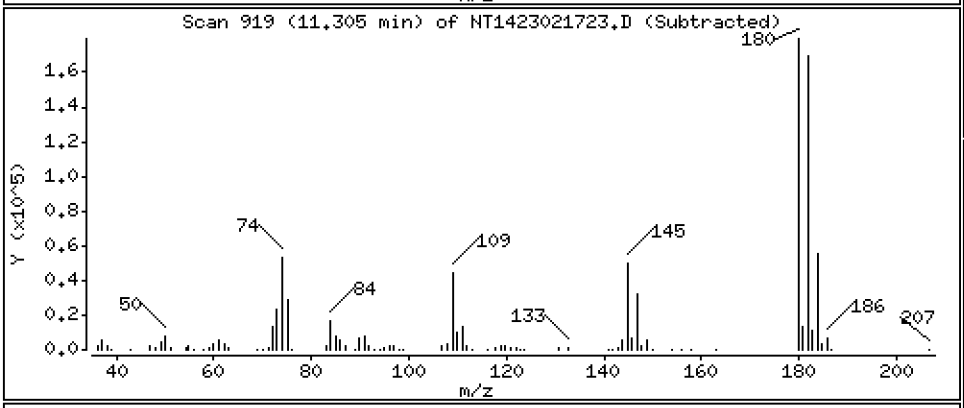
Column phase: ZB-5msi

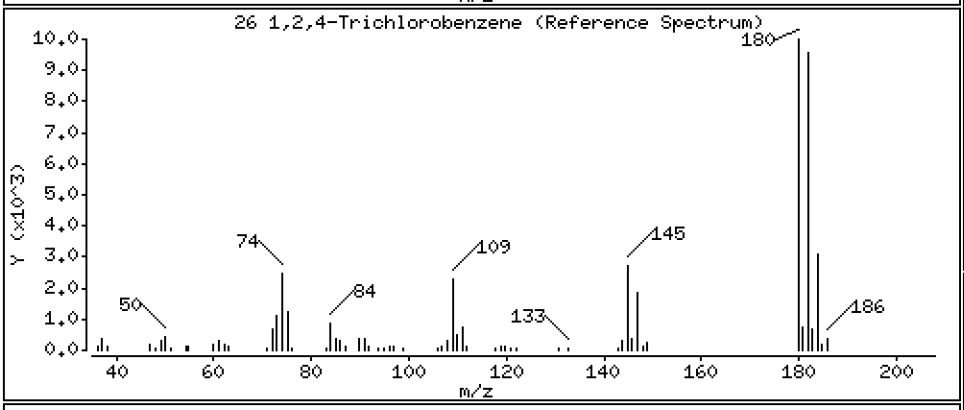
Column diameter: 0.25

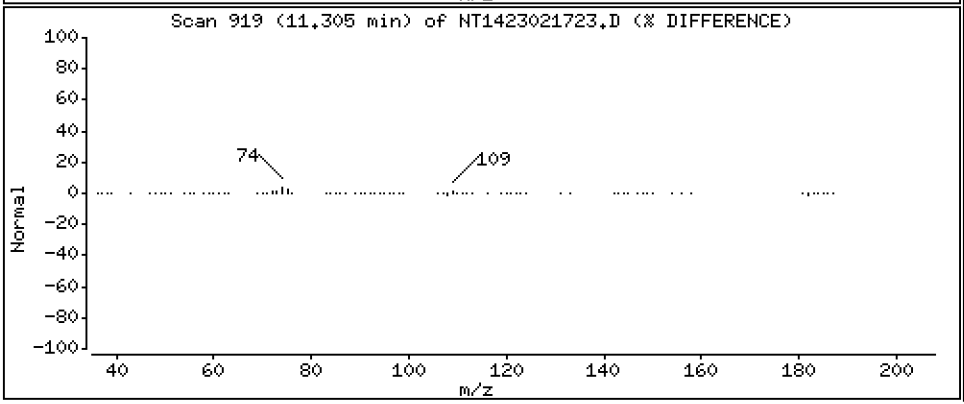
26 1,2,4-Trichlorobenzene

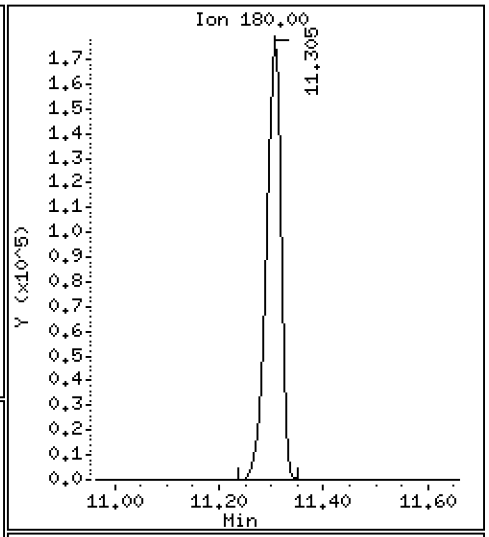
Concentration: 3.565 ug/mL

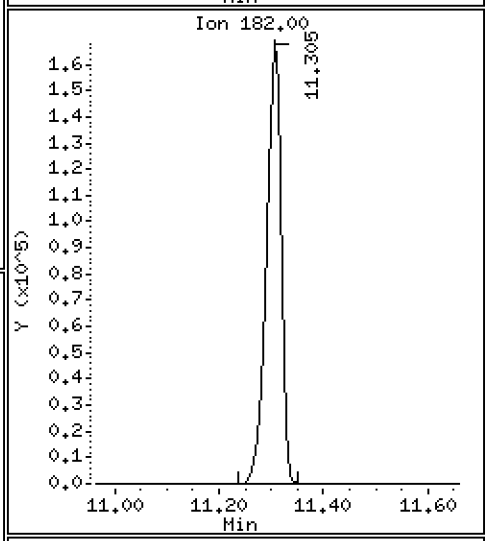


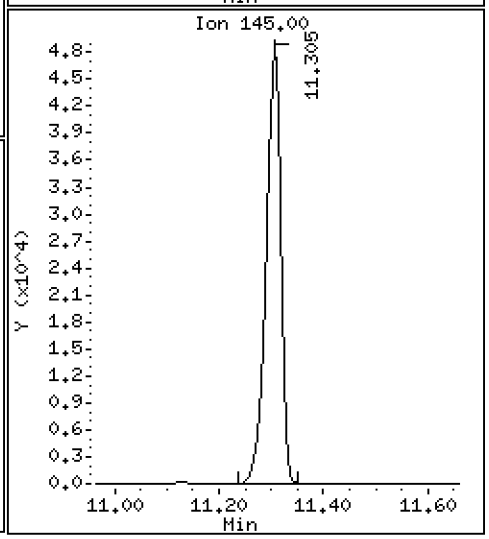












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021723.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

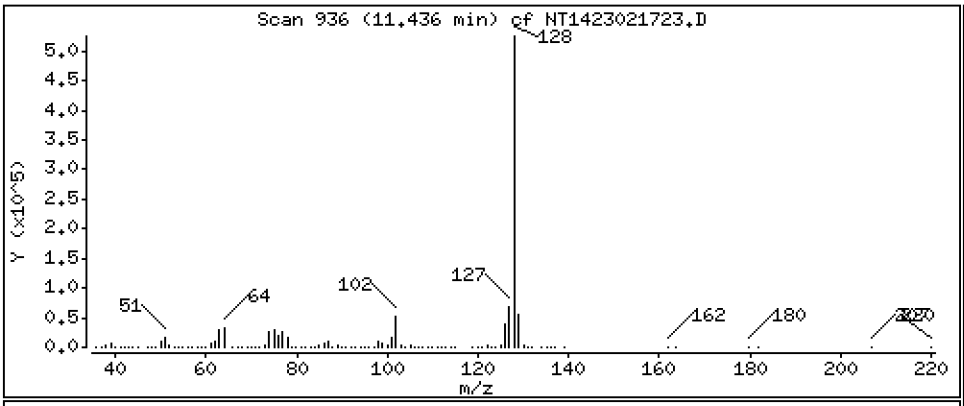
Operator: DSD

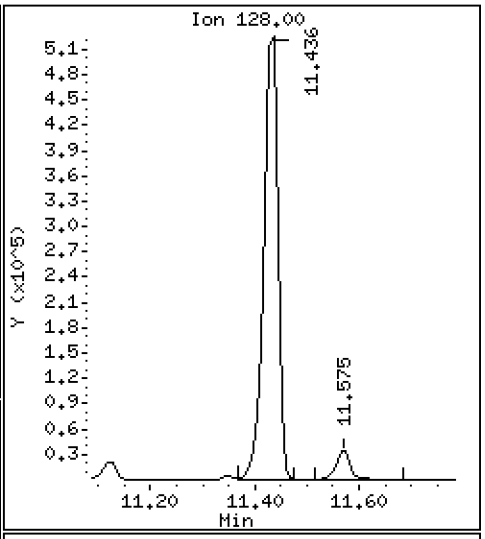
Column phase: ZB-5msi

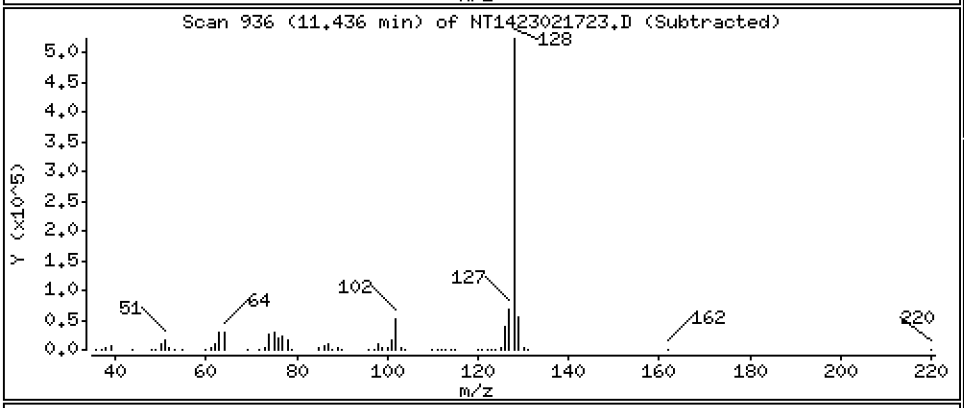
Column diameter: 0.25

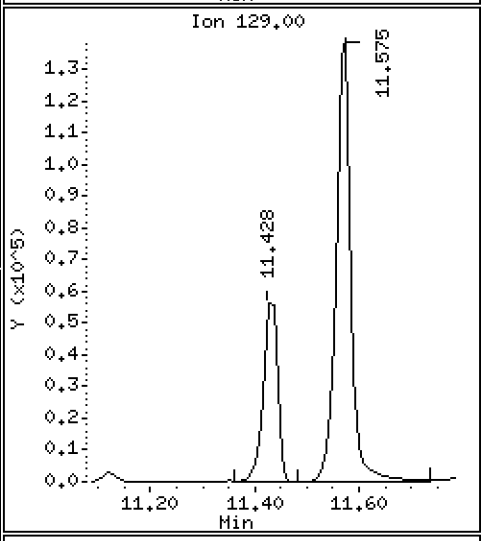
28 Naphthalene

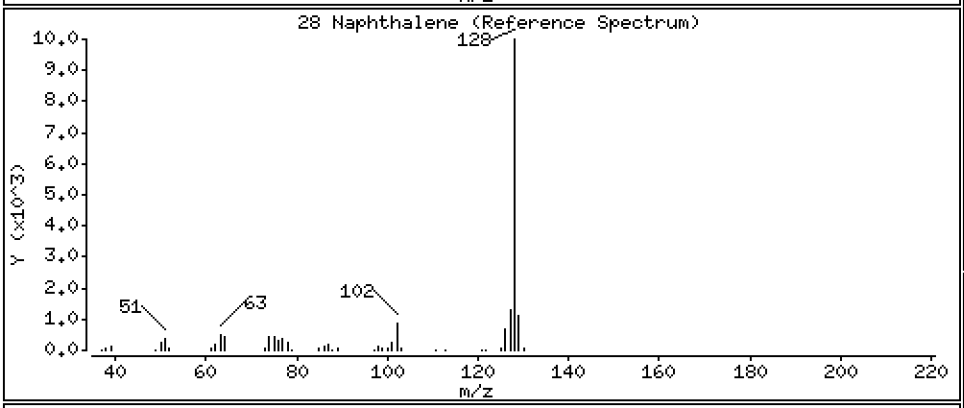
Concentration: 3.711 ug/mL

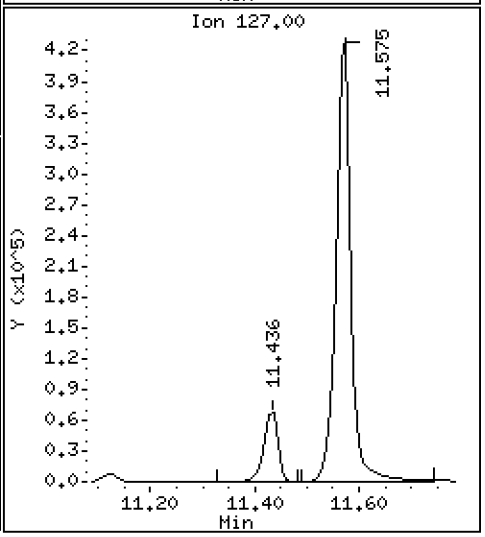


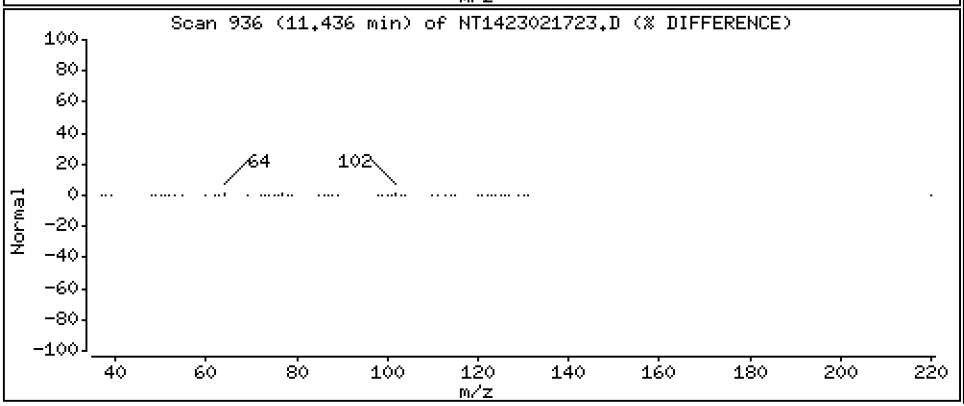












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

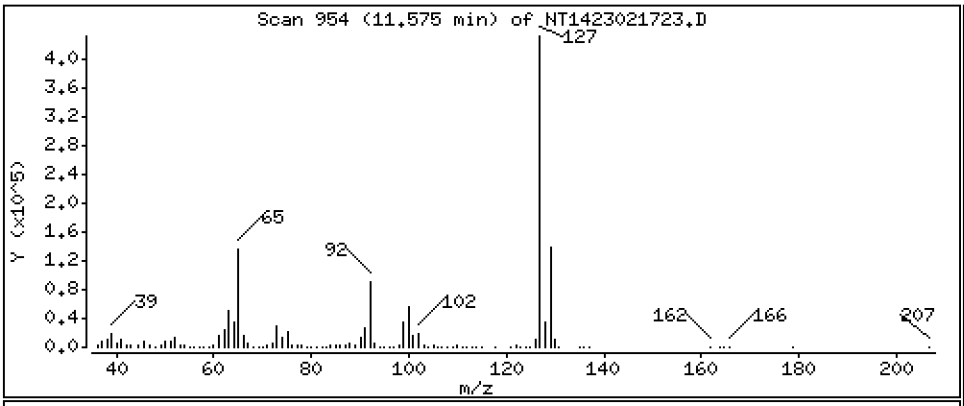
Operator: DSD

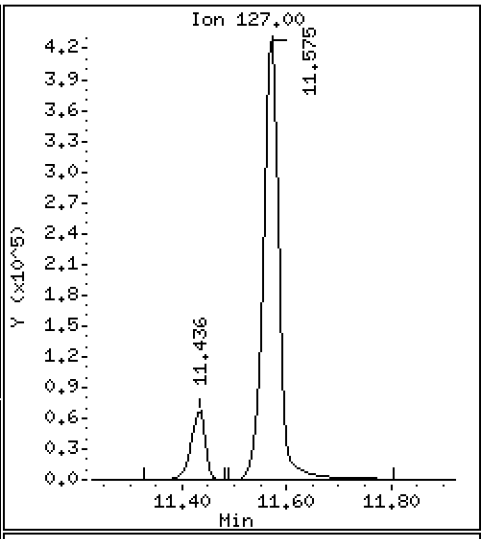
Column phase: ZB-5msi

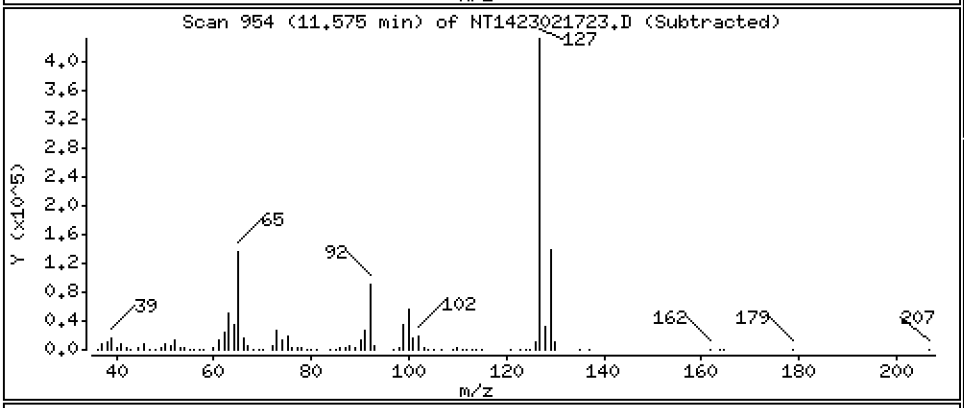
Column diameter: 0.25

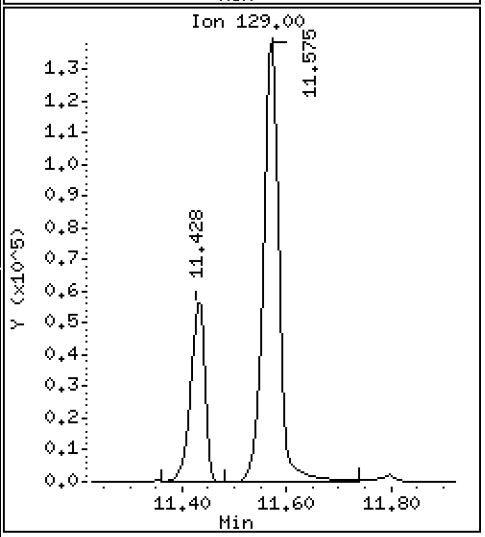
29 4-Chloroaniline

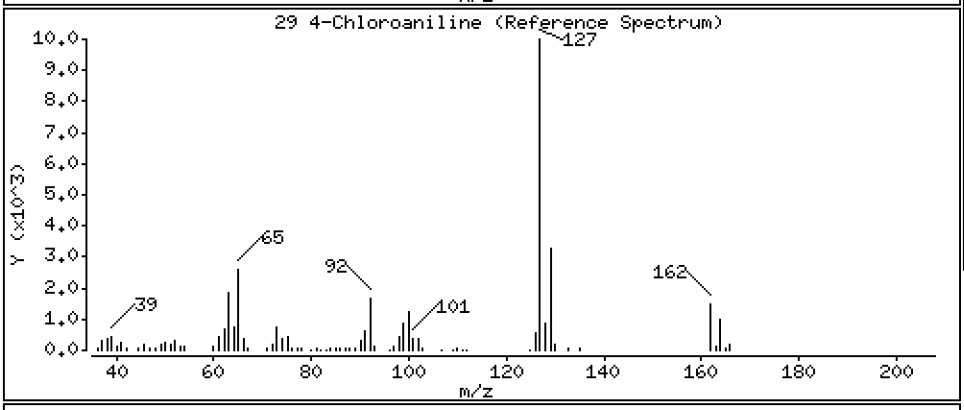
Concentration: 8.498 ug/mL

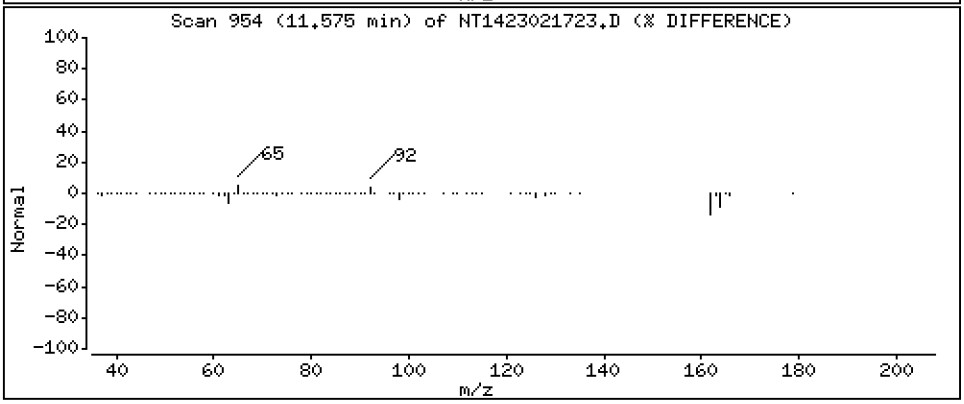












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021723.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

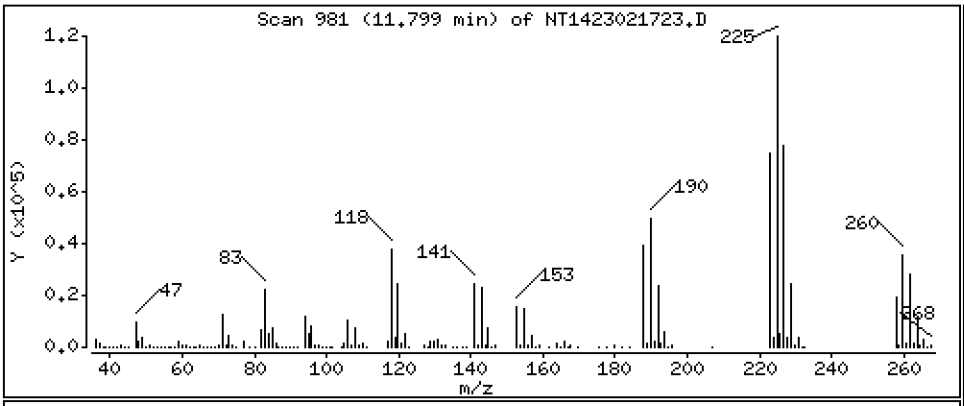
Operator: DSD

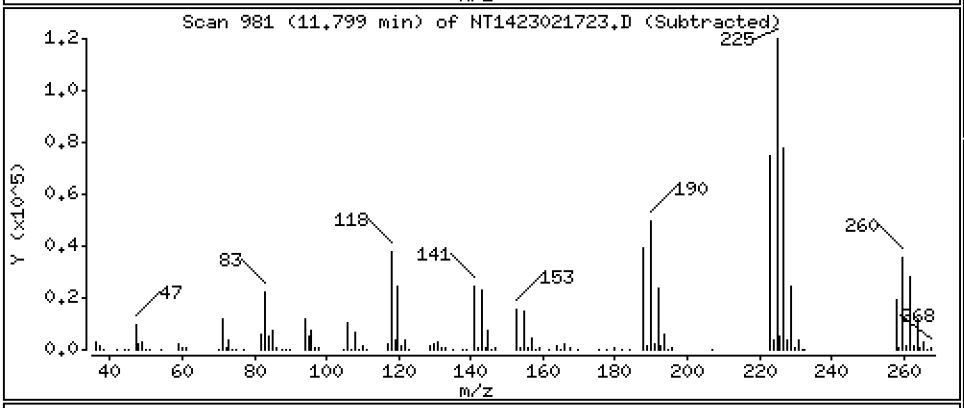
Column phase: ZB-5msi

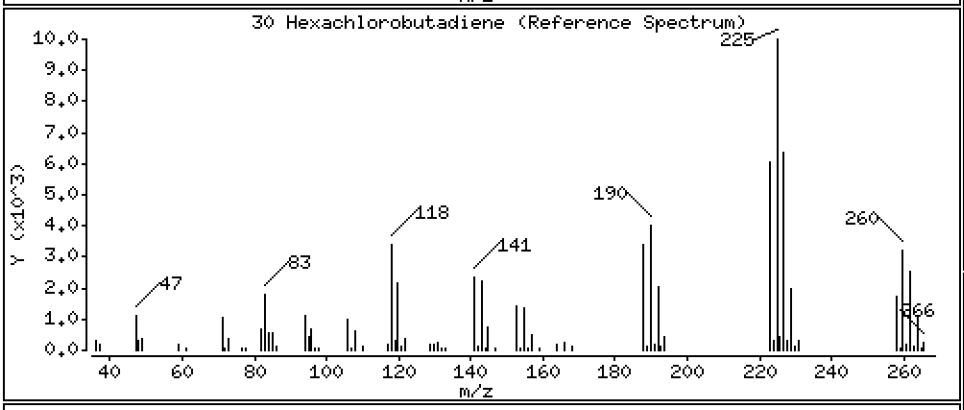
Column diameter: 0.25

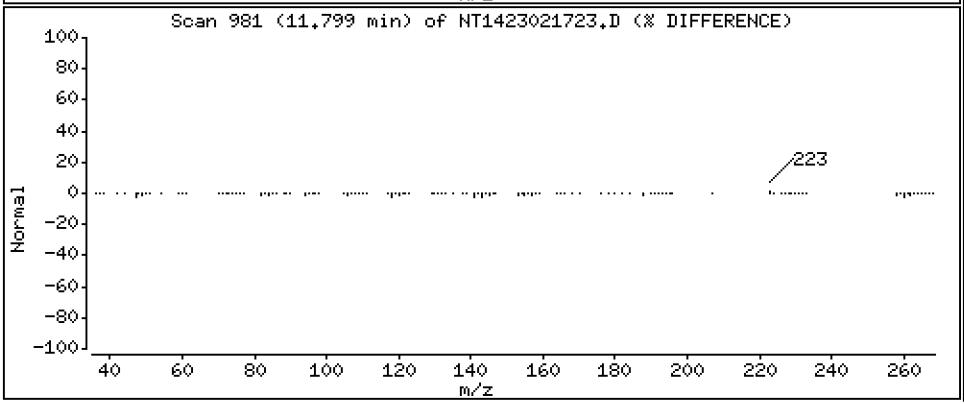
30 Hexachlorobutadiene

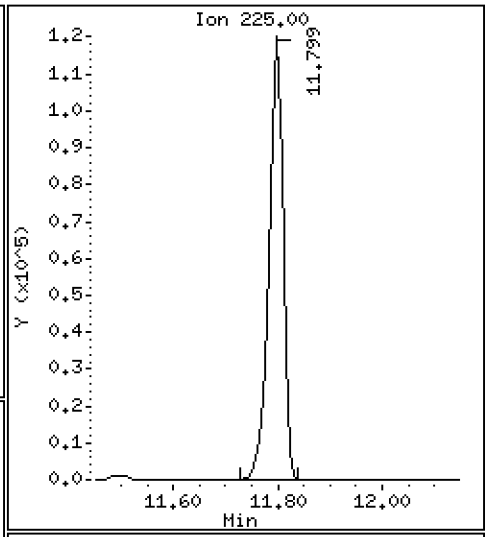
Concentration: 3.729 ug/mL

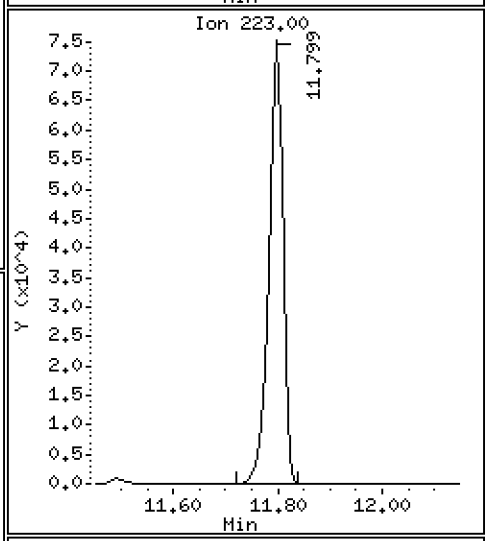


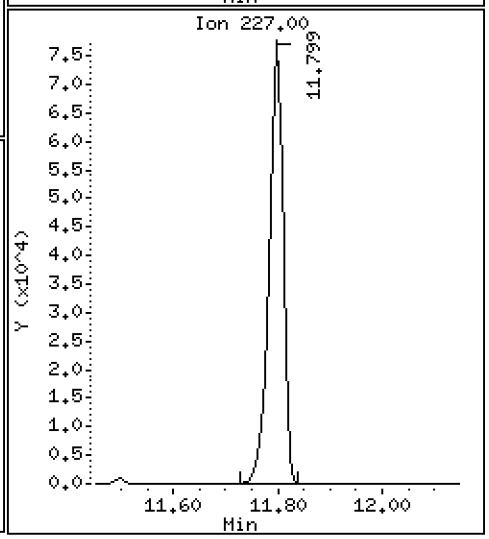












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021723.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

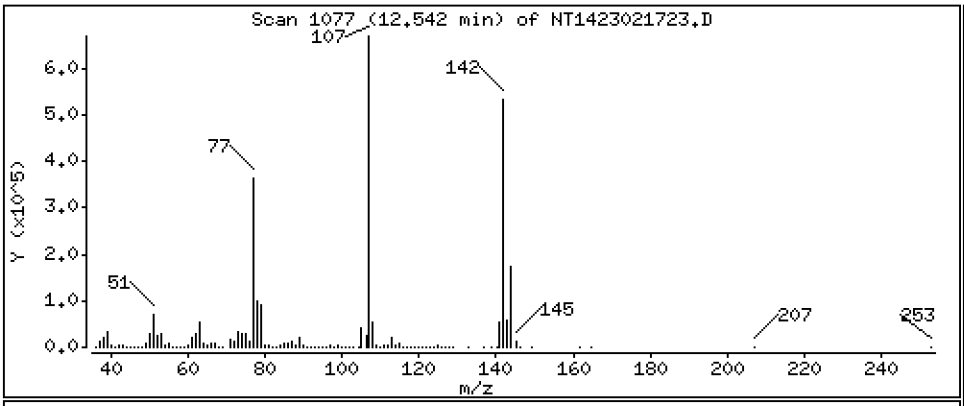
Operator: DSD

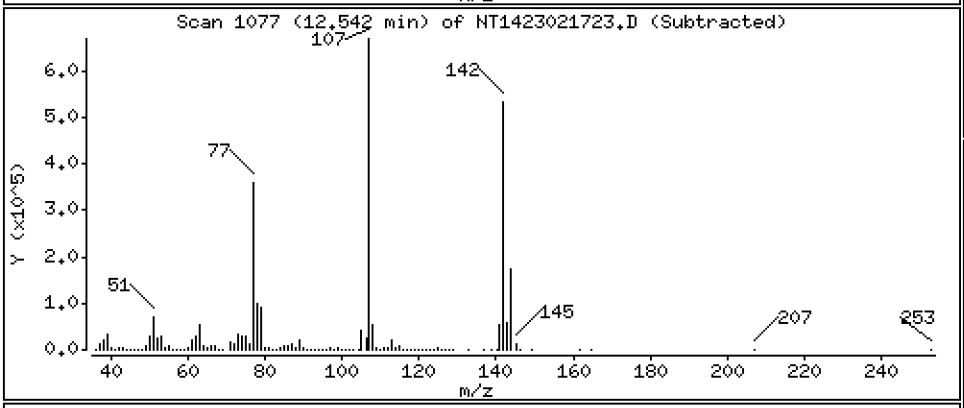
Column phase: ZB-5msi

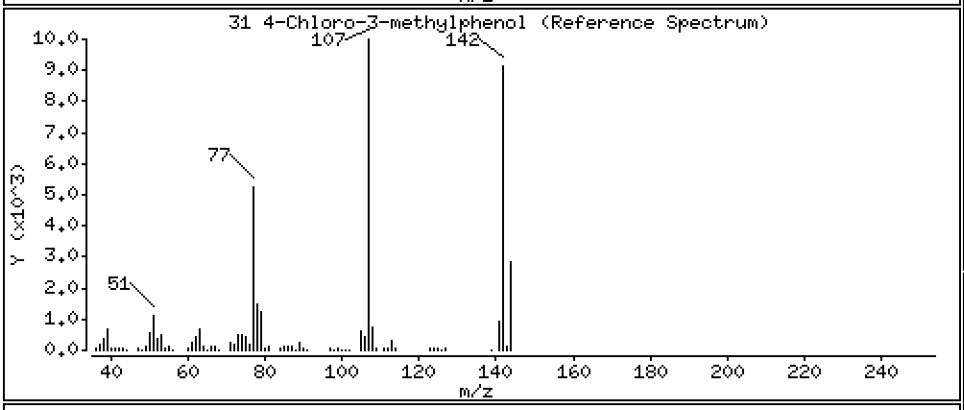
Column diameter: 0.25

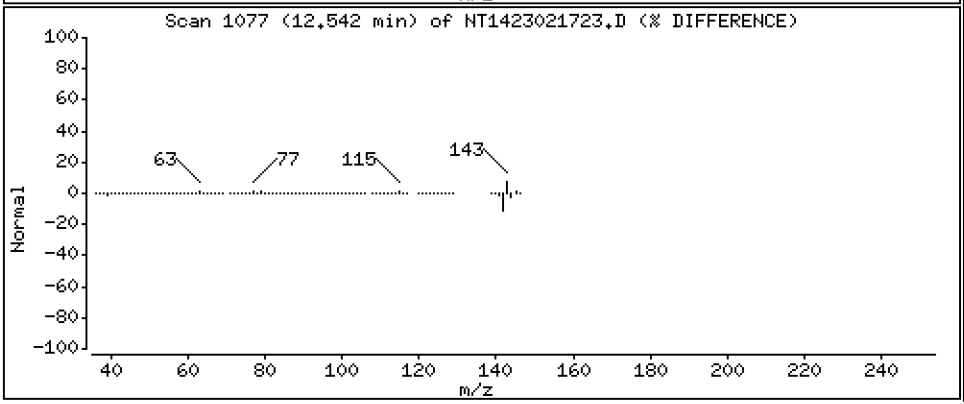
31 4-Chloro-3-methylphenol

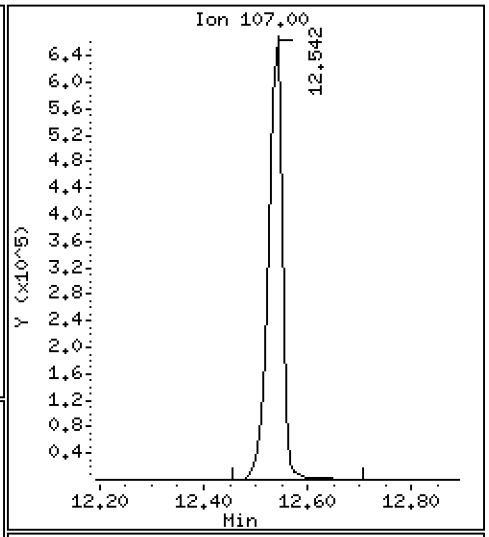
Concentration: 14.21 ug/mL

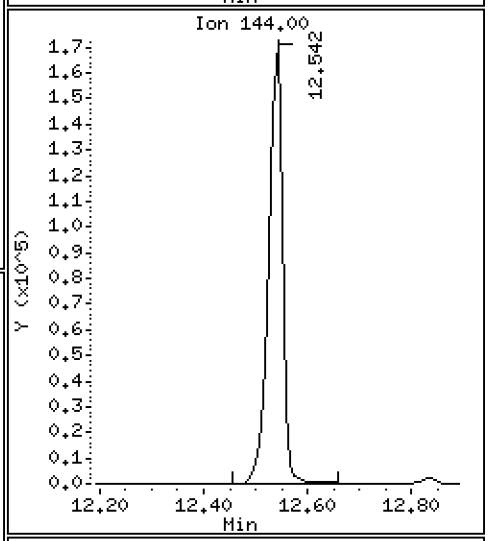


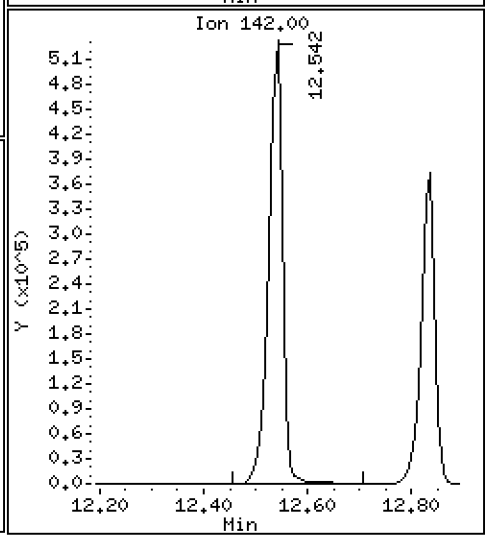












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021723.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

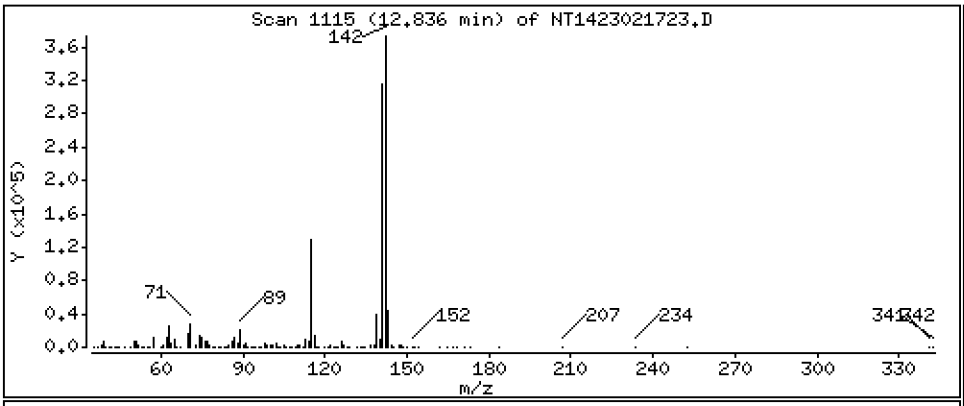
Operator: DSD

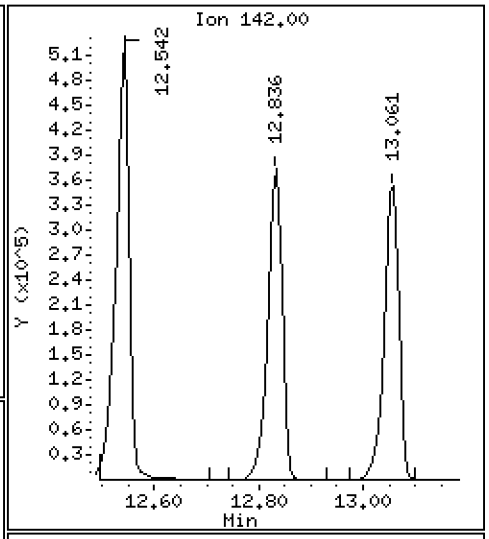
Column phase: ZB-5msi

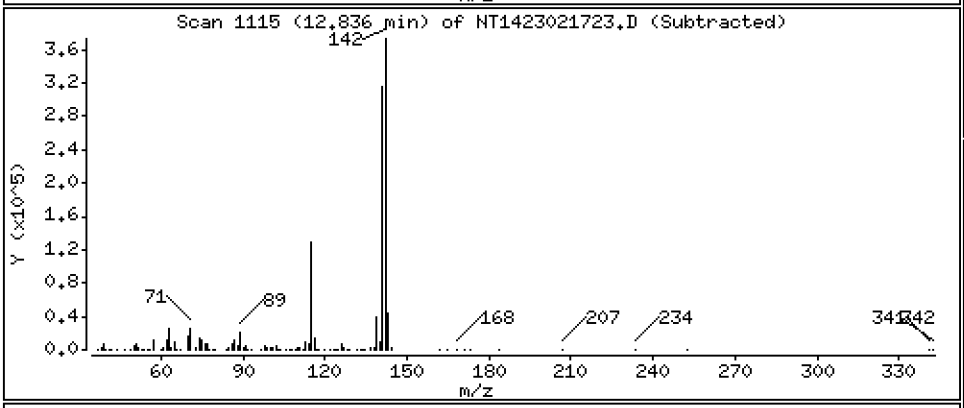
Column diameter: 0.25

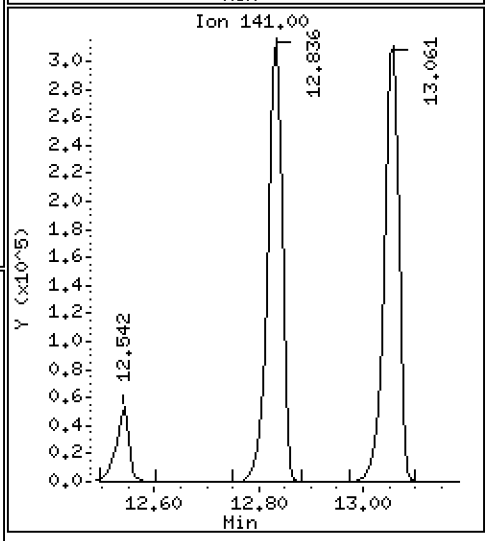
32 2-Methylnaphthalene

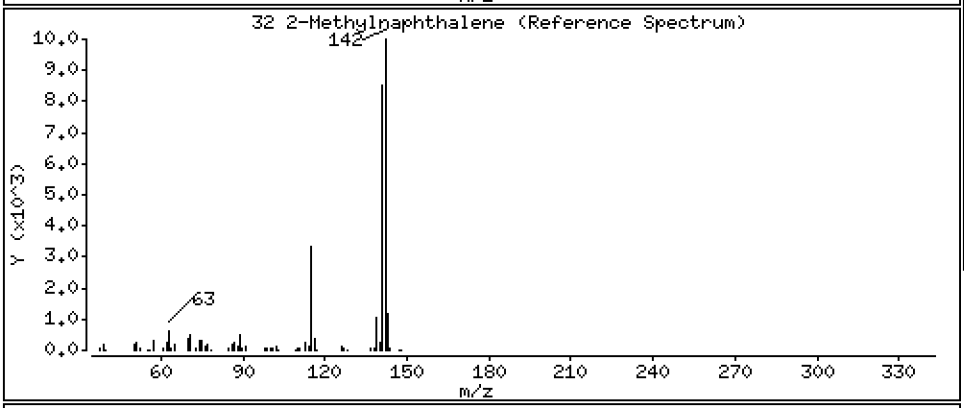
Concentration: 3.655 ug/mL

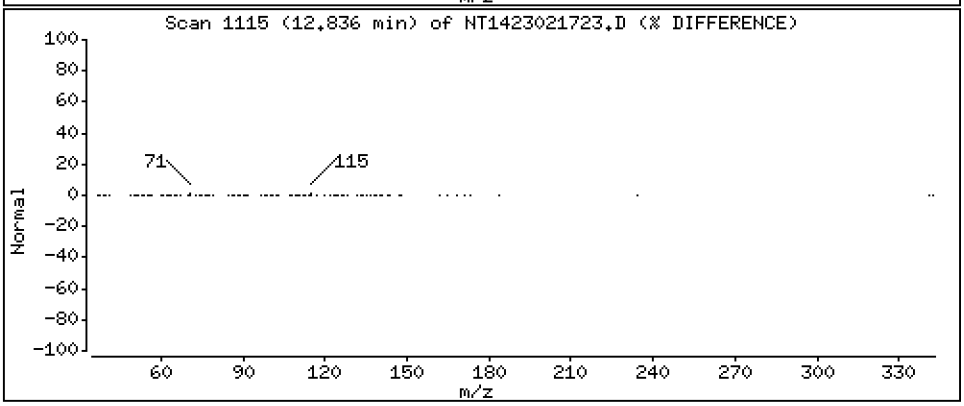












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021723.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

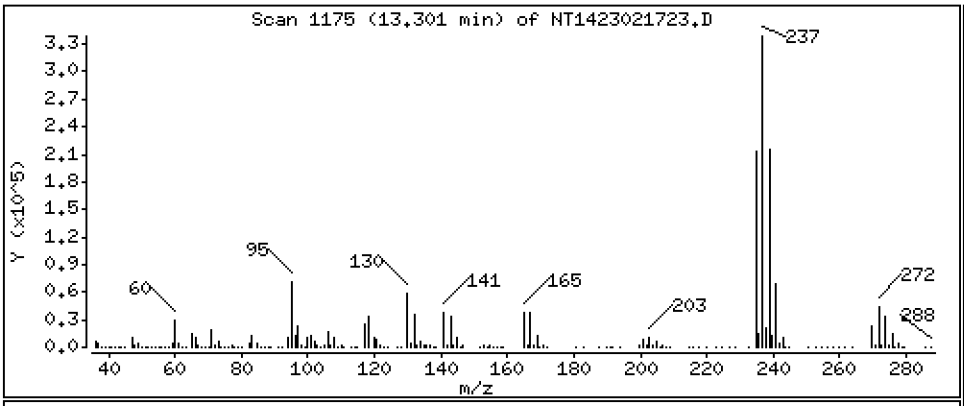
Operator: DSD

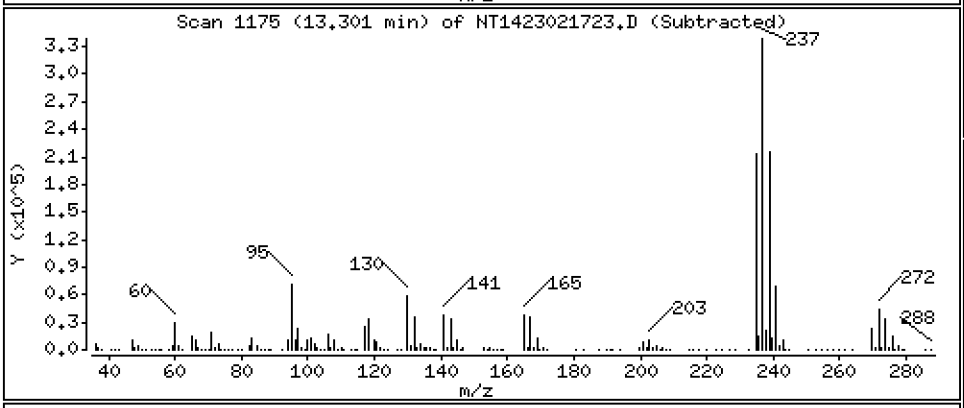
Column phase: ZB-5msi

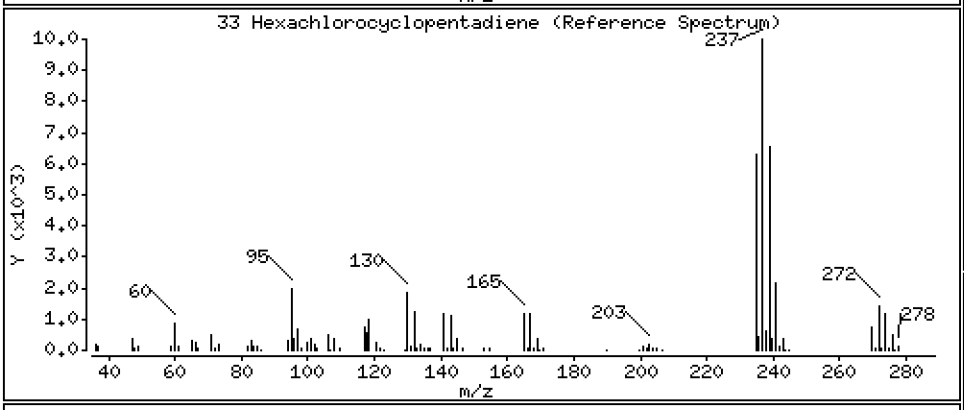
Column diameter: 0.25

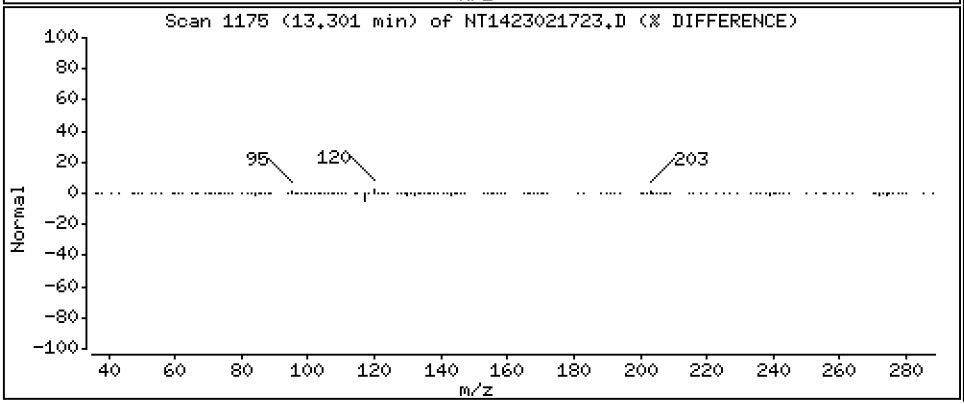
33 Hexachlorocyclopentadiene

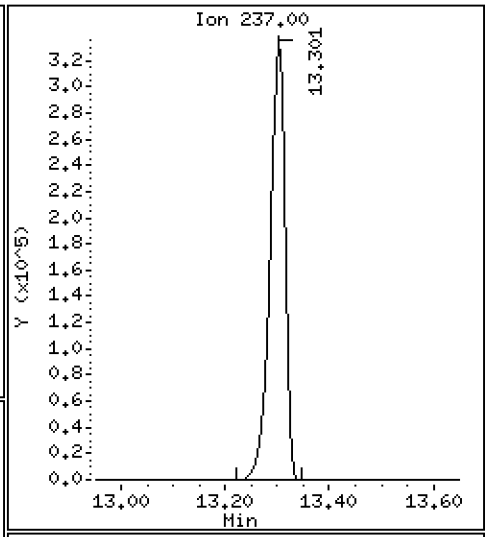
Concentration: 10.69 ug/mL

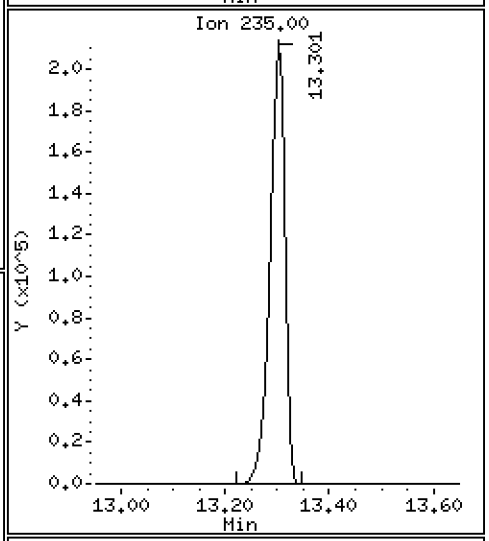


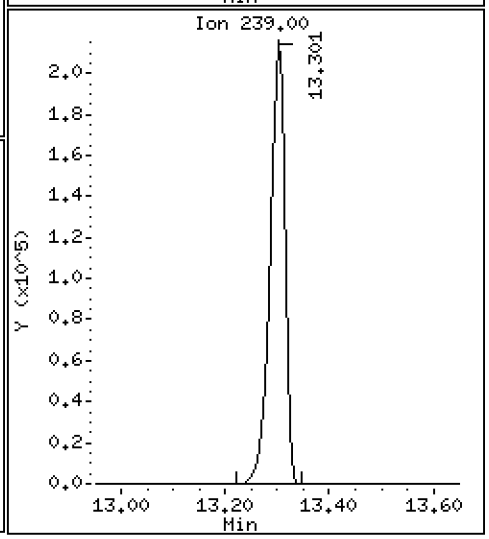












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021723.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

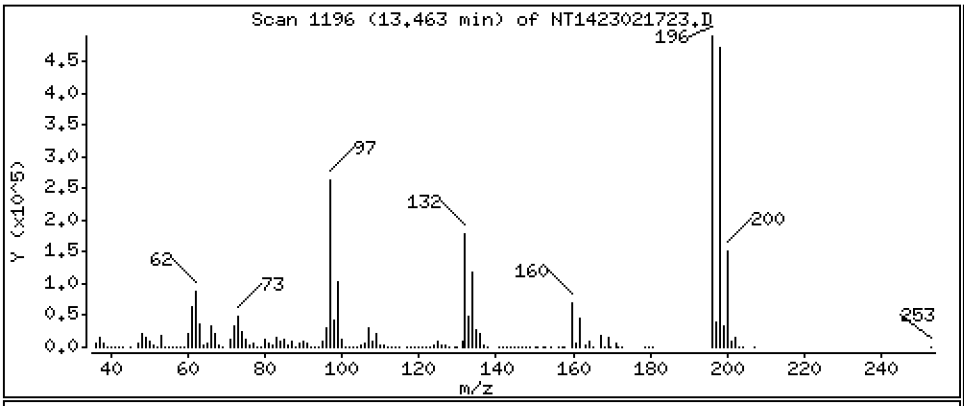
Operator: DSD

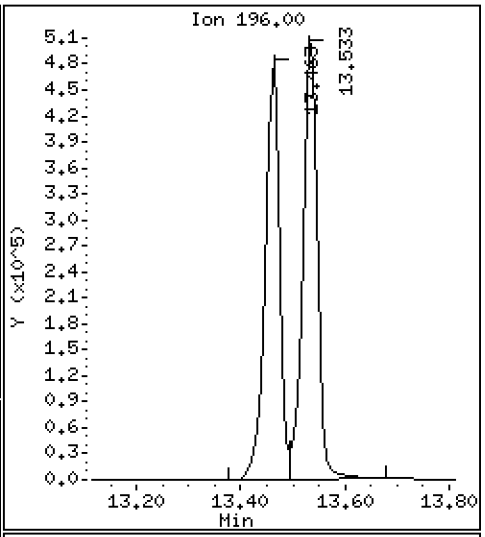
Column phase: ZB-5msi

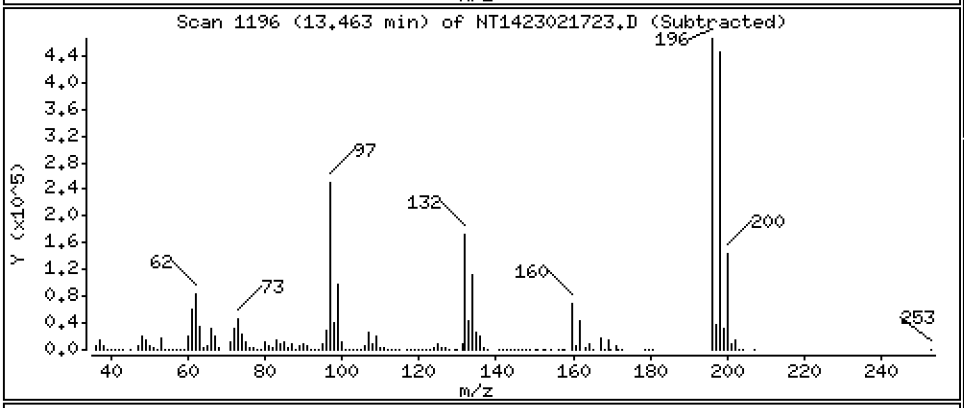
Column diameter: 0.25

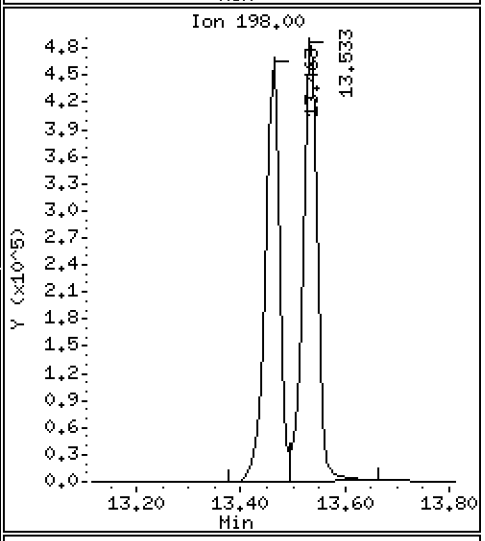
34 2,4,6-Trichlorophenol

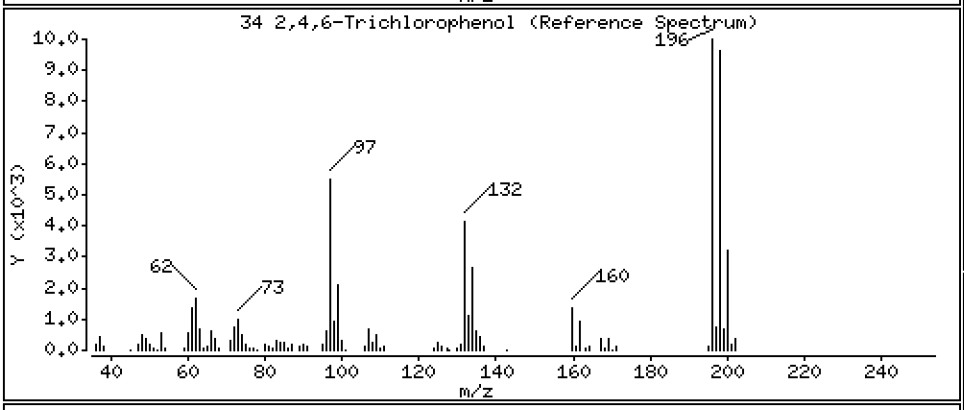
Concentration: 14.50 ug/mL

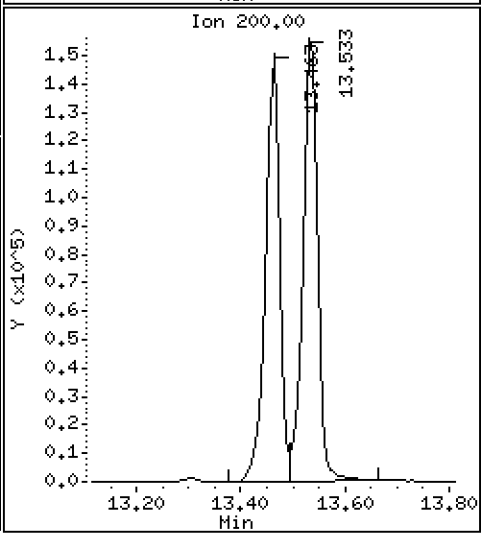


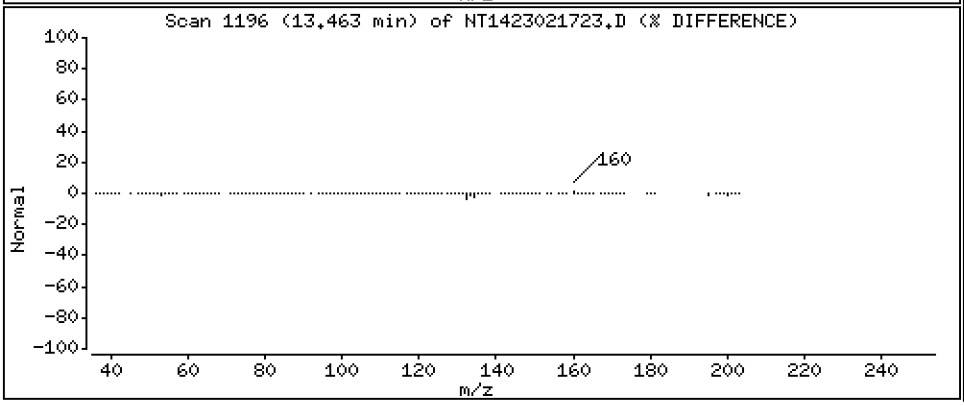












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

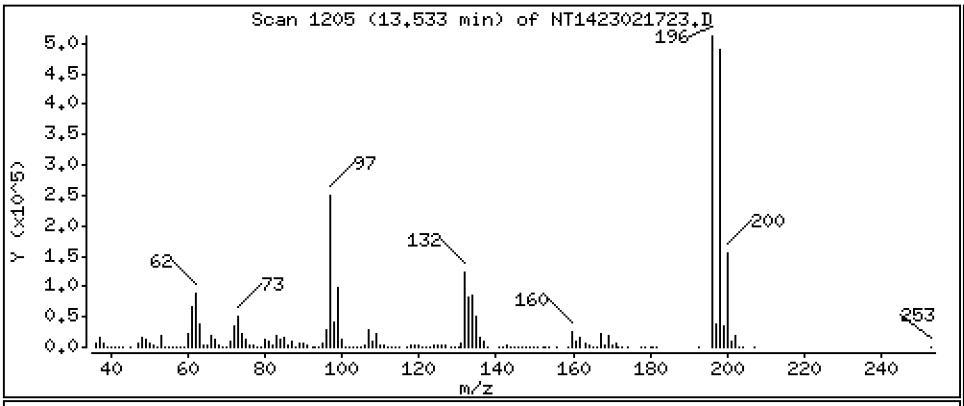
Operator: DSD

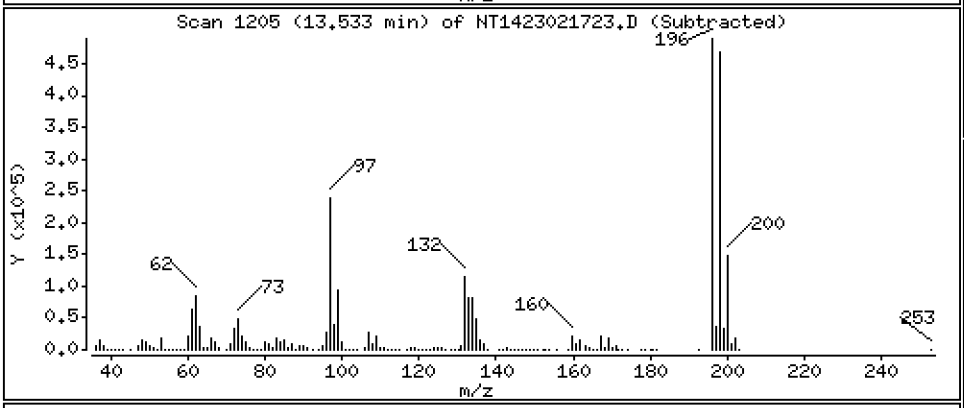
Column phase: ZB-5msi

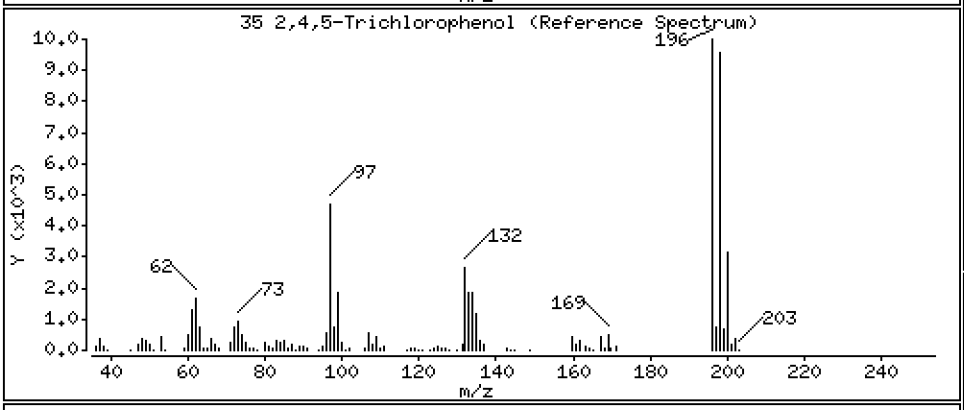
Column diameter: 0.25

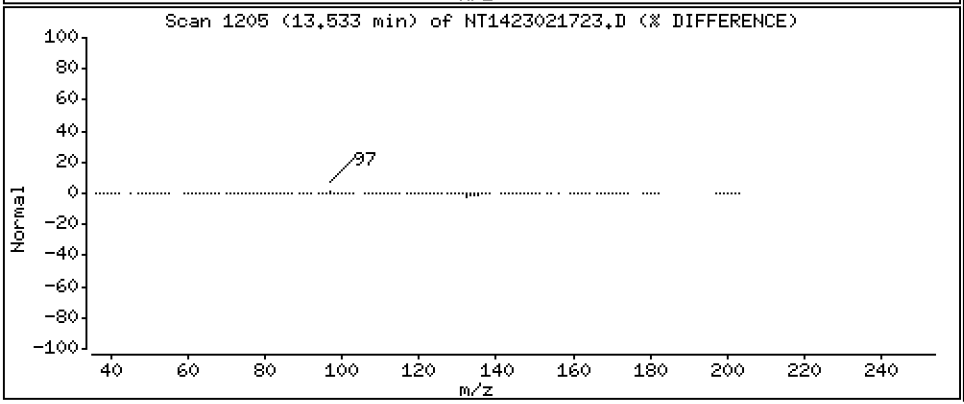
35 2,4,5-Trichlorophenol

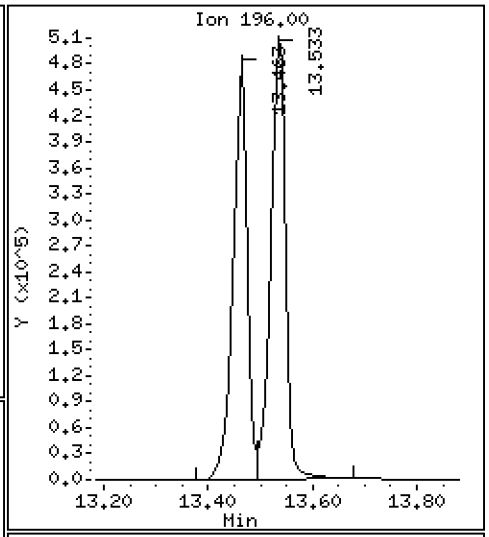
Concentration: 14.66 ug/mL

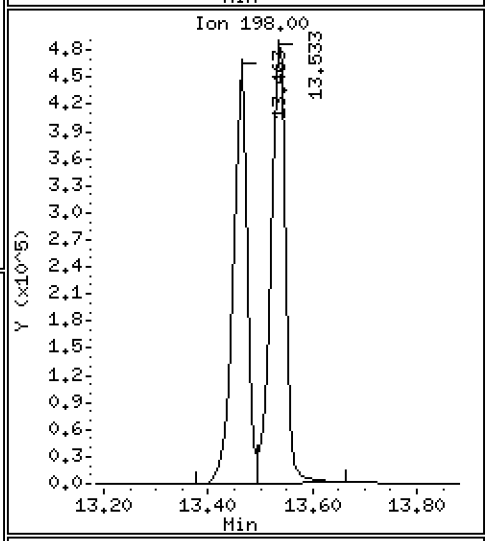


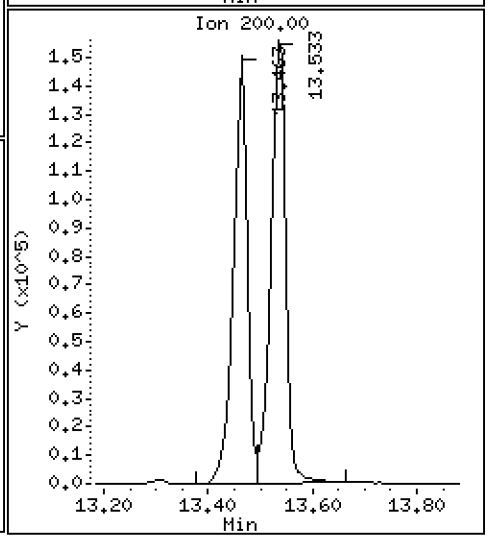












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

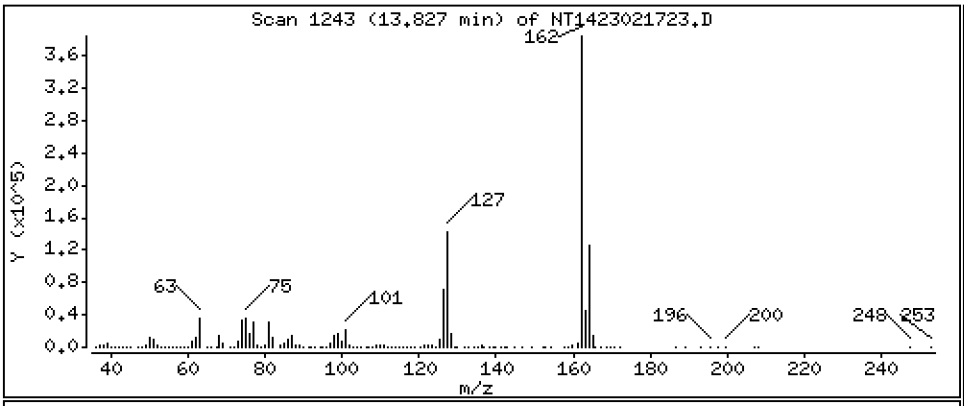
Operator: DSD

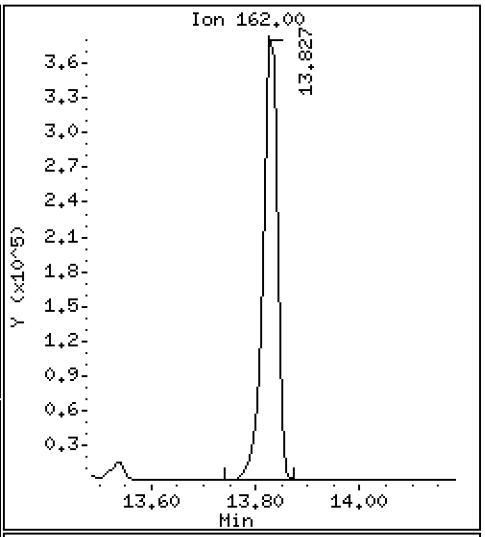
Column phase: ZB-5msi

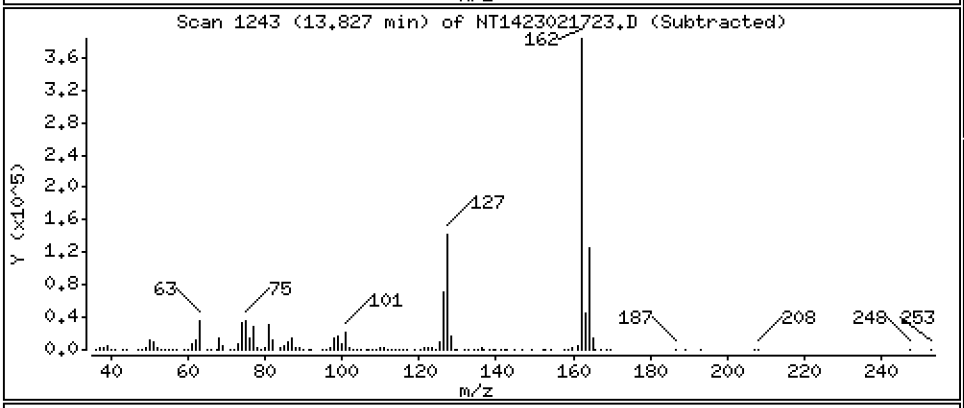
Column diameter: 0.25

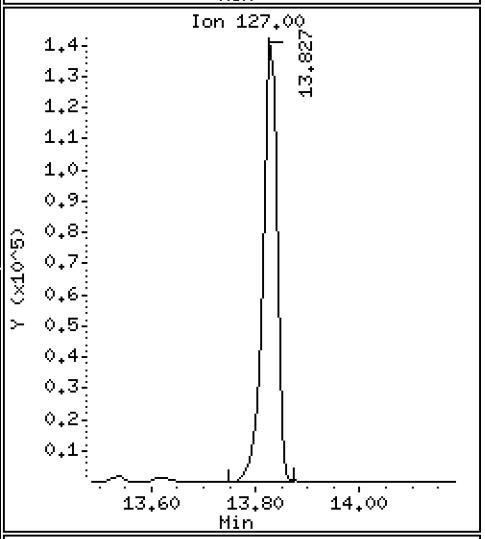
37 2-Chloronaphthalene

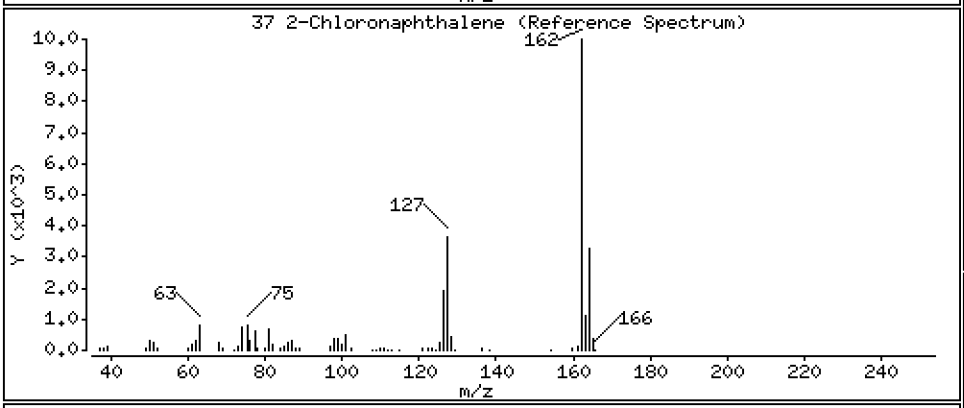
Concentration: 3.868 ug/mL

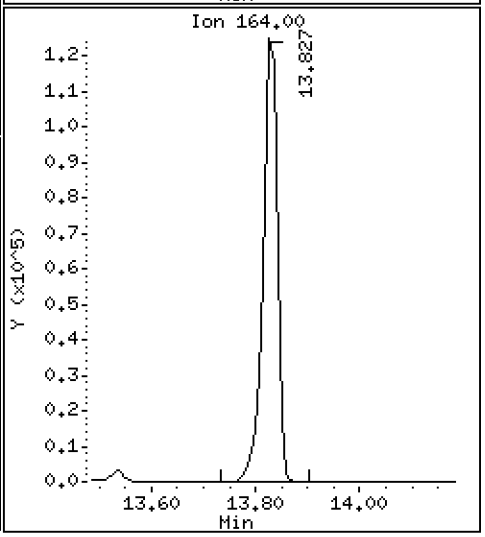


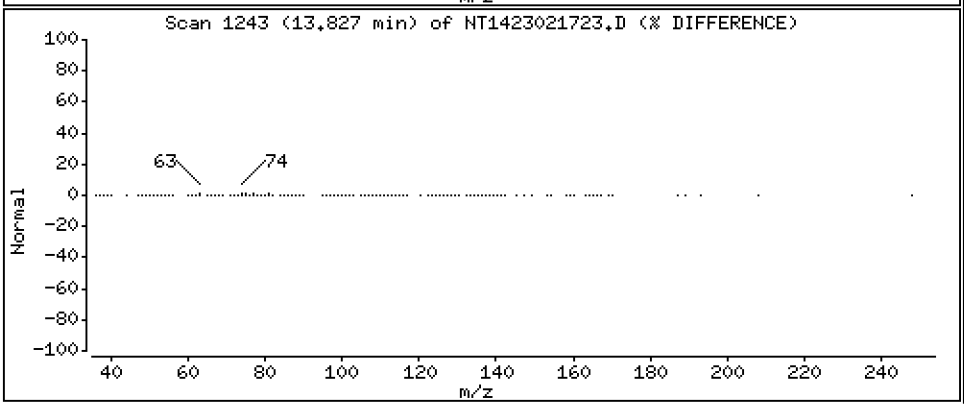












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

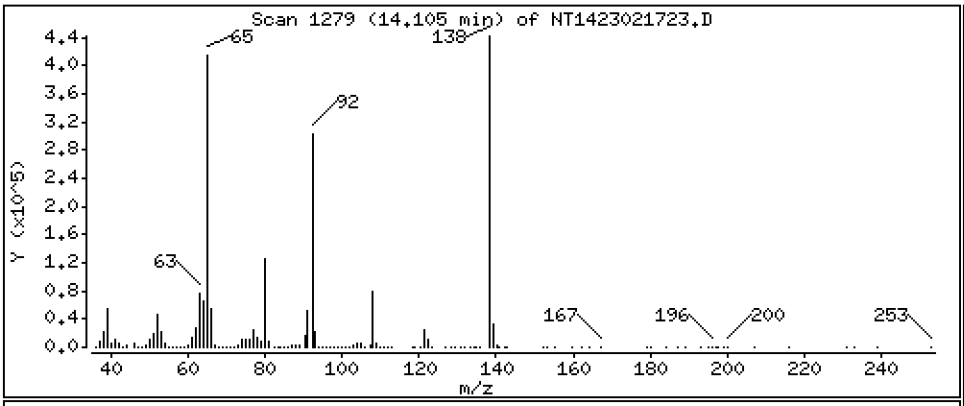
Operator: DSD

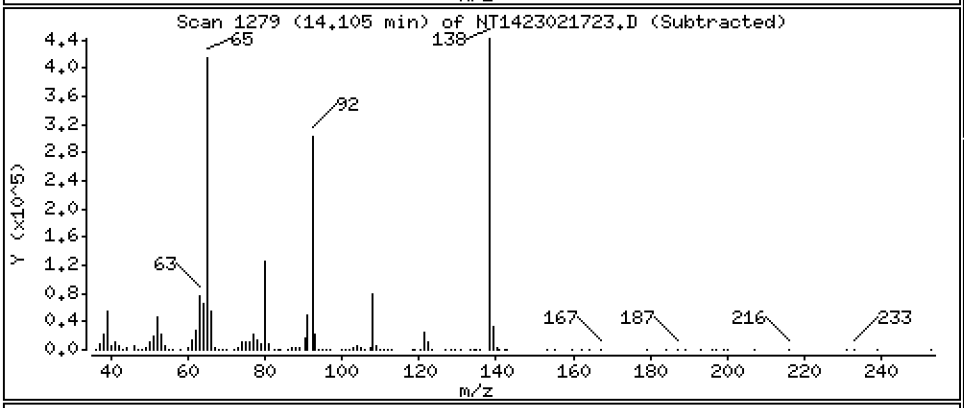
Column phase: ZB-5msi

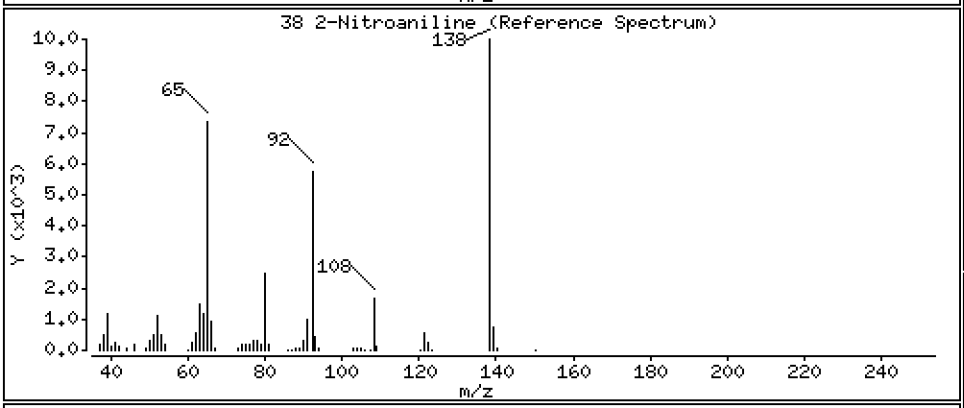
Column diameter: 0.25

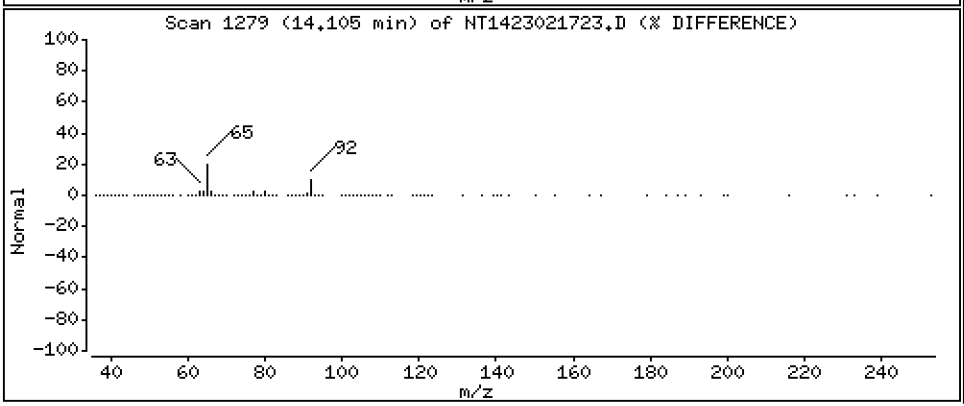
38 2-Nitroaniline

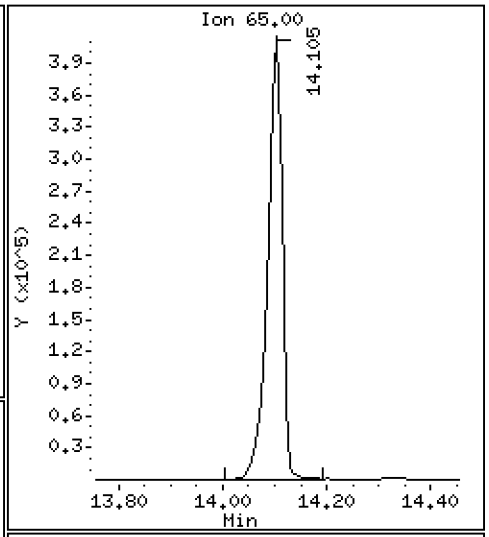
Concentration: 13.21 ug/mL

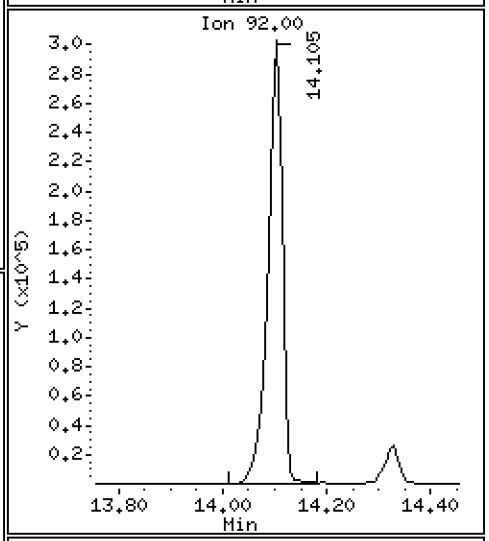


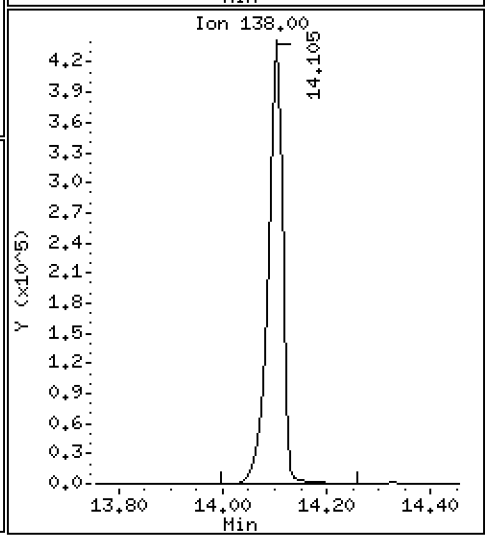












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

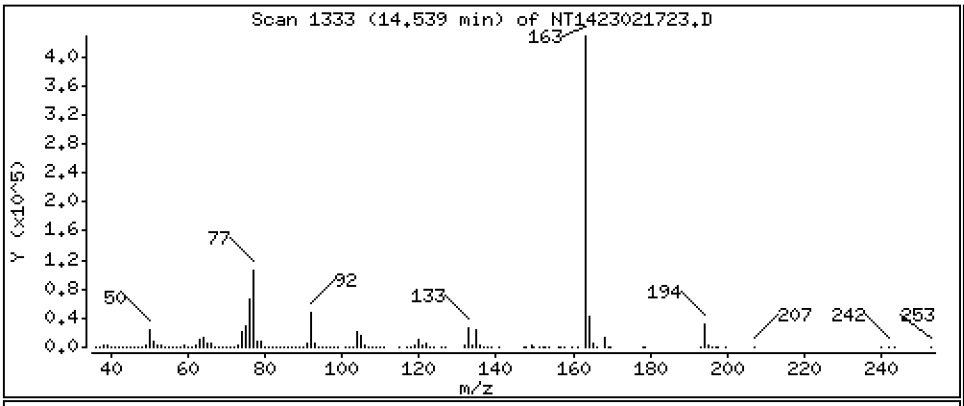
Operator: DSD

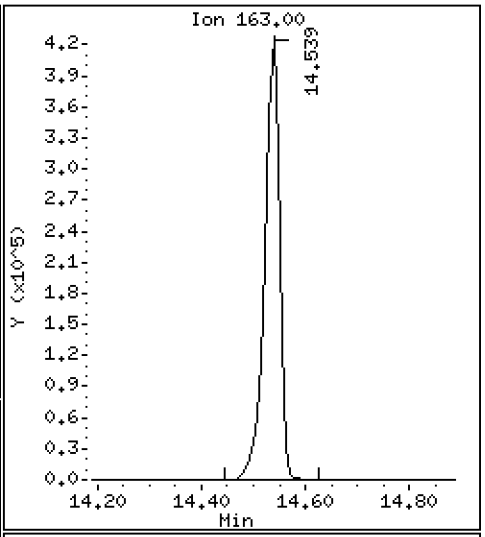
Column phase: ZB-5msi

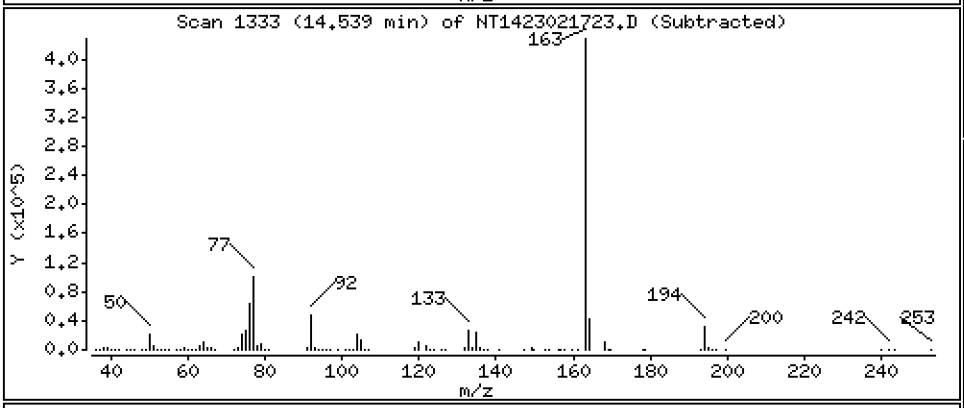
Column diameter: 0.25

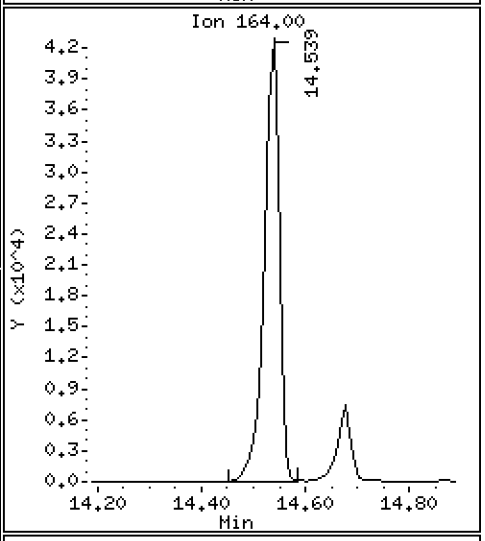
39 Dimethylphthalate

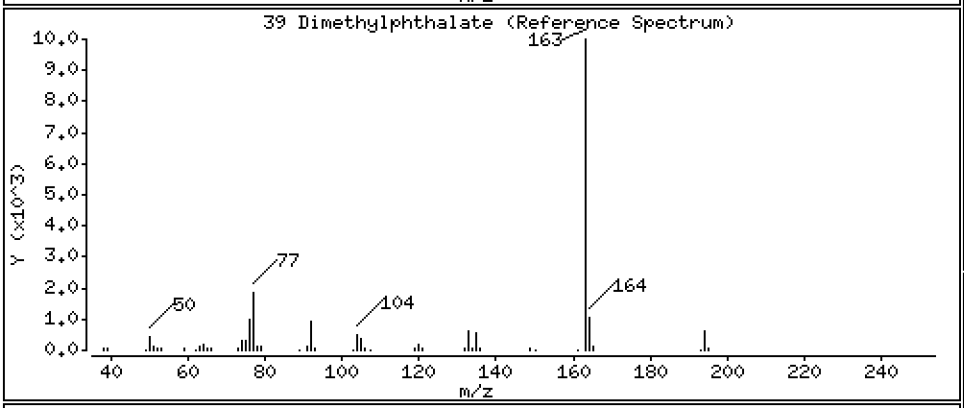
Concentration: 4.270 ug/mL

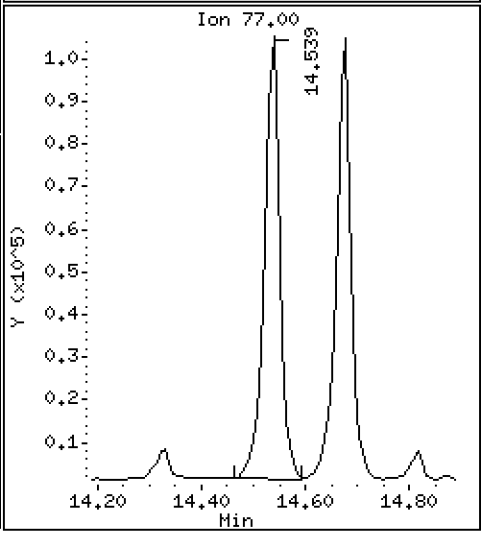


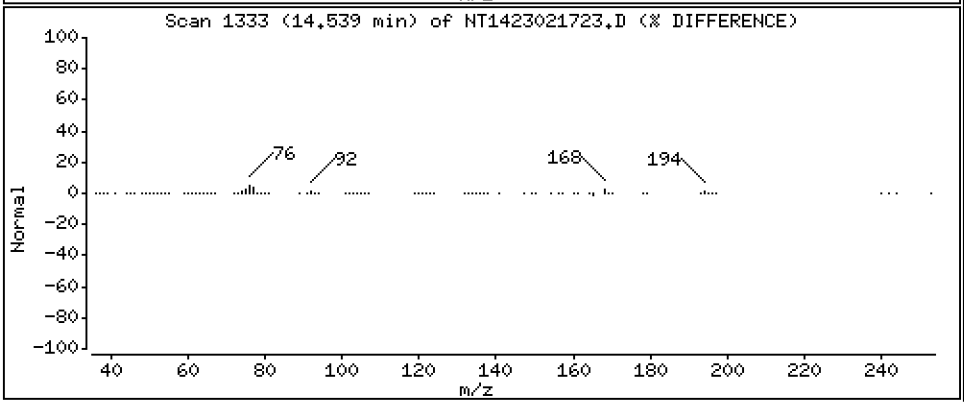












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

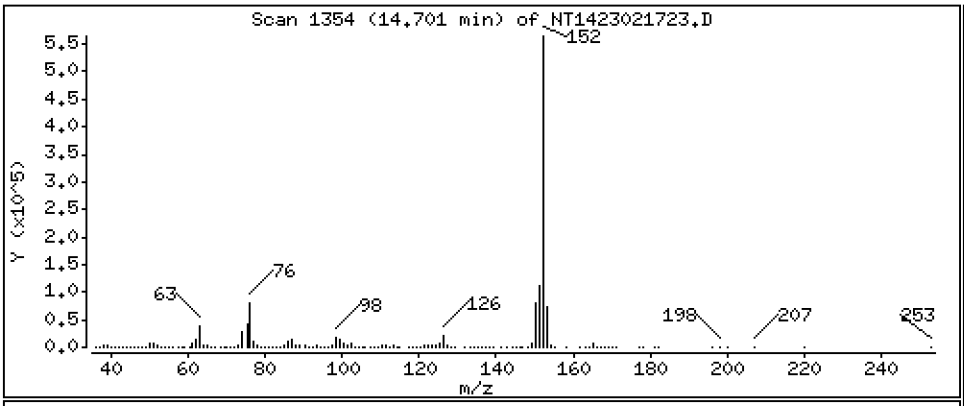
Operator: DSD

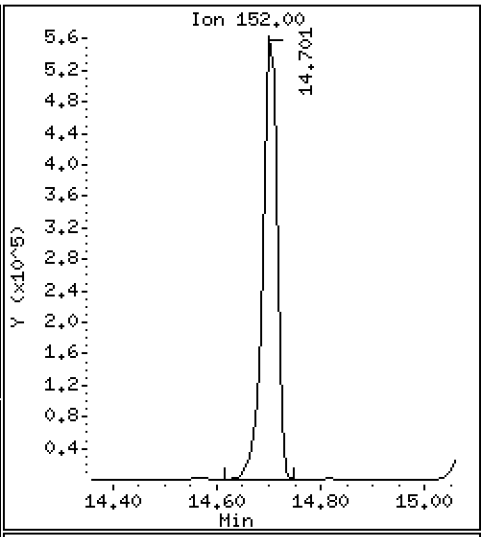
Column phase: ZB-5msi

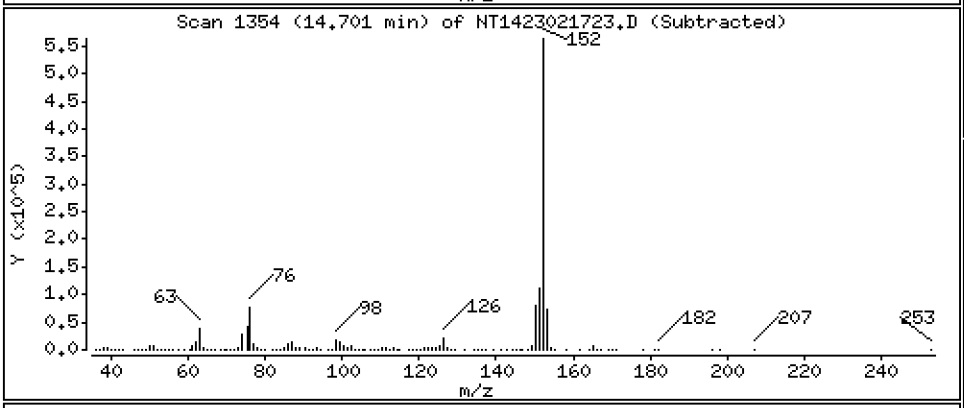
Column diameter: 0.25

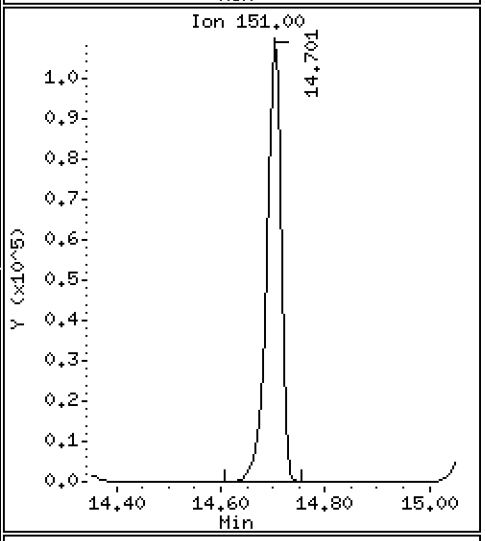
40 Acenaphthylene

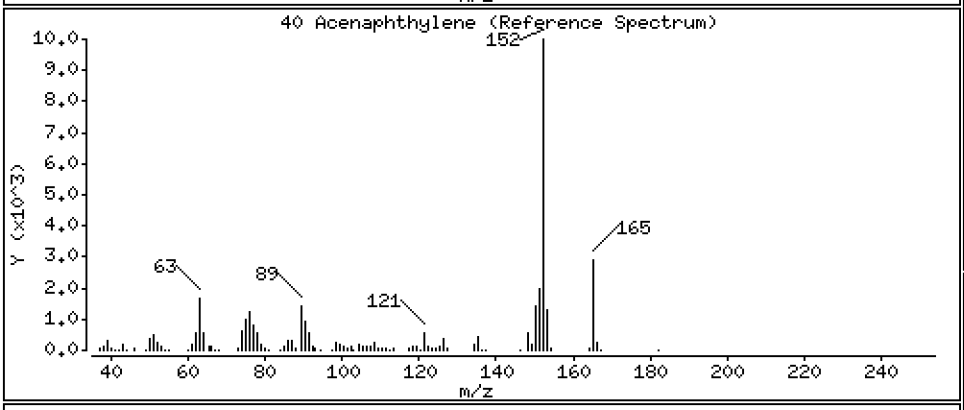
Concentration: 3.743 ug/mL

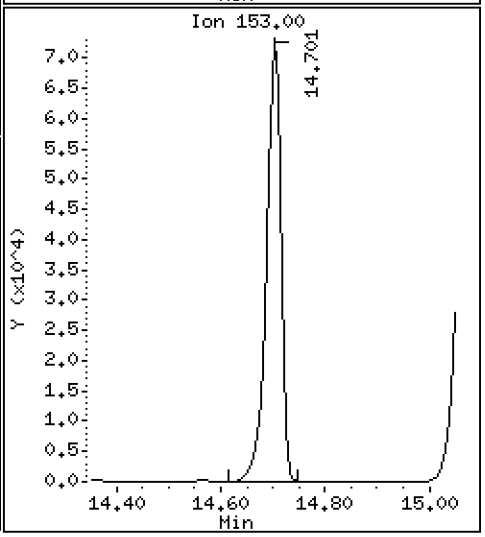


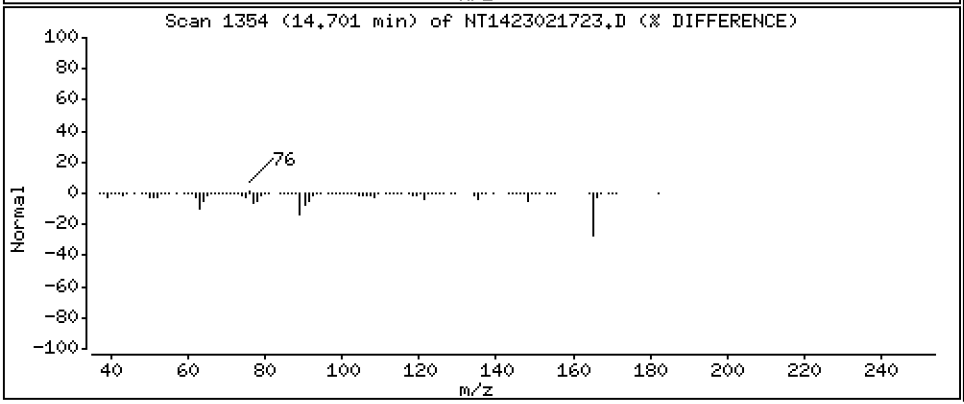












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

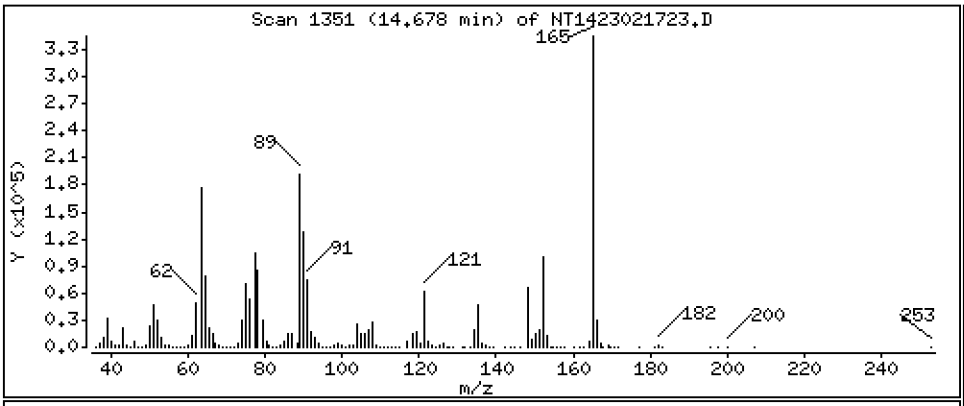
Operator: DSD

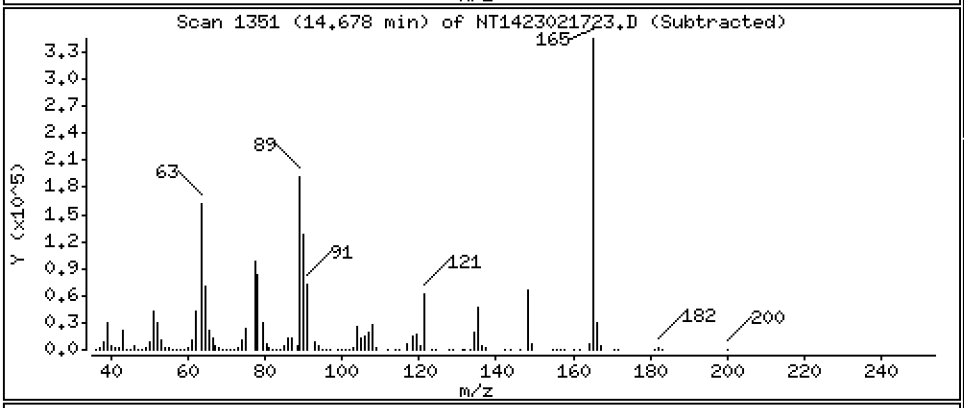
Column phase: ZB-5msi

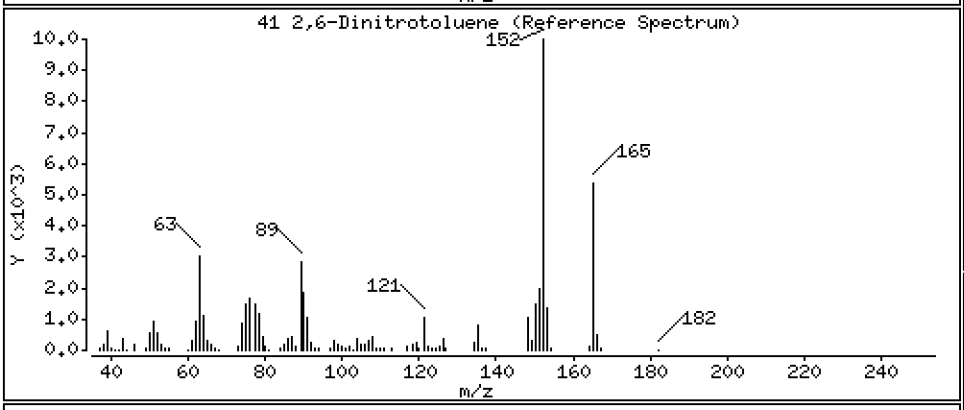
Column diameter: 0.25

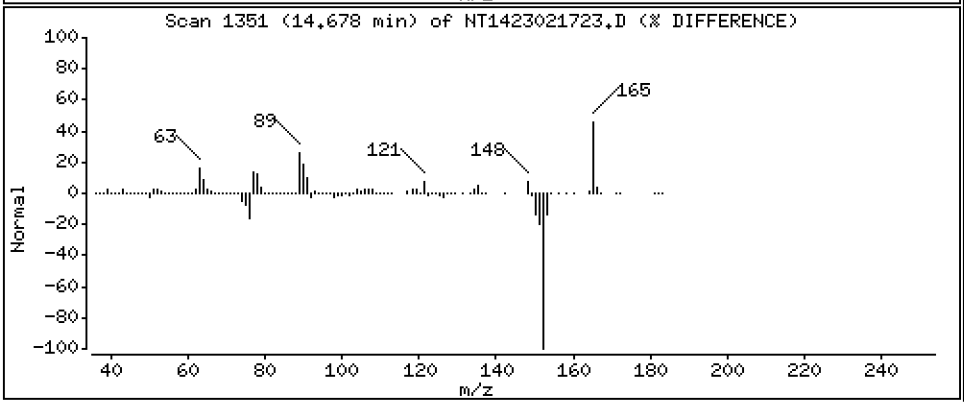
41 2,6-Dinitrotoluene

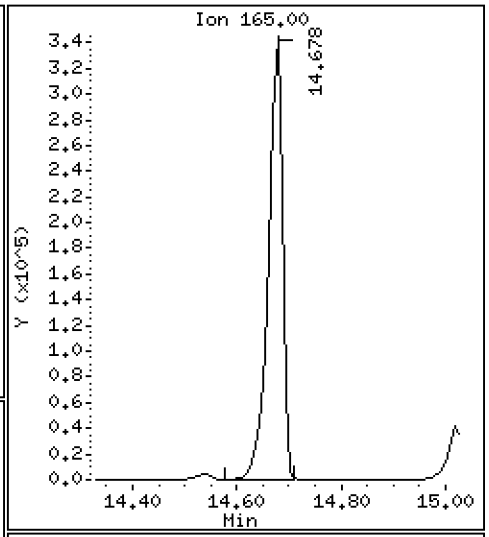
Concentration: 13.86 ug/mL

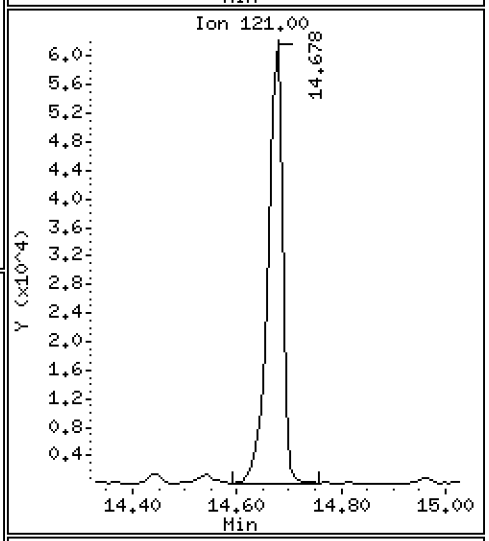


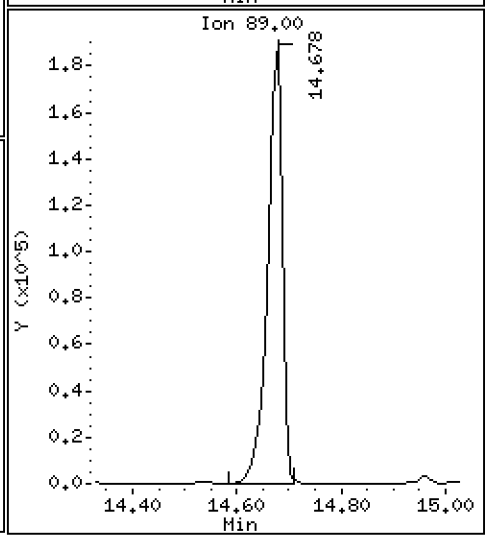












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

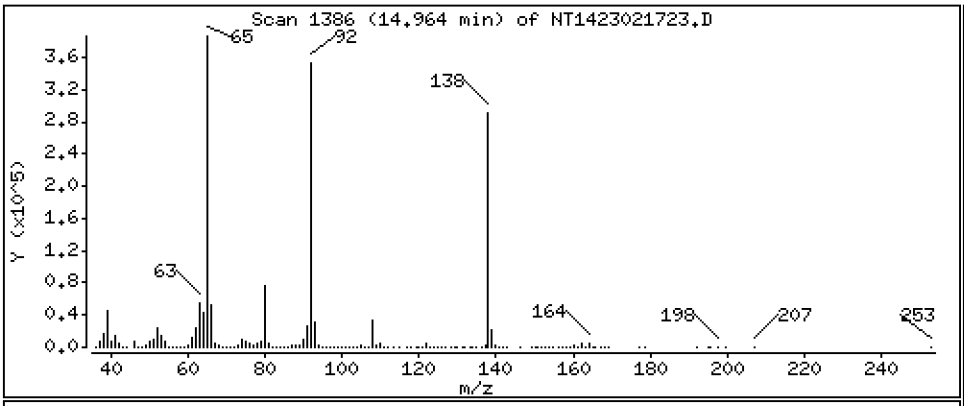
Operator: DSD

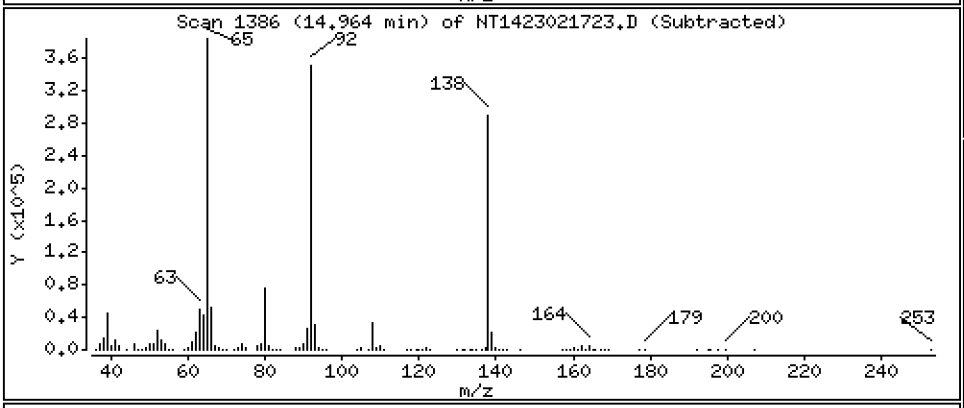
Column phase: ZB-5msi

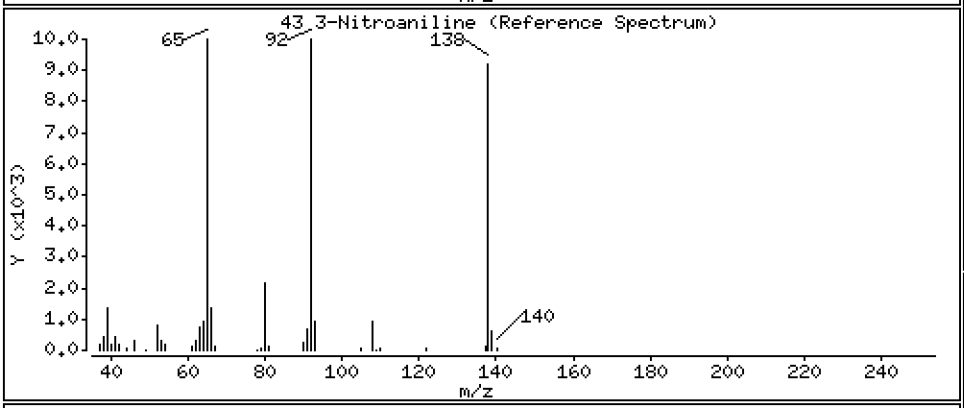
Column diameter: 0.25

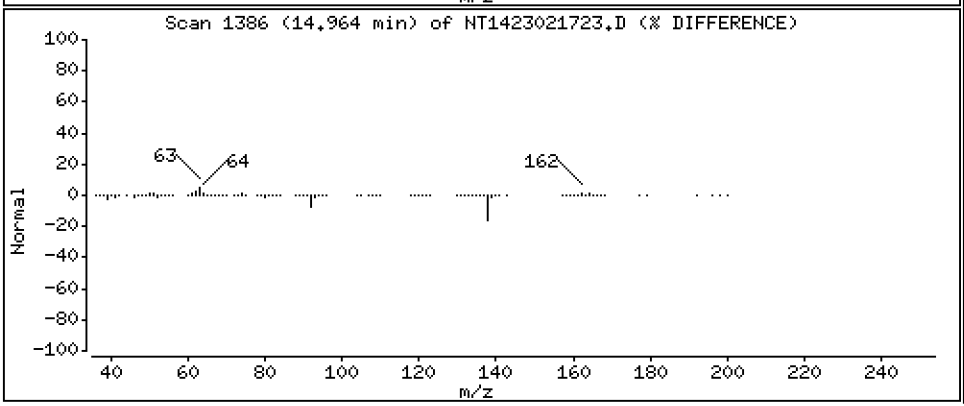
43 3-Nitroaniline

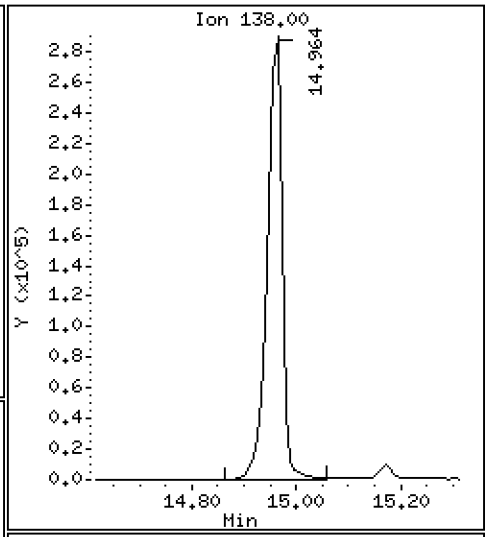
Concentration: 11.74 ug/mL

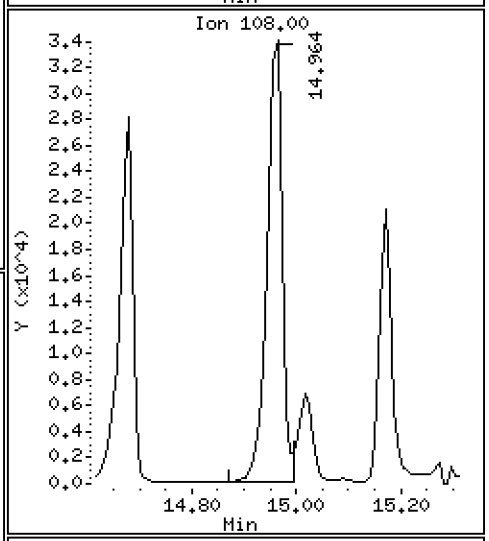


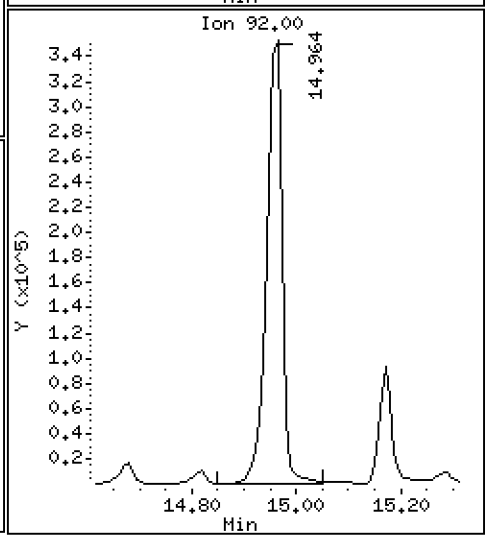












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021723.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

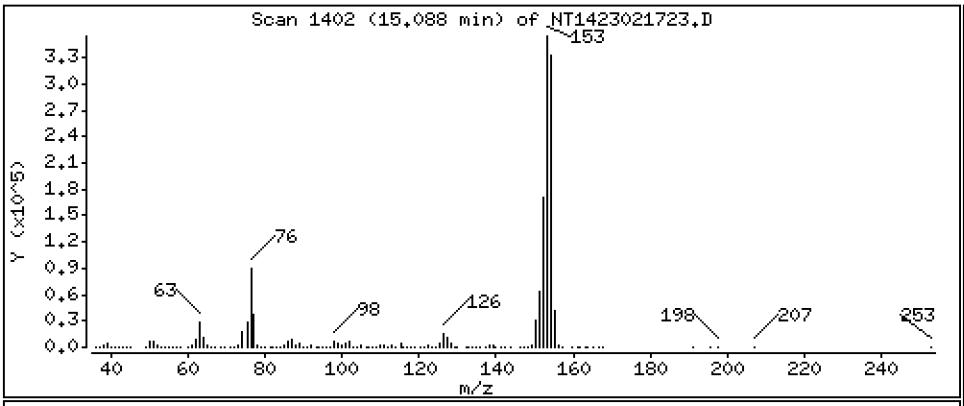
Operator: DSD

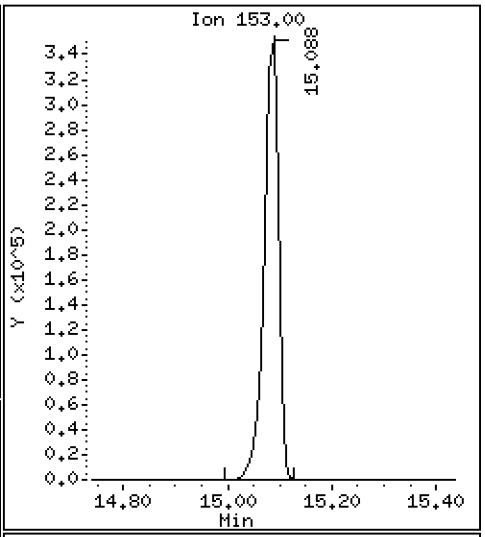
Column phase: ZB-5msi

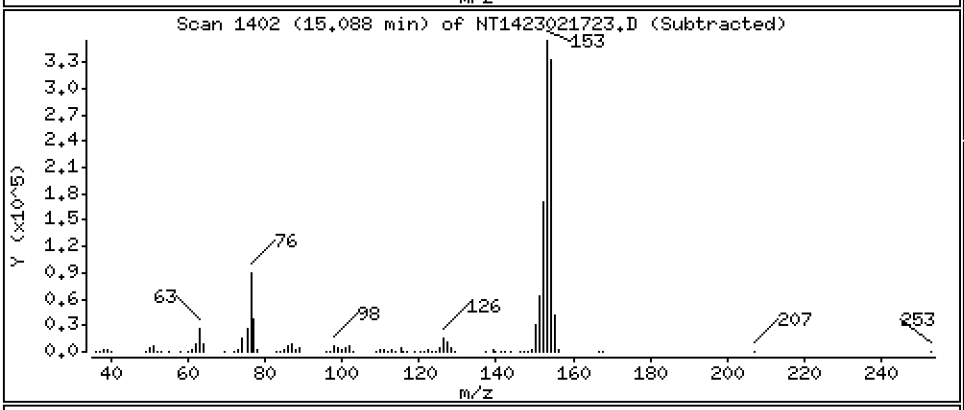
Column diameter: 0.25

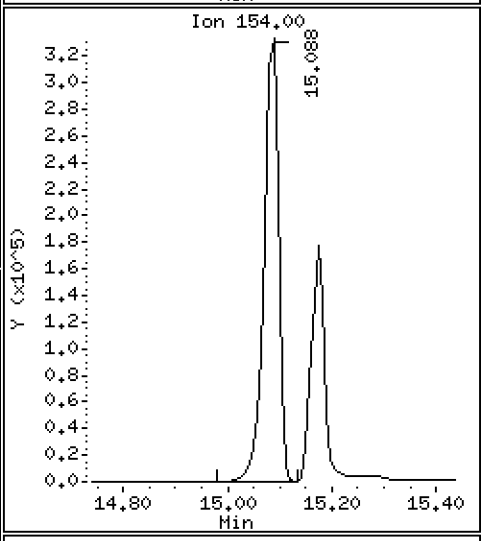
44 Acenaphthene

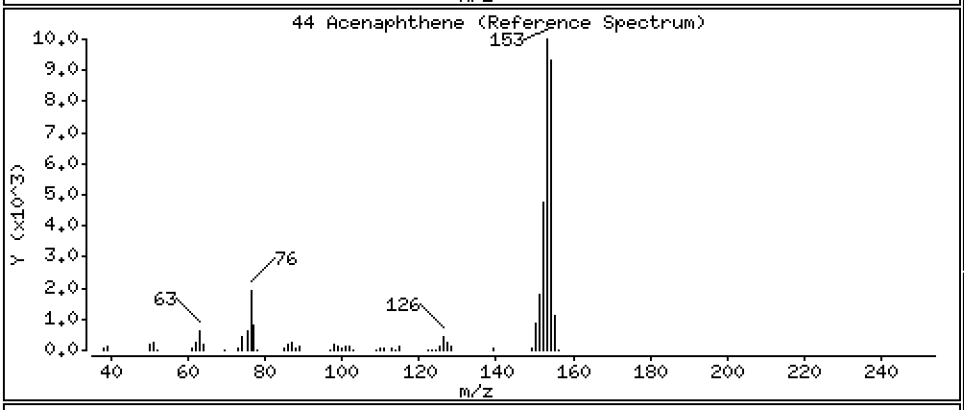
Concentration: 3.940 ug/mL

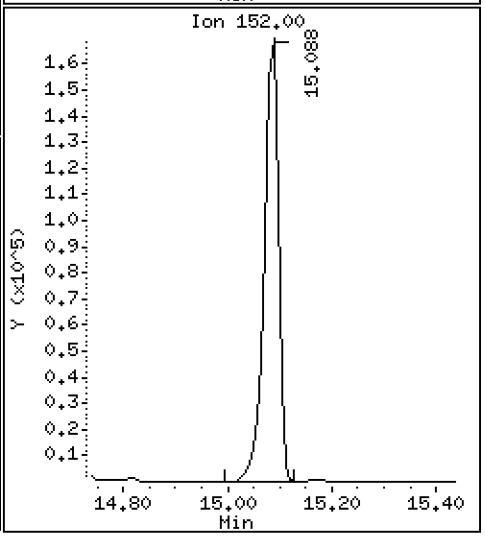


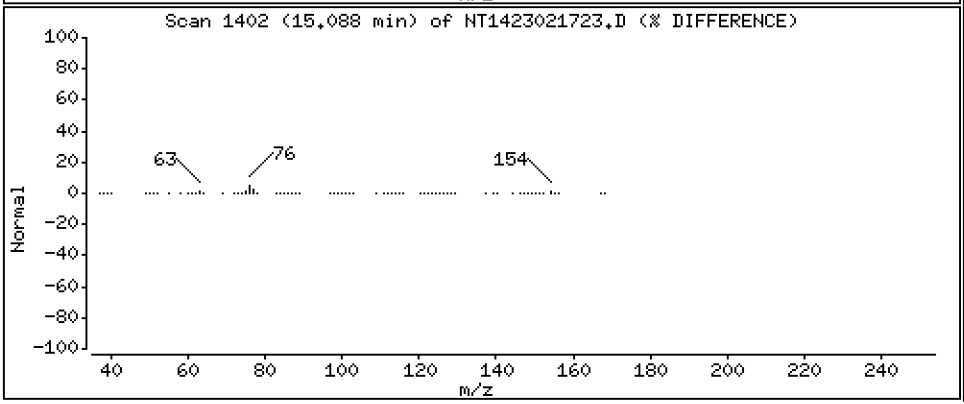












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

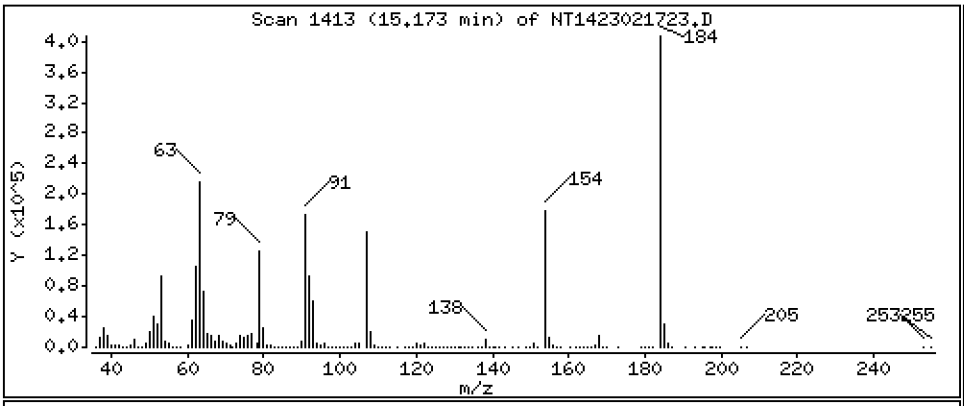
Operator: DSD

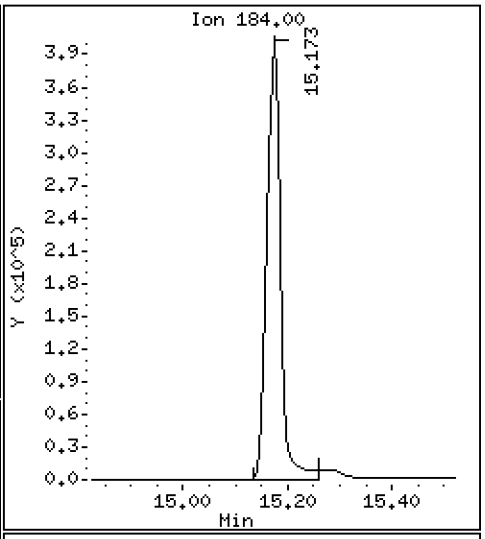
Column phase: ZB-5msi

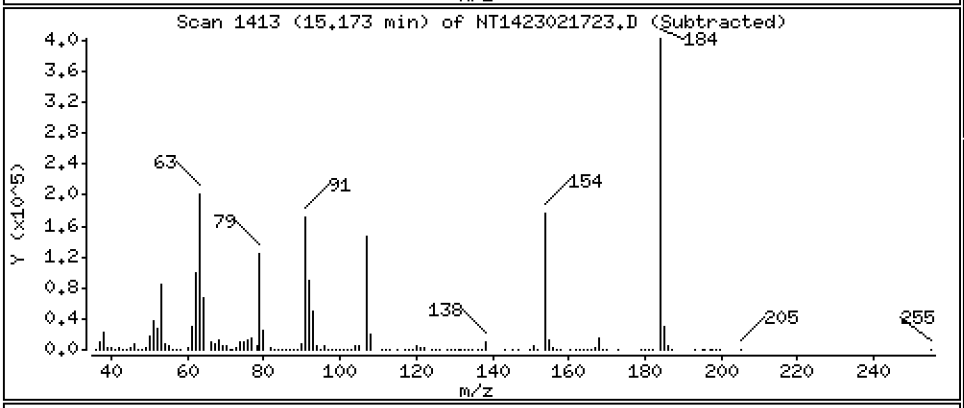
Column diameter: 0.25

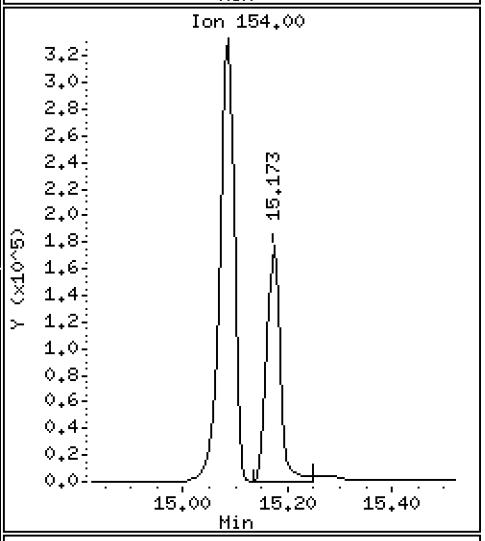
45 2,4-Dinitrophenol

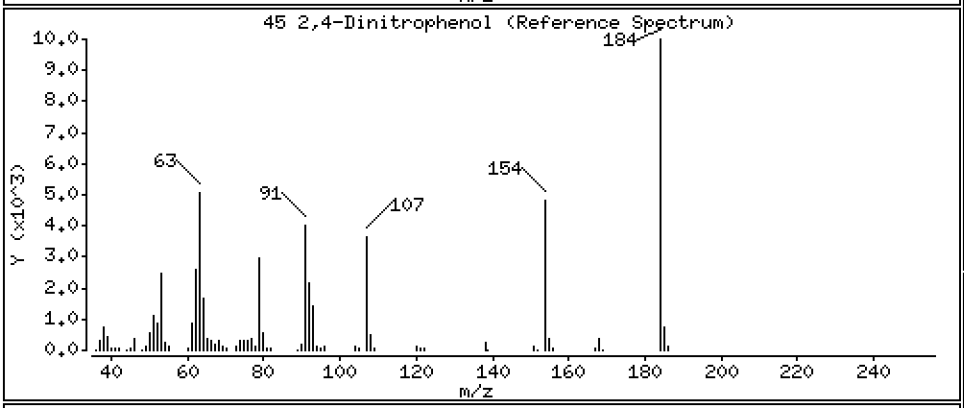
Concentration: 22.82 ug/mL

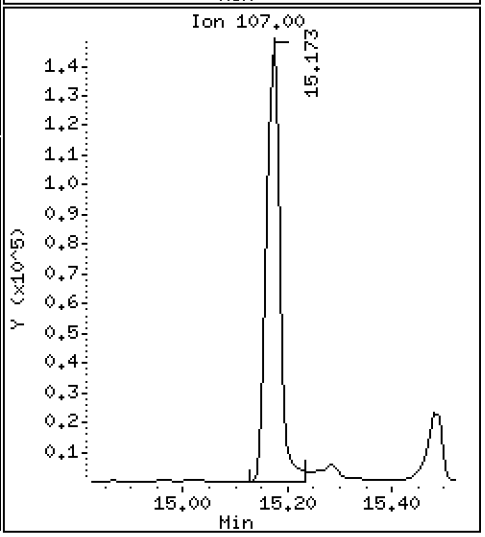


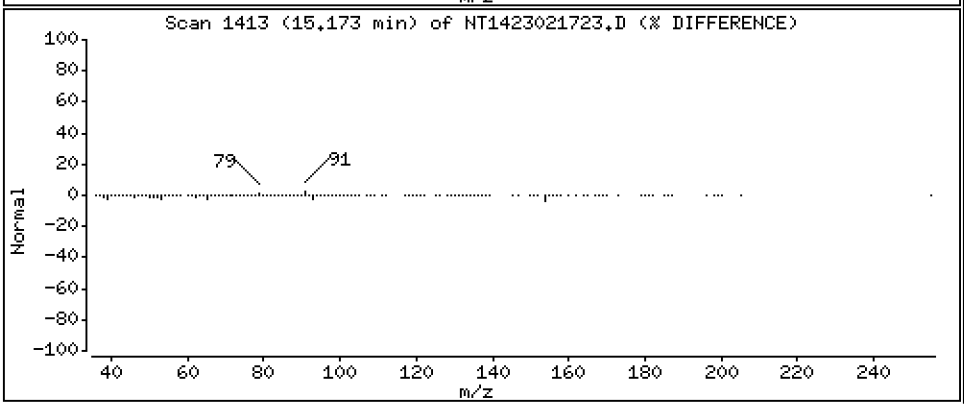












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

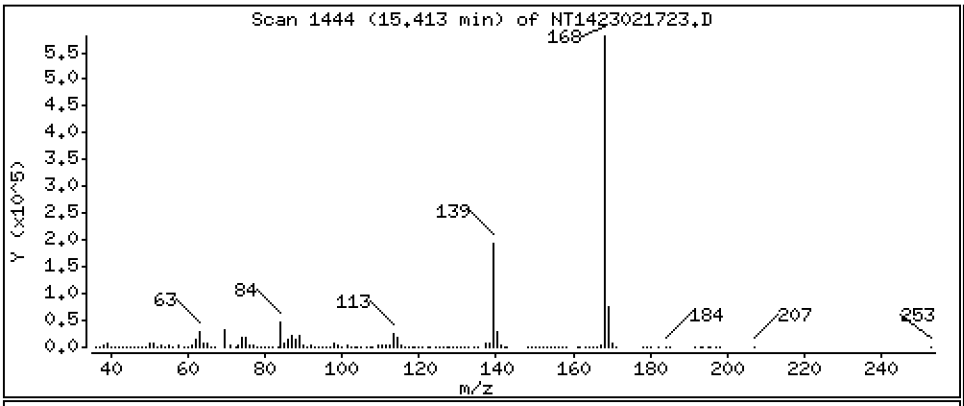
Operator: DSD

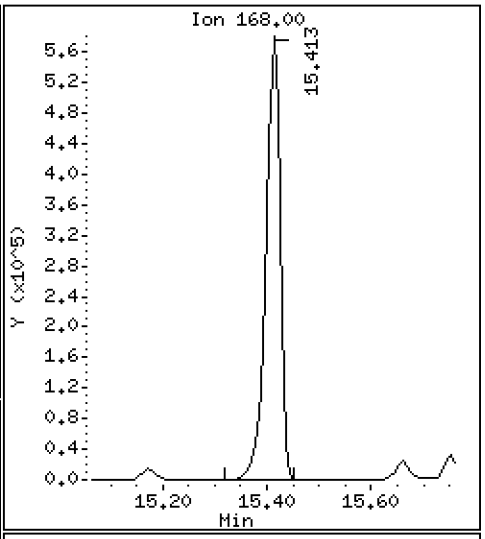
Column phase: ZB-5msi

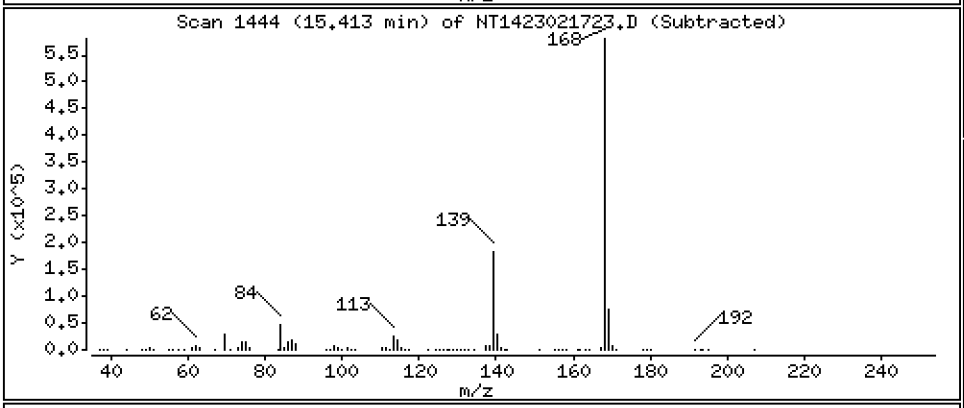
Column diameter: 0.25

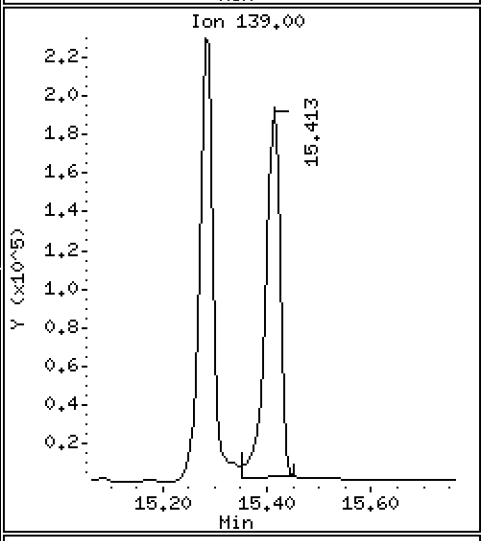
46 Dibenzofuran

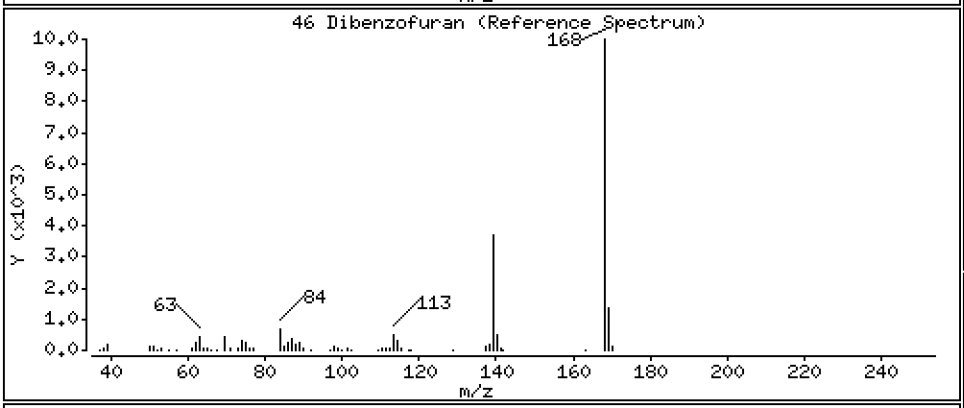
Concentration: 3.899 ug/mL

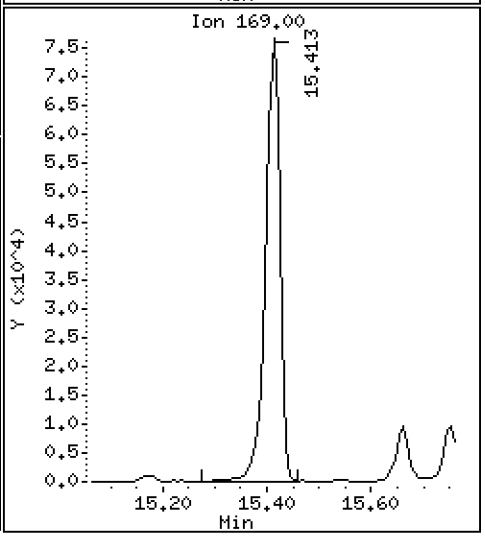


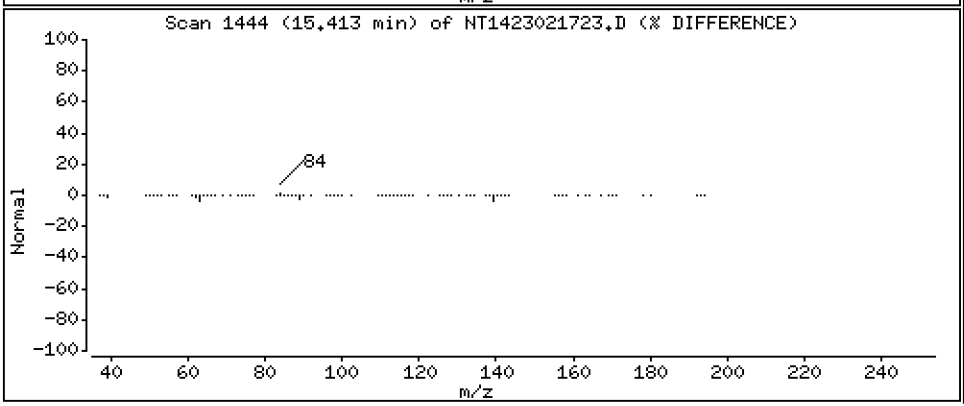












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

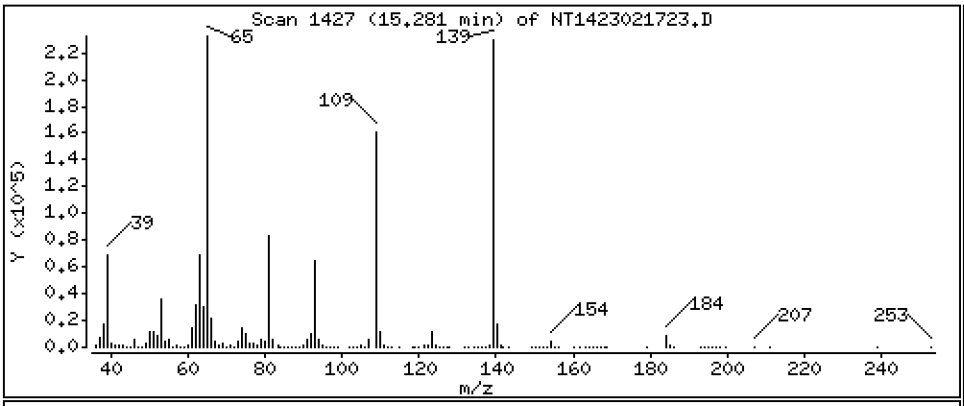
Operator: DSD

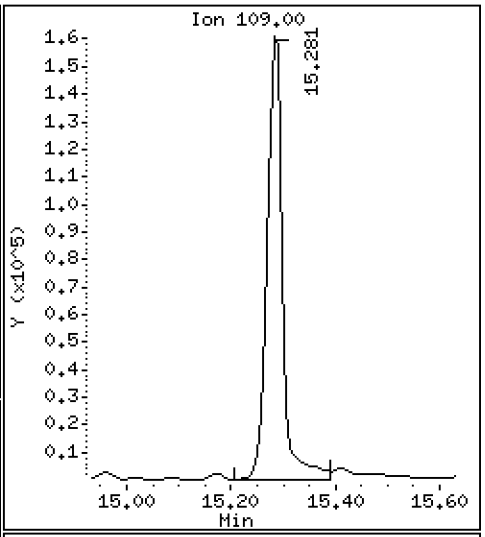
Column phase: ZB-5msi

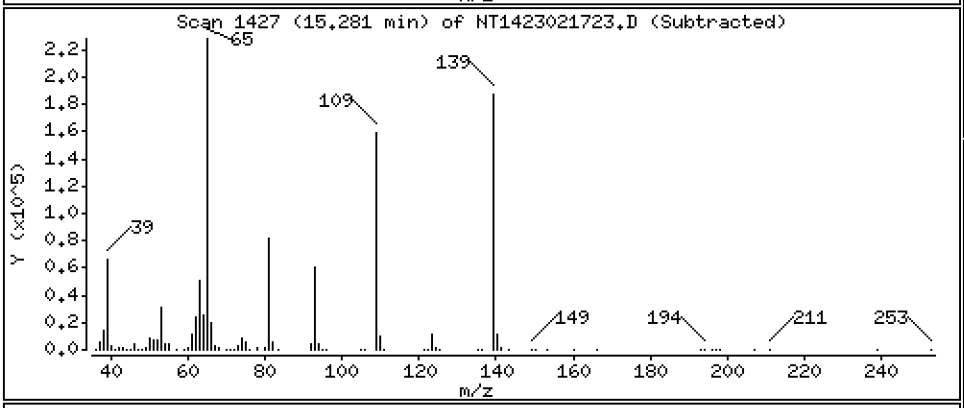
Column diameter: 0.25

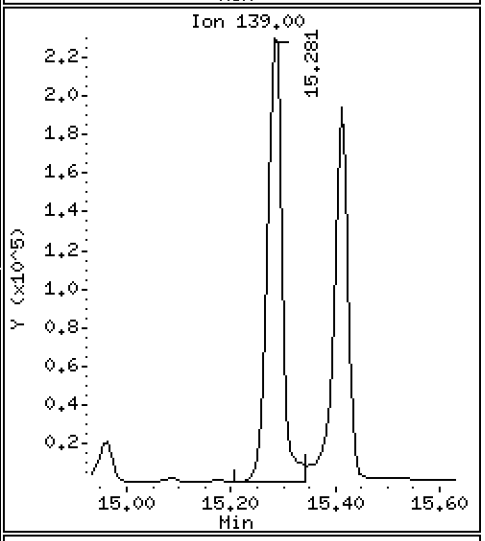
47 4-Nitrophenol

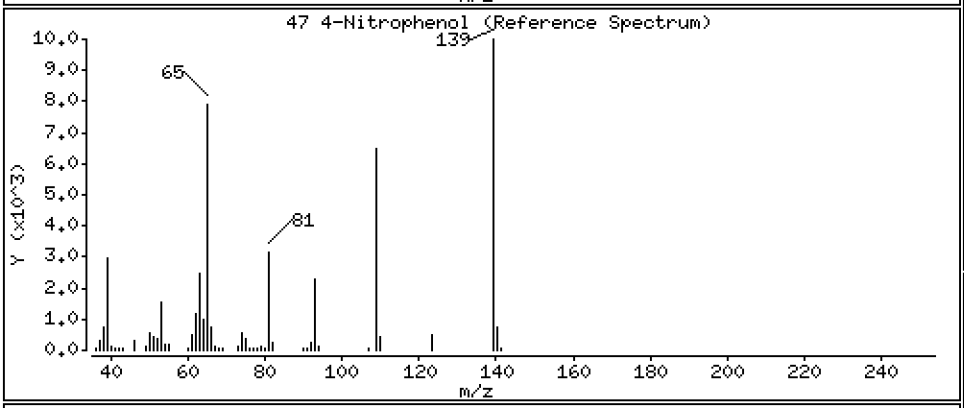
Concentration: 11.52 ug/mL

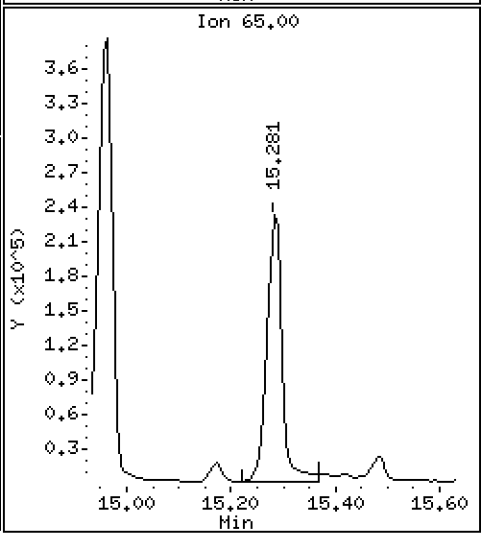


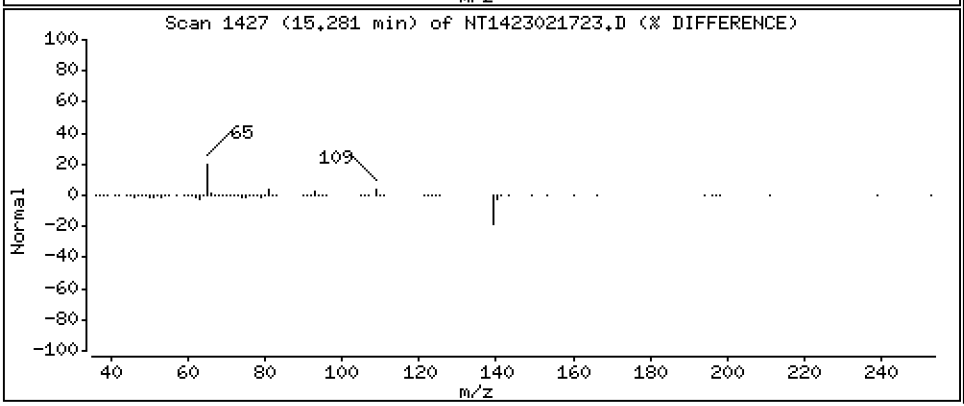












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

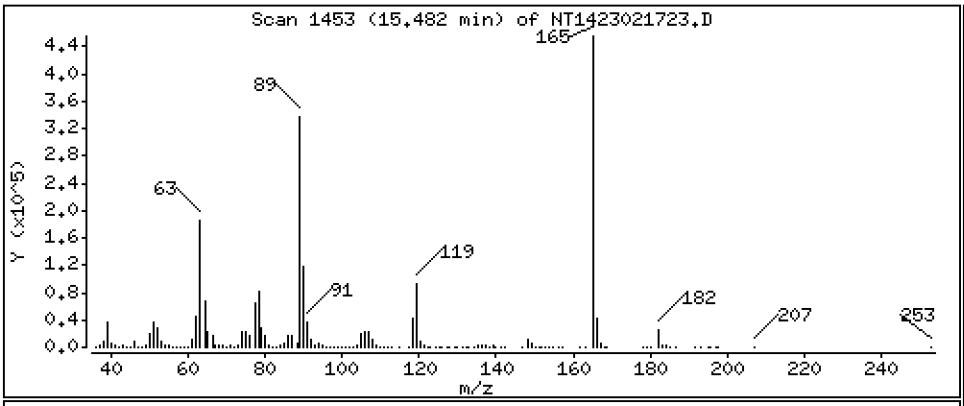
Operator: DSD

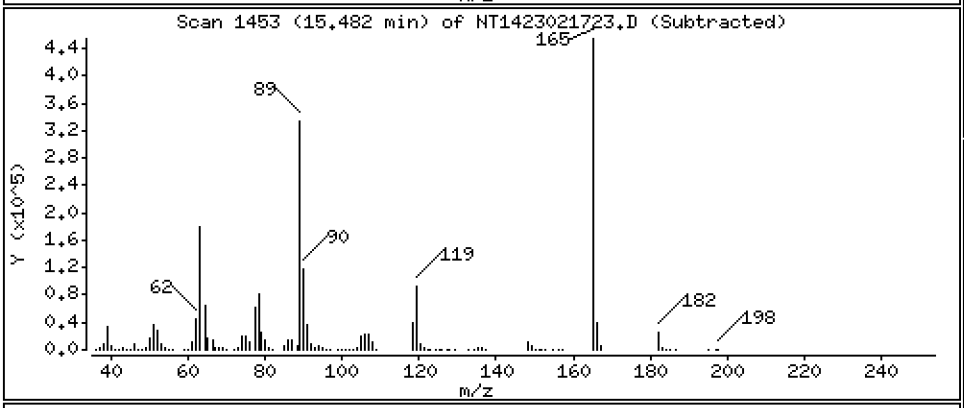
Column phase: ZB-5msi

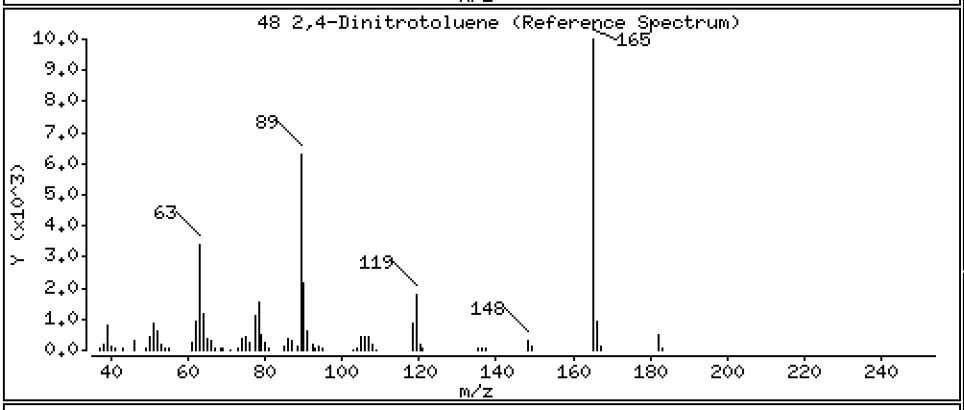
Column diameter: 0.25

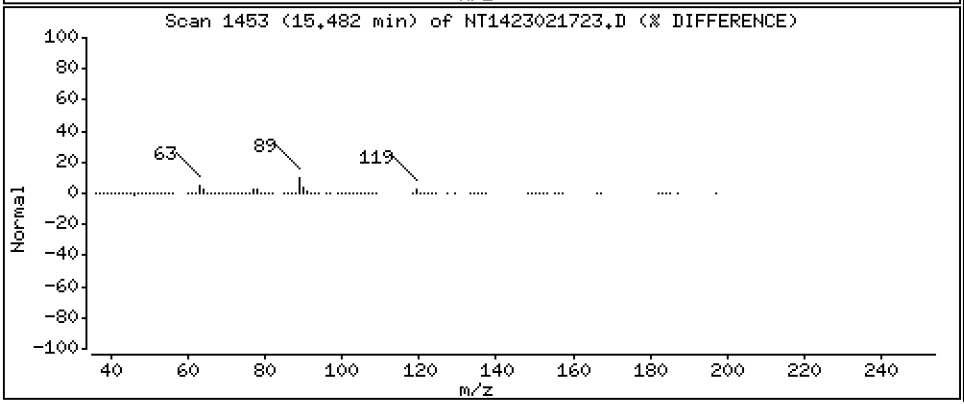
48 2,4-Dinitrotoluene

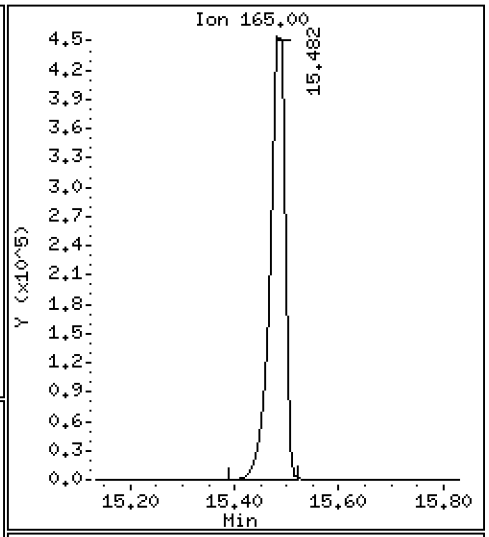
Concentration: 13.81 ug/mL

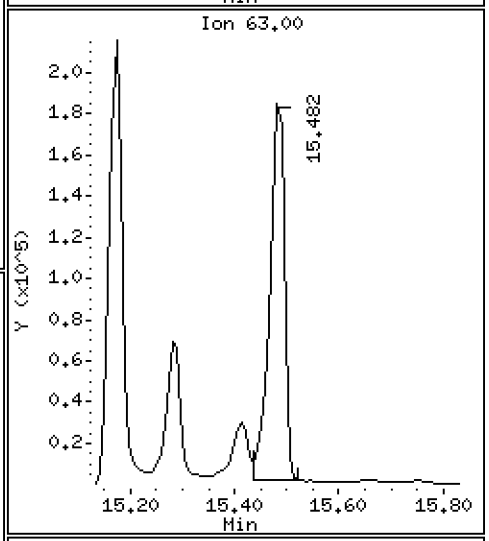


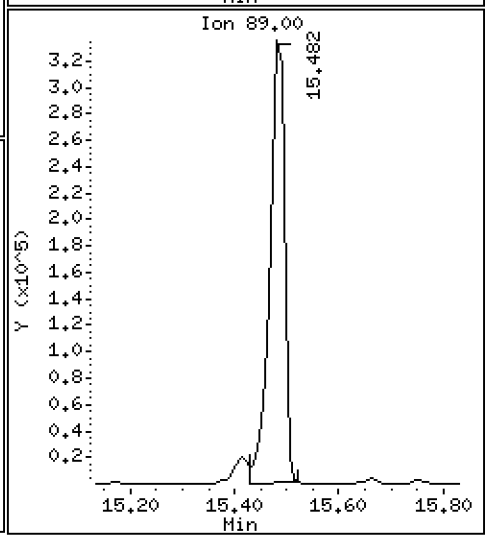












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

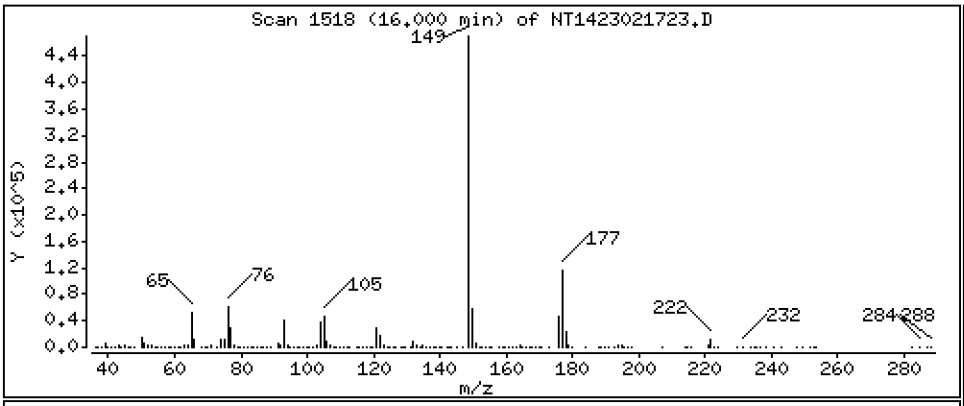
Operator: DSD

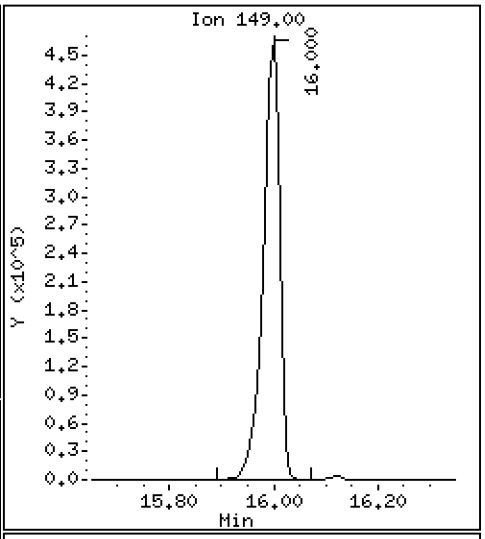
Column phase: ZB-5msi

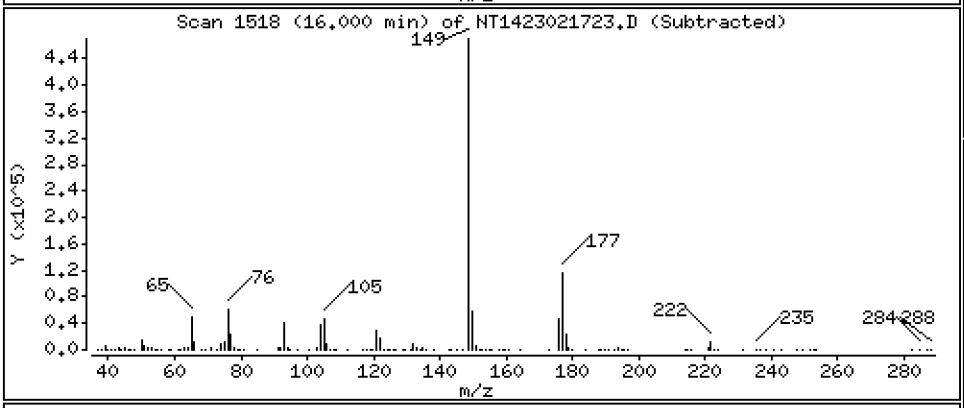
Column diameter: 0.25

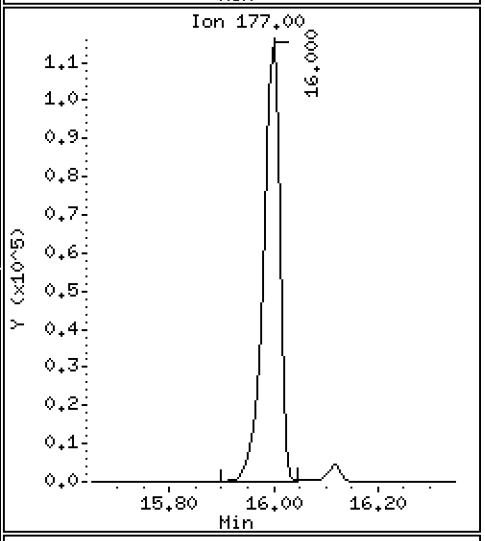
50 Diethylphthalate

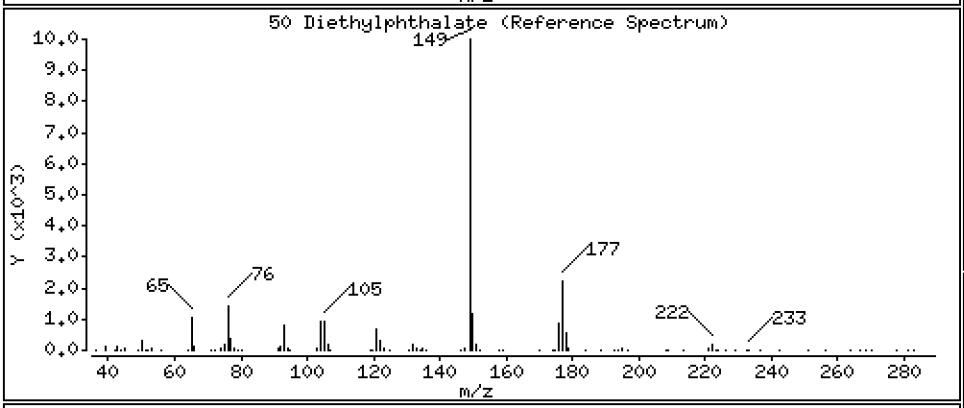
Concentration: 4.776 ug/mL

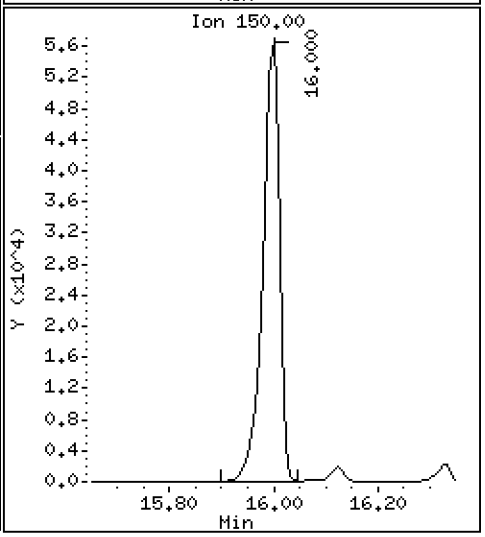


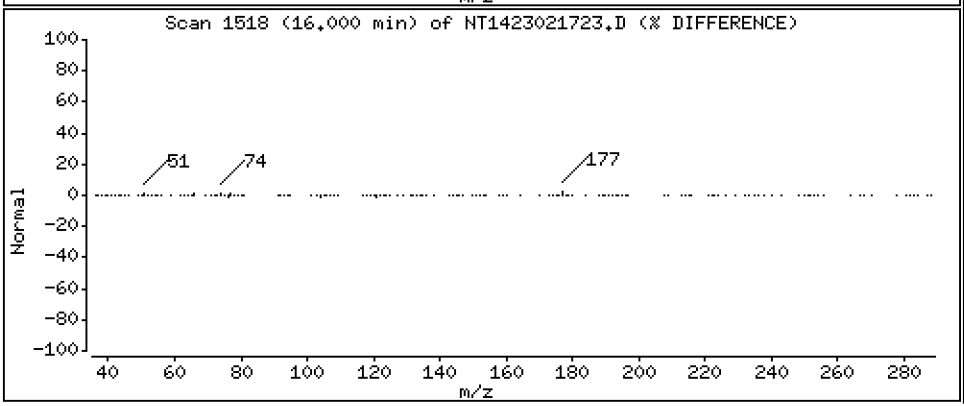












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

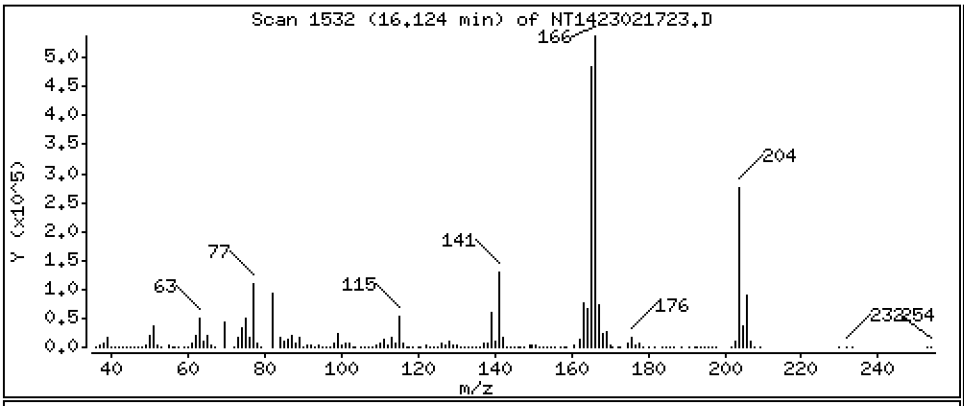
Operator: DSD

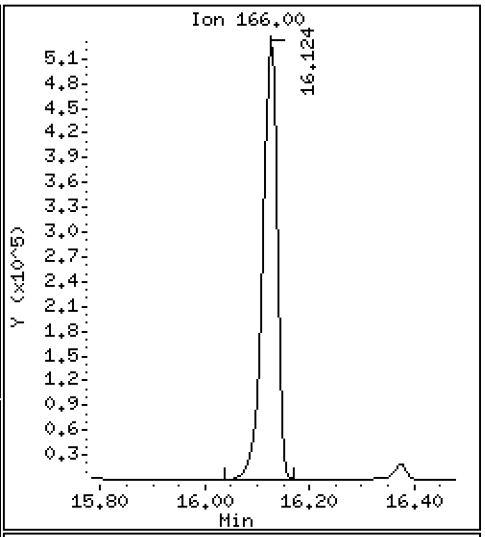
Column phase: ZB-5msi

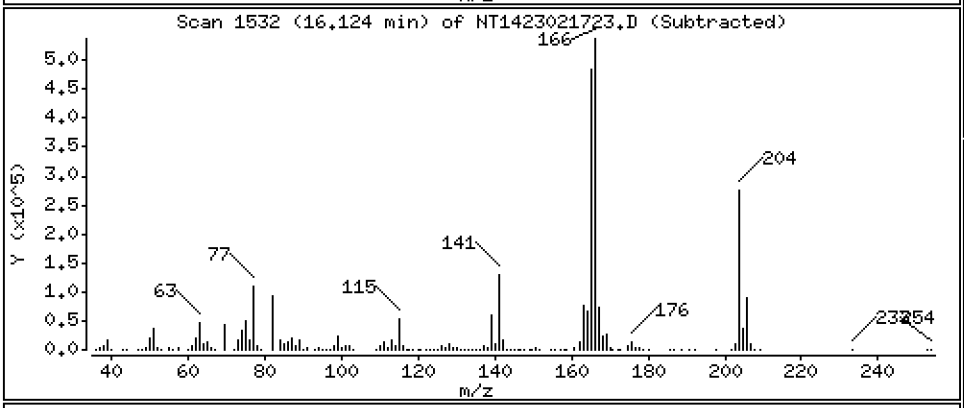
Column diameter: 0.25

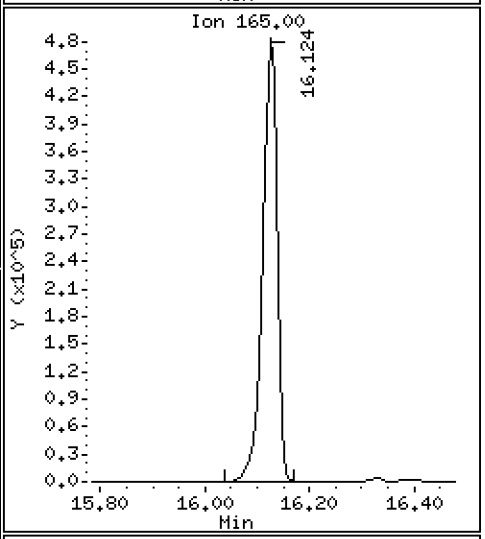
49 Fluorene

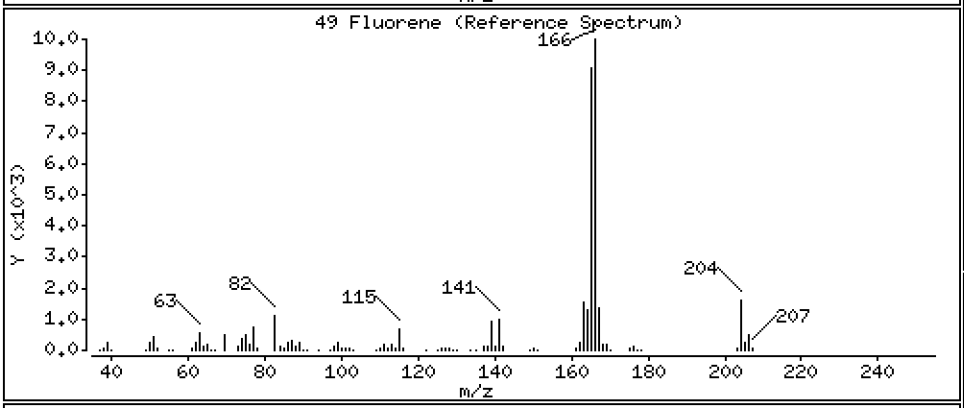
Concentration: 3.950 ug/mL

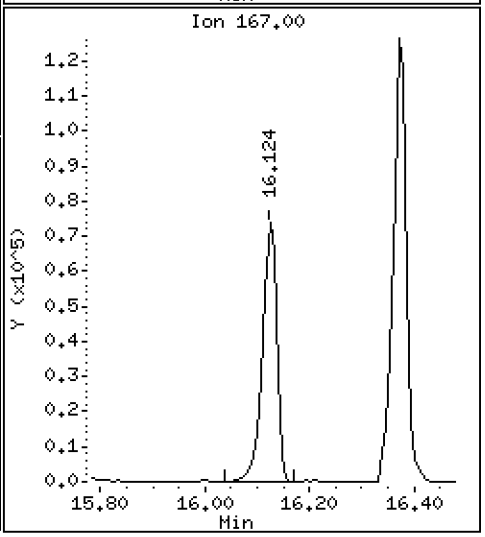


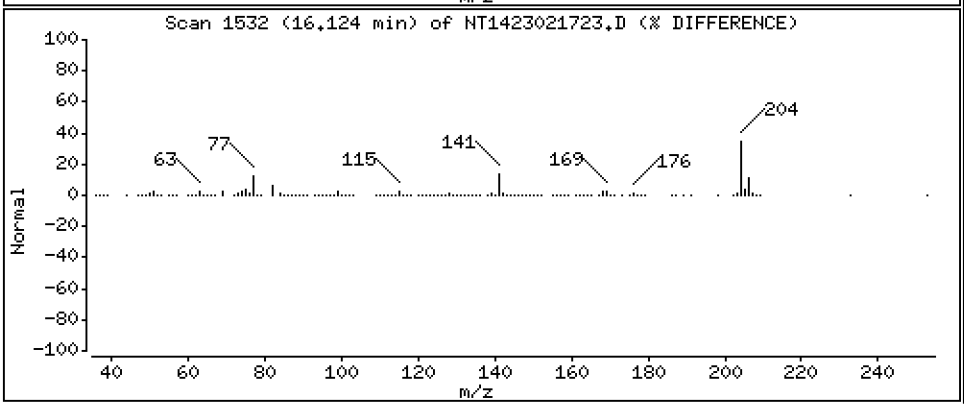












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

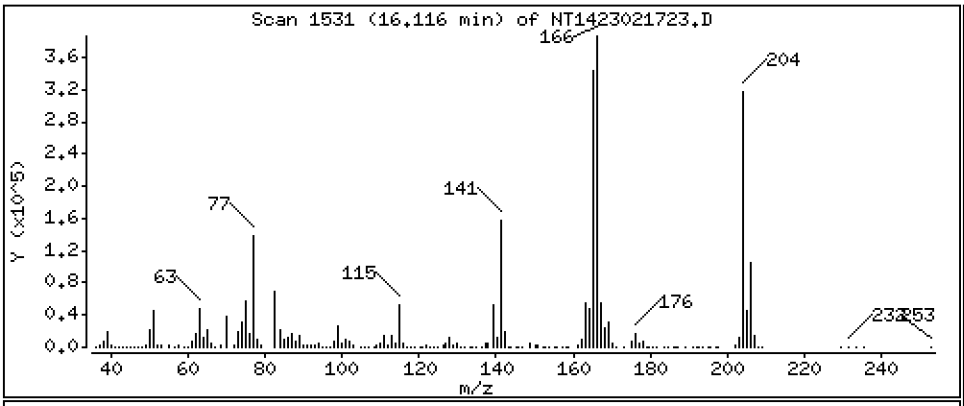
Operator: DSD

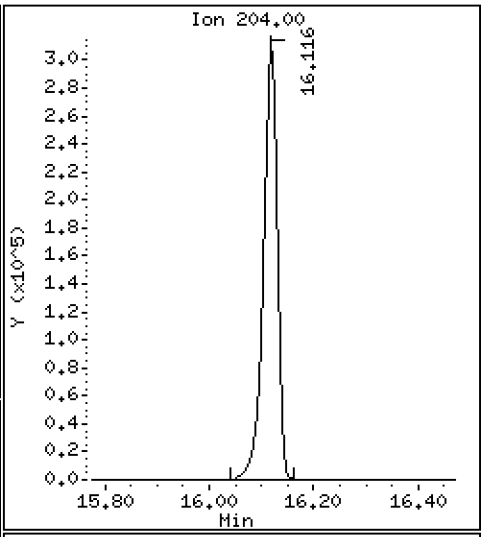
Column phase: ZB-5msi

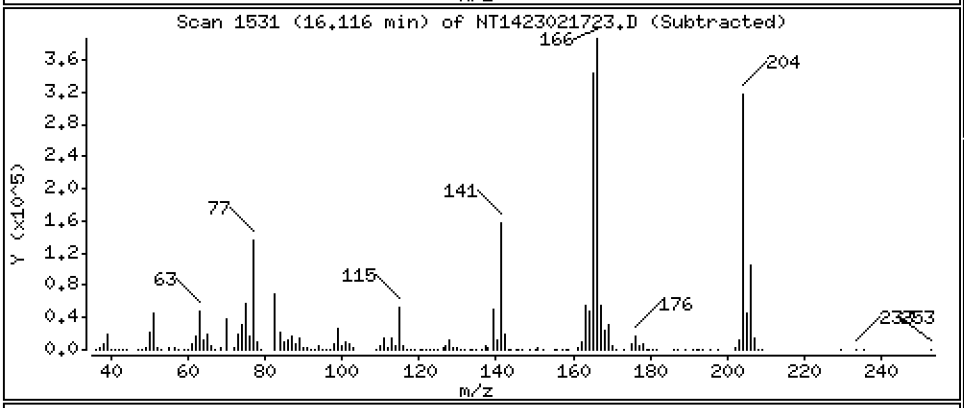
Column diameter: 0.25

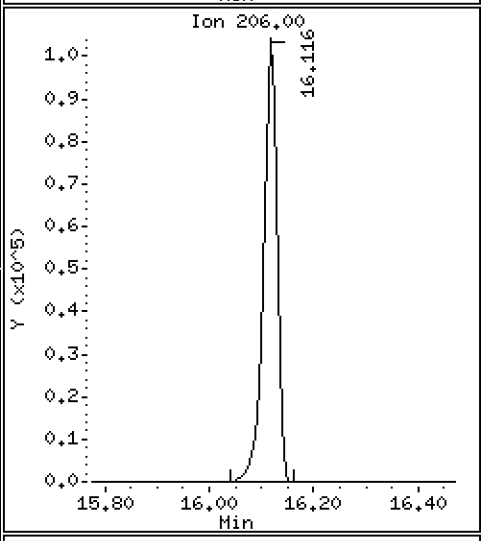
51 4-Chlorophenyl-phenylether

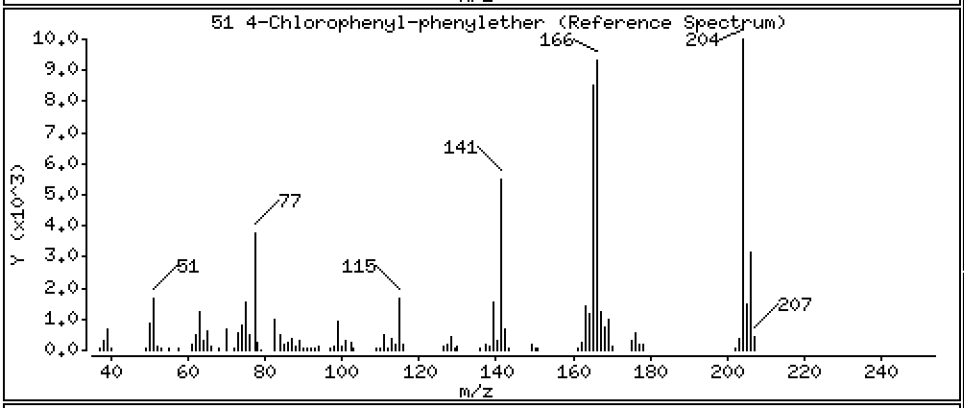
Concentration: 4.088 ug/mL

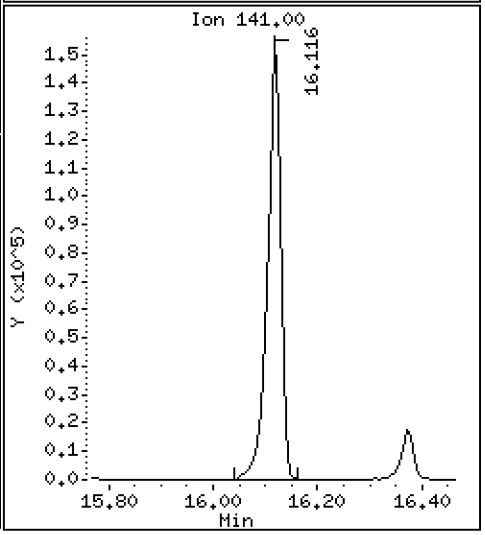


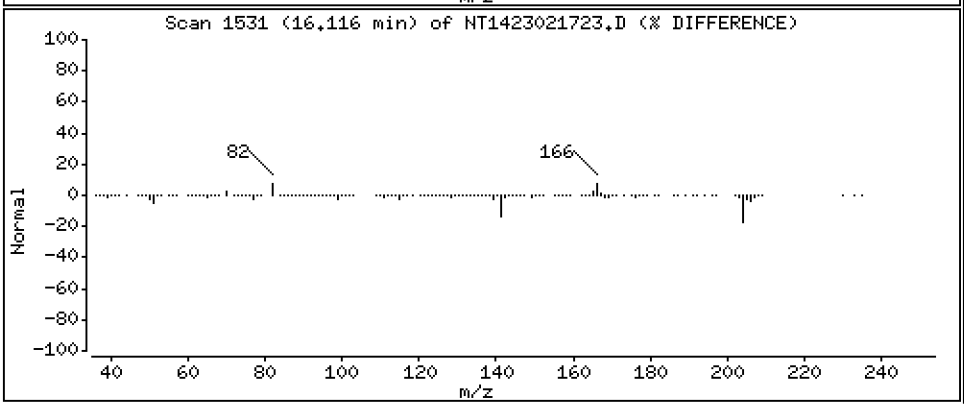












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

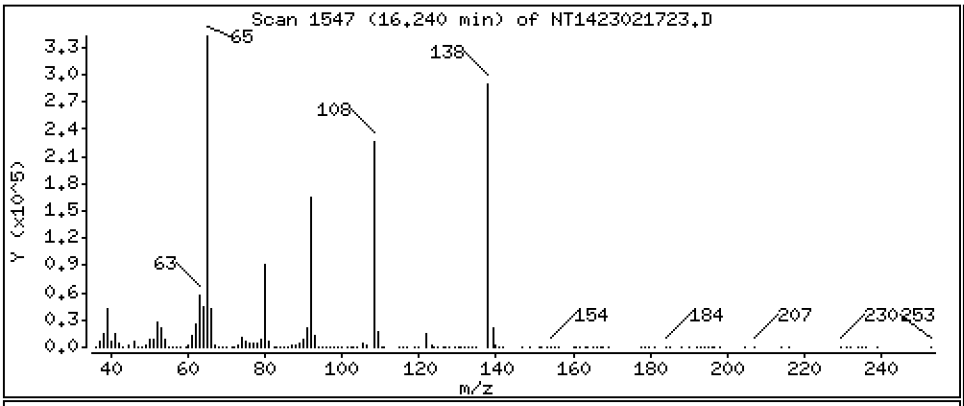
Operator: DSD

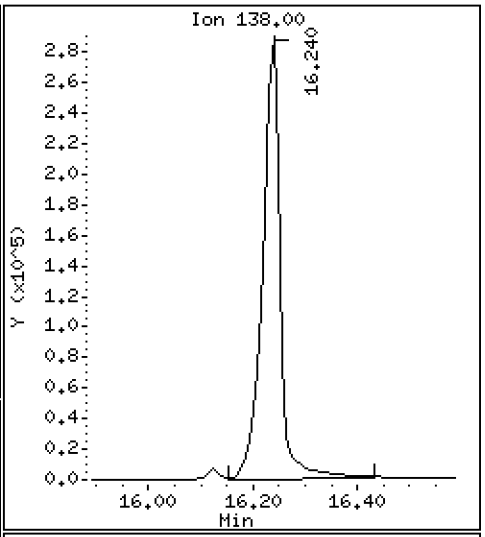
Column phase: ZB-5msi

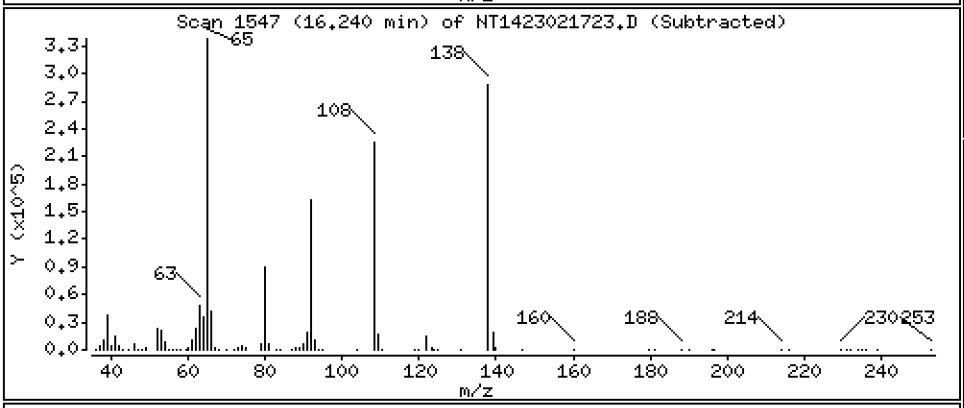
Column diameter: 0.25

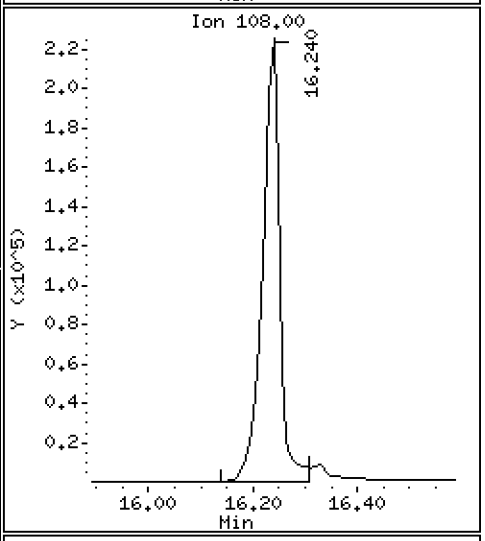
52 4-Nitroaniline

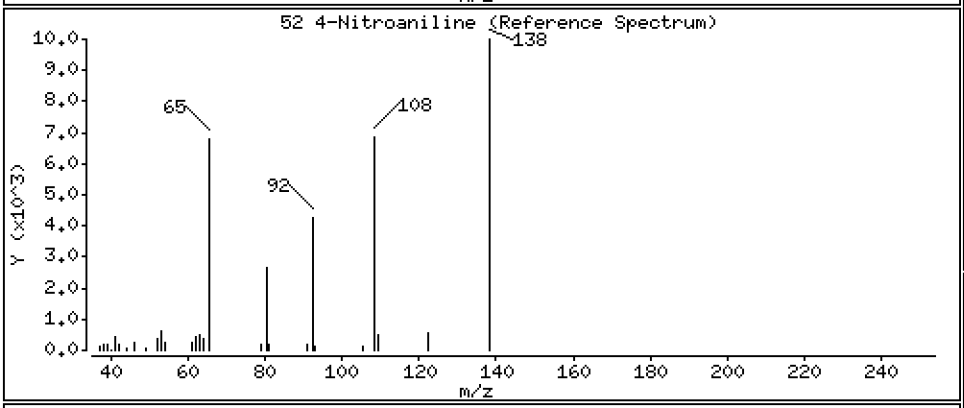
Concentration: 12.05 ug/mL

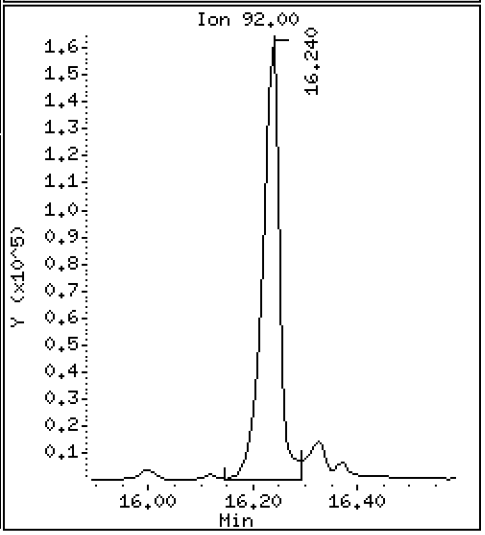


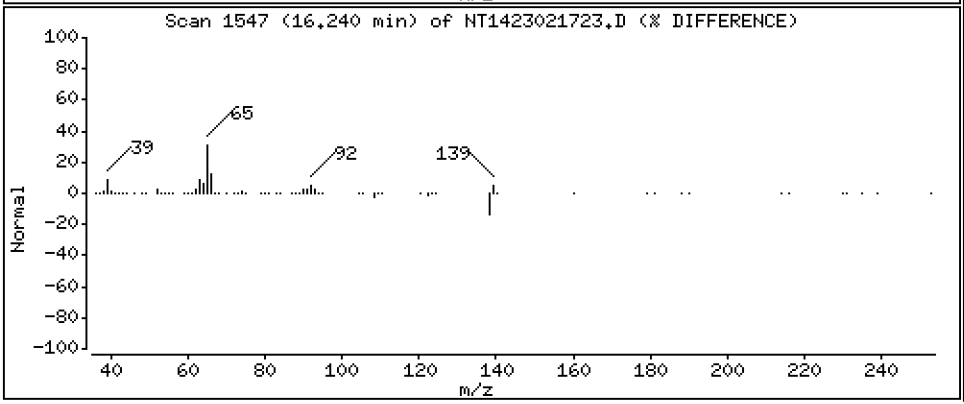












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

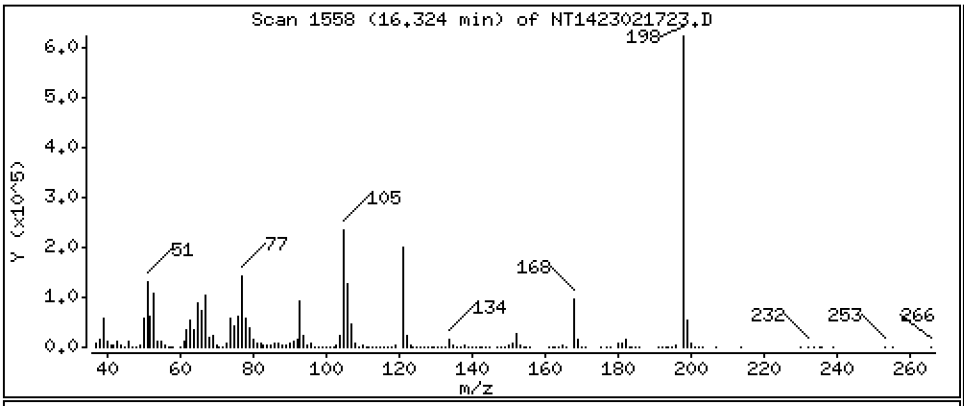
Operator: DSD

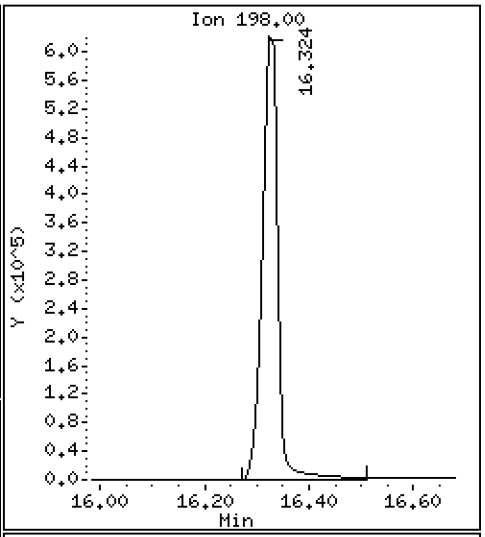
Column phase: ZB-5msi

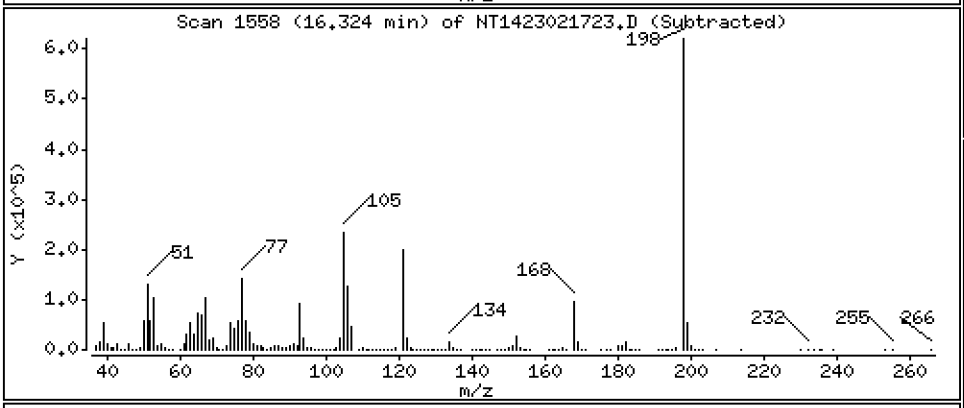
Column diameter: 0.25

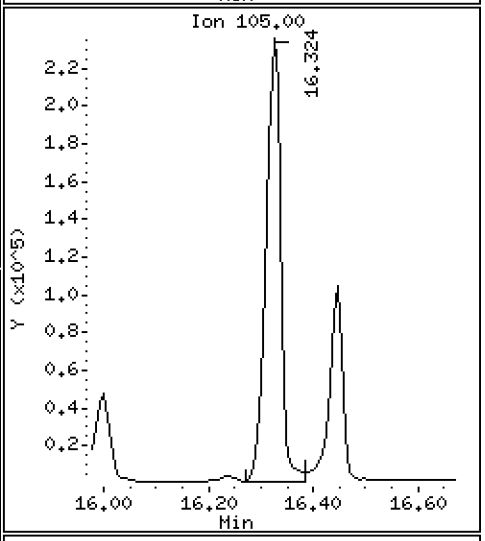
53 4,6-Dinitro-2-methylphenol

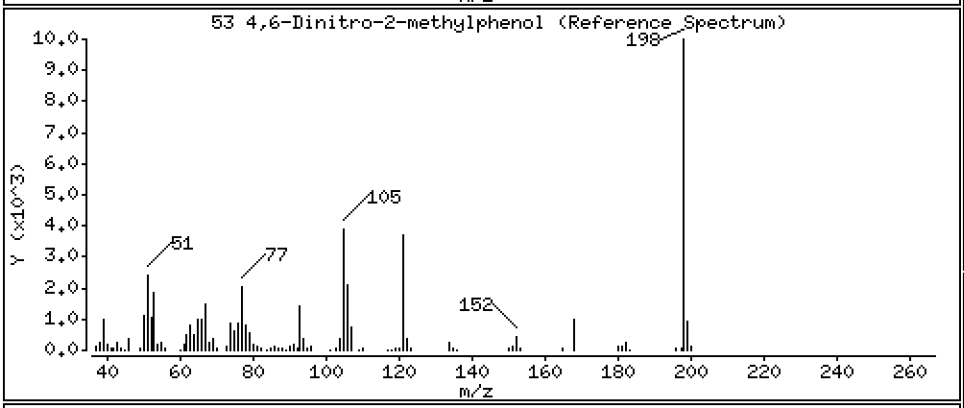
Concentration: 27.03 ug/mL

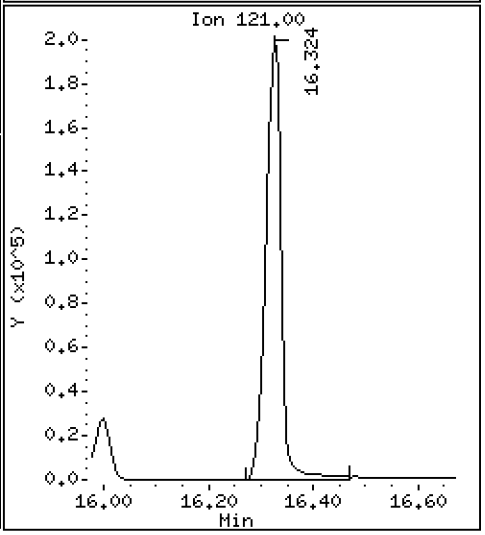


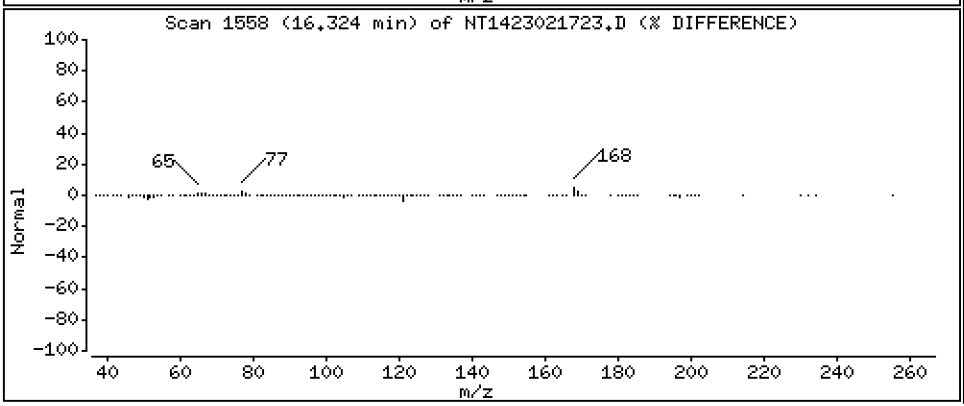












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

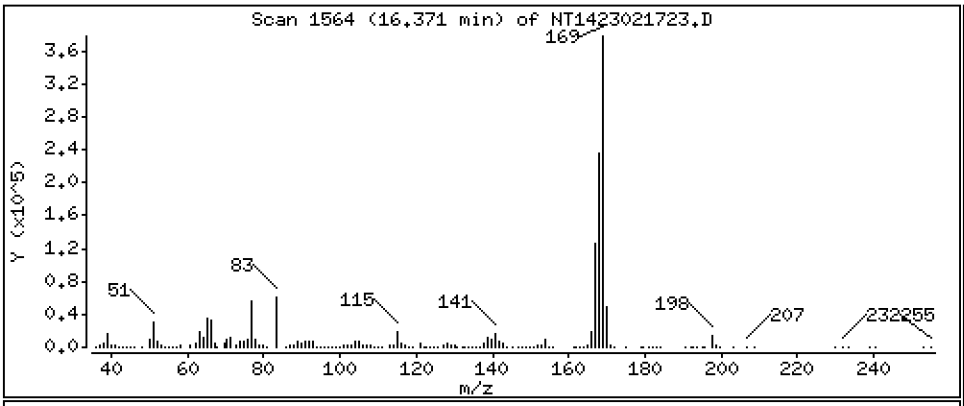
Operator: DSD

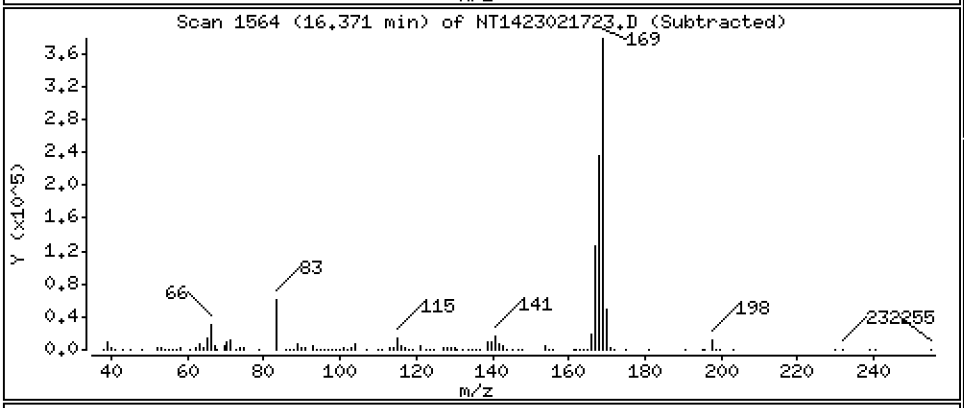
Column phase: ZB-5msi

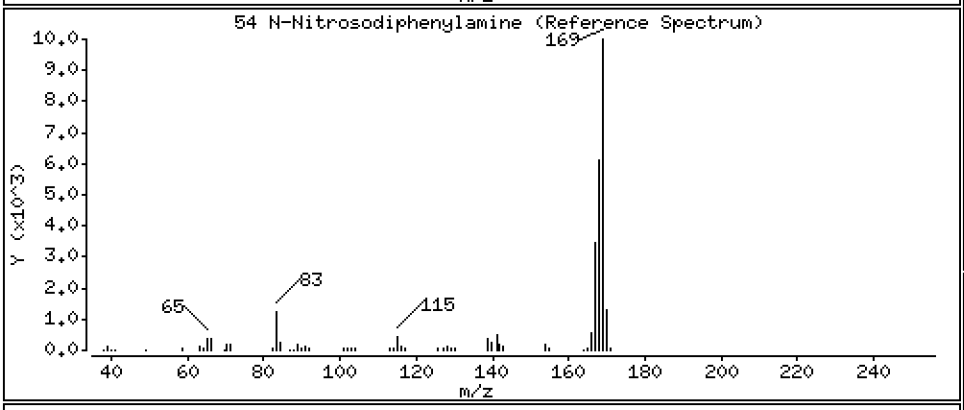
Column diameter: 0.25

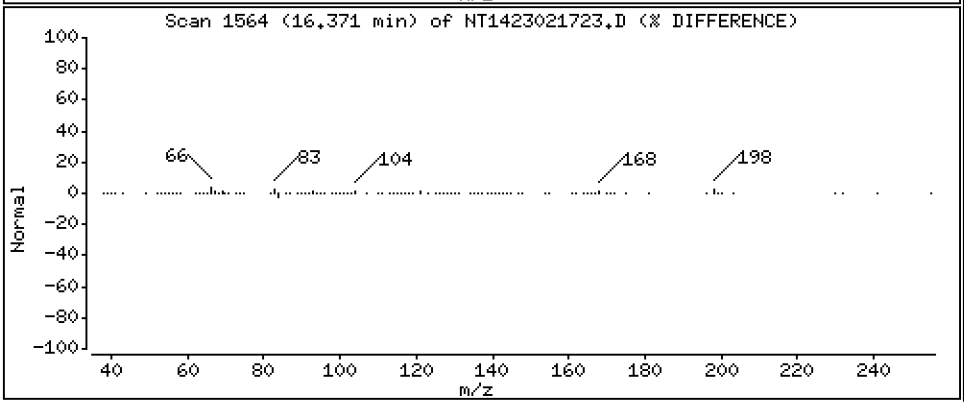
54 N-Nitrosodiphenylamine

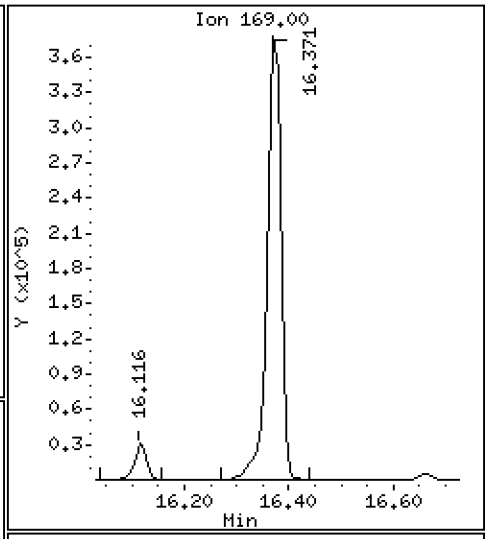
Concentration: 3.835 ug/mL

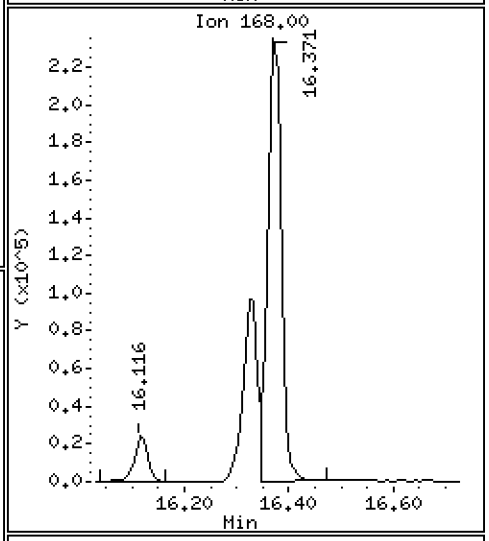


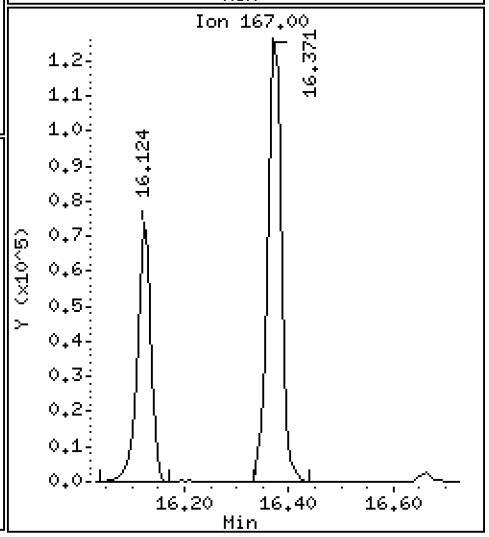












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

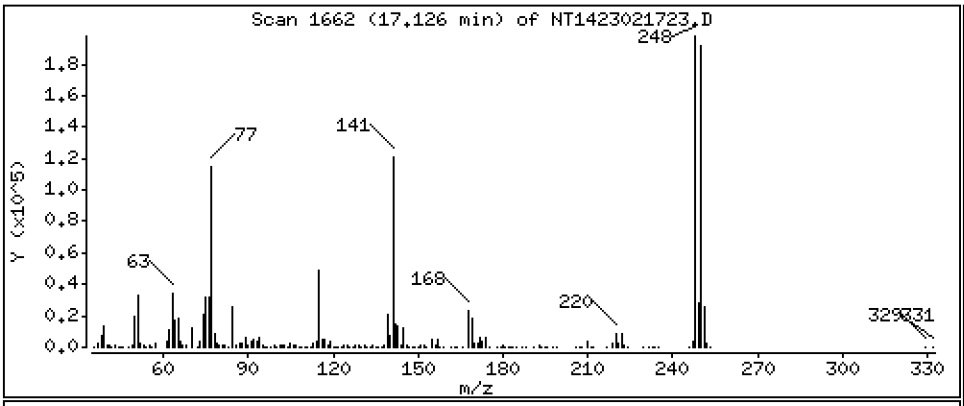
Operator: DSD

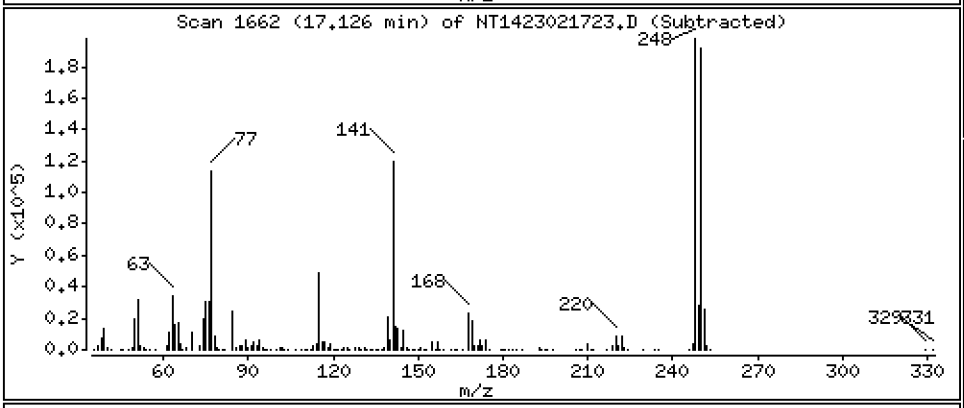
Column phase: ZB-5msi

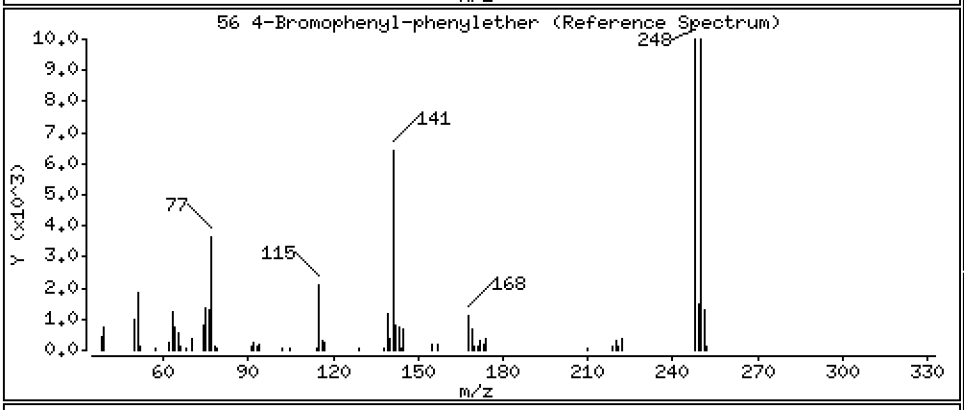
Column diameter: 0.25

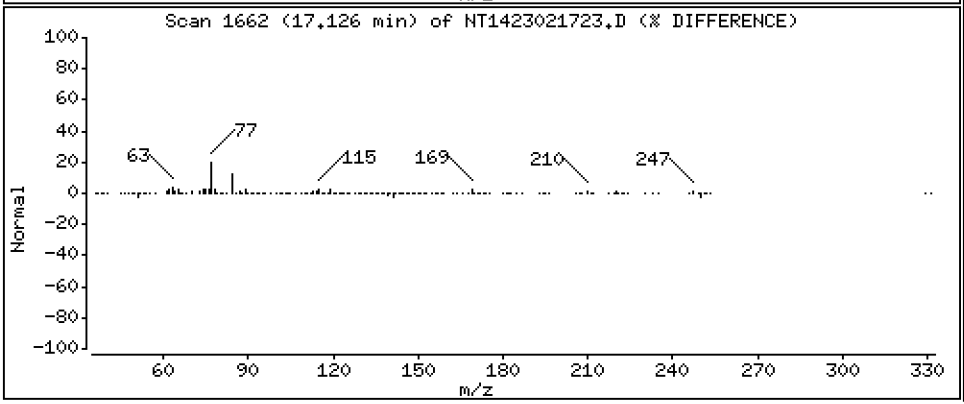
56 4-Bromophenyl-phenylether

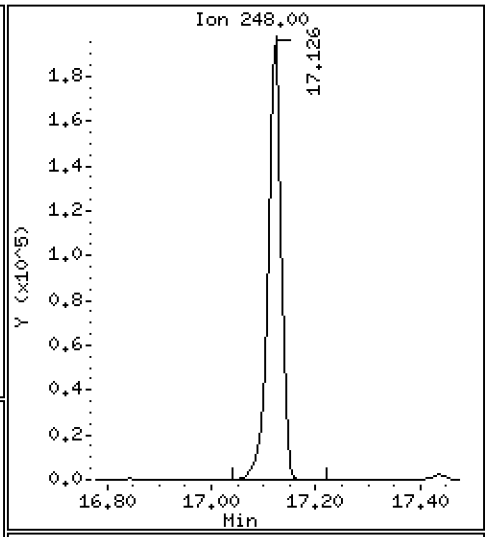
Concentration: 4.470 ug/mL

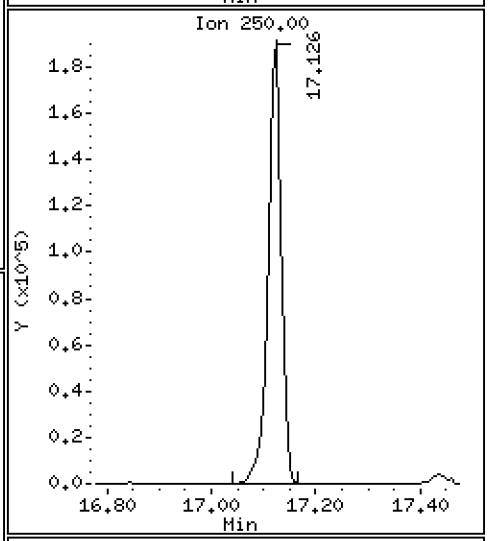


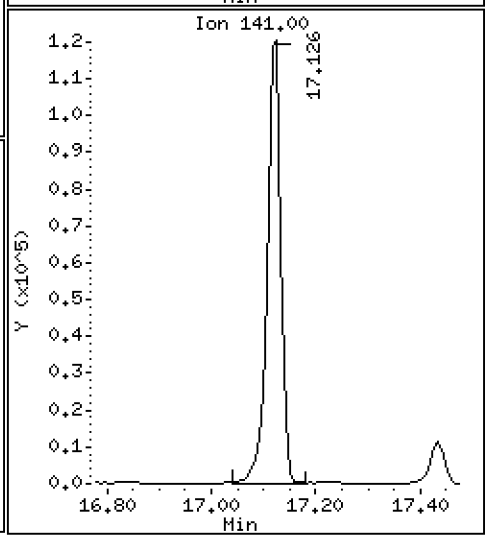












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

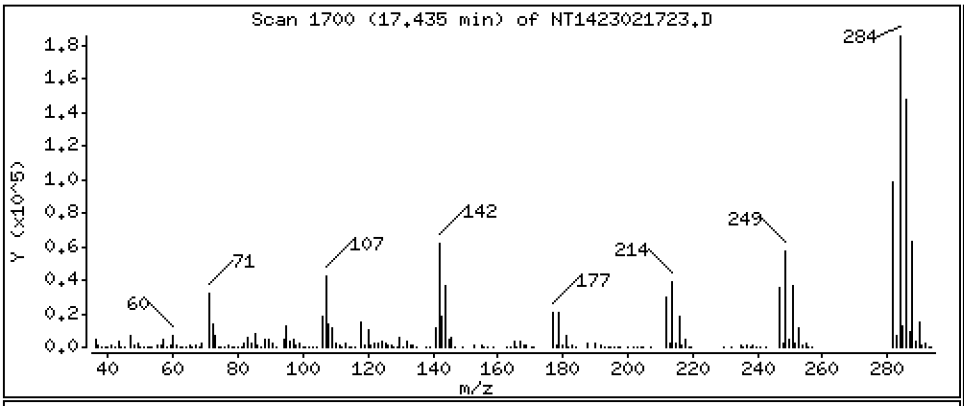
Operator: DSD

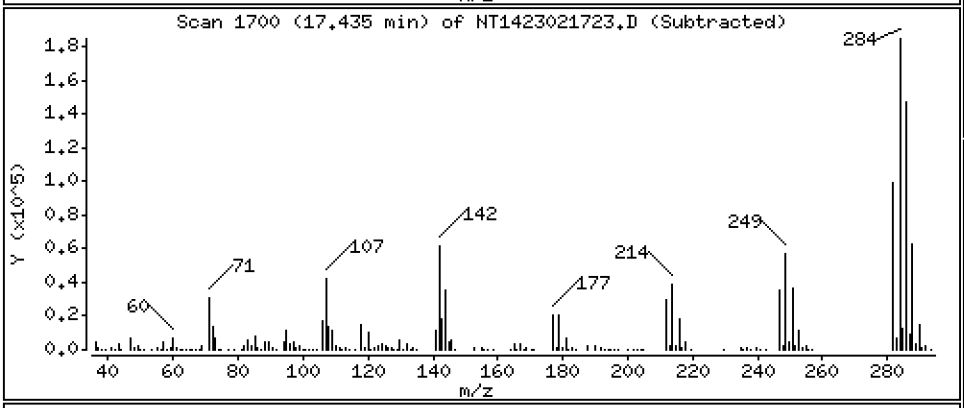
Column phase: ZB-5msi

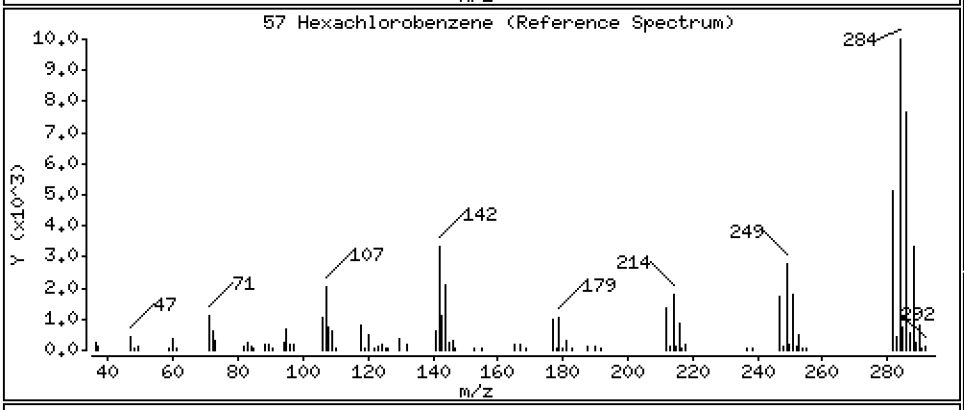
Column diameter: 0.25

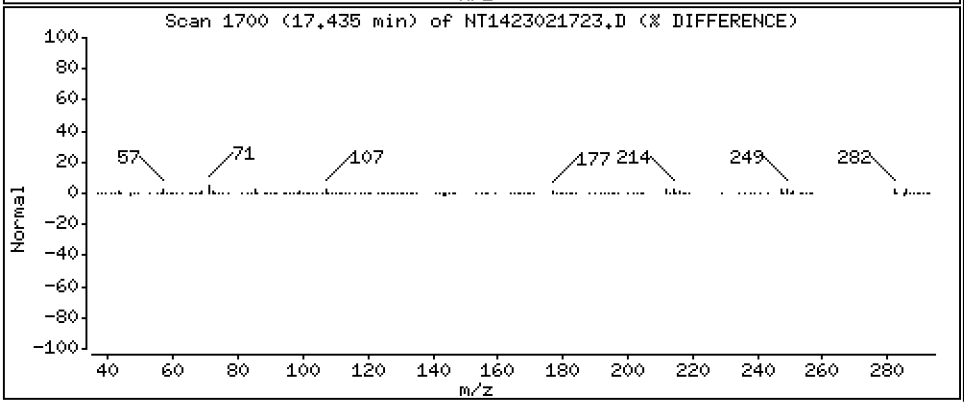
57 Hexachlorobenzene

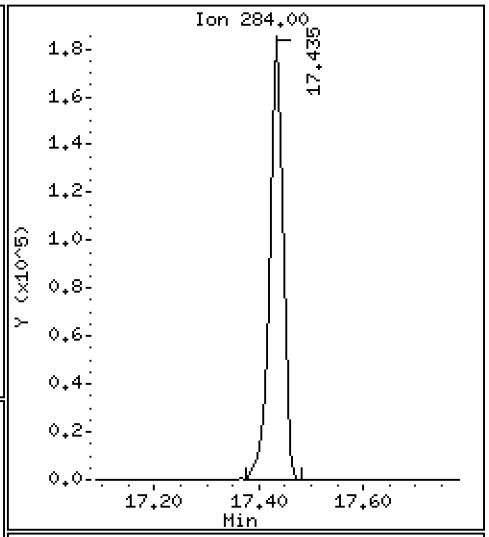
Concentration: 4.159 ug/mL

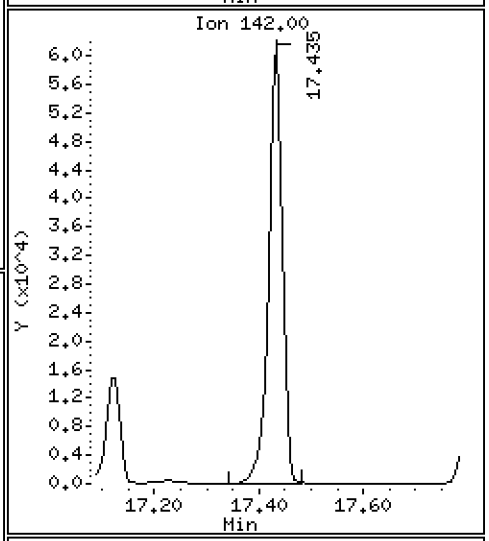


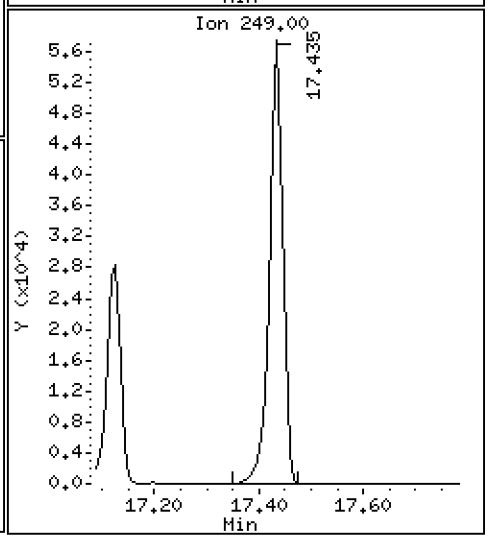












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

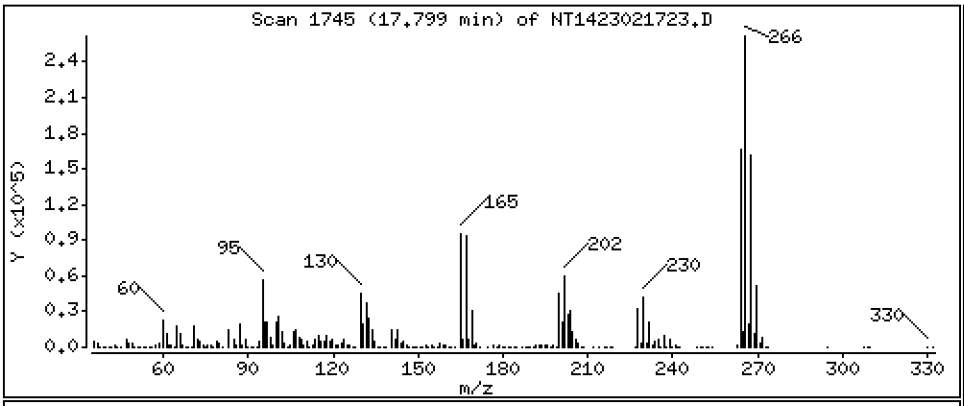
Operator: DSD

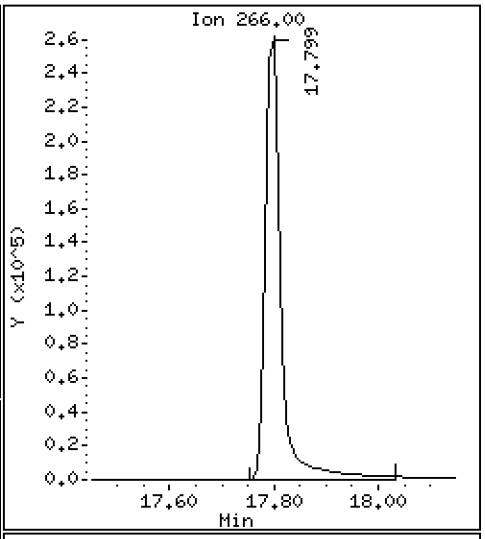
Column phase: ZB-5msi

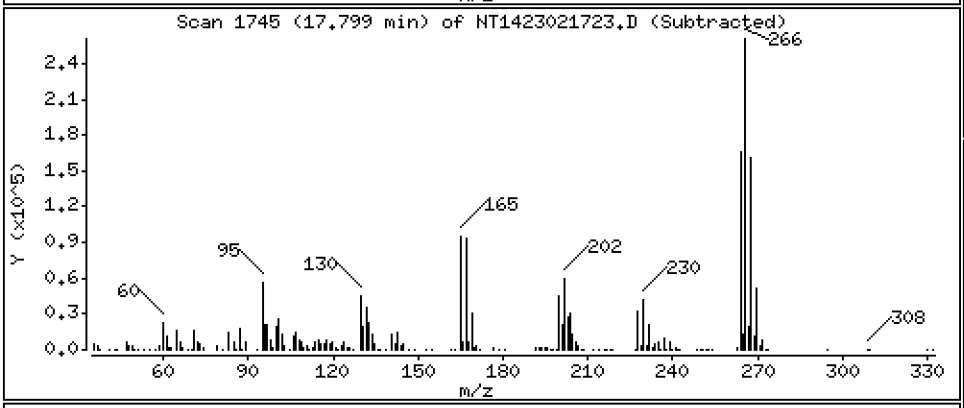
Column diameter: 0.25

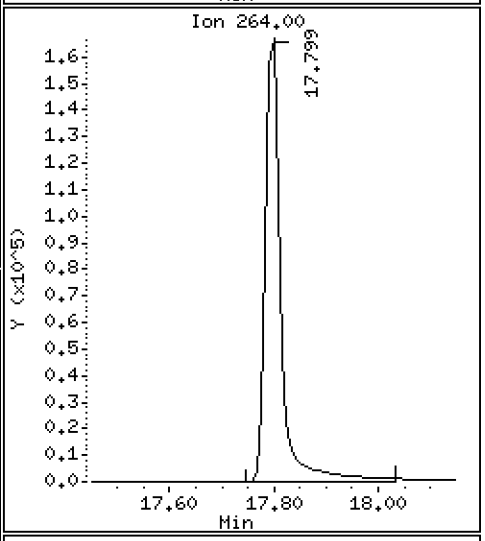
58 Pentachlorophenol

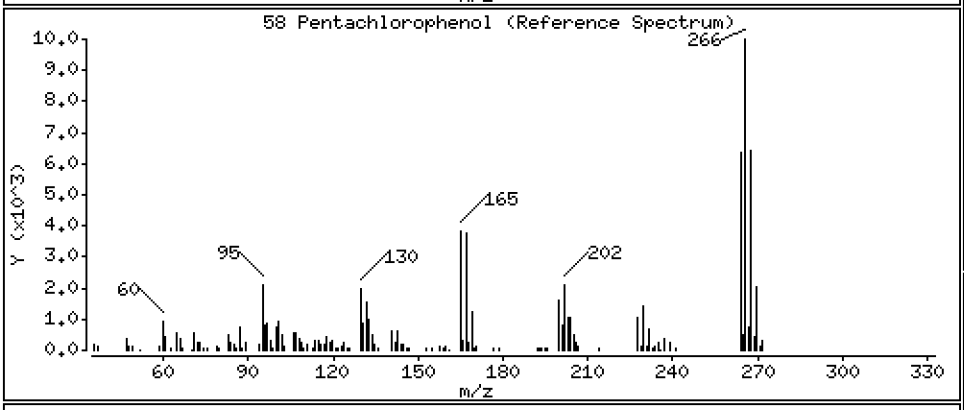
Concentration: 13.34 ug/mL

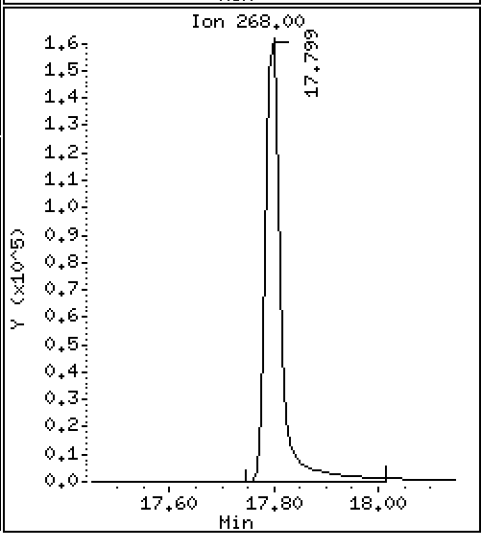


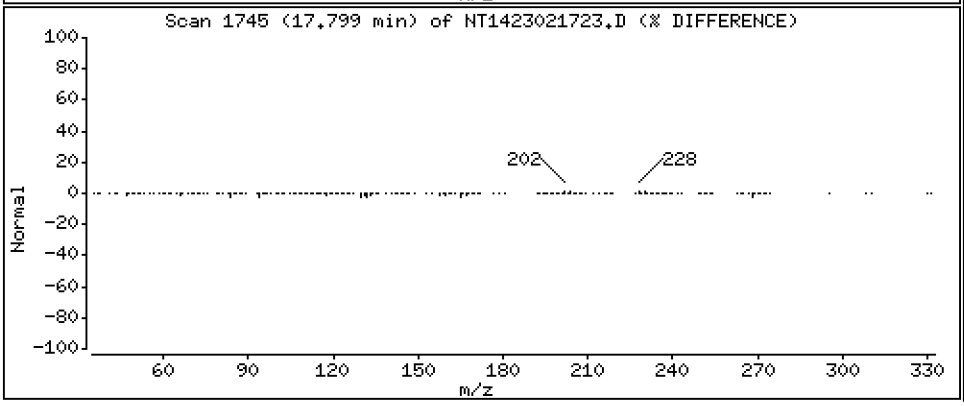












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021723.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

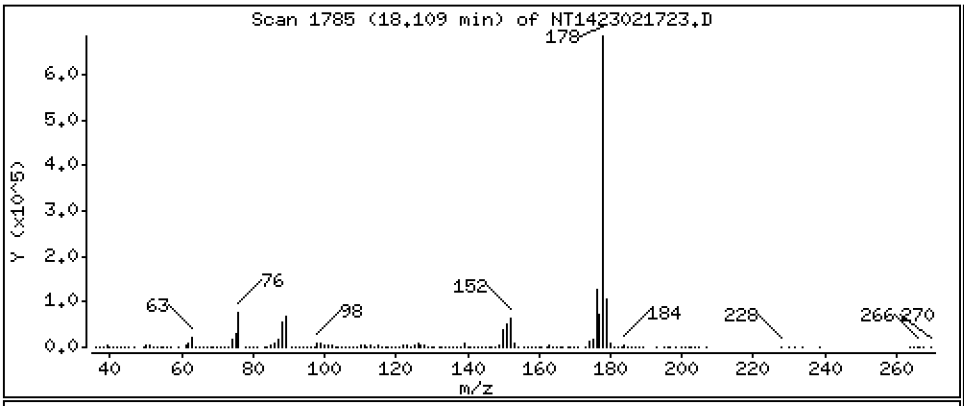
Operator: DSD

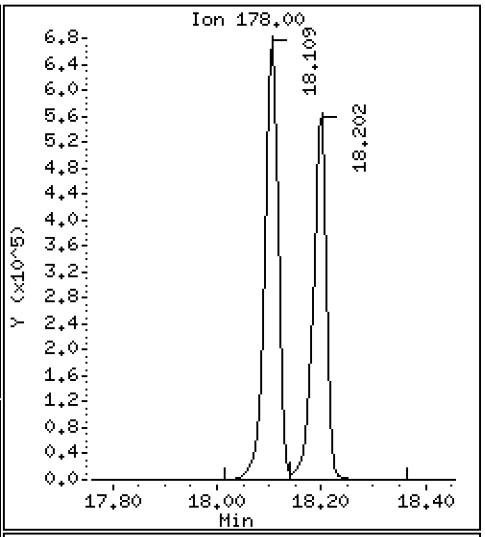
Column phase: ZB-5msi

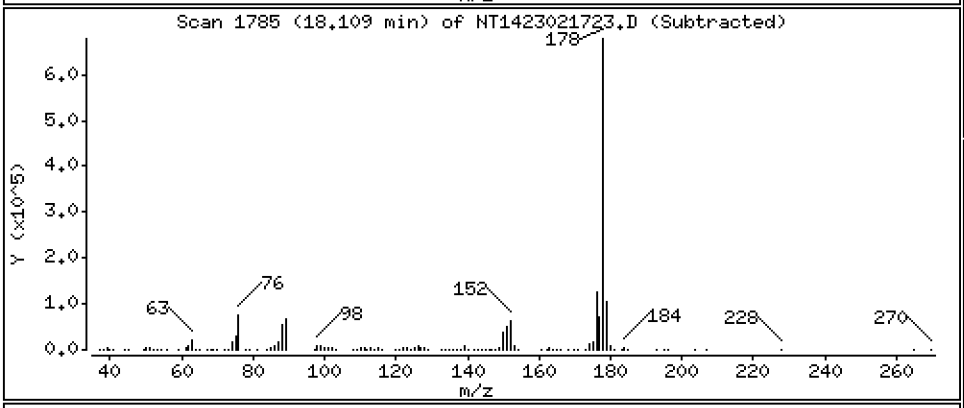
Column diameter: 0.25

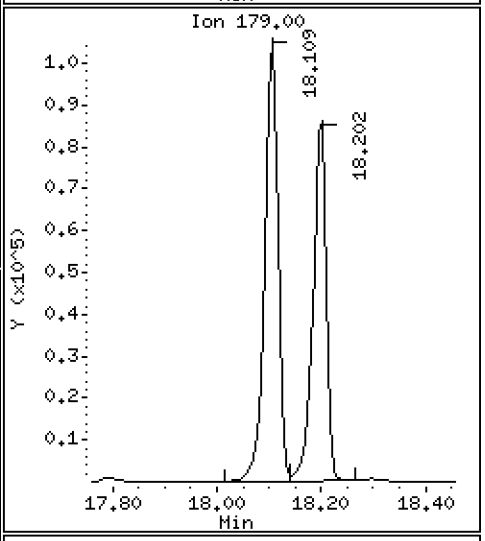
60 Phenanthrene

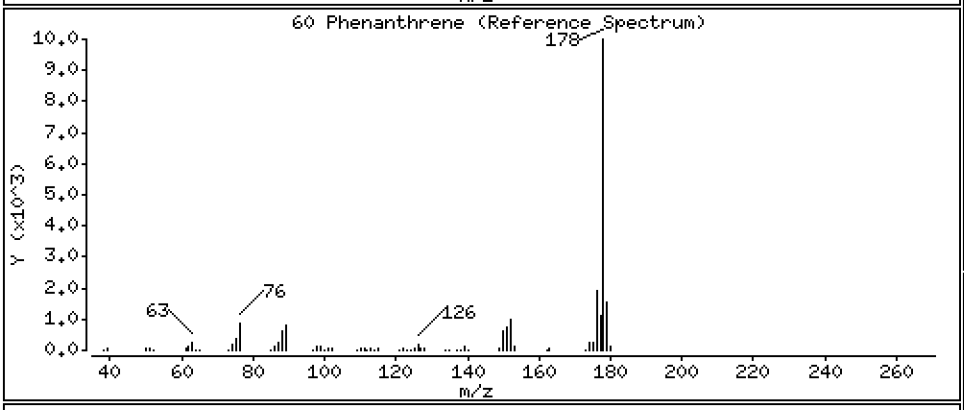
Concentration: 4.047 ug/mL

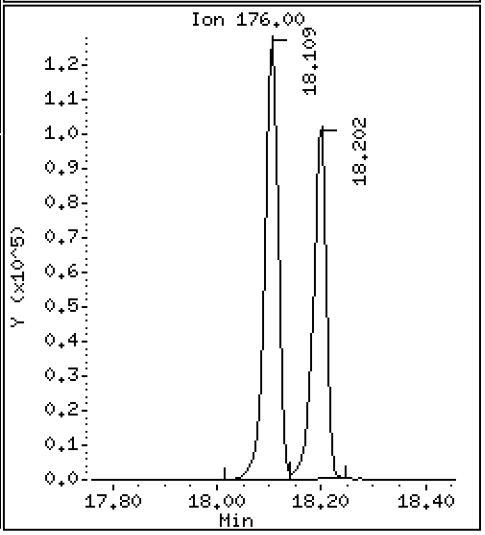


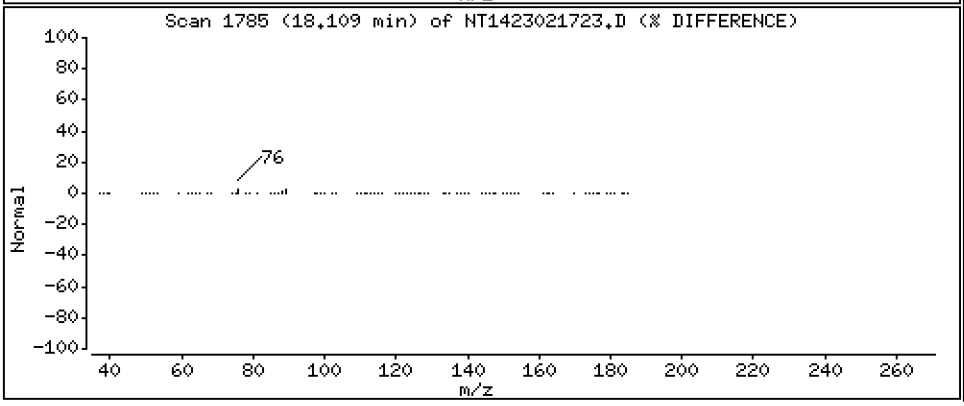












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

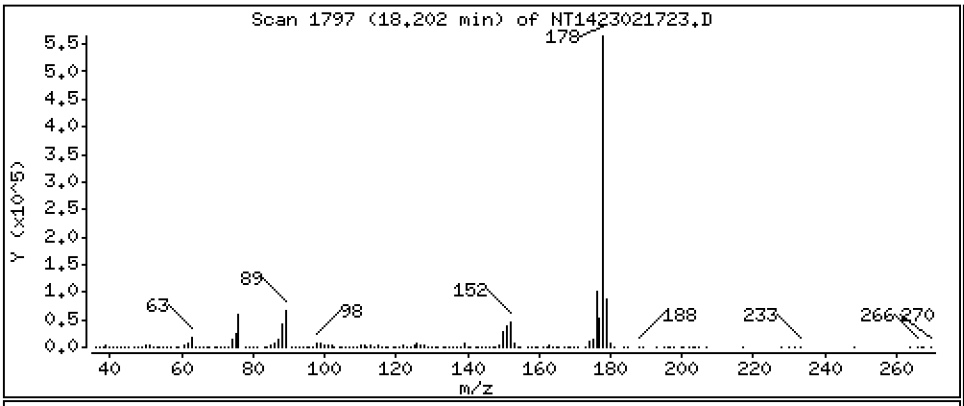
Operator: DSD

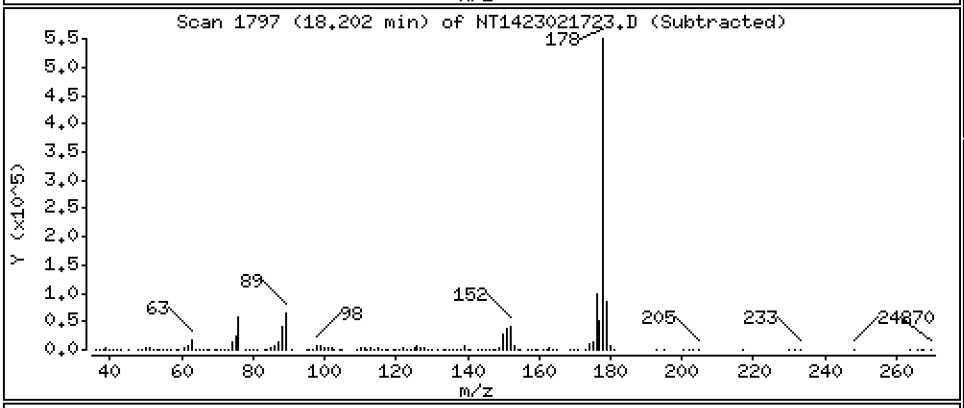
Column phase: ZB-5msi

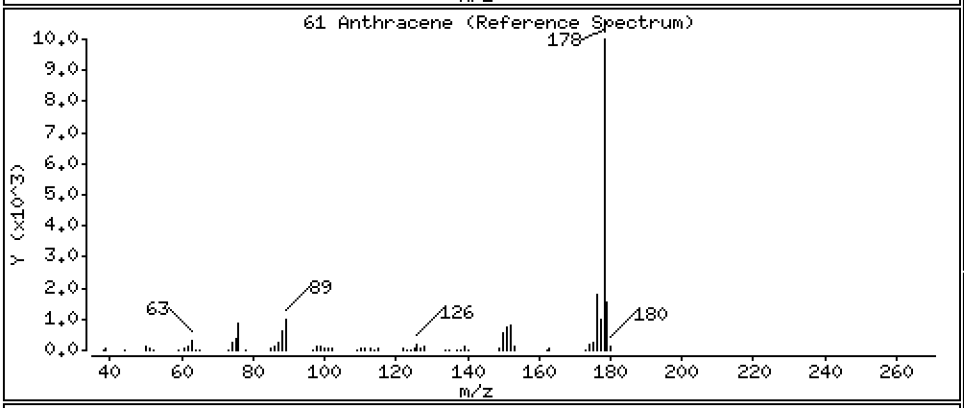
Column diameter: 0.25

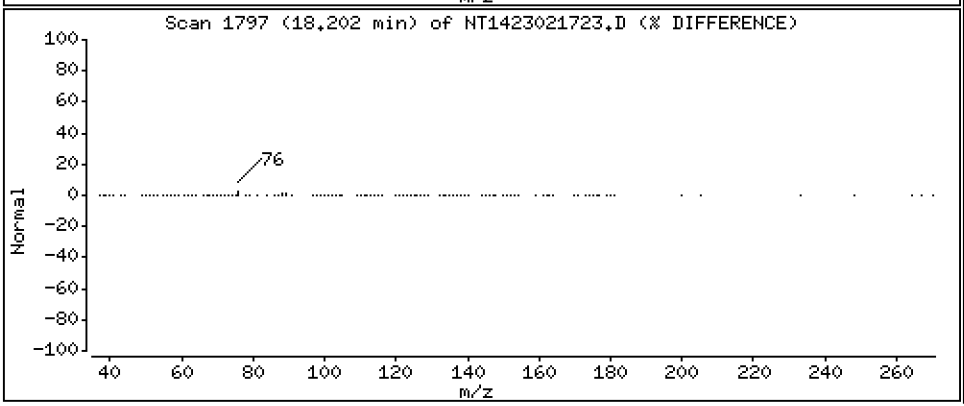
61 Anthracene

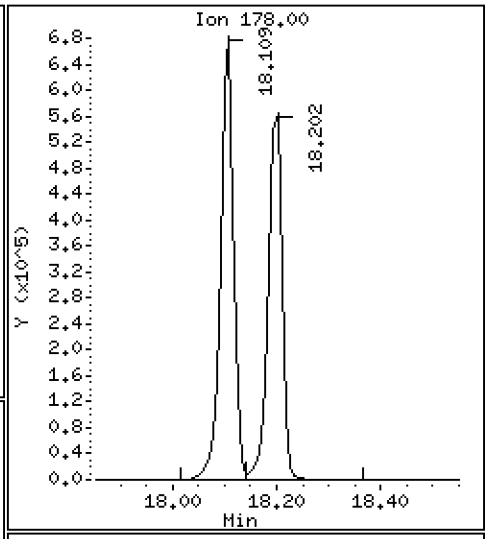
Concentration: 3.503 ug/mL

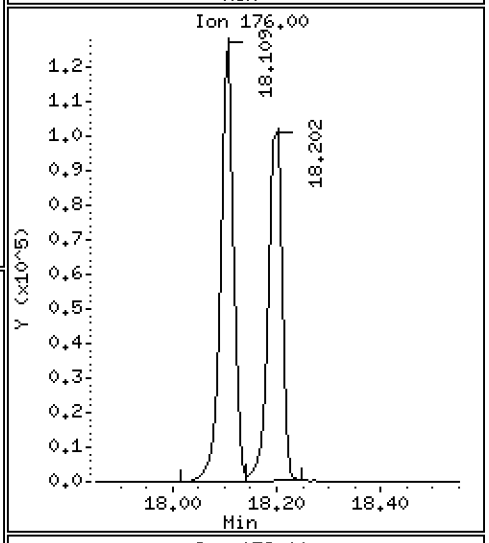


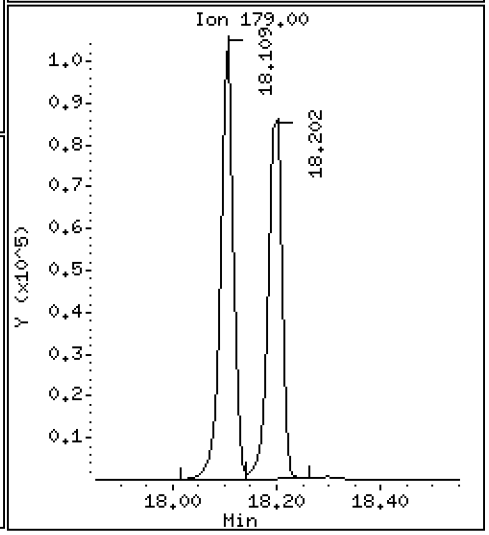












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021723.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

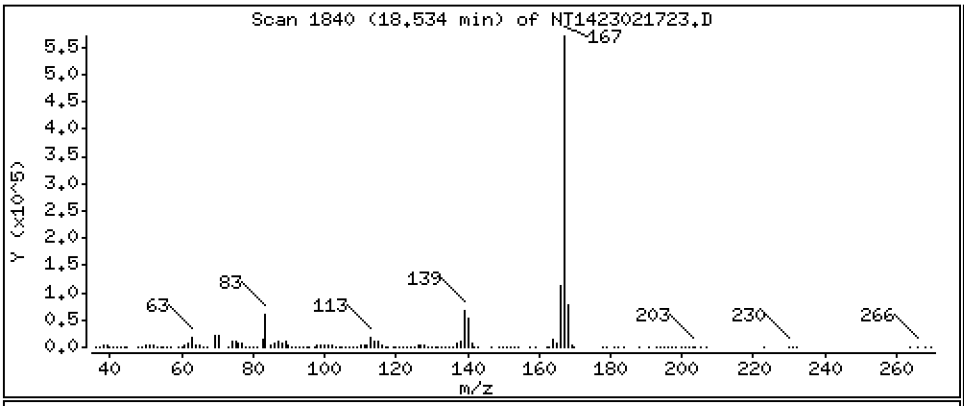
Operator: DSD

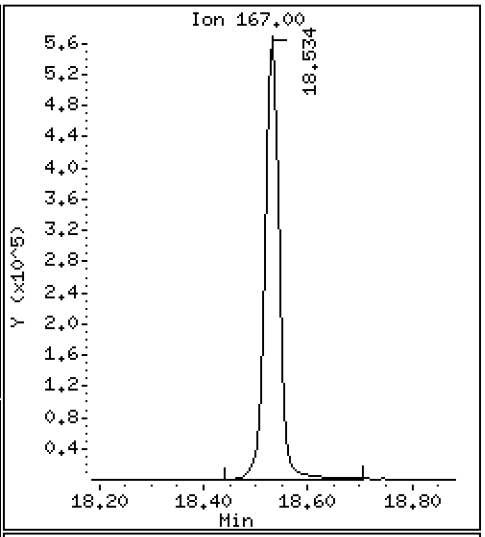
Column phase: ZB-5msi

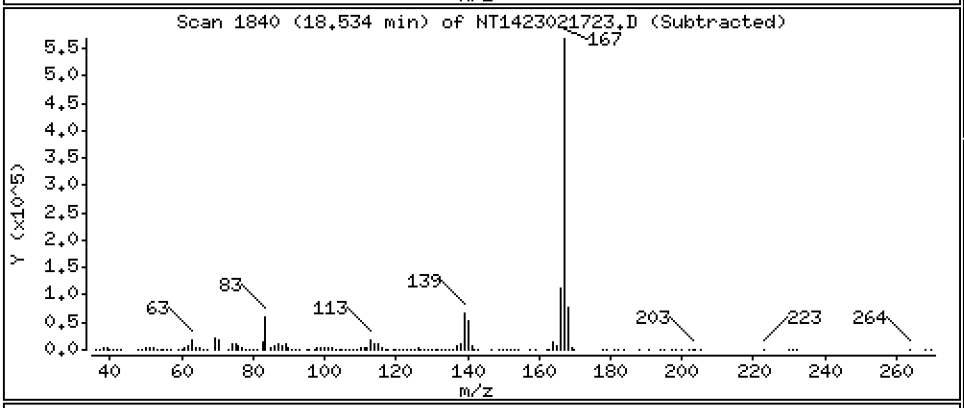
Column diameter: 0.25

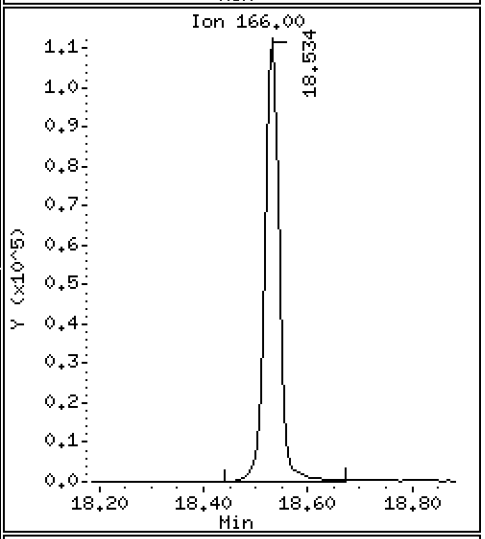
62 Carbazole

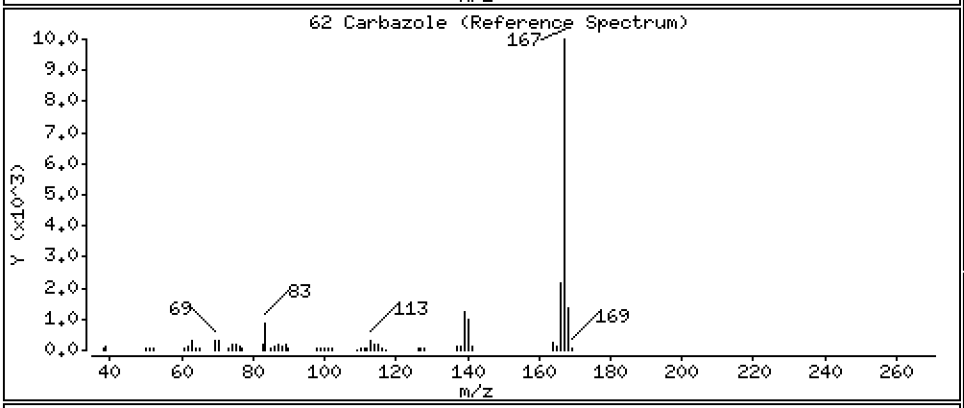
Concentration: 4.032 ug/mL

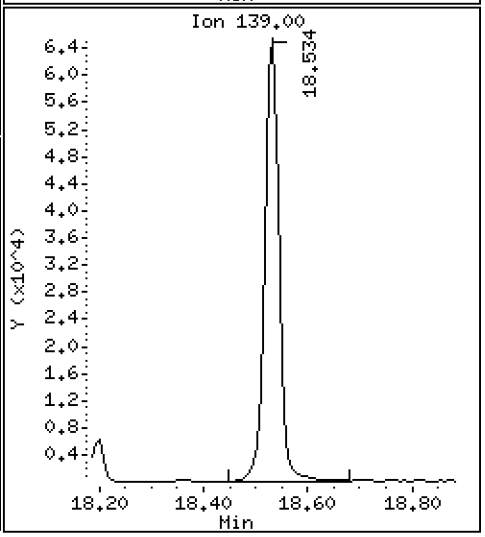


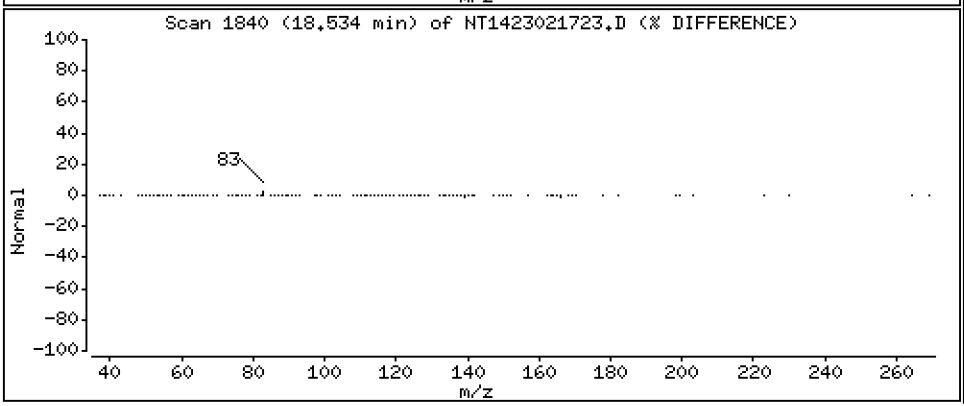












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021723.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

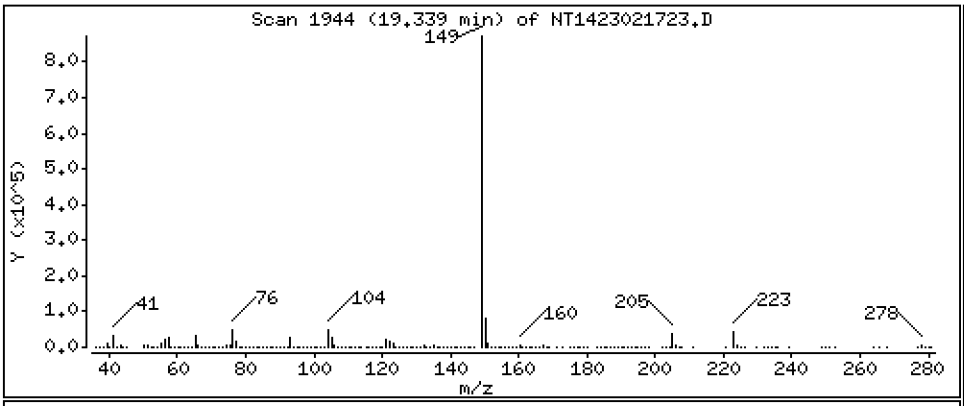
Operator: DSD

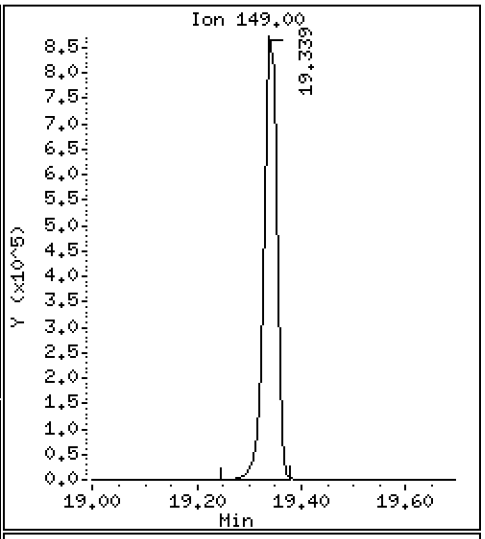
Column phase: ZB-5msi

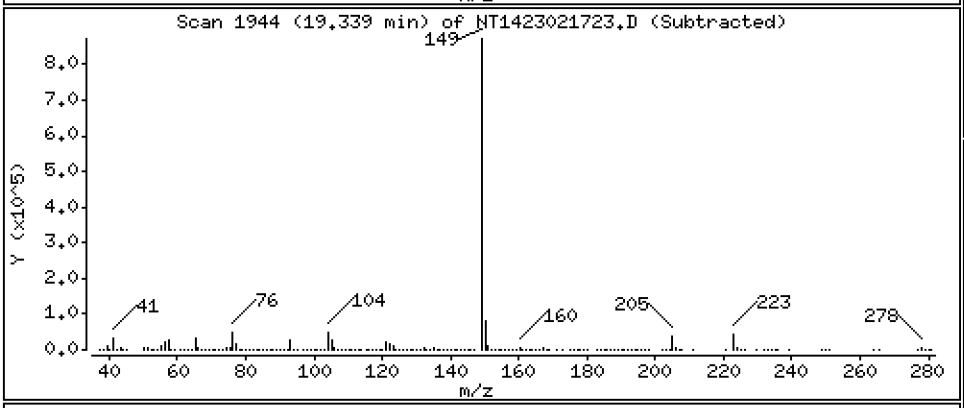
Column diameter: 0.25

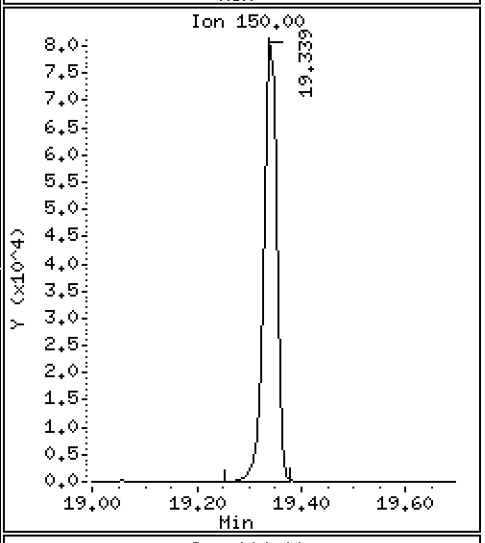
63 Di-n-butylphthalate

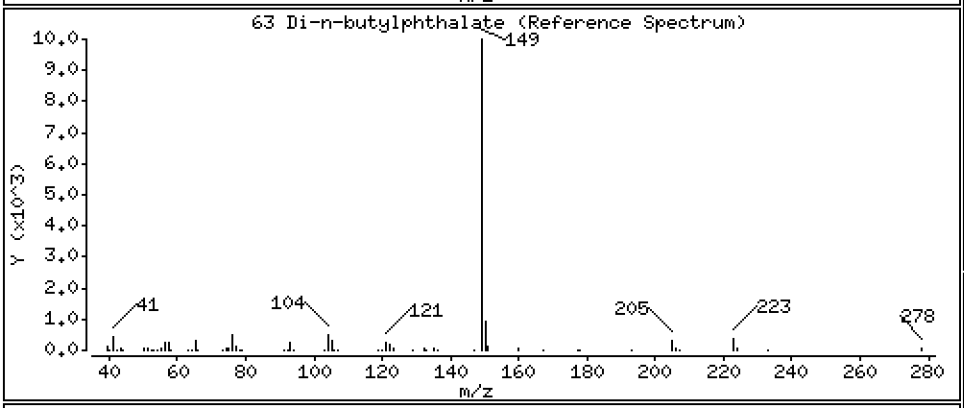
Concentration: 4.954 ug/mL

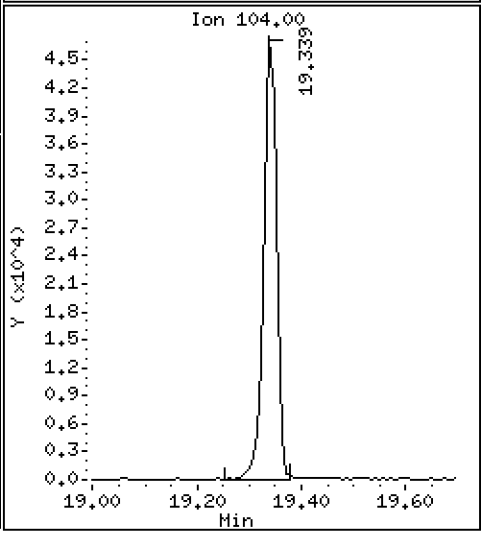


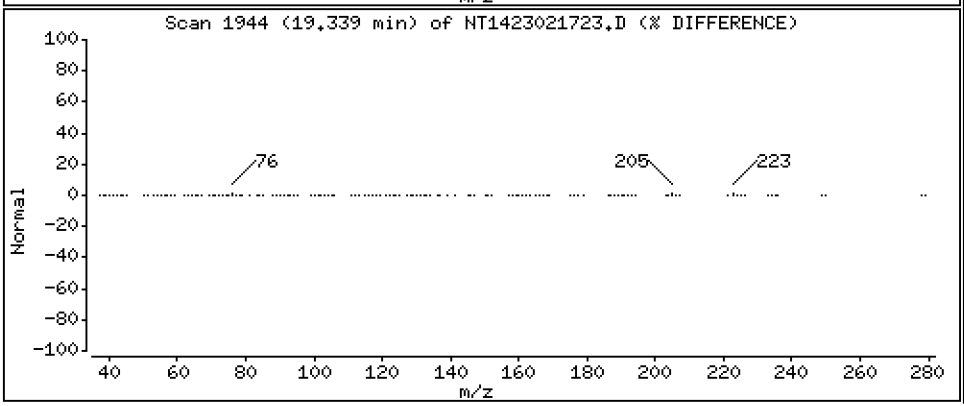












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

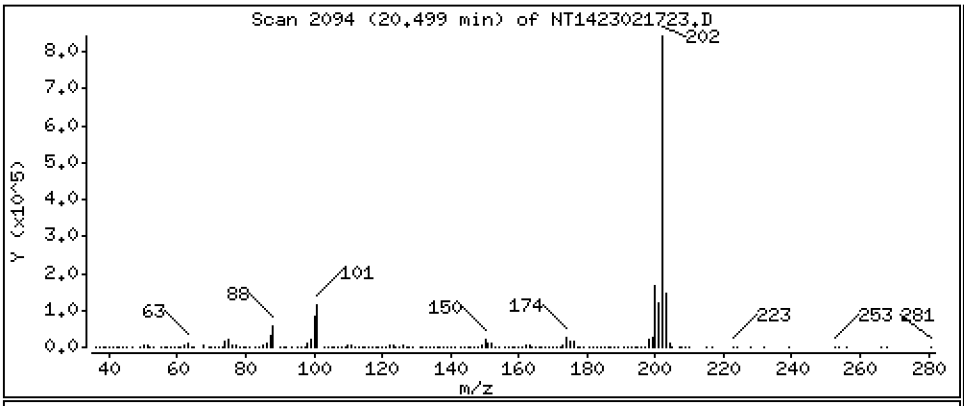
Operator: DSD

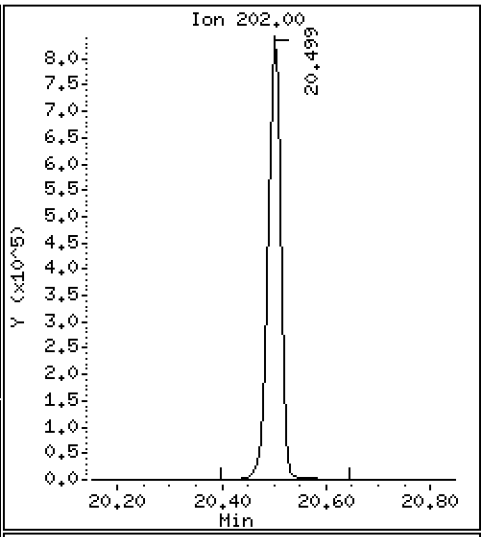
Column phase: ZB-5msi

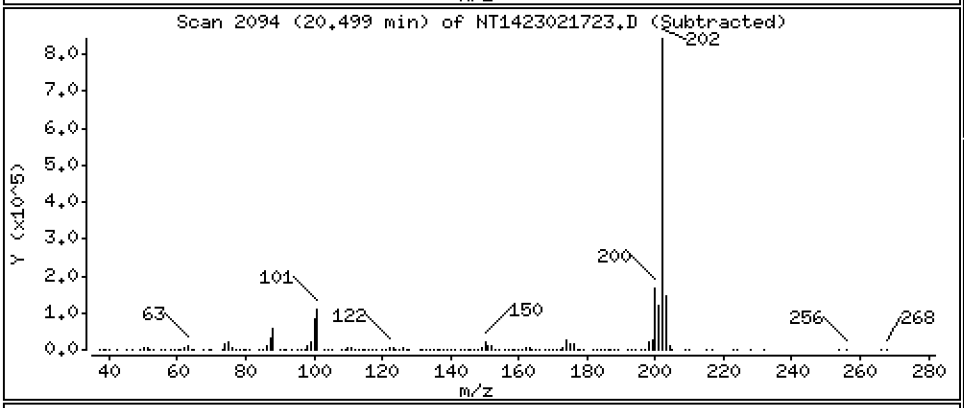
Column diameter: 0.25

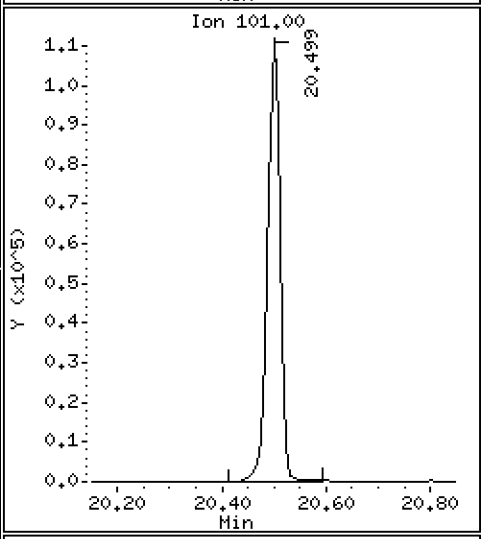
64 Fluoranthene

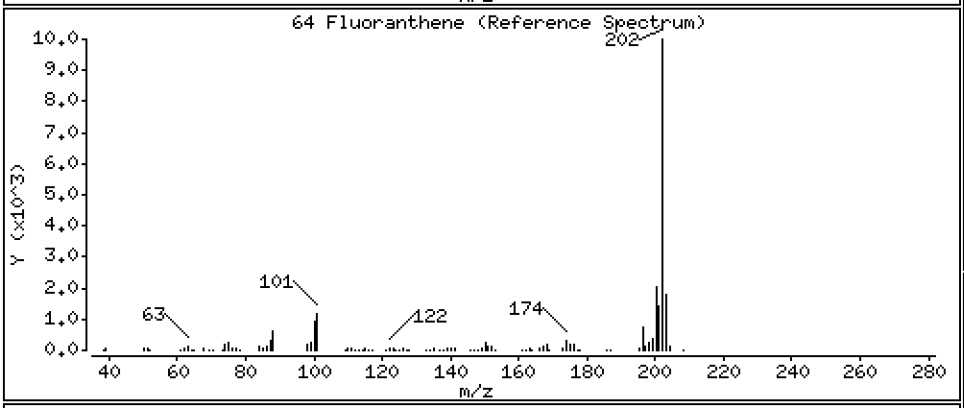
Concentration: 4.981 ug/mL

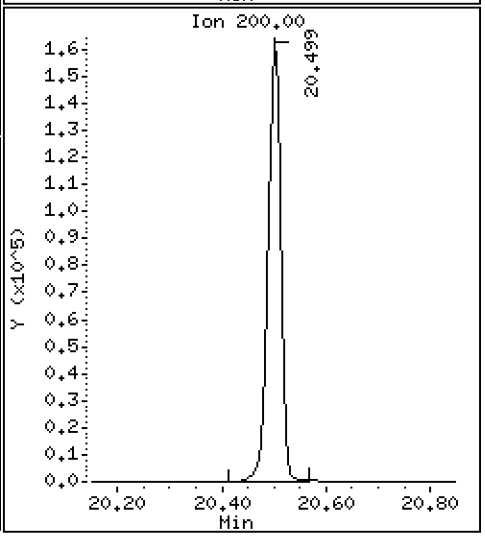


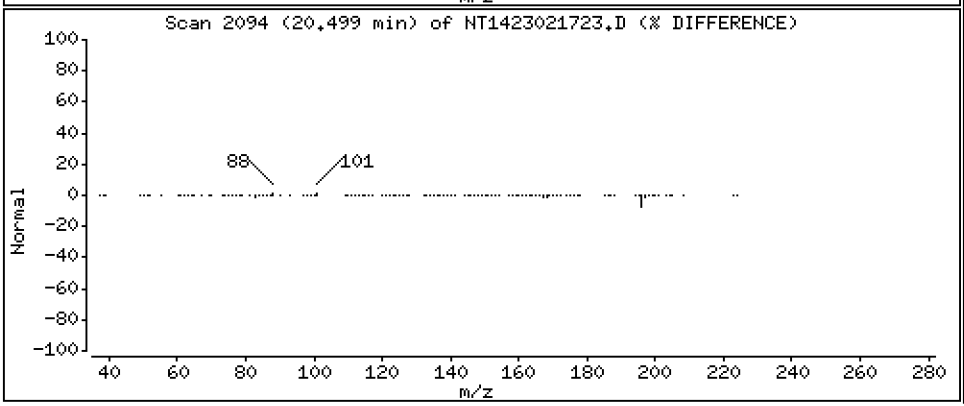












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

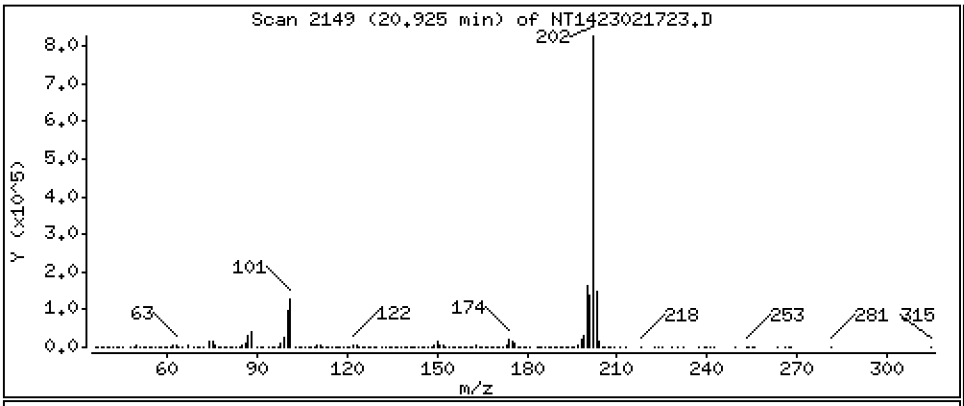
Operator: DSD

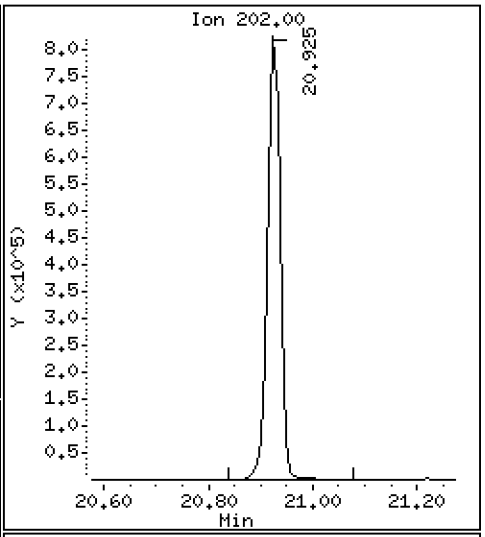
Column phase: ZB-5msi

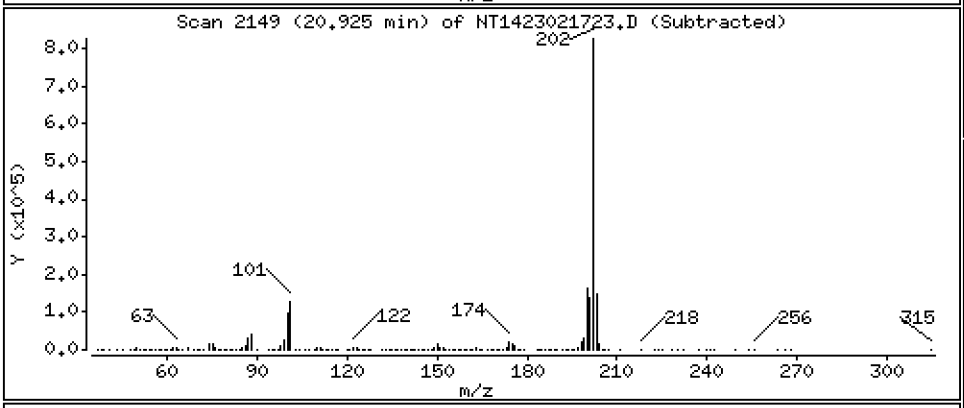
Column diameter: 0.25

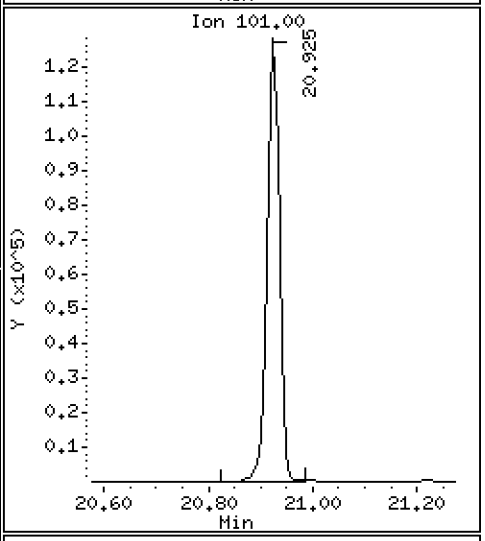
65 Pyrene

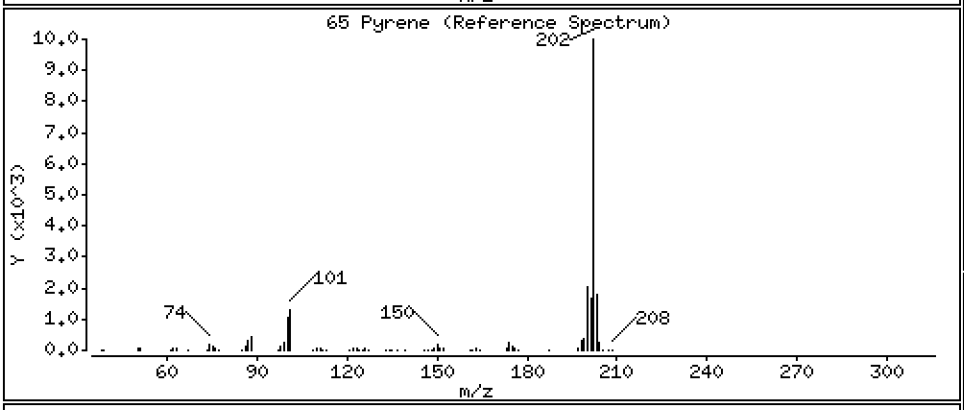
Concentration: 4.895 ug/mL

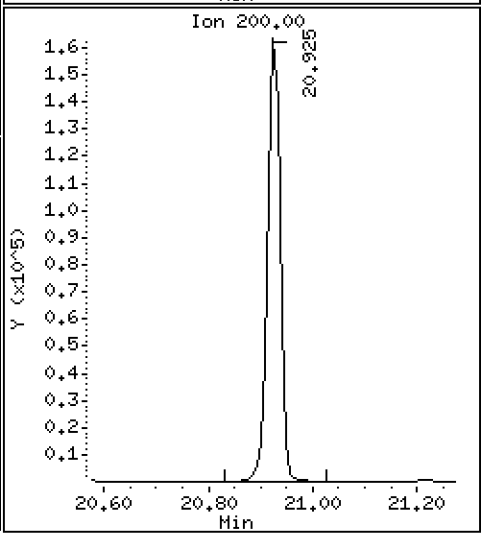


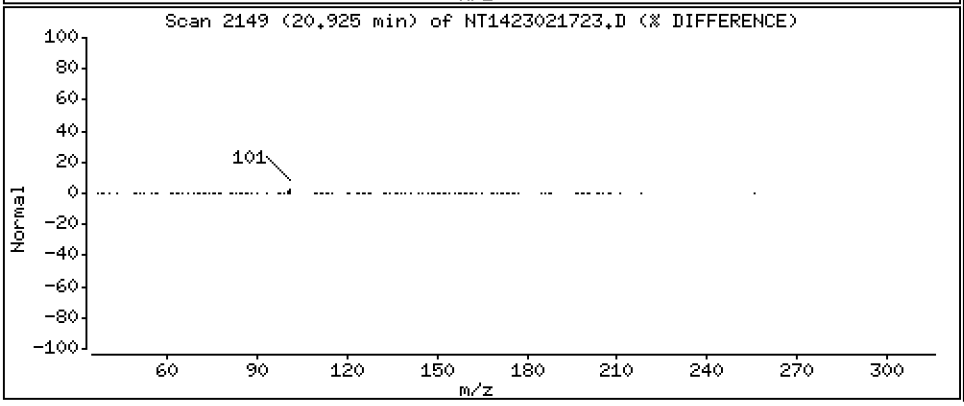












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

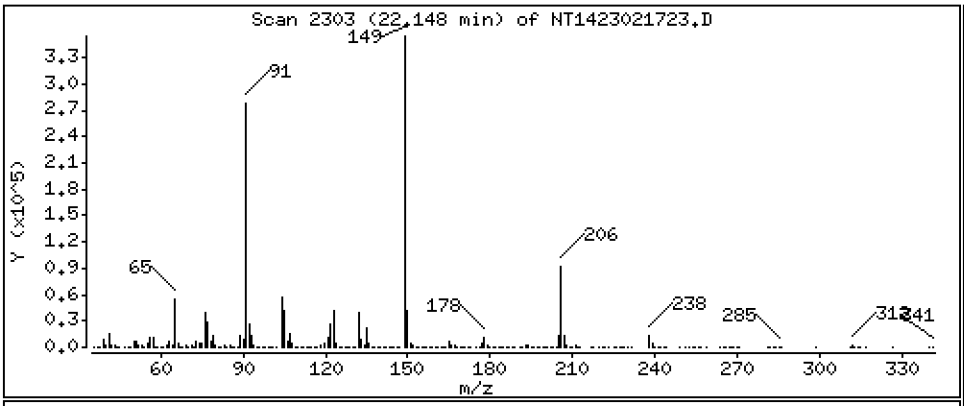
Operator: DSD

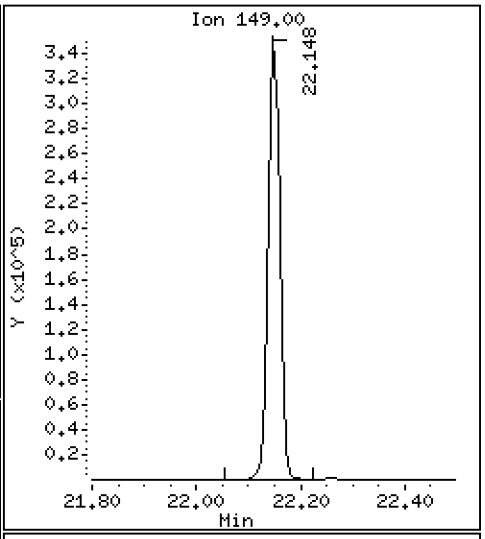
Column phase: ZB-5msi

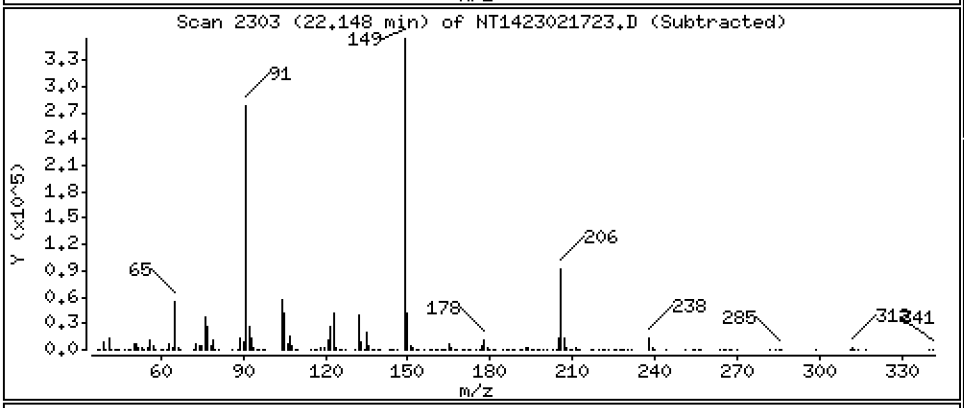
Column diameter: 0.25

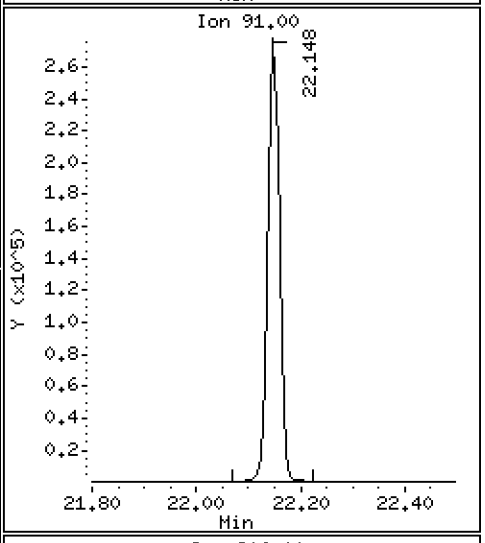
67 Butylbenzylphthalate

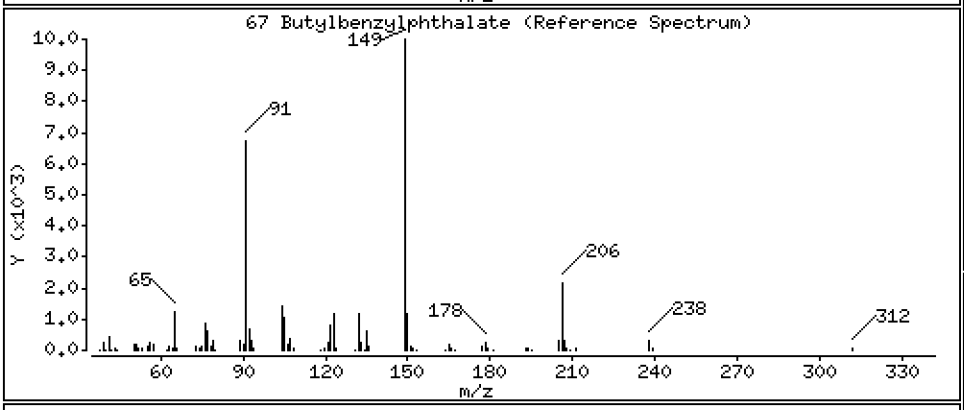
Concentration: 5.345 ug/mL

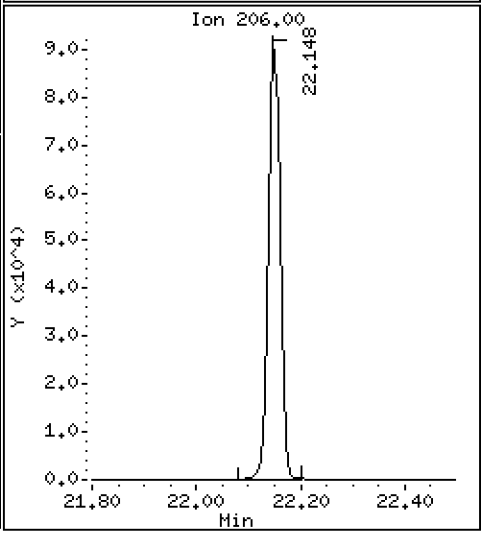


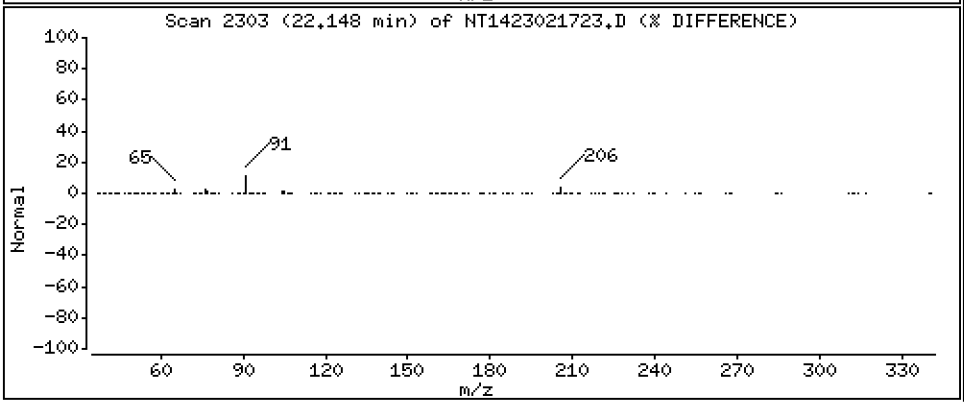












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021723.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

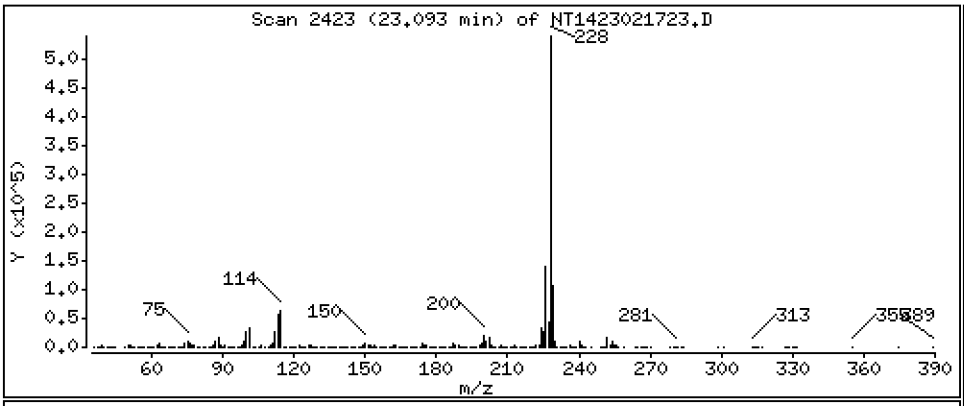
Operator: DSD

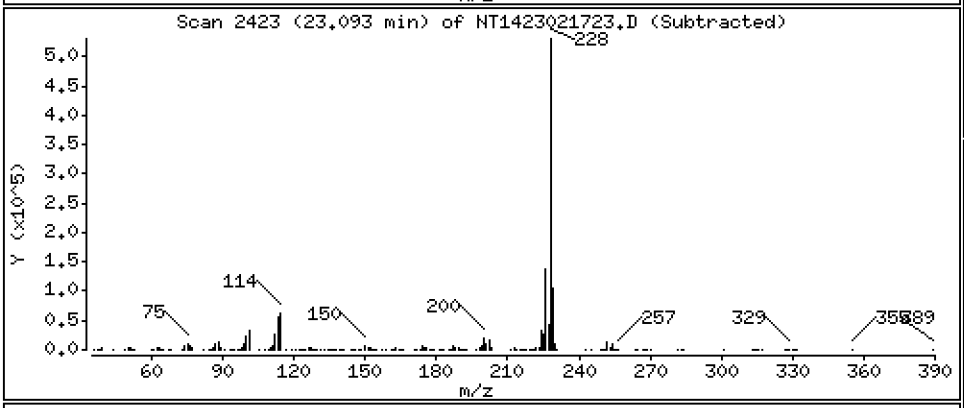
Column phase: ZB-5msi

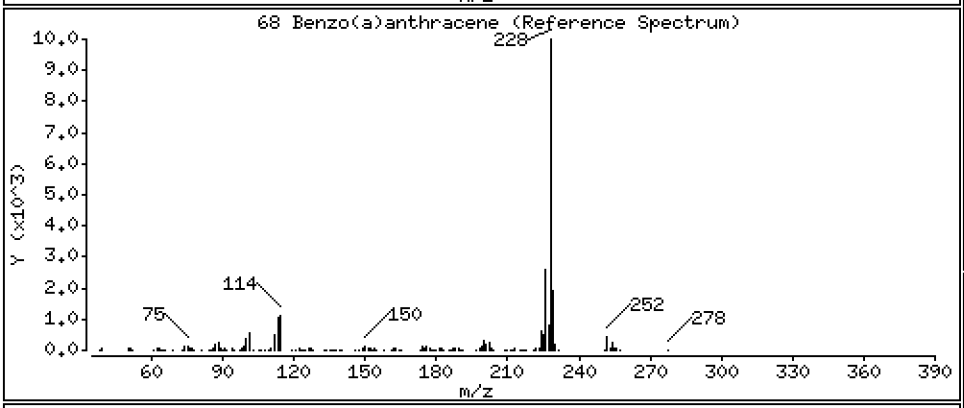
Column diameter: 0.25

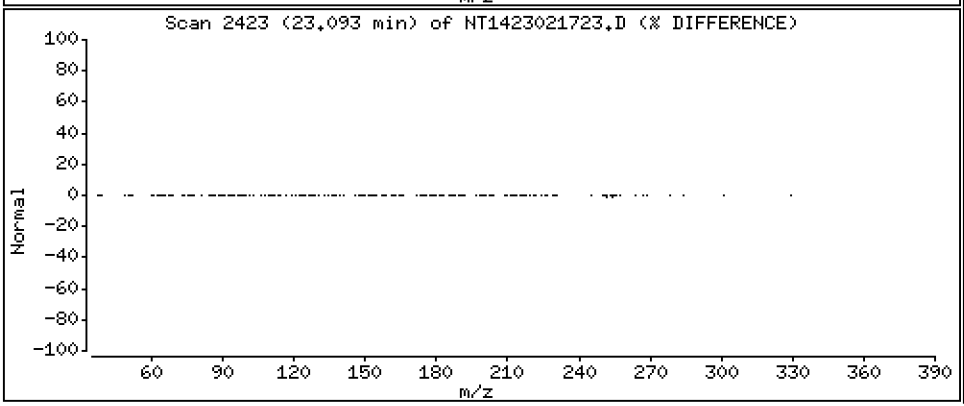
68 Benzo(a)anthracene

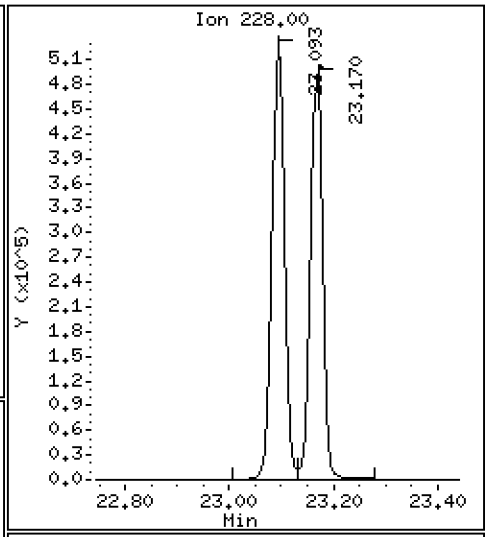
Concentration: 4.162 ug/mL

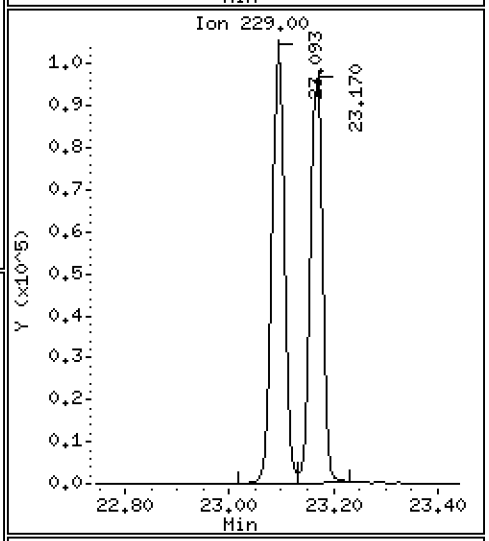


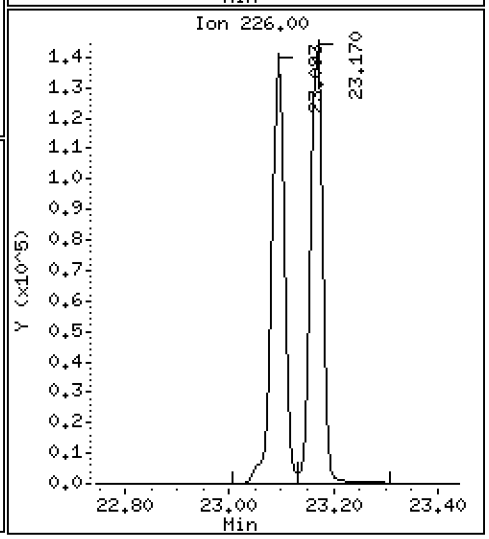












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

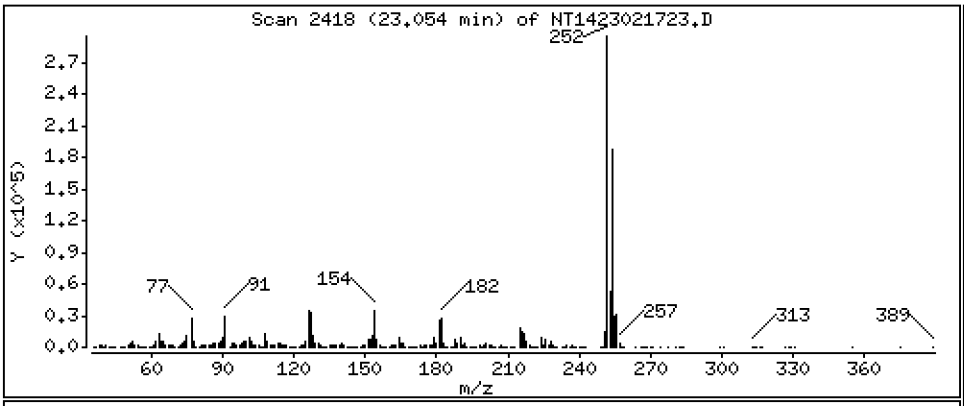
Operator: DSD

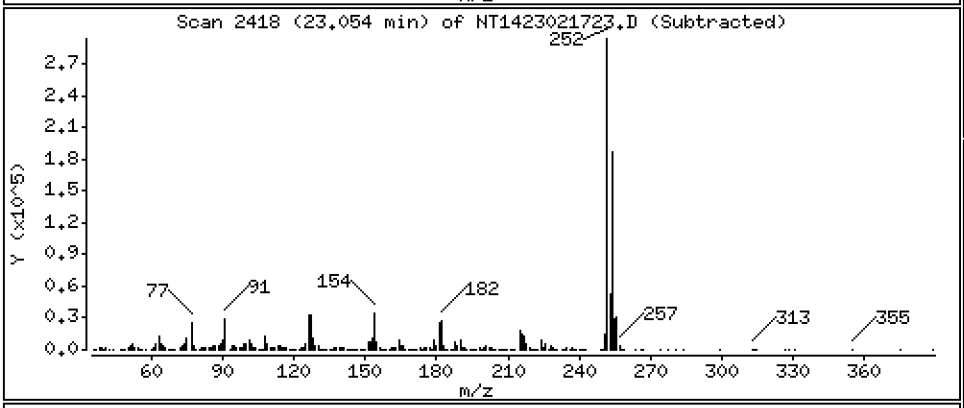
Column phase: ZB-5msi

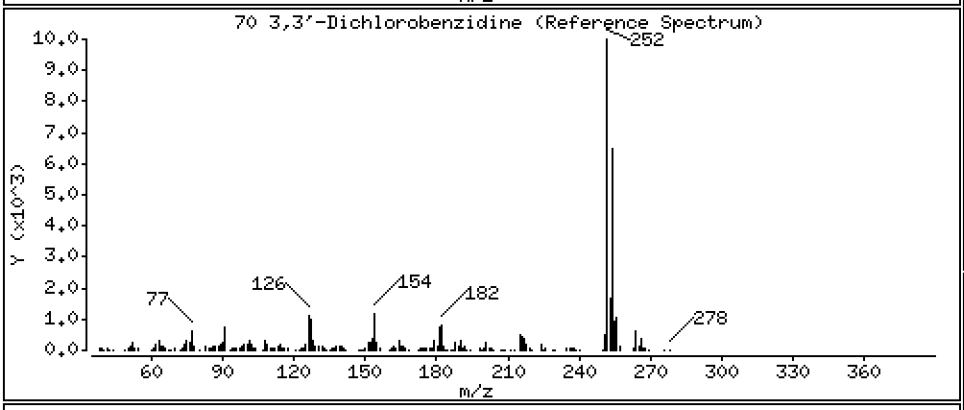
Column diameter: 0.25

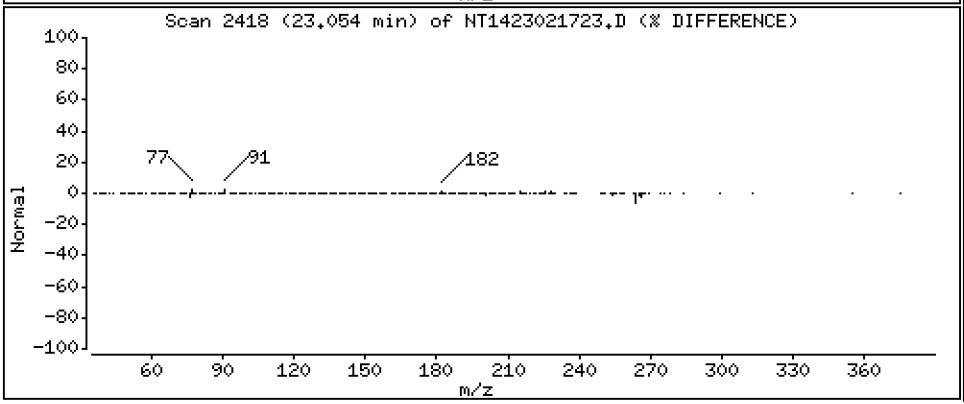
70 3,3'-Dichlorobenzidine

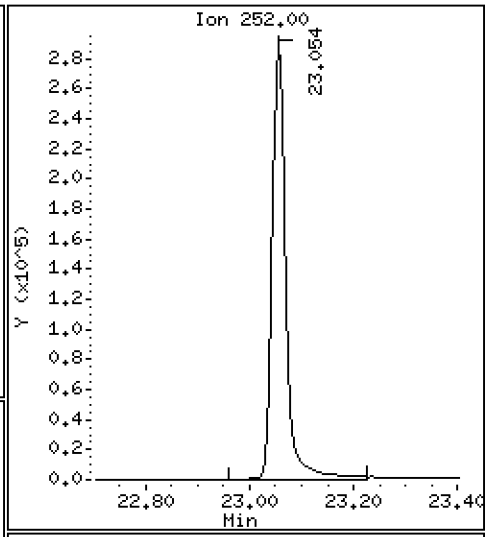
Concentration: 8.141 ug/mL

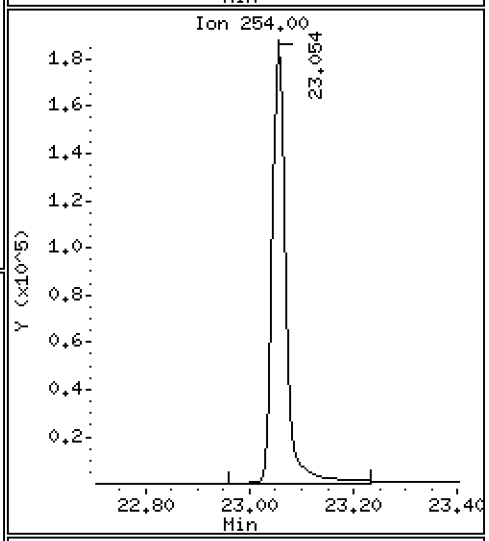


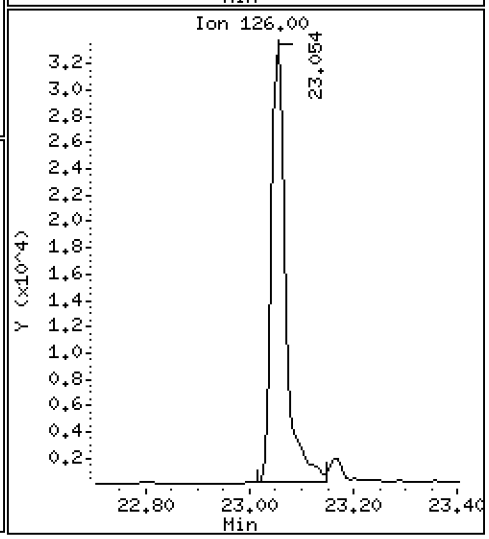












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021723.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

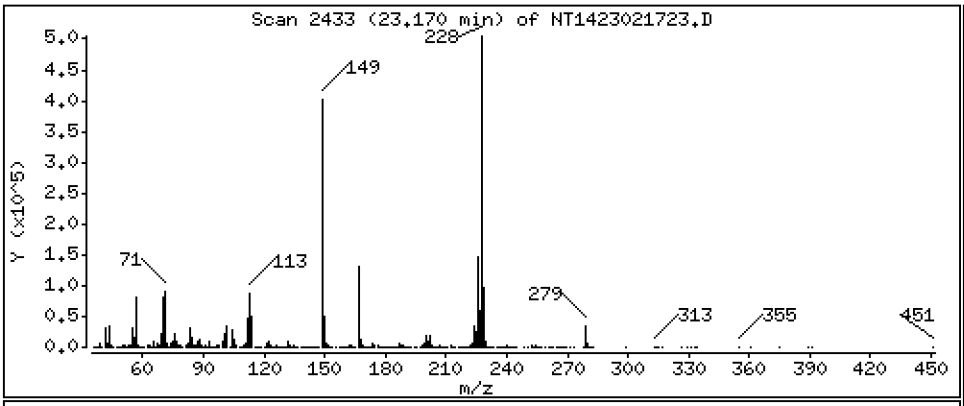
Operator: DSD

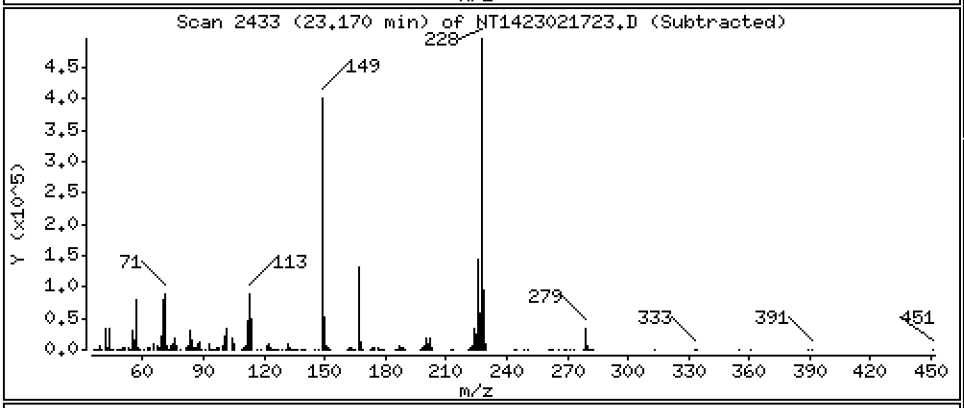
Column phase: ZB-5msi

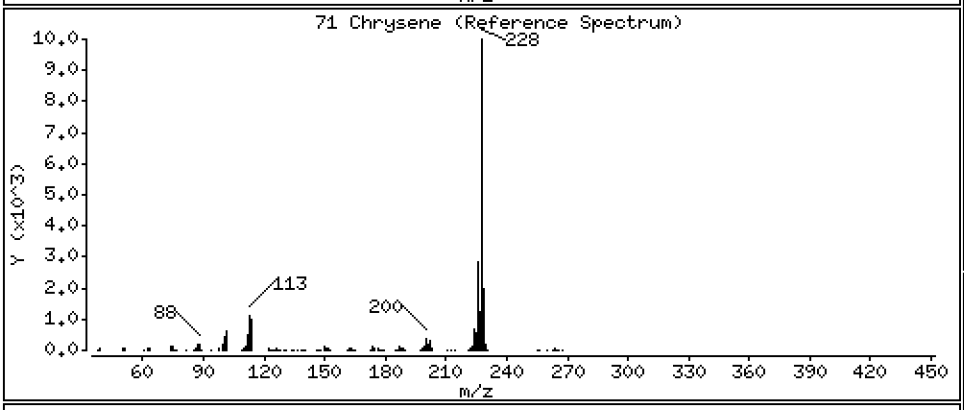
Column diameter: 0.25

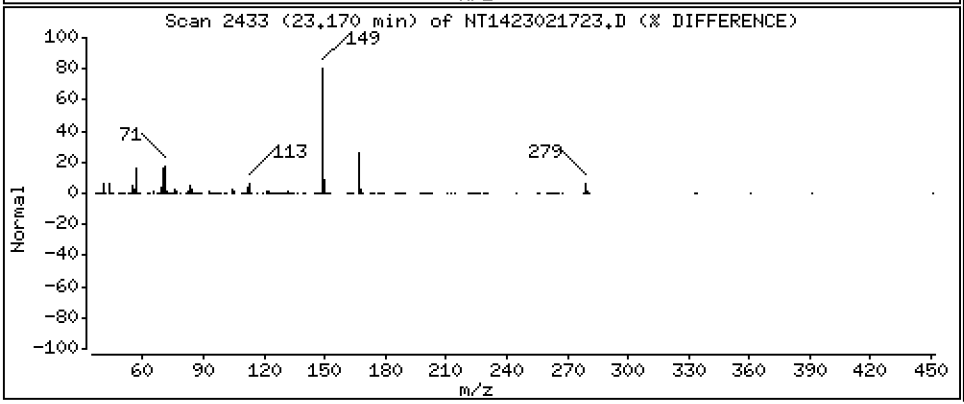
71 Chrysene

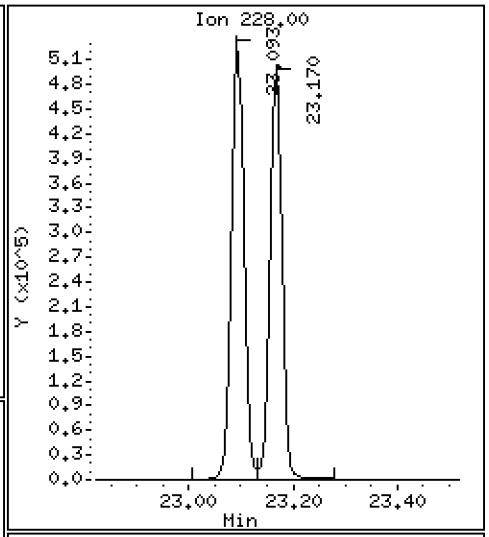
Concentration: 4.170 ug/mL

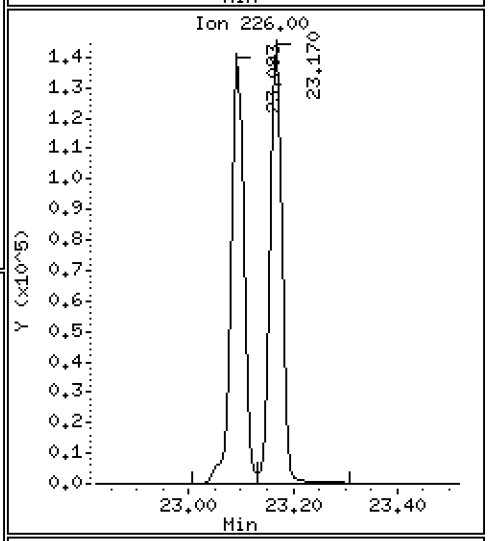


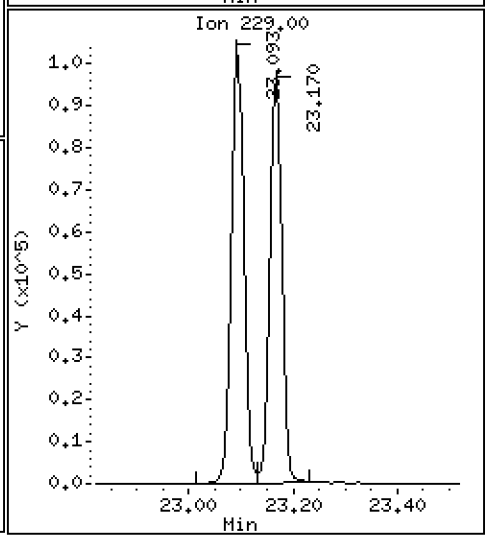












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021723.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

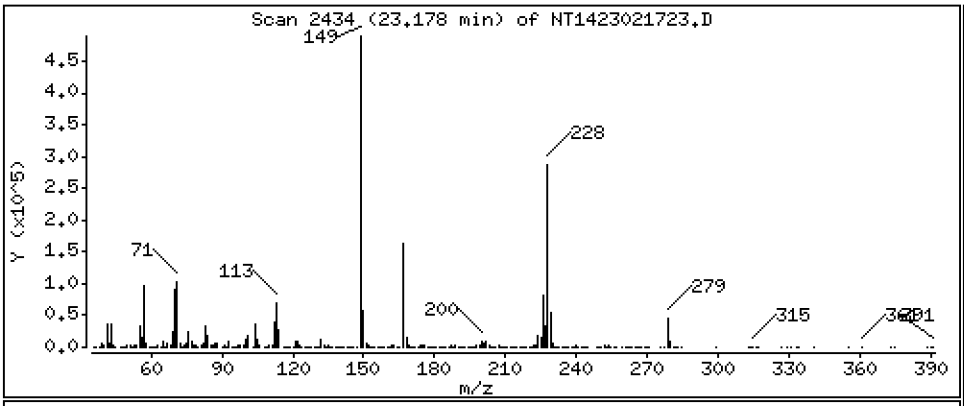
Operator: DSD

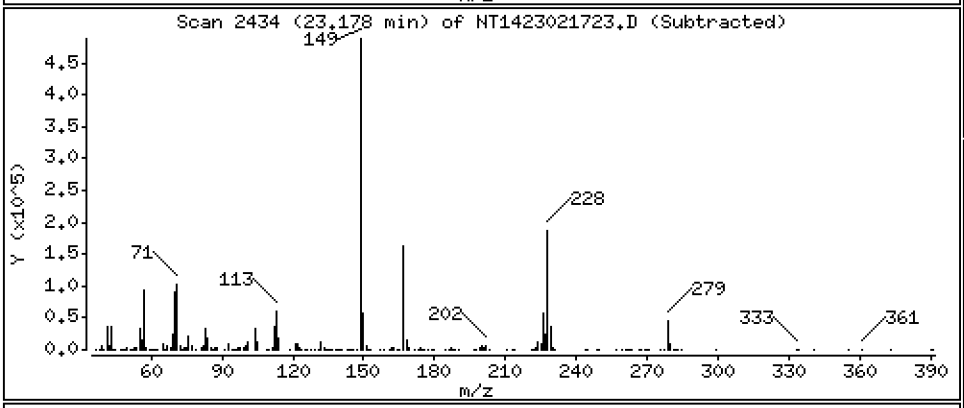
Column phase: ZB-5msi

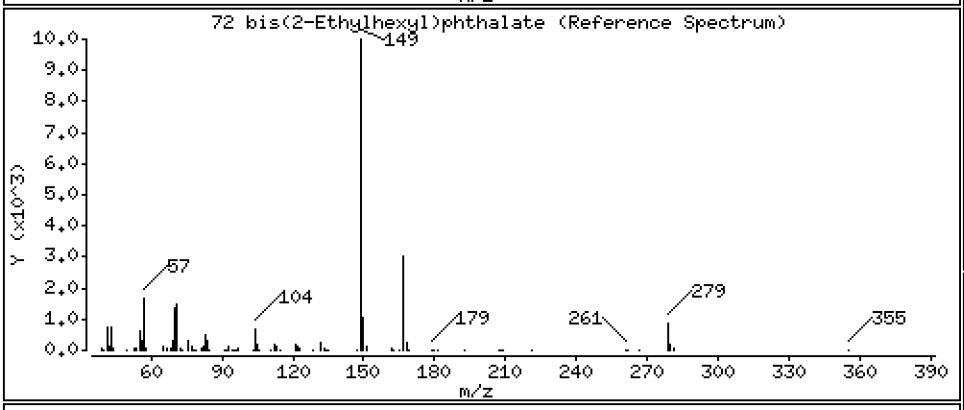
Column diameter: 0.25

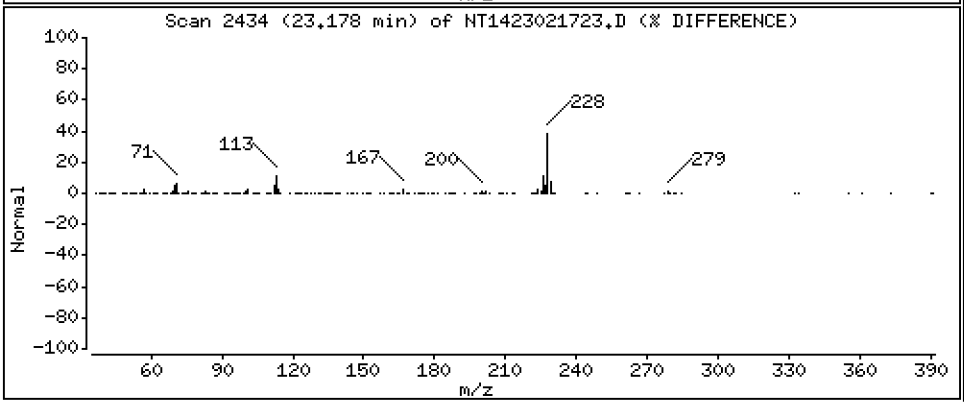
72 bis(2-Ethylhexyl)phthalate

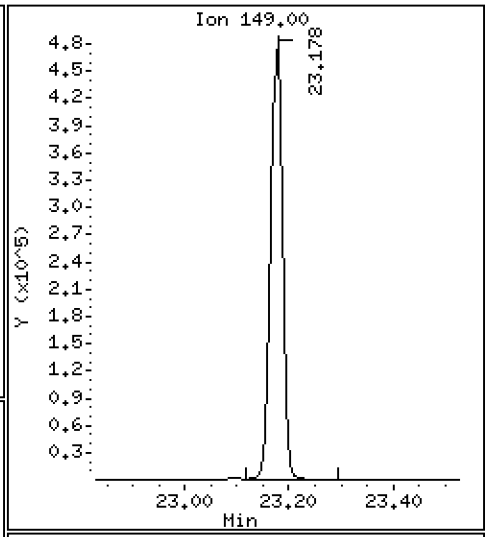
Concentration: 3.949 ug/mL

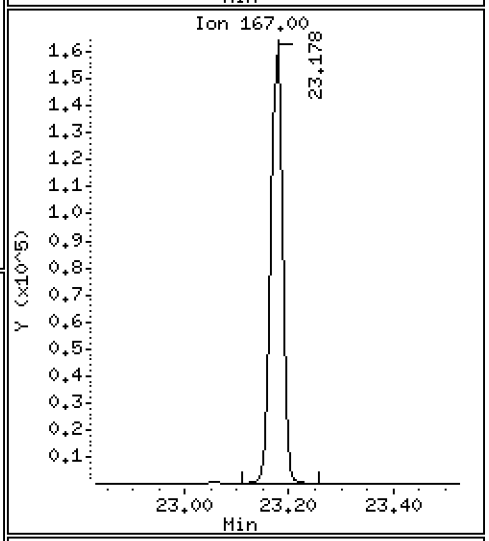


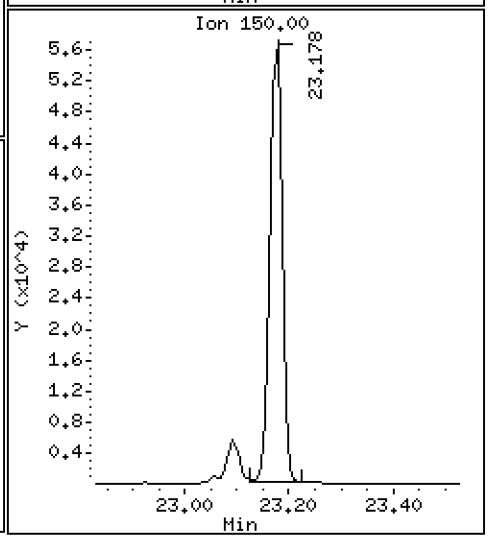












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

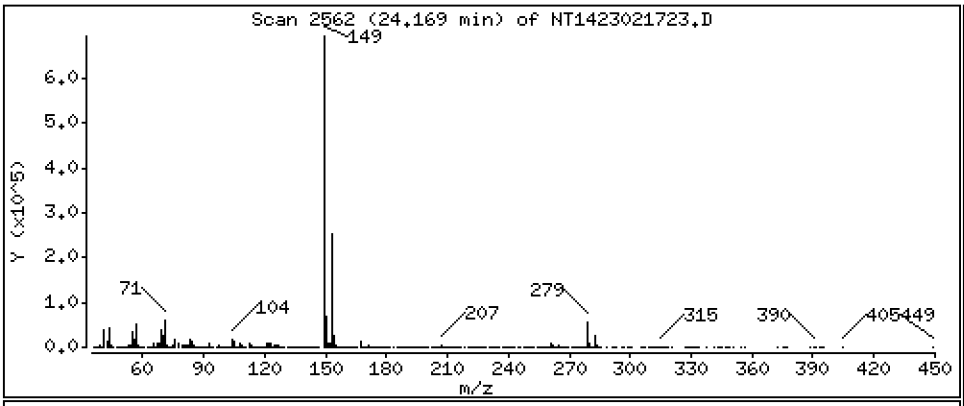
Operator: DSD

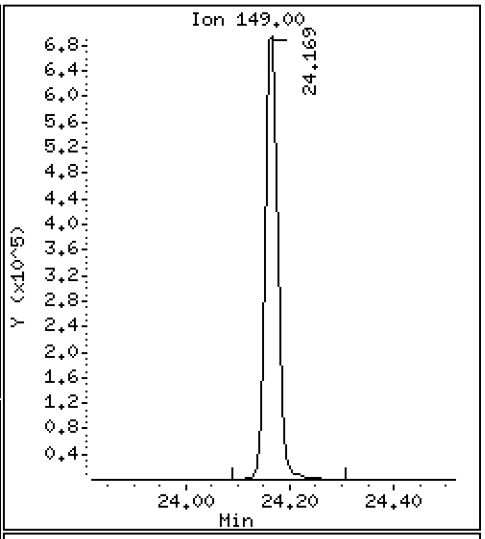
Column phase: ZB-5msi

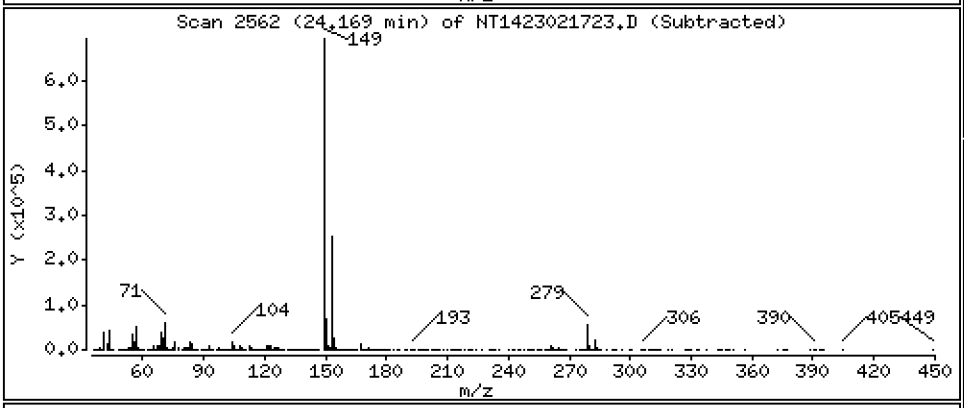
Column diameter: 0.25

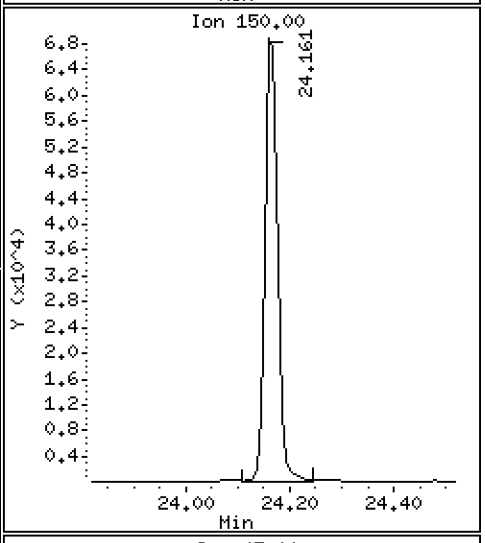
73 Di-n-octylphthalate

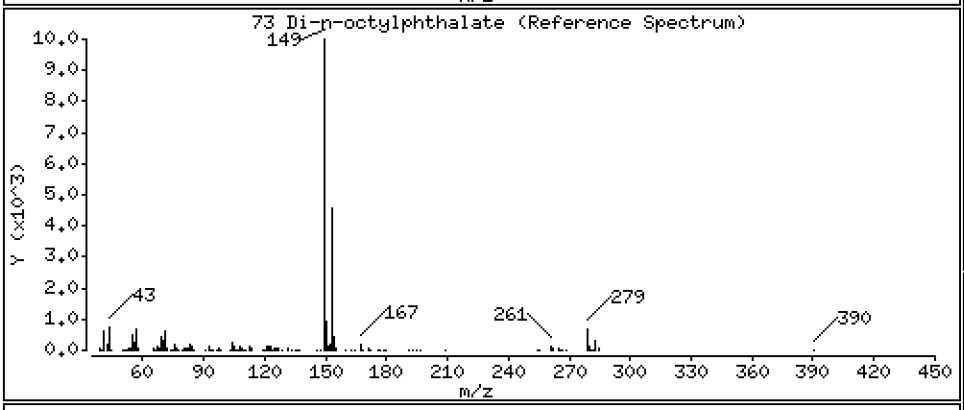
Concentration: 4.425 ug/mL

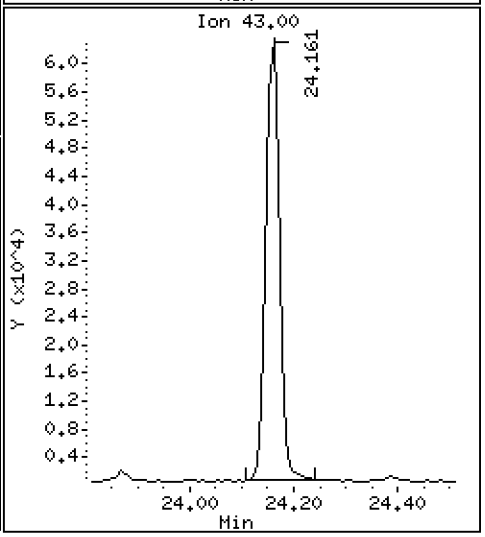


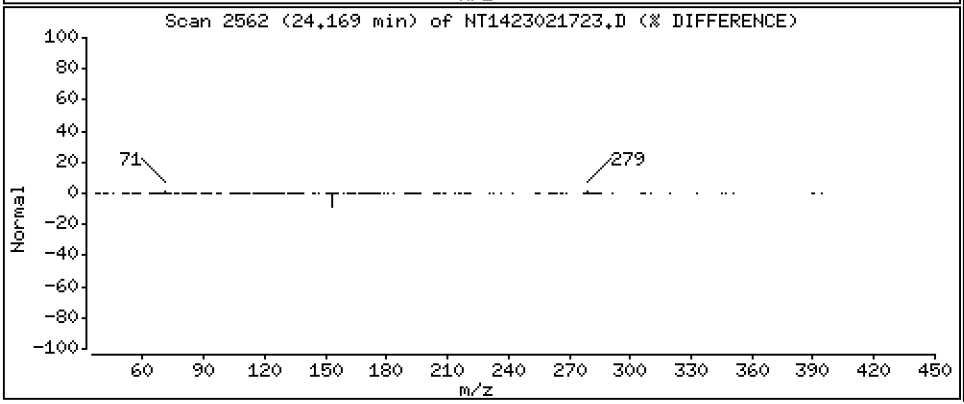












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

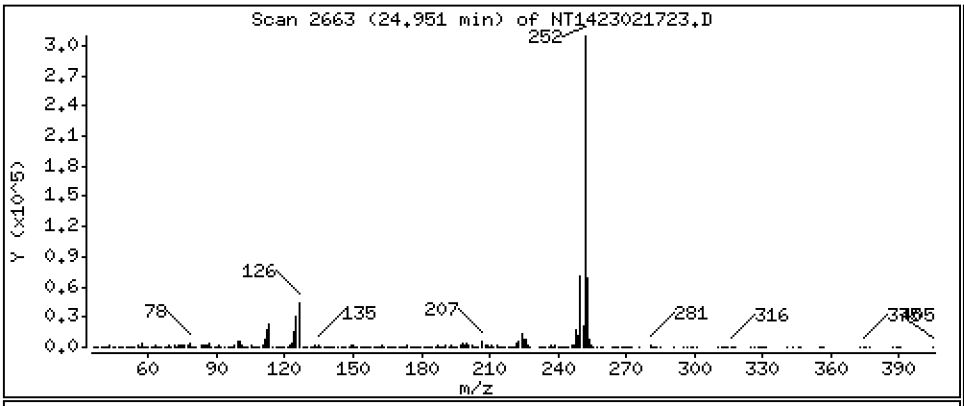
Operator: DSD

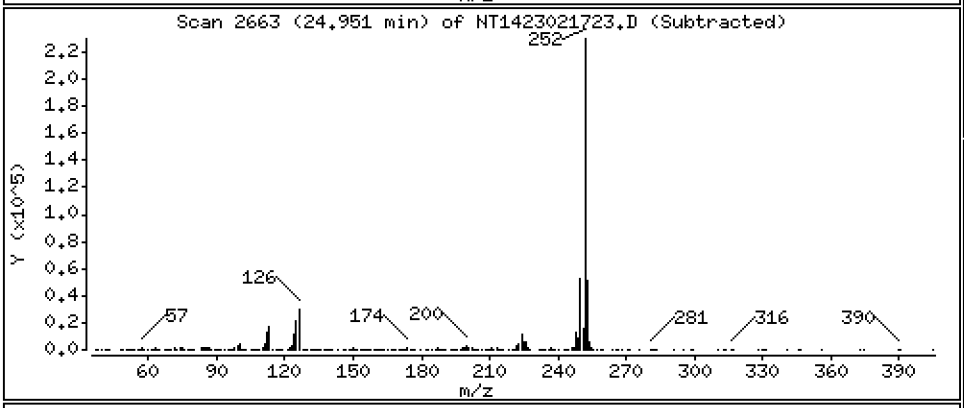
Column phase: ZB-5msi

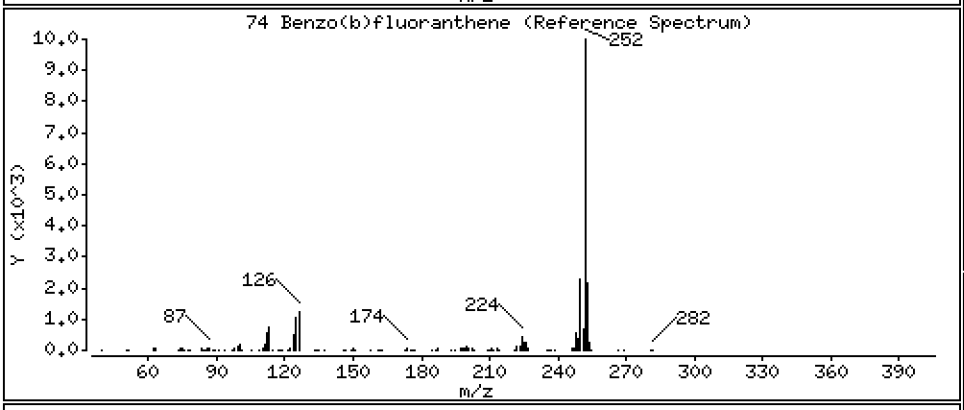
Column diameter: 0.25

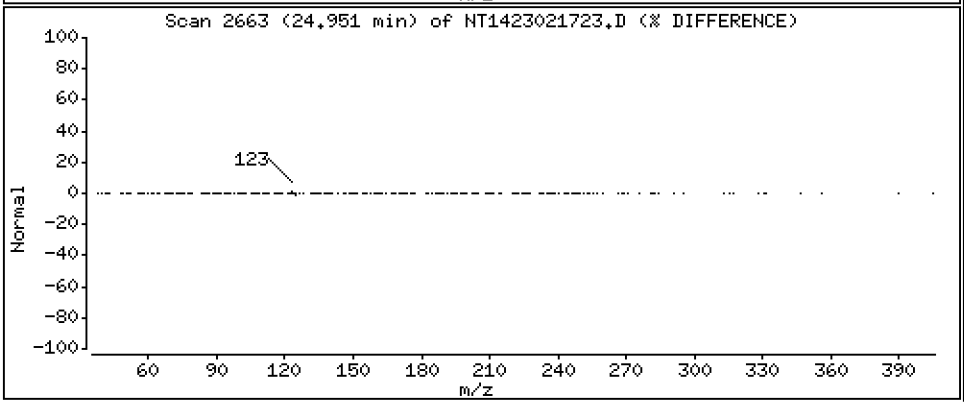
74 Benzo(b)fluoranthene

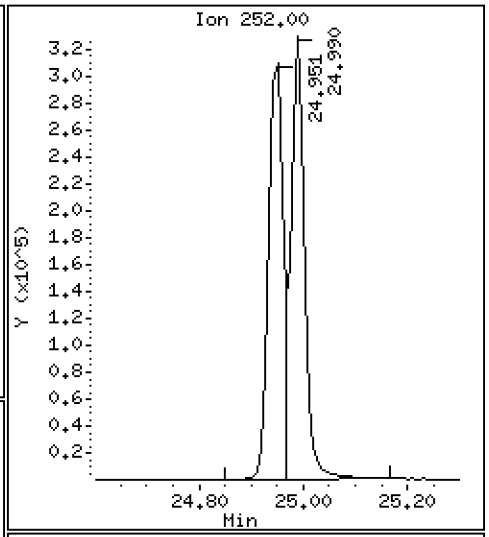
Concentration: 4.183 ug/mL

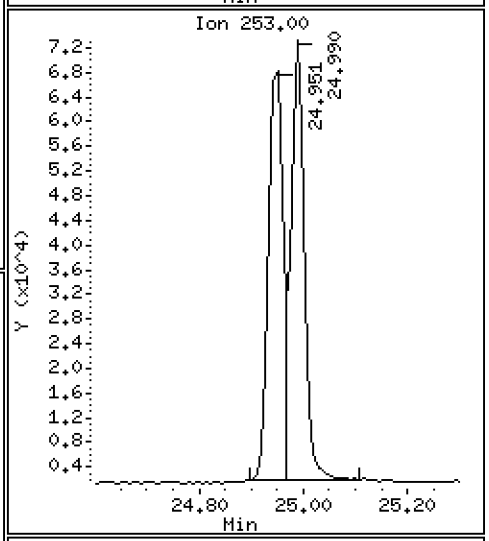


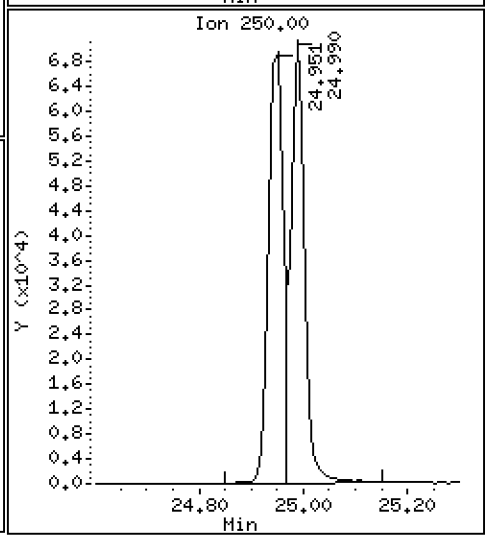












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

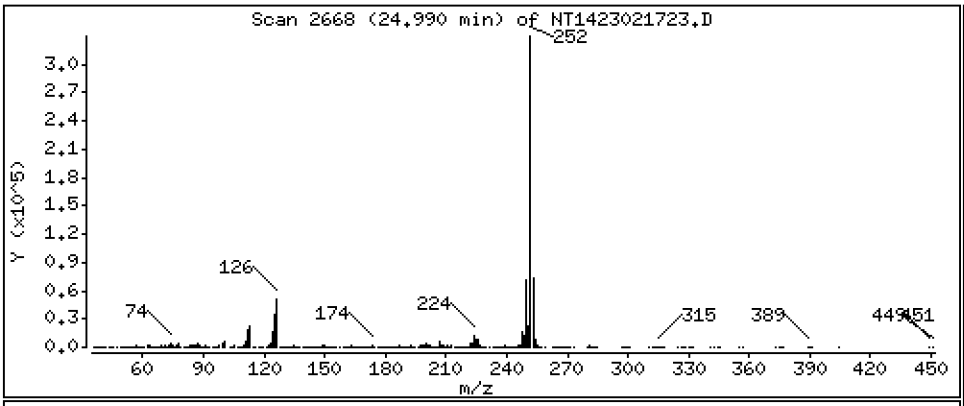
Operator: DSD

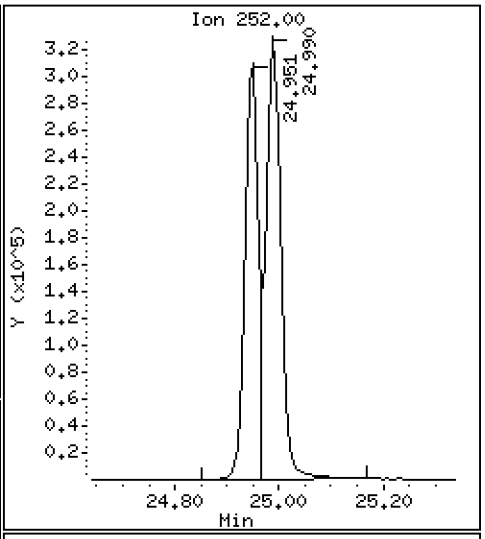
Column phase: ZB-5msi

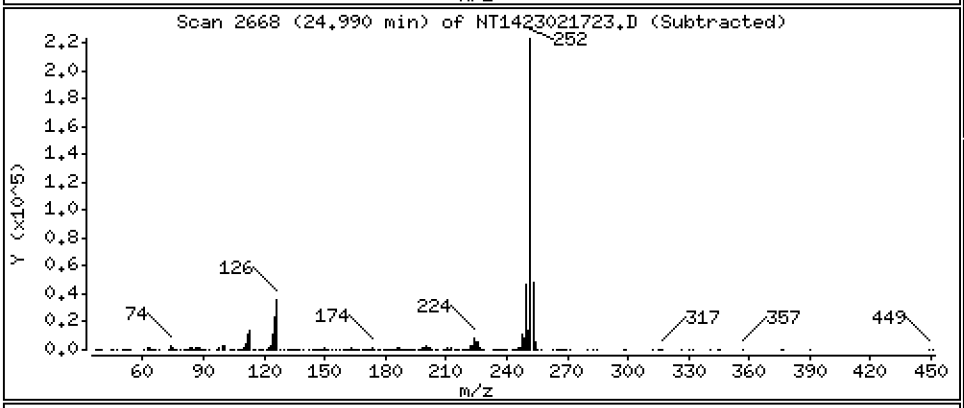
Column diameter: 0.25

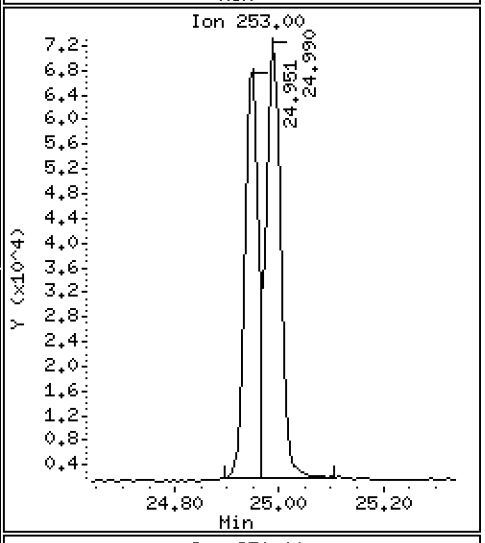
75 Benzo(k)fluoranthene

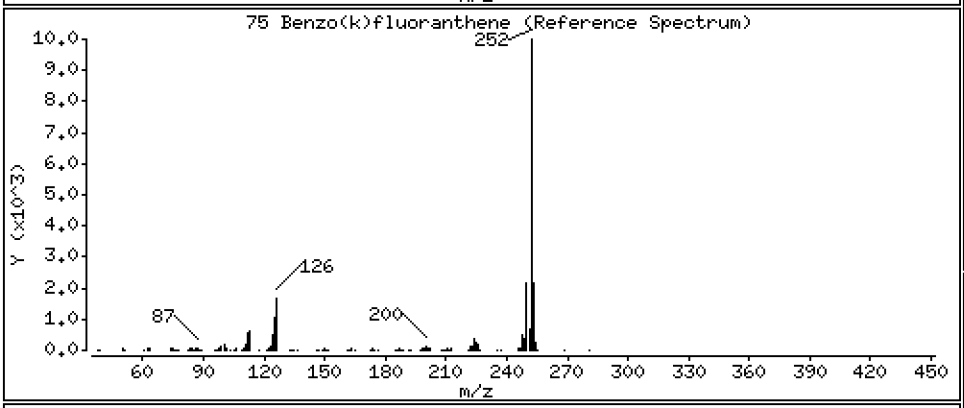
Concentration: 4.396 ug/mL

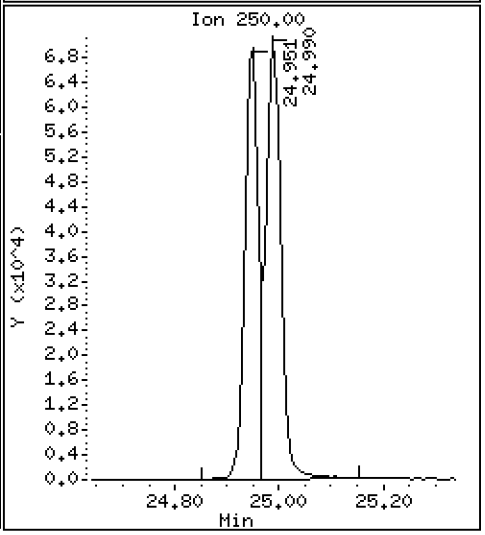


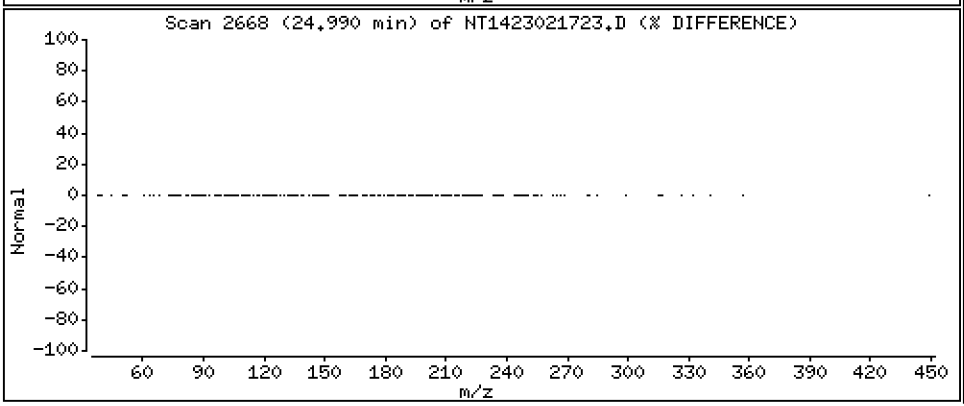












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021723.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

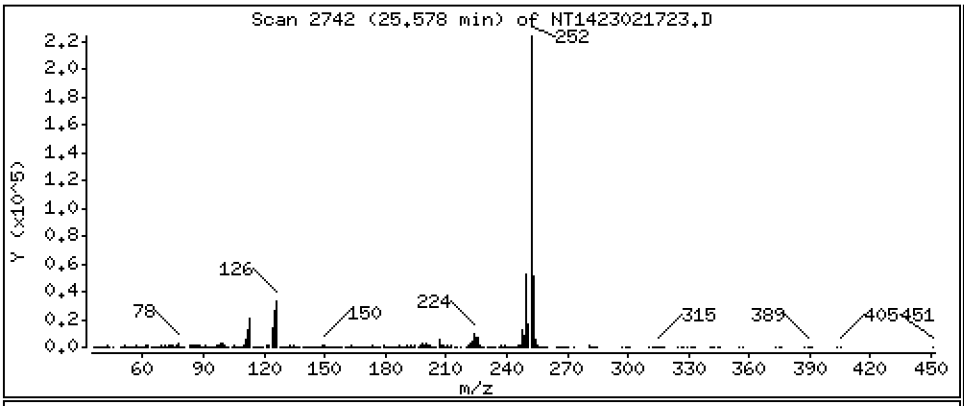
Operator: DSD

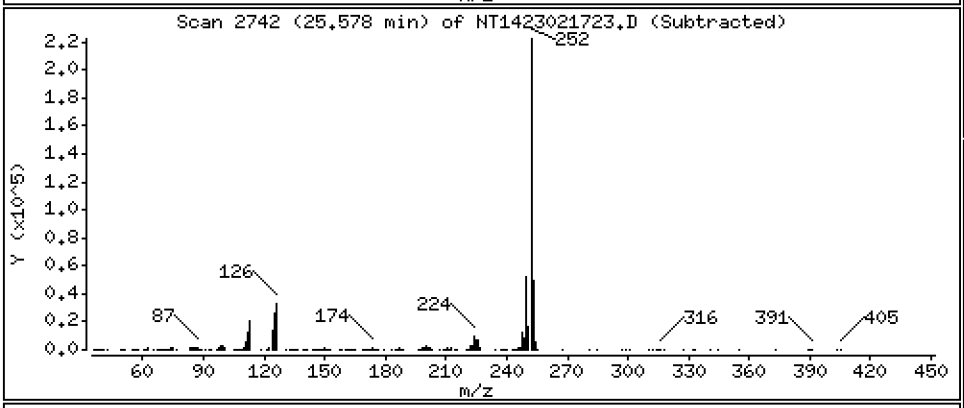
Column phase: ZB-5msi

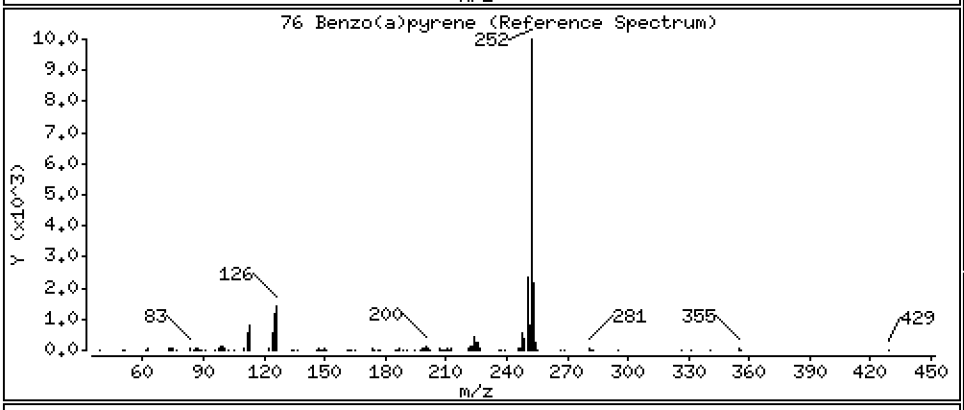
Column diameter: 0.25

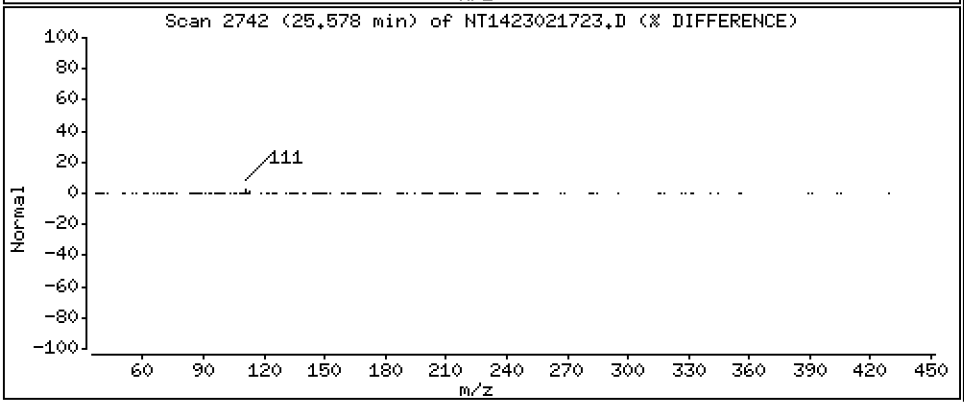
76 Benzo(a)pyrene

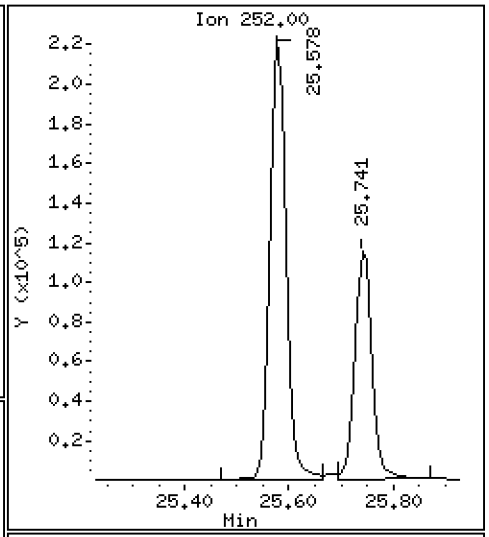
Concentration: 3.738 ug/mL

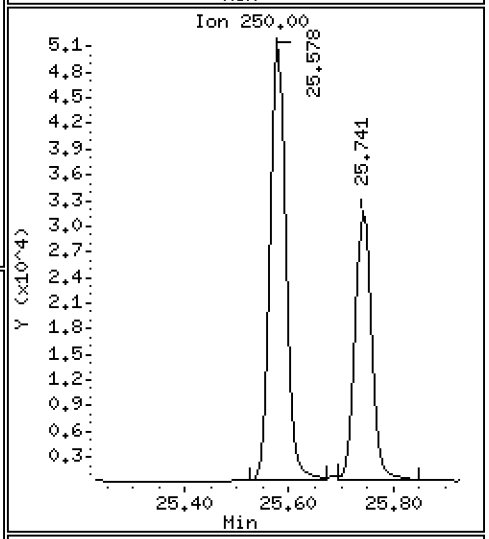


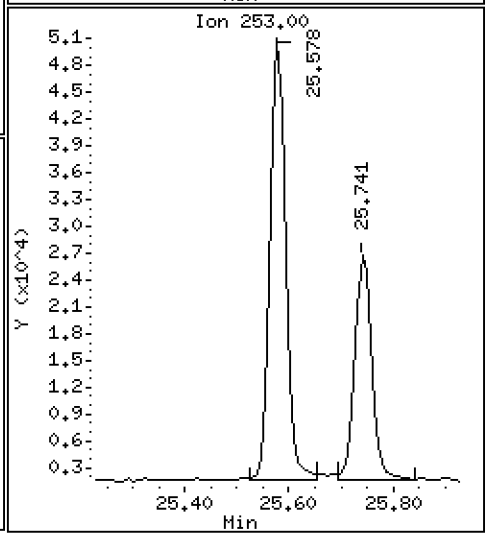












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

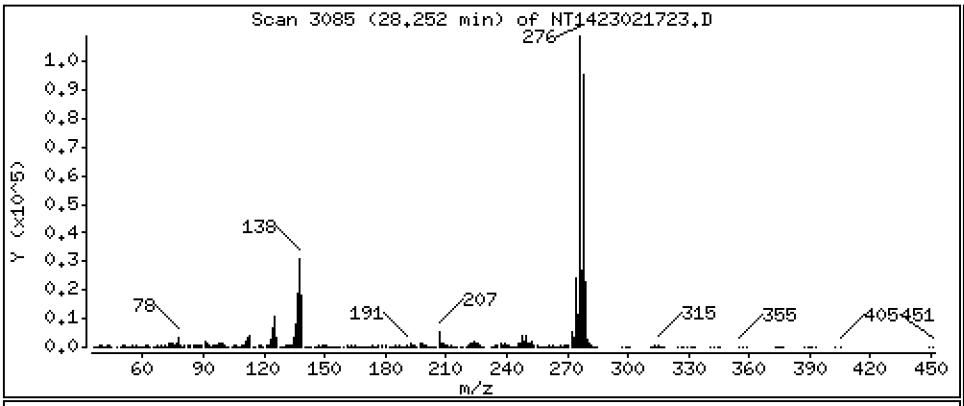
Operator: DSD

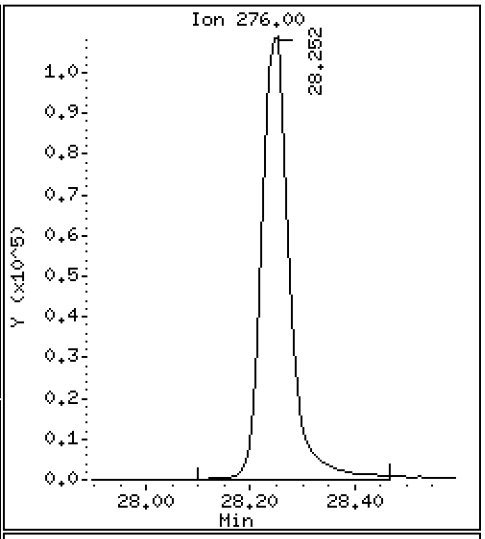
Column phase: ZB-5msi

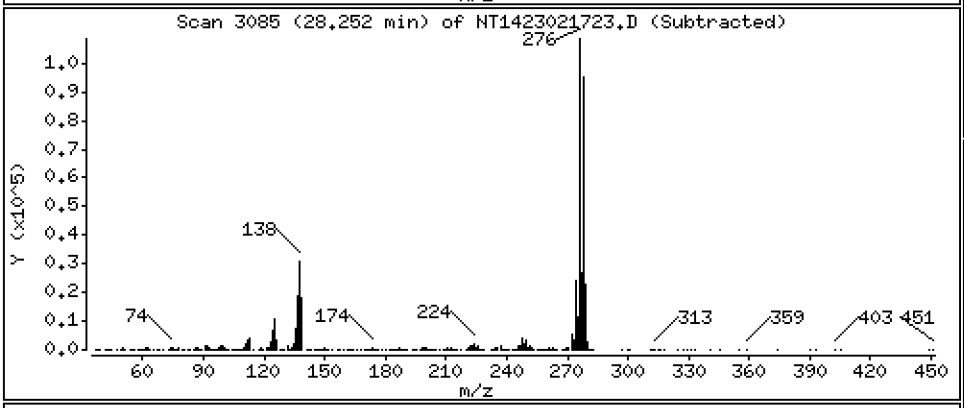
Column diameter: 0.25

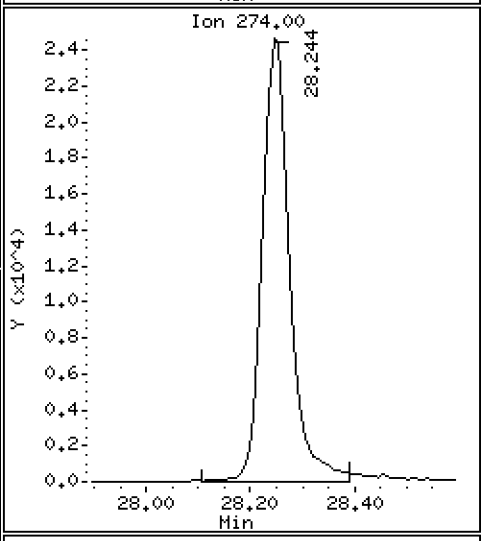
78 Indeno(1,2,3-cd)pyrene

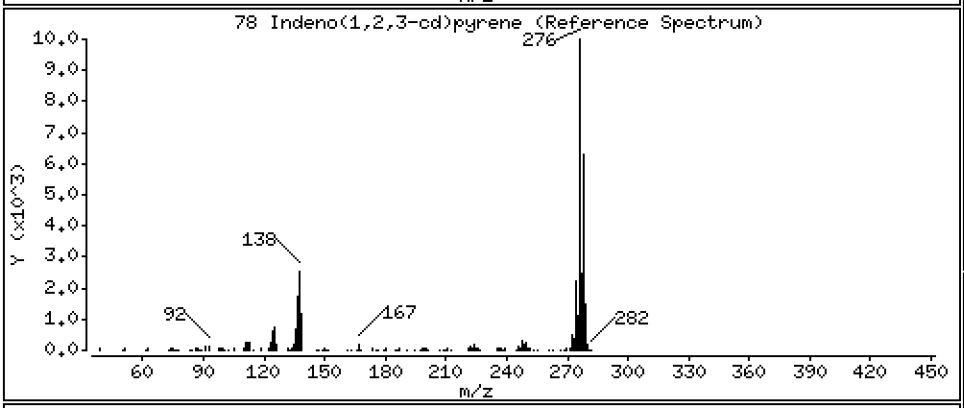
Concentration: 3.655 ug/mL

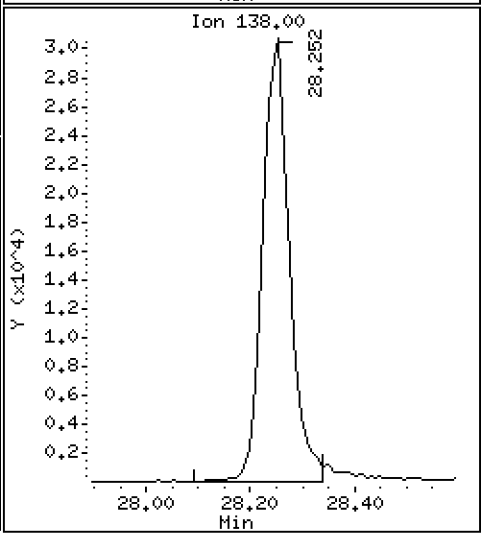


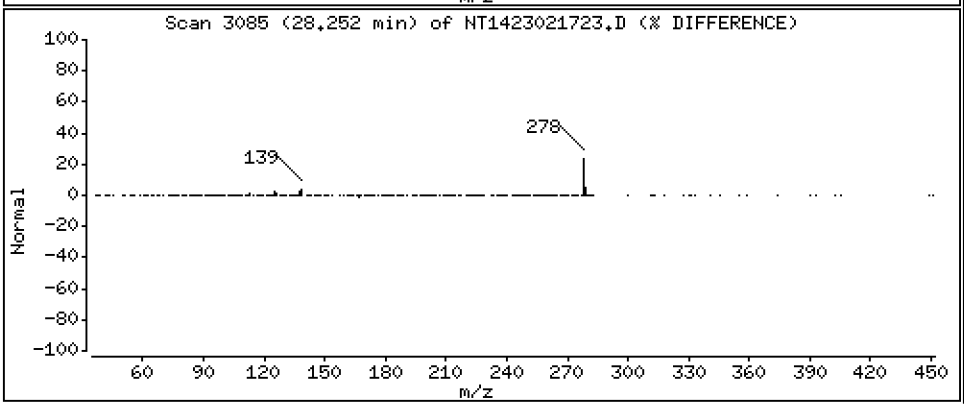












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021723.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

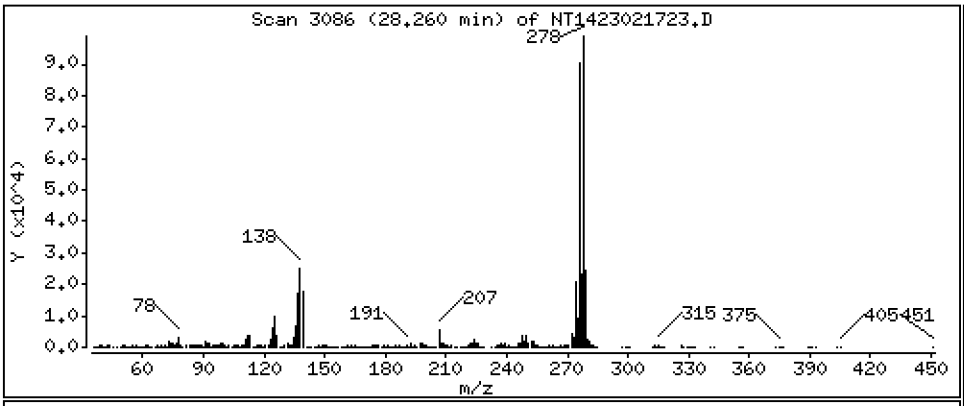
Operator: DSD

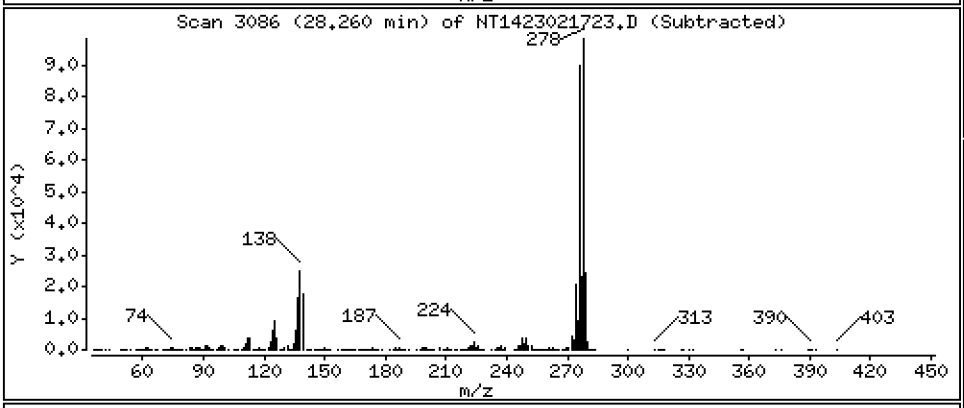
Column phase: ZB-5msi

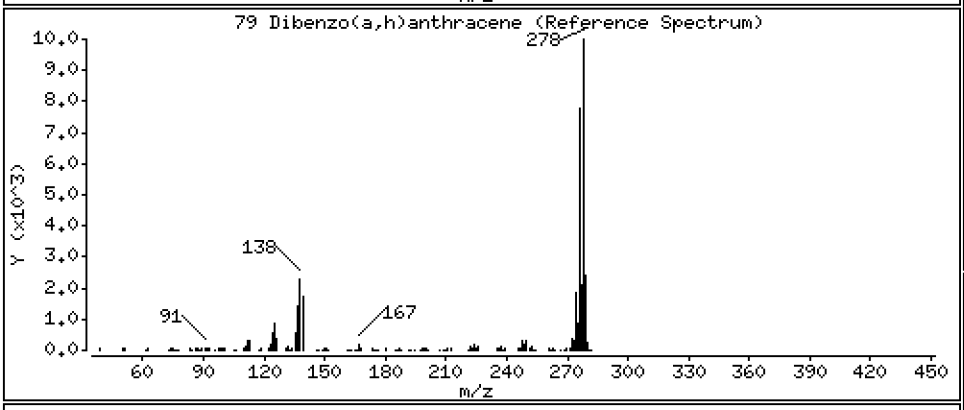
Column diameter: 0.25

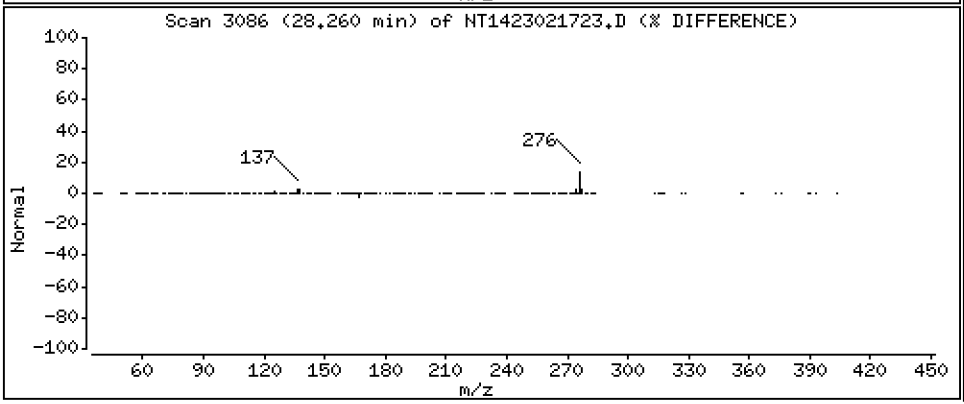
79 Dibenzo(a,h)anthracene

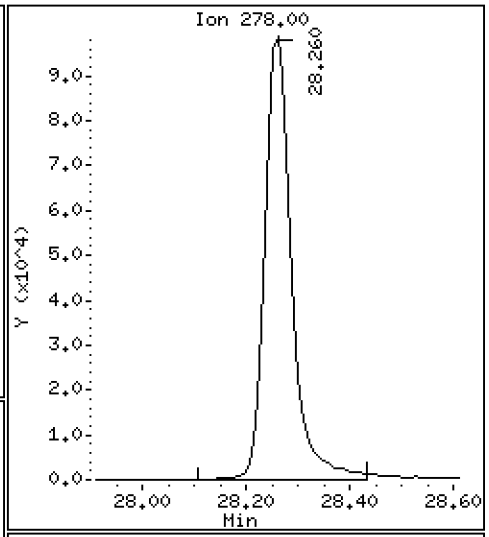
Concentration: 3.803 ug/mL

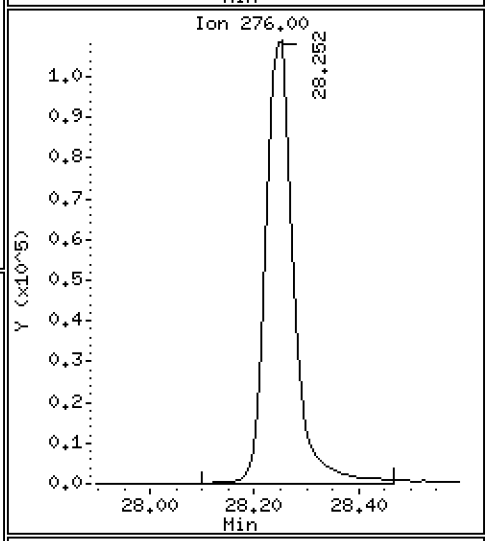


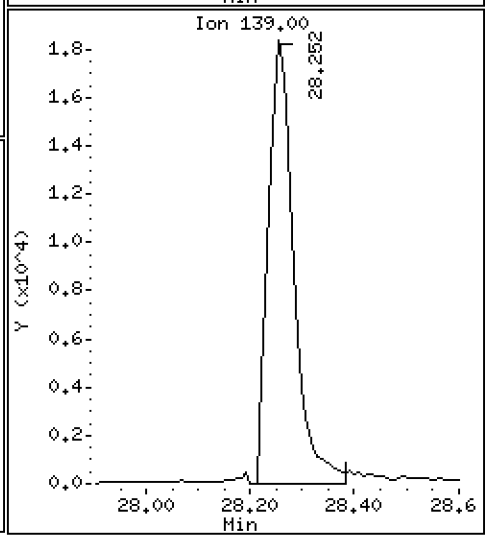












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

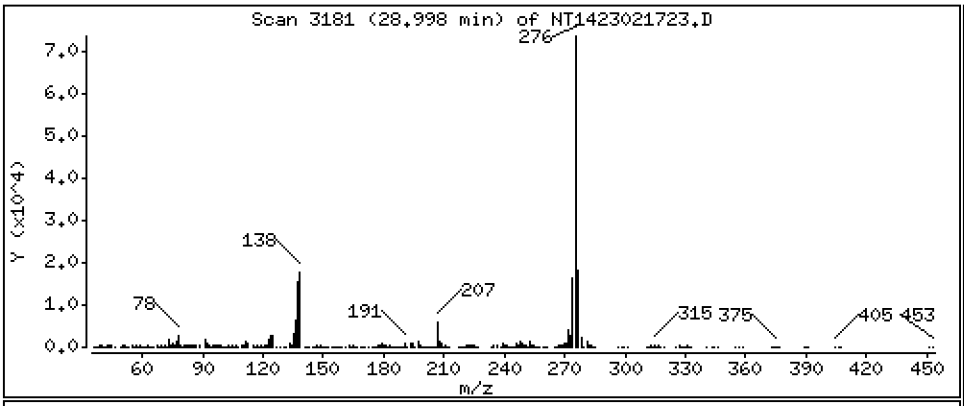
Operator: DSD

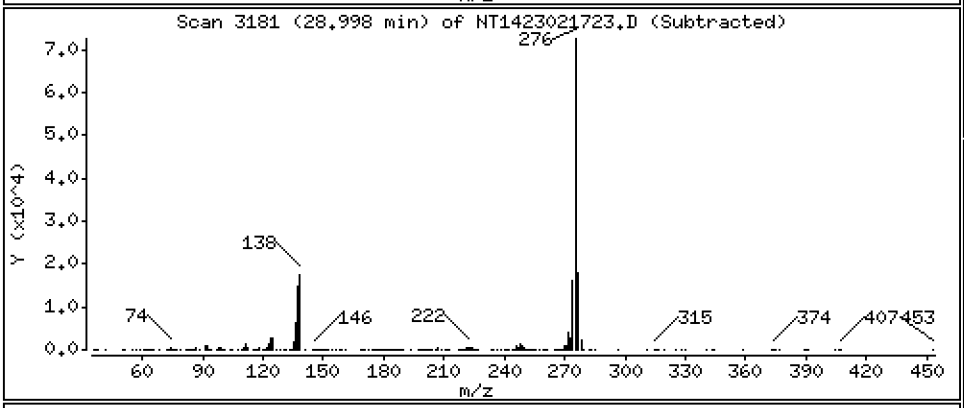
Column phase: ZB-5msi

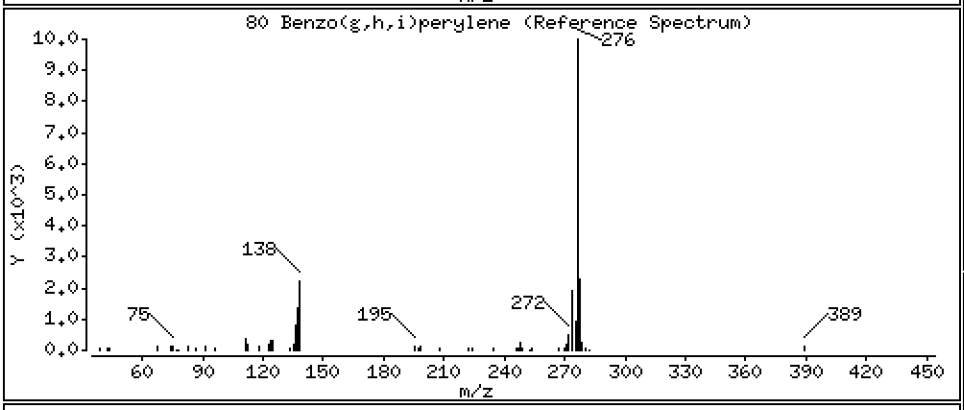
Column diameter: 0.25

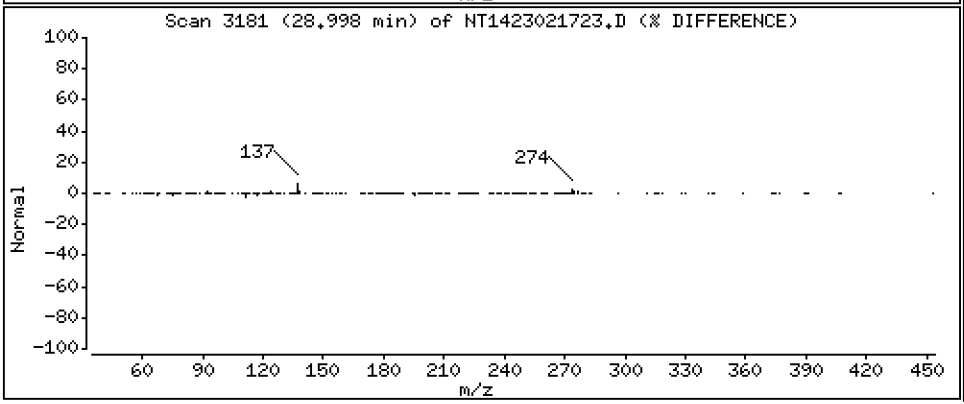
80 Benzo(g,h,i)perylene

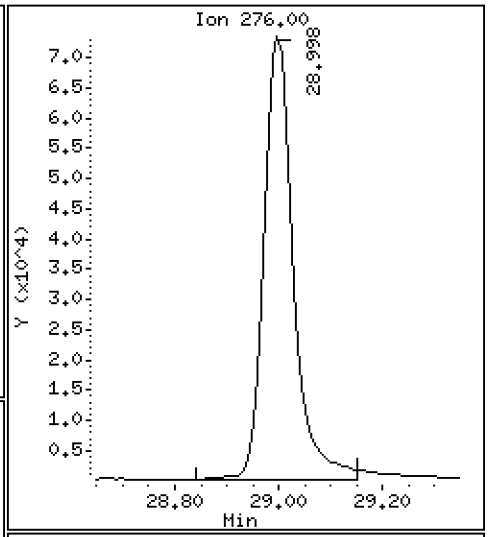
Concentration: 3.177 ug/mL

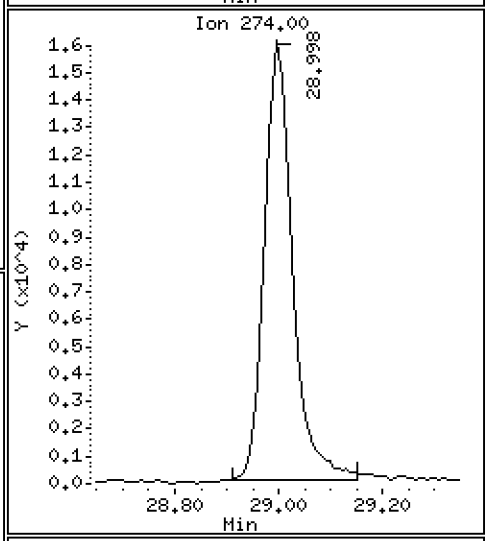


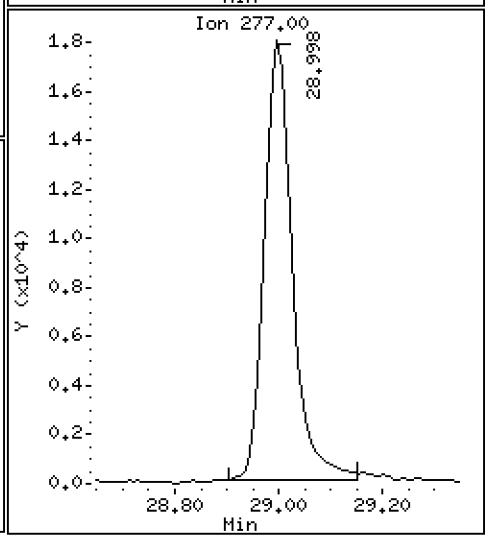












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

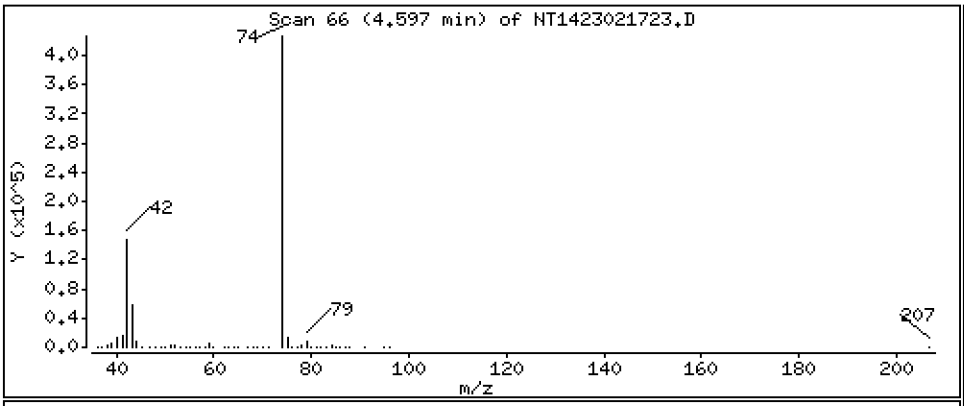
Operator: DSD

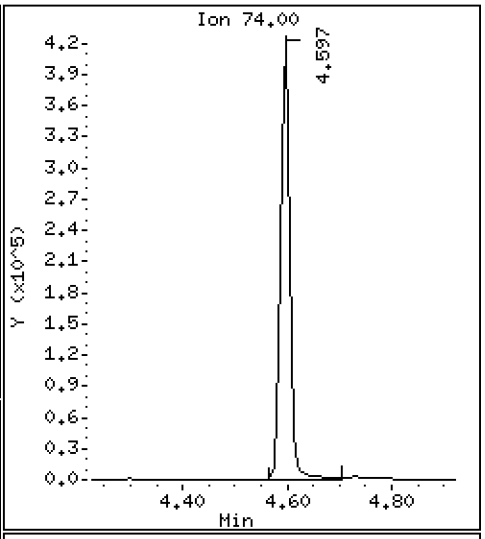
Column phase: ZB-5msi

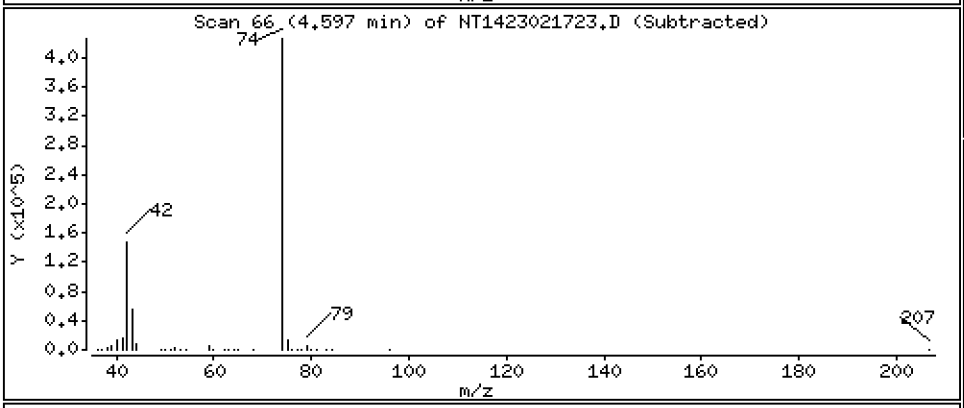
Column diameter: 0.25

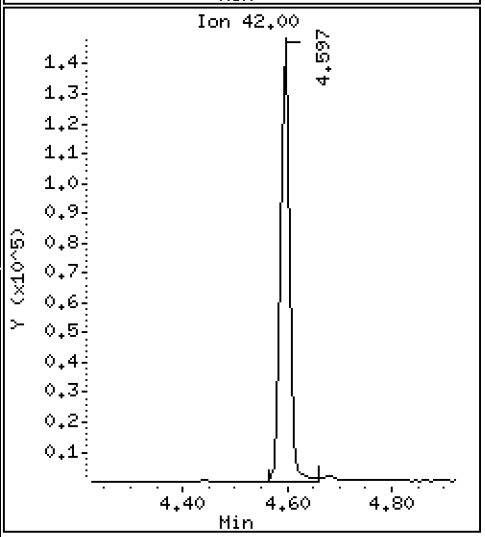
90 N-Nitrosodimethylamine

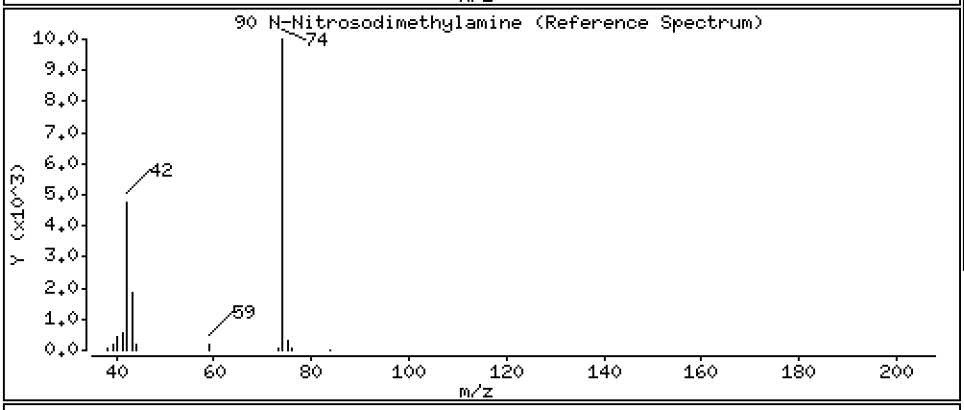
Concentration: 9.465 ug/mL

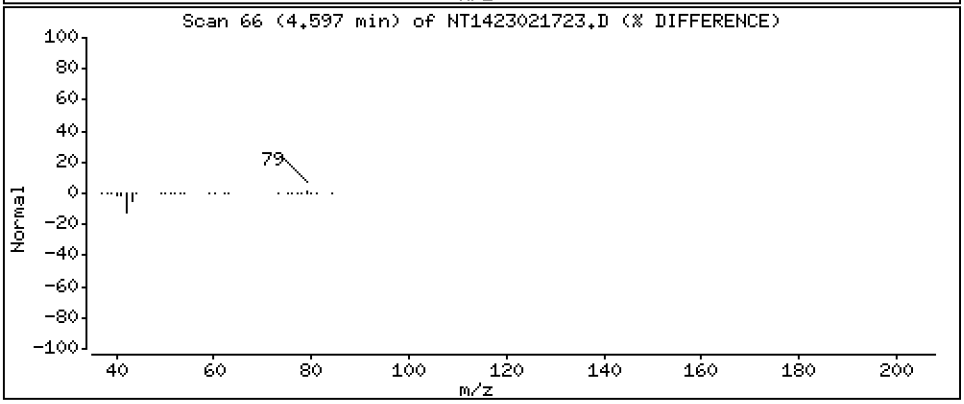












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

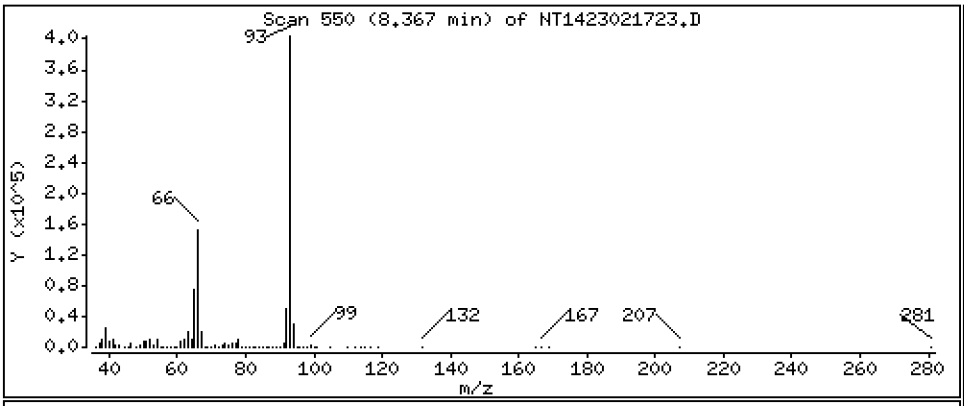
Operator: DSD

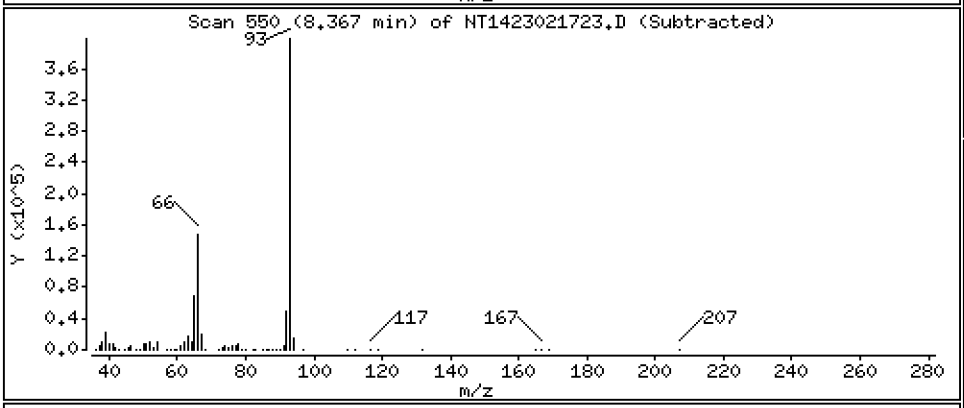
Column phase: ZB-5msi

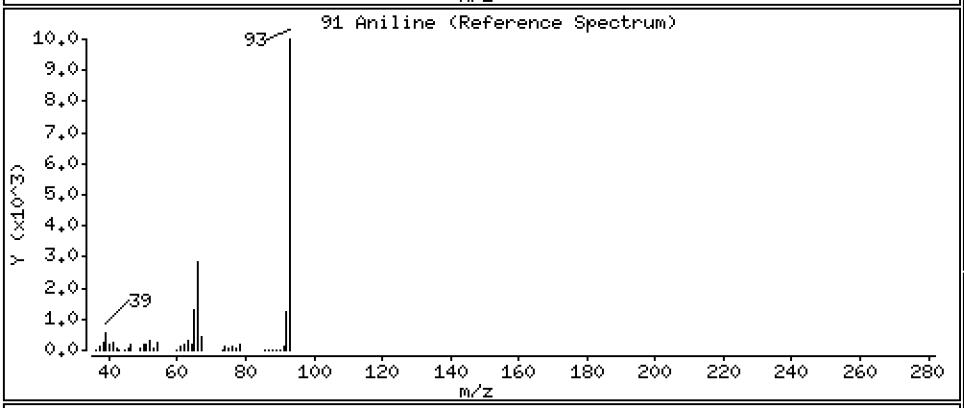
Column diameter: 0.25

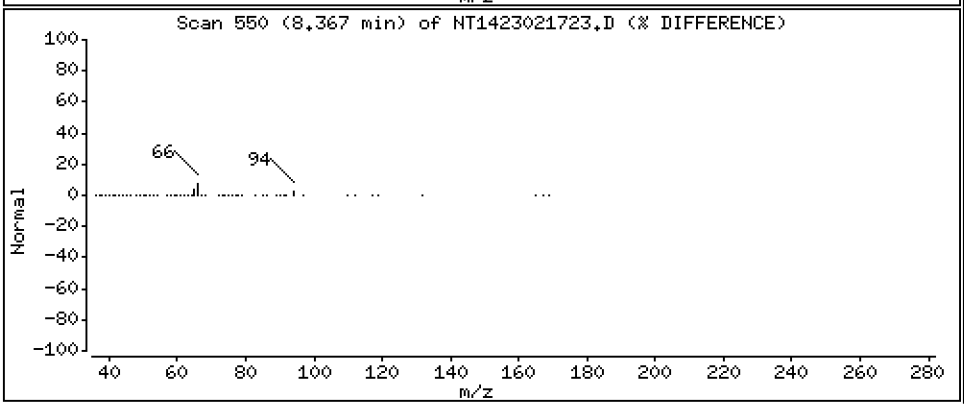
91 Aniline

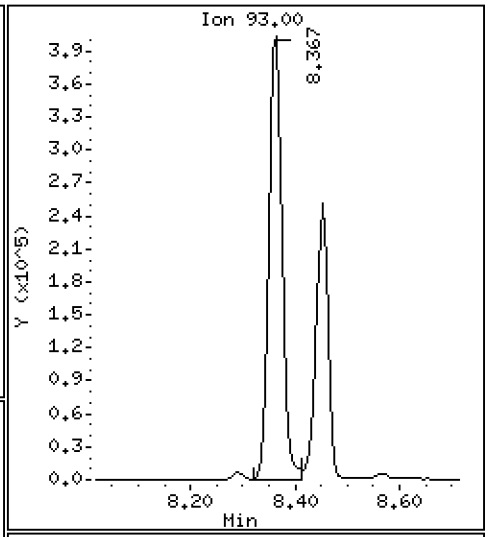
Concentration: 5.019 ug/mL

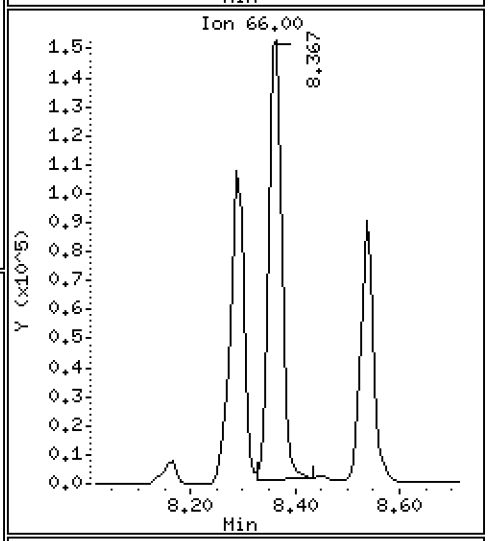


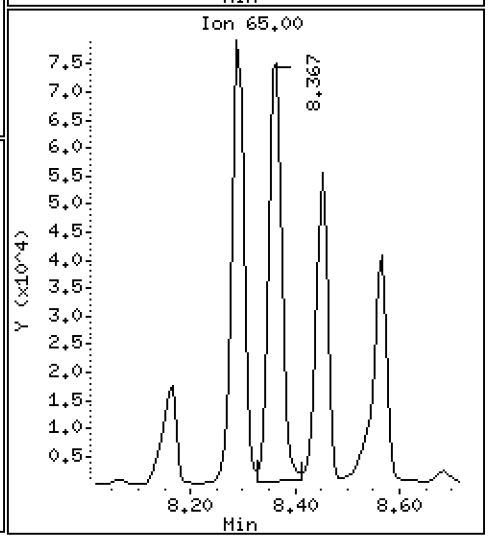












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021723.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

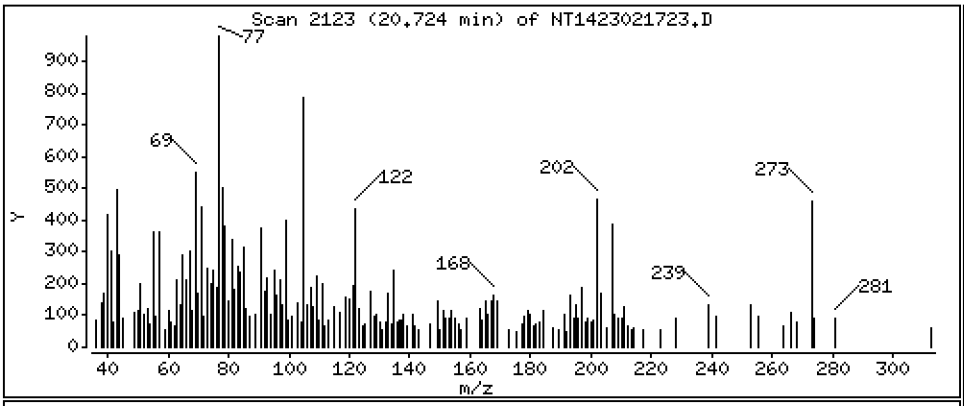
Operator: DSD

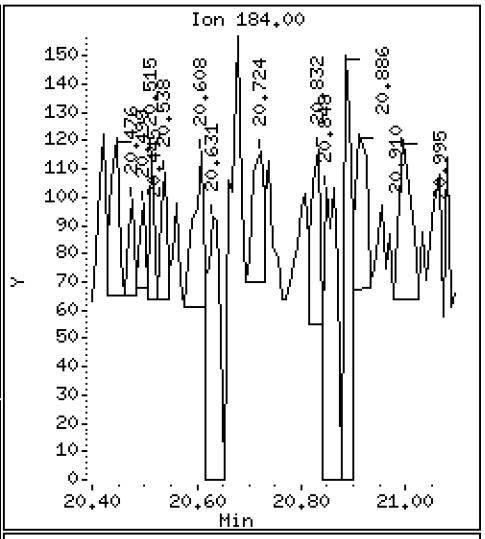
Column phase: ZB-5msi

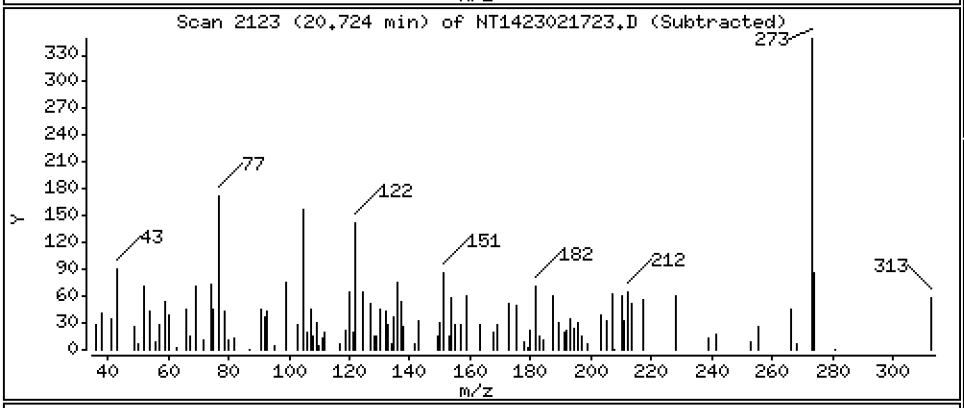
Column diameter: 0.25

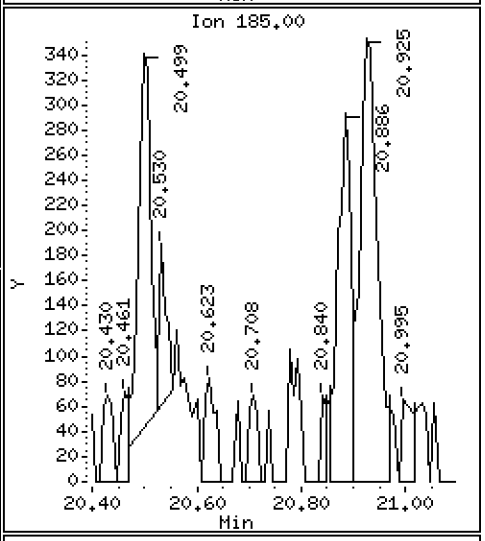
93 Benzidine

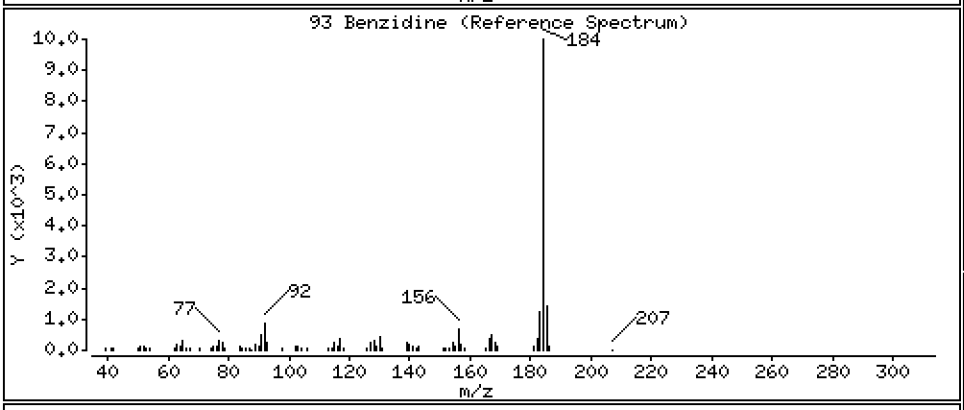
Concentration: 0.001043 ug/mL

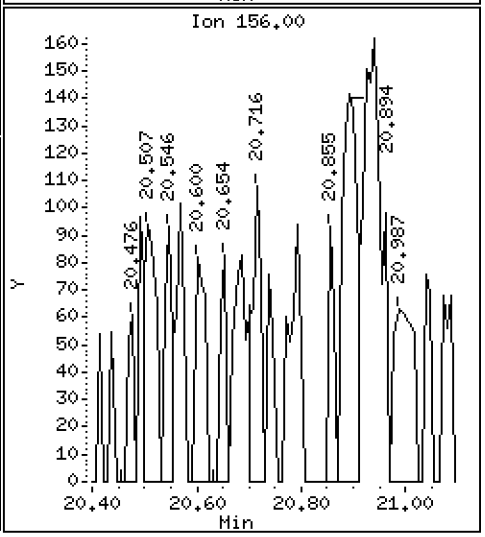


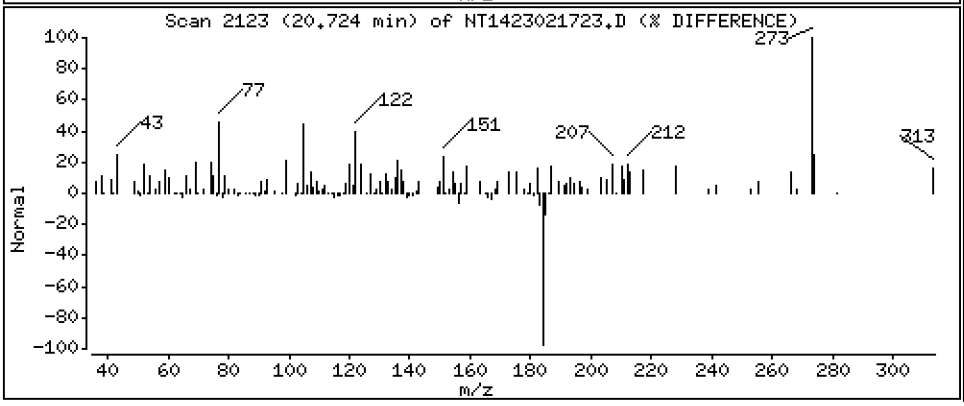












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021723.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

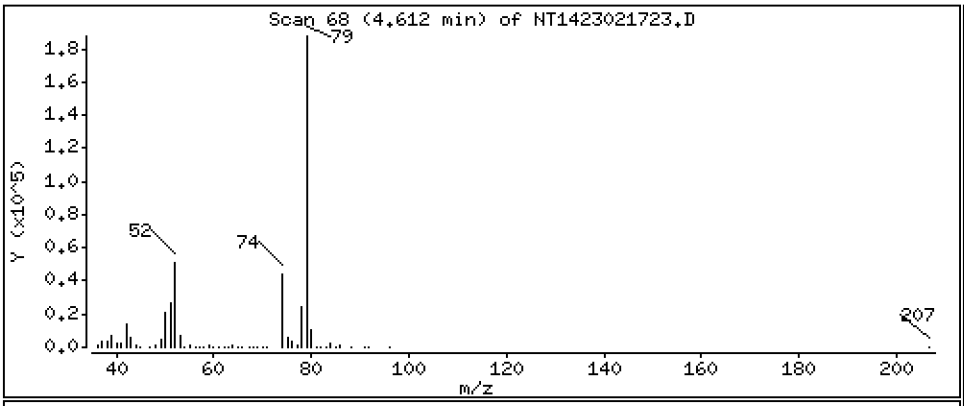
Operator: DSD

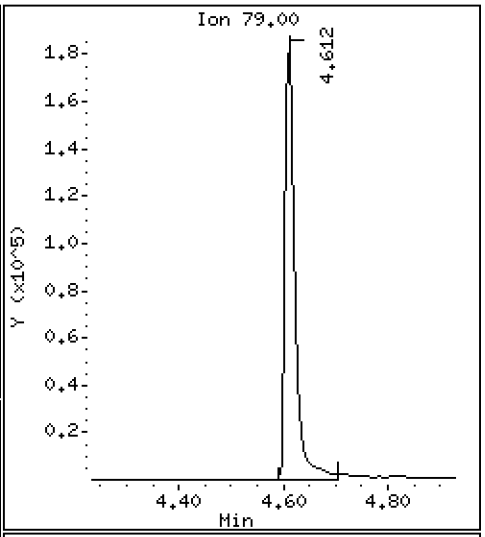
Column phase: ZB-5msi

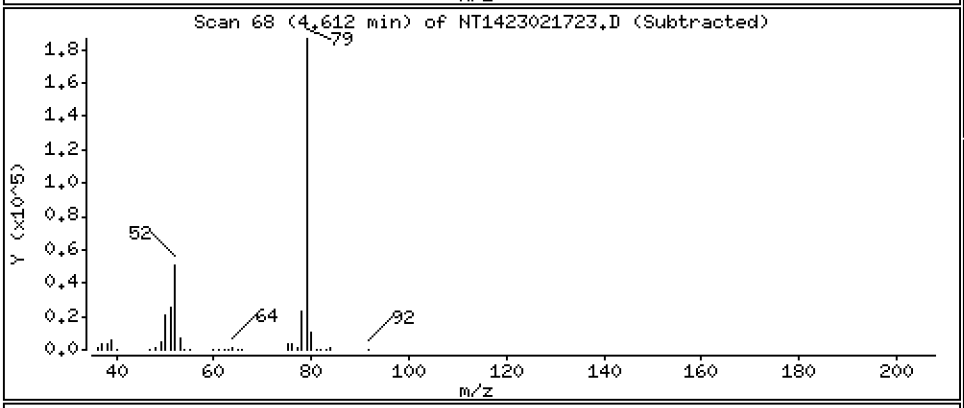
Column diameter: 0.25

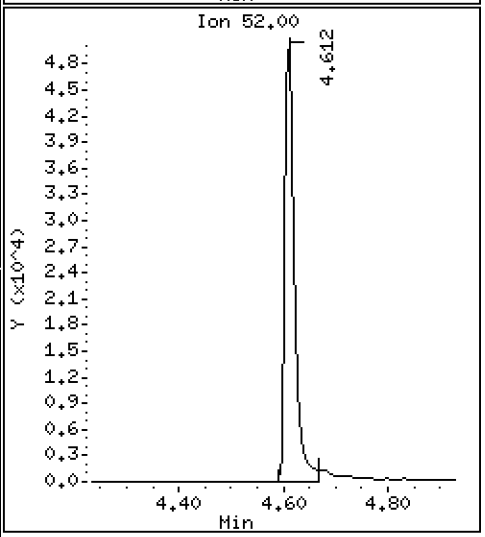
103 Pyridine

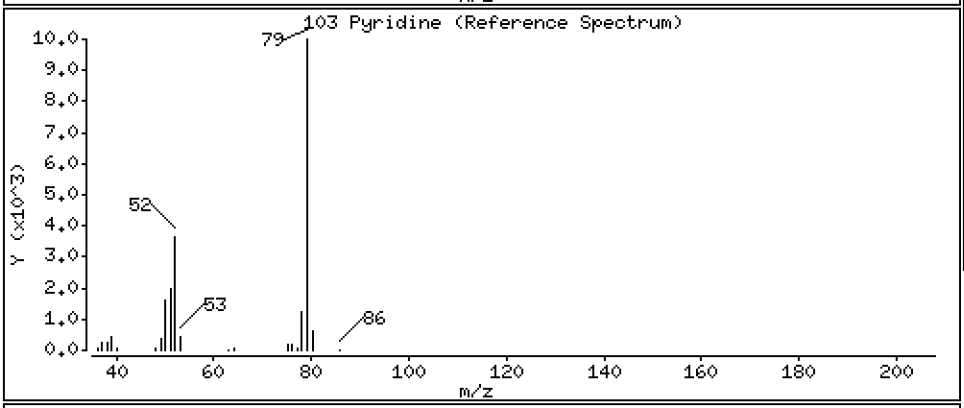
Concentration: 2.819 ug/mL

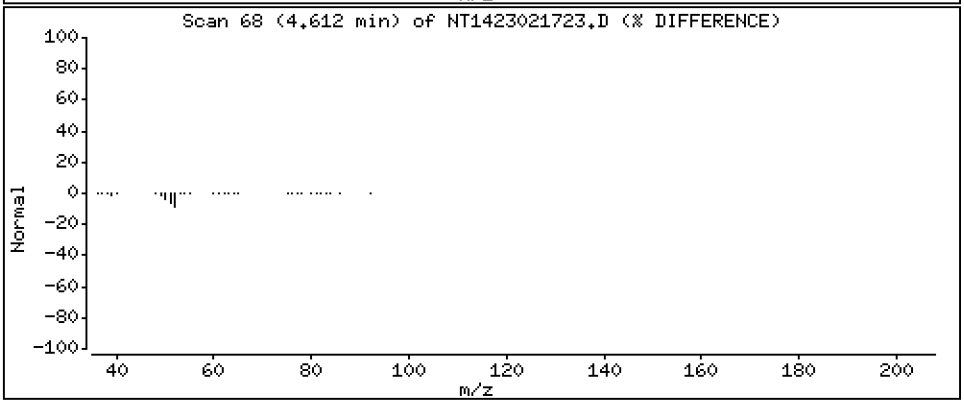












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

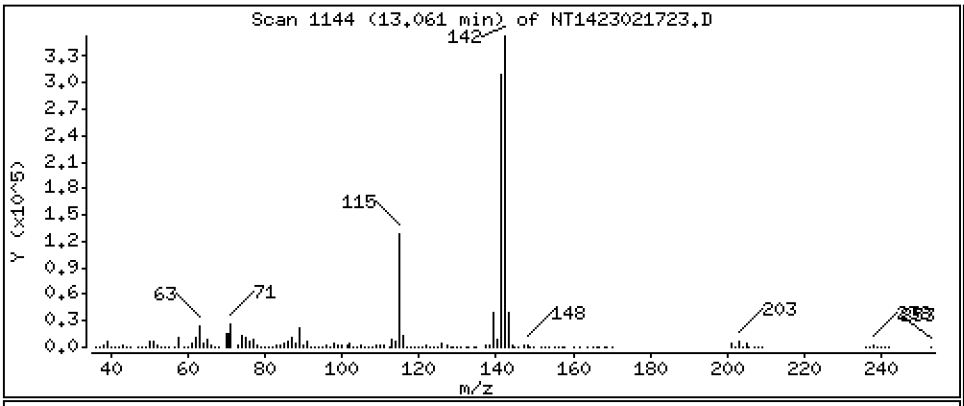
Operator: DSD

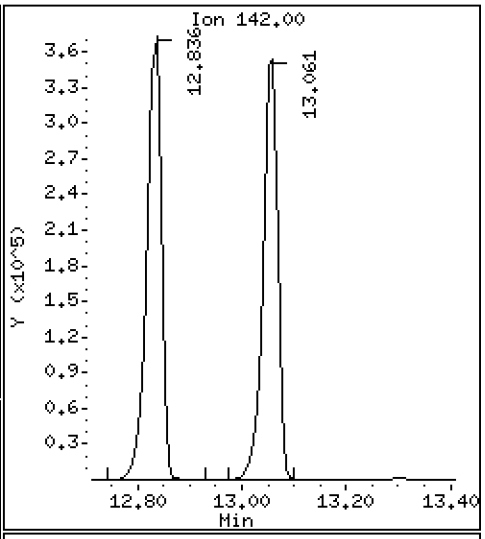
Column phase: ZB-5msi

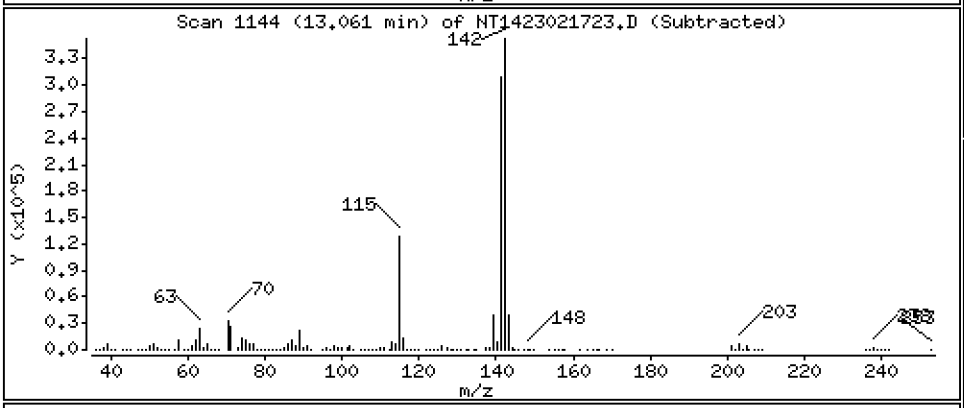
Column diameter: 0.25

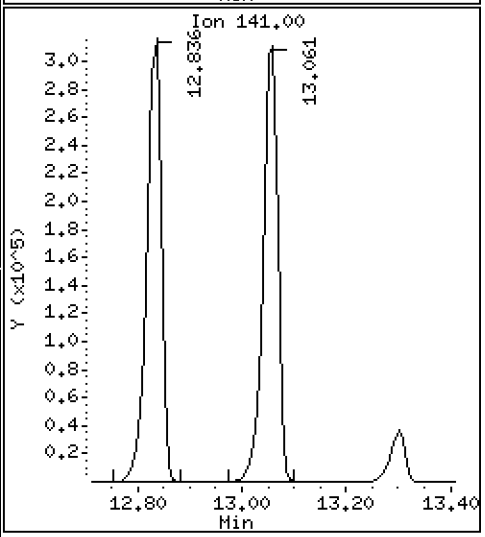
105 1-methylnaphthalene

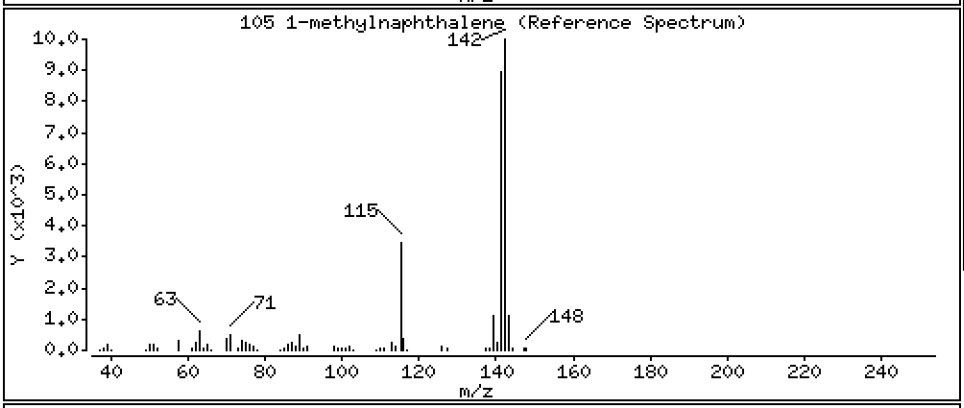
Concentration: 3.748 ug/mL

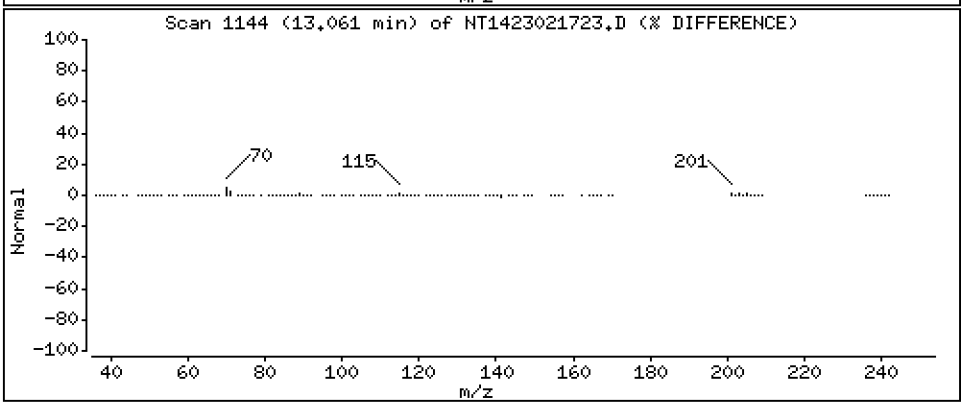












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

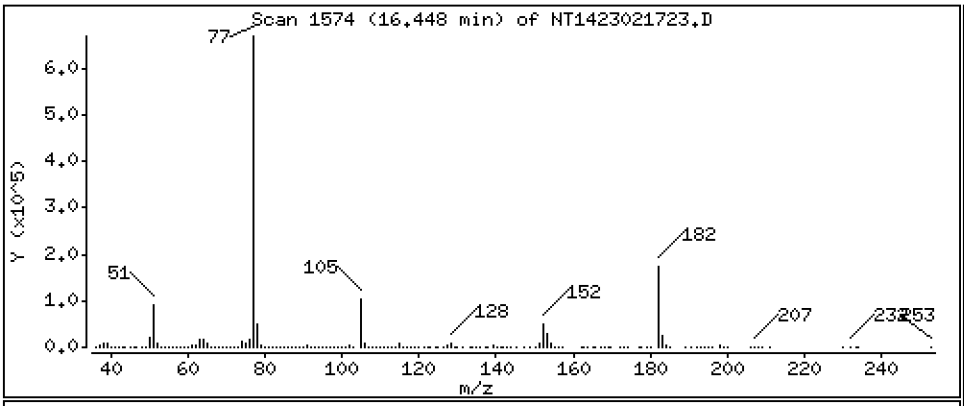
Operator: DSD

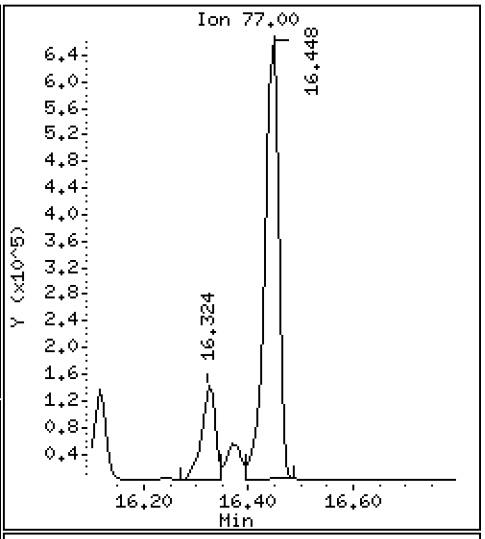
Column phase: ZB-5msi

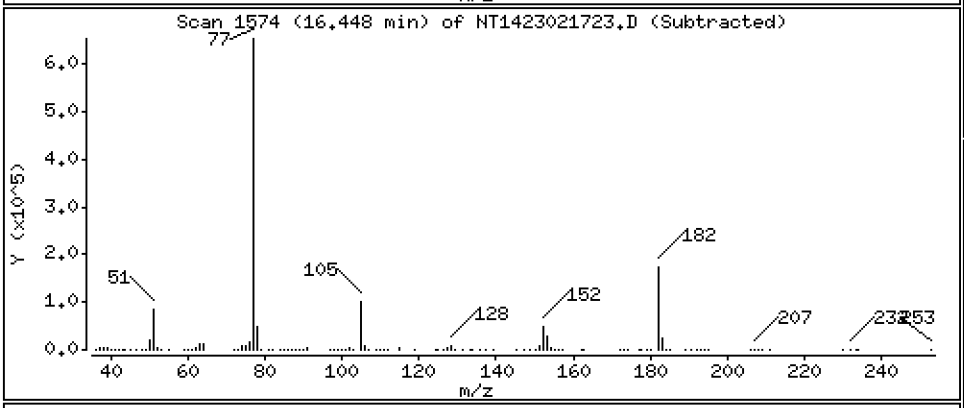
Column diameter: 0.25

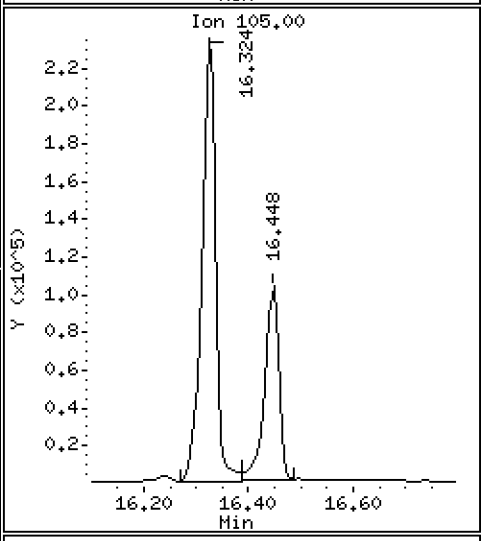
111 Azobenzene (1,2-DP-Hydrazine)

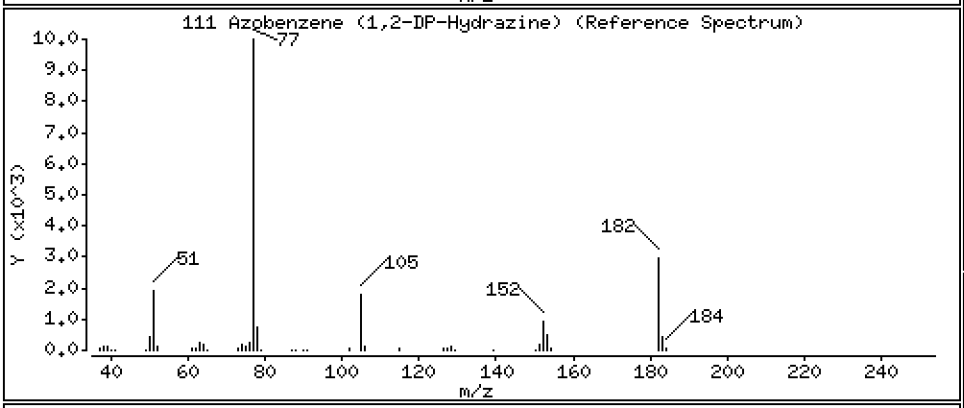
Concentration: 3.840 ug/mL

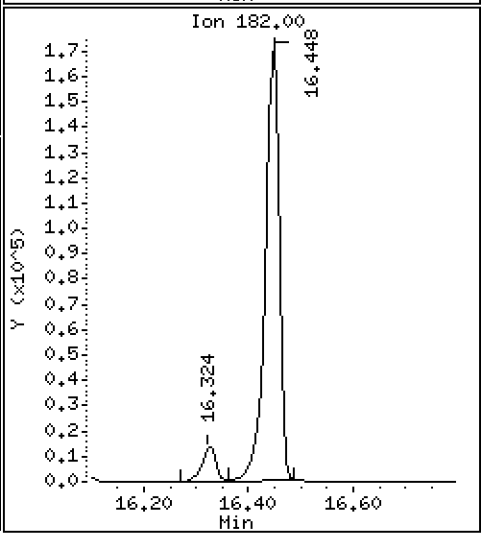


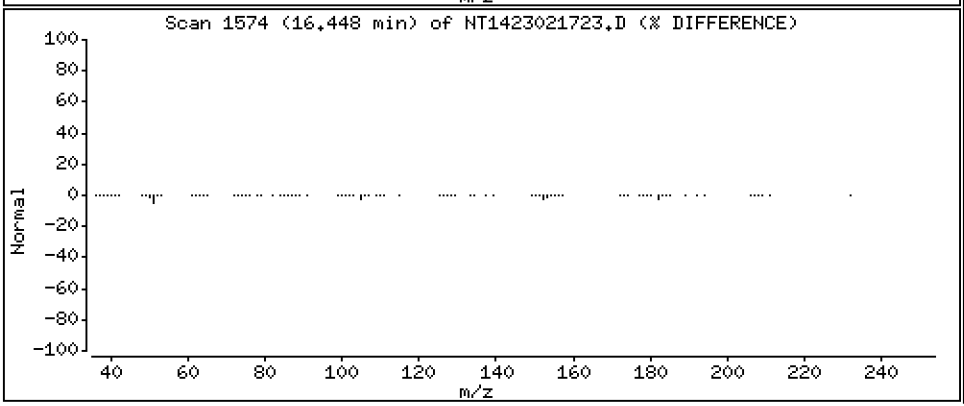












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

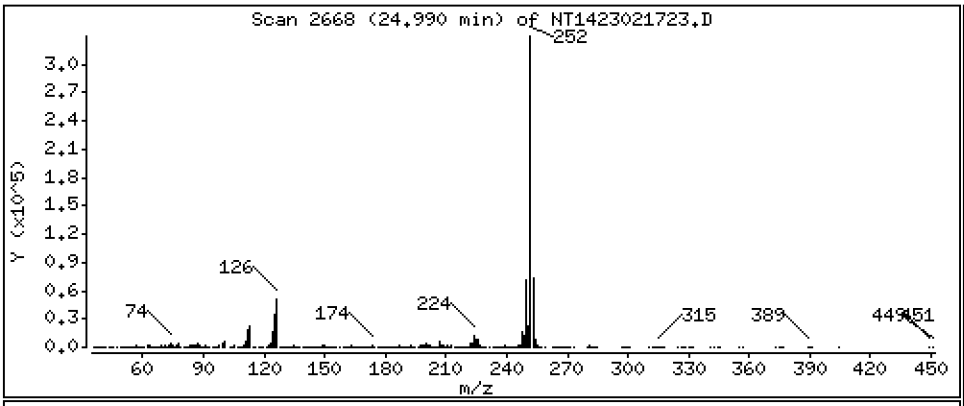
Operator: DSD

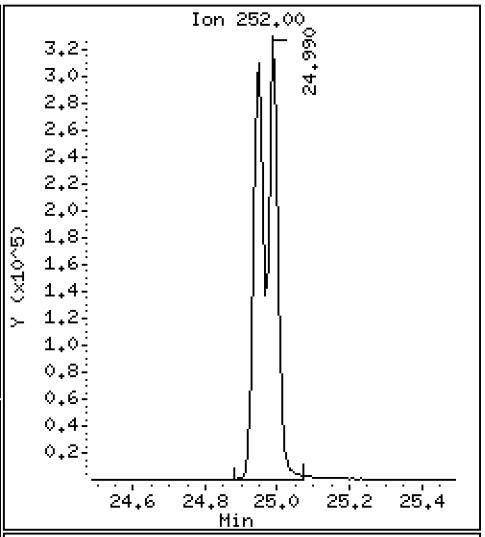
Column phase: ZB-5msi

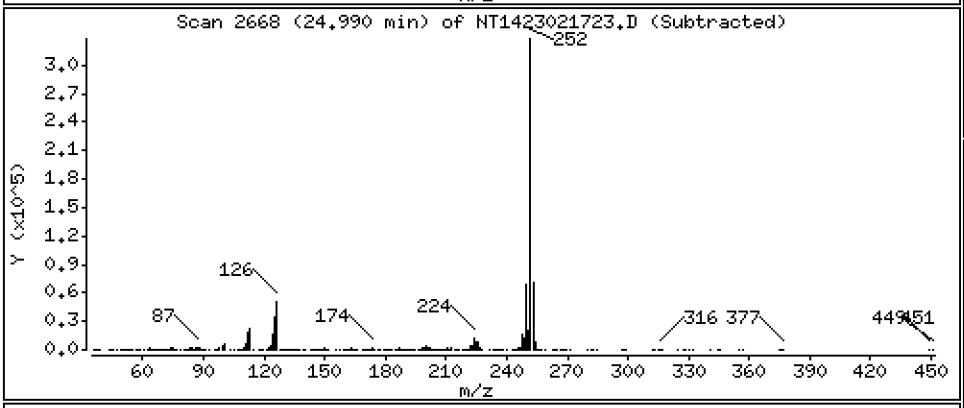
Column diameter: 0.25

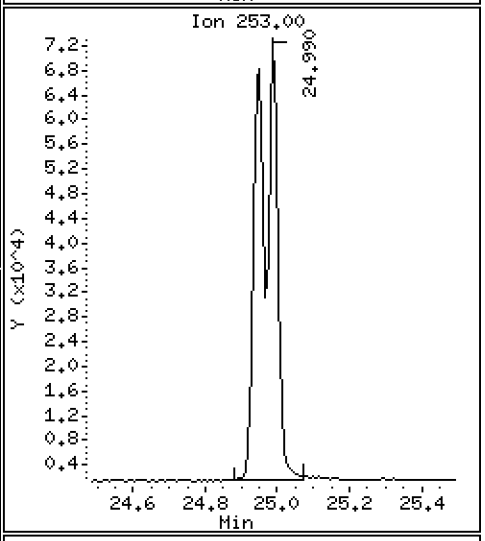
187 Total Benzofluoranthenes

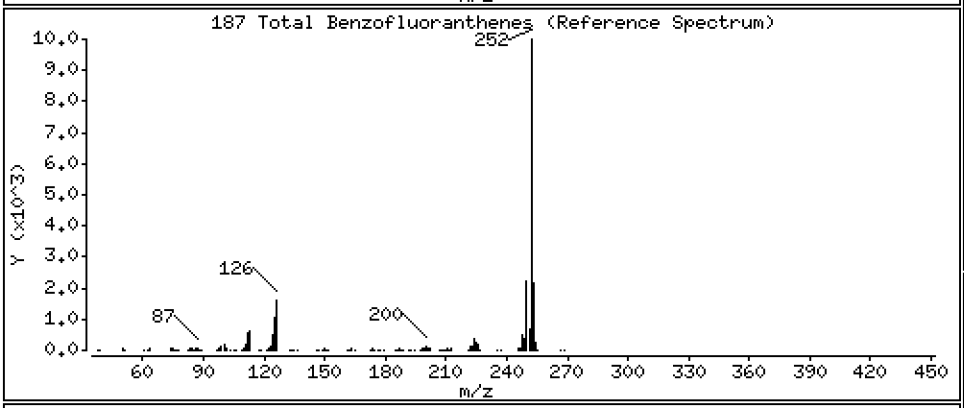
Concentration: 8.573 ug/mL

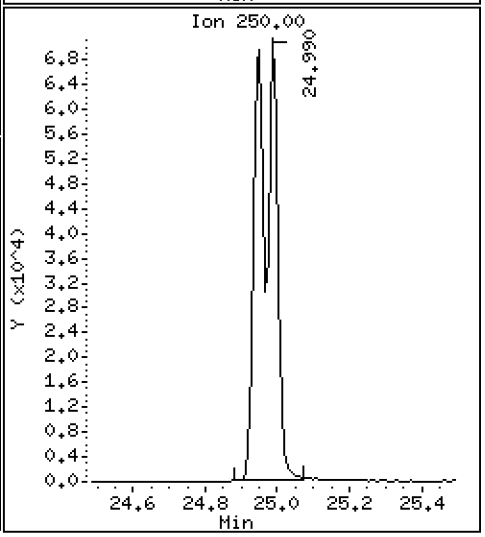


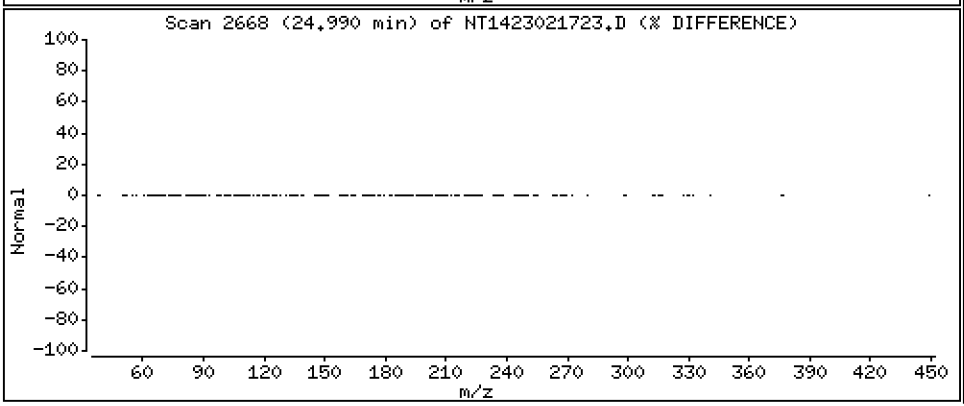












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD1

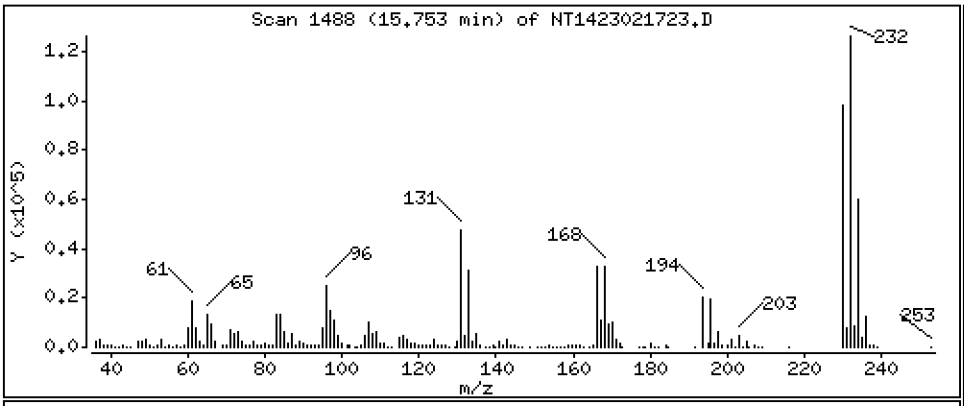
Operator: DSD

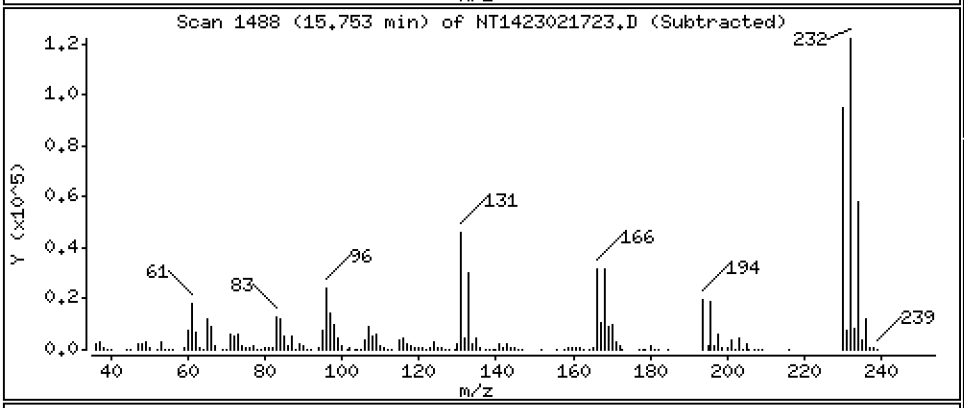
Column phase: ZB-5msi

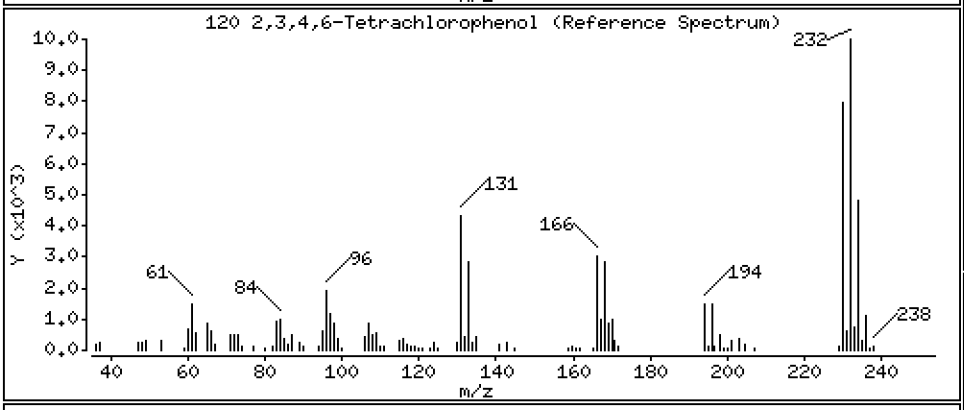
Column diameter: 0.25

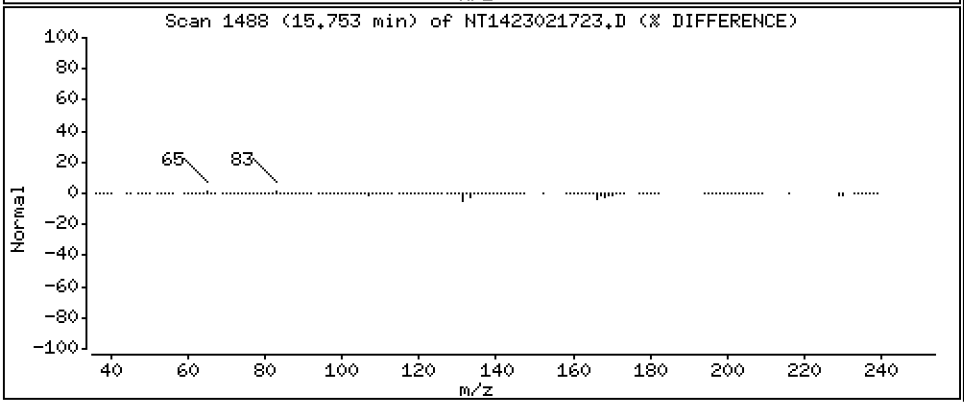
120 2,3,4,6-Tetrachlorophenol

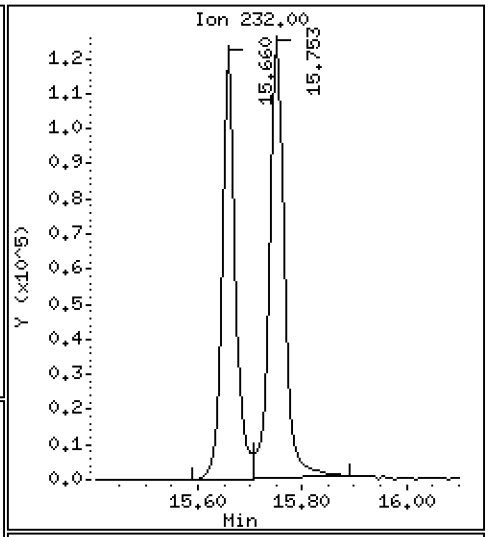
Concentration: 3.376 ug/mL

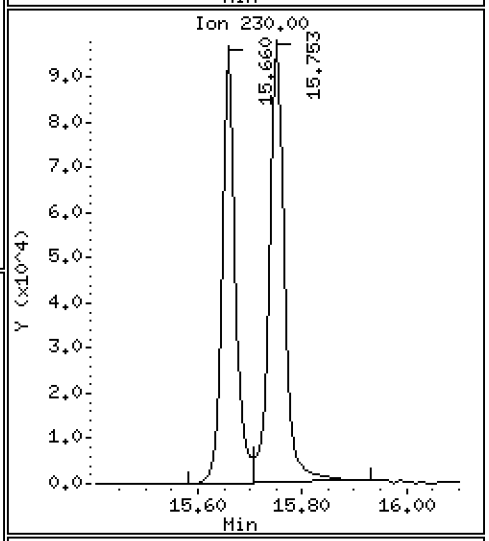


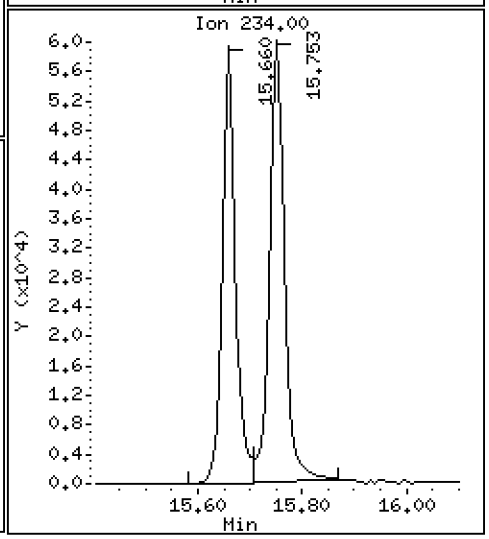












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230217A.b\NT1423021723.D
Lab Smp Id: BLA0339-BSD1
Inj Date : 17-FEB-2023 23:55 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : BLA0339-BSD1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230217A.b\ABN.m
Meth Date : 01-Mar-2023 13:20 van Quant Type: ISTD
Cal Date : 16-FEB-2023 19:30 Cal File: NT1423021610.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

								CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.689	6.674	(0.752)	439279	5.85406	5.854
$	2 Phenol-d5	99	8.273	8.273	(0.930)	655752	5.50882	5.509
	3 Phenol	94	8.289	8.296	(0.931)	448656	3.56032	3.560
$	5 2-Chlorophenol-d4	132	8.536	8.536	(0.959)	470407	5.53835	5.538
	4 Bis(2-Chloroethyl)ether	93	8.451	8.459	(0.950)	376223	3.90824	3.908
	6 2-Chlorophenol	128	8.567	8.567	(0.963)	316168	3.56275	3.563
	7 1,3-Dichlorobenzene	146	8.830	8.838	(0.992)	344807	3.49018	3.490
*	8 1,4-Dichlorobenzene-d4	152	8.900	8.900	(1.000)	280695	4.00000	
	9 1,4-Dichlorobenzene	146	8.931	8.931	(1.003)	335418	3.57743	3.577
$	10 1,2-Dichlorobenzene-d4	152	9.257	9.264	(1.040)	213079	3.34687	3.347
	12 1,2-Dichlorobenzene	146	9.288	9.288	(1.044)	333951	3.56284	3.563
	11 Benzyl alcohol	108	9.179	9.179	(1.031)	243378	3.42465	3.425
	14 2,2'-oxybis(1-Chloropropane)	121	9.474	9.482	(1.065)	113626	4.23746	4.237
	13 2-Methylphenol	108	9.404	9.404	(1.057)	283912	3.22652	3.227
	17 Hexachloroethane	117	9.878	9.878	(1.110)	144871	3.55410	3.554
	16 N-Nitroso-di-n-propylamine	70	9.738	9.746	(1.094)	296827	3.70573	3.706
	15 4-Methylphenol	108	9.684	9.676	(1.088)	331215	3.56467	3.565
$	18 Nitrobenzene-d5	82	10.002	10.002	(0.878)	420459	3.54487	3.545
	19 Nitrobenzene	77	10.033	10.040	(0.881)	440830	3.70360	3.704
	20 Isophorone	82	10.491	10.491	(0.921)	855948	5.45055	5.451
	21 2-Nitrophenol	139	10.669	10.669	(0.937)	190784	3.52951	3.530
	22 2,4-Dimethylphenol	107	10.723	10.723	(0.942)	628499	6.99267	6.993
	23 Bis(2-Chloroethoxy)methane	93	10.925	10.925	(0.959)	448231	4.38771	4.388
	24 Benzoic acid	105	11.002	11.010	(0.966)	1231519	20.7043	20.70
	25 2,4-Dichlorophenol	162	11.119	11.126	(0.976)	1061294	13.7967	13.80
	26 1,2,4-Trichlorobenzene	180	11.304	11.312	(0.993)	332200	3.56504	3.565
*	27 Naphthalene-d8	136	11.389	11.397	(1.000)	1026678	4.00000	
	28 Naphthalene	128	11.436	11.436	(1.004)	939330	3.71062	3.711
	29 4-Chloroaniline	127	11.575	11.574	(1.016)	919073	8.49801	8.498
	30 Hexachlorobutadiene	225	11.799	11.799	(1.036)	214219	3.72925	3.729
	31 4-Chloro-3-methylphenol	107	12.542	12.542	(1.101)	1183103	14.2096	14.21
	32 2-Methylnaphthalene	142	12.836	12.836	(1.127)	692895	3.65465	3.655
	33 Hexachlorocyclopentadiene	237	13.300	13.300	(0.886)	640046	10.6881	10.69

		QUANT SIG					CONCENTRATIONS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
	34 2,4,6-Trichlorophenol	196	13.463	13.462	(0.896)	882699	14.4992	14.50
	35 2,4,5-Trichlorophenol	196	13.532	13.532	(0.901)	966603	14.6607	14.66
$	36 2-Fluorobiphenyl	172	13.625	13.625	(0.907)	834866	3.77510	3.775
	37 2-Chloronaphthalene	162	13.826	13.834	(0.921)	698286	3.86845	3.868
	38 2-Nitroaniline	65	14.105	14.105	(0.939)	775338	13.2111	13.21
	39 Dimethylphthalate	163	14.538	14.538	(0.968)	806268	4.27029	4.270
	40 Acenaphthylene	152	14.701	14.709	(0.979)	1030585	3.74326	3.743
	41 2,6-Dinitrotoluene	165	14.678	14.678	(0.977)	615957	13.8643	13.86
*	42 Acenaphthene-d10	164	15.018	15.018	(1.000)	618128	4.00000	
	43 3-Nitroaniline	138	14.964	14.964	(0.996)	553485	11.7373	11.74
	44 Acenaphthene	153	15.088	15.088	(1.005)	649521	3.94040	3.940
	45 2,4-Dinitrophenol	184	15.173	15.173	(1.010)	699597	22.8153	22.82
	46 Dibenzofuran	168	15.412	15.412	(1.026)	1055356	3.89949	3.899
	47 4-Nitrophenol	109	15.281	15.281	(1.017)	317525	11.5206	11.52
	48 2,4-Dinitrotoluene	165	15.482	15.482	(1.031)	867169	13.8050	13.81
	50 Diethylphthalate	149	16.000	16.000	(1.065)	1198923	4.77646	4.776
	49 Fluorene	166	16.123	16.131	(1.074)	1117963	3.95015	3.950
	51 4-Chlorophenyl-phenylether	204	16.116	16.123	(1.073)	618677	4.08820	4.088
	52 4-Nitroaniline	138	16.239	16.239	(1.081)	652043	12.0519	12.05
	53 4,6-Dinitro-2-methylphenol	198	16.324	16.332	(0.904)	1221401	27.0279	27.03
	54 N-Nitrosodiphenylamine	169	16.370	16.378	(0.907)	659958	3.83523	3.835
$	55 2,4,6-Tribromophenol	330	16.663	16.663	(1.110)	220227	6.10449	6.104
	56 4-Bromophenyl-phenylether	248	17.126	17.126	(0.949)	342605	4.47013	4.470
	57 Hexachlorobenzene	284	17.435	17.435	(0.966)	323935	4.15942	4.159
	58 Pentachlorophenol	266	17.799	17.799	(0.986)	525922	13.3401	13.34
*	59 Phenanthrene-d10	188	18.054	18.062	(1.000)	1197444	4.00000	
	60 Phenanthrene	178	18.108	18.108	(1.003)	1164357	4.04652	4.047
	61 Anthracene	178	18.201	18.201	(1.008)	998570	3.50284	3.503
	62 Carbazole	167	18.534	18.534	(1.027)	1043059	4.03195	4.032
	63 Di-n-butylphthalate	149	19.338	19.346	(1.071)	1431565	4.95432	4.954
	64 Fluoranthene	202	20.499	20.499	(0.887)	1359986	4.98104	4.981
	65 Pyrene	202	20.924	20.924	(0.905)	1413187	4.89485	4.895
$	66 Terphenyl-d14	244	21.219	21.218	(0.918)	1034102	5.04458	5.045
	67 Butylbenzylphthalate	149	22.148	22.148	(0.958)	514119	5.34450	5.345
	68 Benzo(a)anthracene	228	23.092	23.092	(0.999)	842903	4.16209	4.162
*	69 Chrysene-d12	240	23.123	23.123	(1.000)	632854	4.00000	
	70 3,3'-Dichlorobenzidine	252	23.054	23.054	(0.997)	506795	8.14105	8.141
	71 Chrysene	228	23.170	23.170	(1.002)	759598	4.16996	4.170
	72 bis(2-Ethylhexyl)phthalate	149	23.178	23.177	(0.960)	719214	3.94910	3.949
*	134 Di-n-octylphthalate-d4	153	24.153	24.153	(1.000)	1086422	4.00000	
	73 Di-n-octylphthalate	149	24.168	24.168	(1.001)	1124067	4.42500	4.425
	74 Benzo(b)fluoranthene	252	24.950	24.950	(0.971)	585013	4.18335	4.183
	75 Benzo(k)fluoranthene	252	24.989	24.989	(0.973)	656957	4.39646	4.396
	76 Benzo(a)pyrene	252	25.577	25.577	(0.995)	498516	3.73801	3.738
*	77 Perylene-d12	264	25.694	25.694	(1.000)	440715	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	28.252	28.244	(1.100)	406221	3.65462	3.655
	79 Dibenzo(a,h)anthracene	278	28.259	28.259	(1.100)	348673	3.80281	3.803
	80 Benzo(g,h,i)perylene	276	28.997	28.997	(1.129)	286871	3.17733	3.177
	90 N-Nitrosodimethylamine	74	4.596	4.573	(0.516)	549903	9.46514	9.465
	91 Aniline	93	8.366	8.366	(0.940)	676509	5.01901	5.019
	93 Benzidine	184	20.723	20.746	(0.896)	77	0.00104	0.001043
	103 Pyridine	79	4.612	4.581	(0.518)	259184	2.81935	2.819
	105 1-methylnaphthalene	142	13.060	13.060	(1.147)	667105	3.74791	3.748
	111 Azobenzene (1,2-DP-Hydrazine)	77	16.447	16.447	(1.095)	1171422	3.84004	3.840

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.989	24.989	(0.973)	1170436	8.57270	8.573
120 2,3,4,6-Tetrachlorophenol	232	15.752	15.752	(1.049)	240481	3.37552	3.376

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021723.D
Lab Smp Id: BLA0339-BSD1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230217A.b\ABN.m
Misc Info:

Calibration Date: 17-FEB-2023
Calibration Time: 20:19
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	351756	175878	703512	280695	-20.20
27 Naphthalene-d8	1299383	649692	2598766	1026678	-20.99
42 Acenaphthene-d10	808045	404023	1616090	618128	-23.50
59 Phenanthrene-d10	1607740	803870	3215480	1197444	-25.52
69 Chrysene-d12	876381	438191	1752762	632854	-27.79
134 Di-n-octylphthala	1545452	772726	3090904	1086422	-29.70
77 Perylene-d12	639717	319859	1279434	440715	-31.11

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.39	-0.07
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.00
59 Phenanthrene-d10	18.06	17.56	18.56	18.05	-0.04
69 Chrysene-d12	23.12	22.62	23.62	23.12	0.00
134 Di-n-octylphthala	24.15	23.65	24.65	24.15	0.00
77 Perylene-d12	25.69	25.19	26.19	25.69	0.00

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

REVIEW SUMMARY FOR FILE - NT1423021723.D

Lab ID: BLA0339-BSD1
nt14.i, ABN.m, 17-FEB-2023 23:55

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: NT1423021717.D

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

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

STANDARD REFERENCE MATERIAL RECOVERY

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLA0339-SRM1
Batch: BLA0339
Initial/Final: 1 g / 1 mL
Preparation: EPA 3546 (Microwave)
Analyzed: 02/18/2023 0:30
Standard ID: K003477
Expires: 01/31/2024
Standard Lot#: CRM 143 (LRAC8918)
Description: CRM 143 BNAs - Sandy Loam

ANALYTE	TRUE (ug/kg wet)	FOUND (ug/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
Phenol	2660.0	2960	43.9	200		111	26 - 174
4-Methylphenol	6617.0	7360	73.9	200		111	40 - 160
Naphthalene	4458.0	4290	42.4	200		96.3	25 - 175
Acenaphthylene	1948.0	2050	62.4	200		105	37 - 167
Dimethylphthalate	4537.0	5310	43.9	200		117	41 - 159
Acenaphthene	5489.0	6110	52.2	200		111	41 - 159
Dibenzofuran	6130.0	6870	141	200		112	45 - 155
Fluorene	3724.0	4210	146	200		113	44 - 156
Phenanthrene	5052.0	5470	87.2	200		108	46 - 154
Anthracene	2866.0	2680	71.9	200		93.6	42 - 158
Fluoranthene	2497.0	3570	60.9	200		143	39 - 161
Pyrene	2964.0	4380	56.8	200		148	38 - 162
Butylbenzylphthalate	3511.0	5380	94.1	200		153	36 - 164
Benzo(a)anthracene	5751.0	6570	59.6	200		114	49 - 151
Chrysene	1477.0	1700	60.6	200		115	45 - 155
bis(2-Ethylhexyl)phthalate	2905.0	3080	54.6	500	Q	106	26 - 174
Benzofluoranthenes, Total	6534.0	6170	100	400		94.5	40 - 160
Benzo(a)pyrene	5902.0	5130	42.3	200		86.9	43 - 157
Indeno(1,2,3-cd)pyrene	3914.0	4540	147	200		116	22 - 178
Dibenzo(a,h)anthracene	3420.0	4260	172	200		124	37 - 163
Benzo(g,h,i)perylene	1380.0	1560	136	200	Q	113	35 - 165

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021724.D

Date : 18-FEB-2023 00:30

Client ID:

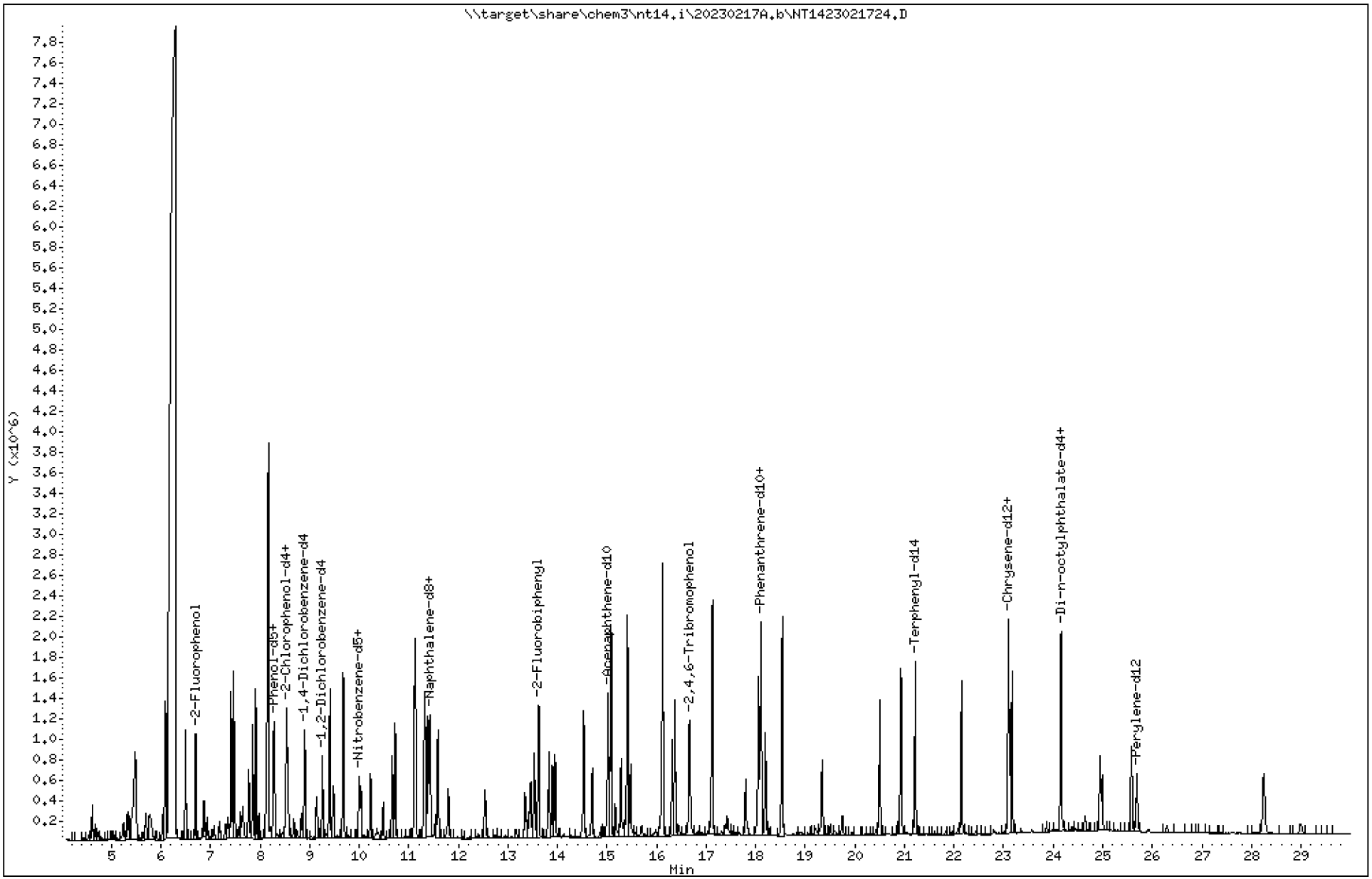
Instrument: nt14.i

Sample Info: BLA0339-SRM1

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

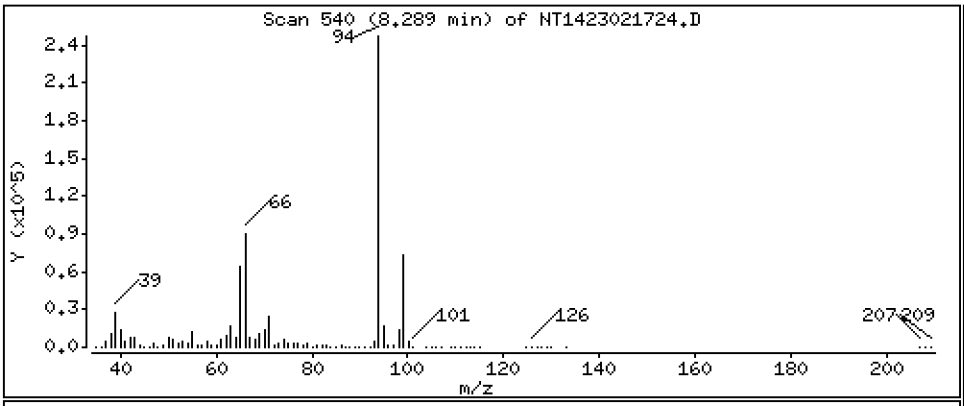
Operator: DSD

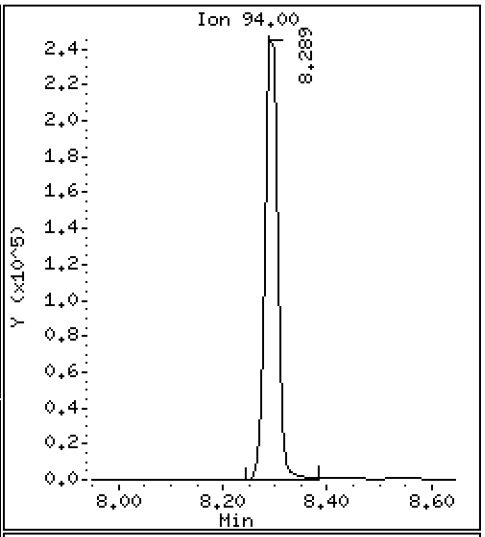
Column phase: ZB-5msi

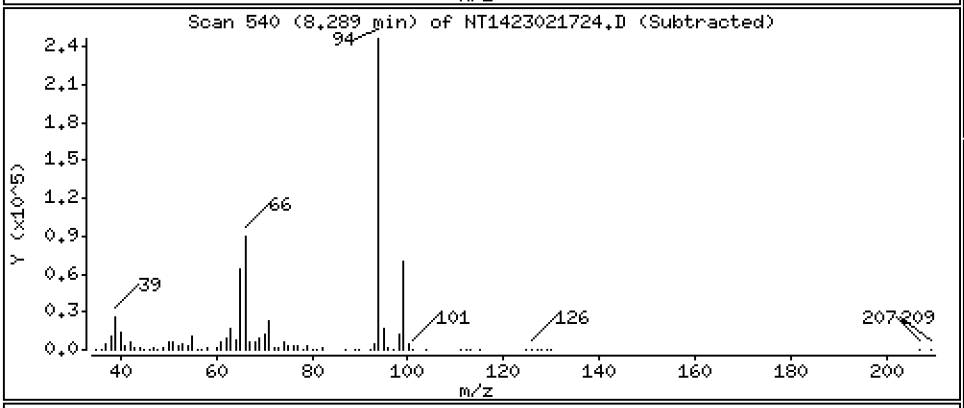
Column diameter: 0.25

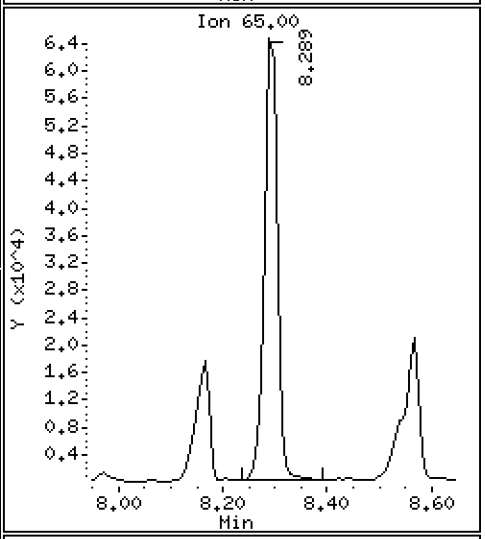
3 Phenol

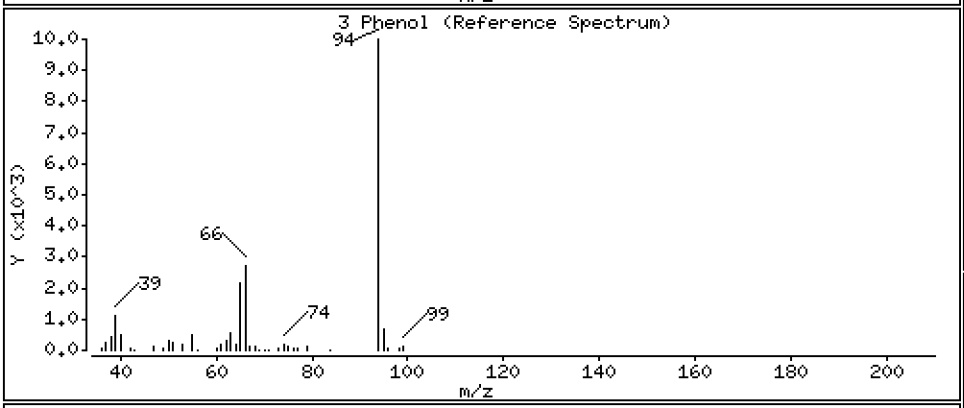
Concentration: 2.963 ug/mL

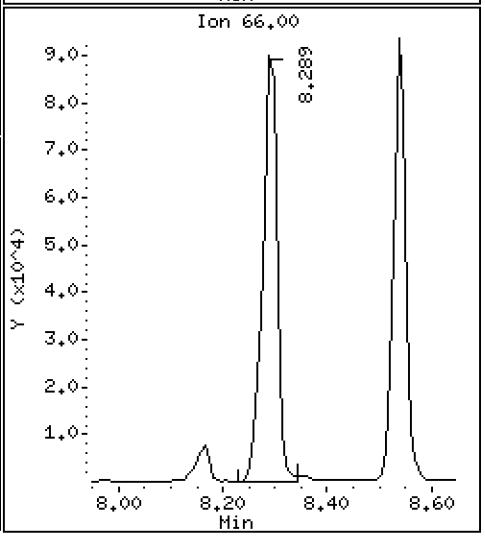


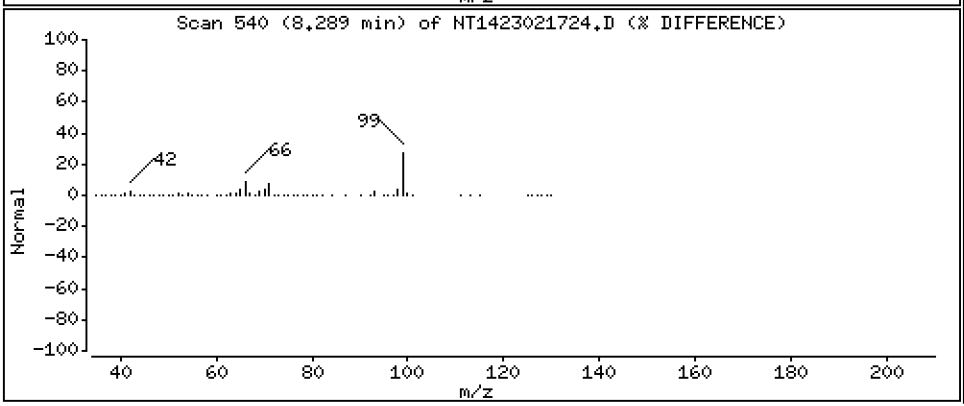












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

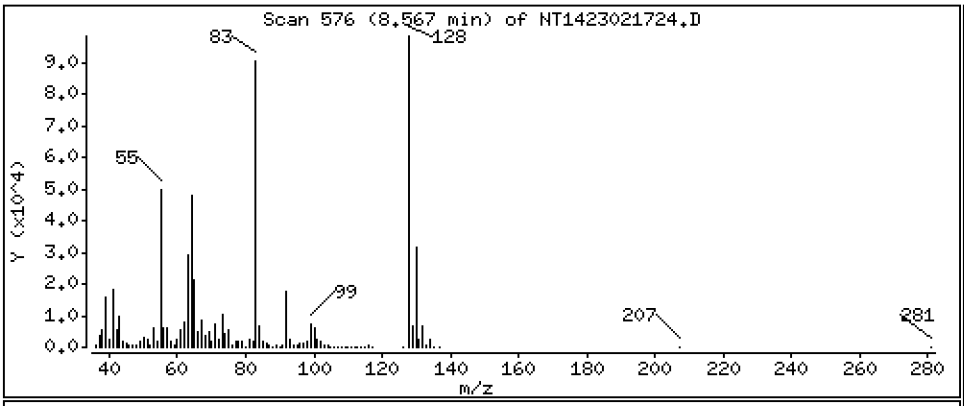
Operator: DSD

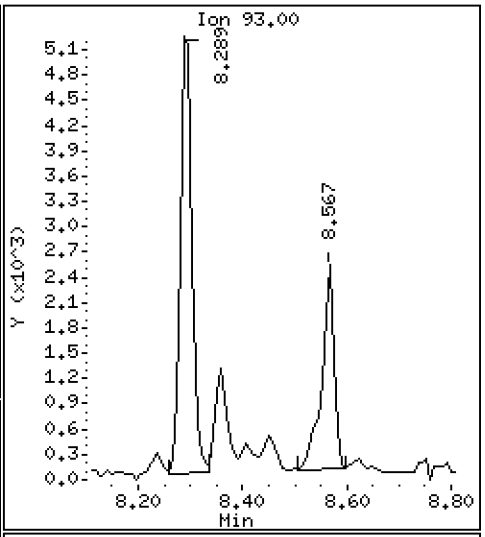
Column phase: ZB-5msi

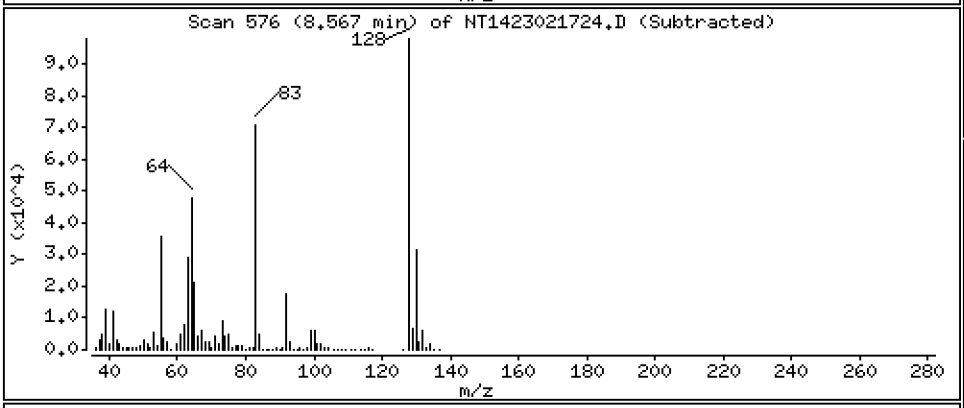
Column diameter: 0.25

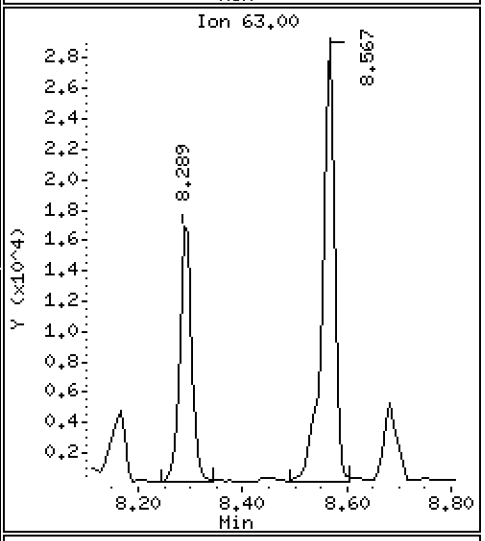
4 Bis(2-Chloroethyl)ether

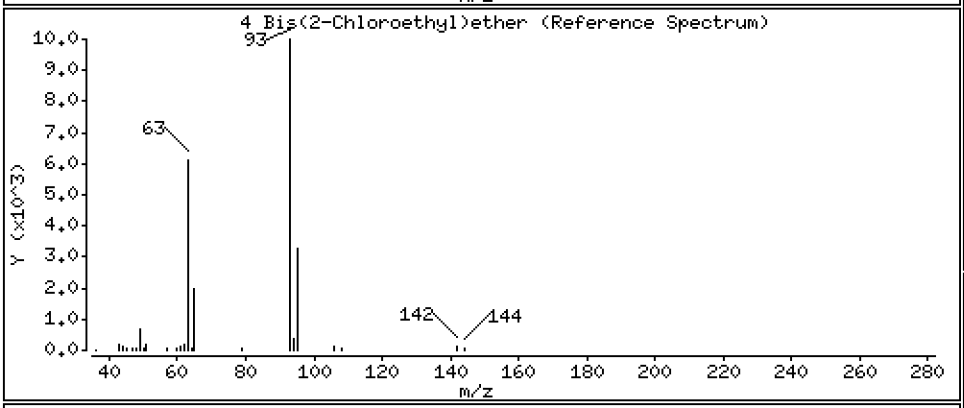
Concentration: 0.04043 ug/mL

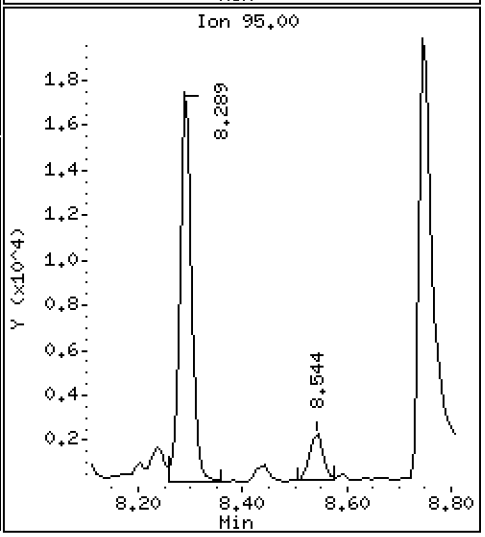


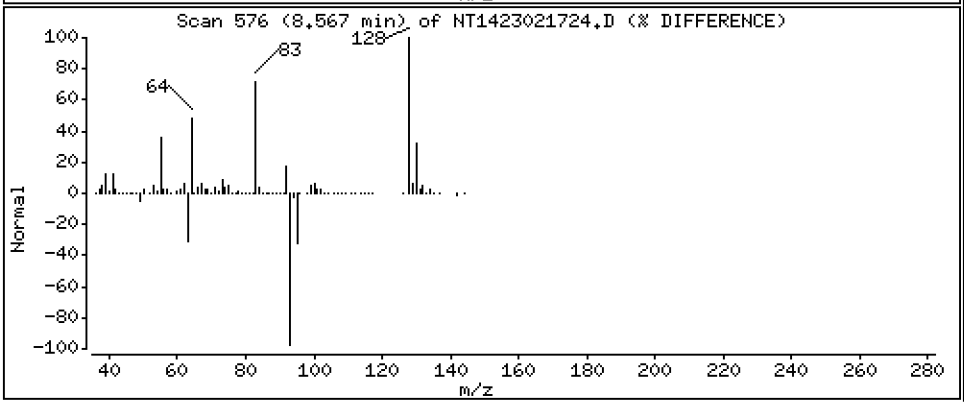












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

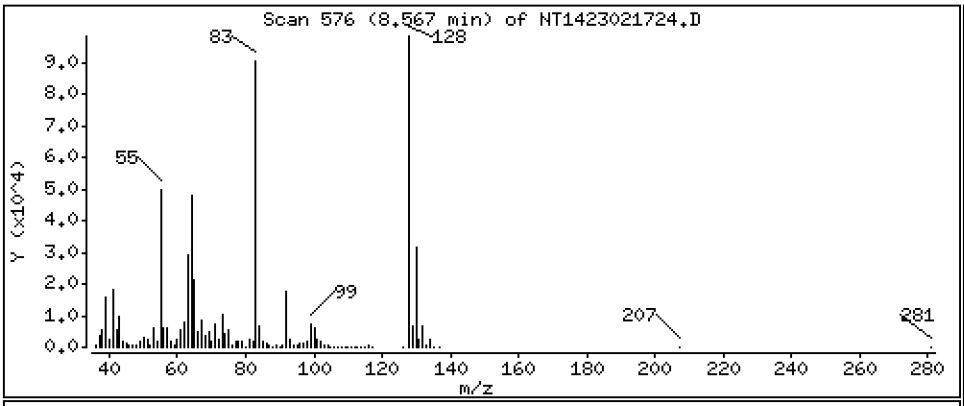
Operator: DSD

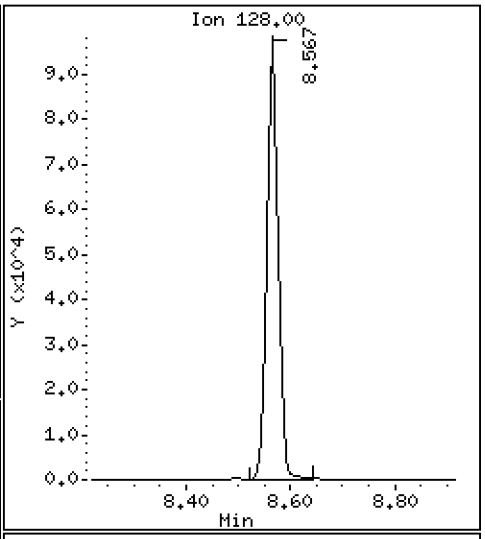
Column phase: ZB-5msi

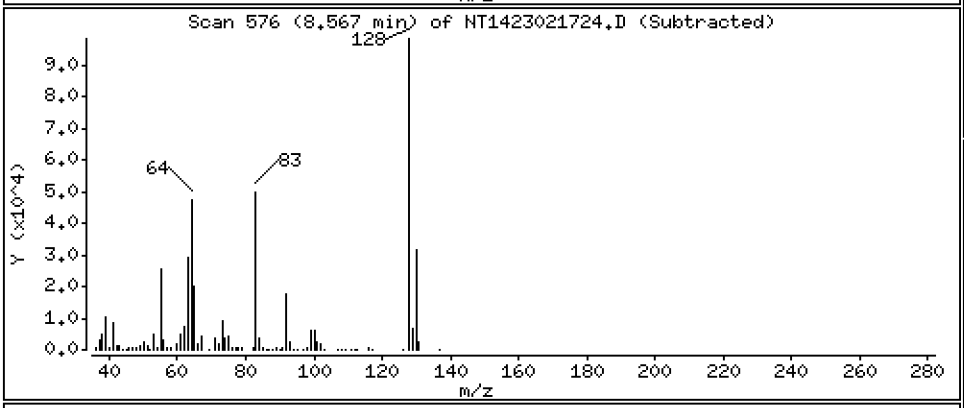
Column diameter: 0.25

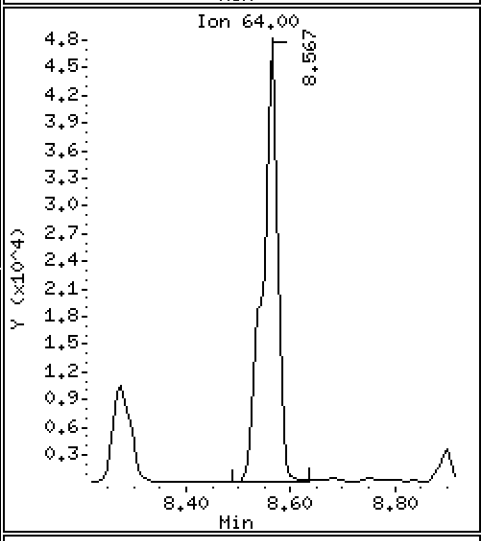
6 2-Chlorophenol

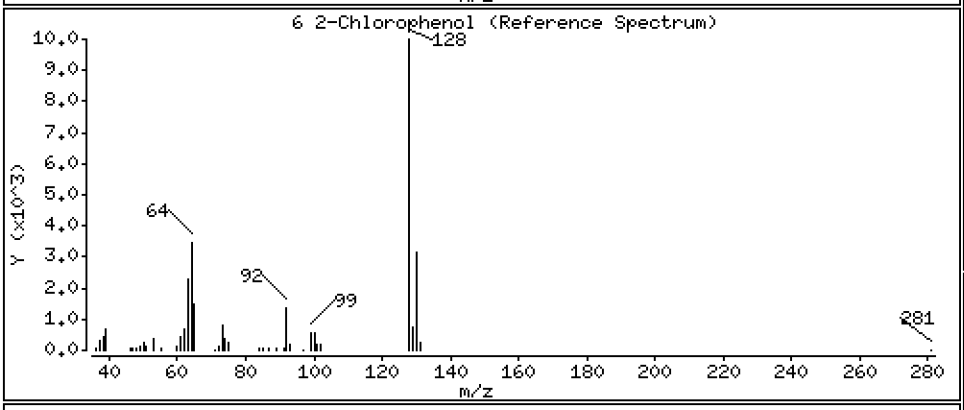
Concentration: 1.552 ug/mL

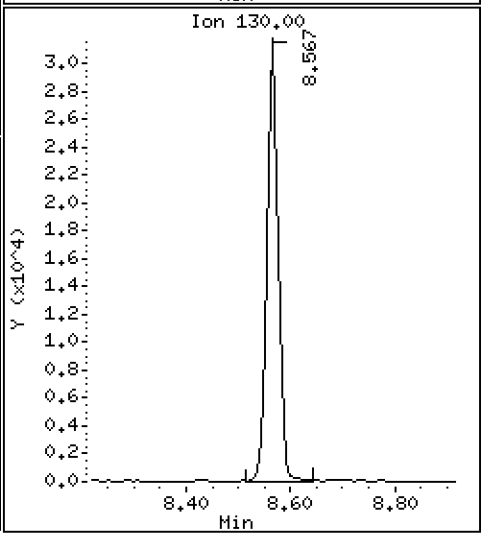


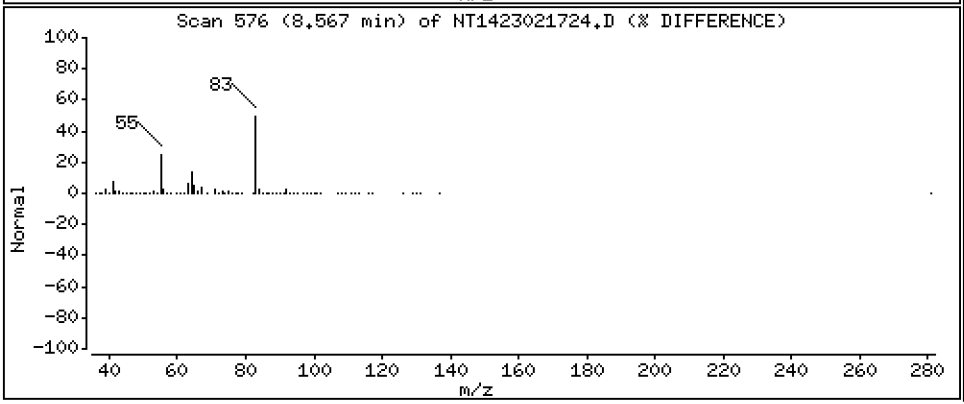












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

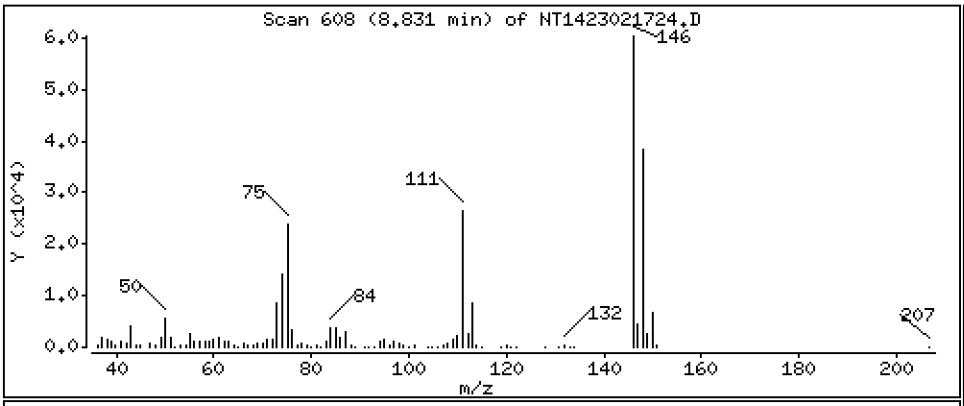
Operator: DSD

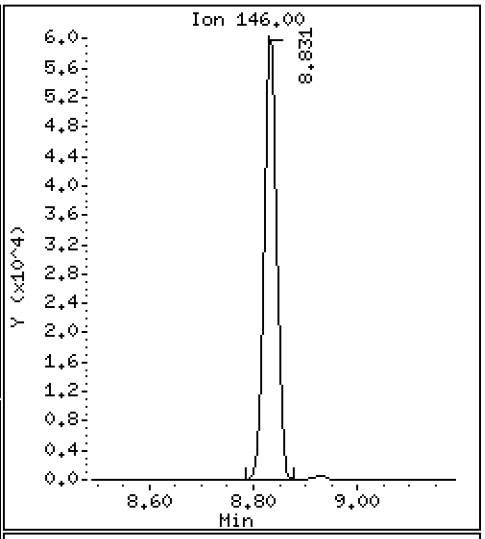
Column phase: ZB-5msi

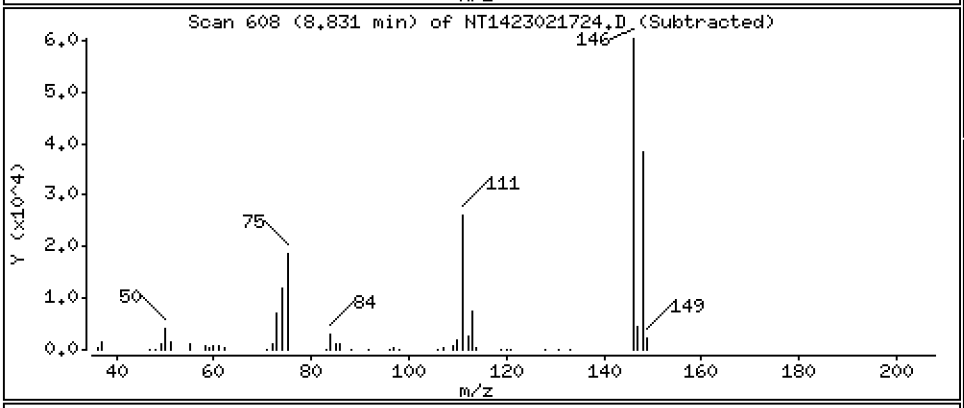
Column diameter: 0.25

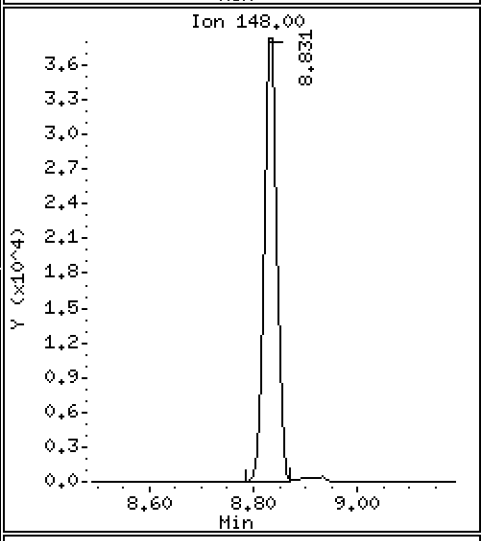
7 1,3-Dichlorobenzene

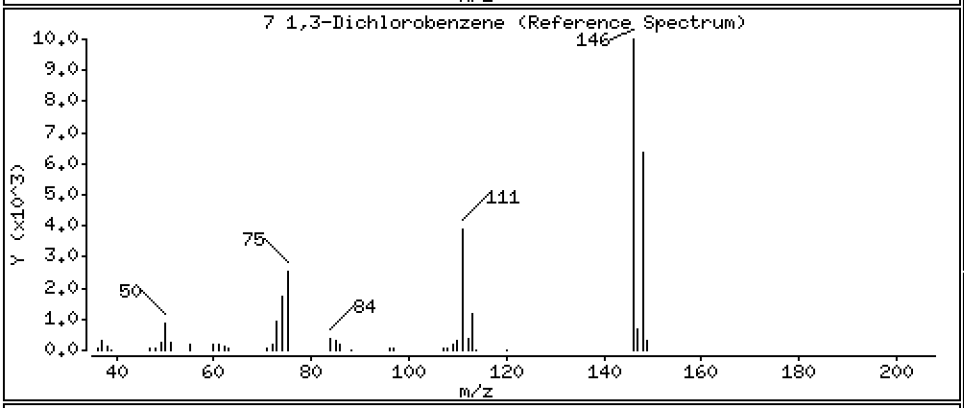
Concentration: 0.9873 ug/mL

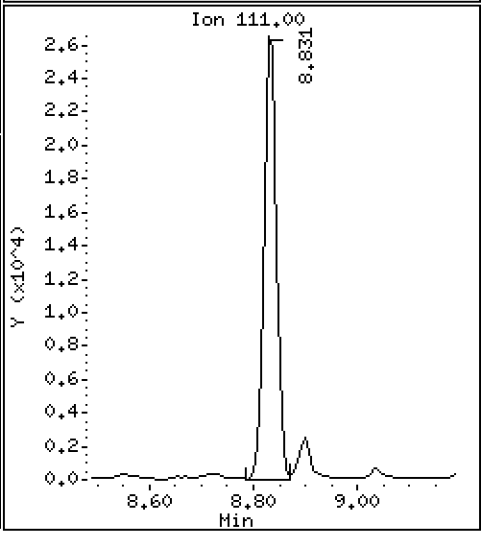


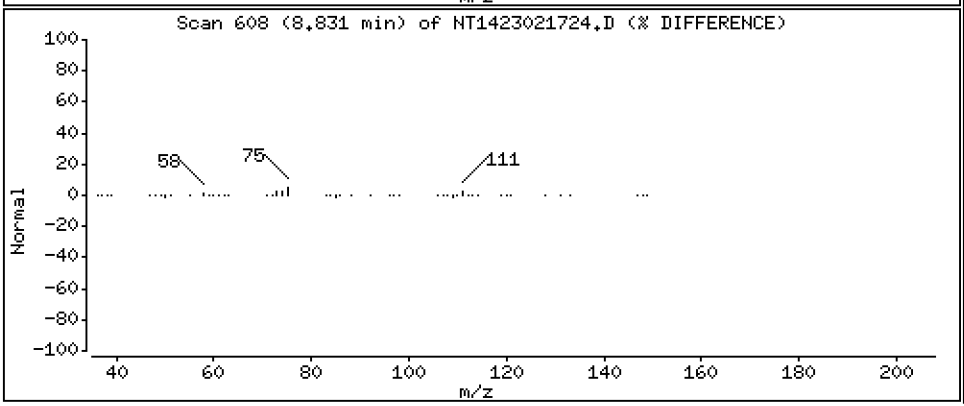












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021724.D

Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

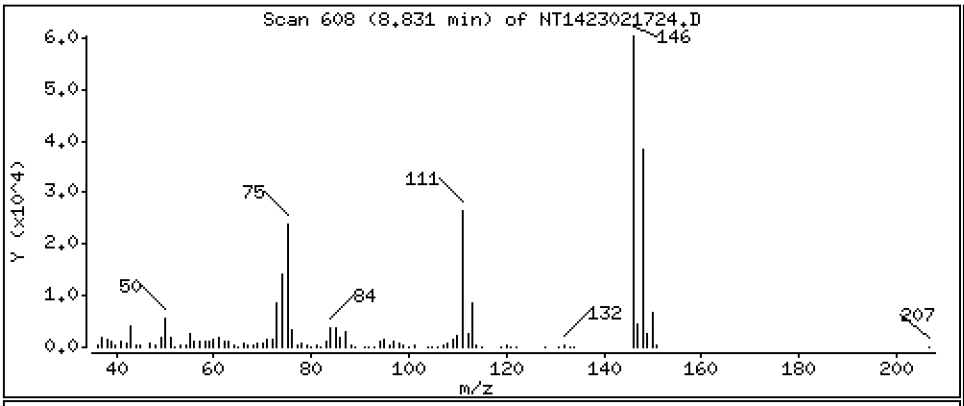
Operator: DSD

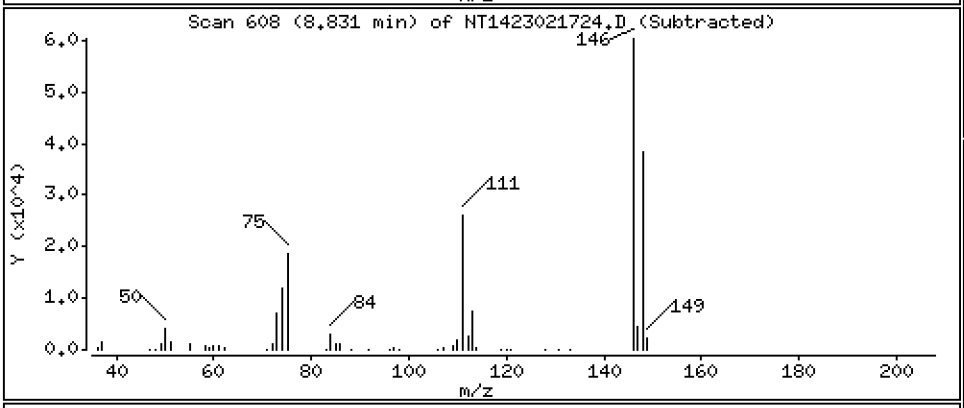
Column phase: ZB-5msi

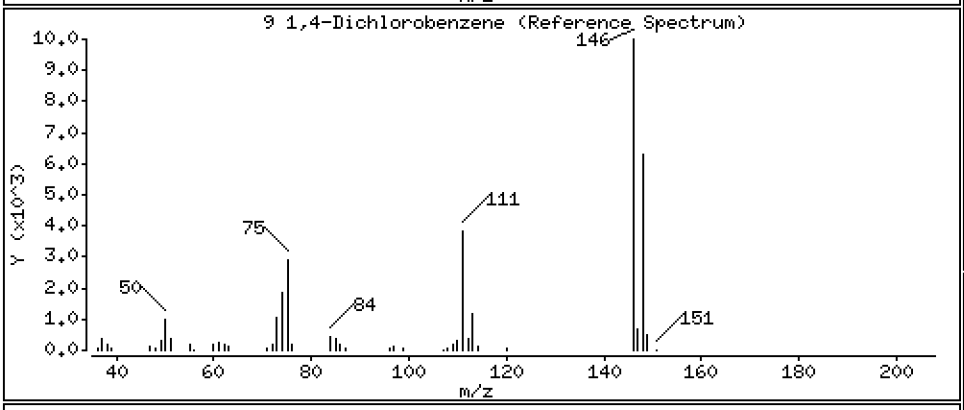
Column diameter: 0.25

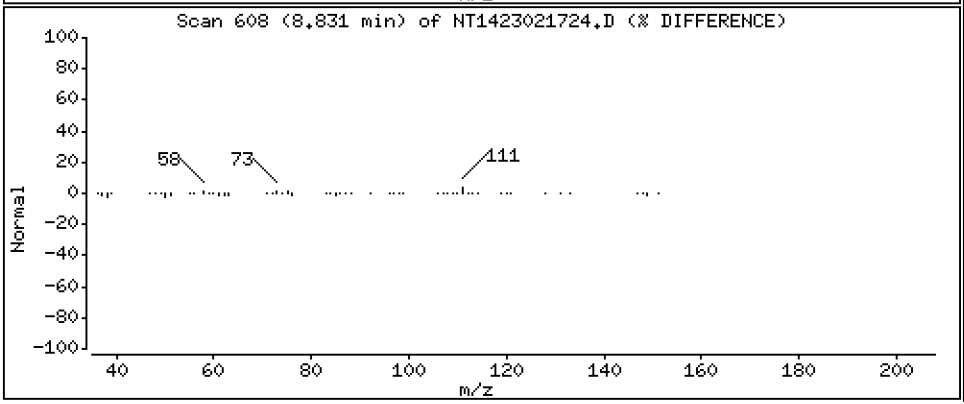
9 1,4-Dichlorobenzene

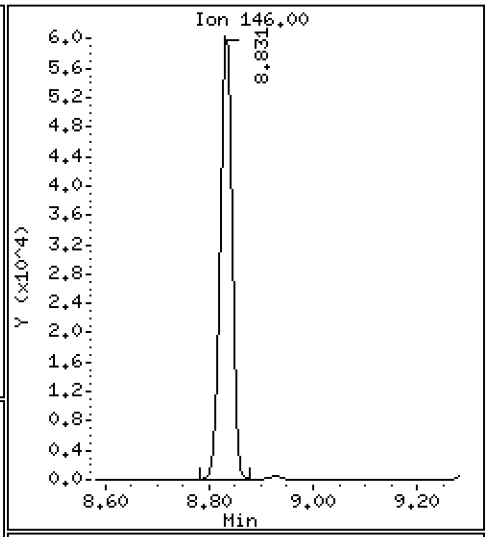
Concentration: 1.040 ug/mL

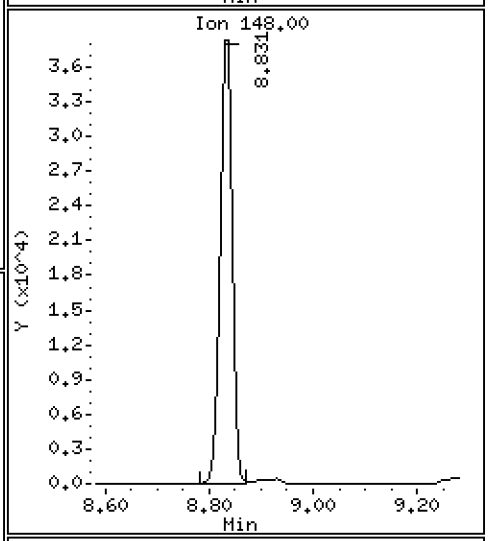


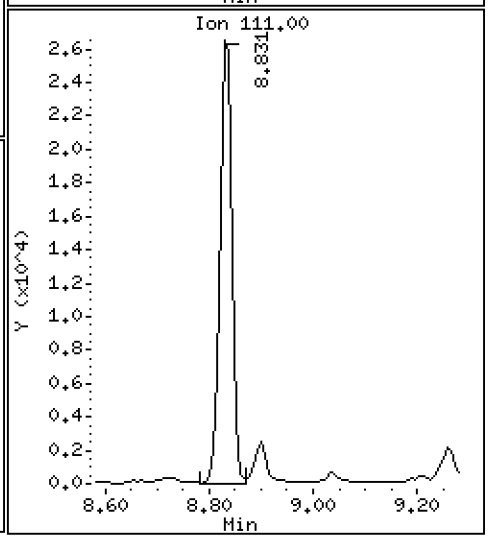












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

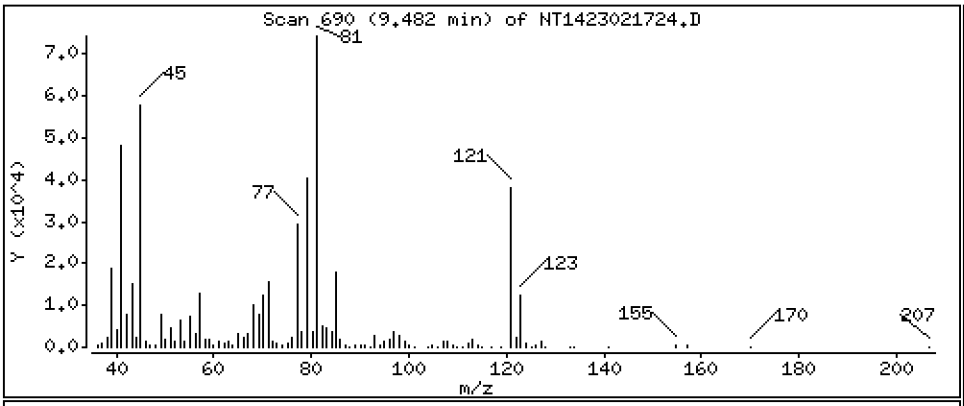
Operator: DSD

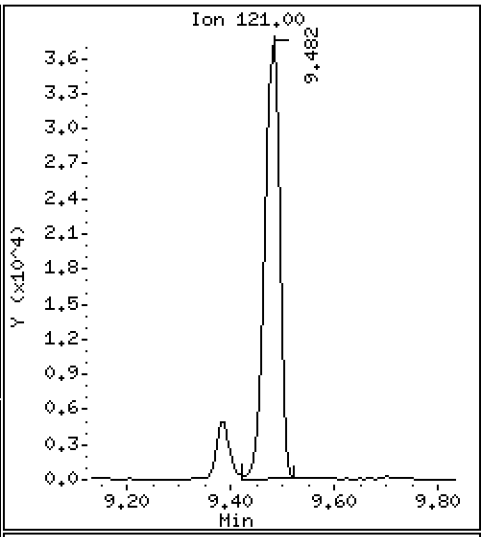
Column phase: ZB-5msi

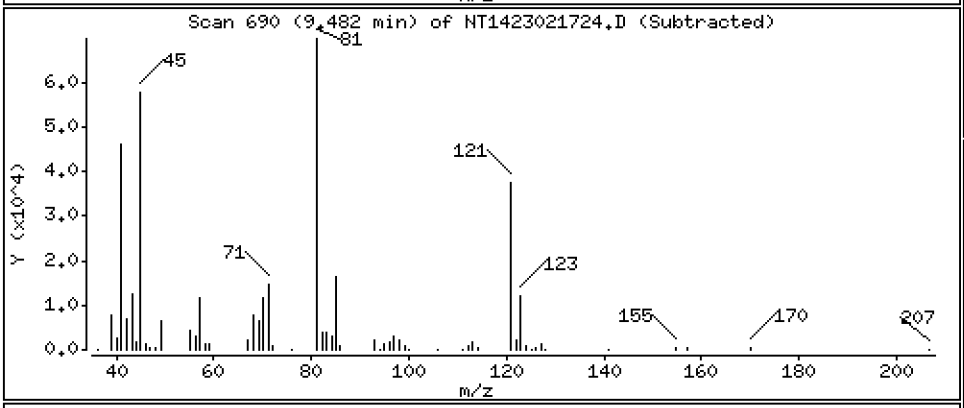
Column diameter: 0.25

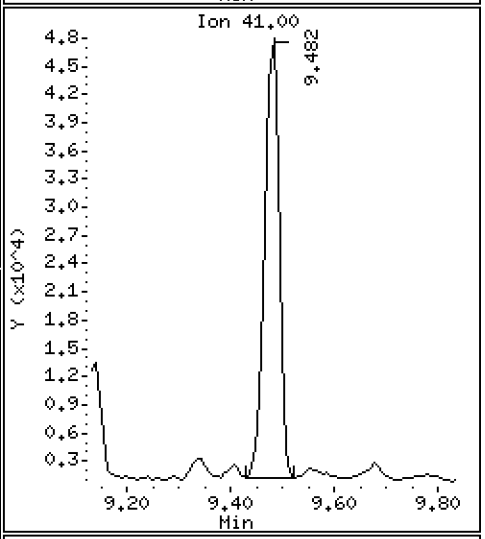
14 2,2'-oxybis(1-Chloropropane)

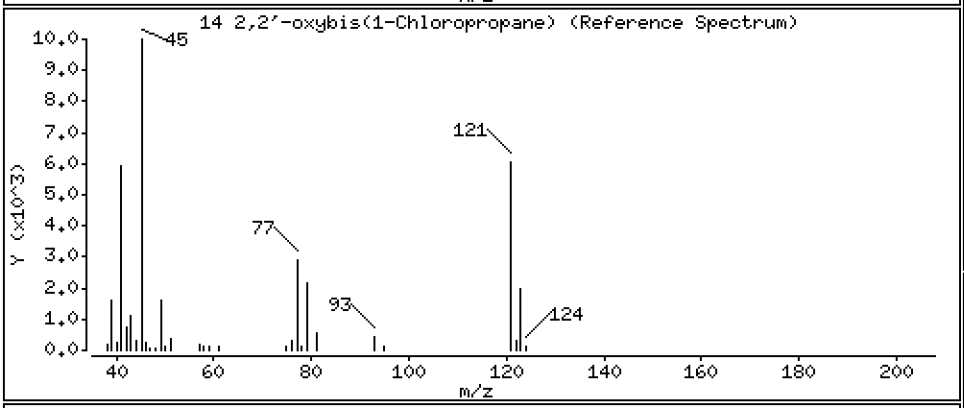
Concentration: 2.570 ug/mL

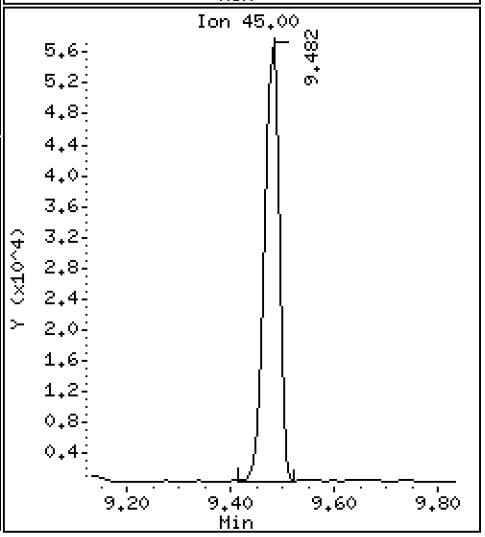


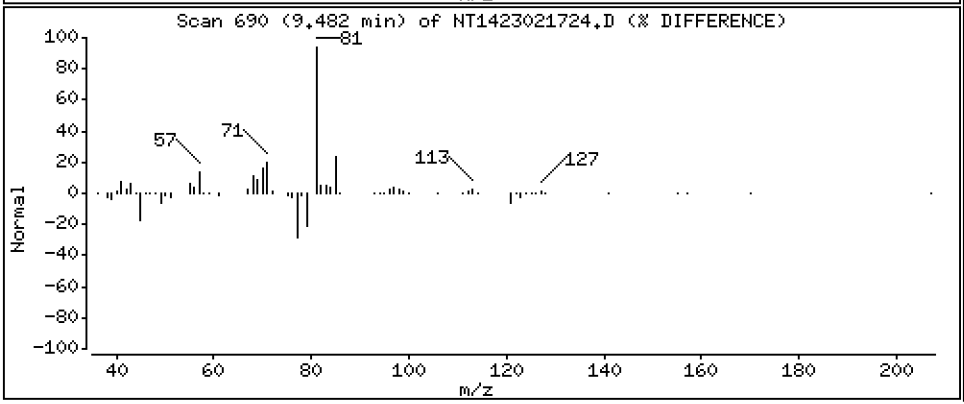












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

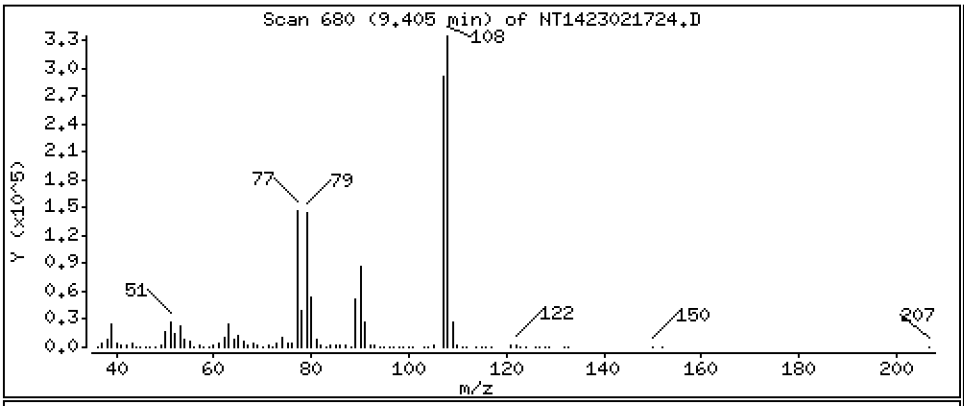
Operator: DSD

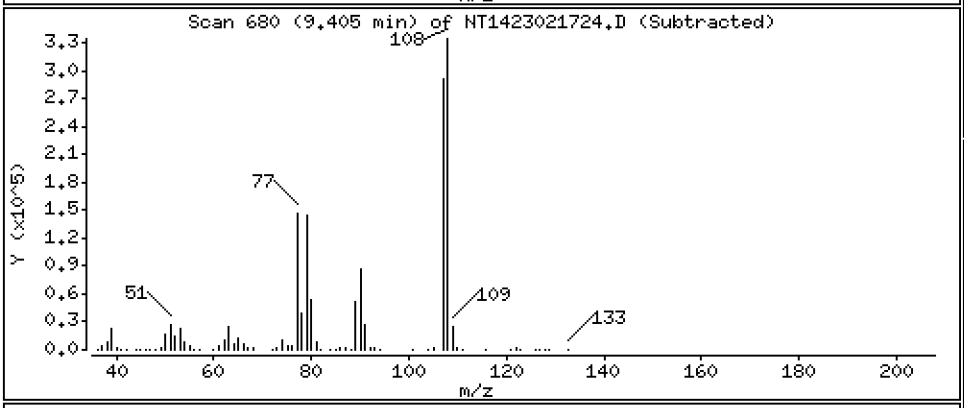
Column phase: ZB-5msi

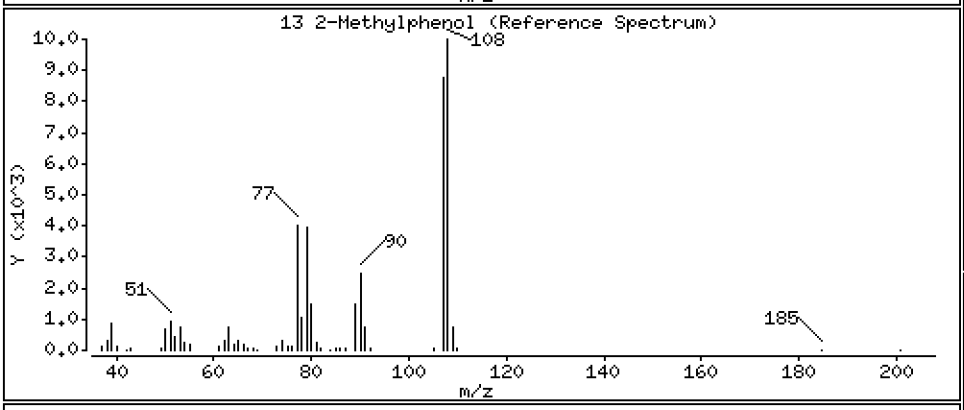
Column diameter: 0.25

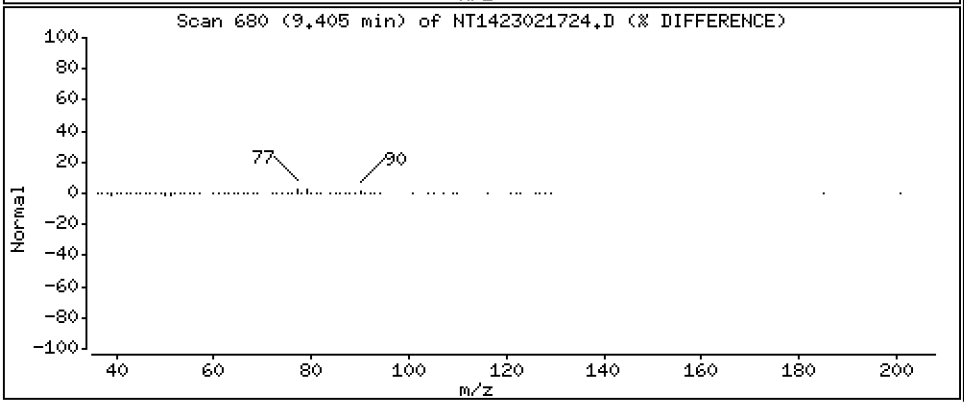
13 2-Methylphenol

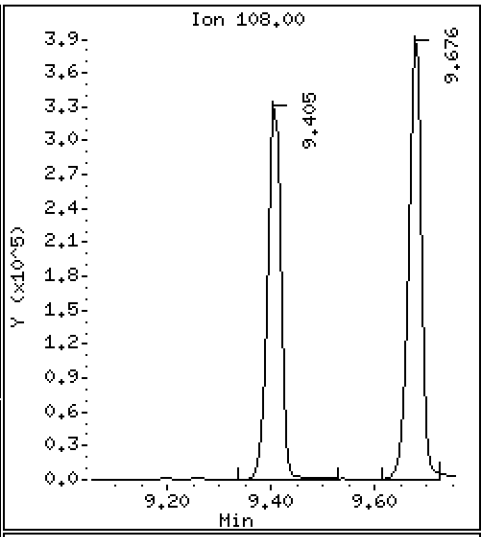
Concentration: 6.121 ug/mL

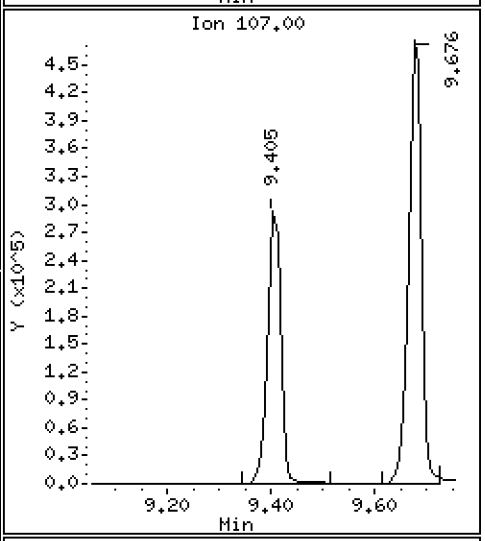


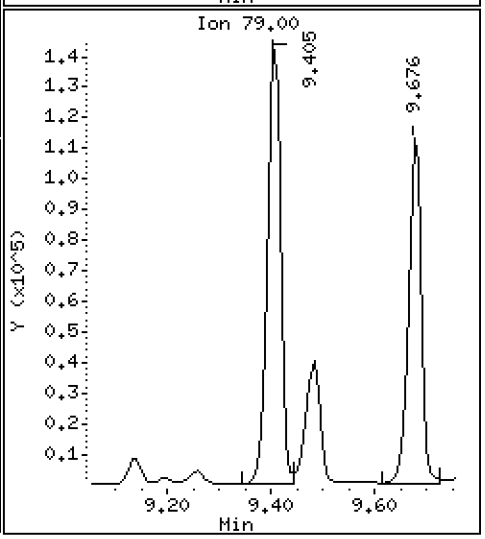












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

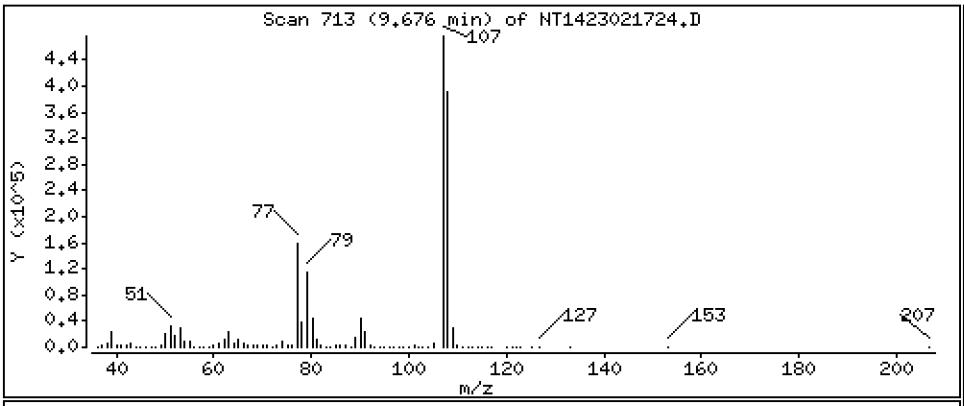
Operator: DSD

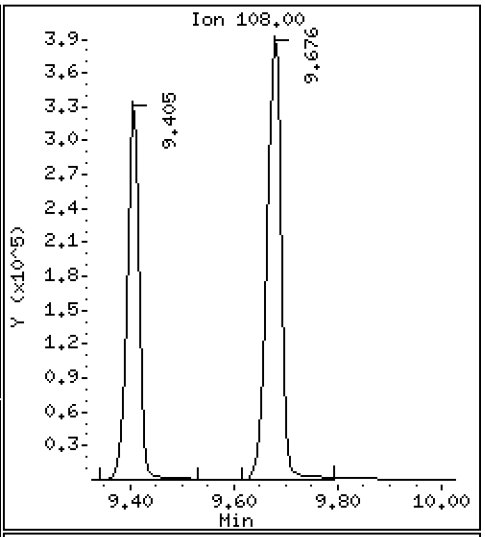
Column phase: ZB-5msi

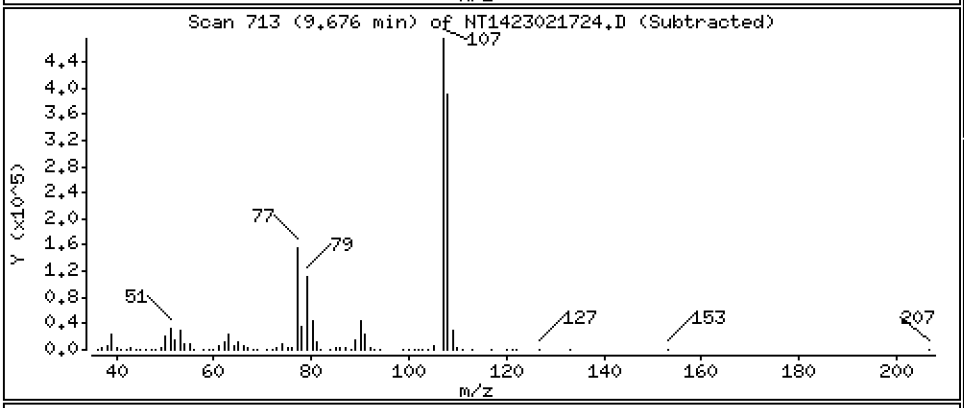
Column diameter: 0.25

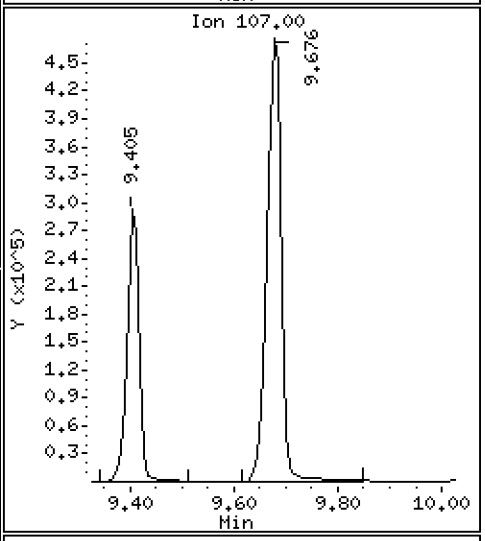
15 4-Methylphenol

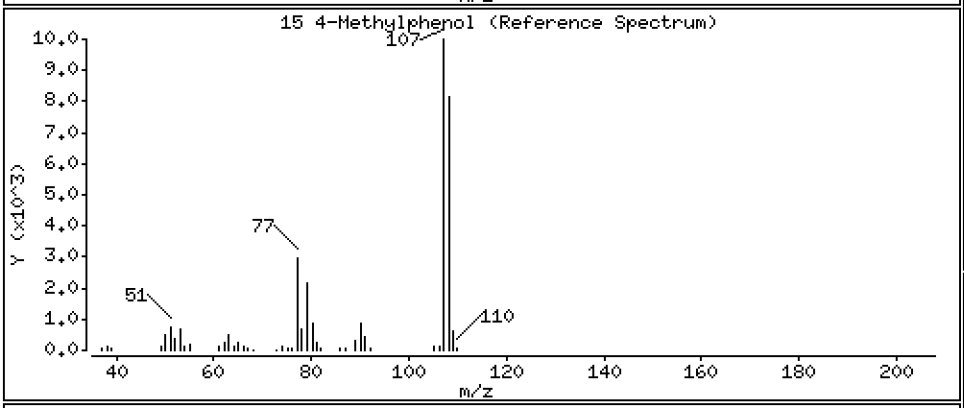
Concentration: 7.363 ug/mL

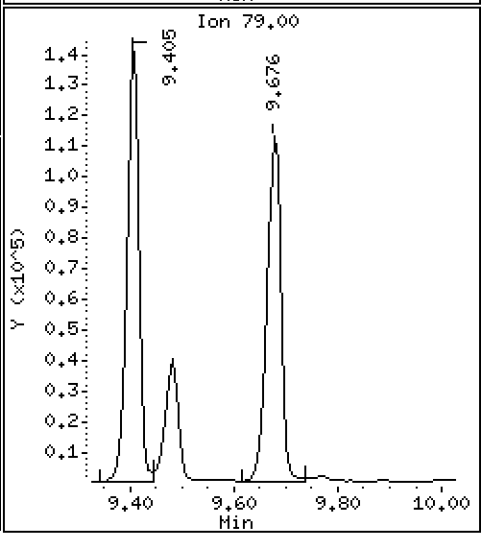


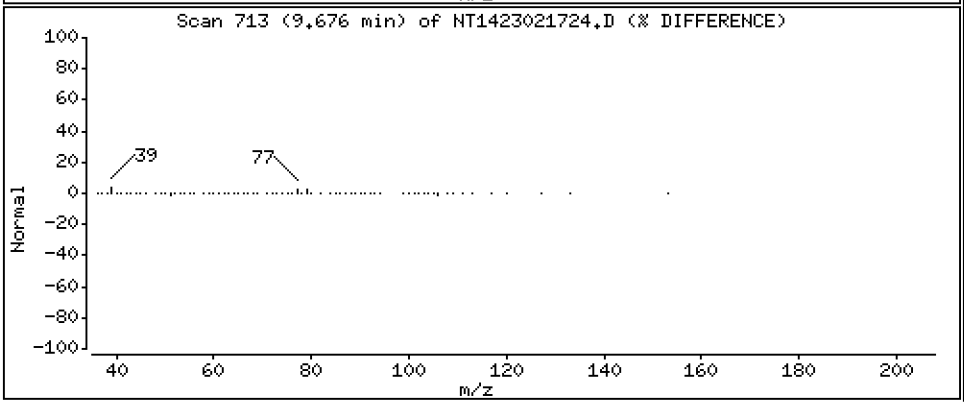












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

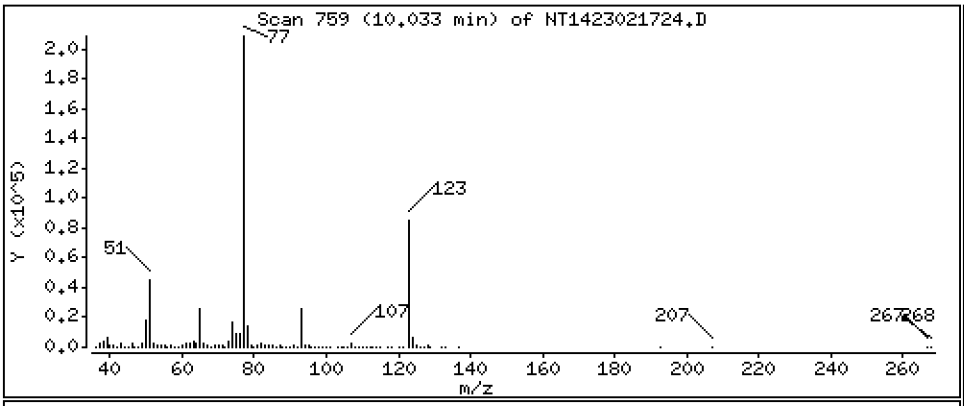
Operator: DSD

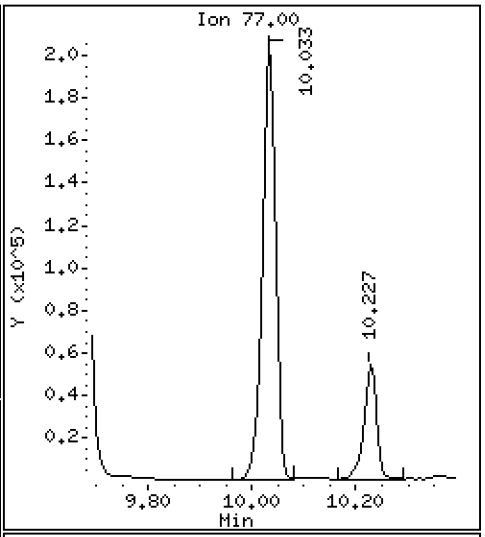
Column phase: ZB-5msi

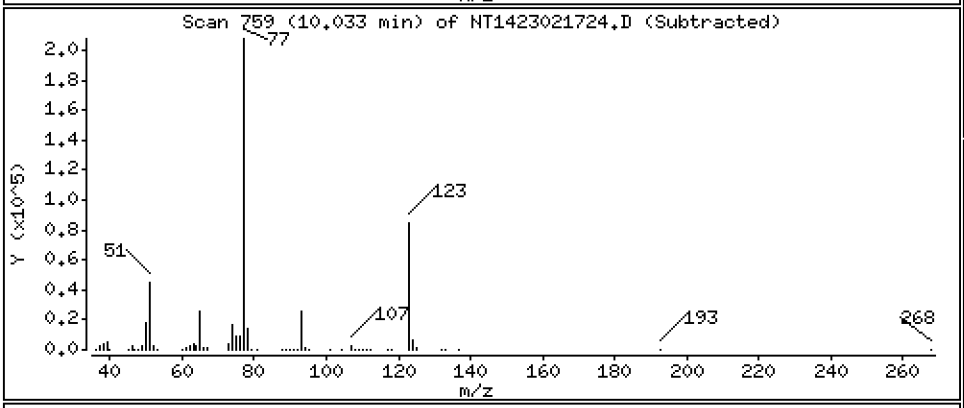
Column diameter: 0.25

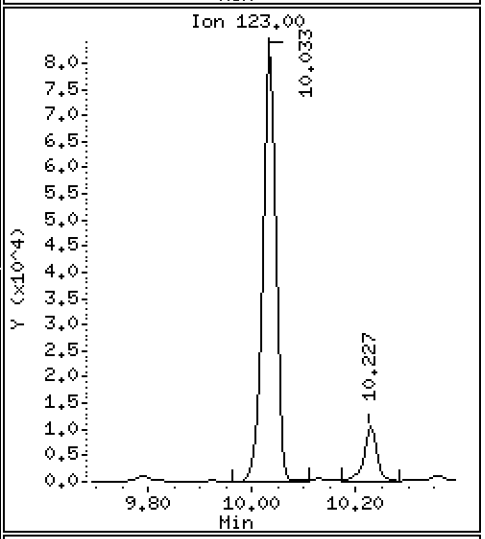
19 Nitrobenzene

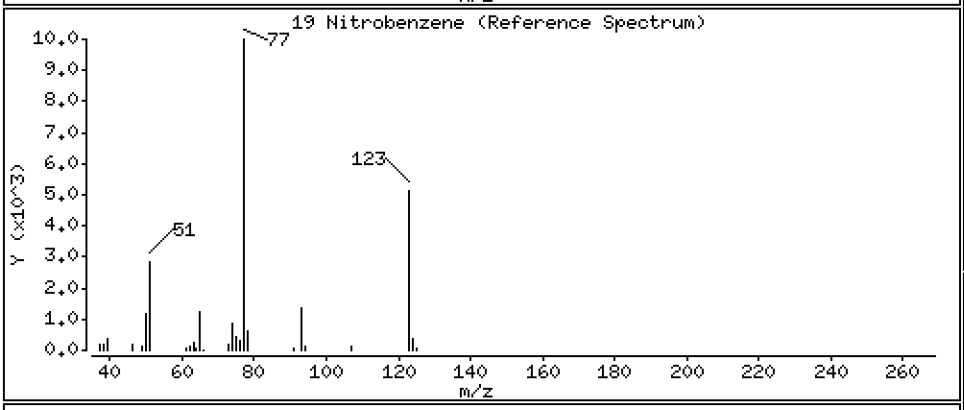
Concentration: 2.931 ug/mL

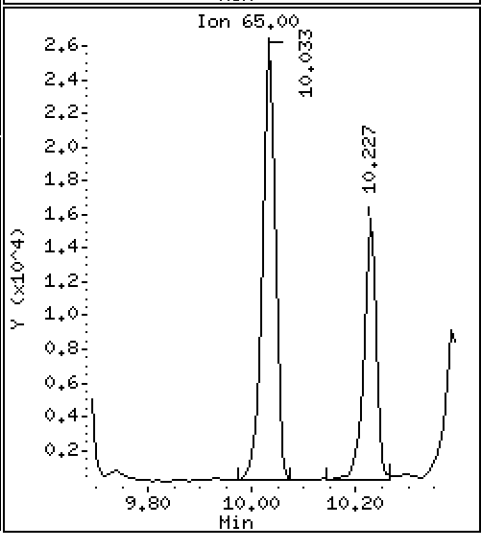


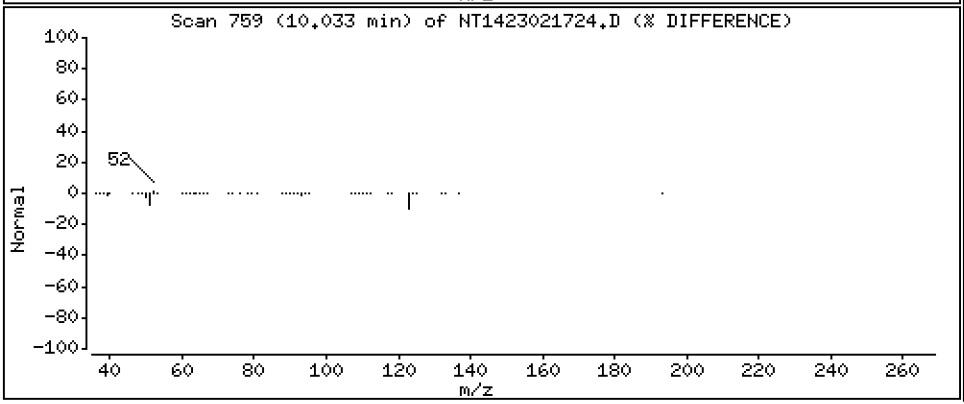












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

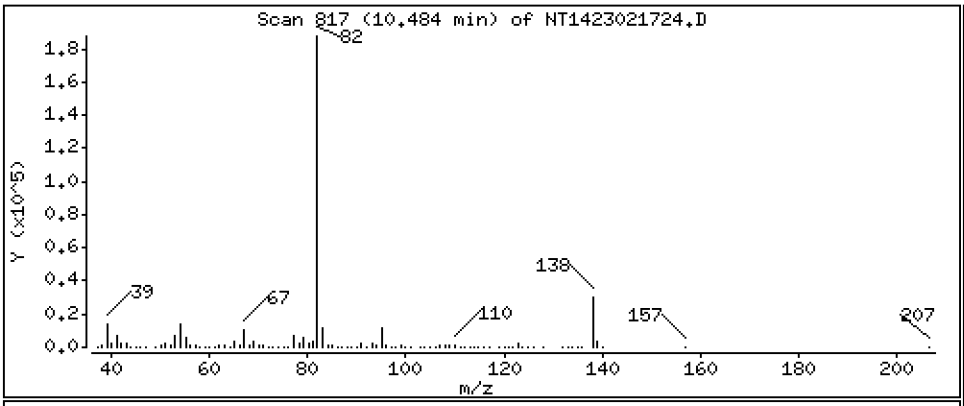
Operator: DSD

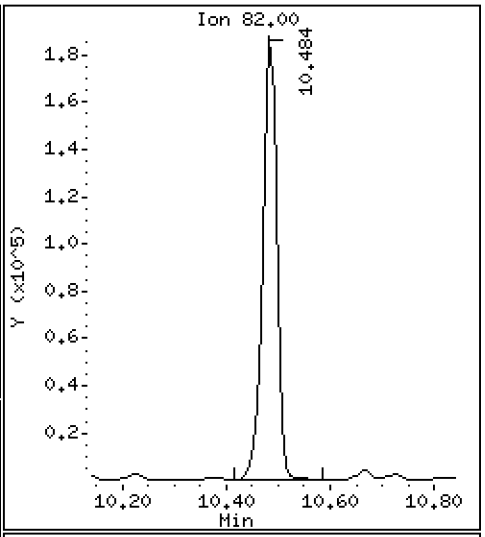
Column phase: ZB-5msi

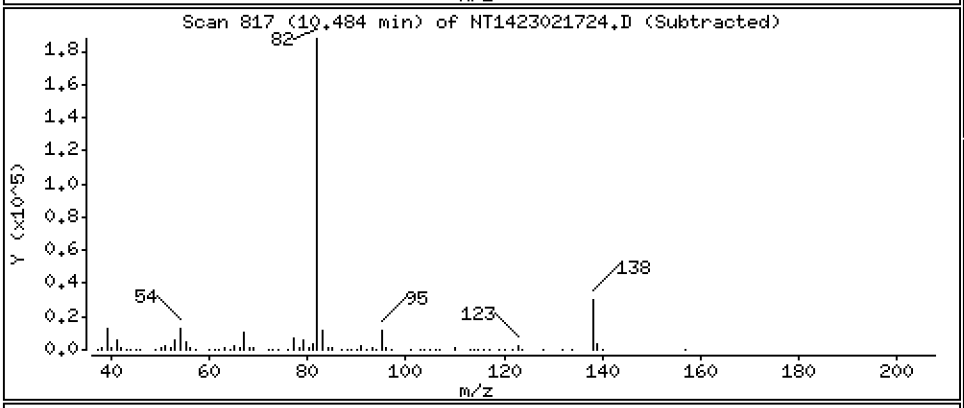
Column diameter: 0.25

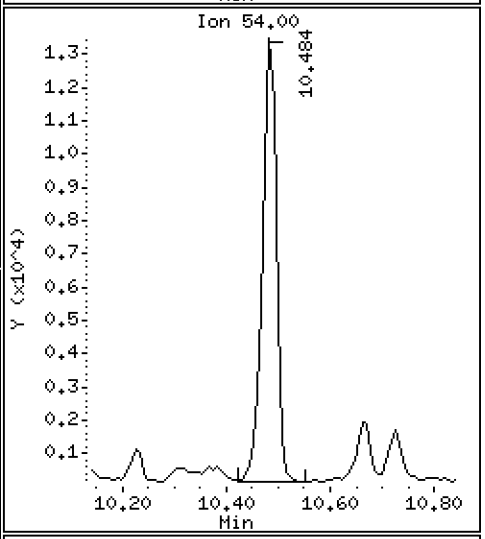
20 Isophorone

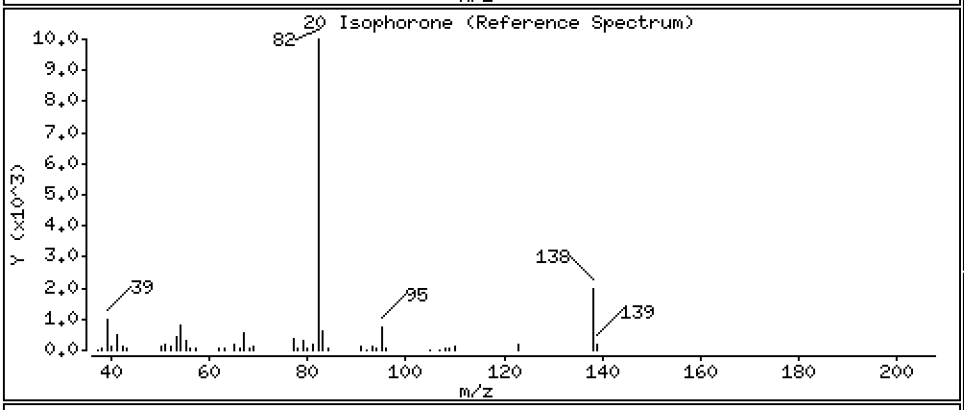
Concentration: 2.109 ug/mL

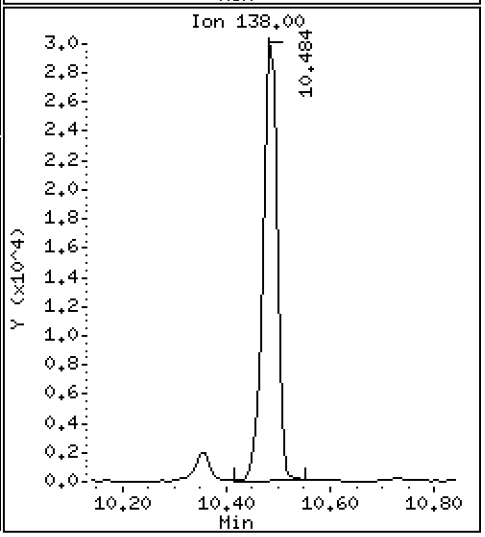


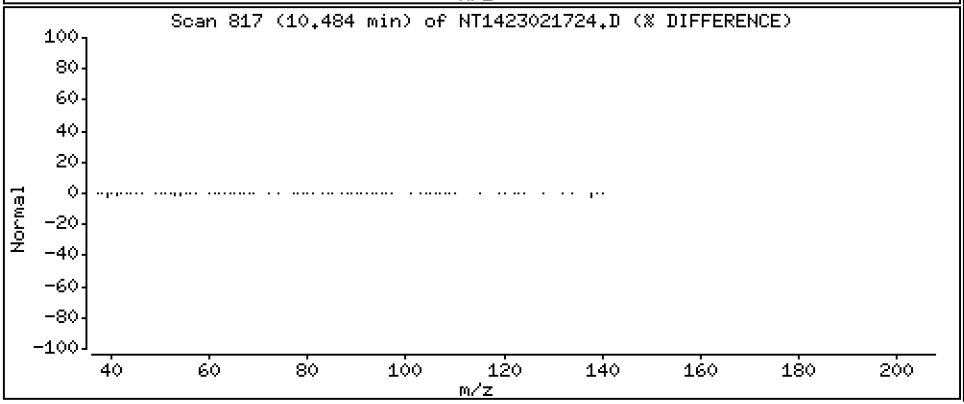












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

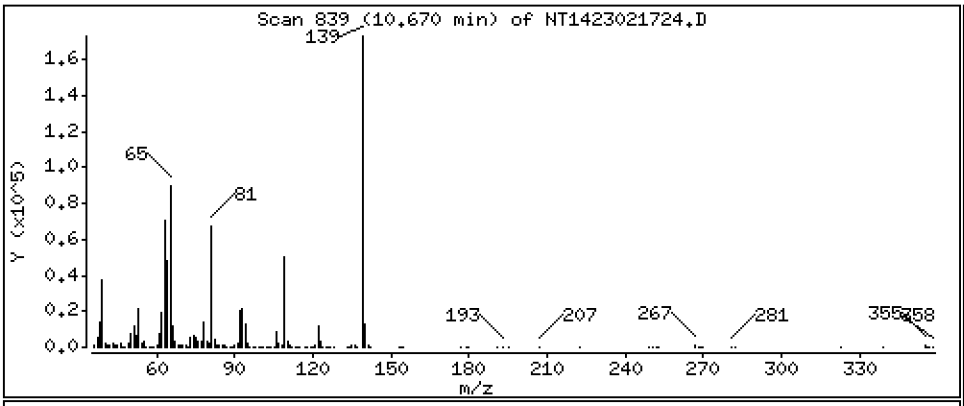
Operator: DSD

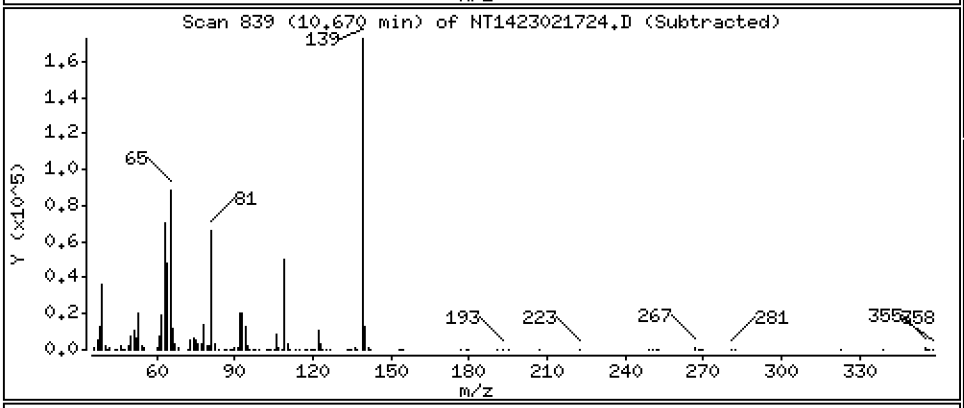
Column phase: ZB-5msi

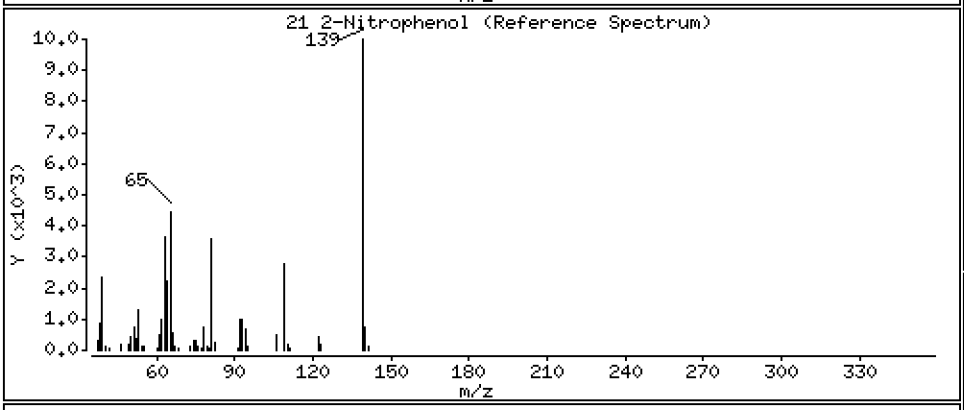
Column diameter: 0.25

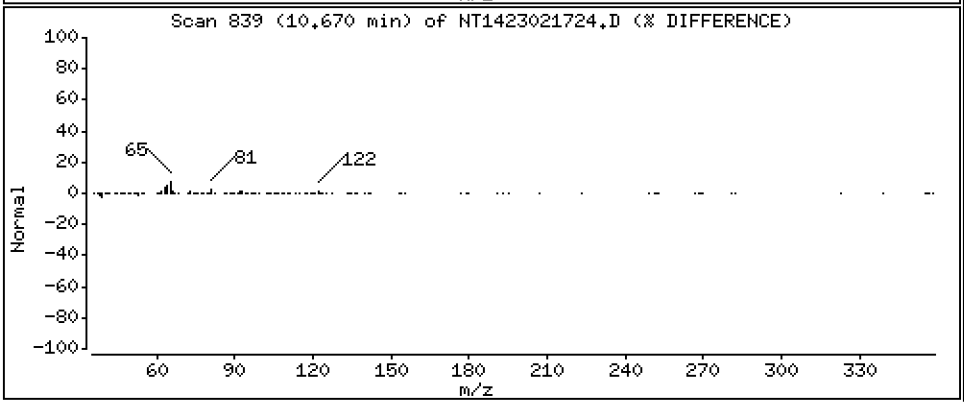
21 2-Nitrophenol

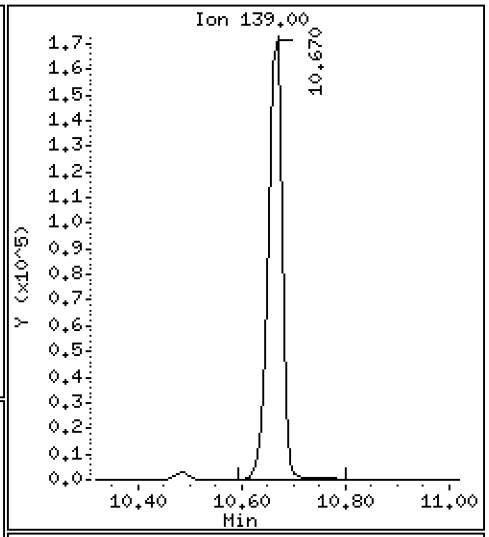
Concentration: 6.043 ug/mL

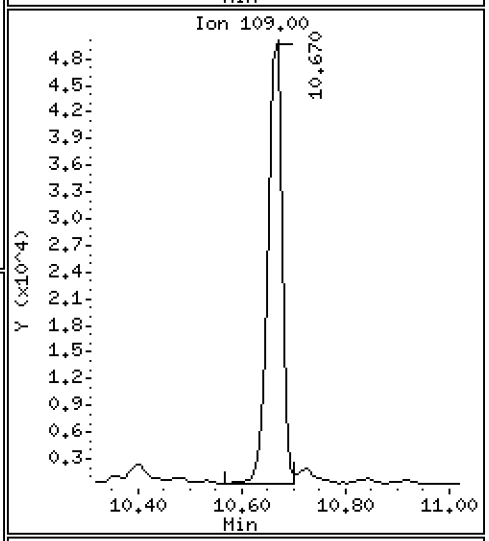


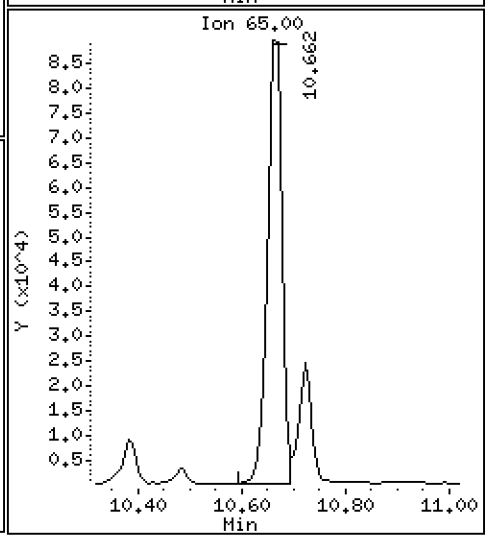












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

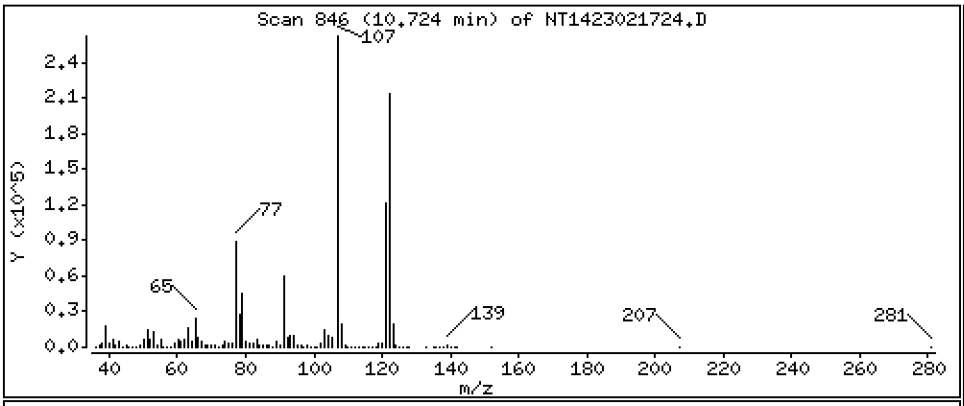
Operator: DSD

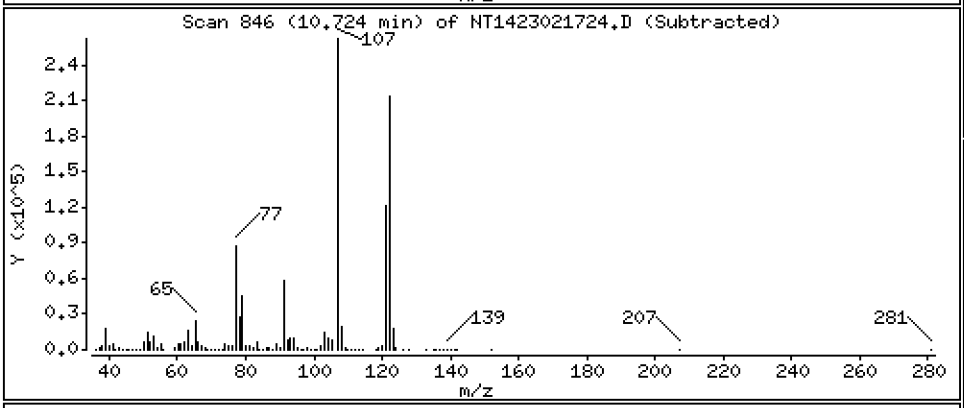
Column phase: ZB-5msi

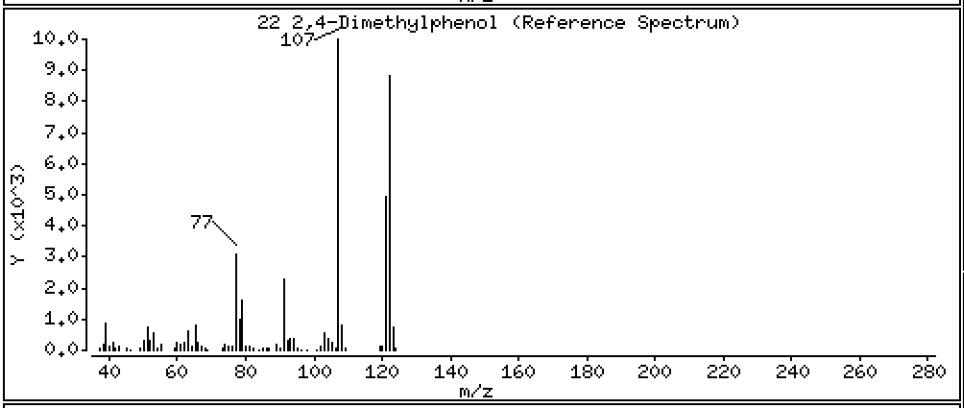
Column diameter: 0.25

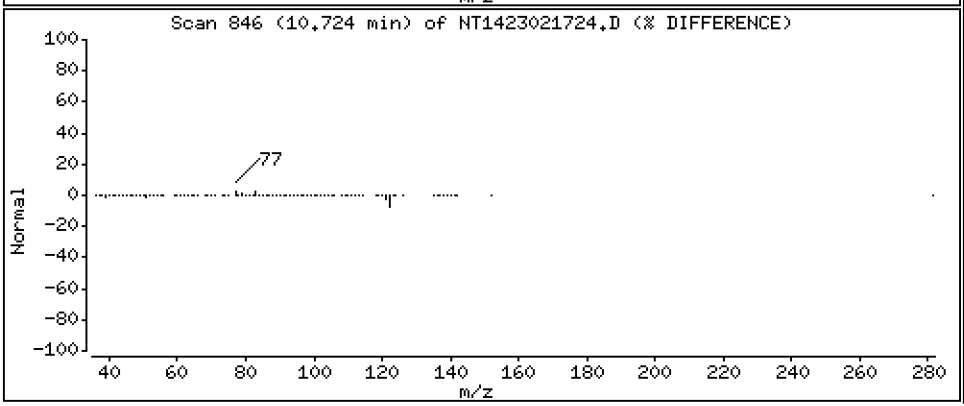
22 2,4-Dimethylphenol

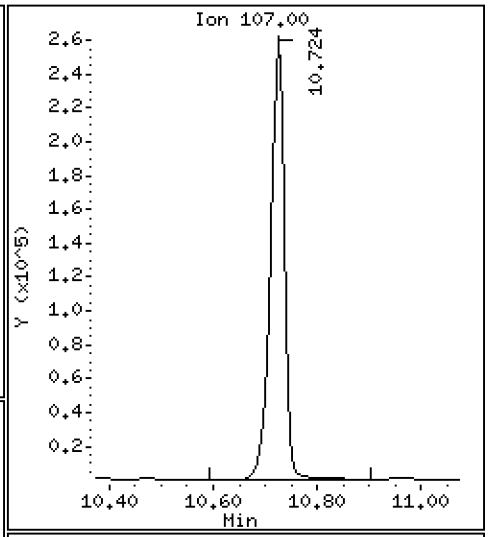
Concentration: 5.394 ug/mL

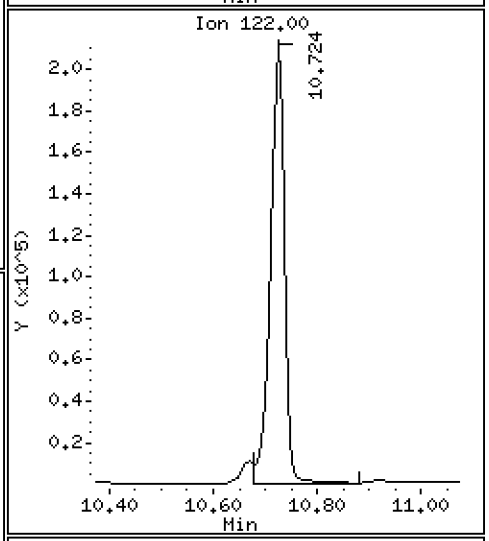


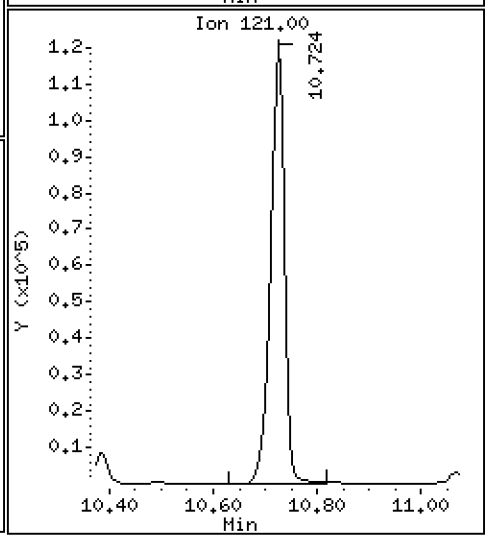












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

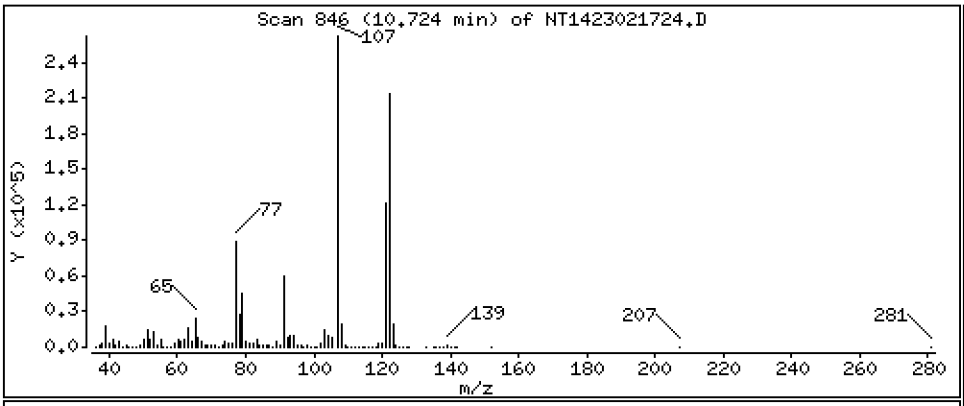
Operator: DSD

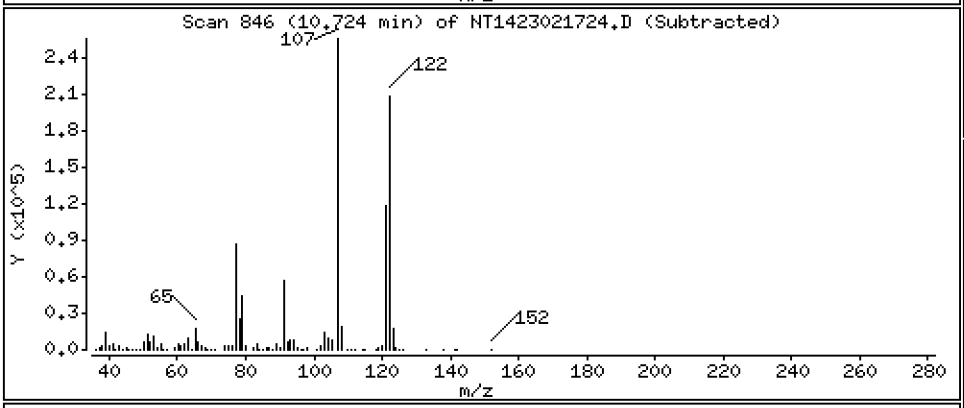
Column phase: ZB-5msi

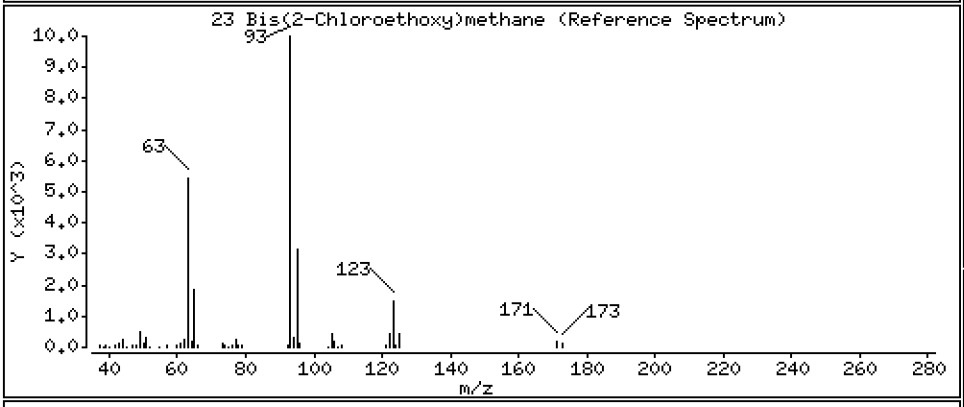
Column diameter: 0.25

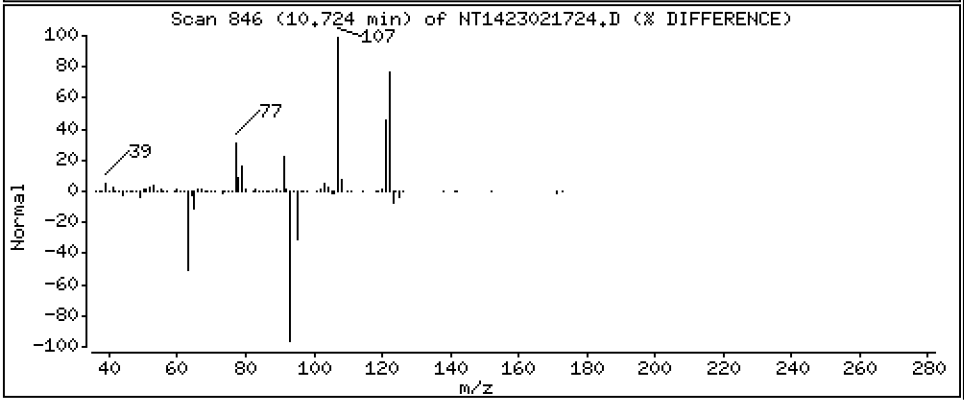
23 Bis(2-Chloroethoxy)methane

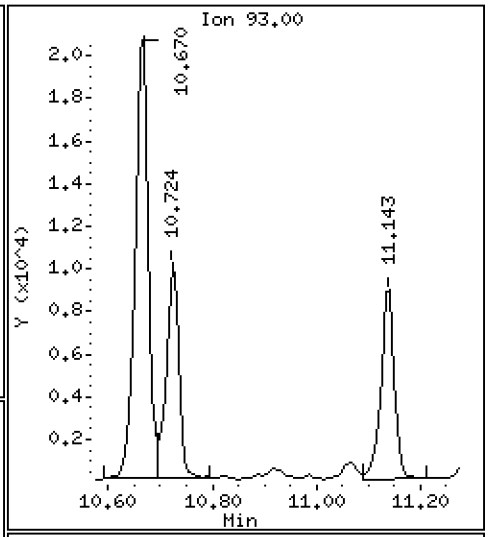
Concentration: 0.1754 ug/mL

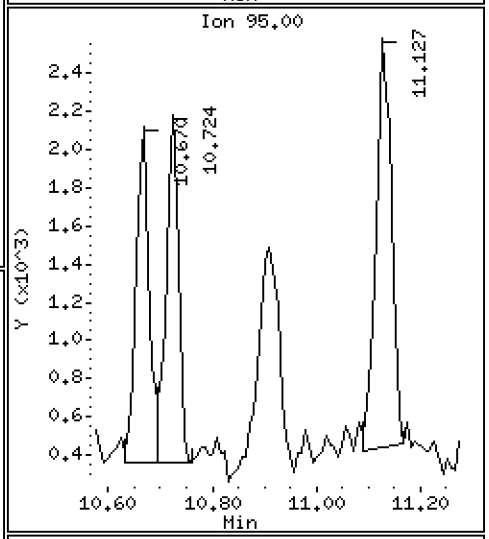


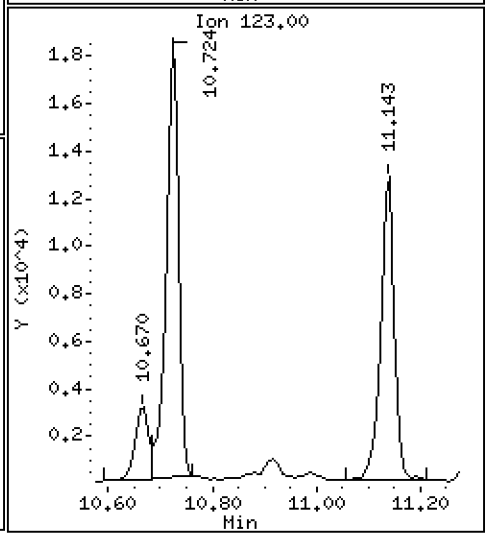












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

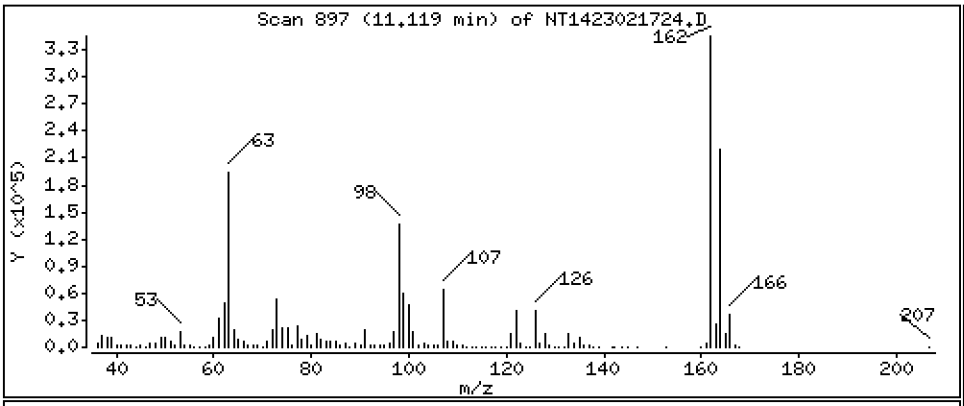
Operator: DSD

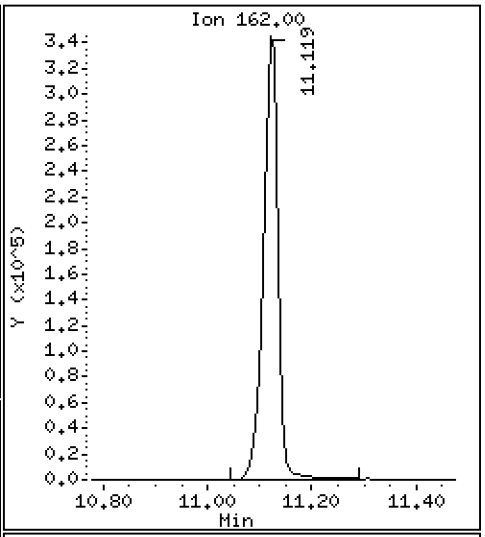
Column phase: ZB-5msi

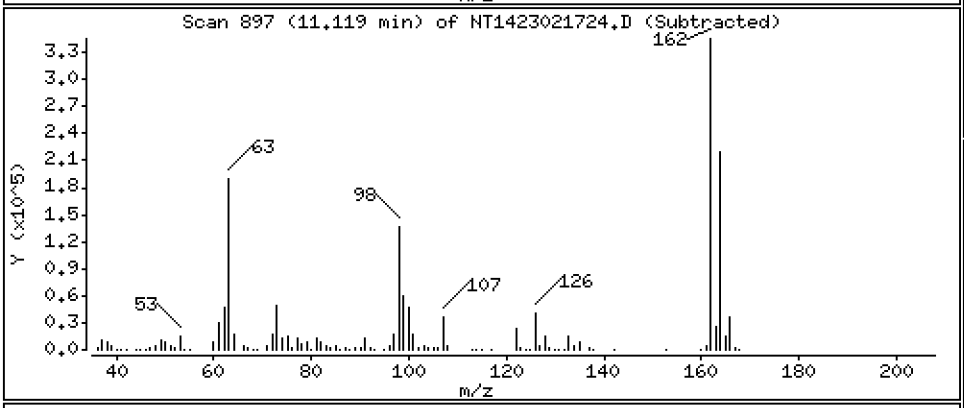
Column diameter: 0.25

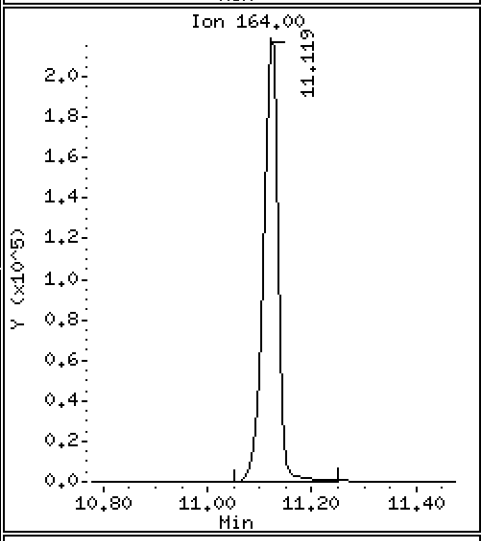
25 2,4-Dichlorophenol

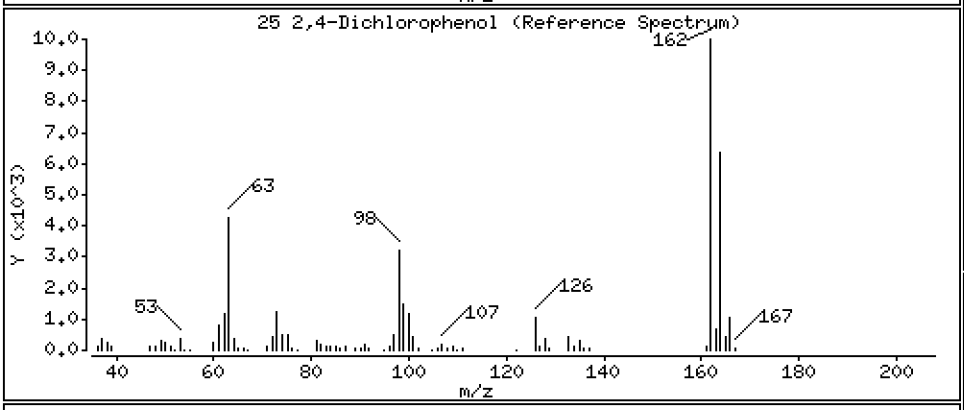
Concentration: 8.874 ug/mL

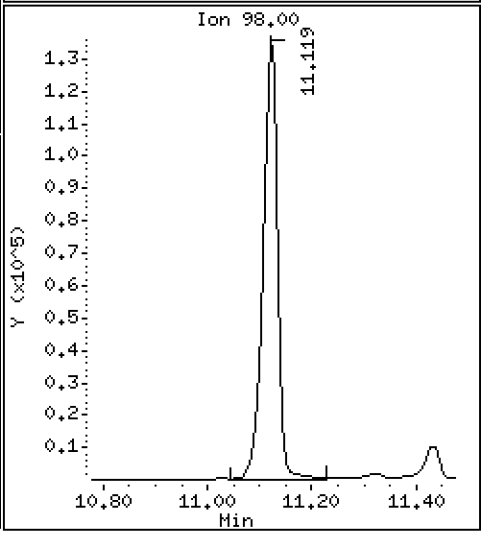


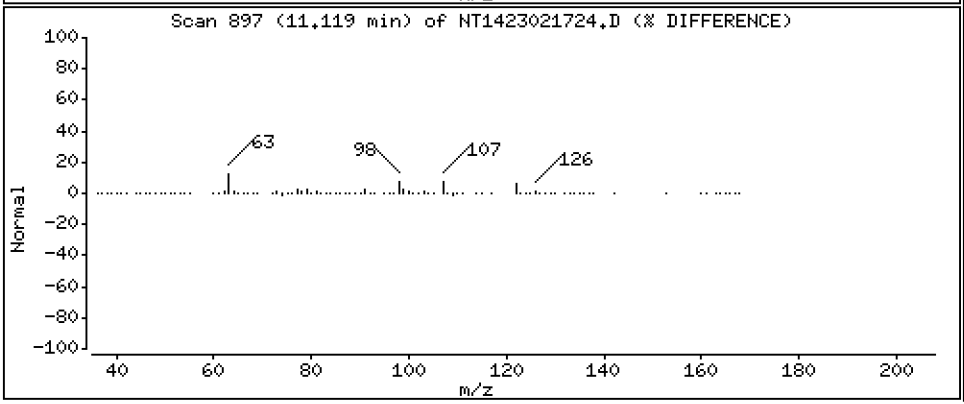












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

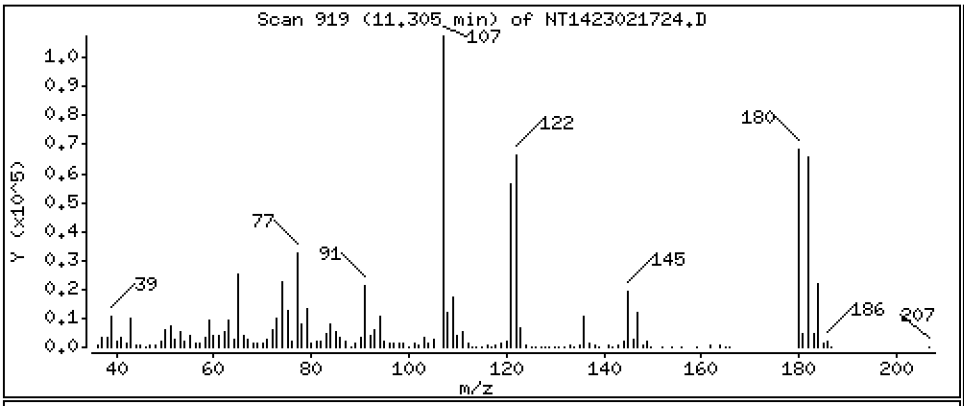
Operator: DSD

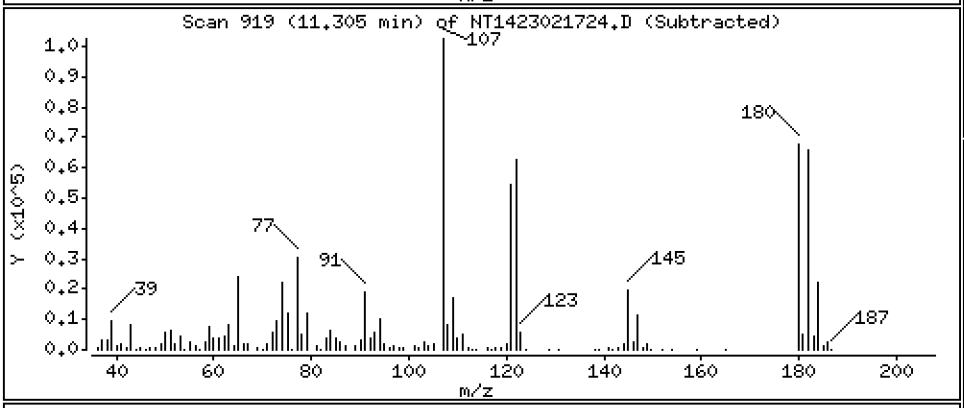
Column phase: ZB-5msi

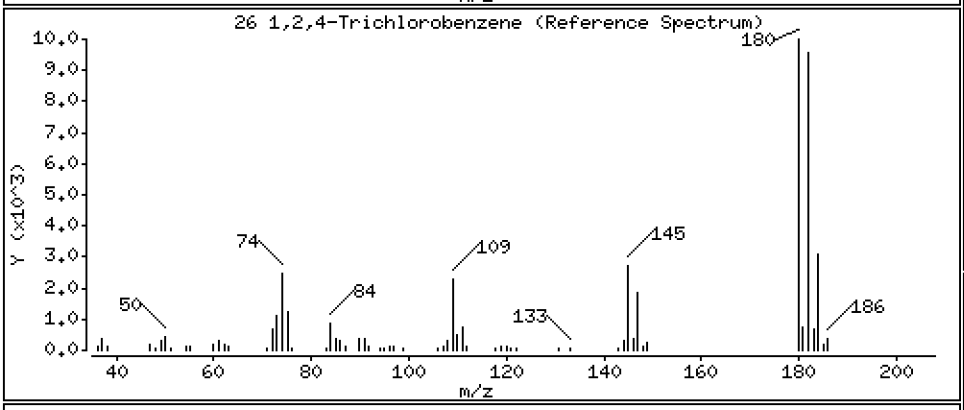
Column diameter: 0.25

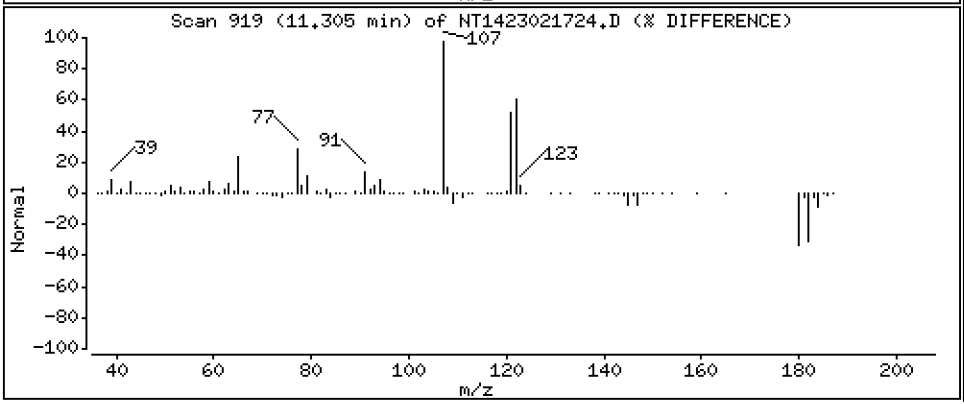
26 1,2,4-Trichlorobenzene

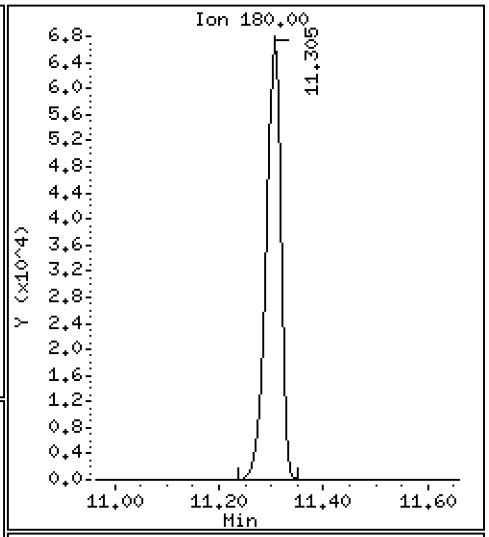
Concentration: 1.349 ug/mL

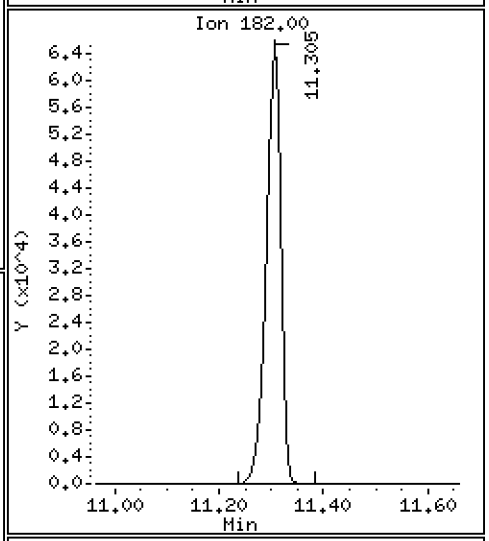


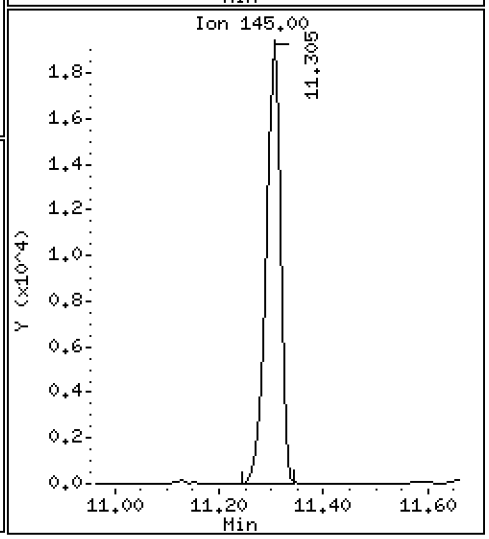












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

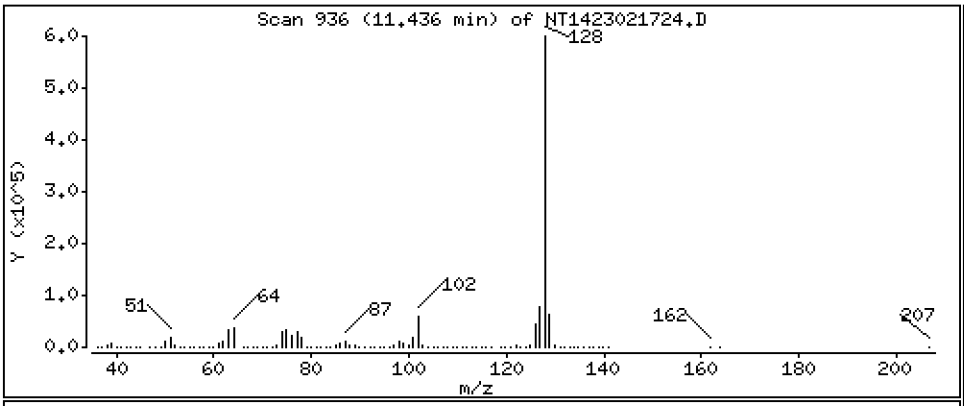
Operator: DSD

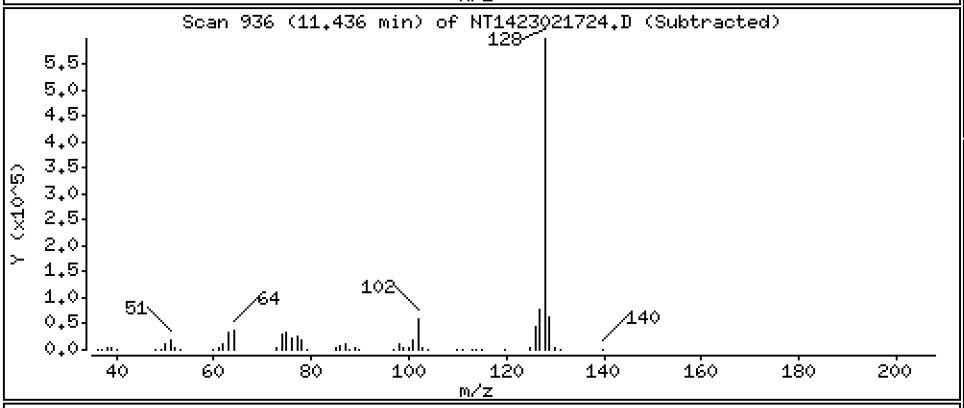
Column phase: ZB-5msi

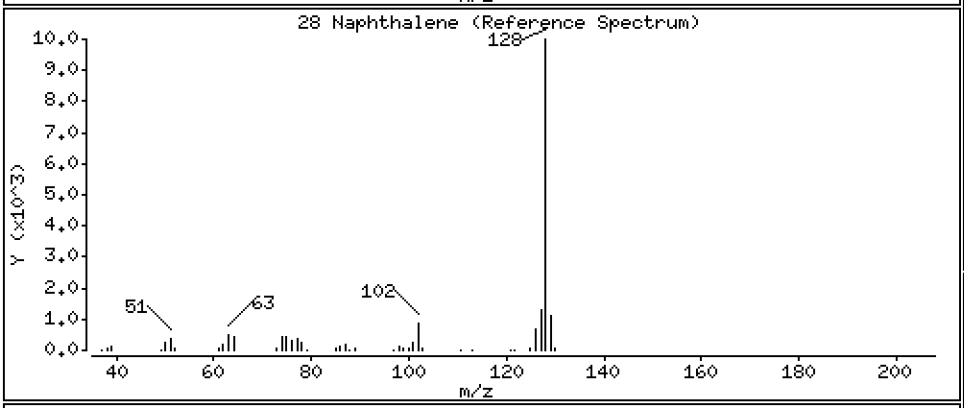
Column diameter: 0.25

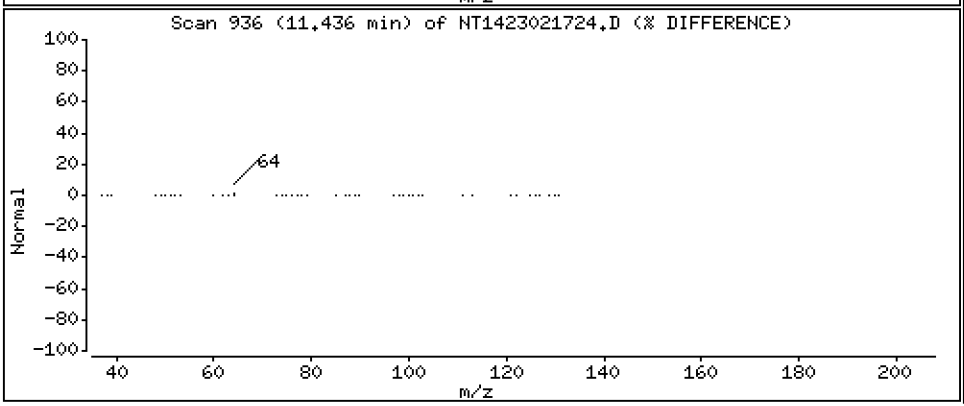
28 Naphthalene

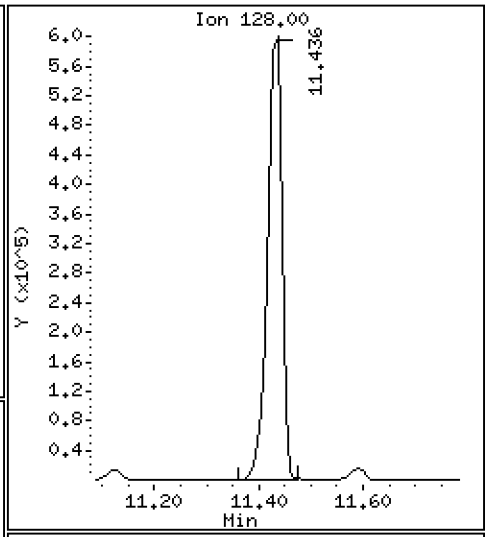
Concentration: 4.291 ug/mL

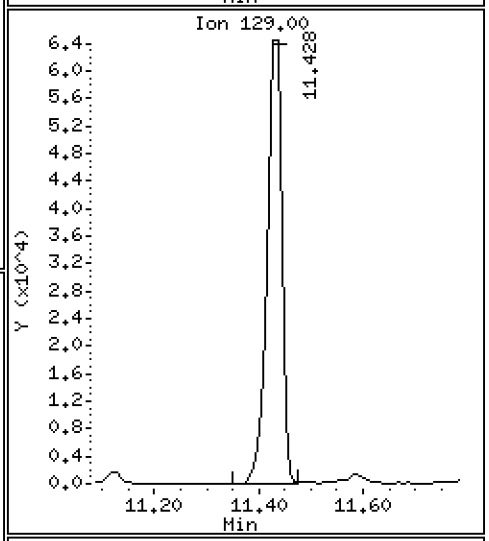


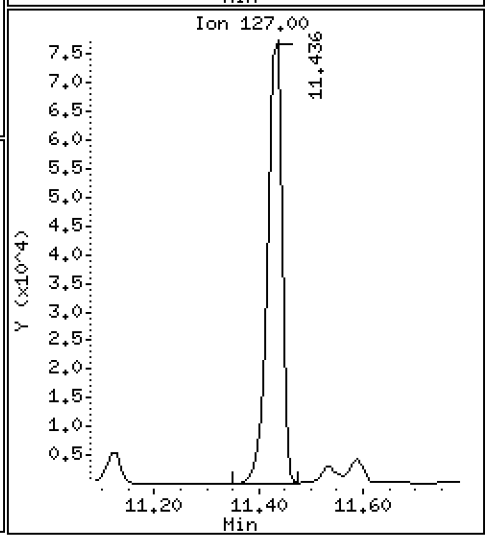












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

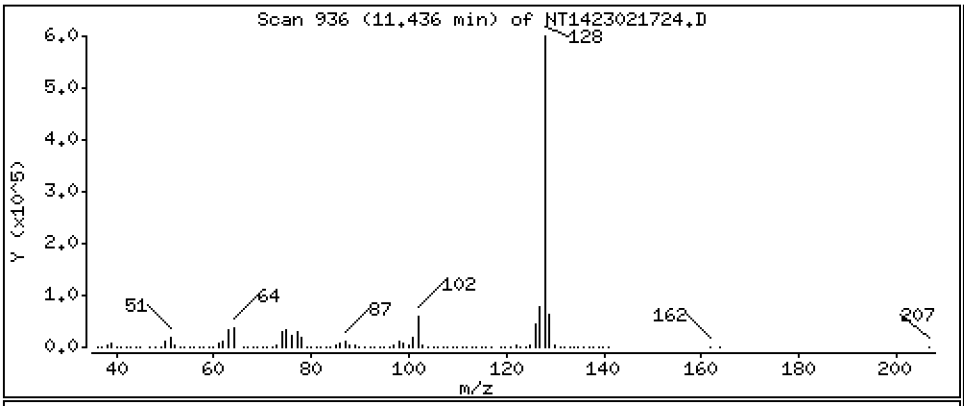
Operator: DSD

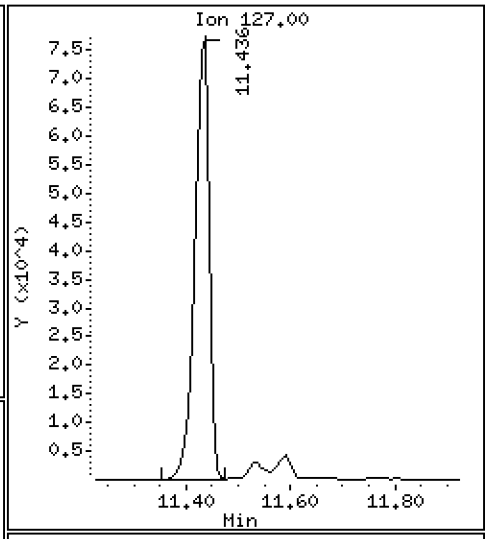
Column phase: ZB-5msi

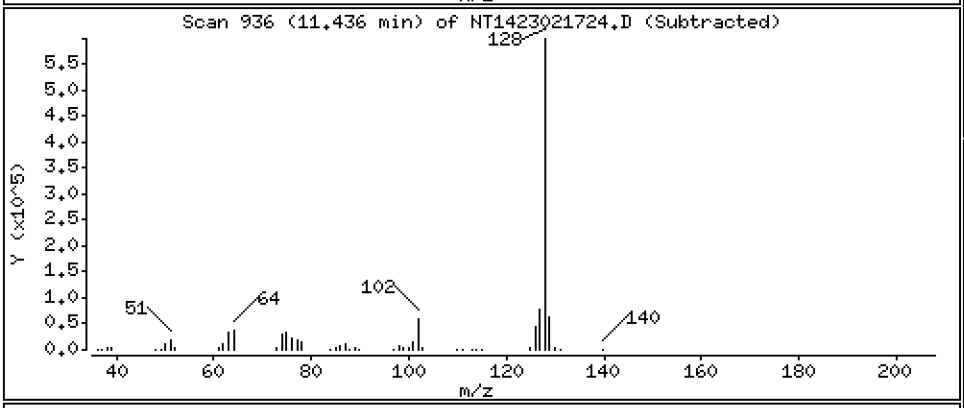
Column diameter: 0.25

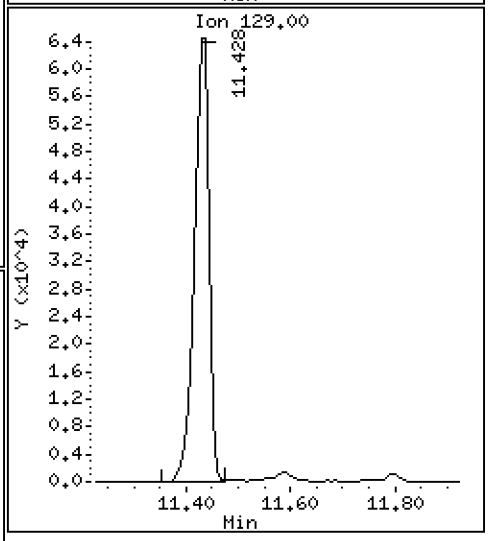
29 4-Chloroaniline

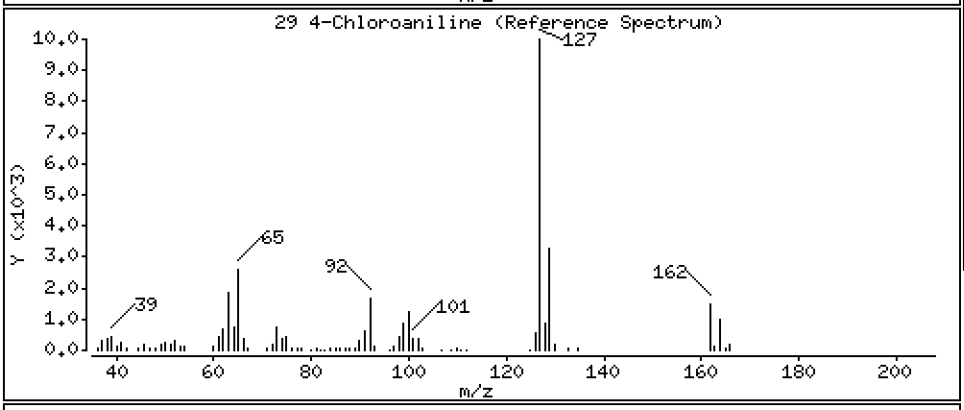
Concentration: 1.298 ug/mL

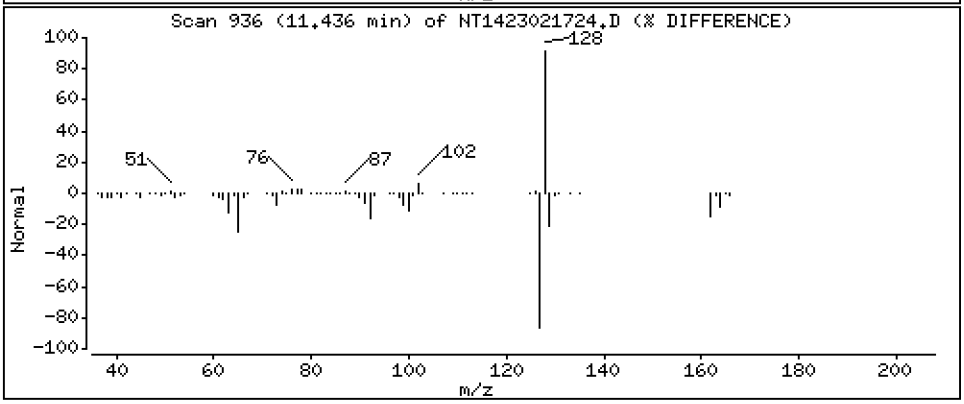












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

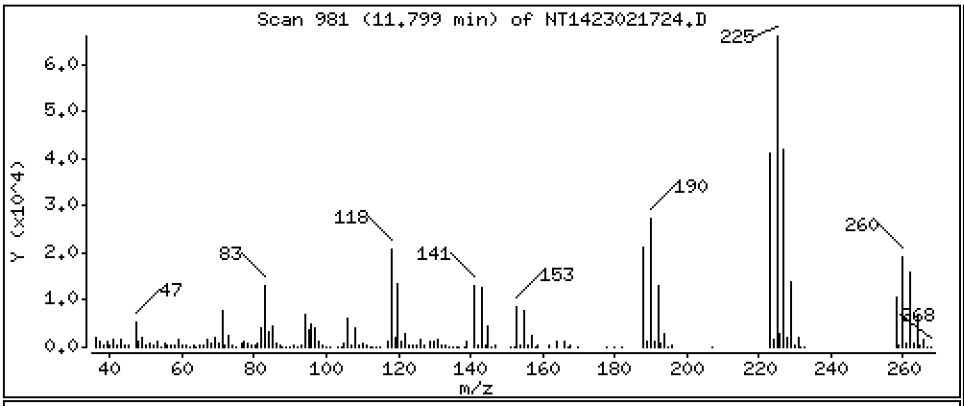
Operator: DSD

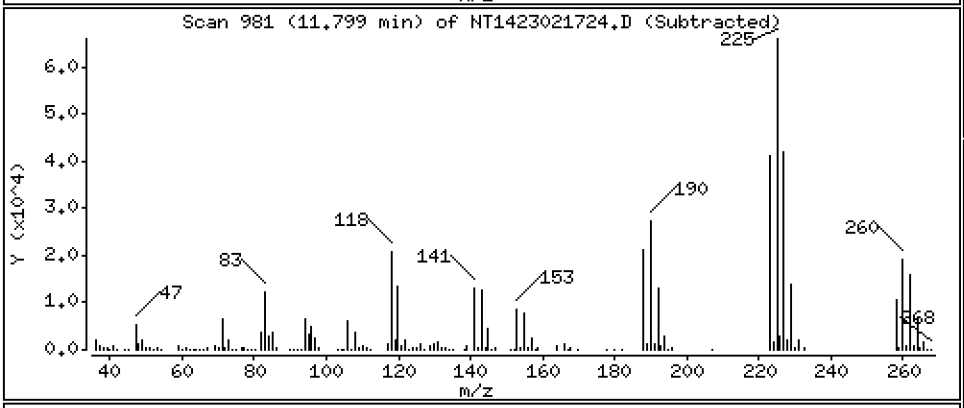
Column phase: ZB-5msi

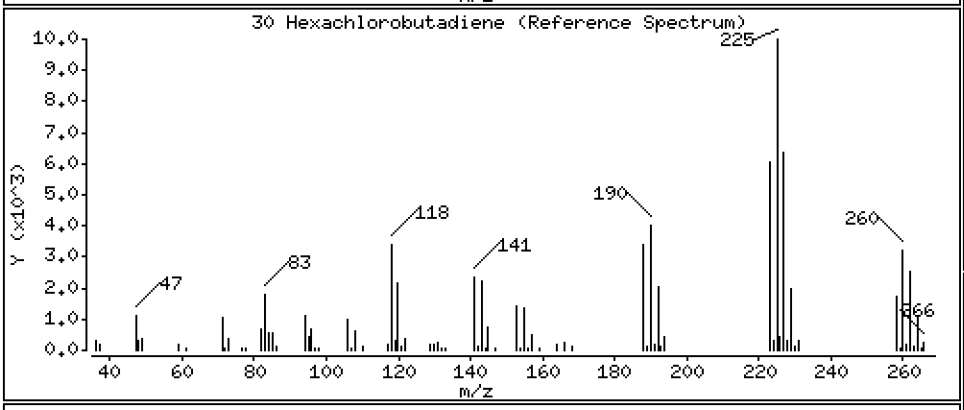
Column diameter: 0.25

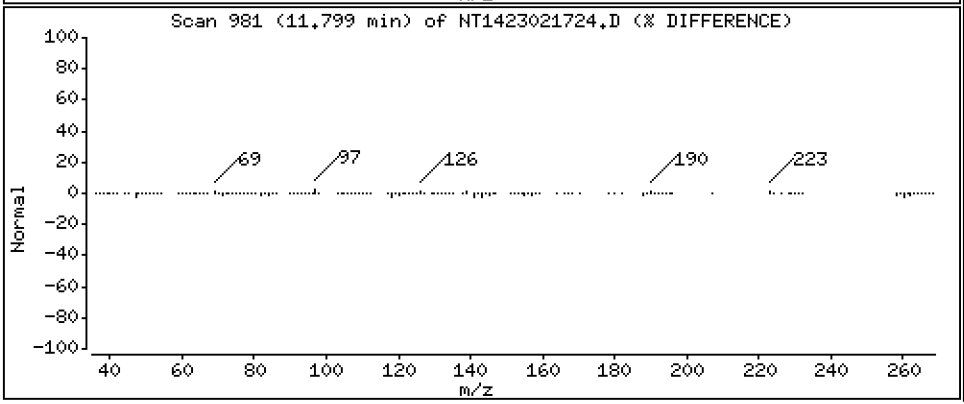
30 Hexachlorobutadiene

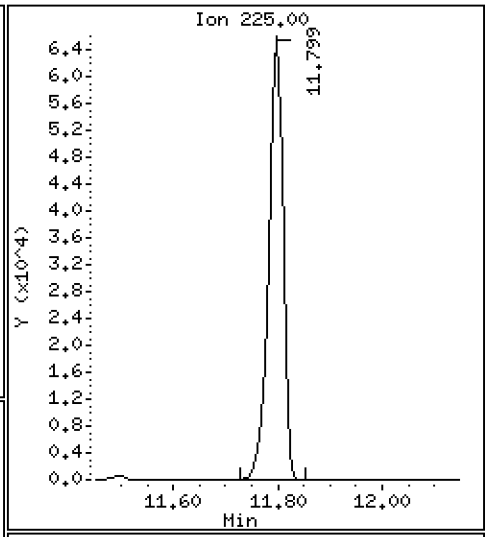
Concentration: 2.083 ug/mL

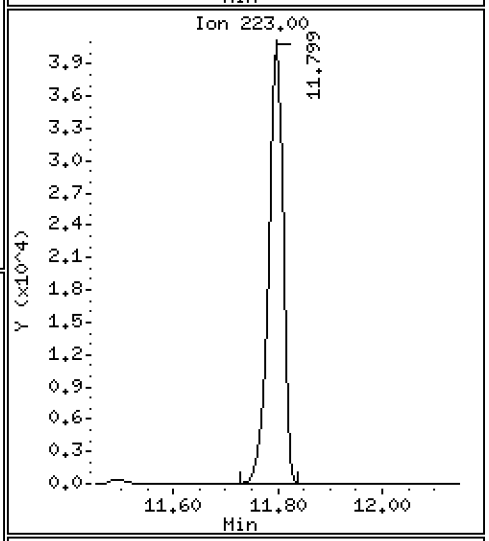


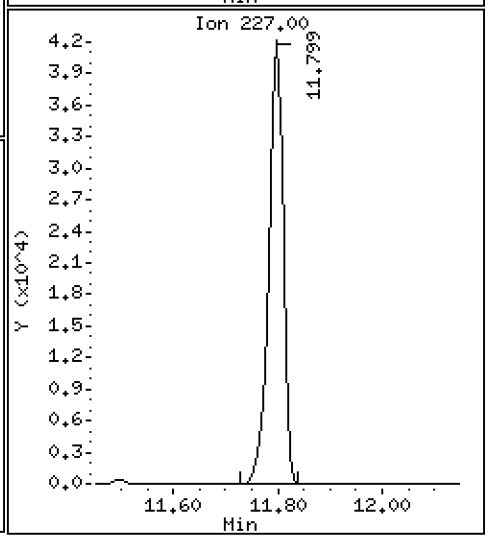












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

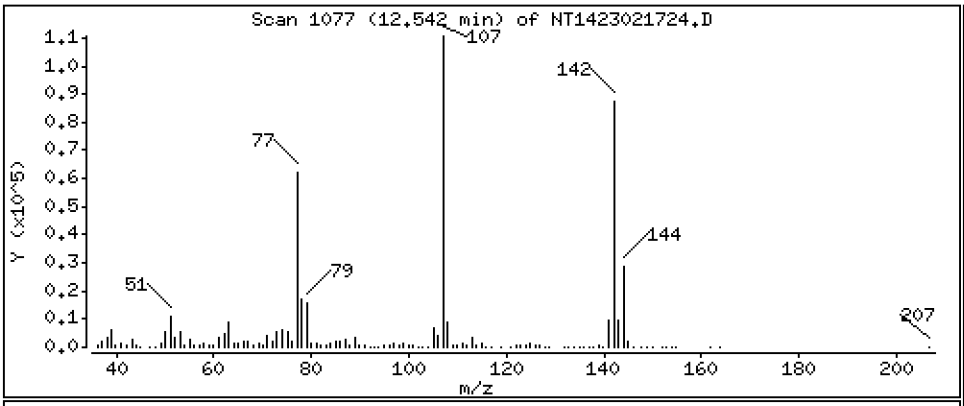
Operator: DSD

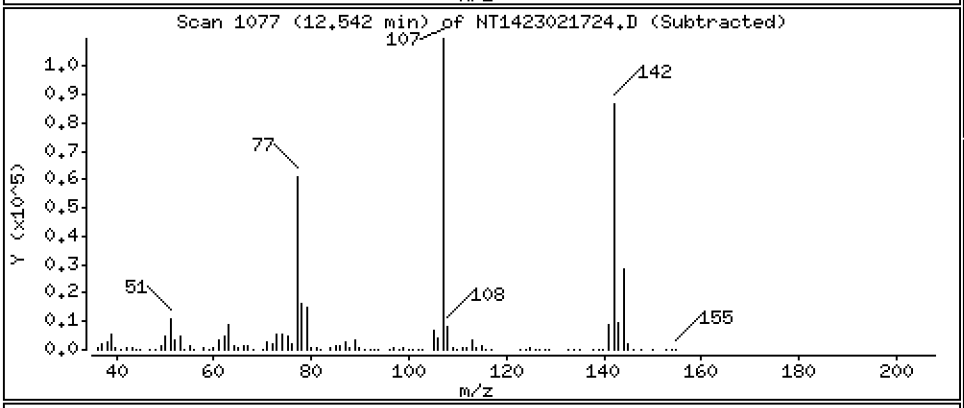
Column phase: ZB-5msi

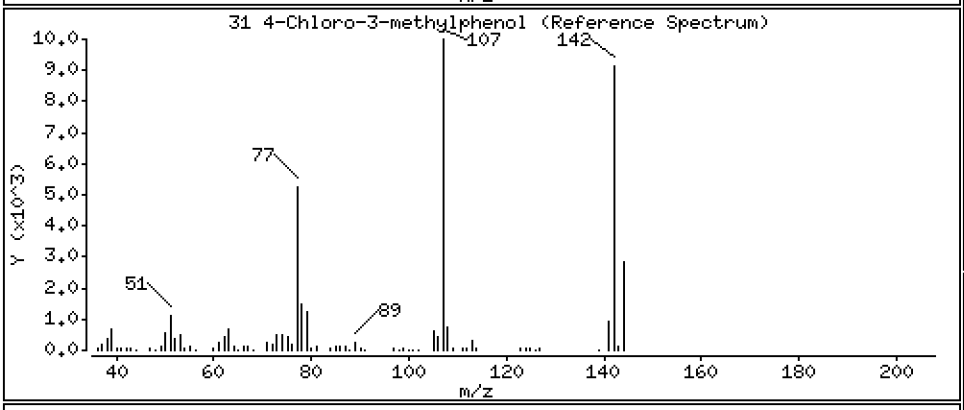
Column diameter: 0.25

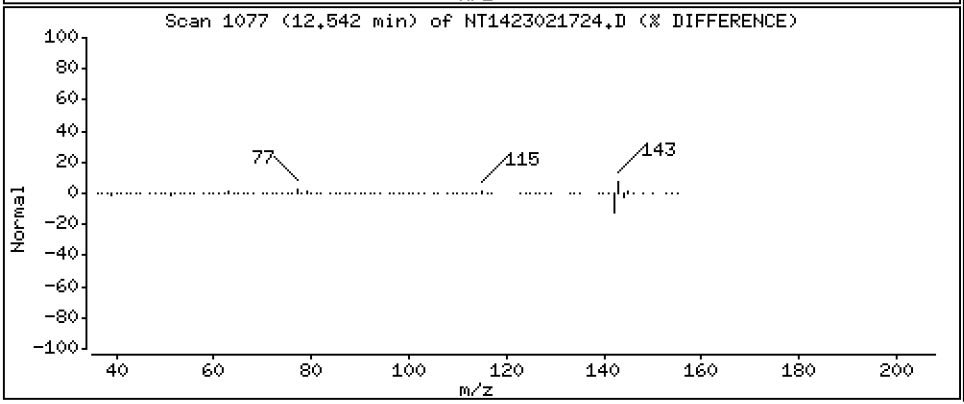
31 4-Chloro-3-methylphenol

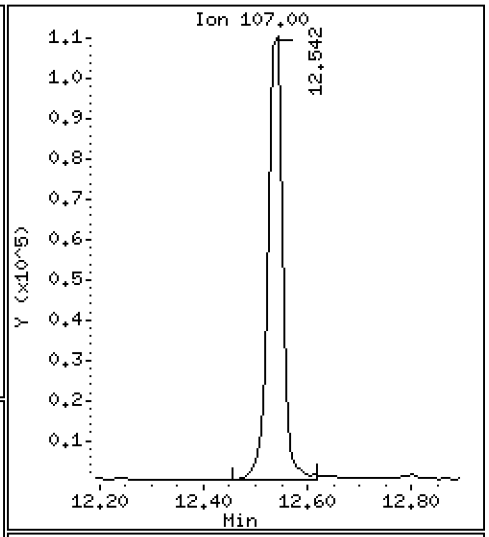
Concentration: 2.455 ug/mL

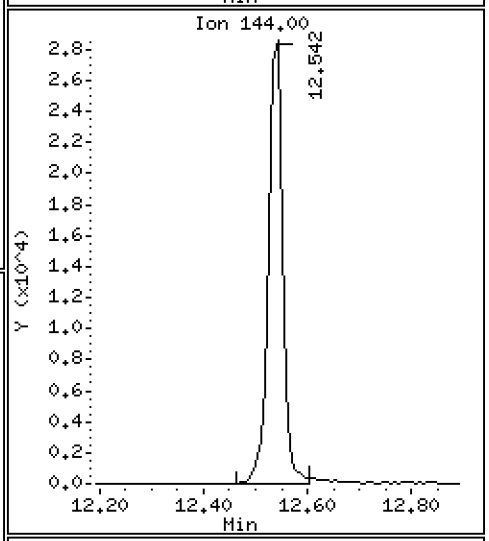


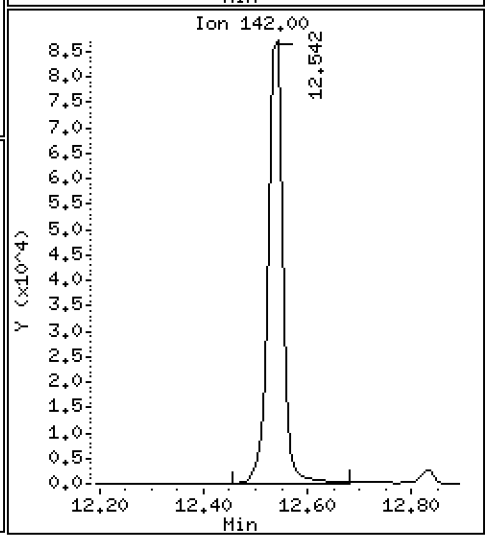












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

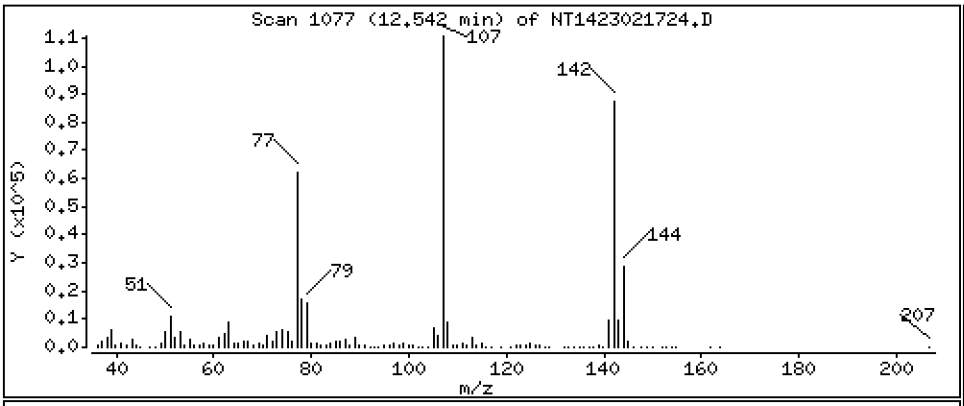
Operator: DSD

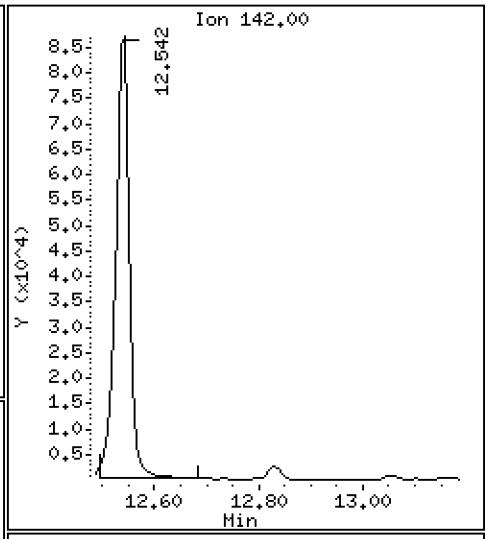
Column phase: ZB-5msi

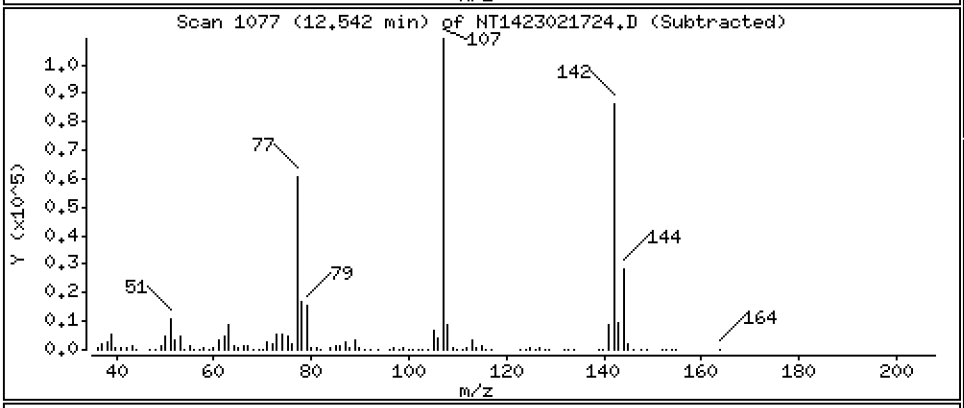
Column diameter: 0.25

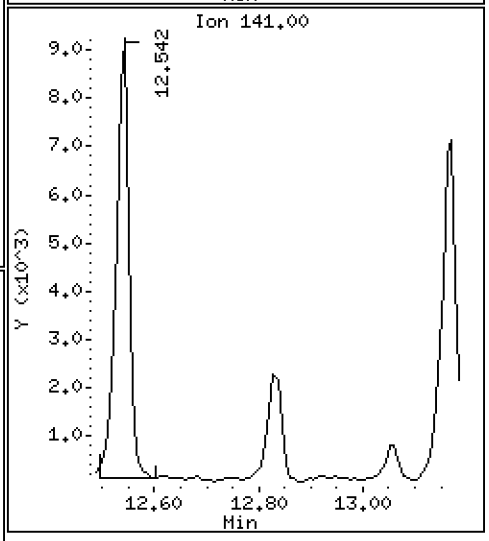
32 2-Methylnaphthalene

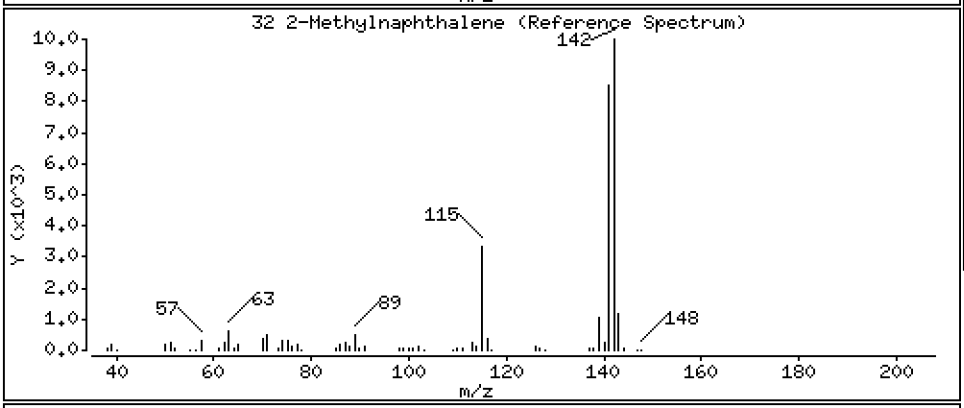
Concentration: 0.8343 ug/mL

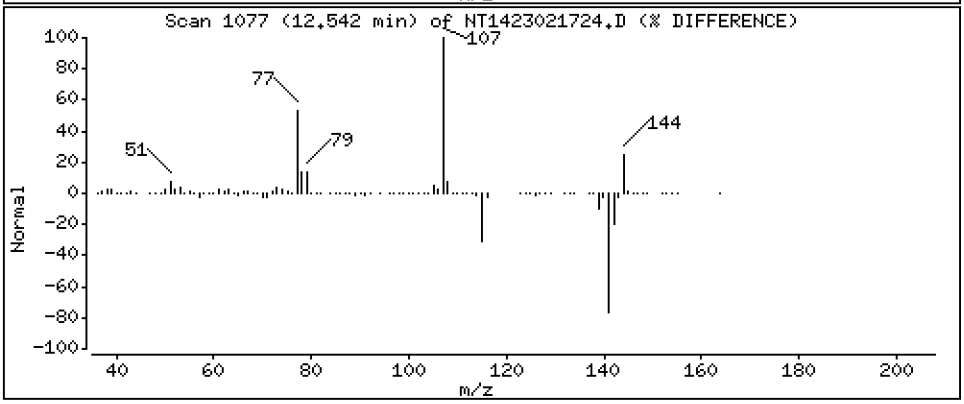












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

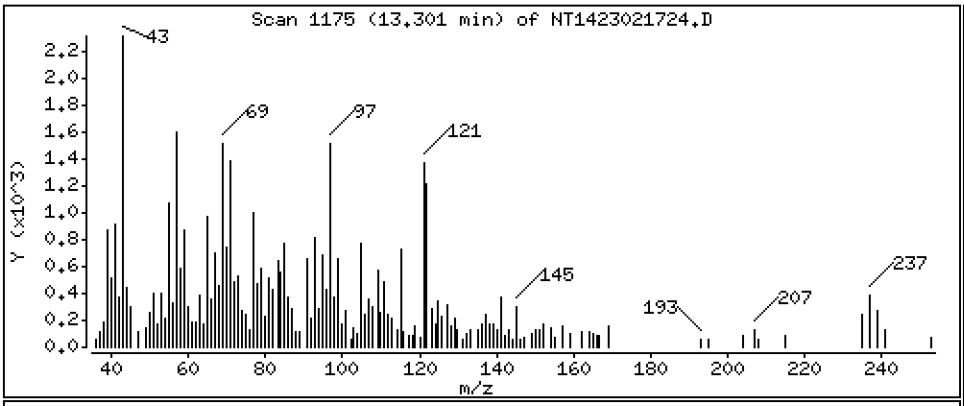
Operator: DSD

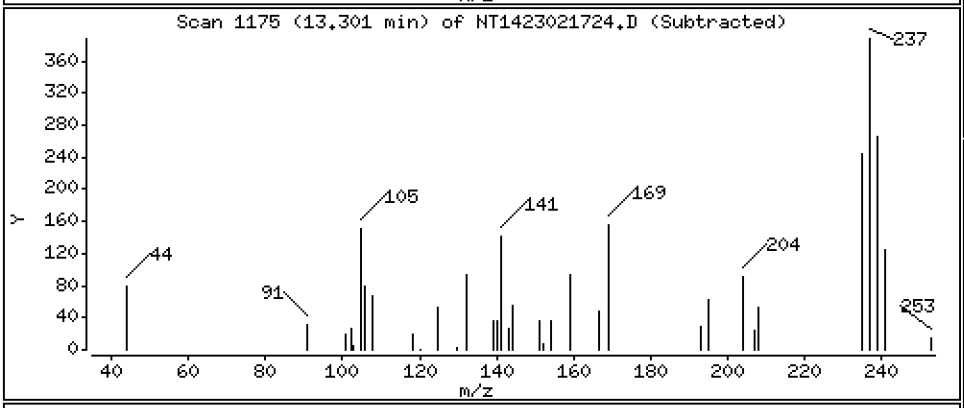
Column phase: ZB-5msi

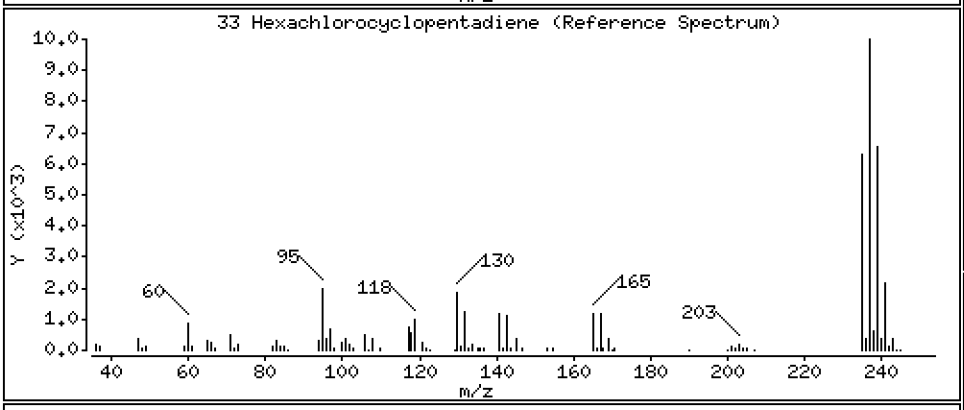
Column diameter: 0.25

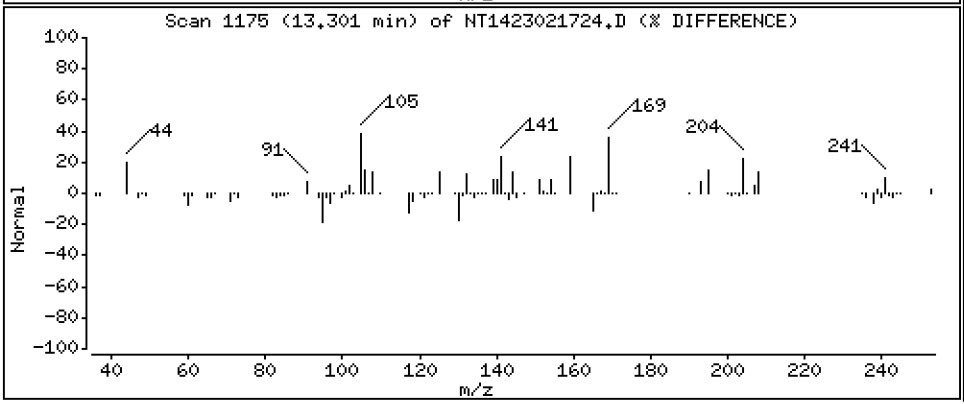
33 Hexachlorocyclopentadiene

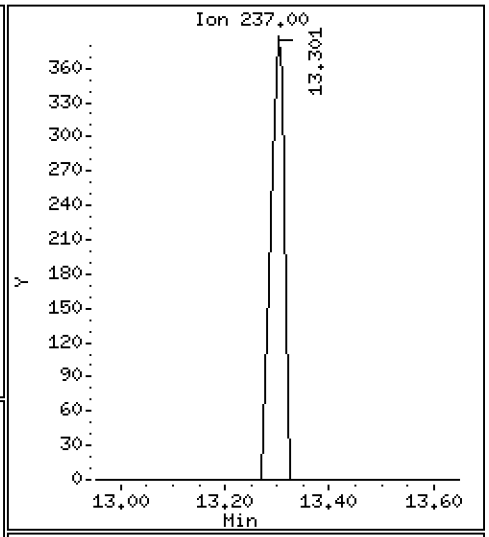
Concentration: 0.01101 ug/mL

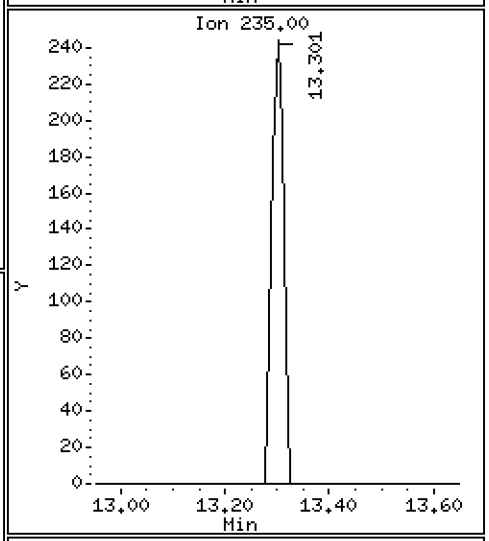


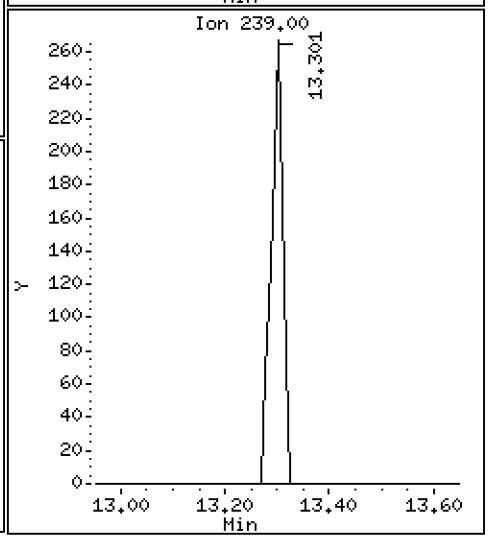












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

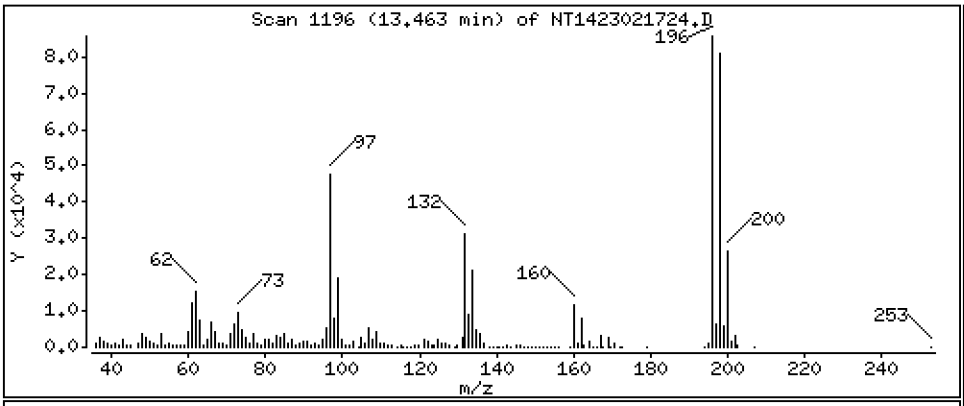
Operator: DSD

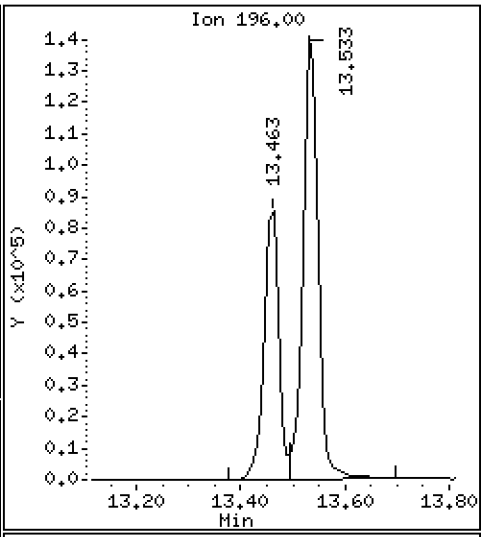
Column phase: ZB-5msi

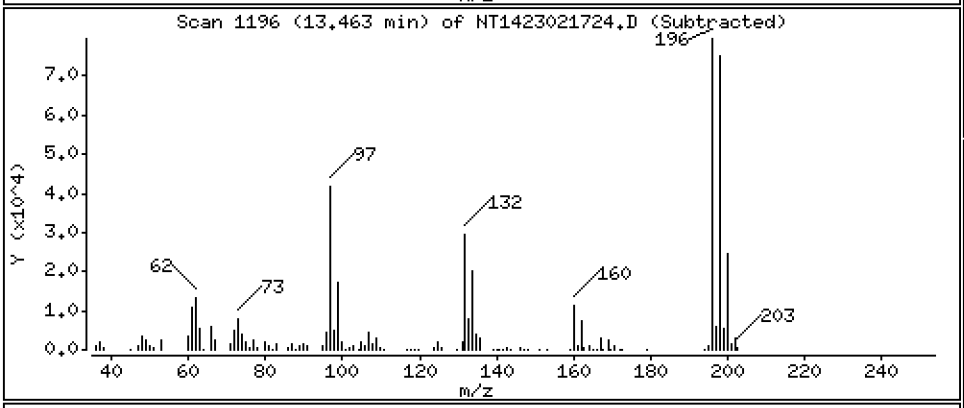
Column diameter: 0.25

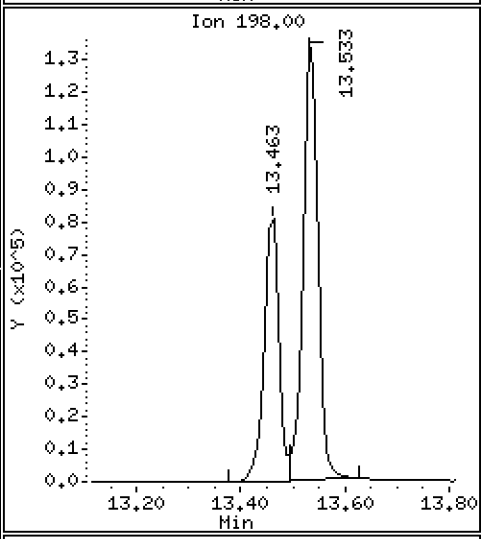
34 2,4,6-Trichlorophenol

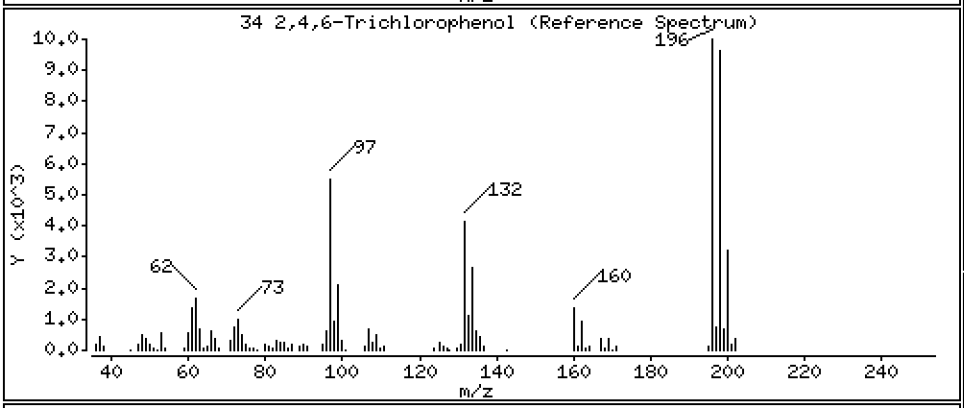
Concentration: 2.682 ug/mL

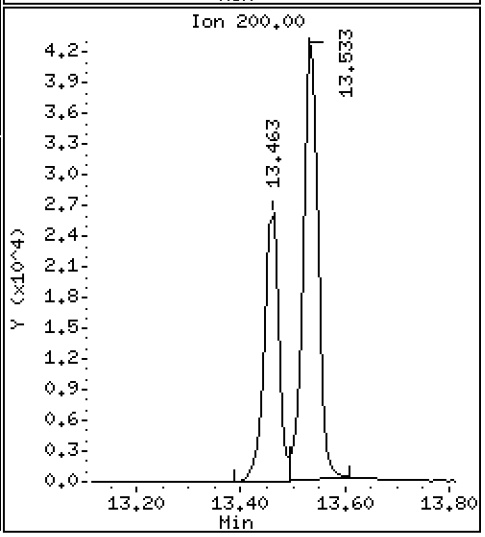


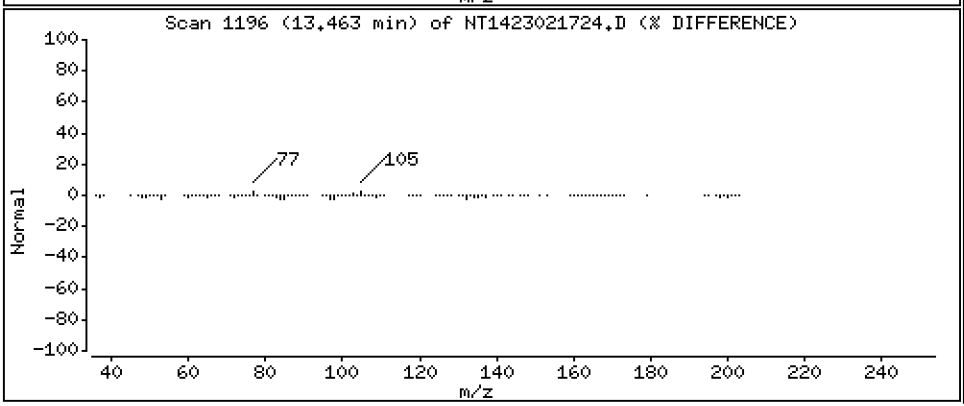












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

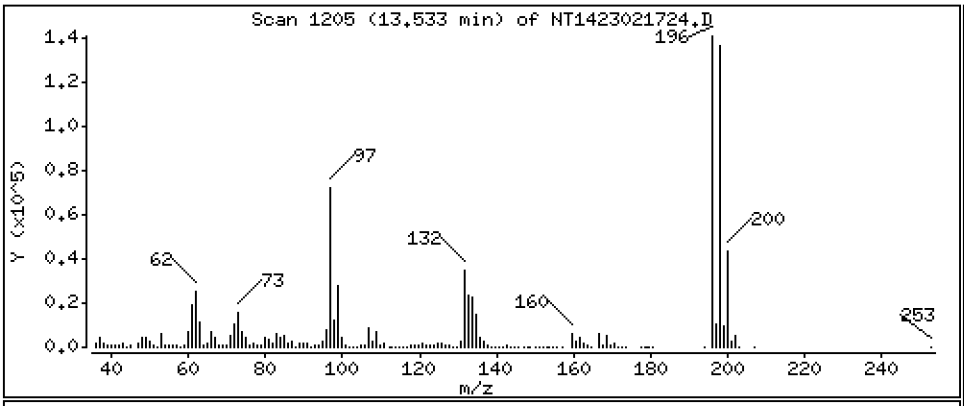
Operator: DSD

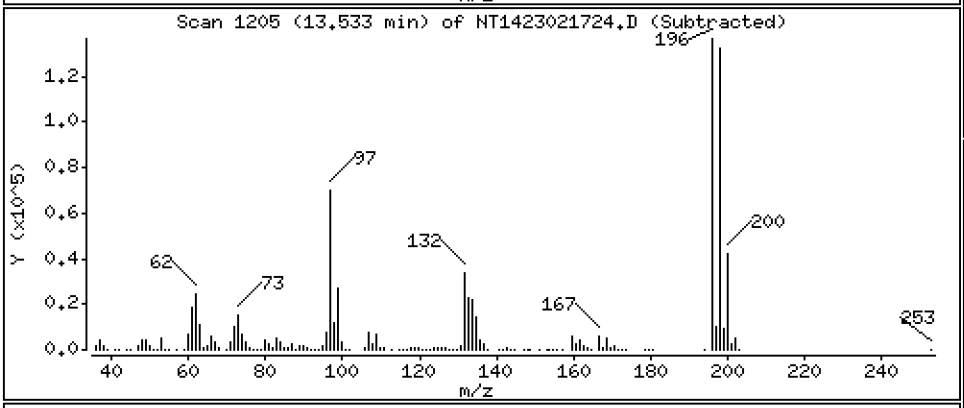
Column phase: ZB-5msi

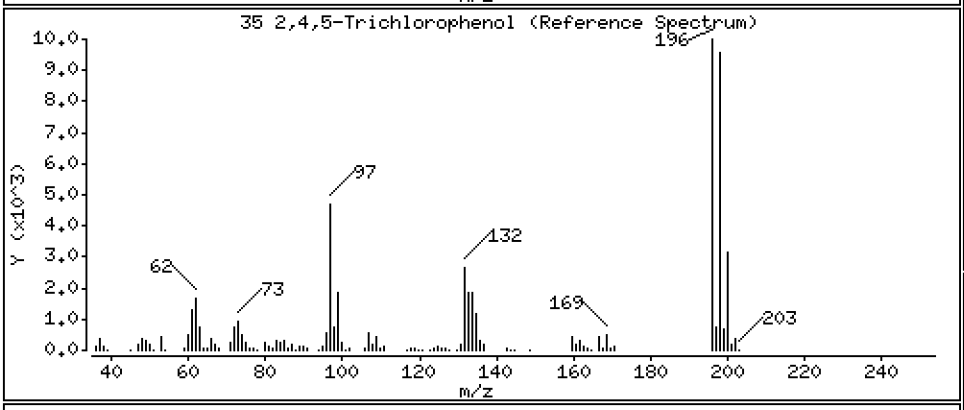
Column diameter: 0.25

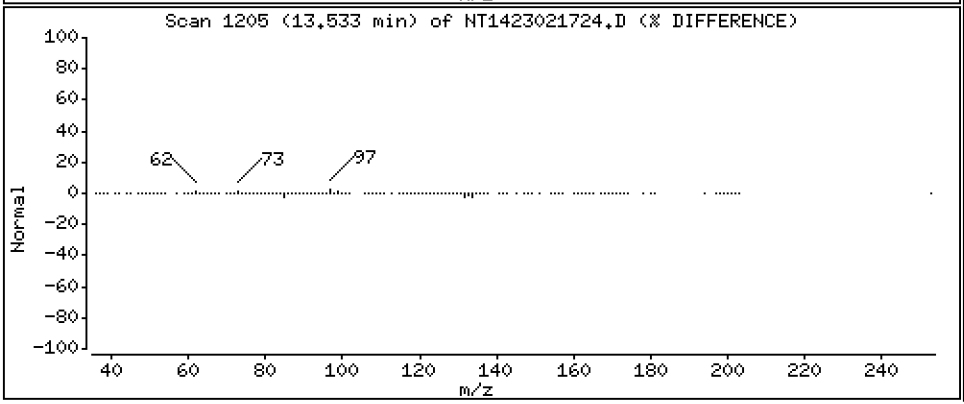
35 2,4,5-Trichlorophenol

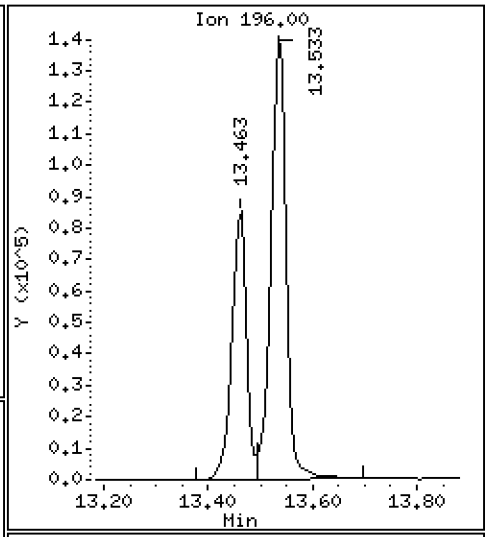
Concentration: 4.147 ug/mL

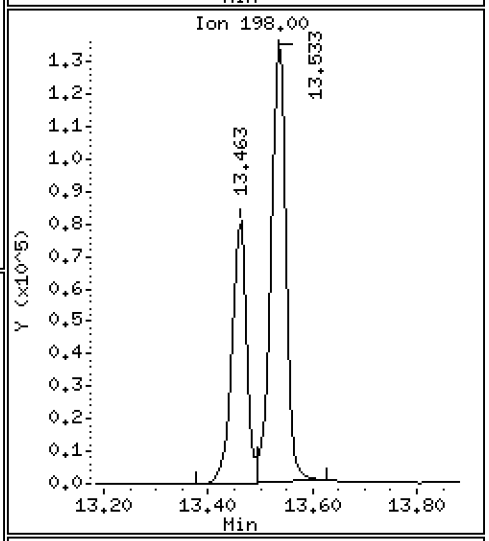


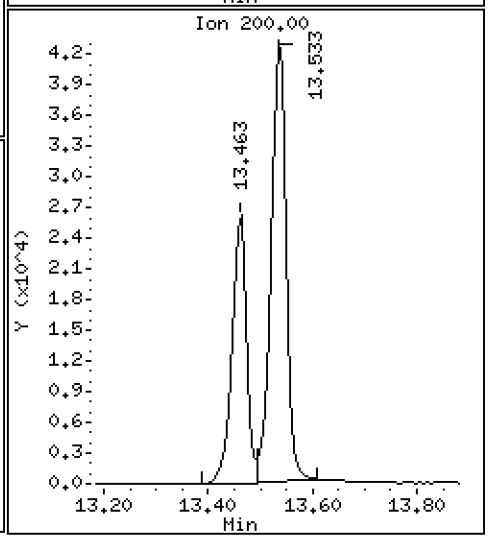












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

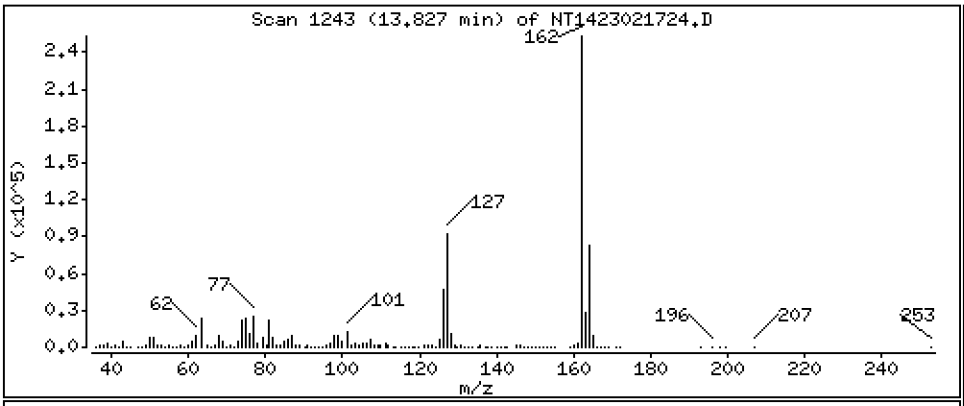
Operator: DSD

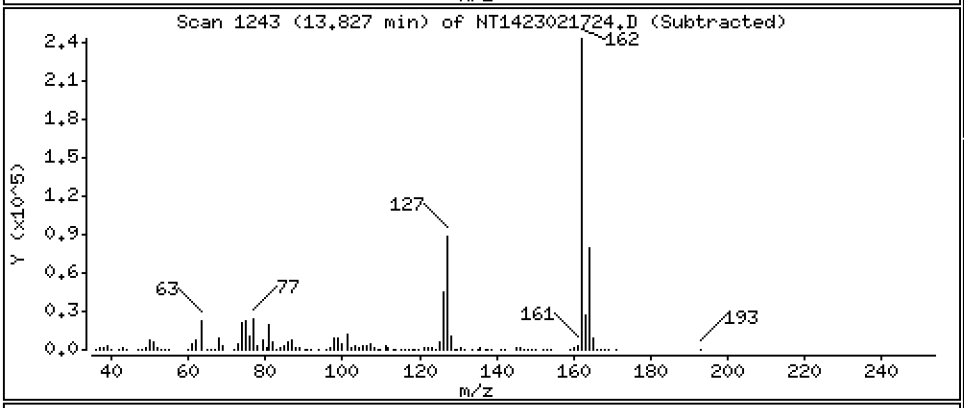
Column phase: ZB-5msi

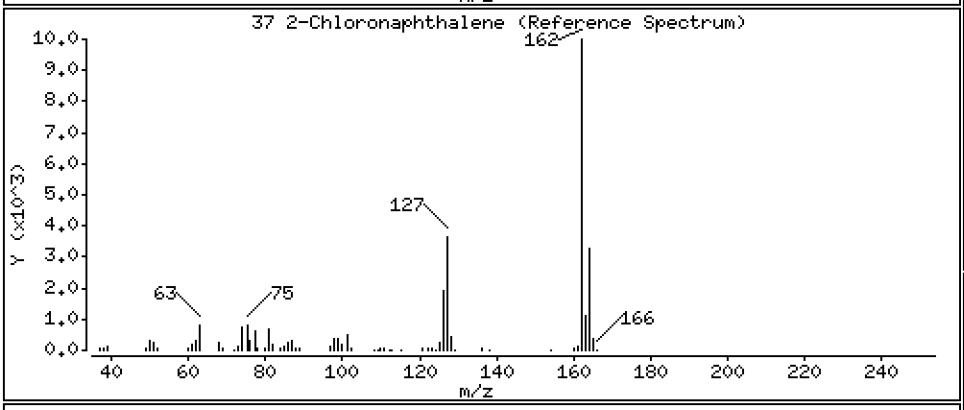
Column diameter: 0.25

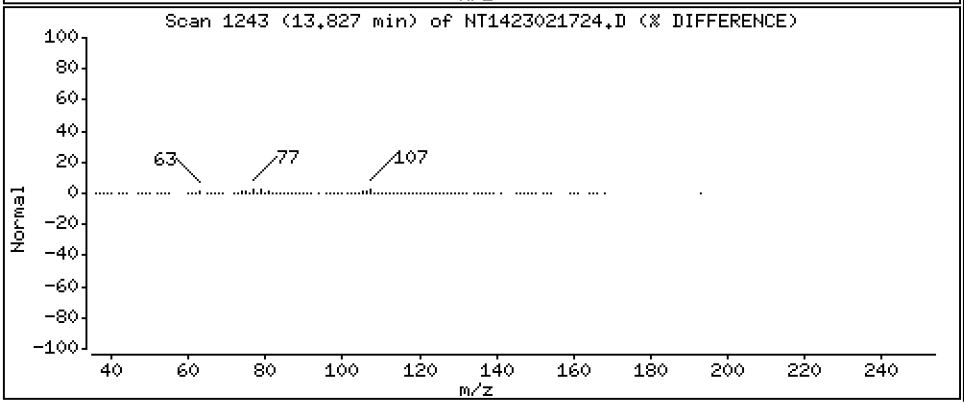
37 2-Chloronaphthalene

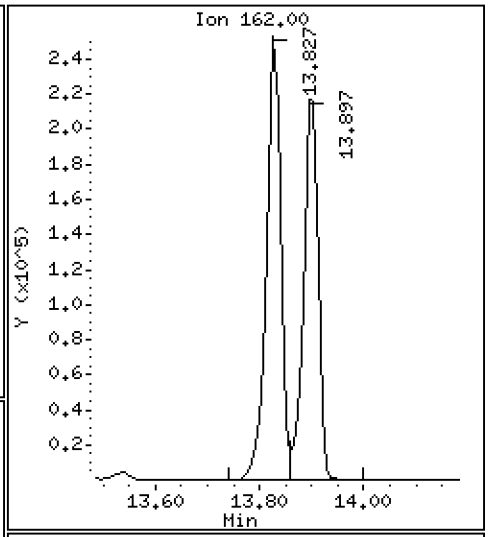
Concentration: 2.529 ug/mL

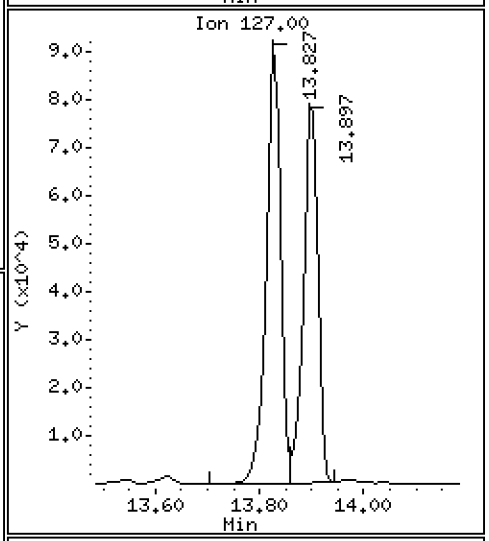


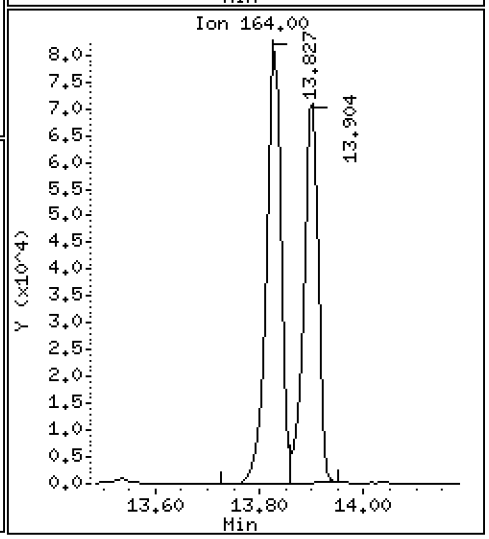












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

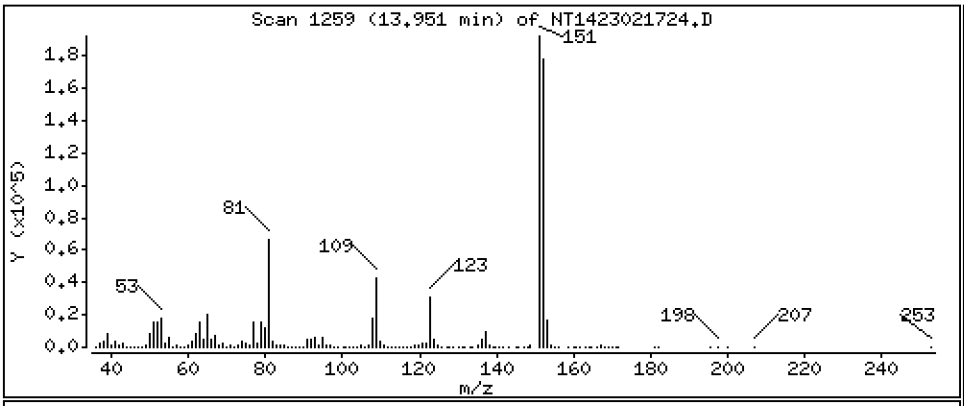
Operator: DSD

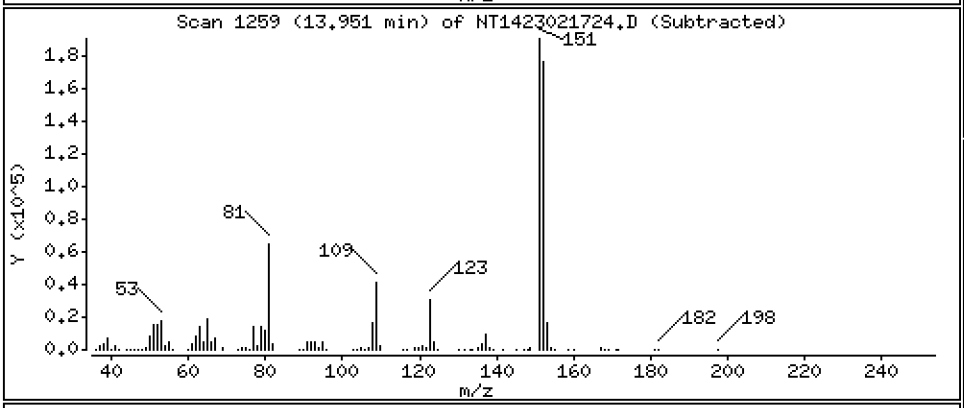
Column phase: ZB-5msi

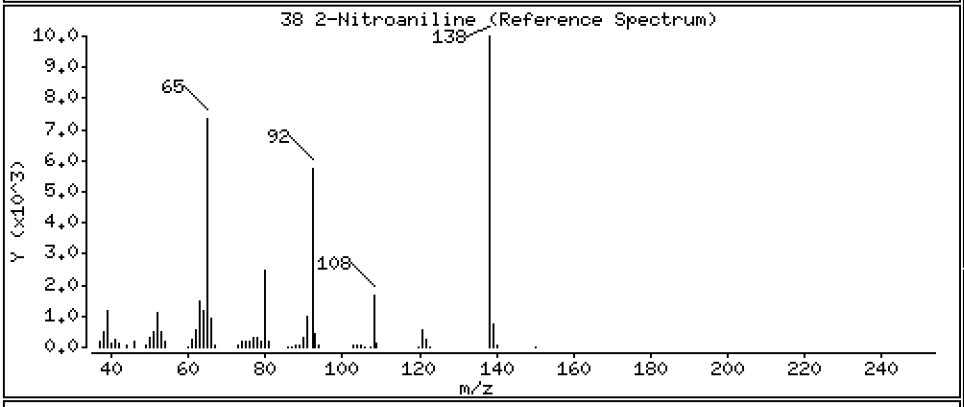
Column diameter: 0.25

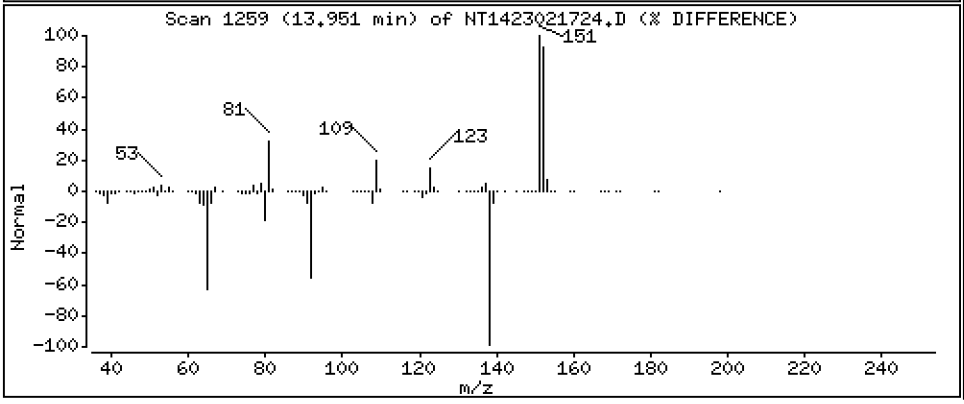
38 2-Nitroaniline

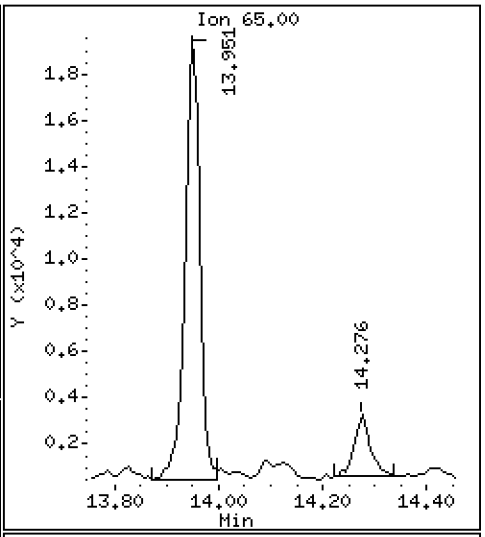
Concentration: 0.6071 ug/mL

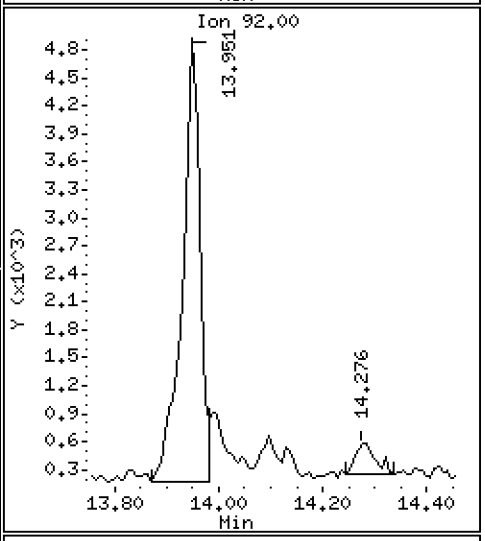


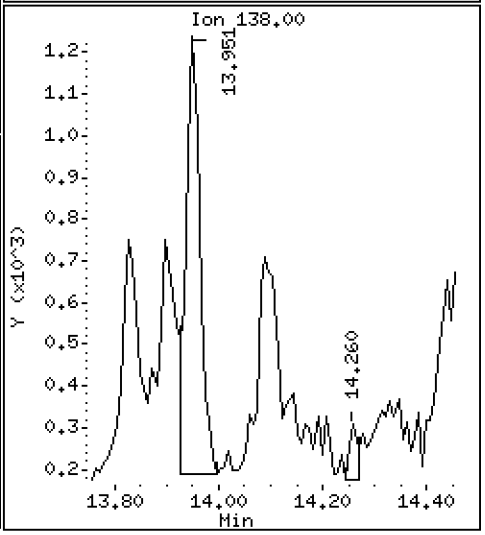












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

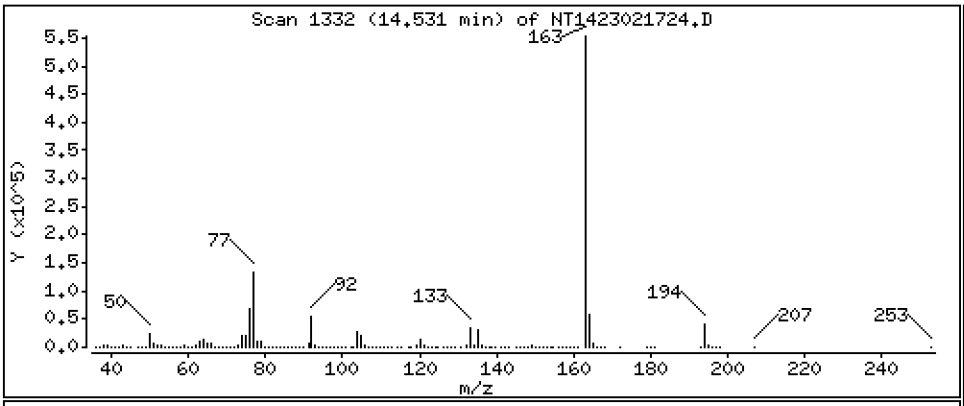
Operator: DSD

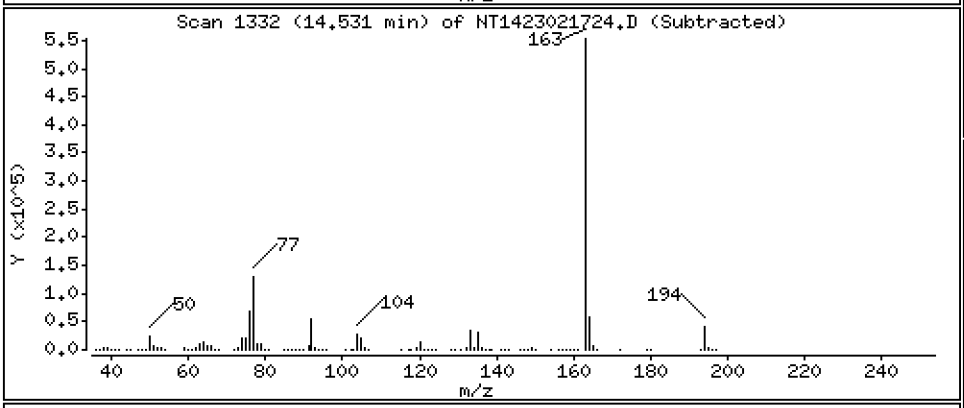
Column phase: ZB-5msi

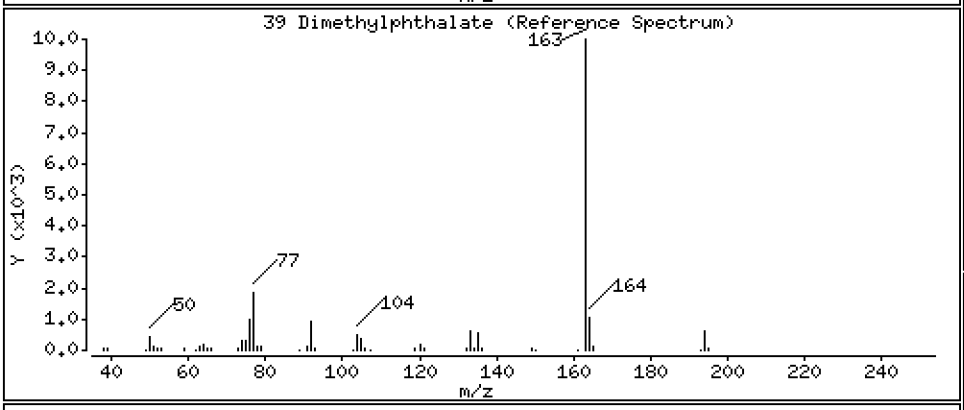
Column diameter: 0.25

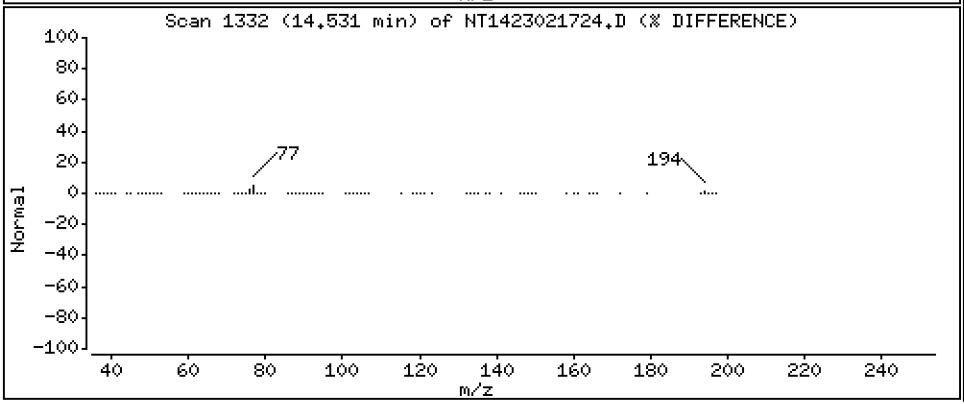
39 Dimethylphthalate

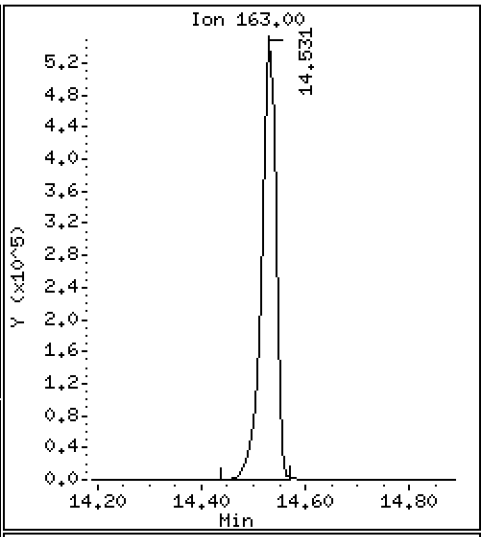
Concentration: 5.307 ug/mL

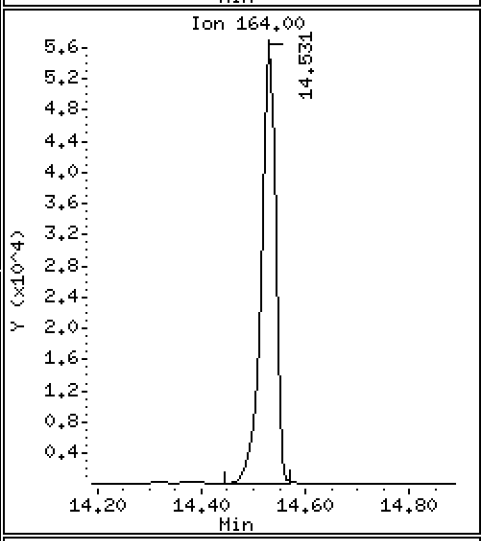


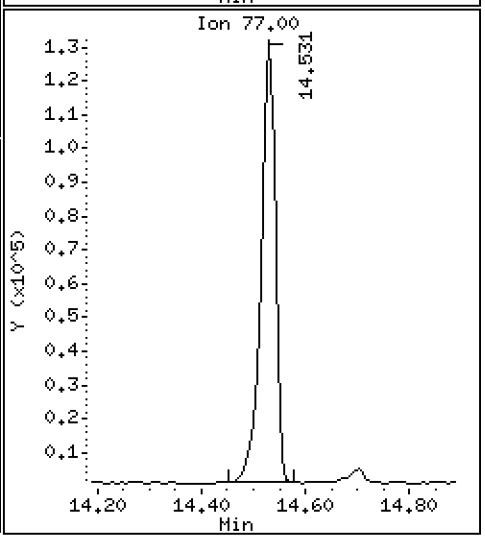












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

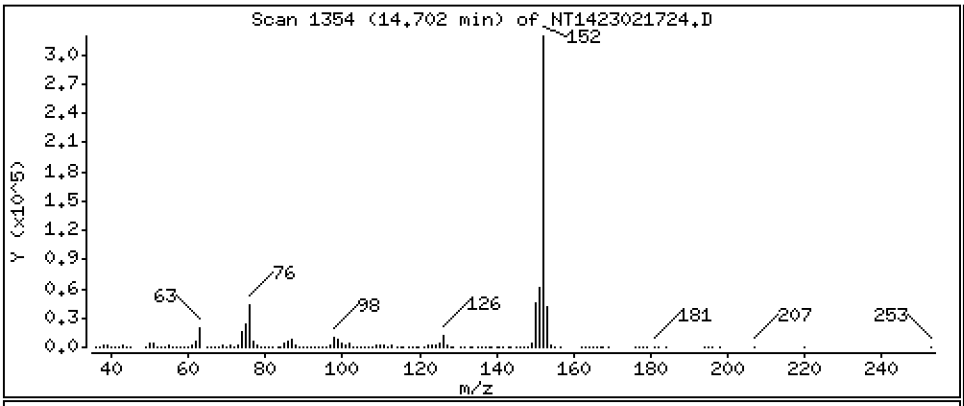
Operator: DSD

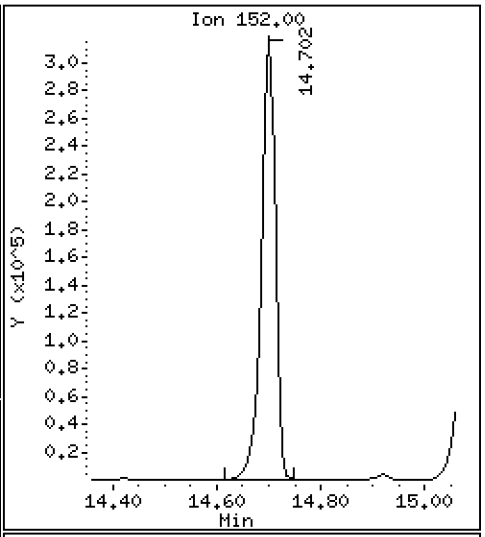
Column phase: ZB-5msi

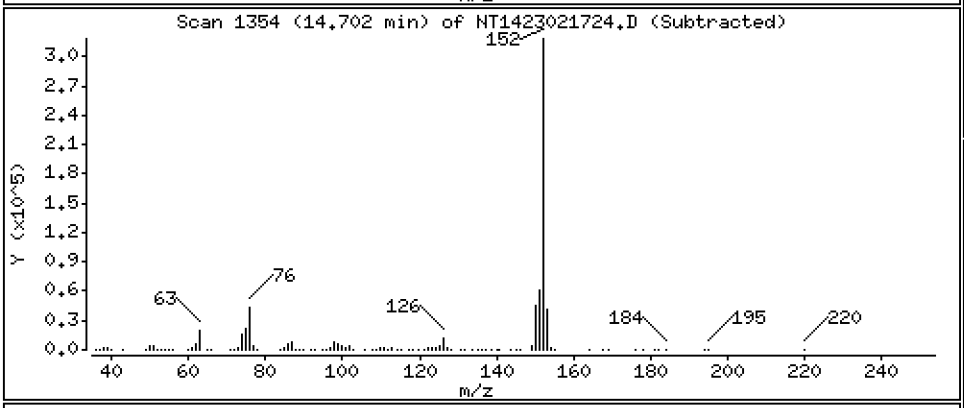
Column diameter: 0.25

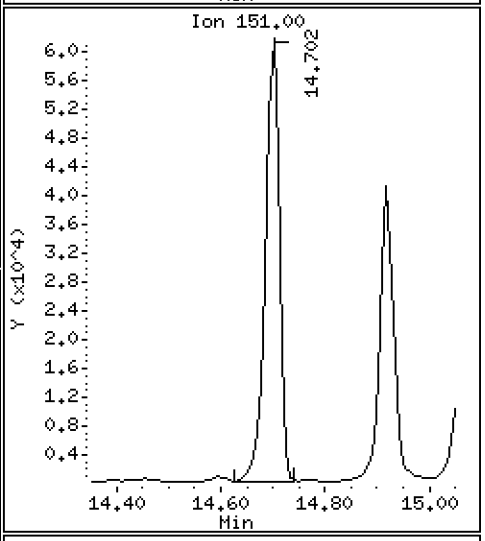
40 Acenaphthylene

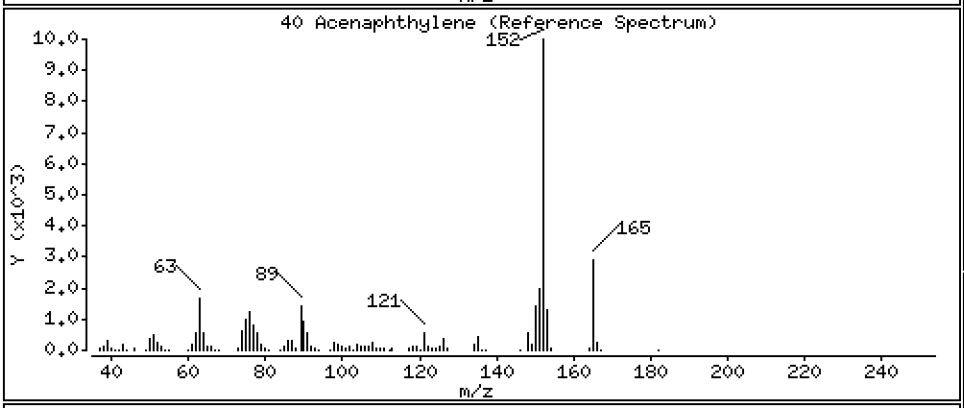
Concentration: 2.051 ug/mL

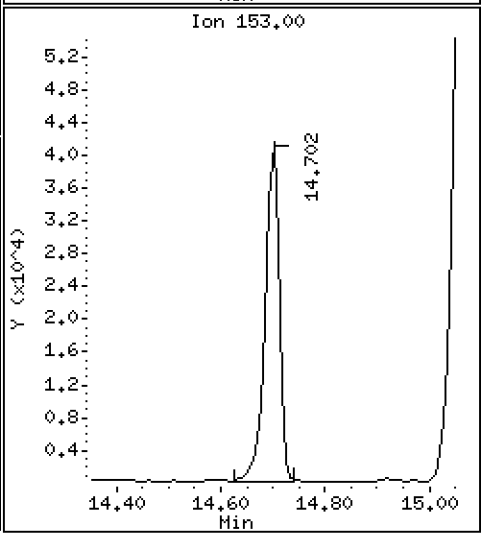


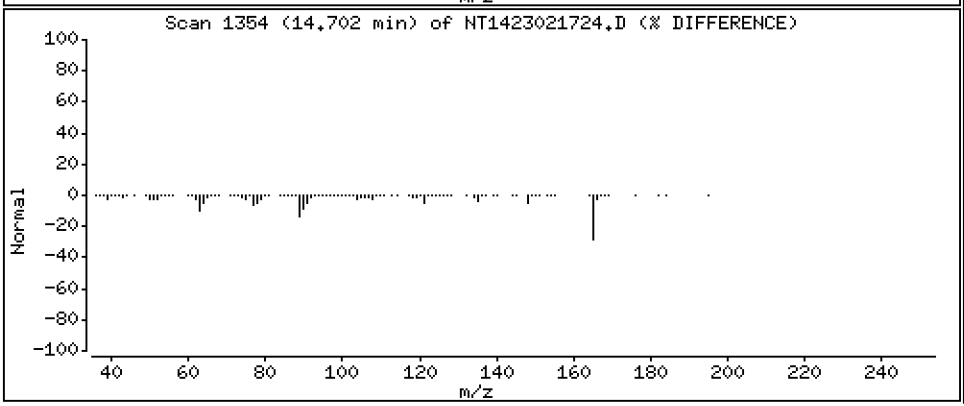












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

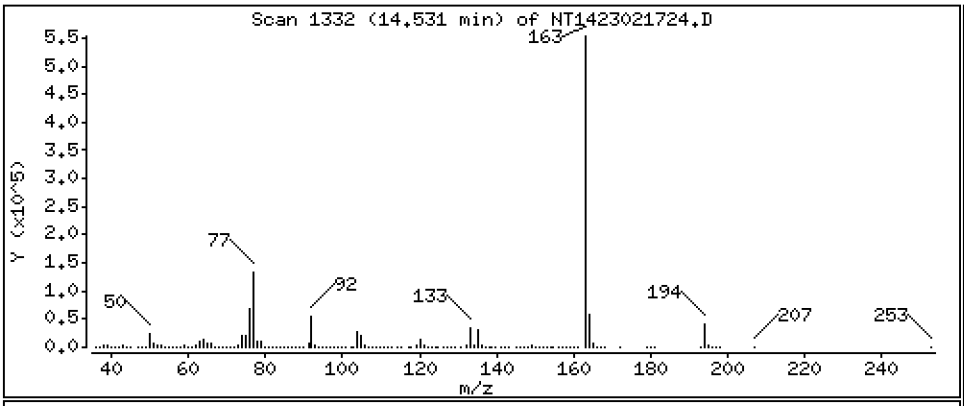
Operator: DSD

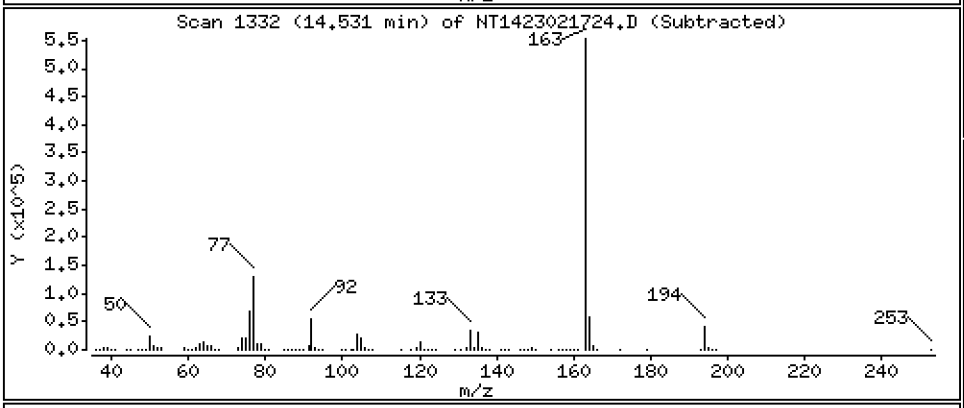
Column phase: ZB-5msi

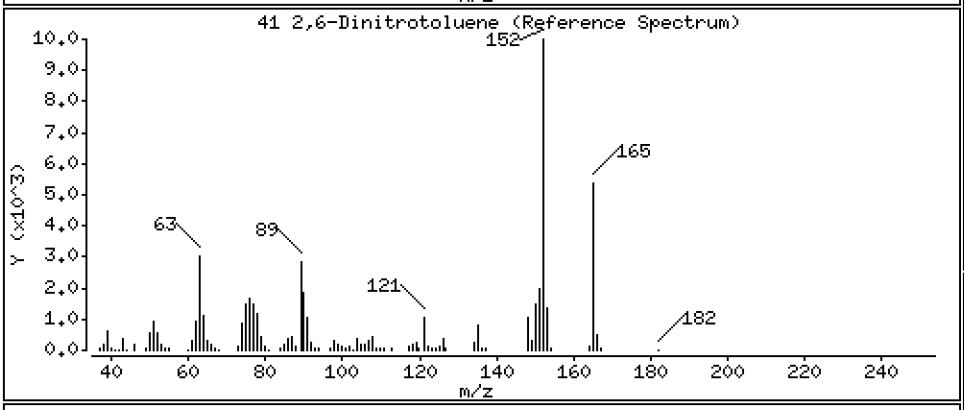
Column diameter: 0.25

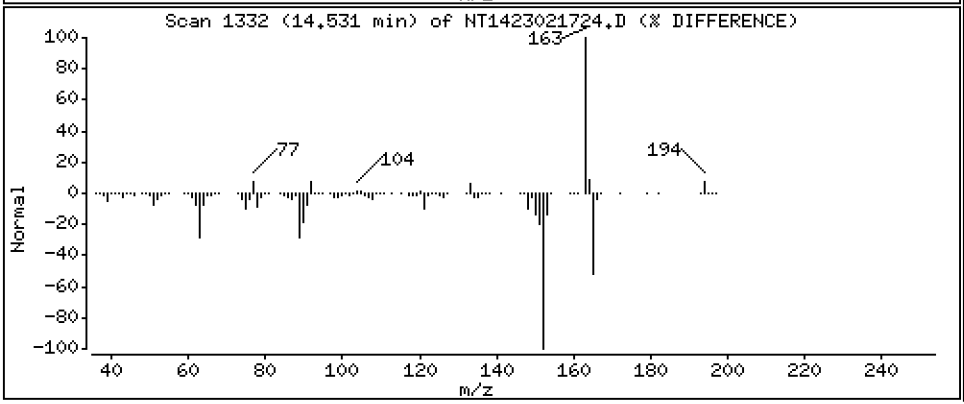
41 2,6-Dinitrotoluene

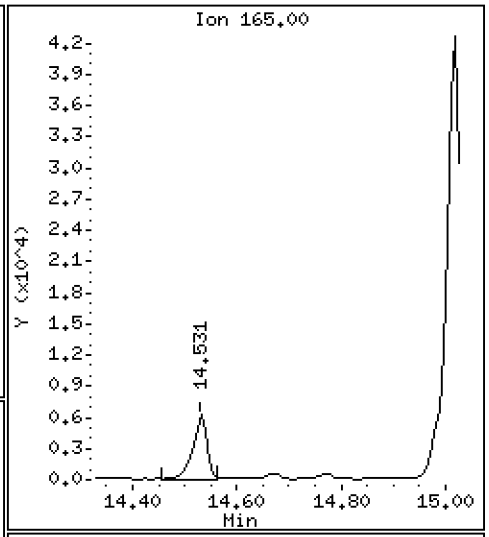
Concentration: 0.2497 ug/mL

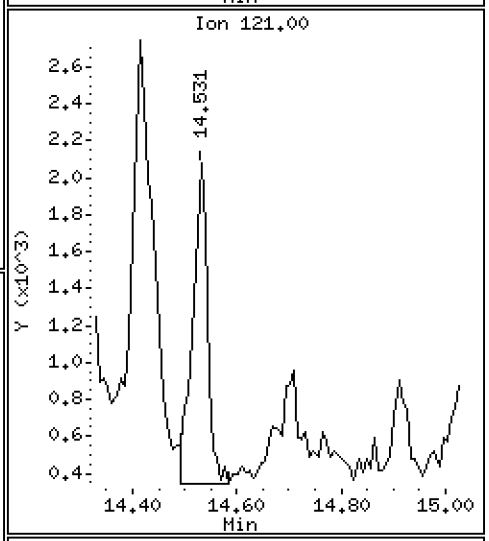


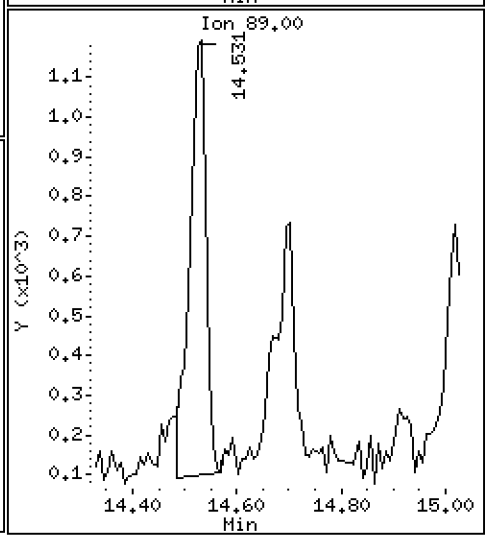












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

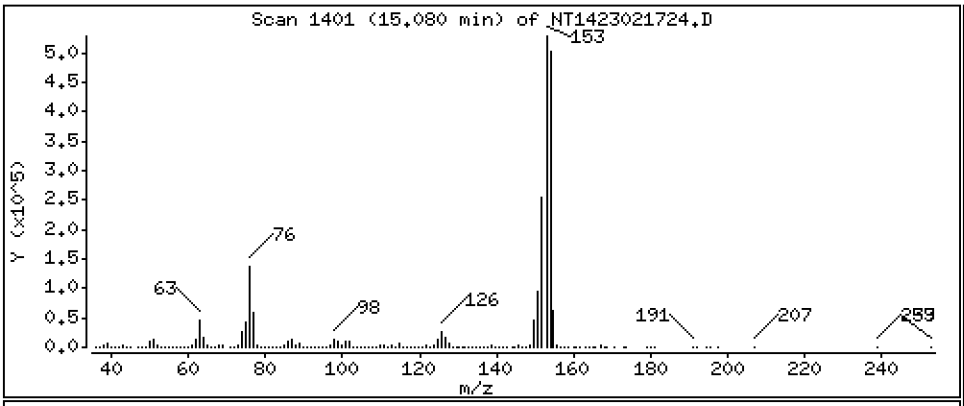
Operator: DSD

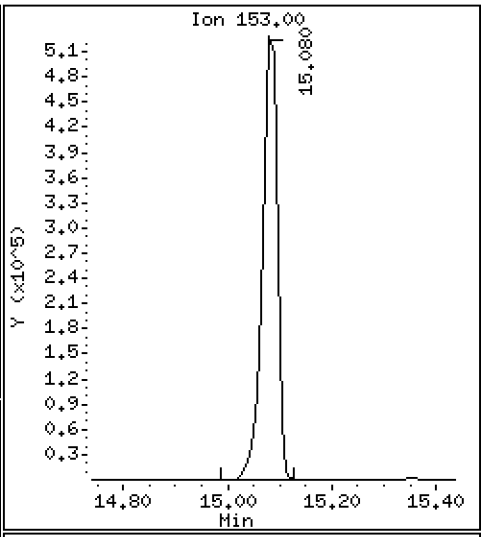
Column phase: ZB-5msi

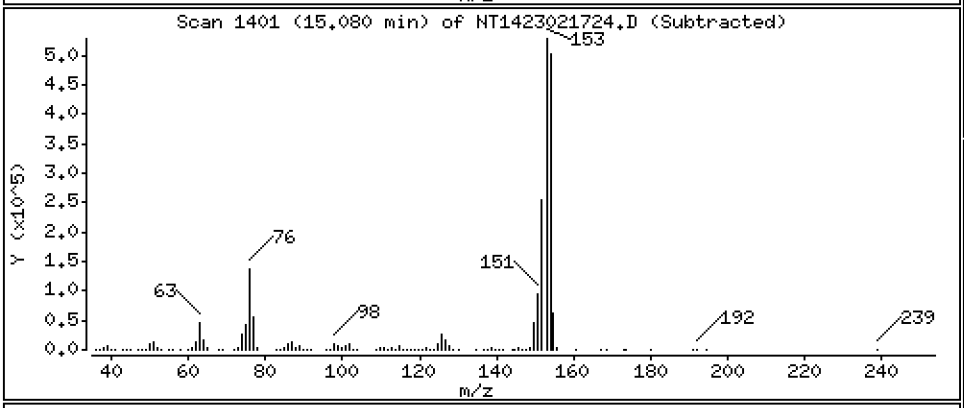
Column diameter: 0.25

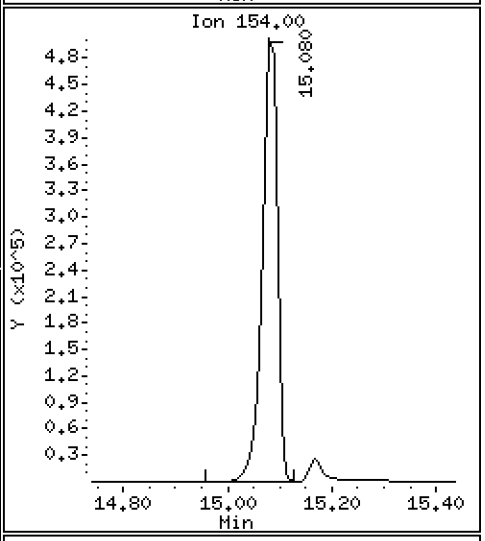
44 Acenaphthene

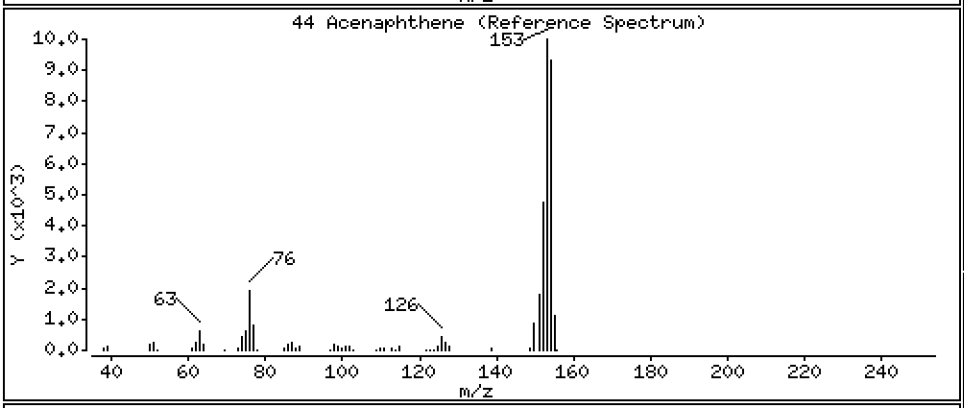
Concentration: 6.110 ug/mL

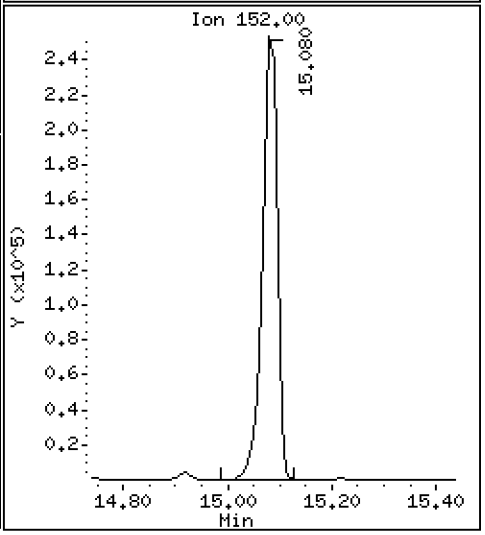


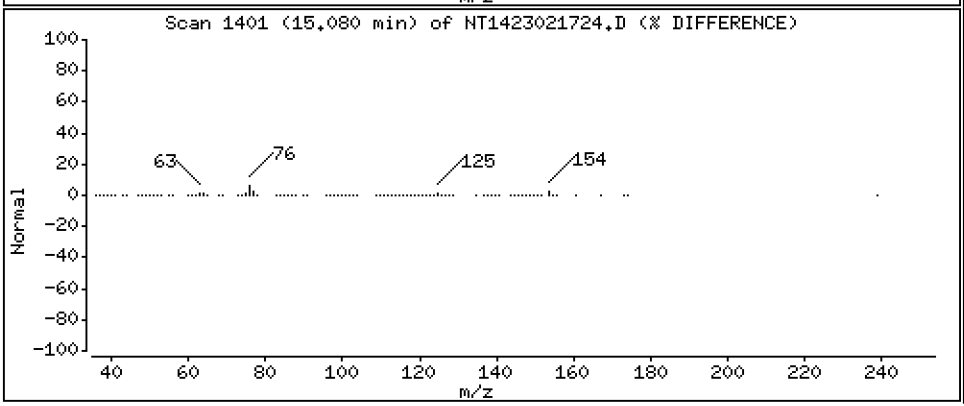












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

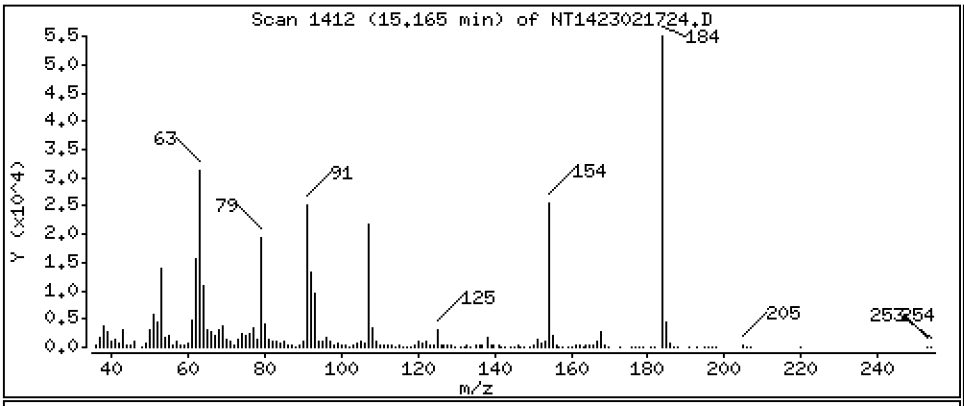
Operator: DSD

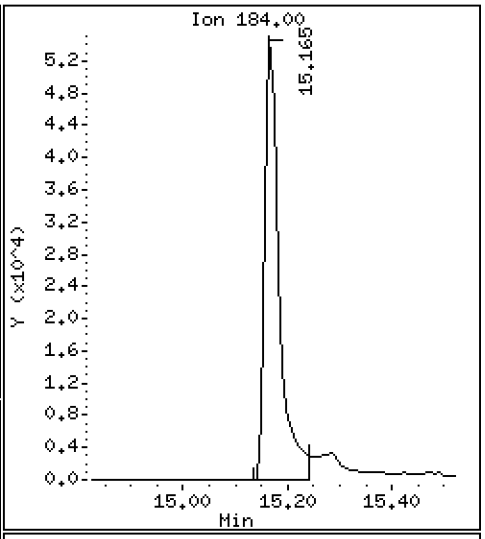
Column phase: ZB-5msi

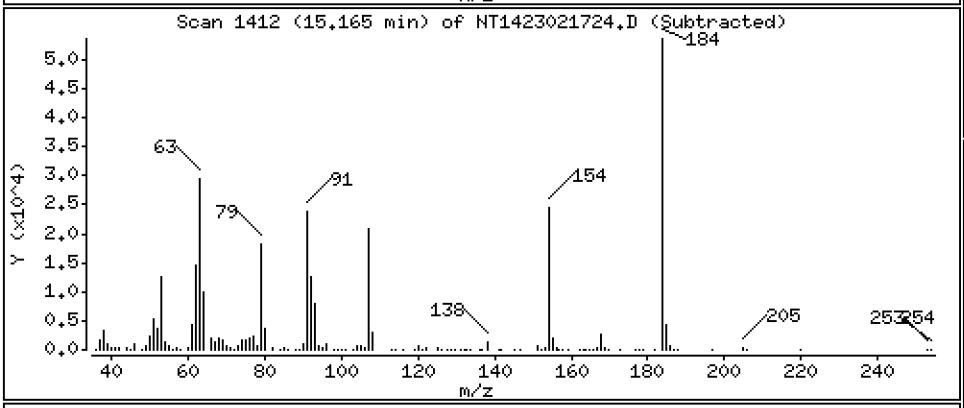
Column diameter: 0.25

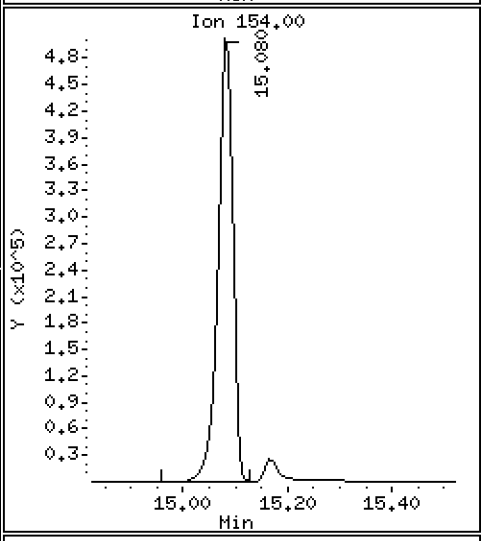
45 2,4-Dinitrophenol

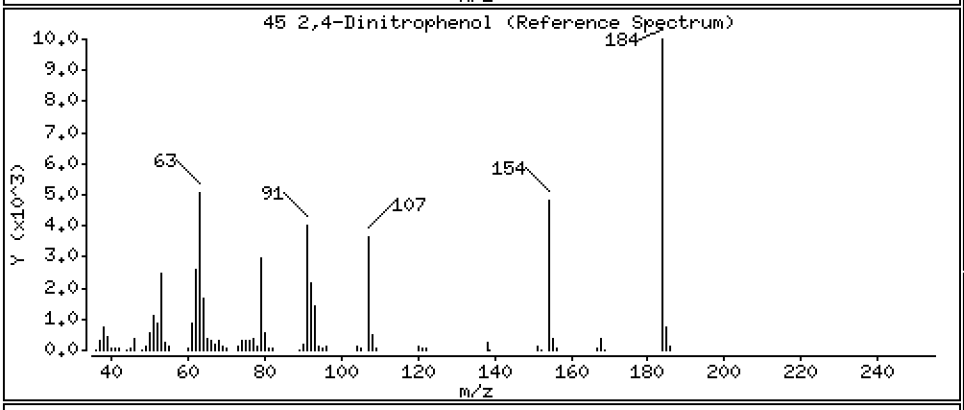
Concentration: 3.438 ug/mL

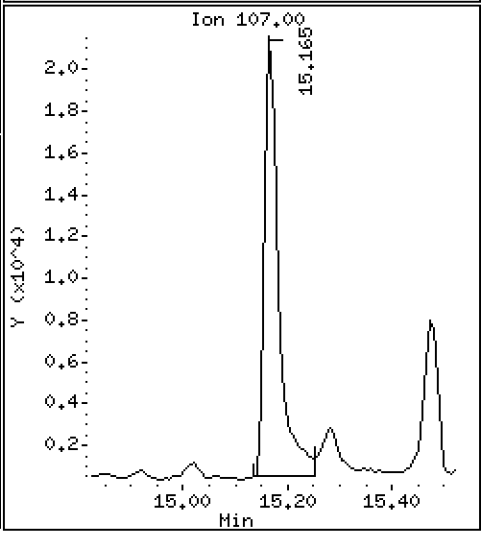


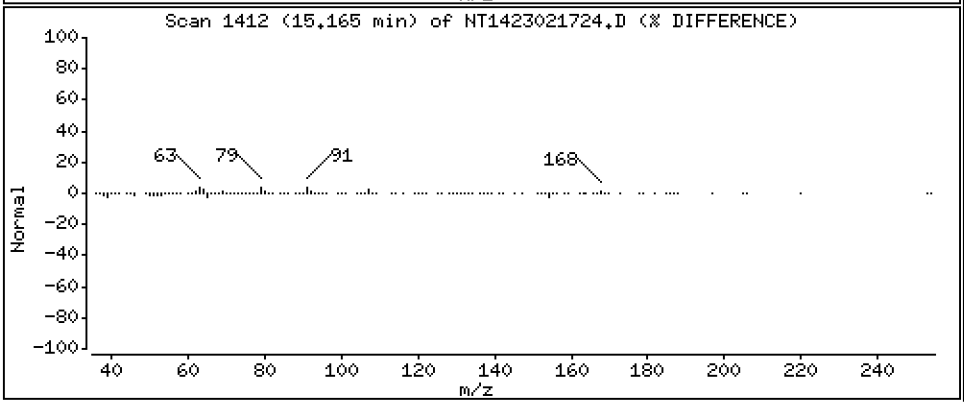












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

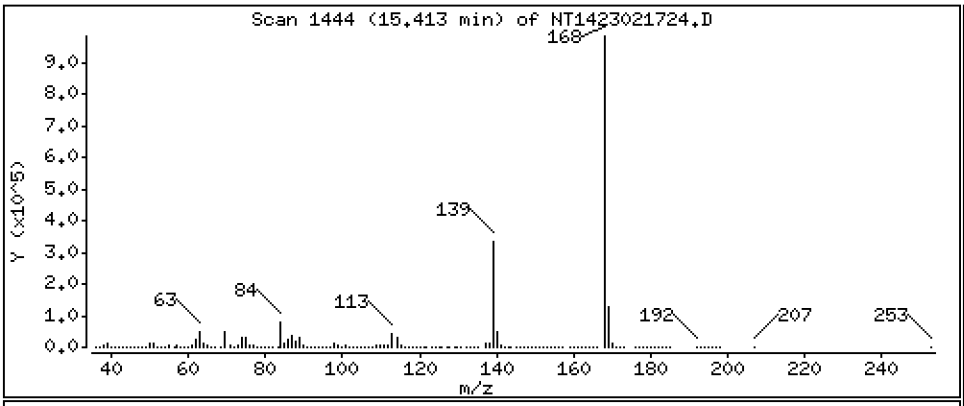
Operator: DSD

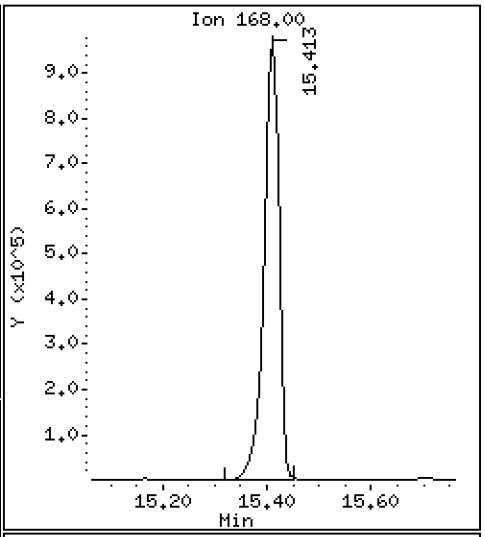
Column phase: ZB-5msi

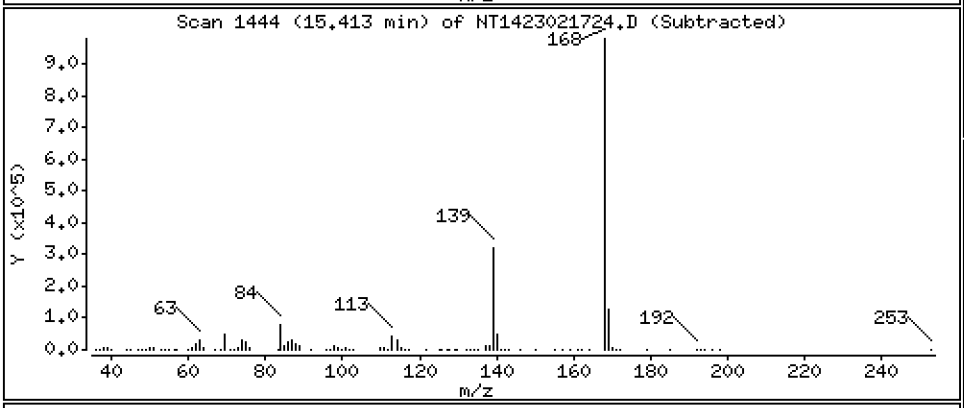
Column diameter: 0.25

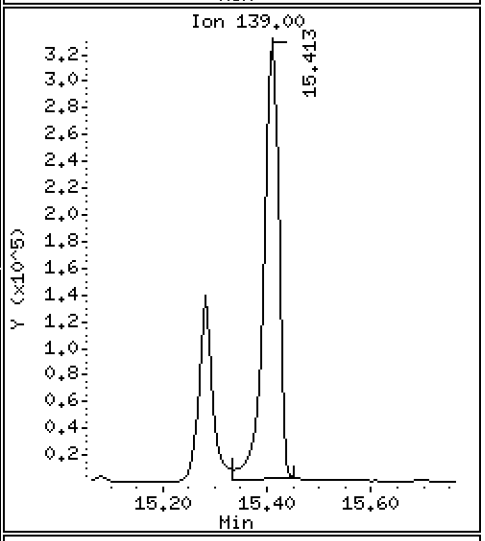
46 Dibenzofuran

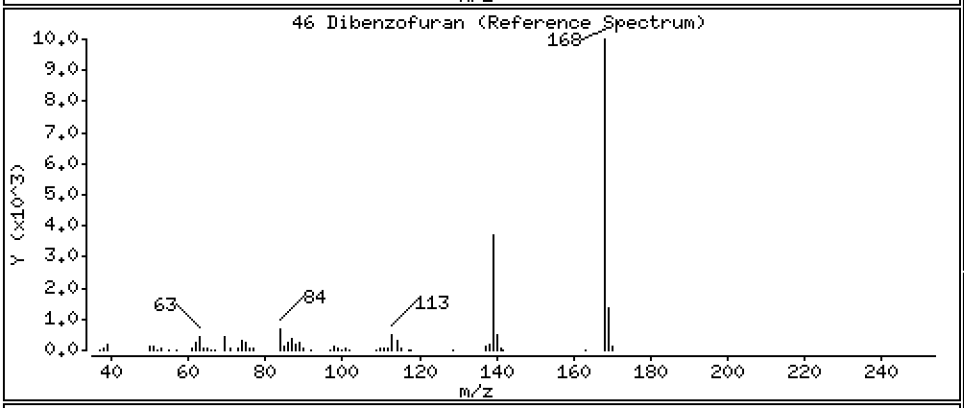
Concentration: 6.868 ug/mL

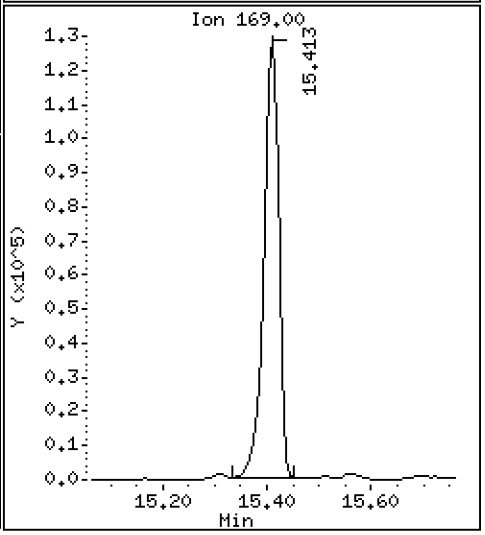


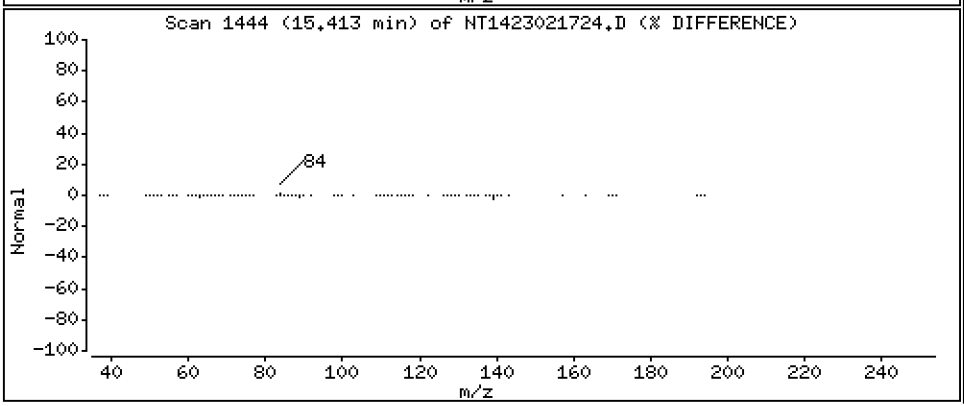












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

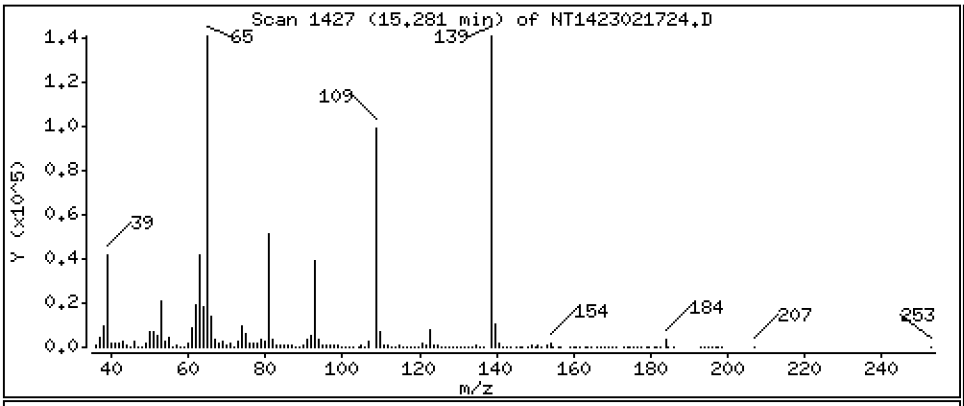
Operator: DSD

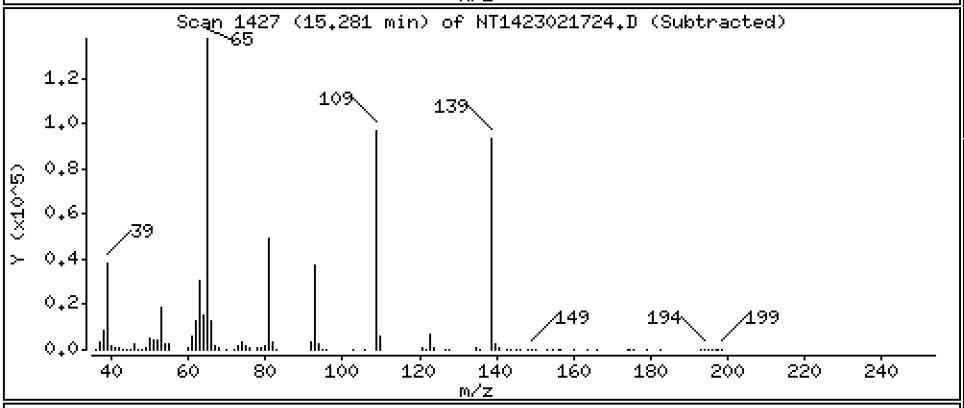
Column phase: ZB-5msi

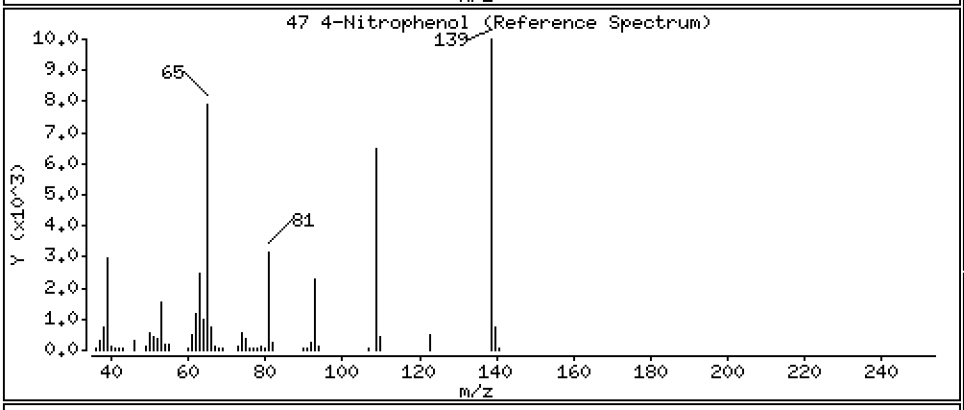
Column diameter: 0.25

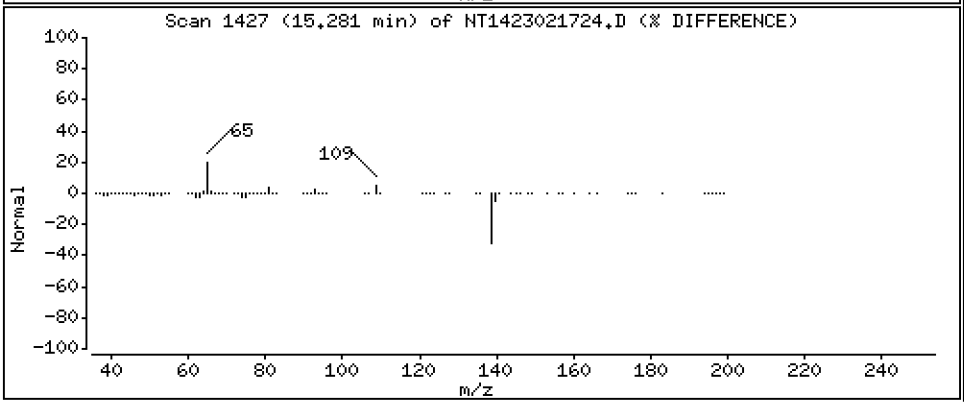
47 4-Nitrophenol

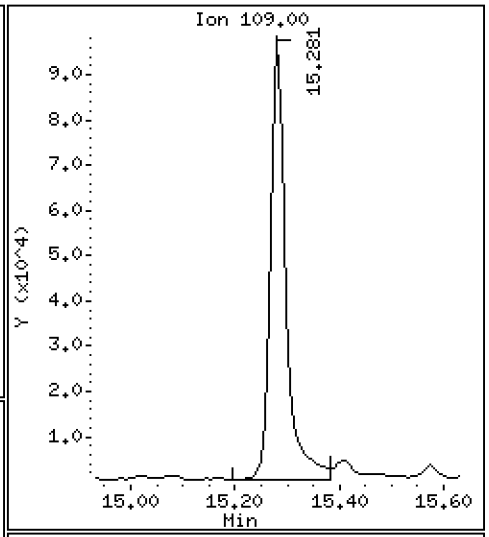
Concentration: 6.961 ug/mL

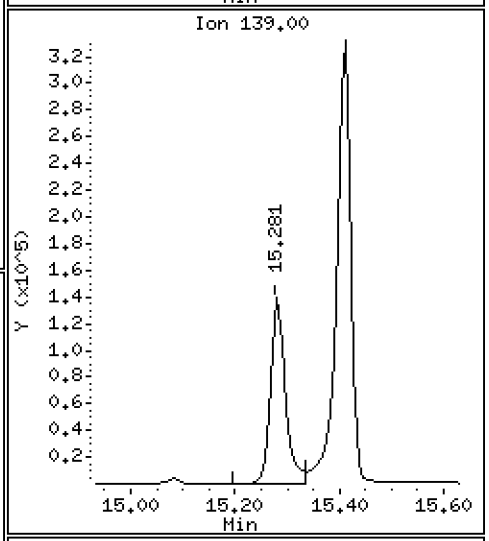


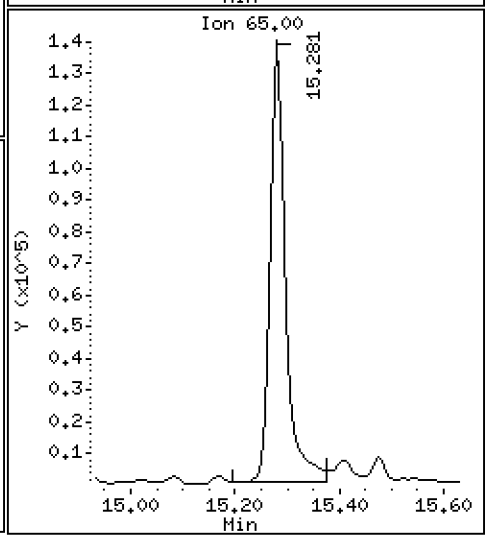












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

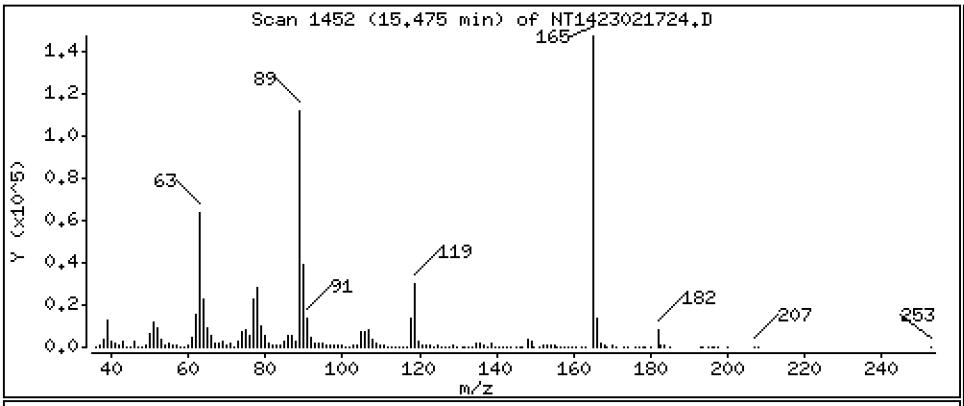
Operator: DSD

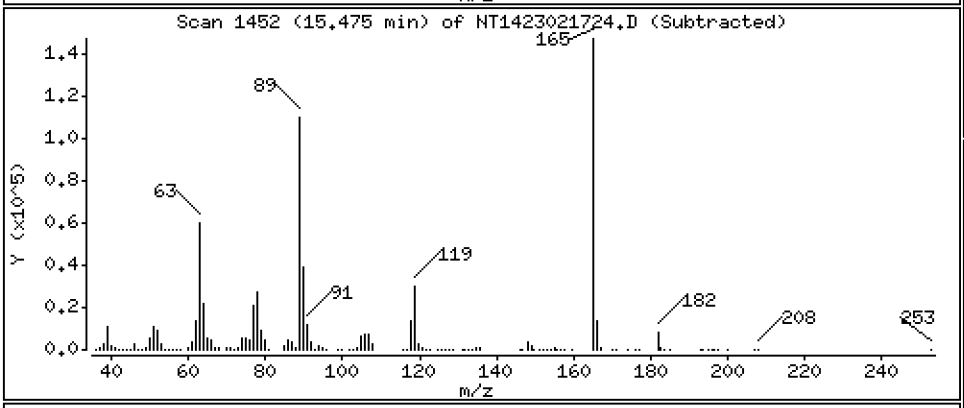
Column phase: ZB-5msi

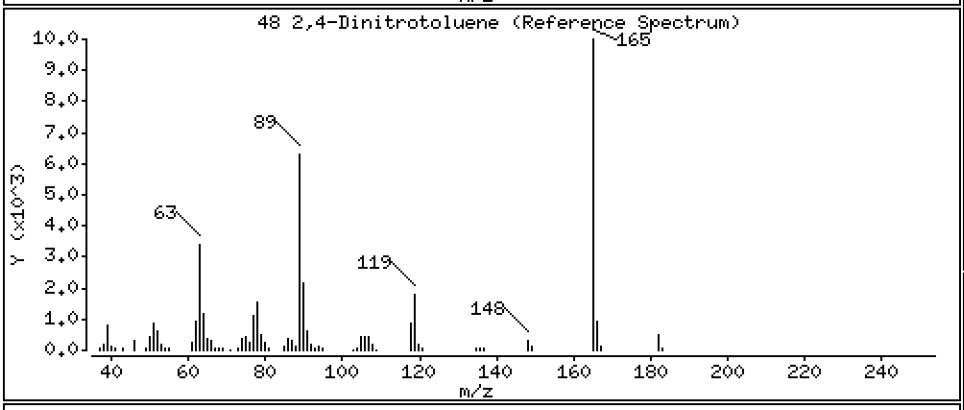
Column diameter: 0.25

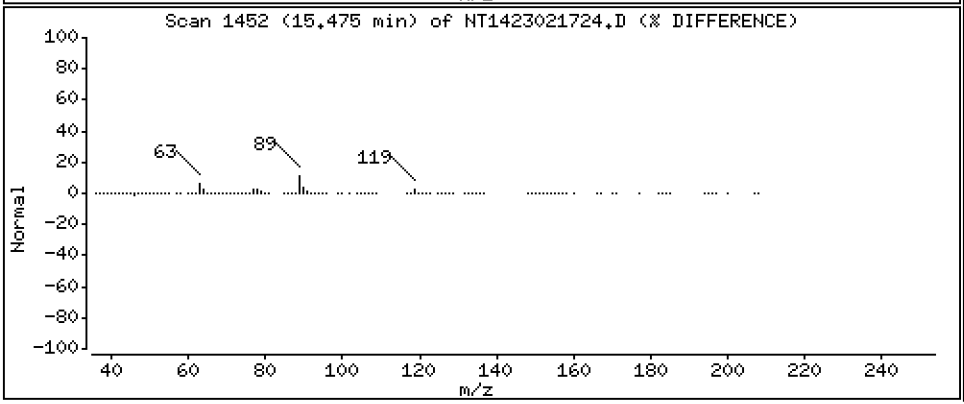
48 2,4-Dinitrotoluene

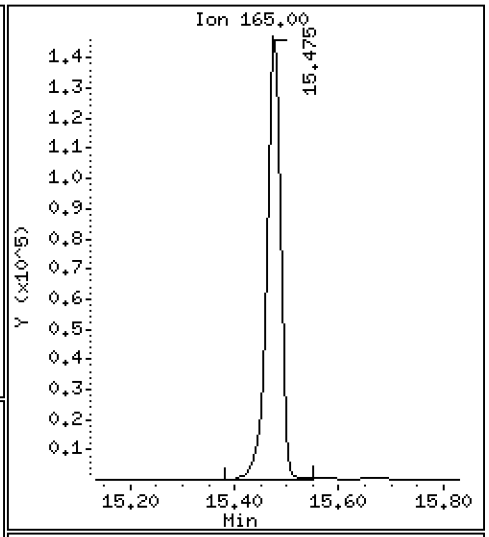
Concentration: 4.214 ug/mL

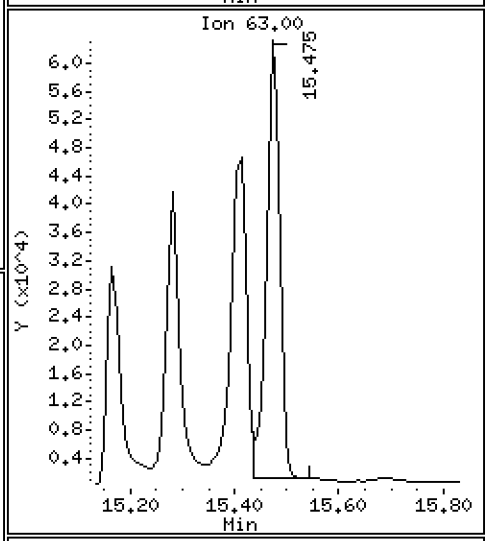


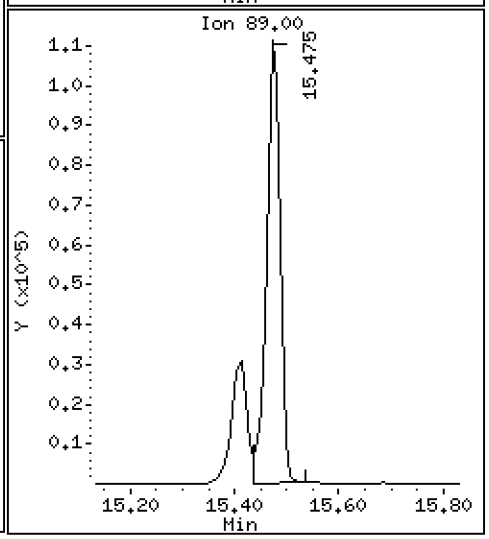












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

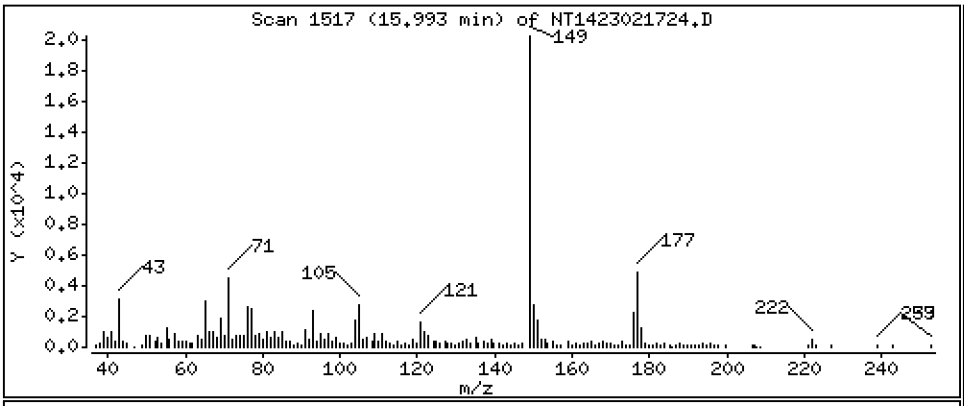
Operator: DSD

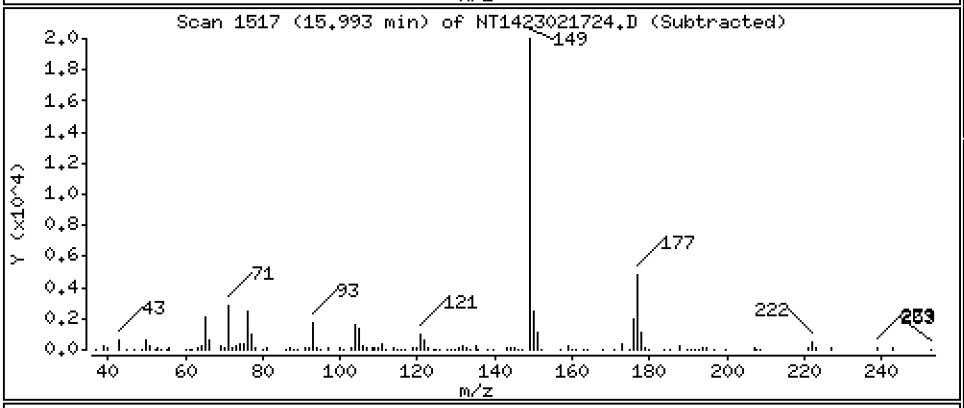
Column phase: ZB-5msi

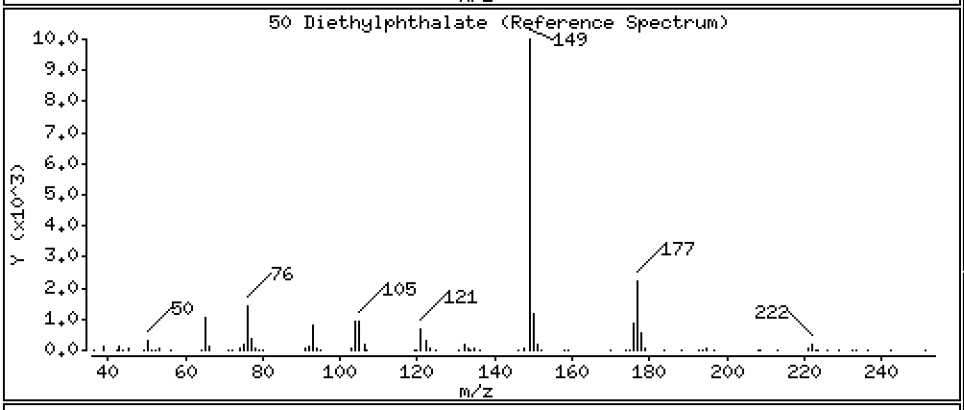
Column diameter: 0.25

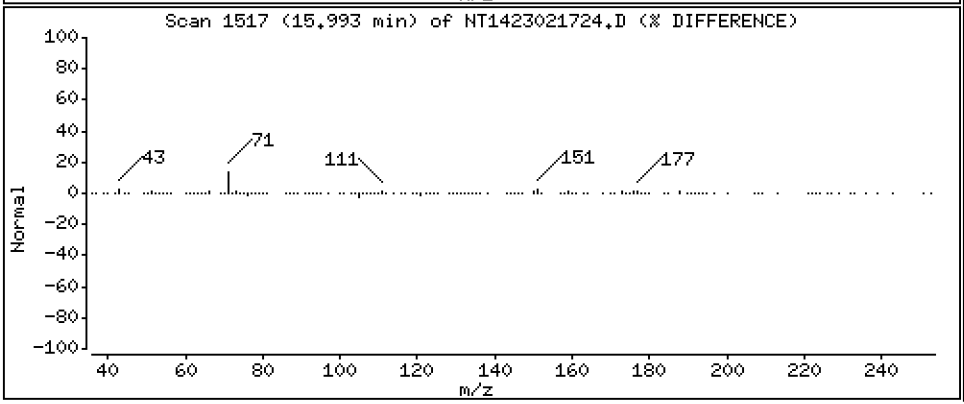
50 Diethylphthalate

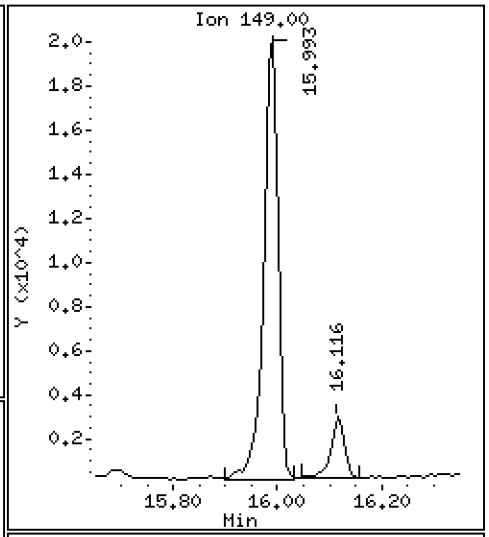
Concentration: 0.1664 ug/mL

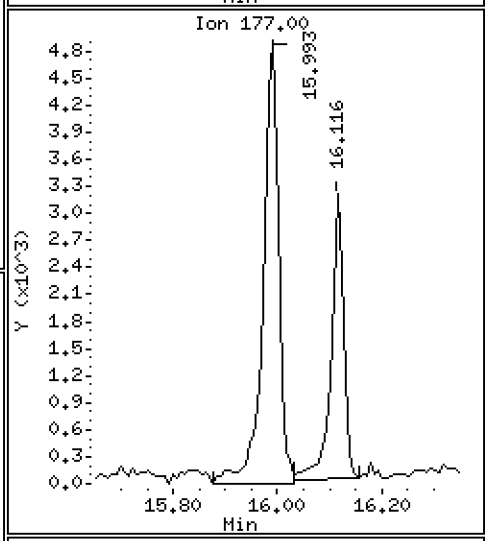


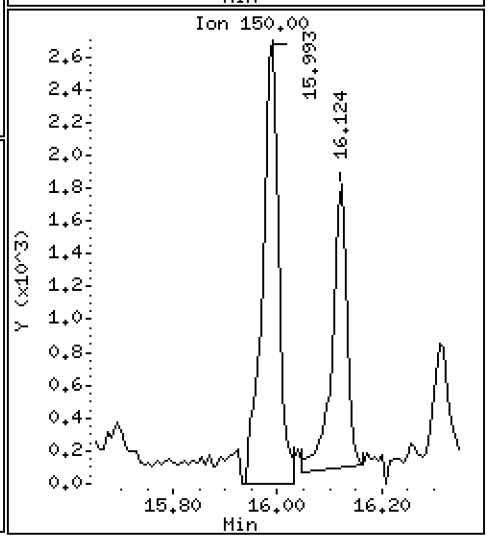












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

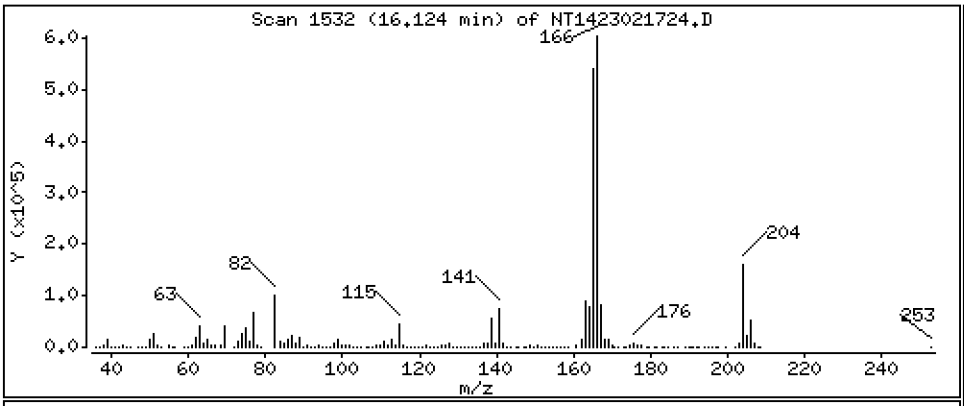
Operator: DSD

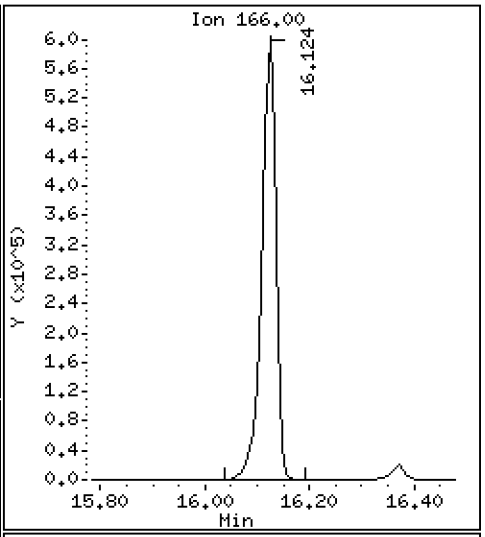
Column phase: ZB-5msi

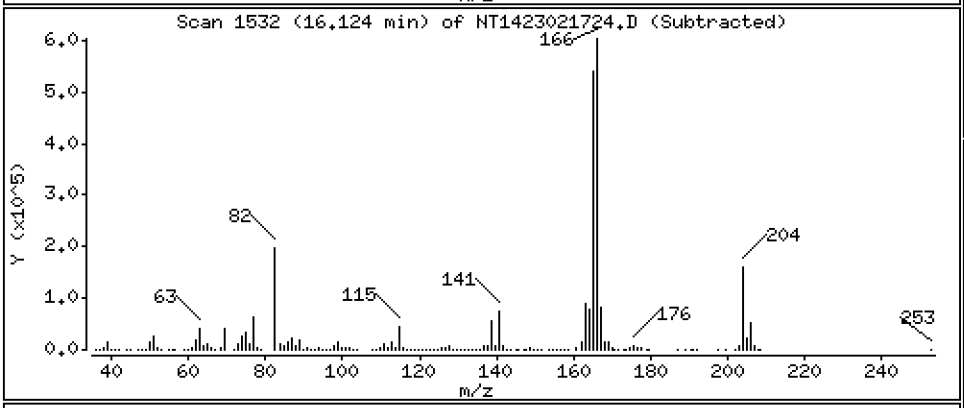
Column diameter: 0.25

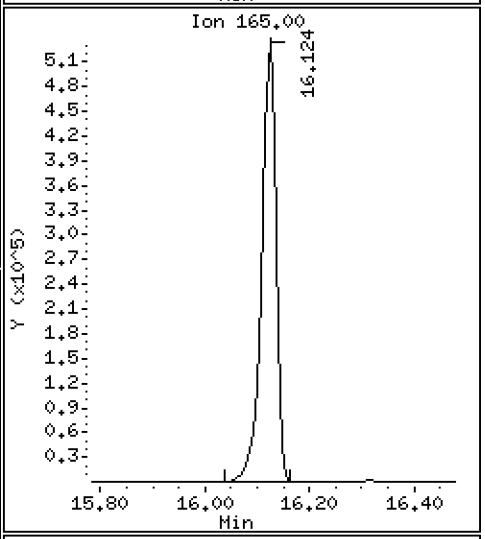
49 Fluorene

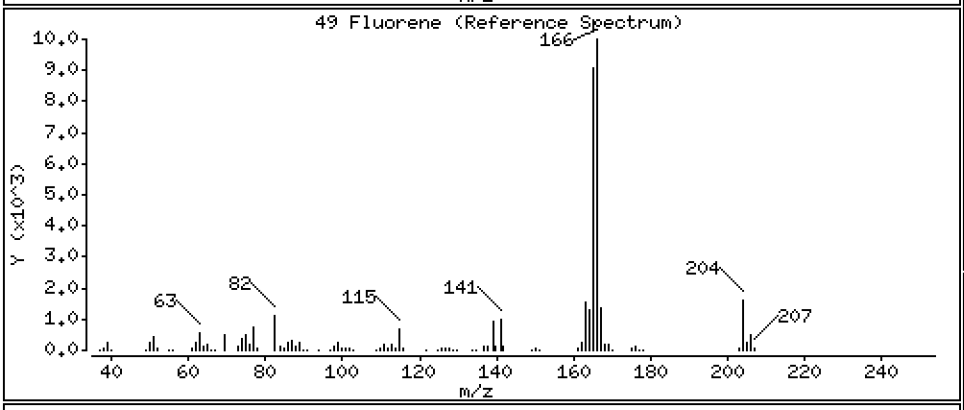
Concentration: 4.207 ug/mL

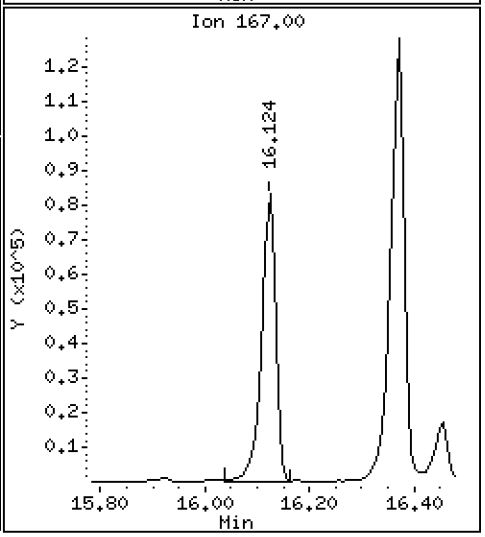


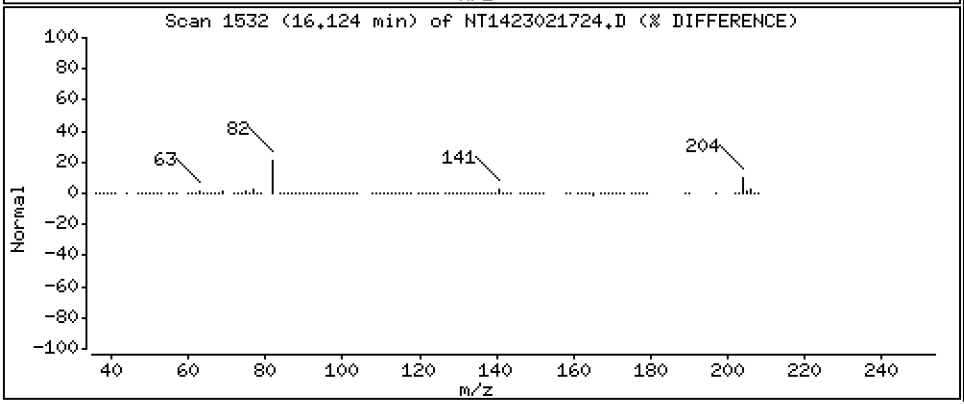












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

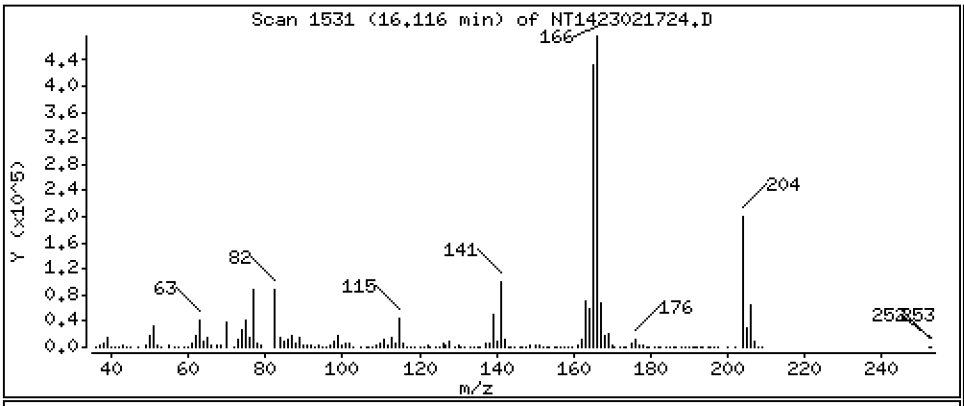
Operator: DSD

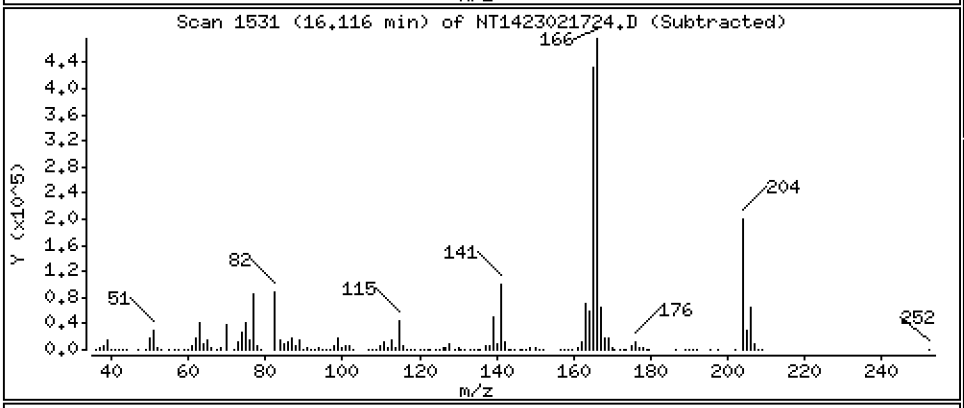
Column phase: ZB-5msi

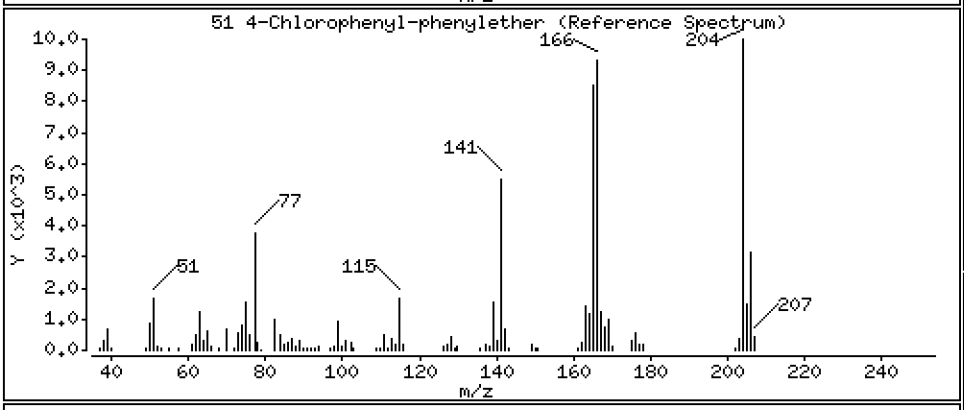
Column diameter: 0.25

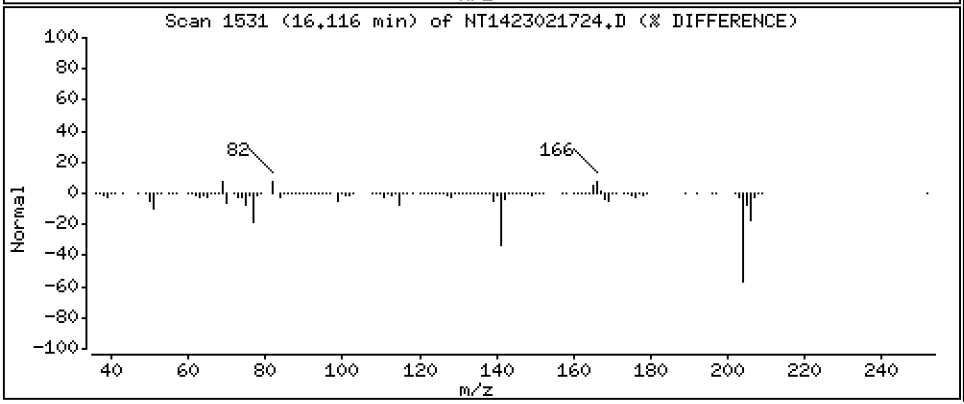
51 4-Chlorophenyl-phenylether

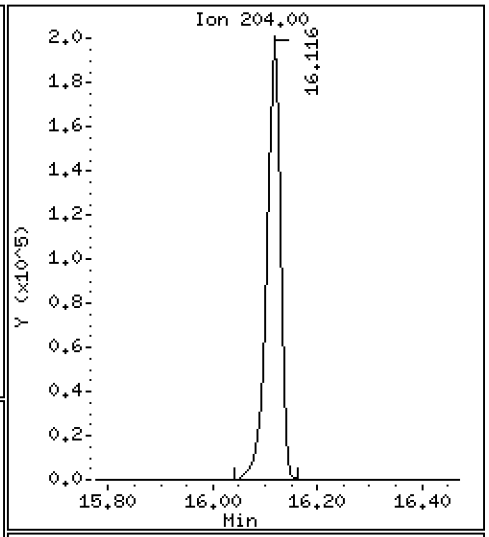
Concentration: 2.567 ug/mL

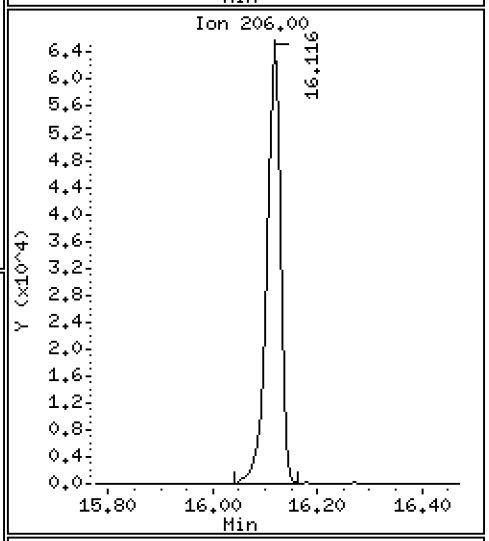


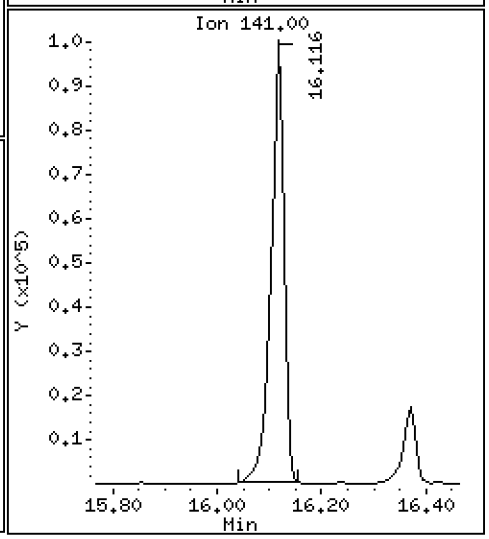












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

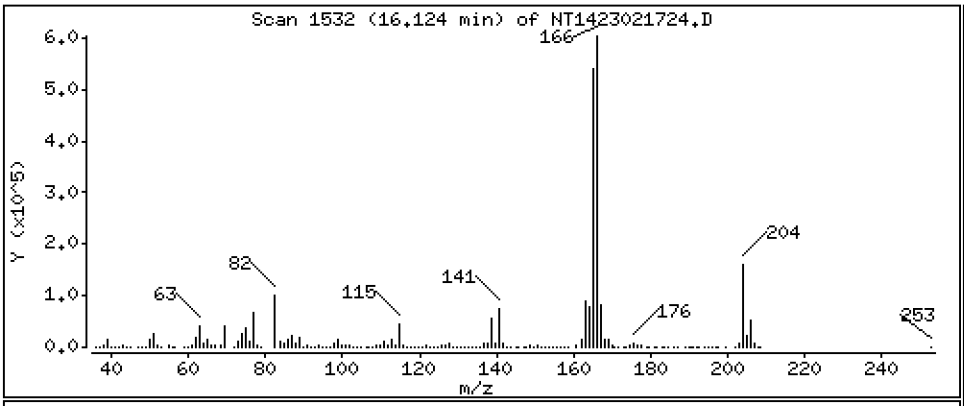
Operator: DSD

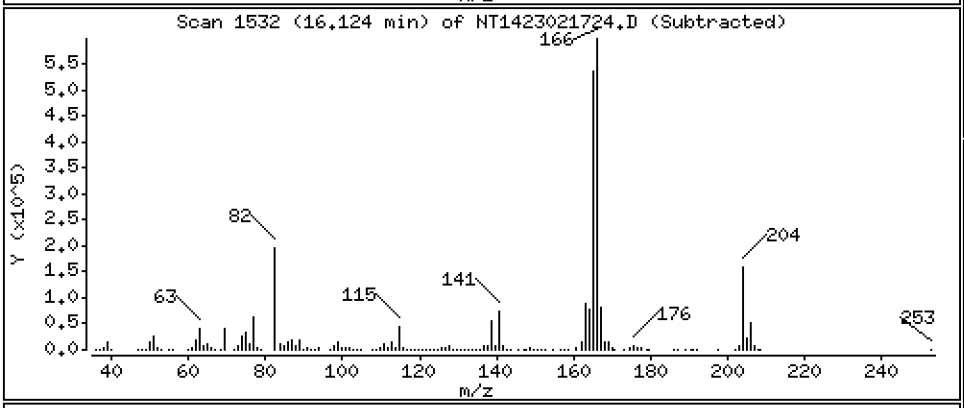
Column phase: ZB-5msi

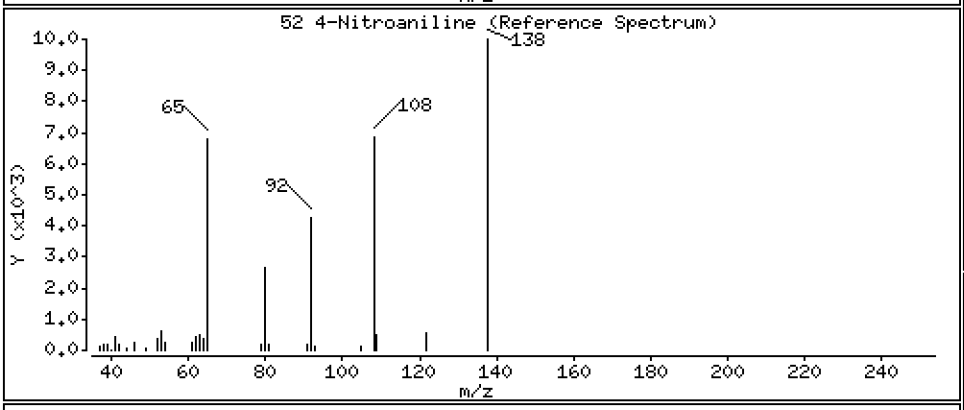
Column diameter: 0.25

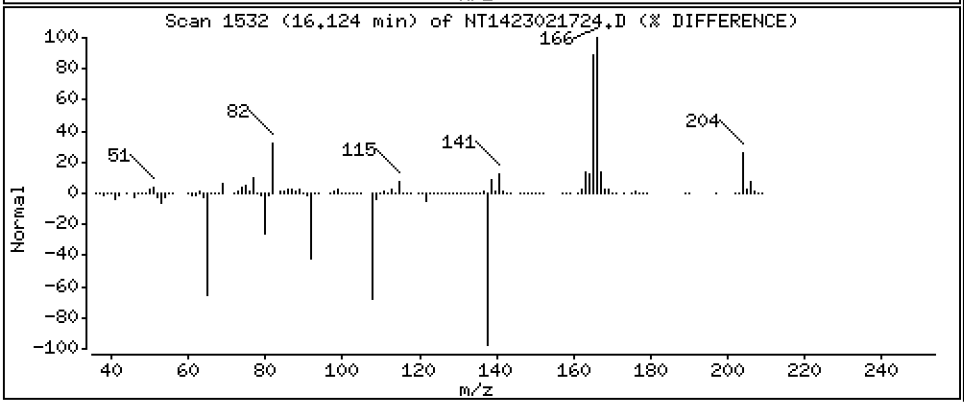
52 4-Nitroaniline

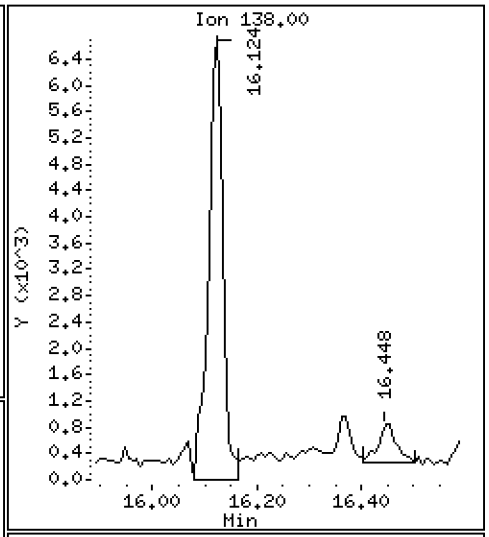
Concentration: 0.2482 ug/mL

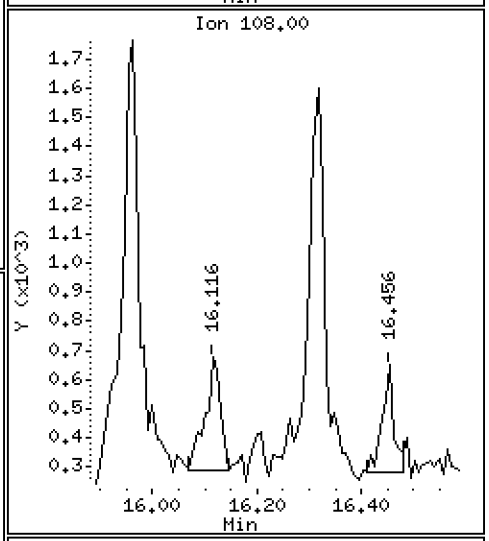


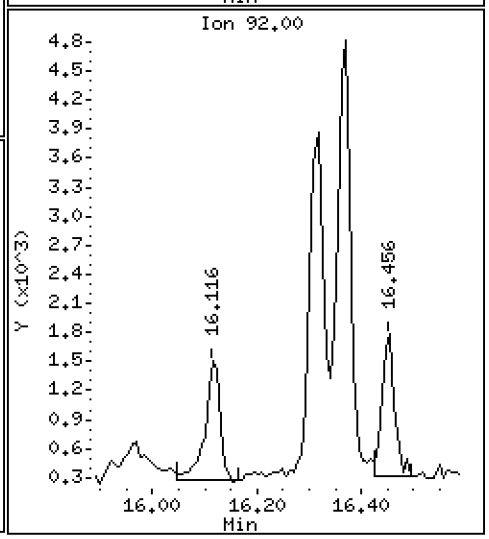












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

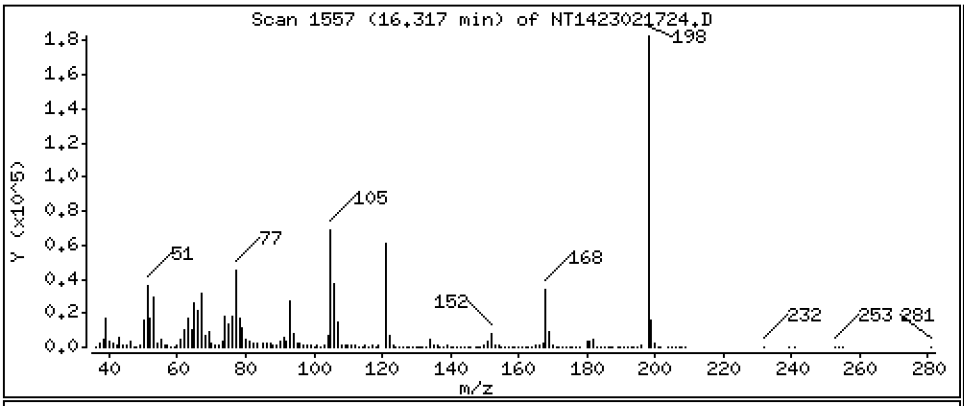
Operator: DSD

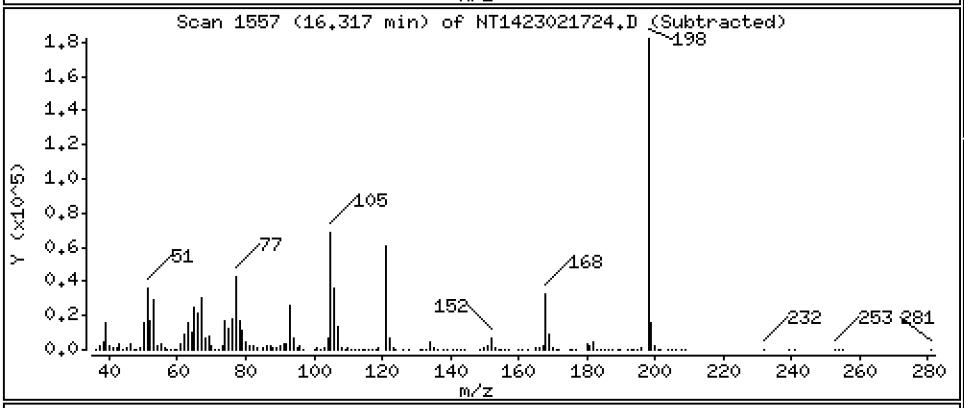
Column phase: ZB-5msi

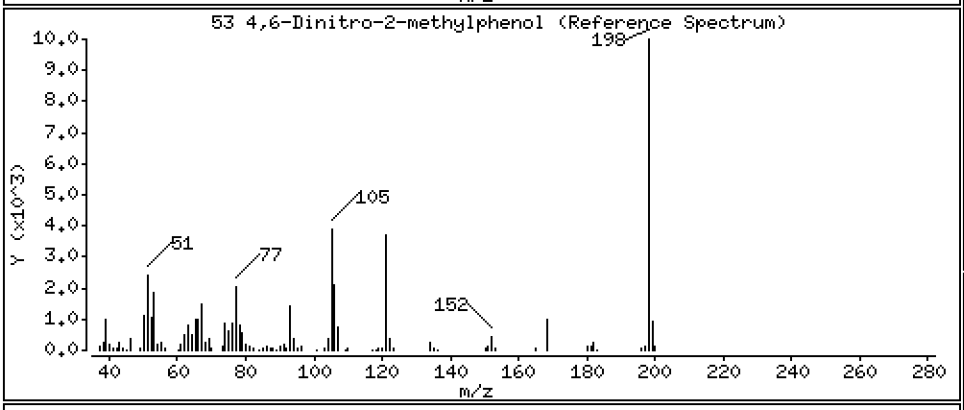
Column diameter: 0.25

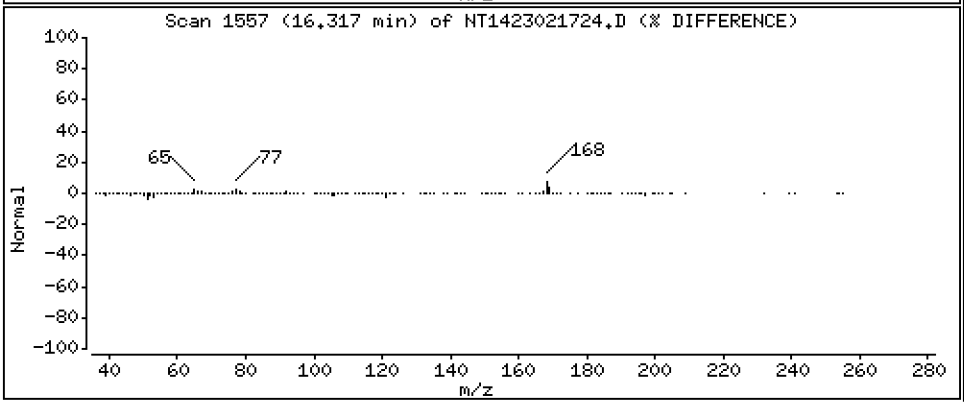
53 4,6-Dinitro-2-methylphenol

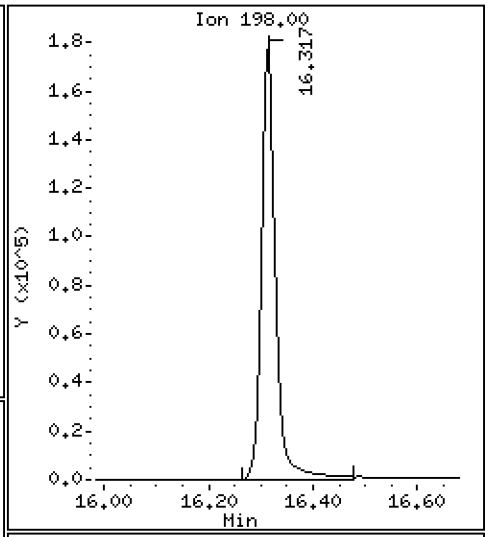
Concentration: 7.382 ug/mL

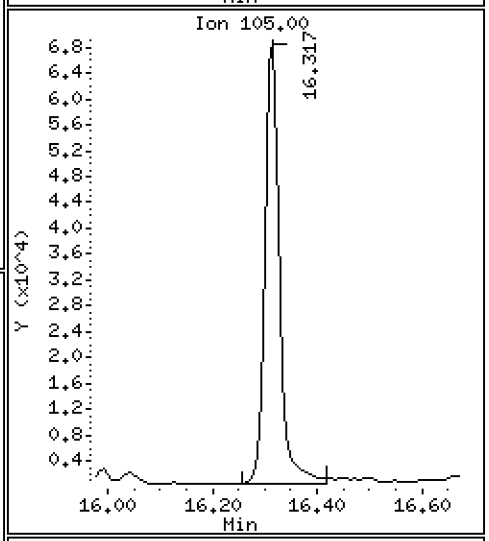


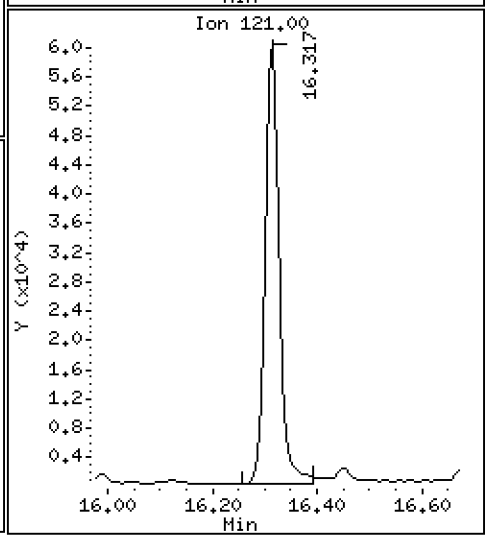












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

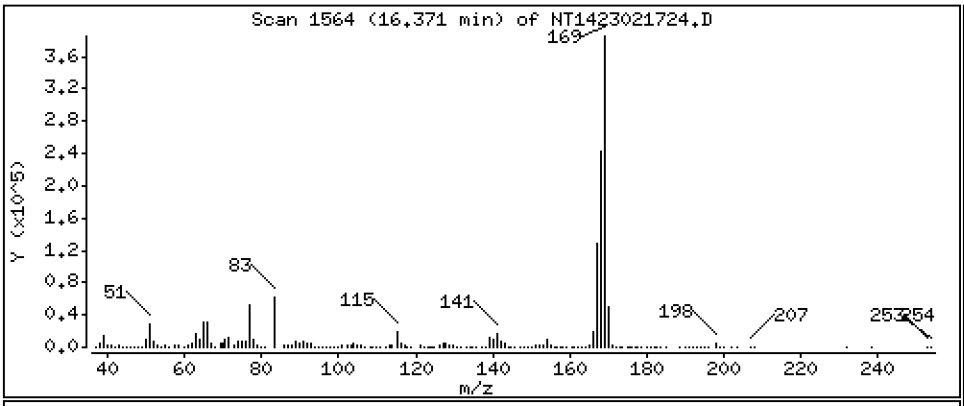
Operator: DSD

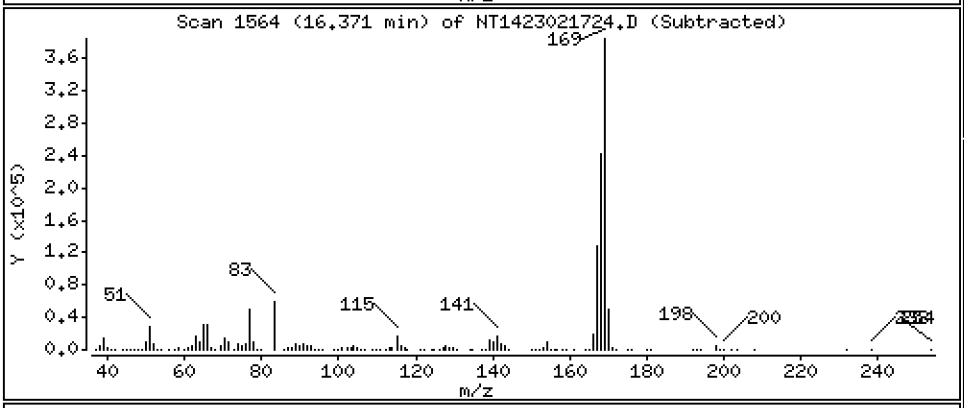
Column phase: ZB-5msi

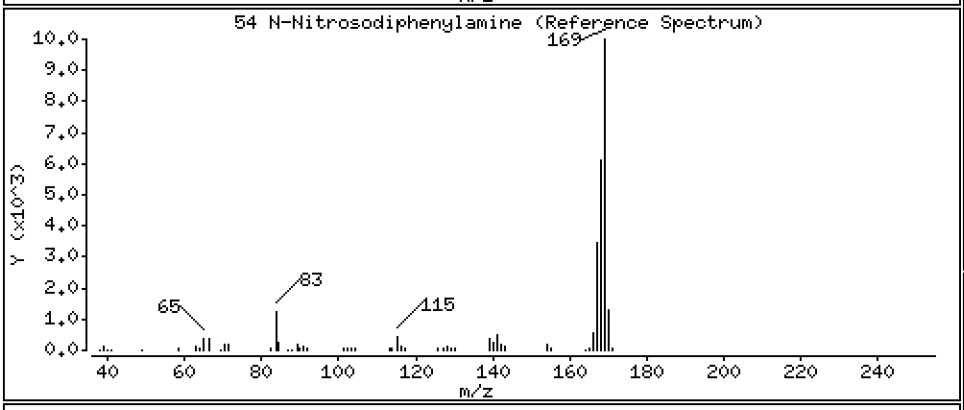
Column diameter: 0.25

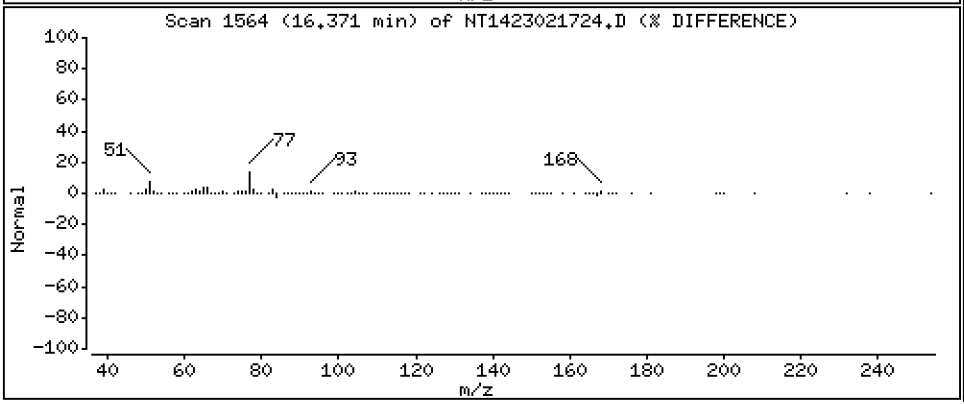
54 N-Nitrosodiphenylamine

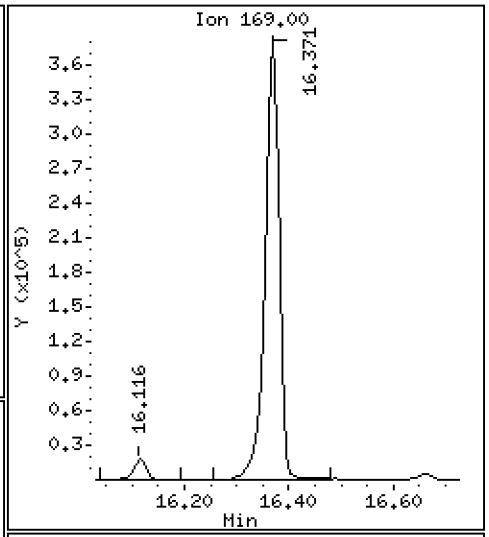
Concentration: 3.891 ug/mL

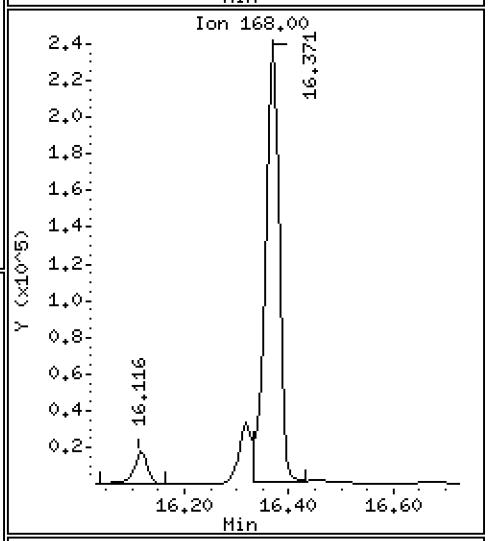


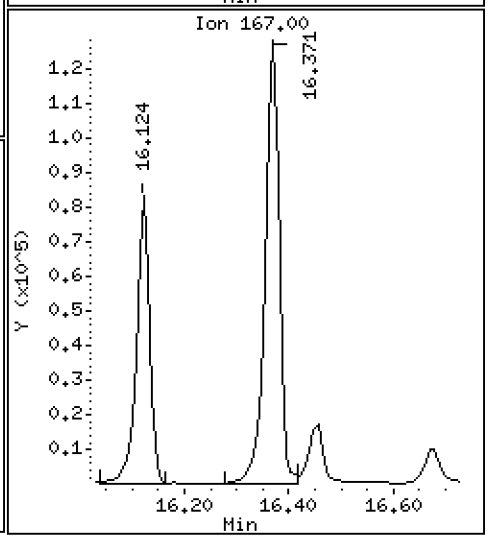












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021724.D

Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

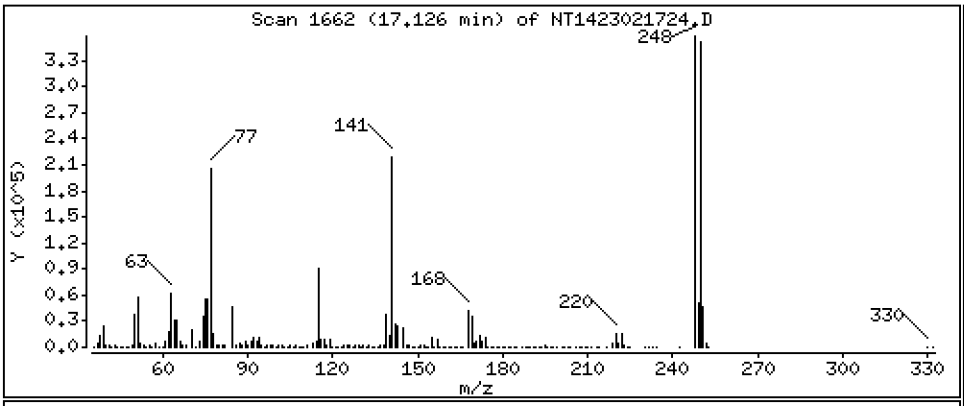
Operator: DSD

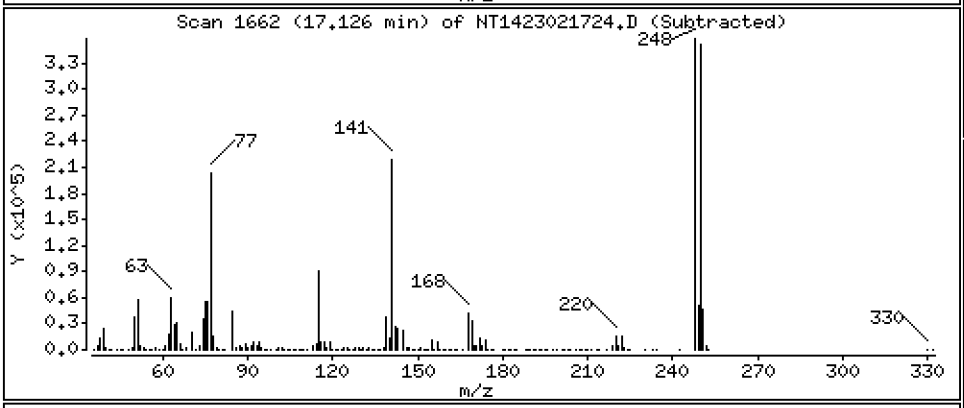
Column phase: ZB-5msi

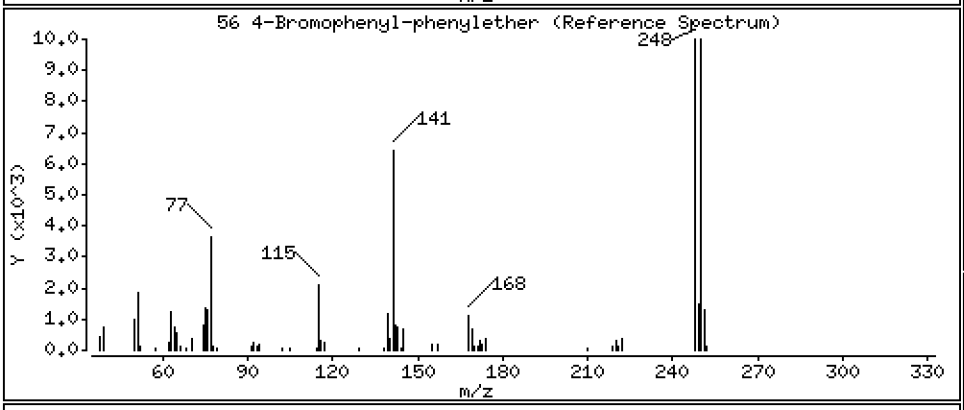
Column diameter: 0.25

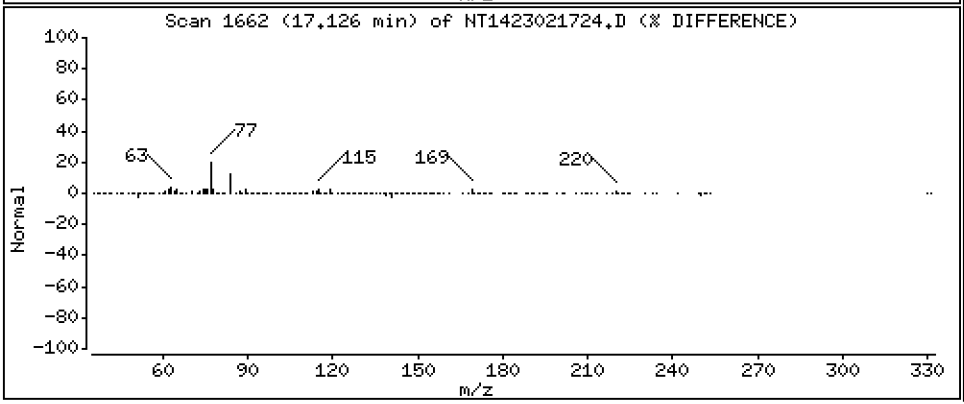
56 4-Bromophenyl-phenylether

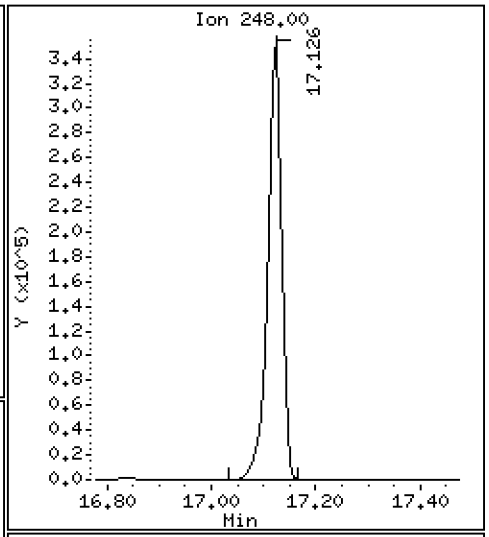
Concentration: 8.328 ug/mL

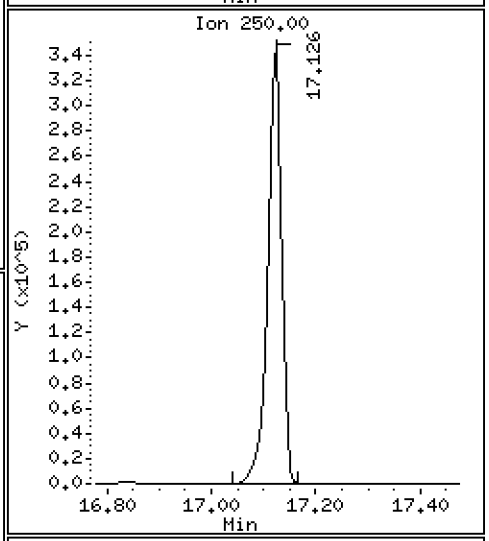


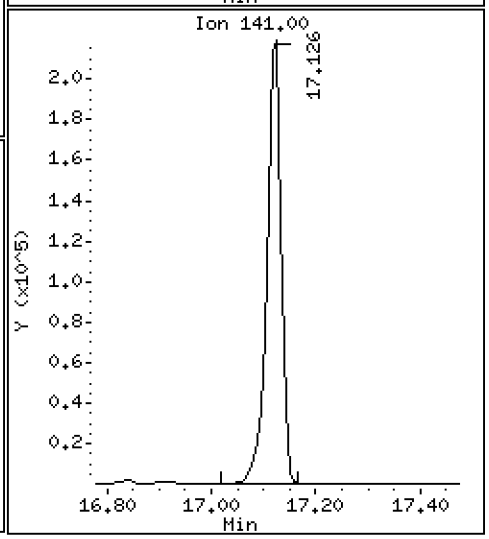












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

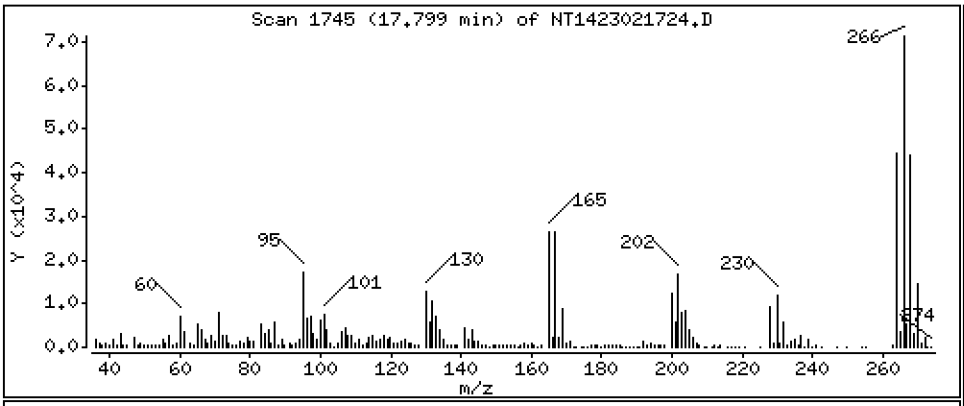
Operator: DSD

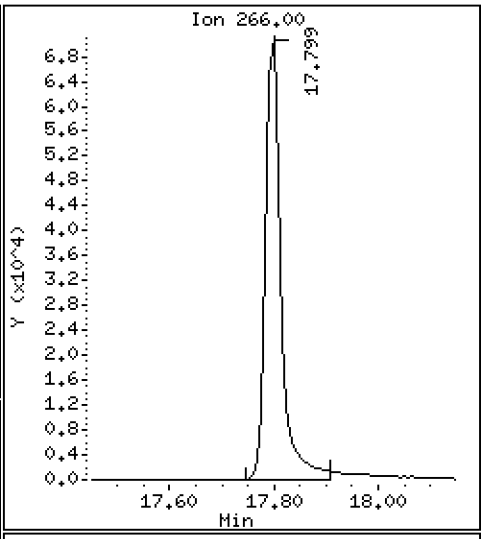
Column phase: ZB-5msi

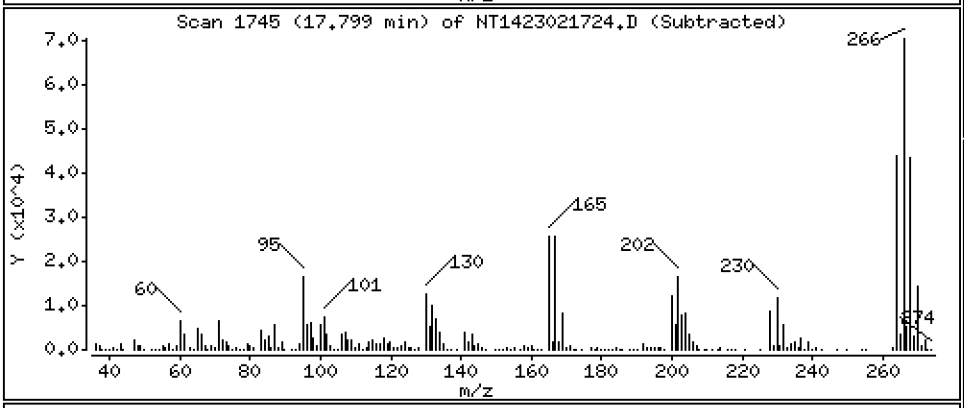
Column diameter: 0.25

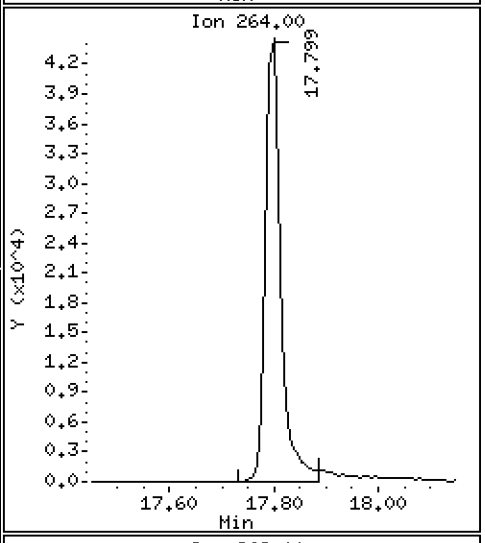
58 Pentachlorophenol

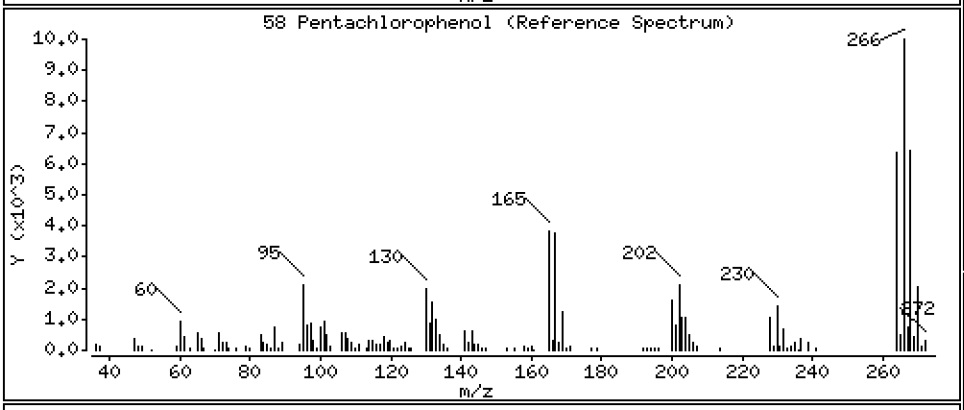
Concentration: 3.605 ug/mL

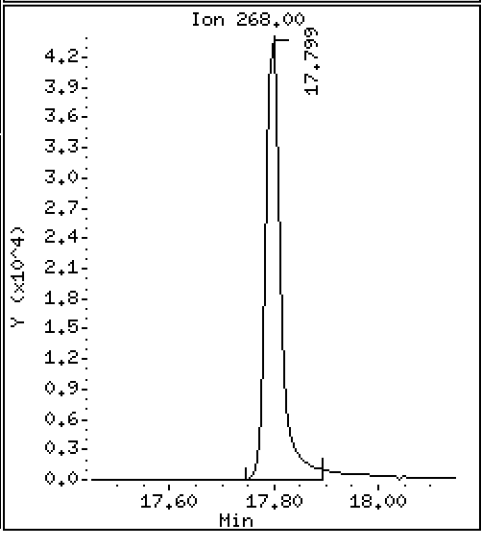


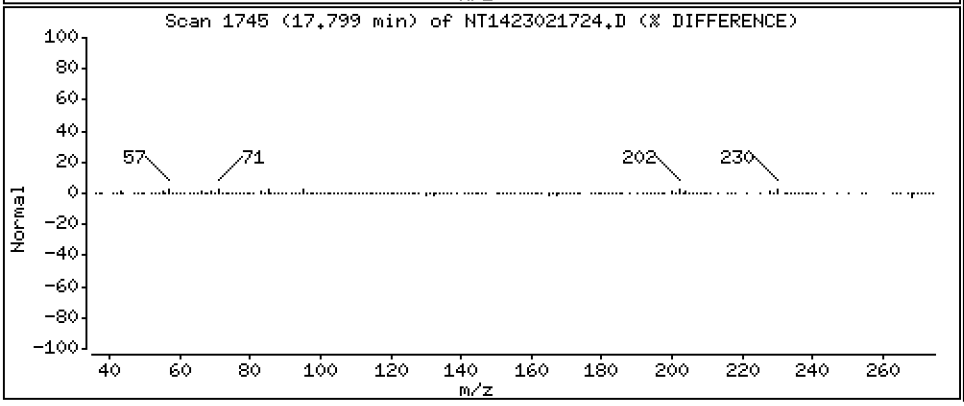












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

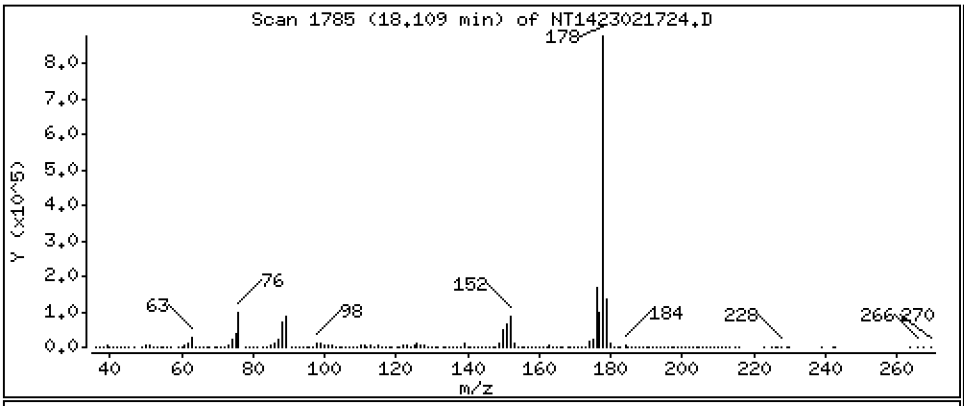
Operator: DSD

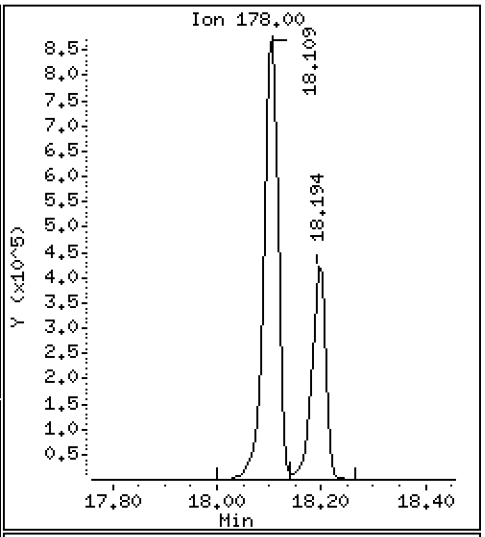
Column phase: ZB-5msi

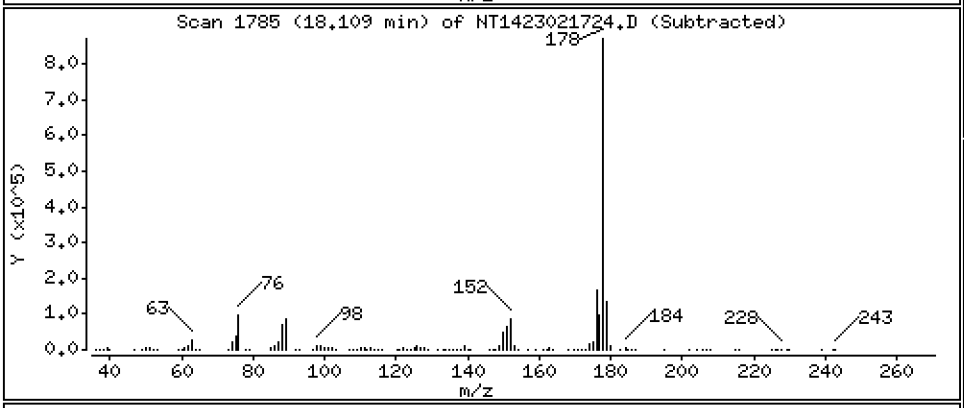
Column diameter: 0.25

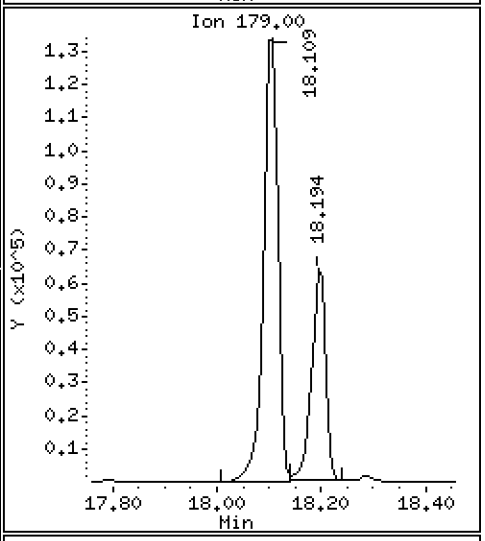
60 Phenanthrene

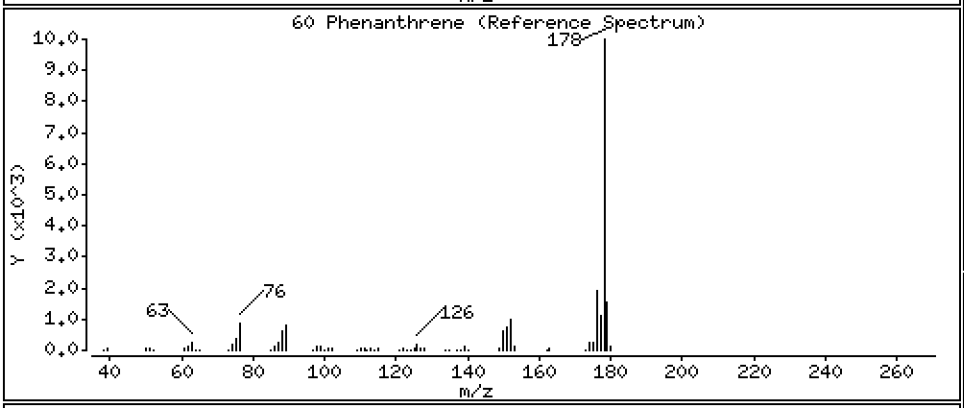
Concentration: 5.472 ug/mL

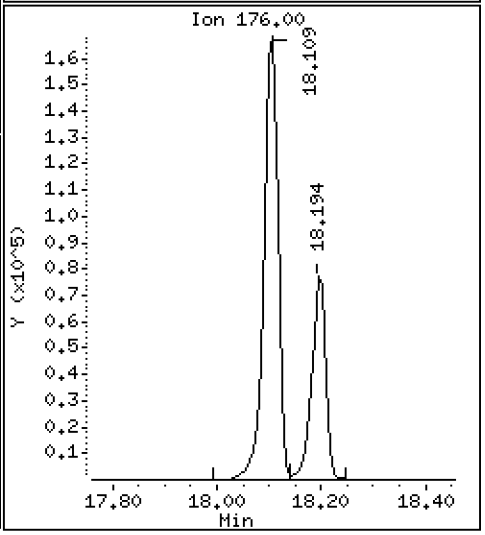


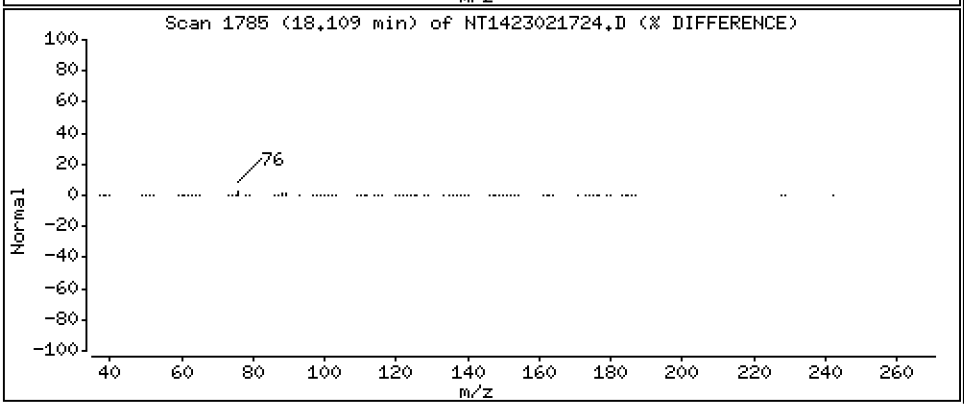












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

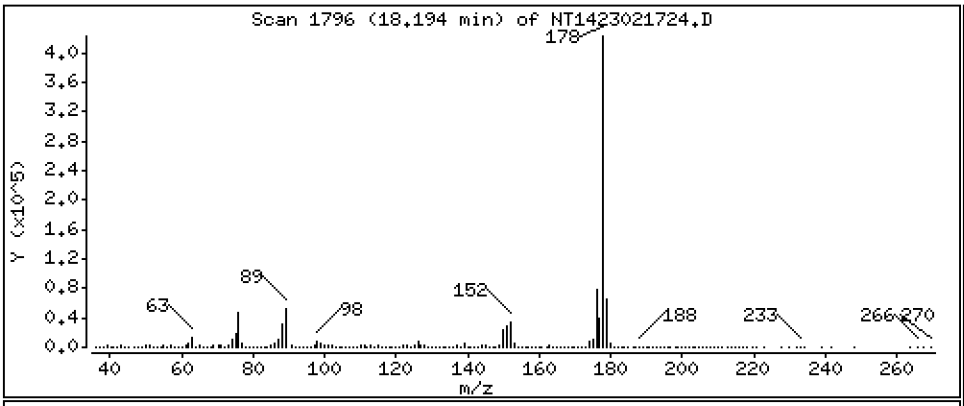
Operator: DSD

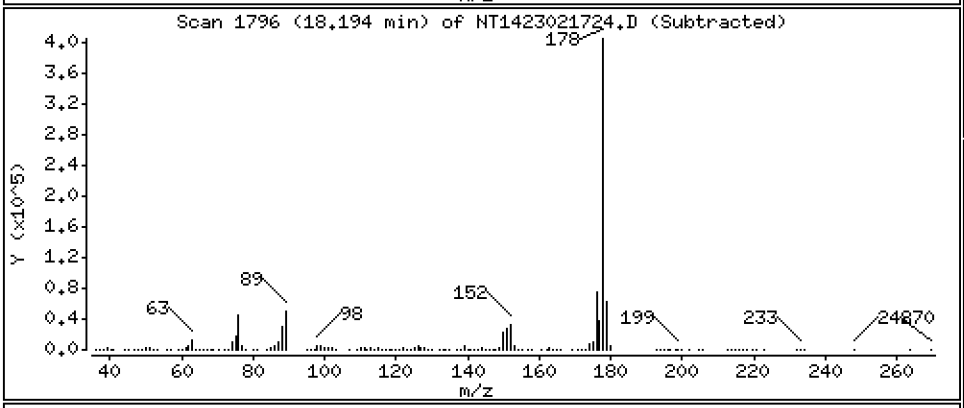
Column phase: ZB-5msi

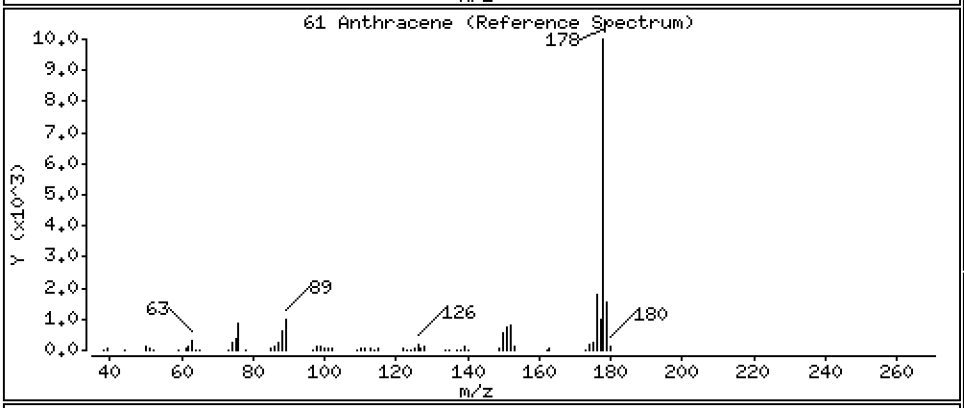
Column diameter: 0.25

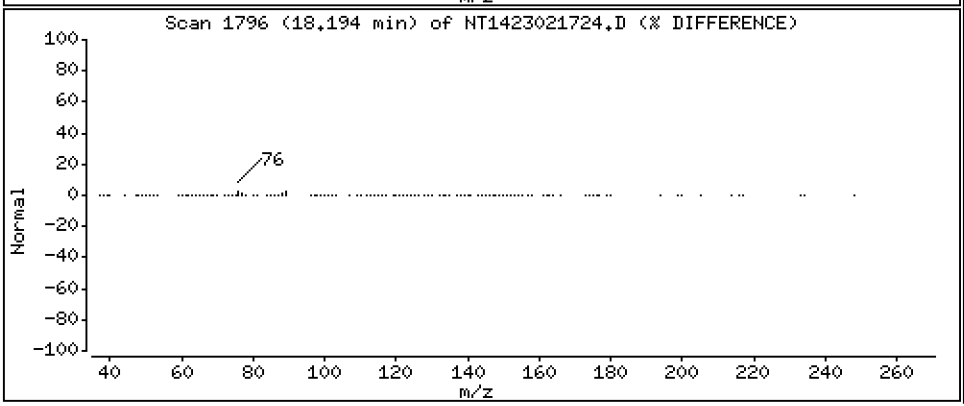
61 Anthracene

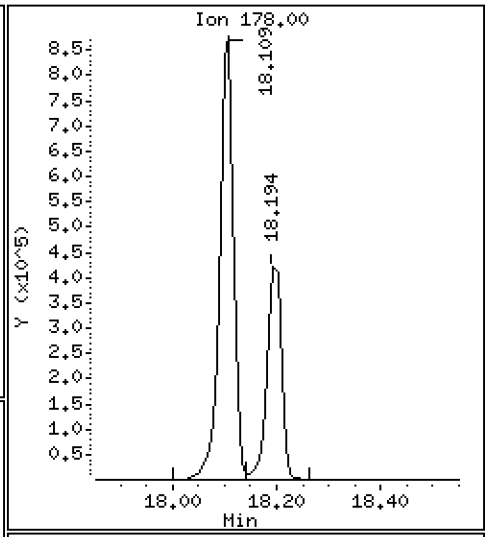
Concentration: 2.681 ug/mL

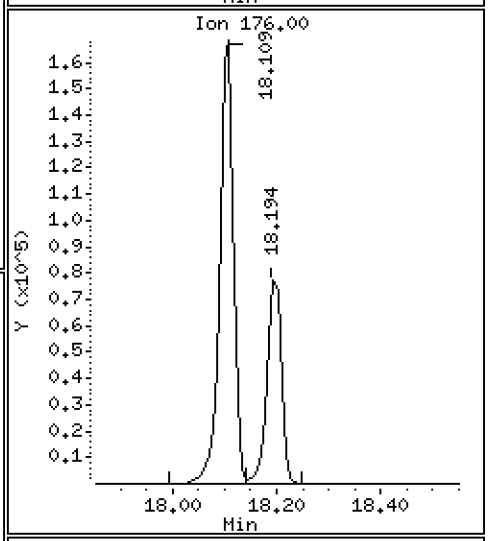


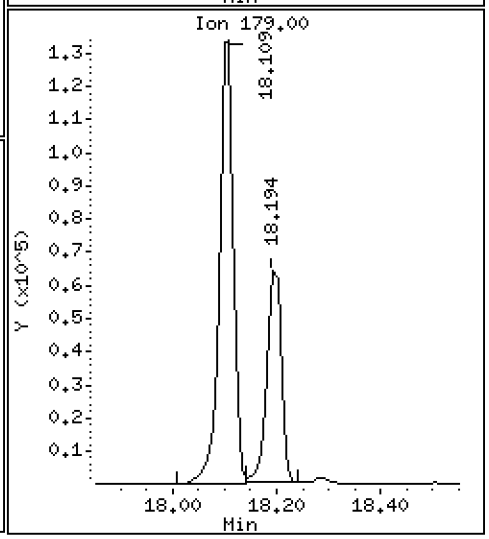












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

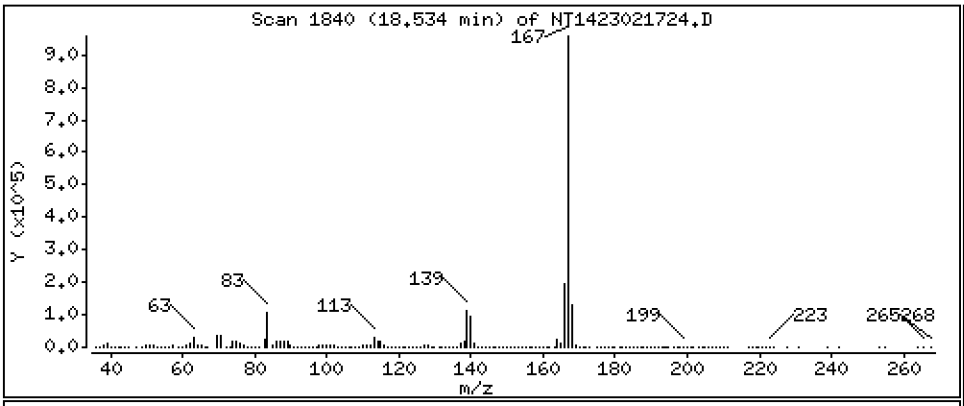
Operator: DSD

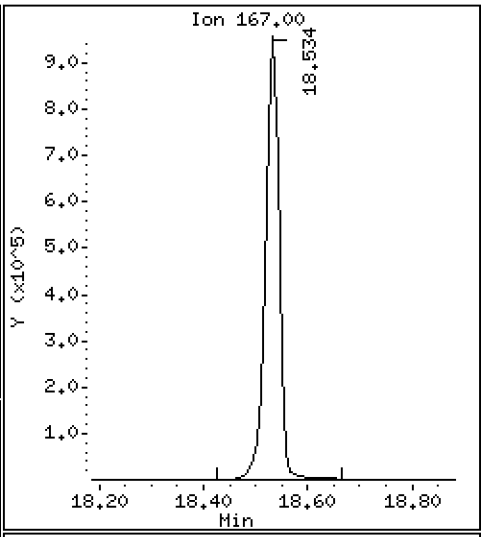
Column phase: ZB-5msi

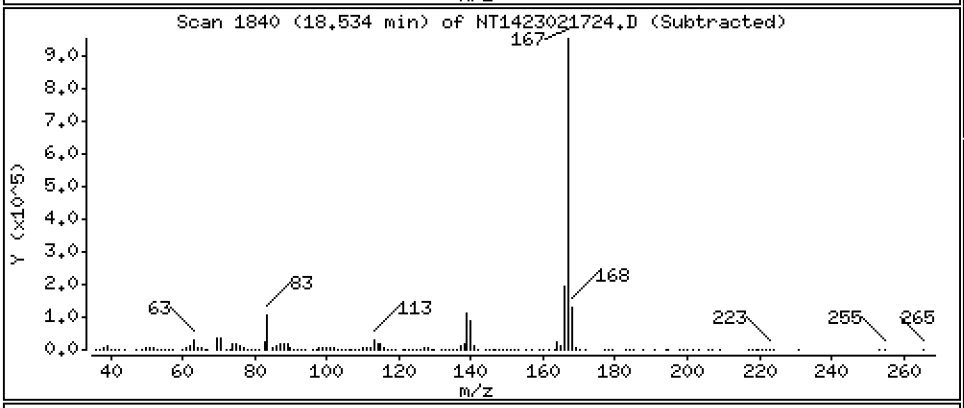
Column diameter: 0.25

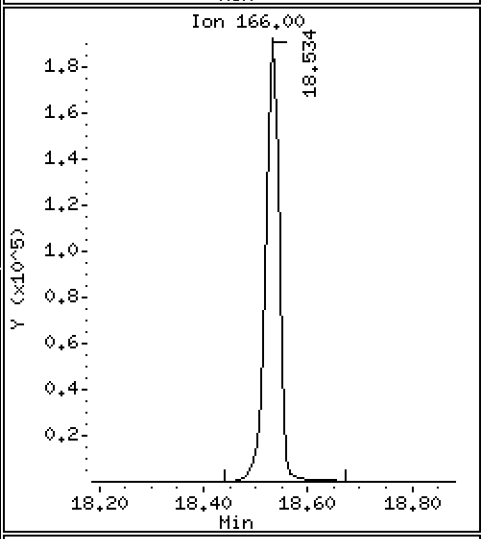
62 Carbazole

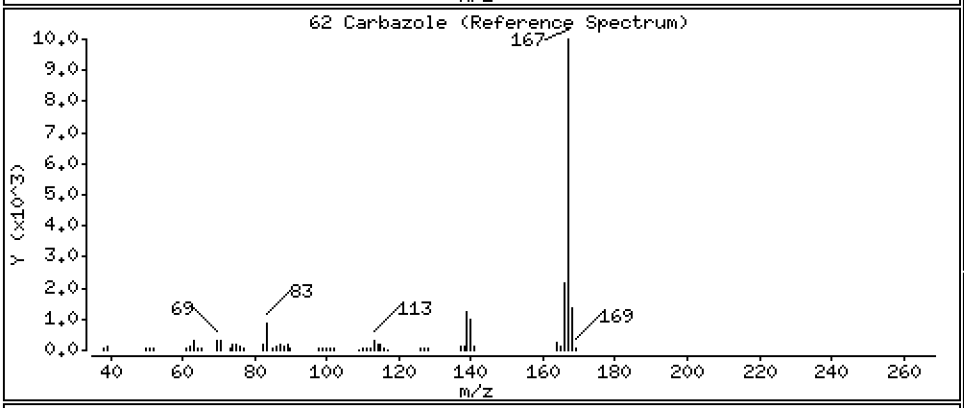
Concentration: 6.291 ug/mL

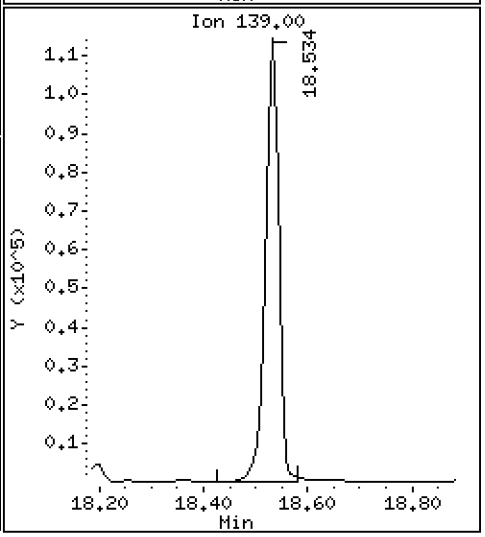


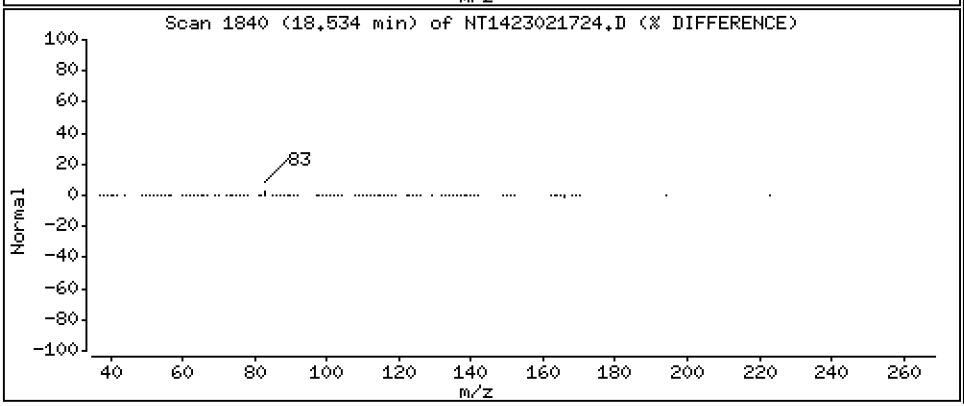












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

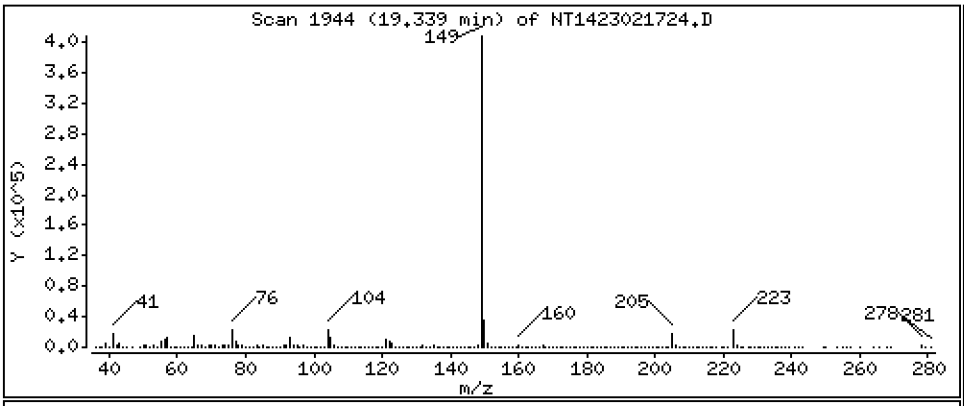
Operator: DSD

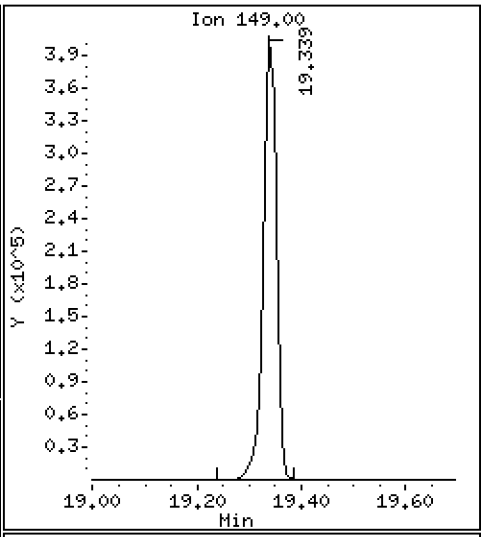
Column phase: ZB-5msi

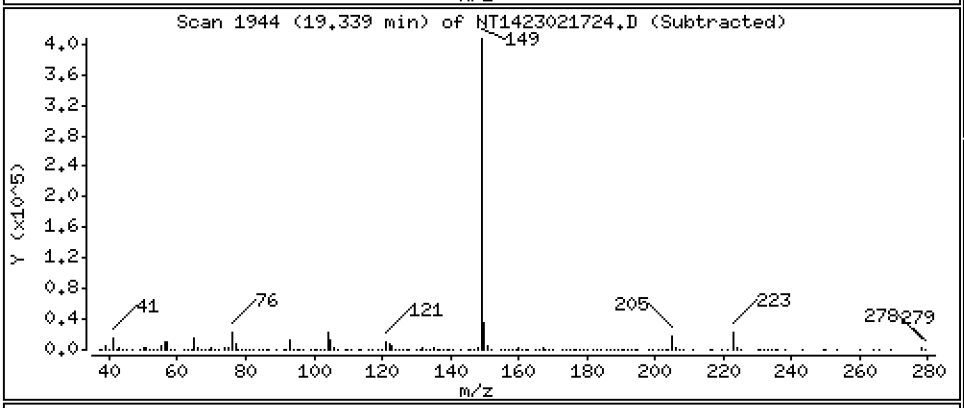
Column diameter: 0.25

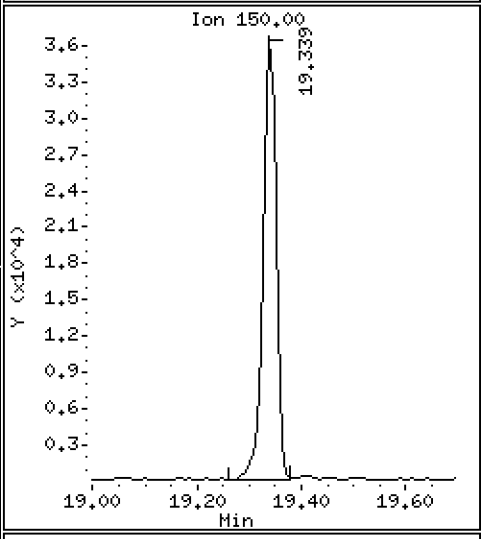
63 Di-n-butylphthalate

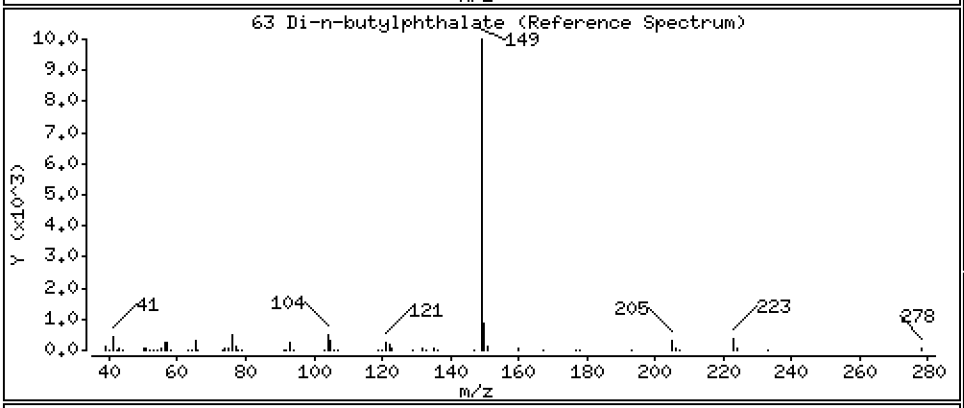
Concentration: 2.269 ug/mL

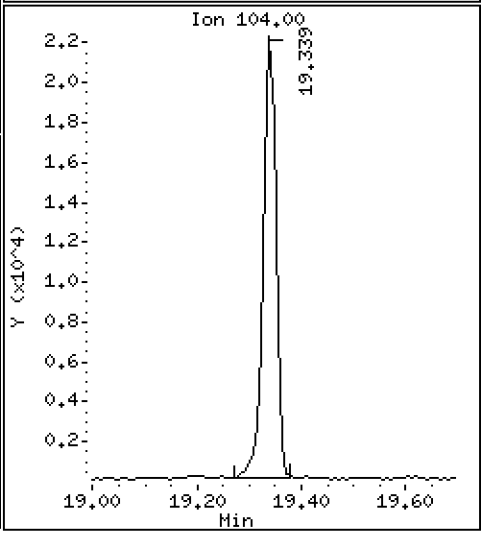


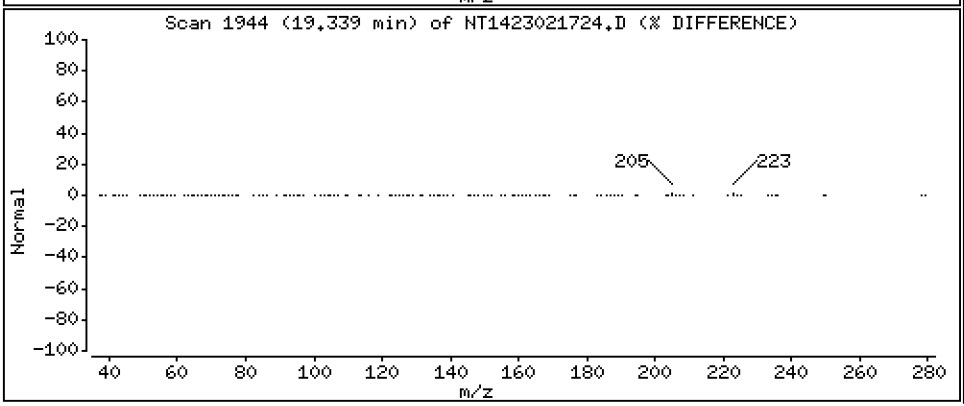












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

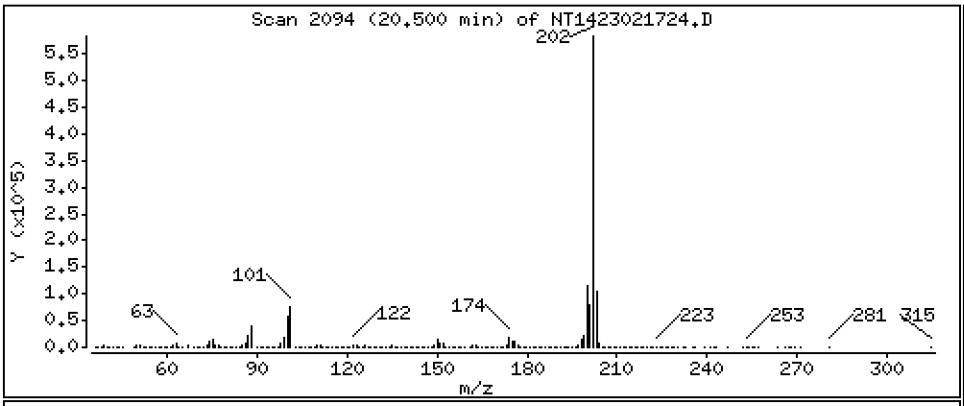
Operator: DSD

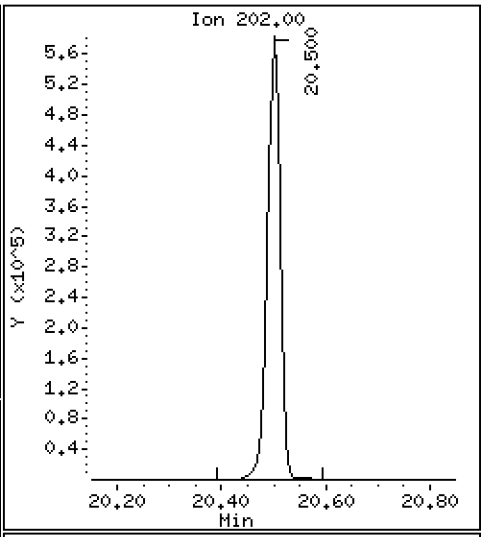
Column phase: ZB-5msi

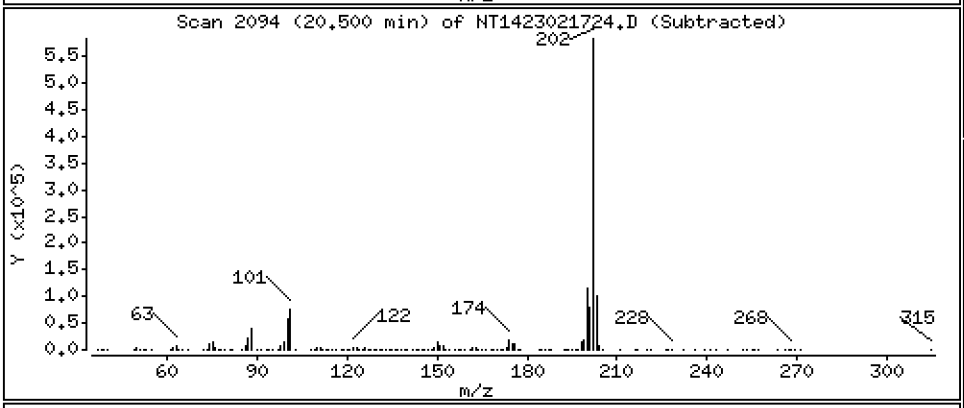
Column diameter: 0.25

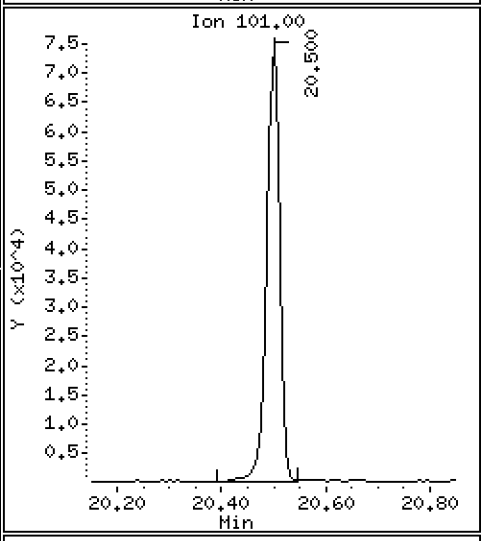
64 Fluoranthene

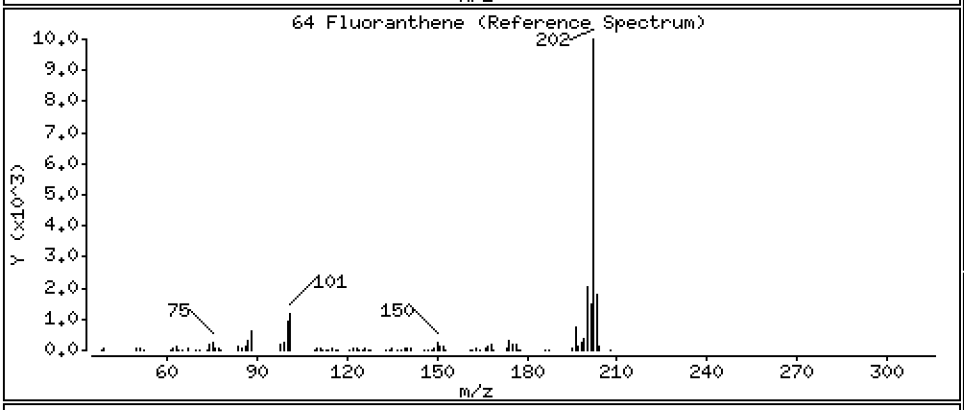
Concentration: 3.567 ug/mL

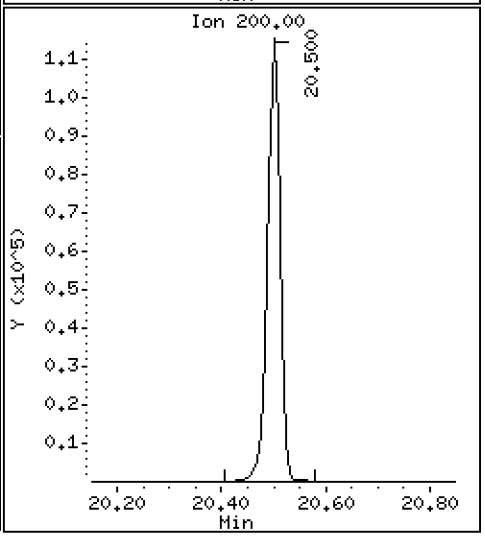


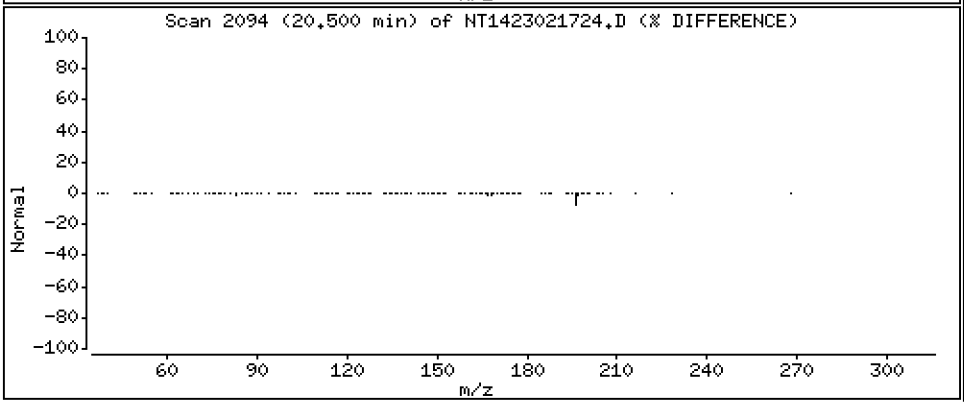












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021724.D

Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

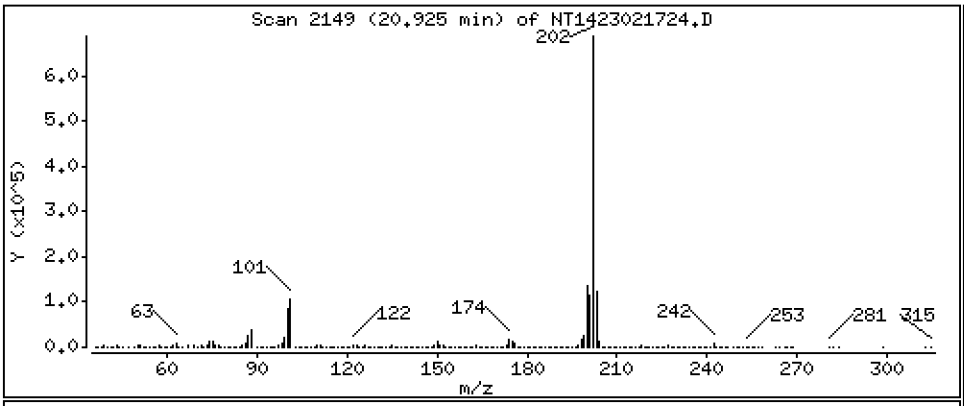
Operator: DSD

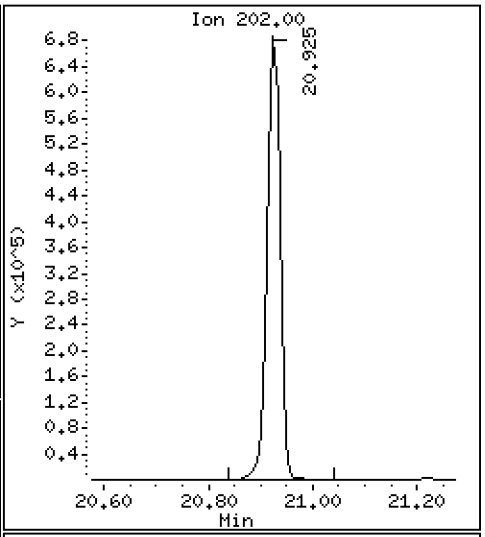
Column phase: ZB-5msi

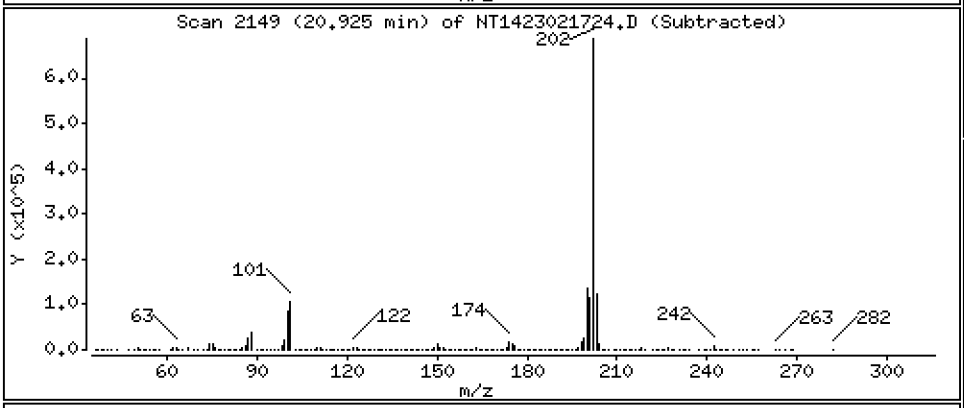
Column diameter: 0.25

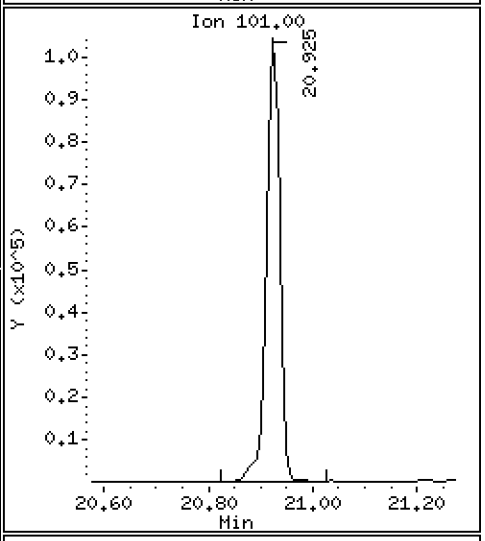
65 Pyrene

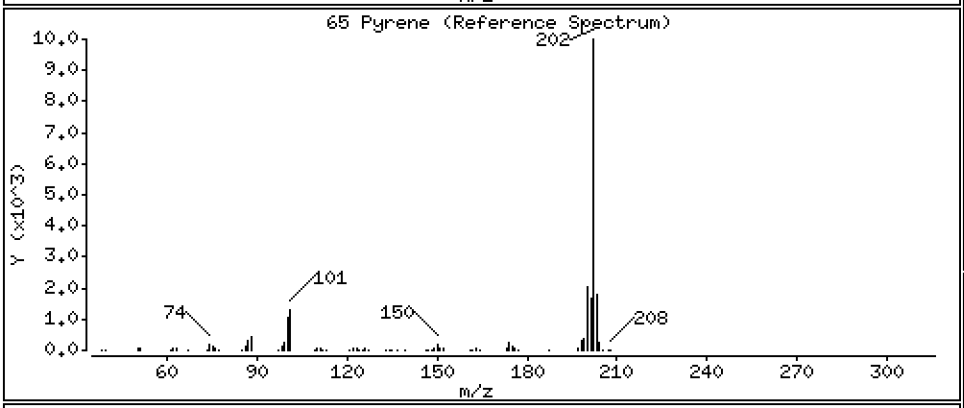
Concentration: 4.384 ug/mL

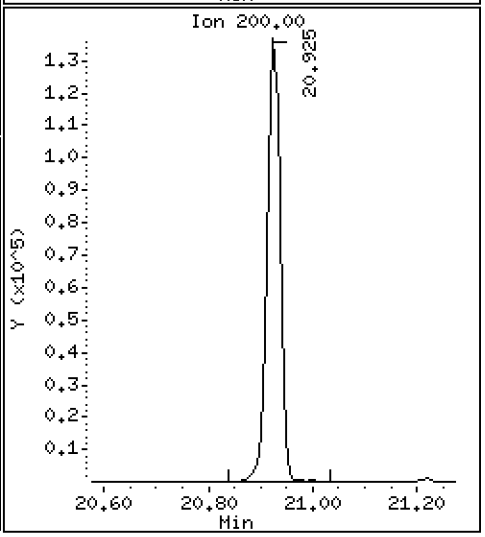


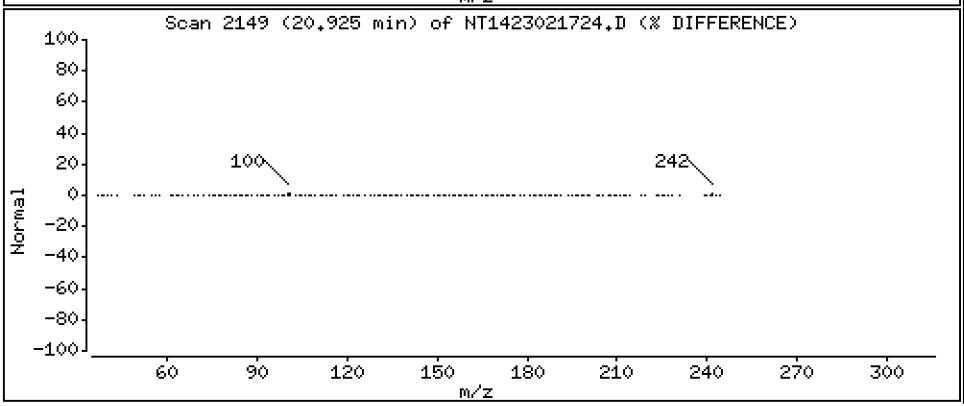












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

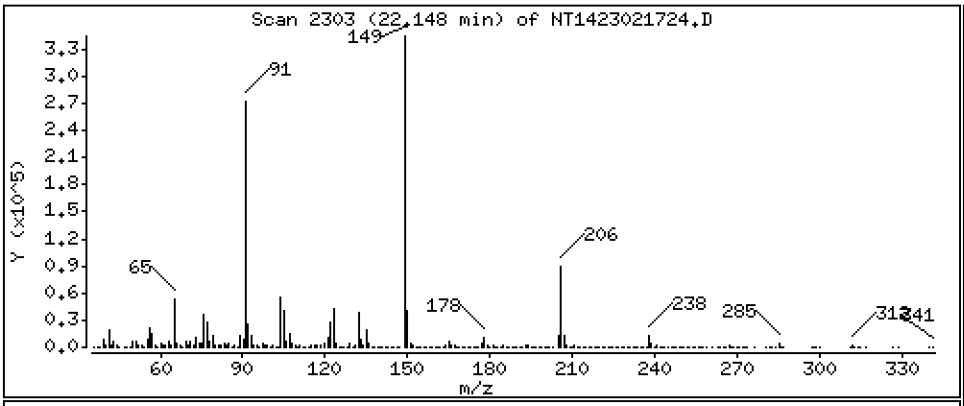
Operator: DSD

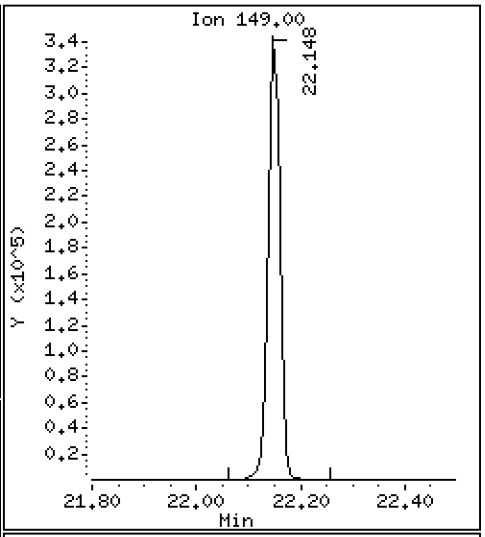
Column phase: ZB-5msi

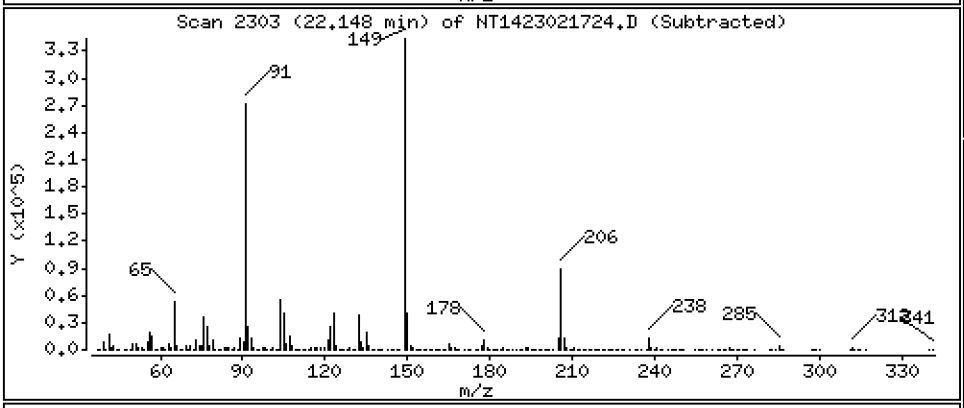
Column diameter: 0.25

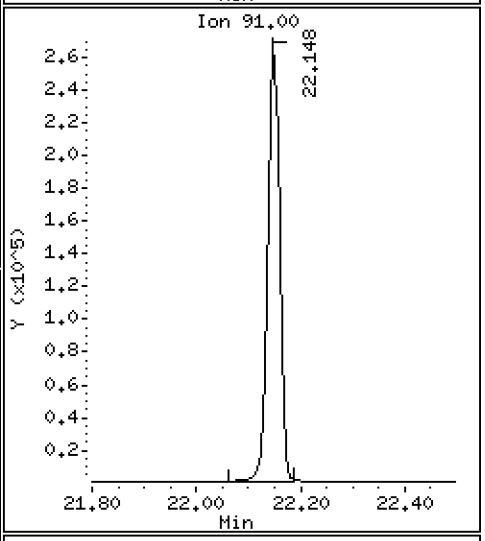
67 Butylbenzylphthalate

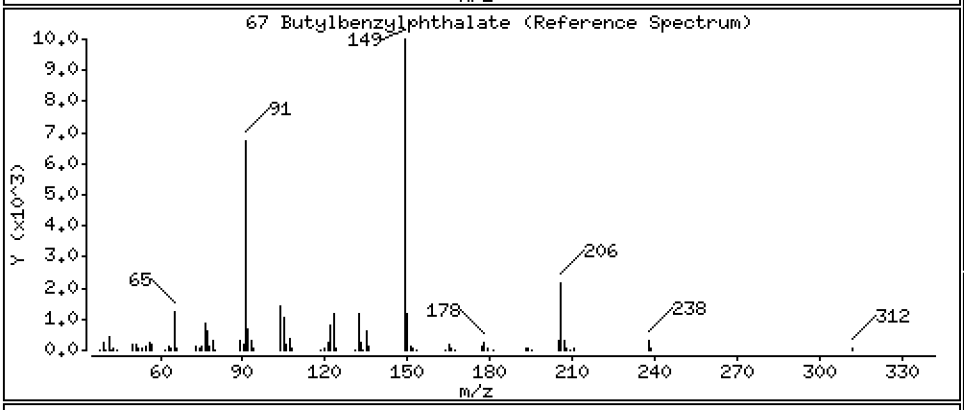
Concentration: 5.379 ug/mL

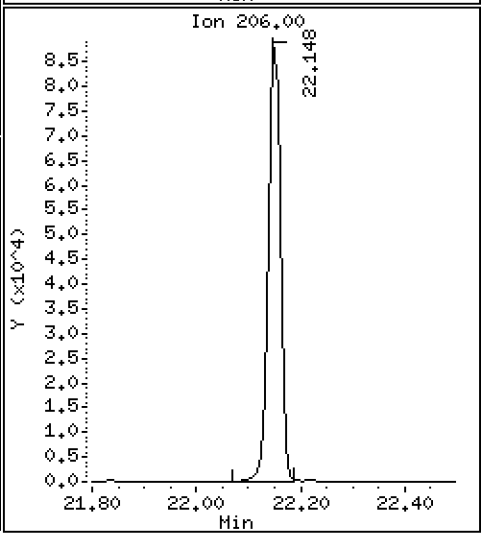


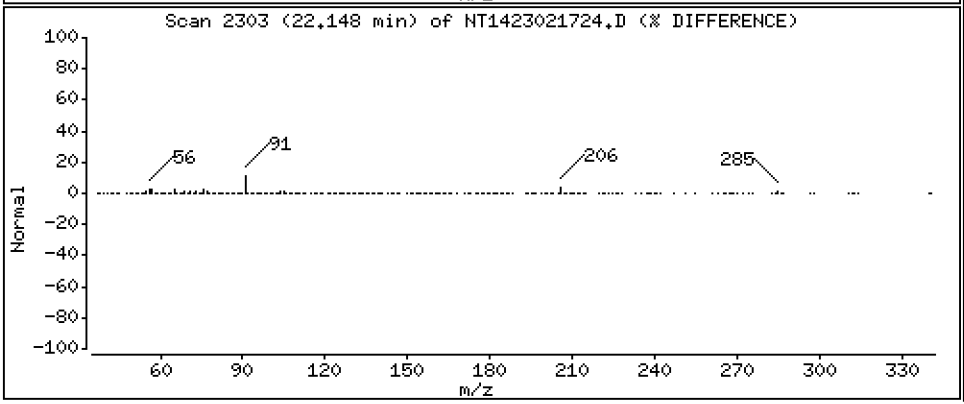












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

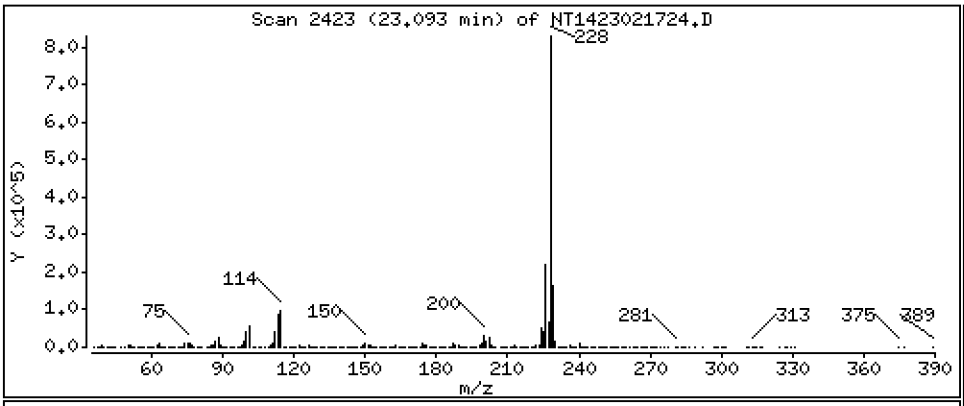
Operator: DSD

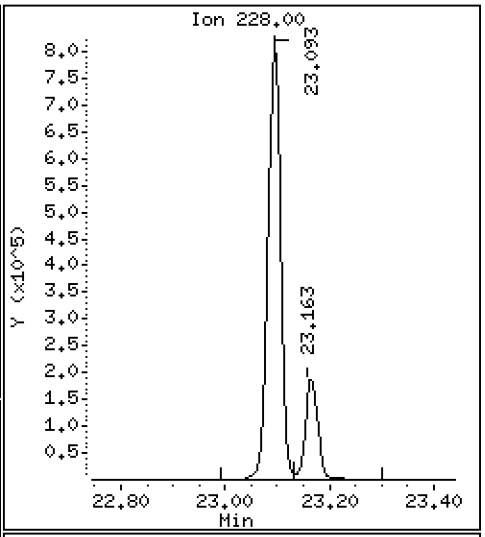
Column phase: ZB-5msi

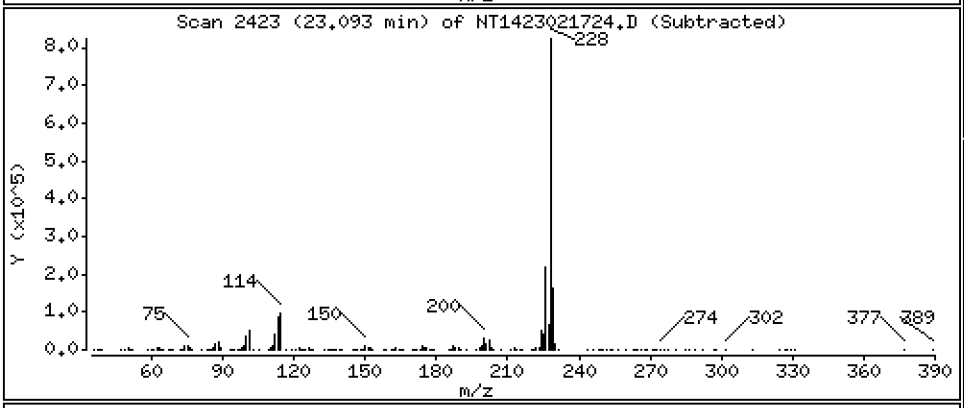
Column diameter: 0.25

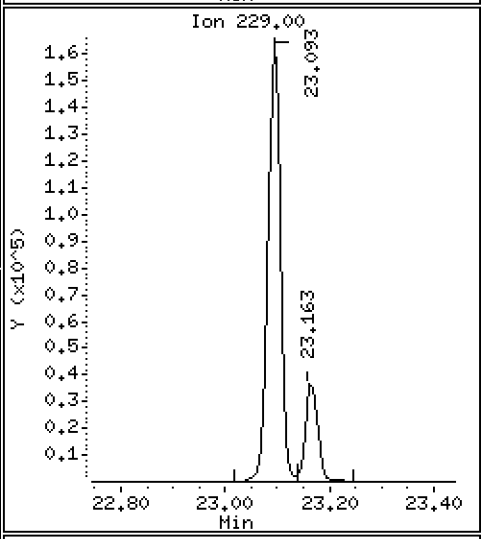
68 Benzo(a)anthracene

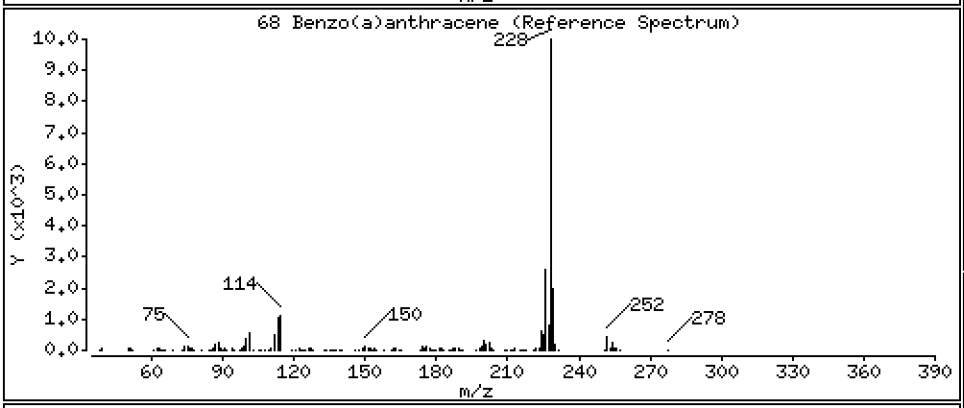
Concentration: 6.571 ug/mL

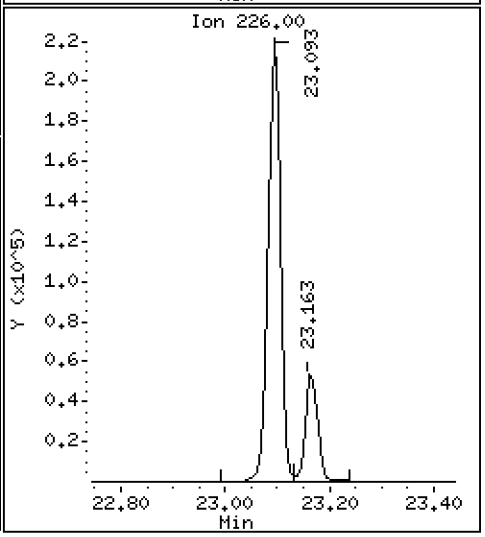


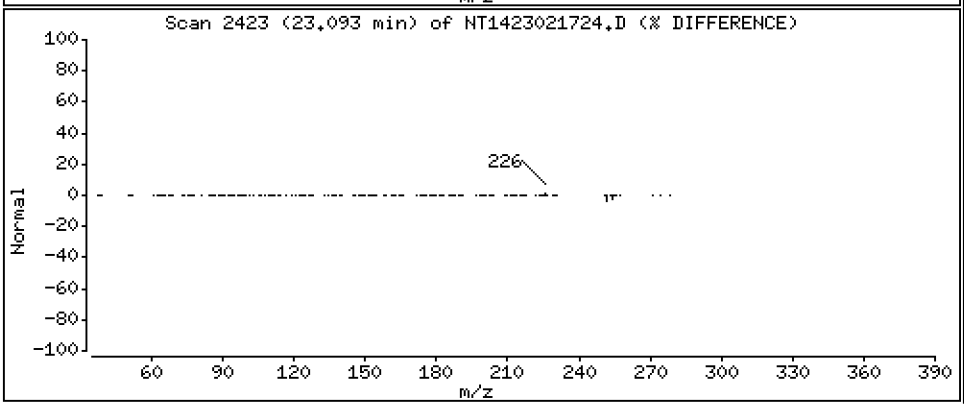












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

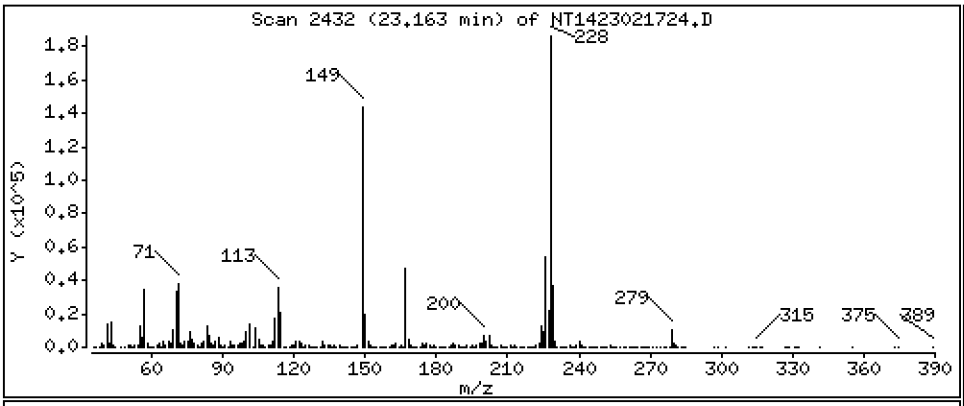
Operator: DSD

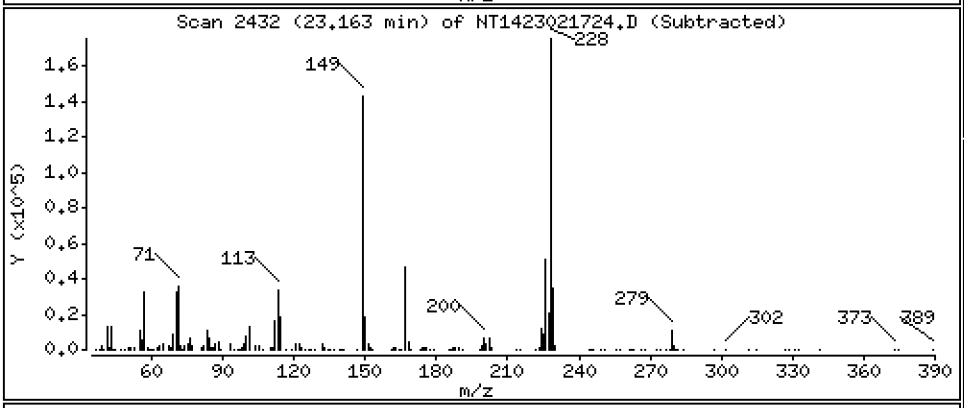
Column phase: ZB-5msi

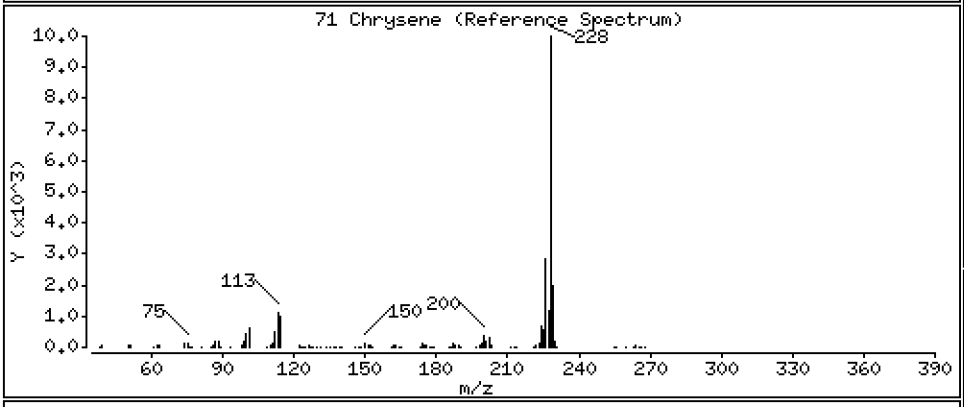
Column diameter: 0.25

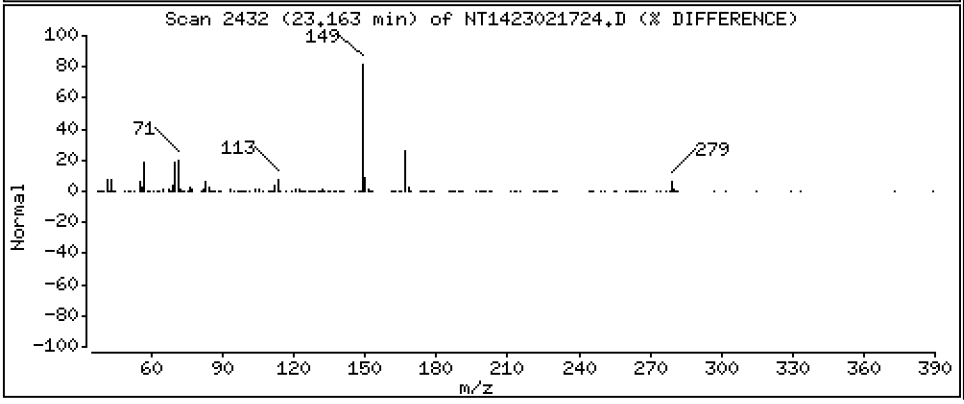
71 Chrysene

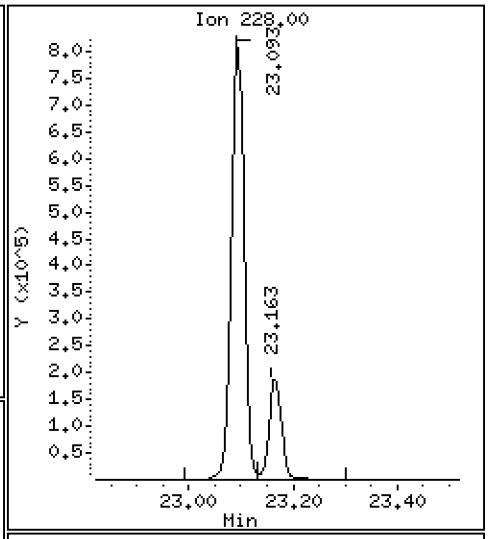
Concentration: 1.704 ug/mL

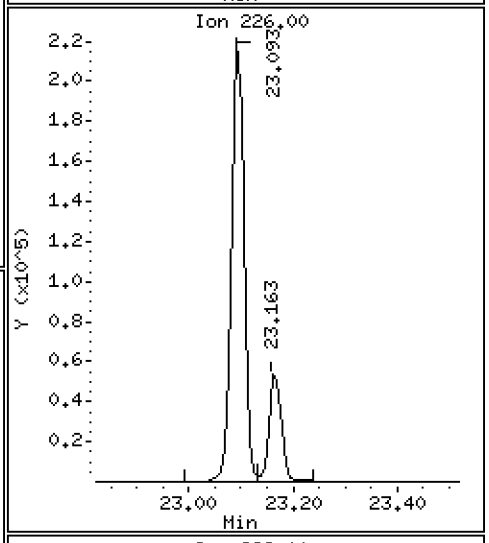


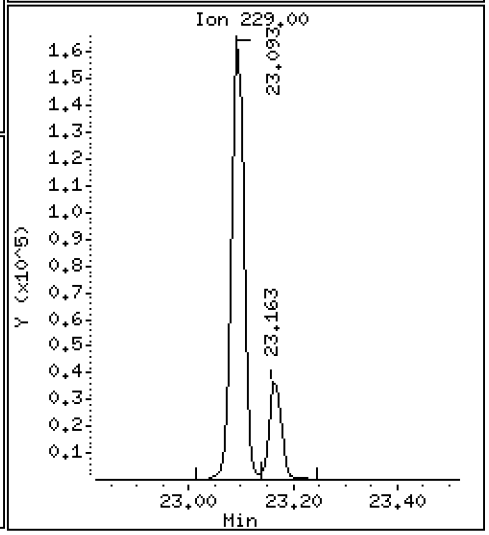












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

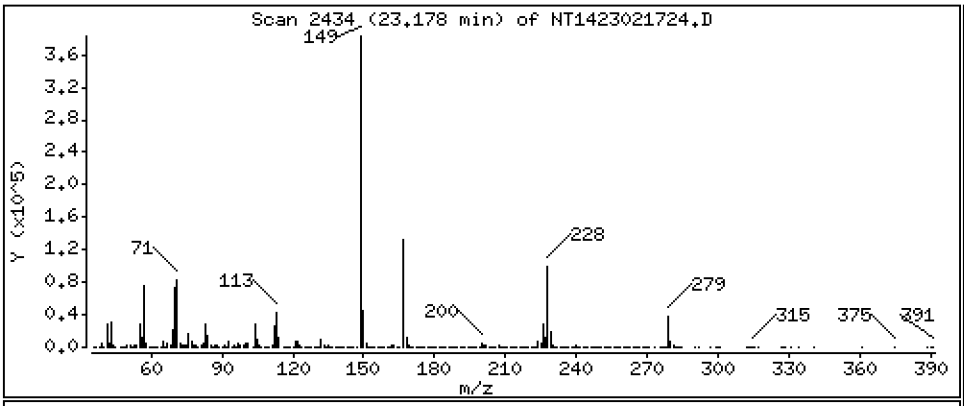
Operator: DSD

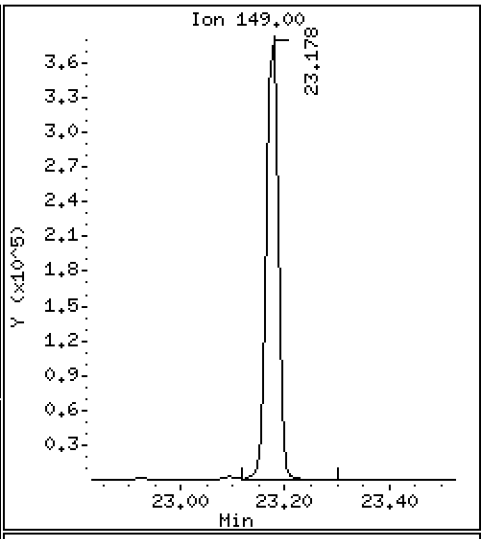
Column phase: ZB-5msi

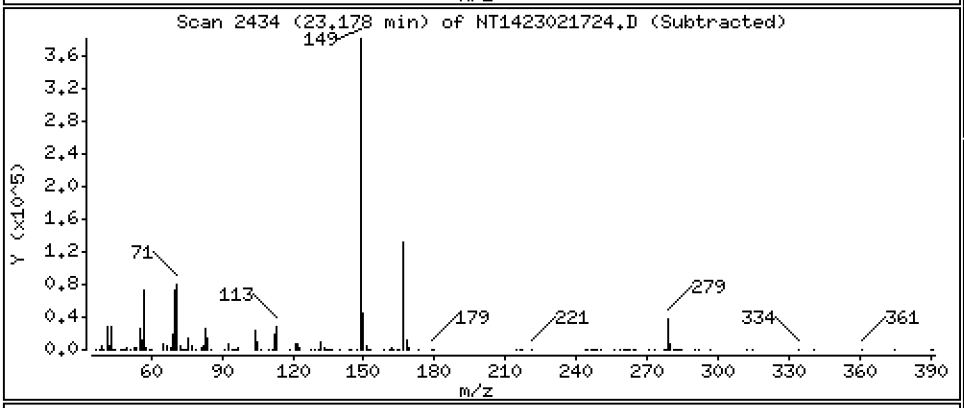
Column diameter: 0.25

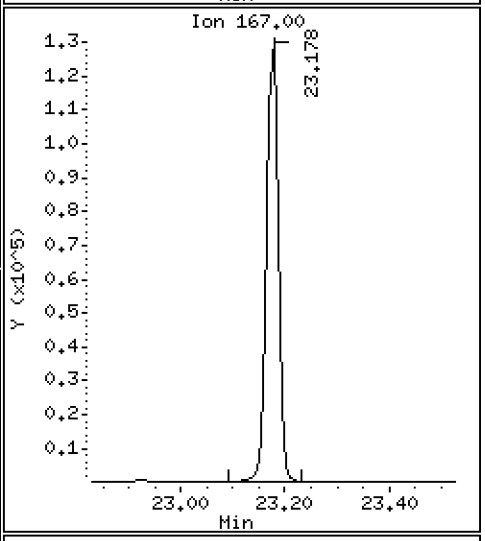
72 bis(2-Ethylhexyl)phthalate

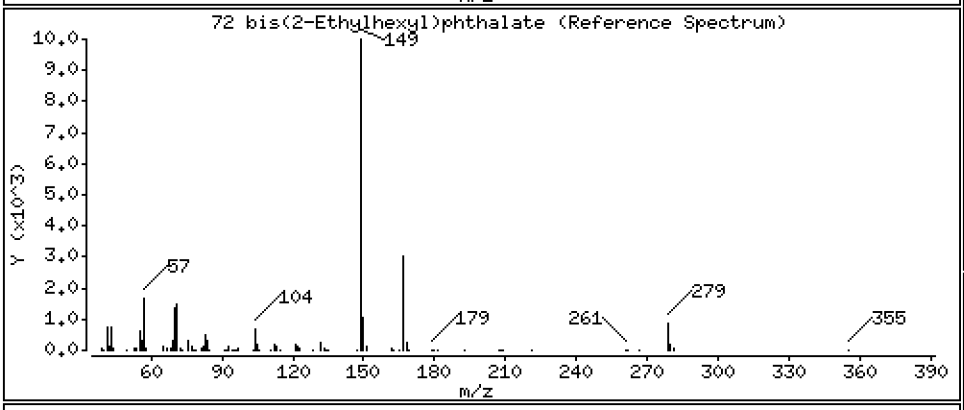
Concentration: 3.079 ug/mL

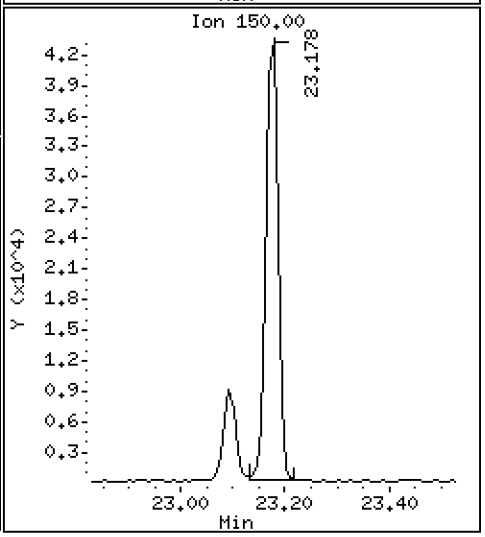


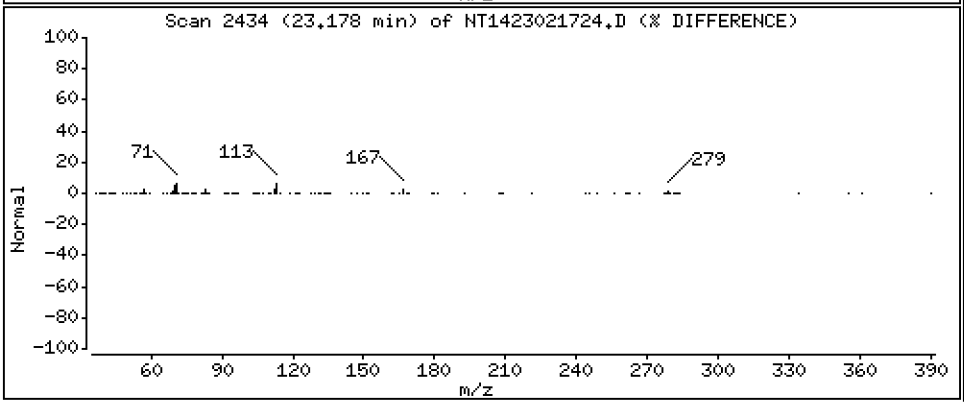












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

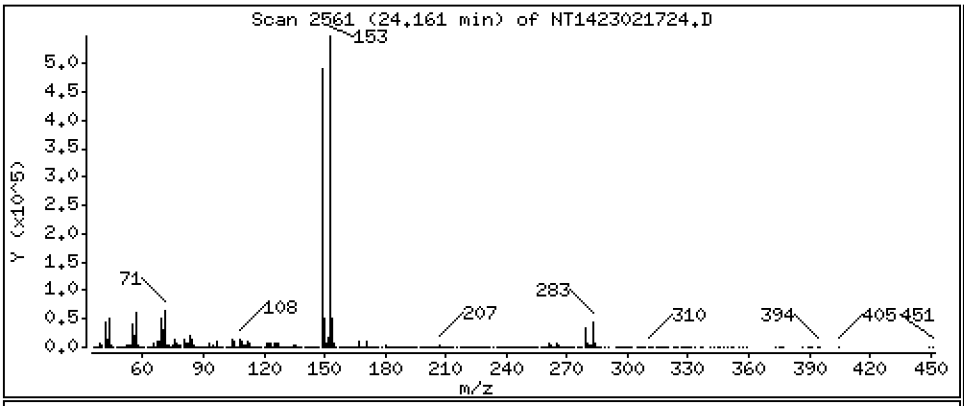
Operator: DSD

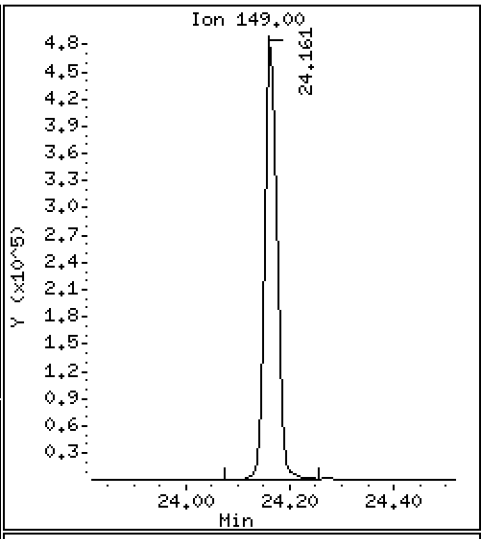
Column phase: ZB-5msi

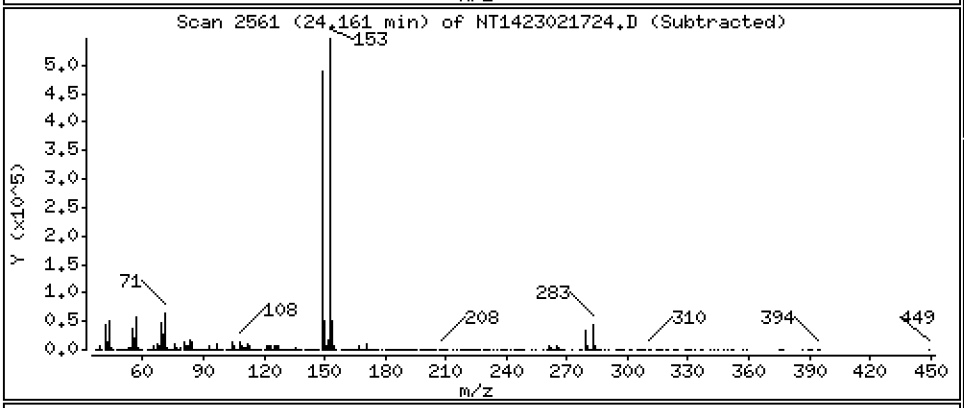
Column diameter: 0.25

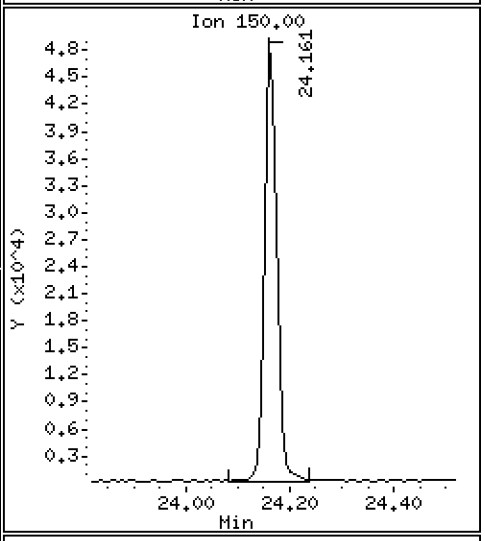
73 Di-n-octylphthalate

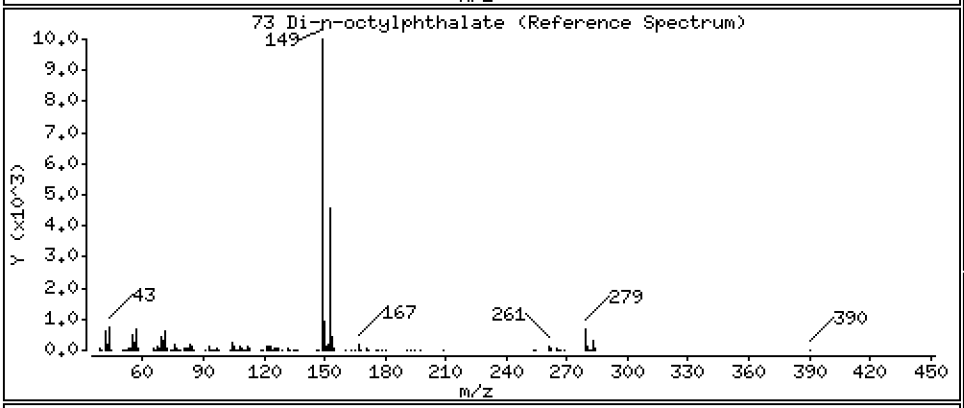
Concentration: 2.996 ug/mL

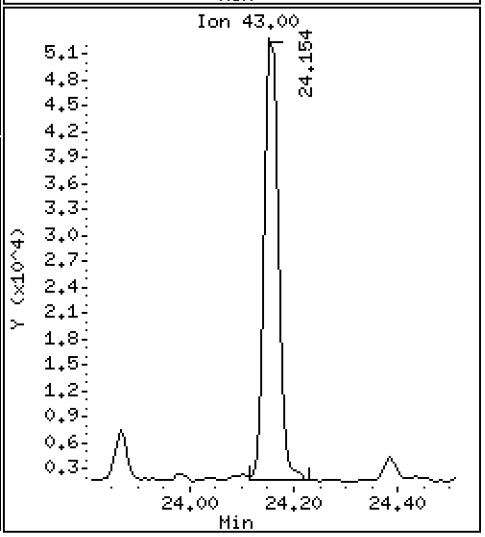


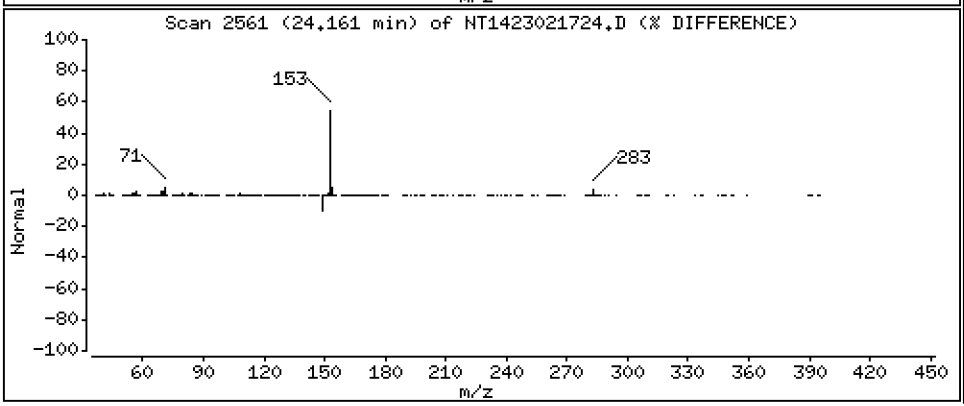












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

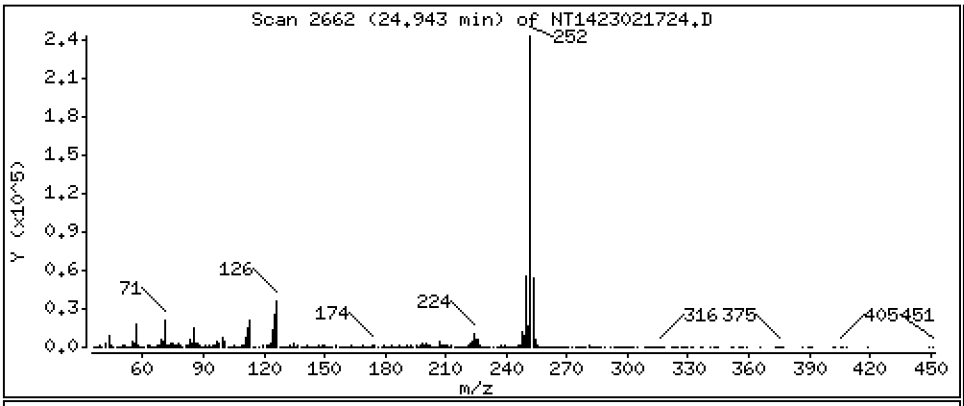
Operator: DSD

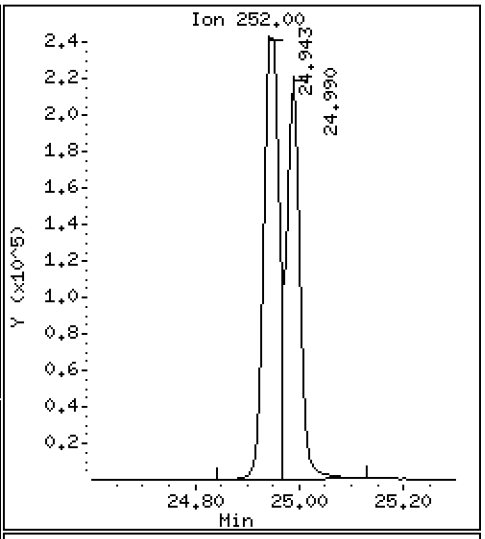
Column phase: ZB-5msi

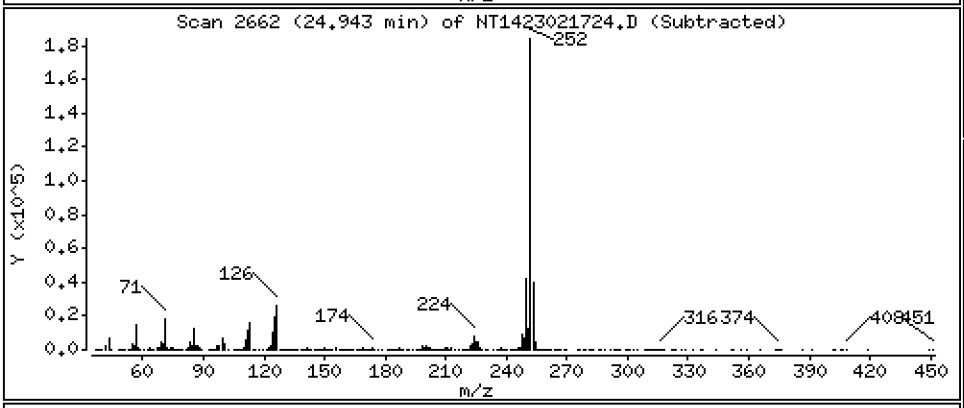
Column diameter: 0.25

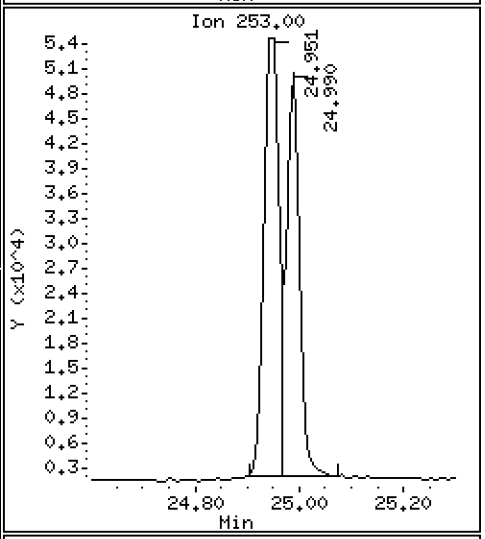
74 Benzo(b)fluoranthene

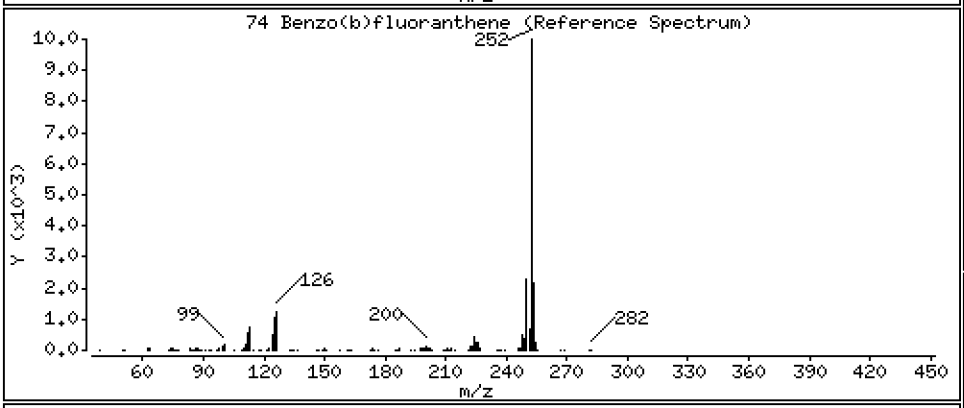
Concentration: 3.328 ug/mL

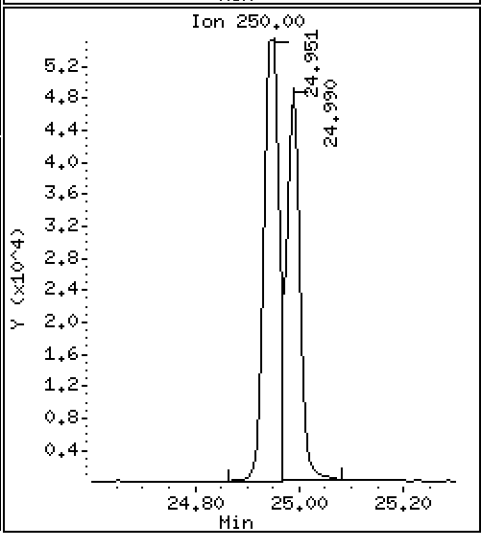


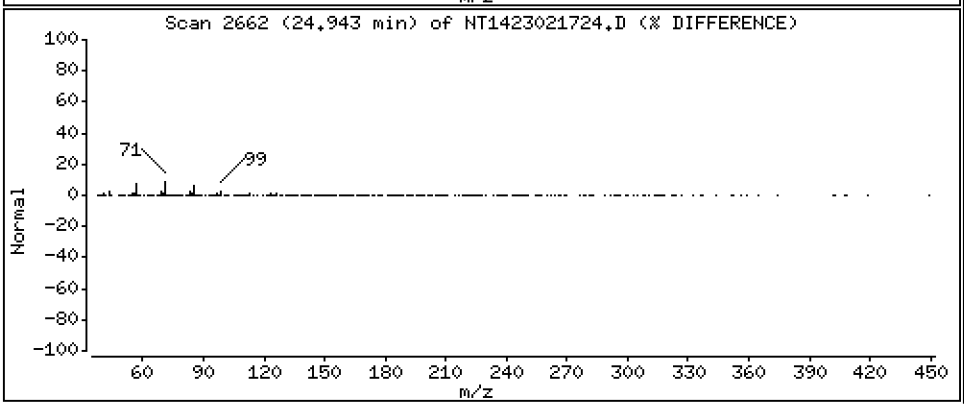












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

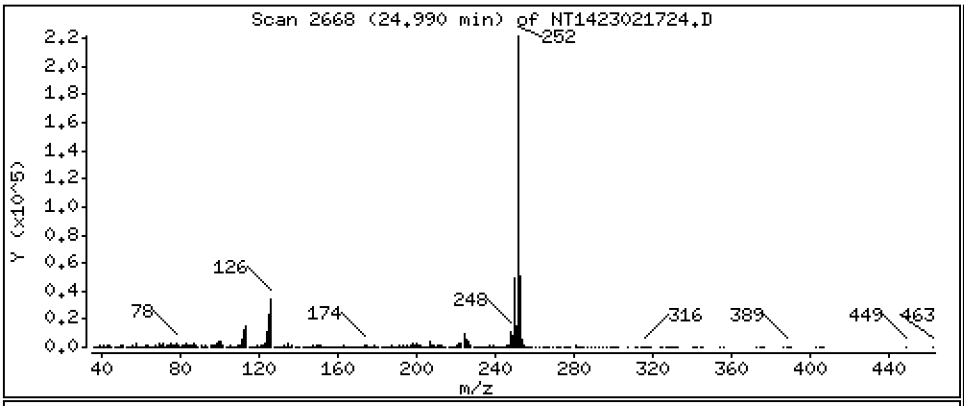
Operator: DSD

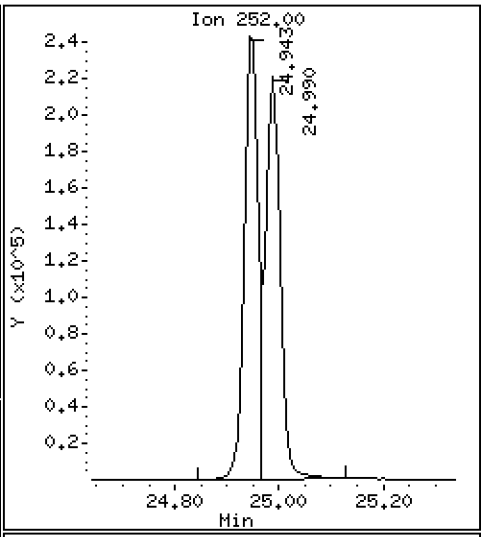
Column phase: ZB-5msi

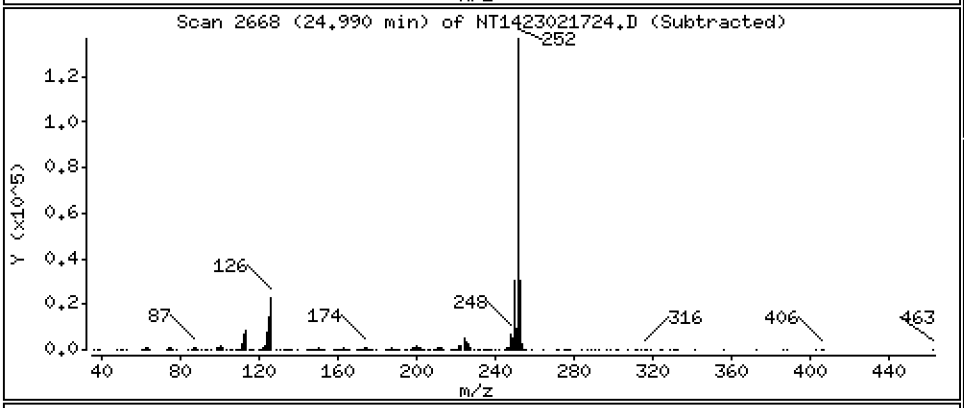
Column diameter: 0.25

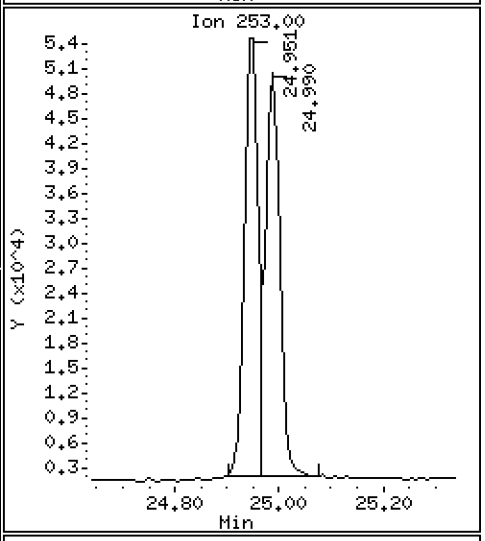
75 Benzo(k)fluoranthene

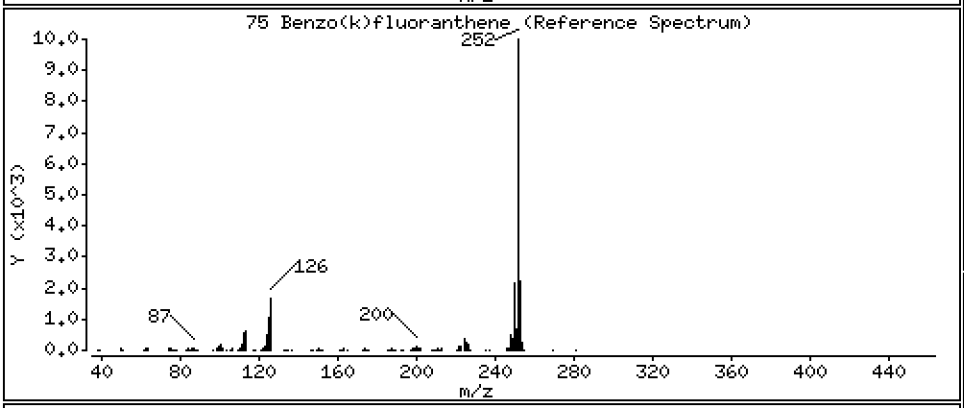
Concentration: 2.867 ug/mL

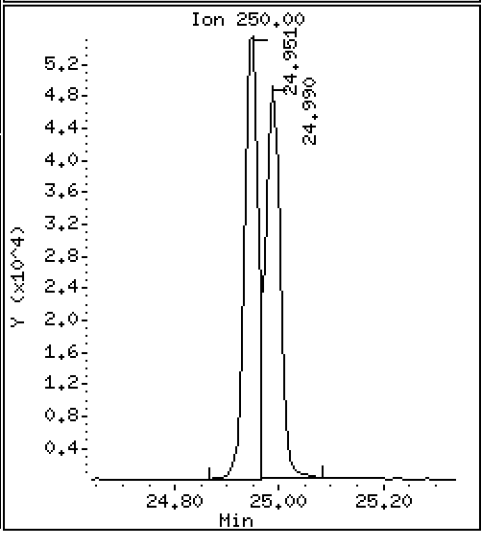


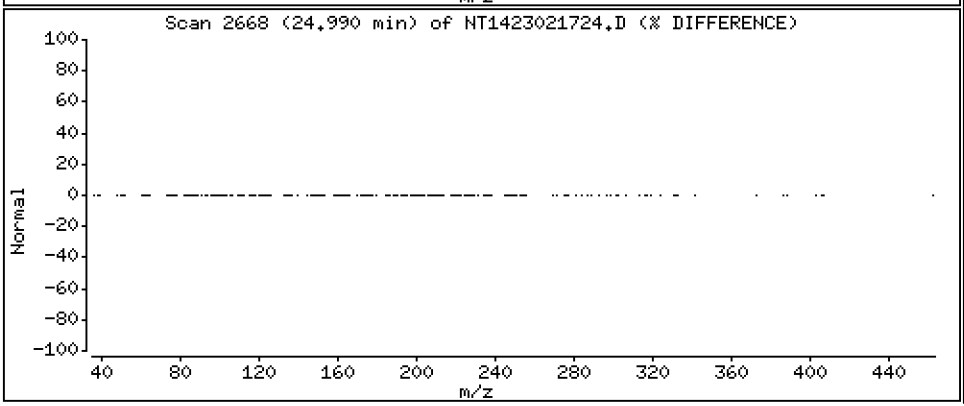












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

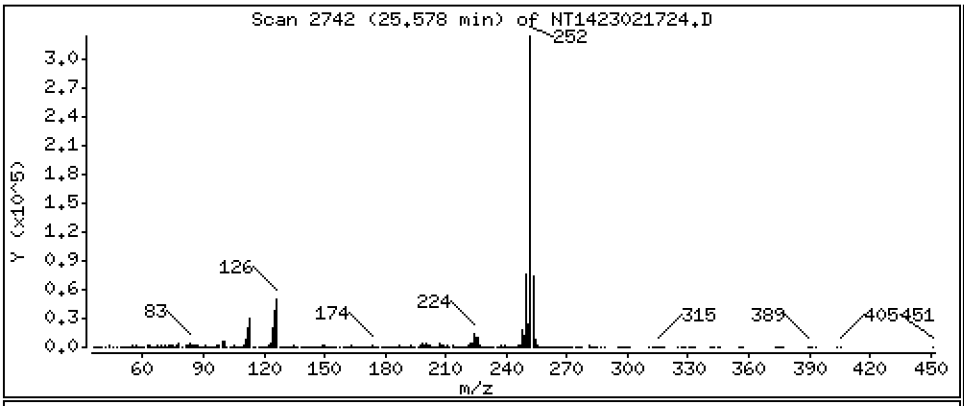
Operator: DSD

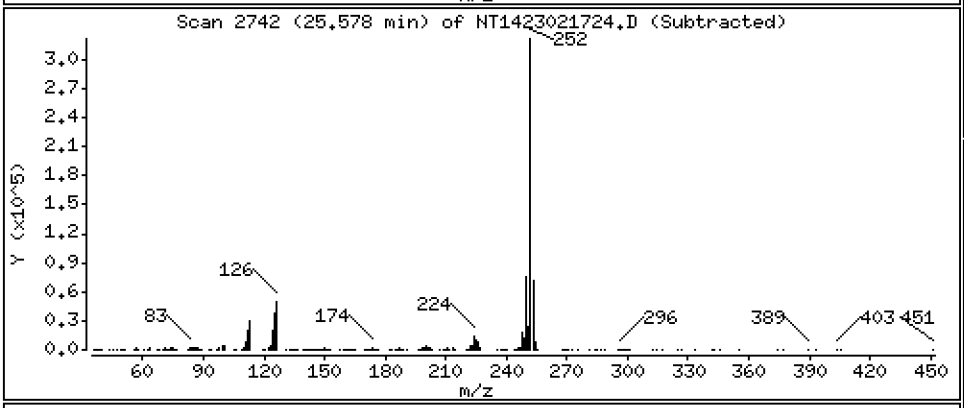
Column phase: ZB-5msi

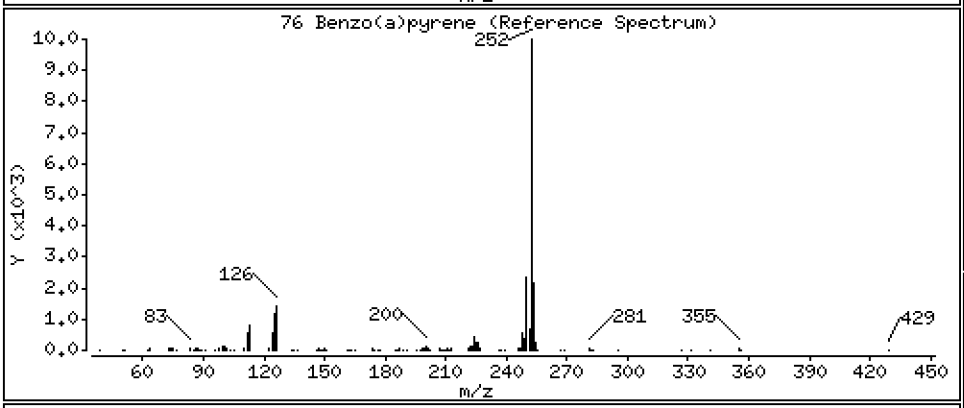
Column diameter: 0.25

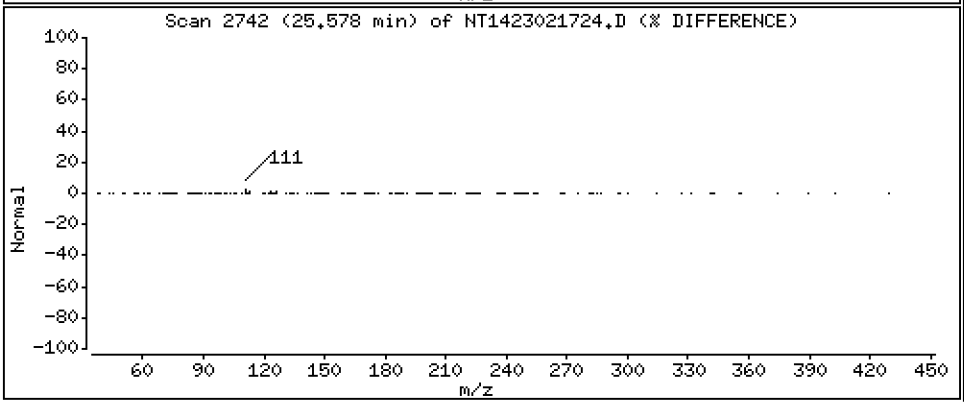
76 Benzo(a)pyrene

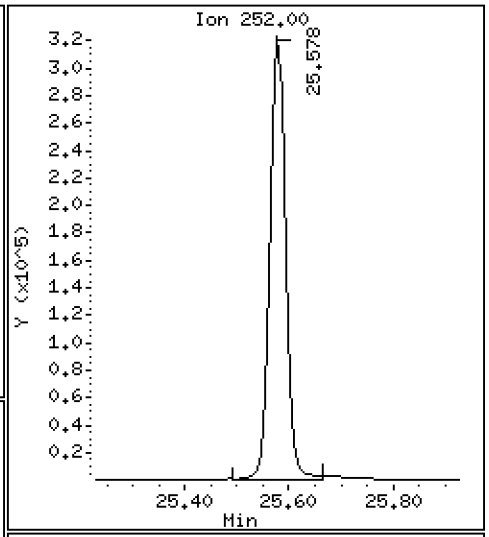
Concentration: 5.129 ug/mL

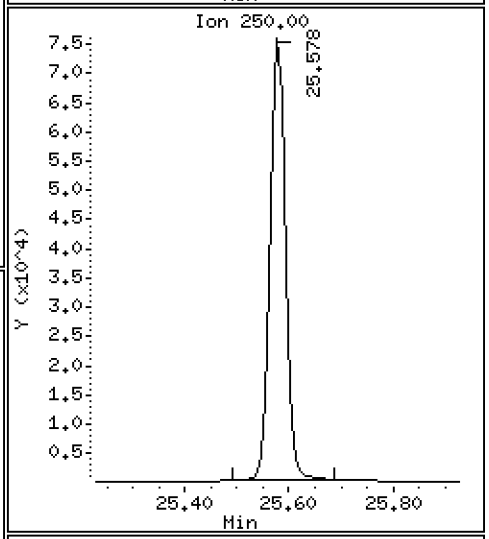


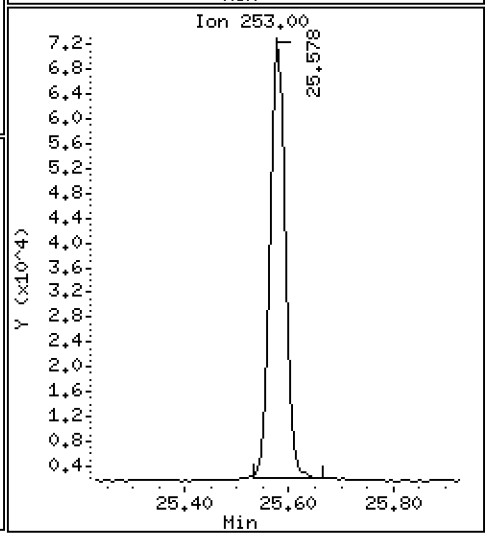












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

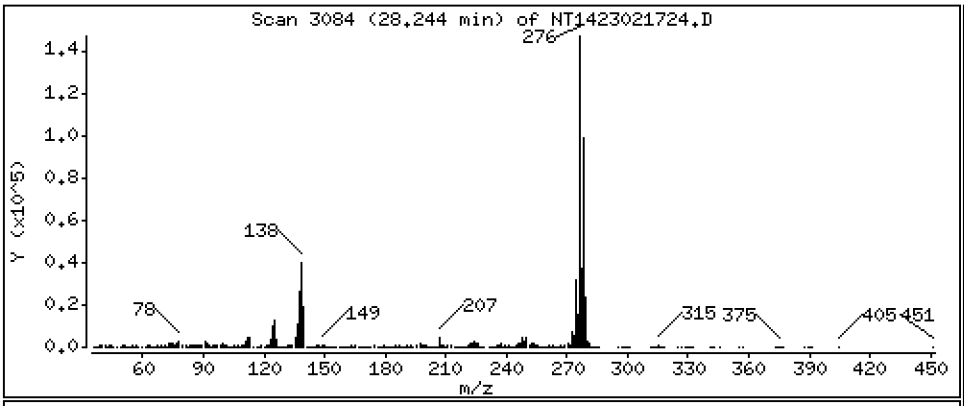
Operator: DSD

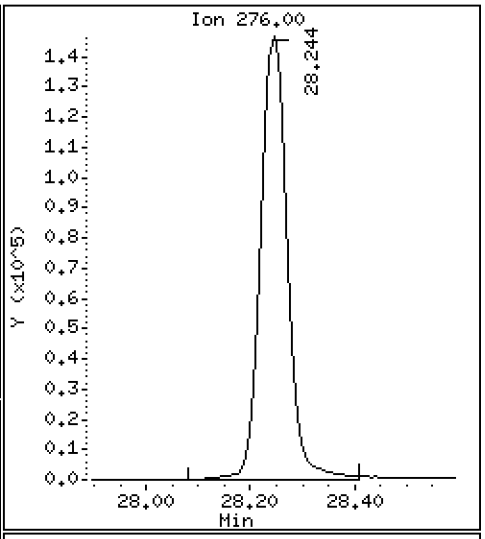
Column phase: ZB-5msi

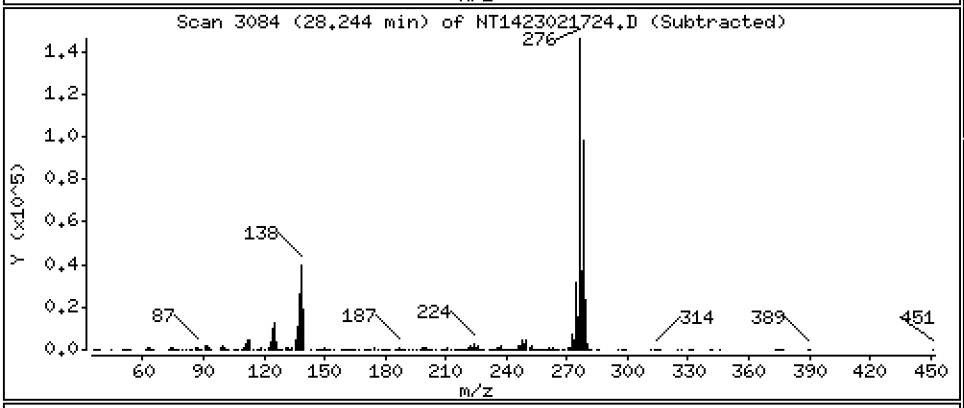
Column diameter: 0.25

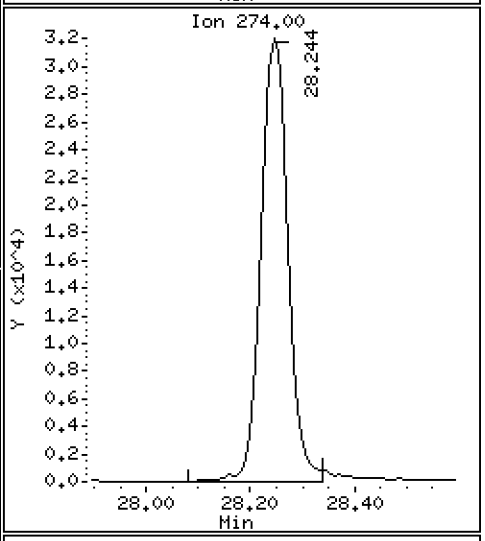
78 Indeno(1,2,3-cd)pyrene

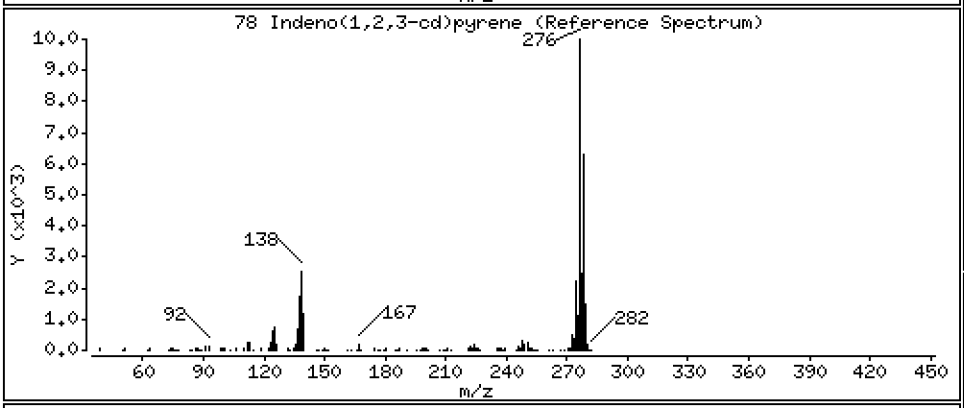
Concentration: 4.545 ug/mL

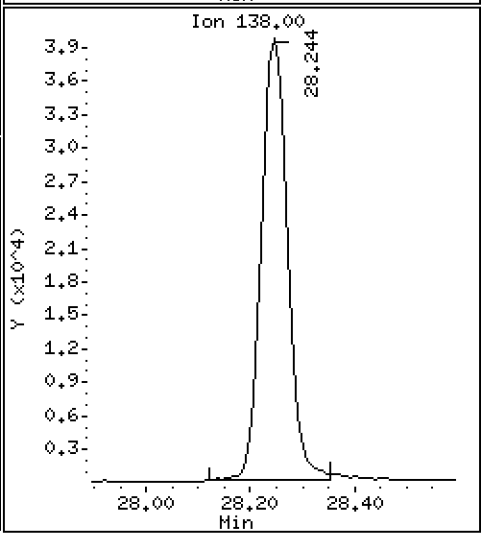


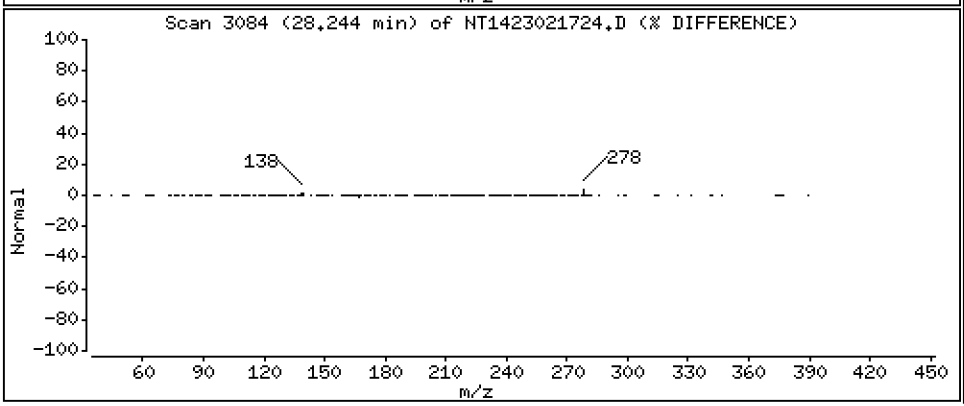












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

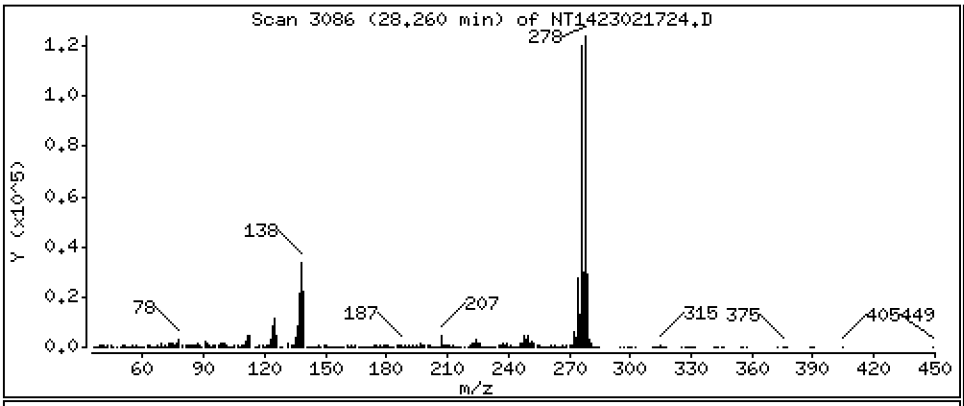
Operator: DSD

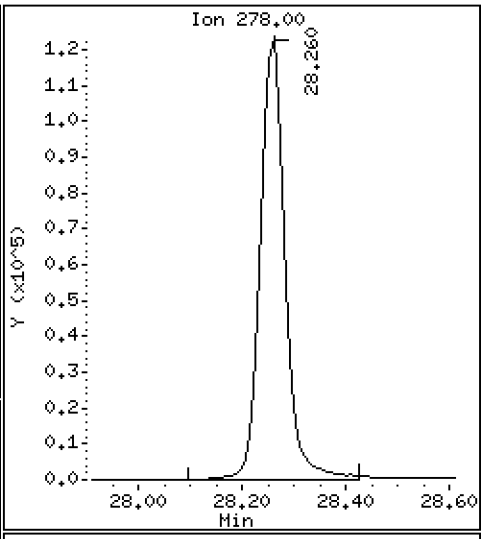
Column phase: ZB-5msi

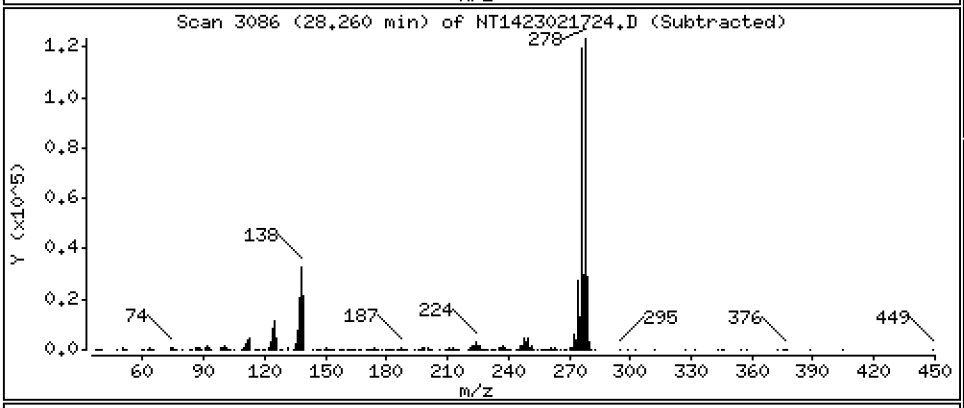
Column diameter: 0.25

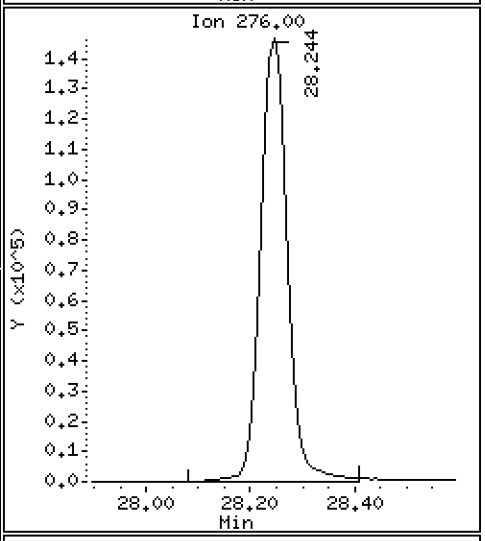
79 Dibenzo(a,h)anthracene

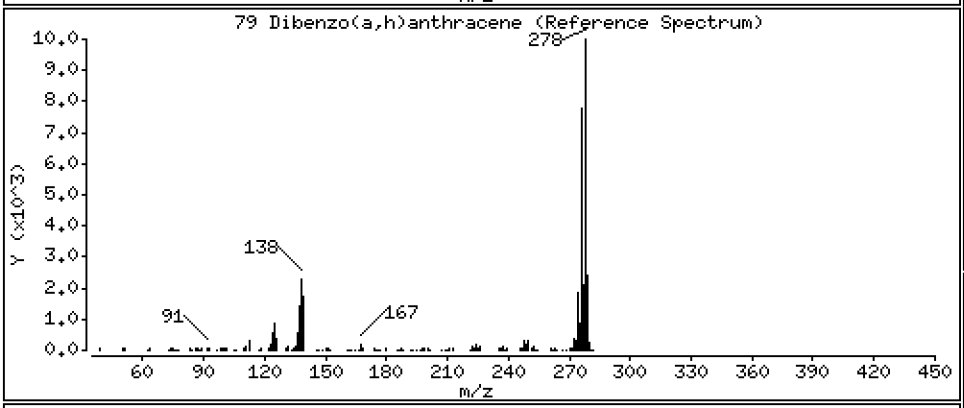
Concentration: 4.257 ug/mL

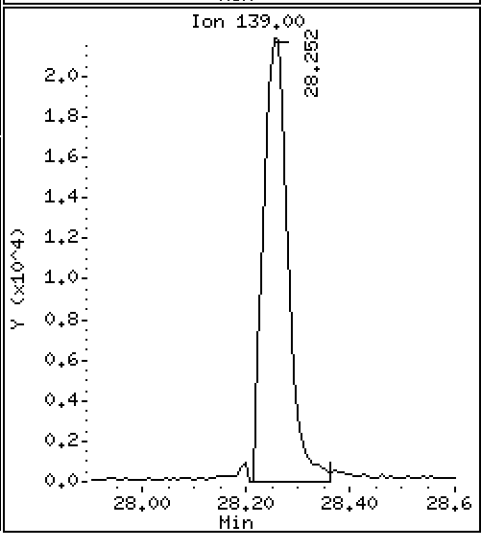


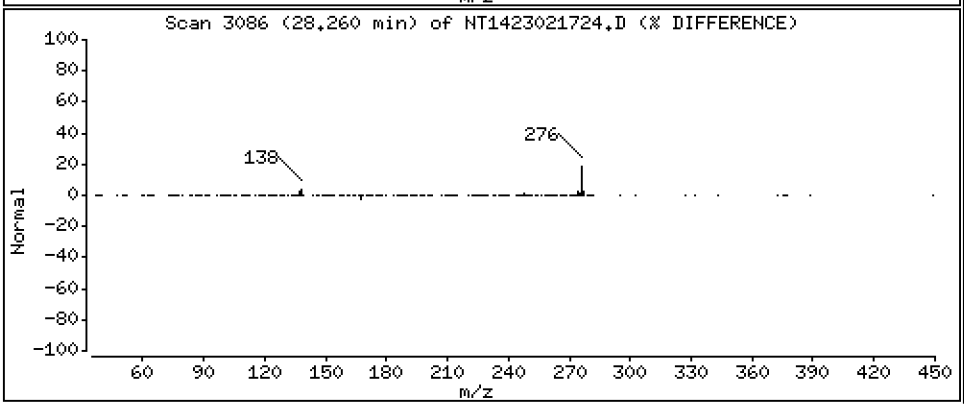












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

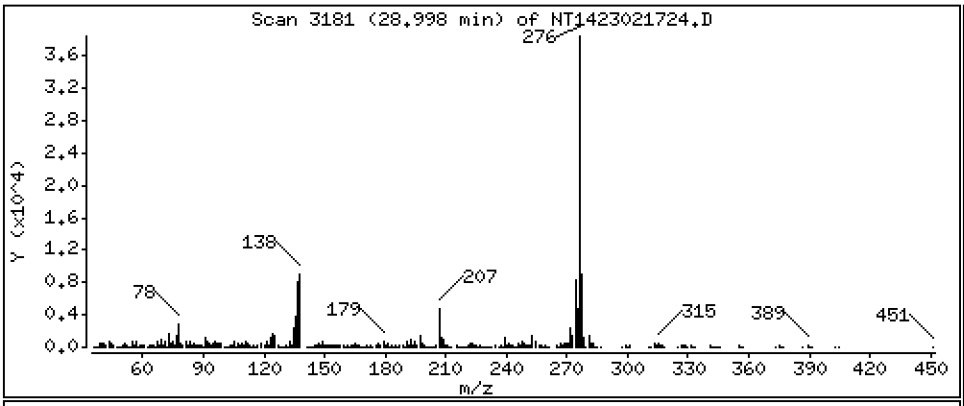
Operator: DSD

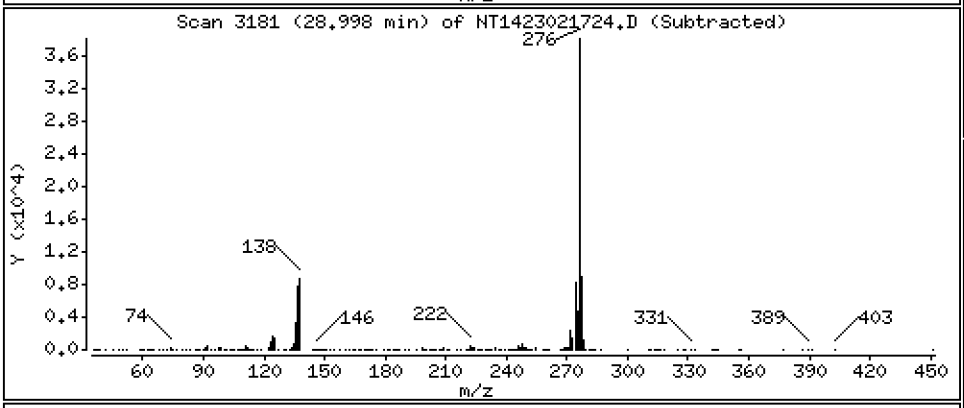
Column phase: ZB-5msi

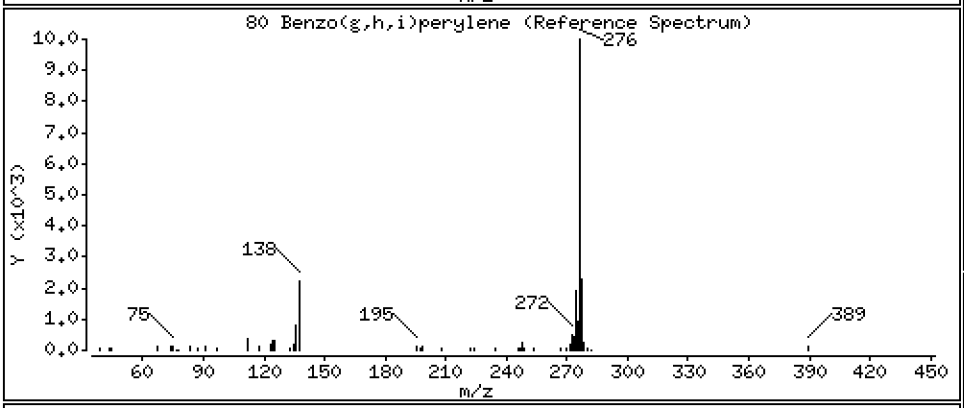
Column diameter: 0.25

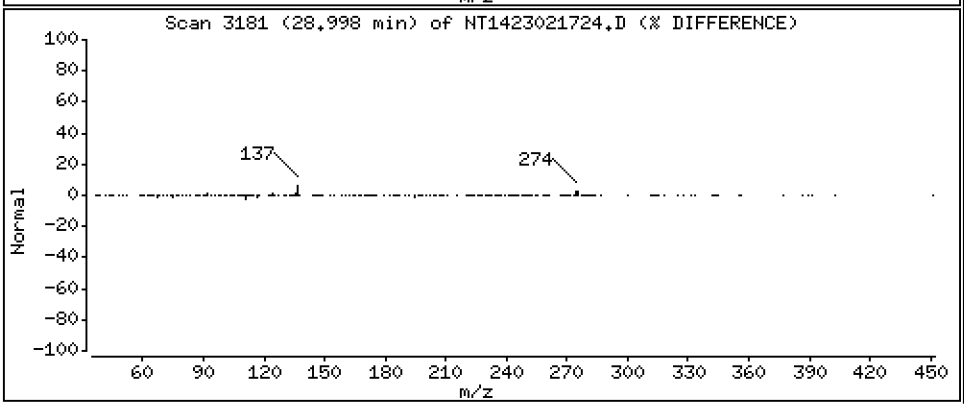
80 Benzo(g,h,i)perylene

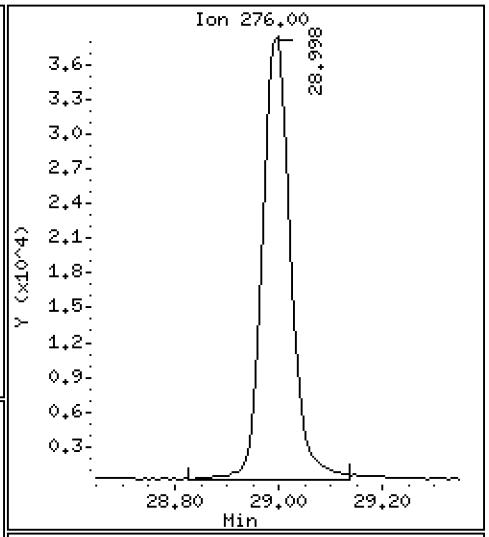
Concentration: 1.564 ug/mL

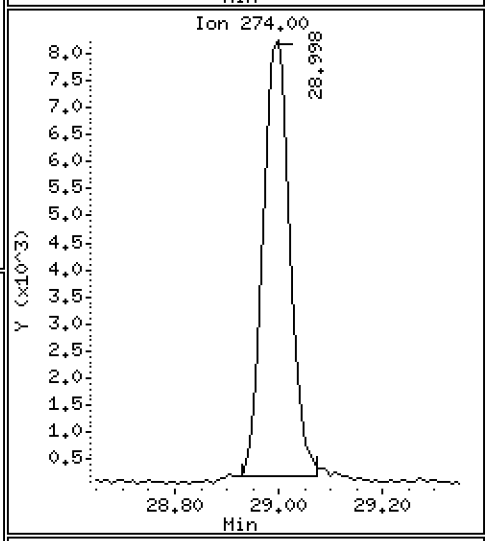


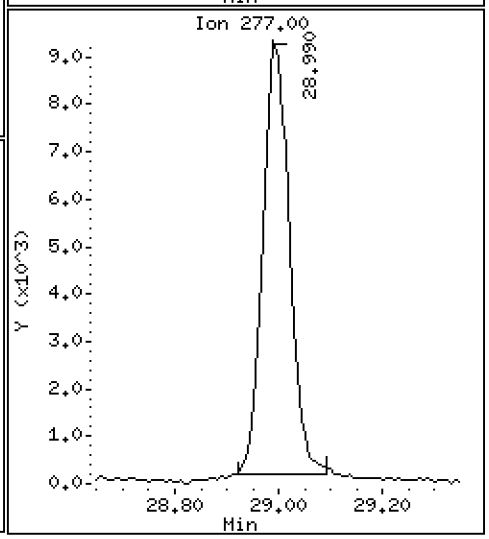












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

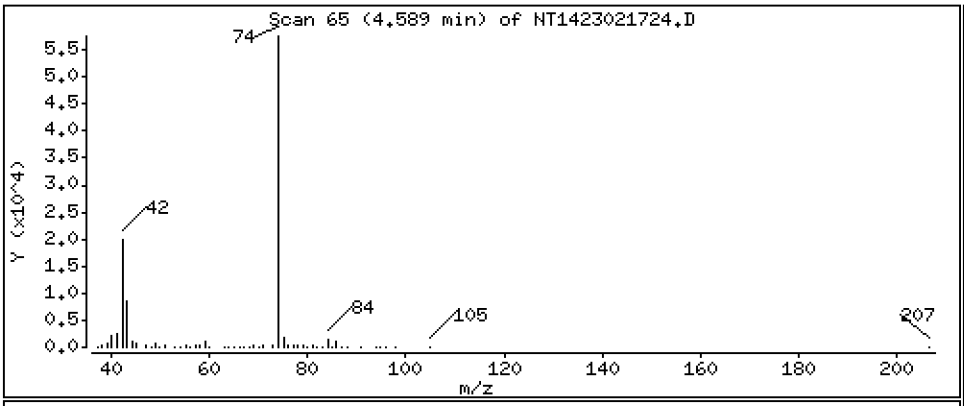
Operator: DSD

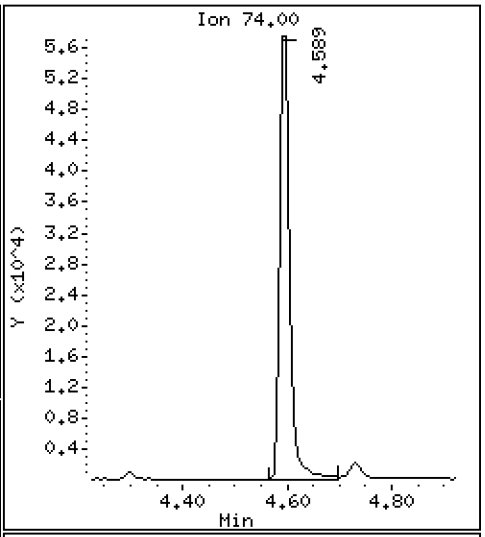
Column phase: ZB-5msi

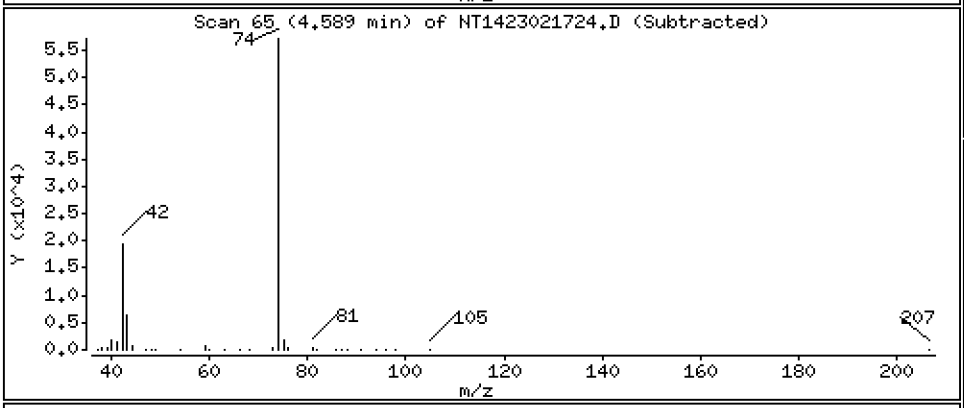
Column diameter: 0.25

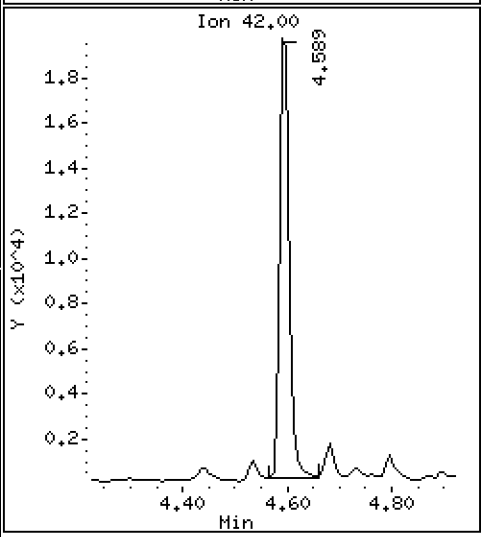
90 N-Nitrosodimethylamine

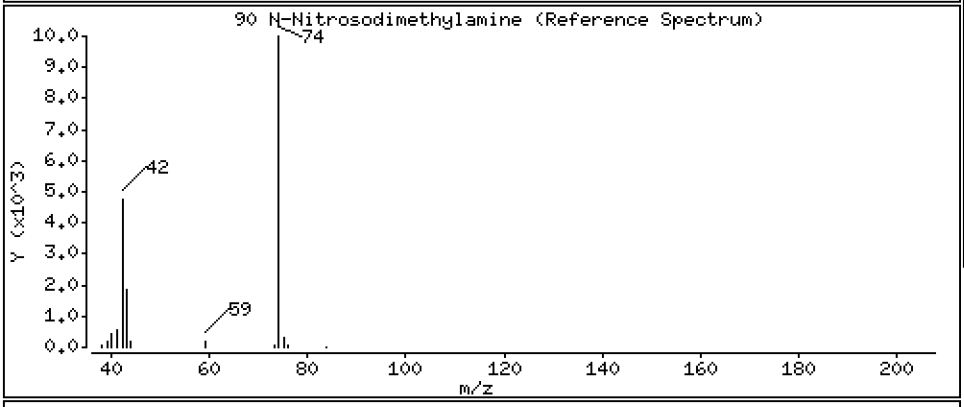
Concentration: 1.349 ug/mL

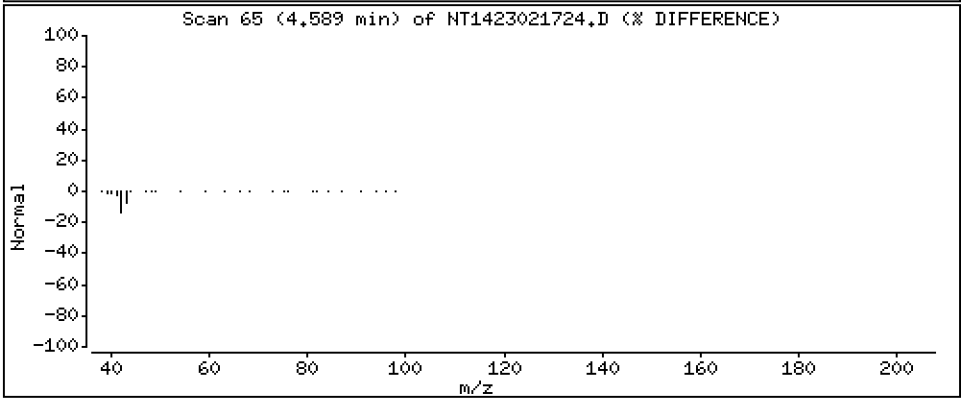












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021724.D

Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

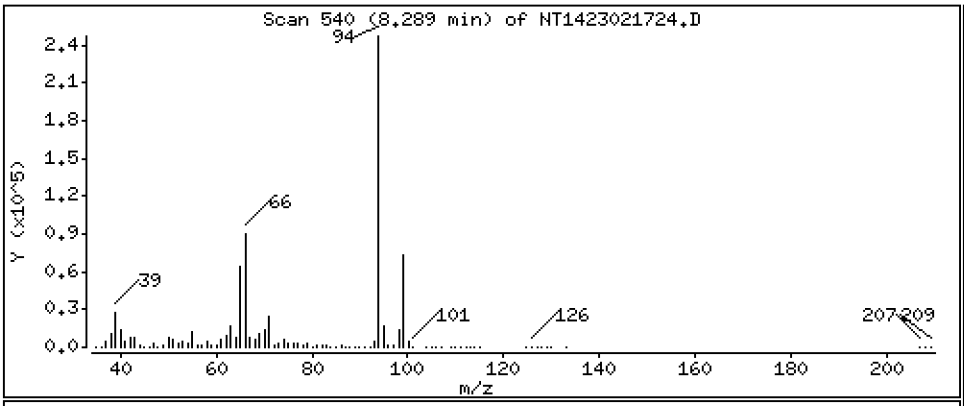
Operator: DSD

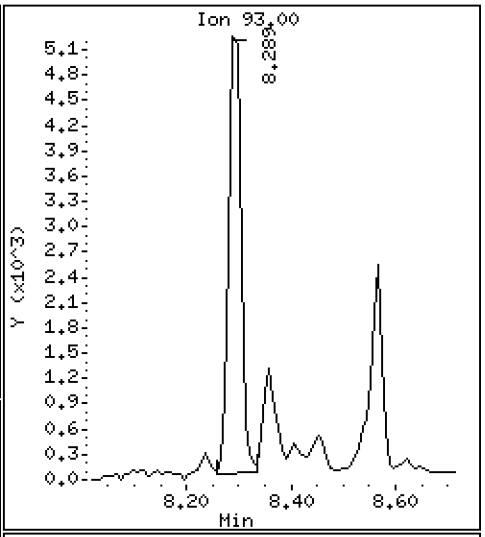
Column phase: ZB-5msi

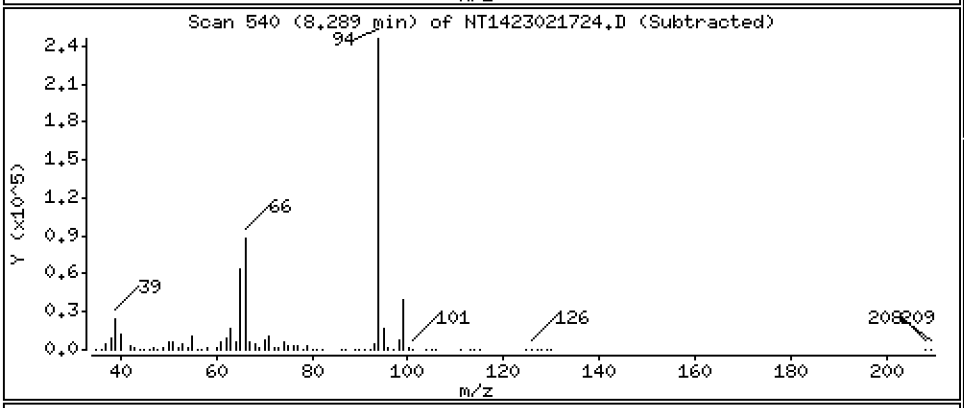
Column diameter: 0.25

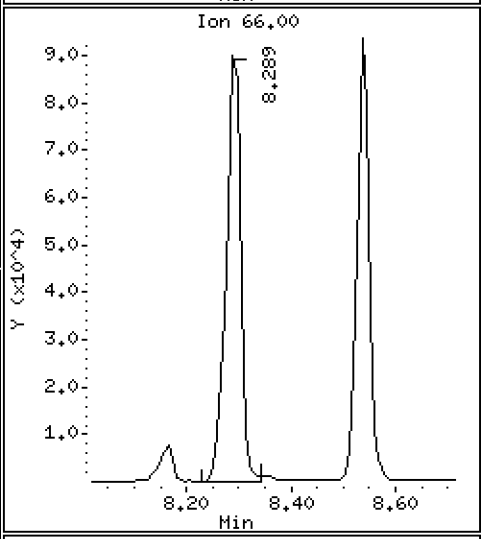
91 Aniline

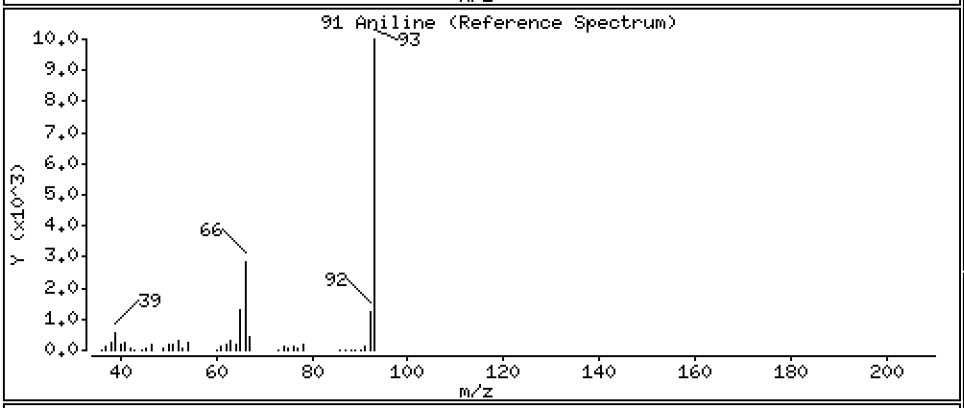
Concentration: 0.05766 ug/mL

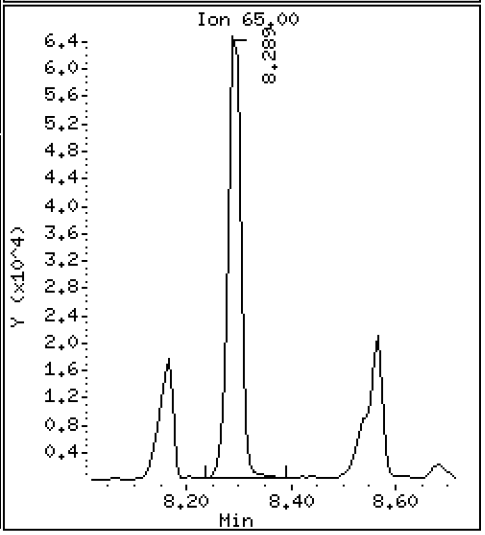


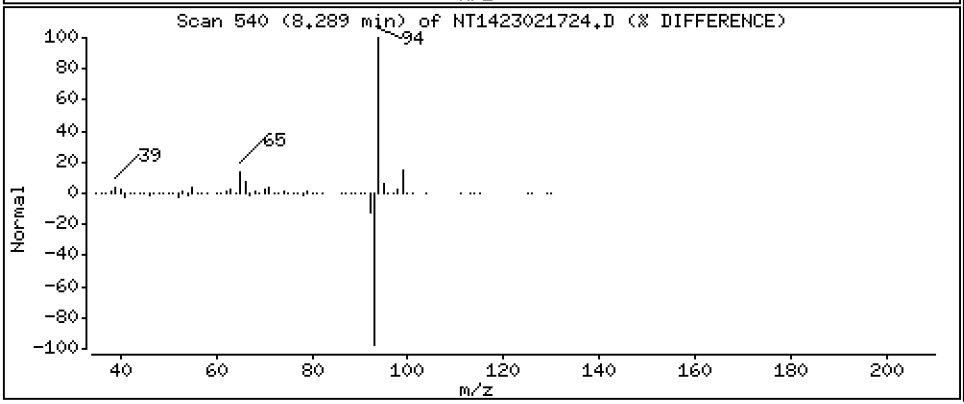












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021724.D

Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

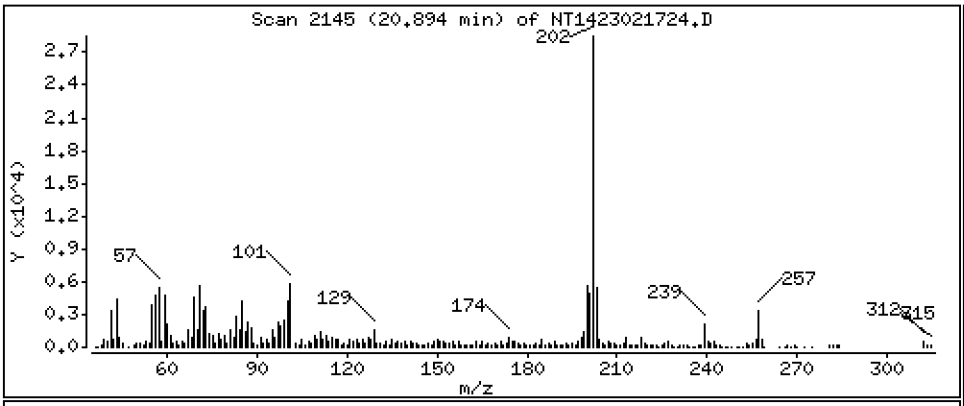
Operator: DSD

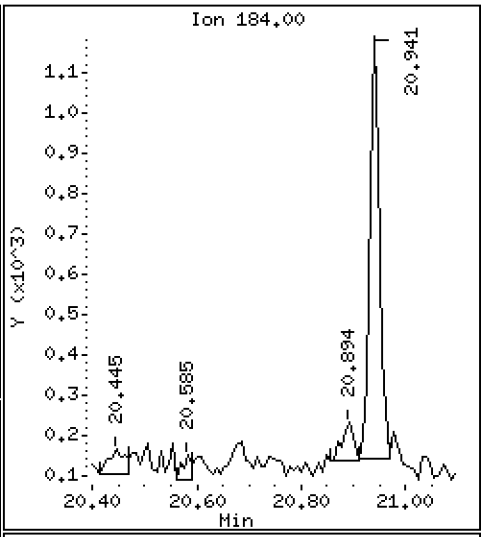
Column phase: ZB-5msi

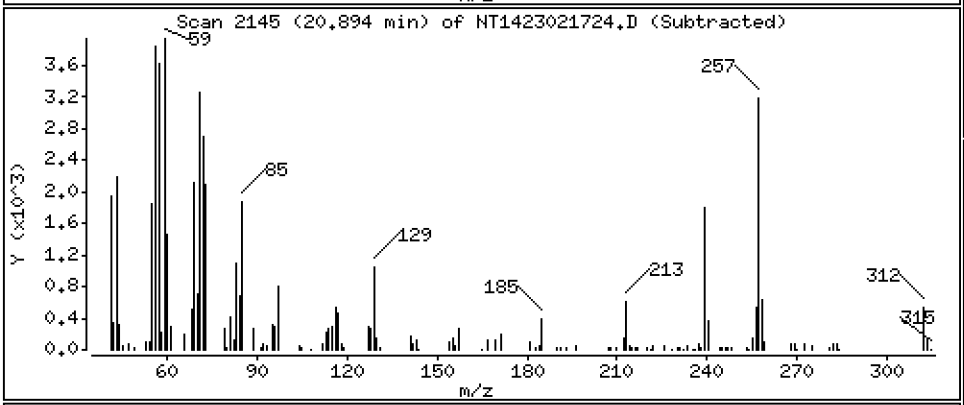
Column diameter: 0.25

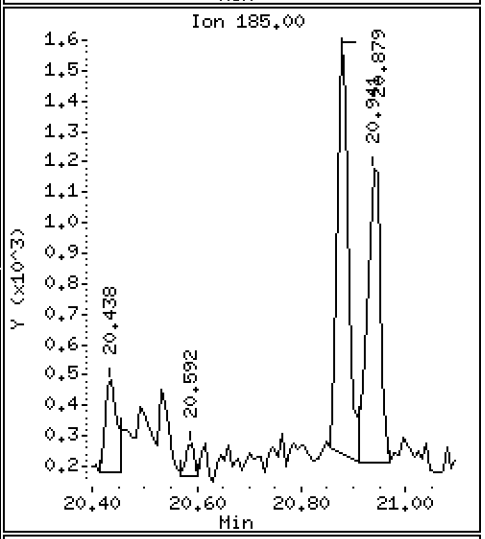
93 Benzidine

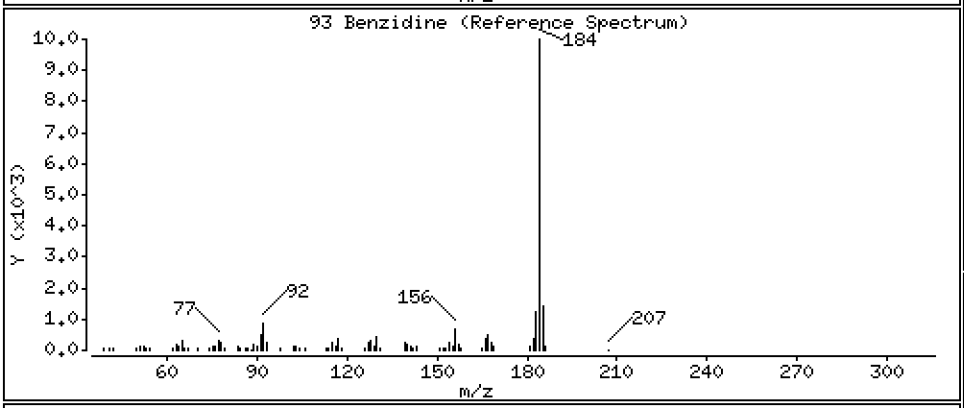
Concentration: 0.002073 ug/mL

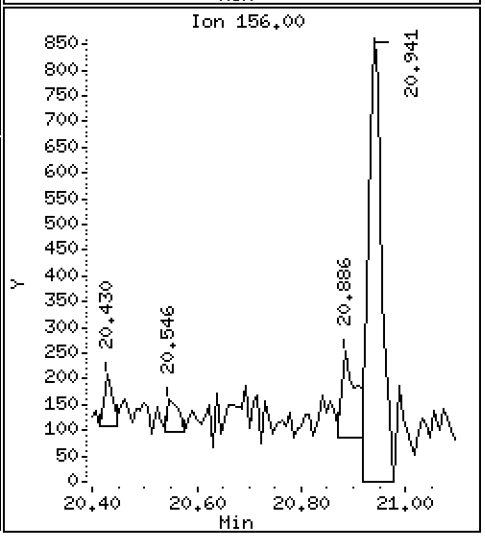


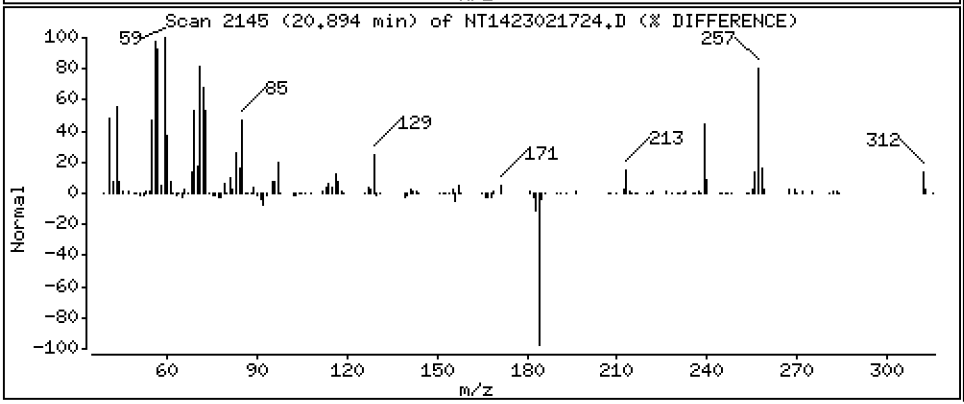












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

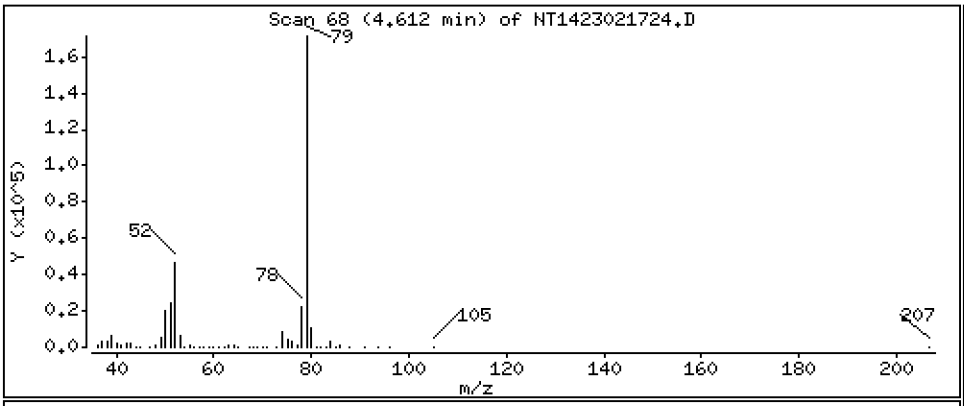
Operator: DSD

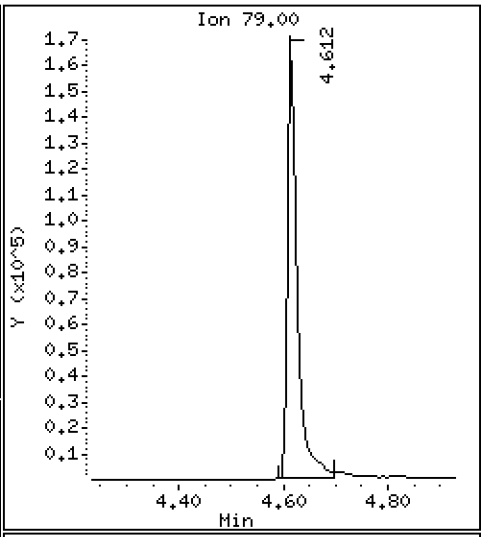
Column phase: ZB-5msi

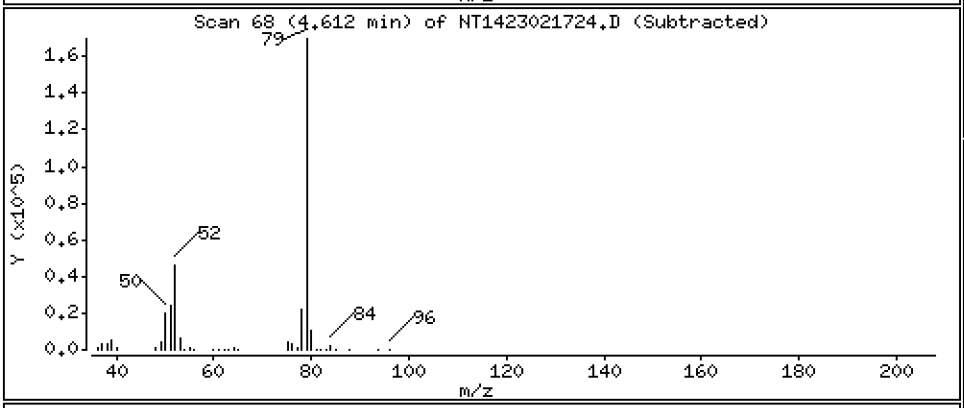
Column diameter: 0.25

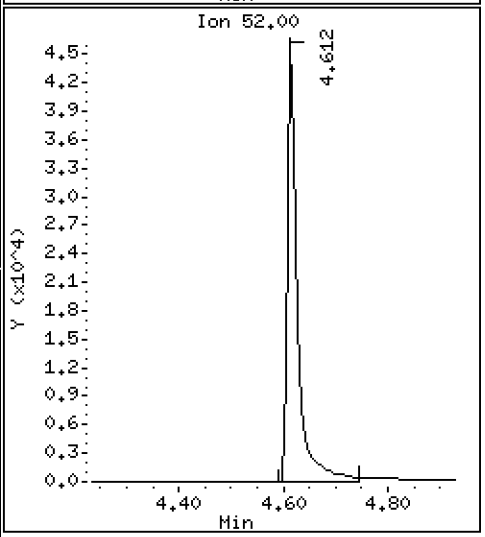
103 Pyridine

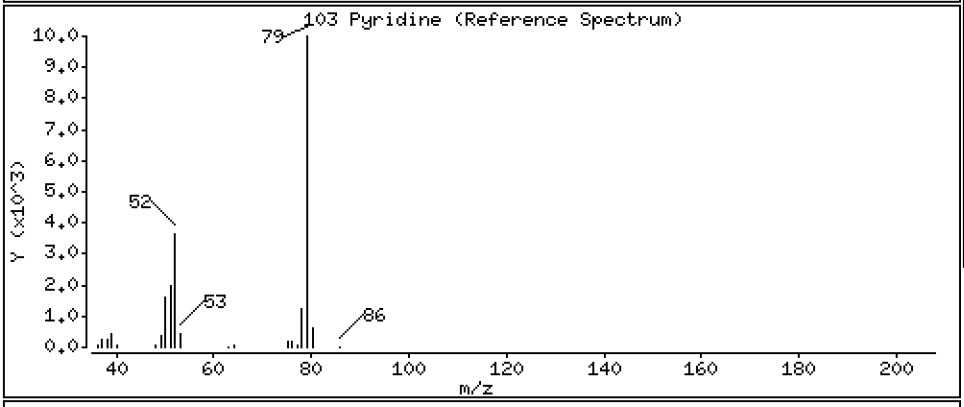
Concentration: 2.379 ug/mL

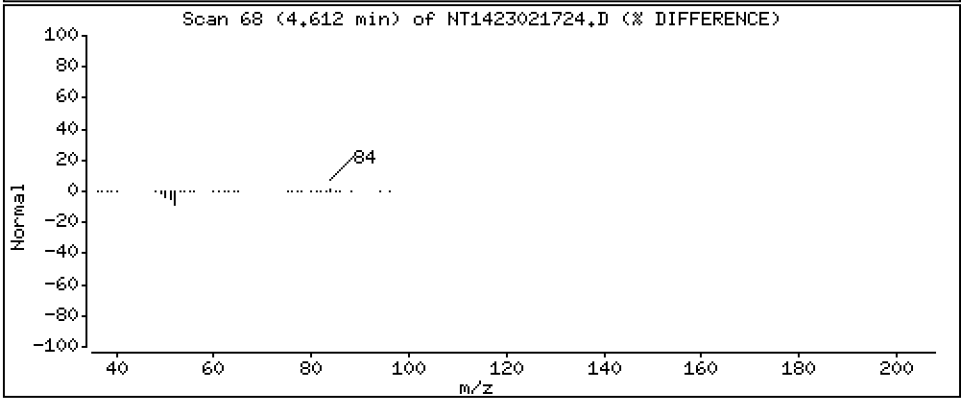












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021724.D

Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

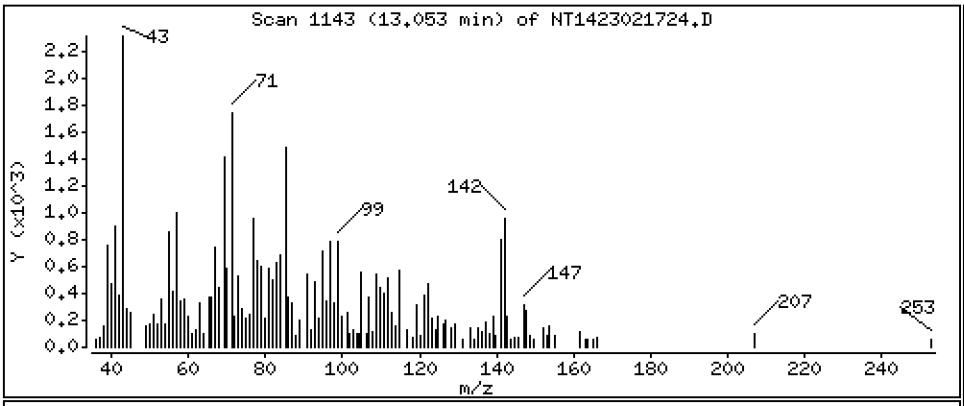
Operator: DSD

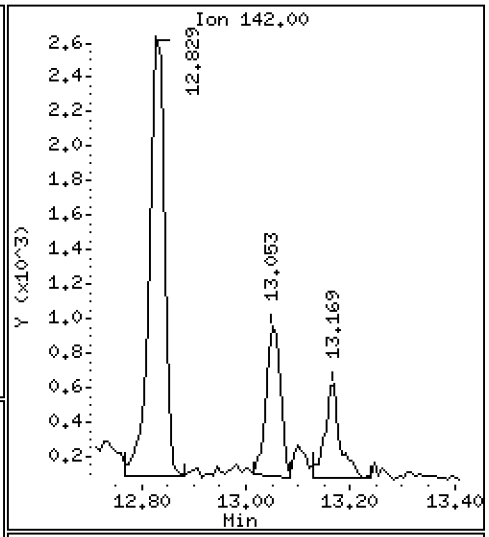
Column phase: ZB-5msi

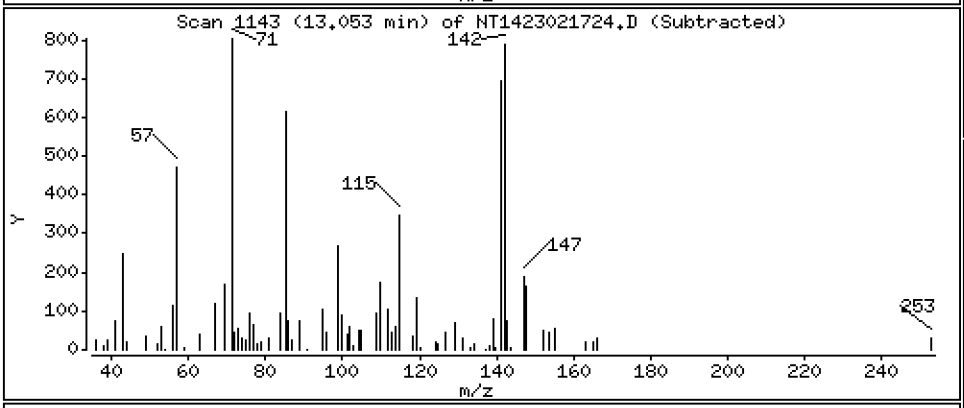
Column diameter: 0.25

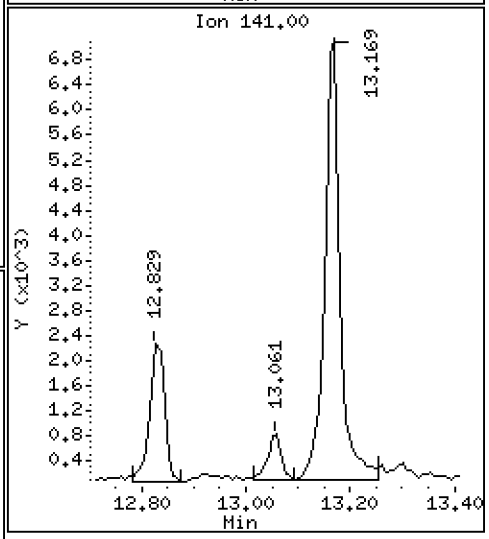
105 1-methylnaphthalene

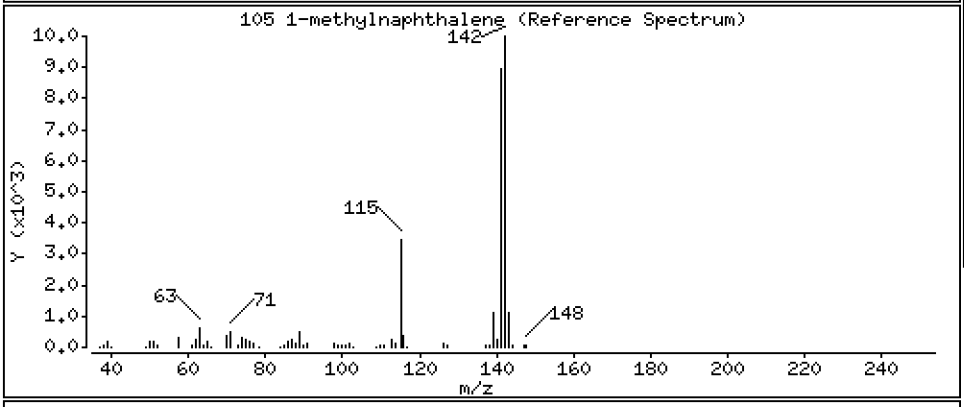
Concentration: 0.009216 ug/mL

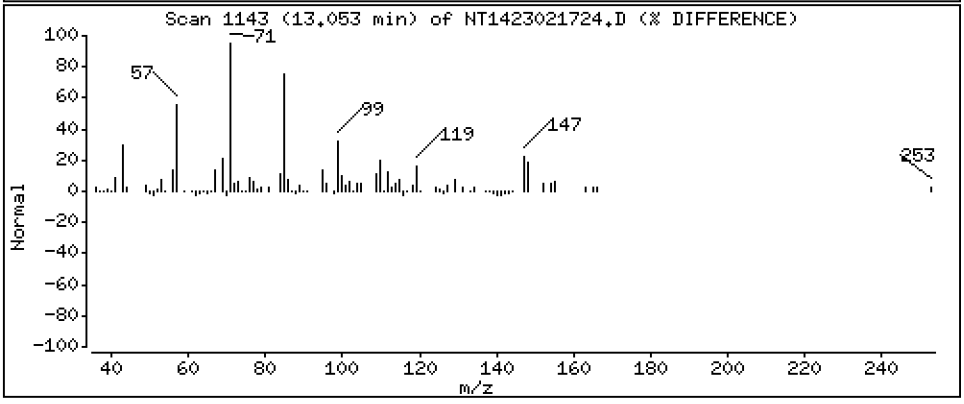












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

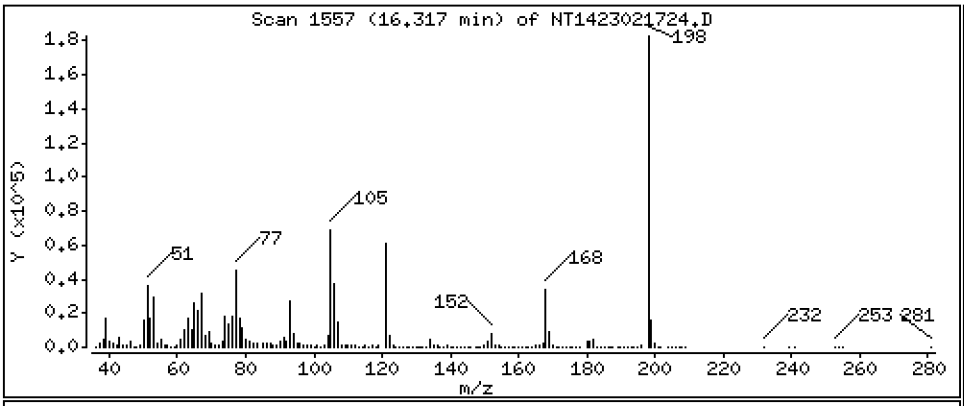
Operator: DSD

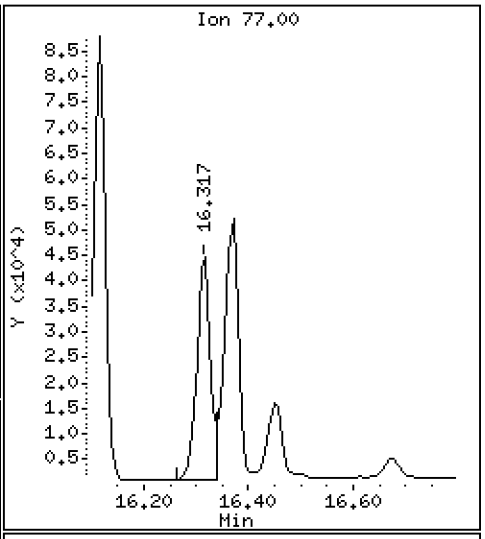
Column phase: ZB-5msi

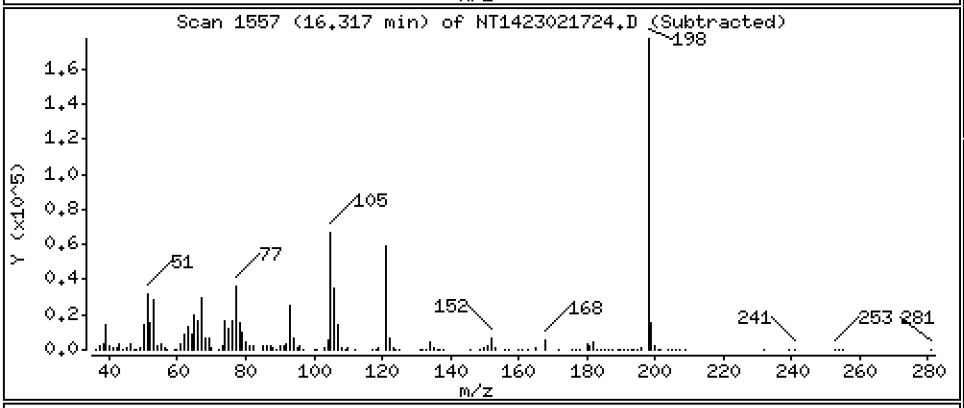
Column diameter: 0.25

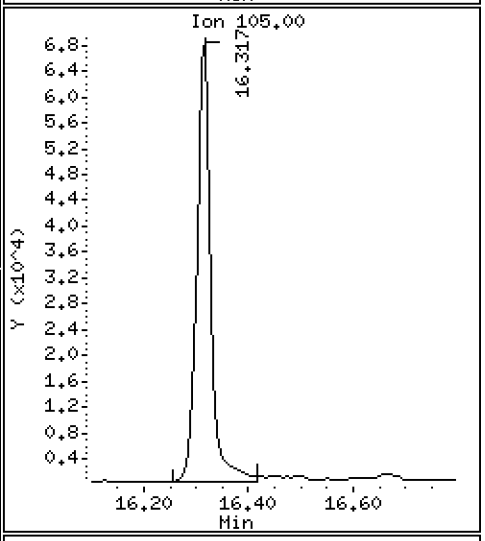
111 Azobenzene (1,2-DP-Hydrazine)

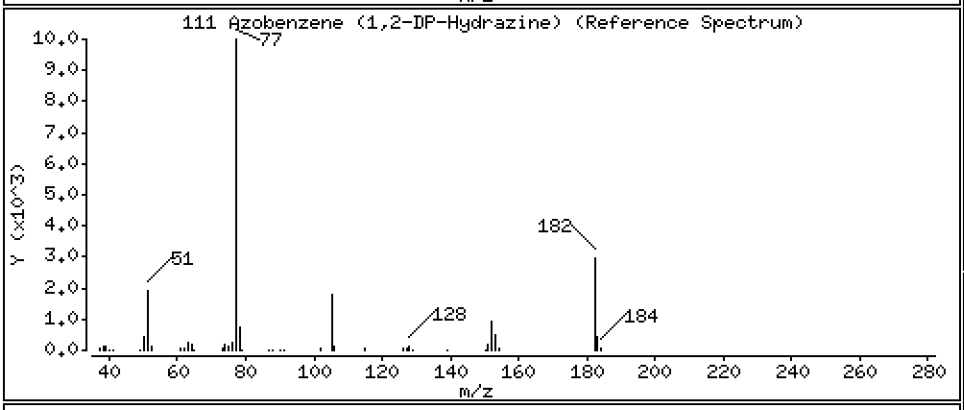
Concentration: 0.2593 ug/mL

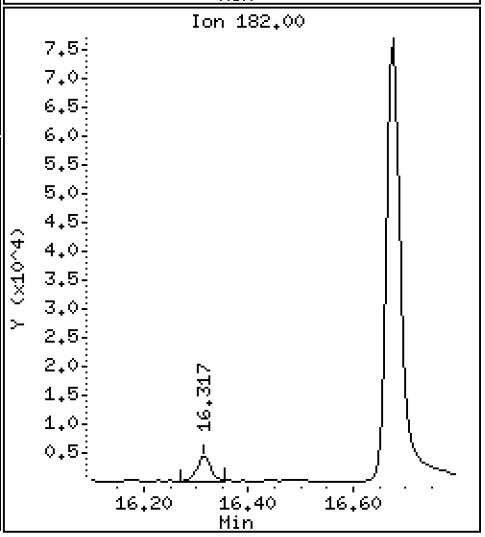


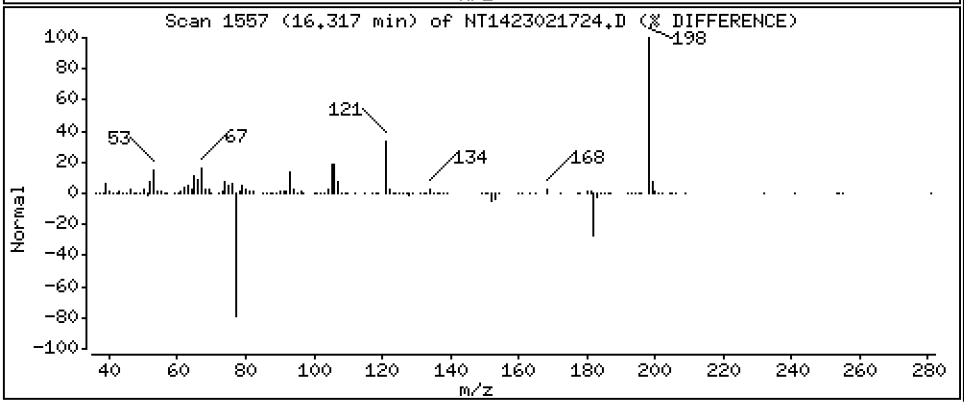












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

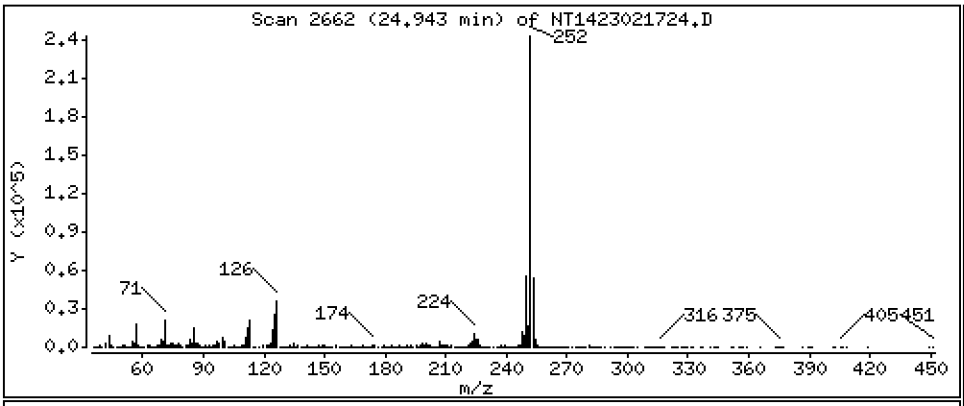
Operator: DSD

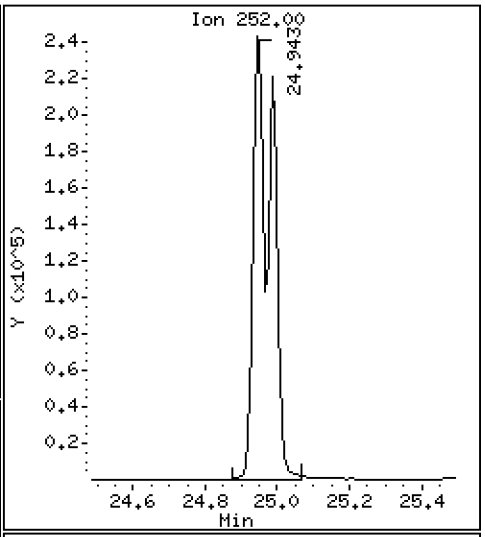
Column phase: ZB-5msi

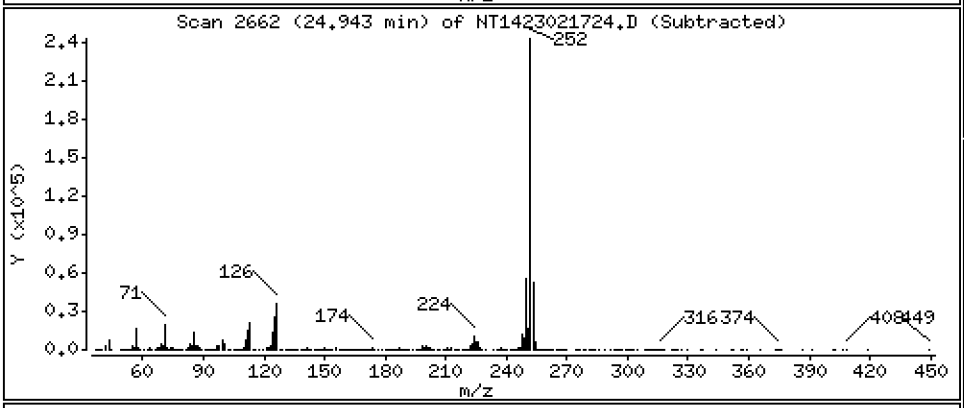
Column diameter: 0.25

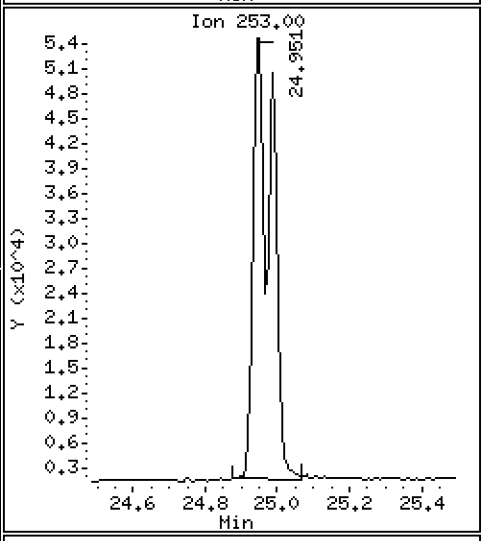
187 Total Benzofluoranthenes

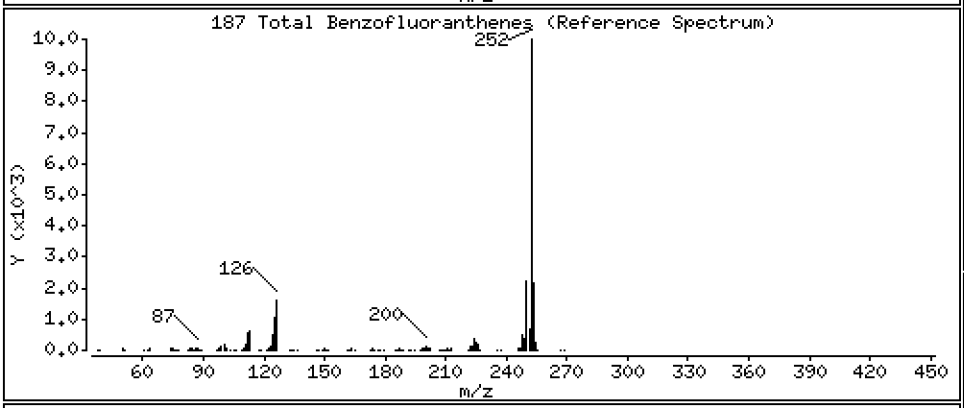
Concentration: 6.174 ug/mL

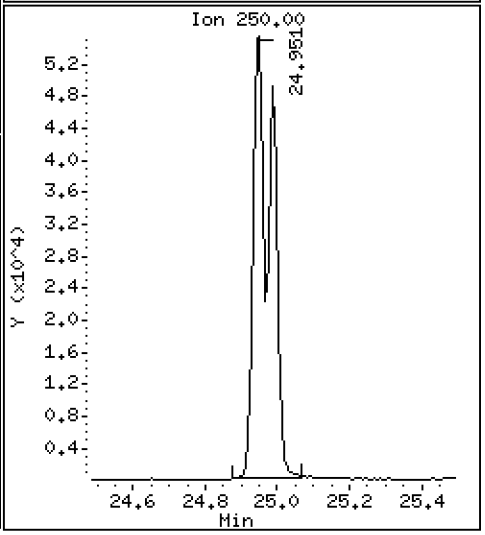


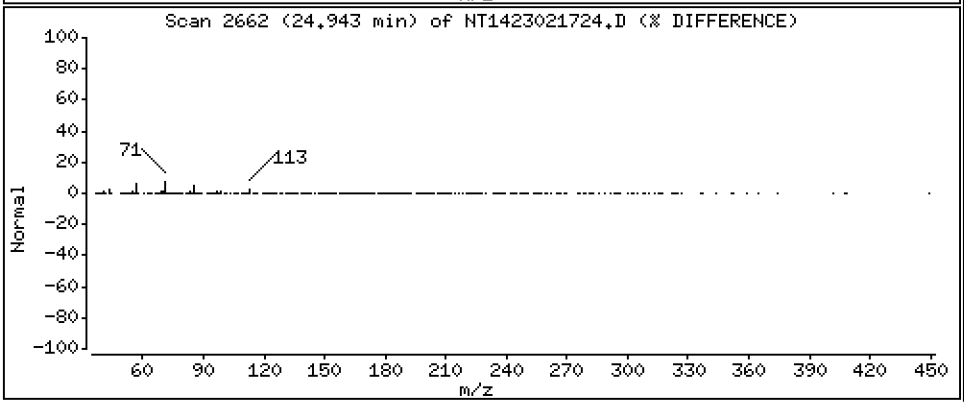












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM1

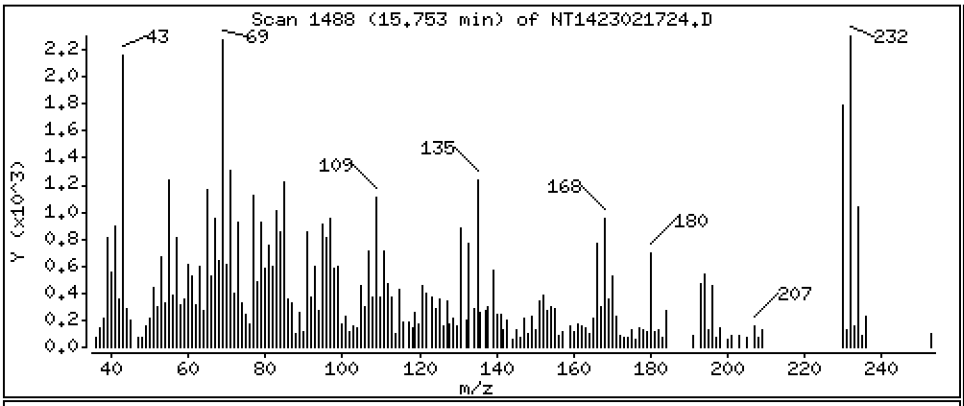
Operator: DSD

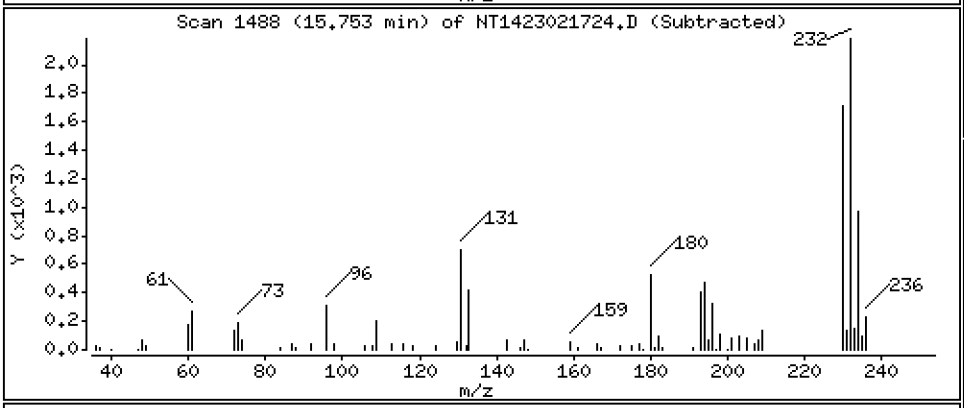
Column phase: ZB-5msi

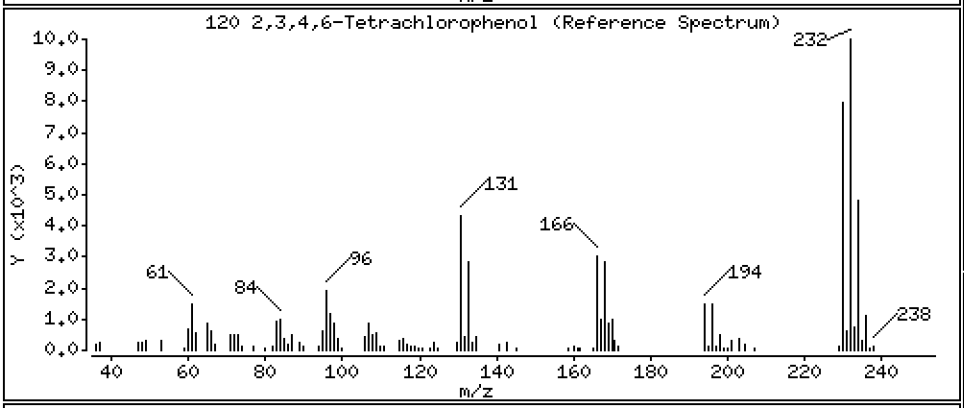
Column diameter: 0.25

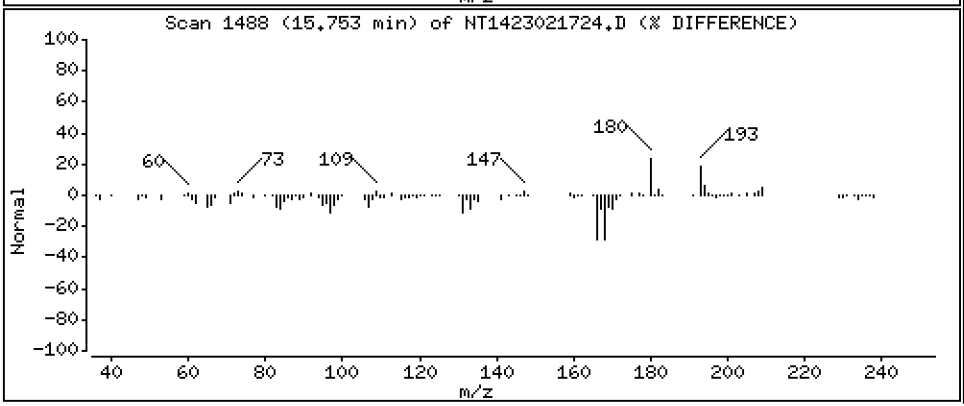
120 2,3,4,6-Tetrachlorophenol

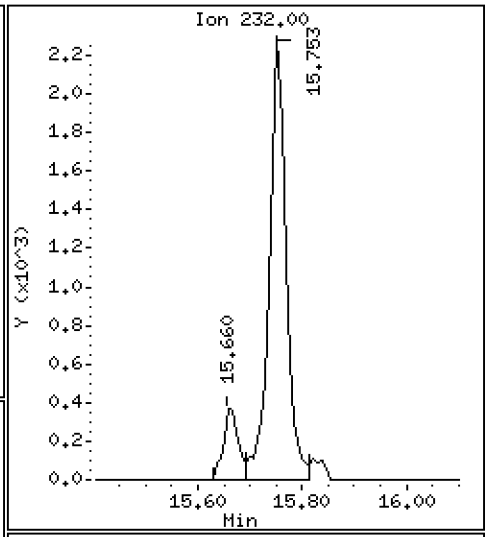
Concentration: 0.07028 ug/mL

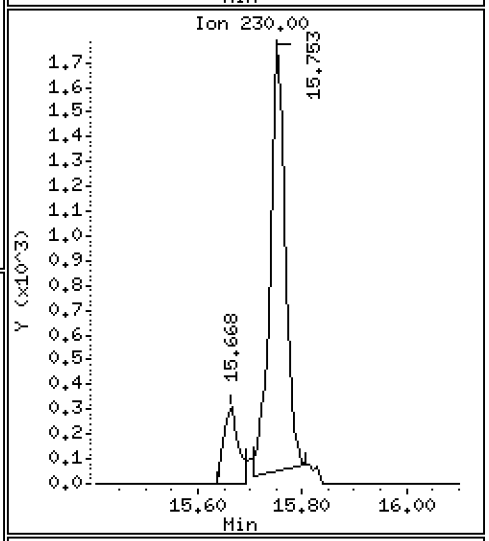


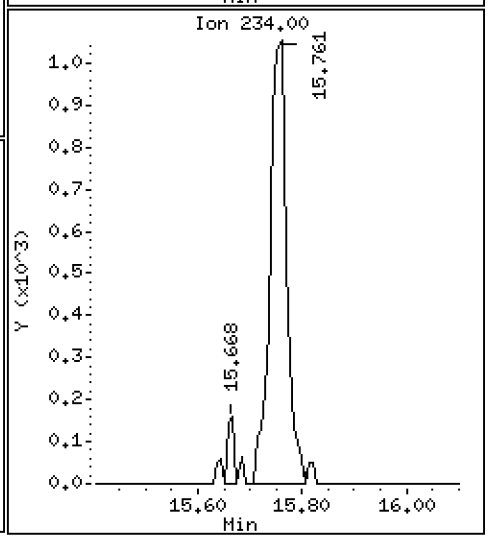












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230217A.b\NT1423021724.D
Lab Smp Id: BLA0339-SRM1
Inj Date : 18-FEB-2023 00:30 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : BLA0339-SRM1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230217A.b\ABN.m
Meth Date : 01-Mar-2023 13:20 van Quant Type: ISTD
Cal Date : 16-FEB-2023 19:30 Cal File: NT1423021610.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.705	6.674	(0.753)	459515	5.87745	5.877
$	2 Phenol-d5	99	8.273	8.273	(0.930)	673514	5.43048	5.430
	3 Phenol	94	8.289	8.296	(0.931)	389052	2.96316	2.963
$	5 2-Chlorophenol-d4	132	8.536	8.536	(0.959)	490133	5.53852	5.539
	4 Bis(2-Chloroethyl)ether	93	8.567	8.459	(0.963)	4055	0.04043	0.04043
	6 2-Chlorophenol	128	8.567	8.567	(0.963)	143487	1.55186	1.552
	7 1,3-Dichlorobenzene	146	8.830	8.838	(0.992)	101628	0.98732	0.9873
*	8 1,4-Dichlorobenzene-d4	152	8.900	8.900	(1.000)	292457	4.00000	
	9 1,4-Dichlorobenzene	146	8.830	8.931	(0.992)	101628	1.04033	1.040
$	10 1,2-Dichlorobenzene-d4	152	9.257	9.264	(1.040)	217632	3.28090	3.281
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	Compound Not Detected.					
	14 2,2'-oxybis(1-Chloropropane)	121	9.482	9.482	(1.065)	71805	2.57013	2.570
	13 2-Methylphenol	108	9.404	9.404	(1.057)	561183	6.12107	6.121
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	9.676	9.676	(1.087)	712771	7.36261	7.363
$	18 Nitrobenzene-d5	82	10.002	10.002	(0.878)	424131	3.54646	3.546
	19 Nitrobenzene	77	10.033	10.040	(0.881)	351750	2.93093	2.931
	20 Isophorone	82	10.483	10.491	(0.920)	333909	2.10882	2.109
	21 2-Nitrophenol	139	10.669	10.669	(0.937)	333453	6.04347	6.043
	22 2,4-Dimethylphenol	107	10.723	10.723	(0.942)	488847	5.39423	5.394
	23 Bis(2-Chloroethoxy)methane	93	10.723	10.925	(0.942)	18070	0.17543	0.1754
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	11.119	11.126	(0.976)	688292	8.87421	8.874
	26 1,2,4-Trichlorobenzene	180	11.304	11.312	(0.993)	126781	1.34939	1.349
*	27 Naphthalene-d8	136	11.389	11.397	(1.000)	1035181	4.00000	
	28 Naphthalene	128	11.436	11.436	(1.004)	1095244	4.29099	4.291
	29 4-Chloroaniline	127	11.436	11.574	(1.004)	141575	1.29829	1.298
	30 Hexachlorobutadiene	225	11.799	11.799	(1.036)	120668	2.08340	2.083
	31 4-Chloro-3-methylphenol	107	12.542	12.542	(1.101)	206065	2.45461	2.455
	32 2-Methylnaphthalene	142	12.542	12.836	(1.101)	159491	0.83432	0.8343
	33 Hexachlorocyclopentadiene	237	13.300	13.300	(0.886)	661	0.01101	0.01101

		QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
34	2,4,6-Trichlorophenol	196	13.463	13.462	(0.896)	163642	2.68170	2.682
35	2,4,5-Trichlorophenol	196	13.532	13.532	(0.901)	274071	4.14721	4.147
$ 36	2-Fluorobiphenyl	172	13.625	13.625	(0.907)	843400	3.80478	3.805
37	2-Chloronaphthalene	162	13.826	13.834	(0.921)	457641	2.52937	2.529
38	2-Nitroaniline	65	13.950	14.105	(0.929)	35715	0.60713	0.6071
39	Dimethylphthalate	163	14.531	14.538	(0.968)	1004307	5.30675	5.307
40	Acenaphthylene	152	14.701	14.709	(0.979)	565912	2.05069	2.051
41	2,6-Dinitrotoluene	165	14.531	14.678	(0.968)	11121	0.24973	0.2497
* 42	Acenaphthene-d10	164	15.018	15.018	(1.000)	619575	4.00000	
43	3-Nitroaniline	138	Compound Not Detected.					
44	Acenaphthene	153	15.080	15.088	(1.004)	1009580	6.11044	6.110
45	2,4-Dinitrophenol	184	15.165	15.173	(1.010)	100807	3.43788	3.438
46	Dibenzofuran	168	15.412	15.412	(1.026)	1863196	6.86834	6.868
47	4-Nitrophenol	109	15.281	15.281	(1.017)	191583	6.96099	6.961
48	2,4-Dinitrotoluene	165	15.474	15.482	(1.030)	265308	4.21374	4.214
50	Diethylphthalate	149	15.992	16.000	(1.065)	41857	0.16637	0.1664
49	Fluorene	166	16.124	16.131	(1.074)	1193380	4.20677	4.207
51	4-Chlorophenyl-phenylether	204	16.116	16.123	(1.073)	389386	2.56704	2.567
52	4-Nitroaniline	138	16.124	16.239	(1.074)	13460	0.24820	0.2482
53	4,6-Dinitro-2-methylphenol	198	16.316	16.332	(0.904)	330892	7.38183	7.382
54	N-Nitrosodiphenylamine	169	16.370	16.378	(0.907)	685492	3.89113	3.891
$ 55	2,4,6-Tribromophenol	330	16.663	16.663	(1.110)	221345	6.12086	6.121
56	4-Bromophenyl-phenylether	248	17.126	17.126	(0.949)	653423	8.32758	8.328
57	Hexachlorobenzene	284	Compound Not Detected.					
58	Pentachlorophenol	266	17.799	17.799	(0.986)	141041	3.60453	3.605
* 59	Phenanthrene-d10	188	18.054	18.062	(1.000)	1225906	4.00000	
60	Phenanthrene	178	18.108	18.108	(1.003)	1611966	5.47204	5.472
61	Anthracene	178	18.193	18.201	(1.008)	782594	2.68149	2.681
62	Carbazole	167	18.534	18.534	(1.027)	1666044	6.29058	6.291
63	Di-n-butylphthalate	149	19.338	19.346	(1.071)	671269	2.26917	2.269
64	Fluoranthene	202	20.499	20.499	(0.887)	954306	3.56690	3.567
65	Pyrene	202	20.925	20.924	(0.905)	1240335	4.38427	4.384
$ 66	Terphenyl-d14	244	21.219	21.218	(0.918)	1024274	5.09913	5.099
67	Butylbenzylphthalate	149	22.148	22.148	(0.958)	507090	5.37917	5.379
68	Benzo(a)anthracene	228	23.092	23.092	(0.999)	1303972	6.57083	6.571
* 69	Chrysene-d12	240	23.123	23.123	(1.000)	620134	4.00000	
70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
71	Chrysene	228	23.162	23.170	(1.002)	304215	1.70430	1.704
72	bis(2-Ethylhexyl)phthalate	149	23.178	23.177	(0.960)	571089	3.07910	3.079
* 134	Di-n-octylphthalate-d4	153	24.153	24.153	(1.000)	1100064	4.00000	
73	Di-n-octylphthalate	149	24.161	24.168	(1.000)	770578	2.99584	2.996
74	Benzo(b)fluoranthene	252	24.943	24.950	(0.971)	479003	3.32815	3.328
75	Benzo(k)fluoranthene	252	24.989	24.989	(0.973)	440954	2.86724	2.867
76	Benzo(a)pyrene	252	25.578	25.577	(0.996)	705915	5.12915	5.129
* 77	Perylene-d12	264	25.686	25.694	(1.000)	453579	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	28.244	28.244	(1.100)	522647	4.54471	4.545
79	Dibenzo(a,h)anthracene	278	28.259	28.259	(1.100)	402795	4.25694	4.257
80	Benzo(g,h,i)perylene	276	28.997	28.997	(1.129)	143584	1.56351	1.564
90	N-Nitrosodimethylamine	74	4.589	4.573	(0.516)	81631	1.34855	1.349
91	Aniline	93	8.289	8.366	(0.931)	8098	0.05766	0.05766
93	Benzidine	184	20.894	20.746	(0.904)	150	0.00207	0.002073
103	Pyridine	79	4.612	4.581	(0.518)	227889	2.37923	2.379
105	1-methylnaphthalene	142	13.052	13.060	(1.146)	1654	0.00922	0.009216
111	Azobenzene (1,2-DP-Hydrazine)	77	16.316	16.447	(1.086)	79285	0.25930	0.2593

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.943	24.989	(0.971)	867491	6.17362	6.174
120 2,3,4,6-Tetrachlorophenol	232	15.752	15.752	(1.049)	4951	0.07028	0.07028

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021724.D
Lab Smp Id: BLA0339-SRM1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230217A.b\ABN.m
Misc Info:

Calibration Date: 17-FEB-2023
Calibration Time: 20:19
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	351756	175878	703512	292457	-16.86
27 Naphthalene-d8	1299383	649692	2598766	1035181	-20.33
42 Acenaphthene-d10	808045	404023	1616090	619575	-23.32
59 Phenanthrene-d10	1607740	803870	3215480	1225906	-23.75
69 Chrysene-d12	876381	438191	1752762	620134	-29.24
134 Di-n-octylphthala	1545452	772726	3090904	1100064	-28.82
77 Perylene-d12	639717	319859	1279434	453579	-29.10

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.39	-0.07
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.00
59 Phenanthrene-d10	18.06	17.56	18.56	18.05	-0.04
69 Chrysene-d12	23.12	22.62	23.62	23.12	0.00
134 Di-n-octylphthala	24.15	23.65	24.65	24.15	0.00
77 Perylene-d12	25.69	25.19	26.19	25.69	-0.03

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

REVIEW SUMMARY FOR FILE - NT1423021724.D

Lab ID: BLA0339-SRM1
nt14.i, ABN.m, 18-FEB-2023 00:30

RT	CO-ELUTION COMPOUNDS
8.831	1,4-Dichlorobenzene and 1,3-Dichlorobenzene
12.542	4-Chloro-3-methylphenol and 2-Methylnaphthalene
14.531	Dimethylphthalate and 2,6-Dinitrotoluene

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.963	0.950	0.0121	Bis(2-Chloroethyl)ether
0.992	1.003	-0.0113	1,4-Dichlorobenzene
0.942	0.959	-0.0170	Bis(2-Chloroethoxy)methane
1.004	1.016	-0.0115	4-Chloroaniline
1.101	1.126	-0.0251	2-Methylnaphthalene
0.929	0.939	-0.0103	2-Nitroaniline
0.968	0.977	-0.0098	2,6-Dinitrotoluene
1.074	1.081	-0.0077	4-Nitroaniline
0.931	0.940	-0.0087	Aniline
0.904	0.897	0.0064	Benzidine
1.086	1.095	-0.0087	Azobenzene (1,2-DP-Hydrazine)

RRT check based on Ccal File: NT1423021717.D

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

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

Analytical Resources, LLC
Analytical Chemists and Consultants

MASS SPECTROMETER
INSTRUMENT PERFORMANCE CHECK
EPA 8270E

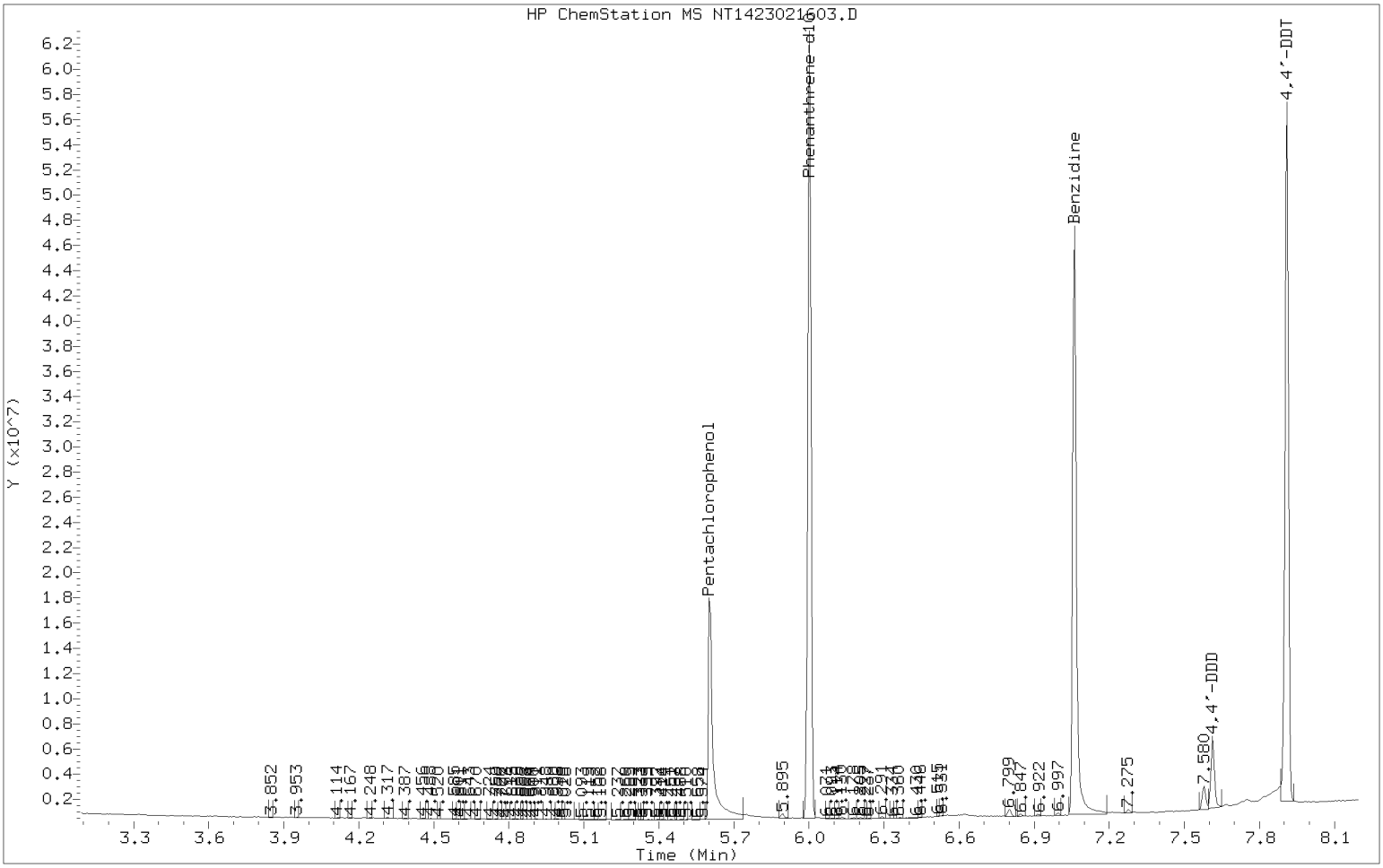
Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Lab File ID:	NT1423021603.D	Injection Date:	02/16/23
Instrument ID:	NT14	Injection Time:	14:33
Sequence:	SLB0234	Lab Sample ID:	SLB0234-TUN3

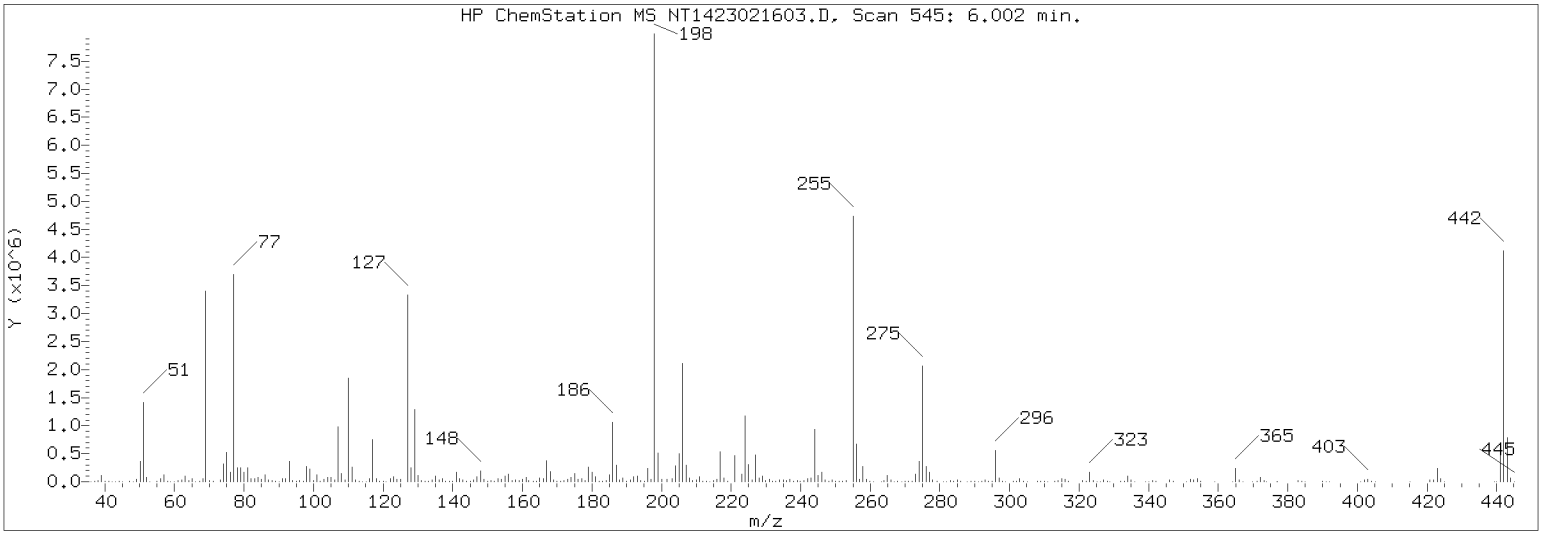
m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
68	Less than 2% of 69	1.69	PASS
69	Less than 100% of 198	43.6	PASS
70	Less than 2% of 69	0.508	PASS
197	Less than 2% of 198	0.611	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.61	PASS
365	1 - 100% of 198	2.96	PASS
441	Less than 150% of 443	74.2	PASS
442	1 - 200% of 198	52	PASS
443	15 - 24% of 442	19	PASS
4,4'-DDD	Less than 20% of 4,4'-DDT		
4,4'-DDE	Less than 20% of		
4,4'-DDT	Less than 200% of		

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
MS Tune	SLB0234-TUN3	NT1423021603.D	02/16/2023	14:33
Cal Standard	SLB0234-CAL7	NT1423021604.D	02/16/2023	15:54
Cal Standard	SLB0234-CAL6	NT1423021605.D	02/16/2023	16:30
Cal Standard	SLB0234-CAL5	NT1423021606.D	02/16/2023	17:06
Cal Standard	SLB0234-CAL4	NT1423021607.D	02/16/2023	17:42
Cal Standard	SLB0234-CAL3	NT1423021608.D	02/16/2023	18:18
Cal Standard	SLB0234-CAL2	NT1423021609.D	02/16/2023	18:54
Cal Standard	SLB0234-CAL1	NT1423021610.D	02/16/2023	19:30
Secondary Cal Check	SLB0234-SCV1	NT1423021613.D	02/16/2023	21:18
Initial Cal Blank	SLB0234-ICB1	NT1423021618.D	02/17/2023	0:17

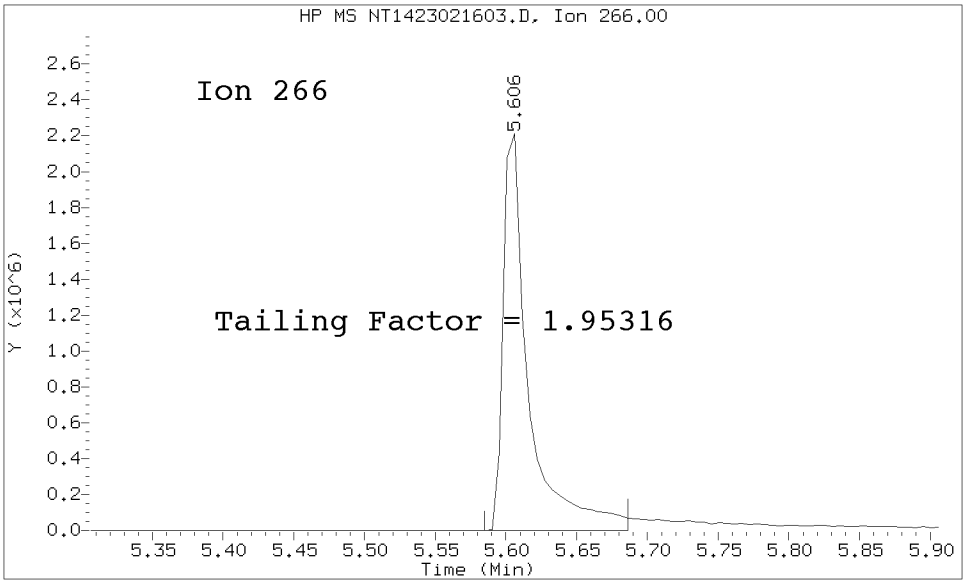
DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230216.b/NT1423021603.D/NT1423021603.D
Method Used: \20230216.b\DFTPP8270E.m Inst: nt14
Injection Date: 16-FEB-2023 14:33 Operator: DSD
Sample Info: SLB0234-TUN3 SLB0234-TUN3
Report Date: 02/28/2023 14:33



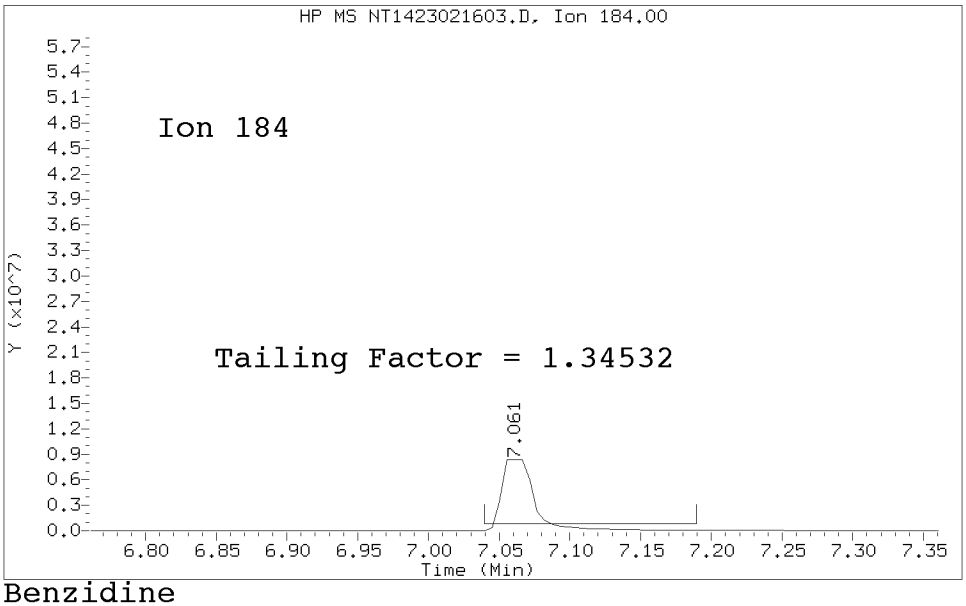


Datafile Analyzed: /20230216.b/NT1423021603.D/NT1423021603.D
Method Used: \20230216.b\DFTPP8270E.m\sw846ddt.m Inst: nt14
Injection Date: 16-FEB-2023 14:33 Operator: DSD
Sample Info: SEQ-TUN3
Report Date: 02/28/2023 14:33



Pentachlorophenol
==========
Exp. RT = 5.606
Found RT = 5.606

Tail Factor = 1.953 Maximum Allowed = 2.0



Benzidine
==========
Exp. RT = 7.061
Found RT = 7.061

Tail Factor = 1.345 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.9531646	2.000	PASS
Benzidine	1.3453237	2.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	9391744			N/A
4,4-DDE	0	0.0	20.0	PASS
4,4-DDD	1131675	10.8	20.0	PASS
4,4-DDD + DDE	1131675	10.8	20.0	PASS

Tuning Sample, nt14.i/20230216.b/NT1423021603.D, *** PASSED ***

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
68	Less than 2.00% of mass 69	0.74 (1.69)
69	Mass 69 relative abundance	43.59
70	Less than 2.00% of mass 69	0.22 (0.51)
197	Less than 2.00% of mass 198	0.61
199	5.00 - 9.00% of mass 198	6.61
365	1.00 - 100.00% of mass 198	2.96
441	Less than 150.00% of mass 443	7.33 (74.20)
442	Less than 200.00% of mass 198	52.01
443	15.00 - 24.00% of mass 442	9.87 (18.98)

Data File: NT1423021603.D
Spectrum: Avg. Scans 544-546 (6.00), Background Scan 538
Location of Maximum: 198.00
Number of points: 325

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	234	127.00	2627072	210.00	30808	297.00	57304
37.00	4928	128.00	193536	211.00	66264	298.00	4346
38.00	16100	129.00	1002176	212.00	9012	299.00	778
39.00	86128	130.00	83024	213.00	4418	301.00	6536
40.00	1445	131.00	16110	214.00	2279	302.00	8309
41.00	1468	132.00	6808	215.00	17000	303.00	46096
42.00	911	133.00	2061	216.00	33704	304.00	12268
45.00	3191	134.00	28776	217.00	423104	305.00	985
48.00	1341	135.00	78176	218.00	55256	308.00	6175
49.00	6693	136.00	33232	219.00	5491	309.00	4166
50.00	287040	137.00	42088	221.00	341952	310.00	5991
51.00	1107456	138.00	8363	223.00	98976	311.00	732
52.00	60656	139.00	5700	224.00	901184	313.00	4780
53.00	2876	140.00	12940	225.00	232640	314.00	21184
55.00	10099	141.00	129168	226.00	25264	315.00	48568
56.00	44688	142.00	43080	227.00	360896	316.00	28648
57.00	99760	143.00	28672	228.00	53192	317.00	5757
58.00	6888	144.00	8339	229.00	80040	321.00	13596
59.00	1648	145.00	7386	230.00	9491	322.00	5967
60.00	1219	146.00	24536	231.00	35008	323.00	128608
61.00	23280	147.00	65392	232.00	5357	324.00	21648
62.00	28400	148.00	150720	233.00	6636	325.00	923
63.00	82528	149.00	32664	234.00	23312	326.00	1964
64.00	13066	150.00	10353	235.00	28000	327.00	25704
65.00	44920	151.00	16872	236.00	18056	328.00	12093
66.00	4461	152.00	11153	237.00	35552	329.00	3076
67.00	1649	153.00	42824	238.00	4722	332.00	9967
68.00	45176	154.00	34848	239.00	14633	333.00	12196
69.00	2675712	155.00	74600	240.00	12321	334.00	85224
70.00	13596	156.00	107384	241.00	22320	335.00	22864
73.00	21600	157.00	20016	242.00	47792	336.00	2619
74.00	251584	158.00	24240	243.00	50944	339.00	718
75.00	407680	159.00	22784	244.00	707776	340.00	1309
76.00	140096	160.00	40720	245.00	89264	341.00	14289
77.00	2915840	161.00	62672	246.00	131016	342.00	4394
78.00	200000	162.00	16872	247.00	28936	346.00	28552
79.00	186752	163.00	6683	248.00	6201	347.00	5145
80.00	136704	164.00	8065	249.00	26176	350.00	717
81.00	195200	165.00	49128	250.00	5926	351.00	823
82.00	47032	166.00	40400	251.00	5853	352.00	38056
83.00	45208	167.00	281088	252.00	7432	353.00	26224
85.00	31296	168.00	145536	253.00	15033	354.00	38056
86.00	54160	169.00	23504	254.00	9410	355.00	6985
87.00	26064	170.00	9632	255.00	3554304	359.00	2383
88.00	9527	171.00	12313	256.00	515328	364.00	1635
89.00	7167	172.00	22392	257.00	38256	365.00	181568
90.00	698	173.00	32920	258.00	210304	366.00	24640
91.00	40408	174.00	61832	259.00	31408	367.00	955
92.00	45528	175.00	112128	260.00	6139	370.00	3600

93.00	296960	176.00	31504	261.00	5764	371.00	8738
94.00	22352	177.00	48936	263.00	1078	372.00	60448
95.00	4027	178.00	18064	264.00	5808	373.00	16079
96.00	11069	179.00	205632	265.00	83712	374.00	1592
97.00	3421	180.00	139904	266.00	10984	377.00	1690
98.00	217408	181.00	66784	267.00	858	383.00	15955
99.00	183808	182.00	10904	268.00	681	384.00	4548
100.00	17952	183.00	6693	269.00	1031	385.00	782
101.00	98832	184.00	17728	270.00	3497	390.00	7317
102.00	4121	185.00	100784	271.00	7357	391.00	5379
103.00	32928	186.00	819968	272.00	11090	392.00	3751
104.00	64456	187.00	233216	273.00	102560	401.00	3177
105.00	58656	188.00	25416	274.00	276800	402.00	23400
106.00	20736	189.00	49520	275.00	1550848	403.00	32568
107.00	771648	190.00	8839	276.00	207552	404.00	11566
108.00	119928	191.00	20984	277.00	134784	405.00	2935
109.00	22672	192.00	68752	278.00	23960	415.00	674
110.00	1432064	193.00	74840	279.00	4579	421.00	24160
111.00	204544	194.00	19224	281.00	931	422.00	26616
112.00	24896	195.00	6565	282.00	3437	423.00	186048
113.00	8405	196.00	183680	283.00	14509	424.00	41216
114.00	1701	197.00	37512	284.00	9331	425.00	4321
115.00	1796	198.00	6138368	285.00	23984	438.00	1391
116.00	40928	199.00	405696	286.00	4717	439.00	1400
117.00	604736	200.00	30232	288.00	884	440.00	2550
118.00	44648	201.00	34040	289.00	5002	441.00	449664
119.00	8501	203.00	43656	290.00	4674	442.00	3192320
120.00	8877	204.00	213312	291.00	3293	443.00	606016
121.00	3538	205.00	381120	292.00	6118	444.00	54800
122.00	44736	206.00	1595904	293.00	25544	445.00	2486
123.00	73984	207.00	210944	294.00	6665		
124.00	34728	208.00	47112	295.00	9652		
125.00	32952	209.00	14622	296.00	426176		

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GB00046	Instrument:	NT14
Calibration Date:	02/16/2023	Column (1):	ZB-5MS

Calibration Comments: 625/8270E ICAL

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	**RRF**	Conc	RRF	Conc	RRF	Conc	**RRF**	Conc	**RRF**
Phenol	0.2	1.774541	0.5	1.639004	1	1.802186	2.5	1.979108	5	1.736309	10	1.867998
bis(2-chloroethyl) ether	0.2	1.548367	0.5	1.293159	1	1.341938	2.5	1.422743	5	1.245725	10	1.390469
2-Chlorophenol	0.2	1.274664	0.5	1.150961	1	1.21585	2.5	1.331081	5	1.223749	10	1.345902
1,3-Dichlorobenzene	0.2	1.631574	0.5	1.33554	1	1.369604	2.5	1.466131	5	1.288626	10	1.406453
1,4-Dichlorobenzene	0.2	1.552803	0.5	1.235439	1	1.298594	2.5	1.383491	5	1.227555	10	1.350102
1,2-Dichlorobenzene	0.2	1.540572	0.5	1.255654	1	1.300974	2.5	1.396876	5	1.225526	10	1.335821
Benzyl Alcohol	0.2	0.4230078	0.5	0.6821133	1	0.8625967	2.5	1.016704	5	0.939509	10	1.051749
2,2'-Oxybis(1-chloropropane)	0.2	0.4328938	0.5	0.3527133	1	0.3650537	2.5	0.3922745	5	0.3006275	10	0.3986169
2-Methylphenol	0.2	1.209454	0.5	1.14368	1	1.256352	2.5	1.347057	5	1.228202	10	1.313957
Hexachloroethane	0.2	0.649816	0.5	0.5238375	1	0.5543179	2.5	0.5931919	5	0.5400284	10	0.6048627
N-Nitroso-di-n-Propylamine	0.2	1.132837	0.5	1.025402	1	1.093938	2.5	1.229126	5	1.088117	10	1.211726
4-Methylphenol	0.2	1.226754	0.5	1.157396	1	1.319253	2.5	1.449198	5	1.317406	10	1.411814
Nitrobenzene	0.2	0.4888566	0.5	0.4259418	1	0.4433679	2.5	0.4929486	5	0.4411621	10	0.4867516
Isophorone	0.2	0.5532393	0.5	0.4559633	1	0.5866061	2.5	0.6738111	5	0.6150445	10	0.7007138
2-Nitrophenol	0.2	5.892626E-02	0.5	0.1071584	1	0.1480794	2.5	0.2010659	5	0.1984993	10	0.2244677
2,4-Dimethylphenol	0.4	0.3936776	1	0.3445792	2	0.3694083	5	0.3630598	10	0.3387161	20	0.3189191
Bis(2-Chloroethoxy)methane	0.2	0.4239618	0.5	0.3591245	1	0.3916308	2.5	0.4188771	5	0.3738165	10	0.415741
2,4-Dichlorophenol	0.4	0.2585462	1	0.2753685	2	0.3109592	5	0.3326045	10	0.3065583	20	0.3223347
1,2,4-Trichlorobenzene	0.2	0.4312371	0.5	0.3485662	1	0.355031	2.5	0.373089	5	0.3283684	10	0.3599381
Naphthalene	0.2	1.145839	0.5	0.9310198	1	0.9594187	2.5	0.9828545	5	0.9354499	10	0.9897557
Benzoic acid	0.8		2		4	3.005635E-02	10	0.1514055	20	0.2018266	40	0.2618054
4-Chloroaniline			1	0.3666298	2	0.4119131	5	0.4684844	10	0.431505	20	0.4319783
Hexachlorobutadiene	0.2	0.2575132	0.5	0.210491	1	0.2205688	2.5	0.229162	5	0.2050837	10	0.2260092
4-Chloro-3-Methylphenol			1	0.2792272	2	0.3165984	5	0.3494863	10	0.3241858	20	0.3466222
2-Methylnaphthalene	0.2	0.8379466	0.5	0.6942257	1	0.7348638	2.5	0.753674	5	0.6806457	10	0.7506724
Hexachlorocyclopentadiene			1	0.3097661	2	0.3494775	5	0.4006967	10	0.3900889	20	0.441245
2,4,6-Trichlorophenol			1	0.3197148	2	0.3745669	5	0.4092901	10	0.3951941	20	0.4335281

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GB00046	Instrument:	NT14
Calibration Date:	02/16/2023	Column (1):	ZB-5MS

Calibration Comments: 625/8270E ICAL

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
2,4,5-Trichlorophenol			1	0.3497415	2	0.408525	5	0.4506027	10	0.4281145	20	0.4745865
2-Chloronaphthalene	0.2	1.289455	0.5	1.072228	1	1.128993	2.5	1.190217	5	1.08193	10	1.224648
2-Nitroaniline			1	0.3244738	2	0.366902	5	0.407421	10	0.3646791	20	0.4126418
Acenaphthylene	0.2	2.070077	0.5	1.730918	1	1.791647	2.5	1.773028	5	1.677114	10	1.761502
Dimethylphthalate	0.2	1.358859	0.5	1.14041	1	1.210959	2.5	1.26939	5	1.116372	10	1.246292
2,6-Dinitrotoluene			1	0.2585363	2	0.2773524	5	0.3042317	10	0.2739006	20	0.3129035
Acenaphthene	0.2	1.201369	0.5	1.005659	1	1.044413	2.5	1.061492	5	1.005131	10	1.094657
3-Nitroaniline			1	0.2485094	2	0.2844635	5	0.3190441	10	0.2967385	20	0.3423737
2,4-Dinitrophenol	0.8		2	2.841757E-03	4	3.857443E-02	10	0.1196777	20	0.1695336	40	0.2231567
Dibenzofuran	0.2	2.020709	0.5	1.666795	1	1.721988	2.5	1.736549	5	1.600945	10	1.791312
4-Nitrophenol	0.4		1	6.958146E-02	2	0.1214277	5	0.1565799	10	0.1654371	20	0.1871749
2,4-Dinitrotoluene			1	0.3360512	2	0.3806073	5	0.4302785	10	0.39053	20	0.4525117
Fluorene	0.2	2.111796	0.5	1.769529	1	1.845242	2.5	1.847244	5	1.720333	10	1.816649
4-Chlorophenylphenyl ether	0.2	1.158003	0.5	0.9373493	1	0.9616299	2.5	1.010155	5	0.8842218	10	0.9842114
Diethyl phthalate	0.2	1.734798	0.5	1.560677	1	1.535918	2.5	1.648649	5	1.442422	10	1.764006
4-Nitroaniline			1	0.2742271	2	0.3192018	5	0.3655106	10	0.3399166	20	0.4019225
4,6-Dinitro-2-methylphenol	0.8	1.168045E-03	2	3.528843E-02	4	7.901793E-02	10	0.1247432	20	0.136336	40	0.1618783
N-Nitrosodiphenylamine	0.2	0.5917414	0.5	0.5355618	1	0.5658666	2.5	0.6267734	5	0.530631	10	0.5956972
4-Bromophenyl phenyl ether	0.2	0.2659628	0.5	0.2232278	1	0.2394325	2.5	0.2711516	5	0.2399704	10	0.2766802
Hexachlorobenzene	0.2	0.2969838	0.5	0.23596	1	0.2474585	2.5	0.2772606	5	0.2332177	10	0.2657791
Pentachlorophenol	0.4		1	3.638779E-02	2	6.295541E-02	5	0.1009905	10	0.1204468	20	0.1414085
Phenanthrene	0.2	1.090962	0.5	0.8932503	1	0.9310429	2.5	0.9866633	5	0.8938755	10	0.9745269
Anthracene	0.2	0.976984	0.5	0.8820678	1	0.939946	2.5	1.002564	5	0.9449707	10	0.97807
Carbazole	0.2	0.8023557	0.5	0.7567361	1	0.8290407	2.5	0.9540148	5	0.8420745	10	0.9466283
Di-n-Butylphthalate	0.2	0.7694454	0.5	0.7824137	1	0.9454219	2.5	1.097243	5	0.982282	10	1.110866
Fluoranthene	0.2	1.830446	0.5	1.532727	1	1.691617	2.5	1.717196	5	1.648857	10	1.857606
Pyrene	0.2	2.031721	0.5	1.723089	1	1.856976	2.5	1.896926	5	1.669151	10	1.823868

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GB00046	Instrument:	NT14
Calibration Date:	02/16/2023	Column (1):	ZB-5MS

Calibration Comments: 625/8270E ICAL

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	**RRF**	Conc	RRF	Conc	RRF	Conc	**RRF**	Conc	**RRF**
Butylbenzylphthalate	0.2	0.3710966	0.5	0.3950638	1	0.4931541	2.5	0.5852617	5	0.5571076	10	0.6365005
Benzo(a)anthracene	0.2	1.370173	0.5	1.177508	1	1.281172	2.5	1.267753	5	1.224925	10	1.33108
3,3'-Dichlorobenzidine	0.6	0.2350457	1.5	0.2650574	3	0.3234083	7.5	0.3752759	15	0.361634	30	0.4132299
Chrysene	0.2	1.325538	0.5	1.092839	1	1.138605	2.5	1.140188	5	1.095668	10	1.174675
bis(2-Ethylhexyl)phthalate	0.2	0.3946174	0.5	0.4287519	1	0.5082251	2.5	0.629324	5	0.5761929	10	0.6851799
Di-n-Octylphthalate	0.2	1.060271	0.5	0.8545037	1	0.8704387	2.5	0.961576	5	0.8518093	10	0.9958332
Benzofluoranthenes, Total	0.4	1.193635	1	1.091257	2	1.168248	5	1.304101	10	1.205603	20	1.357727
Benzo(a)pyrene	0.2	0.904521	0.5	0.8419381	1	1.054343	2.5	1.160628	5	1.116976	10	1.268633
Indeno(1,2,3-cd)pyrene	0.2	0.6564156	0.5	0.6100594	1	0.7457887	2.5	0.8899137	5	0.9040508	10	1.104522
Dibenzo(a,h)anthracene	0.2	0.4949923	0.5	0.5125102	1	0.6084081	2.5	0.7363566	5	0.7407528	10	0.911839
Benzo(g,h,i)perylene	0.2	0.5942066	0.5	0.5318934	1	0.595943	2.5	0.7083501	5	0.7204419	10	0.9175366
1-Methylnaphthalene	0.2	0.7695554	0.5	0.6460957	1	0.6717759	2.5	0.7242832	5	0.6269013	10	0.7218961
2-Fluorophenol	0.3	0.8334258	0.75	0.9179344	1.5	1.127094	3.75	1.221498	7.5	1.161305	15	1.145663
Phenol-d5	0.3	1.650671	0.75	1.529847	1.5	1.717591	3.75	1.820997	7.5	1.749741	15	1.737211
2-Chlorophenol-d4	0.3	1.241921	0.75	1.13869	1.5	1.206188	3.75	1.258647	7.5	1.216881	15	1.217744
1,2-Dichlorobenzene-d4	0.2	1.075866	0.5	0.8860843	1	0.9072079	2.5	0.9118611	5	0.8645581	10	0.864159
Nitrobenzene-d5	0.2	0.5010233	0.5	0.4240498	1	0.4564956	2.5	0.4734308	5	0.4640273	10	0.4616663
2-Fluorobiphenyl	0.2	1.728678	0.5	1.382317	1	1.425311	2.5	1.40442	5	1.378991	10	1.373039
2,4,6-Tribromophenol	0.3	0.1256857	0.75	0.1582254	1.5	0.2038137	3.75	0.2123544	7.5	0.2231717	15	0.2465391
p-Terphenyl-d14	0.2	1.47811	0.5	1.25932	1	1.347532	2.5	1.266693	5	1.247869	10	1.254347

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GB00046	Instrument:	NT14
Calibration Date:	02/16/2023	Column (1):	ZB-5MS

Calibration Comments: 625/8270E ICAL

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Phenol	20	1.771217										
bis(2-chloroethyl) ether	20	1.360175										
2-Chlorophenol	20	1.310092										
1,3-Dichlorobenzene	20	1.356963										
1,4-Dichlorobenzene	20	1.304743										
1,2-Dichlorobenzene	20	1.294536										
Benzyl Alcohol	20	1.033181										
2,2'-Oxybis(1-chloropropane)	20	0.432644										
2-Methylphenol	20	1.278848										
Hexachloroethane	20	0.6000208										
N-Nitroso-di-n-Propylamine	20	1.208964										
4-Methylphenol	20	1.386784										
Nitrobenzene	20	0.4671398										
Isophorone	20	0.6974522										
2-Nitrophenol	20	0.2298697										
2,4-Dimethylphenol	40	0.3228772										
Bis(2-Chloroethoxy)methane	20	0.4028921										
2,4-Dichlorophenol	40	0.291528										
1,2,4-Trichlorobenzene	20	0.3450898										
Naphthalene	20	0.9595736										
Benzoic acid	80	0.2931724										
4-Chloroaniline	40	0.4176791										
Hexachlorobutadiene	20	0.21778										
4-Chloro-3-Methylphenol	40	0.3302149										
2-Methylnaphthalene	20	0.7186292										
Hexachlorocyclopentadiene	40	0.4338294										
2,4,6-Trichlorophenol	40	0.431457										

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GB00046	Instrument:	NT14
Calibration Date:	02/16/2023	Column (1):	ZB-5MS

Calibration Comments: 625/8270E ICAL

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
2,4,5-Trichlorophenol	40	0.4483409										
2-Chloronaphthalene	20	1.189199										
2-Nitroaniline	40	0.402573										
Acenaphthylene	20	1.667048										
Dimethylphthalate	20	1.210388										
2,6-Dinitrotoluene	40	0.298066										
Acenaphthene	20	1.05404										
3-Nitroaniline	40	0.3398001										
2,4-Dinitrophenol	80	0.2419218										
Dibenzofuran	20	1.721143										
4-Nitrophenol	40	0.1819528										
2,4-Dinitrotoluene	40	0.4489533										
Fluorene	20	1.709379										
4-Chlorophenylphenyl ether	20	0.9194885										
Diethyl phthalate	20	1.683638										
4-Nitroaniline	40	0.3998668										
4,6-Dinitro-2-methylphenol	80	0.166873										
N-Nitrosodiphenylamine	20	0.5774469										
4-Bromophenyl phenyl ether	20	0.2757341										
Hexachlorobenzene	20	0.2644157										
Pentachlorophenol	40	0.1454637										
Phenanthrene	20	0.9580091										
Anthracene	20	0.9413352										
Carbazole	20	0.9183321										
Di-n-Butylphthalate	20	1.068949										
Fluoranthene	20	1.801606										
Pyrene	20	1.771908										

INITIAL CALIBRATION DATA

EPA 8270E

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Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
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Calibration Date:	02/16/2023	Column (1):	ZB-5MS

Calibration Comments: 625/8270E ICAL

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Butylbenzylphthalate	20	0.625608										
Benzo(a)anthracene	20	1.307642										
3,3'-Dichlorobenzidine	60	0.4030643										
Chrysene	20	1.091964										
bis(2-Ethylhexyl)phthalate	20	0.6070881										
Di-n-Octylphthalate	20	0.952501										
Benzofluoranthenes, Total	40	1.353642										
Benzo(a)pyrene	20	1.246655										
Indeno(1,2,3-cd)pyrene	20	1.124574										
Dibenzo(a,h)anthracene	20	0.9279728										
Benzo(g,h,i)perylene	20	0.9548503										
1-Methylnaphthalene	20	0.693815										
2-Fluorophenol	30	1.07834										
Phenol-d5	30	1.668142										
2-Chlorophenol-d4	30	1.192523										
1,2-Dichlorobenzene-d4	20	0.8410243										
Nitrobenzene-d5	20	0.4541029										
2-Fluorobiphenyl	20	1.324951										
2,4,6-Tribromophenol	30	0.2516169										
p-Terphenyl-d14	20	1.215823										

INITIAL CALIBRATION DATA

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Calibration:	GB00046	Instrument:	NT14
Calibration Date:	02/16/2023	Column (1):	ZB-5MS

Calibration Comments: 625/8270E ICAL

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Phenol	1.795766	5.9			RSD (15)	
bis(2-chloroethyl) ether	1.371797	7.1			RSD (15)	
2-Chlorophenol	1.264614	5.6			RSD (15)	
1,3-Dichlorobenzene	1.407842	8.0			RSD (15)	
1,4-Dichlorobenzene	1.336104	8.3			RSD (15)	
1,2-Dichlorobenzene	1.335708	7.9			RSD (15)	
Benzyl Alcohol	0.8584087	26.9		0.9991	QCOD (0.99)	
2,2'-Oxybis(1-chloropropane)	0.3821177	12.3			RSD (15)	
2-Methylphenol	1.253936	5.4			RSD (15)	
Hexachloroethane	0.5808679	7.5			RSD (15)	
N-Nitroso-di-n-Propylamine	1.141444	6.8			RSD (15)	
4-Methylphenol	1.324086	7.8			RSD (15)	
Nitrobenzene	0.4637383	5.8			RSD (15)	
Isophorone	0.6118329	14.5			RSD (15)	
2-Nitrophenol	0.1668667	38.7		0.9988	QCOD (0.99)	
2,4-Dimethylphenol	0.3501768	7.7			RSD (15)	
Bis(2-Chloroethoxy)methane	0.3980063	6.1			RSD (15)	
2,4-Dichlorophenol	0.2996999	8.7			RSD (15)	
1,2,4-Trichlorobenzene	0.3630457	9.1			RSD (15)	
Naphthalene	0.986273	7.5			RSD (15)	
Benzoic acid	0.1876532	55.2		0.9911	QCOD (0.99)	
4-Chloroaniline	0.4213649	7.9			RSD (15)	
Hexachlorobutadiene	0.2238011	7.6			RSD (15)	
4-Chloro-3-Methylphenol	0.3243891	7.9			RSD (15)	
2-Methylnaphthalene	0.7386653	7.0			RSD (15)	
Hexachlorocyclopentadiene	0.3875173	13.0			RSD (15)	
2,4,6-Trichlorophenol	0.3939585	10.8			RSD (15)	
2,4,5-Trichlorophenol	0.4266518	10.3			RSD (15)	
2-Chloronaphthalene	1.168096	6.7			RSD (15)	
2-Nitroaniline	0.3797818	9.0			RSD (15)	

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GB00046	Instrument:	NT14
Calibration Date:	02/16/2023	Column (1):	ZB-5MS

Calibration Comments: 625/8270E ICAL

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Acenaphthylene	1.781619	7.6			RSD (15)	
Dimethylphthalate	1.22181	6.7			RSD (15)	
2,6-Dinitrotoluene	0.2874984	7.2			RSD (15)	
Acenaphthene	1.06668	6.3			RSD (15)	
3-Nitroaniline	0.3051549	11.8			RSD (15)	
2,4-Dinitrophenol	0.1326177	73.4		0.9907	QCOD (0.99)	
Dibenzofuran	1.751349	7.6			RSD (15)	
4-Nitrophenol	0.1470256	30.3		0.9979	QCOD (0.99)	
2,4-Dinitrotoluene	0.4064887	11.2			RSD (15)	
Fluorene	1.831453	7.4			RSD (15)	
4-Chlorophenylphenyl ether	0.9792941	9.1			RSD (15)	
Diethyl phthalate	1.624301	7.1			RSD (15)	
4-Nitroaniline	0.3501076	14.1			RSD (15)	
4,6-Dinitro-2-methylphenol	0.1007578	63.6		0.9971	QCOD (0.99)	
N-Nitrosodiphenylamine	0.5748169	5.9			RSD (15)	
4-Bromophenyl phenyl ether	0.2560228	8.4			RSD (15)	
Hexachlorobenzene	0.2601536	8.8			RSD (15)	
Pentachlorophenol	0.1012755	43.3		0.9964	QCOD (0.99)	
Phenanthrene	0.96119	7.1			RSD (15)	
Anthracene	0.9522768	4.1			RSD (15)	
Carbazole	0.8641689	8.8			RSD (15)	
Di-n-Butylphthalate	0.9652316	14.8			RSD (15)	
Fluoranthene	1.725722	6.6			RSD (15)	
Pyrene	1.824806	6.6			RSD (15)	
Butylbenzylphthalate	0.5233989	20.5		0.9988	QCOD (0.99)	
Benzo(a)anthracene	1.280036	5.1			RSD (15)	
3,3'-Dichlorobenzidine	0.3395308	20.1		0.9987	QCOD (0.99)	
Chrysene	1.151354	7.2			RSD (15)	
bis(2-Ethylhexyl)phthalate	0.5470542	19.6		0.9966	QCOD (0.99)	
Di-n-Octylphthalate	0.9352762	8.5			RSD (15)	

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GB00046	Instrument:	NT14
Calibration Date:	02/16/2023	Column (1):	ZB-5MS

Calibration Comments: 625/8270E ICAL

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Benzofluoranthenes, Total	1.239173	8.2			RSD (15)	
Benzo(a)pyrene	1.084813	15.0		0.9990	QCOD (0.99)	
Indeno(1,2,3-cd)pyrene	0.8621891	23.7		0.9977	QCOD (0.99)	
Dibenzo(a,h)anthracene	0.7046903	24.9		0.9976	QCOD (0.99)	
Benzo(g,h,i)perylene	0.7176031	22.8		0.9970	QCOD (0.99)	
1-Methylnaphthalene	0.6934747	7.1			RSD (15)	
2-Fluorophenol	1.069323	13.2			RSD (15)	
Phenol-d5	1.696314	5.4			RSD (15)	
2-Chlorophenol-d4	1.210371	3.2			RSD (15)	
1,2-Dichlorobenzene-d4	0.9072515	8.7			RSD (15)	
Nitrobenzene-d5	0.4621137	5.0			RSD (15)	
2-Fluorobiphenyl	1.431101	9.4			RSD (15)	
2,4,6-Tribromophenol	0.2030581	22.7		0.9993	QCOD (0.99)	
p-Terphenyl-d14	1.295671	6.9			RSD (15)	

ANALYSIS SEQUENCE

SLB0234

Instrument ID: NT14
Calibration ID: GB00046
MS EM Level: 1706 EV

GCMS Description: Agilent 7890A/5975C XL
GCMS Column ID: L001045

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLB0234-TUN3	MS Tune	QC		1	L001678		02/16/2023 14:33	NT1423021603.D	DSD	
SLB0234-CAL1	ABN 0.2	QC		2	K011105	K010831	02/16/2023 19:30	NT1423021610.D	DSD	
SLB0234-CAL2	ABN 0.5	QC		3	K011106	K010831	02/16/2023 18:54	NT1423021609.D	DSD	
SLB0234-CAL3	ABN 1.0	QC		4	K011107	K010831	02/16/2023 18:18	NT1423021608.D	DSD	
SLB0234-CAL4	ABN 2.5	QC		5	K011108	K010831	02/16/2023 17:42	NT1423021607.D	DSD	
SLB0234-CAL5	ABN 5	QC		6	K011109	K010831	02/16/2023 17:06	NT1423021606.D	DSD	
SLB0234-CAL6	ABN 10	QC		7	K011110	K010831	02/16/2023 16:30	NT1423021605.D	DSD	
SLB0234-CAL7	ABN 20	QC		8	K011111	K010831	02/16/2023 15:54	NT1423021604.D	DSD	
SLB0234-SCV1	SCV 5.0	QC		9	K010066	K010831	02/16/2023 21:18	NT1423021613.D	DSD	
SLB0234-ICB1	Initial Cal Blank	QC		10	K005156	K010831	02/17/2023 00:17	NT1423021618.D	DSD	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230216.b

	Time	Filename	LabID	ClientId	DF																	
1	1220	NT1423021601.D			1	|NO ISTDS FOUND||																
2	1407	NT1423021602.D	SEQ-TUN2		1	|NO ISTDS FOUND||																
3	1433	NT1423021603.D	SLB0234-TUN3		1	|NO ISTDS FOUND||																
4	1554	NT1423021604.D	SLB0234-CAL7		1	| 8.91	259368	11.40	972103	15.03	589881	18.07	1170883	23.13	710371	25.69	450749	24.16	918441 |			
5	1630	NT1423021605.D	SLB0234-CAL6		1	| 8.90	291239	11.40	1073728	15.02	652598	18.06	1295935	23.12	801336	25.69	501893	24.15	964521 |			
6	1706	NT1423021606.D	SLB0234-CAL5		1	| 8.90	375798	11.40	1378169	15.02	847135	18.05	1675180	23.12	1073562	25.69	721978	24.15	1344129 |			
7	1742	NT1423021607.D	SLB0234-CAL4		1	| 8.90	329194	11.39	1213660	15.02	760118	18.05	1448105	23.12	989085	25.69	640481	24.15	1170114 |			
8	1818	NT1423021608.D	SLB0234-CAL3		1	| 8.90	363048	11.39	1323614	15.02	812533	18.05	1628200	23.12	1067204	25.69	739668	24.15	1276639 |			
9	1854	NT1423021609.D	SLB0234-CAL2		1	| 8.90	369229	11.39	1340371	15.02	817804	18.05	1651873	23.12	1097443	25.69	733004	24.15	1258630 |			
10	1930	NT1423021610.D	SLB0234-CAL1		1	| 8.90	315597	11.39	1132602	15.02	679791	18.05	1365529	23.12	860315	25.69	574514	24.15	913087 |			
11	2006	NT1423021611.D	SIM 0.1		1	| 8.90	323228	11.39	1153158	15.02	693417	18.05	1395554	23.12	888516	25.69	590195	24.15	942766 |			
12	2042	NT1423021612.D	SIM 0.05		1	| 8.90	325804	11.39	1179450	15.02	699735	18.05	1419663	23.12	892941	25.69	583873	24.15	922711 |			
13	2118	NT1423021613.D	SLB0234-SCV1		1	| 8.90	362894	11.40	1343351	15.02	854455	18.05	1630237	23.12	1112056	25.69	733476	24.15	1298332 |			
14	2154	NT1423021614.D	SEQ-ICV1		1	| 9.26	379473	11.40	1277038	15.02	790990	18.06	1598997	23.12	1030873	25.69	689426	24.15	1262589 |			
15	2230	NT1423021615.D	SEQ-LCV1		1	| 9.26	39089	11.39	1297021	15.02	796314	18.05	1596176	23.12	1039333	25.69	693092	24.15	1184417 |			
16	2306	NT1423021616.D	SIM-ICV1		1	| 9.26	78399	11.39	1262464	15.02	789163	18.05	1586131	23.12	1059006	25.69	701741	24.15	1219722 |			
17	2342	NT1423021617.D	SIM-LCV1		1	| 8.90	315583	11.39	1132828	15.01	674086	18.05	1359277	23.12	885569	25.69	581219	24.15	907558 |			
18	0017	NT1423021618.D	SLB0234-ICB1		1	| 8.90	274788	11.39	975858	15.01	576816	18.05	1140272	23.12	714655	25.69	466173	24.15	689415 |			

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230216.b

Instrument: nt14.i Date: 16-FEB-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
1220	NT1423021601.D		1	NO MANUAL INTEGRATION
1407	NT1423021602.D	SEQ-TUN2	1	NO MANUAL INTEGRATION
1433	NT1423021603.D	SLB0234-TUN3	1	NO MANUAL INTEGRATION
1554	NT1423021604.D	SLB0234-CAL7	1	2,2'-oxybis(1-Chloropropane), Benzoic acid, Total Benzofluoranthenes,
1630	NT1423021605.D	SLB0234-CAL6	1	2,2'-oxybis(1-Chloropropane), Total Benzofluoranthenes,
1706	NT1423021606.D	SLB0234-CAL5	1	NO MANUAL INTEGRATION
1742	NT1423021607.D	SLB0234-CAL4	1	2,2'-oxybis(1-Chloropropane), Total Benzofluoranthenes,
1818	NT1423021608.D	SLB0234-CAL3	1	2,2'-oxybis(1-Chloropropane), Benzoic acid, Pentachlorophenol, Total Benzofluoranthenes,
1854	NT1423021609.D	SLB0234-CAL2	1	2,2'-oxybis(1-Chloropropane), 2,4-Dinitrophenol, 4-Nitrophenol, 4,6-Dinitro-2-methylphenol, Pentachlorophenol, 2,4,6-Tribromophenol,
1930	NT1423021610.D	SLB0234-CAL1	1	Total Benzofluoranthenes, 2,4,6-Tribromophenol,
2006	NT1423021611.D	SIM 0.1	1	NO MANUAL INTEGRATION
2042	NT1423021612.D	SIM 0.05	1	NO MANUAL INTEGRATION
2118	NT1423021613.D	SLB0234-SCV1	1	NO MANUAL INTEGRATION
2154	NT1423021614.D	SEQ-ICV1	1	NO MANUAL INTEGRATION
2230	NT1423021615.D	SEQ-LCV1	1	NO MANUAL INTEGRATION
2306	NT1423021616.D	SIM-ICV1	1	NO MANUAL INTEGRATION
2342	NT1423021617.D	SIM-LCV1	1	NO MANUAL INTEGRATION

Instrument: nt14.i Date: 17-FEB-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
0017	NT1423021618.D	SLB0234-ICB1	1	Phenol-d5, 2-Chlorophenol-d4, 1,2-Dichlorobenzene-d4,

Security Status Report

Date: 01-Mar-2023 08:58

NT1423021601.D	Data Locked	van, 01-Mar-2023 08:58
NT1423021602.D	Data Locked	van, 01-Mar-2023 08:58
NT1423021603.D	Data Locked	van, 01-Mar-2023 08:58
NT1423021604.D	Data Locked	van, 01-Mar-2023 08:58
NT1423021605.D	Data Locked	van, 01-Mar-2023 08:58
NT1423021606.D	Data Locked	van, 01-Mar-2023 08:58
NT1423021607.D	Data Locked	van, 01-Mar-2023 08:58
NT1423021608.D	Data Locked	van, 01-Mar-2023 08:58
NT1423021609.D	Data Locked	van, 01-Mar-2023 08:58
NT1423021610.D	Data Locked	van, 01-Mar-2023 08:58
NT1423021611.D	Data Locked	van, 01-Mar-2023 08:58
NT1423021612.D	Data Locked	van, 01-Mar-2023 08:58
NT1423021613.D	Data Locked	van, 01-Mar-2023 08:58
NT1423021614.D	Data Locked	van, 01-Mar-2023 08:58
NT1423021615.D	Data Locked	van, 01-Mar-2023 08:58
NT1423021616.D	Data Locked	van, 01-Mar-2023 08:58
NT1423021617.D	Data Locked	van, 01-Mar-2023 08:58
NT1423021618.D	Data Locked	van, 01-Mar-2023 08:58

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
End Cal Date : 16-FEB-2023 19:30
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt14.i\20230216.b\ABN.m
Last Edit : 17-Feb-2023 10:36 deenayd

Calibration File Names:
Level 1: \\target\share\chem3\nt14.i\20230216.b\NT1423021610.D
Level 2: \\target\share\chem3\nt14.i\20230216.b\NT1423021609.D
Level 3: \\target\share\chem3\nt14.i\20230216.b\NT1423021608.D
Level 4: \\target\share\chem3\nt14.i\20230216.b\NT1423021607.D
Level 5: \\target\share\chem3\nt14.i\20230216.b\NT1423021606.D
Level 6: \\target\share\chem3\nt14.i\20230216.b\NT1423021605.D
Level 7: \\target\share\chem3\nt14.i\20230216.b\NT1423021604.D

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
End Cal Date : 16-FEB-2023 19:30
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt14.i\20230216.b\ABN.m
Last Edit : 17-Feb-2023 10:36 deenayd

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
End Cal Date : 16-FEB-2023 19:30
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt14.i\20230216.b\ABN.m
Last Edit : 17-Feb-2023 10:36 deenayd

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
End Cal Date : 16-FEB-2023 19:30
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt14.i\20230216.b\ABN.m
Last Edit : 17-Feb-2023 10:36 deenayd

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
End Cal Date : 16-FEB-2023 19:30
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt14.i\20230216.b\ABN.m
Last Edit : 17-Feb-2023 10:36 deenayd

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

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Start Cal Date : 30-DEC-2022 08:06
End Cal Date : 16-FEB-2023 19:30
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt14.i\20230216.b\ABN.m
Last Edit : 17-Feb-2023 10:36 deenayd

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

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
143 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	
120 2,3,4,6-Tetrachlorophenol	5181	28898	74897	205457	459997	799412						
	1465480						QUAD	0.000e+000	2.19925	-0.07751	0.99940	
178 2-Benzyl-4-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
119 7,12-Dimethylbenz(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	
118 Triphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
117 Butyl Diphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
116 Dibutyl Phenyl Phosphate	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
115 Tributyl Phosphate	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
114 Beta-Pinene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
113 Diphenyl Oxide	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
112 Biphenyl	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
111 Azobenzene (1,2-DP-Hydrazine)	2.17511 / 1.91809	1.86164	1.91637	2.04699	1.84942	2.05076	AVRG		1.97405		6.07383	
110 Tetrachloroguaiacol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-

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

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
105 1-methylnaphthalene	0.76956	0.64610	0.67178	0.72428	0.62690	0.72190						
	0.69381						AVRG		0.69347		7.13589	
151 1,2,4,5-Tetrachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
152 Benzo(e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	
153 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	
154 Diazinon	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	
155 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	

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

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
163 1,2,3,5,8-Pentachloronaphthal	***** / *****	*****	*****	*****	*****	*****	AVRG		0.000e+000		0.000e+000
164 1,2,3,4,6,7-Hexachloronaphtha	***** / *****	*****	*****	*****	*****	*****	AVRG		0.000e+000		0.000e+000
165 1,2,3,4,5,6,7-Heptachloronaph	***** / *****	*****	*****	*****	*****	*****	AVRG		0.000e+000		0.000e+000
166 Octachloronaphthalene	***** / *****	*****	*****	*****	*****	*****	AVRG		0.000e+000		0.000e+000
167 2,2',4,4',5-Pentabromobipheny	***** / *****	*****	*****	*****	*****	*****	AVRG		0.000e+000		0.000e+000
3 Phenol	1.77454 / 1.77122	1.63900	1.80219	1.97911	1.73631	1.86800	AVRG		1.79577		5.92982
4 Bis(2-Chloroethyl)ether	1.54837 / 1.36017	1.29316	1.34194	1.42274	1.24572	1.39047	AVRG		1.37180		7.11919

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
6 2-Chlorophenol	1.27466	1.15096	1.21585	1.33108	1.22375	1.34590					
	1.31009						AVRG		1.26461		5.60637
7 1,3-Dichlorobenzene	1.63157	1.33554	1.36960	1.46613	1.28863	1.40645					
	1.35696						AVRG		1.40784		8.04387
9 1,4-Dichlorobenzene	1.55280	1.23544	1.29859	1.38349	1.22756	1.35010					
	1.30474						AVRG		1.33610		8.29540
11 Benzyl alcohol	6675	31482	78291	209183	441332	765776					
	1339870						QUAD	0.000e+000	0.99193	-0.00518	0.99932
12 1,2-Dichlorobenzene	1.54057	1.25565	1.30097	1.39688	1.22553	1.33582					
	1.29454						AVRG		1.33571		7.92084
13 2-Methylphenol	1.20945	1.14368	1.25635	1.34706	1.22820	1.31396					
	1.27885						AVRG		1.25394		5.41840
14 2,2'-oxybis(1-Chloropropane)	0.43289	0.35271	0.36505	0.39227	0.30063	0.39862					
	0.43264						AVRG		0.38212		12.32257

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
15 4-Methylphenol	1.22675	1.15740	1.31925	1.44920	1.31741	1.41181						
	1.38678						AVRG		1.32409		7.83698	
16 N-Nitroso-di-n-propylamine	1.13284	1.02540	1.09394	1.22913	1.08812	1.21173						
	1.20896						AVRG		1.14144		6.76981	
17 Hexachloroethane	0.64982	0.52384	0.55432	0.59319	0.54003	0.60486						
	0.60002						AVRG		0.58087		7.52828	
19 Nitrobenzene	0.48886	0.42594	0.44337	0.49295	0.44116	0.48675						
	0.46714						AVRG		0.46374		5.82529	
20 Isophorone	0.55324	0.45596	0.58661	0.67381	0.61504	0.70071						
	0.69745						AVRG		0.61183		14.53436	
21 2-Nitrophenol	3337	17954	49000	152516	341957	602543						
	1117285						QUAD	0.000e+000	4.82750	-0.42568	0.99937	<-
22 2,4-Dimethylphenol	0.39368	0.34458	0.36941	0.36306	0.33872	0.31892						
	0.32288						AVRG		0.35018		7.65655	

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
23 Bis(2-Chloroethoxy)methane	0.42396	0.35912	0.39163	0.41888	0.37382	0.41574						
	0.40289						AVRG		0.39801		6.14179	
24 Benzoic acid	+++++	+++++	39783	459387	1390756	2811078						
	5699876						QUAD	0.000e+000	4.55169	-0.19720	0.99674	<-
25 2,4-Dichlorophenol	0.25855	0.27537	0.31096	0.33260	0.30656	0.32233						
	0.29153						AVRG		0.29970		8.74488	
26 1,2,4-Trichlorobenzene	0.43124	0.34857	0.35503	0.37309	0.32837	0.35994						
	0.34509						AVRG		0.36305		9.10742	
28 Naphthalene	1.14584	0.93102	0.95942	0.98285	0.93545	0.98976						
	0.95957						AVRG		0.98627		7.46856	
29 4-Chloroaniline	+++++	0.36663	0.41191	0.46848	0.43150	0.43198						
	0.41768						AVRG		0.42136		7.89584	
30 Hexachlorobutadiene	0.25751	0.21049	0.22057	0.22916	0.20508	0.22601						
	0.21778						AVRG		0.22380		7.61861	

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
31 4-Chloro-3-methylphenol	+++++	0.27923	0.31660	0.34949	0.32419	0.34662					
	0.33021						AVRG		0.32439		7.86964
32 2-Methylnaphthalene	0.83795	0.69423	0.73486	0.75367	0.68065	0.75067					
	0.71863						AVRG		0.73867		6.98730
33 Hexachlorocyclopentadiene	+++++	0.30977	0.34948	0.40070	0.39009	0.44124					
	0.43383						AVRG		0.38752		13.00754
34 2,4,6-Trichlorophenol	+++++	0.31971	0.37457	0.40929	0.39519	0.43353					
	0.43146						AVRG		0.39396		10.82693
35 2,4,5-Trichlorophenol	+++++	0.34974	0.40852	0.45060	0.42811	0.47459					
	0.44834						AVRG		0.42665		10.26358
37 2-Chloronaphthalene	1.28946	1.07223	1.12899	1.19022	1.08193	1.22465					
	1.18920						AVRG		1.16810		6.72322
38 2-Nitroaniline	+++++	0.32447	0.36690	0.40742	0.36468	0.41264					
	0.40257						AVRG		0.37978		8.98042

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
39 Dimethylphthalate	1.35886	1.14041	1.21096	1.26939	1.11637	1.24629						
	1.21039						AVRG		1.22181		6.65229	
40 Acenaphthylene	2.07008	1.73092	1.79165	1.77303	1.67711	1.76150						
	1.66705						AVRG		1.78162		7.61386	
41 2,6-Dinitrotoluene	+++++	0.25854	0.27735	0.30423	0.27390	0.31290						
	0.29807						AVRG		0.28750		7.23573	
43 3-Nitroaniline	+++++	0.24851	0.28446	0.31904	0.29674	0.34237						
	0.33980						AVRG		0.30515		11.80285	
44 Acenaphthene	1.20137	1.00566	1.04441	1.06149	1.00513	1.09466						
	1.05404						AVRG		1.06668		6.30262	
45 2,4-Dinitrophenol	+++++	1162	31343	227423	718089	1456316						
	2854102						QUAD	0.000e+000	5.32321	-0.25058	0.99647	<-
46 Dibenzofuran	2.02071	1.66680	1.72199	1.73655	1.60095	1.79131						
	1.72114						AVRG		1.75135		7.58634	

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
47 4-Nitrophenol	+++++ / 1073305	14226	49332	148774	350369	610750	QUAD	0.000e+000	5.65986	-0.10326	0.99889
48 2,4-Dinitrotoluene	+++++ / 0.44895	0.33605	0.38061	0.43028	0.39053	0.45251	AVRG		0.40649		11.20533
49 Fluorene	2.11180 / 1.70938	1.76953	1.84524	1.84724	1.72033	1.81665	AVRG		1.83145		7.40432
50 Diethylphthalate	1.73480 / 1.68364	1.56068	1.53592	1.64865	1.44242	1.76401	AVRG		1.62430		7.14349
51 4-Chlorophenyl-phenylether	1.15800 / 0.91949	0.93735	0.96163	1.01015	0.88422	0.98421	AVRG		0.97929		9.09528
52 4-Nitroaniline	+++++ / 0.39987	0.27423	0.31920	0.36551	0.33992	0.40192	AVRG		0.35011		14.11751
53 4,6-Dinitro-2-methylphenol	+++++ / 3907775	29146	128657	451603	1141937	2097838	QUAD	0.000e+000	6.91369	-0.28358	0.99859

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
End Cal Date : 16-FEB-2023 19:30
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt14.i\20230216.b\ABN.m
Last Edit : 17-Feb-2023 10:36 deenayd

Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
54 N-Nitrosodiphenylamine	0.59174	0.53556	0.56587	0.62677	0.53063	0.59570					
	0.57745						AVRG		0.57482		5.94312
56 4-Bromophenyl-phenylether	0.26596	0.22323	0.23943	0.27115	0.23997	0.27668					
	0.27573						AVRG		0.25602		8.36414
57 Hexachlorobenzene	0.29698	0.23596	0.24746	0.27726	0.23322	0.26578					
	0.26442						AVRG		0.26015		8.83670
58 Pentachlorophenol	+++++	15027	51252	182806	504425	916281					
	1703210						QUAD	0.000e+000	7.91738	-0.73777	0.99844
60 Phenanthrene	1.09096	0.89325	0.93104	0.98666	0.89388	0.97453					
	0.95801						AVRG		0.96119		7.07323
61 Anthracene	0.97698	0.88207	0.93995	1.00256	0.94497	0.97807					
	0.94134						AVRG		0.95228		4.08038
62 Carbazole	0.80236	0.75674	0.82904	0.95401	0.84207	0.94663					
	0.91833						AVRG		0.86417		8.82426

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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End Cal Date : 16-FEB-2023 19:30
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt14.i\20230216.b\ABN.m
Last Edit : 17-Feb-2023 10:36 deenayd

Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
63 Di-n-butylphthalate	0.76945	0.78241	0.94542	1.09724	0.98228	1.11087					
	1.06895						AVRG		0.96523		14.76294
64 Fluoranthene	1.83045	1.53273	1.69162	1.71720	1.64886	1.85761					
	1.80161						AVRG		1.72572		6.62852
65 Pyrene	2.03172	1.72309	1.85698	1.89693	1.66915	1.82387					
	1.77191						AVRG		1.82481		6.57694
67 Butylbenzylphthalate	15963	54195	131574	361796	747612	1275127					
	2222069						QUAD	0.000e+000	1.66291	-0.02242	0.99910
68 Benzo(a)anthracene	1.37017	1.17751	1.28117	1.26775	1.22492	1.33108					
	1.30764						AVRG		1.28004		5.06229
70 3,3'-Dichlorobenzidine	+++++	109082	258857	695962	1455887	2483520					
	4294878						QUAD	0.000e+000	2.55218	-0.01333	0.99896
71 Chrysene	1.32554	1.09284	1.13861	1.14019	1.09567	1.17468					
	1.09196						AVRG		1.15135		7.19925

ARI Labs, Inc.

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Start Cal Date : 30-DEC-2022 08:06
End Cal Date : 16-FEB-2023 19:30
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt14.i\20230216.b\ABN.m
Last Edit : 17-Feb-2023 10:36 deenayd

Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
72 bis(2-Ethylhexyl)phthalate	18016	67455	162205	460238	968097	1652176					
	2787873						QUAD	0.000e+000	1.45165	0.05996	0.99721
73 Di-n-octylphthalate	1.06027	0.85450	0.87044	0.96158	0.85181	0.99583					
	0.95250						AVRG		0.93528		8.50606
74 Benzo(b)fluoranthene	1.20864	1.14709	1.14517	1.36875	1.26830	1.37282					
	1.37389						AVRG		1.26924		8.23621
75 Benzo(k)fluoranthene	1.32495	1.18084	1.35491	1.37164	1.26586	1.50904					
	1.48643						AVRG		1.35624		8.53801
187 Total Benzofluoranthenes	1.19363	1.09126	1.16825	1.30410	1.20560	1.35773					
	1.35364						AVRG		1.23917		8.16907
76 Benzo(a)pyrene	25983	77143	194966	464600	1008040	1591795					
	2809643						QUAD	0.000e+000	0.83208	-0.00524	0.99917
78 Indeno(1,2,3-cd)pyrene	18856	55897	137909	356233	815881	1385879					
	2534503						QUAD	0.000e+000	1.01205	-0.02258	0.99835

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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Quant Method : ISTD
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Method file : \\target\share\chem3\nt14.i\20230216.b\ABN.m
Last Edit : 17-Feb-2023 10:36 deenayd

Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
79 Dibenzo(a,h)anthracene	14219	46959	112505	294764	668509	1144114						
	2091414						QUAD	0.000e+000	1.22823	-0.03357	0.99825	
80 Benzo(g,h,i)perylene	17069	48735	110200	283553	650179	1151263						
	2151989						QUAD	0.000e+000	1.24846	-0.04323	0.99780	
90 N-Nitrosodimethylamine	0.71309	0.75515	0.87746	0.98364	0.83460	0.85109						
	0.78035						AVRG		0.82791		10.80638	
91 Aniline	2.11345	1.90858	2.02775	1.96557	1.85334	1.83207						
	1.74479						AVRG		1.92079		6.52023	
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	
93 Benzidine	+++++	94244	233866	457874	1382091	1329832						
	2294259						QUAD	0.000e+000	2.14244	0.29989	0.98574	<-
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	

ARI Labs, Inc.

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Method file : \\target\share\chem3\nt14.i\20230216.b\ABN.m
Last Edit : 17-Feb-2023 10:36 deenayd

Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
97 Caffeine	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
98 Retene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
99 Perylene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
100 3-beta-Coprostanol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
101 Cholesterol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
102 beta-Sitosterol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
103 Pyridine	2.25509 / 2.49678	2.34554	2.83461	3.09016	2.61958	2.69879	AVRG		2.62008		10.98457	

ARI Labs, Inc.

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Integrator : HP RTE
Method file : \\target\share\chem3\nt14.i\20230216.b\ABN.m
Last Edit : 17-Feb-2023 10:36 deenayd

Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
188 2,6-Dichlorophenol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
189 N-Nitrosomethylethylamine	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
$ 1 2-Fluorophenol	0.83343 / 1.07834	0.91793	1.12709	1.22150	1.16130	1.14566	AVRG		1.06932		13.19390	
$ 137 d8-1,4-Dioxane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
$ 2 Phenol-d5	1.65067 / 1.66814	1.52985	1.71759	1.82100	1.74974	1.73721	AVRG		1.69631		5.44111	
$ 5 2-Chlorophenol-d4	1.24192 / 1.19252	1.13869	1.20619	1.25865	1.21688	1.21774	AVRG		1.21037		3.18147	
$ 10 1,2-Dichlorobenzene-d4	1.07587 / 0.84102	0.88608	0.90721	0.91186	0.86456	0.86416	AVRG		0.90725		8.65161	

ARI Labs, Inc.

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Integrator : HP RTE
Method file : \\target\share\chem3\nt14.i\20230216.b\ABN.m
Last Edit : 17-Feb-2023 10:36 deenayd

Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
$ 18 Nitrobenzene-d5	0.50102	0.42405	0.45650	0.47343	0.46403	0.46167					
	0.45410						AVRG		0.46211		4.99005
$ 36 2-Fluorobiphenyl	1.72868	1.38232	1.42531	1.40442	1.37899	1.37304					
	1.32495						AVRG		1.43110		9.41958
$ 55 2,4,6-Tribromophenol	+++++	24262	62102	151326	354481	603341					
	1113180						QUAD	0.000e+000	4.35777	-0.20851	0.99952
$ 66 Terphenyl-d14	1.47811	1.25932	1.34753	1.26669	1.24787	1.25435					
	1.21582						AVRG		1.29567		6.93927
$ 85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000
$ 86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000
$ 87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
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Quant Method : ISTD
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Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt14.i\20230216.b\ABN.m
Last Edit : 17-Feb-2023 10:36 deenayd

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt14.i\20230216.b\ABN.m
Last Edit : 17-Feb-2023 10:36 deenayd

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20230216.b\ABN.m
Batch File: \\target\share\chem3\nt14.i\20230216.b
Inst ID: nt14.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	NT1423021604	NT1423021605	NT1423021606	NT1423021607	NT1423021608	NT1423021609	NT1423021610
INJ.DATE:	16-FEB-2023	16-FEB-2023	16-FEB-2023	16-FEB-2023	16-FEB-2023	16-FEB-2023	16-FEB-2023
INJ.TIME:	15:54	16:30	17:06	17:42	18:18	18:54	19:30

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
$ 1 2-Fluorophenol	6.682	6.674	6.674	6.674	6.674	6.674	6.682	6.682	3.682-9.682	6.676	0.004
186 Carbaryl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.785	15.785-21.785	+++++	+++++
179 n-Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.645	5.645-11.645	+++++	+++++
180 n-Octadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.455	14.455-20.455	+++++	+++++
169 4-tert-Butylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.696	17.696-23.696	+++++	+++++
170 N,N-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.219	16.219-22.219	+++++	+++++
171 2,3-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.559	16.559-22.559	+++++	+++++
172 2,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.559	16.559-22.559	+++++	+++++
173 2,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.949	19.949-25.949	+++++	+++++
174 2,6-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.196	16.196-22.196	+++++	+++++
175 3,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.559	16.559-22.559	+++++	+++++
176 3,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.503	17.503-23.503	+++++	+++++
177 p-Benzoquinone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.827	4.827-10.827	+++++	+++++
168 Pentachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.842	12.842-18.842	+++++	+++++
145 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.212	44.212-50.212	+++++	+++++
146 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.746	44.746-50.746	+++++	+++++
147 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	48.216	45.216-51.216	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20230216.b\ABN.m
Batch File: \\target\share\chem3\nt14.i\20230216.b
Inst ID: nt14.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
148 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.281	44.281-50.281	+++++	+++++
149 TCMX	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.387	40.387-46.387	+++++	+++++
150 DCBP	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.989	47.989-53.989	+++++	+++++
138 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	67.733	64.733-70.733	+++++	+++++
139 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.067	62.067-68.067	+++++	+++++
140 Diallate A	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.487	62.487-68.487	+++++	+++++
141 Diallate B	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.487	62.487-68.487	+++++	+++++
142 1,2-Dibromo-3-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	49.917	46.917-52.917	+++++	+++++
135 2,3,5,6-Tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.383	13.383-19.383	+++++	+++++
136 2,3,4,5-tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	39.317	36.317-42.317	+++++	+++++
$ 137 d8-1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.445	0.000-5.445	+++++	+++++
* 134 Di-n-octylphthalate-d4	24.161	24.153	24.154	24.153	24.154	24.154	24.154	24.161	21.161-27.161	24.155	0.003
133 Butylatedhydroxytoluen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.571	12.571-18.571	+++++	+++++
132 3,6-Dimethylphenanthre	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.450	62.450-68.450	+++++	+++++
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	64.400	61.400-67.400	+++++	+++++
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	62.100	59.100-65.100	+++++	+++++
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.912	51.912-57.912	+++++	+++++
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.212	51.212-57.212	+++++	+++++
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	57.650	54.650-60.650	+++++	+++++
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	56.750	53.750-59.750	+++++	+++++
144 alpha-Terpineol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.447	8.447-14.447	+++++	+++++
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	52.166	49.166-55.166	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20230216.b\ABN.m
Batch File: \\target\share\chem3\nt14.i\20230216.b
Inst ID: nt14.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.617	47.617-53.617	+++++	+++++
123 Acetophenone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.252	7.252-13.252	+++++	+++++
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.467	40.467-46.467	+++++	+++++
143 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.697	0.000-5.697	+++++	+++++
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.500	51.500-57.500	+++++	+++++
120 2,3,4,6-Tetrachlorophe	15.760	15.753	15.753	15.745	15.745	15.753	15.761	15.760	12.760-18.760	15.753	0.006
178 2-Benzyl-4-Chloropheno	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.963	15.963-21.963	+++++	+++++
119 7,12-Dimethylbenz(a)an	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.069	44.069-50.069	+++++	+++++
118 Triphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.215	18.215-24.215	+++++	+++++
117 Butyl Diphenyl Phospha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.761	13.761-19.761	+++++	+++++
116 Dibutyl Phenyl Phospha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.747	15.747-21.747	+++++	+++++
115 Tributyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.923	13.923-19.923	+++++	+++++
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	48.950	45.950-51.950	+++++	+++++
113 Diphenyl Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.341	11.341-17.341	+++++	+++++
112 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.085	11.085-17.085	+++++	+++++
111 Azobenzene (1,2-DP-Hyd	16.463	16.455	16.448	16.440	16.440	16.440	16.440	16.463	13.463-19.463	16.447	0.009
110 Tetrachloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.140	14.140-20.140	+++++	+++++
109 3,4,5-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.070	12.070-18.070	+++++	+++++
181 3,4,6-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.232	12.232-18.232	+++++	+++++
108 4,5,6-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.374	13.374-19.374	+++++	+++++
184 3,4-Dichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.120	10.120-16.120	+++++	+++++
107 4,5-Dichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.096	11.096-17.096	+++++	+++++
182 4,6-Dichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.096	11.096-17.096	+++++	+++++
185 4-Chloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.735	8.735-14.735	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20230216.b\ABN.m
Batch File: \\target\share\chem3\nt14.i\20230216.b
Inst ID: nt14.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.243	6.243-12.243	+++++	+++++
	105 1-methylnaphthalene	13.068	13.061	13.061	13.053	13.053	13.053	13.053	13.068	10.068-16.068	13.057	0.006
	151 1,2,4,5-Tetrachloroben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.499	8.499-14.499	+++++	+++++
	152 Benzo(e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	30.943	27.943-33.943	+++++	+++++
	153 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.642	24.642-30.642	+++++	+++++
	154 Diazinon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.953	22.953-28.953	+++++	+++++
	155 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.750	24.750-30.750	+++++	+++++
	156 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.464	23.464-29.464	+++++	+++++
	157 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.099	24.099-30.099	+++++	+++++
	158 Ethion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.513	21.513-27.513	+++++	+++++
	159 4-Nonylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.132	22.132-28.132	+++++	+++++
	160 Tetraethyl Tin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.528	16.528-22.528	+++++	+++++
	161 1,2,3-Trichloronaphtha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	36.246	33.246-39.246	+++++	+++++
	162 1,2,3,4-Tetrachloronap	+++++	+++++	+++++	+++++	+++++	+++++	+++++	37.506	34.506-40.506	+++++	+++++
	163 1,2,3,5,8-Pentachloron	+++++	+++++	+++++	+++++	+++++	+++++	+++++	38.893	35.893-41.893	+++++	+++++
	164 1,2,3,4,6,7-Hexachloro	+++++	+++++	+++++	+++++	+++++	+++++	+++++	39.681	36.681-42.681	+++++	+++++
	165 1,2,3,4,5,6,7-Heptachl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	41.123	38.123-44.123	+++++	+++++
	166 Octachloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	42.253	39.253-45.253	+++++	+++++
	167 2,2',4,4',5-Pentabromo	+++++	+++++	+++++	+++++	+++++	+++++	+++++	42.033	39.033-45.033	+++++	+++++
$	2 Phenol-d5	8.289	8.274	8.266	8.266	8.266	8.266	8.266	8.289	5.289-11.289	8.271	0.009
	3 Phenol	8.312	8.297	8.289	8.289	8.282	8.289	8.289	8.312	5.312-11.312	8.293	0.010
	4 Bis(2-Chloroethyl)ethe	8.467	8.459	8.459	8.451	8.452	8.452	8.452	8.467	5.467-11.467	8.456	0.006
$	5 2-Chlorophenol-d4	8.544	8.544	8.537	8.536	8.537	8.537	8.537	8.544	5.544-11.544	8.539	0.004

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20230216.b\ABN.m
Batch File: \\target\share\chem3\nt14.i\20230216.b
Inst ID: nt14.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	6 2-Chlorophenol	8.575	8.567	8.567	8.559	8.560	8.560	8.567	8.575	5.575-11.575	8.565	0.006
	7 1,3-Dichlorobenzene	8.838	8.838	8.838	8.838	8.838	8.838	8.838	8.838	5.838-11.838	8.838	0.000
*	8 1,4-Dichlorobenzene-d4	8.908	8.900	8.900	8.900	8.900	8.900	8.900	8.908	5.908-11.908	8.901	0.003
	9 1,4-Dichlorobenzene	8.939	8.931	8.931	8.931	8.931	8.931	8.931	8.939	5.939-11.939	8.932	0.003
$	10 1,2-Dichlorobenzene-d4	9.265	9.265	9.265	9.257	9.257	9.257	9.257	9.265	6.265-12.265	9.260	0.004
	11 Benzyl alcohol	9.195	9.187	9.180	9.179	9.180	9.187	9.203	9.195	6.195-12.195	9.187	0.009
	12 1,2-Dichlorobenzene	9.296	9.288	9.288	9.288	9.288	9.288	9.288	9.296	6.296-12.296	9.289	0.003
	13 2-Methylphenol	9.412	9.412	9.405	9.405	9.405	9.405	9.405	9.412	6.412-12.412	9.407	0.004
	14 2,2'-oxybis(1-Chloropr	9.490	9.482	9.482	9.482	9.475	9.475	9.482	9.490	6.490-12.490	9.481	0.005
	15 4-Methylphenol	9.692	9.684	9.676	9.676	9.677	9.677	9.684	9.692	6.692-12.692	9.681	0.006
	16 N-Nitroso-di-n-propyla	9.769	9.754	9.746	9.738	9.739	9.739	9.739	9.769	6.769-12.769	9.746	0.012
	17 Hexachloroethane	9.886	9.878	9.878	9.878	9.878	9.878	9.878	9.886	6.886-12.886	9.879	0.003
$	18 Nitrobenzene-d5	10.010	10.010	10.002	10.002	9.995	10.002	10.002	10.010	7.010-13.010	10.003	0.005
	19 Nitrobenzene	10.049	10.041	10.041	10.033	10.034	10.034	10.033	10.049	7.049-13.049	10.038	0.006
	20 Isophorone	10.522	10.507	10.491	10.483	10.484	10.484	10.491	10.522	7.522-13.522	10.495	0.015
	21 2-Nitrophenol	10.677	10.670	10.670	10.669	10.670	10.670	10.677	10.677	7.677-13.677	10.672	0.004
	22 2,4-Dimethylphenol	10.739	10.732	10.724	10.724	10.724	10.724	10.724	10.739	7.739-13.739	10.727	0.006
	23 Bis(2-Chloroethoxy)met	10.941	10.933	10.926	10.925	10.926	10.926	10.926	10.941	7.941-13.941	10.929	0.006
	24 Benzoic acid	11.150	11.057	10.995	10.925	10.879	+++++	+++++	11.150	8.150-14.150	11.001	0.107
	25 2,4-Dichlorophenol	11.135	11.127	11.119	11.119	11.119	11.119	11.127	11.135	8.135-14.135	11.124	0.006
	26 1,2,4-Trichlorobenzene	11.312	11.313	11.313	11.305	11.305	11.305	11.305	11.312	8.312-14.312	11.308	0.004
*	27 Naphthalene-d8	11.397	11.397	11.398	11.390	11.390	11.390	11.390	11.397	8.397-14.397	11.393	0.004
	28 Naphthalene	11.444	11.436	11.436	11.436	11.429	11.429	11.429	11.444	8.444-14.444	11.434	0.006
	29 4-Chloroaniline	11.590	11.583	11.575	11.567	11.568	11.568	11.575	11.590	8.590-14.590	11.575	0.009

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20230216.b\ABN.m
Batch File: \\target\share\chem3\nt14.i\20230216.b
Inst ID: nt14.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	30 Hexachlorobutadiene	11.807	11.799	11.799	11.799	11.799	11.799	11.799	11.807	8.807-14.807	11.800	0.003
	31 4-Chloro-3-methylpheno	12.550	12.542	12.534	12.534	12.535	12.535	12.542	12.550	9.550-15.550	12.539	0.006
	32 2-Methylnaphthalene	12.844	12.836	12.836	12.836	12.836	12.829	12.836	12.844	9.844-15.844	12.836	0.004
	33 Hexachlorocyclopentadi	13.308	13.308	13.308	13.300	13.301	13.301	13.301	13.308	10.308-16.308	13.304	0.004
	34 2,4,6-Trichlorophenol	13.471	13.463	13.463	13.455	13.456	13.455	13.463	13.471	10.471-16.471	13.461	0.006
	35 2,4,5-Trichlorophenol	13.548	13.540	13.533	13.533	13.533	13.533	13.541	13.548	10.548-16.548	13.537	0.006
$	36 2-Fluorobiphenyl	13.633	13.626	13.626	13.625	13.618	13.618	13.618	13.633	10.633-16.633	13.623	0.006
	37 2-Chloronaphthalene	13.842	13.834	13.835	13.827	13.827	13.827	13.827	13.842	10.842-16.842	13.831	0.006
	38 2-Nitroaniline	14.121	14.113	14.098	14.098	14.090	14.090	14.098	14.121	11.121-17.121	14.101	0.012
	39 Dimethylphthalate	14.562	14.547	14.539	14.531	14.531	14.531	14.531	14.562	11.562-17.562	14.539	0.012
	40 Acenaphthylene	14.717	14.709	14.702	14.701	14.702	14.702	14.702	14.717	11.717-17.717	14.705	0.006
	41 2,6-Dinitrotoluene	14.694	14.686	14.678	14.670	14.671	14.671	14.671	14.694	11.694-17.694	14.677	0.009
*	42 Acenaphthene-d10	15.026	15.019	15.019	15.018	15.019	15.019	15.019	15.026	12.026-18.026	15.020	0.003
	43 3-Nitroaniline	14.987	14.972	14.957	14.949	14.949	14.949	14.957	14.987	11.987-17.987	14.960	0.015
	44 Acenaphthene	15.096	15.088	15.088	15.080	15.081	15.081	15.081	15.096	12.096-18.096	15.085	0.006
	45 2,4-Dinitrophenol	15.204	15.181	15.173	15.165	15.166	15.282	+++++	15.204	12.204-18.204	15.195	0.045
	46 Dibenzofuran	15.428	15.420	15.413	15.413	15.405	15.405	15.405	15.428	12.428-18.428	15.413	0.009
	47 4-Nitrophenol	15.312	15.289	15.274	15.266	15.266	15.274	+++++	15.312	12.312-18.312	15.280	0.018
	48 2,4-Dinitrotoluene	15.513	15.490	15.482	15.475	15.475	15.475	15.475	15.513	12.513-18.513	15.483	0.014
	49 Fluorene	16.139	16.132	16.124	16.124	16.124	16.124	16.124	16.139	13.139-19.139	16.127	0.006
	50 Diethylphthalate	16.016	16.008	16.000	15.992	15.985	15.985	15.985	16.016	13.016-19.016	15.996	0.012
	51 4-Chlorophenyl-phenyle	16.131	16.124	16.116	16.116	16.116	16.116	16.116	16.131	13.131-19.131	16.120	0.006
	52 4-Nitroaniline	16.286	16.255	16.232	16.224	16.217	16.217	16.224	16.286	13.286-19.286	16.236	0.025
	53 4,6-Dinitro-2-methylph	16.363	16.340	16.325	16.317	16.309	16.317	16.371	16.363	13.363-19.363	16.334	0.024

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20230216.b\ABN.m
Batch File: \\target\share\chem3\nt14.i\20230216.b
Inst ID: nt14.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	54 N-Nitrosodiphenylamine	16.394	16.386	16.379	16.371	16.371	16.363	16.371	16.394	13.394-19.394	16.376	0.011
$	55 2,4,6-Tribromophenol	16.679	16.671	16.664	16.656	16.656	16.656	16.664	16.679	13.679-19.679	16.664	0.009
	56 4-Bromophenyl-phenylet	17.134	17.126	17.126	17.119	17.119	17.119	17.119	17.134	14.134-20.134	17.123	0.006
	57 Hexachlorobenzene	17.443	17.443	17.435	17.435	17.428	17.428	17.435	17.443	14.443-20.443	17.435	0.006
	58 Pentachlorophenol	17.807	17.799	17.792	17.791	17.799	17.815	+++++	17.807	14.807-20.807	17.801	0.009
*	59 Phenanthrene-d10	18.070	18.062	18.055	18.054	18.055	18.055	18.055	18.070	15.070-21.070	18.058	0.006
	60 Phenanthrene	18.124	18.109	18.109	18.101	18.101	18.101	18.101	18.124	15.124-21.124	18.107	0.008
	61 Anthracene	18.217	18.202	18.202	18.194	18.194	18.194	18.194	18.217	15.217-21.217	18.199	0.009
	62 Carbazole	18.542	18.534	18.534	18.526	18.527	18.527	18.534	18.542	15.542-21.542	18.532	0.006
	63 Di-n-butylphthalate	19.354	19.347	19.339	19.339	19.339	19.339	19.347	19.354	16.354-22.354	19.343	0.006
	64 Fluoranthene	20.515	20.507	20.500	20.499	20.500	20.500	20.500	20.515	17.515-23.515	20.503	0.006
	65 Pyrene	20.940	20.933	20.925	20.925	20.925	20.925	20.925	20.940	17.940-23.940	20.928	0.006
$	66 Terphenyl-d14	21.227	21.219	21.219	21.219	21.219	21.219	21.219	21.227	18.227-24.227	21.220	0.003
	67 Butylbenzylphthalate	22.156	22.148	22.148	22.148	22.148	22.148	22.148	22.156	19.156-25.156	22.149	0.003
	68 Benzo(a)anthracene	23.100	23.093	23.093	23.093	23.093	23.093	23.093	23.100	20.100-26.100	23.094	0.003
*	69 Chrysene-d12	23.131	23.124	23.124	23.124	23.116	23.124	23.124	23.131	20.131-26.131	23.124	0.004
	70 3,3'-Dichlorobenzidine	23.069	23.062	23.054	23.054	23.054	23.054	23.054	23.069	20.069-26.069	23.057	0.006
	71 Chrysene	23.178	23.170	23.170	23.162	23.163	23.163	23.163	23.178	20.178-26.178	23.167	0.006
	72 bis(2-Ethylhexyl)phtha	23.178	23.178	23.178	23.178	23.170	23.178	23.178	23.178	20.178-26.178	23.177	0.003
	73 Di-n-octylphthalate	24.169	24.161	24.161	24.161	24.161	24.161	24.161	24.169	21.169-27.169	24.162	0.003
	74 Benzo(b)fluoranthene	24.958	24.951	24.943	24.943	24.943	24.943	24.943	24.958	21.958-27.958	24.946	0.006
	75 Benzo(k)fluoranthene	24.997	24.989	24.990	24.982	24.982	24.990	24.990	24.997	21.997-27.997	24.988	0.005
	187 Total Benzofluoranthen	24.997	24.989	24.990	24.943	24.982	24.943	24.943	24.997	21.997-27.997	24.970	0.025
	76 Benzo(a)pyrene	25.585	25.578	25.578	25.570	25.570	25.570	25.578	25.585	22.585-28.585	25.576	0.006

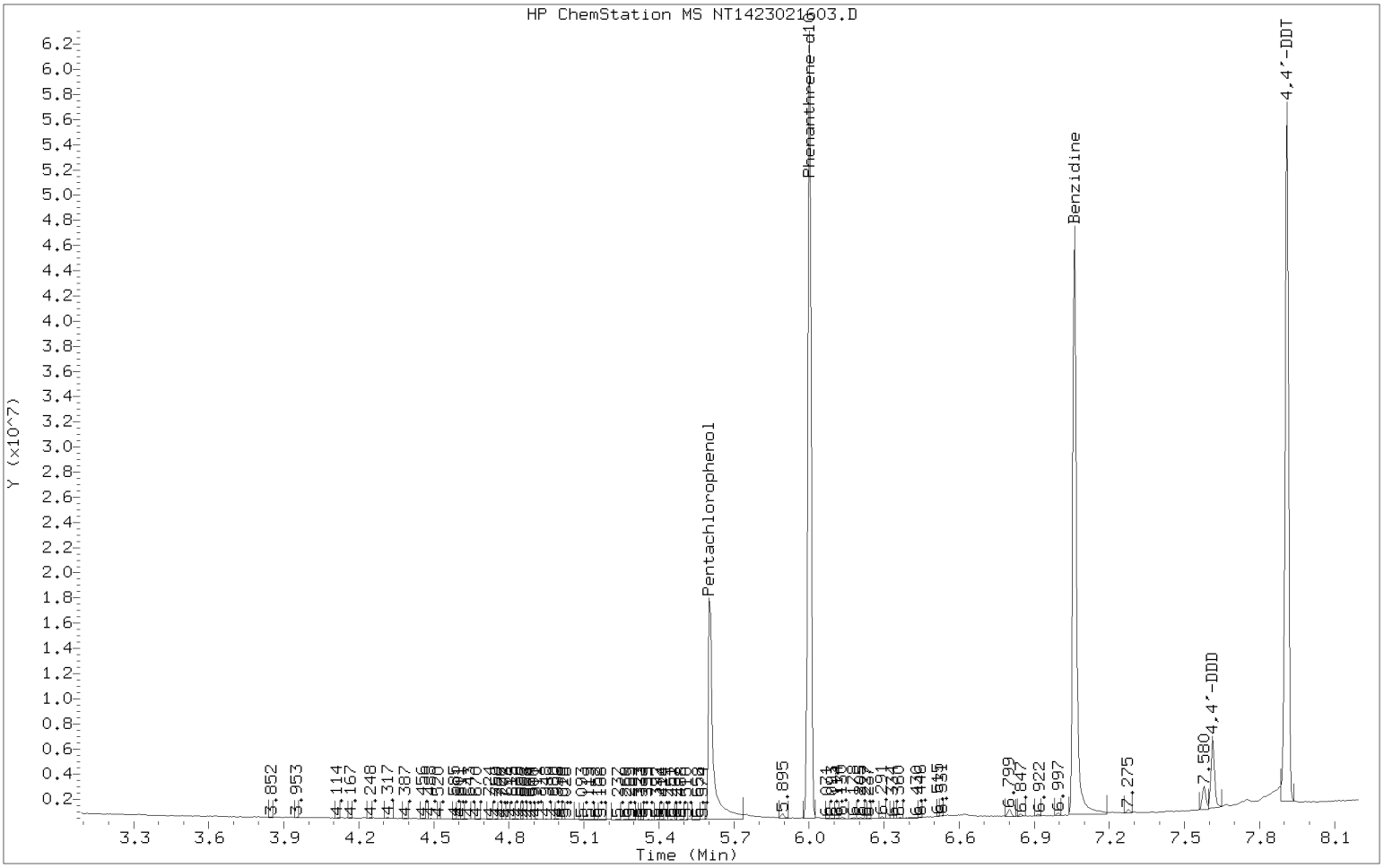
ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

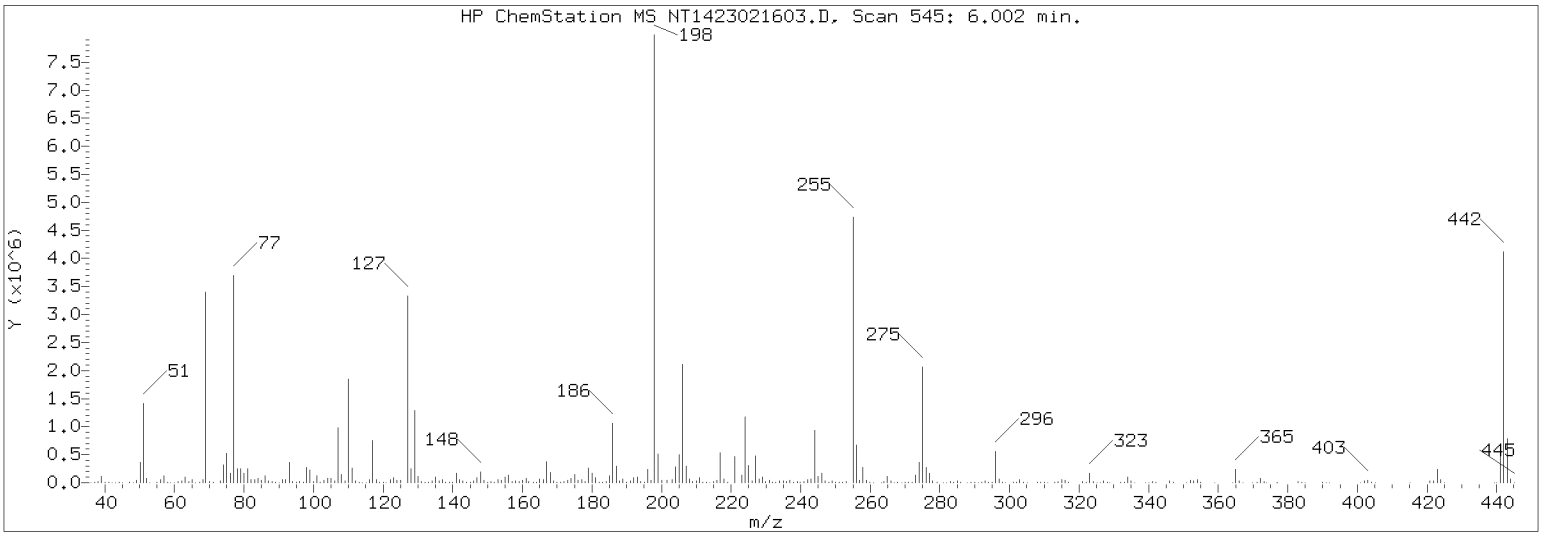
Method File: \\target\share\chem3\nt14.i\20230216.b\ABN.m
Batch File: \\target\share\chem3\nt14.i\20230216.b
Inst ID: nt14.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
*	77 Perylene-d12	25.694	25.686	25.686	25.686	25.687	25.687	25.686	25.694	22.694-28.694	25.688	0.003
	78 Indeno(1,2,3-cd)pyrene	28.260	28.237	28.237	28.229	28.237	28.237	28.245	28.260	25.260-31.260	28.240	0.010
	79 Dibenzo(a,h)anthracene	28.267	28.260	28.252	28.244	28.245	28.252	28.268	28.267	25.267-31.267	28.256	0.010
	80 Benzo(g,h,i)perylene	29.013	28.998	28.990	28.982	28.983	28.982	28.998	29.013	26.013-32.013	28.992	0.012
$	85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	51.633	48.633-54.633	+++++	+++++
$	86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	63.533	60.533-66.533	+++++	+++++
$	87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	60.273	57.273-63.273	+++++	+++++
$	88 Dibenz(a,h)anthracene-	+++++	+++++	+++++	+++++	+++++	+++++	+++++	78.600	75.600-81.600	+++++	+++++
$	89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.841	47.841-53.841	+++++	+++++
	90 N-Nitrosodimethylamine	4.597	4.589	4.574	4.566	4.566	4.566	4.566	4.597	1.597-7.597	4.575	0.013
	91 Aniline	8.374	8.366	8.359	8.359	8.359	8.359	8.359	8.374	5.374-11.374	8.362	0.006
	92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	56.160	53.160-59.160	+++++	+++++
	93 Benzidine	20.747	20.747	20.739	20.739	20.740	20.747	20.755	20.747	17.747-23.747	20.745	0.006
$	95 D10-1-methylnaphthalen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	52.075	49.075-55.075	+++++	+++++
	96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	49.250	46.250-52.250	+++++	+++++
	97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	61.202	58.202-64.202	+++++	+++++
	98 Retene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.787	15.787-21.787	+++++	+++++
	99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.361	21.361-27.361	+++++	+++++
	100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.411	22.411-28.411	+++++	+++++
	101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.023	23.023-29.023	+++++	+++++
	102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	79.550	76.550-82.550	+++++	+++++
	103 Pyridine	4.581	4.581	4.582	4.581	4.582	4.589	4.597	4.581	1.581-7.581	4.585	0.006
	188 2,6-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.874	8.874-14.874	+++++	+++++
	189 N-Nitrosomethylethylam	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.818	2.818-8.818	+++++	+++++

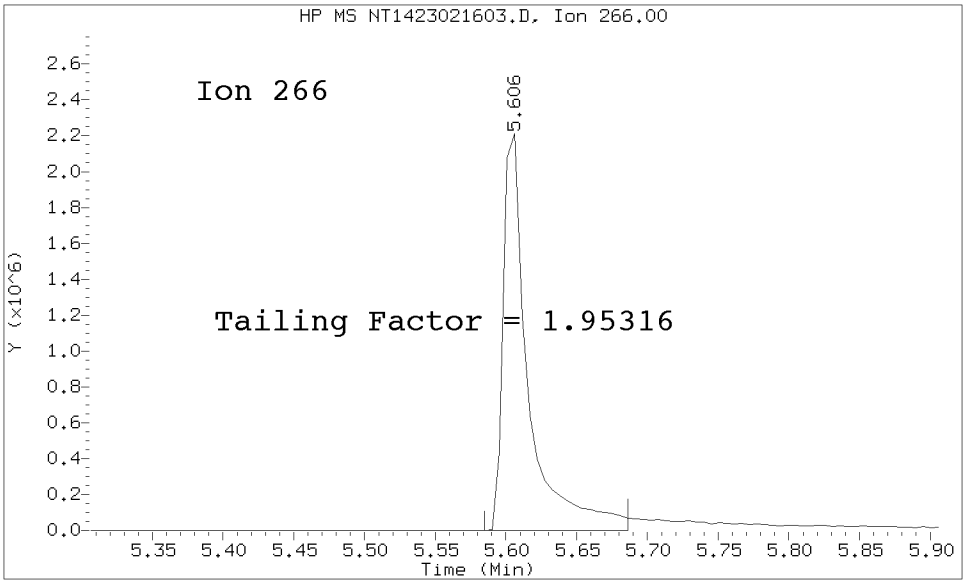
DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230216.b/NT1423021603.D/NT1423021603.D
Method Used: \20230216.b\DFTPP8270E.m Inst: nt14
Injection Date: 16-FEB-2023 14:33 Operator: DSD
Sample Info: SLB0234-TUN3 SLB0234-TUN3
Report Date: 02/28/2023 14:33



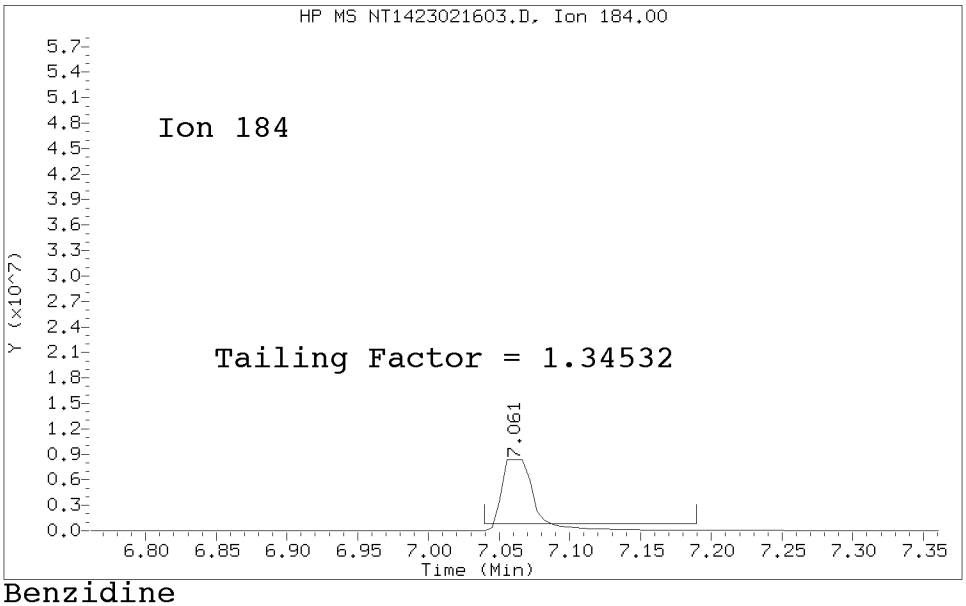


Datafile Analyzed: /20230216.b/NT1423021603.D/NT1423021603.D
Method Used: \20230216.b\DFTPP8270E.m\sw846ddt.m Inst: nt14
Injection Date: 16-FEB-2023 14:33 Operator: DSD
Sample Info: SEQ-TUN3
Report Date: 02/28/2023 14:33



Pentachlorophenol
==========
Exp. RT = 5.606
Found RT = 5.606

Tail Factor = 1.953 Maximum Allowed = 2.0



Benzidine
==========
Exp. RT = 7.061
Found RT = 7.061

Tail Factor = 1.345 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.9531646	2.000	PASS
Benzidine	1.3453237	2.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	9391744			N/A
4,4-DDE	0	0.0	20.0	PASS
4,4-DDD	1131675	10.8	20.0	PASS
4,4-DDD + DDE	1131675	10.8	20.0	PASS

Tuning Sample, nt14.i/20230216.b/NT1423021603.D, *** PASSED ***

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
68	Less than 2.00% of mass 69	0.74 (1.69)
69	Mass 69 relative abundance	43.59
70	Less than 2.00% of mass 69	0.22 (0.51)
197	Less than 2.00% of mass 198	0.61
199	5.00 - 9.00% of mass 198	6.61
365	1.00 - 100.00% of mass 198	2.96
441	Less than 150.00% of mass 443	7.33 (74.20)
442	Less than 200.00% of mass 198	52.01
443	15.00 - 24.00% of mass 442	9.87 (18.98)

Data File: NT1423021603.D
Spectrum: Avg. Scans 544-546 (6.00), Background Scan 538
Location of Maximum: 198.00
Number of points: 325

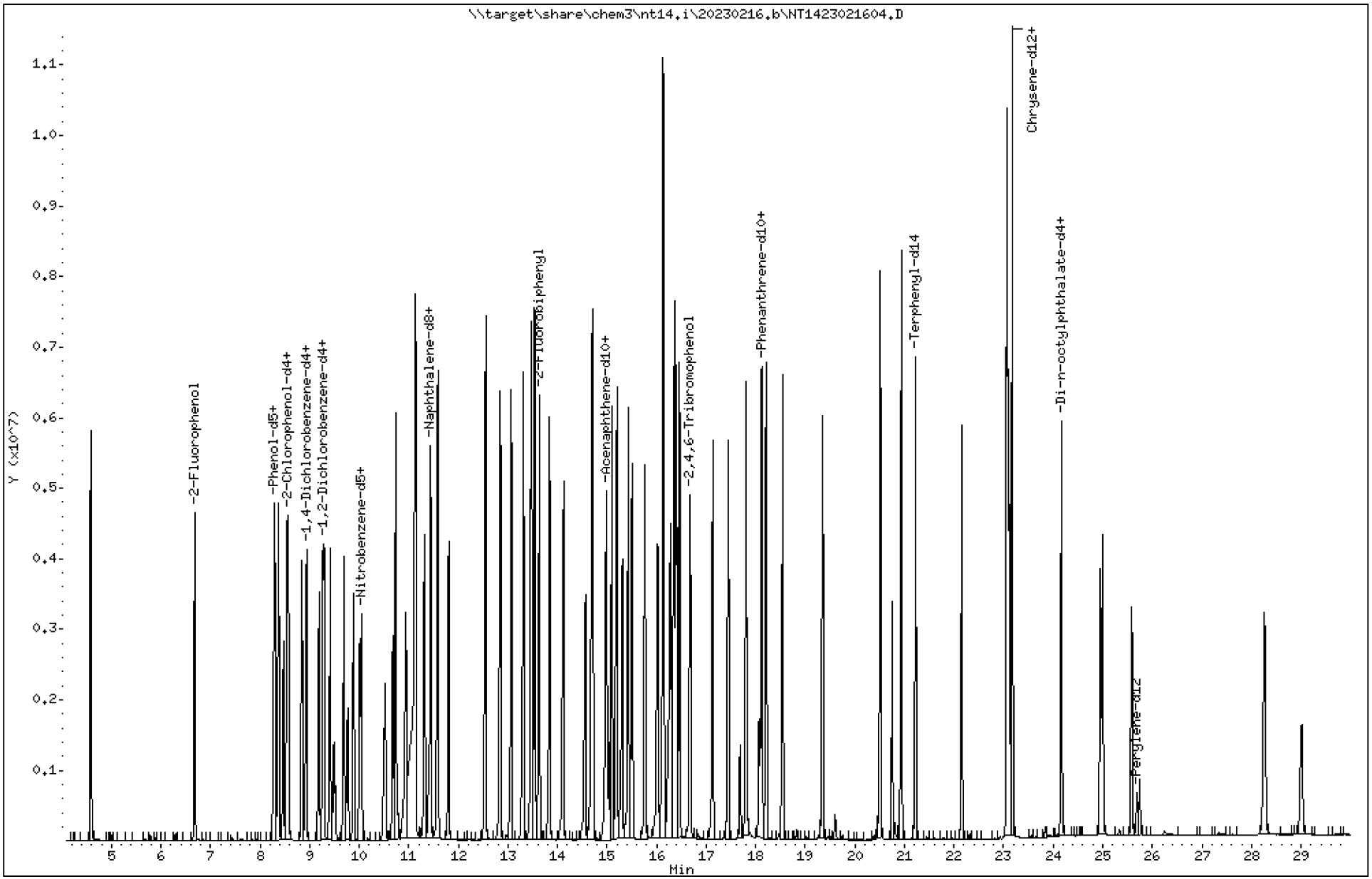
m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	234	127.00	2627072	210.00	30808	297.00	57304
37.00	4928	128.00	193536	211.00	66264	298.00	4346
38.00	16100	129.00	1002176	212.00	9012	299.00	778
39.00	86128	130.00	83024	213.00	4418	301.00	6536
40.00	1445	131.00	16110	214.00	2279	302.00	8309
41.00	1468	132.00	6808	215.00	17000	303.00	46096
42.00	911	133.00	2061	216.00	33704	304.00	12268
45.00	3191	134.00	28776	217.00	423104	305.00	985
48.00	1341	135.00	78176	218.00	55256	308.00	6175
49.00	6693	136.00	33232	219.00	5491	309.00	4166
50.00	287040	137.00	42088	221.00	341952	310.00	5991
51.00	1107456	138.00	8363	223.00	98976	311.00	732
52.00	60656	139.00	5700	224.00	901184	313.00	4780
53.00	2876	140.00	12940	225.00	232640	314.00	21184
55.00	10099	141.00	129168	226.00	25264	315.00	48568
56.00	44688	142.00	43080	227.00	360896	316.00	28648
57.00	99760	143.00	28672	228.00	53192	317.00	5757
58.00	6888	144.00	8339	229.00	80040	321.00	13596
59.00	1648	145.00	7386	230.00	9491	322.00	5967
60.00	1219	146.00	24536	231.00	35008	323.00	128608
61.00	23280	147.00	65392	232.00	5357	324.00	21648
62.00	28400	148.00	150720	233.00	6636	325.00	923
63.00	82528	149.00	32664	234.00	23312	326.00	1964
64.00	13066	150.00	10353	235.00	28000	327.00	25704
65.00	44920	151.00	16872	236.00	18056	328.00	12093
66.00	4461	152.00	11153	237.00	35552	329.00	3076
67.00	1649	153.00	42824	238.00	4722	332.00	9967
68.00	45176	154.00	34848	239.00	14633	333.00	12196
69.00	2675712	155.00	74600	240.00	12321	334.00	85224
70.00	13596	156.00	107384	241.00	22320	335.00	22864
73.00	21600	157.00	20016	242.00	47792	336.00	2619
74.00	251584	158.00	24240	243.00	50944	339.00	718
75.00	407680	159.00	22784	244.00	707776	340.00	1309
76.00	140096	160.00	40720	245.00	89264	341.00	14289
77.00	2915840	161.00	62672	246.00	131016	342.00	4394
78.00	200000	162.00	16872	247.00	28936	346.00	28552
79.00	186752	163.00	6683	248.00	6201	347.00	5145
80.00	136704	164.00	8065	249.00	26176	350.00	717
81.00	195200	165.00	49128	250.00	5926	351.00	823
82.00	47032	166.00	40400	251.00	5853	352.00	38056
83.00	45208	167.00	281088	252.00	7432	353.00	26224
85.00	31296	168.00	145536	253.00	15033	354.00	38056
86.00	54160	169.00	23504	254.00	9410	355.00	6985
87.00	26064	170.00	9632	255.00	3554304	359.00	2383
88.00	9527	171.00	12313	256.00	515328	364.00	1635
89.00	7167	172.00	22392	257.00	38256	365.00	181568
90.00	698	173.00	32920	258.00	210304	366.00	24640
91.00	40408	174.00	61832	259.00	31408	367.00	955
92.00	45528	175.00	112128	260.00	6139	370.00	3600

93.00	296960	176.00	31504	261.00	5764	371.00	8738
94.00	22352	177.00	48936	263.00	1078	372.00	60448
95.00	4027	178.00	18064	264.00	5808	373.00	16079
96.00	11069	179.00	205632	265.00	83712	374.00	1592
97.00	3421	180.00	139904	266.00	10984	377.00	1690
98.00	217408	181.00	66784	267.00	858	383.00	15955
99.00	183808	182.00	10904	268.00	681	384.00	4548
100.00	17952	183.00	6693	269.00	1031	385.00	782
101.00	98832	184.00	17728	270.00	3497	390.00	7317
102.00	4121	185.00	100784	271.00	7357	391.00	5379
103.00	32928	186.00	819968	272.00	11090	392.00	3751
104.00	64456	187.00	233216	273.00	102560	401.00	3177
105.00	58656	188.00	25416	274.00	276800	402.00	23400
106.00	20736	189.00	49520	275.00	1550848	403.00	32568
107.00	771648	190.00	8839	276.00	207552	404.00	11566
108.00	119928	191.00	20984	277.00	134784	405.00	2935
109.00	22672	192.00	68752	278.00	23960	415.00	674
110.00	1432064	193.00	74840	279.00	4579	421.00	24160
111.00	204544	194.00	19224	281.00	931	422.00	26616
112.00	24896	195.00	6565	282.00	3437	423.00	186048
113.00	8405	196.00	183680	283.00	14509	424.00	41216
114.00	1701	197.00	37512	284.00	9331	425.00	4321
115.00	1796	198.00	6138368	285.00	23984	438.00	1391
116.00	40928	199.00	405696	286.00	4717	439.00	1400
117.00	604736	200.00	30232	288.00	884	440.00	2550
118.00	44648	201.00	34040	289.00	5002	441.00	449664
119.00	8501	203.00	43656	290.00	4674	442.00	3192320
120.00	8877	204.00	213312	291.00	3293	443.00	606016
121.00	3538	205.00	381120	292.00	6118	444.00	54800
122.00	44736	206.00	1595904	293.00	25544	445.00	2486
123.00	73984	207.00	210944	294.00	6665		
124.00	34728	208.00	47112	295.00	9652		
125.00	32952	209.00	14622	296.00	426176		

Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021604.D
Date : 16-FEB-2023 15:54
Client ID:
Sample Info: SLB0234-CAL7

Instrument: nt14.i
Operator: DSD
Column diameter: 0.25

Column phase: ZB-5msi



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230216.b\NT1423021604.D
Lab Smp Id: SLB0234-CAL7
Inj Date : 16-FEB-2023 15:54 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0234-CAL7
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230216.b\ABN.m
Meth Date : 17-Feb-2023 15:05 deenayd Quant Type: ISTD
Cal Date : 16-FEB-2023 15:54 Cal File: NT1423021604.D
Als bottle: 2 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.681	6.682	(0.750)	2097651	30.0000	30.25
$	2 Phenol-d5	99	8.289	8.266	(0.931)	3244970	30.0000	29.50
	3 Phenol	94	8.312	8.289	(0.933)	2296985	20.0000	19.73
$	5 2-Chlorophenol-d4	132	8.543	8.536	(0.959)	2319767	30.0000	29.56
	4 Bis(2-Chloroethyl)ether	93	8.466	8.451	(0.950)	1763929	20.0000	19.83
	6 2-Chlorophenol	128	8.574	8.567	(0.963)	1698980	20.0000	20.72
	7 1,3-Dichlorobenzene	146	8.837	8.838	(0.992)	1759764	20.0000	19.28
*	8 1,4-Dichlorobenzene-d4	152	8.907	8.900	(1.000)	259368	4.00000	
	9 1,4-Dichlorobenzene	146	8.938	8.931	(1.003)	1692043	20.0000	19.53
$	10 1,2-Dichlorobenzene-d4	152	9.264	9.257	(1.040)	1090674	20.0000	18.54
	12 1,2-Dichlorobenzene	146	9.295	9.288	(1.044)	1678806	20.0000	19.38
	11 Benzyl alcohol	108	9.194	9.202	(1.032)	1339870	20.0000	19.94
	14 2,2'-oxybis(1-Chloropropane)	121	9.489	9.482	(1.065)	561070	20.0000	22.64(M)
	13 2-Methylphenol	108	9.412	9.404	(1.057)	1658461	20.0000	20.40
	17 Hexachloroethane	117	9.885	9.878	(1.110)	778131	20.0000	20.66
	16 N-Nitroso-di-n-propylamine	70	9.769	9.738	(1.097)	1567833	20.0000	21.18
	15 4-Methylphenol	108	9.691	9.684	(1.088)	1798437	20.0000	20.95
$	18 Nitrobenzene-d5	82	10.009	10.002	(0.878)	2207174	20.0000	19.65
	19 Nitrobenzene	77	10.048	10.033	(0.882)	2270540	20.0000	20.15
	20 Isophorone	82	10.521	10.491	(0.923)	3389977	20.0000	22.80
	21 2-Nitrophenol	139	10.677	10.677	(0.937)	1117285	20.0000	19.94
	22 2,4-Dimethylphenol	107	10.739	10.724	(0.942)	3138699	40.0000	36.88
	23 Bis(2-Chloroethoxy)methane	93	10.940	10.925	(0.960)	1958263	20.0000	20.25
	24 Benzoic acid	105	11.150	10.879	(0.978)	5699876	80.0000	79.64(M)
	25 2,4-Dichlorophenol	162	11.134	11.127	(0.977)	2833952	40.0000	38.91
	26 1,2,4-Trichlorobenzene	180	11.312	11.305	(0.993)	1677314	20.0000	19.01
*	27 Naphthalene-d8	136	11.397	11.389	(1.000)	972103	4.00000	
	28 Naphthalene	128	11.443	11.428	(1.004)	4664022	20.0000	19.46
	29 4-Chloroaniline	127	11.590	11.575	(1.017)	4060271	40.0000	39.65
	30 Hexachlorobutadiene	225	11.806	11.799	(1.036)	1058523	20.0000	19.46
	31 4-Chloro-3-methylphenol	107	12.549	12.542	(1.101)	3210029	40.0000	40.72
	32 2-Methylnaphthalene	142	12.843	12.836	(1.127)	3492908	20.0000	19.46
	33 Hexachlorocyclopentadiene	237	13.308	13.301	(0.886)	2559077	40.0000	44.78
	34 2,4,6-Trichlorophenol	196	13.470	13.463	(0.896)	2545083	40.0000	43.81

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	35	2,4,5-Trichlorophenol	196	13.547	13.541	(0.902)	2644678	40.0000	42.03
$	36	2-Fluorobiphenyl	172	13.633	13.617	(0.907)	3907816	20.0000	18.52
	37	2-Chloronaphthalene	162	13.842	13.826	(0.921)	3507429	20.0000	20.36
	38	2-Nitroaniline	65	14.120	14.097	(0.940)	2374702	40.0000	42.40
	39	Dimethylphthalate	163	14.561	14.531	(0.969)	3569925	20.0000	19.81
	40	Acenaphthylene	152	14.716	14.701	(0.979)	4916800	20.0000	18.71
	41	2,6-Dinitrotoluene	165	14.693	14.670	(0.978)	1758235	40.0000	41.47
*	42	Acenaphthene-d10	164	15.026	15.018	(1.000)	589881	4.00000	
	43	3-Nitroaniline	138	14.987	14.957	(0.997)	2004416	40.0000	44.54
	44	Acenaphthene	153	15.095	15.080	(1.005)	3108791	20.0000	19.76
	45	2,4-Dinitrophenol	184	15.203	15.282	(1.012)	2854102	80.0000	79.56
	46	Dibenzofuran	168	15.428	15.405	(1.027)	5076349	20.0000	19.66
	47	4-Nitrophenol	109	15.312	15.273	(1.019)	1073305	40.0000	39.83
	48	2,4-Dinitrotoluene	165	15.513	15.475	(1.032)	2648290	40.0000	44.18
	50	Diethylphthalate	149	16.015	15.984	(1.066)	4965731	20.0000	20.73
	49	Fluorene	166	16.139	16.124	(1.074)	5041652	20.0000	18.67
	51	4-Chlorophenyl-phenylether	204	16.131	16.116	(1.074)	2711944	20.0000	18.78
	52	4-Nitroaniline	138	16.285	16.224	(1.084)	2358738	40.0000	45.69
	53	4,6-Dinitro-2-methylphenol	198	16.362	16.370	(0.906)	3907775	80.0000	79.66
	54	N-Nitrosodiphenylamine	169	16.393	16.370	(0.907)	3380614	20.0000	20.09
$	55	2,4,6-Tribromophenol	330	16.678	16.663	(1.110)	1113180	30.0000	29.92
	56	4-Bromophenyl-phenylether	248	17.133	17.118	(0.948)	1614262	20.0000	21.54
	57	Hexachlorobenzene	284	17.442	17.434	(0.965)	1547999	20.0000	20.33
	58	Pentachlorophenol	266	17.806	17.814	(0.985)	1703210	40.0000	39.82
*	59	Phenanthrene-d10	188	18.069	18.054	(1.000)	1170883	4.00000	
	60	Phenanthrene	178	18.123	18.101	(1.003)	5608583	20.0000	19.93
	61	Anthracene	178	18.216	18.193	(1.008)	5510967	20.0000	19.77
	62	Carbazole	167	18.541	18.534	(1.026)	5376297	20.0000	21.25
	63	Di-n-butylphthalate	149	19.354	19.346	(1.071)	6258073	20.0000	22.15
	64	Fluoranthene	202	20.514	20.499	(0.887)	6399044	20.0000	20.88
	65	Pyrene	202	20.940	20.925	(0.905)	6293561	20.0000	19.42
$	66	Terphenyl-d14	244	21.226	21.219	(0.918)	4318428	20.0000	18.77
	67	Butylbenzylphthalate	149	22.155	22.148	(0.958)	2222069	20.0000	19.93
	68	Benzo(a)anthracene	228	23.100	23.092	(0.999)	4644554	20.0000	20.43
*	69	Chrysene-d12	240	23.131	23.123	(1.000)	710371	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.069	23.054	(0.997)	4294878	60.0000	59.77
	71	Chrysene	228	23.177	23.162	(1.002)	3878496	20.0000	18.97
	72	bis(2-Ethylhexyl)phthalate	149	23.177	23.178	(0.959)	2787873	20.0000	19.84
*	134	Di-n-octylphthalate-d4	153	24.160	24.153	(1.000)	918441	4.00000	
	73	Di-n-octylphthalate	149	24.168	24.161	(1.000)	4374080	20.0000	20.37
	74	Benzo(b)fluoranthene	252	24.958	24.943	(0.971)	3096394	20.0000	21.65
	75	Benzo(k)fluoranthene	252	24.997	24.989	(0.973)	3350043	20.0000	21.92(H)
	76	Benzo(a)pyrene	252	25.585	25.578	(0.996)	2809643	20.0000	19.93
*	77	Perylene-d12	264	25.693	25.686	(1.000)	450749	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.259	28.244	(1.100)	2534503	20.0000	19.91
	79	Dibenzo(a,h)anthracene	278	28.267	28.267	(1.100)	2091414	20.0000	19.90
	80	Benzo(g,h,i)perylene	276	29.013	28.997	(1.129)	2151989	20.0000	19.90
	90	N-Nitrosodimethylamine	74	4.596	4.566	(0.516)	2023986	40.0000	37.70
	91	Aniline	93	8.374	8.358	(0.940)	4525432	40.0000	36.33
	93	Benzidine	184	20.746	20.754	(0.897)	2294259	40.0000	40.19
	103	Pyridine	79	4.581	4.597	(0.514)	3237928	40.0000	38.12
	105	1-methylnaphthalene	142	13.068	13.053	(1.147)	3372298	20.0000	20.01
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.462	16.440	(1.096)	5657218	20.0000	19.43
	187	Total Benzofluoranthenes	252	24.997	24.943	(0.973)	6101526	40.0000	43.69(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
120 2,3,4,6-Tetrachlorophenol	232	15.760	15.760	(1.049)	1465480	20.0000	19.94

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021604.D
Lab Smp Id: SLB0234-CAL7
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\ABN.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 17:06
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	375798	187899	751596	259368	-30.98
27 Naphthalene-d8	1378169	689085	2756338	972103	-29.46
42 Acenaphthene-d10	847135	423568	1694270	589881	-30.37
59 Phenanthrene-d10	1675180	837590	3350360	1170883	-30.10
69 Chrysene-d12	1073562	536781	2147124	710371	-33.83
134 Di-n-octylphthala	1344129	672065	2688258	918441	-31.67
77 Perylene-d12	721978	360989	1443956	450749	-37.57

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.91	0.08
27 Naphthalene-d8	11.40	10.90	11.90	11.40	-0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.03	0.05
59 Phenanthrene-d10	18.05	17.55	18.55	18.07	0.08
69 Chrysene-d12	23.12	22.62	23.62	23.13	0.03
134 Di-n-octylphthala	24.15	23.65	24.65	24.16	0.03
77 Perylene-d12	25.69	25.19	26.19	25.69	0.03

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

REVIEW SUMMARY FOR FILE - NT1423021604.D

Lab ID: SLB0234-CAL7
nt14.i, ABN.m, 16-FEB-2023 15:54

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.978	0.000	0.9783	Benzoic acid
1.012	0.000	1.0118	2,4-Dinitrophenol
1.019	0.000	1.0190	4-Nitrophenol
0.985	0.000	0.9854	Pentachlorophenol

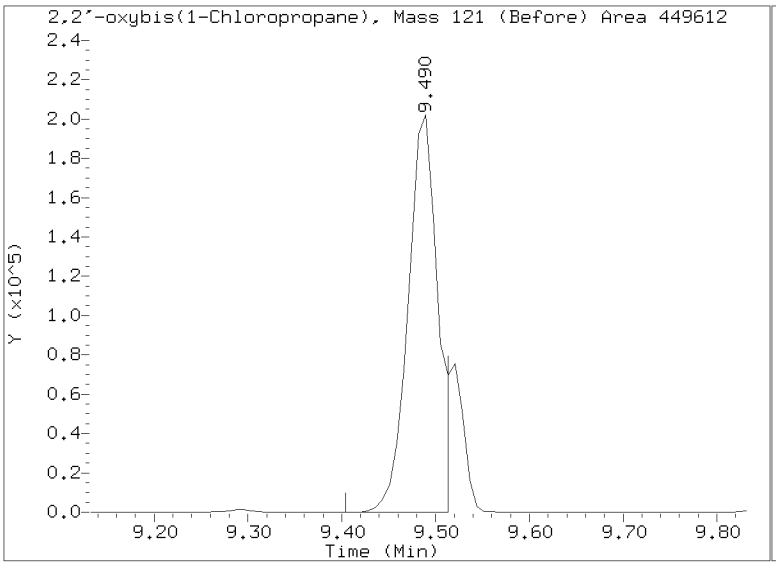
RRT check based on Ccal File: NT1423021610.D

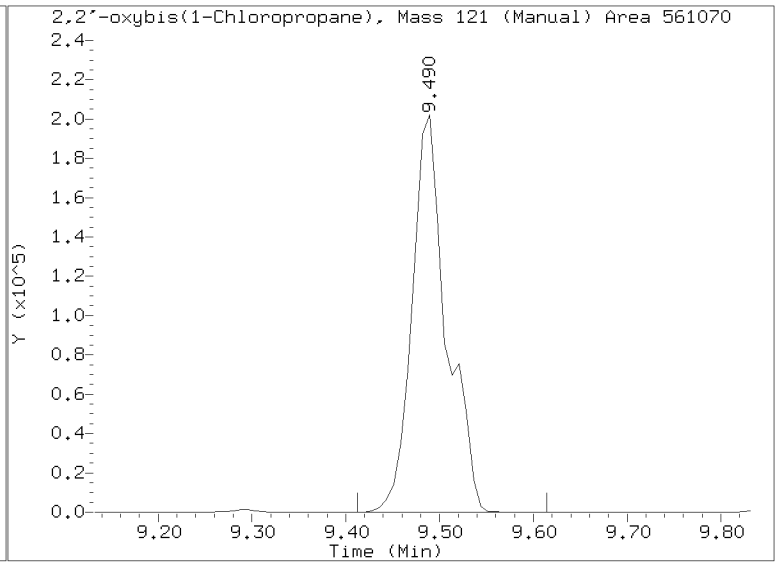
On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

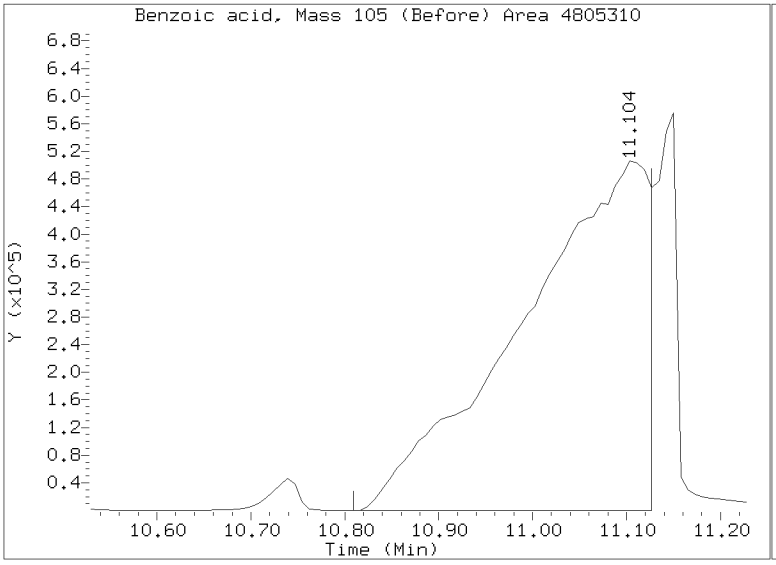
* Only compounds listed in the work order have been verified by the analyst *

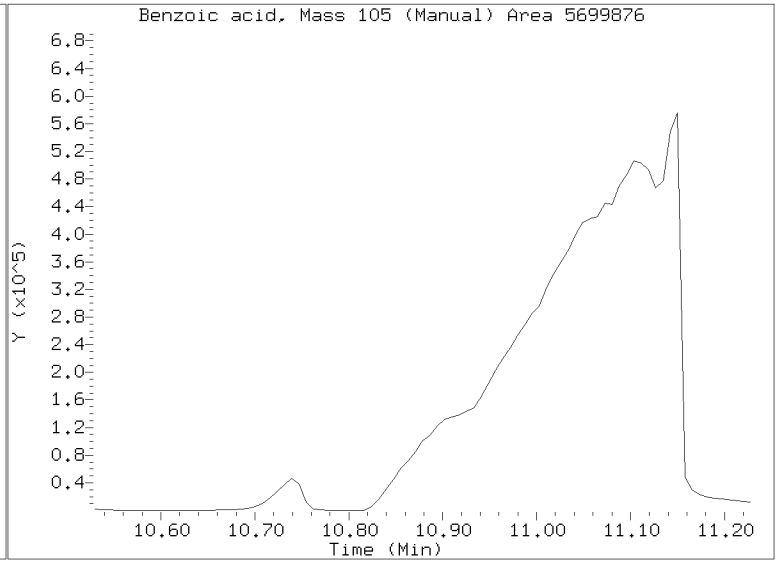
Quant Ion Manual Peak Adjustment Report

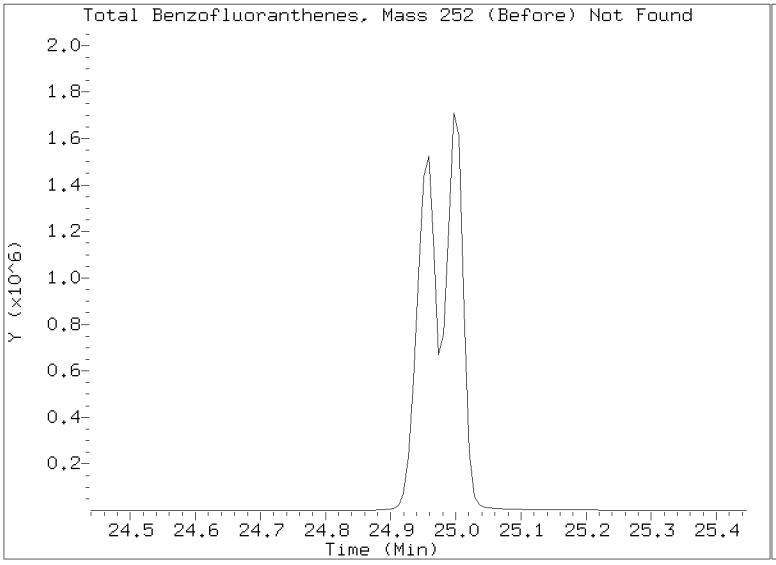
Datafile: //target/share/chem3/nt14.i/20230216.b/NT1423021604.D
Injection Date: 16-FEB-2023 15:54
Lab ID:SLB0234-CAL7 Client ID:
Report Date: 02/28/2023 14:37

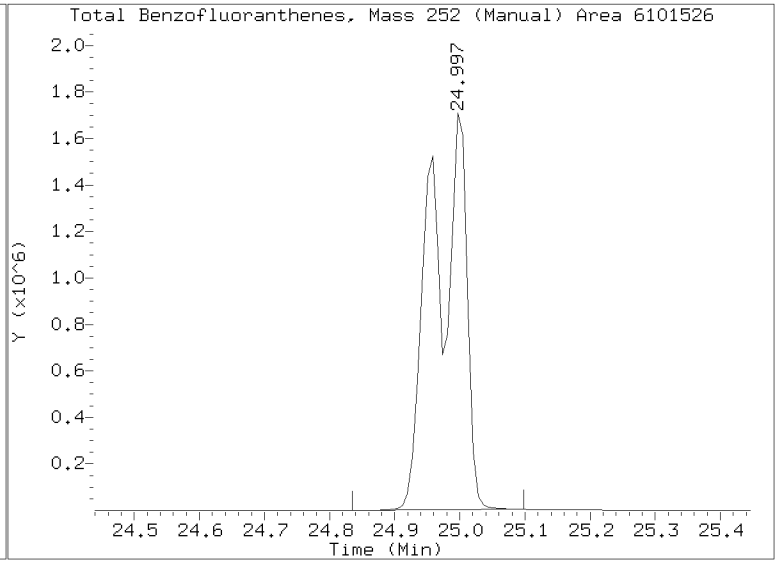












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021605.D

Page 1

Date : 16-FEB-2023 16:30

Client ID:

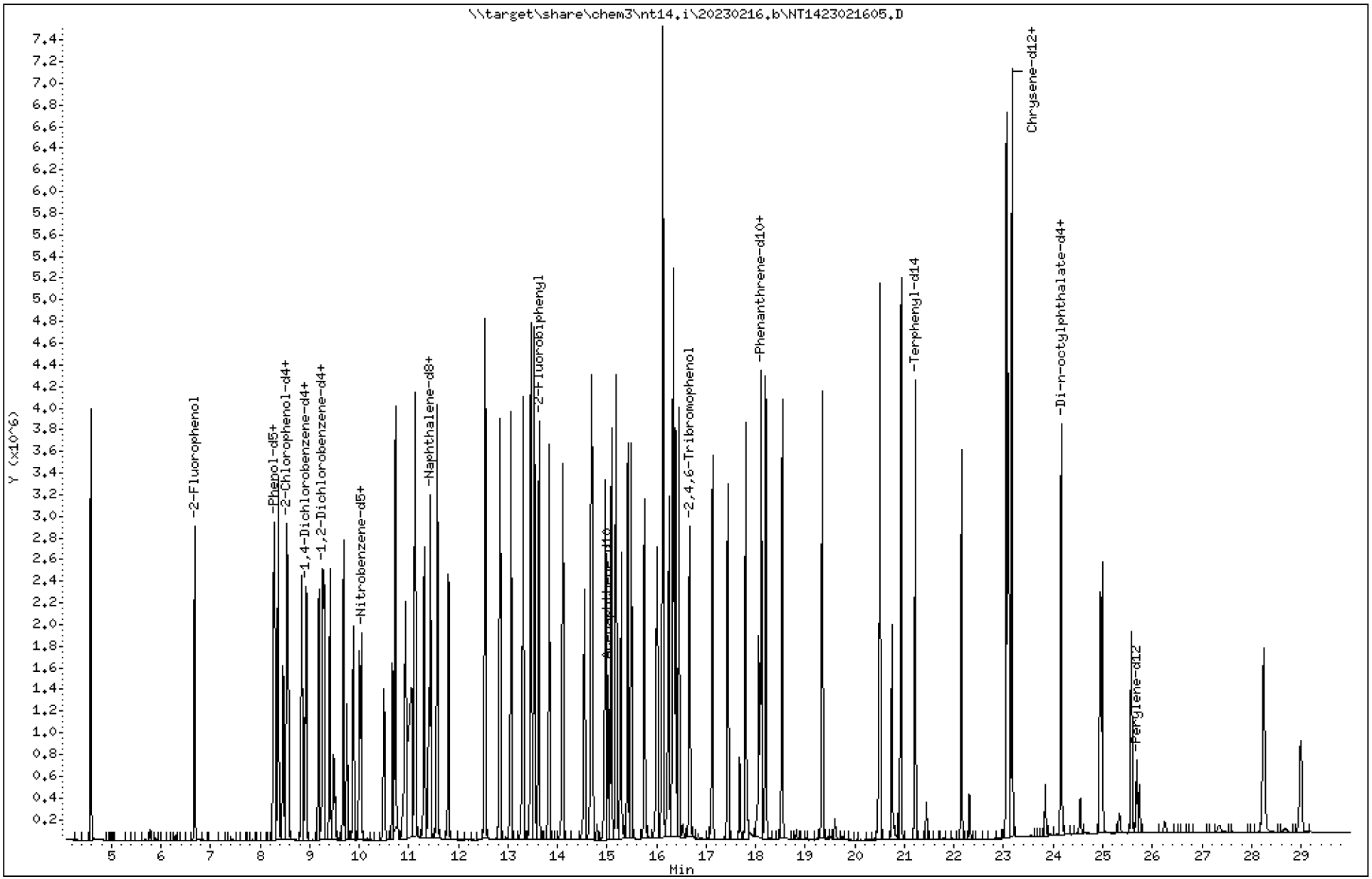
Instrument: nt14.i

Sample Info: SLB0234-CAL6

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230216.b\NT1423021605.D
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Inj Date : 16-FEB-2023 16:30 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0234-CAL6
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230216.b\ABN.m
Meth Date : 17-Feb-2023 15:05 deenayd Quant Type: ISTD
Cal Date : 16-FEB-2023 16:30 Cal File: NT1423021605.D
Als bottle: 3 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.674	6.682	(0.750)	1251231	15.0000	16.07
$	2 Phenol-d5	99	8.273	8.266	(0.930)	1897289	15.0000	15.36
	3 Phenol	94	8.296	8.289	(0.932)	1360085	10.0000	10.40
$	5 2-Chlorophenol-d4	132	8.544	8.536	(0.960)	1329954	15.0000	15.09
	4 Bis(2-Chloroethyl)ether	93	8.459	8.451	(0.950)	1012397	10.0000	10.14
	6 2-Chlorophenol	128	8.567	8.567	(0.963)	979948	10.0000	10.64
	7 1,3-Dichlorobenzene	146	8.838	8.838	(0.993)	1024035	10.0000	9.990
*	8 1,4-Dichlorobenzene-d4	152	8.900	8.900	(1.000)	291239	4.00000	
	9 1,4-Dichlorobenzene	146	8.931	8.931	(1.003)	983006	10.0000	10.10
$	10 1,2-Dichlorobenzene-d4	152	9.264	9.257	(1.041)	629192	10.0000	9.525
	12 1,2-Dichlorobenzene	146	9.288	9.288	(1.044)	972608	10.0000	10.00
	11 Benzyl alcohol	108	9.187	9.202	(1.032)	765776	10.0000	10.29
	14 2,2'-oxybis(1-Chloropropane)	121	9.482	9.482	(1.065)	290232	10.0000	10.43(M)
	13 2-Methylphenol	108	9.412	9.404	(1.058)	956689	10.0000	10.48
	17 Hexachloroethane	117	9.878	9.878	(1.110)	440399	10.0000	10.41
	16 N-Nitroso-di-n-propylamine	70	9.753	9.738	(1.096)	882255	10.0000	10.62
	15 4-Methylphenol	108	9.684	9.684	(1.088)	1027938	10.0000	10.66
$	18 Nitrobenzene-d5	82	10.009	10.002	(0.878)	1239260	10.0000	9.990
	19 Nitrobenzene	77	10.041	10.033	(0.881)	1306597	10.0000	10.50
	20 Isophorone	82	10.506	10.491	(0.922)	1880940	10.0000	11.45
	21 2-Nitrophenol	139	10.669	10.677	(0.936)	602543	10.0000	10.30
	22 2,4-Dimethylphenol	107	10.731	10.724	(0.942)	1712162	20.0000	18.21
	23 Bis(2-Chloroethoxy)methane	93	10.933	10.925	(0.959)	1115982	10.0000	10.45
	24 Benzoic acid	105	11.057	10.879	(0.970)	2811078	40.0000	42.26
	25 2,4-Dichlorophenol	162	11.126	11.127	(0.976)	1730499	20.0000	21.51
	26 1,2,4-Trichlorobenzene	180	11.312	11.305	(0.993)	966189	10.0000	9.914
*	27 Naphthalene-d8	136	11.397	11.389	(1.000)	1073728	4.00000	
	28 Naphthalene	128	11.436	11.428	(1.003)	2656821	10.0000	10.04
	29 4-Chloroaniline	127	11.582	11.575	(1.016)	2319136	20.0000	20.50
	30 Hexachlorobutadiene	225	11.799	11.799	(1.035)	606681	10.0000	10.10
	31 4-Chloro-3-methylphenol	107	12.542	12.542	(1.100)	1860890	20.0000	21.37
	32 2-Methylnaphthalene	142	12.836	12.836	(1.126)	2015045	10.0000	10.16
	33 Hexachlorocyclopentadiene	237	13.308	13.301	(0.886)	1439778	20.0000	22.77
	34 2,4,6-Trichlorophenol	196	13.463	13.463	(0.896)	1414598	20.0000	22.01

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
35	2,4,5-Trichlorophenol	196	13.540	13.541	(0.902)	1548571	20.0000	22.25
$ 36	2-Fluorobiphenyl	172	13.625	13.617	(0.907)	2240106	10.0000	9.594
37	2-Chloronaphthalene	162	13.834	13.826	(0.921)	1998007	10.0000	10.48
38	2-Nitroaniline	65	14.113	14.097	(0.940)	1346446	20.0000	21.73
39	Dimethylphthalate	163	14.546	14.531	(0.969)	2033320	10.0000	10.20
40	Acenaphthylene	152	14.709	14.701	(0.979)	2873882	10.0000	9.887
41	2,6-Dinitrotoluene	165	14.685	14.670	(0.978)	1021001	20.0000	21.77
* 42	Acenaphthene-d10	164	15.018	15.018	(1.000)	652598	4.00000	
43	3-Nitroaniline	138	14.972	14.957	(0.997)	1117162	20.0000	22.44
44	Acenaphthene	153	15.088	15.080	(1.005)	1785928	10.0000	10.26
45	2,4-Dinitrophenol	184	15.180	15.282	(1.011)	1456316	40.0000	42.52
46	Dibenzofuran	168	15.420	15.405	(1.027)	2922516	10.0000	10.23
47	4-Nitrophenol	109	15.289	15.273	(1.018)	610750	20.0000	20.83
48	2,4-Dinitrotoluene	165	15.490	15.475	(1.031)	1476541	20.0000	22.26
50	Diethylphthalate	149	16.008	15.984	(1.066)	2877967	10.0000	10.86
49	Fluorene	166	16.131	16.124	(1.074)	2963854	10.0000	9.919
51	4-Chlorophenyl-phenylether	204	16.123	16.116	(1.074)	1605736	10.0000	10.05
52	4-Nitroaniline	138	16.254	16.224	(1.082)	1311469	20.0000	22.96
53	4,6-Dinitro-2-methylphenol	198	16.339	16.370	(0.905)	2097838	40.0000	41.79
54	N-Nitrosodiphenylamine	169	16.386	16.370	(0.907)	1929962	10.0000	10.36
$ 55	2,4,6-Tribromophenol	330	16.671	16.663	(1.110)	603341	15.0000	15.40
56	4-Bromophenyl-phenylether	248	17.126	17.118	(0.948)	896399	10.0000	10.81
57	Hexachlorobenzene	284	17.443	17.434	(0.966)	861081	10.0000	10.22
58	Pentachlorophenol	266	17.799	17.814	(0.985)	916281	20.0000	20.92
* 59	Phenanthrene-d10	188	18.062	18.054	(1.000)	1295935	4.00000	
60	Phenanthrene	178	18.108	18.101	(1.003)	3157309	10.0000	10.14
61	Anthracene	178	18.201	18.193	(1.008)	3168788	10.0000	10.27
62	Carbazole	167	18.534	18.534	(1.026)	3066922	10.0000	10.95
63	Di-n-butylphthalate	149	19.346	19.346	(1.071)	3599026	10.0000	11.51
64	Fluoranthene	202	20.507	20.499	(0.887)	3721417	10.0000	10.76
65	Pyrene	202	20.932	20.925	(0.905)	3653827	10.0000	9.995
$ 66	Terphenyl-d14	244	21.219	21.219	(0.918)	2512884	10.0000	9.681
67	Butylbenzylphthalate	149	22.148	22.148	(0.958)	1275127	10.0000	10.36
68	Benzo(a)anthracene	228	23.092	23.092	(0.999)	2666606	10.0000	10.40
* 69	Chrysene-d12	240	23.123	23.123	(1.000)	801336	4.00000	
70	3,3'-Dichlorobenzidine	252	23.061	23.054	(0.997)	2483520	30.0000	31.13
71	Chrysene	228	23.170	23.162	(1.002)	2353274	10.0000	10.20
72	bis(2-Ethylhexyl)phthalate	149	23.177	23.178	(0.960)	1652176	10.0000	10.65
* 134	Di-n-octylphthalate-d4	153	24.153	24.153	(1.000)	964521	4.00000	
73	Di-n-octylphthalate	149	24.161	24.161	(1.000)	2401255	10.0000	10.65
74	Benzo(b)fluoranthene	252	24.950	24.943	(0.971)	1722526	10.0000	10.82
75	Benzo(k)fluoranthene	252	24.989	24.989	(0.973)	1893445	10.0000	11.13(H)
76	Benzo(a)pyrene	252	25.577	25.578	(0.996)	1591795	10.0000	10.35
* 77	Perylene-d12	264	25.686	25.686	(1.000)	501893	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	28.236	28.244	(1.099)	1385879	10.0000	10.49
79	Dibenzo(a,h)anthracene	278	28.259	28.267	(1.100)	1144114	10.0000	10.50
80	Benzo(g,h,i)perylene	276	28.997	28.997	(1.129)	1151263	10.0000	10.55
90	N-Nitrosodimethylamine	74	4.589	4.566	(0.516)	1239357	20.0000	20.56
91	Aniline	93	8.366	8.358	(0.940)	2667847	20.0000	19.08
93	Benzidine	184	20.746	20.754	(0.897)	1329832	20.0000	17.53
103	Pyridine	79	4.581	4.597	(0.515)	1964983	20.0000	20.60
105	1-methylnaphthalene	142	13.060	13.053	(1.146)	1937800	10.0000	10.41
111	Azobenzene (1,2-DP-Hydrazine)	77	16.455	16.440	(1.096)	3345797	10.0000	10.39
187	Total Benzofluoranthenes	252	24.989	24.943	(0.973)	3407168	20.0000	21.91(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
120 2,3,4,6-Tetrachlorophenol	232	15.752	15.760	(1.049)	799412	10.0000	10.31

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021605.D
Lab Smp Id: SLB0234-CAL6
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\ABN.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 17:06
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	375798	187899	751596	291239	-22.50
27 Naphthalene-d8	1378169	689085	2756338	1073728	-22.09
42 Acenaphthene-d10	847135	423568	1694270	652598	-22.96
59 Phenanthrene-d10	1675180	837590	3350360	1295935	-22.64
69 Chrysene-d12	1073562	536781	2147124	801336	-25.36
134 Di-n-octylphthala	1344129	672065	2688258	964521	-28.24
77 Perylene-d12	721978	360989	1443956	501893	-30.48

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	-0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.40	-0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	-0.00
59 Phenanthrene-d10	18.05	17.55	18.55	18.06	0.04
69 Chrysene-d12	23.12	22.62	23.62	23.12	-0.00
134 Di-n-octylphthala	24.15	23.65	24.65	24.15	-0.00
77 Perylene-d12	25.69	25.19	26.19	25.69	-0.00

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

REVIEW SUMMARY FOR FILE - NT1423021605.D

Lab ID: SLB0234-CAL6
nt14.i, ABN.m, 16-FEB-2023 16:30

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.970	0.000	0.9701	Benzoic acid
1.011	0.000	1.0108	2,4-Dinitrophenol
1.018	0.000	1.0180	4-Nitrophenol
0.985	0.000	0.9854	Pentachlorophenol

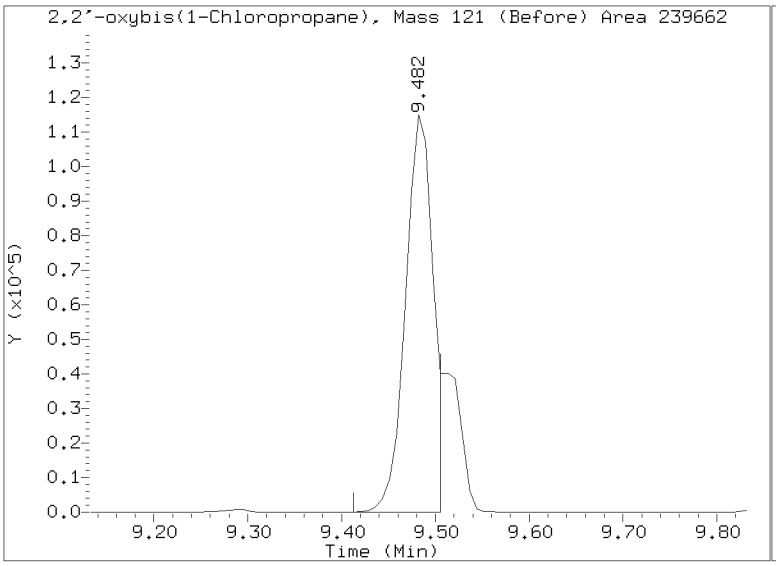
RRT check based on Ccal File: NT1423021610.D

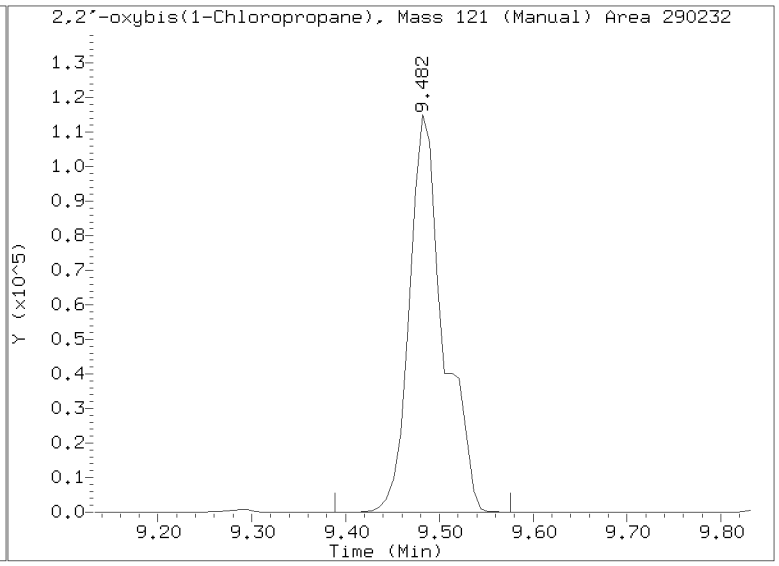
On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

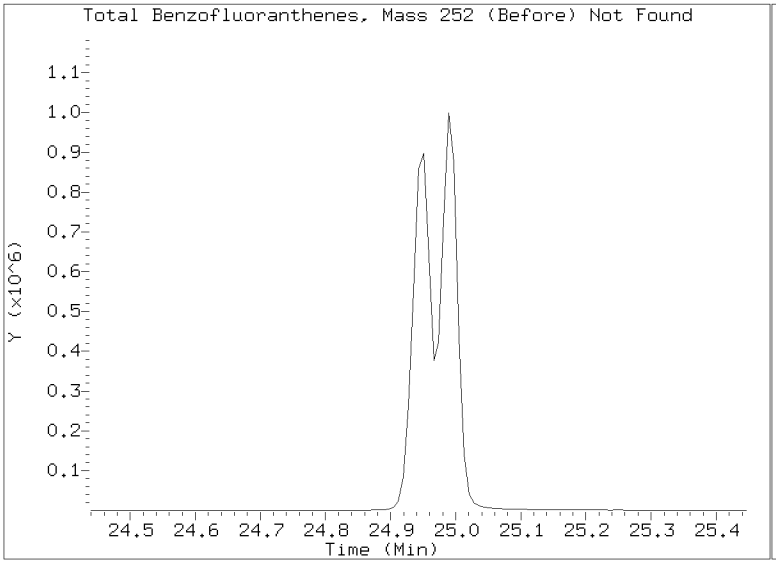
* Only compounds listed in the work order have been verified by the analyst *

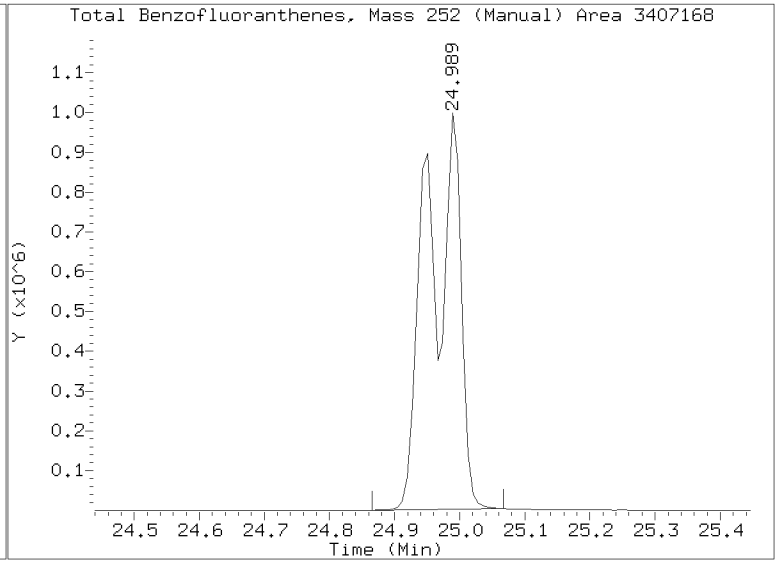
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230216.b/NT1423021605.D
Injection Date: 16-FEB-2023 16:30
Lab ID:SLB0234-CAL6 Client ID:
Report Date: 02/28/2023 14:37









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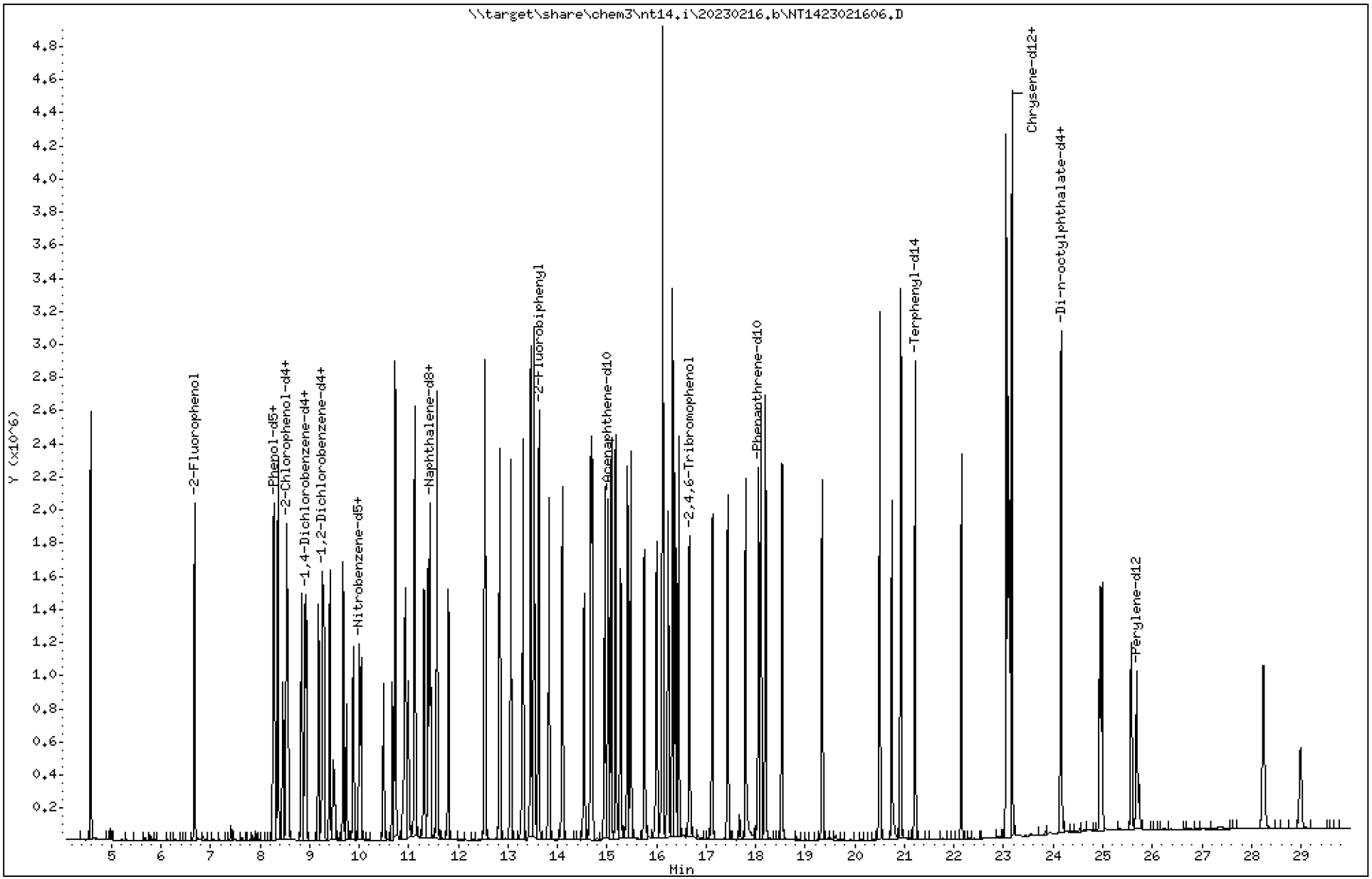
Date : 16-FEB-2023 17:06
Client ID:
Sample Info: SLB0234-CAL5

Instrument: nt14.i
Operator: DSD
Column diameter: 0.25

Column phase: ZB-5msi



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

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Inj Date : 16-FEB-2023 17:06 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0234-CAL5
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230216.b\ABN.m
Meth Date : 17-Feb-2023 15:05 deenayd Quant Type: ISTD
Cal Date : 16-FEB-2023 17:06 Cal File: NT1423021606.D
Als bottle: 4 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.674	6.682	(0.750)	818280	7.50000	8.145
$	2 Phenol-d5	99	8.266	8.266	(0.929)	1232905	7.50000	7.736
	3 Phenol	94	8.289	8.289	(0.931)	815627	5.00000	4.834
$	5 2-Chlorophenol-d4	132	8.536	8.536	(0.959)	857440	7.50000	7.540
	4 Bis(2-Chloroethyl)ether	93	8.459	8.451	(0.950)	585176	5.00000	4.540
	6 2-Chlorophenol	128	8.567	8.567	(0.963)	574853	5.00000	4.838
	7 1,3-Dichlorobenzene	146	8.838	8.838	(0.993)	605329	5.00000	4.577
*	8 1,4-Dichlorobenzene-d4	152	8.900	8.900	(1.000)	375798	4.00000	
	9 1,4-Dichlorobenzene	146	8.931	8.931	(1.003)	576641	5.00000	4.594
$	10 1,2-Dichlorobenzene-d4	152	9.265	9.257	(1.041)	406124	5.00000	4.765
	12 1,2-Dichlorobenzene	146	9.288	9.288	(1.044)	575688	5.00000	4.588
	11 Benzyl alcohol	108	9.179	9.202	(1.031)	441332	5.00000	4.631
	14 2,2'-oxybis(1-Chloropropane)	121	9.482	9.482	(1.065)	141219	5.00000	3.934
	13 2-Methylphenol	108	9.404	9.404	(1.057)	576945	5.00000	4.897
	17 Hexachloroethane	117	9.878	9.878	(1.110)	253677	5.00000	4.648
	16 N-Nitroso-di-n-propylamine	70	9.746	9.738	(1.095)	511140	5.00000	4.766
	15 4-Methylphenol	108	9.676	9.684	(1.087)	618848	5.00000	4.975
$	18 Nitrobenzene-d5	82	10.002	10.002	(0.878)	799385	5.00000	5.021
	19 Nitrobenzene	77	10.041	10.033	(0.881)	759995	5.00000	4.757
	20 Isophorone	82	10.491	10.491	(0.920)	1059544	5.00000	5.026
	21 2-Nitrophenol	139	10.669	10.677	(0.936)	341957	5.00000	4.686
	22 2,4-Dimethylphenol	107	10.723	10.724	(0.941)	1167020	10.0000	9.673
	23 Bis(2-Chloroethoxy)methane	93	10.925	10.925	(0.959)	643978	5.00000	4.696
	24 Benzoic acid	105	10.995	10.879	(0.965)	1390756	20.0000	17.57
	25 2,4-Dichlorophenol	162	11.119	11.127	(0.976)	1056223	10.0000	10.23
	26 1,2,4-Trichlorobenzene	180	11.312	11.305	(0.993)	565684	5.00000	4.522
*	27 Naphthalene-d8	136	11.397	11.389	(1.000)	1378169	4.00000	
	28 Naphthalene	128	11.436	11.428	(1.003)	1611510	5.00000	4.742
	29 4-Chloroaniline	127	11.575	11.575	(1.016)	1486717	10.0000	10.24
	30 Hexachlorobutadiene	225	11.799	11.799	(1.035)	353300	5.00000	4.582
	31 4-Chloro-3-methylphenol	107	12.534	12.542	(1.100)	1116957	10.0000	9.994
	32 2-Methylnaphthalene	142	12.836	12.836	(1.126)	1172556	5.00000	4.607
	33 Hexachlorocyclopentadiene	237	13.308	13.301	(0.886)	826145	10.0000	10.07
	34 2,4,6-Trichlorophenol	196	13.463	13.463	(0.896)	836957	10.0000	10.03

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	35	2,4,5-Trichlorophenol	196	13.532	13.541	(0.901)	906677	10.0000	10.03
$	36	2-Fluorobiphenyl	172	13.625	13.617	(0.907)	1460239	5.00000	4.818
	37	2-Chloronaphthalene	162	13.834	13.826	(0.921)	1145676	5.00000	4.631
	38	2-Nitroaniline	65	14.097	14.097	(0.939)	772331	10.0000	9.602
	39	Dimethylphthalate	163	14.538	14.531	(0.968)	1182147	5.00000	4.569
	40	Acenaphthylene	152	14.701	14.701	(0.979)	1775928	5.00000	4.707
	41	2,6-Dinitrotoluene	165	14.678	14.670	(0.977)	580077	10.0000	9.527
*	42	Acenaphthene-d10	164	15.018	15.018	(1.000)	847135	4.00000	
	43	3-Nitroaniline	138	14.956	14.957	(0.996)	628444	10.0000	9.724
	44	Acenaphthene	153	15.088	15.080	(1.005)	1064352	5.00000	4.711
	45	2,4-Dinitrophenol	184	15.173	15.282	(1.010)	718089	20.0000	17.33
	46	Dibenzofuran	168	15.412	15.405	(1.026)	1695271	5.00000	4.571
	47	4-Nitrophenol	109	15.273	15.273	(1.017)	350369	10.0000	9.293
	48	2,4-Dinitrotoluene	165	15.482	15.475	(1.031)	827079	10.0000	9.607
	50	Diethylphthalate	149	16.000	15.984	(1.065)	1527408	5.00000	4.440
	49	Fluorene	166	16.124	16.124	(1.074)	1821693	5.00000	4.697
	51	4-Chlorophenyl-phenylether	204	16.116	16.116	(1.073)	936319	5.00000	4.515
	52	4-Nitroaniline	138	16.231	16.224	(1.081)	719888	10.0000	9.709
	53	4,6-Dinitro-2-methylphenol	198	16.324	16.370	(0.904)	1141937	20.0000	18.32
	54	N-Nitrosodiphenylamine	169	16.378	16.370	(0.907)	1111128	5.00000	4.616
$	55	2,4,6-Tribromophenol	330	16.663	16.663	(1.110)	354481	7.50000	7.148
	56	4-Bromophenyl-phenylether	248	17.126	17.118	(0.949)	502492	5.00000	4.687
	57	Hexachlorobenzene	284	17.435	17.434	(0.966)	488352	5.00000	4.482
	58	Pentachlorophenol	266	17.791	17.814	(0.985)	504425	10.0000	9.269
*	59	Phenanthrene-d10	188	18.054	18.054	(1.000)	1675180	4.00000	
	60	Phenanthrene	178	18.108	18.101	(1.003)	1871753	5.00000	4.650
	61	Anthracene	178	18.201	18.193	(1.008)	1978745	5.00000	4.962
	62	Carbazole	167	18.534	18.534	(1.027)	1763283	5.00000	4.872
	63	Di-n-butylphthalate	149	19.339	19.346	(1.071)	2056874	5.00000	5.088
	64	Fluoranthene	202	20.499	20.499	(0.887)	2212688	5.00000	4.777
	65	Pyrene	202	20.925	20.925	(0.905)	2239922	5.00000	4.574
$	66	Terphenyl-d14	244	21.219	21.219	(0.918)	1674581	5.00000	4.816
	67	Butylbenzylphthalate	149	22.148	22.148	(0.958)	747612	5.00000	4.589
	68	Benzo(a)anthracene	228	23.092	23.092	(0.999)	1643791	5.00000	4.785
*	69	Chrysene-d12	240	23.123	23.123	(1.000)	1073562	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.054	23.054	(0.997)	1455887	15.0000	13.75
	71	Chrysene	228	23.170	23.162	(1.002)	1470334	5.00000	4.758
	72	bis(2-Ethylhexyl)phthalate	149	23.178	23.178	(0.960)	968097	5.00000	4.307
*	134	Di-n-octylphthalate-d4	153	24.153	24.153	(1.000)	1344129	4.00000	
	73	Di-n-octylphthalate	149	24.161	24.161	(1.000)	1431177	5.00000	4.554
	74	Benzo(b)fluoranthene	252	24.943	24.943	(0.971)	1144607	5.00000	4.996
	75	Benzo(k)fluoranthene	252	24.989	24.989	(0.973)	1142401	5.00000	4.667
	76	Benzo(a)pyrene	252	25.578	25.578	(0.996)	1008040	5.00000	4.606
*	77	Perylene-d12	264	25.686	25.686	(1.000)	721978	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.236	28.244	(1.099)	815881	5.00000	4.459
	79	Dibenzo(a,h)anthracene	278	28.252	28.267	(1.100)	668509	5.00000	4.434
	80	Benzo(g,h,i)perylene	276	28.990	28.997	(1.129)	650179	5.00000	4.357
	90	N-Nitrosodimethylamine	74	4.573	4.566	(0.514)	784103	10.0000	10.08
	91	Aniline	93	8.358	8.358	(0.939)	1741207	10.0000	9.649
	93	Benzidine	184	20.739	20.754	(0.897)	1382091	10.0000	13.02
	103	Pyridine	79	4.581	4.597	(0.515)	1230542	10.0000	9.998
	105	1-methylnaphthalene	142	13.060	13.053	(1.146)	1079970	5.00000	4.520
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.447	16.440	(1.095)	1958385	5.00000	4.684
	187	Total Benzofluoranthenes	252	24.989	24.943	(0.973)	2176047	10.0000	9.729

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
120 2,3,4,6-Tetrachlorophenol	232	15.753	15.760	(1.049)	459997	5.00000	4.685

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021606.D
Lab Smp Id: SLB0234-CAL5
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\ABN.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 17:06
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	375798	187899	751596	375798	0.00
27 Naphthalene-d8	1378169	689085	2756338	1378169	0.00
42 Acenaphthene-d10	847135	423568	1694270	847135	0.00
59 Phenanthrene-d10	1675180	837590	3350360	1675180	0.00
69 Chrysene-d12	1073562	536781	2147124	1073562	0.00
134 Di-n-octylphthala	1344129	672065	2688258	1344129	0.00
77 Perylene-d12	721978	360989	1443956	721978	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.40	0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.00
59 Phenanthrene-d10	18.05	17.55	18.55	18.05	0.00
69 Chrysene-d12	23.12	22.62	23.62	23.12	0.00
134 Di-n-octylphthala	24.15	23.65	24.65	24.15	0.00
77 Perylene-d12	25.69	25.19	26.19	25.69	0.00

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

REVIEW SUMMARY FOR FILE - NT1423021606.D

Lab ID: SLB0234-CAL5
nt14.i, ABN.m, 16-FEB-2023 17:06

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.965	0.000	0.9647	Benzoic acid
1.010	0.000	1.0103	2,4-Dinitrophenol
1.017	0.000	1.0170	4-Nitrophenol
0.985	0.000	0.9854	Pentachlorophenol

RRT check based on Ccal File: NT1423021610.D

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

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

Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021607.D

Date : 16-FEB-2023 17:42

Client ID:

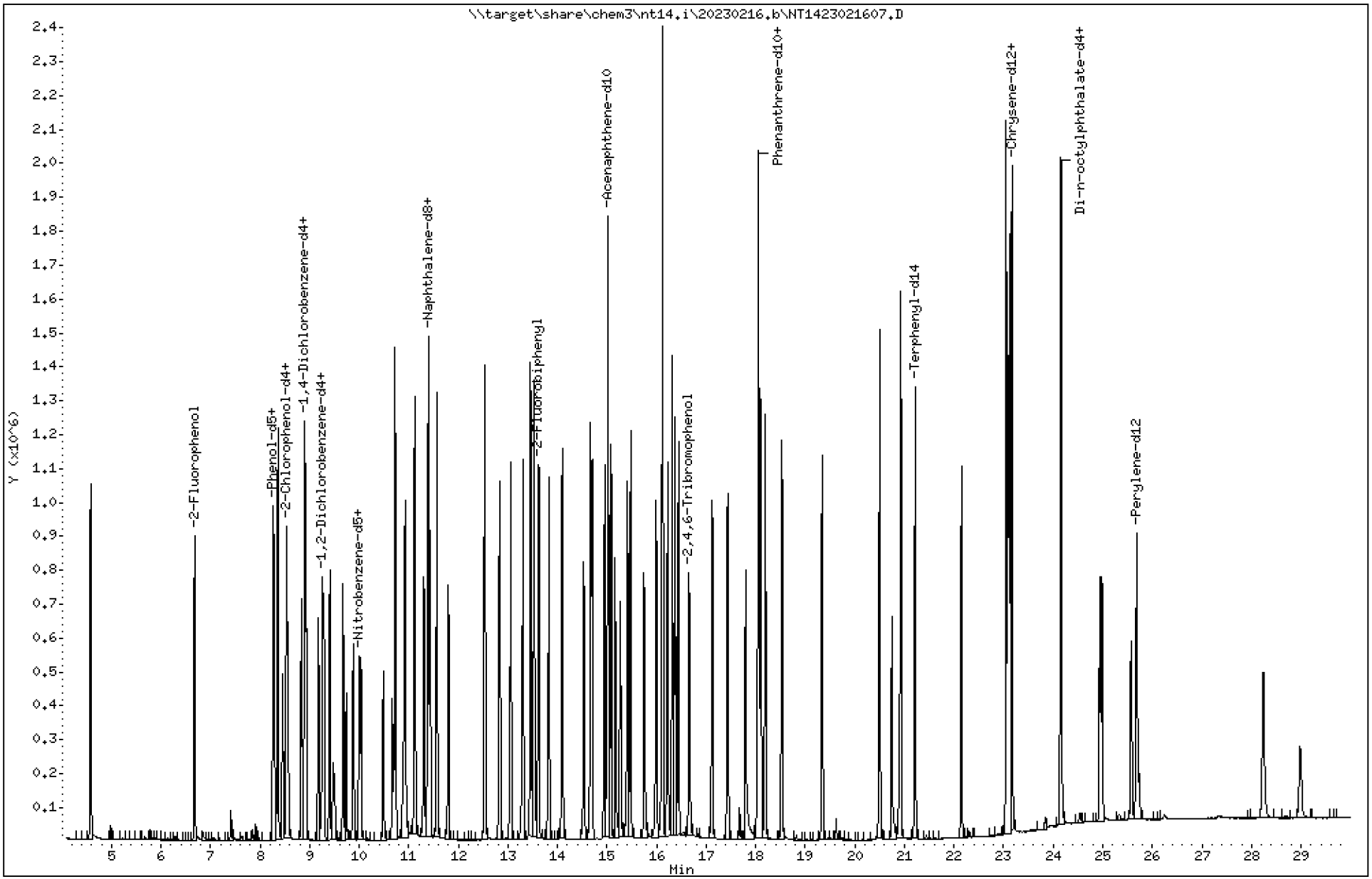
Instrument: nt14.i

Sample Info: SLB0234-CAL4

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230216.b\NT1423021607.D
Lab Smp Id: SLB0234-CAL4
Inj Date : 16-FEB-2023 17:42 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0234-CAL4
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230216.b\ABN.m
Meth Date : 17-Feb-2023 15:05 deenayd Quant Type: ISTD
Cal Date : 16-FEB-2023 17:42 Cal File: NT1423021607.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.674	6.682	(0.750)	376978	3.75000	4.284
$	2 Phenol-d5	99	8.265	8.266	(0.929)	561995	3.75000	4.026
	3 Phenol	94	8.289	8.289	(0.931)	407194	2.50000	2.755
$	5 2-Chlorophenol-d4	132	8.536	8.536	(0.959)	388443	3.75000	3.900
	4 Bis(2-Chloroethyl)ether	93	8.451	8.451	(0.950)	292724	2.50000	2.593
	6 2-Chlorophenol	128	8.559	8.567	(0.962)	273865	2.50000	2.631
	7 1,3-Dichlorobenzene	146	8.838	8.838	(0.993)	301651	2.50000	2.604
*	8 1,4-Dichlorobenzene-d4	152	8.900	8.900	(1.000)	329194	4.00000	
	9 1,4-Dichlorobenzene	146	8.931	8.931	(1.003)	284648	2.50000	2.589
$	10 1,2-Dichlorobenzene-d4	152	9.256	9.257	(1.040)	187612	2.50000	2.513
	12 1,2-Dichlorobenzene	146	9.288	9.288	(1.044)	287402	2.50000	2.614
	11 Benzyl alcohol	108	9.179	9.202	(1.031)	209183	2.50000	2.513
	14 2,2'-oxybis(1-Chloropropane)	121	9.482	9.482	(1.065)	80709	2.50000	2.566(M)
	13 2-Methylphenol	108	9.404	9.404	(1.057)	277152	2.50000	2.686
	17 Hexachloroethane	117	9.878	9.878	(1.110)	122047	2.50000	2.553
	16 N-Nitroso-di-n-propylamine	70	9.738	9.738	(1.094)	252888	2.50000	2.692
	15 4-Methylphenol	108	9.676	9.684	(1.087)	298167	2.50000	2.736
$	18 Nitrobenzene-d5	82	10.002	10.002	(0.878)	359115	2.50000	2.561
	19 Nitrobenzene	77	10.033	10.033	(0.881)	373920	2.50000	2.657
	20 Isophorone	82	10.483	10.491	(0.920)	511111	2.50000	2.753
	21 2-Nitrophenol	139	10.669	10.677	(0.937)	152516	2.50000	2.400
	22 2,4-Dimethylphenol	107	10.723	10.724	(0.942)	550789	5.00000	5.184
	23 Bis(2-Chloroethoxy)methane	93	10.925	10.925	(0.959)	317734	2.50000	2.631
	24 Benzoic acid	105	10.925	10.879	(0.959)	459387	10.0000	6.778
	25 2,4-Dichlorophenol	162	11.119	11.127	(0.976)	504586	5.00000	5.549
	26 1,2,4-Trichlorobenzene	180	11.304	11.305	(0.993)	283002	2.50000	2.569
*	27 Naphthalene-d8	136	11.389	11.389	(1.000)	1213660	4.00000	
	28 Naphthalene	128	11.436	11.428	(1.004)	745532	2.50000	2.491
	29 4-Chloroaniline	127	11.567	11.575	(1.016)	710726	5.00000	5.559
	30 Hexachlorobutadiene	225	11.799	11.799	(1.036)	173828	2.50000	2.560
	31 4-Chloro-3-methylphenol	107	12.534	12.542	(1.100)	530197	5.00000	5.387
	32 2-Methylnaphthalene	142	12.836	12.836	(1.127)	571690	2.50000	2.551
	33 Hexachlorocyclopentadiene	237	13.300	13.301	(0.886)	380721	5.00000	5.170
	34 2,4,6-Trichlorophenol	196	13.455	13.463	(0.896)	388886	5.00000	5.195

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	35	2,4,5-Trichlorophenol	196	13.532	13.541	(0.901)	428139	5.00000	5.281
$	36	2-Fluorobiphenyl	172	13.625	13.617	(0.907)	667203	2.50000	2.453
	37	2-Chloronaphthalene	162	13.826	13.826	(0.921)	565441	2.50000	2.547
	38	2-Nitroaniline	65	14.097	14.097	(0.939)	387110	5.00000	5.364
	39	Dimethylphthalate	163	14.531	14.531	(0.968)	603054	2.50000	2.597
	40	Acenaphthylene	152	14.701	14.701	(0.979)	842319	2.50000	2.488
	41	2,6-Dinitrotoluene	165	14.670	14.670	(0.977)	289065	5.00000	5.291
*	42	Acenaphthene-d10	164	15.018	15.018	(1.000)	760118	4.00000	
	43	3-Nitroaniline	138	14.948	14.957	(0.995)	303139	5.00000	5.228
	44	Acenaphthene	153	15.080	15.080	(1.004)	504287	2.50000	2.488
	45	2,4-Dinitrophenol	184	15.165	15.282	(1.010)	227423	10.0000	6.281
	46	Dibenzofuran	168	15.412	15.405	(1.026)	824989	2.50000	2.479
	47	4-Nitrophenol	109	15.265	15.273	(1.016)	148774	5.00000	4.415
	48	2,4-Dinitrotoluene	165	15.474	15.475	(1.030)	408828	5.00000	5.293
	50	Diethylphthalate	149	15.992	15.984	(1.065)	783230	2.50000	2.537
	49	Fluorene	166	16.123	16.124	(1.074)	877577	2.50000	2.522
	51	4-Chlorophenyl-phenylether	204	16.116	16.116	(1.073)	479898	2.50000	2.579
	52	4-Nitroaniline	138	16.224	16.224	(1.080)	347289	5.00000	5.220
	53	4,6-Dinitro-2-methylphenol	198	16.316	16.370	(0.904)	451603	10.0000	8.514
	54	N-Nitrosodiphenylamine	169	16.370	16.370	(0.907)	567271	2.50000	2.726
$	55	2,4,6-Tribromophenol	330	16.655	16.663	(1.109)	151326	3.75000	3.437
	56	4-Bromophenyl-phenylether	248	17.118	17.118	(0.948)	245410	2.50000	2.648
	57	Hexachlorobenzene	284	17.435	17.434	(0.966)	250939	2.50000	2.664
	58	Pentachlorophenol	266	17.791	17.814	(0.985)	182806	5.00000	3.951
*	59	Phenanthrene-d10	188	18.054	18.054	(1.000)	1448105	4.00000	
	60	Phenanthrene	178	18.100	18.101	(1.003)	892995	2.50000	2.566
	61	Anthracene	178	18.193	18.193	(1.008)	907386	2.50000	2.632
	62	Carbazole	167	18.526	18.534	(1.026)	863446	2.50000	2.760
	63	Di-n-butylphthalate	149	19.338	19.346	(1.071)	993077	2.50000	2.842
	64	Fluoranthene	202	20.499	20.499	(0.887)	1061533	2.50000	2.488
	65	Pyrene	202	20.924	20.925	(0.905)	1172638	2.50000	2.599
$	66	Terphenyl-d14	244	21.218	21.219	(0.918)	783042	2.50000	2.444
	67	Butylbenzylphthalate	149	22.148	22.148	(0.958)	361796	2.50000	2.421
	68	Benzo(a)anthracene	228	23.092	23.092	(0.999)	783697	2.50000	2.476
*	69	Chrysene-d12	240	23.123	23.123	(1.000)	989085	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.054	23.054	(0.997)	695962	7.50000	7.157
	71	Chrysene	228	23.162	23.162	(1.002)	704839	2.50000	2.476
	72	bis(2-Ethylhexyl)phthalate	149	23.177	23.178	(0.960)	460238	2.50000	2.321
*	134	Di-n-octylphthalate-d4	153	24.153	24.153	(1.000)	1170114	4.00000	
	73	Di-n-octylphthalate	149	24.161	24.161	(1.000)	703221	2.50000	2.570
	74	Benzo(b)fluoranthene	252	24.942	24.943	(0.971)	547910	2.50000	2.696
	75	Benzo(k)fluoranthene	252	24.981	24.989	(0.973)	549070	2.50000	2.528(H)
	76	Benzo(a)pyrene	252	25.570	25.578	(0.995)	464600	2.50000	2.403
*	77	Perylene-d12	264	25.686	25.686	(1.000)	640481	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.228	28.244	(1.099)	356233	2.50000	2.224
	79	Dibenzo(a,h)anthracene	278	28.244	28.267	(1.100)	294764	2.50000	2.233
	80	Benzo(g,h,i)perylene	276	28.982	28.997	(1.128)	283553	2.50000	2.177
	90	N-Nitrosodimethylamine	74	4.565	4.566	(0.513)	404759	5.00000	5.940
	91	Aniline	93	8.358	8.358	(0.939)	808819	5.00000	5.117
	93	Benzidine	184	20.739	20.754	(0.897)	457874	5.00000	4.224
	103	Pyridine	79	4.581	4.597	(0.515)	635789	5.00000	5.897
	105	1-methylnaphthalene	142	13.052	13.053	(1.146)	549396	2.50000	2.611
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.439	16.440	(1.095)	972471	2.50000	2.592
	187	Total Benzofluoranthenes	252	24.942	24.943	(0.971)	1044065	5.00000	5.262(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
120 2,3,4,6-Tetrachlorophenol	232	15.745	15.760	(1.048)	205457	2.50000	2.355

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021607.D
Lab Smp Id: SLB0234-CAL4
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\ABN.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 17:06
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	375798	187899	751596	329194	-12.40
27 Naphthalene-d8	1378169	689085	2756338	1213660	-11.94
42 Acenaphthene-d10	847135	423568	1694270	760118	-10.27
59 Phenanthrene-d10	1675180	837590	3350360	1448105	-13.56
69 Chrysene-d12	1073562	536781	2147124	989085	-7.87
134 Di-n-octylphthala	1344129	672065	2688258	1170114	-12.95
77 Perylene-d12	721978	360989	1443956	640481	-11.29

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	-0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.39	-0.07
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	-0.00
59 Phenanthrene-d10	18.05	17.55	18.55	18.05	-0.00
69 Chrysene-d12	23.12	22.62	23.62	23.12	-0.00
134 Di-n-octylphthala	24.15	23.65	24.65	24.15	-0.00
77 Perylene-d12	25.69	25.19	26.19	25.69	-0.00

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

REVIEW SUMMARY FOR FILE - NT1423021607.D

Lab ID: SLB0234-CAL4
nt14.i, ABN.m, 16-FEB-2023 17:42

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.959	0.000	0.9592	Benzoic acid
1.010	0.000	1.0098	2,4-Dinitrophenol
1.016	0.000	1.0165	4-Nitrophenol
0.985	0.000	0.9854	Pentachlorophenol

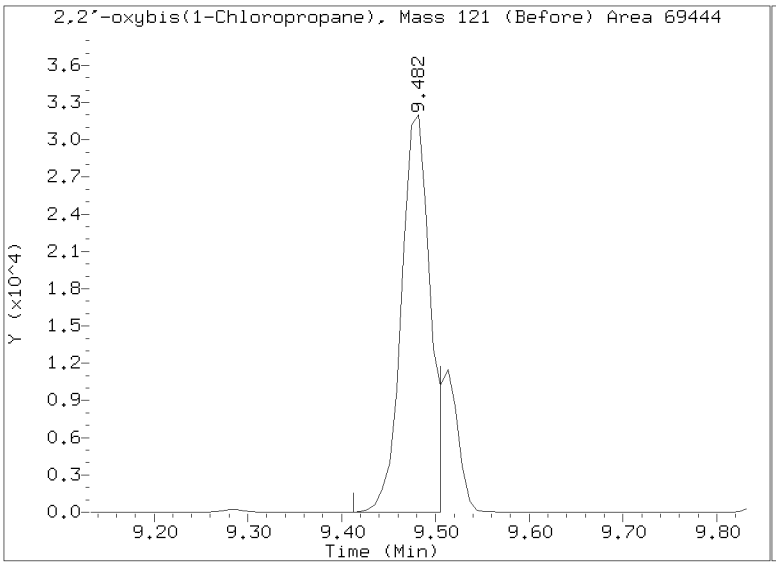
RRT check based on Ccal File: NT1423021610.D

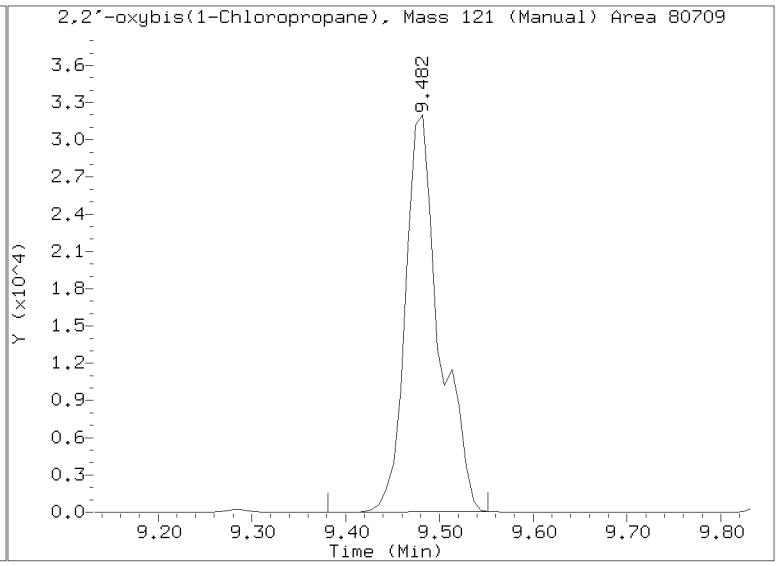
On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

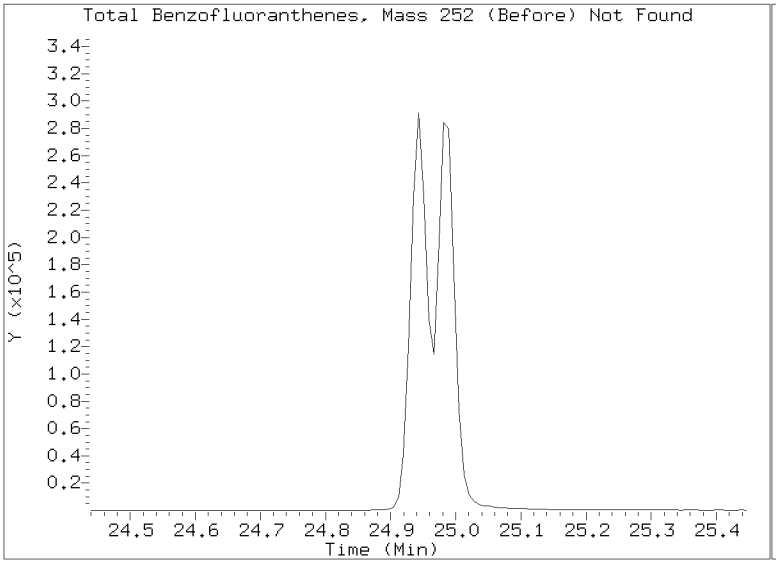
* Only compounds listed in the work order have been verified by the analyst *

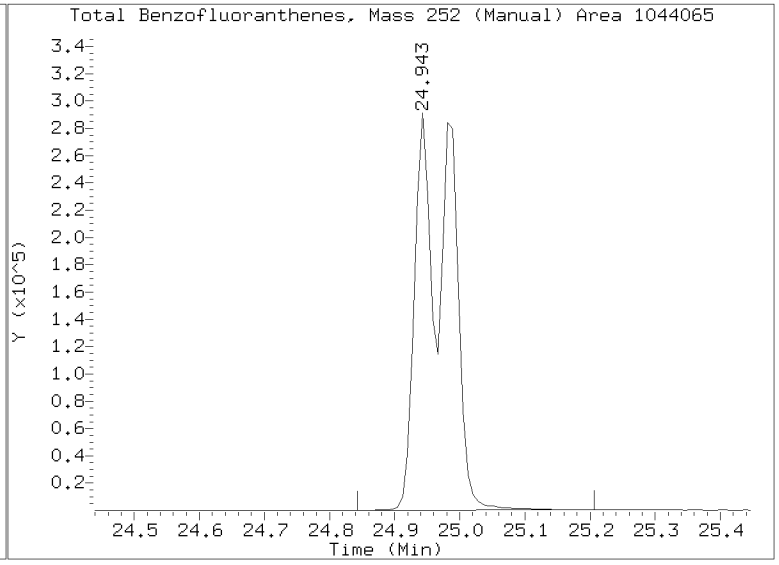
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230216.b/NT1423021607.D
Injection Date: 16-FEB-2023 17:42
Lab ID:SLB0234-CAL4 Client ID:
Report Date: 02/28/2023 14:37









Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021608.D

Date : 16-FEB-2023 18:18

Client ID:

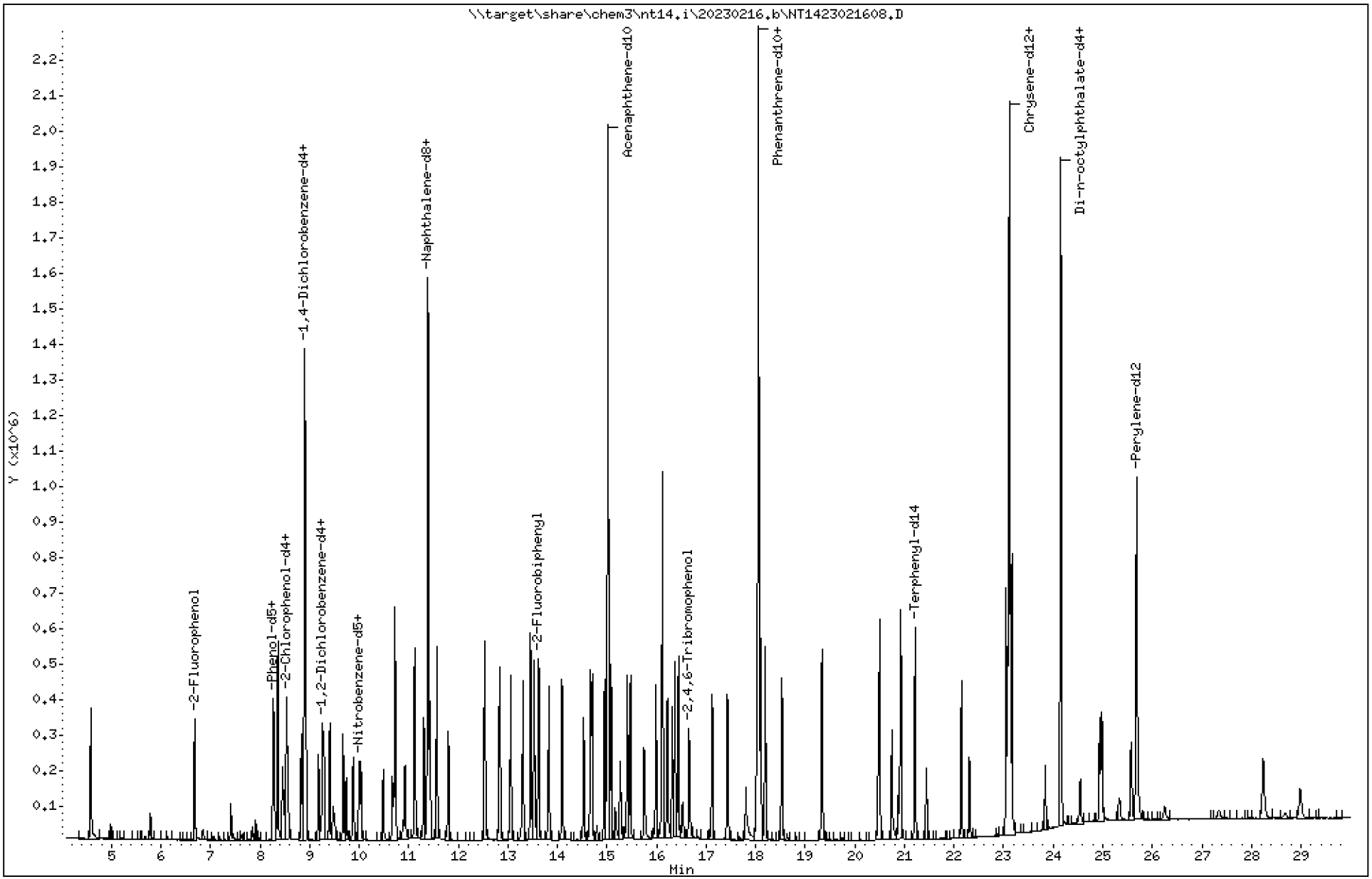
Instrument: nt14.i

Sample Info: SLB0234-CAL3

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230216.b\NT1423021608.D
Lab Smp Id: SLB0234-CAL3
Inj Date : 16-FEB-2023 18:18 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0234-CAL3
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230216.b\ABN.m
Meth Date : 17-Feb-2023 15:05 deenayd Quant Type: ISTD
Cal Date : 16-FEB-2023 18:18 Cal File: NT1423021608.D
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.674	6.682	(0.750)	153446	1.50000	1.581
$	2 Phenol-d5	99	8.266	8.266	(0.929)	233838	1.50000	1.519
	3 Phenol	94	8.281	8.289	(0.930)	163570	1.00000	1.004
$	5 2-Chlorophenol-d4	132	8.536	8.536	(0.959)	164214	1.50000	1.495
	4 Bis(2-Chloroethyl)ether	93	8.451	8.451	(0.950)	121797	1.00000	0.9782
	6 2-Chlorophenol	128	8.559	8.567	(0.962)	110353	1.00000	0.9614
	7 1,3-Dichlorobenzene	146	8.838	8.838	(0.993)	124308	1.00000	0.9728
*	8 1,4-Dichlorobenzene-d4	152	8.900	8.900	(1.000)	363048	4.00000	
	9 1,4-Dichlorobenzene	146	8.931	8.931	(1.003)	117863	1.00000	0.9719
$	10 1,2-Dichlorobenzene-d4	152	9.257	9.257	(1.040)	82340	1.00000	1.0000
	12 1,2-Dichlorobenzene	146	9.288	9.288	(1.044)	118079	1.00000	0.9740
	11 Benzyl alcohol	108	9.179	9.202	(1.031)	78291	1.00000	0.8547
	14 2,2'-oxybis(1-Chloropropane)	121	9.474	9.482	(1.065)	33133	1.00000	0.9553(M)
	13 2-Methylphenol	108	9.404	9.404	(1.057)	114029	1.00000	1.002
	17 Hexachloroethane	117	9.878	9.878	(1.110)	50311	1.00000	0.9543
	16 N-Nitroso-di-n-propylamine	70	9.738	9.738	(1.094)	99288	1.00000	0.9584
	15 4-Methylphenol	108	9.676	9.684	(1.087)	119738	1.00000	0.9963
$	18 Nitrobenzene-d5	82	9.994	10.002	(0.878)	151056	1.00000	0.9878
	19 Nitrobenzene	77	10.033	10.033	(0.881)	146712	1.00000	0.9561
	20 Isophorone	82	10.483	10.491	(0.920)	194110	1.00000	0.9588
	21 2-Nitrophenol	139	10.669	10.677	(0.937)	49000	1.00000	0.7125
	22 2,4-Dimethylphenol	107	10.724	10.724	(0.942)	244477	2.00000	2.110
	23 Bis(2-Chloroethoxy)methane	93	10.925	10.925	(0.959)	129592	1.00000	0.9840
	24 Benzoic acid	105	10.879	10.879	(0.955)	39783	4.00000	0.5465(M)
	25 2,4-Dichlorophenol	162	11.119	11.127	(0.976)	205795	2.00000	2.075
	26 1,2,4-Trichlorobenzene	180	11.305	11.305	(0.993)	117481	1.00000	0.9779
*	27 Naphthalene-d8	136	11.390	11.389	(1.000)	1323614	4.00000	
	28 Naphthalene	128	11.428	11.428	(1.003)	317475	1.00000	0.9728
	29 4-Chloroaniline	127	11.567	11.575	(1.016)	272607	2.00000	1.955
	30 Hexachlorobutadiene	225	11.799	11.799	(1.036)	72987	1.00000	0.9856
	31 4-Chloro-3-methylphenol	107	12.534	12.542	(1.100)	209527	2.00000	1.952
	32 2-Methylnaphthalene	142	12.836	12.836	(1.127)	243169	1.00000	0.9949
	33 Hexachlorocyclopentadiene	237	13.300	13.301	(0.886)	141981	2.00000	1.804
	34 2,4,6-Trichlorophenol	196	13.455	13.463	(0.896)	152174	2.00000	1.902

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	35 2,4,5-Trichlorophenol	196	13.532	13.541	(0.901)	165970	2.00000	1.915
$	36 2-Fluorobiphenyl	172	13.618	13.617	(0.907)	289528	1.00000	0.9960
	37 2-Chloronaphthalene	162	13.827	13.826	(0.921)	229336	1.00000	0.9665
	38 2-Nitroaniline	65	14.090	14.097	(0.938)	149060	2.00000	1.932
	39 Dimethylphthalate	163	14.531	14.531	(0.968)	245986	1.00000	0.9911
	40 Acenaphthylene	152	14.701	14.701	(0.979)	363943	1.00000	1.006
	41 2,6-Dinitrotoluene	165	14.670	14.670	(0.977)	112679	2.00000	1.929
*	42 Acenaphthene-d10	164	15.018	15.018	(1.000)	812533	4.00000	
	43 3-Nitroaniline	138	14.949	14.957	(0.995)	115568	2.00000	1.864
	44 Acenaphthene	153	15.080	15.080	(1.004)	212155	1.00000	0.9791
	45 2,4-Dinitrophenol	184	15.165	15.282	(1.010)	31343	4.00000	0.8199
	46 Dibenzofuran	168	15.405	15.405	(1.026)	349793	1.00000	0.9832
	47 4-Nitrophenol	109	15.266	15.273	(1.016)	49332	2.00000	1.373
	48 2,4-Dinitrotoluene	165	15.474	15.475	(1.030)	154628	2.00000	1.873
	50 Diethylphthalate	149	15.985	15.984	(1.064)	311996	1.00000	0.9456
	49 Fluorene	166	16.124	16.124	(1.074)	374830	1.00000	1.008
	51 4-Chlorophenyl-phenylether	204	16.116	16.116	(1.073)	195339	1.00000	0.9820
	52 4-Nitroaniline	138	16.216	16.224	(1.080)	129681	2.00000	1.823
	53 4,6-Dinitro-2-methylphenol	198	16.309	16.370	(0.903)	128657	4.00000	2.178
	54 N-Nitrosodiphenylamine	169	16.370	16.370	(0.907)	230336	1.00000	0.9844
$	55 2,4,6-Tribromophenol	330	16.656	16.663	(1.109)	62102	1.50000	1.327
	56 4-Bromophenyl-phenylether	248	17.118	17.118	(0.948)	97461	1.00000	0.9352
	57 Hexachlorobenzene	284	17.427	17.434	(0.965)	100728	1.00000	0.9512
	58 Pentachlorophenol	266	17.799	17.814	(0.986)	51252	2.00000	0.9940(M)
*	59 Phenanthrene-d10	188	18.054	18.054	(1.000)	1628200	4.00000	
	60 Phenanthrene	178	18.101	18.101	(1.003)	378981	1.00000	0.9686
	61 Anthracene	178	18.194	18.193	(1.008)	382605	1.00000	0.9871
	62 Carbazole	167	18.526	18.534	(1.026)	337461	1.00000	0.9594
	63 Di-n-butylphthalate	149	19.339	19.346	(1.071)	384834	1.00000	0.9795
	64 Fluoranthene	202	20.499	20.499	(0.887)	451325	1.00000	0.9802
	65 Pyrene	202	20.925	20.925	(0.905)	495443	1.00000	1.018
$	66 Terphenyl-d14	244	21.219	21.219	(0.918)	359523	1.00000	1.040
	67 Butylbenzylphthalate	149	22.148	22.148	(0.958)	131574	1.00000	0.8187
	68 Benzo(a)anthracene	228	23.093	23.092	(0.999)	341818	1.00000	1.001
*	69 Chrysene-d12	240	23.116	23.123	(1.000)	1067204	4.00000	
	70 3,3'-Dichlorobenzidine	252	23.054	23.054	(0.997)	258857	3.00000	2.473
	71 Chrysene	228	23.162	23.162	(1.002)	303781	1.00000	0.9889
	72 bis(2-Ethylhexyl)phthalate	149	23.170	23.178	(0.959)	162205	1.00000	0.7416
*	134 Di-n-octylphthalate-d4	153	24.153	24.153	(1.000)	1276639	4.00000	
	73 Di-n-octylphthalate	149	24.161	24.161	(1.000)	277809	1.00000	0.9307
	74 Benzo(b)fluoranthene	252	24.943	24.943	(0.971)	211762	1.00000	0.9023
	75 Benzo(k)fluoranthene	252	24.982	24.989	(0.973)	250546	1.00000	0.9990(H)
	76 Benzo(a)pyrene	252	25.570	25.578	(0.995)	194966	1.00000	0.8758
*	77 Perylene-d12	264	25.686	25.686	(1.000)	739668	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	28.236	28.244	(1.099)	137909	1.00000	0.7516
	79 Dibenzo(a,h)anthracene	278	28.244	28.267	(1.100)	112505	1.00000	0.7442
	80 Benzo(g,h,i)perylene	276	28.982	28.997	(1.128)	110200	1.00000	0.7402
	90 N-Nitrosodimethylamine	74	4.566	4.566	(0.513)	159280	2.00000	2.120
	91 Aniline	93	8.359	8.358	(0.939)	368085	2.00000	2.111
	93 Benzidine	184	20.739	20.754	(0.897)	233886	2.00000	1.936
	103 Pyridine	79	4.581	4.597	(0.515)	257275	2.00000	2.164
	105 1-methylnaphthalene	142	13.053	13.053	(1.146)	222293	1.00000	0.9687
	111 Azobenzene (1,2-DP-Hydrazine)	77	16.440	16.440	(1.095)	389278	1.00000	0.9708
	187 Total Benzofluoranthenes	252	24.982	24.943	(0.973)	432058	2.00000	1.886(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
120 2,3,4,6-Tetrachlorophenol	232	15.745	15.760	(1.048)	74897	1.00000	0.8082

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021608.D
Lab Smp Id: SLB0234-CAL3
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\ABN.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 17:06
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	375798	187899	751596	363048	-3.39
27 Naphthalene-d8	1378169	689085	2756338	1323614	-3.96
42 Acenaphthene-d10	847135	423568	1694270	812533	-4.08
59 Phenanthrene-d10	1675180	837590	3350360	1628200	-2.80
69 Chrysene-d12	1073562	536781	2147124	1067204	-0.59
134 Di-n-octylphthala	1344129	672065	2688258	1276639	-5.02
77 Perylene-d12	721978	360989	1443956	739668	2.45

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.39	-0.07
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.00
59 Phenanthrene-d10	18.05	17.55	18.55	18.05	0.00
69 Chrysene-d12	23.12	22.62	23.62	23.12	-0.03
134 Di-n-octylphthala	24.15	23.65	24.65	24.15	0.00
77 Perylene-d12	25.69	25.19	26.19	25.69	0.00

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

REVIEW SUMMARY FOR FILE - NT1423021608.D

Lab ID: SLB0234-CAL3
nt14.i, ABN.m, 16-FEB-2023 18:18

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.955	0.000	0.9551	Benzoic acid
1.010	0.000	1.0098	2,4-Dinitrophenol
1.016	0.000	1.0165	4-Nitrophenol
0.986	0.000	0.9859	Pentachlorophenol

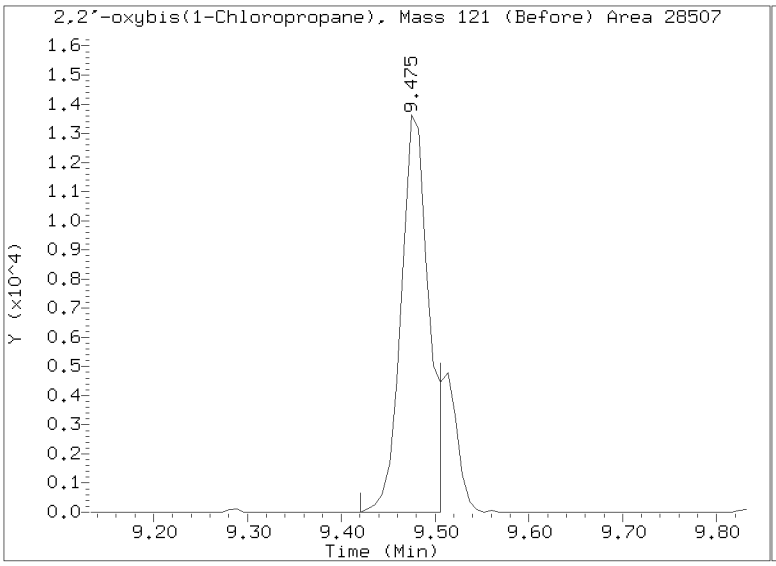
RRT check based on Ccal File: NT1423021610.D

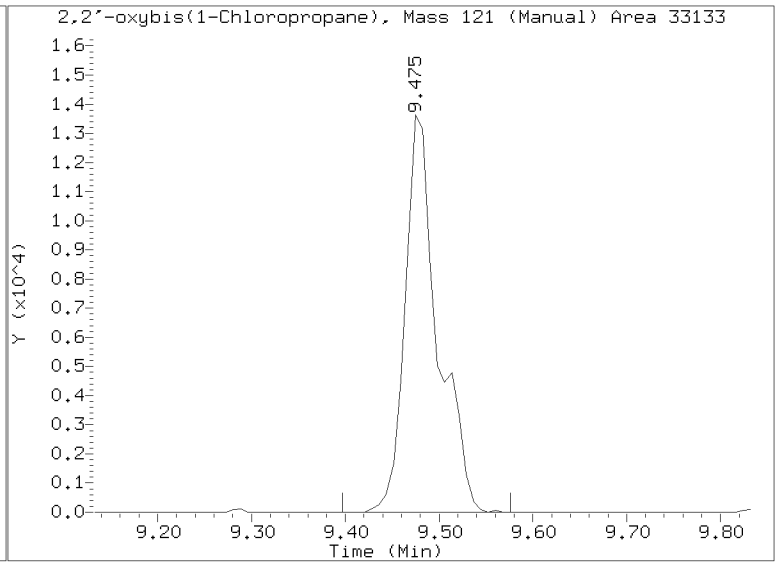
On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

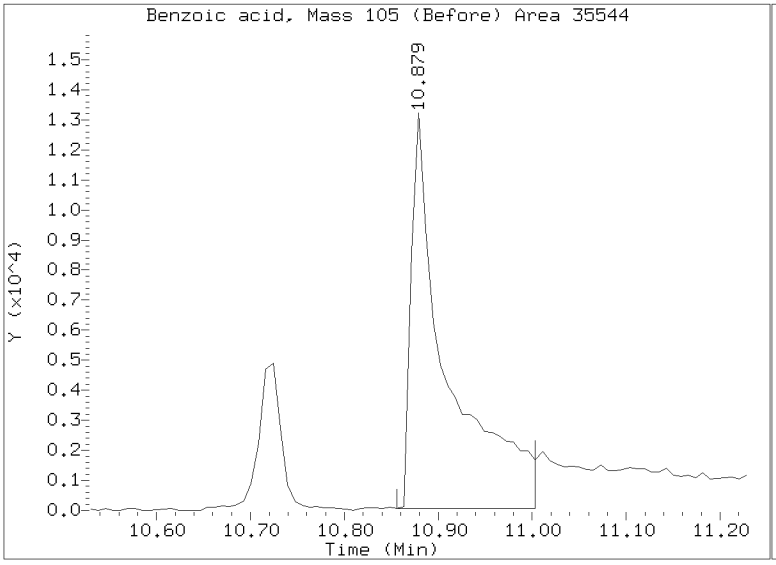
* Only compounds listed in the work order have been verified by the analyst *

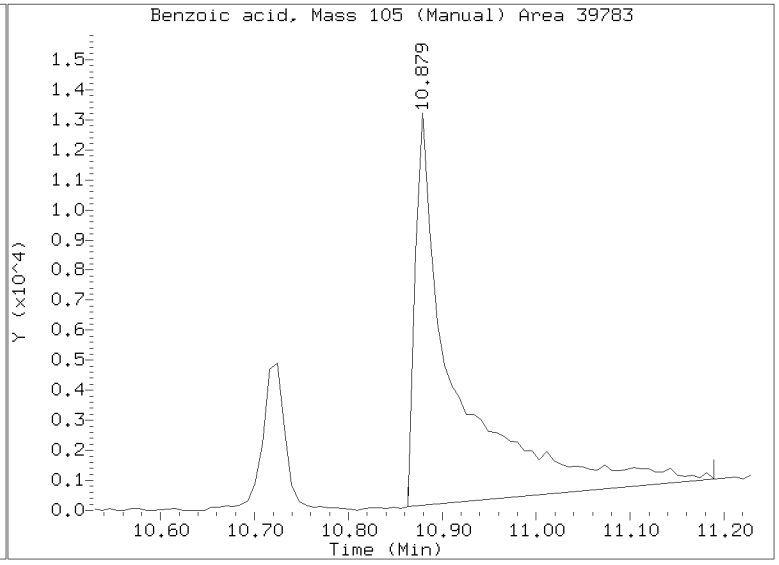
Quant Ion Manual Peak Adjustment Report

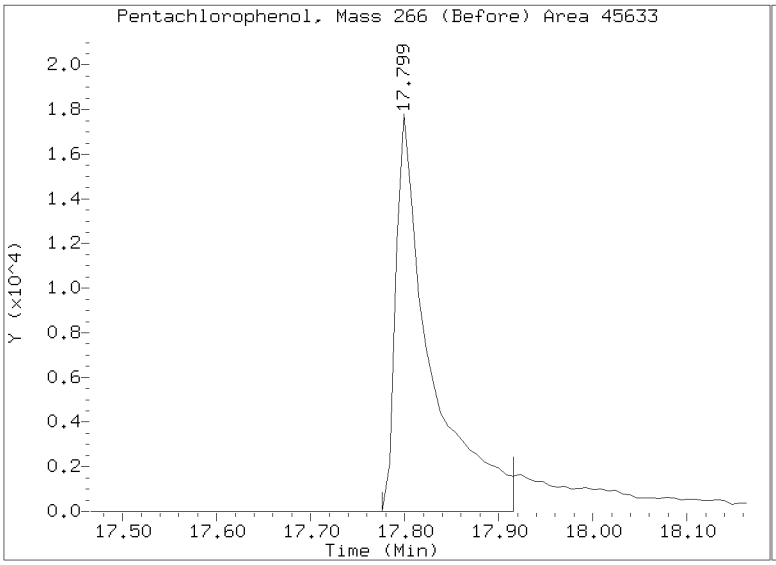
Datafile: //target/share/chem3/nt14.i/20230216.b/NT1423021608.D
Injection Date: 16-FEB-2023 18:18
Lab ID:SLB0234-CAL3 Client ID:
Report Date: 02/28/2023 14:37

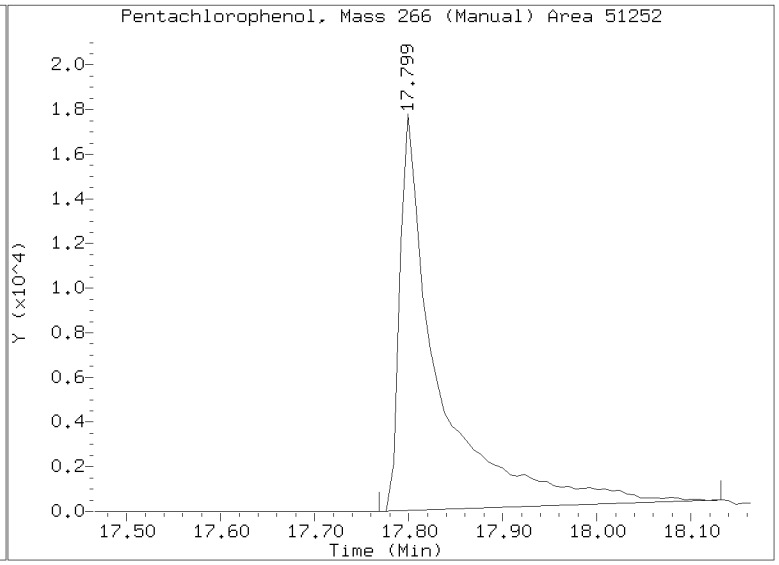












Quant Ion Manual Peak Adjustment Report

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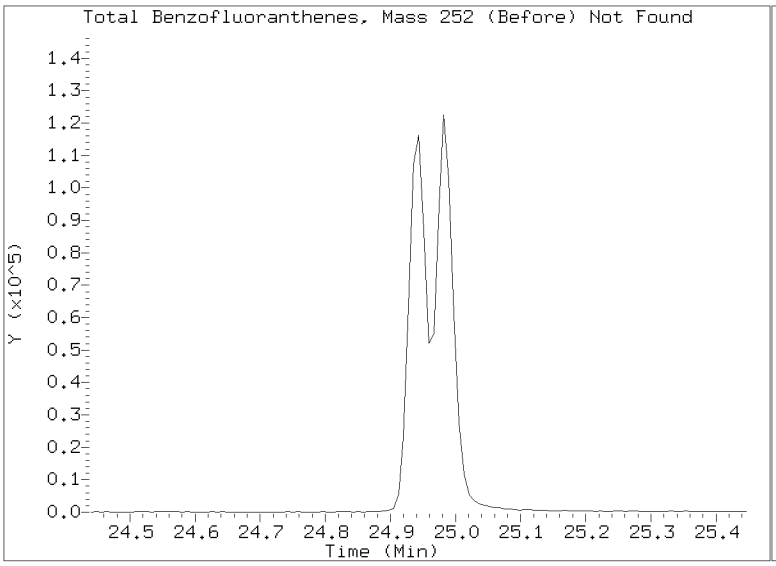
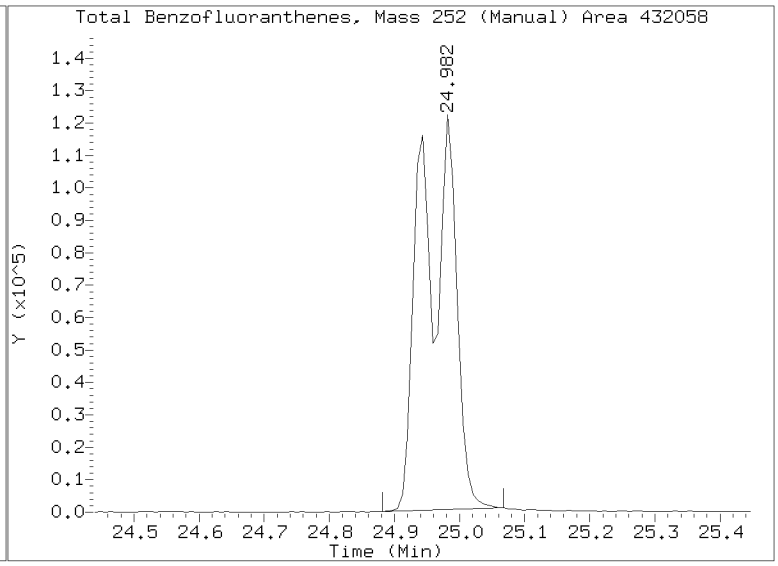
Injection Date: 16-FEB-2023 18:18
Lab ID:SLB0234-CAL3 Client ID:
Report Date: 02/28/2023 14:37

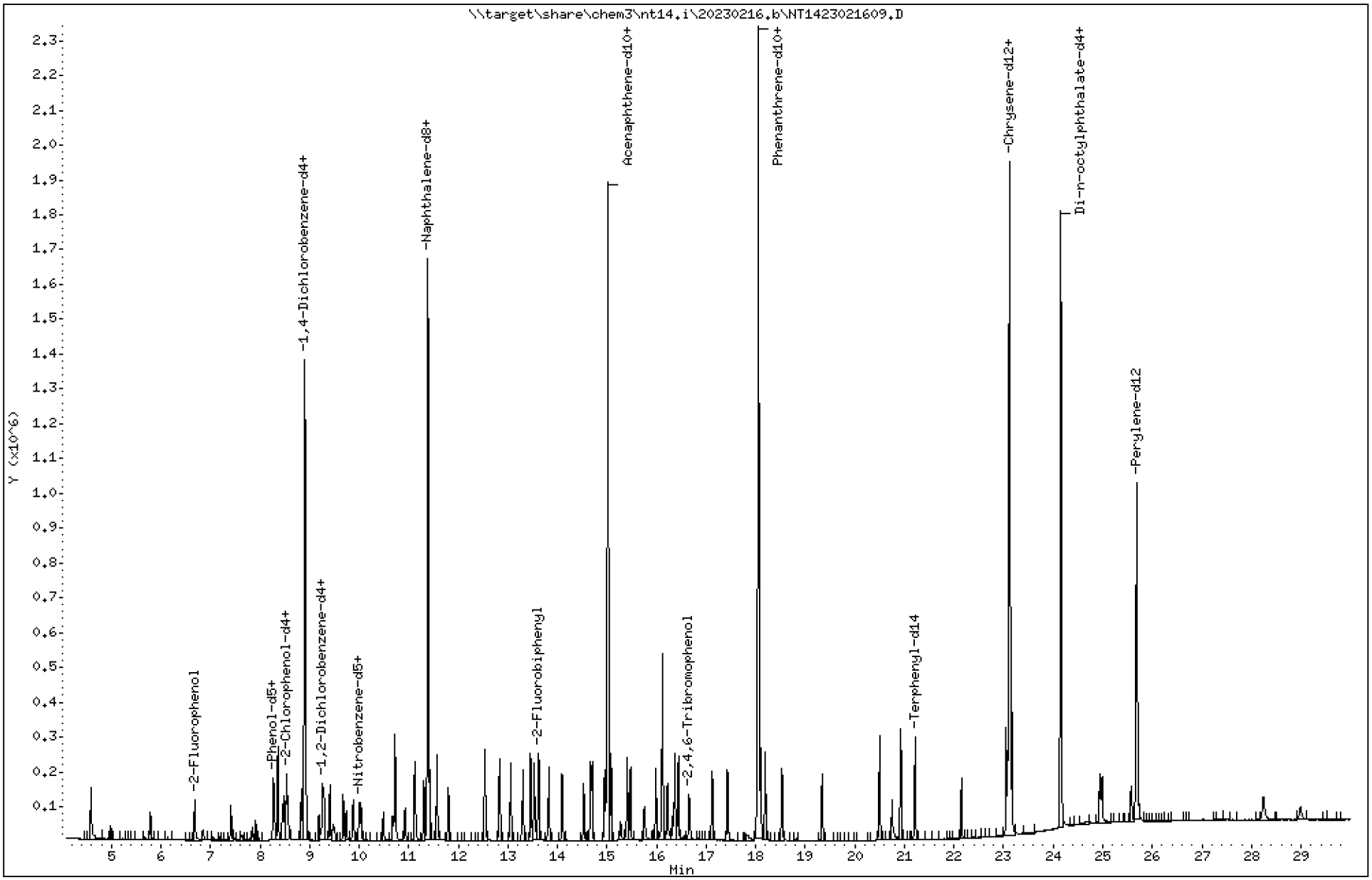




Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021609.D
Date : 16-FEB-2023 18:54
Client ID:
Sample Info: SLB0234-CAL2

Instrument: nt14.i
Operator: DSD
Column diameter: 0.25

Column phase: ZB-5msi



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230216.b\NT1423021609.D
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Inj Date : 16-FEB-2023 18:54 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0234-CAL2
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230216.b\ABN.m
Meth Date : 17-Feb-2023 15:05 deenayd Quant Type: ISTD
Cal Date : 16-FEB-2023 18:54 Cal File: NT1423021609.D
Als bottle: 7 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.674	6.682	(0.750)	63549	0.75000	0.6438
$	2 Phenol-d5	99	8.266	8.266	(0.929)	105912	0.75000	0.6764
	3 Phenol	94	8.289	8.289	(0.931)	75646	0.50000	0.4564
$	5 2-Chlorophenol-d4	132	8.536	8.536	(0.959)	78832	0.75000	0.7056
	4 Bis(2-Chloroethyl)ether	93	8.451	8.451	(0.950)	59684	0.50000	0.4713
	6 2-Chlorophenol	128	8.559	8.567	(0.962)	53121	0.50000	0.4551
	7 1,3-Dichlorobenzene	146	8.838	8.838	(0.993)	61640	0.50000	0.4743
*	8 1,4-Dichlorobenzene-d4	152	8.900	8.900	(1.000)	369229	4.00000	
	9 1,4-Dichlorobenzene	146	8.931	8.931	(1.003)	57020	0.50000	0.4623
$	10 1,2-Dichlorobenzene-d4	152	9.257	9.257	(1.040)	40896	0.50000	0.4883
	12 1,2-Dichlorobenzene	146	9.288	9.288	(1.044)	57953	0.50000	0.4700
	11 Benzyl alcohol	108	9.187	9.202	(1.032)	31482	0.50000	0.3382
	14 2,2'-oxybis(1-Chloropropane)	121	9.474	9.482	(1.065)	16279	0.50000	0.4615(M)
	13 2-Methylphenol	108	9.404	9.404	(1.057)	52785	0.50000	0.4560
	17 Hexachloroethane	117	9.878	9.878	(1.110)	24177	0.50000	0.4509
	16 N-Nitroso-di-n-propylamine	70	9.738	9.738	(1.094)	47326	0.50000	0.4492
	15 4-Methylphenol	108	9.676	9.684	(1.087)	53418	0.50000	0.4371
$	18 Nitrobenzene-d5	82	10.002	10.002	(0.878)	71048	0.50000	0.4588
	19 Nitrobenzene	77	10.033	10.033	(0.881)	71365	0.50000	0.4592
	20 Isophorone	82	10.483	10.491	(0.920)	76395	0.50000	0.3726
	21 2-Nitrophenol	139	10.669	10.677	(0.937)	17954	0.50000	0.2583
	22 2,4-Dimethylphenol	107	10.724	10.724	(0.942)	115466	1.00000	0.9840
	23 Bis(2-Chloroethoxy)methane	93	10.925	10.925	(0.959)	60170	0.50000	0.4512
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	11.119	11.127	(0.976)	92274	1.00000	0.9188
	26 1,2,4-Trichlorobenzene	180	11.305	11.305	(0.993)	58401	0.50000	0.4801
*	27 Naphthalene-d8	136	11.389	11.389	(1.000)	1340371	4.00000	
	28 Naphthalene	128	11.428	11.428	(1.003)	155989	0.50000	0.4720
	29 4-Chloroaniline	127	11.567	11.575	(1.016)	122855	1.00000	0.8701
	30 Hexachlorobutadiene	225	11.799	11.799	(1.036)	35267	0.50000	0.4703
	31 4-Chloro-3-methylphenol	107	12.534	12.542	(1.100)	93567	1.00000	0.8608
	32 2-Methylnaphthalene	142	12.828	12.836	(1.126)	116315	0.50000	0.4699
	33 Hexachlorocyclopentadiene	237	13.300	13.301	(0.886)	63332	1.00000	0.7994
	34 2,4,6-Trichlorophenol	196	13.455	13.463	(0.896)	65366	1.00000	0.8115

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	35	2,4,5-Trichlorophenol	196	13.532	13.541	(0.901)	71505	1.00000	0.8197
$	36	2-Fluorobiphenyl	172	13.617	13.617	(0.907)	141308	0.50000	0.4830
	37	2-Chloronaphthalene	162	13.826	13.826	(0.921)	109609	0.50000	0.4590
	38	2-Nitroaniline	65	14.090	14.097	(0.938)	66339	1.00000	0.8544
	39	Dimethylphthalate	163	14.531	14.531	(0.968)	116579	0.50000	0.4667
	40	Acenaphthylene	152	14.701	14.701	(0.979)	176944	0.50000	0.4858
	41	2,6-Dinitrotoluene	165	14.670	14.670	(0.977)	52858	1.00000	0.8993
*	42	Acenaphthene-d10	164	15.018	15.018	(1.000)	817804	4.00000	
	43	3-Nitroaniline	138	14.949	14.957	(0.995)	50808	1.00000	0.8144
	44	Acenaphthene	153	15.080	15.080	(1.004)	102804	0.50000	0.4714
	45	2,4-Dinitrophenol	184	15.281	15.282	(1.017)	1162	2.00000	0.03025(M)
	46	Dibenzofuran	168	15.405	15.405	(1.026)	170389	0.50000	0.4759
	47	4-Nitrophenol	109	15.273	15.273	(1.017)	14226	1.00000	0.3937(M)
	48	2,4-Dinitrotoluene	165	15.474	15.475	(1.030)	68706	1.00000	0.8267
	50	Diethylphthalate	149	15.985	15.984	(1.064)	159541	0.50000	0.4804
	49	Fluorene	166	16.124	16.124	(1.074)	180891	0.50000	0.4831
	51	4-Chlorophenyl-phenylether	204	16.116	16.116	(1.073)	95821	0.50000	0.4786
	52	4-Nitroaniline	138	16.216	16.224	(1.080)	56066	1.00000	0.7833
	53	4,6-Dinitro-2-methylphenol	198	16.316	16.370	(0.904)	29146	2.00000	0.4876(M)
	54	N-Nitrosodiphenylamine	169	16.363	16.370	(0.906)	110585	0.50000	0.4659
$	55	2,4,6-Tribromophenol	330	16.656	16.663	(1.109)	24262	0.75000	0.5164(M)
	56	4-Bromophenyl-phenylether	248	17.118	17.118	(0.948)	46093	0.50000	0.4360
	57	Hexachlorobenzene	284	17.427	17.434	(0.965)	48722	0.50000	0.4535
	58	Pentachlorophenol	266	17.814	17.814	(0.987)	15027	1.00000	0.2879(M)
*	59	Phenanthrene-d10	188	18.054	18.054	(1.000)	1651873	4.00000	
	60	Phenanthrene	178	18.101	18.101	(1.003)	184442	0.50000	0.4647
	61	Anthracene	178	18.193	18.193	(1.008)	182133	0.50000	0.4631
	62	Carbazole	167	18.526	18.534	(1.026)	156254	0.50000	0.4378
	63	Di-n-butylphthalate	149	19.339	19.346	(1.071)	161556	0.50000	0.4053
	64	Fluoranthene	202	20.499	20.499	(0.887)	210260	0.50000	0.4441
	65	Pyrene	202	20.925	20.925	(0.905)	236374	0.50000	0.4721
$	66	Terphenyl-d14	244	21.219	21.219	(0.918)	172754	0.50000	0.4860
	67	Butylbenzylphthalate	149	22.148	22.148	(0.958)	54195	0.50000	0.3283
	68	Benzo(a)anthracene	228	23.093	23.092	(0.999)	161531	0.50000	0.4600
*	69	Chrysene-d12	240	23.123	23.123	(1.000)	1097443	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.054	23.054	(0.997)	109082	1.50000	1.014
	71	Chrysene	228	23.162	23.162	(1.002)	149916	0.50000	0.4746
	72	bis(2-Ethylhexyl)phthalate	149	23.178	23.178	(0.960)	67455	0.50000	0.3119
*	134	Di-n-octylphthalate-d4	153	24.153	24.153	(1.000)	1258630	4.00000	
	73	Di-n-octylphthalate	149	24.161	24.161	(1.000)	134438	0.50000	0.4568
	74	Benzo(b)fluoranthene	252	24.943	24.943	(0.971)	105103	0.50000	0.4519
	75	Benzo(k)fluoranthene	252	24.989	24.989	(0.973)	108195	0.50000	0.4353(H)
	76	Benzo(a)pyrene	252	25.570	25.578	(0.995)	77143	0.50000	0.3500
*	77	Perylene-d12	264	25.686	25.686	(1.000)	733004	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.236	28.244	(1.099)	55897	0.50000	0.3082
	79	Dibenzo(a,h)anthracene	278	28.252	28.267	(1.100)	46959	0.50000	0.3142
	80	Benzo(g,h,i)perylene	276	28.982	28.997	(1.128)	48735	0.50000	0.3313
	90	N-Nitrosodimethylamine	74	4.566	4.566	(0.513)	69706	1.00000	0.9121
	91	Aniline	93	8.358	8.358	(0.939)	176176	1.00000	0.9936
	93	Benzidine	184	20.747	20.754	(0.897)	94244	1.00000	0.7448
	103	Pyridine	79	4.589	4.597	(0.516)	108255	1.00000	0.8952
	105	1-methylnaphthalene	142	13.053	13.053	(1.146)	108251	0.50000	0.4658
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.440	16.440	(1.095)	190307	0.50000	0.4715
	187	Total Benzofluoranthenes	252	24.943	24.943	(0.971)	199974	1.00000	0.8806(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
120 2,3,4,6-Tetrachlorophenol	232	15.753	15.760	(1.049)	28898	0.50000	0.3105

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021609.D
Lab Smp Id: SLB0234-CAL2
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\ABN.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 17:06
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	375798	187899	751596	369229	-1.75
27 Naphthalene-d8	1378169	689085	2756338	1340371	-2.74
42 Acenaphthene-d10	847135	423568	1694270	817804	-3.46
59 Phenanthrene-d10	1675180	837590	3350360	1651873	-1.39
69 Chrysene-d12	1073562	536781	2147124	1097443	2.22
134 Di-n-octylphthala	1344129	672065	2688258	1258630	-6.36
77 Perylene-d12	721978	360989	1443956	733004	1.53

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.39	-0.07
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.00
59 Phenanthrene-d10	18.05	17.55	18.55	18.05	0.00
69 Chrysene-d12	23.12	22.62	23.62	23.12	0.00
134 Di-n-octylphthala	24.15	23.65	24.65	24.15	0.00
77 Perylene-d12	25.69	25.19	26.19	25.69	0.00

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

REVIEW SUMMARY FOR FILE - NT1423021609.D

Lab ID: SLB0234-CAL2
nt14.i, ABN.m, 16-FEB-2023 18:54

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.017	0.000	1.0175	2,4-Dinitrophenol
1.017	0.000	1.0170	4-Nitrophenol
0.987	0.000	0.9867	Pentachlorophenol

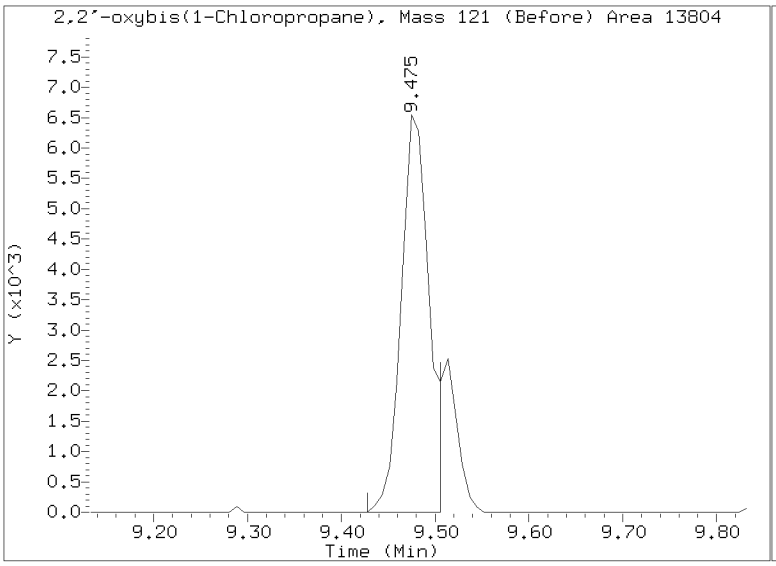
RRT check based on Ccal File: NT1423021610.D

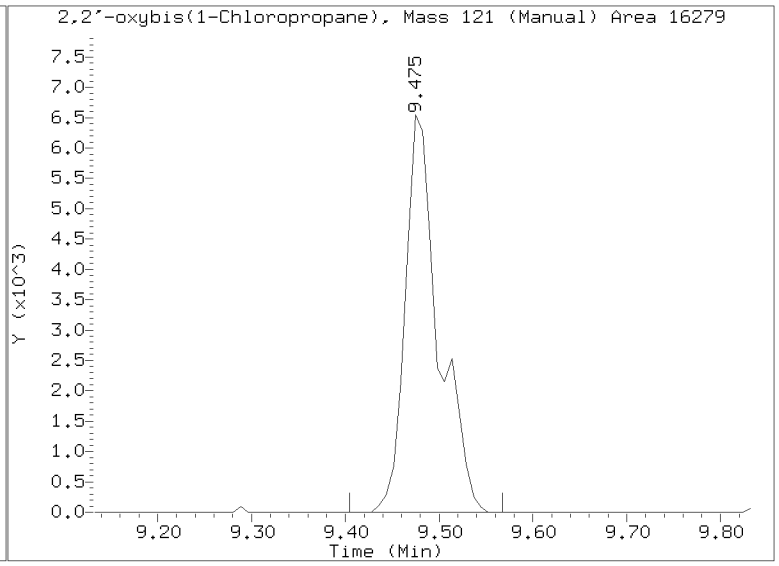
On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

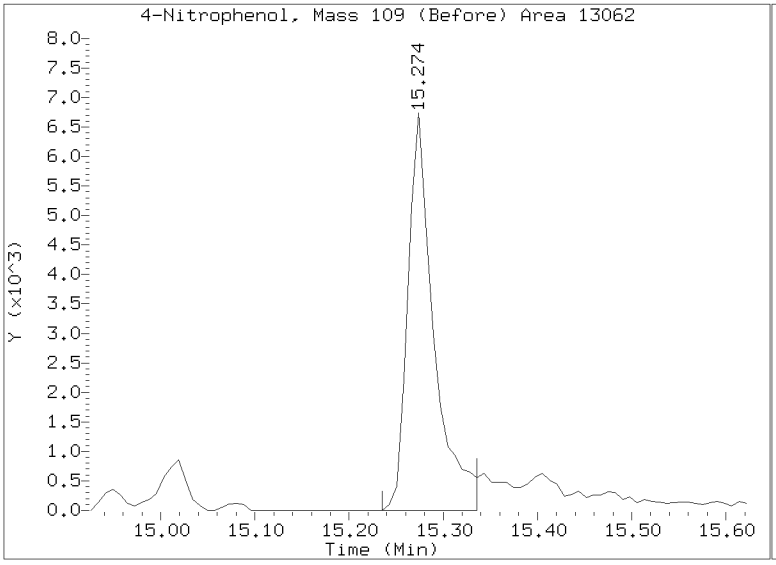
* Only compounds listed in the work order have been verified by the analyst *

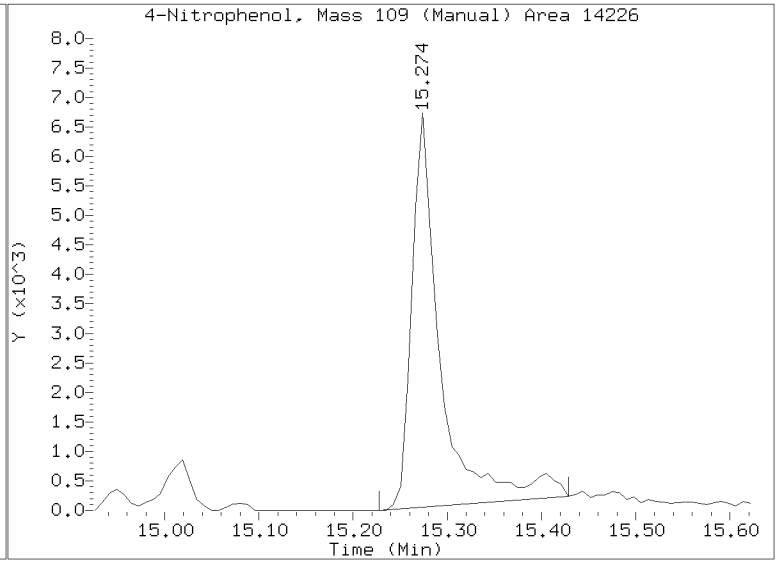
Quant Ion Manual Peak Adjustment Report

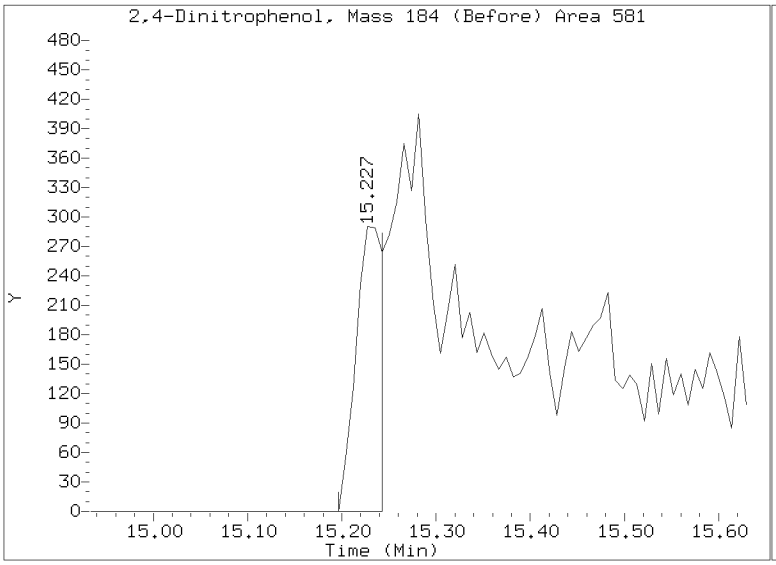
Datafile: //target/share/chem3/nt14.i/20230216.b/NT1423021609.D
Injection Date: 16-FEB-2023 18:54
Lab ID:SLB0234-CAL2 Client ID:
Report Date: 02/28/2023 14:37

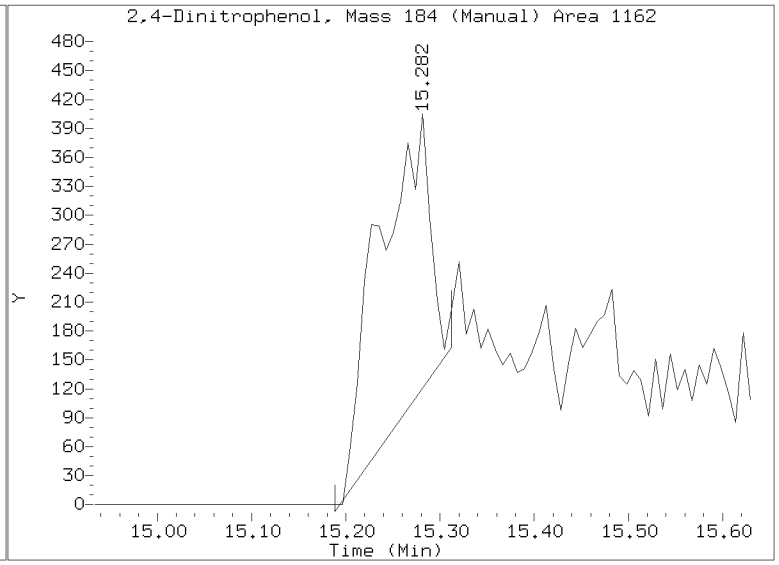












Quant Ion Manual Peak Adjustment Report

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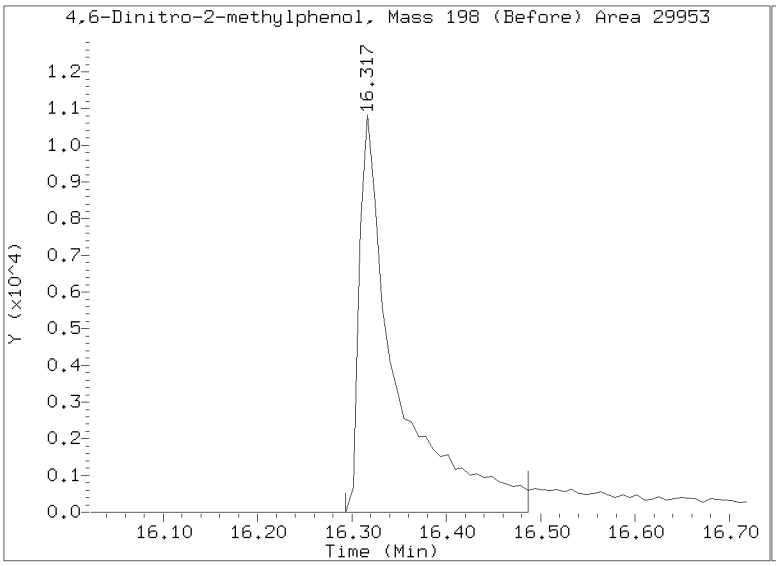
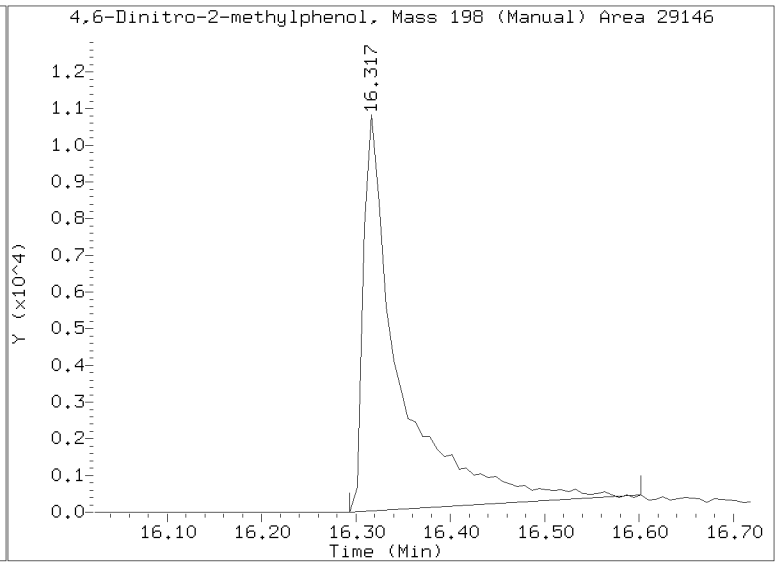
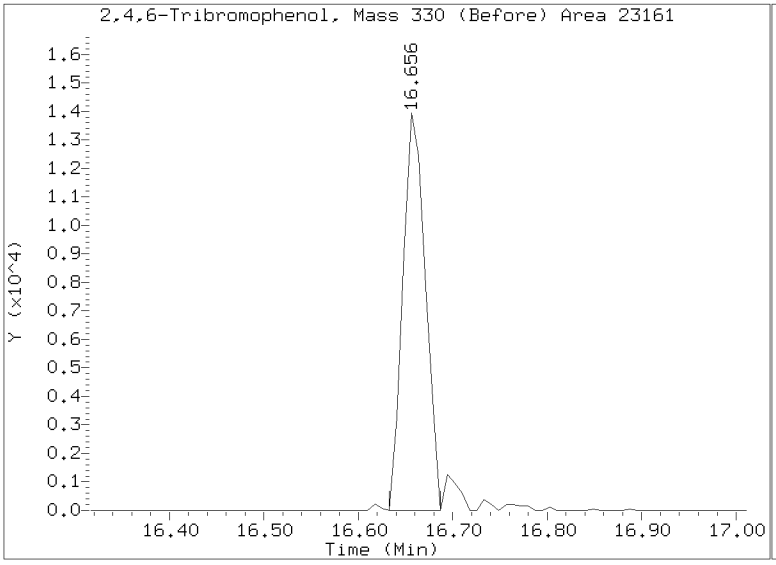
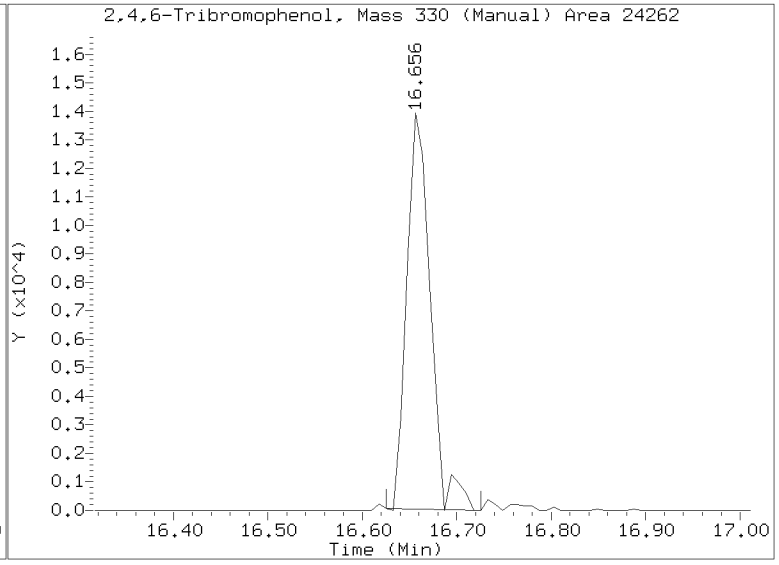
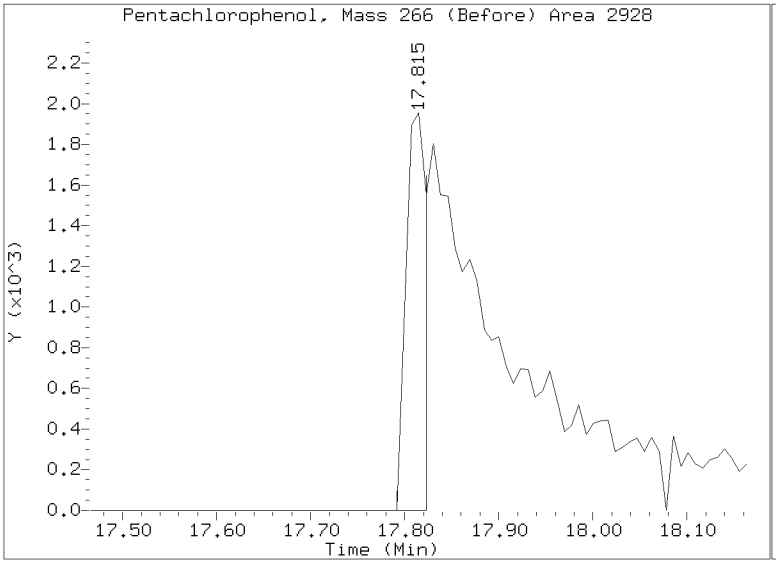
Injection Date: 16-FEB-2023 18:54
Lab ID:SLB0234-CAL2 Client ID:
Report Date: 02/28/2023 14:37

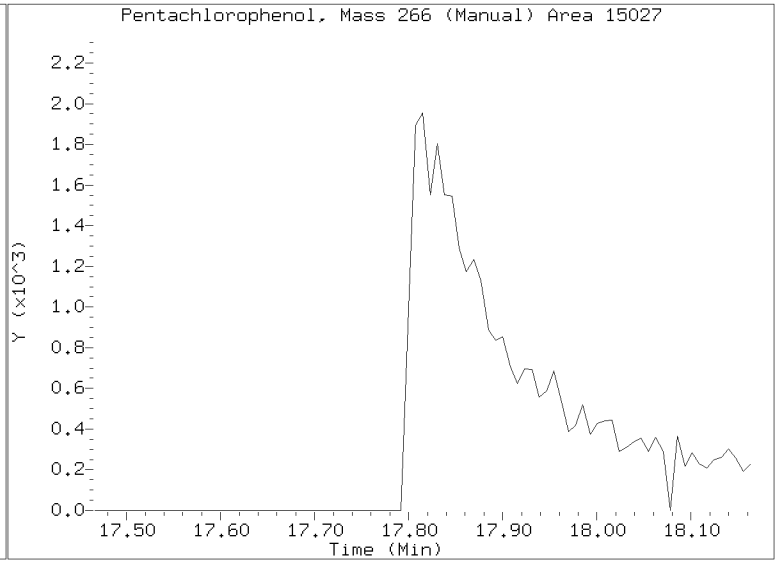












Quant Ion Manual Peak Adjustment Report

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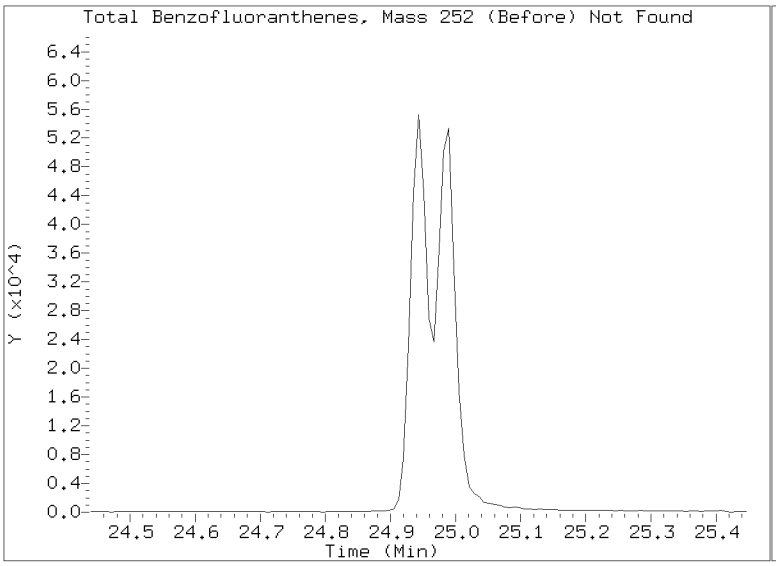
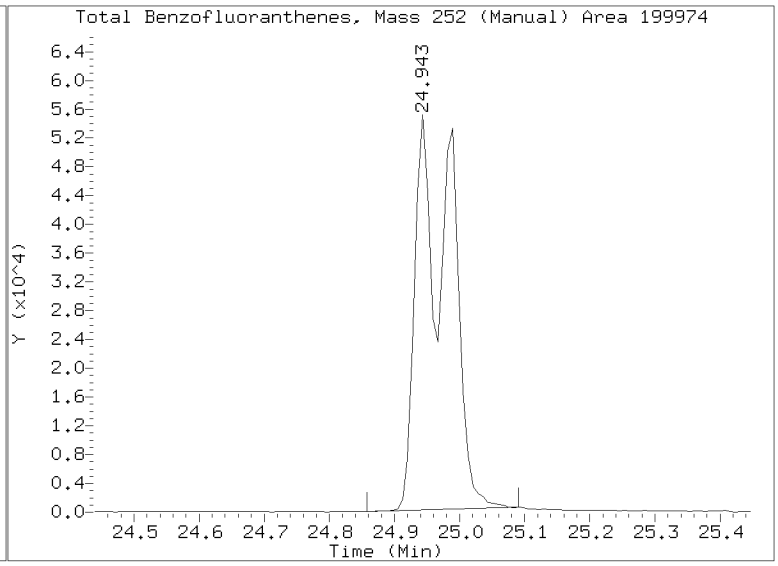
Injection Date: 16-FEB-2023 18:54
Lab ID:SLB0234-CAL2 Client ID:
Report Date: 02/28/2023 14:37

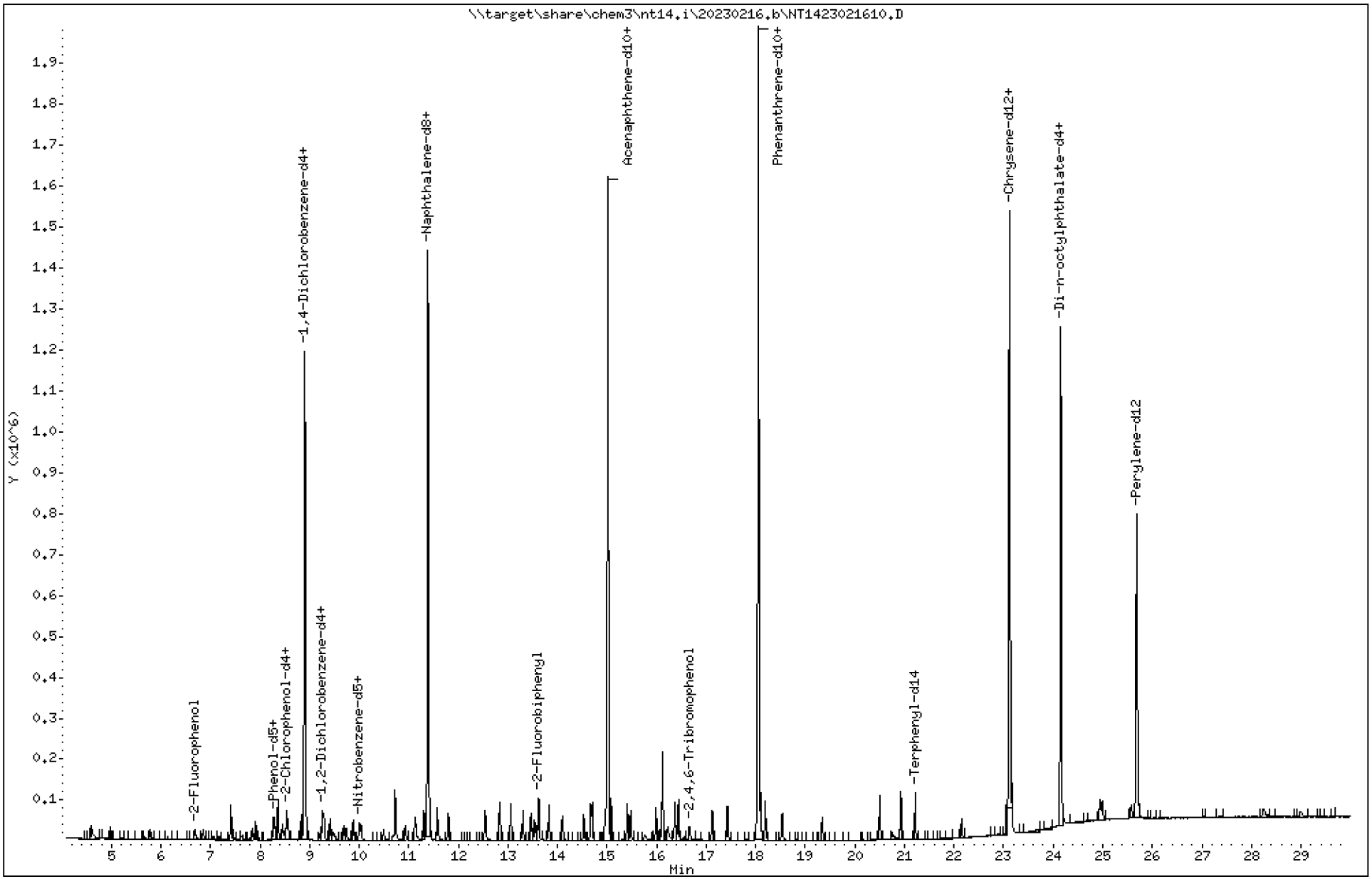




Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021610.D
Date : 16-FEB-2023 19:30
Client ID:
Sample Info: SLB0234-CAL1

Instrument: nt14.i
Operator: DSD
Column diameter: 0.25

Column phase: ZB-5msi



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230216.b\NT1423021610.D
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Inj Date : 16-FEB-2023 19:30 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0234-CAL1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230216.b\ABN.m
Meth Date : 17-Feb-2023 15:05 deenayd Quant Type: ISTD
Cal Date : 16-FEB-2023 19:30 Cal File: NT1423021610.D
Als bottle: 8 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.682	6.682	(0.751)	19727	0.30000	0.2338
$	2 Phenol-d5	99	8.266	8.266	(0.929)	39071	0.30000	0.2919
	3 Phenol	94	8.289	8.289	(0.931)	28002	0.20000	0.1976
$	5 2-Chlorophenol-d4	132	8.536	8.536	(0.959)	29396	0.30000	0.3078
	4 Bis(2-Chloroethyl)ether	93	8.451	8.451	(0.950)	24433	0.20000	0.2257
	6 2-Chlorophenol	128	8.567	8.567	(0.963)	20114	0.20000	0.2016
	7 1,3-Dichlorobenzene	146	8.838	8.838	(0.993)	25746	0.20000	0.2318
*	8 1,4-Dichlorobenzene-d4	152	8.900	8.900	(1.000)	315597	4.00000	
	9 1,4-Dichlorobenzene	146	8.931	8.931	(1.003)	24503	0.20000	0.2324
$	10 1,2-Dichlorobenzene-d4	152	9.257	9.257	(1.040)	16977	0.20000	0.2372
	12 1,2-Dichlorobenzene	146	9.288	9.288	(1.044)	24310	0.20000	0.2307
	11 Benzyl alcohol	108	9.202	9.202	(1.034)	6675	0.20000	0.08391
	14 2,2'-oxybis(1-Chloropropane)	121	9.482	9.482	(1.065)	6831	0.20000	0.2266
	13 2-Methylphenol	108	9.404	9.404	(1.057)	19085	0.20000	0.1929
	17 Hexachloroethane	117	9.878	9.878	(1.110)	10254	0.20000	0.2237
	16 N-Nitroso-di-n-propylamine	70	9.738	9.738	(1.094)	17876	0.20000	0.1985
	15 4-Methylphenol	108	9.684	9.684	(1.088)	19358	0.20000	0.1853
$	18 Nitrobenzene-d5	82	10.002	10.002	(0.878)	28373	0.20000	0.2168
	19 Nitrobenzene	77	10.033	10.033	(0.881)	27684	0.20000	0.2108
	20 Isophorone	82	10.491	10.491	(0.921)	31330	0.20000	0.1808
	21 2-Nitrophenol	139	10.677	10.677	(0.937)	3337	0.20000	0.05688
	22 2,4-Dimethylphenol	107	10.724	10.724	(0.942)	44588	0.40000	0.4497
	23 Bis(2-Chloroethoxy)methane	93	10.925	10.925	(0.959)	24009	0.20000	0.2130
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	11.127	11.127	(0.977)	29283	0.40000	0.3451
	26 1,2,4-Trichlorobenzene	180	11.305	11.305	(0.993)	24421	0.20000	0.2376
*	27 Naphthalene-d8	136	11.389	11.389	(1.000)	1132602	4.00000	
	28 Naphthalene	128	11.428	11.428	(1.003)	64889	0.20000	0.2324
	29 4-Chloroaniline	127	11.575	11.575	(1.016)	44962	0.40000	0.3769
	30 Hexachlorobutadiene	225	11.799	11.799	(1.036)	14583	0.20000	0.2301
	31 4-Chloro-3-methylphenol	107	12.542	12.542	(1.101)	32488	0.40000	0.3537
	32 2-Methylnaphthalene	142	12.836	12.836	(1.127)	47453	0.20000	0.2269
	33 Hexachlorocyclopentadiene	237	13.300	13.301	(0.886)	21835	0.40000	0.3315
	34 2,4,6-Trichlorophenol	196	13.463	13.463	(0.896)	18177	0.40000	0.2715

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	35	2,4,5-Trichlorophenol	196	13.540	13.541	(0.902)	19352	0.40000	0.2669
$	36	2-Fluorobiphenyl	172	13.617	13.617	(0.907)	58757	0.20000	0.2416
	37	2-Chloronaphthalene	162	13.826	13.826	(0.921)	43828	0.20000	0.2208
	38	2-Nitroaniline	65	14.097	14.097	(0.939)	22321	0.40000	0.3458
	39	Dimethylphthalate	163	14.531	14.531	(0.968)	46187	0.20000	0.2224
	40	Acenaphthylene	152	14.701	14.701	(0.979)	70361	0.20000	0.2324
	41	2,6-Dinitrotoluene	165	14.670	14.670	(0.977)	19314	0.40000	0.3953
*	42	Acenaphthene-d10	164	15.018	15.018	(1.000)	679791	4.00000	
	43	3-Nitroaniline	138	14.956	14.957	(0.996)	16429	0.40000	0.3168
	44	Acenaphthene	153	15.080	15.080	(1.004)	40834	0.20000	0.2253
	45	2,4-Dinitrophenol	184	Compound Not Detected.					
	46	Dibenzofuran	168	15.405	15.405	(1.026)	68683	0.20000	0.2308
	47	4-Nitrophenol	109	Compound Not Detected.					
	48	2,4-Dinitrotoluene	165	15.474	15.475	(1.030)	22350	0.40000	0.3235
	50	Diethylphthalate	149	15.984	15.984	(1.064)	58965	0.20000	0.2136
	49	Fluorene	166	16.124	16.124	(1.074)	71779	0.20000	0.2306
	51	4-Chlorophenyl-phenylether	204	16.116	16.116	(1.073)	39360	0.20000	0.2365
	52	4-Nitroaniline	138	16.224	16.224	(1.080)	13890	0.40000	0.2334
	53	4,6-Dinitro-2-methylphenol	198	16.370	16.370	(0.907)	319	0.80000	0.006460
	54	N-Nitrosodiphenylamine	169	16.370	16.370	(0.907)	40402	0.20000	0.2059
$	55	2,4,6-Tribromophenol	330	16.663	16.663	(1.110)	6408	0.30000	0.1642(M)
	56	4-Bromophenyl-phenylether	248	17.118	17.118	(0.948)	18159	0.20000	0.2078
	57	Hexachlorobenzene	284	17.435	17.434	(0.966)	20277	0.20000	0.2283
	58	Pentachlorophenol	266	Compound Not Detected.					
*	59	Phenanthrene-d10	188	18.054	18.054	(1.000)	1365529	4.00000	
	60	Phenanthrene	178	18.101	18.101	(1.003)	74487	0.20000	0.2270
	61	Anthracene	178	18.193	18.193	(1.008)	66705	0.20000	0.2052
	62	Carbazole	167	18.534	18.534	(1.027)	54782	0.20000	0.1857
	63	Di-n-butylphthalate	149	19.346	19.346	(1.072)	52535	0.20000	0.1594
	64	Fluoranthene	202	20.499	20.499	(0.887)	78738	0.20000	0.2121
	65	Pyrene	202	20.925	20.925	(0.905)	87396	0.20000	0.2227
$	66	Terphenyl-d14	244	21.219	21.219	(0.918)	63582	0.20000	0.2282
	67	Butylbenzylphthalate	149	22.148	22.148	(0.958)	15963	0.20000	0.1234
	68	Benzo(a)anthracene	228	23.092	23.092	(0.999)	58939	0.20000	0.2141
*	69	Chrysene-d12	240	23.123	23.123	(1.000)	860315	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.054	23.054	(0.997)	30332	0.60000	0.3599
	71	Chrysene	228	23.162	23.162	(1.002)	57019	0.20000	0.2303
	72	bis(2-Ethylhexyl)phthalate	149	23.178	23.178	(0.960)	18016	0.20000	0.1147
*	134	Di-n-octylphthalate-d4	153	24.153	24.153	(1.000)	913087	4.00000	
	73	Di-n-octylphthalate	149	24.161	24.161	(1.000)	48406	0.20000	0.2267
	74	Benzo(b)fluoranthene	252	24.943	24.943	(0.971)	34719	0.20000	0.1905
	75	Benzo(k)fluoranthene	252	24.989	24.989	(0.973)	38060	0.20000	0.1954(H)
	76	Benzo(a)pyrene	252	25.578	25.578	(0.996)	25983	0.20000	0.1505
*	77	Perylene-d12	264	25.686	25.686	(1.000)	574514	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.244	28.244	(1.100)	18856	0.20000	0.1328
	79	Dibenzo(a,h)anthracene	278	28.267	28.267	(1.100)	14219	0.20000	0.1215
	80	Benzo(g,h,i)perylene	276	28.997	28.997	(1.129)	17069	0.20000	0.1482
	90	N-Nitrosodimethylamine	74	4.566	4.566	(0.513)	22505	0.40000	0.3445
	91	Aniline	93	8.358	8.358	(0.939)	66700	0.40000	0.4401
	93	Benzidine	184	20.754	20.754	(0.898)	22396	0.40000	0.2239
	103	Pyridine	79	4.597	4.597	(0.517)	35585	0.40000	0.3443
	105	1-methylnaphthalene	142	13.053	13.053	(1.146)	43580	0.20000	0.2219
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.440	16.440	(1.095)	73931	0.20000	0.2204
	187	Total Benzofluoranthenes	252	24.943	24.943	(0.971)	68576	0.40000	0.3853(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
120 2,3,4,6-Tetrachlorophenol	232	15.760	15.760	(1.049)	5181	0.20000	0.06703

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021610.D
Lab Smp Id: SLB0234-CAL1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\ABN.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 17:06
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	375798	187899	751596	315597	-16.02
27 Naphthalene-d8	1378169	689085	2756338	1132602	-17.82
42 Acenaphthene-d10	847135	423568	1694270	679791	-19.75
59 Phenanthrene-d10	1675180	837590	3350360	1365529	-18.48
69 Chrysene-d12	1073562	536781	2147124	860315	-19.86
134 Di-n-octylphthala	1344129	672065	2688258	913087	-32.07
77 Perylene-d12	721978	360989	1443956	574514	-20.42

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.39	-0.07
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.00
59 Phenanthrene-d10	18.05	17.55	18.55	18.05	0.00
69 Chrysene-d12	23.12	22.62	23.62	23.12	0.00
134 Di-n-octylphthala	24.15	23.65	24.65	24.15	0.00
77 Perylene-d12	25.69	25.19	26.19	25.69	0.00

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

REVIEW SUMMARY FOR FILE - NT1423021610.D

Lab ID: SLB0234-CAL1
nt14.i, ABN.m, 16-FEB-2023 19:30

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

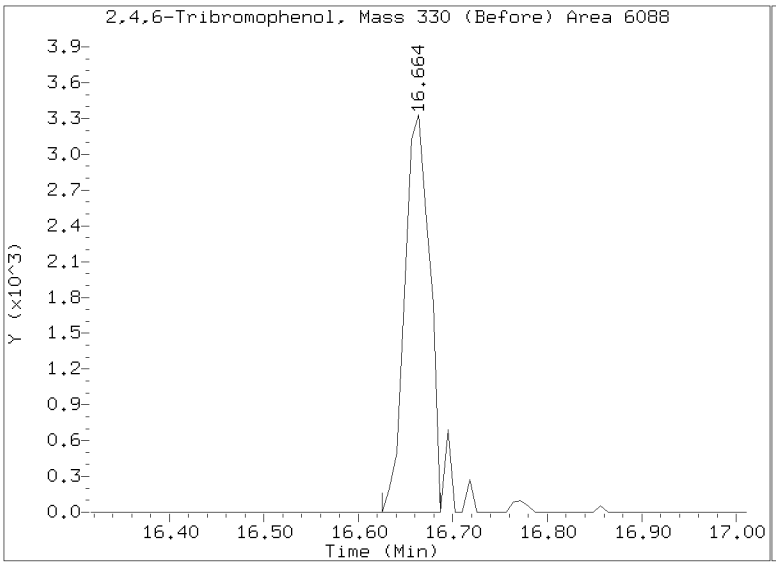
RRT check based on Ccal File: NT1423021610.D

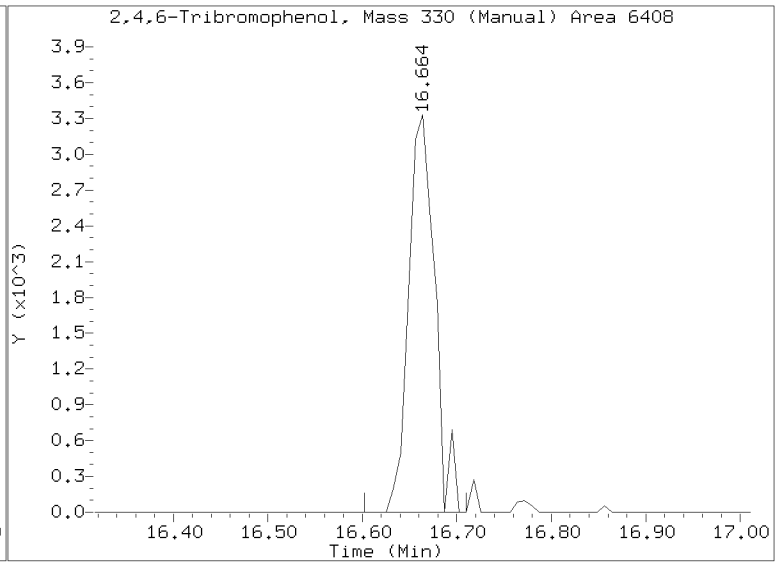
On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

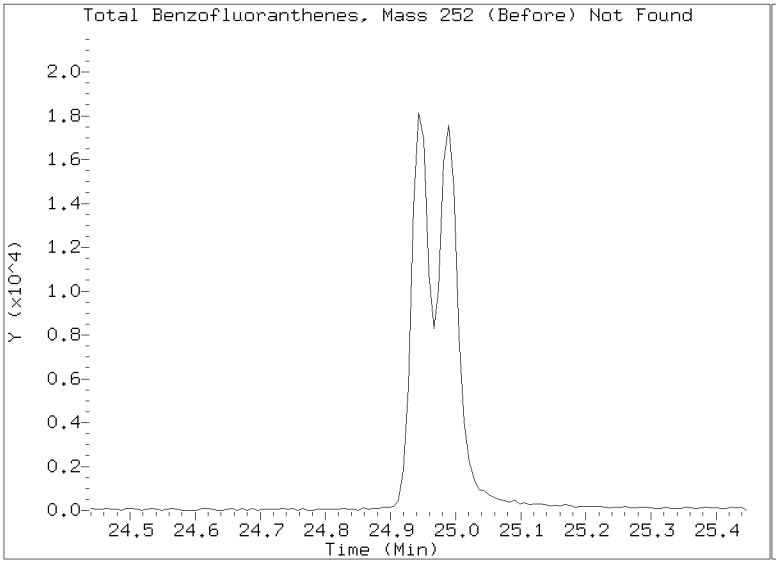
* Only compounds listed in the work order have been verified by the analyst *

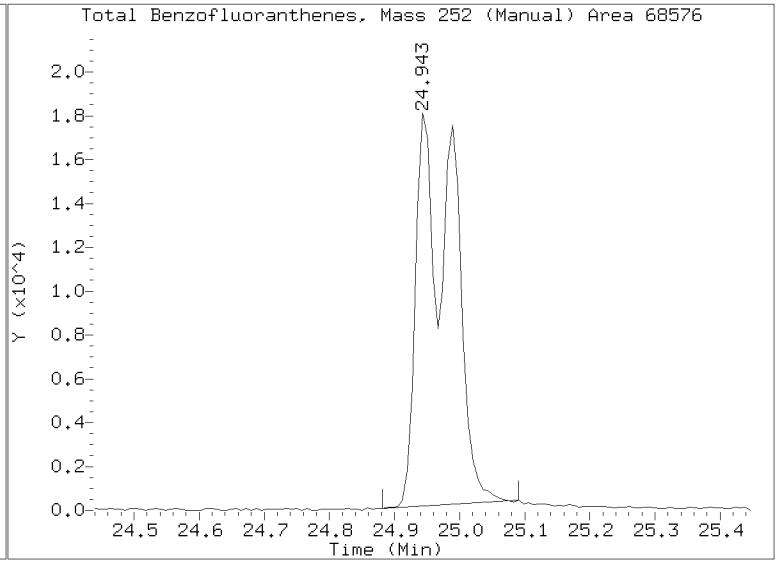
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230216.b/NT1423021610.D
Injection Date: 16-FEB-2023 19:30
Lab ID:SLB0234-CAL1 Client ID:
Report Date: 02/28/2023 14:37









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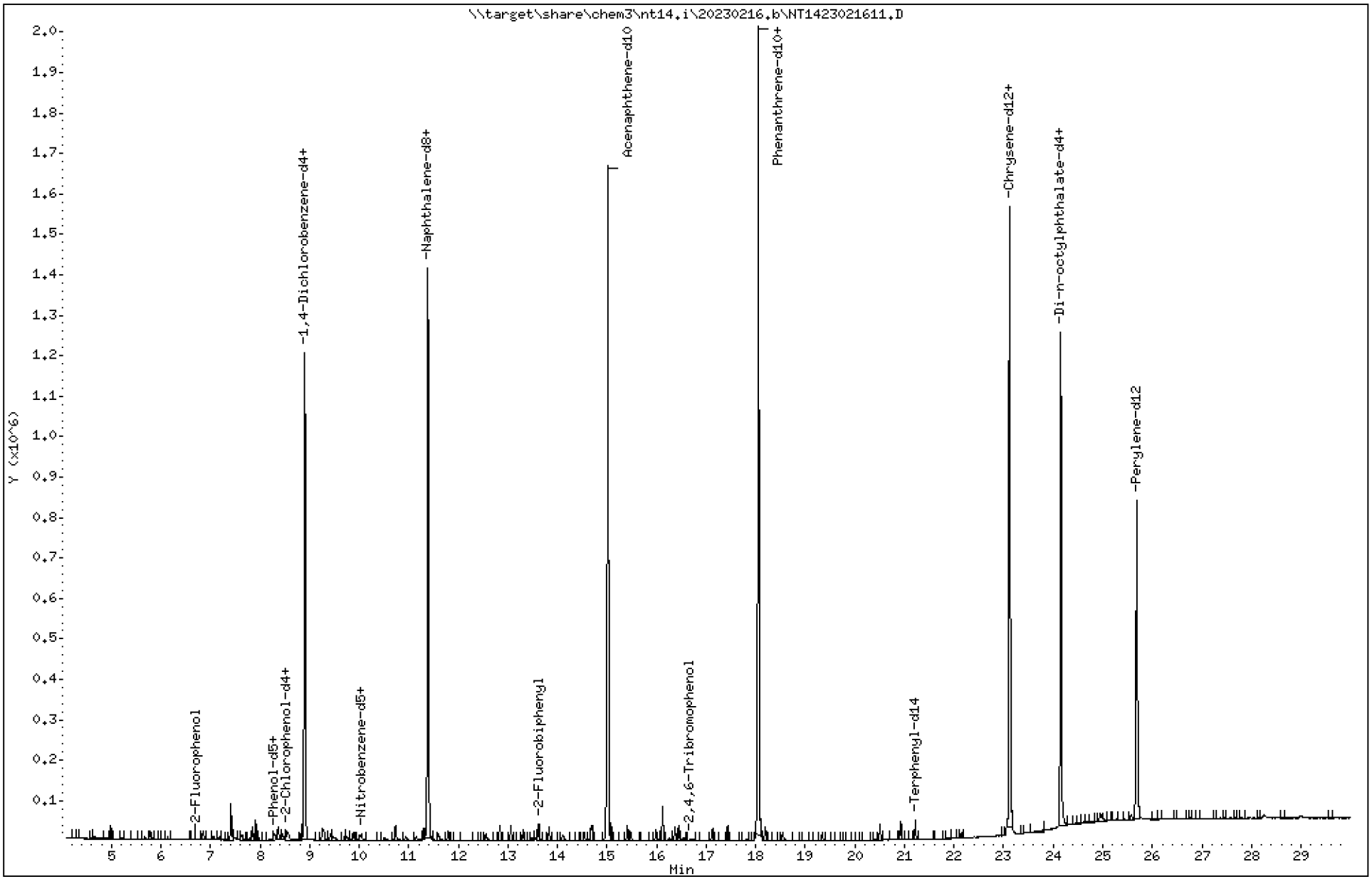
Date : 16-FEB-2023 20:06
Client ID:
Sample Info: SIM 0.1

Instrument: nt14.i
Operator: DSD
Column diameter: 0.25

Column phase: ZB-5msi



Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021611.D

Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

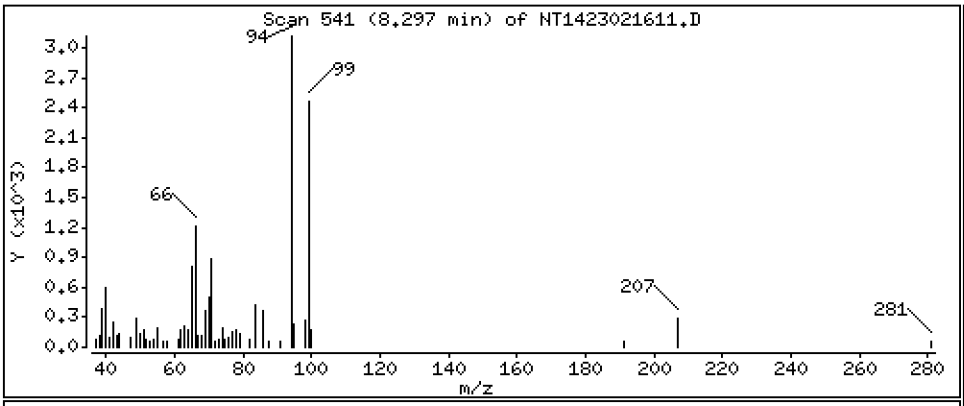
Operator: DSD

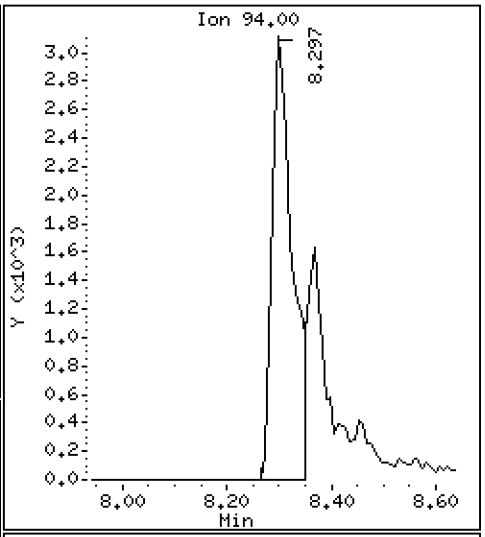
Column phase: ZB-5msi

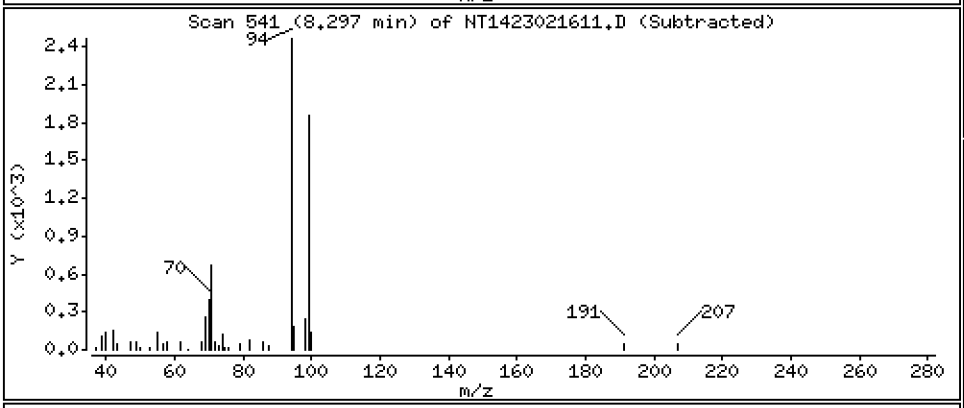
Column diameter: 0.25

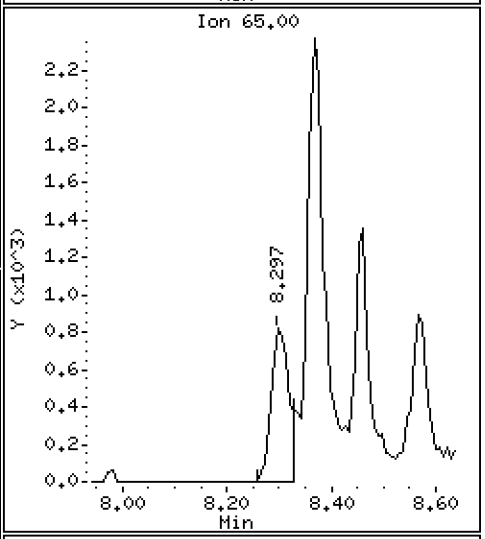
3 Phenol

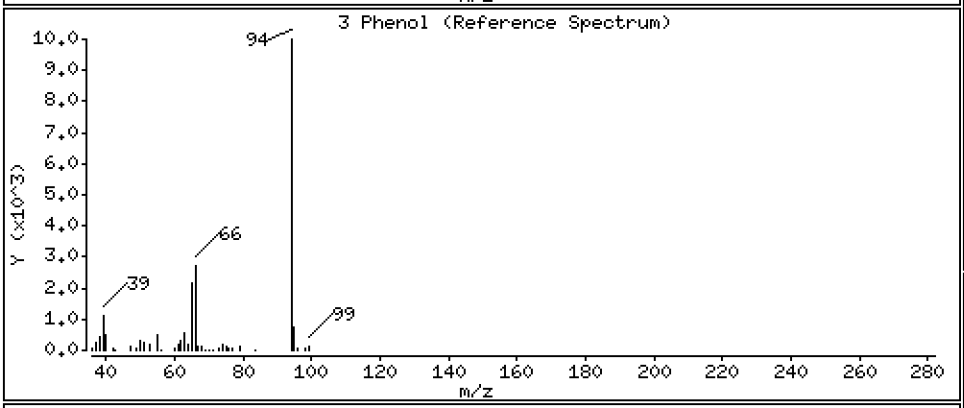
Concentration: 0.05905 ug/mL

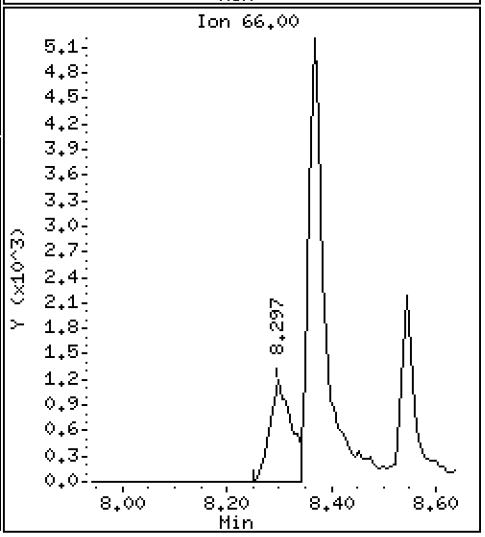


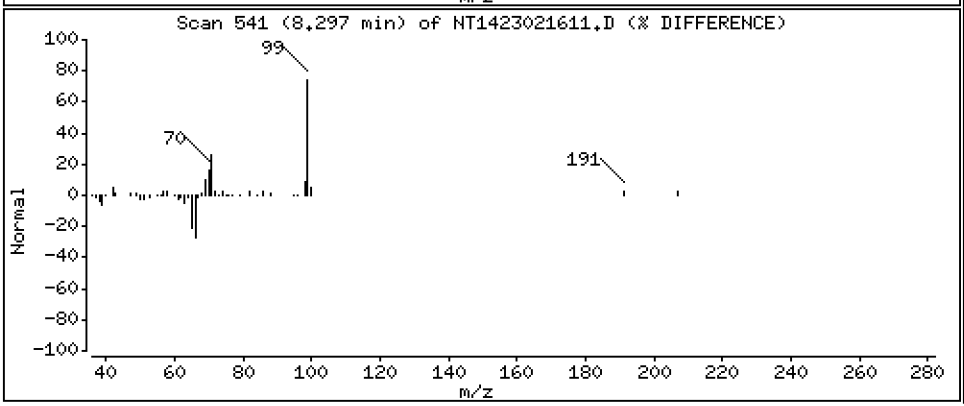












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

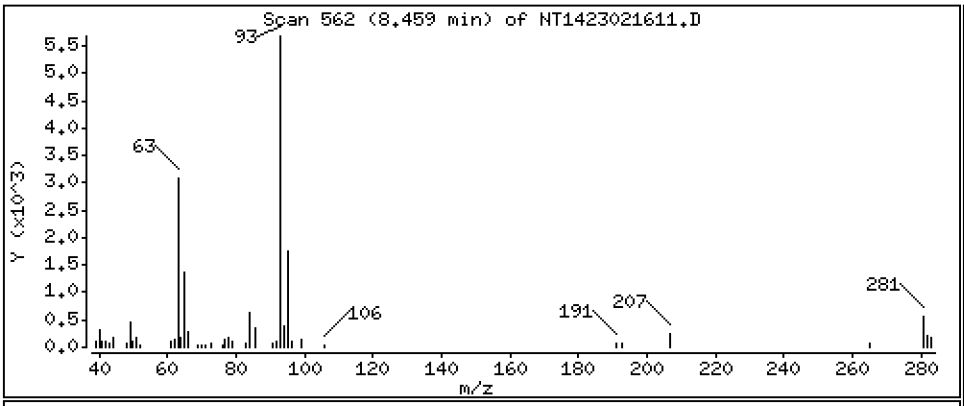
Operator: DSD

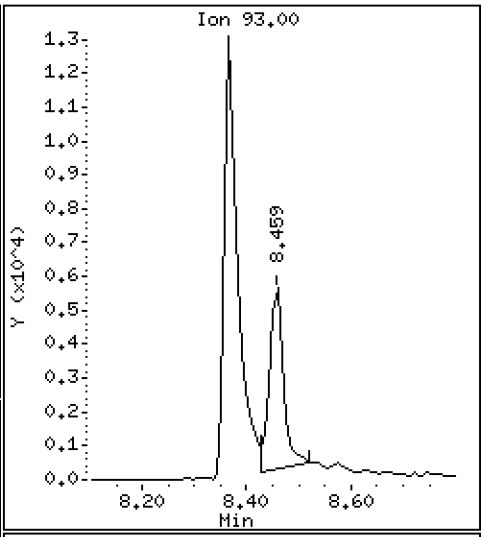
Column phase: ZB-5msi

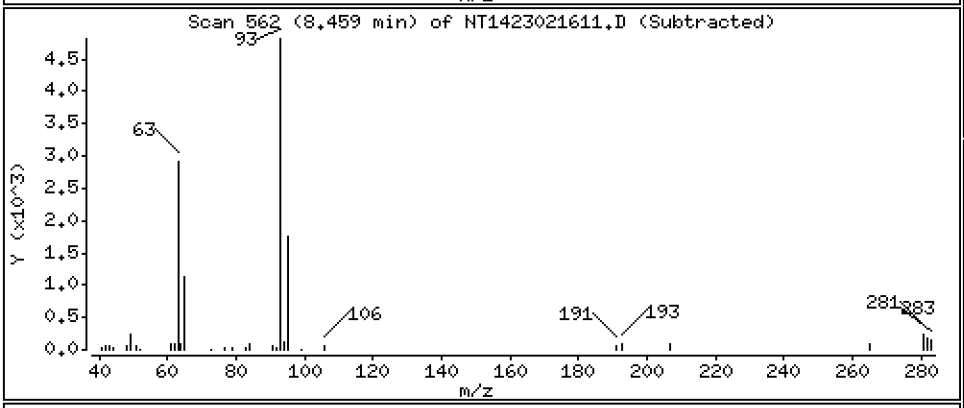
Column diameter: 0.25

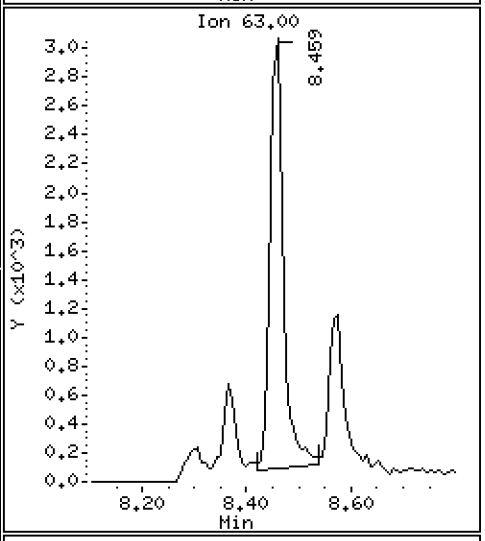
4 Bis(2-Chloroethyl)ether

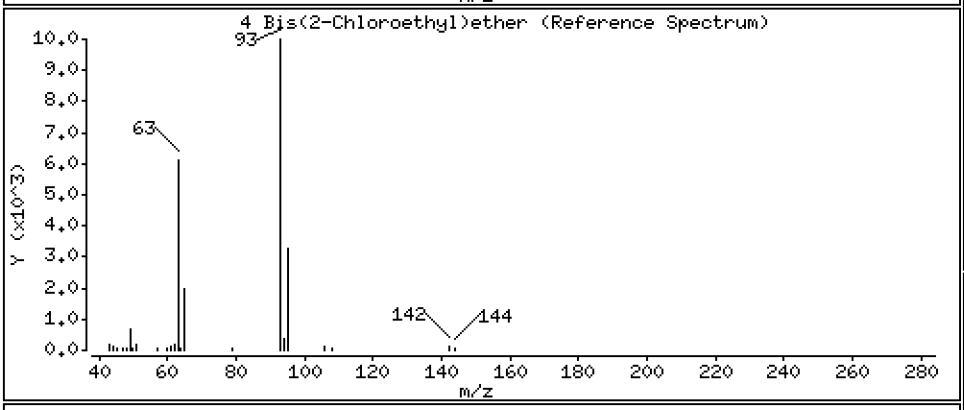
Concentration: 0.08655 ug/mL

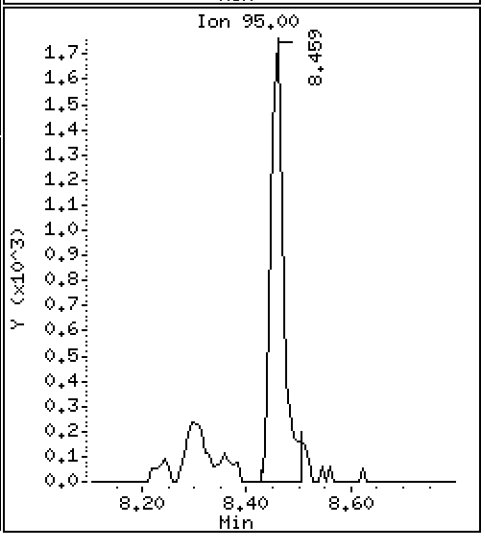


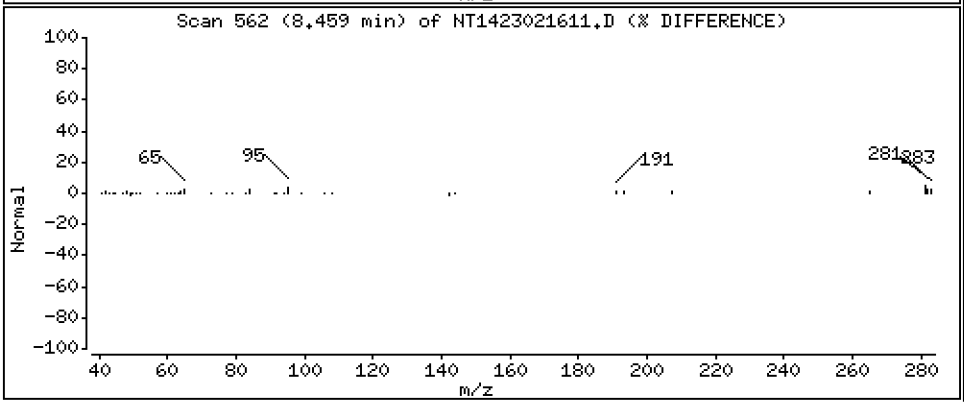












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

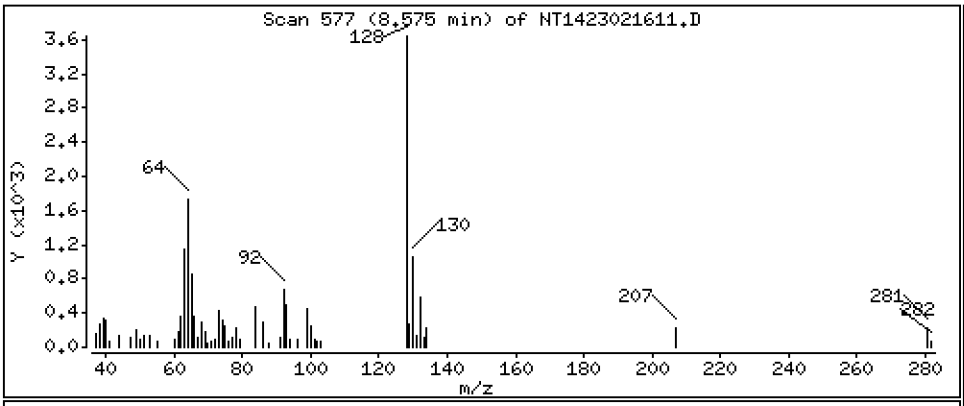
Operator: DSD

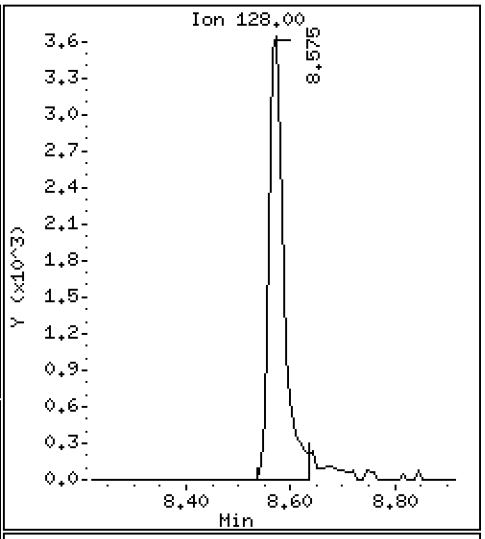
Column phase: ZB-5msi

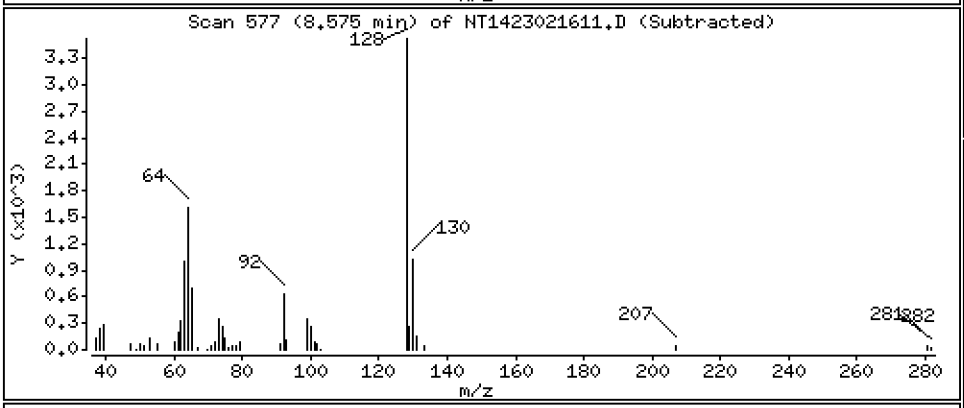
Column diameter: 0.25

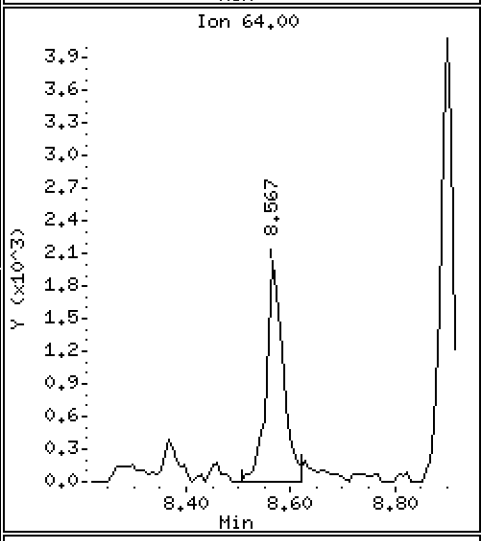
6 2-Chlorophenol

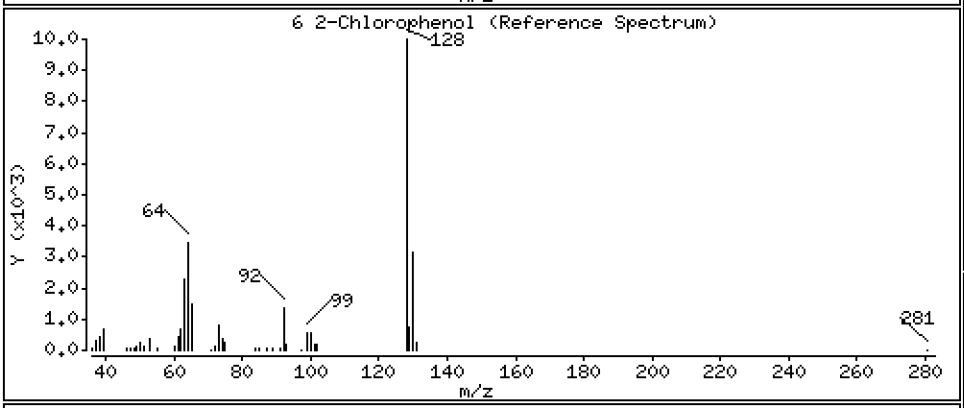
Concentration: 0.06896 ug/mL

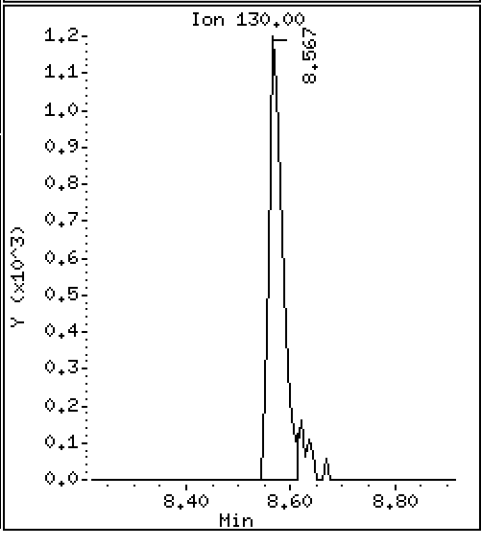


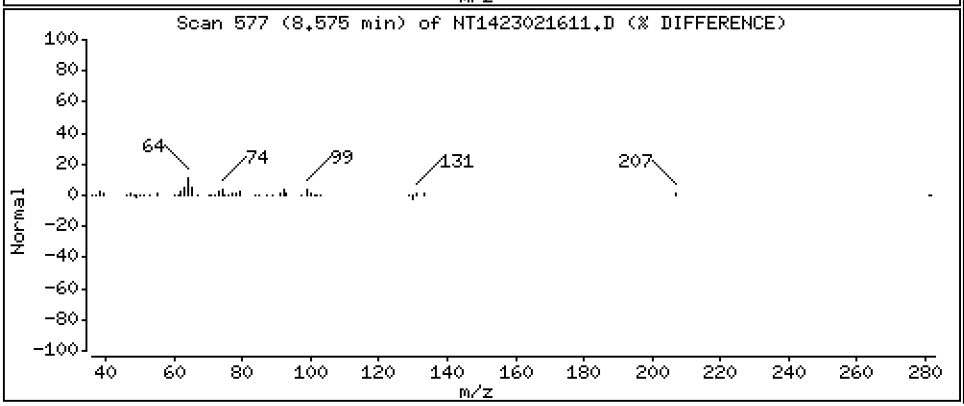












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

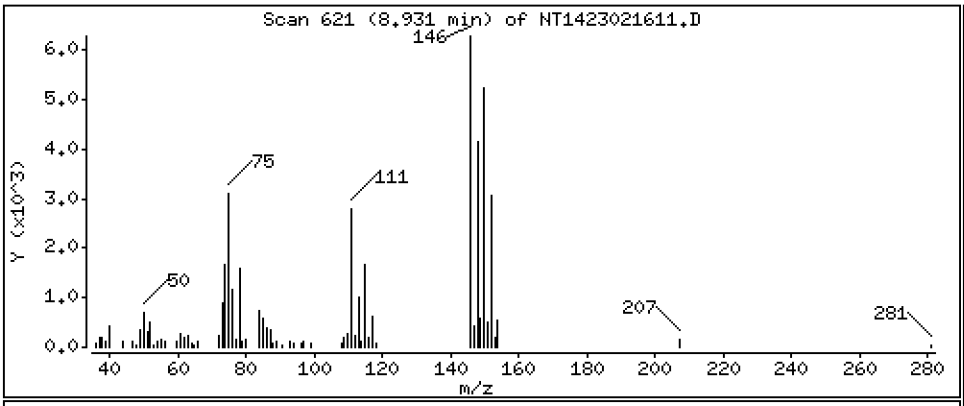
Operator: DSD

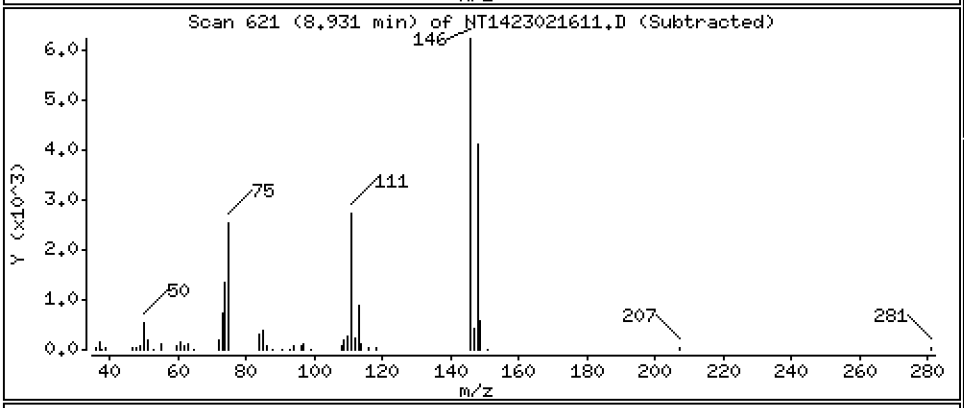
Column phase: ZB-5msi

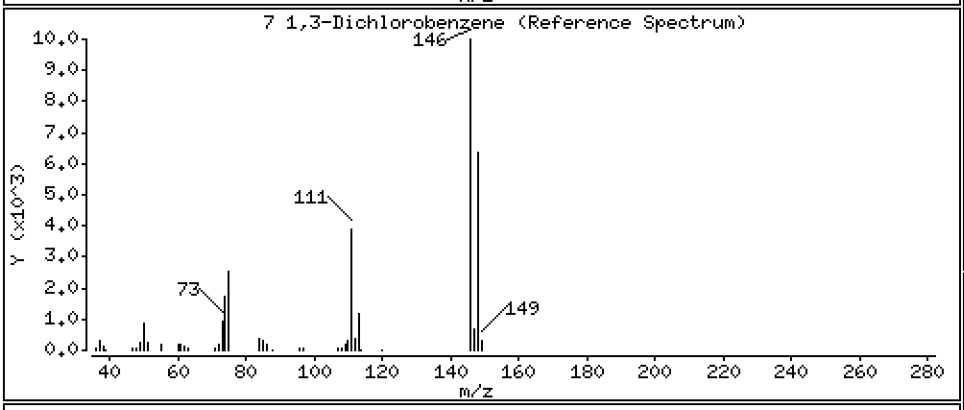
Column diameter: 0.25

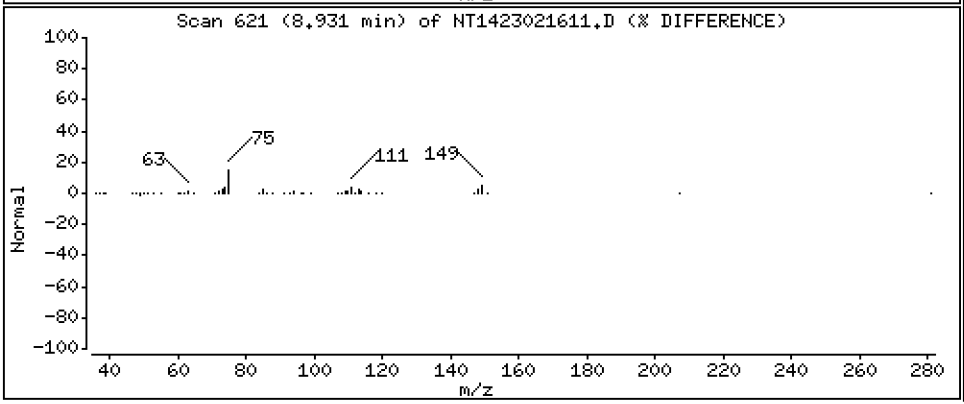
7 1,3-Dichlorobenzene

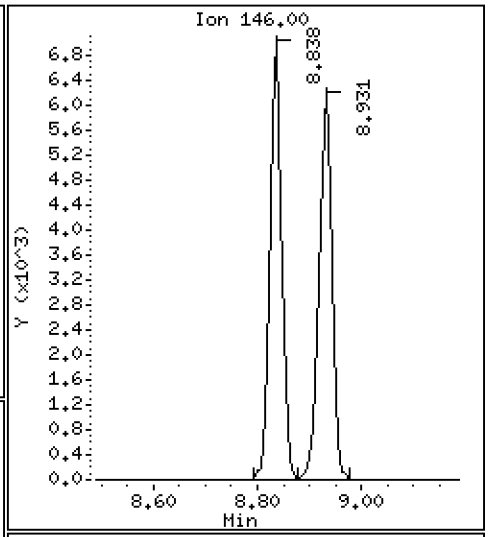
Concentration: 0.09212 ug/mL

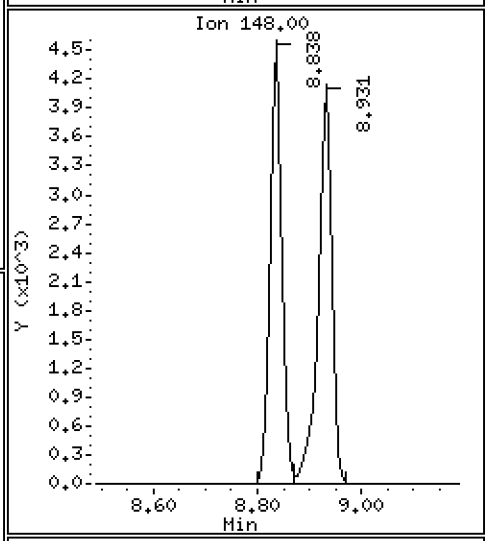


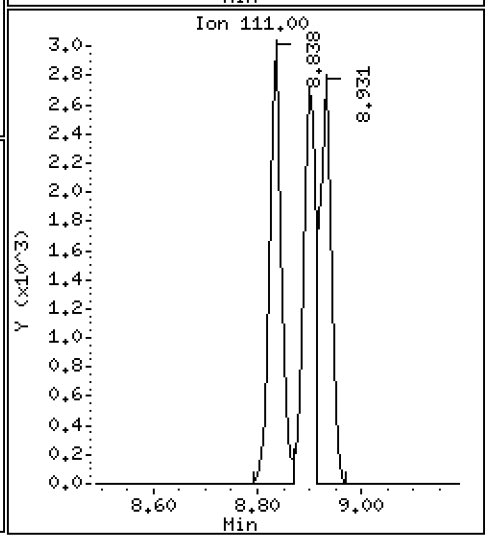












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

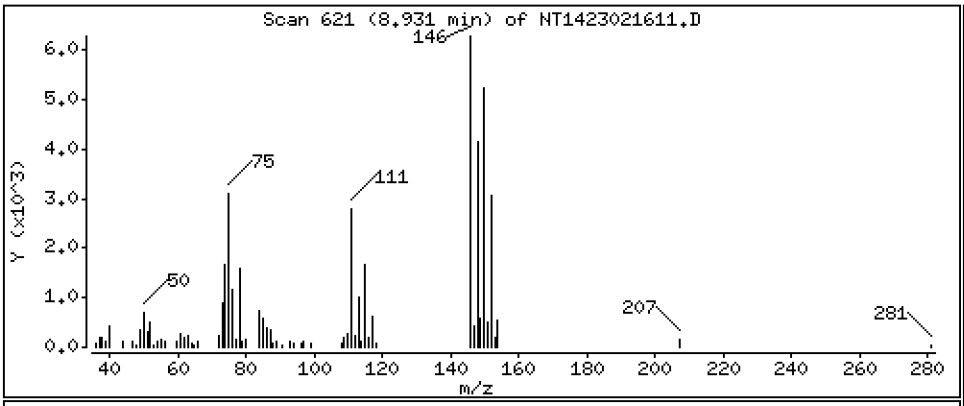
Operator: DSD

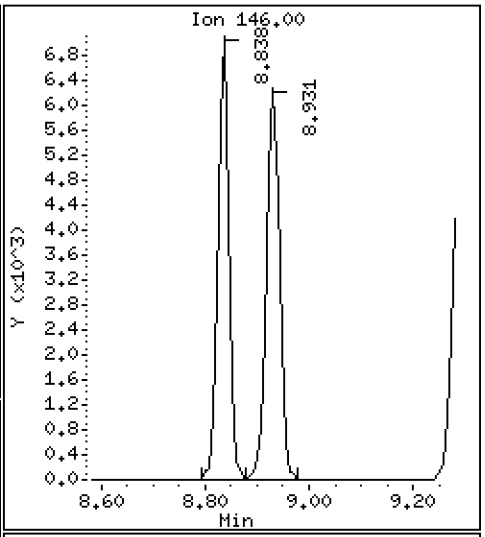
Column phase: ZB-5msi

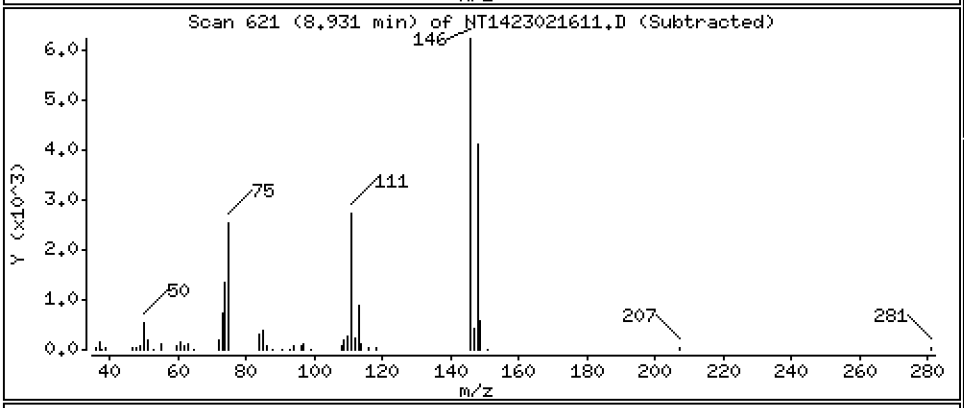
Column diameter: 0.25

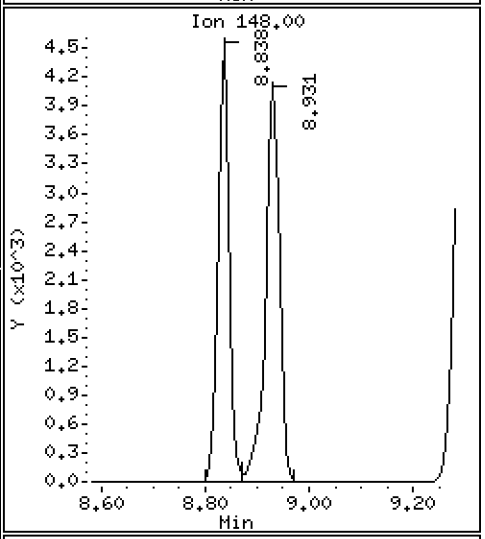
9 1,4-Dichlorobenzene

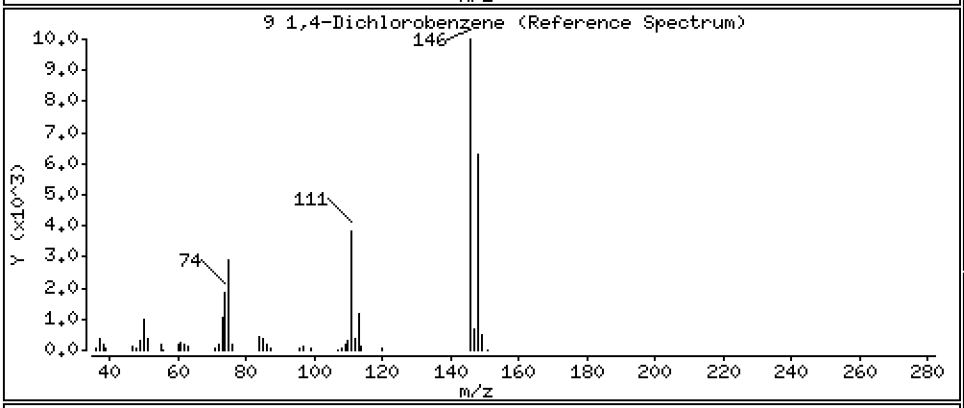
Concentration: 0.09707 ug/mL

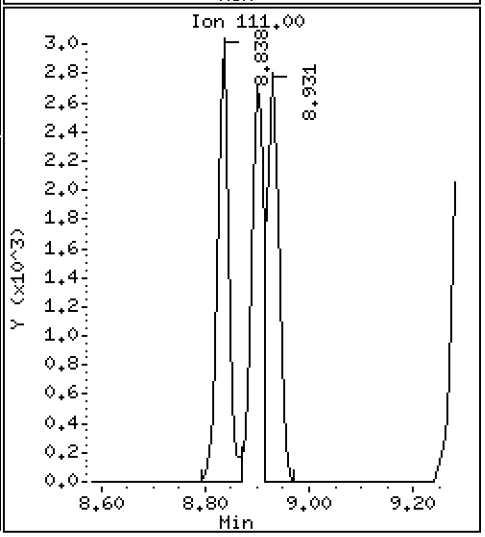


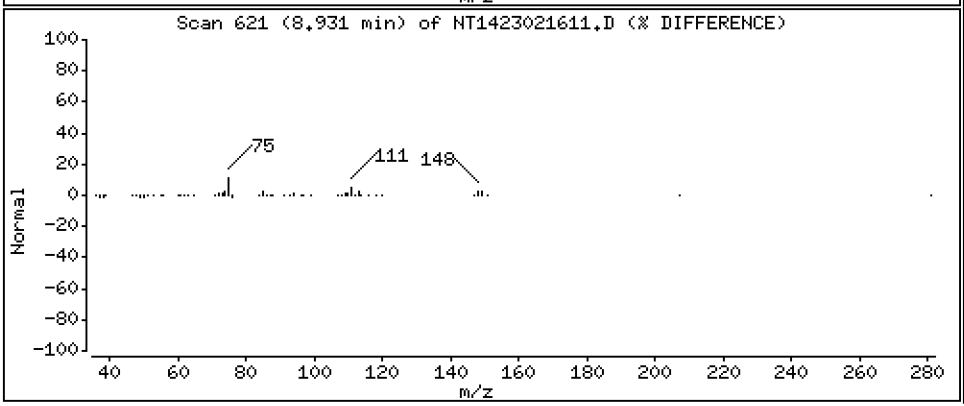












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

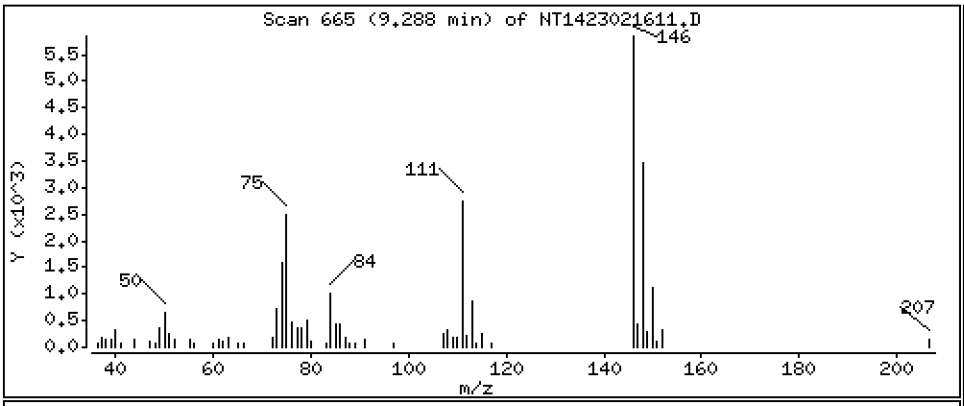
Operator: DSD

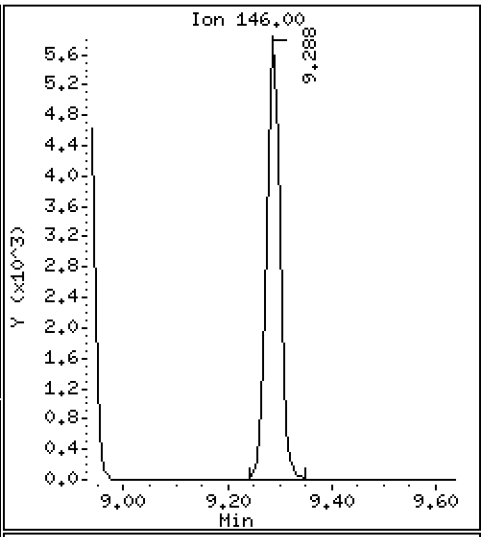
Column phase: ZB-5msi

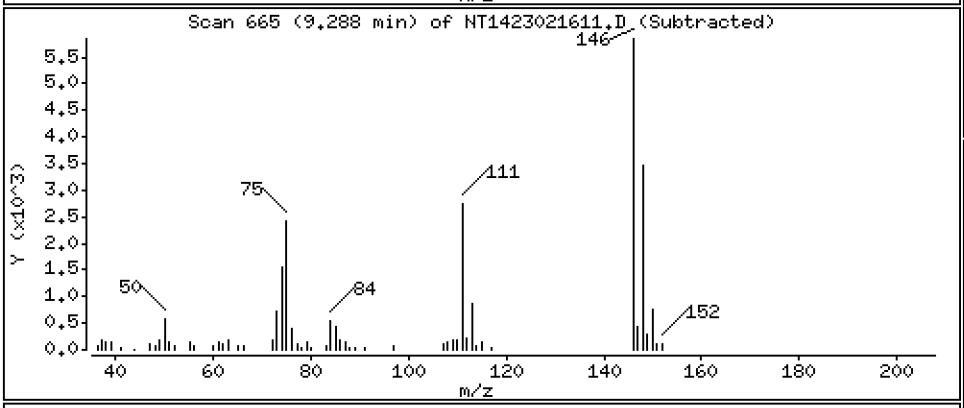
Column diameter: 0.25

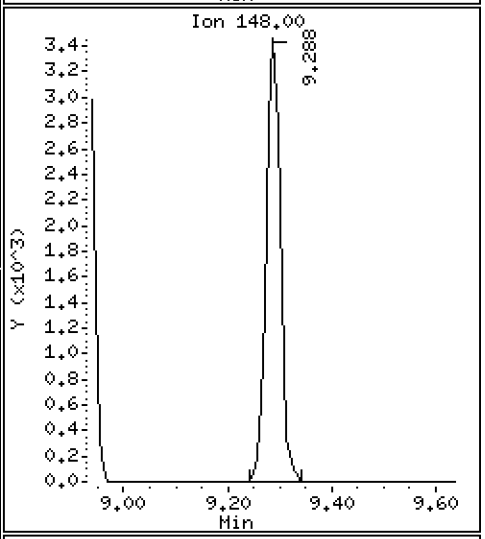
12 1,2-Dichlorobenzene

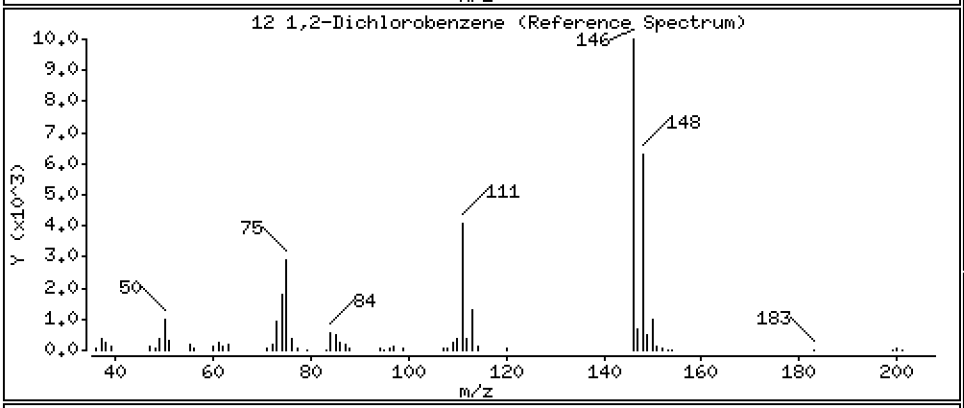
Concentration: 0.09276 ug/mL

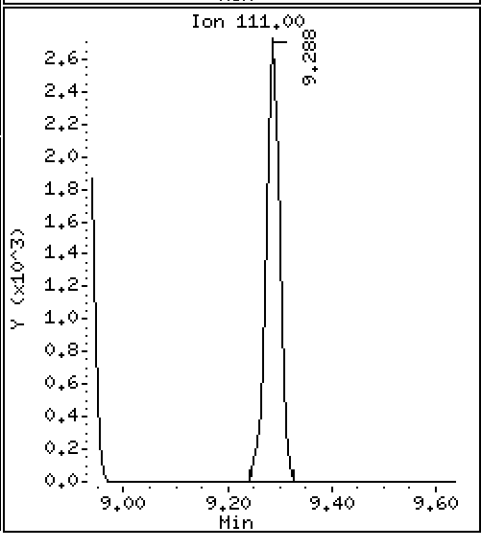


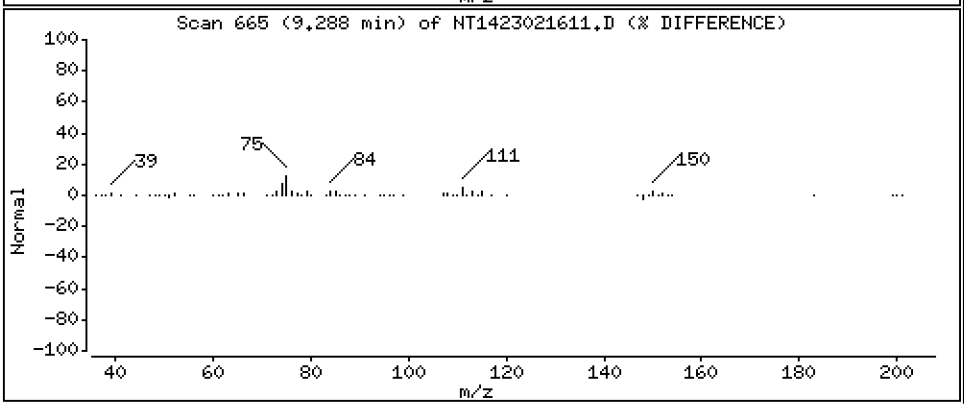












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

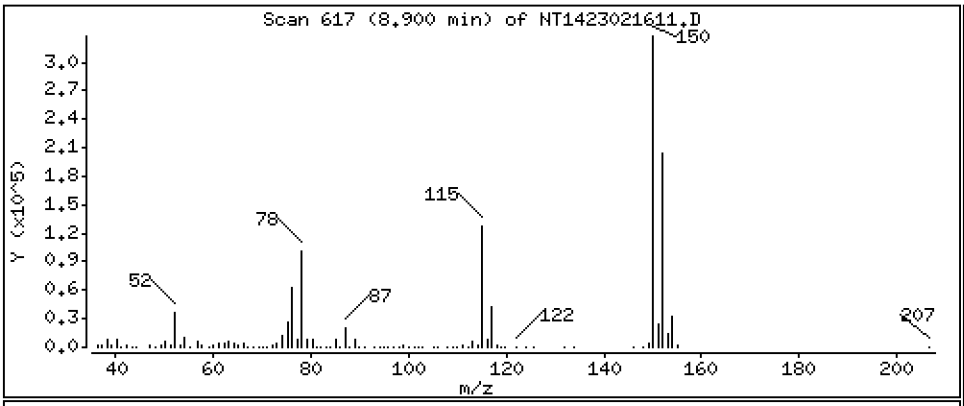
Operator: DSD

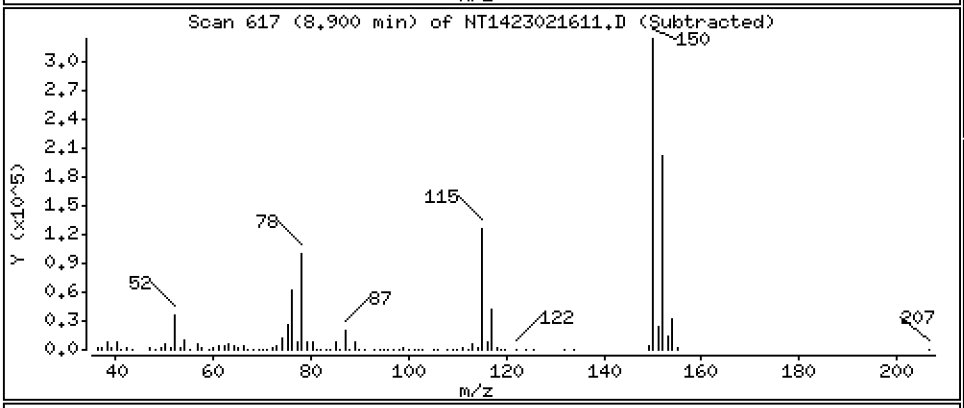
Column phase: ZB-5msi

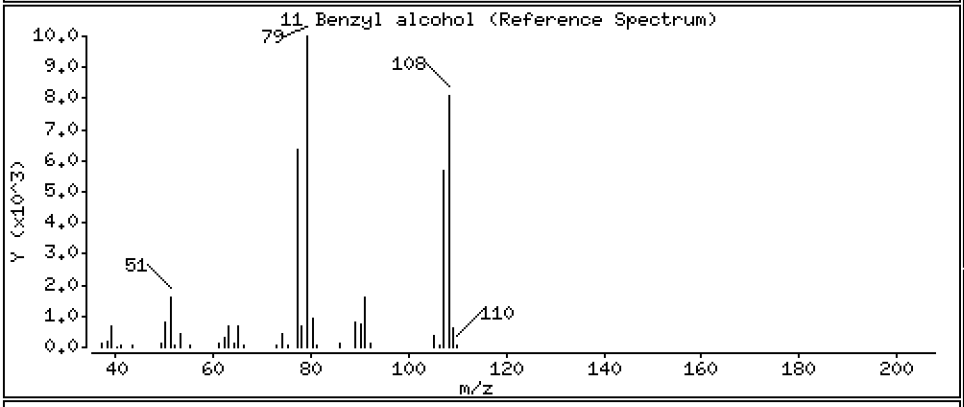
Column diameter: 0.25

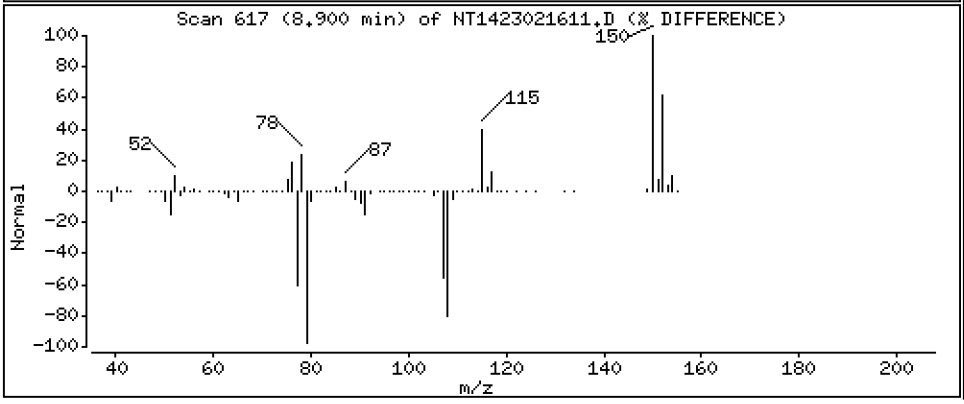
11 Benzyl alcohol

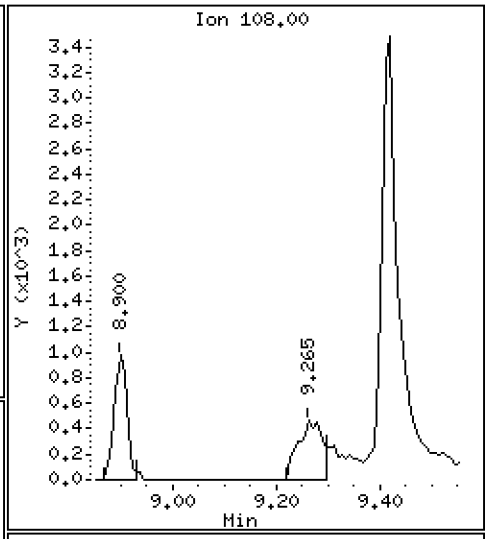
Concentration: 0.01970 ug/mL

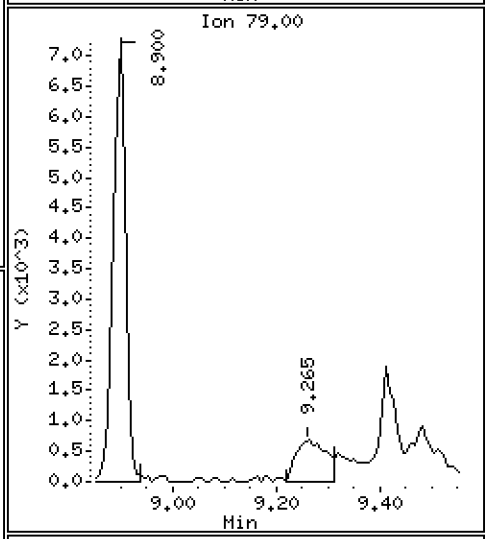


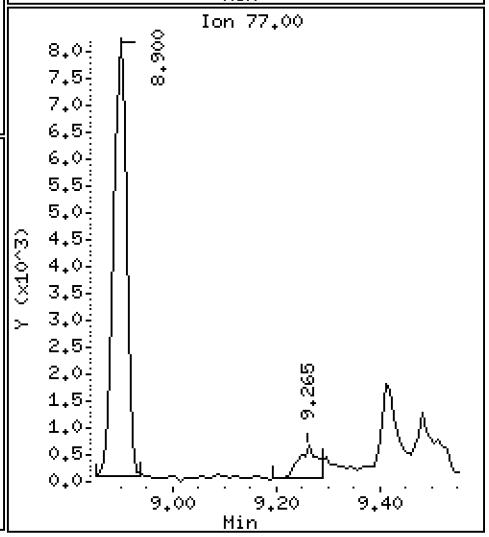












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

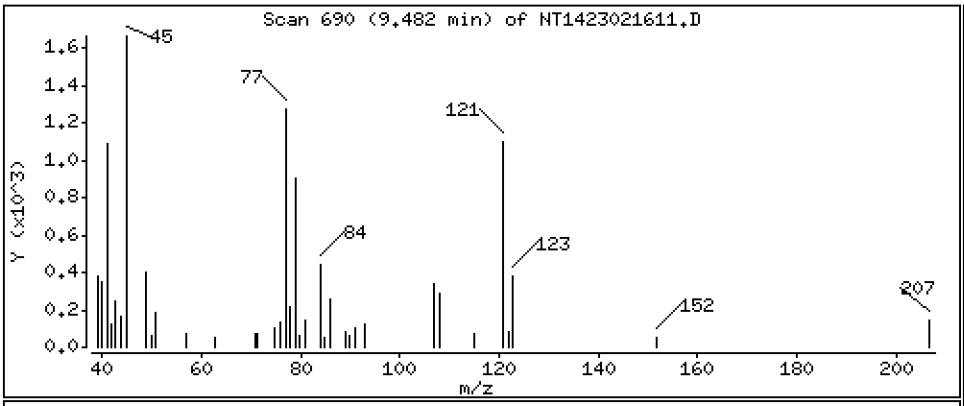
Operator: DSD

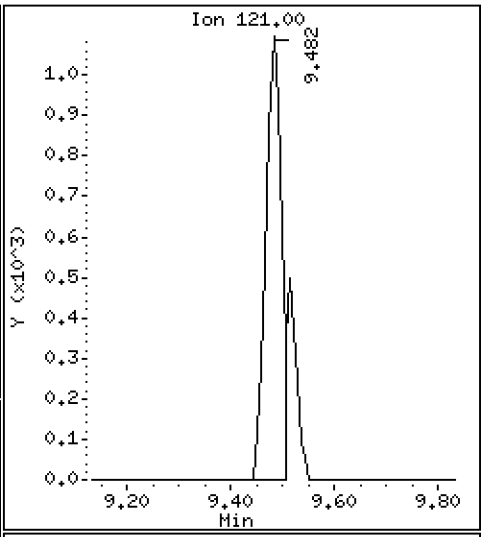
Column phase: ZB-5msi

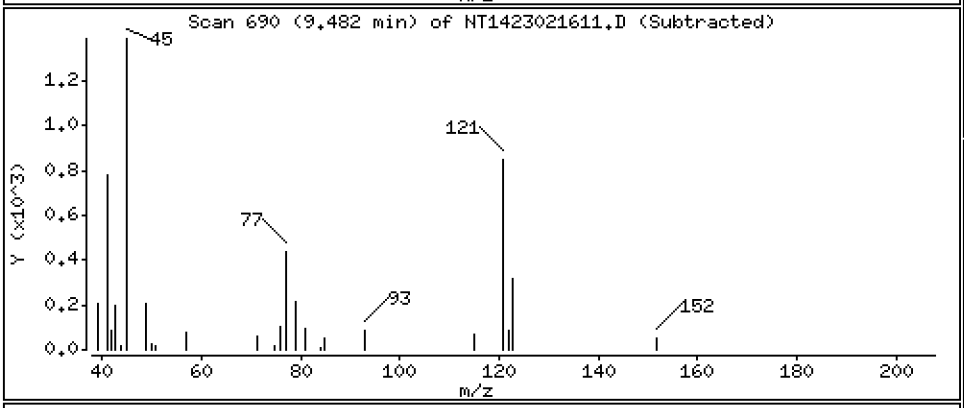
Column diameter: 0.25

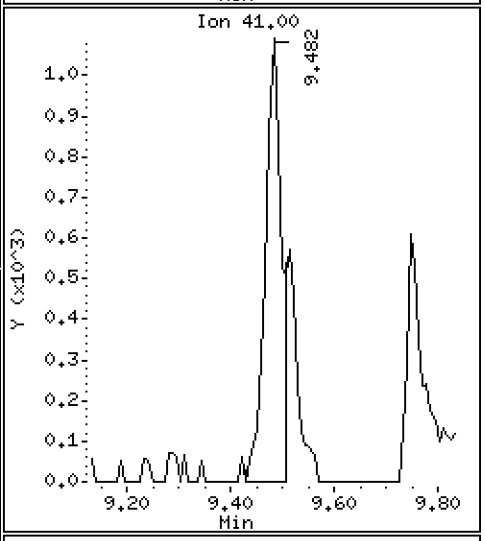
14 2,2'-oxybis(1-Chloropropane)

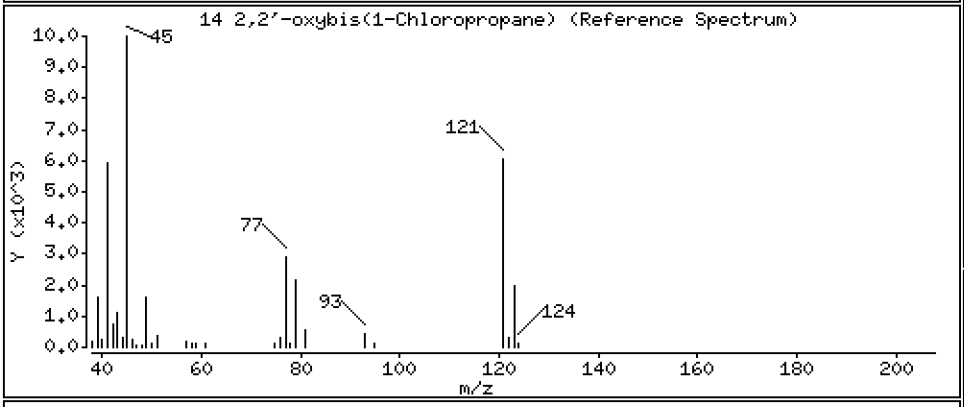
Concentration: 0.07216 ug/mL

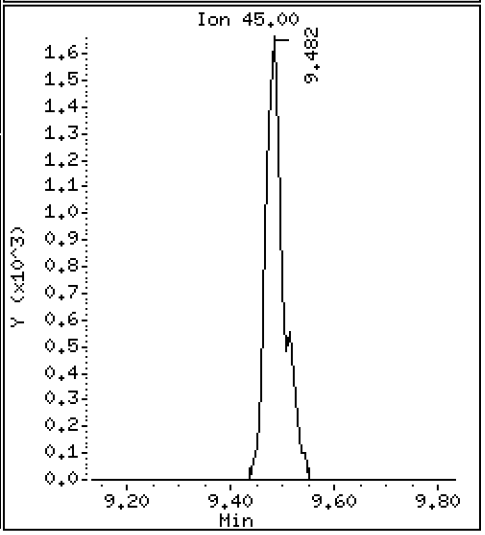


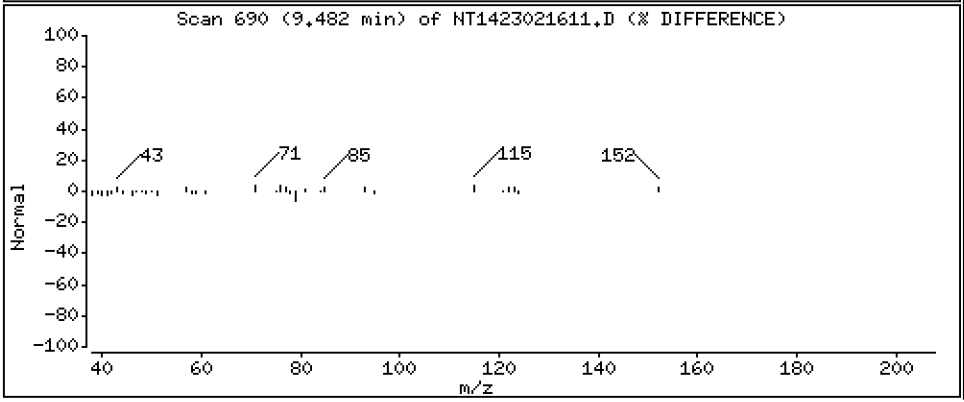












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

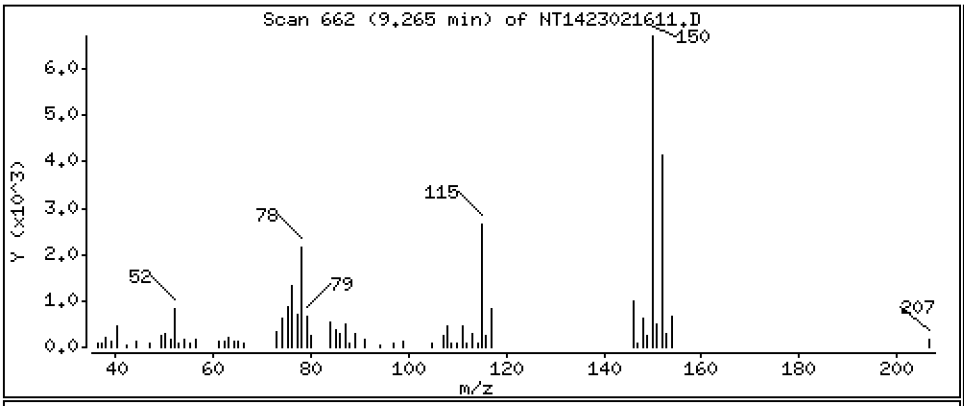
Operator: DSD

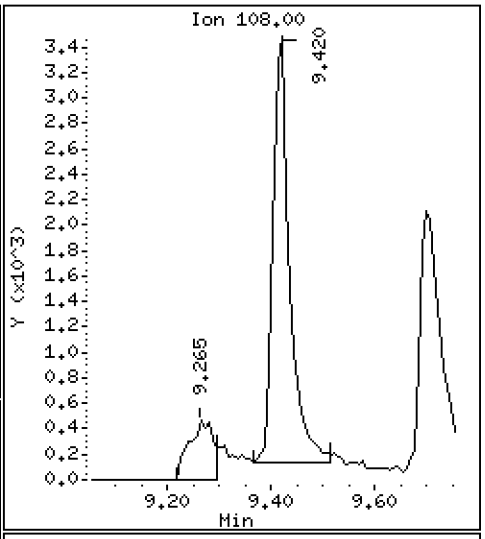
Column phase: ZB-5msi

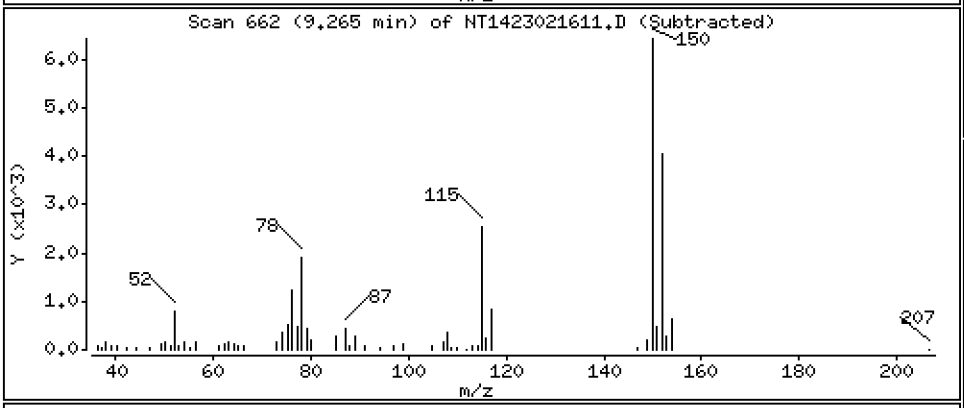
Column diameter: 0.25

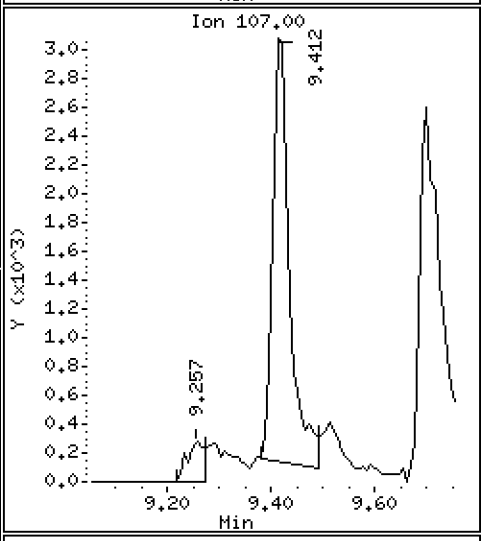
13 2-Methylphenol

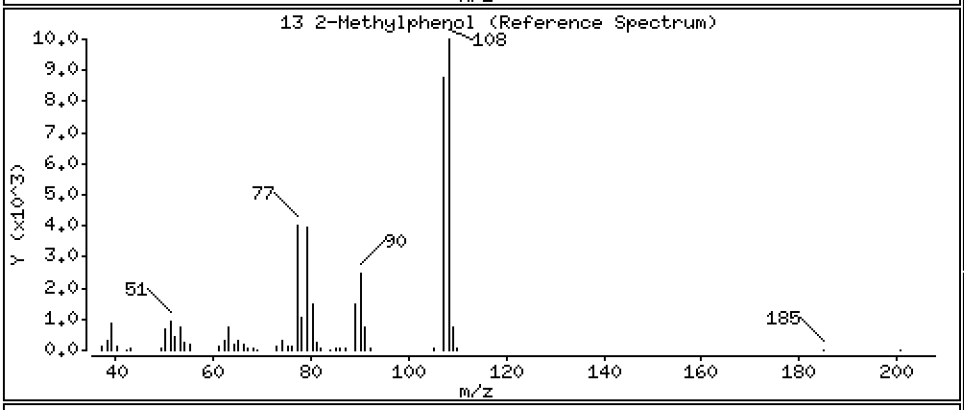
Concentration: 0.01503 ug/mL

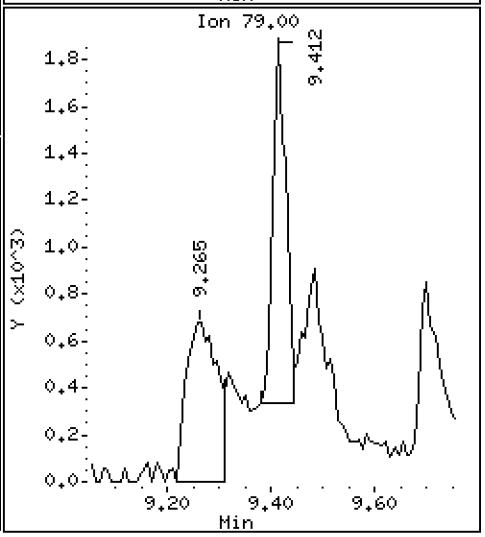


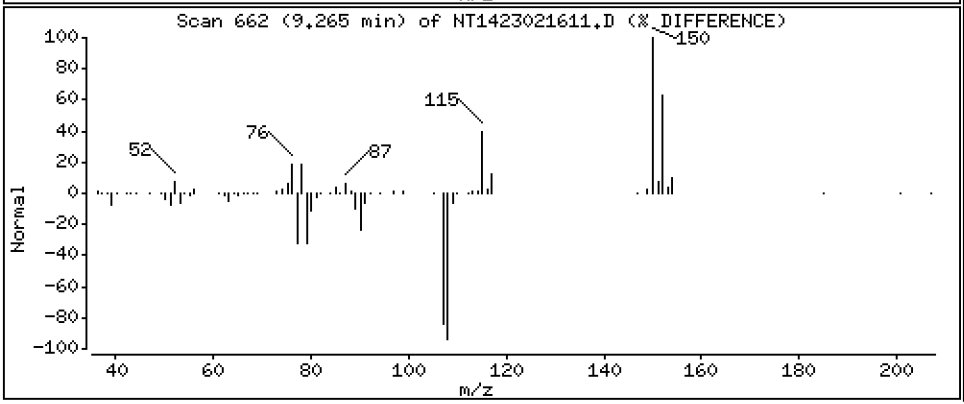












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021611.D

Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

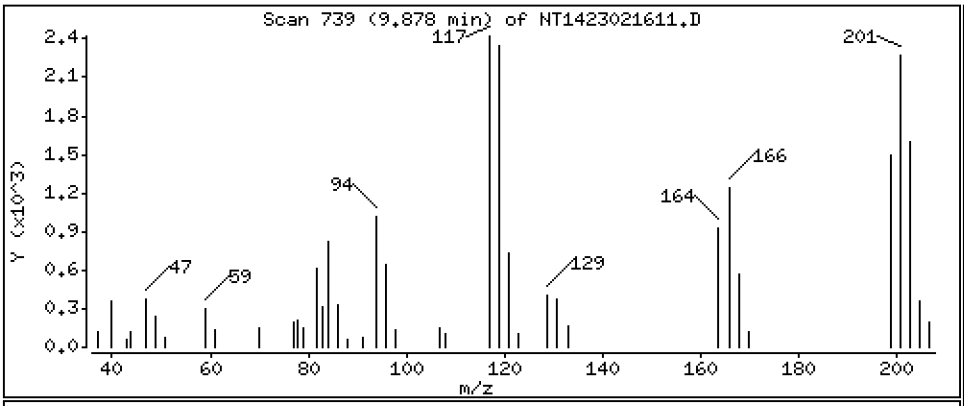
Operator: DSD

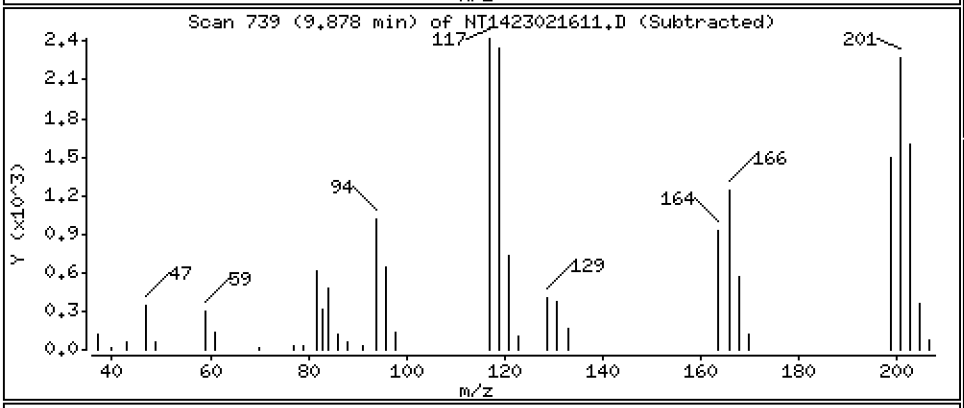
Column phase: ZB-5msi

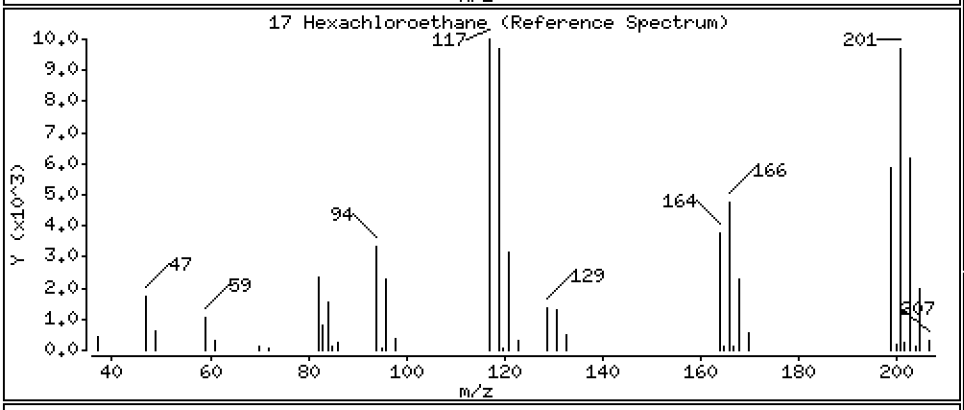
Column diameter: 0.25

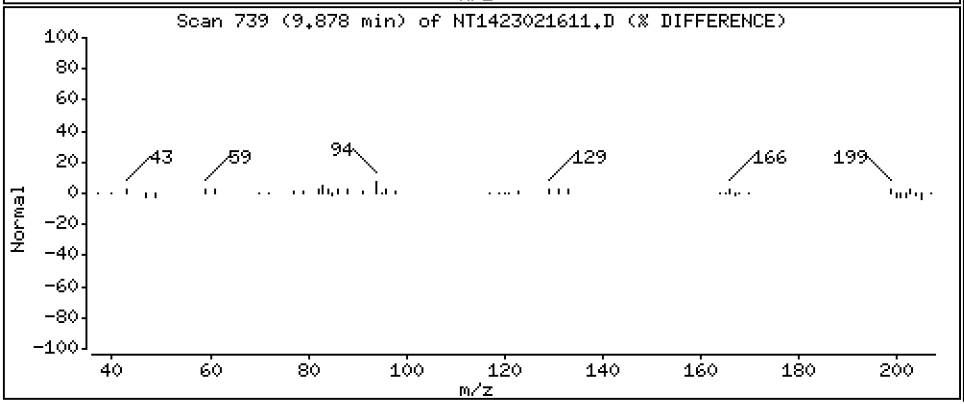
17 Hexachloroethane

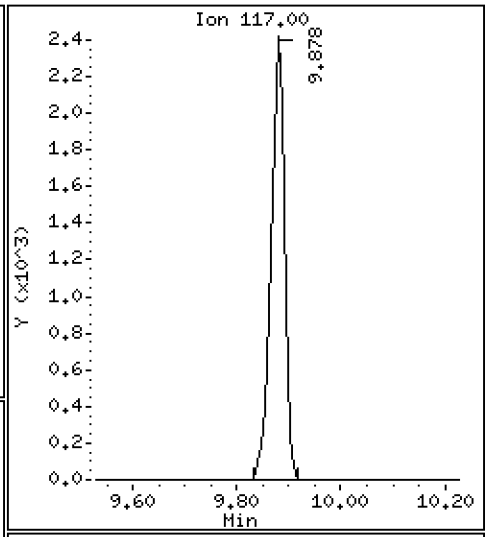
Concentration: 0.08822 ug/mL

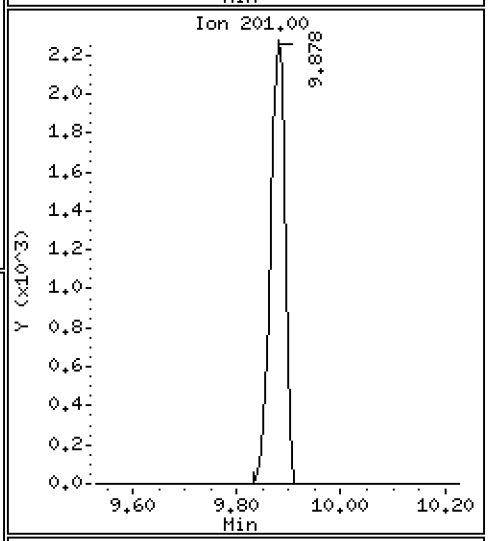


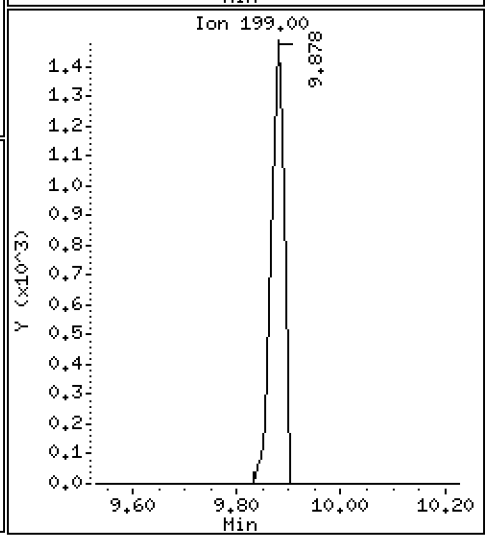












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

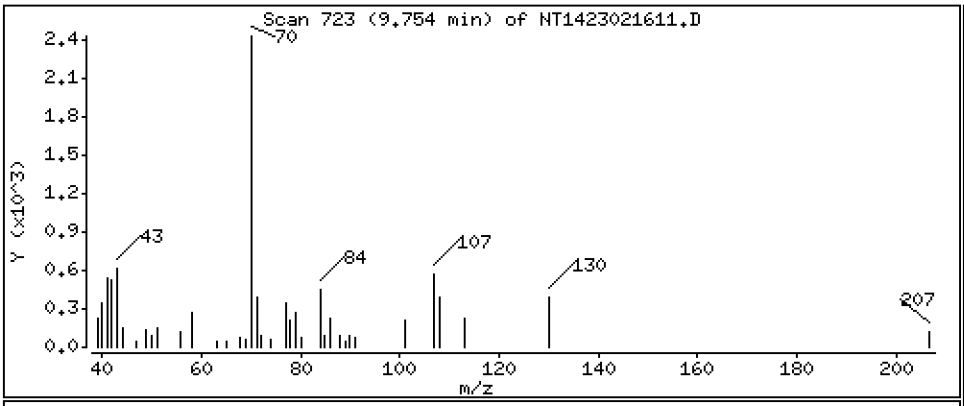
Operator: DSD

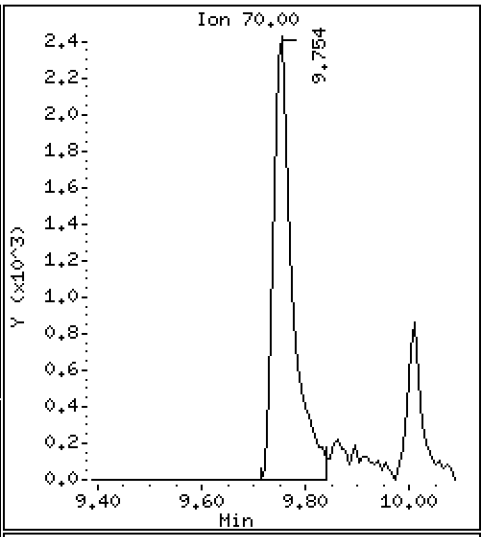
Column phase: ZB-5msi

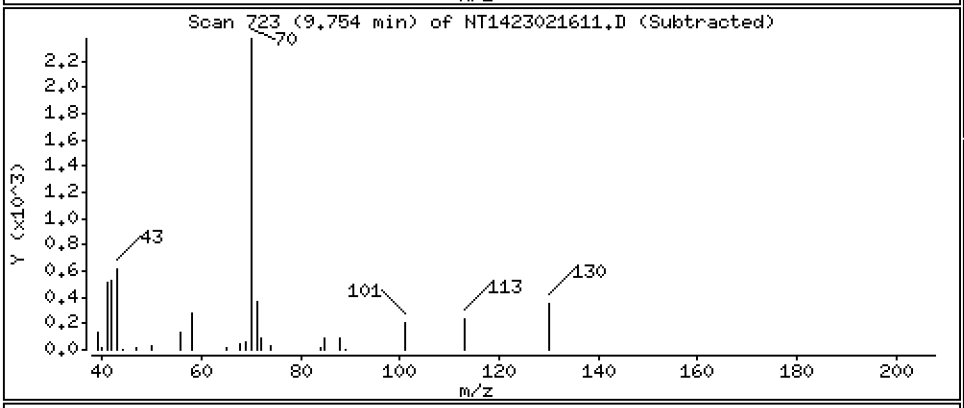
Column diameter: 0.25

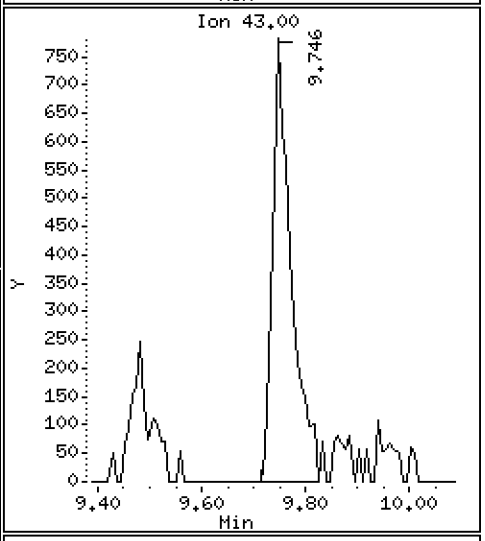
16 N-Nitroso-di-n-propylamine

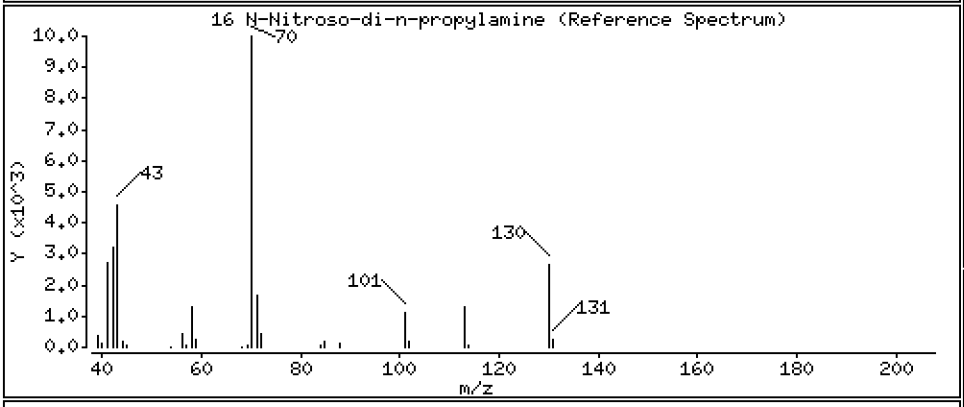
Concentration: 0.06806 ug/mL

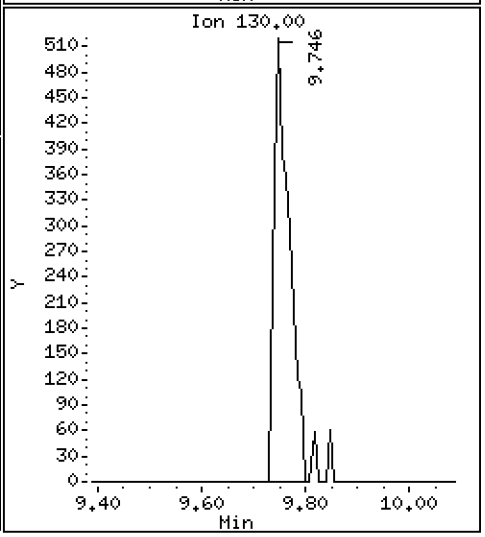


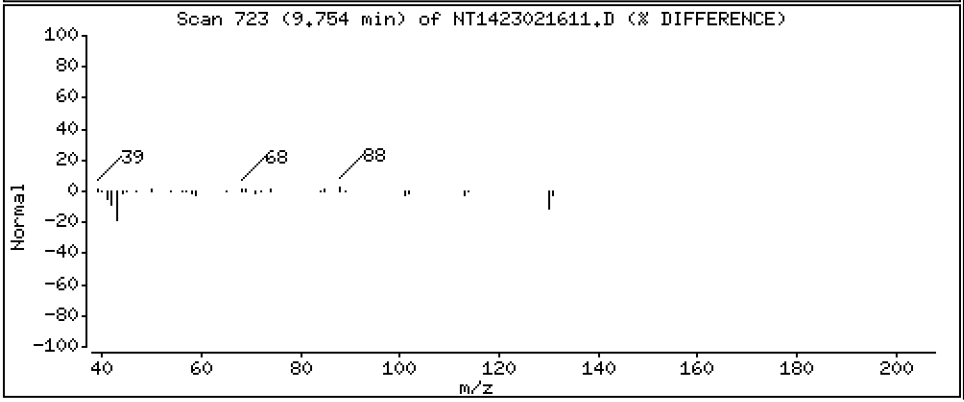












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

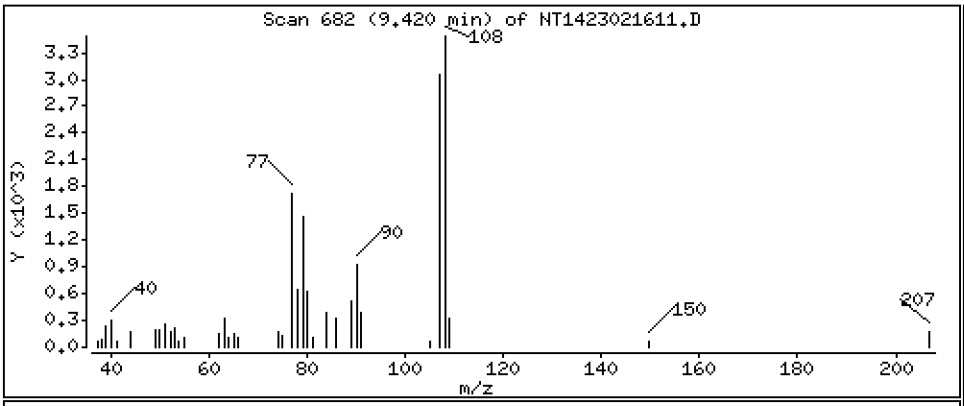
Operator: DSD

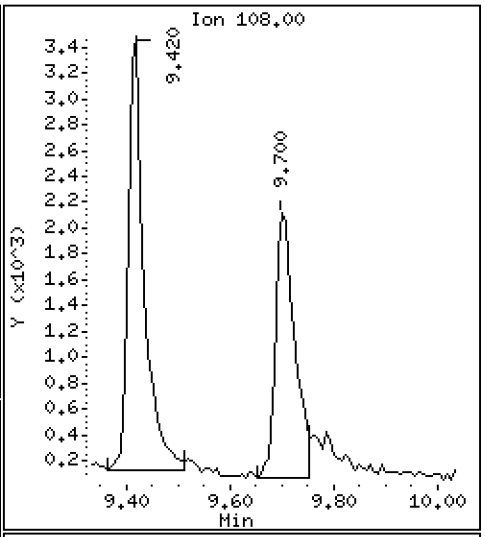
Column phase: ZB-5msi

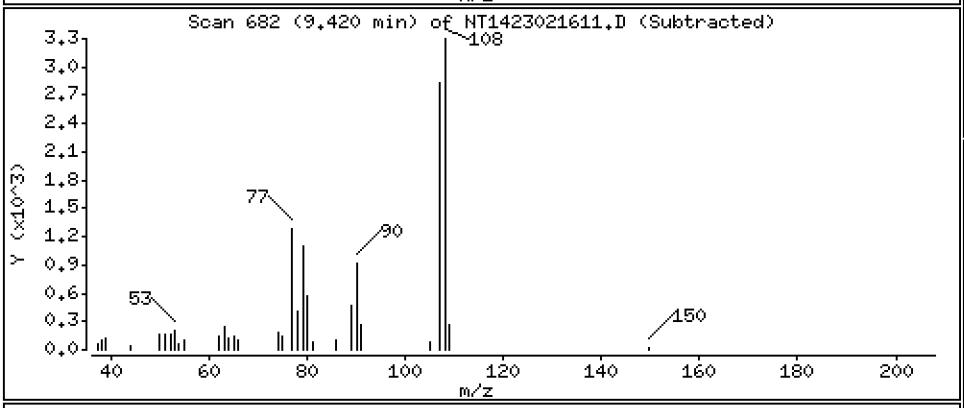
Column diameter: 0.25

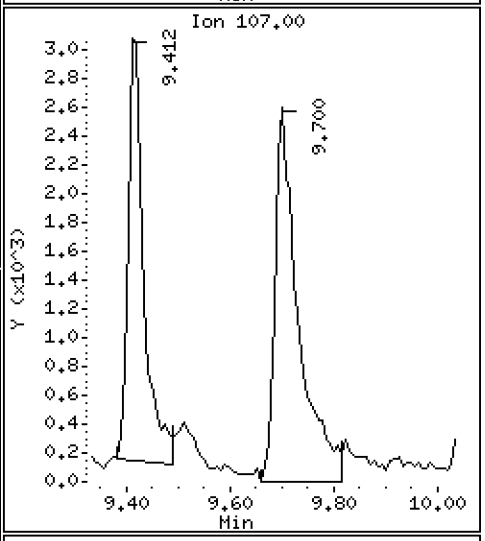
15 4-Methylphenol

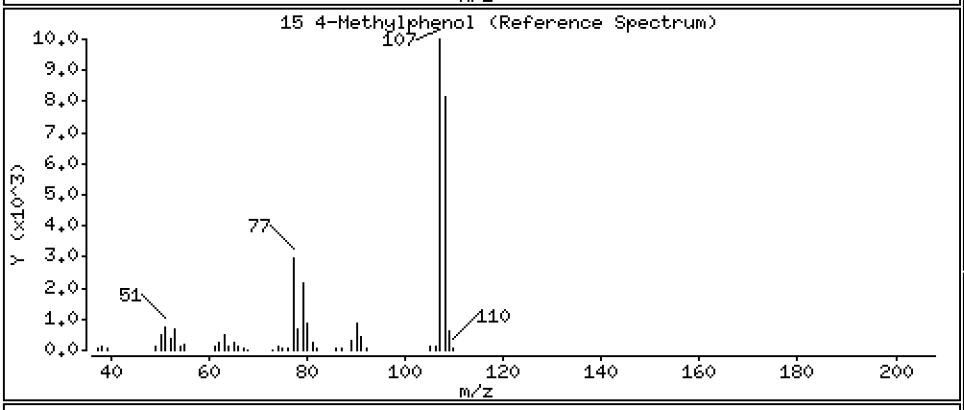
Concentration: 0.06809 ug/mL

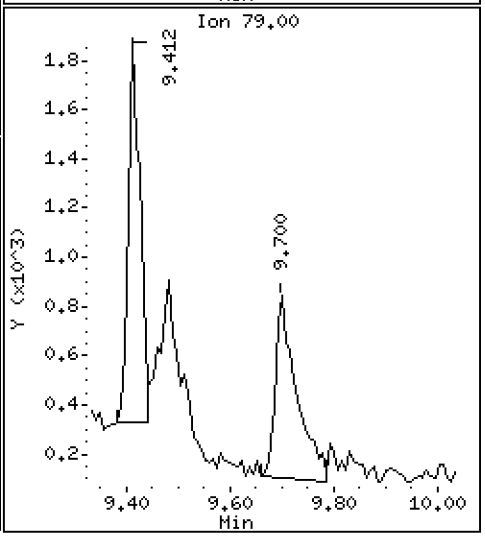


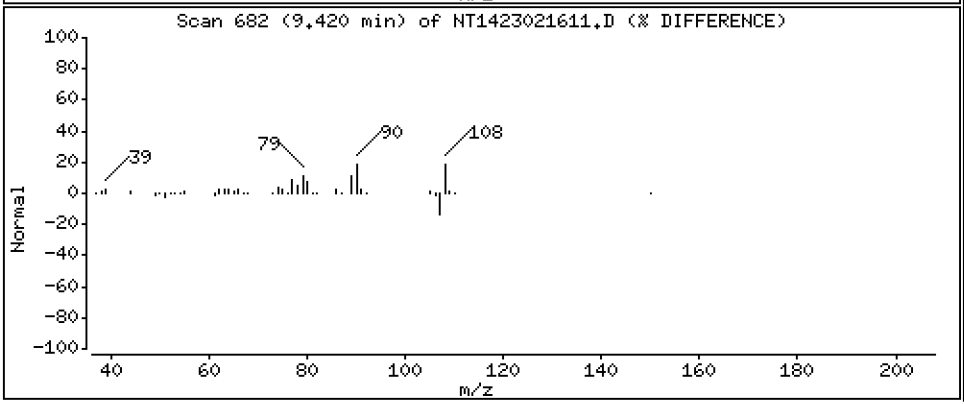












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

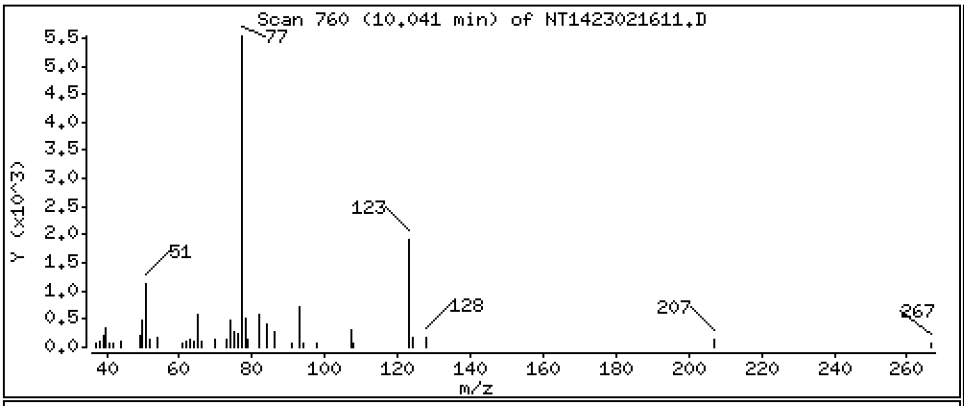
Operator: DSD

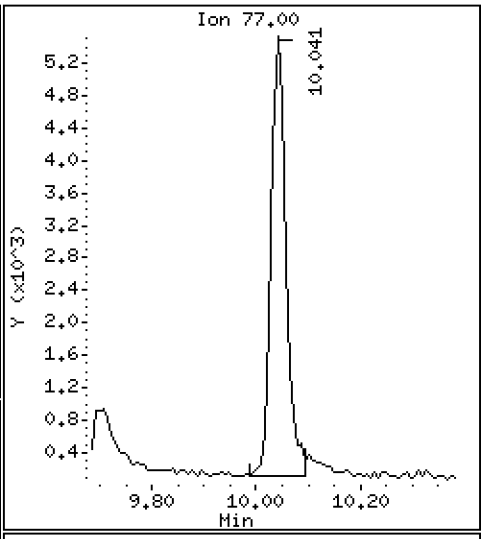
Column phase: ZB-5msi

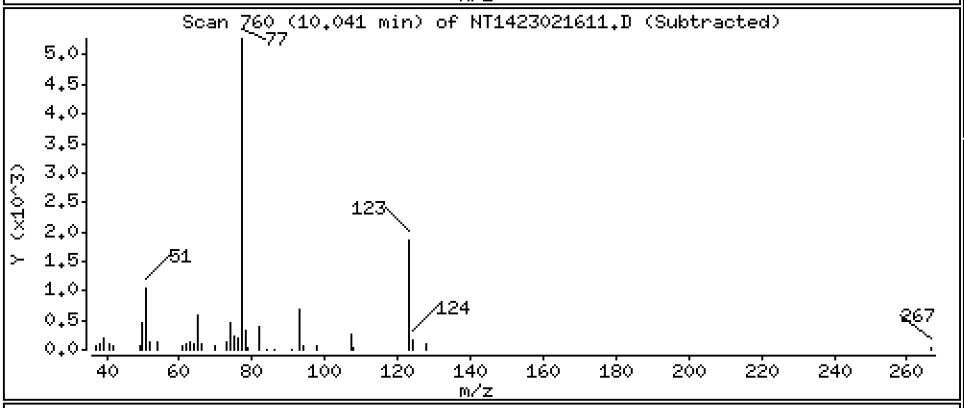
Column diameter: 0.25

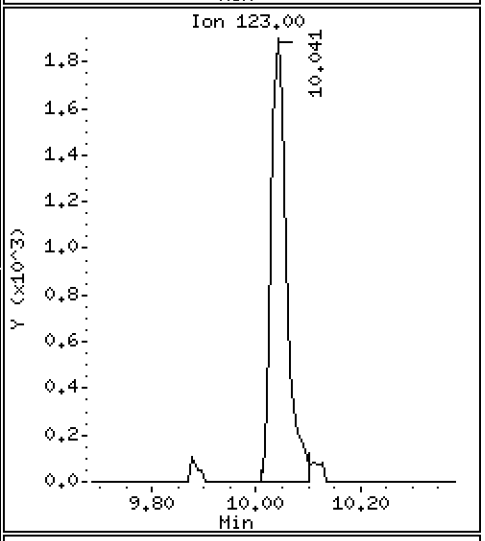
19 Nitrobenzene

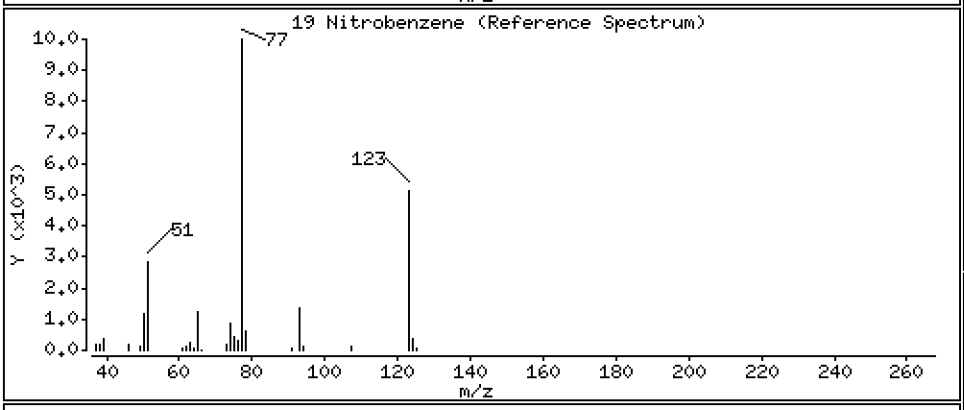
Concentration: 0.07780 ug/mL

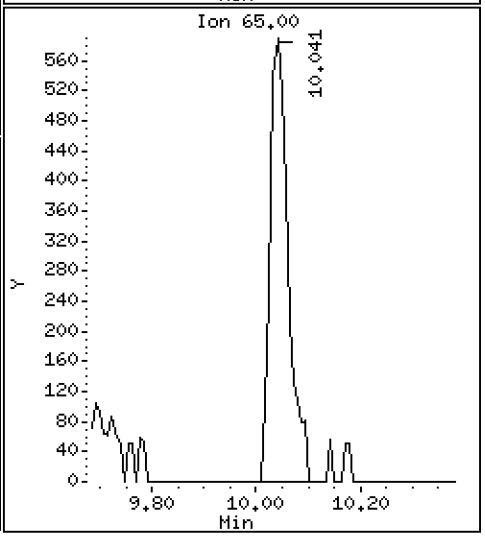


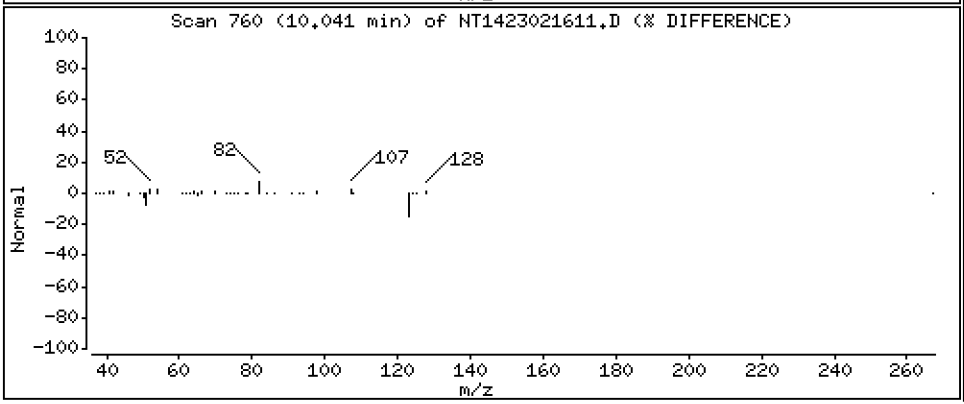












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

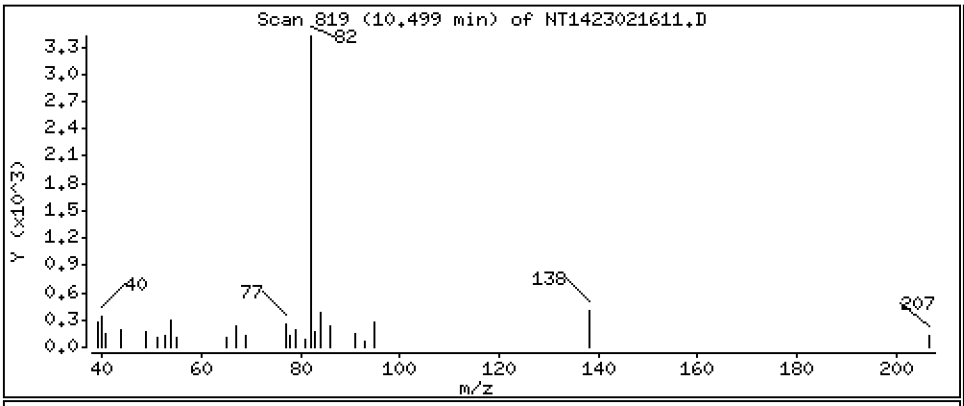
Operator: DSD

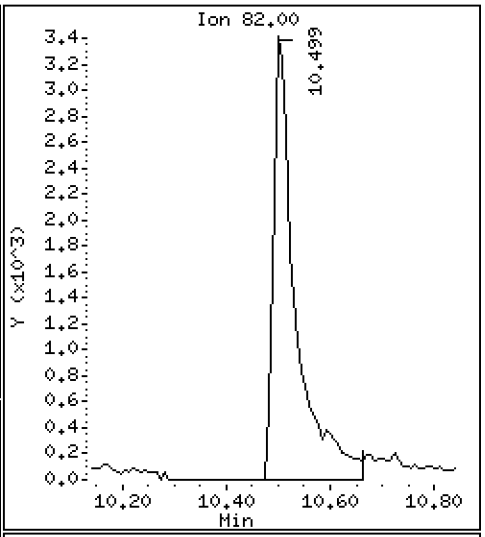
Column phase: ZB-5msi

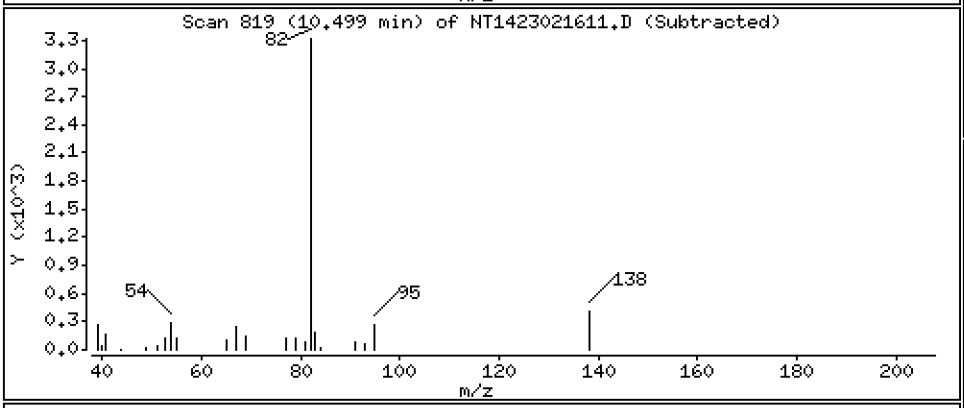
Column diameter: 0.25

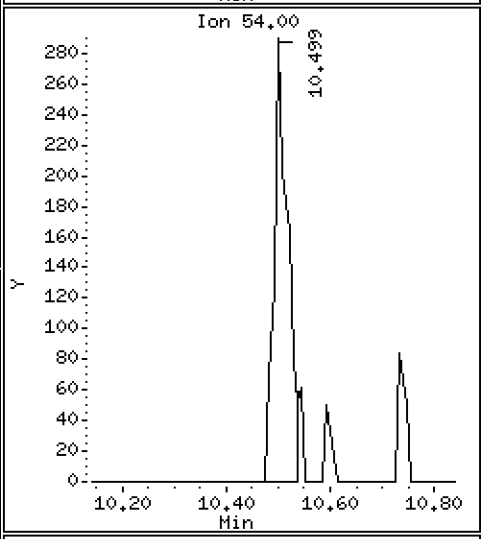
20 Isophorone

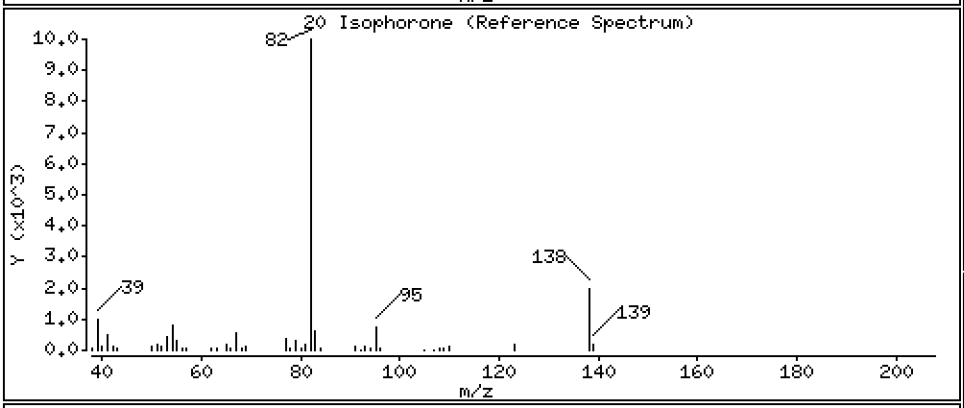
Concentration: 0.06126 ug/mL

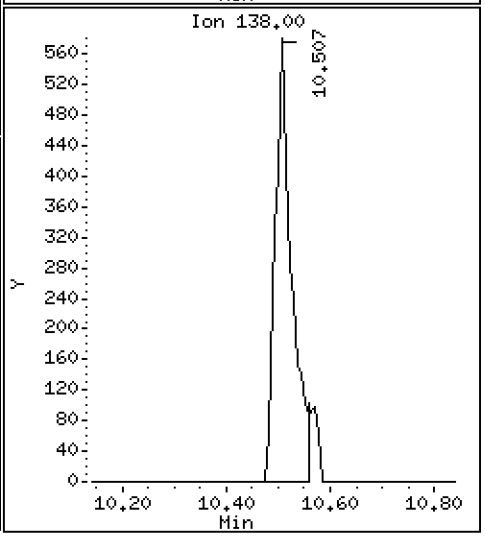


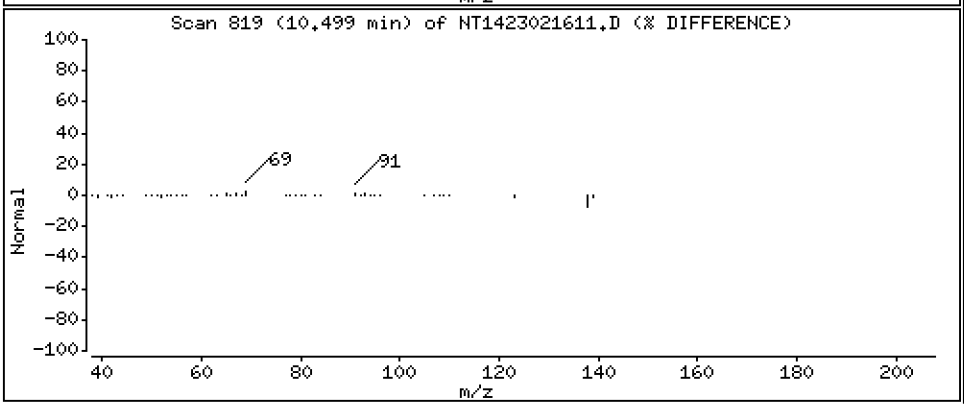












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

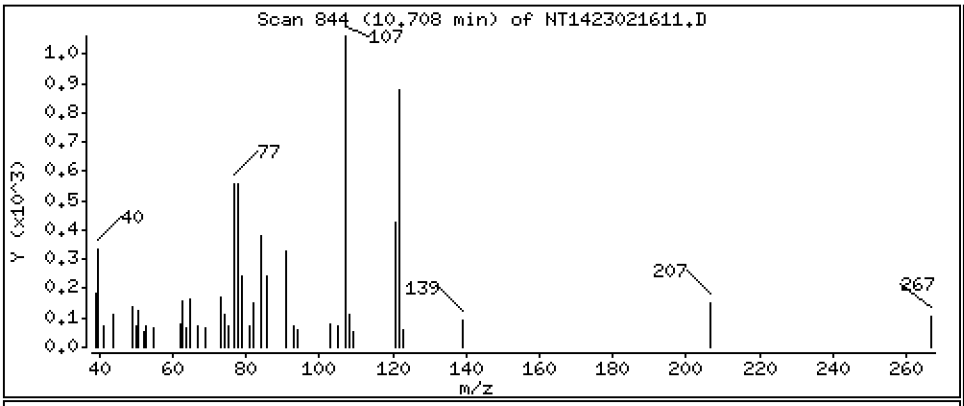
Operator: DSD

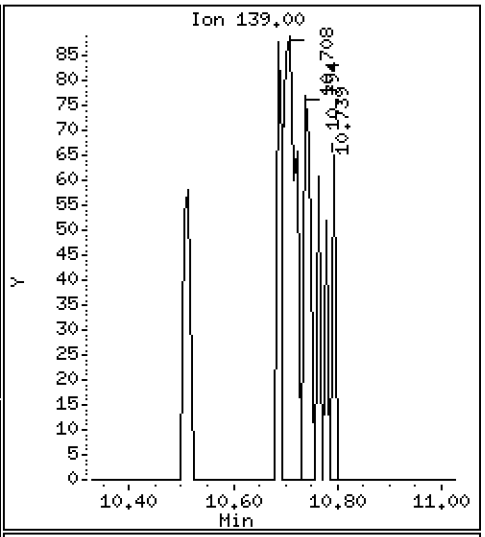
Column phase: ZB-5msi

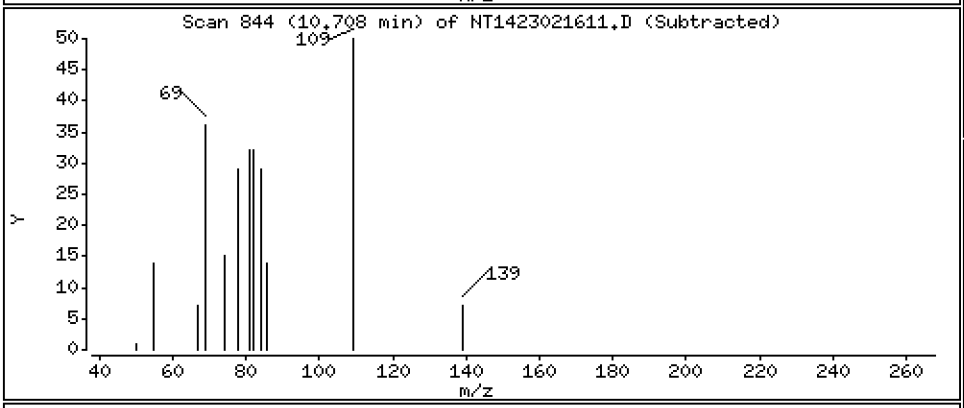
Column diameter: 0.25

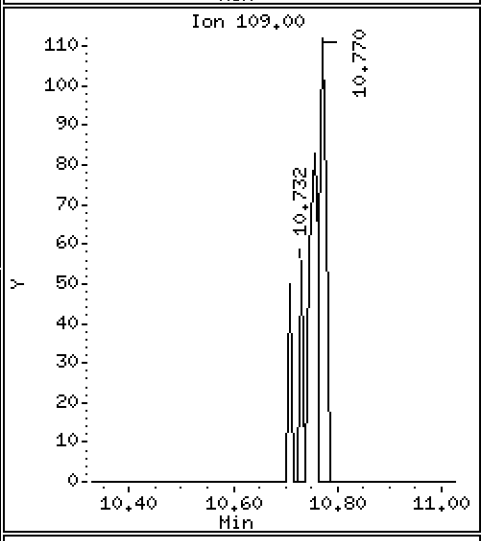
21 2-Nitrophenol

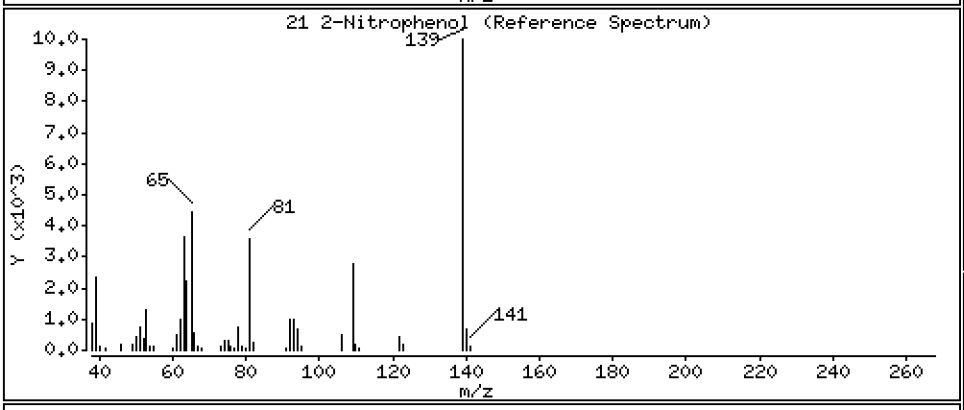
Concentration: 0.002847 ug/mL

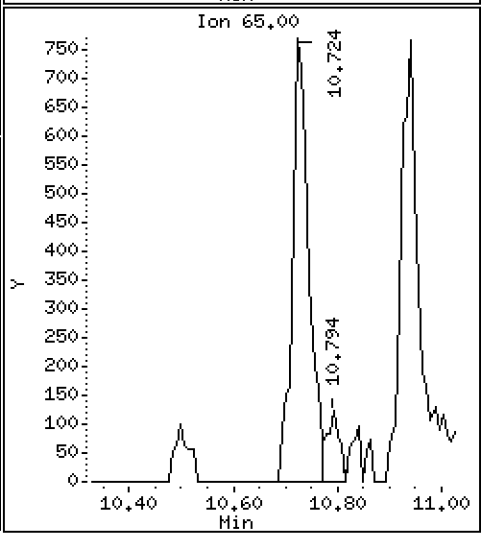


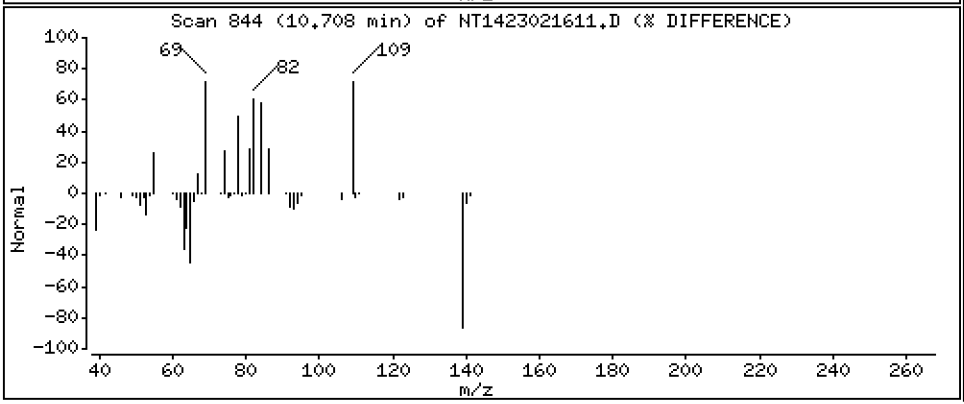












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

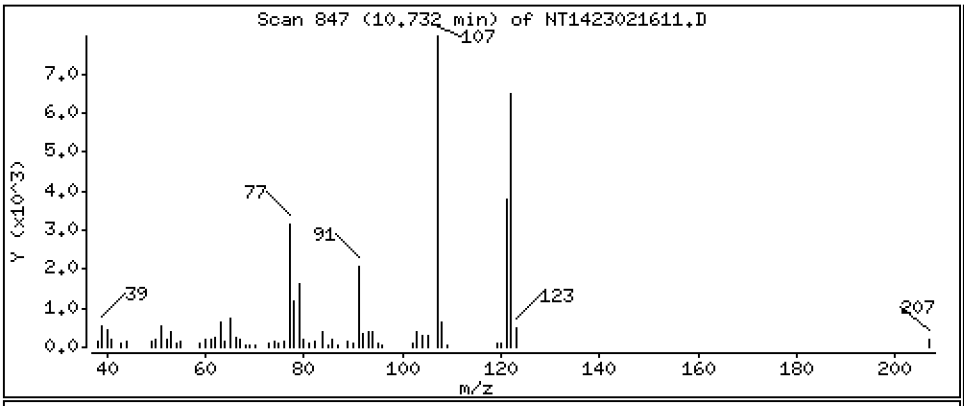
Operator: DSD

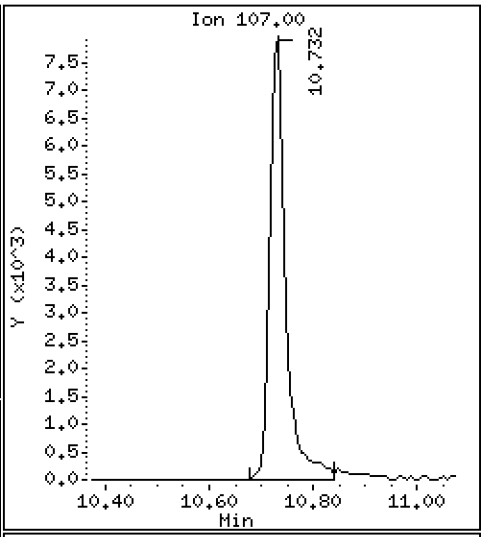
Column phase: ZB-5msi

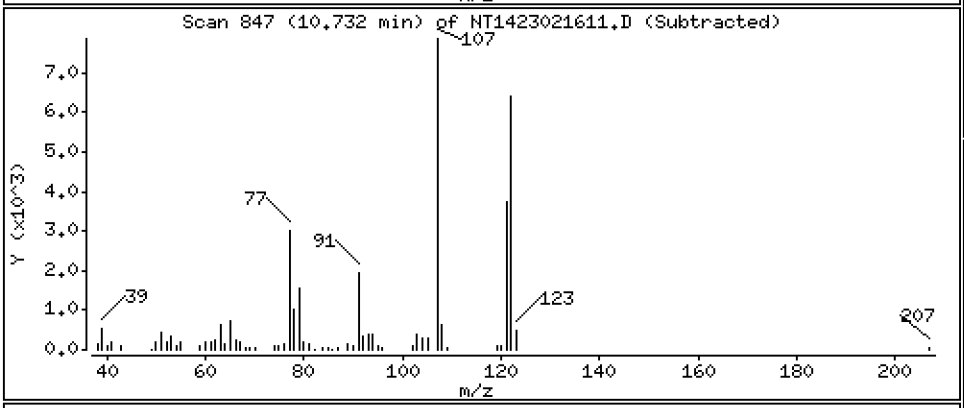
Column diameter: 0.25

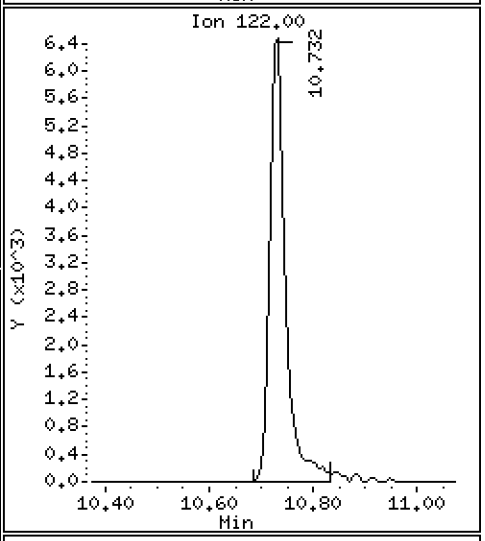
22 2,4-Dimethylphenol

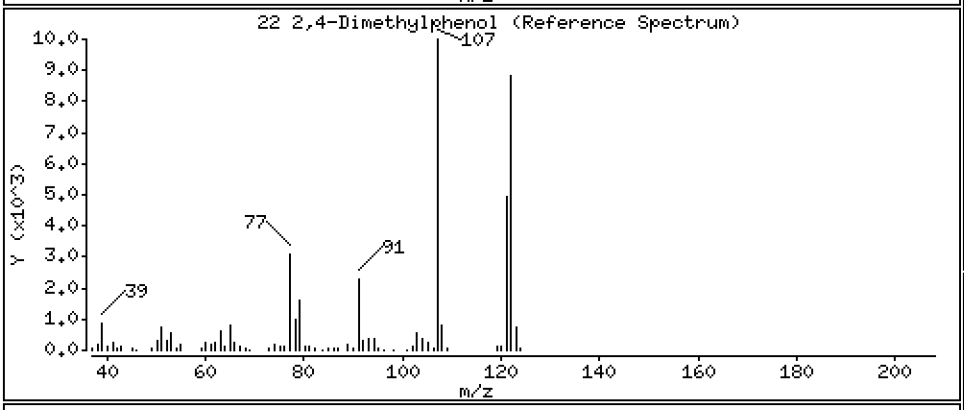
Concentration: 0.1635 ug/mL

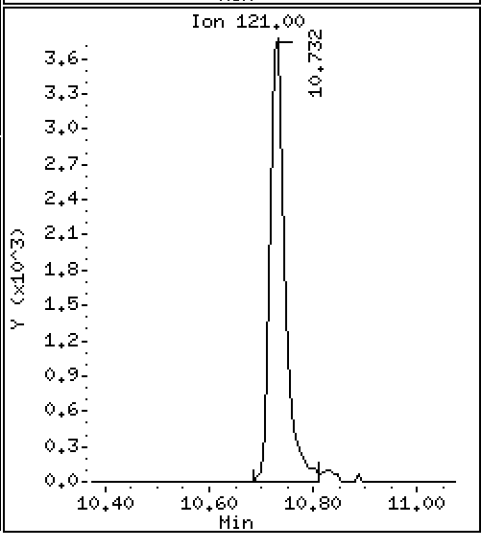


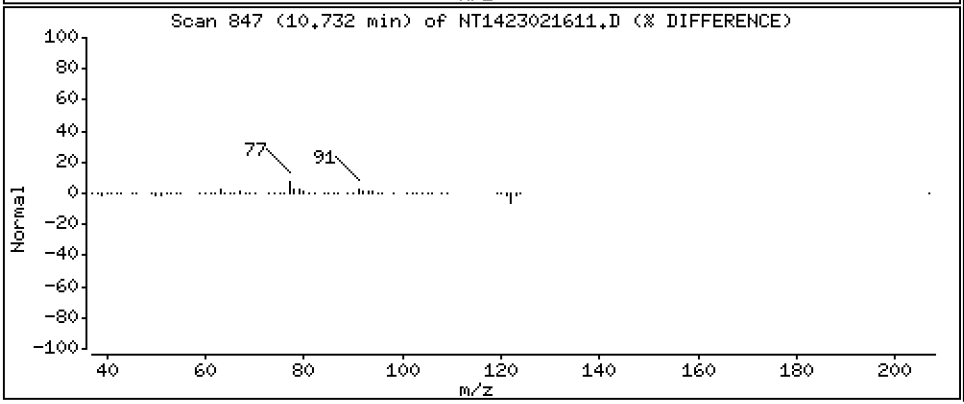












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021611.D

Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

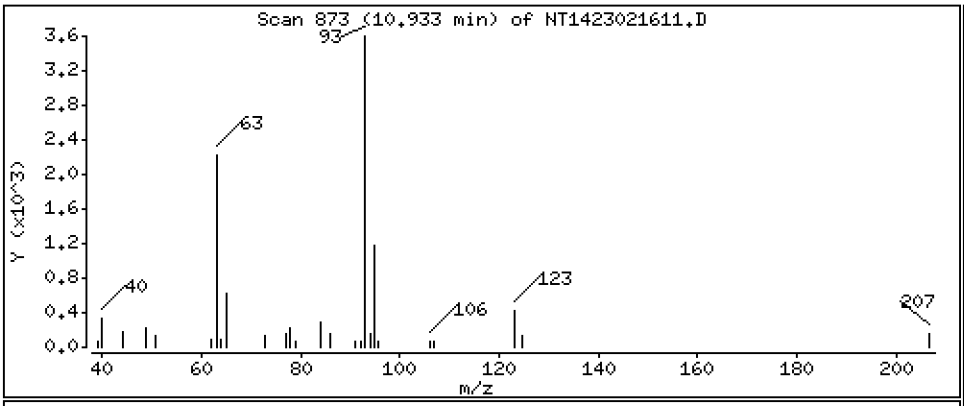
Operator: DSD

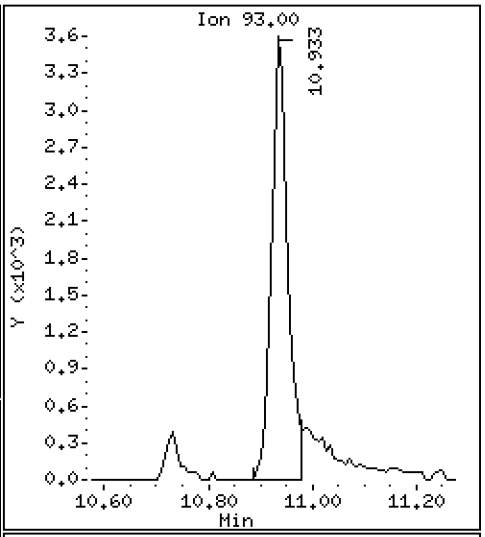
Column phase: ZB-5msi

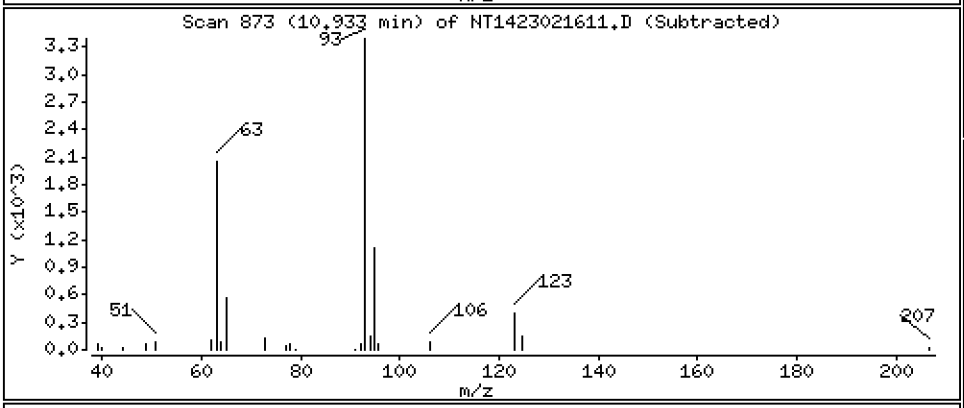
Column diameter: 0.25

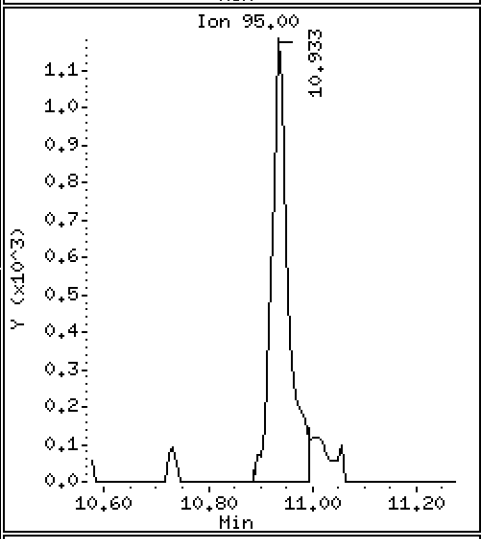
23 Bis(2-Chloroethoxy)methane

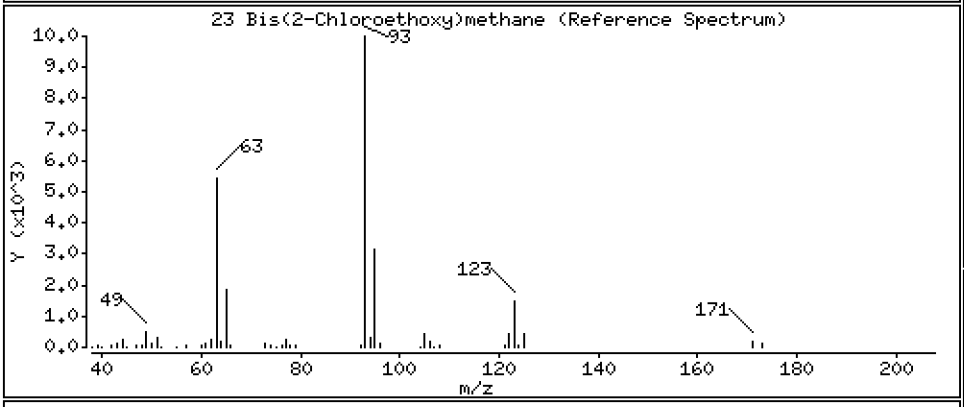
Concentration: 0.06793 ug/mL

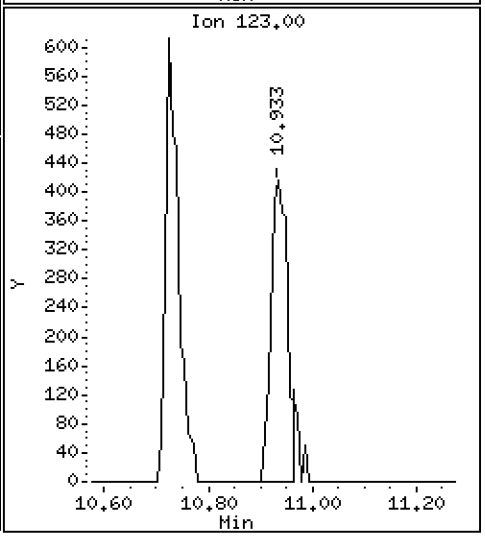


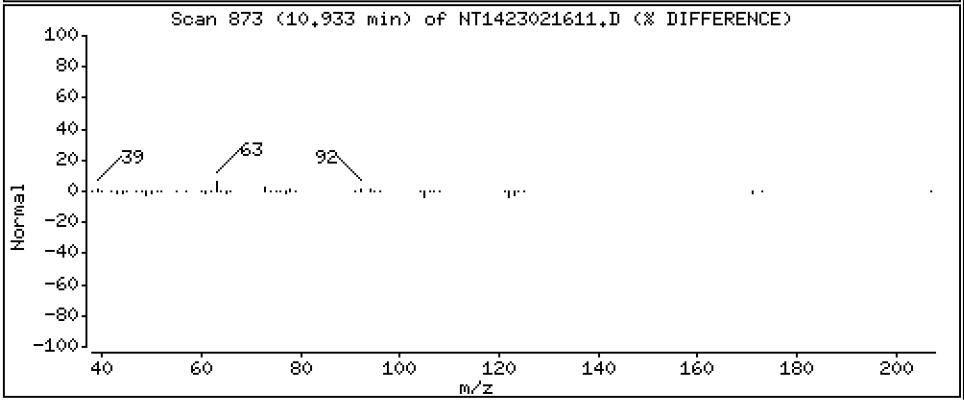












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

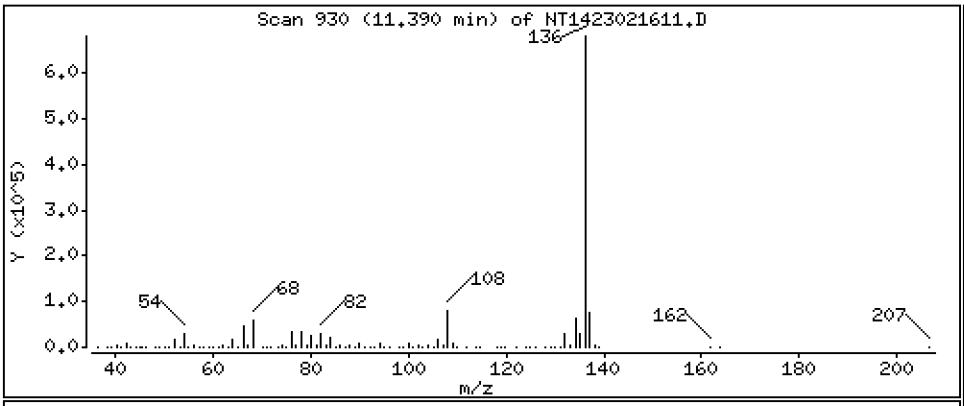
Operator: DSD

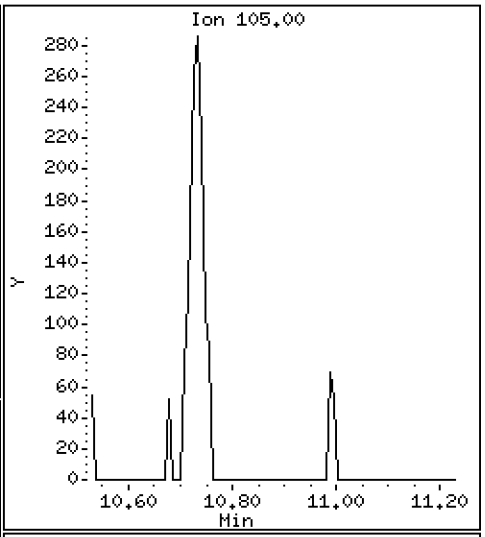
Column phase: ZB-5msi

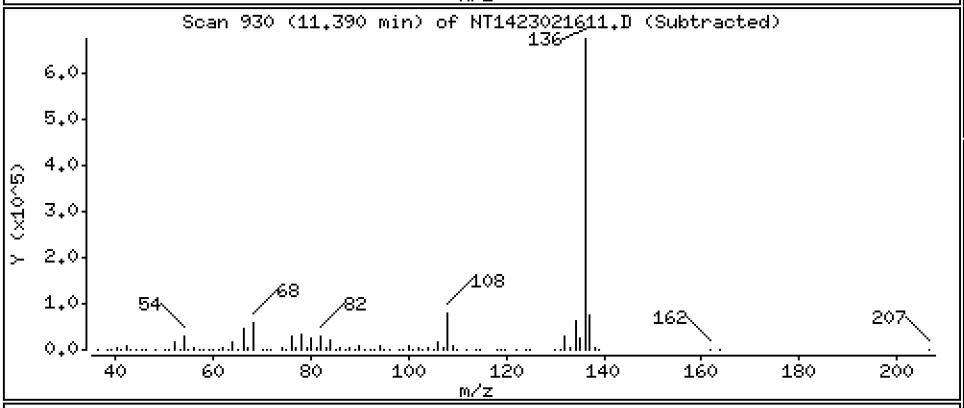
Column diameter: 0.25

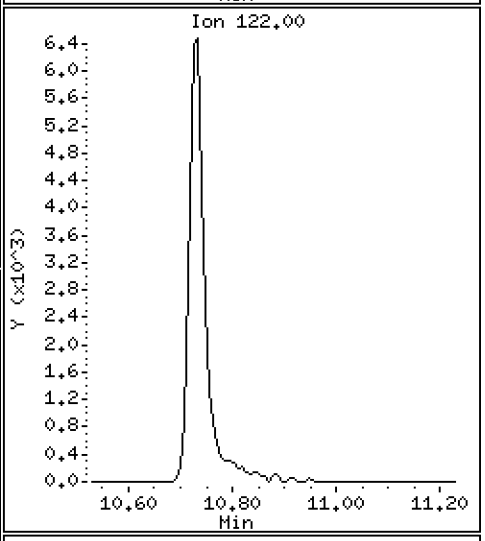
24 Benzoic acid

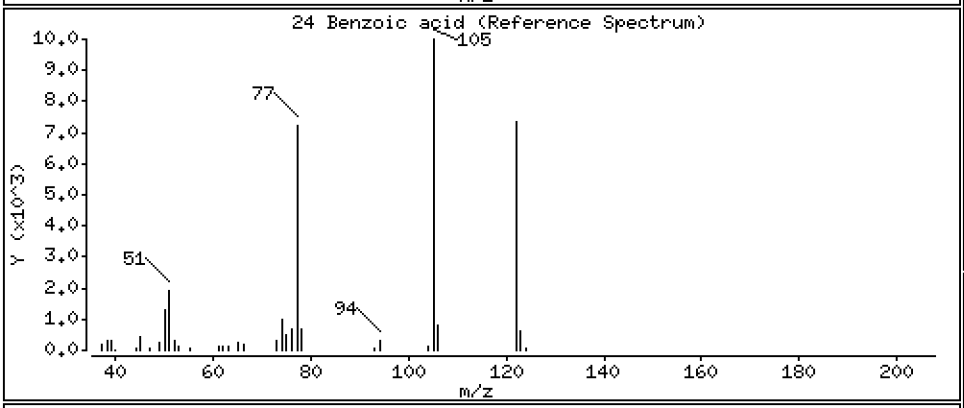
Concentration: 0.01812 ug/mL

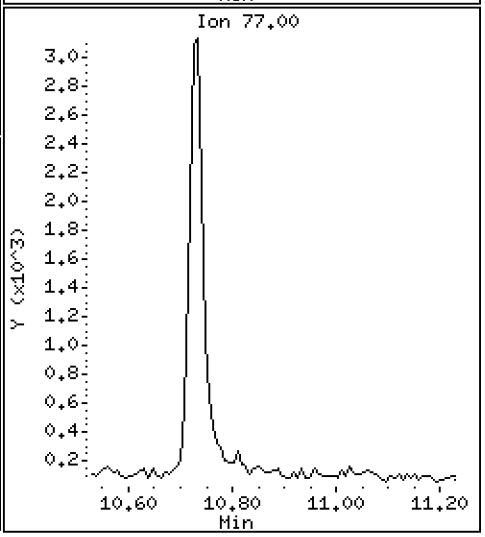


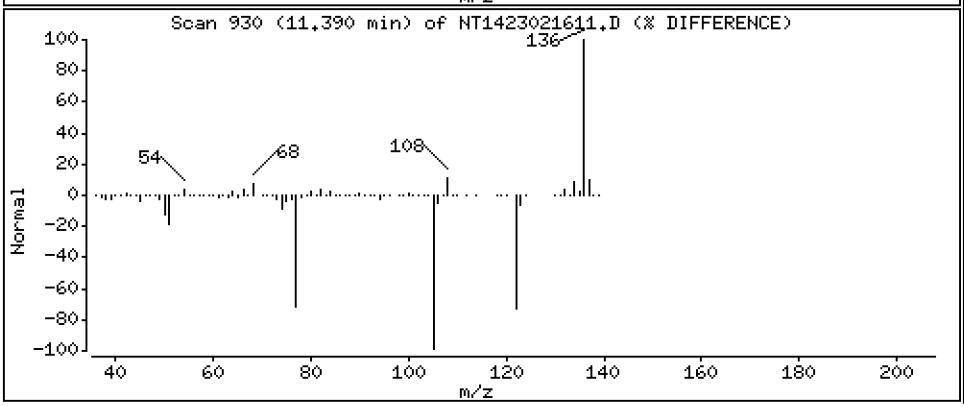












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

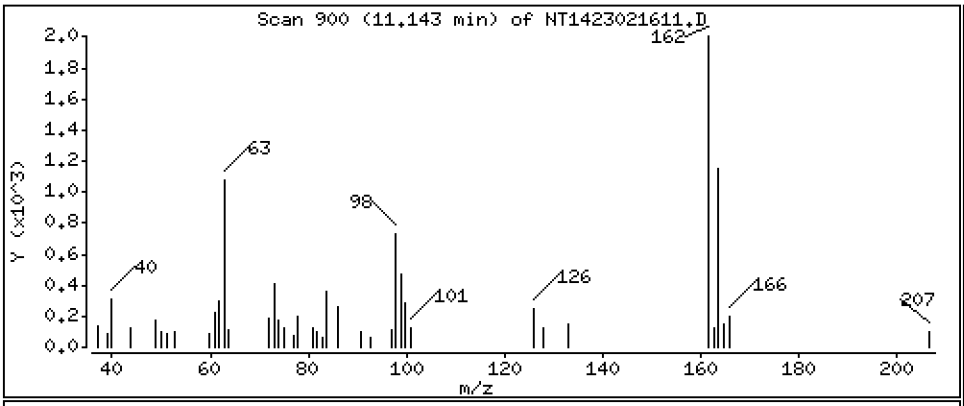
Operator: DSD

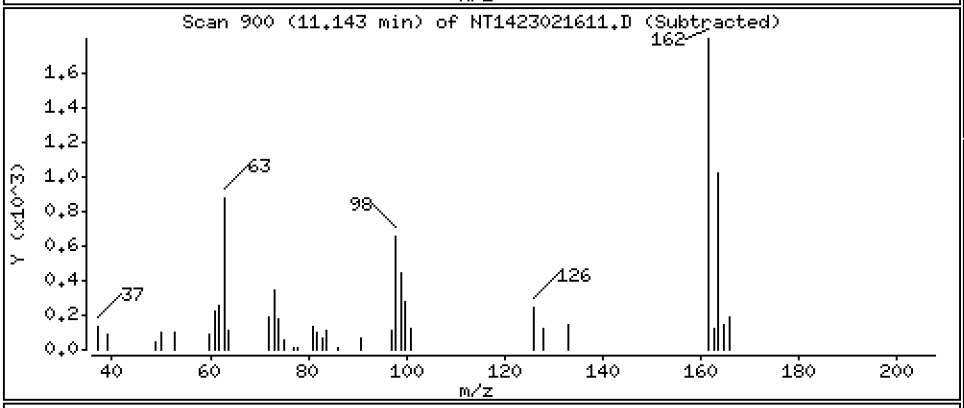
Column phase: ZB-5msi

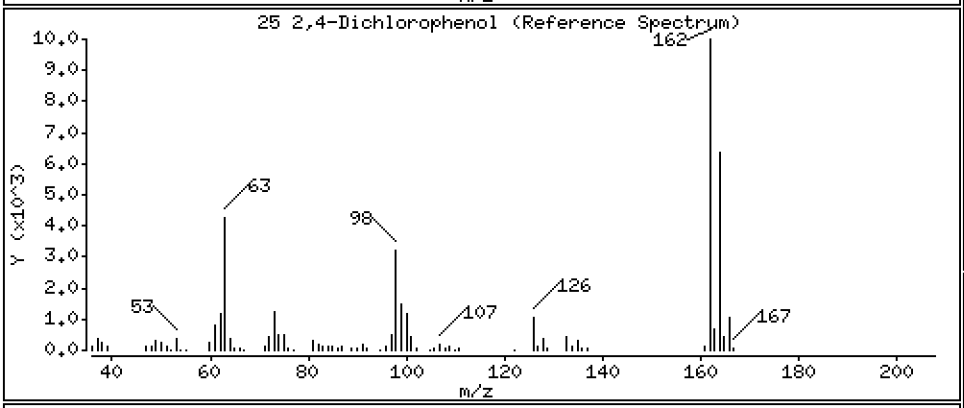
Column diameter: 0.25

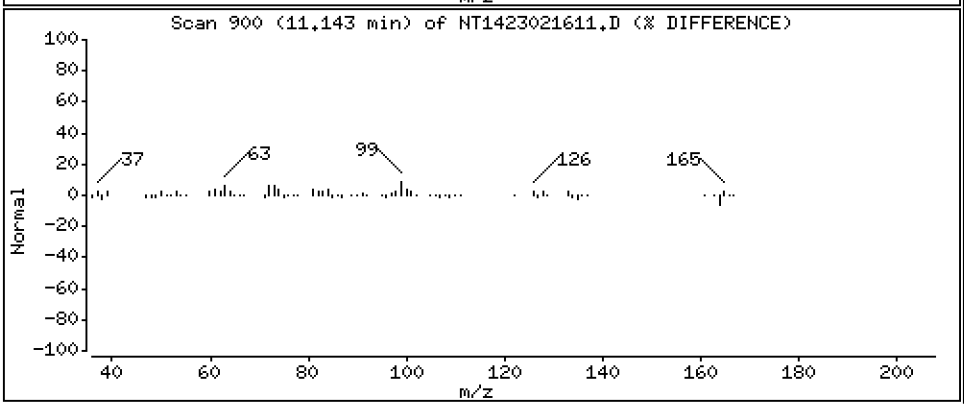
25 2,4-Dichlorophenol

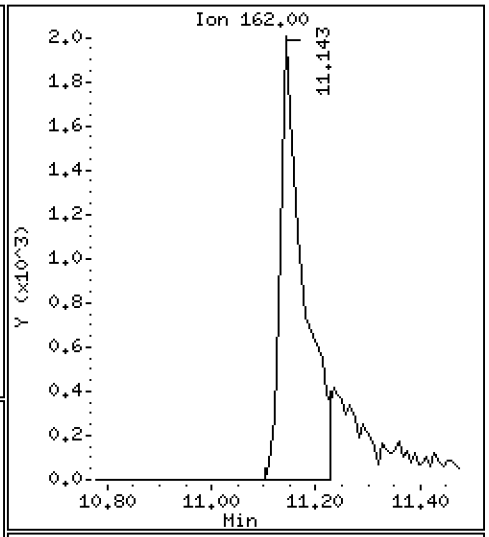
Concentration: 0.07562 ug/mL

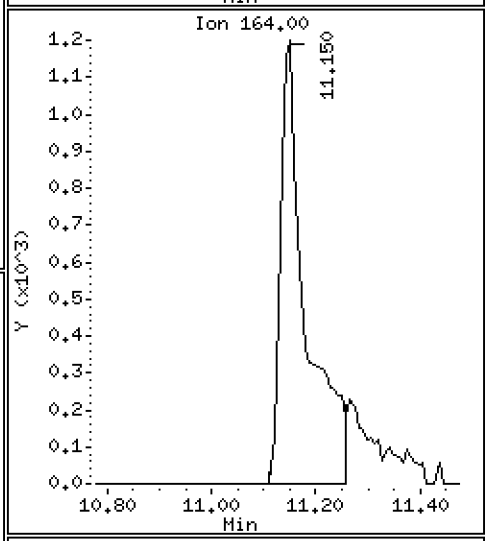


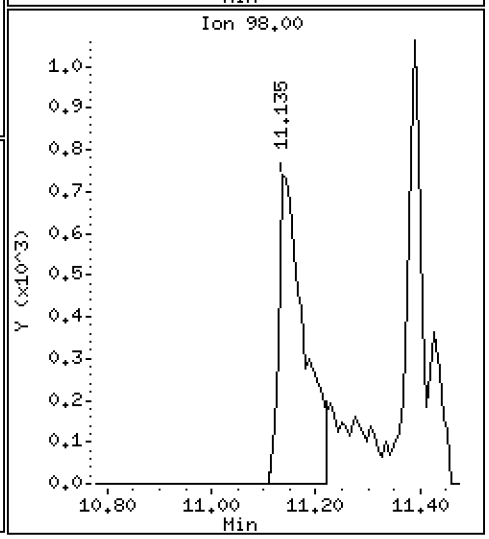












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

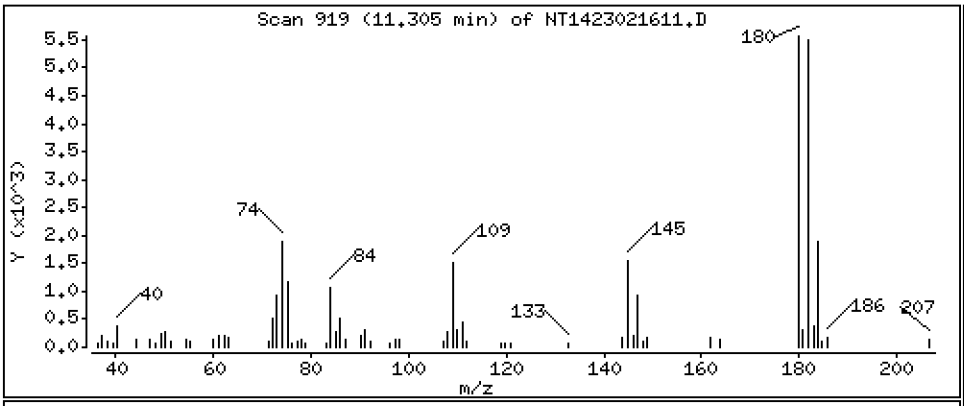
Operator: DSD

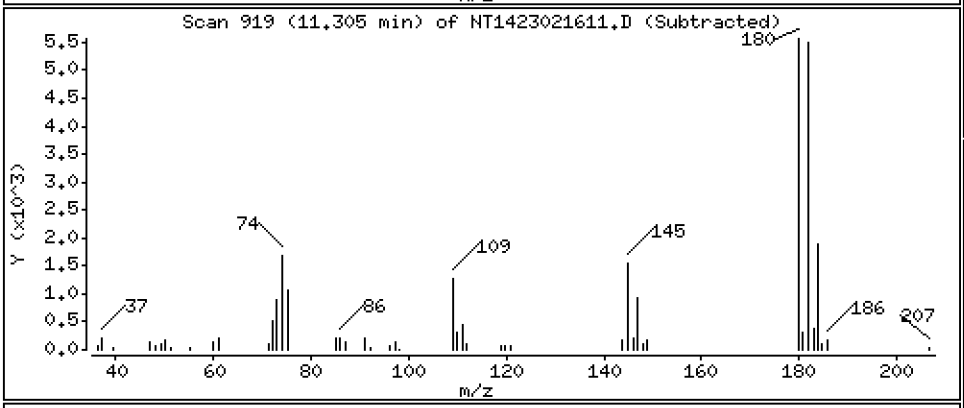
Column phase: ZB-5msi

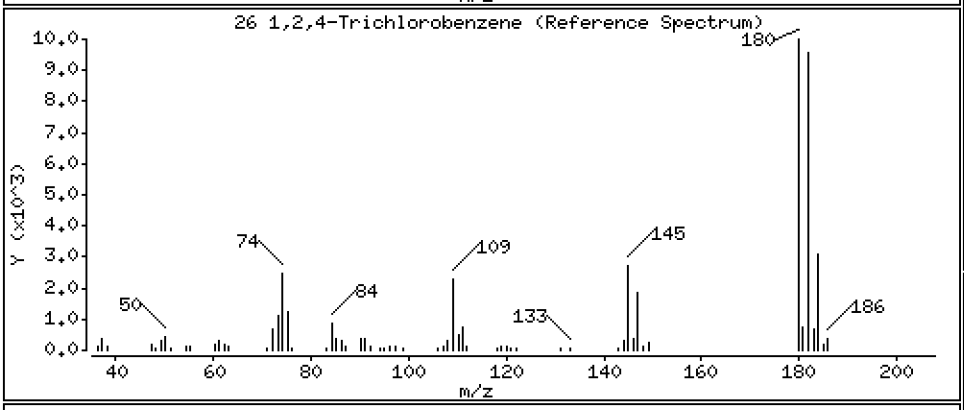
Column diameter: 0.25

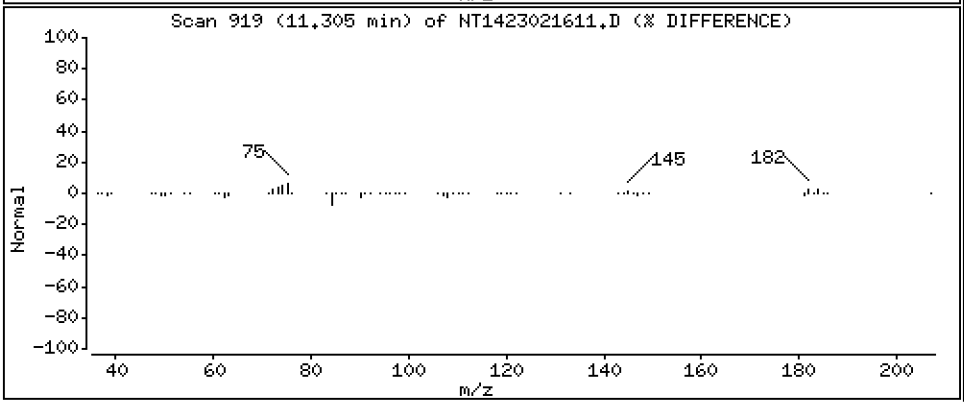
26 1,2,4-Trichlorobenzene

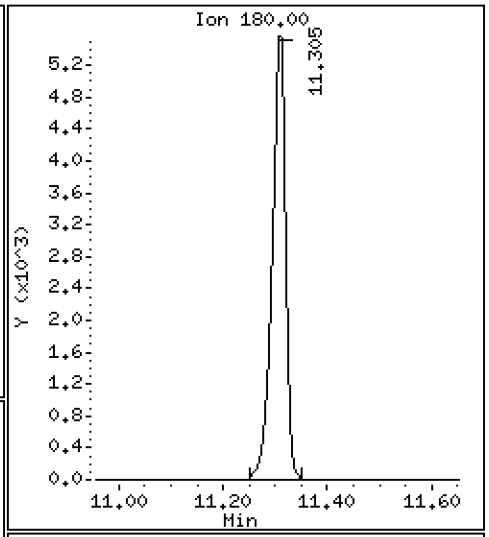
Concentration: 0.09472 ug/mL

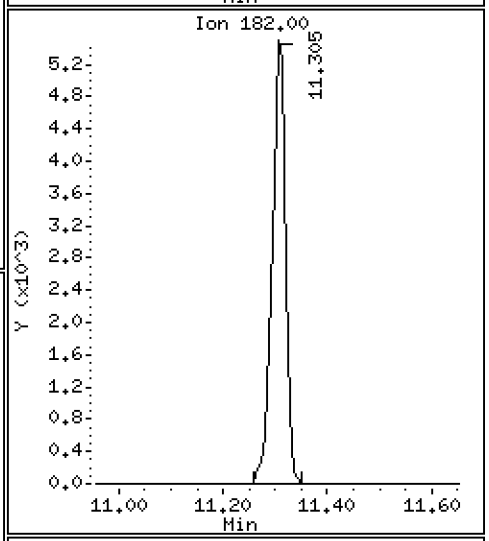


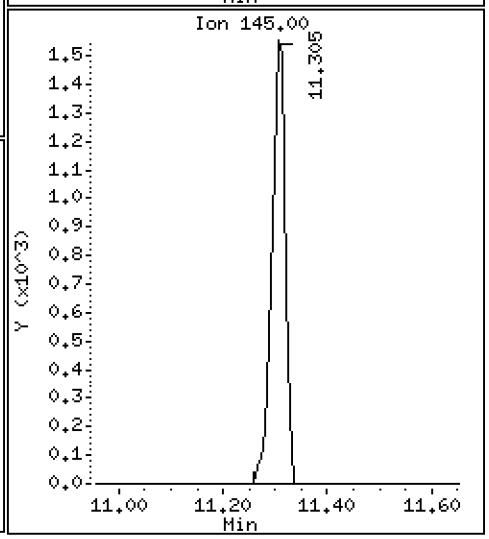












Date : 16-FEB-2023 20:06

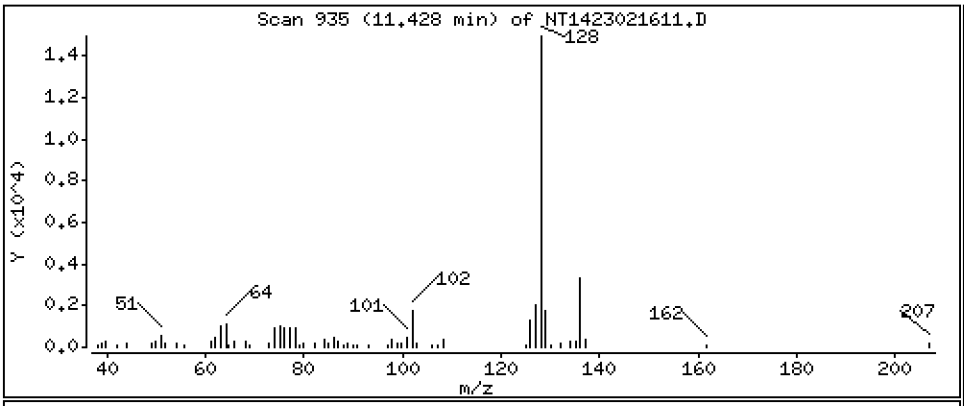
Client ID: Instrument: nt14.i

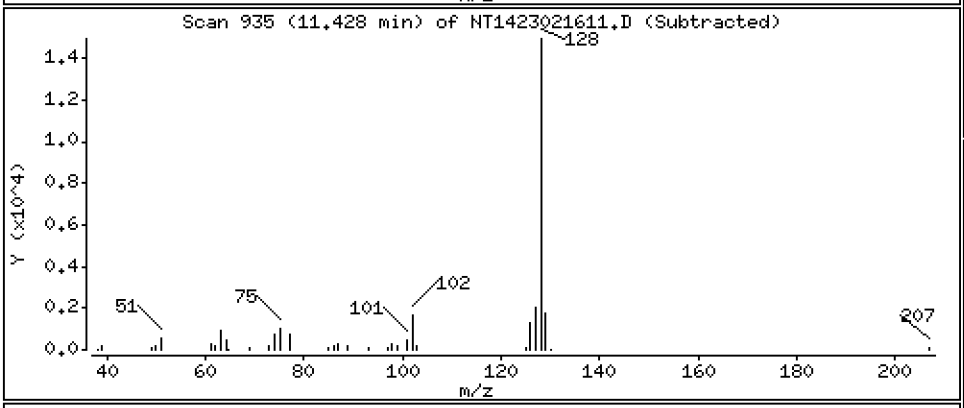
Sample Info: SIM 0.1

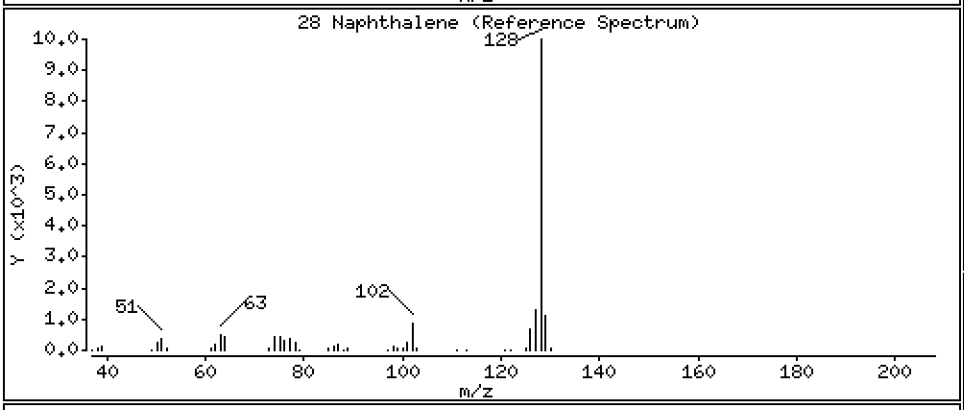
Operator: DSD

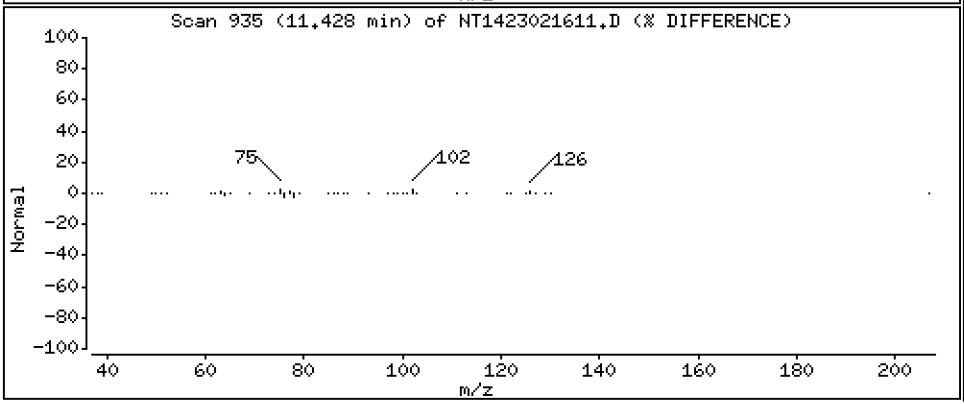
Column phase: ZB-5msi Column diameter: 0.25

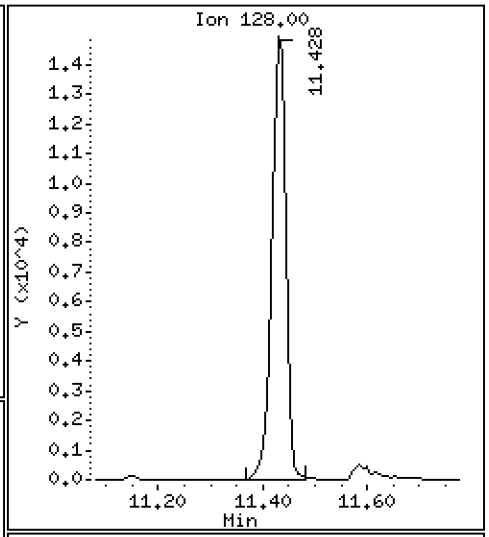
28 Naphthalene Concentration: 0.09375 ug/mL

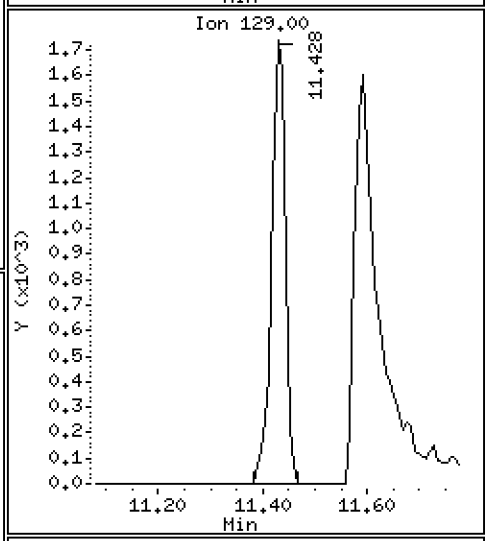


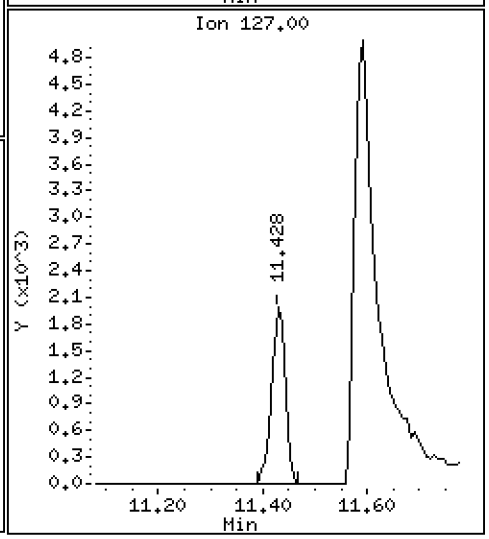












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

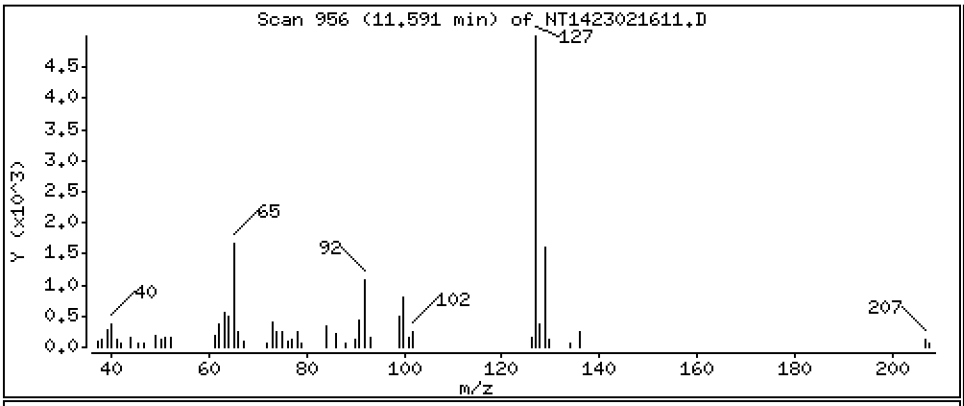
Operator: DSD

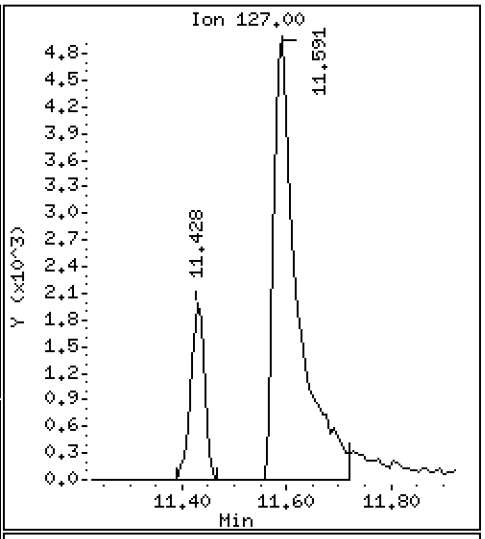
Column phase: ZB-5msi

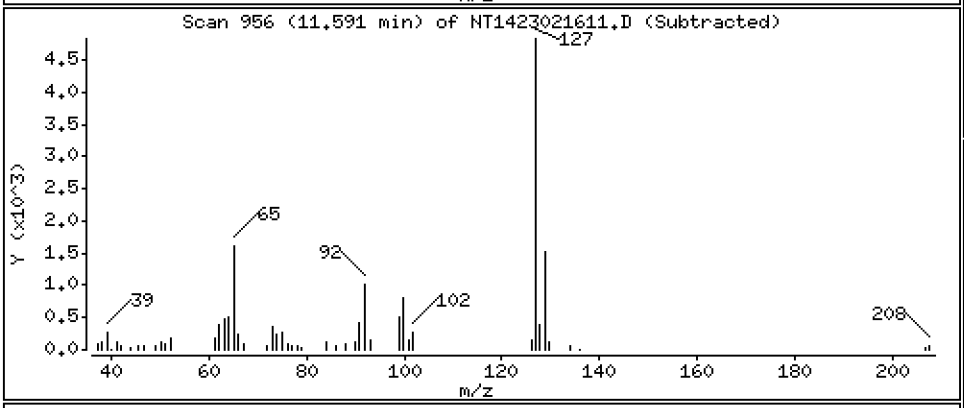
Column diameter: 0.25

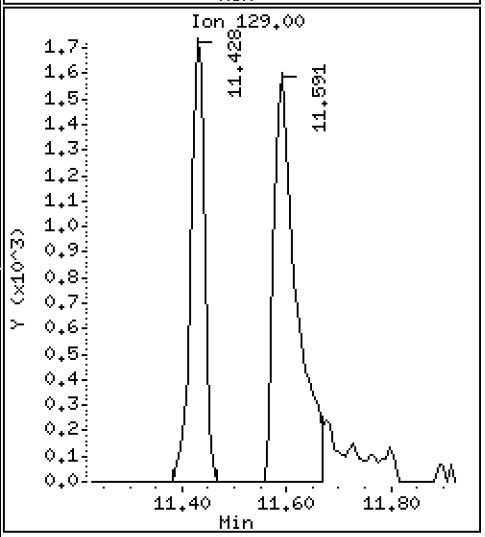
29 4-Chloroaniline

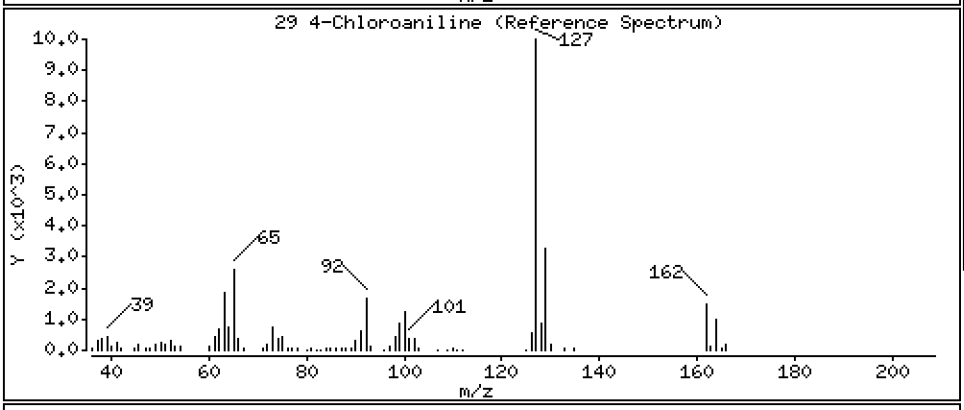
Concentration: 0.1409 ug/mL

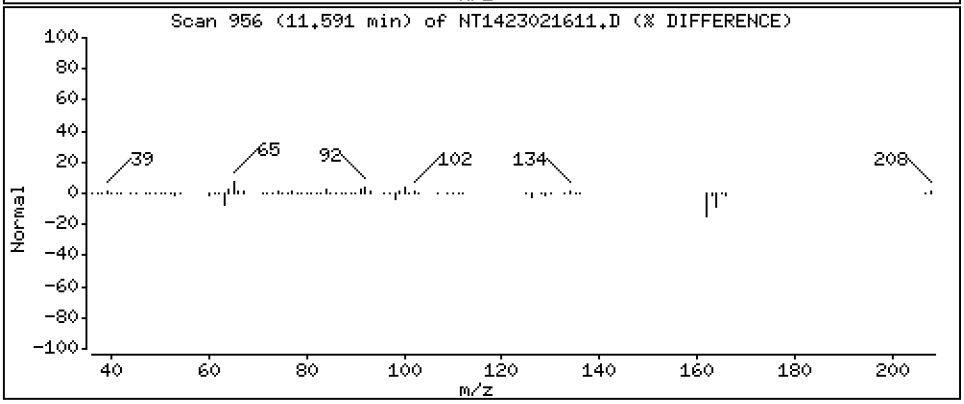












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021611.D

Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

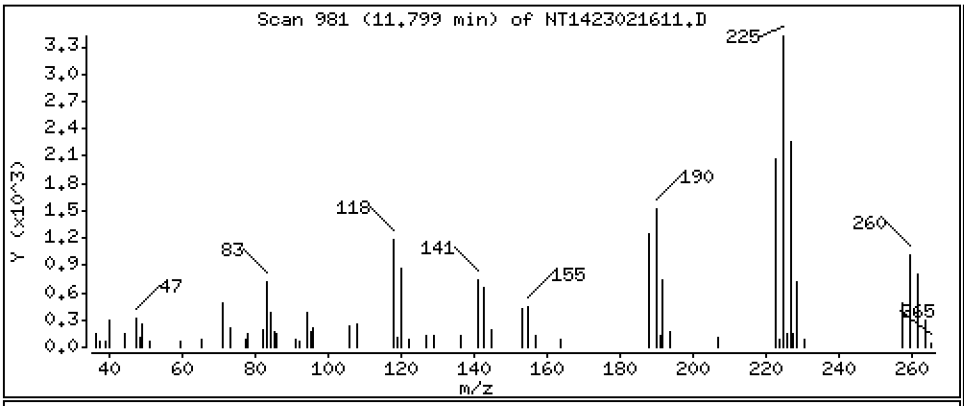
Operator: DSD

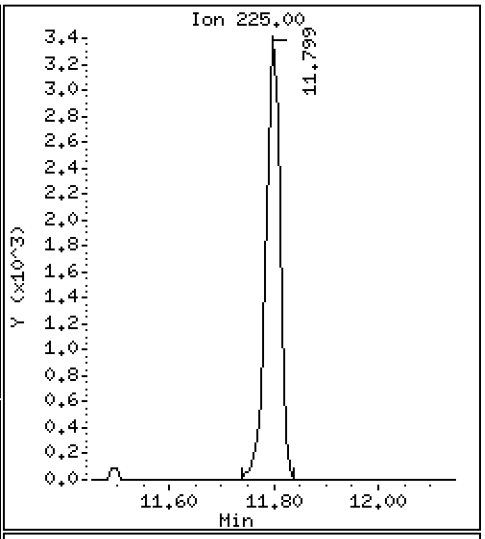
Column phase: ZB-5msi

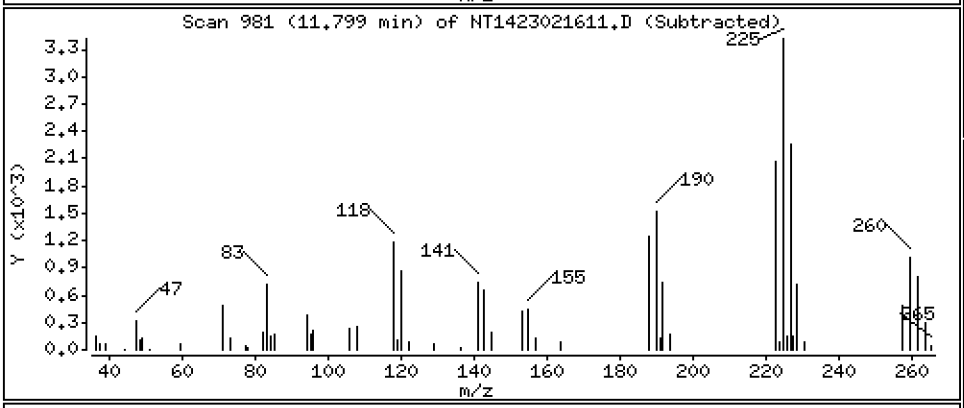
Column diameter: 0.25

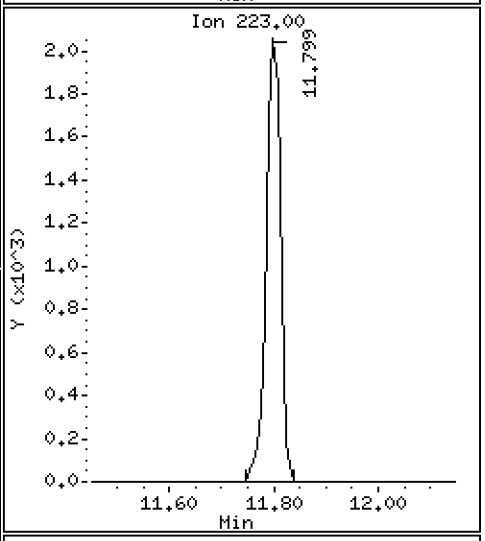
30 Hexachlorobutadiene

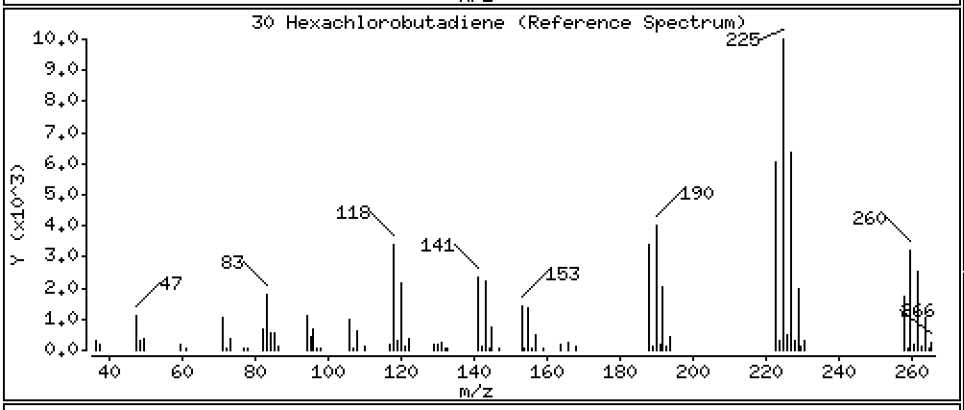
Concentration: 0.09510 ug/mL

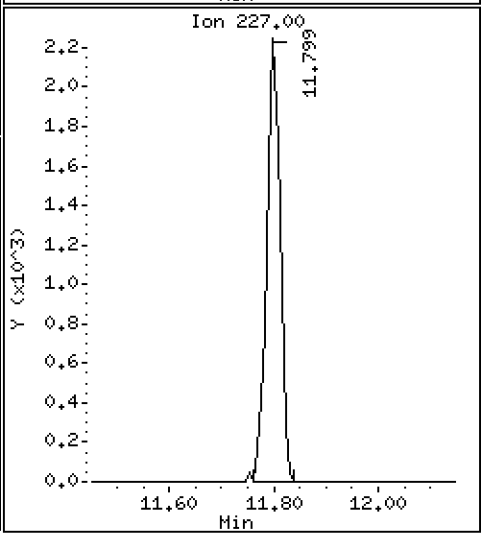


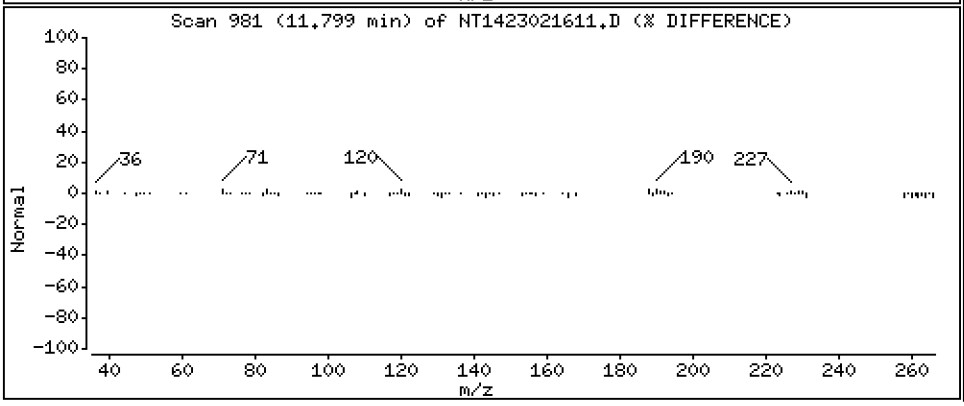












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

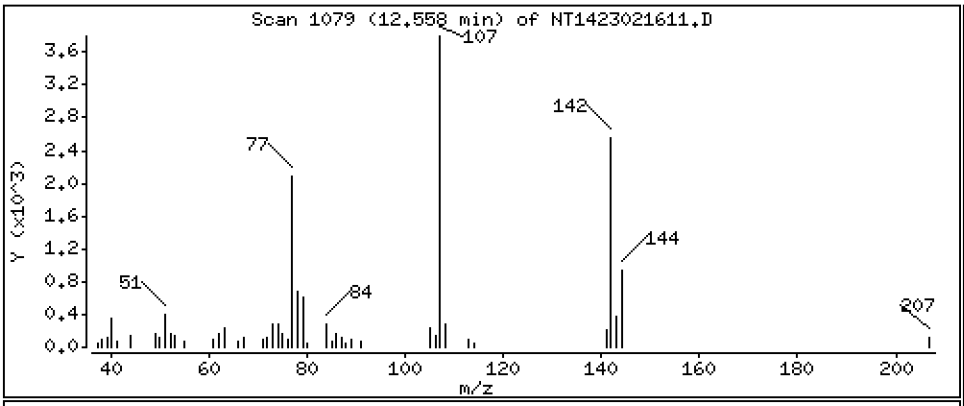
Operator: DSD

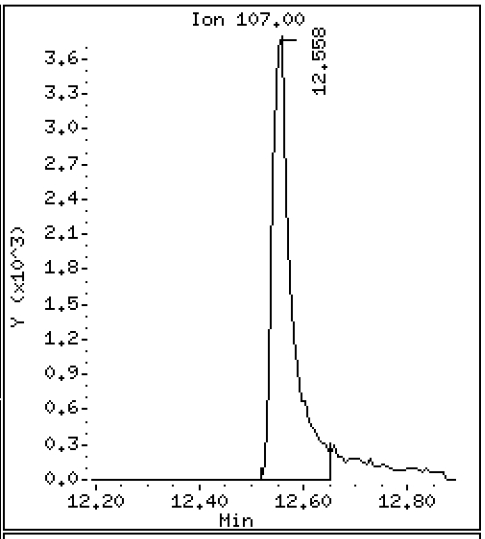
Column phase: ZB-5msi

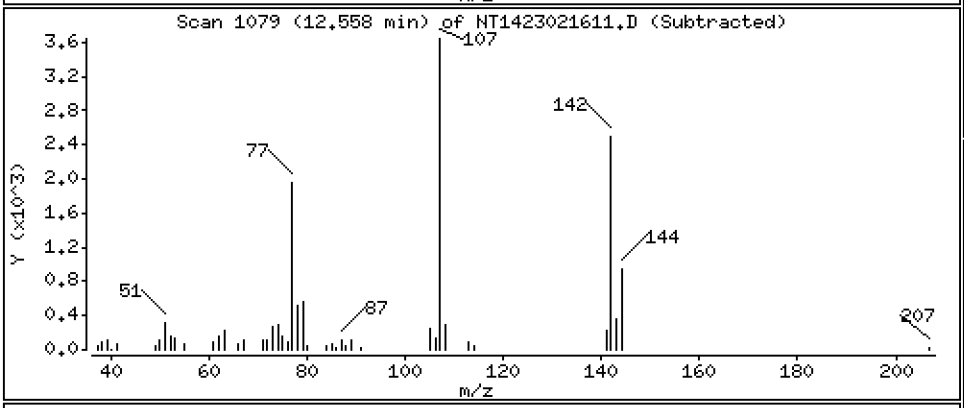
Column diameter: 0.25

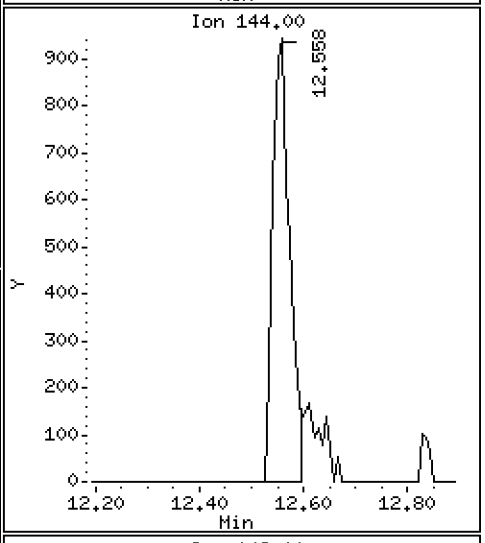
31 4-Chloro-3-methylphenol

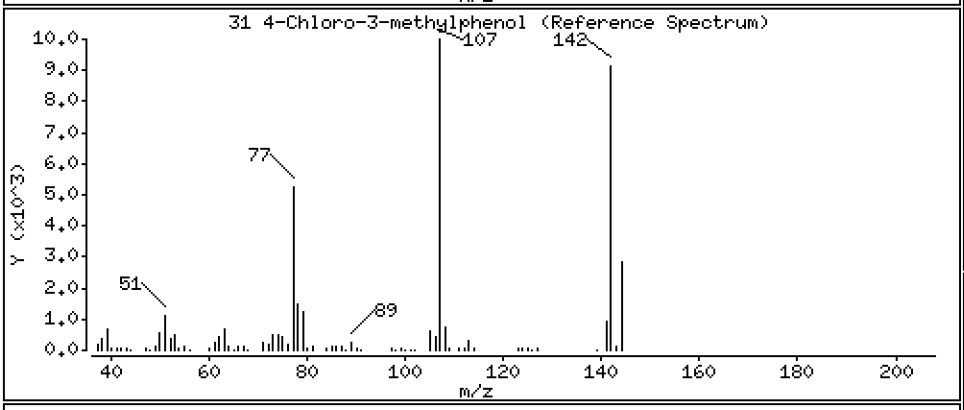
Concentration: 0.1035 ug/mL

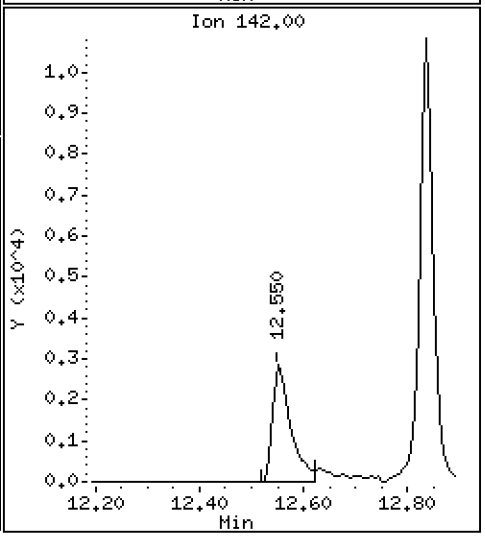


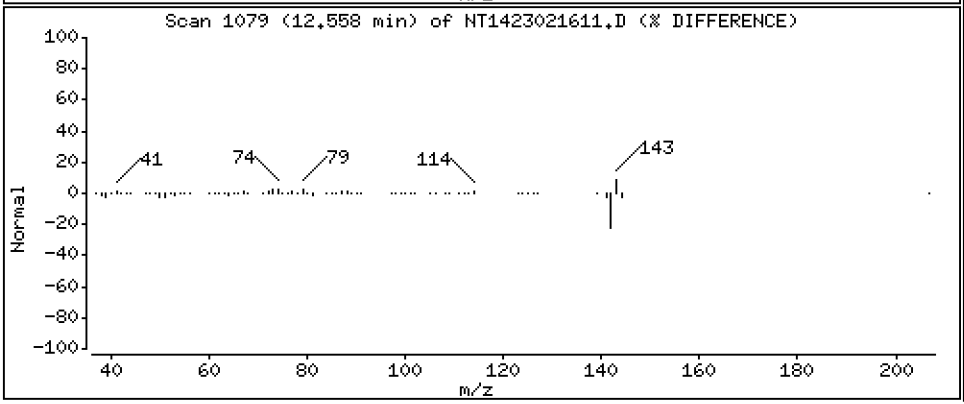












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

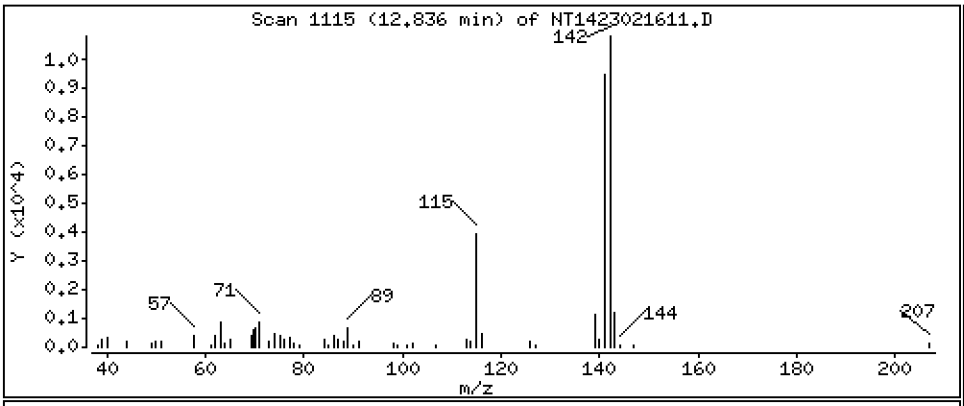
Operator: DSD

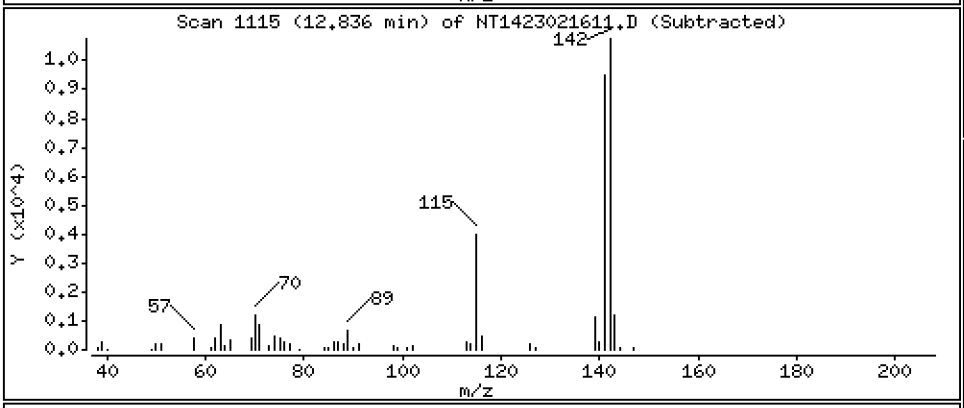
Column phase: ZB-5msi

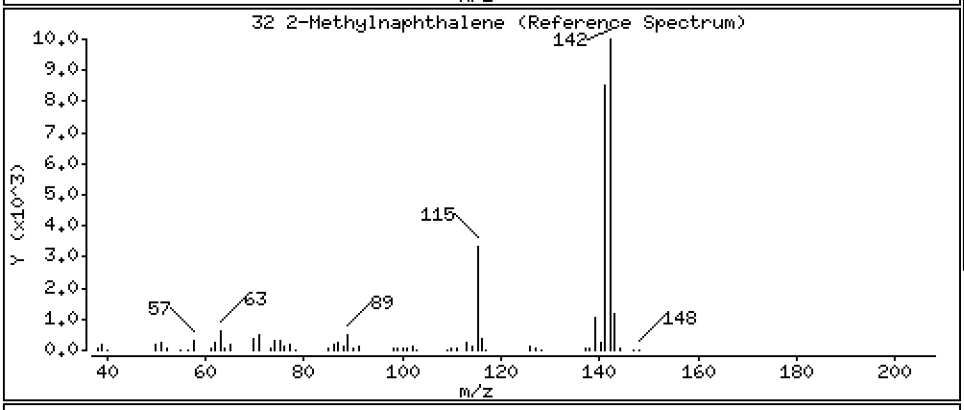
Column diameter: 0.25

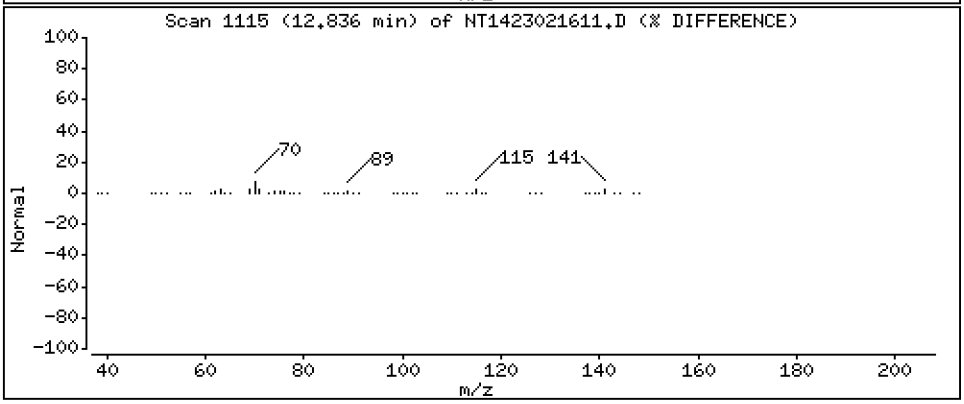
32 2-Methylnaphthalene

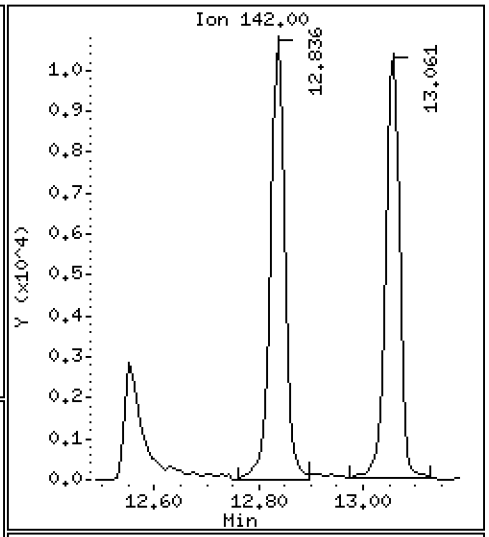
Concentration: 0.09397 ug/mL

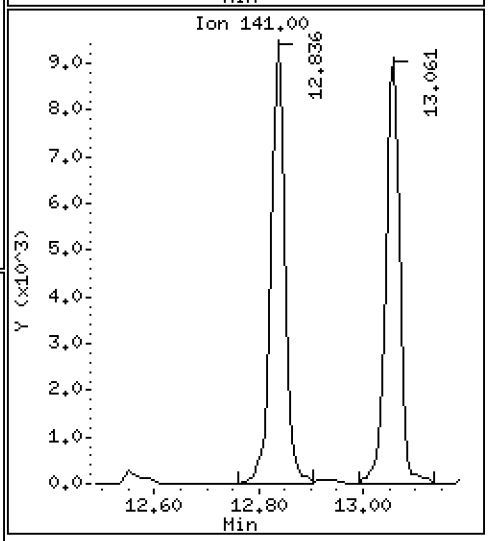












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

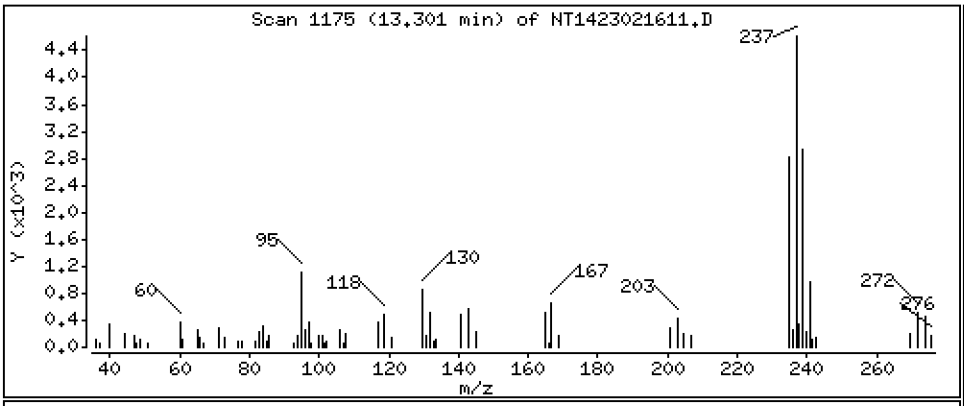
Operator: DSD

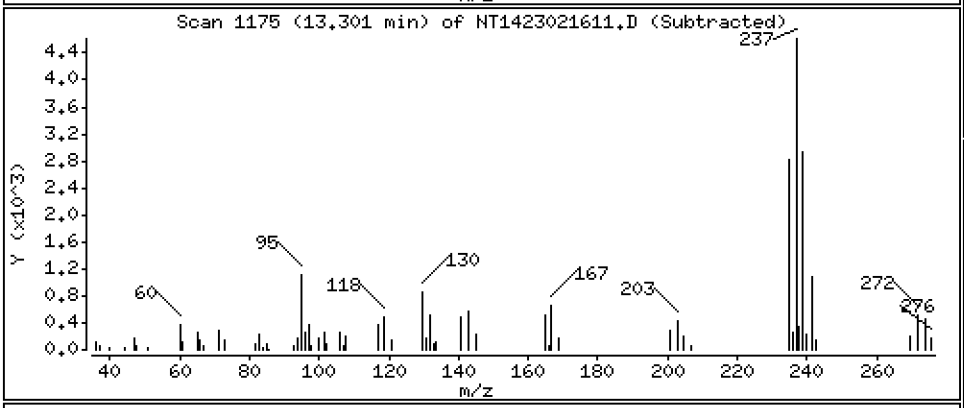
Column phase: ZB-5msi

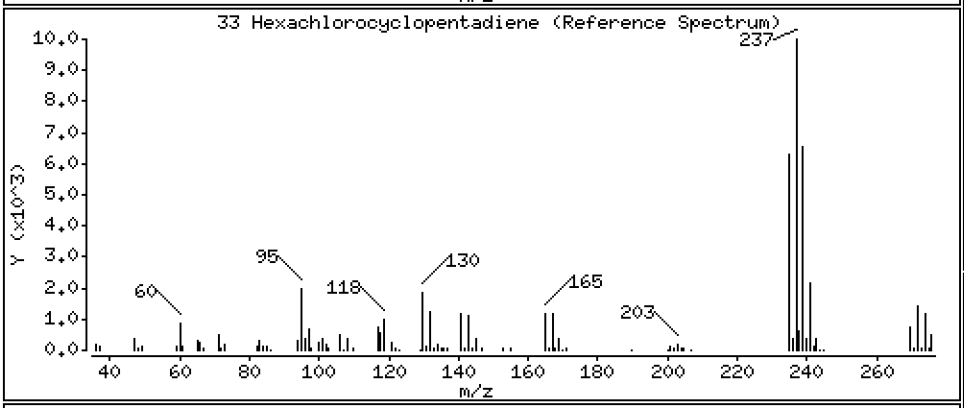
Column diameter: 0.25

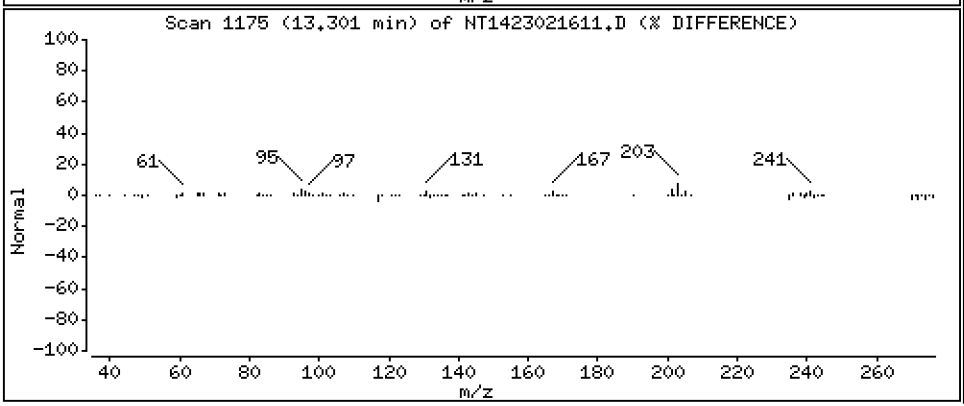
33 Hexachlorocyclopentadiene

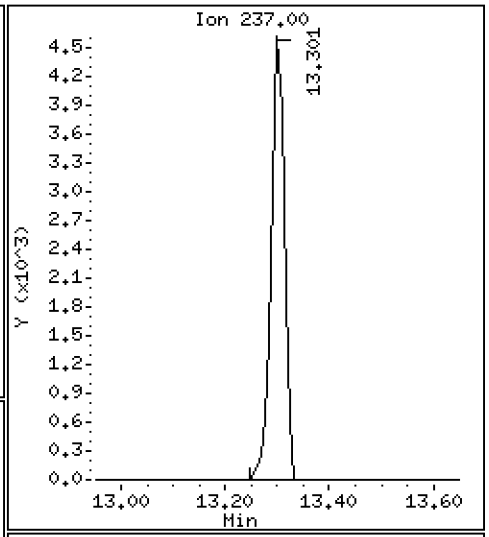
Concentration: 0.1146 ug/mL

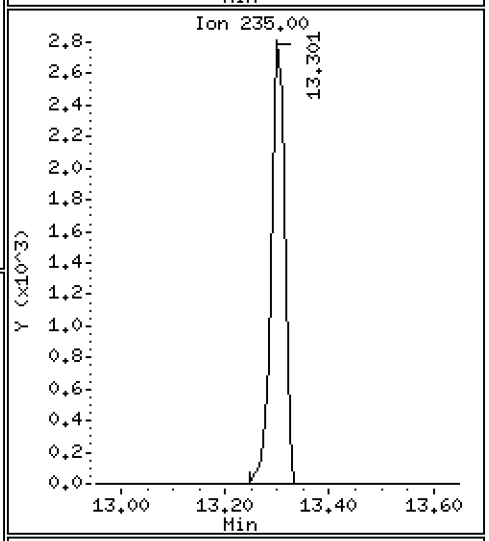


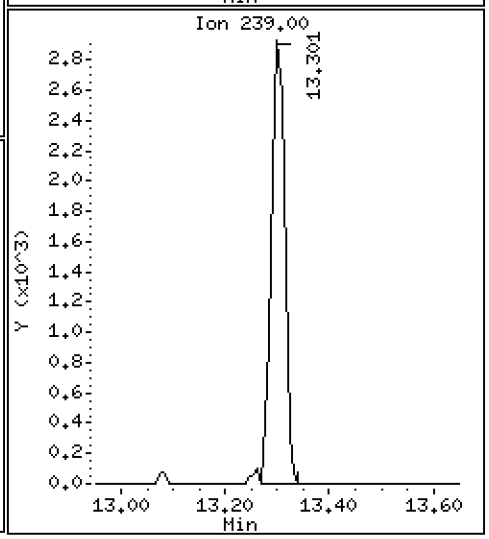












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

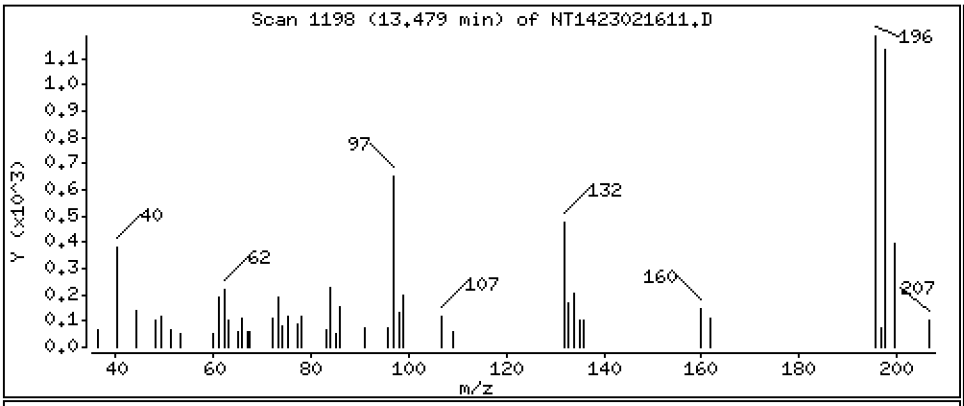
Operator: DSD

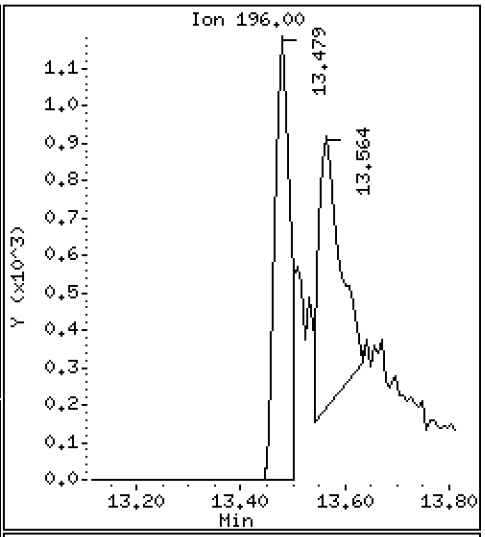
Column phase: ZB-5msi

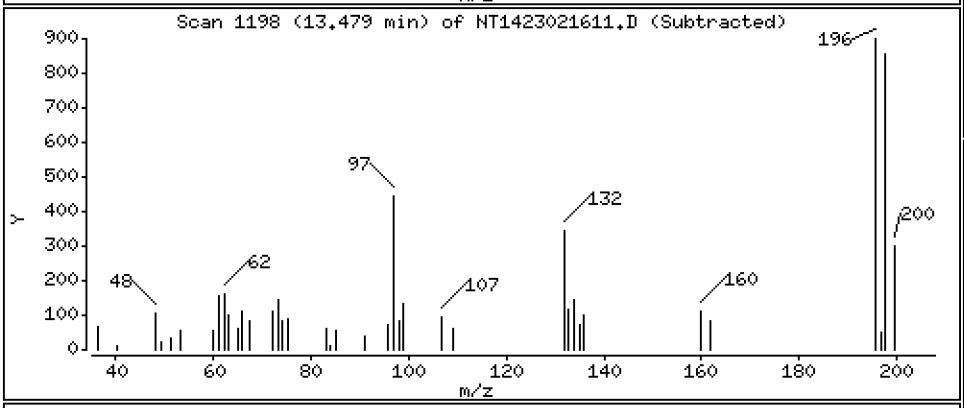
Column diameter: 0.25

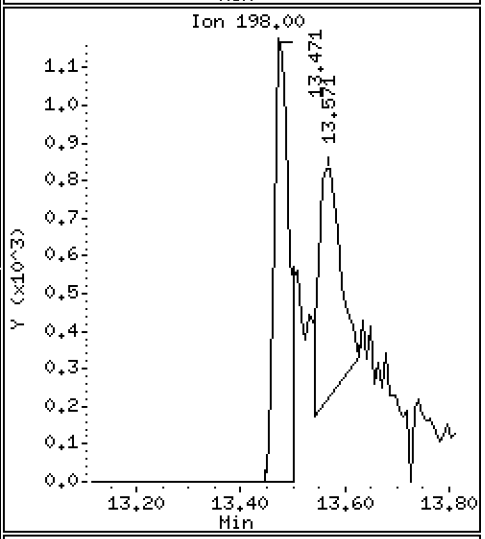
34 2,4,6-Trichlorophenol

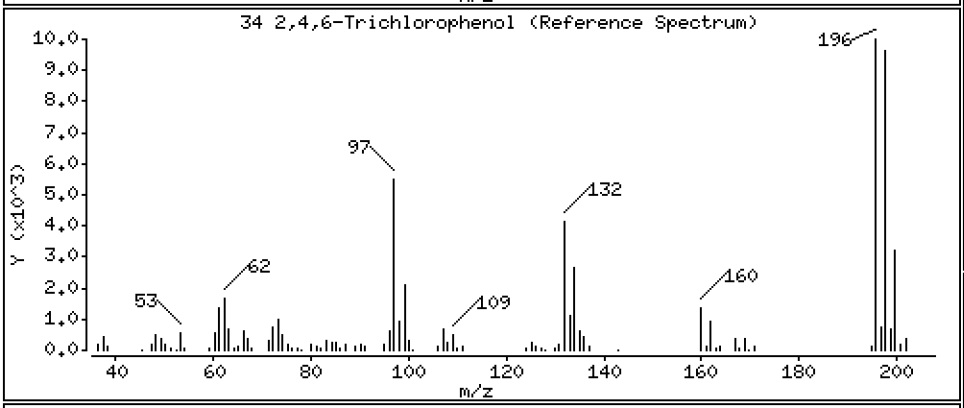
Concentration: 0.03568 ug/mL

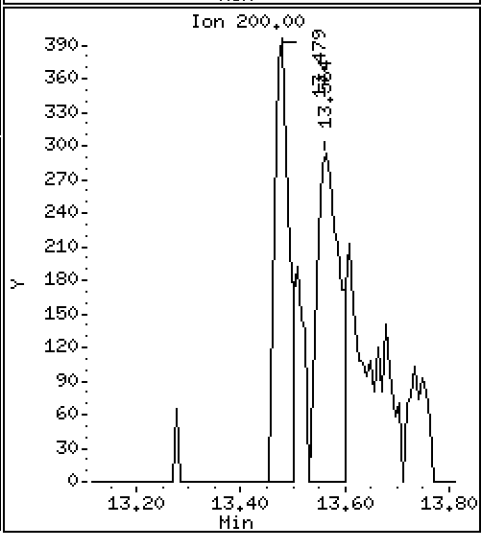


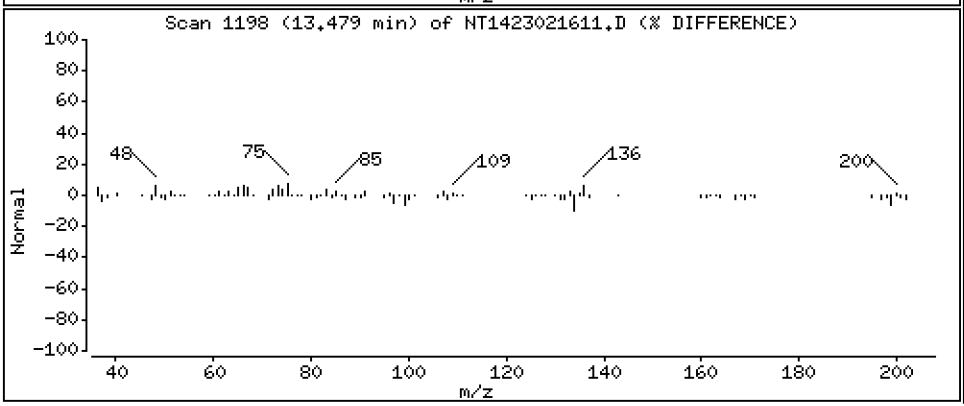












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

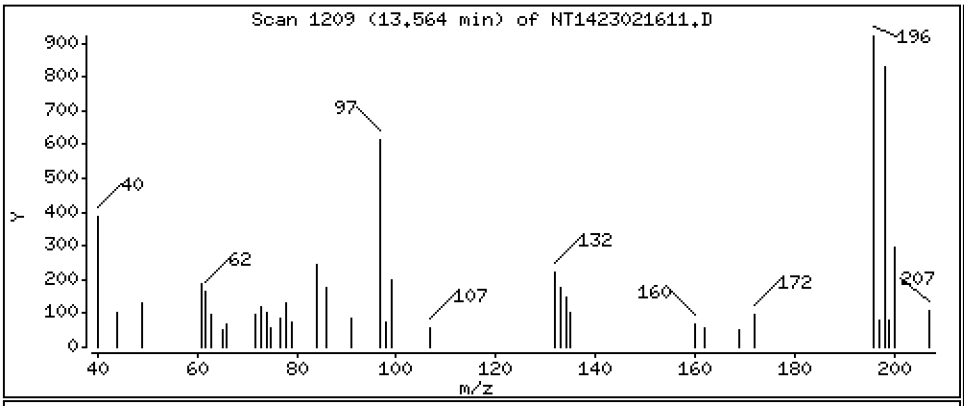
Operator: DSD

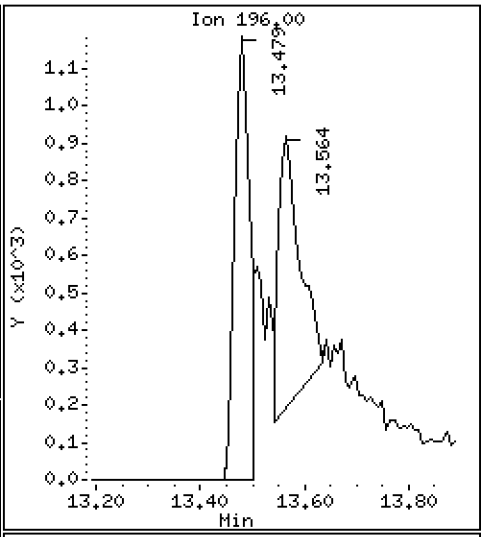
Column phase: ZB-5msi

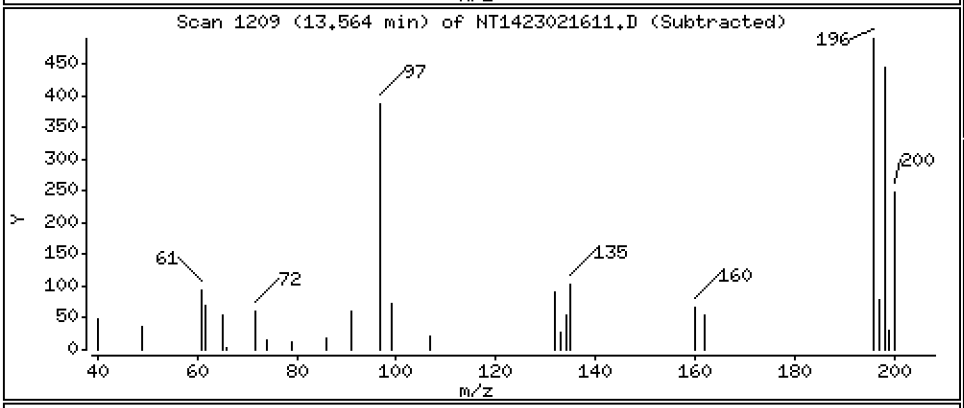
Column diameter: 0.25

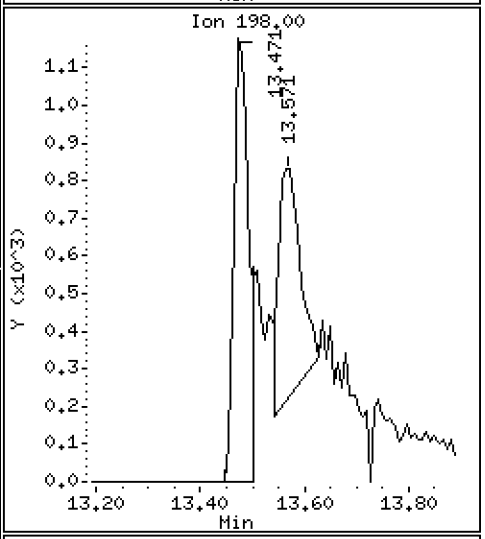
35 2,4,5-Trichlorophenol

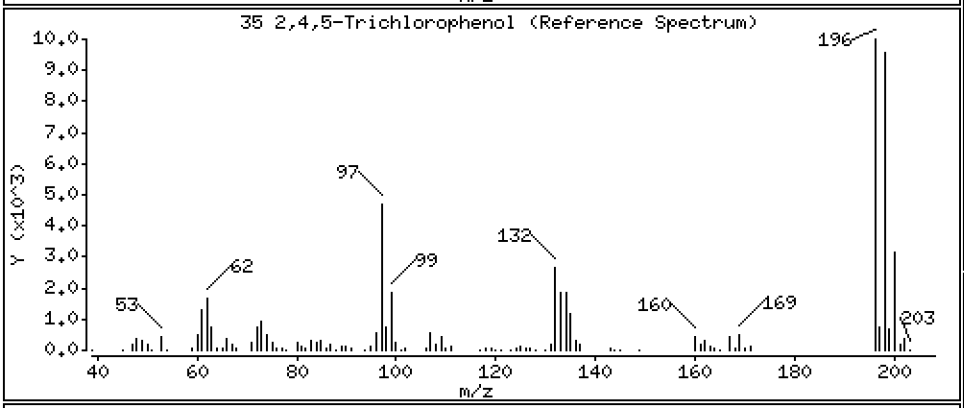
Concentration: 0.02933 ug/mL

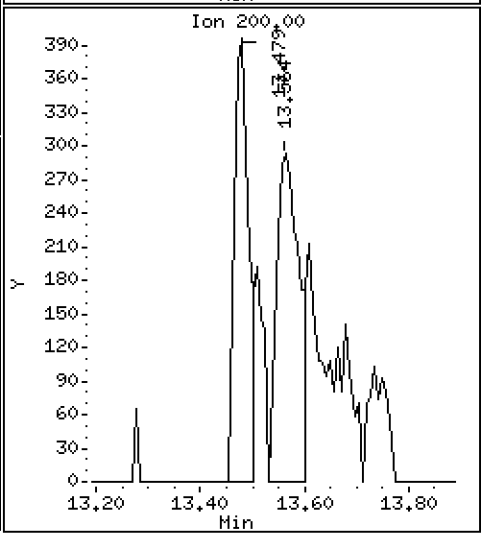


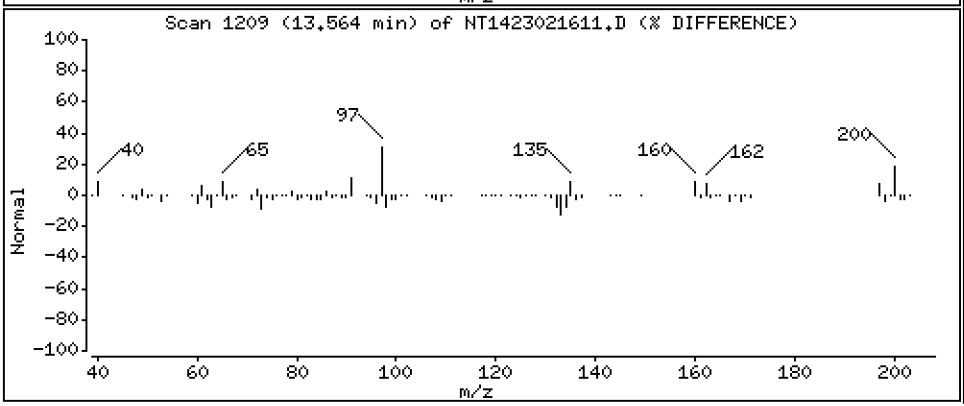












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

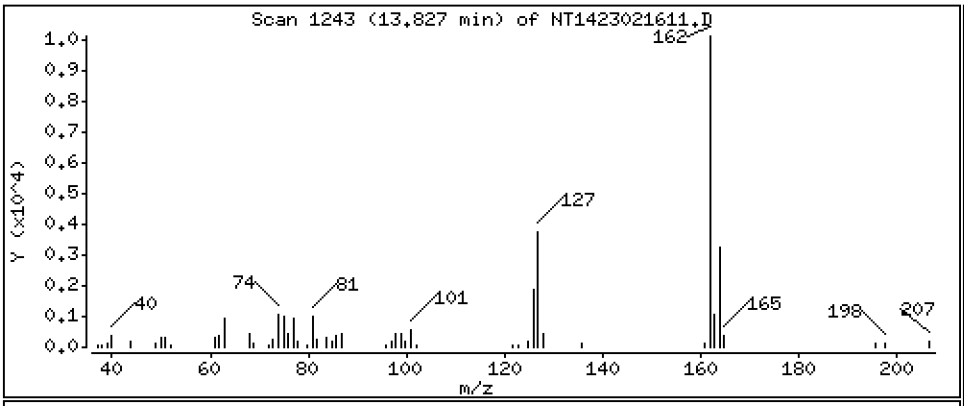
Operator: DSD

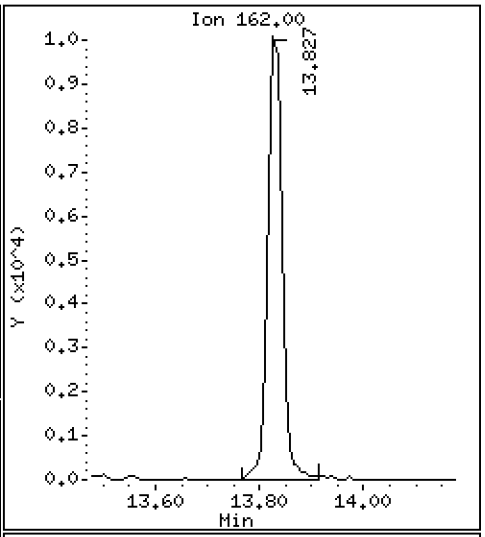
Column phase: ZB-5msi

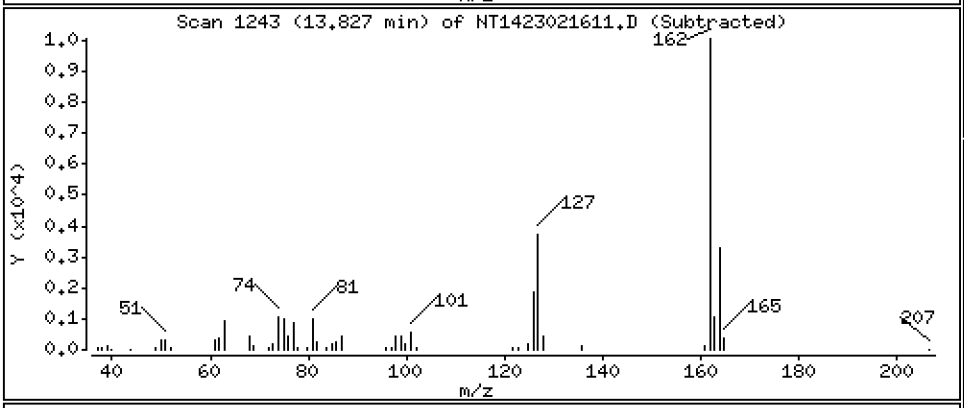
Column diameter: 0.25

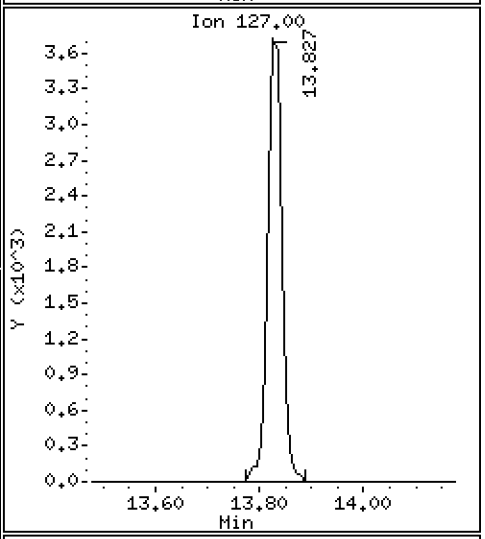
37 2-Chloronaphthalene

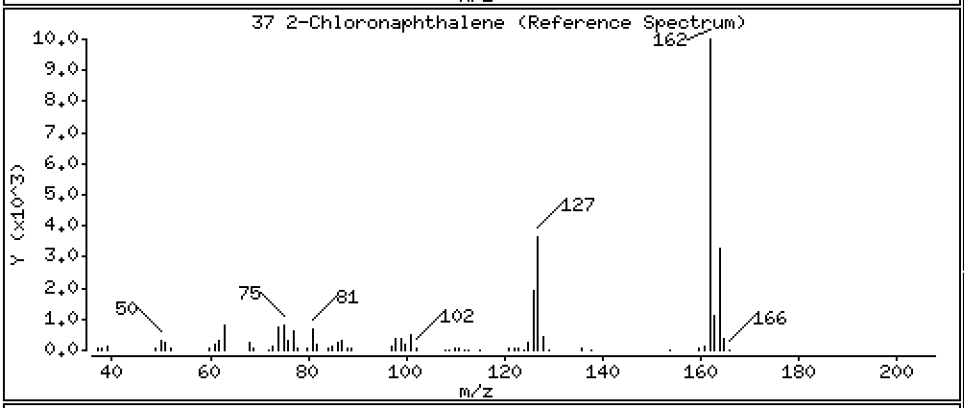
Concentration: 0.09217 ug/mL

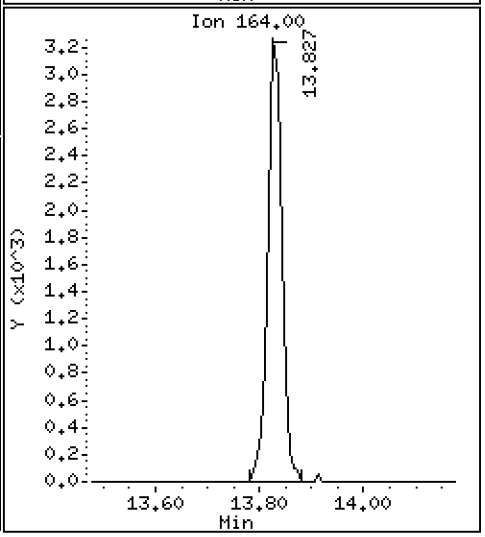


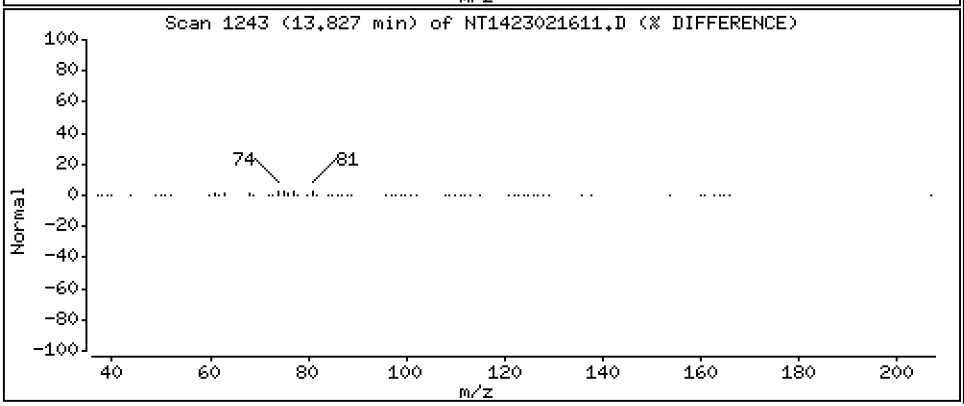












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

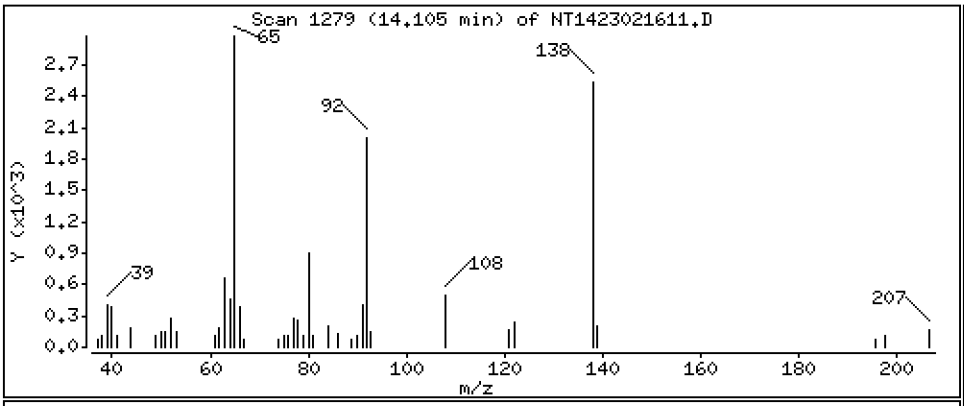
Operator: DSD

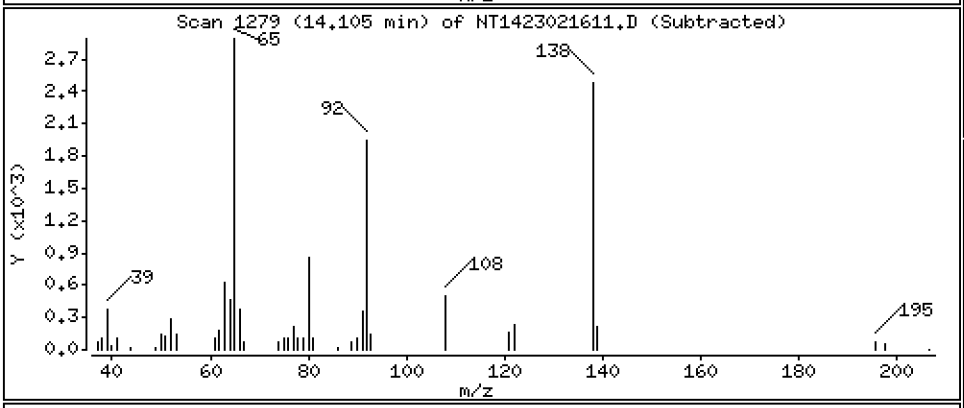
Column phase: ZB-5msi

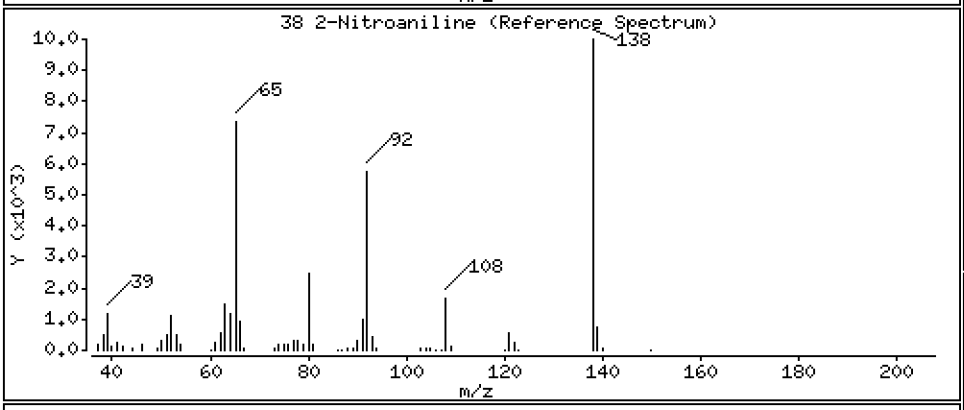
Column diameter: 0.25

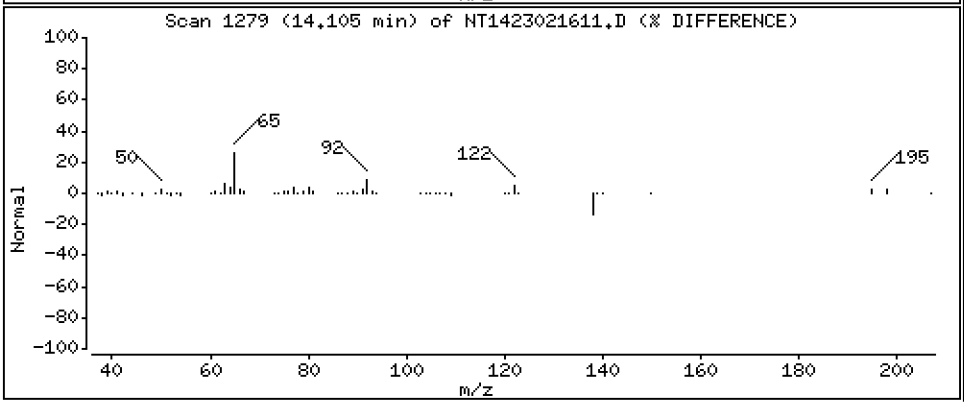
38 2-Nitroaniline

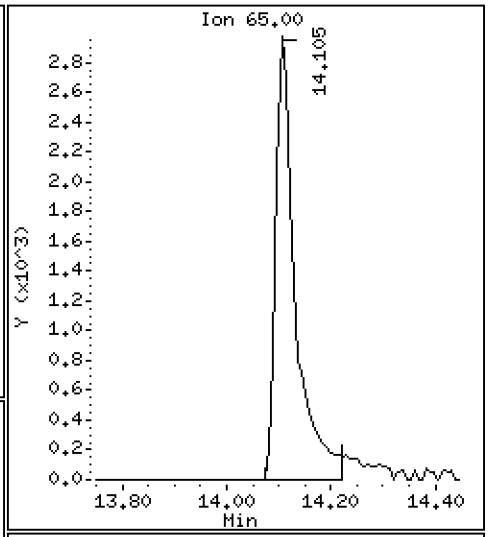
Concentration: 0.1154 ug/mL

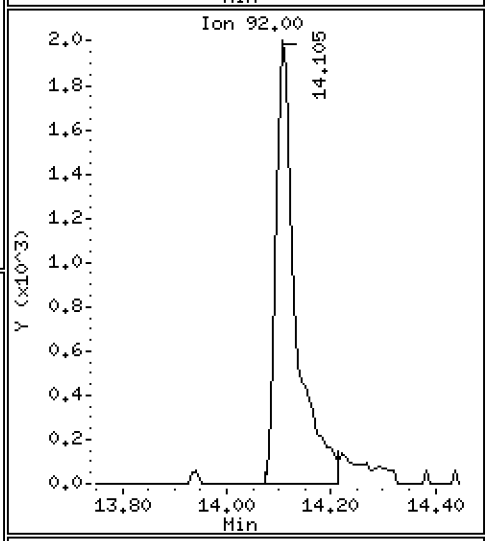


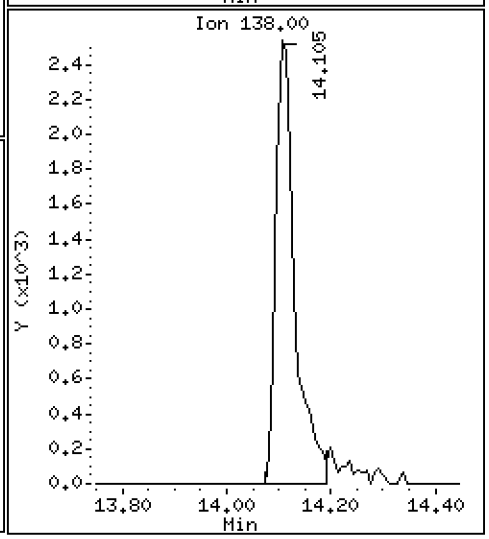












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021611.D

Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

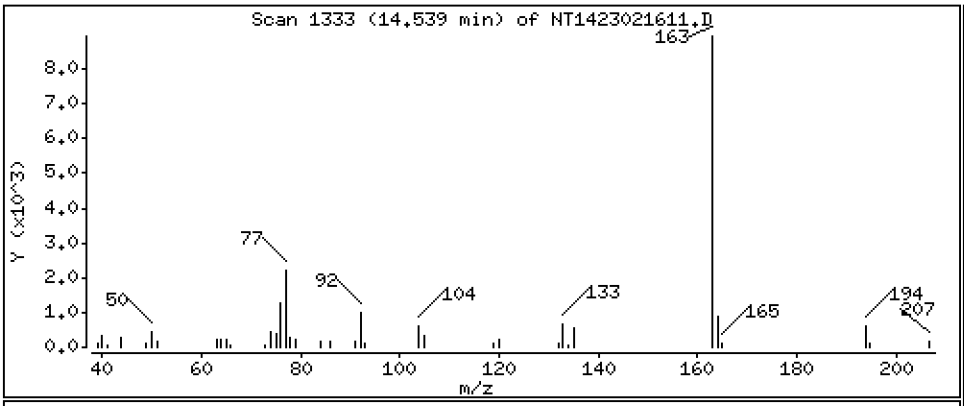
Operator: DSD

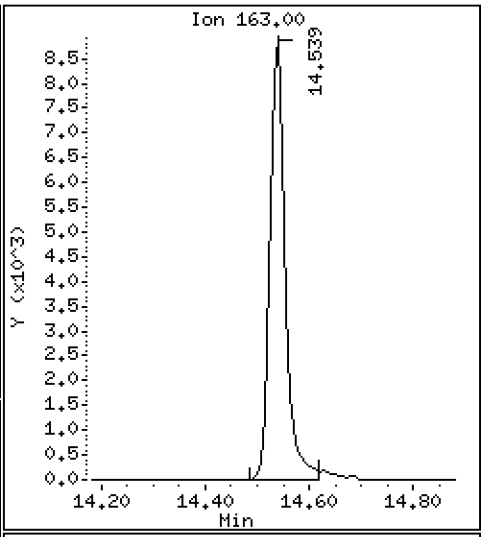
Column phase: ZB-5msi

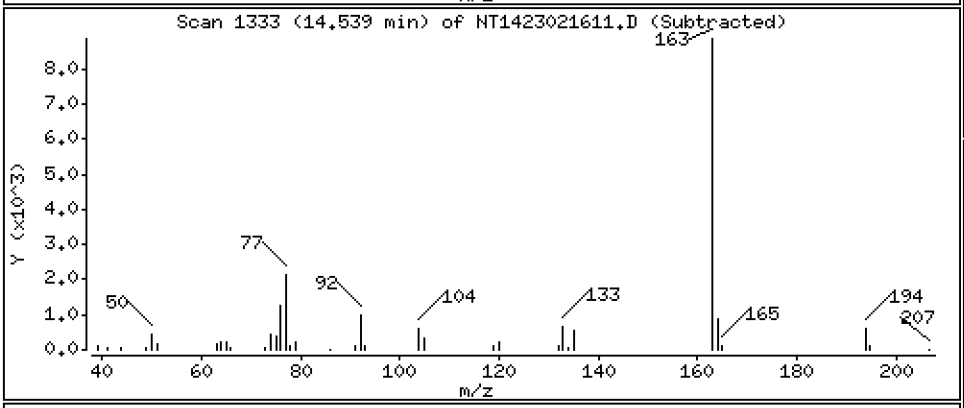
Column diameter: 0.25

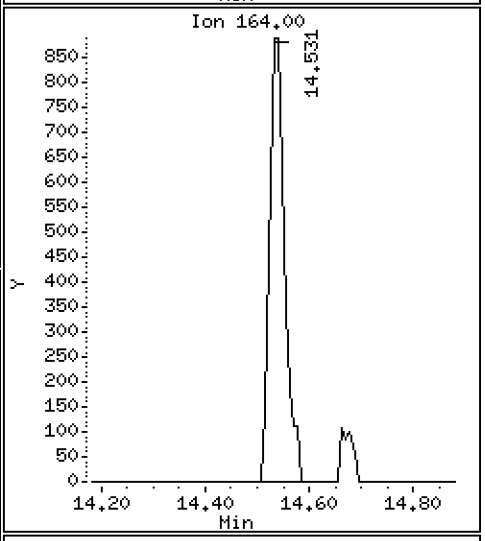
39 Dimethylphthalate

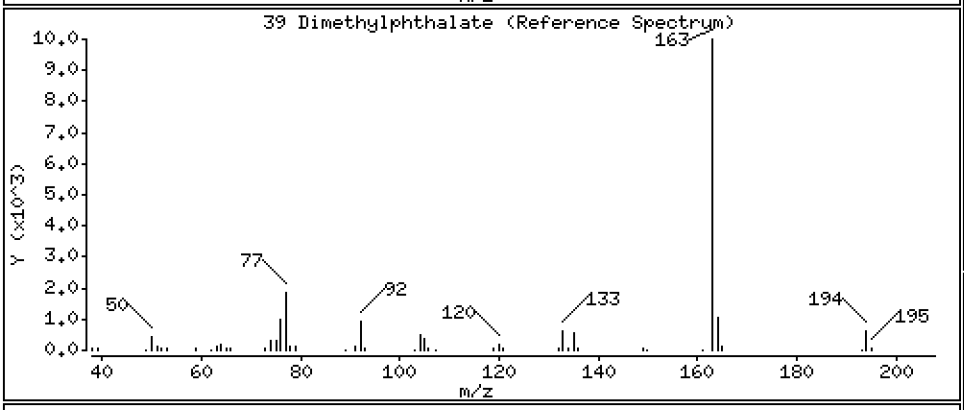
Concentration: 0.08312 ug/mL

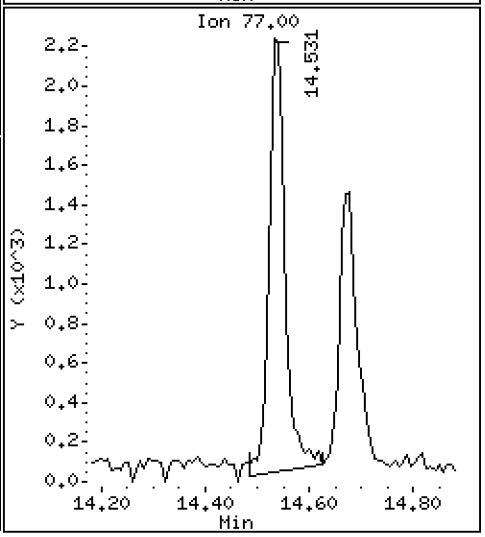


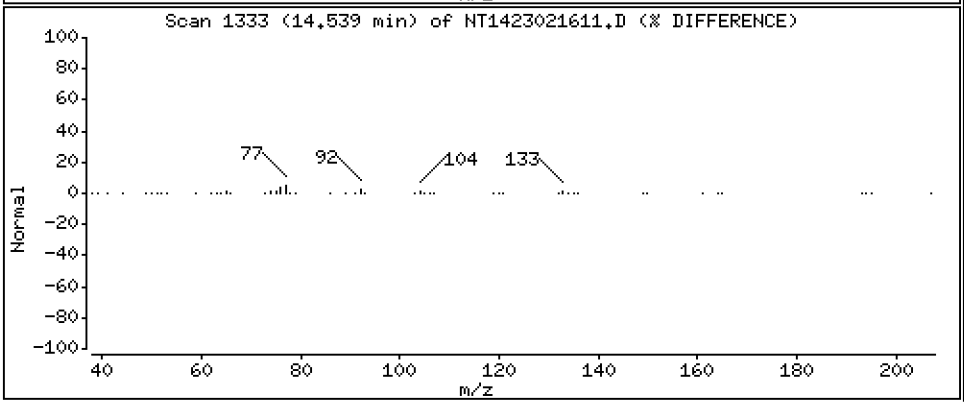












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

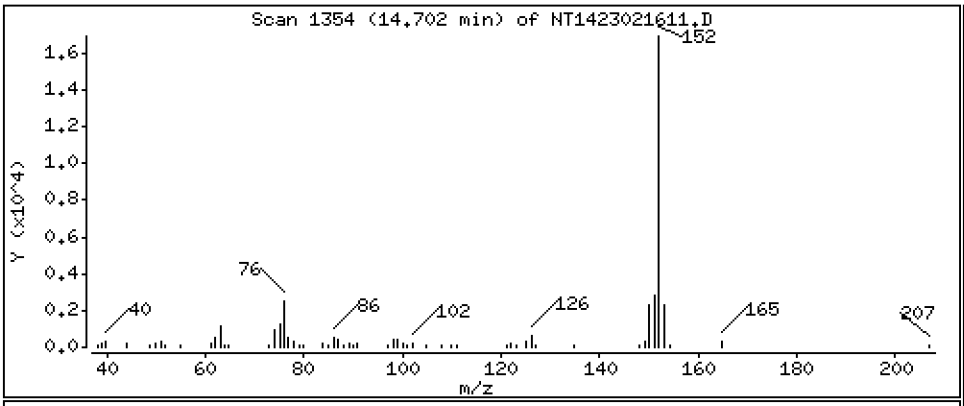
Operator: DSD

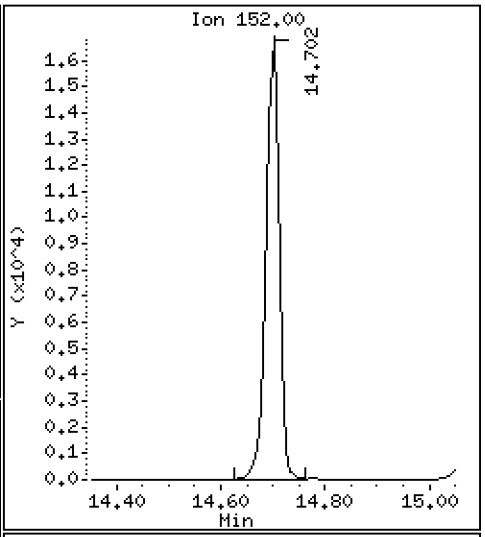
Column phase: ZB-5msi

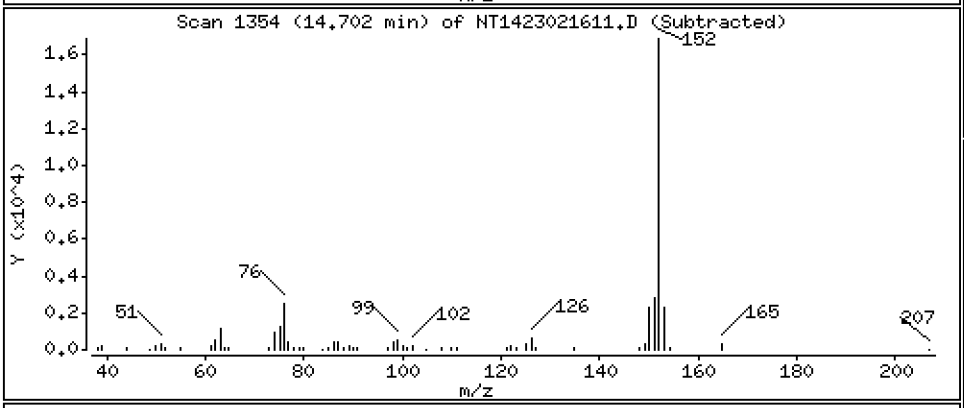
Column diameter: 0.25

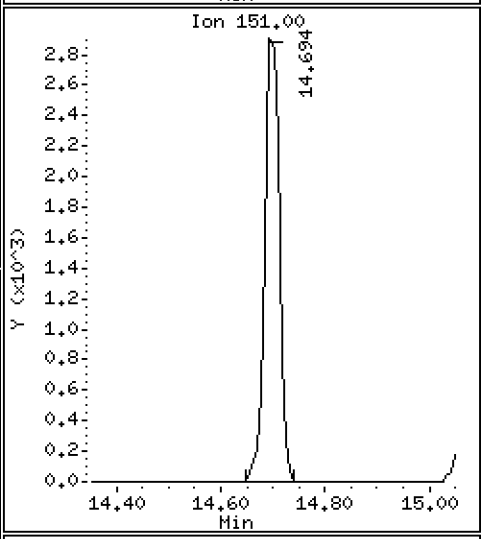
40 Acenaphthylene

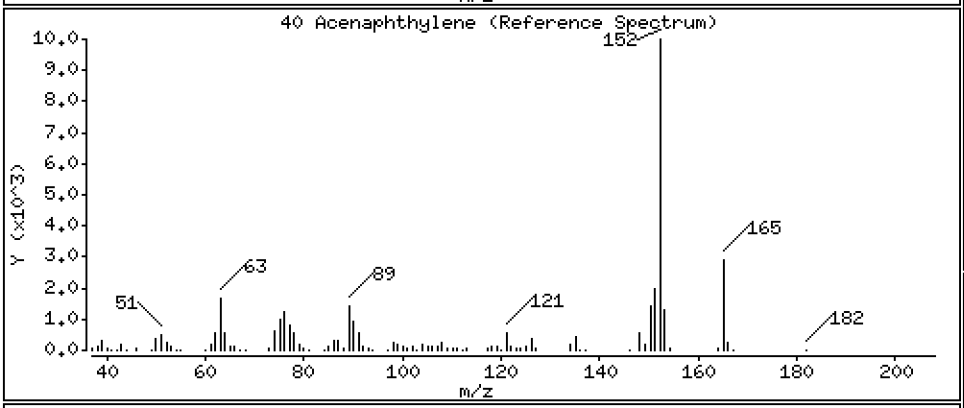
Concentration: 0.09160 ug/mL

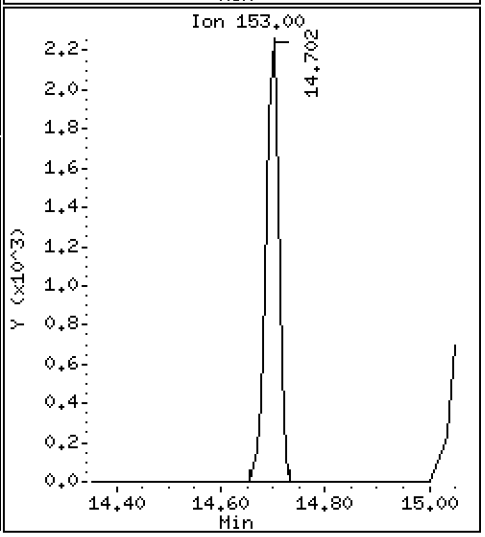


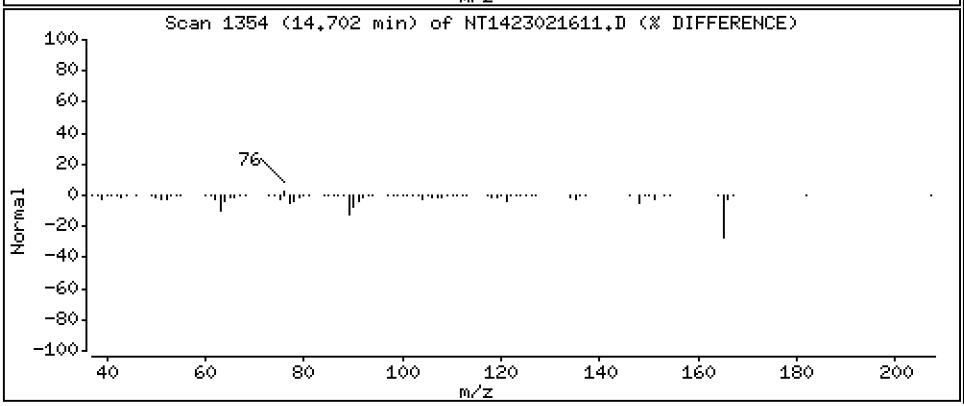












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

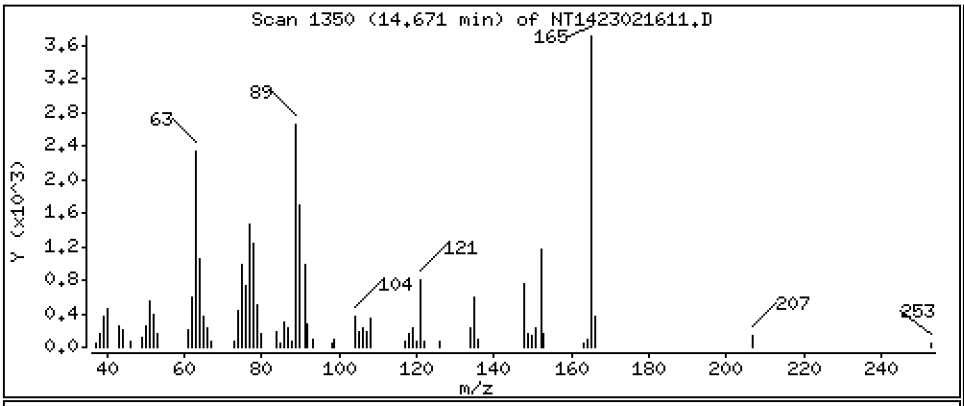
Operator: DSD

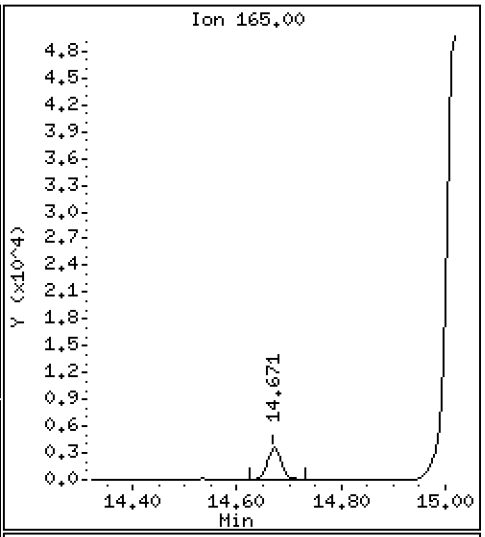
Column phase: ZB-5msi

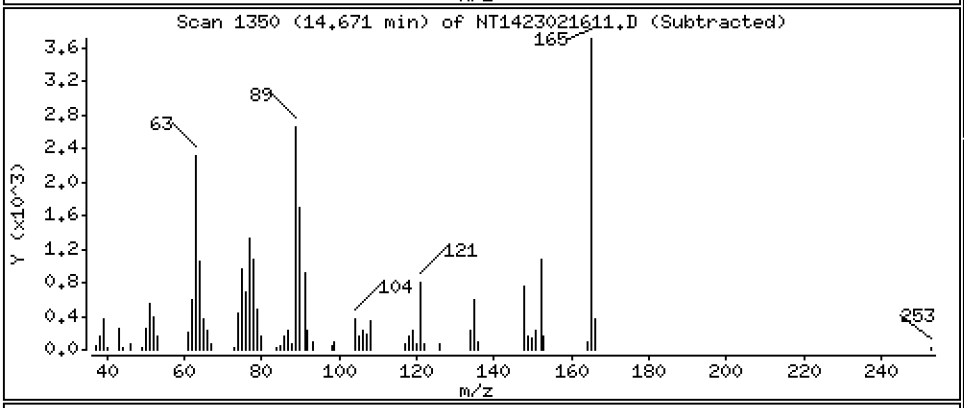
Column diameter: 0.25

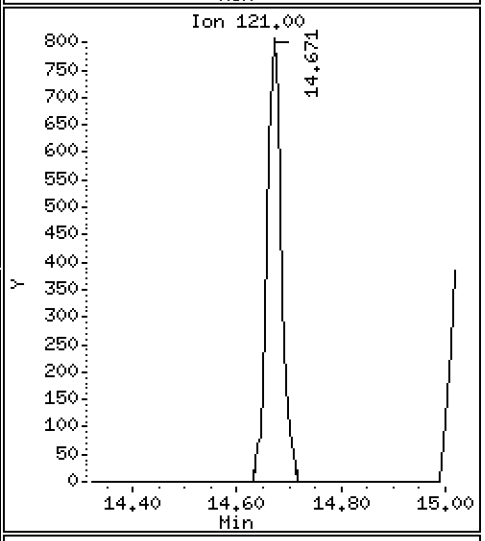
41 2,6-Dinitrotoluene

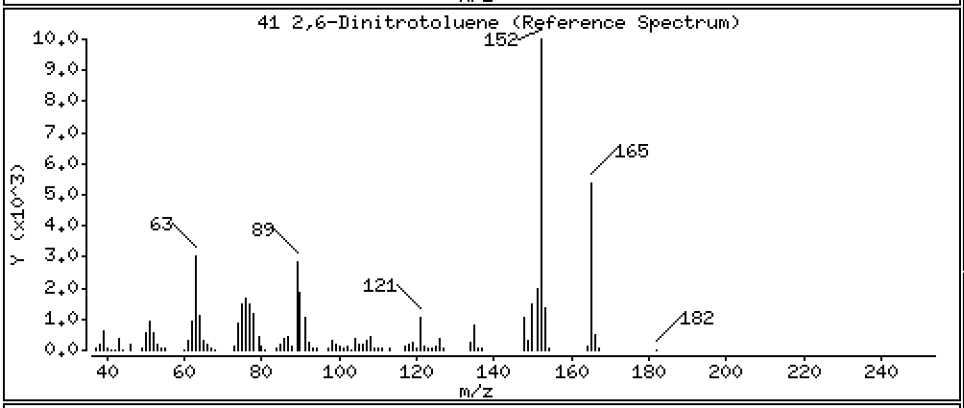
Concentration: 0.1313 ug/mL

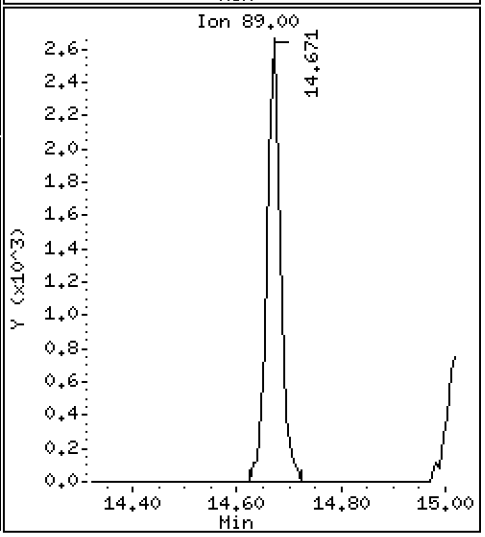


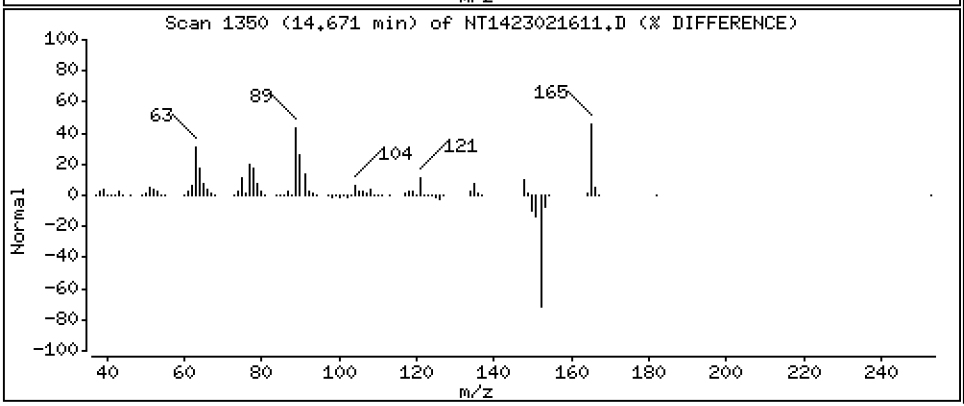












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

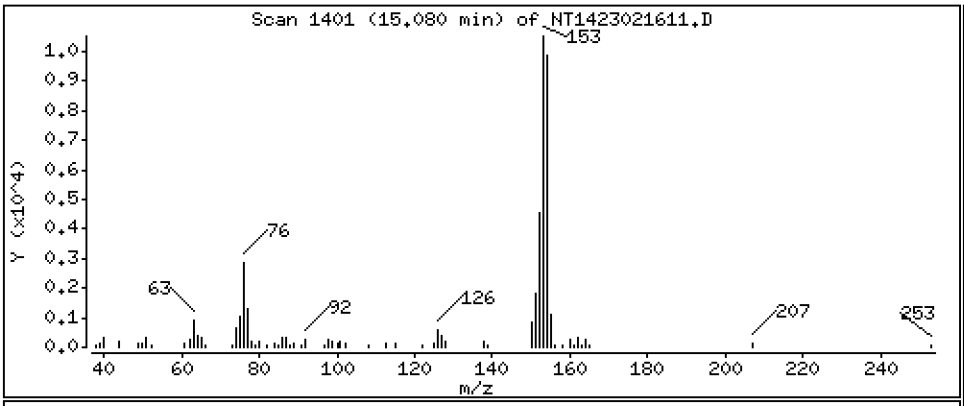
Operator: DSD

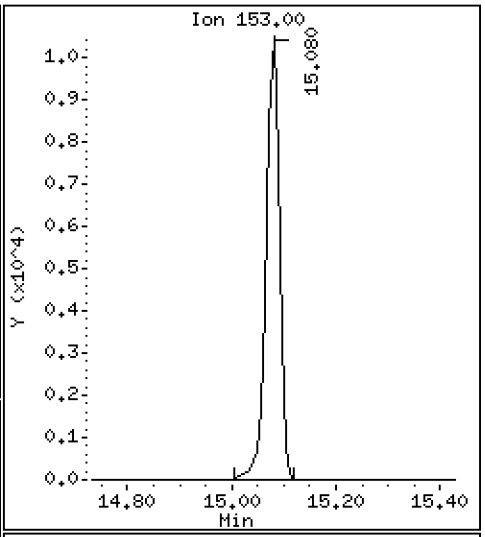
Column phase: ZB-5msi

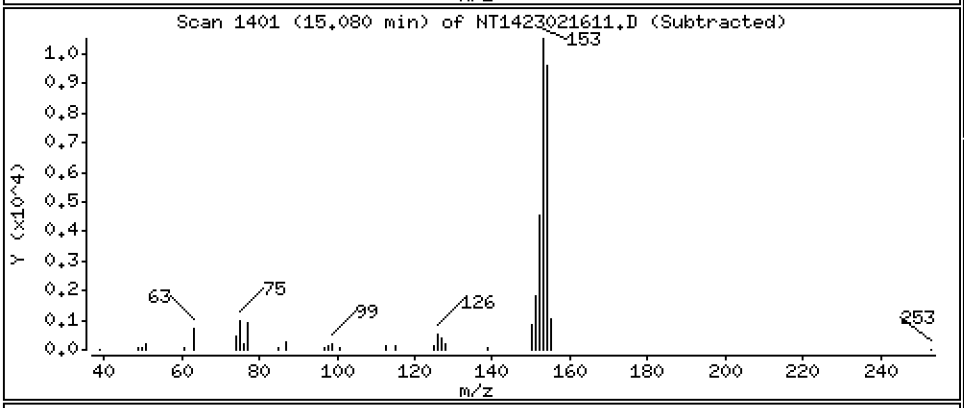
Column diameter: 0.25

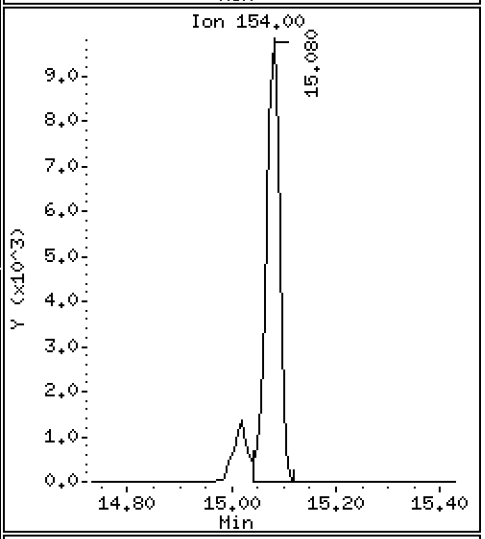
44 Acenaphthene

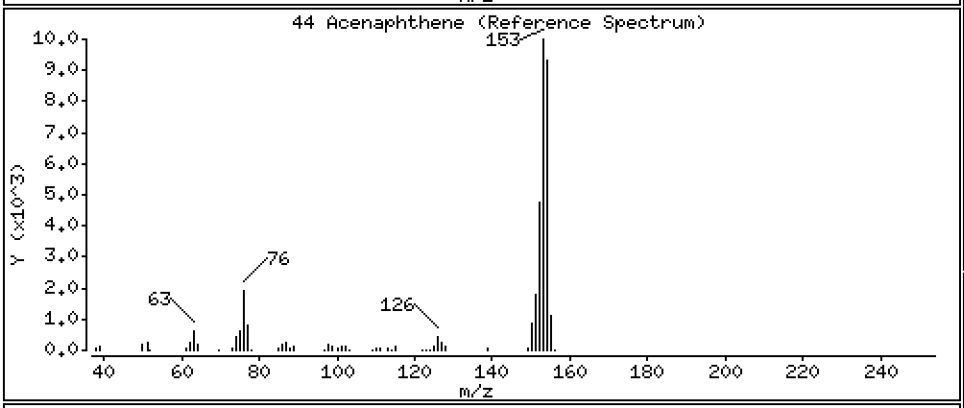
Concentration: 0.09618 ug/mL

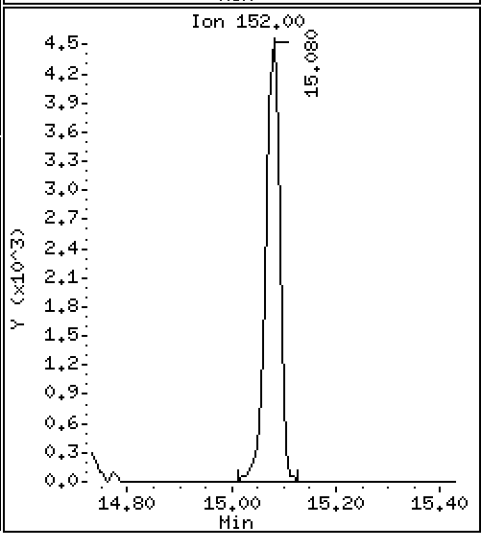


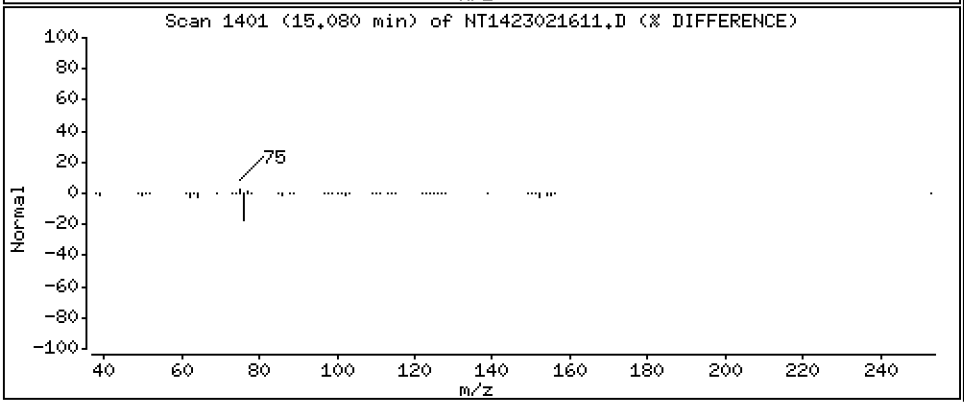












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

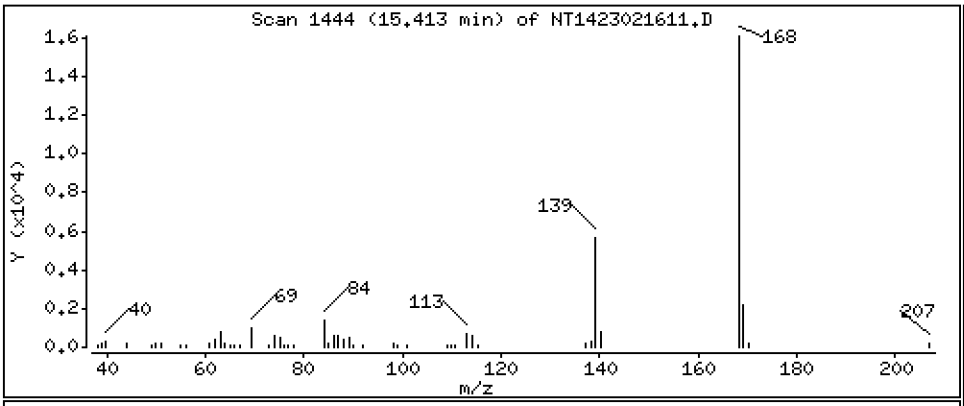
Operator: DSD

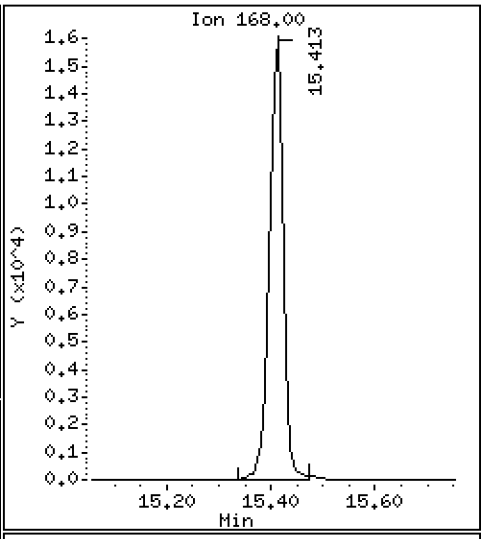
Column phase: ZB-5msi

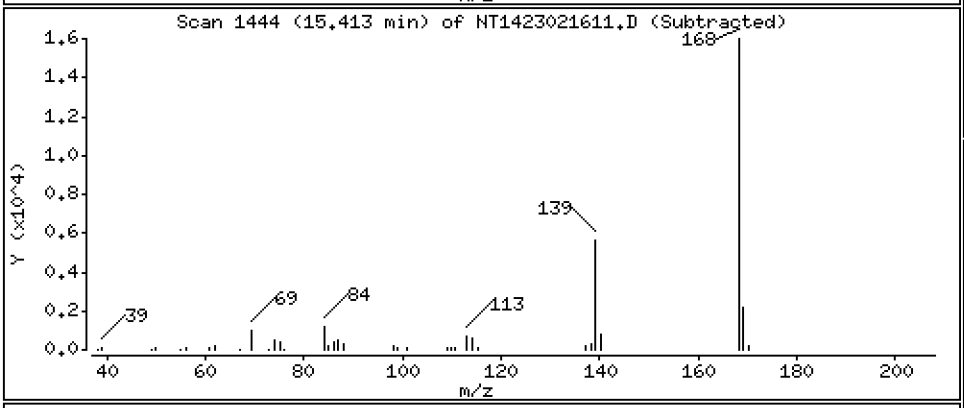
Column diameter: 0.25

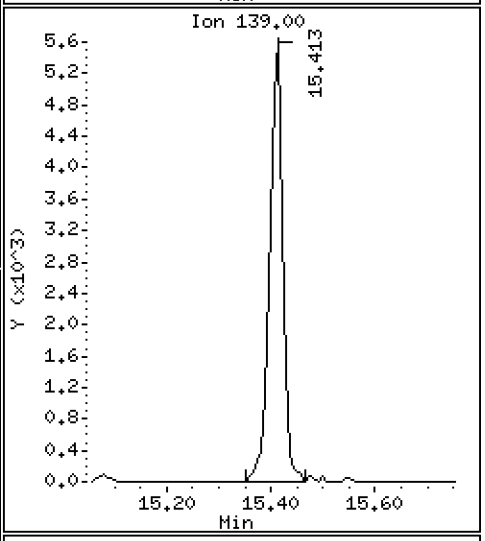
46 Dibenzofuran

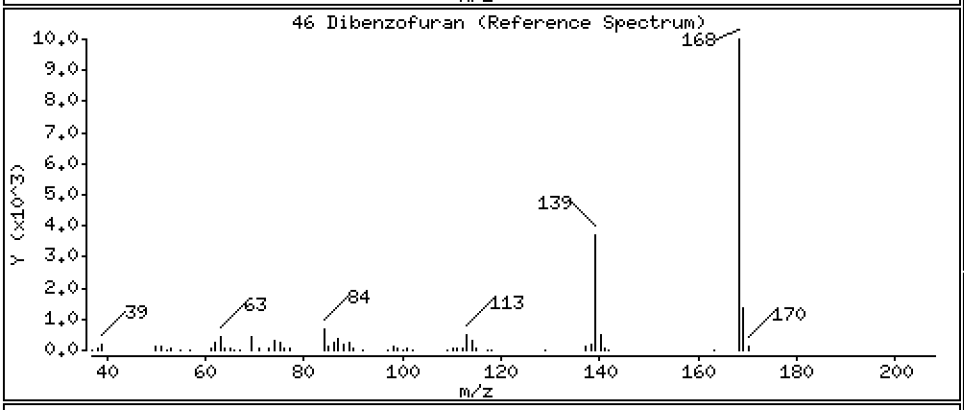
Concentration: 0.09458 ug/mL

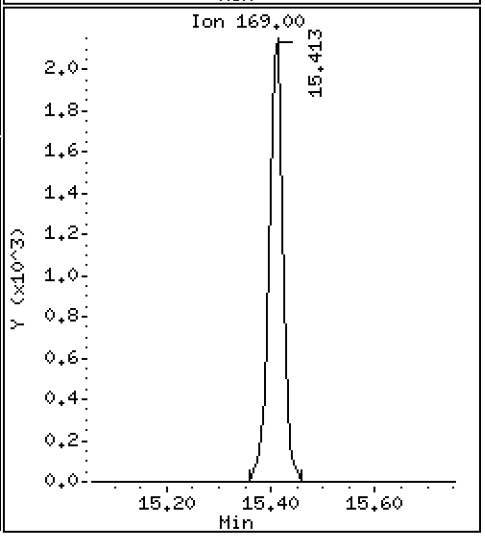


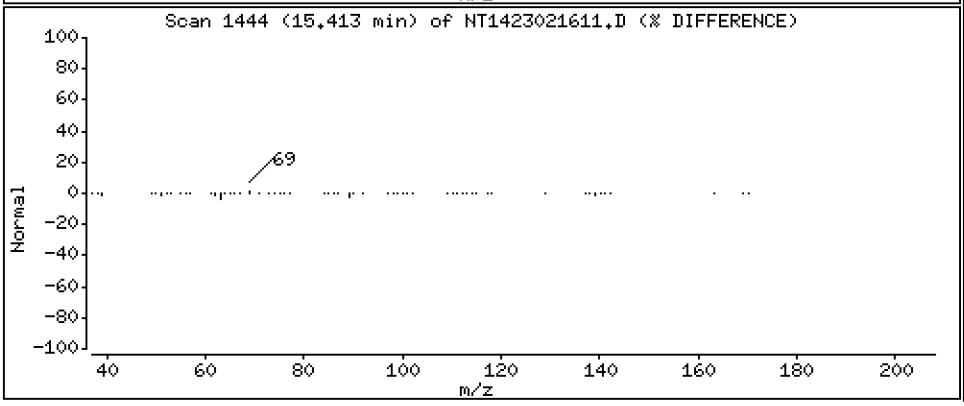












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

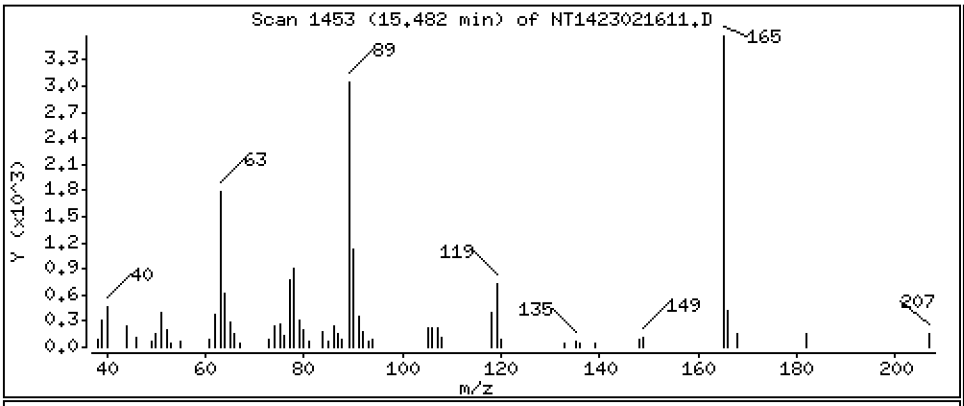
Operator: DSD

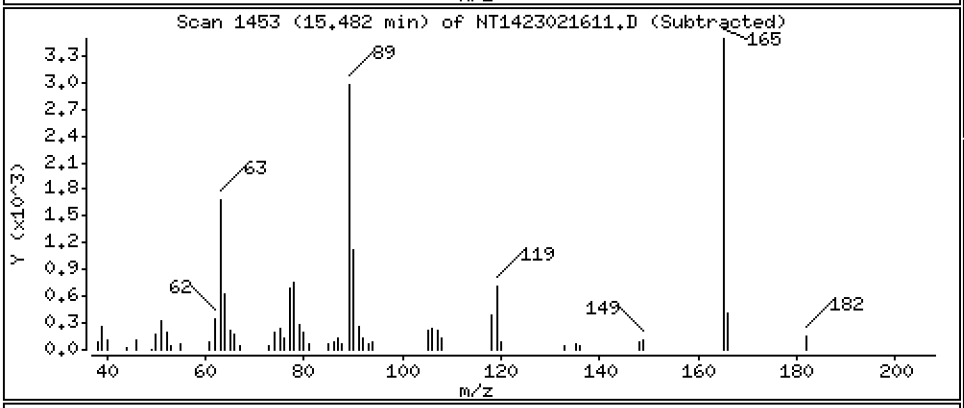
Column phase: ZB-5msi

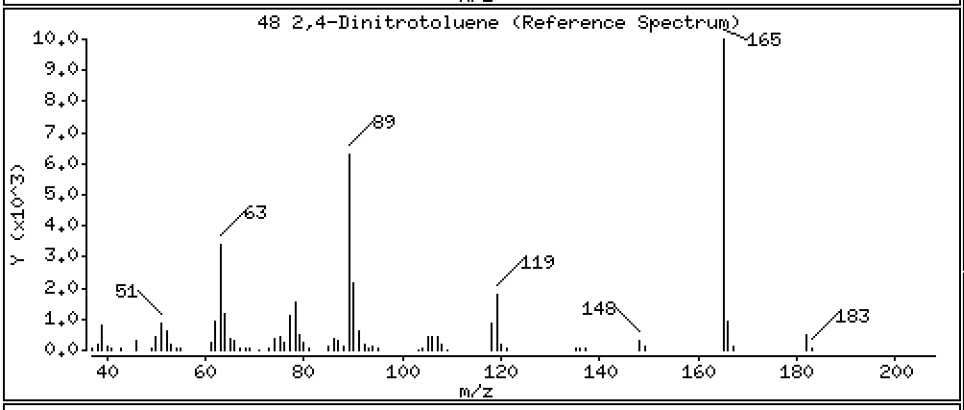
Column diameter: 0.25

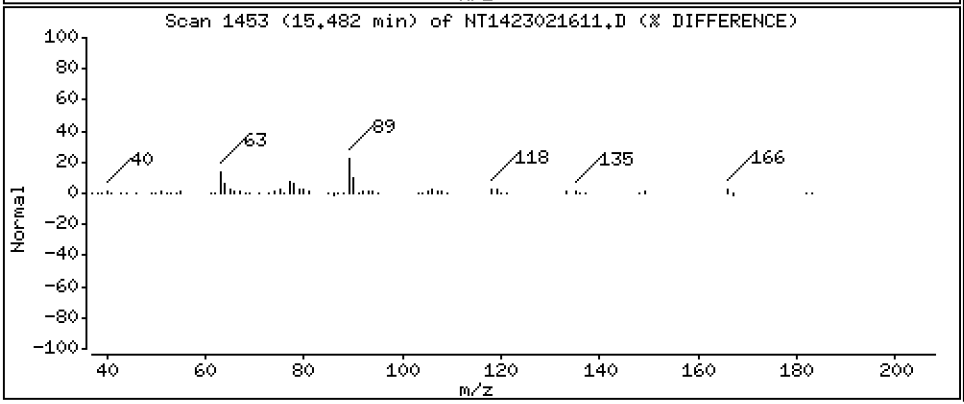
48 2,4-Dinitrotoluene

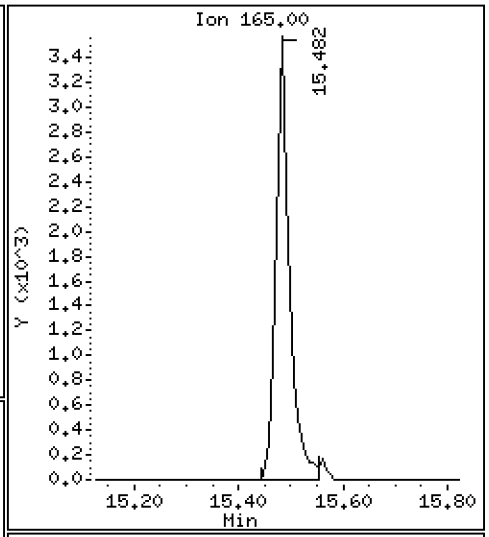
Concentration: 0.08952 ug/mL

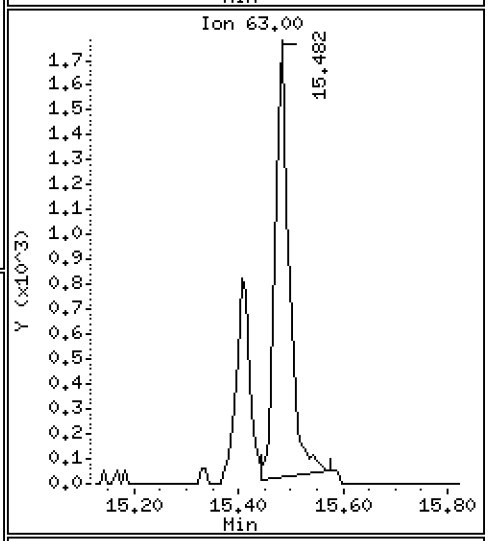


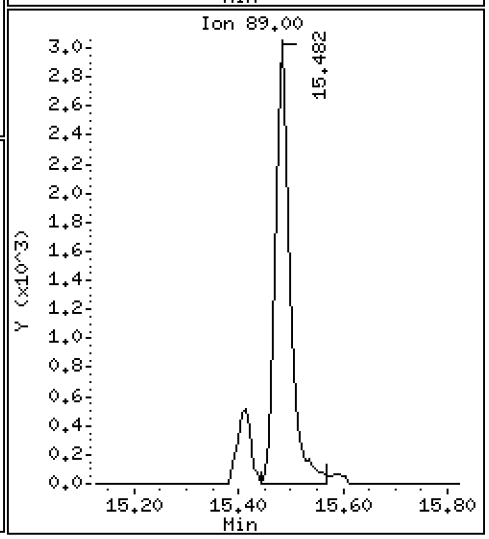












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

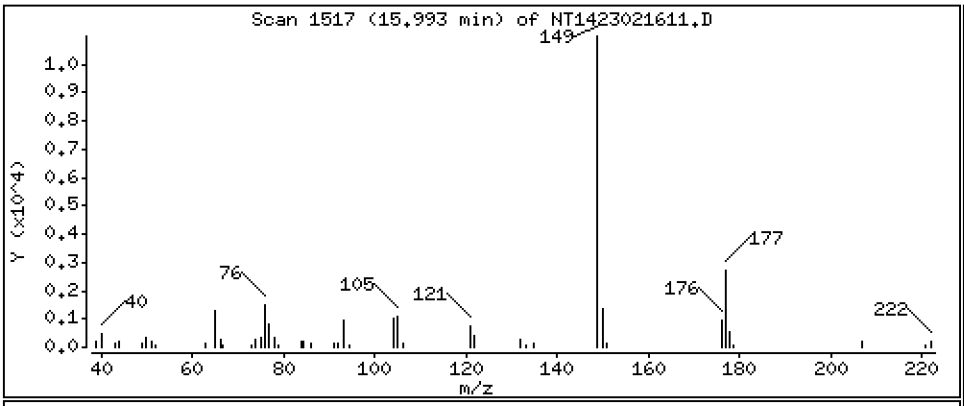
Operator: DSD

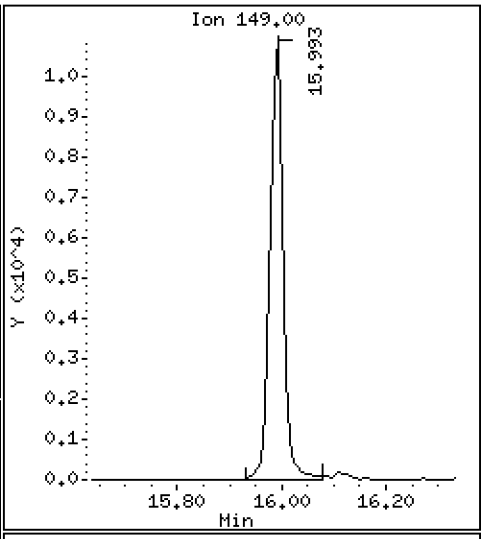
Column phase: ZB-5msi

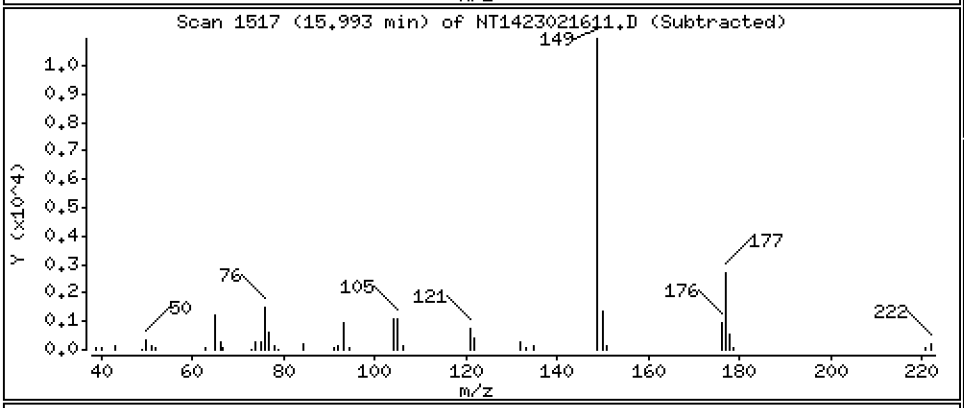
Column diameter: 0.25

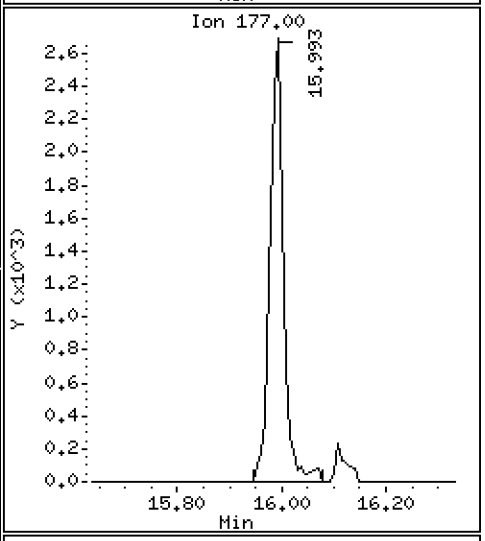
50 Diethylphthalate

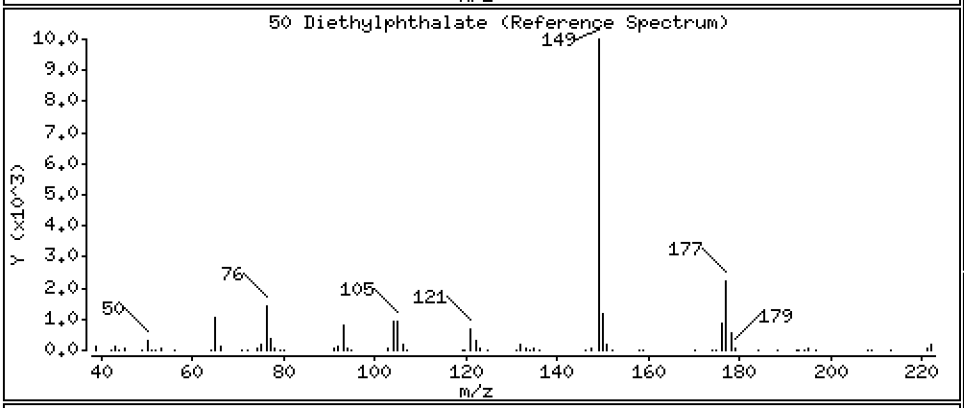
Concentration: 0.07328 ug/mL

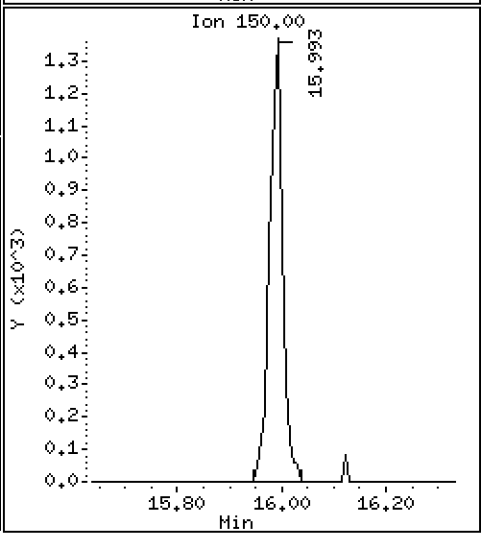


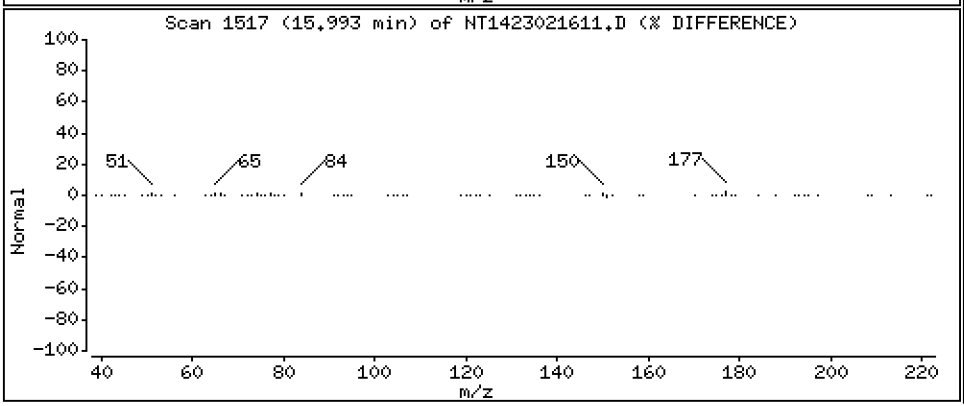












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021611.D

Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

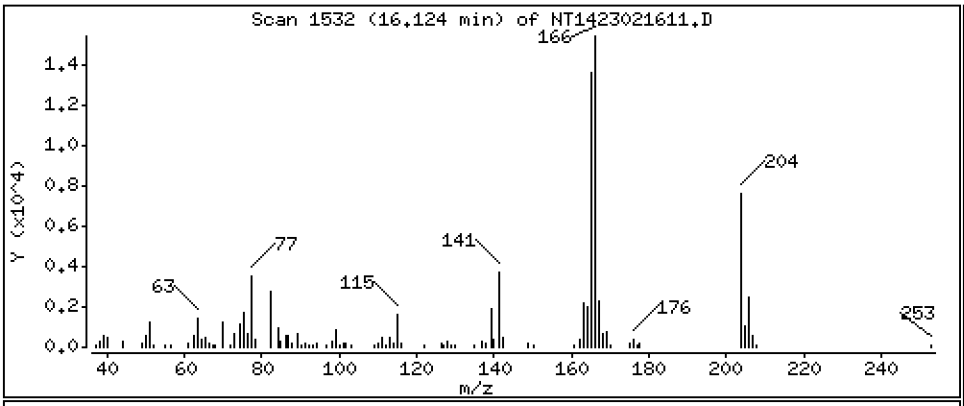
Operator: DSD

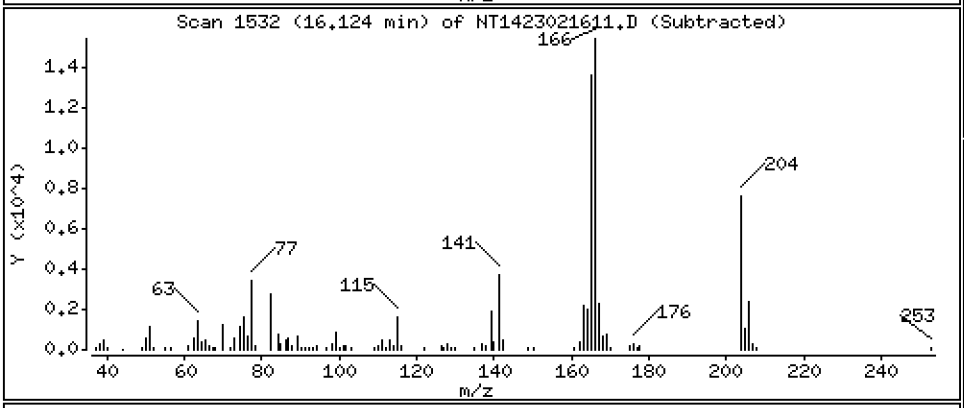
Column phase: ZB-5msi

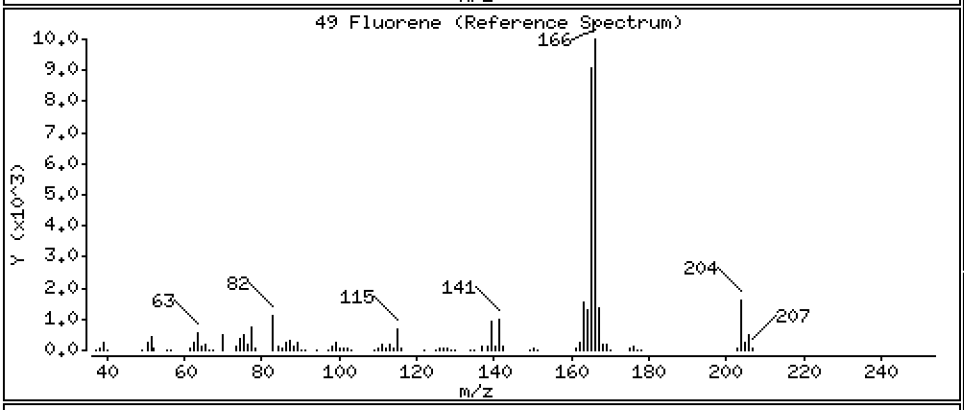
Column diameter: 0.25

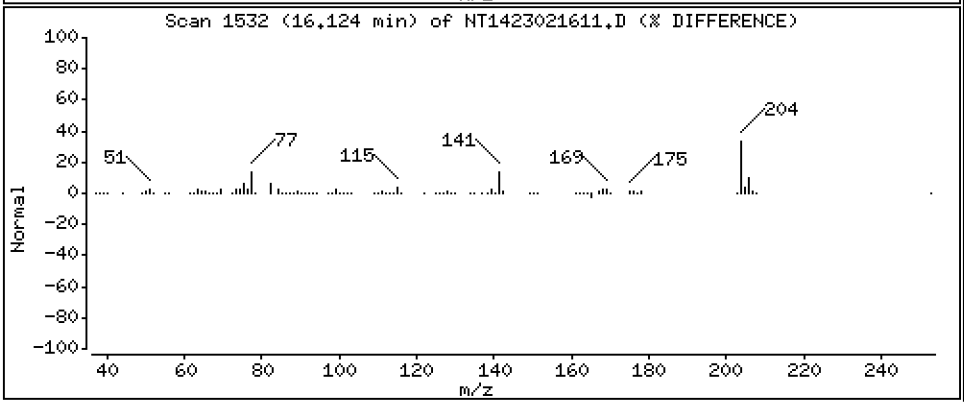
49 Fluorene

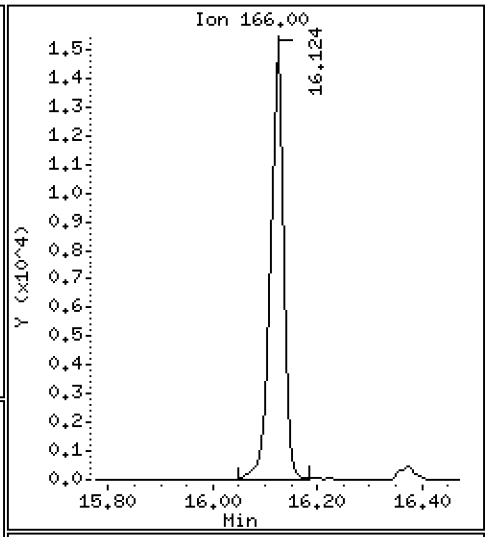
Concentration: 0.09099 ug/mL

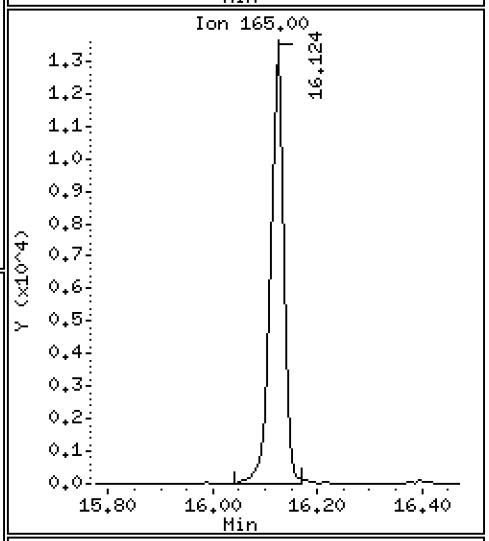


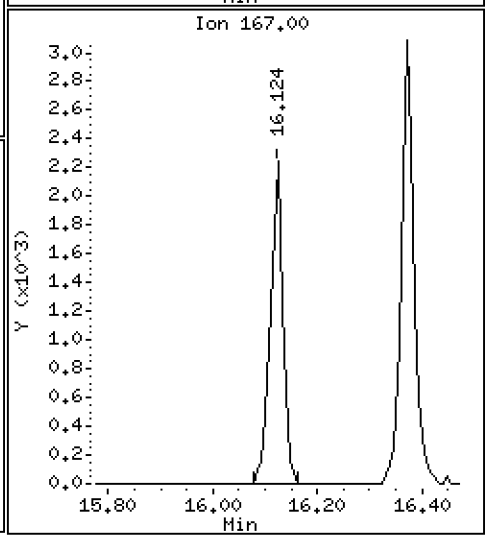












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021611.D

Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

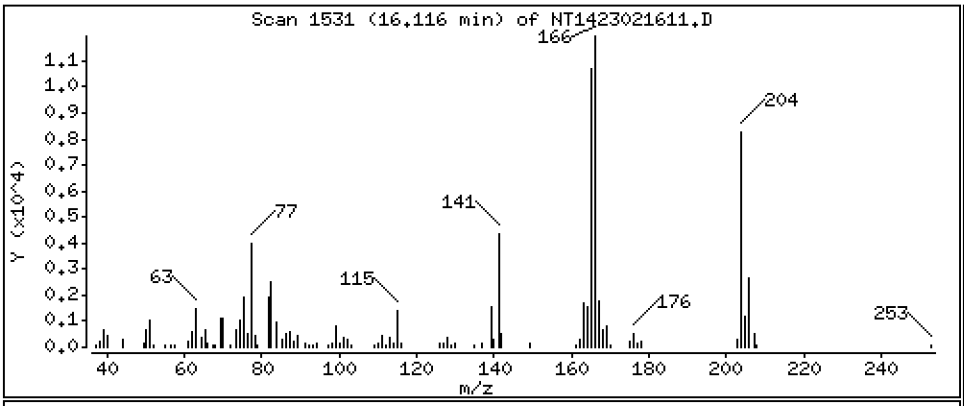
Operator: DSD

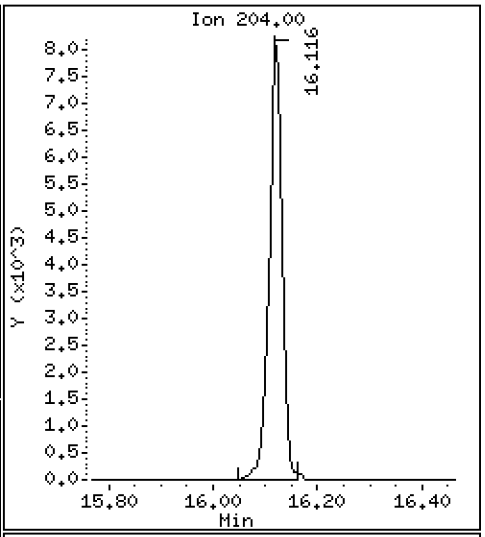
Column phase: ZB-5msi

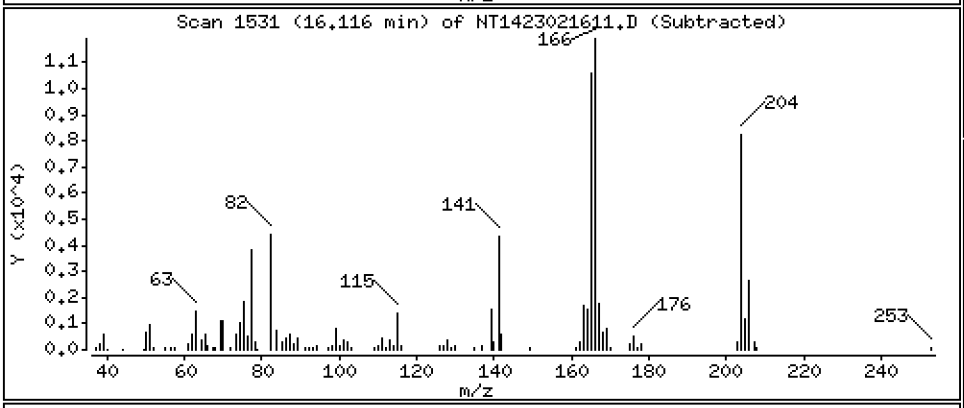
Column diameter: 0.25

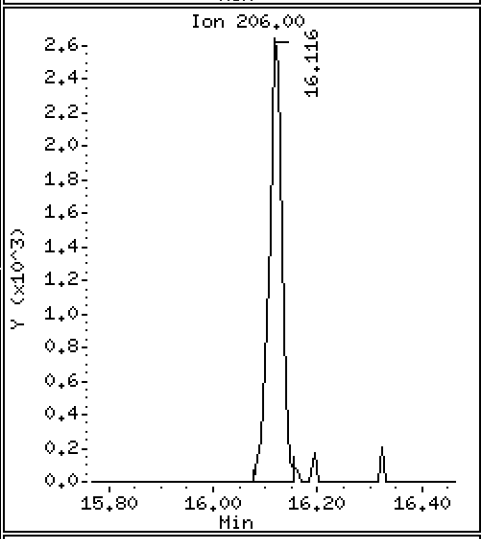
51 4-Chlorophenyl-phenylether

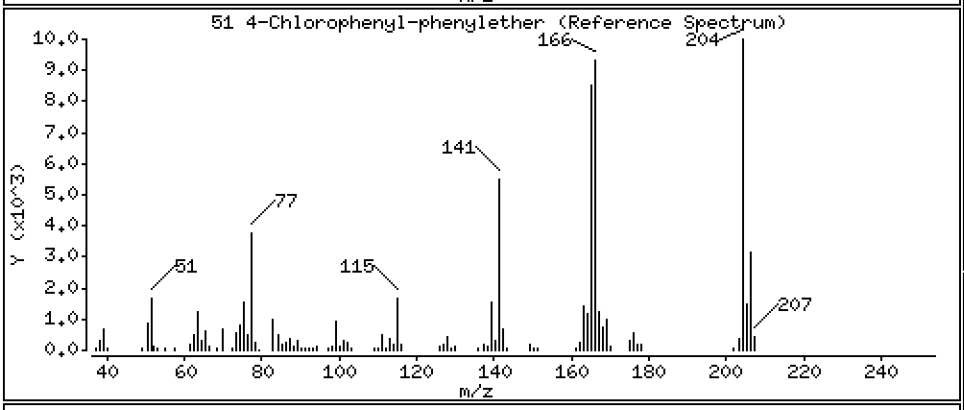
Concentration: 0.09547 ug/mL

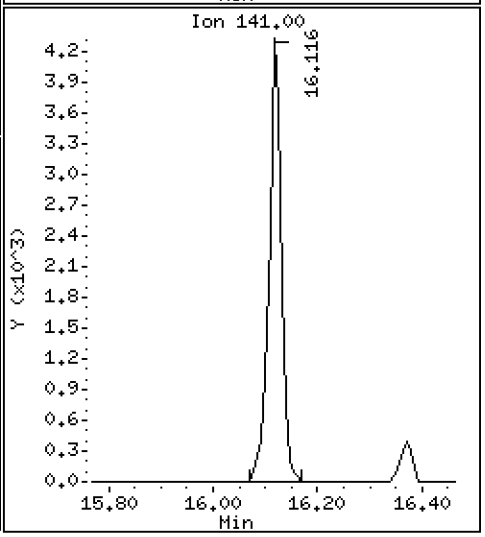


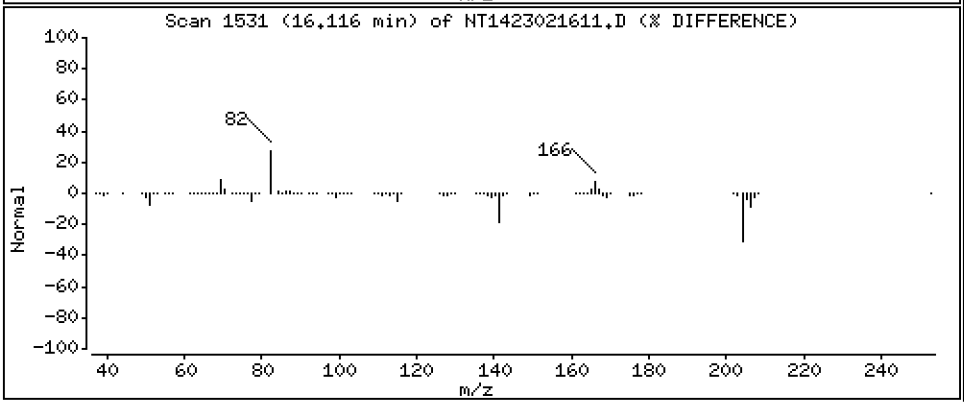












Date : 16-FEB-2023 20:06

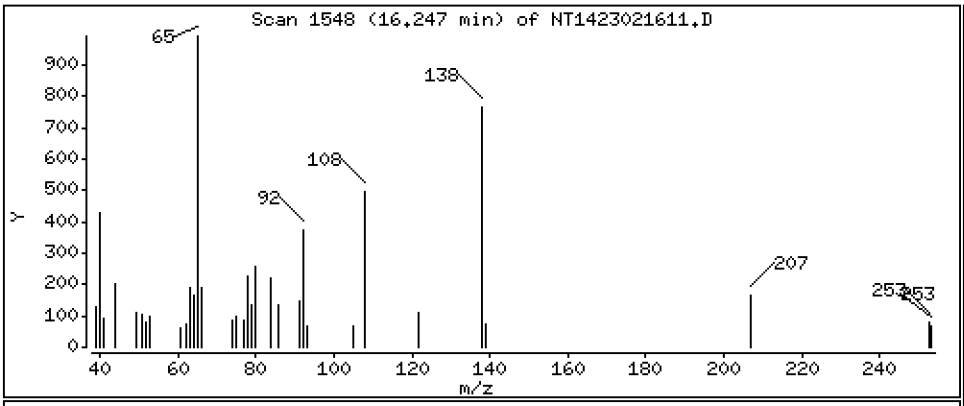
Client ID: Instrument: nt14.i

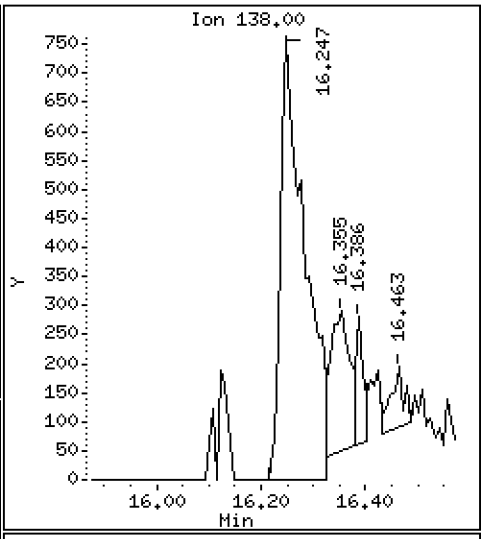
Sample Info: SIM 0.1

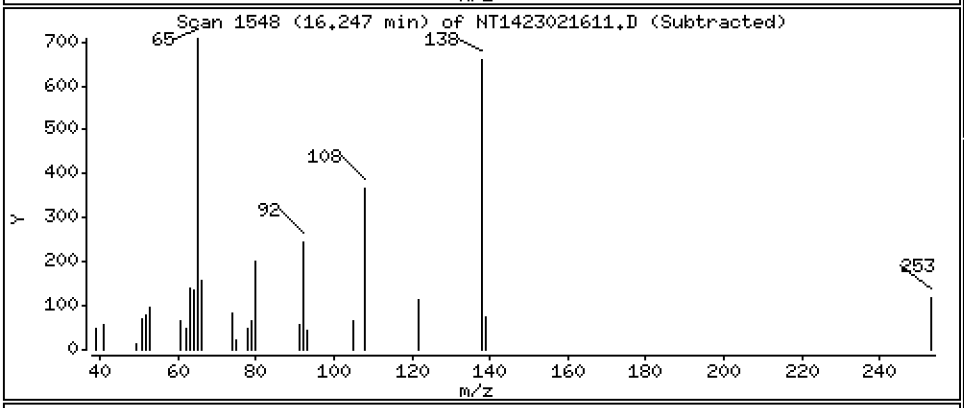
Operator: DSD

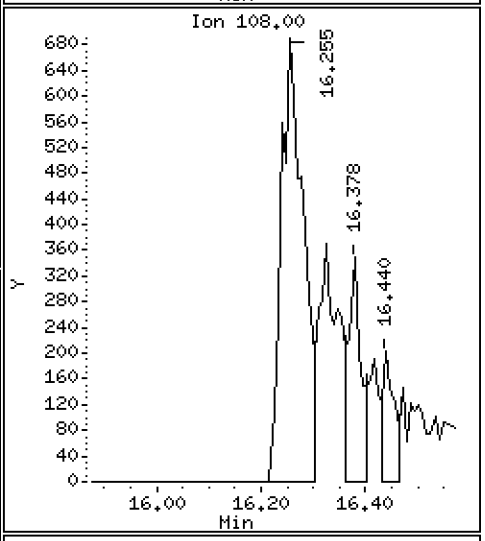
Column phase: ZB-5msi Column diameter: 0.25

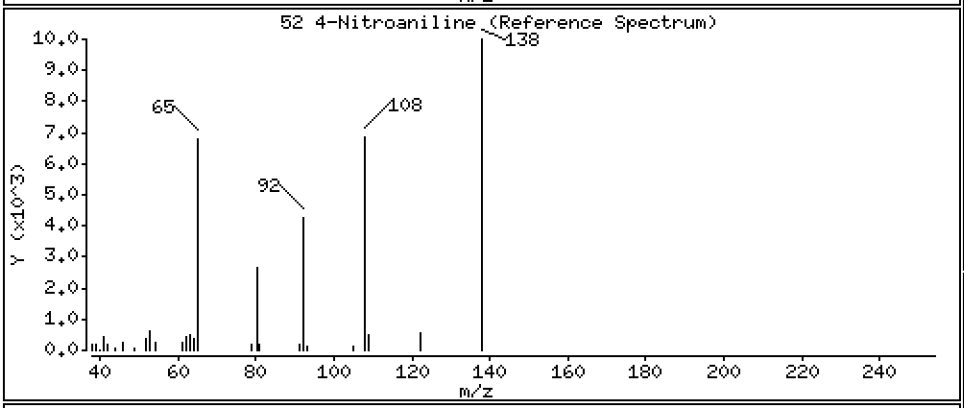
52 4-Nitroaniline Concentration: 0.04197 ug/mL

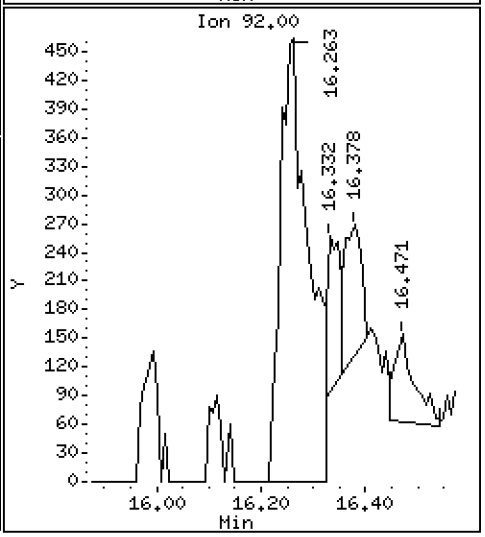


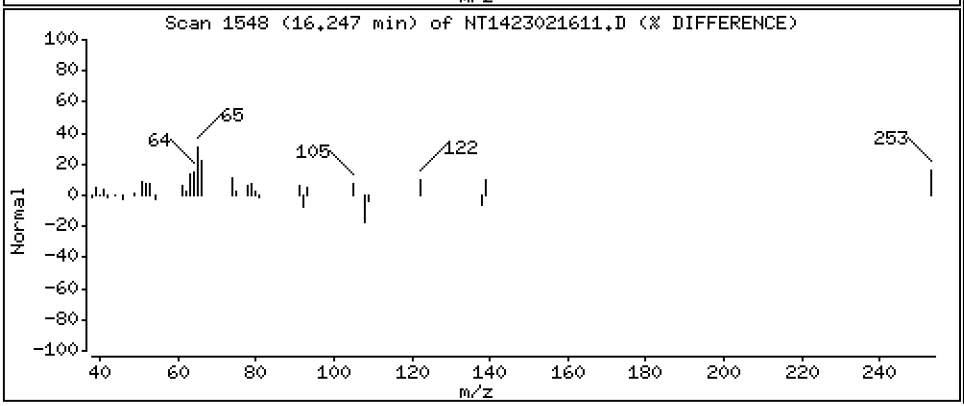












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021611.D

Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

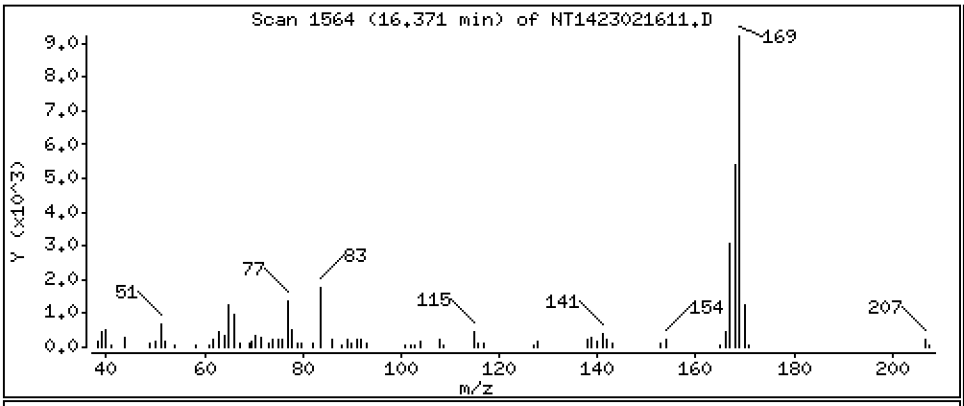
Operator: DSD

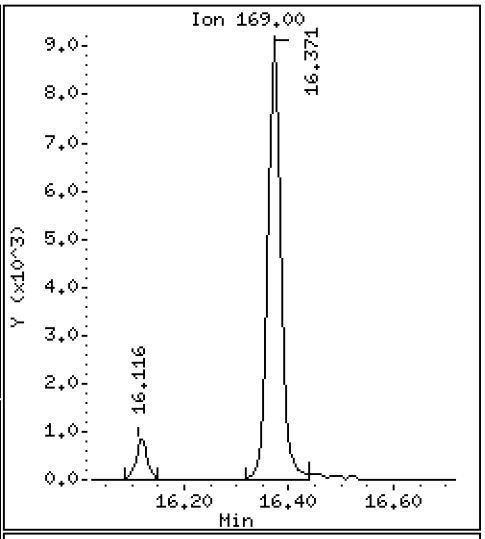
Column phase: ZB-5msi

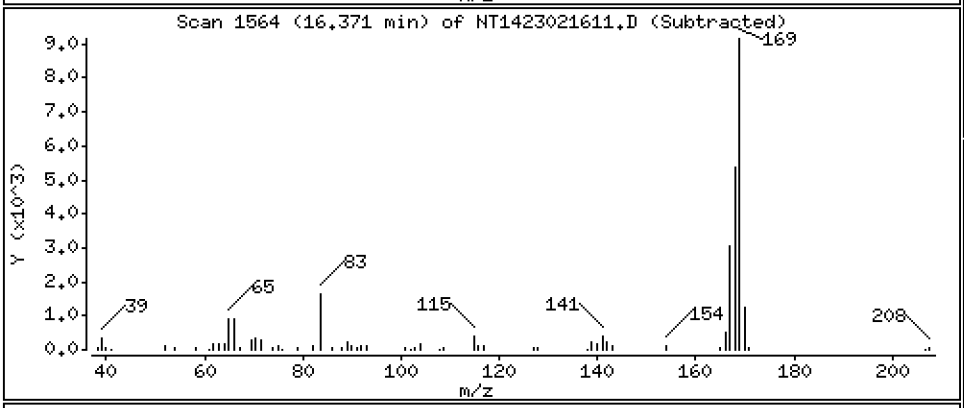
Column diameter: 0.25

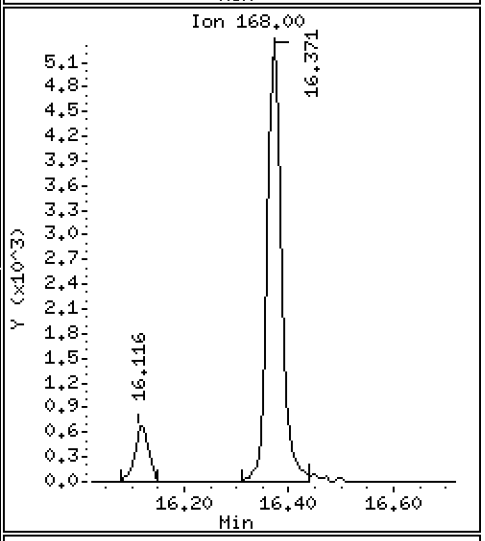
54 N-Nitrosodiphenylamine

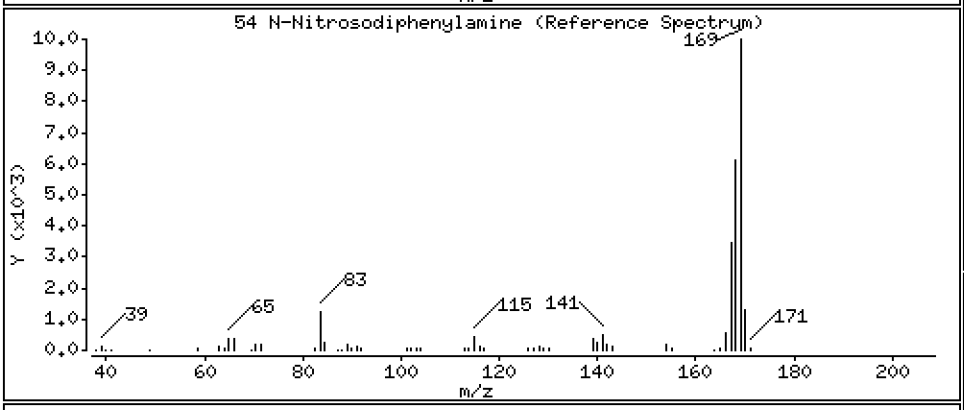
Concentration: 0.07580 ug/mL

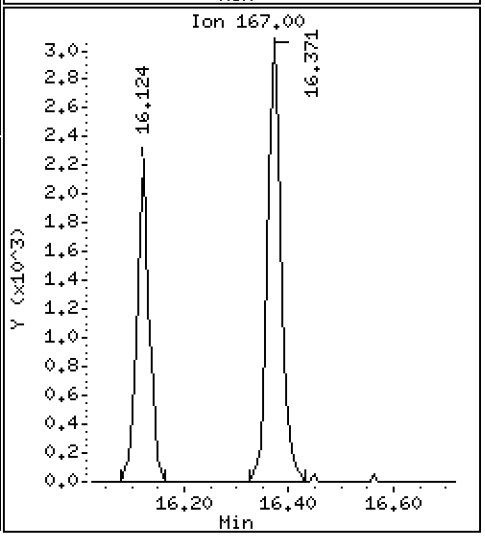


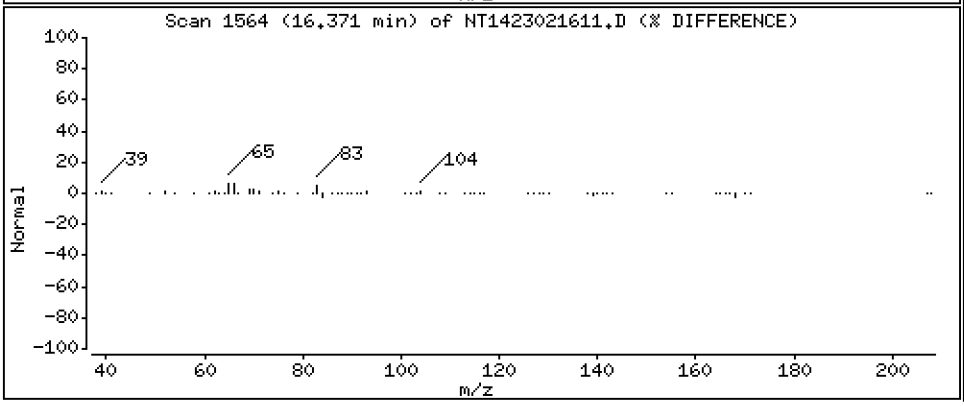












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

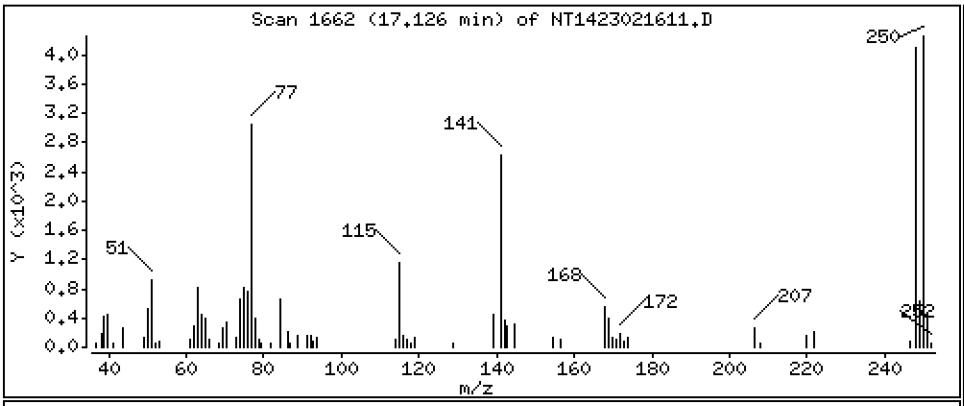
Operator: DSD

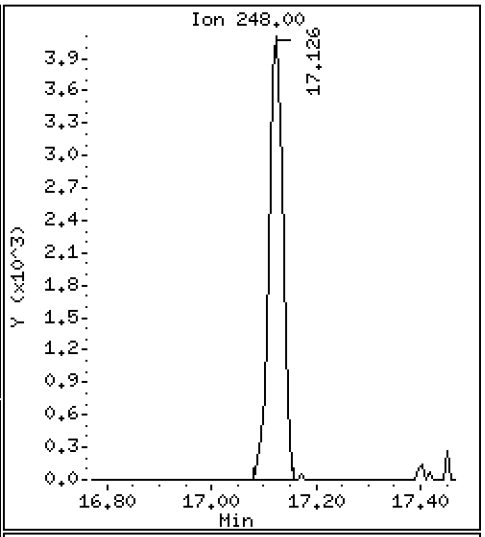
Column phase: ZB-5msi

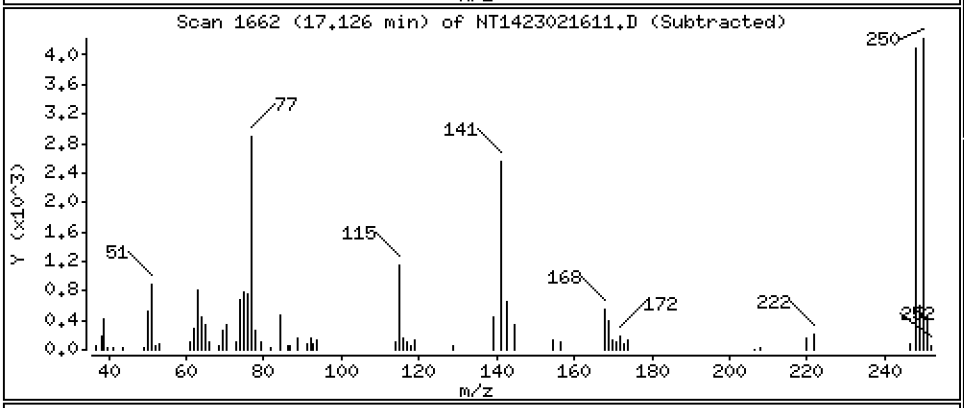
Column diameter: 0.25

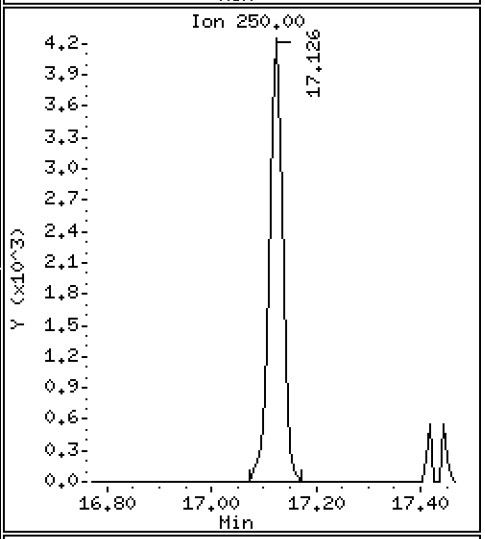
56 4-Bromophenyl-phenylether

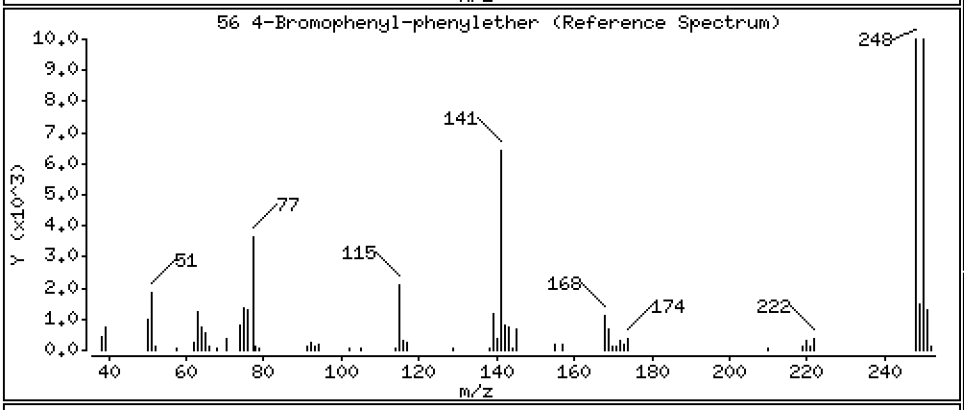
Concentration: 0.08111 ug/mL

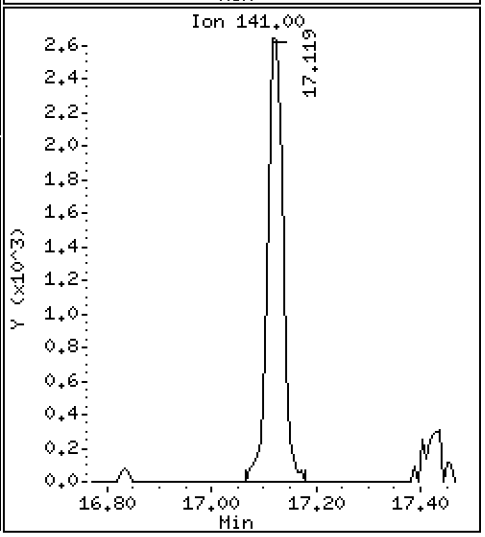


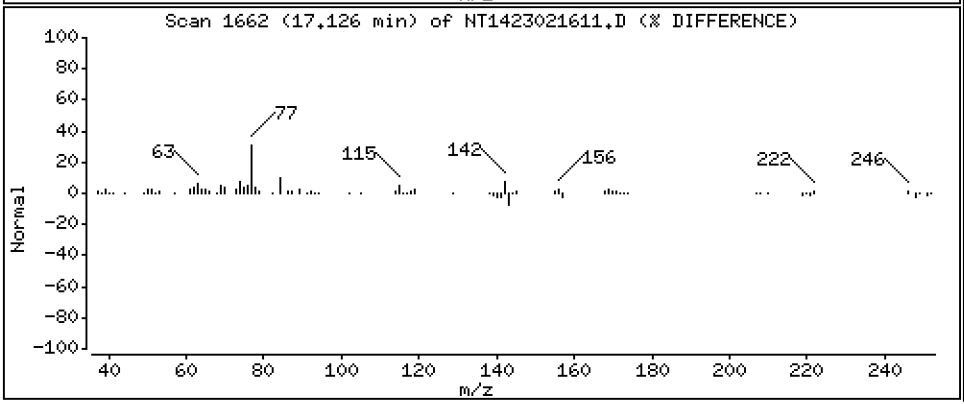












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

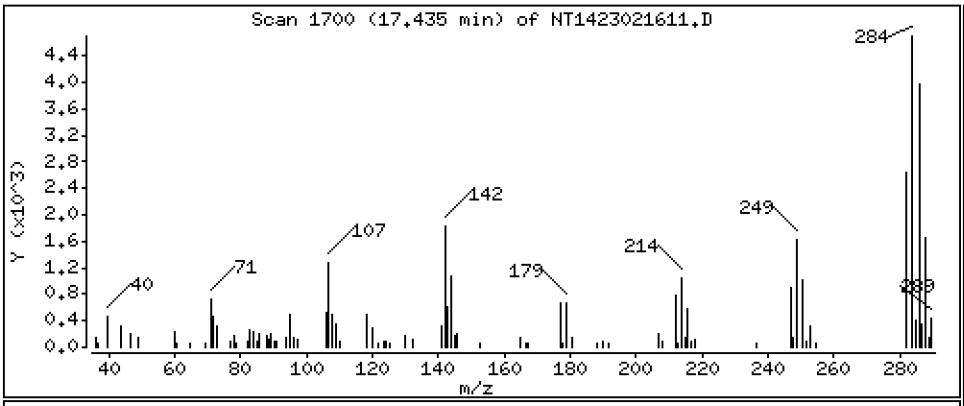
Operator: DSD

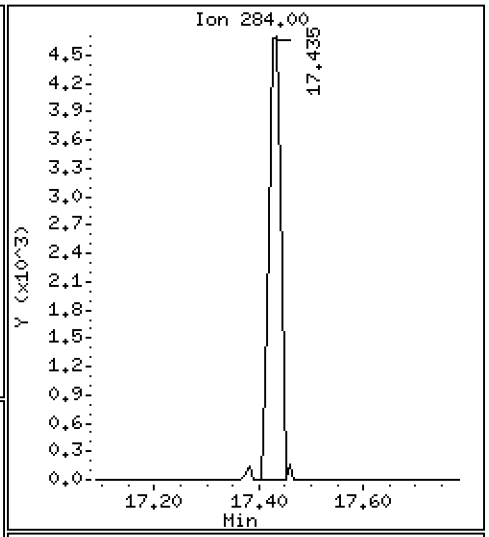
Column phase: ZB-5msi

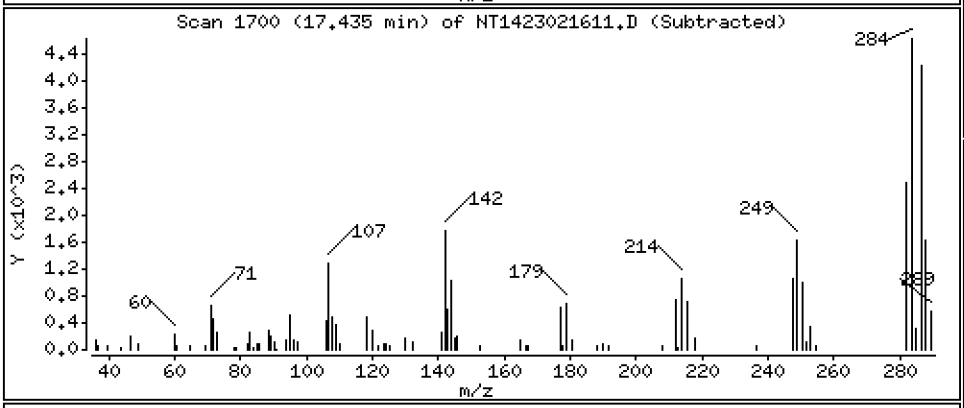
Column diameter: 0.25

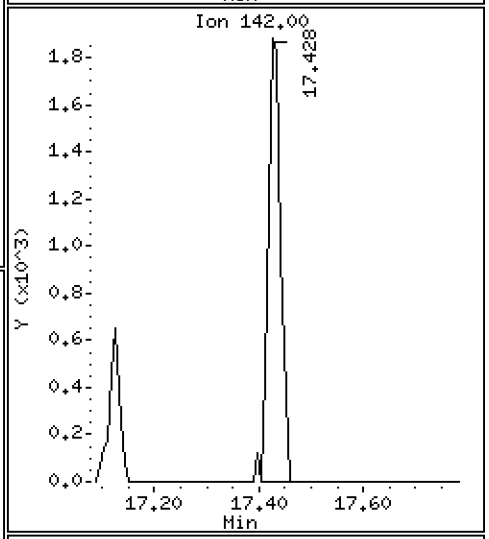
57 Hexachlorobenzene

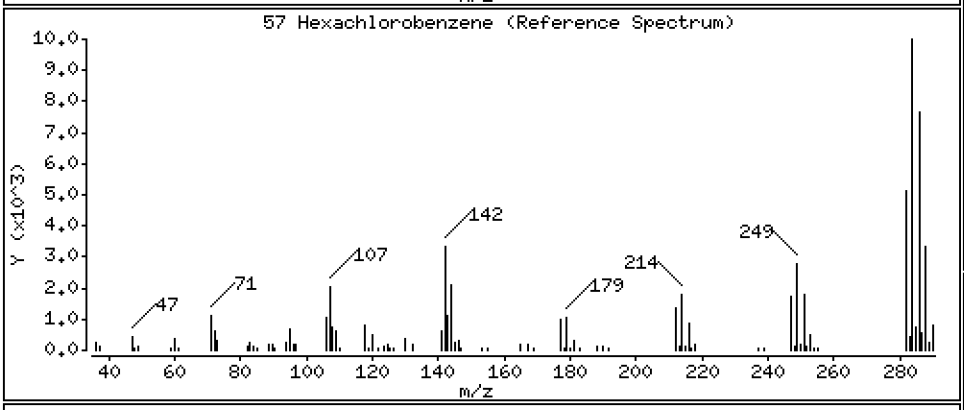
Concentration: 0.08291 ug/mL

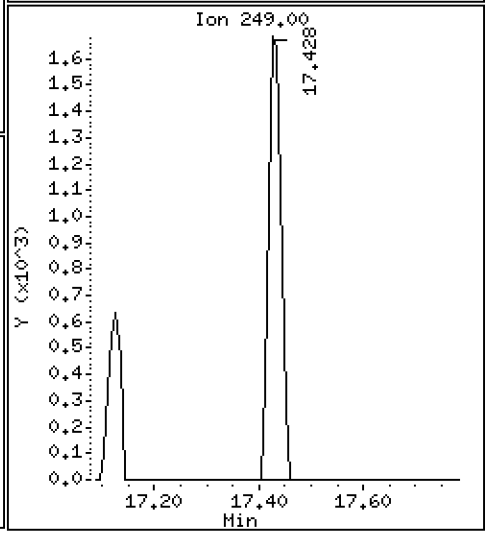


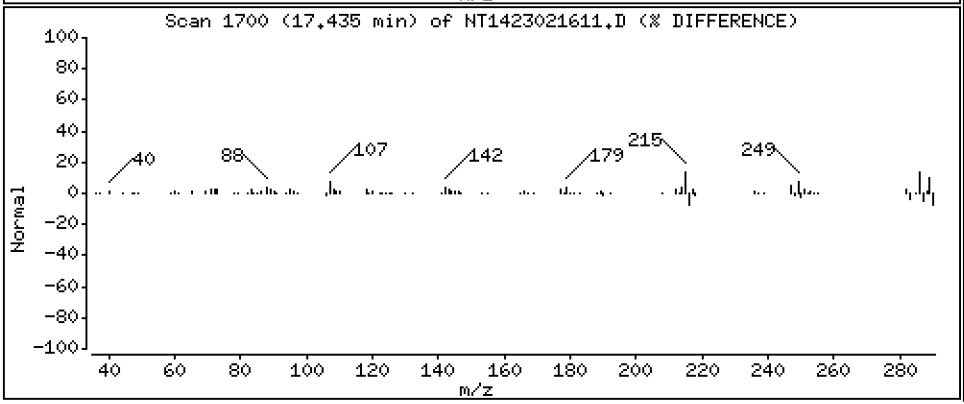












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021611.D

Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

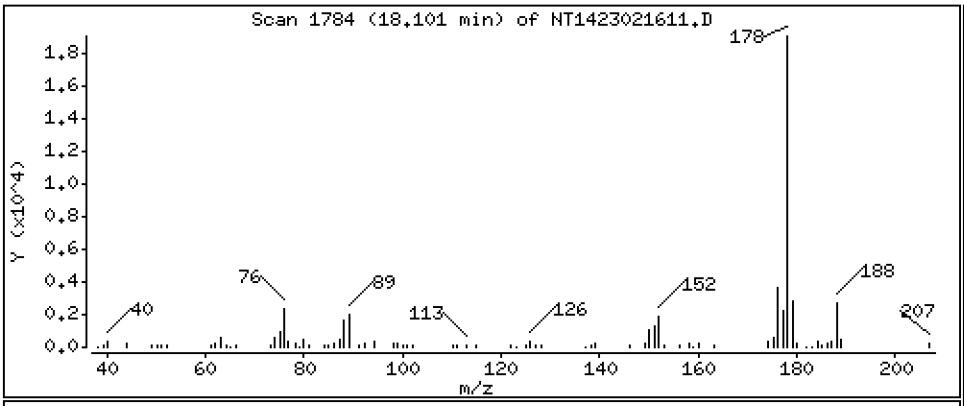
Operator: DSD

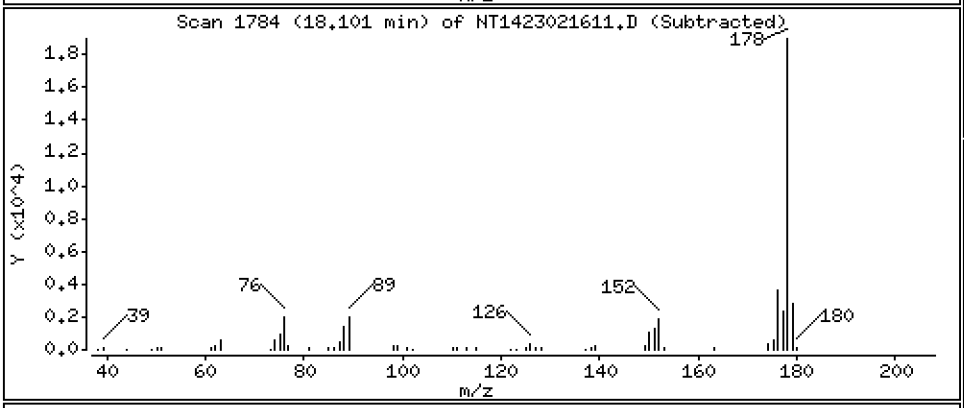
Column phase: ZB-5msi

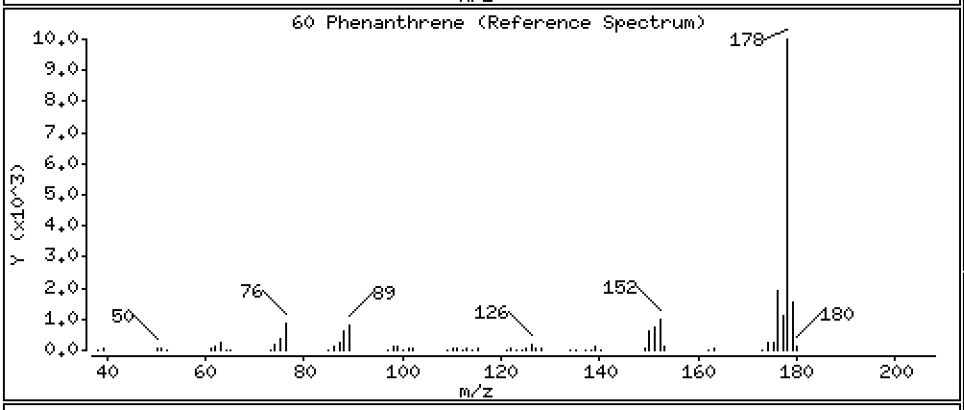
Column diameter: 0.25

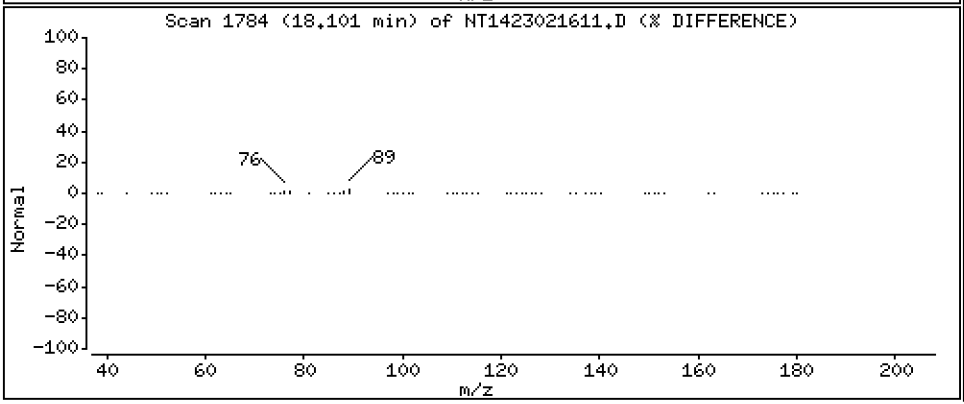
60 Phenanthrene

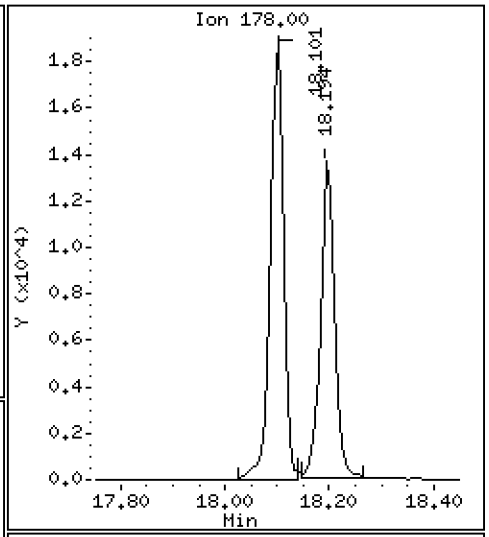
Concentration: 0.09512 ug/mL

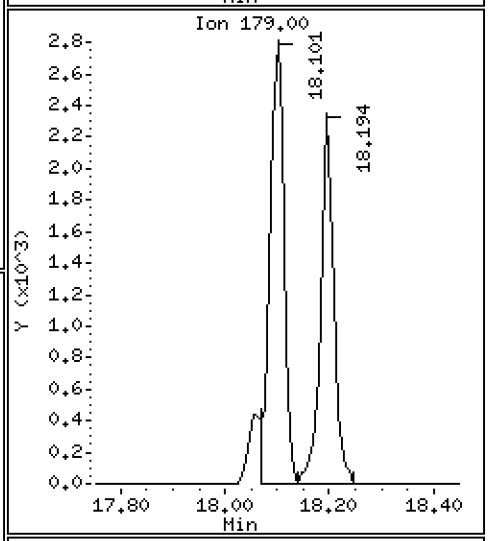


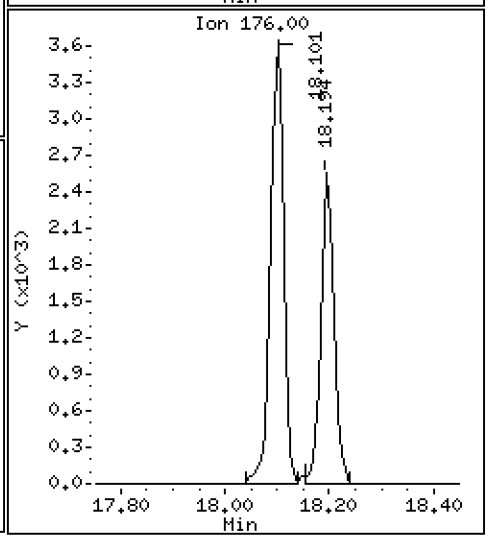












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021611.D

Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

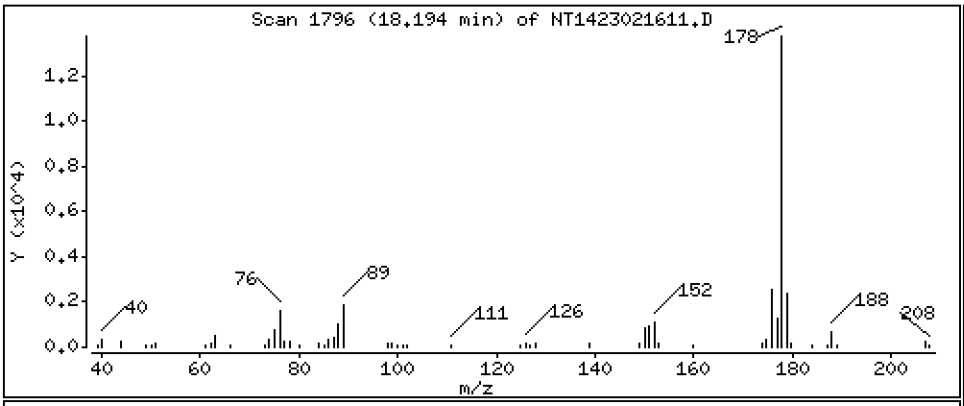
Operator: DSD

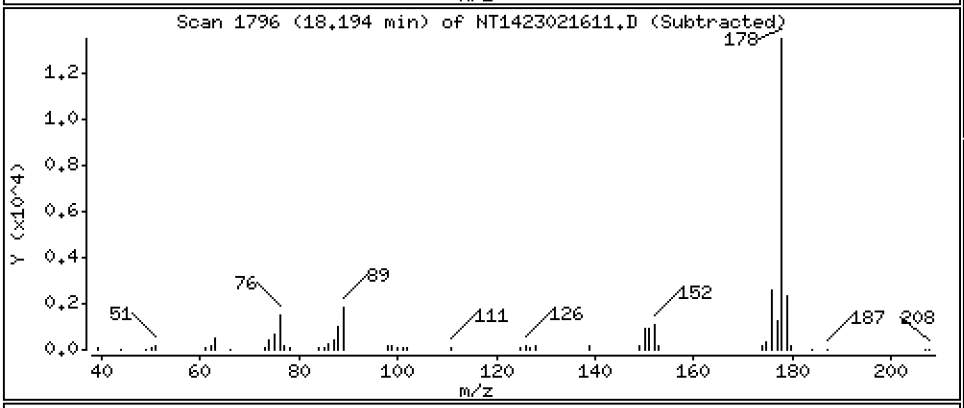
Column phase: ZB-5msi

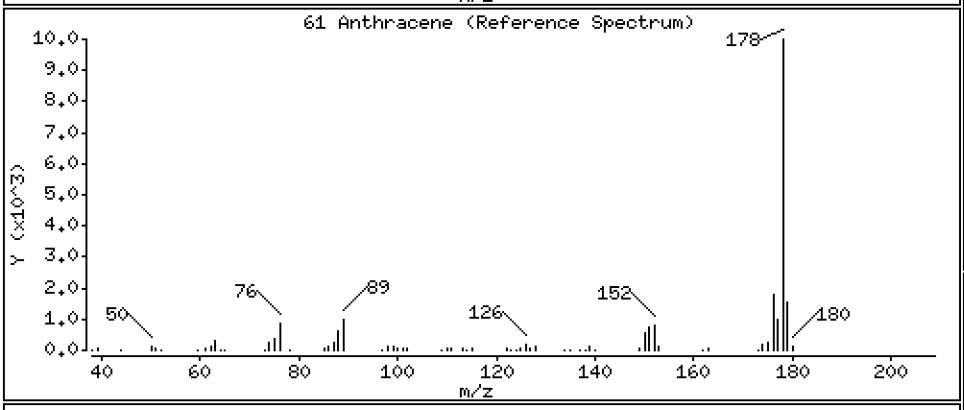
Column diameter: 0.25

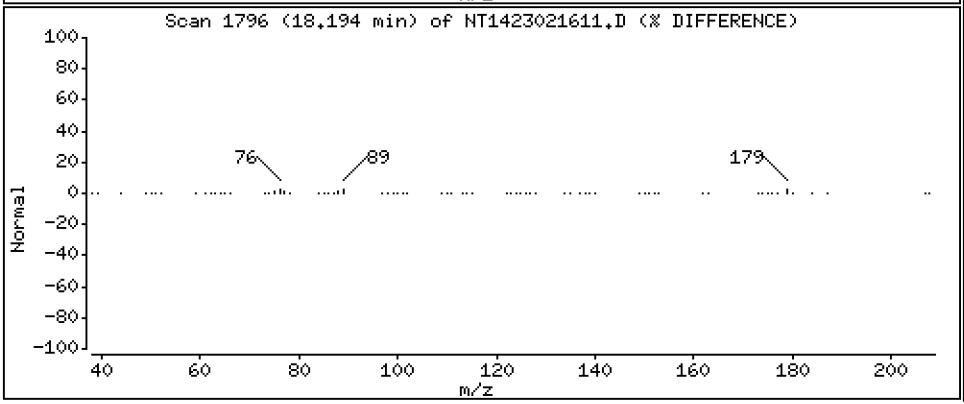
61 Anthracene

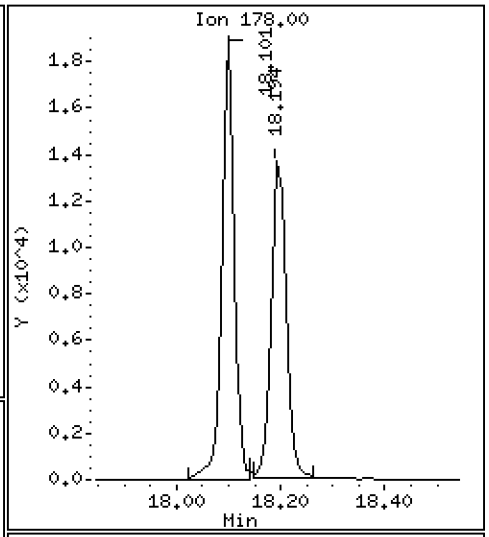
Concentration: 0.07794 ug/mL

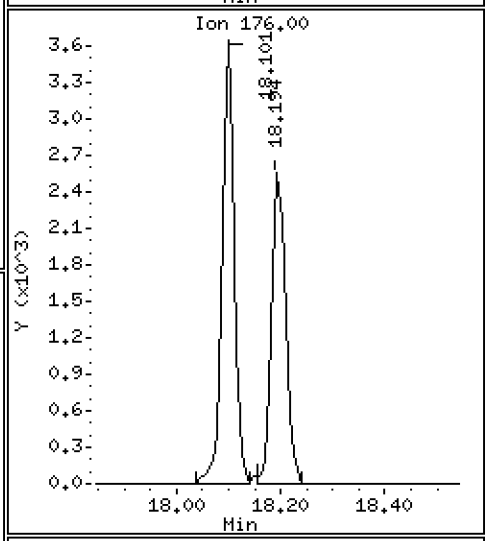


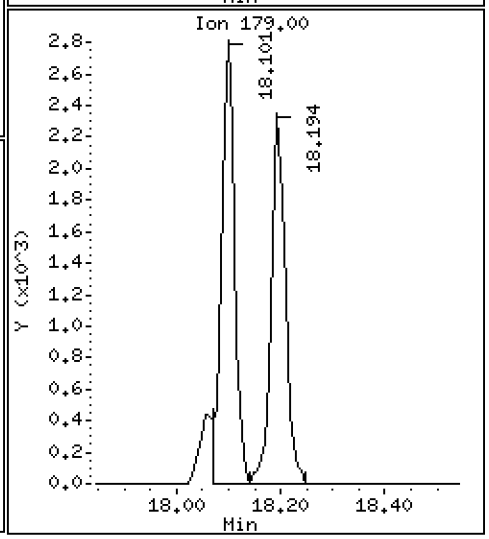












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021611.D

Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

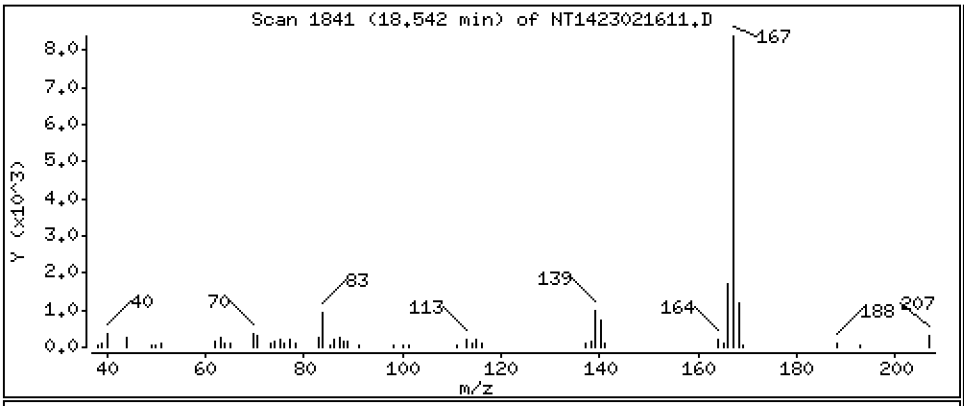
Operator: DSD

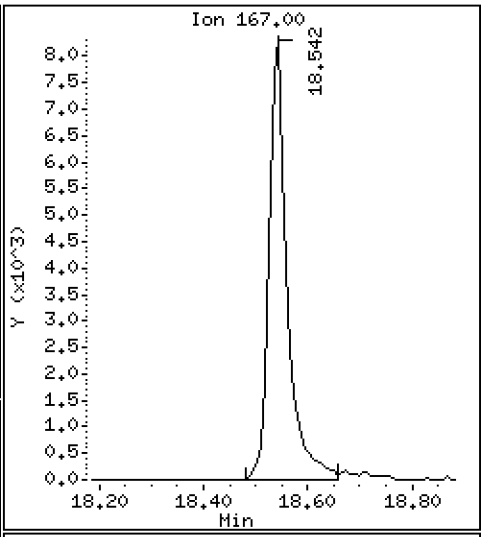
Column phase: ZB-5msi

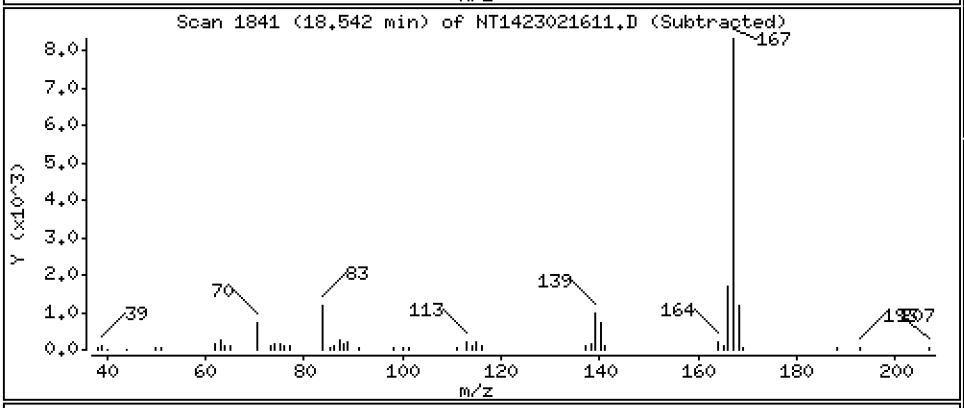
Column diameter: 0.25

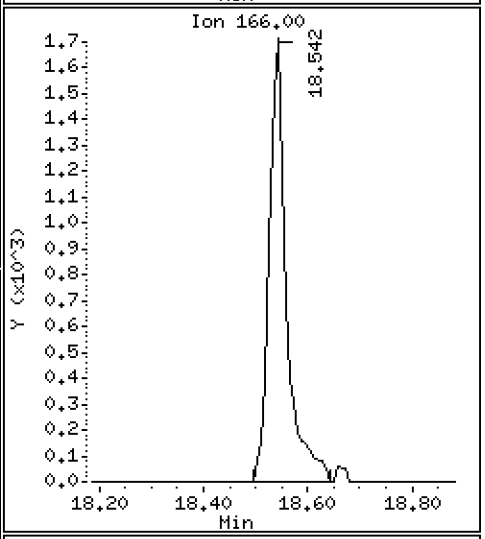
62 Carbazole

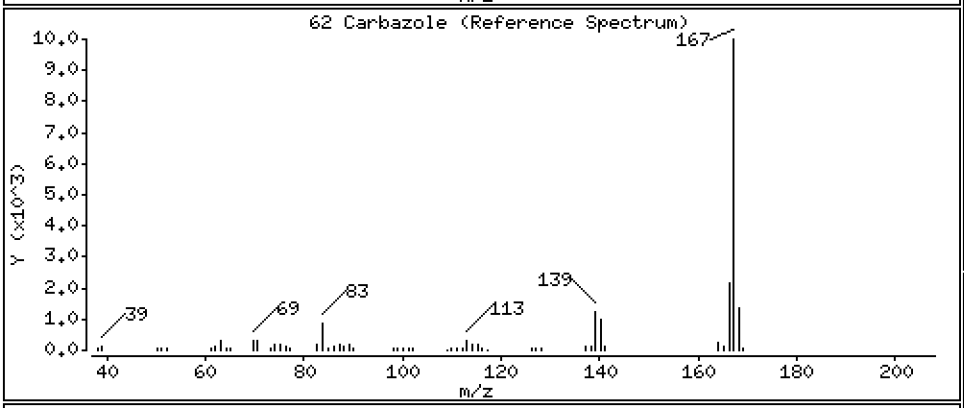
Concentration: 0.06512 ug/mL

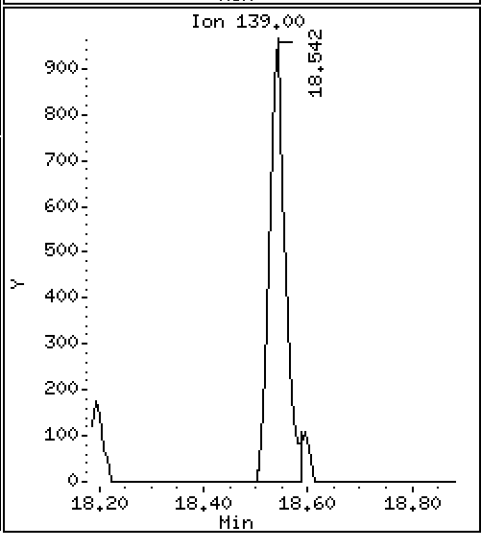


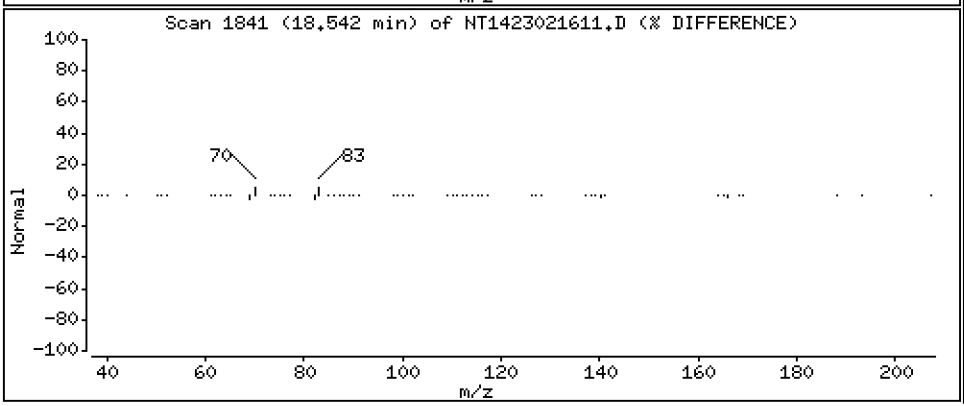












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

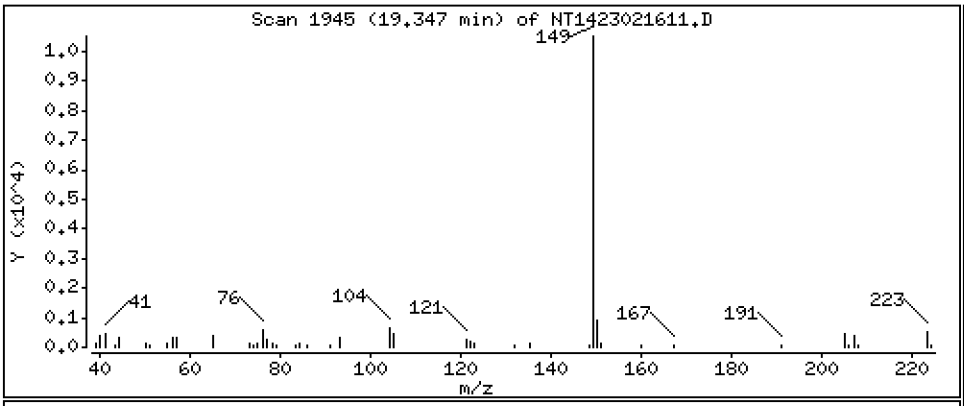
Operator: DSD

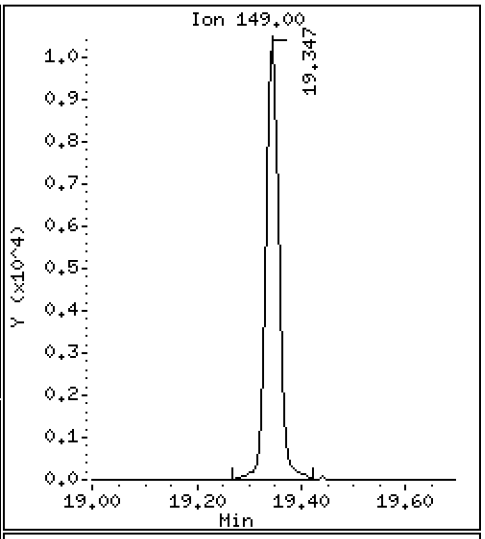
Column phase: ZB-5msi

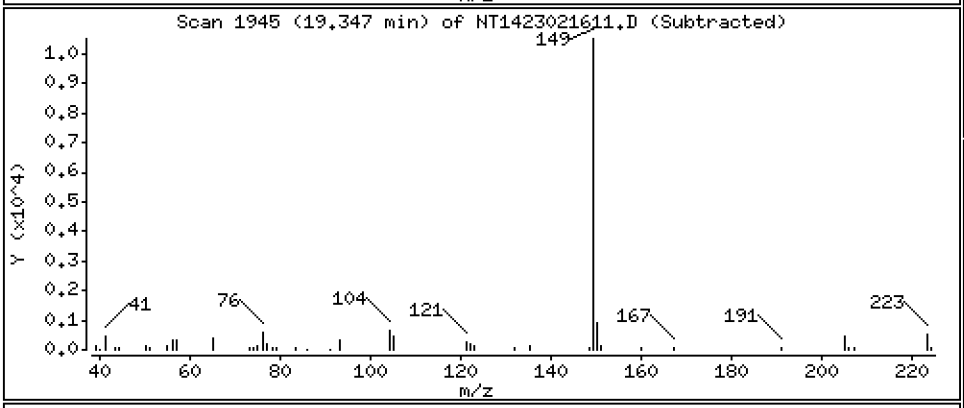
Column diameter: 0.25

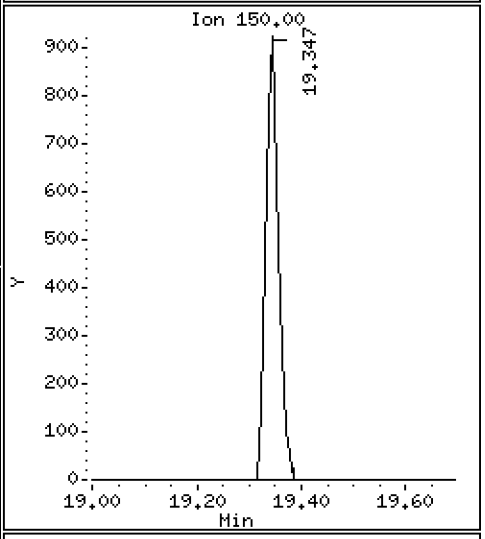
63 Di-n-butylphthalate

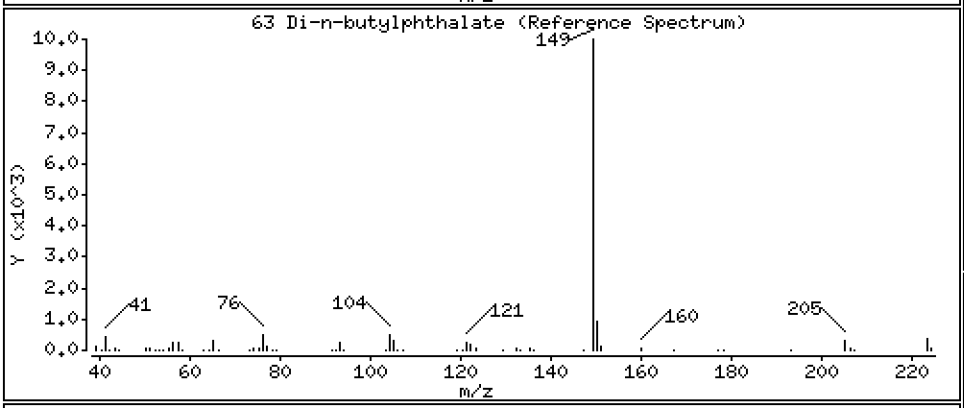
Concentration: 0.05157 ug/mL

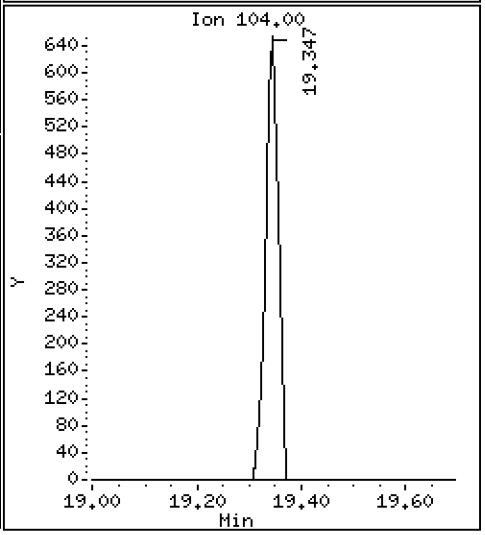


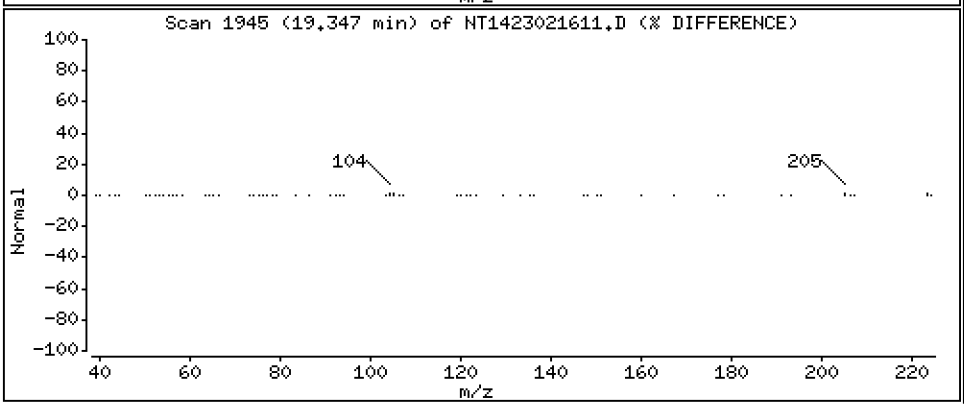












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

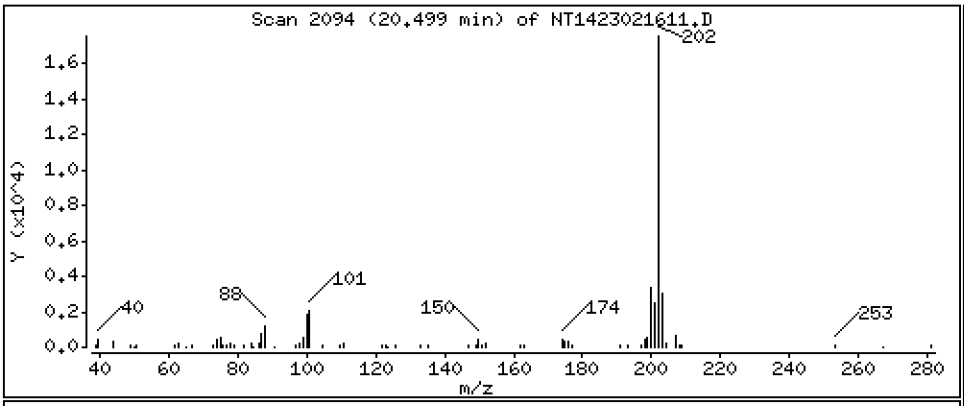
Operator: DSD

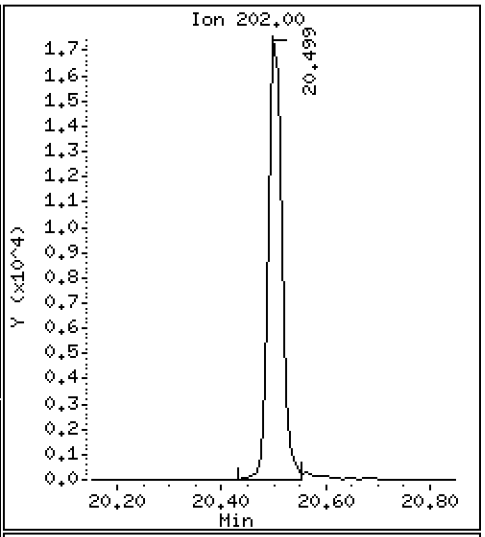
Column phase: ZB-5msi

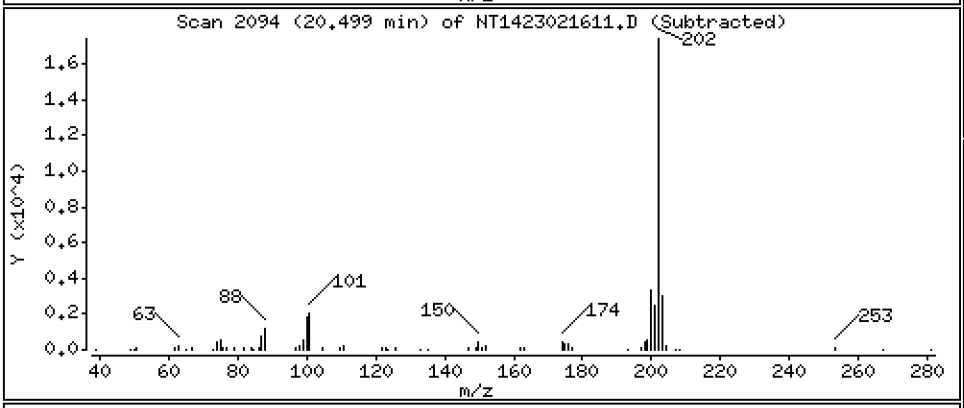
Column diameter: 0.25

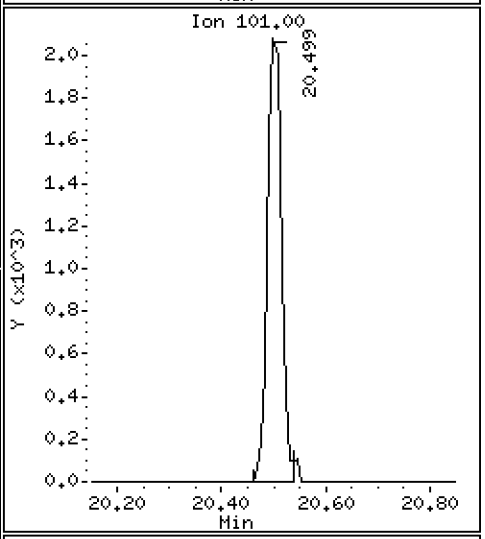
64 Fluoranthene

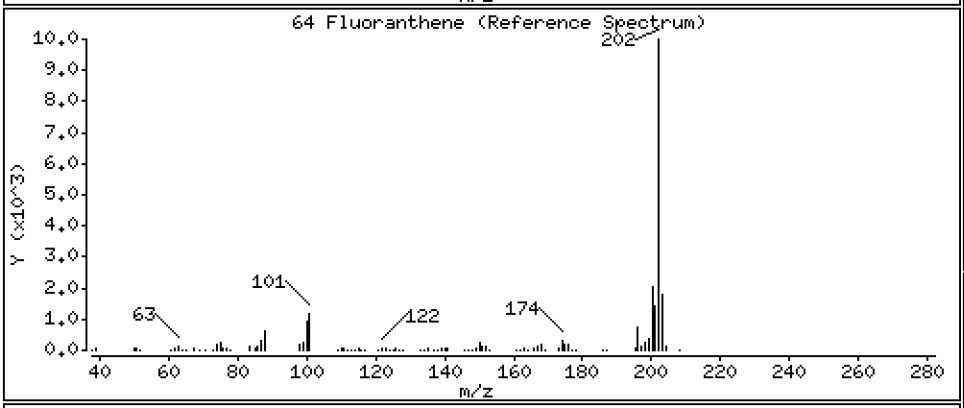
Concentration: 0.07893 ug/mL

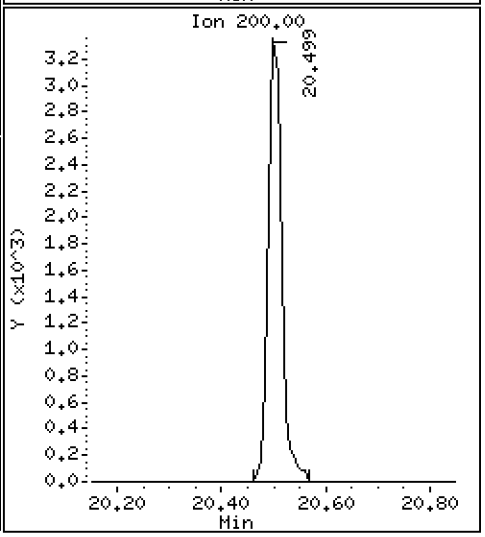


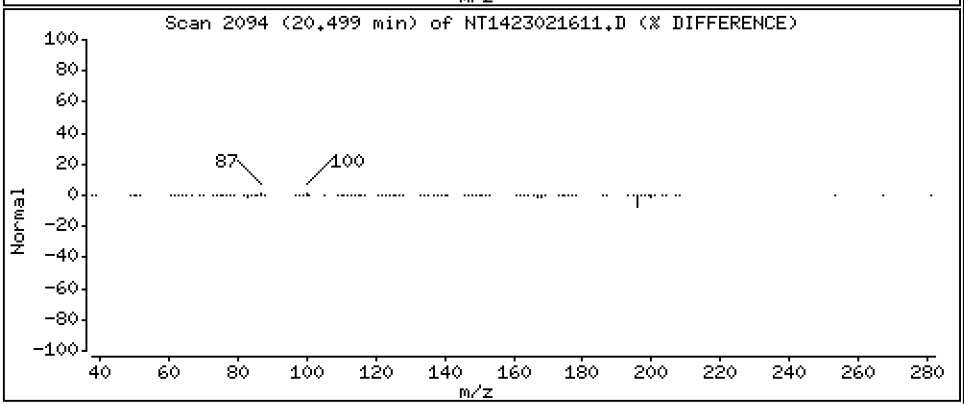












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

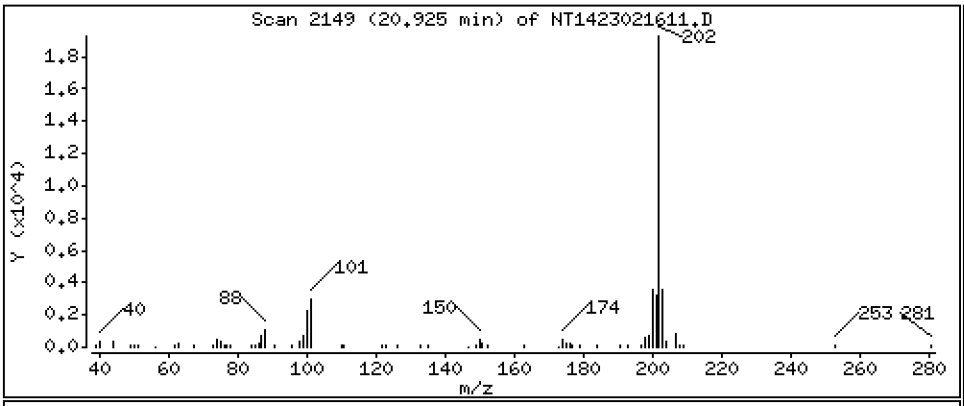
Operator: DSD

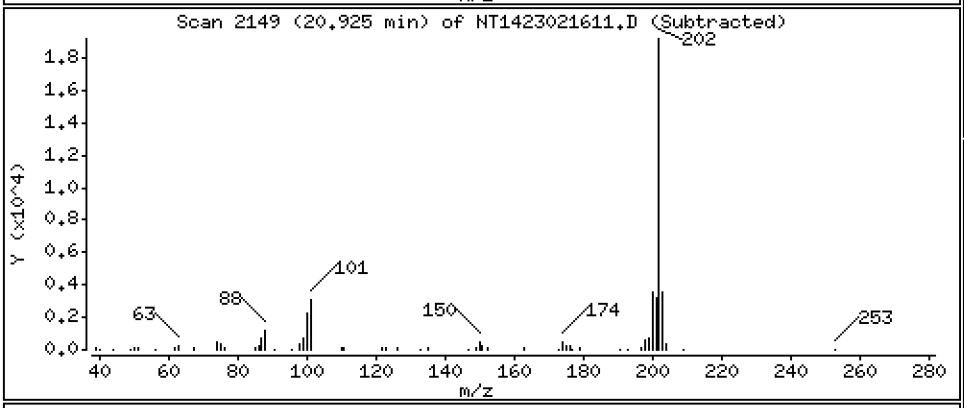
Column phase: ZB-5msi

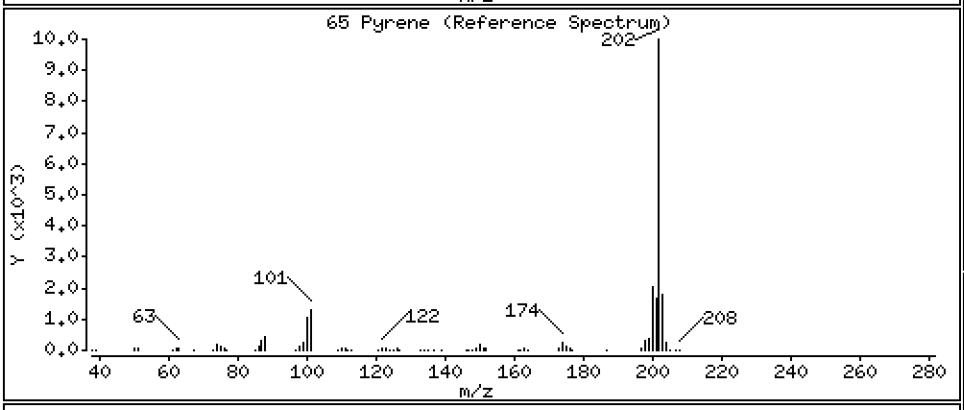
Column diameter: 0.25

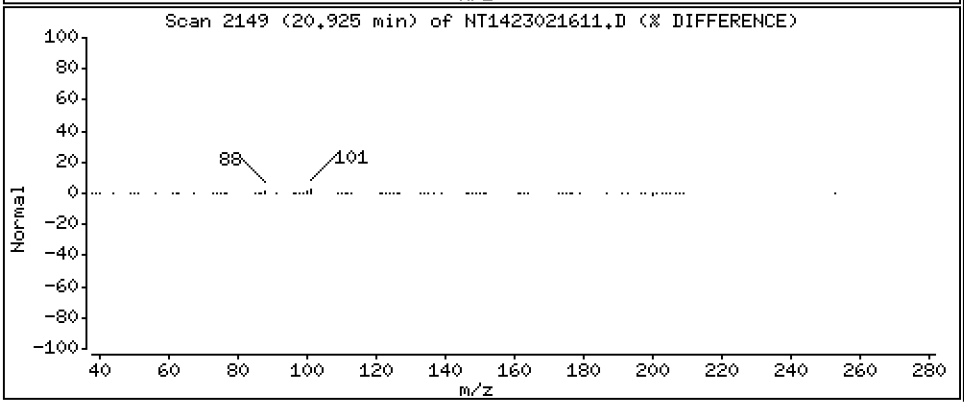
65 Pyrene

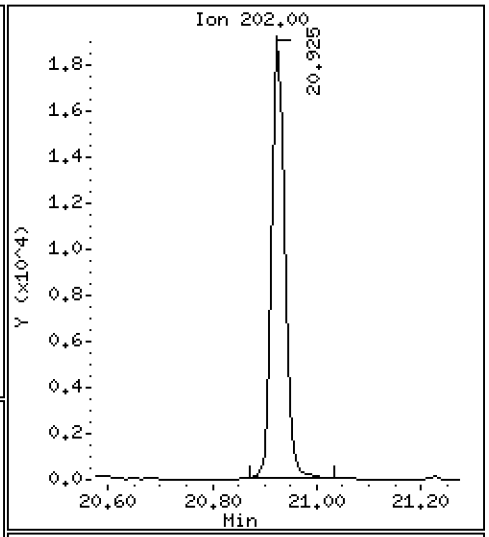
Concentration: 0.08653 ug/mL

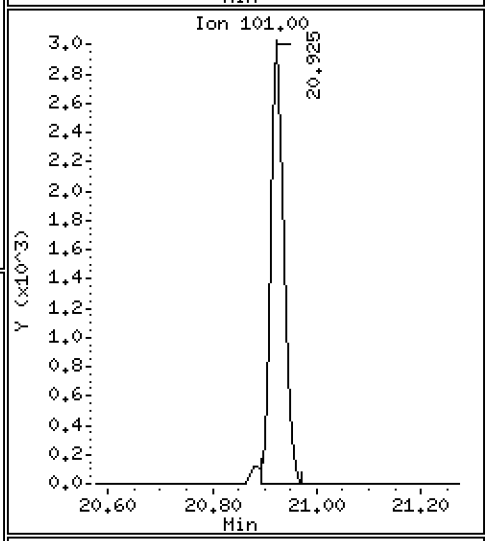


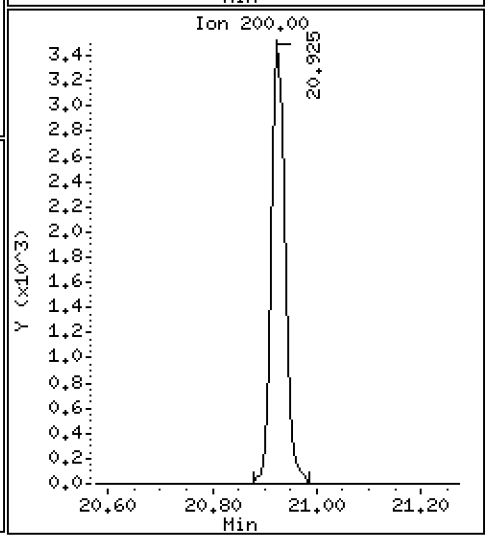












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021611.D

Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

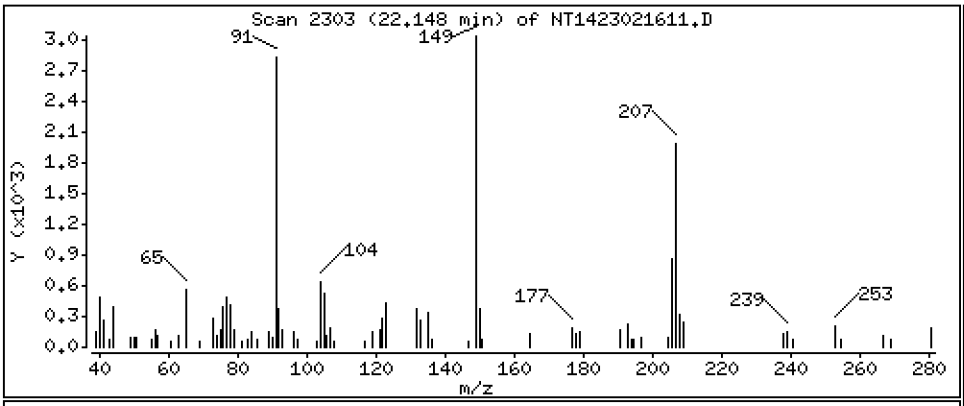
Operator: DSD

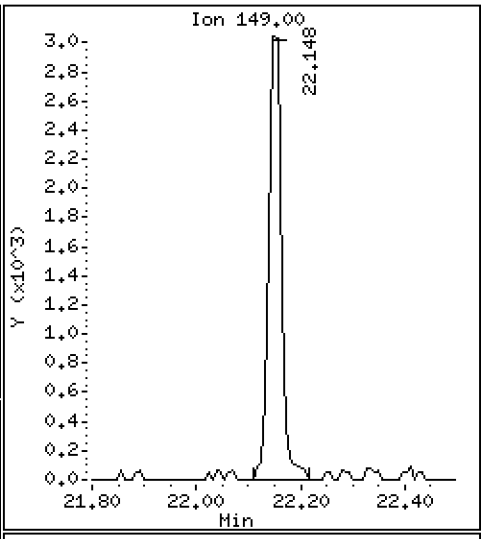
Column phase: ZB-5msi

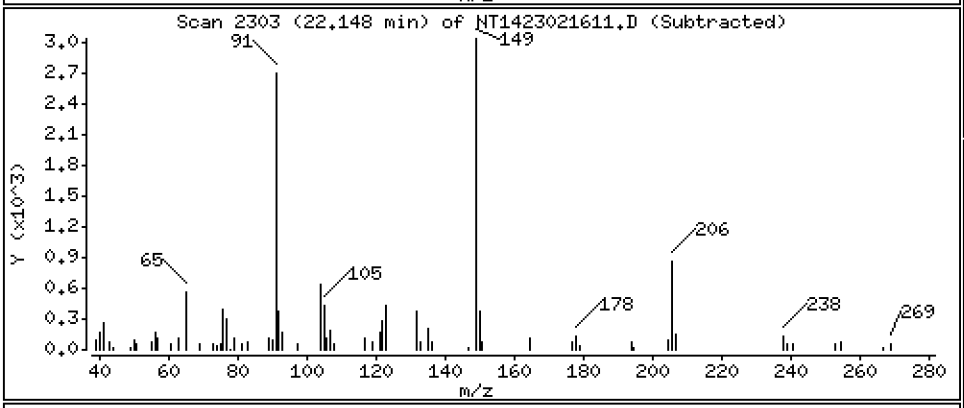
Column diameter: 0.25

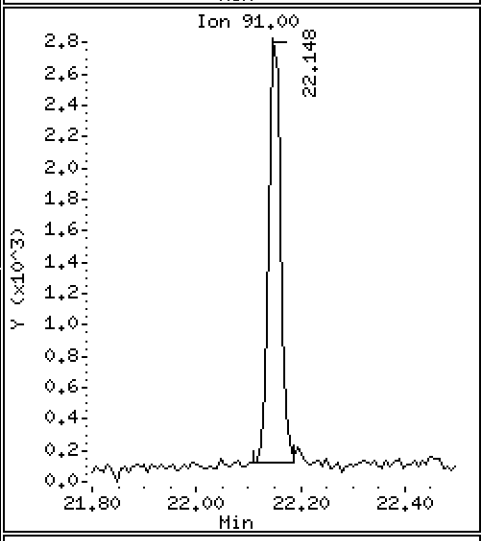
67 Butylbenzylphthalate

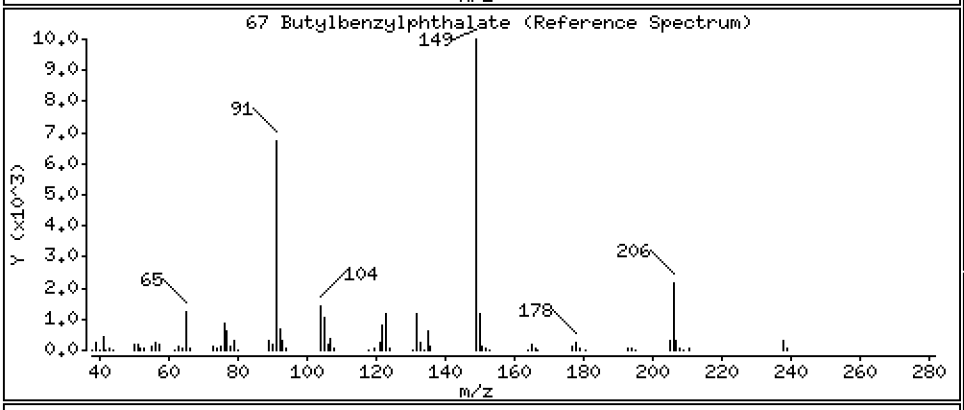
Concentration: 0.03658 ug/mL

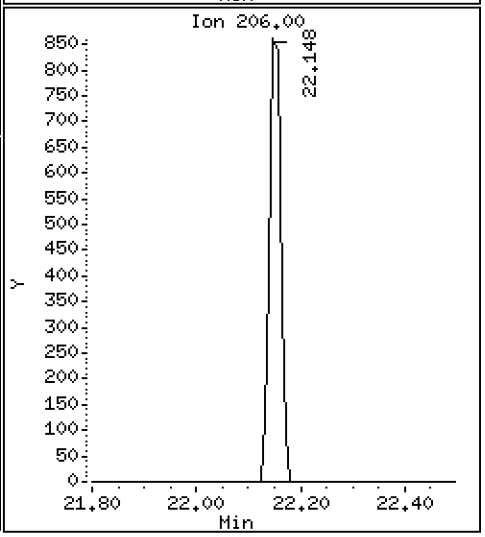


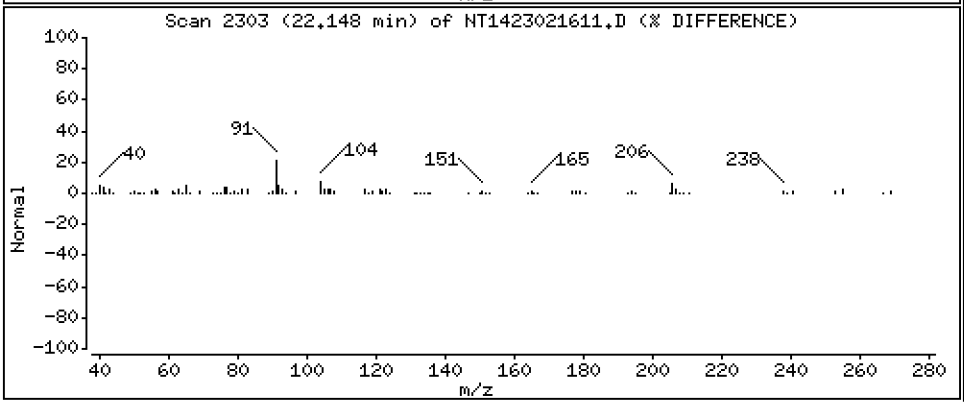












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021611.D

Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

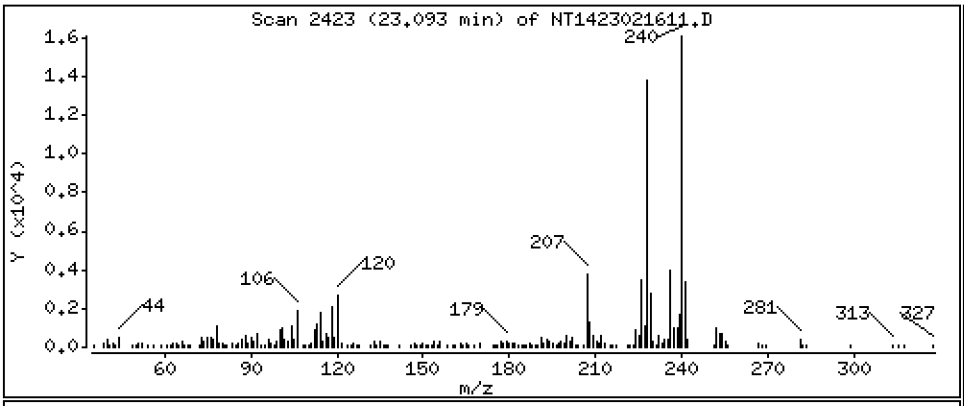
Operator: DSD

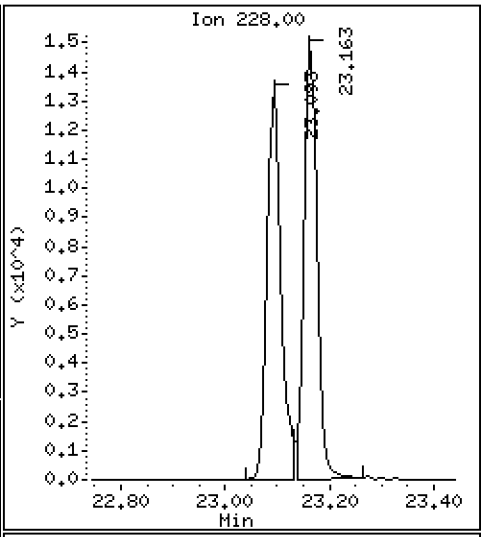
Column phase: ZB-5msi

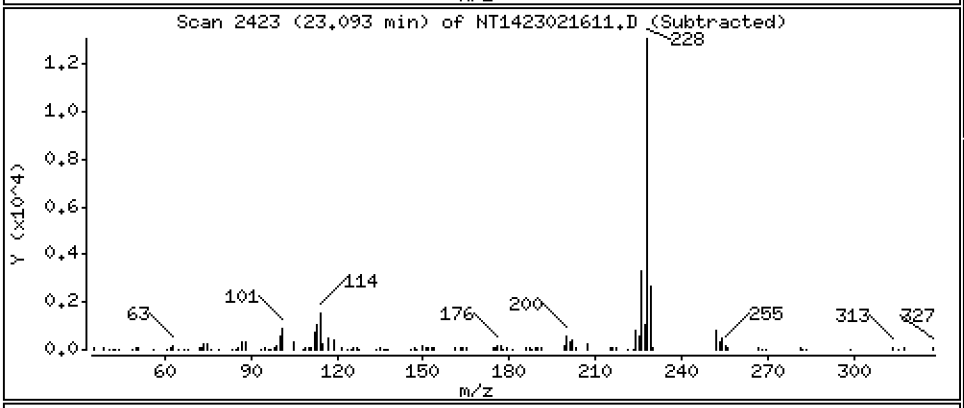
Column diameter: 0.25

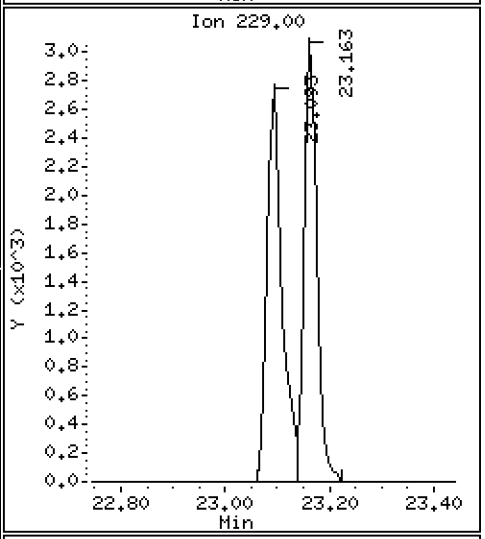
68 Benzo(a)anthracene

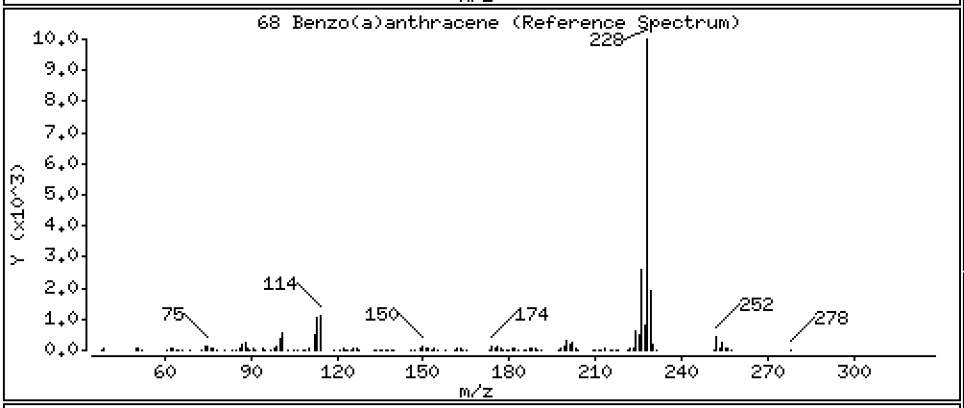
Concentration: 0.08484 ug/mL

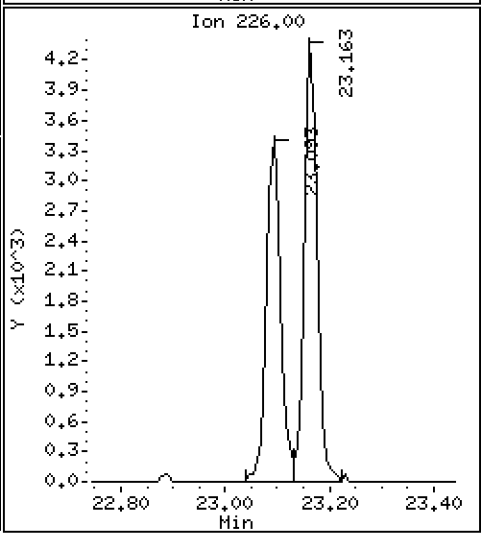


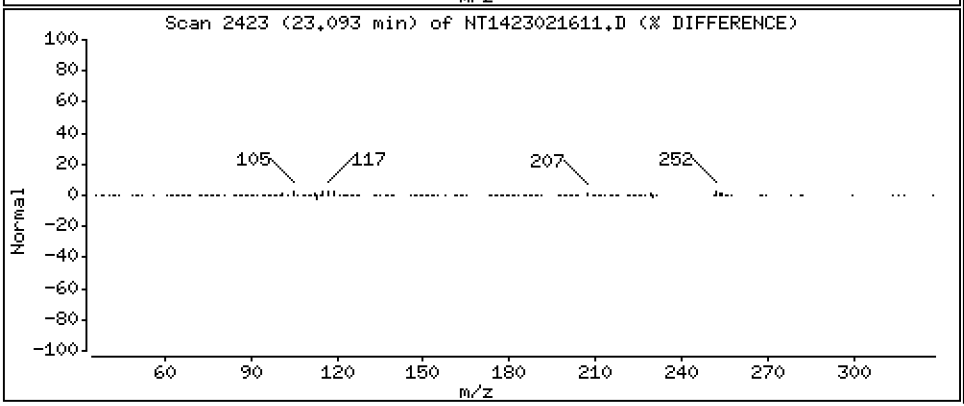












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021611.D

Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

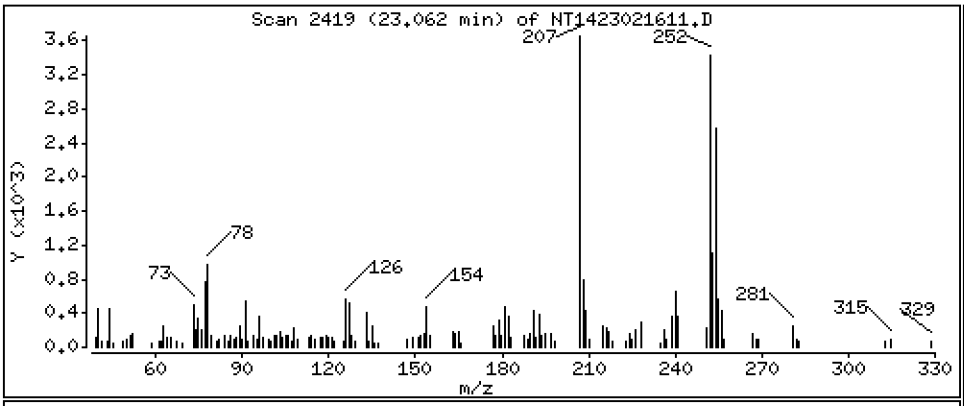
Operator: DSD

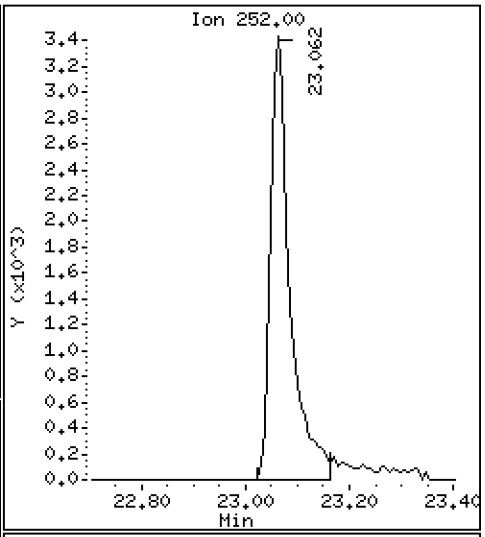
Column phase: ZB-5msi

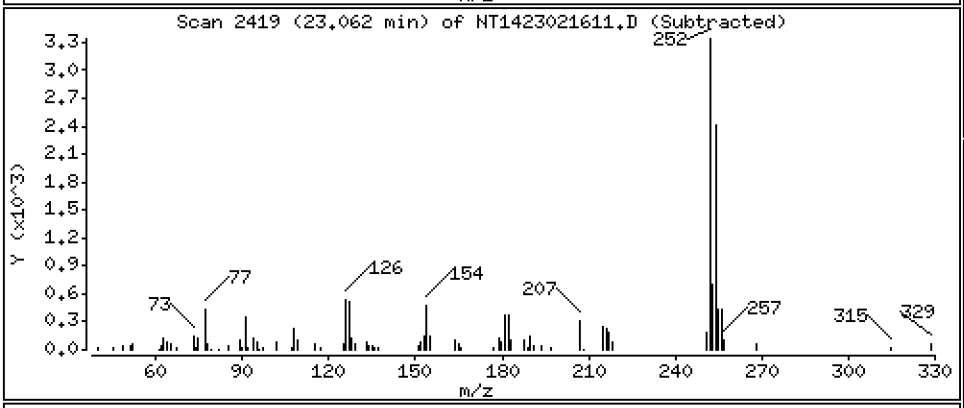
Column diameter: 0.25

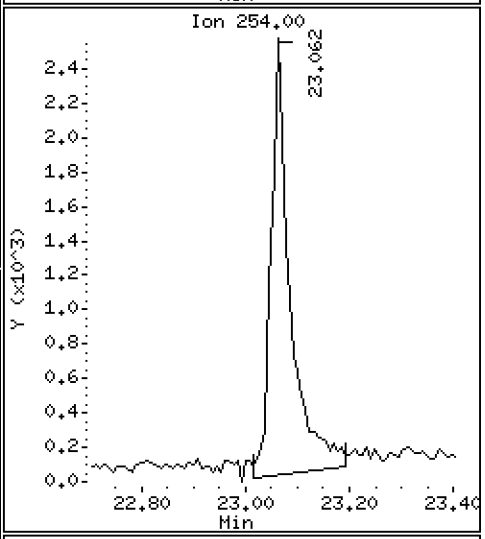
70 3,3'-Dichlorobenzidine

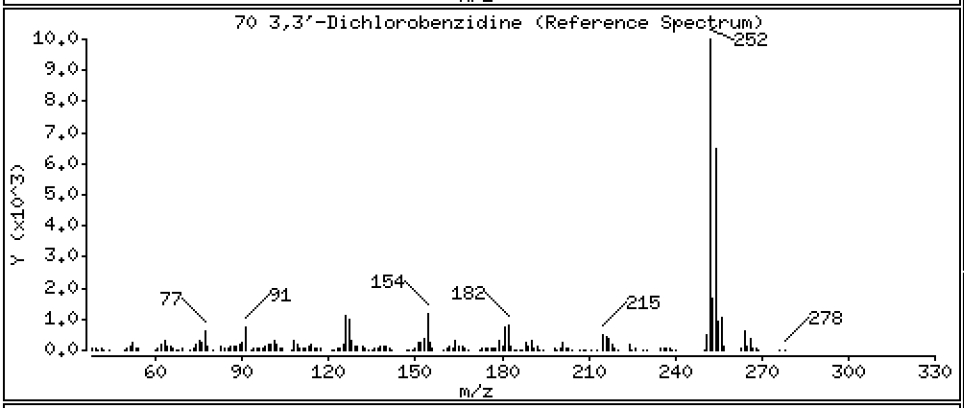
Concentration: 0.1016 ug/mL

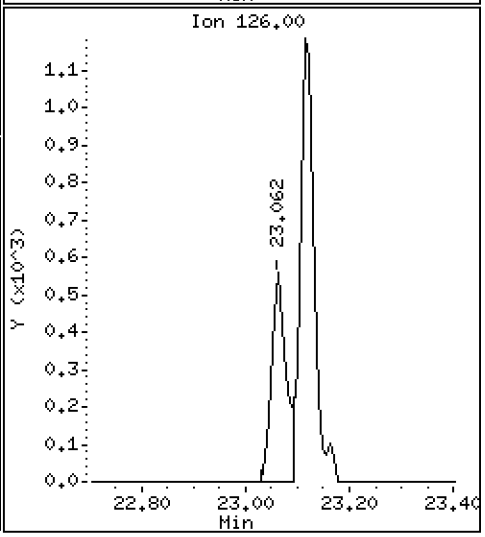


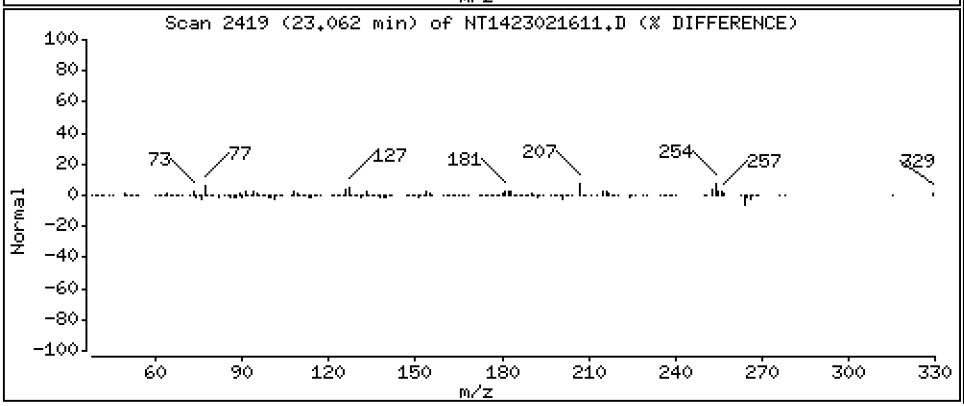












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021611.D

Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

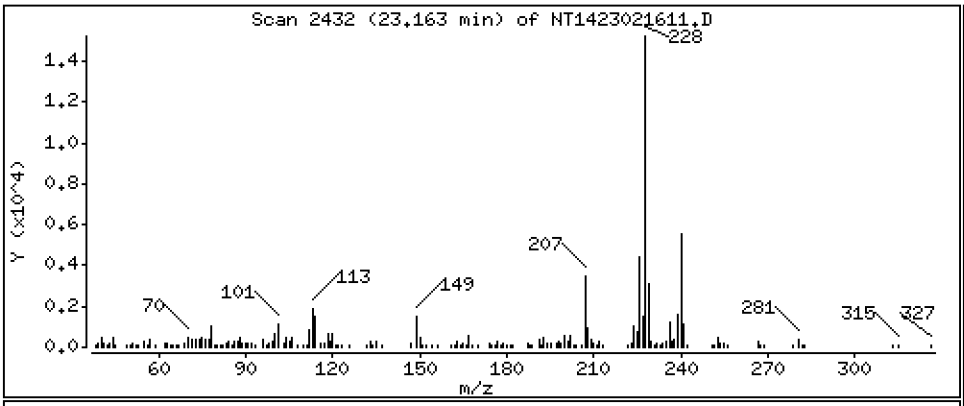
Operator: DSD

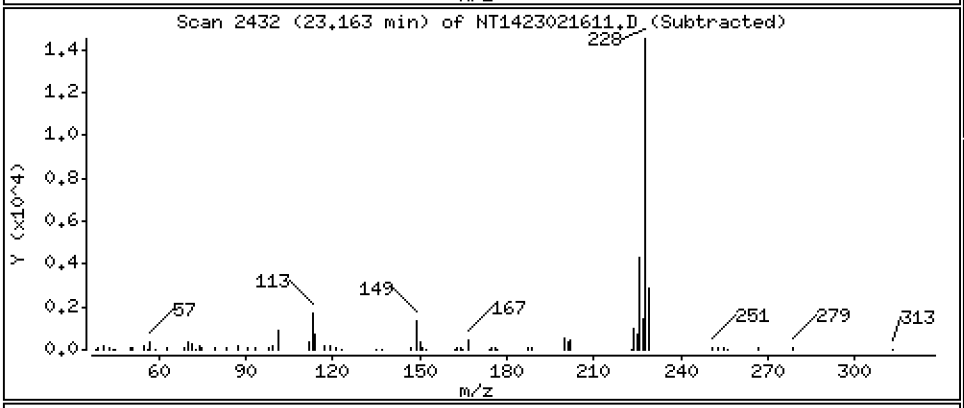
Column phase: ZB-5msi

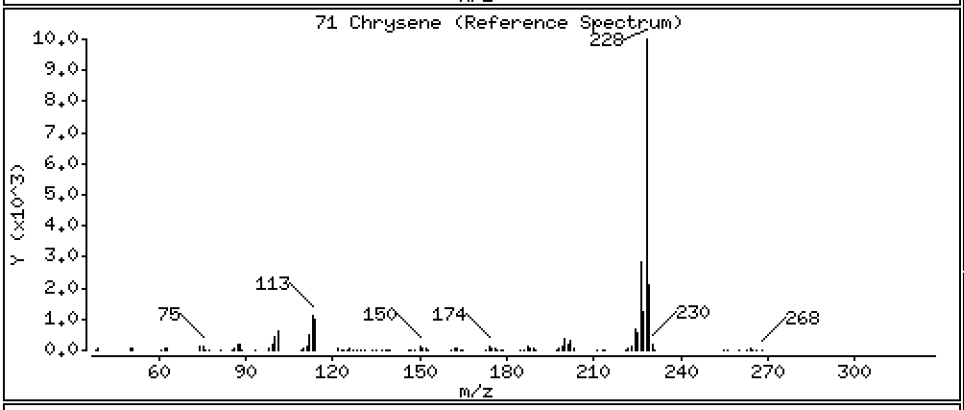
Column diameter: 0.25

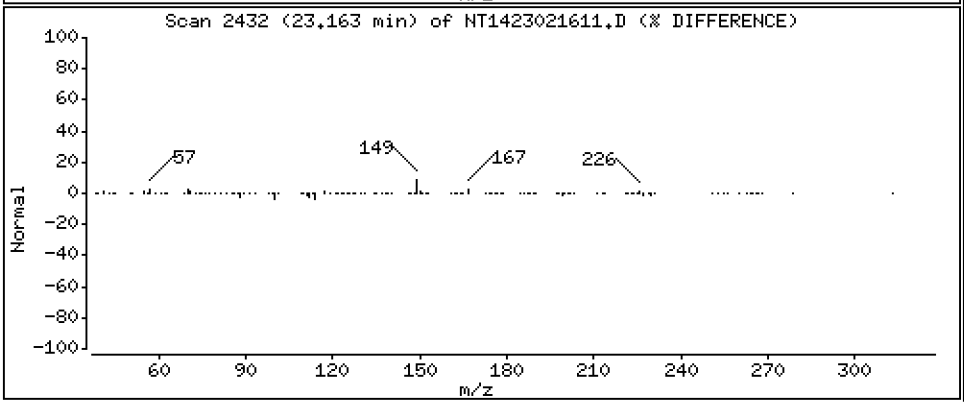
71 Chrysene

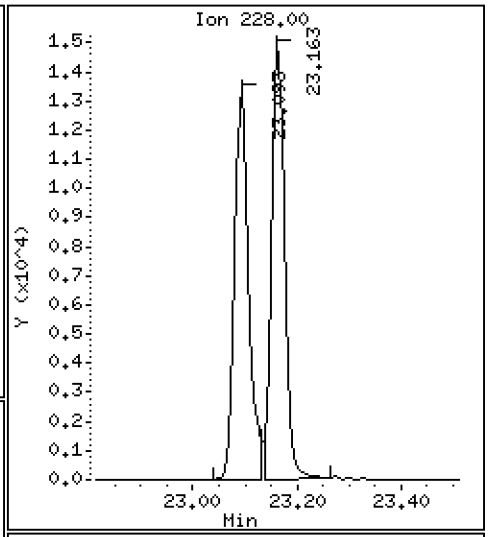
Concentration: 0.09597 ug/mL

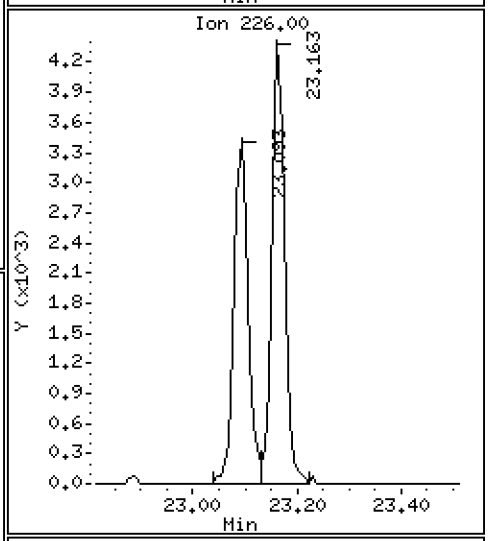


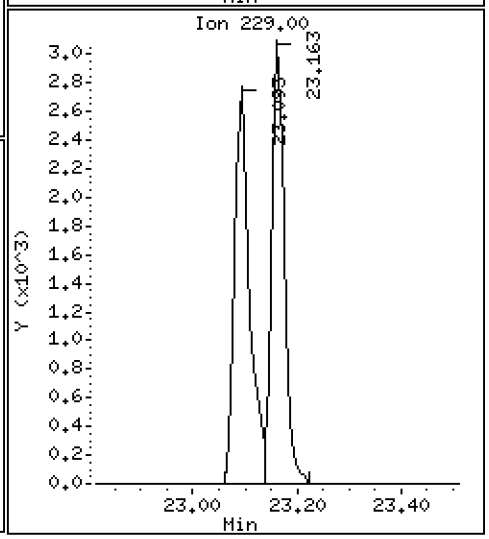












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021611.D

Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

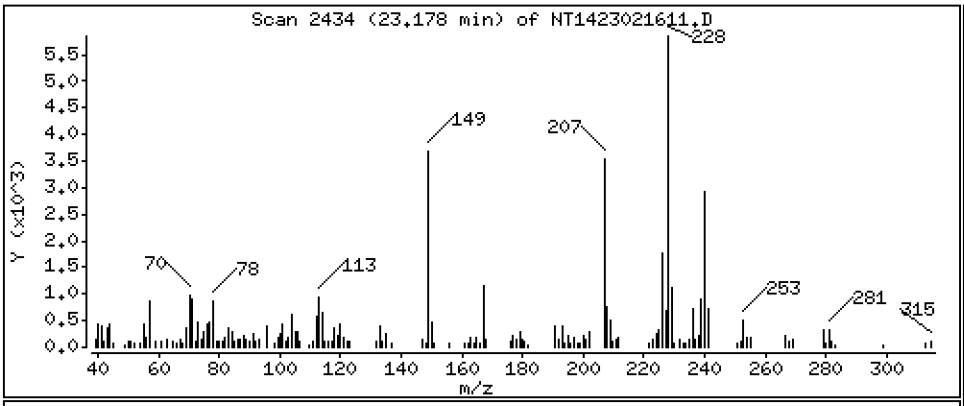
Operator: DSD

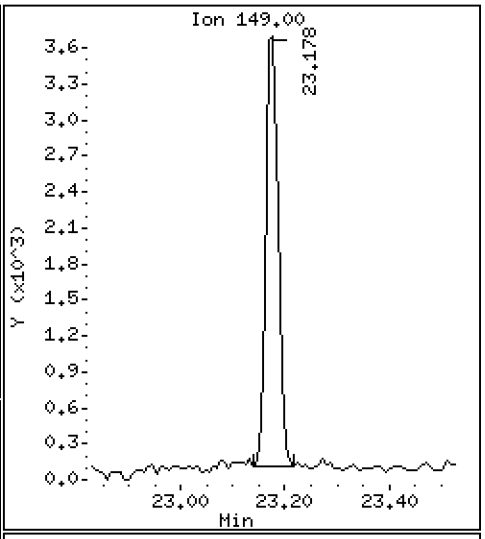
Column phase: ZB-5msi

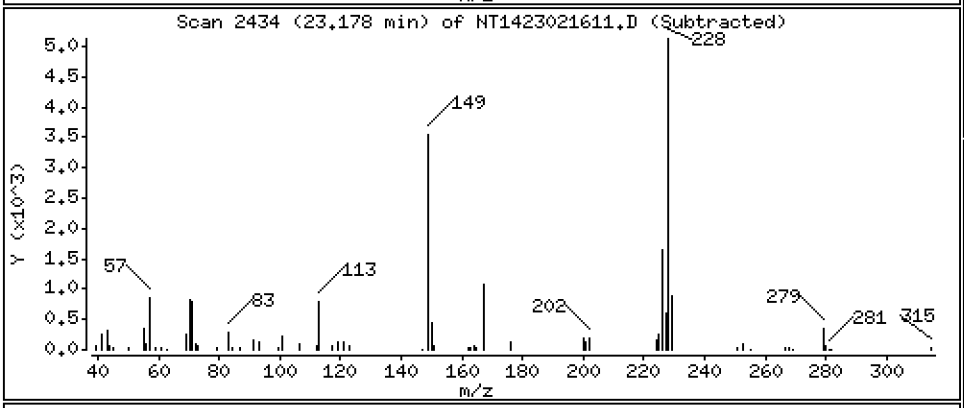
Column diameter: 0.25

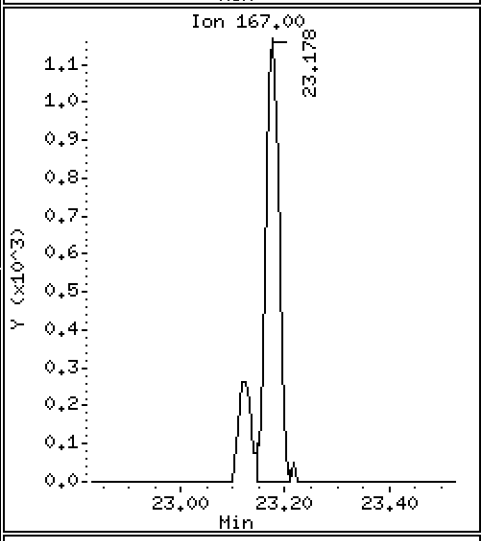
72 bis(2-Ethylhexyl)phthalate

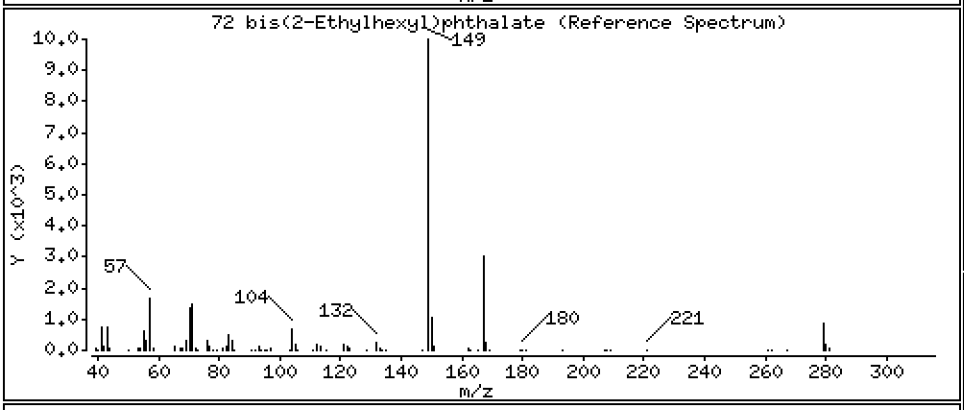
Concentration: 0.03459 ug/mL

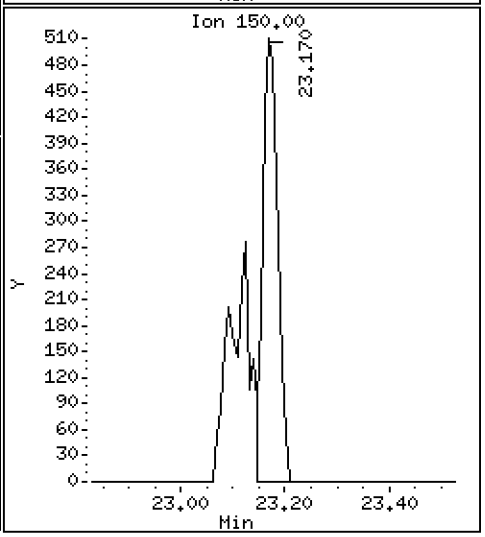


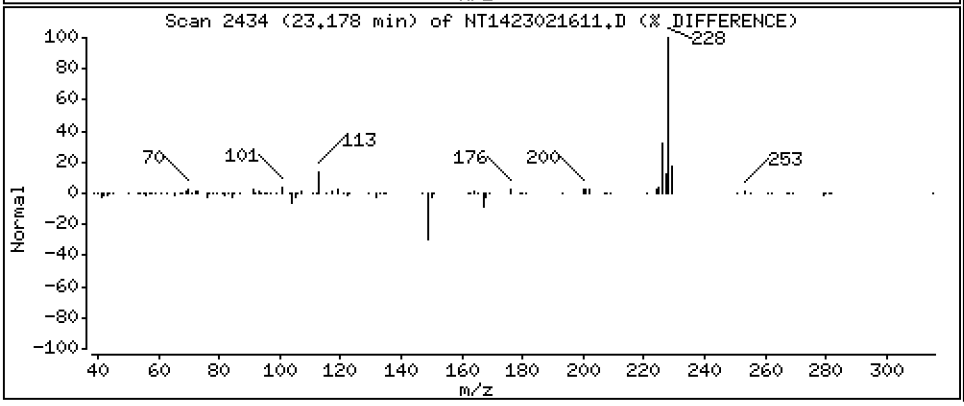












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

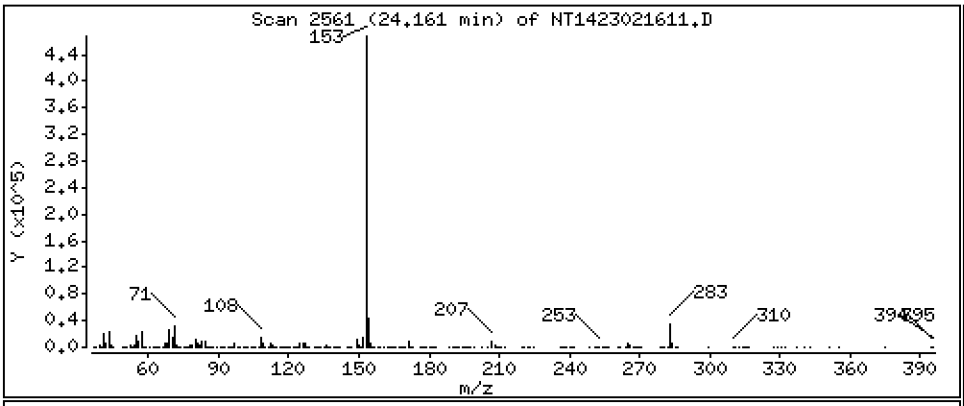
Operator: DSD

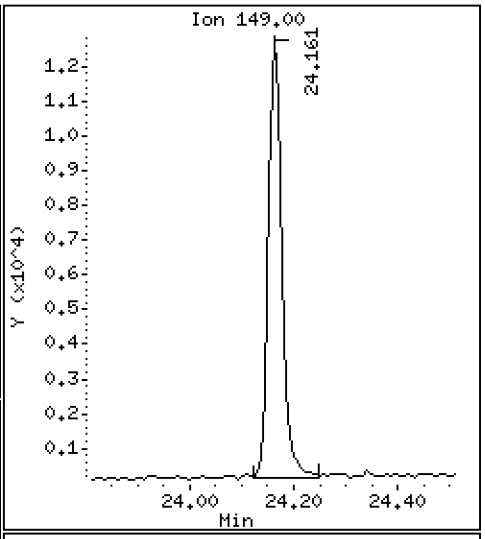
Column phase: ZB-5msi

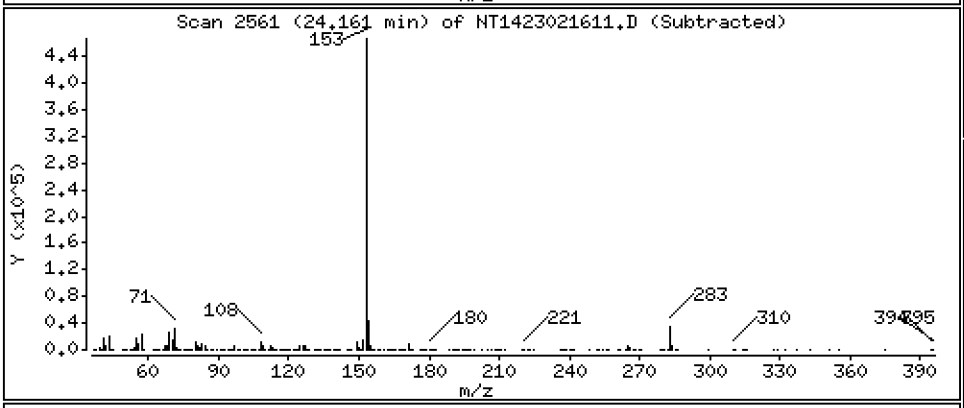
Column diameter: 0.25

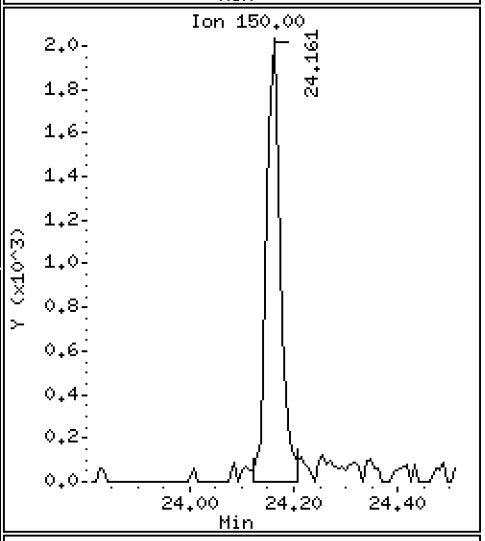
73 Di-n-octylphthalate

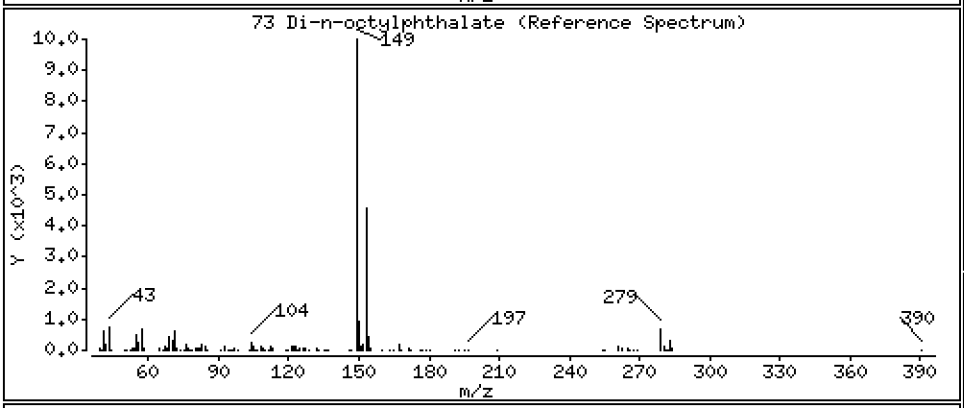
Concentration: 0.09801 ug/mL

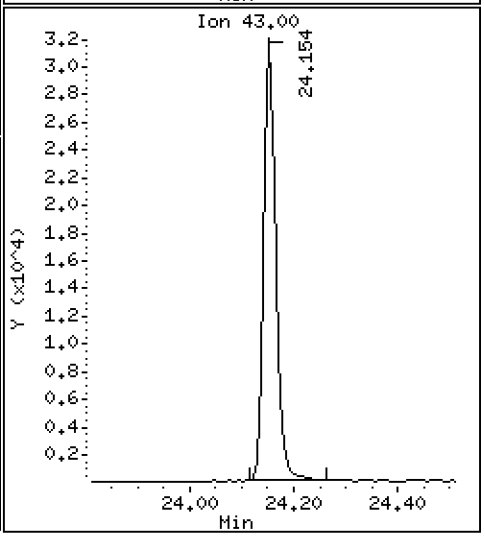


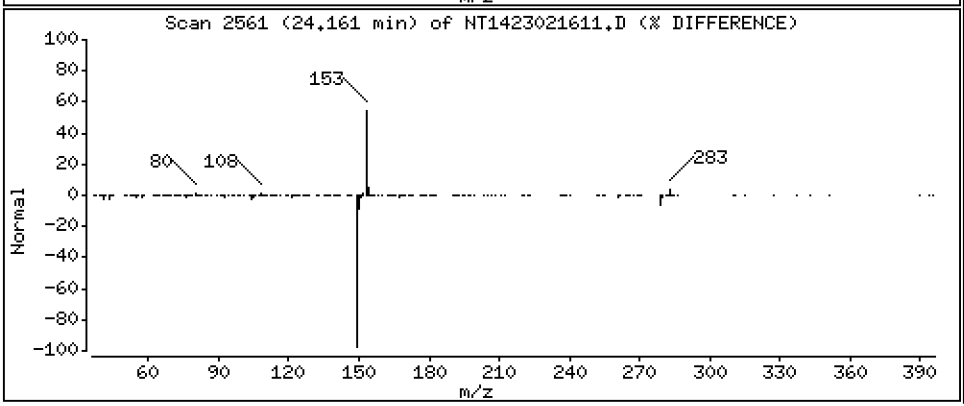












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

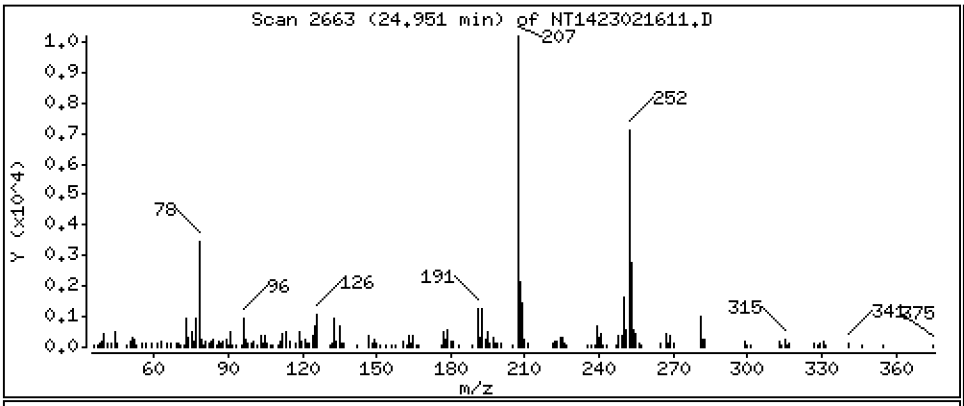
Operator: DSD

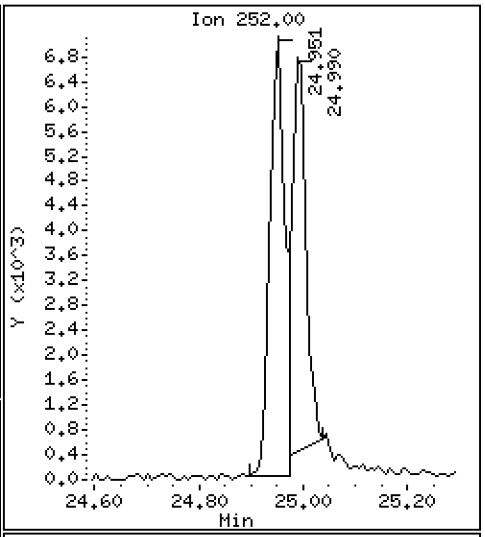
Column phase: ZB-5msi

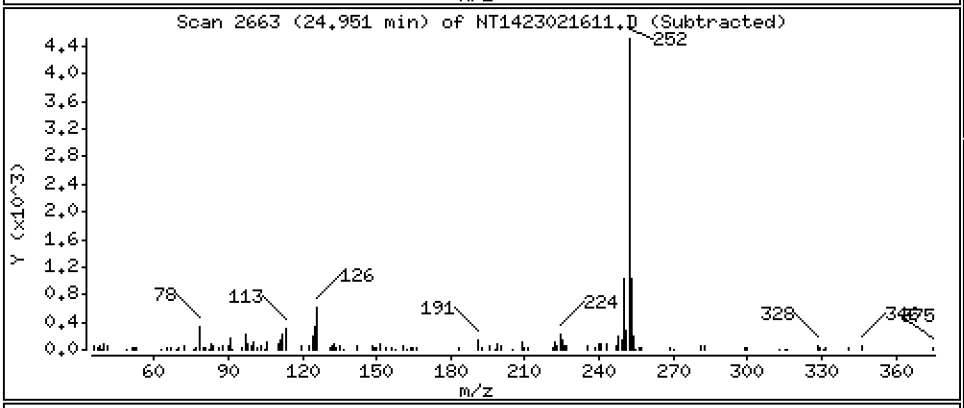
Column diameter: 0.25

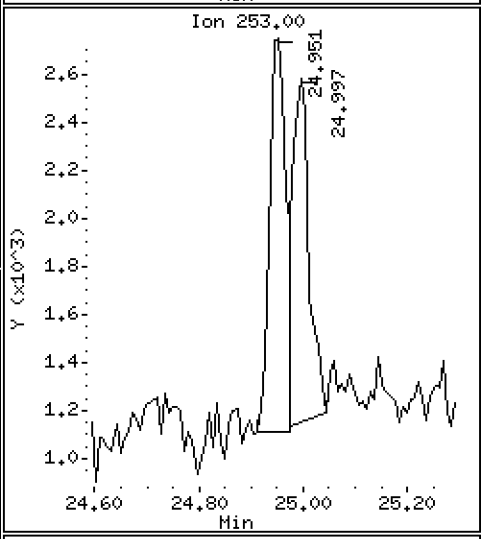
74 Benzo(b)fluoranthene

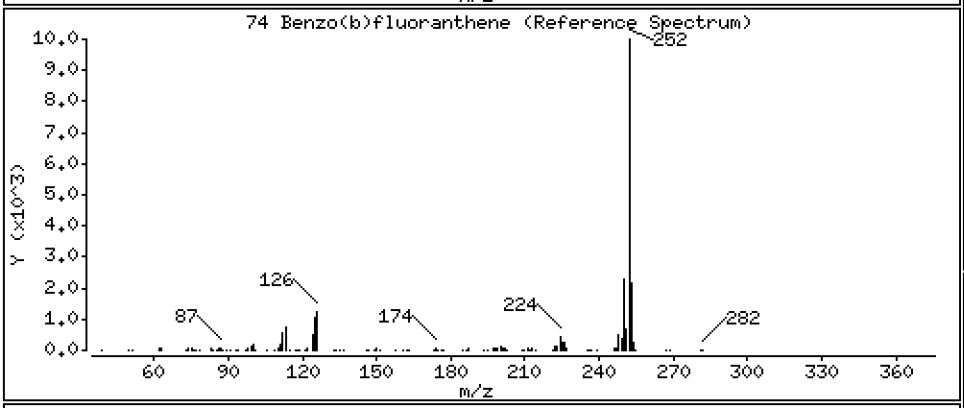
Concentration: 0.07678 ug/mL

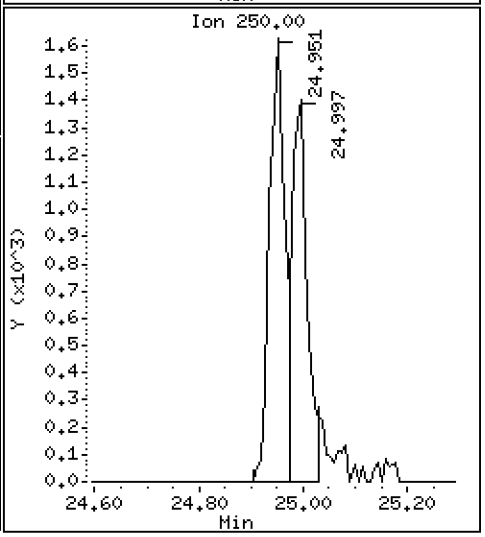


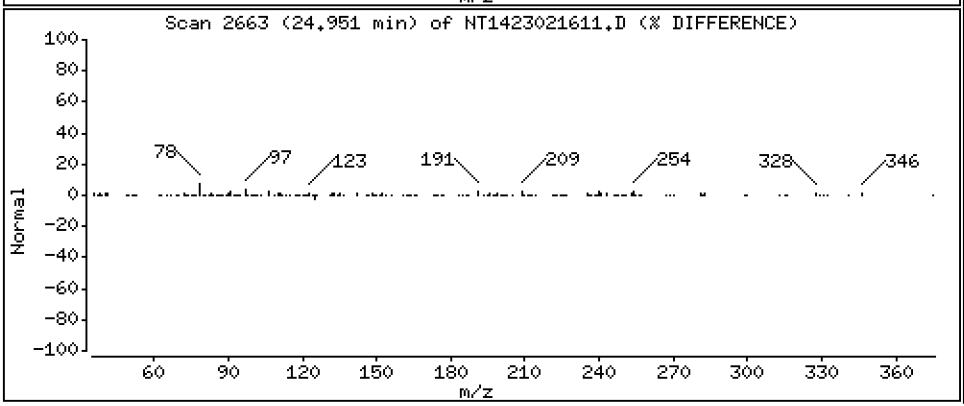












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

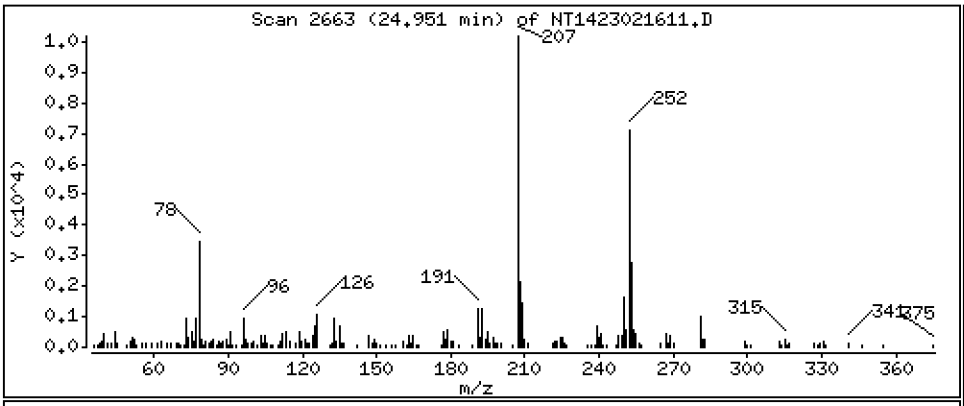
Operator: DSD

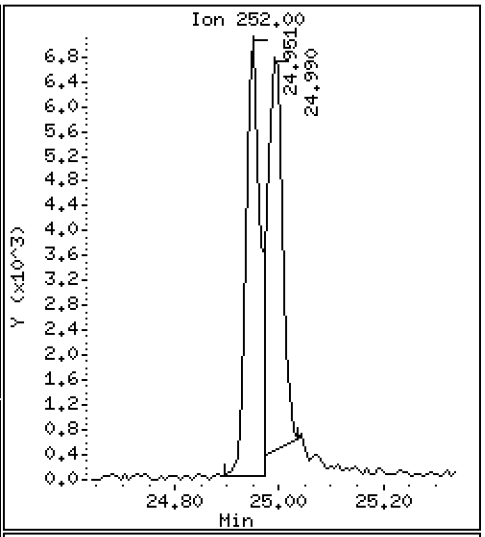
Column phase: ZB-5msi

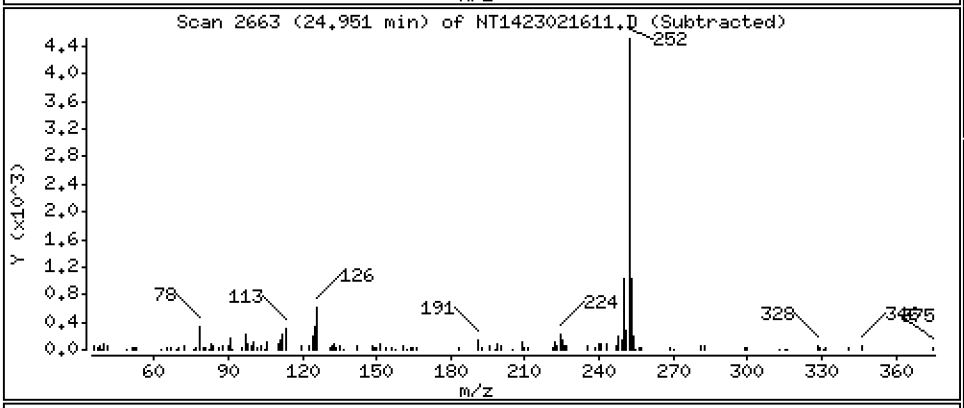
Column diameter: 0.25

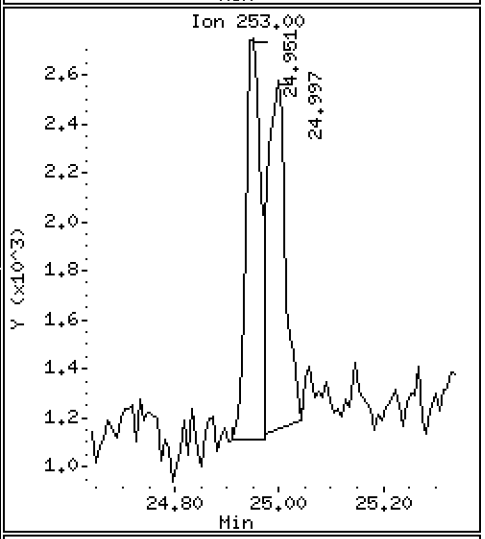
75 Benzo(k)fluoranthene

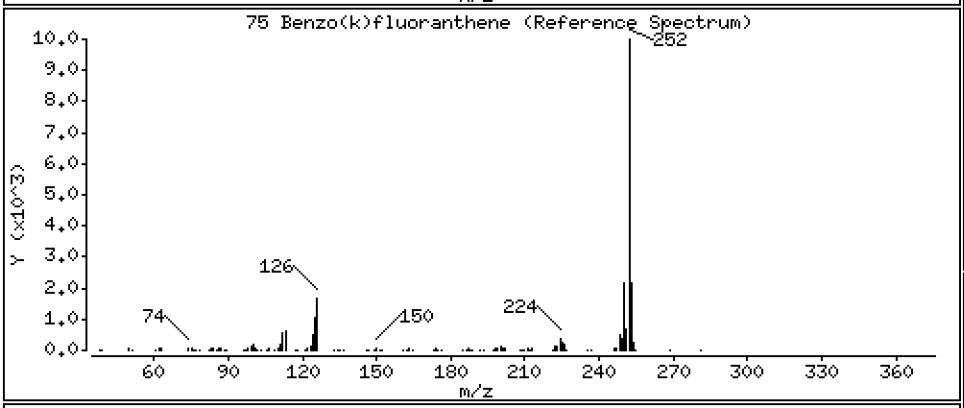
Concentration: 0.07185 ug/mL

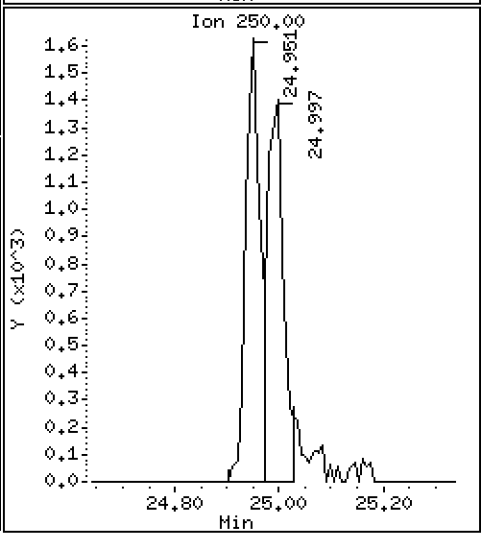


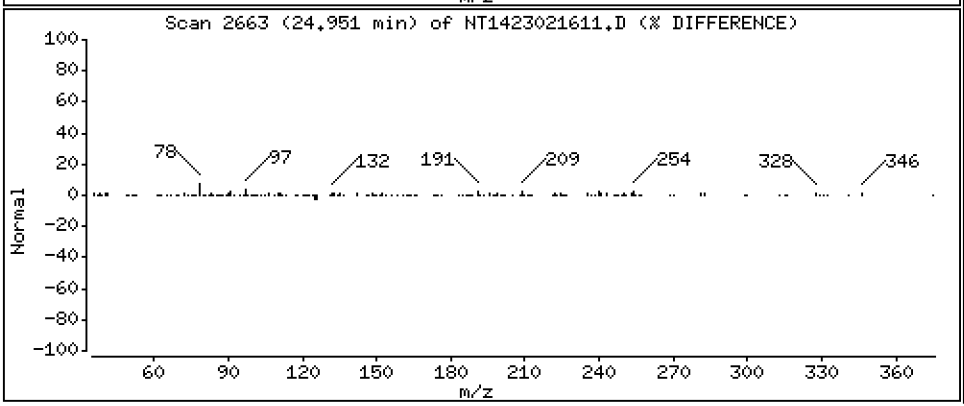












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

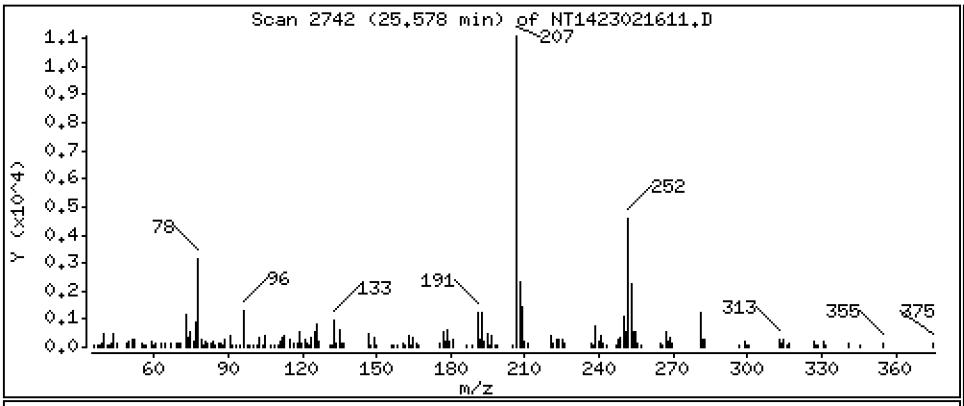
Operator: DSD

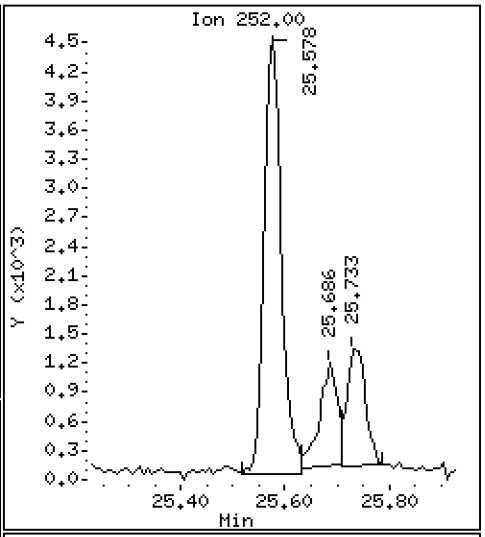
Column phase: ZB-5msi

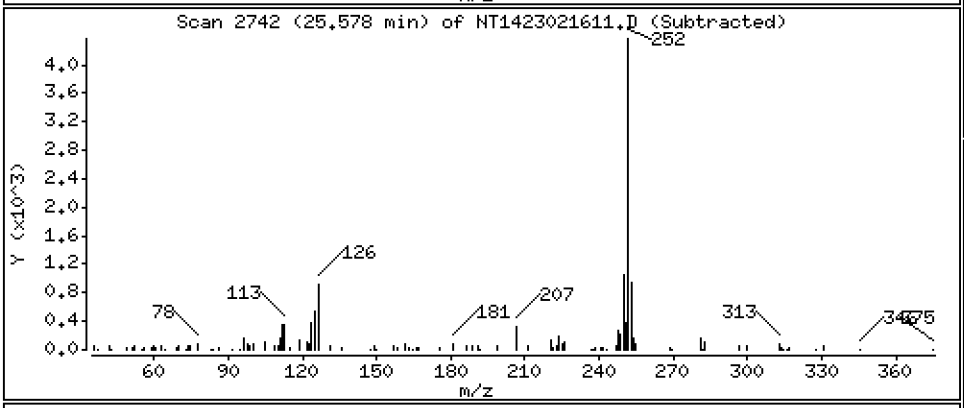
Column diameter: 0.25

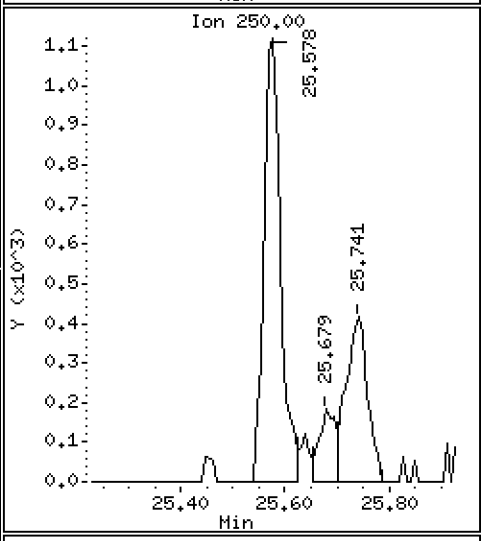
76 Benzo(a)pyrene

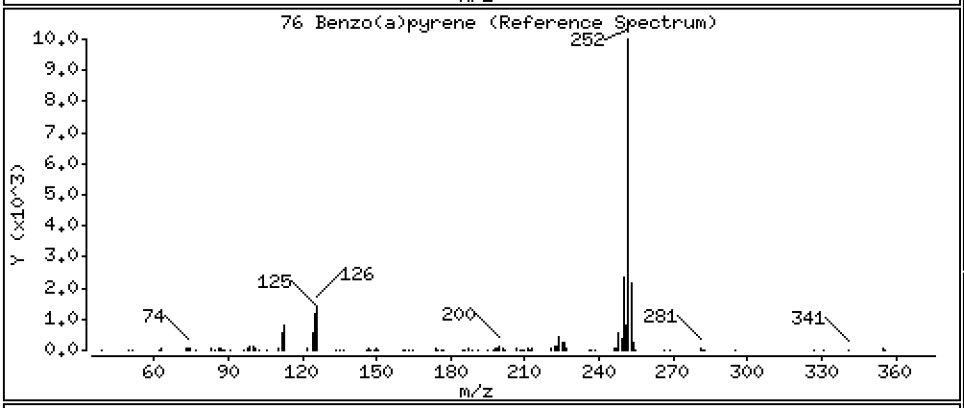
Concentration: 0.05649 ug/mL

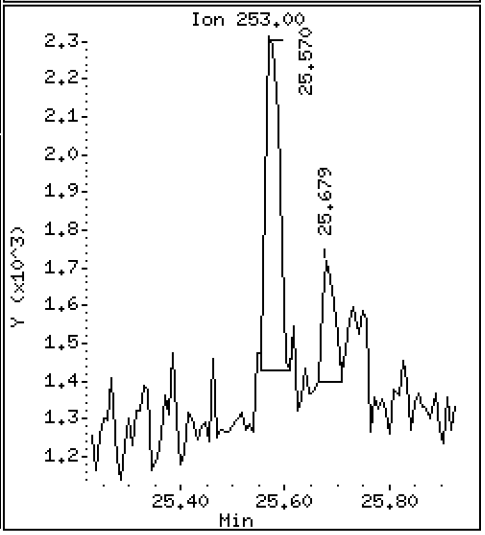


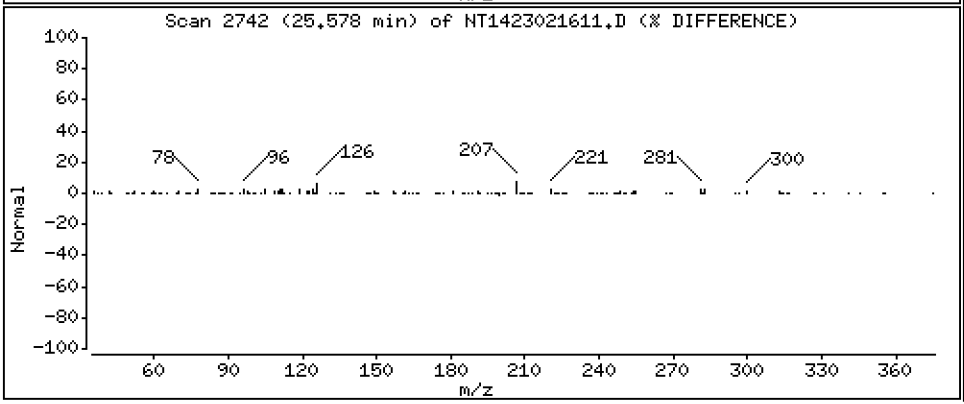












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021611.D

Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

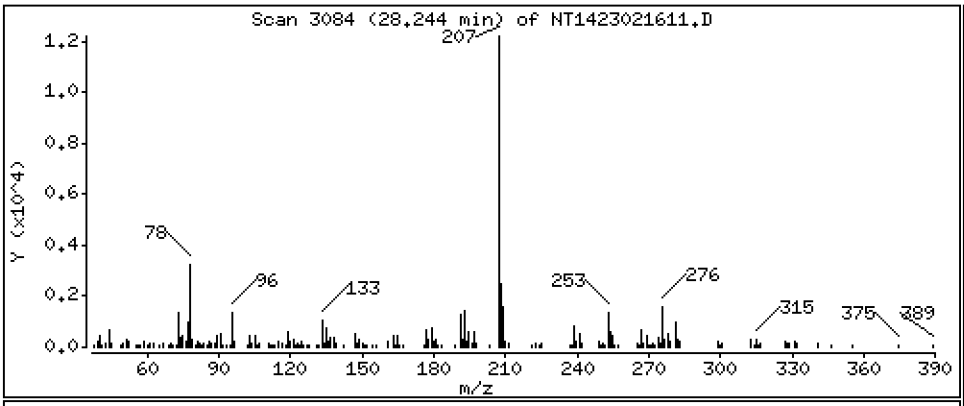
Operator: DSD

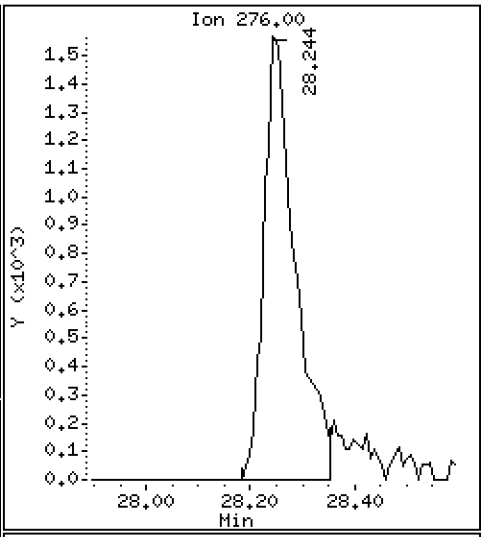
Column phase: ZB-5msi

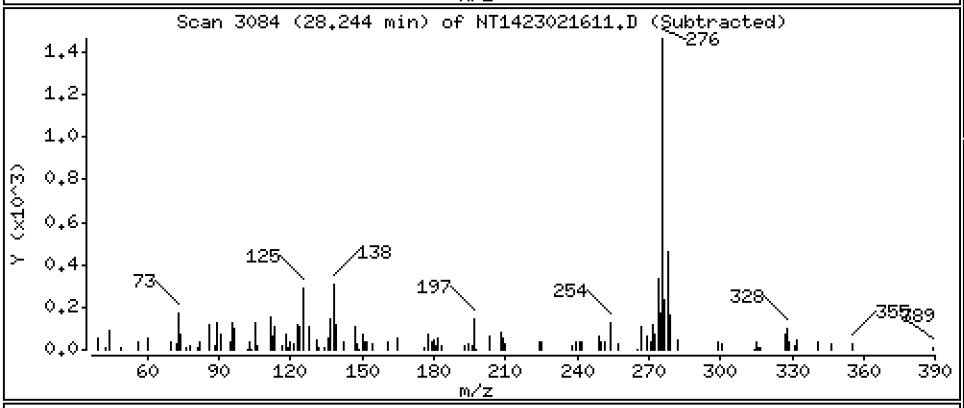
Column diameter: 0.25

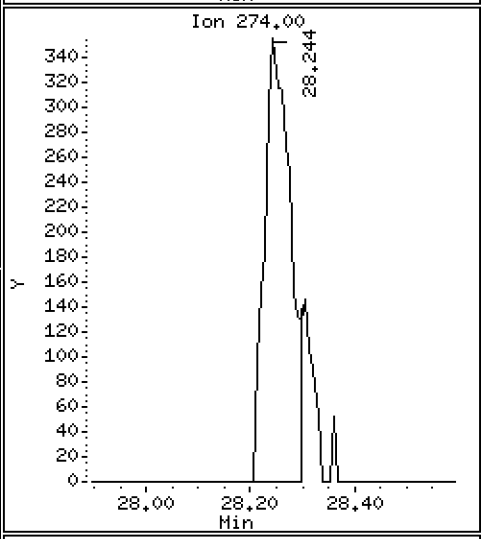
78 Indeno(1,2,3-cd)pyrene

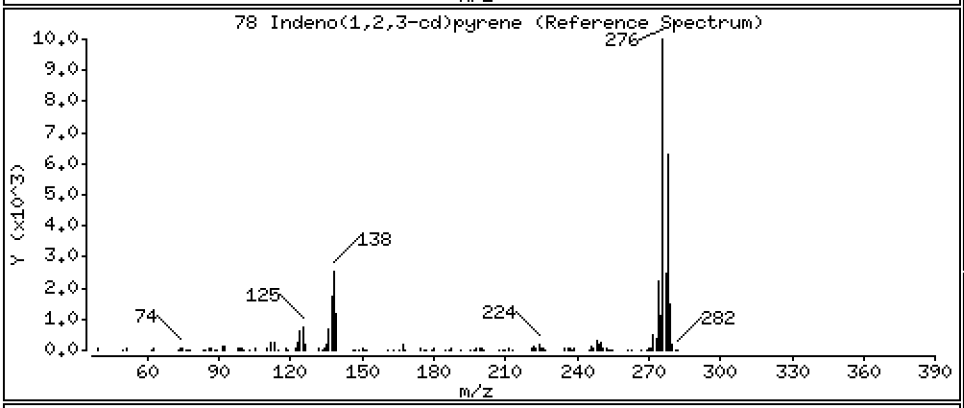
Concentration: 0.04483 ug/mL

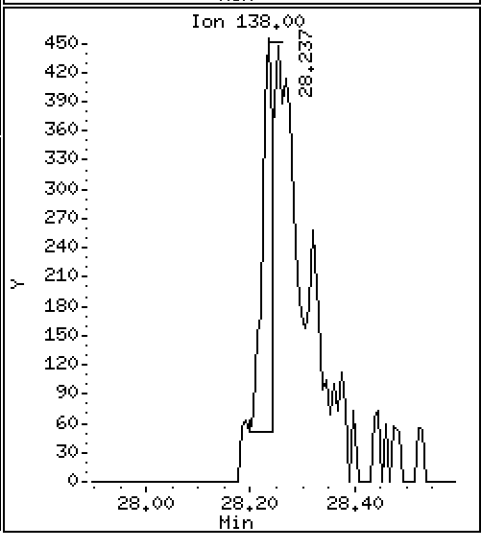


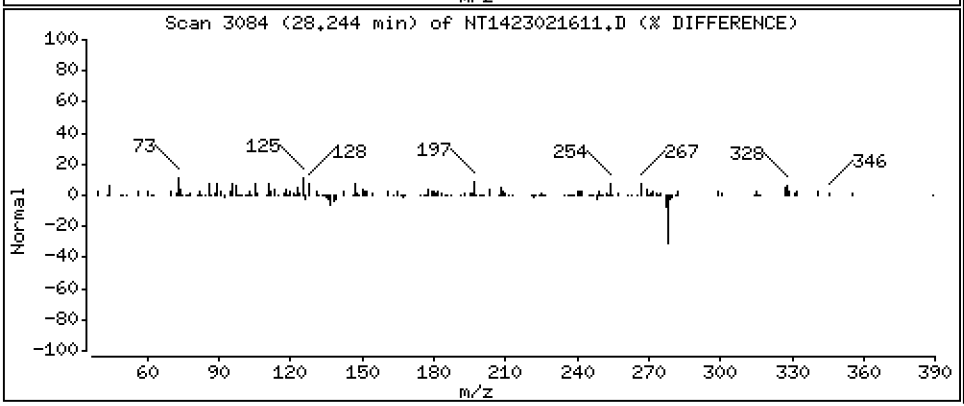












Date : 16-FEB-2023 20:06

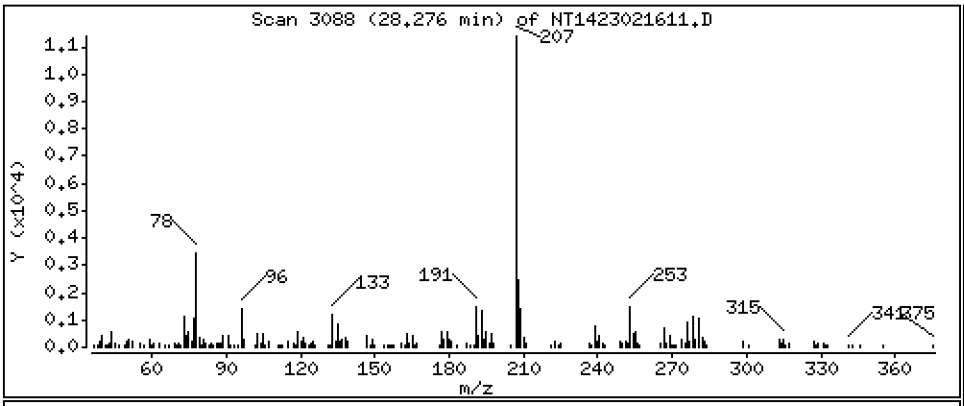
Client ID: Instrument: nt14.i

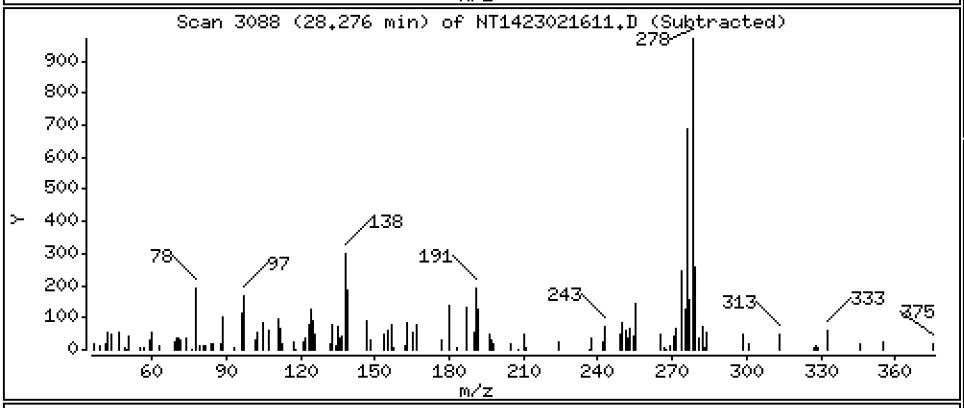
Sample Info: SIM 0.1

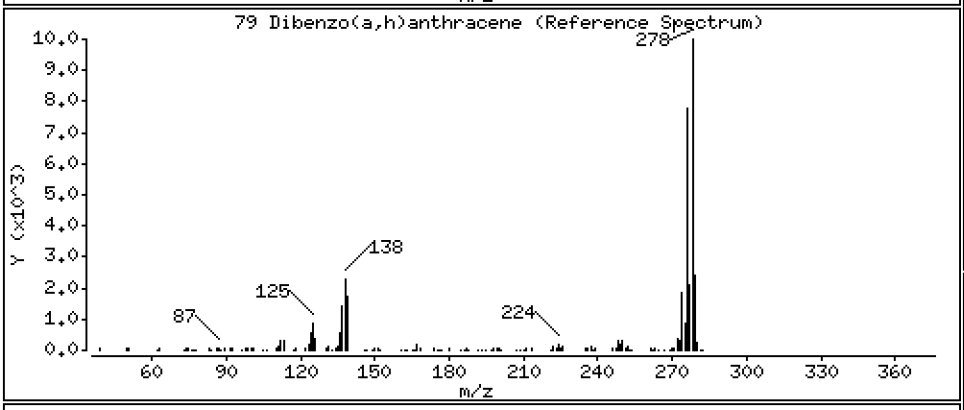
Operator: DSD

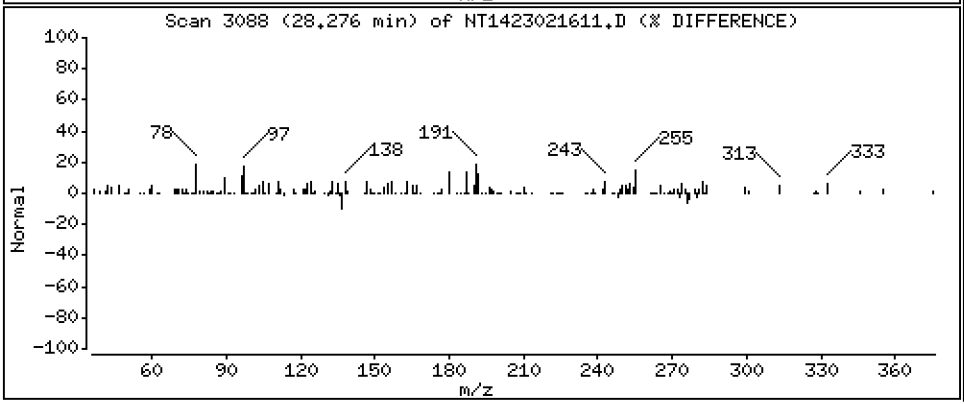
Column phase: ZB-5msi Column diameter: 0.25

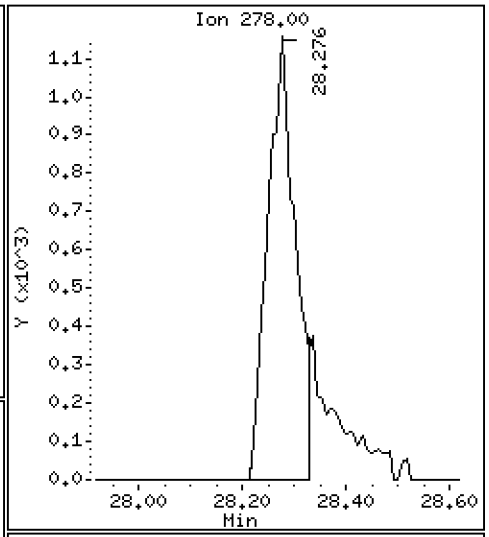
79 Dibenzo(a,h)anthracene Concentration: 0.03572 ug/mL

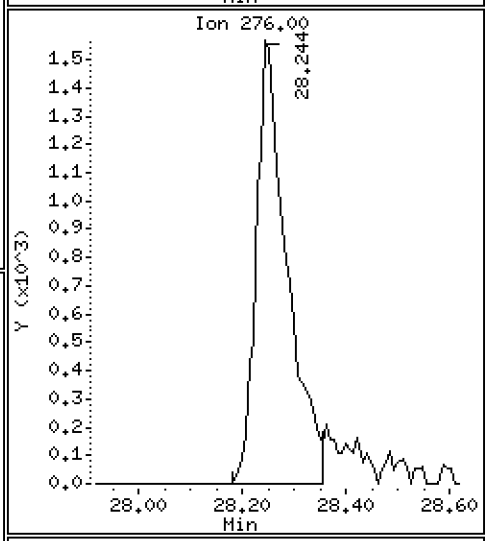


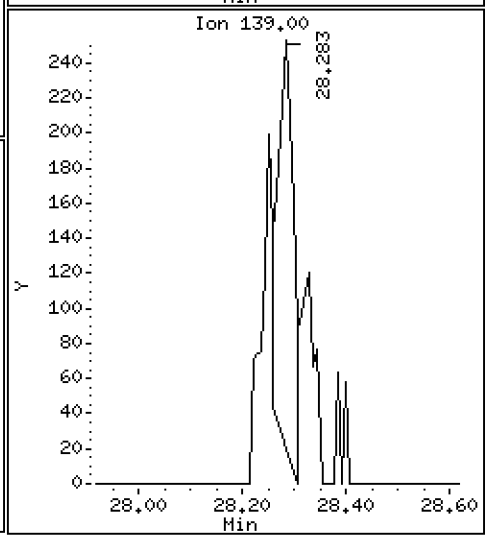












Date : 16-FEB-2023 20:06

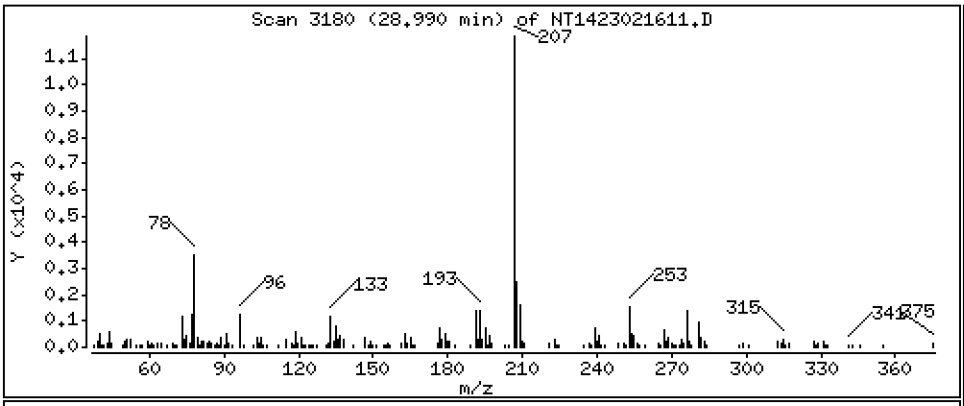
Client ID: Instrument: nt14.i

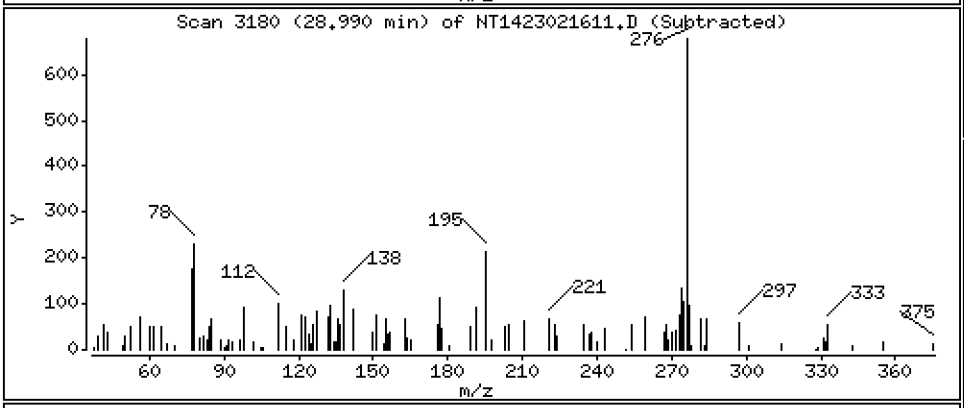
Sample Info: SIM 0.1

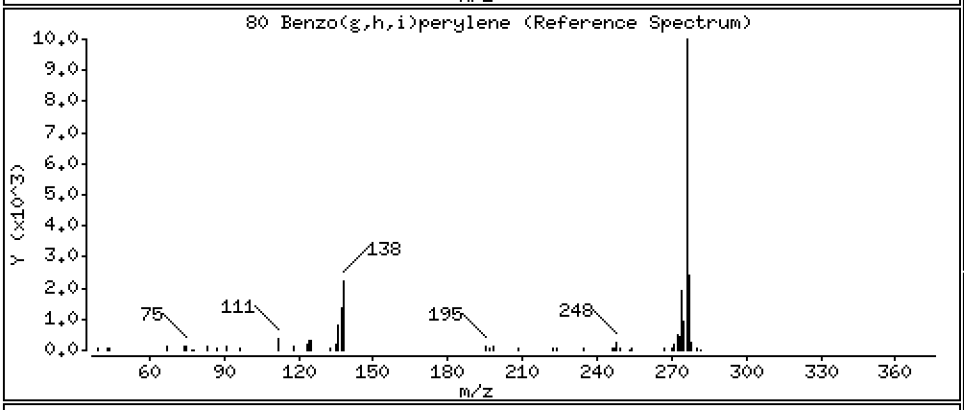
Operator: DSD

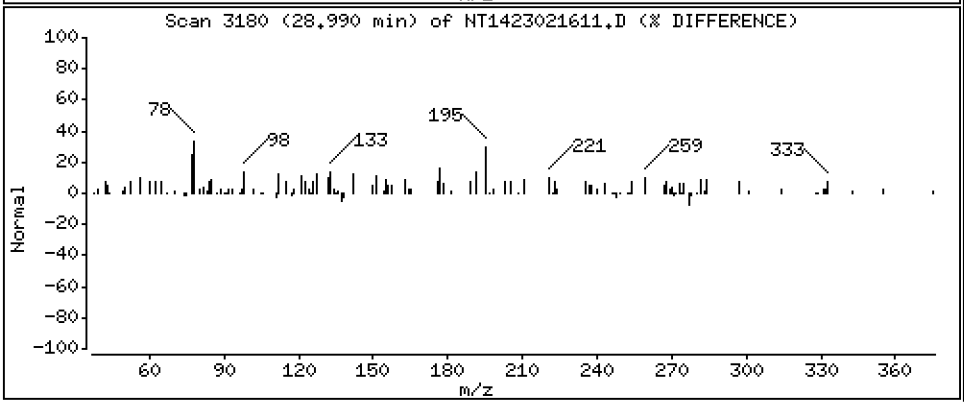
Column phase: ZB-5msi Column diameter: 0.25

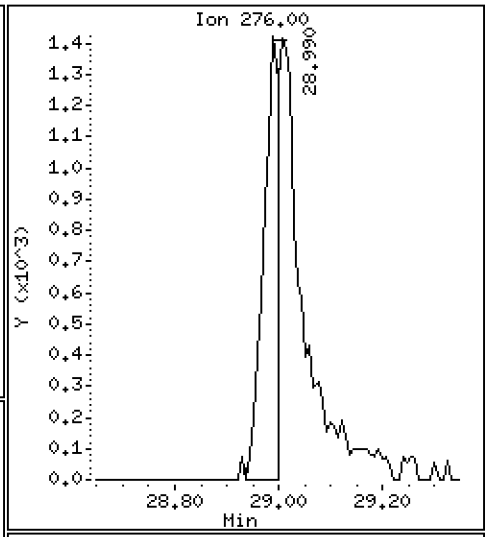
80 Benzo(g,h,i)perylene Concentration: 0.02333 ug/mL

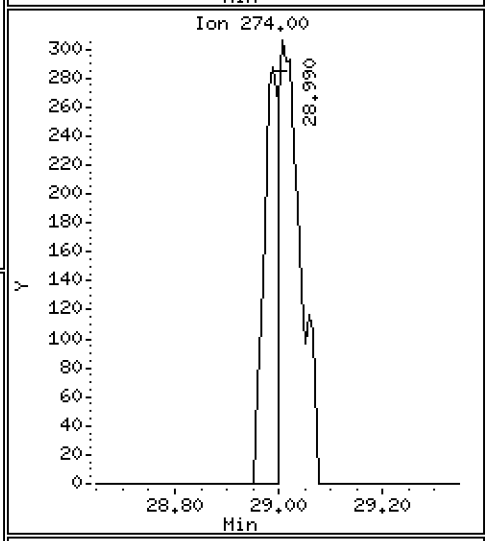


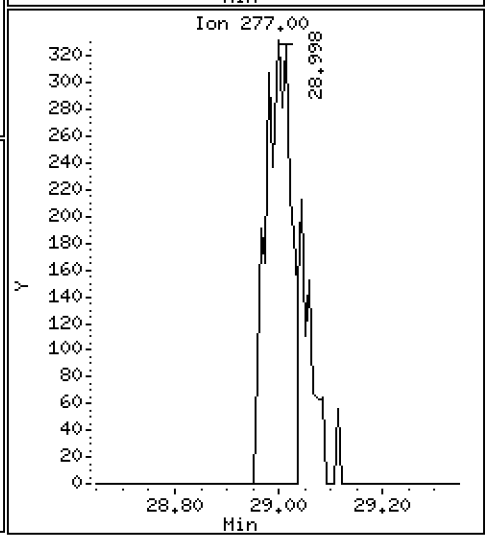












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

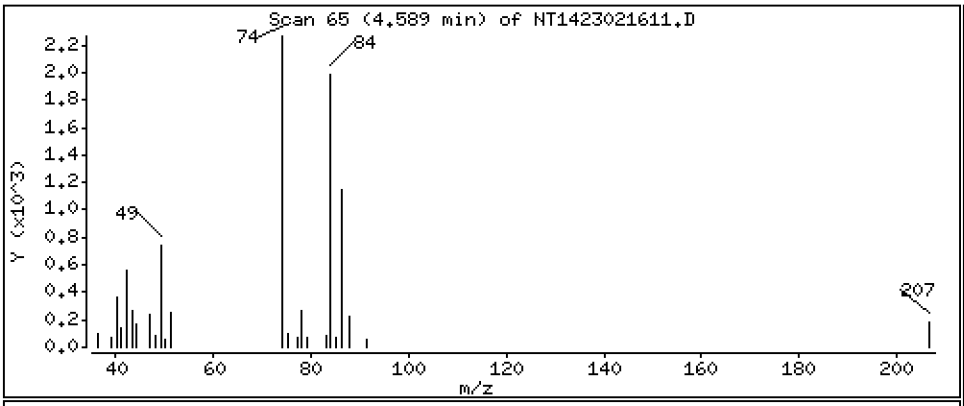
Operator: DSD

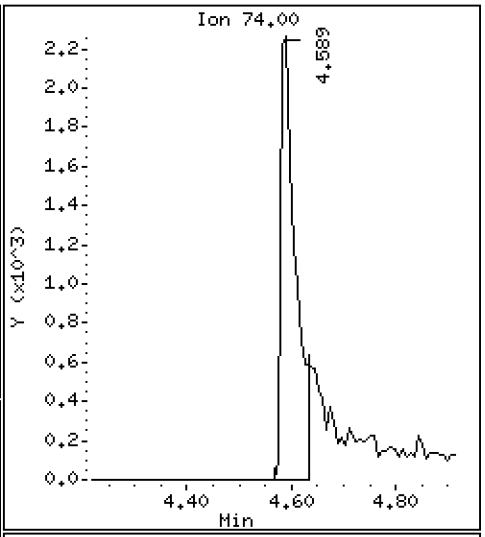
Column phase: ZB-5msi

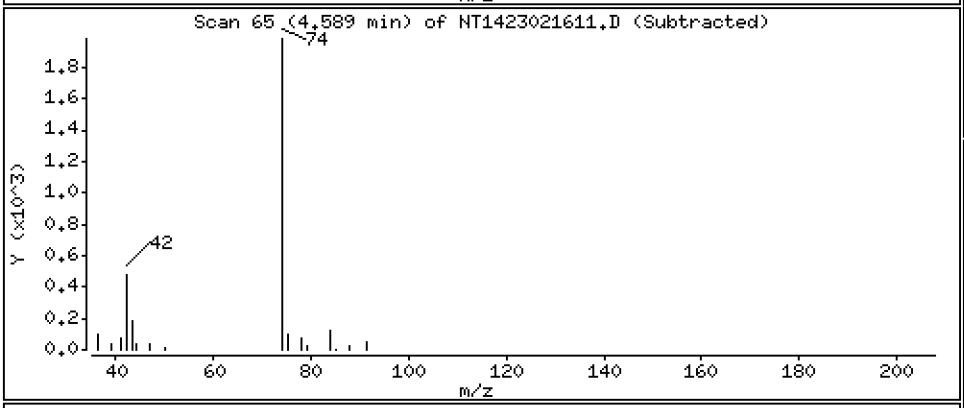
Column diameter: 0.25

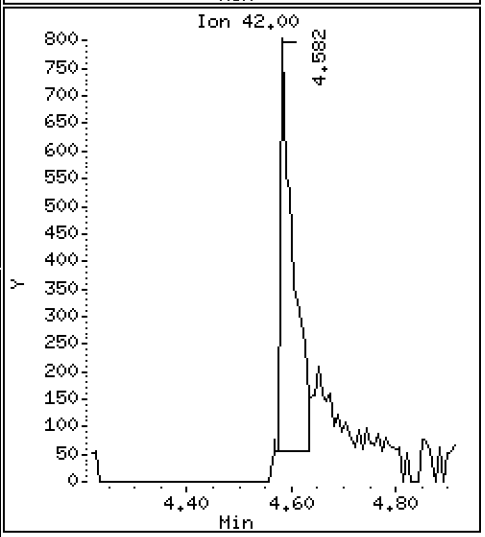
90 N-Nitrosodimethylamine

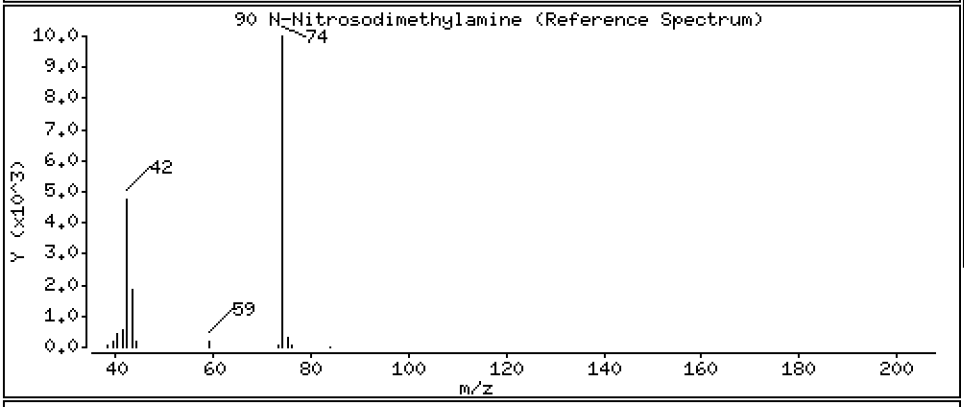
Concentration: 0.07113 ug/mL

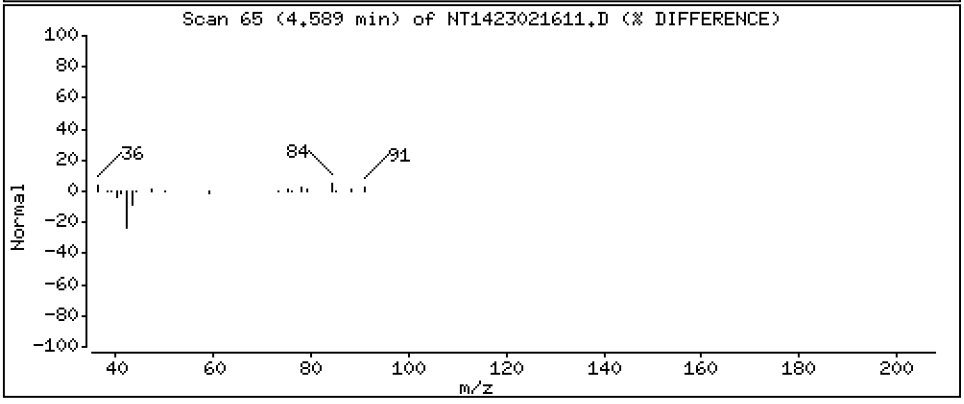












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

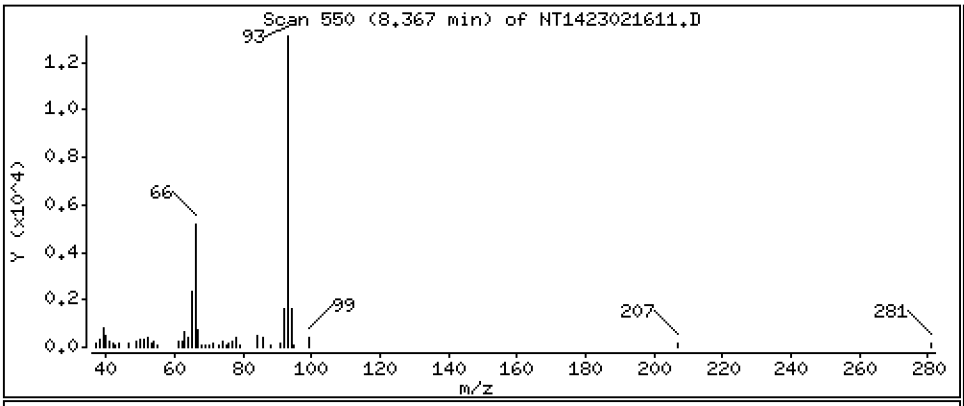
Operator: DSD

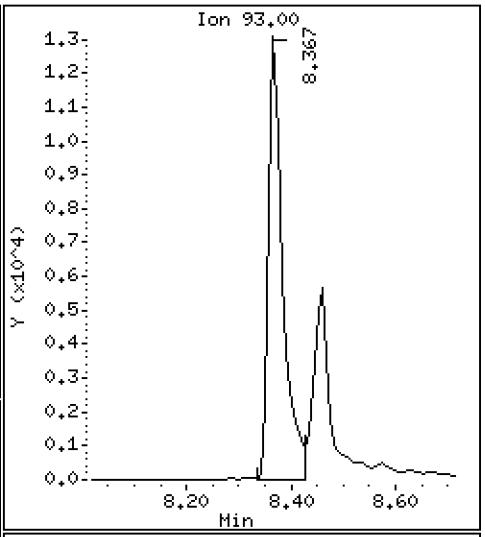
Column phase: ZB-5msi

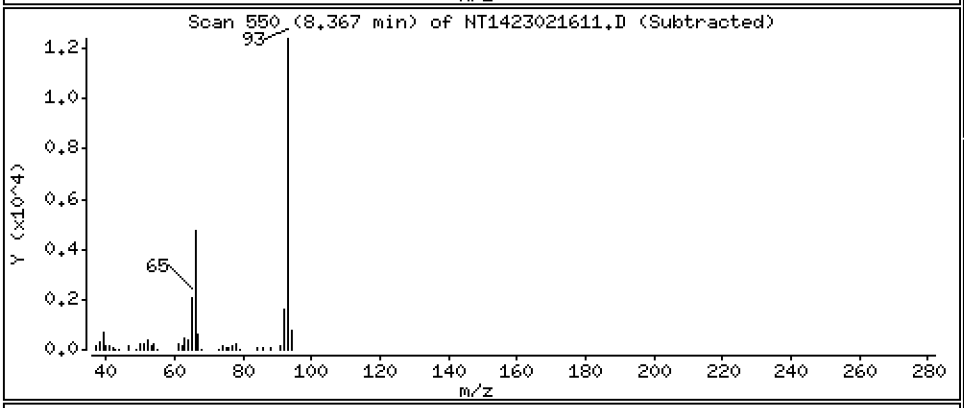
Column diameter: 0.25

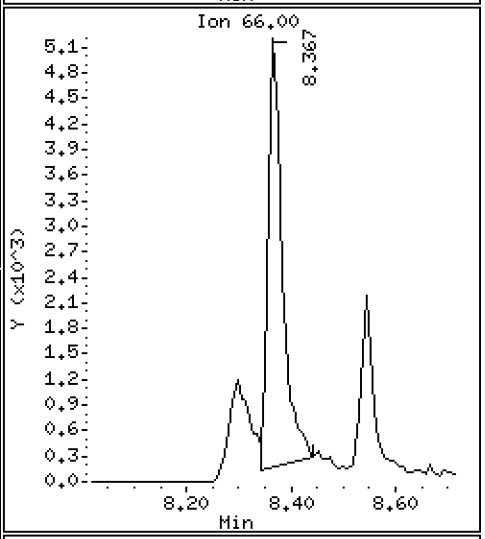
91 Aniline

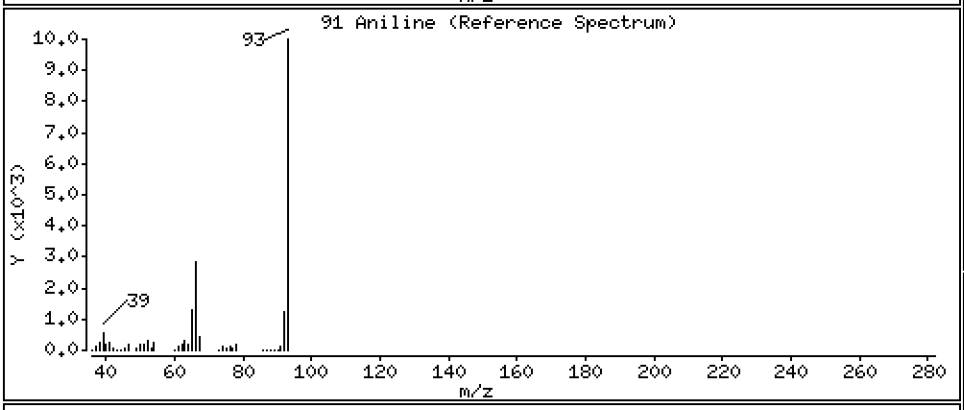
Concentration: 0.1543 ug/mL

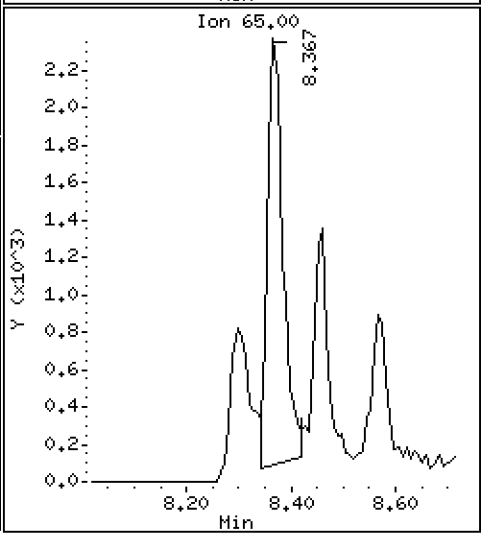


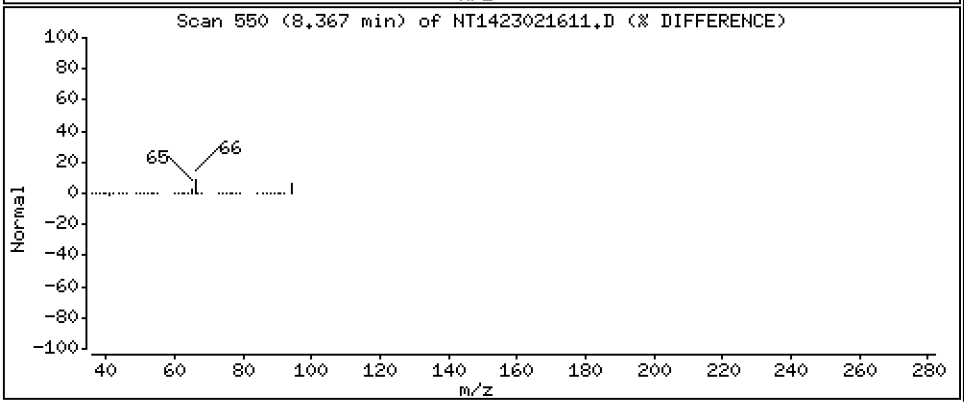












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

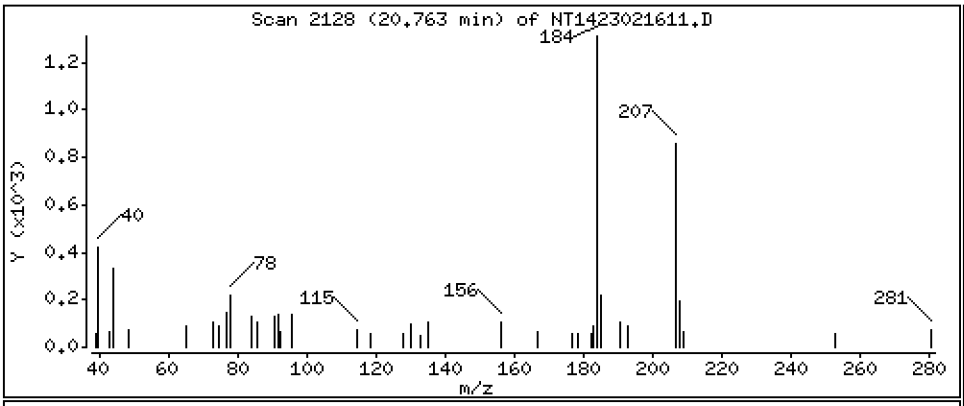
Operator: DSD

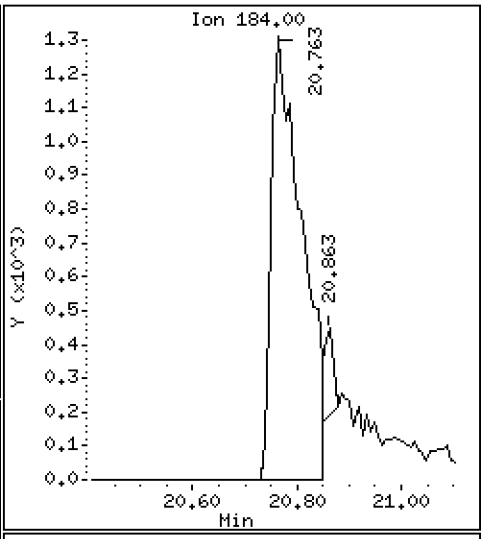
Column phase: ZB-5msi

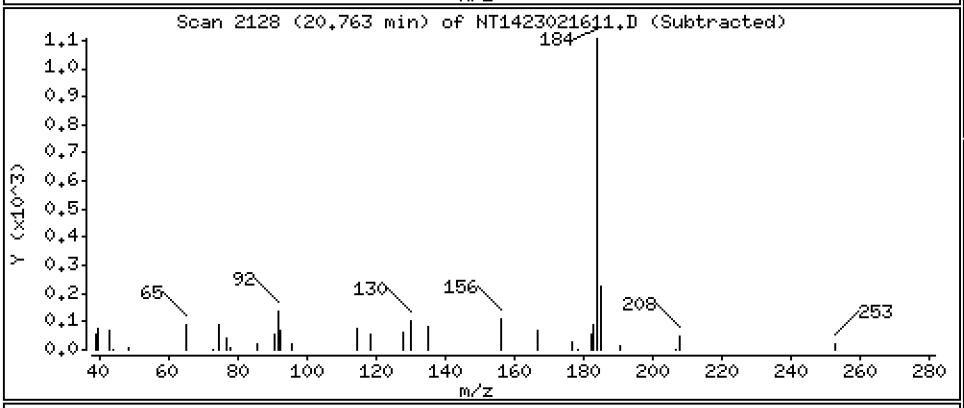
Column diameter: 0.25

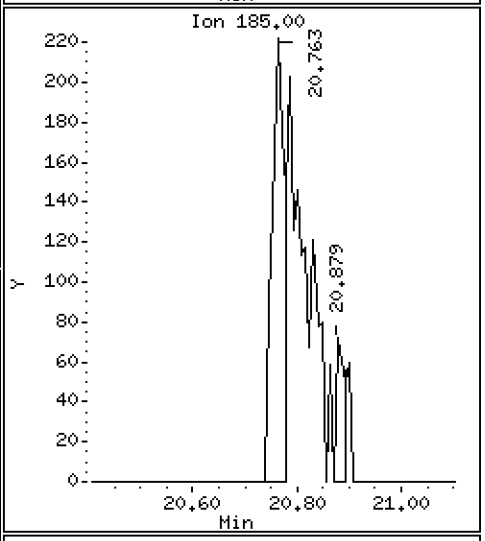
93 Benzidine

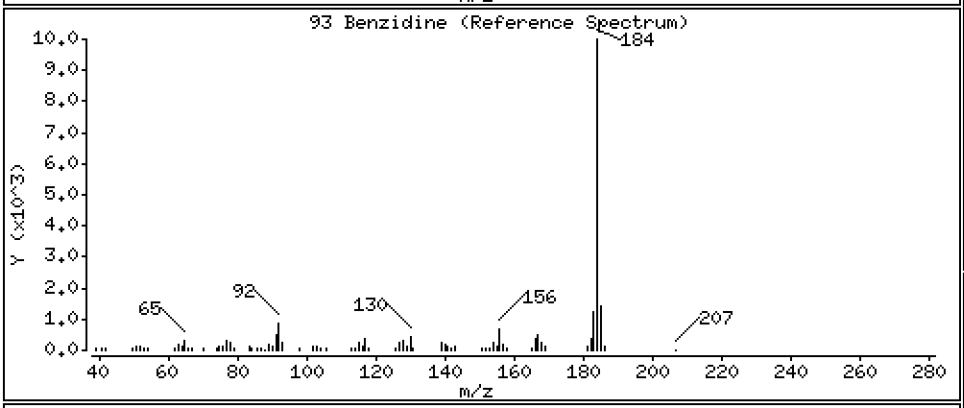
Concentration: 0.05115 ug/mL

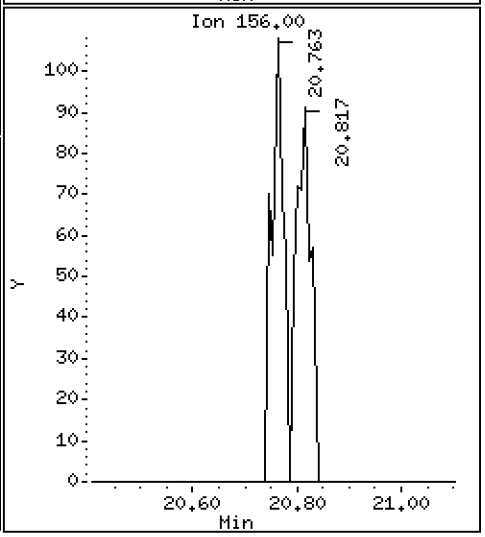


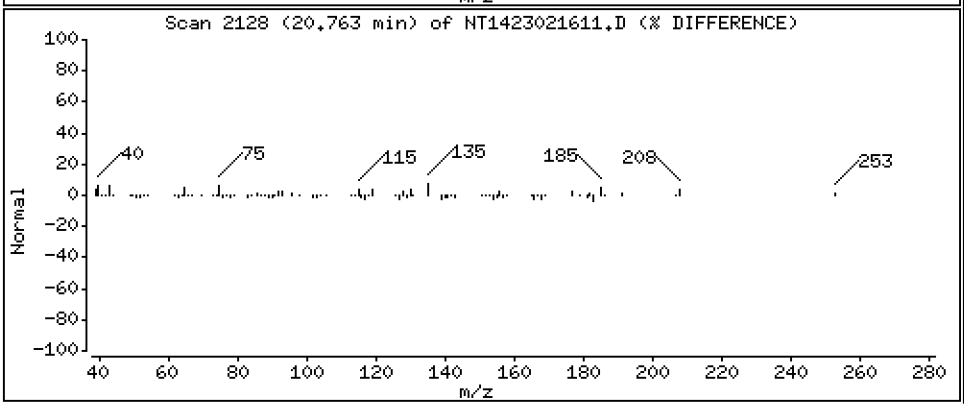












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021611.D

Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

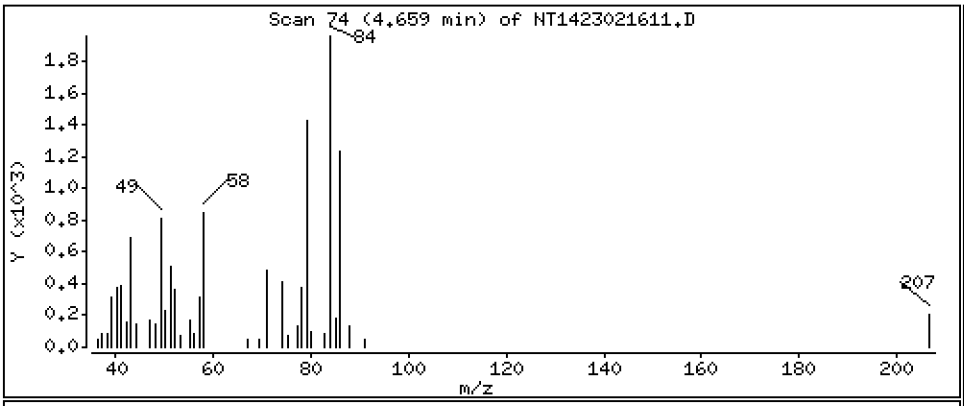
Operator: DSD

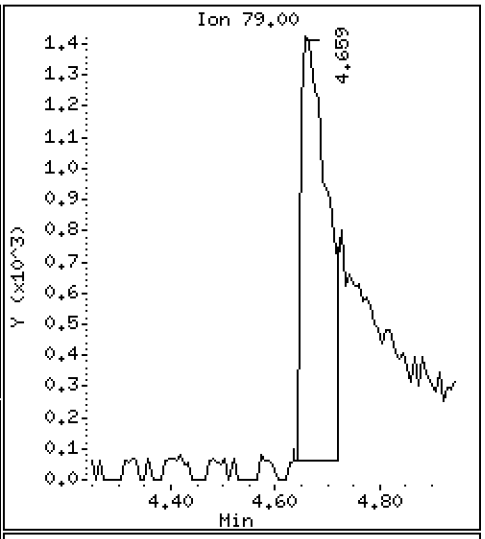
Column phase: ZB-5msi

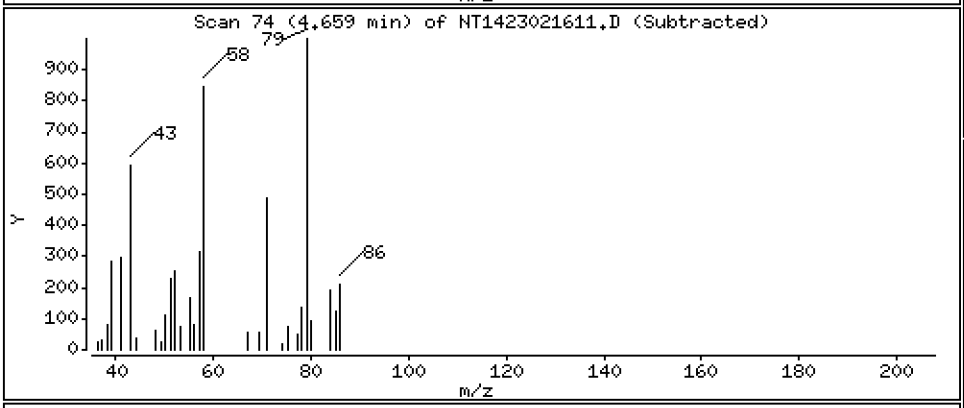
Column diameter: 0.25

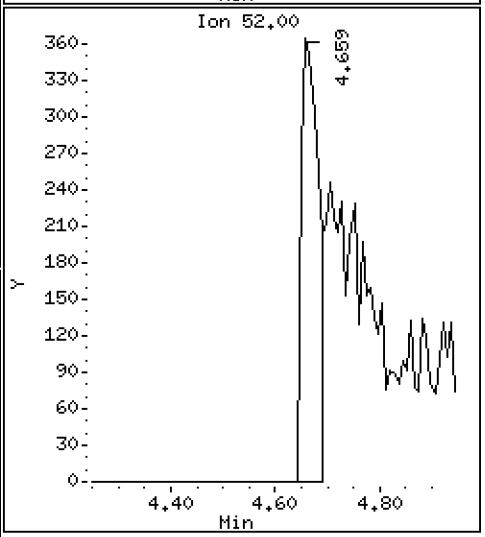
103 Pyridine

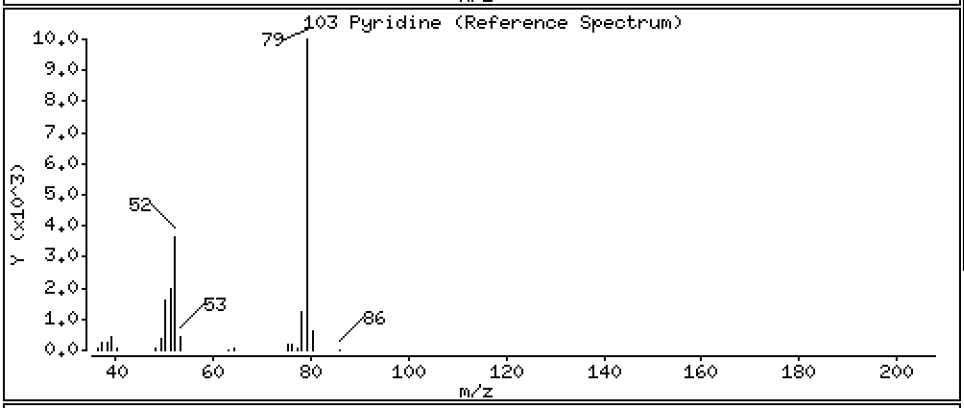
Concentration: 0.04452 ug/mL

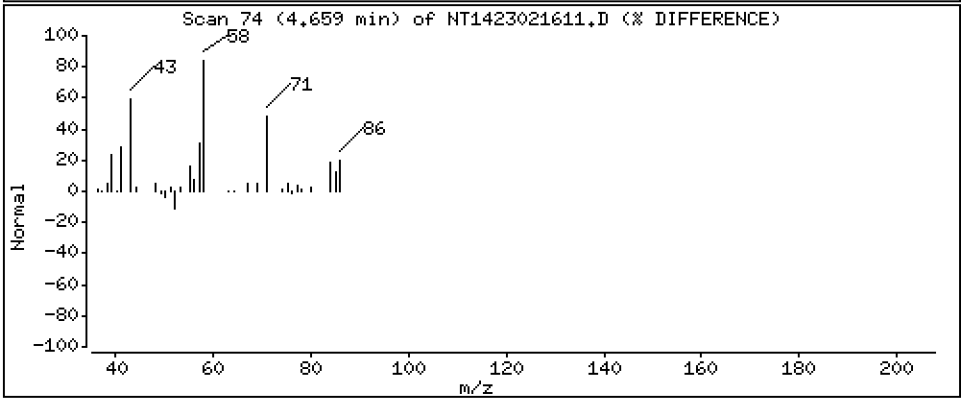












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

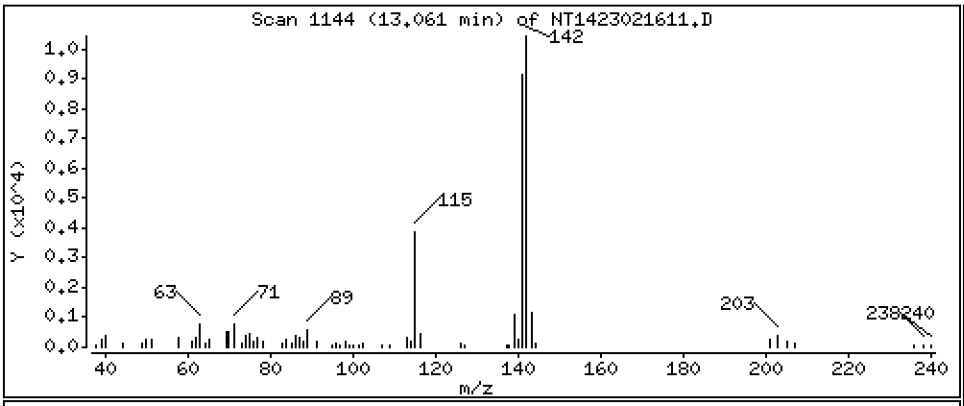
Operator: DSD

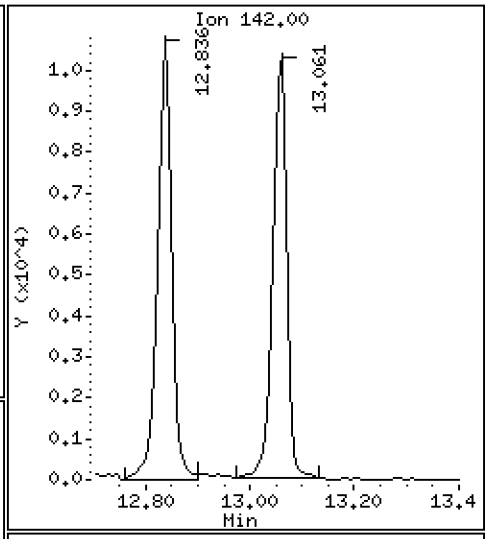
Column phase: ZB-5msi

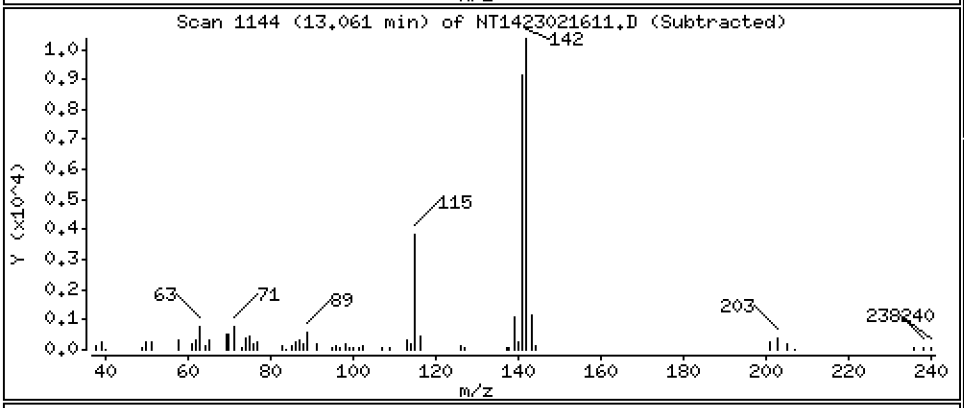
Column diameter: 0.25

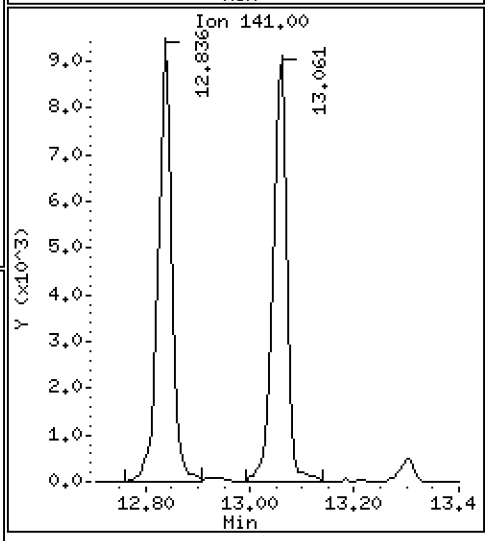
105 1-methylnaphthalene

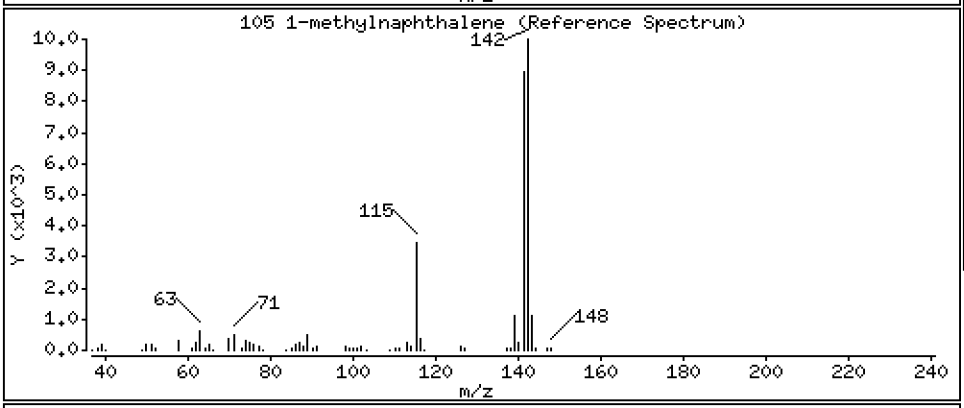
Concentration: 0.09171 ug/mL

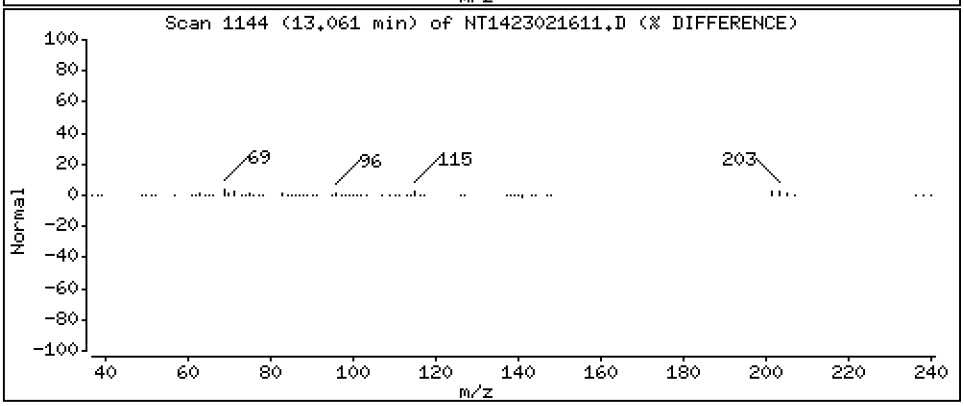












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

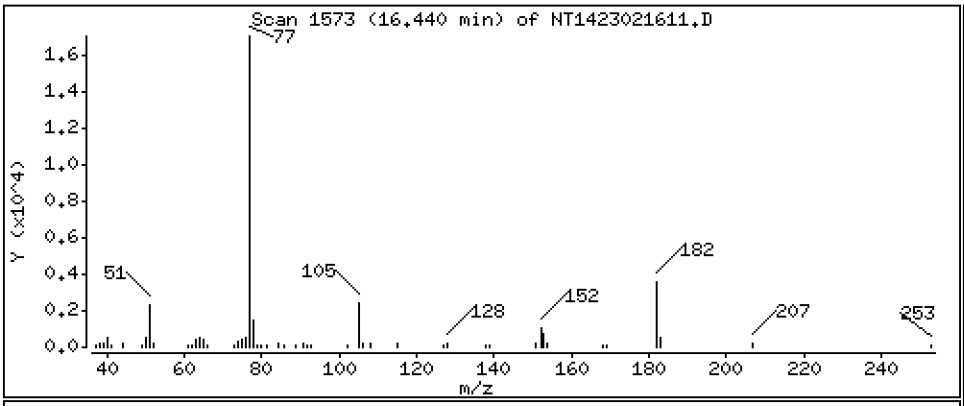
Operator: DSD

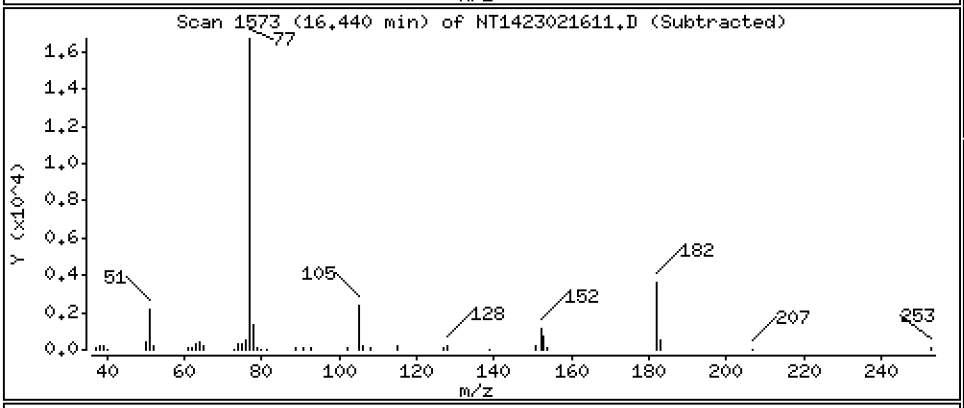
Column phase: ZB-5msi

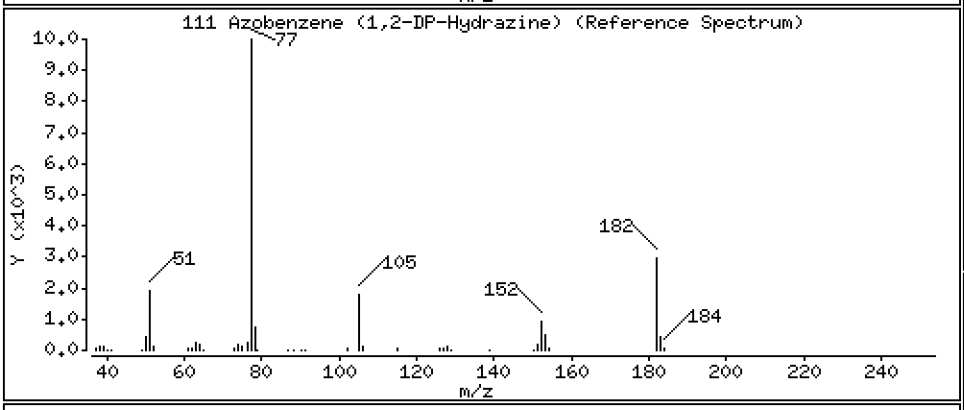
Column diameter: 0.25

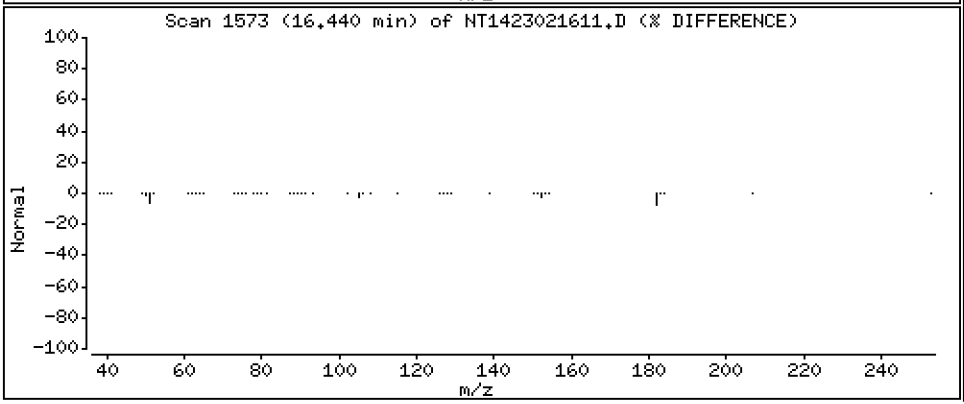
111 Azobenzene (1,2-DP-Hydrazine)

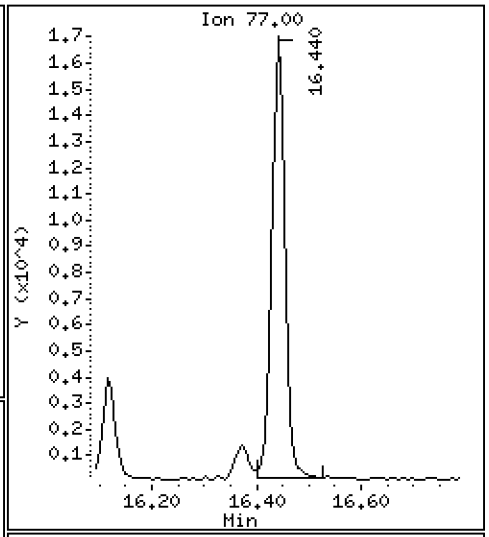
Concentration: 0.08155 ug/mL

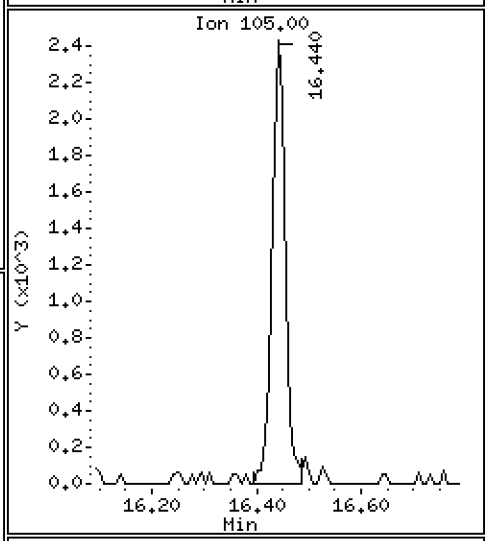


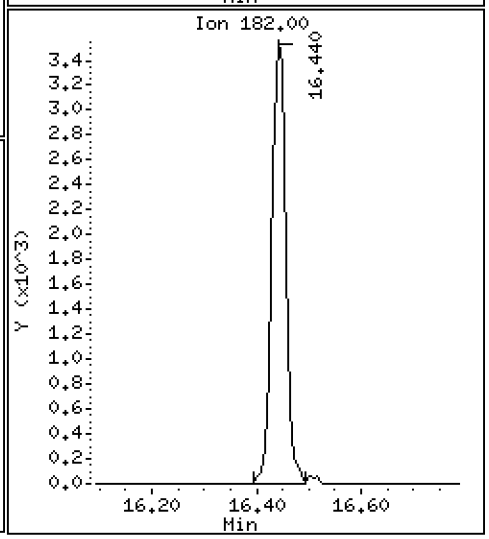












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Date : 16-FEB-2023 20:06

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.1

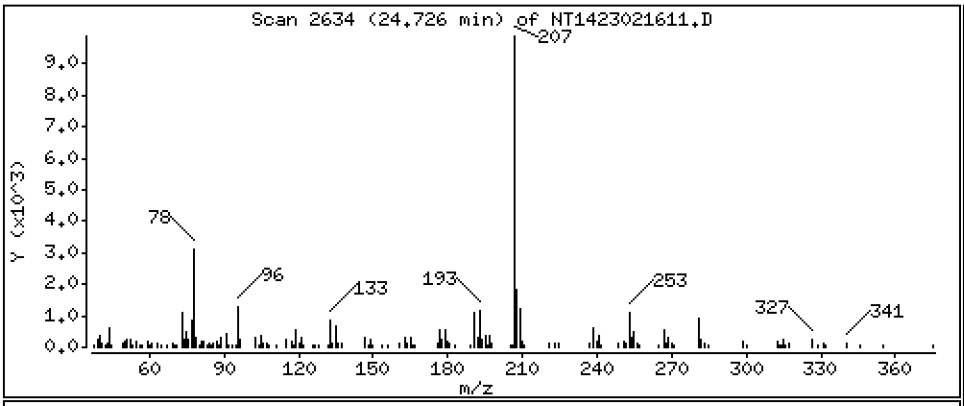
Operator: DSD

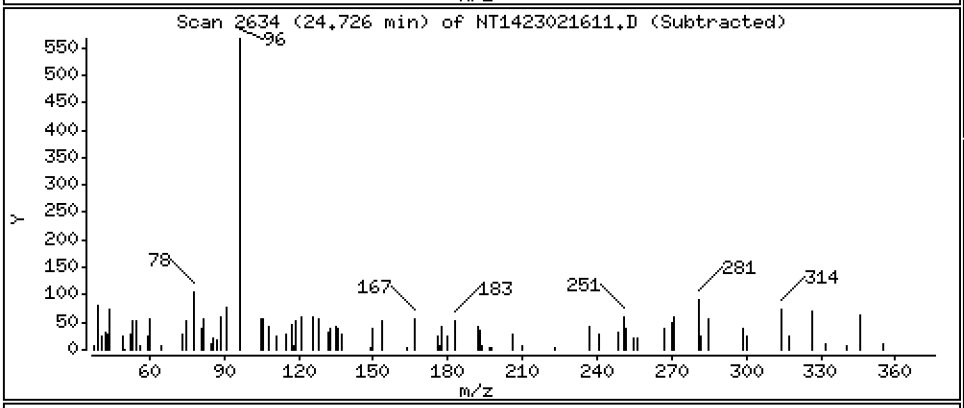
Column phase: ZB-5msi

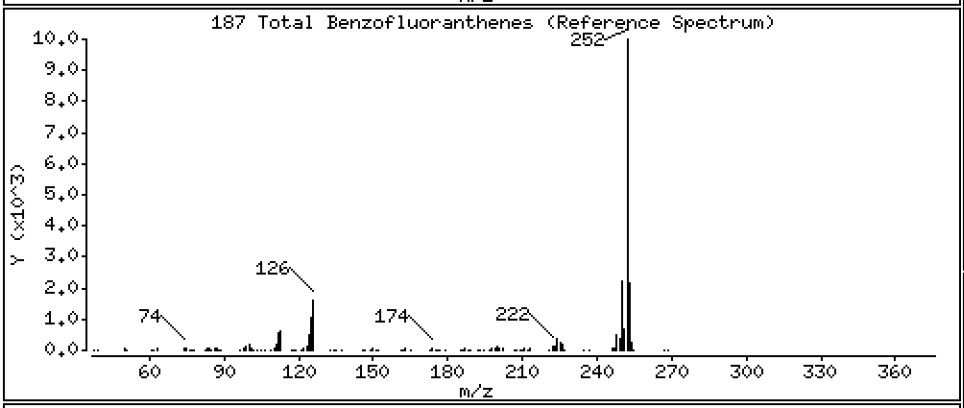
Column diameter: 0.25

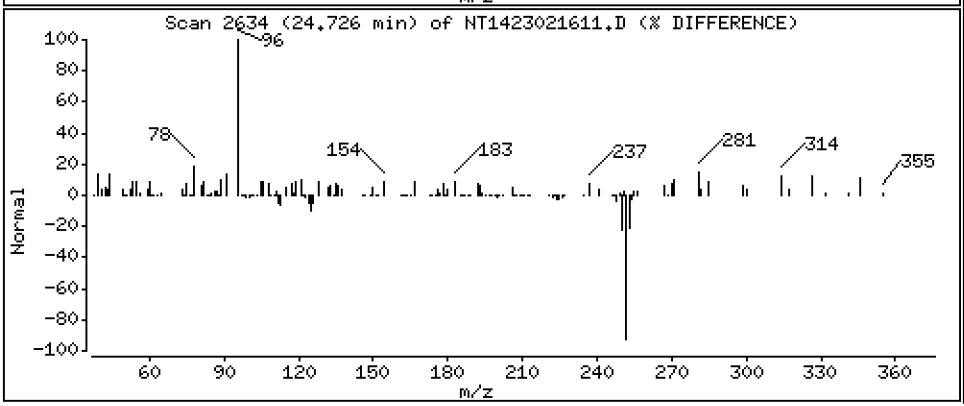
187 Total Benzofluoranthenes

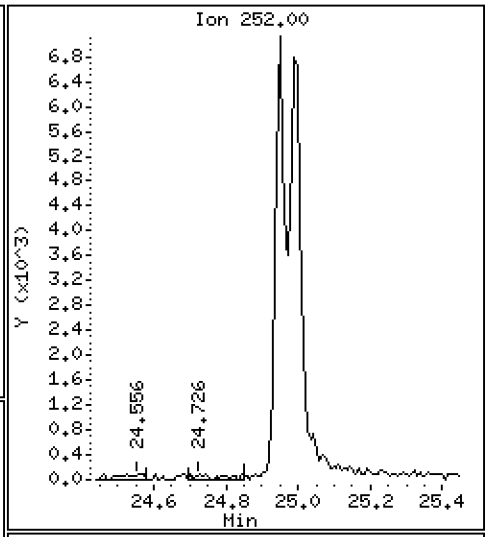
Concentration: 0.002374 ug/mL

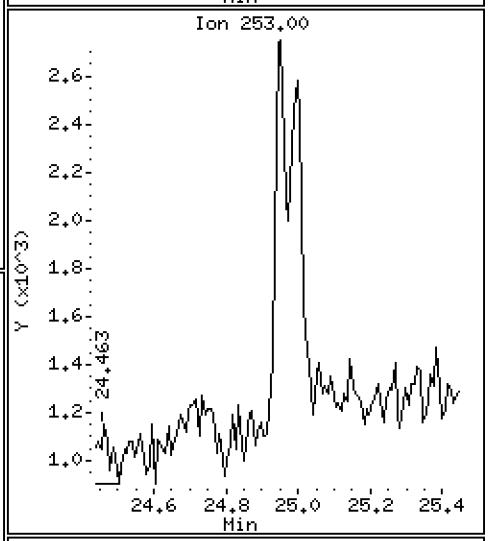


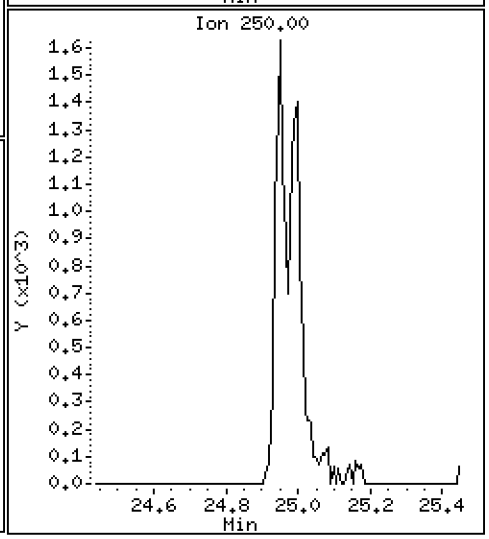












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230216.b\NT1423021611.D
Lab Smp Id: SIM 0.1
Inj Date : 16-FEB-2023 20:06 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SIM 0.1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230216.b\ABN.m
Meth Date : 17-Feb-2023 15:05 deenayd Quant Type: ISTD
Cal Date : 16-FEB-2023 19:30 Cal File: NT1423021610.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.705	6.682	(0.753)	2102	0.02433	0.02433
$	2 Phenol-d5	99	8.273	8.266	(0.930)	12864	0.09385	0.09385
	3 Phenol	94	8.297	8.289	(0.932)	8569	0.05905	0.05905
$	5 2-Chlorophenol-d4	132	8.544	8.536	(0.960)	9624	0.09840	0.09840
	4 Bis(2-Chloroethyl)ether	93	8.459	8.451	(0.950)	9594	0.08655	0.08655
	6 2-Chlorophenol	128	8.575	8.567	(0.963)	7047	0.06896	0.06896
	7 1,3-Dichlorobenzene	146	8.931	8.838	(1.003)	10480	0.09212	0.09212
*	8 1,4-Dichlorobenzene-d4	152	8.900	8.900	(1.000)	323228	4.00000	
	9 1,4-Dichlorobenzene	146	8.931	8.931	(1.003)	10480	0.09707	0.09707
$	10 1,2-Dichlorobenzene-d4	152	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	9.288	9.288	(1.044)	10012	0.09276	0.09276
	11 Benzyl alcohol	108	8.900	9.202	(1.000)	1605	0.01970	0.01970
	14 2,2'-oxybis(1-Chloropropane)	121	9.482	9.482	(1.065)	2228	0.07216	0.07216
	13 2-Methylphenol	108	9.264	9.404	(1.041)	1523	0.01503	0.01503
	17 Hexachloroethane	117	9.878	9.878	(1.110)	4141	0.08822	0.08822
	16 N-Nitroso-di-n-propylamine	70	9.754	9.738	(1.096)	6278	0.06806	0.06806
	15 4-Methylphenol	108	9.420	9.684	(1.058)	7285	0.06809	0.06809
$	18 Nitrobenzene-d5	82	10.010	10.002	(0.879)	10667	0.08007	0.08007
	19 Nitrobenzene	77	10.041	10.033	(0.882)	10401	0.07780	0.07780
	20 Isophorone	82	10.499	10.491	(0.922)	10805	0.06126	0.06126
	21 2-Nitrophenol	139	10.708	10.677	(0.940)	170	0.00285	0.002847
	22 2,4-Dimethylphenol	107	10.731	10.724	(0.942)	16506	0.16350	0.1635
	23 Bis(2-Chloroethoxy)methane	93	10.933	10.925	(0.960)	7794	0.06793	0.06793
	24 Benzoic acid	105	11.389	10.879	(1.000)	1148	0.01812	0.01812
	25 2,4-Dichlorophenol	162	11.142	11.127	(0.978)	6534	0.07562	0.07562
	26 1,2,4-Trichlorobenzene	180	11.304	11.305	(0.993)	9914	0.09472	0.09472
*	27 Naphthalene-d8	136	11.389	11.389	(1.000)	1153158	4.00000	
	28 Naphthalene	128	11.428	11.428	(1.003)	26657	0.09375	0.09375
	29 4-Chloroaniline	127	11.590	11.575	(1.018)	17115	0.14089	0.1409
	30 Hexachlorobutadiene	225	11.799	11.799	(1.036)	6136	0.09510	0.09510
	31 4-Chloro-3-methylphenol	107	12.557	12.542	(1.103)	9681	0.10352	0.1035
	32 2-Methylnaphthalene	142	12.836	12.836	(1.127)	20011	0.09397	0.09397
	33 Hexachlorocyclopentadiene	237	13.300	13.301	(0.886)	7697	0.11458	0.1146
	34 2,4,6-Trichlorophenol	196	13.478	13.463	(0.897)	2437	0.03568	0.03568

			QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	35	2,4,5-Trichlorophenol	196	13.563	13.541	(0.903)	2169	0.02933	0.02933
$	36	2-Fluorobiphenyl	172	13.625	13.617	(0.907)	24607	0.09919	0.09919
	37	2-Chloronaphthalene	162	13.826	13.826	(0.921)	18663	0.09217	0.09217
	38	2-Nitroaniline	65	14.105	14.097	(0.939)	7597	0.11539	0.1154
	39	Dimethylphthalate	163	14.538	14.531	(0.968)	17605	0.08312	0.08312
	40	Acenaphthylene	152	14.701	14.701	(0.979)	28290	0.09160	0.09160
	41	2,6-Dinitrotoluene	165	14.670	14.670	(0.977)	6543	0.13128	0.1313
*	42	Acenaphthene-d10	164	15.018	15.018	(1.000)	693417	4.00000	
	43	3-Nitroaniline	138	Compound Not Detected.					
	44	Acenaphthene	153	15.080	15.080	(1.004)	17785	0.09618	0.09618
	45	2,4-Dinitrophenol	184	Compound Not Detected.					
	46	Dibenzofuran	168	15.412	15.405	(1.026)	28716	0.09458	0.09458
	47	4-Nitrophenol	109	Compound Not Detected.					
	48	2,4-Dinitrotoluene	165	15.482	15.475	(1.031)	6308	0.08952	0.08952
	50	Diethylphthalate	149	15.992	15.984	(1.065)	20633	0.07328	0.07328
	49	Fluorene	166	16.123	16.124	(1.074)	28890	0.09099	0.09099
	51	4-Chlorophenyl-phenylether	204	16.116	16.116	(1.073)	16208	0.09547	0.09547
	52	4-Nitroaniline	138	16.247	16.224	(1.082)	2547	0.04197	0.04197
	53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54	N-Nitrosodiphenylamine	169	16.370	16.370	(0.907)	15202	0.07580	0.07580
$	55	2,4,6-Tribromophenol	330	16.671	16.663	(1.110)	464	0.01166	0.01166
	56	4-Bromophenyl-phenylether	248	17.126	17.118	(0.949)	7245	0.08111	0.08111
	57	Hexachlorobenzene	284	17.435	17.434	(0.966)	7525	0.08291	0.08291
	58	Pentachlorophenol	266	Compound Not Detected.					
*	59	Phenanthrene-d10	188	18.054	18.054	(1.000)	1395554	4.00000	
	60	Phenanthrene	178	18.101	18.101	(1.003)	31898	0.09512	0.09512
	61	Anthracene	178	18.193	18.193	(1.008)	25896	0.07794	0.07794
	62	Carbazole	167	18.542	18.534	(1.027)	19634	0.06512	0.06512
	63	Di-n-butylphthalate	149	19.346	19.346	(1.072)	17366	0.05157	0.05157
	64	Fluoranthene	202	20.499	20.499	(0.887)	30258	0.07893	0.07893
	65	Pyrene	202	20.925	20.925	(0.905)	35075	0.08653	0.08653
$	66	Terphenyl-d14	244	21.219	21.219	(0.918)	25821	0.08972	0.08972
	67	Butylbenzylphthalate	149	22.148	22.148	(0.958)	4887	0.03658	0.03658
	68	Benzo(a)anthracene	228	23.092	23.092	(0.999)	24122	0.08484	0.08484
*	69	Chrysene-d12	240	23.123	23.123	(1.000)	888516	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.061	23.054	(0.997)	8840	0.10156	0.1016
	71	Chrysene	228	23.162	23.162	(1.002)	24543	0.09597	0.09597
	72	bis(2-Ethylhexyl)phthalate	149	23.178	23.178	(0.960)	5615	0.03459	0.03459
*	134	Di-n-octylphthalate-d4	153	24.153	24.153	(1.000)	942766	4.00000	
	73	Di-n-octylphthalate	149	24.161	24.161	(1.000)	21606	0.09801	0.09801
	74	Benzo(b)fluoranthene	252	24.950	24.943	(0.971)	14379	0.07678	0.07678
	75	Benzo(k)fluoranthene	252	24.950	24.989	(0.971)	14379	0.07185	0.07185
	76	Benzo(a)pyrene	252	25.578	25.578	(0.996)	10018	0.05649	0.05649
*	77	Perylene-d12	264	25.686	25.686	(1.000)	590195	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.244	28.244	(1.100)	6537	0.04483	0.04483
	79	Dibenzo(a,h)anthracene	278	28.275	28.267	(1.101)	4292	0.03572	0.03572
	80	Benzo(g,h,i)perylene	276	28.990	28.997	(1.129)	2758	0.02333	0.02333
	90	N-Nitrosodimethylamine	74	4.589	4.566	(0.516)	4759	0.07113	0.07113
	91	Aniline	93	8.366	8.358	(0.940)	23947	0.15428	0.1543
	93	Benzidine	184	20.762	20.754	(0.898)	5299	0.05115	0.05115
	103	Pyridine	79	4.658	4.597	(0.523)	4713	0.04452	0.04452
	105	1-methylnaphthalene	142	13.060	13.053	(1.147)	18334	0.09171	0.09171
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.440	16.440	(1.095)	27906	0.08155	0.08155
	187	Total Benzofluoranthenes	252	24.726	24.943	(0.963)	434	0.00237	0.002374
	120	2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021611.D
Lab Smp Id: SIM 0.1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\ABN.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 17:06
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	375798	187899	751596	323228	-13.99
27 Naphthalene-d8	1378169	689085	2756338	1153158	-16.33
42 Acenaphthene-d10	847135	423568	1694270	693417	-18.15
59 Phenanthrene-d10	1675180	837590	3350360	1395554	-16.69
69 Chrysene-d12	1073562	536781	2147124	888516	-17.24
134 Di-n-octylphthala	1344129	672065	2688258	942766	-29.86
77 Perylene-d12	721978	360989	1443956	590195	-18.25

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	-0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.39	-0.07
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	-0.00
59 Phenanthrene-d10	18.05	17.55	18.55	18.05	-0.00
69 Chrysene-d12	23.12	22.62	23.62	23.12	-0.00
134 Di-n-octylphthala	24.15	23.65	24.65	24.15	-0.00
77 Perylene-d12	25.69	25.19	26.19	25.69	-0.00

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

REVIEW SUMMARY FOR FILE - NT1423021611.D

Lab ID: SIM 0.1
nt14.i, ABN.m, 16-FEB-2023 20:06

RT	CO-ELUTION COMPOUNDS
8.900	1,4-Dichlorobenzene-d4 and Benzyl alcohol
8.931	1,4-Dichlorobenzene and 1,3-Dichlorobenzene
24.951	Benzo(k)fluoranthene and Benzo(b)fluoranthene

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.003	0.993	0.0105	1,3-Dichlorobenzene
1.000	1.034	-0.0340	Benzyl alcohol
1.041	1.057	-0.0157	2-Methylphenol
1.058	1.088	-0.0297	4-Methylphenol
1.000	0.000	1.0000	Benzoic acid
0.523	0.516	0.0069	Pyridine
0.963	0.971	-0.0084	Total Benzofluoranthenes

RRT check based on Ccal File: NT1423021610.D

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

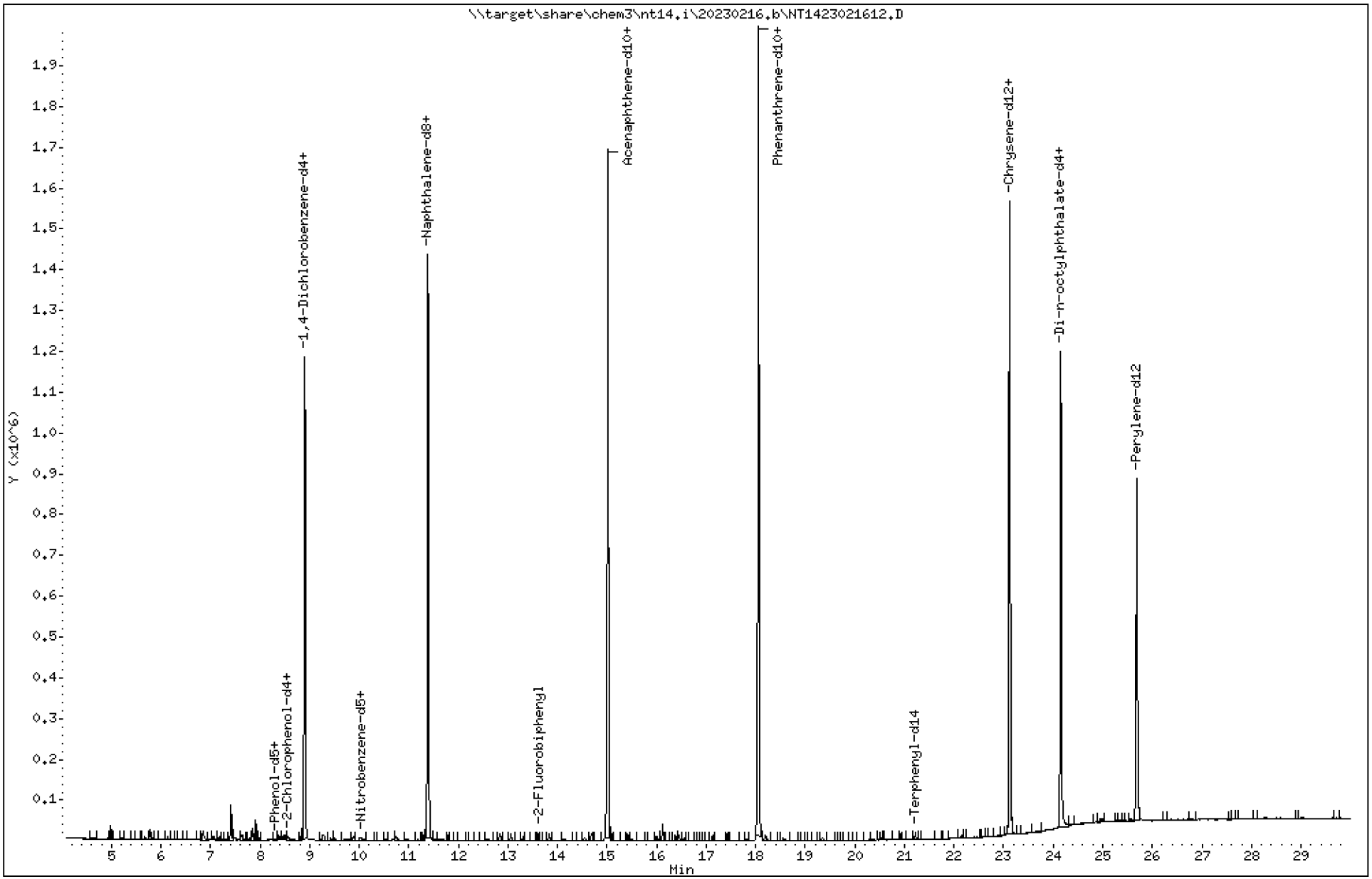
* Only compounds listed in the work order have been verified by the analyst *

Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021612.D
Date : 16-FEB-2023 20:42
Client ID:
Sample Info: SIM 0.05

Column phase: ZB-5msi

Instrument: nt14.i

Operator: DSD
Column diameter: 0.25



Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021612.D

Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

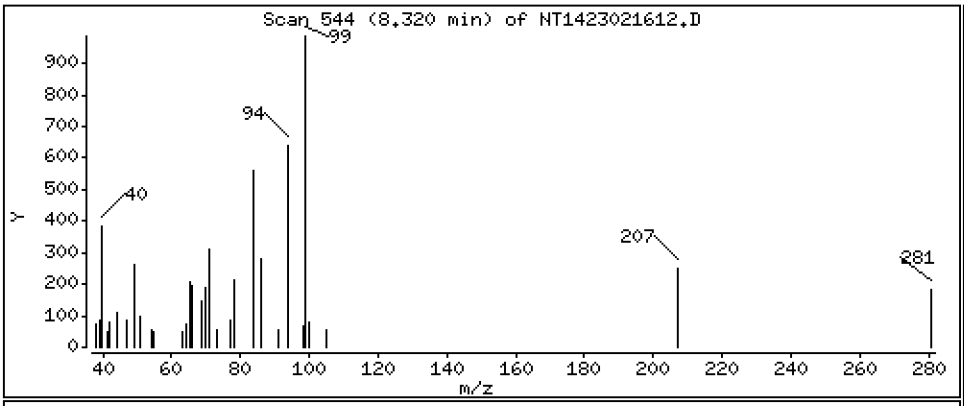
Operator: DSD

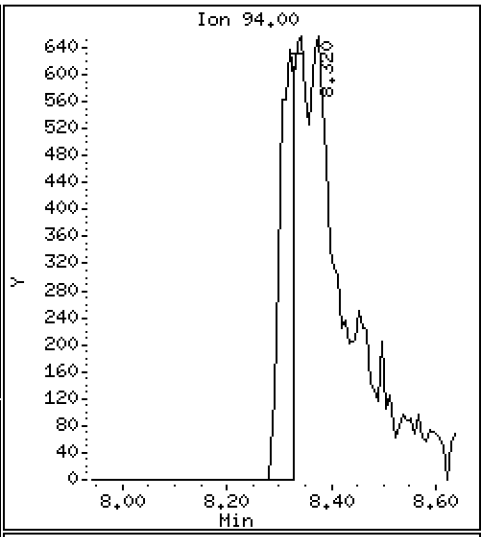
Column phase: ZB-5msi

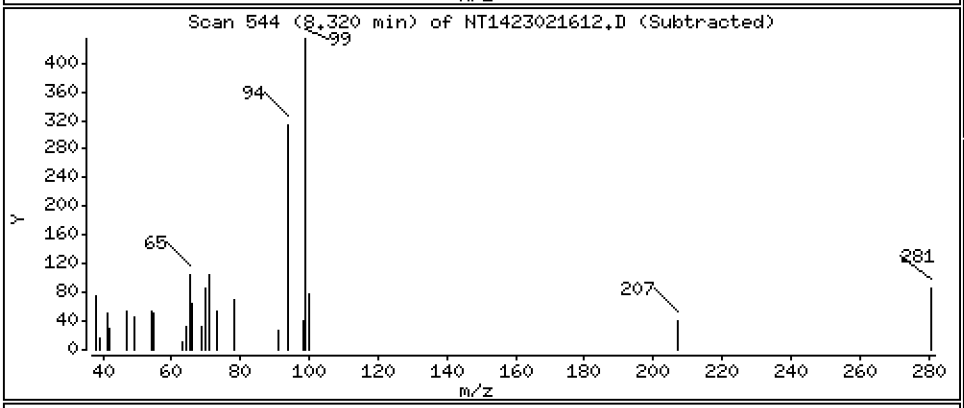
Column diameter: 0.25

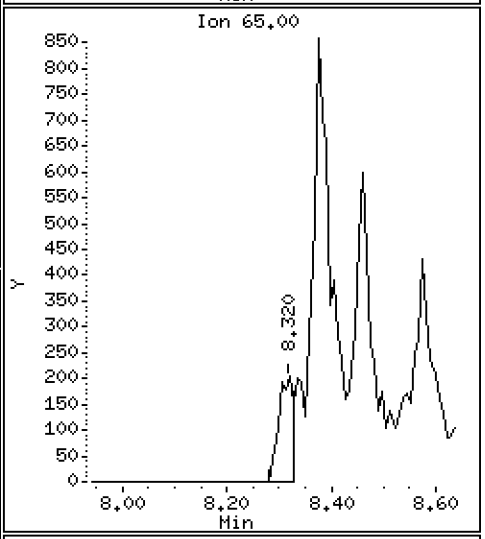
3 Phenol

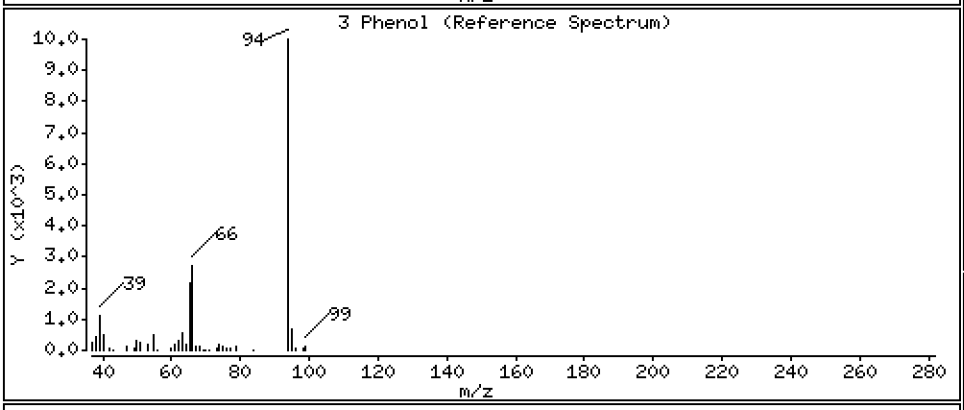
Concentration: 0.008833 ug/mL

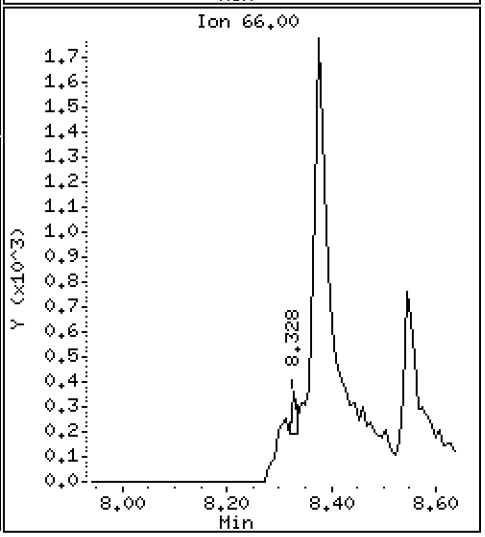


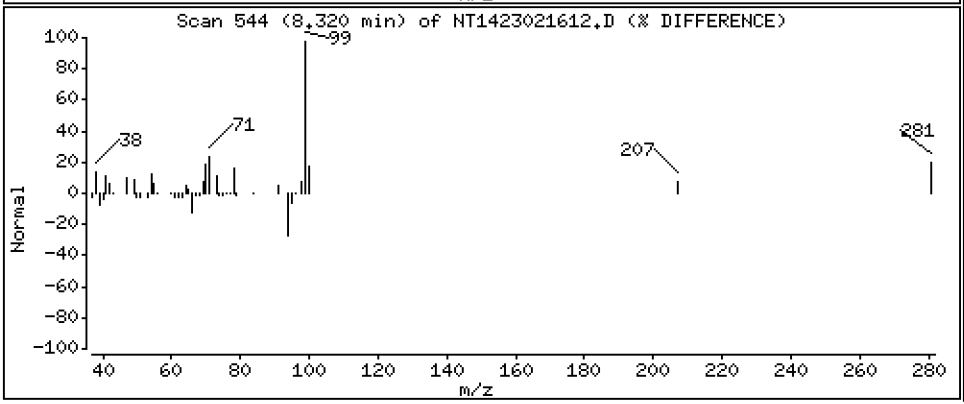












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021612.D

Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

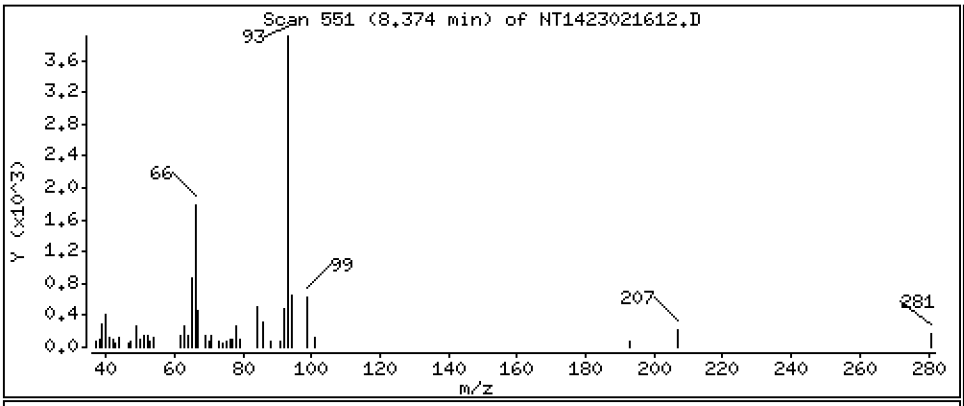
Operator: DSD

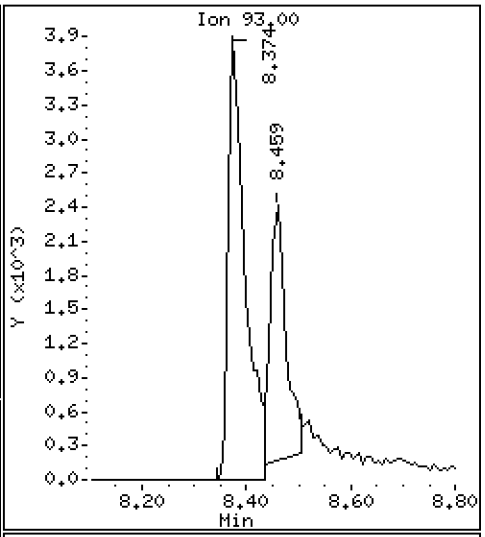
Column phase: ZB-5msi

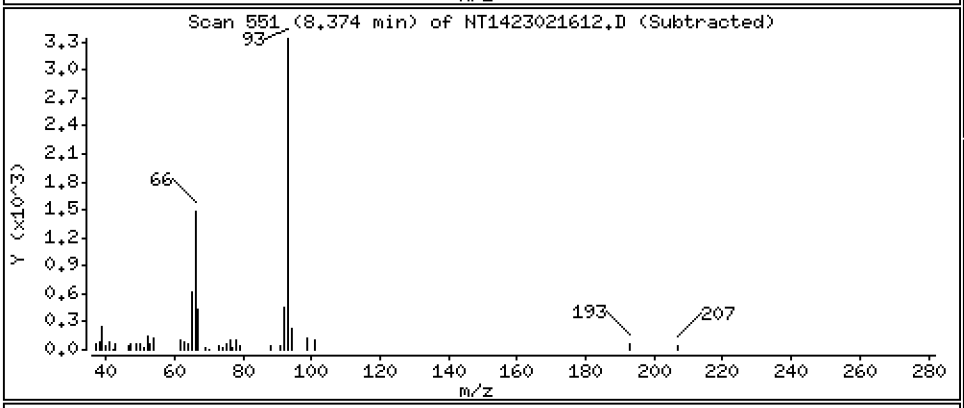
Column diameter: 0.25

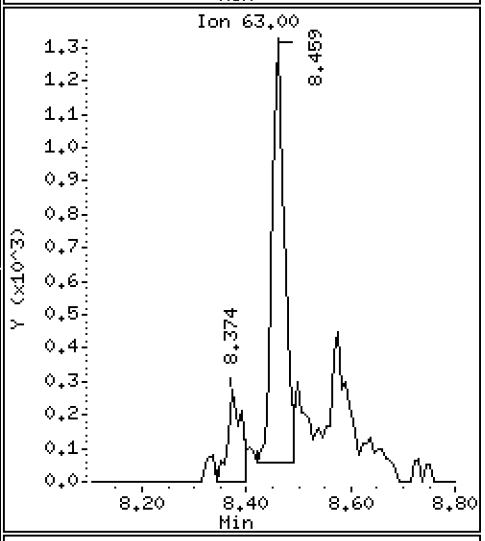
4 Bis(2-Chloroethyl)ether

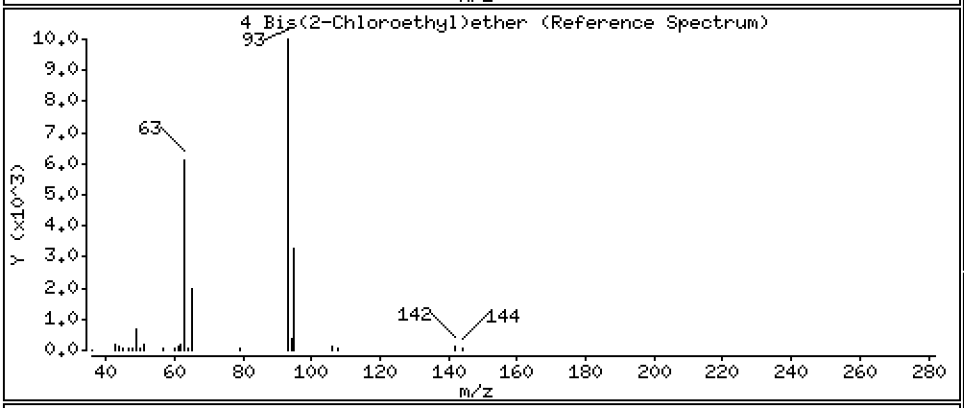
Concentration: 0.07728 ug/mL

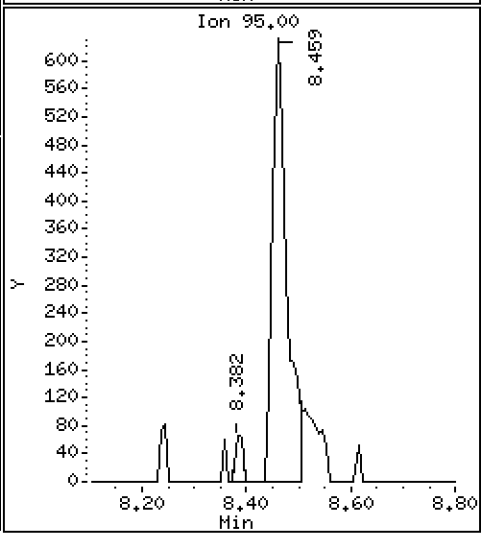


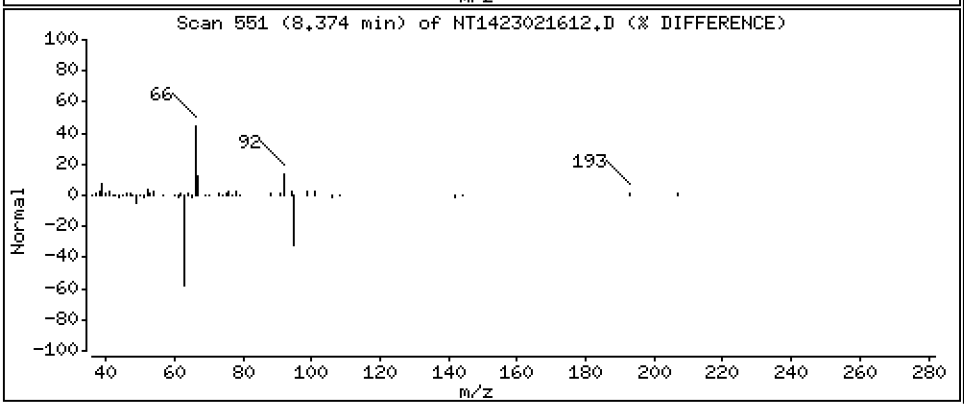












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021612.D

Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

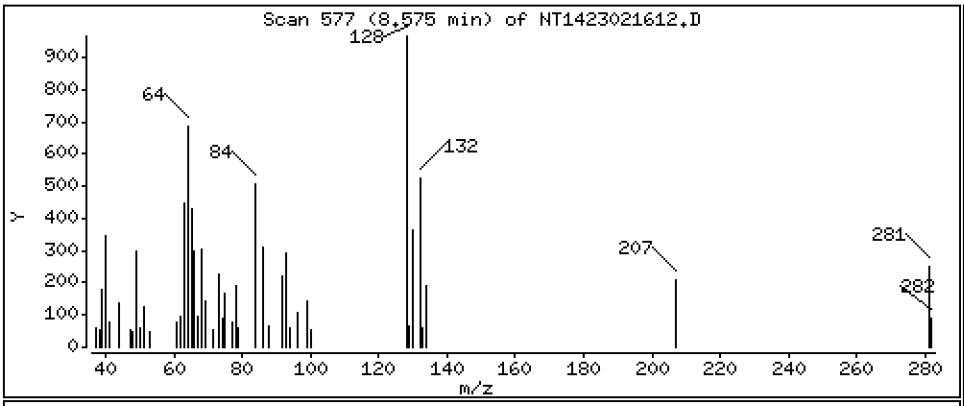
Operator: DSD

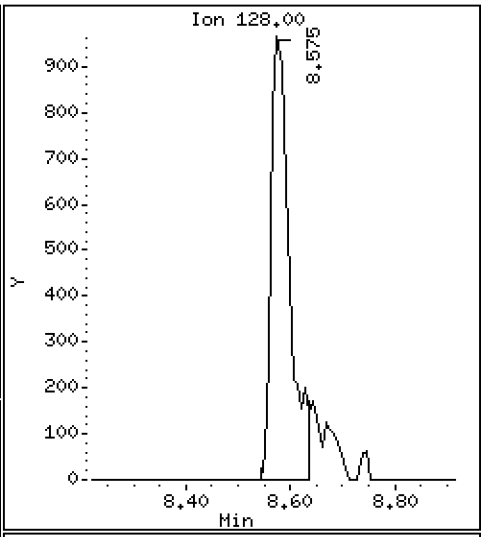
Column phase: ZB-5msi

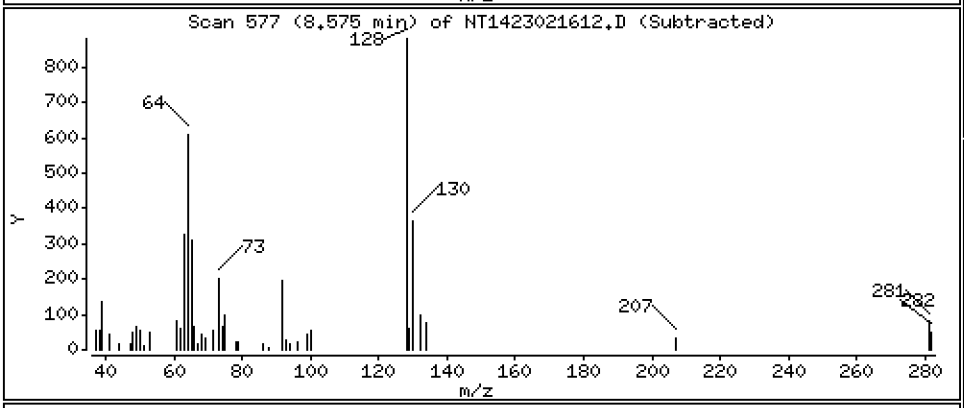
Column diameter: 0.25

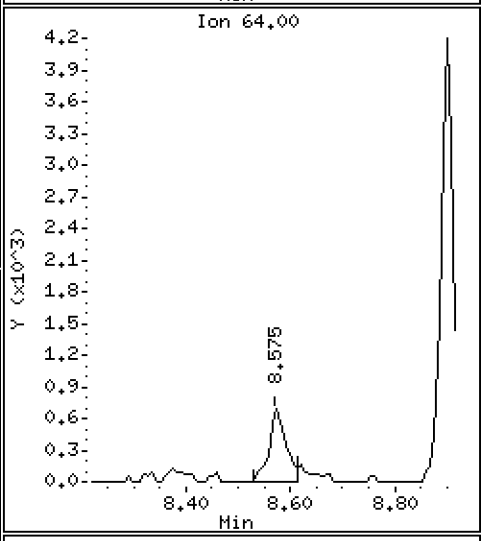
6 2-Chlorophenol

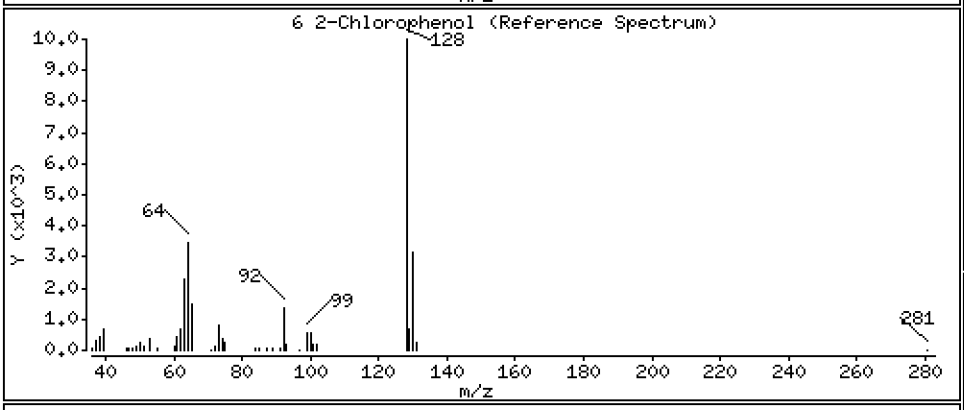
Concentration: 0.02252 ug/mL

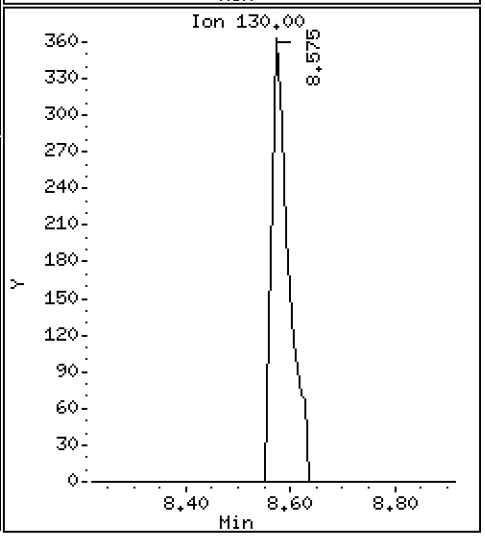


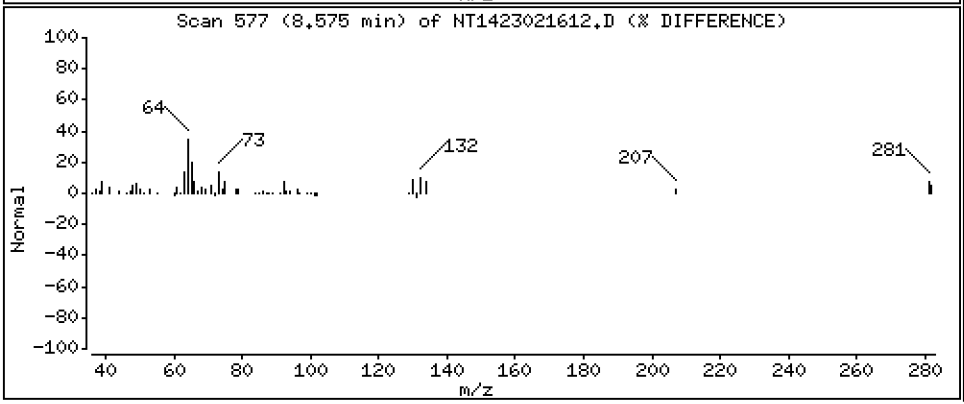












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

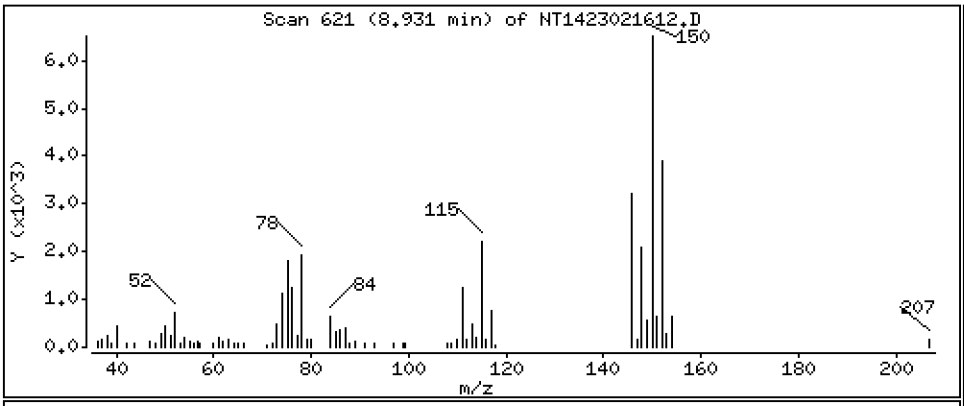
Operator: DSD

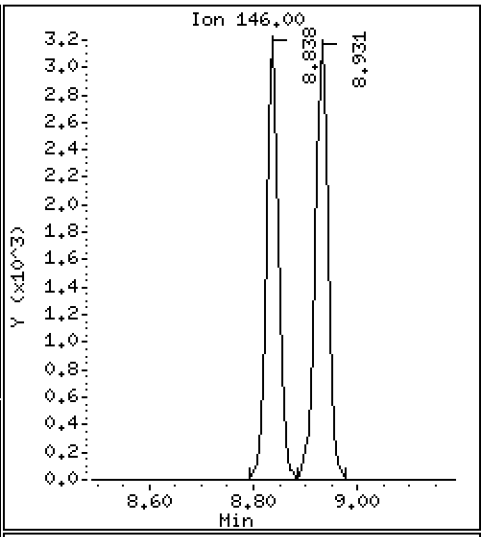
Column phase: ZB-5msi

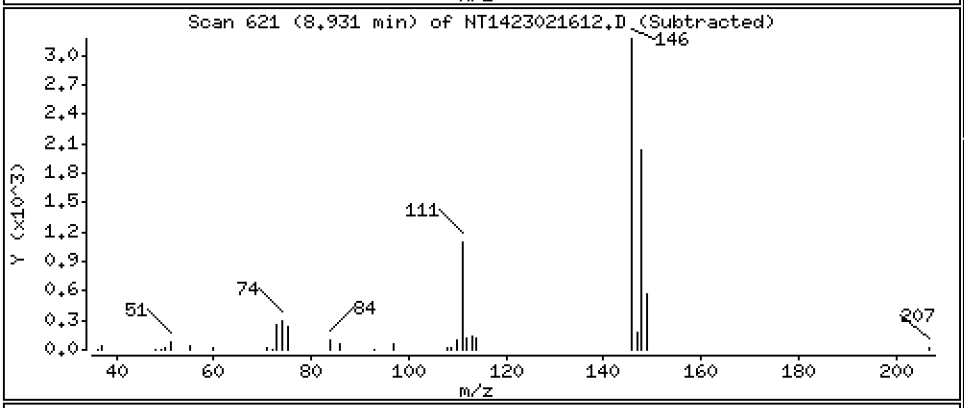
Column diameter: 0.25

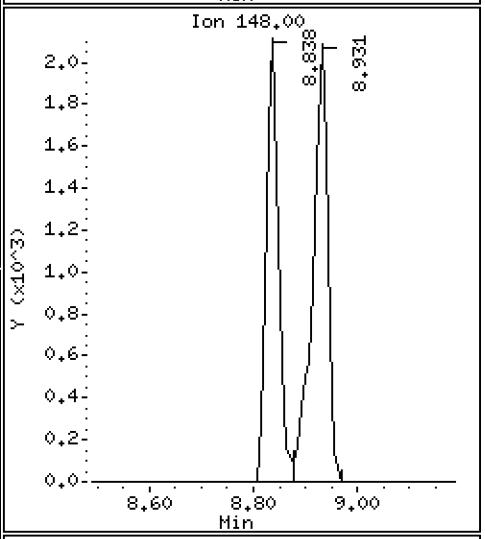
7 1,3-Dichlorobenzene

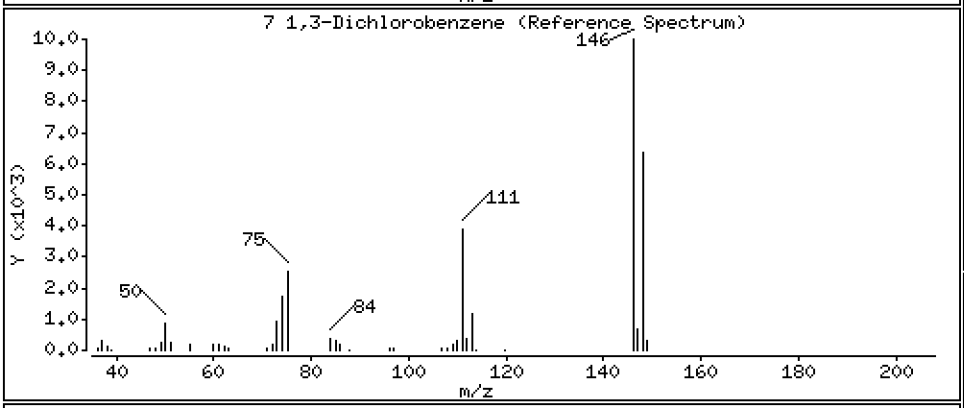
Concentration: 0.04564 ug/mL

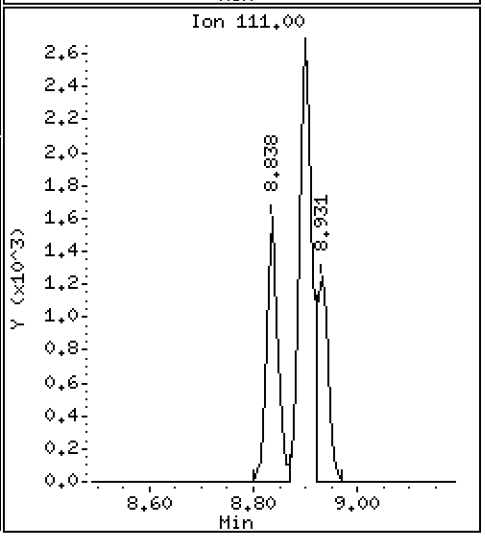


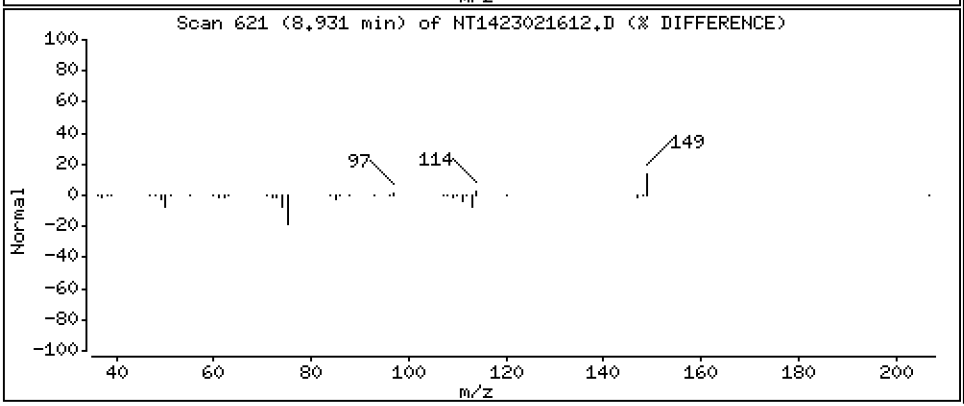












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021612.D

Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

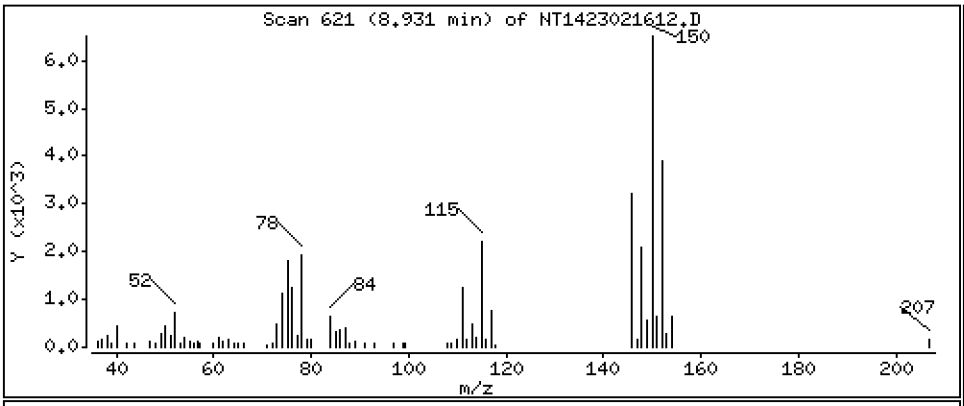
Operator: DSD

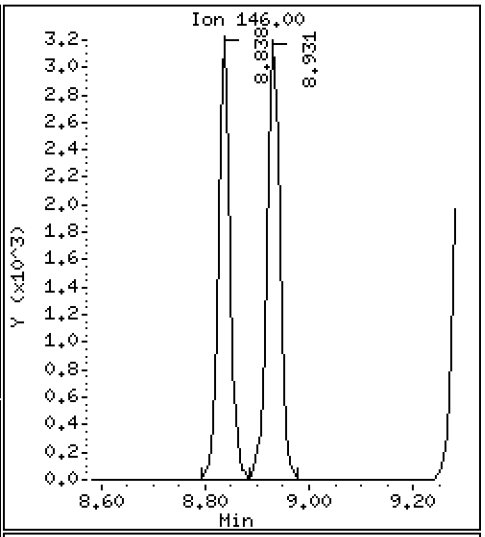
Column phase: ZB-5msi

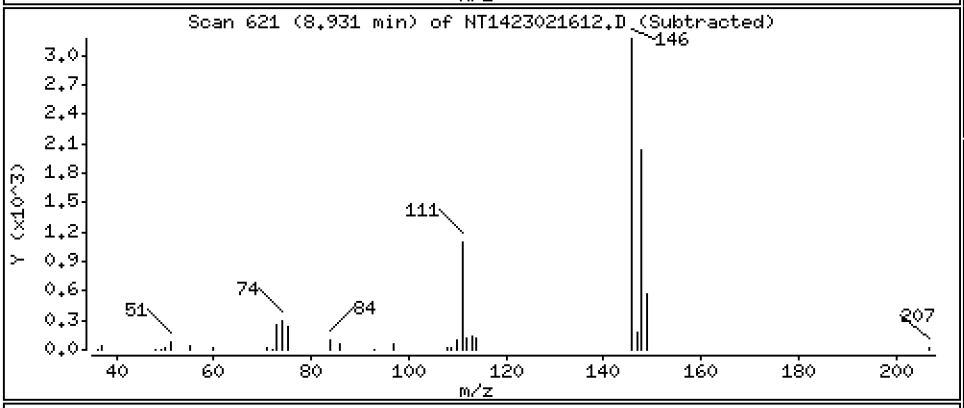
Column diameter: 0.25

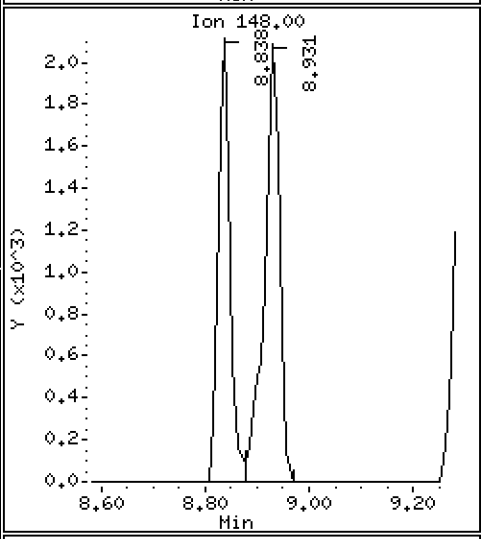
9 1,4-Dichlorobenzene

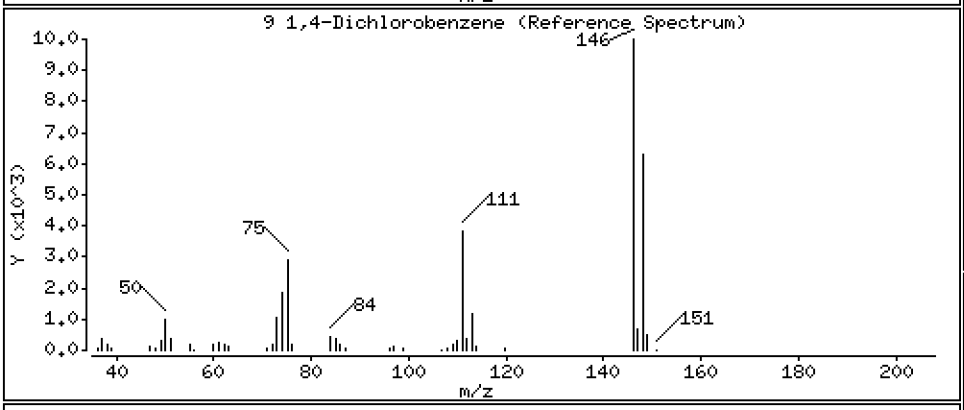
Concentration: 0.04809 ug/mL

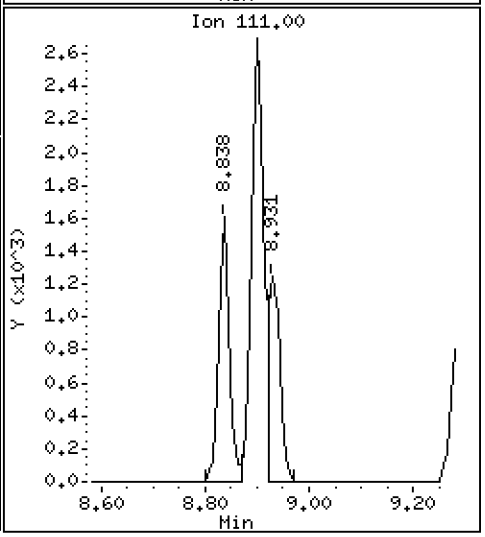


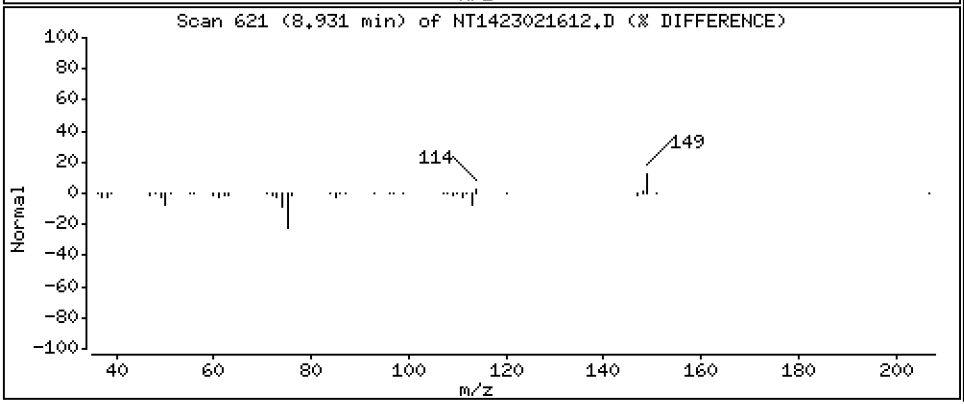












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021612.D

Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

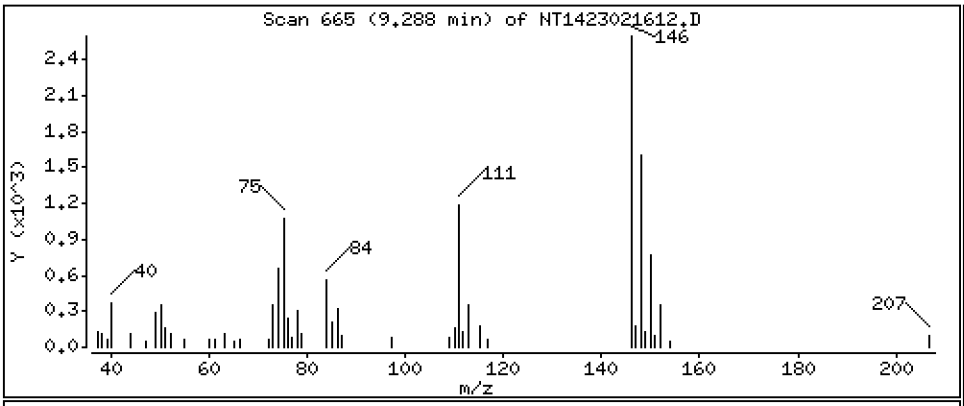
Operator: DSD

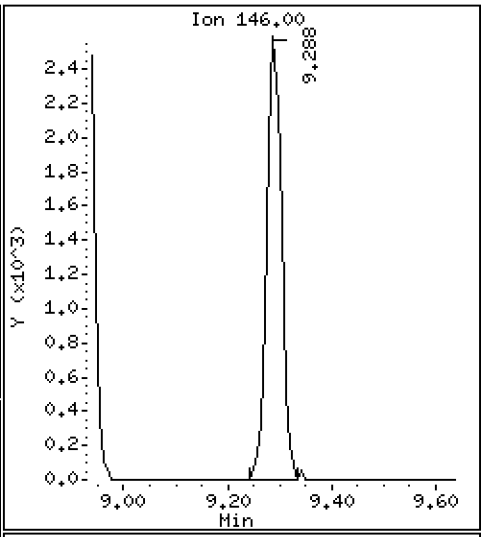
Column phase: ZB-5msi

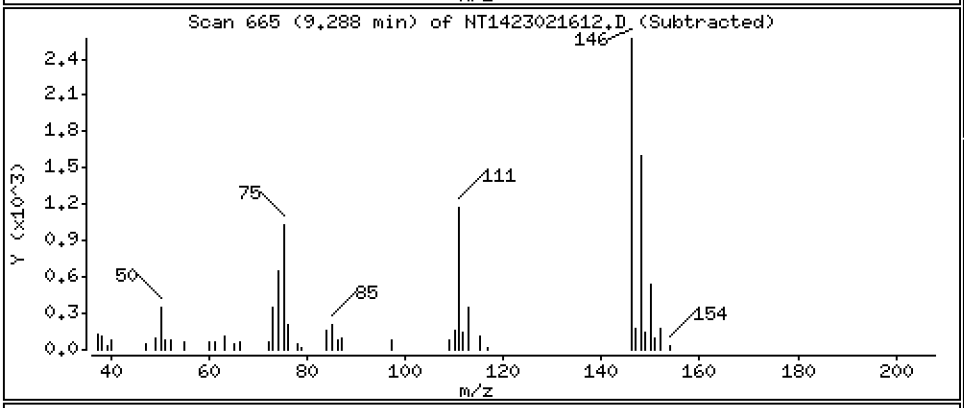
Column diameter: 0.25

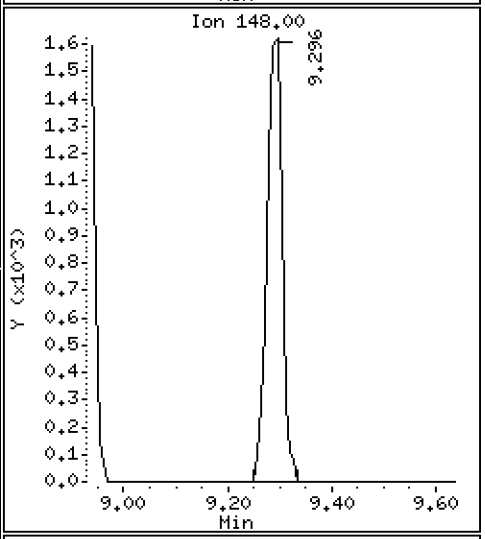
12 1,2-Dichlorobenzene

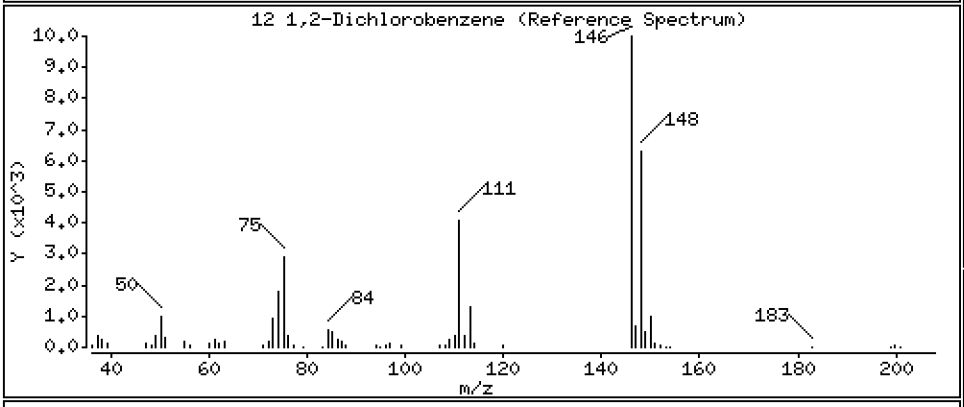
Concentration: 0.04512 ug/mL

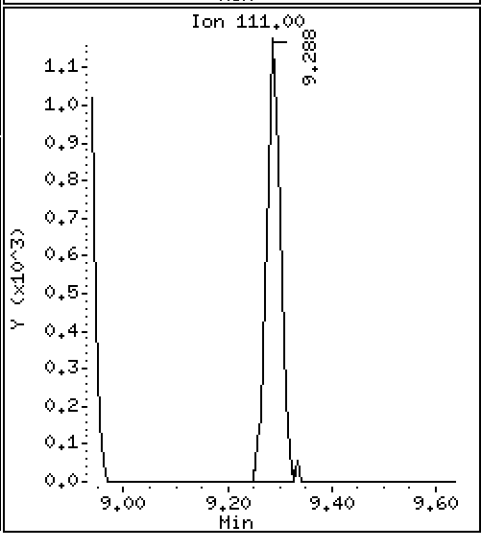


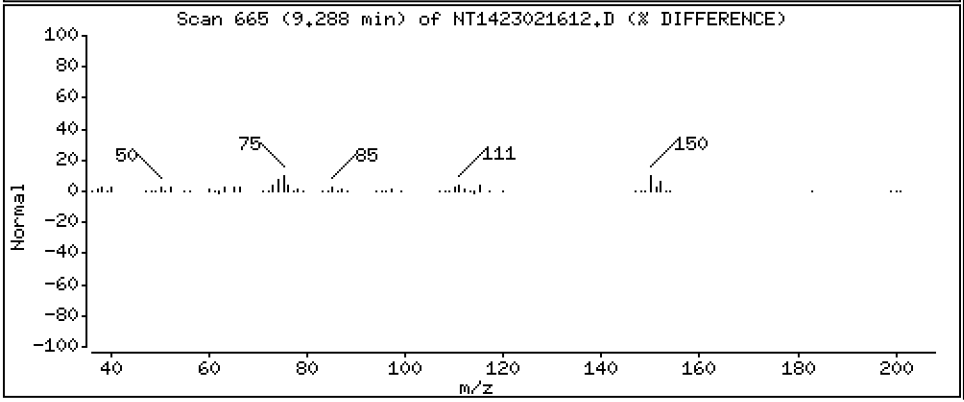












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021612.D

Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

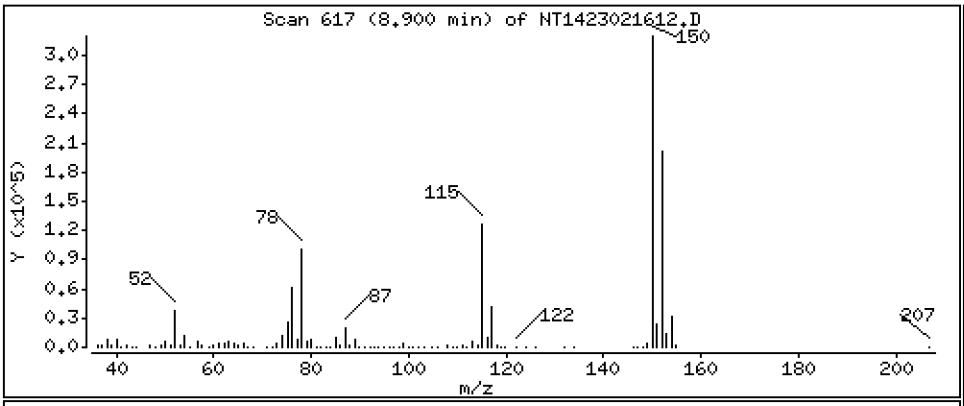
Operator: DSD

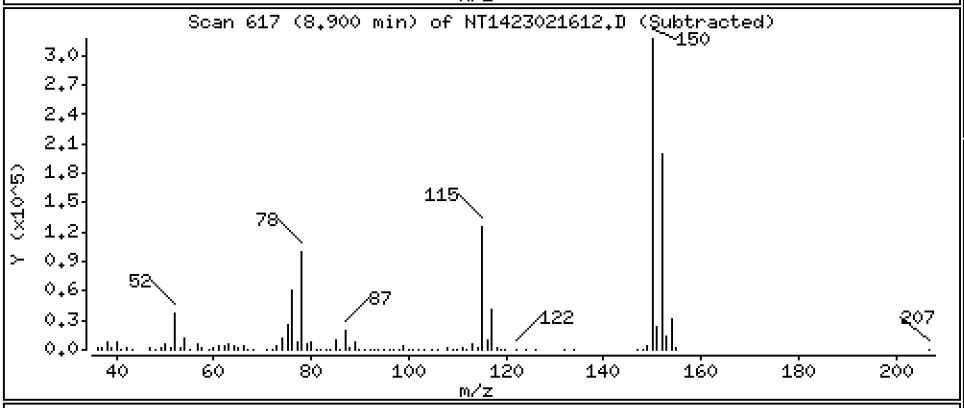
Column phase: ZB-5msi

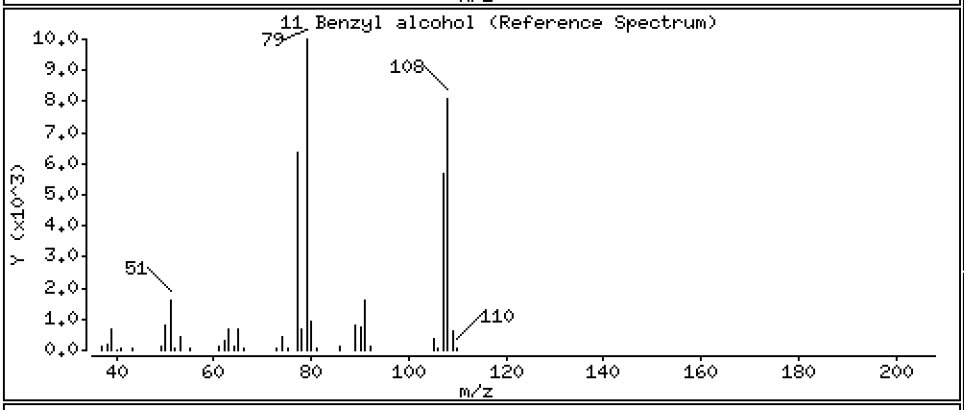
Column diameter: 0.25

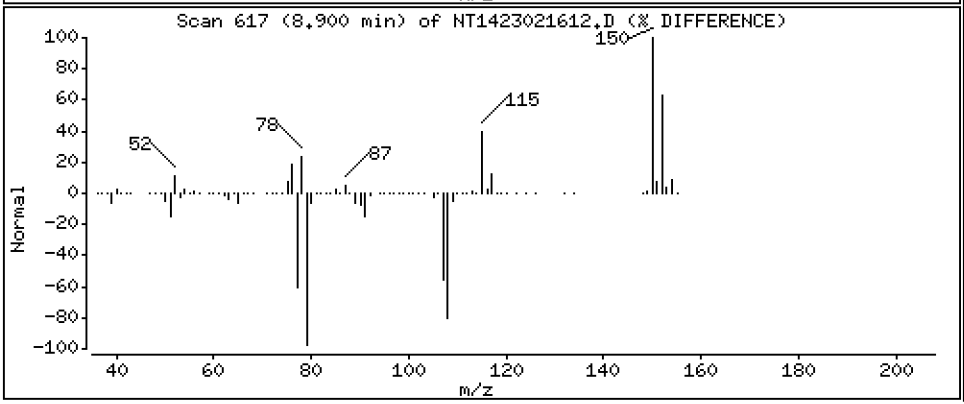
11 Benzyl alcohol

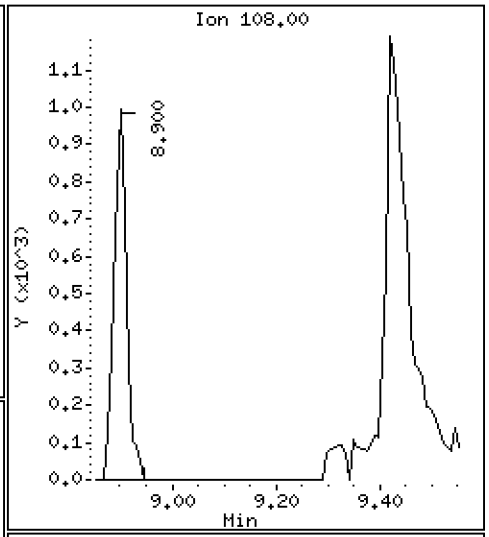
Concentration: 0.01927 ug/mL

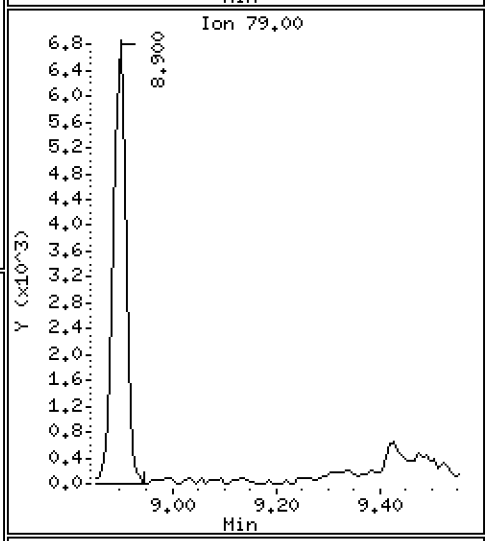


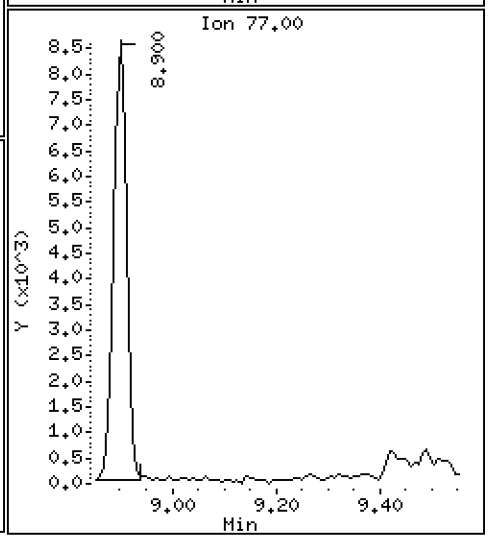












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021612.D

Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

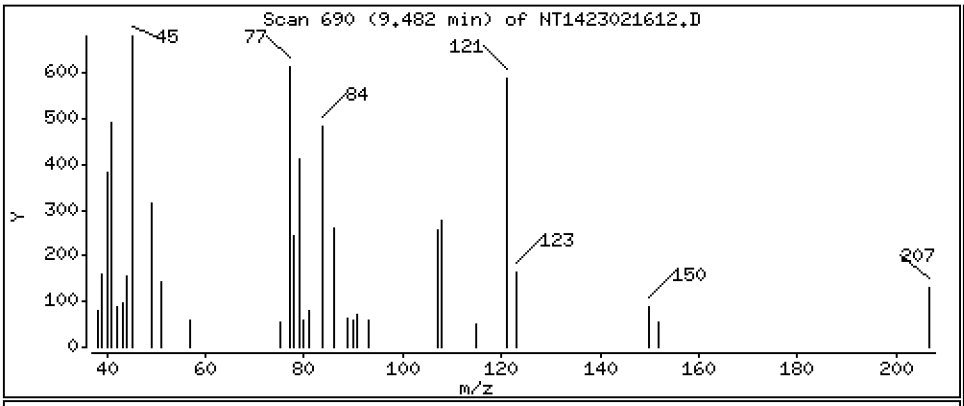
Operator: DSD

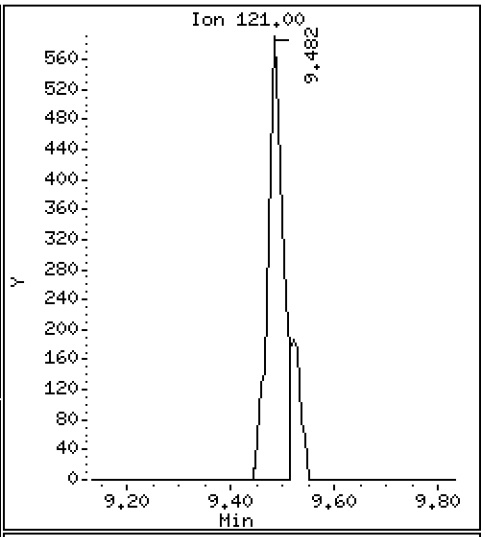
Column phase: ZB-5msi

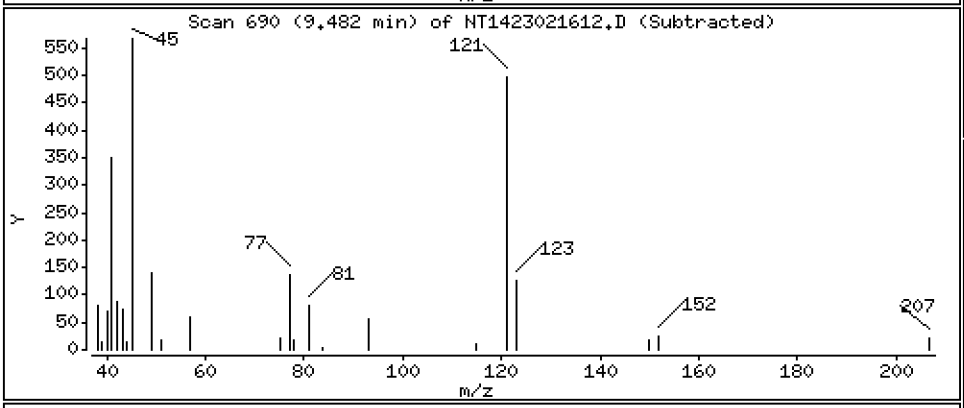
Column diameter: 0.25

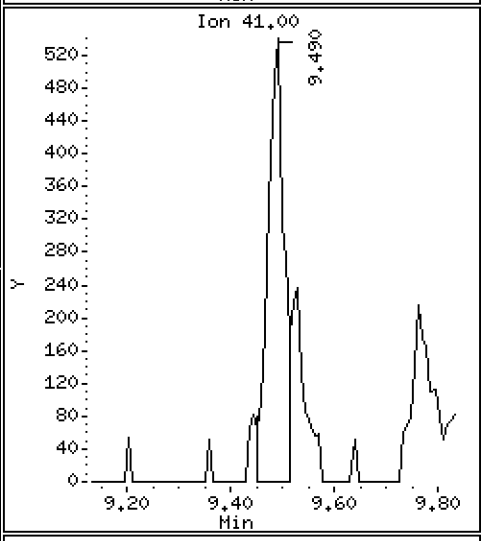
14 2,2'-oxybis(1-Chloropropane)

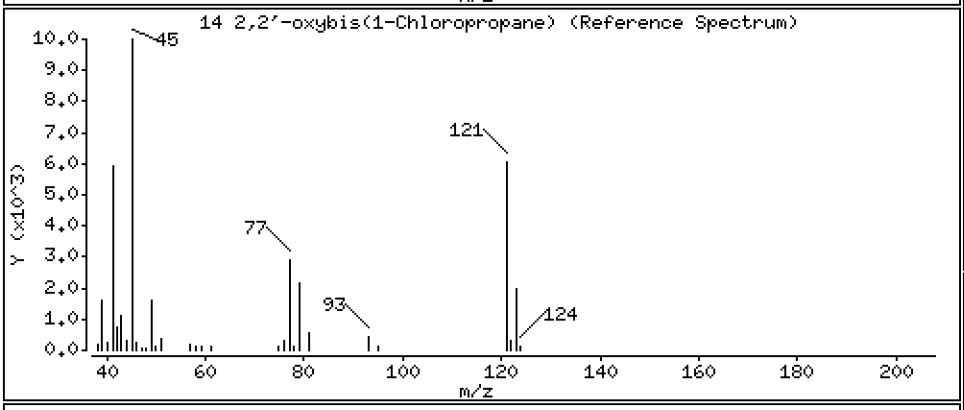
Concentration: 0.03727 ug/mL

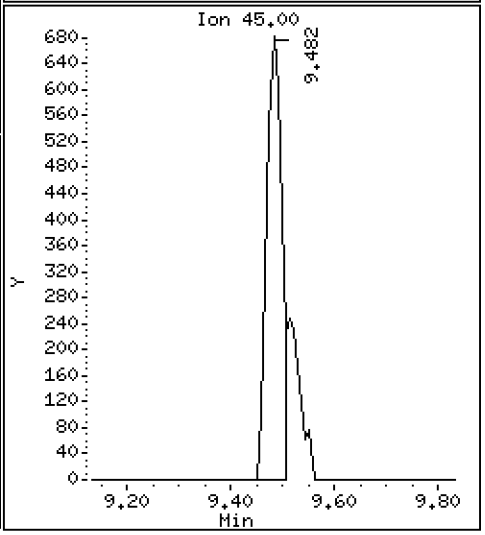


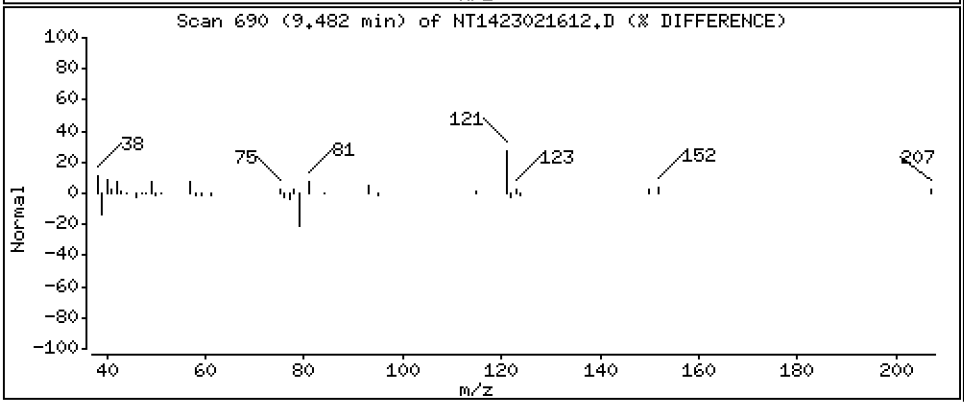












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

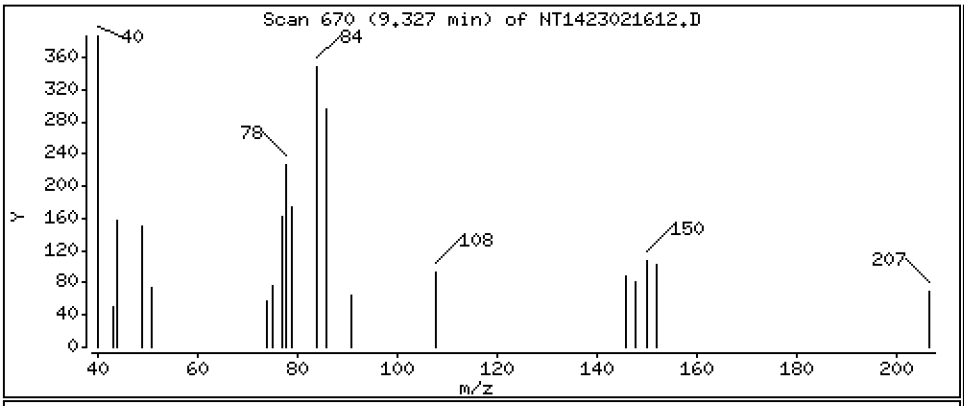
Operator: DSD

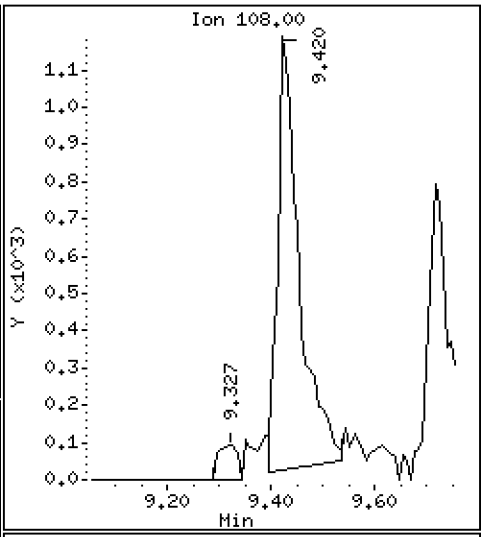
Column phase: ZB-5msi

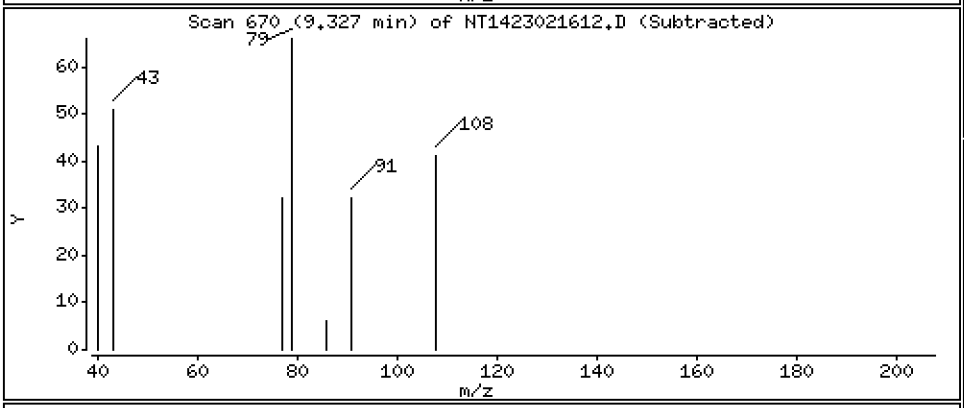
Column diameter: 0.25

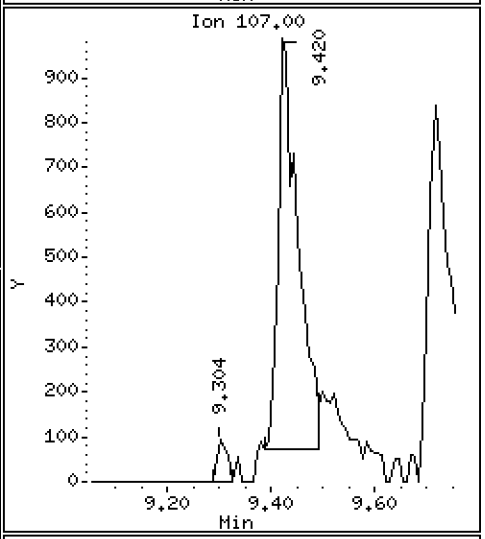
13 2-Methylphenol

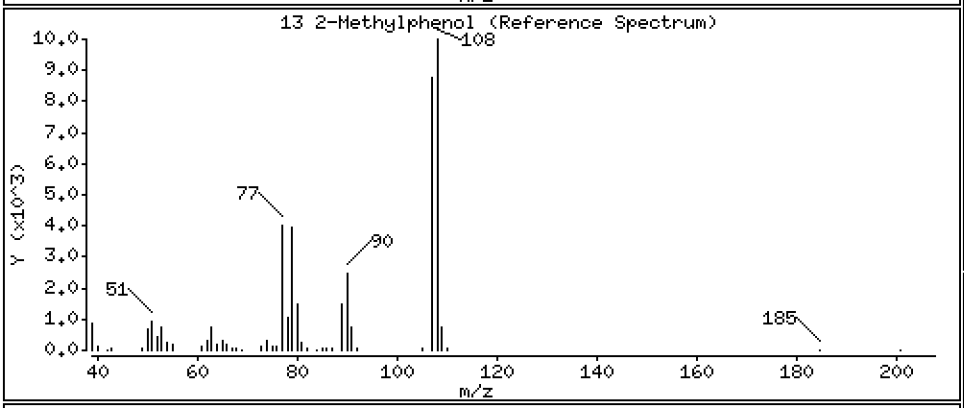
Concentration: 0.002272 ug/mL

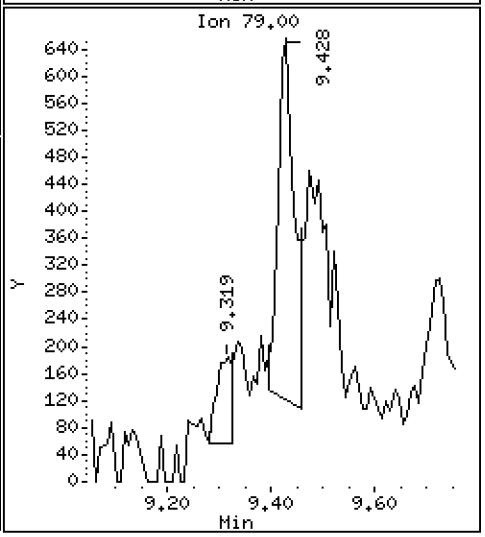


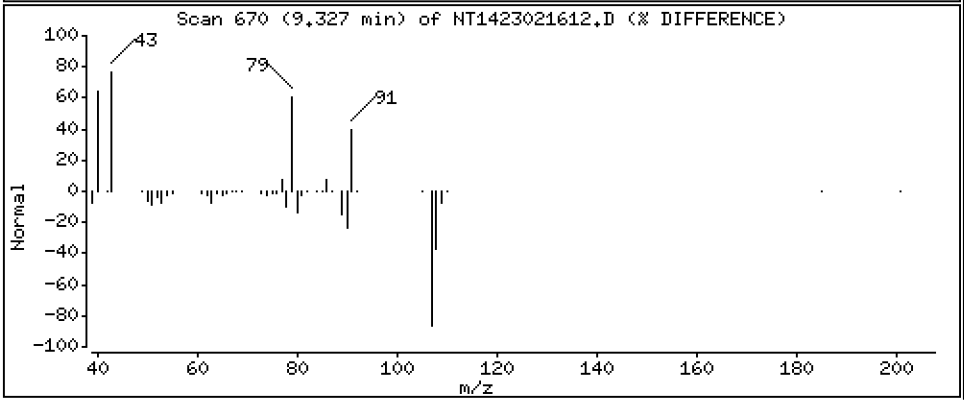












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

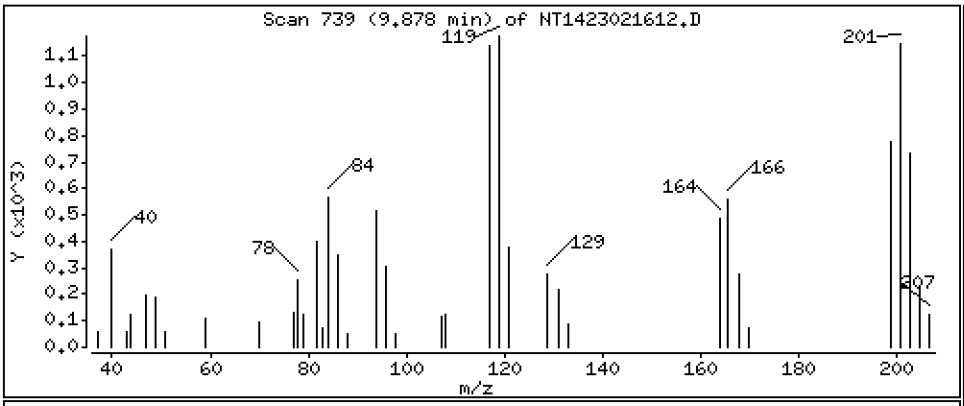
Operator: DSD

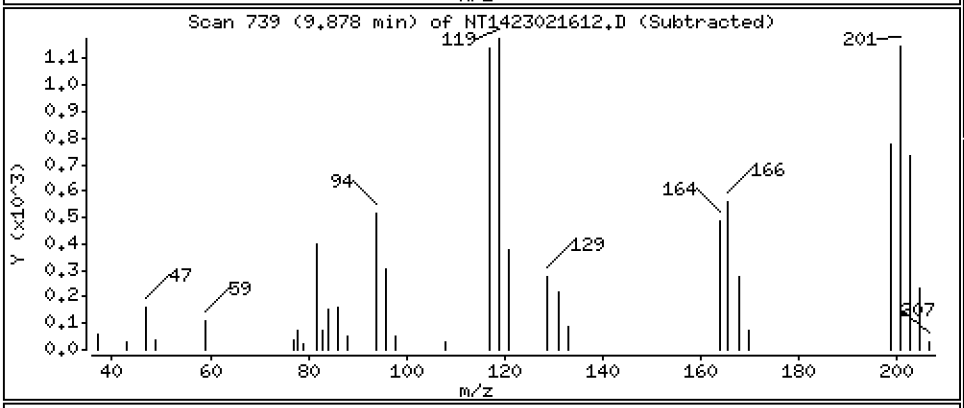
Column phase: ZB-5msi

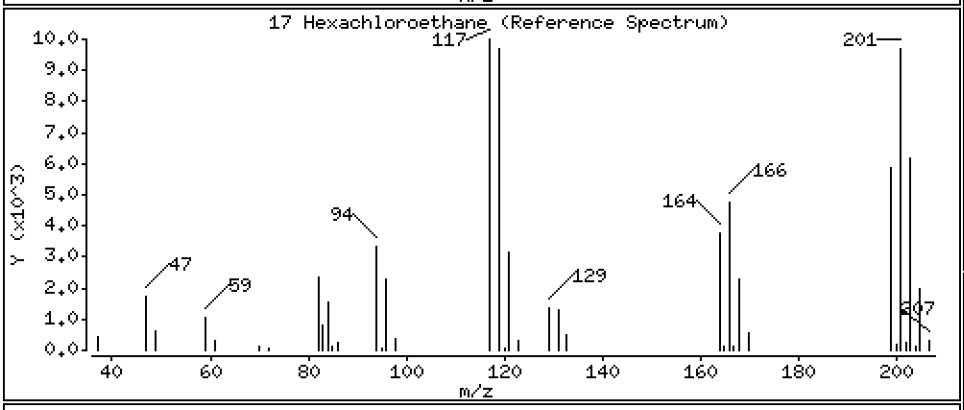
Column diameter: 0.25

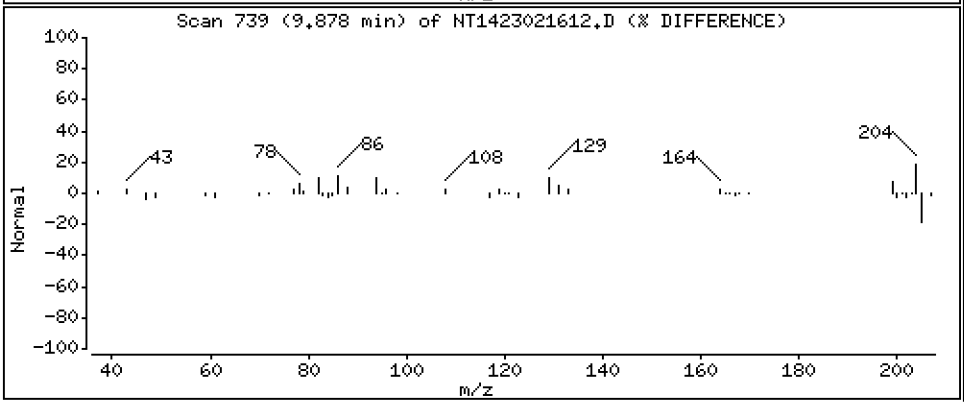
17 Hexachloroethane

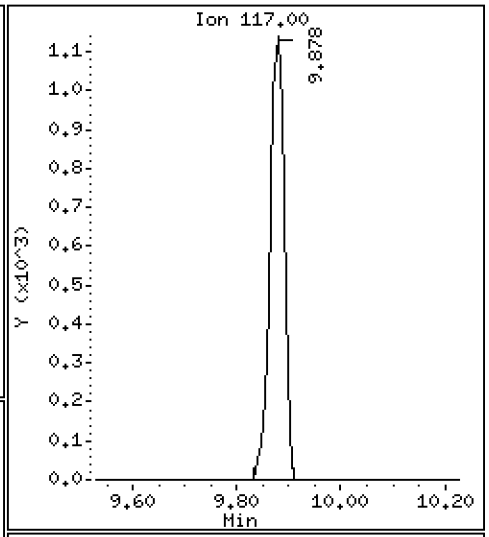
Concentration: 0.04396 ug/mL

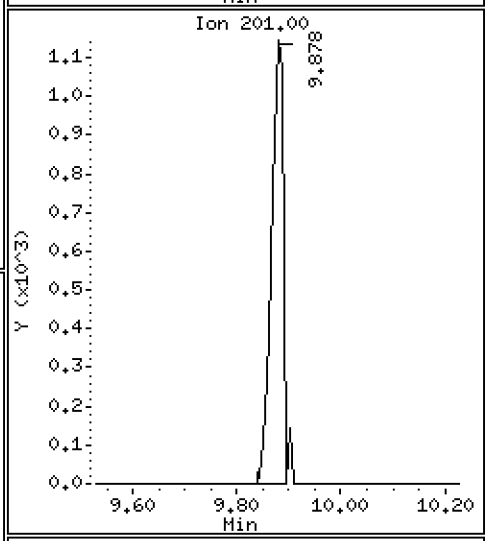


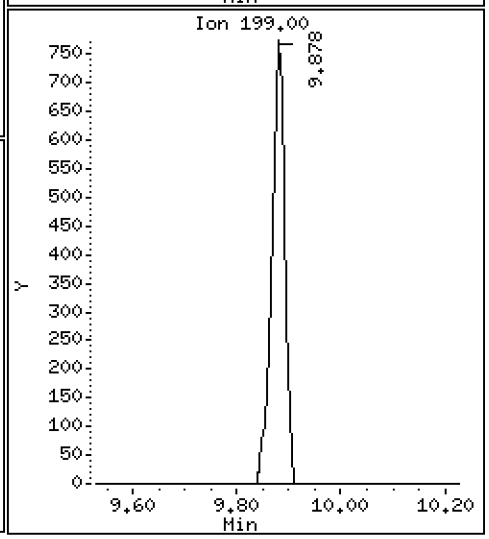












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

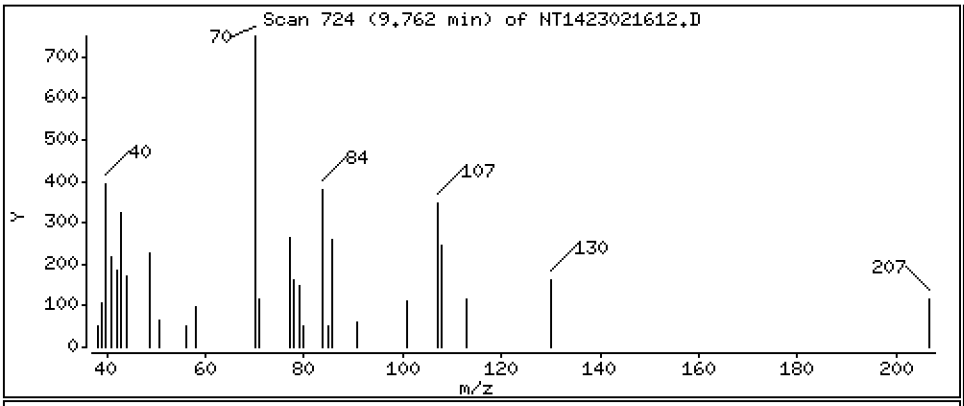
Operator: DSD

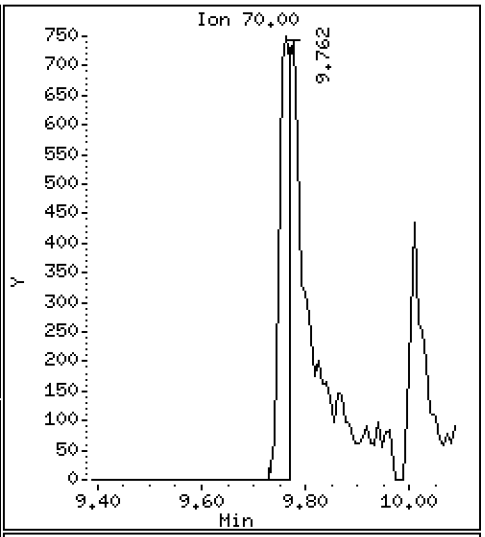
Column phase: ZB-5msi

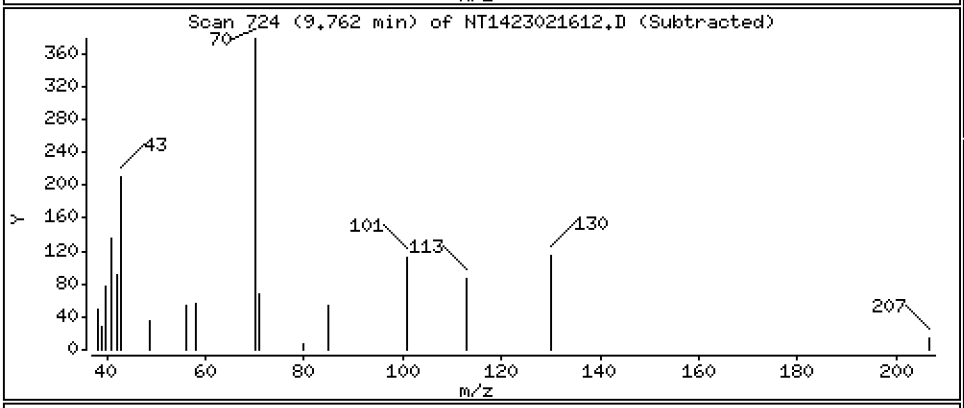
Column diameter: 0.25

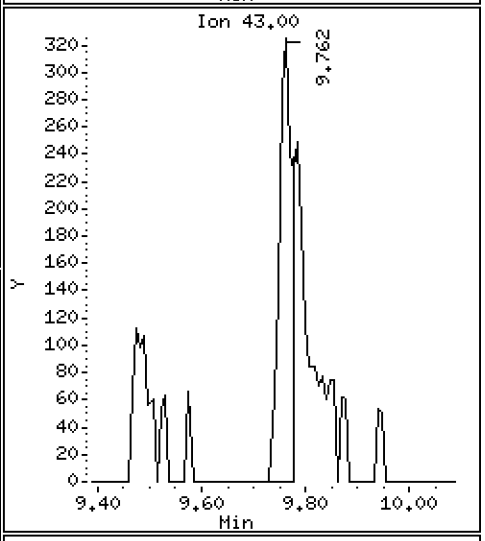
16 N-Nitroso-di-n-propylamine

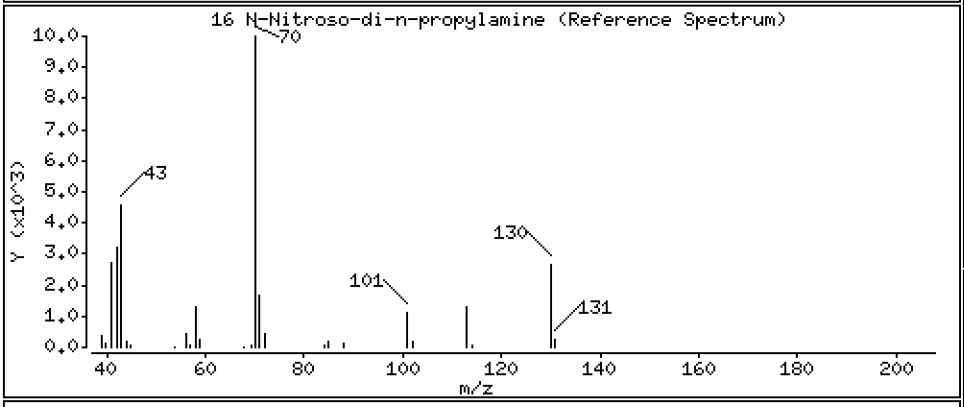
Concentration: 0.01282 ug/mL

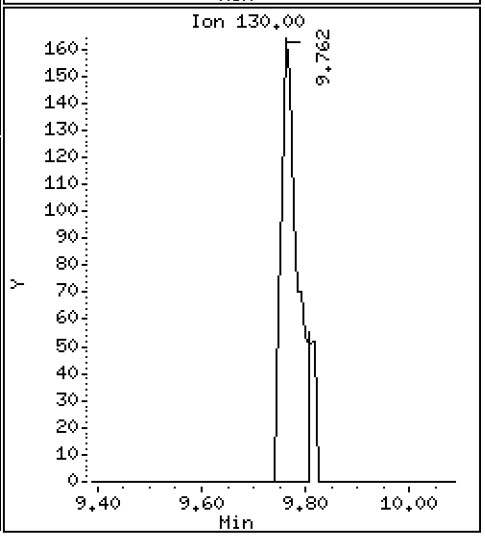


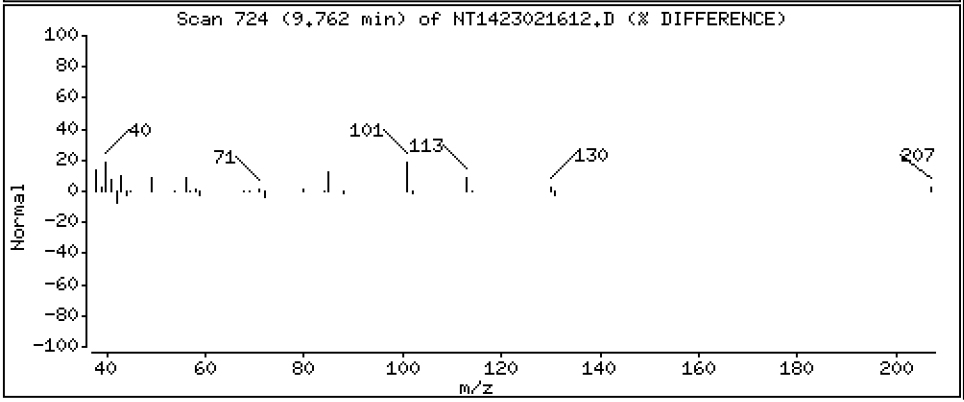












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

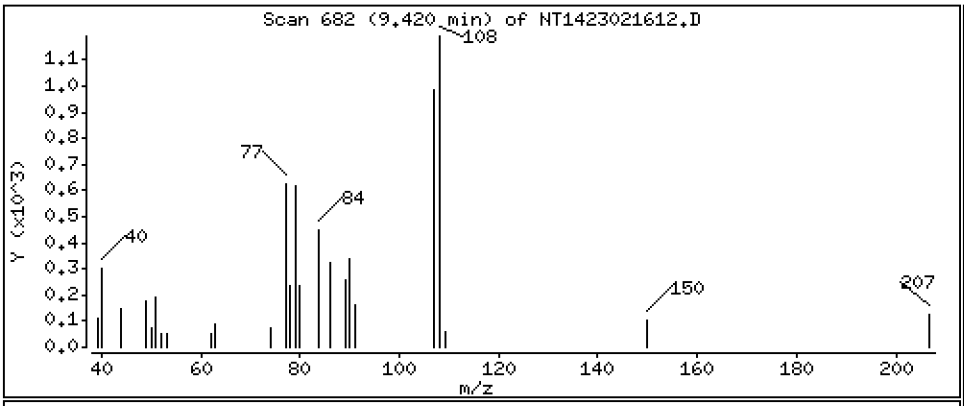
Operator: DSD

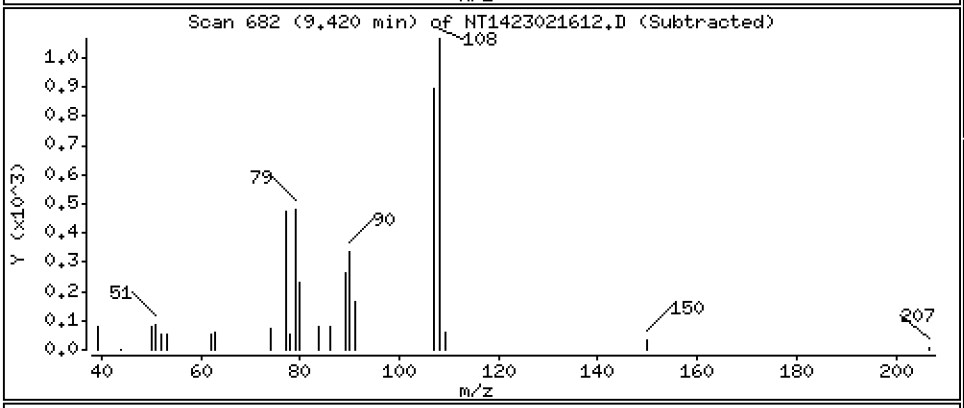
Column phase: ZB-5msi

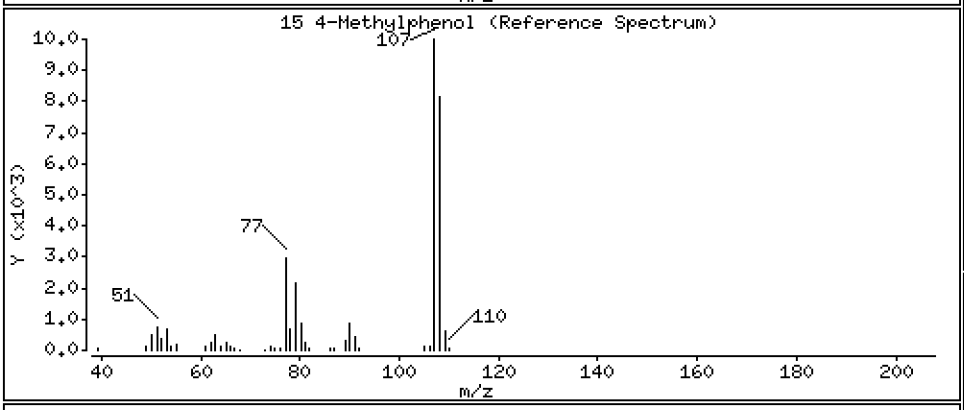
Column diameter: 0.25

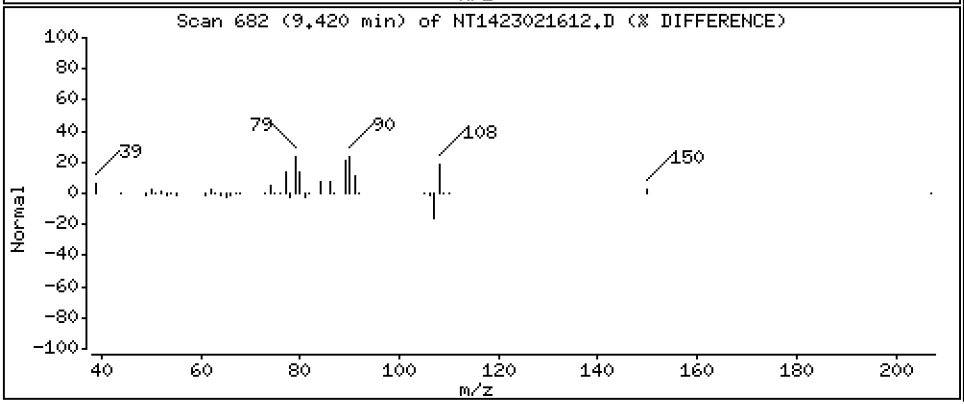
15 4-Methylphenol

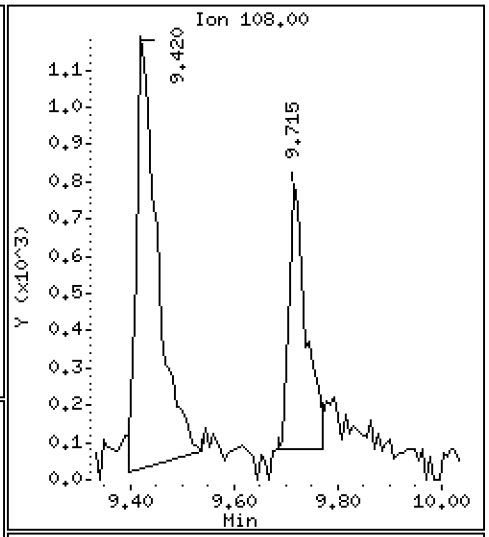
Concentration: 0.03035 ug/mL

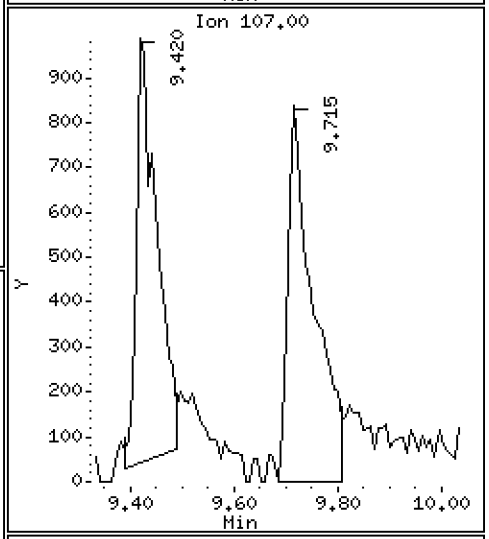


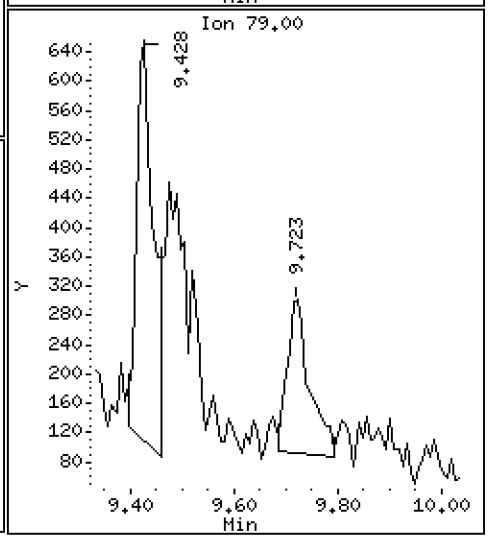












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

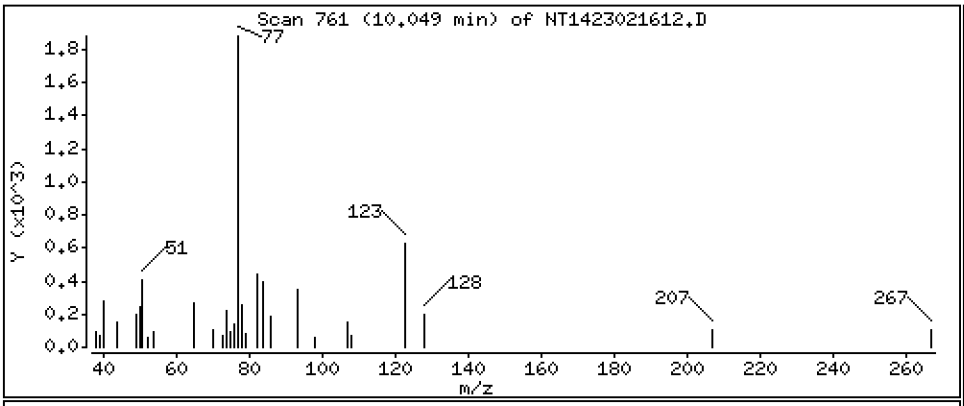
Operator: DSD

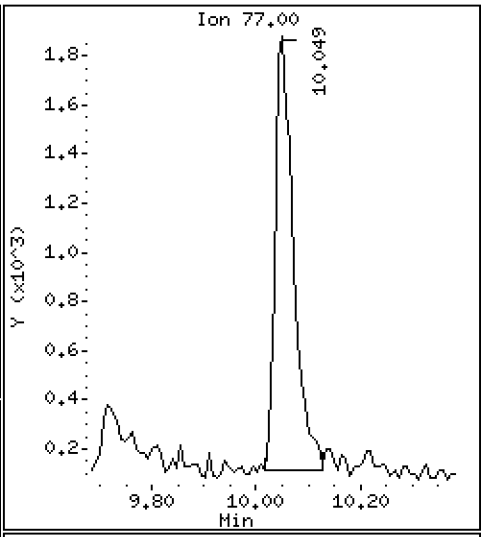
Column phase: ZB-5msi

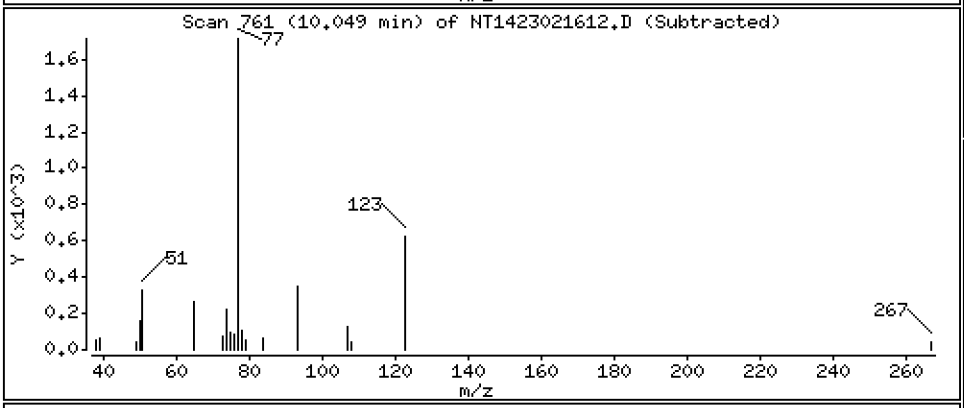
Column diameter: 0.25

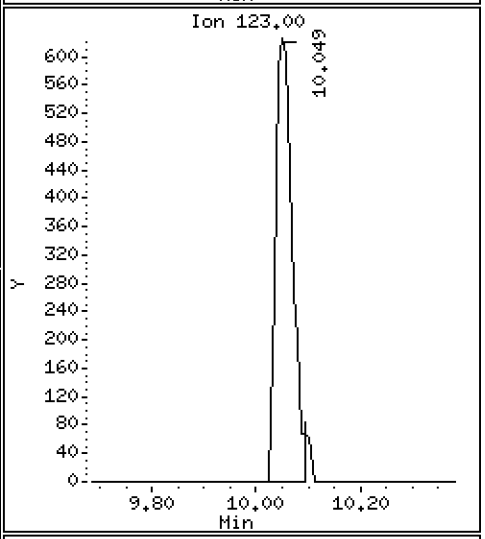
19 Nitrobenzene

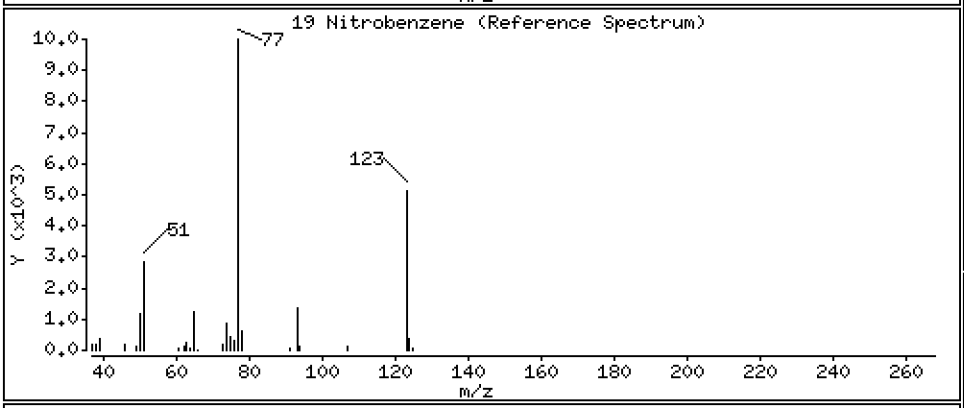
Concentration: 0.03254 ug/mL

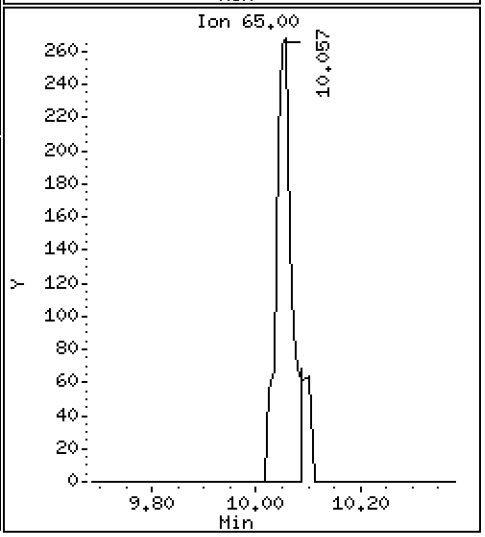


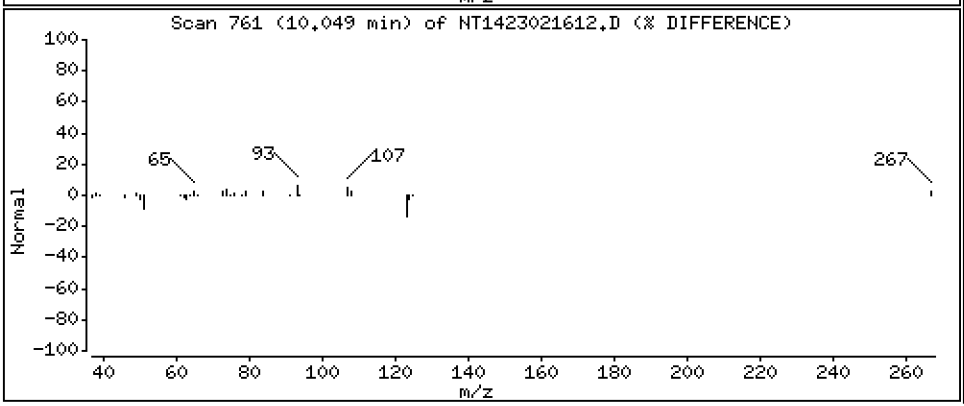












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

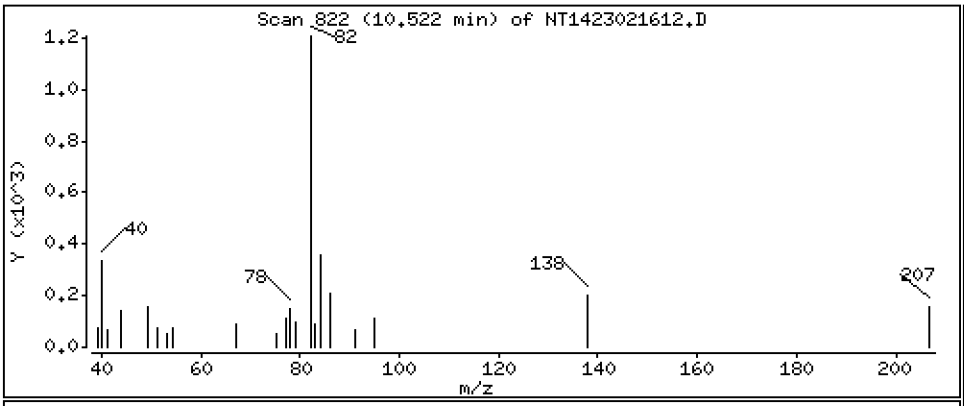
Operator: DSD

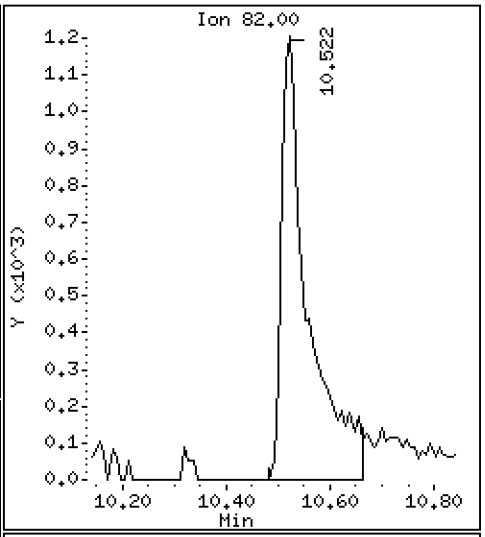
Column phase: ZB-5msi

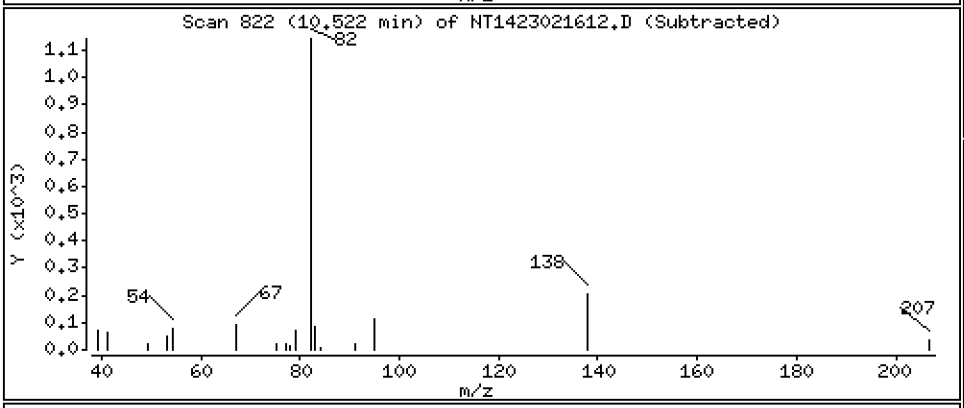
Column diameter: 0.25

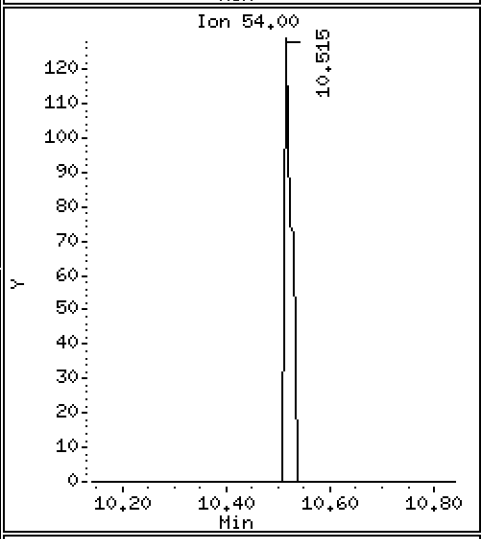
20 Isophorone

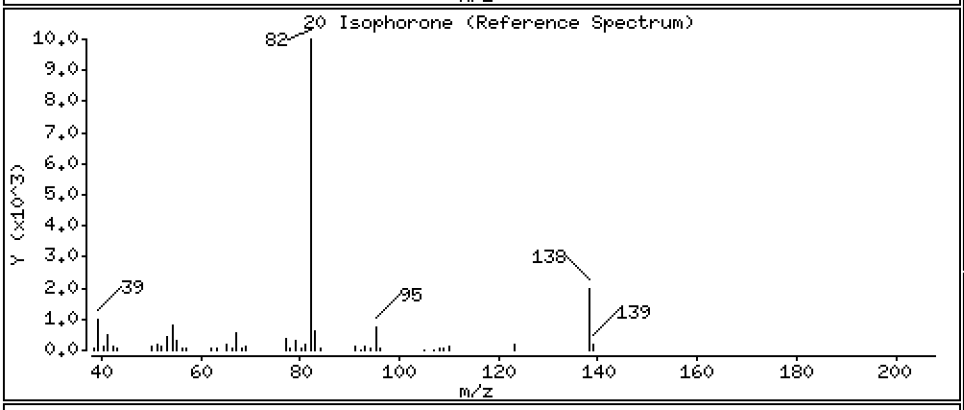
Concentration: 0.02541 ug/mL

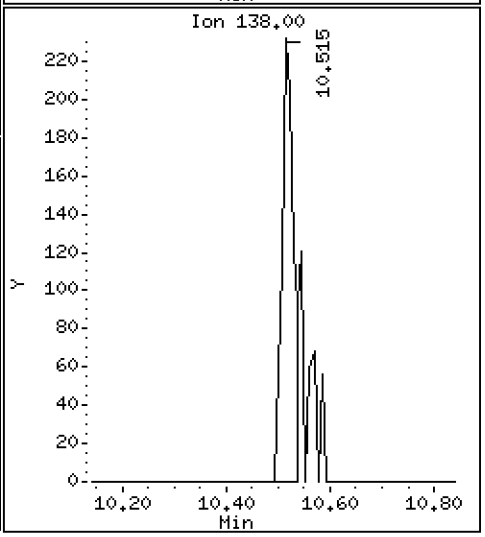


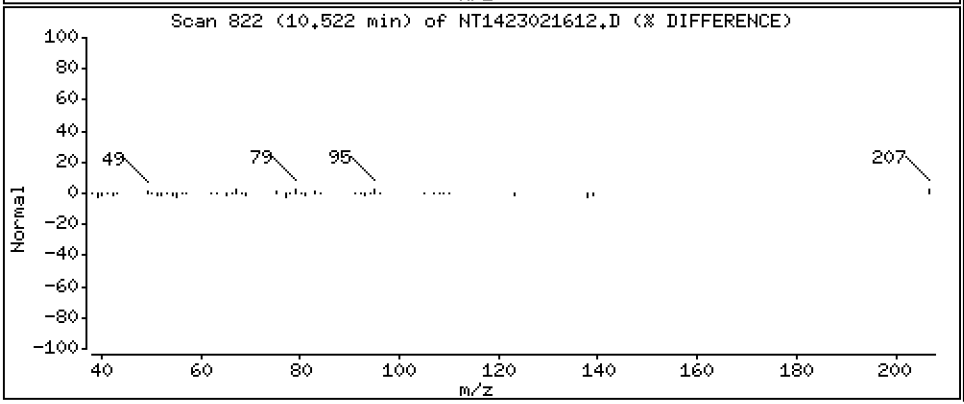












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021612.D

Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

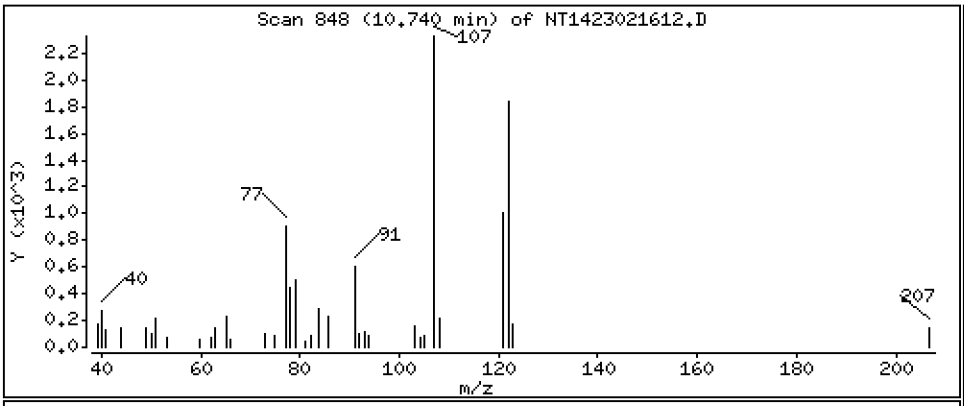
Operator: DSD

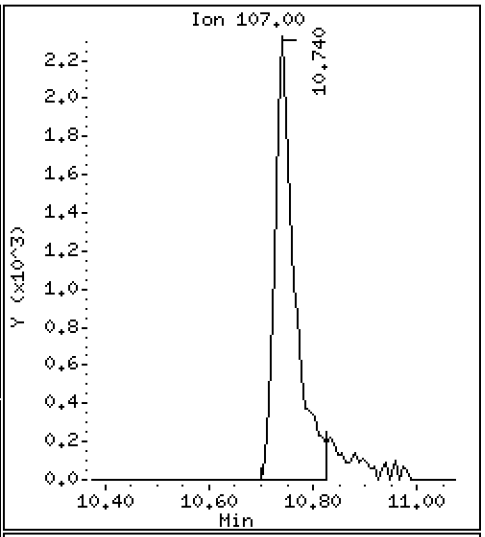
Column phase: ZB-5msi

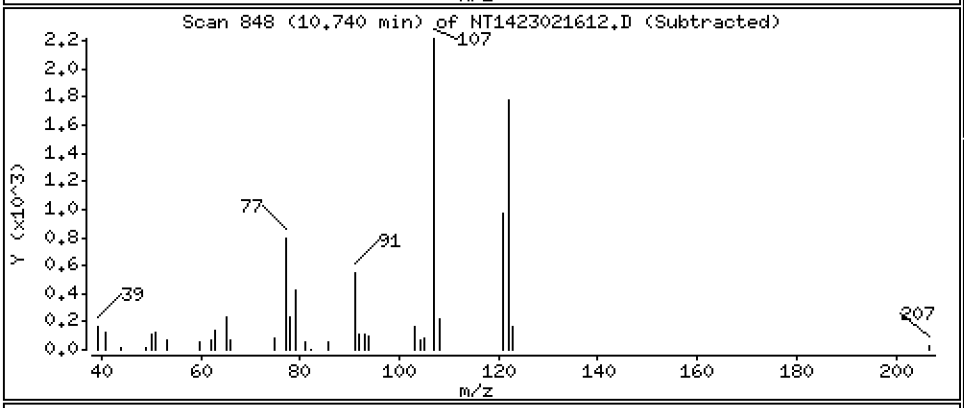
Column diameter: 0.25

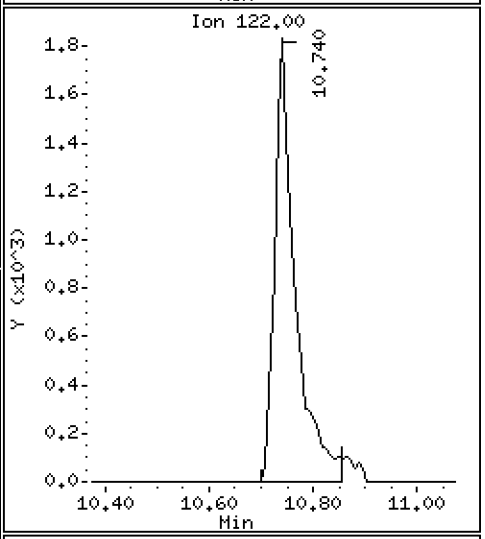
22 2,4-Dimethylphenol

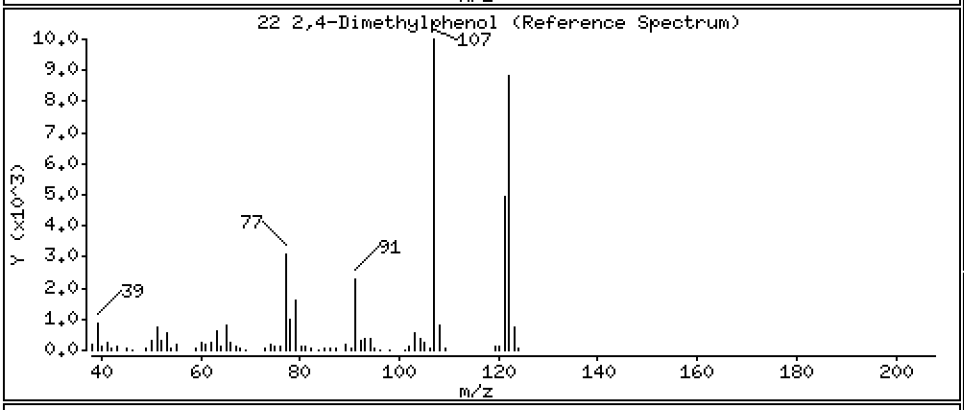
Concentration: 0.06022 ug/mL

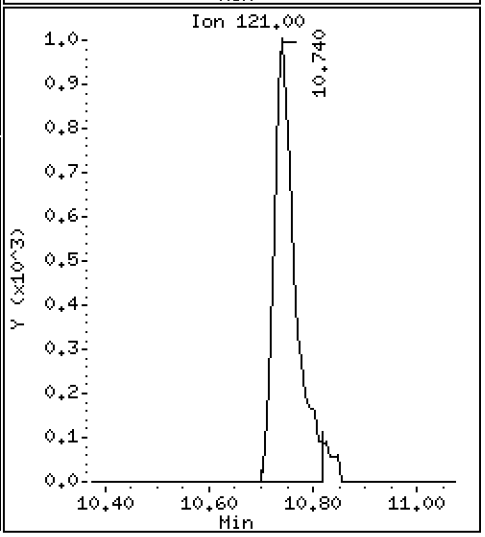


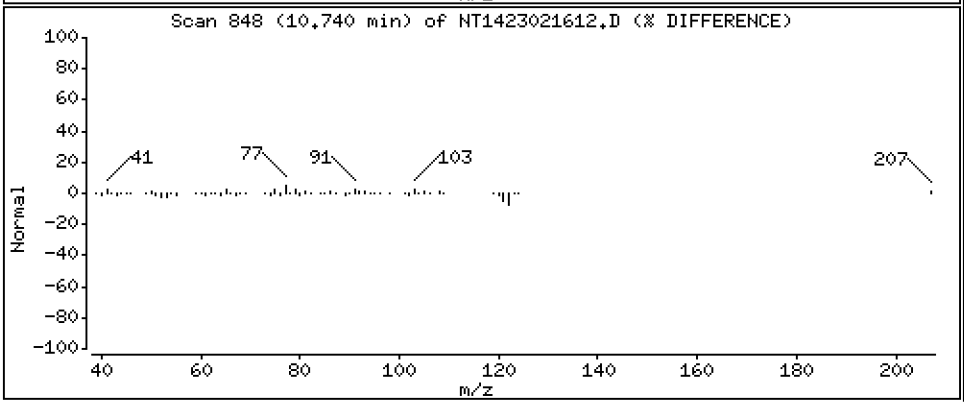












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

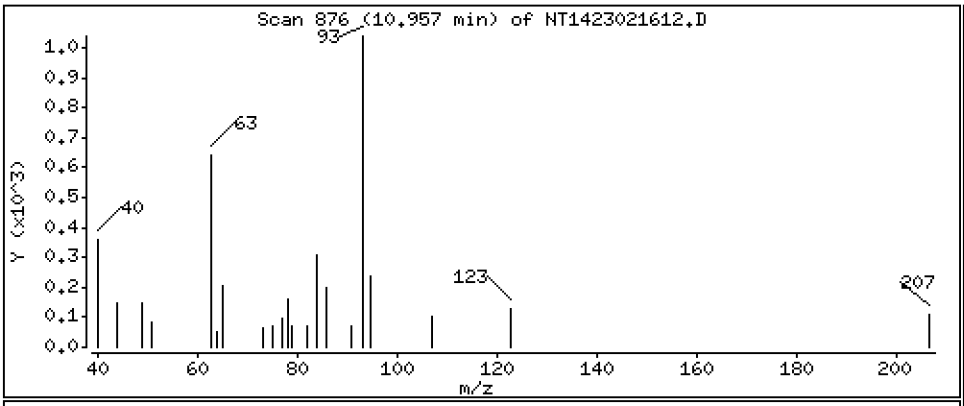
Operator: DSD

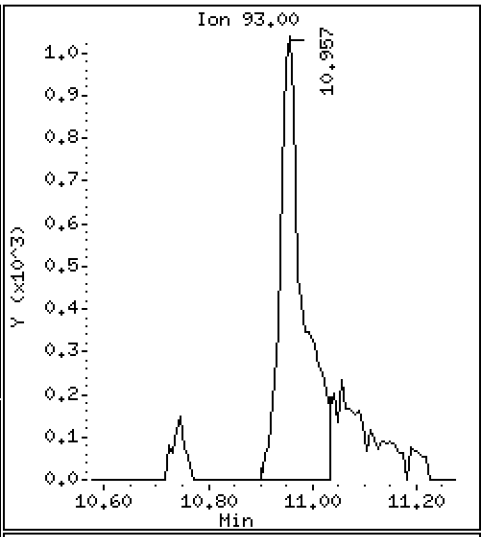
Column phase: ZB-5msi

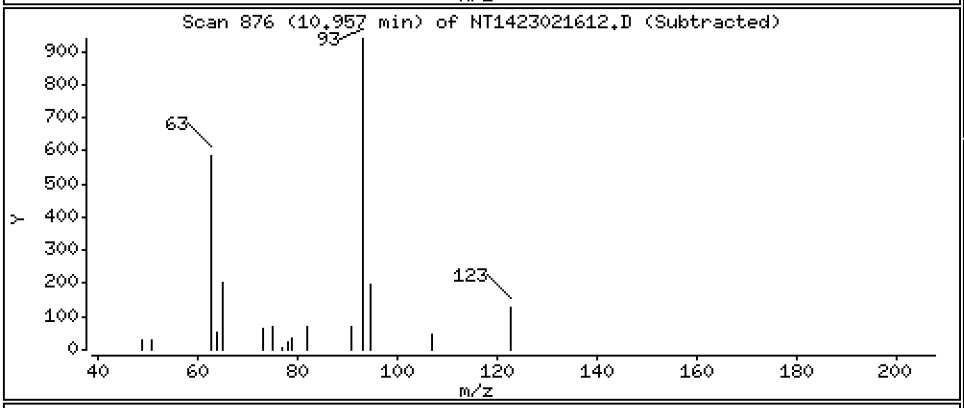
Column diameter: 0.25

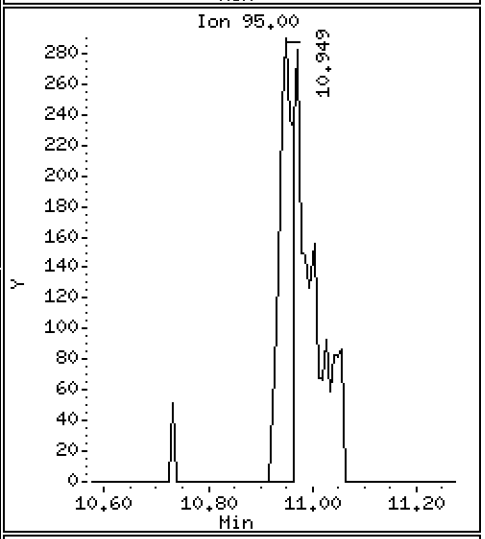
23 Bis(2-Chloroethoxy)methane

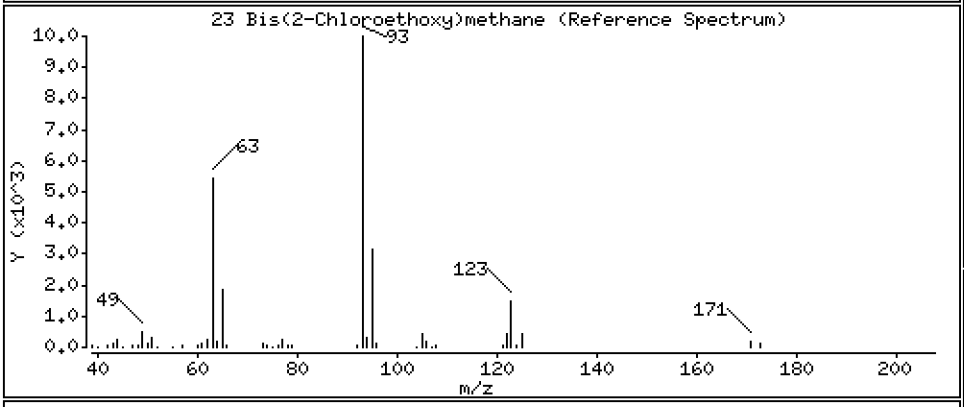
Concentration: 0.02825 ug/mL

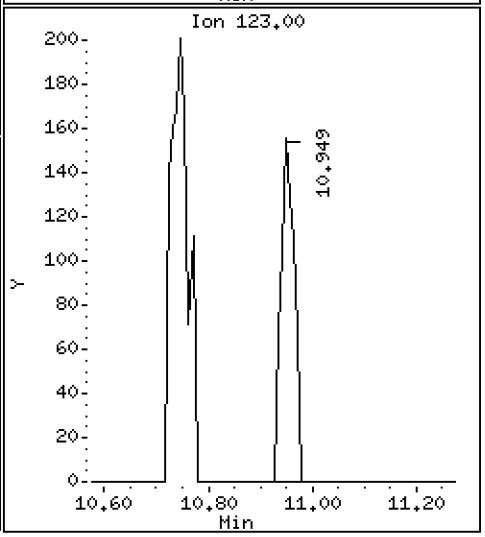


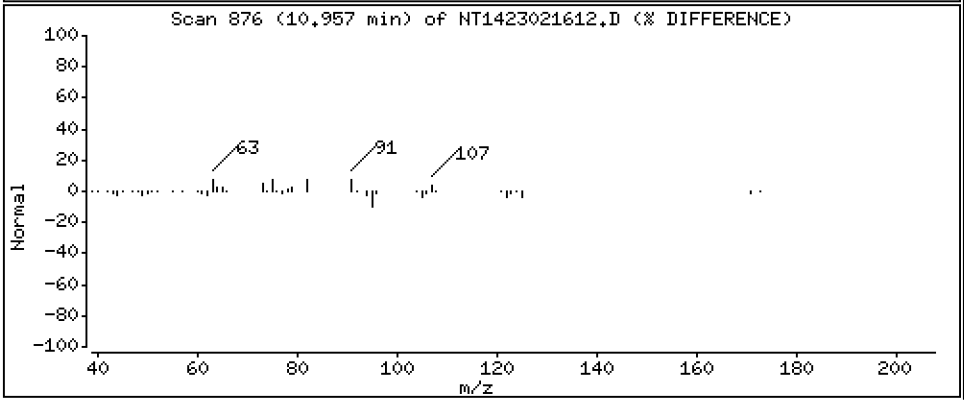












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

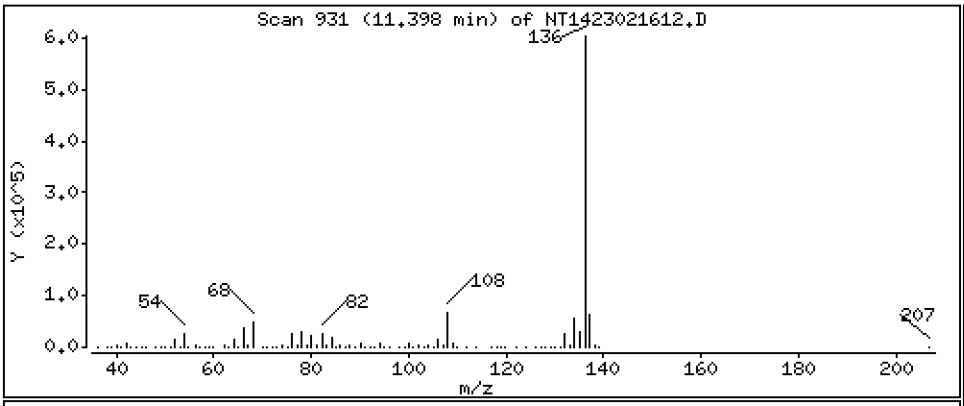
Operator: DSD

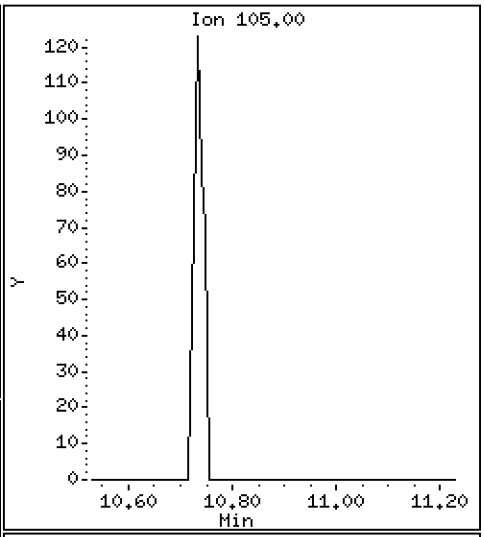
Column phase: ZB-5msi

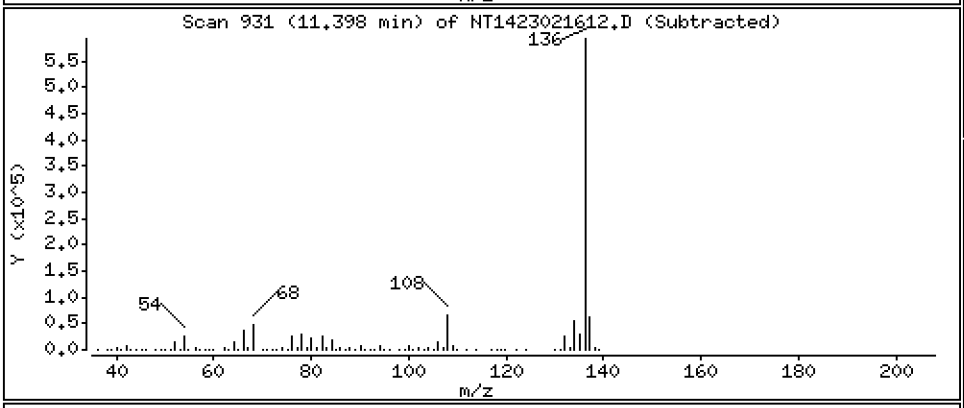
Column diameter: 0.25

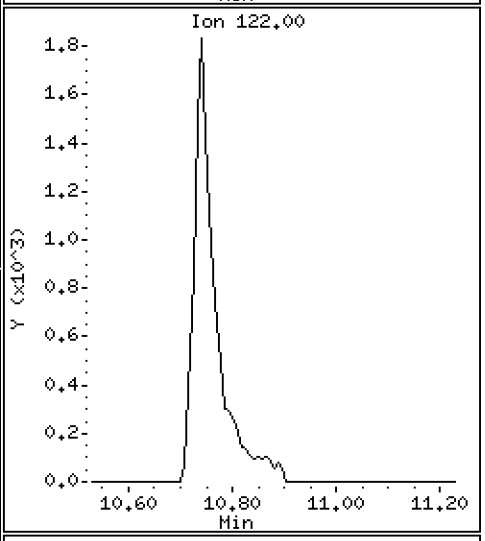
24 Benzoic acid

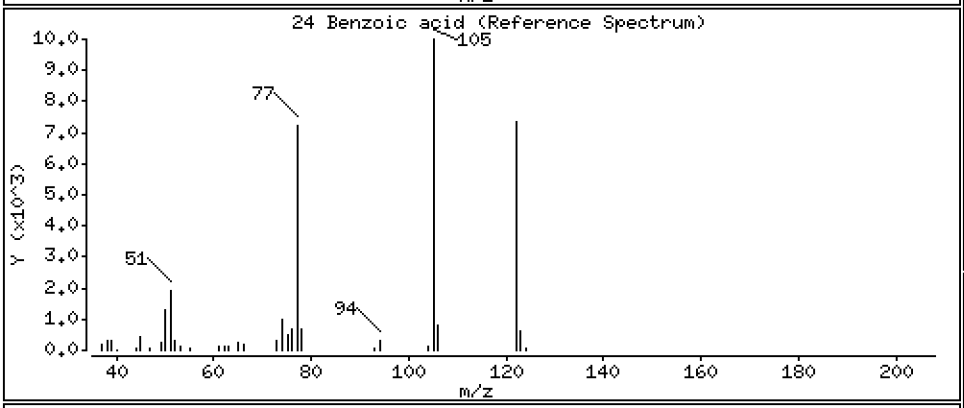
Concentration: 0.01862 ug/mL

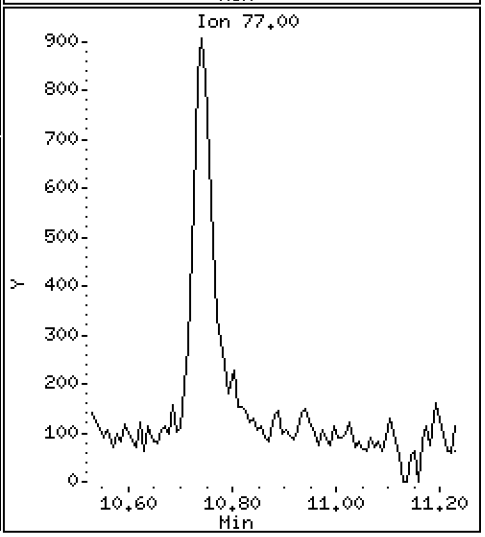


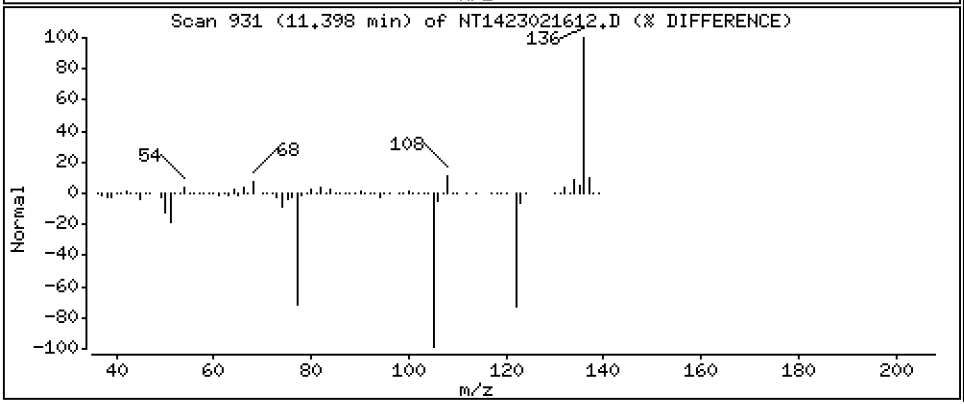












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

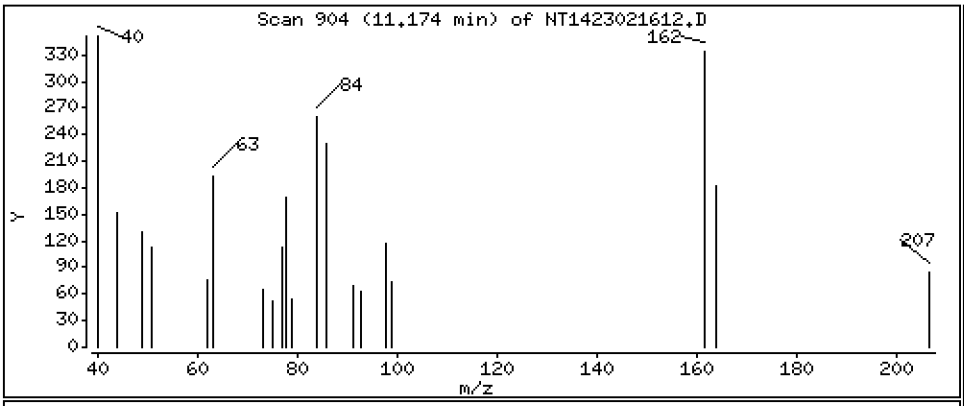
Operator: DSD

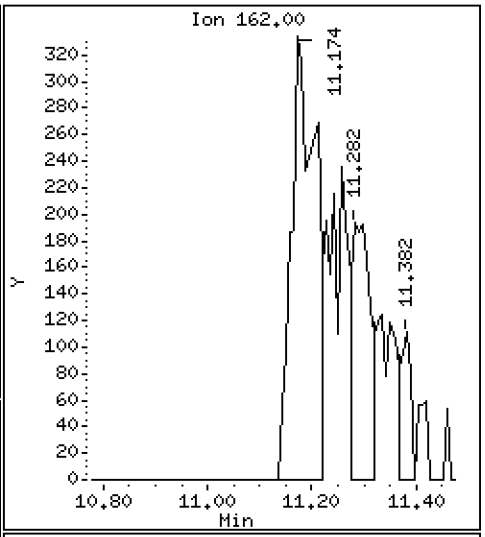
Column phase: ZB-5msi

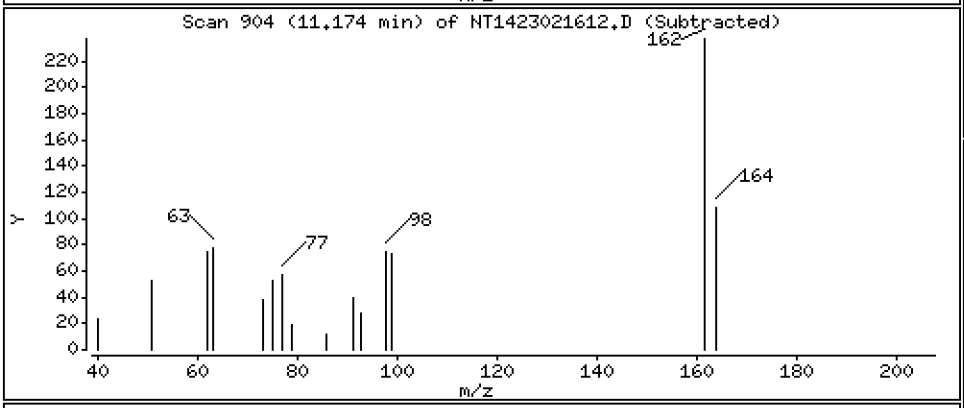
Column diameter: 0.25

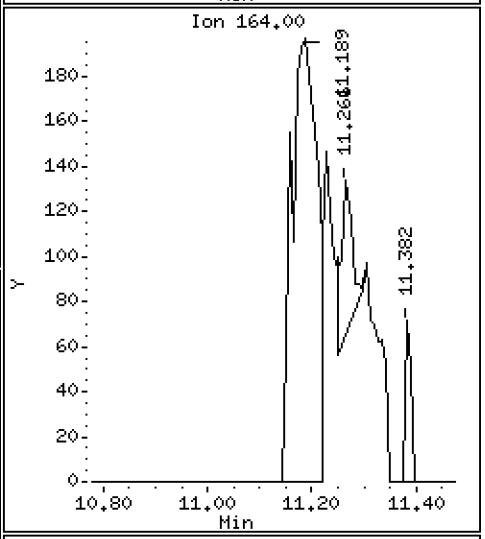
25 2,4-Dichlorophenol

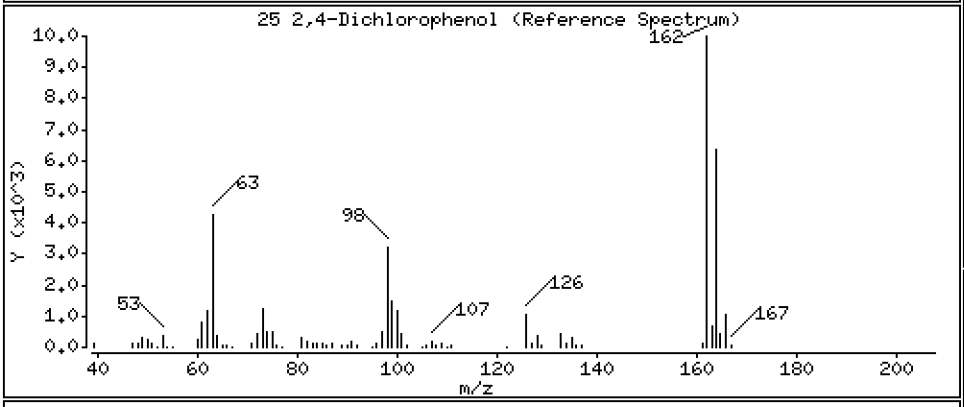
Concentration: 0.01179 ug/mL

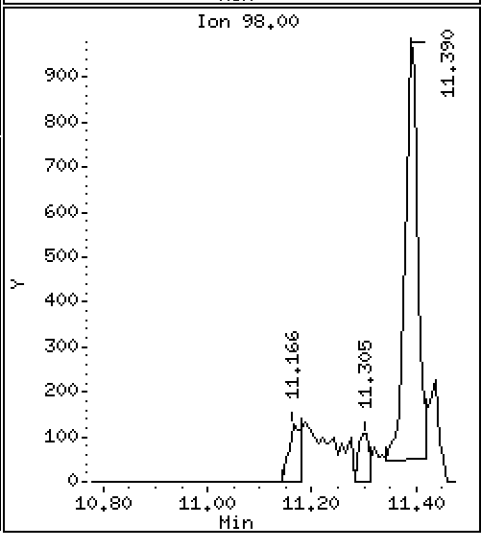


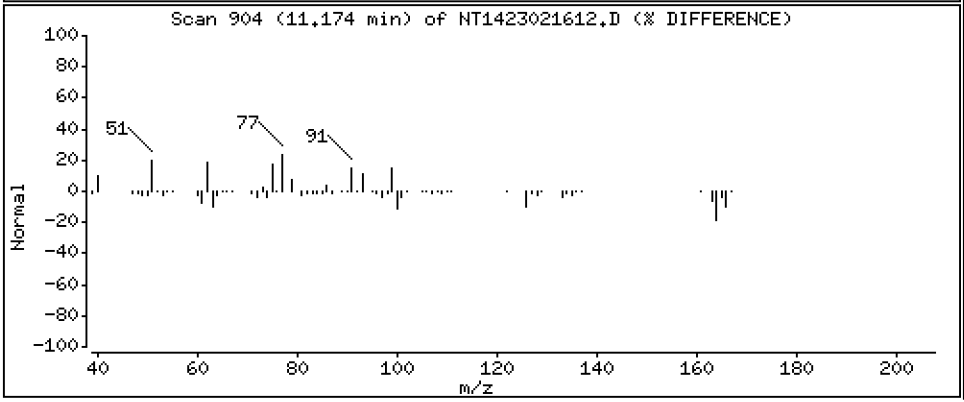












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

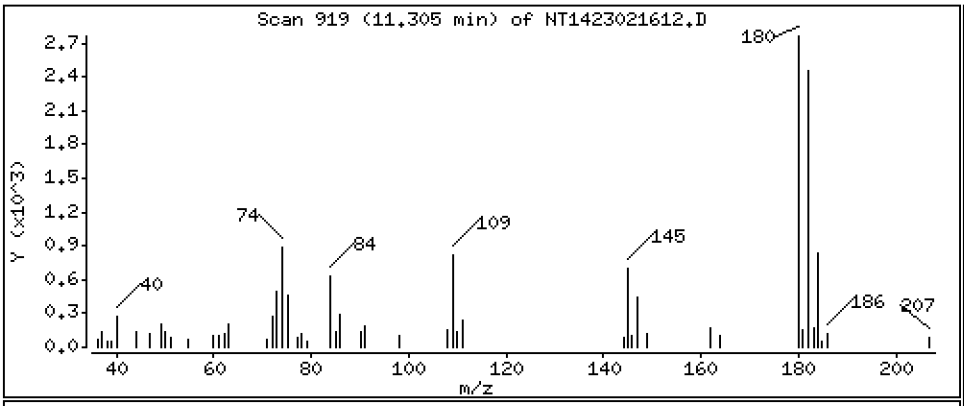
Operator: DSD

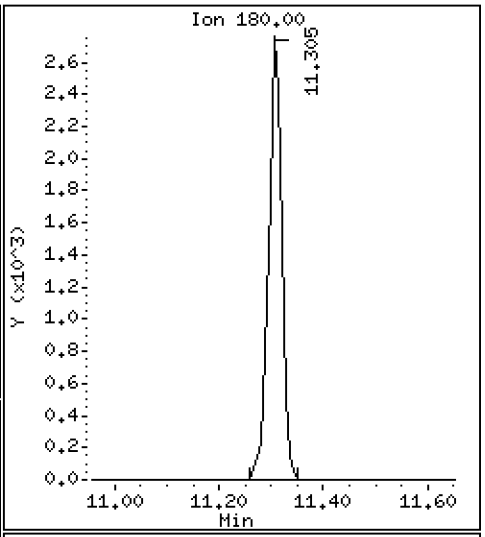
Column phase: ZB-5msi

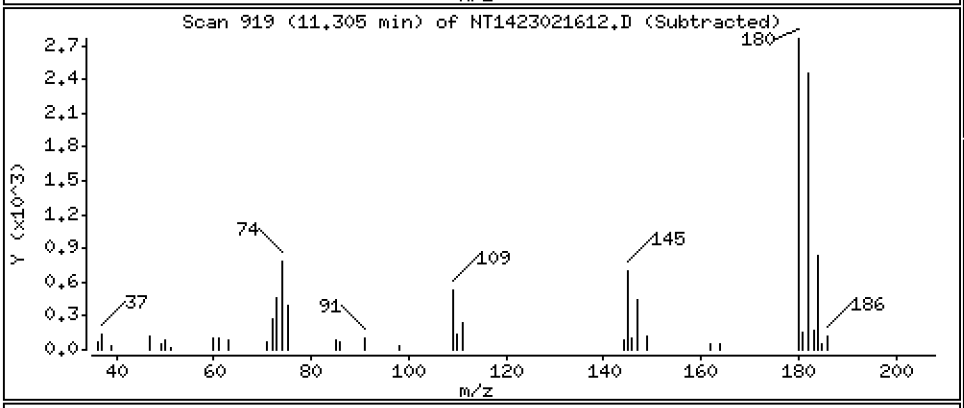
Column diameter: 0.25

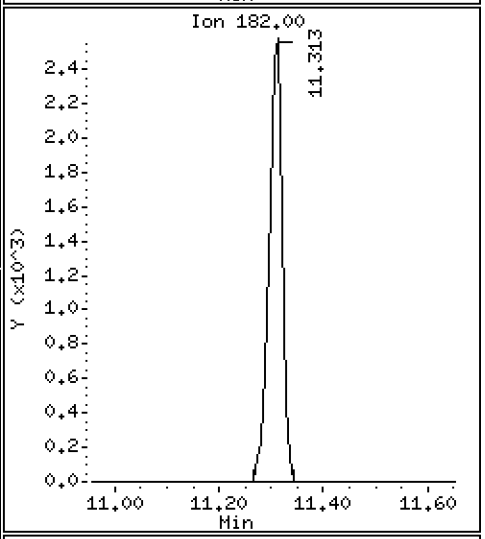
26 1,2,4-Trichlorobenzene

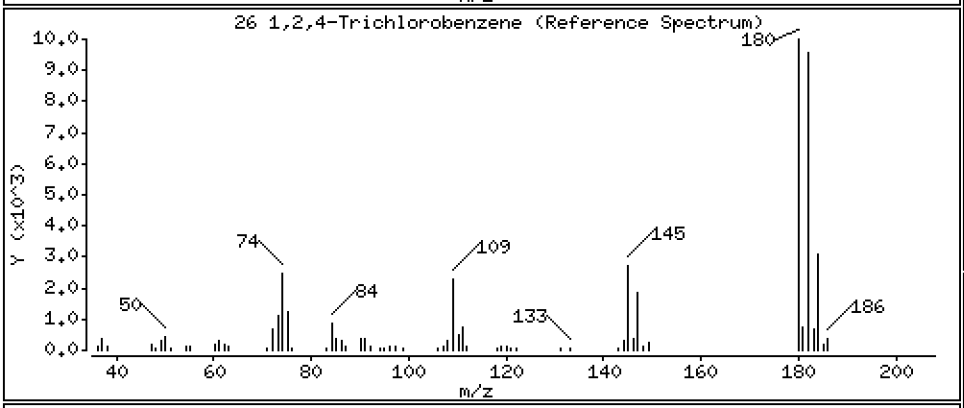
Concentration: 0.04503 ug/mL

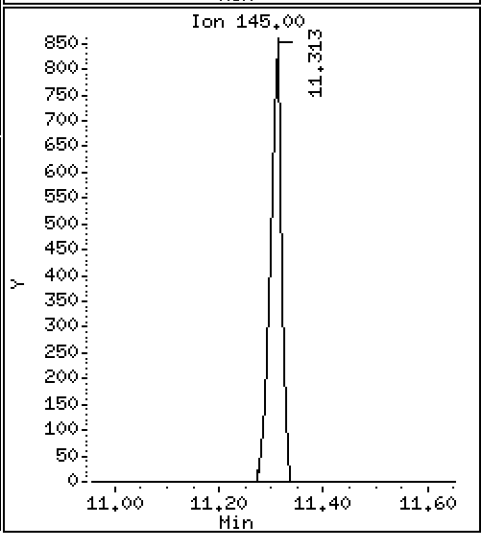


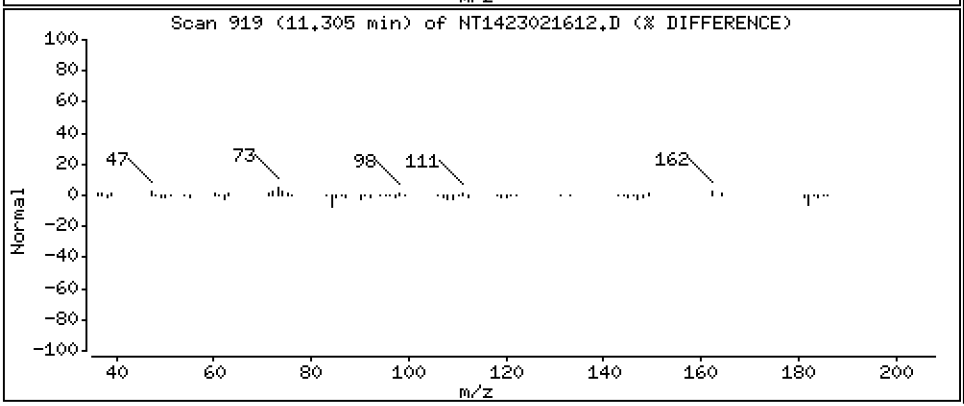












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

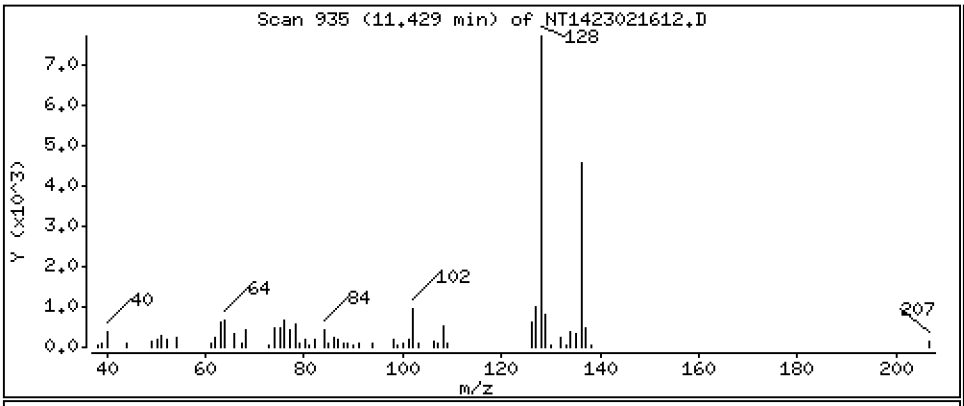
Operator: DSD

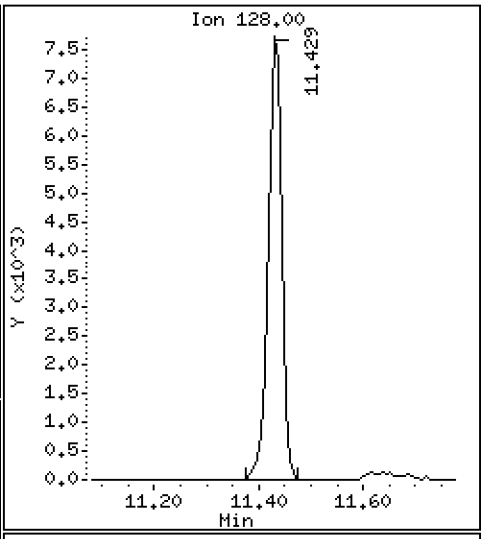
Column phase: ZB-5msi

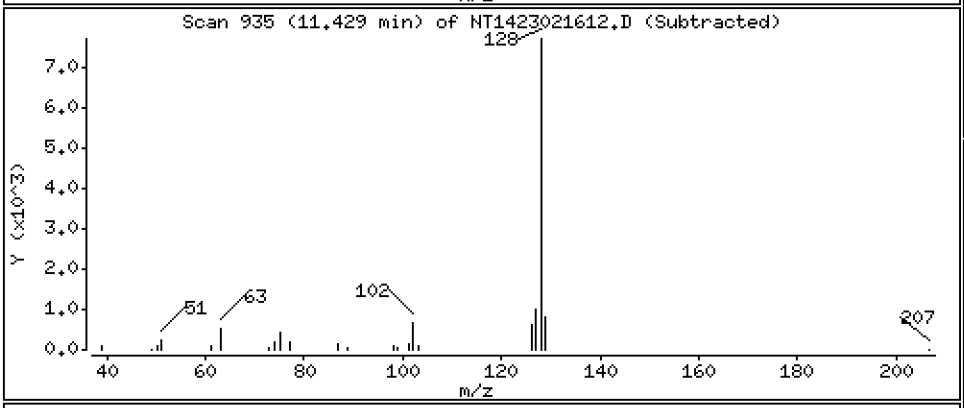
Column diameter: 0.25

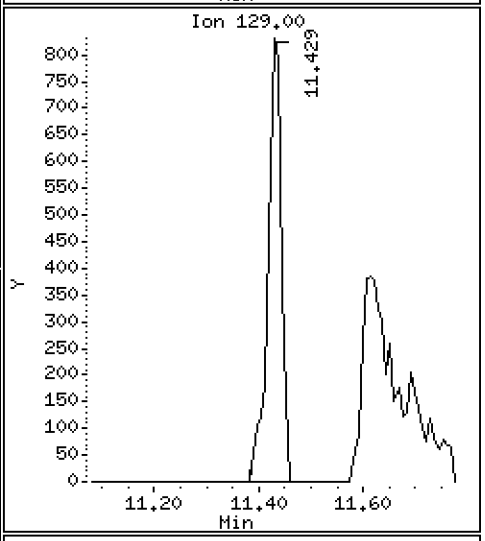
28 Naphthalene

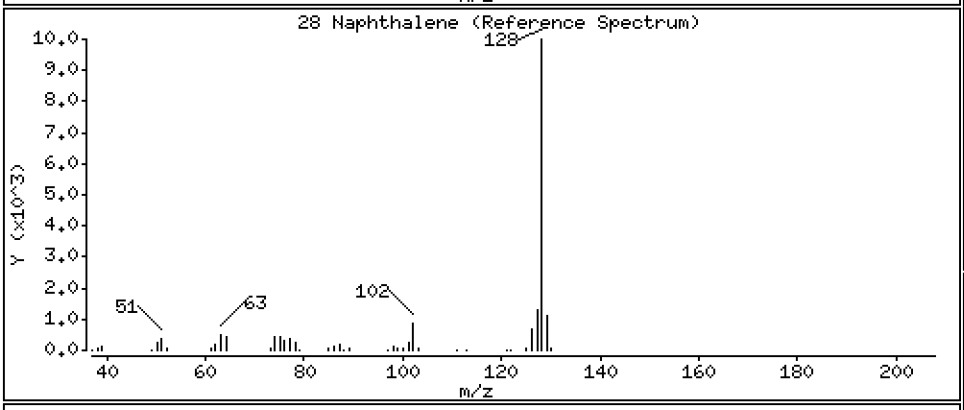
Concentration: 0.04580 ug/mL

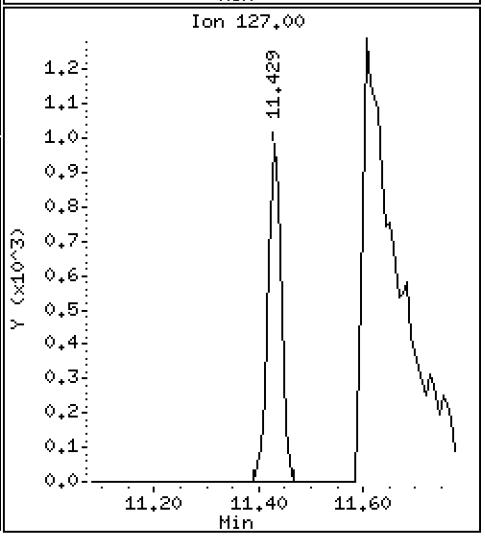


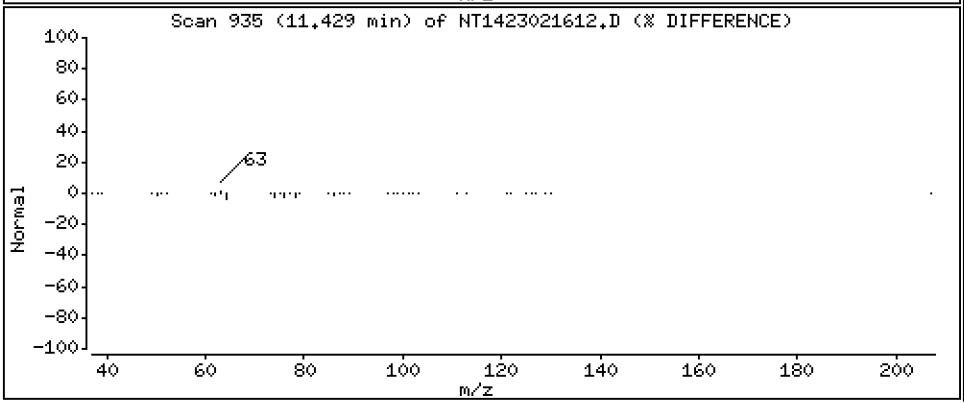












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

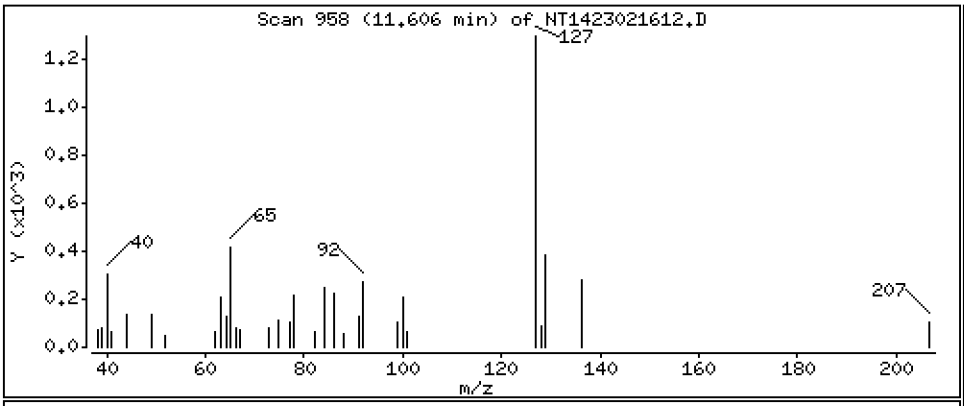
Operator: DSD

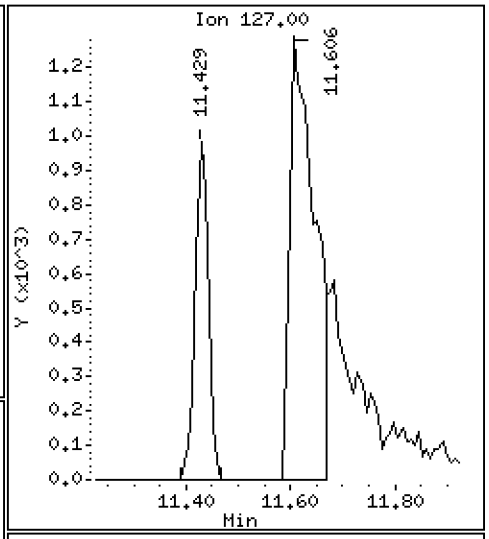
Column phase: ZB-5msi

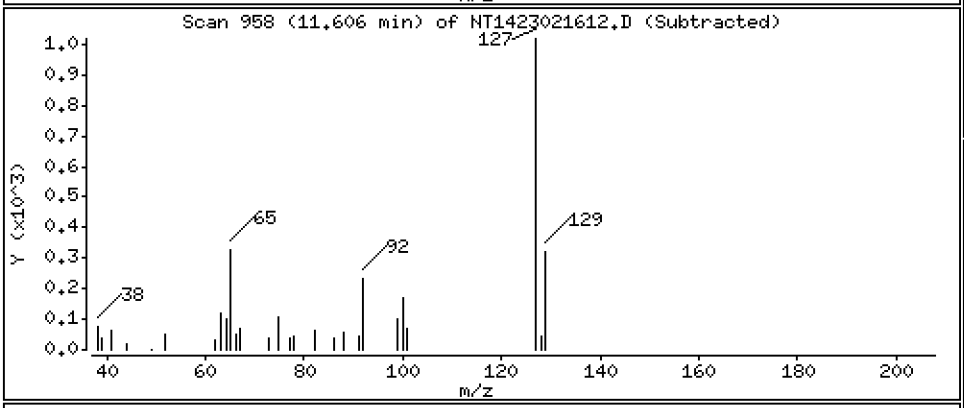
Column diameter: 0.25

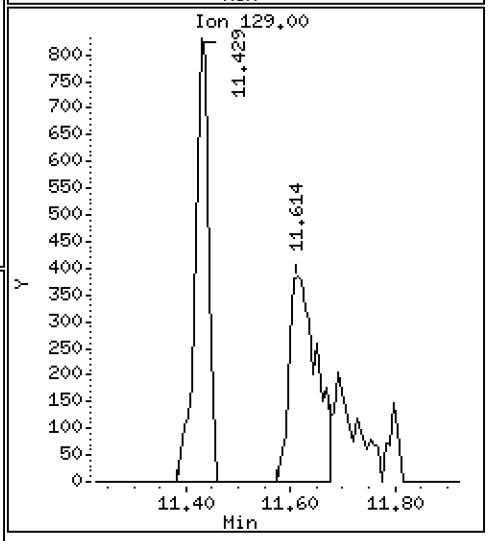
29 4-Chloroaniline

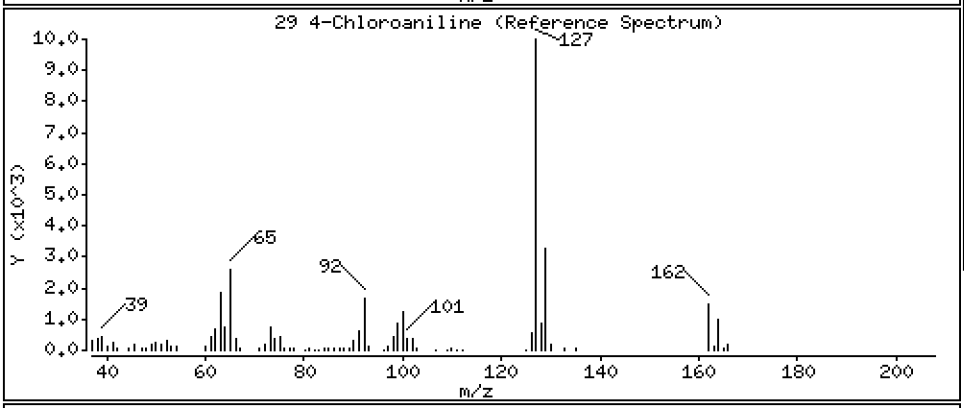
Concentration: 0.03498 ug/mL

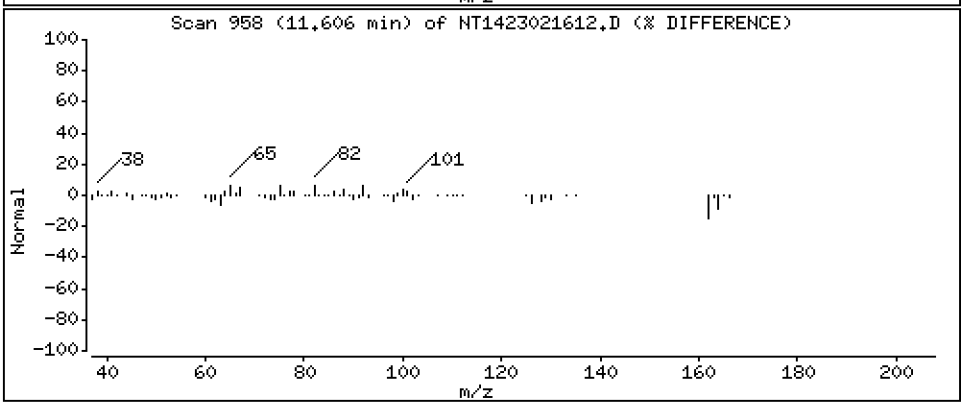












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021612.D

Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

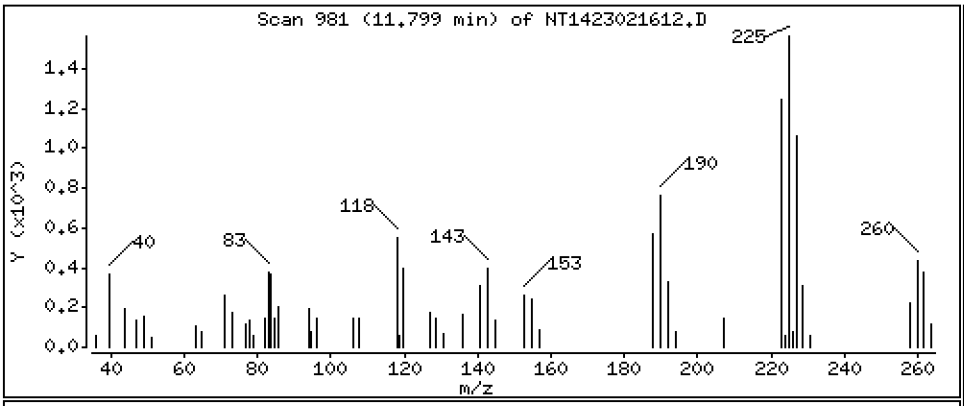
Operator: DSD

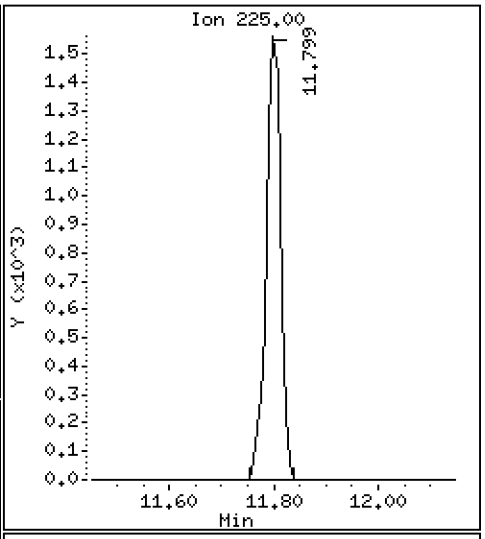
Column phase: ZB-5msi

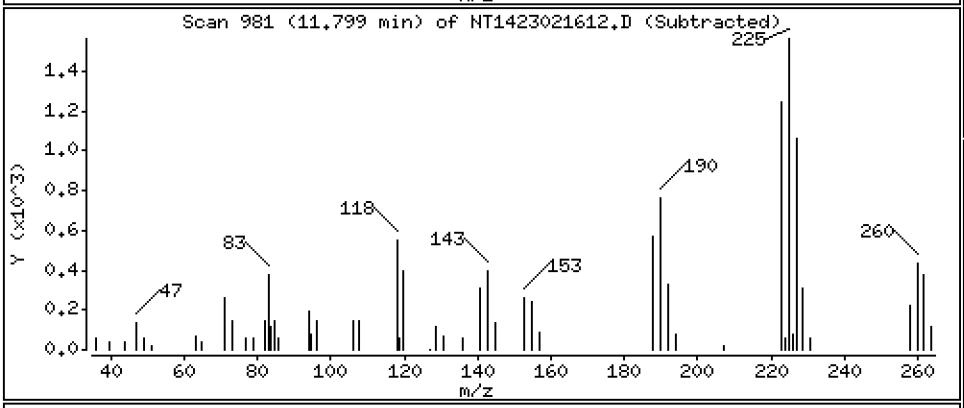
Column diameter: 0.25

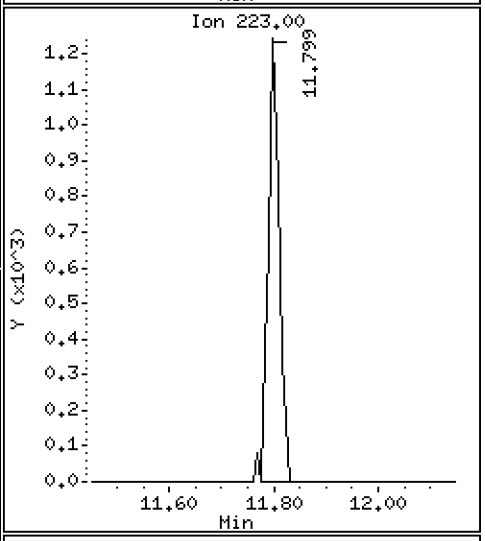
30 Hexachlorobutadiene

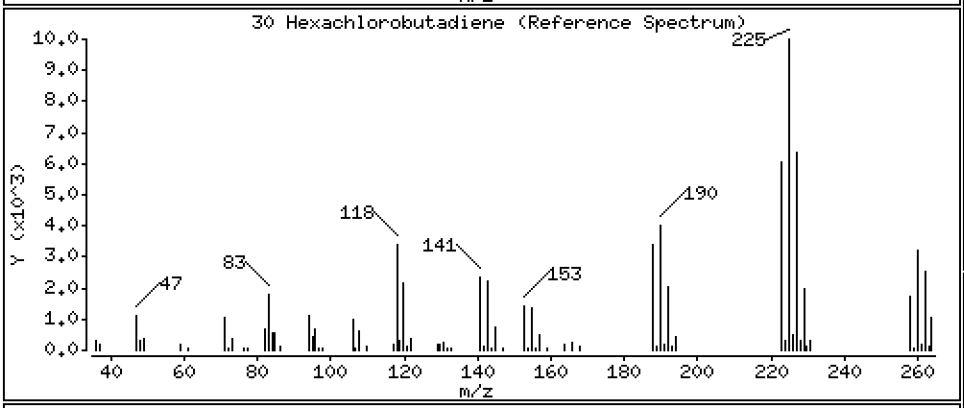
Concentration: 0.04366 ug/mL

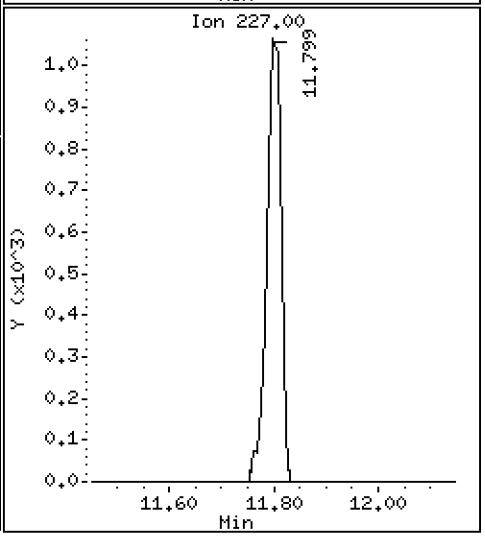


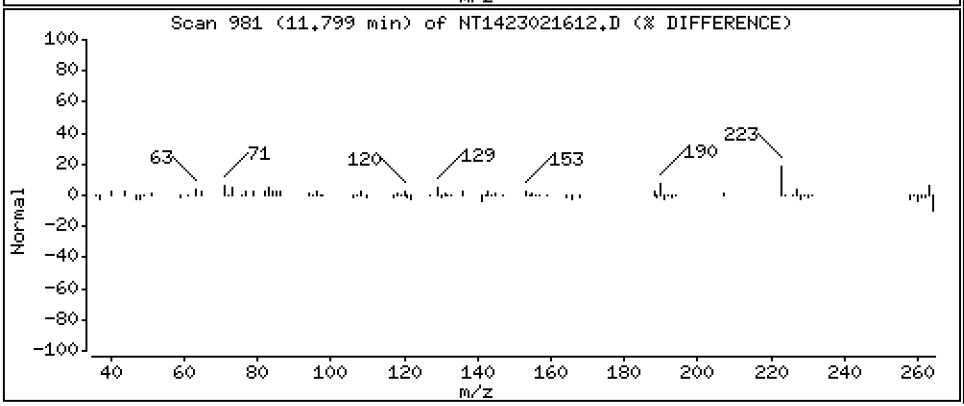












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

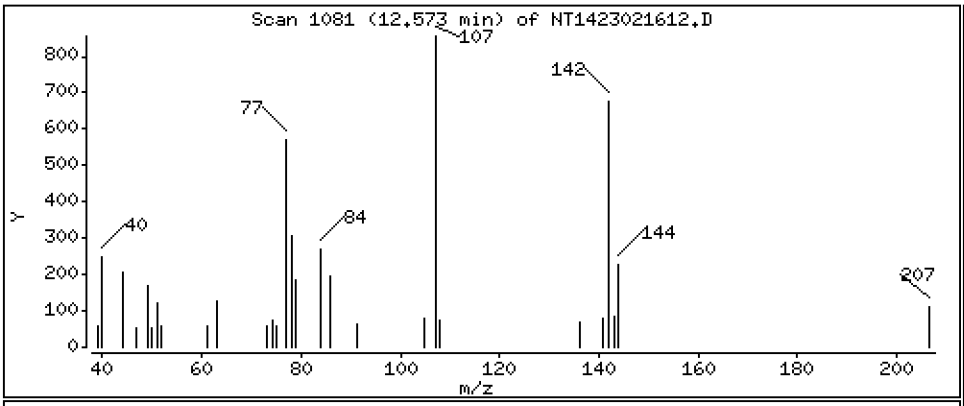
Operator: DSD

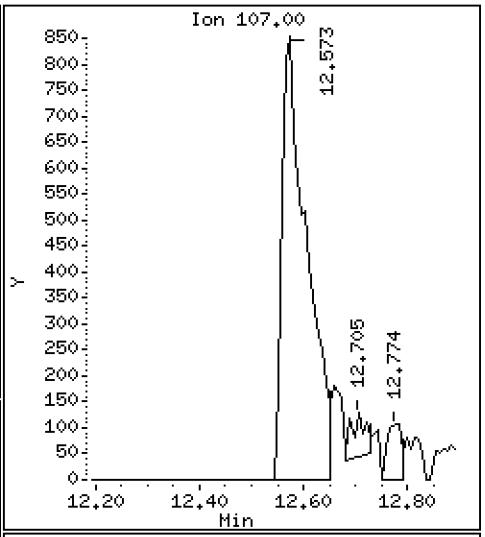
Column phase: ZB-5msi

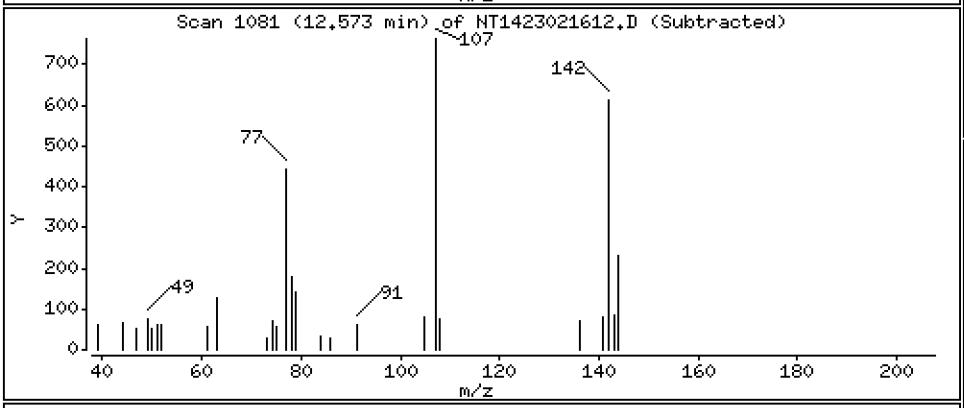
Column diameter: 0.25

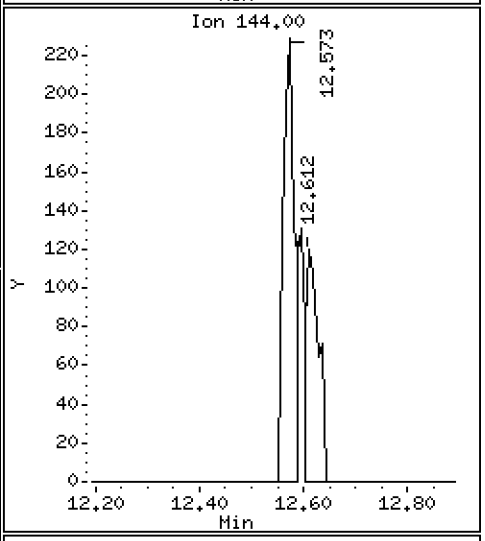
31 4-Chloro-3-methylphenol

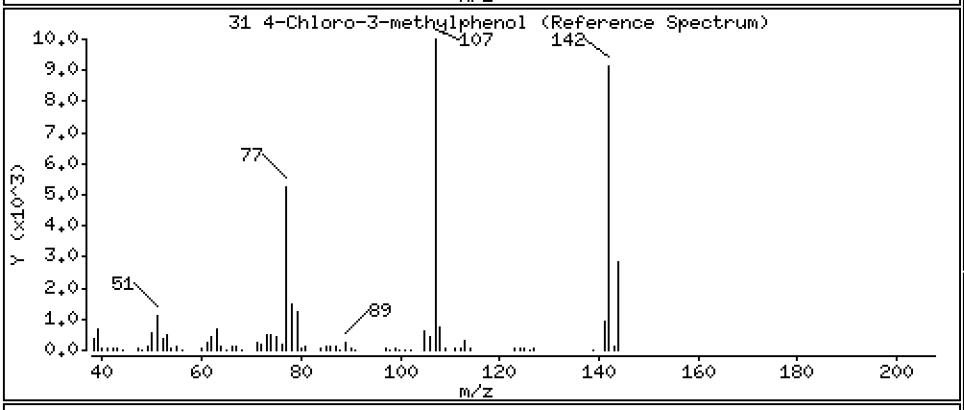
Concentration: 0.03058 ug/mL

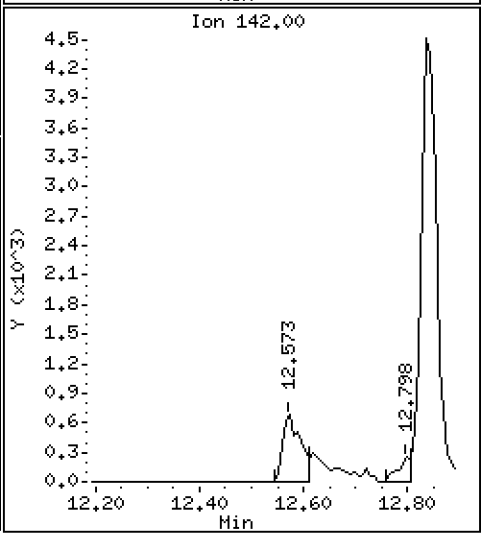


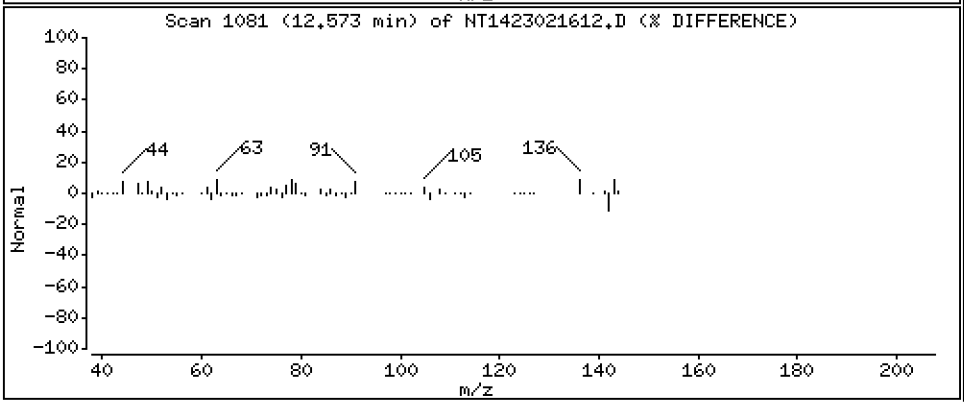












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

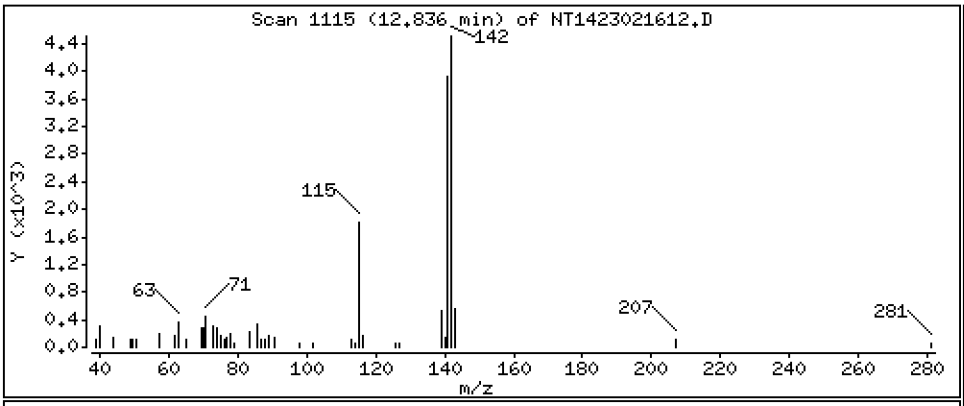
Operator: DSD

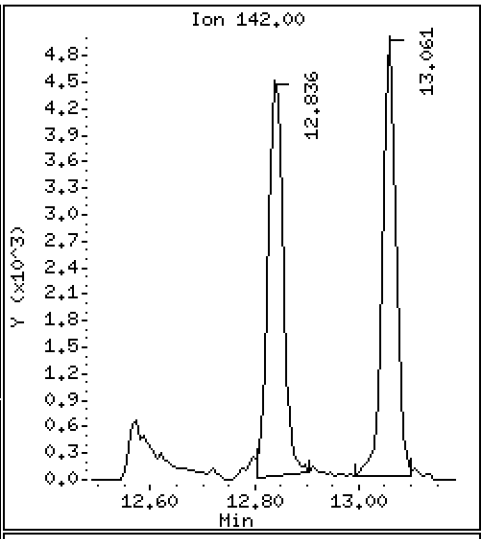
Column phase: ZB-5msi

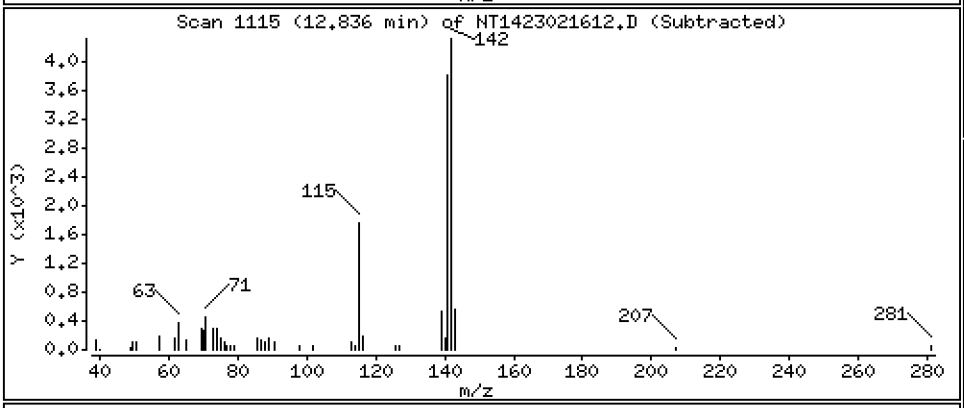
Column diameter: 0.25

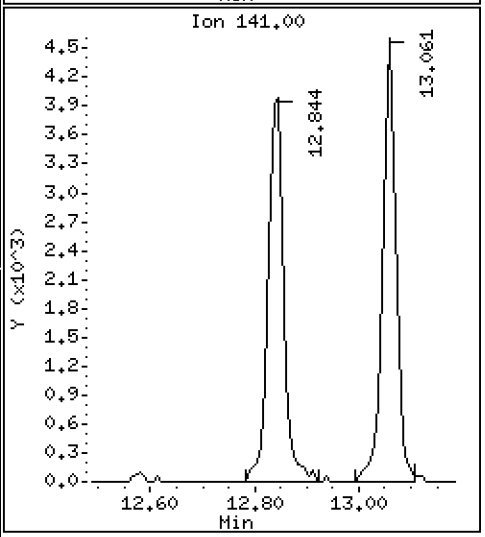
32 2-Methylnaphthalene

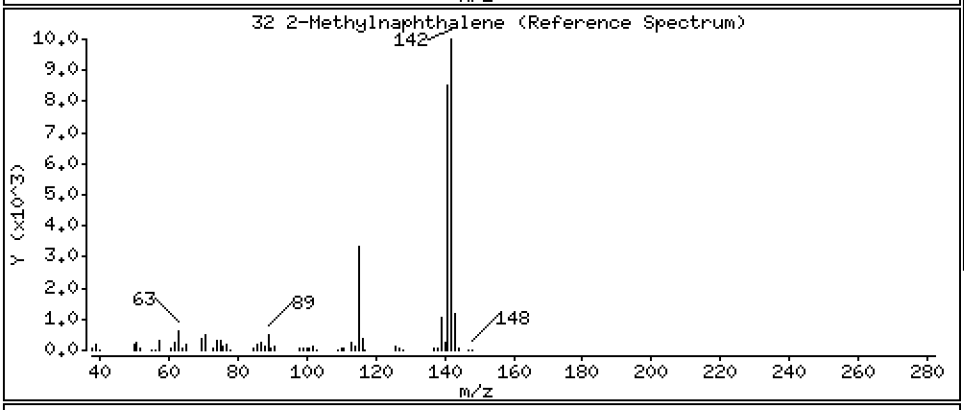
Concentration: 0.04033 ug/mL

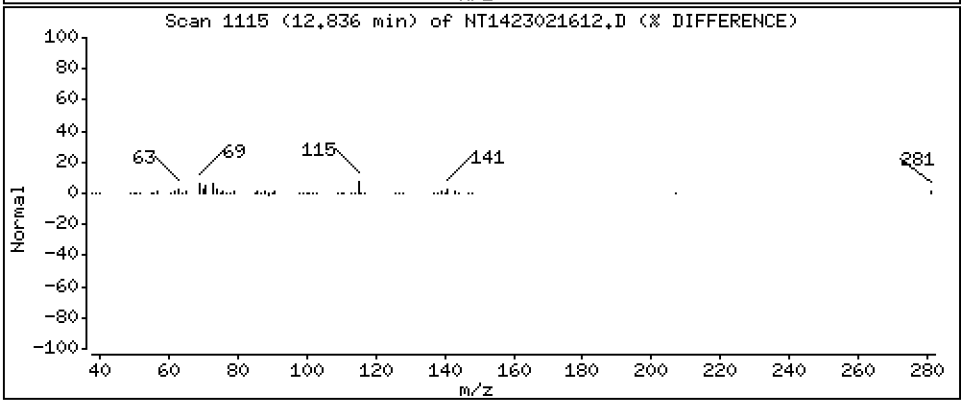












Date : 16-FEB-2023 20:42

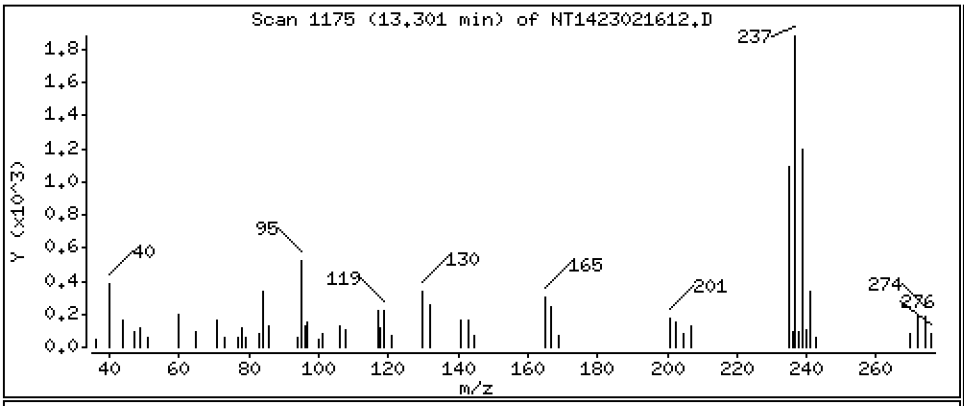
Client ID: Instrument: nt14.i

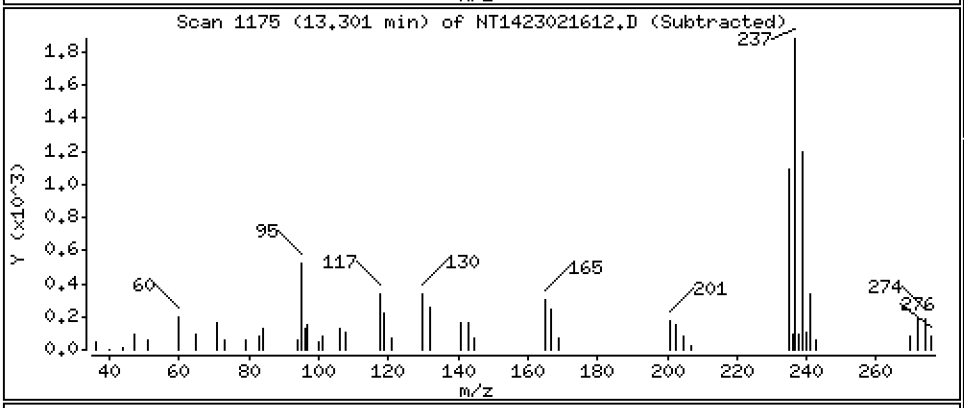
Sample Info: SIM 0.05

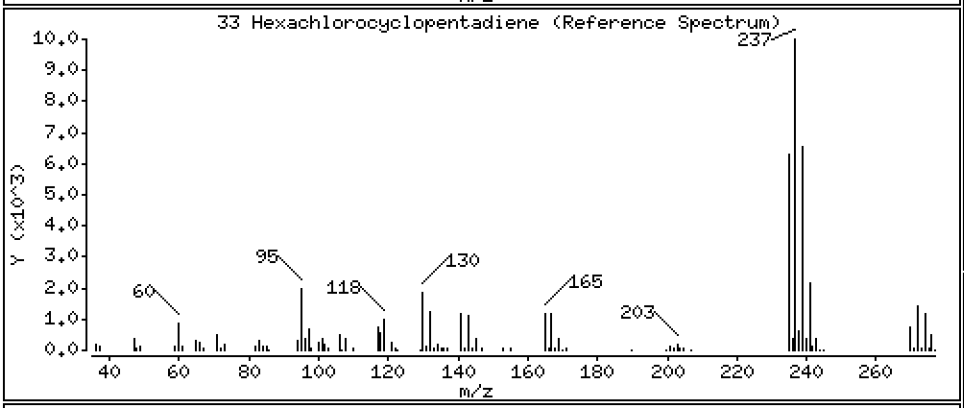
Operator: DSD

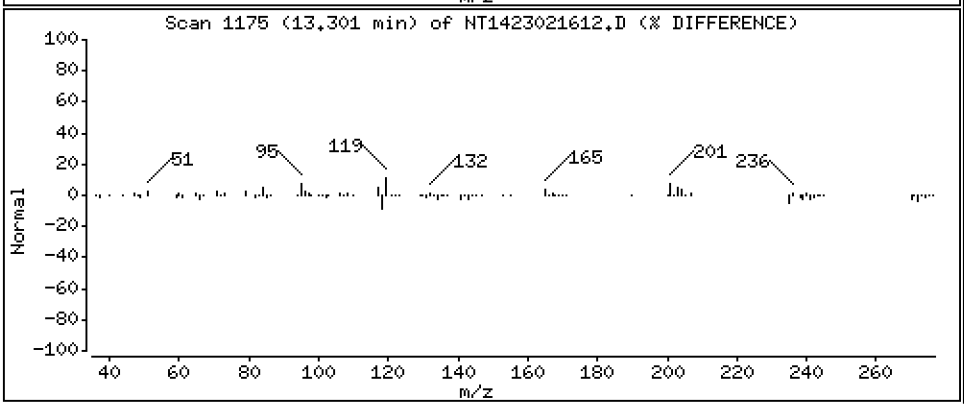
Column phase: ZB-5msi Column diameter: 0.25

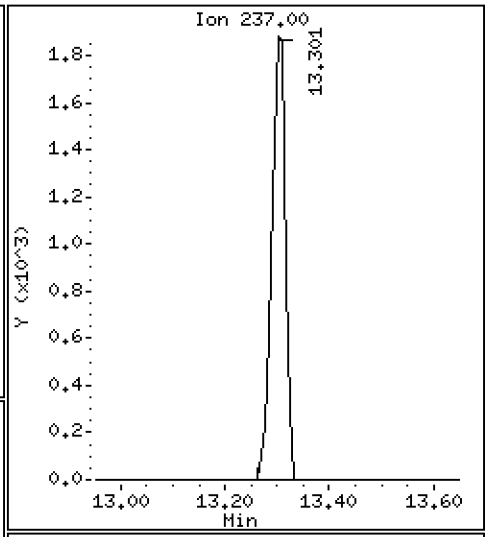
33 Hexachlorocyclopentadiene Concentration: 0.04822 ug/mL

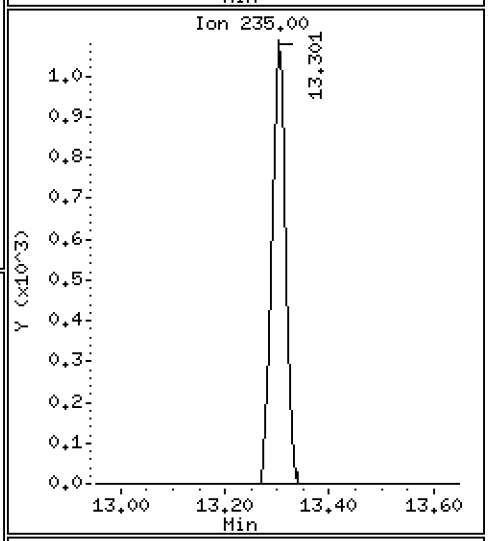


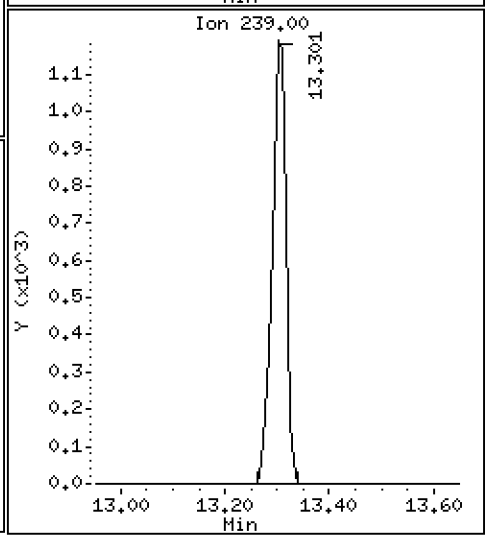












Date : 16-FEB-2023 20:42

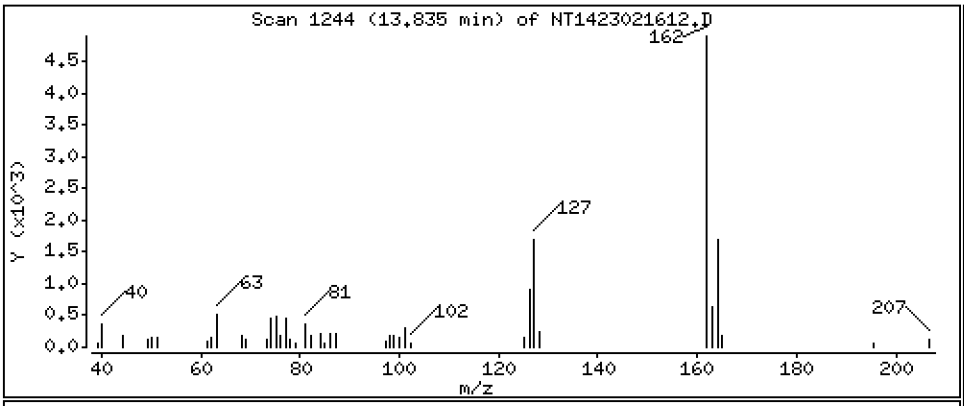
Client ID: Instrument: nt14.i

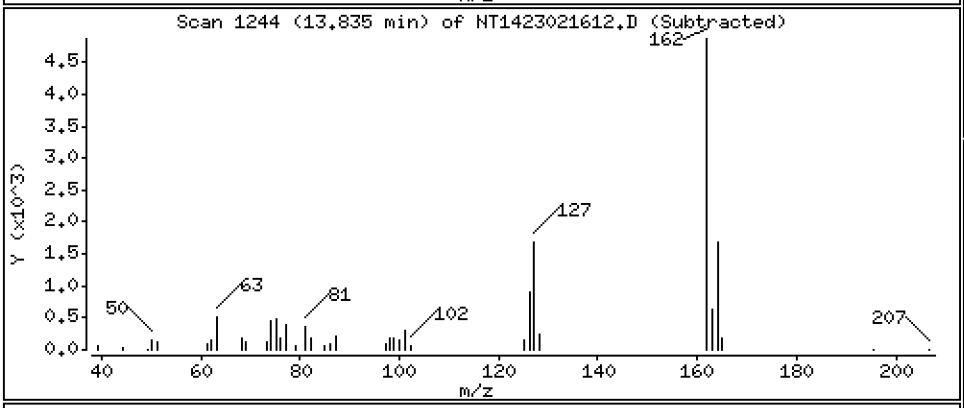
Sample Info: SIM 0.05

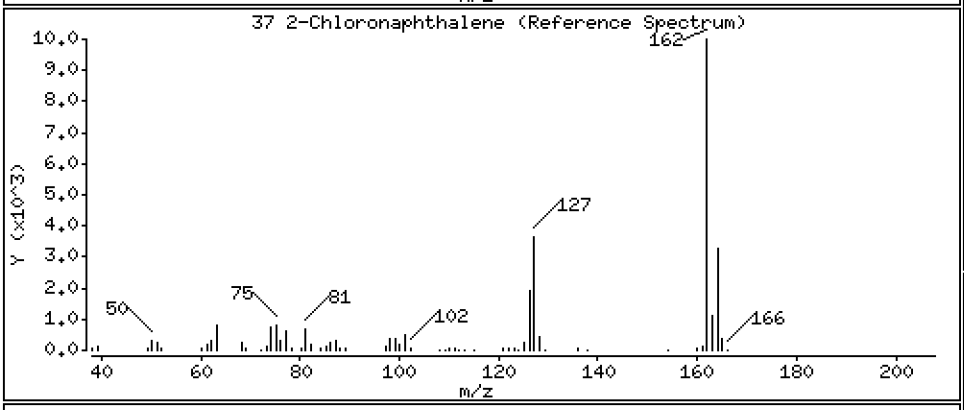
Operator: DSD

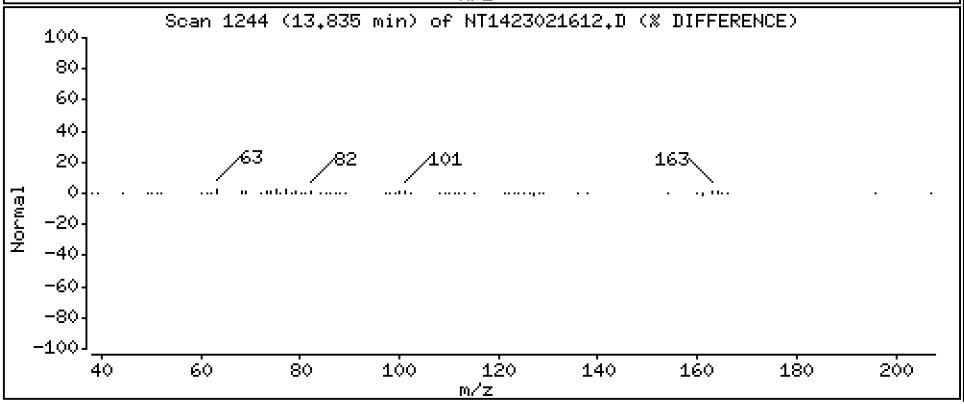
Column phase: ZB-5msi Column diameter: 0.25

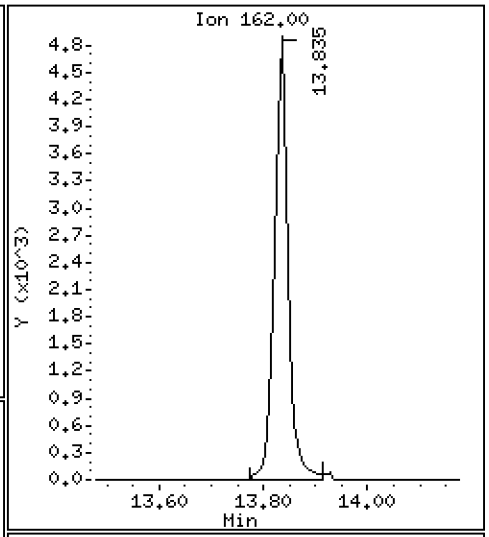
37 2-Chloronaphthalene Concentration: 0.04237 ug/mL

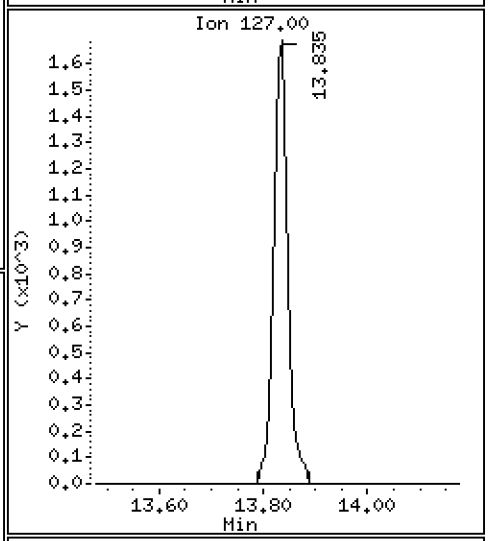


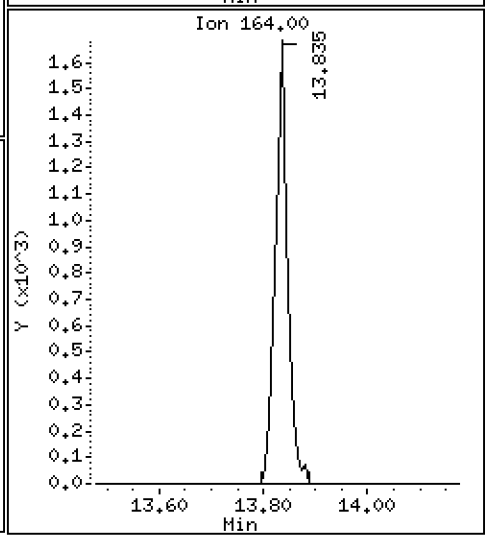












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

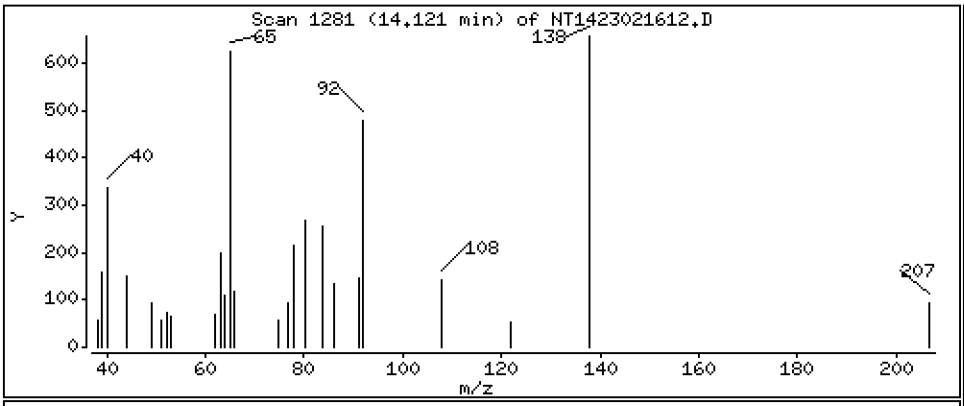
Operator: DSD

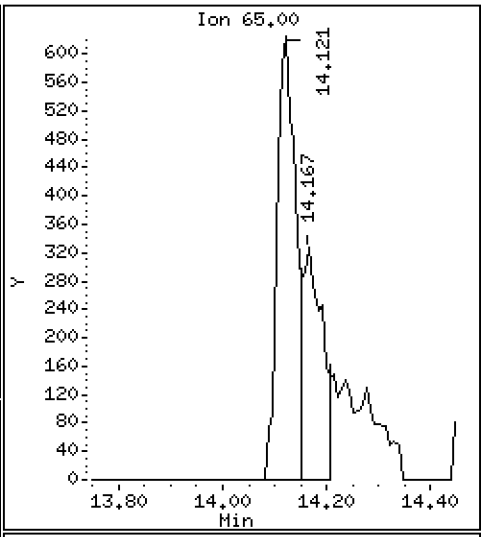
Column phase: ZB-5msi

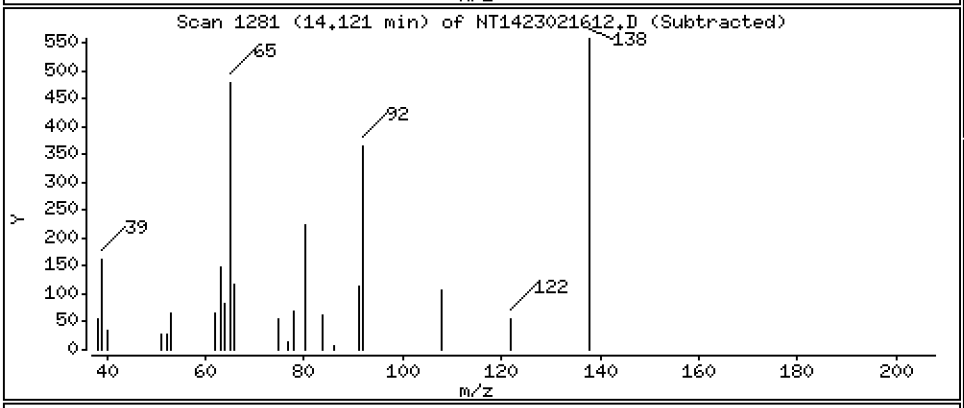
Column diameter: 0.25

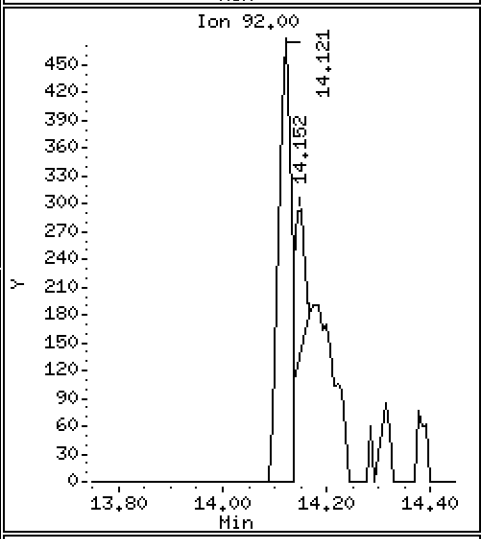
38 2-Nitroaniline

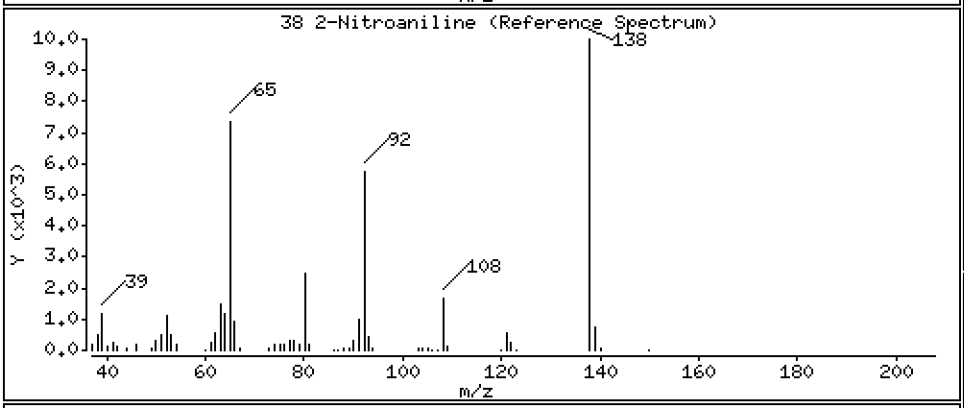
Concentration: 0.02402 ug/mL

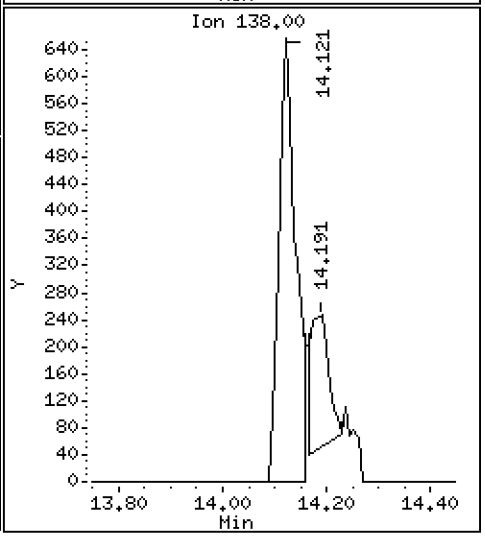


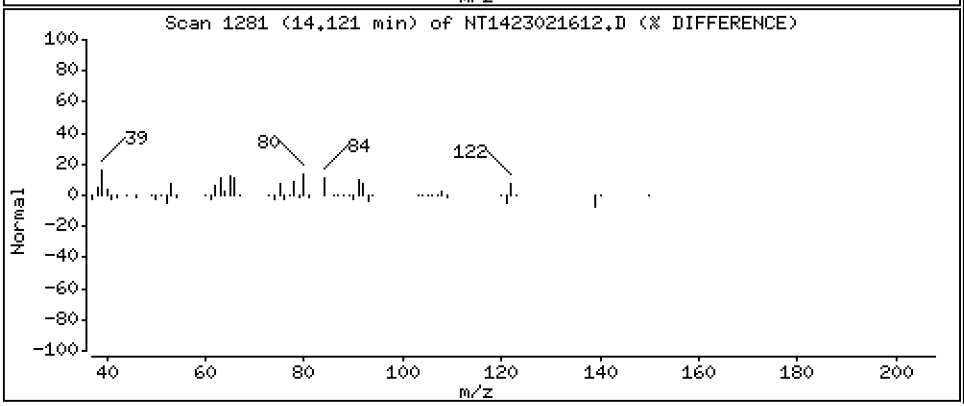












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021612.D

Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

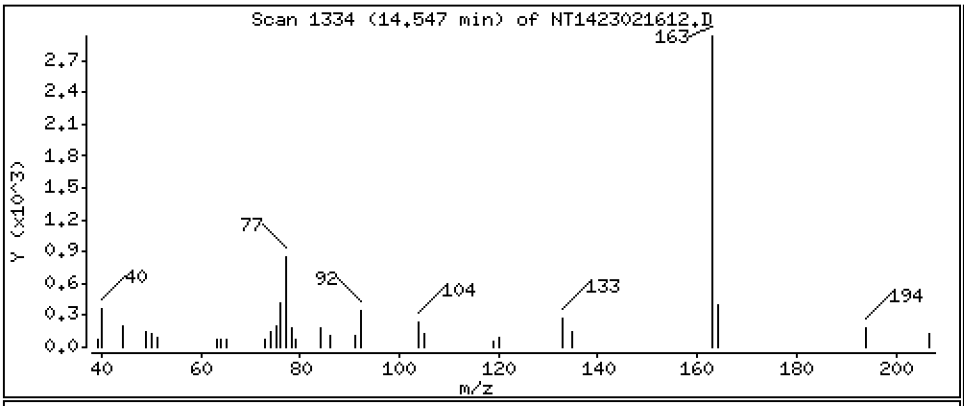
Operator: DSD

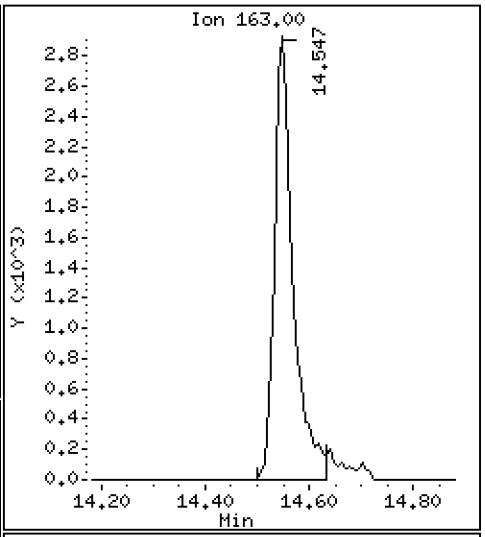
Column phase: ZB-5msi

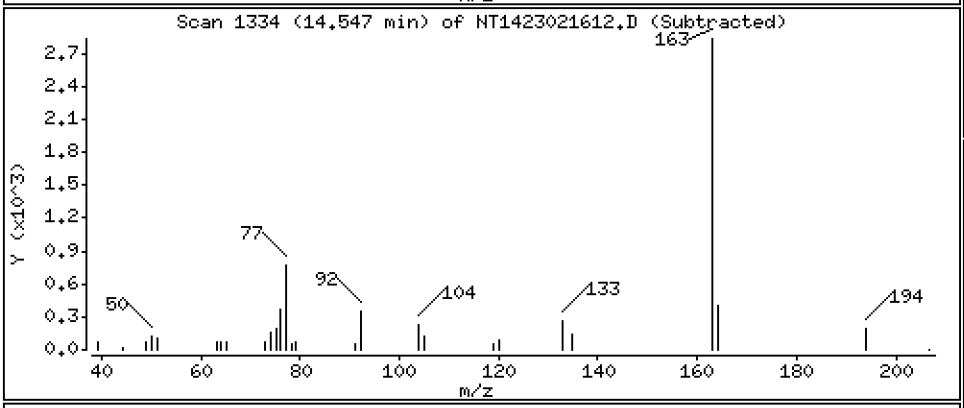
Column diameter: 0.25

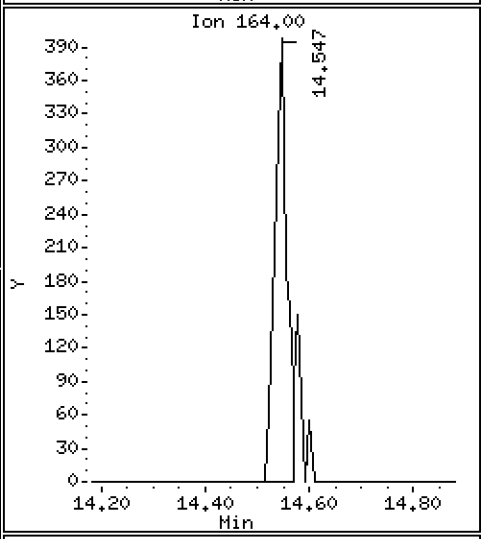
39 Dimethylphthalate

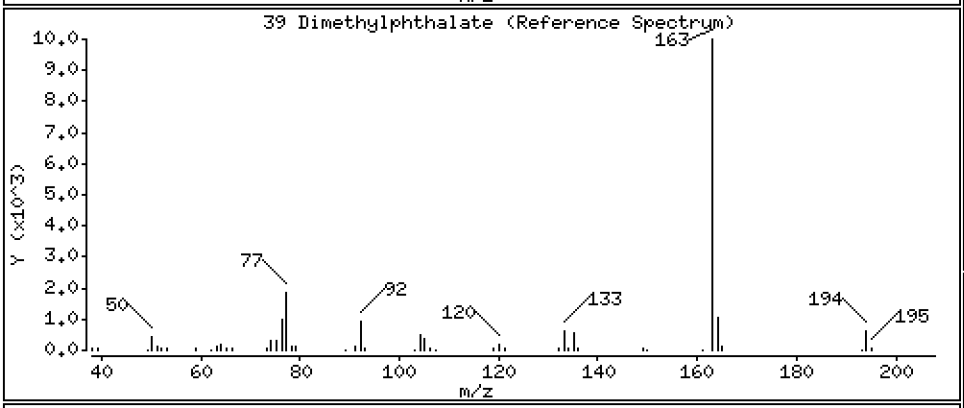
Concentration: 0.03477 ug/mL

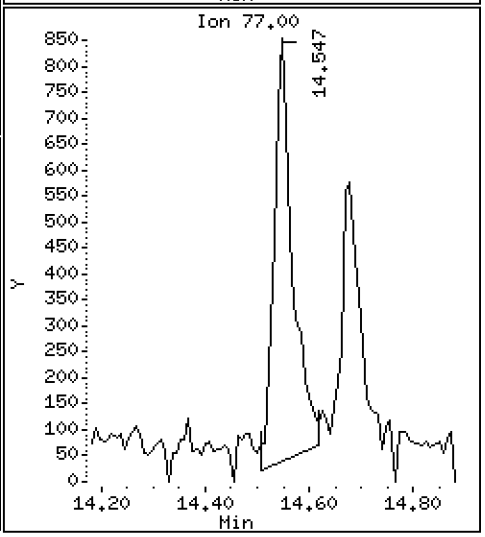


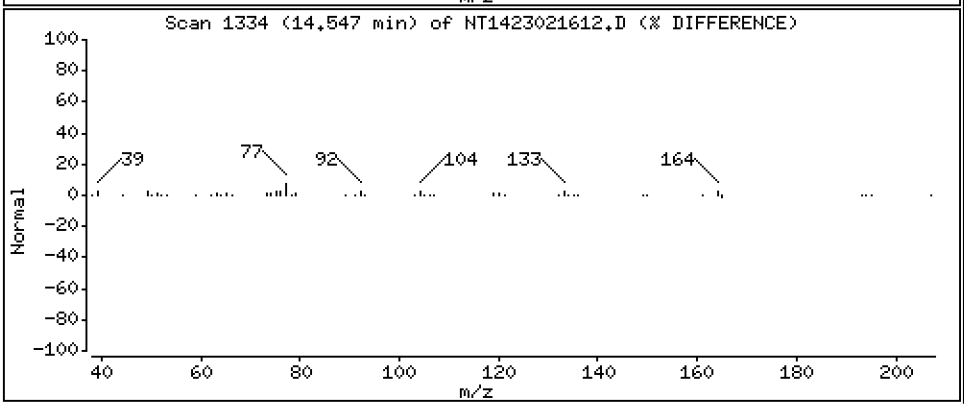












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021612.D

Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

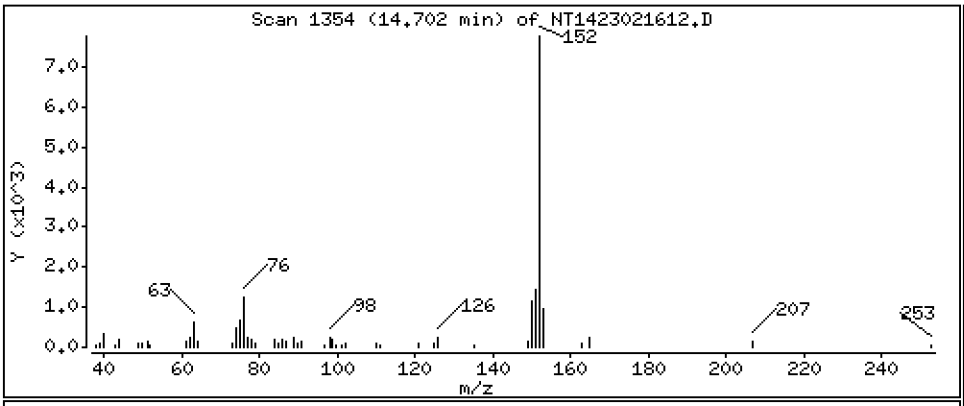
Operator: DSD

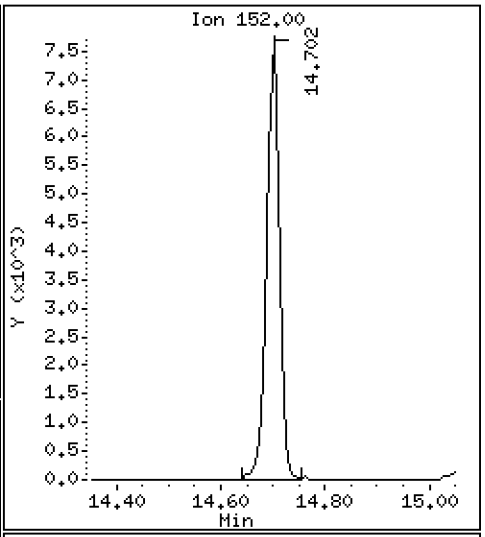
Column phase: ZB-5msi

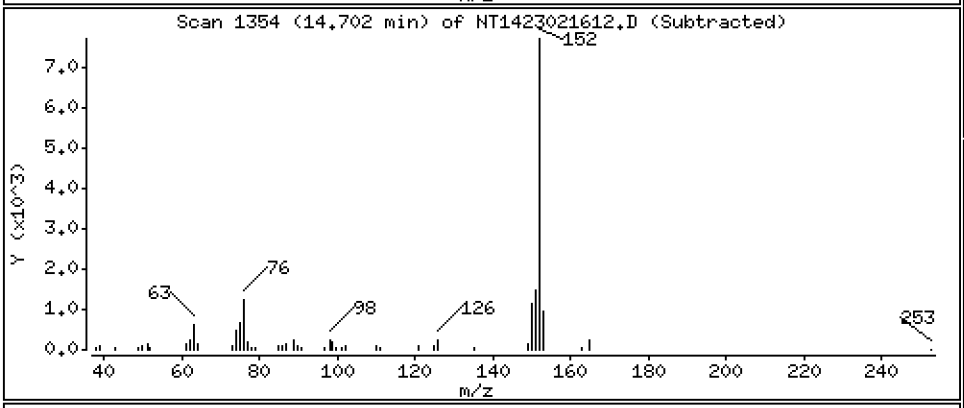
Column diameter: 0.25

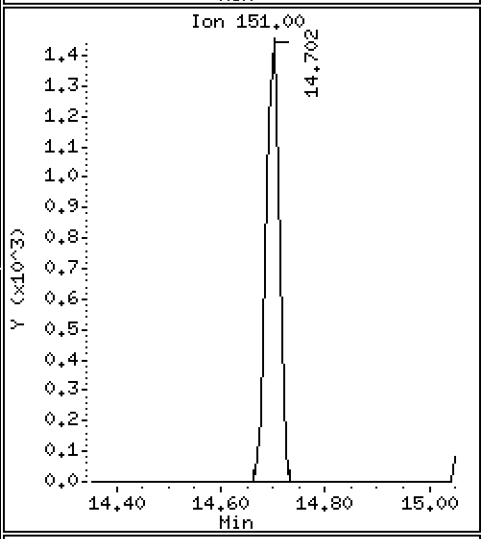
40 Acenaphthylene

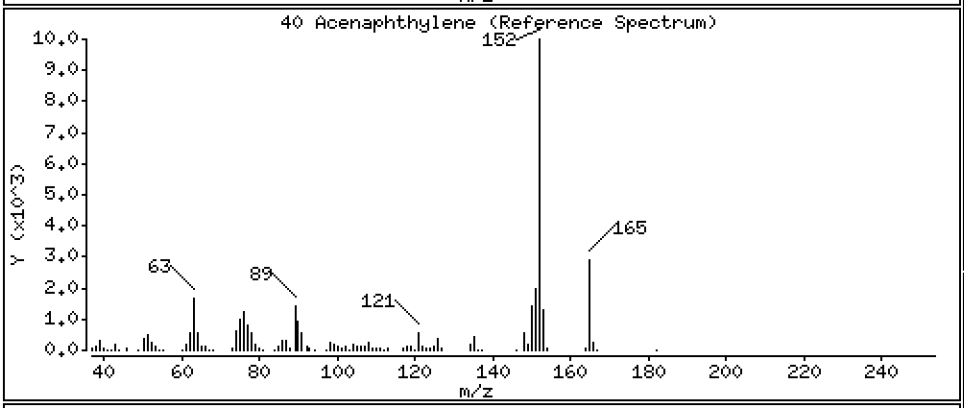
Concentration: 0.03959 ug/mL

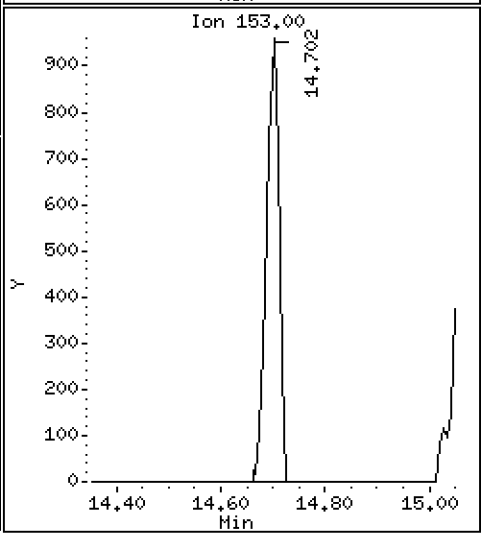


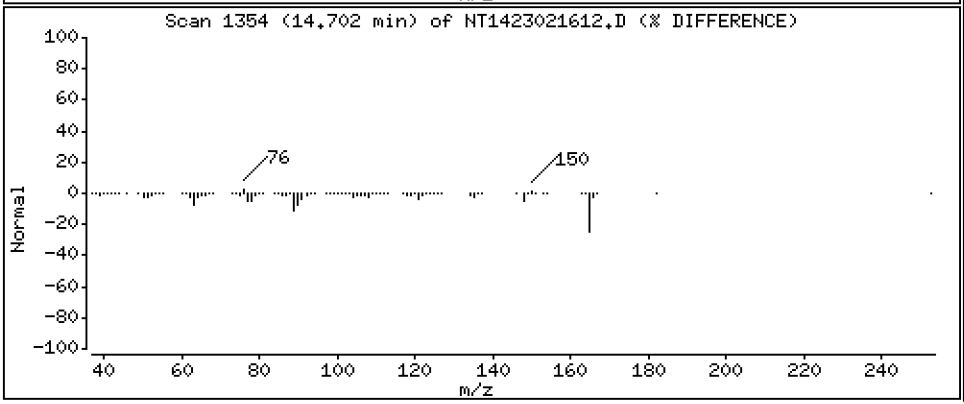












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

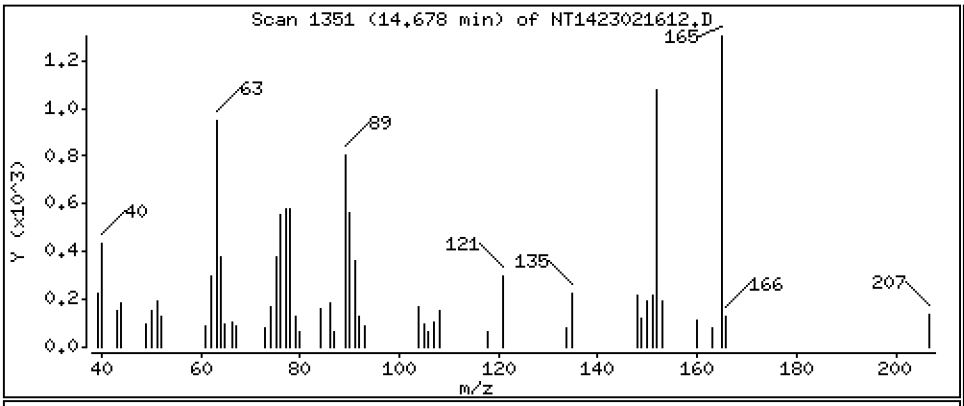
Operator: DSD

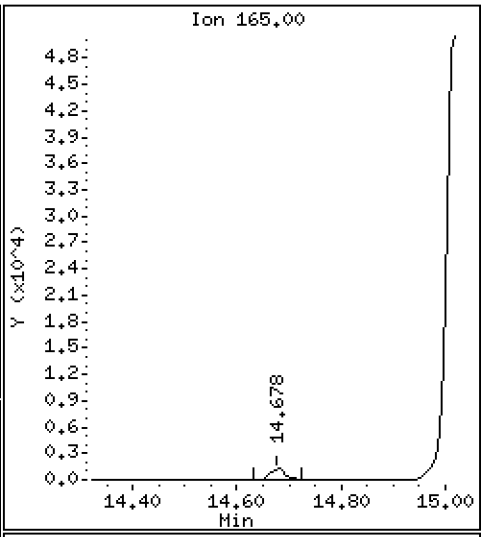
Column phase: ZB-5msi

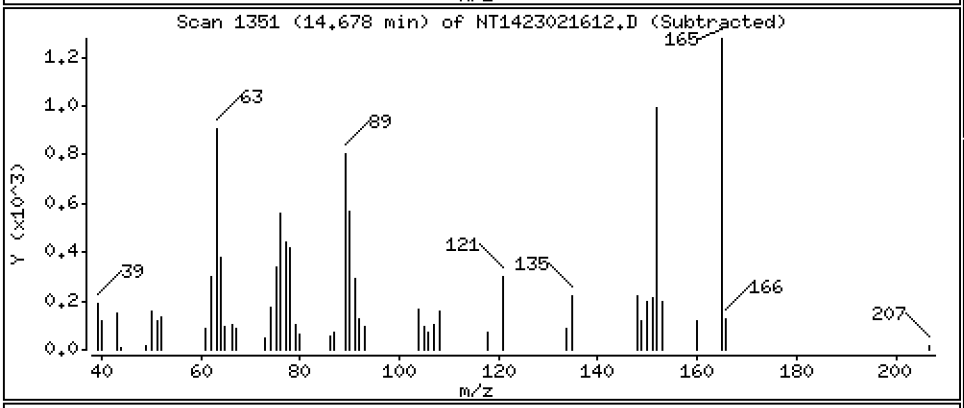
Column diameter: 0.25

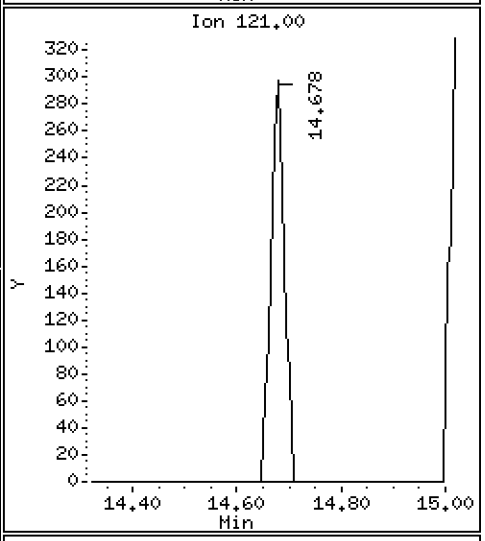
41 2,6-Dinitrotoluene

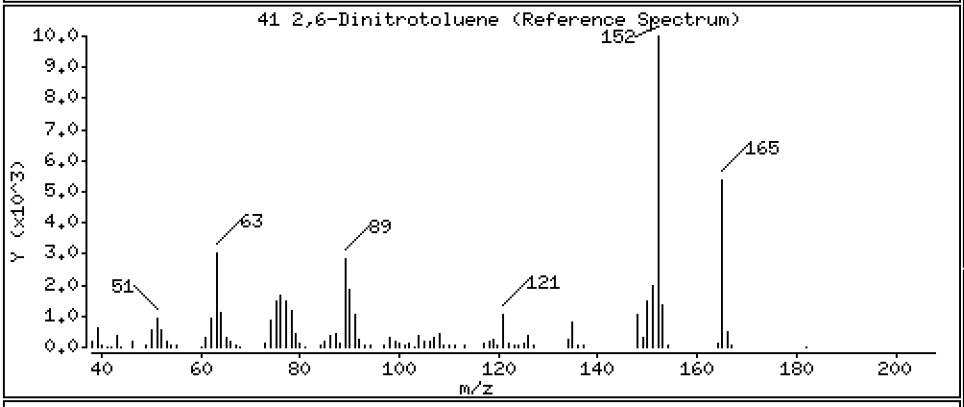
Concentration: 0.05056 ug/mL

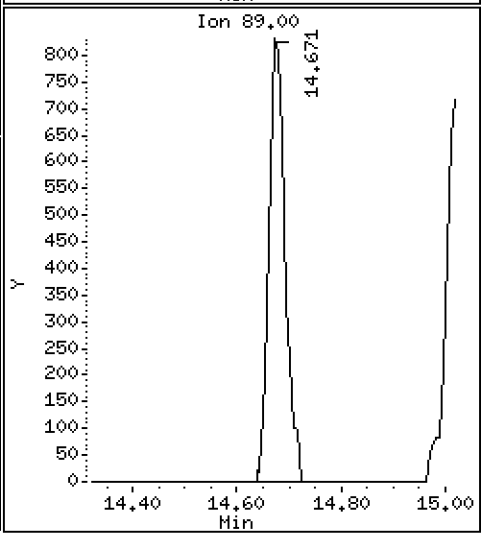


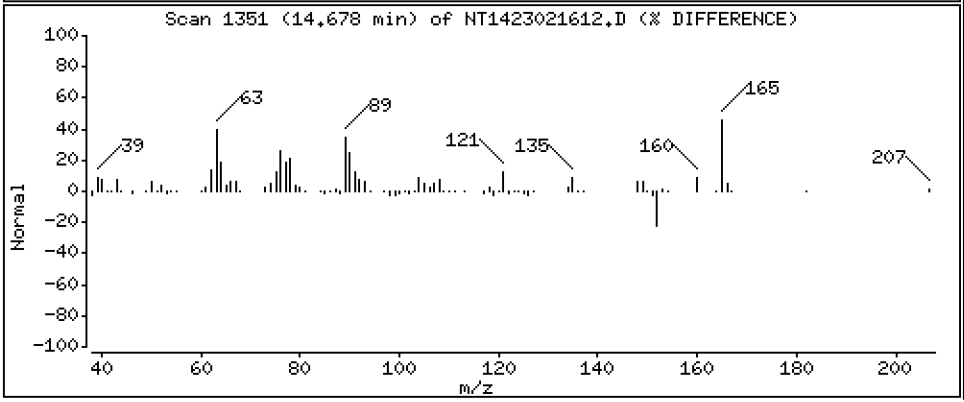












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

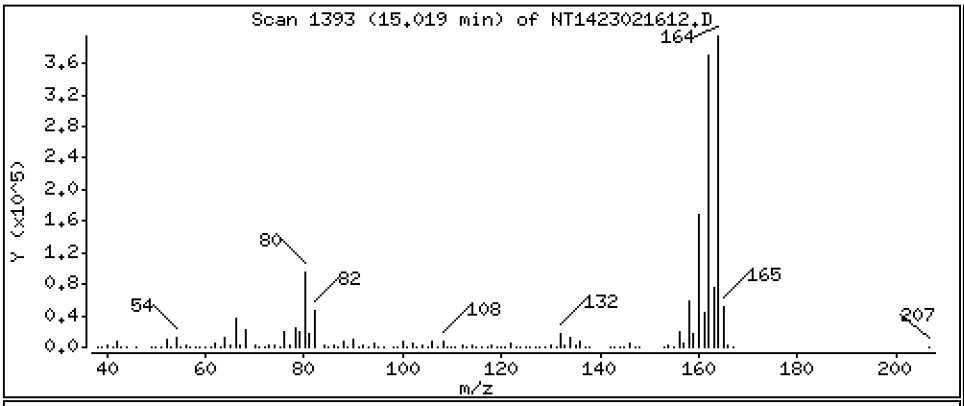
Operator: DSD

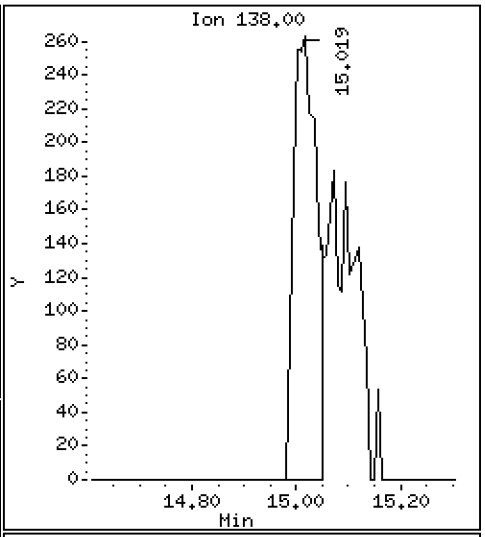
Column phase: ZB-5msi

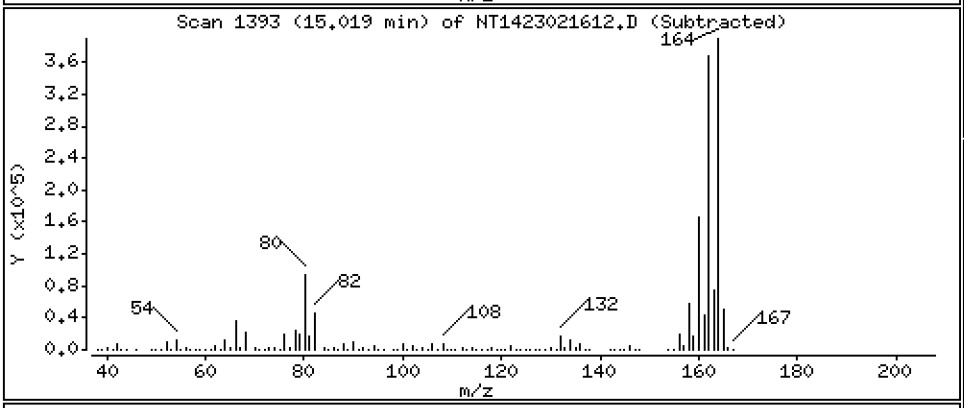
Column diameter: 0.25

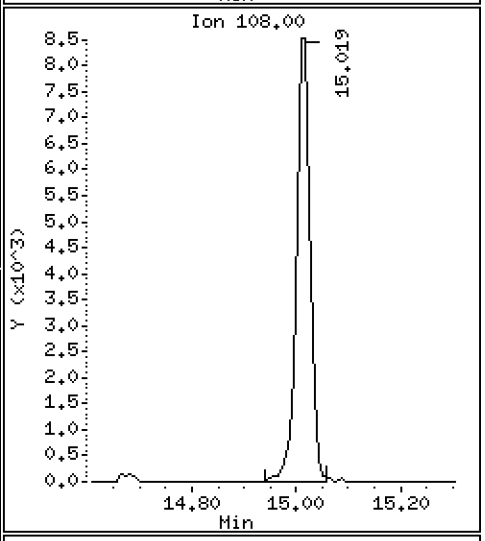
43 3-Nitroaniline

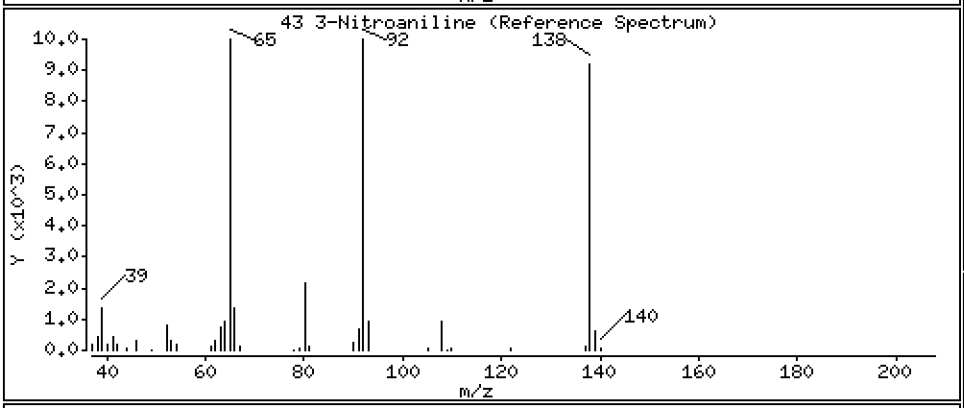
Concentration: 0.01517 ug/mL

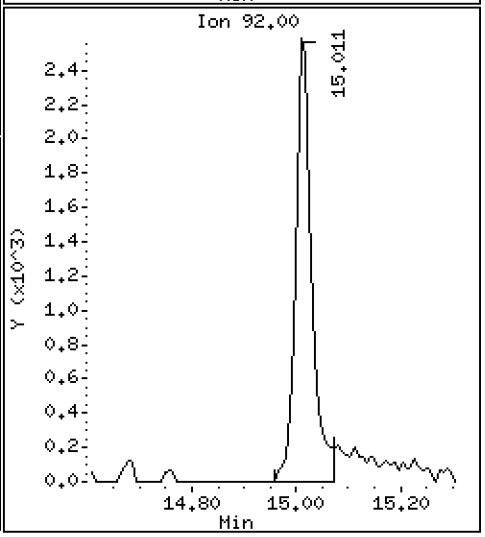


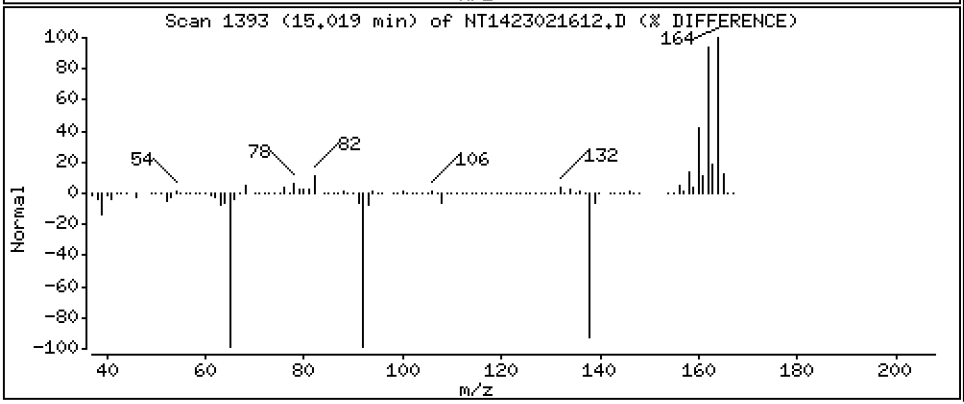












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

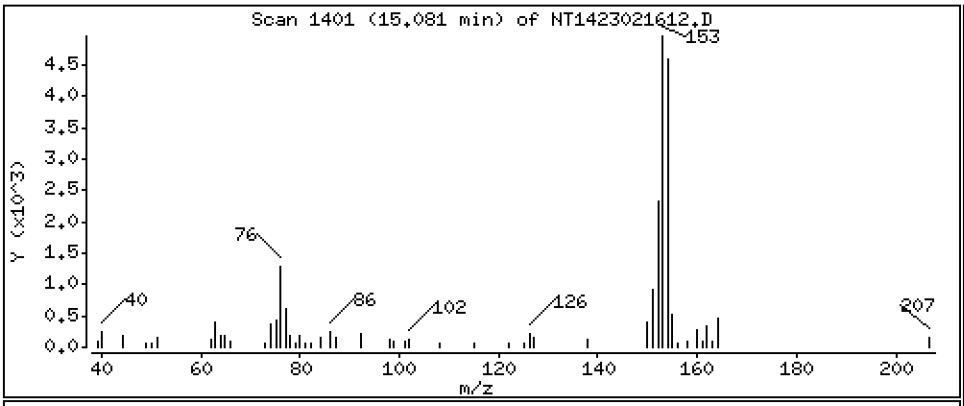
Operator: DSD

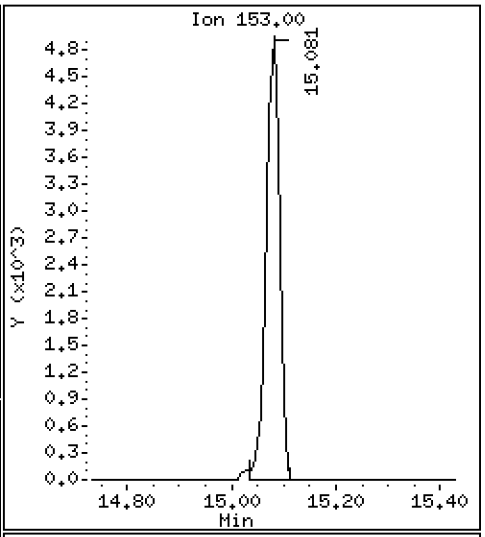
Column phase: ZB-5msi

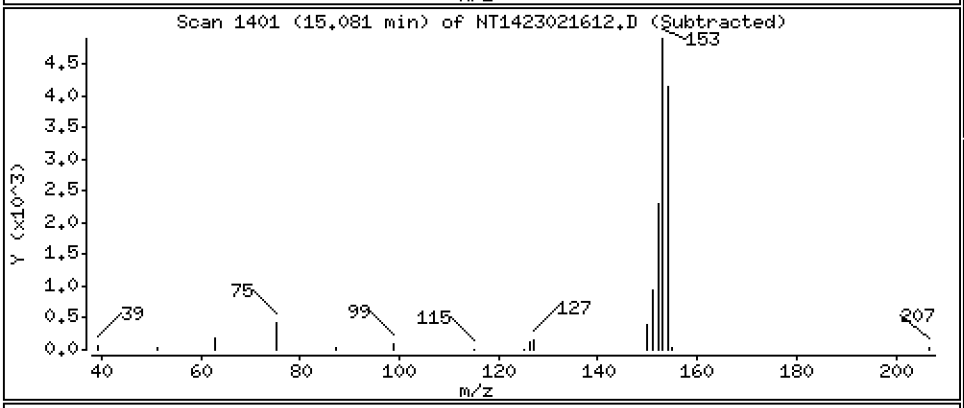
Column diameter: 0.25

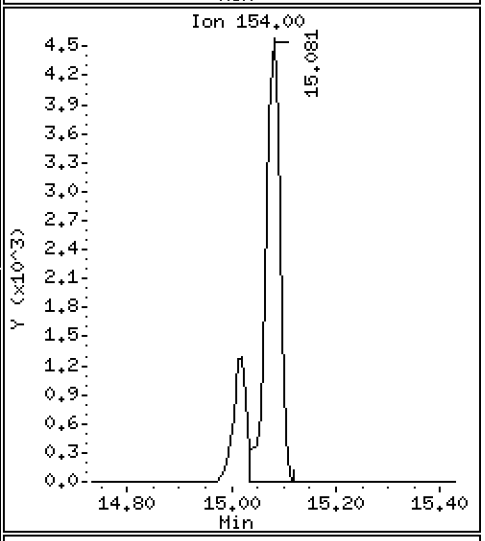
44 Acenaphthene

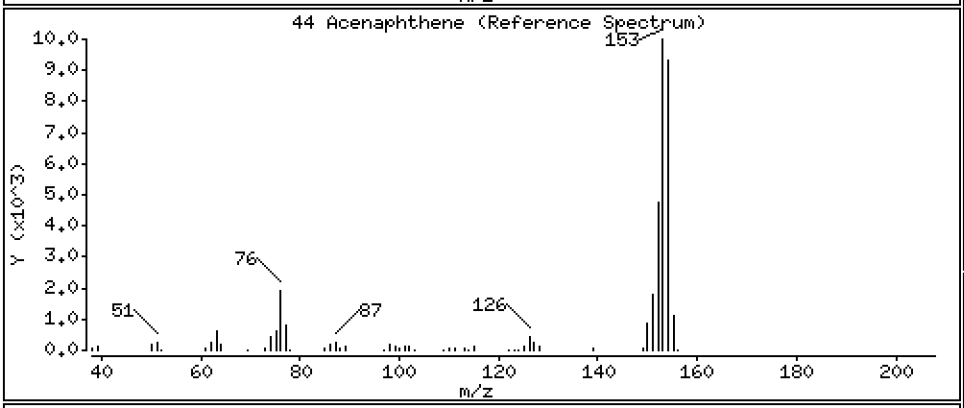
Concentration: 0.04509 ug/mL

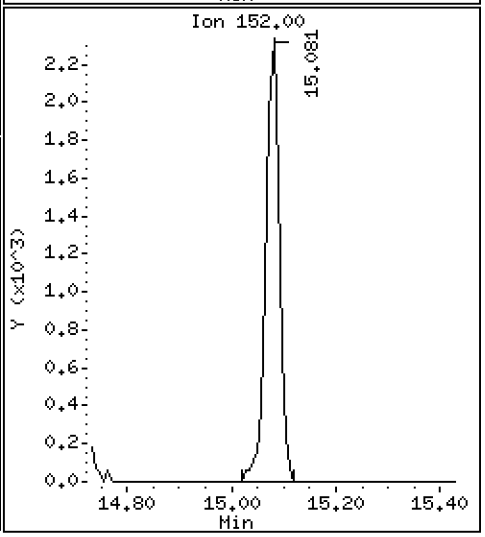


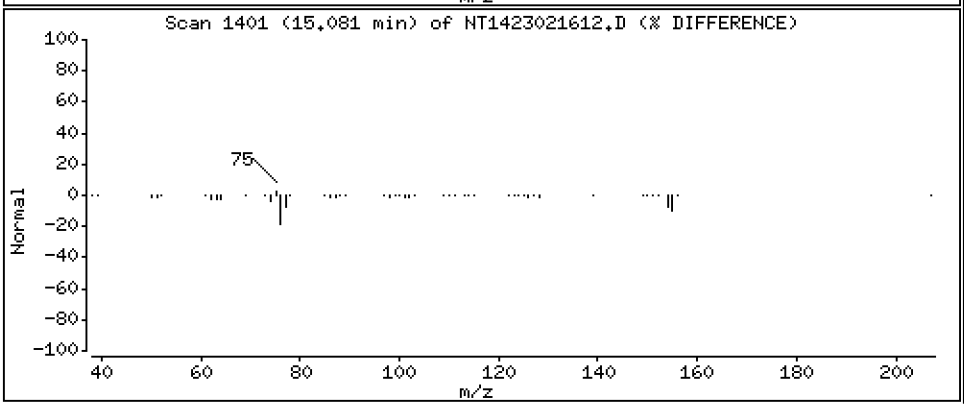












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

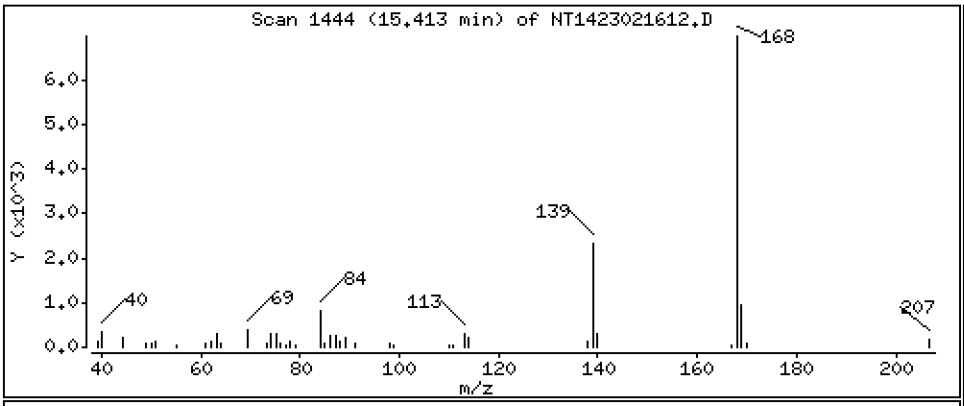
Operator: DSD

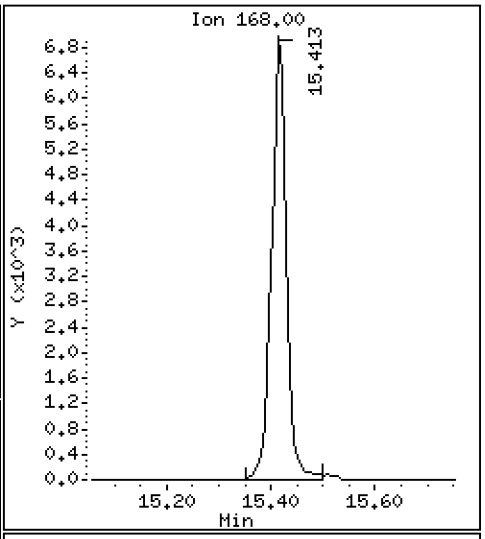
Column phase: ZB-5msi

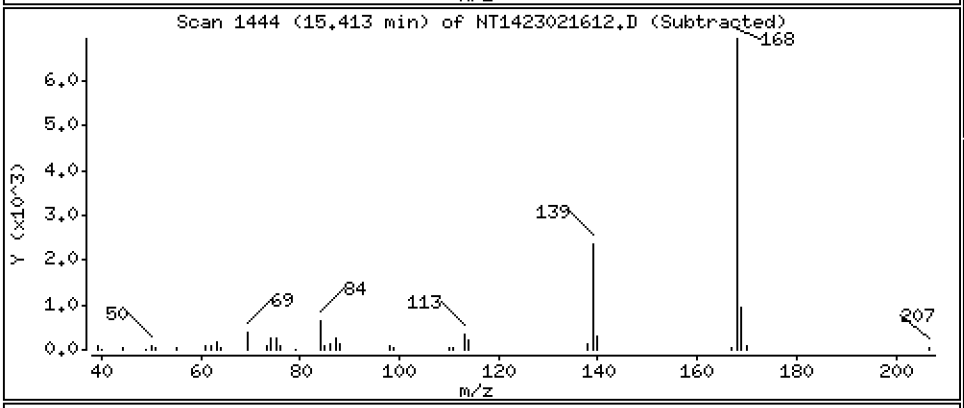
Column diameter: 0.25

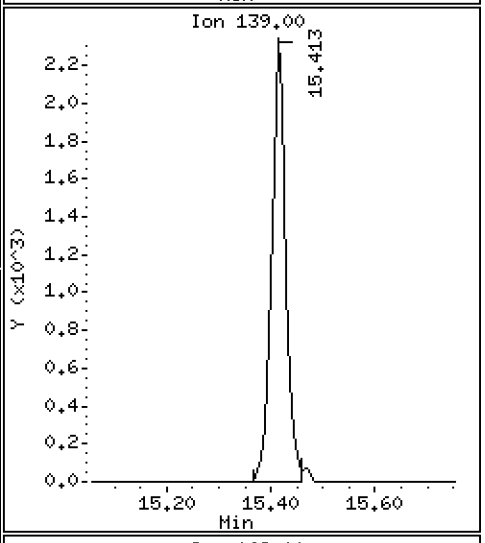
46 Dibenzofuran

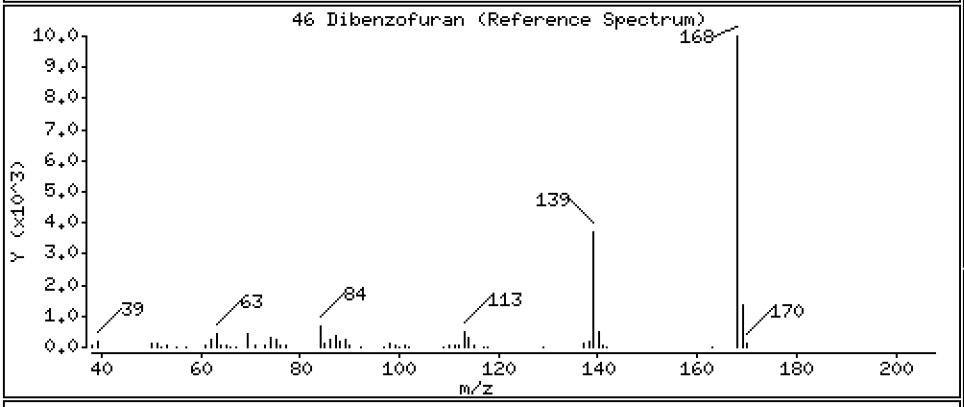
Concentration: 0.04435 ug/mL

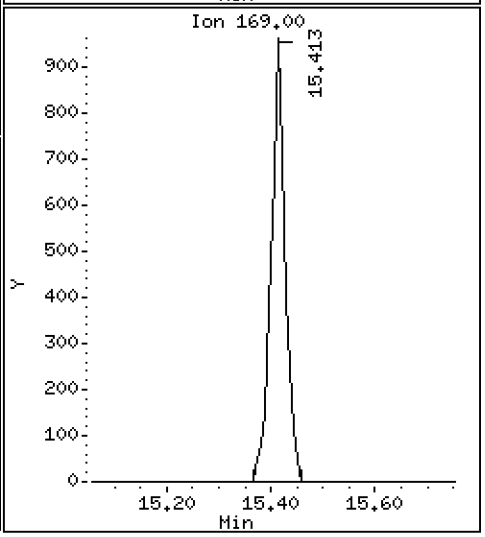


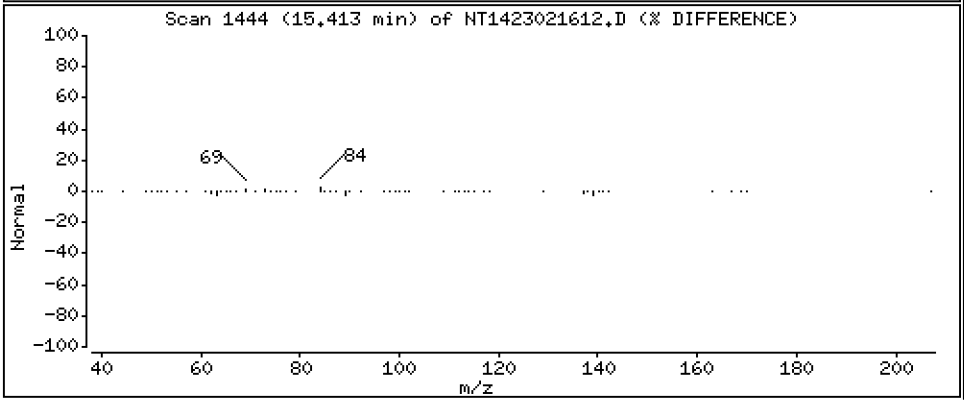












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

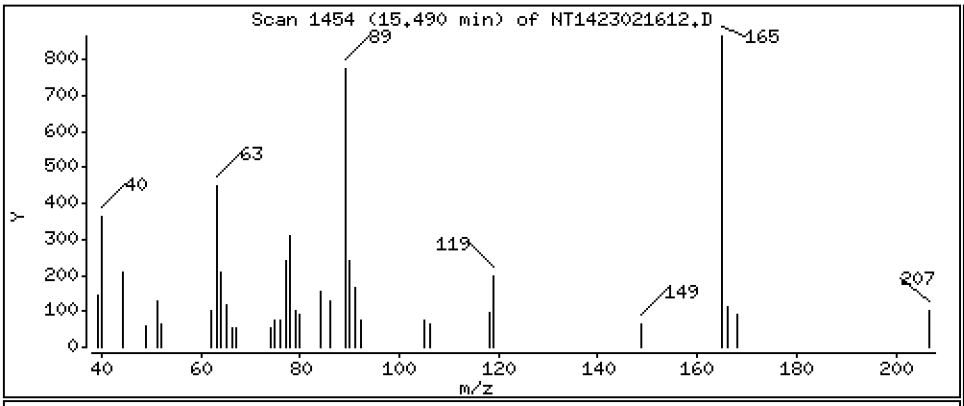
Operator: DSD

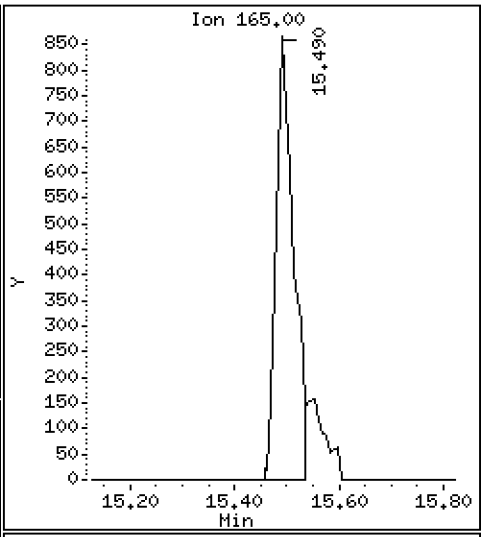
Column phase: ZB-5msi

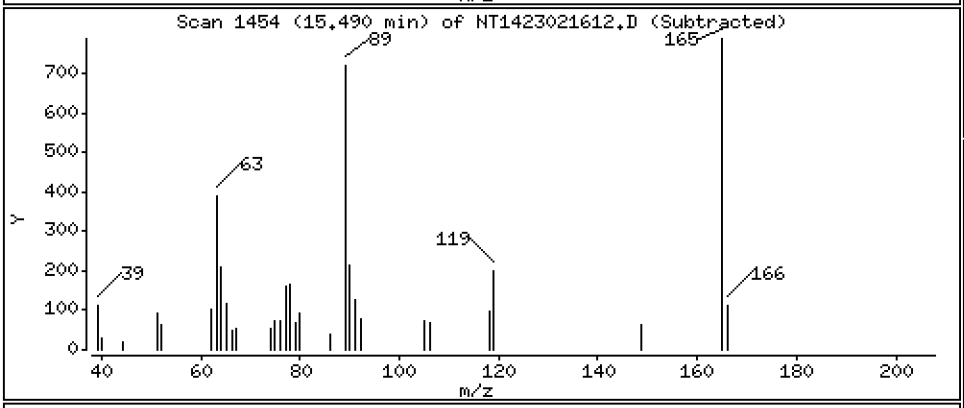
Column diameter: 0.25

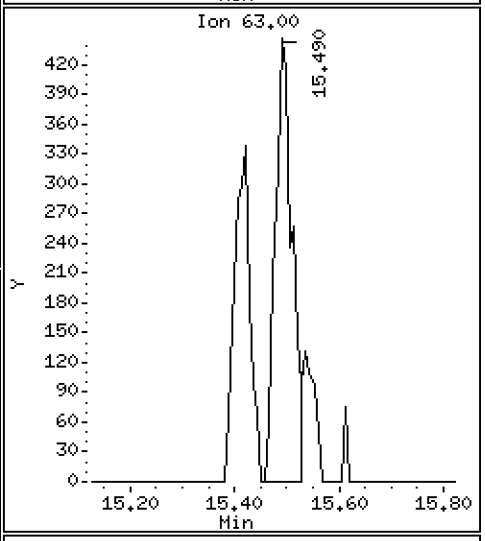
48 2,4-Dinitrotoluene

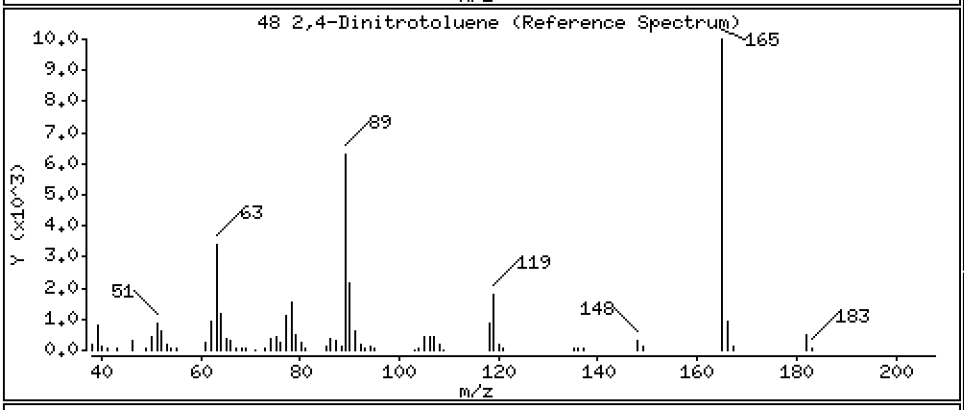
Concentration: 0.02839 ug/mL

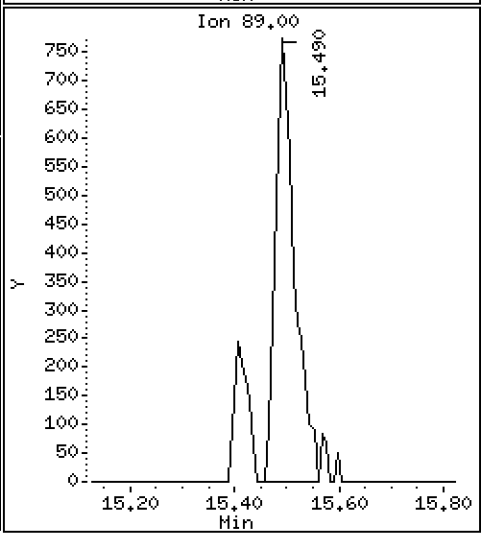


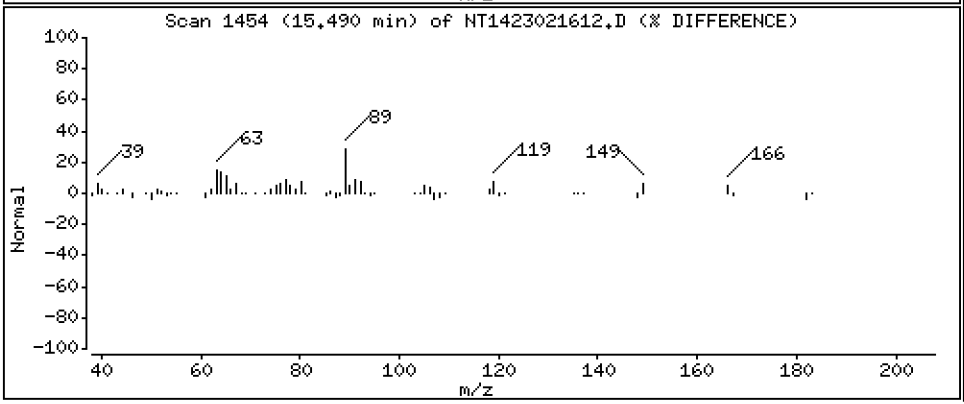












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

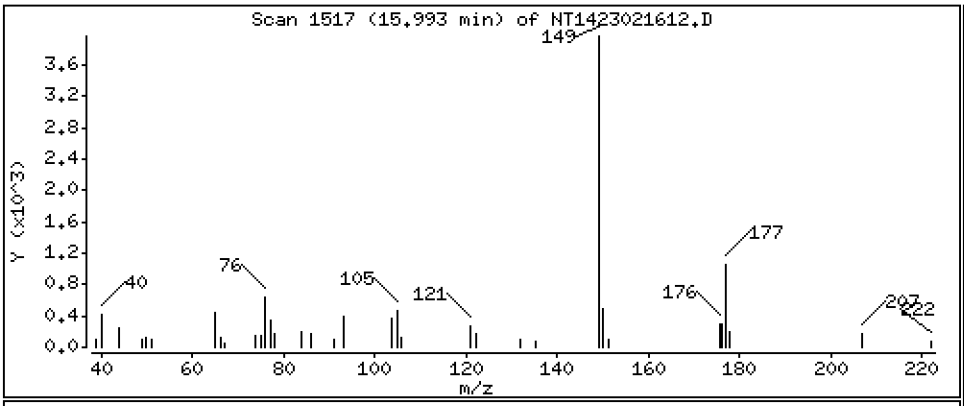
Operator: DSD

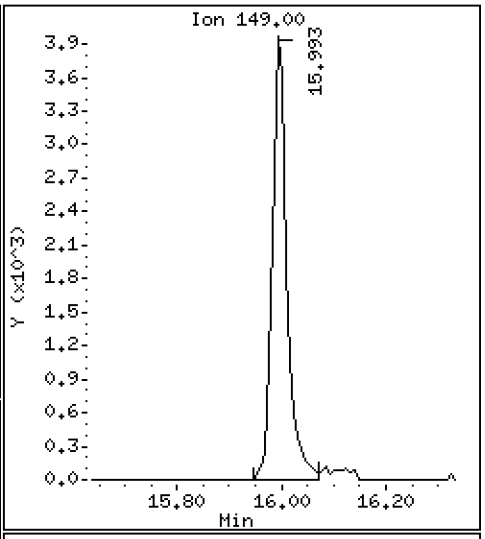
Column phase: ZB-5msi

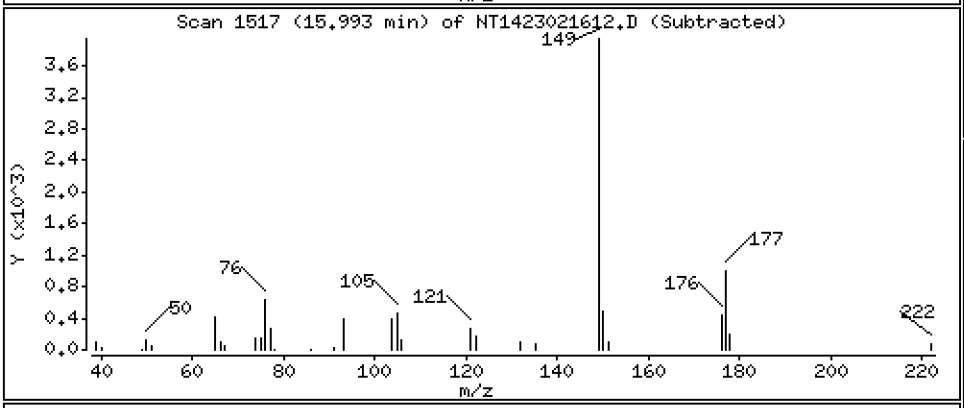
Column diameter: 0.25

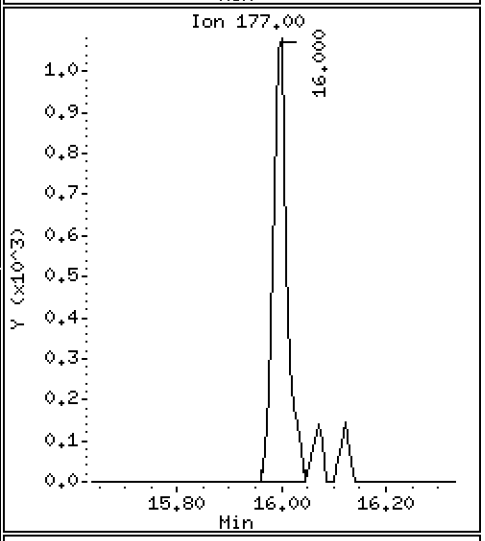
50 Diethylphthalate

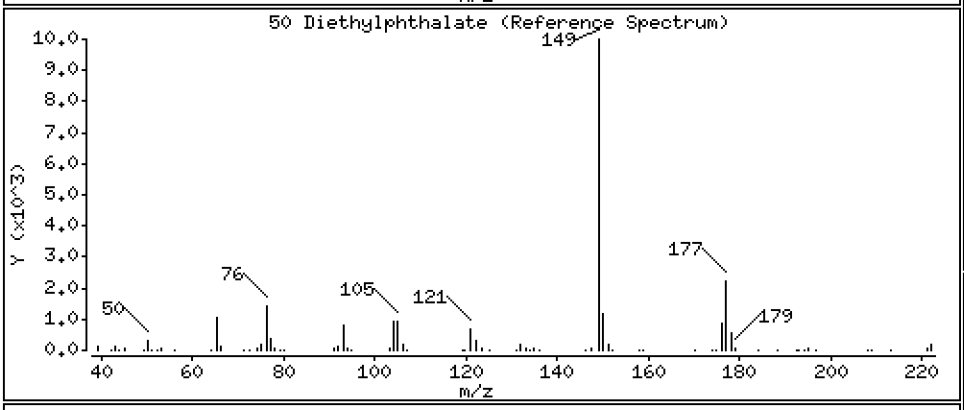
Concentration: 0.03033 ug/mL

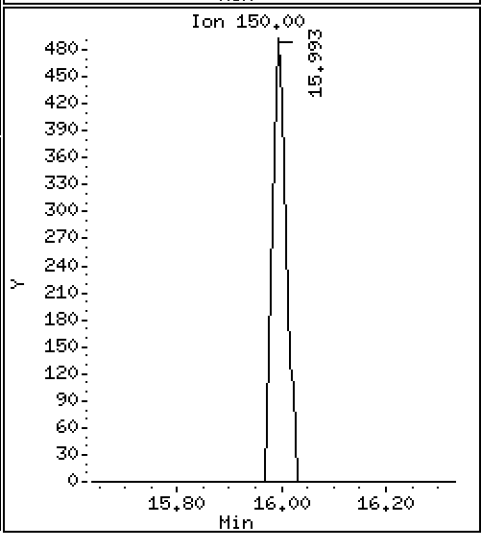


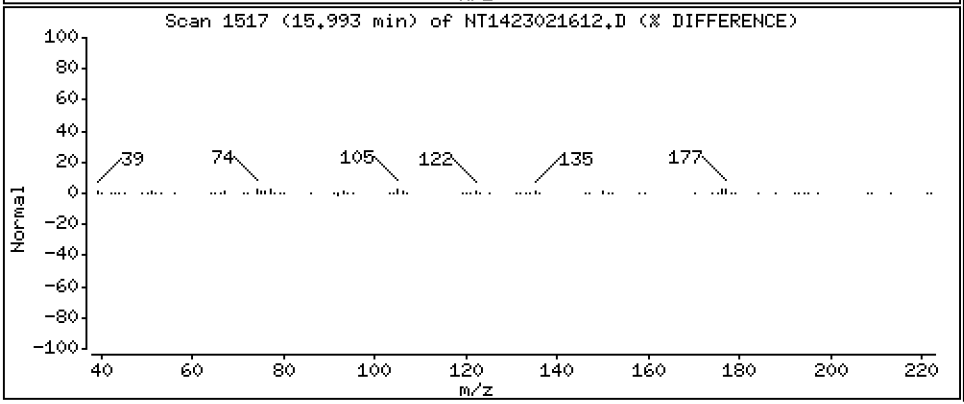












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021612.D

Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

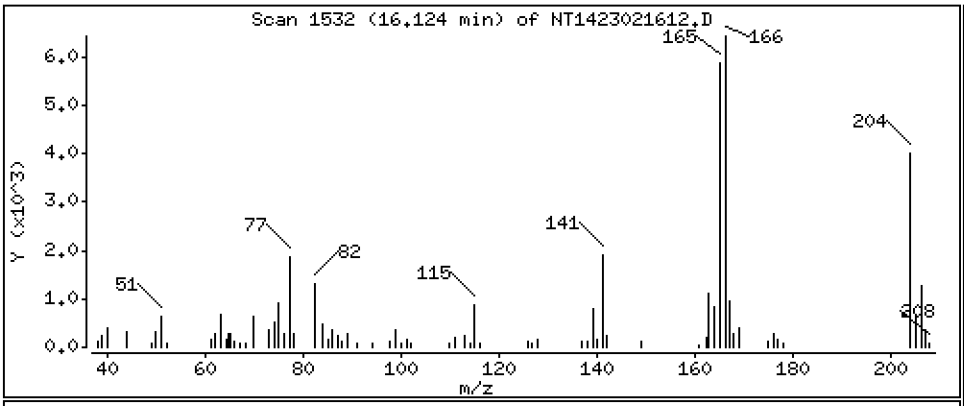
Operator: DSD

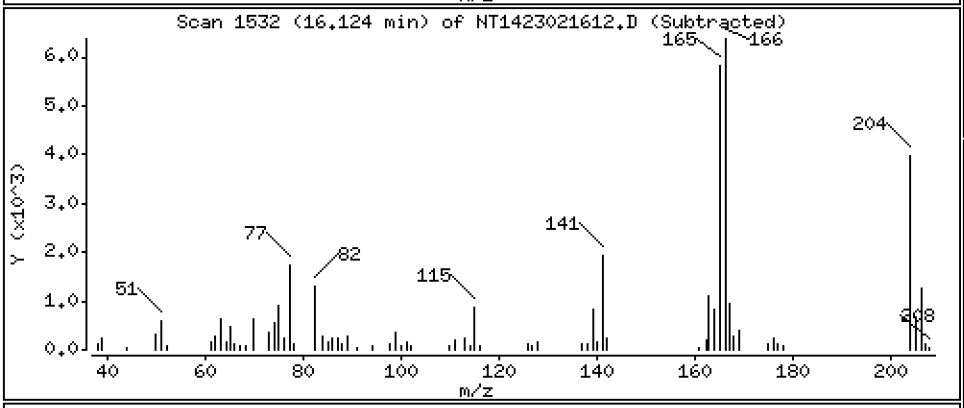
Column phase: ZB-5msi

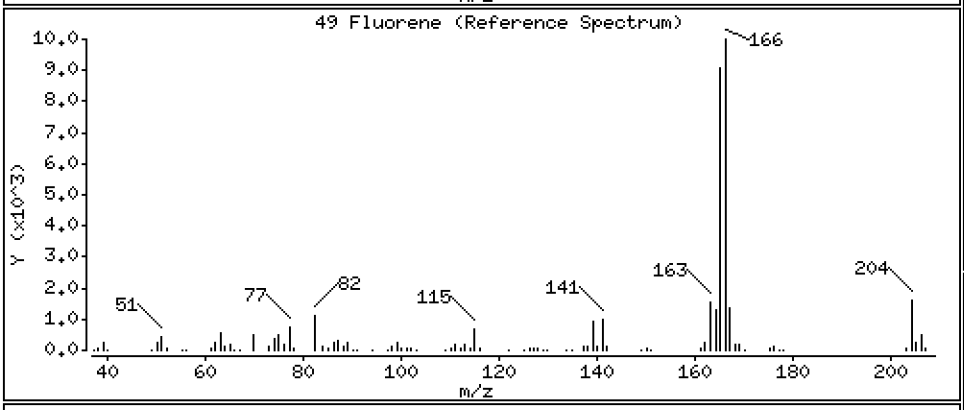
Column diameter: 0.25

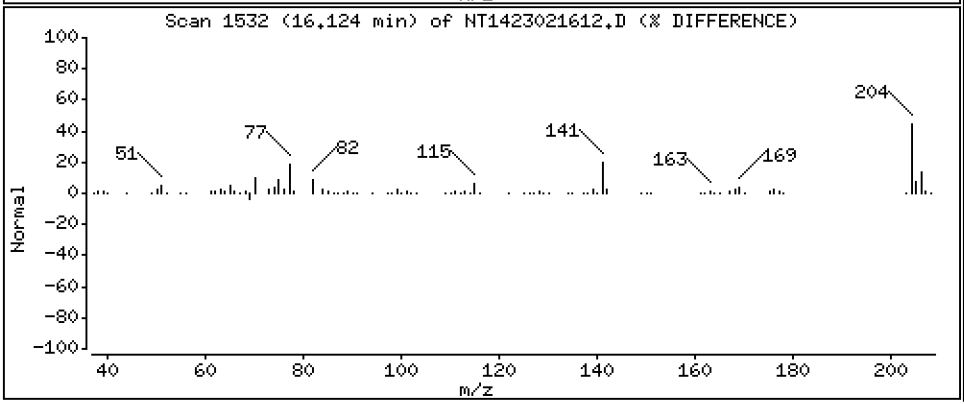
49 Fluorene

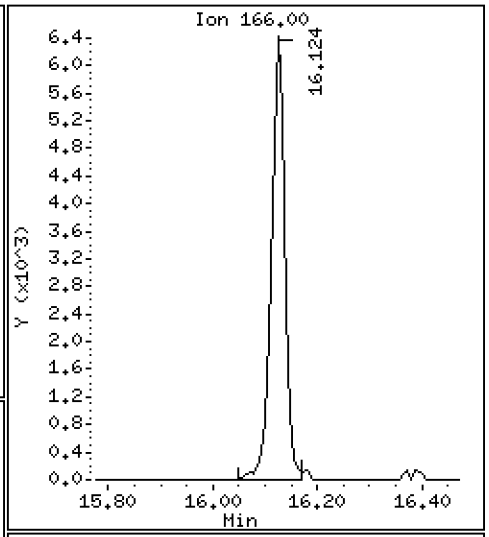
Concentration: 0.04014 ug/mL

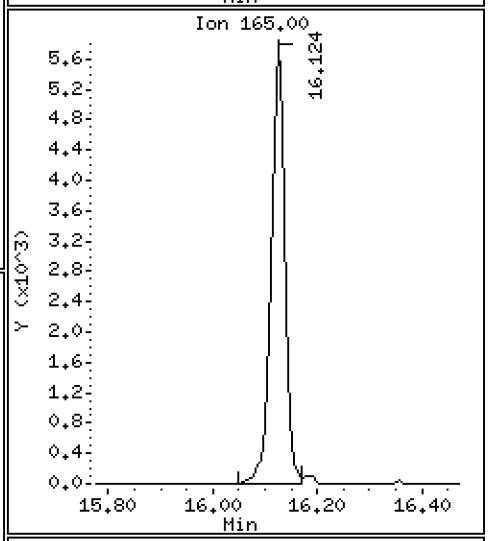


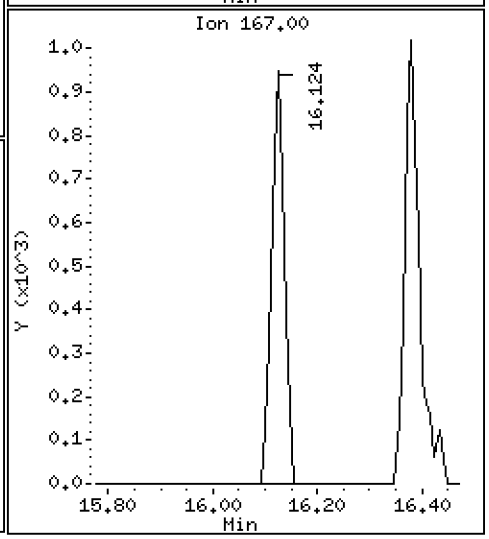












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

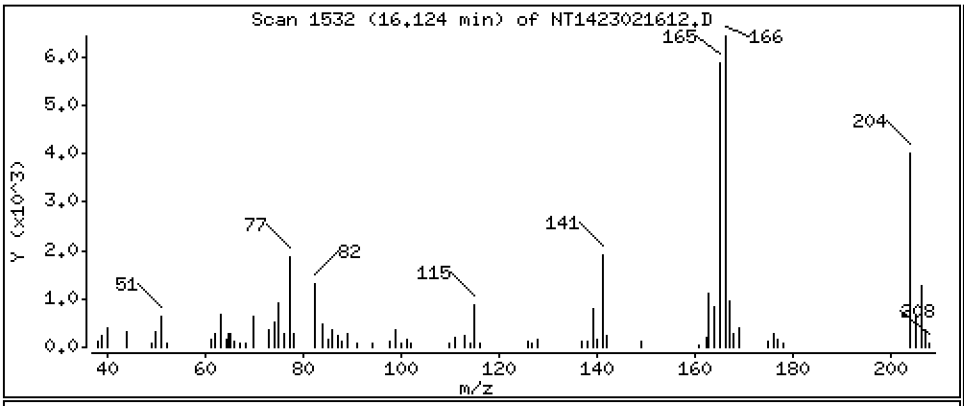
Operator: DSD

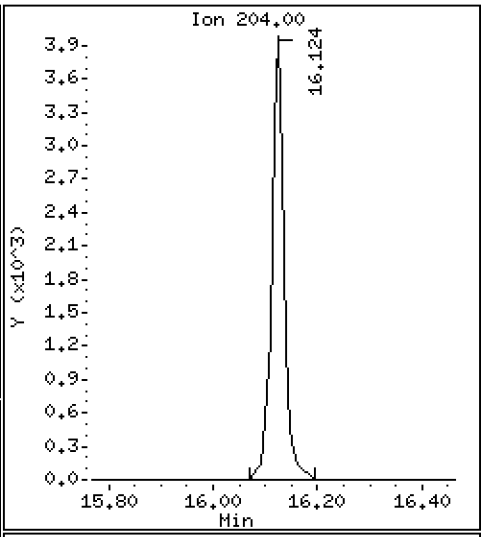
Column phase: ZB-5msi

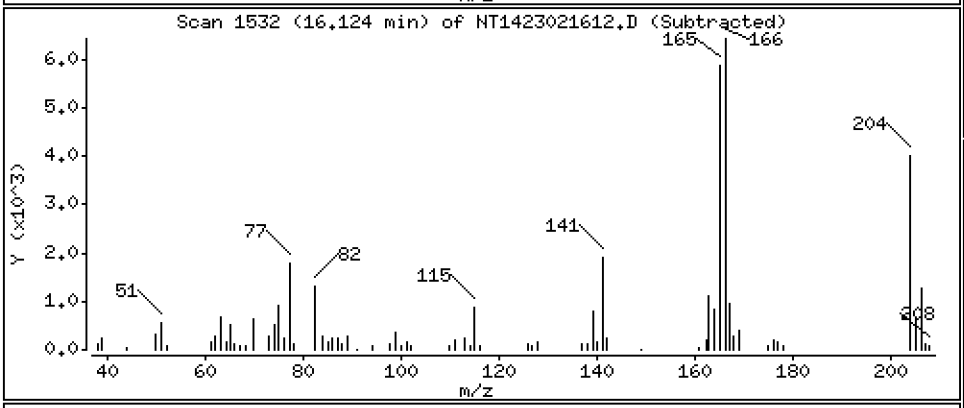
Column diameter: 0.25

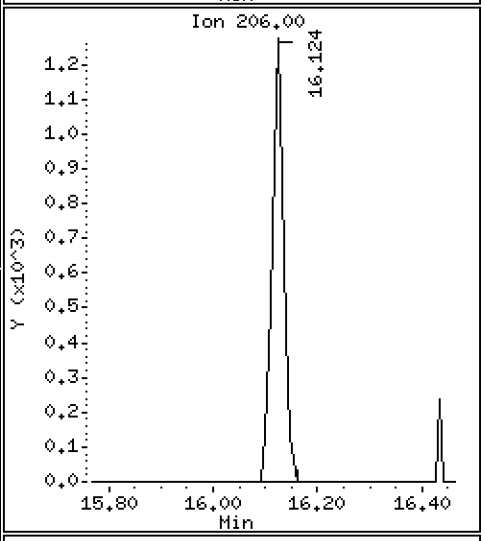
51 4-Chlorophenyl-phenylether

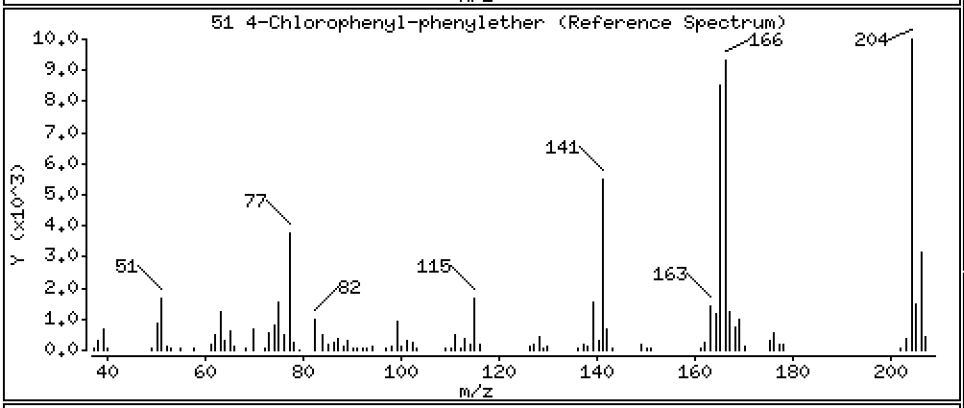
Concentration: 0.03875 ug/mL

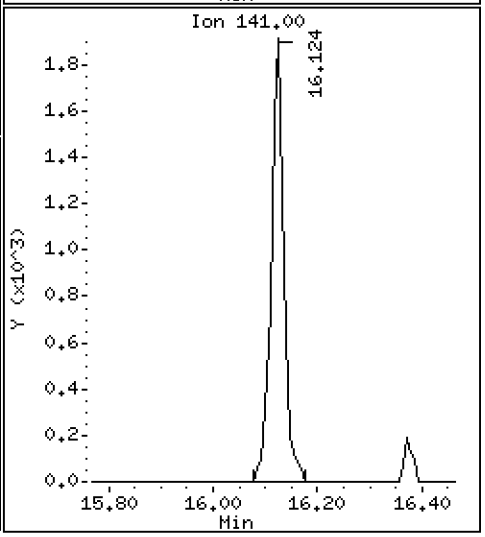


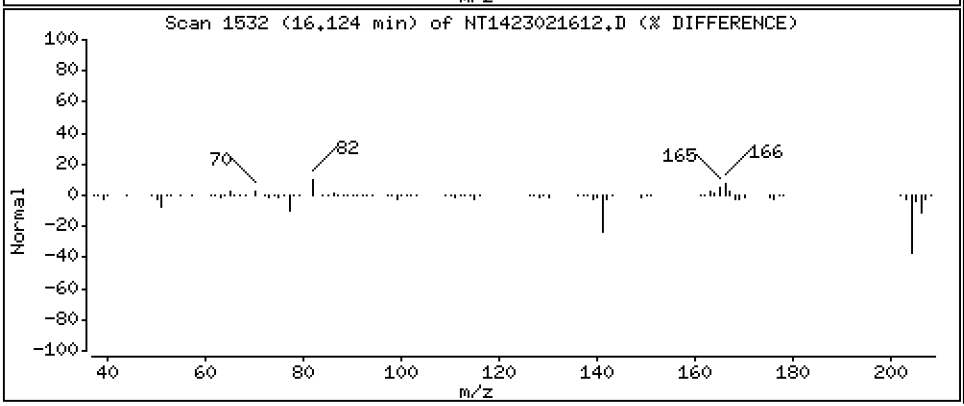












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

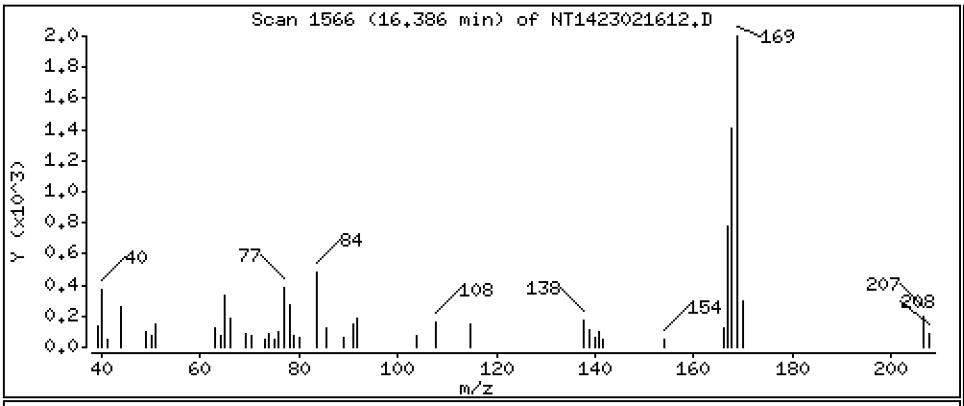
Operator: DSD

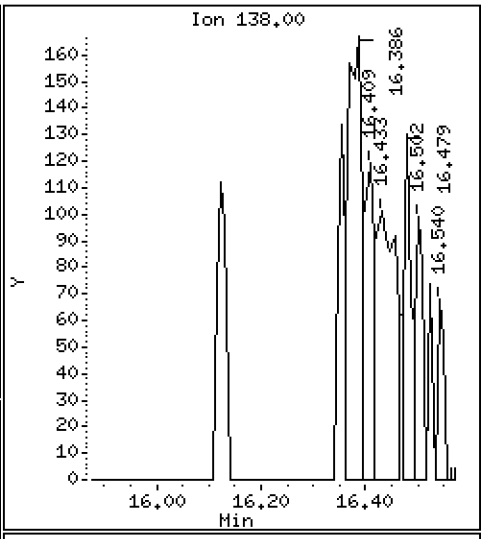
Column phase: ZB-5msi

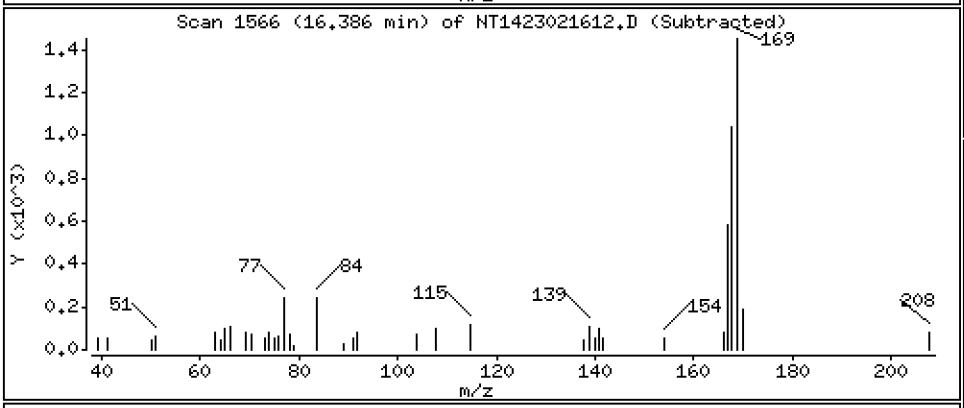
Column diameter: 0.25

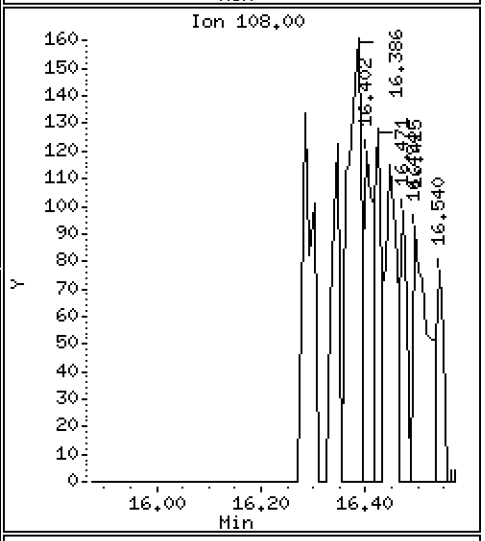
52 4-Nitroaniline

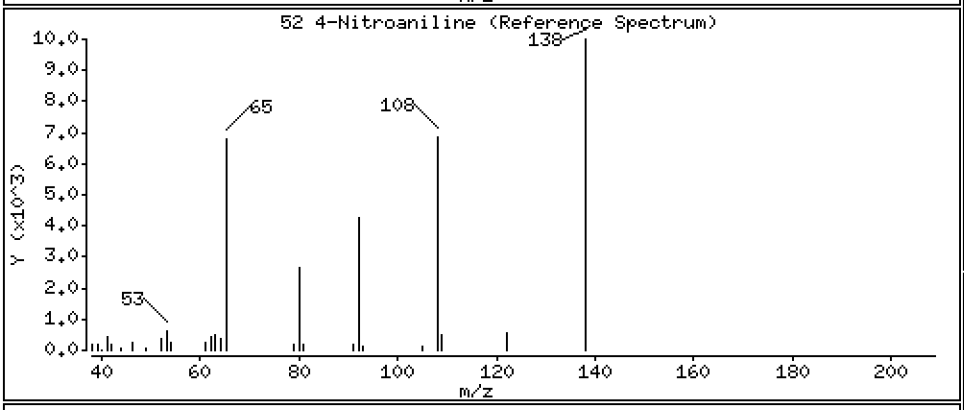
Concentration: 0.004996 ug/mL

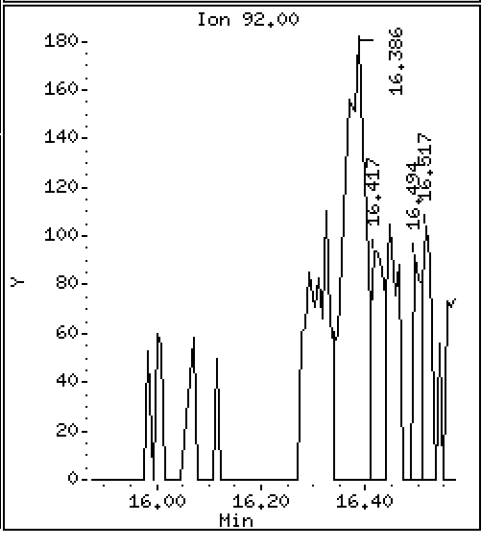


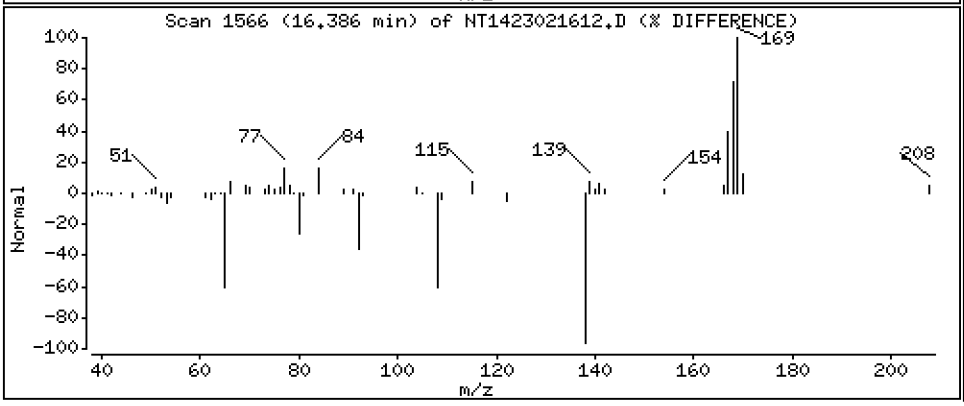












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

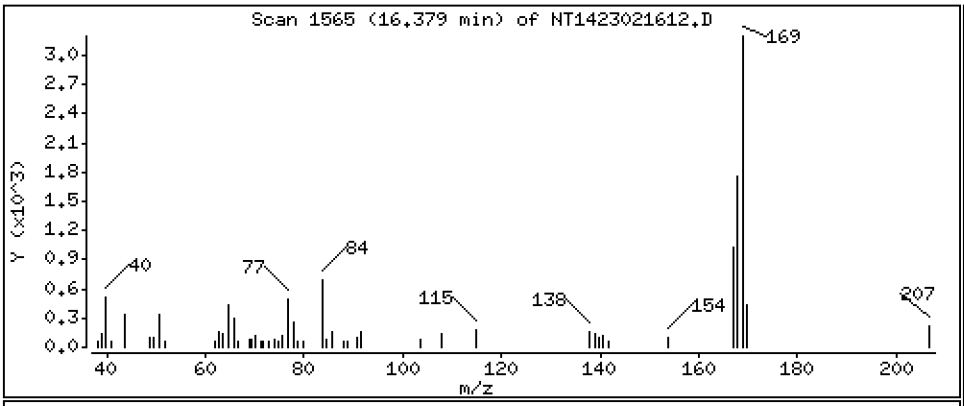
Operator: DSD

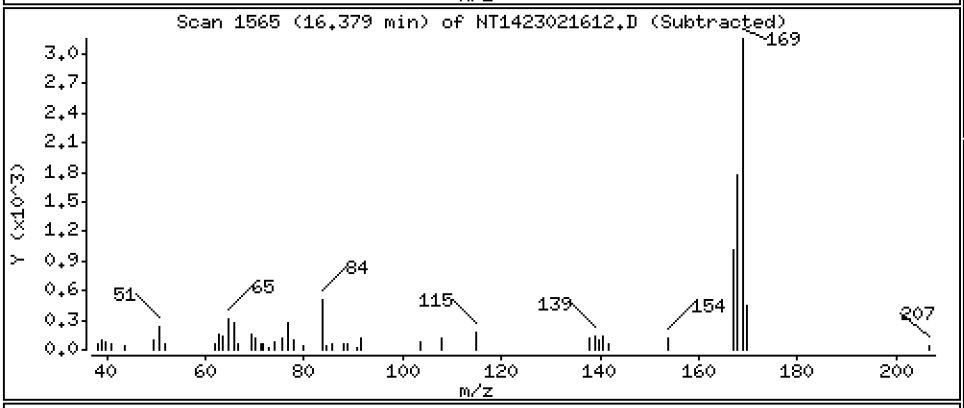
Column phase: ZB-5msi

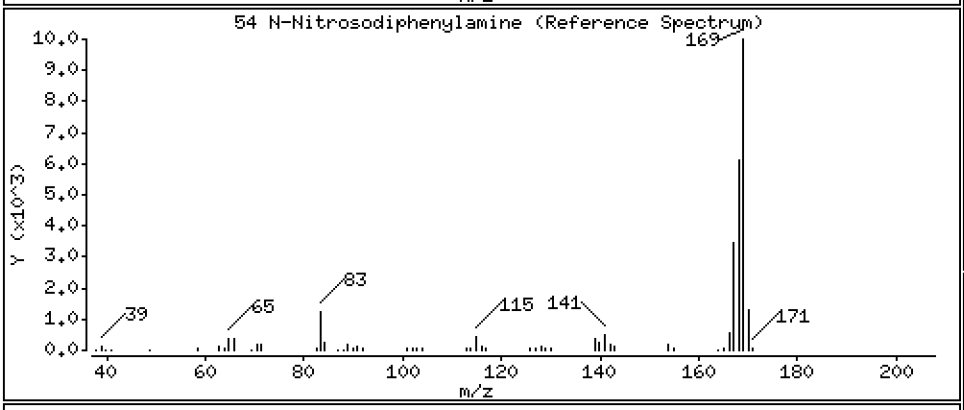
Column diameter: 0.25

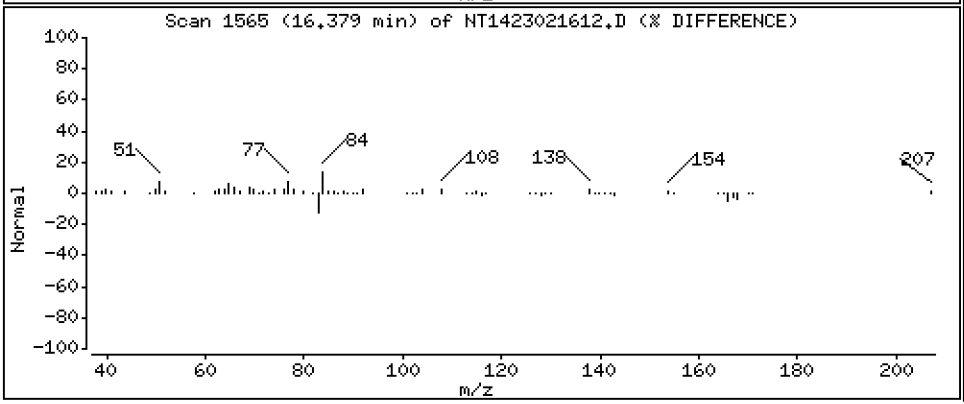
54 N-Nitrosodiphenylamine

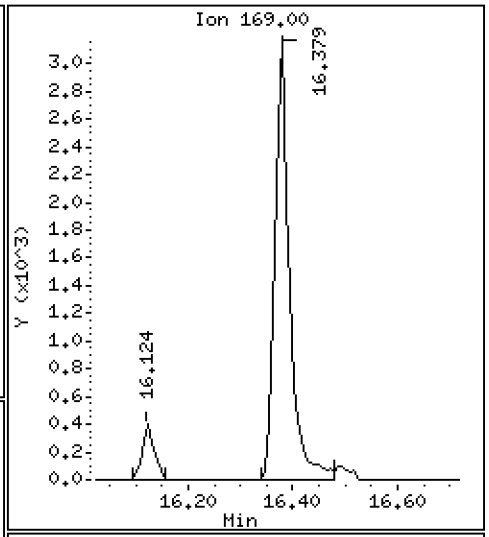
Concentration: 0.02942 ug/mL

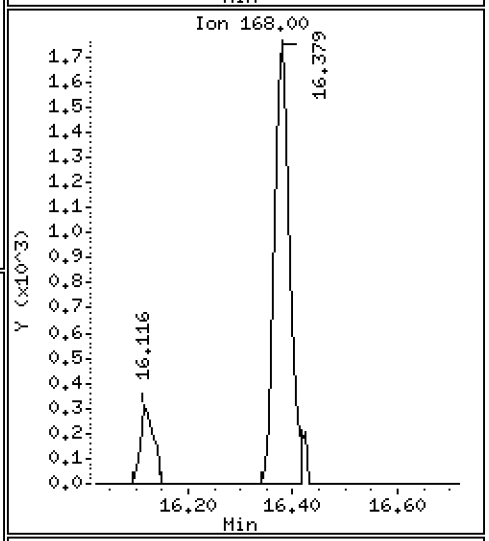


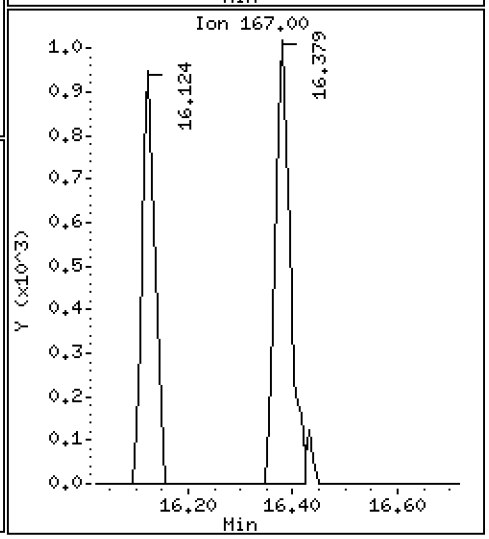












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

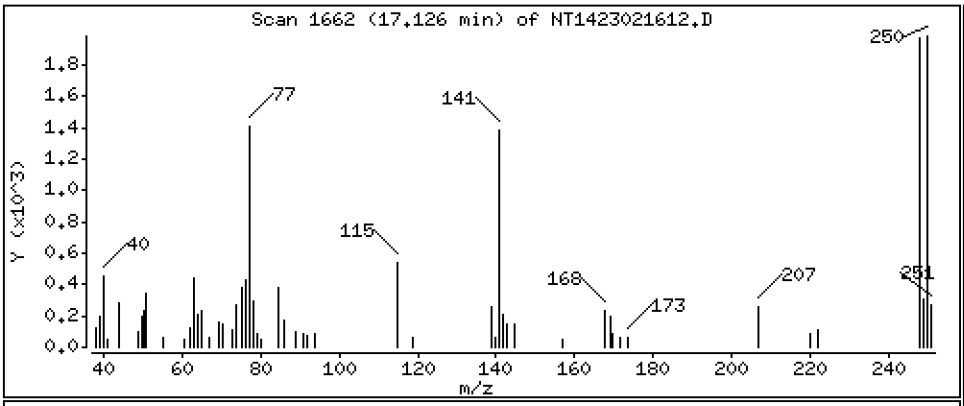
Operator: DSD

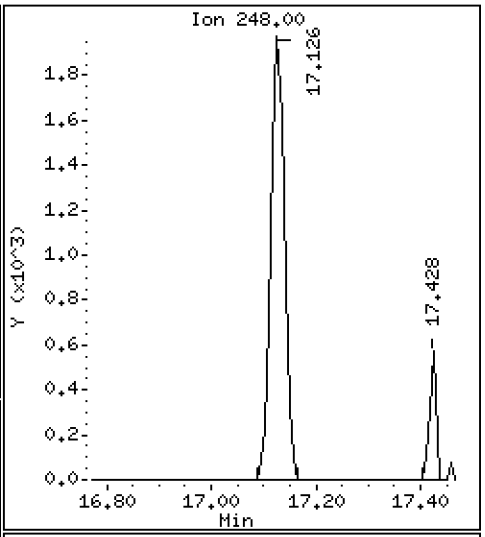
Column phase: ZB-5msi

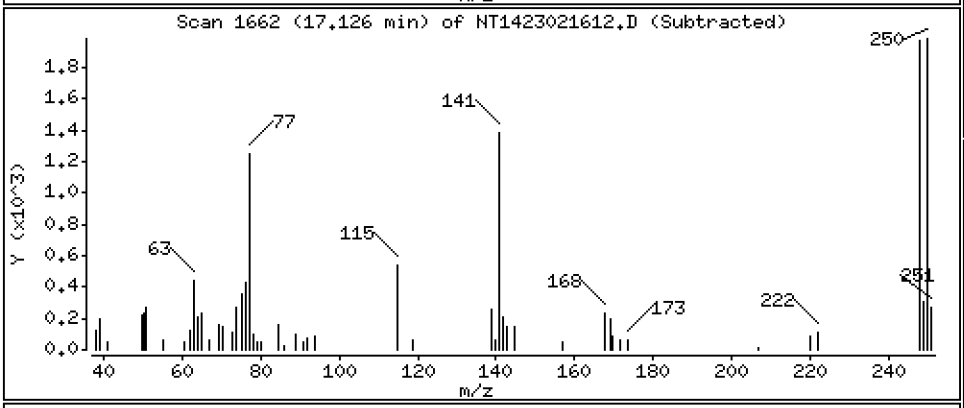
Column diameter: 0.25

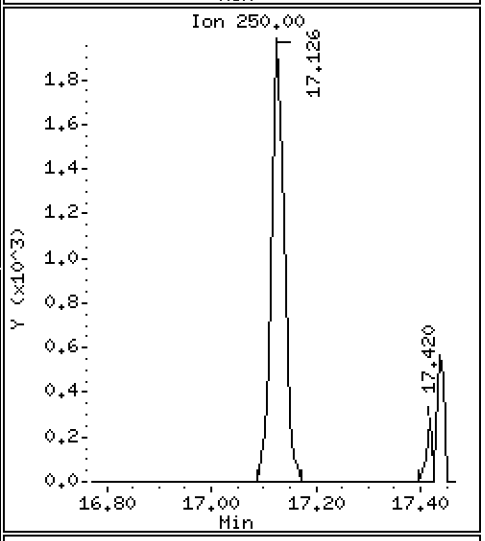
56 4-Bromophenyl-phenylether

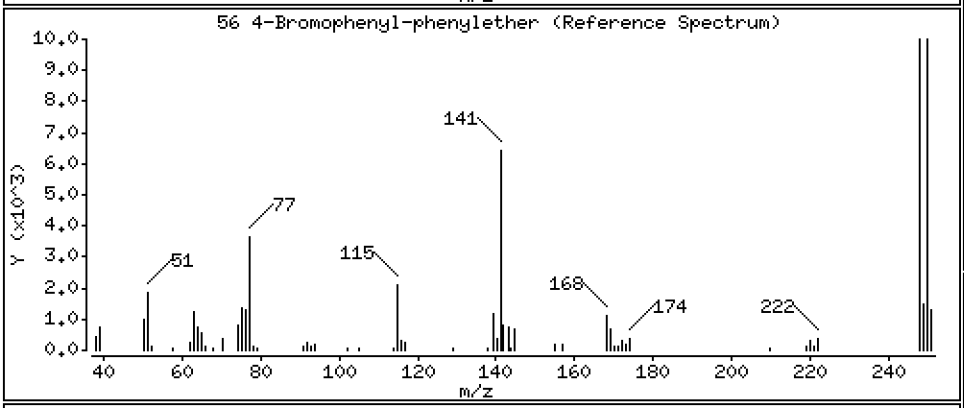
Concentration: 0.03762 ug/mL

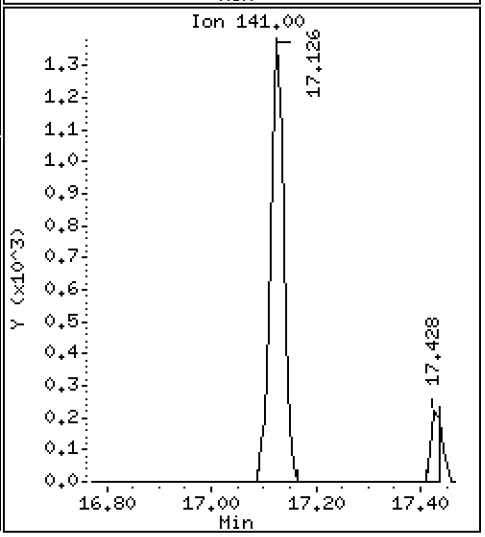


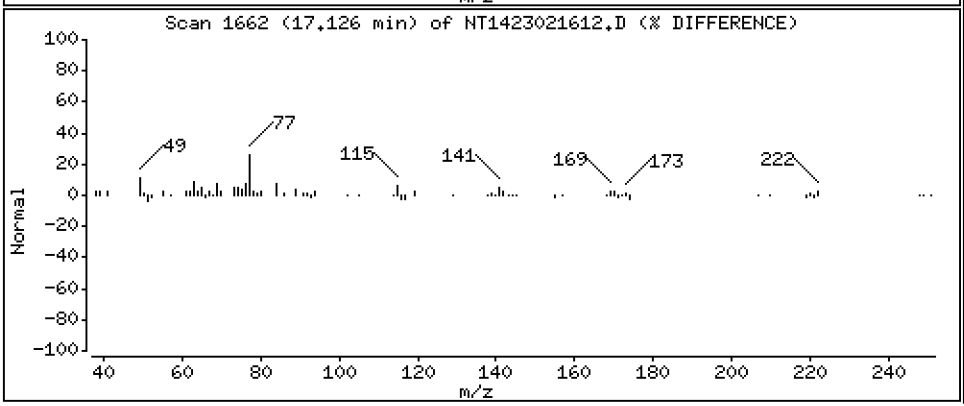












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

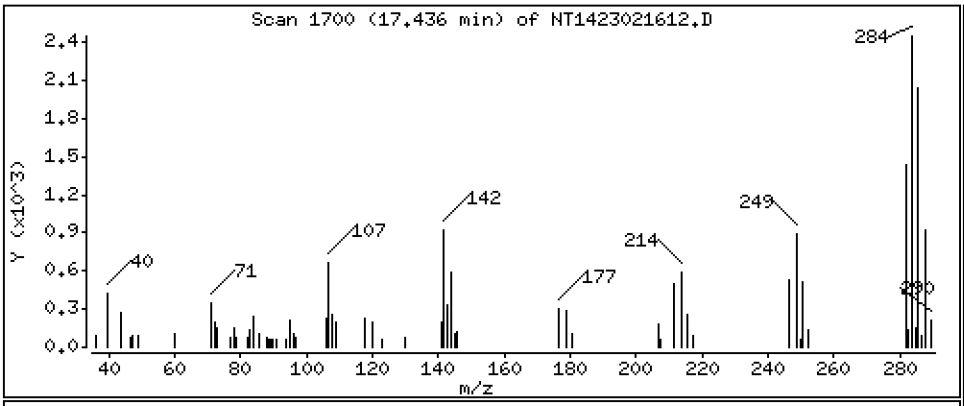
Operator: DSD

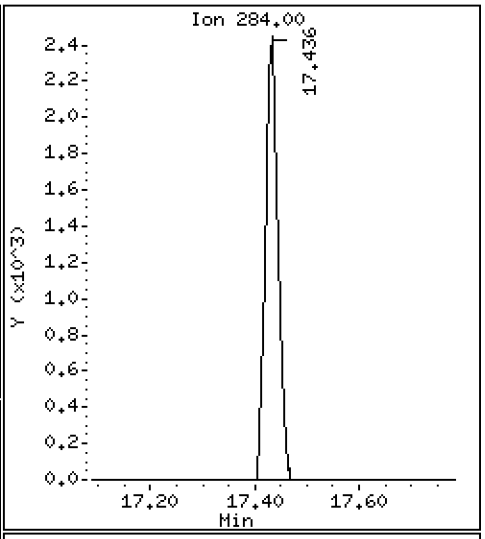
Column phase: ZB-5msi

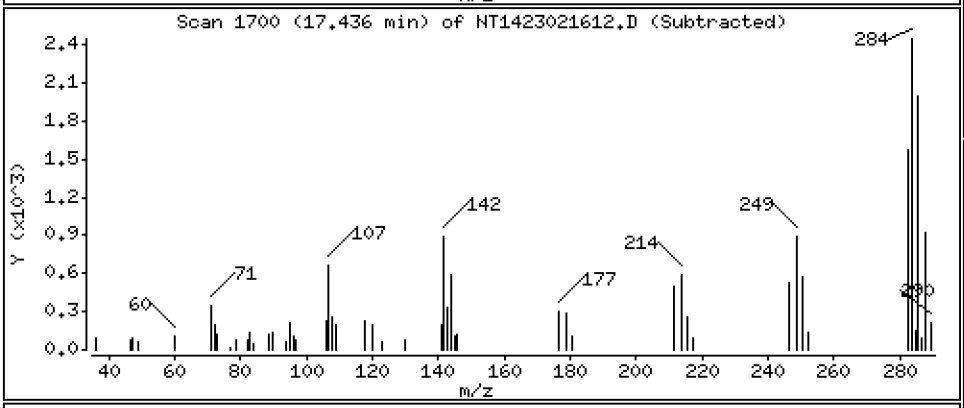
Column diameter: 0.25

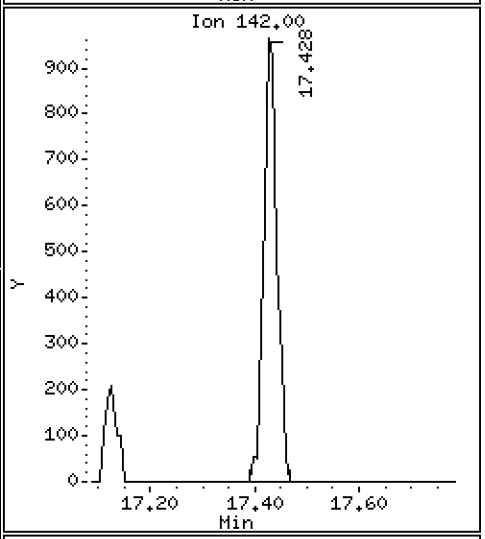
57 Hexachlorobenzene

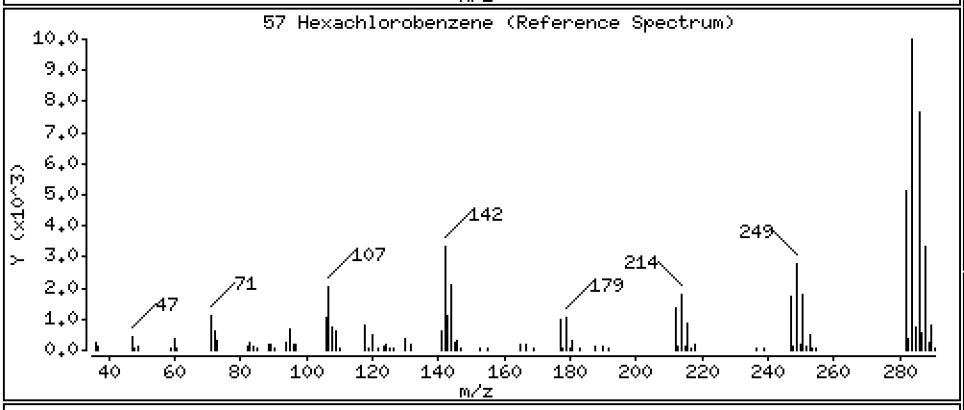
Concentration: 0.04400 ug/mL

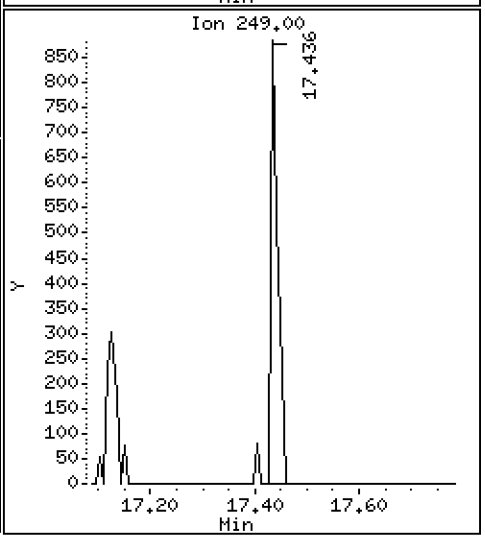


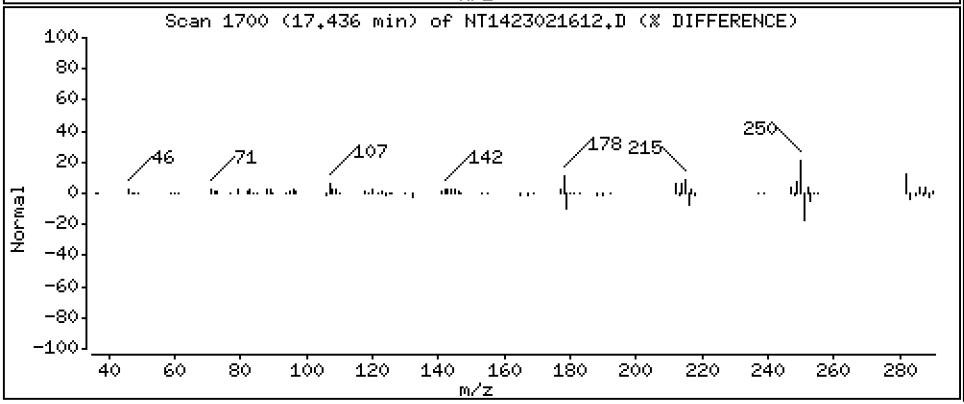












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

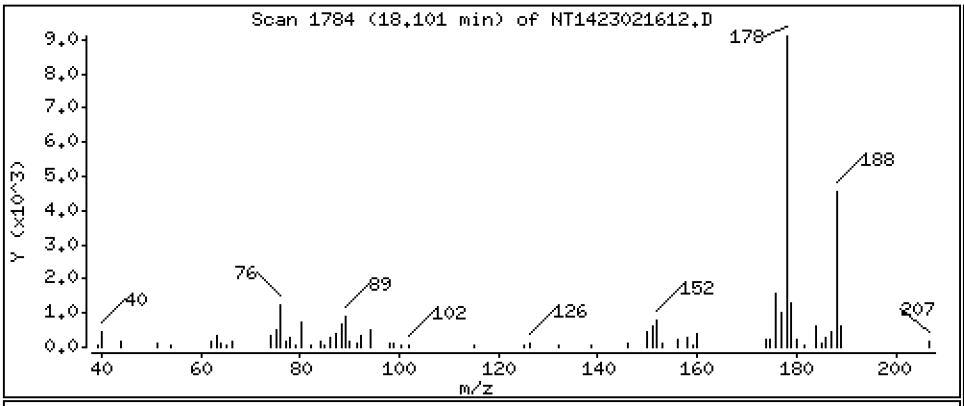
Operator: DSD

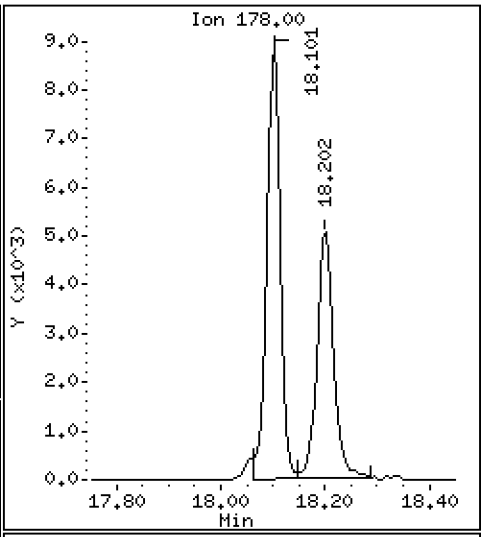
Column phase: ZB-5msi

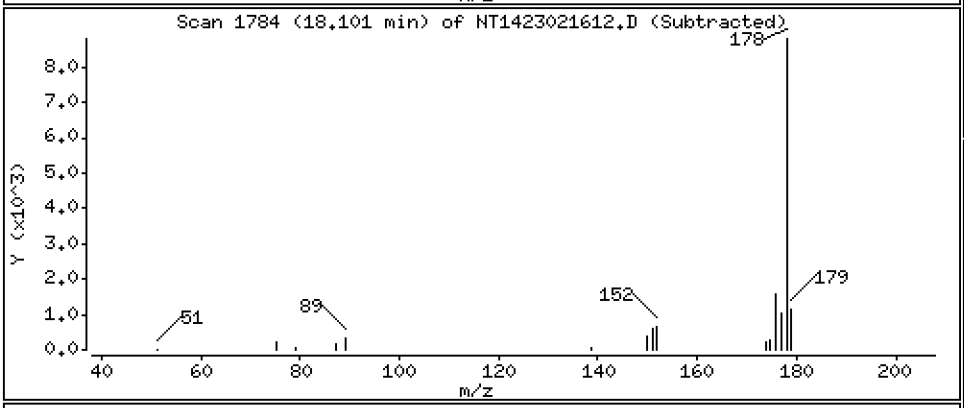
Column diameter: 0.25

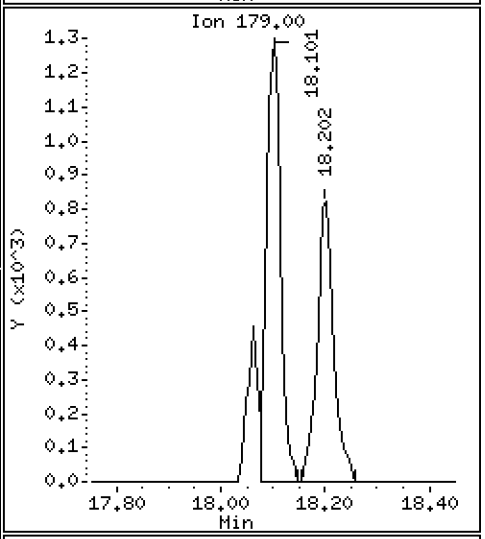
60 Phenanthrene

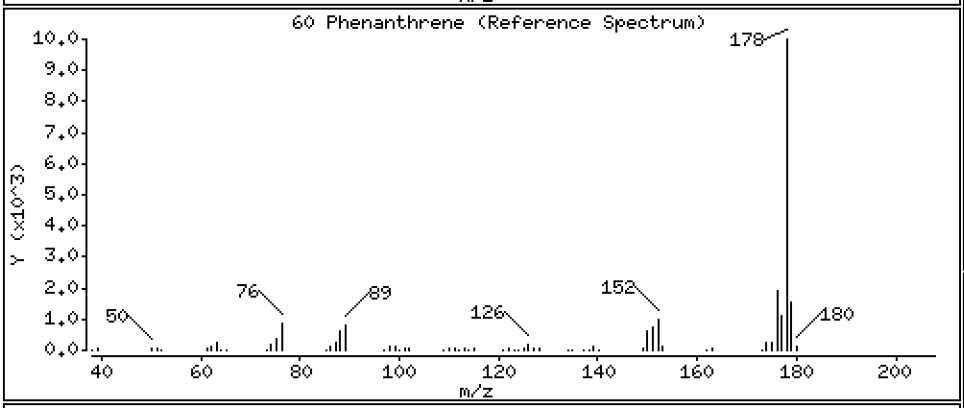
Concentration: 0.04396 ug/mL

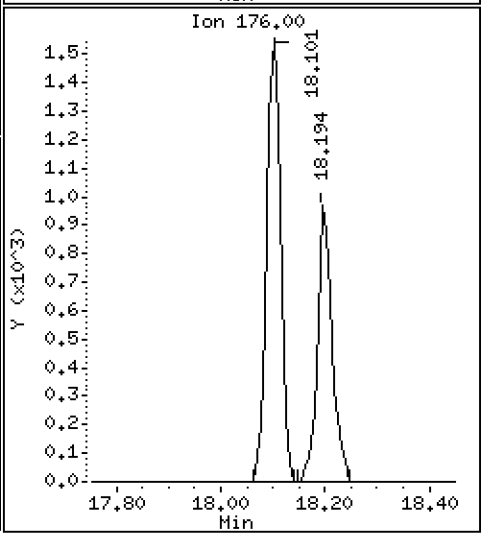


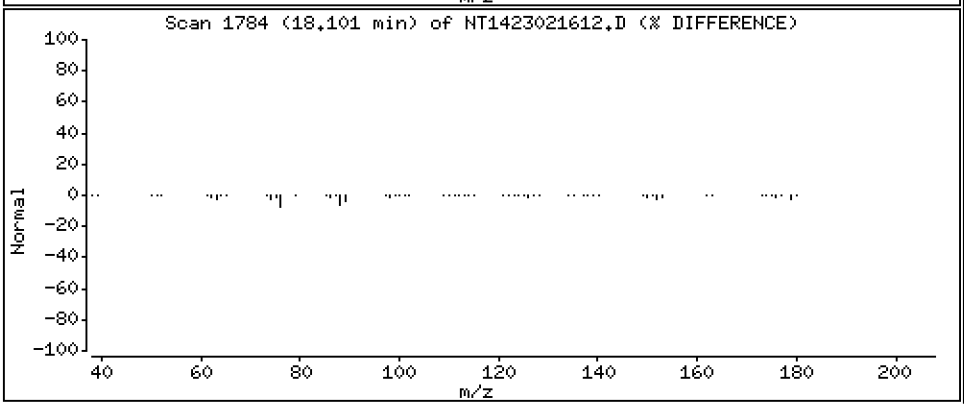












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021612.D

Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

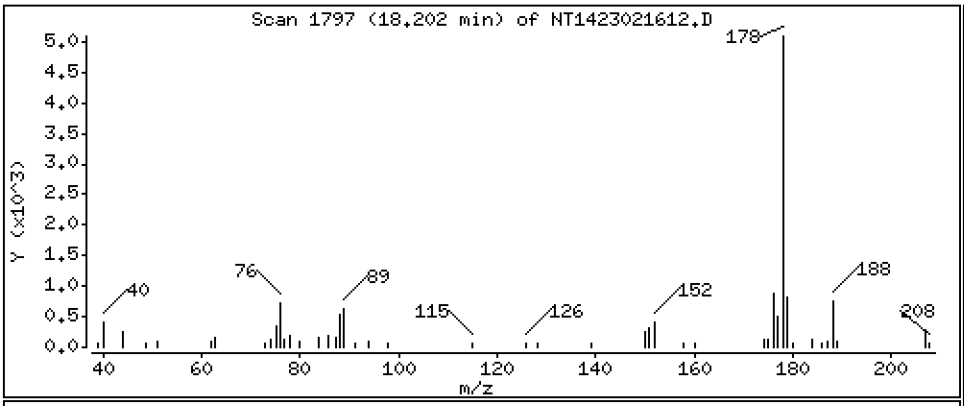
Operator: DSD

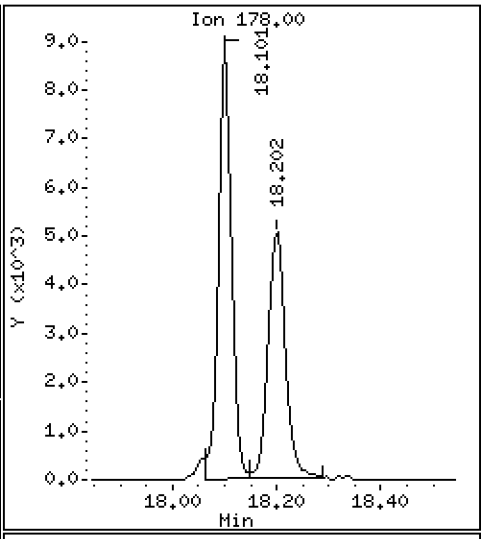
Column phase: ZB-5msi

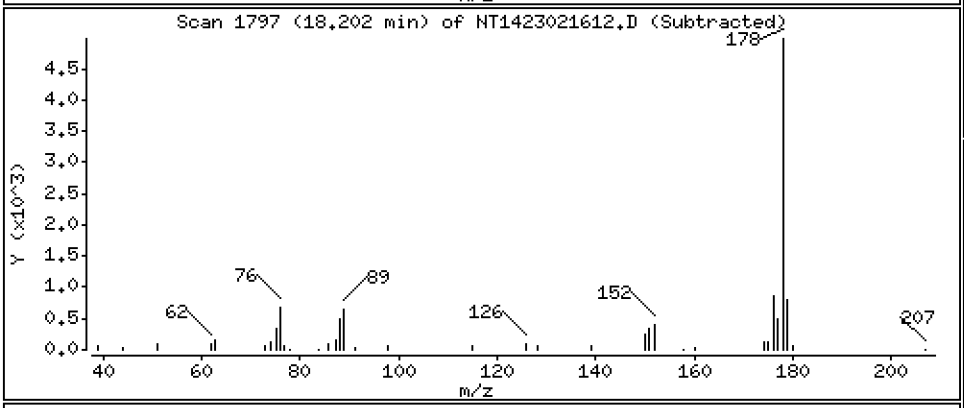
Column diameter: 0.25

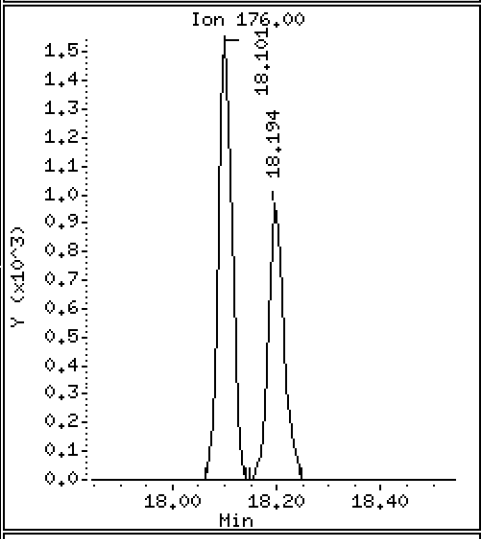
61 Anthracene

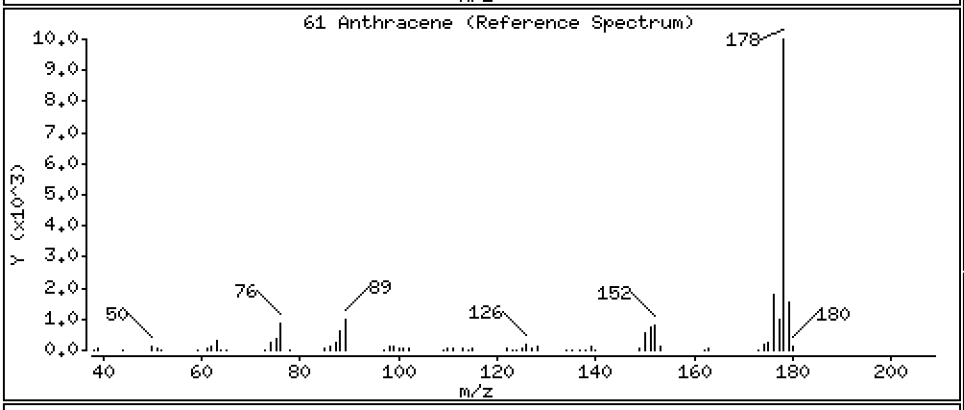
Concentration: 0.03388 ug/mL

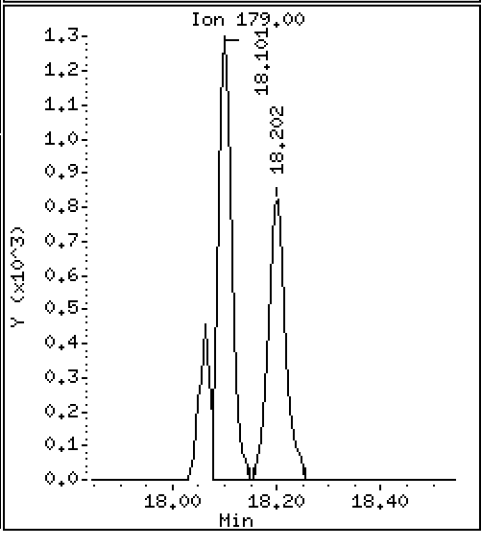


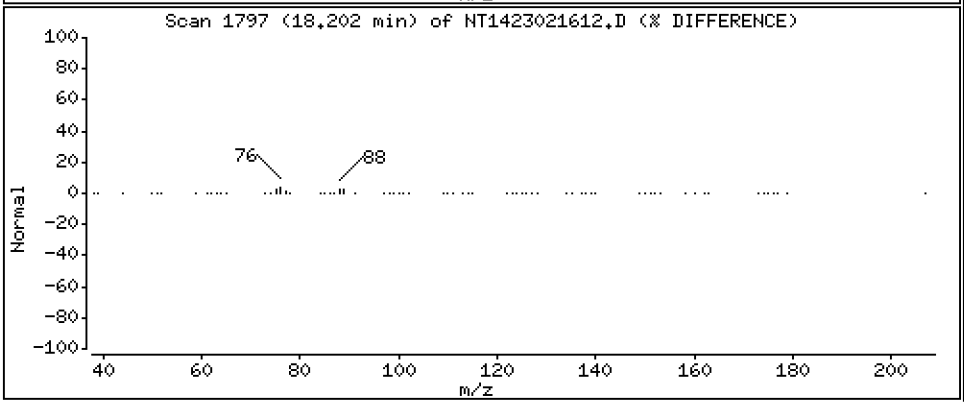












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021612.D

Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

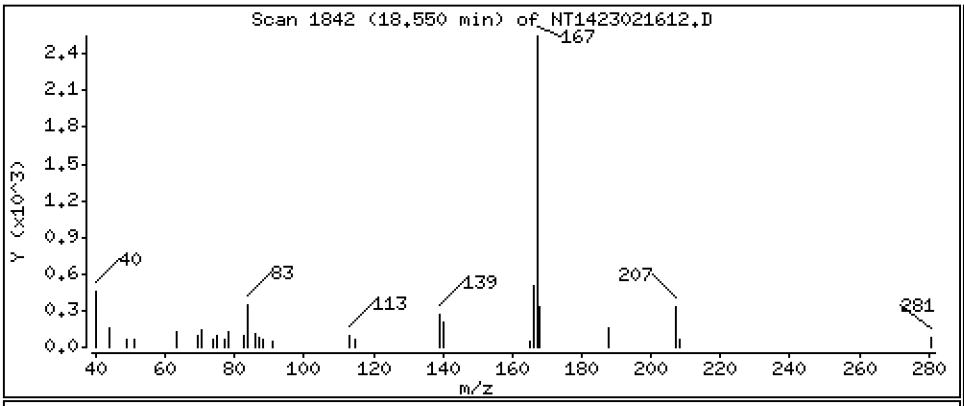
Operator: DSD

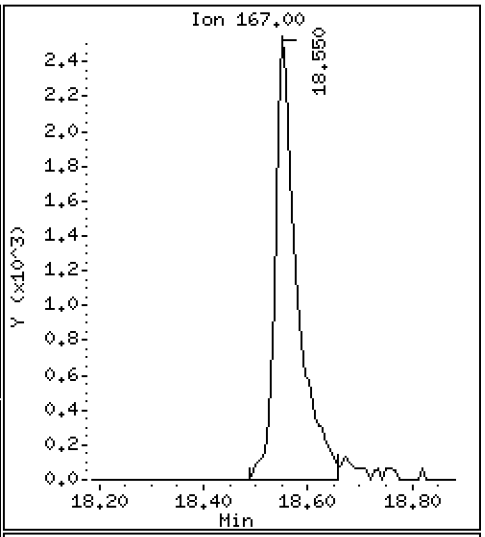
Column phase: ZB-5msi

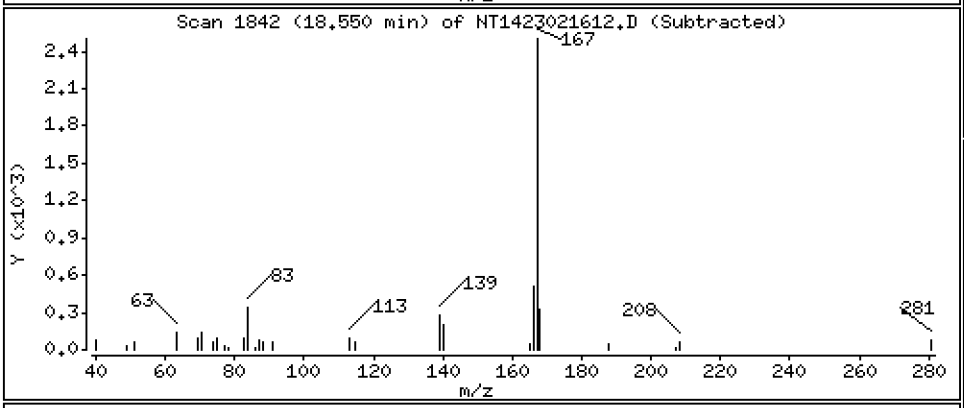
Column diameter: 0.25

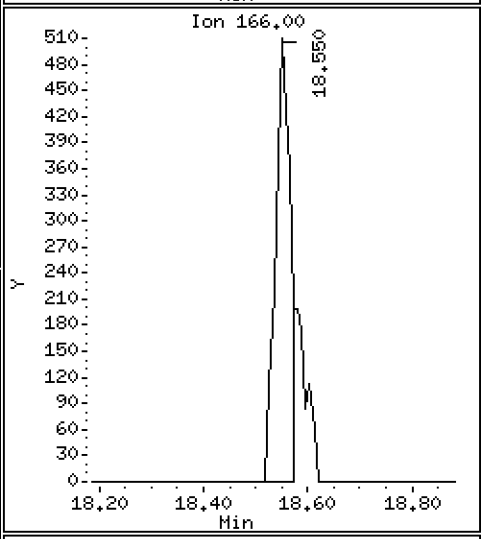
62 Carbazole

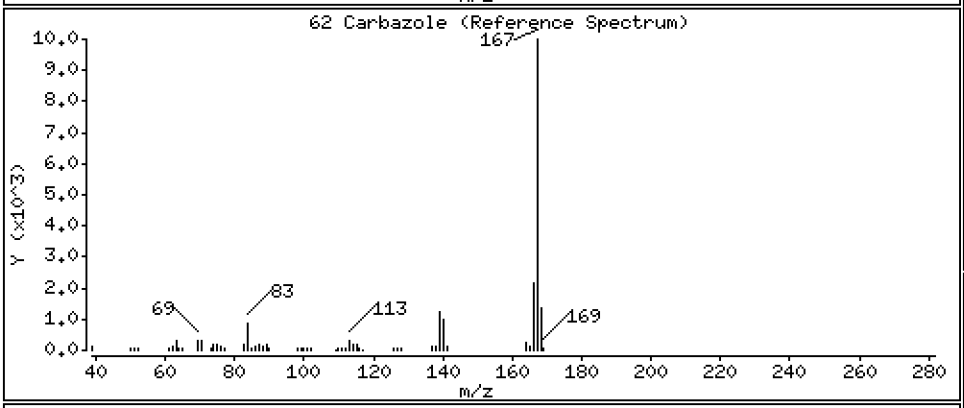
Concentration: 0.02482 ug/mL

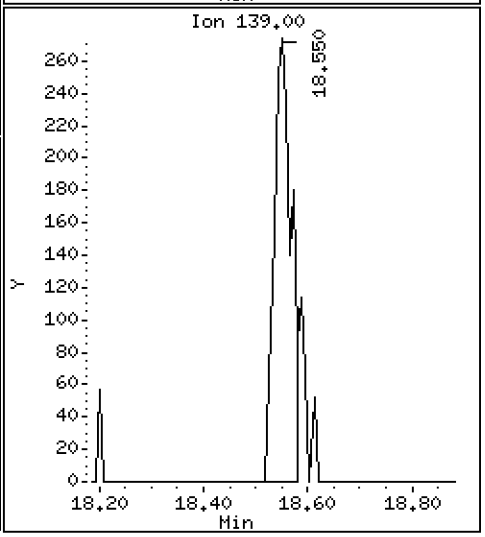


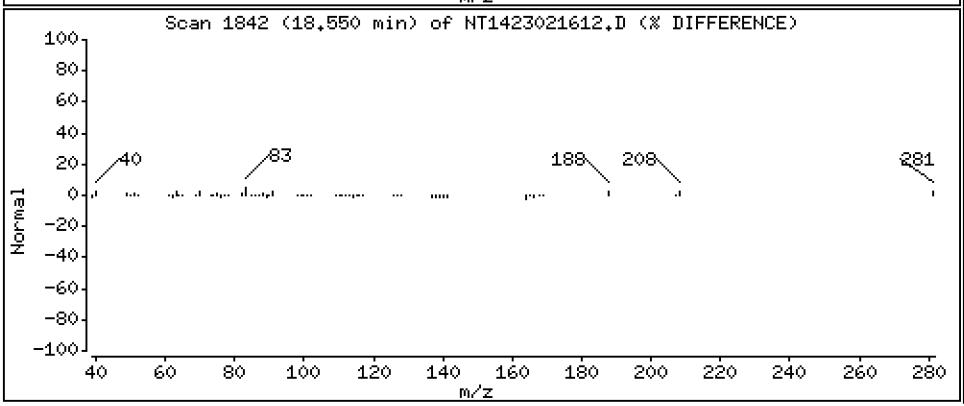












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

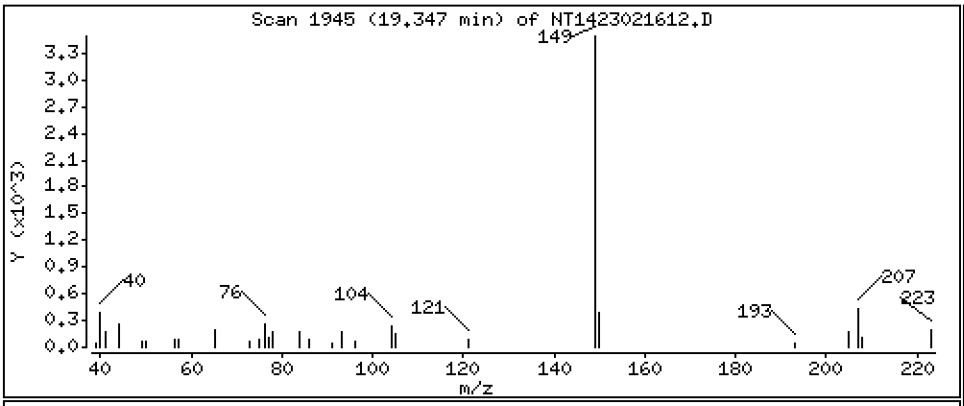
Operator: DSD

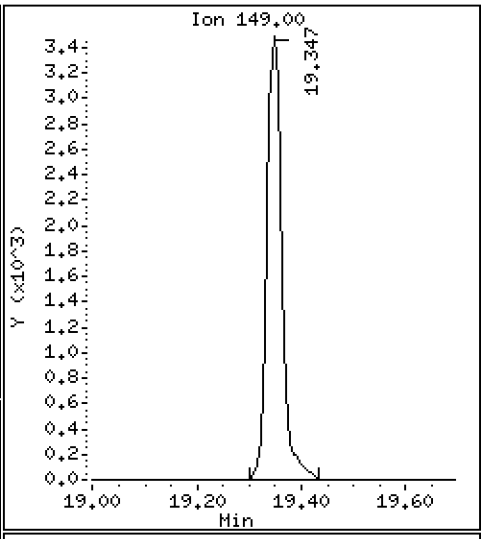
Column phase: ZB-5msi

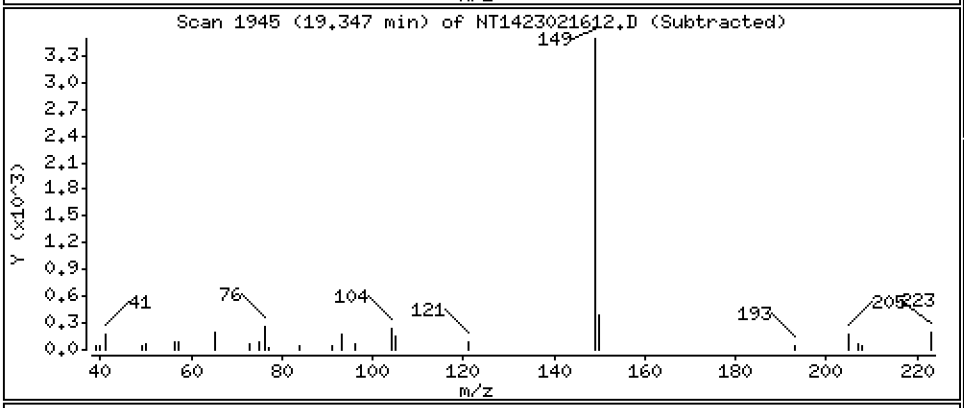
Column diameter: 0.25

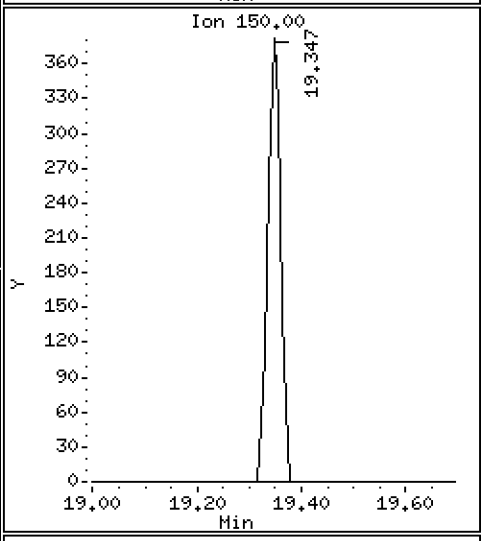
63 Di-n-butylphthalate

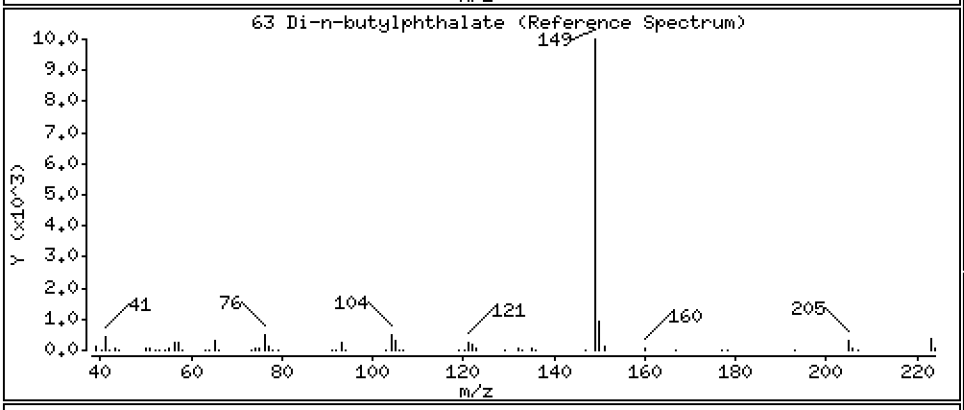
Concentration: 0.01955 ug/mL

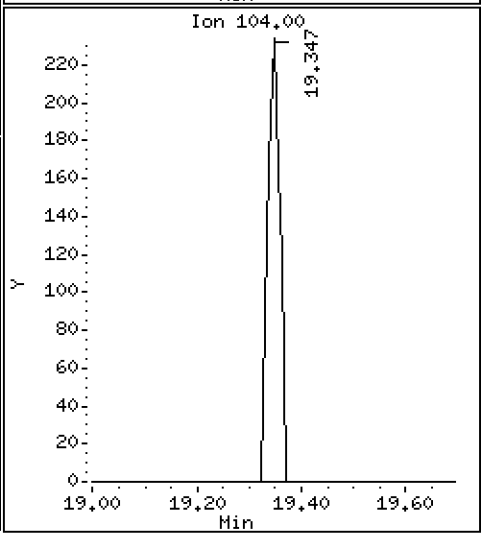


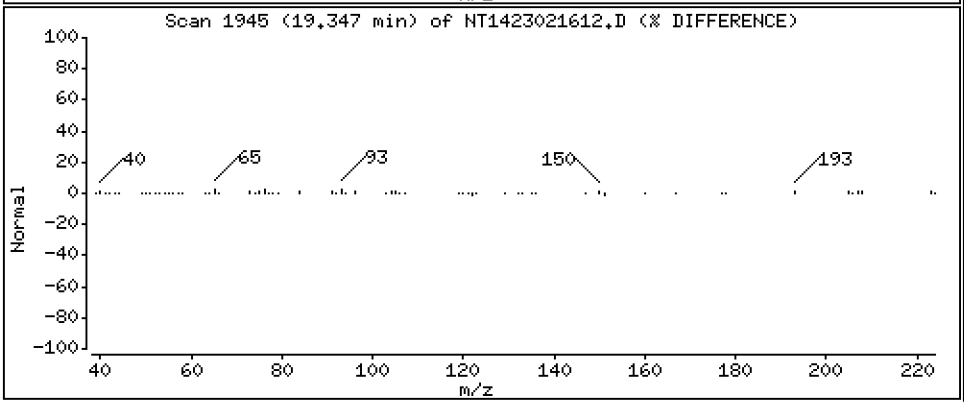












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

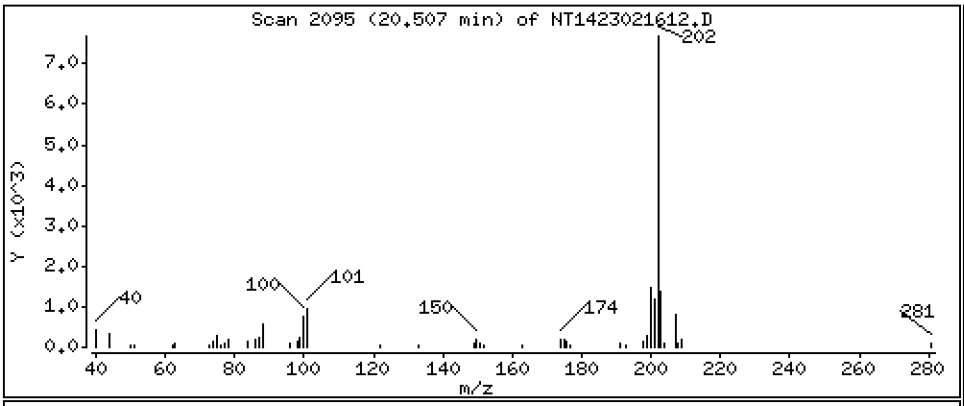
Operator: DSD

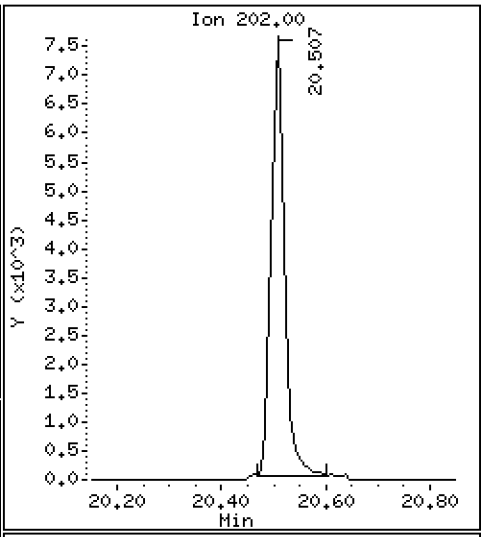
Column phase: ZB-5msi

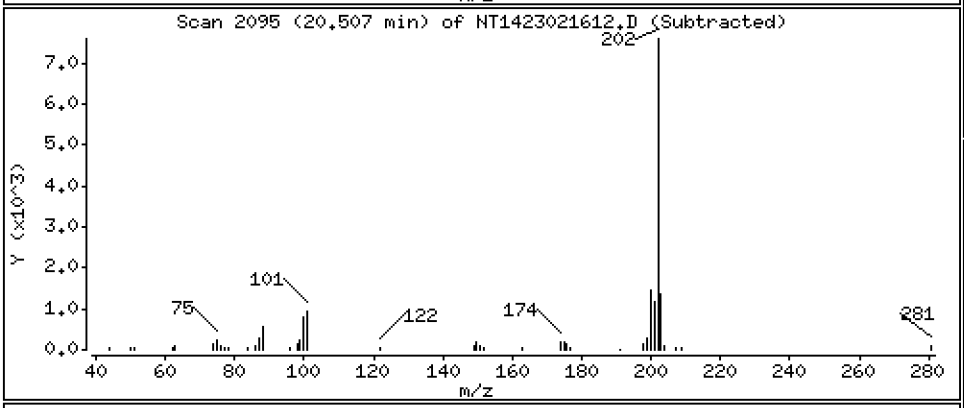
Column diameter: 0.25

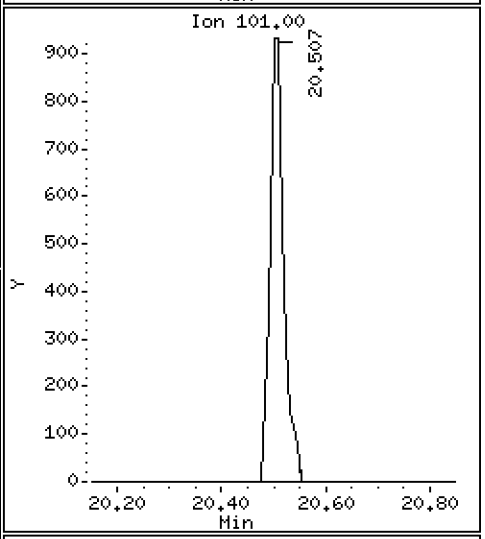
64 Fluoranthene

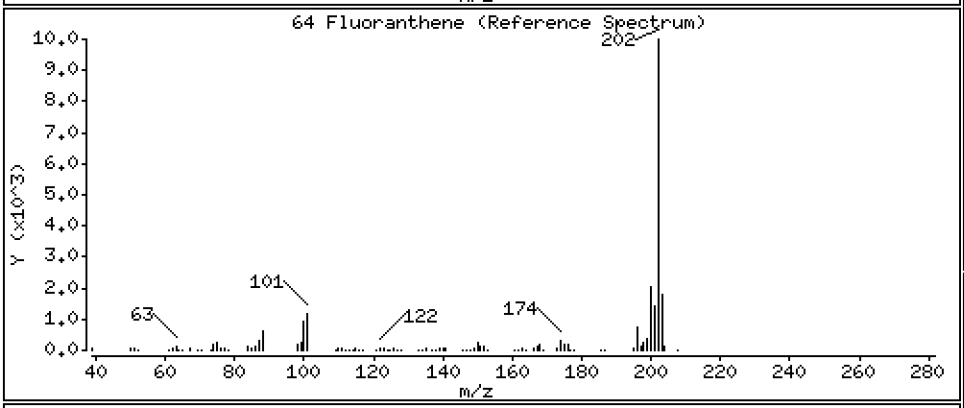
Concentration: 0.03425 ug/mL

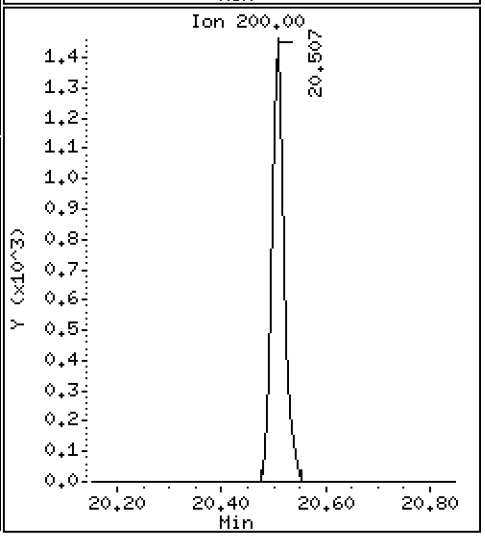


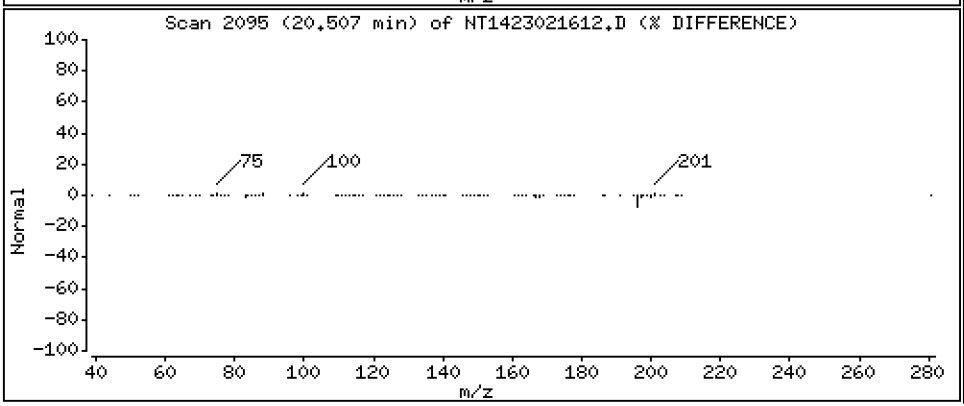












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

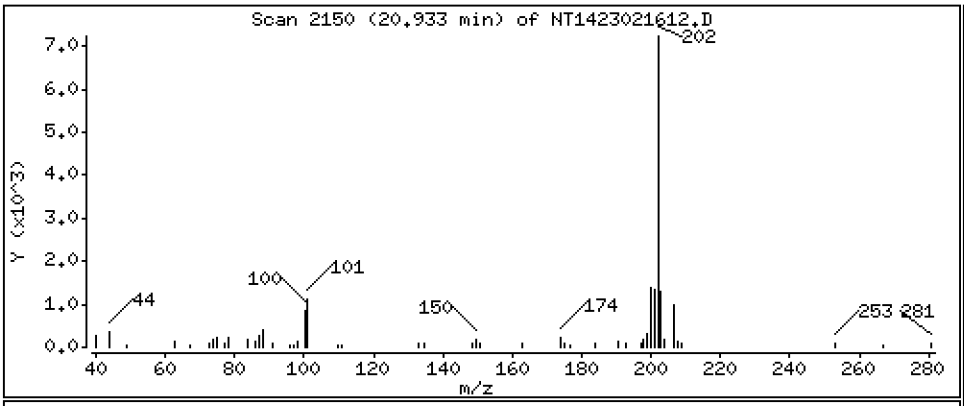
Operator: DSD

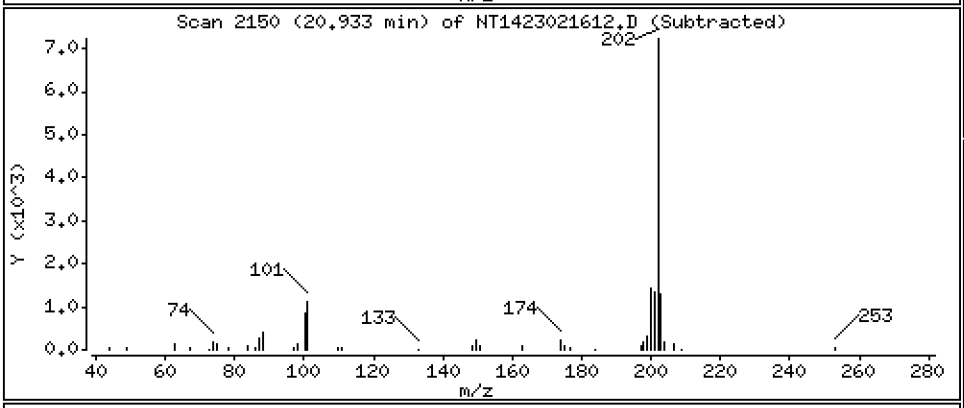
Column phase: ZB-5msi

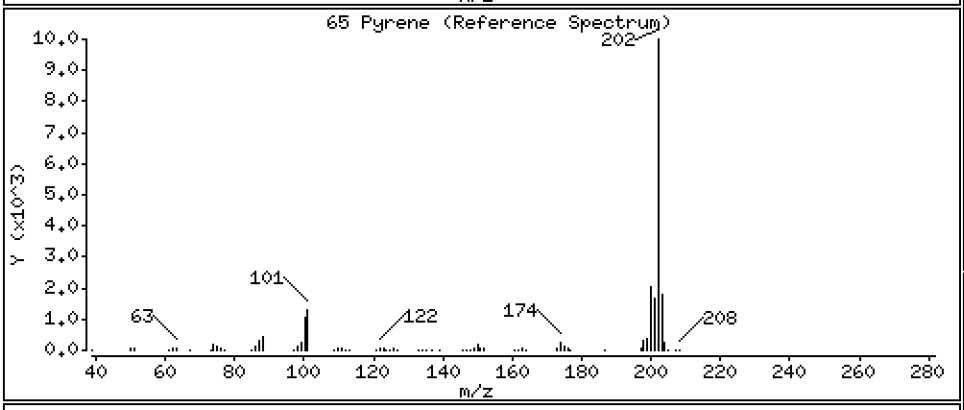
Column diameter: 0.25

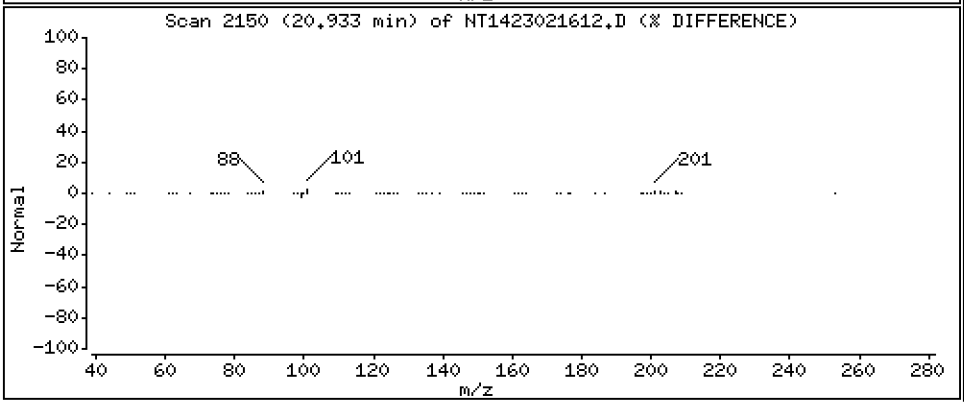
65 Pyrene

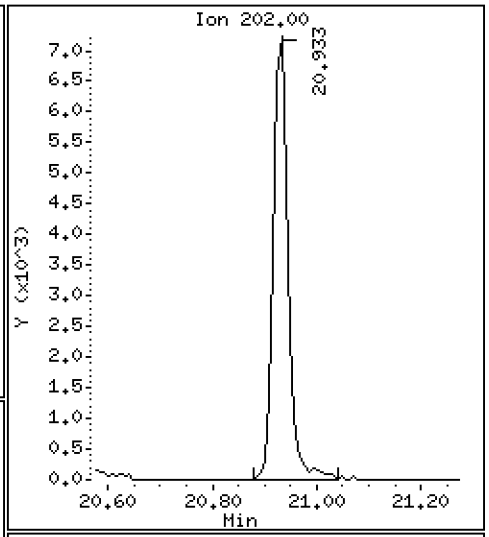
Concentration: 0.03664 ug/mL

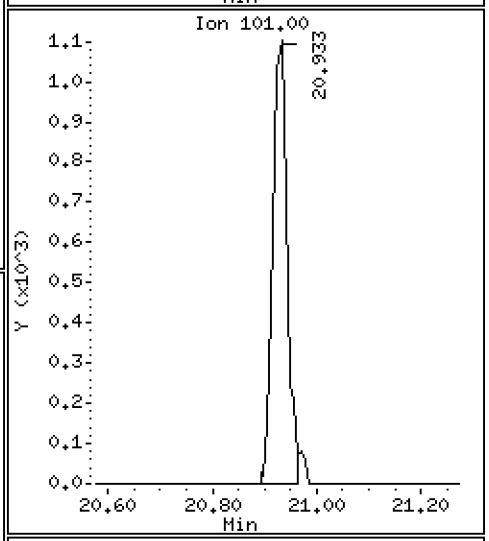


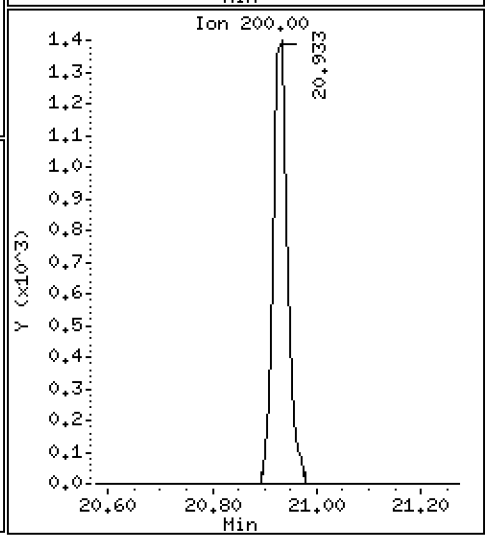












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021612.D

Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

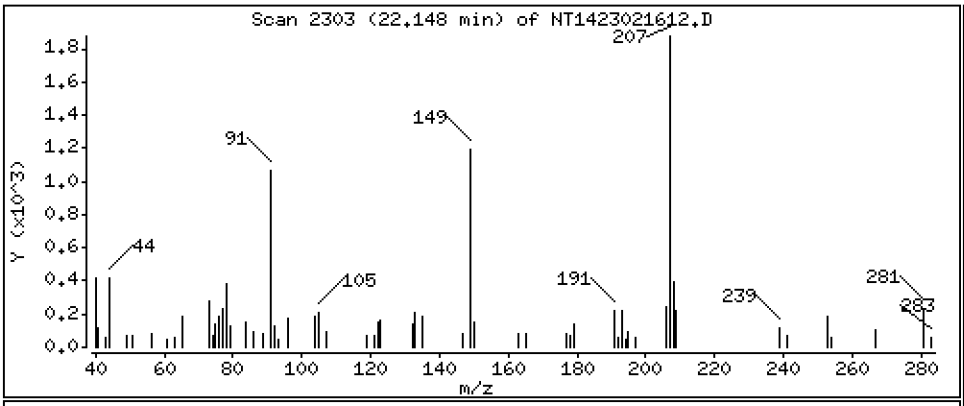
Operator: DSD

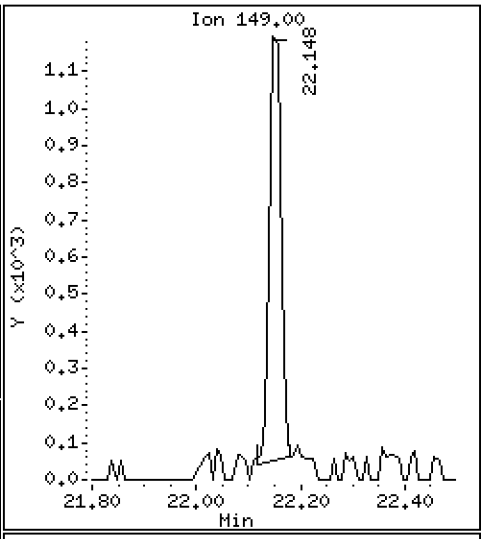
Column phase: ZB-5msi

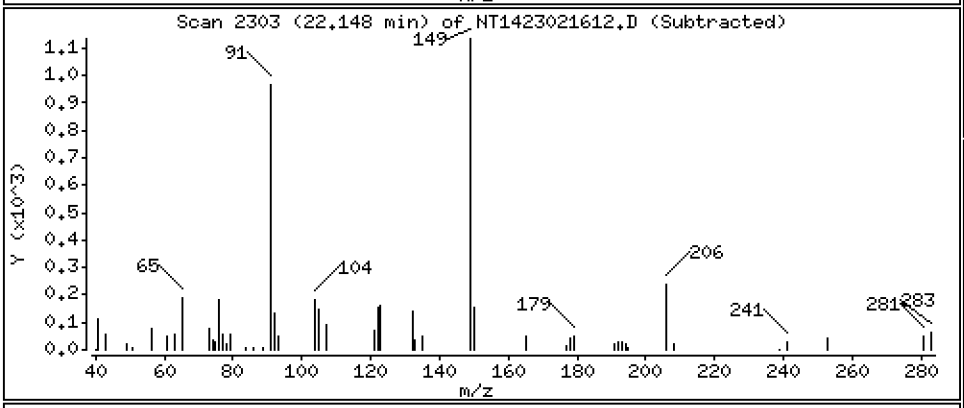
Column diameter: 0.25

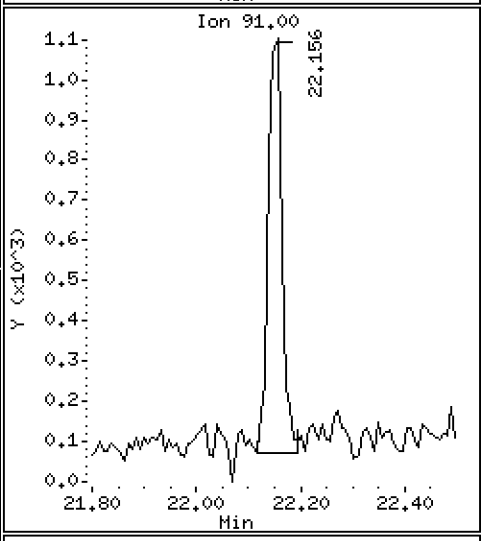
67 Butylbenzylphthalate

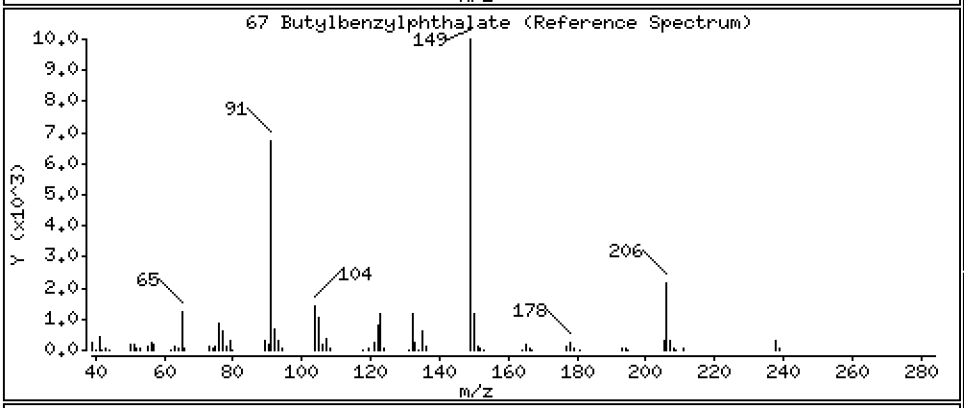
Concentration: 0.01240 ug/mL

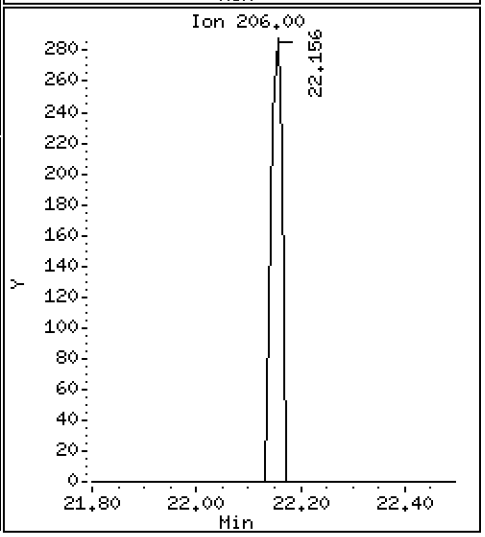


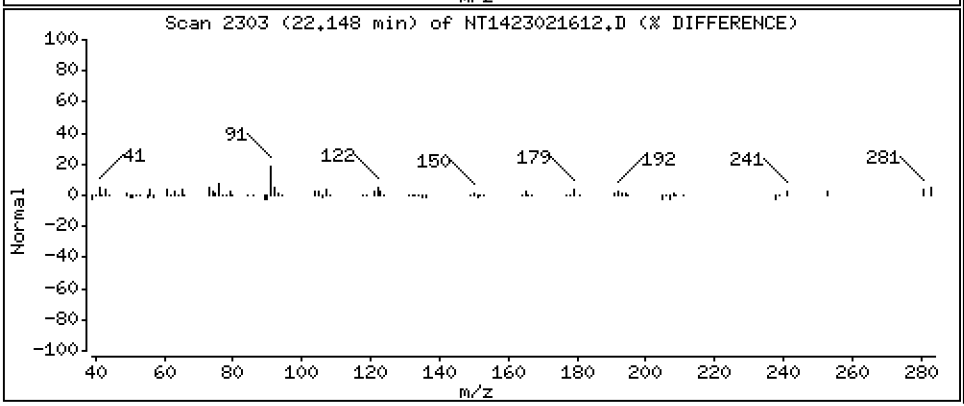












Date : 16-FEB-2023 20:42

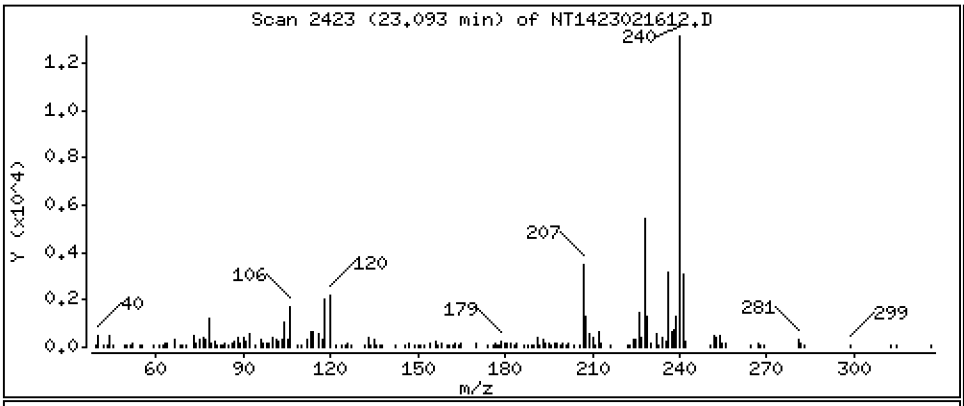
Client ID: Instrument: nt14.i

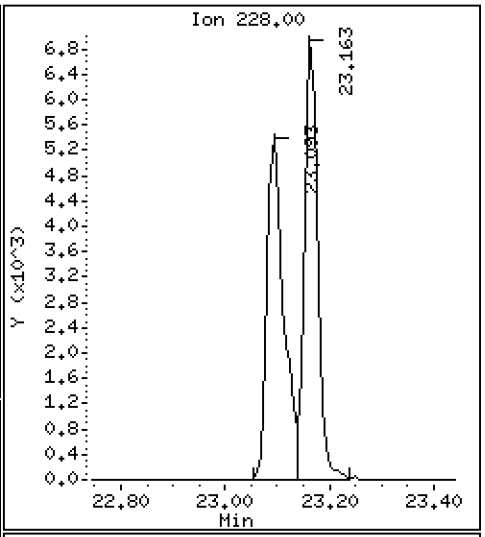
Sample Info: SIM 0.05

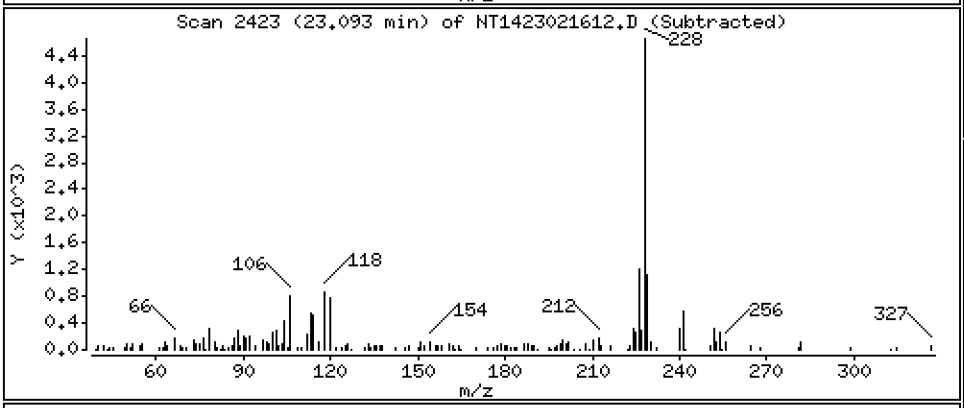
Operator: DSD

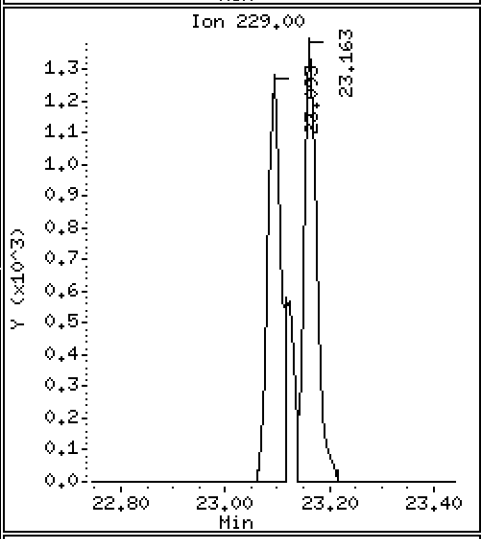
Column phase: ZB-5msi Column diameter: 0.25

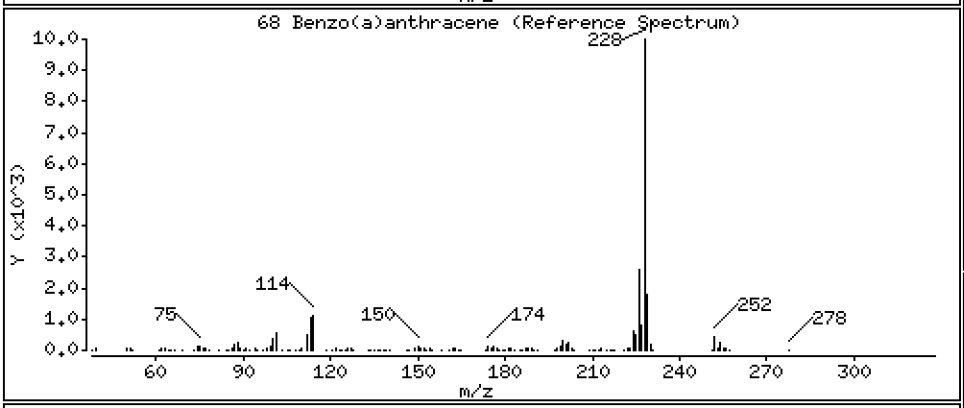
68 Benzo(a)anthracene Concentration: 0.04158 ug/mL

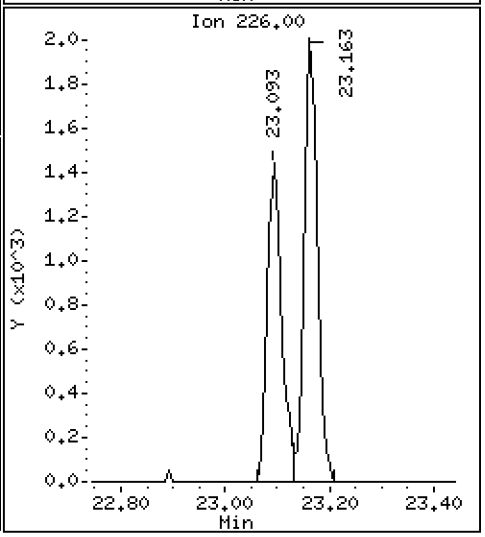


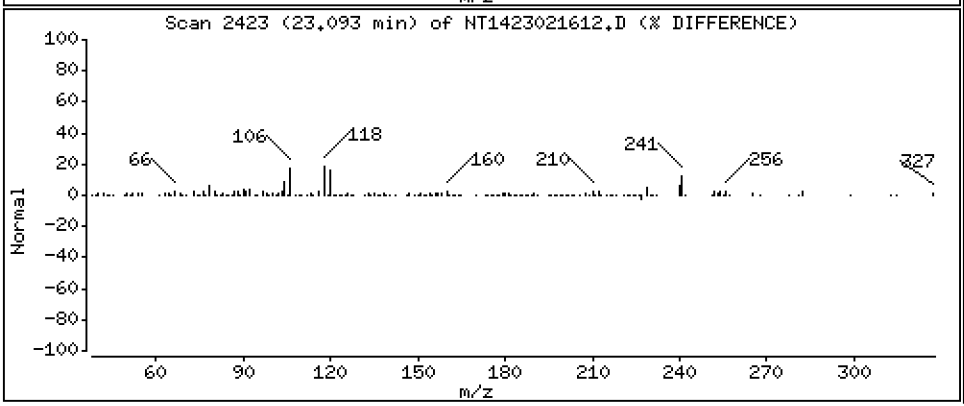












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021612.D

Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

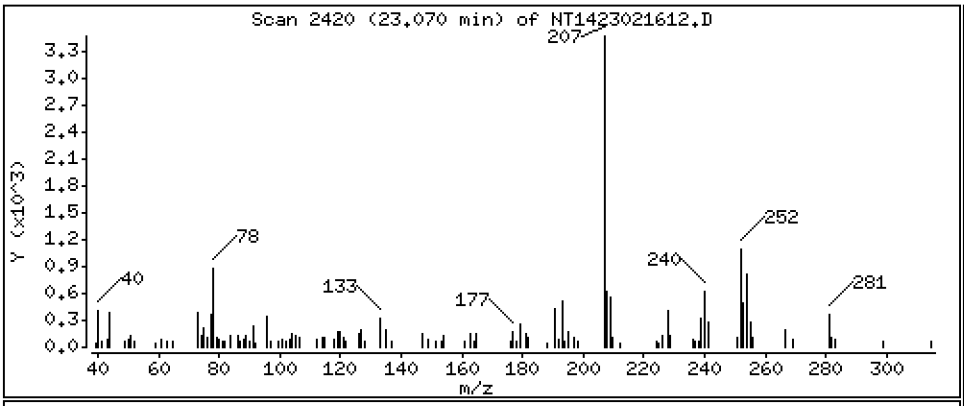
Operator: DSD

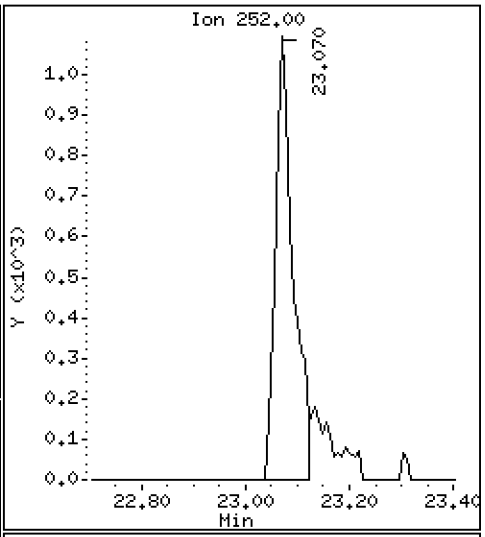
Column phase: ZB-5msi

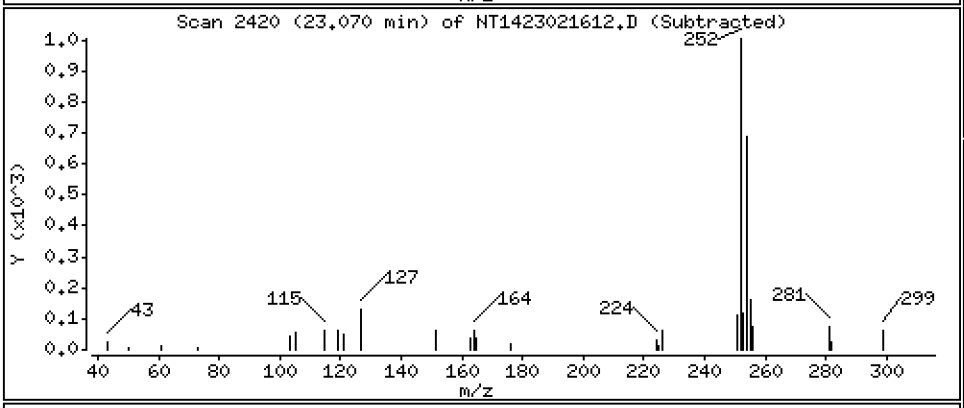
Column diameter: 0.25

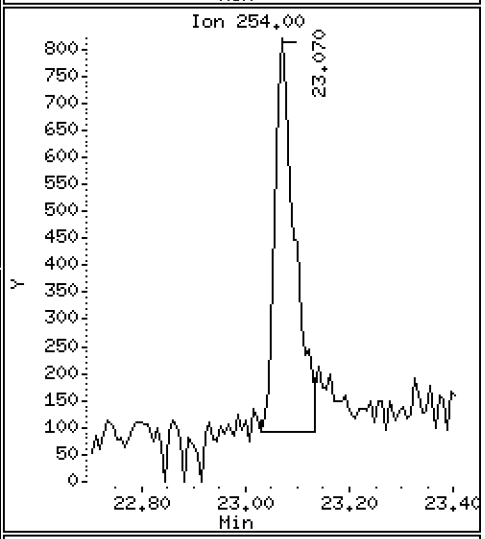
70 3,3'-Dichlorobenzidine

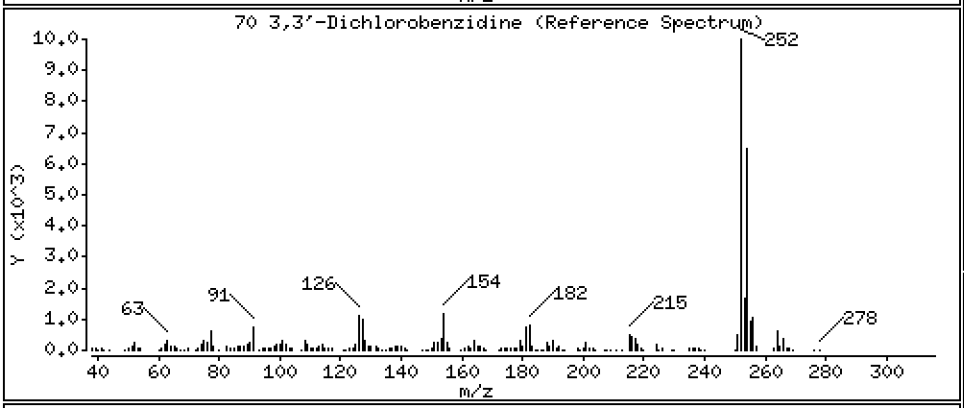
Concentration: 0.03036 ug/mL

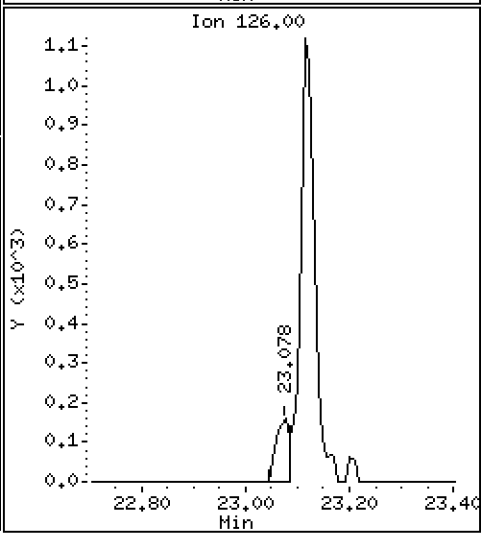


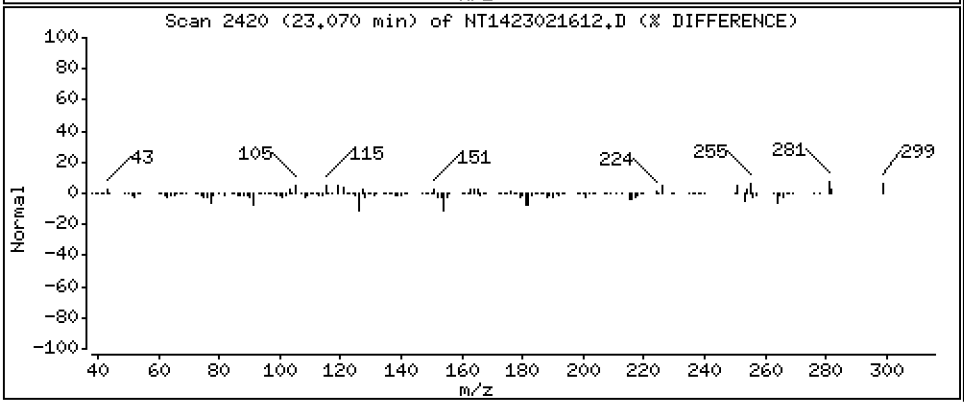












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021612.D

Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

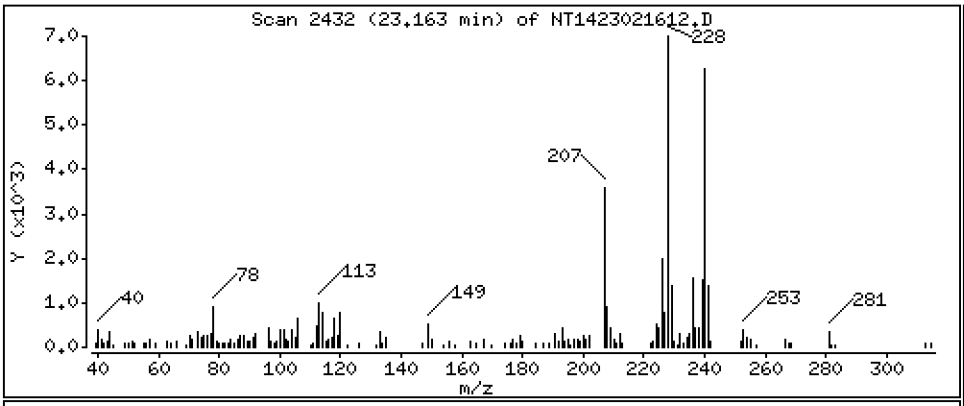
Operator: DSD

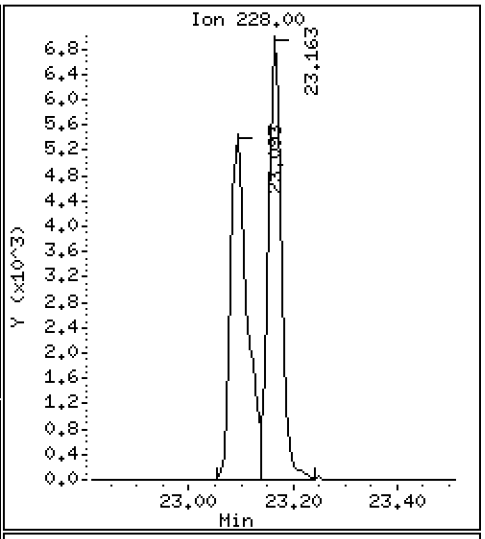
Column phase: ZB-5msi

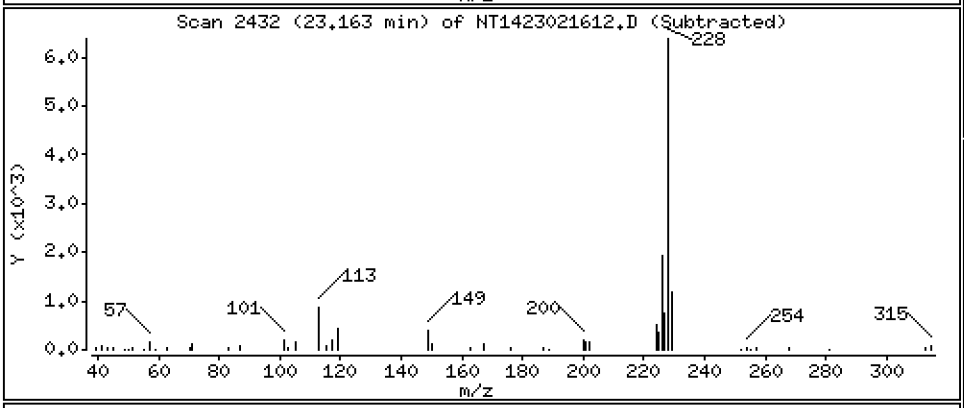
Column diameter: 0.25

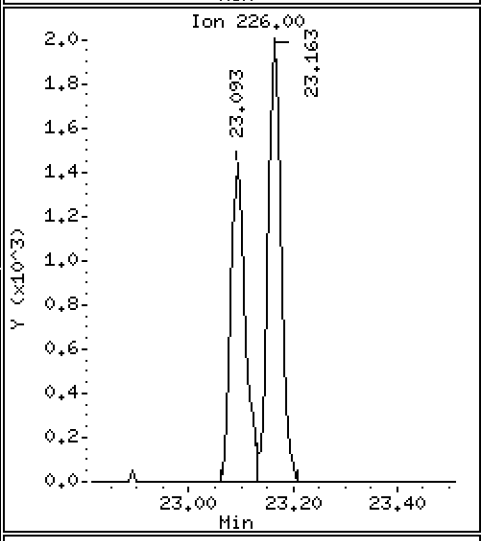
71 Chrysene

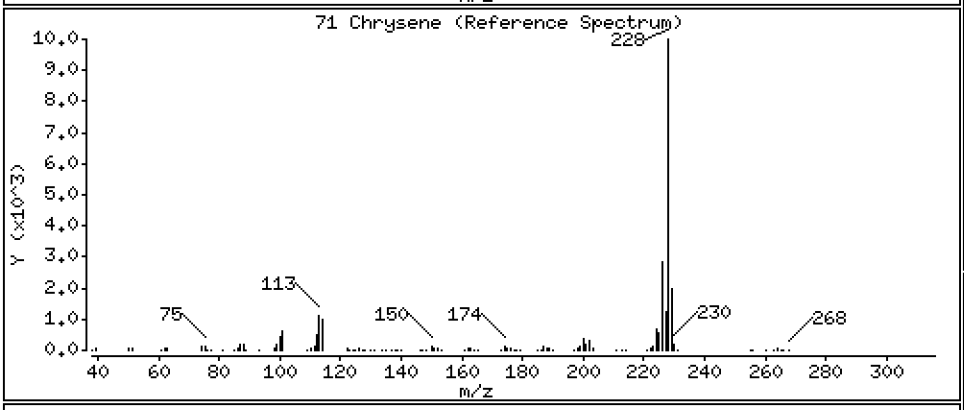
Concentration: 0.04530 ug/mL

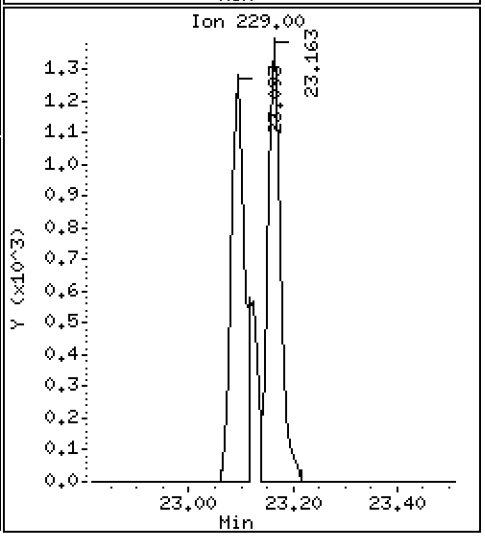


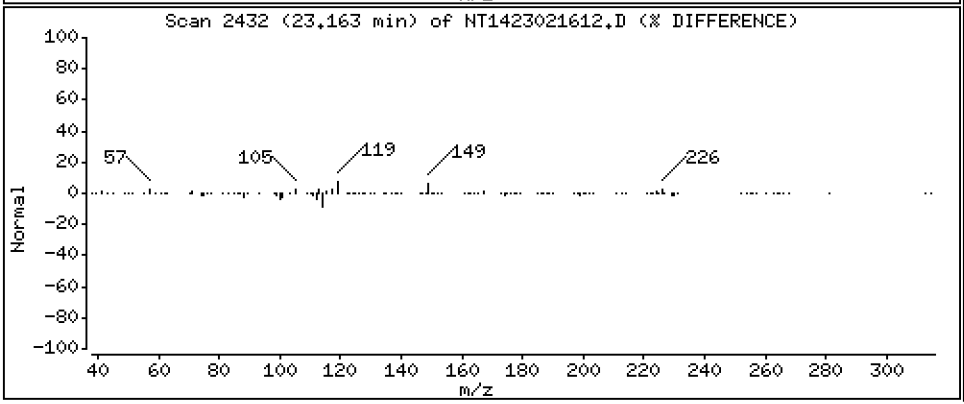












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

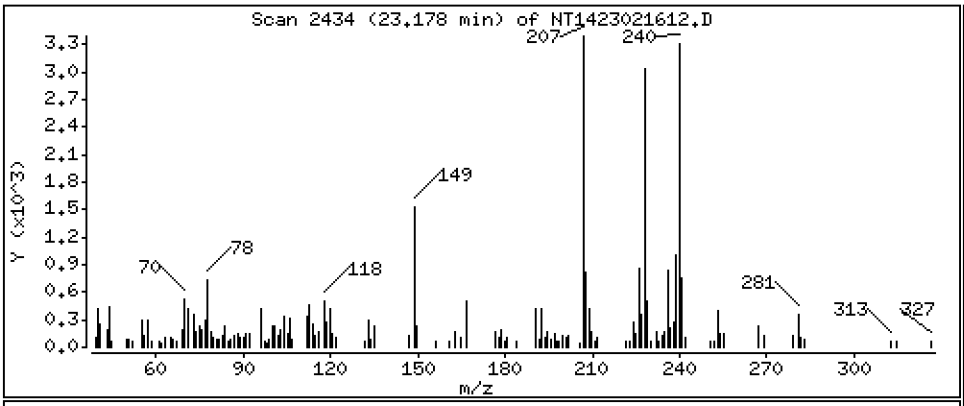
Operator: DSD

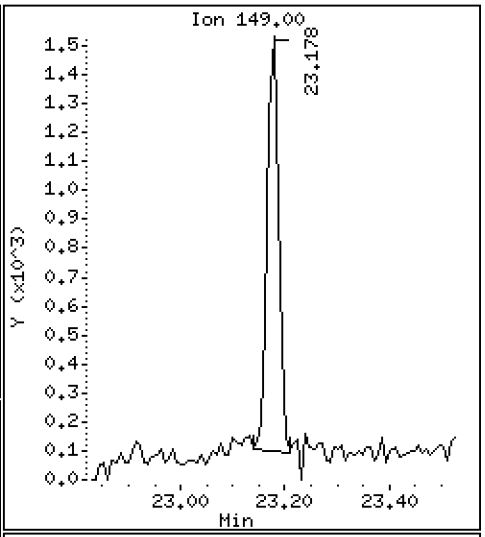
Column phase: ZB-5msi

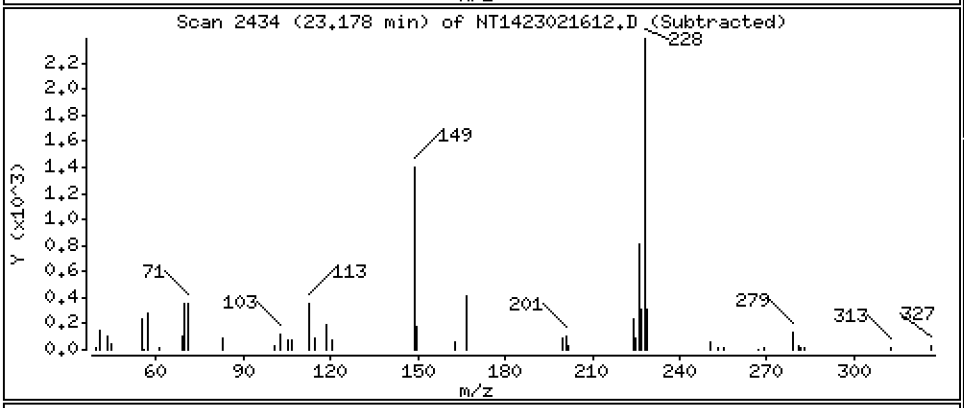
Column diameter: 0.25

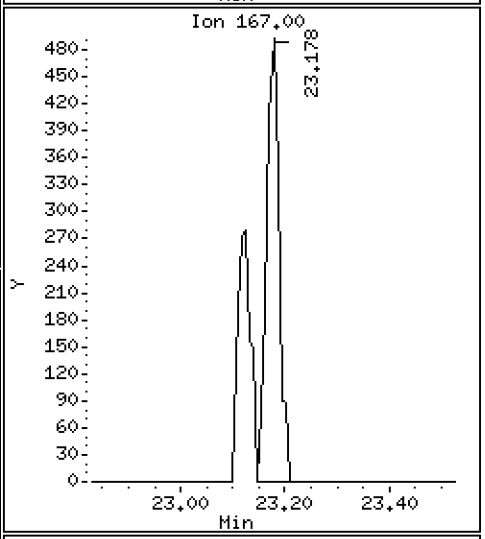
72 bis(2-Ethylhexyl)phthalate

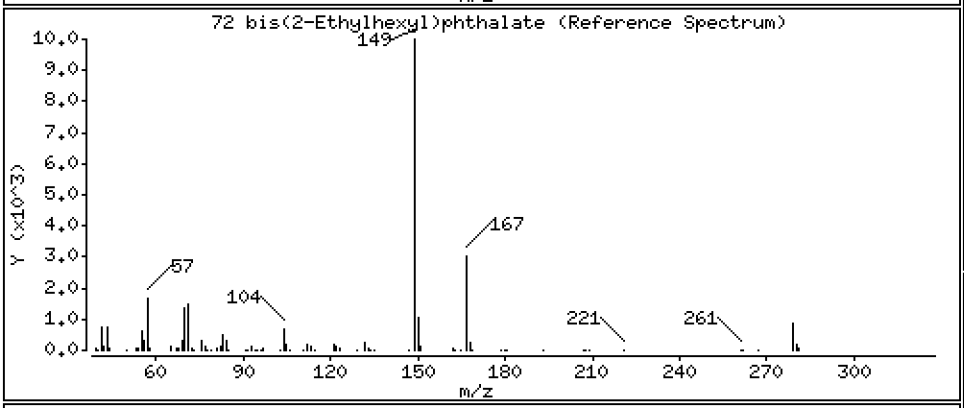
Concentration: 0.01298 ug/mL

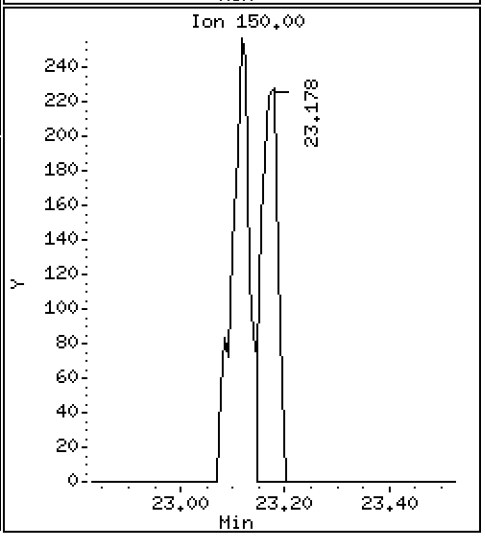


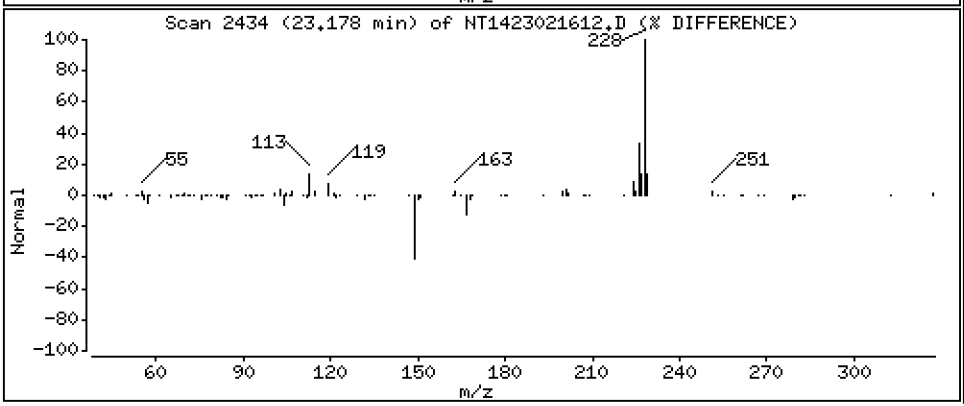












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

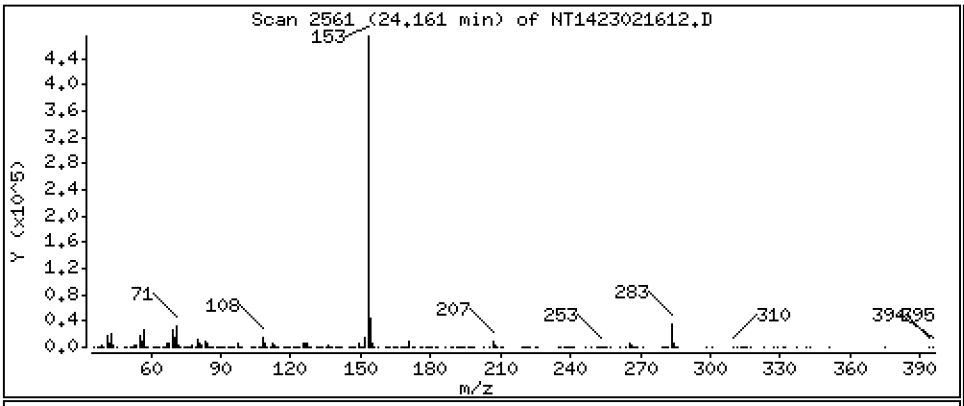
Operator: DSD

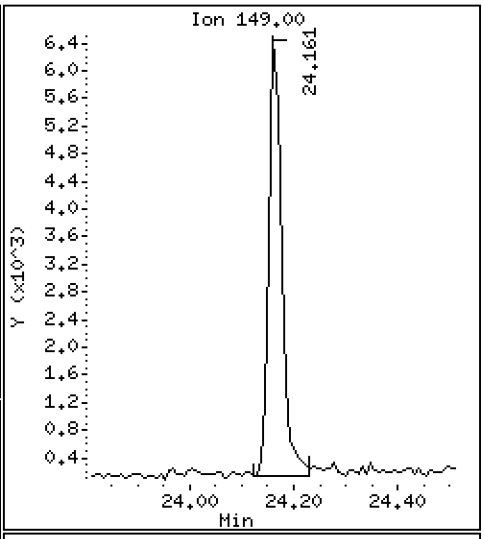
Column phase: ZB-5msi

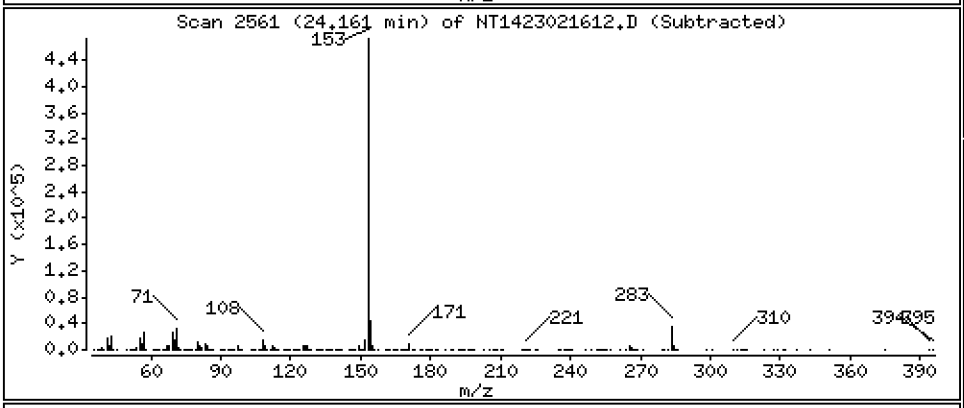
Column diameter: 0.25

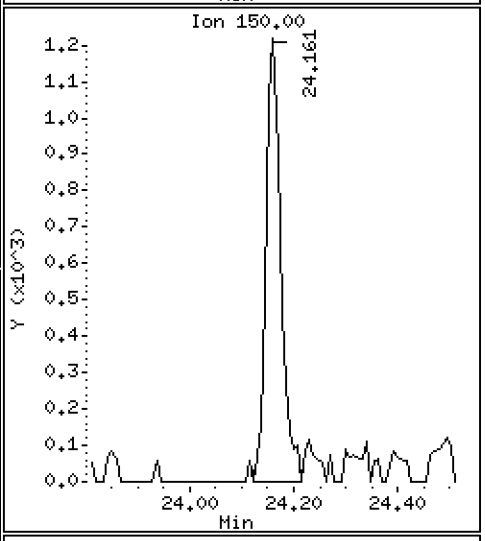
73 Di-n-octylphthalate

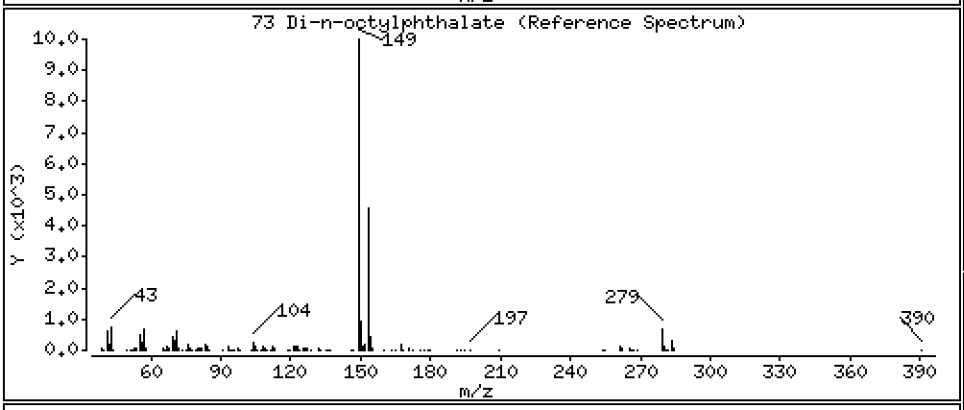
Concentration: 0.04810 ug/mL

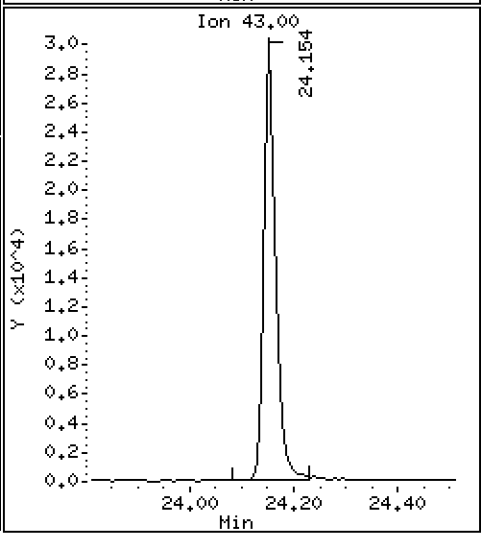


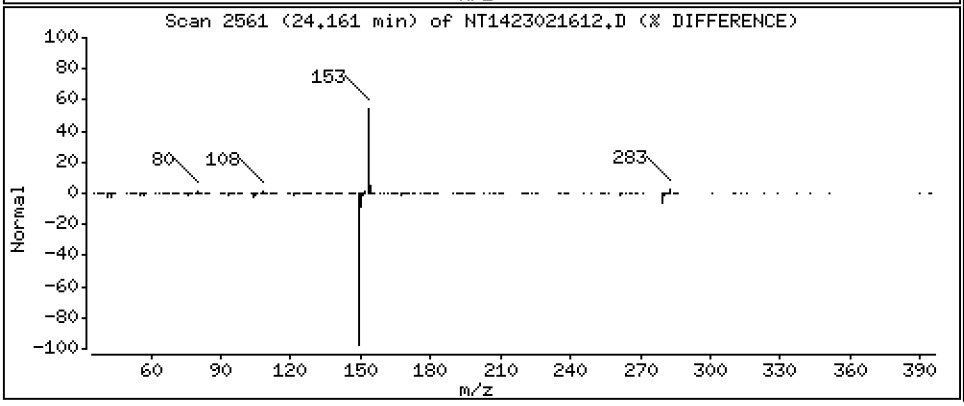












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

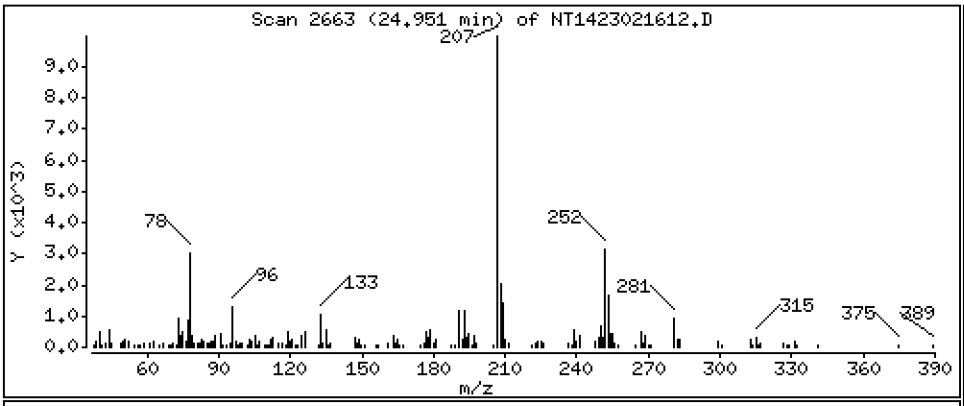
Operator: DSD

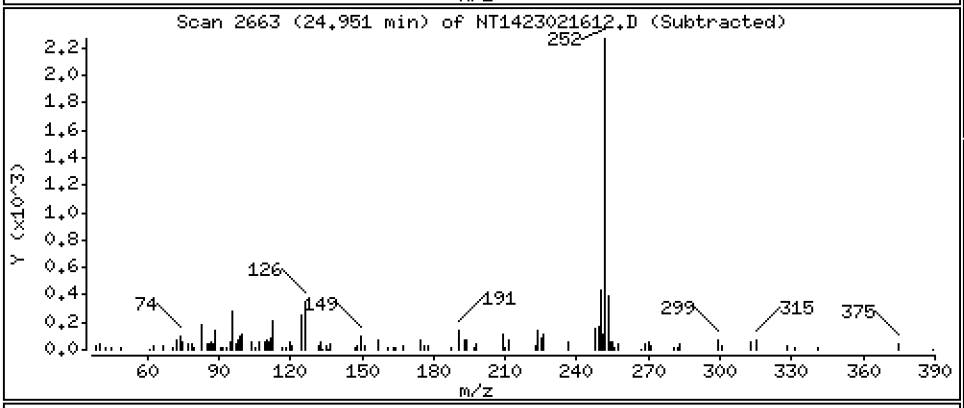
Column phase: ZB-5msi

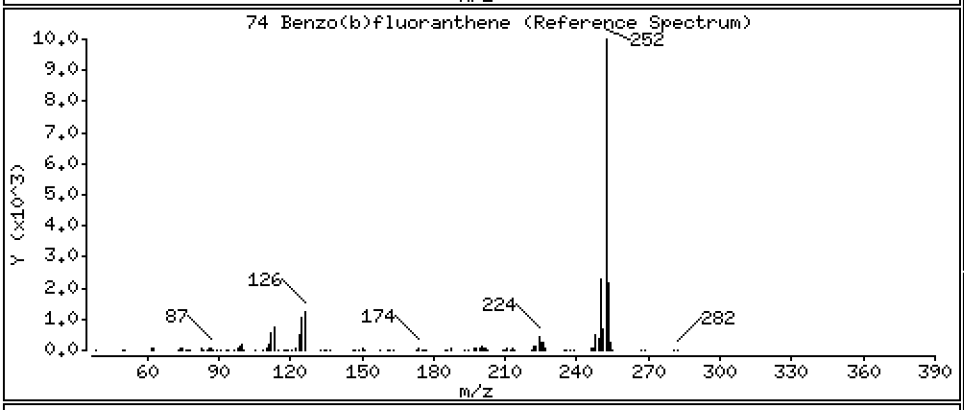
Column diameter: 0.25

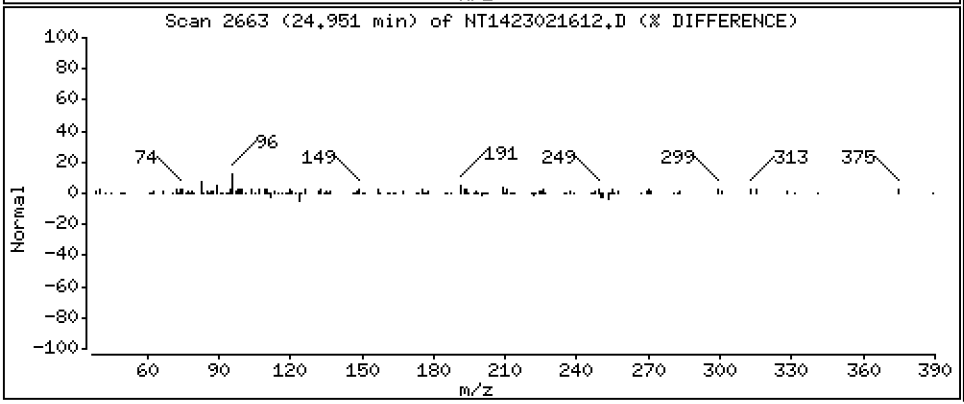
74 Benzo(b)fluoranthene

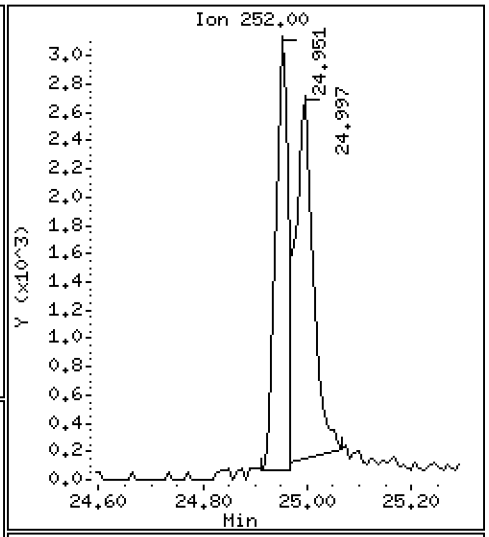
Concentration: 0.02738 ug/mL

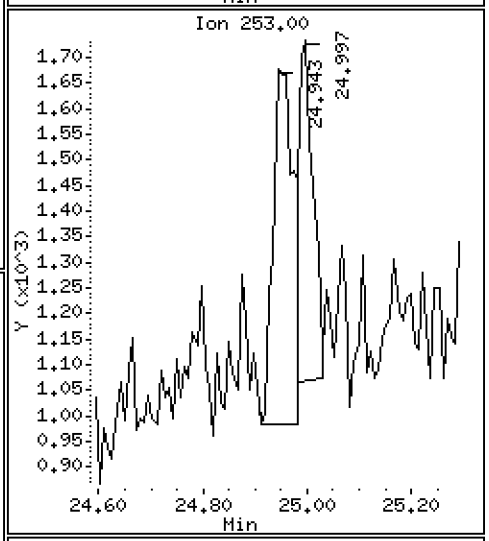


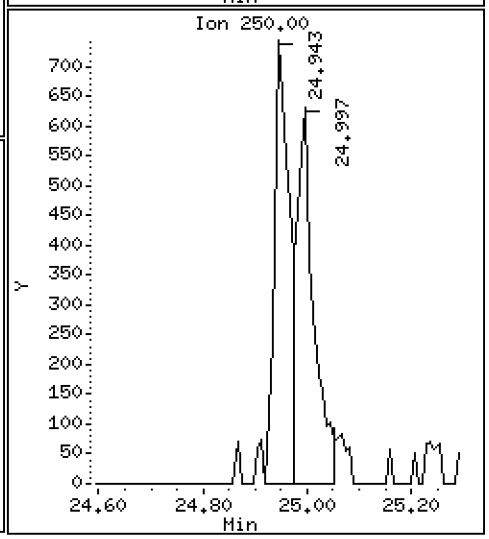












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

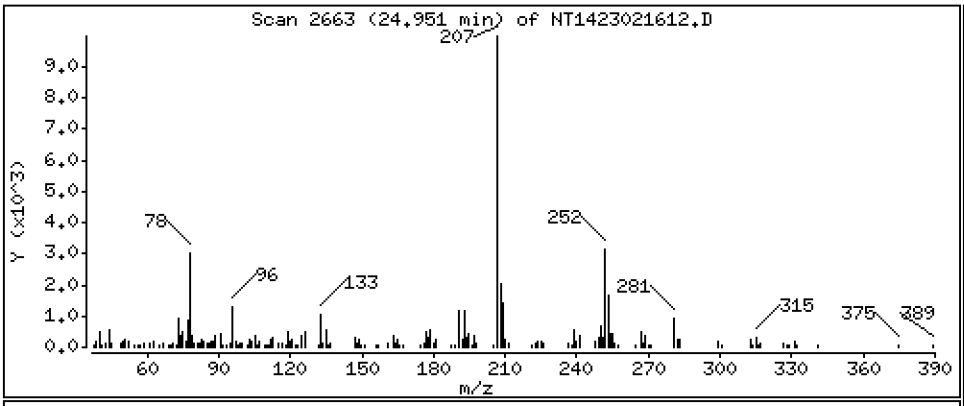
Operator: DSD

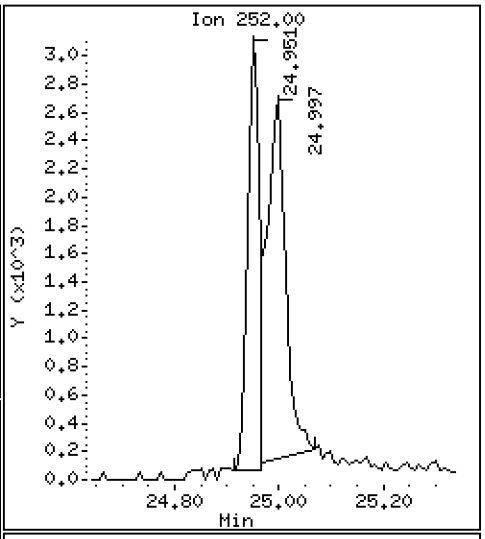
Column phase: ZB-5msi

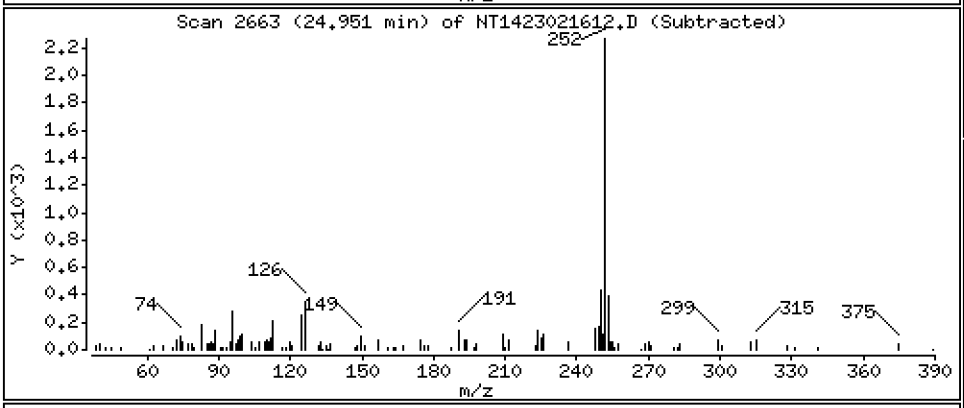
Column diameter: 0.25

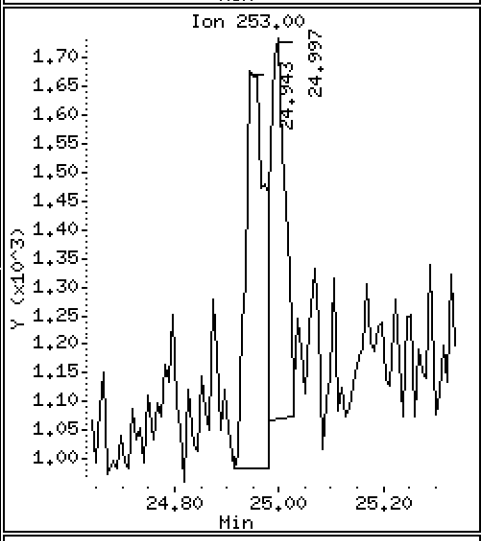
75 Benzo(k)fluoranthene

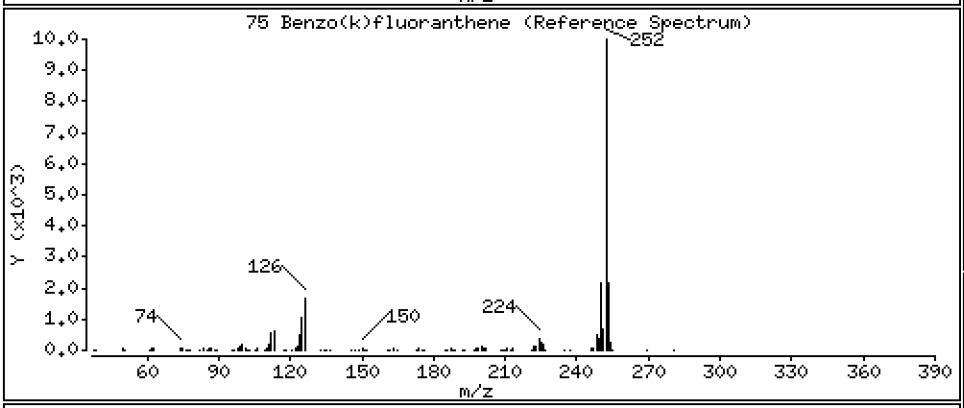
Concentration: 0.02562 ug/mL

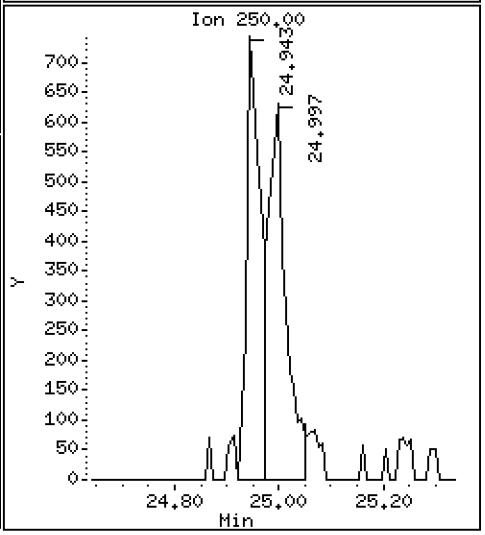


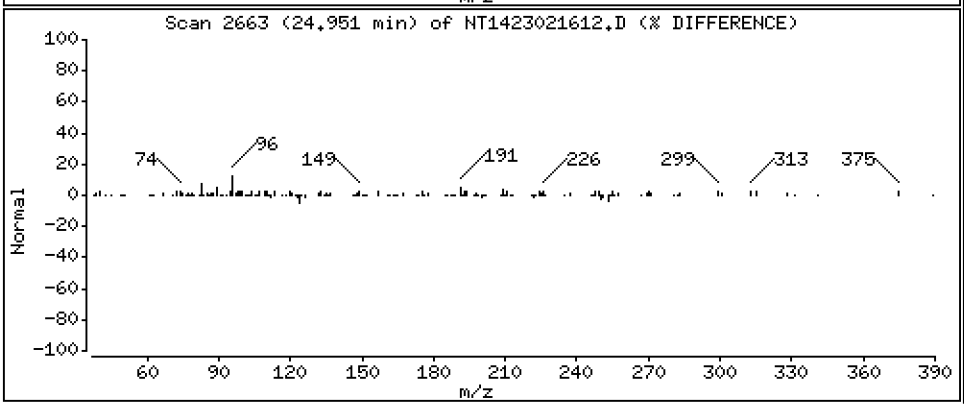












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

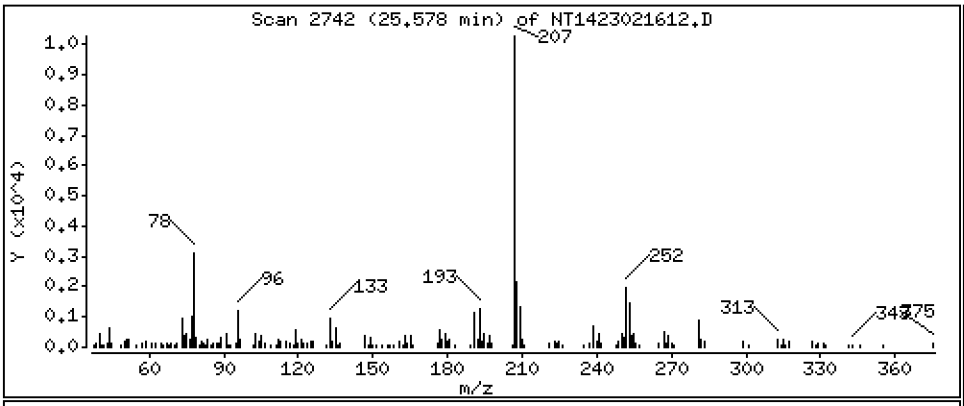
Operator: DSD

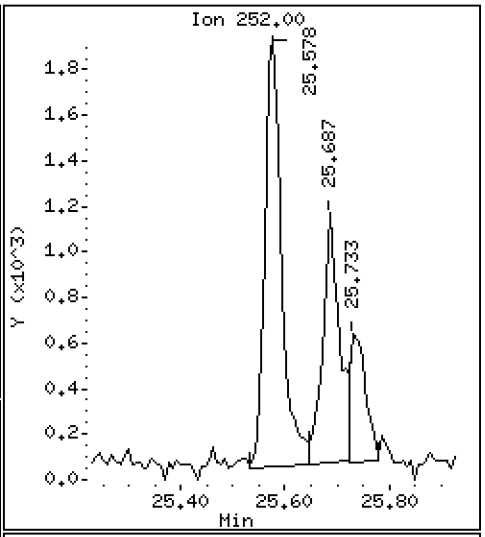
Column phase: ZB-5msi

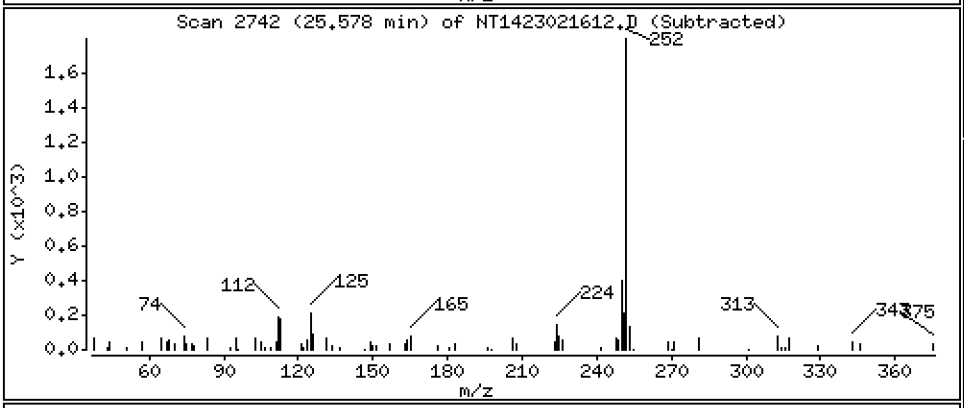
Column diameter: 0.25

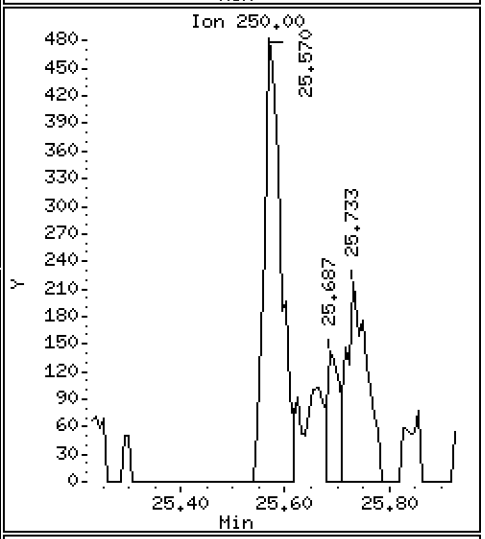
76 Benzo(a)pyrene

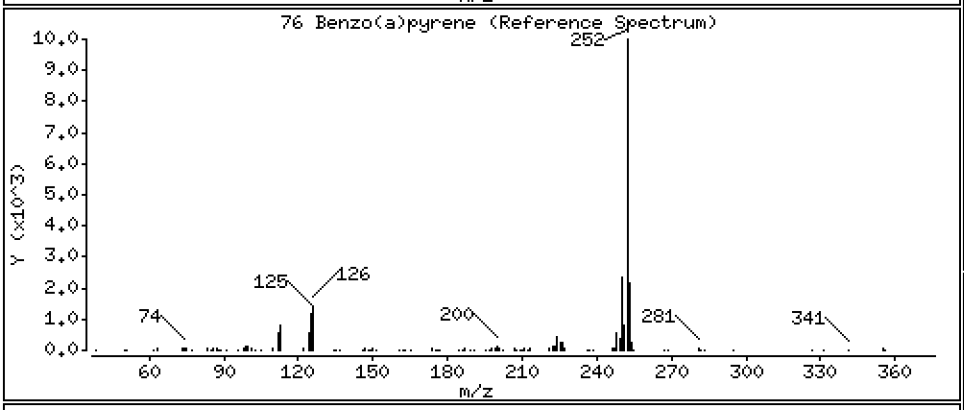
Concentration: 0.02343 ug/mL

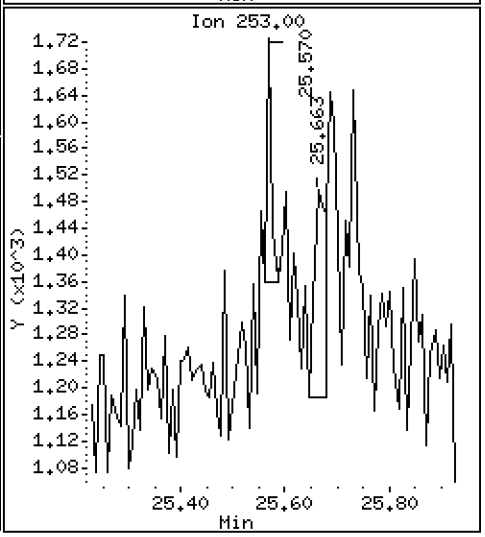


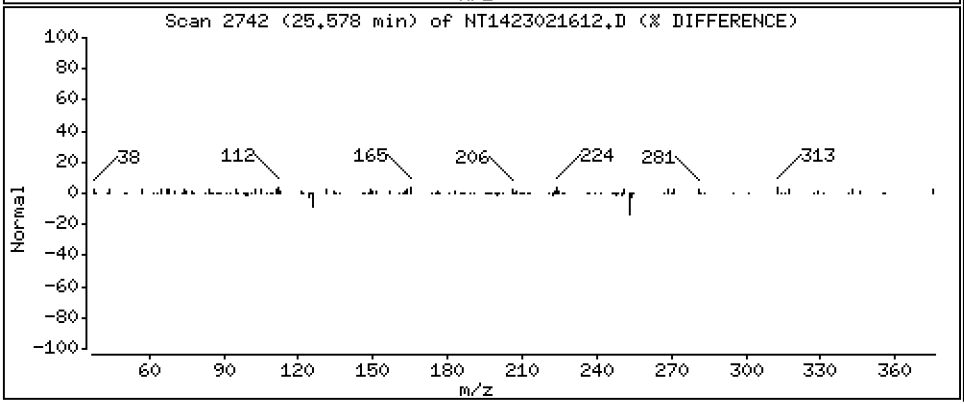












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021612.D

Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

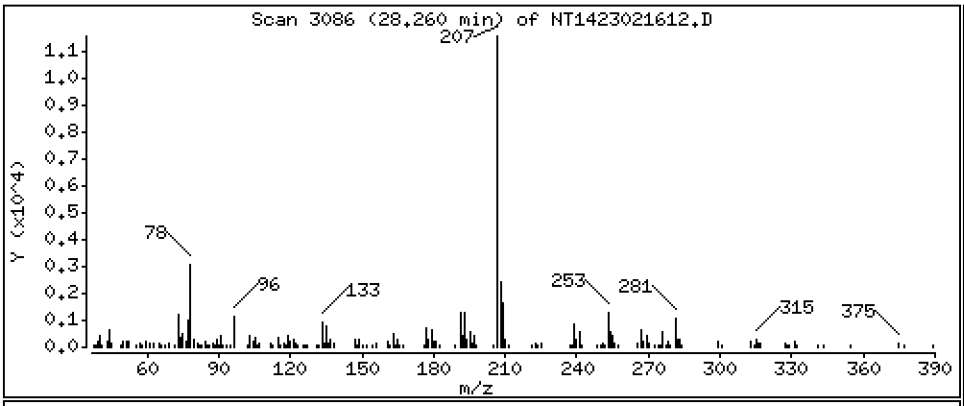
Operator: DSD

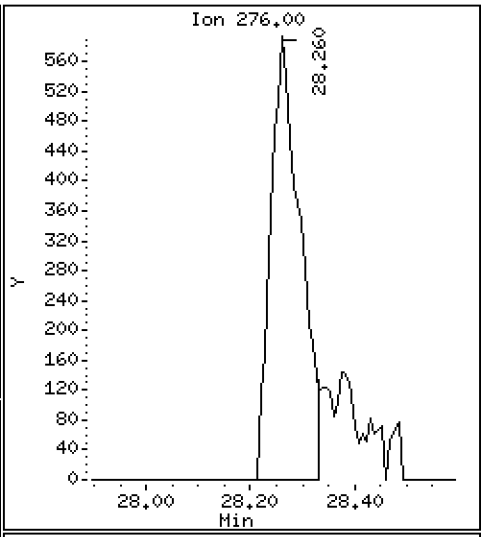
Column phase: ZB-5msi

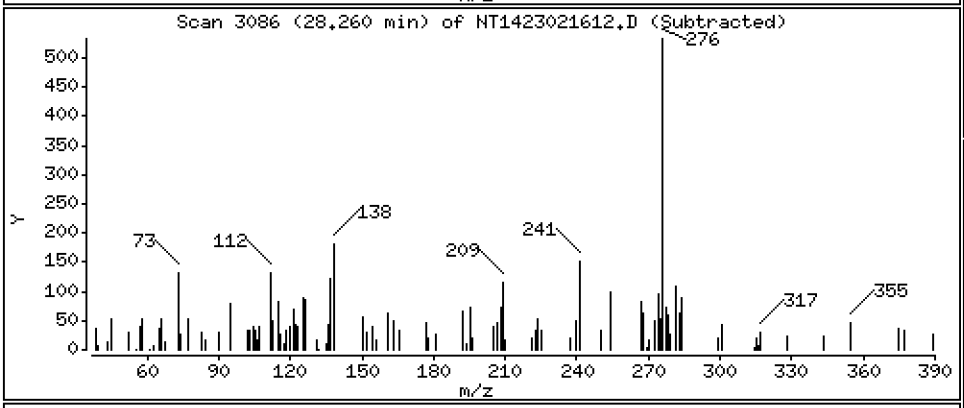
Column diameter: 0.25

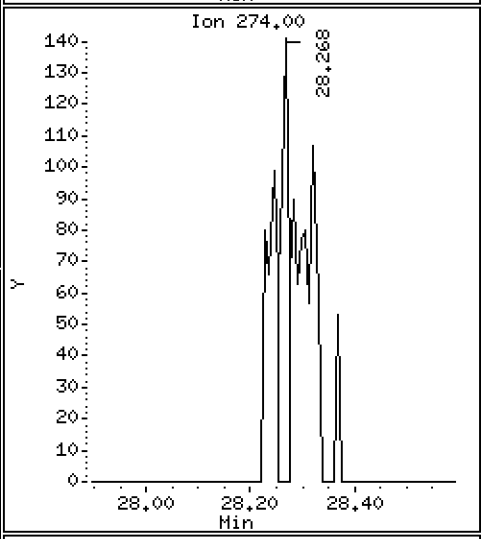
78 Indeno(1,2,3-cd)pyrene

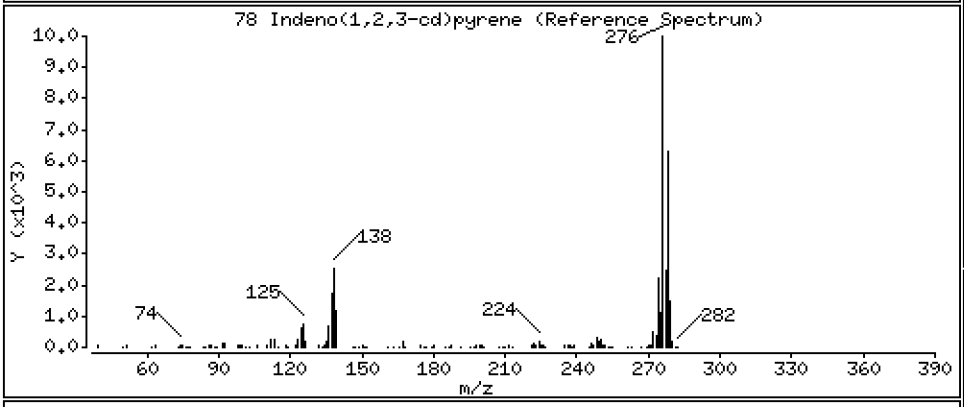
Concentration: 0.01631 ug/mL

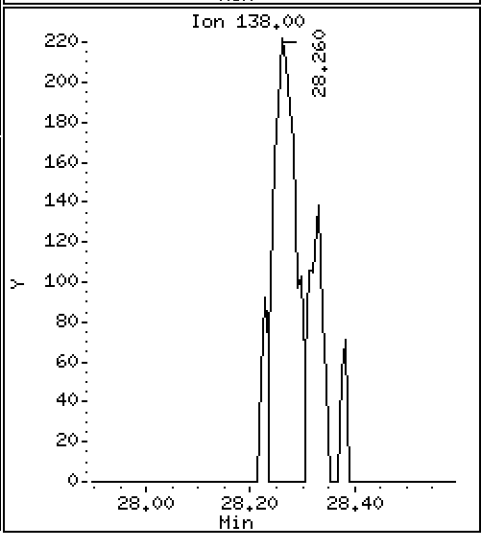


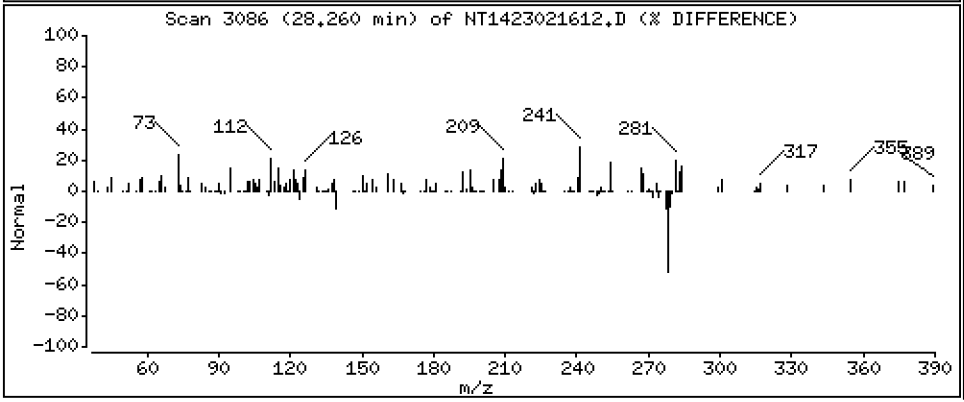












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021612.D

Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

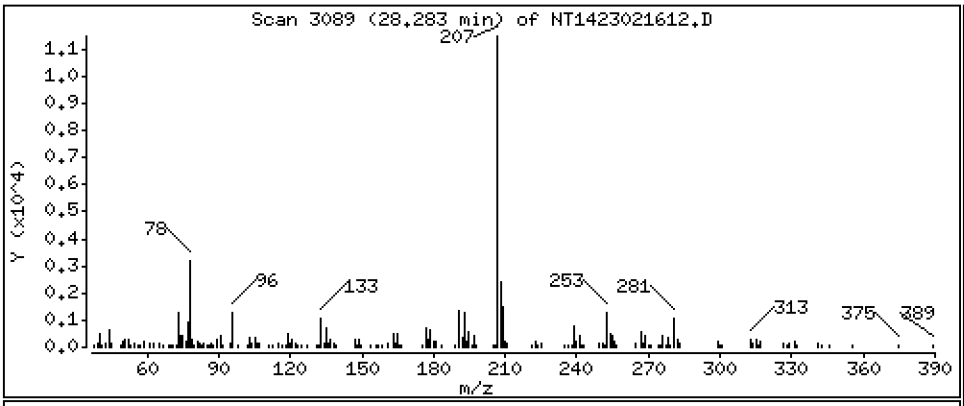
Operator: DSD

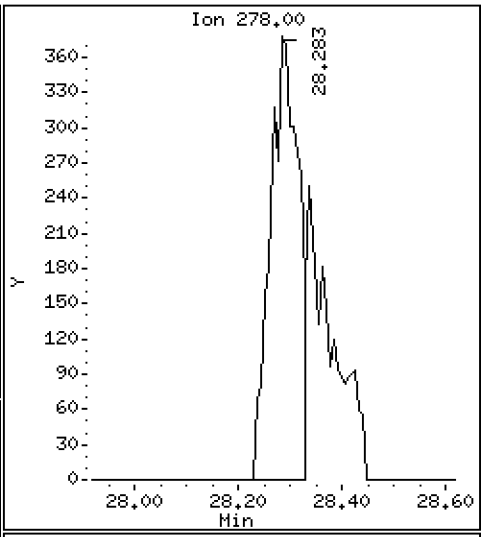
Column phase: ZB-5msi

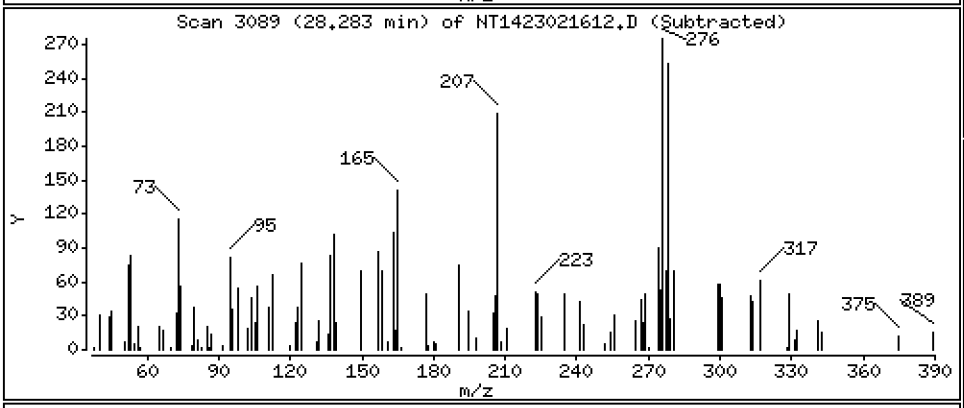
Column diameter: 0.25

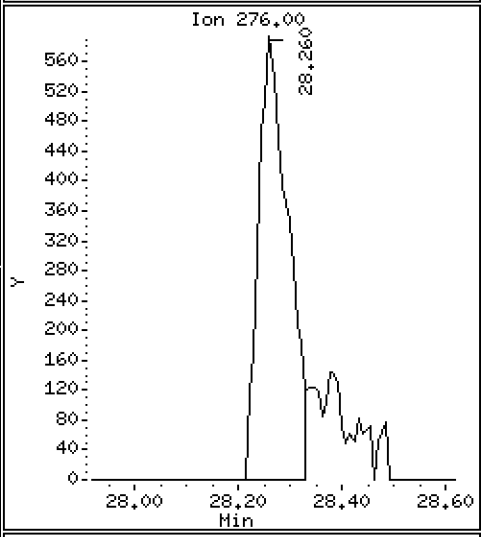
79 Dibenzo(a,h)anthracene

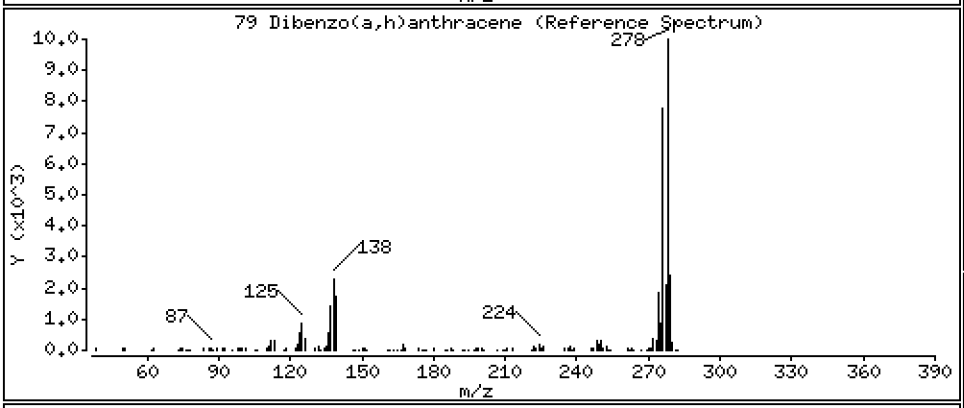
Concentration: 0.01227 ug/mL

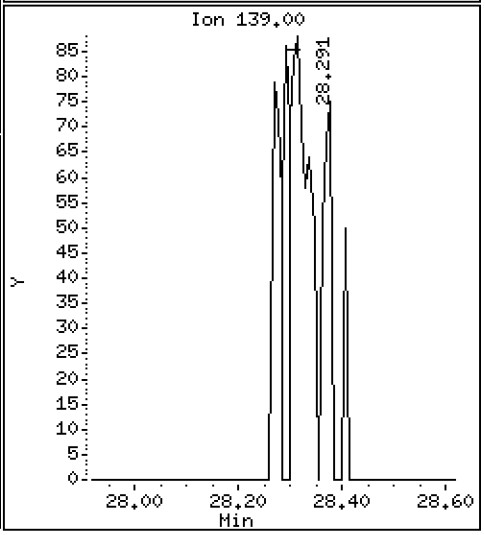


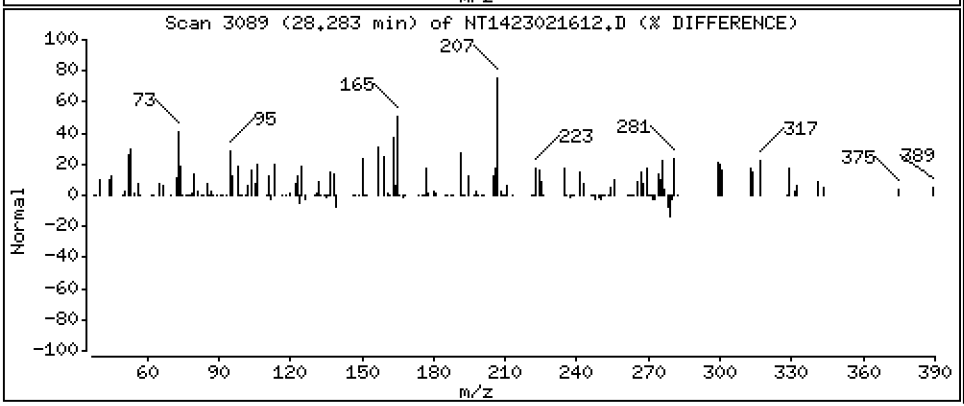












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021612.D

Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

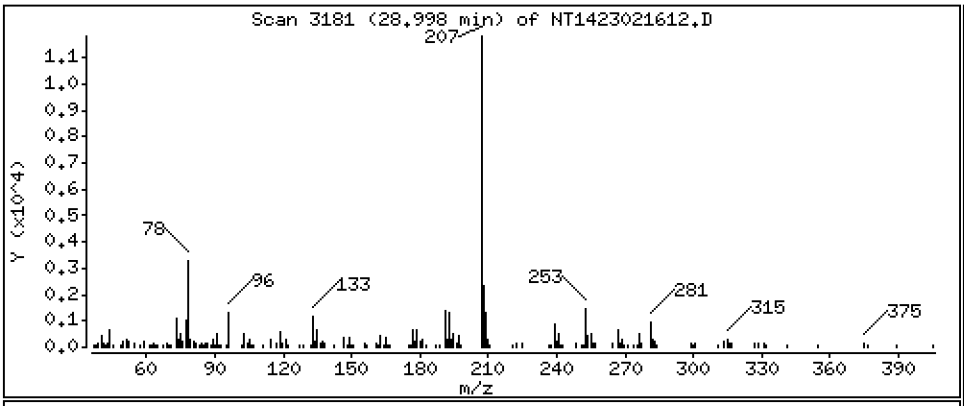
Operator: DSD

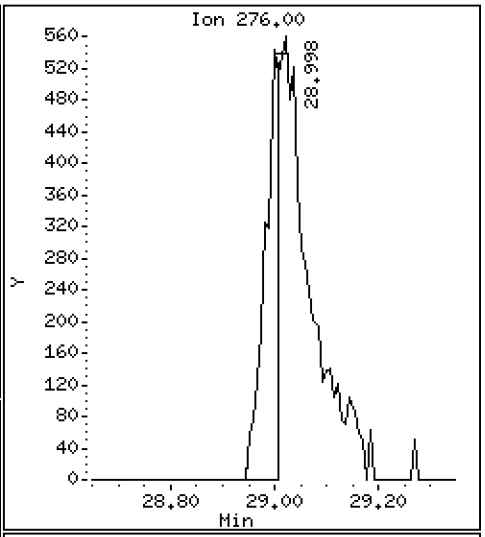
Column phase: ZB-5msi

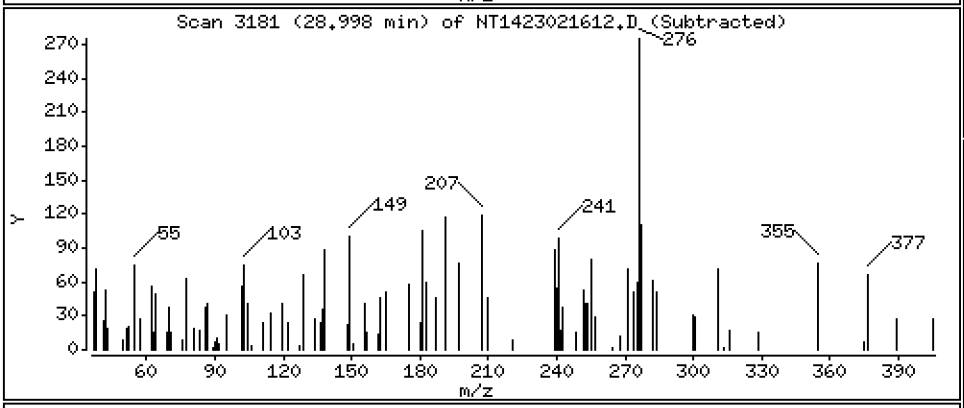
Column diameter: 0.25

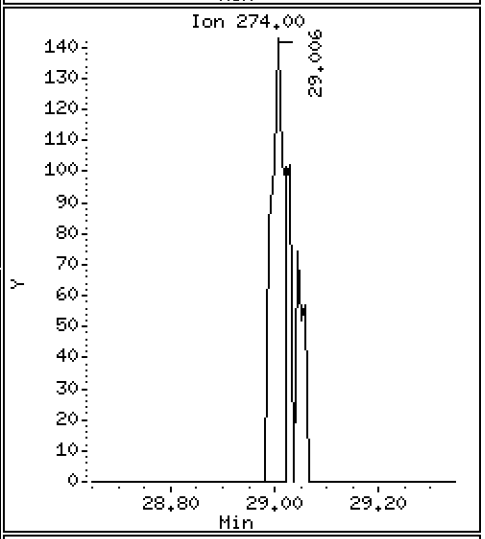
80 Benzo(g,h,i)perylene

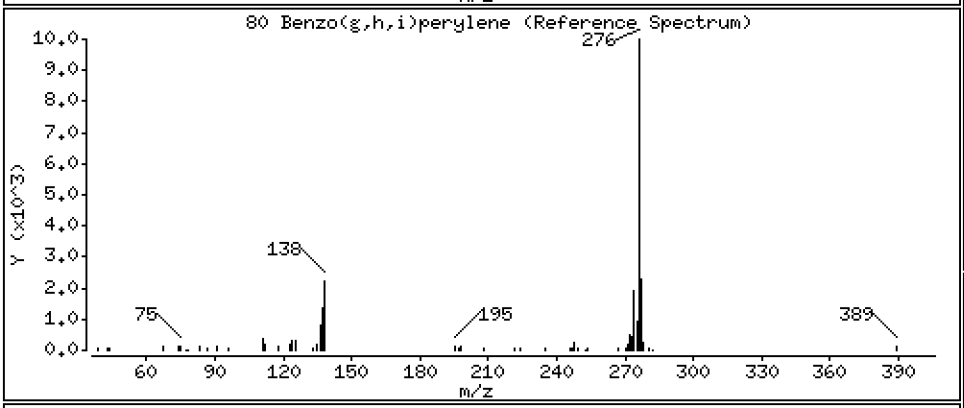
Concentration: 0.008544 ug/mL

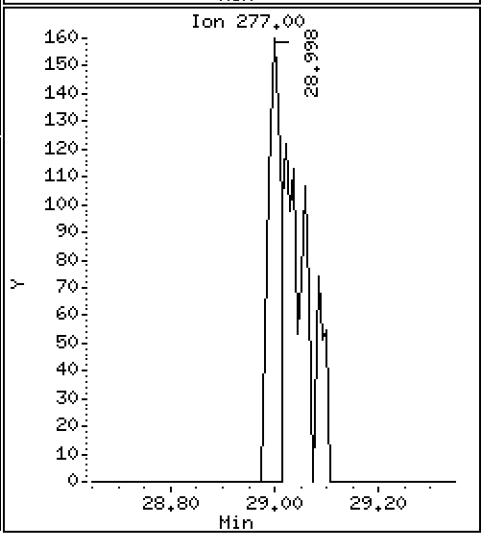


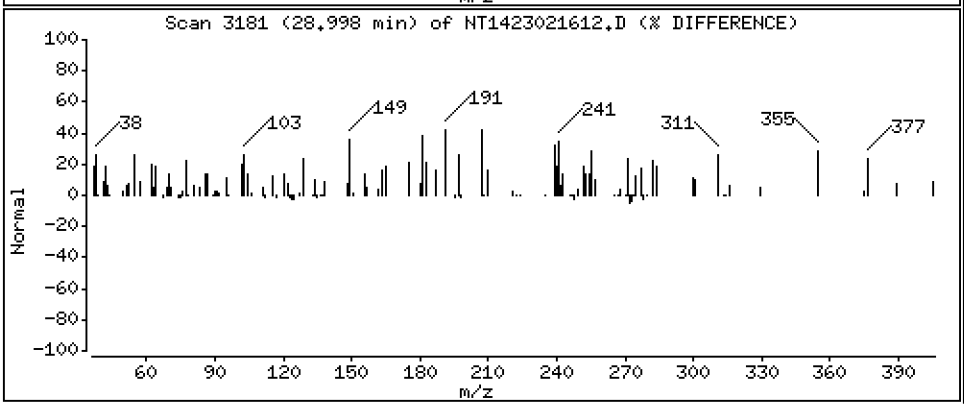












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

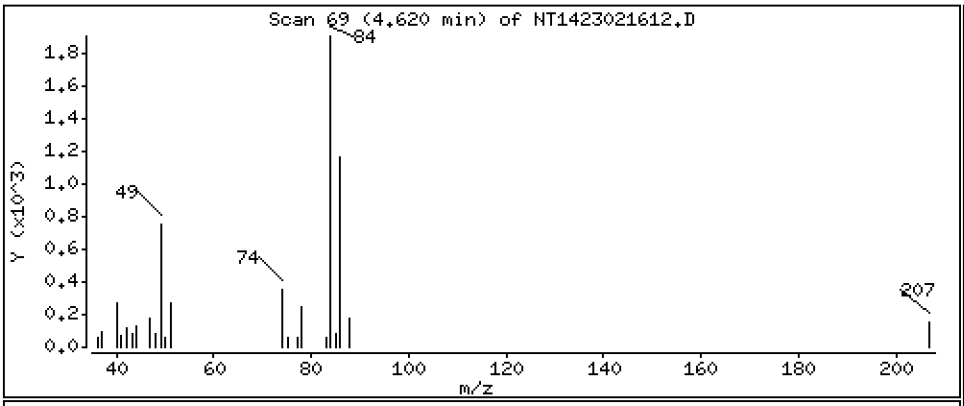
Operator: DSD

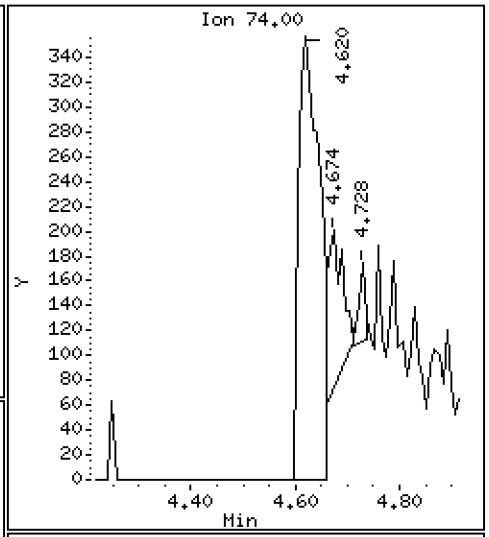
Column phase: ZB-5msi

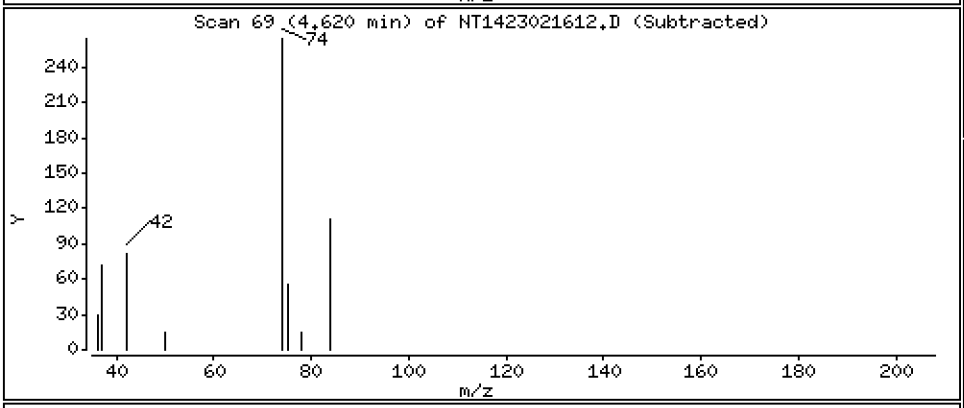
Column diameter: 0.25

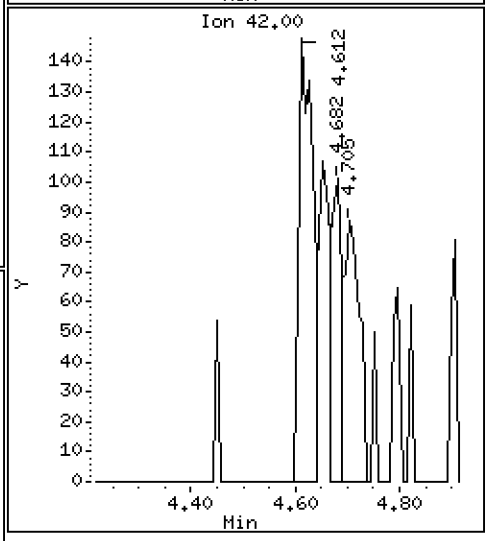
90 N-Nitrosodimethylamine

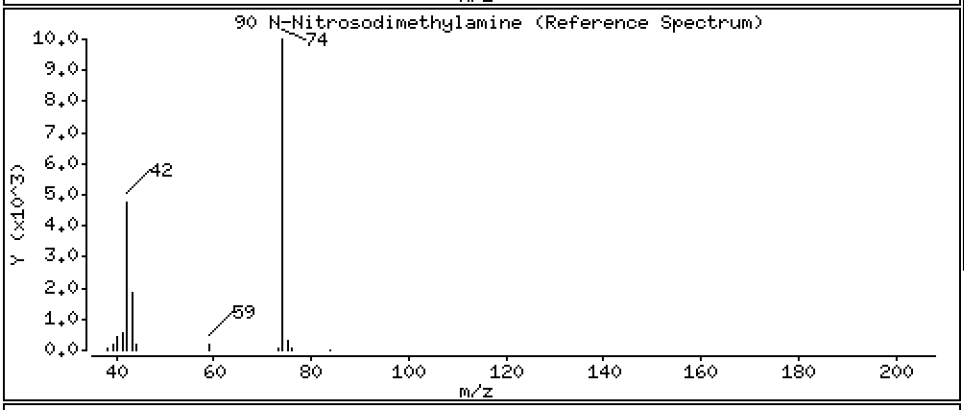
Concentration: 0.01496 ug/mL

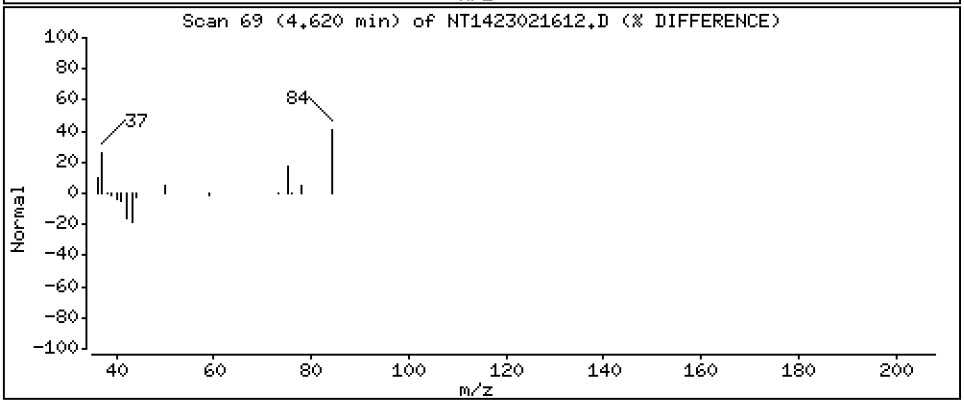












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

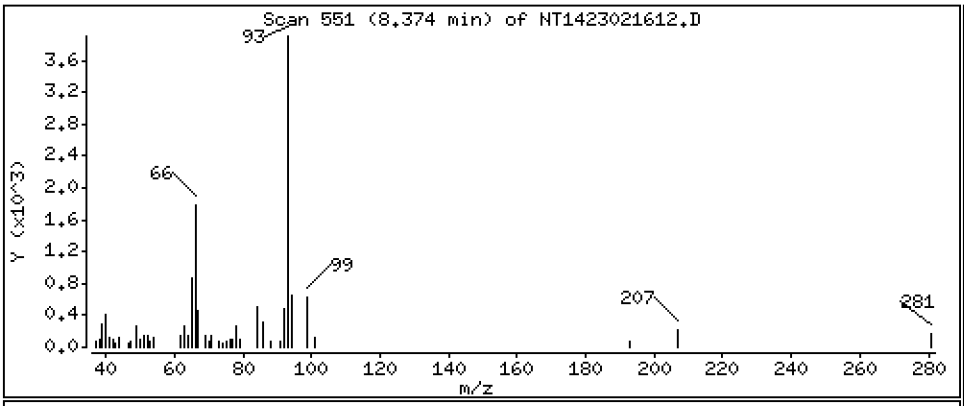
Operator: DSD

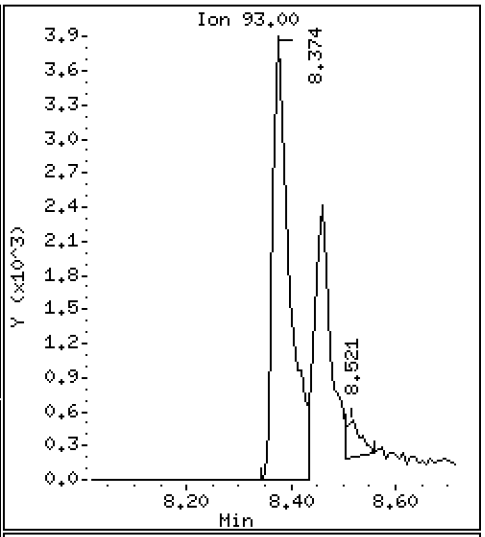
Column phase: ZB-5msi

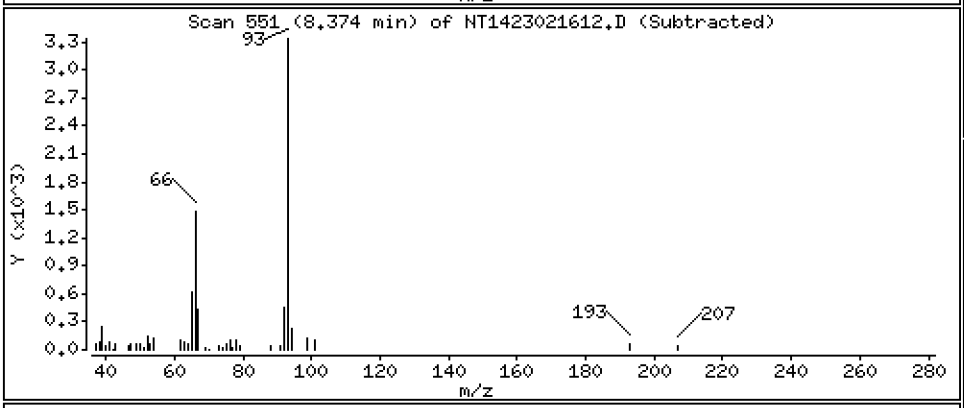
Column diameter: 0.25

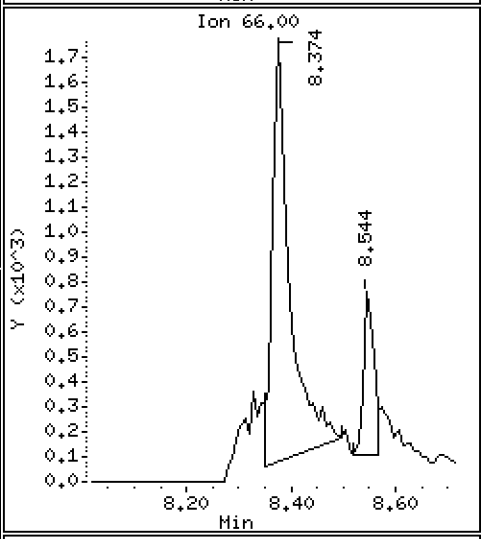
91 Aniline

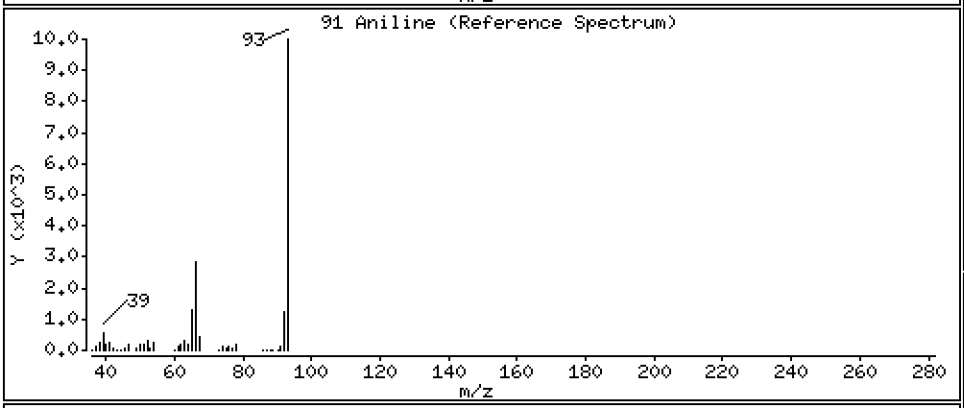
Concentration: 0.05519 ug/mL

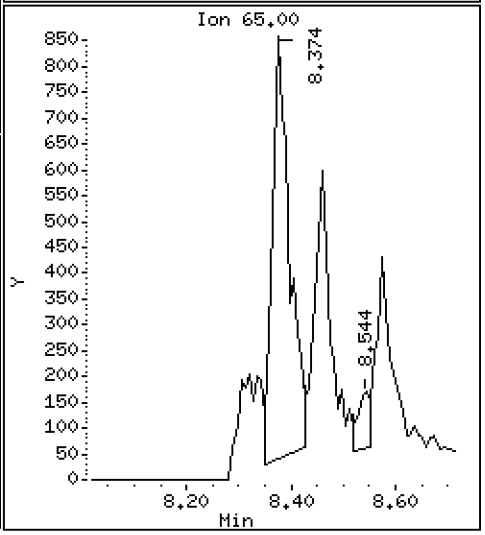


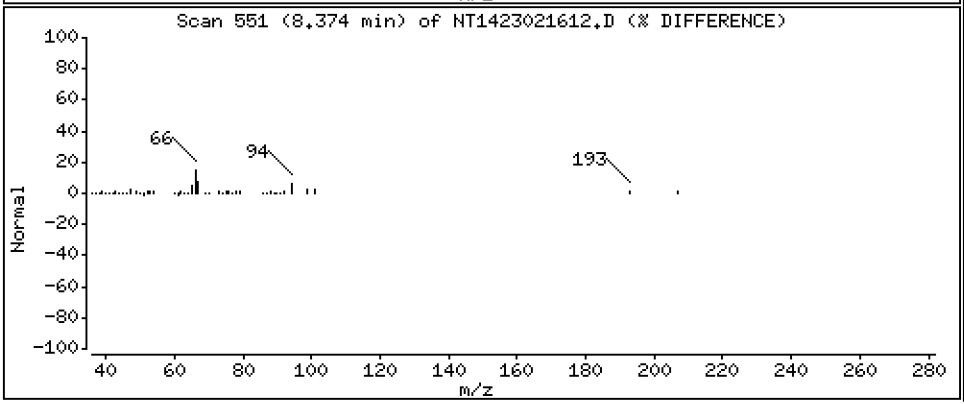












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

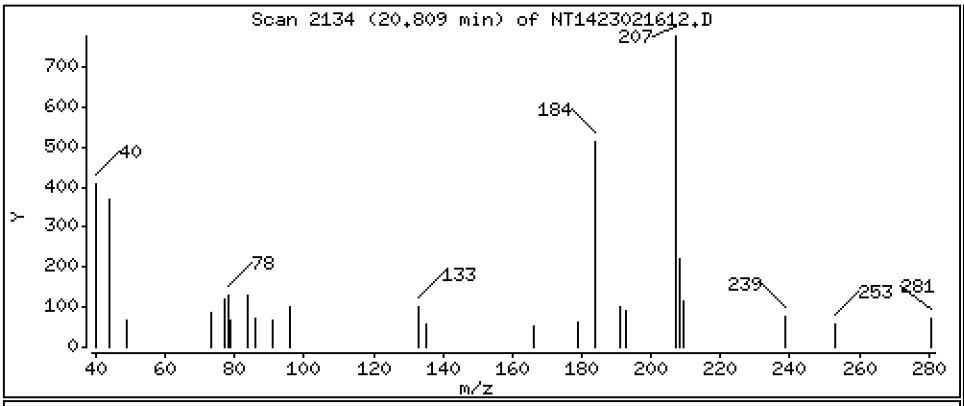
Operator: DSD

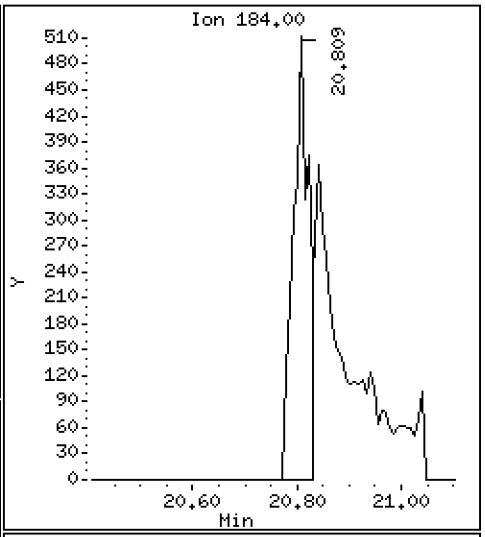
Column phase: ZB-5msi

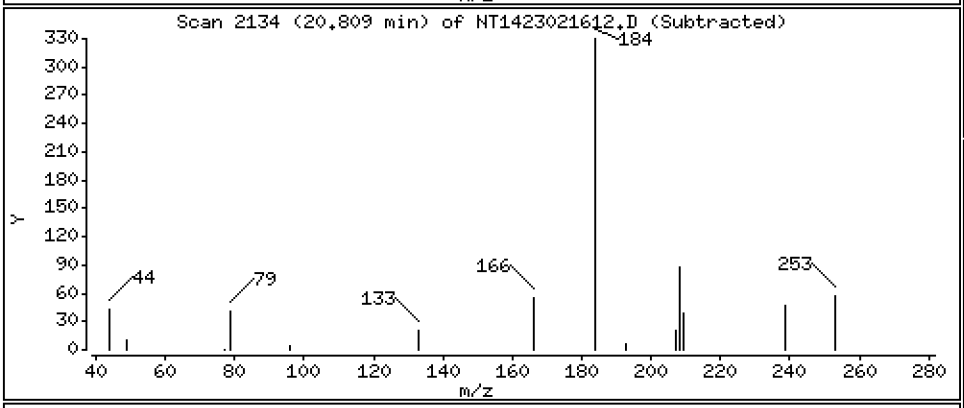
Column diameter: 0.25

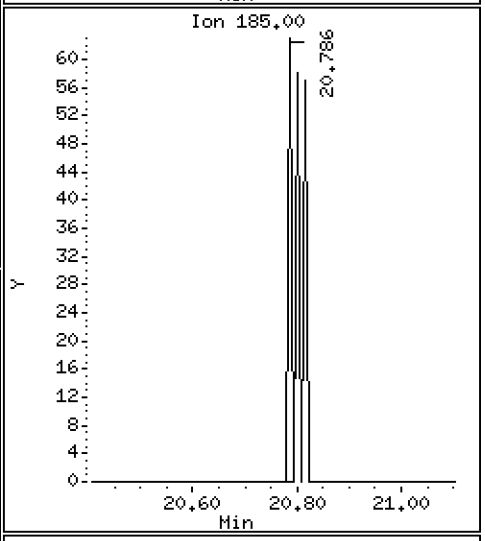
93 Benzidine

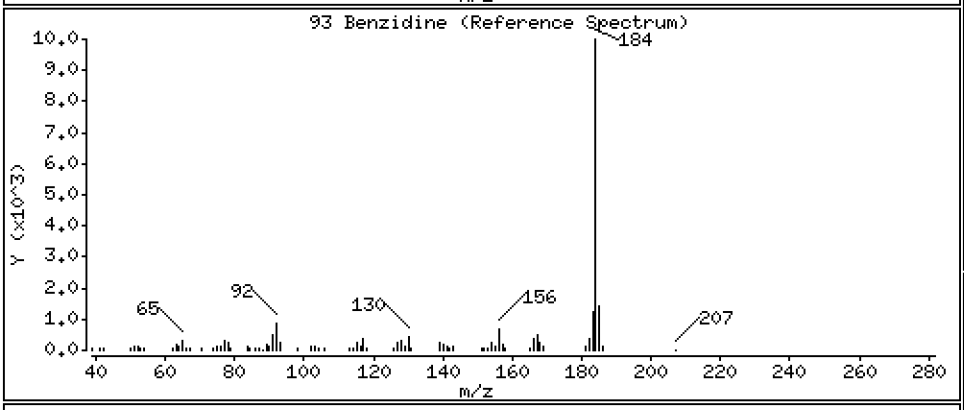
Concentration: 0.01080 ug/mL

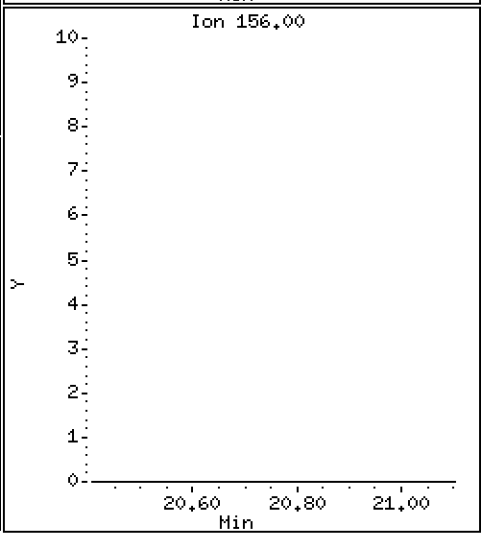


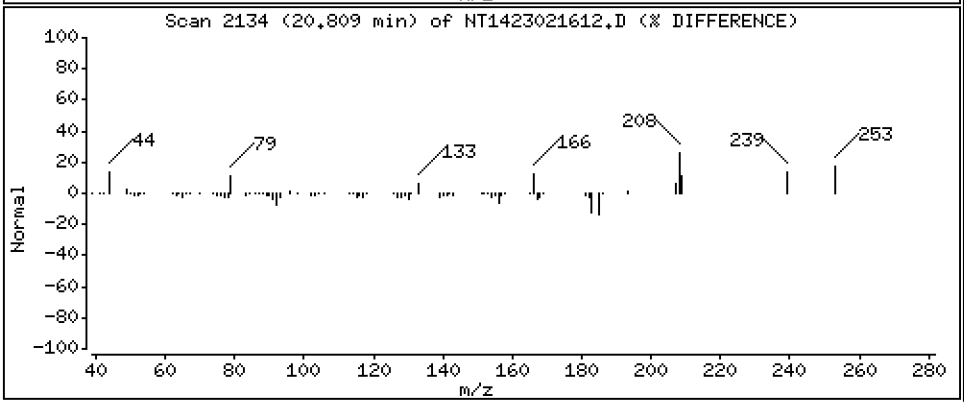












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021612.D

Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

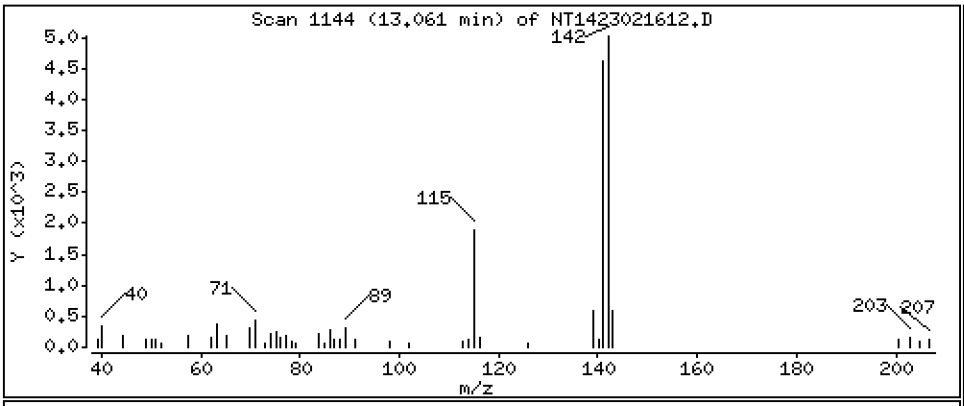
Operator: DSD

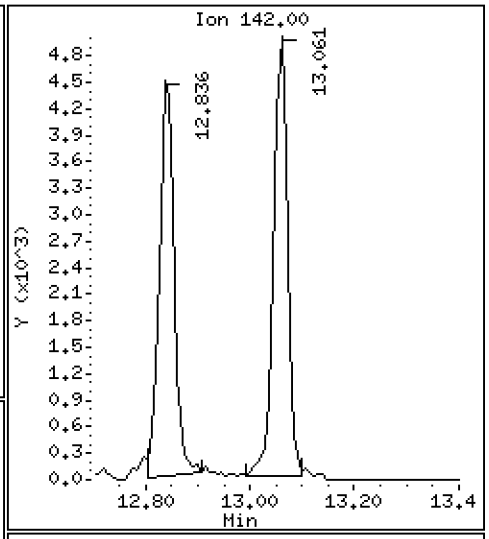
Column phase: ZB-5msi

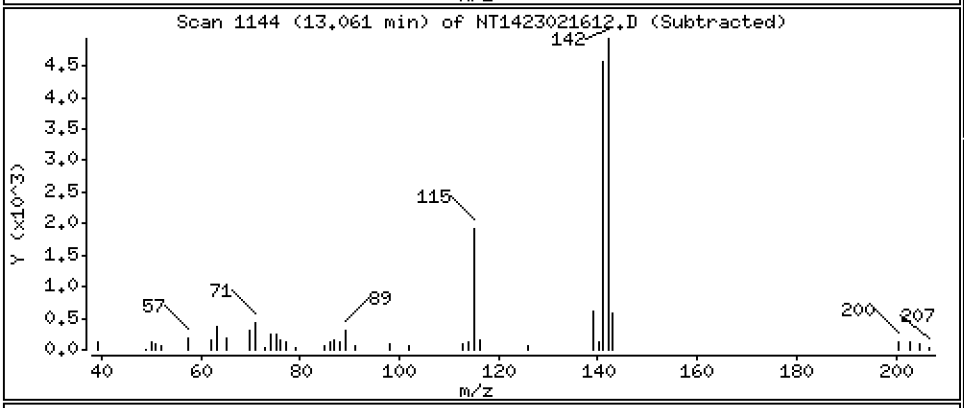
Column diameter: 0.25

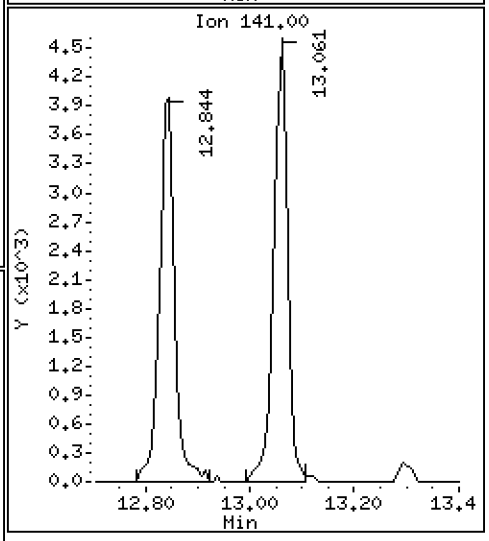
105 1-methylnaphthalene

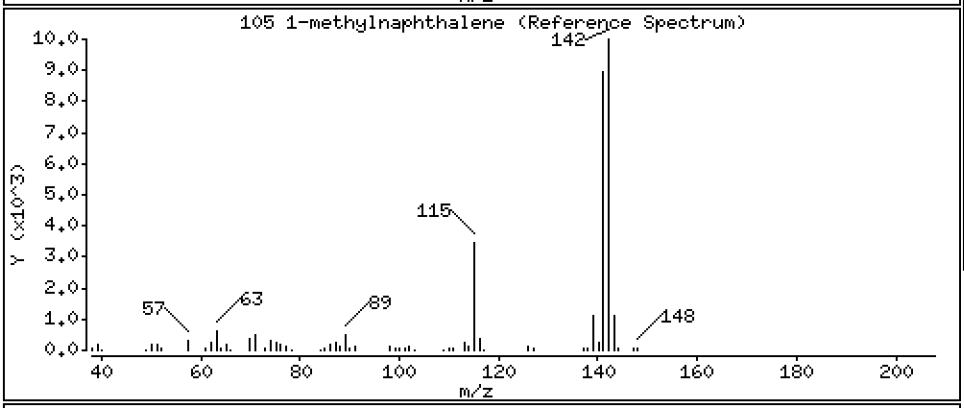
Concentration: 0.04316 ug/mL

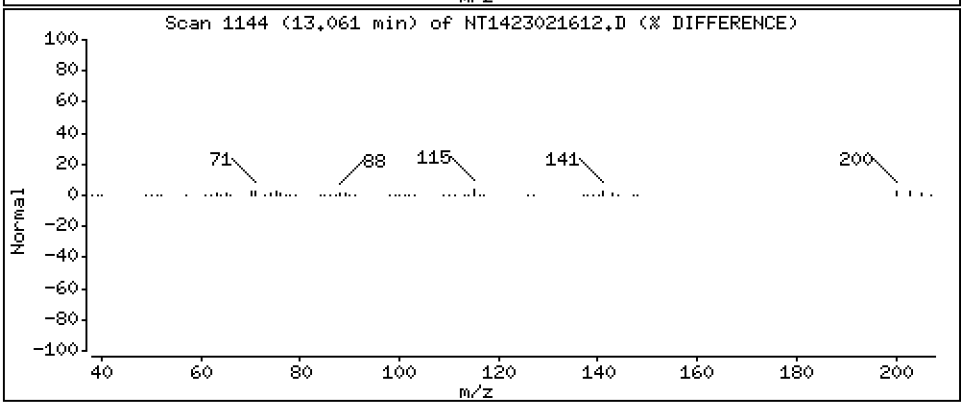












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

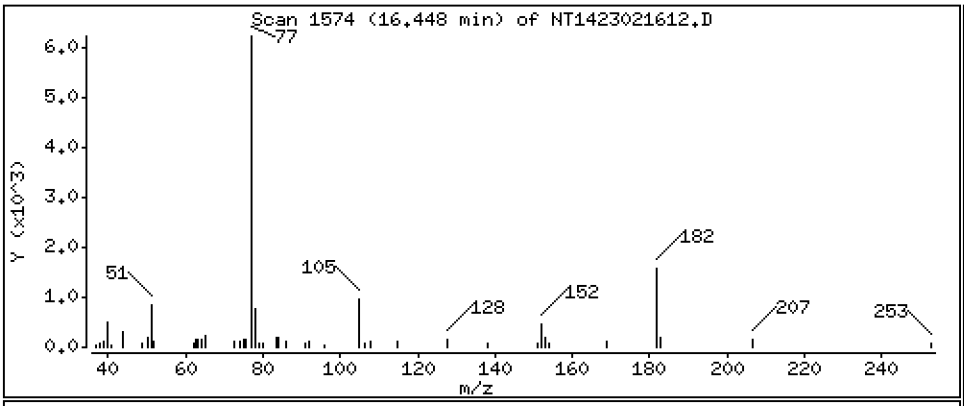
Operator: DSD

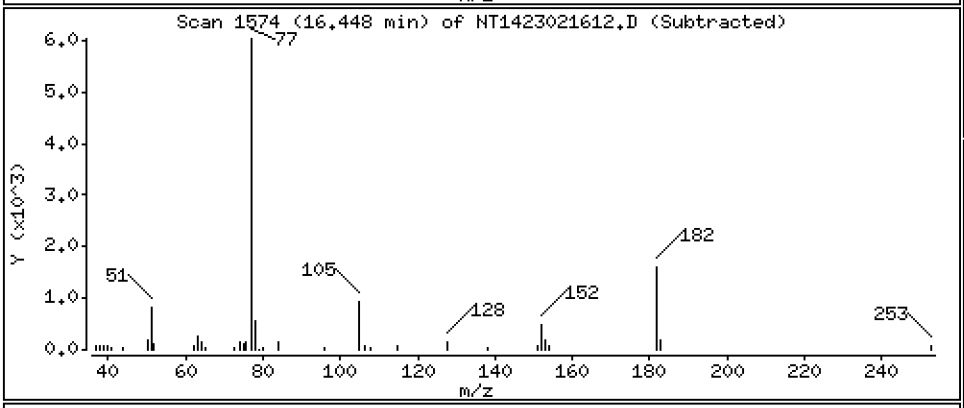
Column phase: ZB-5msi

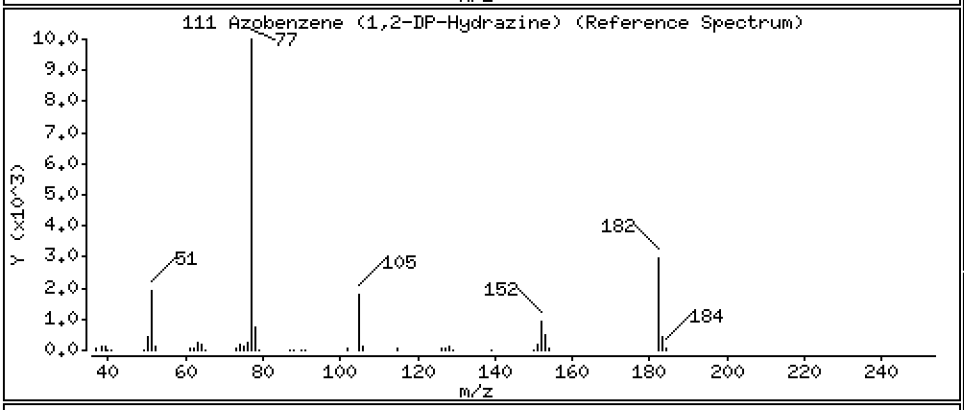
Column diameter: 0.25

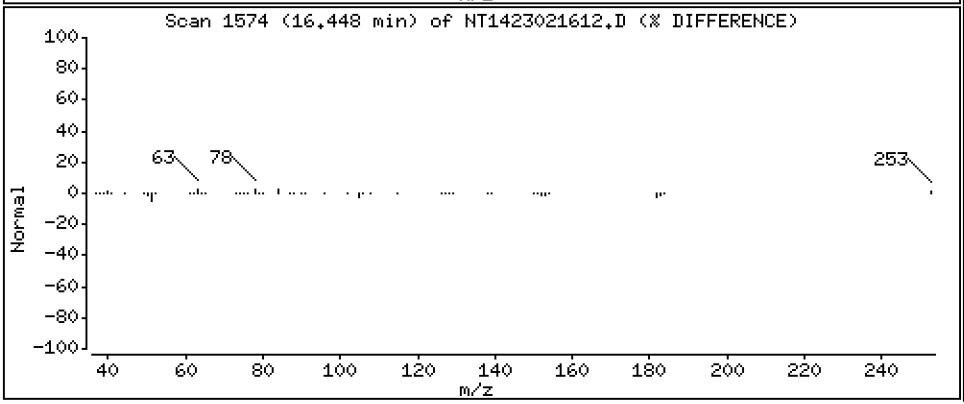
111 Azobenzene (1,2-DP-Hydrazine)

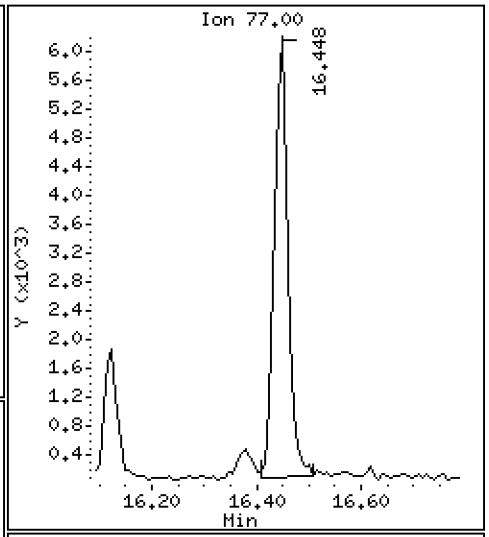
Concentration: 0.03113 ug/mL

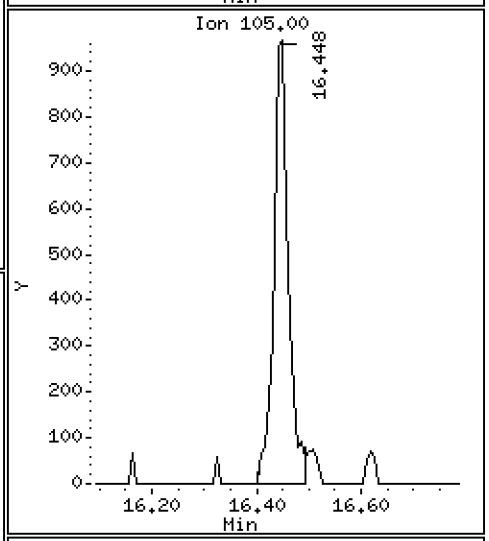


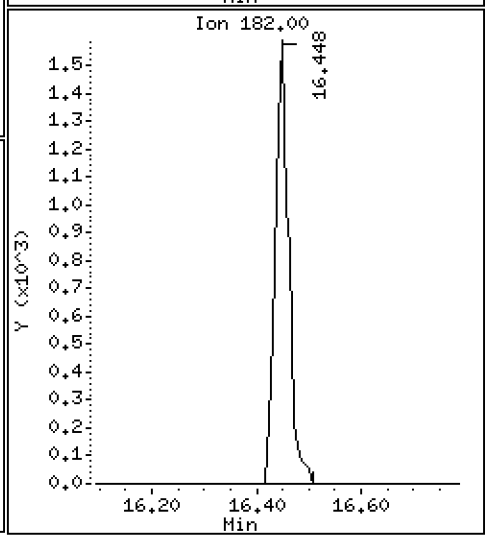












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Date : 16-FEB-2023 20:42

Client ID:

Instrument: nt14.i

Sample Info: SIM 0.05

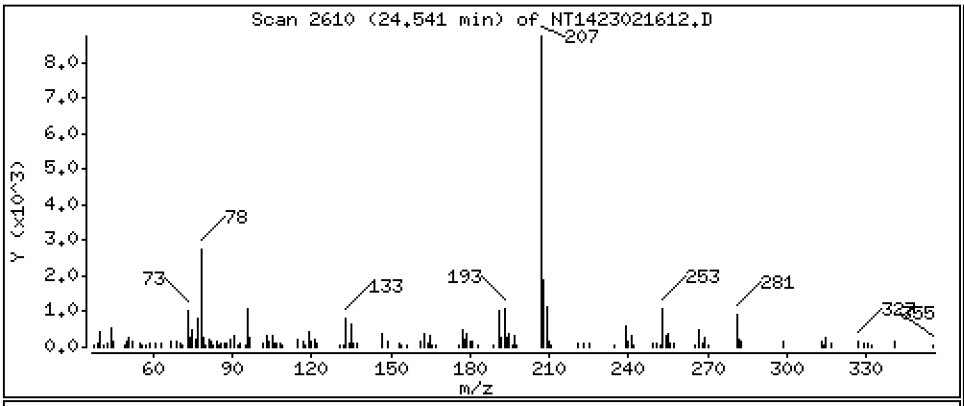
Operator: DSD

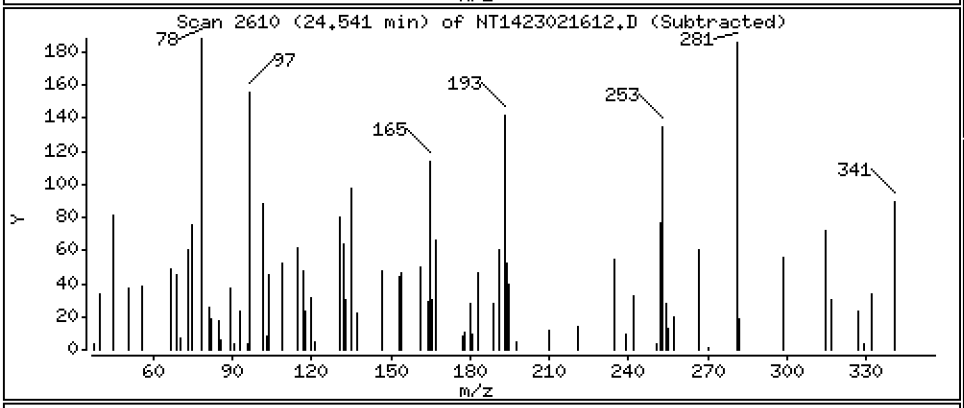
Column phase: ZB-5msi

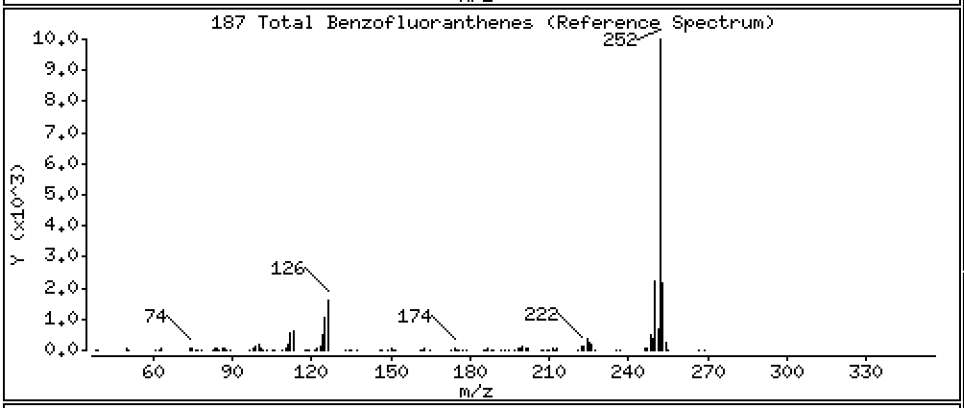
Column diameter: 0.25

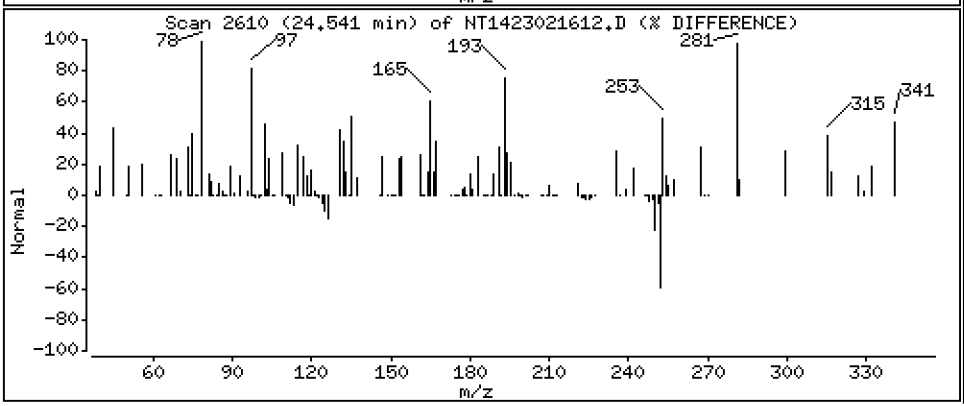
187 Total Benzofluoranthenes

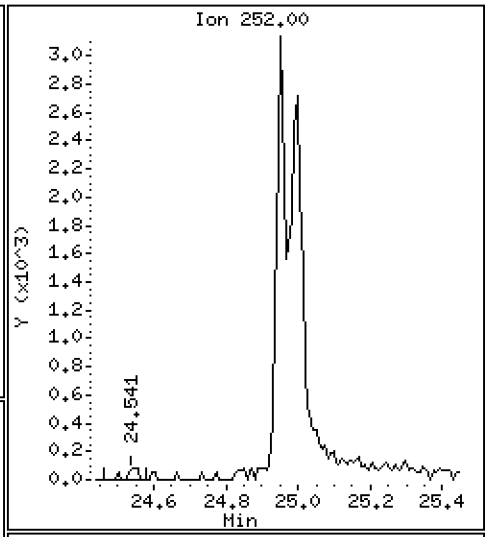
Concentration: 0.0008735 ug/mL

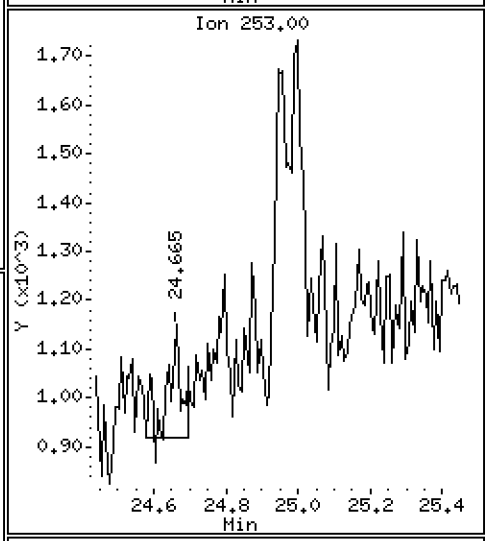


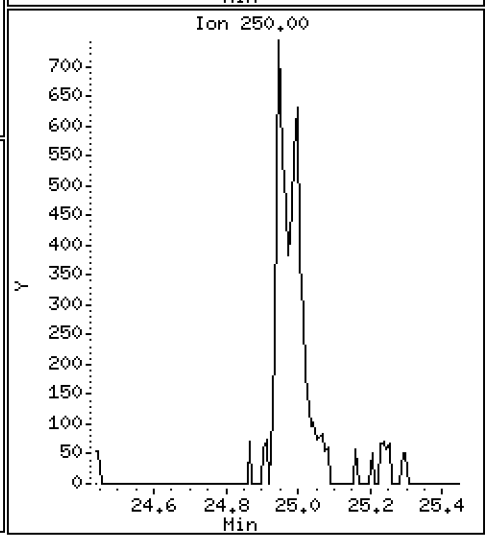












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

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Inj Date : 16-FEB-2023 20:42 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SIM 0.05
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230216.b\ABN.m
Meth Date : 17-Feb-2023 15:05 deenayd Quant Type: ISTD
Cal Date : 16-FEB-2023 19:30 Cal File: NT1423021610.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	Compound Not Detected.					
$	2 Phenol-d5	99	8.297	8.266	(0.932)	2228	0.01613	0.01613
	3 Phenol	94	8.320	8.289	(0.935)	1292	0.00883	0.008833
$	5 2-Chlorophenol-d4	132	8.552	8.536	(0.961)	3614	0.03666	0.03666
	4 Bis(2-Chloroethyl)ether	93	8.374	8.451	(0.941)	8635	0.07728	0.07728
	6 2-Chlorophenol	128	8.575	8.567	(0.963)	2320	0.02252	0.02252
	7 1,3-Dichlorobenzene	146	8.931	8.838	(1.003)	5234	0.04564	0.04564
*	8 1,4-Dichlorobenzene-d4	152	8.900	8.900	(1.000)	325804	4.00000	
	9 1,4-Dichlorobenzene	146	8.931	8.931	(1.003)	5234	0.04809	0.04809
$	10 1,2-Dichlorobenzene-d4	152	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	9.288	9.288	(1.044)	4909	0.04512	0.04512
	11 Benzyl alcohol	108	8.900	9.202	(1.000)	1582	0.01927	0.01927
	14 2,2'-oxybis(1-Chloropropane)	121	9.482	9.482	(1.065)	1160	0.03727	0.03727
	13 2-Methylphenol	108	9.327	9.404	(1.048)	232	0.00227	0.002272
	17 Hexachloroethane	117	9.878	9.878	(1.110)	2080	0.04396	0.04396
	16 N-Nitroso-di-n-propylamine	70	9.761	9.738	(1.097)	1192	0.01282	0.01282
	15 4-Methylphenol	108	9.420	9.684	(1.058)	3273	0.03035	0.03035
$	18 Nitrobenzene-d5	82	10.010	10.002	(0.879)	5476	0.04019	0.04019
	19 Nitrobenzene	77	10.049	10.033	(0.882)	4450	0.03254	0.03254
	20 Isophorone	82	10.522	10.491	(0.924)	4585	0.02541	0.02541
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	10.739	10.724	(0.943)	6218	0.06022	0.06022
	23 Bis(2-Chloroethoxy)methane	93	10.956	10.925	(0.962)	3315	0.02825	0.02825
	24 Benzoic acid	105	11.397	10.879	(1.001)	1206	0.01862	0.01862
	25 2,4-Dichlorophenol	162	11.173	11.127	(0.981)	1042	0.01179	0.01179
	26 1,2,4-Trichlorobenzene	180	11.305	11.305	(0.993)	4820	0.04503	0.04503
*	27 Naphthalene-d8	136	11.389	11.389	(1.000)	1179450	4.00000	
	28 Naphthalene	128	11.428	11.428	(1.003)	13320	0.04580	0.04580
	29 4-Chloroaniline	127	11.606	11.575	(1.019)	4346	0.03498	0.03498
	30 Hexachlorobutadiene	225	11.799	11.799	(1.036)	2881	0.04366	0.04366
	31 4-Chloro-3-methylphenol	107	12.573	12.542	(1.104)	2925	0.03058	0.03058
	32 2-Methylnaphthalene	142	12.836	12.836	(1.127)	8783	0.04033	0.04033
	33 Hexachlorocyclopentadiene	237	13.300	13.301	(0.886)	3269	0.04822	0.04822
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.					

			QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36	2-Fluorobiphenyl	172	13.625	13.617	(0.907)	11124	0.04443	0.04443
	37	2-Chloronaphthalene	162	13.834	13.826	(0.921)	8657	0.04237	0.04237
	38	2-Nitroaniline	65	14.121	14.097	(0.940)	1596	0.02402	0.02402
	39	Dimethylphthalate	163	14.546	14.531	(0.969)	7432	0.03477	0.03477
	40	Acenaphthylene	152	14.701	14.701	(0.979)	12340	0.03959	0.03959
	41	2,6-Dinitrotoluene	165	14.678	14.670	(0.977)	2543	0.05056	0.05056
*	42	Acenaphthene-d10	164	15.018	15.018	(1.000)	699735	4.00000	
	43	3-Nitroaniline	138	15.018	14.957	(1.000)	810	0.01517	0.01517
	44	Acenaphthene	153	15.080	15.080	(1.004)	8413	0.04509	0.04509
	45	2,4-Dinitrophenol	184	Compound Not Detected.					
	46	Dibenzofuran	168	15.412	15.405	(1.026)	13589	0.04435	0.04435
	47	4-Nitrophenol	109	Compound Not Detected.					
	48	2,4-Dinitrotoluene	165	15.490	15.475	(1.031)	2019	0.02839	0.02839
	50	Diethylphthalate	149	15.992	15.984	(1.065)	8617	0.03033	0.03033
	49	Fluorene	166	16.124	16.124	(1.074)	12861	0.04014	0.04014
	51	4-Chlorophenyl-phenylether	204	16.124	16.116	(1.074)	6638	0.03875	0.03875
	52	4-Nitroaniline	138	16.386	16.224	(1.091)	306	0.00500	0.004996
	53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54	N-Nitrosodiphenylamine	169	16.378	16.370	(0.907)	6002	0.02942	0.02942
$	55	2,4,6-Tribromophenol	330	Compound Not Detected.					
	56	4-Bromophenyl-phenylether	248	17.126	17.118	(0.949)	3418	0.03762	0.03762
	57	Hexachlorobenzene	284	17.435	17.434	(0.966)	4063	0.04400	0.04400
	58	Pentachlorophenol	266	Compound Not Detected.					
*	59	Phenanthrene-d10	188	18.054	18.054	(1.000)	1419663	4.00000	
	60	Phenanthrene	178	18.101	18.101	(1.003)	14996	0.04396	0.04396
	61	Anthracene	178	18.201	18.193	(1.008)	11452	0.03388	0.03388
	62	Carbazole	167	18.549	18.534	(1.027)	7614	0.02482	0.02482
	63	Di-n-butylphthalate	149	19.346	19.346	(1.072)	6698	0.01955	0.01955
	64	Fluoranthene	202	20.507	20.499	(0.887)	13196	0.03425	0.03425
	65	Pyrene	202	20.932	20.925	(0.905)	14925	0.03664	0.03664
$	66	Terphenyl-d14	244	21.219	21.219	(0.918)	11139	0.03851	0.03851
	67	Butylbenzylphthalate	149	22.148	22.148	(0.958)	1665	0.01240	0.01240
	68	Benzo(a)anthracene	228	23.092	23.092	(0.999)	11881	0.04158	0.04158
*	69	Chrysene-d12	240	23.123	23.123	(1.000)	892941	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.069	23.054	(0.998)	2656	0.03036	0.03036
	71	Chrysene	228	23.162	23.162	(1.002)	11642	0.04530	0.04530
	72	bis(2-Ethylhexyl)phthalate	149	23.178	23.178	(0.960)	2063	0.01298	0.01298
*	134	Di-n-octylphthalate-d4	153	24.153	24.153	(1.000)	922711	4.00000	
	73	Di-n-octylphthalate	149	24.161	24.161	(1.000)	10377	0.04810	0.04810
	74	Benzo(b)fluoranthene	252	24.950	24.943	(0.971)	5072	0.02738	0.02738
	75	Benzo(k)fluoranthene	252	24.950	24.989	(0.971)	5072	0.02562	0.02562
	76	Benzo(a)pyrene	252	25.578	25.578	(0.996)	4111	0.02343	0.02343
*	77	Perylene-d12	264	25.686	25.686	(1.000)	583873	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.260	28.244	(1.100)	2352	0.01631	0.01631
	79	Dibenzo(a,h)anthracene	278	28.283	28.267	(1.101)	1458	0.01227	0.01227
	80	Benzo(g,h,i)perylene	276	28.997	28.997	(1.129)	999	0.00854	0.008544
	90	N-Nitrosodimethylamine	74	4.620	4.566	(0.519)	1009	0.01496	0.01496
	91	Aniline	93	8.374	8.358	(0.941)	8635	0.05519	0.05519
	93	Benzidine	184	20.809	20.754	(0.900)	1125	0.01080	0.01080
	103	Pyridine	79	Compound Not Detected.					
	105	1-methylnaphthalene	142	13.060	13.053	(1.147)	8825	0.04316	0.04316
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.447	16.440	(1.095)	10750	0.03113	0.03113
	187	Total Benzofluoranthenes	252	24.540	24.943	(0.955)	158	9e-004	0.0008735
	120	2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021612.D
Lab Smp Id: SIM 0.05
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\ABN.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 17:06
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	375798	187899	751596	325804	-13.30
27 Naphthalene-d8	1378169	689085	2756338	1179450	-14.42
42 Acenaphthene-d10	847135	423568	1694270	699735	-17.40
59 Phenanthrene-d10	1675180	837590	3350360	1419663	-15.25
69 Chrysene-d12	1073562	536781	2147124	892941	-16.82
134 Di-n-octylphthala	1344129	672065	2688258	922711	-31.35
77 Perylene-d12	721978	360989	1443956	583873	-19.13

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.39	-0.07
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.00
59 Phenanthrene-d10	18.05	17.55	18.55	18.05	0.00
69 Chrysene-d12	23.12	22.62	23.62	23.12	0.00
134 Di-n-octylphthala	24.15	23.65	24.65	24.15	0.00
77 Perylene-d12	25.69	25.19	26.19	25.69	0.00

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

REVIEW SUMMARY FOR FILE - NT1423021612.D

Lab ID: SIM 0.05
nt14.i, ABN.m, 16-FEB-2023 20:42

RT	CO-ELUTION COMPOUNDS
8.900	1,4-Dichlorobenzene-d4 and Benzyl alcohol
8.931	1,4-Dichlorobenzene and 1,3-Dichlorobenzene
15.019	Acenaphthene-d10 and 3-Nitroaniline
24.951	Benzo(k)fluoranthene and Benzo(b)fluoranthene

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

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.941	0.950	-0.0087	Bis(2-Chloroethyl)ether
1.003	0.993	0.0105	1,3-Dichlorobenzene
1.000	1.034	-0.0340	Benzyl alcohol
1.048	1.057	-0.0087	2-Methylphenol
1.058	1.088	-0.0297	4-Methylphenol
1.001	0.000	1.0007	Benzoic acid
1.091	1.080	0.0108	4-Nitroaniline
0.519	0.513	0.0061	N-Nitrosodimethylamine
0.955	0.971	-0.0157	Total Benzofluoranthenes

RRT check based on Ccal File: NT1423021610.D

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

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

Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D

Page 1

Date : 16-FEB-2023 21:18

Client ID:

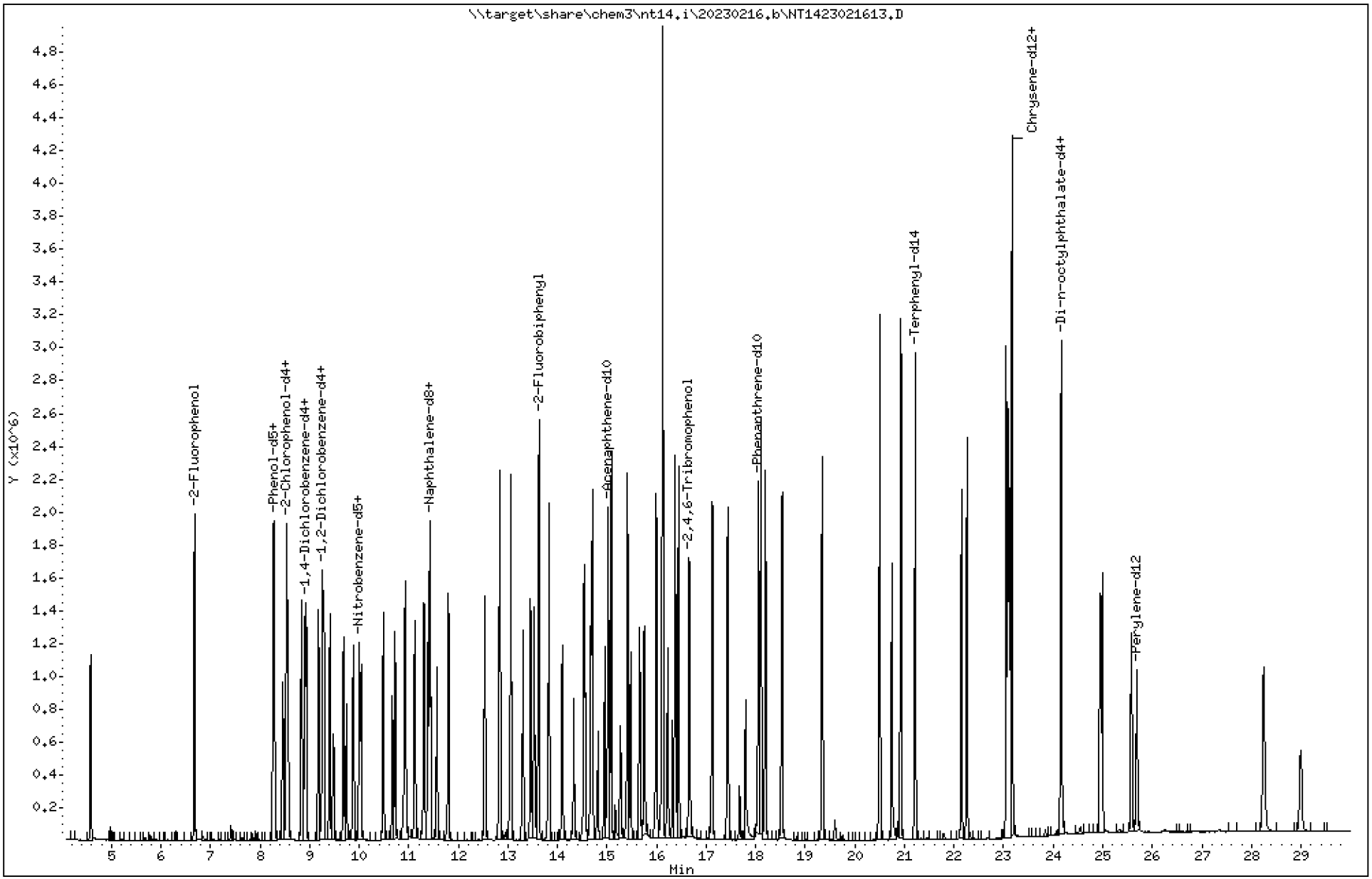
Instrument: nt14.i

Sample Info: SLB0234-SCV1

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

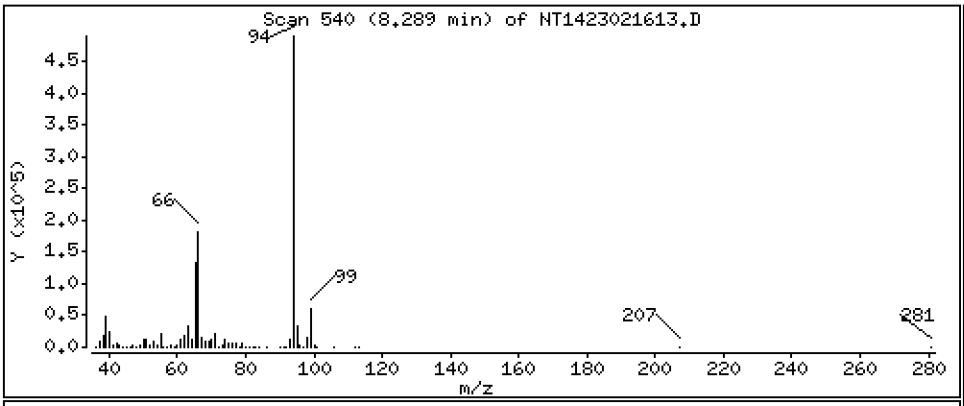
Operator: DSD

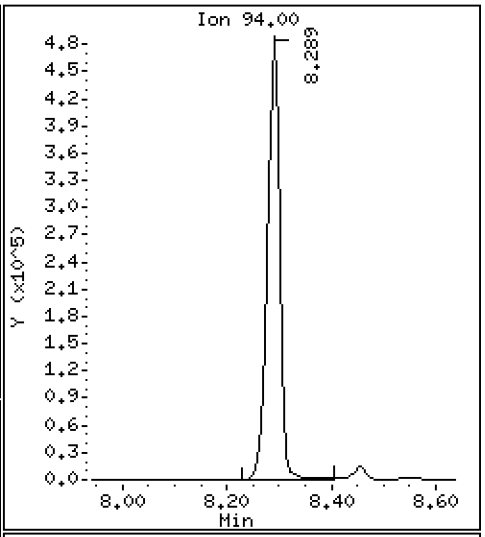
Column phase: ZB-5msi

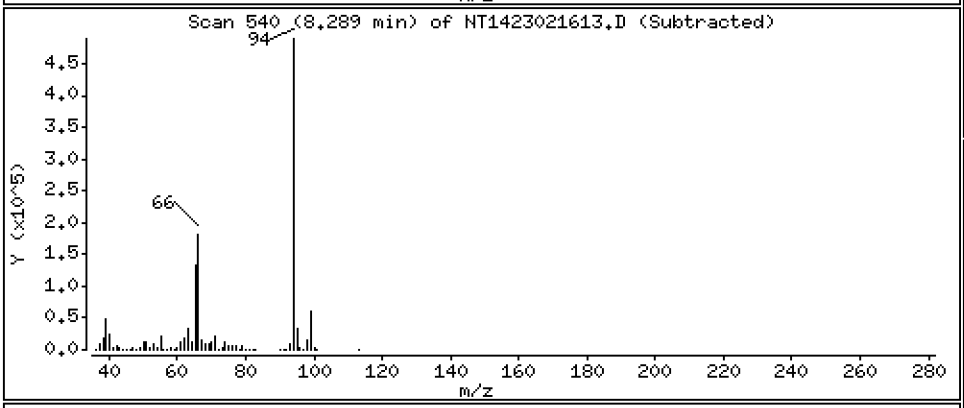
Column diameter: 0.25

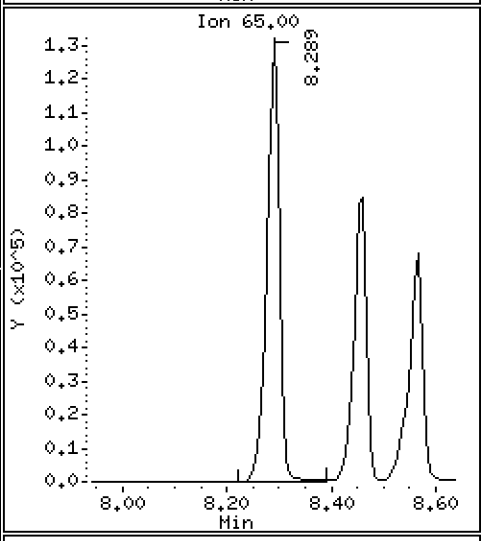
3 Phenol

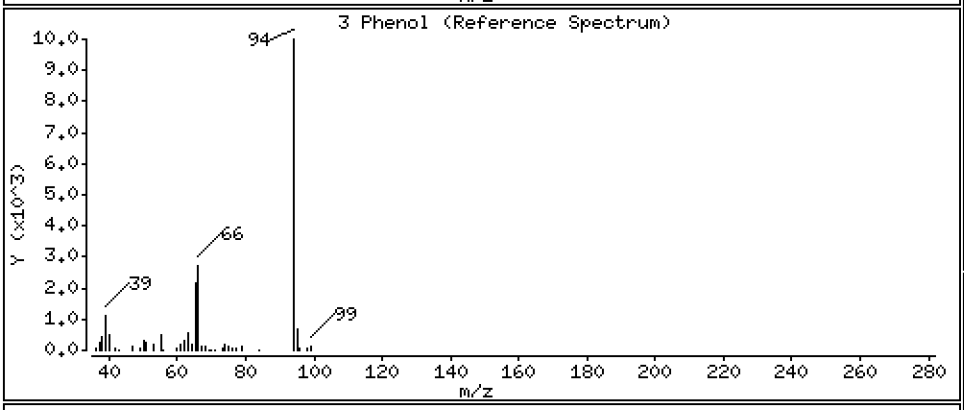
Concentration: 4.627 ug/mL

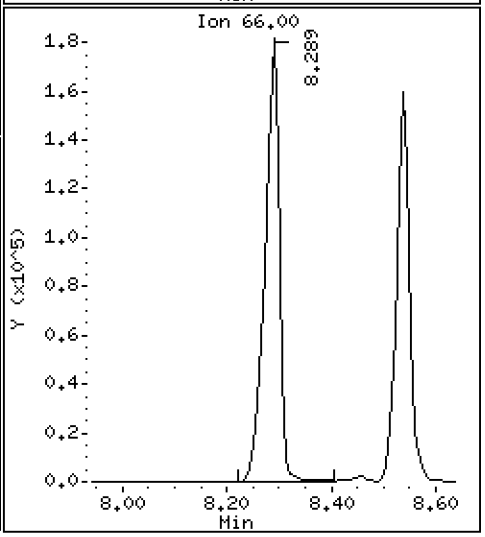


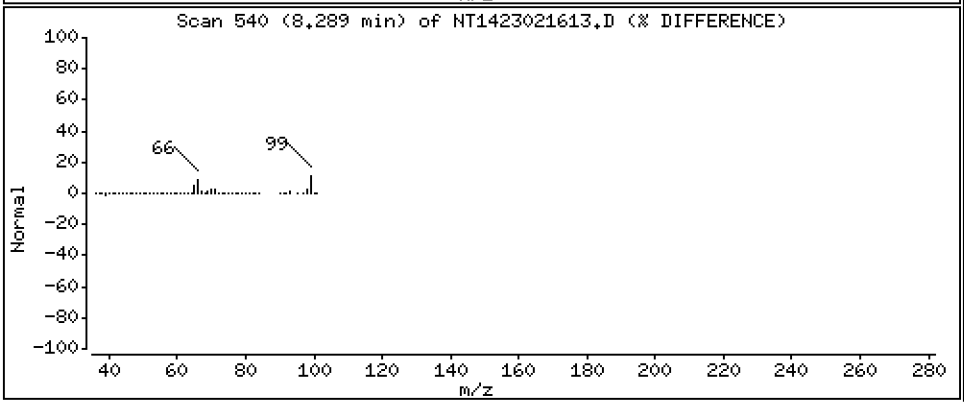












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

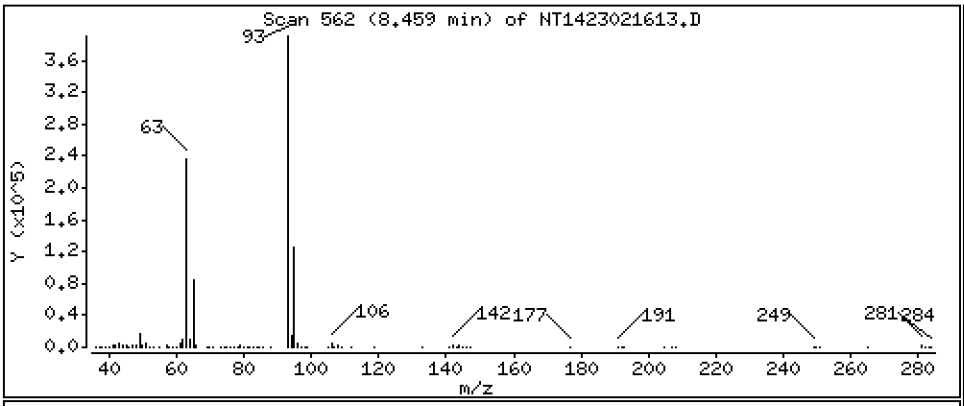
Operator: DSD

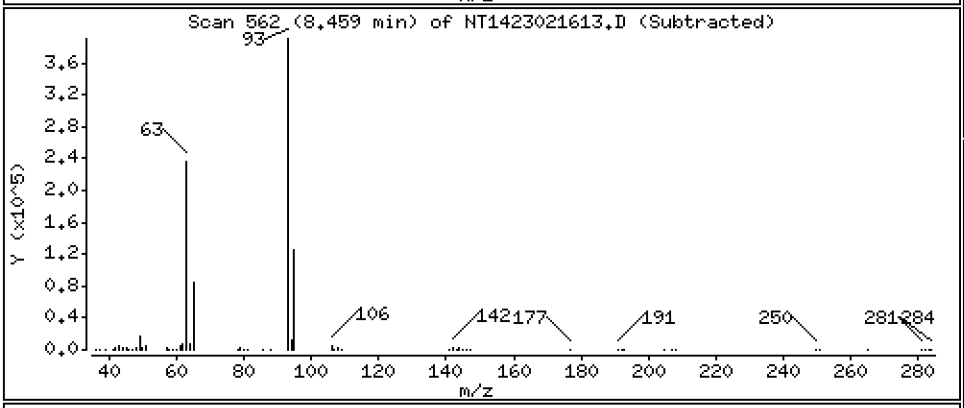
Column phase: ZB-5msi

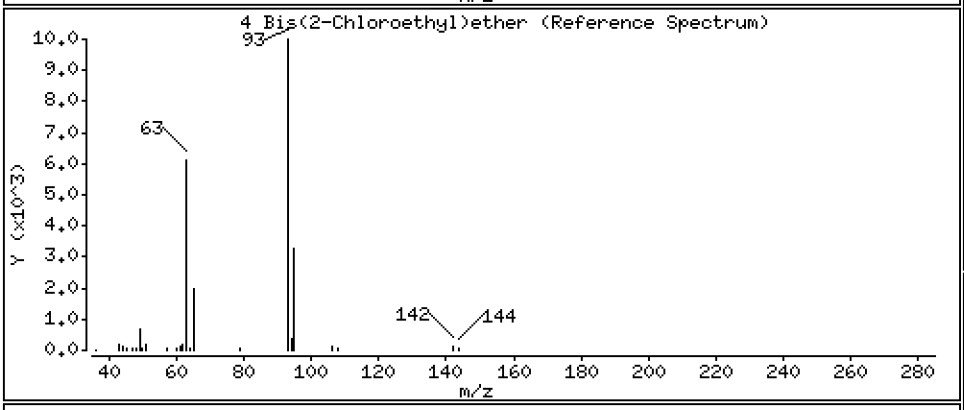
Column diameter: 0.25

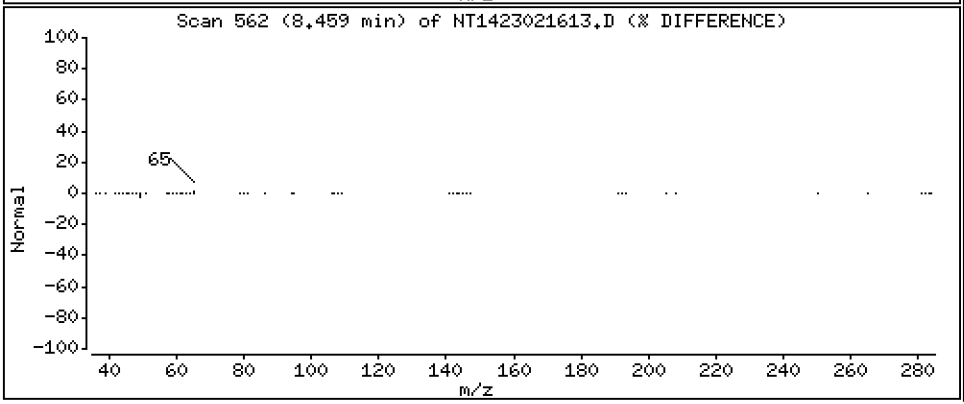
4 Bis(2-Chloroethyl)ether

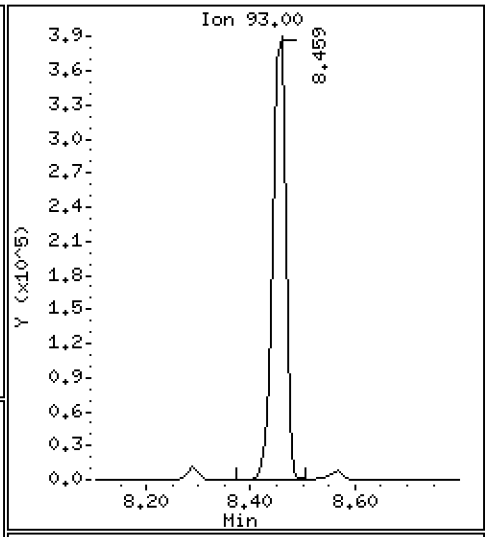
Concentration: 5.159 ug/mL

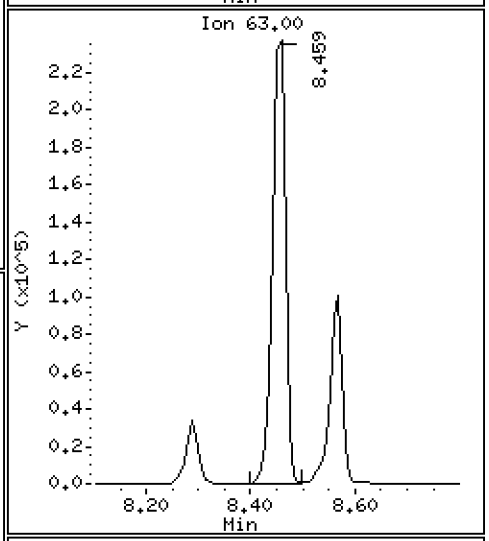


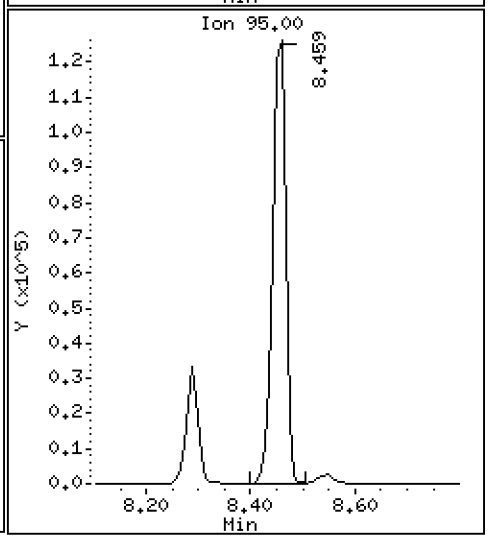












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

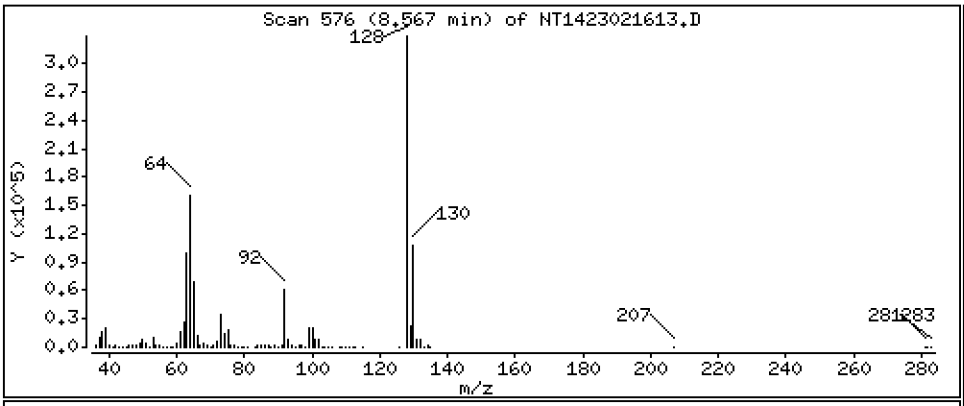
Operator: DSD

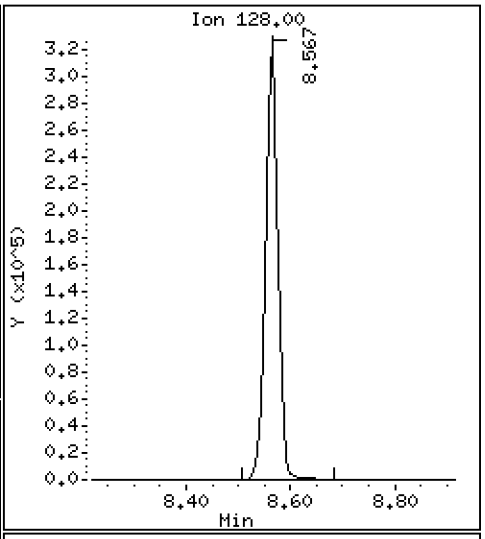
Column phase: ZB-5msi

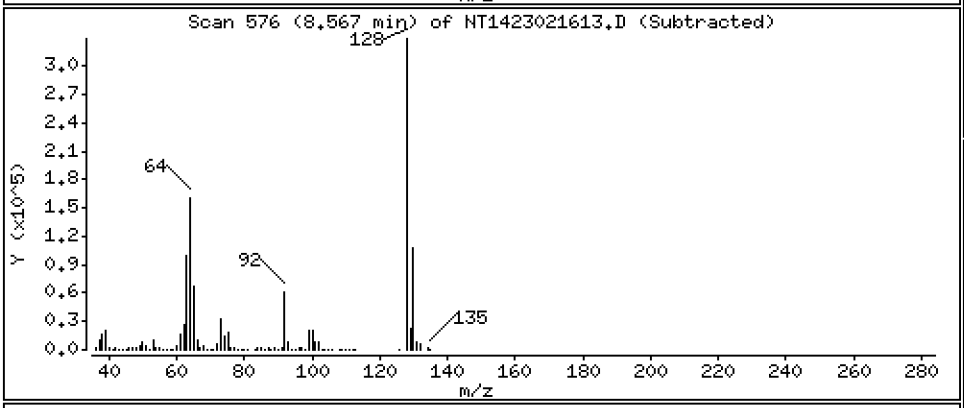
Column diameter: 0.25

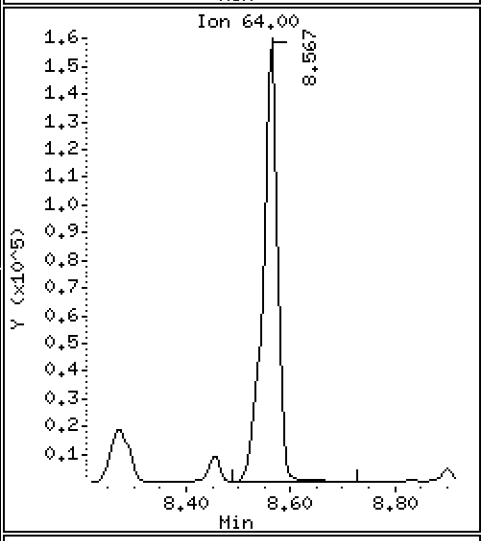
6 2-Chlorophenol

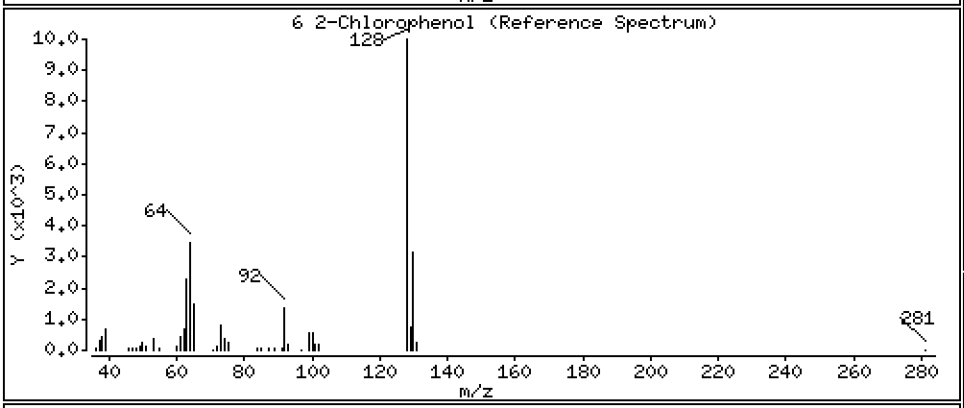
Concentration: 4.617 ug/mL

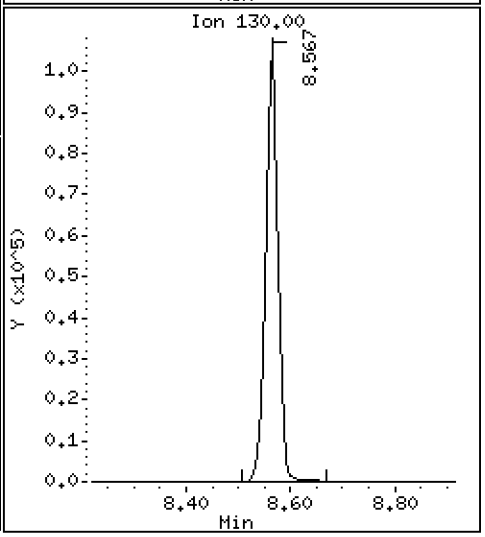


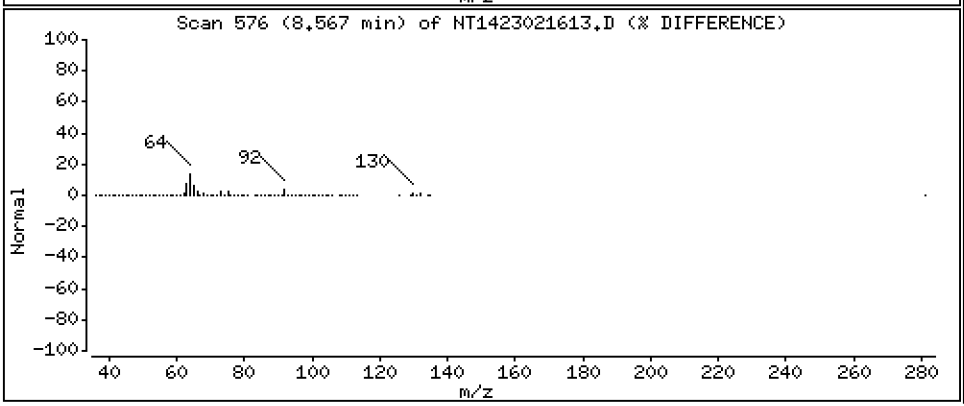












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

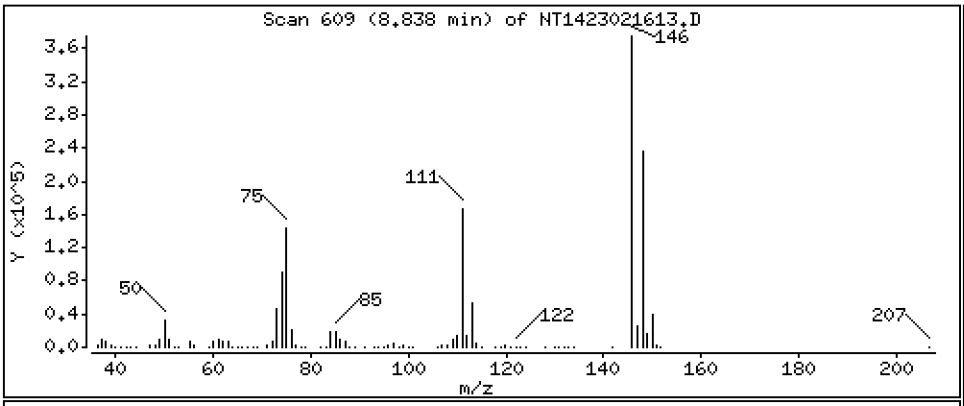
Operator: DSD

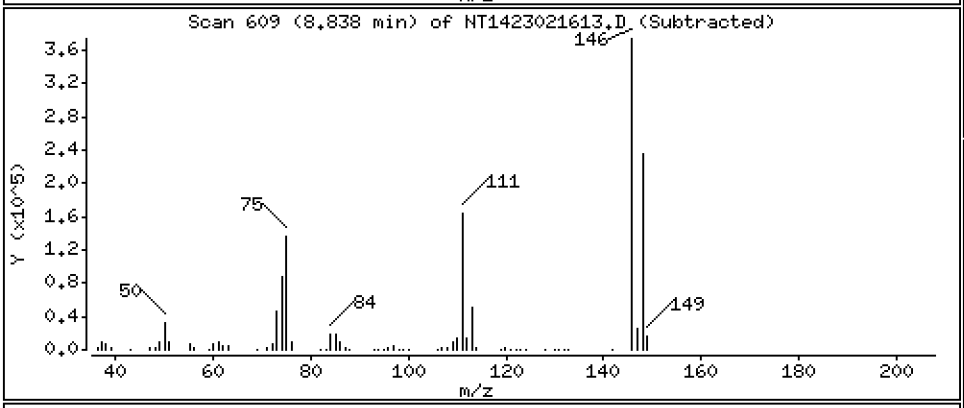
Column phase: ZB-5msi

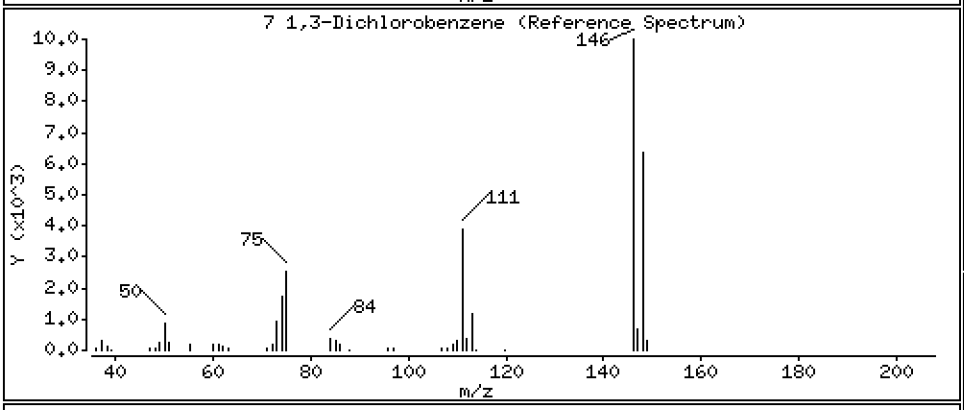
Column diameter: 0.25

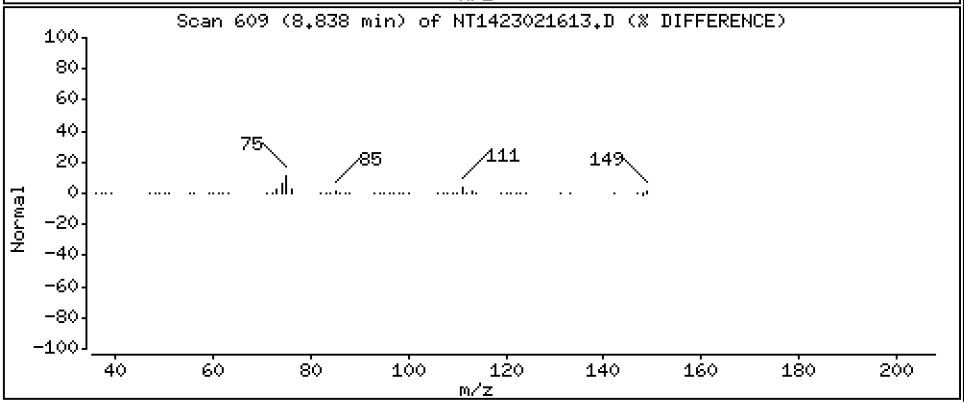
7 1,3-Dichlorobenzene

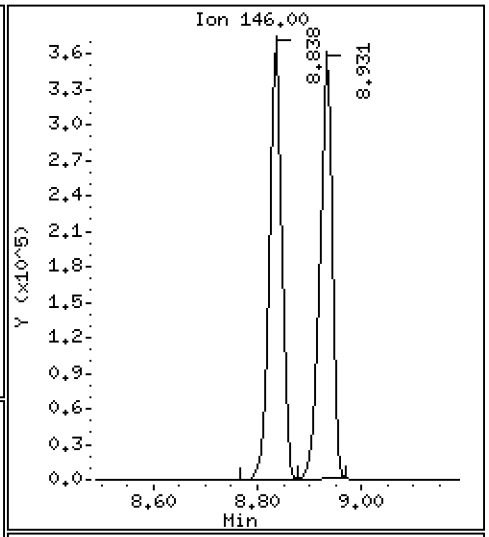
Concentration: 4.770 ug/mL

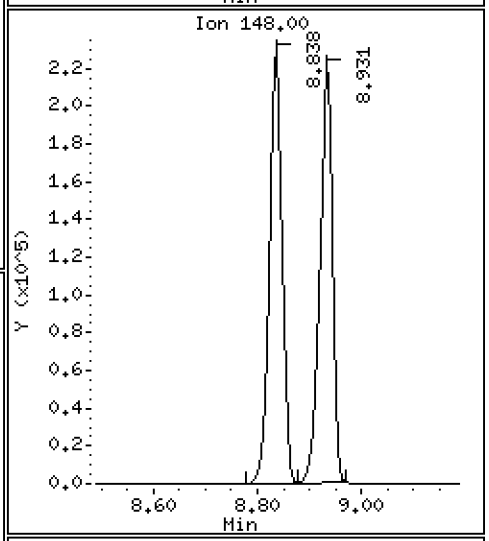


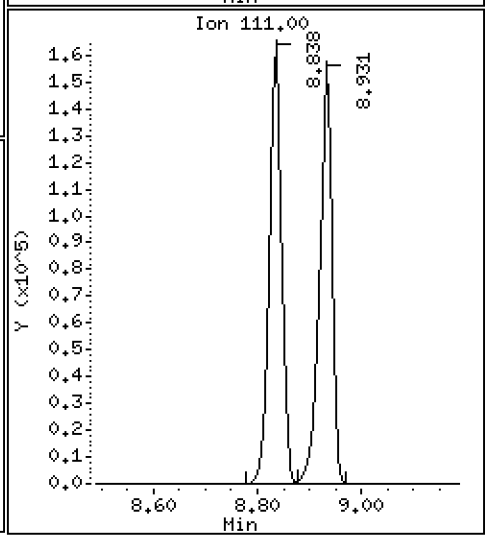












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

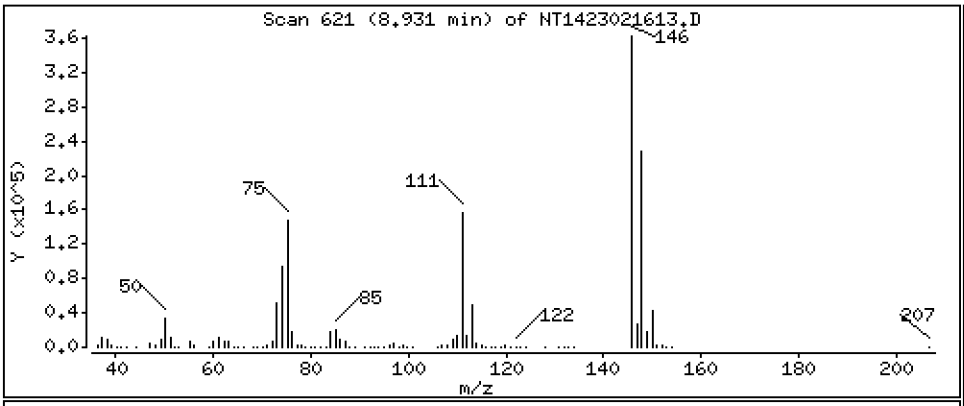
Operator: DSD

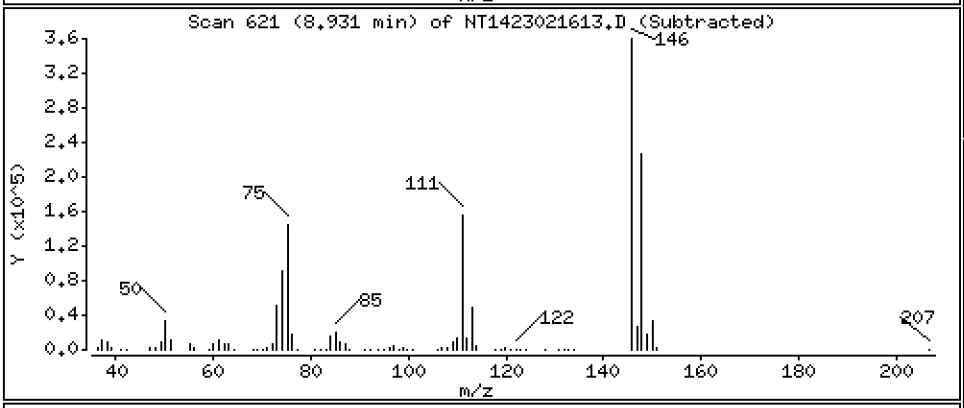
Column phase: ZB-5msi

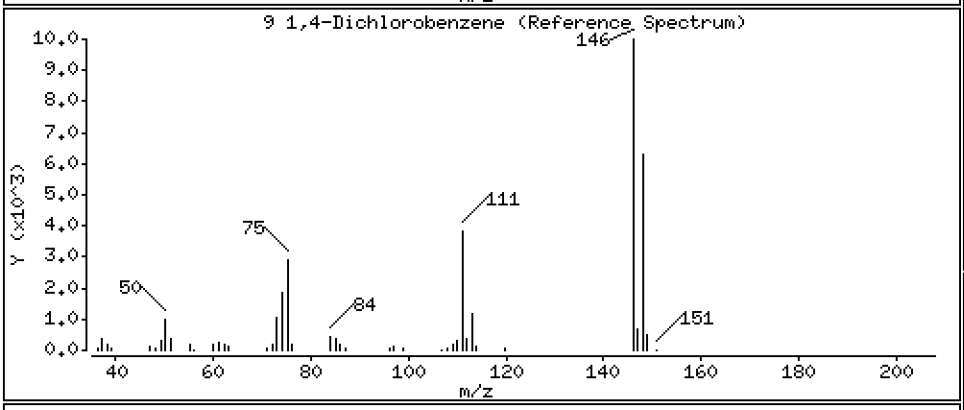
Column diameter: 0.25

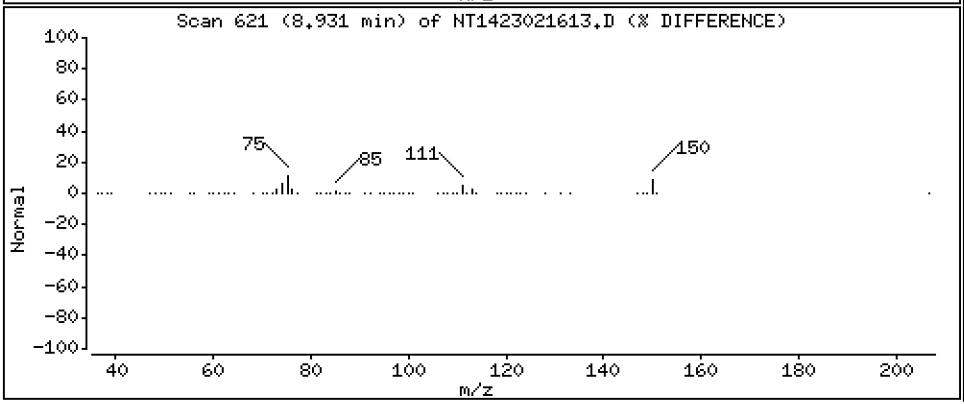
9 1,4-Dichlorobenzene

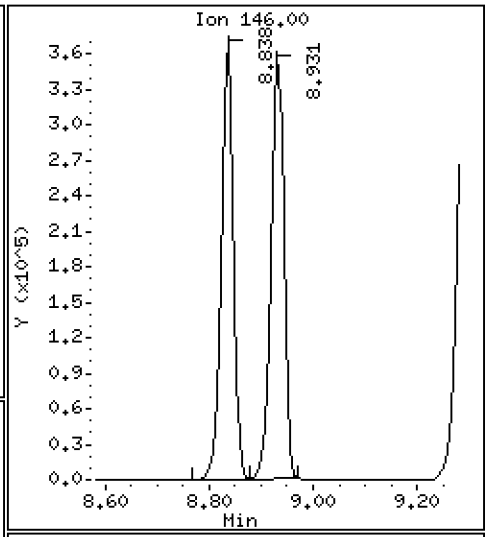
Concentration: 4.791 ug/mL

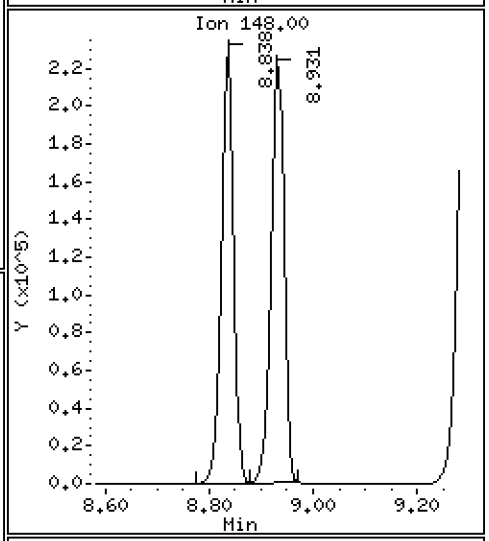


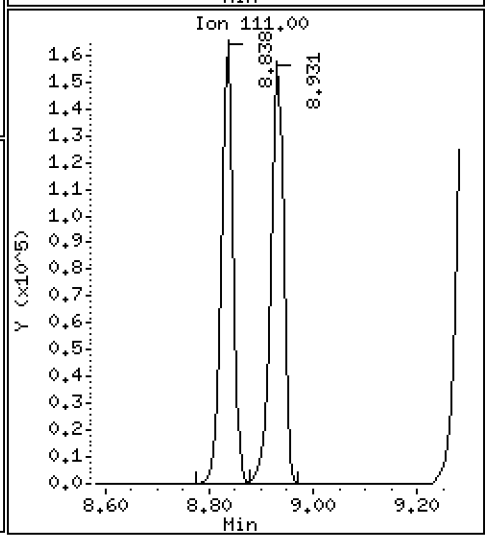












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

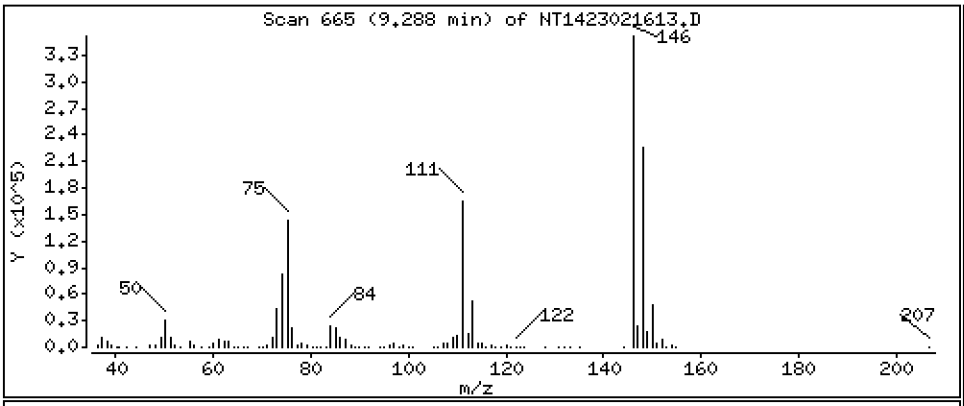
Operator: DSD

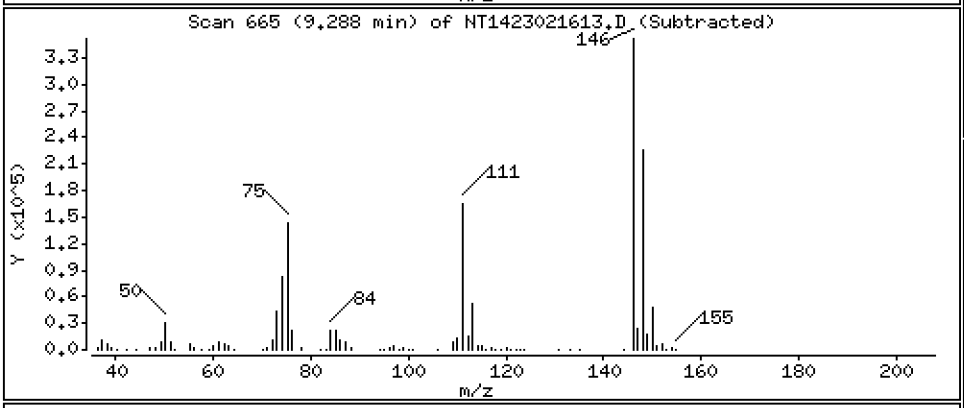
Column phase: ZB-5msi

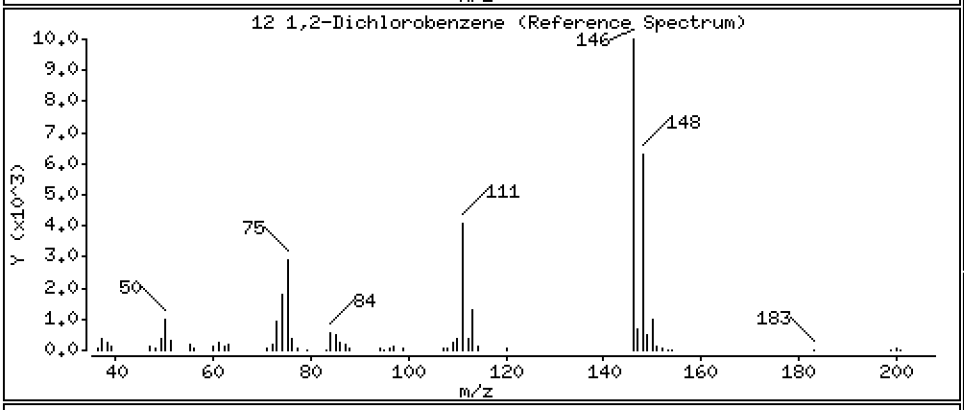
Column diameter: 0.25

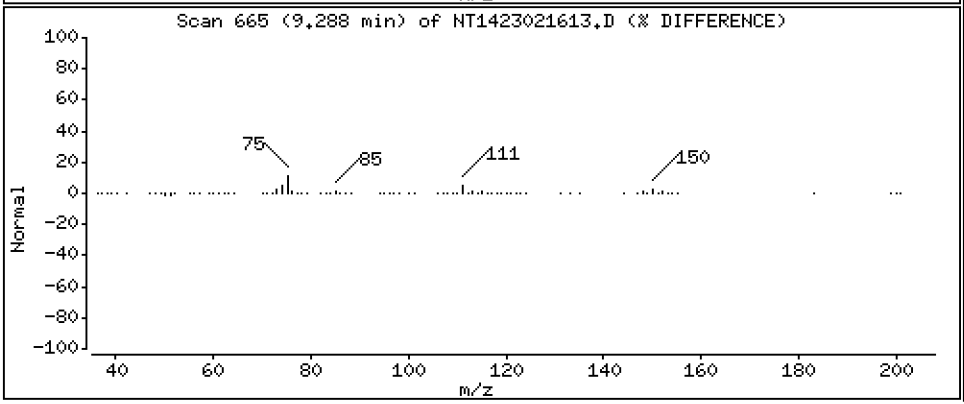
12 1,2-Dichlorobenzene

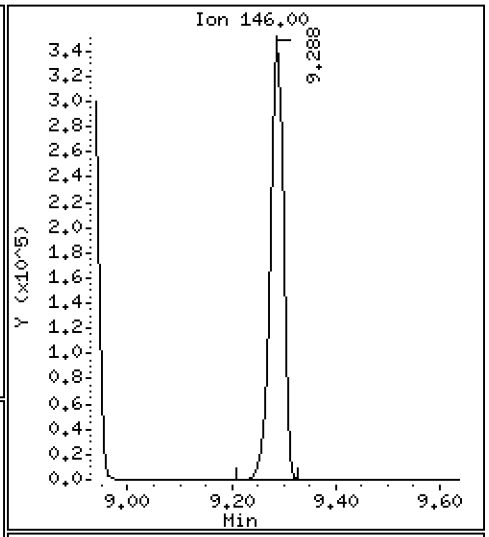
Concentration: 4.758 ug/mL

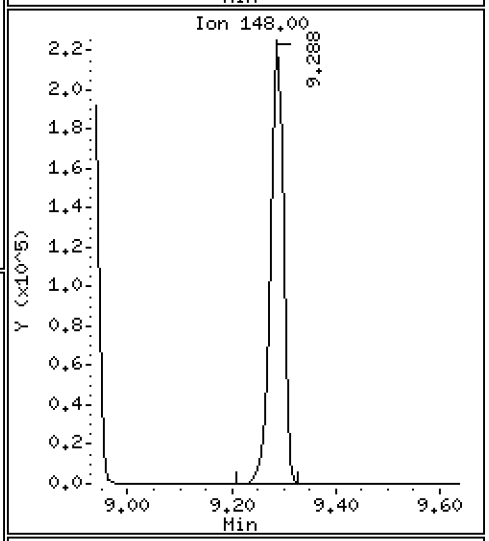


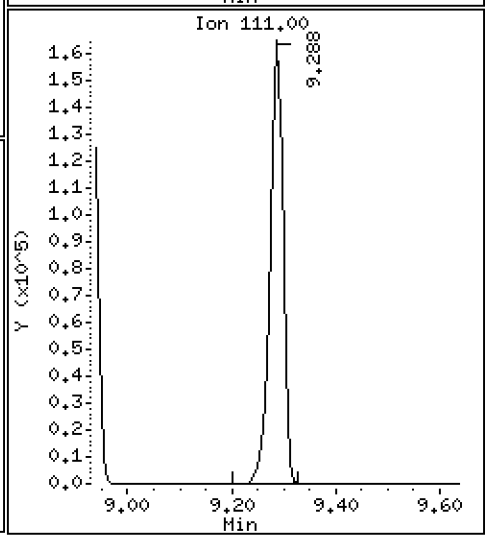












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

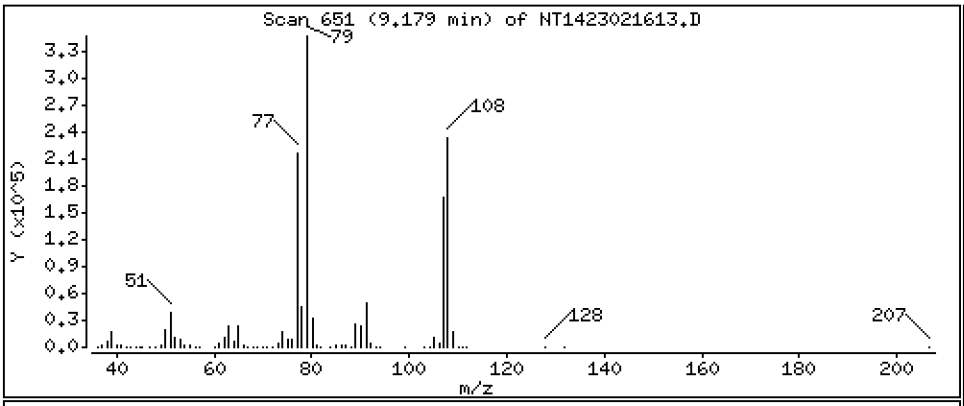
Operator: DSD

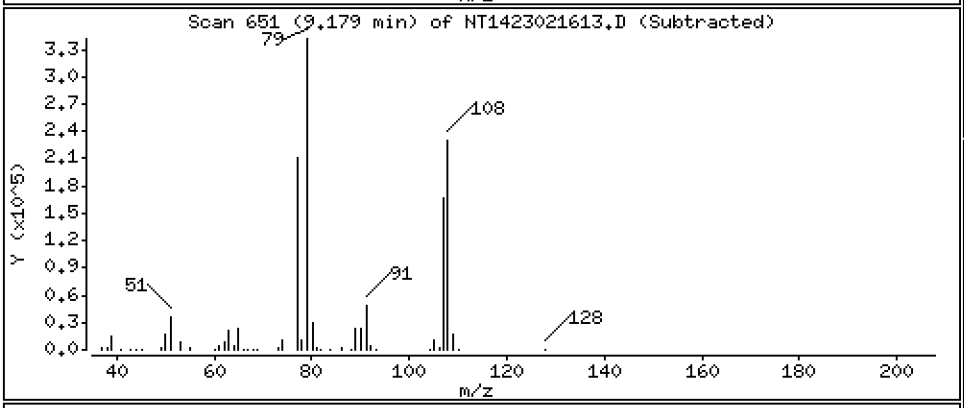
Column phase: ZB-5msi

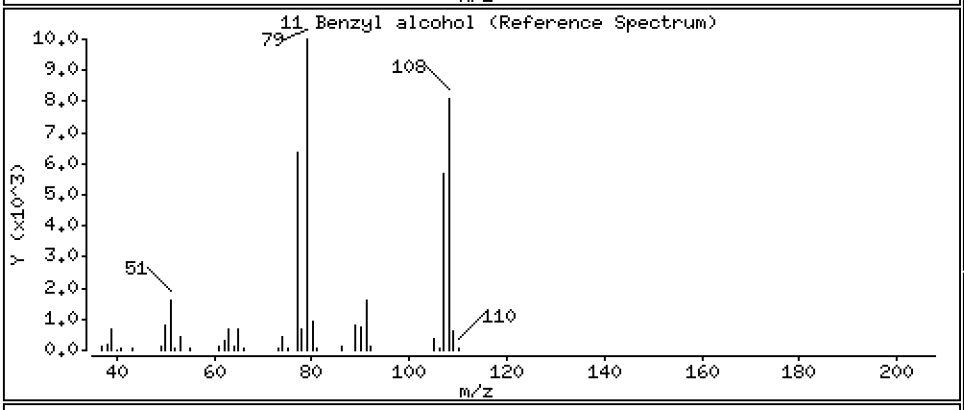
Column diameter: 0.25

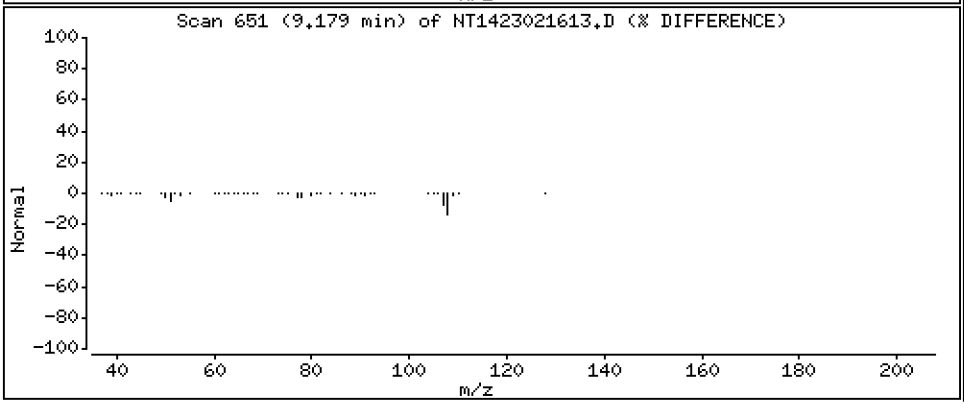
11 Benzyl alcohol

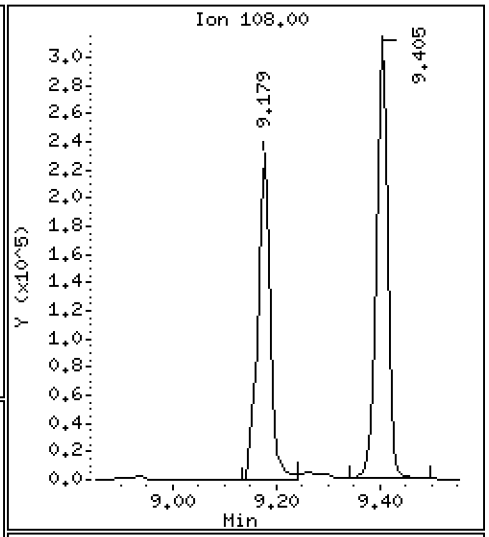
Concentration: 4.625 ug/mL

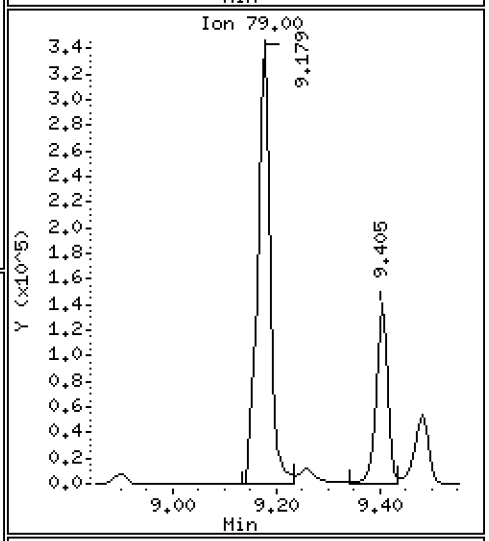


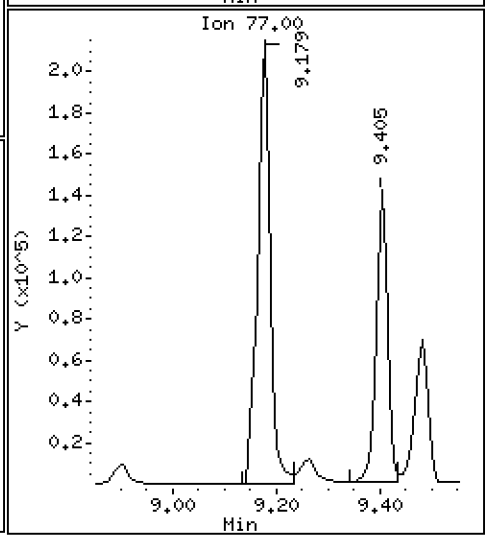












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

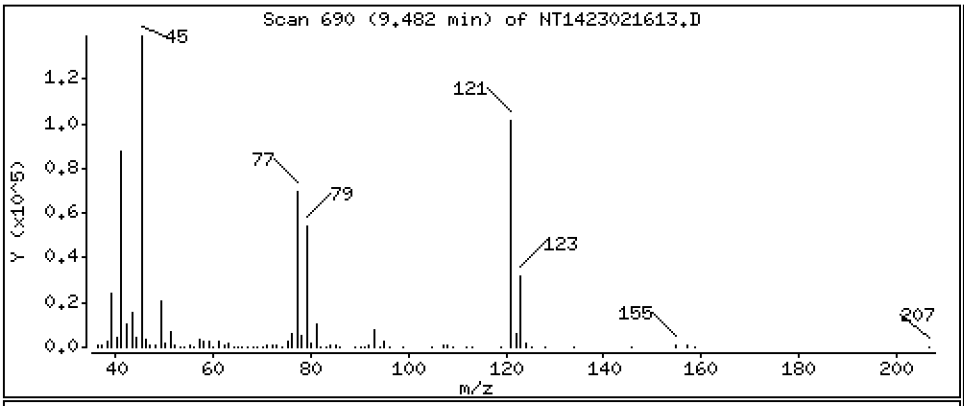
Operator: DSD

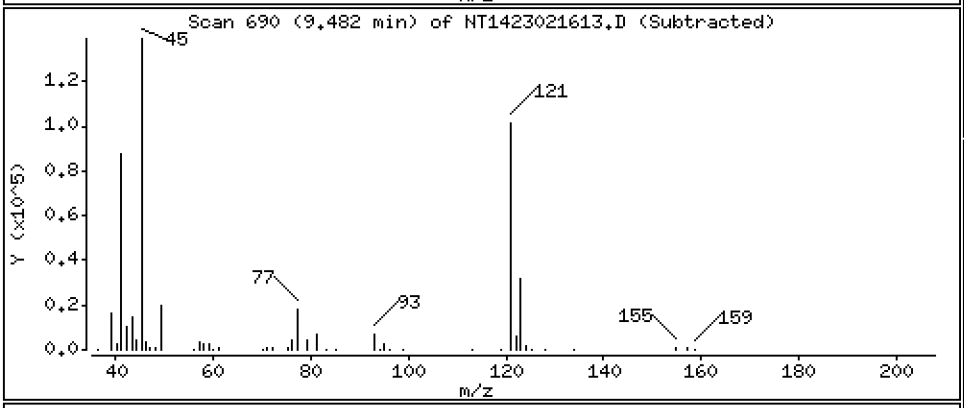
Column phase: ZB-5msi

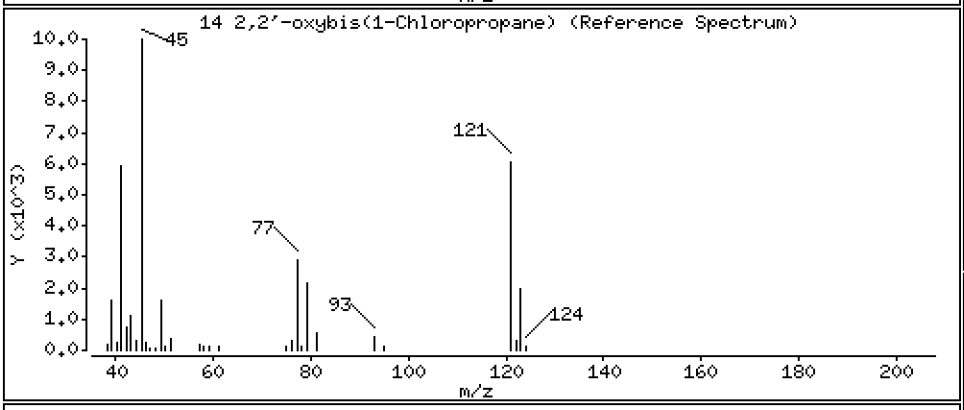
Column diameter: 0.25

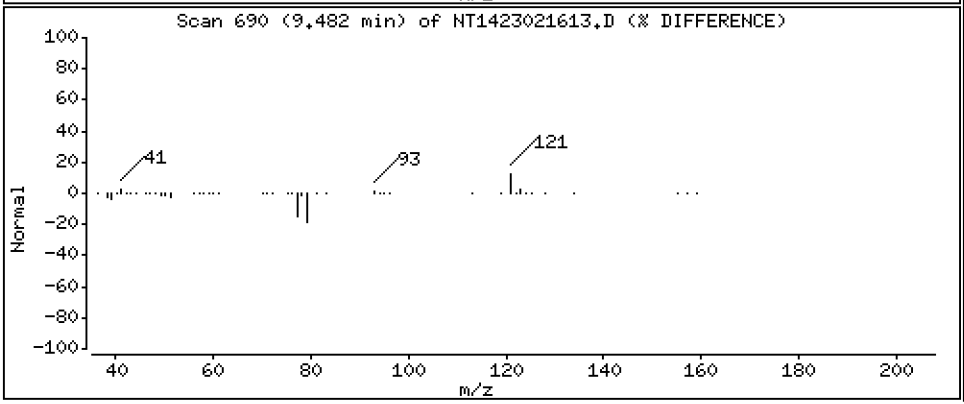
14 2,2'-oxybis(1-Chloropropane)

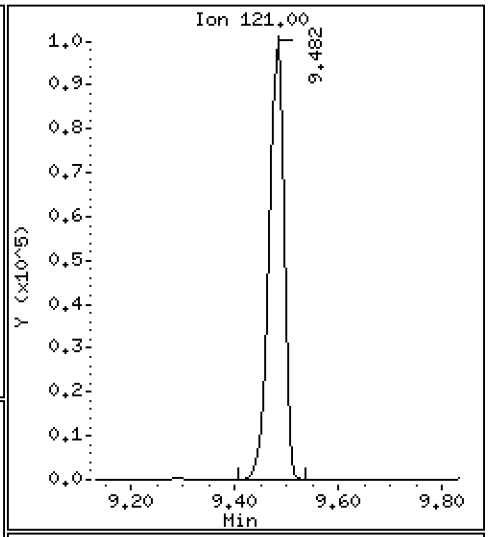
Concentration: 5.567 ug/mL

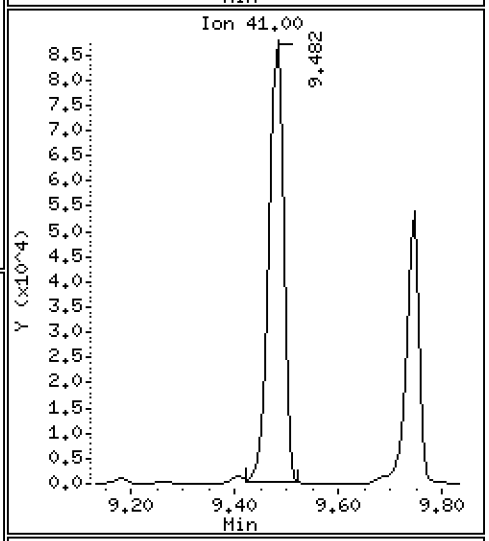


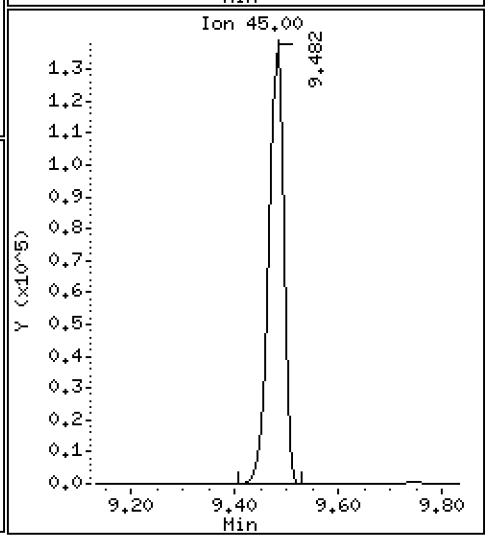












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

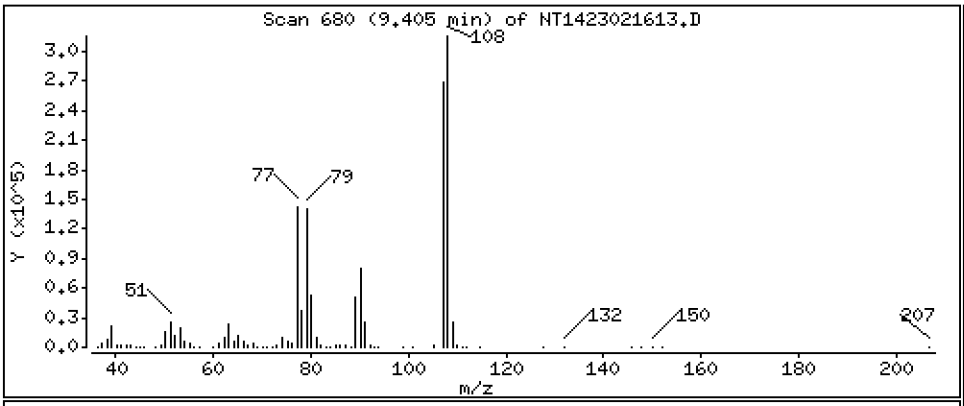
Operator: DSD

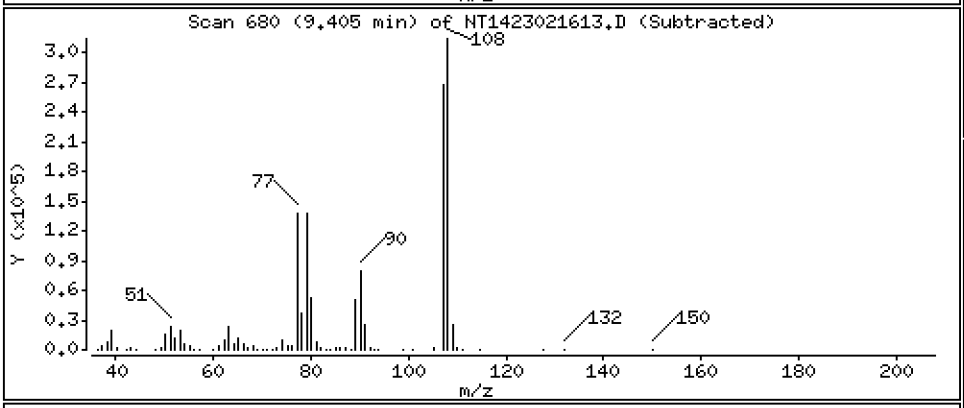
Column phase: ZB-5msi

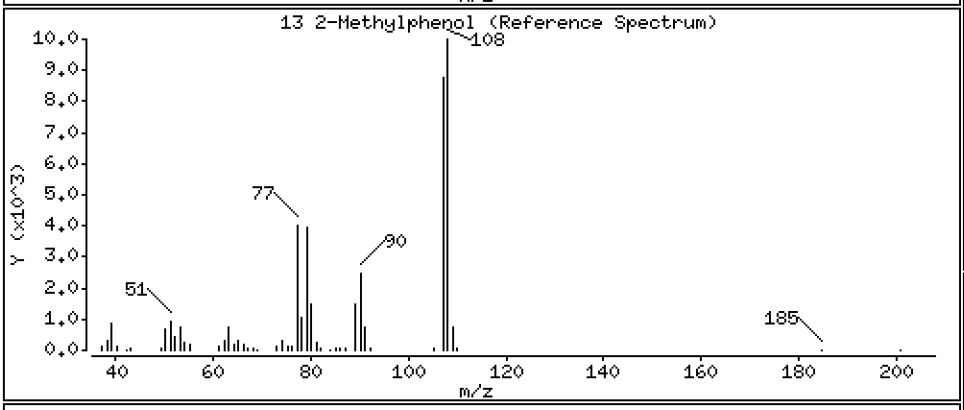
Column diameter: 0.25

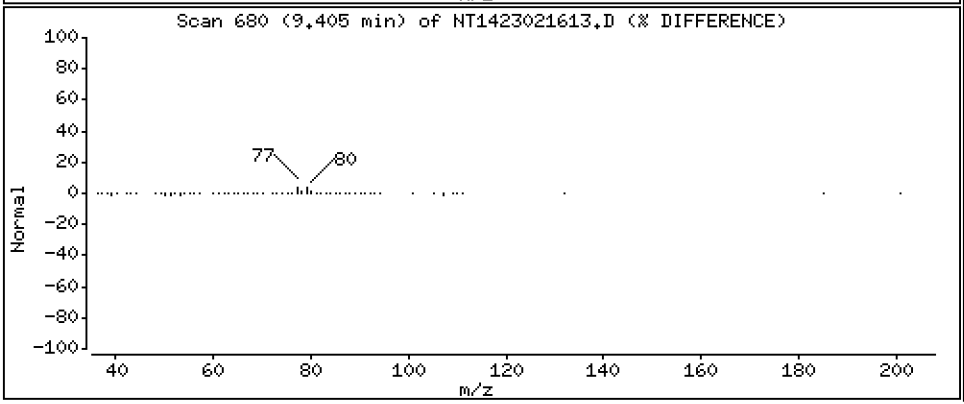
13 2-Methylphenol

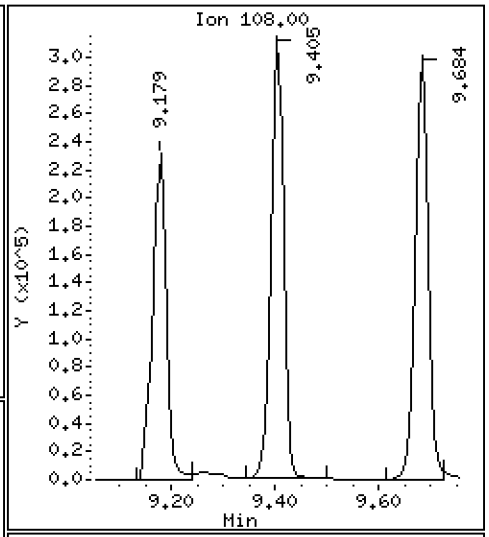
Concentration: 4.368 ug/mL

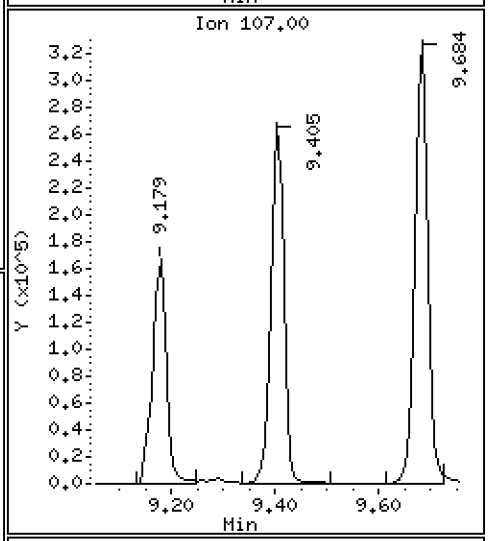


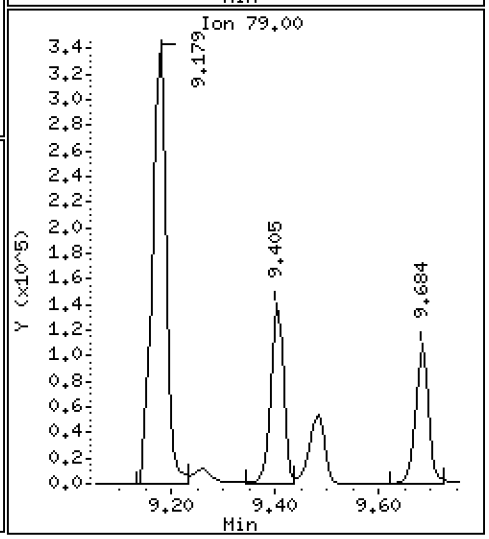












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

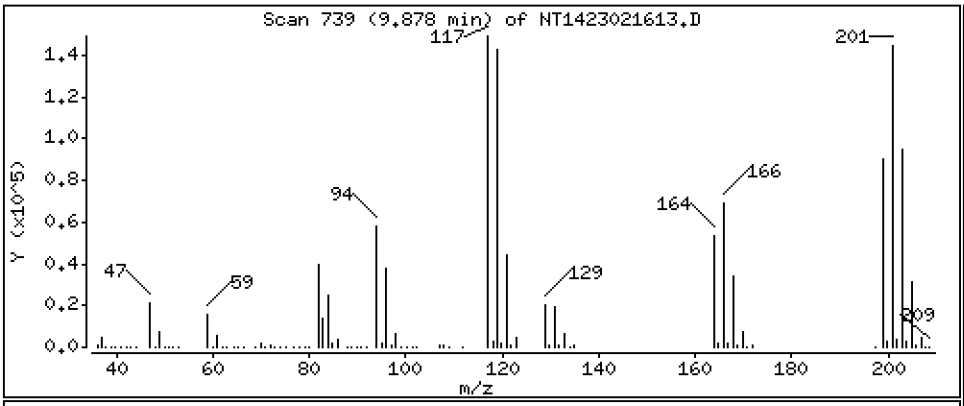
Operator: DSD

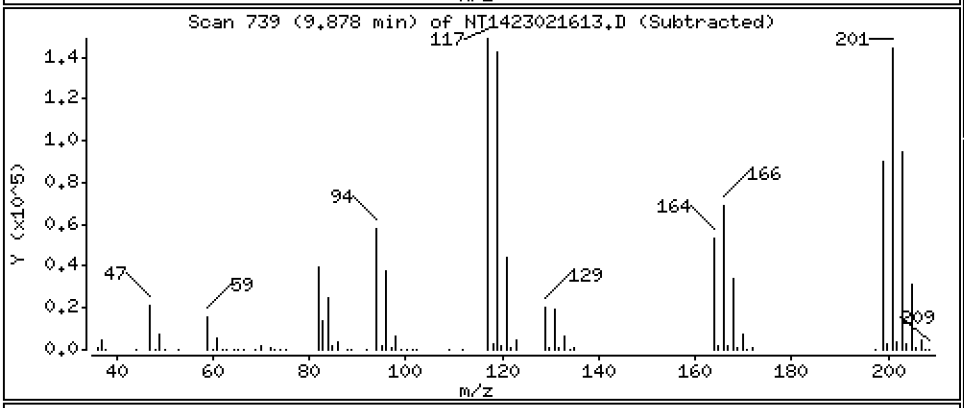
Column phase: ZB-5msi

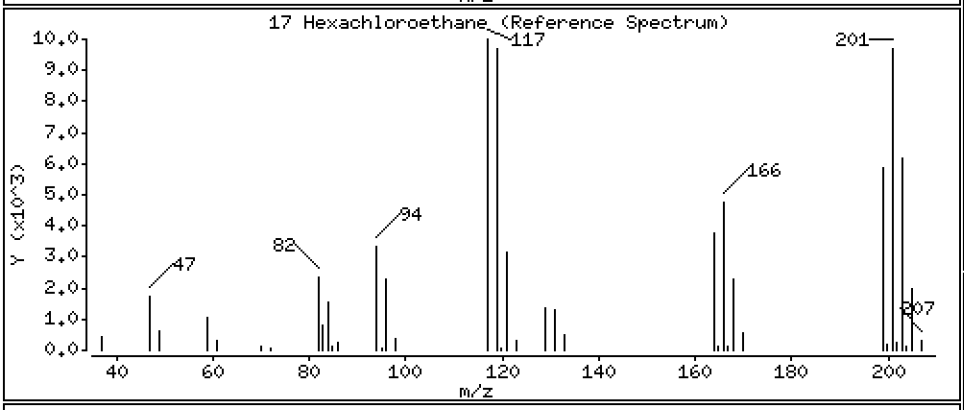
Column diameter: 0.25

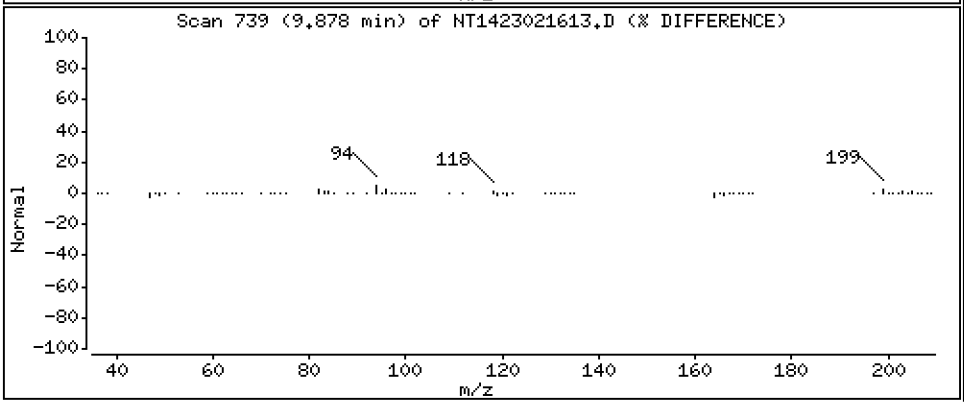
17 Hexachloroethane

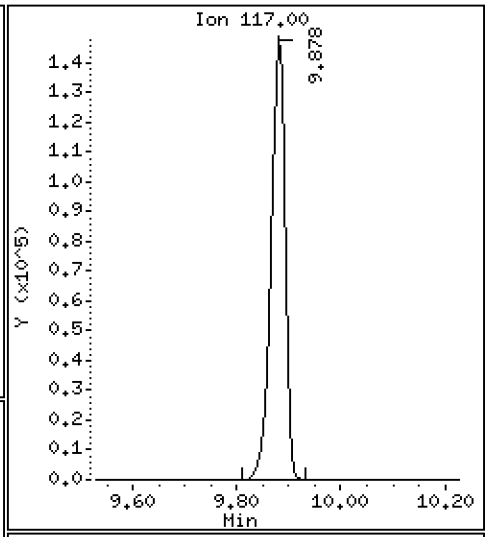
Concentration: 5.037 ug/mL

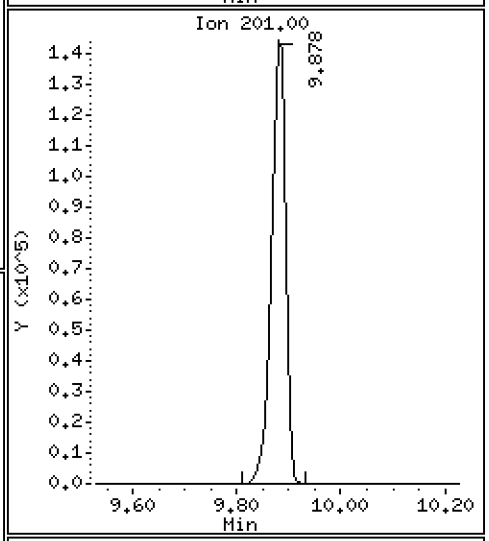


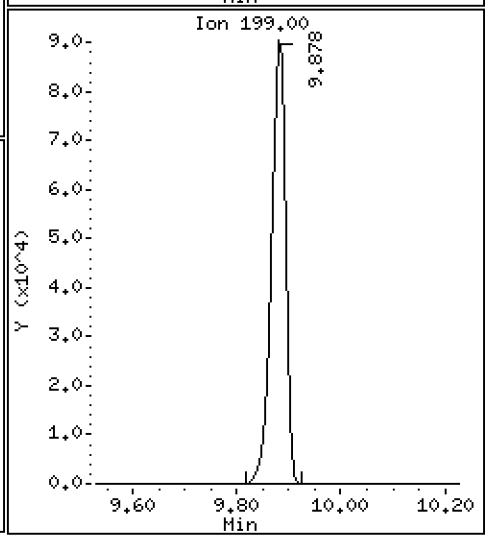












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

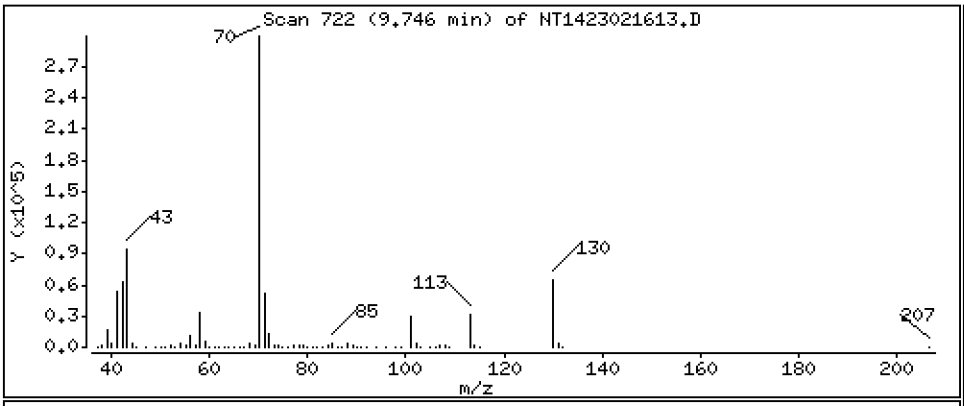
Operator: DSD

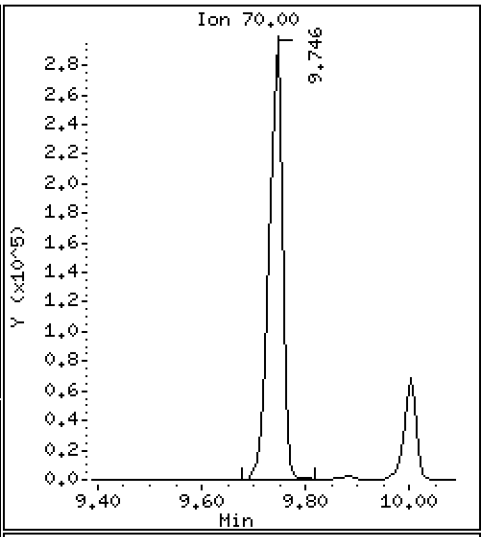
Column phase: ZB-5msi

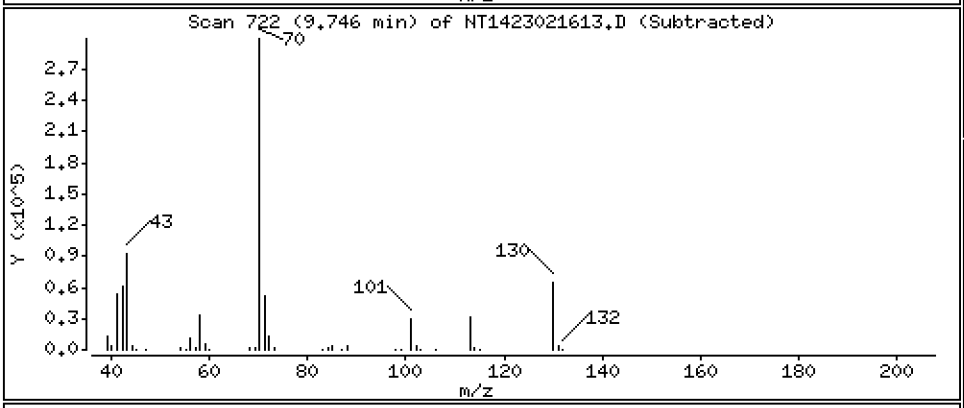
Column diameter: 0.25

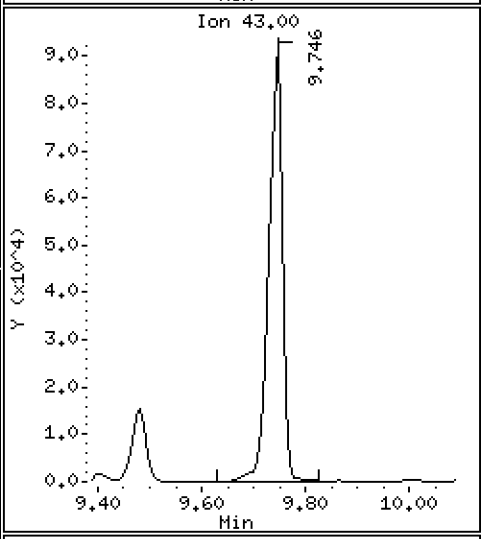
16 N-Nitroso-di-n-propylamine

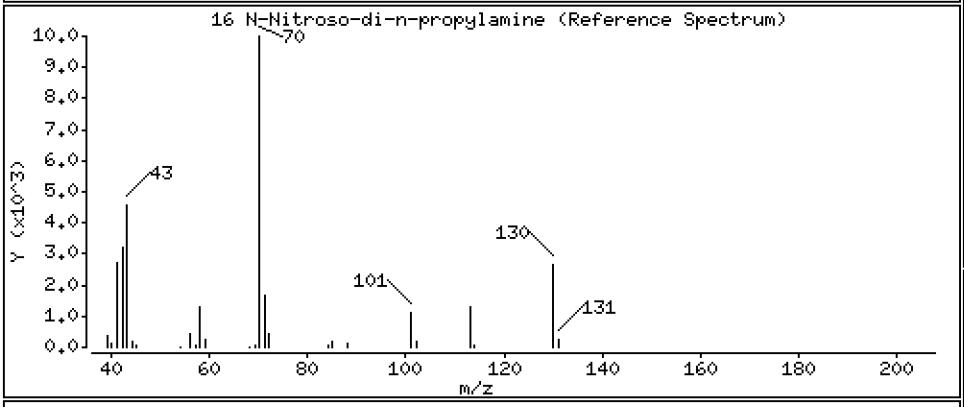
Concentration: 4.988 ug/mL

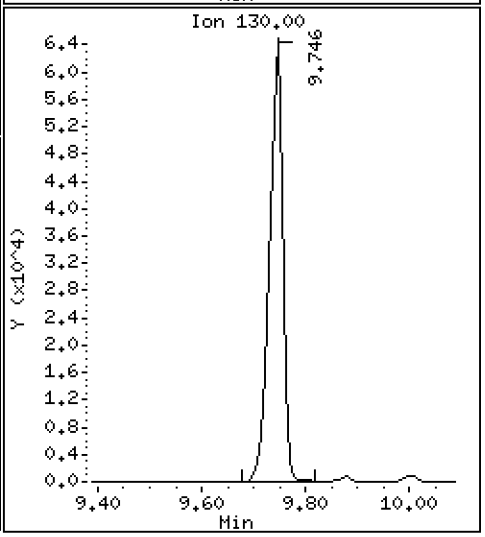


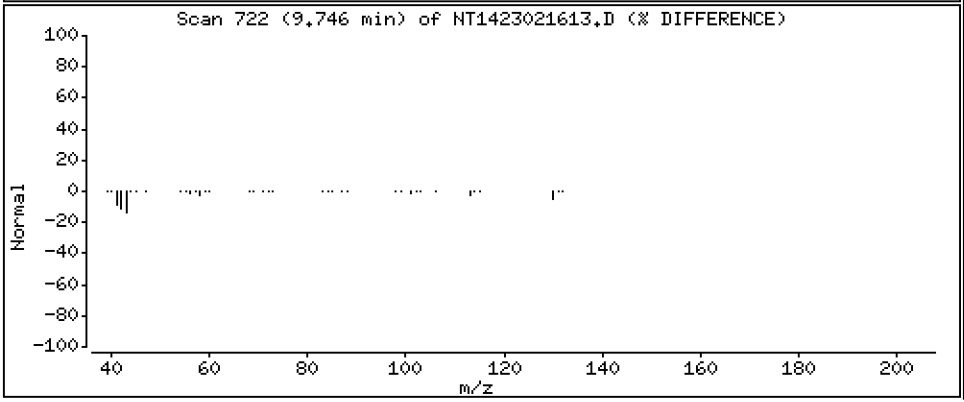












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

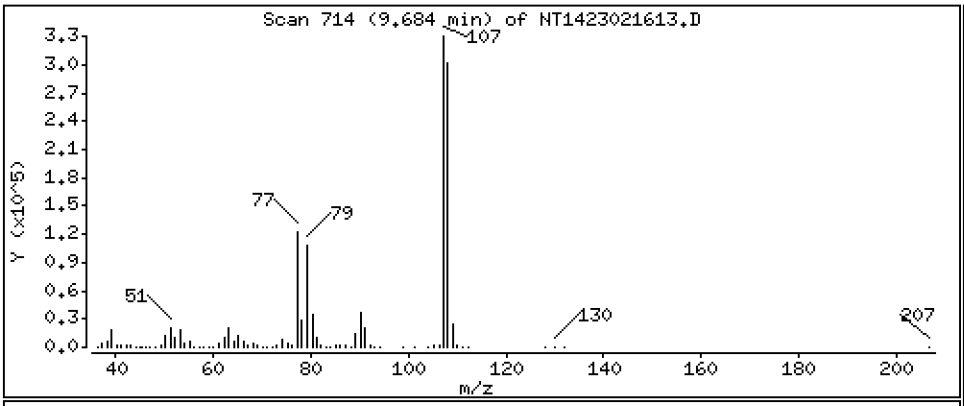
Operator: DSD

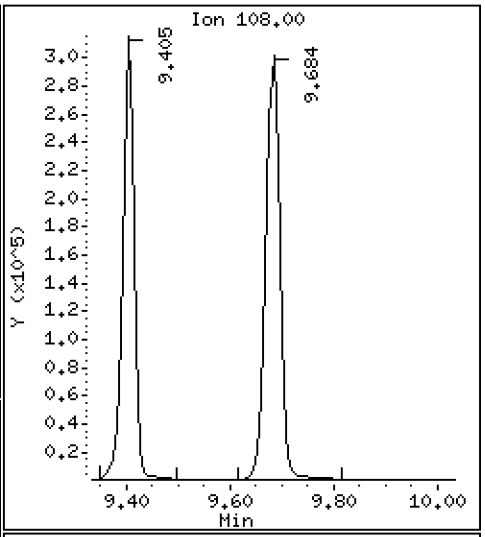
Column phase: ZB-5msi

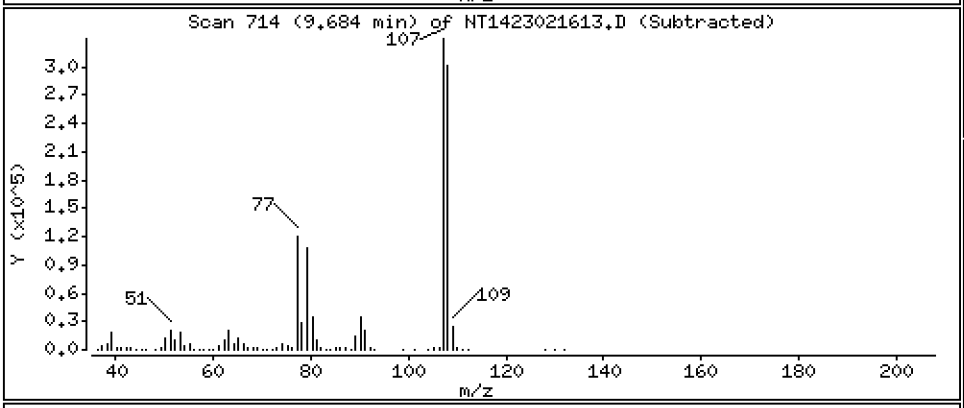
Column diameter: 0.25

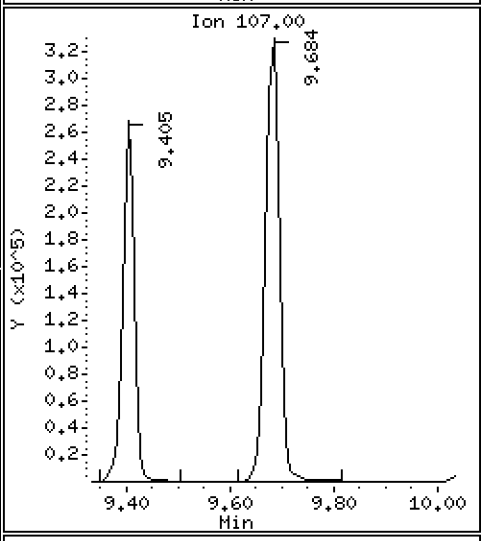
15 4-Methylphenol

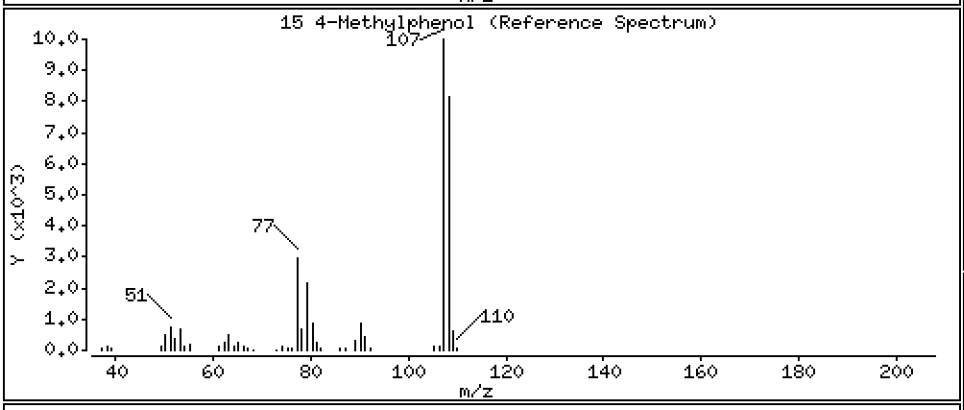
Concentration: 4.591 ug/mL

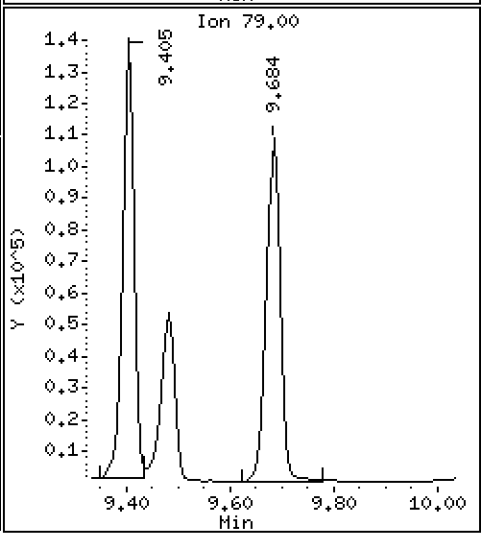


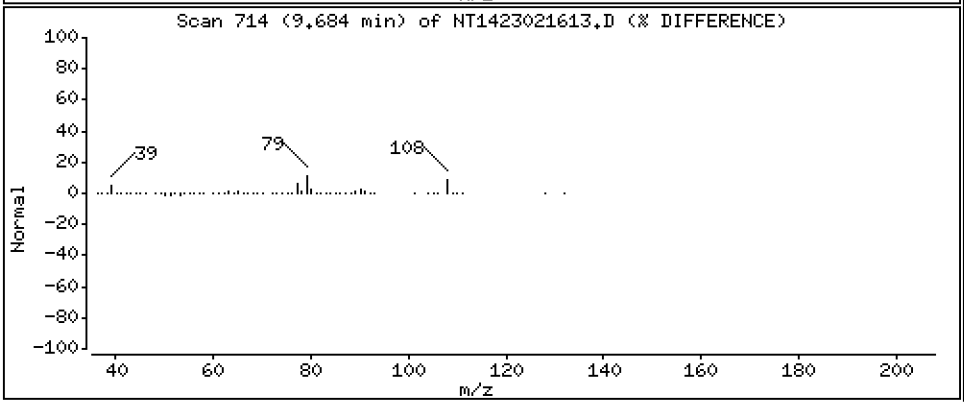












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

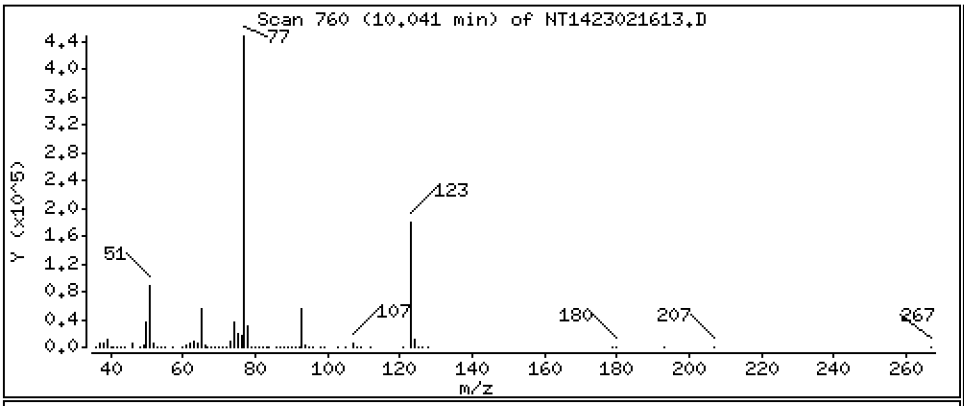
Operator: DSD

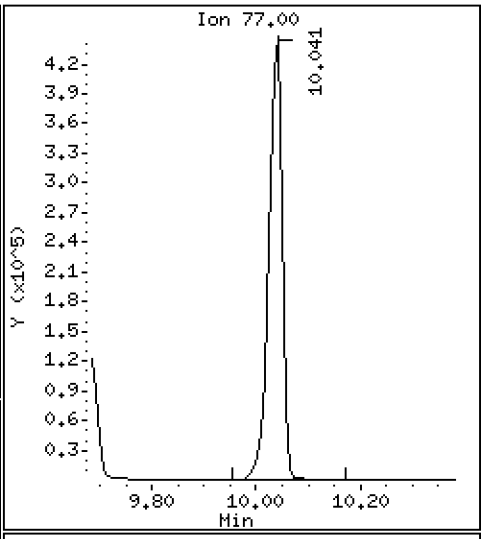
Column phase: ZB-5msi

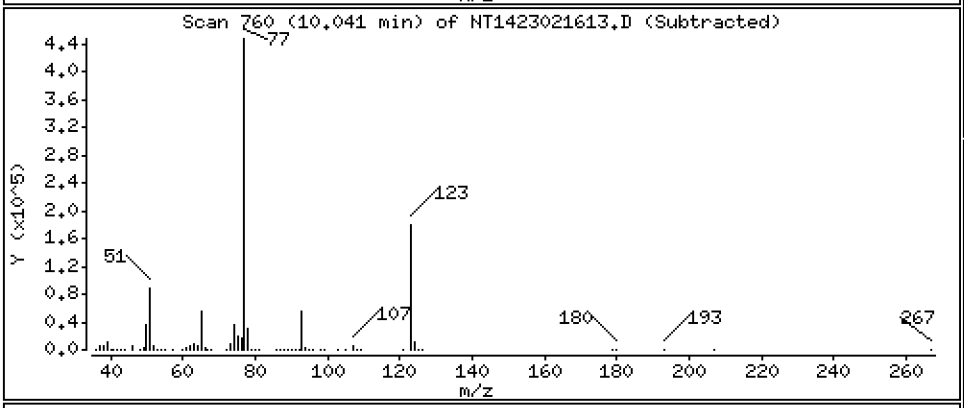
Column diameter: 0.25

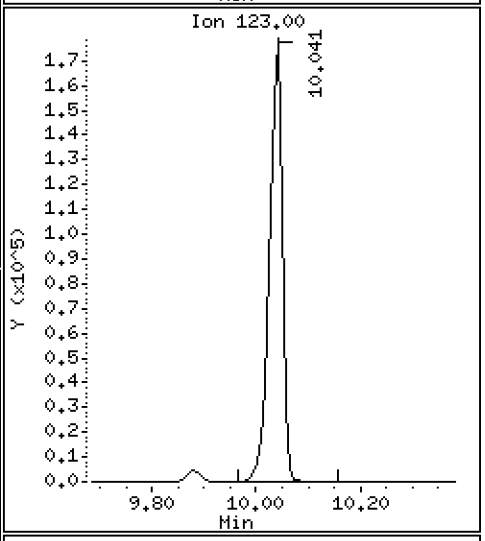
19 Nitrobenzene

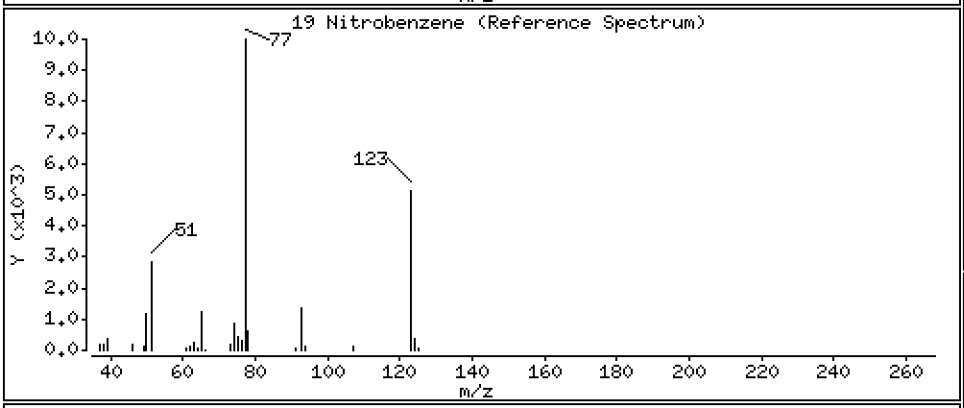
Concentration: 4.949 ug/mL

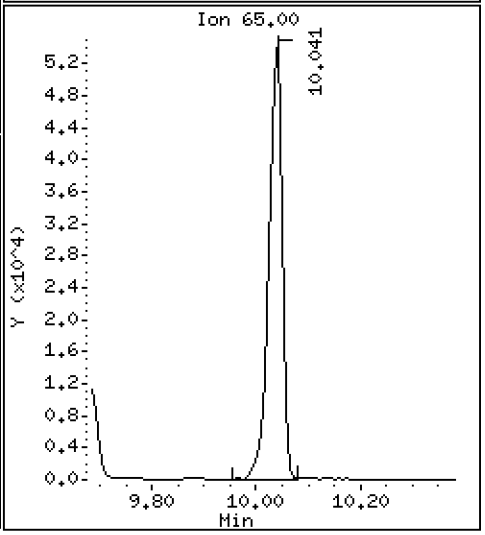


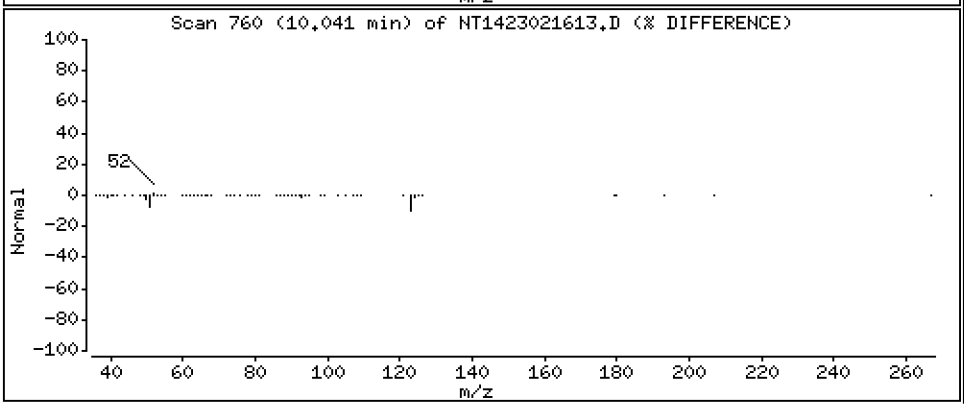












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

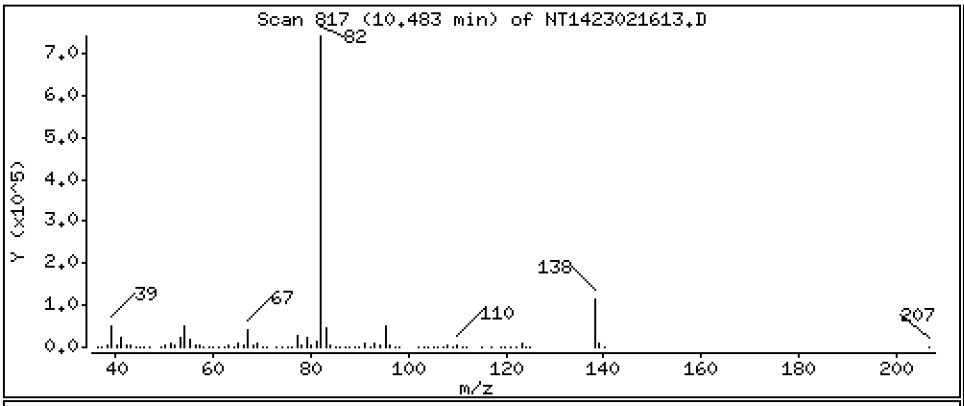
Operator: DSD

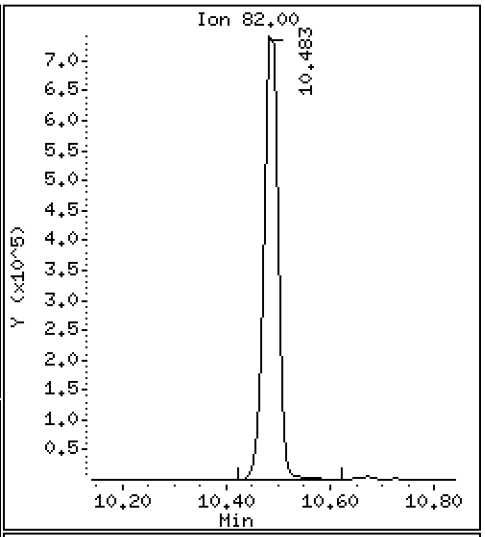
Column phase: ZB-5msi

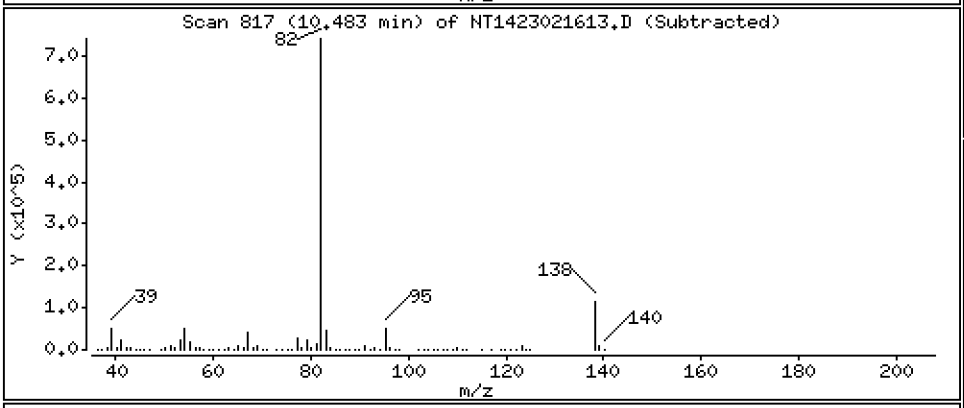
Column diameter: 0.25

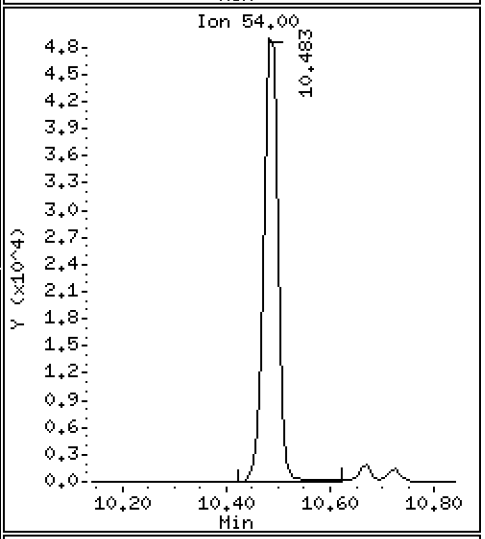
20 Isophorone

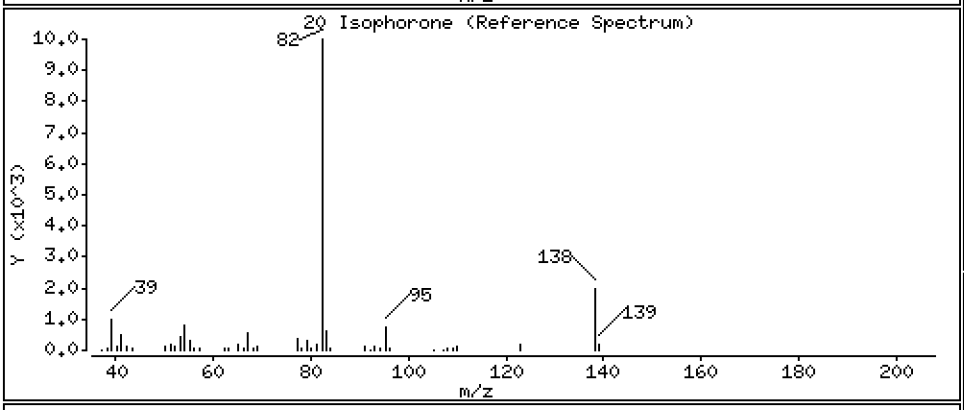
Concentration: 7.094 ug/mL

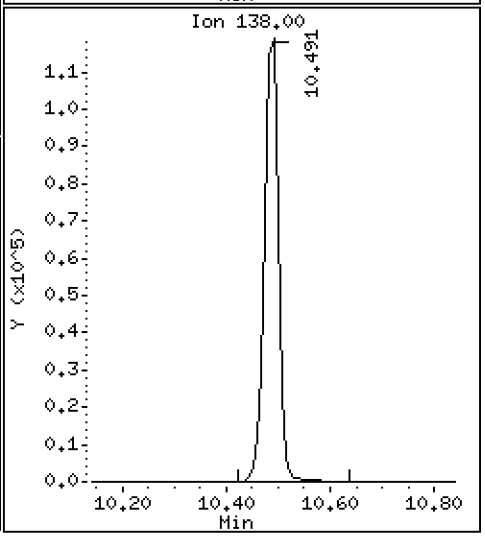


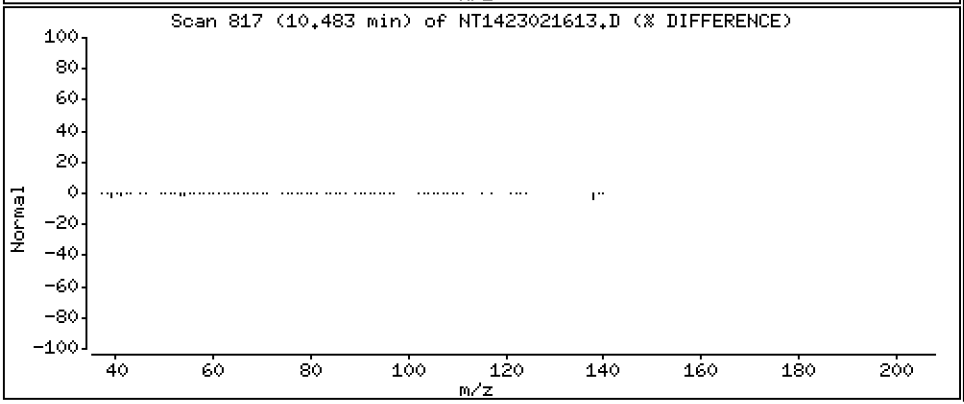












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

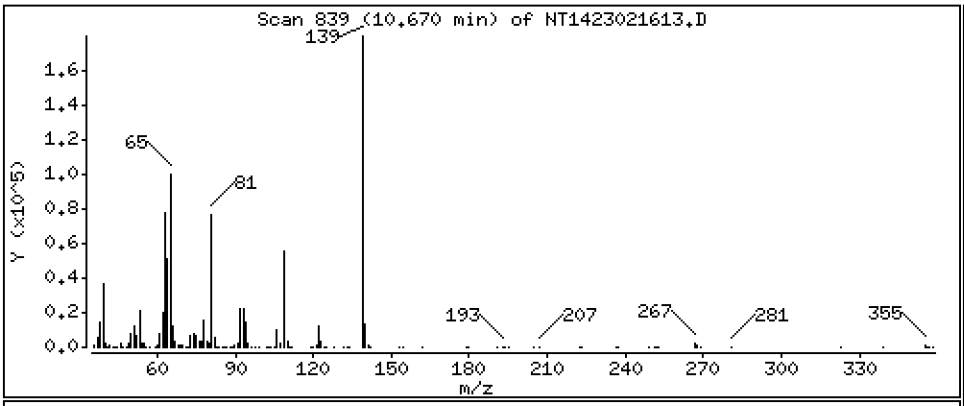
Operator: DSD

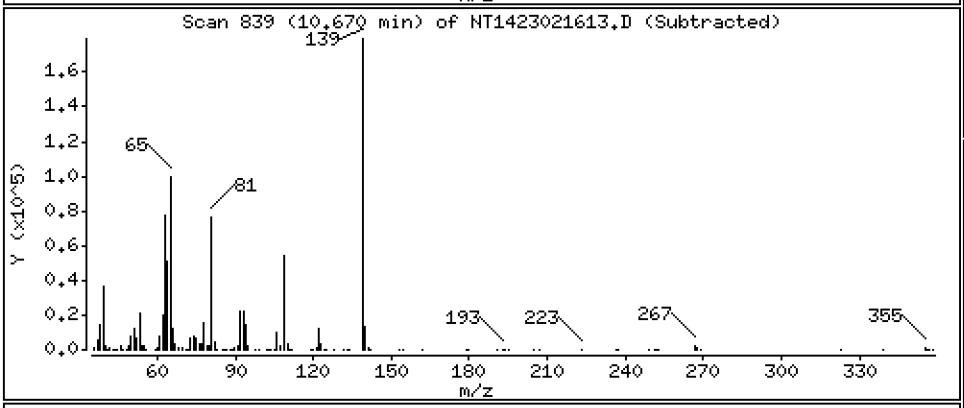
Column phase: ZB-5msi

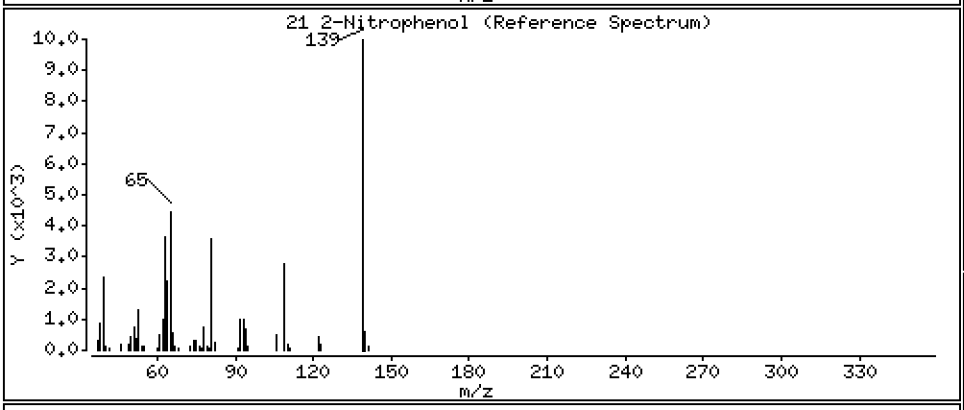
Column diameter: 0.25

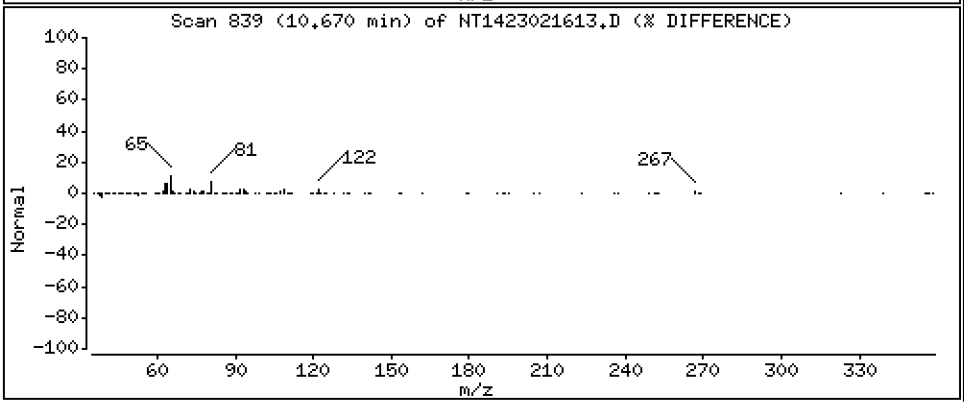
21 2-Nitrophenol

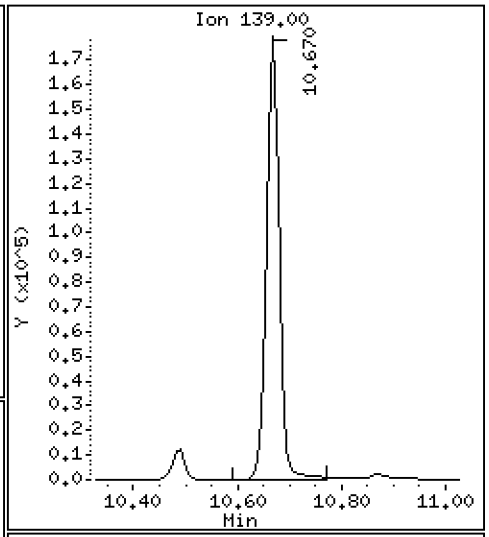
Concentration: 4.453 ug/mL

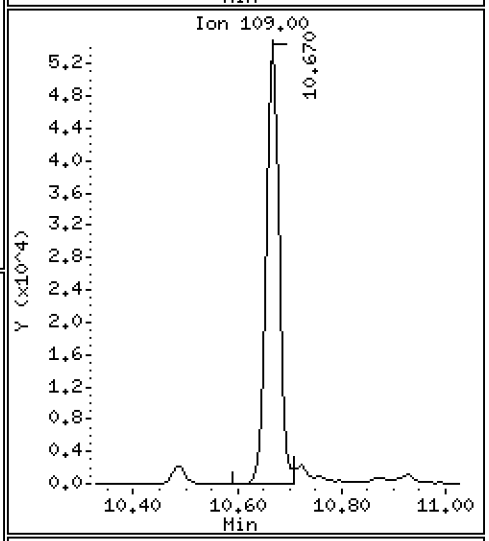


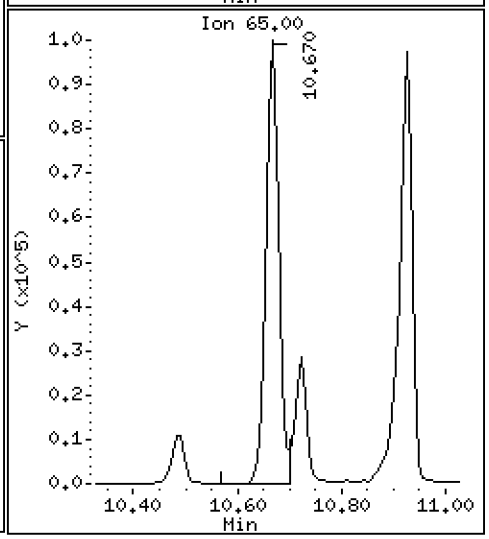












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

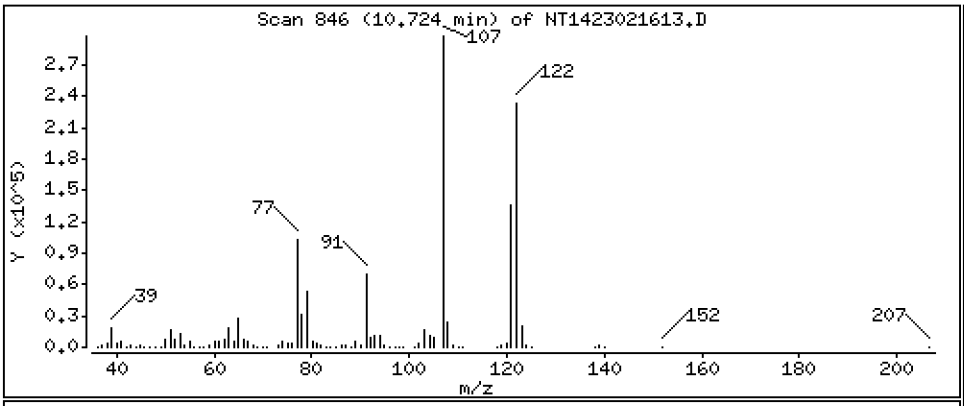
Operator: DSD

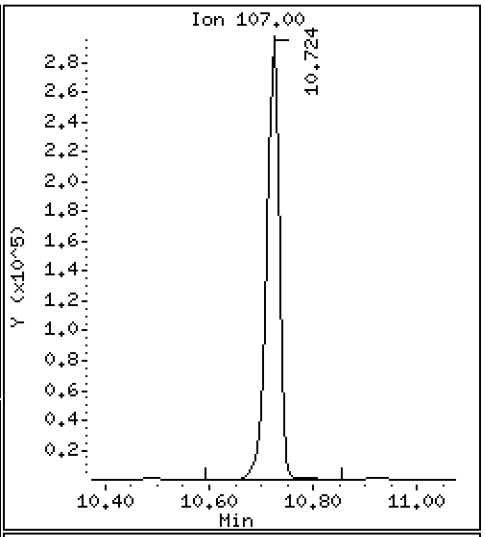
Column phase: ZB-5msi

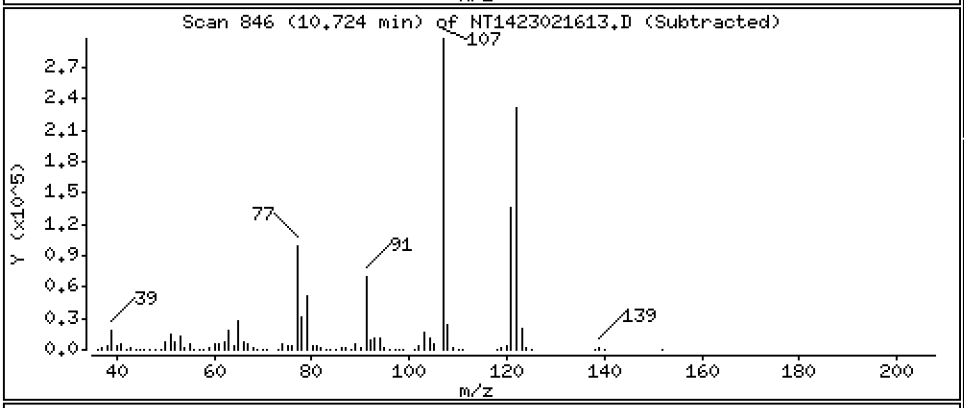
Column diameter: 0.25

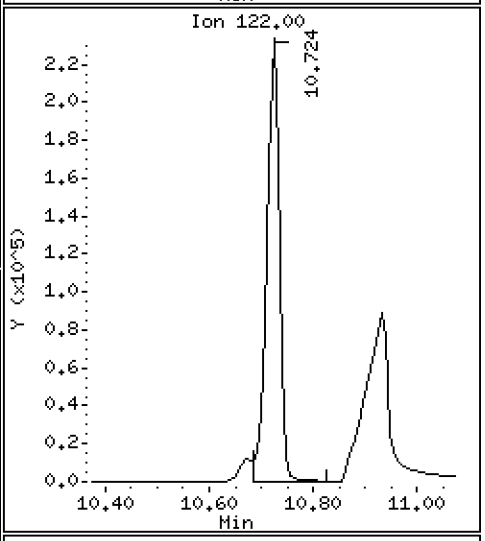
22 2,4-Dimethylphenol

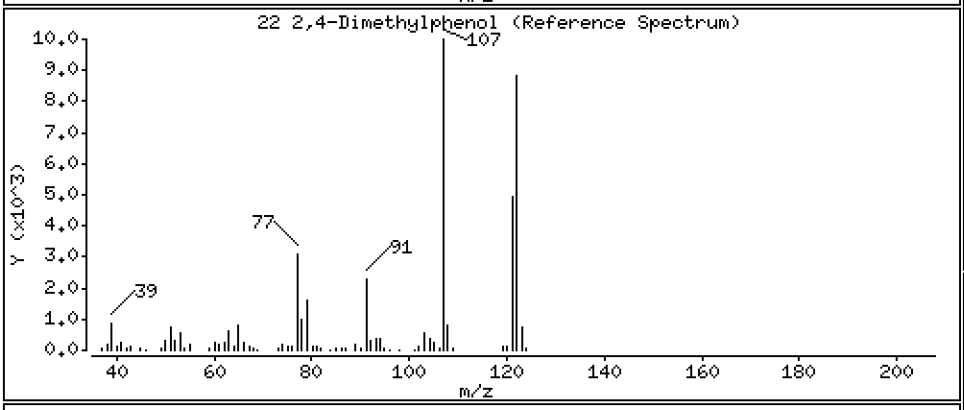
Concentration: 4.274 ug/mL

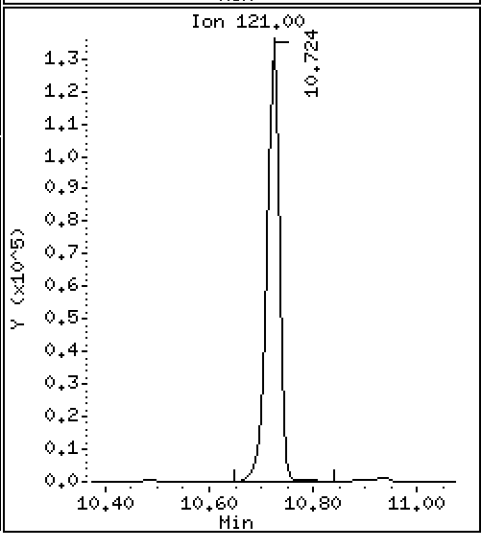


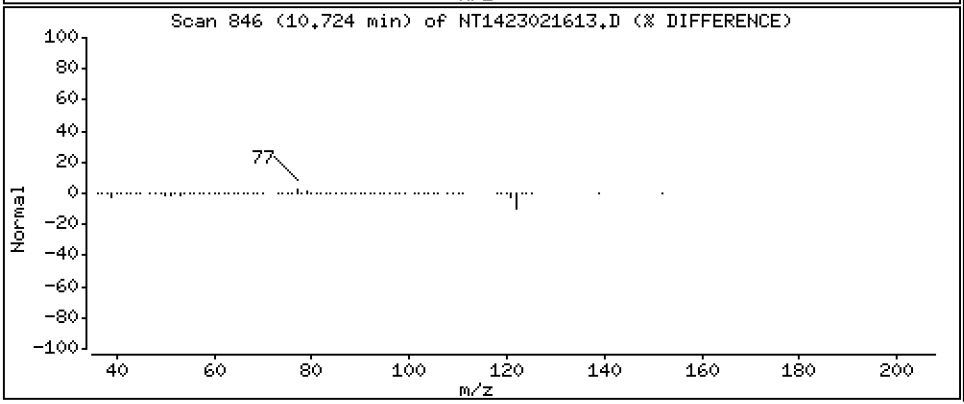












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

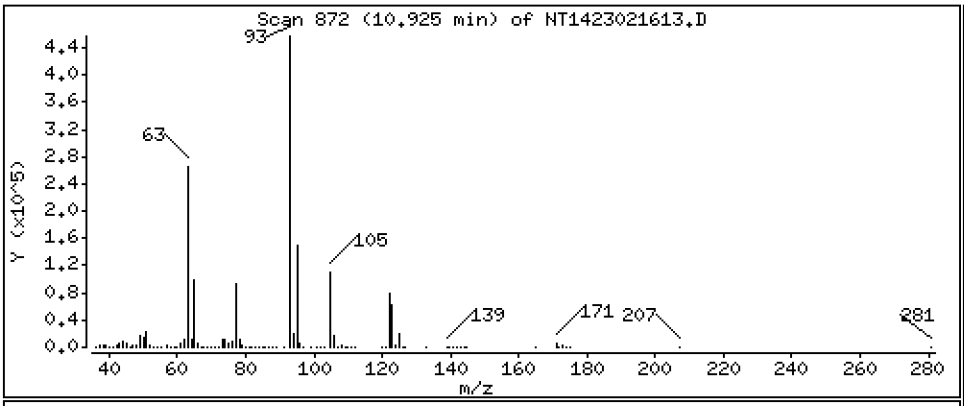
Operator: DSD

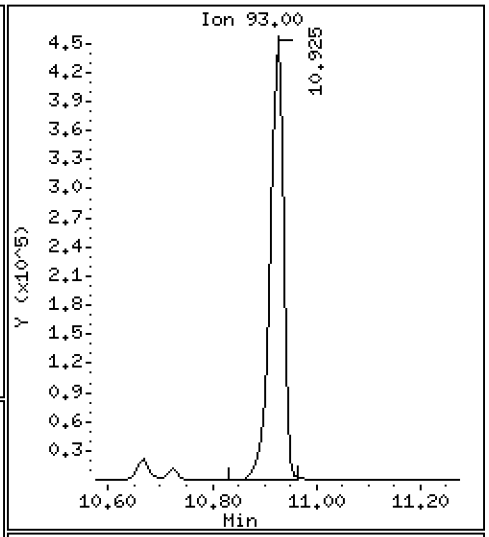
Column phase: ZB-5msi

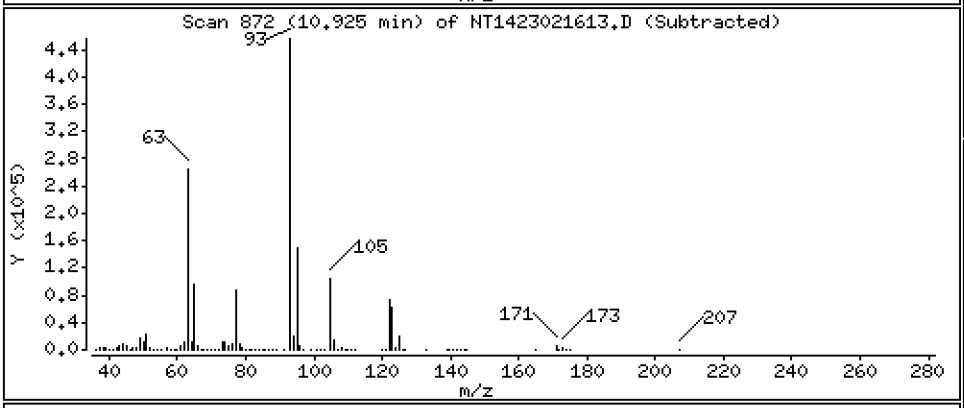
Column diameter: 0.25

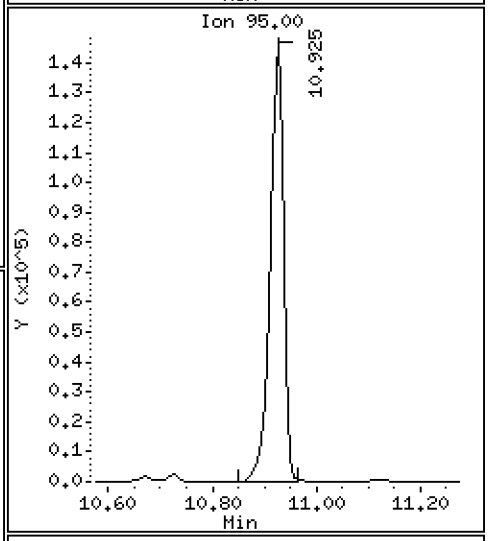
23 Bis(2-Chloroethoxy)methane

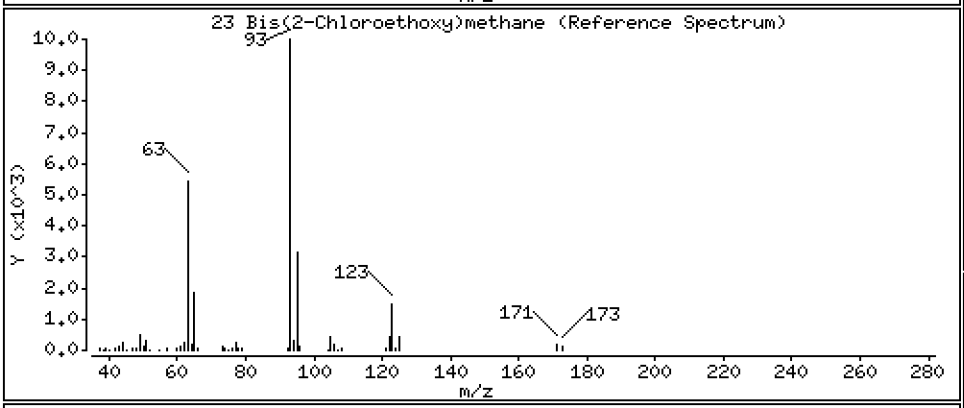
Concentration: 5.740 ug/mL

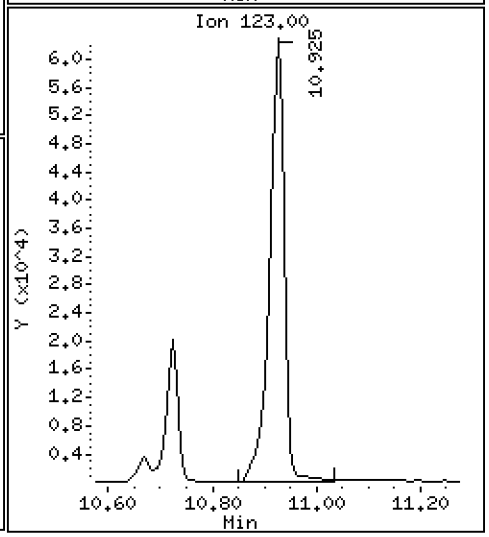


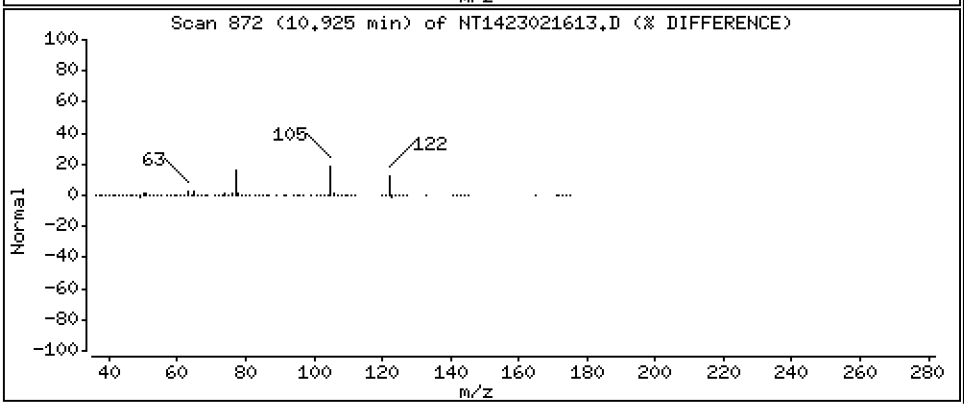












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

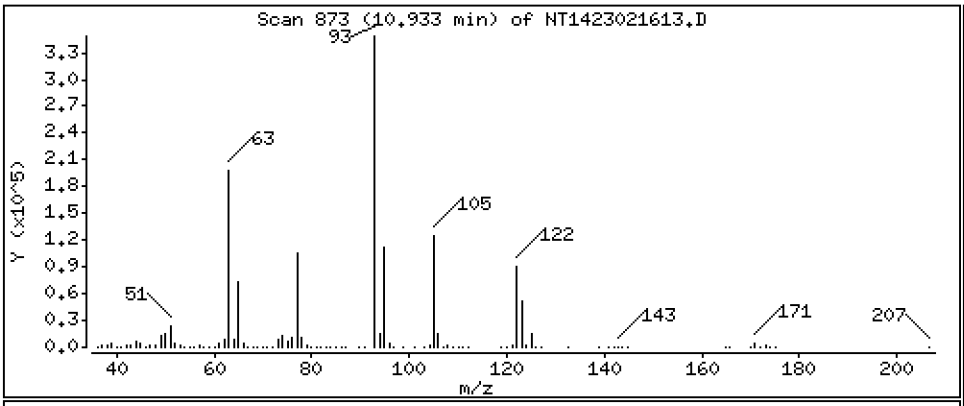
Operator: DSD

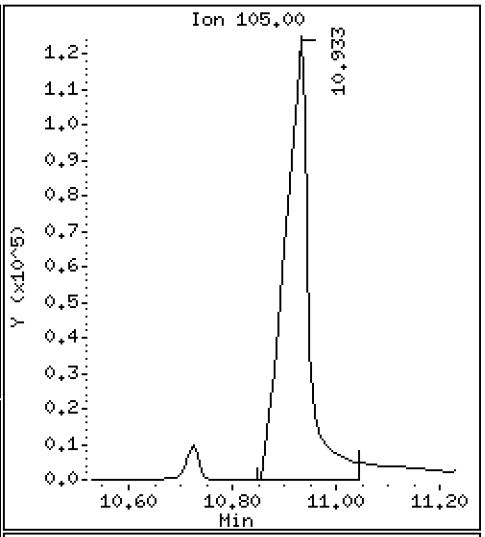
Column phase: ZB-5msi

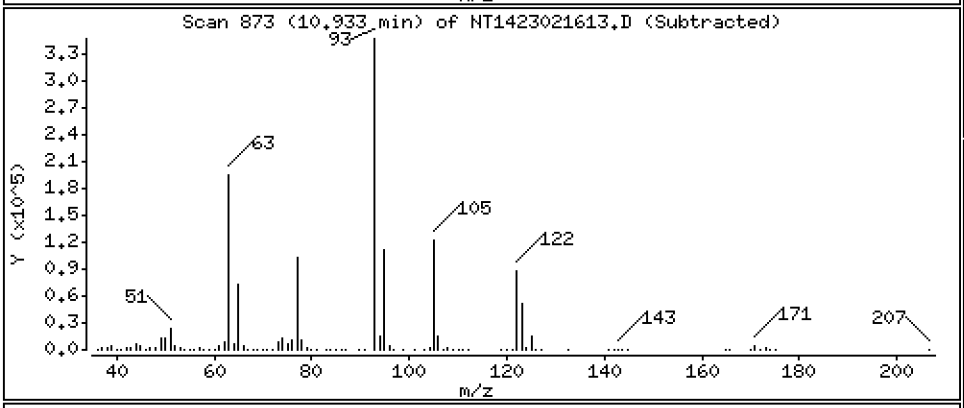
Column diameter: 0.25

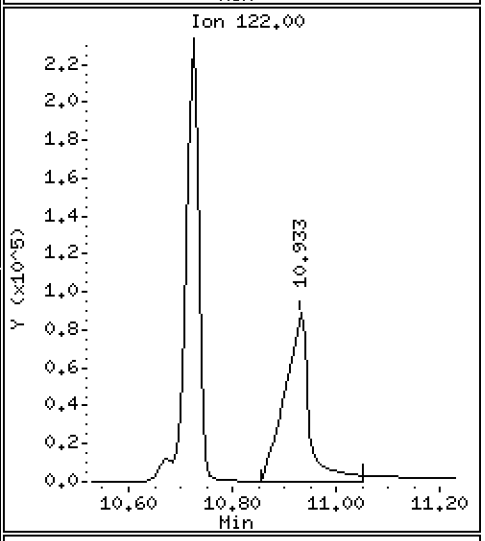
24 Benzoic acid

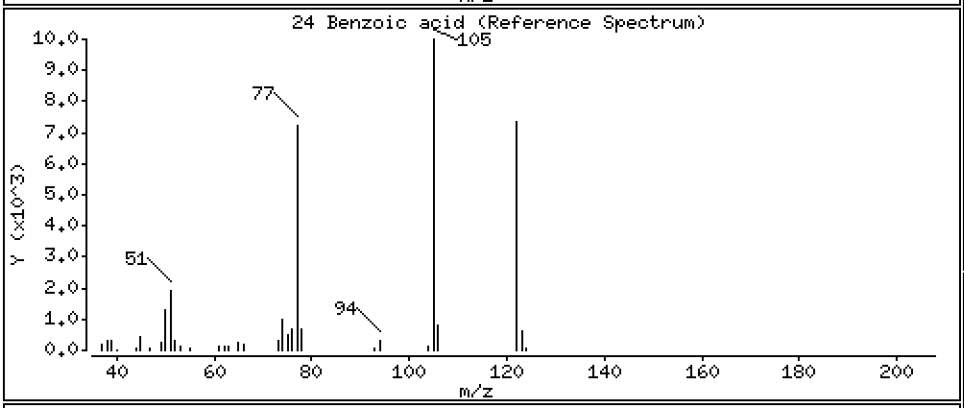
Concentration: 5.510 ug/mL

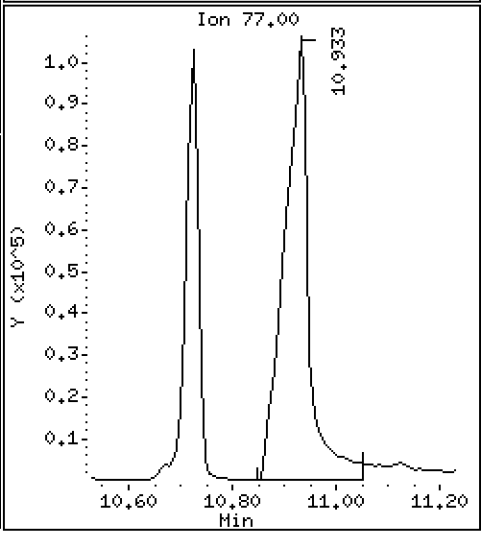


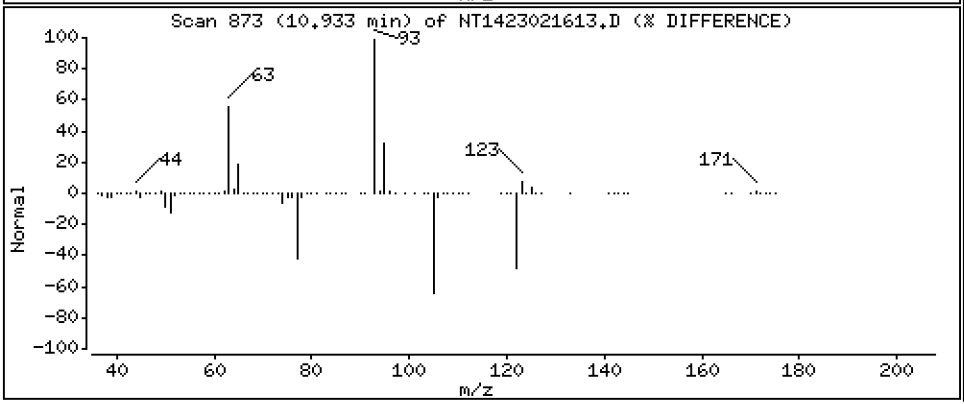












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

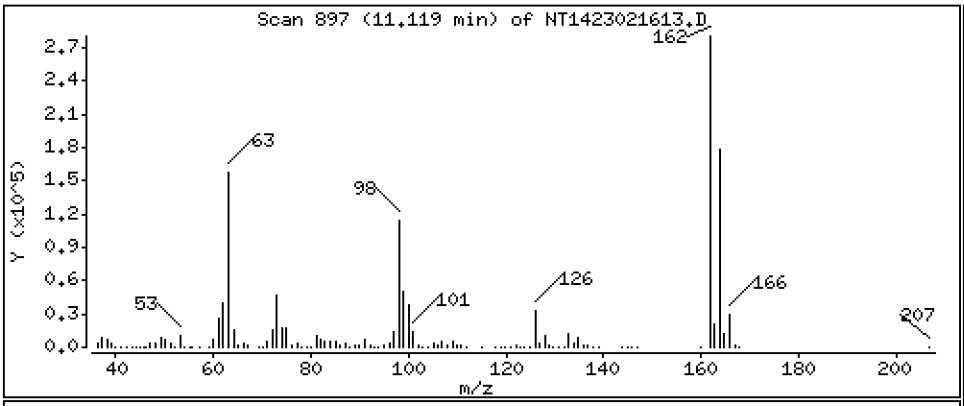
Operator: DSD

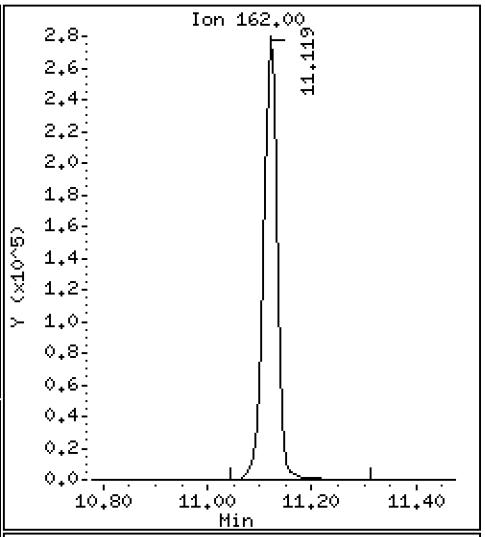
Column phase: ZB-5msi

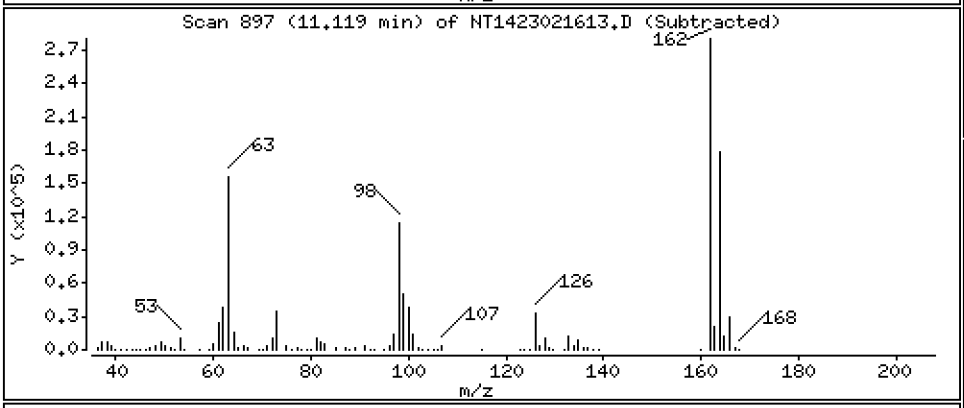
Column diameter: 0.25

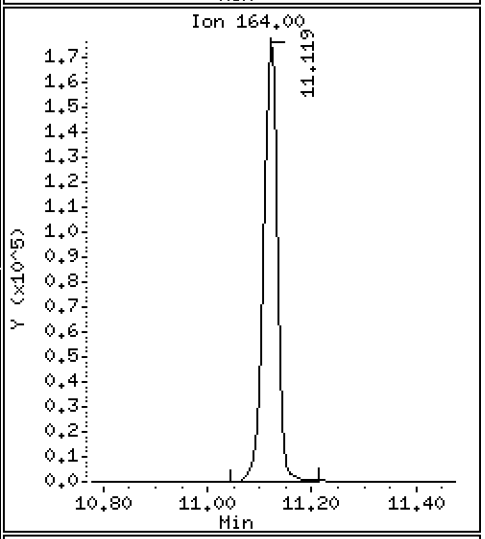
25 2,4-Dichlorophenol

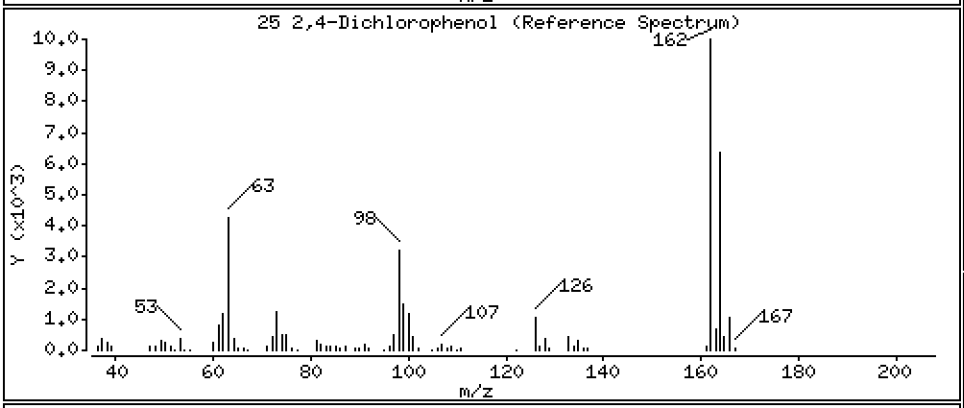
Concentration: 5.124 ug/mL

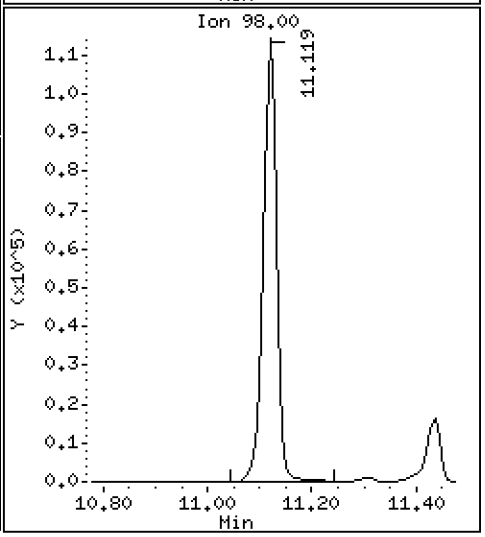


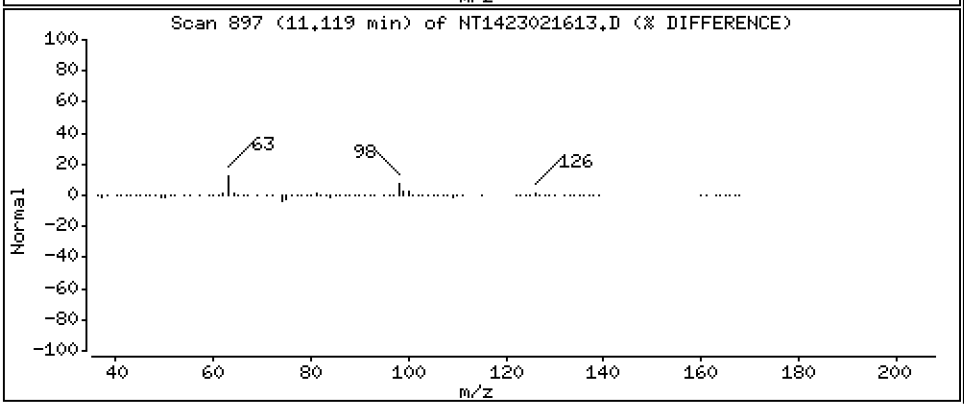












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

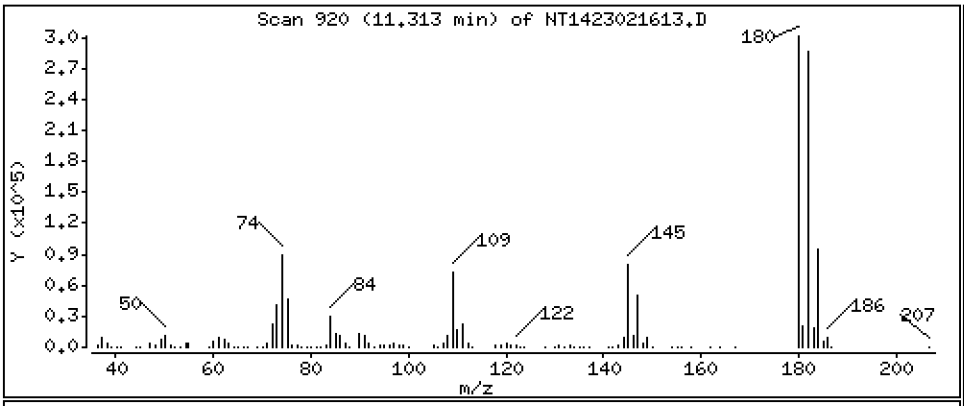
Operator: DSD

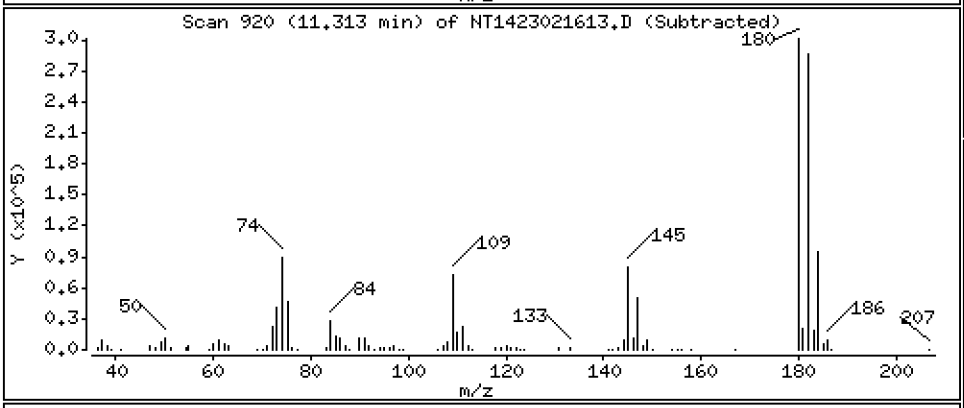
Column phase: ZB-5msi

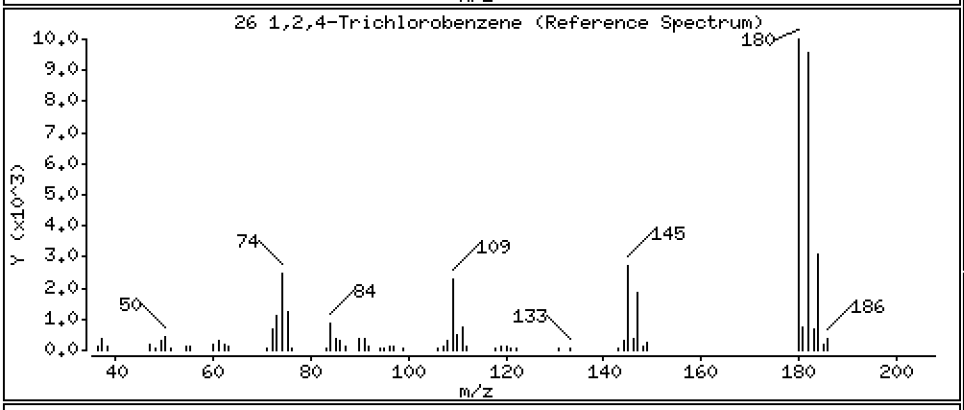
Column diameter: 0.25

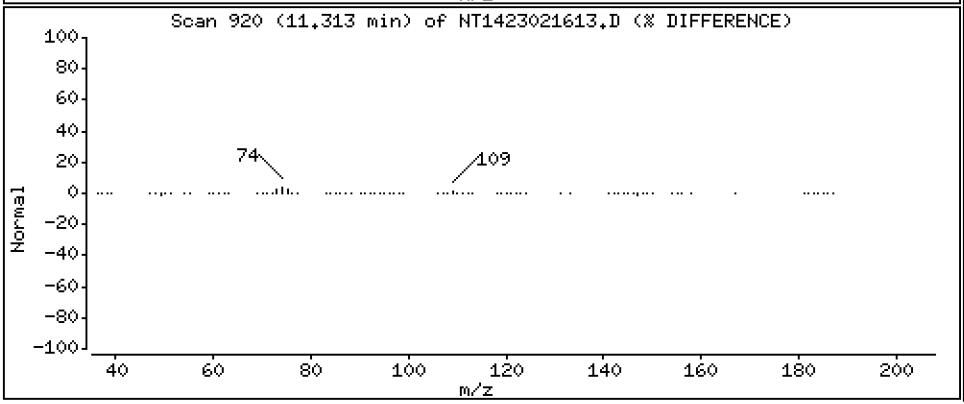
26 1,2,4-Trichlorobenzene

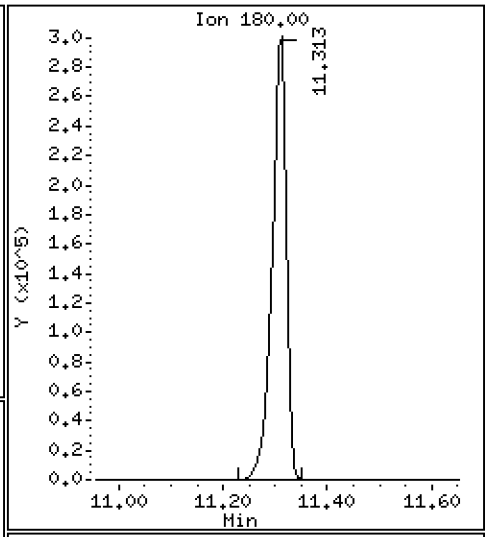
Concentration: 4.650 ug/mL

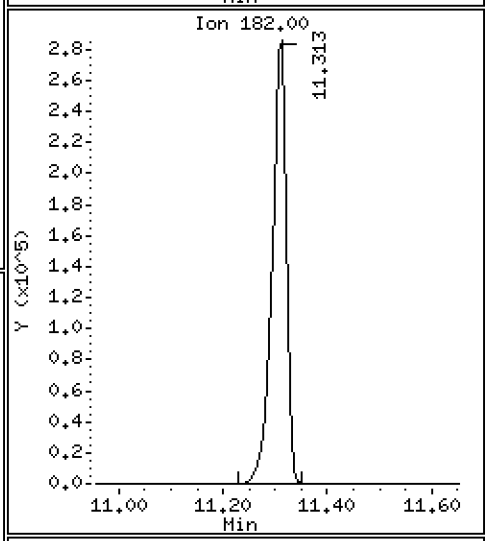


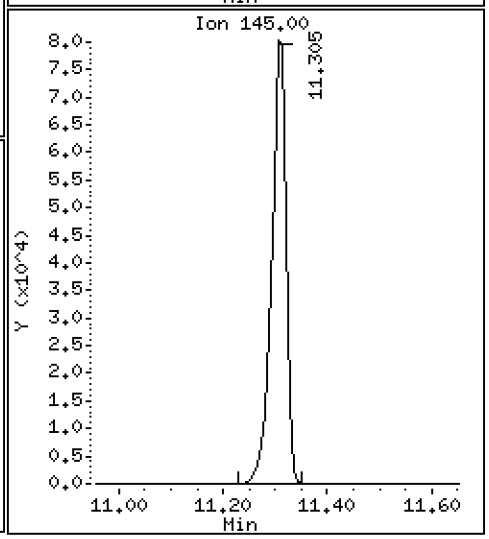












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

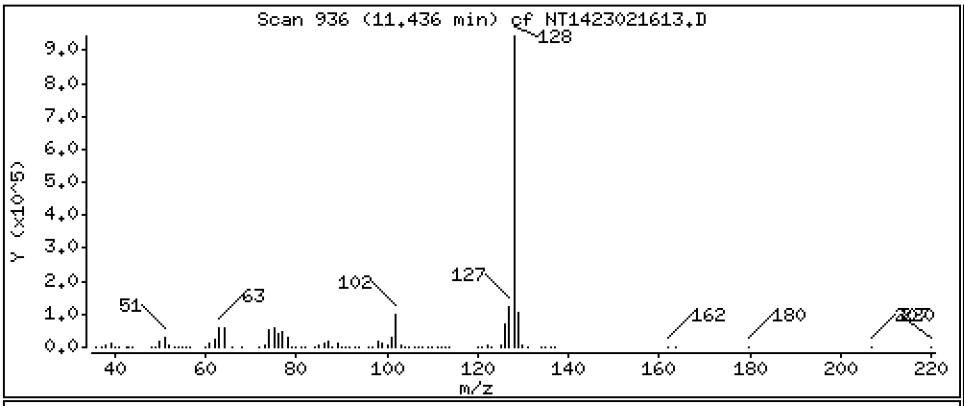
Operator: DSD

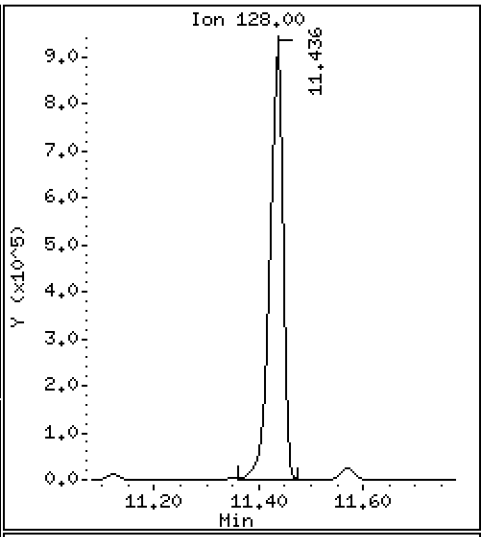
Column phase: ZB-5msi

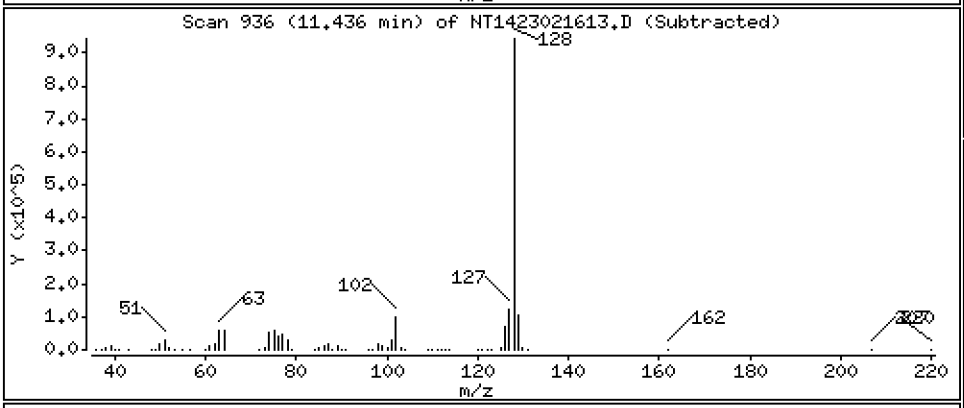
Column diameter: 0.25

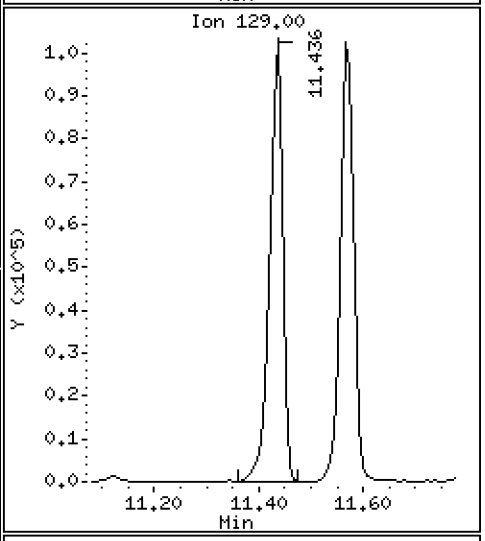
28 Naphthalene

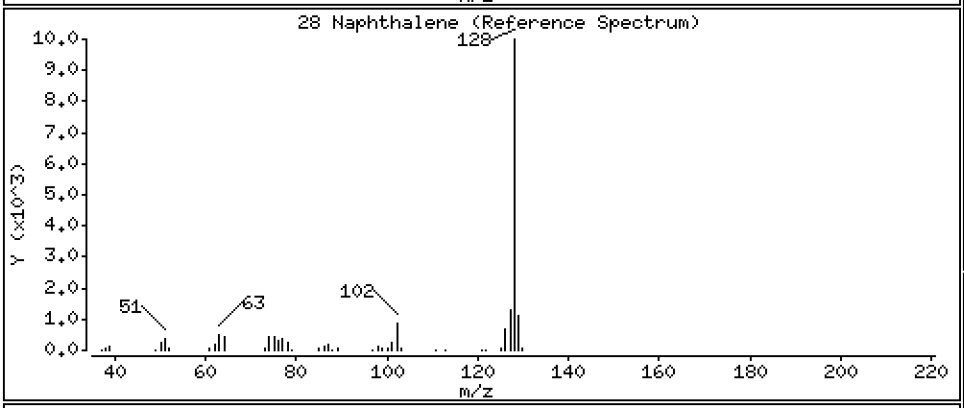
Concentration: 4.736 ug/mL

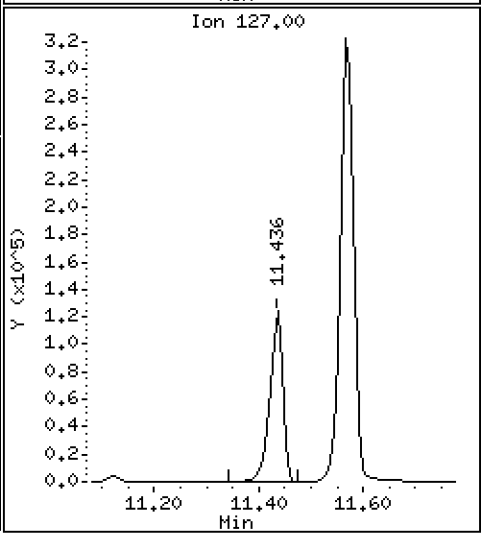


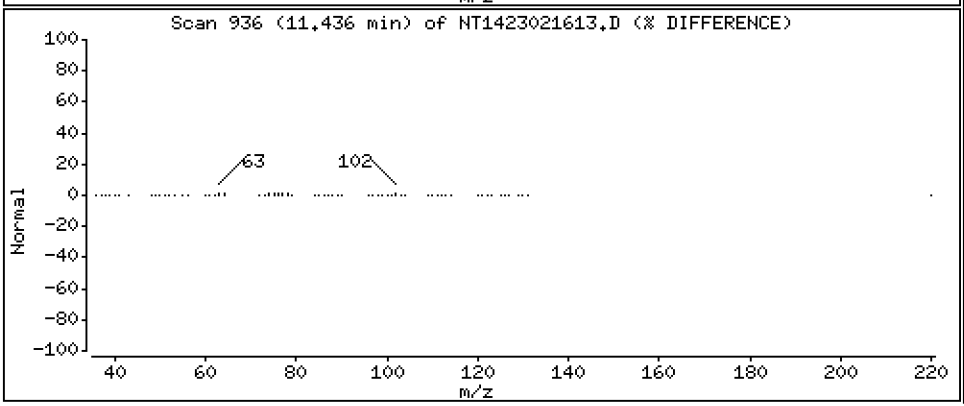












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

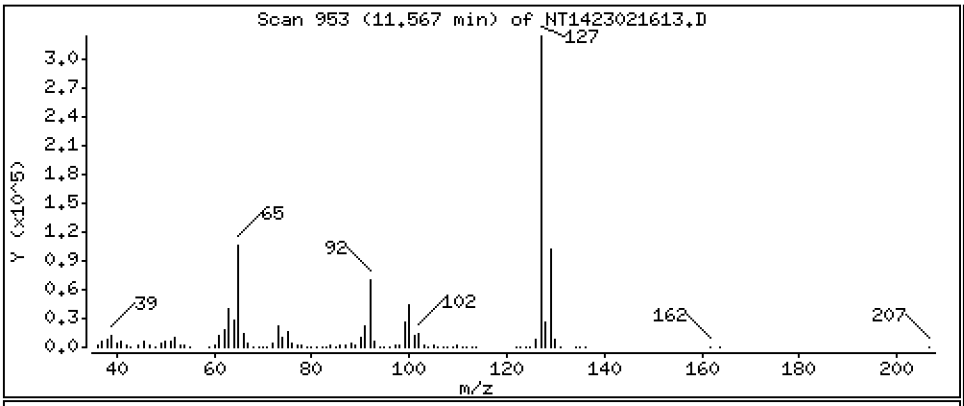
Operator: DSD

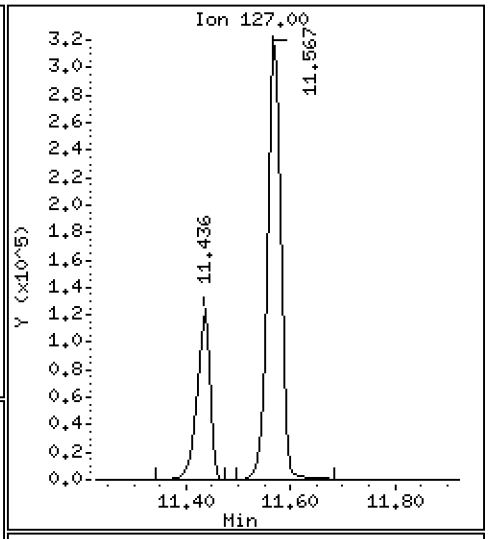
Column phase: ZB-5msi

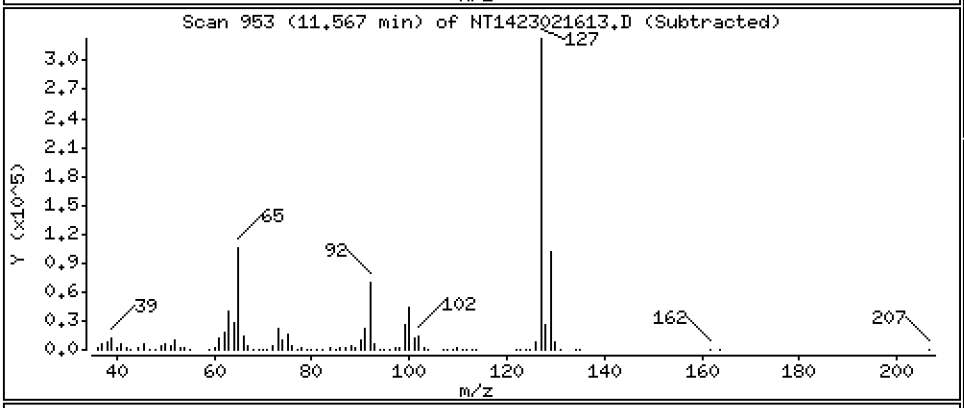
Column diameter: 0.25

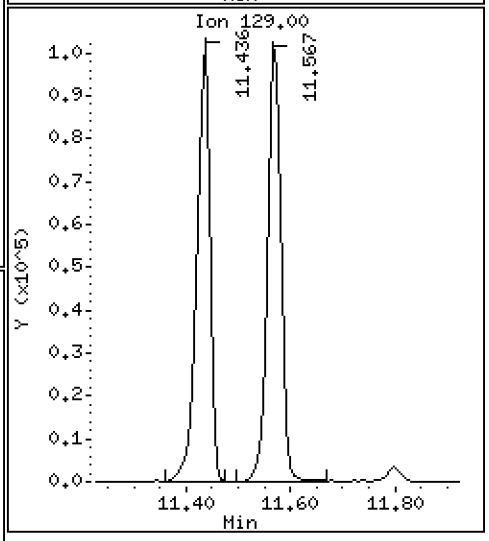
29 4-Chloroaniline

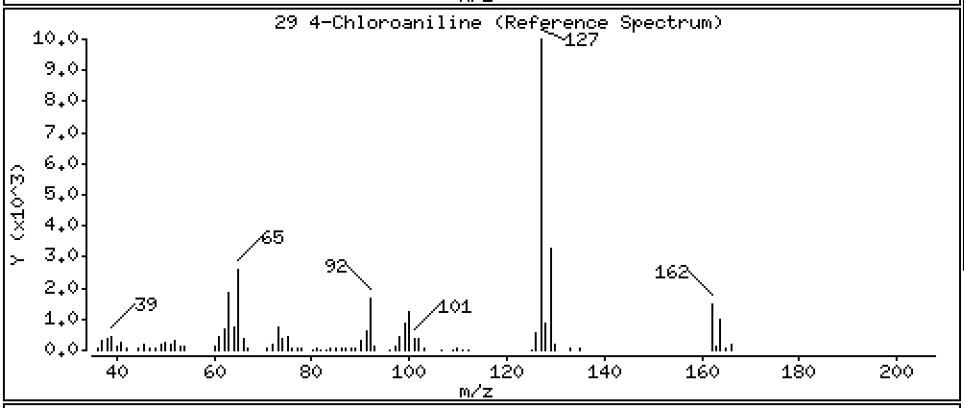
Concentration: 3.911 ug/mL

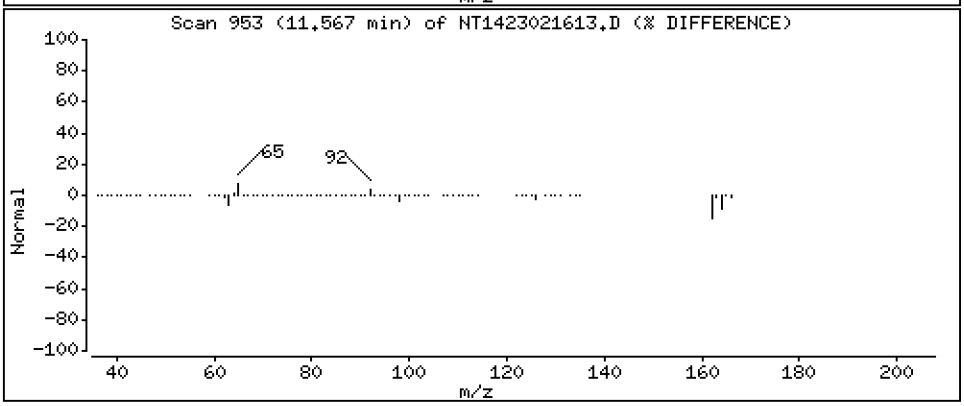












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

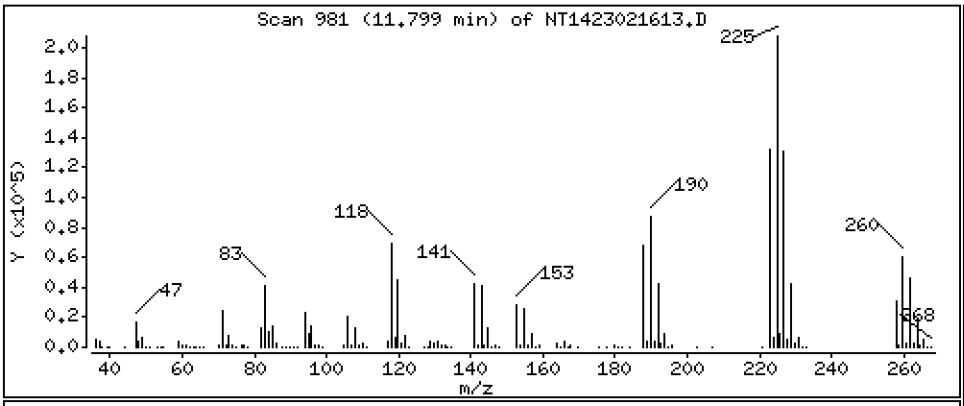
Operator: DSD

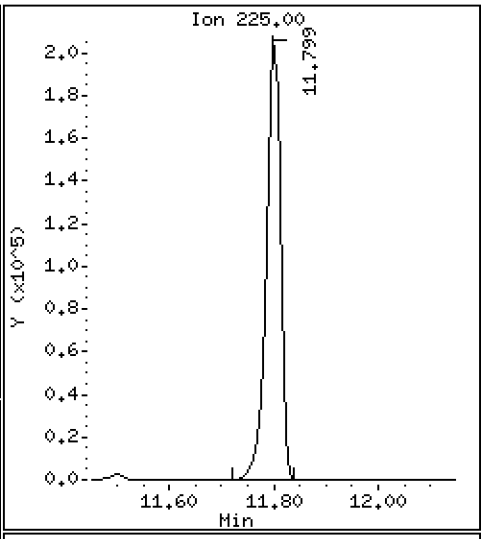
Column phase: ZB-5msi

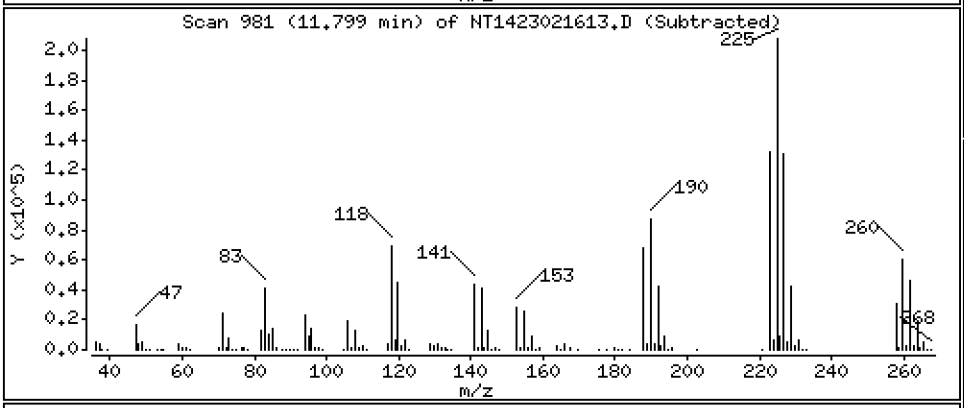
Column diameter: 0.25

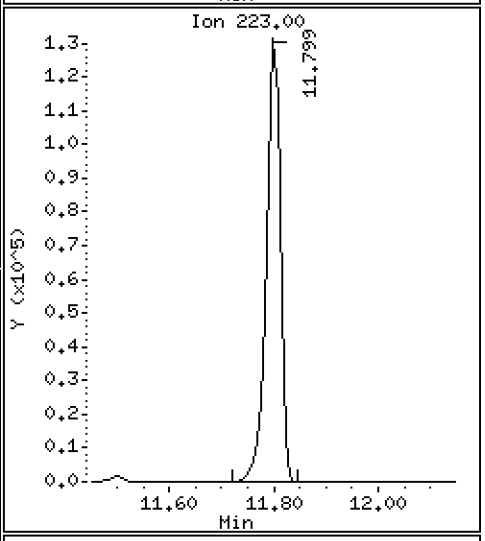
30 Hexachlorobutadiene

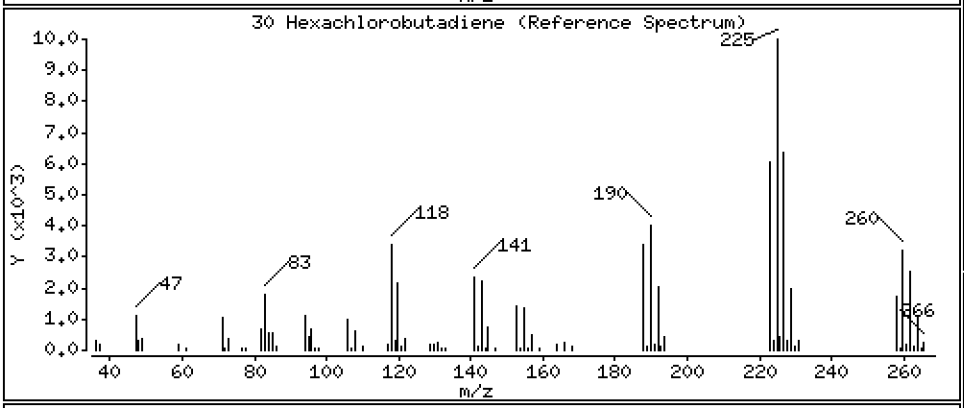
Concentration: 4.917 ug/mL

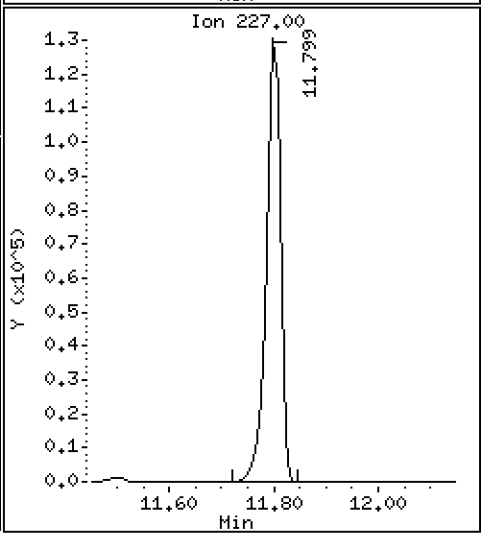


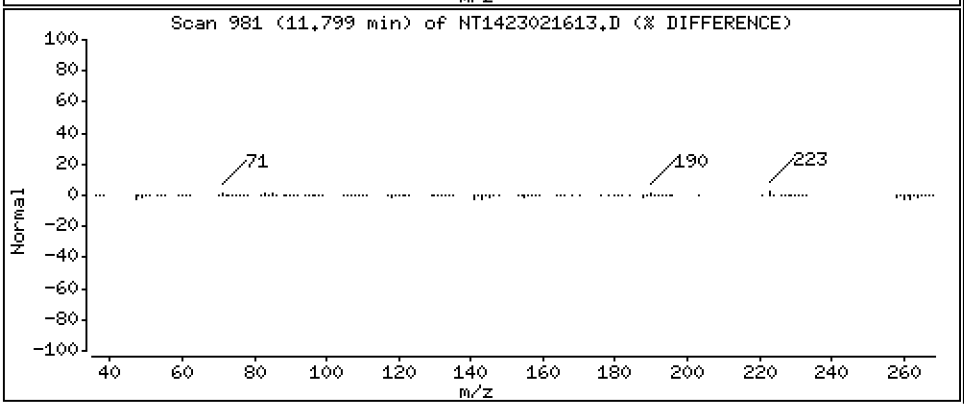












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

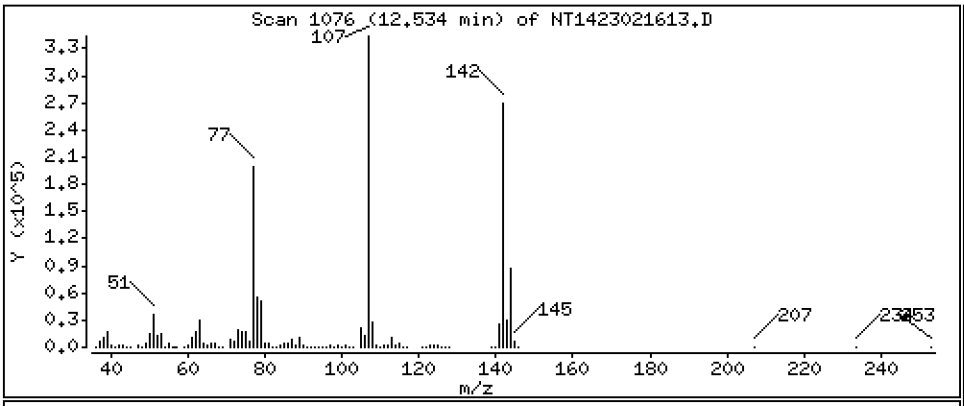
Operator: DSD

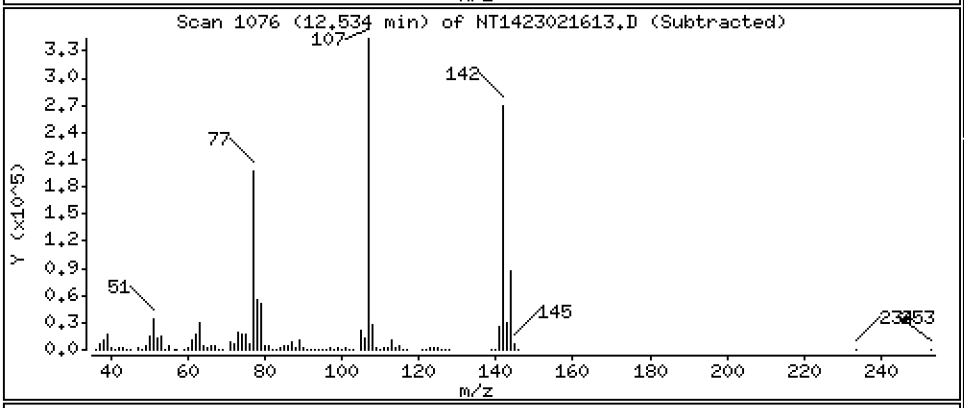
Column phase: ZB-5msi

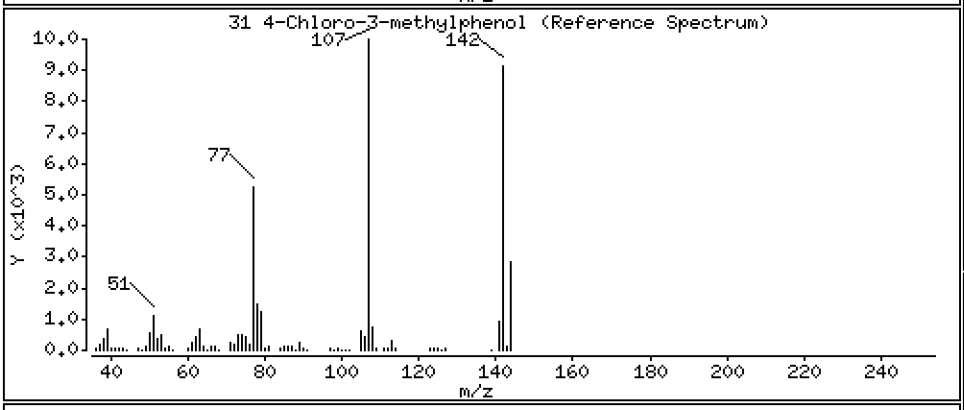
Column diameter: 0.25

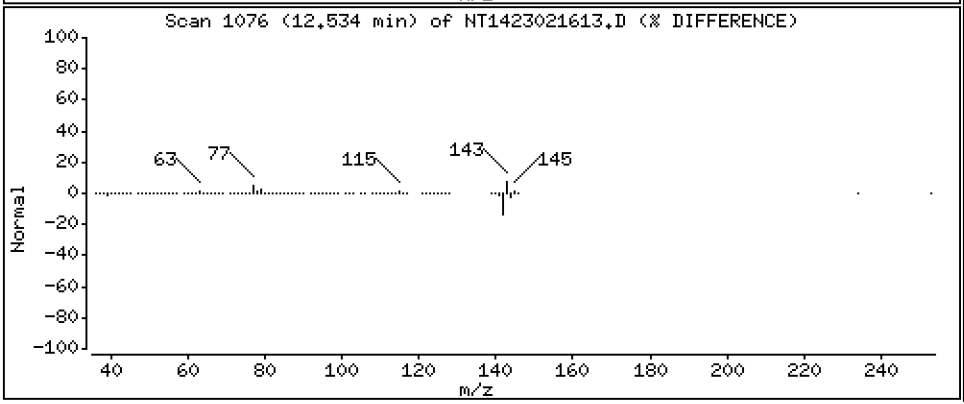
31 4-Chloro-3-methylphenol

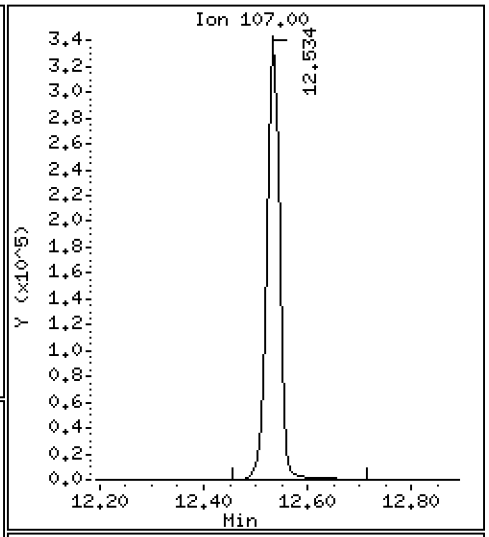
Concentration: 5.045 ug/mL

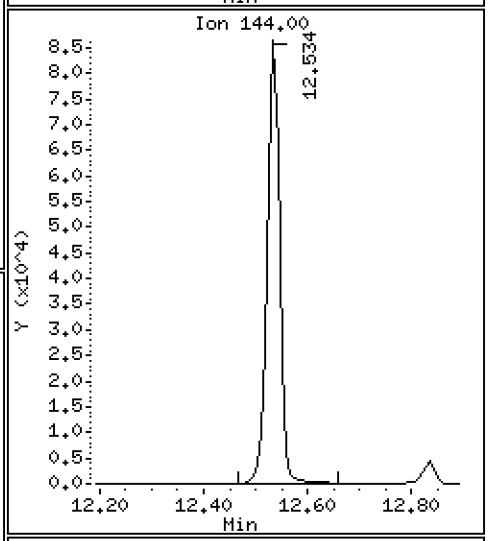


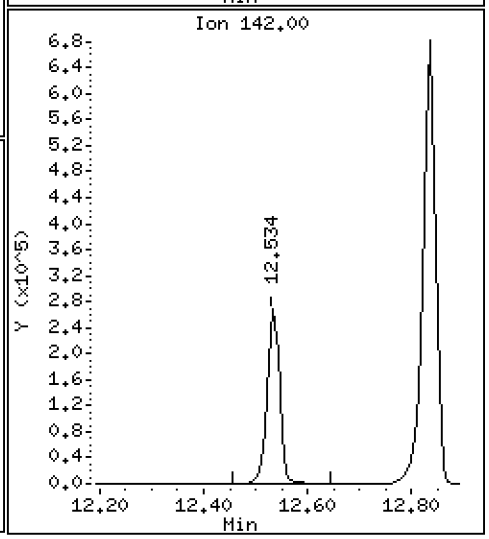












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

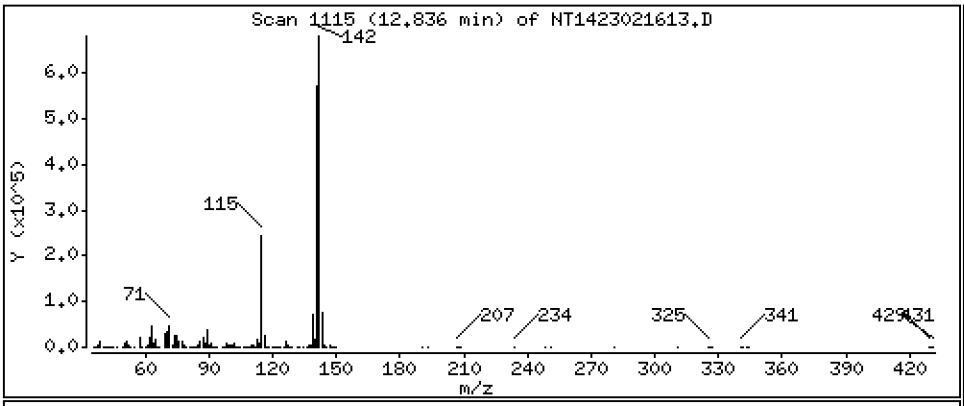
Operator: DSD

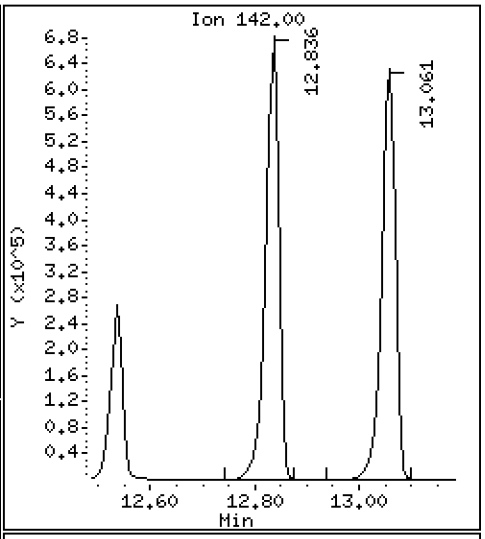
Column phase: ZB-5msi

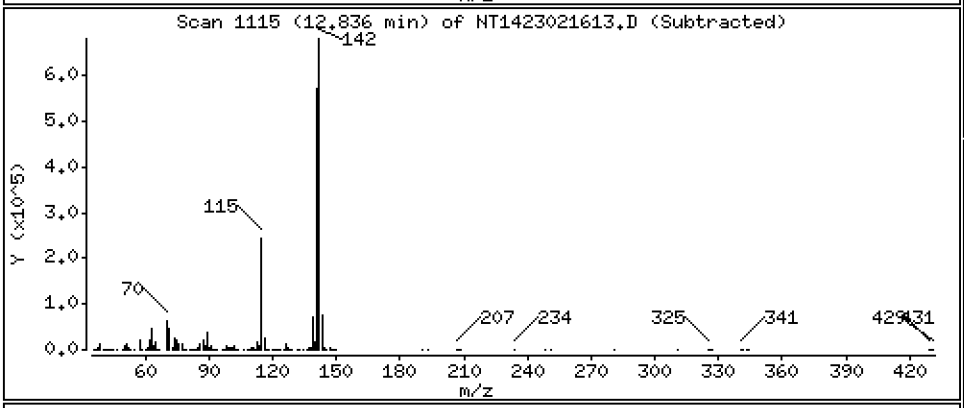
Column diameter: 0.25

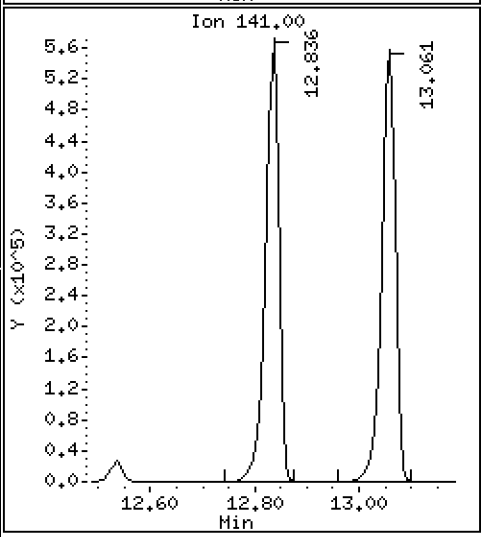
32 2-Methylnaphthalene

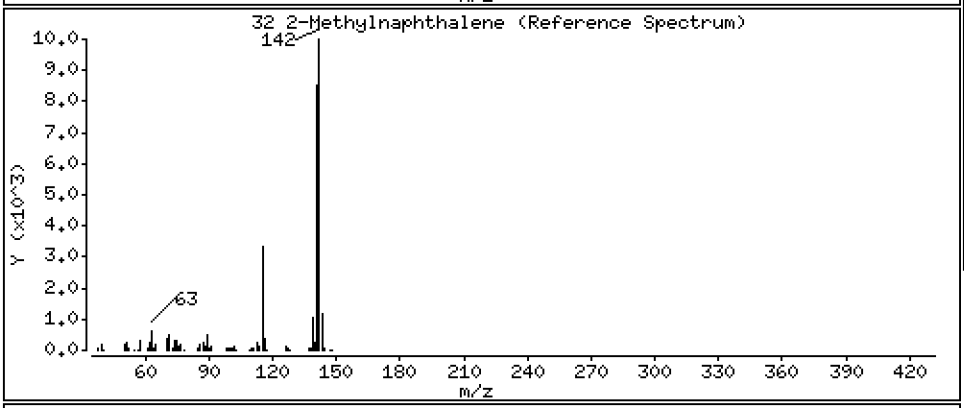
Concentration: 4.606 ug/mL

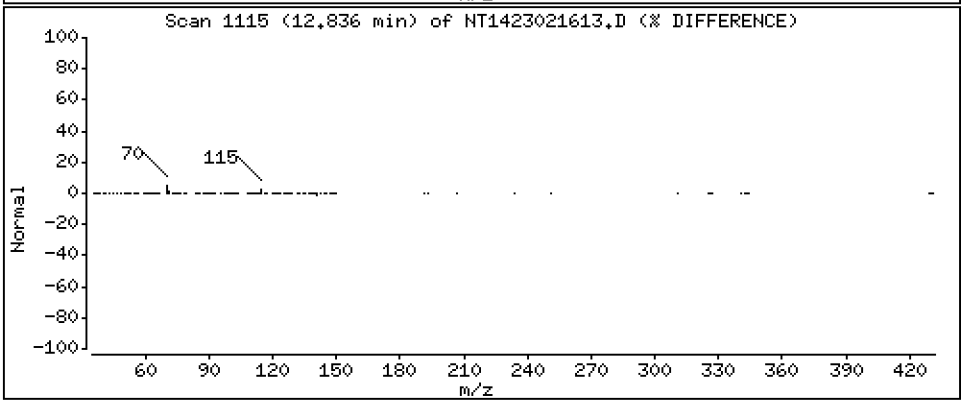












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

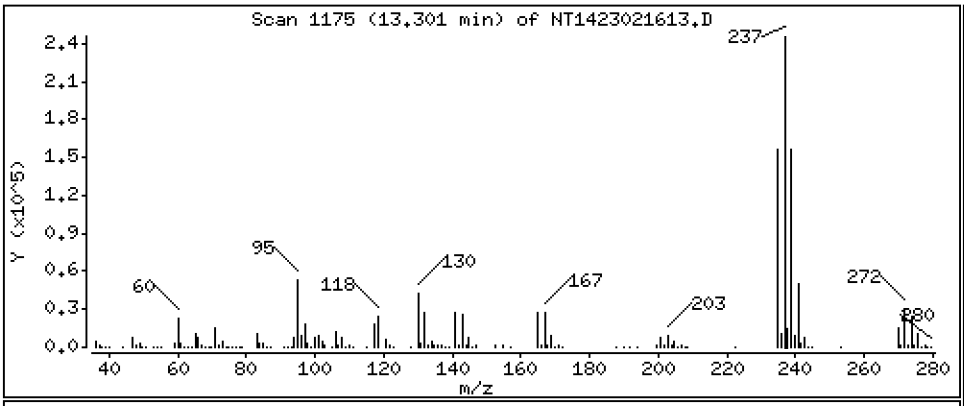
Operator: DSD

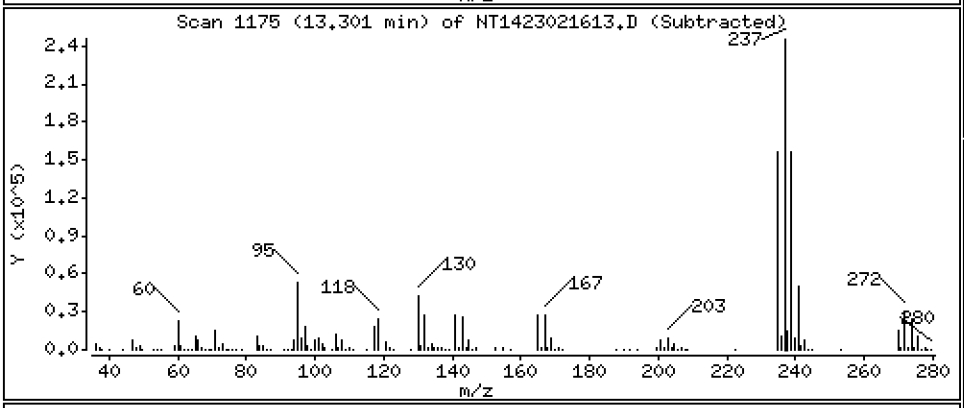
Column phase: ZB-5msi

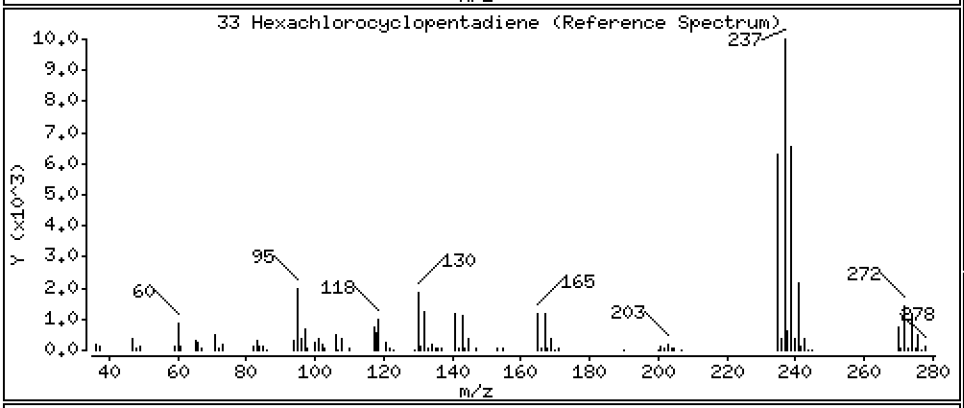
Column diameter: 0.25

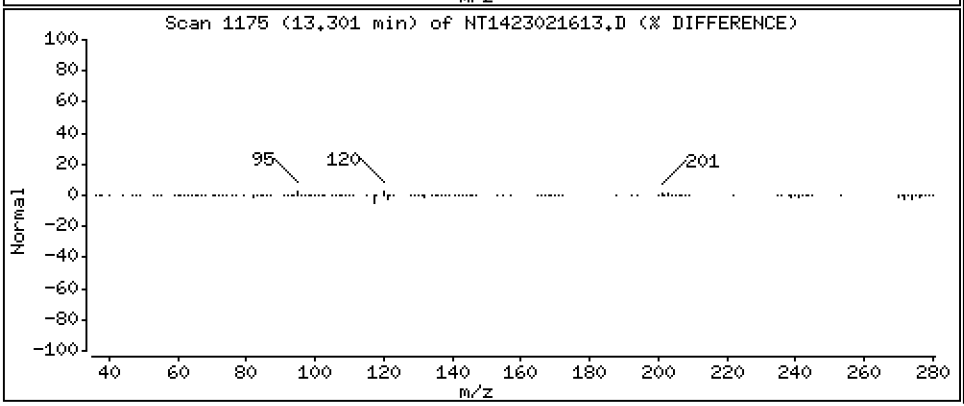
33 Hexachlorocyclopentadiene

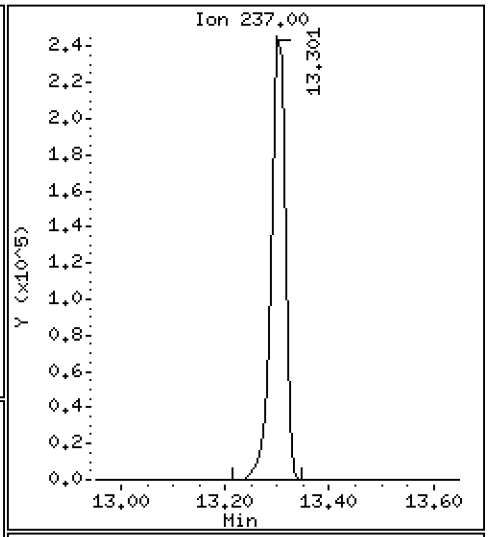
Concentration: 5.301 ug/mL

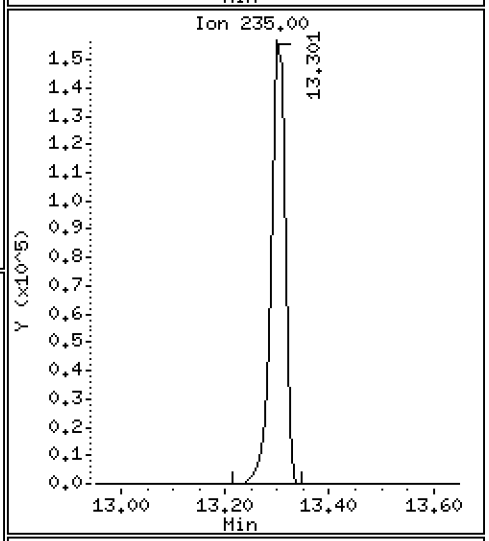


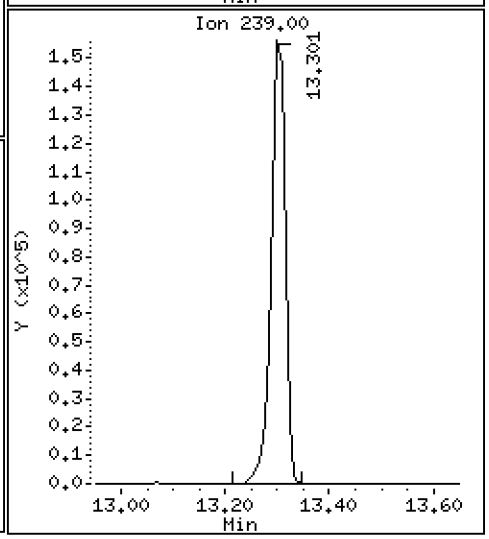












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

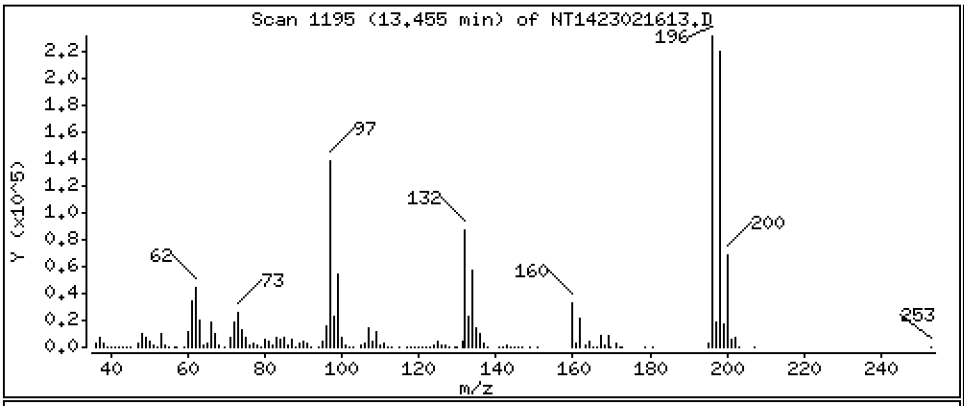
Operator: DSD

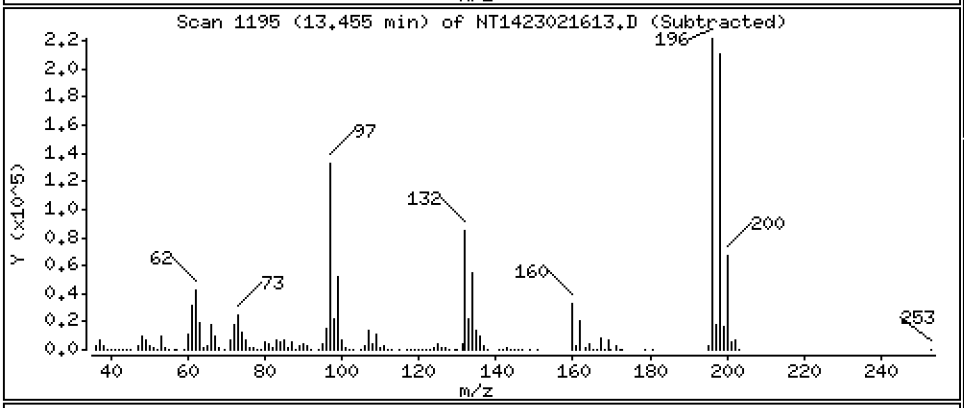
Column phase: ZB-5msi

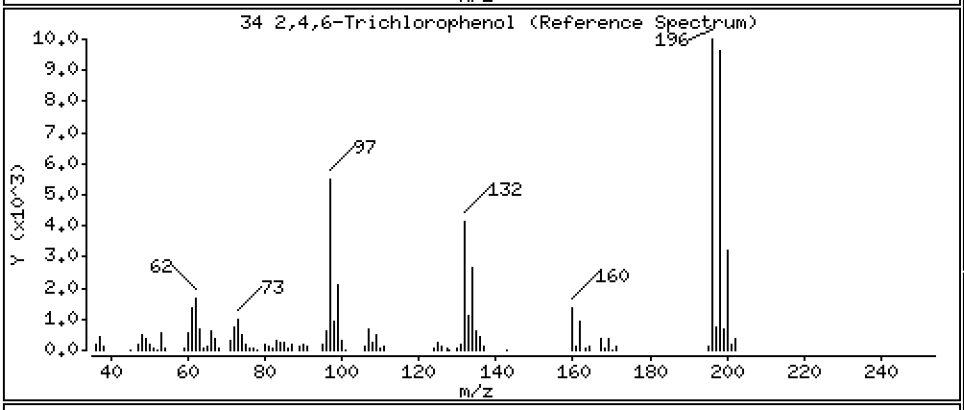
Column diameter: 0.25

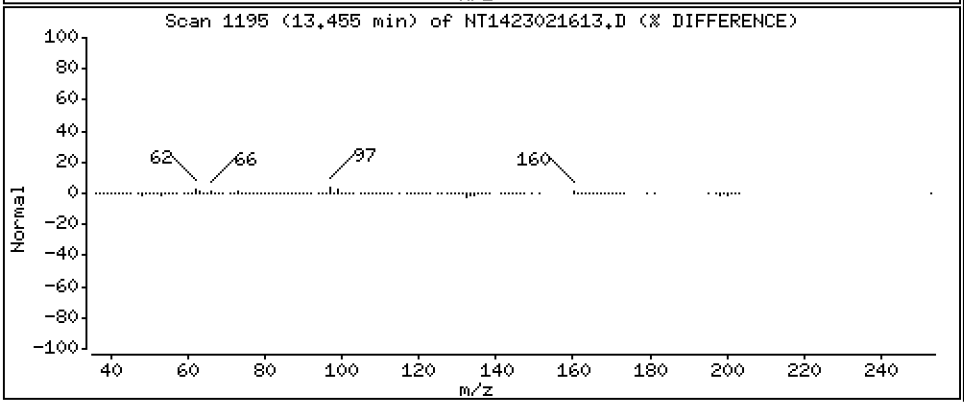
34 2,4,6-Trichlorophenol

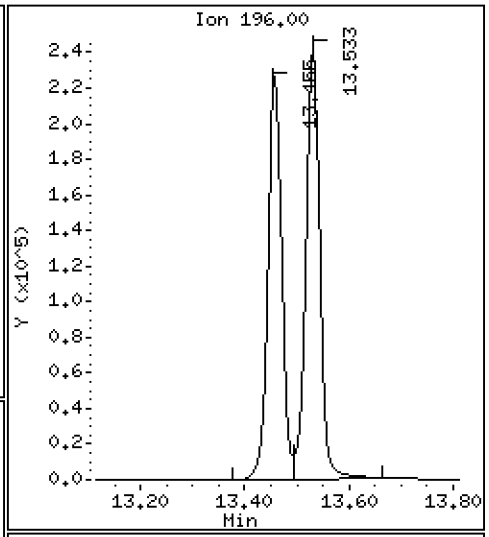
Concentration: 4.808 ug/mL

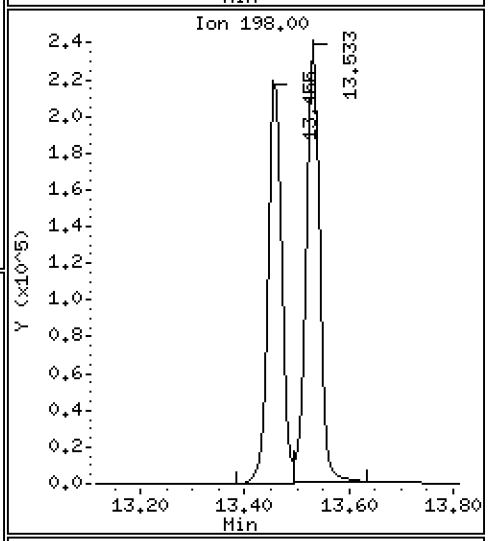


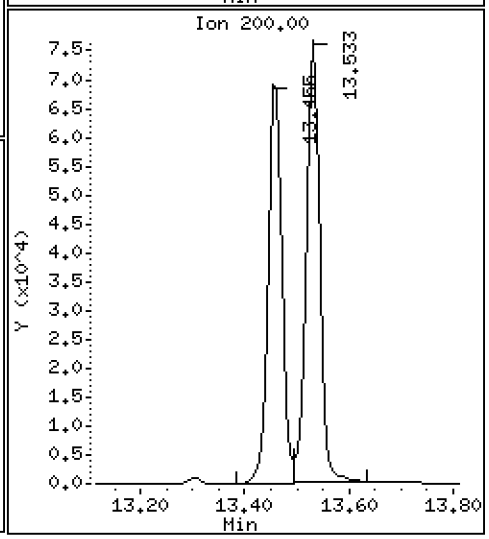












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

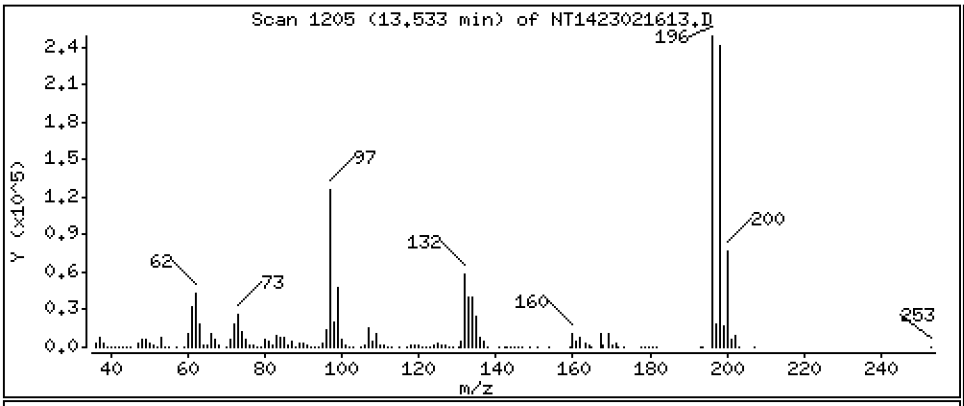
Operator: DSD

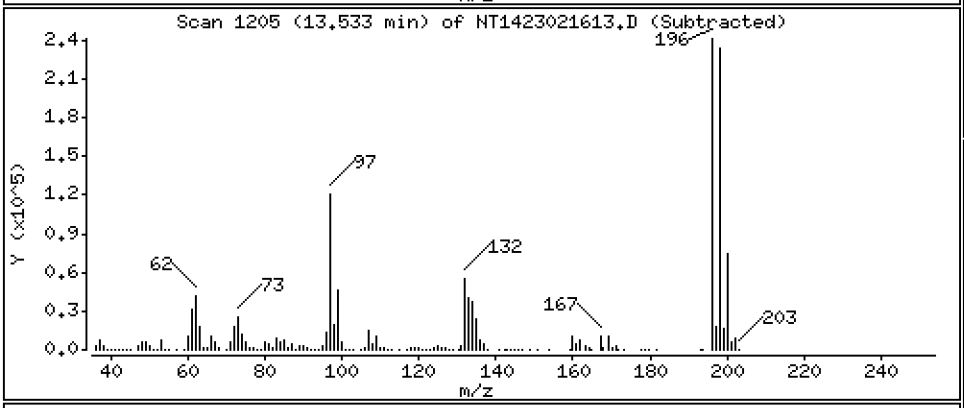
Column phase: ZB-5msi

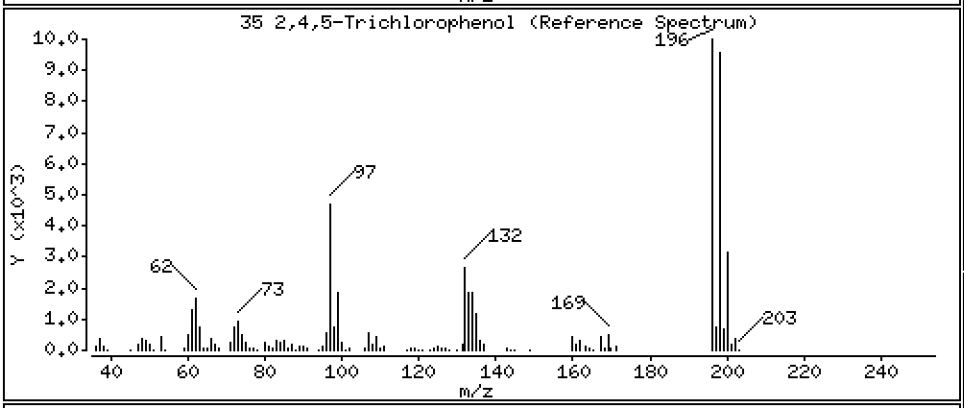
Column diameter: 0.25

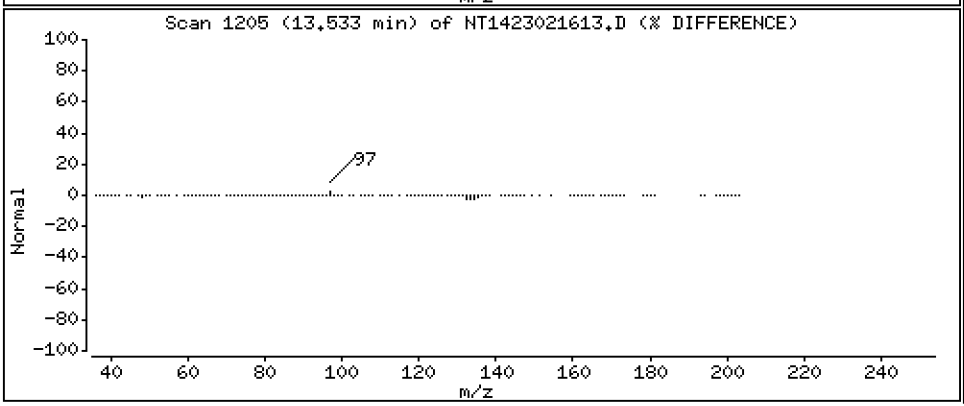
35 2,4,5-Trichlorophenol

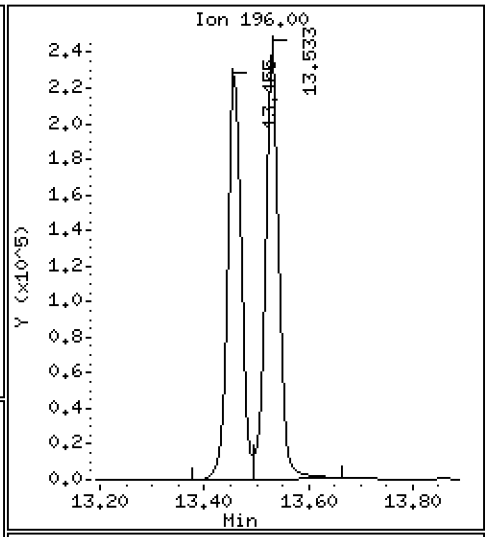
Concentration: 4.707 ug/mL

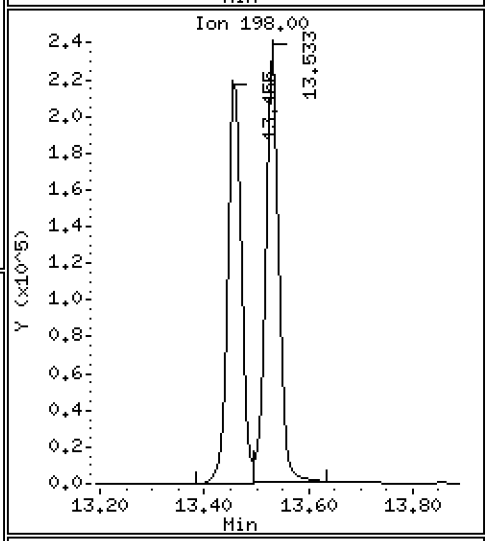


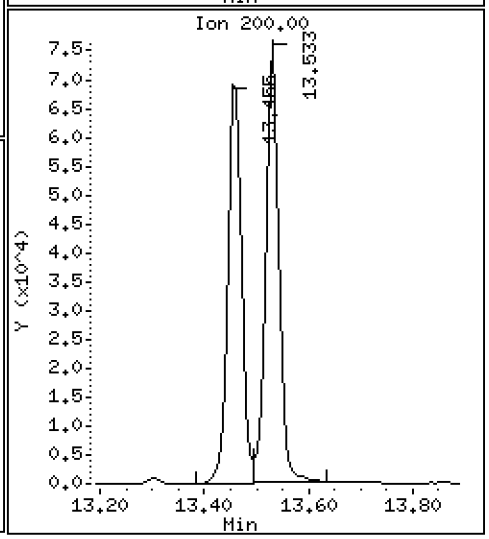












Date : 16-FEB-2023 21:18

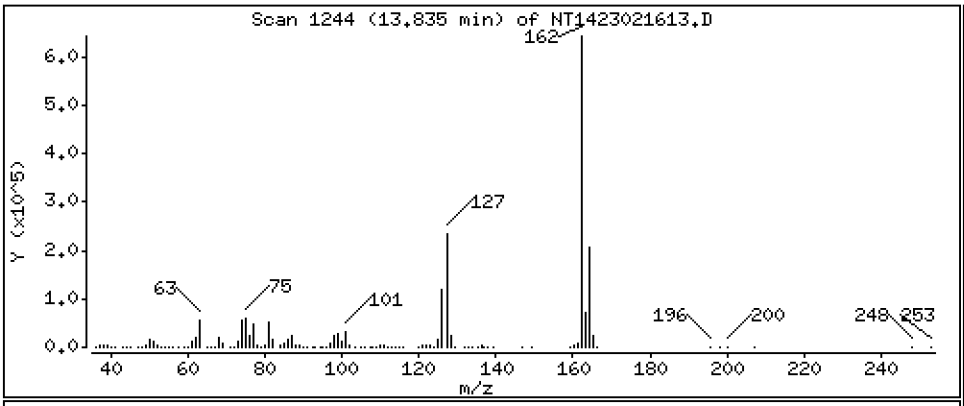
Client ID: Instrument: nt14.i

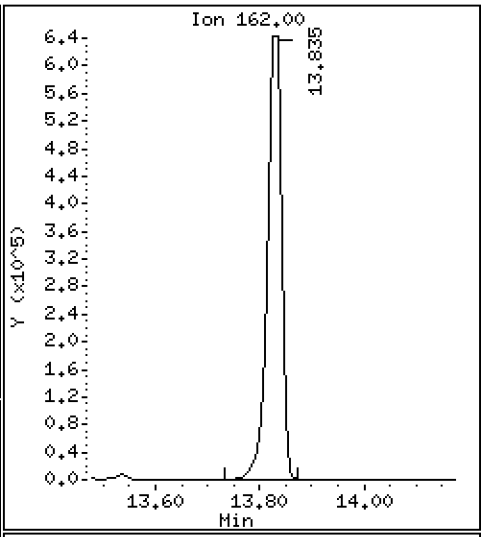
Sample Info: SLB0234-SCV1

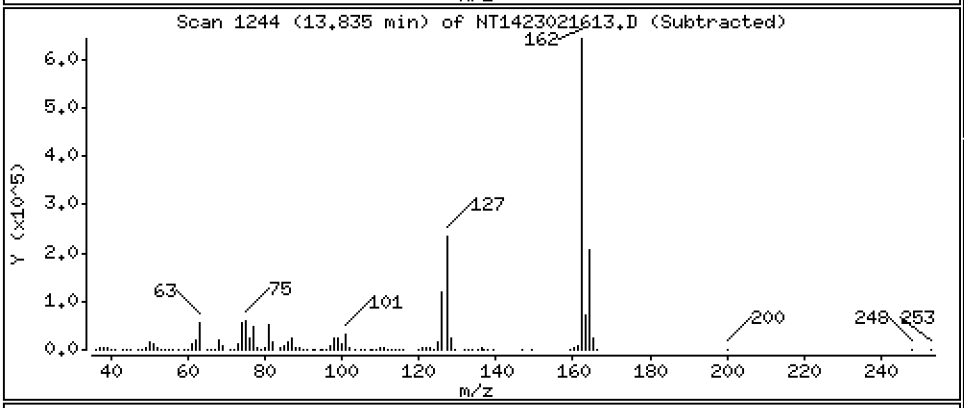
Operator: DSD

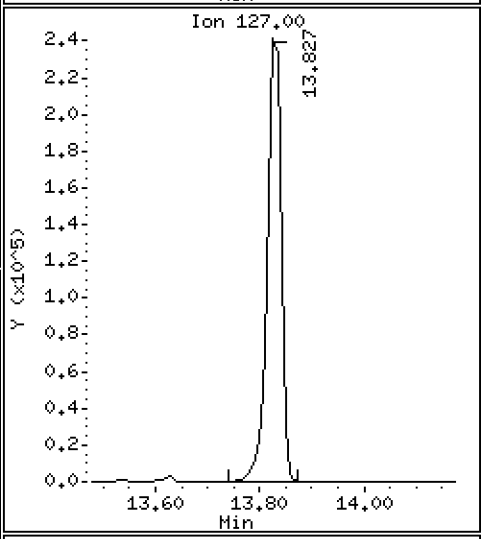
Column phase: ZB-5msi Column diameter: 0.25

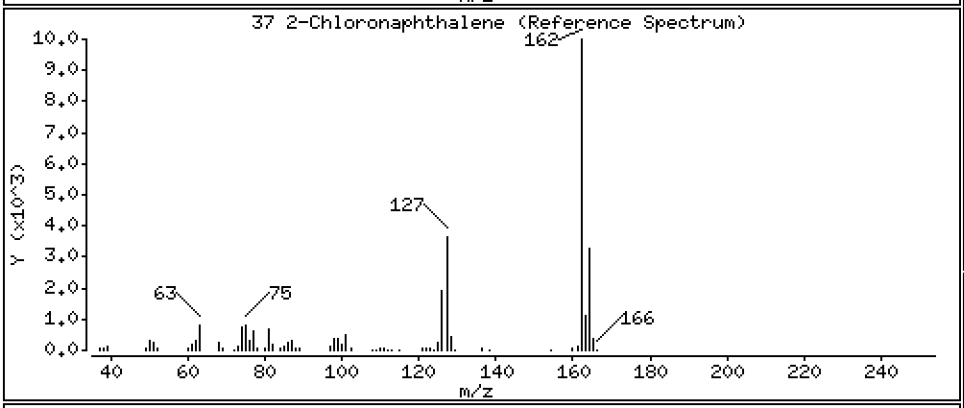
37 2-Chloronaphthalene Concentration: 4.639 ug/mL

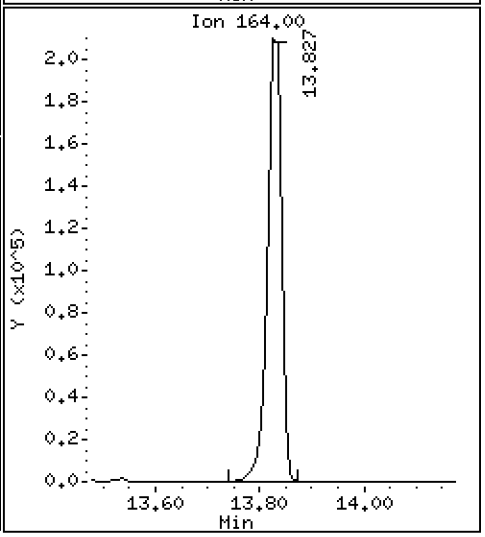


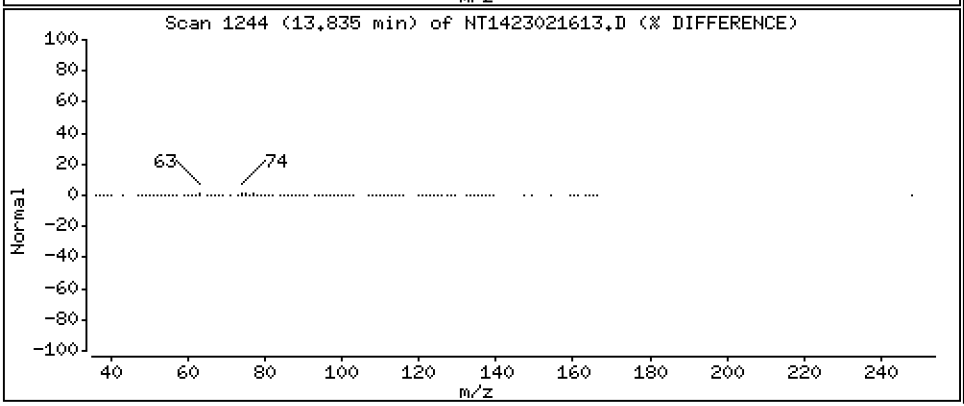












Date : 16-FEB-2023 21:18

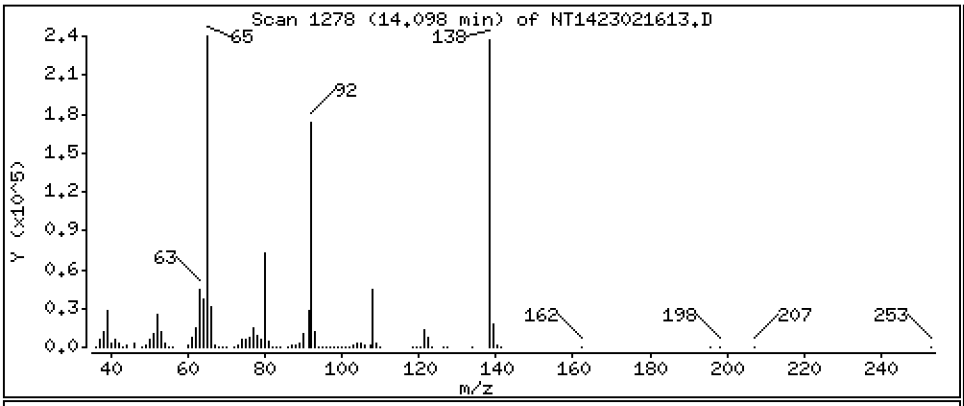
Client ID: Instrument: nt14.i

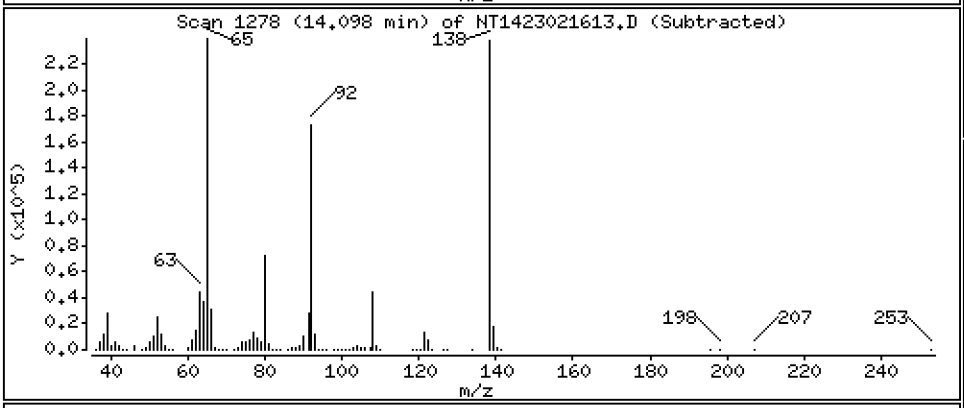
Sample Info: SLB0234-SCV1

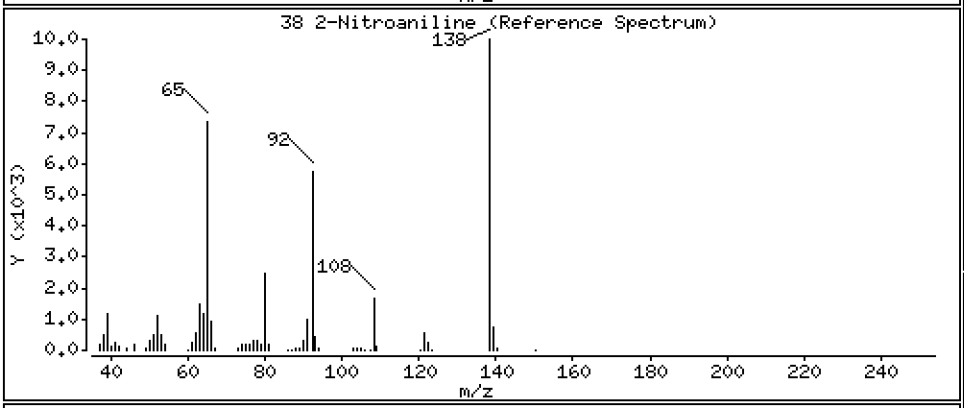
Operator: DSD

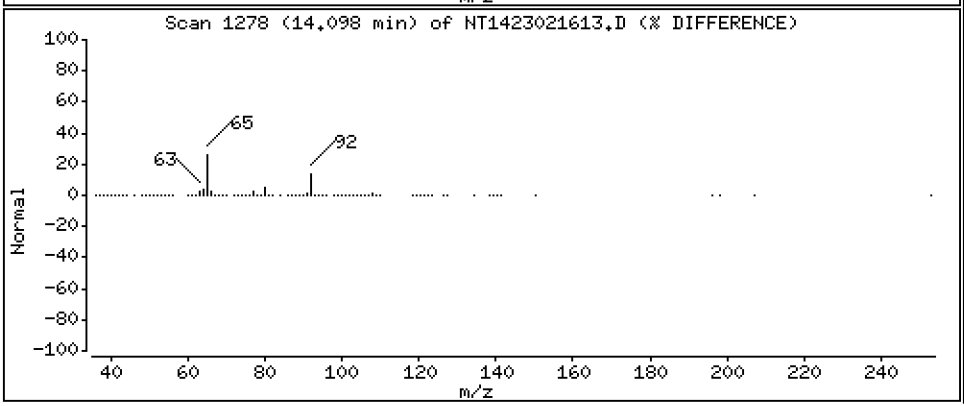
Column phase: ZB-5msi Column diameter: 0.25

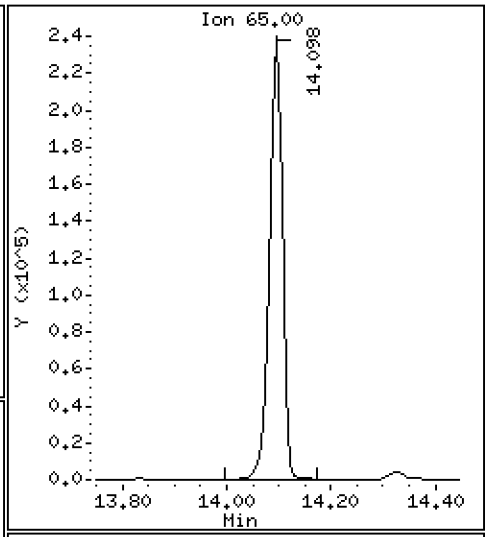
38 2-Nitroaniline Concentration: 4.852 ug/mL

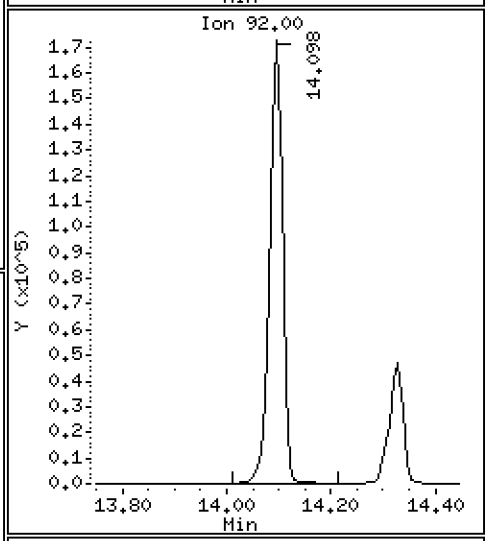


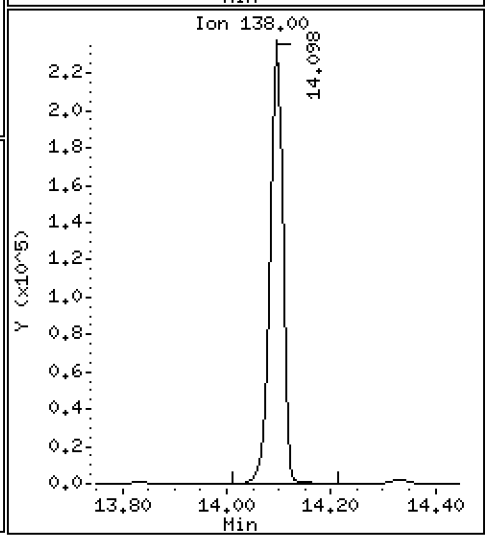












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

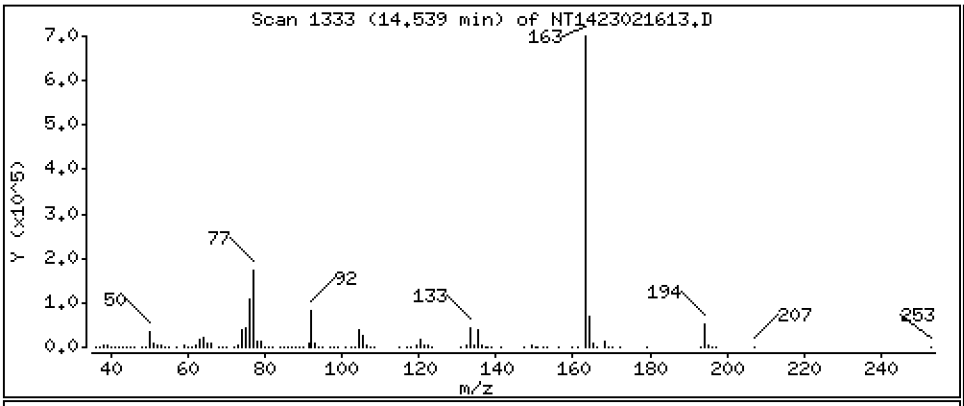
Operator: DSD

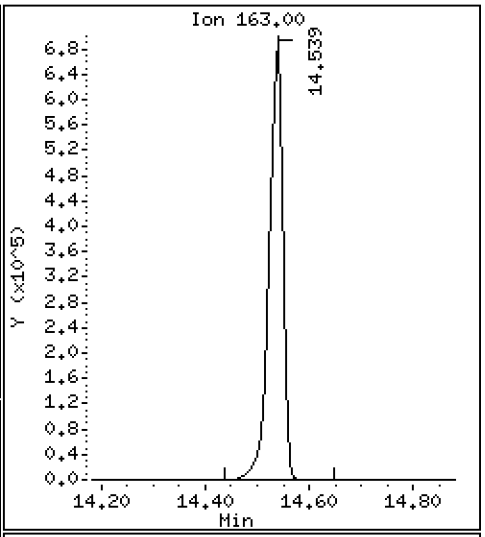
Column phase: ZB-5msi

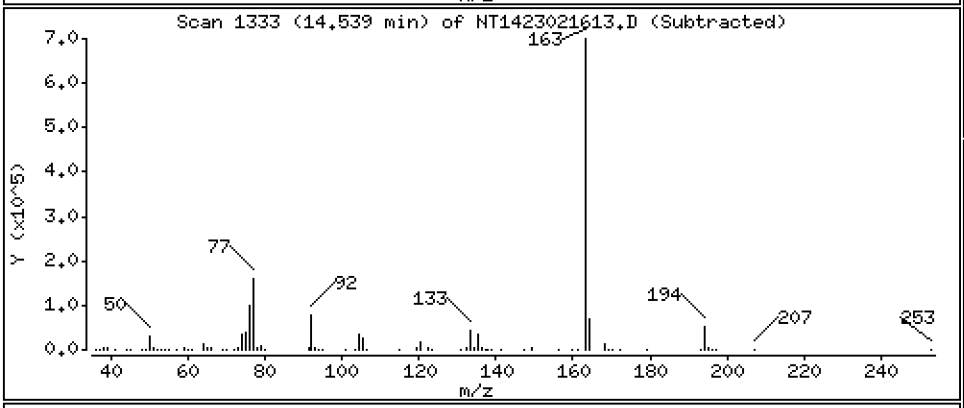
Column diameter: 0.25

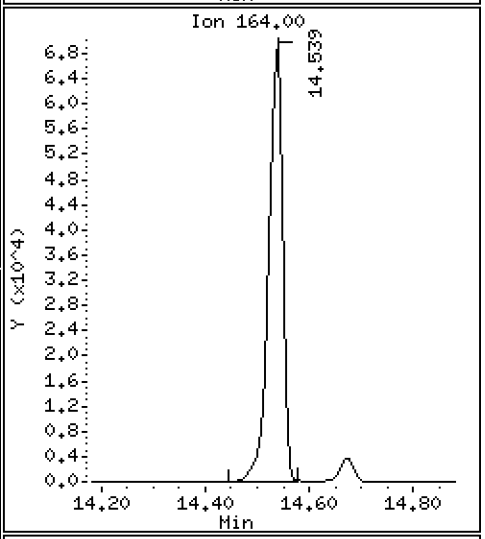
39 Dimethylphthalate

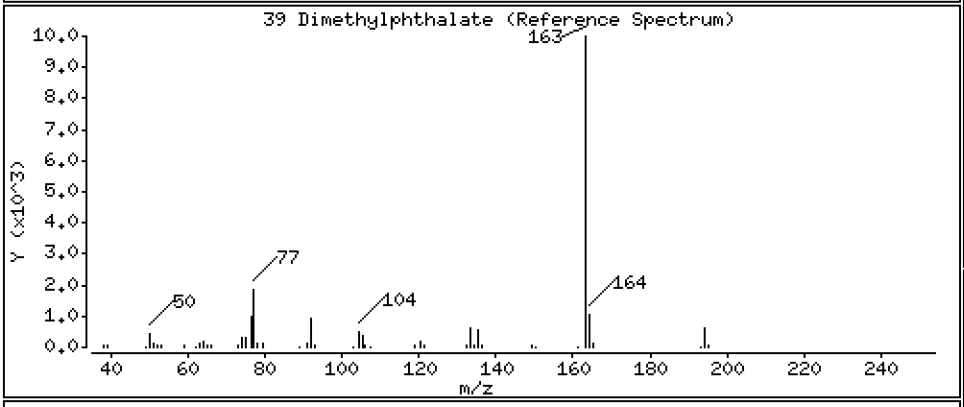
Concentration: 4.693 ug/mL

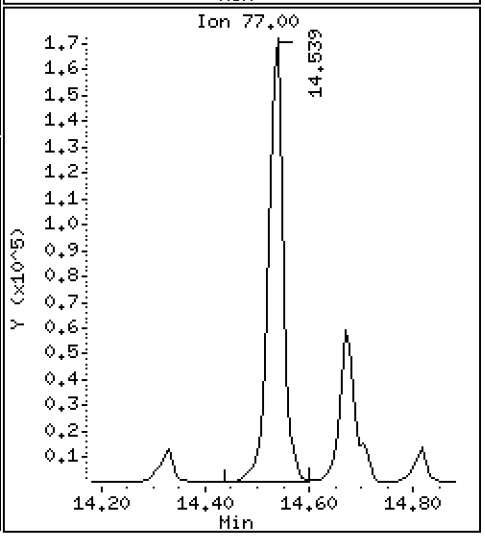


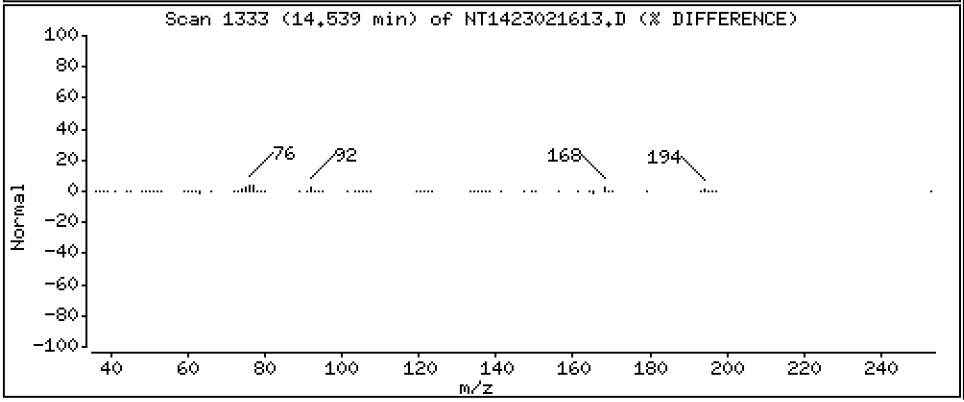












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

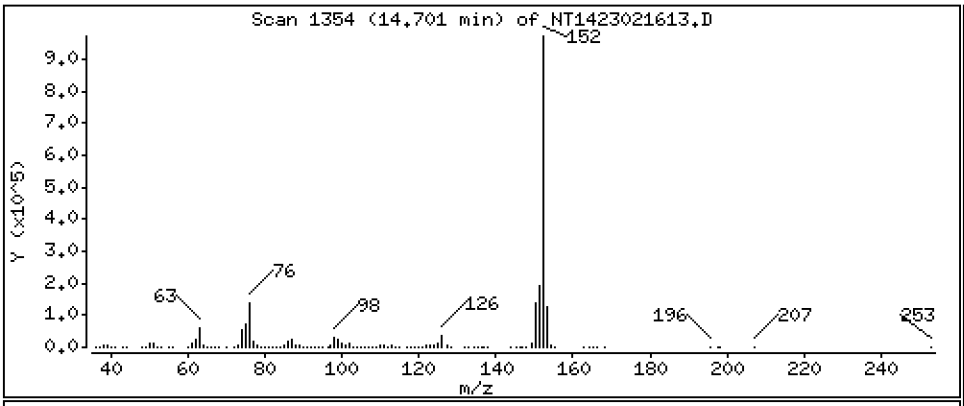
Operator: DSD

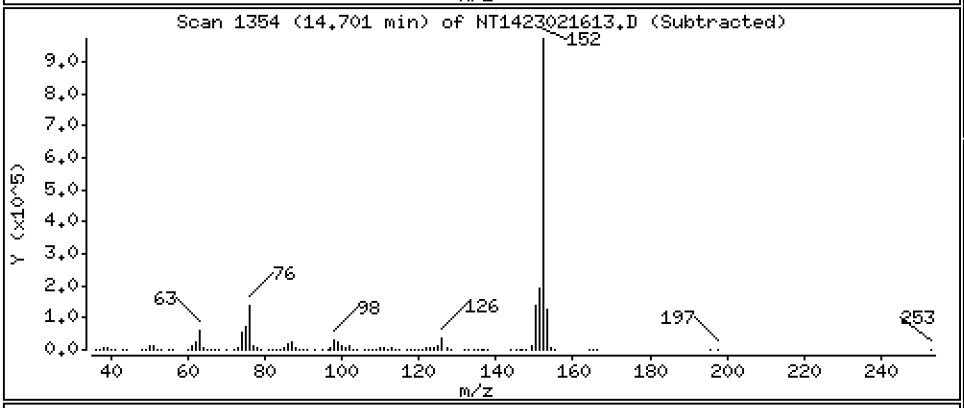
Column phase: ZB-5msi

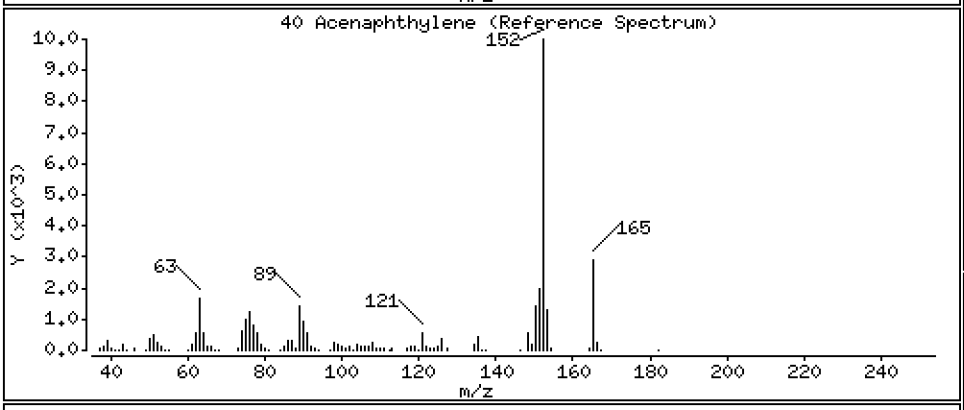
Column diameter: 0.25

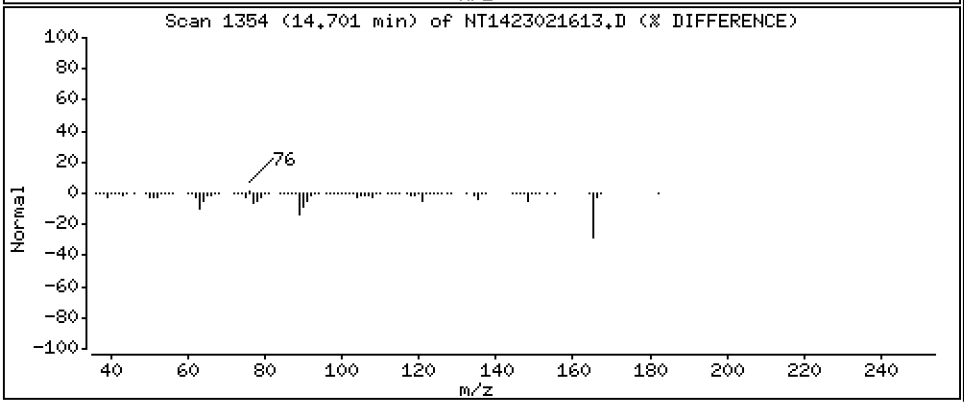
40 Acenaphthylene

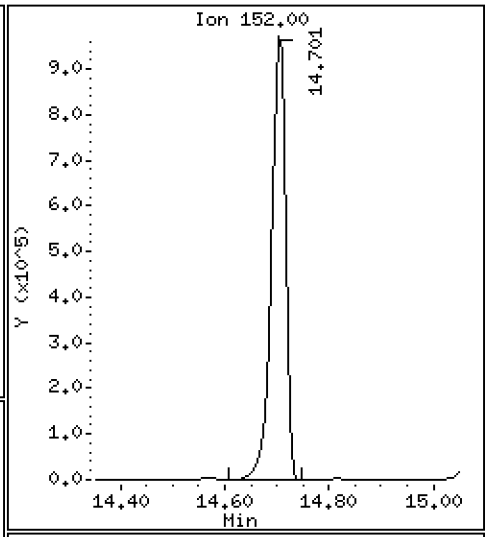
Concentration: 4.657 ug/mL

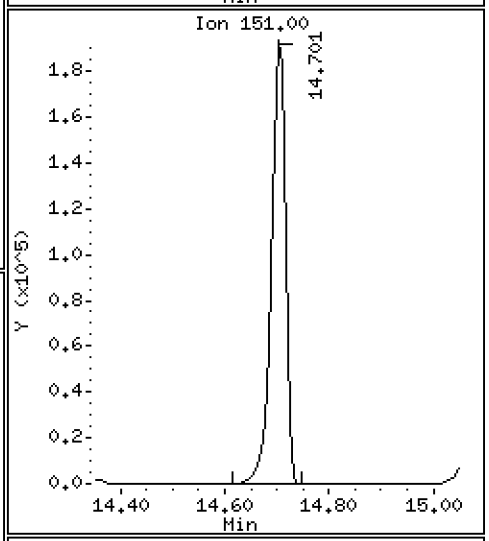


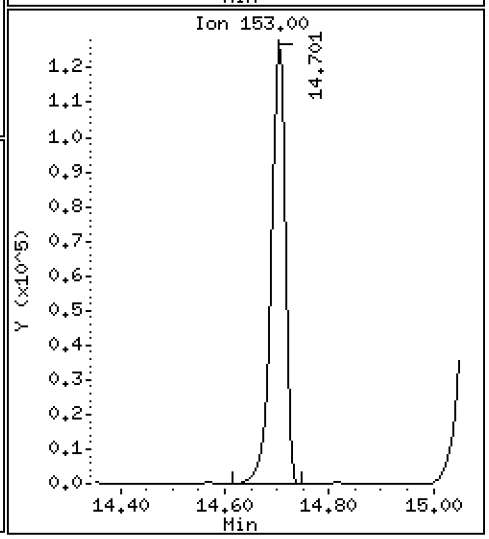












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

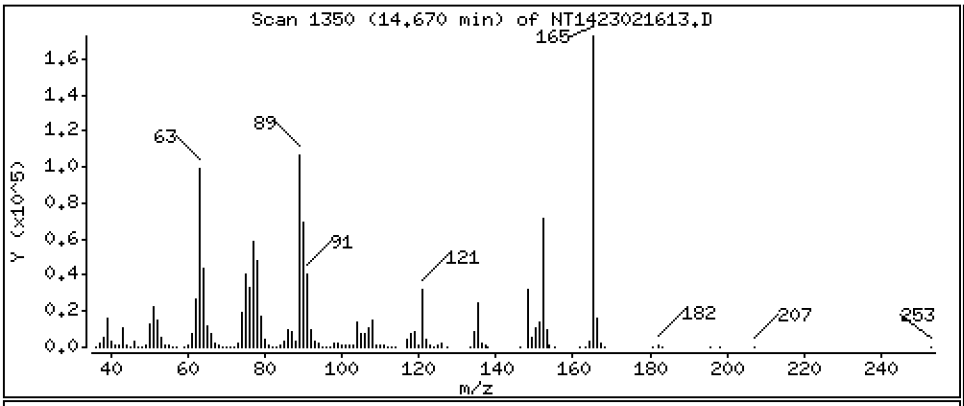
Operator: DSD

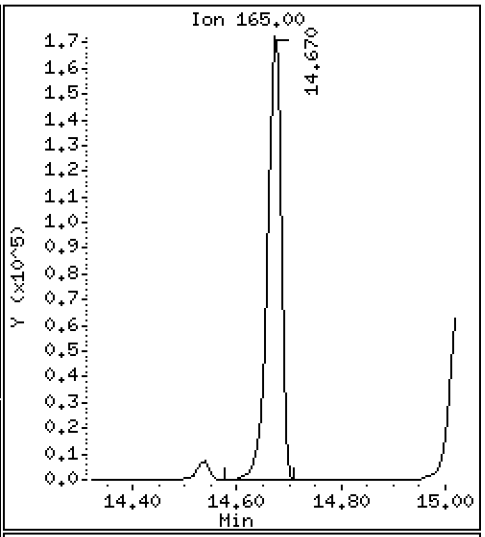
Column phase: ZB-5msi

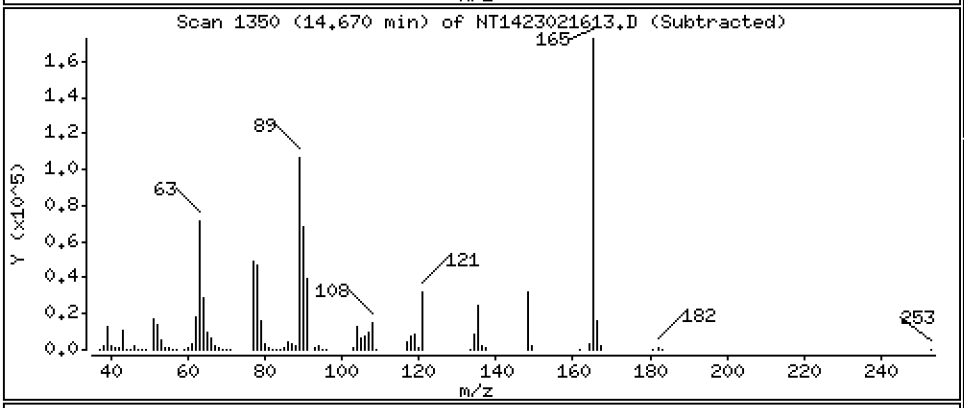
Column diameter: 0.25

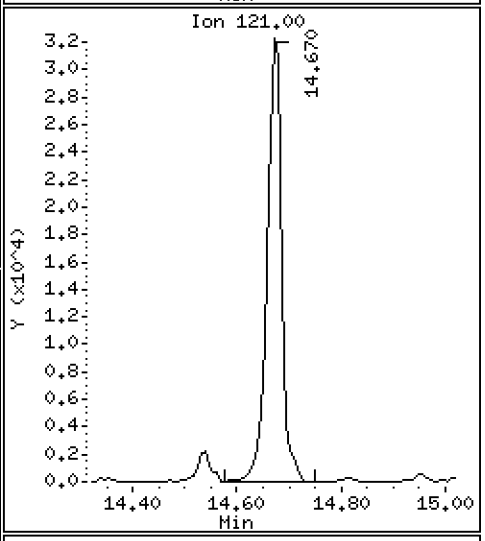
41 2,6-Dinitrotoluene

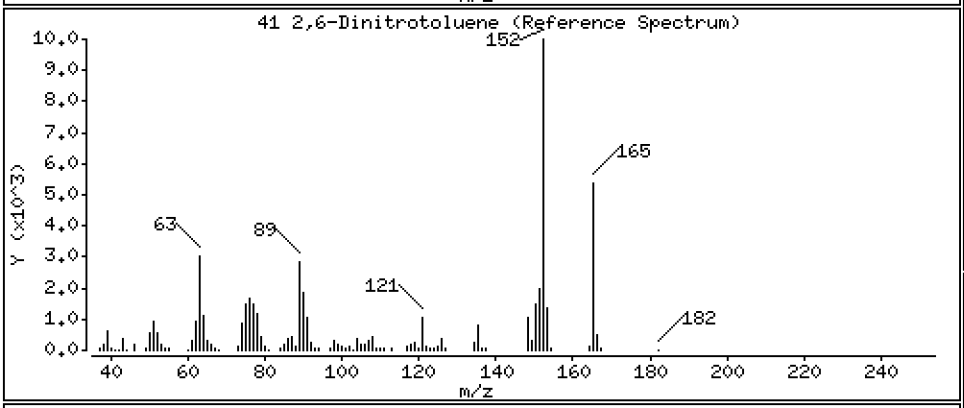
Concentration: 4.935 ug/mL

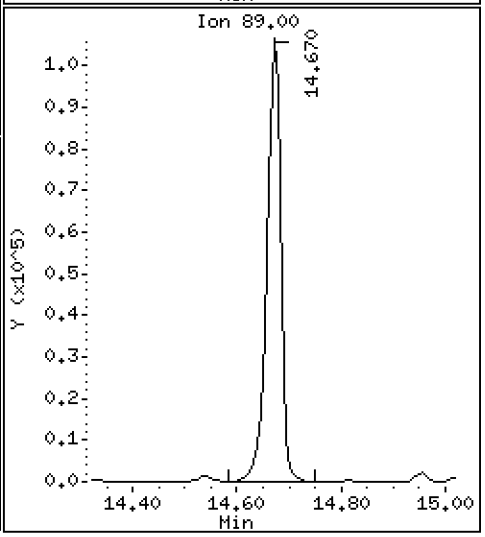


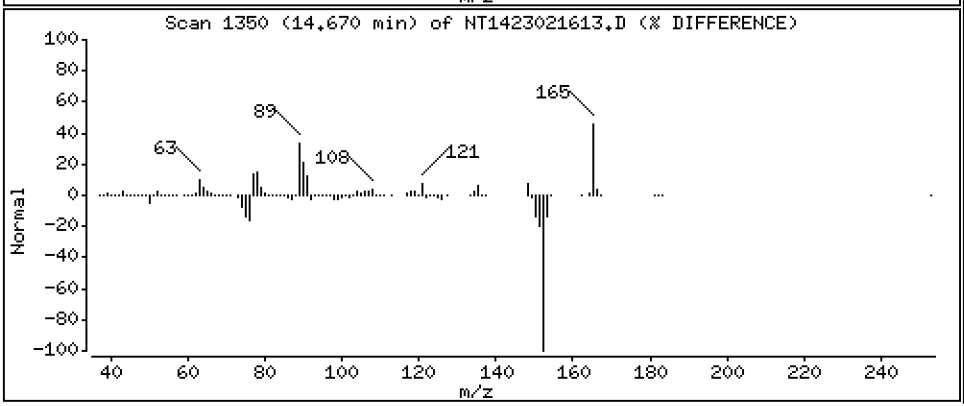












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

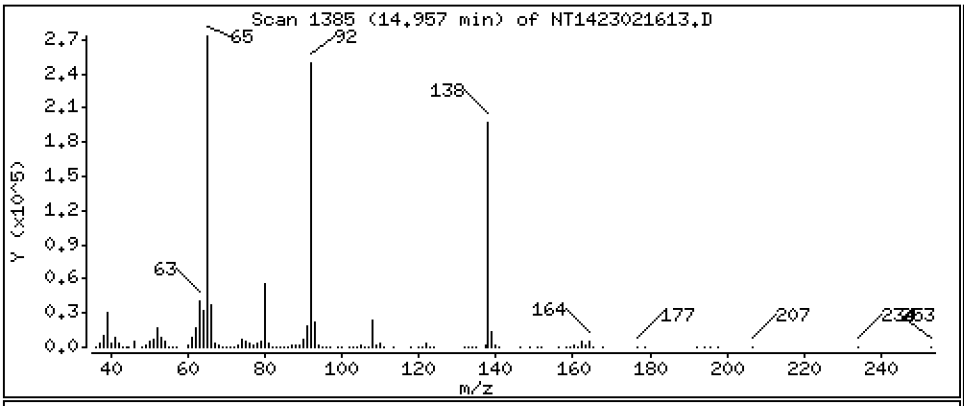
Operator: DSD

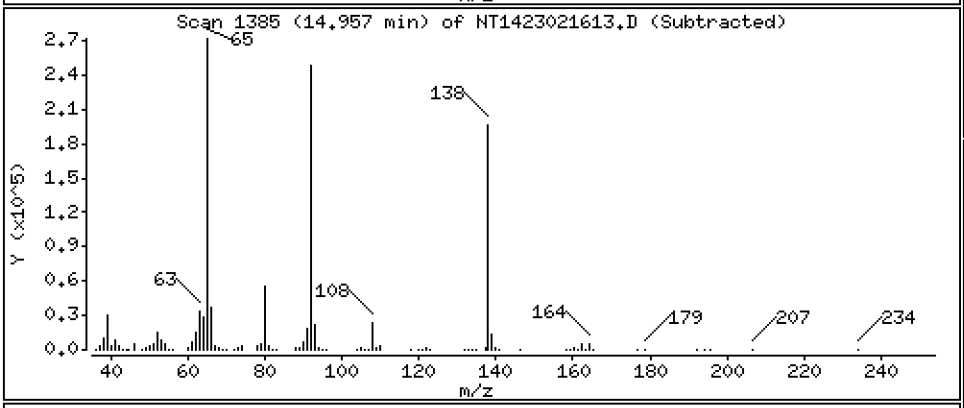
Column phase: ZB-5msi

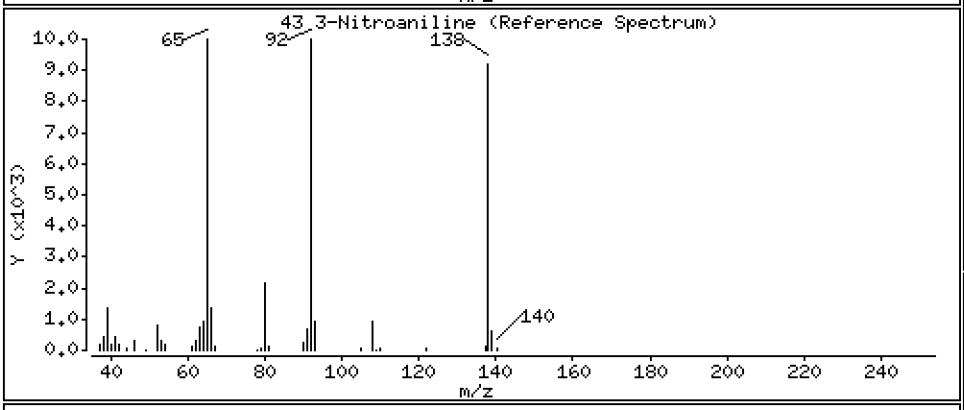
Column diameter: 0.25

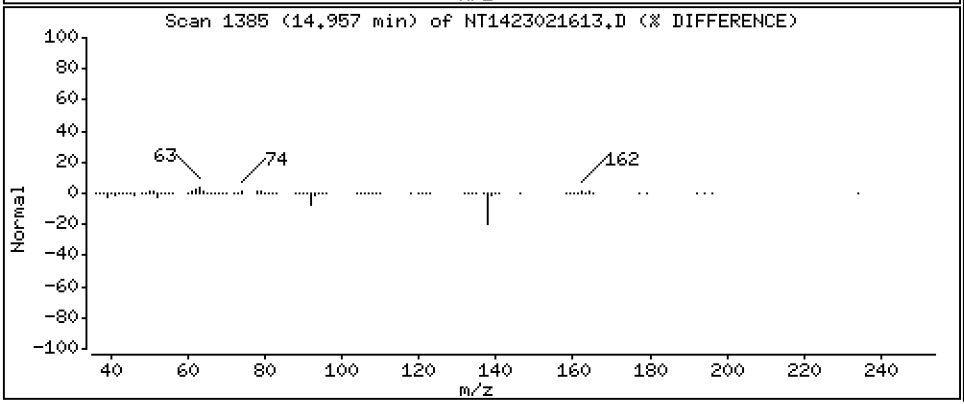
43 3-Nitroaniline

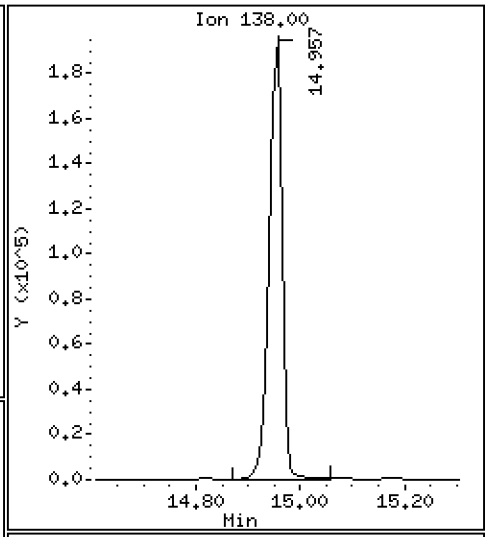
Concentration: 4.922 ug/mL

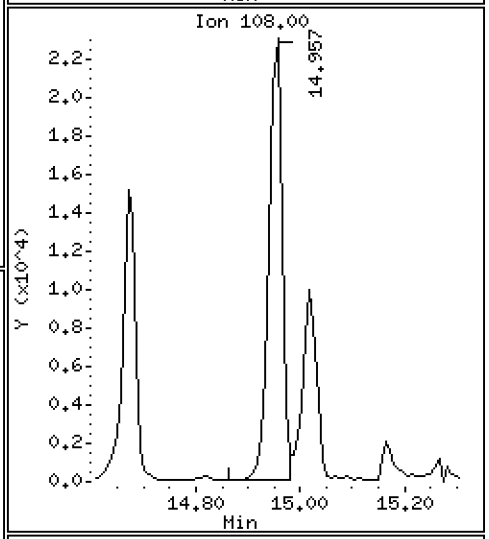


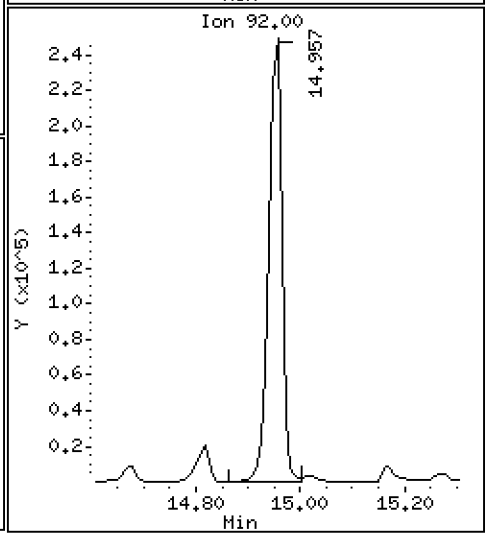












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

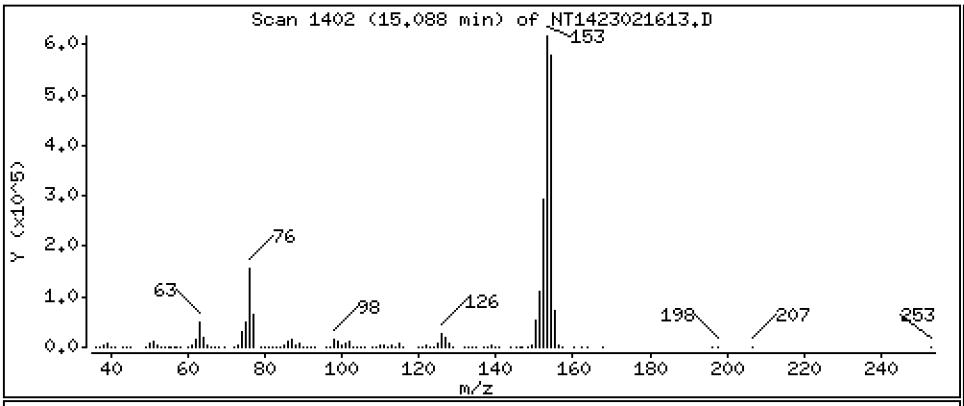
Operator: DSD

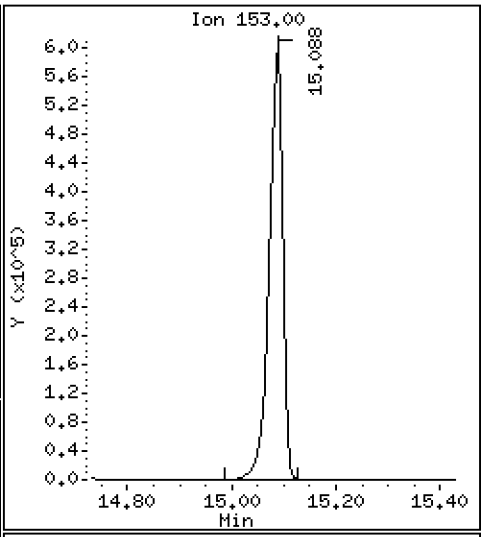
Column phase: ZB-5msi

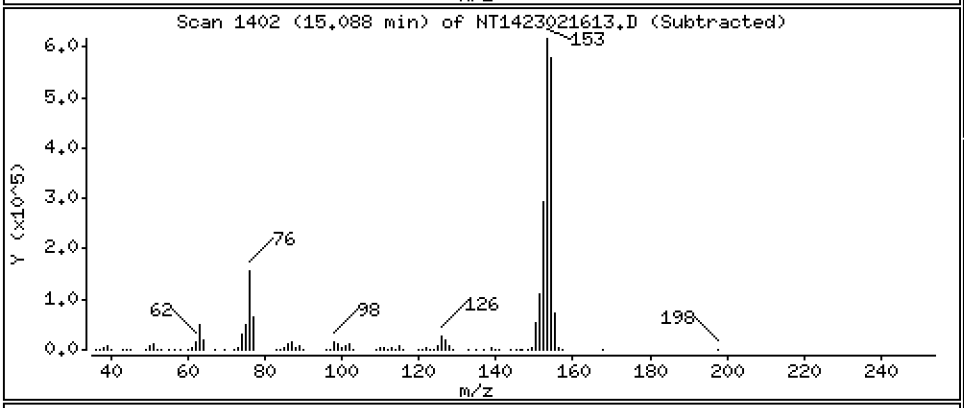
Column diameter: 0.25

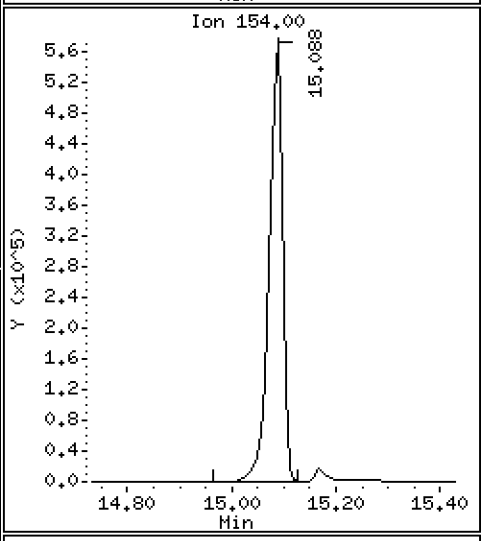
44 Acenaphthene

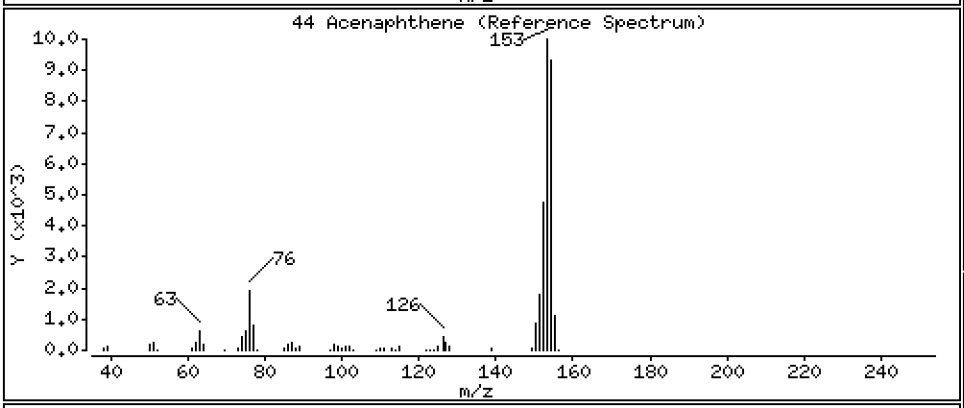
Concentration: 4.633 ug/mL

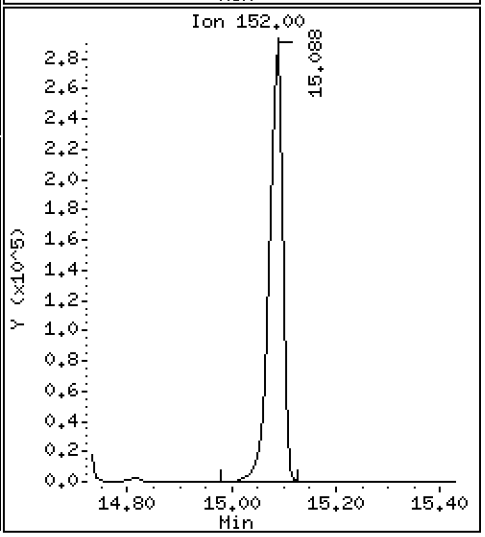


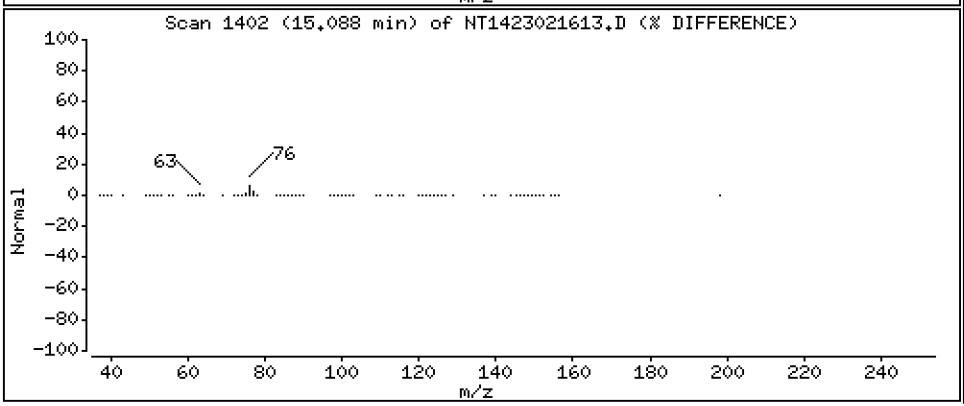












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

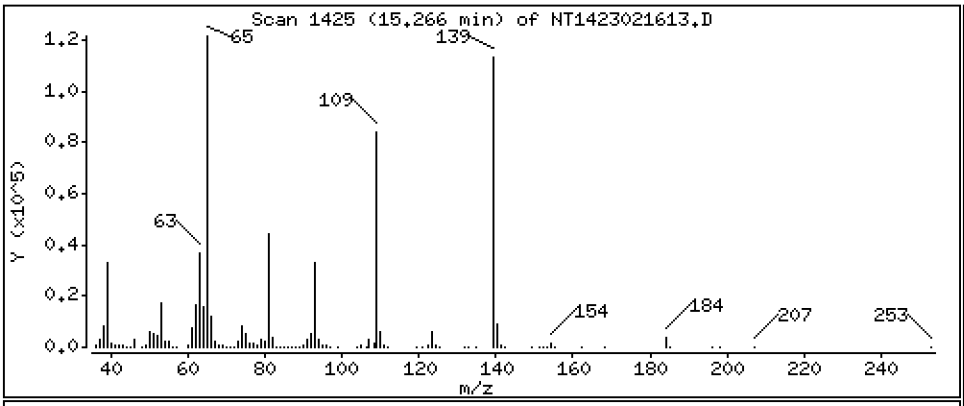
Operator: DSD

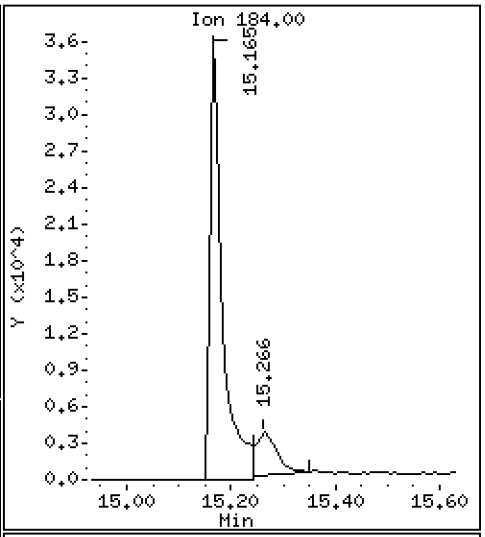
Column phase: ZB-5msi

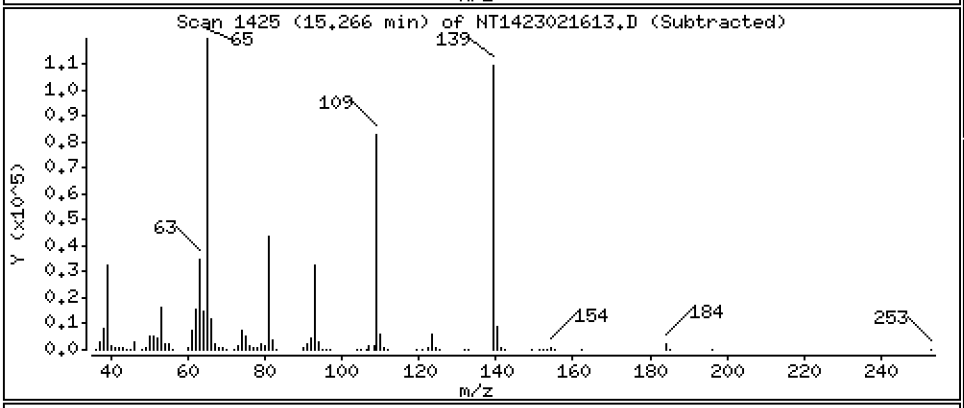
Column diameter: 0.25

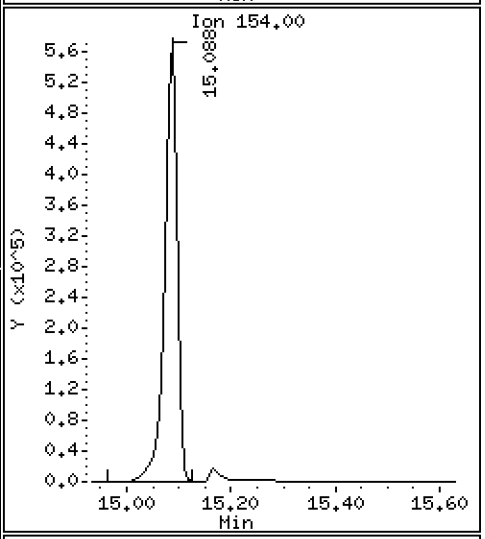
45 2,4-Dinitrophenol

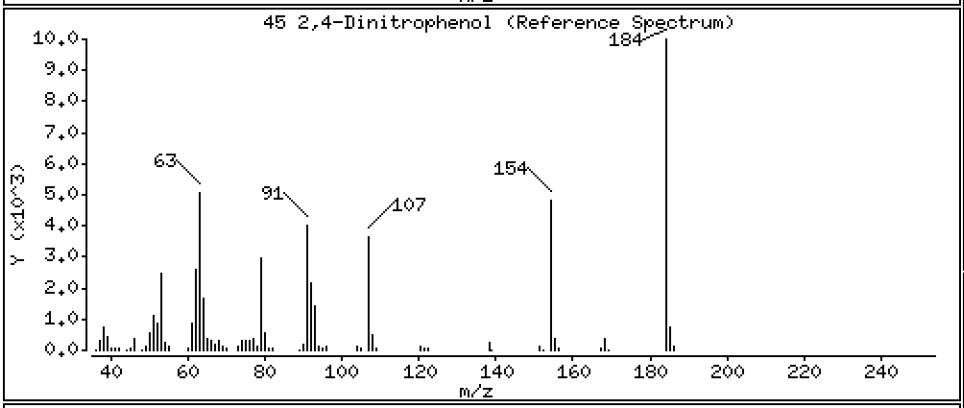
Concentration: 0.2502 ug/mL

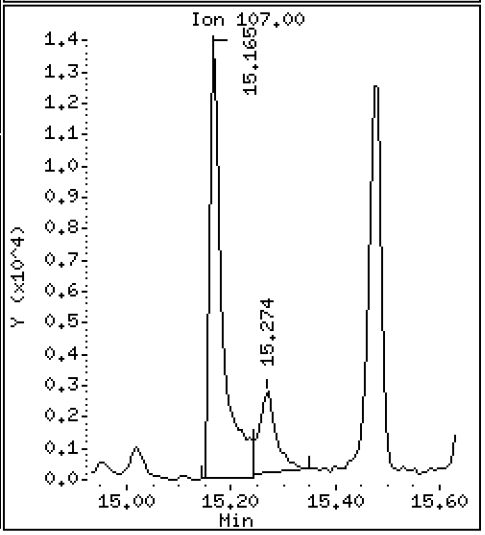


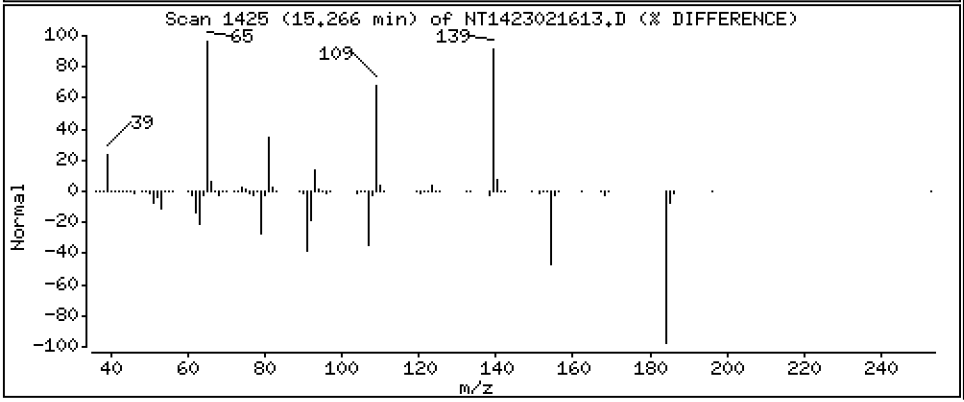












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

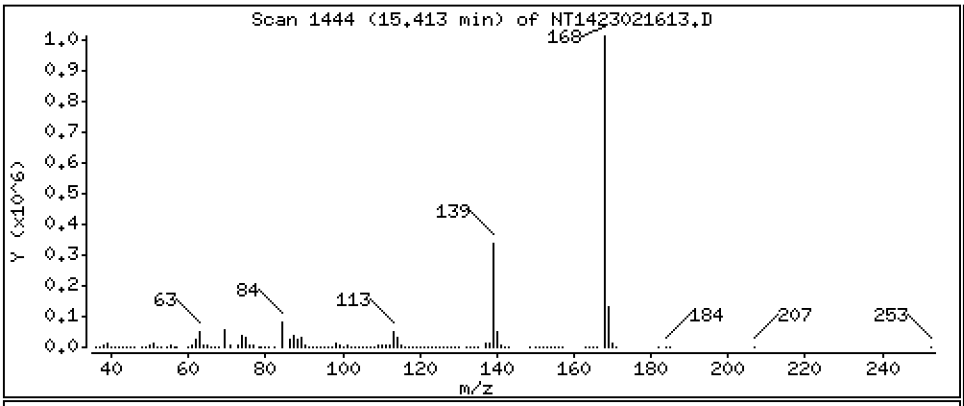
Operator: DSD

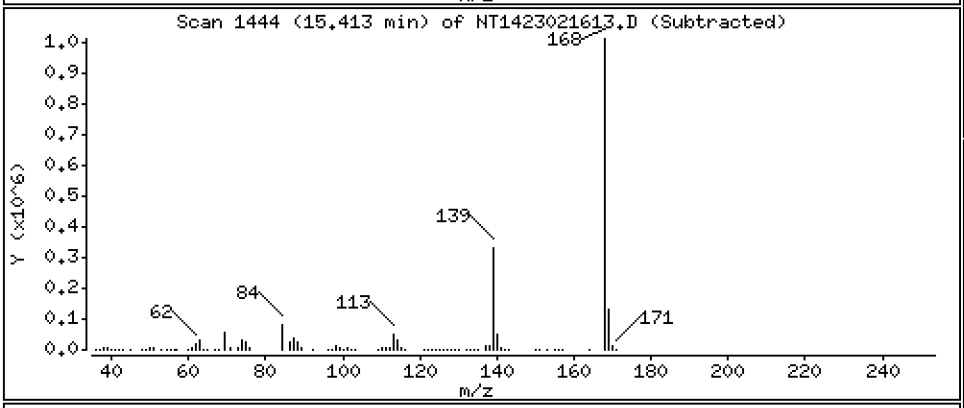
Column phase: ZB-5msi

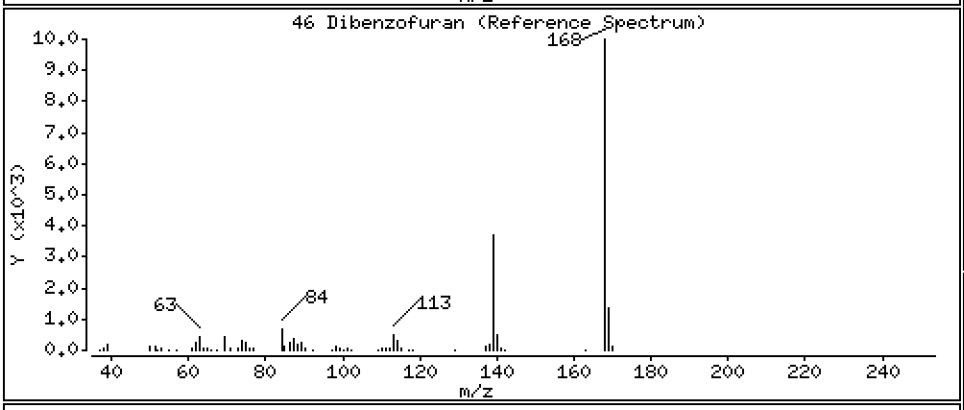
Column diameter: 0.25

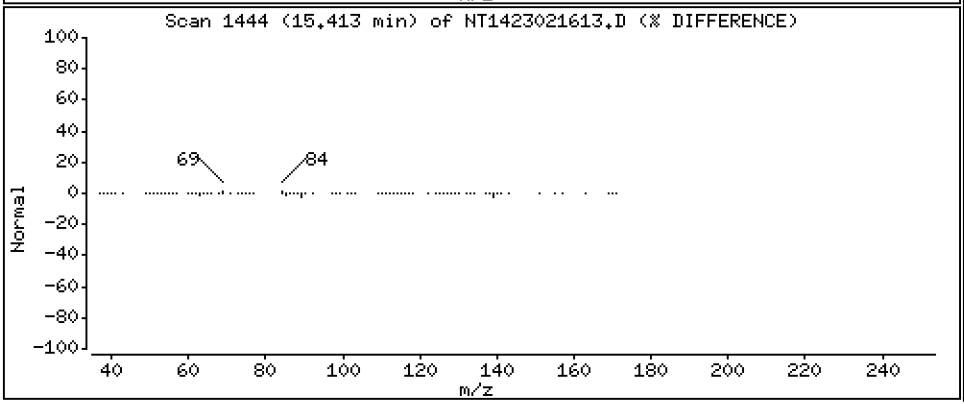
46 Dibenzofuran

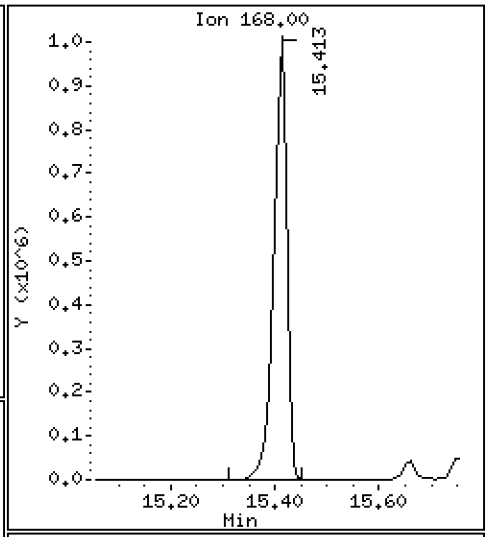
Concentration: 4.548 ug/mL

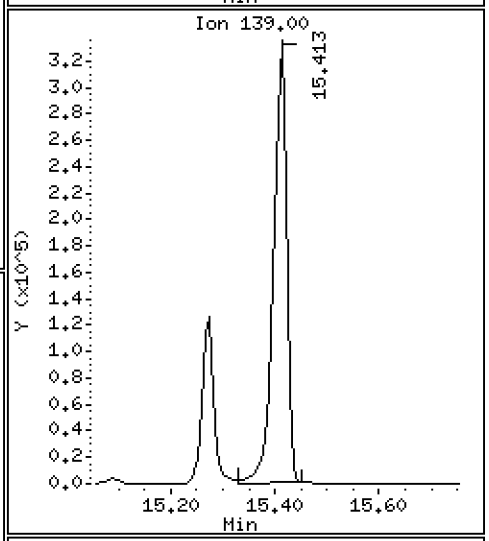


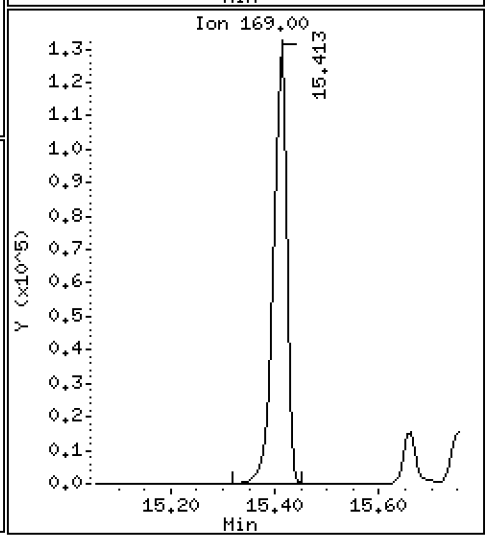












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

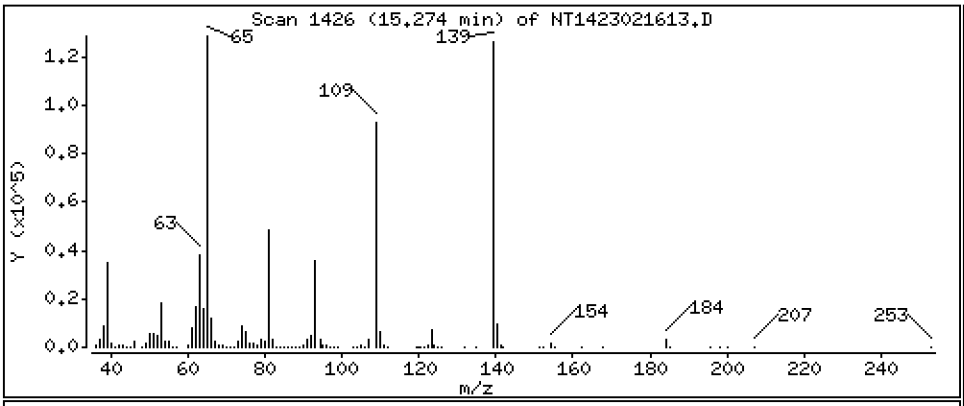
Operator: DSD

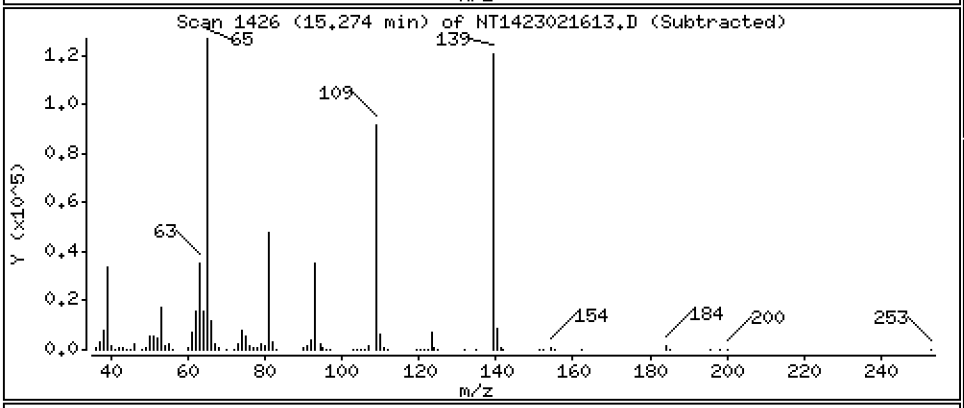
Column phase: ZB-5msi

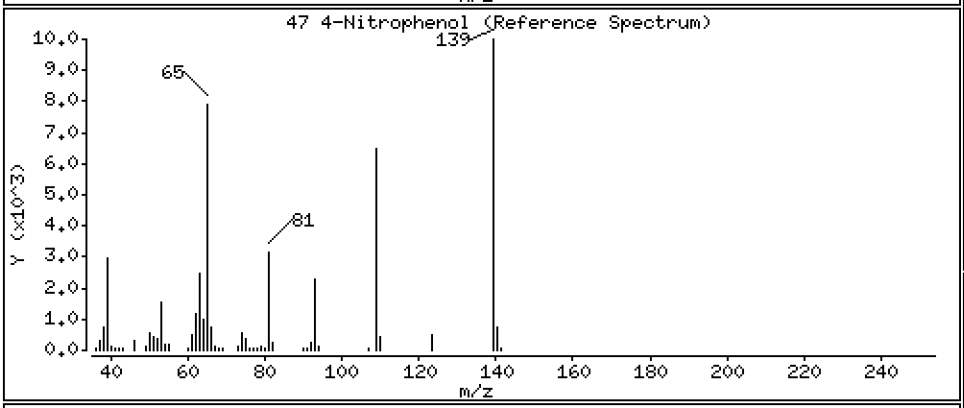
Column diameter: 0.25

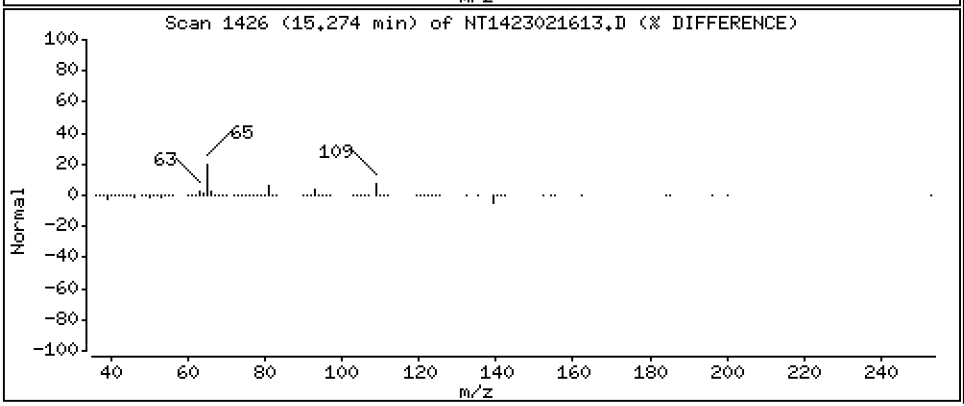
47 4-Nitrophenol

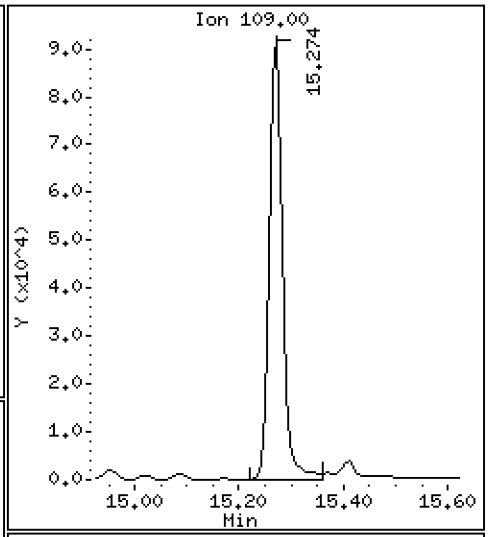
Concentration: 4.052 ug/mL

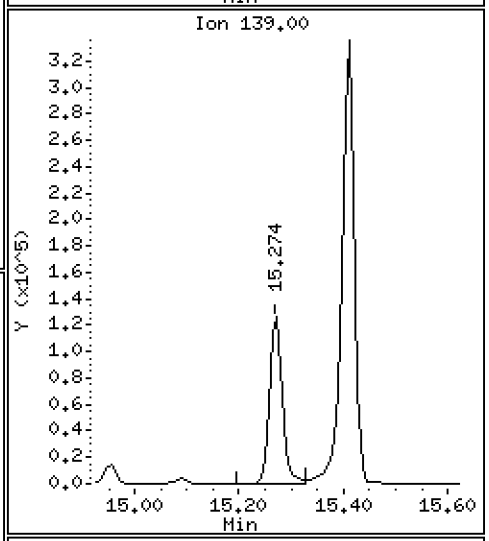


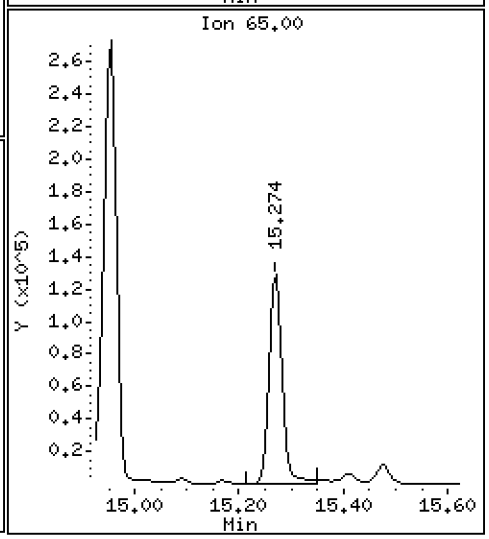












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

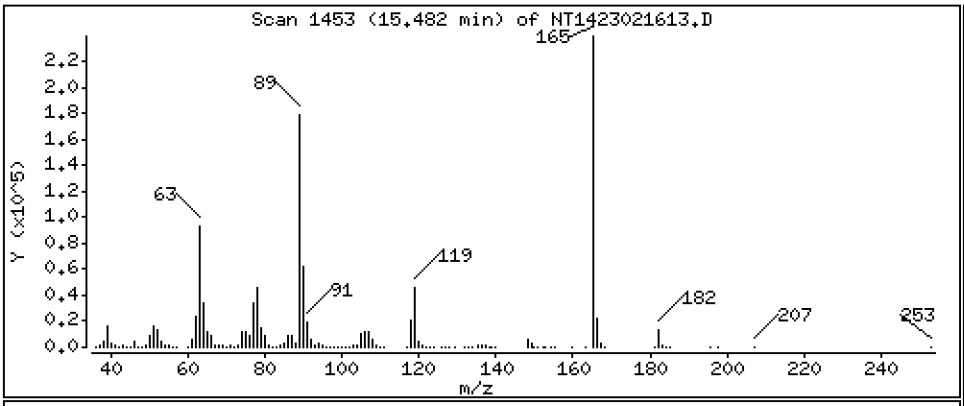
Operator: DSD

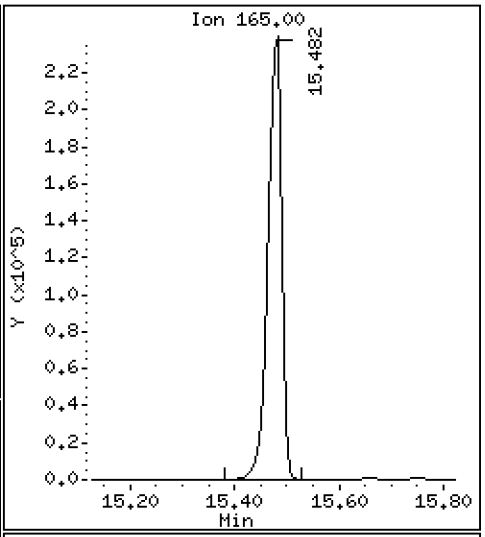
Column phase: ZB-5msi

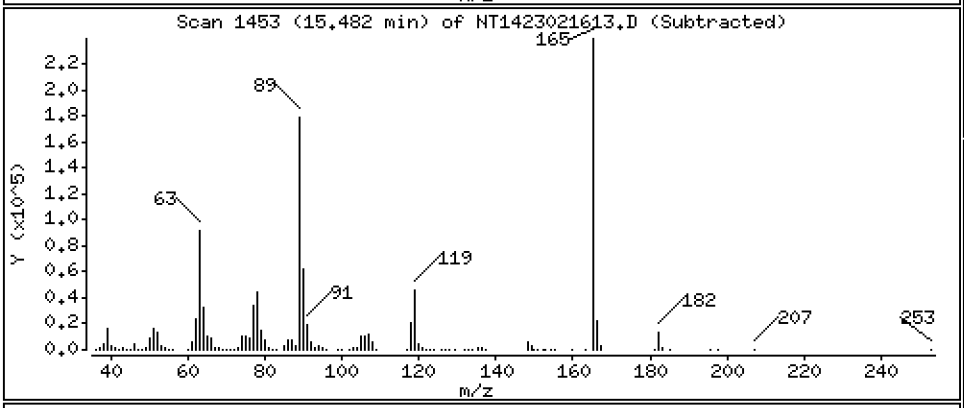
Column diameter: 0.25

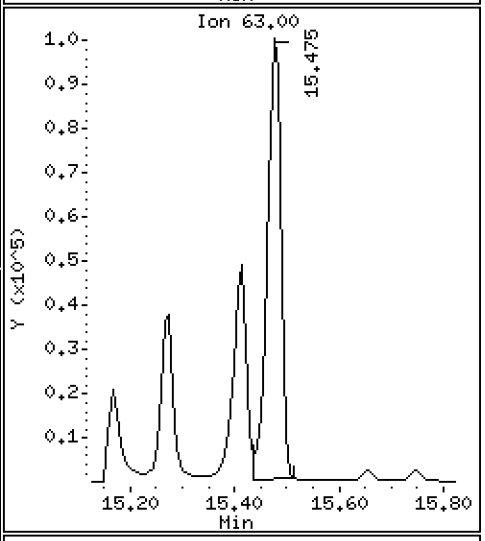
48 2,4-Dinitrotoluene

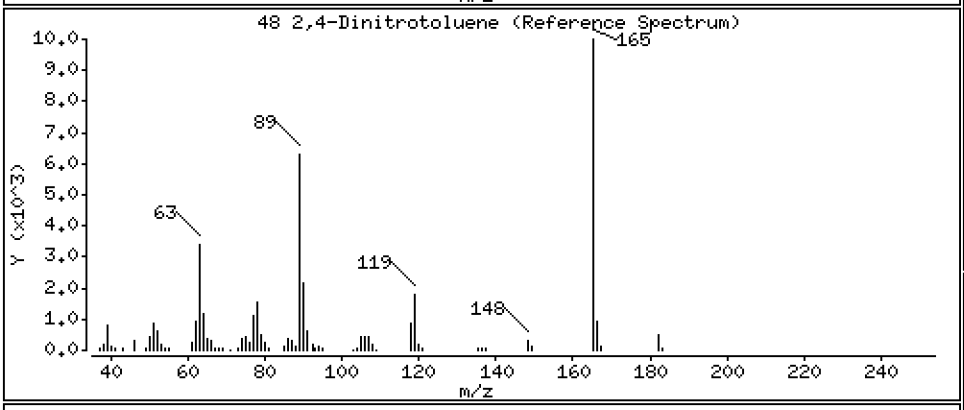
Concentration: 4.855 ug/mL

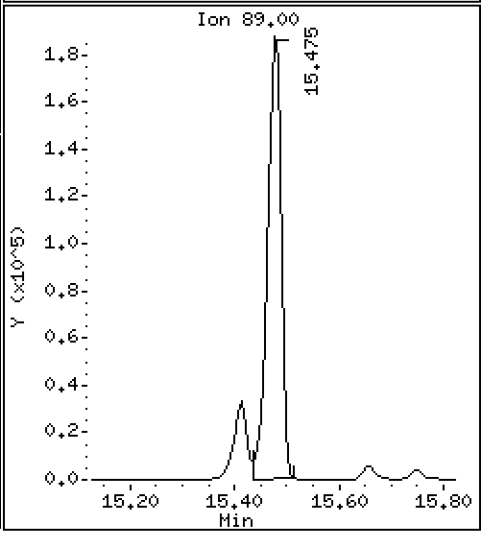


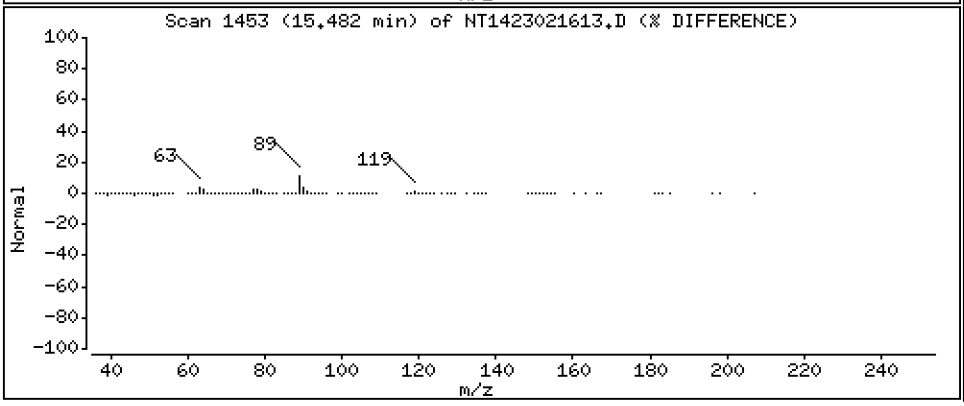












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

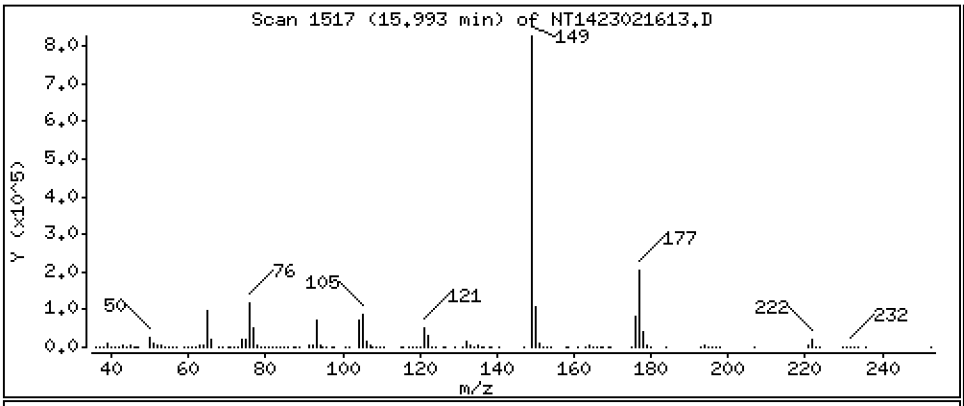
Operator: DSD

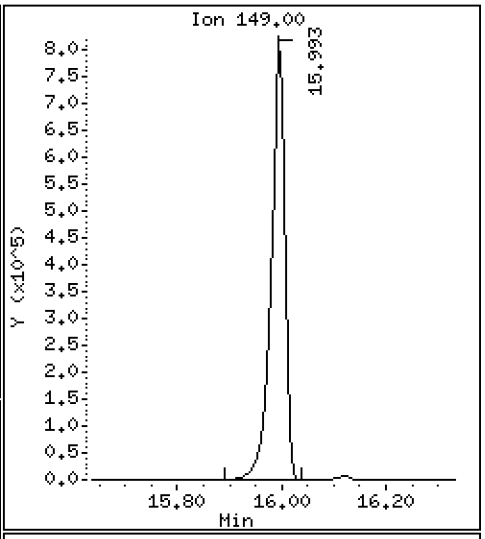
Column phase: ZB-5msi

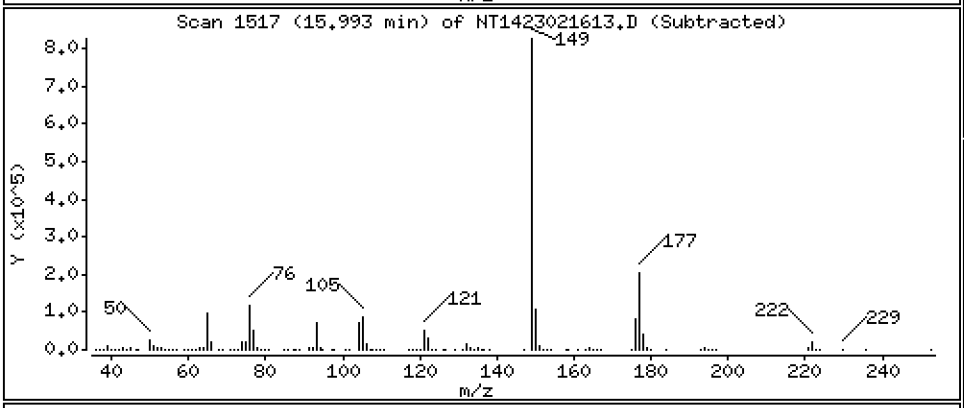
Column diameter: 0.25

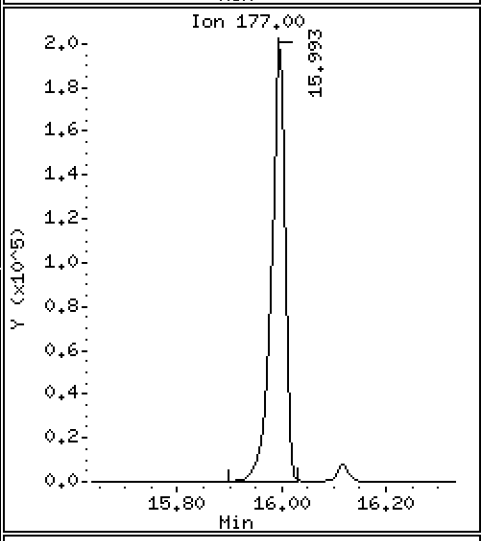
50 Diethylphthalate

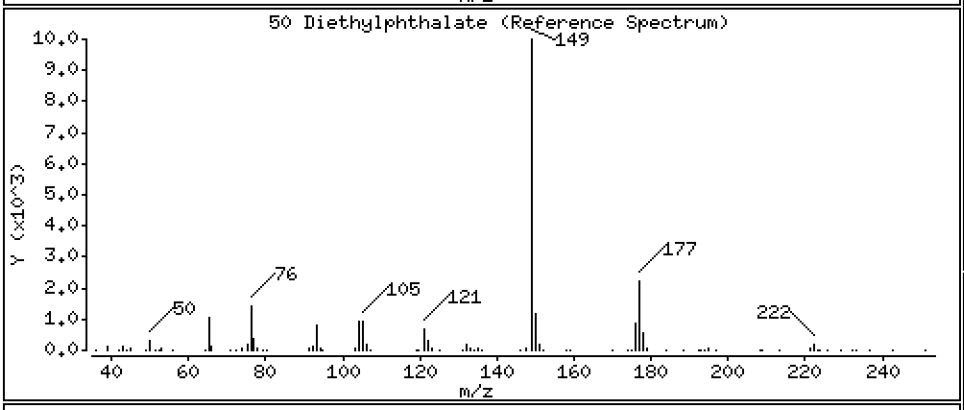
Concentration: 4.722 ug/mL

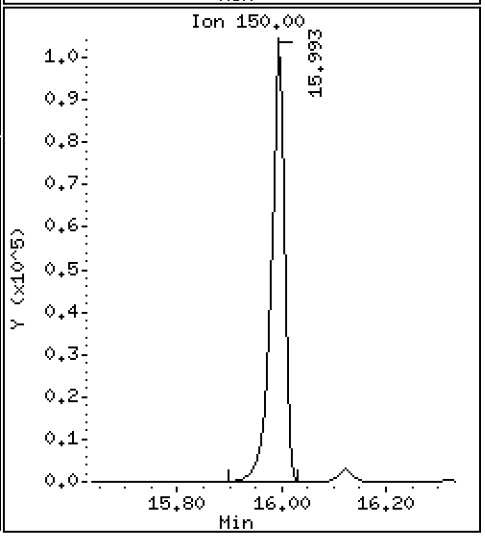


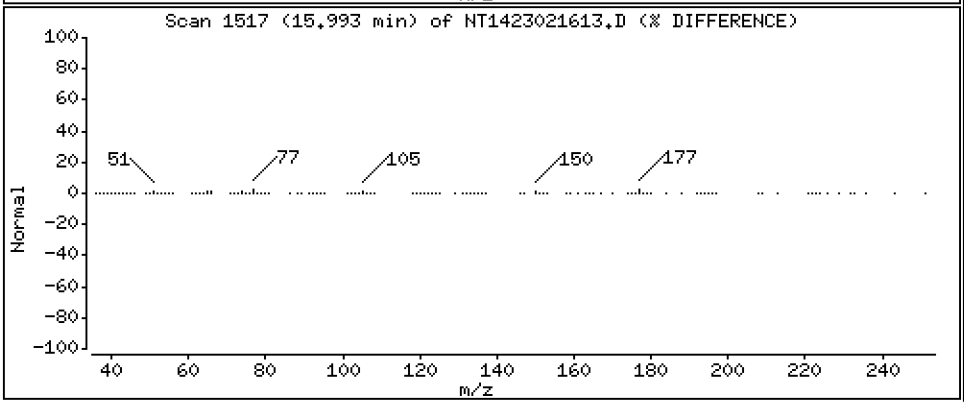












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

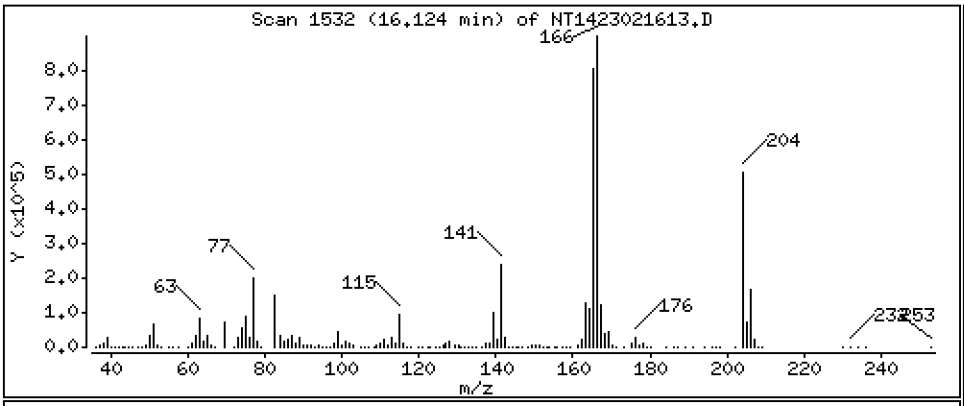
Operator: DSD

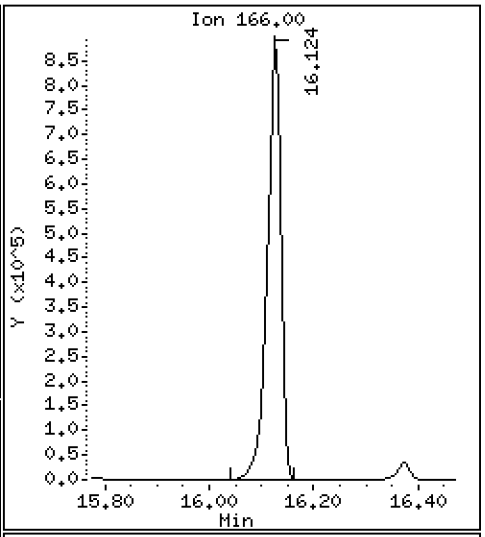
Column phase: ZB-5msi

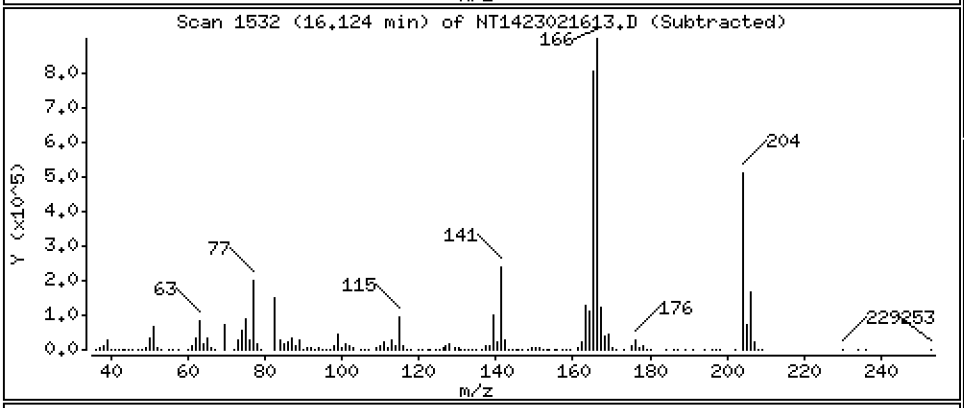
Column diameter: 0.25

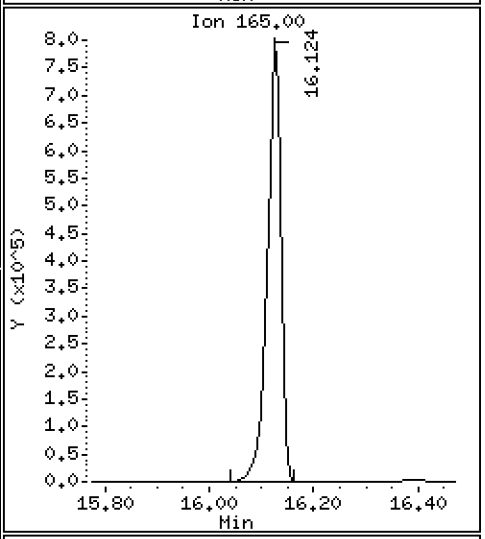
49 Fluorene

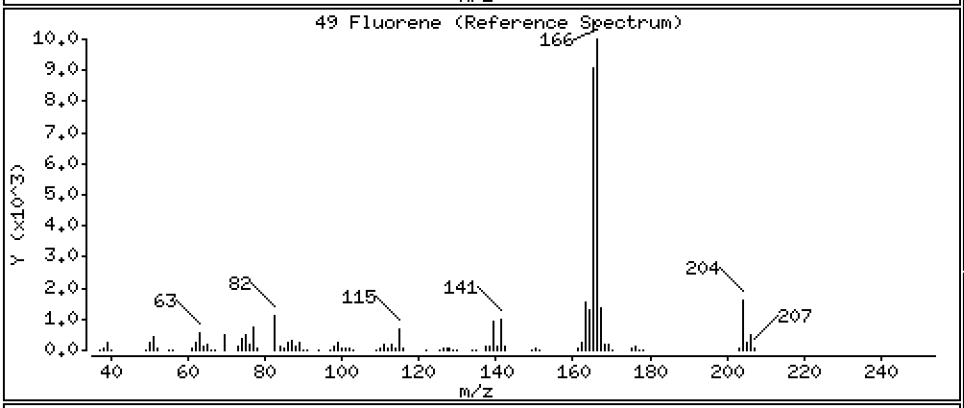
Concentration: 4.638 ug/mL

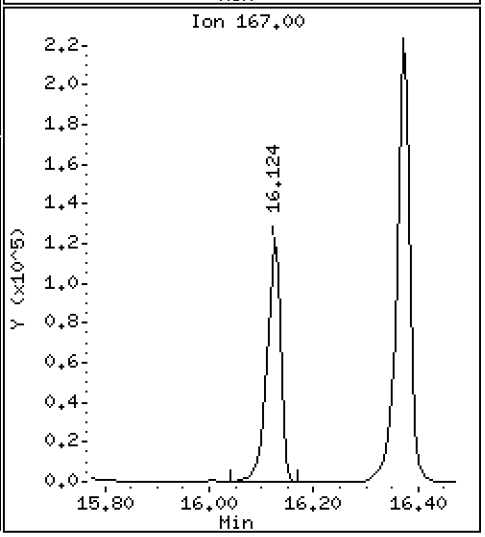


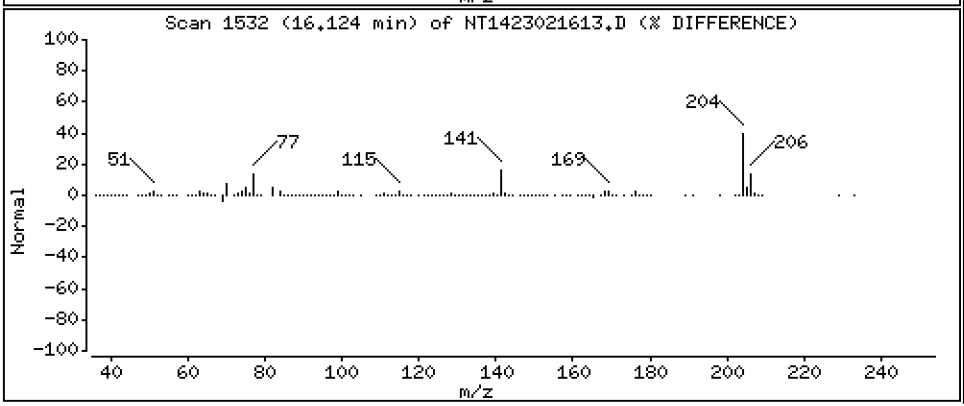












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

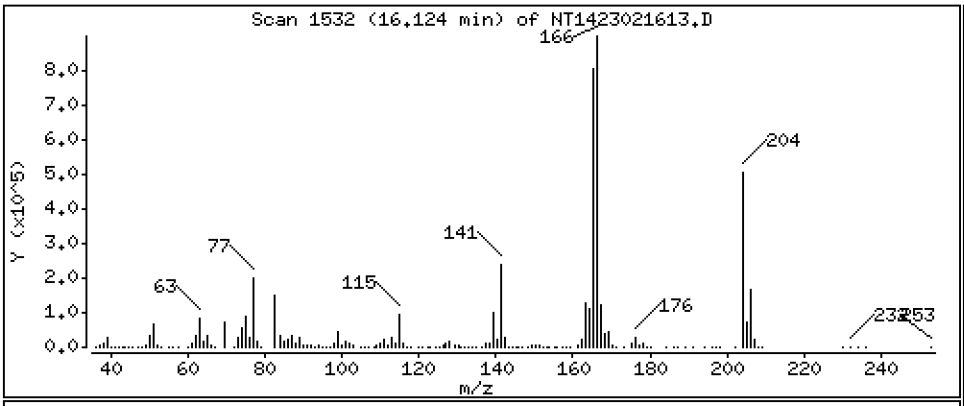
Operator: DSD

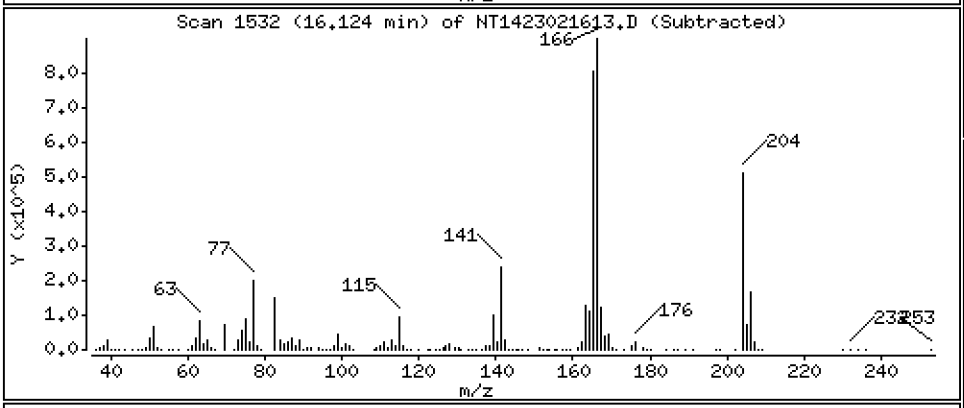
Column phase: ZB-5msi

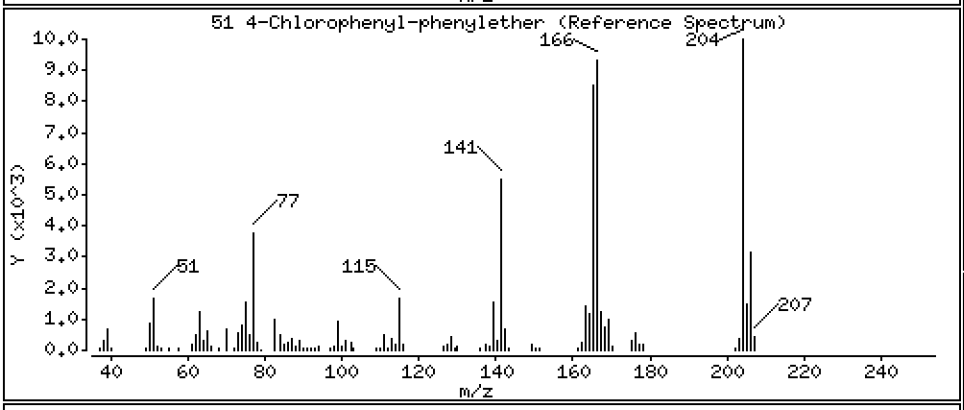
Column diameter: 0.25

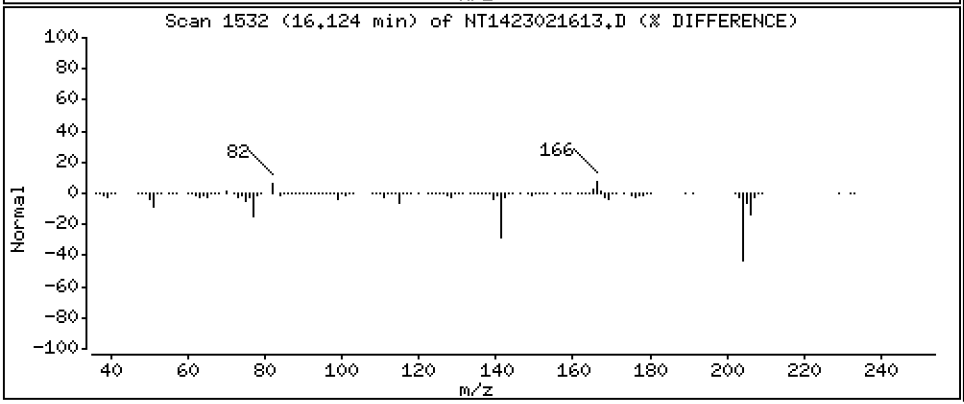
51 4-Chlorophenyl-phenylether

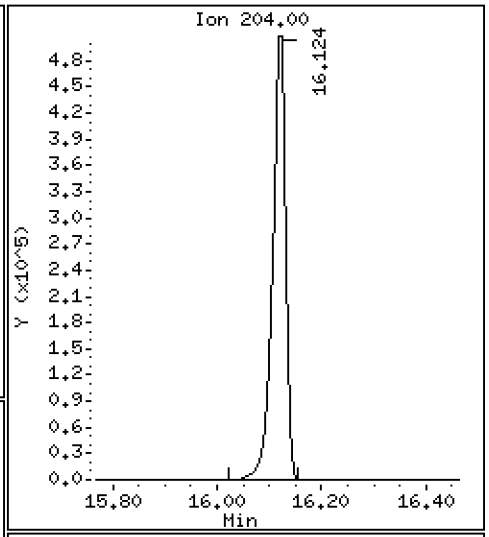
Concentration: 4.754 ug/mL

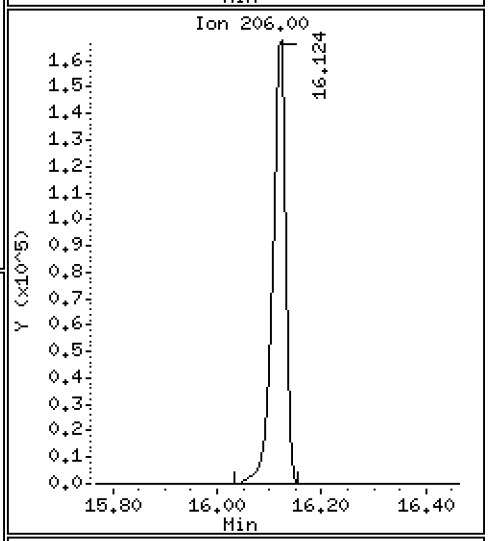


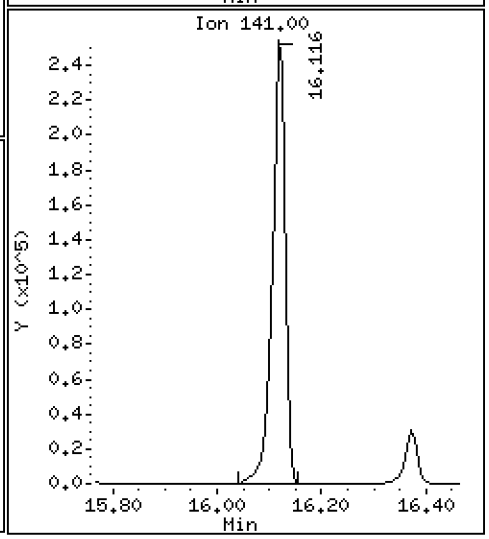












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

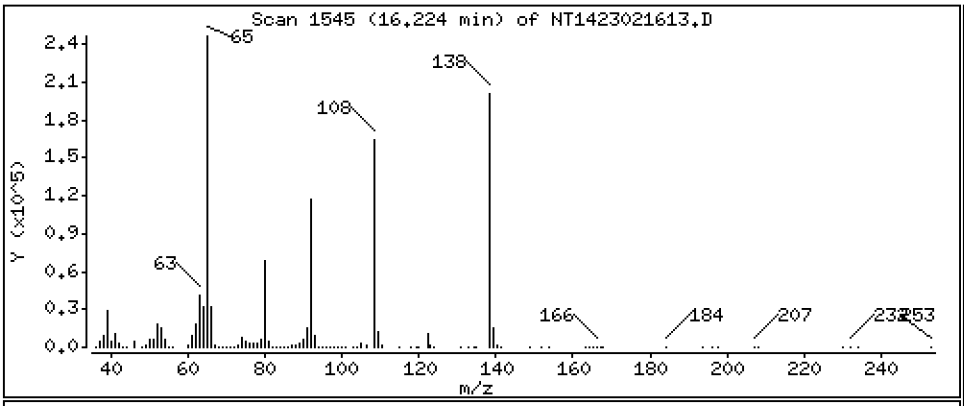
Operator: DSD

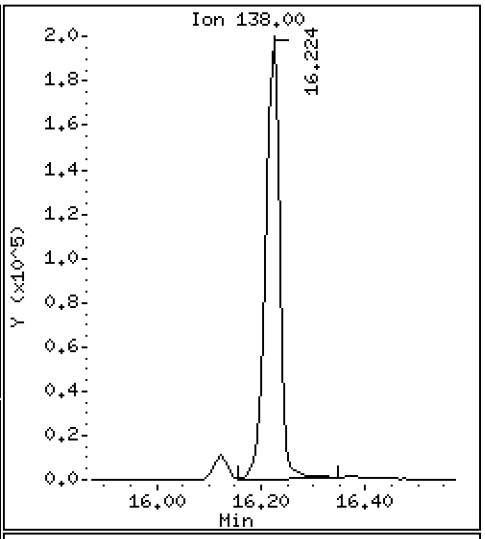
Column phase: ZB-5msi

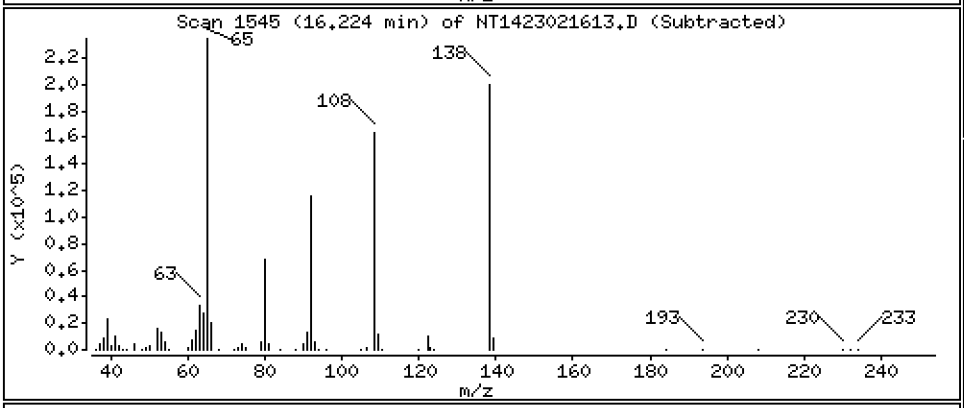
Column diameter: 0.25

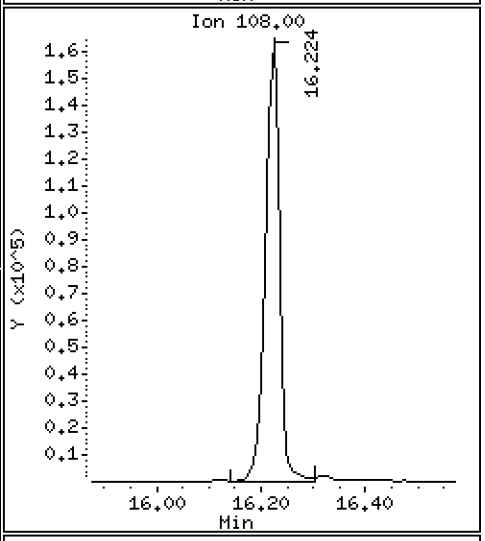
52 4-Nitroaniline

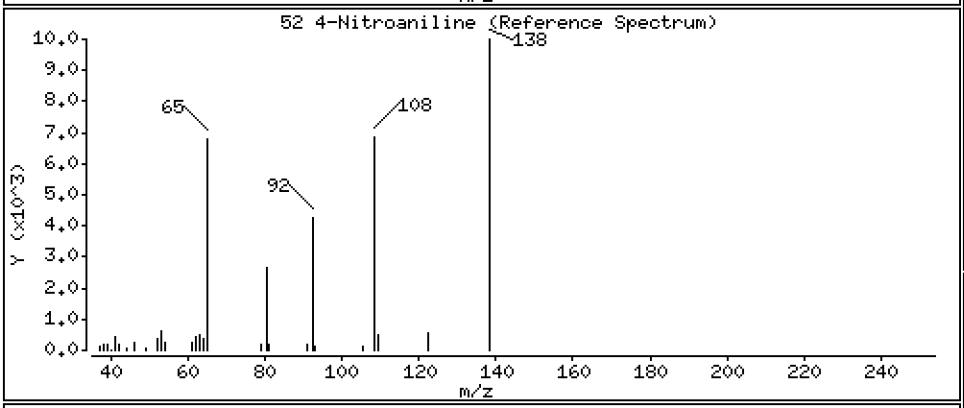
Concentration: 4.762 ug/mL

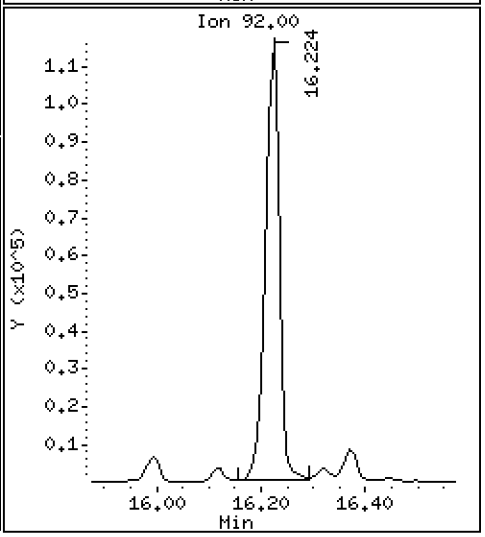


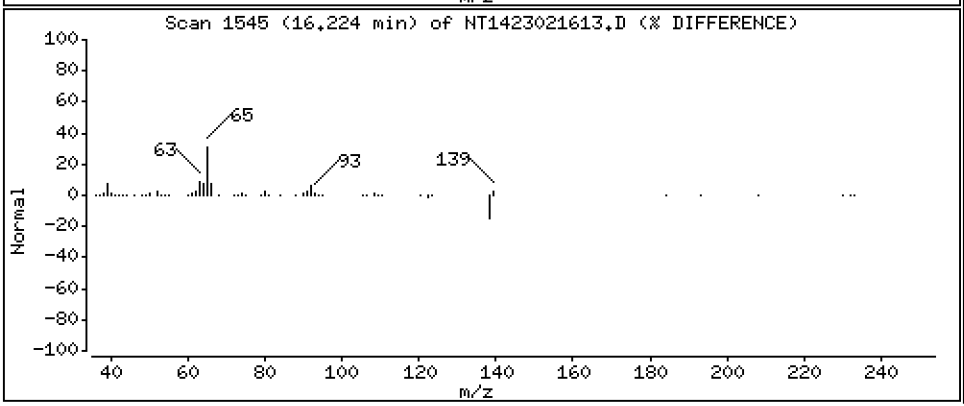












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

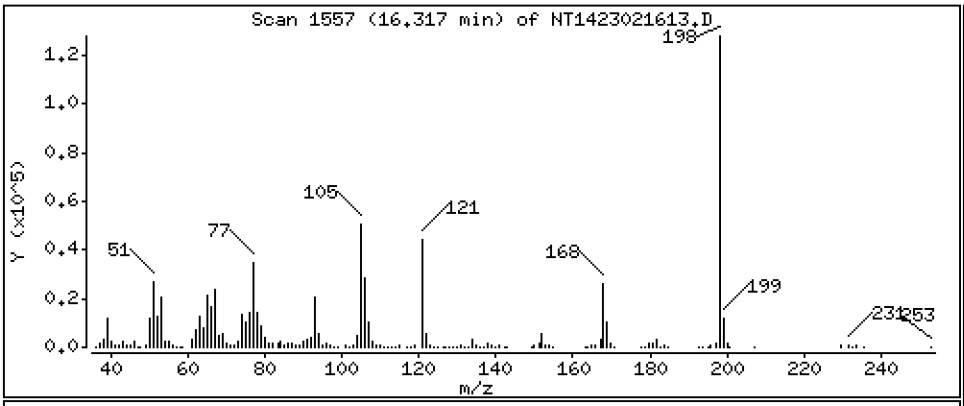
Operator: DSD

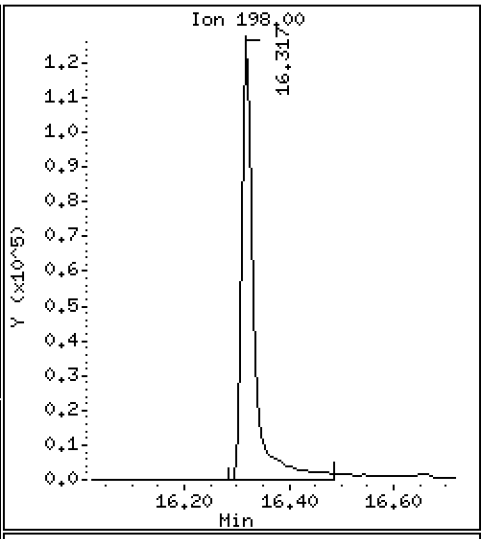
Column phase: ZB-5msi

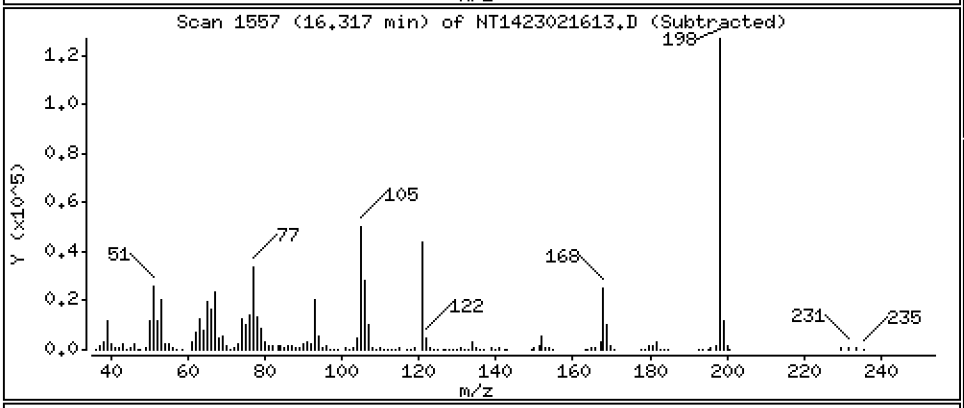
Column diameter: 0.25

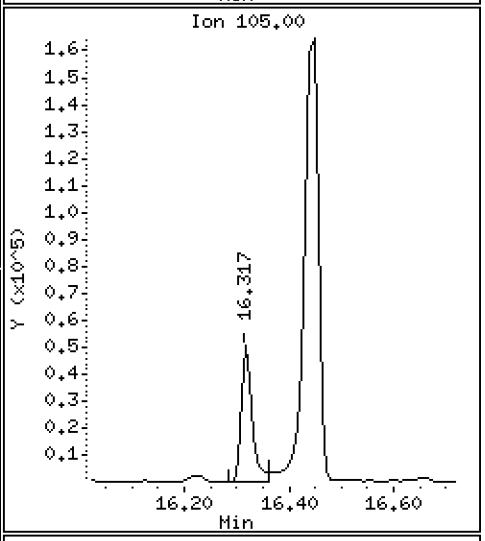
53 4,6-Dinitro-2-methylphenol

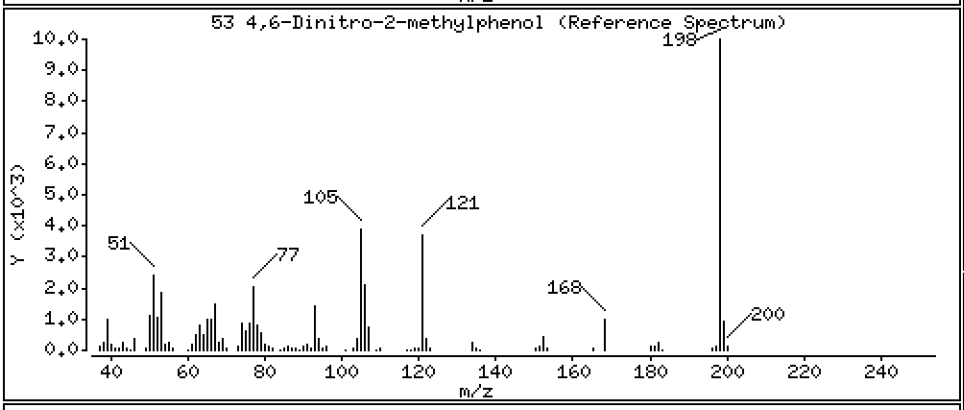
Concentration: 3.653 ug/mL

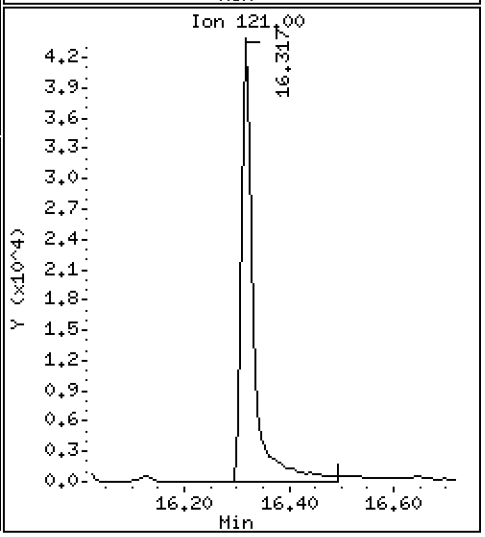


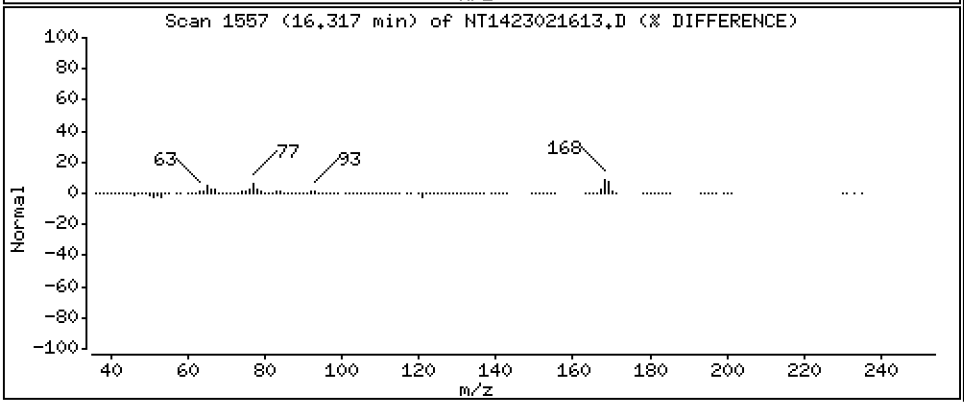












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

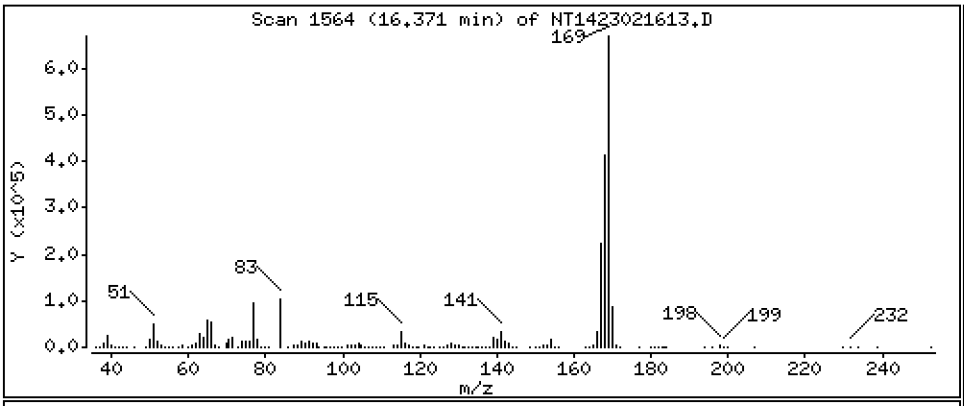
Operator: DSD

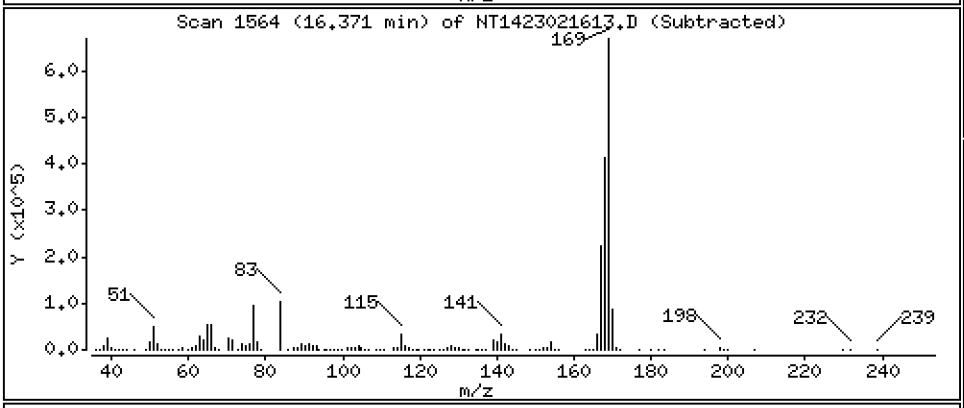
Column phase: ZB-5msi

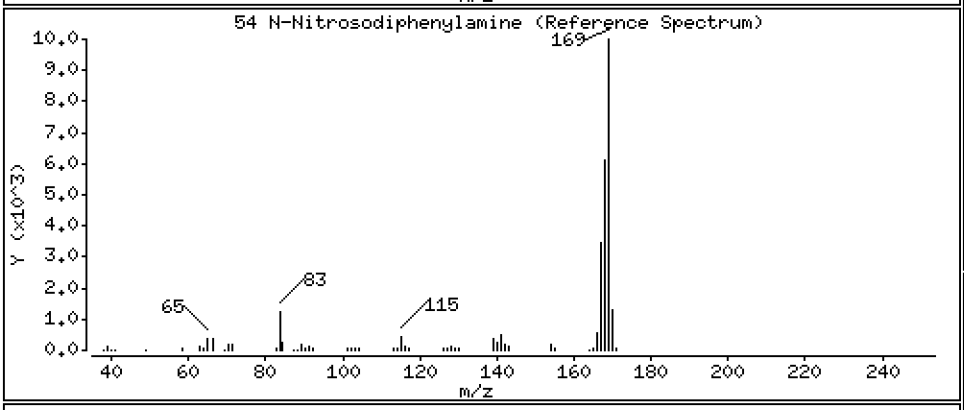
Column diameter: 0.25

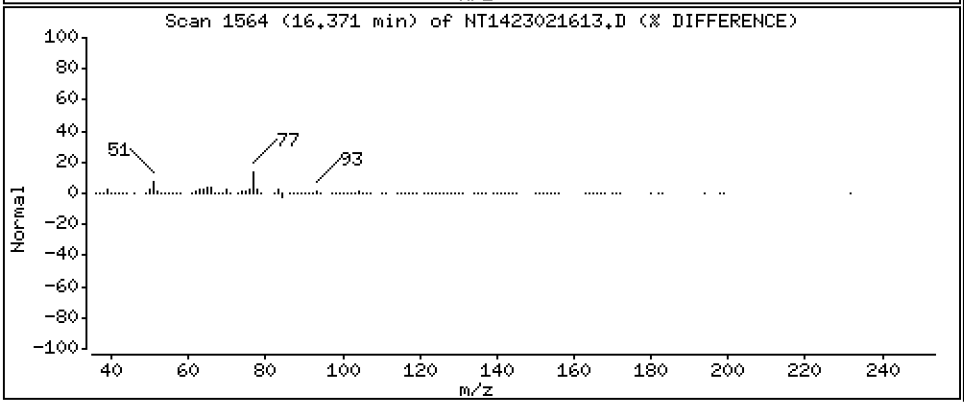
54 N-Nitrosodiphenylamine

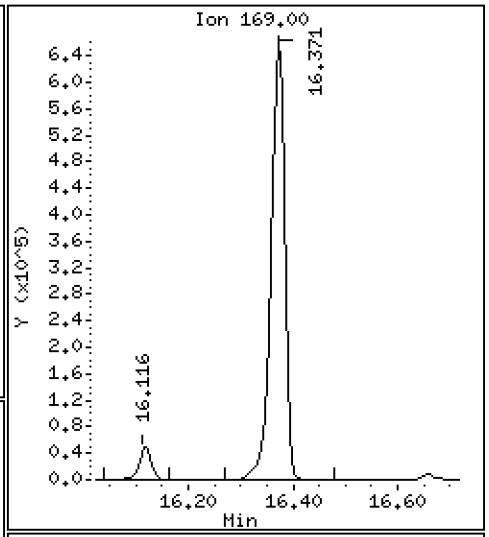
Concentration: 4.907 ug/mL

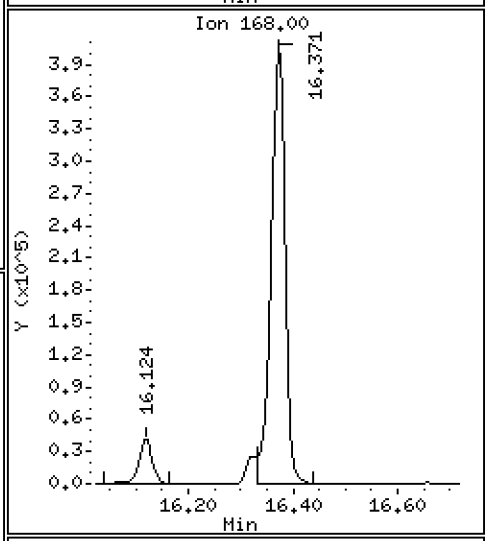


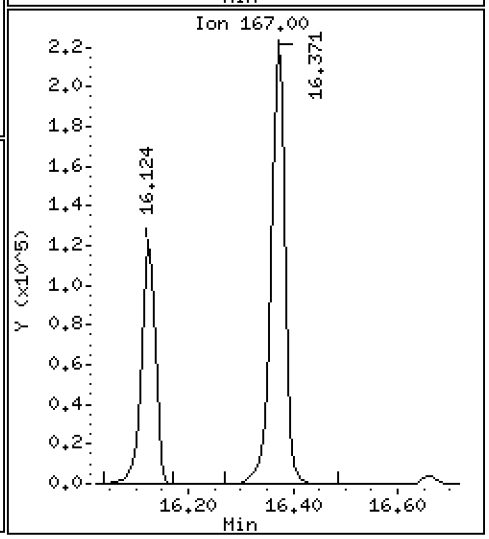












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

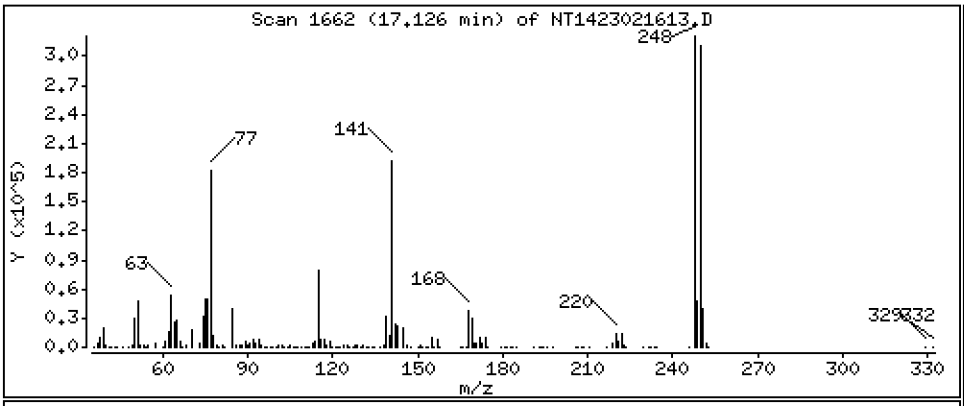
Operator: DSD

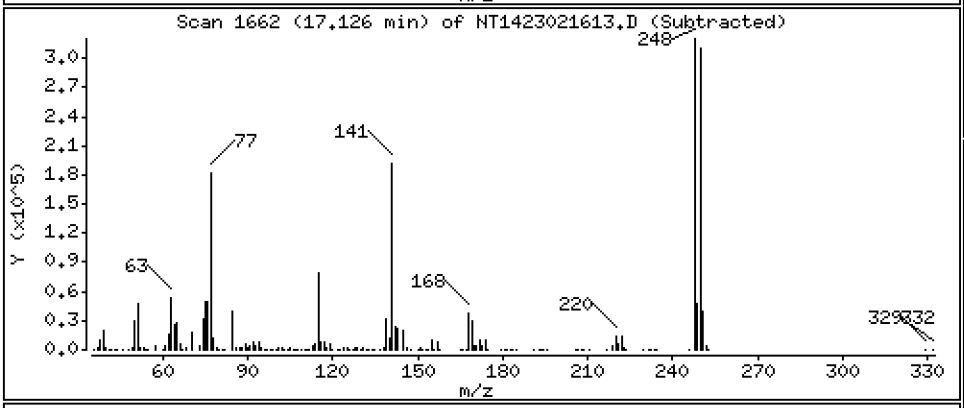
Column phase: ZB-5msi

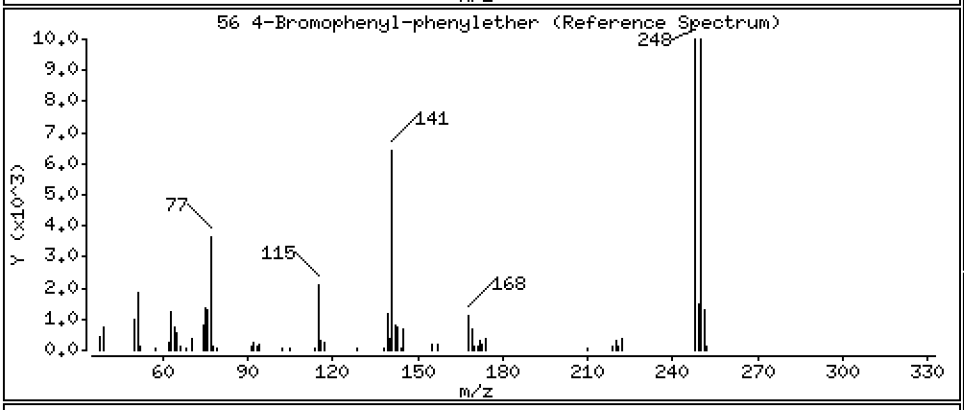
Column diameter: 0.25

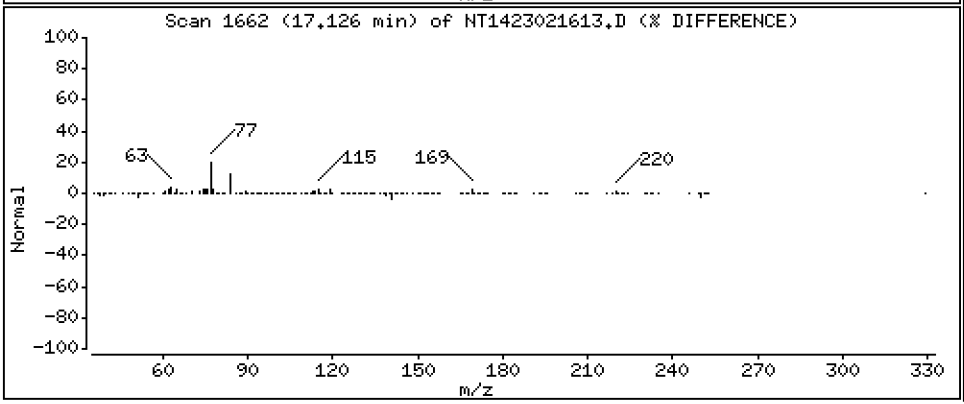
56 4-Bromophenyl-phenylether

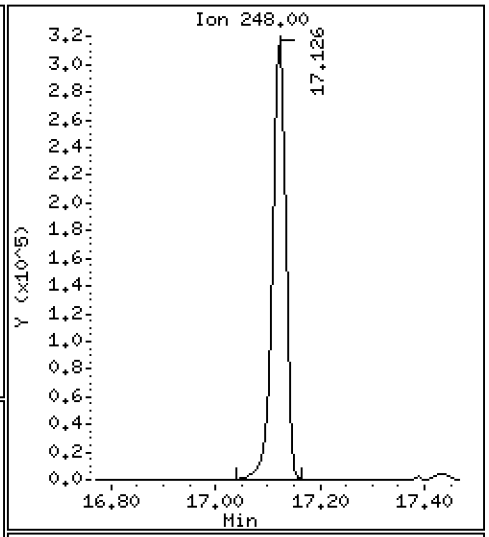
Concentration: 5.153 ug/mL

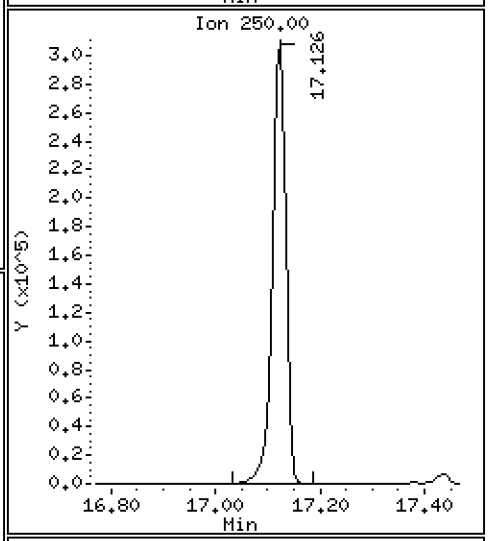


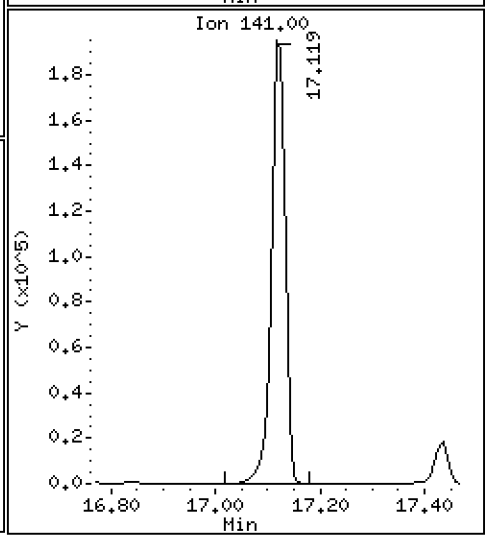












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

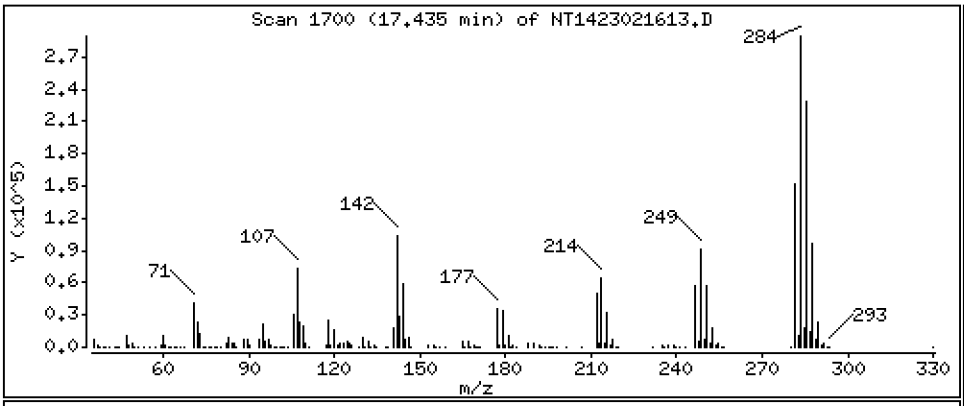
Operator: DSD

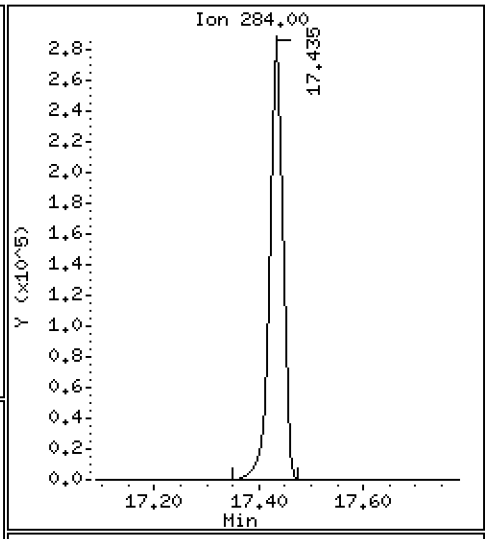
Column phase: ZB-5msi

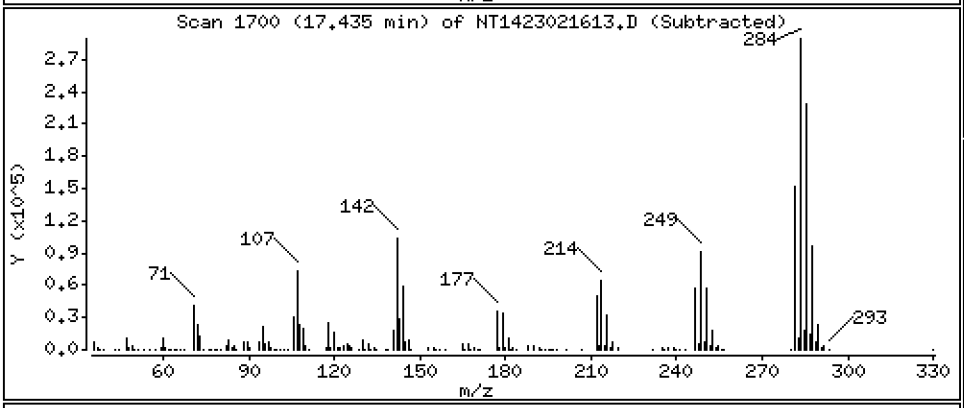
Column diameter: 0.25

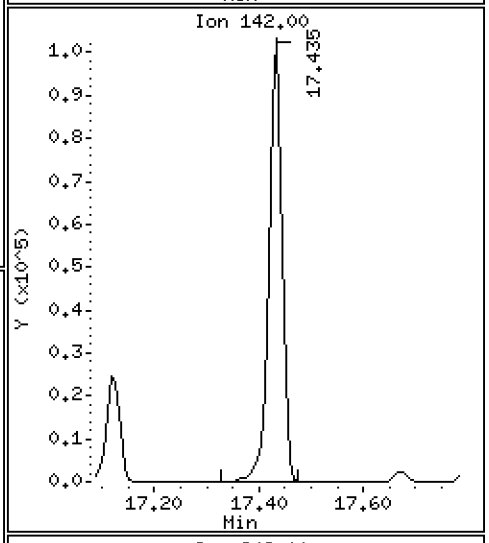
57 Hexachlorobenzene

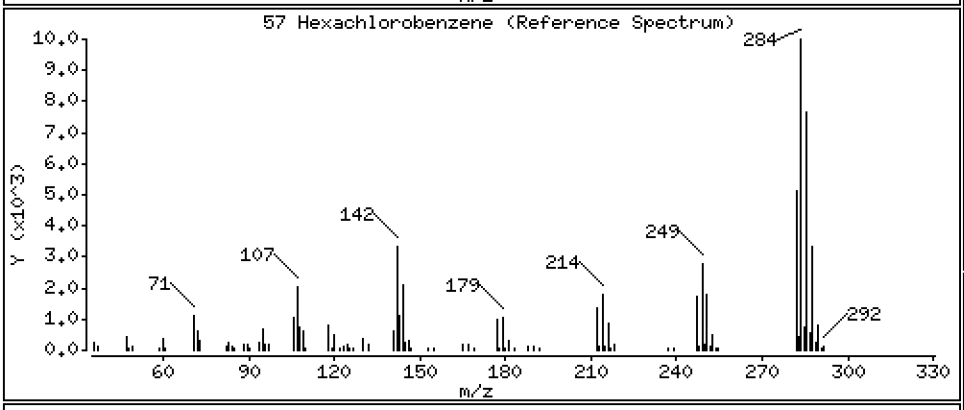
Concentration: 4.679 ug/mL

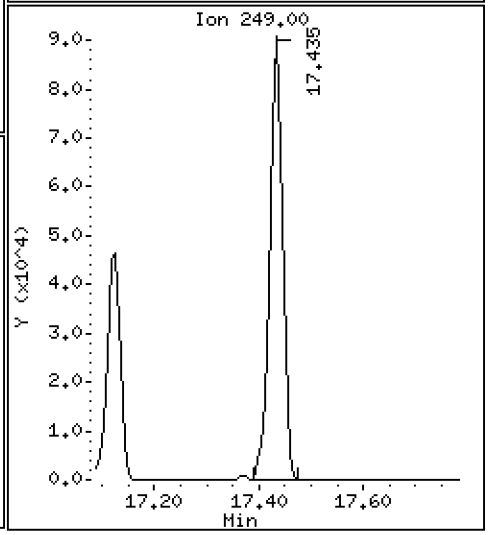


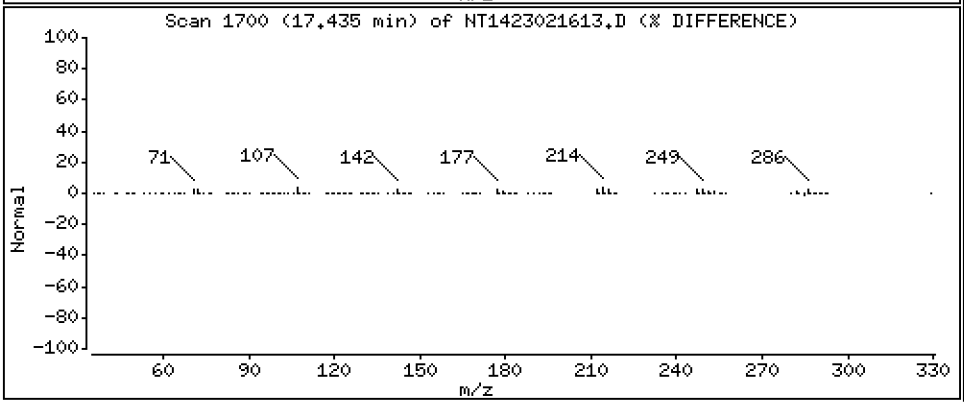












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

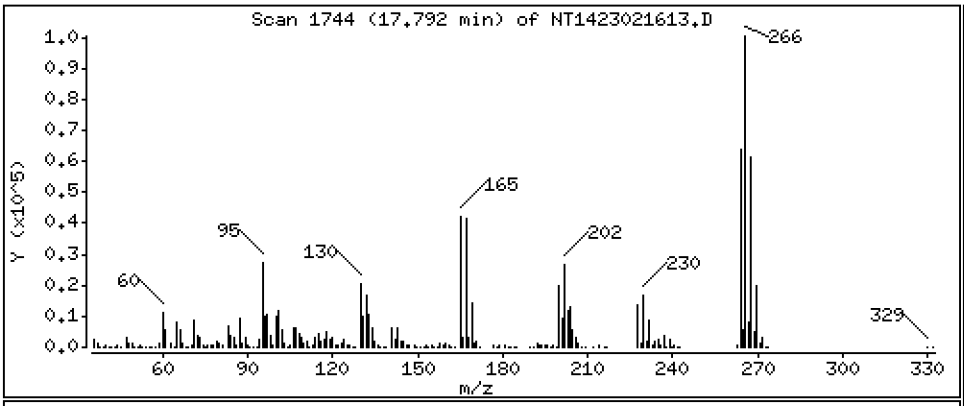
Operator: DSD

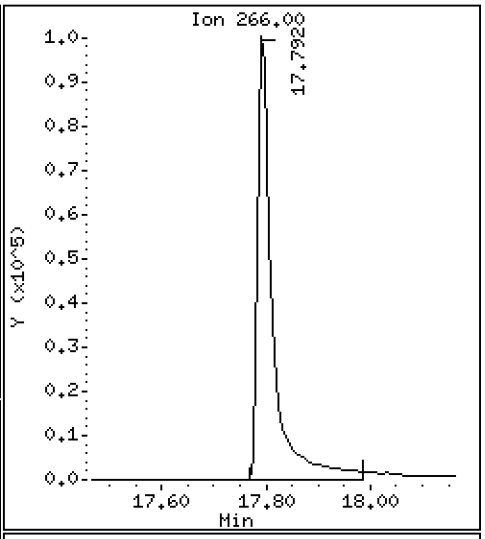
Column phase: ZB-5msi

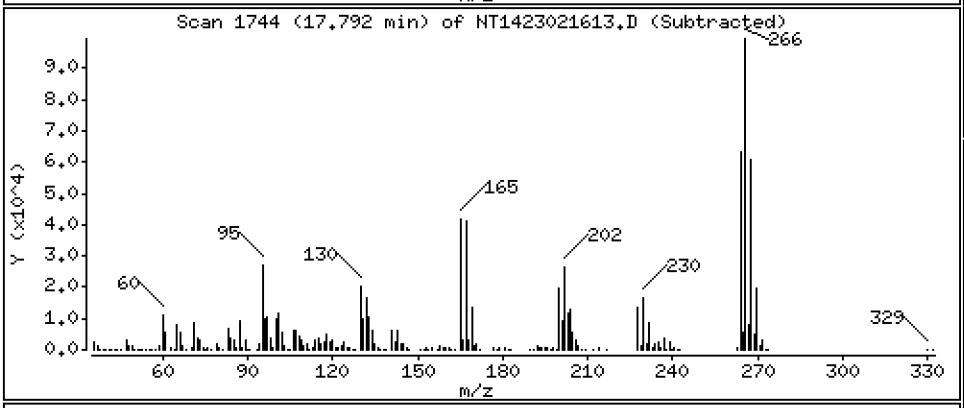
Column diameter: 0.25

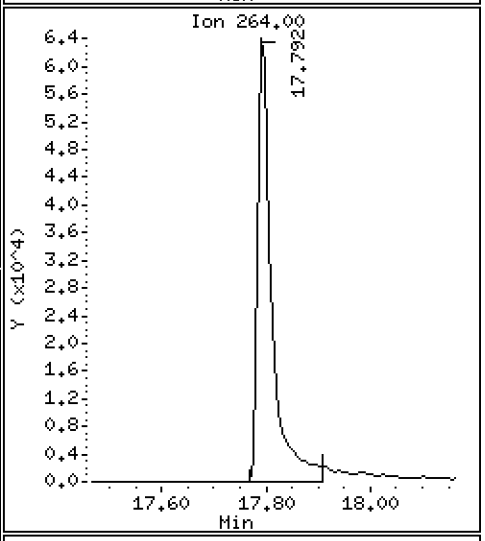
58 Pentachlorophenol

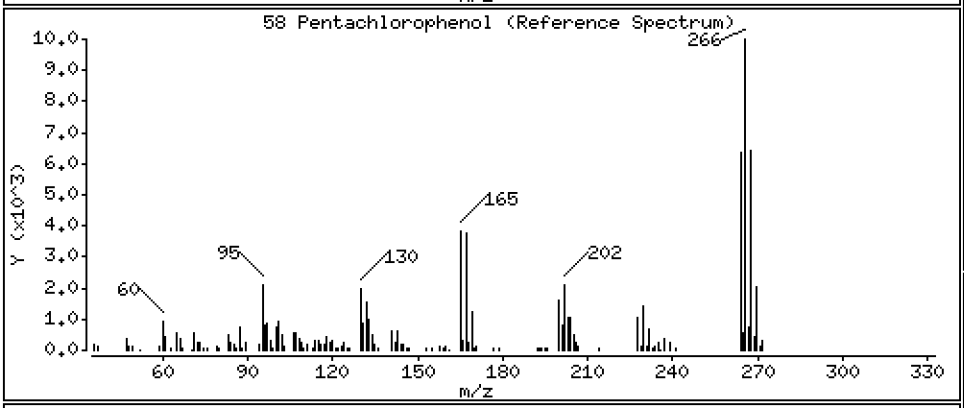
Concentration: 3.932 ug/mL

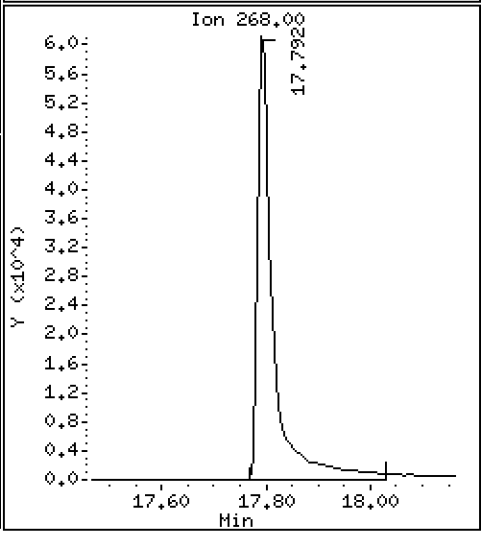


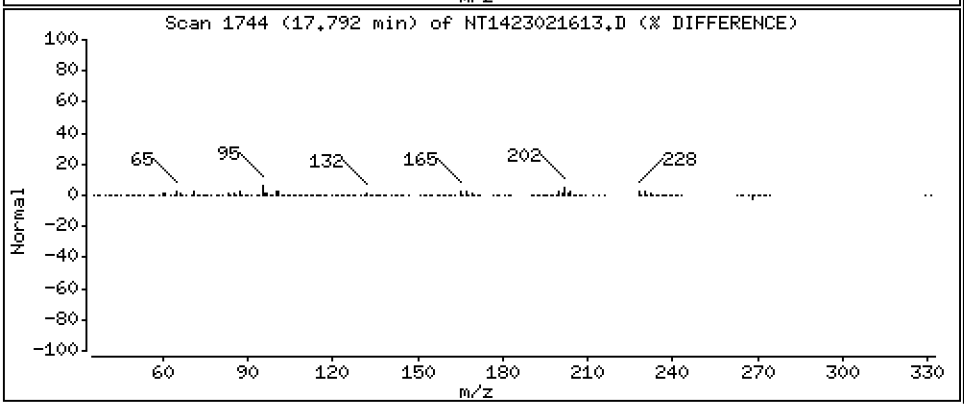












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

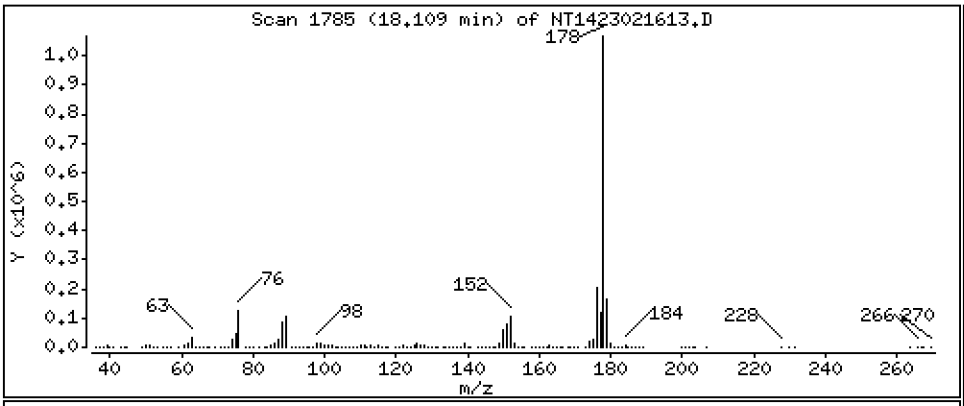
Operator: DSD

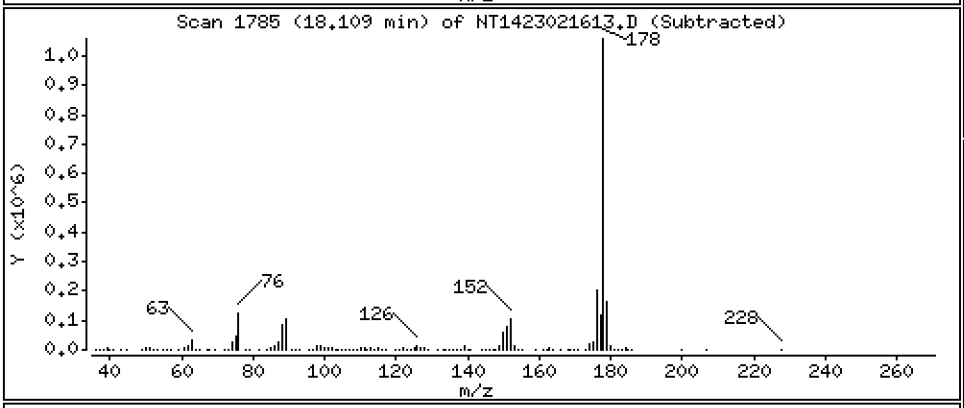
Column phase: ZB-5msi

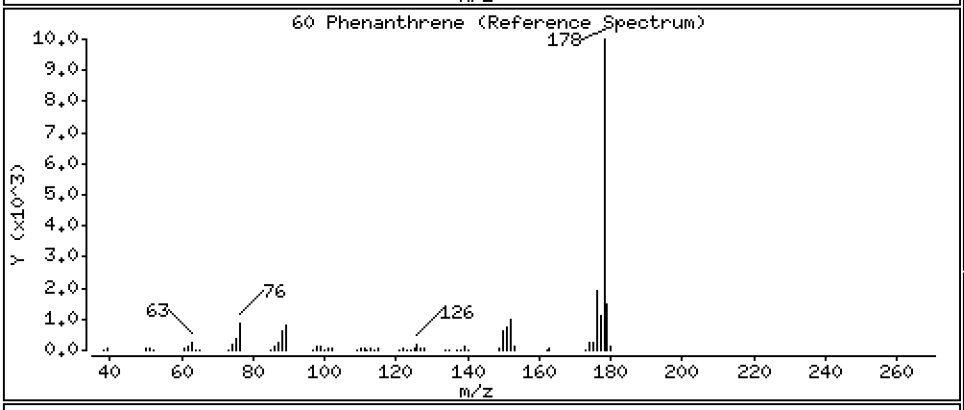
Column diameter: 0.25

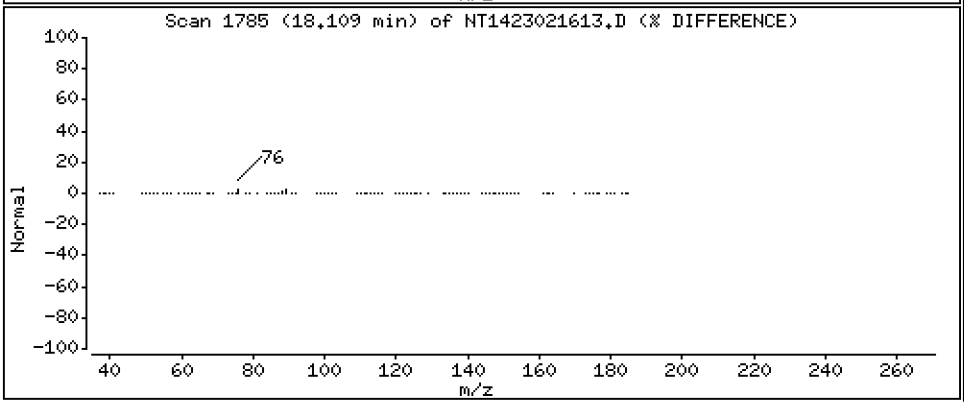
60 Phenanthrene

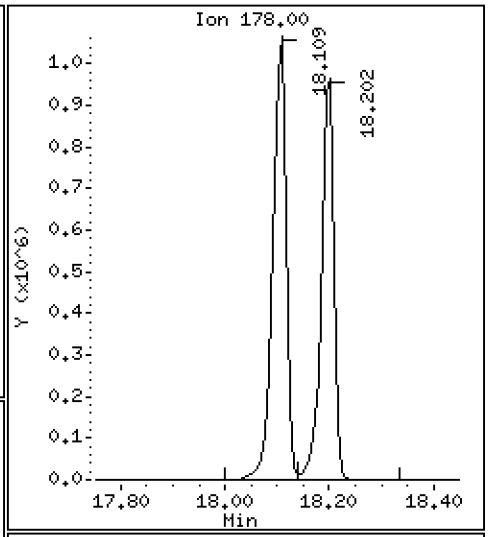
Concentration: 4.690 ug/mL

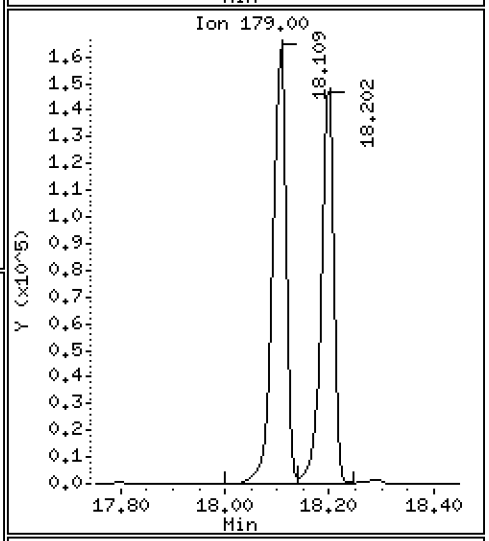


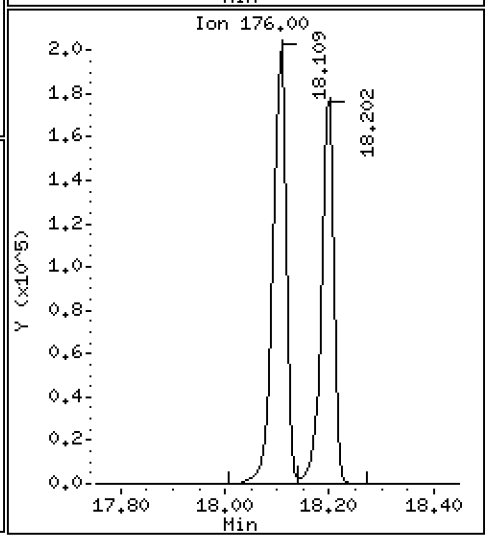












Date : 16-FEB-2023 21:18

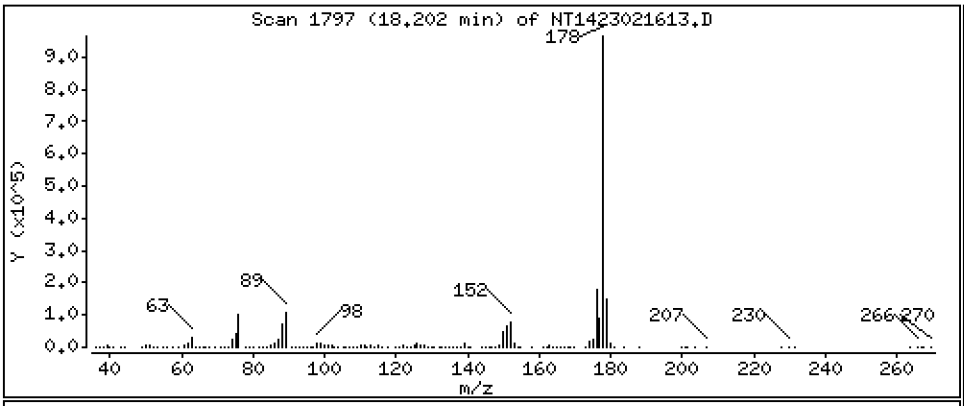
Client ID: Instrument: nt14.i

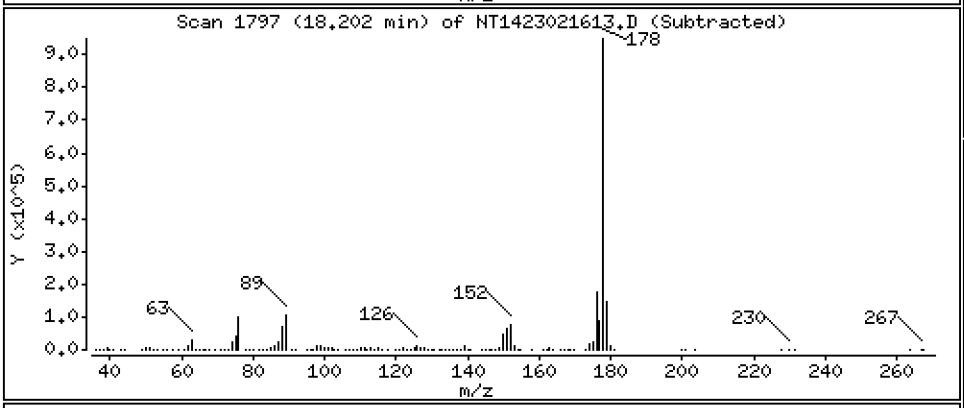
Sample Info: SLB0234-SCV1

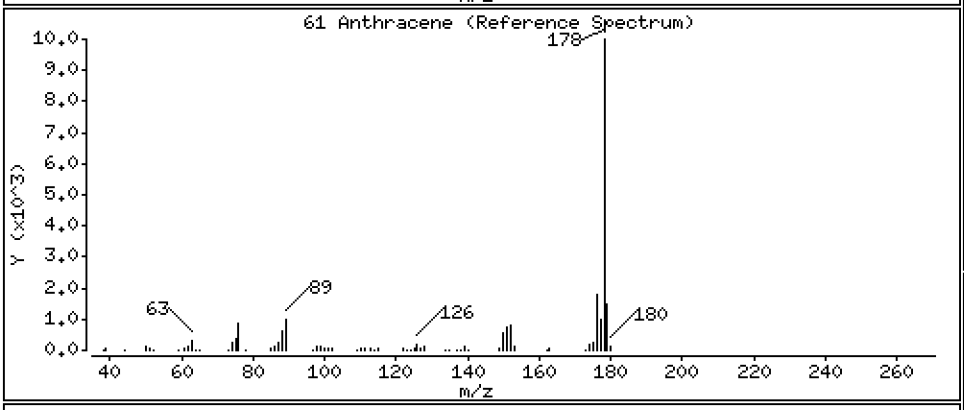
Operator: DSD

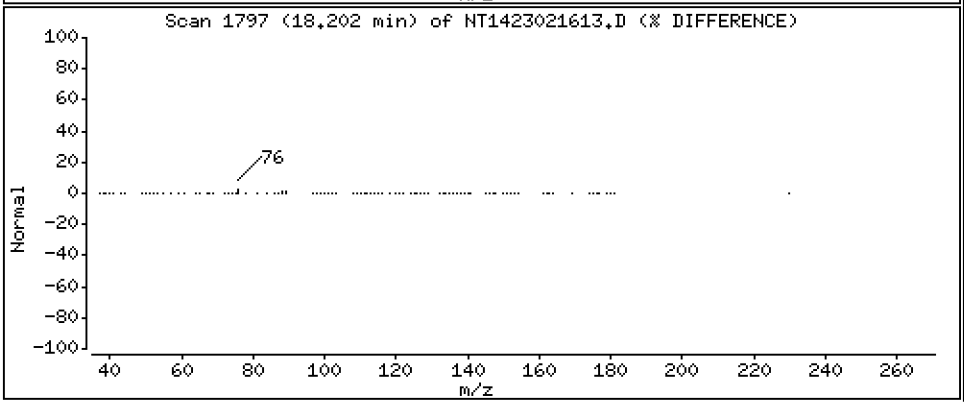
Column phase: ZB-5msi Column diameter: 0.25

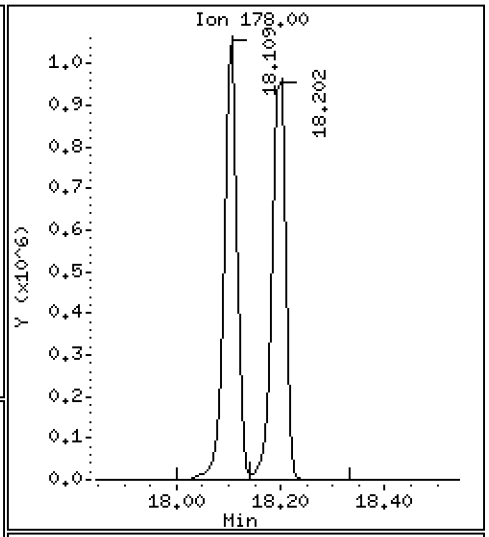
61 Anthracene Concentration: 4.304 ug/mL

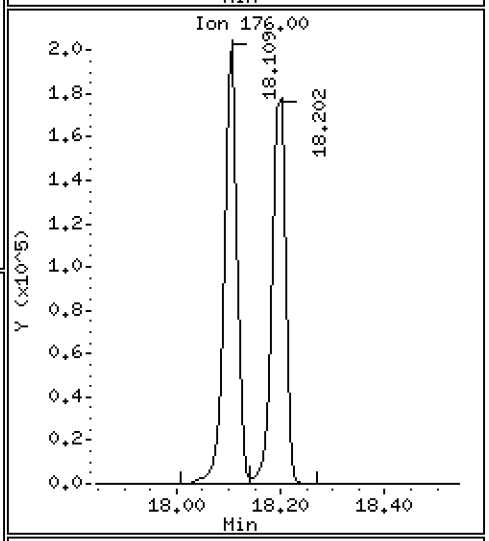


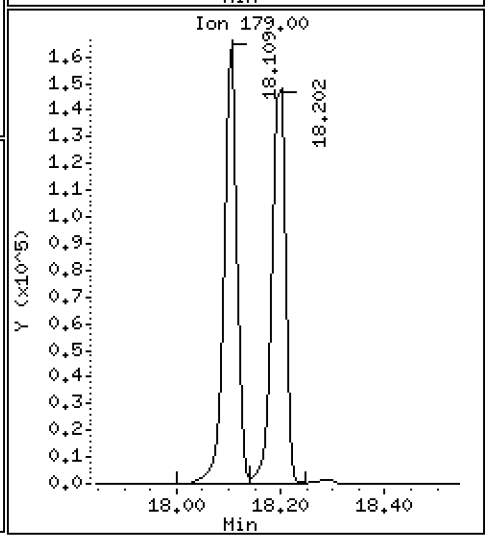












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

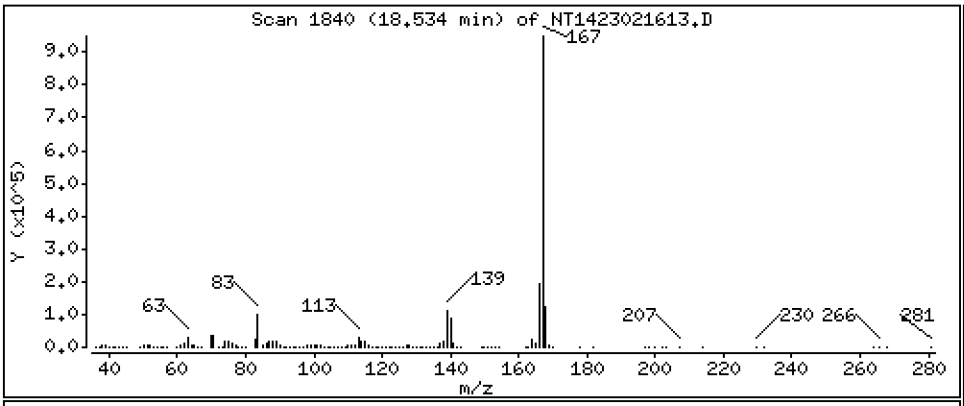
Operator: DSD

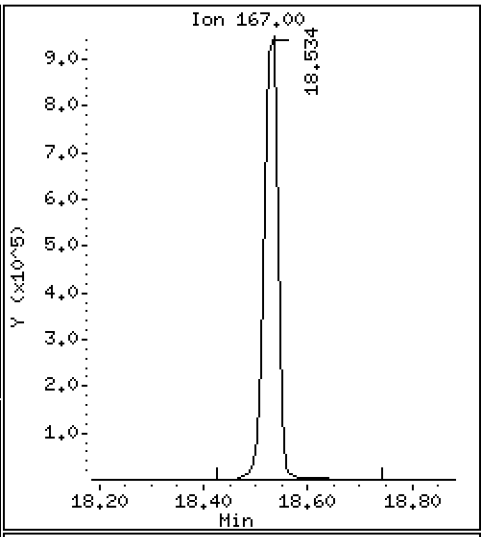
Column phase: ZB-5msi

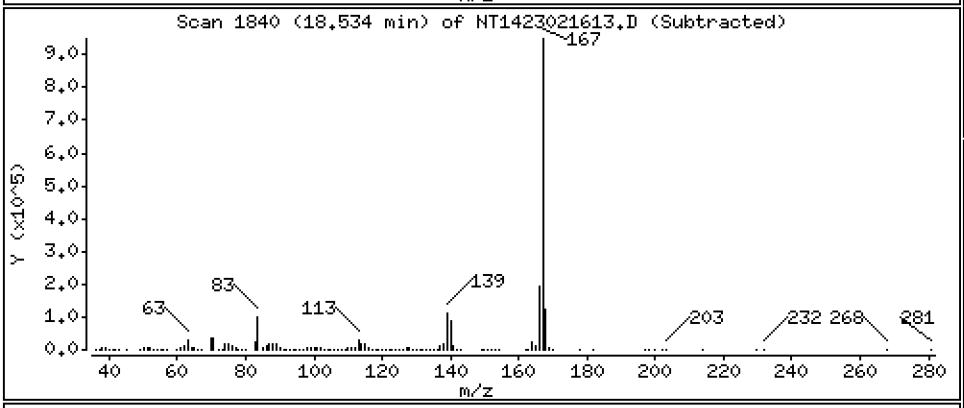
Column diameter: 0.25

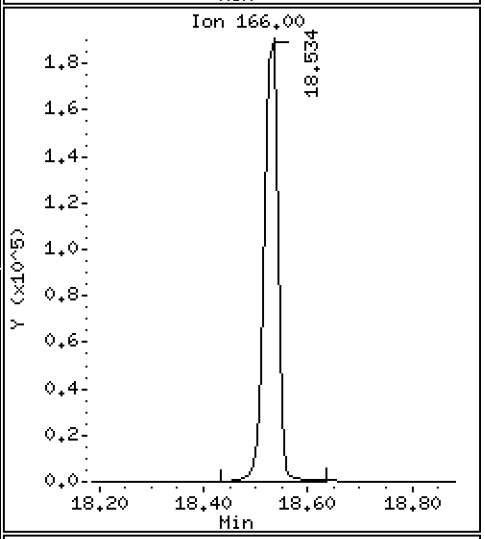
62 Carbazole

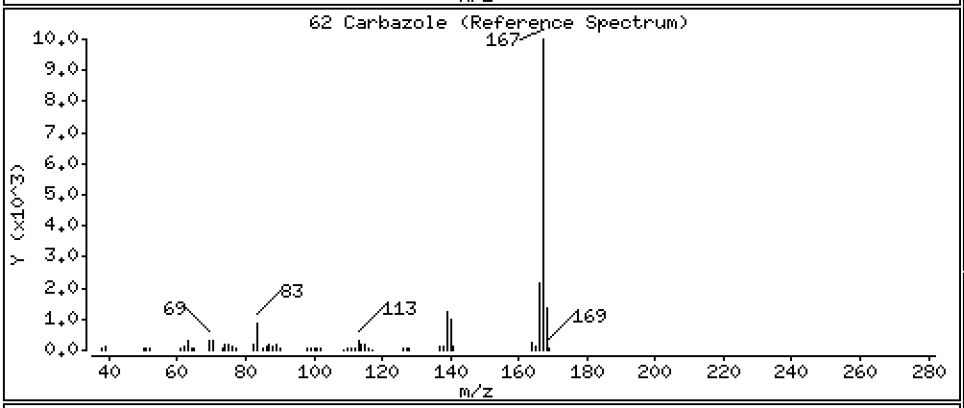
Concentration: 4.792 ug/mL

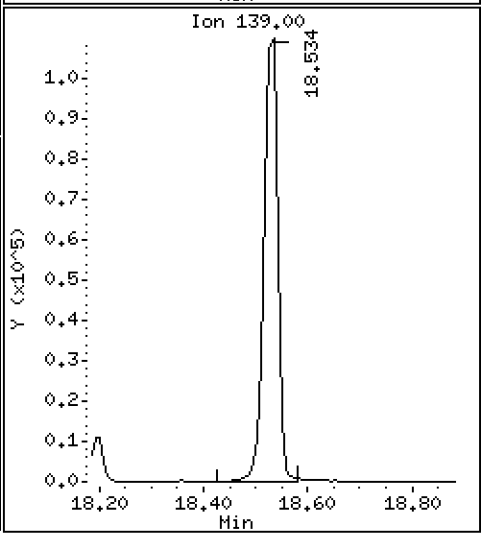


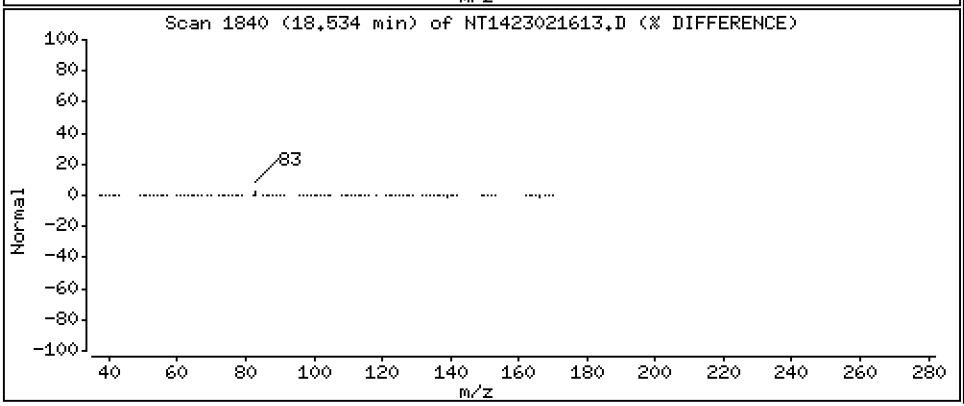












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

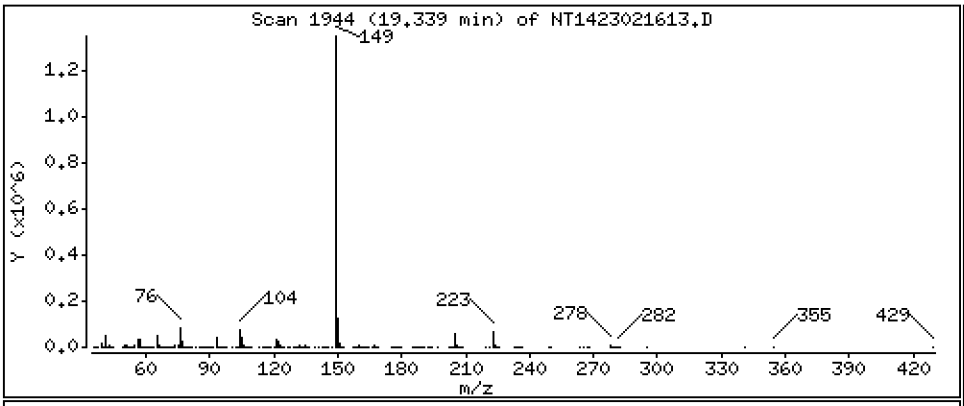
Operator: DSD

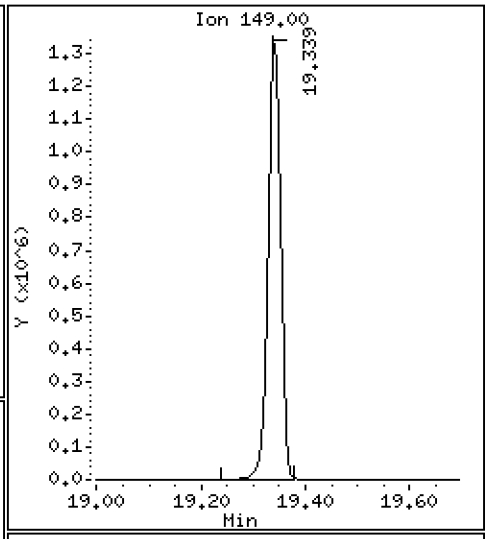
Column phase: ZB-5msi

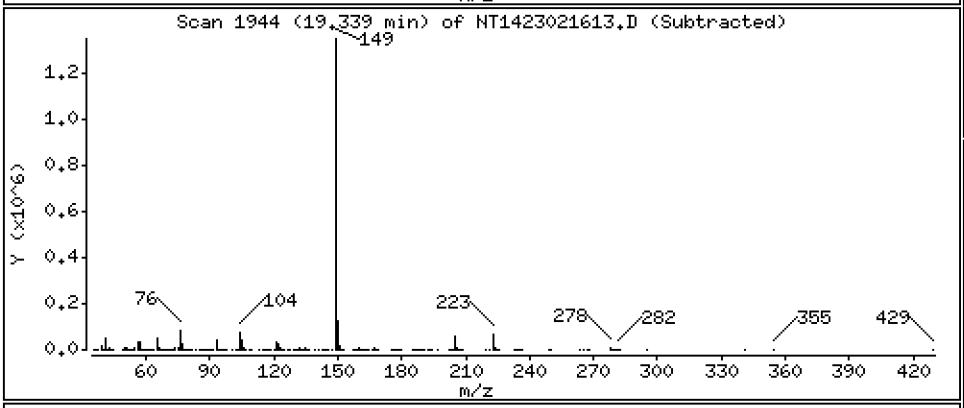
Column diameter: 0.25

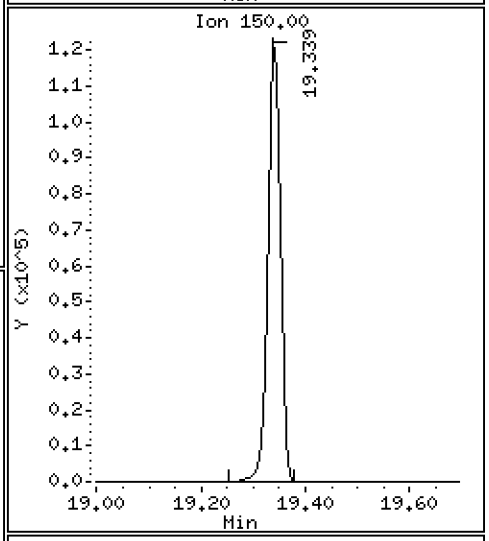
63 Di-n-butylphthalate

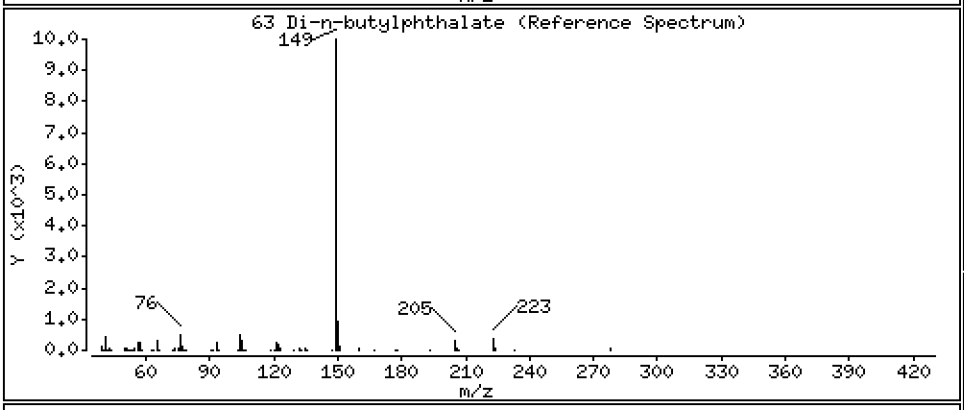
Concentration: 5.515 ug/mL

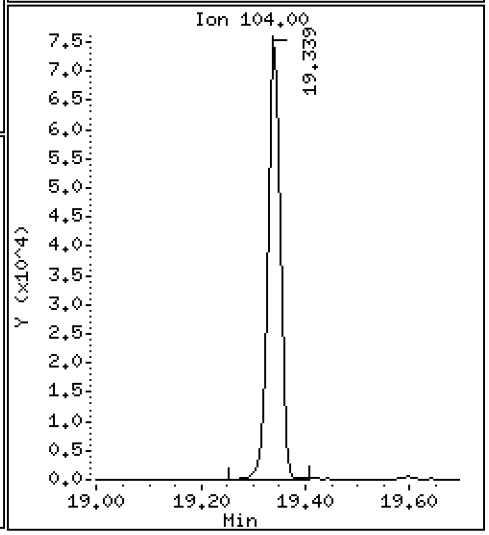


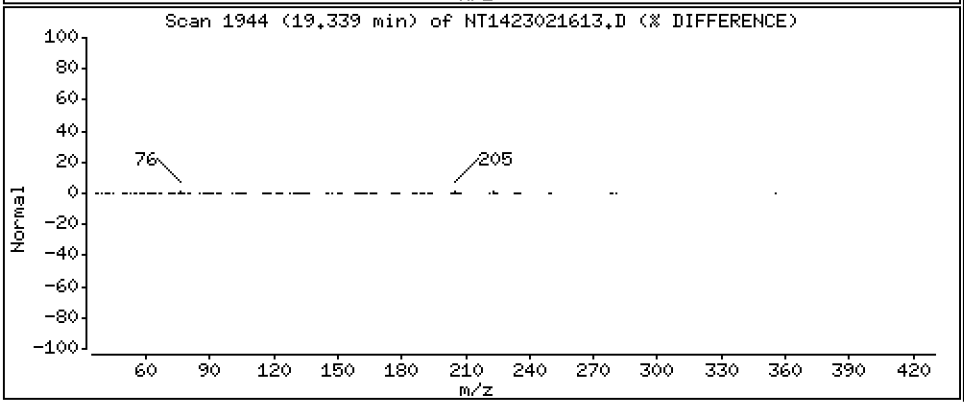












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

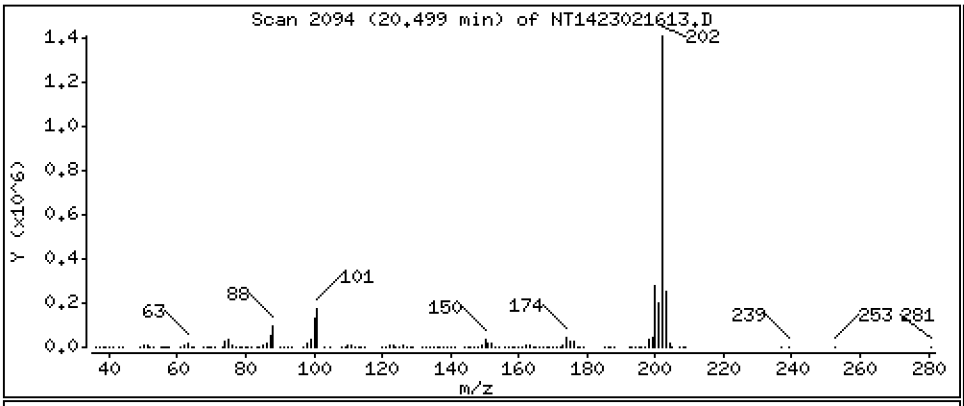
Operator: DSD

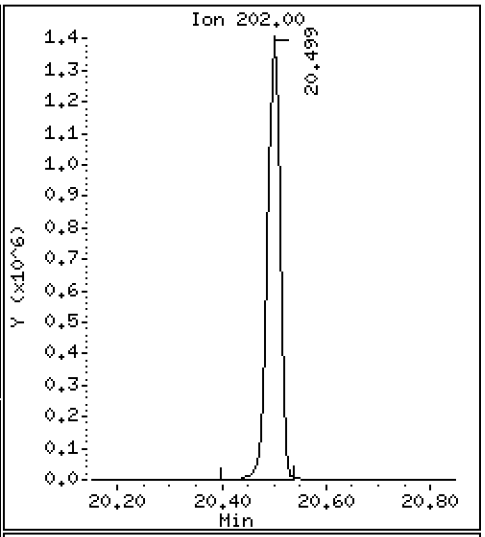
Column phase: ZB-5msi

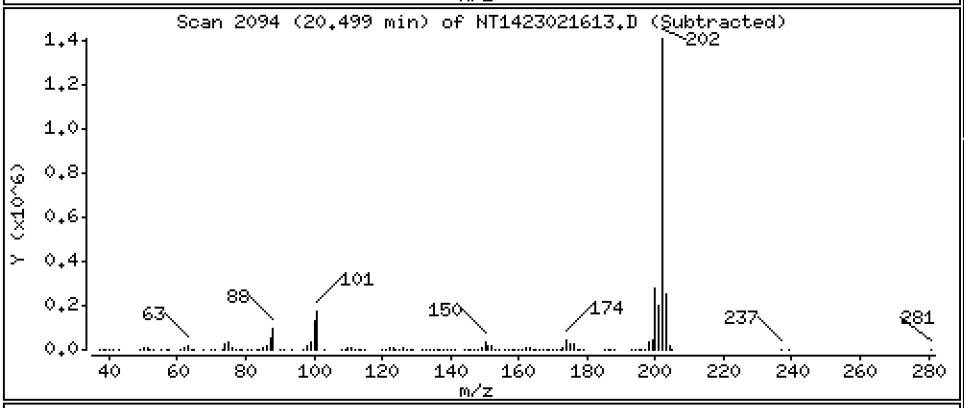
Column diameter: 0.25

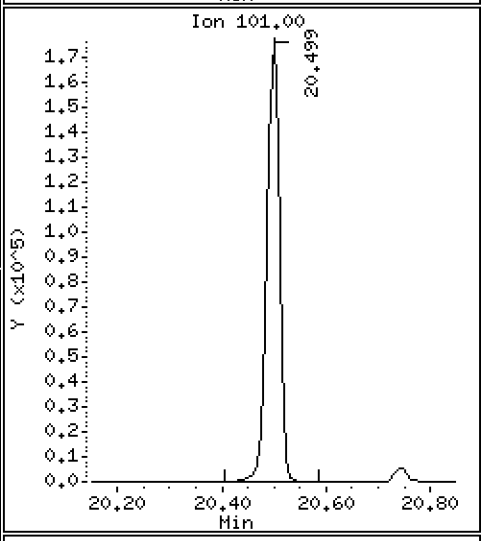
64 Fluoranthene

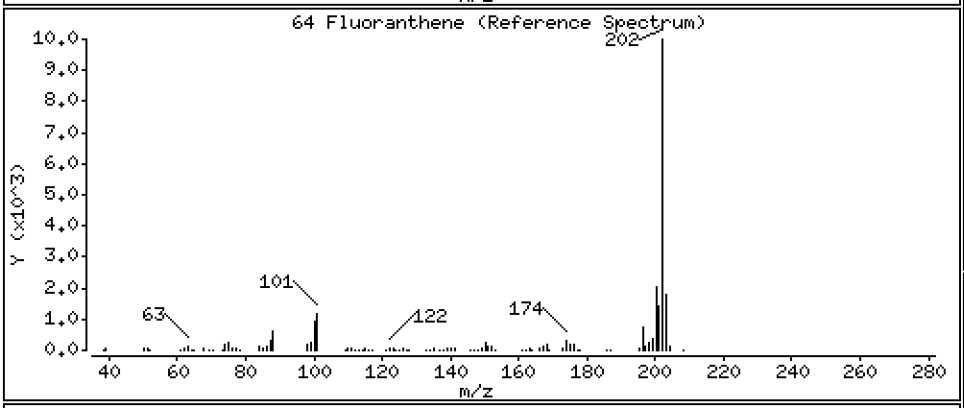
Concentration: 4.682 ug/mL

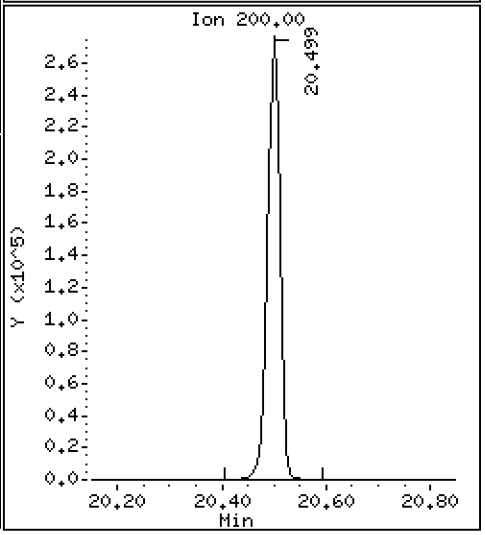


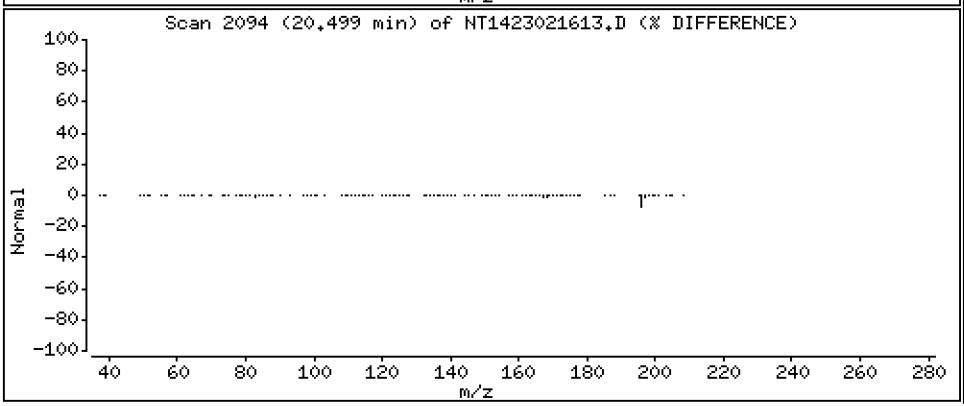












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

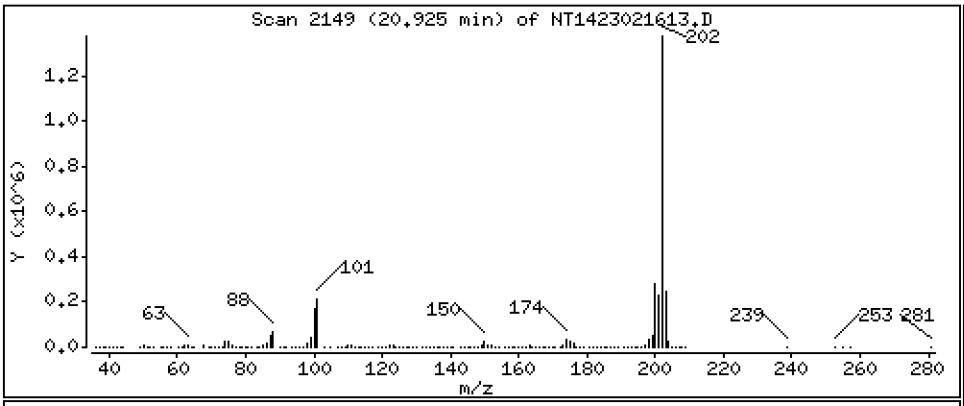
Operator: DSD

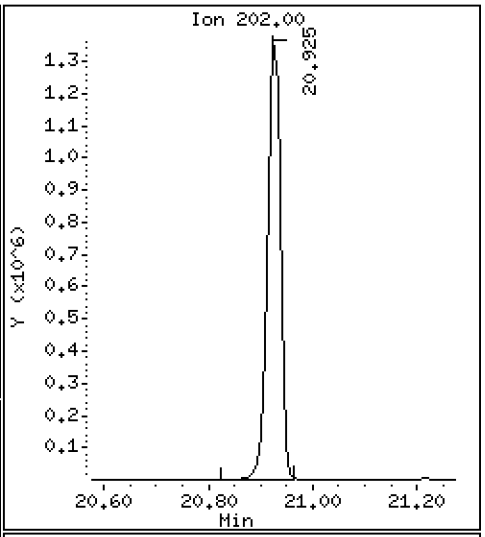
Column phase: ZB-5msi

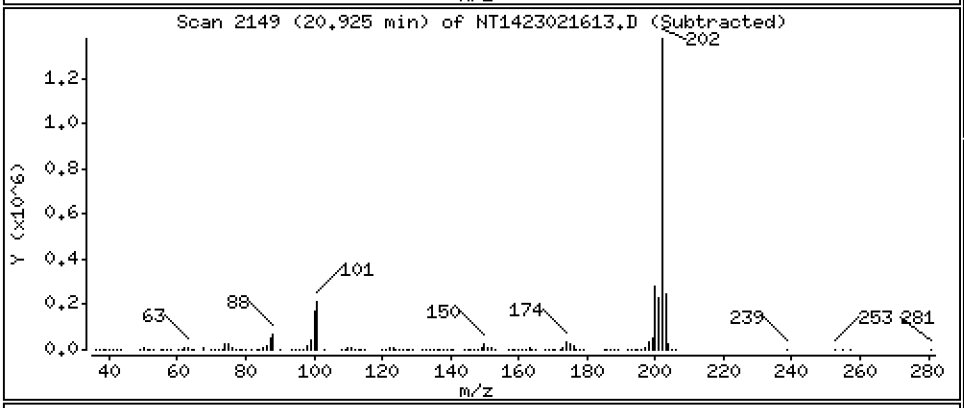
Column diameter: 0.25

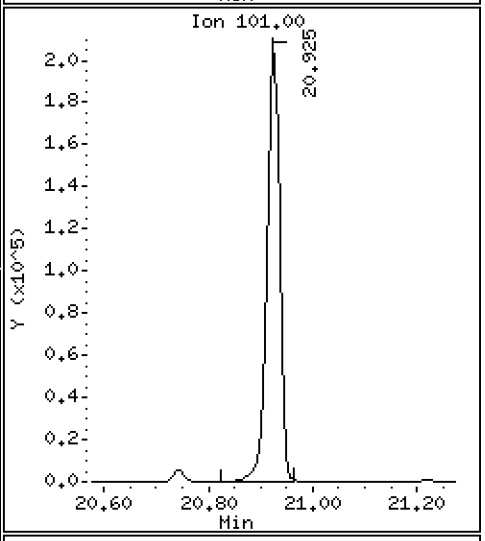
65 Pyrene

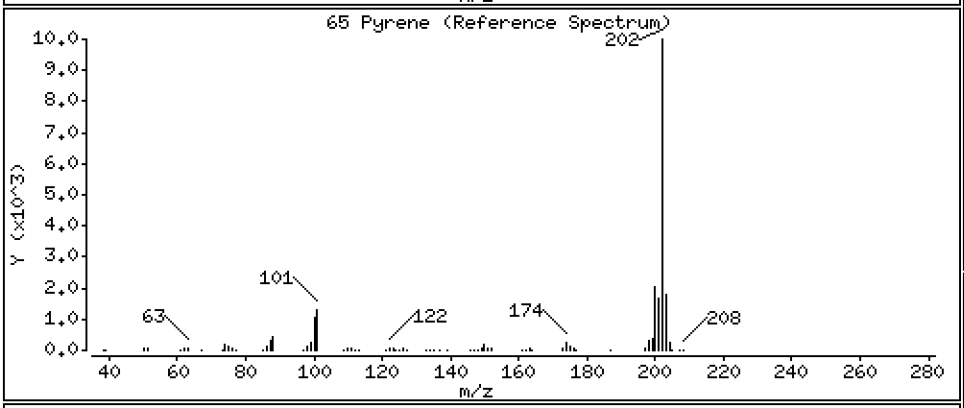
Concentration: 4.400 ug/mL

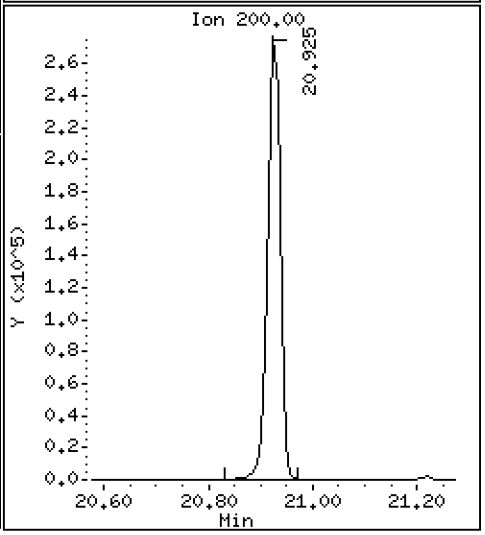


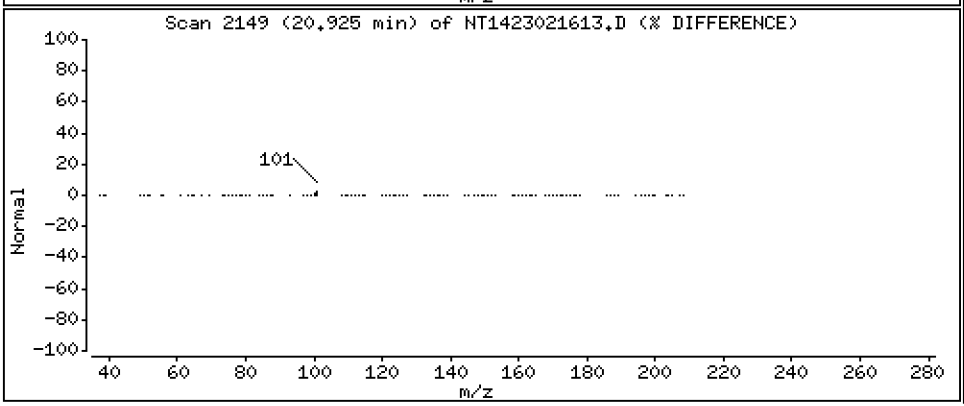












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

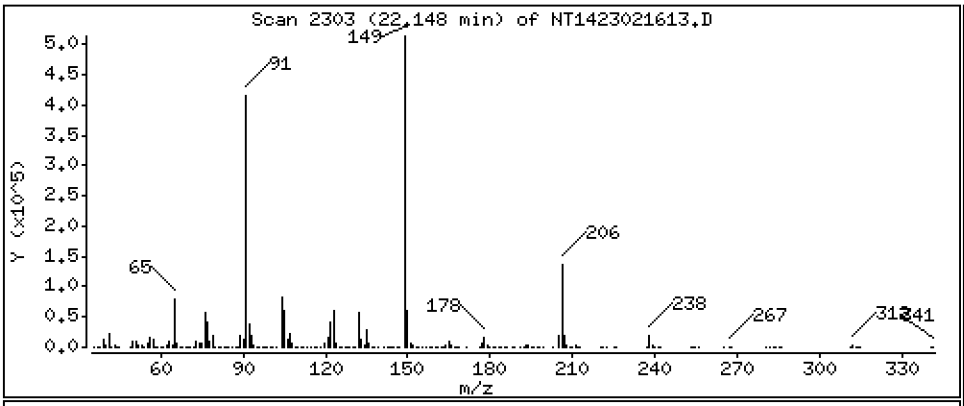
Operator: DSD

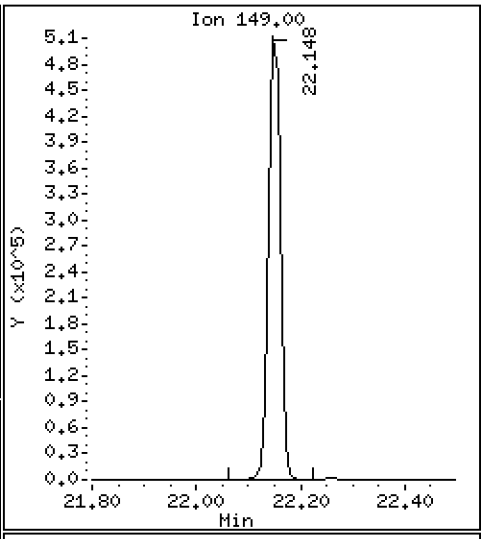
Column phase: ZB-5msi

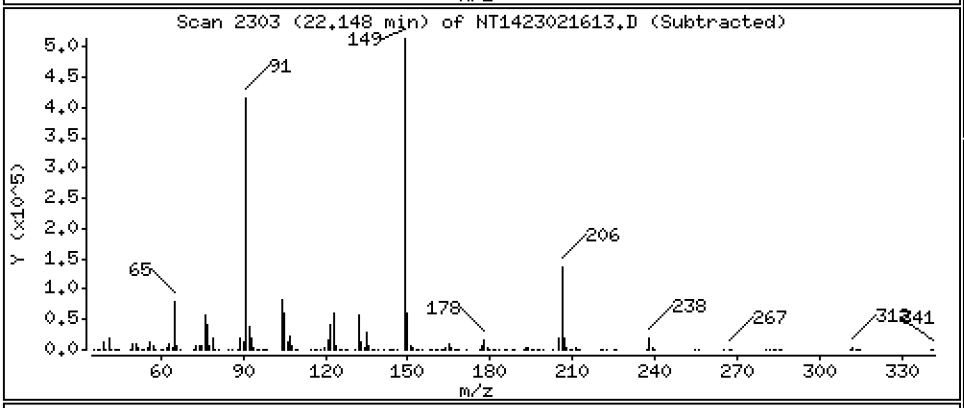
Column diameter: 0.25

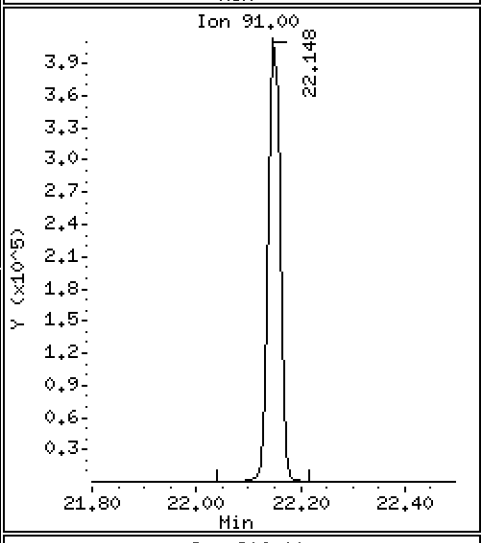
67 Butylbenzylphthalate

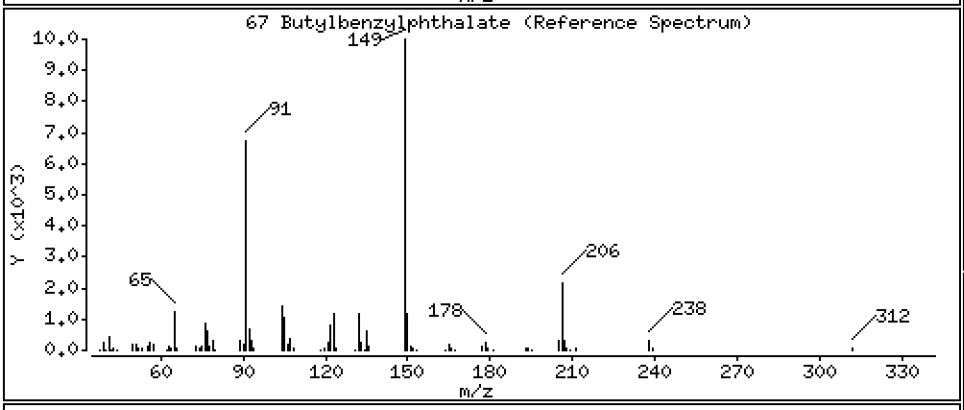
Concentration: 4.568 ug/mL

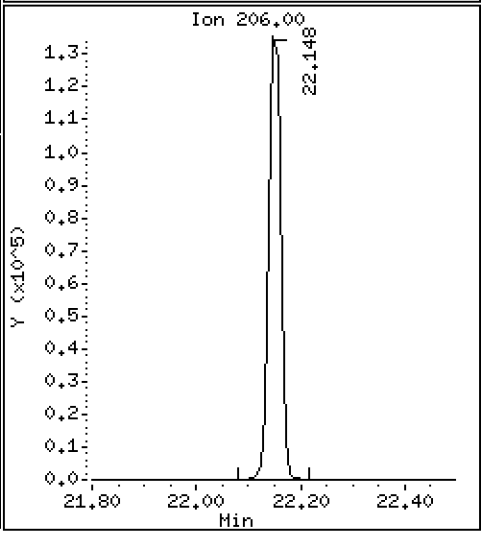


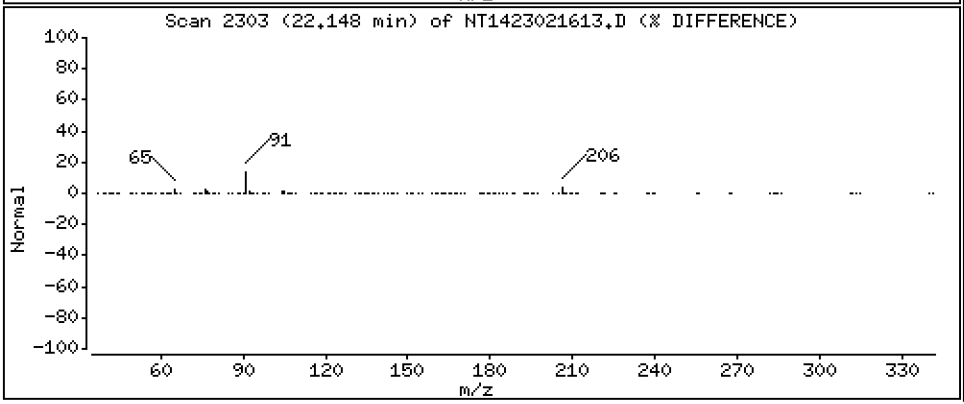












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

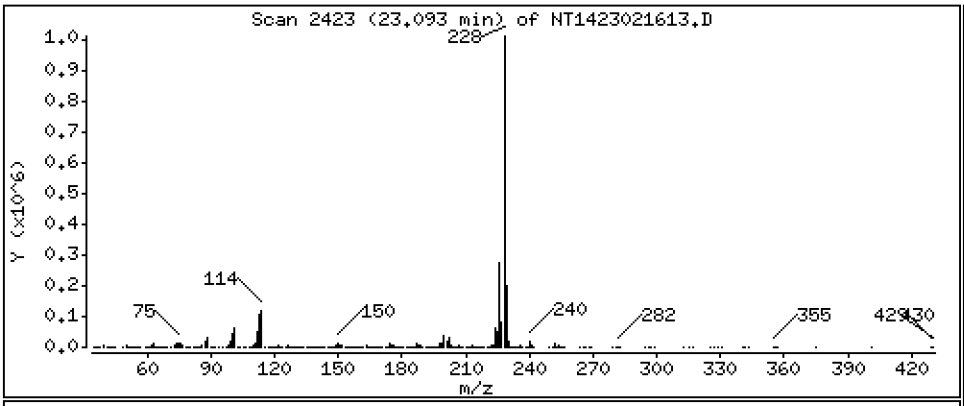
Operator: DSD

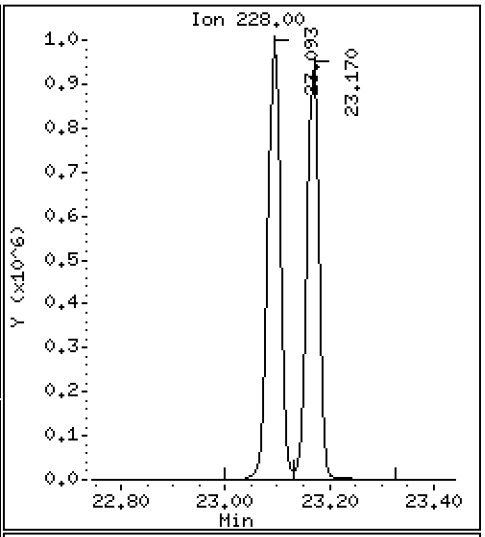
Column phase: ZB-5msi

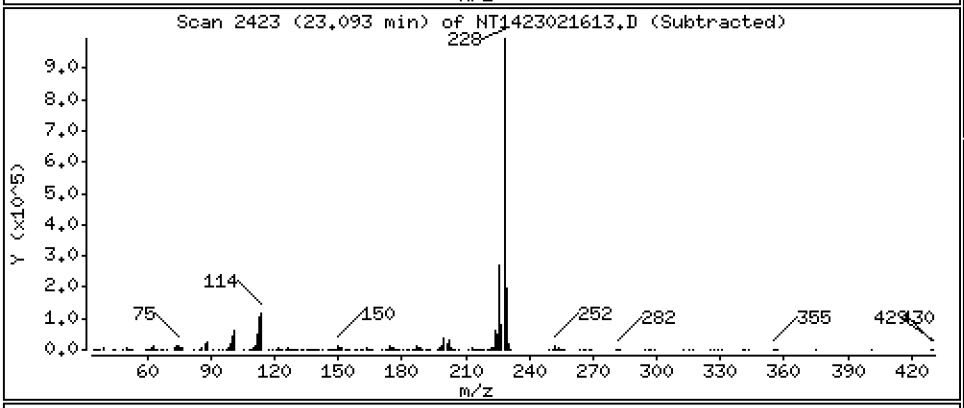
Column diameter: 0.25

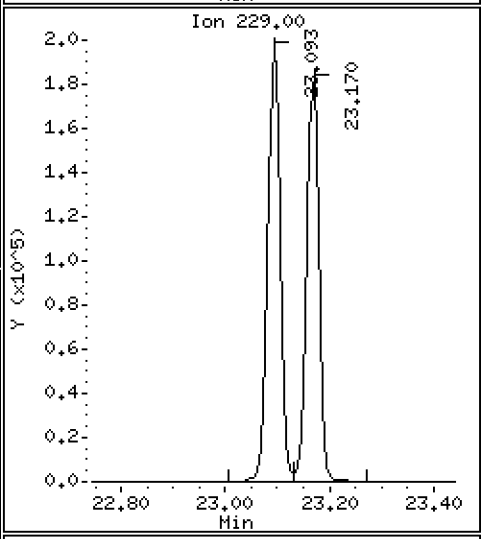
68 Benzo(a)anthracene

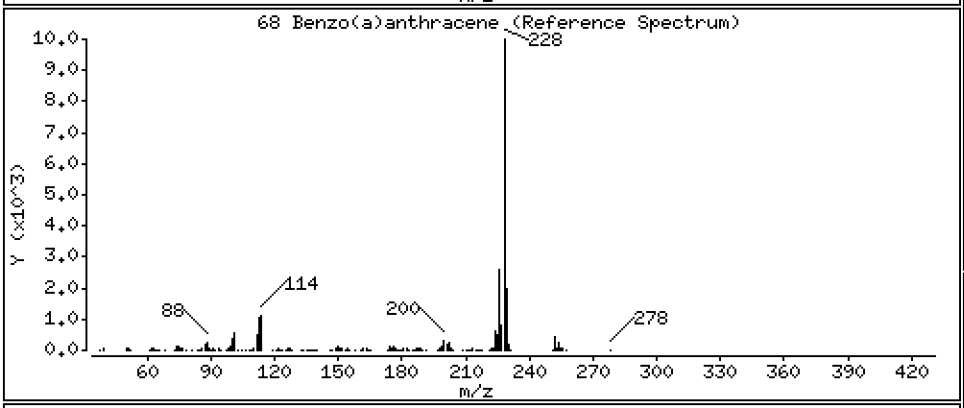
Concentration: 4.530 ug/mL

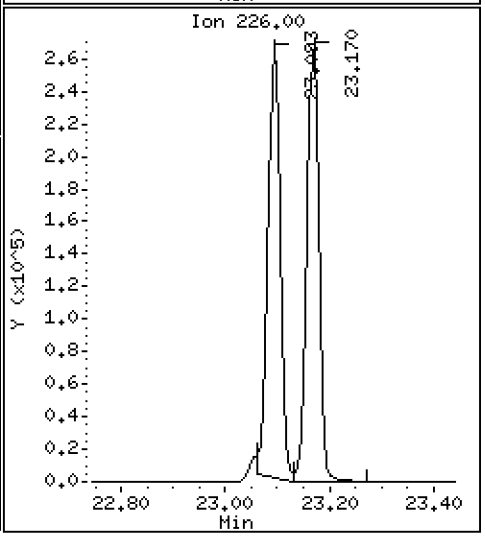


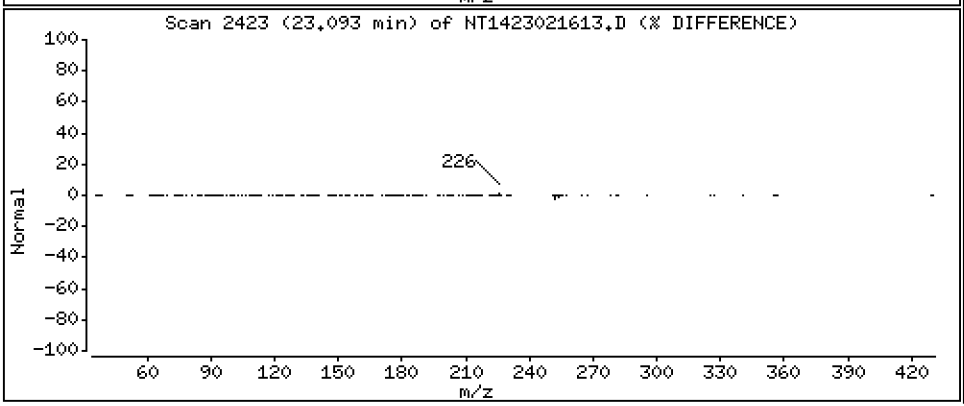












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

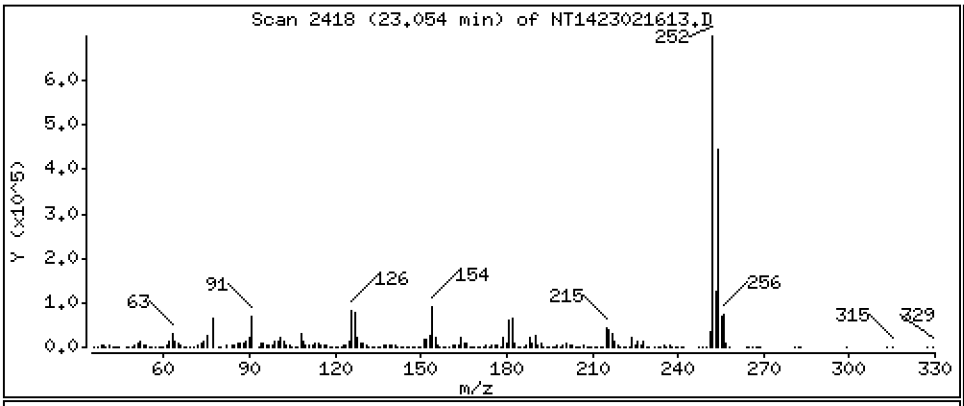
Operator: DSD

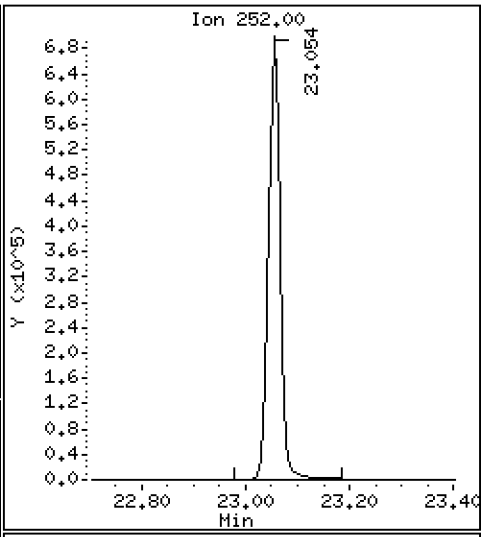
Column phase: ZB-5msi

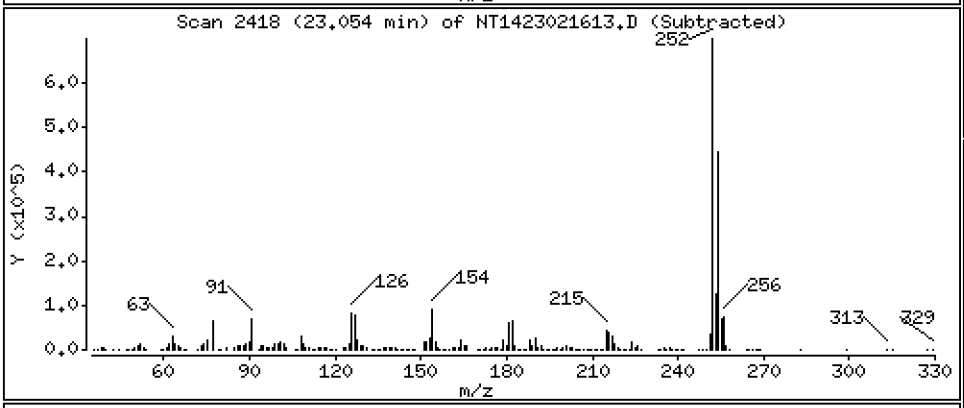
Column diameter: 0.25

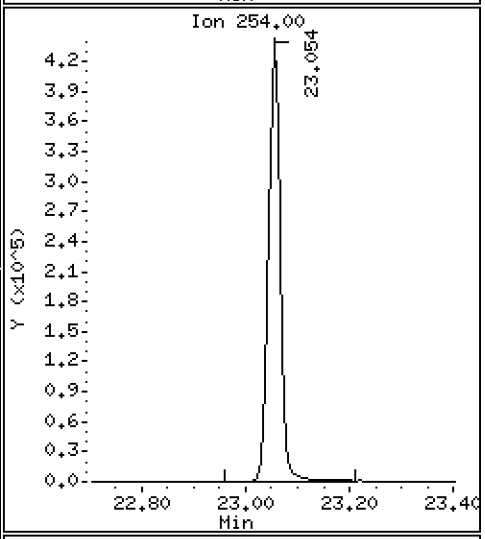
70 3,3'-Dichlorobenzidine

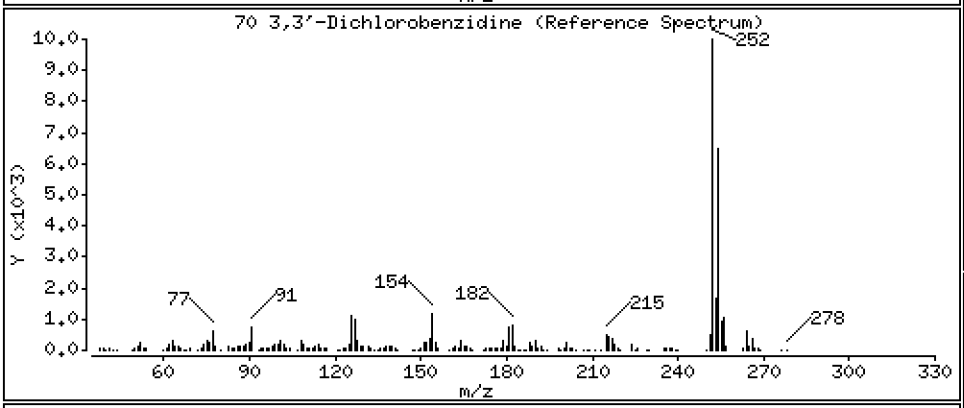
Concentration: 9.328 ug/mL

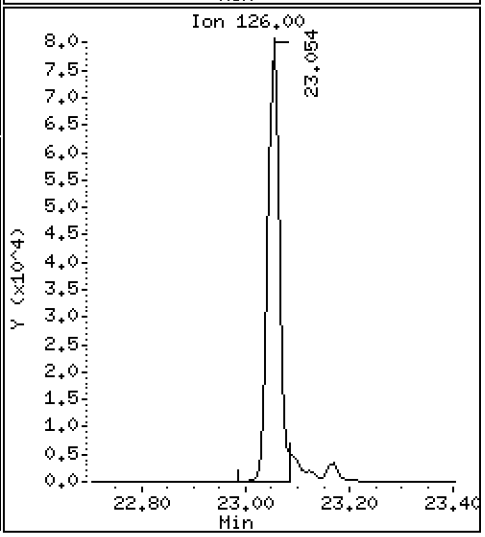


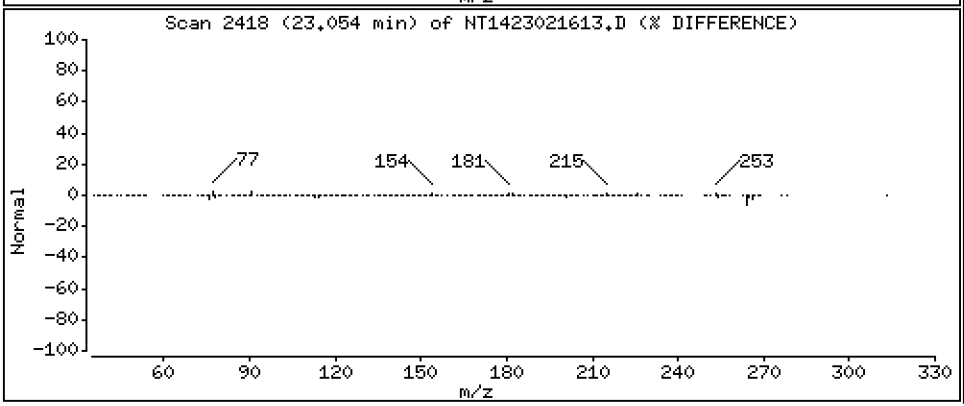












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

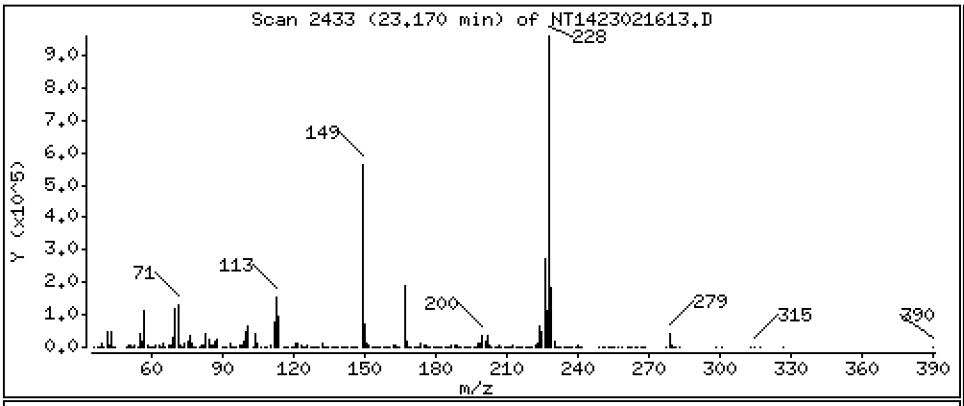
Operator: DSD

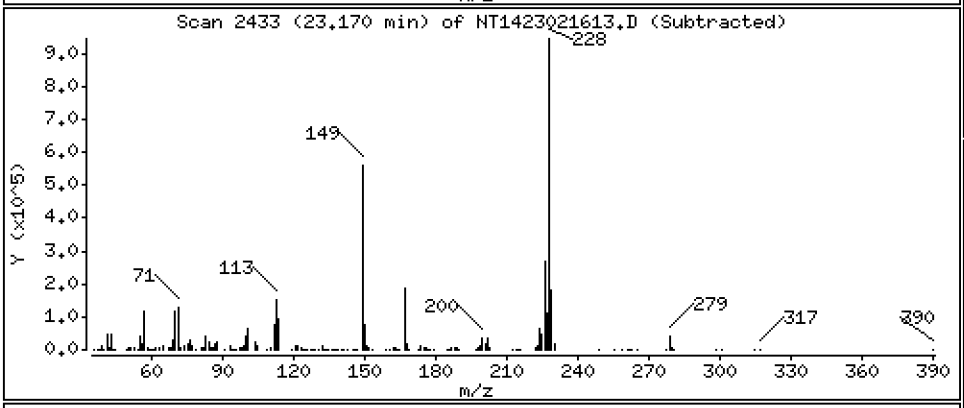
Column phase: ZB-5msi

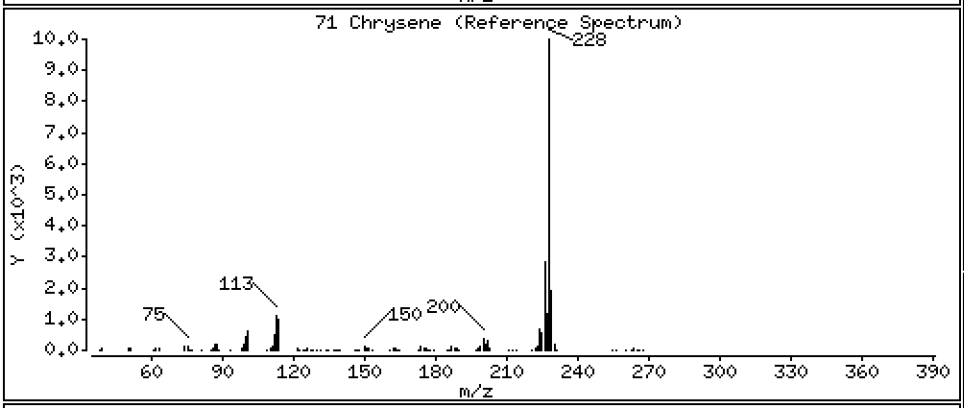
Column diameter: 0.25

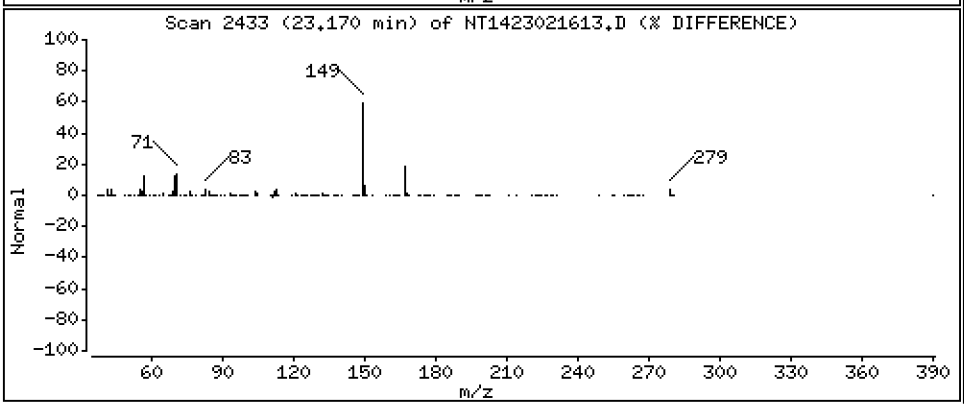
71 Chrysene

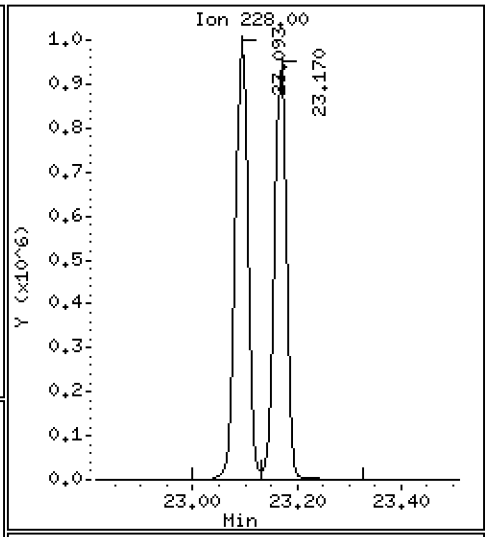
Concentration: 4.474 ug/mL

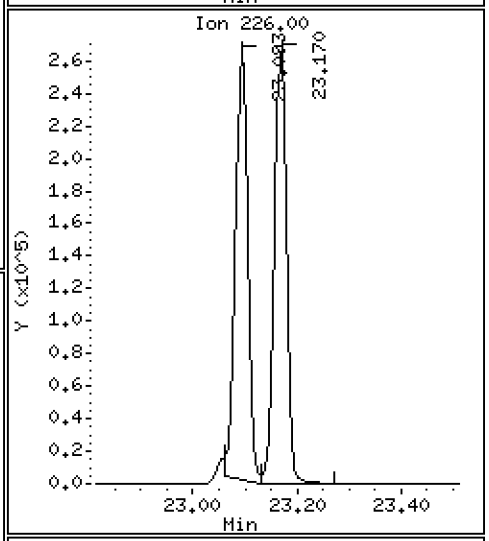


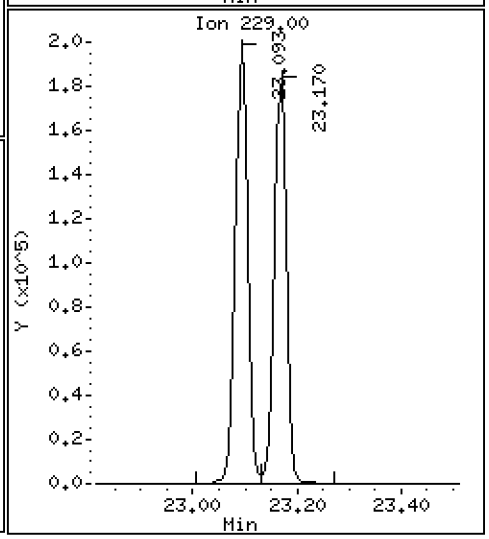












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

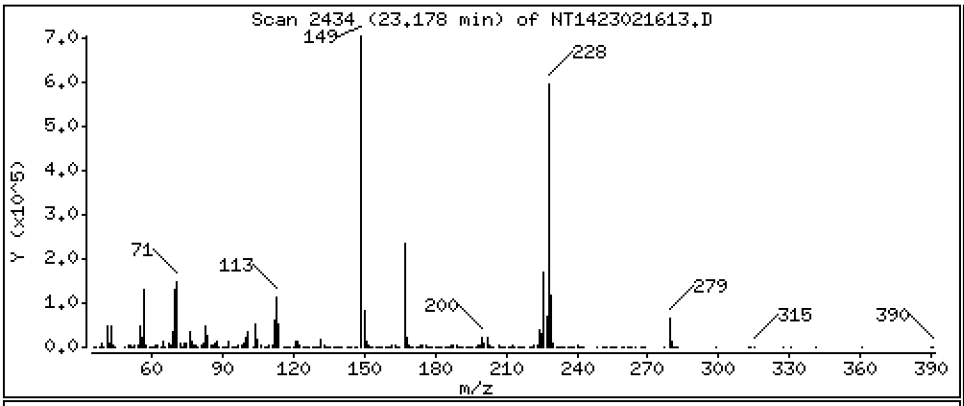
Operator: DSD

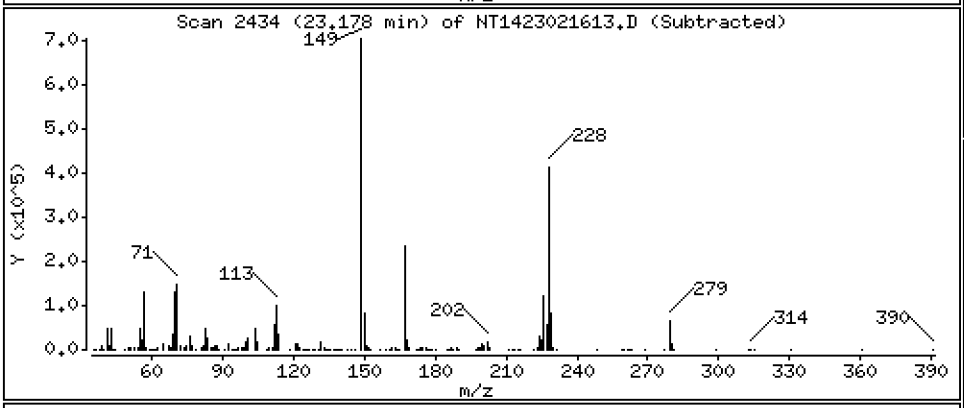
Column phase: ZB-5msi

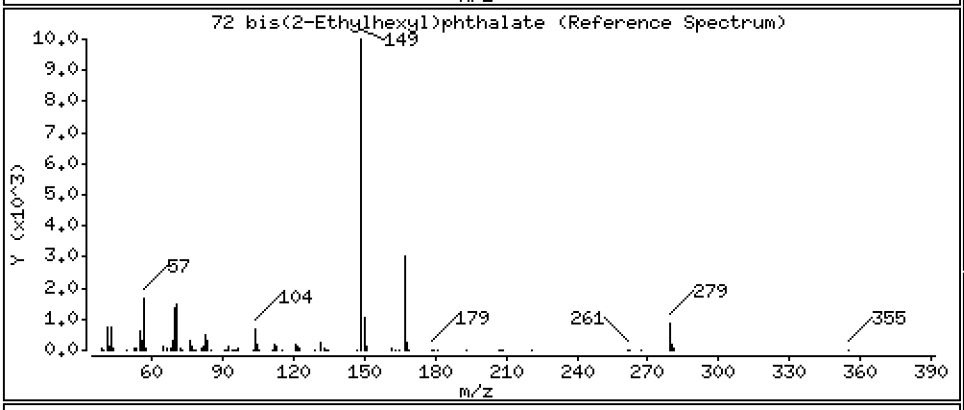
Column diameter: 0.25

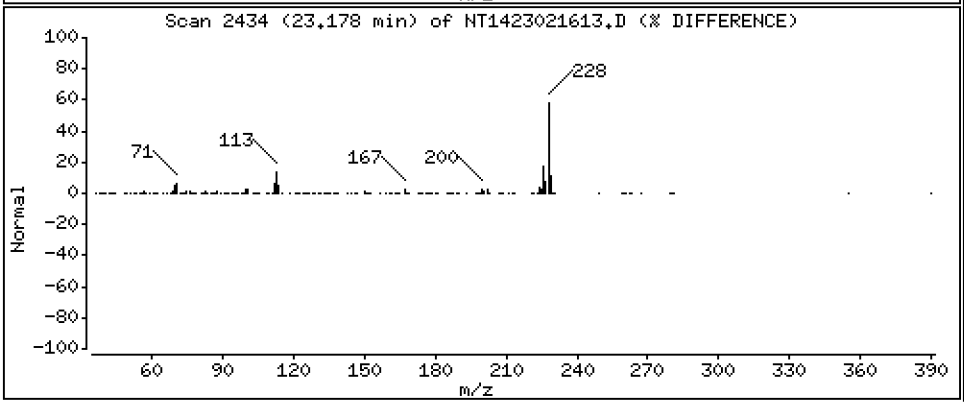
72 bis(2-Ethylhexyl)phthalate

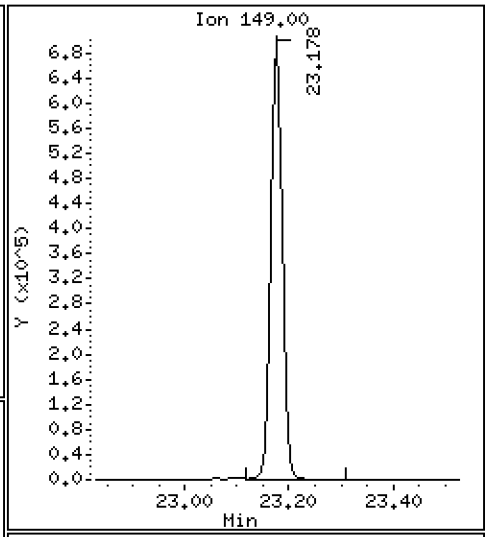
Concentration: 4.649 ug/mL

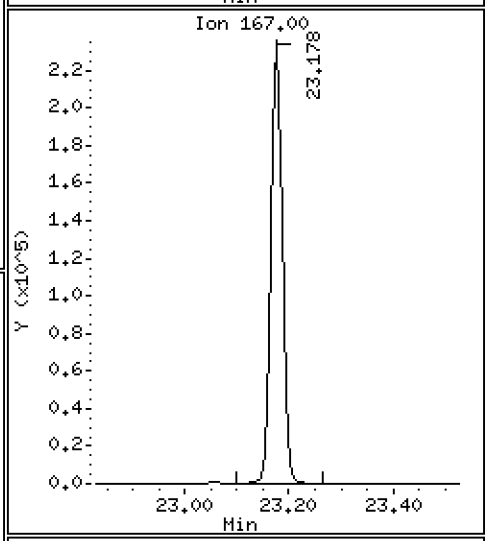


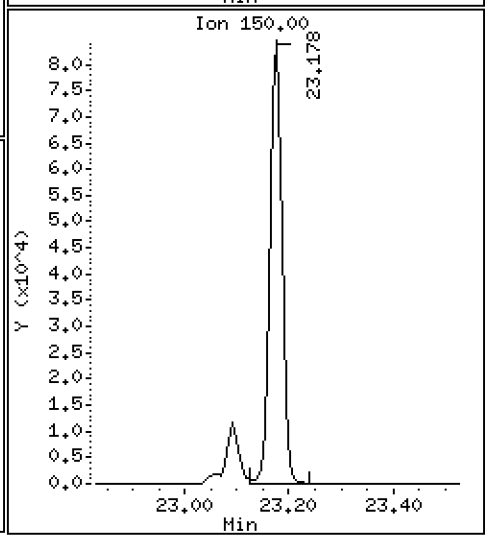












Date : 16-FEB-2023 21:18

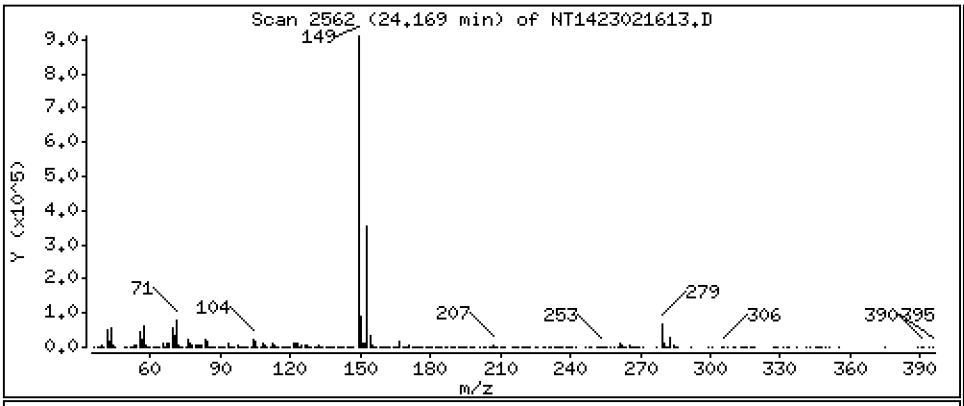
Client ID: Instrument: nt14.i

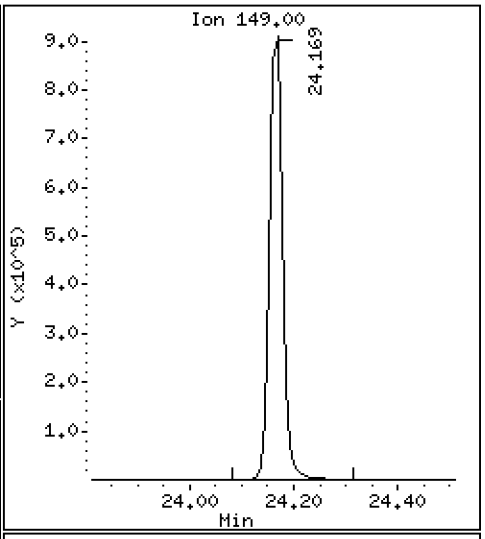
Sample Info: SLB0234-SCV1

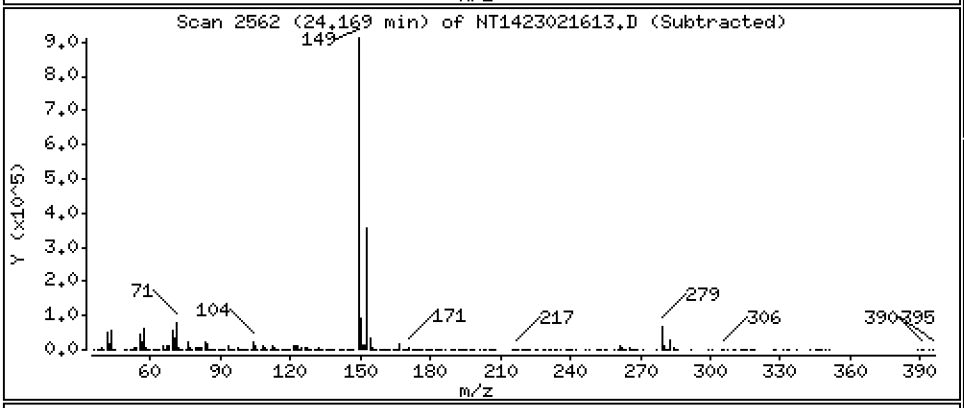
Operator: DSD

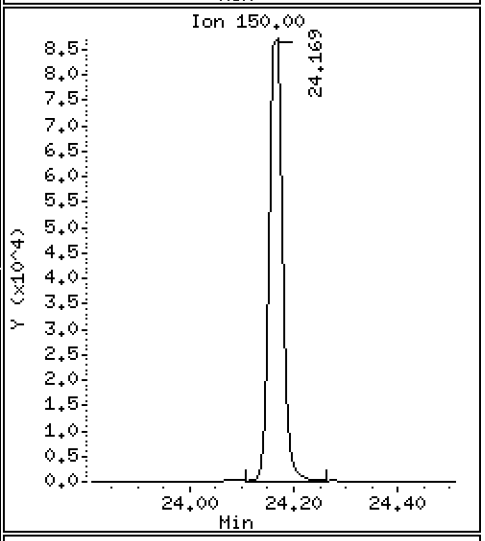
Column phase: ZB-5msi Column diameter: 0.25

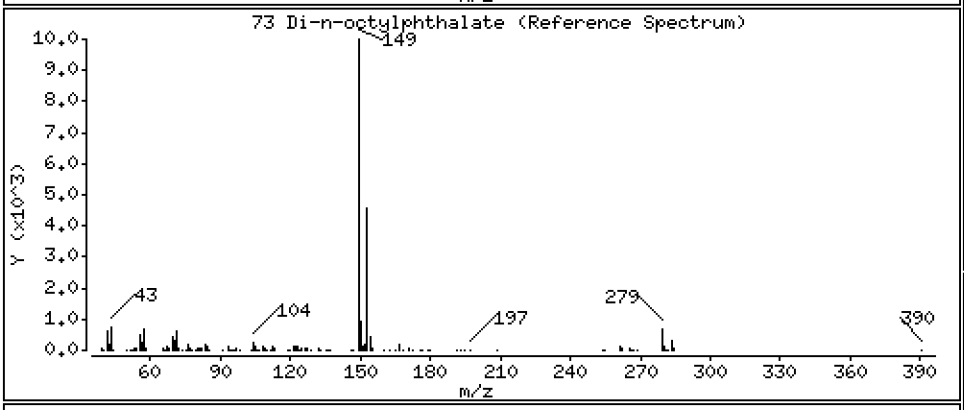
73 Di-n-octylphthalate Concentration: 4.962 ug/mL

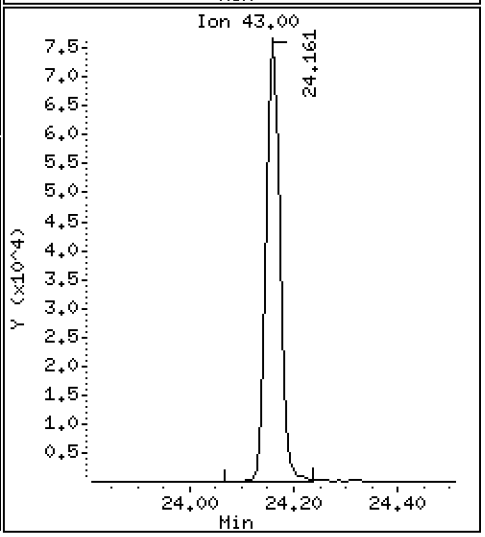


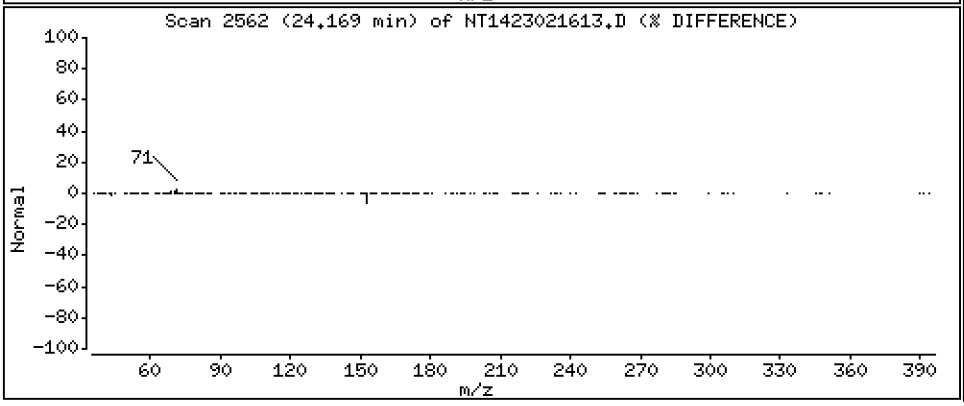












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

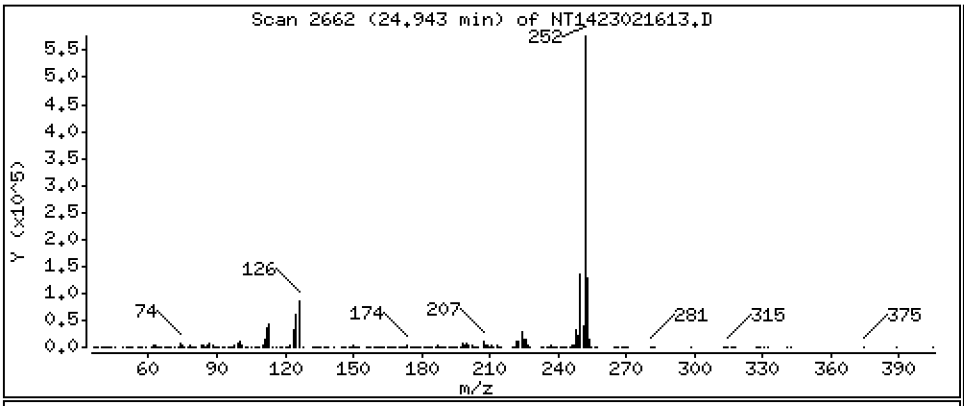
Operator: DSD

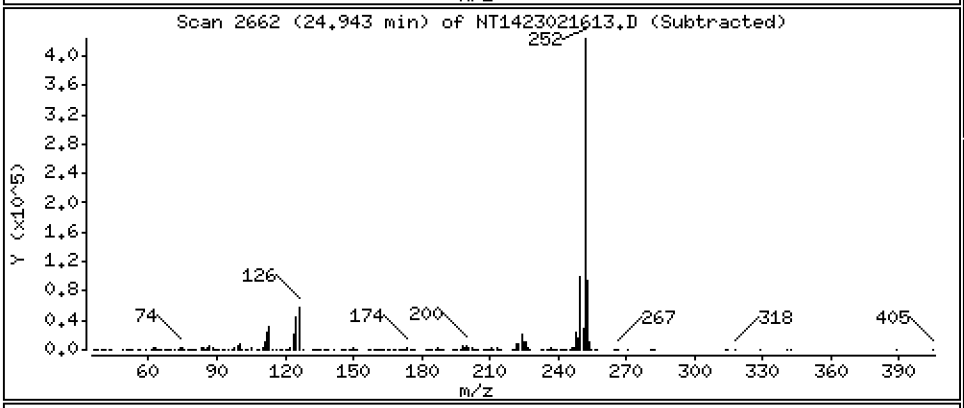
Column phase: ZB-5msi

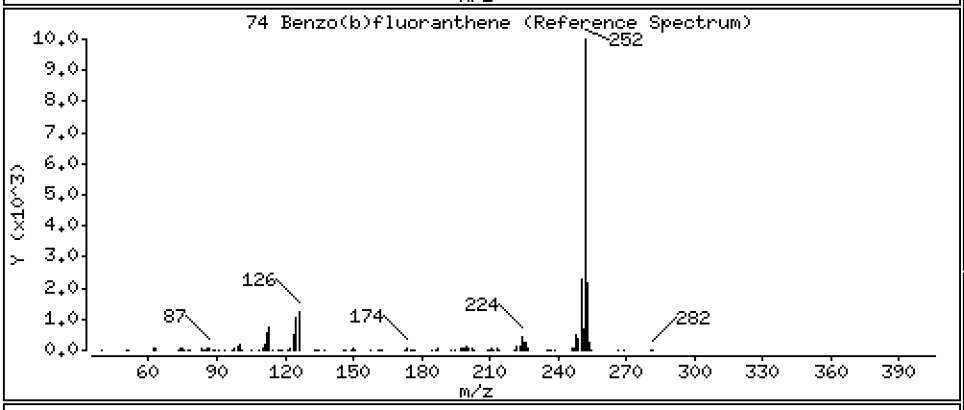
Column diameter: 0.25

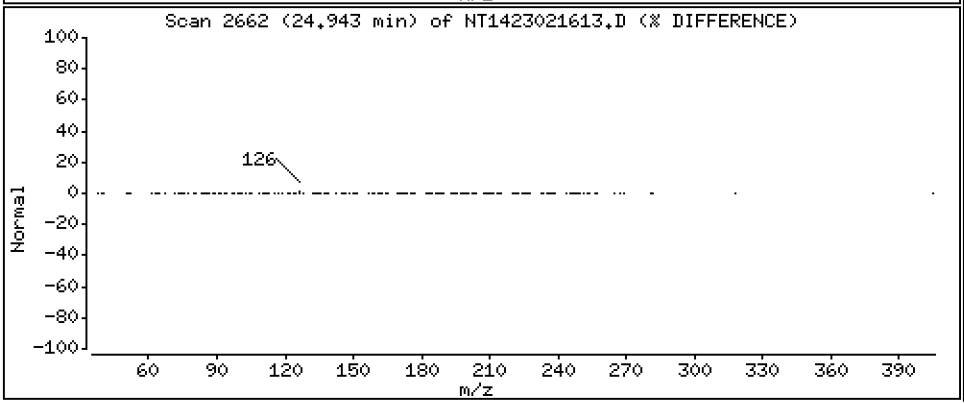
74 Benzo(b)fluoranthene

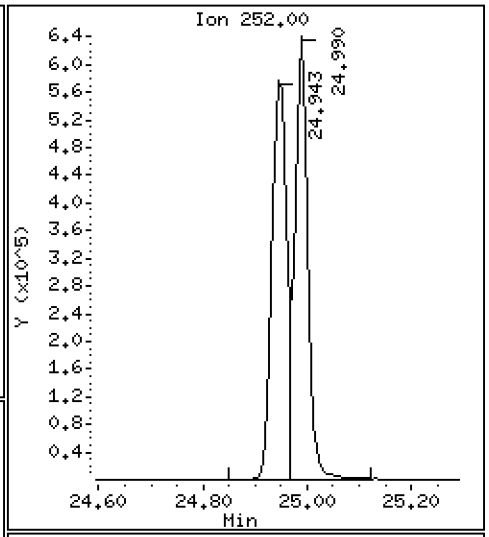
Concentration: 4.813 ug/mL

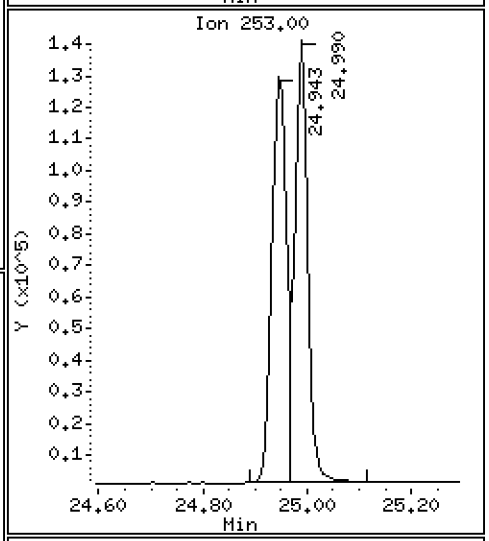


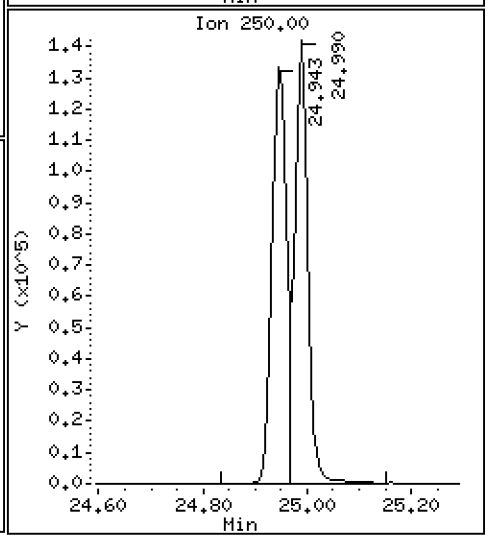












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

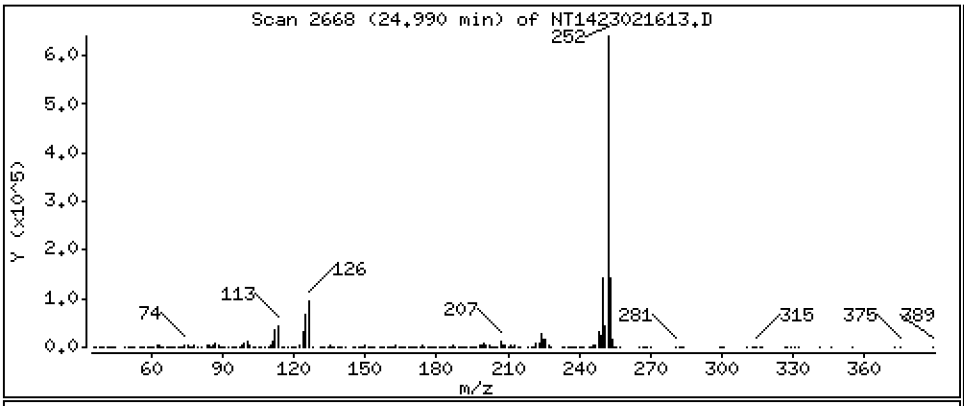
Operator: DSD

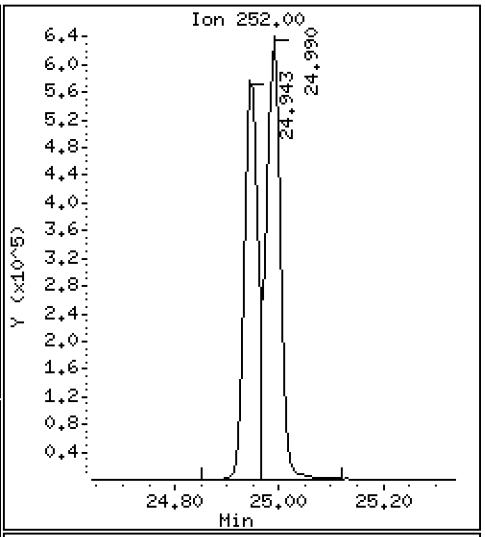
Column phase: ZB-5msi

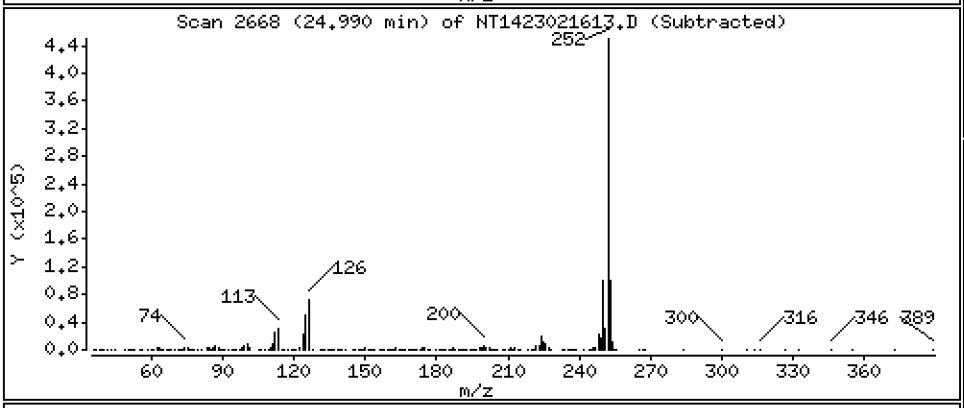
Column diameter: 0.25

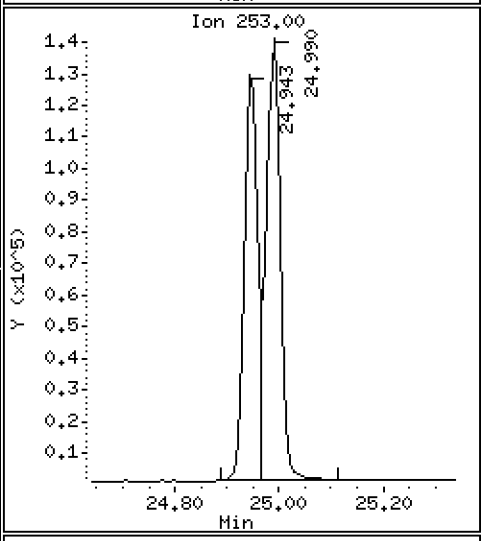
75 Benzo(k)fluoranthene

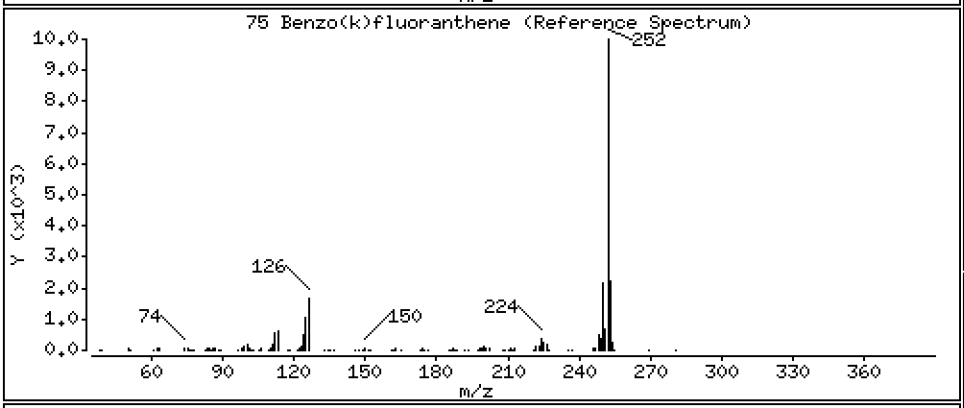
Concentration: 4.838 ug/mL

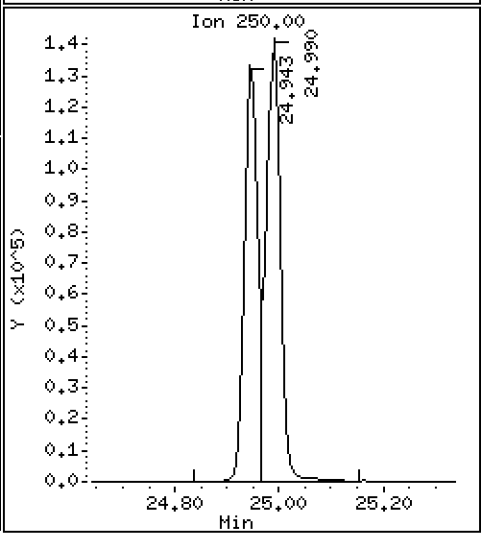


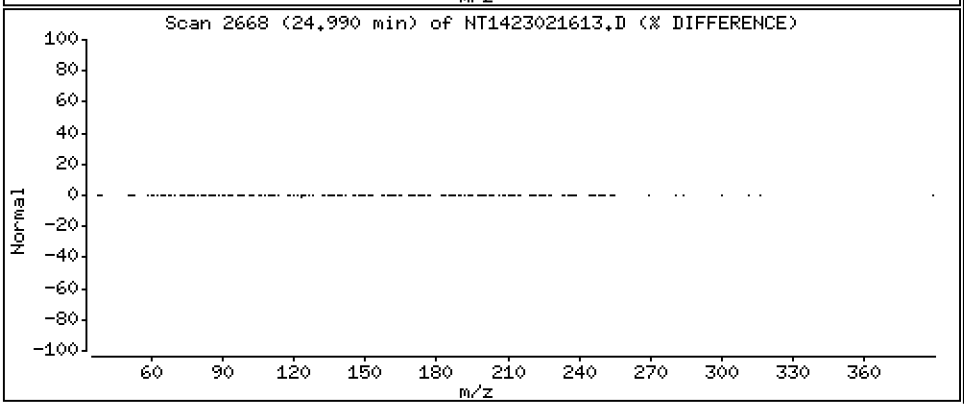












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

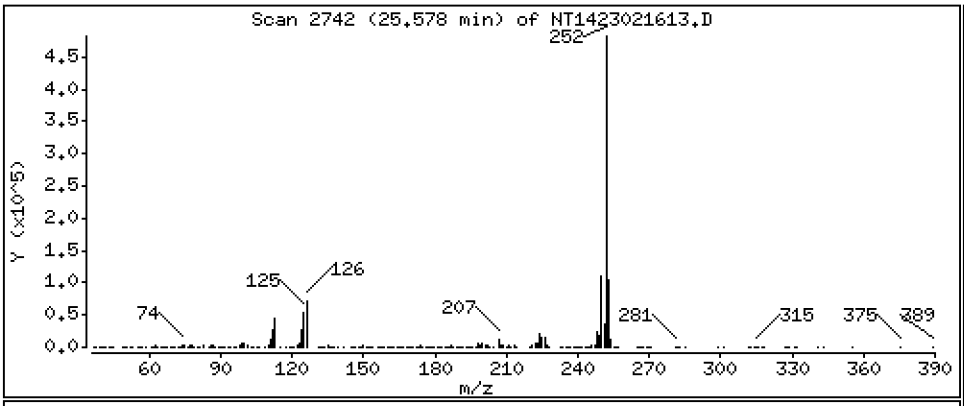
Operator: DSD

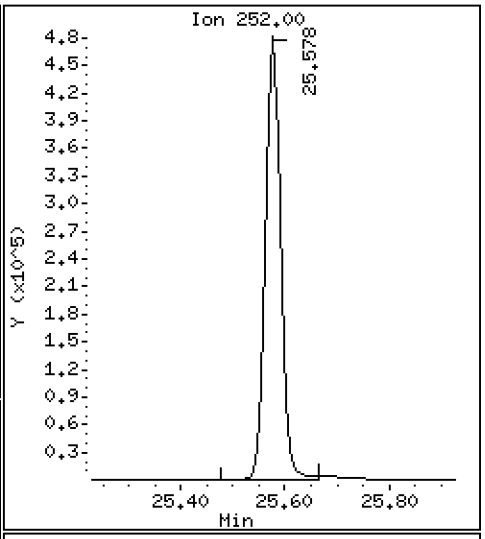
Column phase: ZB-5msi

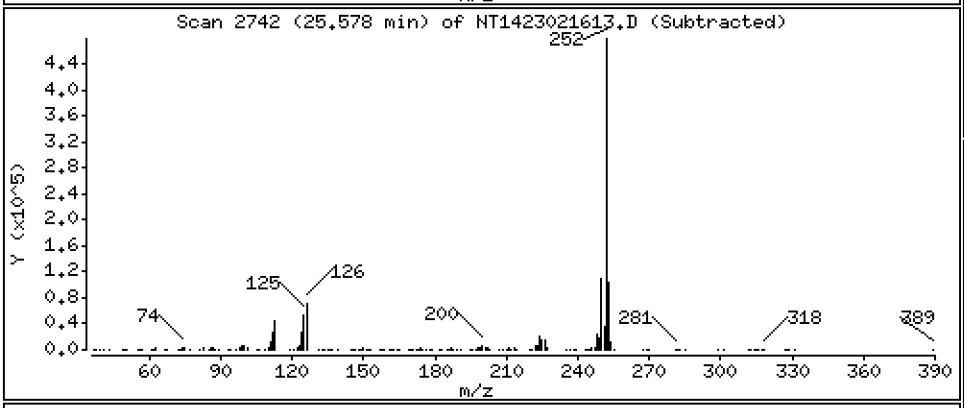
Column diameter: 0.25

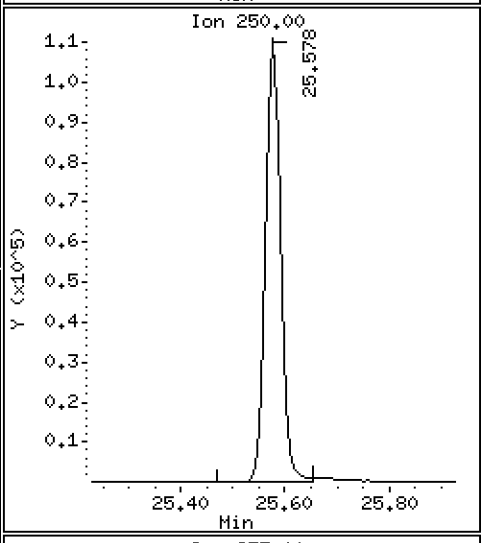
76 Benzo(a)pyrene

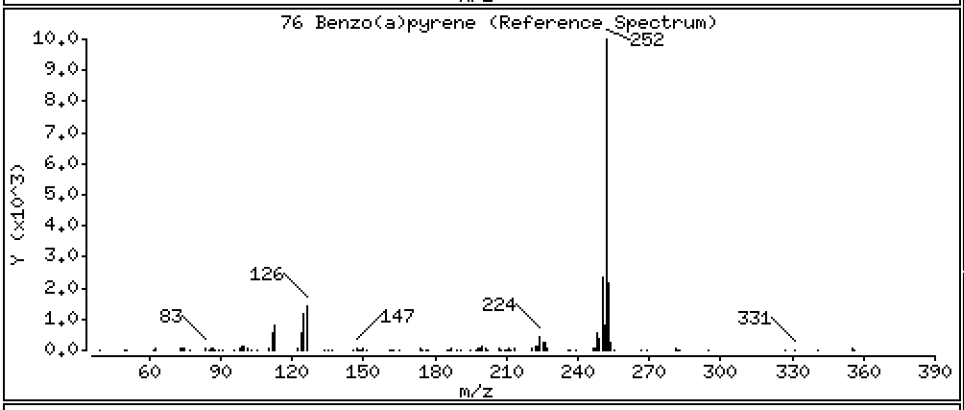
Concentration: 4.607 ug/mL

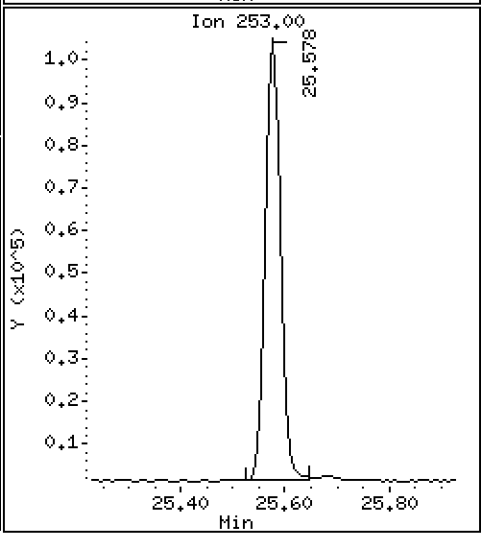


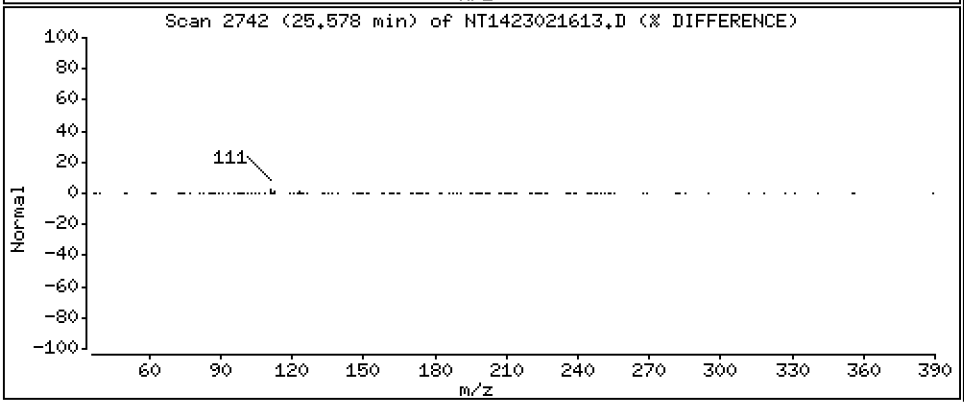












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

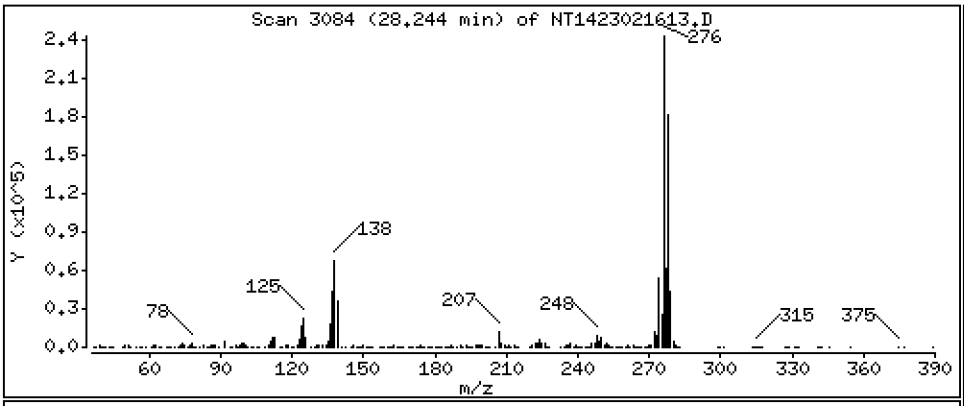
Operator: DSD

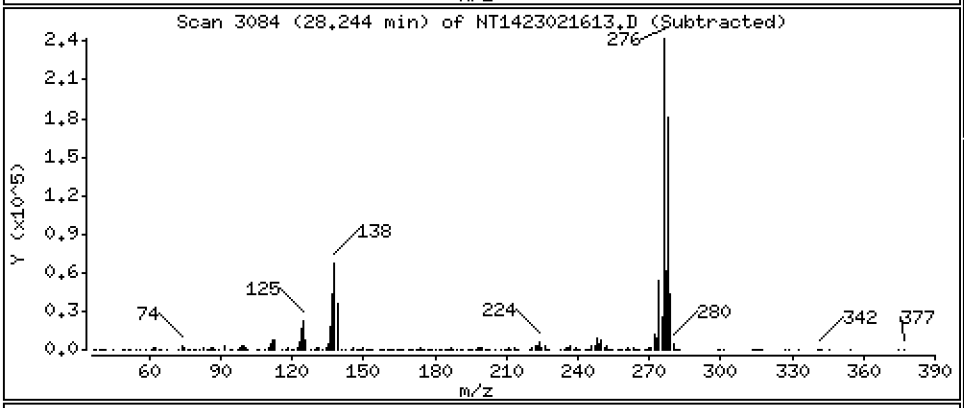
Column phase: ZB-5msi

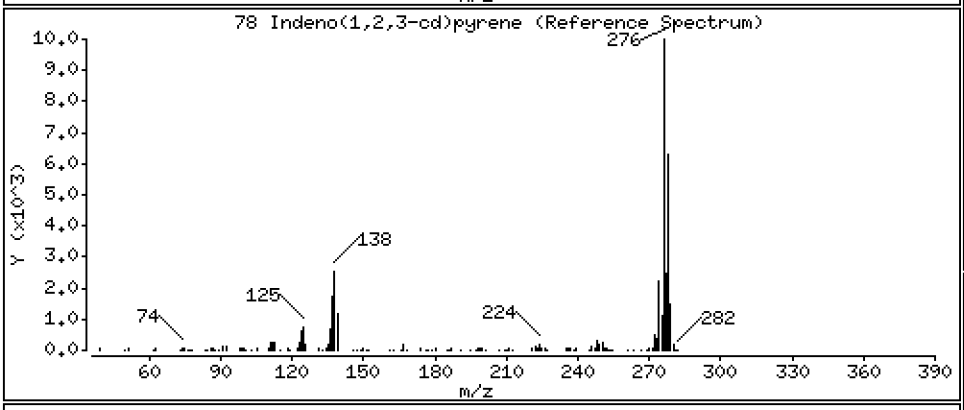
Column diameter: 0.25

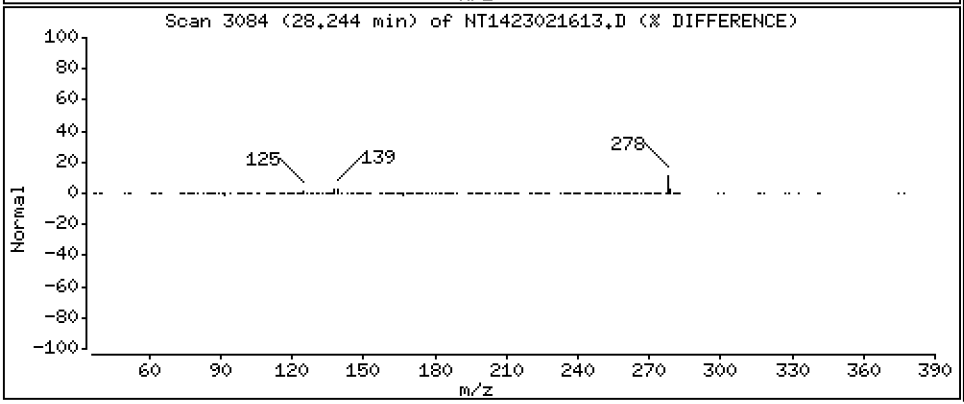
78 Indeno(1,2,3-cd)pyrene

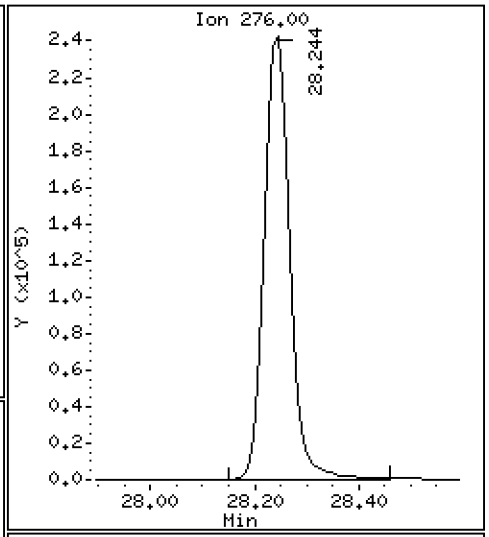
Concentration: 4.395 ug/mL

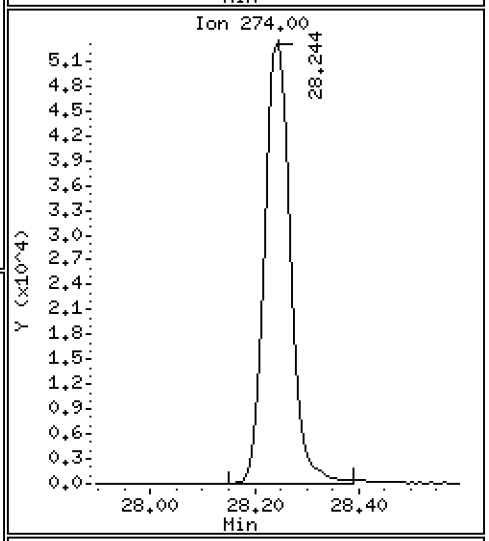


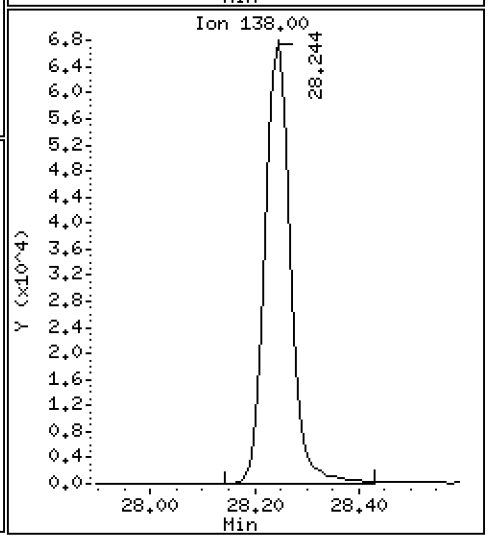












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

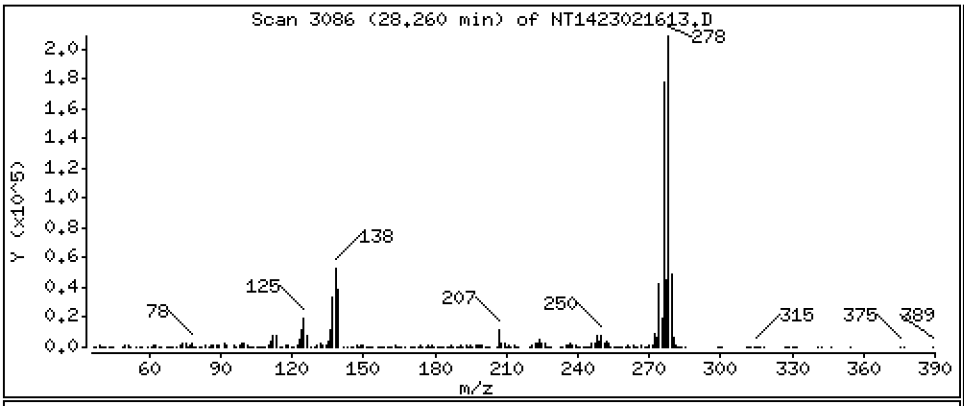
Operator: DSD

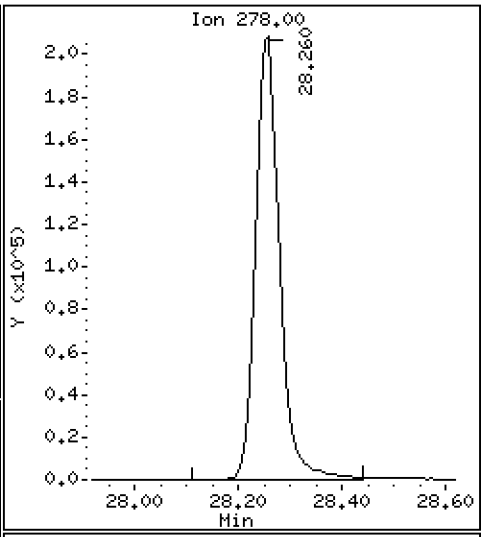
Column phase: ZB-5msi

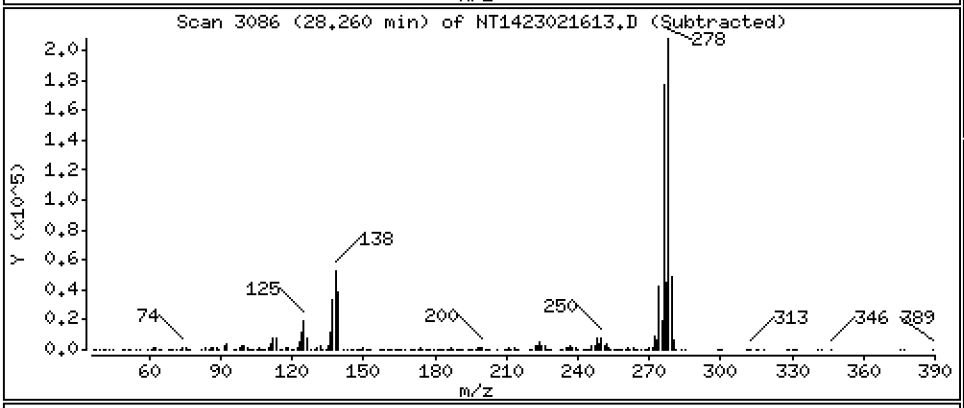
Column diameter: 0.25

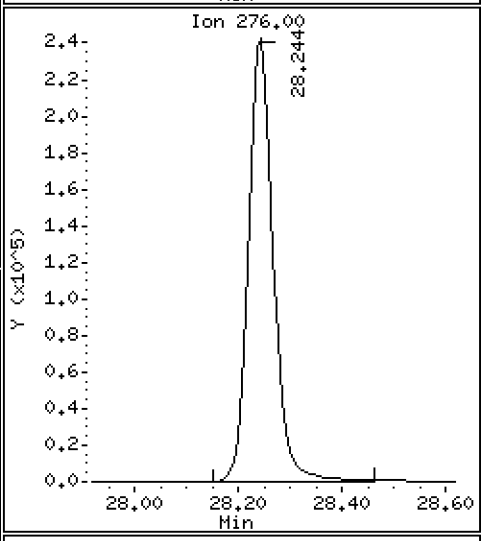
79 Dibenzo(a,h)anthracene

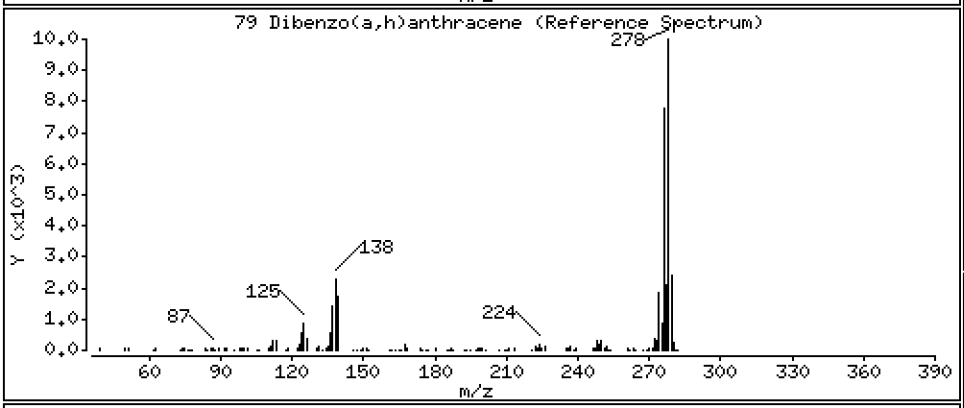
Concentration: 4.365 ug/mL

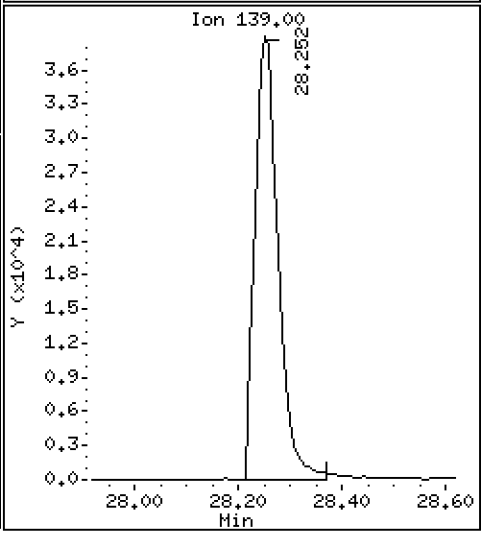


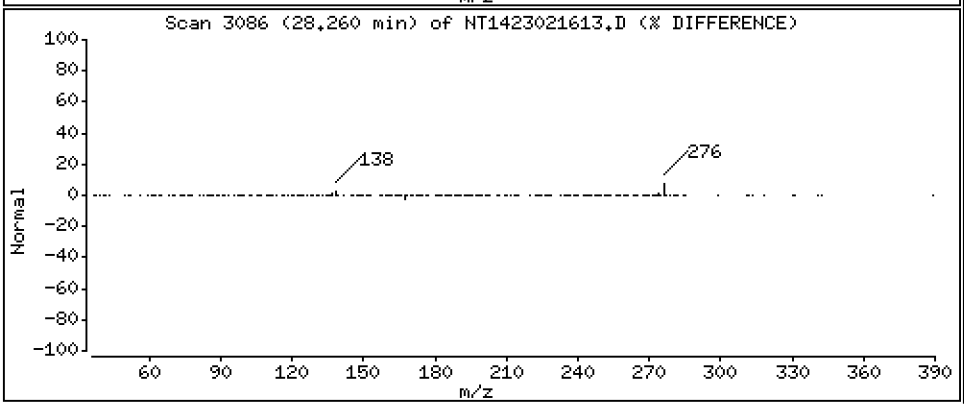












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

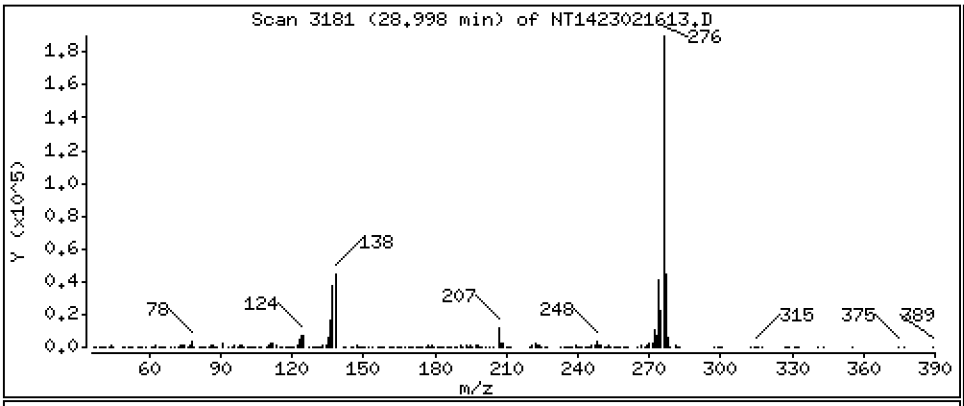
Operator: DSD

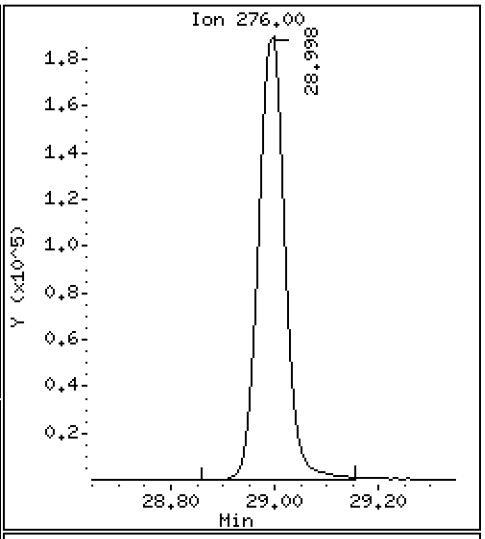
Column phase: ZB-5msi

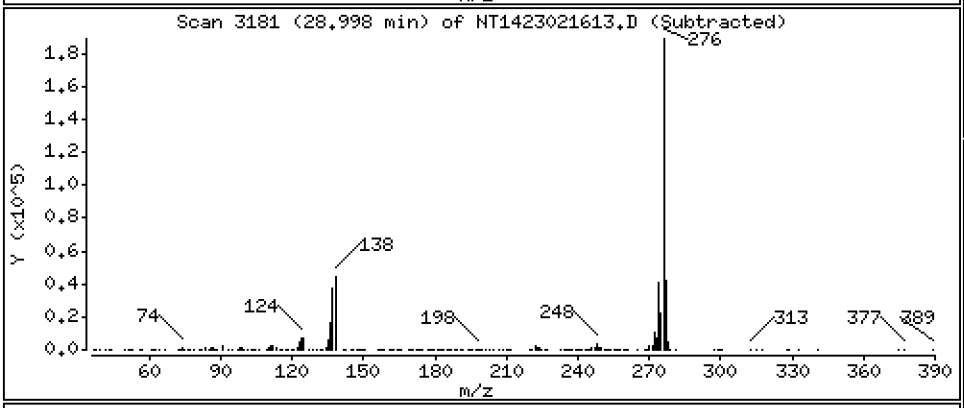
Column diameter: 0.25

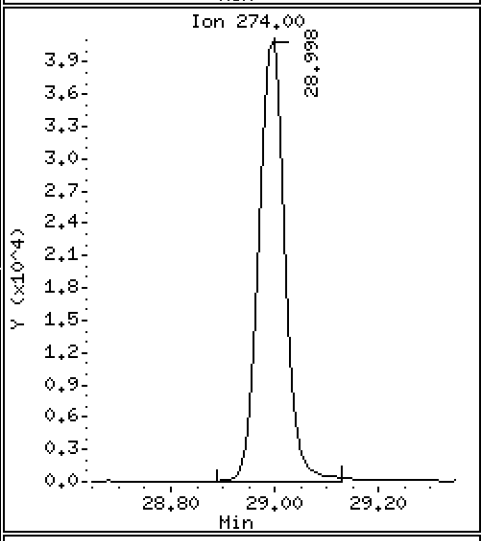
80 Benzo(g,h,i)perylene

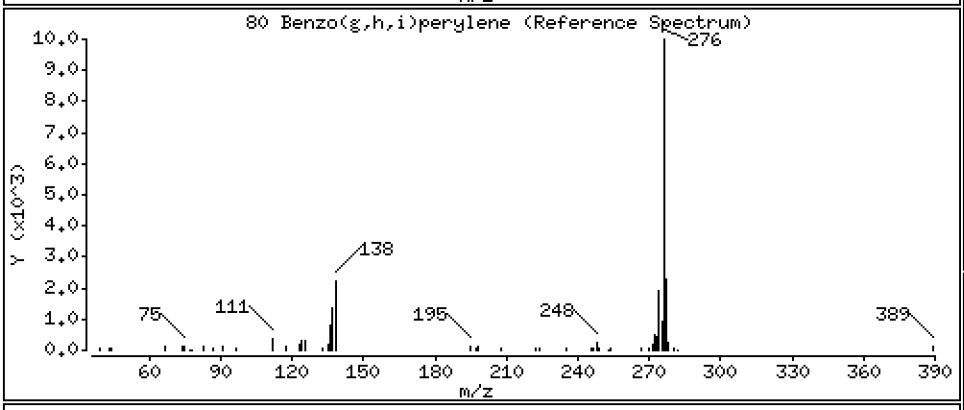
Concentration: 4.380 ug/mL

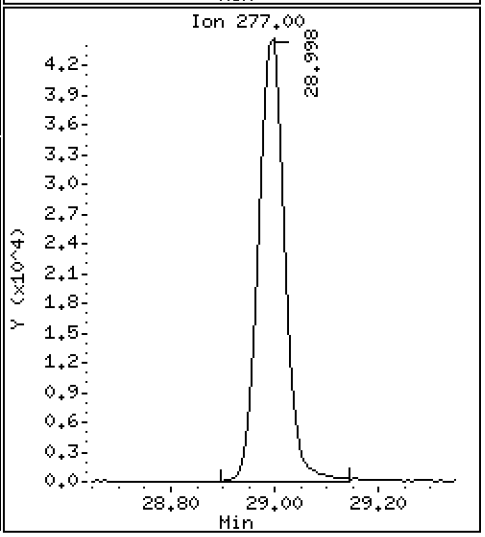


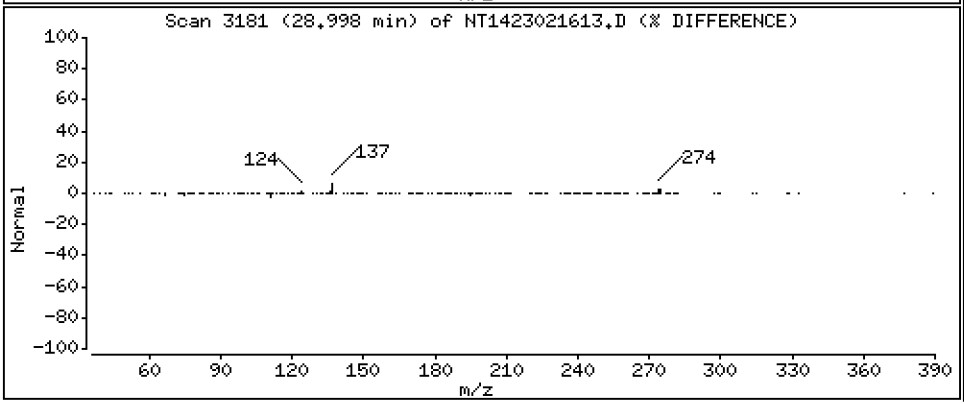












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

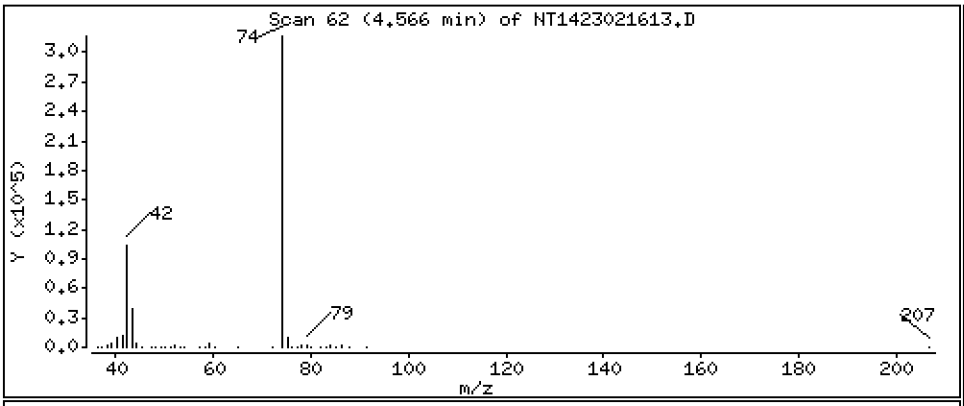
Operator: DSD

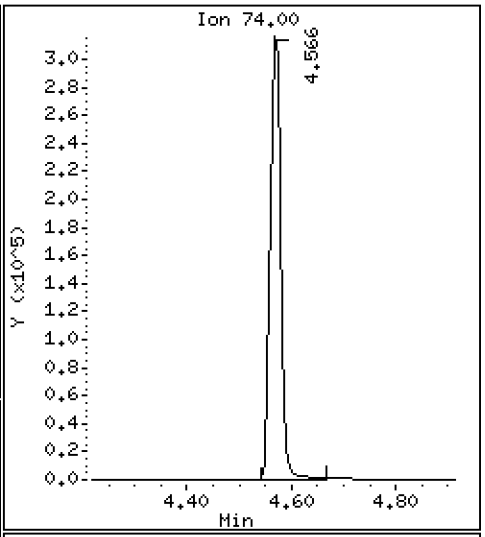
Column phase: ZB-5msi

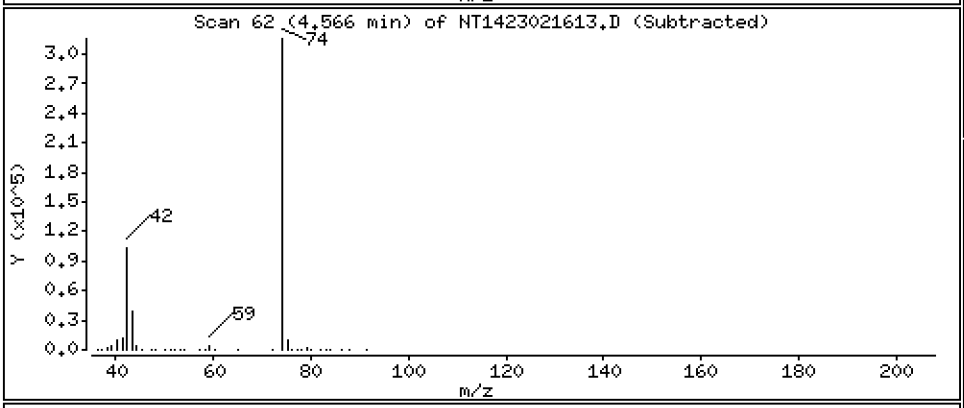
Column diameter: 0.25

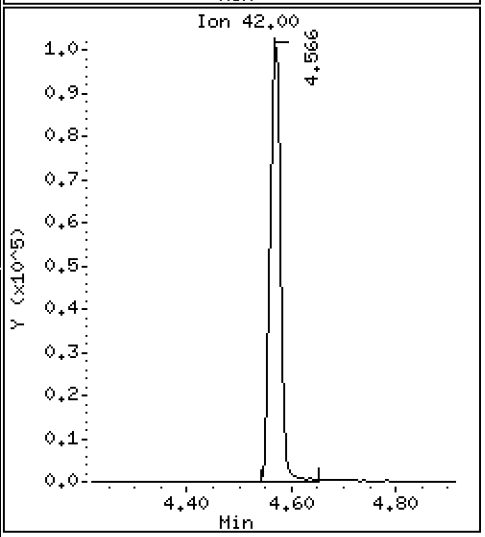
90 N-Nitrosodimethylamine

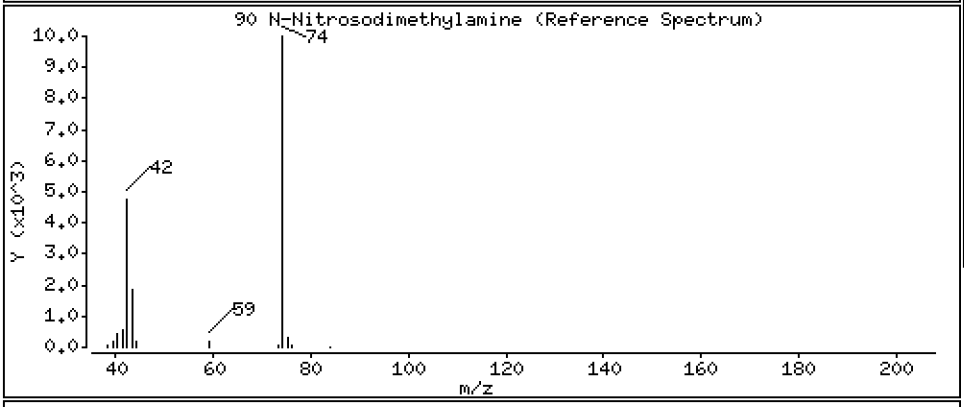
Concentration: 5.632 ug/mL

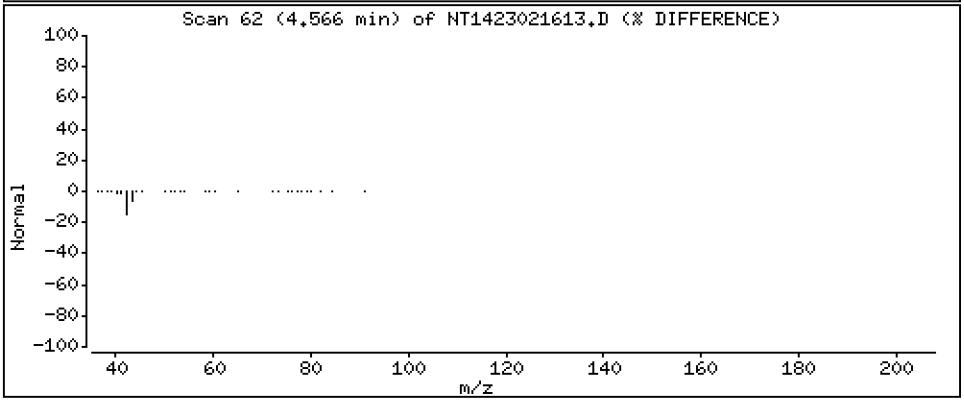












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

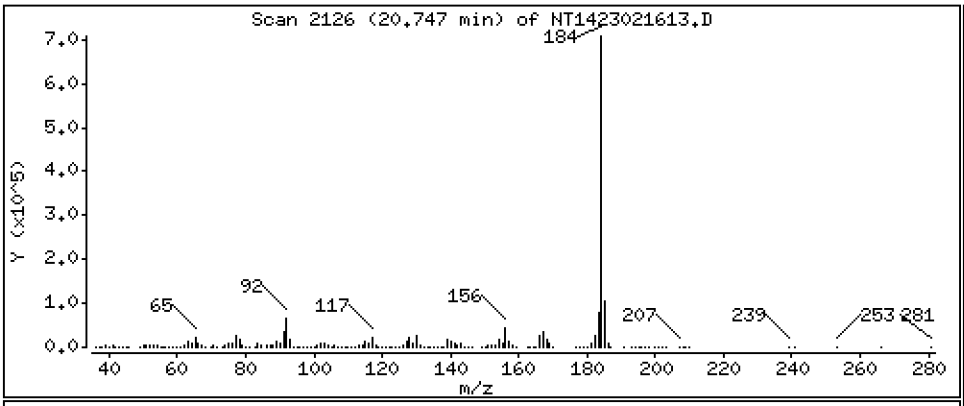
Operator: DSD

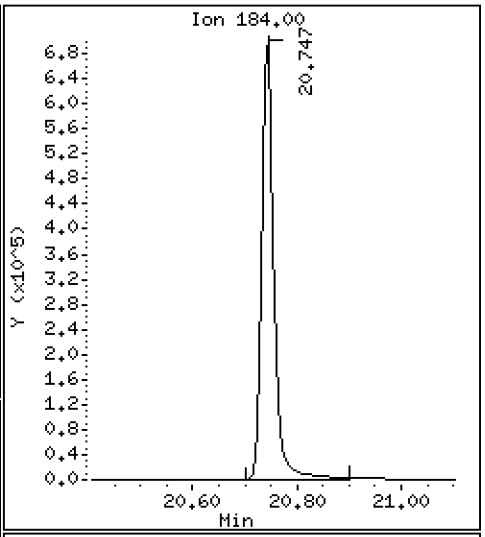
Column phase: ZB-5msi

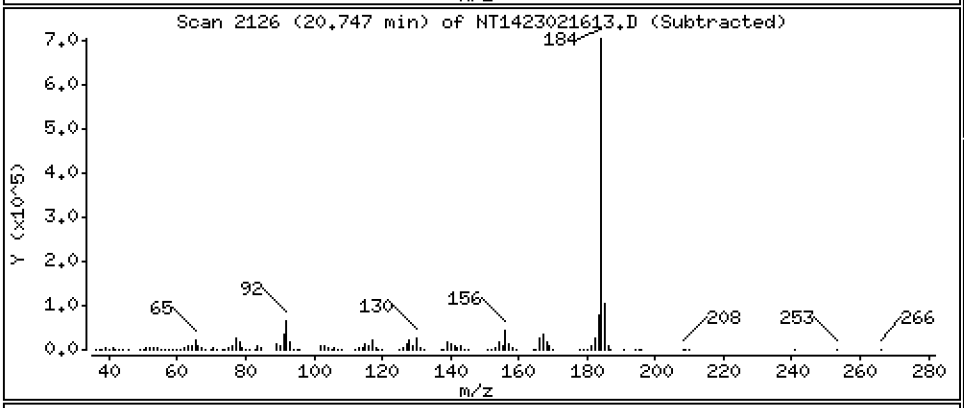
Column diameter: 0.25

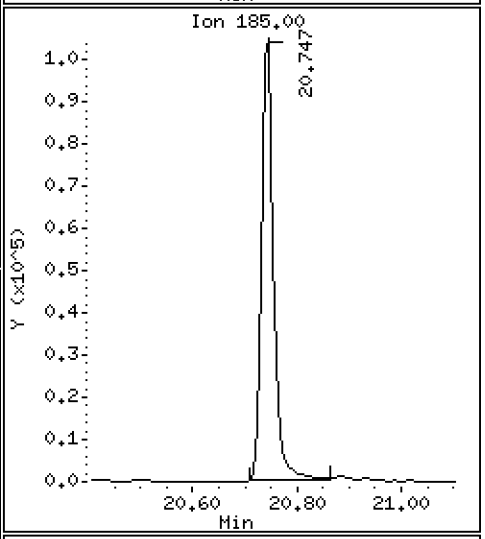
93 Benzidine

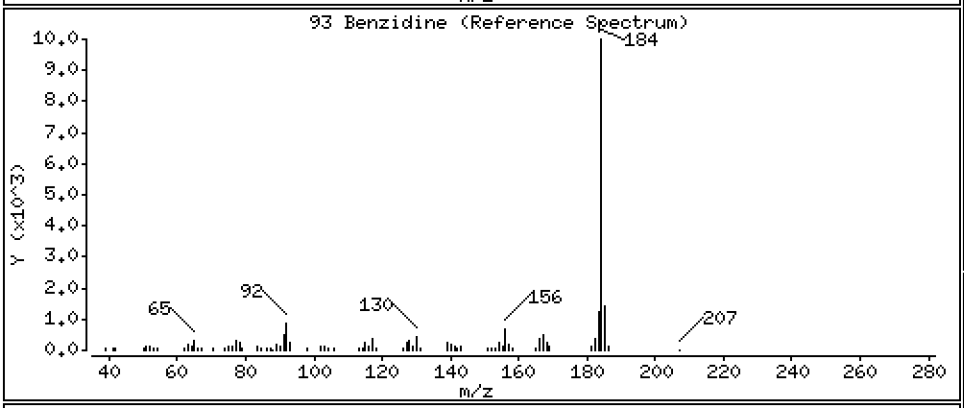
Concentration: 9.984 ug/mL

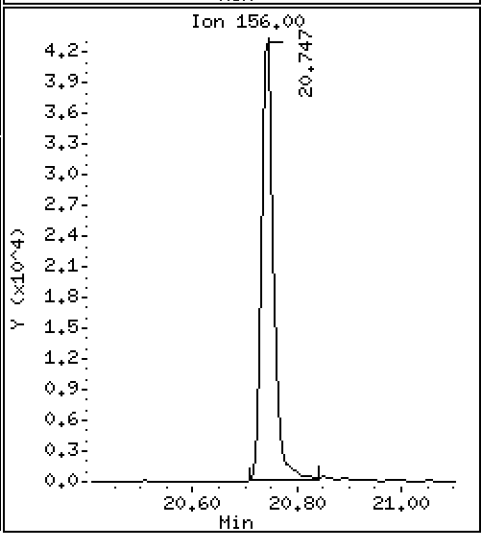


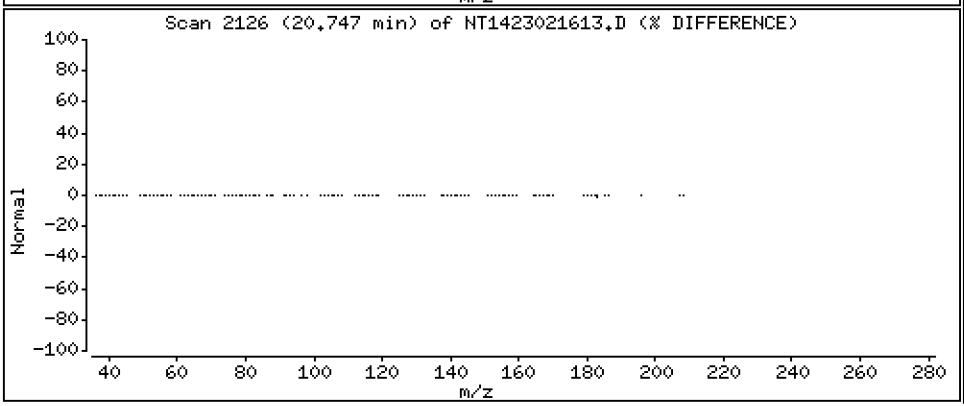












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

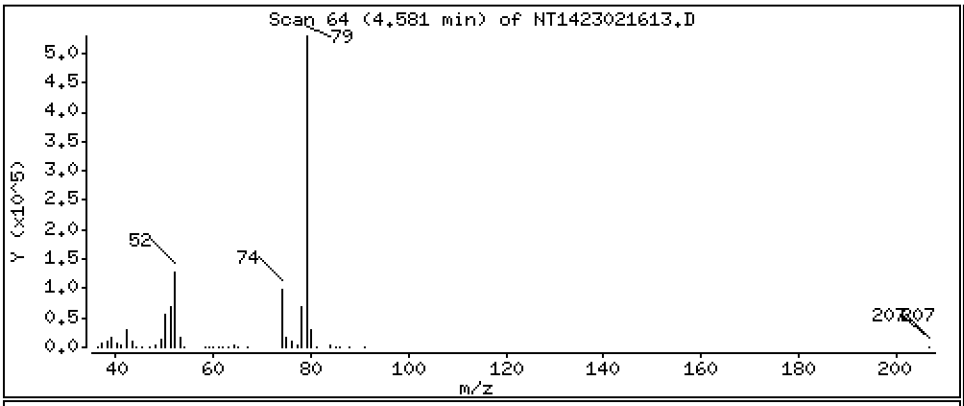
Operator: DSD

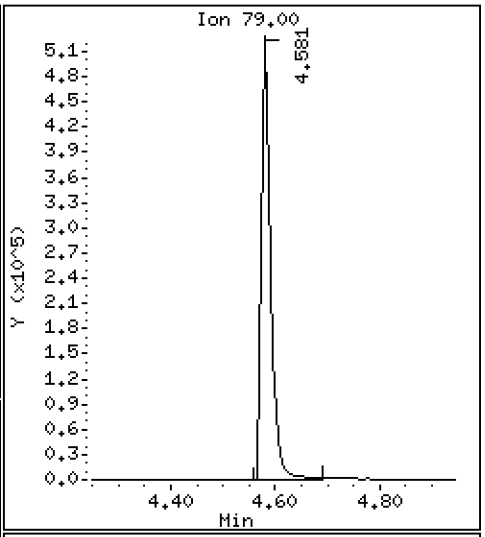
Column phase: ZB-5msi

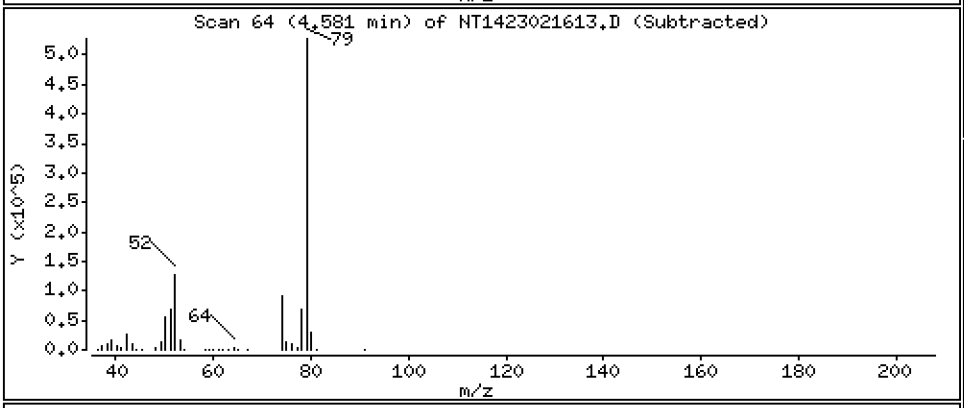
Column diameter: 0.25

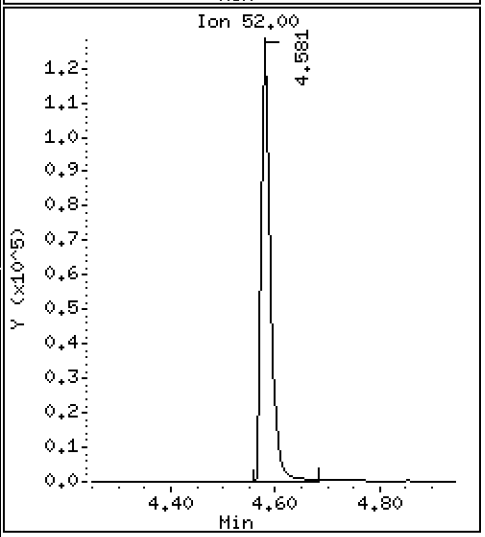
103 Pyridine

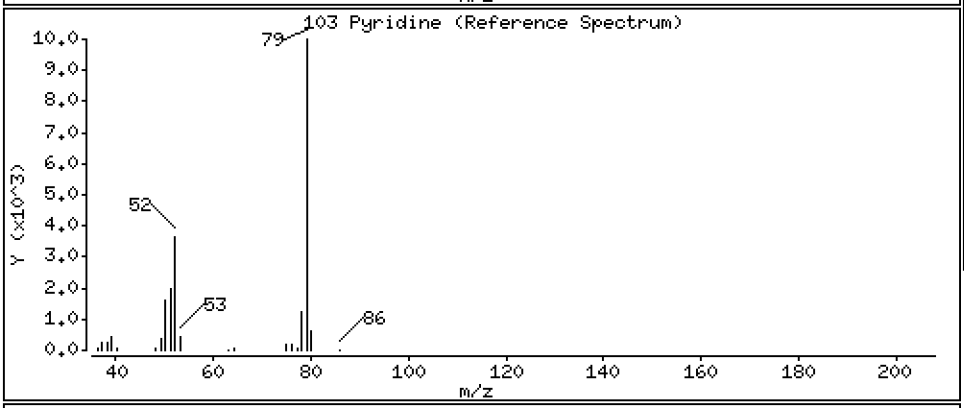
Concentration: 5.566 ug/mL

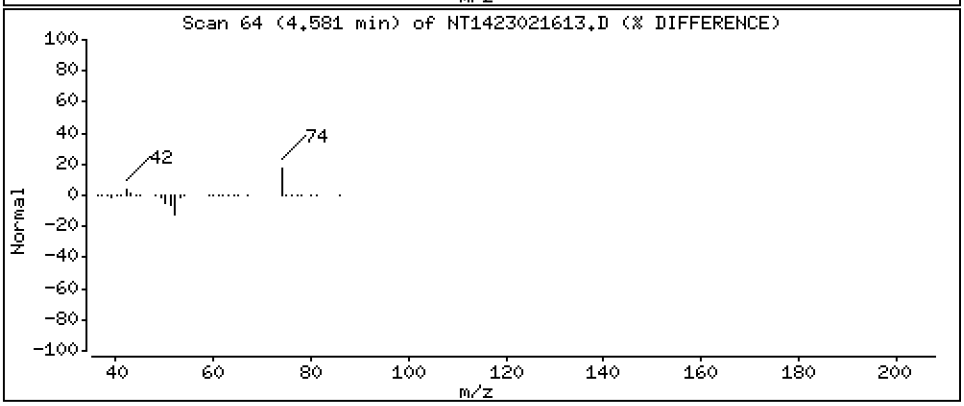












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

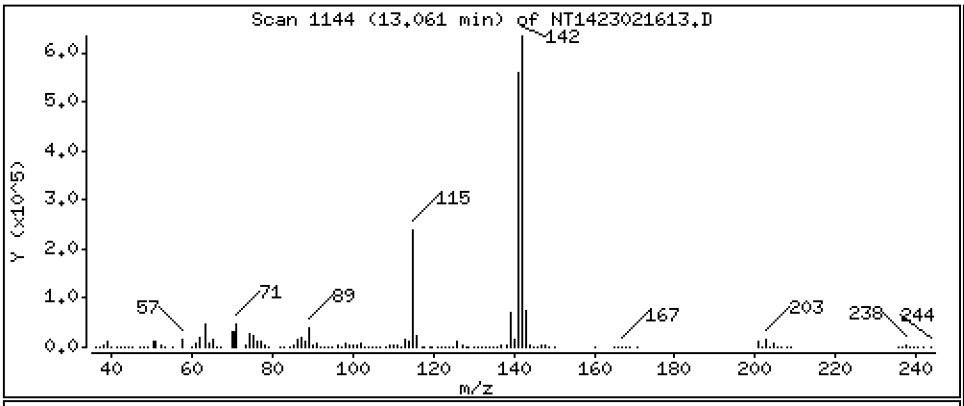
Operator: DSD

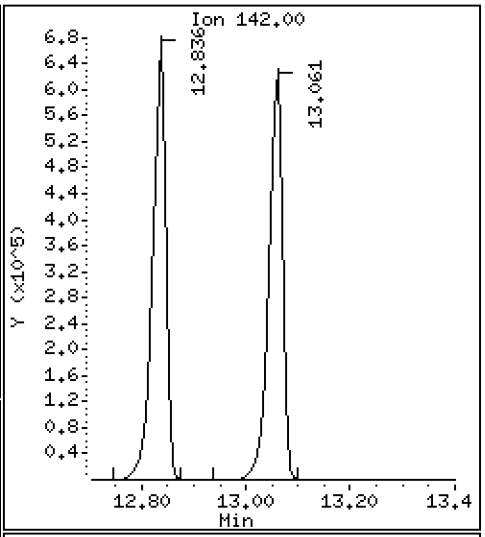
Column phase: ZB-5msi

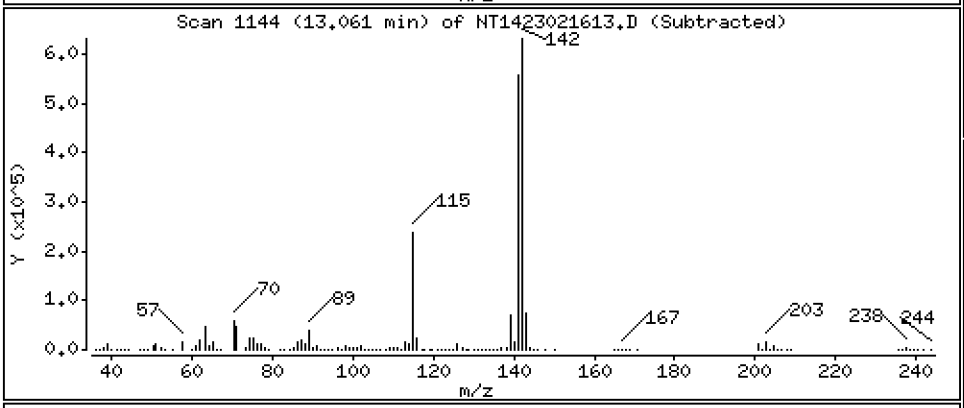
Column diameter: 0.25

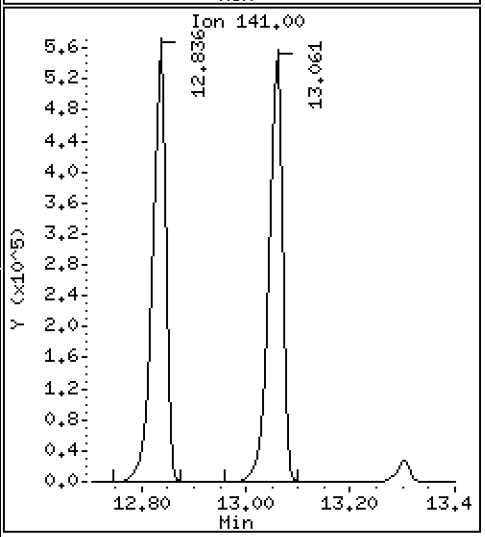
105 1-methylnaphthalene

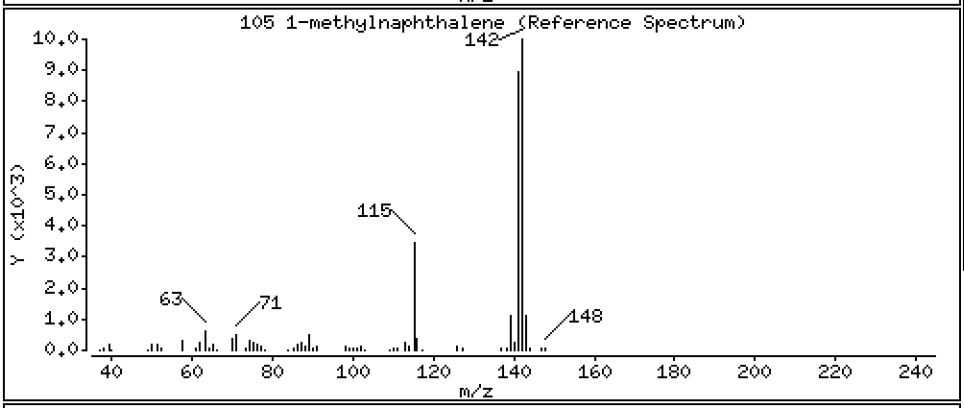
Concentration: 4.760 ug/mL

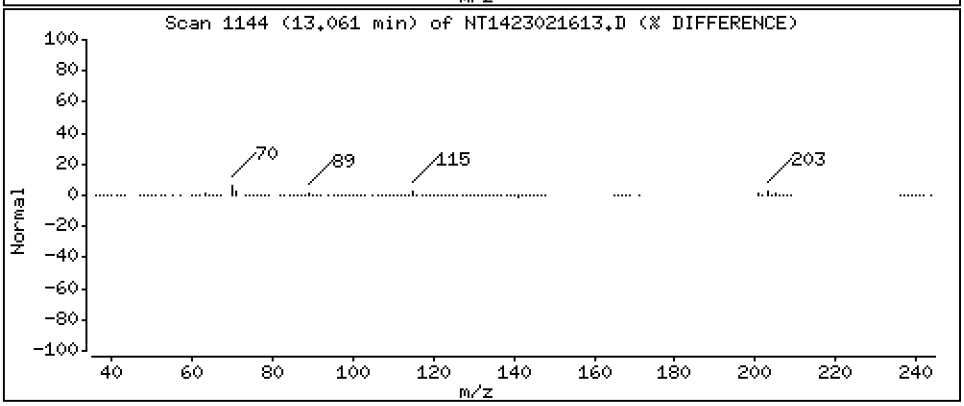












Date : 16-FEB-2023 21:18

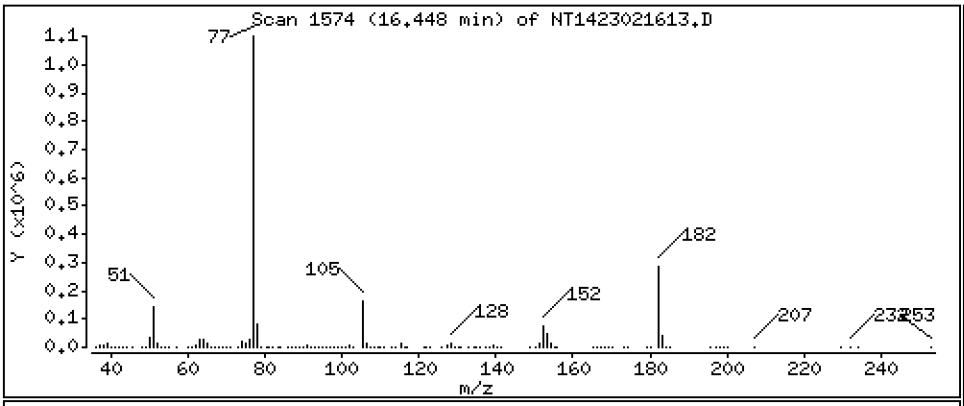
Client ID: Instrument: nt14.i

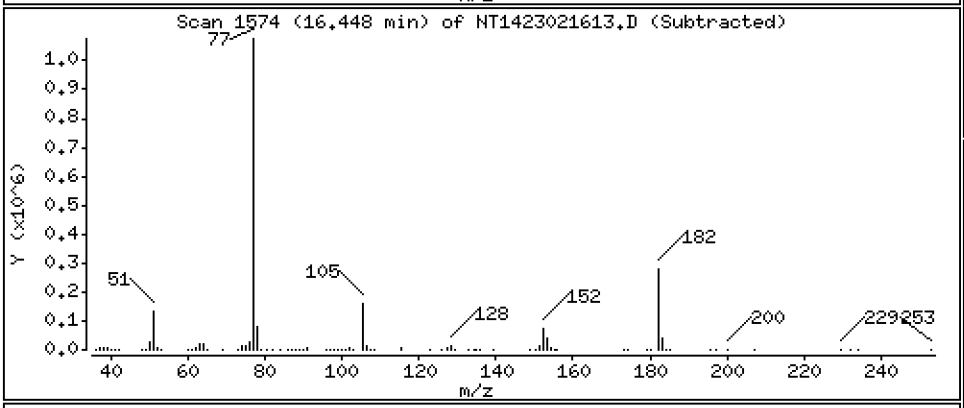
Sample Info: SLB0234-SCV1

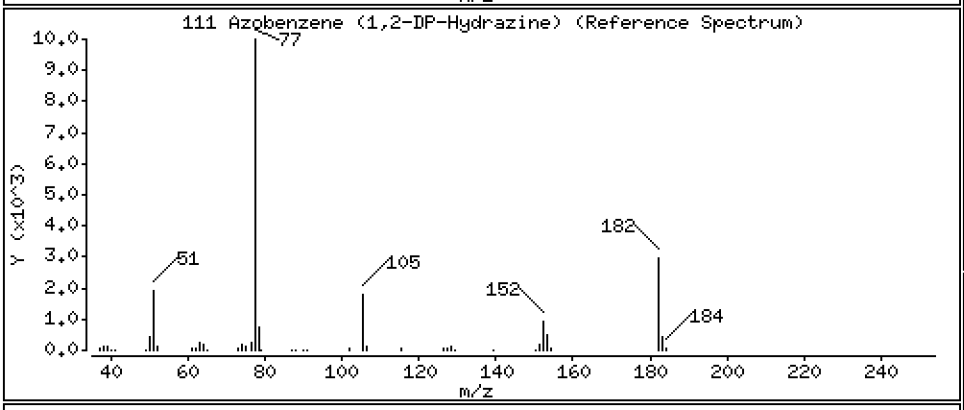
Operator: DSD

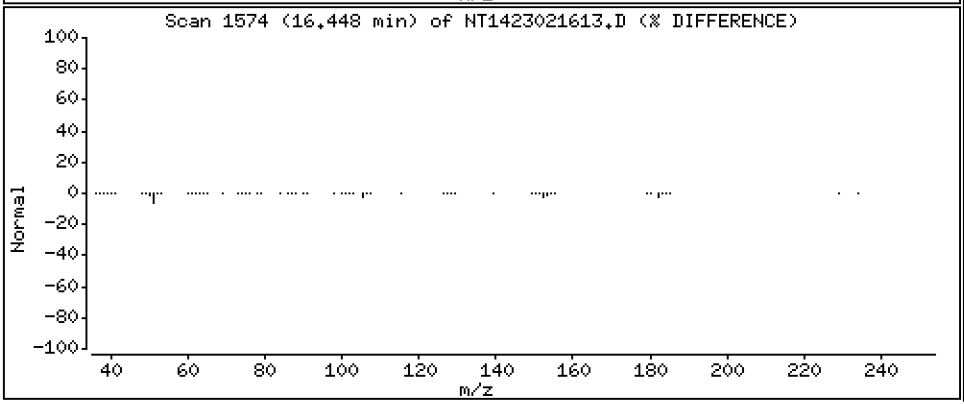
Column phase: ZB-5msi Column diameter: 0.25

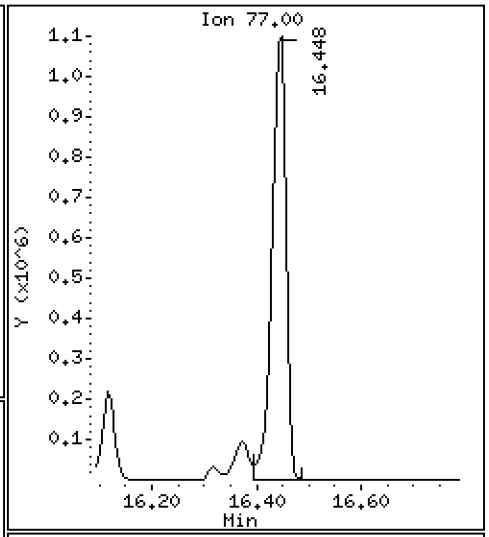
111 Azobenzene (1,2-DP-Hydrazine) Concentration: 4.655 ug/mL

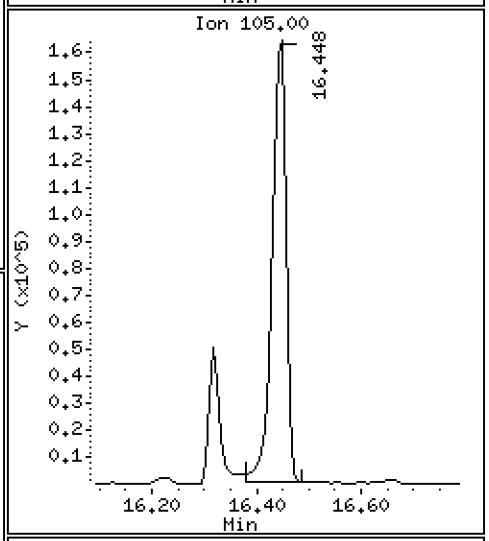


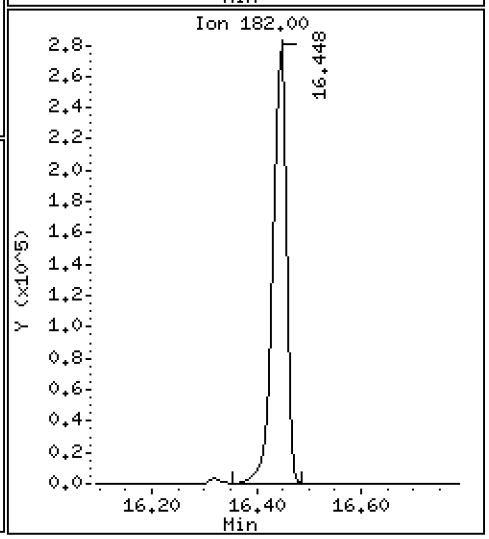












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

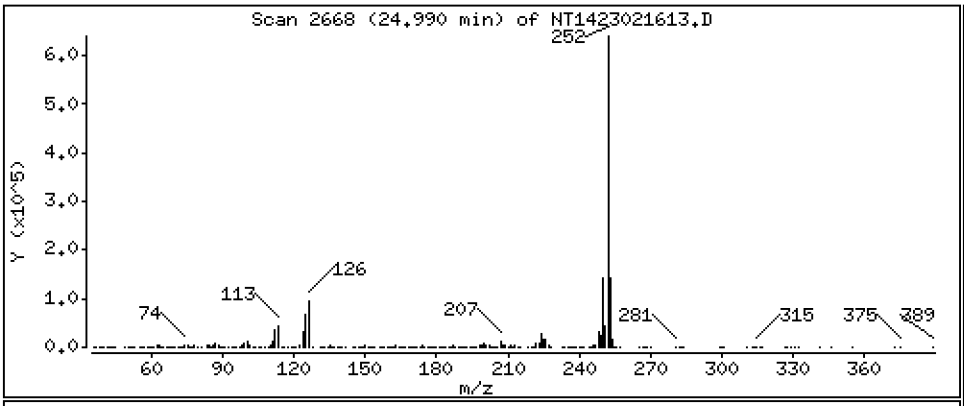
Operator: DSD

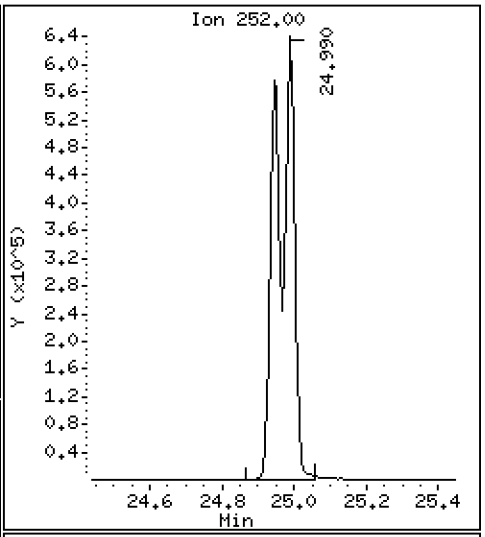
Column phase: ZB-5msi

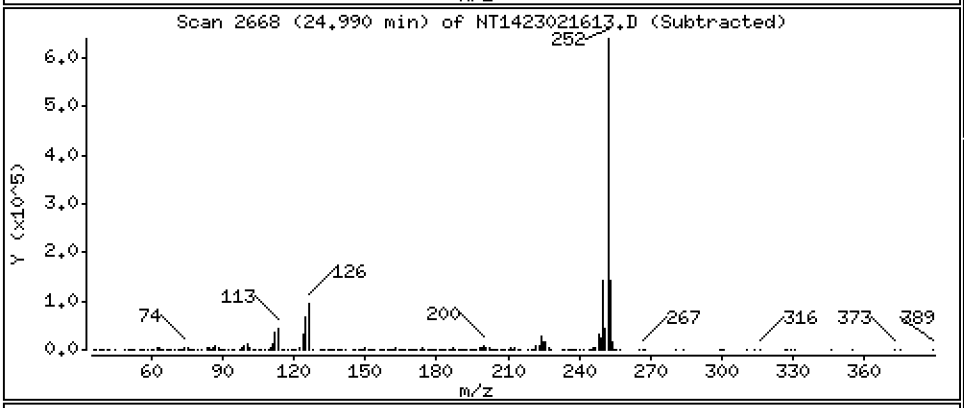
Column diameter: 0.25

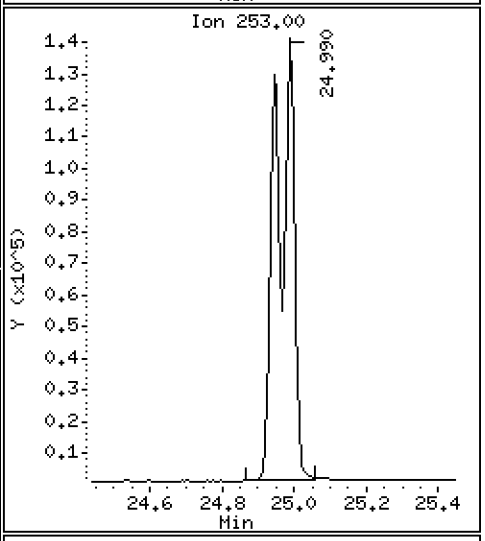
187 Total Benzofluoranthenes

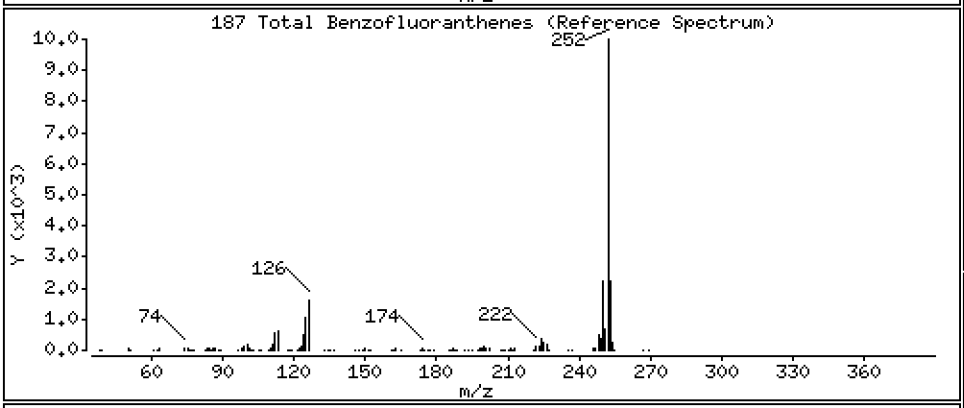
Concentration: 9.712 ug/mL

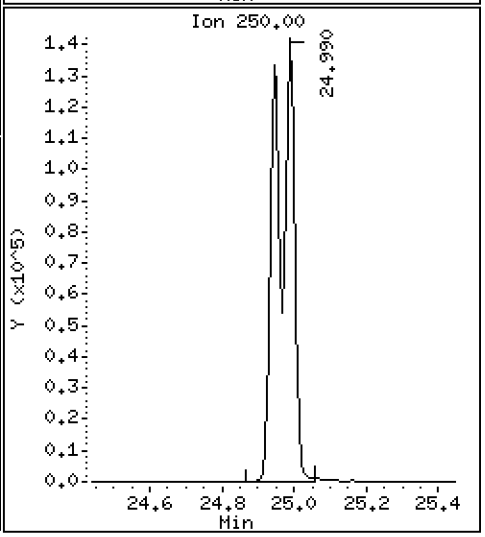


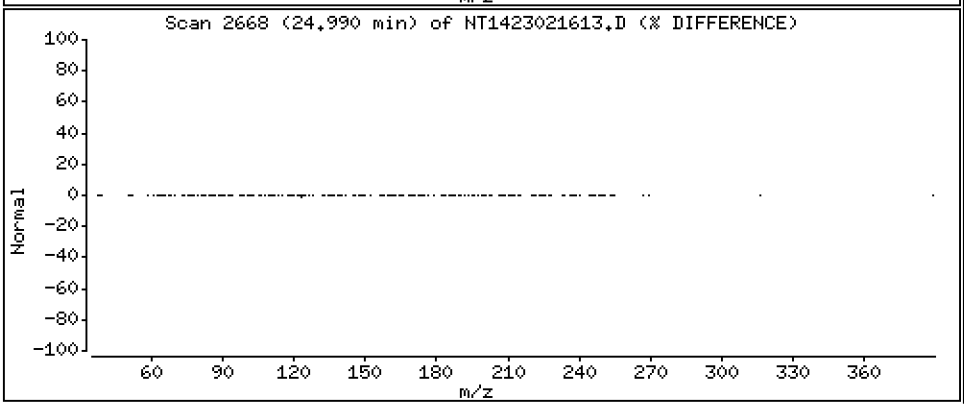












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

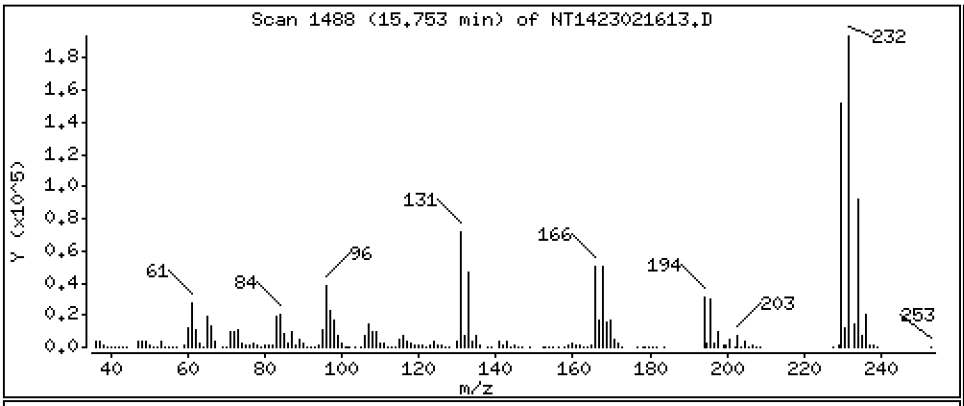
Operator: DSD

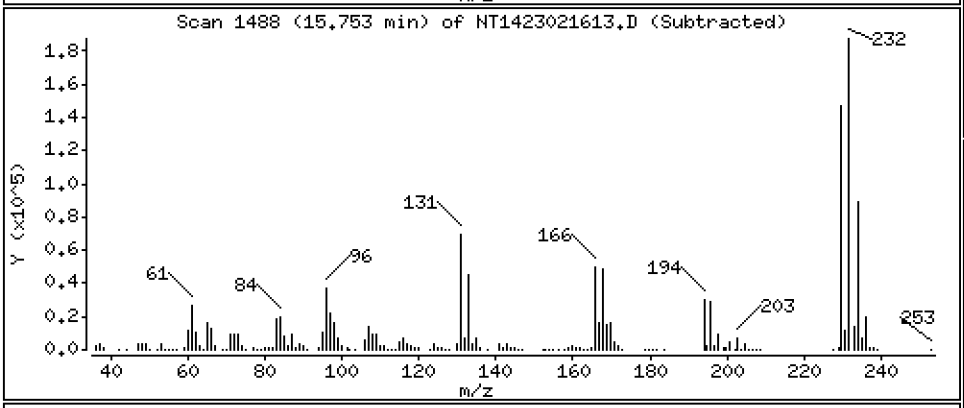
Column phase: ZB-5msi

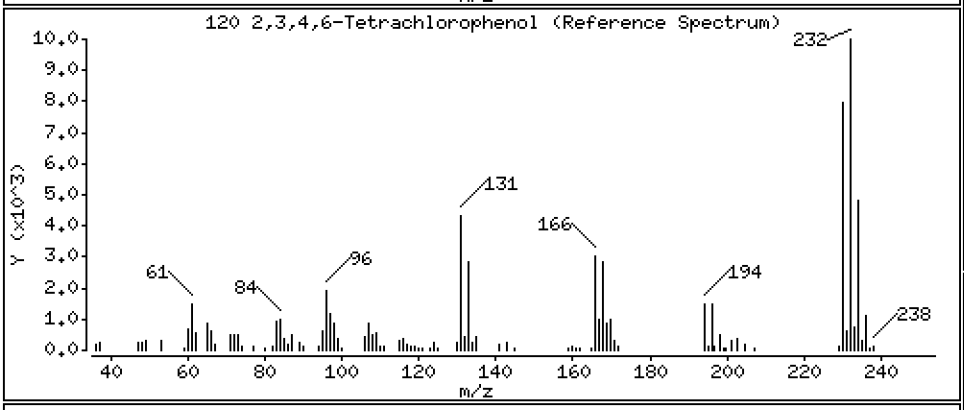
Column diameter: 0.25

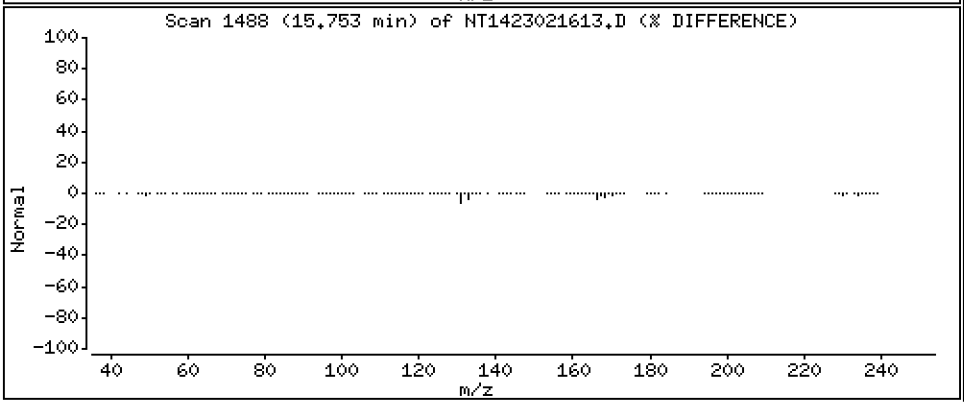
120 2,3,4,6-Tetrachlorophenol

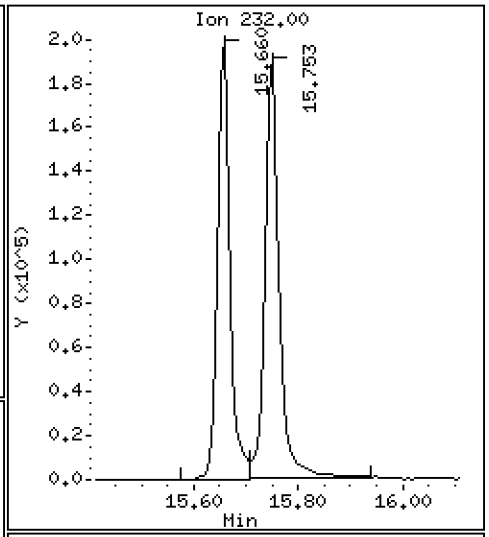
Concentration: 3.875 ug/mL

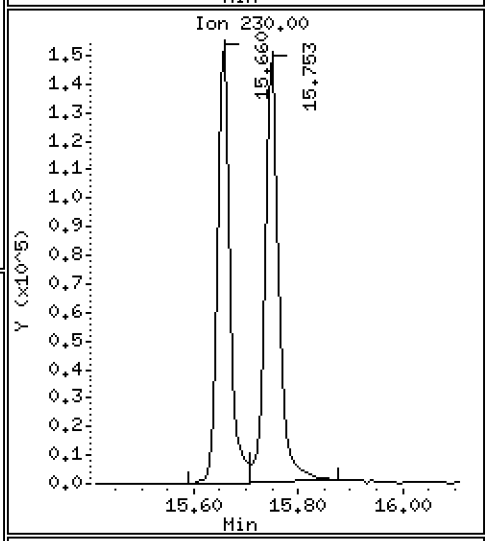


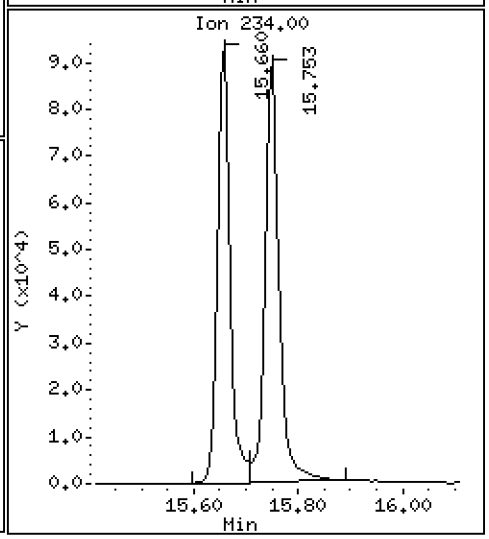












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

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Operator : DSD Inst ID: nt14.i
Smp Info : SLB0234-SCV1
Misc Info :
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Cal Date : 16-FEB-2023 19:30 Cal File: NT1423021610.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: DEENAY-201905

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.674	6.682	(0.750)	812311	8.37324	8.373
$	2 Phenol-d5	99	8.266	8.266	(0.929)	1229645	7.99013	7.990
	3 Phenol	94	8.289	8.289	(0.931)	753865	4.62726	4.627
$	5 2-Chlorophenol-d4	132	8.536	8.536	(0.959)	852471	7.76321	7.763
	4 Bis(2-Chloroethyl)ether	93	8.459	8.451	(0.950)	642018	5.15867	5.159
	6 2-Chlorophenol	128	8.567	8.567	(0.963)	529676	4.61671	4.617
	7 1,3-Dichlorobenzene	146	8.838	8.838	(0.993)	609215	4.76976	4.770
*	8 1,4-Dichlorobenzene-d4	152	8.900	8.900	(1.000)	362894	4.00000	
	9 1,4-Dichlorobenzene	146	8.931	8.931	(1.003)	580699	4.79061	4.791
$	10 1,2-Dichlorobenzene-d4	152	9.264	9.257	(1.041)	410470	4.98694	4.987
	12 1,2-Dichlorobenzene	146	9.288	9.288	(1.044)	576549	4.75778	4.758
	11 Benzyl alcohol	108	9.179	9.202	(1.031)	425653	4.62539	4.625
	14 2,2'-oxybis(1-Chloropropane)	121	9.482	9.482	(1.065)	192988	5.56690	5.567
	13 2-Methylphenol	108	9.404	9.404	(1.057)	496864	4.36760	4.368
	17 Hexachloroethane	117	9.878	9.878	(1.110)	265463	5.03740	5.037
	16 N-Nitroso-di-n-propylamine	70	9.746	9.738	(1.095)	516514	4.98778	4.988
	15 4-Methylphenol	108	9.684	9.684	(1.088)	551454	4.59064	4.591
$	18 Nitrobenzene-d5	82	10.002	10.002	(0.878)	806144	5.19439	5.194
	19 Nitrobenzene	77	10.041	10.033	(0.881)	770727	4.94878	4.949
	20 Isophorone	82	10.483	10.491	(0.920)	1457561	7.09356	7.094
	21 2-Nitrophenol	139	10.669	10.677	(0.936)	316370	4.45322	4.453
	22 2,4-Dimethylphenol	107	10.723	10.724	(0.941)	502608	4.27378	4.274
	23 Bis(2-Chloroethoxy)methane	93	10.925	10.925	(0.959)	767264	5.74018	5.740
	24 Benzoic acid	105	10.933	10.879	(0.959)	412038	5.51023	5.510
	25 2,4-Dichlorophenol	162	11.119	11.127	(0.976)	515695	5.12362	5.124
	26 1,2,4-Trichlorobenzene	180	11.312	11.305	(0.993)	566926	4.64981	4.650
*	27 Naphthalene-d8	136	11.397	11.389	(1.000)	1343351	4.00000	
	28 Naphthalene	128	11.436	11.428	(1.003)	1568652	4.73587	4.736
	29 4-Chloroaniline	127	11.567	11.575	(1.015)	553475	3.91120	3.911
	30 Hexachlorobutadiene	225	11.799	11.799	(1.035)	369529	4.91651	4.917
	31 4-Chloro-3-methylphenol	107	12.534	12.542	(1.100)	549566	5.04457	5.045
	32 2-Methylnaphthalene	142	12.836	12.836	(1.126)	1142706	4.60635	4.606
	33 Hexachlorocyclopentadiene	237	13.300	13.301	(0.886)	438821	5.30111	5.301

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.455	13.463	(0.896)	404613	4.80795	4.808
	35	2,4,5-Trichlorophenol	196	13.532	13.541	(0.901)	428976	4.70685	4.707
$	36	2-Fluorobiphenyl	172	13.625	13.617	(0.907)	1488825	4.87017	4.870
	37	2-Chloronaphthalene	162	13.834	13.826	(0.921)	1157484	4.63882	4.639
	38	2-Nitroaniline	65	14.097	14.097	(0.939)	393653	4.85233	4.852
	39	Dimethylphthalate	163	14.538	14.531	(0.968)	1224849	4.69299	4.693
	40	Acenaphthylene	152	14.701	14.701	(0.979)	1772439	4.65722	4.657
	41	2,6-Dinitrotoluene	165	14.670	14.670	(0.977)	303057	4.93469	4.935
*	42	Acenaphthene-d10	164	15.018	15.018	(1.000)	854455	4.00000	
	43	3-Nitroaniline	138	14.956	14.957	(0.996)	320818	4.92163	4.922
	44	Acenaphthene	153	15.088	15.080	(1.005)	1055715	4.63322	4.633
	45	2,4-Dinitrophenol	184	15.265	15.282	(1.016)	10046	0.25021	0.2502
	46	Dibenzofuran	168	15.412	15.405	(1.026)	1701574	4.54830	4.548
	47	4-Nitrophenol	109	15.273	15.273	(1.017)	153415	4.05153	4.052
	48	2,4-Dinitrotoluene	165	15.482	15.475	(1.031)	421549	4.85479	4.855
	50	Diethylphthalate	149	15.992	15.984	(1.065)	1638308	4.72171	4.722
	49	Fluorene	166	16.123	16.124	(1.074)	1814406	4.63777	4.638
	51	4-Chlorophenyl-phenylether	204	16.123	16.116	(1.074)	994538	4.75422	4.754
	52	4-Nitroaniline	138	16.224	16.224	(1.080)	356106	4.76155	4.762
	53	4,6-Dinitro-2-methylphenol	198	16.316	16.370	(0.904)	216522	3.65299	3.653
	54	N-Nitrosodiphenylamine	169	16.370	16.370	(0.907)	1149631	4.90725	4.907
$	55	2,4,6-Tribromophenol	330	16.663	16.663	(1.110)	357193	7.14108	7.141
	56	4-Bromophenyl-phenylether	248	17.126	17.118	(0.949)	537640	5.15255	5.153
	57	Hexachlorobenzene	284	17.435	17.434	(0.966)	496114	4.67908	4.679
	58	Pentachlorophenol	266	17.791	17.814	(0.985)	204787	3.93169	3.932
*	59	Phenanthrene-d10	188	18.054	18.054	(1.000)	1630237	4.00000	
	60	Phenanthrene	178	18.108	18.101	(1.003)	1837237	4.68992	4.690
	61	Anthracene	178	18.201	18.193	(1.008)	1670411	4.30397	4.304
	62	Carbazole	167	18.534	18.534	(1.027)	1687690	4.79185	4.792
	63	Di-n-butylphthalate	149	19.338	19.346	(1.071)	2169531	5.51497	5.515
	64	Fluoranthene	202	20.499	20.499	(0.887)	2246209	4.68180	4.682
	65	Pyrene	202	20.924	20.925	(0.905)	2232282	4.40013	4.400
$	66	Terphenyl-d14	244	21.219	21.219	(0.918)	1704165	4.73097	4.731
	67	Butylbenzylphthalate	149	22.148	22.148	(0.958)	770848	4.56767	4.568
	68	Benzo(a)anthracene	228	23.092	23.092	(0.999)	1612232	4.53042	4.530
*	69	Chrysene-d12	240	23.123	23.123	(1.000)	1112056	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.054	23.054	(0.997)	1021005	9.32793	9.328
	71	Chrysene	228	23.170	23.162	(1.002)	1432188	4.47430	4.474
	72	bis(2-Ethylhexyl)phthalate	149	23.178	23.178	(0.960)	1007189	4.64885	4.649
*	134	Di-n-octylphthalate-d4	153	24.153	24.153	(1.000)	1298332	4.00000	
	73	Di-n-octylphthalate	149	24.168	24.161	(1.001)	1506391	4.96217	4.962
	74	Benzo(b)fluoranthene	252	24.943	24.943	(0.971)	1120169	4.81299	4.813
	75	Benzo(k)fluoranthene	252	24.989	24.989	(0.973)	1203272	4.83840	4.838
	76	Benzo(a)pyrene	252	25.577	25.578	(0.996)	1024300	4.60711	4.607
*	77	Perylene-d12	264	25.686	25.686	(1.000)	733476	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.244	28.244	(1.100)	816683	4.39546	4.395
	79	Dibenzo(a,h)anthracene	278	28.259	28.267	(1.100)	668295	4.36484	4.365
	80	Benzo(g,h,i)perylene	276	28.997	28.997	(1.129)	664180	4.38025	4.380
	90	N-Nitrosodimethylamine	74	4.566	4.566	(0.513)	423038	5.63216	5.632
	91	Aniline	93	Compound Not Detected.					
	93	Benzidine	184	20.747	20.754	(0.897)	1133759	9.98385	9.984
	103	Pyridine	79	4.581	4.597	(0.515)	661518	5.56593	5.566
	105	1-methylnaphthalene	142	13.060	13.053	(1.146)	1108498	4.75965	4.760
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.447	16.440	(1.095)	1962985	4.65510	4.655

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.989	24.943	(0.973)	2206870	9.71223	9.712
120 2,3,4,6-Tetrachlorophenol	232	15.752	15.760	(1.049)	382367	3.87456	3.875

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021613.D
Lab Smp Id: SLB0234-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\ABN.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 17:06
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	375798	187899	751596	362894	-3.43
27 Naphthalene-d8	1378169	689085	2756338	1343351	-2.53
42 Acenaphthene-d10	847135	423568	1694270	854455	0.86
59 Phenanthrene-d10	1675180	837590	3350360	1630237	-2.68
69 Chrysene-d12	1073562	536781	2147124	1112056	3.59
134 Di-n-octylphthala	1344129	672065	2688258	1298332	-3.41
77 Perylene-d12	721978	360989	1443956	733476	1.59

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	-0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.40	-0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	-0.00
59 Phenanthrene-d10	18.05	17.55	18.55	18.05	-0.00
69 Chrysene-d12	23.12	22.62	23.62	23.12	-0.00
134 Di-n-octylphthala	24.15	23.65	24.65	24.15	-0.00
77 Perylene-d12	25.69	25.19	26.19	25.69	-0.00

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

REVIEW SUMMARY FOR FILE - NT1423021613.D

Lab ID: SLB0234-SCV1
nt14.i, ABN.m, 16-FEB-2023 21:18

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.959	0.000	0.9593	Benzoic acid
1.016	0.000	1.0165	2,4-Dinitrophenol
1.017	0.000	1.0170	4-Nitrophenol
0.985	0.000	0.9854	Pentachlorophenol

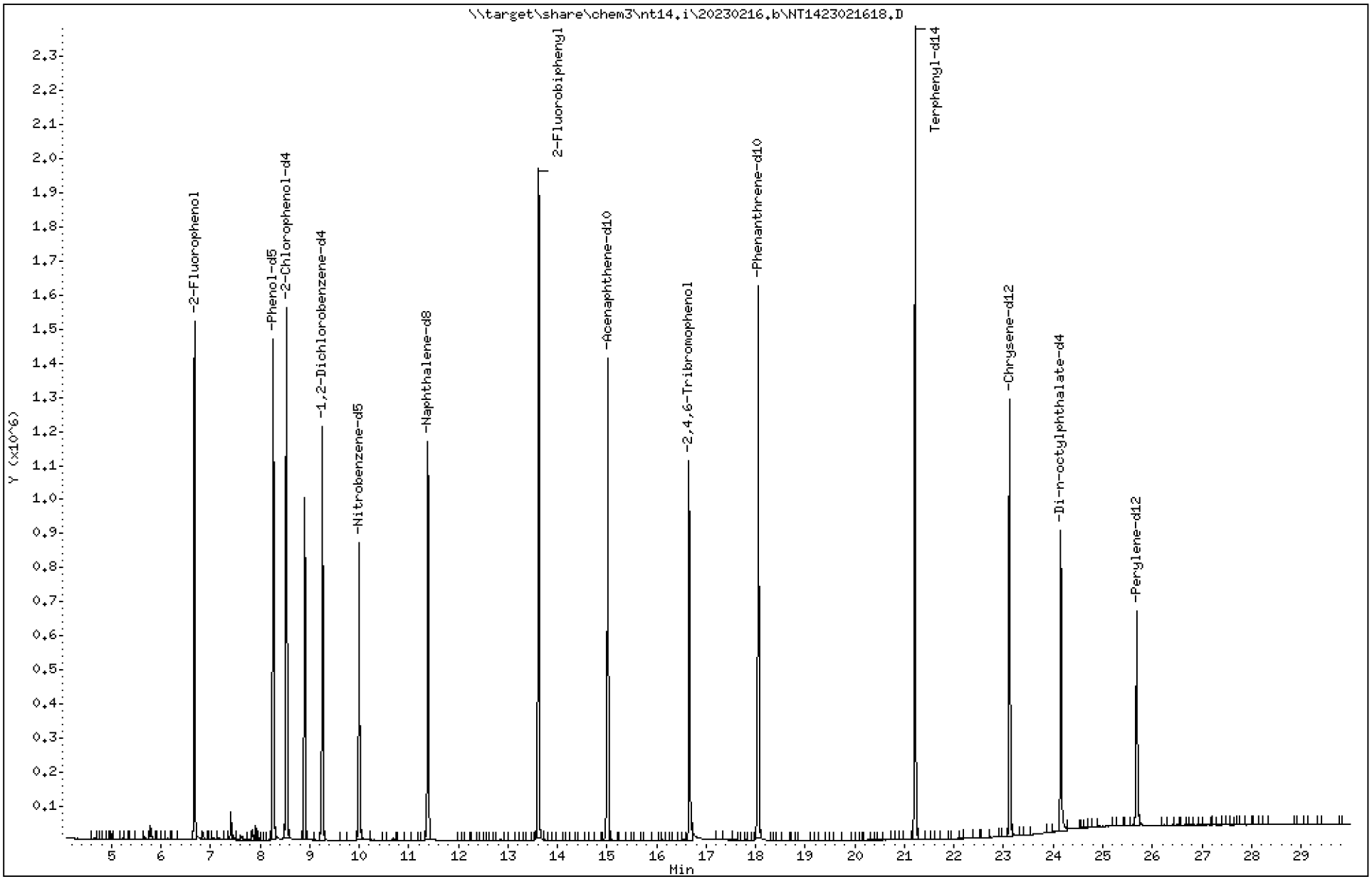
RRT check based on Ccal File: NT1423021610.D

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

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

Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021618.D
Date : 17-FEB-2023 00:17
Client ID:
Sample Info: SLB0234-ICB1

Instrument: nt14.i
Operator: DSD
Column phase: ZB-5msi
Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230216.b\NT1423021618.D
Lab Smp Id: SLB0234-ICB1
Inj Date : 17-FEB-2023 00:17 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0234-ICB1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230216.b\ABN.m
Meth Date : 17-Feb-2023 15:05 deenayd Quant Type: ISTD
Cal Date : 16-FEB-2023 15:54 Cal File: NT1423021604.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: DEENAY-201905

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$ 1	2-Fluorophenol	112	6.674	6.682	(0.721)	643925	8.76574	8.766
$ 2	Phenol-d5	99	8.266	8.266	(0.893)	948703	8.14116	8.141(M)
3	Phenol	94	Compound Not Detected.					
$ 5	2-Chlorophenol-d4	132	8.536	8.536	(0.922)	693874	8.34496	8.345(M)
4	Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
6	2-Chlorophenol	128	Compound Not Detected.					
7	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 8	1,4-Dichlorobenzene-d4	152	8.900	8.900	(1.000)	274788	4.00000	(H)
9	1,4-Dichlorobenzene	146	Compound Not Detected.					
$ 10	1,2-Dichlorobenzene-d4	152	9.257	9.257	(1.040)	340214	5.45867	5.459(M)
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	108	Compound Not Detected.					
14	2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
13	2-Methylphenol	108	Compound Not Detected.					
17	Hexachloroethane	117	Compound Not Detected.					
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
15	4-Methylphenol	108	Compound Not Detected.					
$ 18	Nitrobenzene-d5	82	10.002	10.002	(0.878)	638078	5.65976	5.660
19	Nitrobenzene	77	Compound Not Detected.					
20	Isophorone	82	Compound Not Detected.					
21	2-Nitrophenol	139	Compound Not Detected.					
22	2,4-Dimethylphenol	107	Compound Not Detected.					
23	Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
24	Benzoic acid	105	Compound Not Detected.					
25	2,4-Dichlorophenol	162	Compound Not Detected.					
26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
* 27	Naphthalene-d8	136	11.389	11.389	(1.000)	975858	4.00000	
28	Naphthalene	128	Compound Not Detected.					
29	4-Chloroaniline	127	Compound Not Detected.					
30	Hexachlorobutadiene	225	Compound Not Detected.					
31	4-Chloro-3-methylphenol	107	Compound Not Detected.					
32	2-Methylnaphthalene	142	Compound Not Detected.					
33	Hexachlorocyclopentadiene	237	Compound Not Detected.					

			QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36	2-Fluorobiphenyl	172	13.617	13.617	(0.907)	1161650	5.62895	5.629
	37	2-Chloronaphthalene	162	Compound Not Detected.					
	38	2-Nitroaniline	65	Compound Not Detected.					
	39	Dimethylphthalate	163	Compound Not Detected.					
	40	Acenaphthylene	152	Compound Not Detected.					
	41	2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42	Acenaphthene-d10	164	15.010	15.018	(1.000)	576816	4.00000	
	43	3-Nitroaniline	138	Compound Not Detected.					
	44	Acenaphthene	153	Compound Not Detected.					
	45	2,4-Dinitrophenol	184	Compound Not Detected.					
	46	Dibenzofuran	168	Compound Not Detected.					
	47	4-Nitrophenol	109	Compound Not Detected.					
	48	2,4-Dinitrotoluene	165	Compound Not Detected.					
	50	Diethylphthalate	149	Compound Not Detected.					
	49	Fluorene	166	Compound Not Detected.					
	51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52	4-Nitroaniline	138	Compound Not Detected.					
	53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55	2,4,6-Tribromophenol	330	16.656	16.663	(1.110)	194797	5.79155	5.792
	56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	Compound Not Detected.					
*	59	Phenanthrene-d10	188	18.054	18.054	(1.000)	1140272	4.00000	
	60	Phenanthrene	178	Compound Not Detected.					
	61	Anthracene	178	Compound Not Detected.					
	62	Carbazole	167	Compound Not Detected.					
	63	Di-n-butylphthalate	149	Compound Not Detected.					
	64	Fluoranthene	202	Compound Not Detected.					
	65	Pyrene	202	Compound Not Detected.					
$	66	Terphenyl-d14	244	21.219	21.219	(0.918)	1370199	5.91906	5.919
	67	Butylbenzylphthalate	149	Compound Not Detected.					
	68	Benzo(a)anthracene	228	Compound Not Detected.					
*	69	Chrysene-d12	240	23.116	23.123	(1.000)	714655	4.00000	
	70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71	Chrysene	228	Compound Not Detected.					
	72	bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.					
*	134	Di-n-octylphthalate-d4	153	24.153	24.153	(1.000)	689415	4.00000	
	73	Di-n-octylphthalate	149	Compound Not Detected.					
	74	Benzo(b)fluoranthene	252	Compound Not Detected.					
	75	Benzo(k)fluoranthene	252	Compound Not Detected.					
	76	Benzo(a)pyrene	252	Compound Not Detected.					
*	77	Perylene-d12	264	25.686	25.686	(1.000)	466173	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
	79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	80	Benzo(g,h,i)perylene	276	Compound Not Detected.					
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					
	91	Aniline	93	Compound Not Detected.					
	93	Benzidine	184	Compound Not Detected.					
	103	Pyridine	79	Compound Not Detected.					
	105	1-methylnaphthalene	142	Compound Not Detected.					
	111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

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

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021618.D
Lab Smp Id: SLB0234-ICB1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\ABN.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 17:06
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	375798	187899	751596	274788	-26.88
27 Naphthalene-d8	1378169	689085	2756338	975858	-29.19
42 Acenaphthene-d10	847135	423568	1694270	576816	-31.91
59 Phenanthrene-d10	1675180	837590	3350360	1140272	-31.93
69 Chrysene-d12	1073562	536781	2147124	714655	-33.43
134 Di-n-octylphthala	1344129	672065	2688258	689415	-48.71
77 Perylene-d12	721978	360989	1443956	466173	-35.43

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	-0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.39	-0.07
42 Acenaphthene-d10	15.02	14.52	15.52	15.01	-0.05
59 Phenanthrene-d10	18.05	17.55	18.55	18.05	-0.00
69 Chrysene-d12	23.12	22.62	23.62	23.12	-0.03
134 Di-n-octylphthala	24.15	23.65	24.65	24.15	-0.00
77 Perylene-d12	25.69	25.19	26.19	25.69	-0.00

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

REVIEW SUMMARY FOR FILE - NT1423021618.D

Lab ID: SLB0234-ICB1
nt14.i, ABN.m, 17-FEB-2023 00:17

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.721	0.751	-0.0298	2-Fluorophenol
0.893	0.929	-0.0358	Phenol-d5
0.922	0.959	-0.0370	2-Chlorophenol-d4

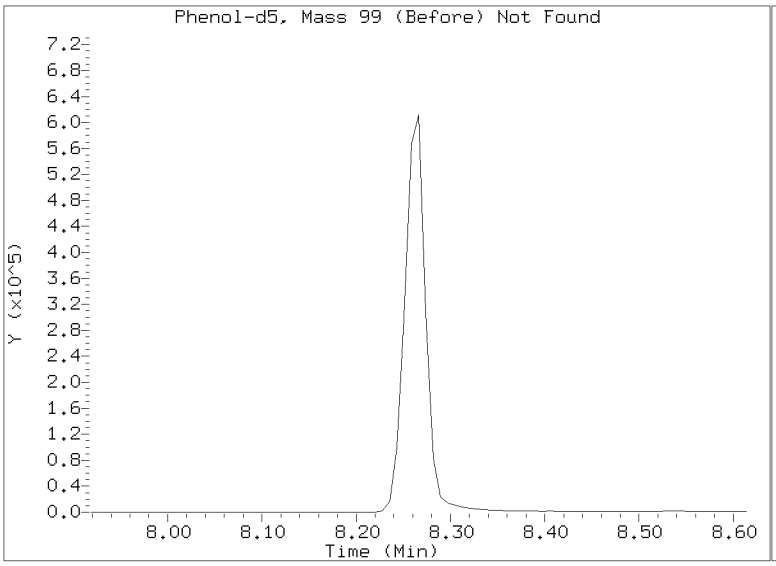
RRT check based on Ccal File: NT1423021610.D

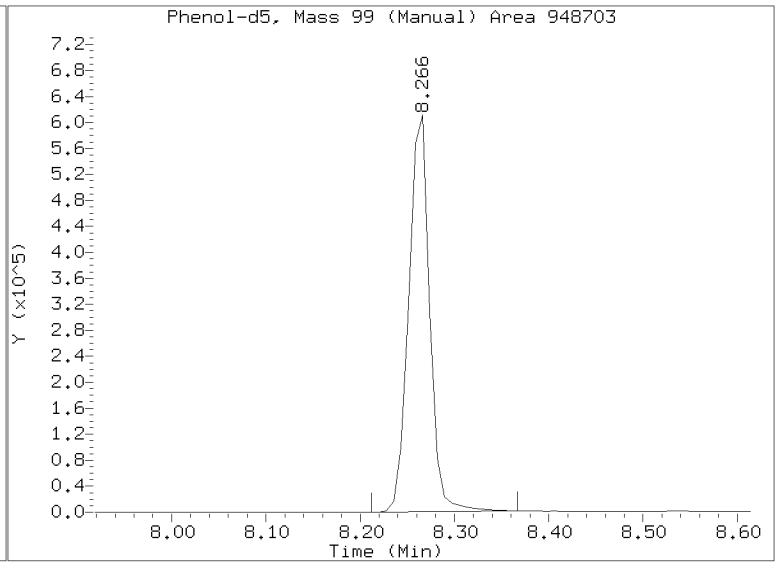
On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

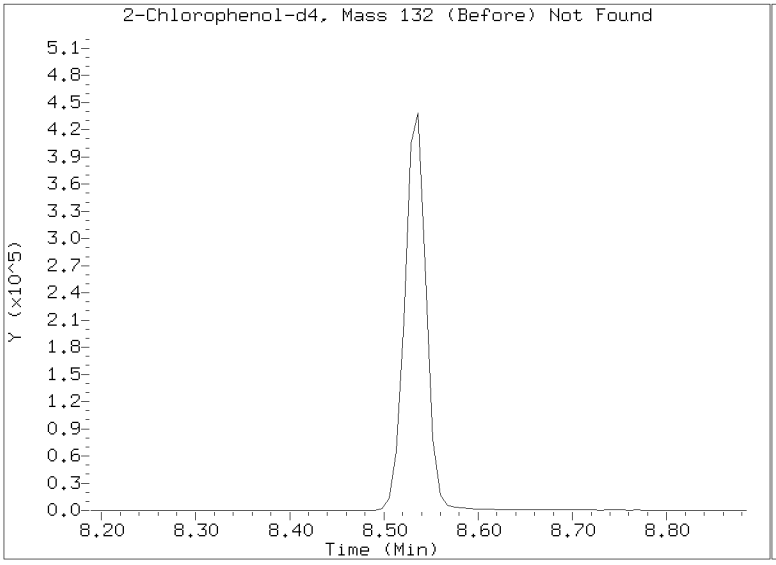
* Only compounds listed in the work order have been verified by the analyst *

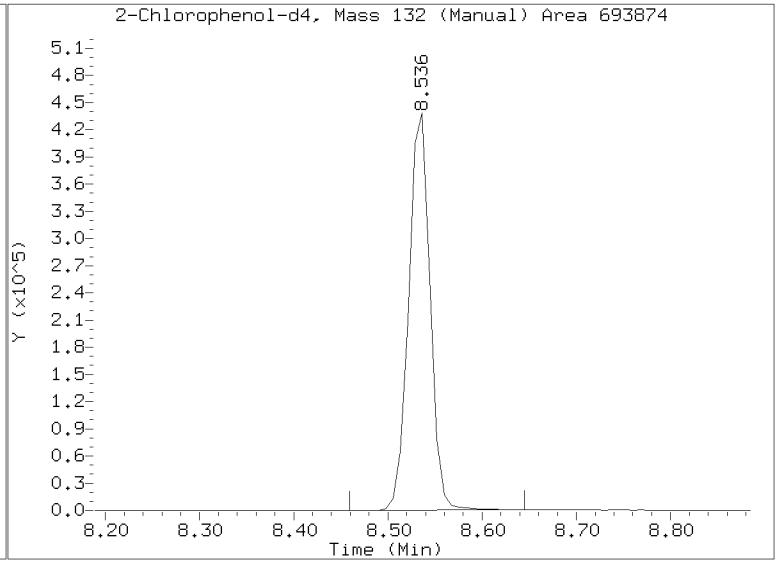
Quant Ion Manual Peak Adjustment Report

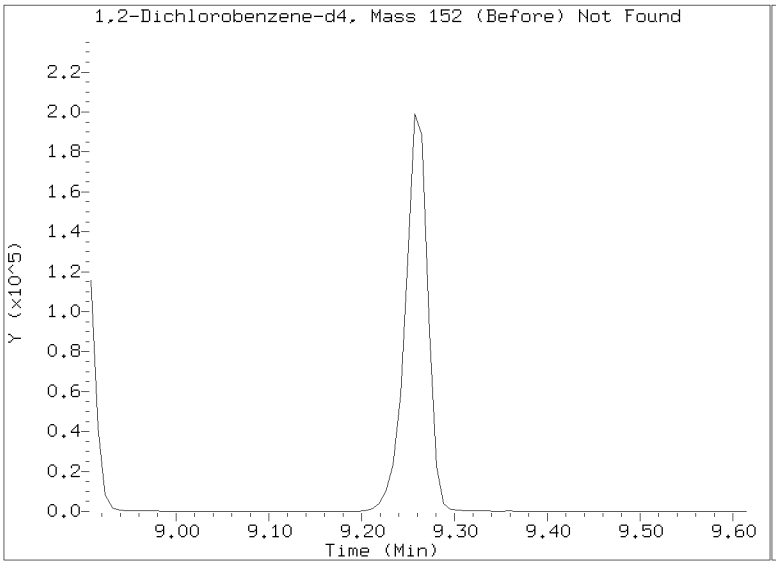
Datafile: //target/share/chem3/nt14.i/20230216.b/NT1423021618.D
Injection Date: 17-FEB-2023 00:17
Lab ID:SLB0234-ICB1 Client ID:
Report Date: 02/28/2023 14:49

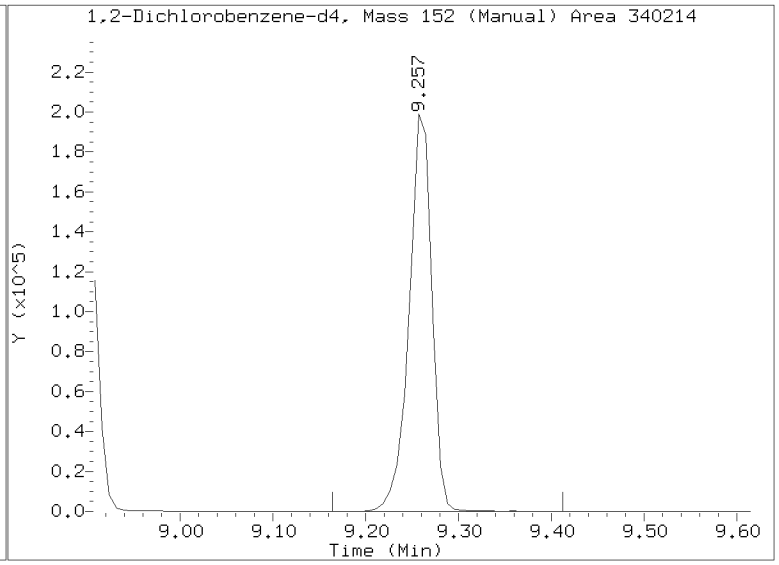












Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GB00046
Laboratory ID: SLB0234-SCV1
Sequence: SLB0234
Sequence Name: SCV 5.0
Standard ID: K010066

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	5.0000	4.6	-7.5	20.00
bis(2-chloroethyl) ether	5.0000	5.2	3.2	20.00
2-Chlorophenol	5.0000	4.6	-7.7	20.00
1,3-Dichlorobenzene	5.0000	4.8	-4.6	20.00
1,4-Dichlorobenzene	5.0000	4.8	-4.2	20.00
1,2-Dichlorobenzene	5.0000	4.8	-4.8	20.00
Benzyl Alcohol	5.0000	4.6	-7.5	20.00
2,2'-Oxybis(1-chloropropane)	5.0000	5.6	11.3	20.00
2-Methylphenol	5.0000	4.4	-12.6	20.00
Hexachloroethane	5.0000	5.0	0.7	20.00
N-Nitroso-di-n-Propylamine	5.0000	5.0	-0.2	20.00
4-Methylphenol	5.0000	4.6	-8.2	20.00
Nitrobenzene	5.0000	4.9	-1.0	20.00
Isophorone	5.0000	7.1	41.9 *	20.00
2-Nitrophenol	5.0000	4.5	-10.9	20.00
2,4-Dimethylphenol	5.0000	4.3	-14.5	20.00
Bis(2-Chloroethoxy)methane	5.0000	5.7	14.8	20.00
2,4-Dichlorophenol	5.0000	5.1	2.5	20.00
1,2,4-Trichlorobenzene	5.0000	4.6	-7.0	20.00
Naphthalene	5.0000	4.7	-5.3	20.00
Benzoic acid	10.000	5.5	-44.9 *	20.00
4-Chloroaniline	5.0000	3.9	-21.8 *	20.00
Hexachlorobutadiene	5.0000	4.9	-1.7	20.00
4-Chloro-3-Methylphenol	5.0000	5.0	0.9	20.00
2-Methylnaphthalene	5.0000	4.6	-7.9	20.00
Hexachlorocyclopentadiene	5.0000	5.3	6.0	20.00
2,4,6-Trichlorophenol	5.0000	4.8	-3.8	20.00
2,4,5-Trichlorophenol	5.0000	4.7	-5.9	20.00
2-Chloronaphthalene	5.0000	4.6	-7.2	20.00
2-Nitroaniline	5.0000	4.9	-3.0	20.00
Acenaphthylene	5.0000	4.7	-6.9	20.00
Dimethylphthalate	5.0000	4.7	-6.1	20.00
2,6-Dinitrotoluene	5.0000	4.9	-1.3	20.00
Acenaphthene	5.0000	4.6	-7.3	20.00

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GB00046
Laboratory ID: SLB0234-SCV1
Sequence: SLB0234
Sequence Name: SCV 5.0
Standard ID: K010066

3-Nitroaniline	5.0000	4.9	-1.6	20.00
2,4-Dinitrophenol	5.0000	0.3	-95.0 *	20.00
Dibenzofuran	5.0000	4.5	-9.0	20.00
4-Nitrophenol	5.0000	4.1	-19.0	20.00
2,4-Dinitrotoluene	5.0000	4.9	-2.9	20.00
Fluorene	5.0000	4.6	-7.2	20.00
4-Chlorophenylphenyl ether	5.0000	4.8	-4.9	20.00
Diethyl phthalate	5.0000	4.7	-5.6	20.00
4-Nitroaniline	5.0000	4.8	-4.8	20.00
4,6-Dinitro-2-methylphenol	5.0000	3.7	-26.9 *	20.00
N-Nitrosodiphenylamine	5.0000	4.9	-1.9	20.00
4-Bromophenyl phenyl ether	5.0000	5.2	3.1	20.00
Hexachlorobenzene	5.0000	4.7	-6.4	20.00
Pentachlorophenol	5.0000	3.9	-21.4 *	20.00
Phenanthrene	5.0000	4.7	-6.2	20.00
Anthracene	5.0000	4.3	-13.9	20.00
Carbazole	5.0000	4.8	-4.2	20.00
Di-n-Butylphthalate	5.0000	5.5	10.3	20.00
Fluoranthene	5.0000	4.7	-6.4	20.00
Pyrene	5.0000	4.4	-12.0	20.00
Butylbenzylphthalate	5.0000	4.6	-8.6	20.00
Benzo(a)anthracene	5.0000	4.5	-9.4	20.00
3,3'-Dichlorobenzidine	10.000	9.3	-6.7	20.00
Chrysene	5.0000	4.5	-10.5	20.00
bis(2-Ethylhexyl)phthalate	5.0000	4.6	-7.0	20.00
Di-n-Octylphthalate	5.0000	5.0	-0.8	20.00
Benzofluoranthenes, Total	10.000	9.7	-2.9	20.00
Benzo(a)pyrene	5.0000	4.6	-7.9	20.00
Indeno(1,2,3-cd)pyrene	5.0000	4.4	-12.1	20.00
Dibenzo(a,h)anthracene	5.0000	4.4	-12.7	20.00
Benzo(g,h,i)perylene	5.0000	4.4	-12.4	20.00
1-Methylnaphthalene	5.0000	4.8	-4.8	20.00
2-Fluorophenol	7.5000	8.37	11.6	20.00
Phenol-d5	7.5000	7.99	6.5	20.00
2-Chlorophenol-d4	7.5000	7.76	3.5	20.00
1,2-Dichlorobenzene-d4	5.0000	4.99	-0.3	20.00
Nitrobenzene-d5	5.0000	5.19	3.9	20.00

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GB00046
Laboratory ID: SLB0234-SCV1
Sequence: SLB0234
Sequence Name: SCV 5.0
Standard ID: K010066

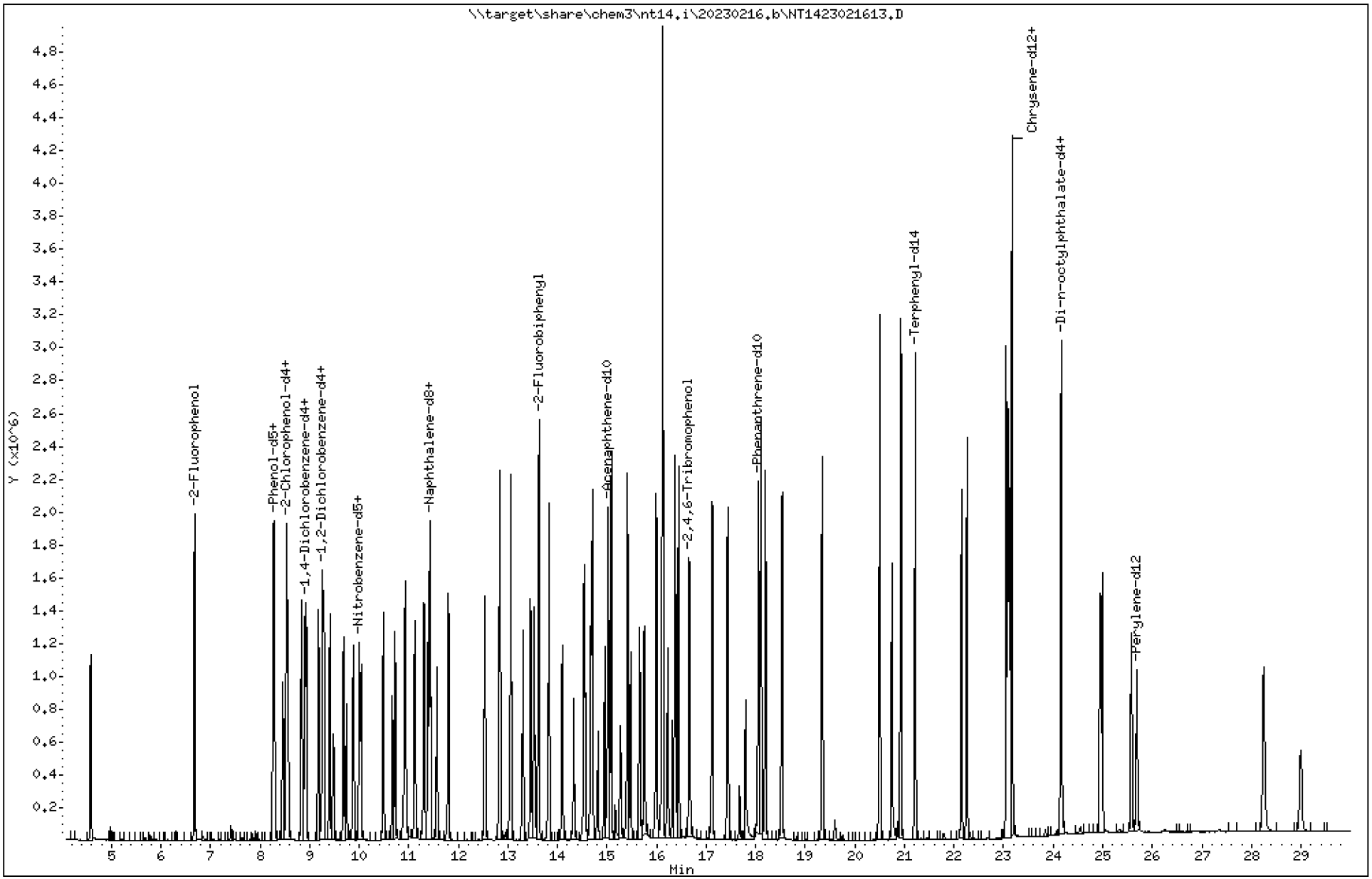
2-Fluorobiphenyl	5.0000	4.87	-2.6	20.00
2,4,6-Tribromophenol	7.5000	7.14	-4.8	20.00
p-Terphenyl-d14	5.0000	4.73	-5.4	20.00

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D
Date : 16-FEB-2023 21:18
Client ID:
Sample Info: SLB0234-SCV1

Instrument: nt14.i
Operator: DSD
Column diameter: 0.25

Column phase: ZB-5msi



Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

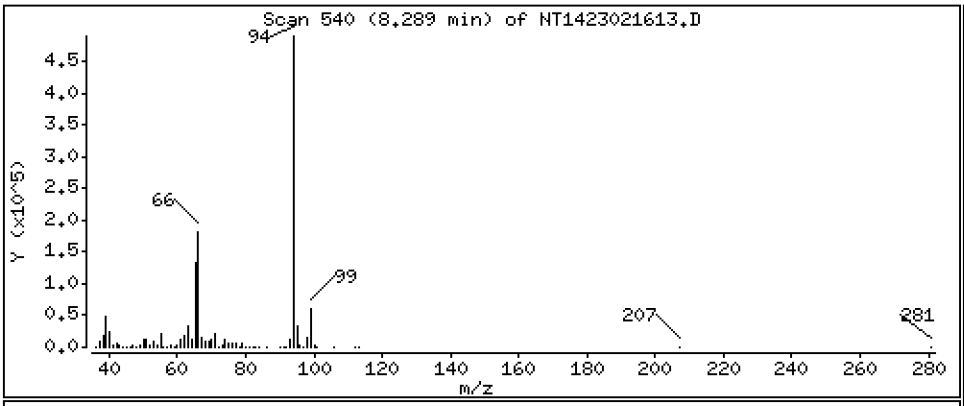
Operator: DSD

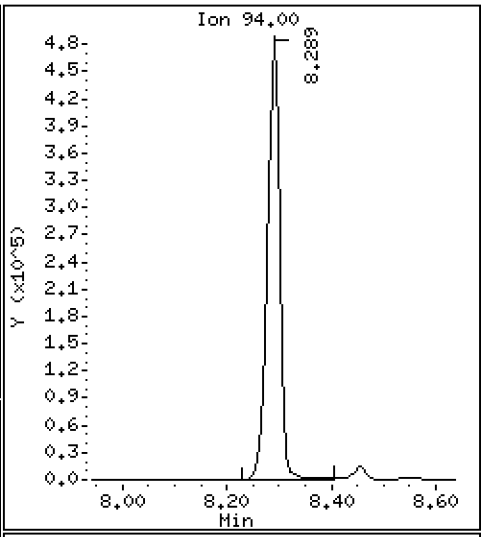
Column phase: ZB-5msi

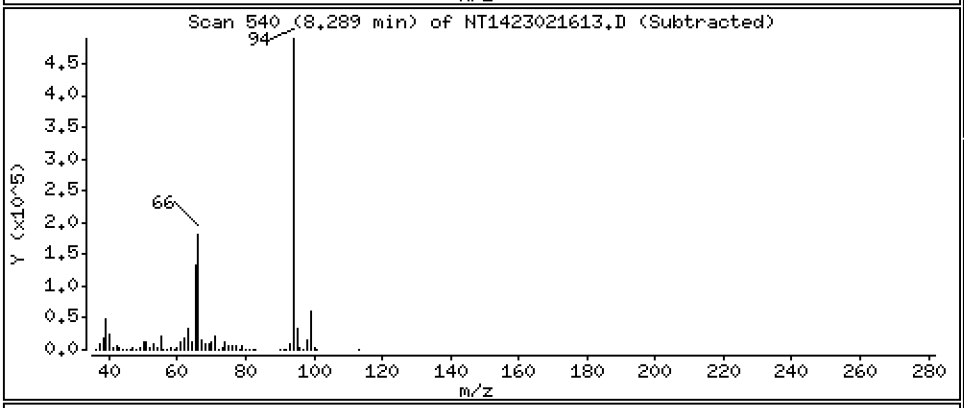
Column diameter: 0.25

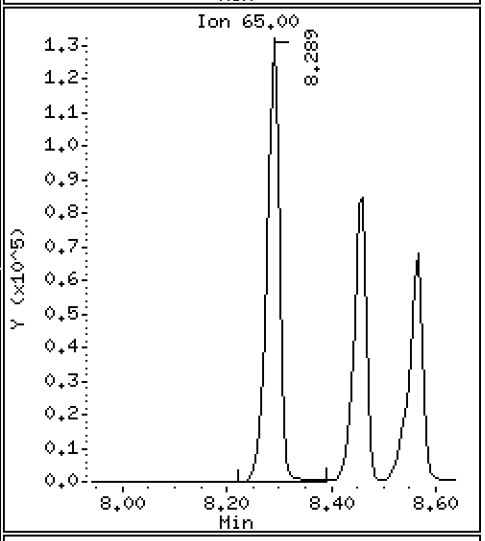
3 Phenol

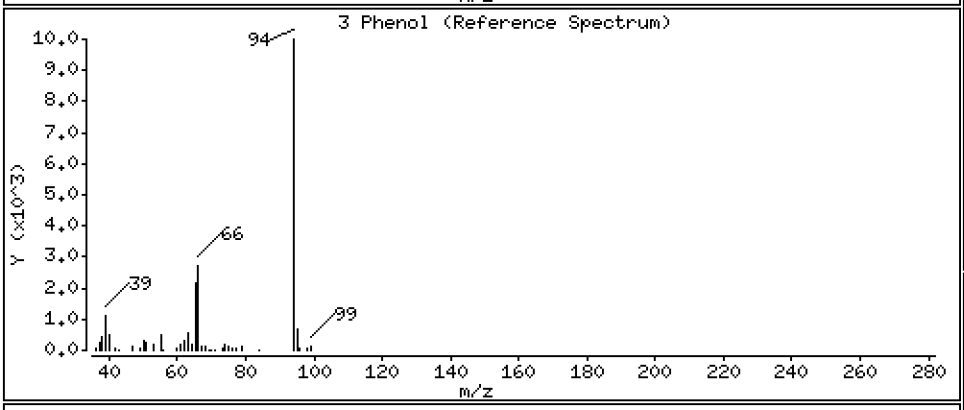
Concentration: 4.627 ug/mL

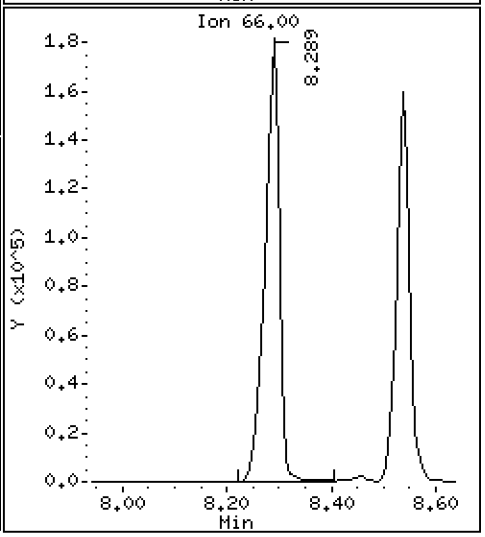


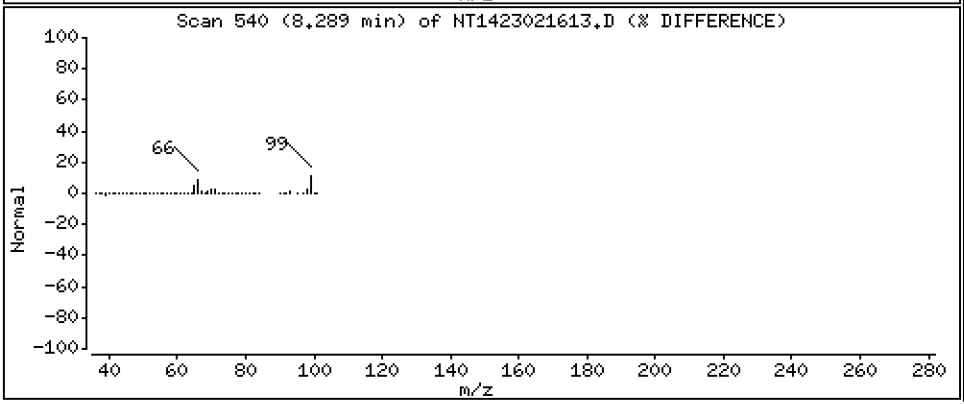












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

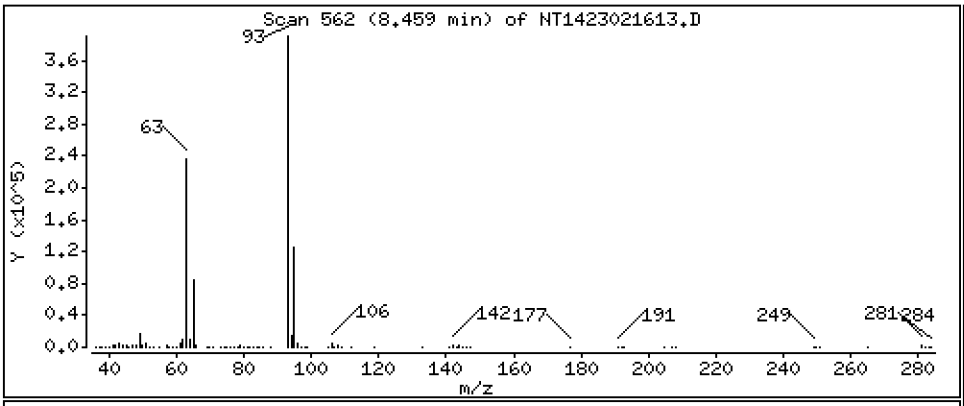
Operator: DSD

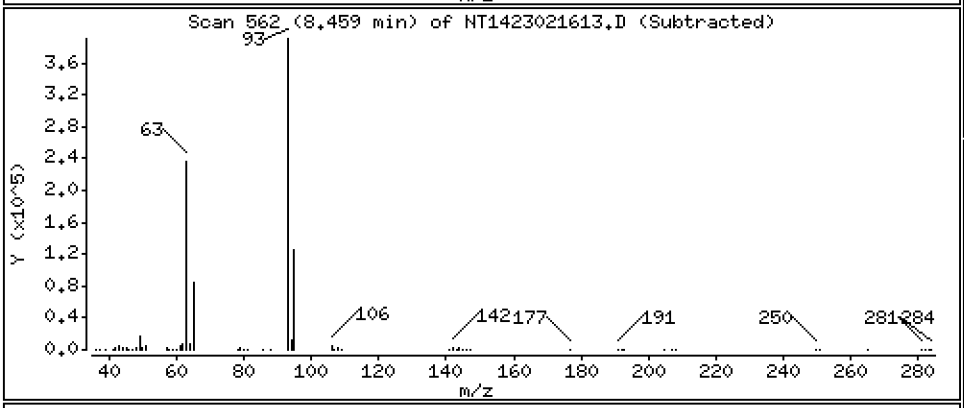
Column phase: ZB-5msi

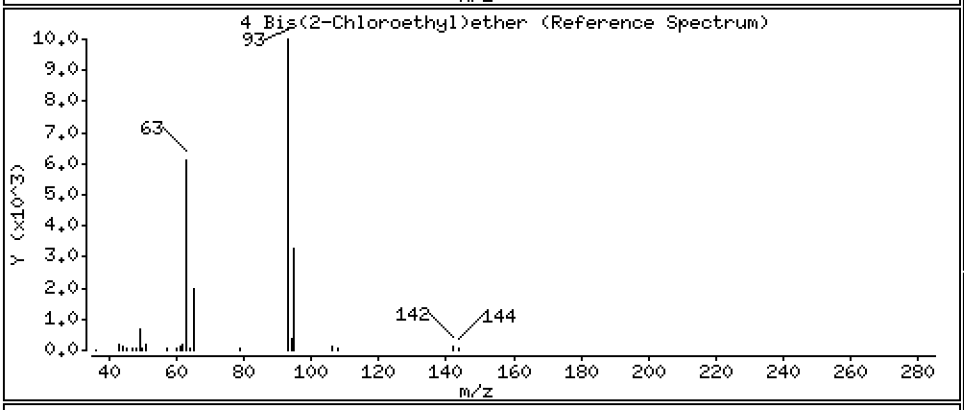
Column diameter: 0.25

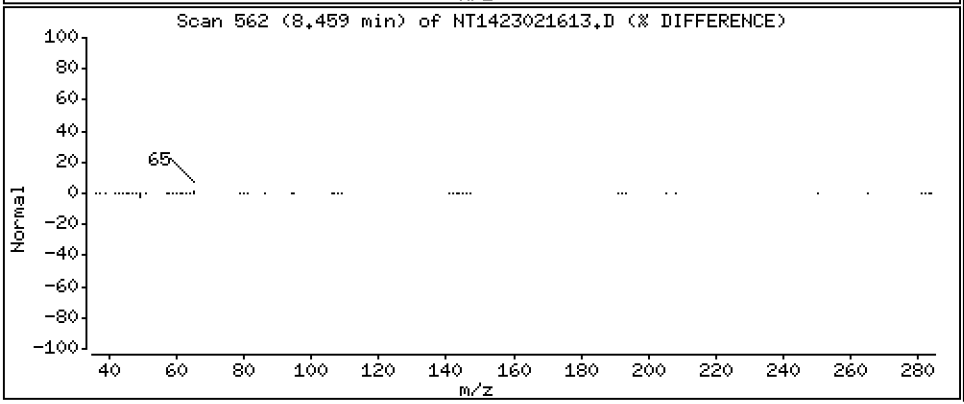
4 Bis(2-Chloroethyl)ether

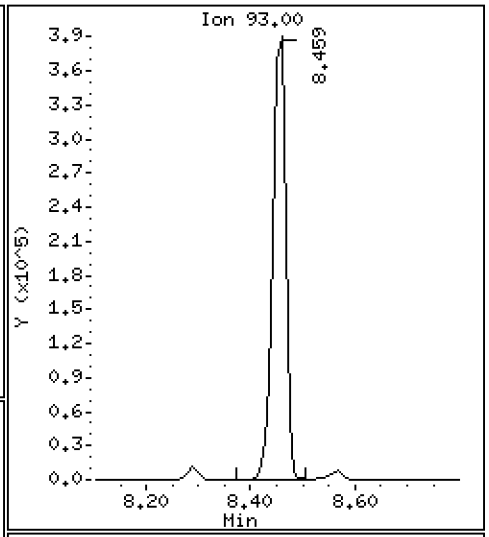
Concentration: 5.159 ug/mL

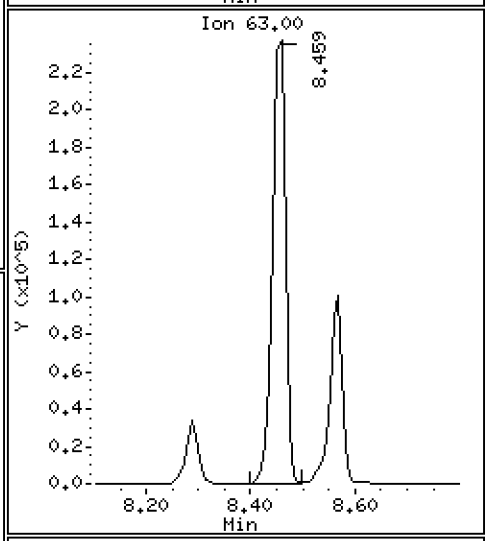


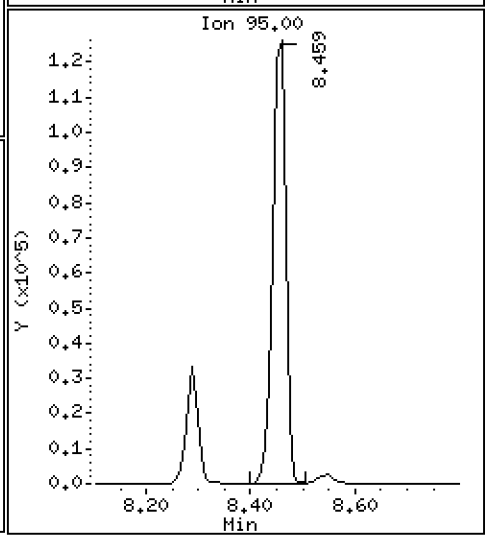












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

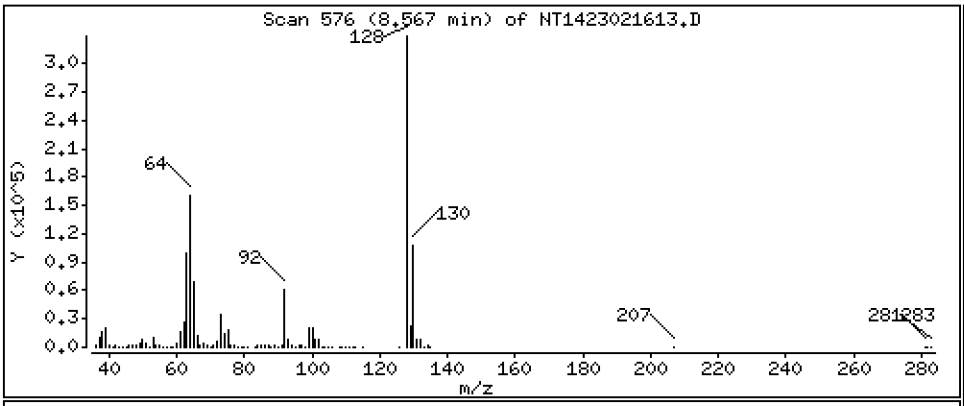
Operator: DSD

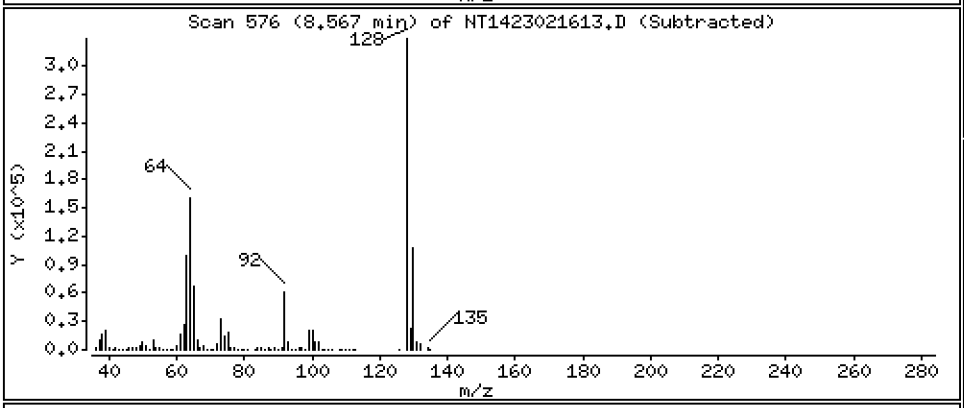
Column phase: ZB-5msi

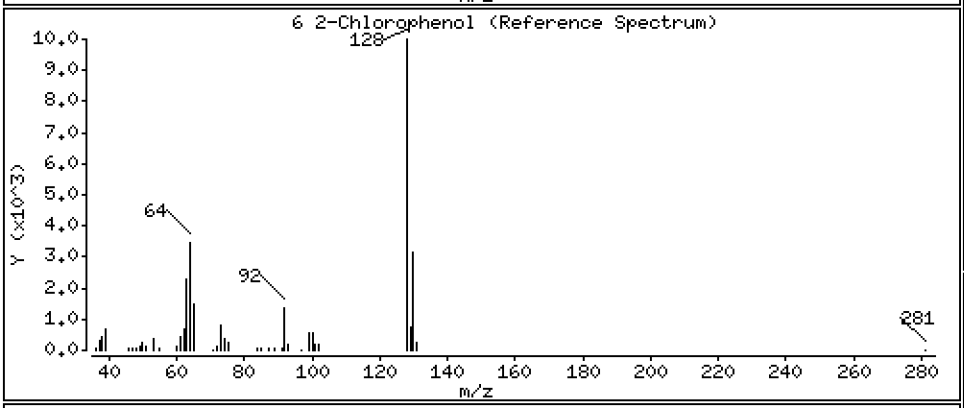
Column diameter: 0.25

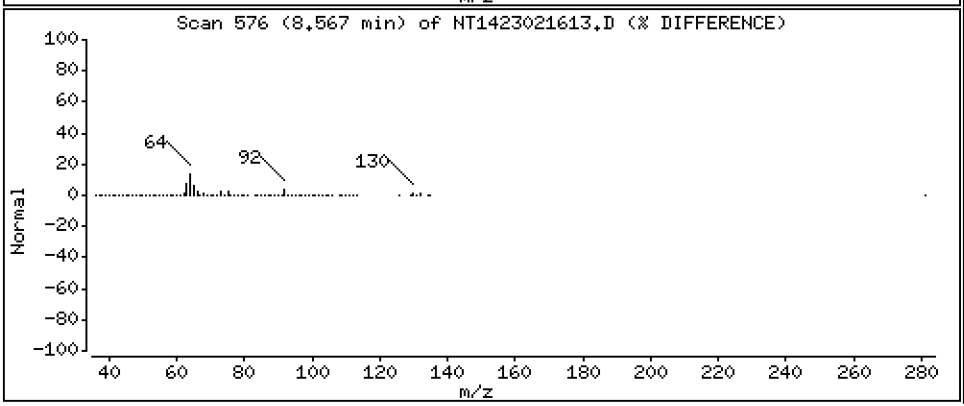
6 2-Chlorophenol

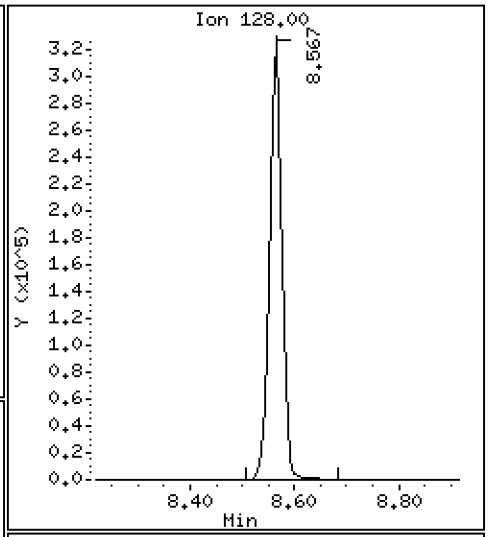
Concentration: 4.617 ug/mL

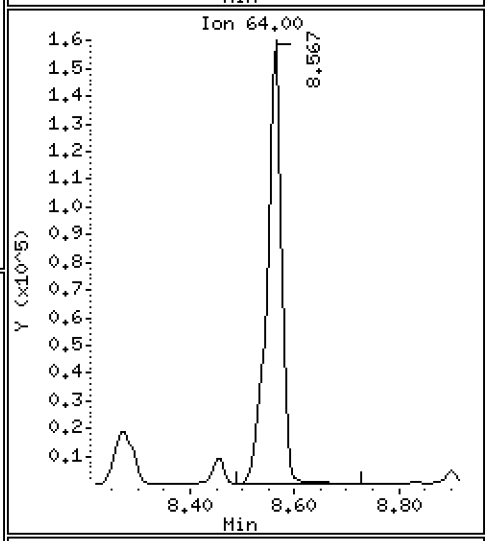


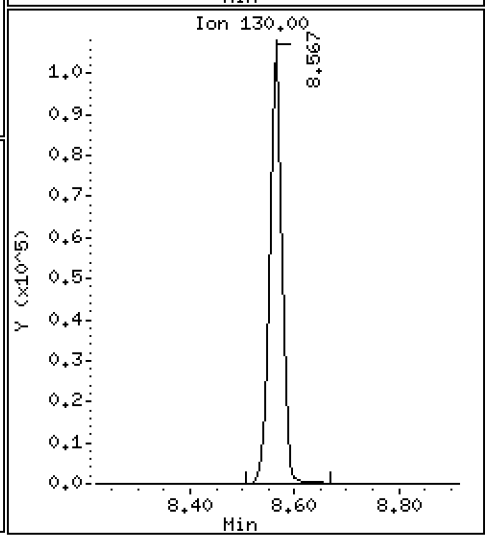












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

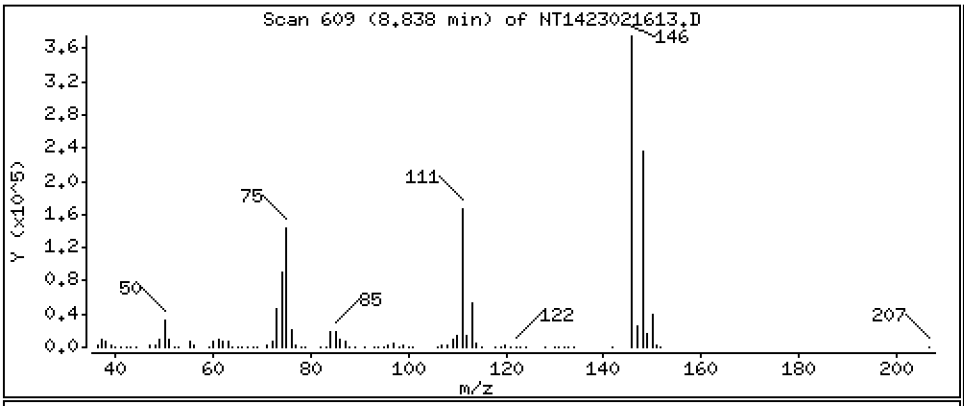
Operator: DSD

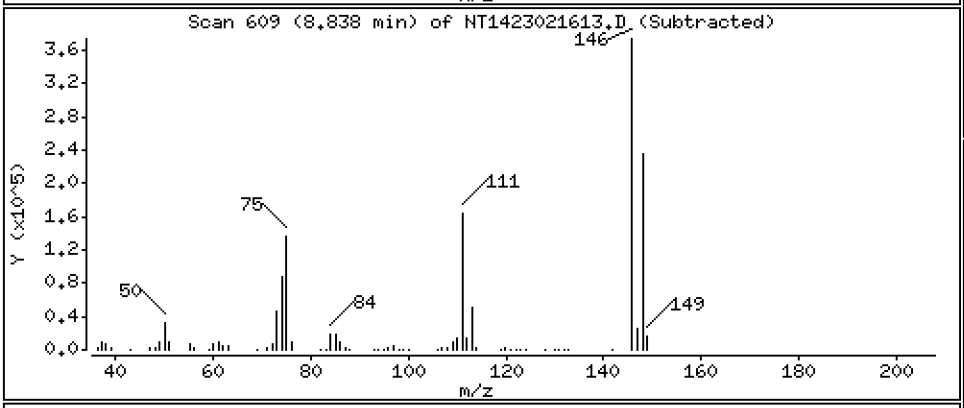
Column phase: ZB-5msi

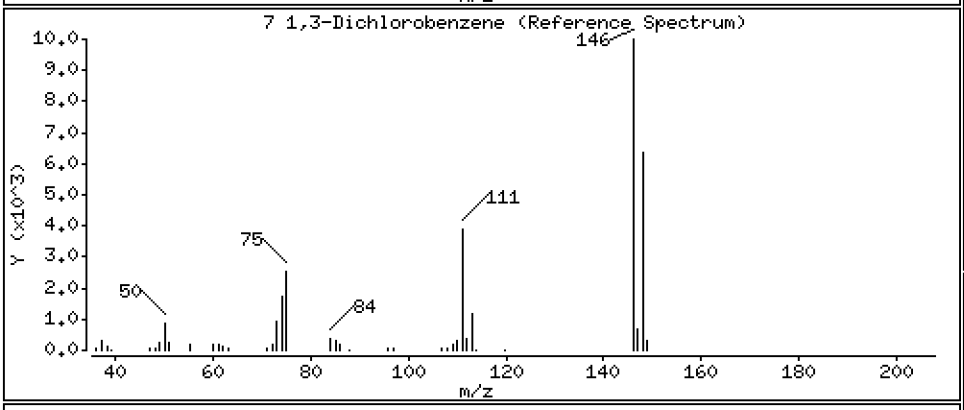
Column diameter: 0.25

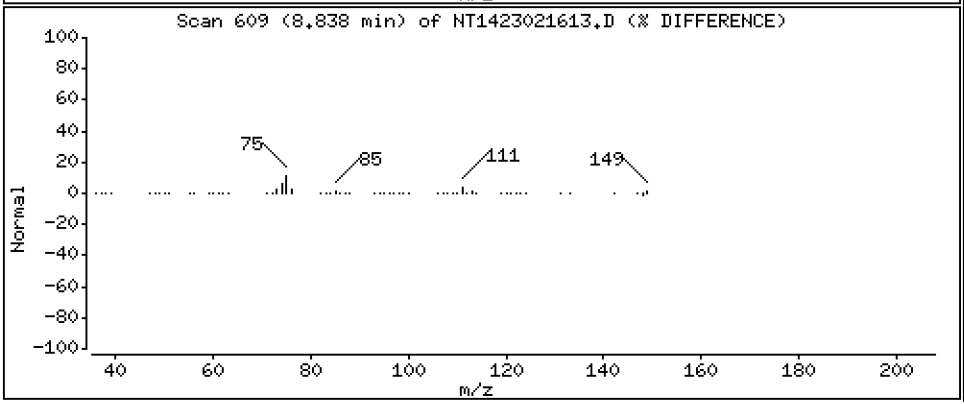
7 1,3-Dichlorobenzene

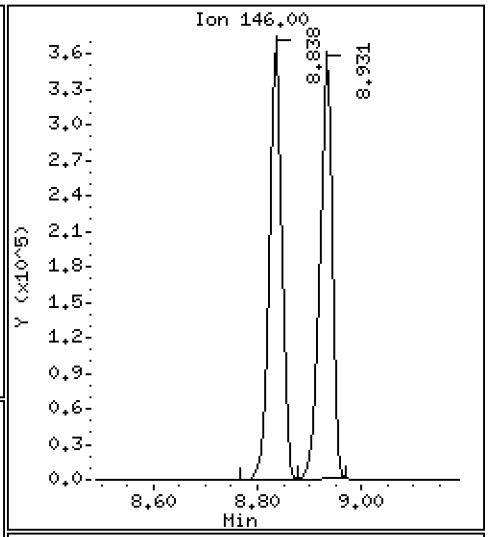
Concentration: 4.770 ug/mL

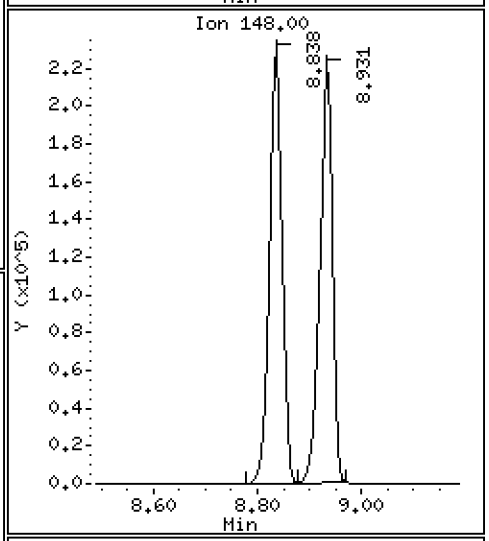


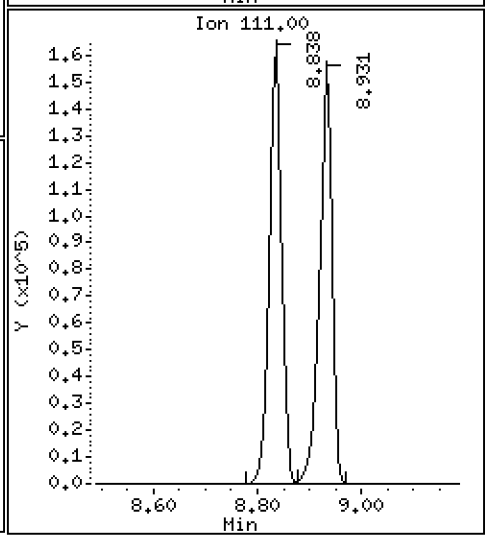












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

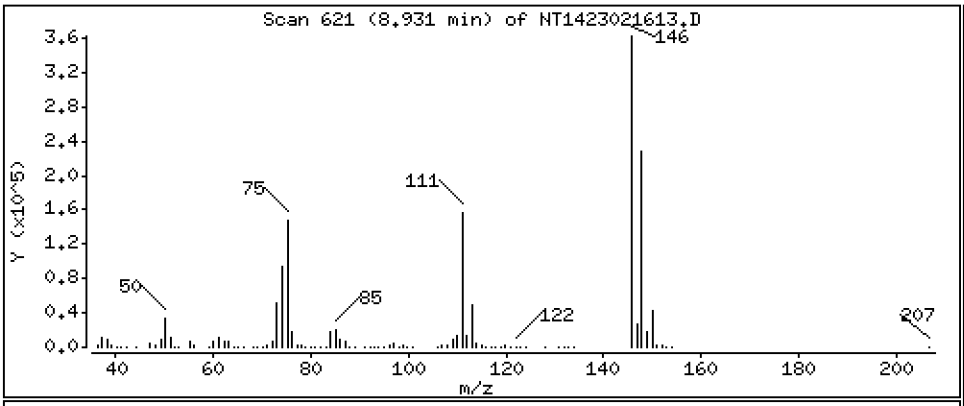
Operator: DSD

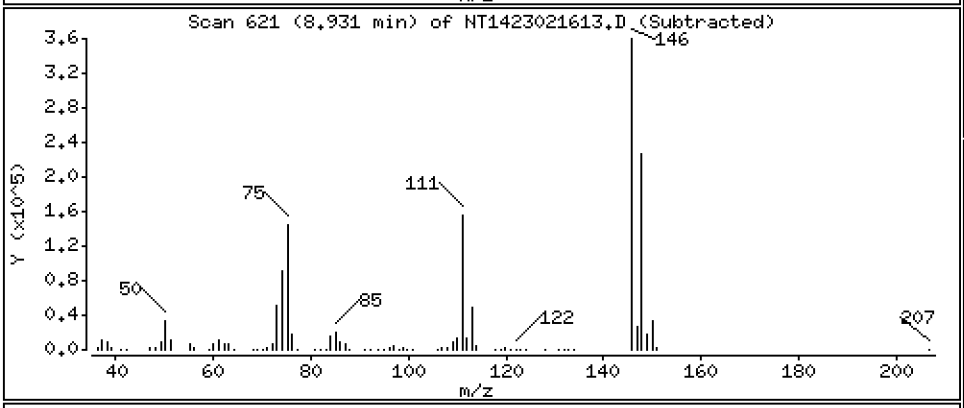
Column phase: ZB-5msi

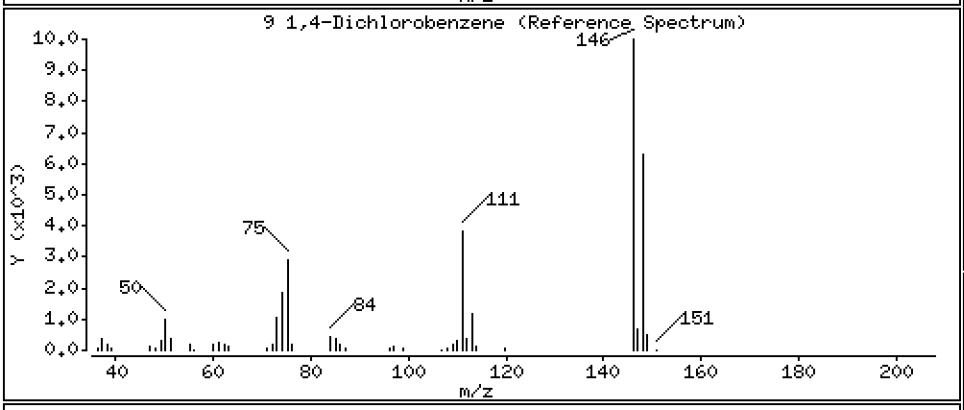
Column diameter: 0.25

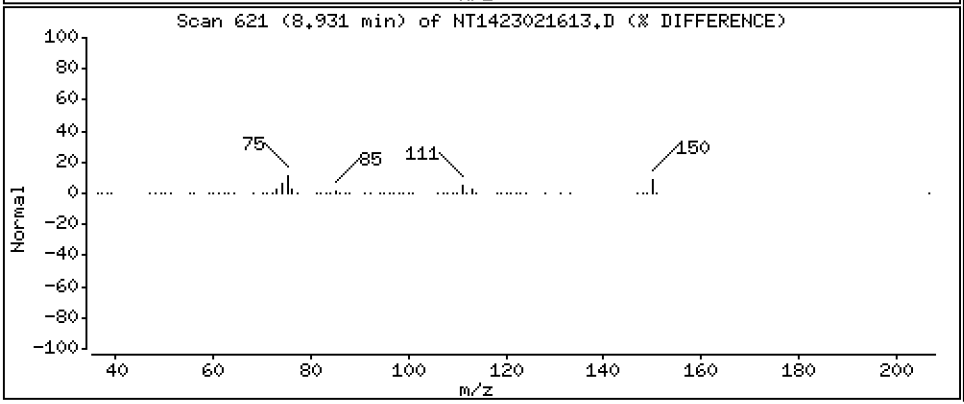
9 1,4-Dichlorobenzene

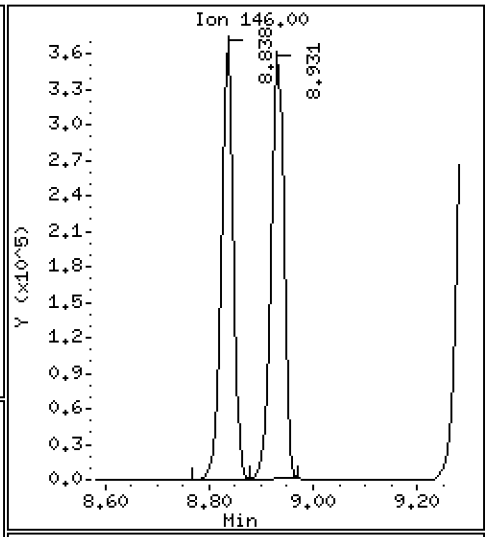
Concentration: 4.791 ug/mL

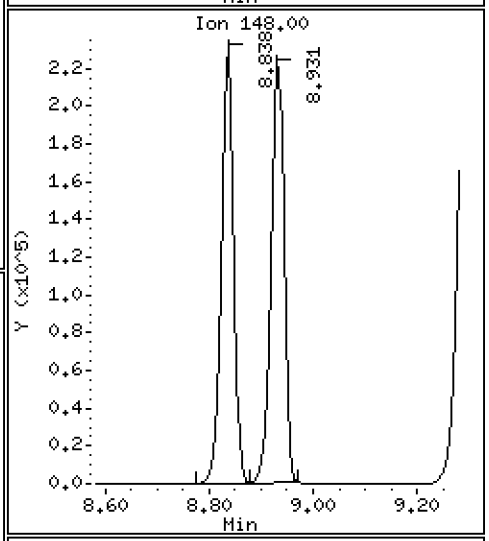


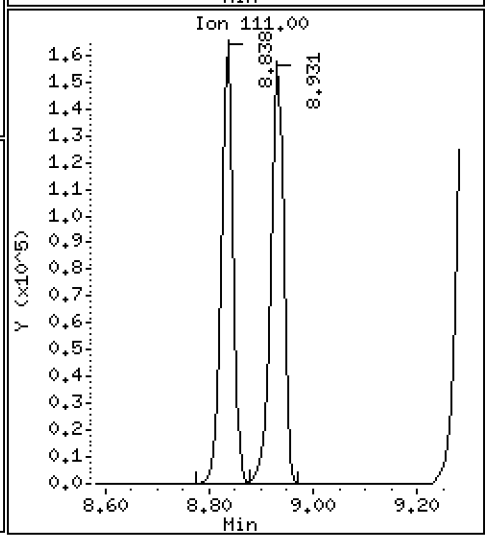












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

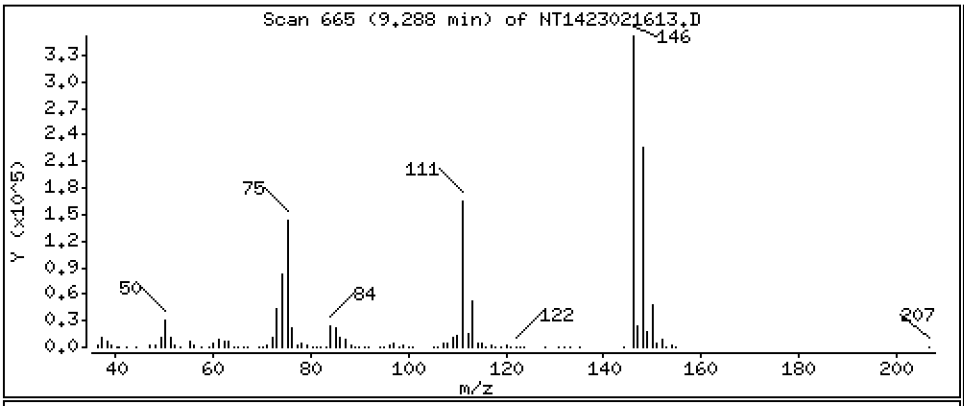
Operator: DSD

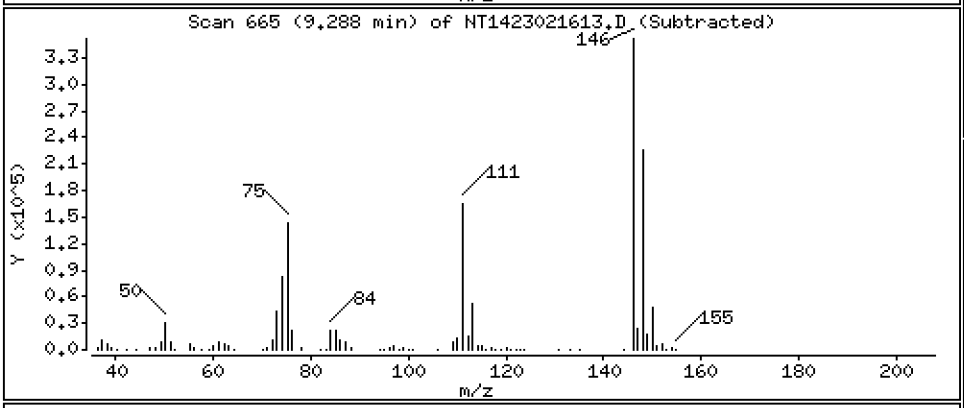
Column phase: ZB-5msi

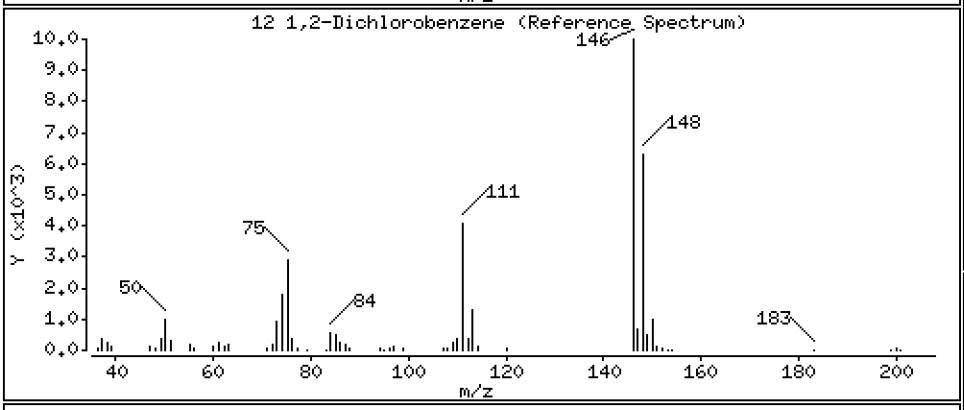
Column diameter: 0.25

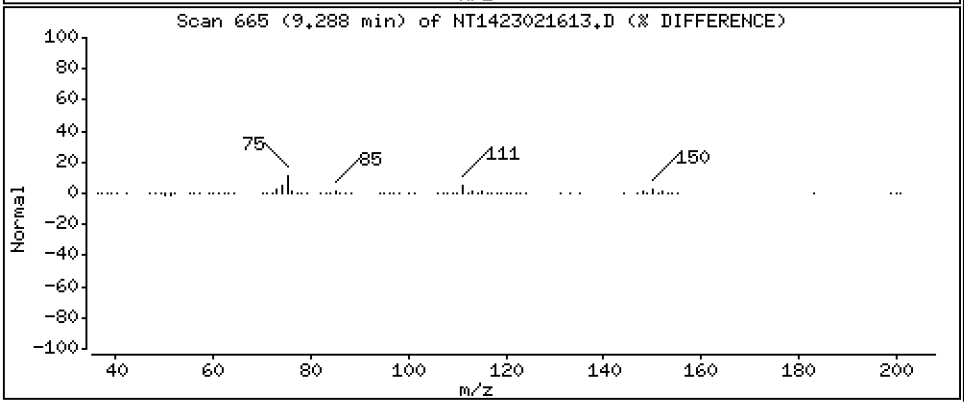
12 1,2-Dichlorobenzene

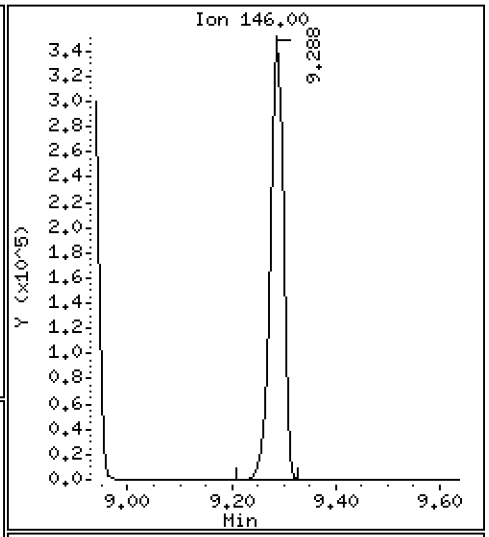
Concentration: 4.758 ug/mL

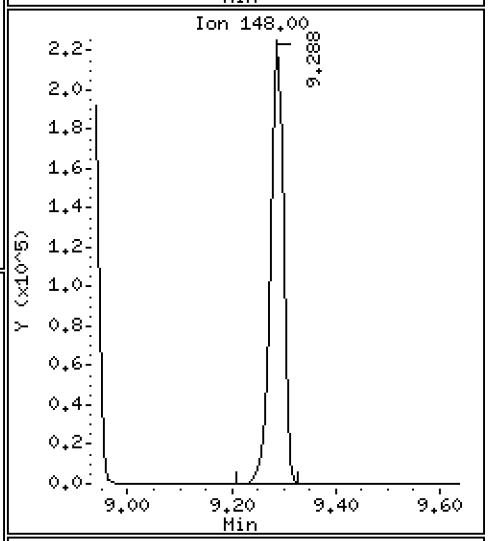


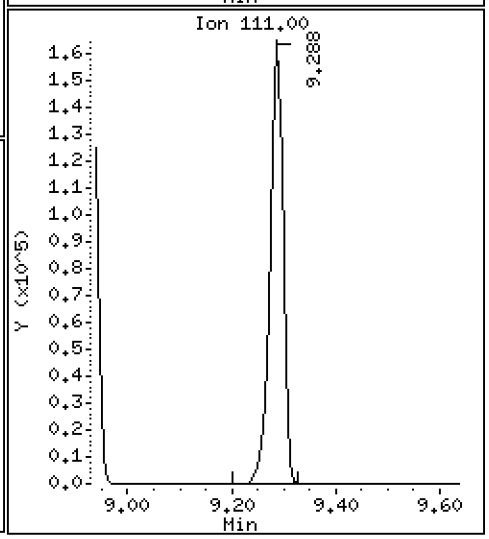












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

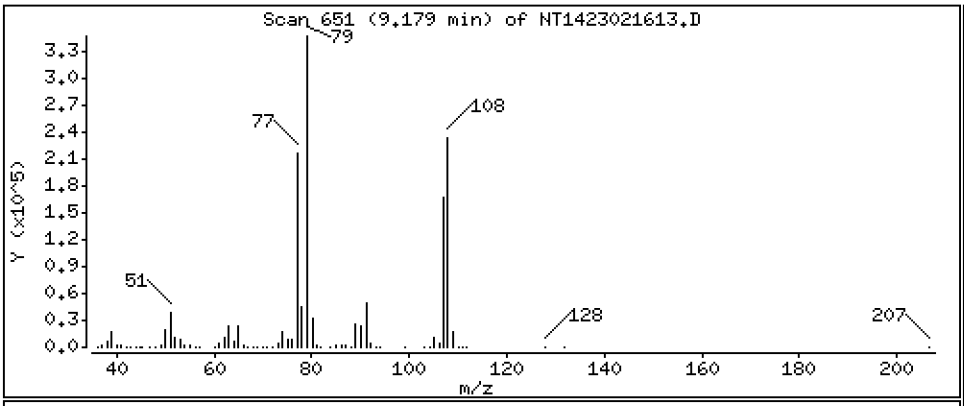
Operator: DSD

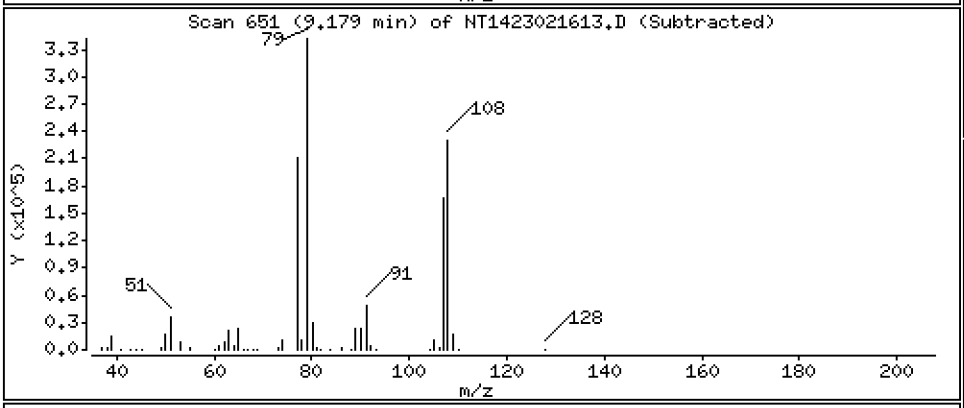
Column phase: ZB-5msi

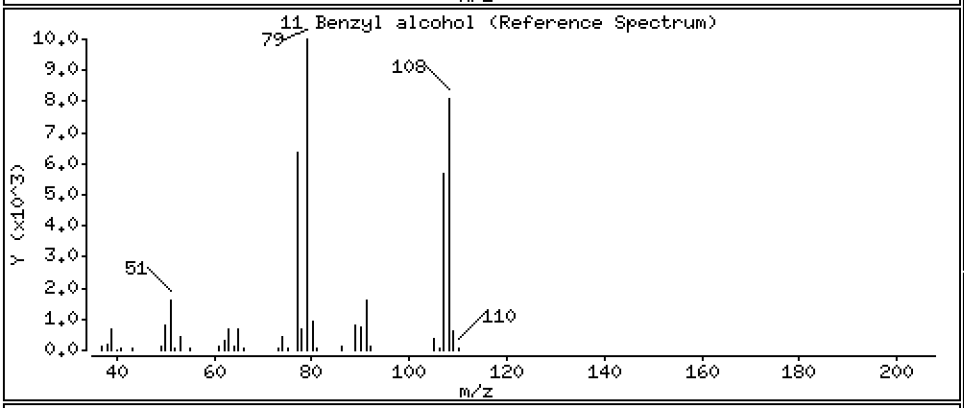
Column diameter: 0.25

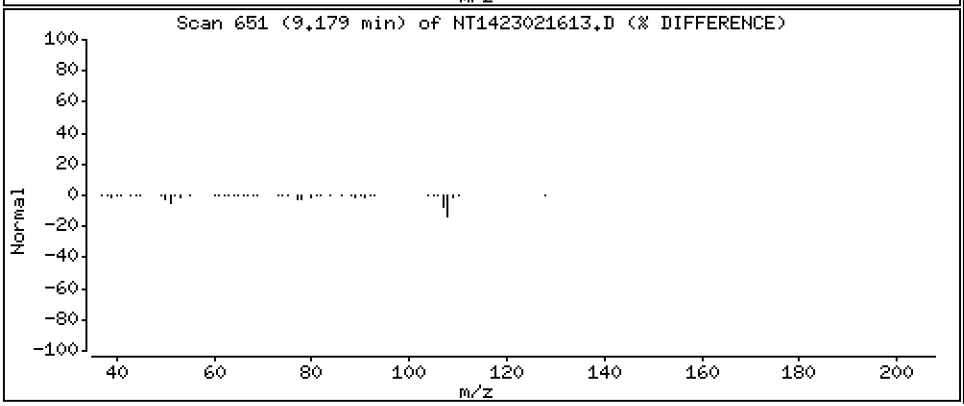
11 Benzyl alcohol

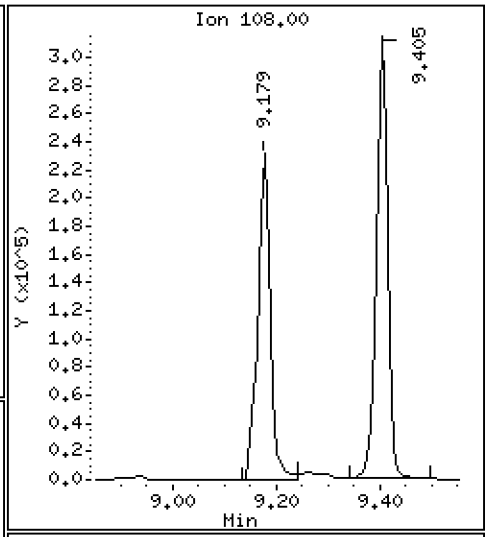
Concentration: 4.625 ug/mL

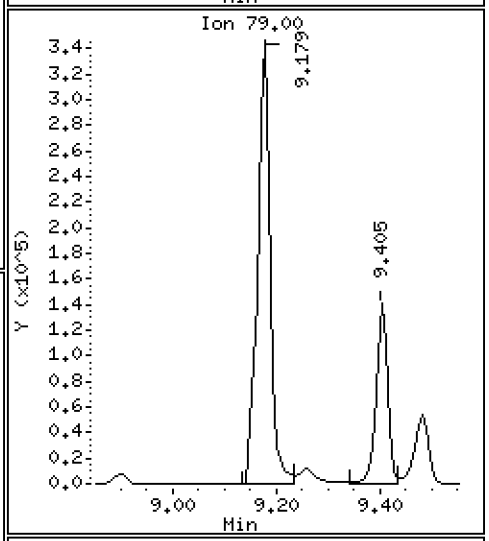


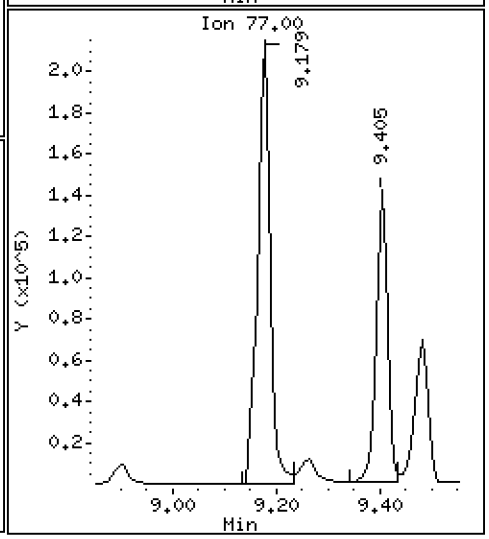












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

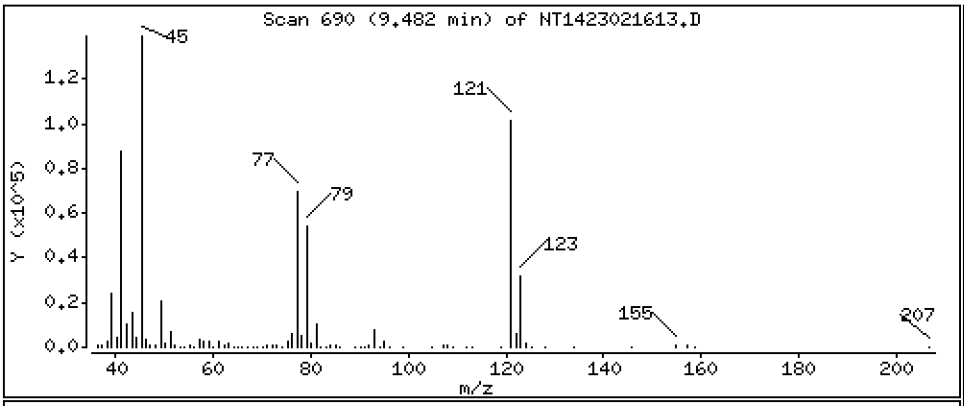
Operator: DSD

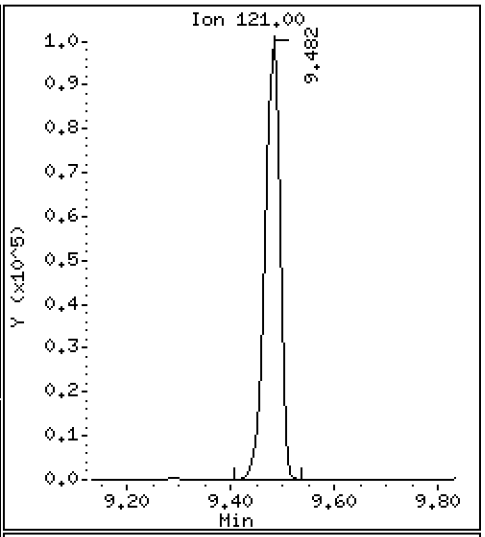
Column phase: ZB-5msi

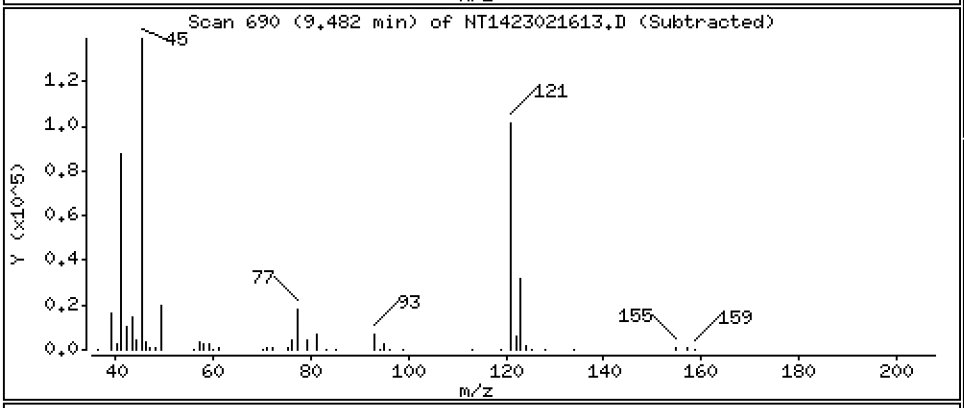
Column diameter: 0.25

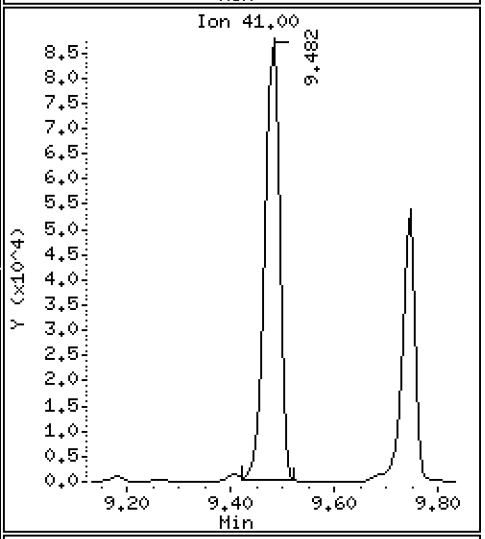
14 2,2'-oxybis(1-Chloropropane)

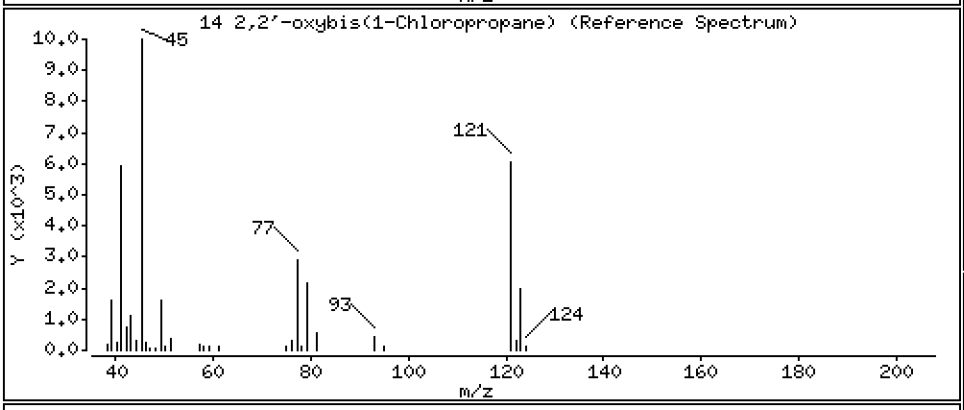
Concentration: 5.567 ug/mL

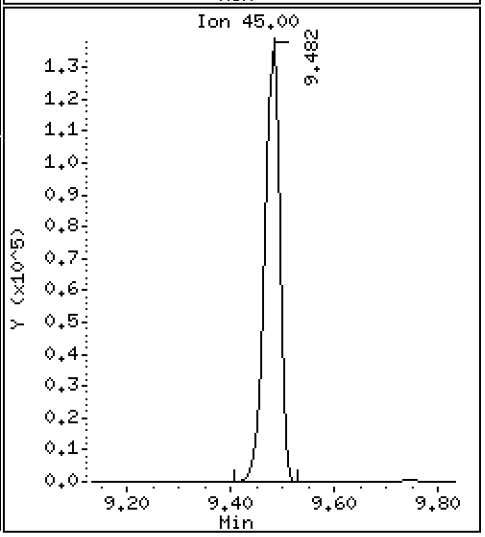


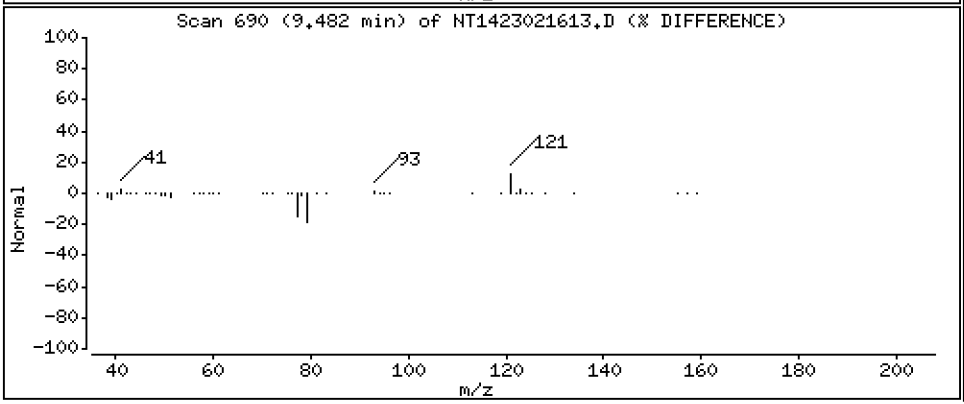












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

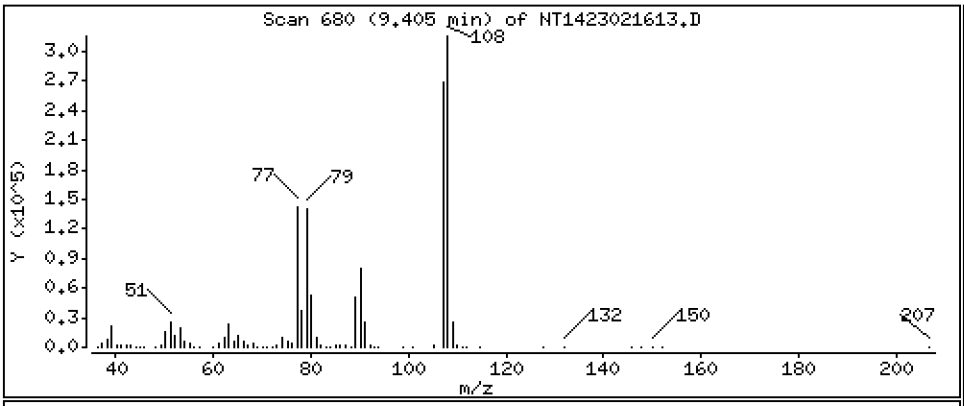
Operator: DSD

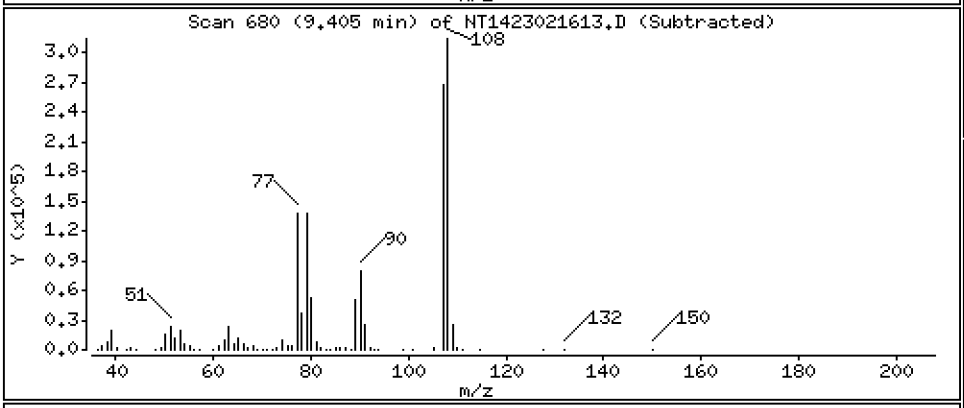
Column phase: ZB-5msi

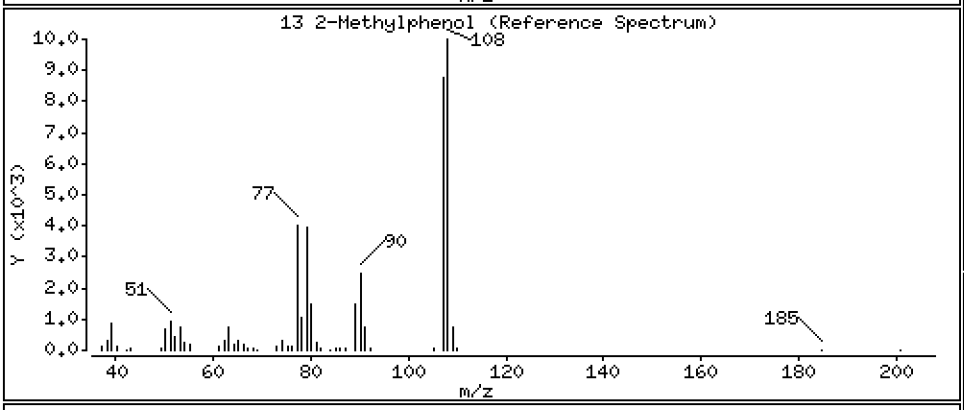
Column diameter: 0.25

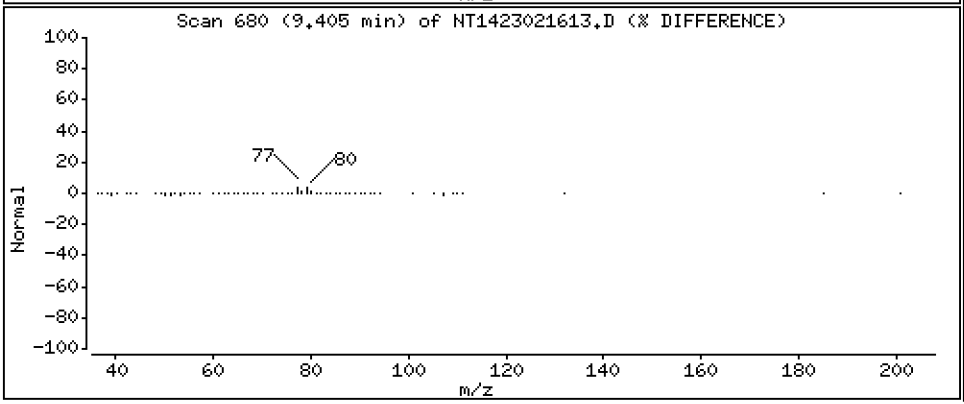
13 2-Methylphenol

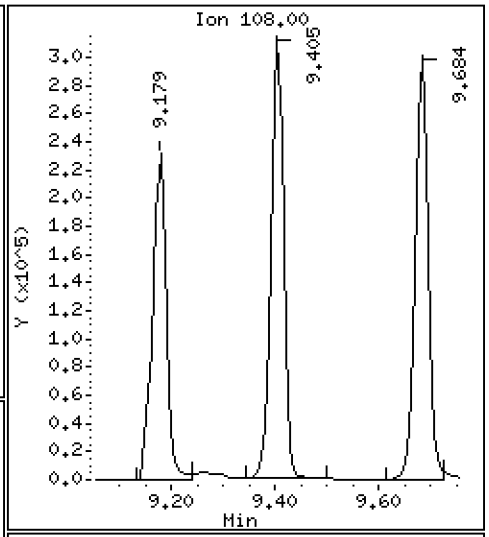
Concentration: 4.368 ug/mL

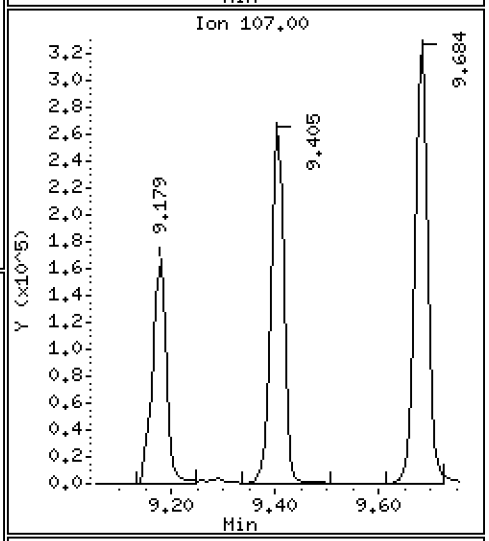


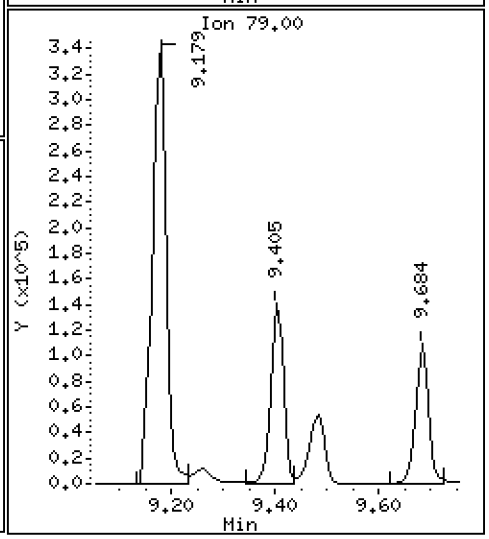












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

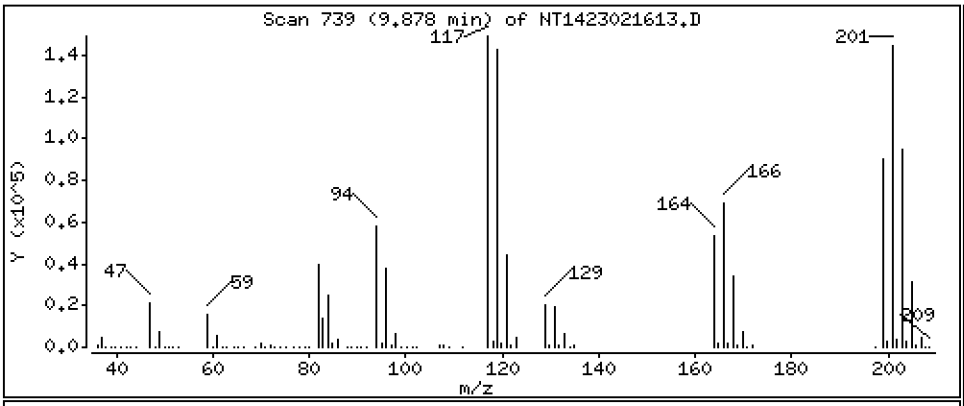
Operator: DSD

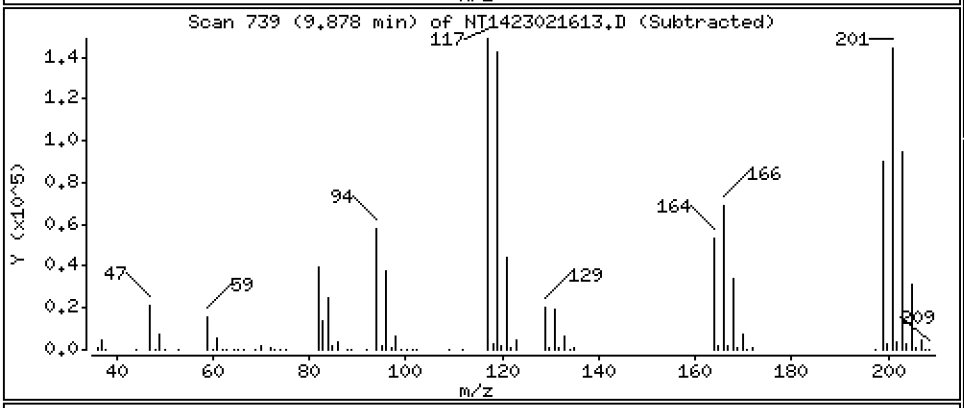
Column phase: ZB-5msi

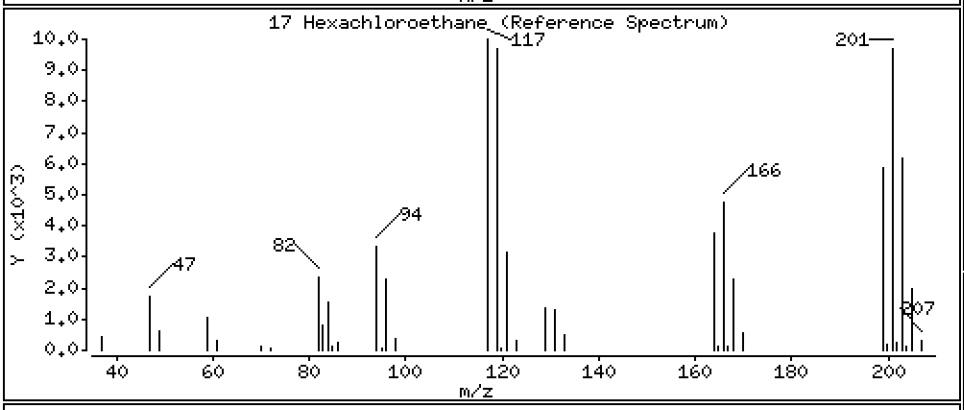
Column diameter: 0.25

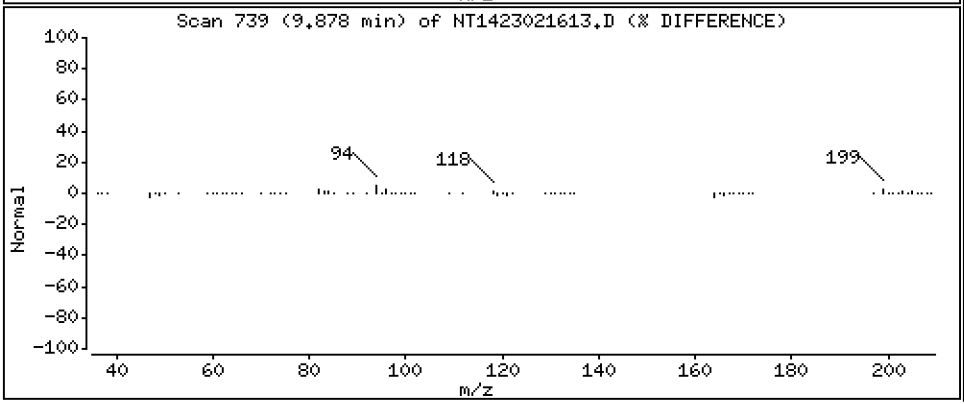
17 Hexachloroethane

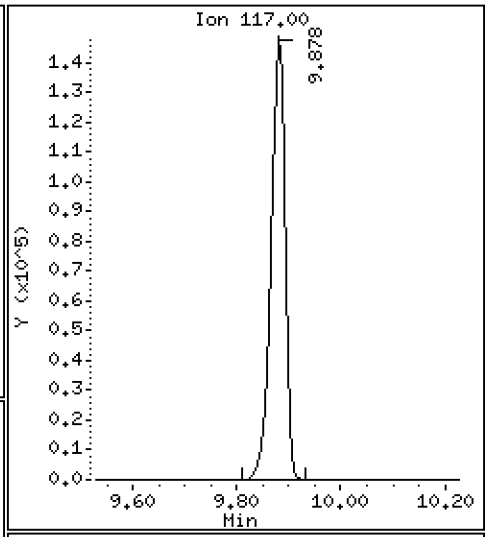
Concentration: 5.037 ug/mL

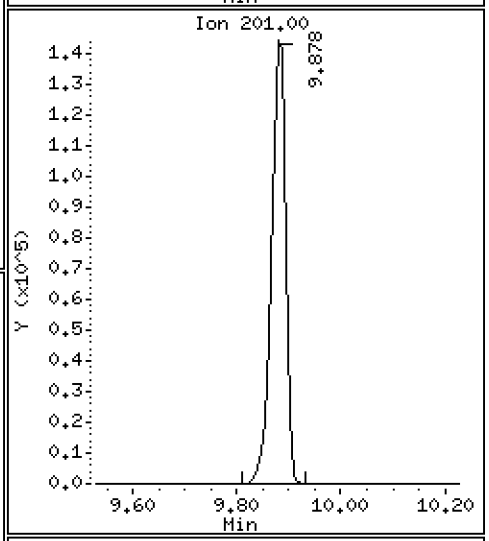


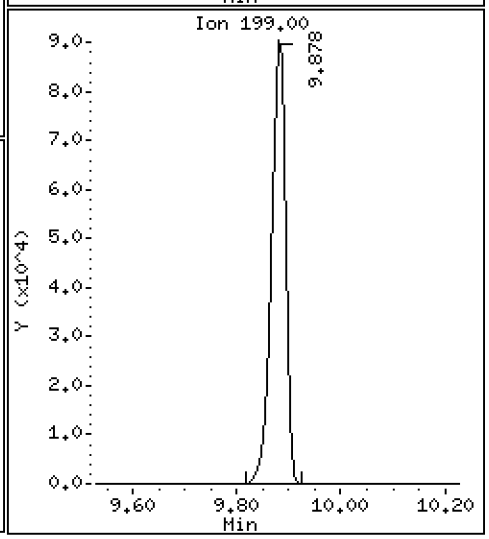












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

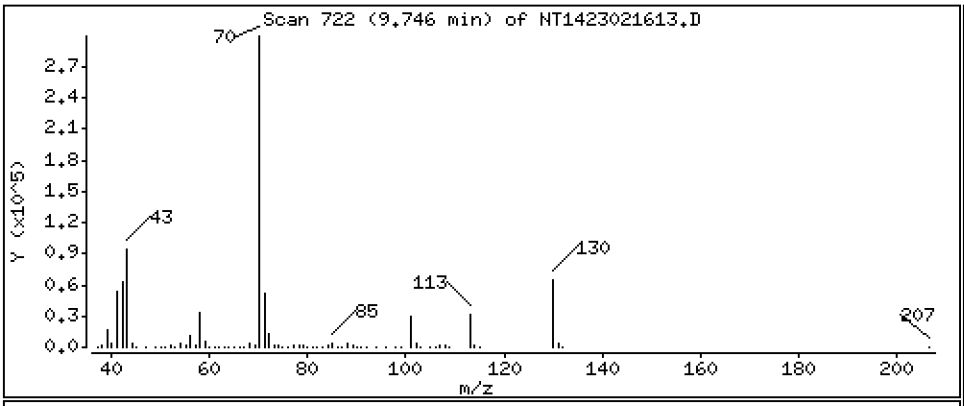
Operator: DSD

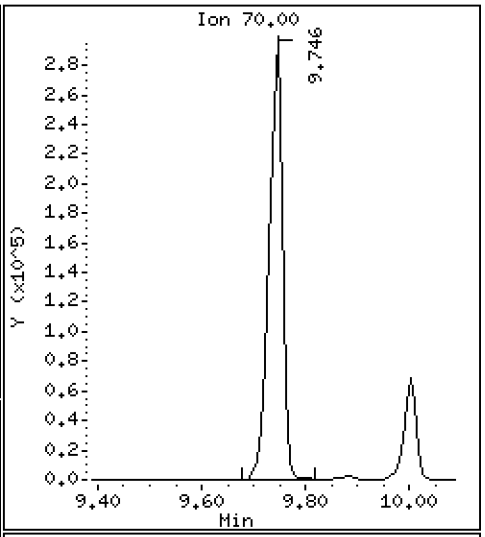
Column phase: ZB-5msi

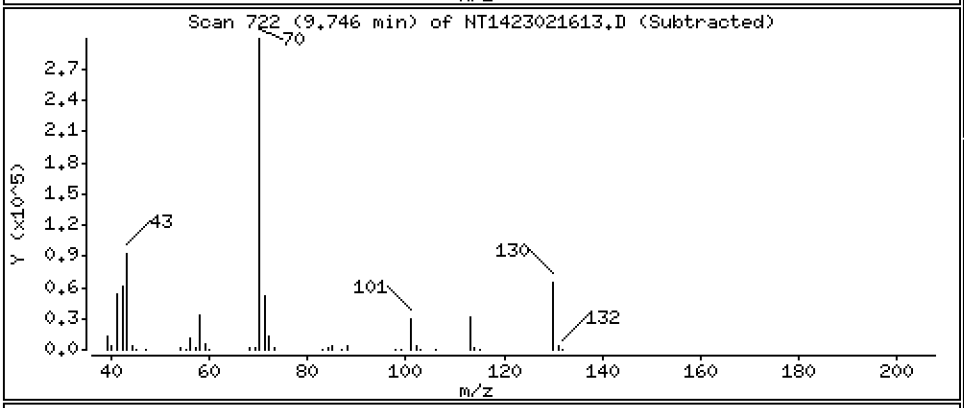
Column diameter: 0.25

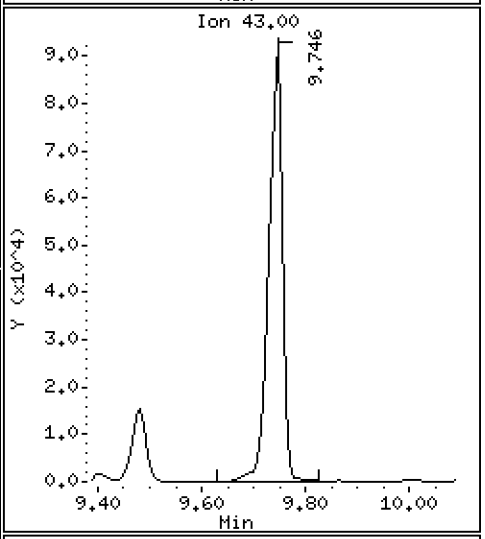
16 N-Nitroso-di-n-propylamine

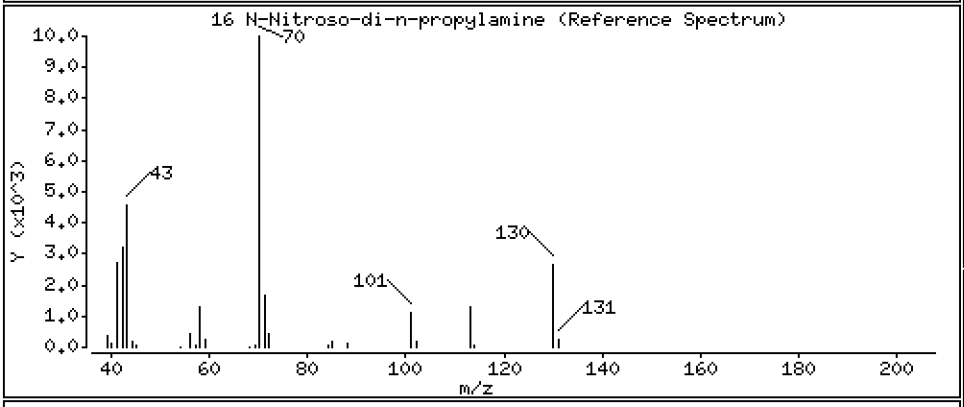
Concentration: 4.988 ug/mL

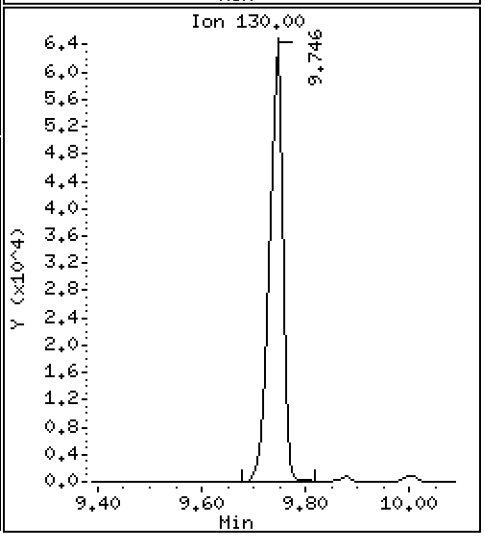


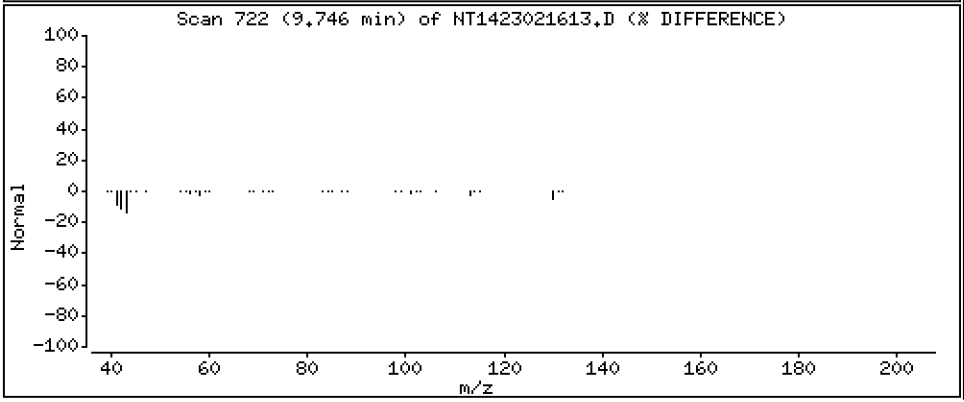












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

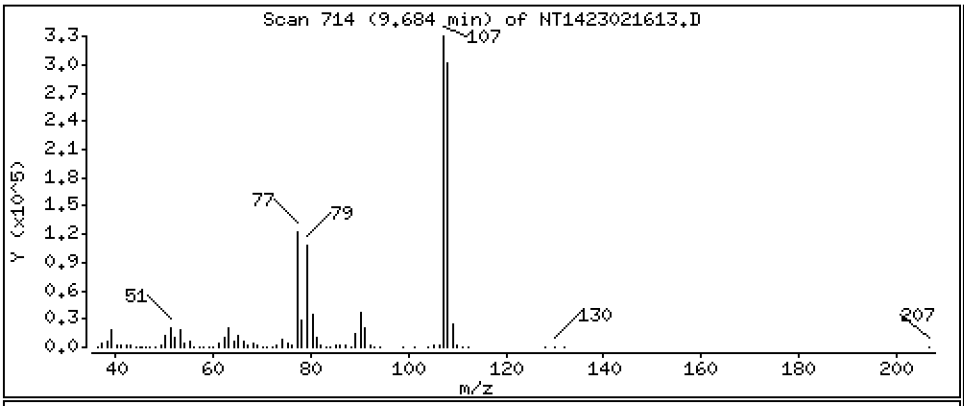
Operator: DSD

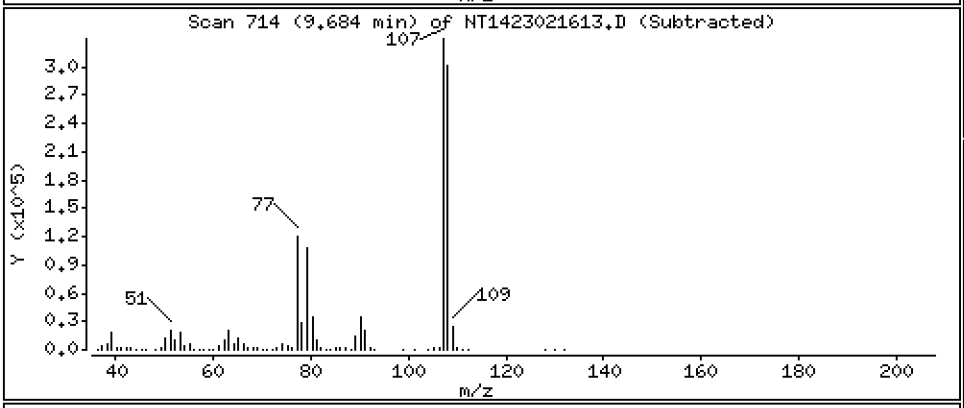
Column phase: ZB-5msi

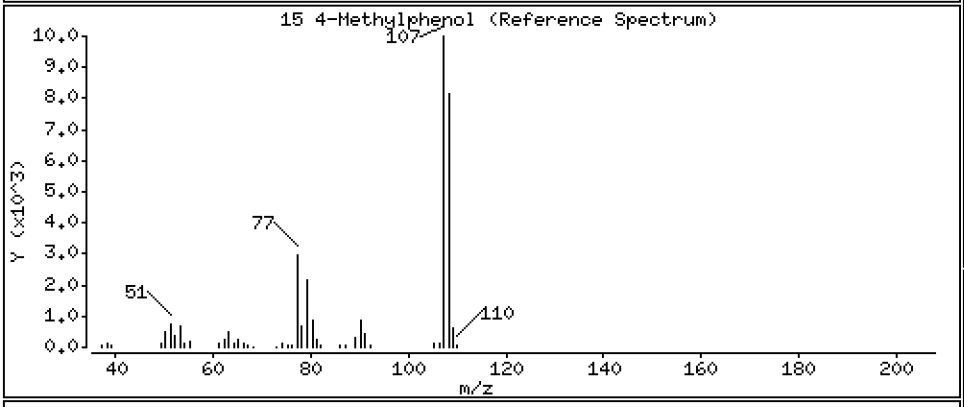
Column diameter: 0.25

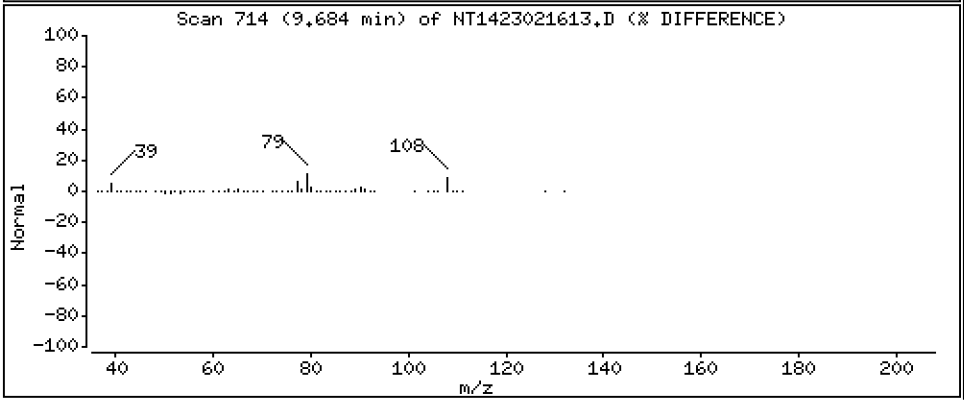
15 4-Methylphenol

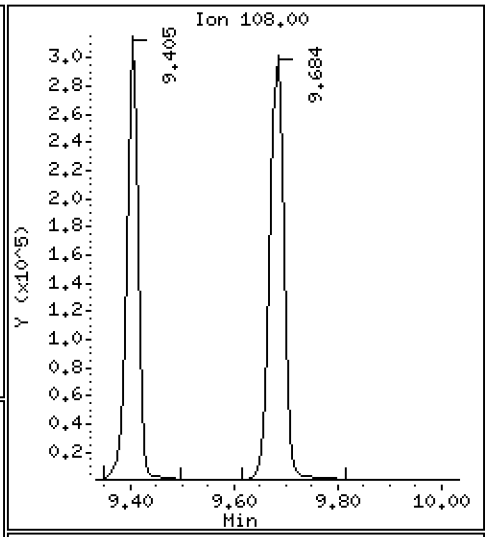
Concentration: 4.591 ug/mL

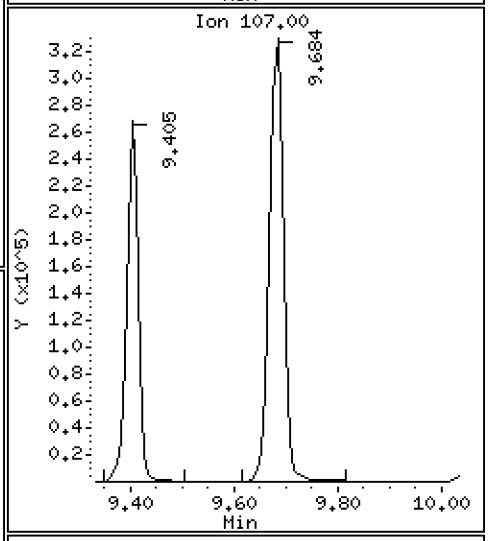


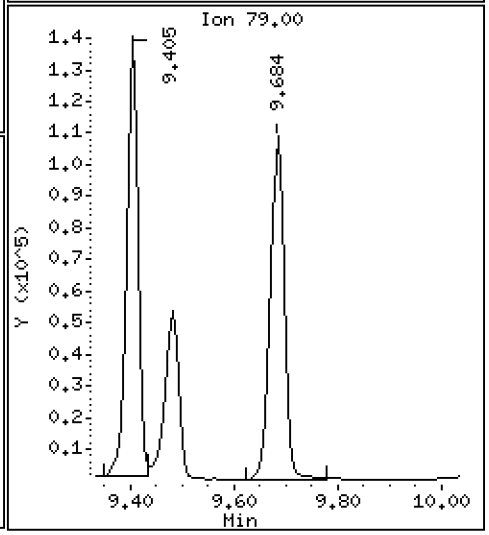












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

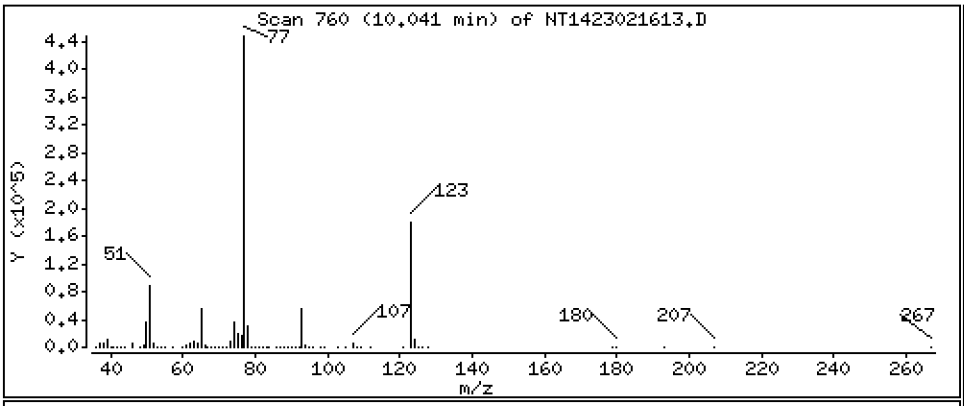
Operator: DSD

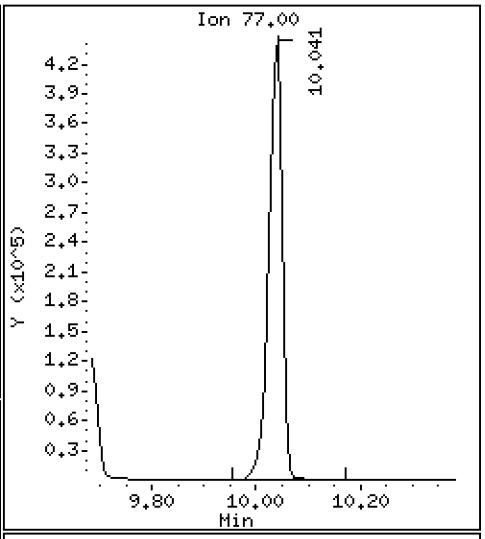
Column phase: ZB-5msi

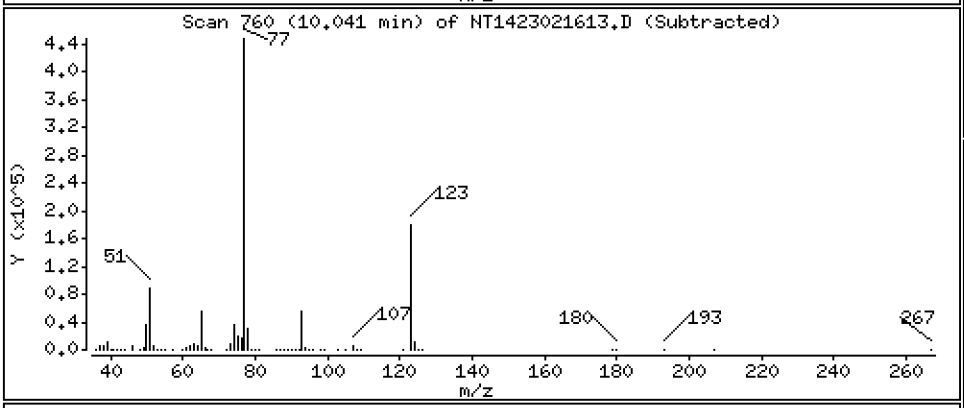
Column diameter: 0.25

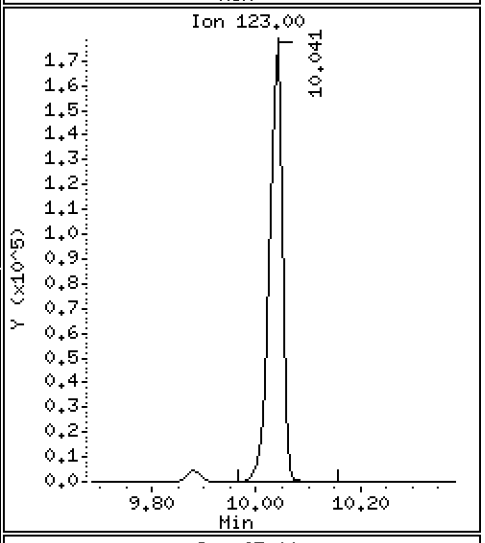
19 Nitrobenzene

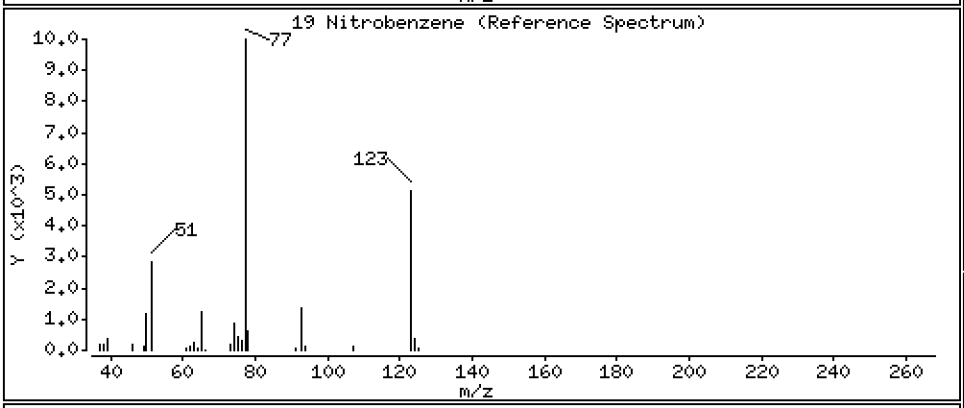
Concentration: 4.949 ug/mL

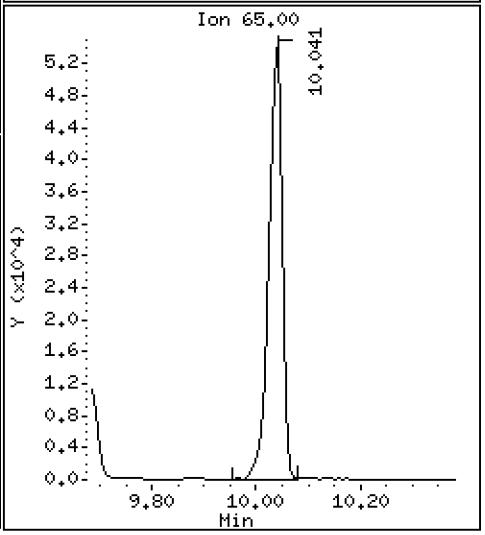


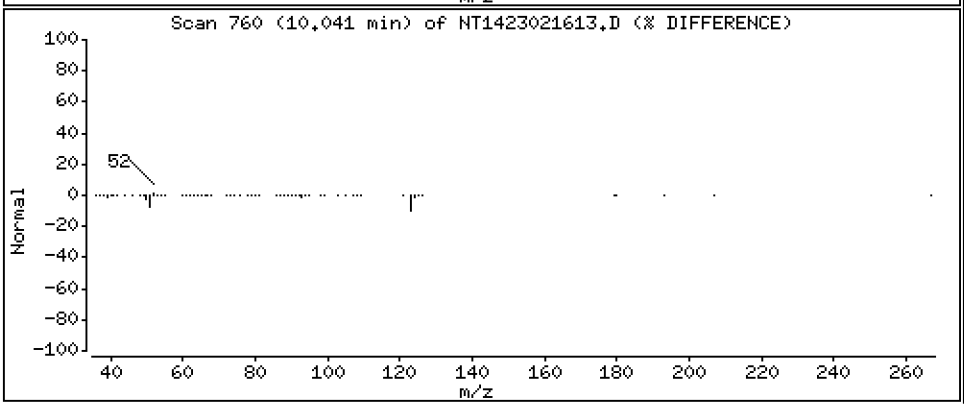












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

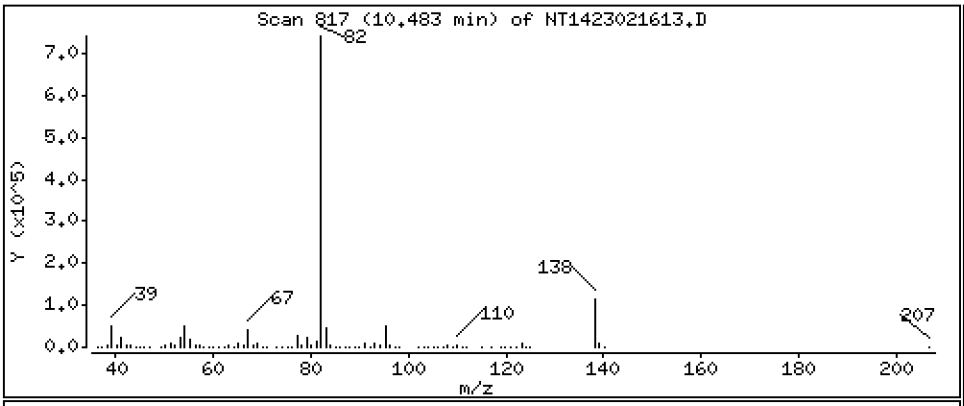
Operator: DSD

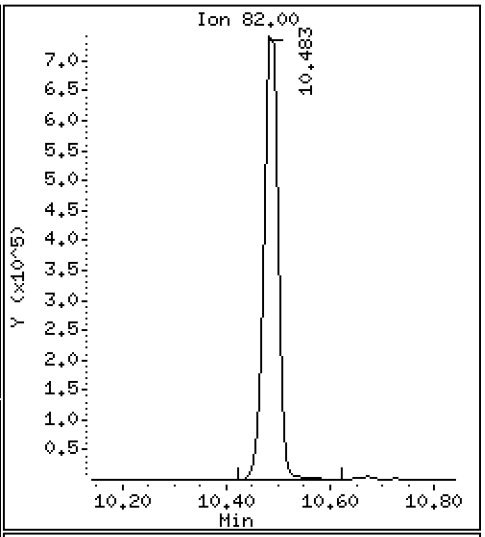
Column phase: ZB-5msi

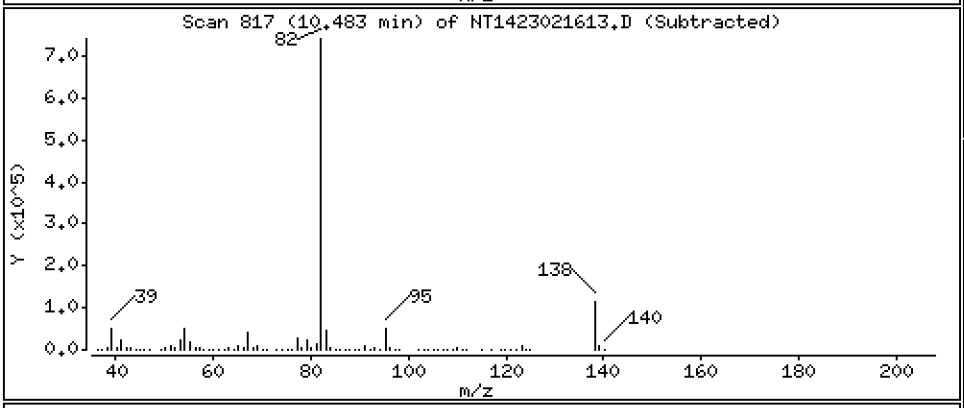
Column diameter: 0.25

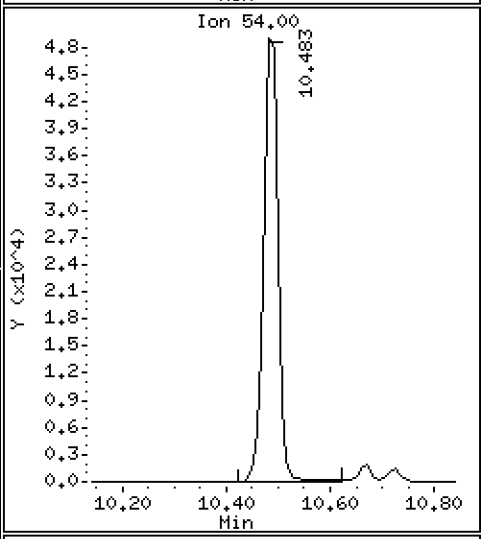
20 Isophorone

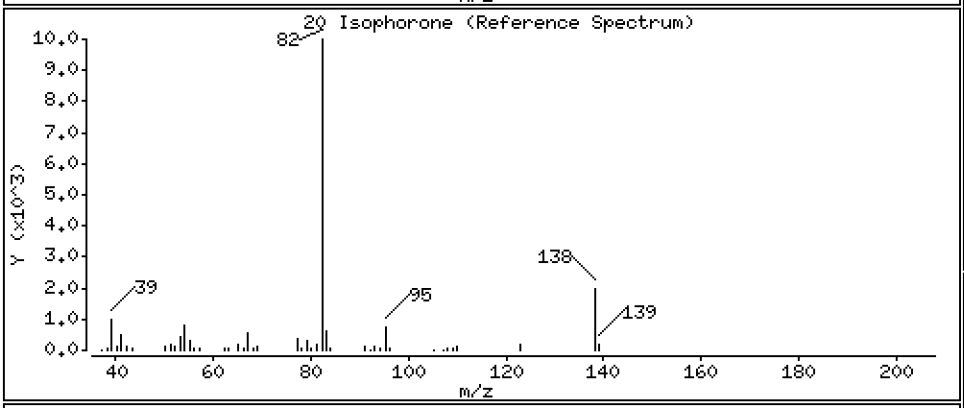
Concentration: 7.094 ug/mL

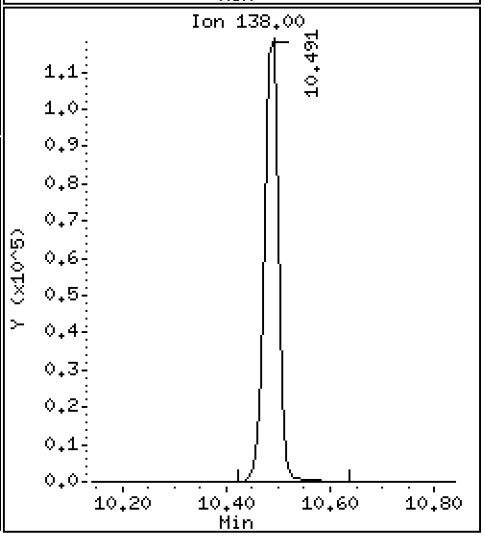


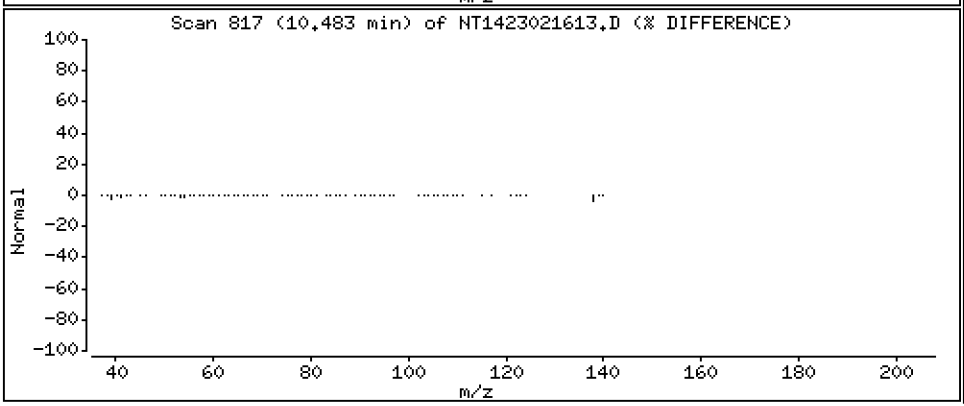












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

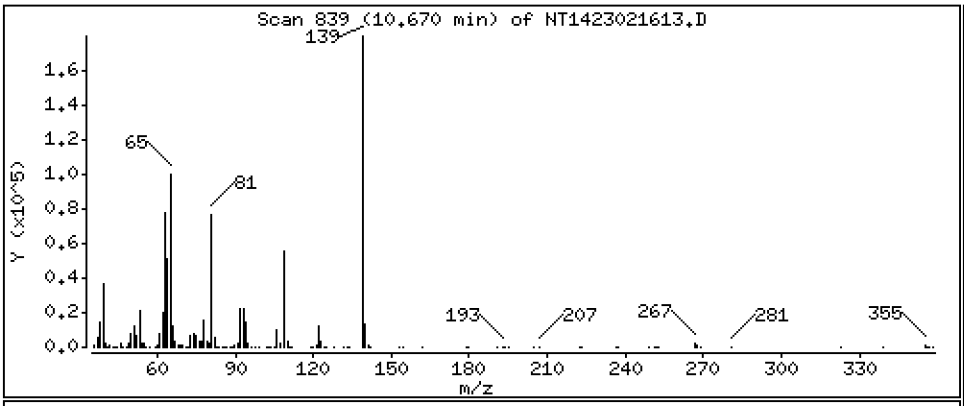
Operator: DSD

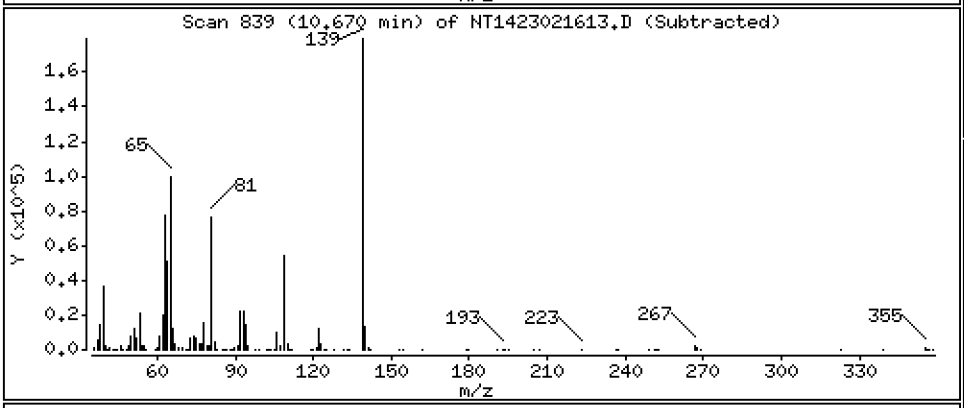
Column phase: ZB-5msi

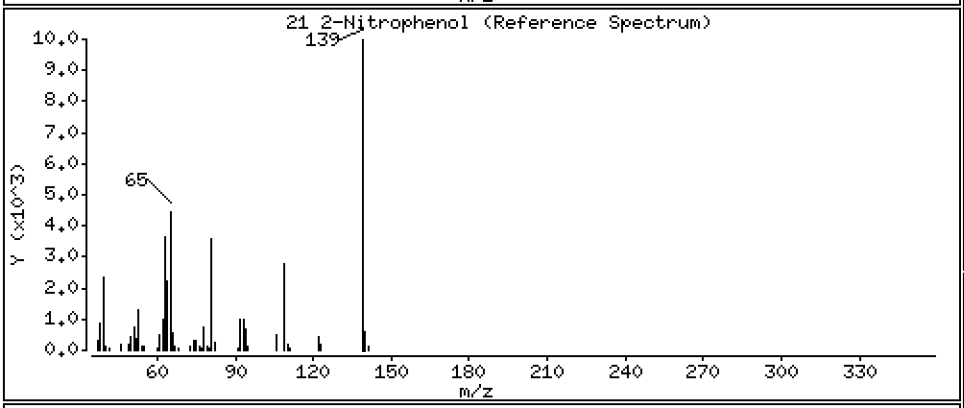
Column diameter: 0.25

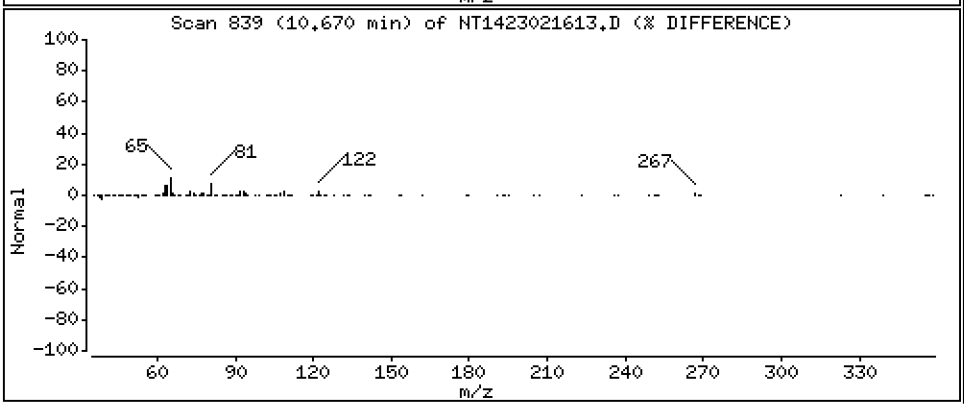
21 2-Nitrophenol

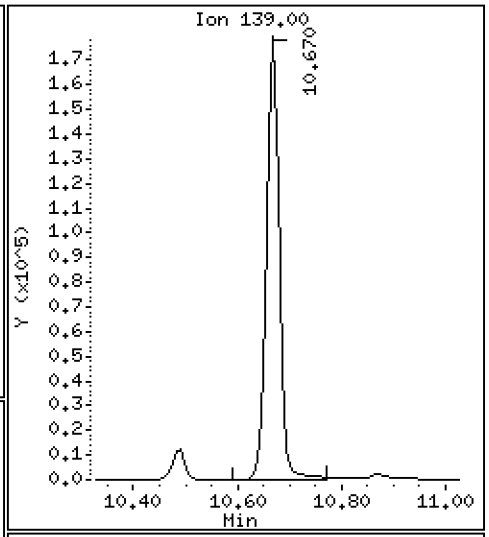
Concentration: 4.453 ug/mL

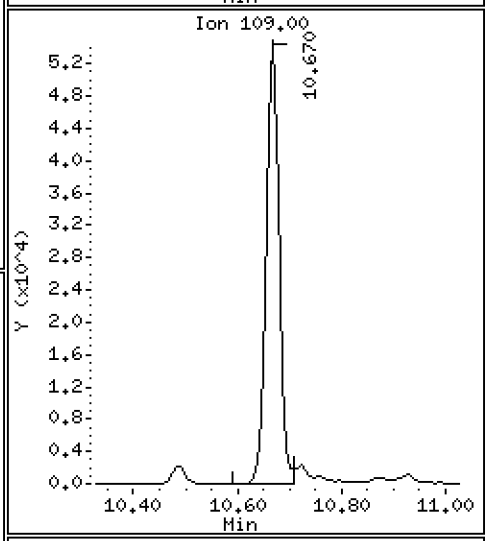


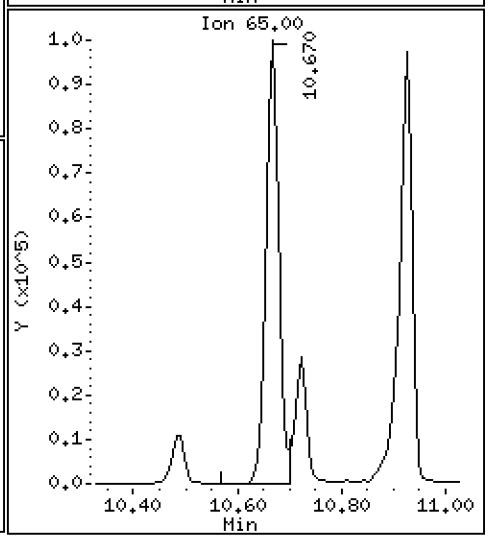












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

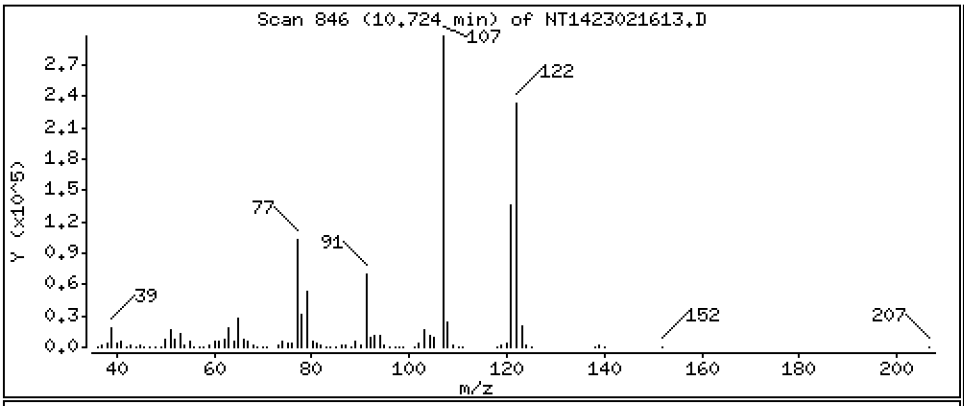
Operator: DSD

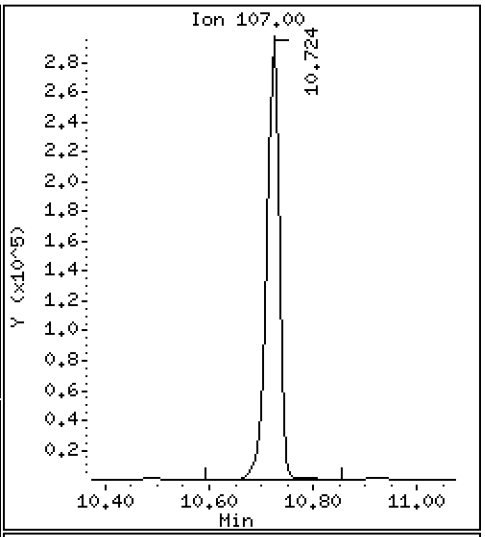
Column phase: ZB-5msi

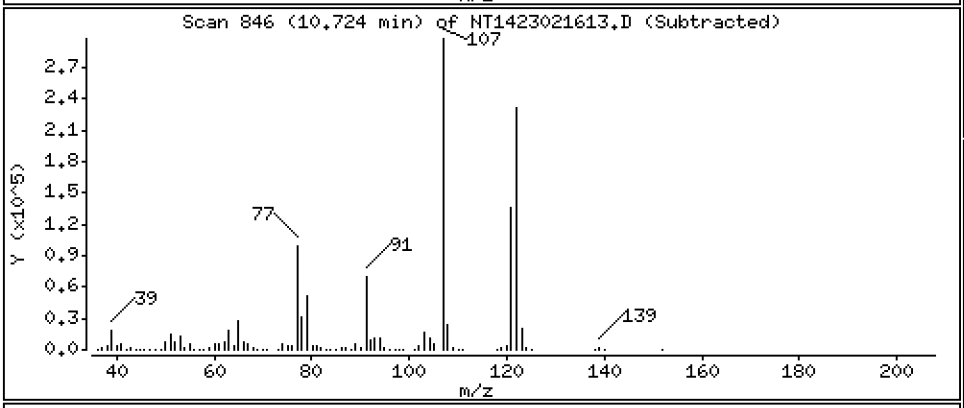
Column diameter: 0.25

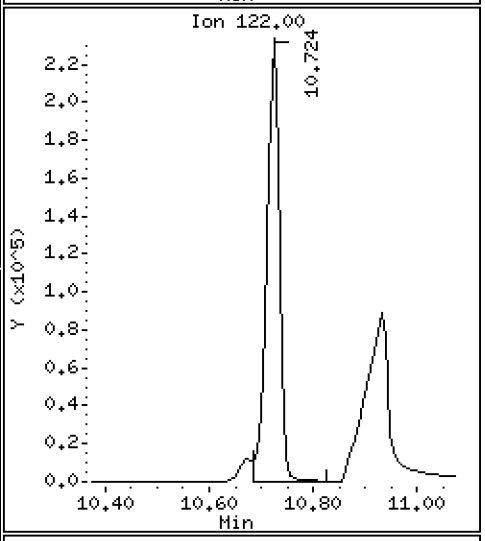
22 2,4-Dimethylphenol

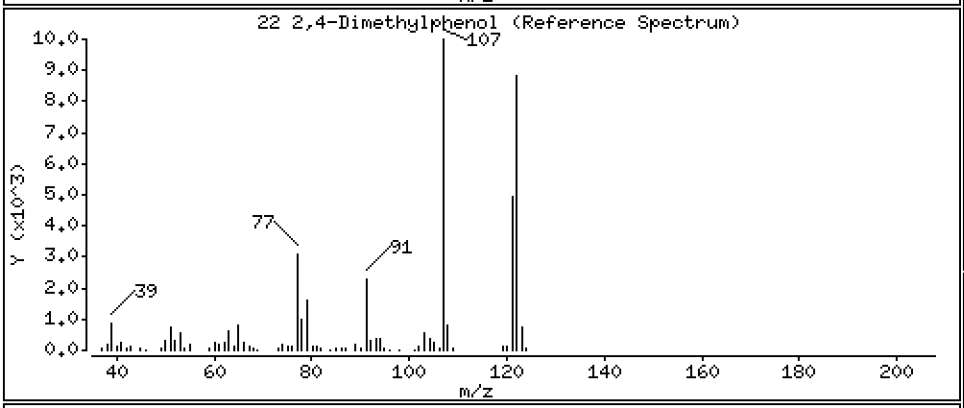
Concentration: 4.274 ug/mL

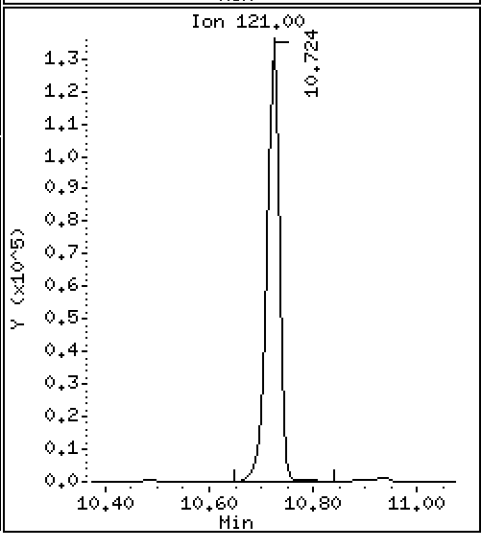


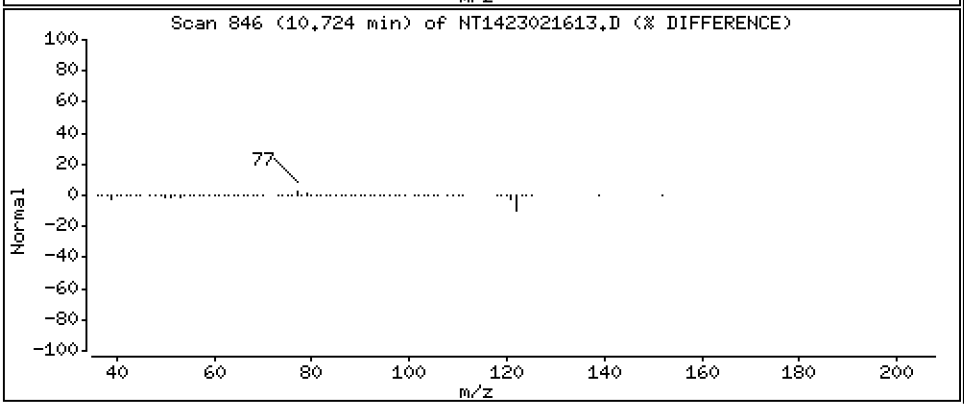












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

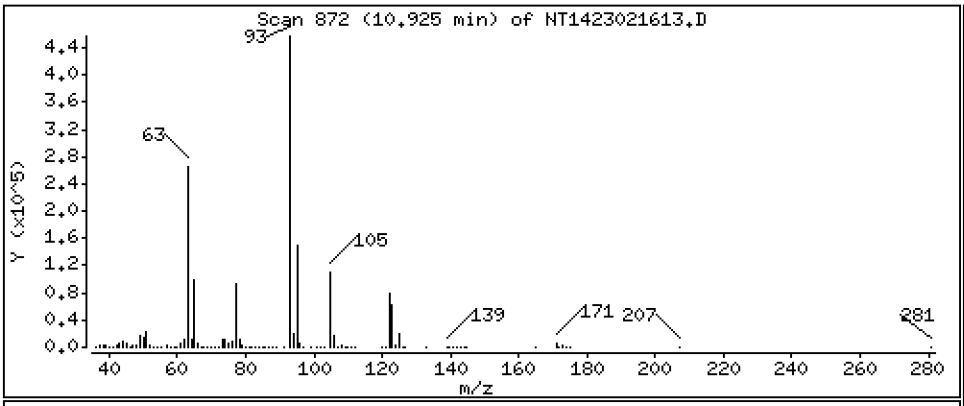
Operator: DSD

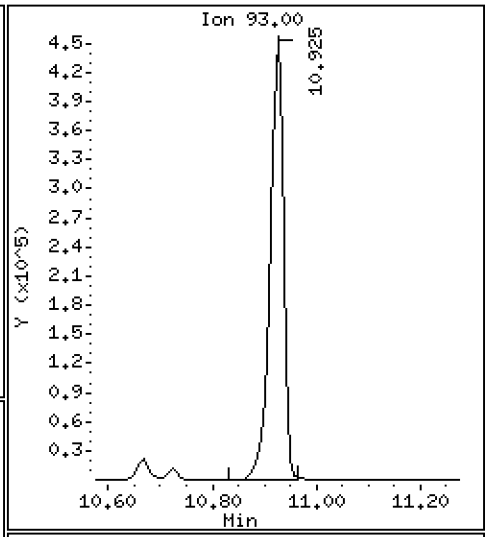
Column phase: ZB-5msi

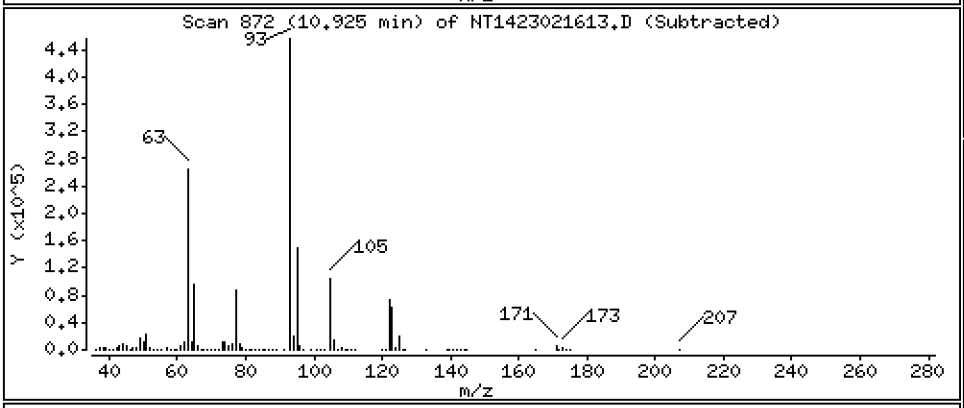
Column diameter: 0.25

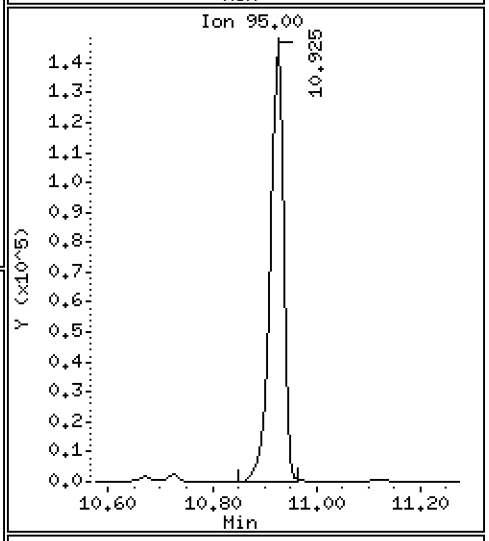
23 Bis(2-Chloroethoxy)methane

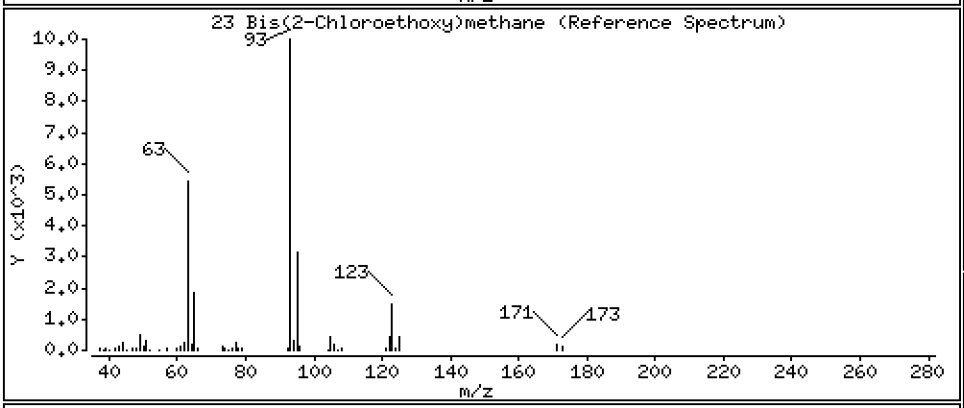
Concentration: 5.740 ug/mL

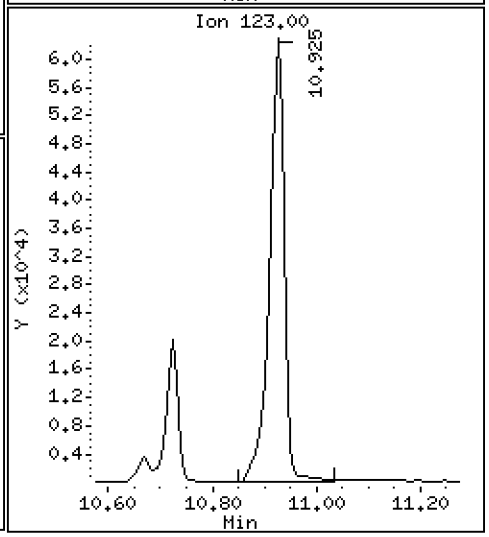


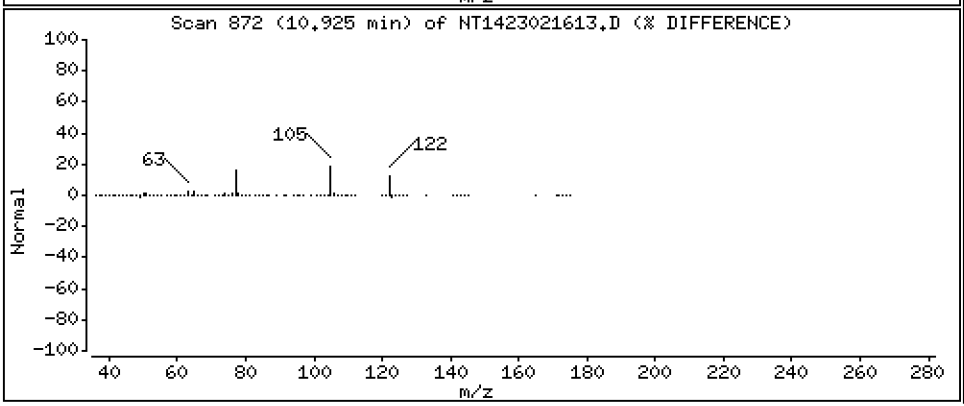












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

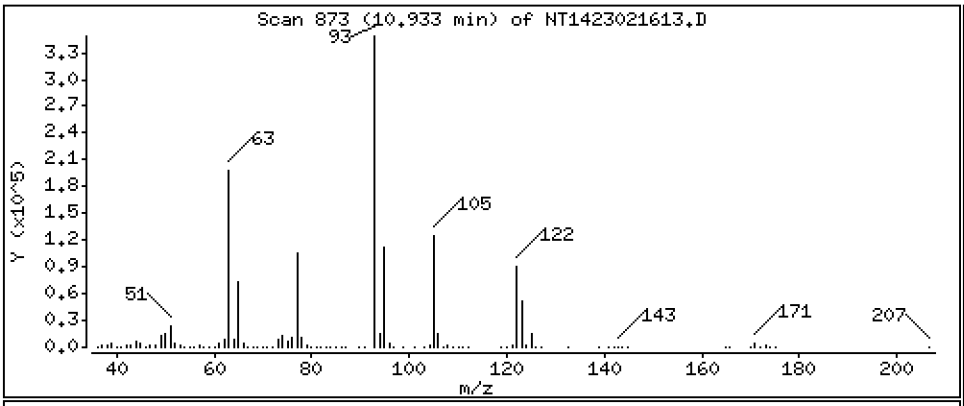
Operator: DSD

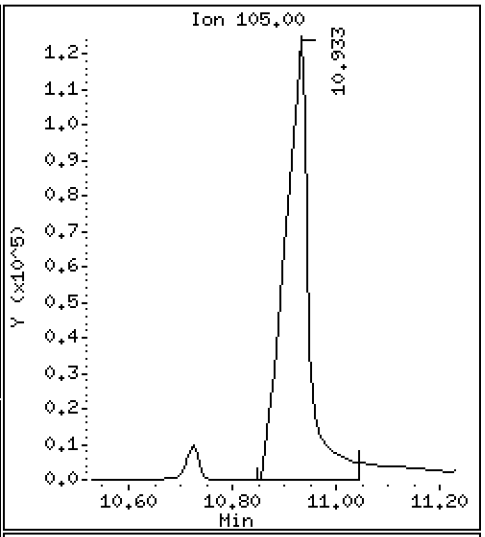
Column phase: ZB-5msi

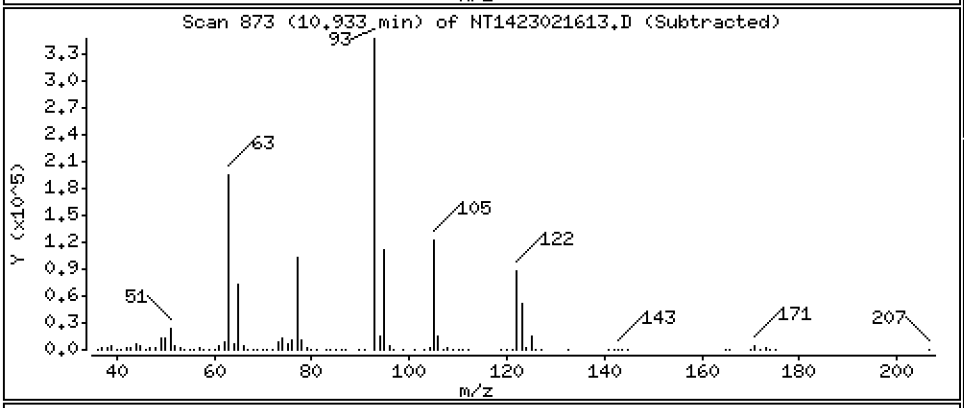
Column diameter: 0.25

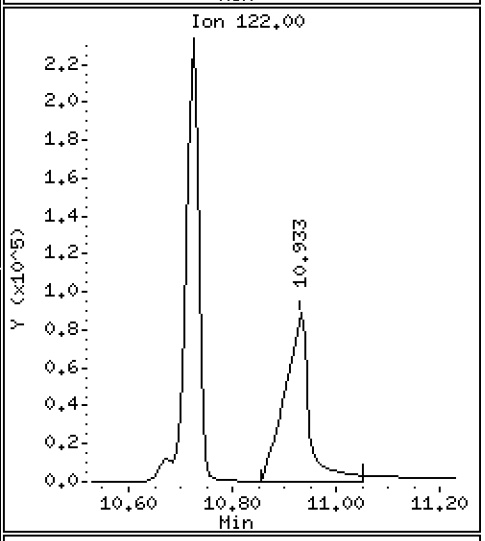
24 Benzoic acid

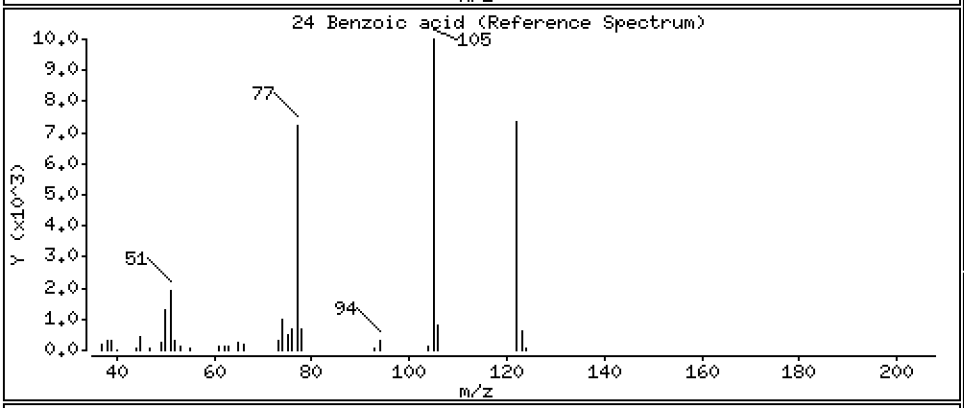
Concentration: 5.510 ug/mL

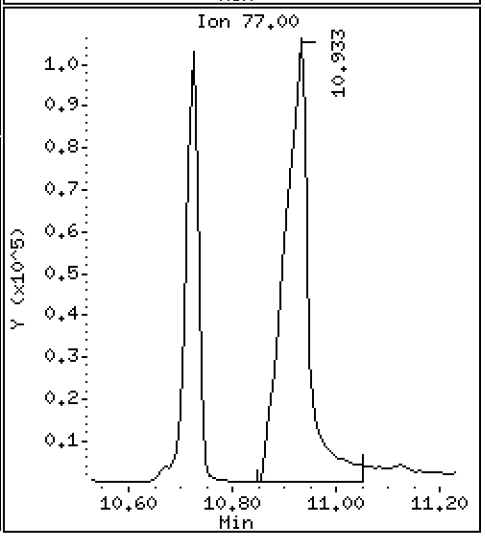


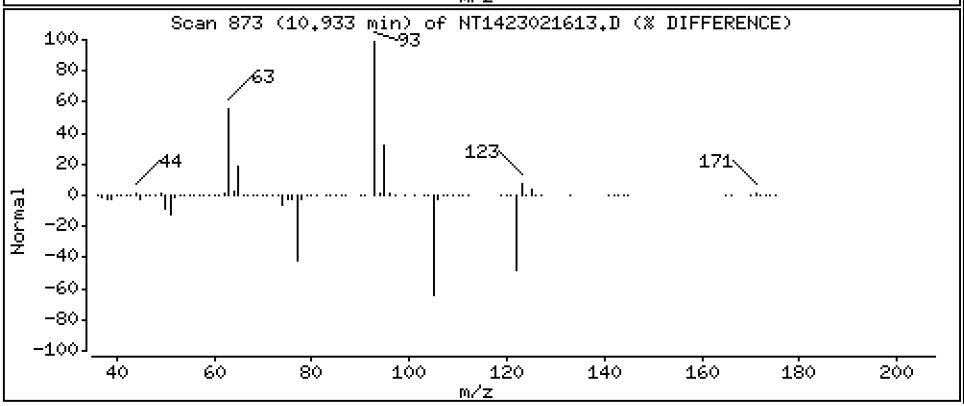












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

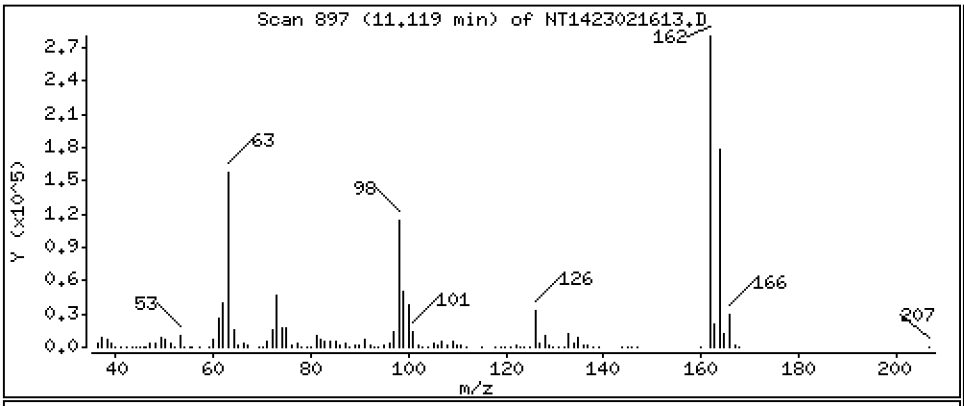
Operator: DSD

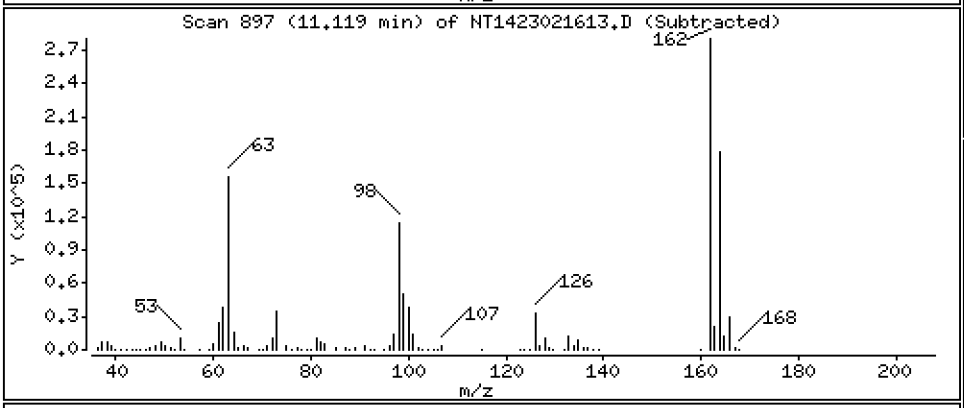
Column phase: ZB-5msi

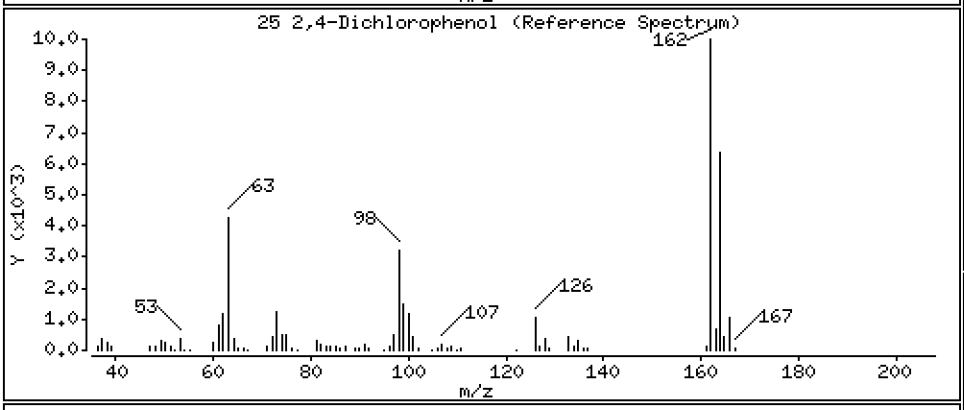
Column diameter: 0.25

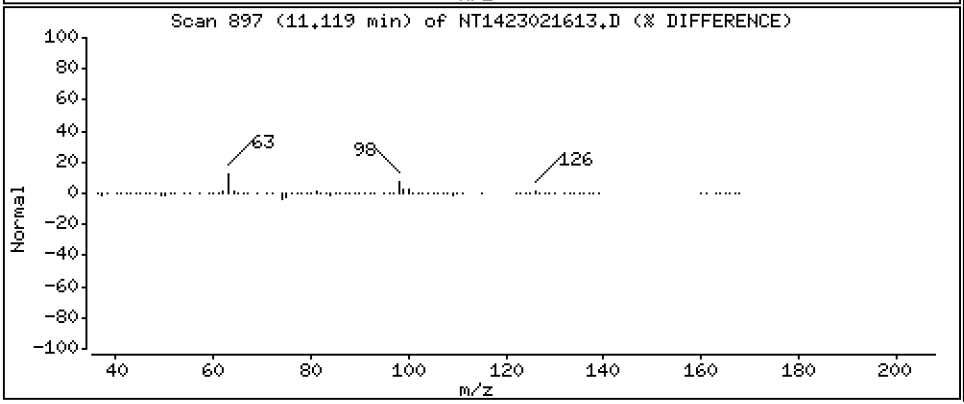
25 2,4-Dichlorophenol

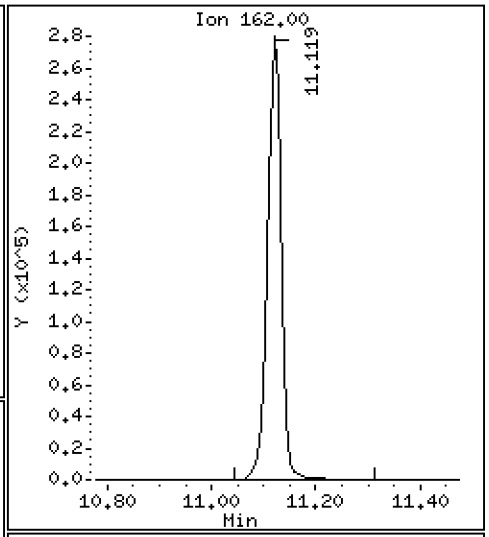
Concentration: 5.124 ug/mL

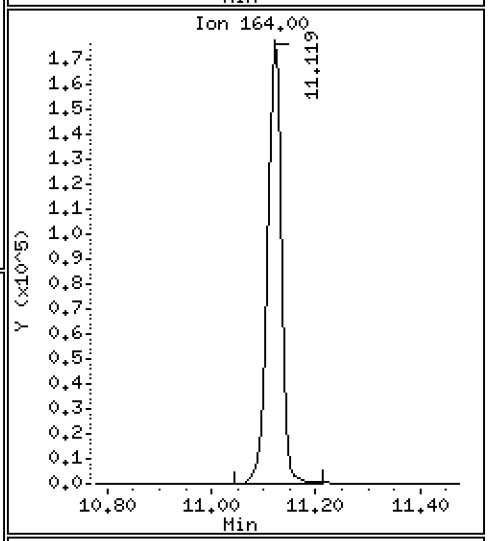


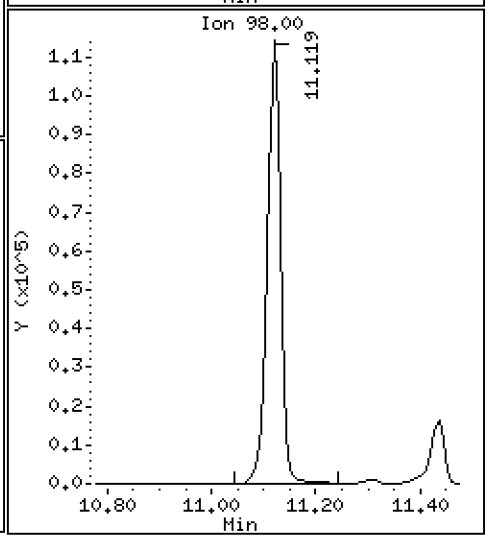












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

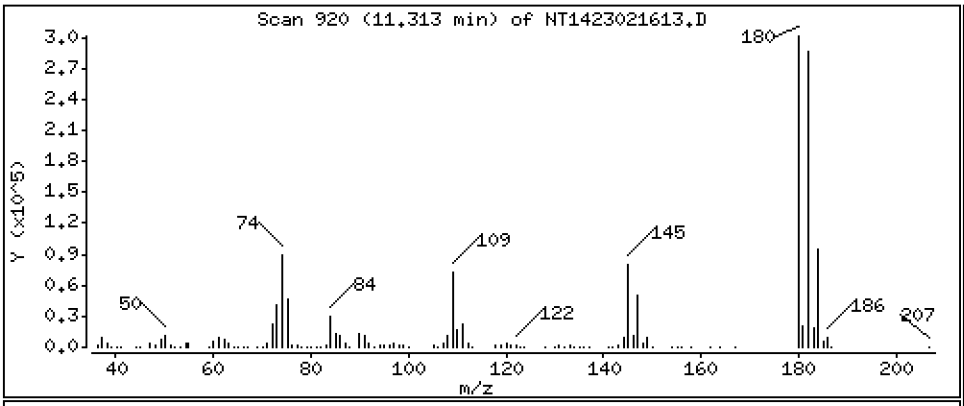
Operator: DSD

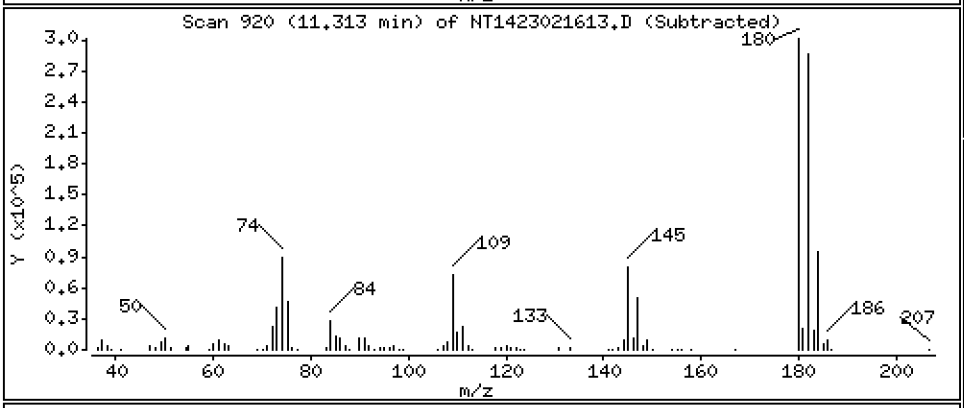
Column phase: ZB-5msi

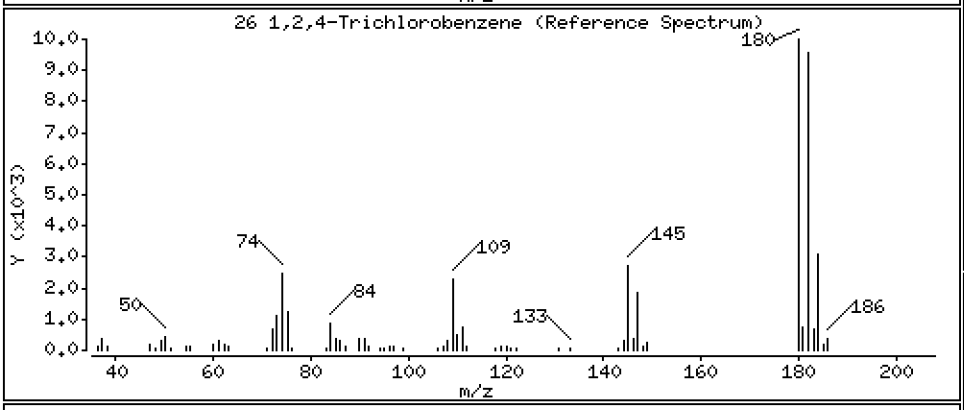
Column diameter: 0.25

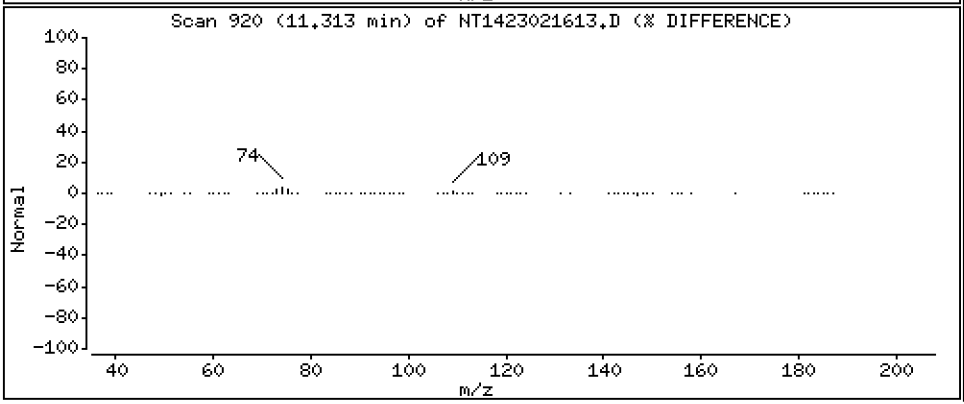
26 1,2,4-Trichlorobenzene

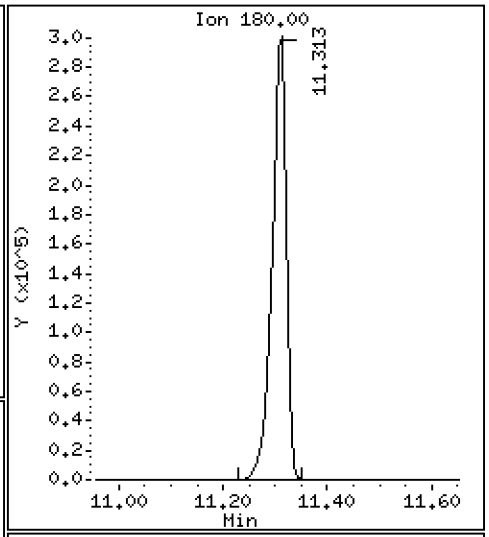
Concentration: 4.650 ug/mL

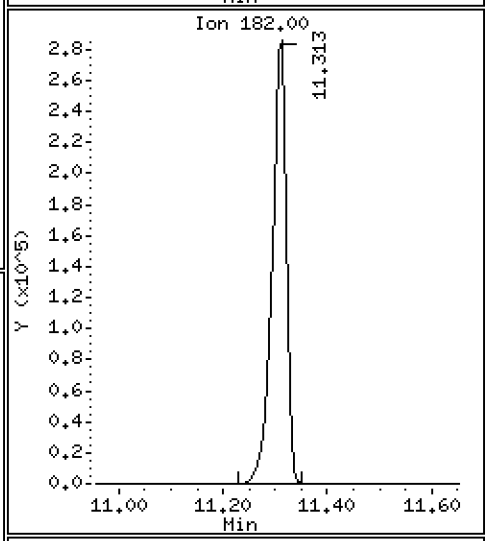


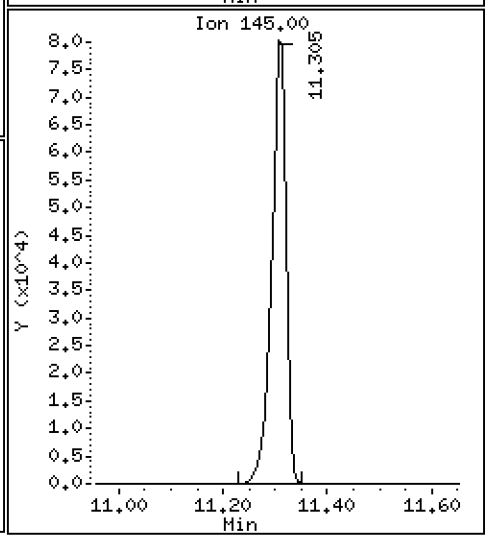












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

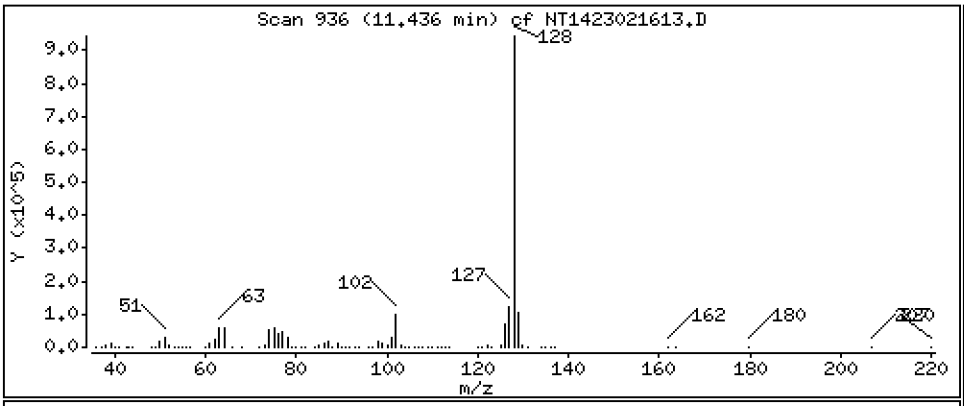
Operator: DSD

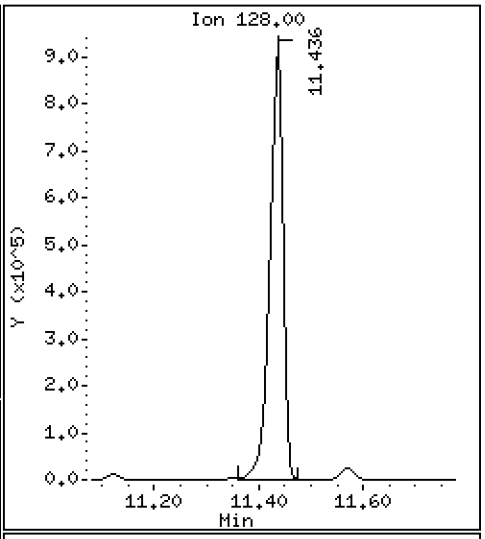
Column phase: ZB-5msi

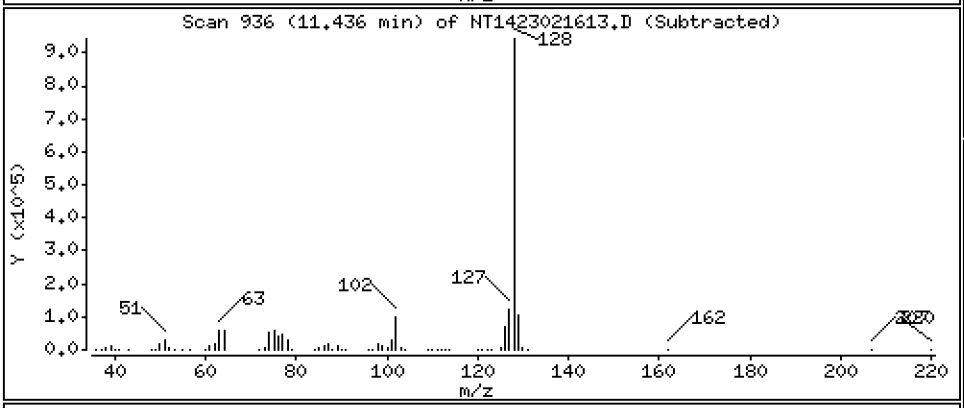
Column diameter: 0.25

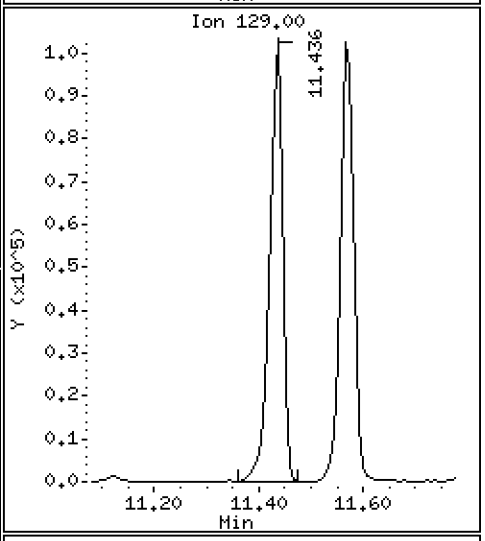
28 Naphthalene

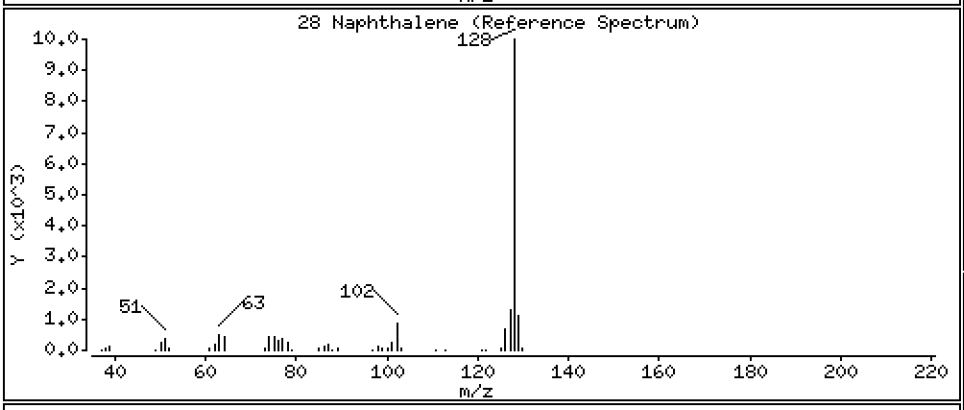
Concentration: 4.736 ug/mL

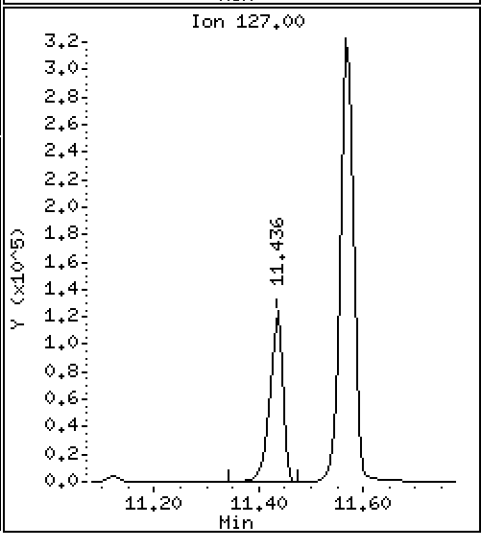


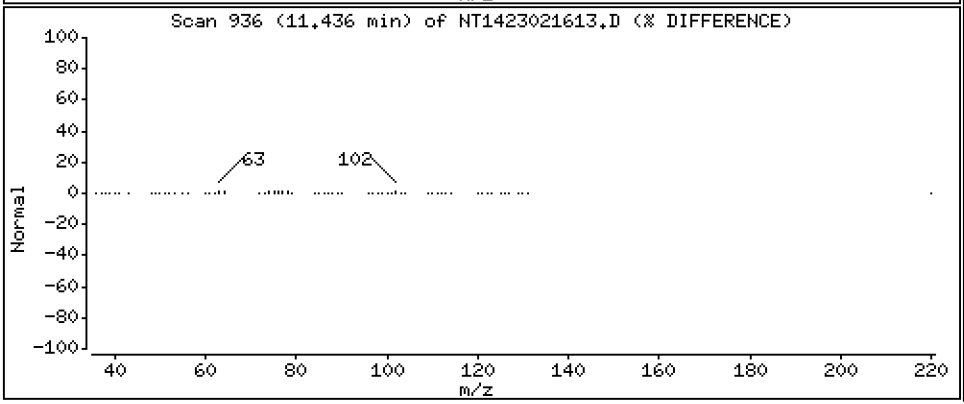












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

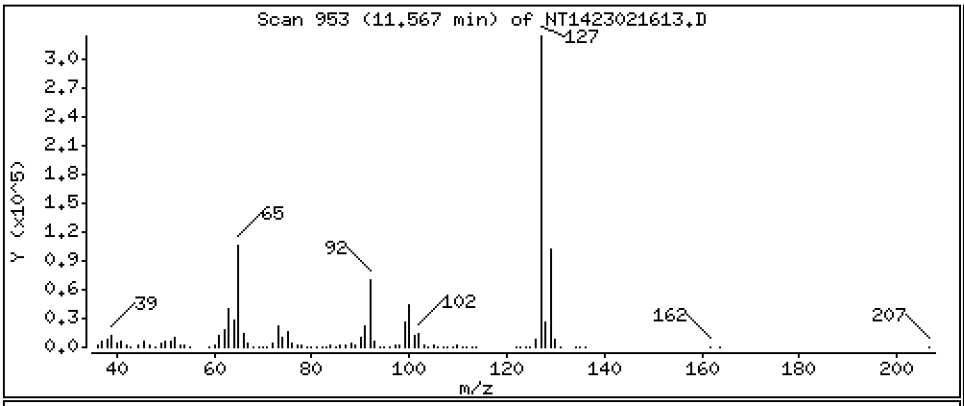
Operator: DSD

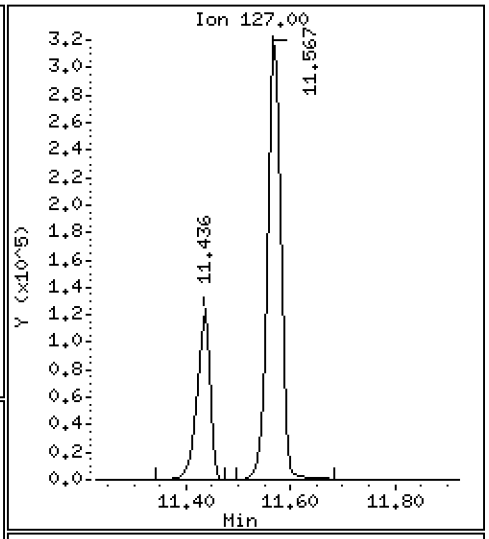
Column phase: ZB-5msi

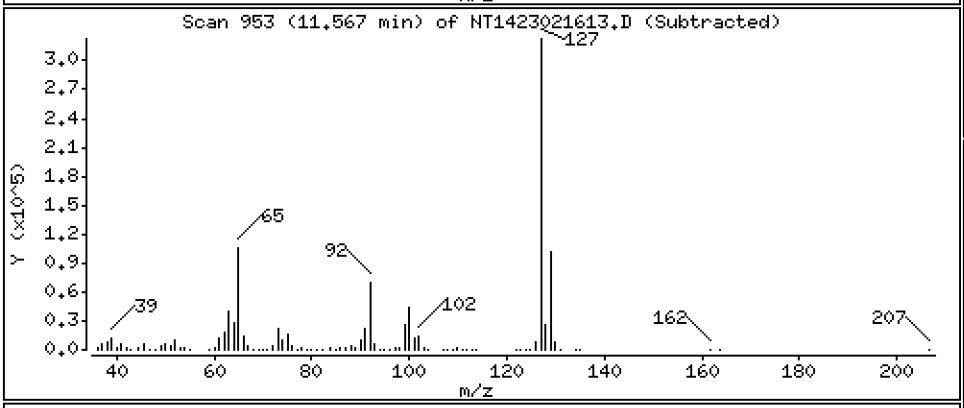
Column diameter: 0.25

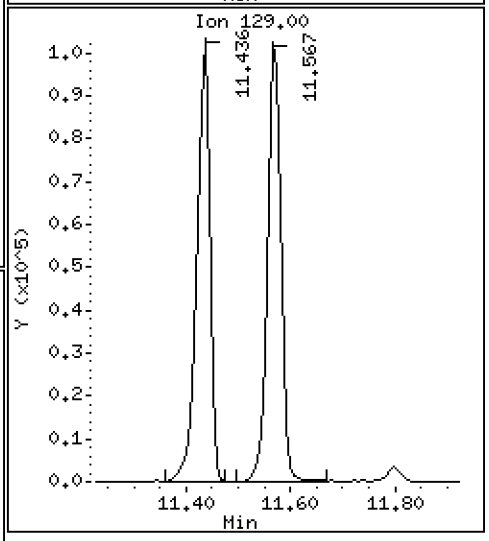
29 4-Chloroaniline

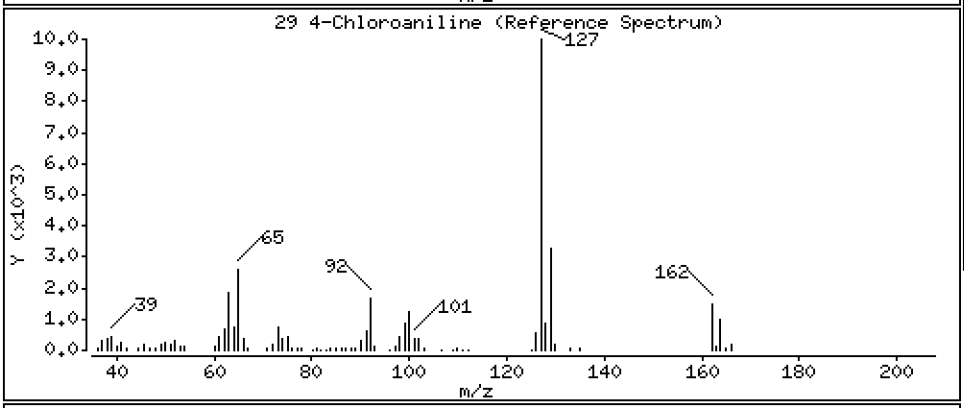
Concentration: 3.911 ug/mL

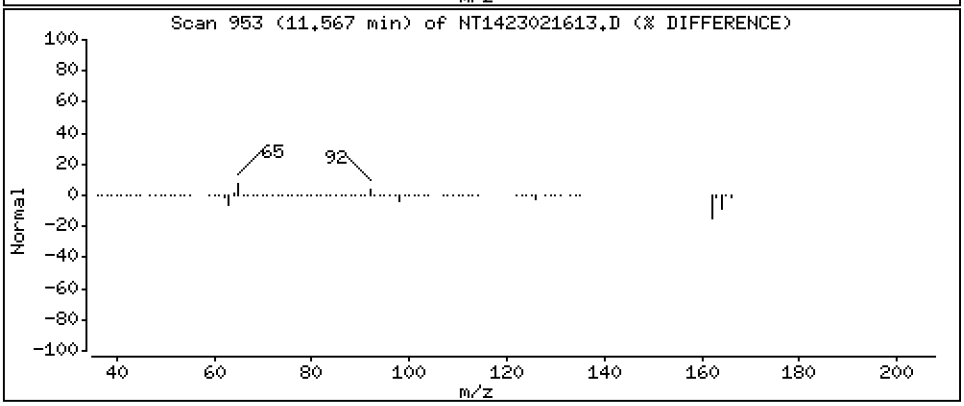












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

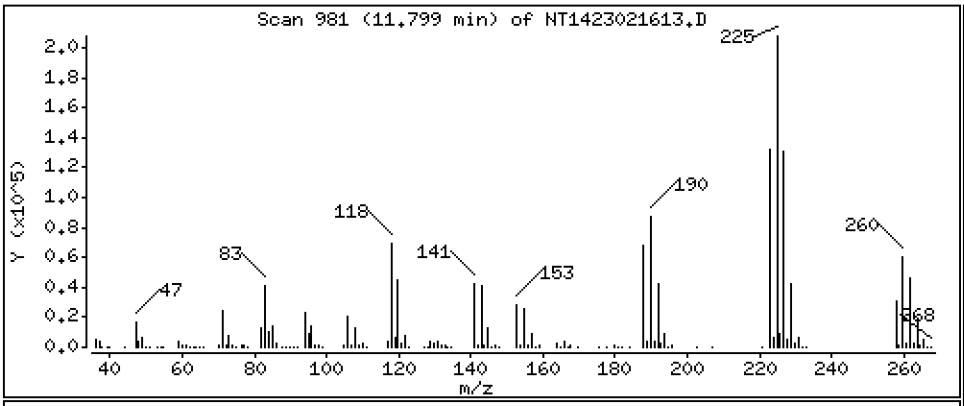
Operator: DSD

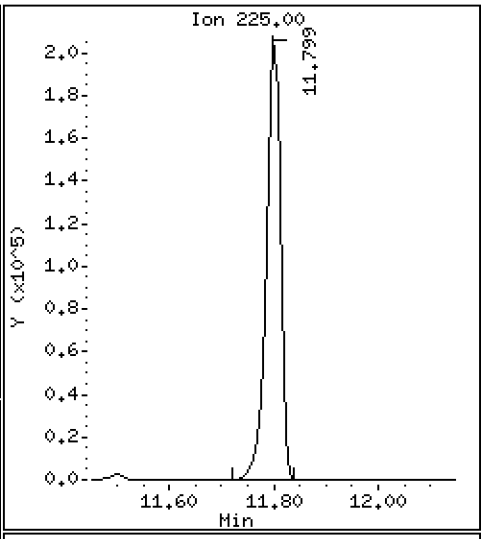
Column phase: ZB-5msi

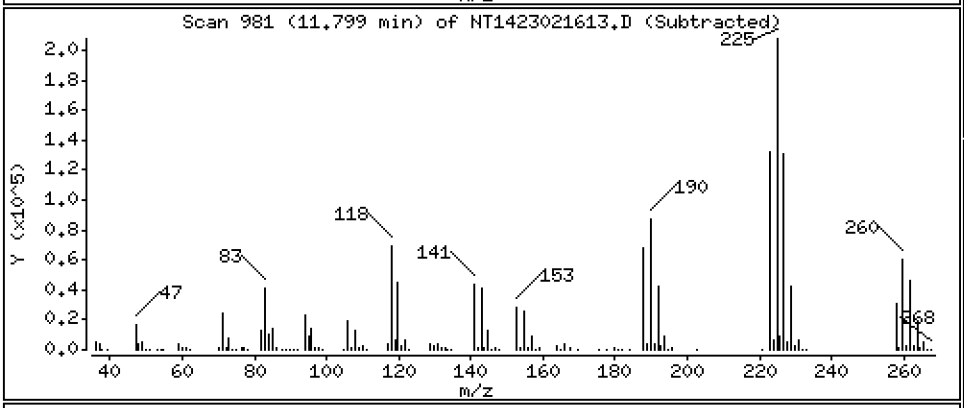
Column diameter: 0.25

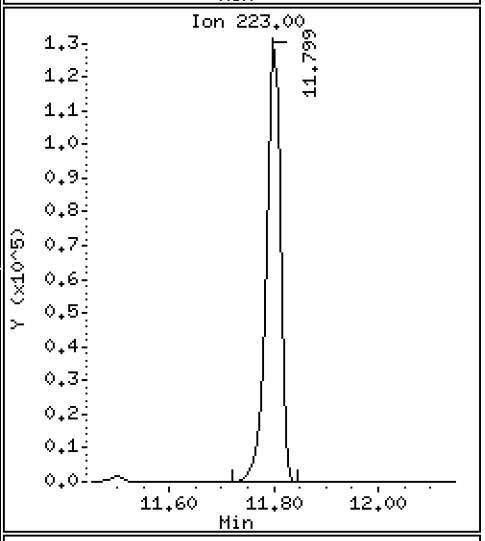
30 Hexachlorobutadiene

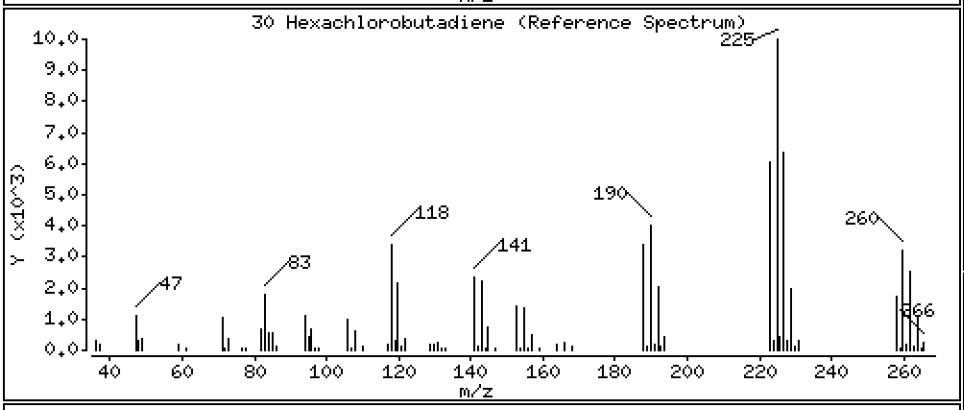
Concentration: 4.917 ug/mL

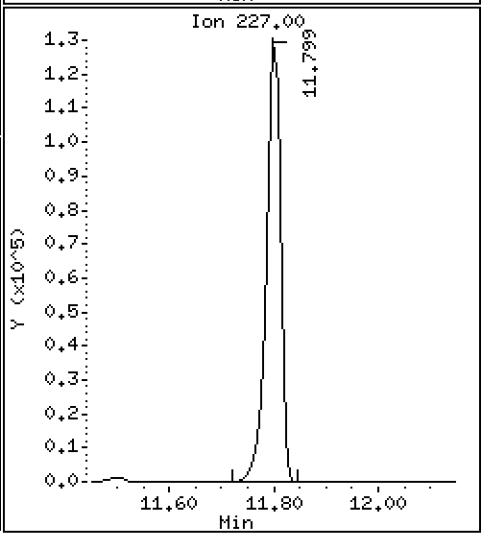


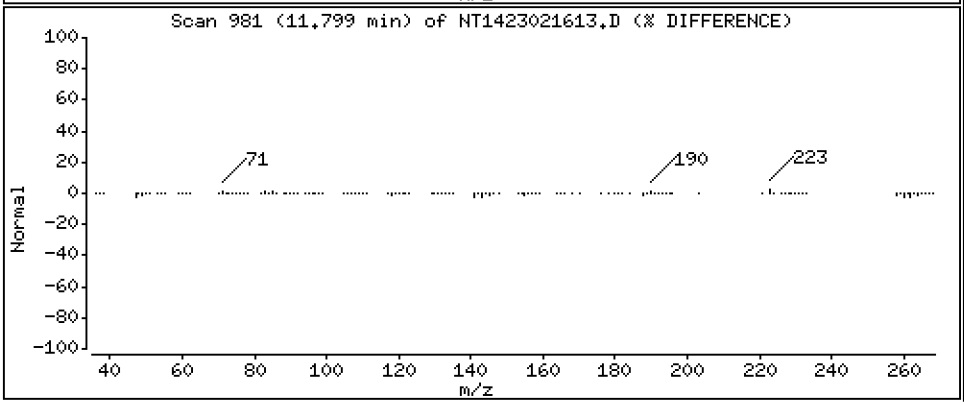












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

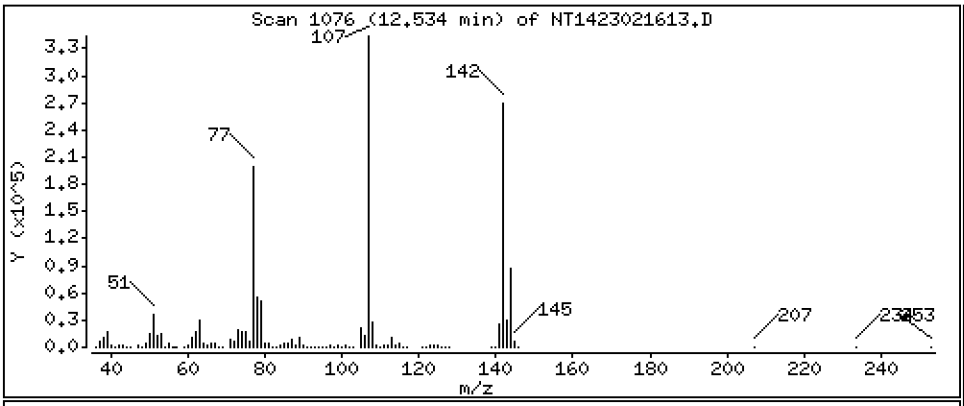
Operator: DSD

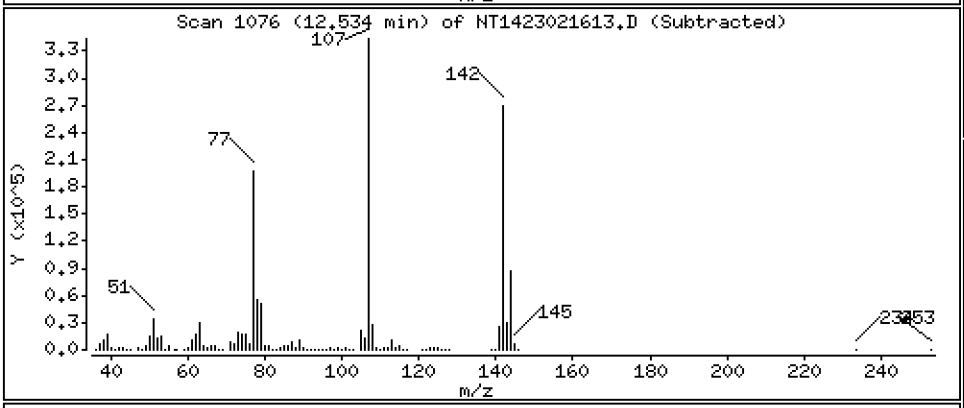
Column phase: ZB-5msi

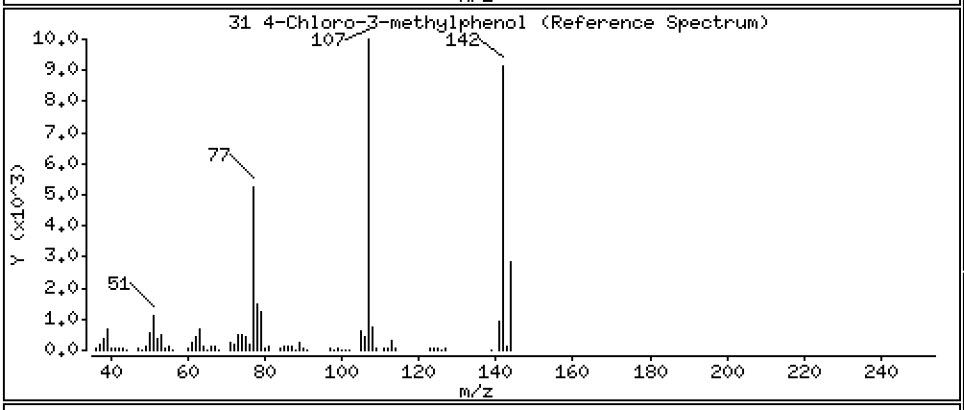
Column diameter: 0.25

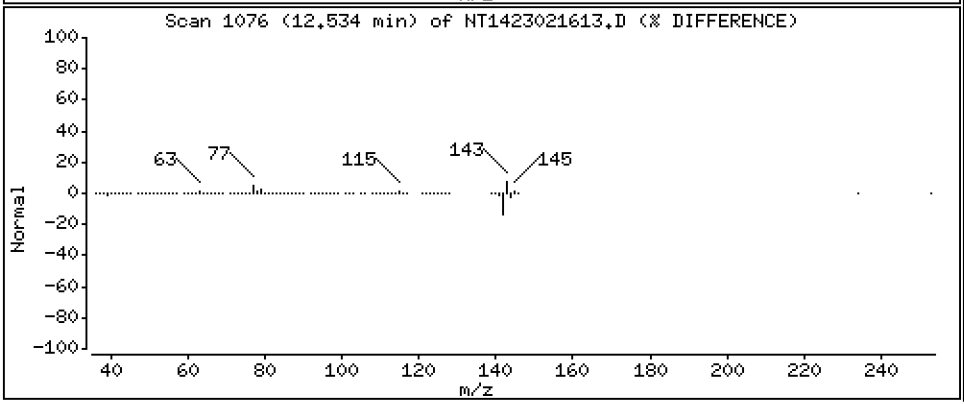
31 4-Chloro-3-methylphenol

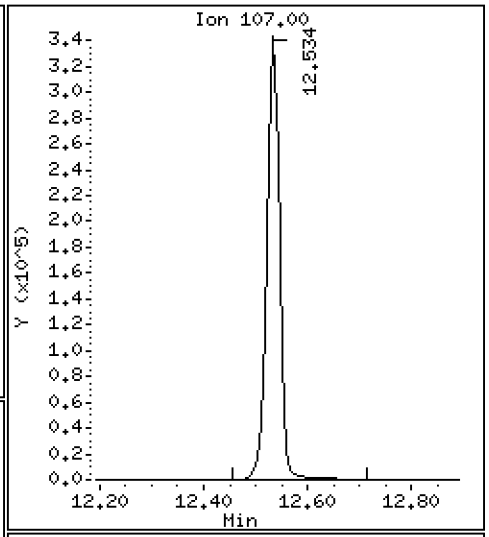
Concentration: 5.045 ug/mL

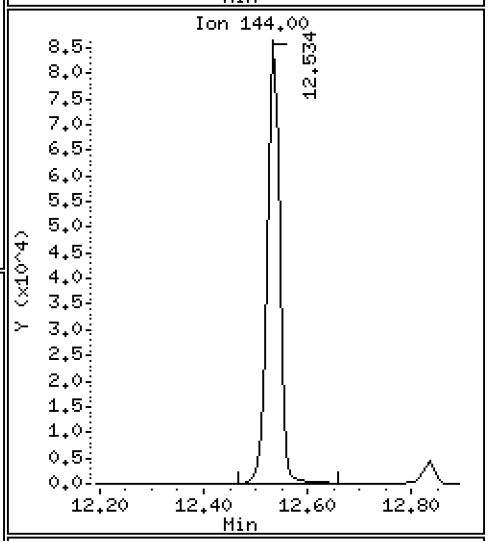


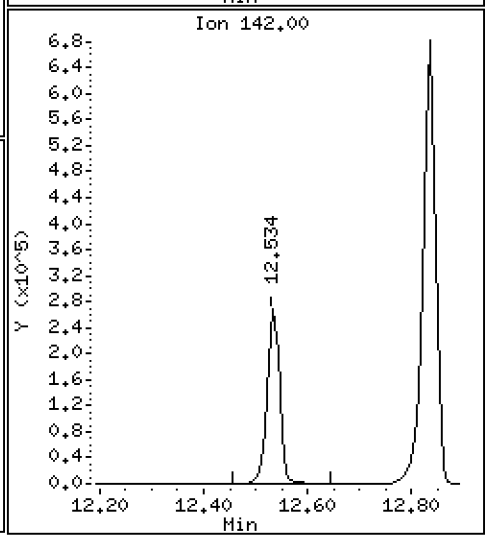












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

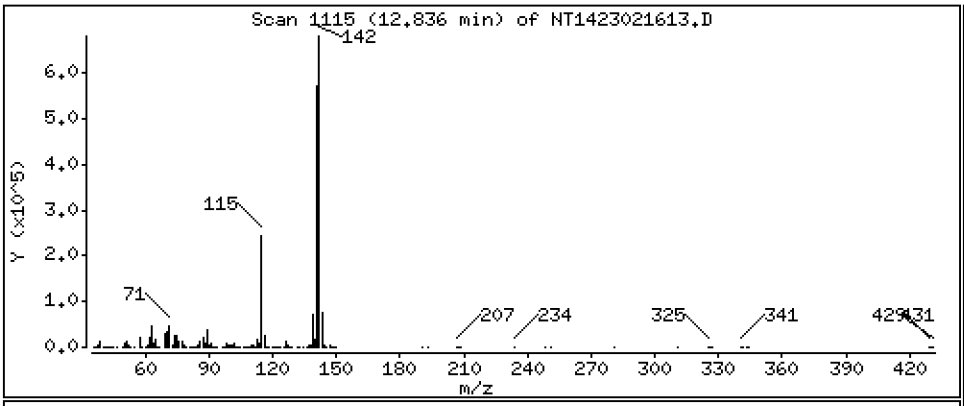
Operator: DSD

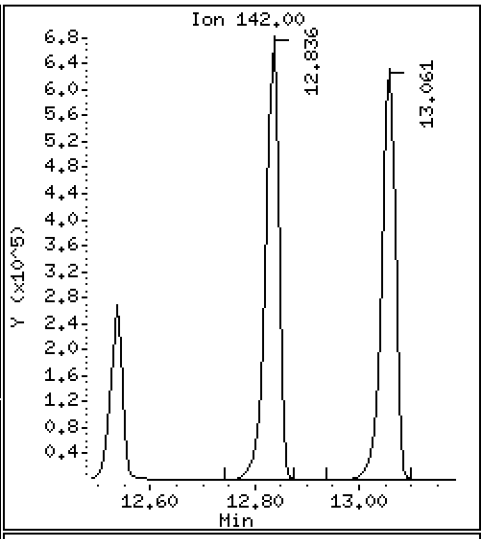
Column phase: ZB-5msi

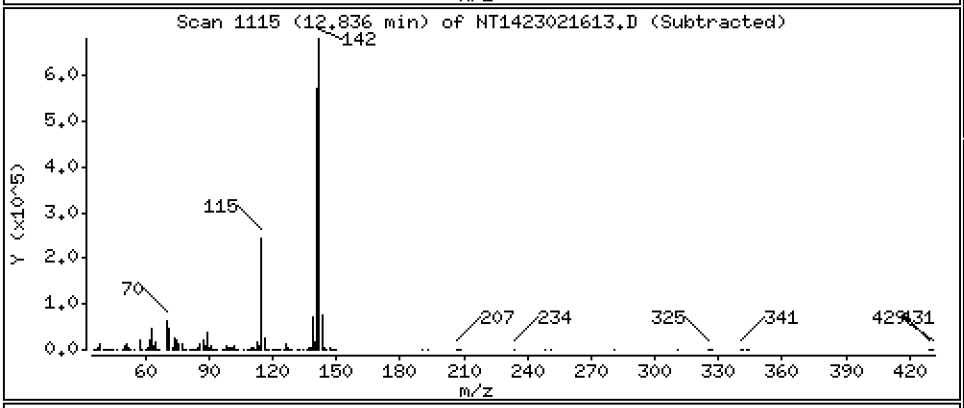
Column diameter: 0.25

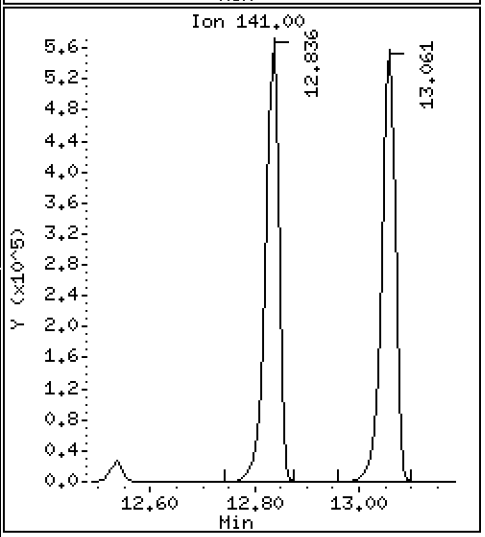
32 2-Methylnaphthalene

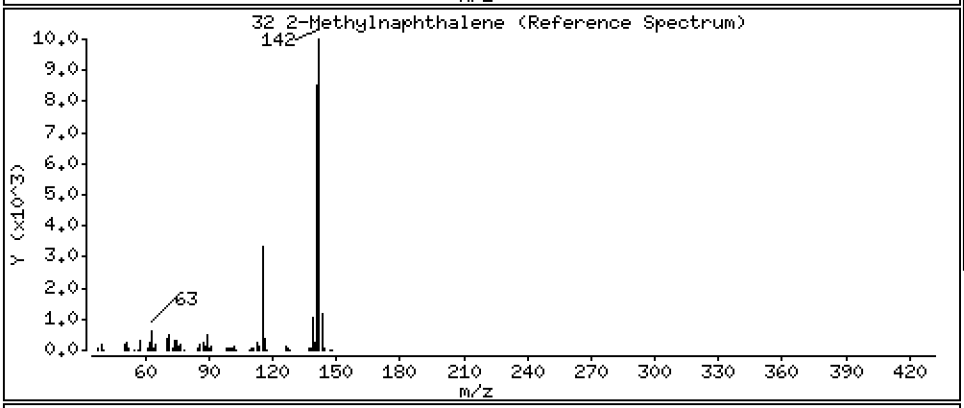
Concentration: 4.606 ug/mL

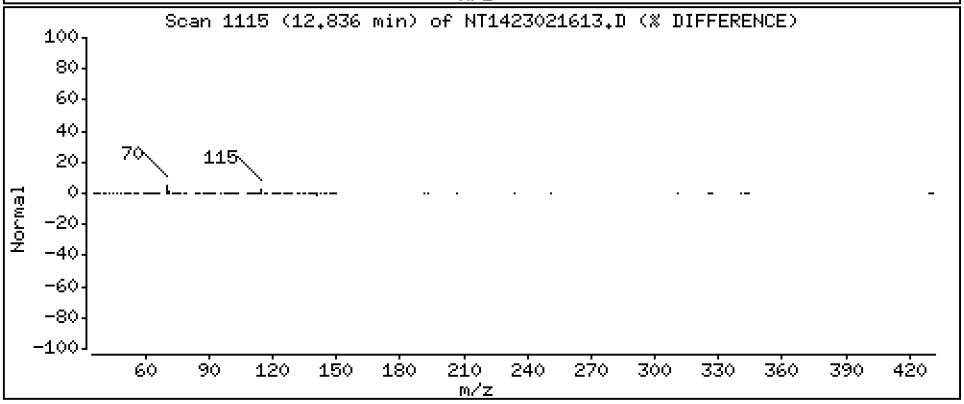












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

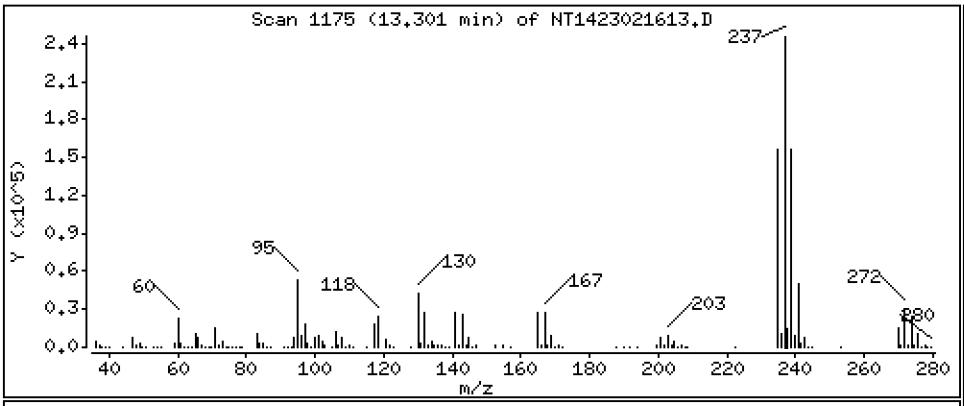
Operator: DSD

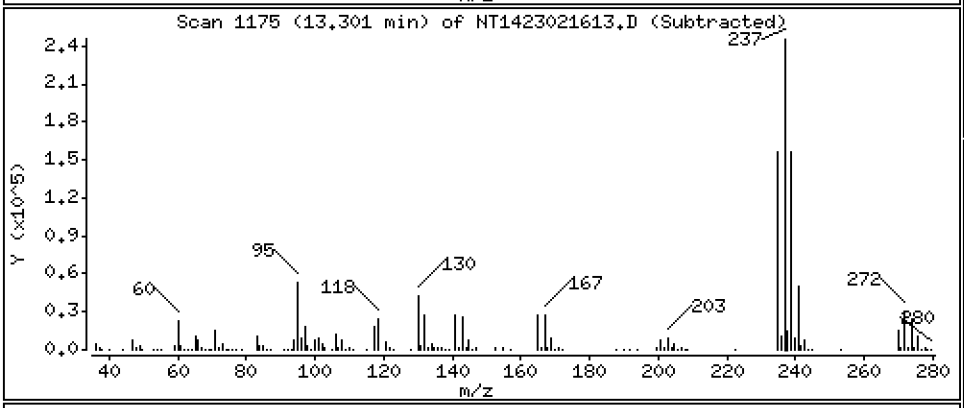
Column phase: ZB-5msi

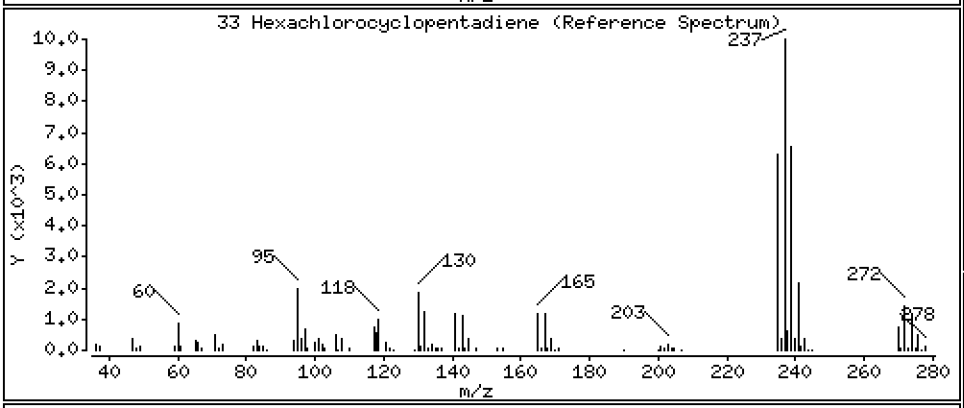
Column diameter: 0.25

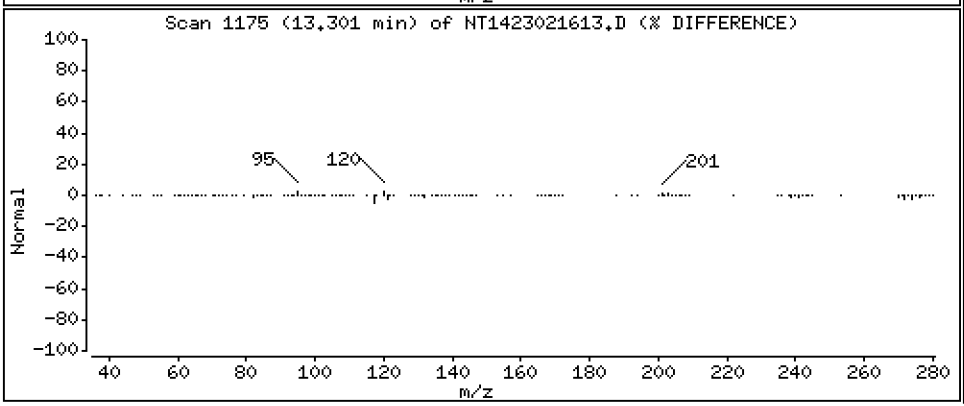
33 Hexachlorocyclopentadiene

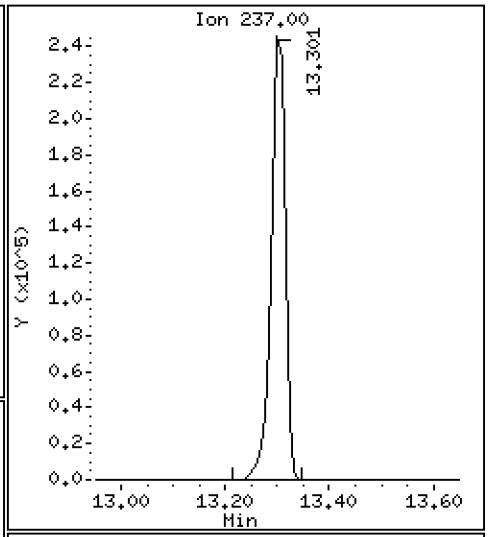
Concentration: 5.301 ug/mL

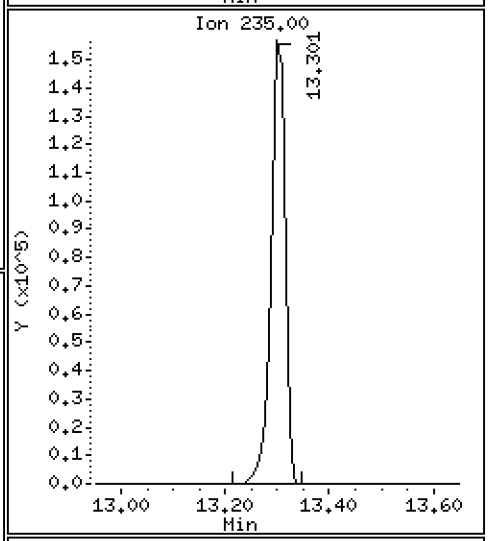


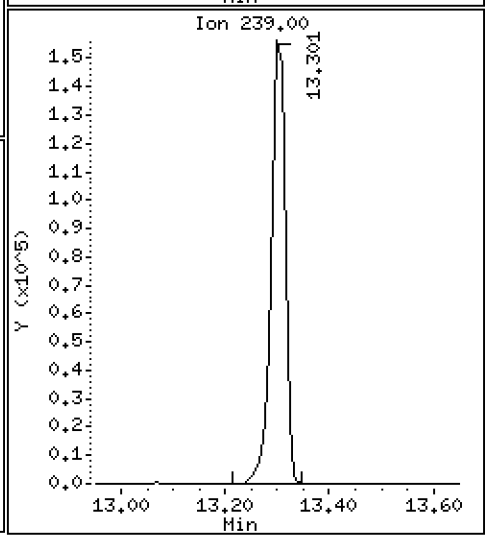












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

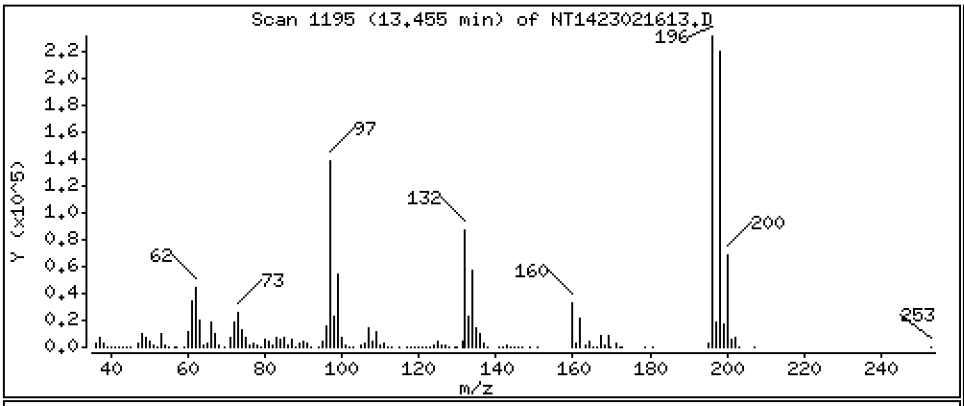
Operator: DSD

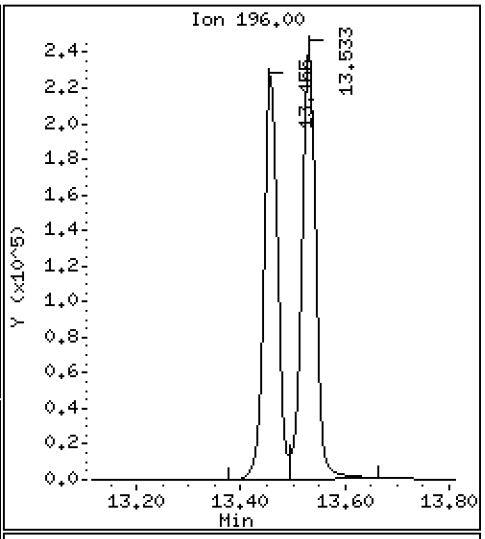
Column phase: ZB-5msi

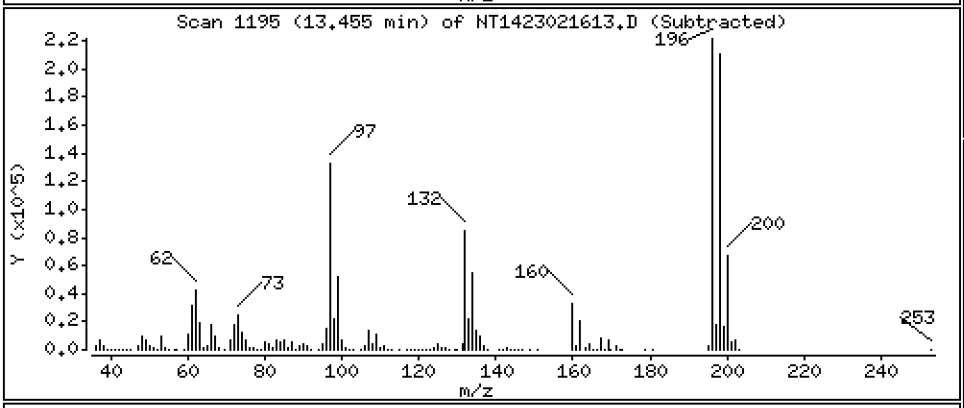
Column diameter: 0.25

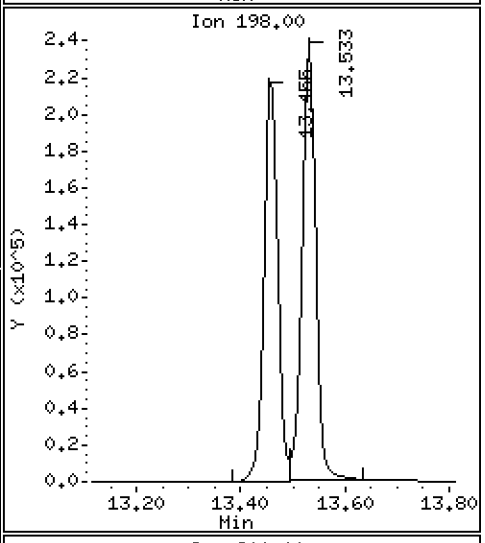
34 2,4,6-Trichlorophenol

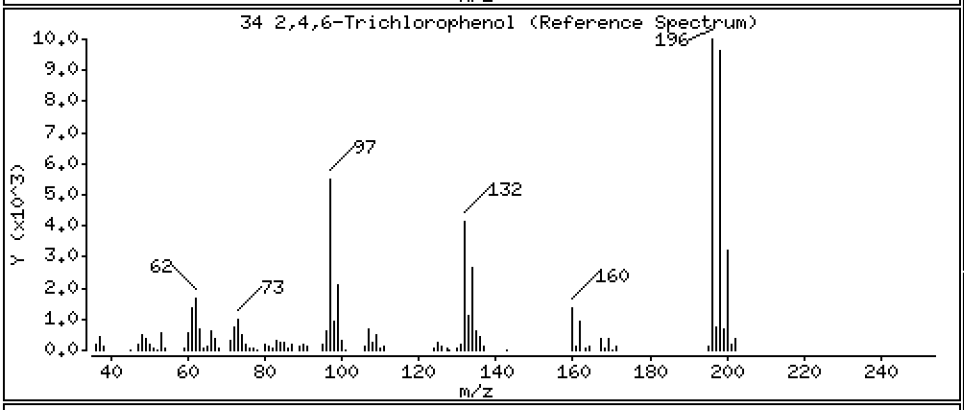
Concentration: 4.808 ug/mL

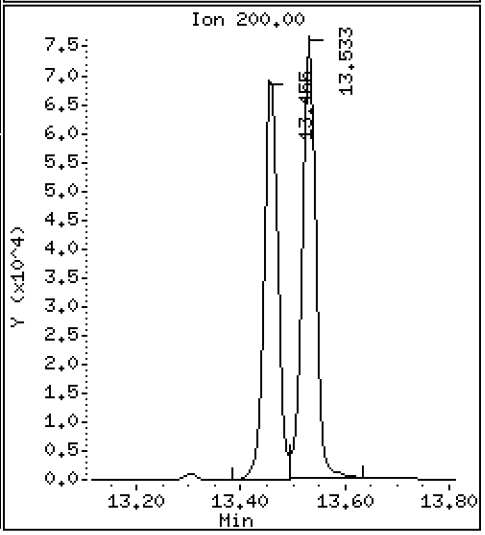


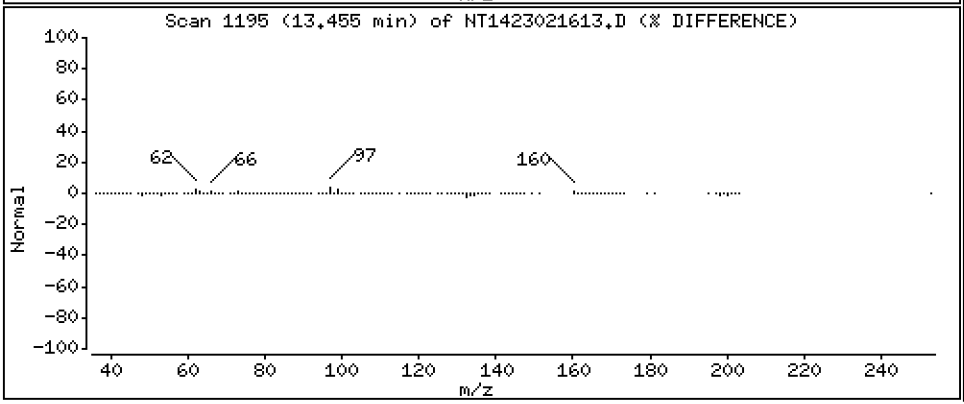












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

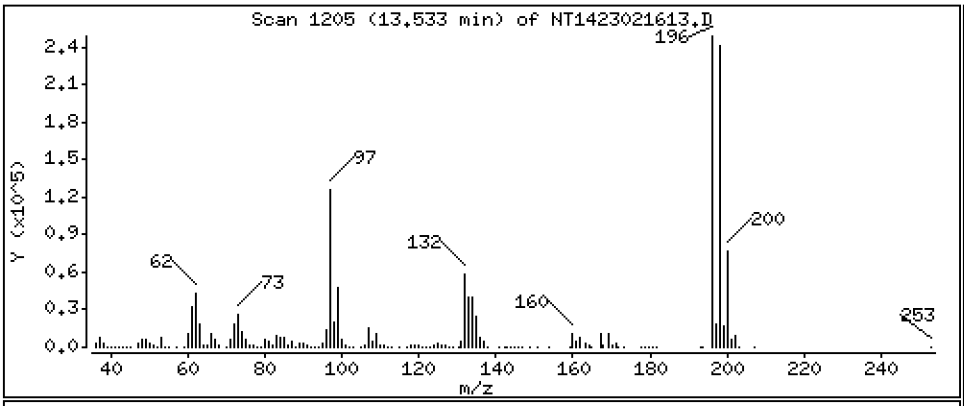
Operator: DSD

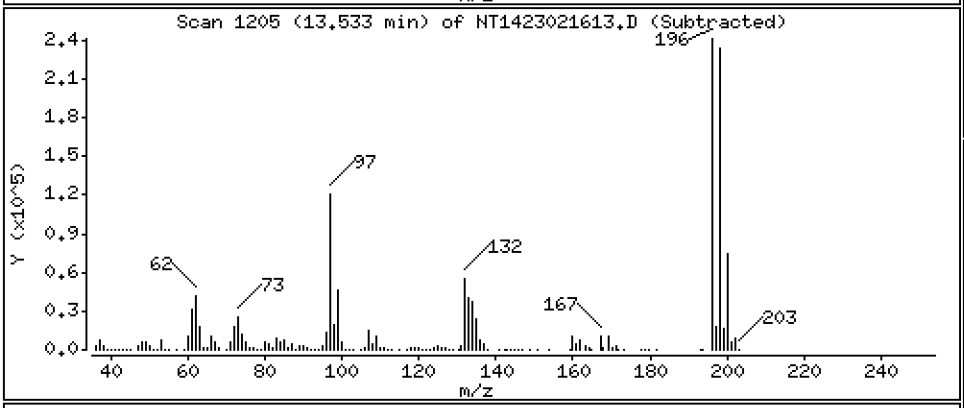
Column phase: ZB-5msi

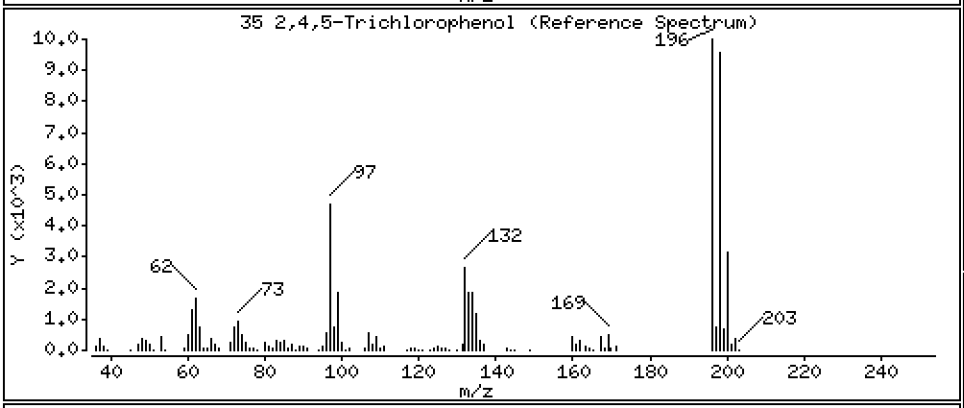
Column diameter: 0.25

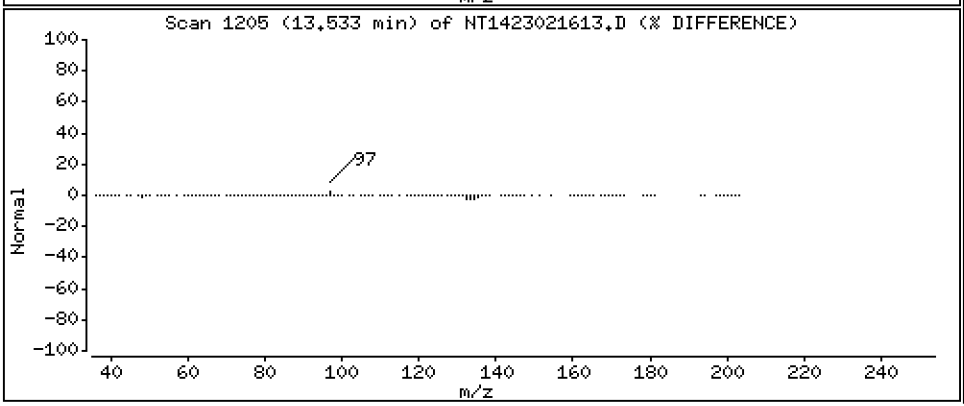
35 2,4,5-Trichlorophenol

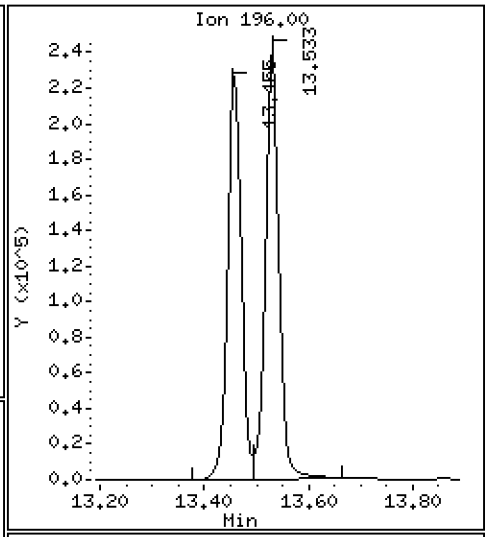
Concentration: 4.707 ug/mL

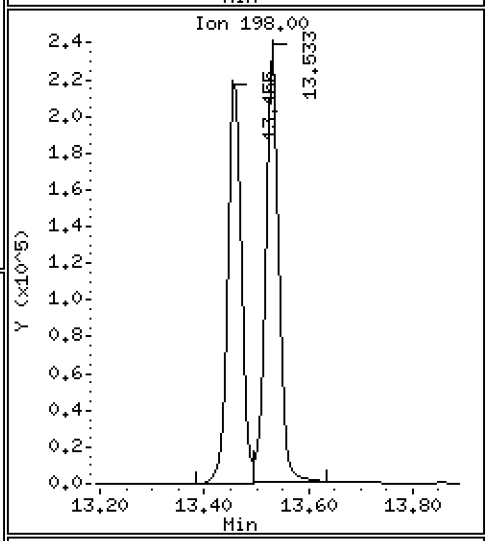


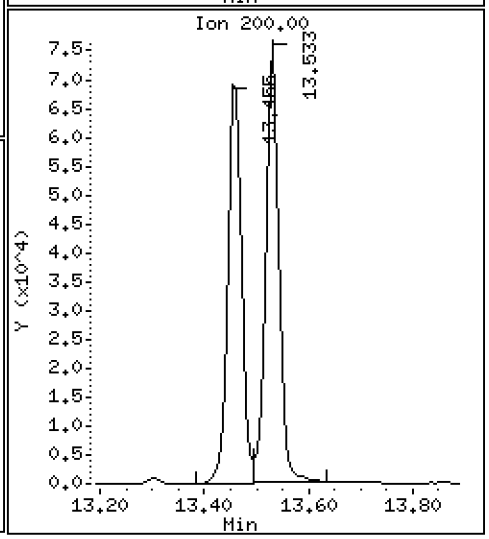












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

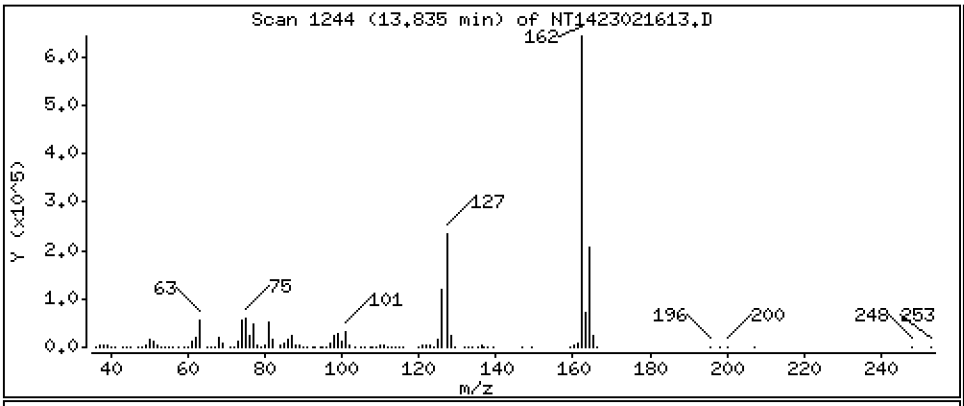
Operator: DSD

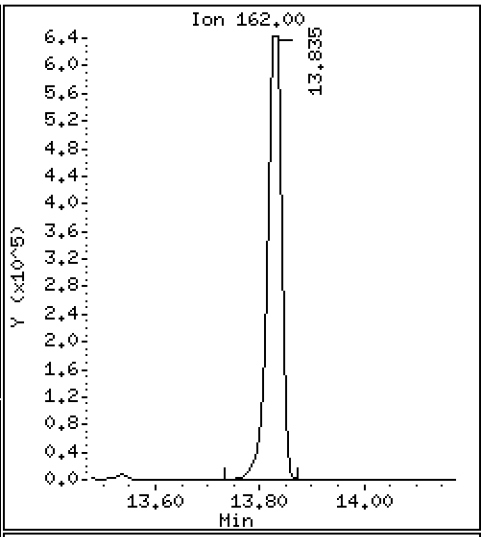
Column phase: ZB-5msi

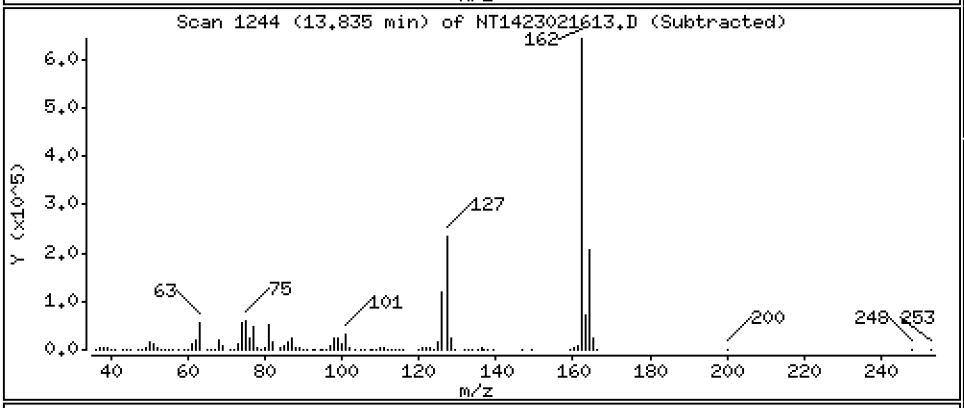
Column diameter: 0.25

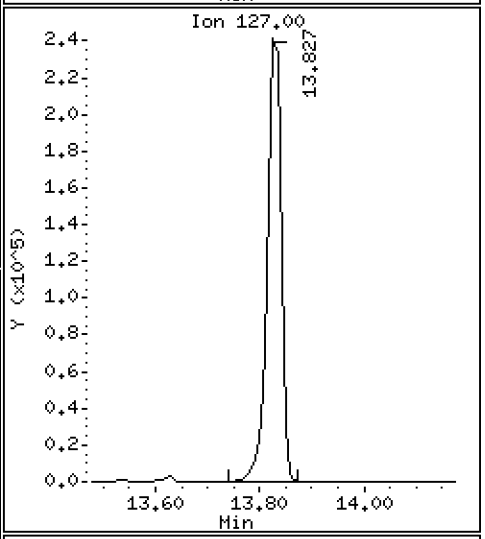
37 2-Chloronaphthalene

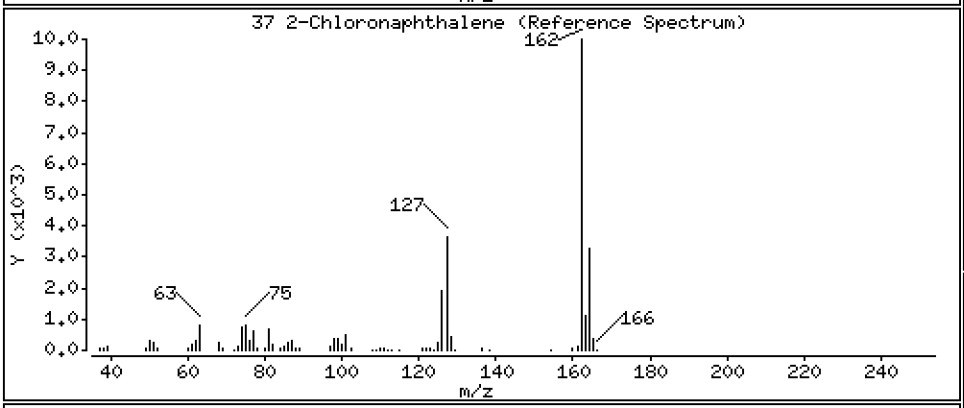
Concentration: 4.639 ug/mL

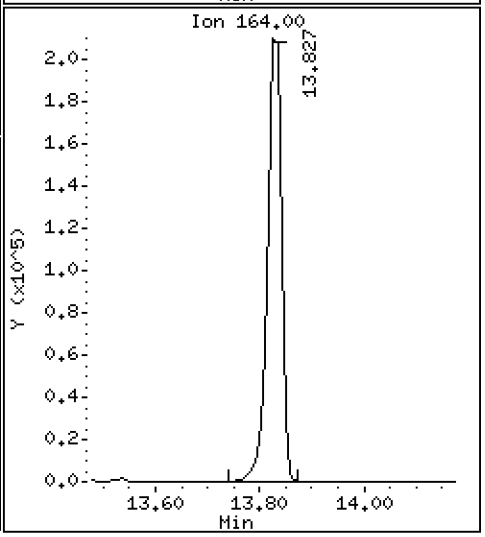


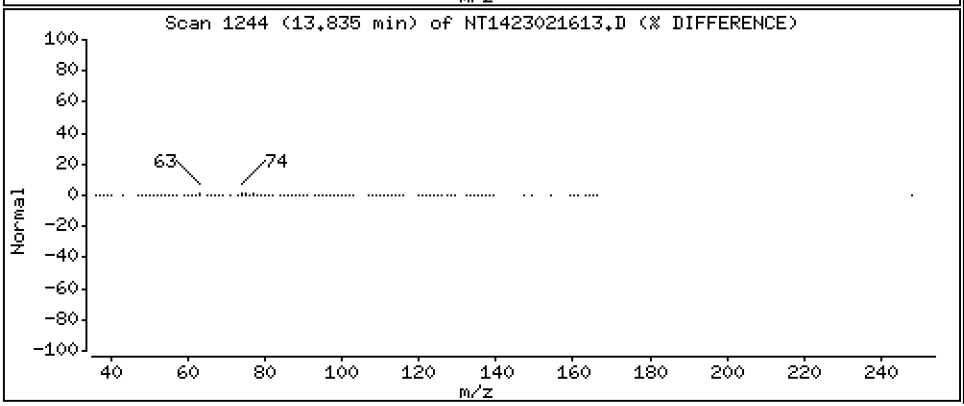












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

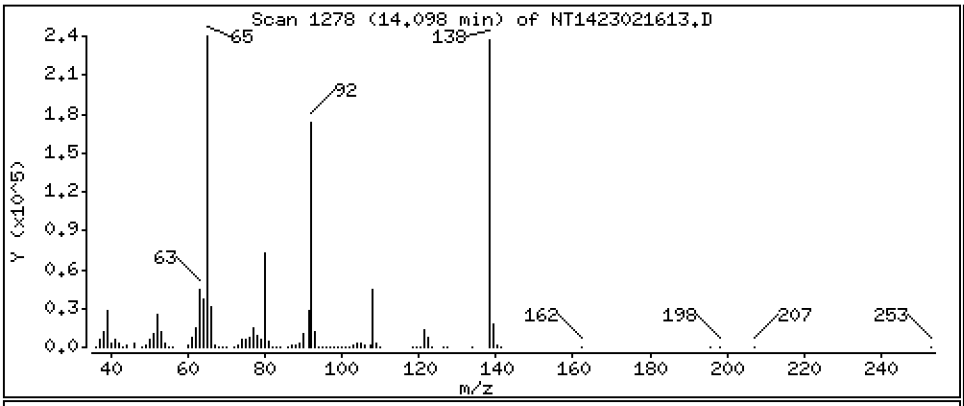
Operator: DSD

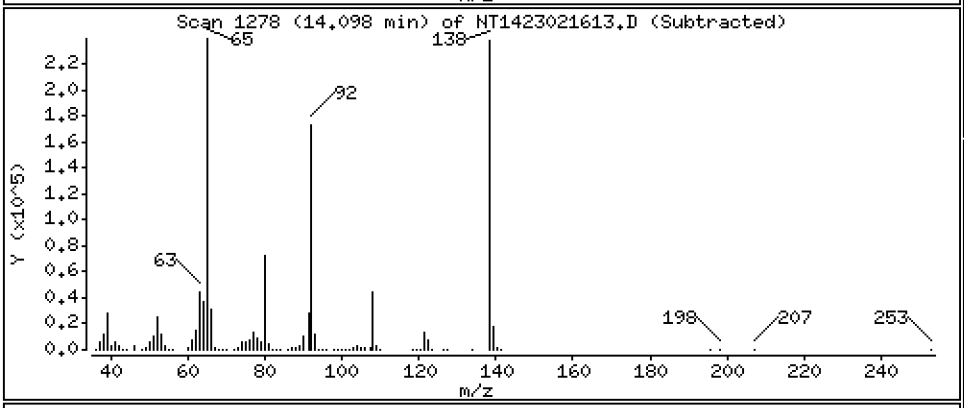
Column phase: ZB-5msi

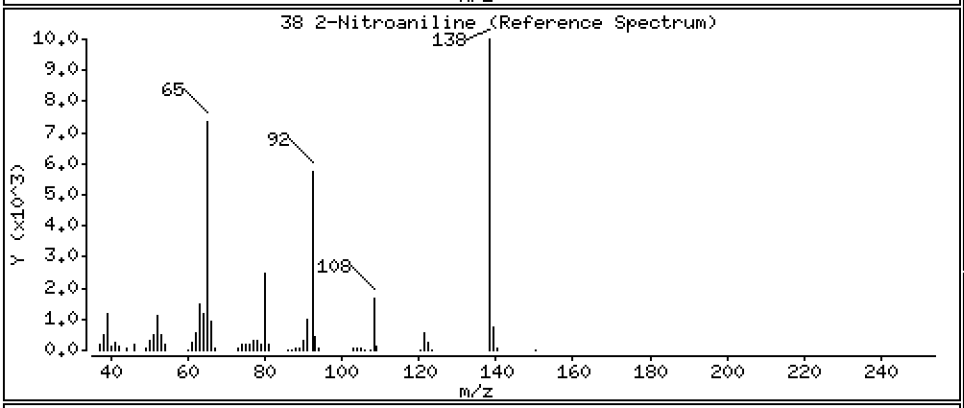
Column diameter: 0.25

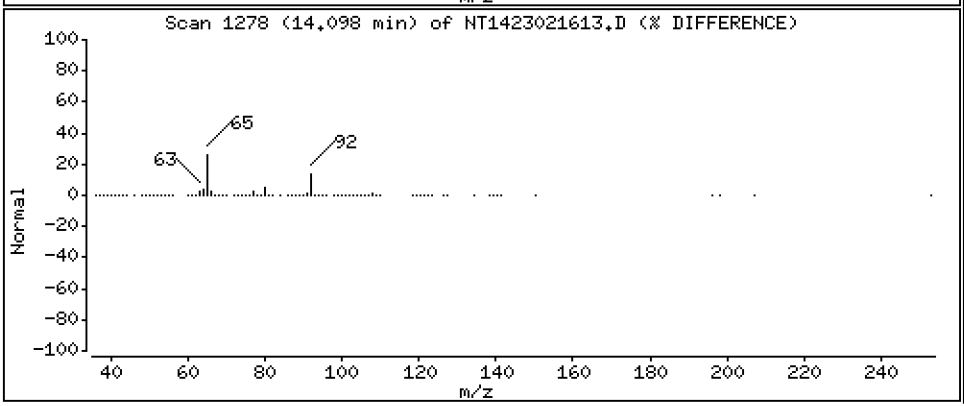
38 2-Nitroaniline

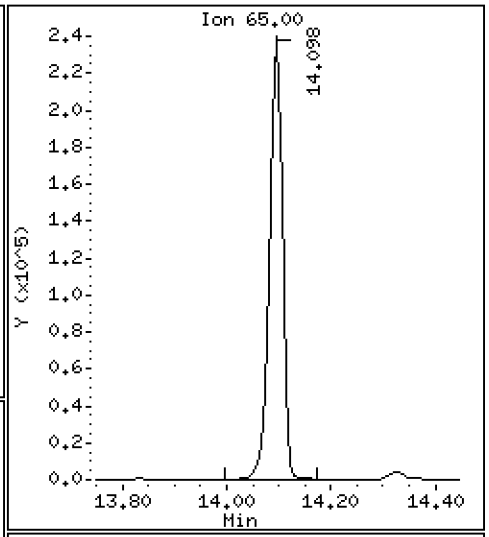
Concentration: 4.852 ug/mL

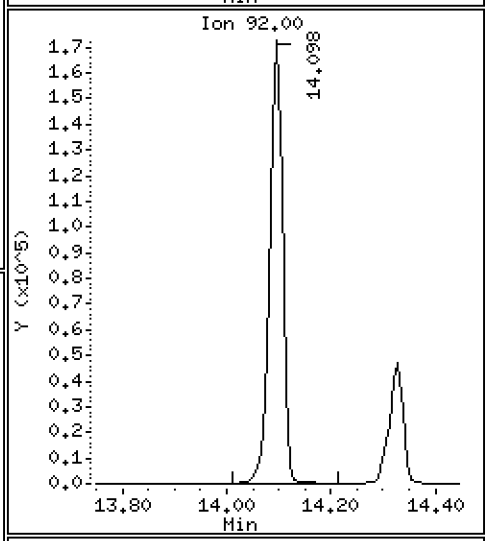


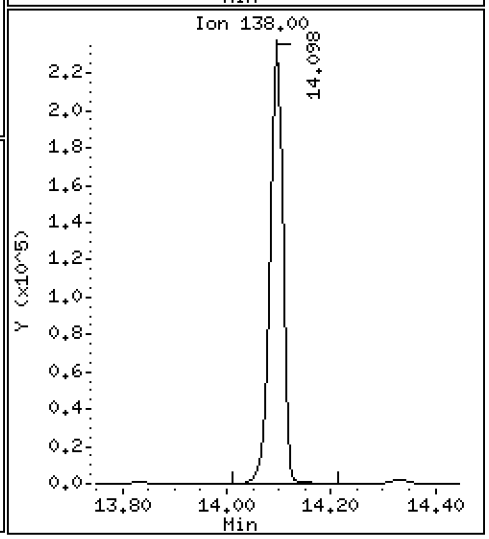












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

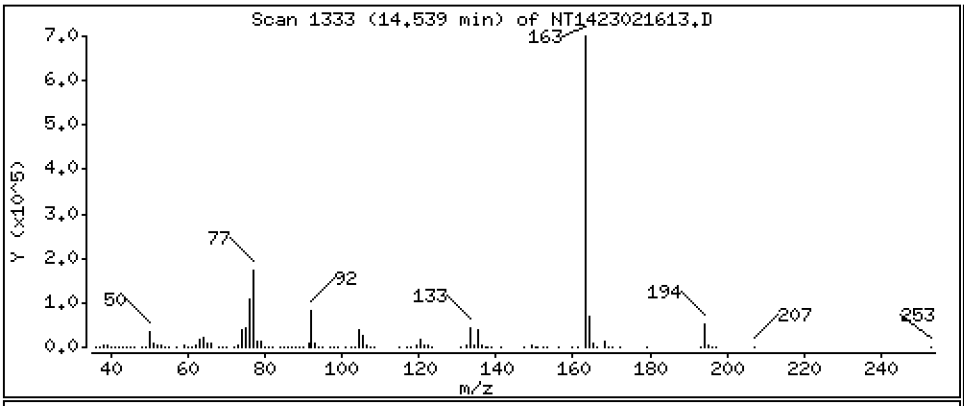
Operator: DSD

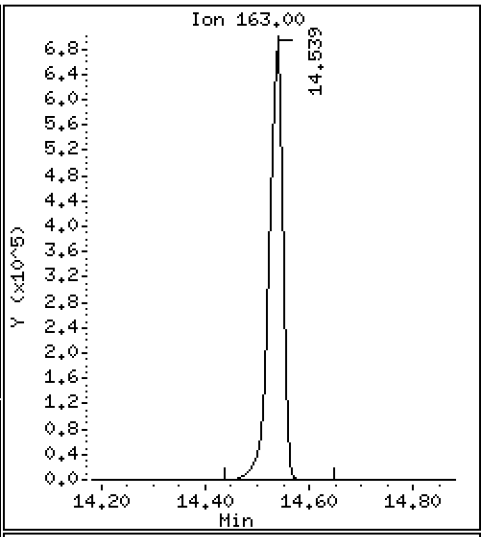
Column phase: ZB-5msi

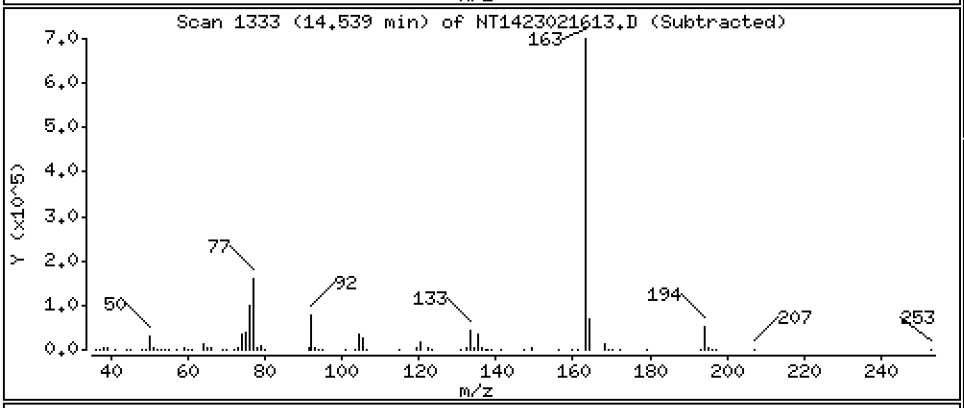
Column diameter: 0.25

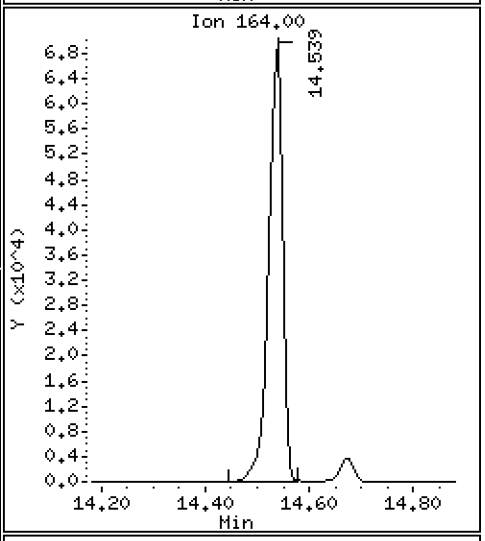
39 Dimethylphthalate

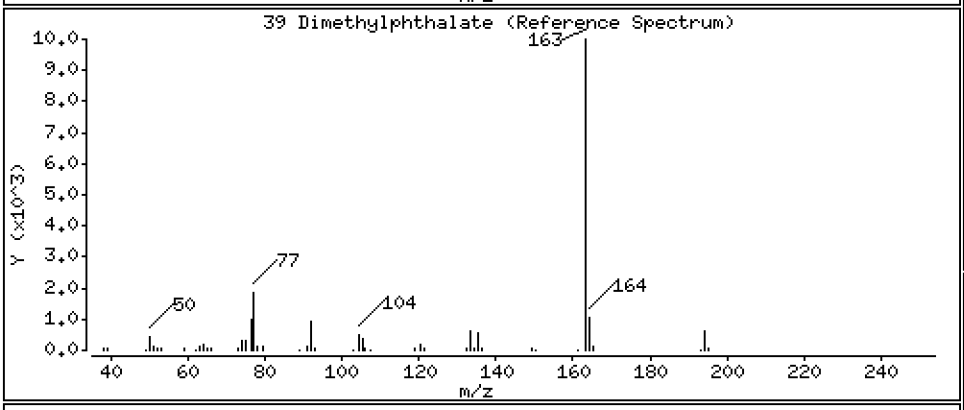
Concentration: 4.693 ug/mL

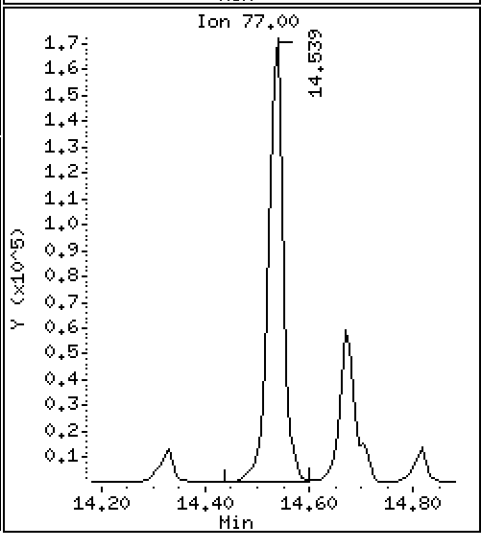


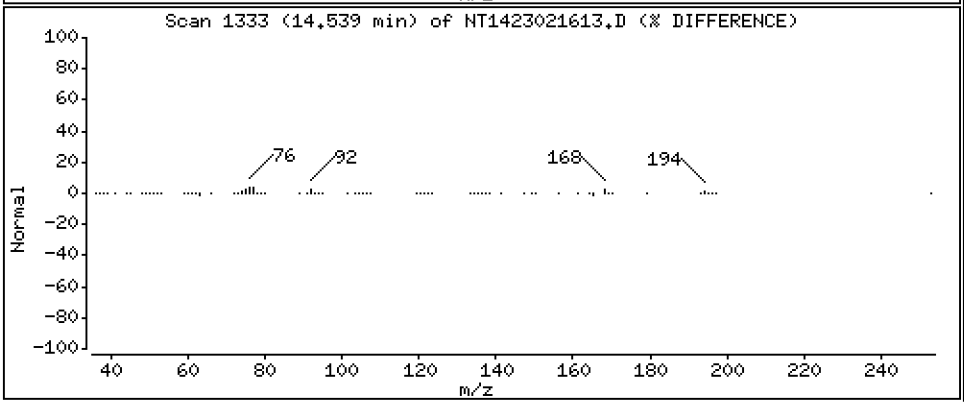












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

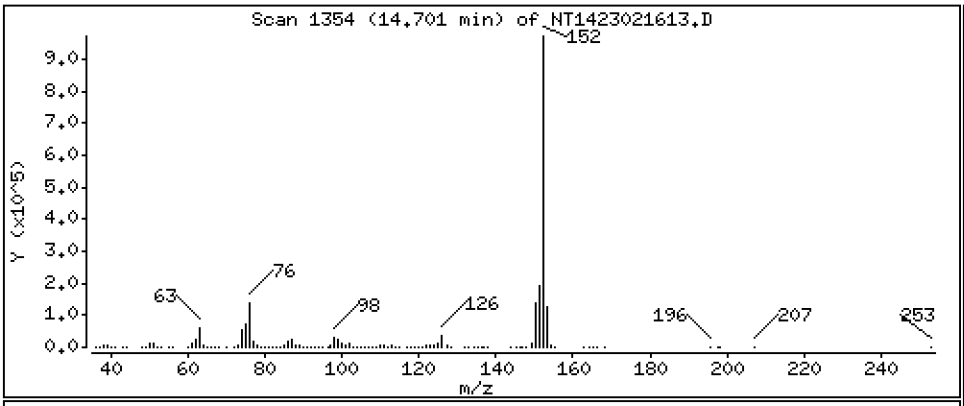
Operator: DSD

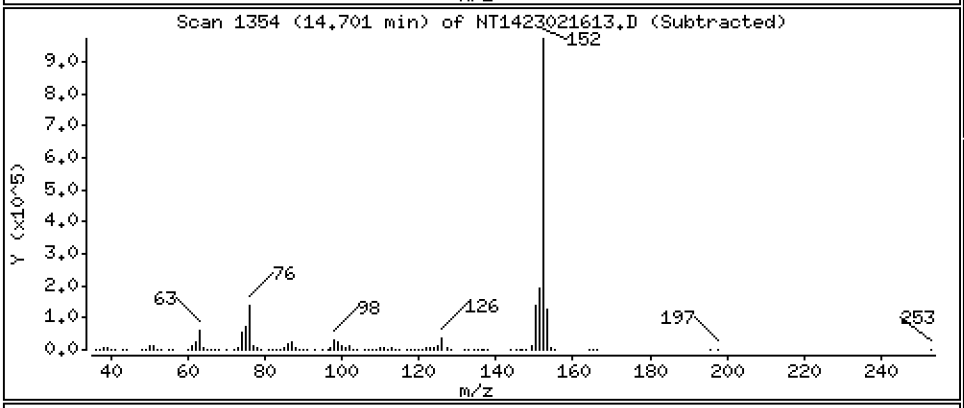
Column phase: ZB-5msi

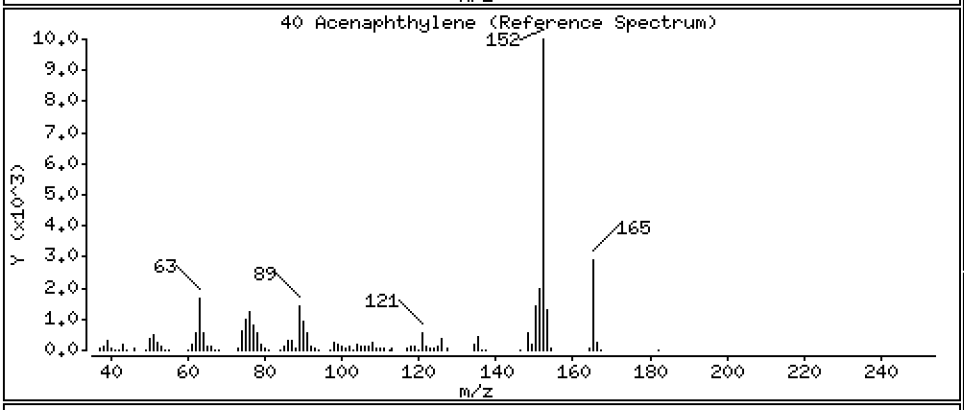
Column diameter: 0.25

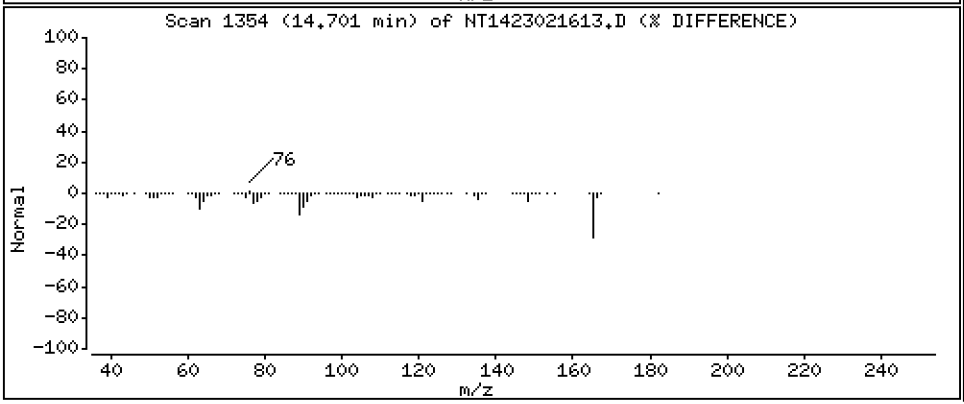
40 Acenaphthylene

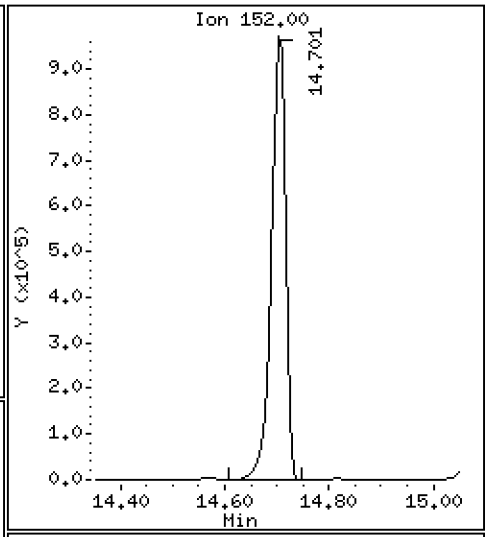
Concentration: 4.657 ug/mL

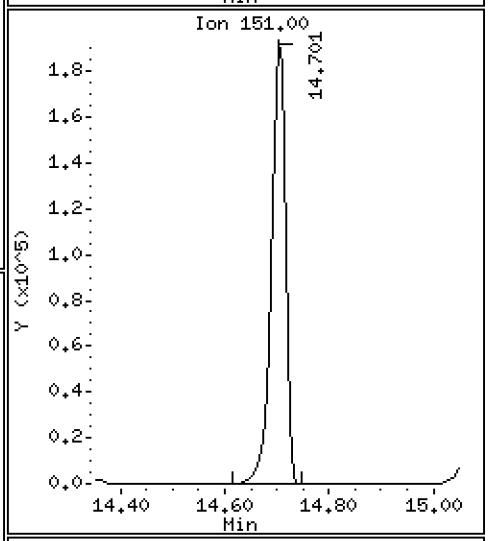


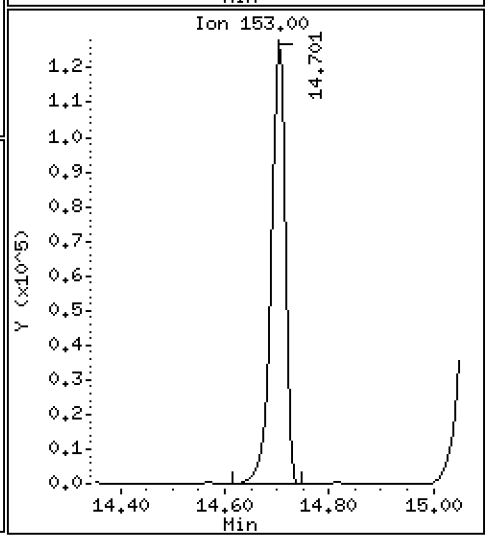












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

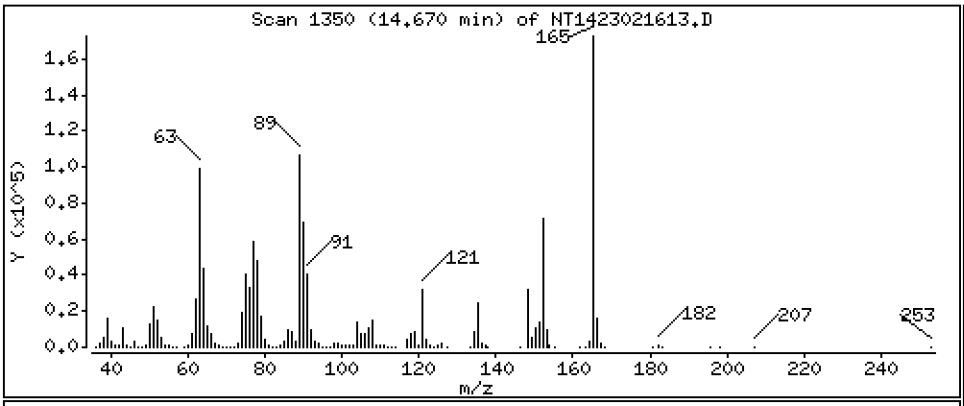
Operator: DSD

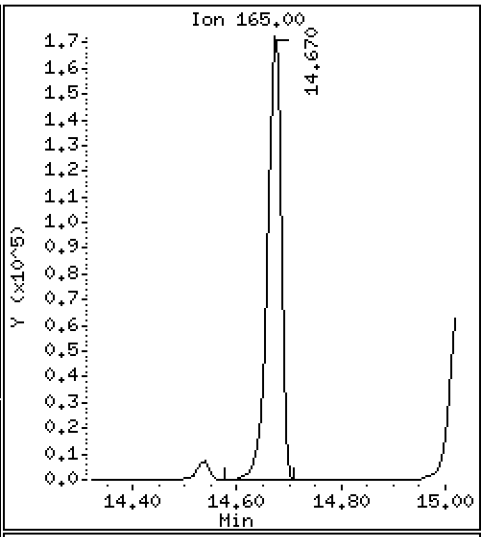
Column phase: ZB-5msi

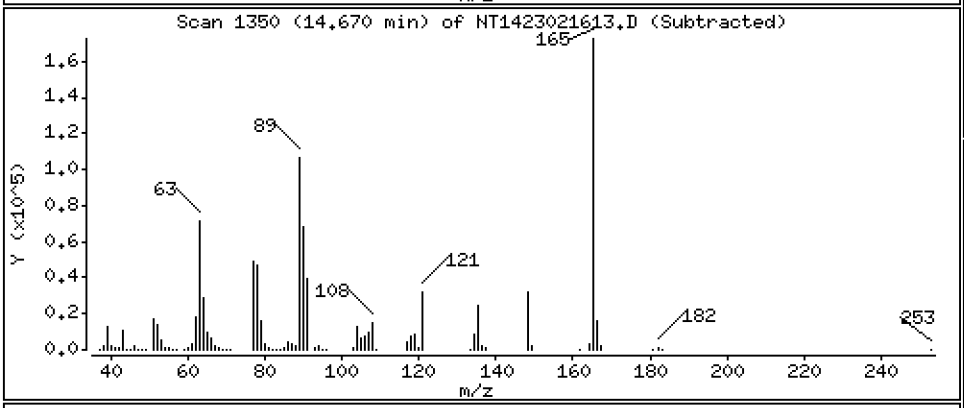
Column diameter: 0.25

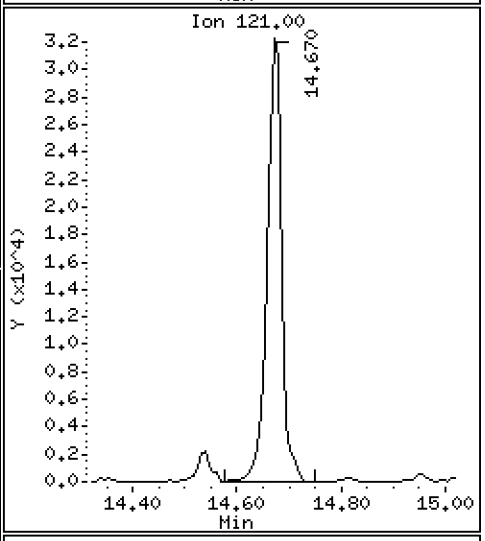
41 2,6-Dinitrotoluene

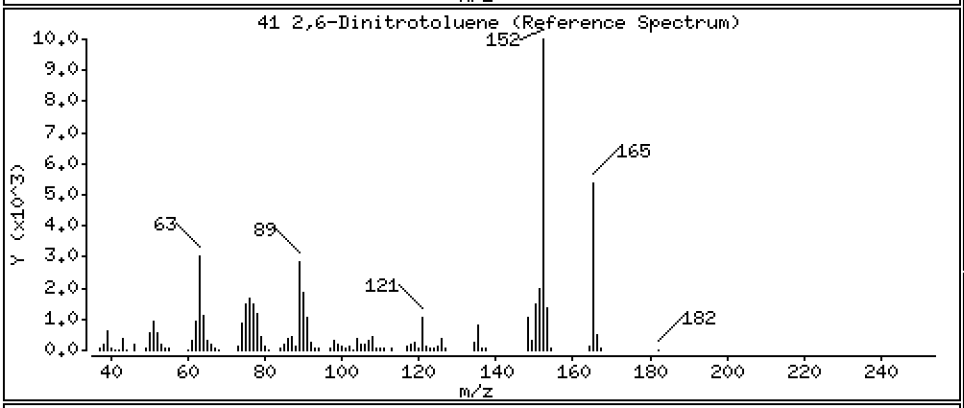
Concentration: 4.935 ug/mL

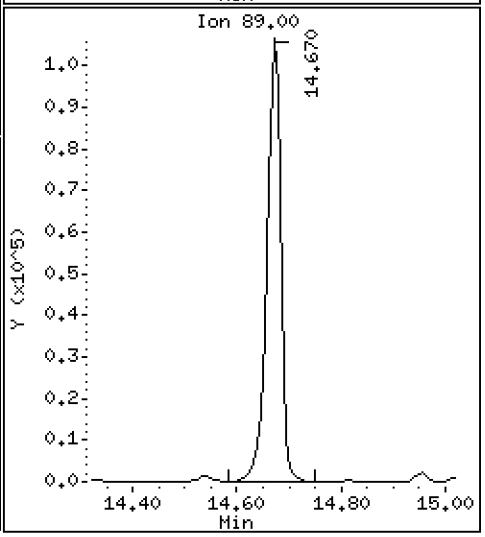


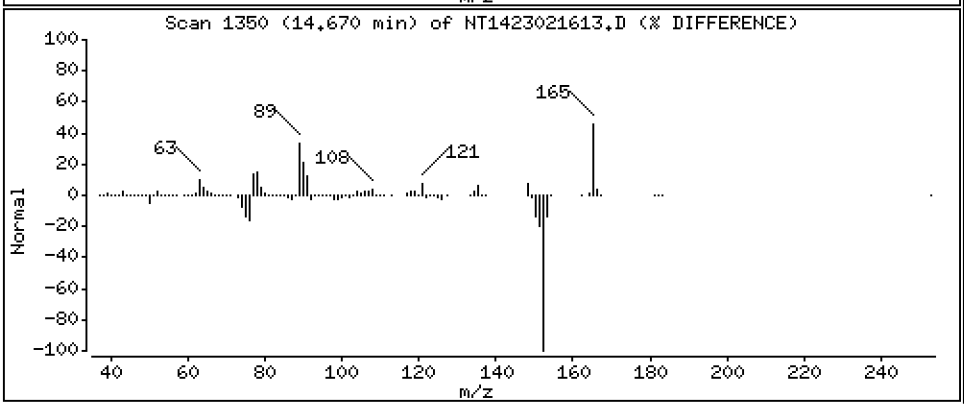












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

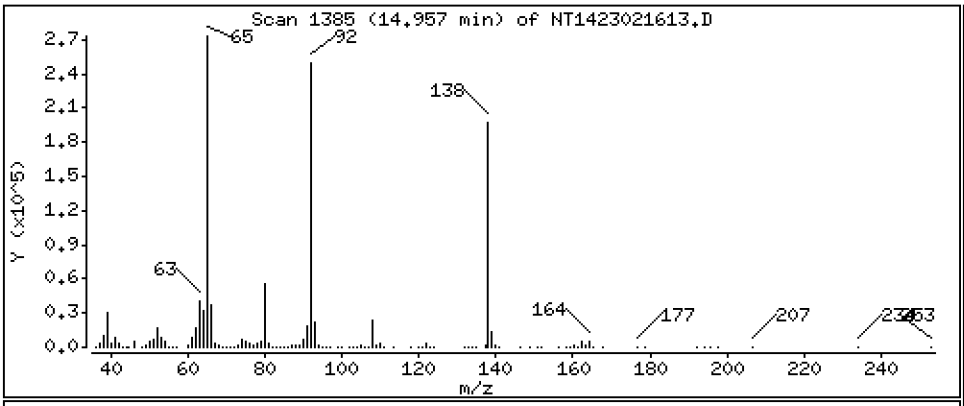
Operator: DSD

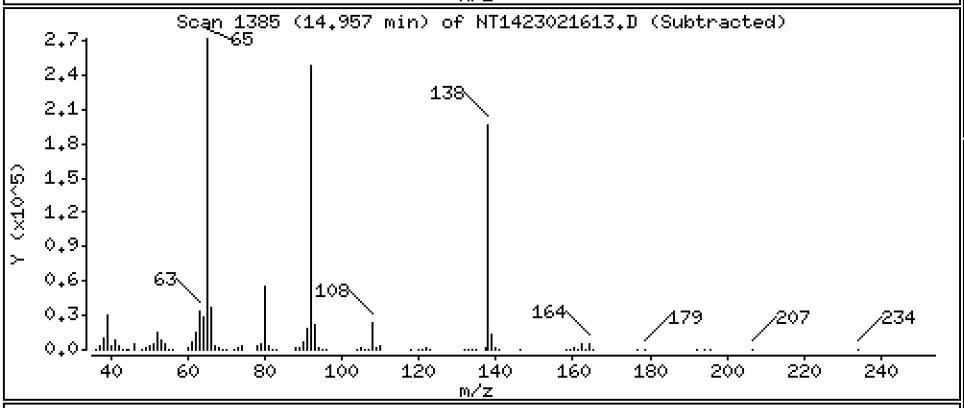
Column phase: ZB-5msi

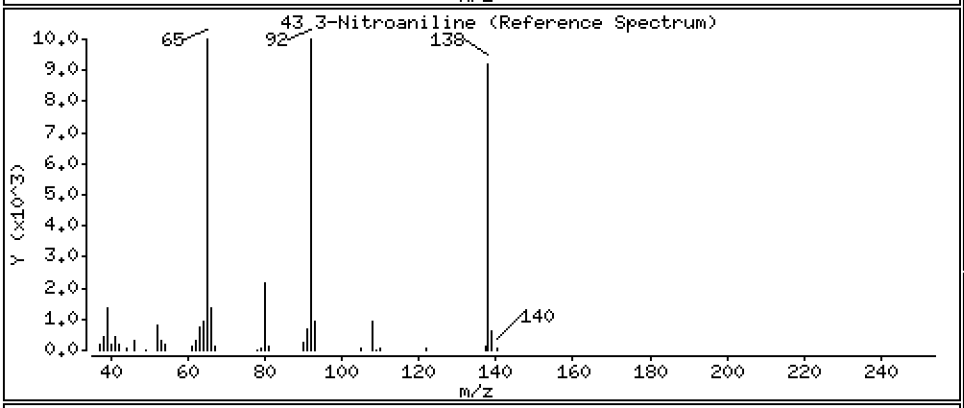
Column diameter: 0.25

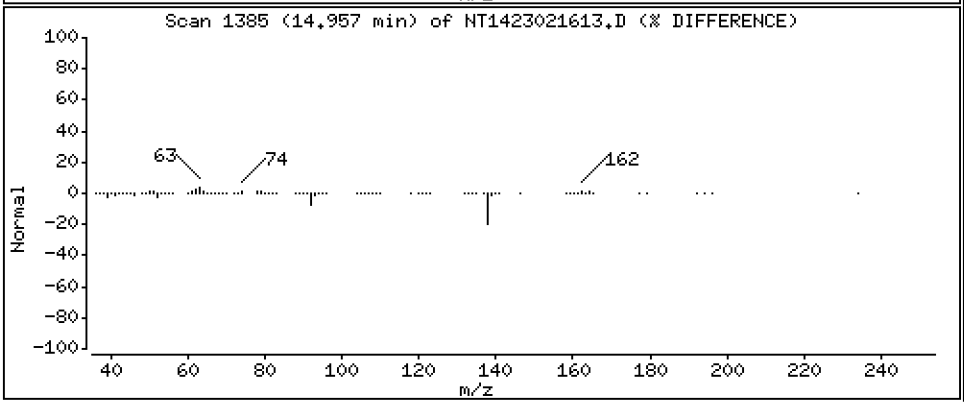
43 3-Nitroaniline

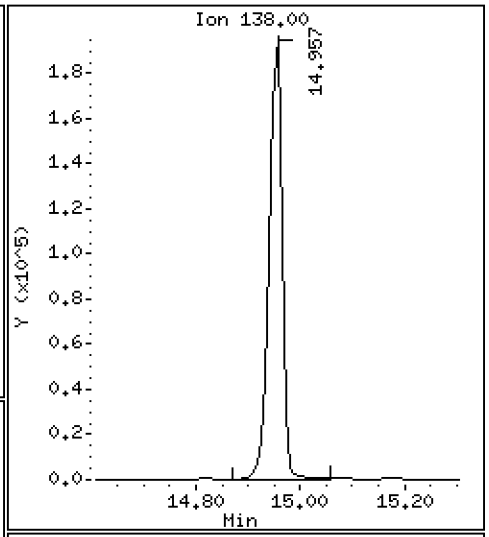
Concentration: 4.922 ug/mL

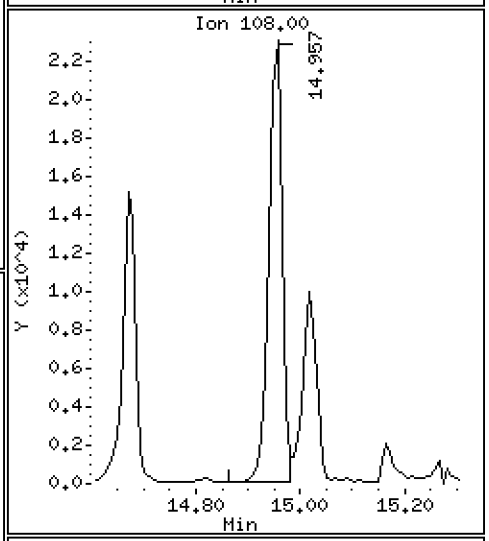


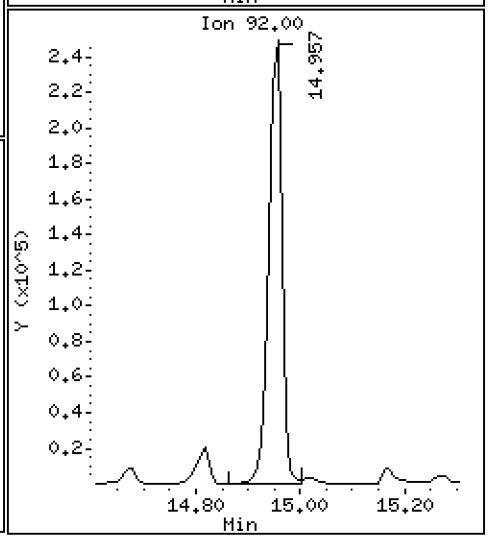












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

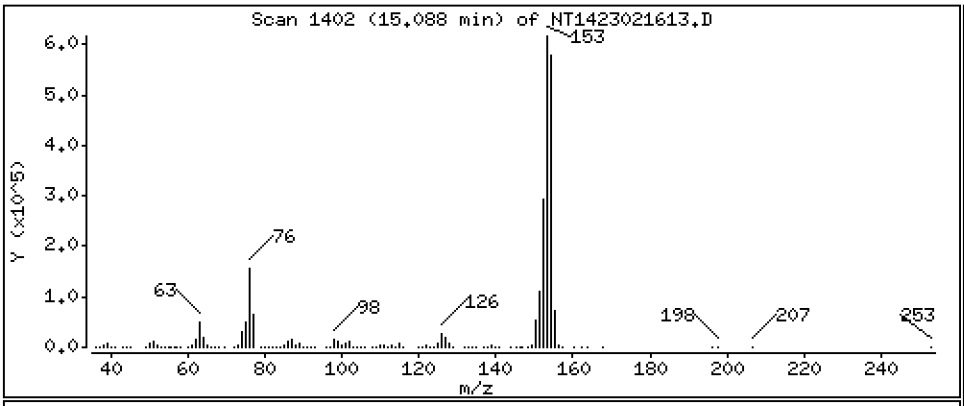
Operator: DSD

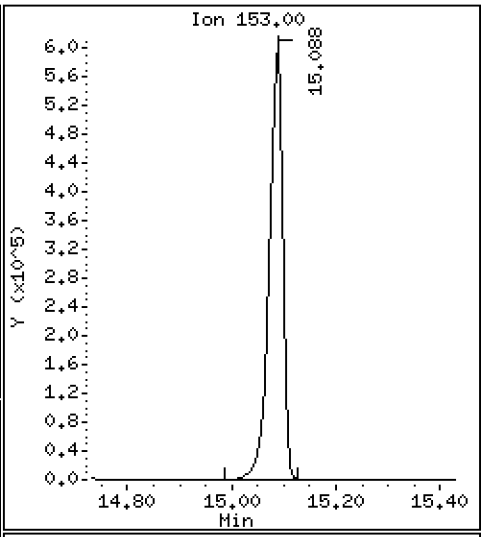
Column phase: ZB-5msi

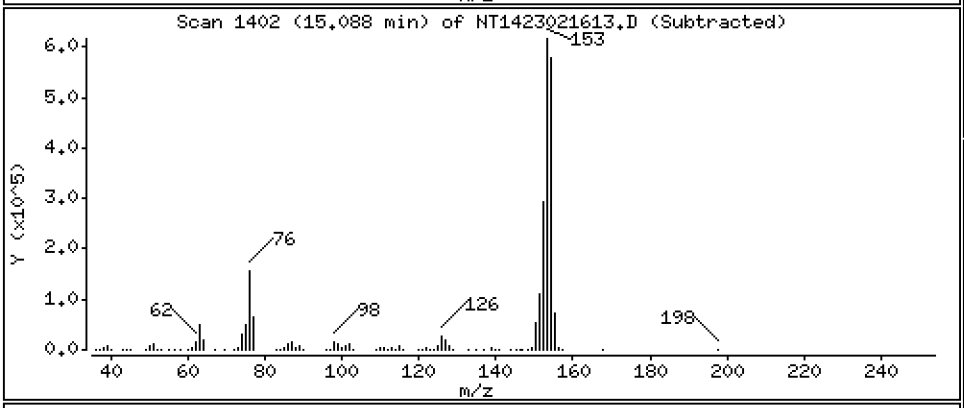
Column diameter: 0.25

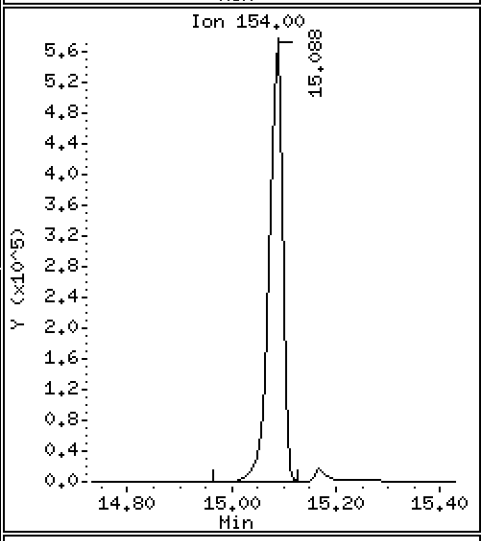
44 Acenaphthene

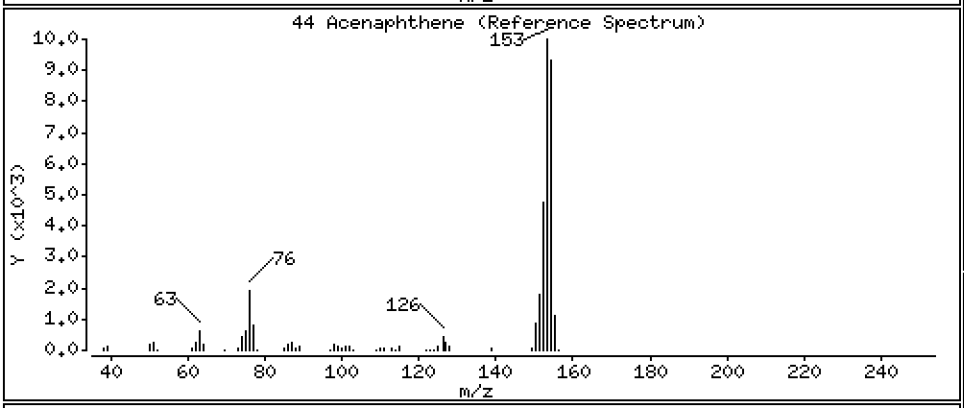
Concentration: 4.633 ug/mL

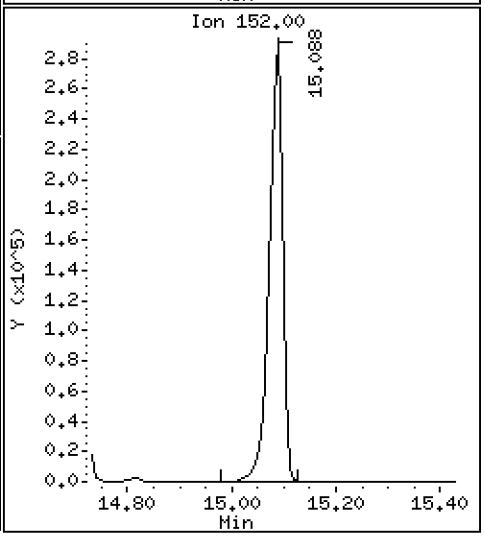


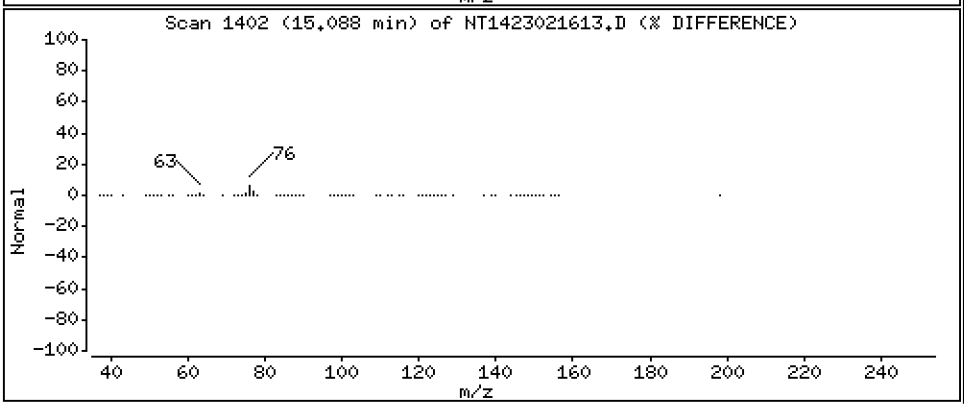












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

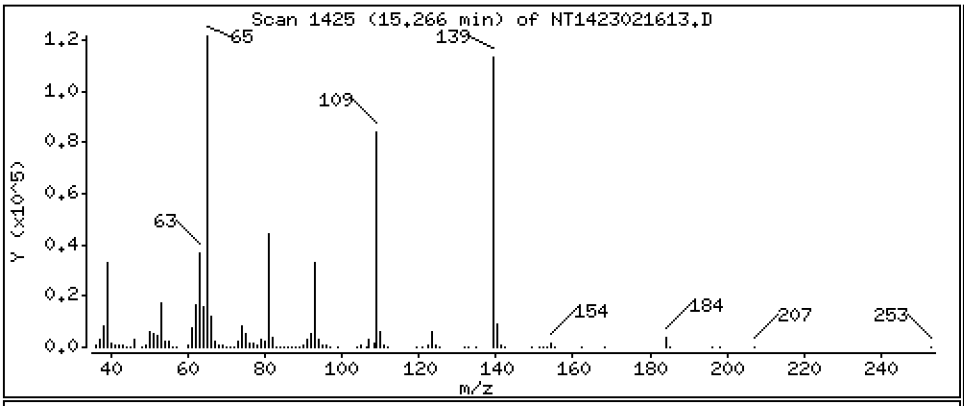
Operator: DSD

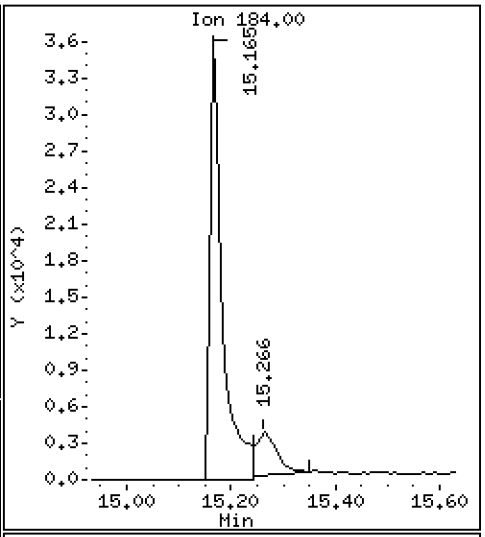
Column phase: ZB-5msi

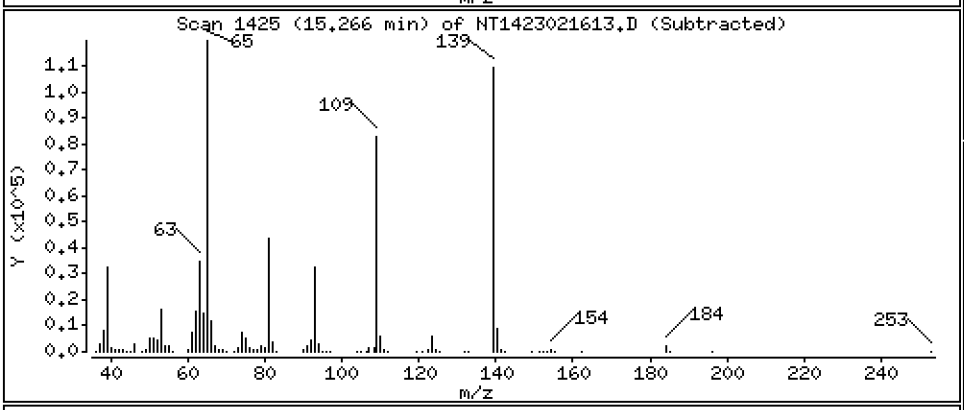
Column diameter: 0.25

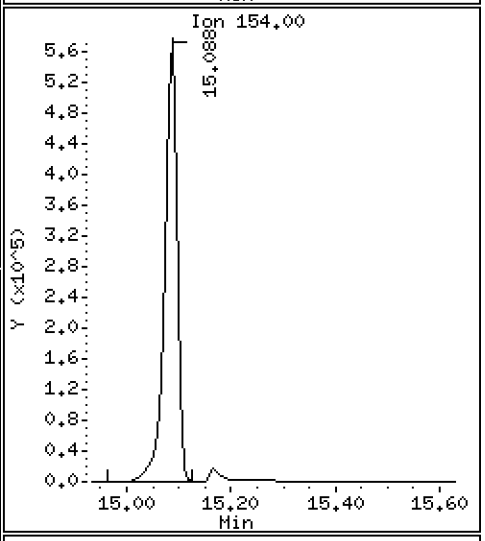
45 2,4-Dinitrophenol

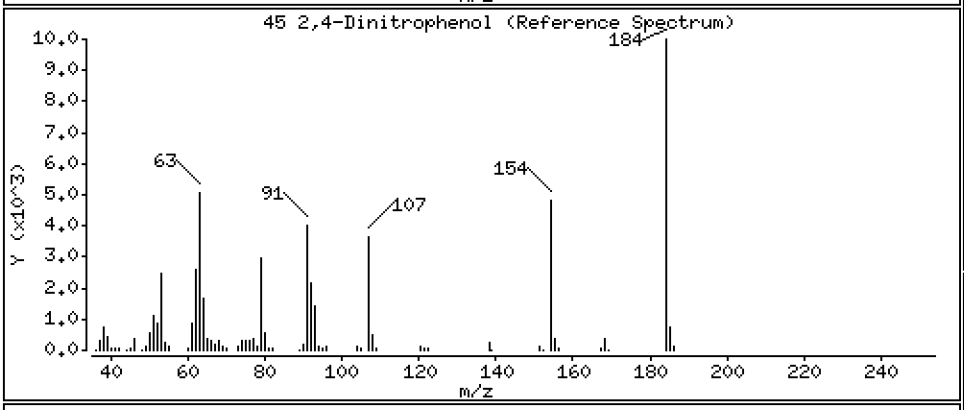
Concentration: 0.2502 ug/mL

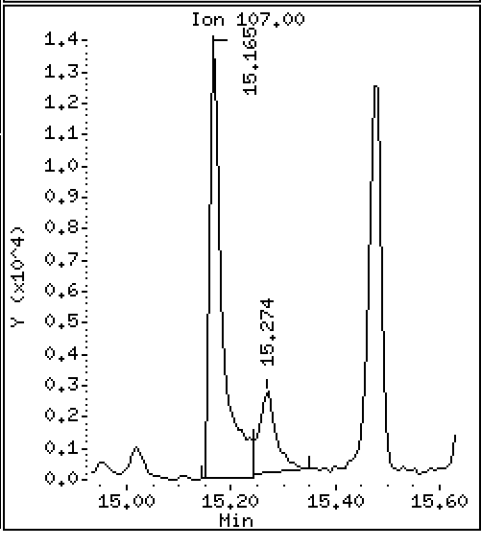


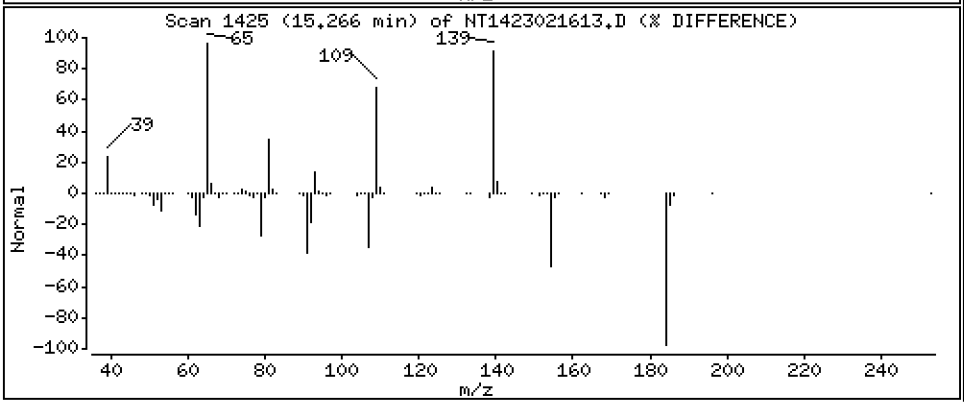












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

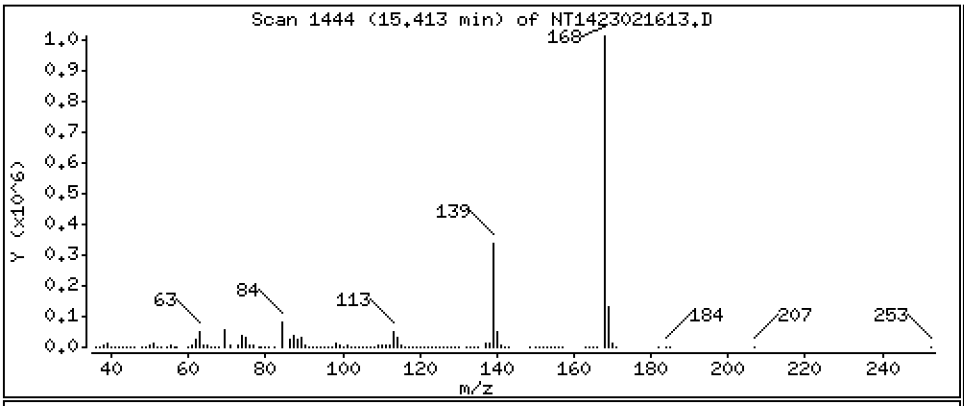
Operator: DSD

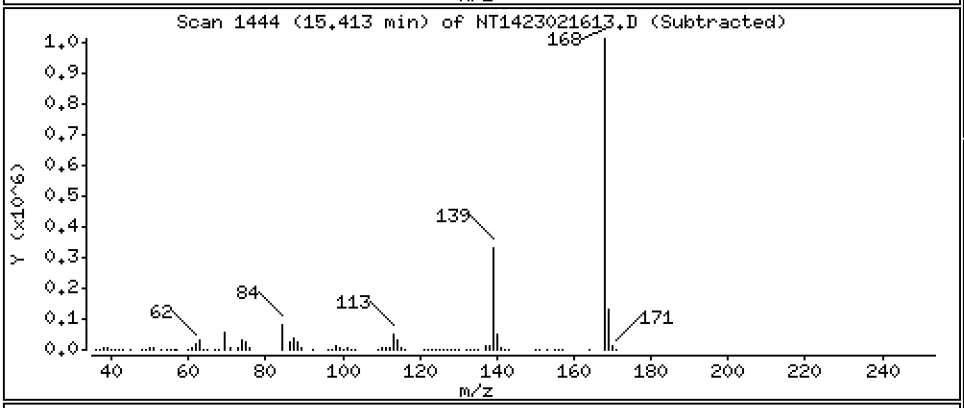
Column phase: ZB-5msi

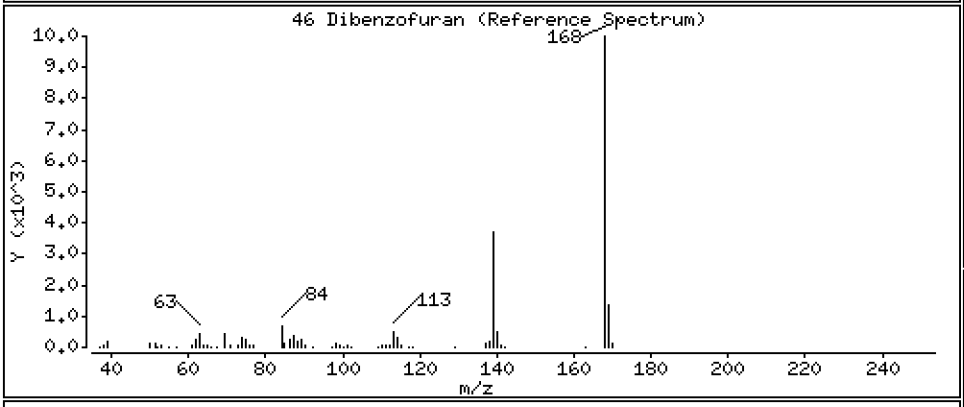
Column diameter: 0.25

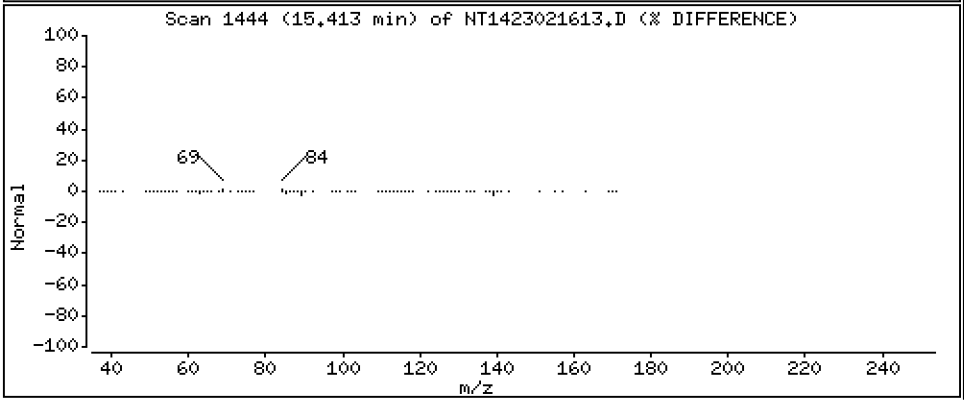
46 Dibenzofuran

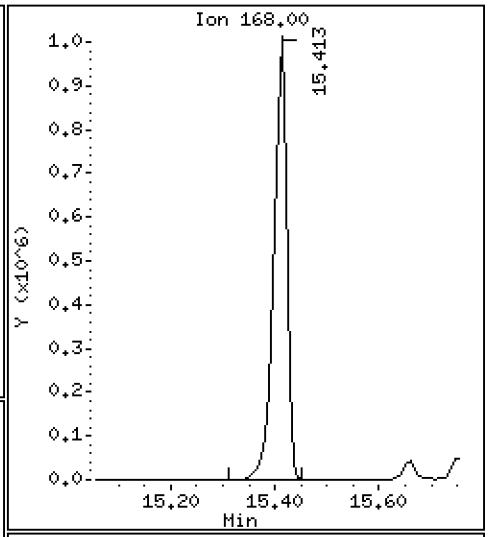
Concentration: 4.548 ug/mL

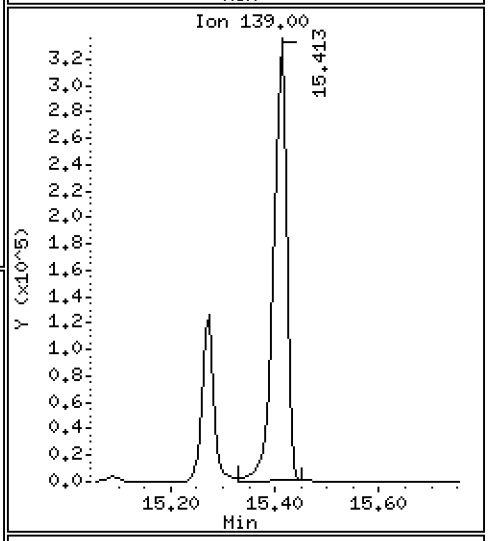


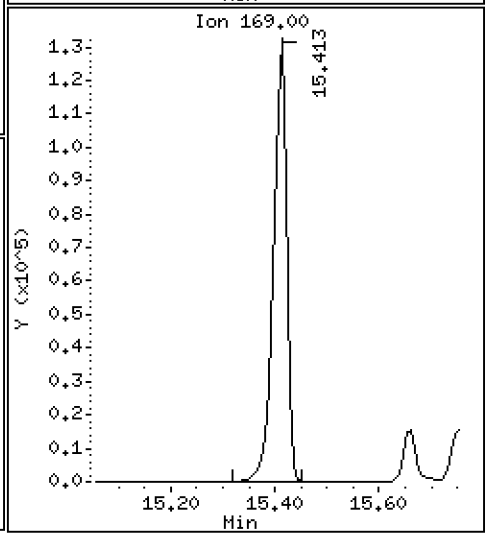












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

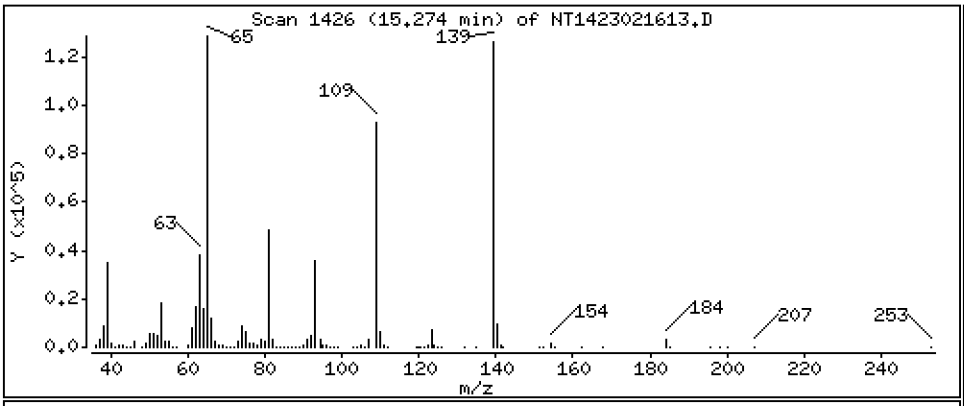
Operator: DSD

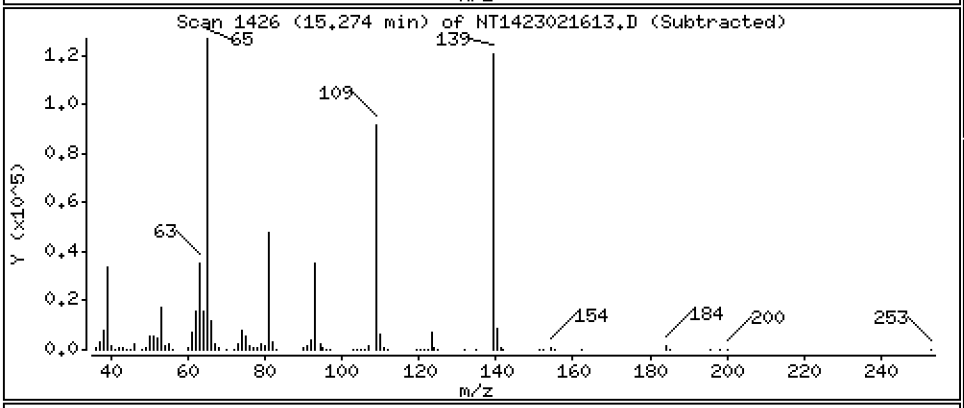
Column phase: ZB-5msi

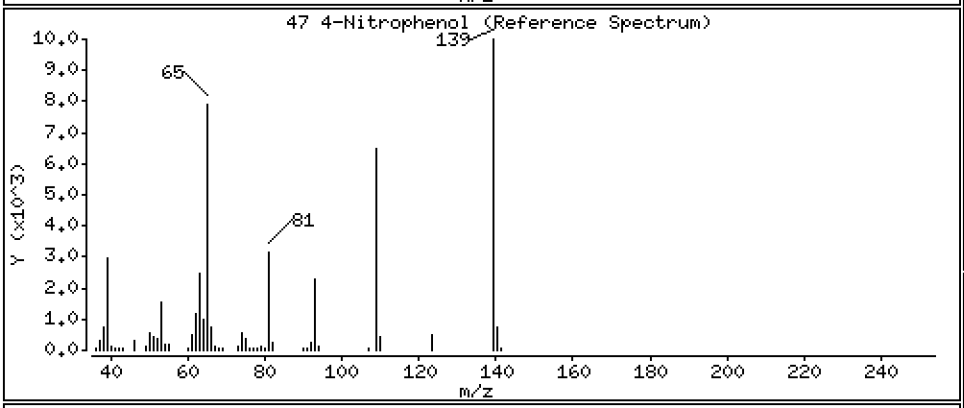
Column diameter: 0.25

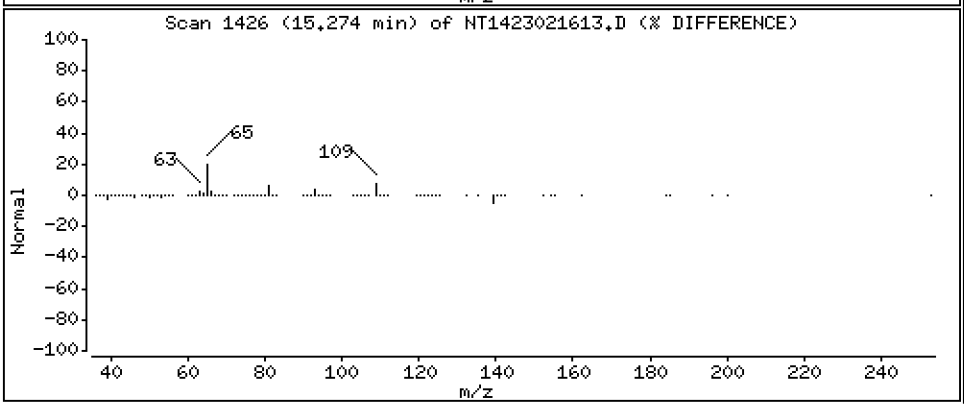
47 4-Nitrophenol

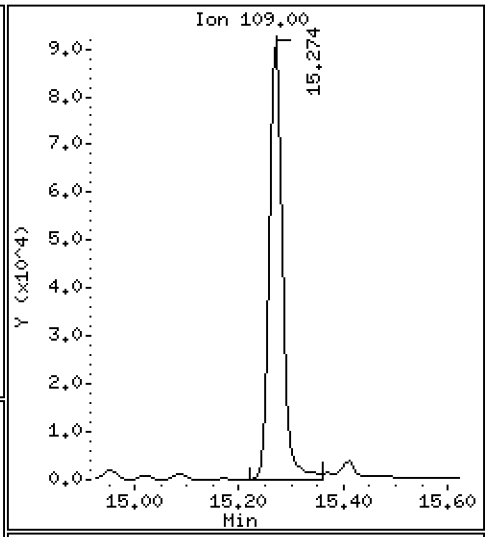
Concentration: 4.052 ug/mL

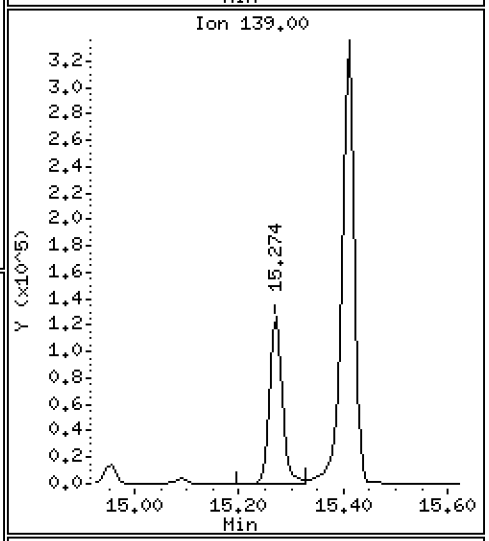


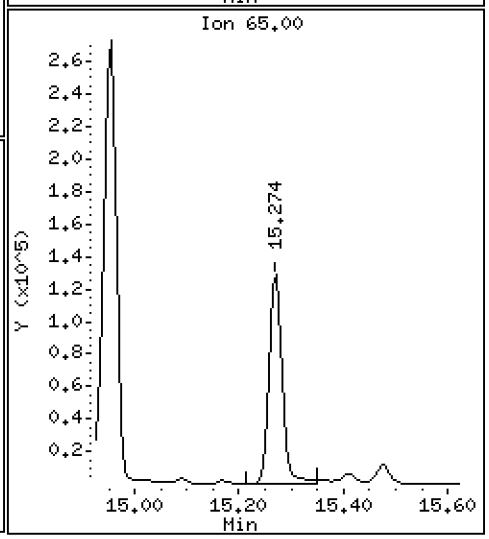












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

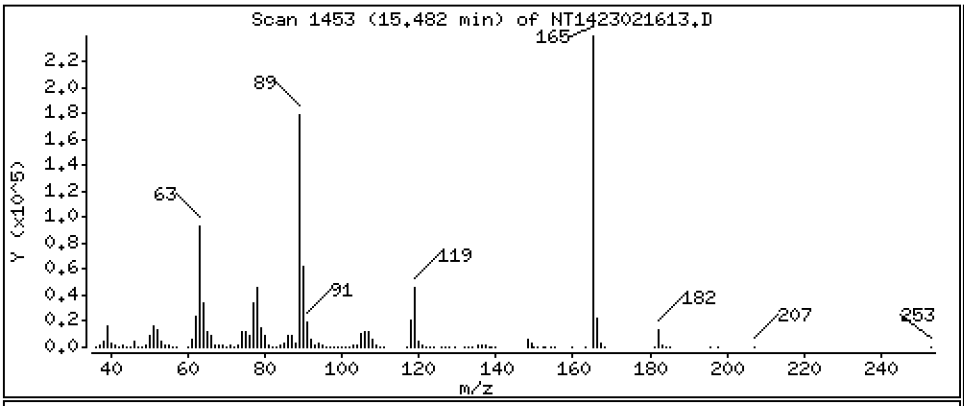
Operator: DSD

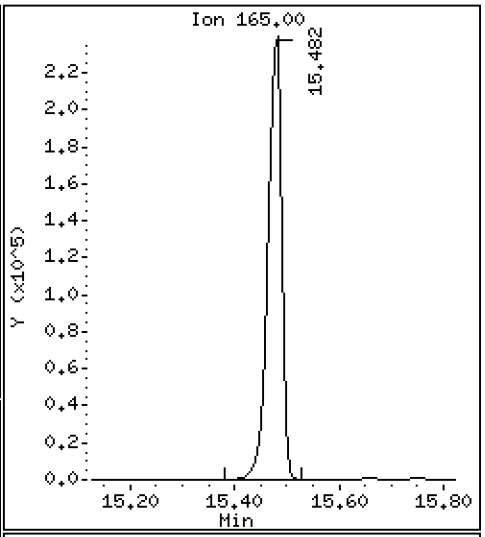
Column phase: ZB-5msi

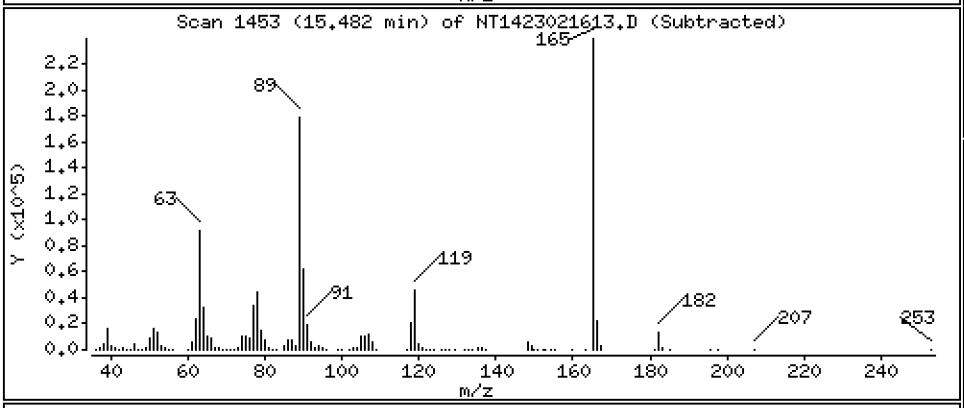
Column diameter: 0.25

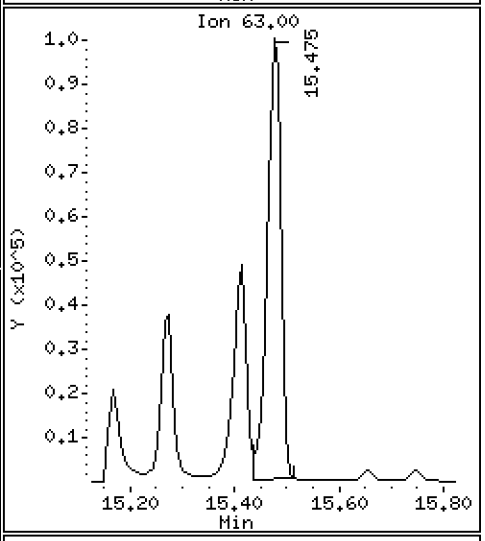
48 2,4-Dinitrotoluene

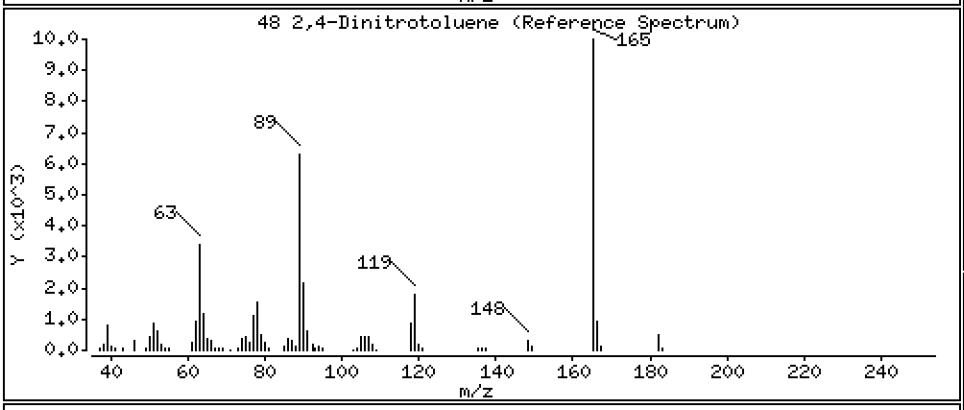
Concentration: 4.855 ug/mL

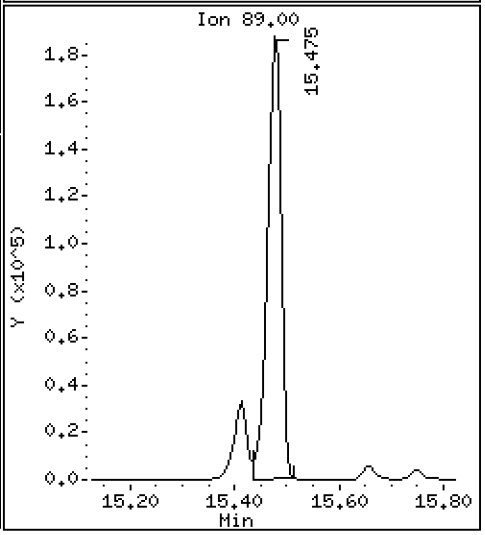


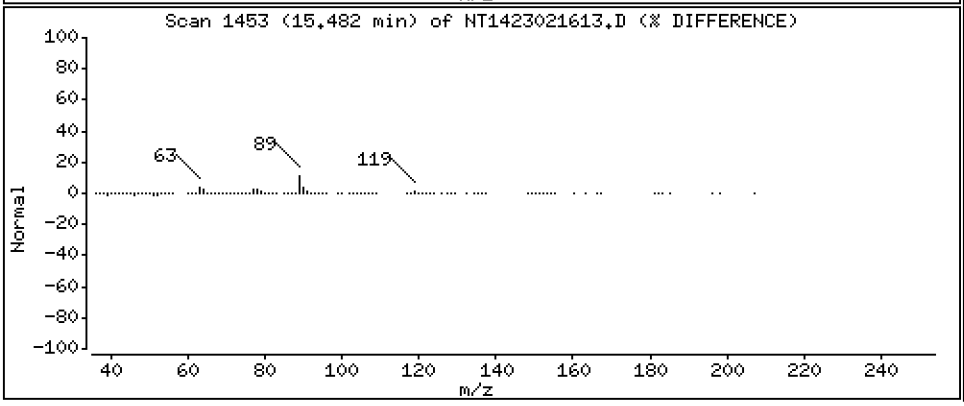












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

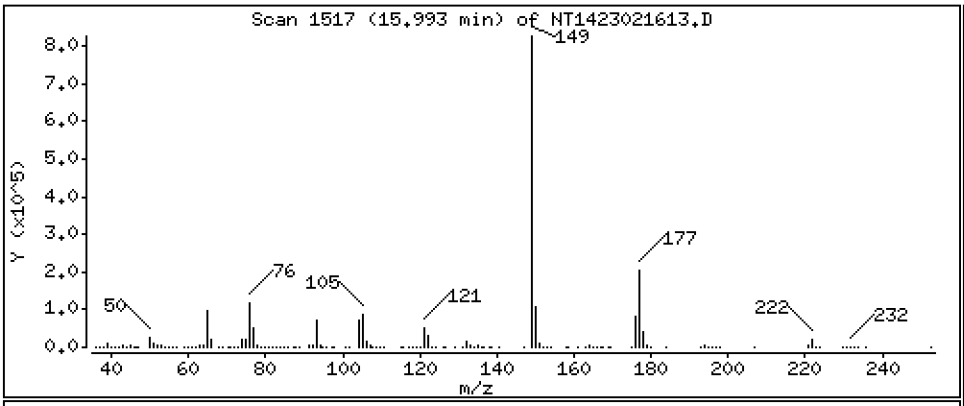
Operator: DSD

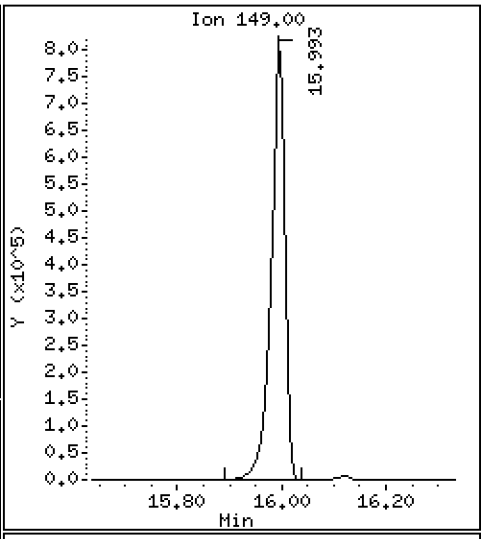
Column phase: ZB-5msi

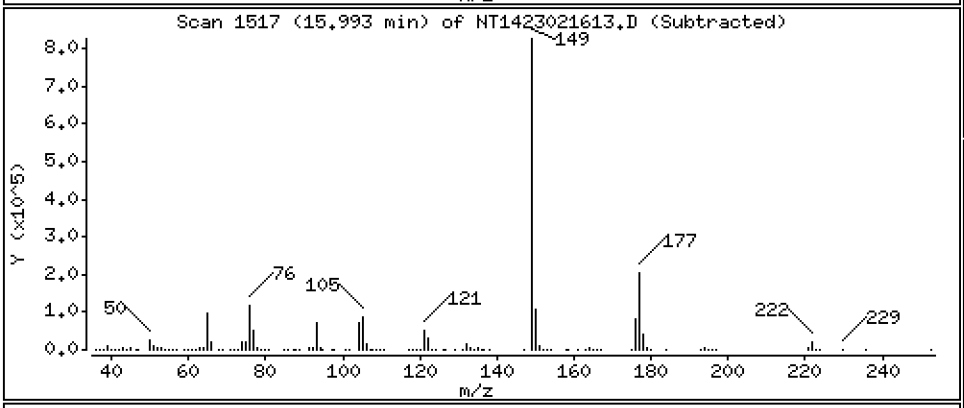
Column diameter: 0.25

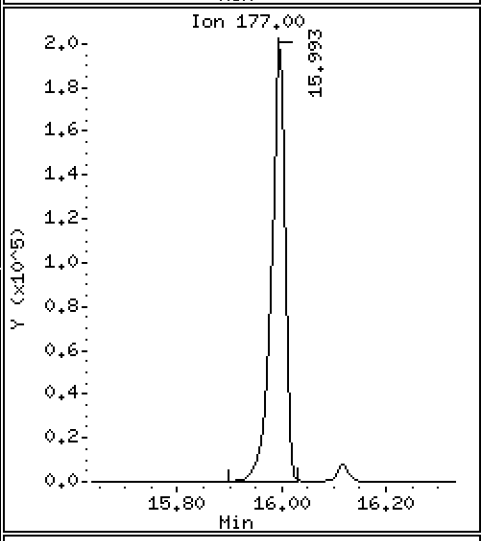
50 Diethylphthalate

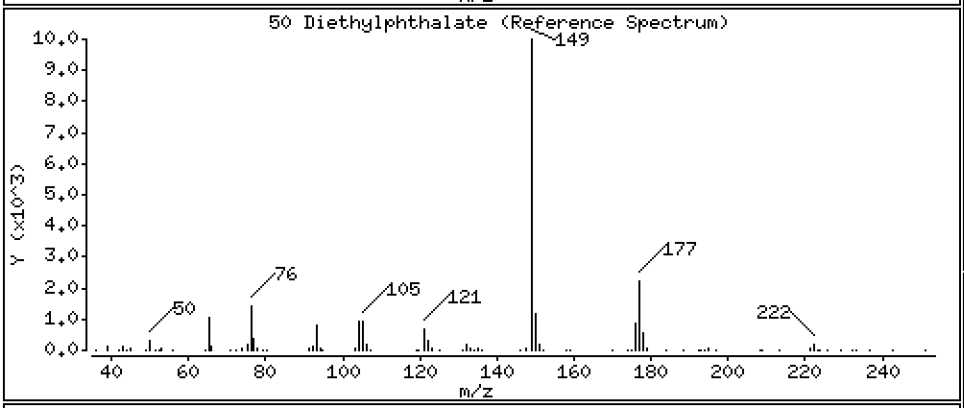
Concentration: 4.722 ug/mL

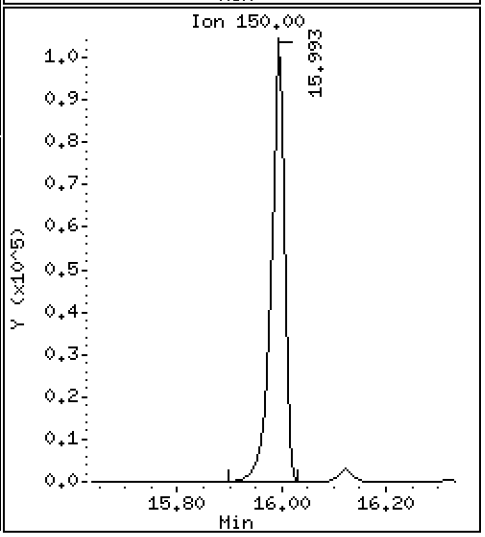


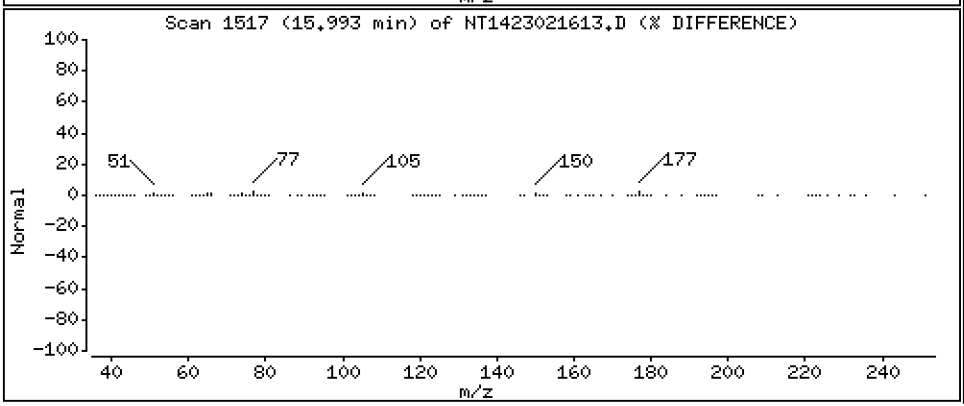












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

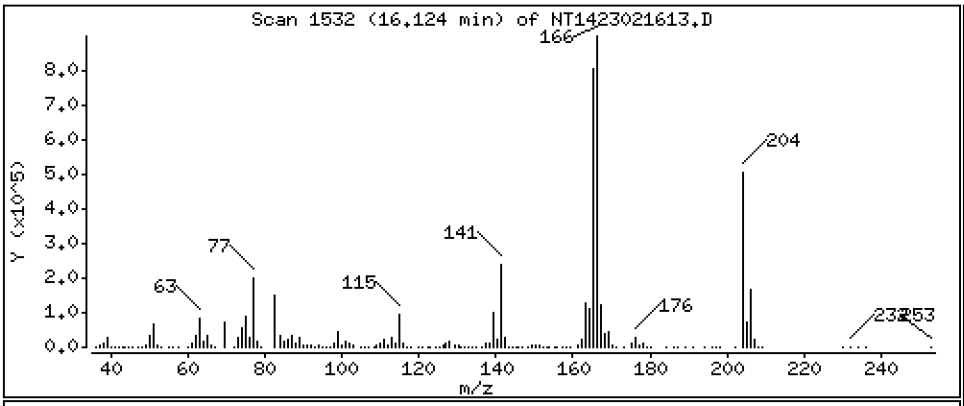
Operator: DSD

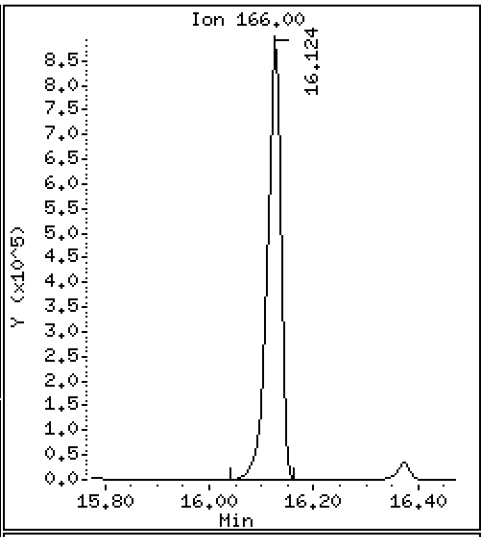
Column phase: ZB-5msi

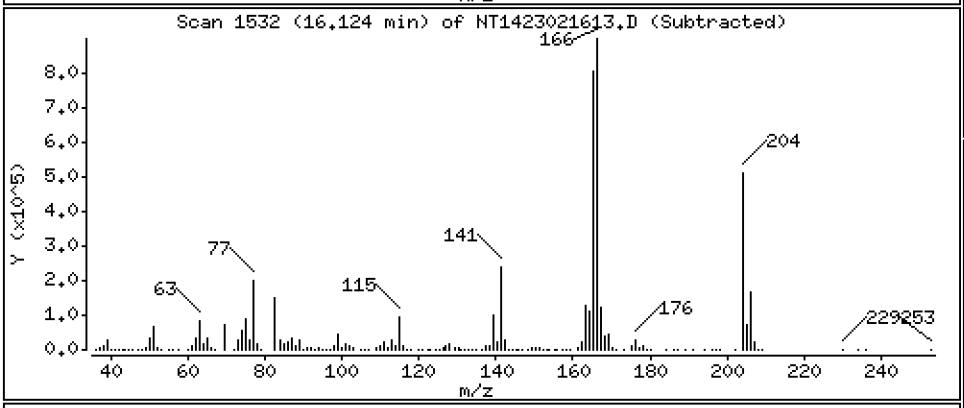
Column diameter: 0.25

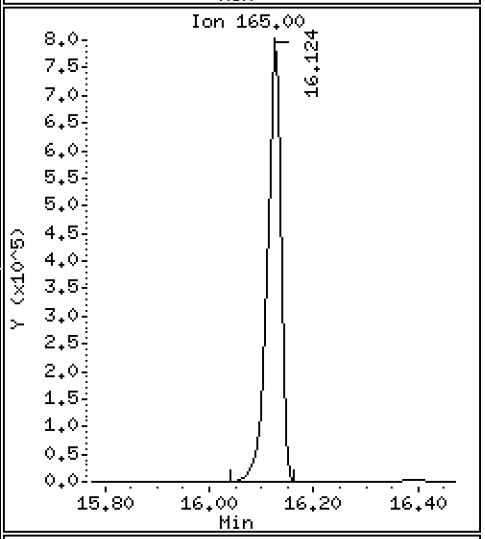
49 Fluorene

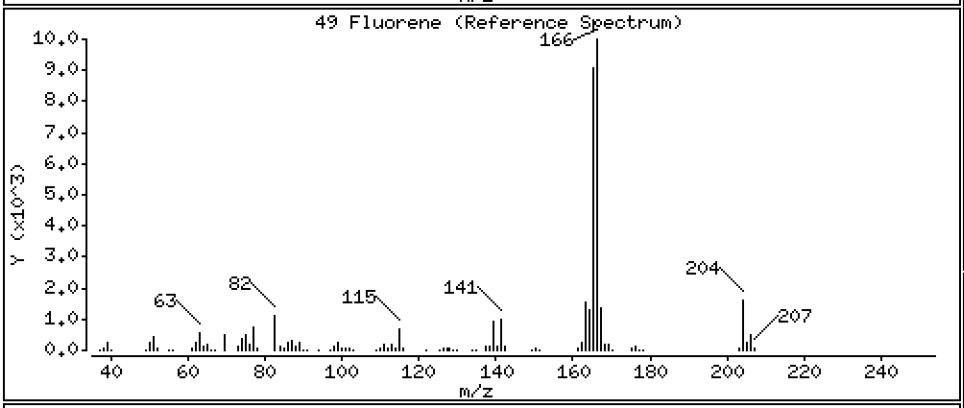
Concentration: 4.638 ug/mL

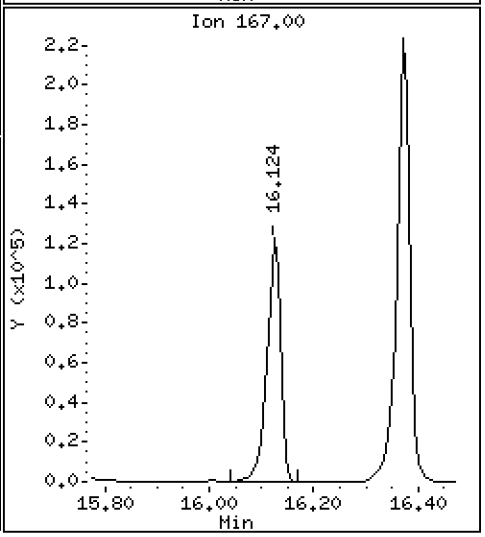


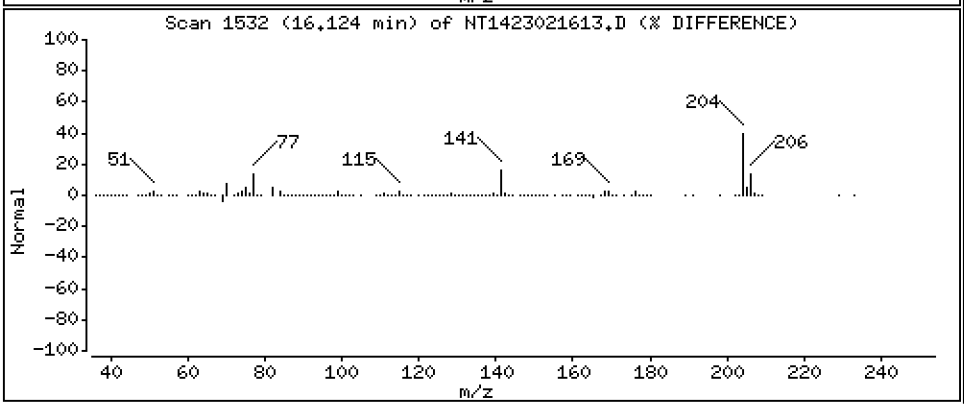












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

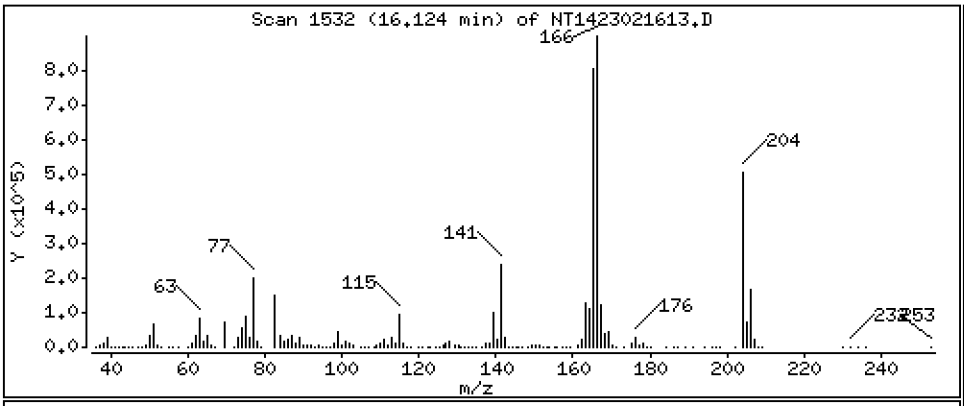
Operator: DSD

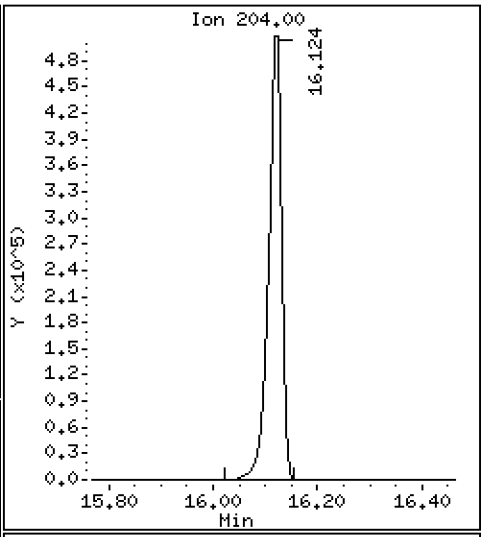
Column phase: ZB-5msi

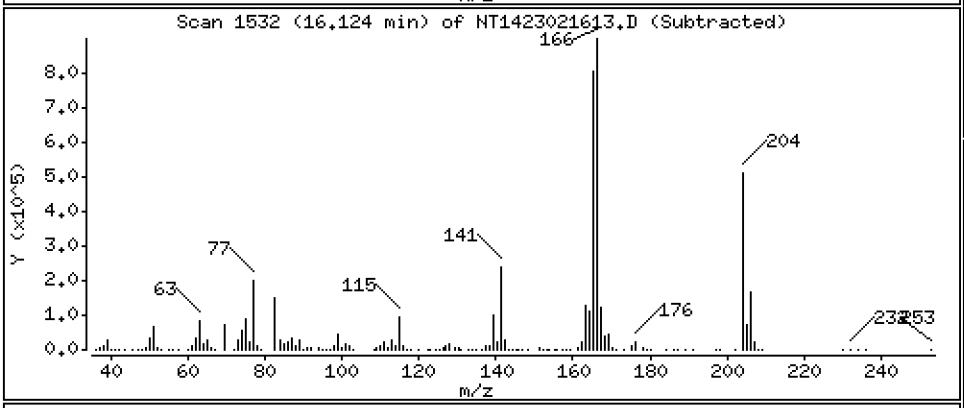
Column diameter: 0.25

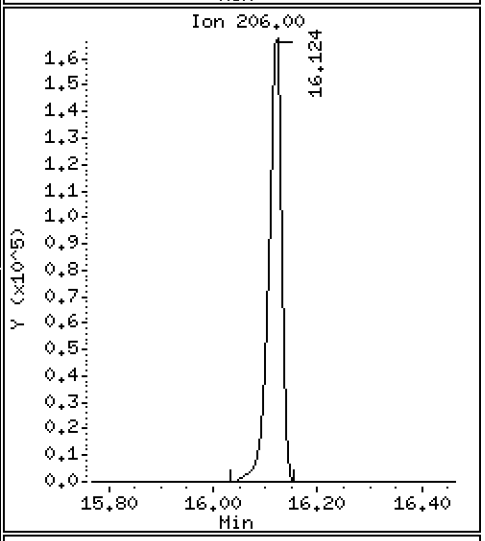
51 4-Chlorophenyl-phenylether

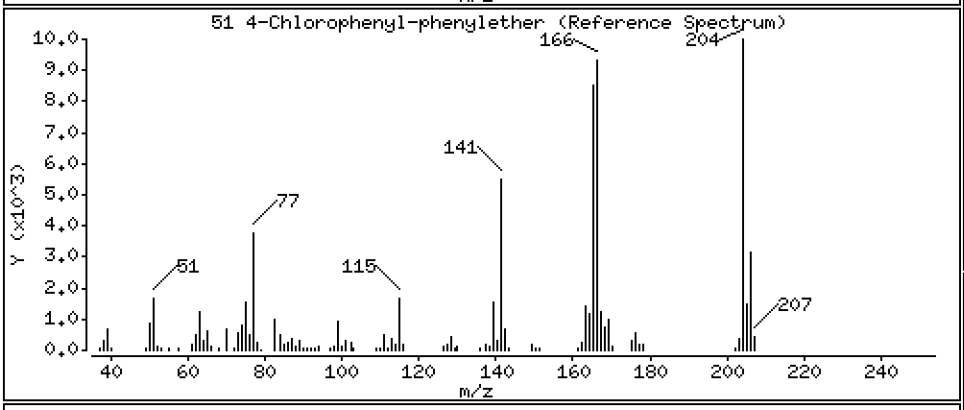
Concentration: 4.754 ug/mL

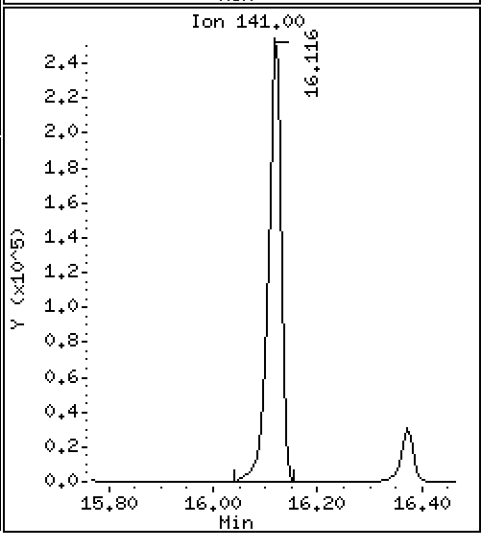


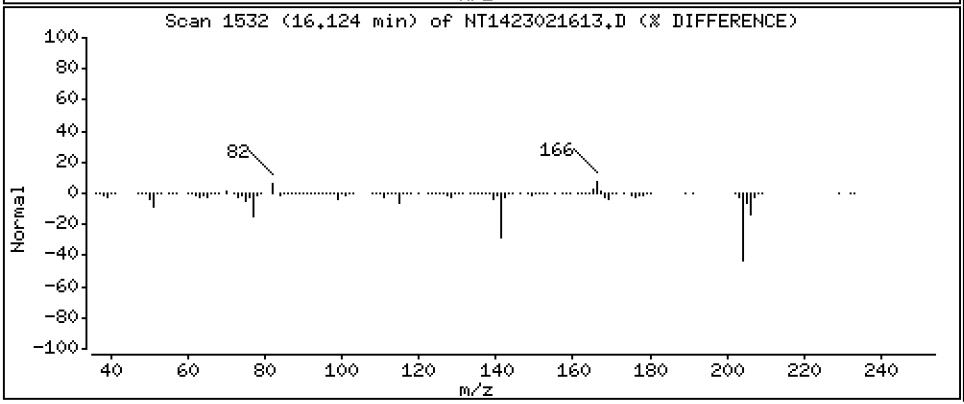












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

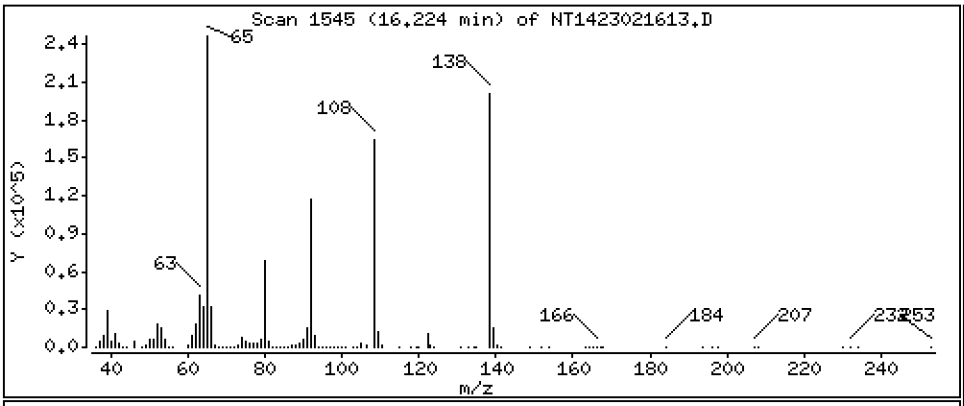
Operator: DSD

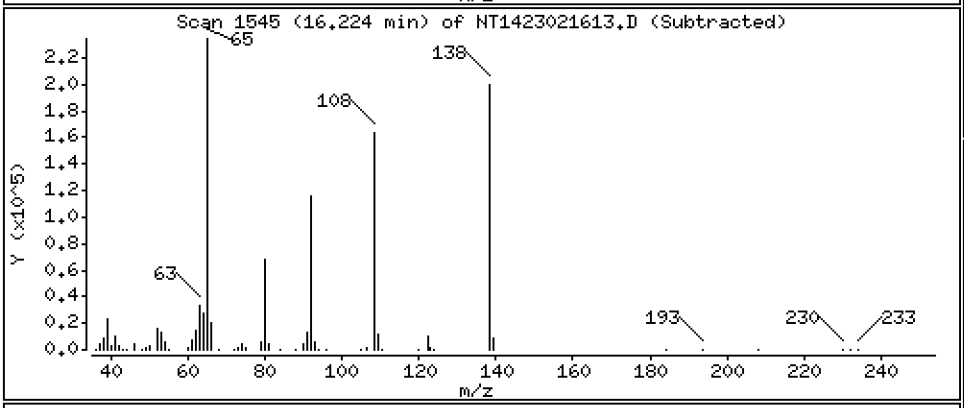
Column phase: ZB-5msi

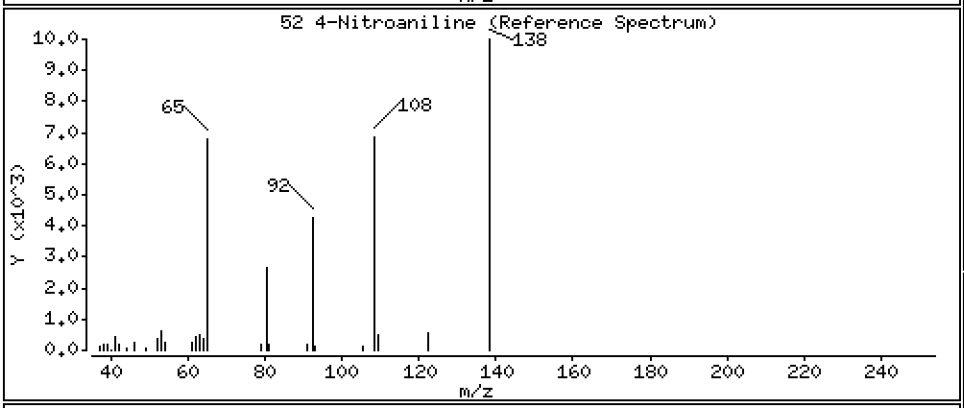
Column diameter: 0.25

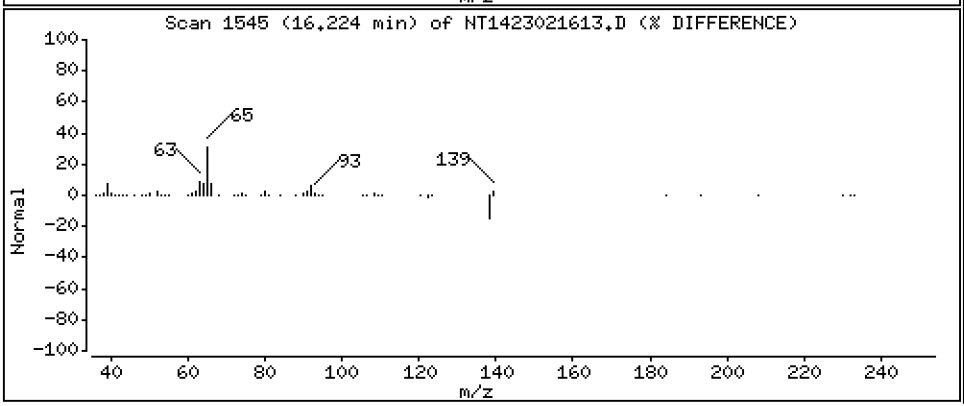
52 4-Nitroaniline

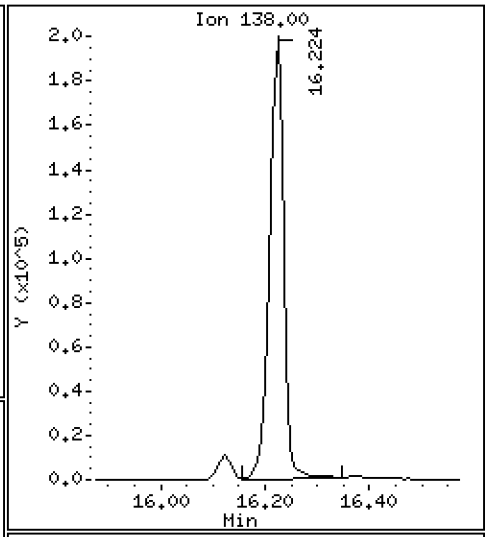
Concentration: 4.762 ug/mL

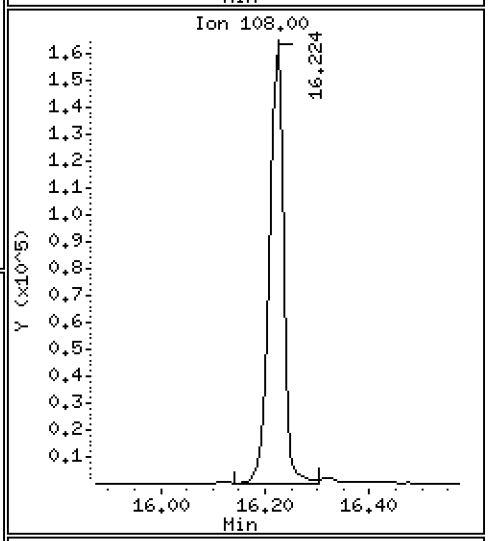


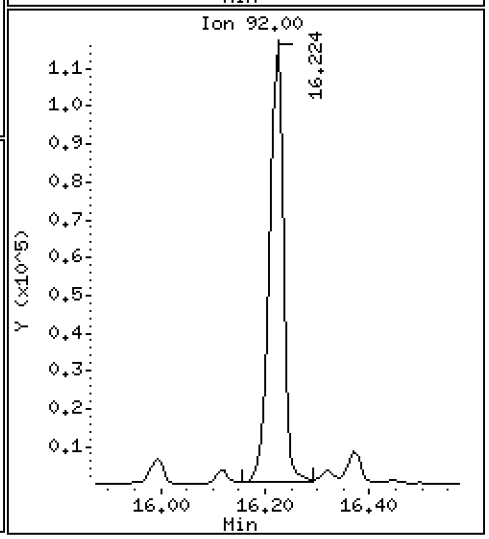












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

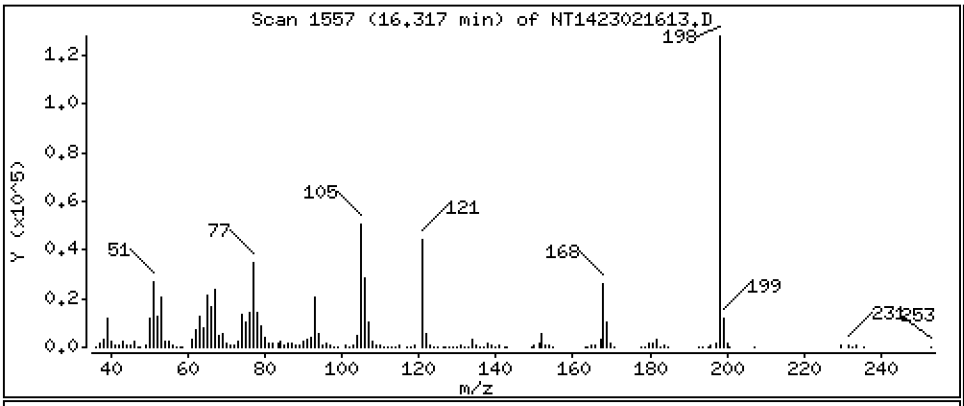
Operator: DSD

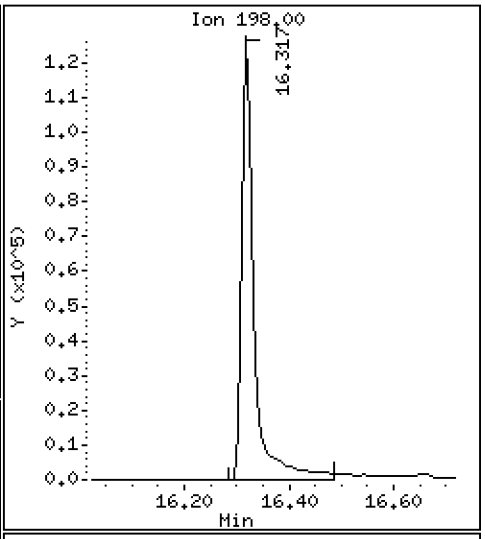
Column phase: ZB-5msi

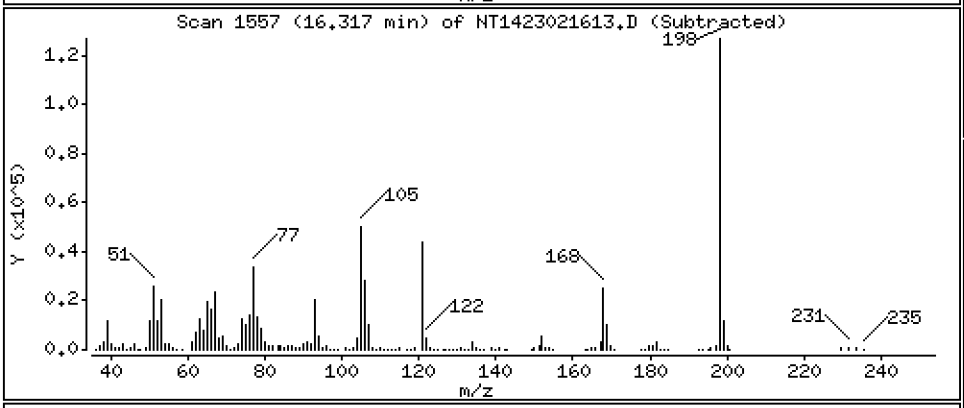
Column diameter: 0.25

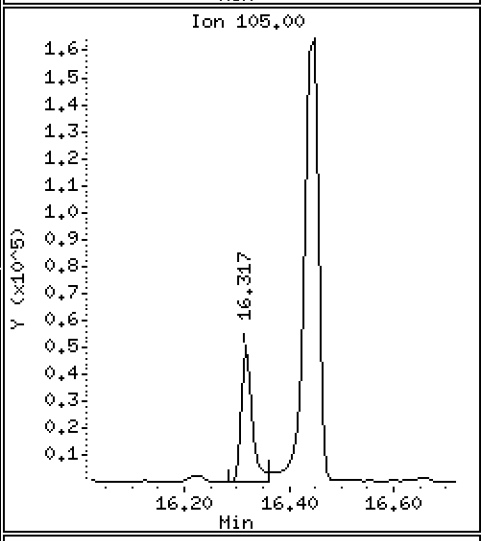
53 4,6-Dinitro-2-methylphenol

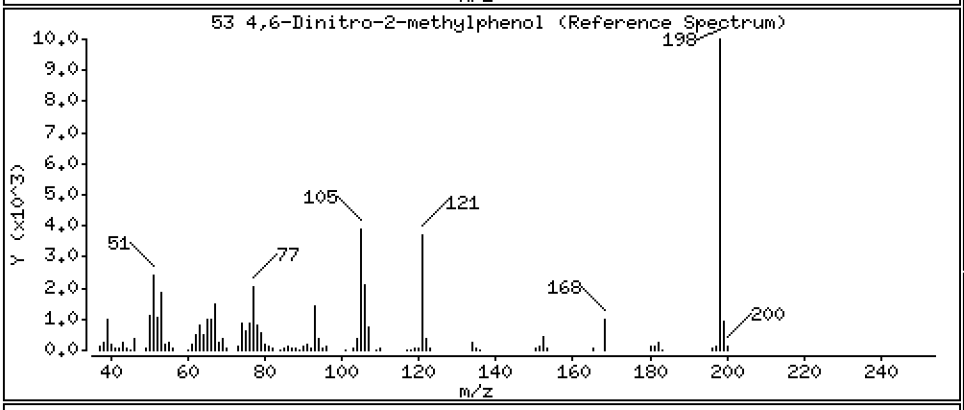
Concentration: 3.653 ug/mL

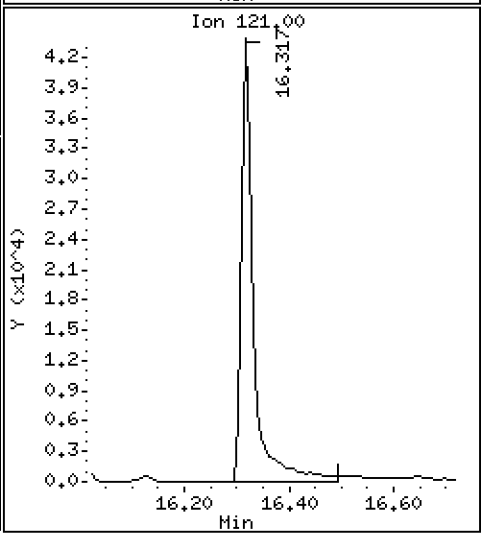


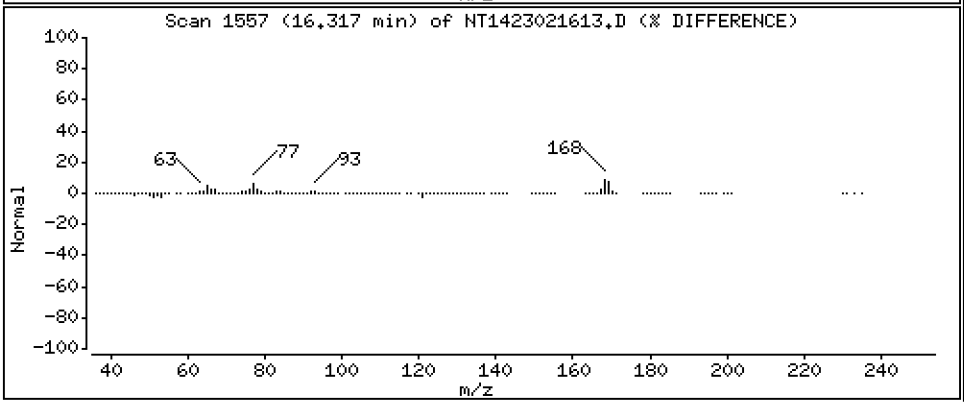












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

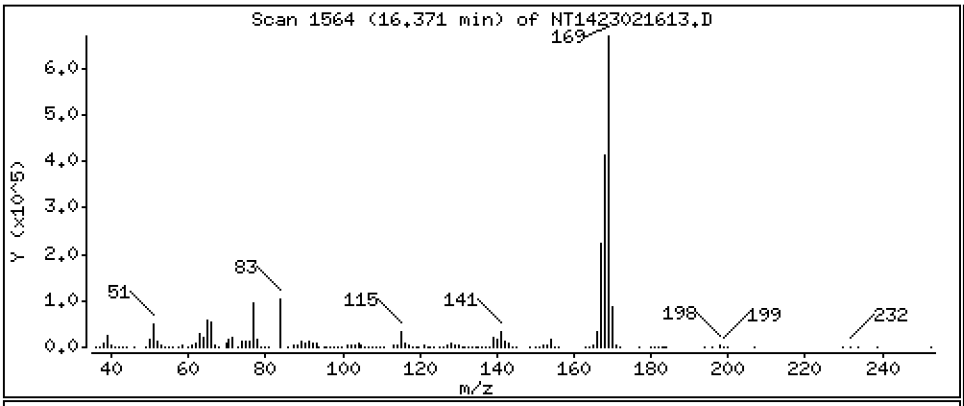
Operator: DSD

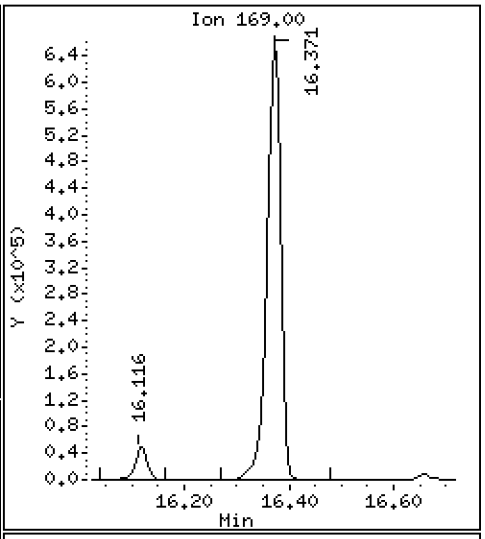
Column phase: ZB-5msi

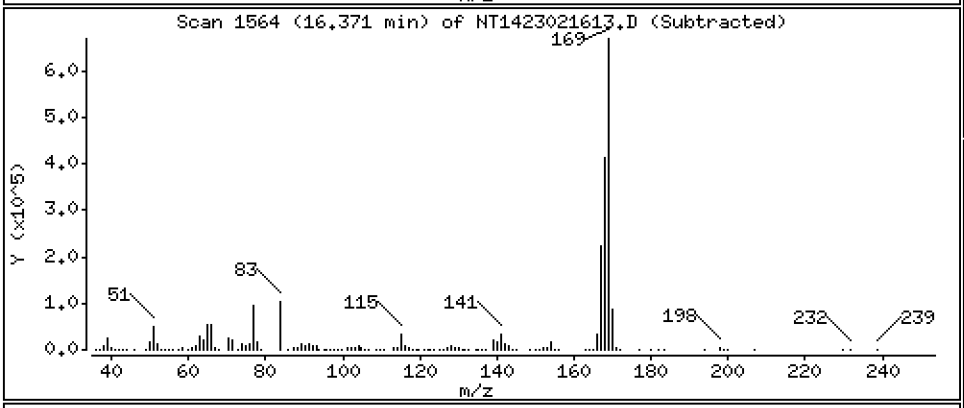
Column diameter: 0.25

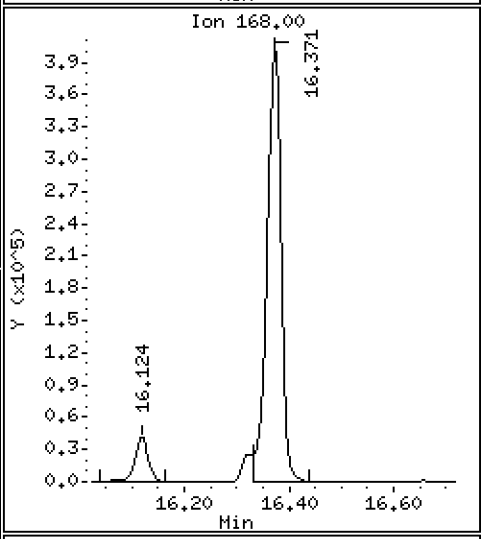
54 N-Nitrosodiphenylamine

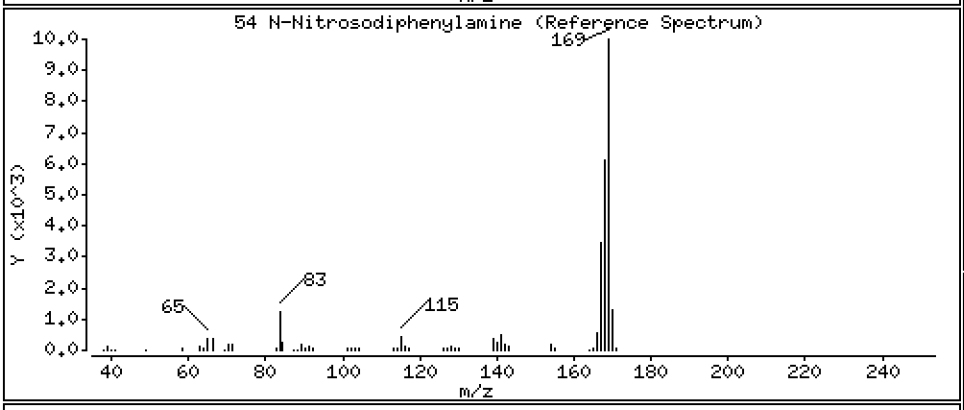
Concentration: 4.907 ug/mL

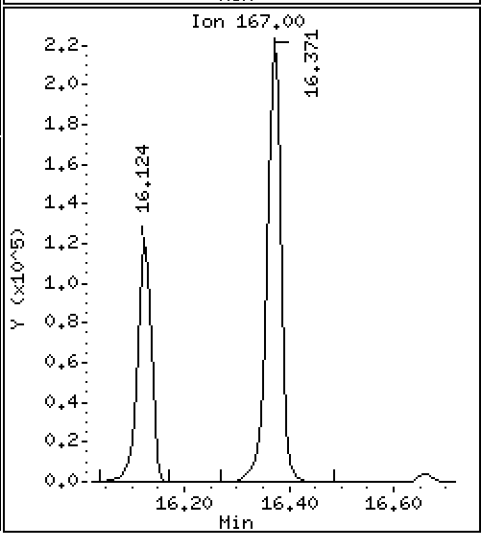


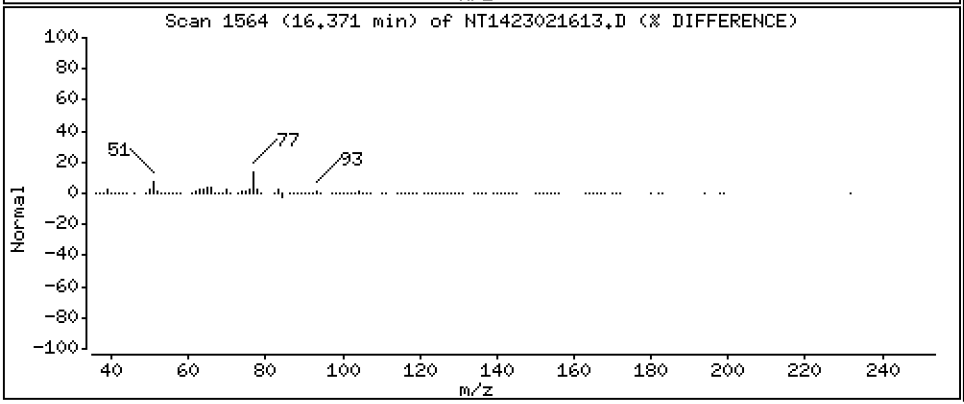












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

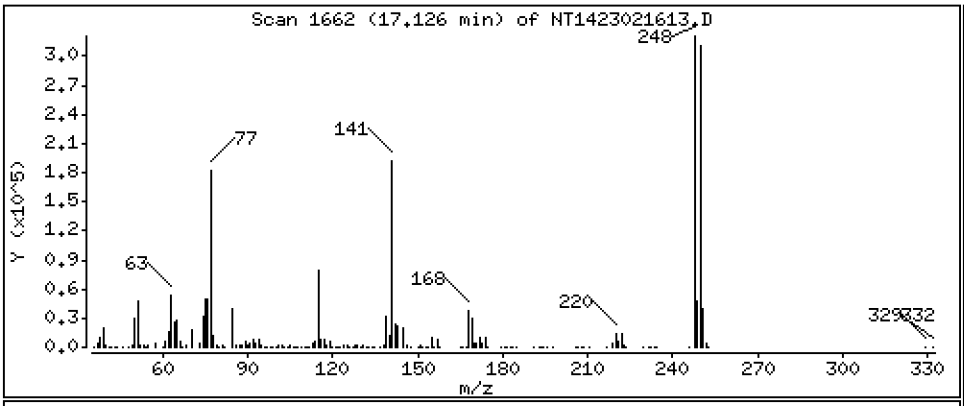
Operator: DSD

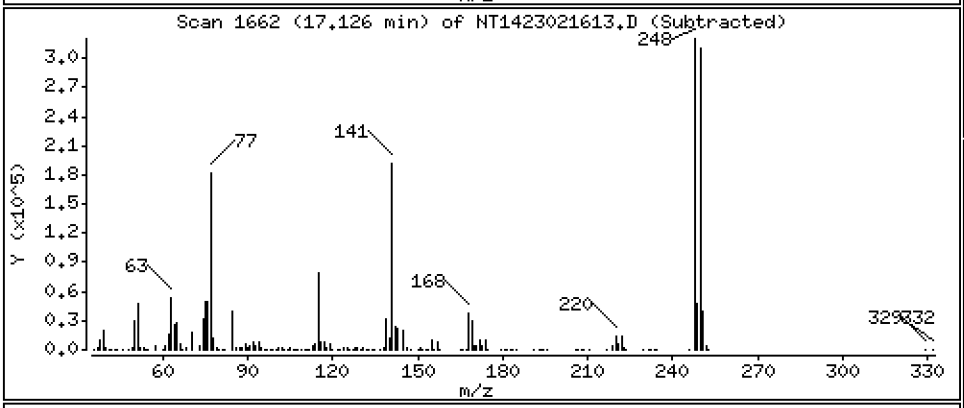
Column phase: ZB-5msi

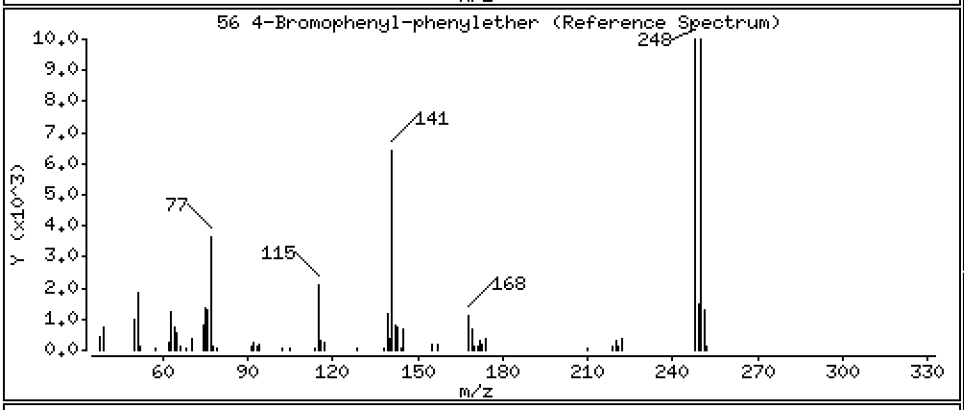
Column diameter: 0.25

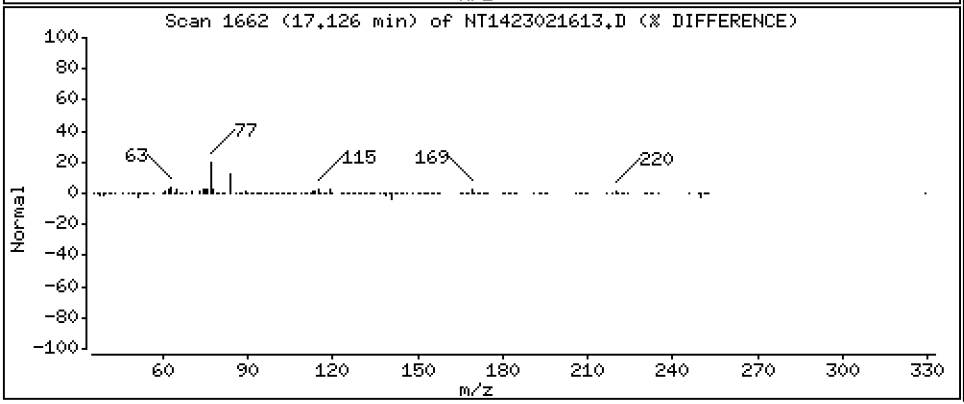
56 4-Bromophenyl-phenylether

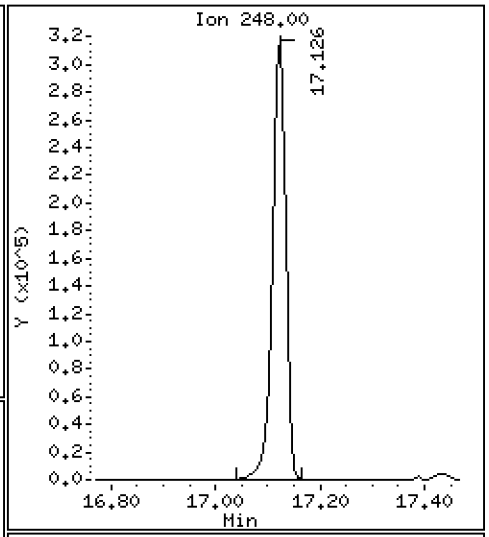
Concentration: 5.153 ug/mL

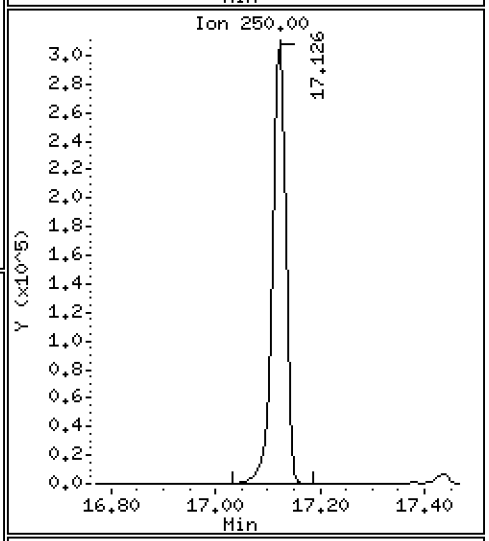


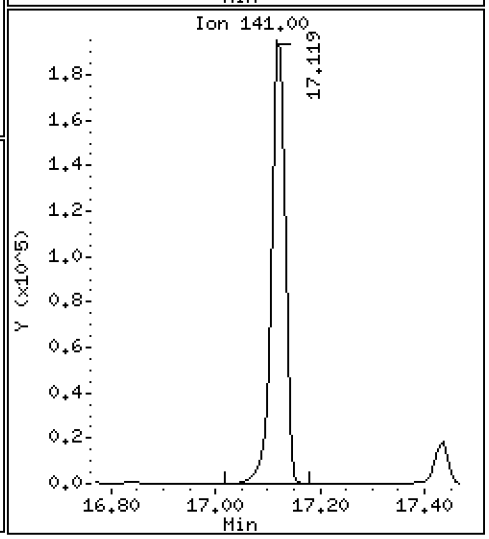












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

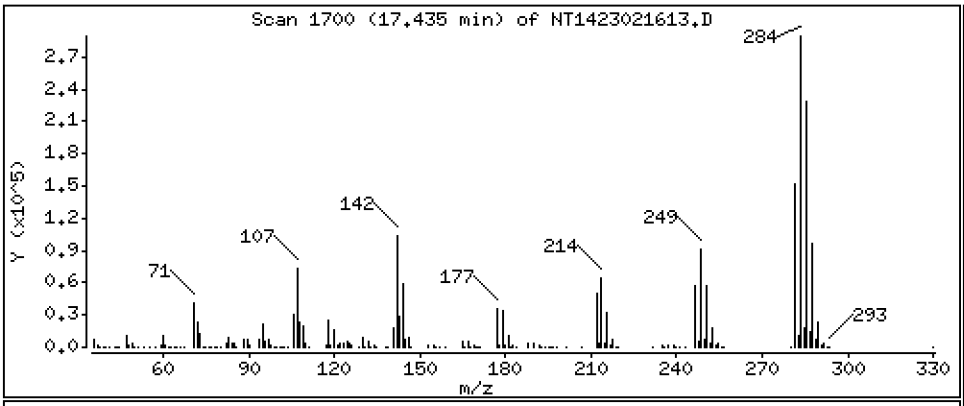
Operator: DSD

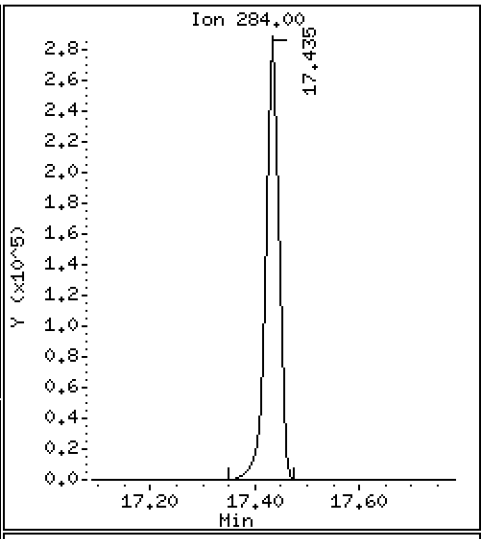
Column phase: ZB-5msi

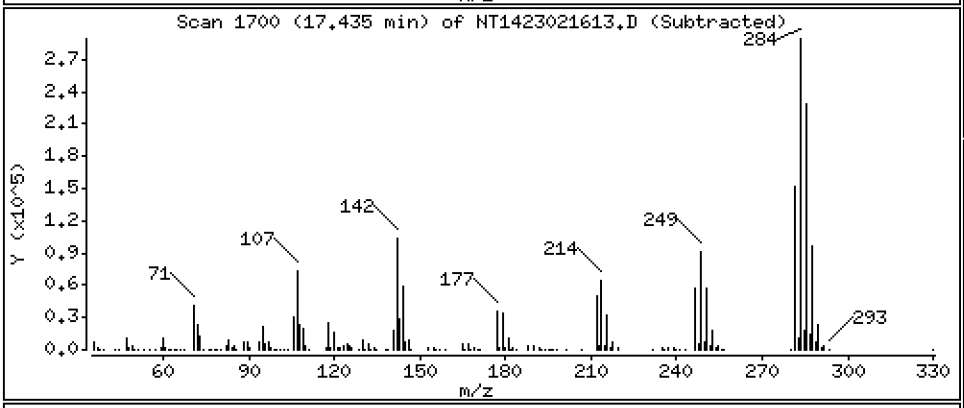
Column diameter: 0.25

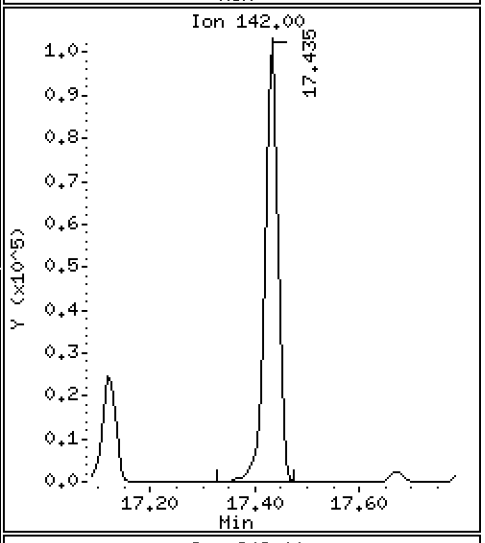
57 Hexachlorobenzene

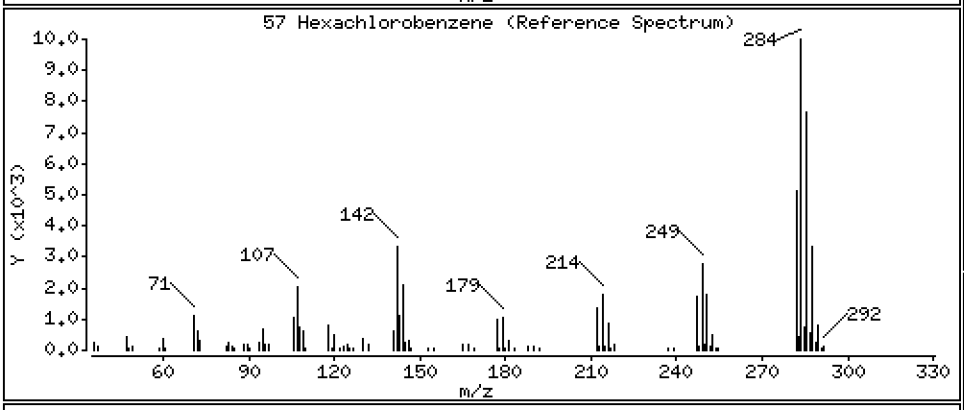
Concentration: 4.679 ug/mL

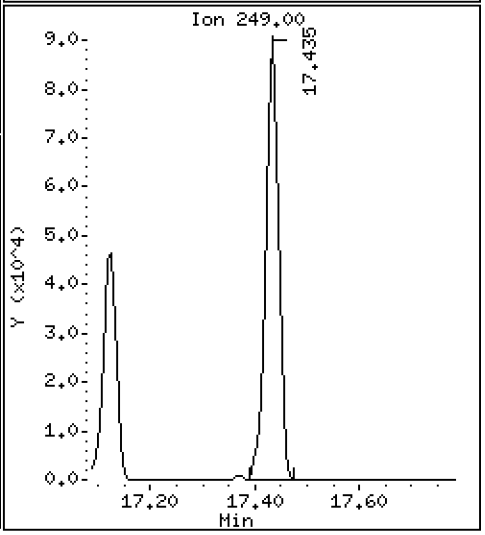


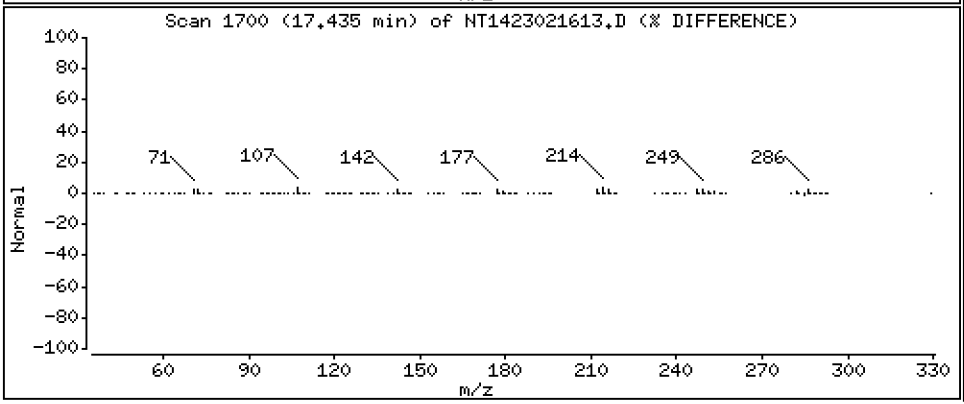












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

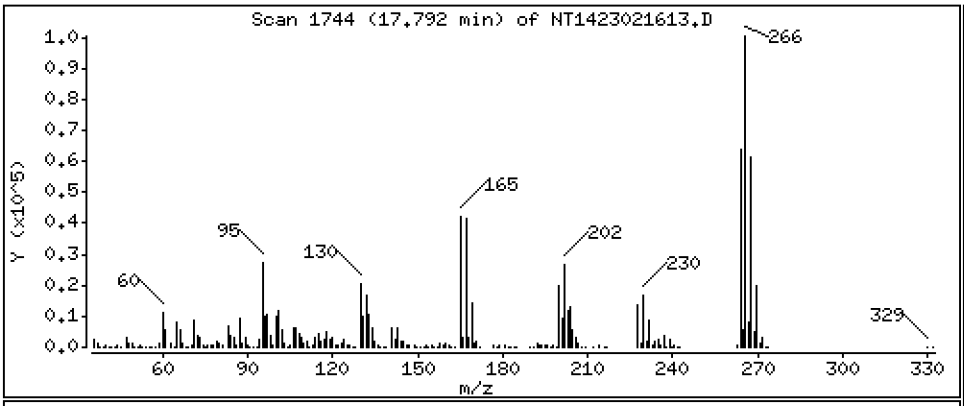
Operator: DSD

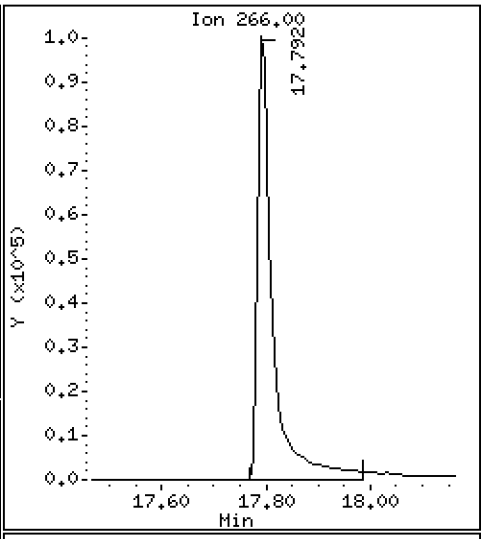
Column phase: ZB-5msi

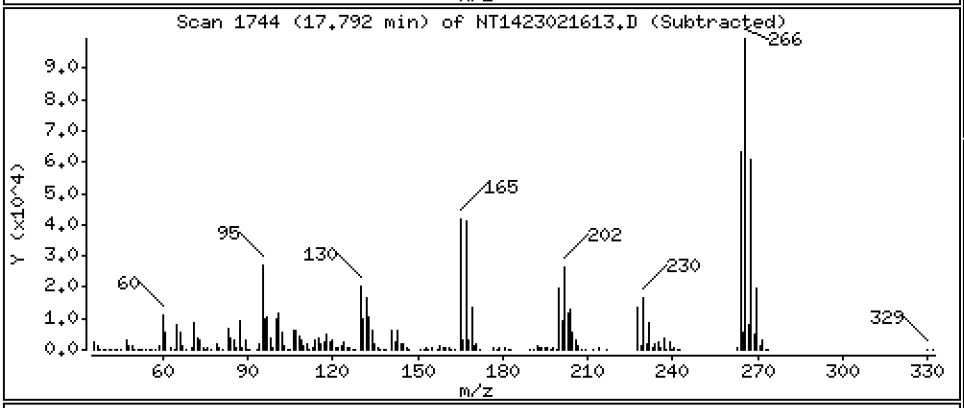
Column diameter: 0.25

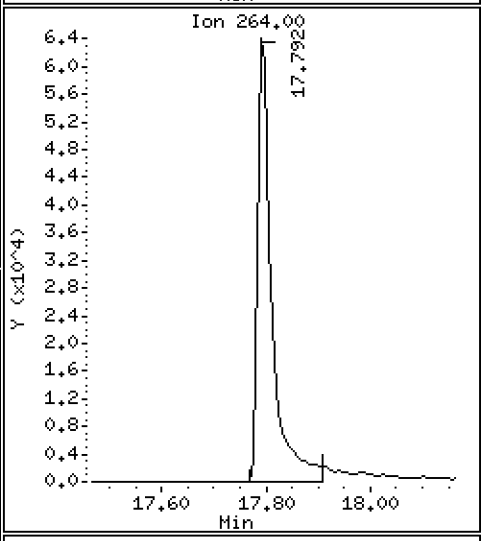
58 Pentachlorophenol

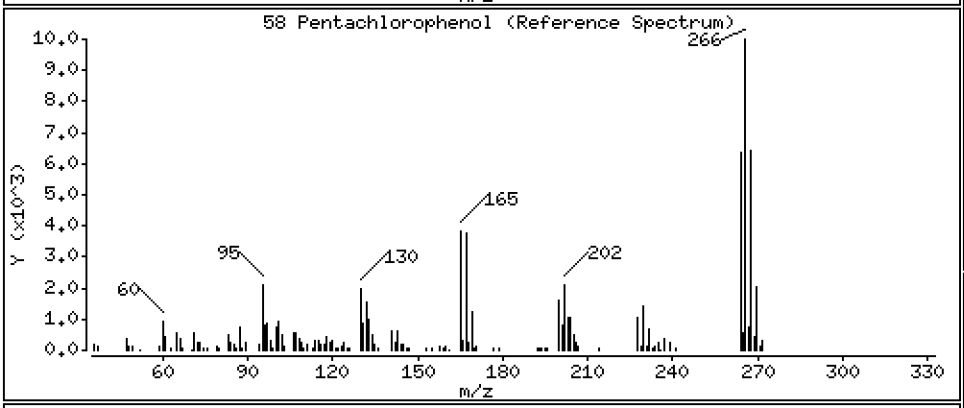
Concentration: 3.932 ug/mL

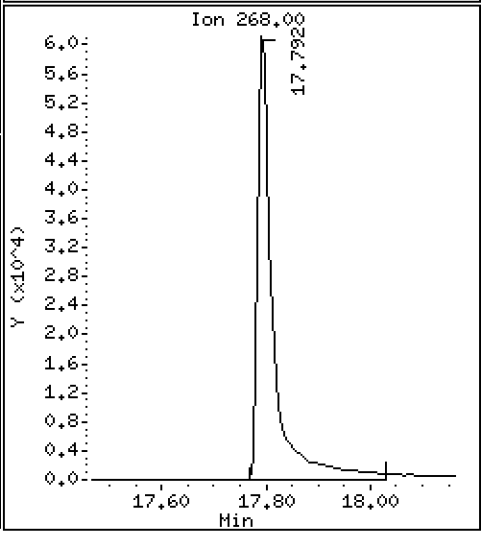


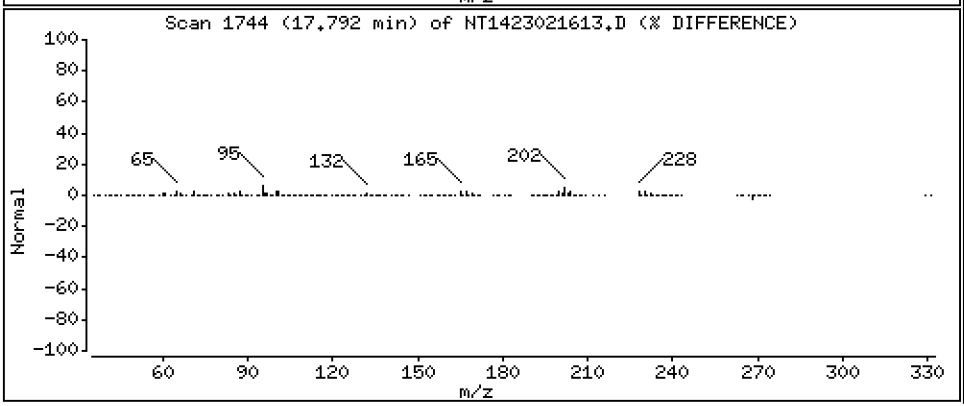












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

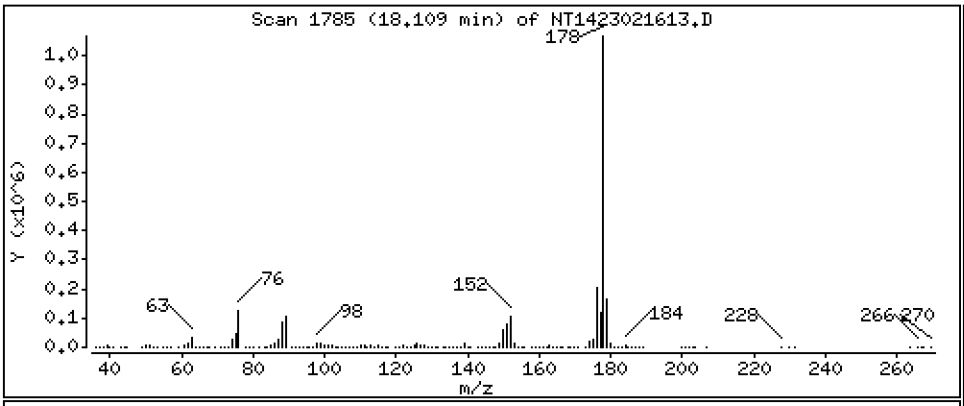
Operator: DSD

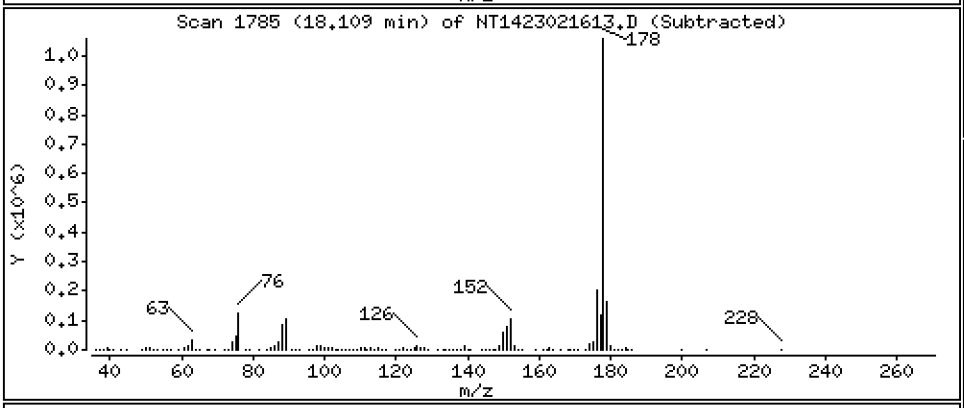
Column phase: ZB-5msi

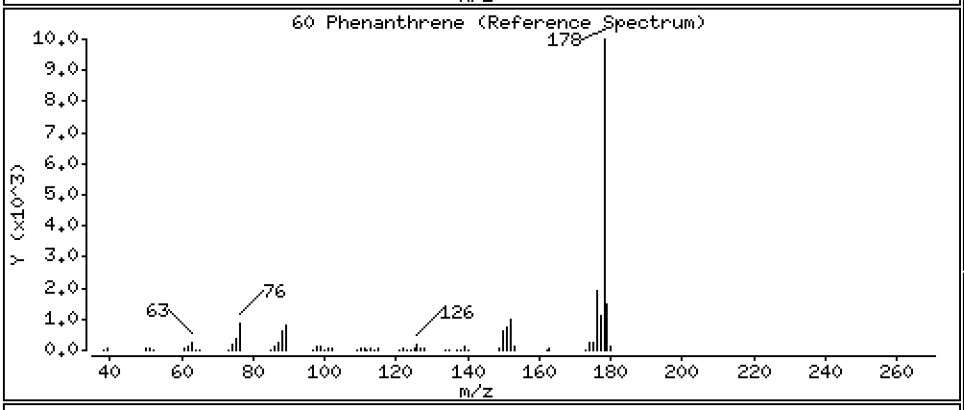
Column diameter: 0.25

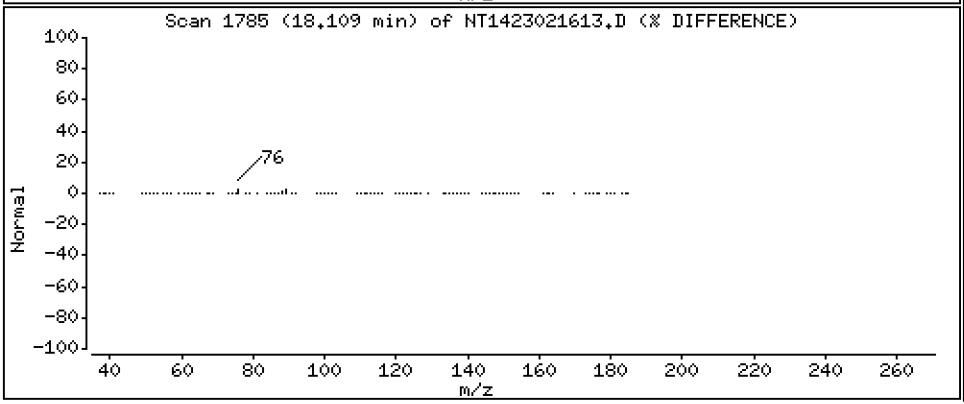
60 Phenanthrene

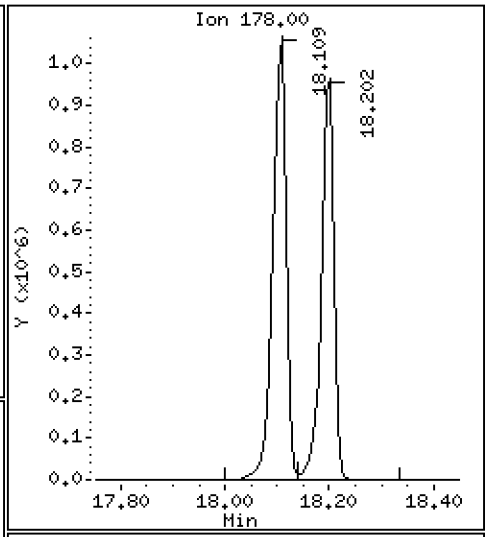
Concentration: 4.690 ug/mL

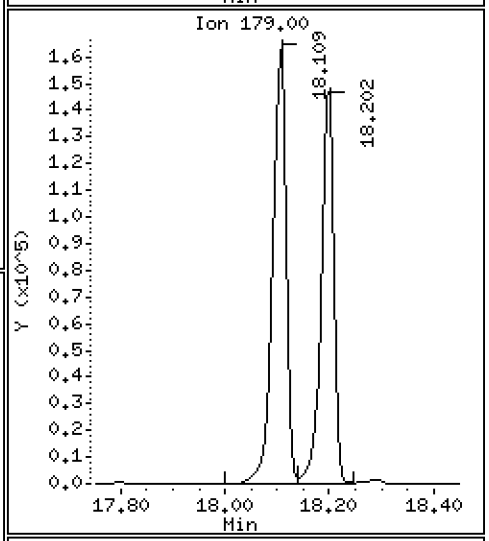


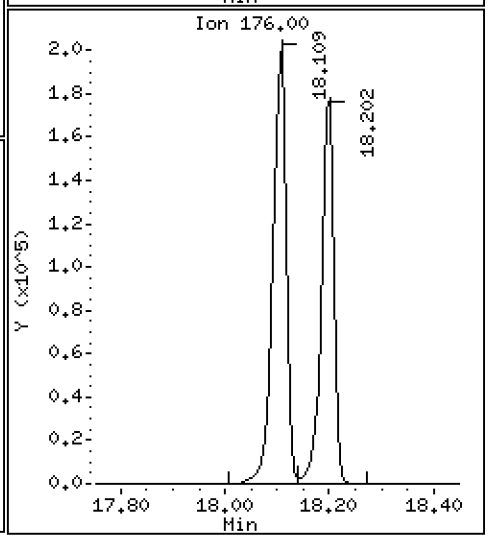












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

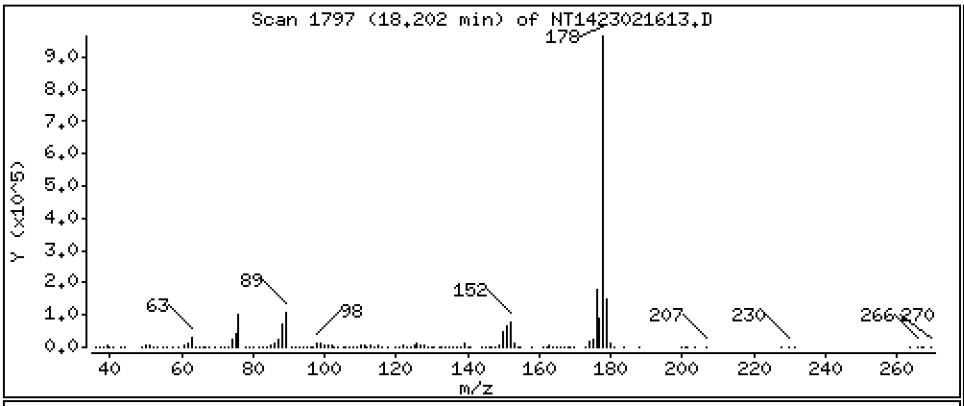
Operator: DSD

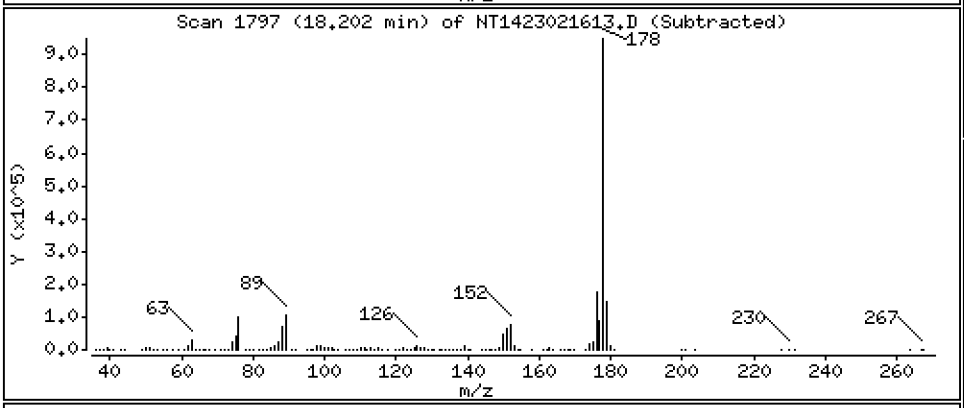
Column phase: ZB-5msi

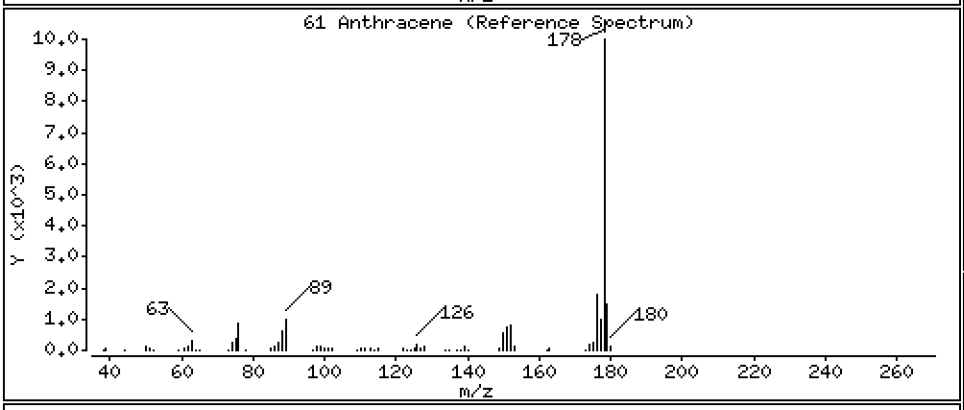
Column diameter: 0.25

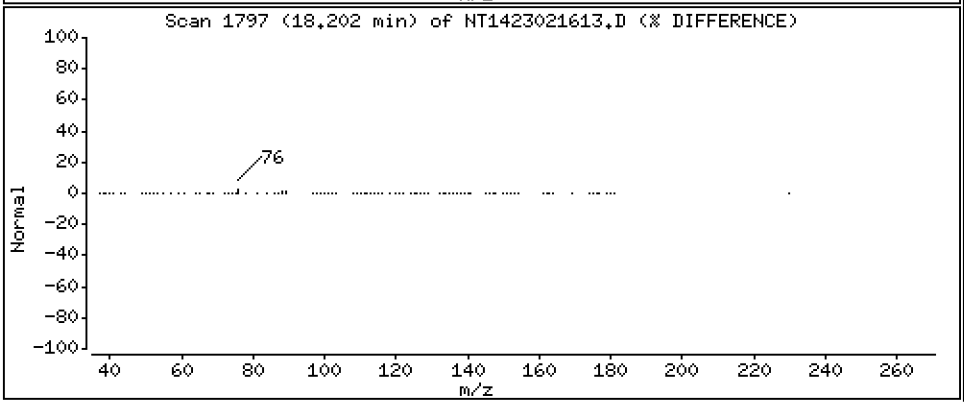
61 Anthracene

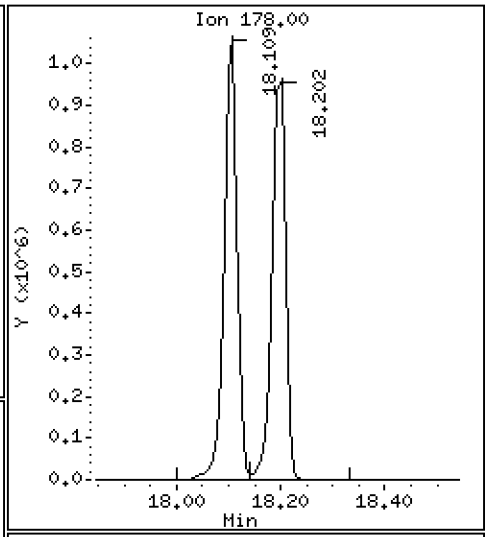
Concentration: 4.304 ug/mL

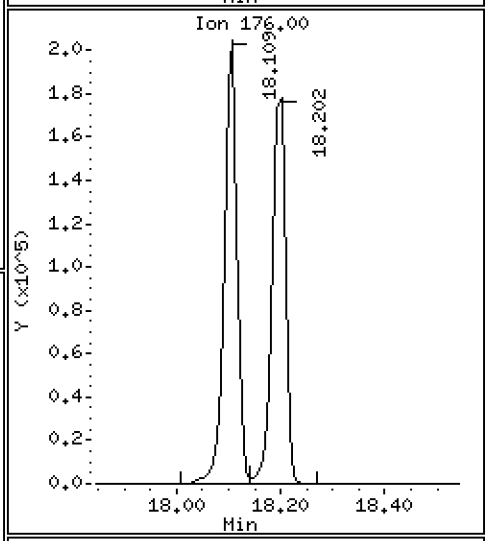


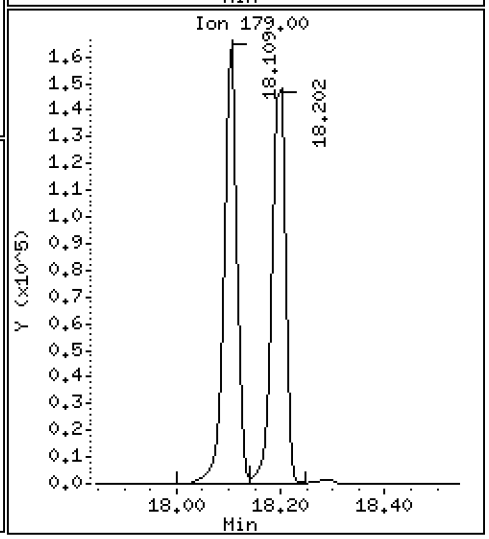












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

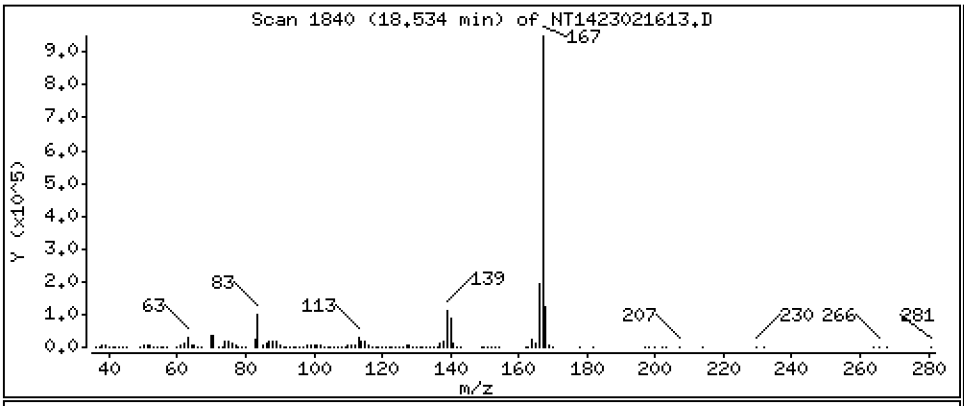
Operator: DSD

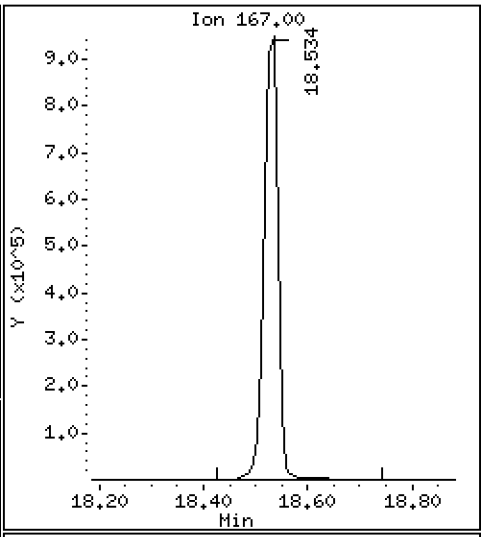
Column phase: ZB-5msi

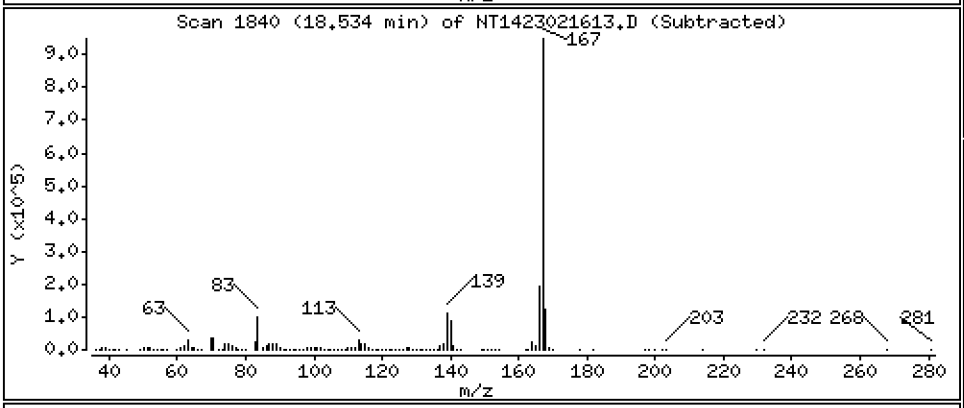
Column diameter: 0.25

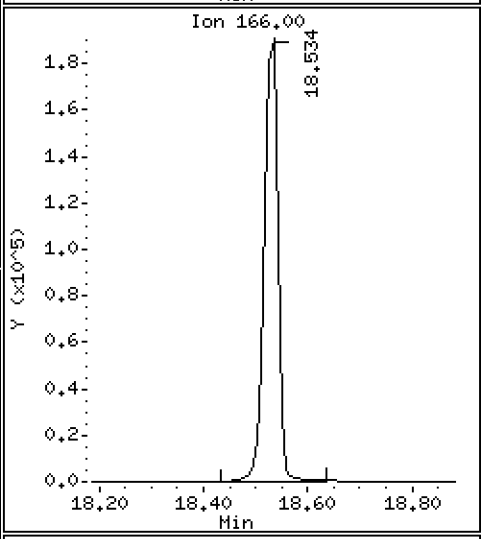
62 Carbazole

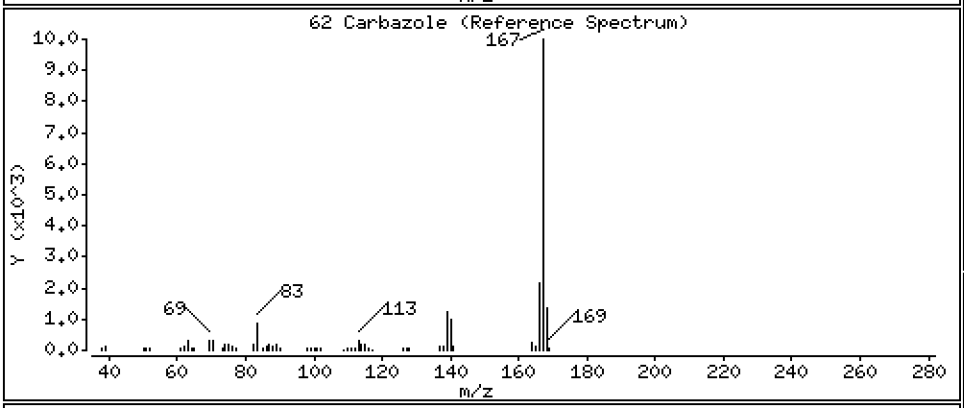
Concentration: 4.792 ug/mL

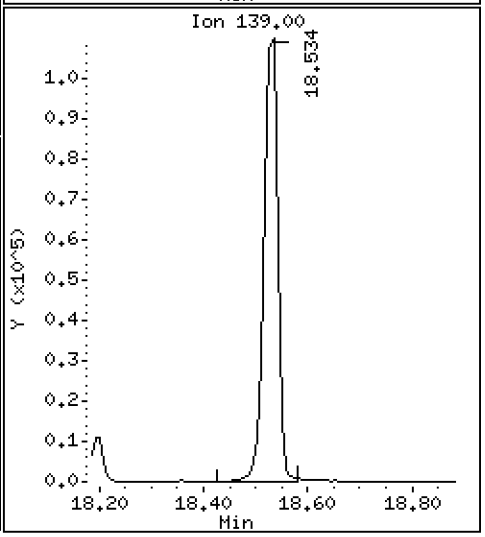


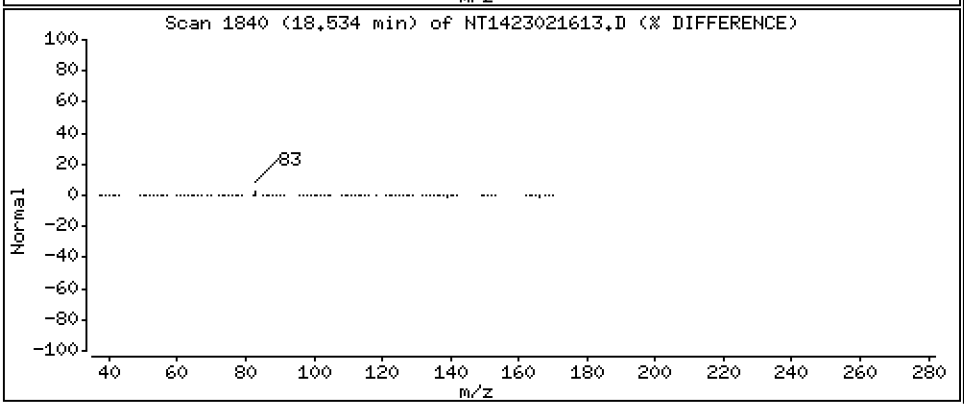












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

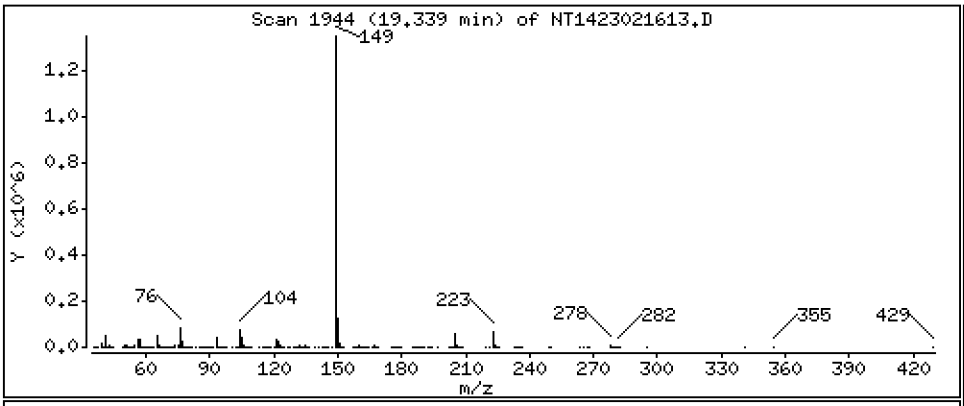
Operator: DSD

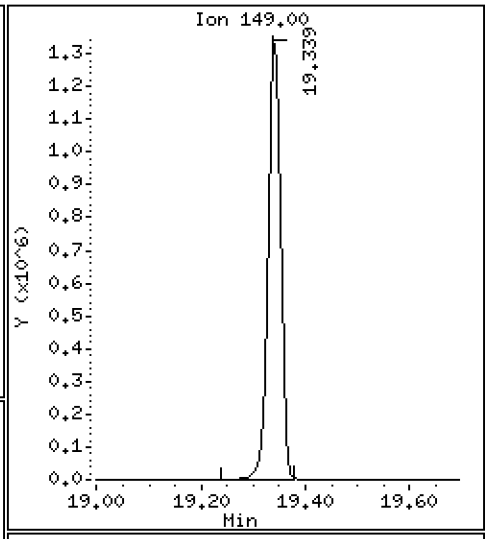
Column phase: ZB-5msi

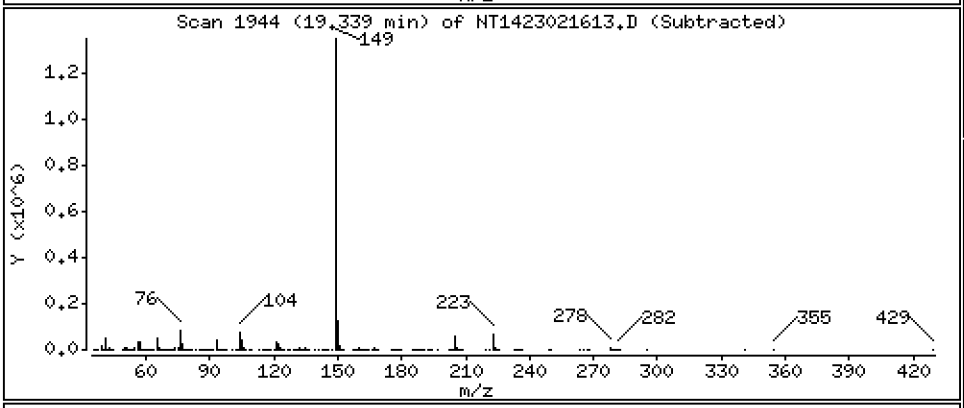
Column diameter: 0.25

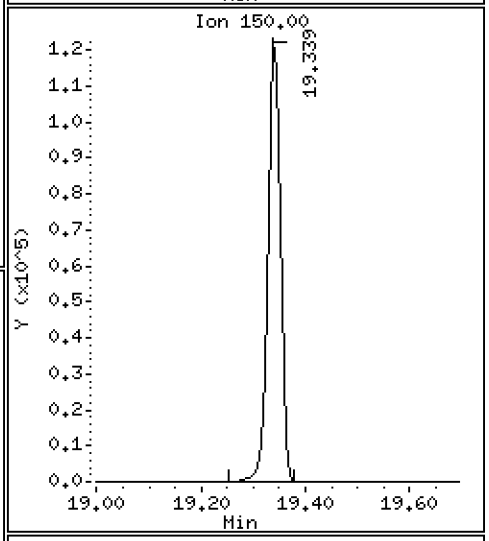
63 Di-n-butylphthalate

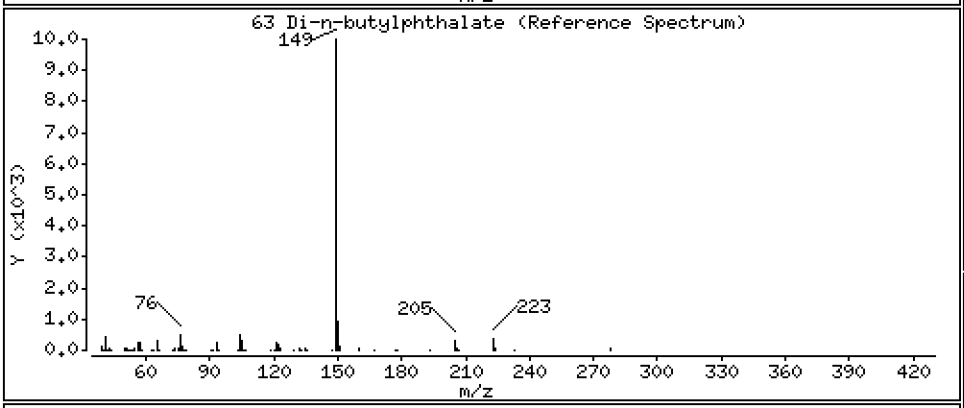
Concentration: 5.515 ug/mL

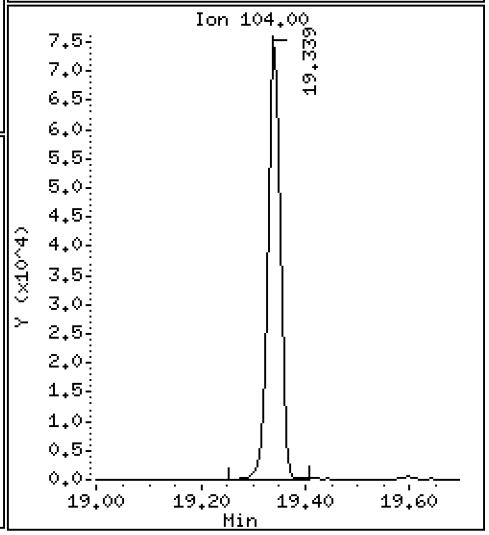


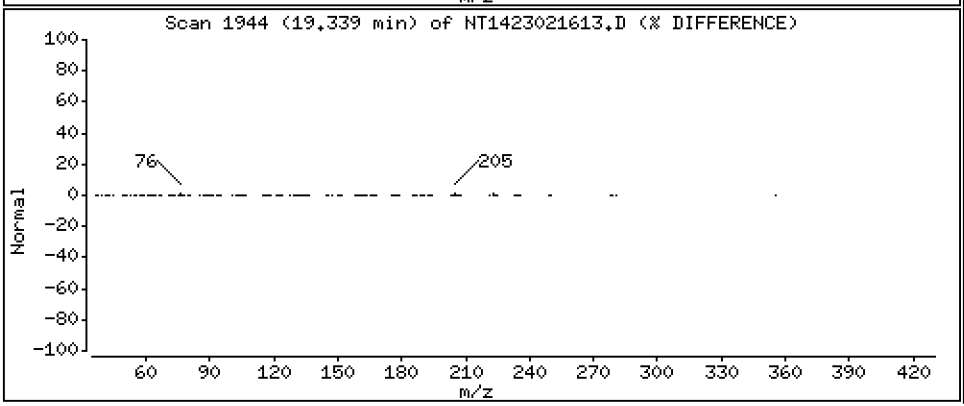












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

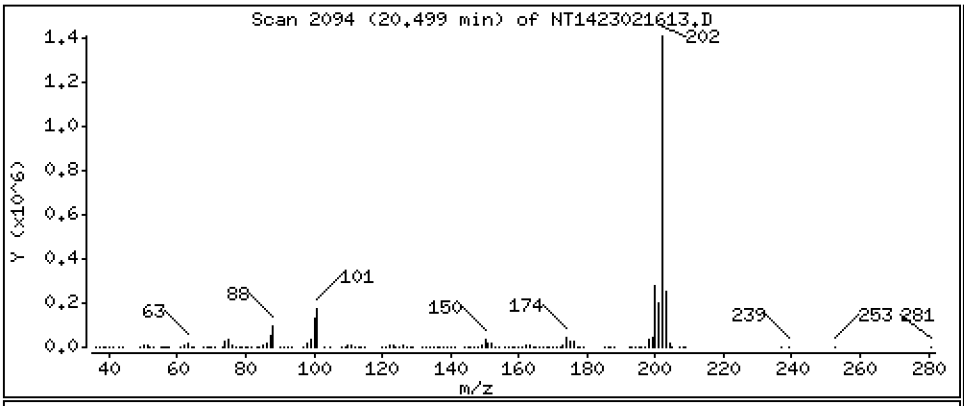
Operator: DSD

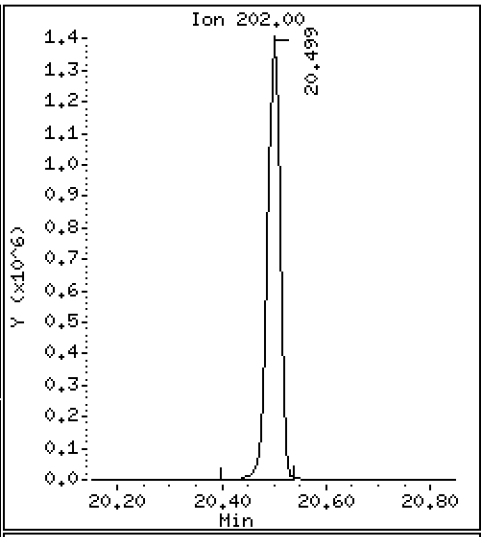
Column phase: ZB-5msi

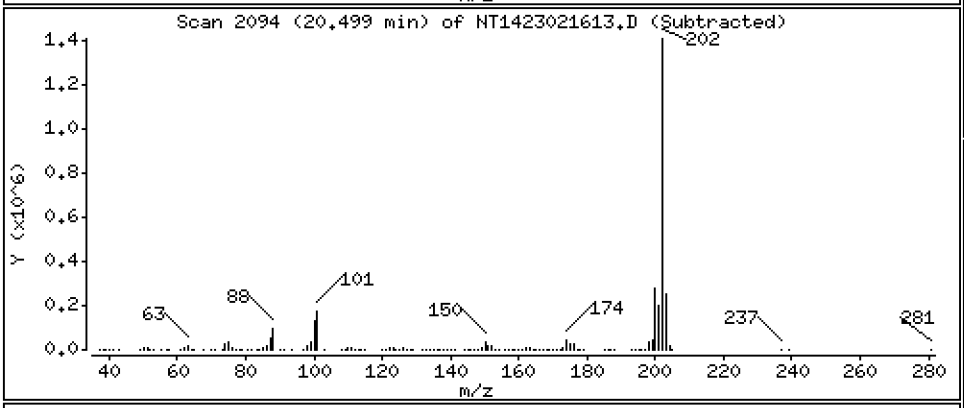
Column diameter: 0.25

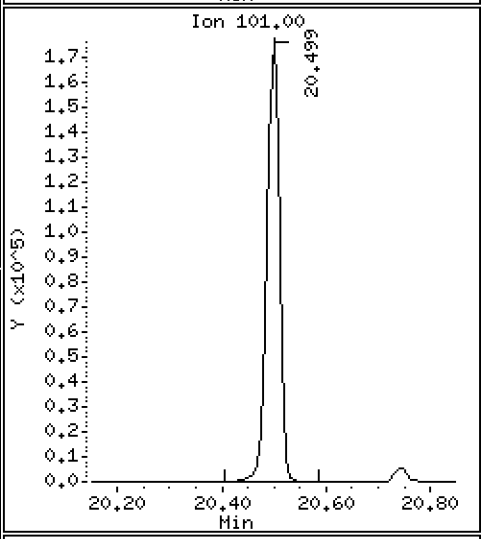
64 Fluoranthene

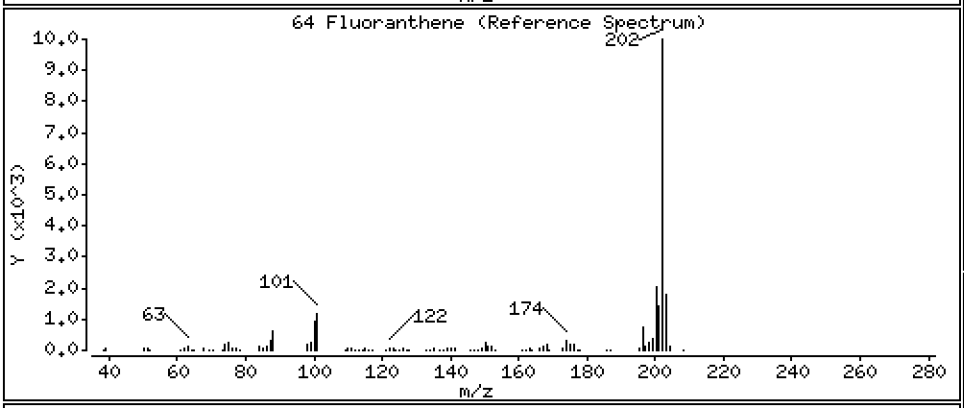
Concentration: 4.682 ug/mL

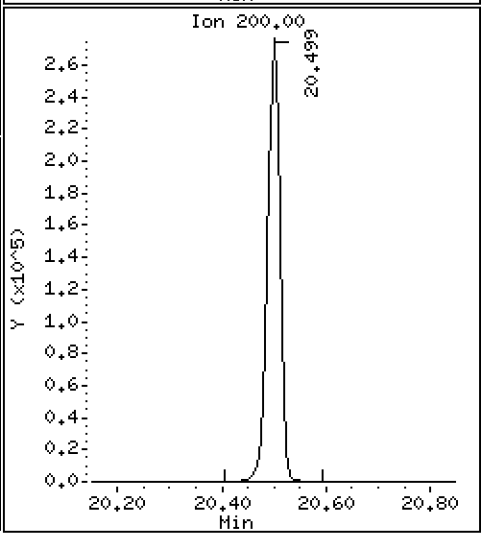


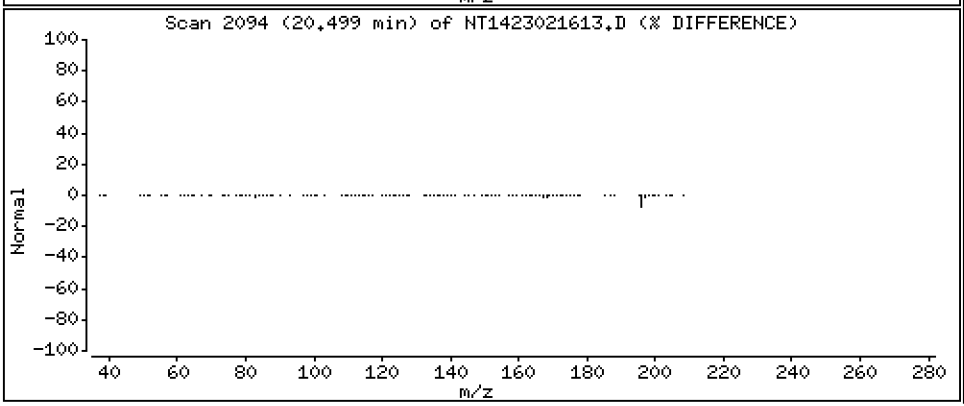












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

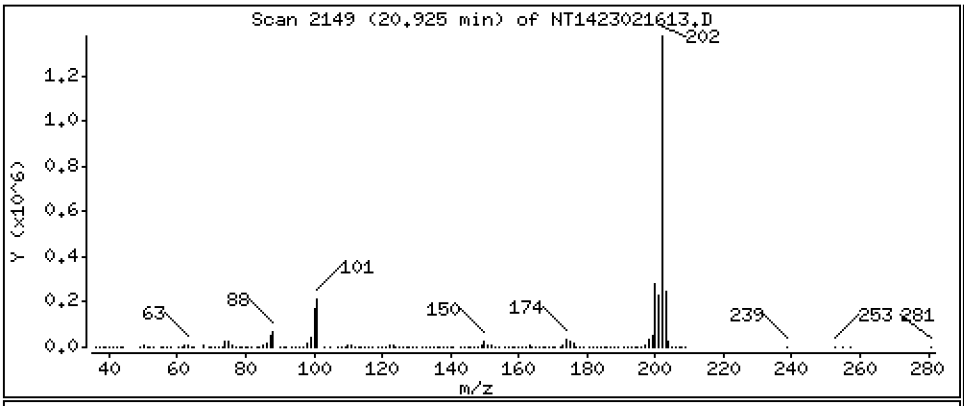
Operator: DSD

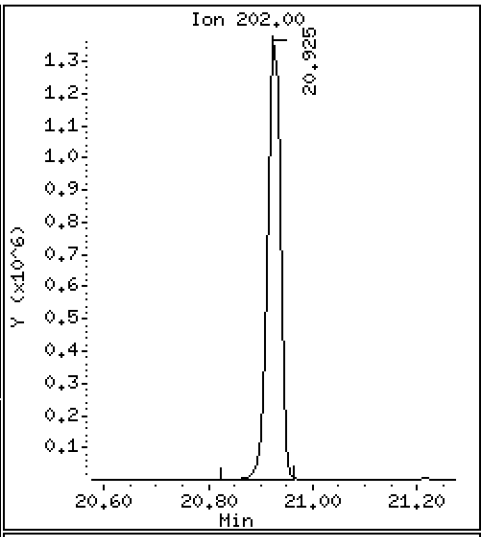
Column phase: ZB-5msi

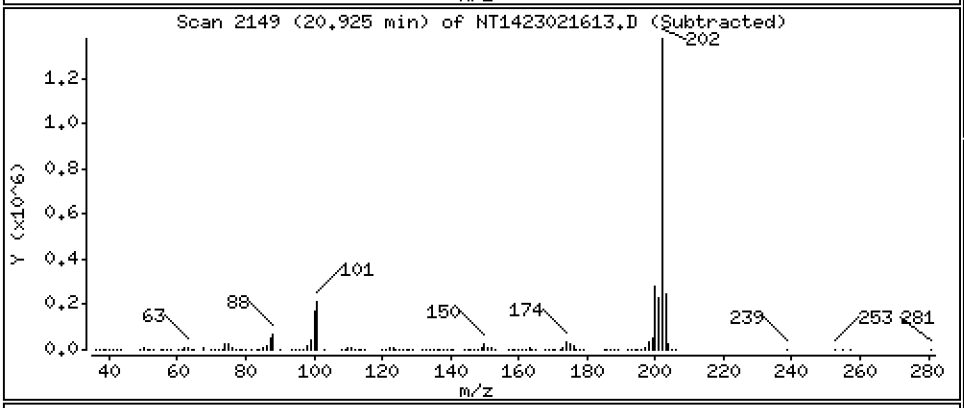
Column diameter: 0.25

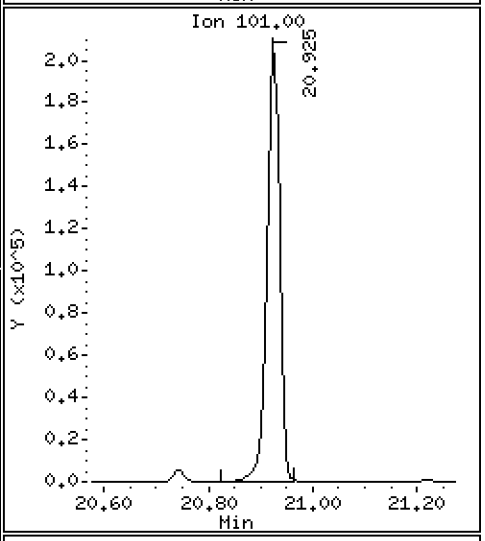
65 Pyrene

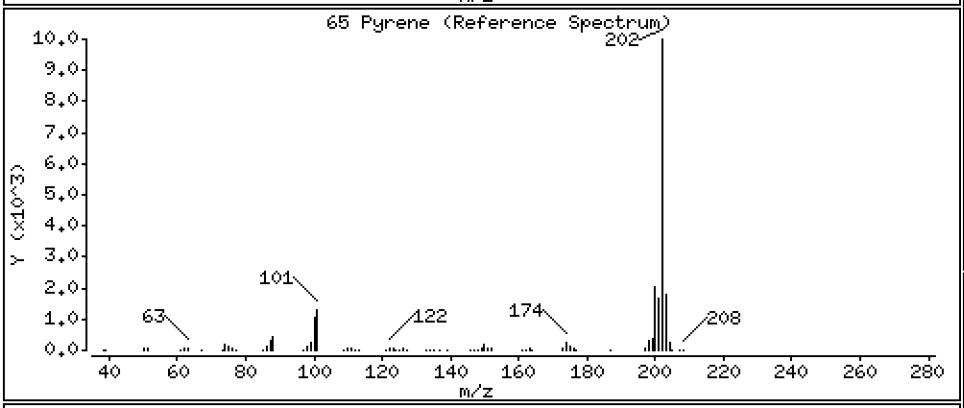
Concentration: 4.400 ug/mL

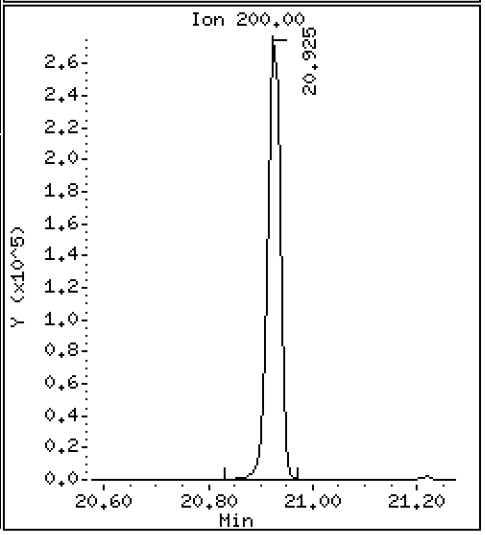


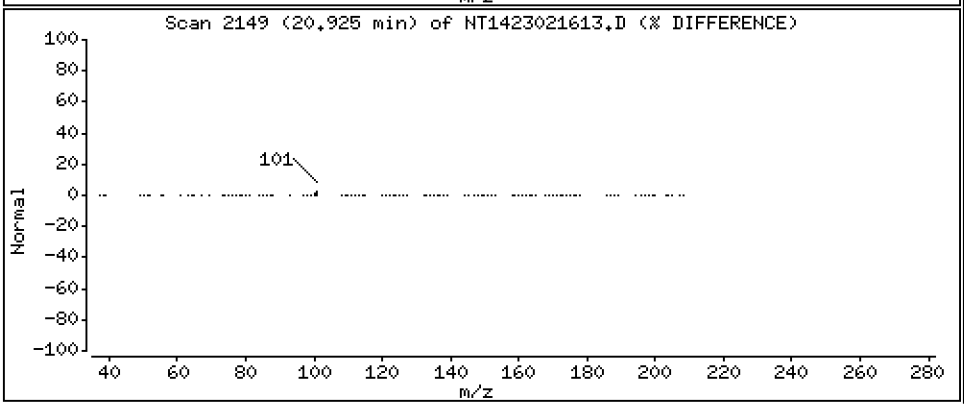












Date : 16-FEB-2023 21:18

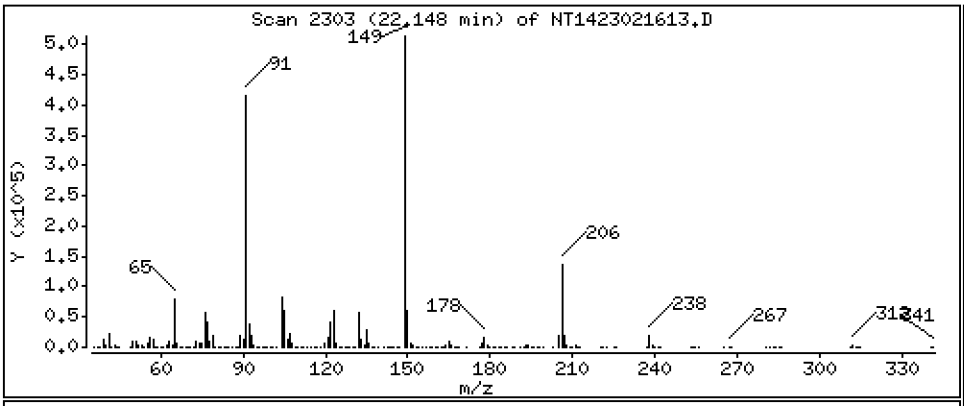
Client ID: Instrument: nt14.i

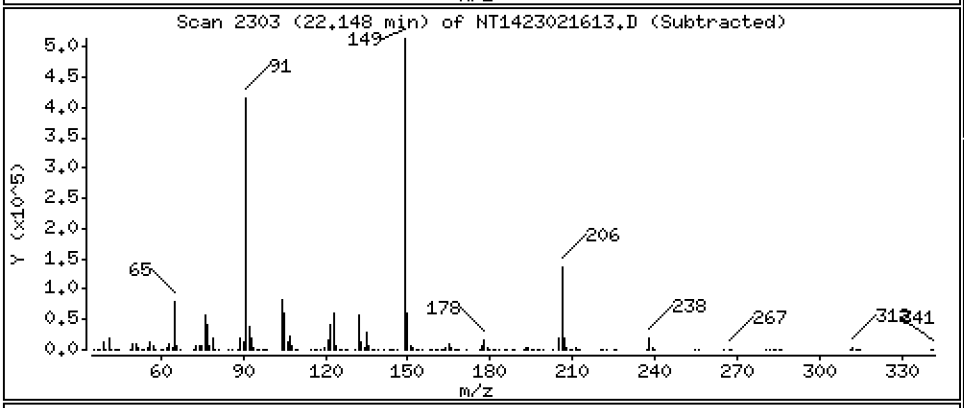
Sample Info: SLB0234-SCV1

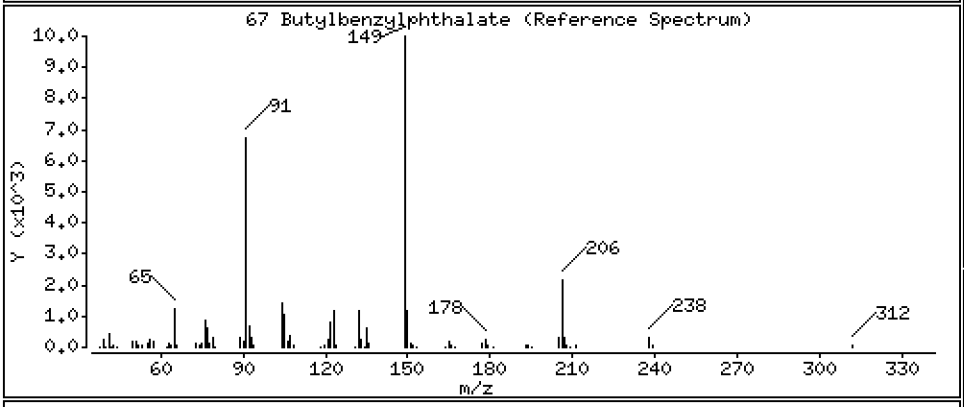
Operator: DSD

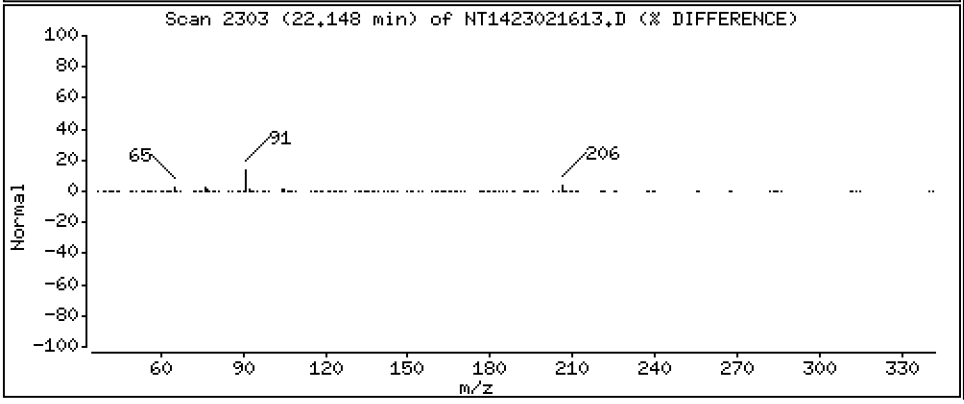
Column phase: ZB-5msi Column diameter: 0.25

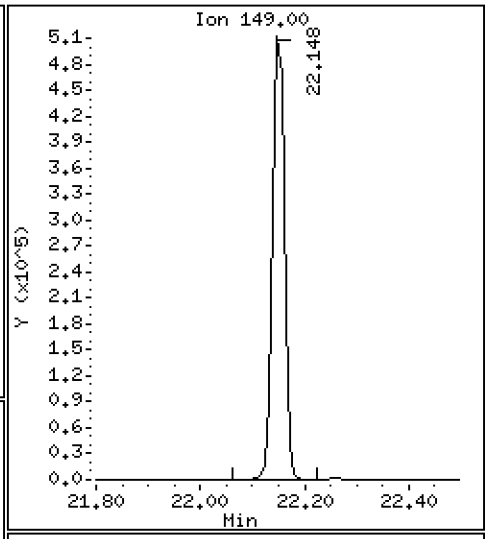
67 Butylbenzylphthalate Concentration: 4.568 ug/mL

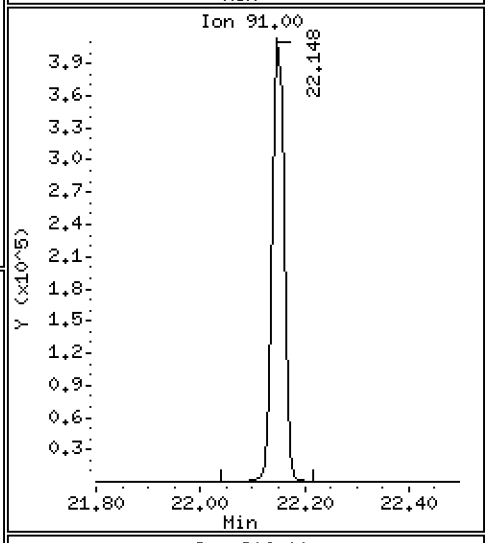


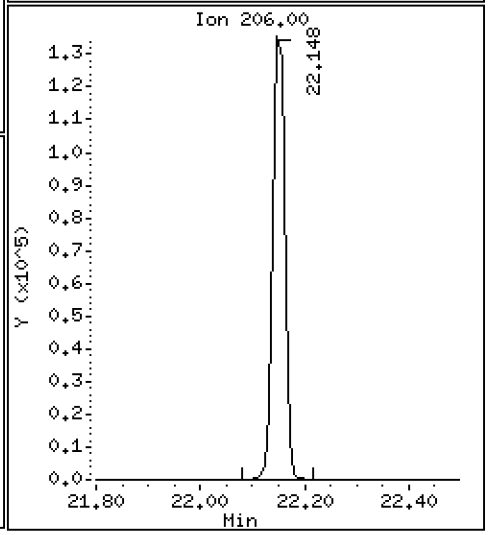












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

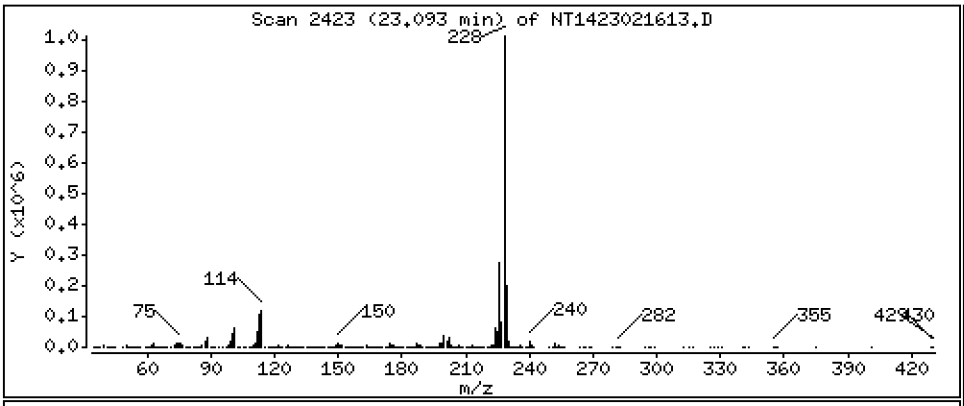
Operator: DSD

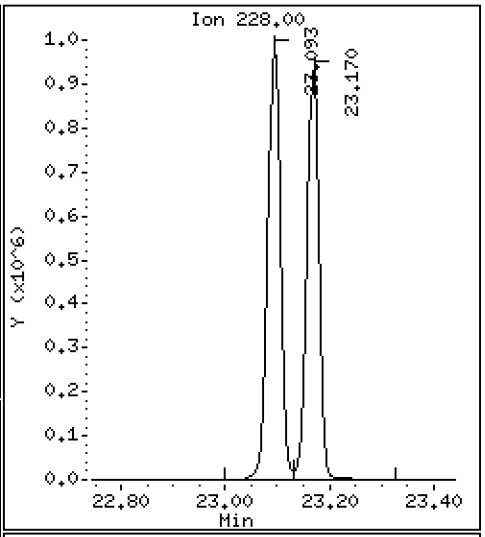
Column phase: ZB-5msi

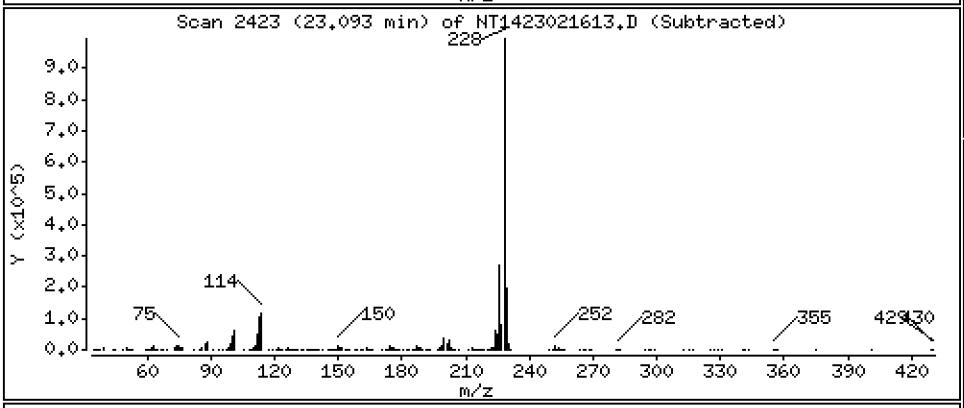
Column diameter: 0.25

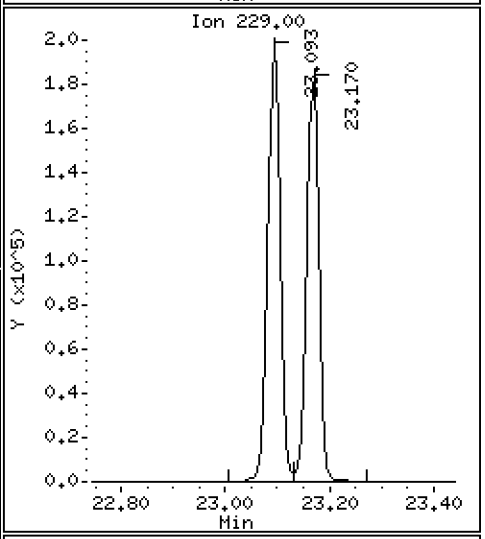
68 Benzo(a)anthracene

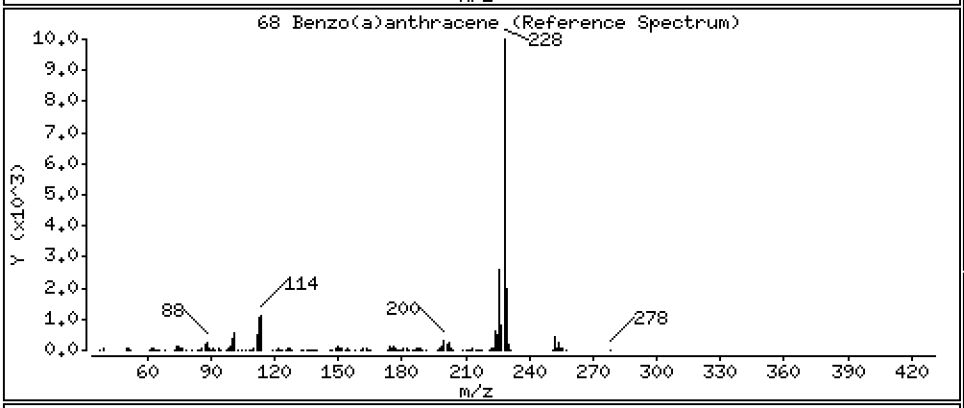
Concentration: 4.530 ug/mL

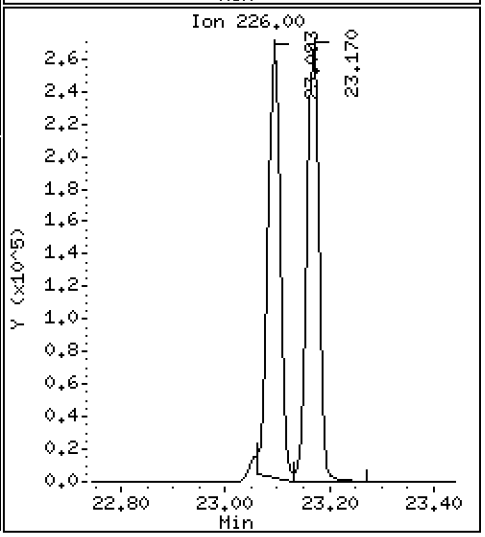


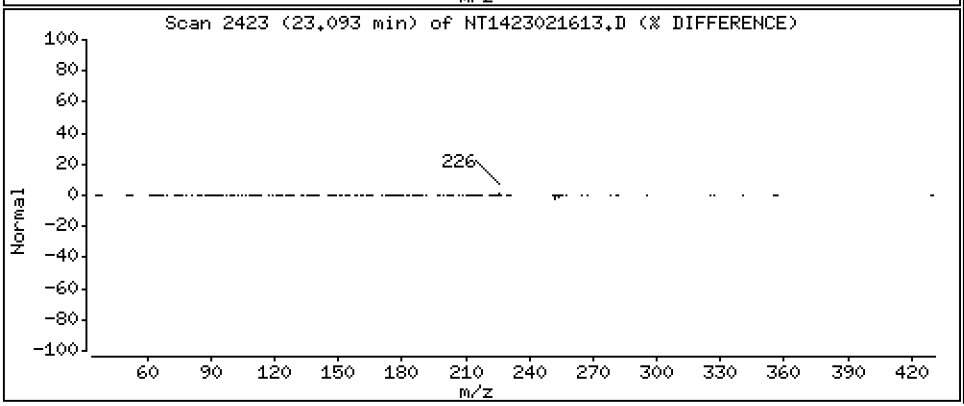












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

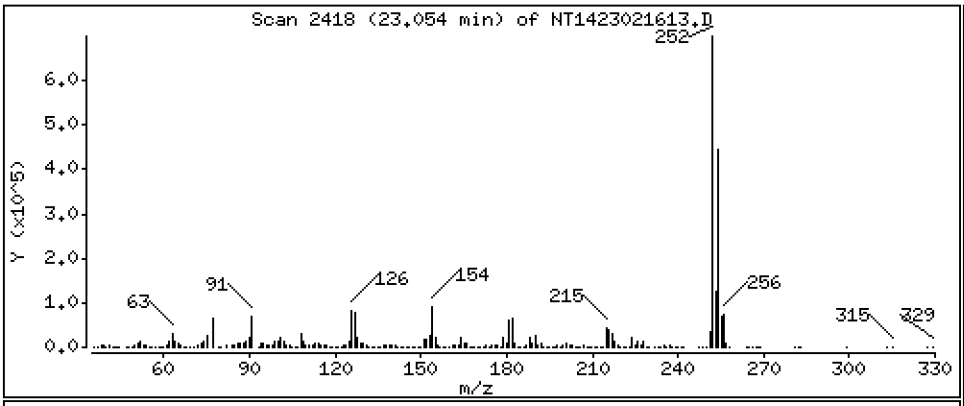
Operator: DSD

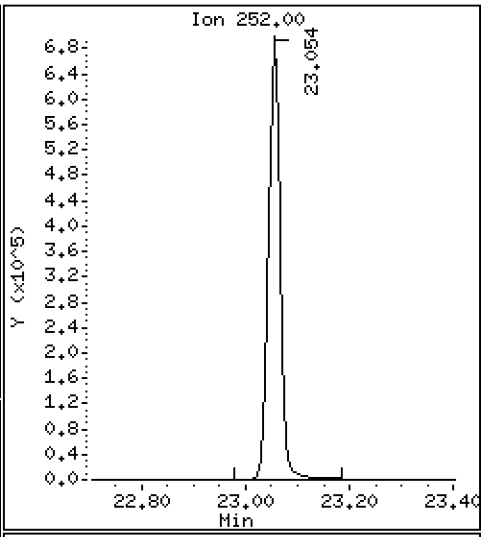
Column phase: ZB-5msi

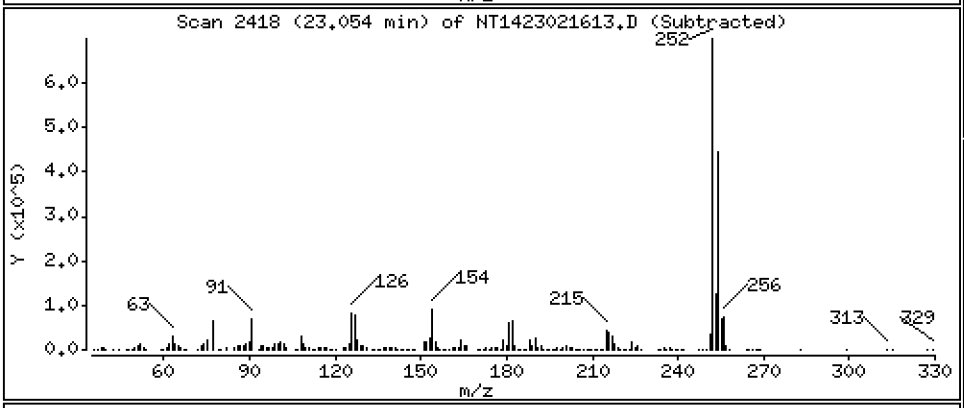
Column diameter: 0.25

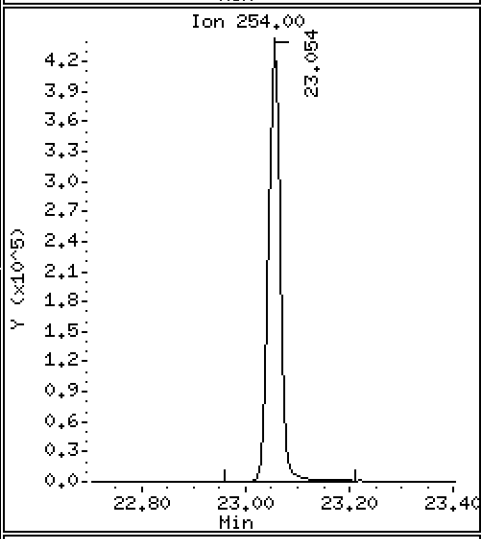
70 3,3'-Dichlorobenzidine

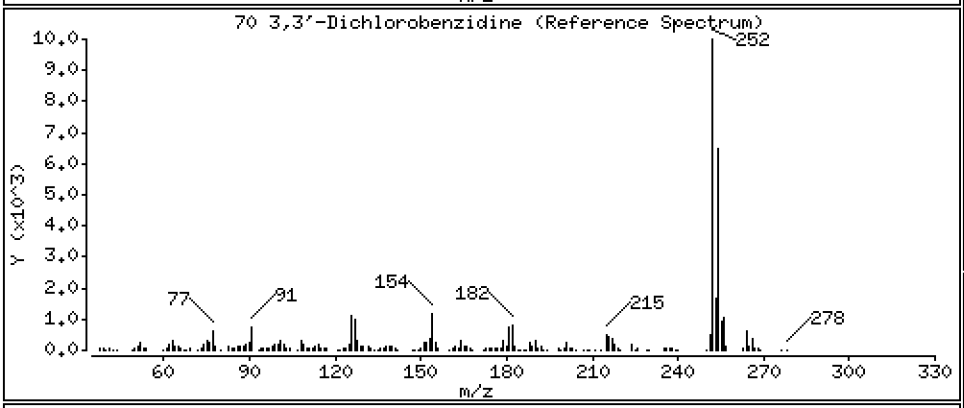
Concentration: 9.328 ug/mL

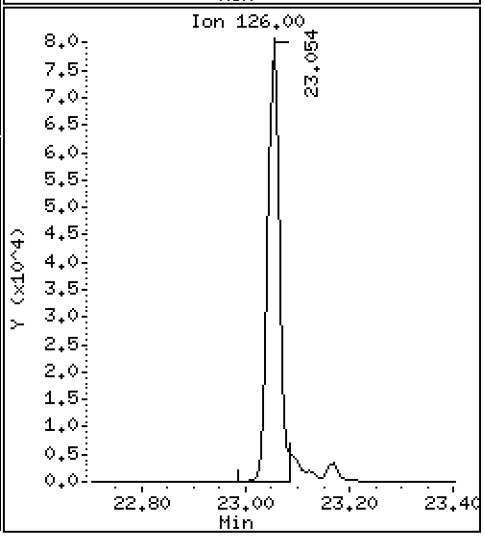


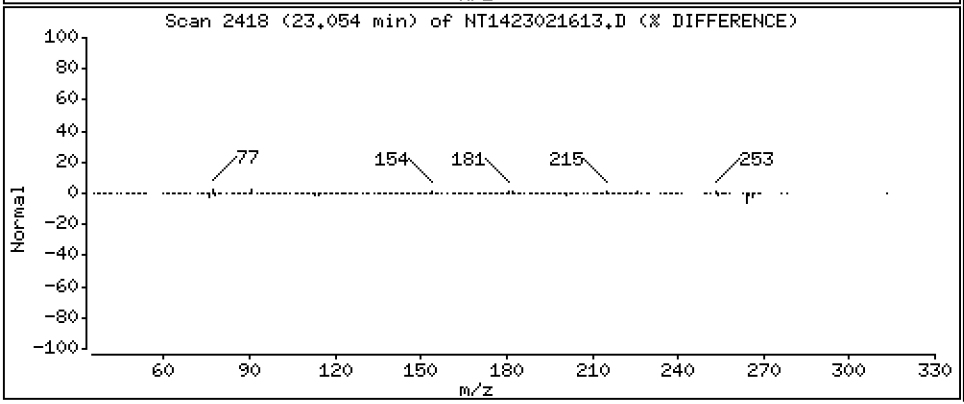












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

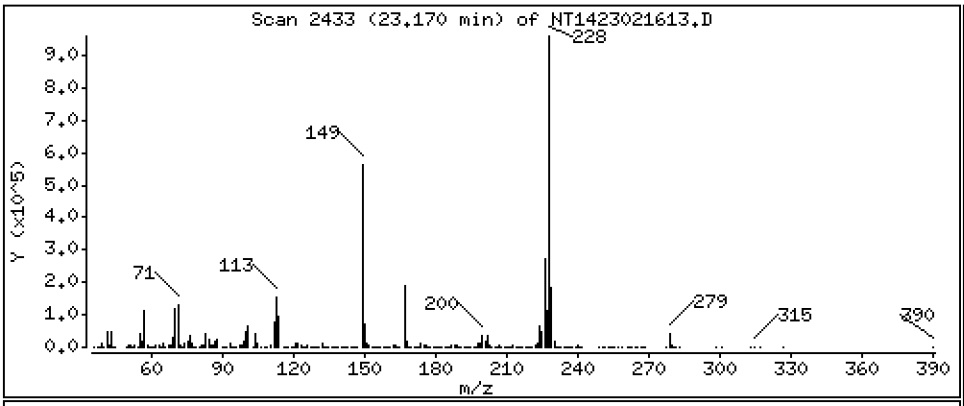
Operator: DSD

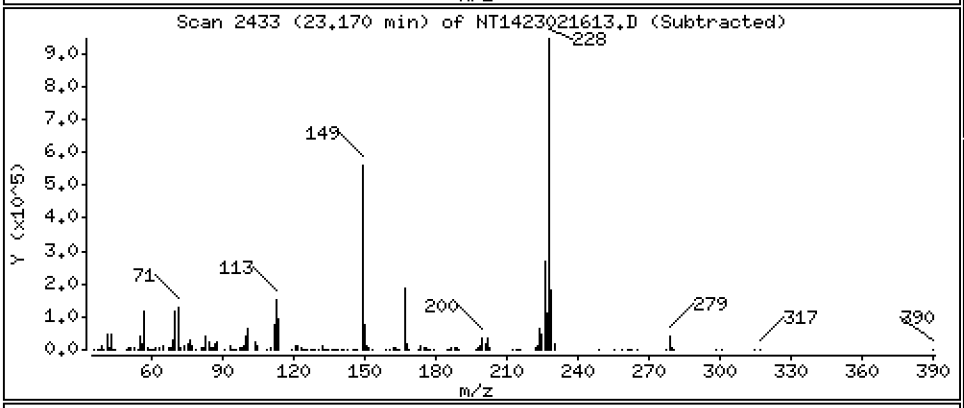
Column phase: ZB-5msi

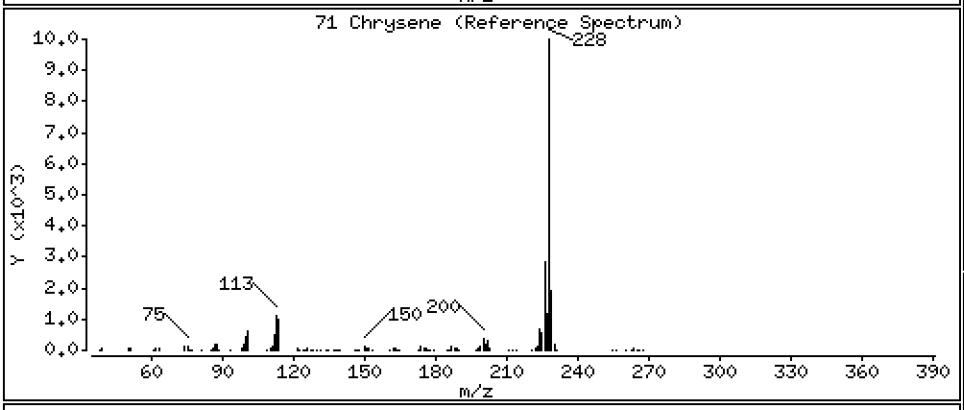
Column diameter: 0.25

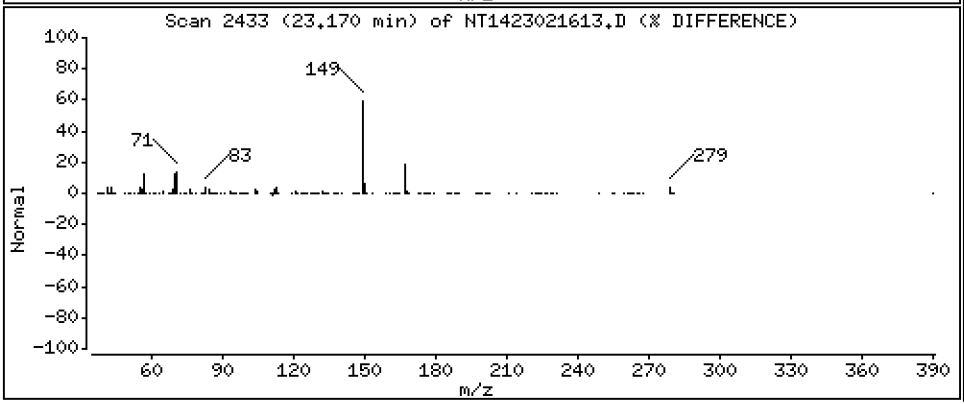
71 Chrysene

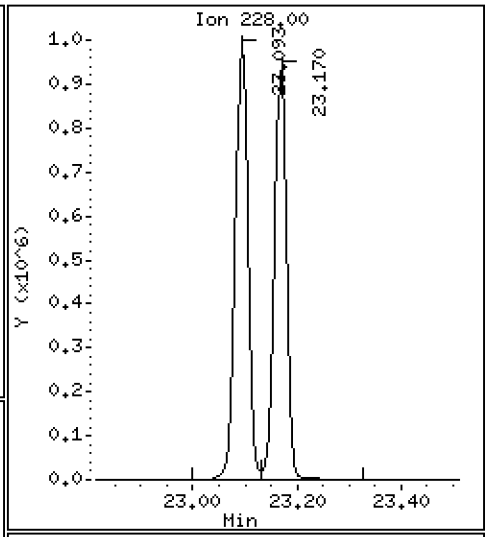
Concentration: 4.474 ug/mL

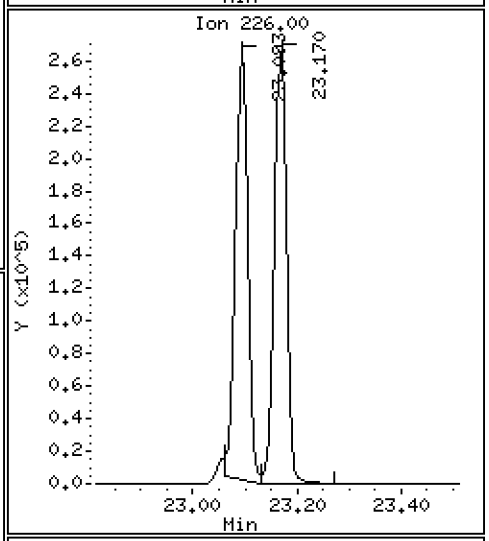


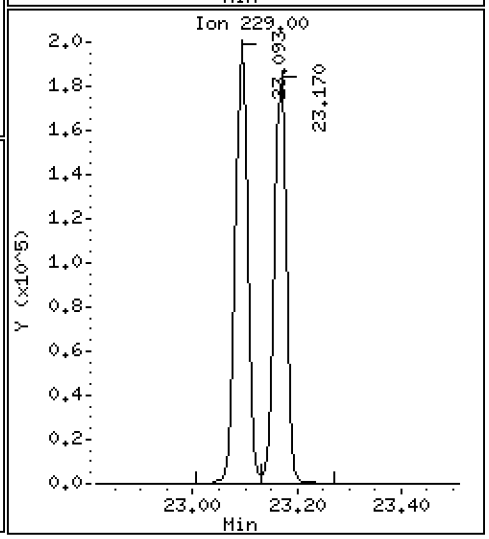












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

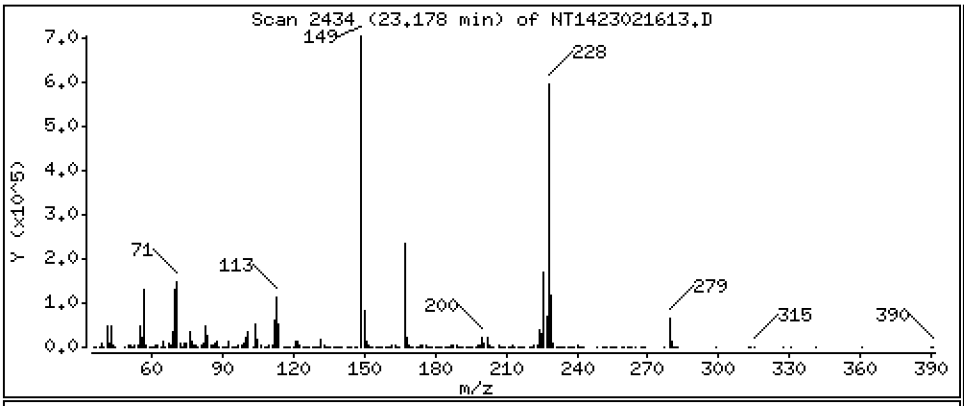
Operator: DSD

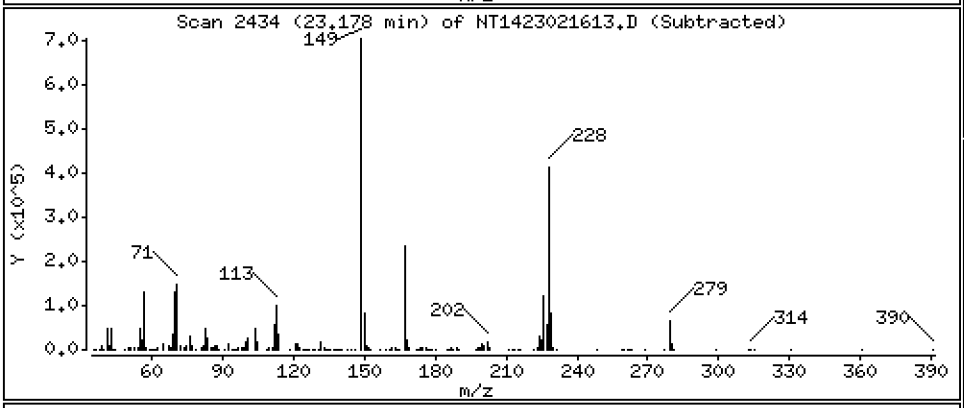
Column phase: ZB-5msi

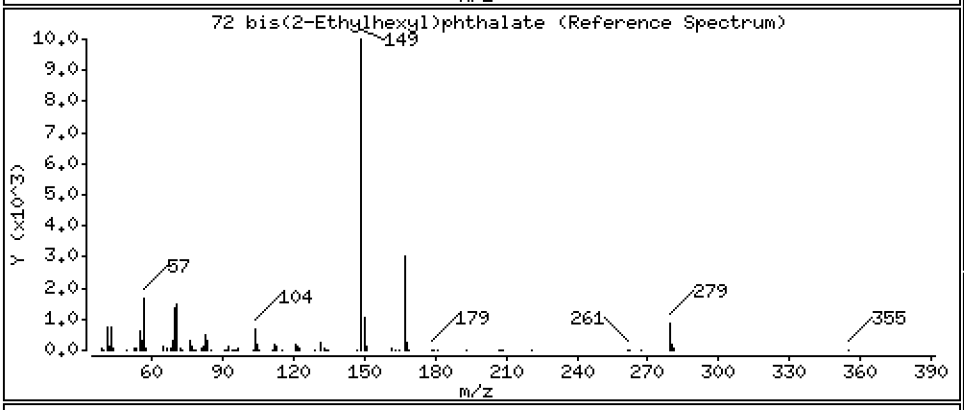
Column diameter: 0.25

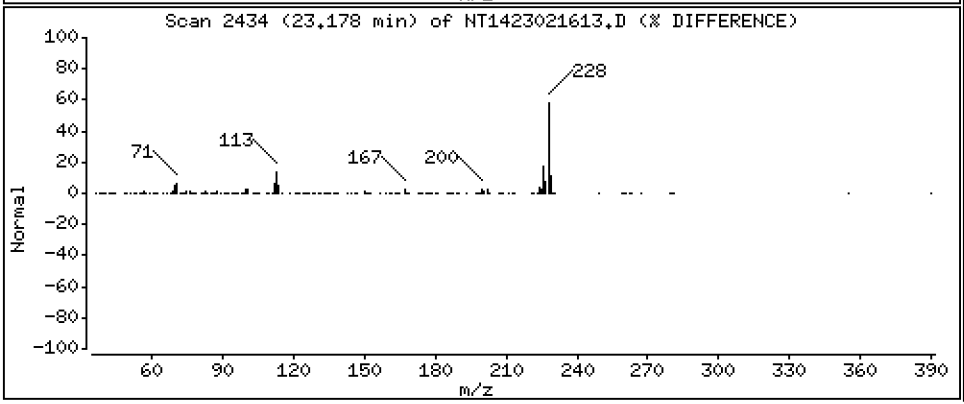
72 bis(2-Ethylhexyl)phthalate

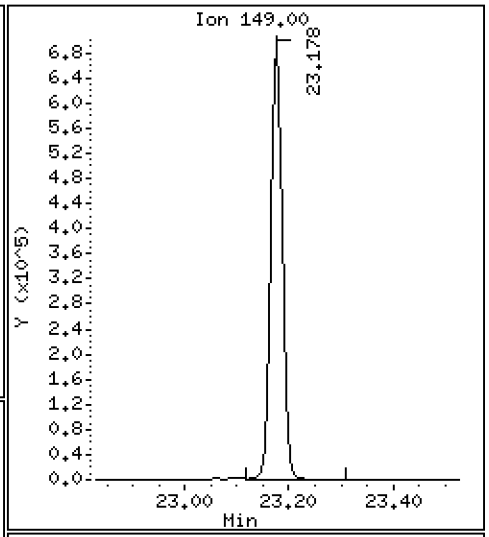
Concentration: 4.649 ug/mL

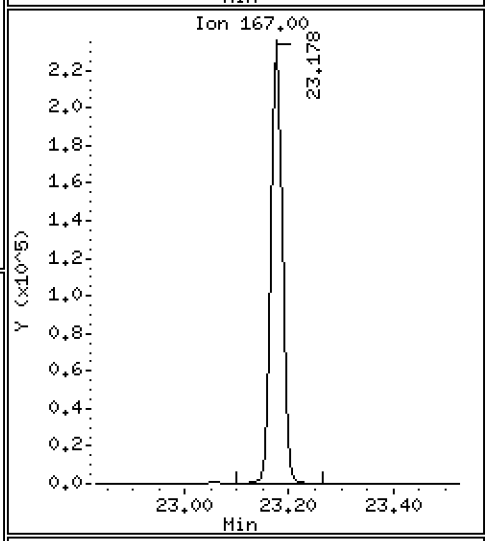


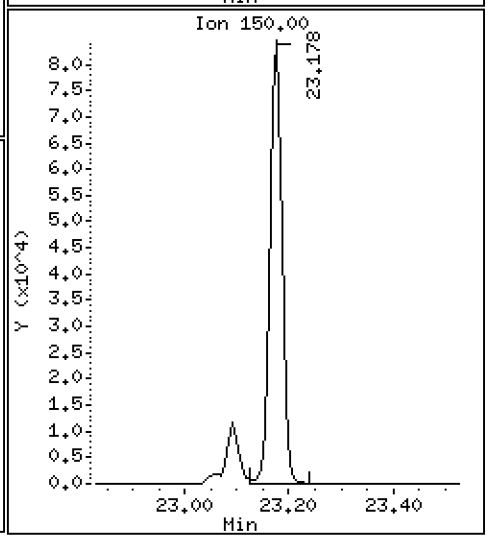












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

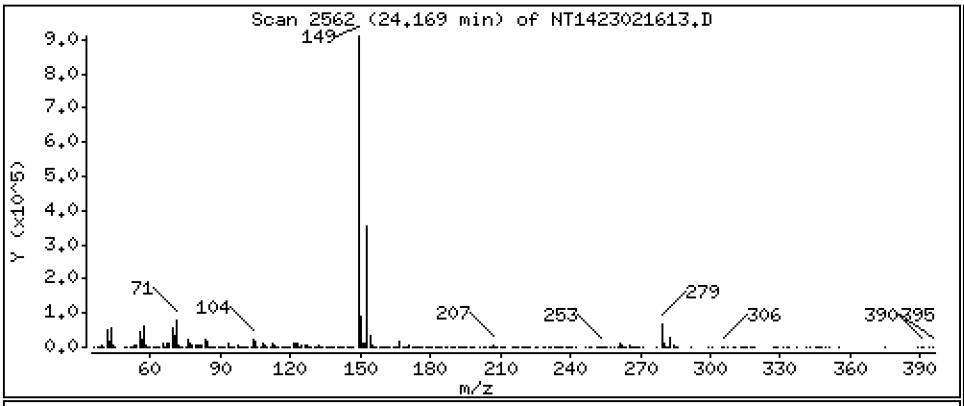
Operator: DSD

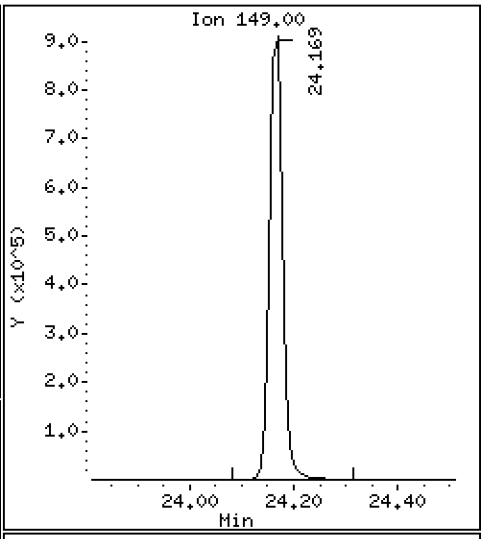
Column phase: ZB-5msi

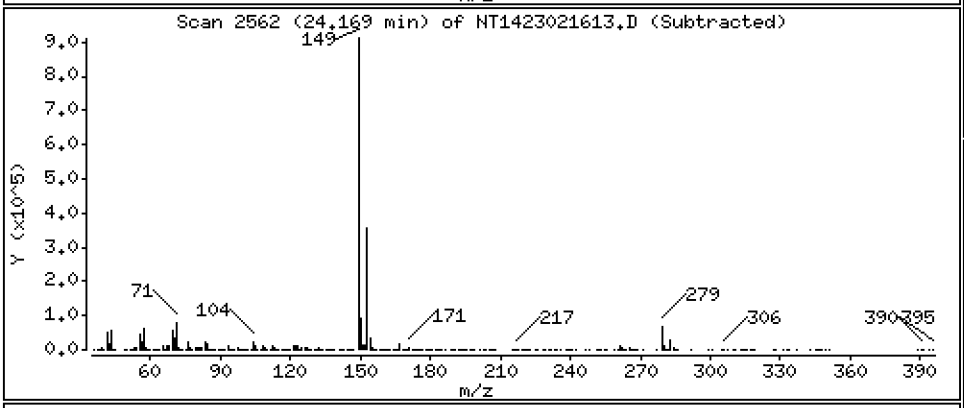
Column diameter: 0.25

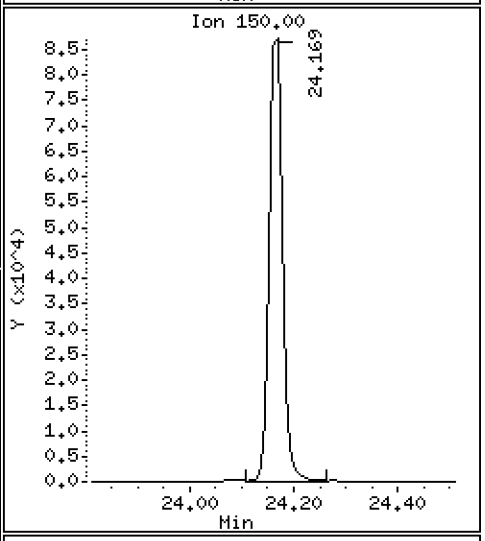
73 Di-n-octylphthalate

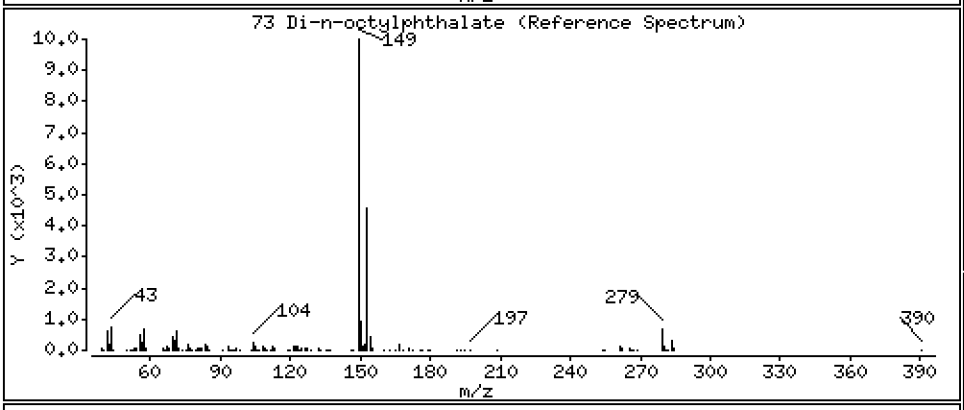
Concentration: 4.962 ug/mL

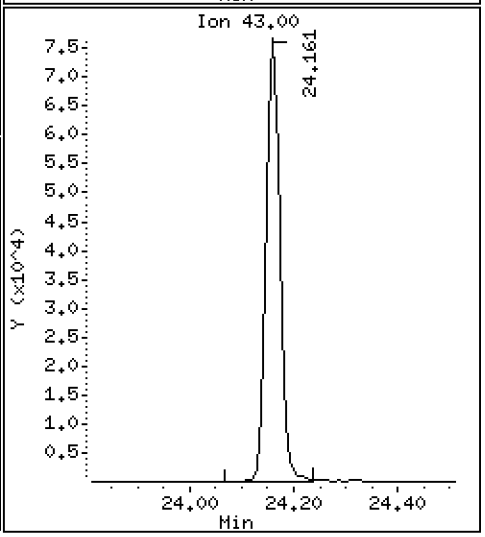


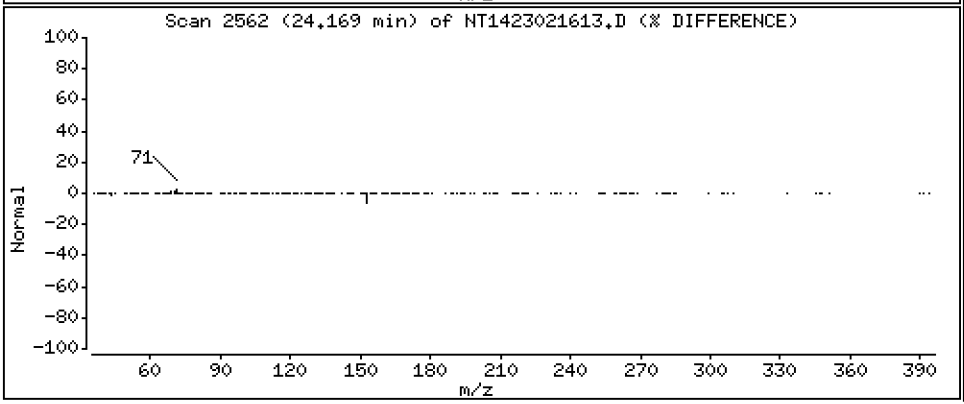












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

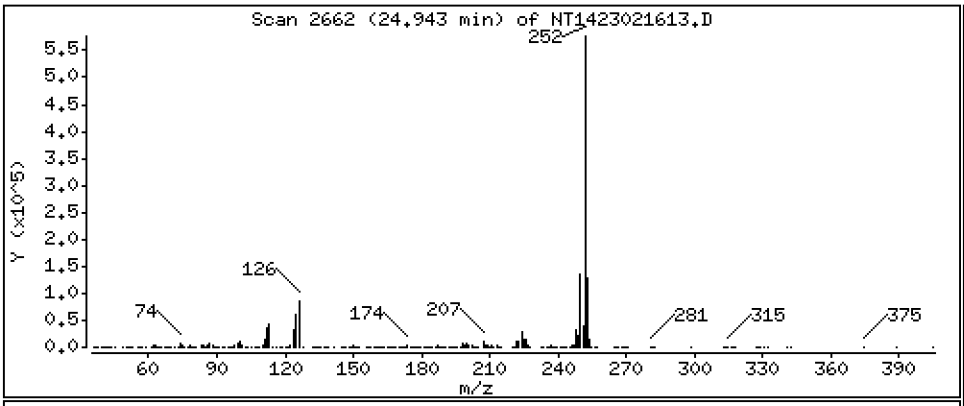
Operator: DSD

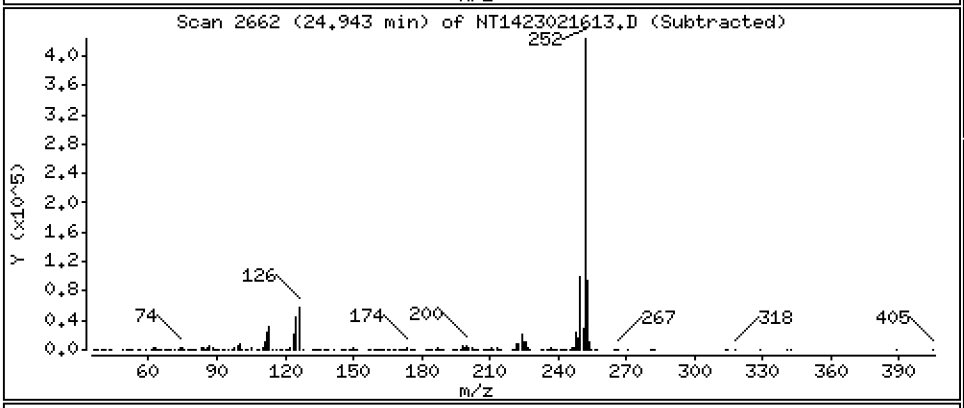
Column phase: ZB-5msi

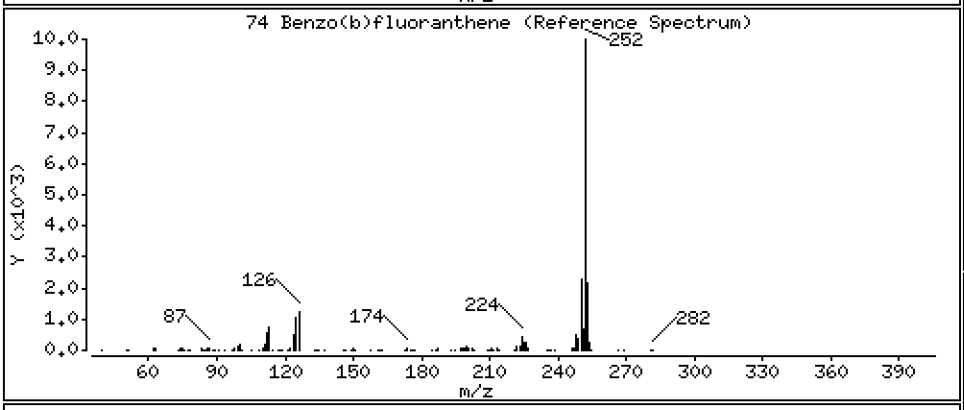
Column diameter: 0.25

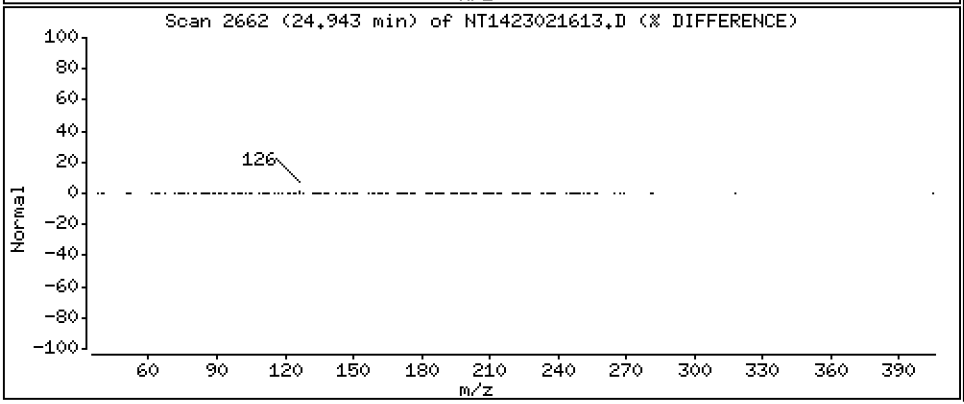
74 Benzo(b)fluoranthene

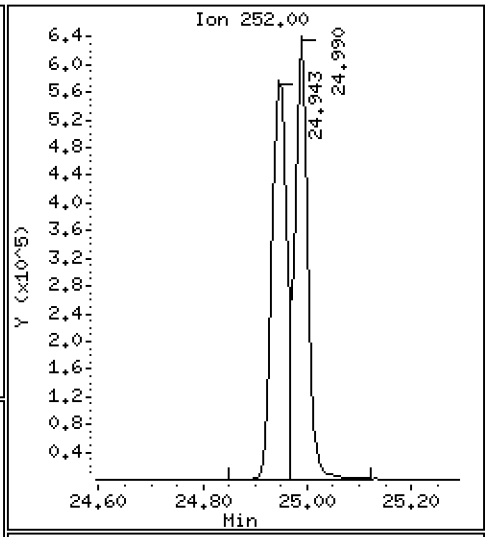
Concentration: 4.813 ug/mL

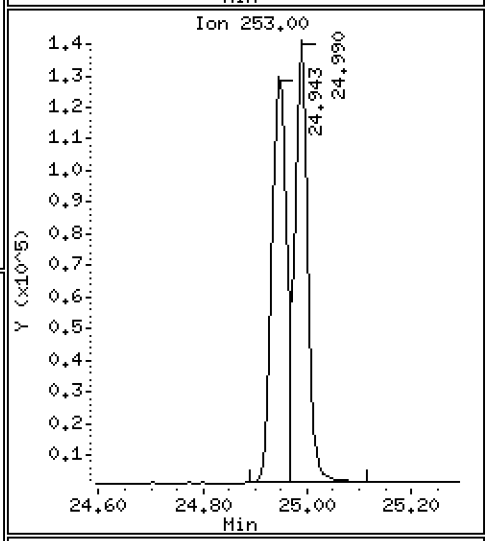


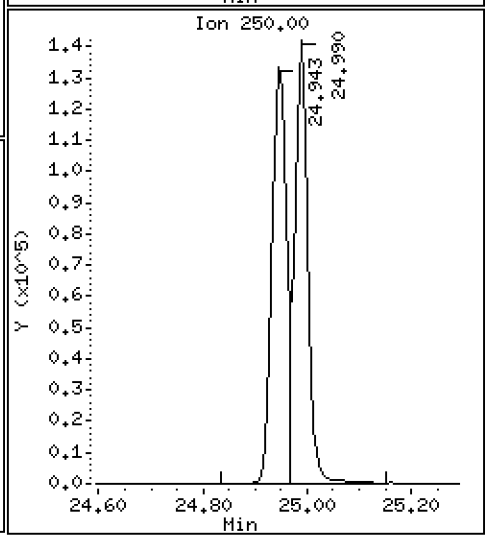












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

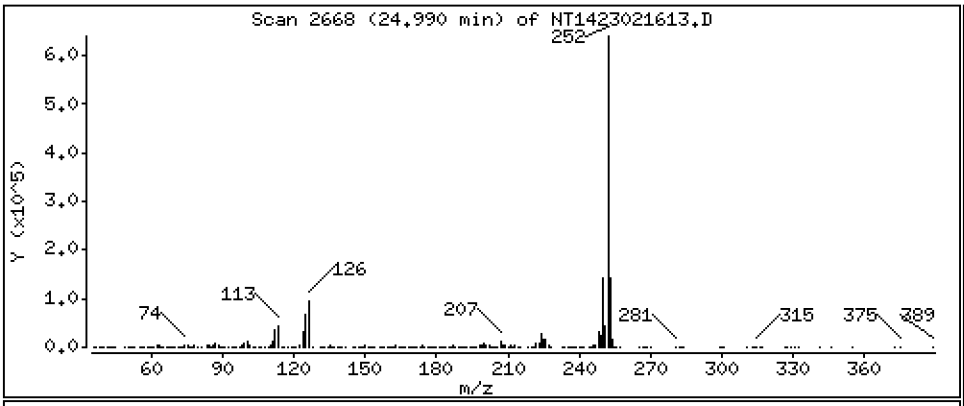
Operator: DSD

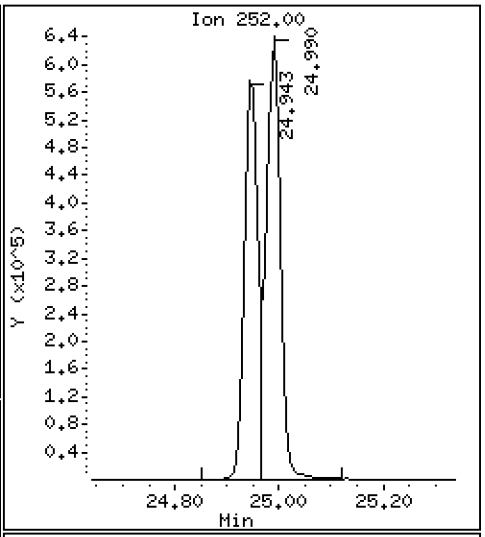
Column phase: ZB-5msi

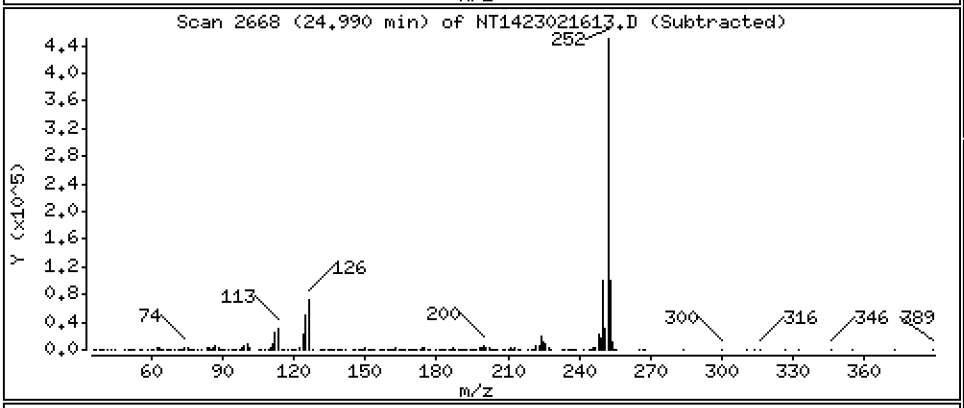
Column diameter: 0.25

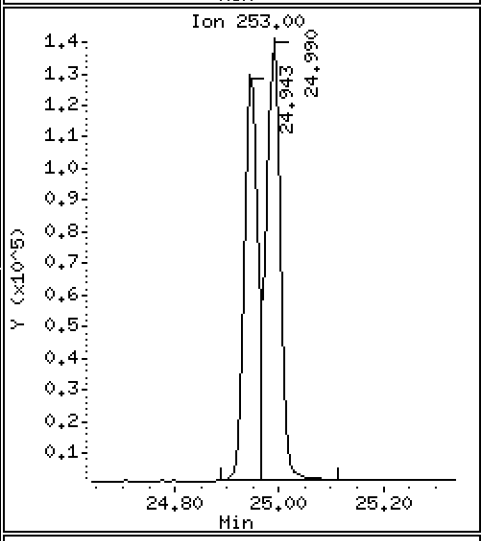
75 Benzo(k)fluoranthene

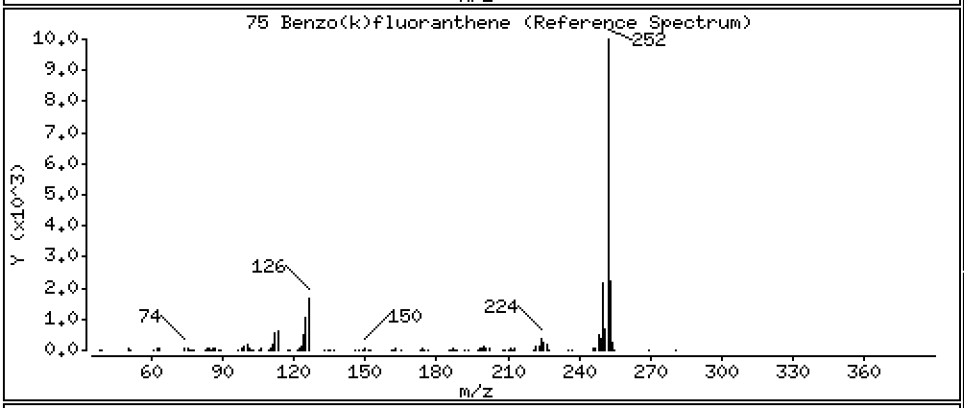
Concentration: 4.838 ug/mL

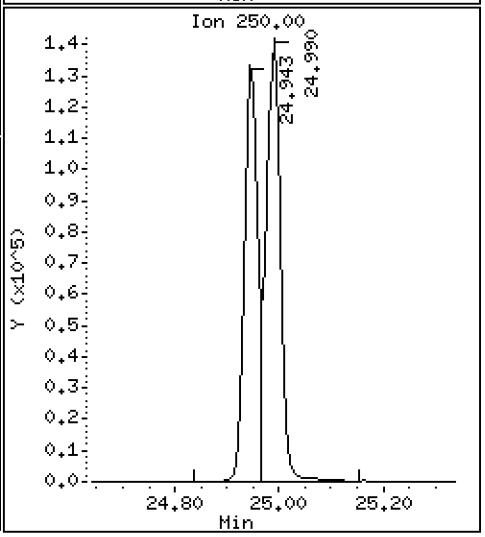


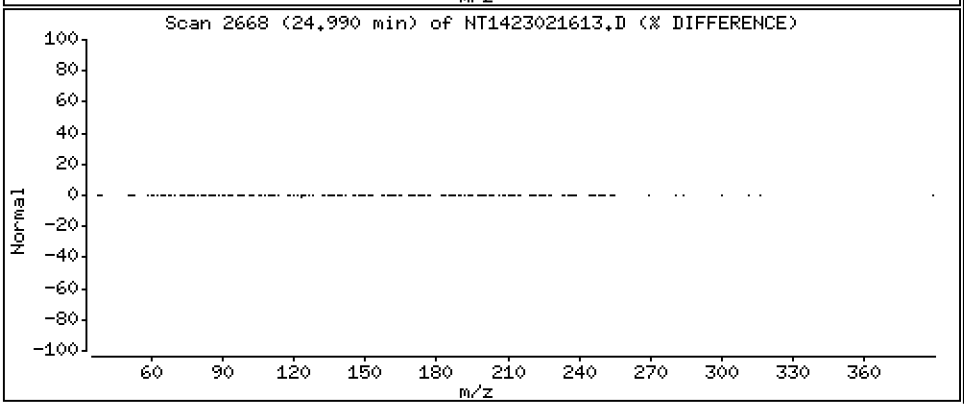












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

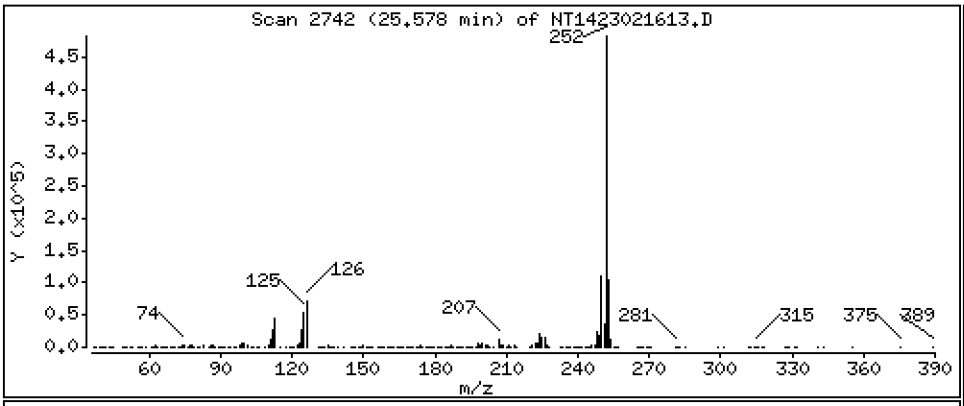
Operator: DSD

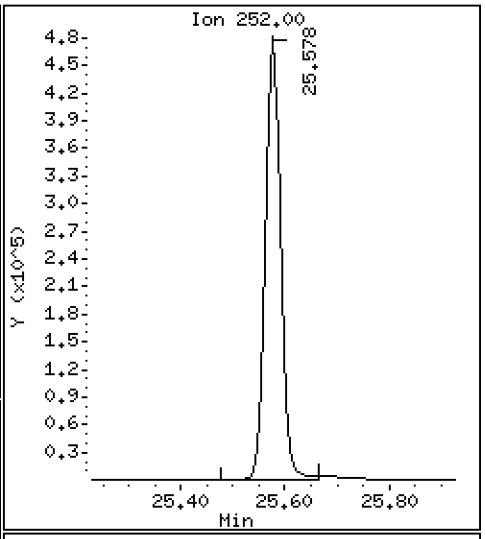
Column phase: ZB-5msi

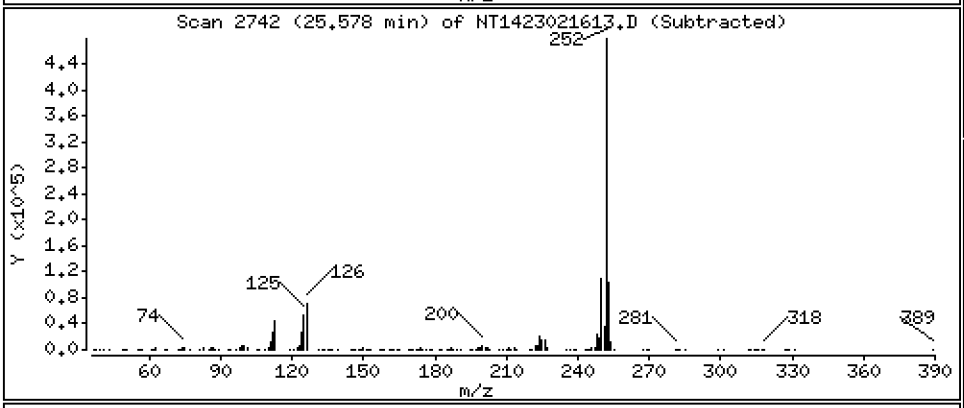
Column diameter: 0.25

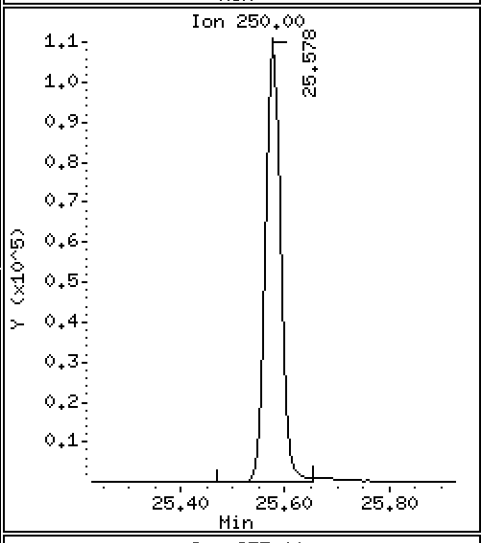
76 Benzo(a)pyrene

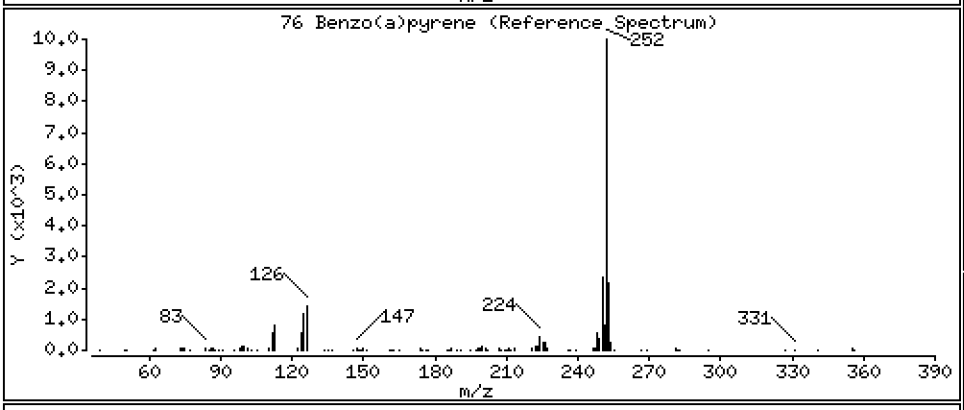
Concentration: 4.607 ug/mL

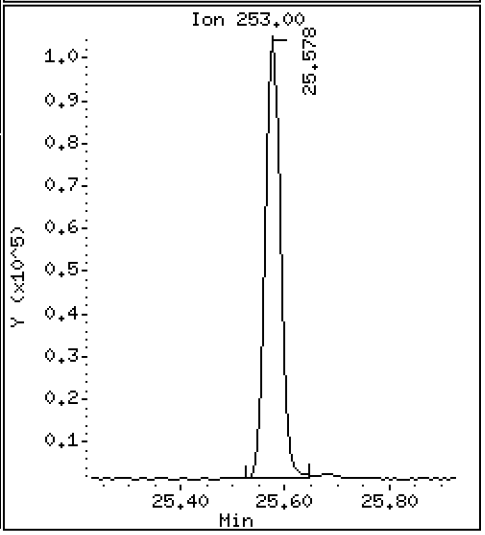


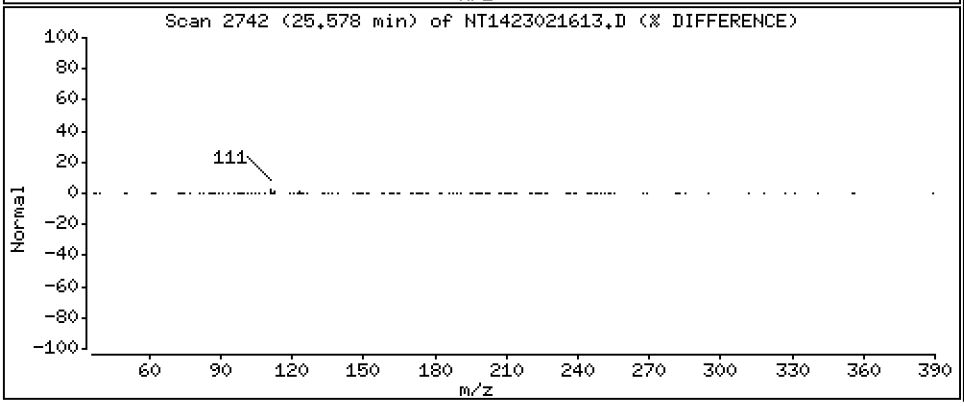












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

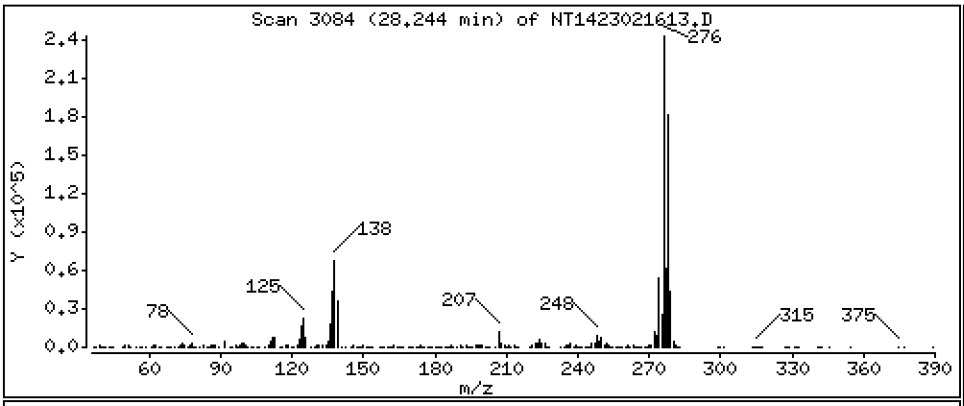
Operator: DSD

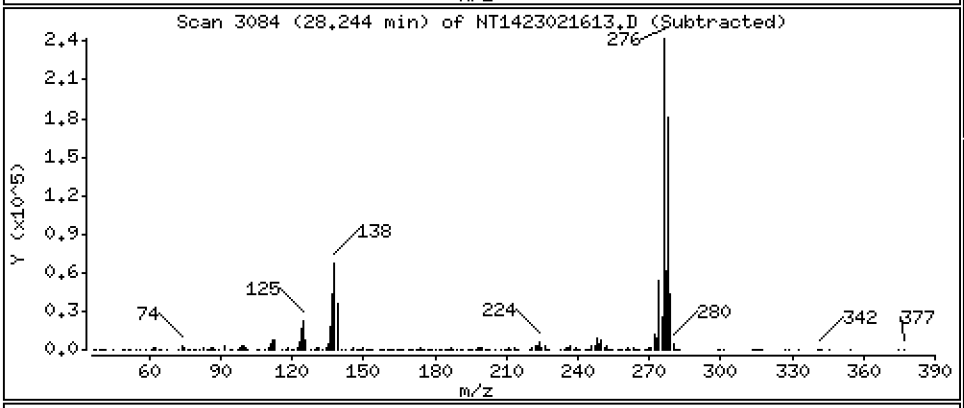
Column phase: ZB-5msi

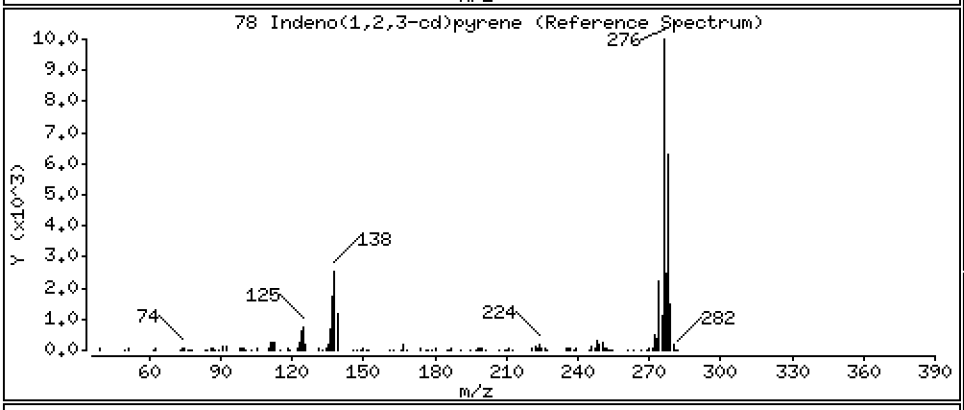
Column diameter: 0.25

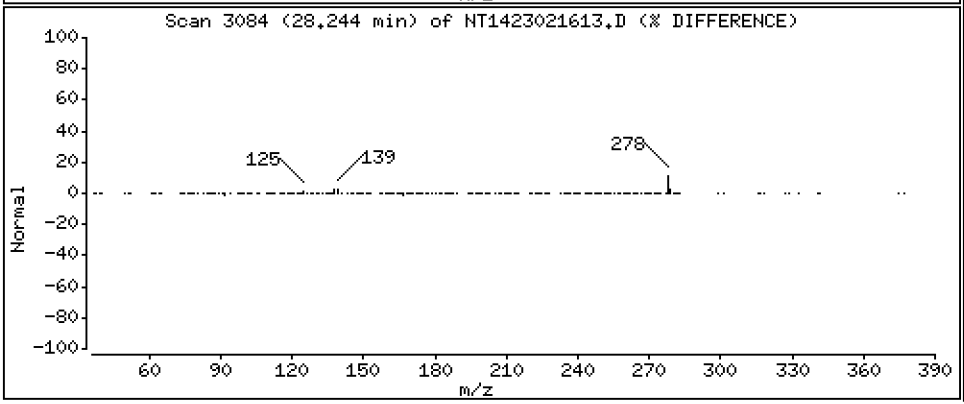
78 Indeno(1,2,3-cd)pyrene

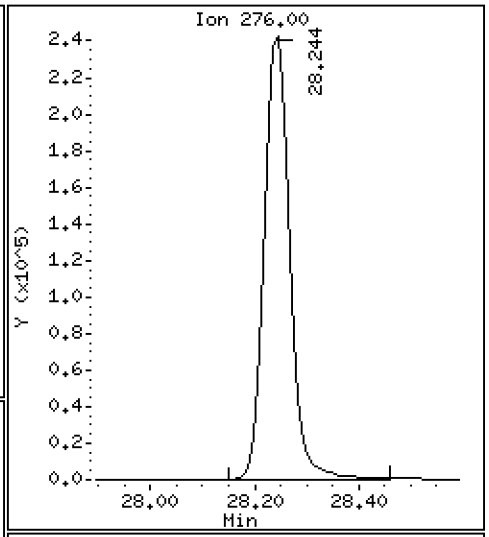
Concentration: 4.395 ug/mL

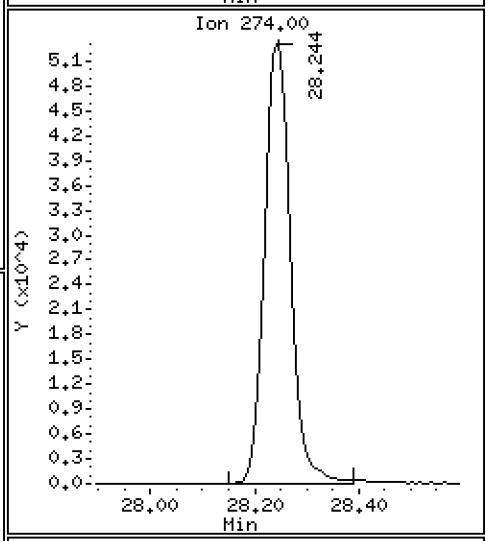


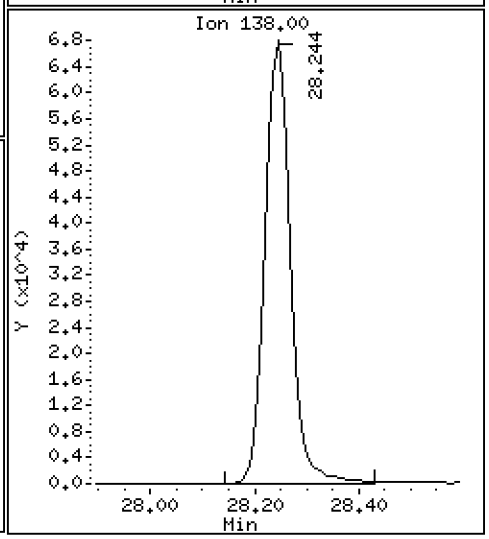












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

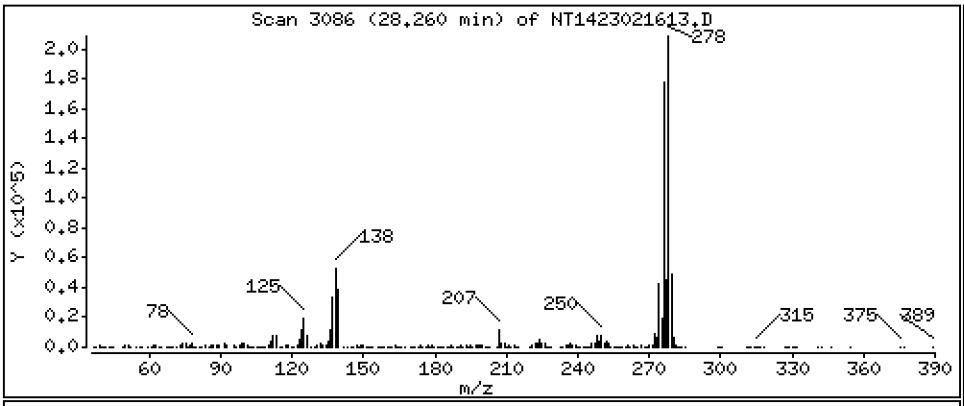
Operator: DSD

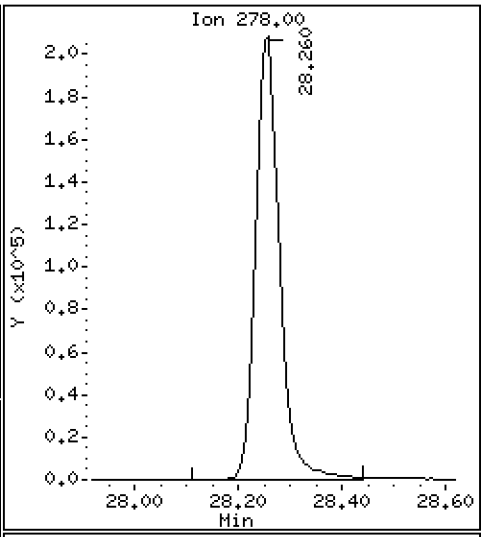
Column phase: ZB-5msi

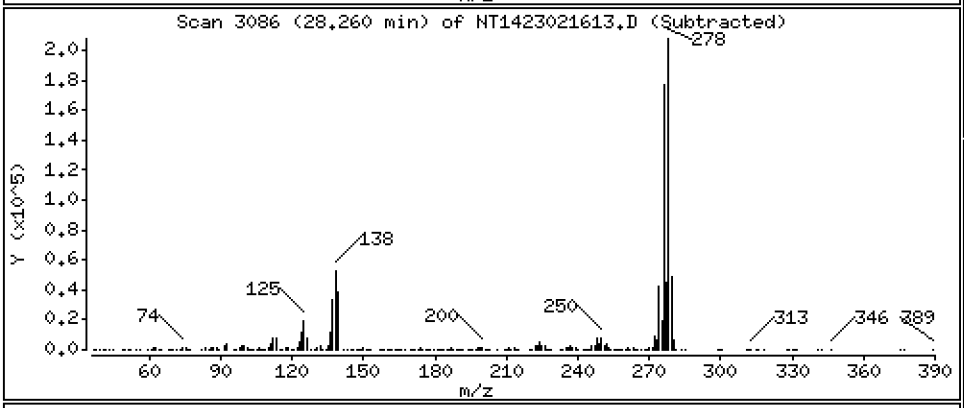
Column diameter: 0.25

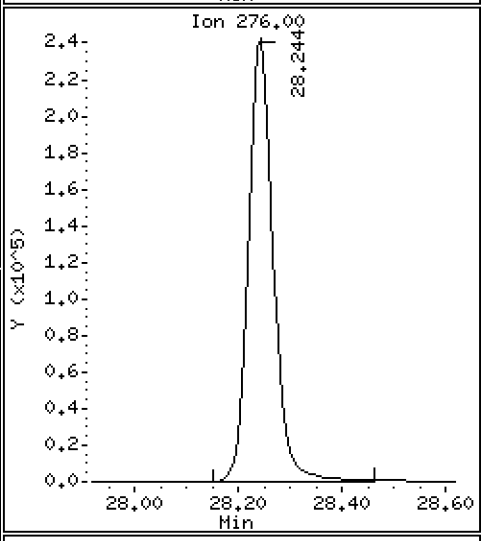
79 Dibenzo(a,h)anthracene

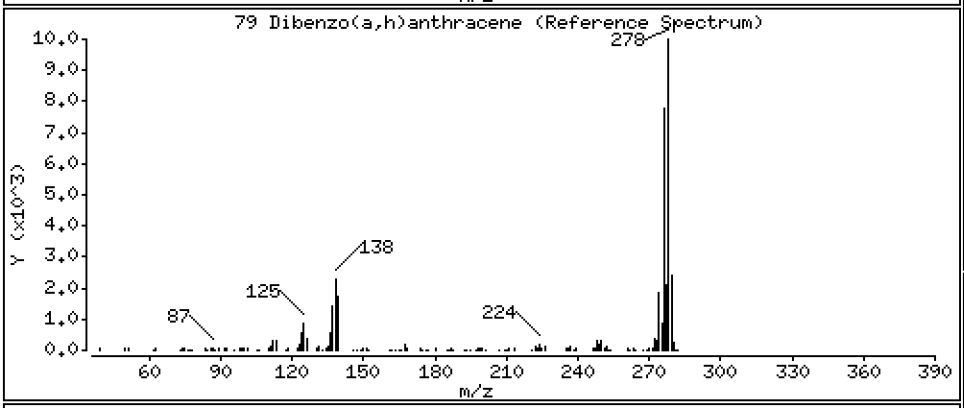
Concentration: 4.365 ug/mL

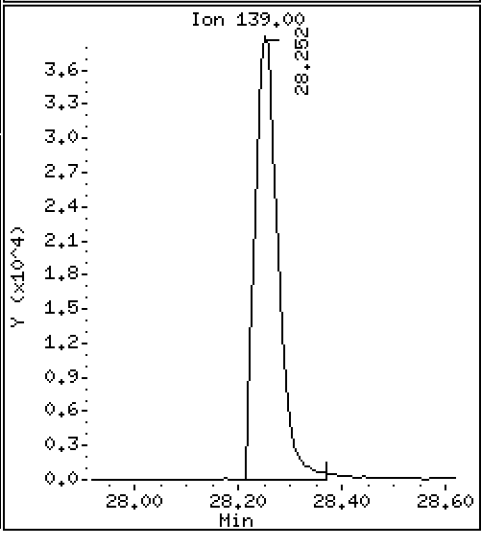


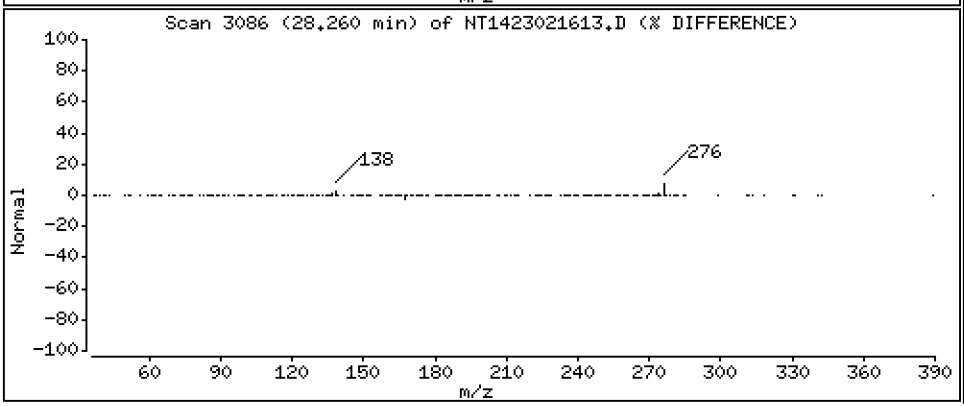












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

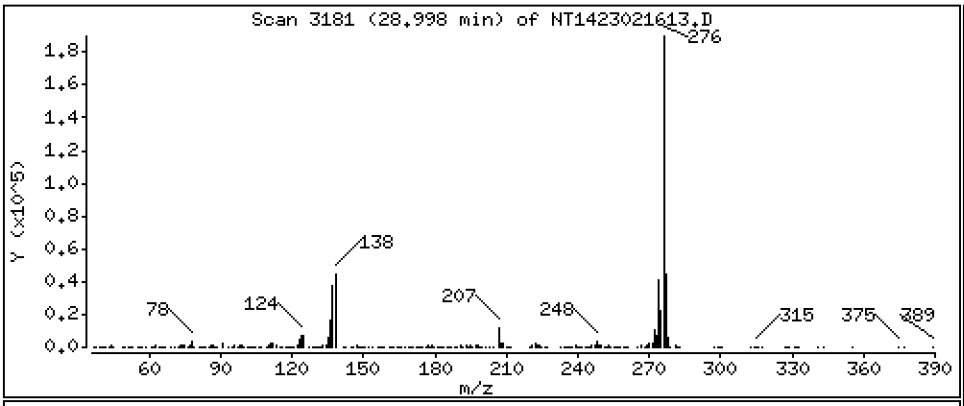
Operator: DSD

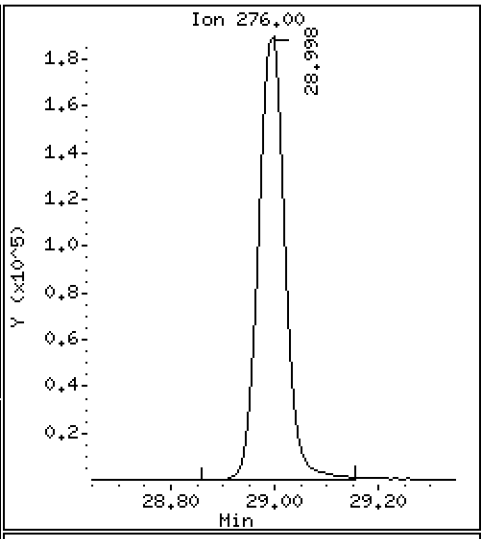
Column phase: ZB-5msi

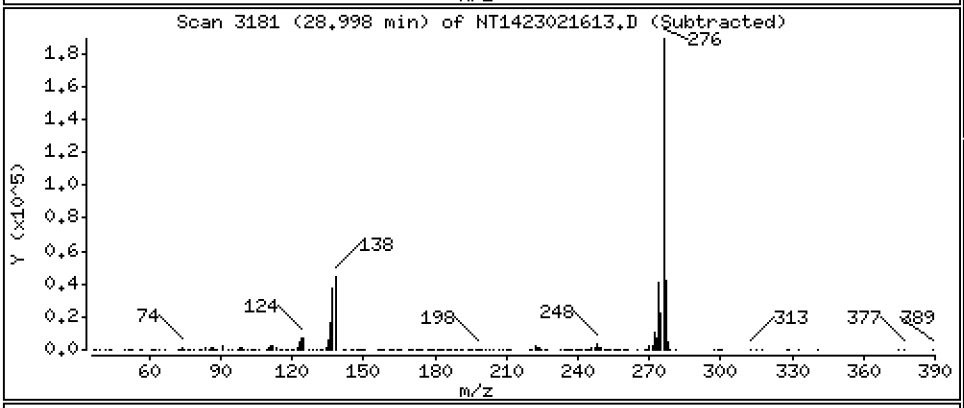
Column diameter: 0.25

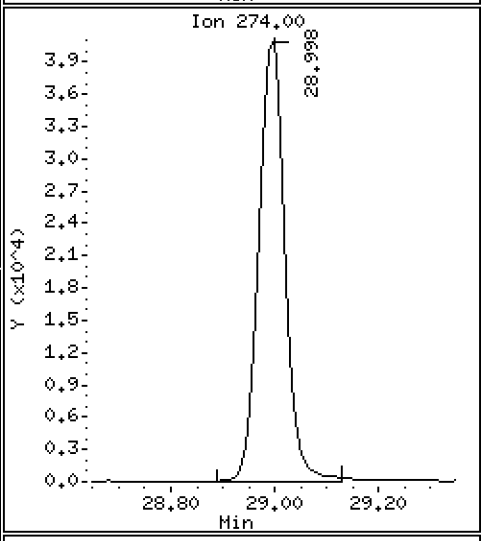
80 Benzo(g,h,i)perylene

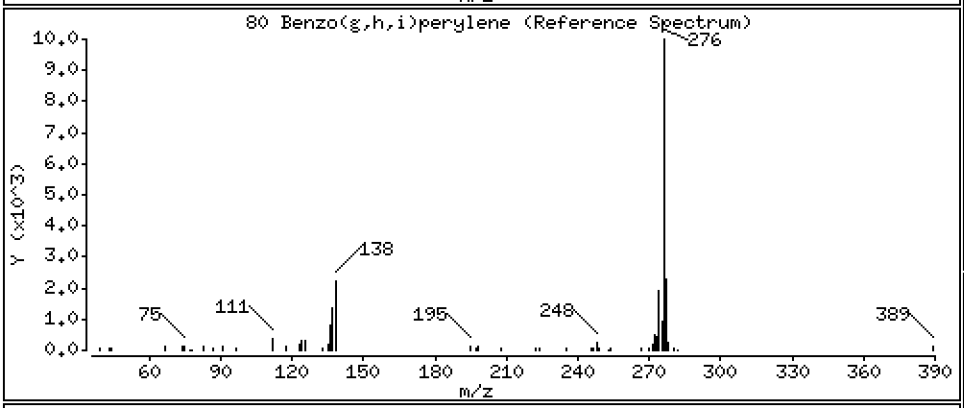
Concentration: 4.380 ug/mL

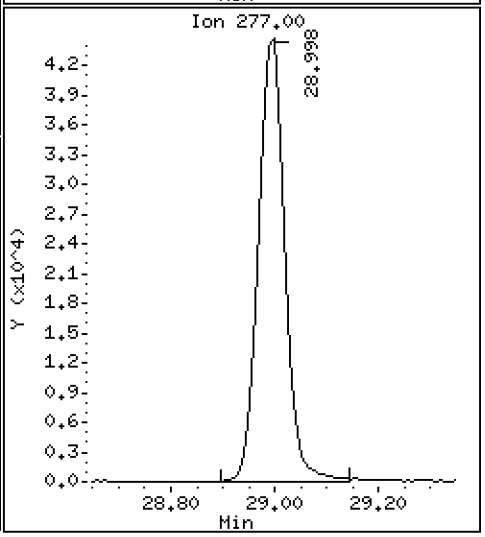


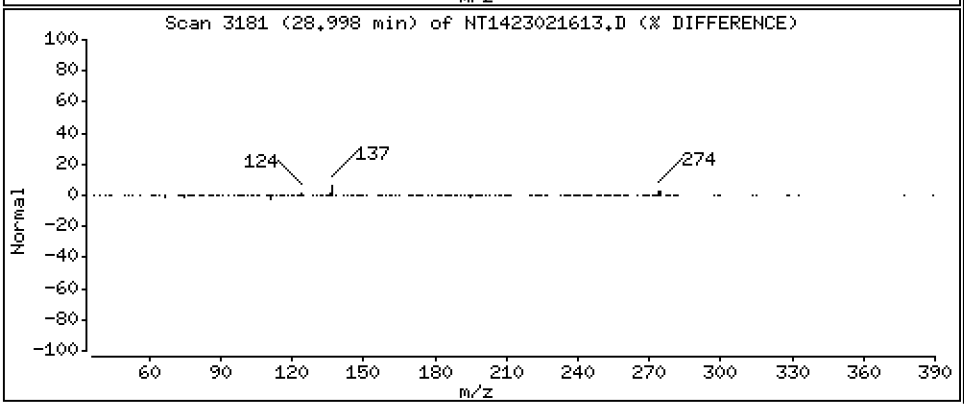












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

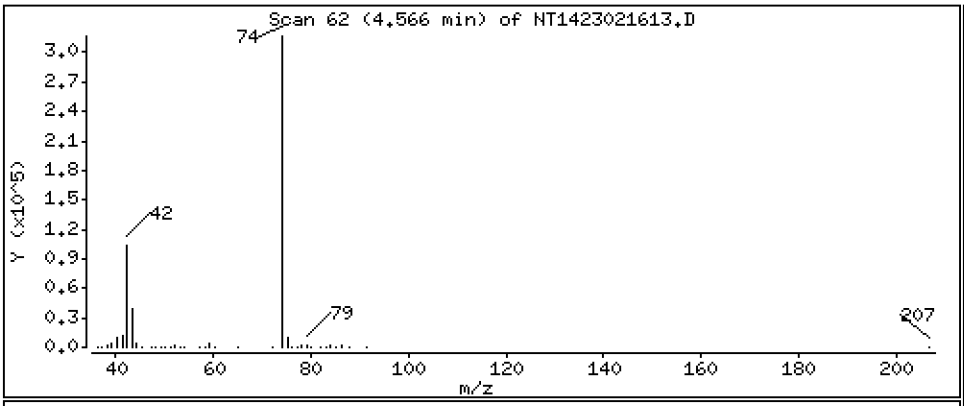
Operator: DSD

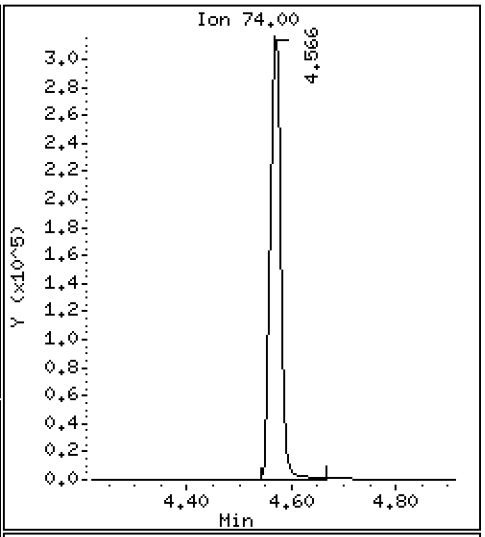
Column phase: ZB-5msi

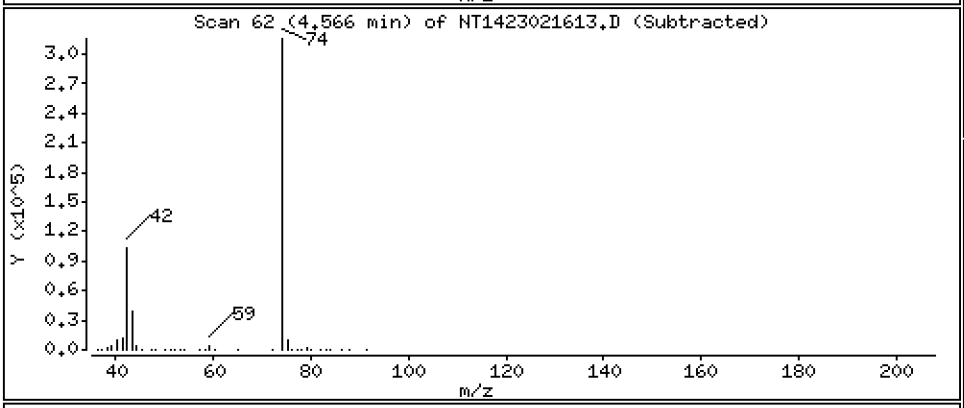
Column diameter: 0.25

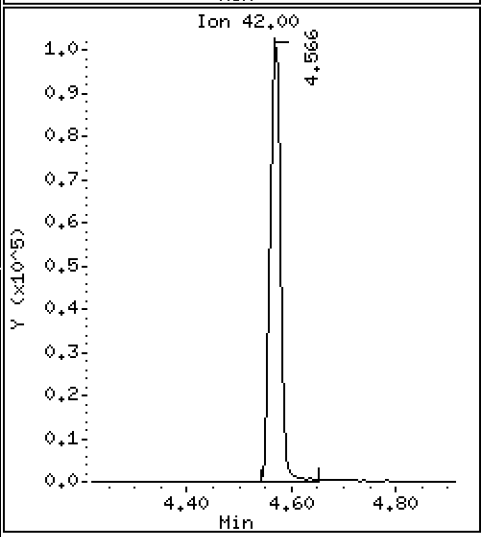
90 N-Nitrosodimethylamine

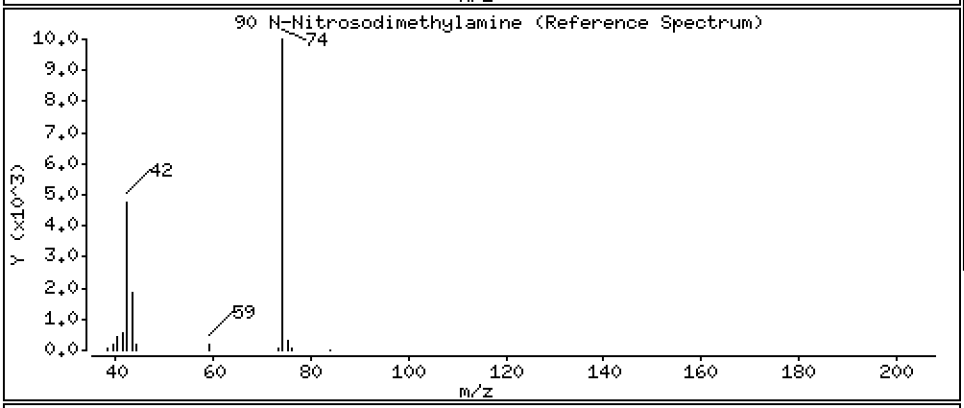
Concentration: 5.632 ug/mL

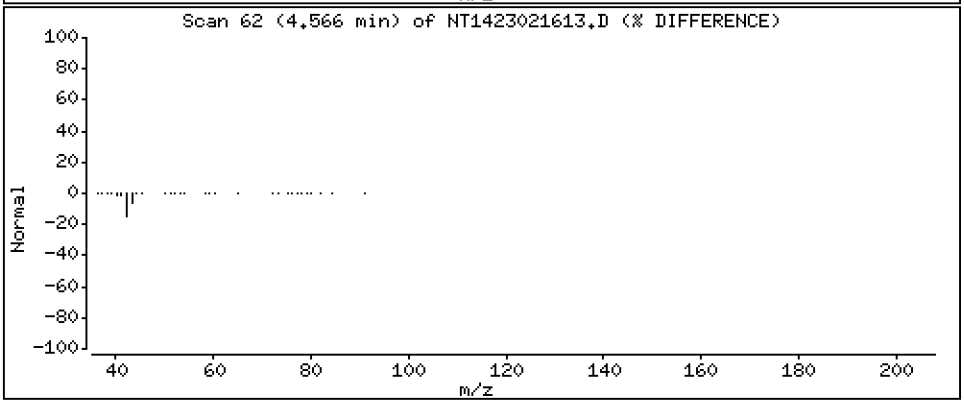












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

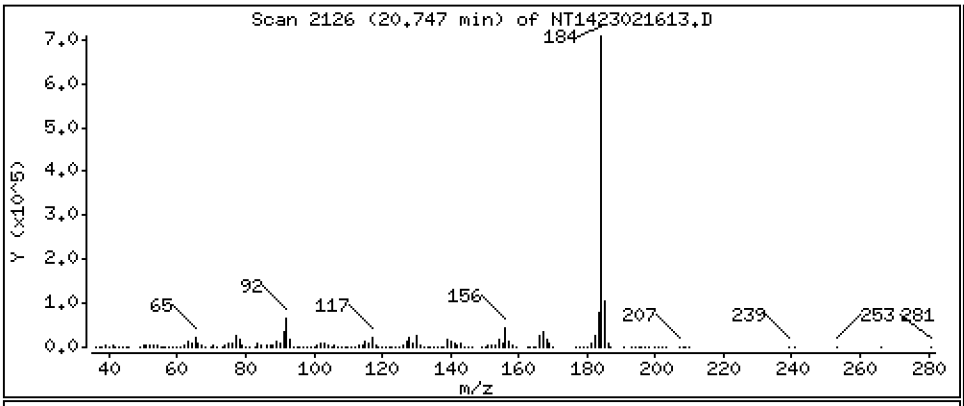
Operator: DSD

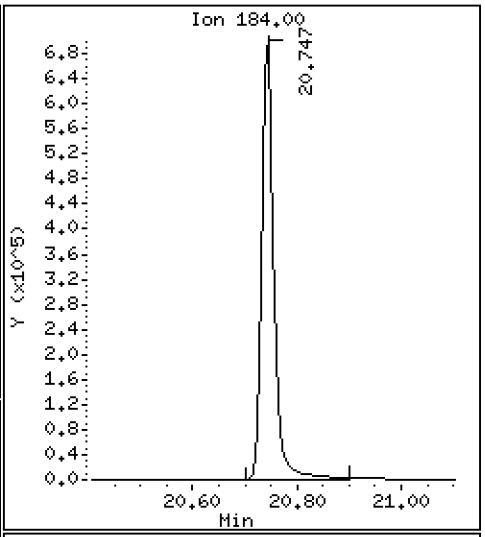
Column phase: ZB-5msi

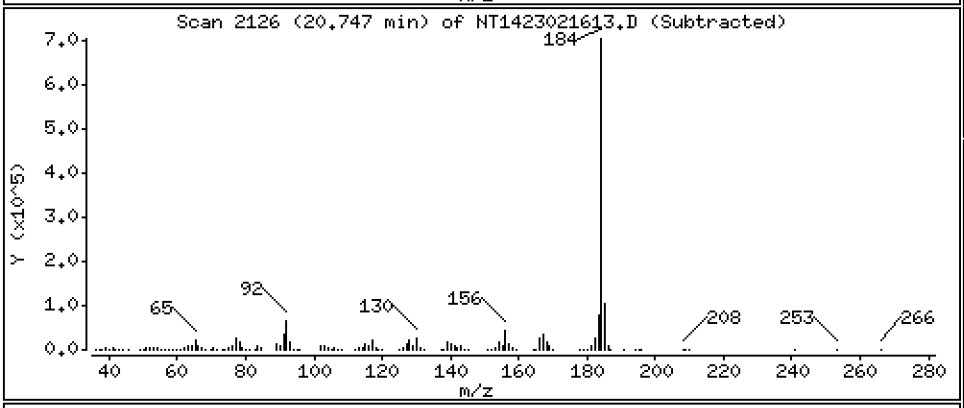
Column diameter: 0.25

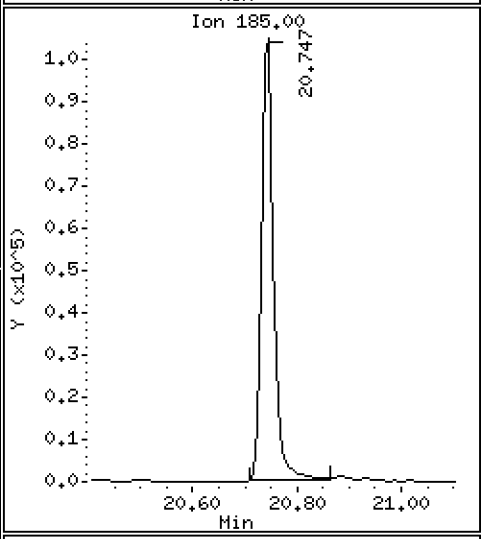
93 Benzidine

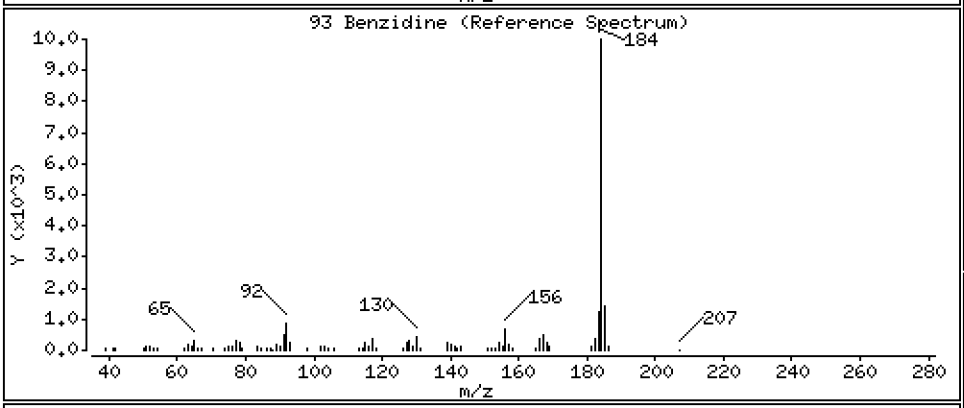
Concentration: 9.984 ug/mL

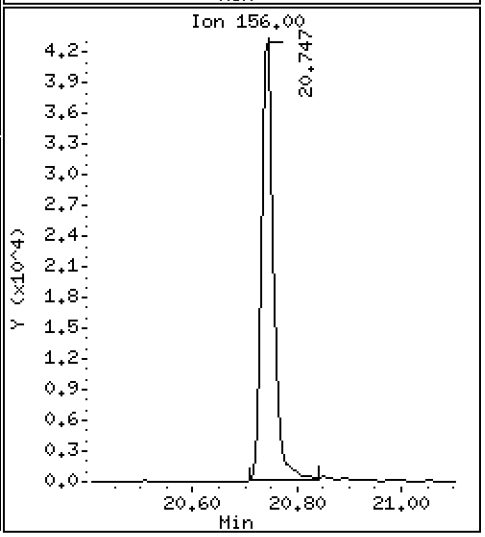


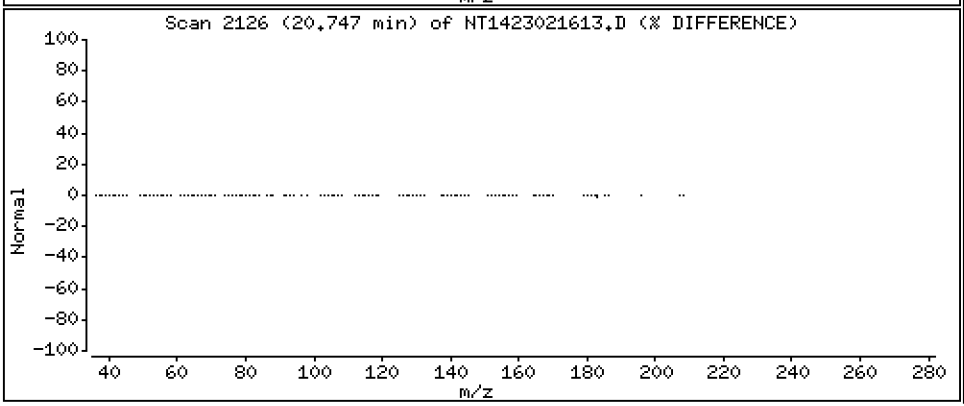












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

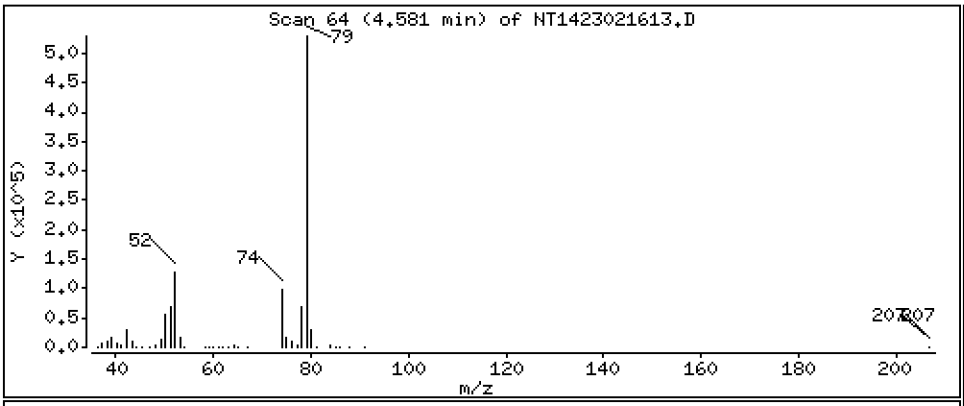
Operator: DSD

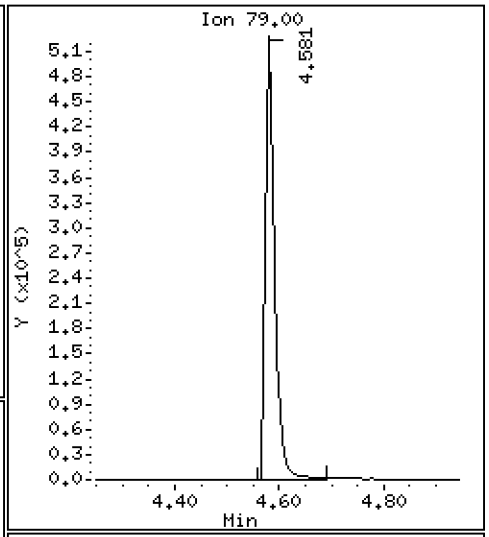
Column phase: ZB-5msi

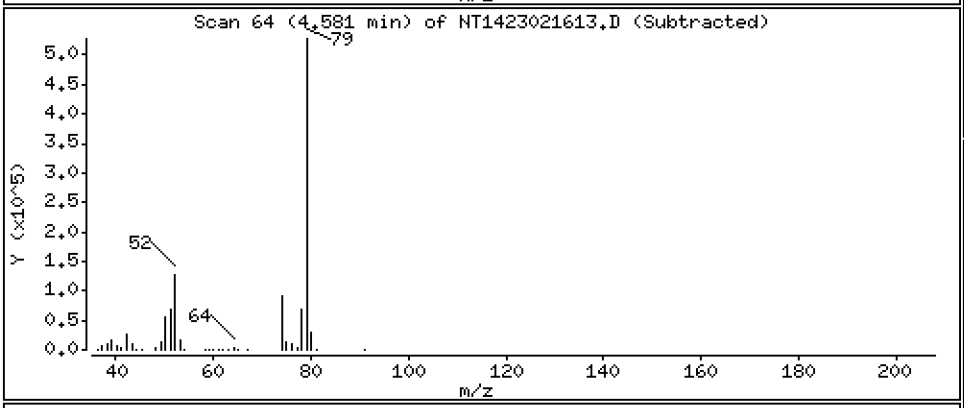
Column diameter: 0.25

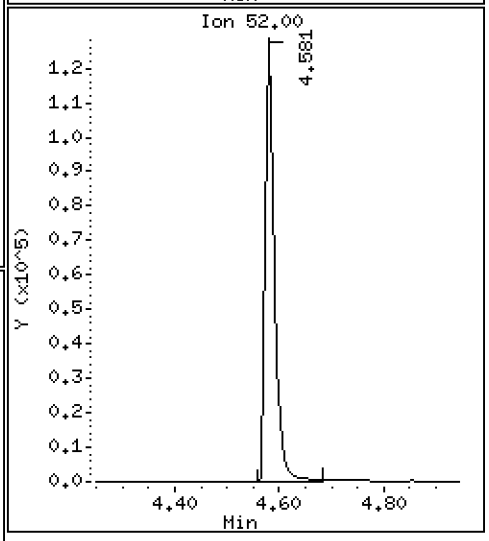
103 Pyridine

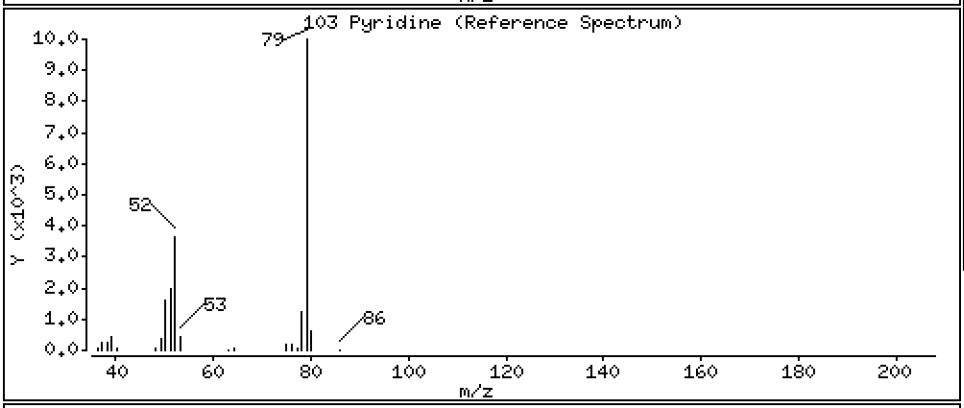
Concentration: 5.566 ug/mL

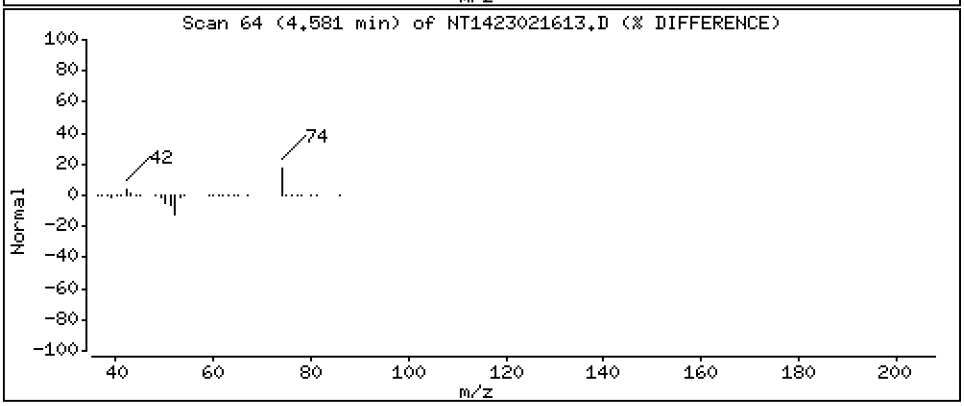












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

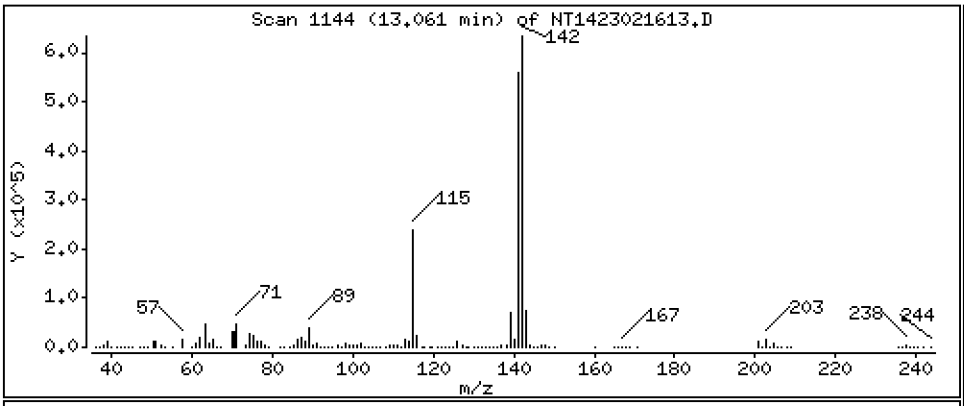
Operator: DSD

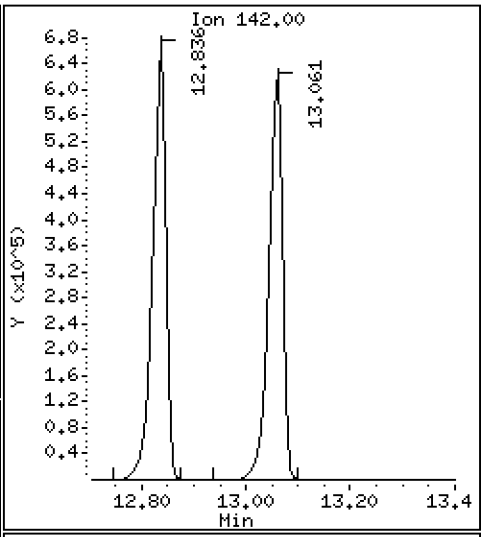
Column phase: ZB-5msi

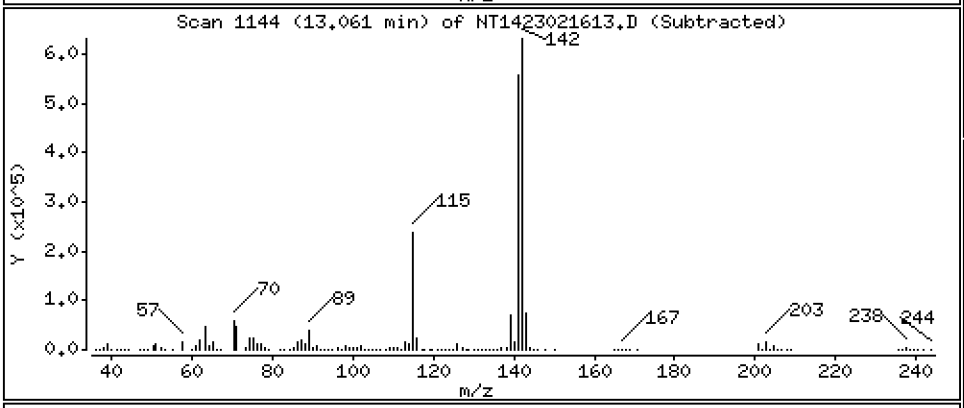
Column diameter: 0.25

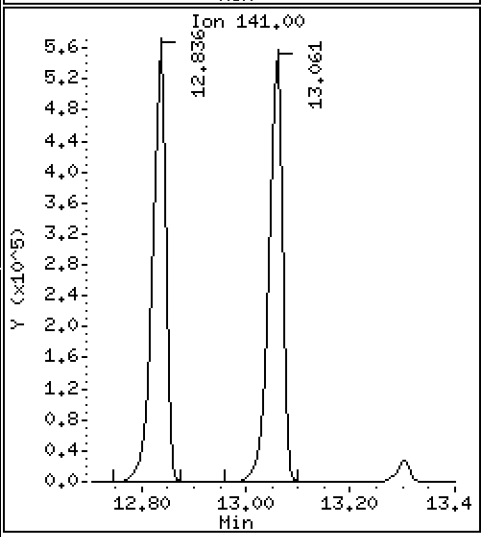
105 1-methylnaphthalene

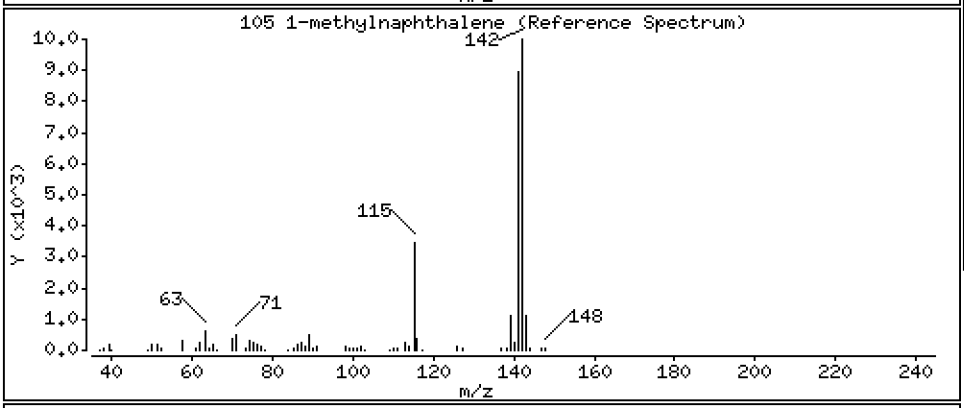
Concentration: 4.760 ug/mL

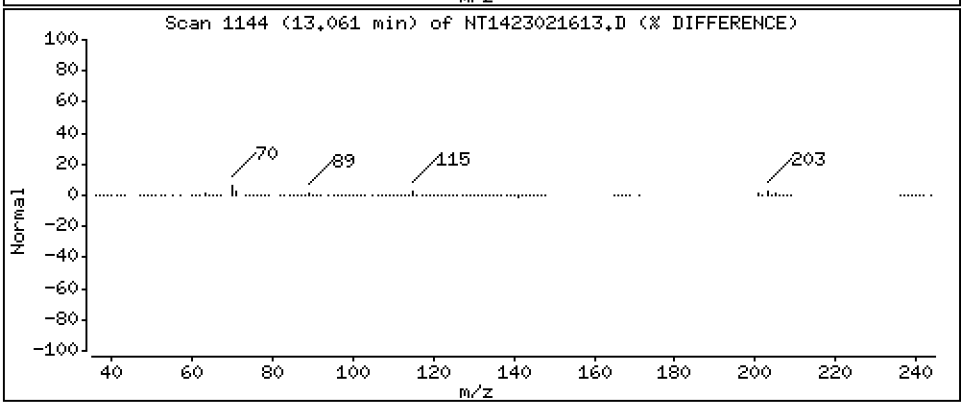












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

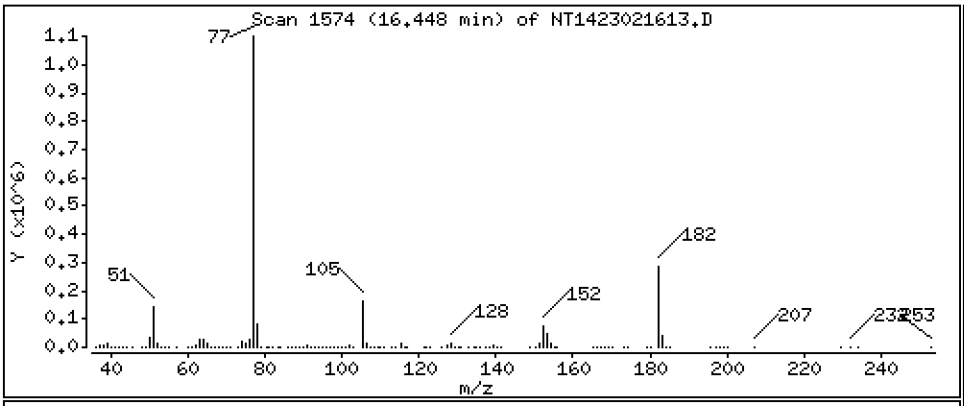
Operator: DSD

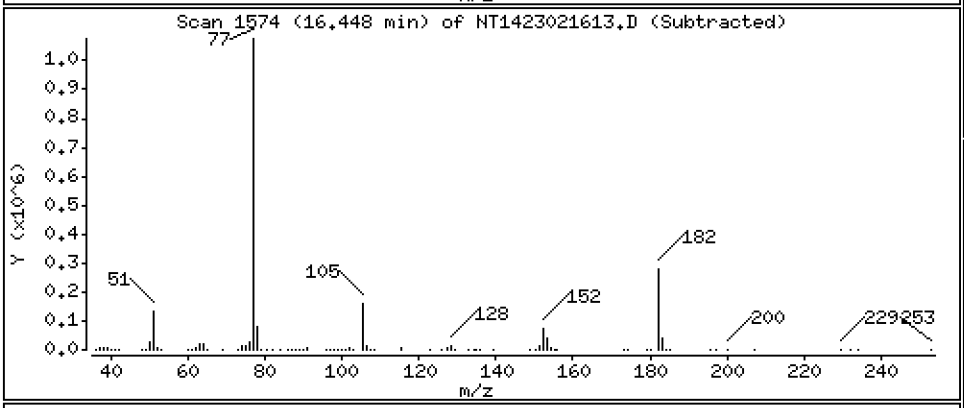
Column phase: ZB-5msi

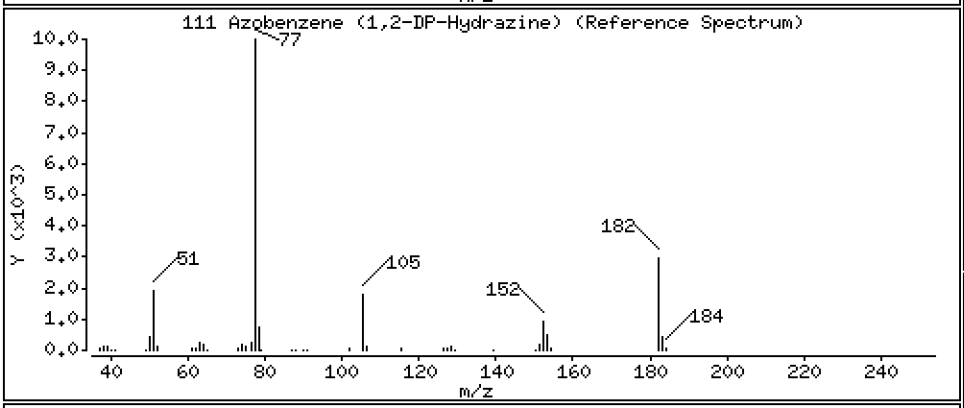
Column diameter: 0.25

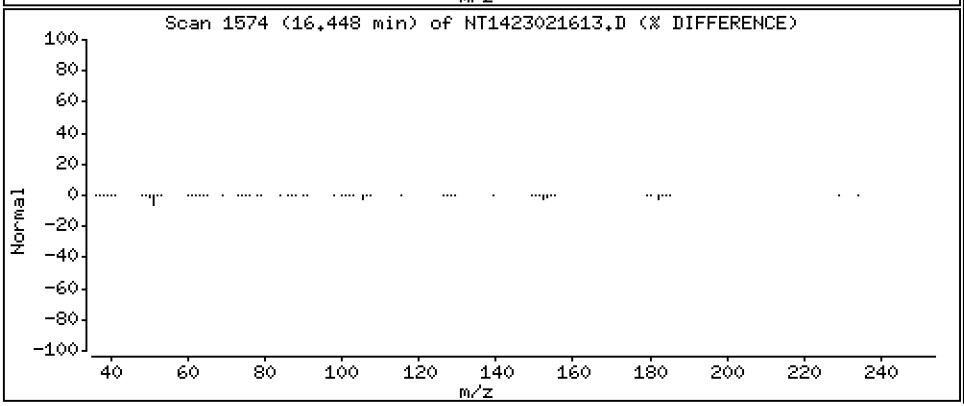
111 Azobenzene (1,2-DP-Hydrazine)

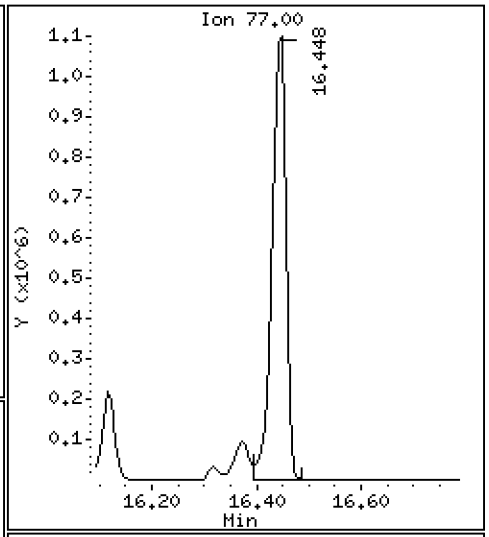
Concentration: 4.655 ug/mL

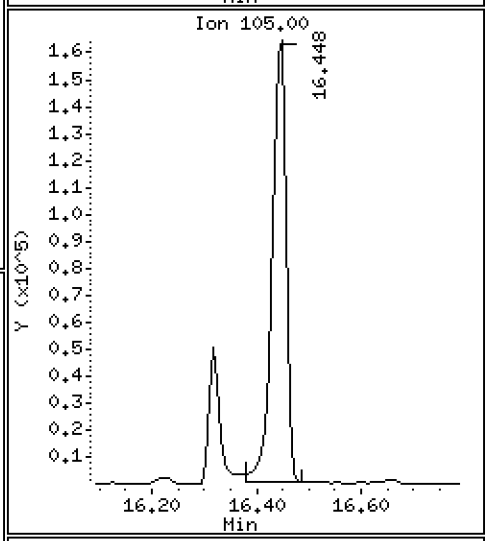


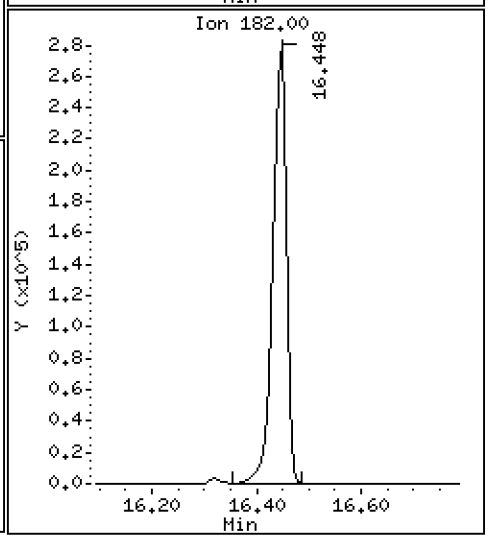












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

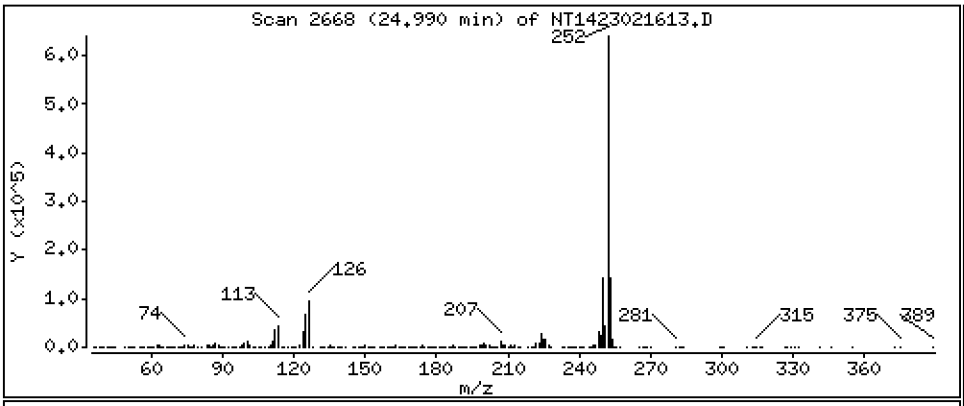
Operator: DSD

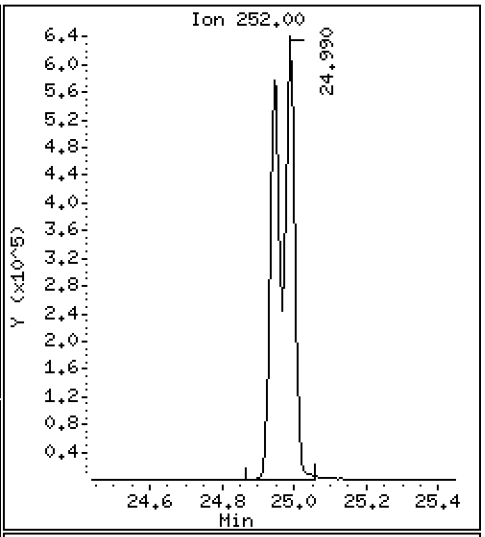
Column phase: ZB-5msi

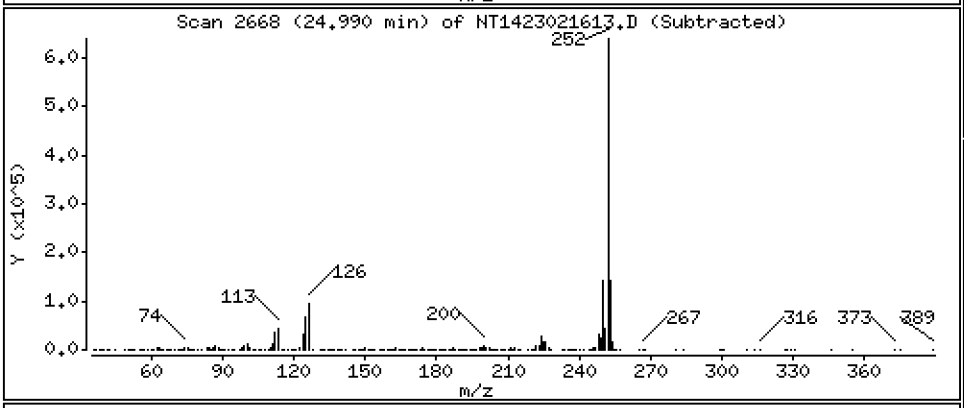
Column diameter: 0.25

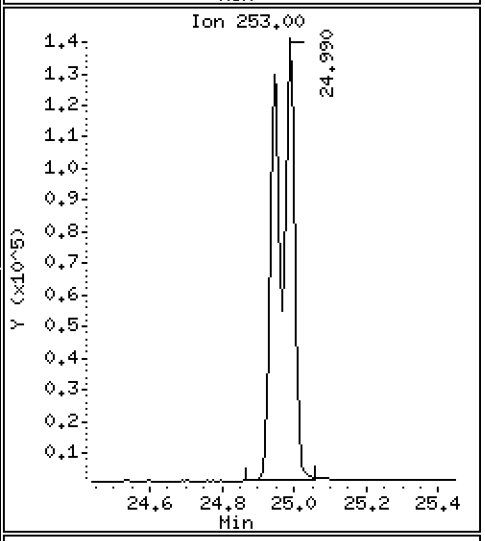
187 Total Benzofluoranthenes

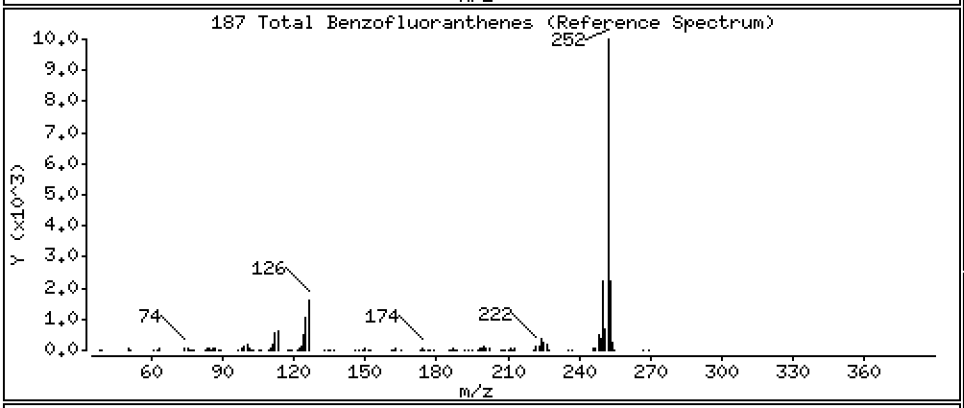
Concentration: 9.712 ug/mL

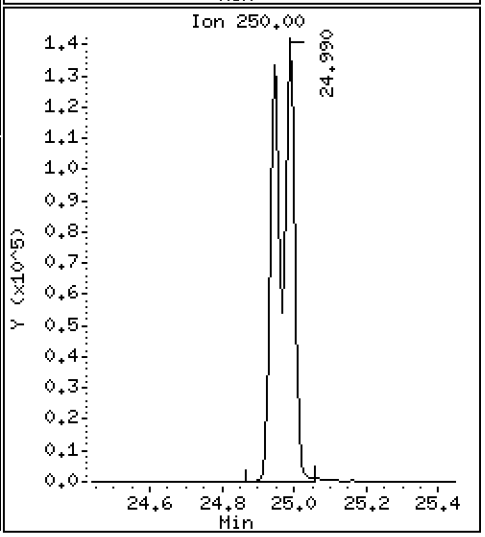


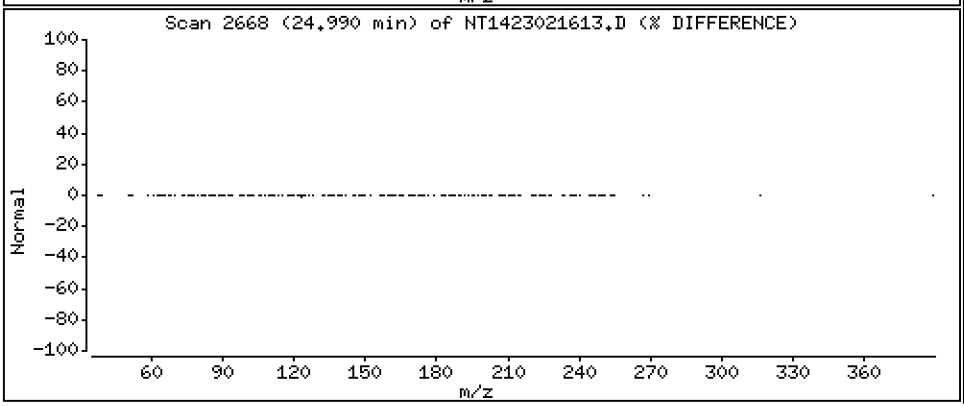












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

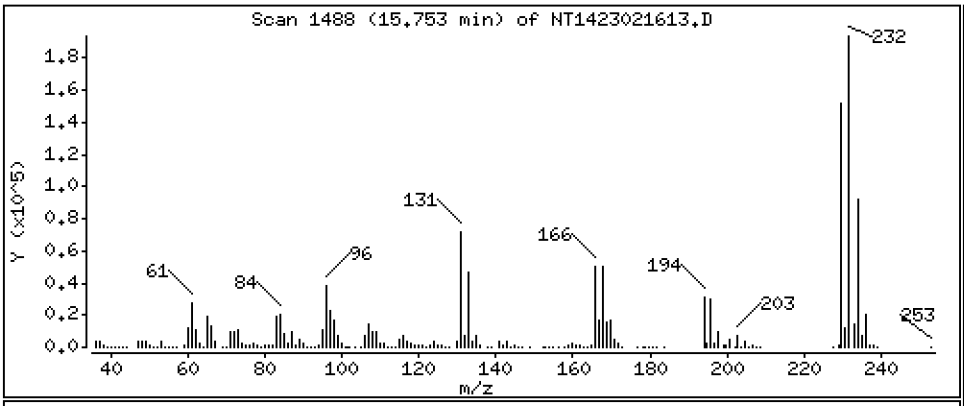
Operator: DSD

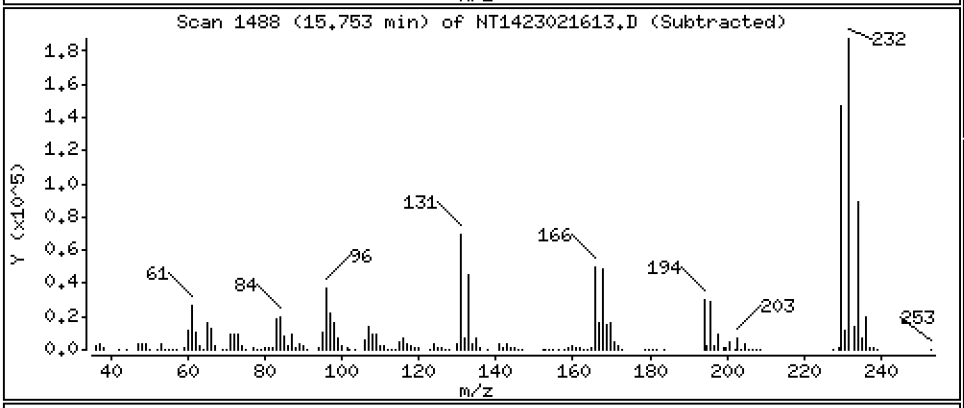
Column phase: ZB-5msi

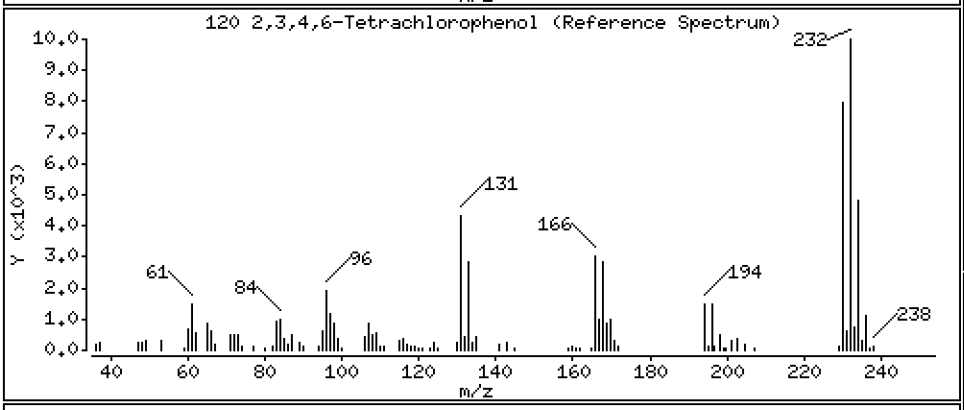
Column diameter: 0.25

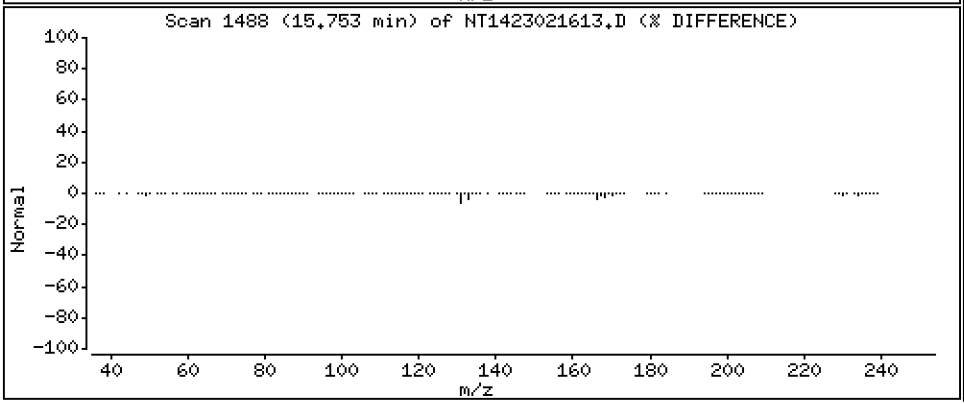
120 2,3,4,6-Tetrachlorophenol

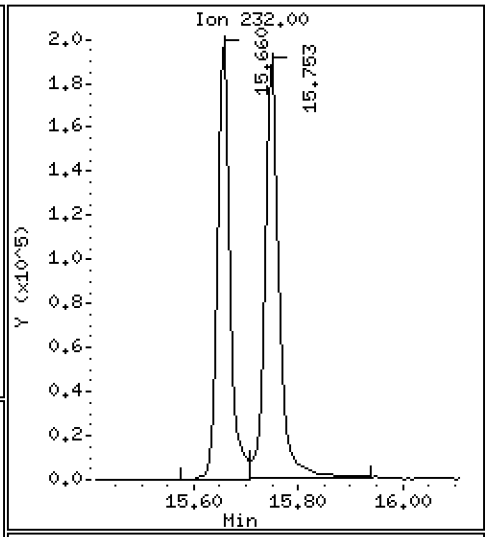
Concentration: 3.875 ug/mL

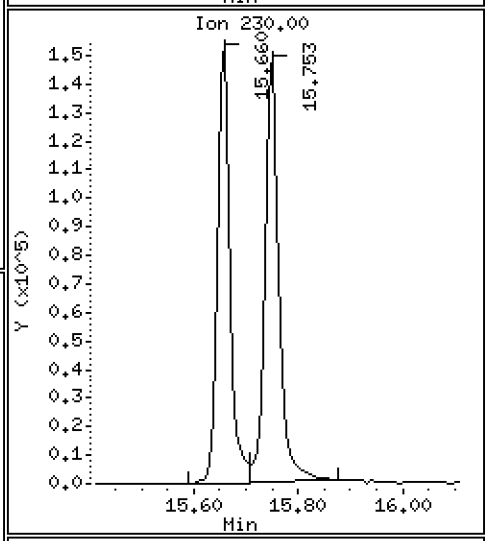


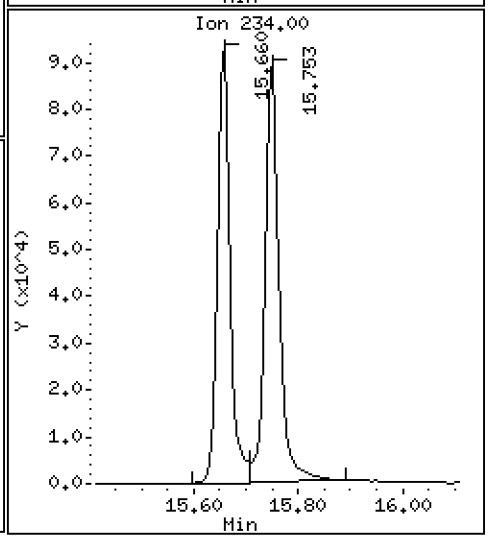












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

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Operator : DSD Inst ID: nt14.i
Smp Info : SLB0234-SCV1
Misc Info :
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Cal Date : 16-FEB-2023 19:30 Cal File: NT1423021610.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: DEENAY-201905

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.674	6.682	(0.750)	812311	8.37324	8.373
$	2 Phenol-d5	99	8.266	8.266	(0.929)	1229645	7.99013	7.990
	3 Phenol	94	8.289	8.289	(0.931)	753865	4.62726	4.627
$	5 2-Chlorophenol-d4	132	8.536	8.536	(0.959)	852471	7.76321	7.763
	4 Bis(2-Chloroethyl)ether	93	8.459	8.451	(0.950)	642018	5.15867	5.159
	6 2-Chlorophenol	128	8.567	8.567	(0.963)	529676	4.61671	4.617
	7 1,3-Dichlorobenzene	146	8.838	8.838	(0.993)	609215	4.76976	4.770
*	8 1,4-Dichlorobenzene-d4	152	8.900	8.900	(1.000)	362894	4.00000	
	9 1,4-Dichlorobenzene	146	8.931	8.931	(1.003)	580699	4.79061	4.791
$	10 1,2-Dichlorobenzene-d4	152	9.264	9.257	(1.041)	410470	4.98694	4.987
	12 1,2-Dichlorobenzene	146	9.288	9.288	(1.044)	576549	4.75778	4.758
	11 Benzyl alcohol	108	9.179	9.202	(1.031)	425653	4.62539	4.625
	14 2,2'-oxybis(1-Chloropropane)	121	9.482	9.482	(1.065)	192988	5.56690	5.567
	13 2-Methylphenol	108	9.404	9.404	(1.057)	496864	4.36760	4.368
	17 Hexachloroethane	117	9.878	9.878	(1.110)	265463	5.03740	5.037
	16 N-Nitroso-di-n-propylamine	70	9.746	9.738	(1.095)	516514	4.98778	4.988
	15 4-Methylphenol	108	9.684	9.684	(1.088)	551454	4.59064	4.591
$	18 Nitrobenzene-d5	82	10.002	10.002	(0.878)	806144	5.19439	5.194
	19 Nitrobenzene	77	10.041	10.033	(0.881)	770727	4.94878	4.949
	20 Isophorone	82	10.483	10.491	(0.920)	1457561	7.09356	7.094
	21 2-Nitrophenol	139	10.669	10.677	(0.936)	316370	4.45322	4.453
	22 2,4-Dimethylphenol	107	10.723	10.724	(0.941)	502608	4.27378	4.274
	23 Bis(2-Chloroethoxy)methane	93	10.925	10.925	(0.959)	767264	5.74018	5.740
	24 Benzoic acid	105	10.933	10.879	(0.959)	412038	5.51023	5.510
	25 2,4-Dichlorophenol	162	11.119	11.127	(0.976)	515695	5.12362	5.124
	26 1,2,4-Trichlorobenzene	180	11.312	11.305	(0.993)	566926	4.64981	4.650
*	27 Naphthalene-d8	136	11.397	11.389	(1.000)	1343351	4.00000	
	28 Naphthalene	128	11.436	11.428	(1.003)	1568652	4.73587	4.736
	29 4-Chloroaniline	127	11.567	11.575	(1.015)	553475	3.91120	3.911
	30 Hexachlorobutadiene	225	11.799	11.799	(1.035)	369529	4.91651	4.917
	31 4-Chloro-3-methylphenol	107	12.534	12.542	(1.100)	549566	5.04457	5.045
	32 2-Methylnaphthalene	142	12.836	12.836	(1.126)	1142706	4.60635	4.606
	33 Hexachlorocyclopentadiene	237	13.300	13.301	(0.886)	438821	5.30111	5.301

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
34	2,4,6-Trichlorophenol	196	13.455	13.463	(0.896)	404613	4.80795	4.808
35	2,4,5-Trichlorophenol	196	13.532	13.541	(0.901)	428976	4.70685	4.707
$ 36	2-Fluorobiphenyl	172	13.625	13.617	(0.907)	1488825	4.87017	4.870
37	2-Chloronaphthalene	162	13.834	13.826	(0.921)	1157484	4.63882	4.639
38	2-Nitroaniline	65	14.097	14.097	(0.939)	393653	4.85233	4.852
39	Dimethylphthalate	163	14.538	14.531	(0.968)	1224849	4.69299	4.693
40	Acenaphthylene	152	14.701	14.701	(0.979)	1772439	4.65722	4.657
41	2,6-Dinitrotoluene	165	14.670	14.670	(0.977)	303057	4.93469	4.935
* 42	Acenaphthene-d10	164	15.018	15.018	(1.000)	854455	4.00000	
43	3-Nitroaniline	138	14.956	14.957	(0.996)	320818	4.92163	4.922
44	Acenaphthene	153	15.088	15.080	(1.005)	1055715	4.63322	4.633
45	2,4-Dinitrophenol	184	15.265	15.282	(1.016)	10046	0.25021	0.2502
46	Dibenzofuran	168	15.412	15.405	(1.026)	1701574	4.54830	4.548
47	4-Nitrophenol	109	15.273	15.273	(1.017)	153415	4.05153	4.052
48	2,4-Dinitrotoluene	165	15.482	15.475	(1.031)	421549	4.85479	4.855
50	Diethylphthalate	149	15.992	15.984	(1.065)	1638308	4.72171	4.722
49	Fluorene	166	16.123	16.124	(1.074)	1814406	4.63777	4.638
51	4-Chlorophenyl-phenylether	204	16.123	16.116	(1.074)	994538	4.75422	4.754
52	4-Nitroaniline	138	16.224	16.224	(1.080)	356106	4.76155	4.762
53	4,6-Dinitro-2-methylphenol	198	16.316	16.370	(0.904)	216522	3.65299	3.653
54	N-Nitrosodiphenylamine	169	16.370	16.370	(0.907)	1149631	4.90725	4.907
$ 55	2,4,6-Tribromophenol	330	16.663	16.663	(1.110)	357193	7.14108	7.141
56	4-Bromophenyl-phenylether	248	17.126	17.118	(0.949)	537640	5.15255	5.153
57	Hexachlorobenzene	284	17.435	17.434	(0.966)	496114	4.67908	4.679
58	Pentachlorophenol	266	17.791	17.814	(0.985)	204787	3.93169	3.932
* 59	Phenanthrene-d10	188	18.054	18.054	(1.000)	1630237	4.00000	
60	Phenanthrene	178	18.108	18.101	(1.003)	1837237	4.68992	4.690
61	Anthracene	178	18.201	18.193	(1.008)	1670411	4.30397	4.304
62	Carbazole	167	18.534	18.534	(1.027)	1687690	4.79185	4.792
63	Di-n-butylphthalate	149	19.338	19.346	(1.071)	2169531	5.51497	5.515
64	Fluoranthene	202	20.499	20.499	(0.887)	2246209	4.68180	4.682
65	Pyrene	202	20.924	20.925	(0.905)	2232282	4.40013	4.400
$ 66	Terphenyl-d14	244	21.219	21.219	(0.918)	1704165	4.73097	4.731
67	Butylbenzylphthalate	149	22.148	22.148	(0.958)	770848	4.56767	4.568
68	Benzo(a)anthracene	228	23.092	23.092	(0.999)	1612232	4.53042	4.530
* 69	Chrysene-d12	240	23.123	23.123	(1.000)	1112056	4.00000	
70	3,3'-Dichlorobenzidine	252	23.054	23.054	(0.997)	1021005	9.32793	9.328
71	Chrysene	228	23.170	23.162	(1.002)	1432188	4.47430	4.474
72	bis(2-Ethylhexyl)phthalate	149	23.178	23.178	(0.960)	1007189	4.64885	4.649
* 134	Di-n-octylphthalate-d4	153	24.153	24.153	(1.000)	1298332	4.00000	
73	Di-n-octylphthalate	149	24.168	24.161	(1.001)	1506391	4.96217	4.962
74	Benzo(b)fluoranthene	252	24.943	24.943	(0.971)	1120169	4.81299	4.813
75	Benzo(k)fluoranthene	252	24.989	24.989	(0.973)	1203272	4.83840	4.838
76	Benzo(a)pyrene	252	25.577	25.578	(0.996)	1024300	4.60711	4.607
* 77	Perylene-d12	264	25.686	25.686	(1.000)	733476	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	28.244	28.244	(1.100)	816683	4.39546	4.395
79	Dibenzo(a,h)anthracene	278	28.259	28.267	(1.100)	668295	4.36484	4.365
80	Benzo(g,h,i)perylene	276	28.997	28.997	(1.129)	664180	4.38025	4.380
90	N-Nitrosodimethylamine	74	4.566	4.566	(0.513)	423038	5.63216	5.632
91	Aniline	93	Compound Not Detected.					
93	Benzidine	184	20.747	20.754	(0.897)	1133759	9.98385	9.984
103	Pyridine	79	4.581	4.597	(0.515)	661518	5.56593	5.566
105	1-methylnaphthalene	142	13.060	13.053	(1.146)	1108498	4.75965	4.760
111	Azobenzene (1,2-DP-Hydrazine)	77	16.447	16.440	(1.095)	1962985	4.65510	4.655

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.989	24.943	(0.973)	2206870	9.71223	9.712
120 2,3,4,6-Tetrachlorophenol	232	15.752	15.760	(1.049)	382367	3.87456	3.875

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021613.D
Lab Smp Id: SLB0234-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\ABN.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 17:06
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	375798	187899	751596	362894	-3.43
27 Naphthalene-d8	1378169	689085	2756338	1343351	-2.53
42 Acenaphthene-d10	847135	423568	1694270	854455	0.86
59 Phenanthrene-d10	1675180	837590	3350360	1630237	-2.68
69 Chrysene-d12	1073562	536781	2147124	1112056	3.59
134 Di-n-octylphthala	1344129	672065	2688258	1298332	-3.41
77 Perylene-d12	721978	360989	1443956	733476	1.59

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	-0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.40	-0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	-0.00
59 Phenanthrene-d10	18.05	17.55	18.55	18.05	-0.00
69 Chrysene-d12	23.12	22.62	23.62	23.12	-0.00
134 Di-n-octylphthala	24.15	23.65	24.65	24.15	-0.00
77 Perylene-d12	25.69	25.19	26.19	25.69	-0.00

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

REVIEW SUMMARY FOR FILE - NT1423021613.D

Lab ID: SLB0234-SCV1
nt14.i, ABN.m, 16-FEB-2023 21:18

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.959	0.000	0.9593	Benzoic acid
1.016	0.000	1.0165	2,4-Dinitrophenol
1.017	0.000	1.0170	4-Nitrophenol
0.985	0.000	0.9854	Pentachlorophenol

RRT check based on Ccal File: NT1423021610.D

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

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

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GB00046
Laboratory ID: SLB0234-SCV1
Sequence: SLB0234
Standard ID: K010066

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	5.0000	4.6	-7.5	20.00
bis(2-chloroethyl) ether	5.0000	5.2	3.2	20.00
2-Chlorophenol	5.0000	4.6	-7.7	20.00
1,3-Dichlorobenzene	5.0000	4.8	-4.6	20.00
1,4-Dichlorobenzene	5.0000	4.8	-4.2	20.00
1,2-Dichlorobenzene	5.0000	4.8	-4.8	20.00
Benzyl Alcohol	5.0000	4.6	-7.5	20.00
2,2'-Oxybis(1-chloropropane)	5.0000	5.6	11.3	20.00
2-Methylphenol	5.0000	4.4	-12.6	20.00
Hexachloroethane	5.0000	5.0	0.7	20.00
N-Nitroso-di-n-Propylamine	5.0000	5.0	-0.2	20.00
4-Methylphenol	5.0000	4.6	-8.2	20.00
Nitrobenzene	5.0000	4.9	-1.0	20.00
Isophorone	5.0000	7.1	41.9 *	20.00
2-Nitrophenol	5.0000	4.5	-10.9	20.00
2,4-Dimethylphenol	5.0000	4.3	-14.5	20.00
Bis(2-Chloroethoxy)methane	5.0000	5.7	14.8	20.00
2,4-Dichlorophenol	5.0000	5.1	2.5	20.00
1,2,4-Trichlorobenzene	5.0000	4.6	-7.0	20.00
Naphthalene	5.0000	4.7	-5.3	20.00
Benzoic acid	10.000	5.5	-44.9 *	20.00
4-Chloroaniline	5.0000	3.9	-21.8 *	20.00
Hexachlorobutadiene	5.0000	4.9	-1.7	20.00
4-Chloro-3-Methylphenol	5.0000	5.0	0.9	20.00
2-Methylnaphthalene	5.0000	4.6	-7.9	20.00
Hexachlorocyclopentadiene	5.0000	5.3	6.0	20.00
2,4,6-Trichlorophenol	5.0000	4.8	-3.8	20.00
2,4,5-Trichlorophenol	5.0000	4.7	-5.9	20.00
2-Chloronaphthalene	5.0000	4.6	-7.2	20.00
2-Nitroaniline	5.0000	4.9	-3.0	20.00
Acenaphthylene	5.0000	4.7	-6.9	20.00
Dimethylphthalate	5.0000	4.7	-6.1	20.00

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GB00046
Laboratory ID: SLB0234-SCV1
Sequence: SLB0234
Standard ID: K010066

2,6-Dinitrotoluene	5.0000	4.9	-1.3	20.00
Acenaphthene	5.0000	4.6	-7.3	20.00
3-Nitroaniline	5.0000	4.9	-1.6	20.00
2,4-Dinitrophenol	5.0000	0.3	-95.0 *	20.00
Dibenzofuran	5.0000	4.5	-9.0	20.00
4-Nitrophenol	5.0000	4.1	-19.0	20.00
2,4-Dinitrotoluene	5.0000	4.9	-2.9	20.00
Fluorene	5.0000	4.6	-7.2	20.00
4-Chlorophenylphenyl ether	5.0000	4.8	-4.9	20.00
Diethyl phthalate	5.0000	4.7	-5.6	20.00
4-Nitroaniline	5.0000	4.8	-4.8	20.00
4,6-Dinitro-2-methylphenol	5.0000	3.7	-26.9 *	20.00
N-Nitrosodiphenylamine	5.0000	4.9	-1.9	20.00
4-Bromophenyl phenyl ether	5.0000	5.2	3.1	20.00
Hexachlorobenzene	5.0000	4.7	-6.4	20.00
Pentachlorophenol	5.0000	3.9	-21.4 *	20.00
Phenanthrene	5.0000	4.7	-6.2	20.00
Anthracene	5.0000	4.3	-13.9	20.00
Carbazole	5.0000	4.8	-4.2	20.00
Di-n-Butylphthalate	5.0000	5.5	10.3	20.00
Fluoranthene	5.0000	4.7	-6.4	20.00
Pyrene	5.0000	4.4	-12.0	20.00
Butylbenzylphthalate	5.0000	4.6	-8.6	20.00
Benzo(a)anthracene	5.0000	4.5	-9.4	20.00
3,3'-Dichlorobenzidine	10.000	9.3	-6.7	20.00
Chrysene	5.0000	4.5	-10.5	20.00
bis(2-Ethylhexyl)phthalate	5.0000	4.6	-7.0	20.00
Di-n-Octylphthalate	5.0000	5.0	-0.8	20.00
Benzofluoranthenes, Total	10.000	9.7	-2.9	20.00
Benzo(a)pyrene	5.0000	4.6	-7.9	20.00
Indeno(1,2,3-cd)pyrene	5.0000	4.4	-12.1	20.00
Dibenzo(a,h)anthracene	5.0000	4.4	-12.7	20.00
Benzo(g,h,i)perylene	5.0000	4.4	-12.4	20.00
1-Methylnaphthalene	5.0000	4.8	-4.8	20.00
2-Fluorophenol	7.5000	8.37	11.6	20.00

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GB00046
Laboratory ID: SLB0234-SCV1
Sequence: SLB0234
Standard ID: K010066

Phenol-d5	7.5000	7.99	6.5	20.00
2-Chlorophenol-d4	7.5000	7.76	3.5	20.00
1,2-Dichlorobenzene-d4	5.0000	4.99	-0.3	20.00
Nitrobenzene-d5	5.0000	5.19	3.9	20.00
2-Fluorobiphenyl	5.0000	4.87	-2.6	20.00
2,4,6-Tribromophenol	7.5000	7.14	-4.8	20.00
p-Terphenyl-d14	5.0000	4.73	-5.4	20.00

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D

Page 1

Date : 16-FEB-2023 21:18

Client ID:

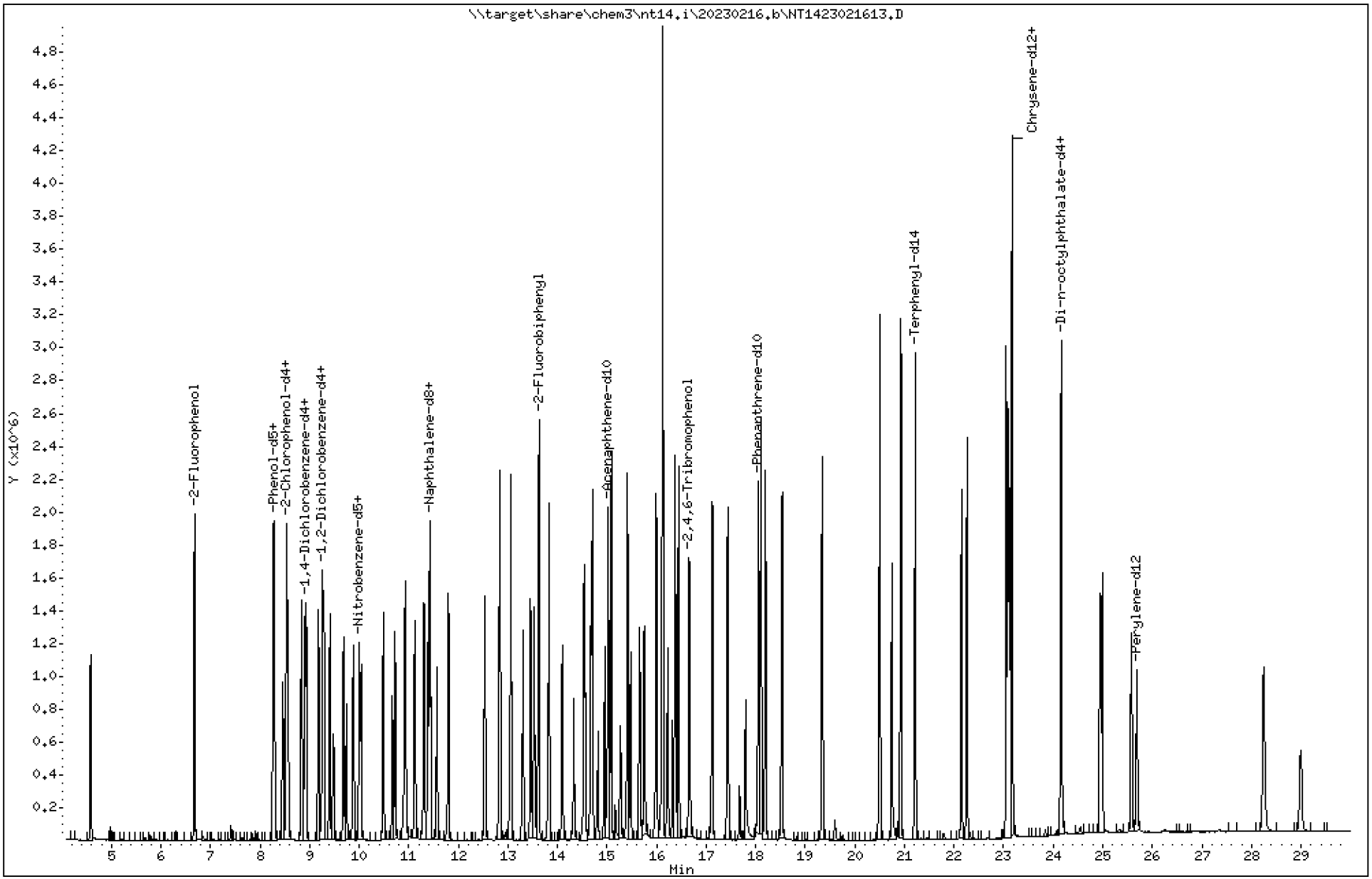
Instrument: nt14.i

Sample Info: SLB0234-SCV1

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

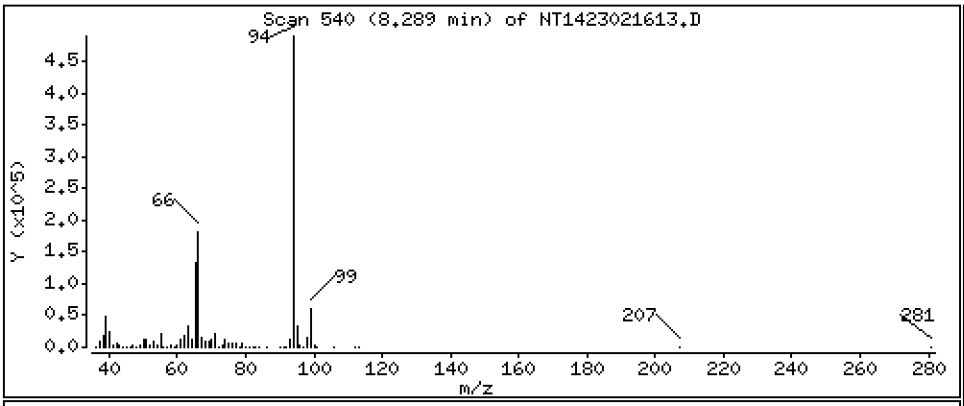
Operator: DSD

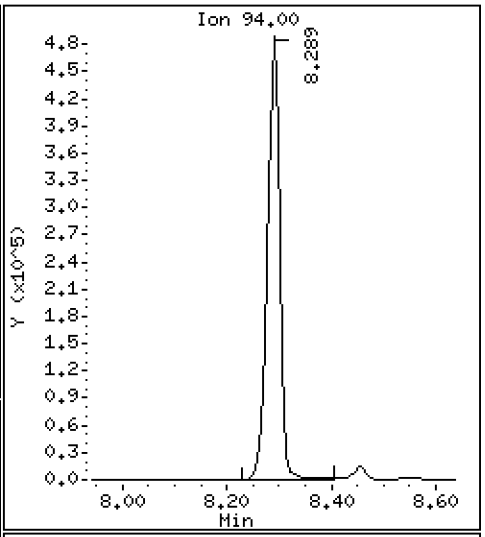
Column phase: ZB-5msi

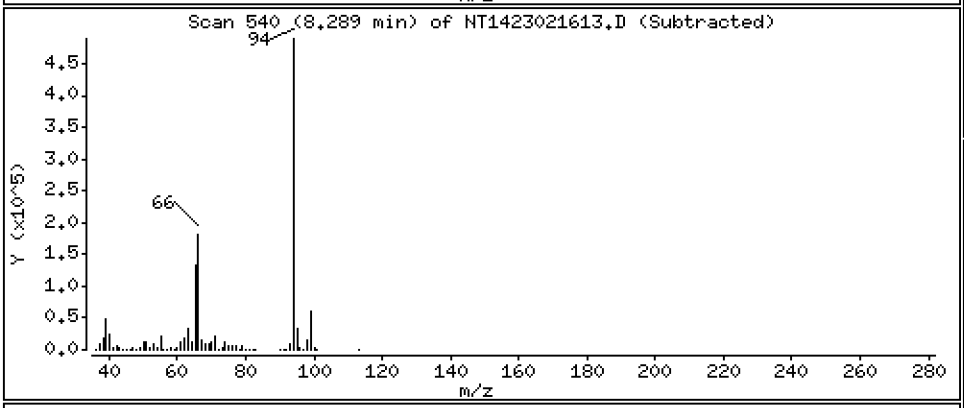
Column diameter: 0.25

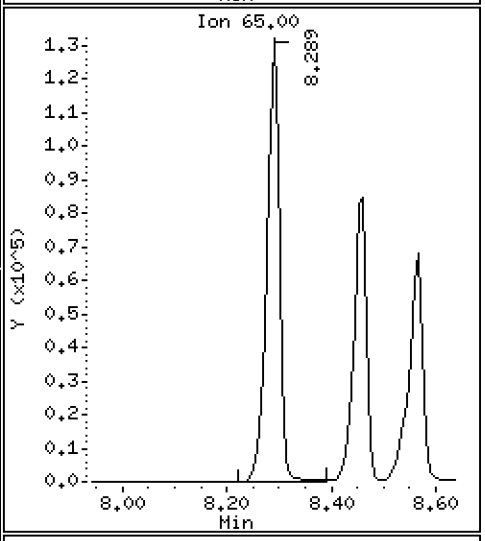
3 Phenol

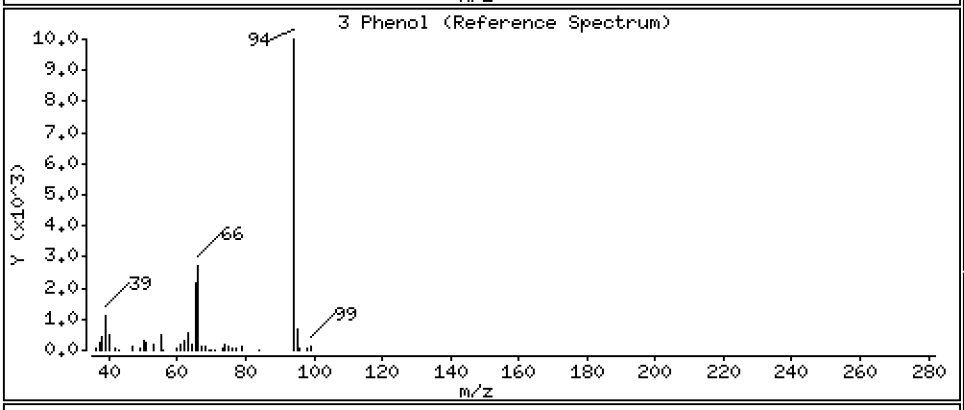
Concentration: 4.627 ug/mL

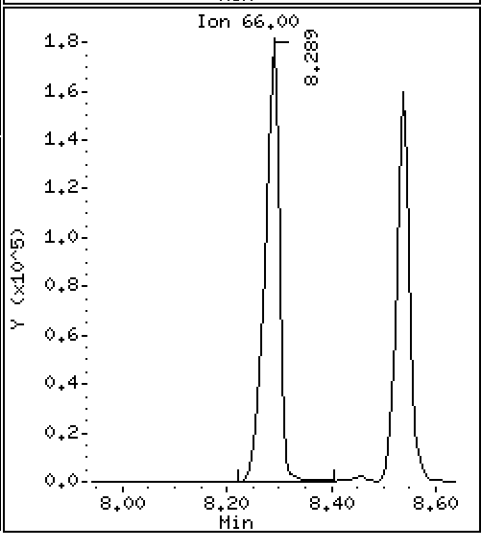


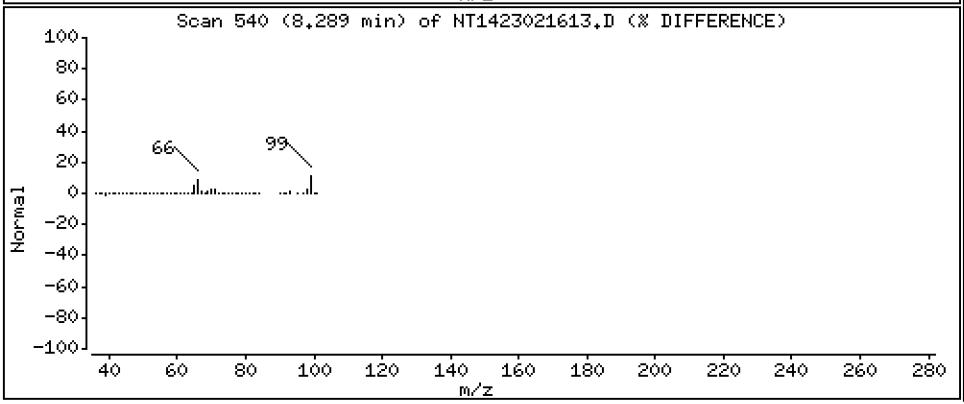












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

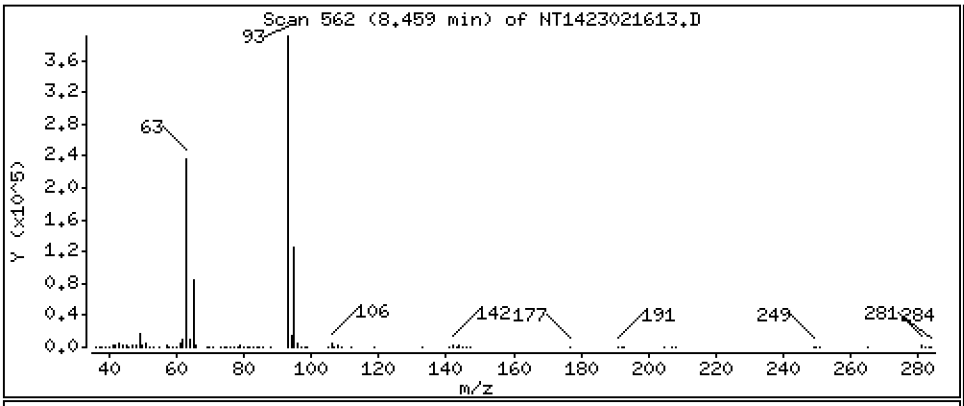
Operator: DSD

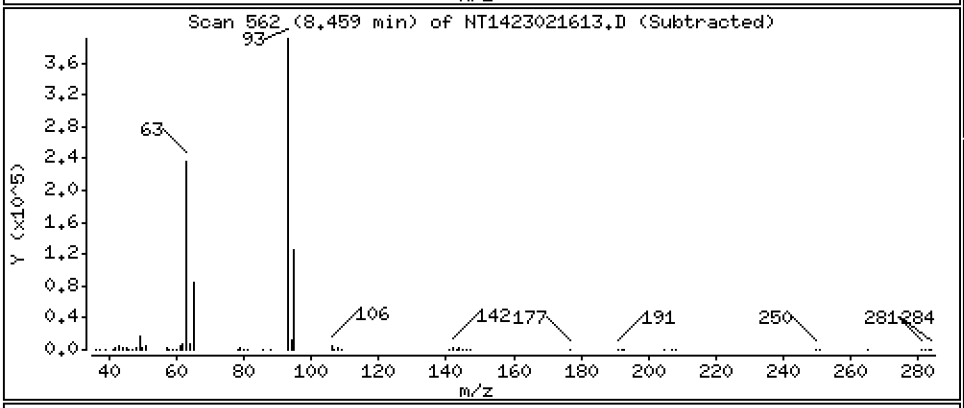
Column phase: ZB-5msi

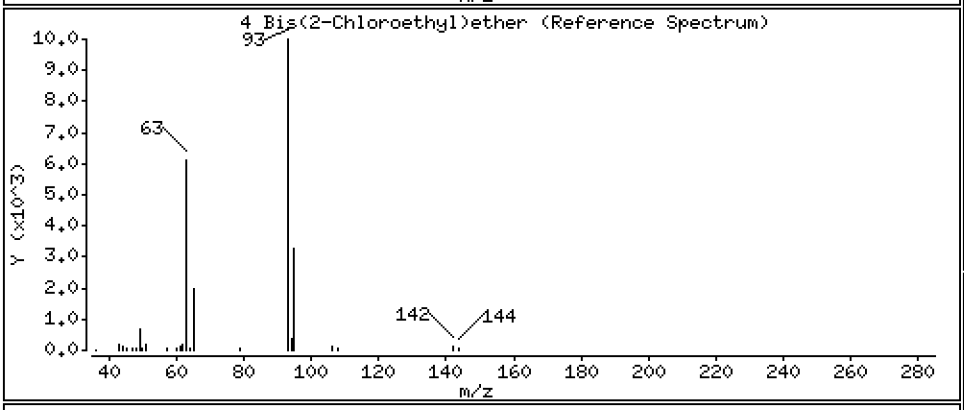
Column diameter: 0.25

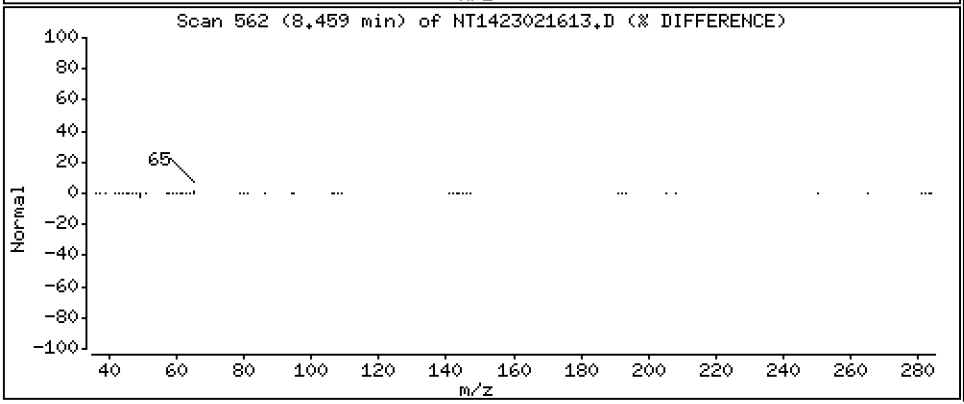
4 Bis(2-Chloroethyl)ether

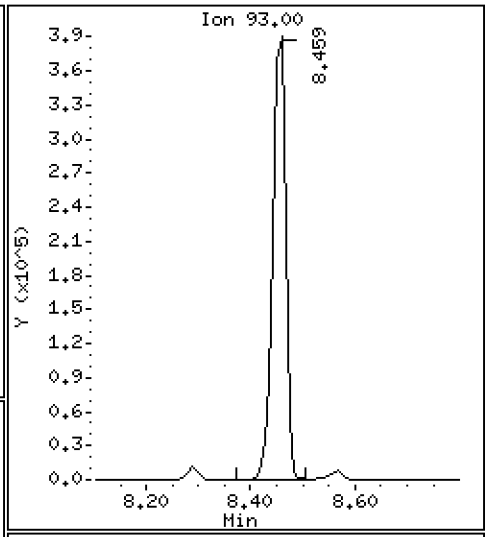
Concentration: 5.159 ug/mL

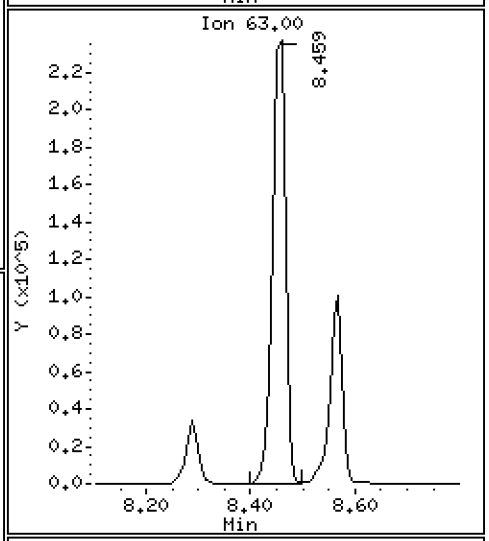


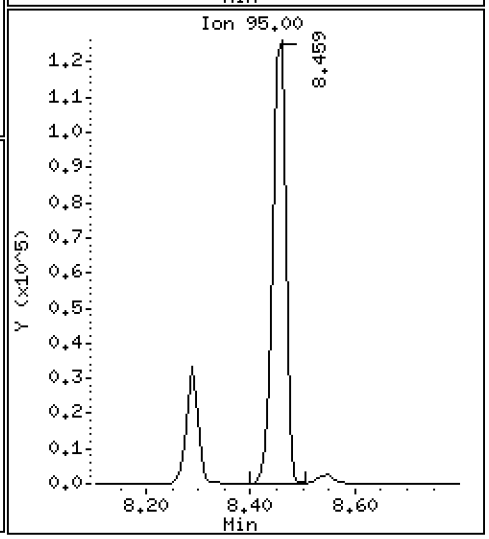












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

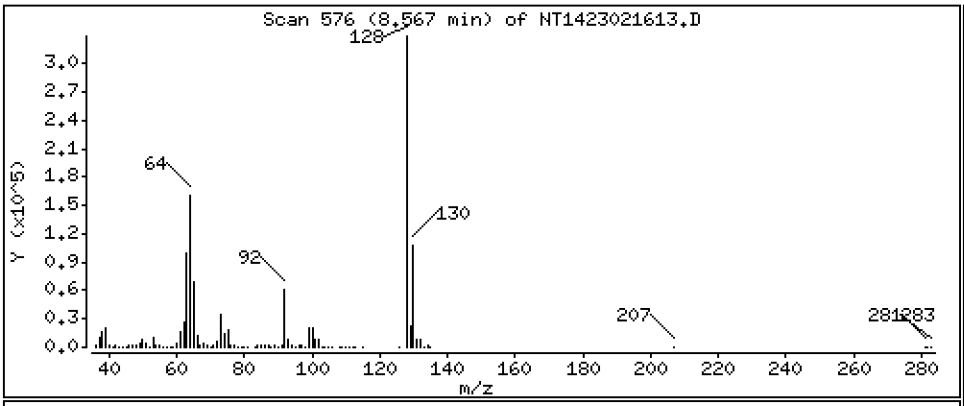
Operator: DSD

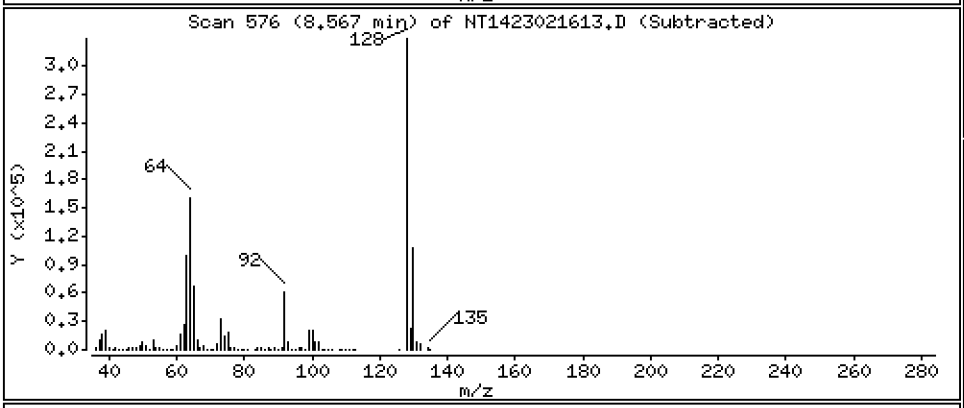
Column phase: ZB-5msi

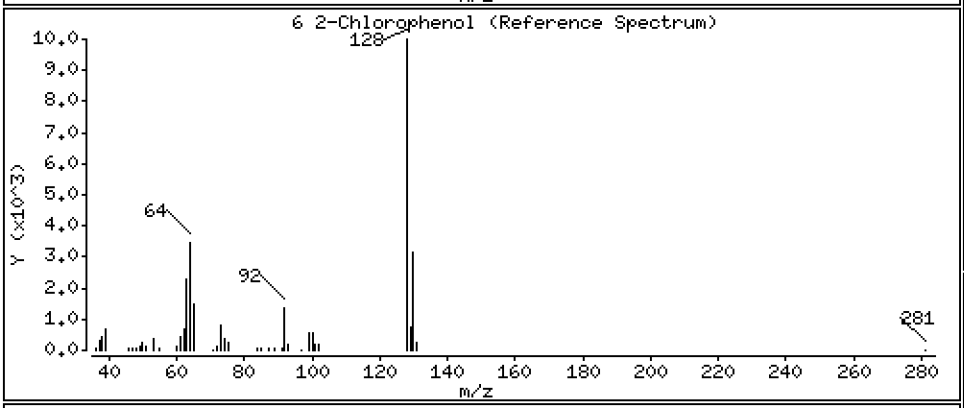
Column diameter: 0.25

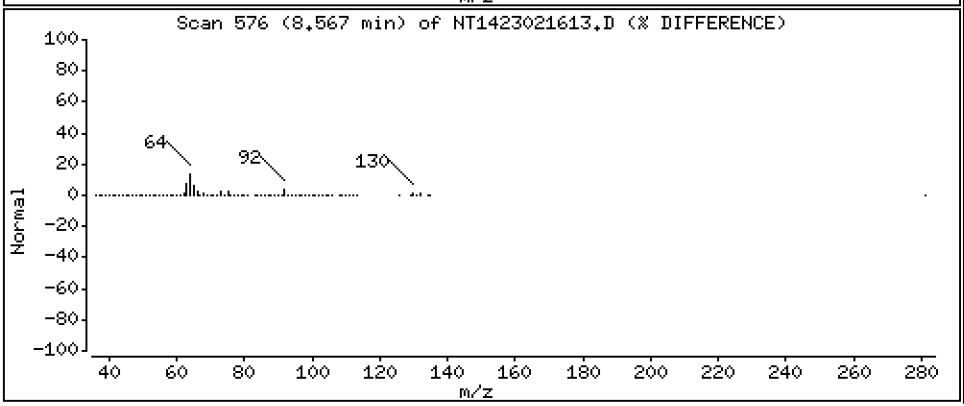
6 2-Chlorophenol

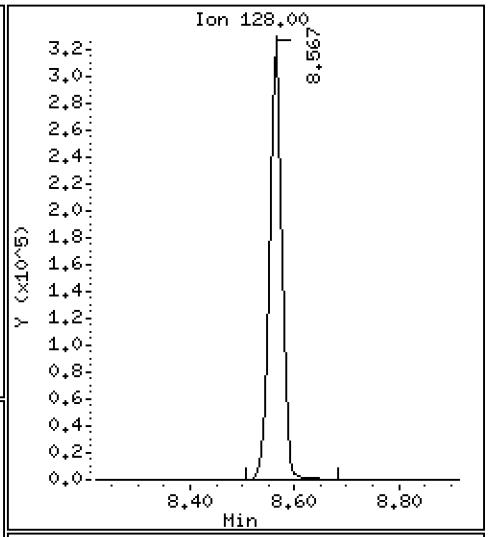
Concentration: 4.617 ug/mL

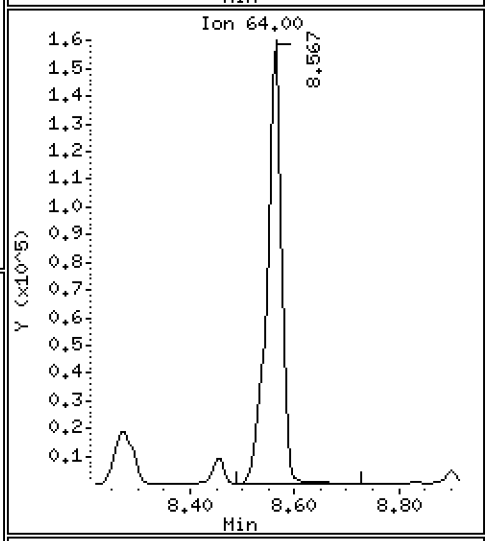


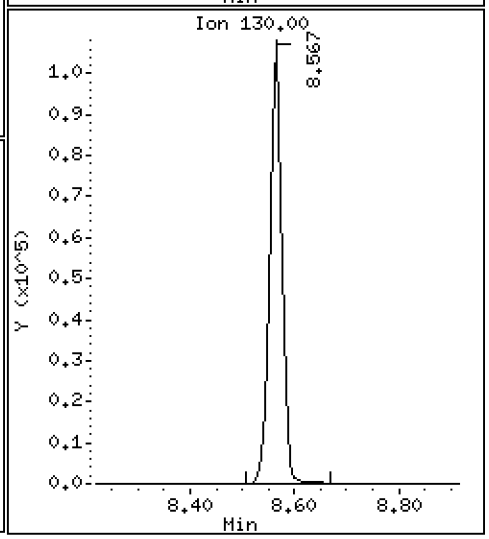












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

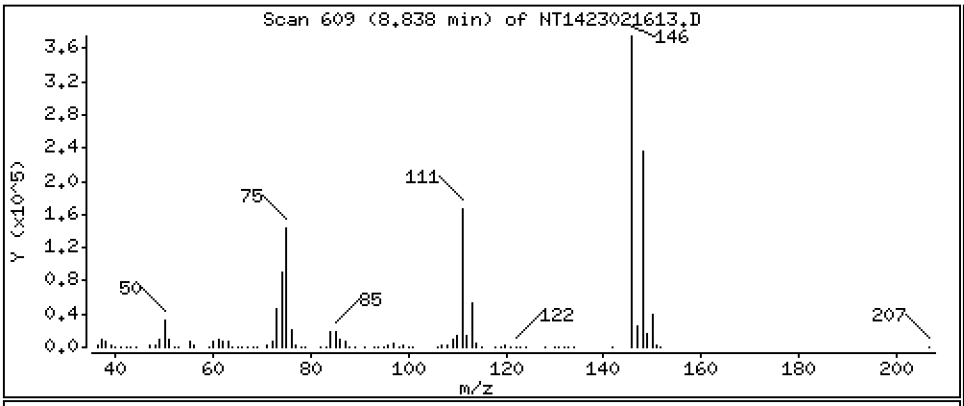
Operator: DSD

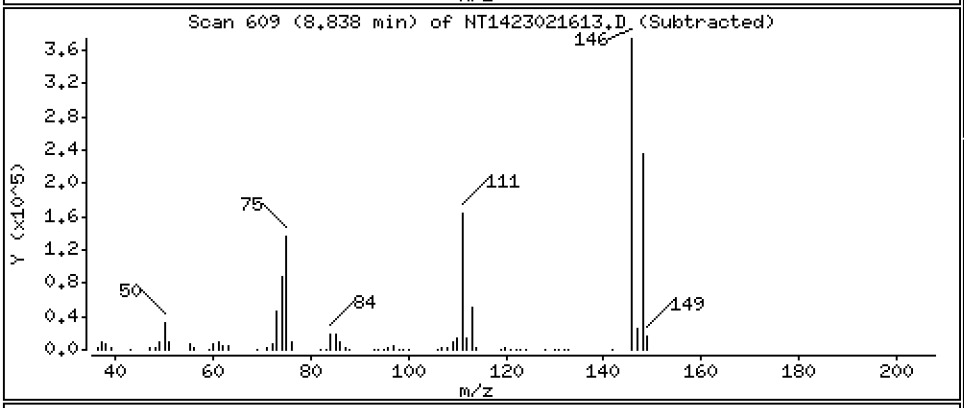
Column phase: ZB-5msi

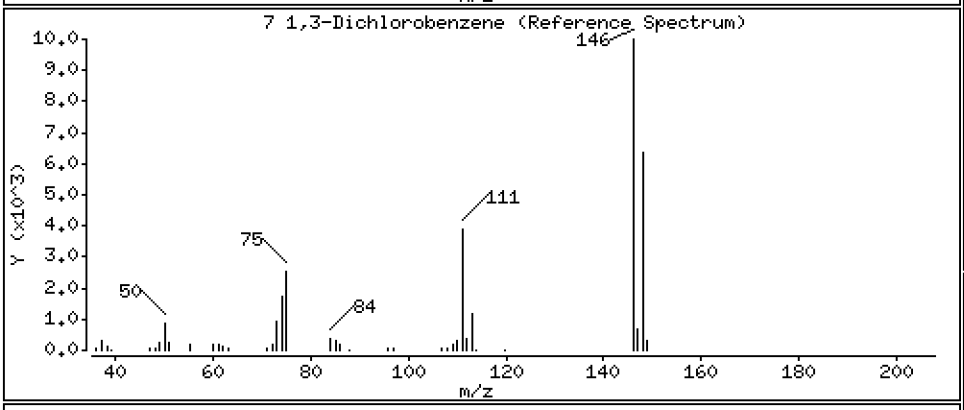
Column diameter: 0.25

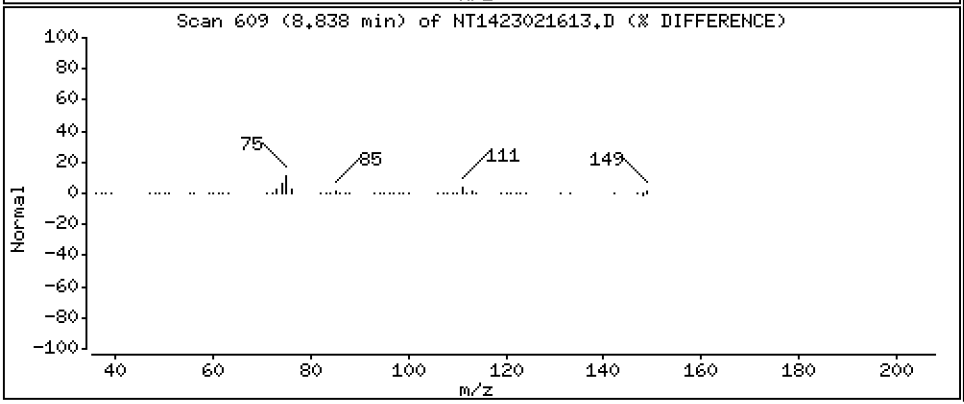
7 1,3-Dichlorobenzene

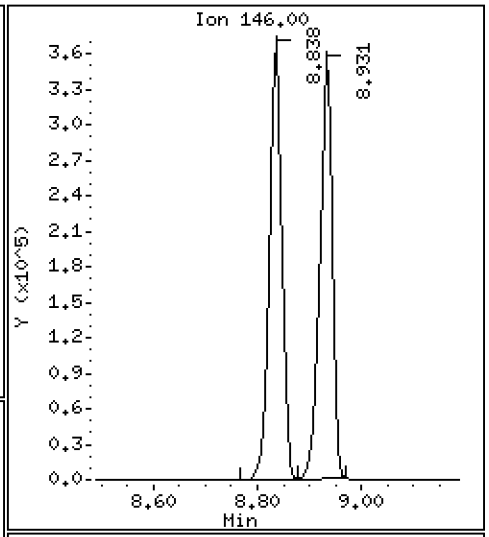
Concentration: 4.770 ug/mL

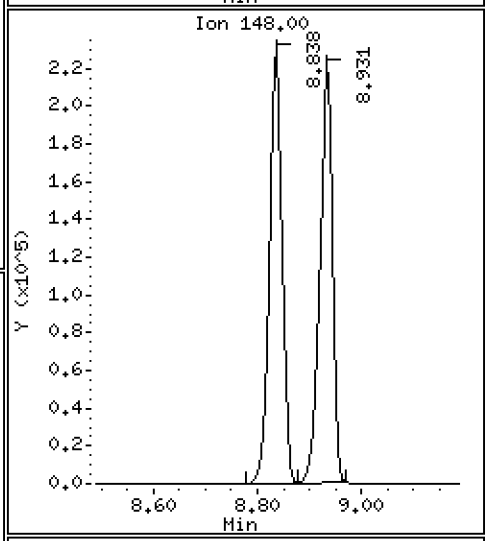


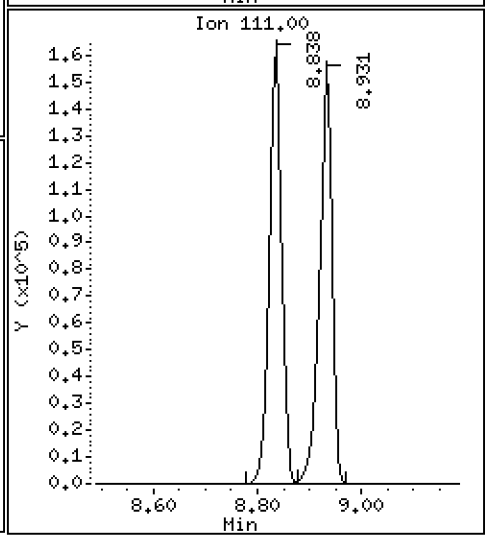












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

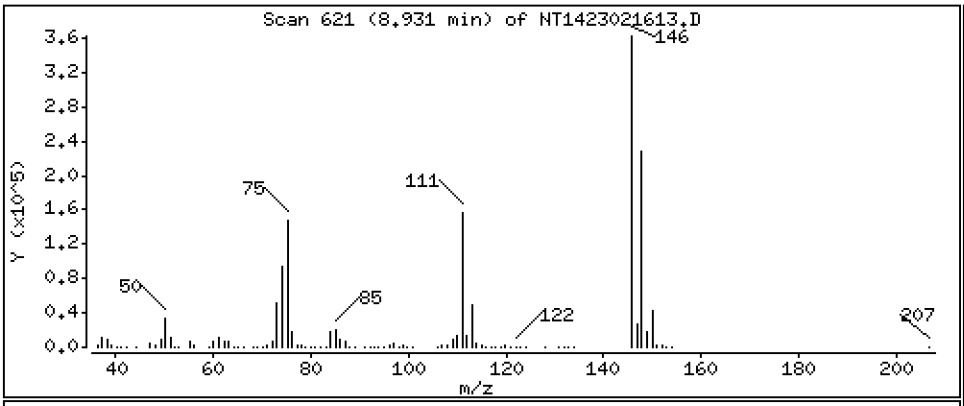
Operator: DSD

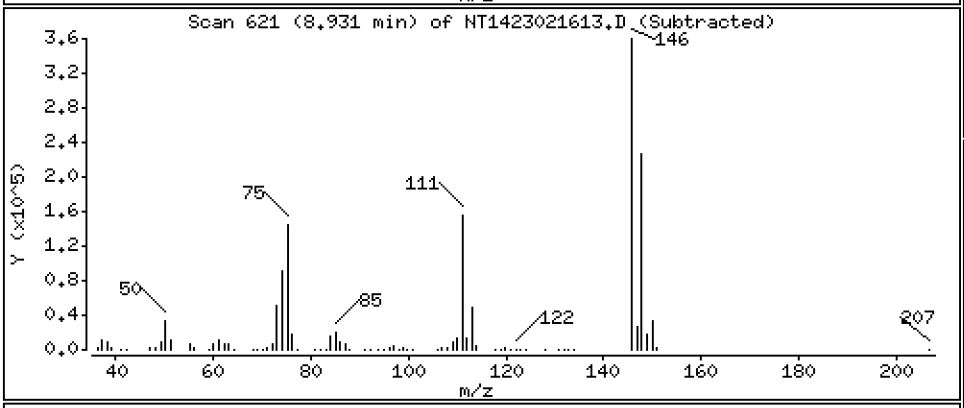
Column phase: ZB-5msi

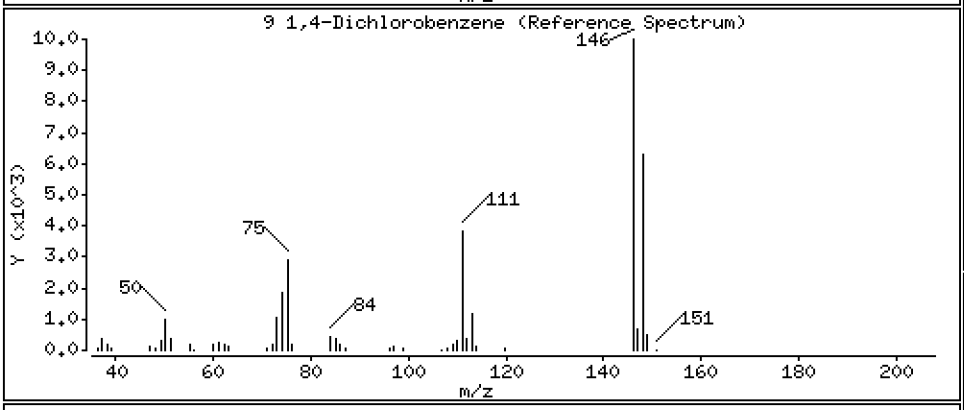
Column diameter: 0.25

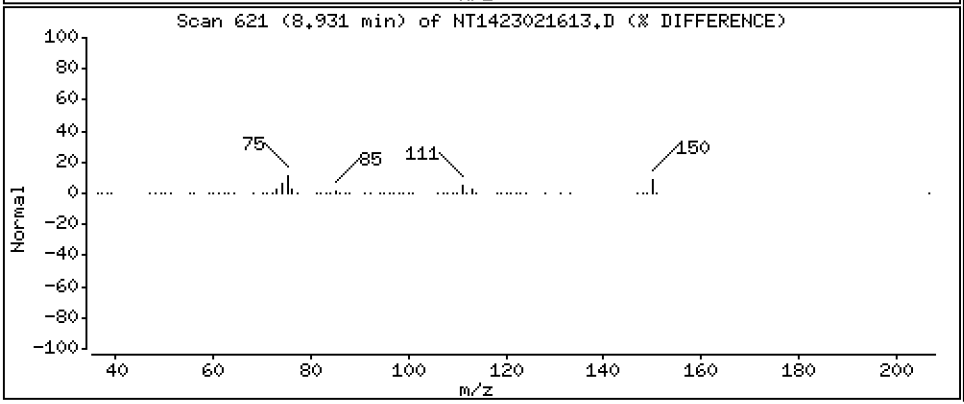
9 1,4-Dichlorobenzene

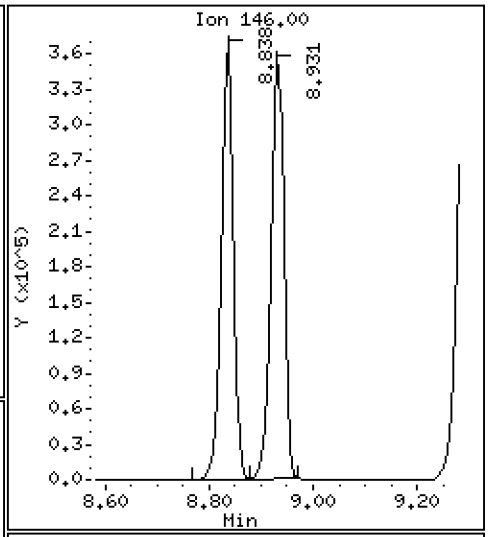
Concentration: 4.791 ug/mL

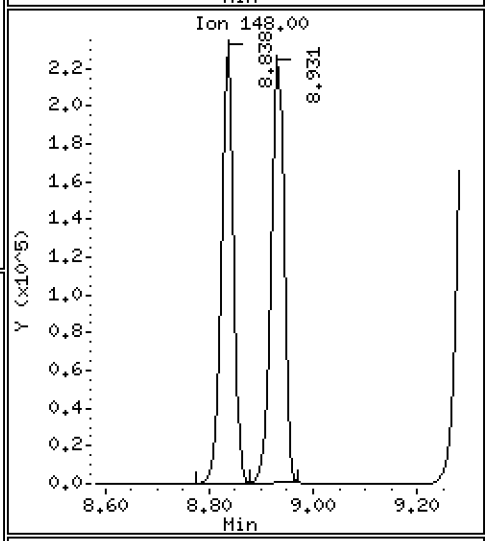


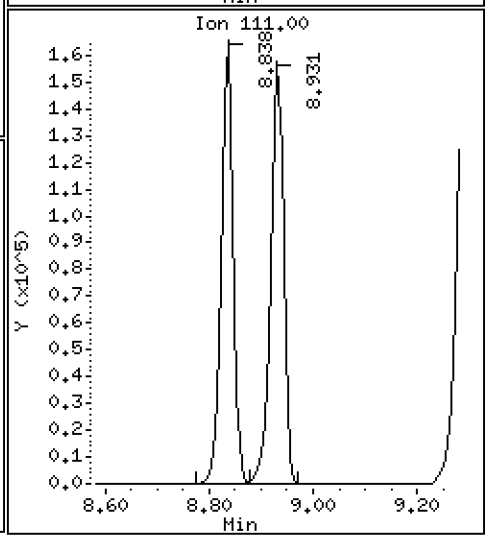












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

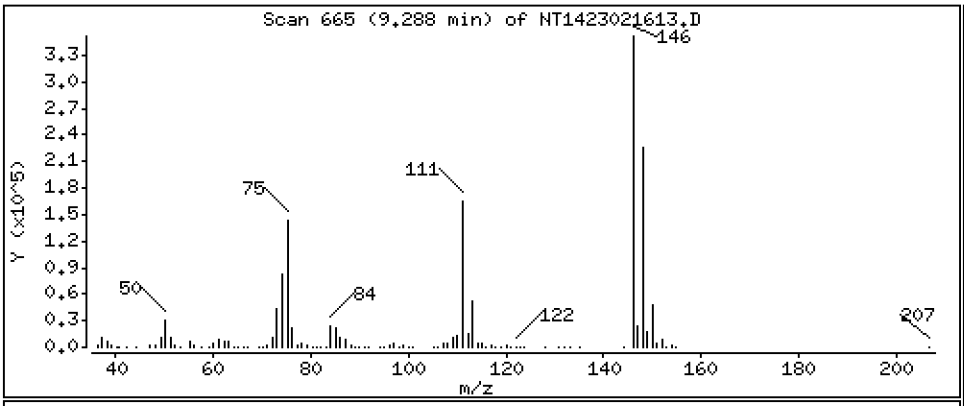
Operator: DSD

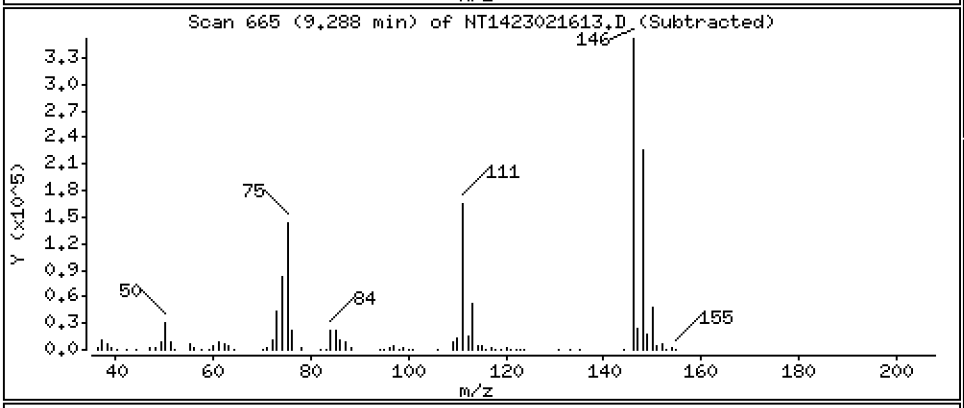
Column phase: ZB-5msi

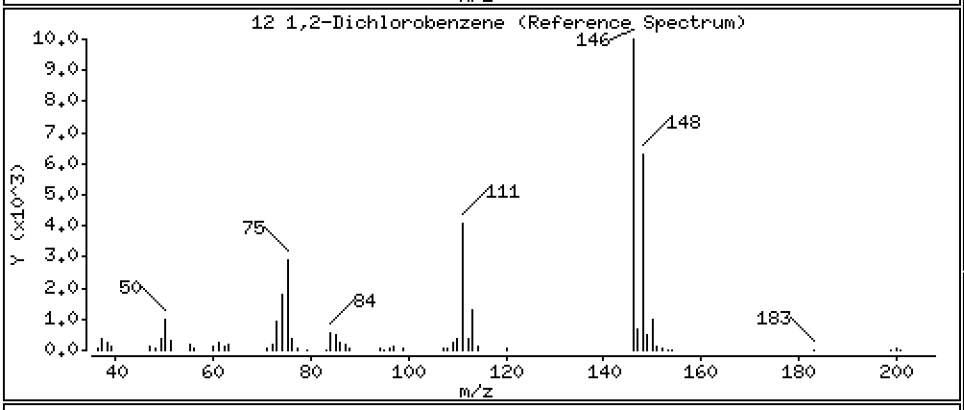
Column diameter: 0.25

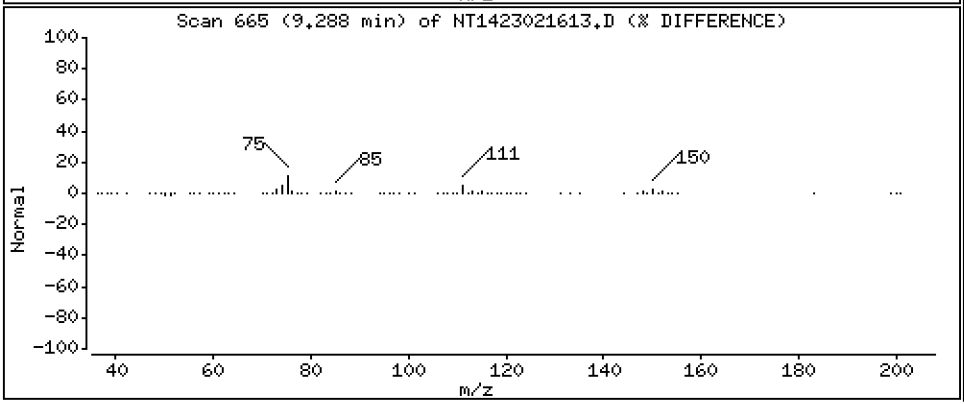
12 1,2-Dichlorobenzene

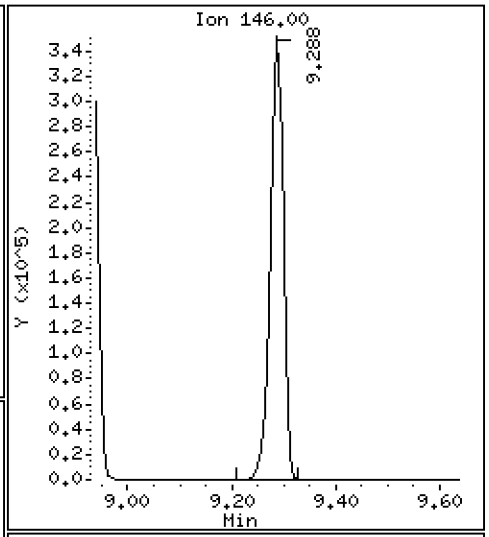
Concentration: 4.758 ug/mL

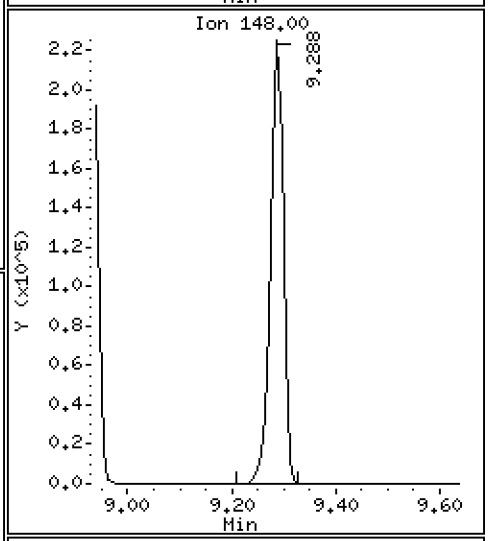


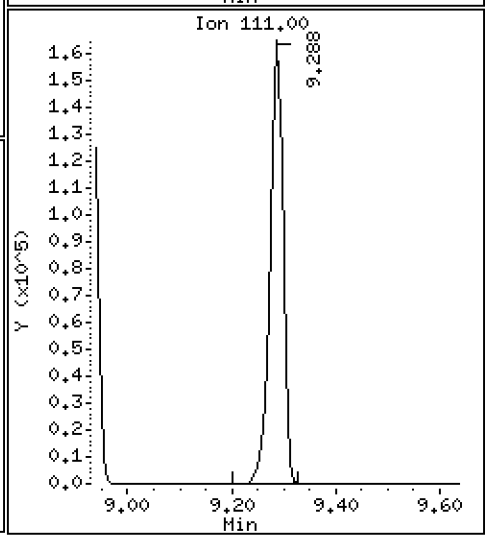












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

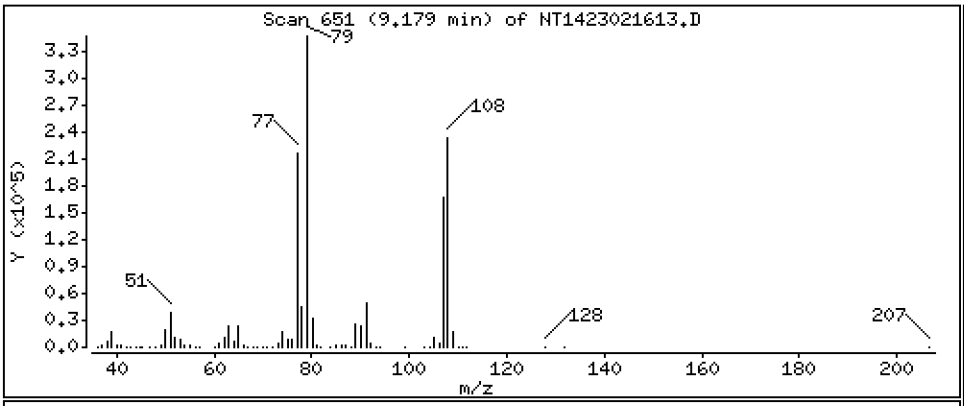
Operator: DSD

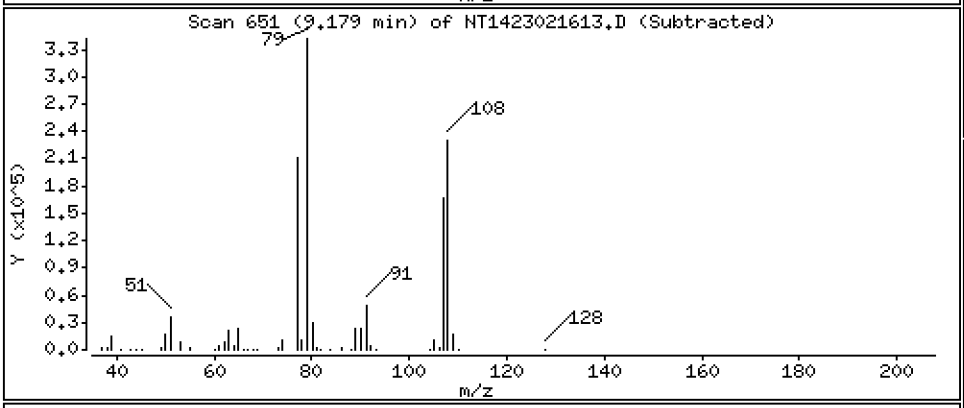
Column phase: ZB-5msi

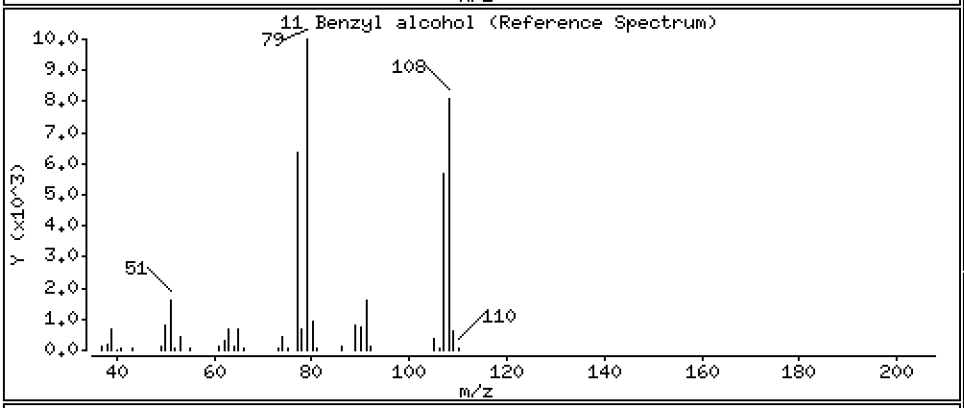
Column diameter: 0.25

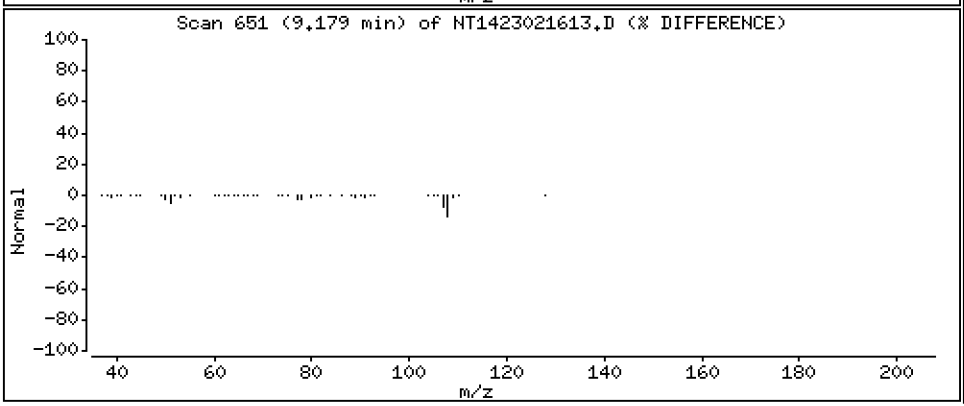
11 Benzyl alcohol

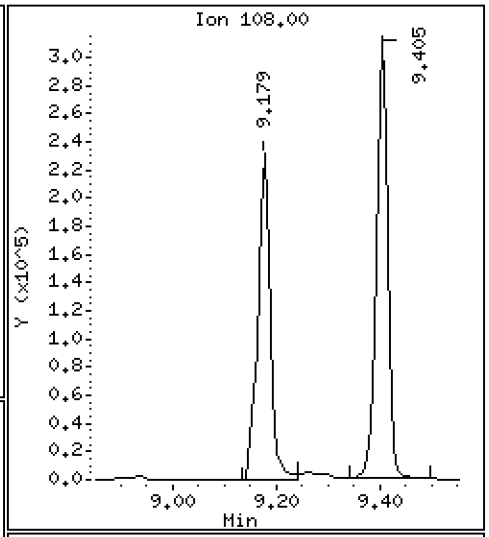
Concentration: 4.625 ug/mL

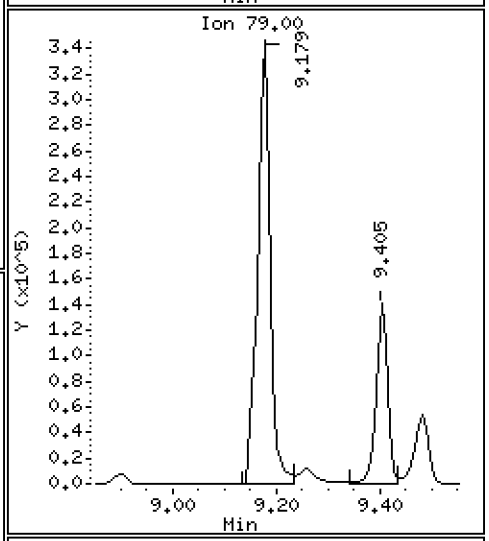


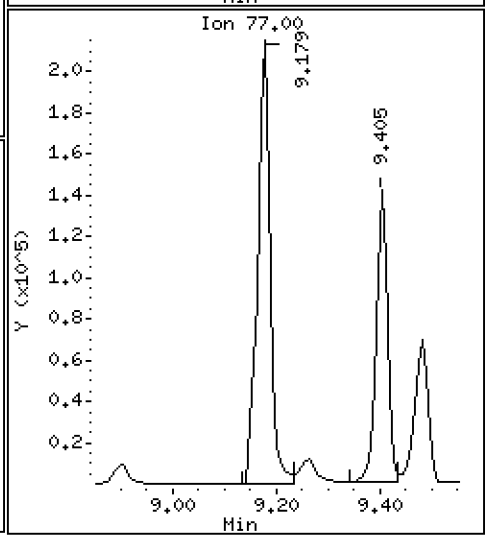












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

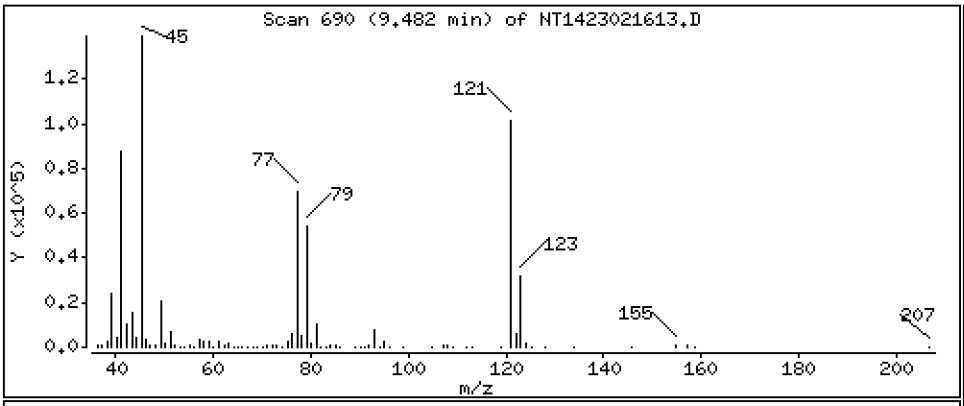
Operator: DSD

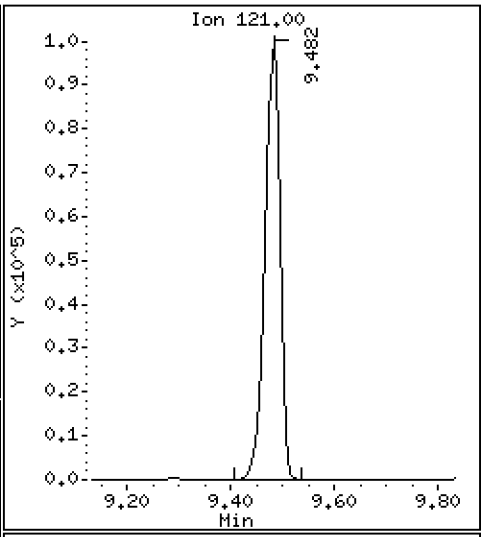
Column phase: ZB-5msi

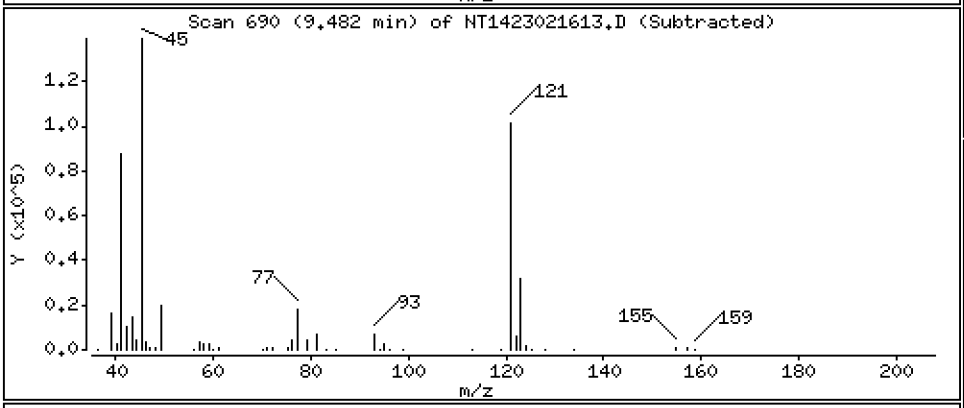
Column diameter: 0.25

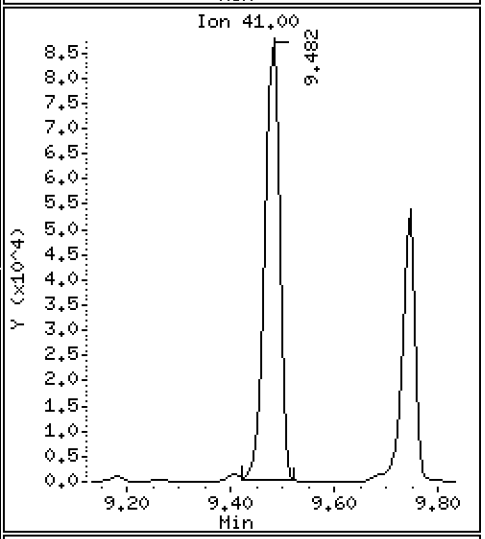
14 2,2'-oxybis(1-Chloropropane)

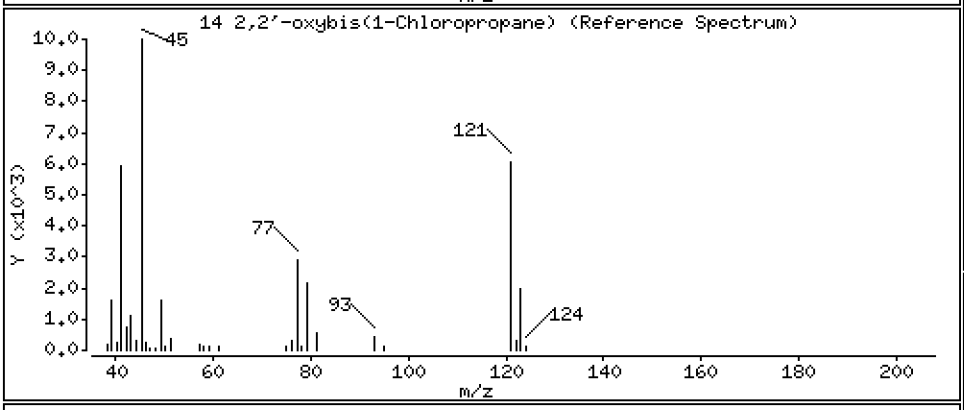
Concentration: 5.567 ug/mL

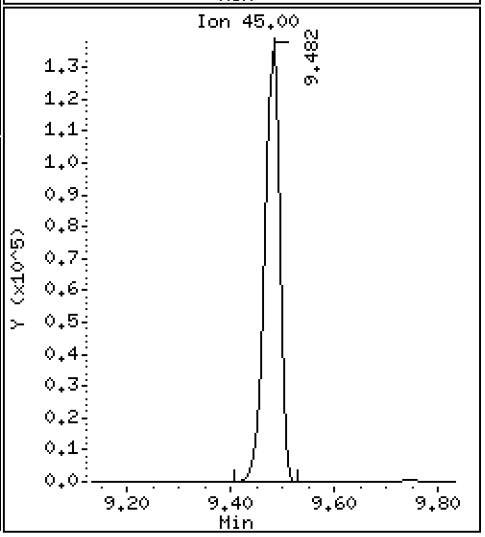


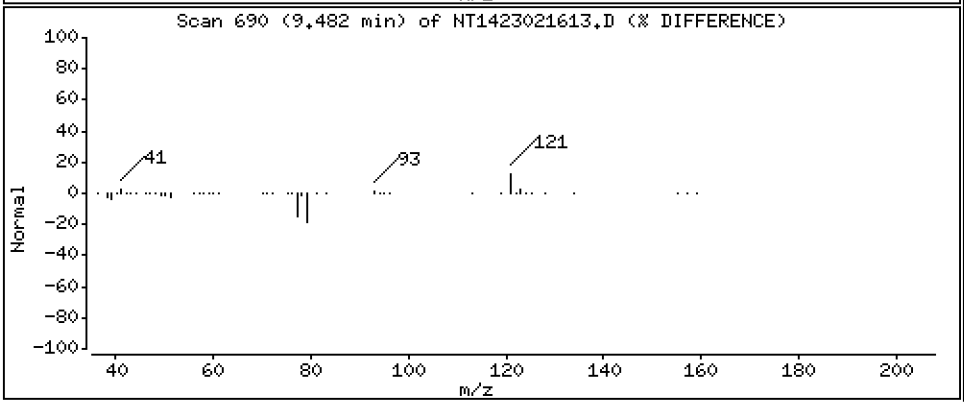












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

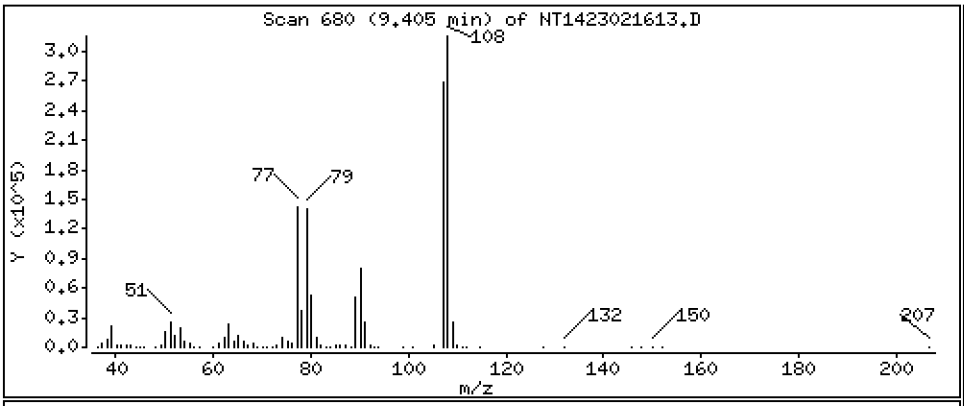
Operator: DSD

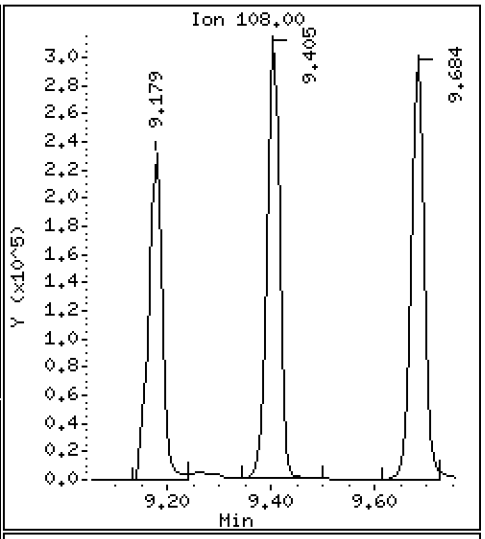
Column phase: ZB-5msi

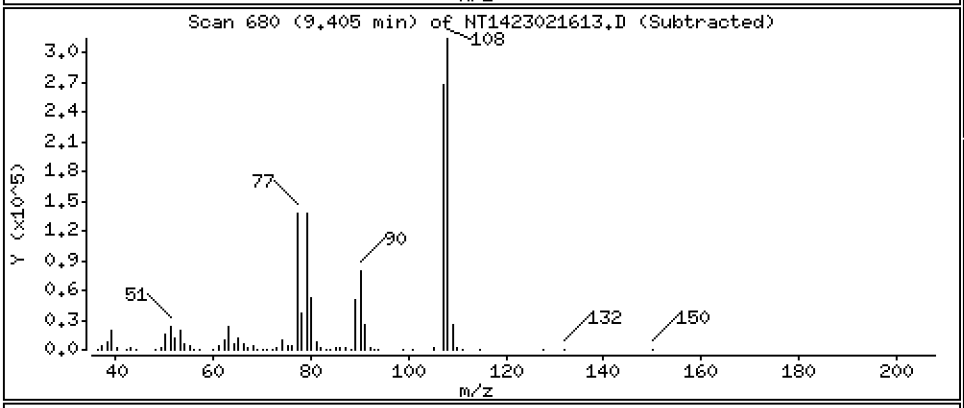
Column diameter: 0.25

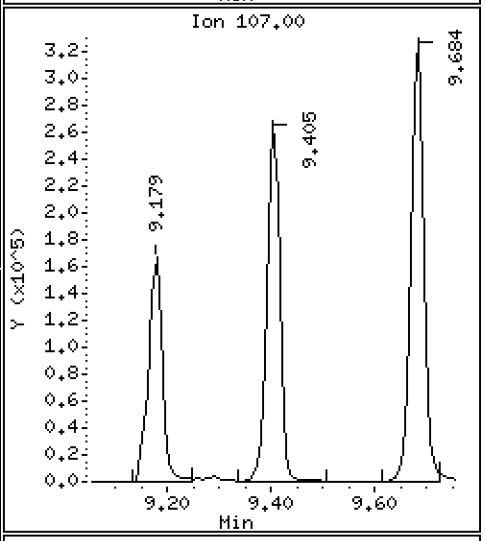
13 2-Methylphenol

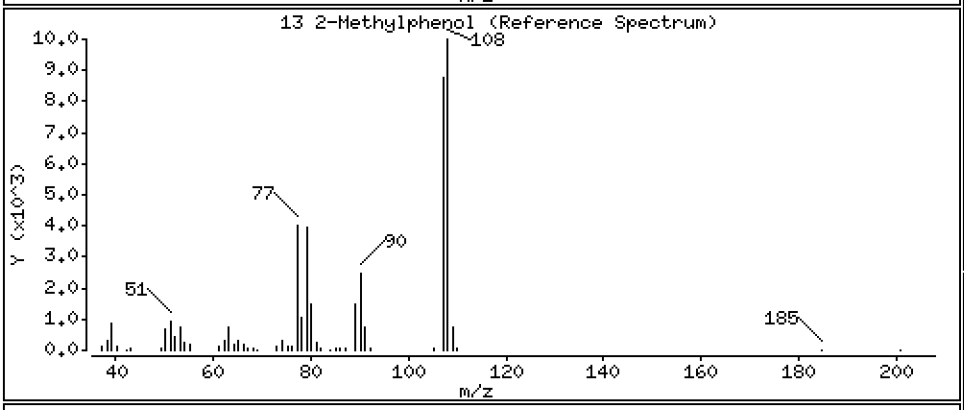
Concentration: 4.368 ug/mL

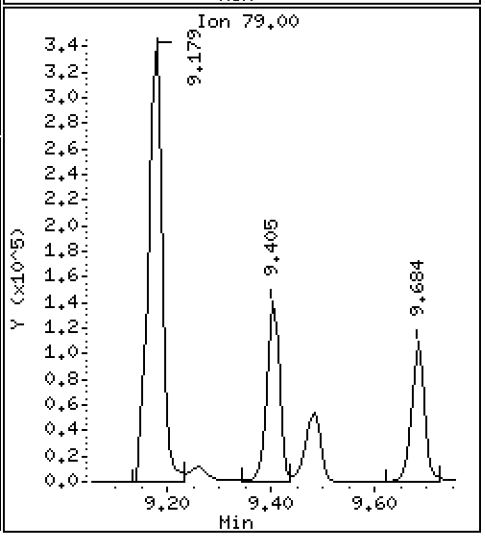


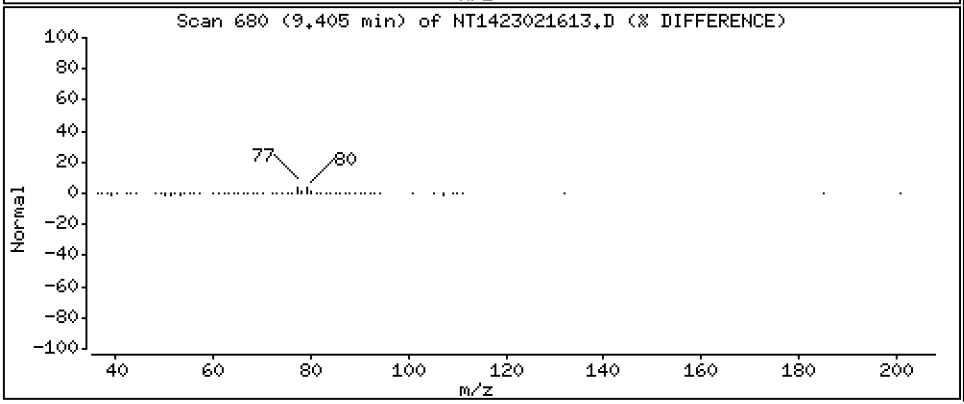












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

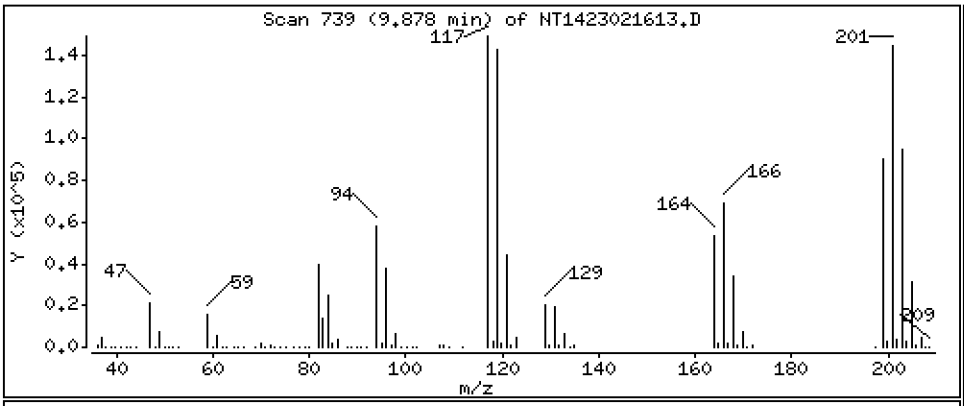
Operator: DSD

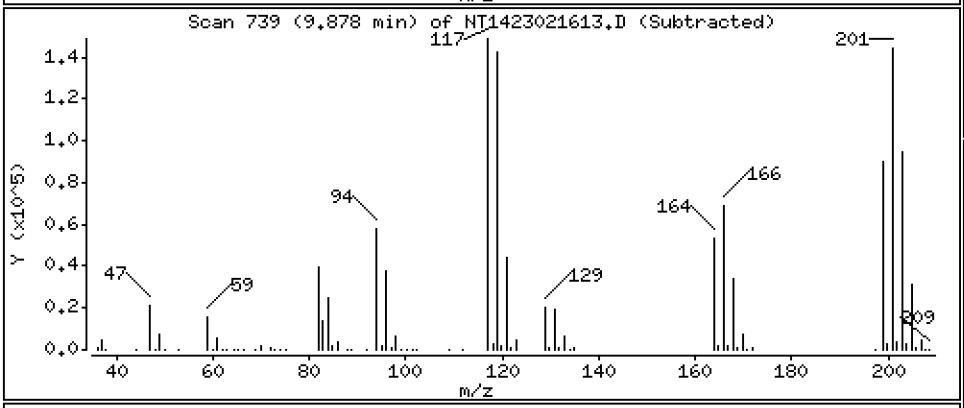
Column phase: ZB-5msi

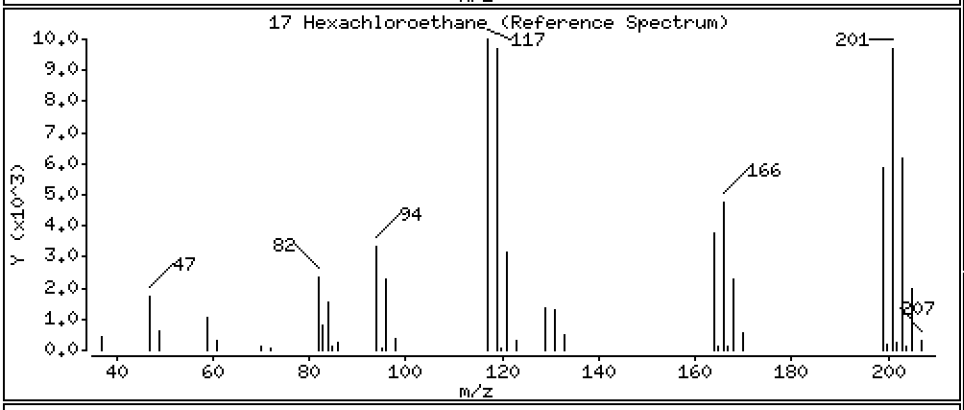
Column diameter: 0.25

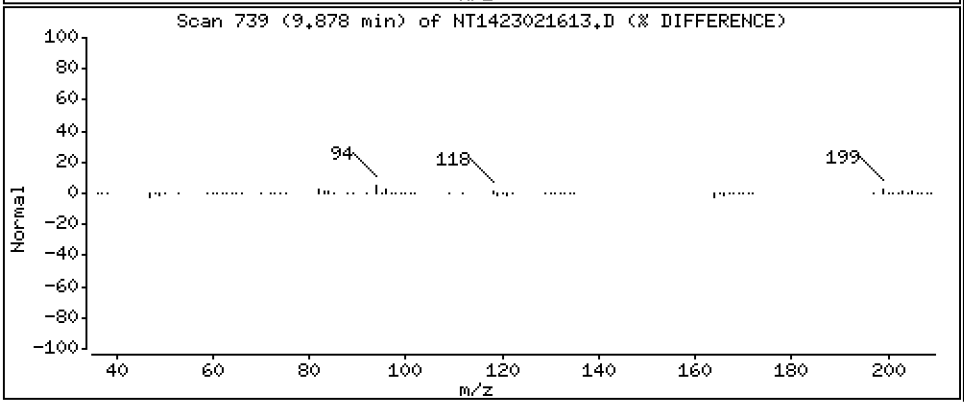
17 Hexachloroethane

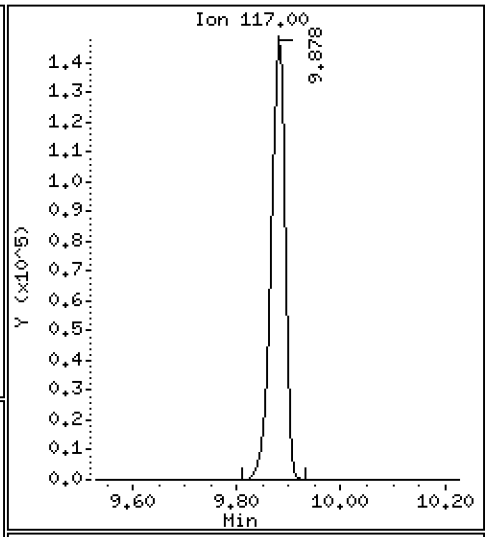
Concentration: 5.037 ug/mL

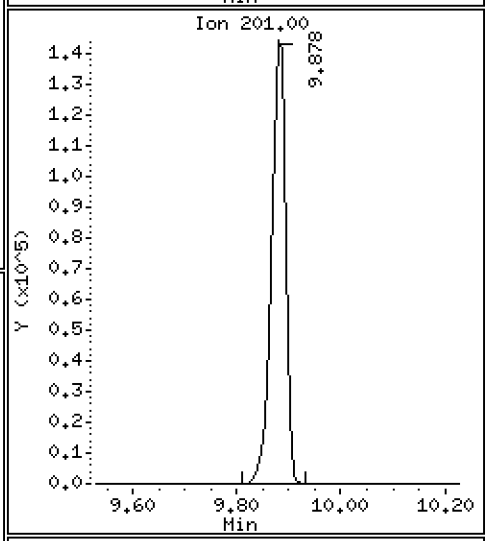


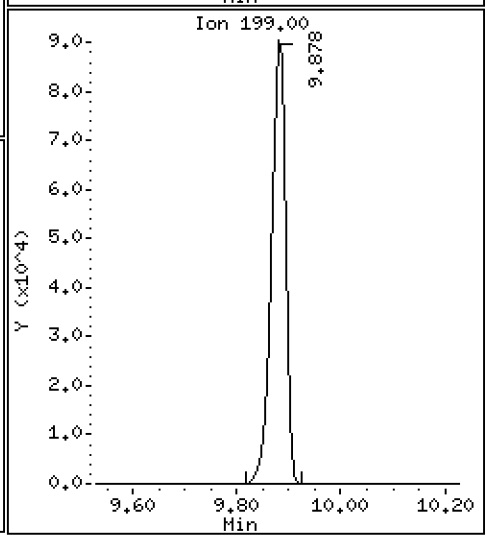












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

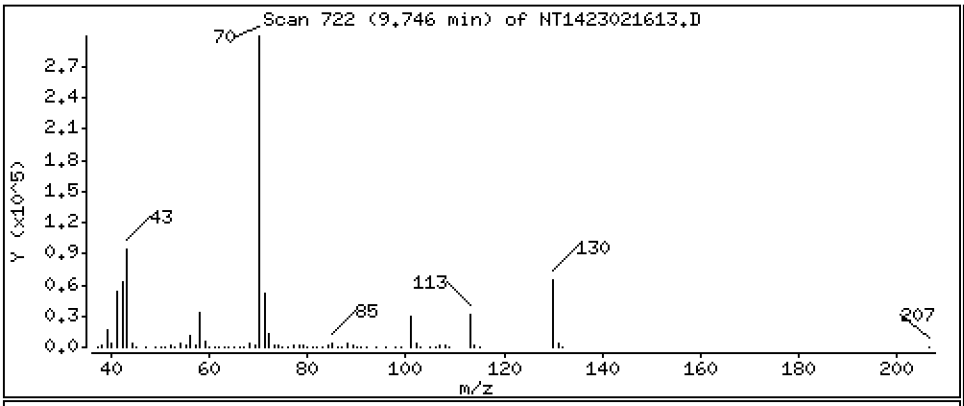
Operator: DSD

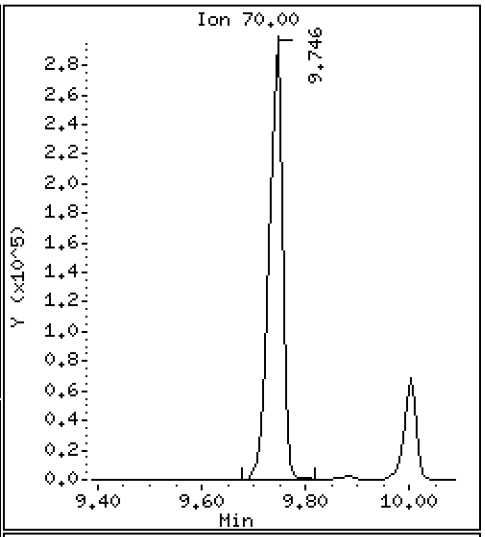
Column phase: ZB-5msi

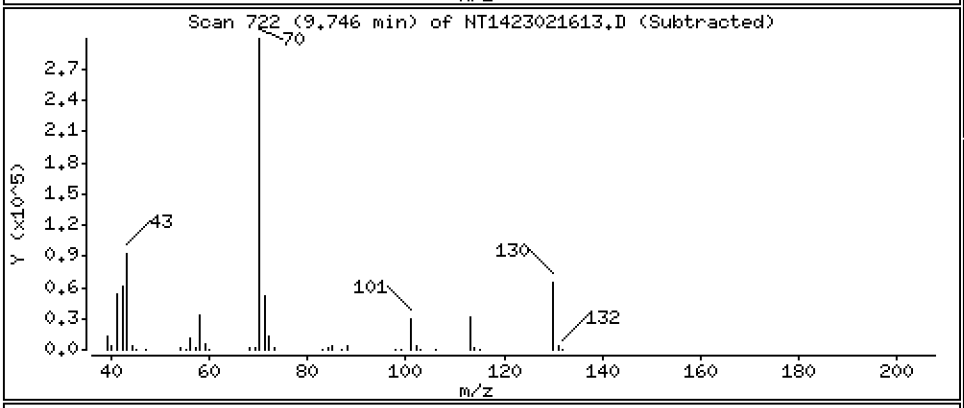
Column diameter: 0.25

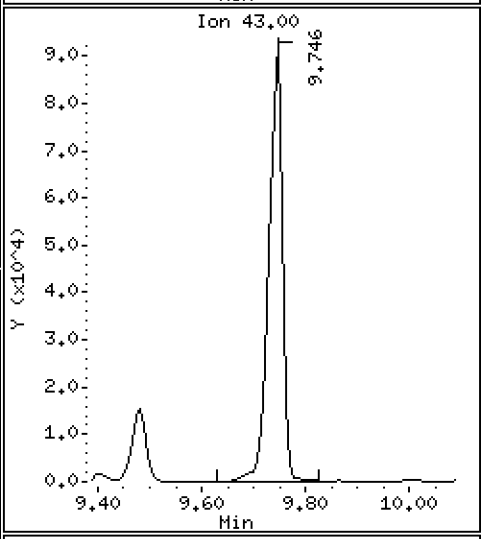
16 N-Nitroso-di-n-propylamine

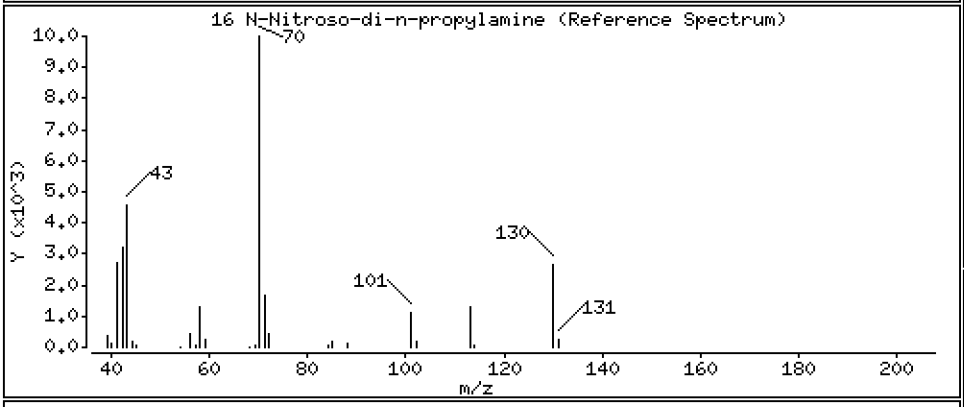
Concentration: 4.988 ug/mL

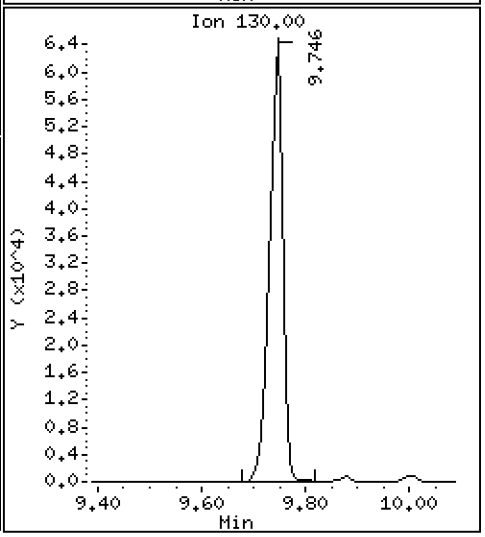


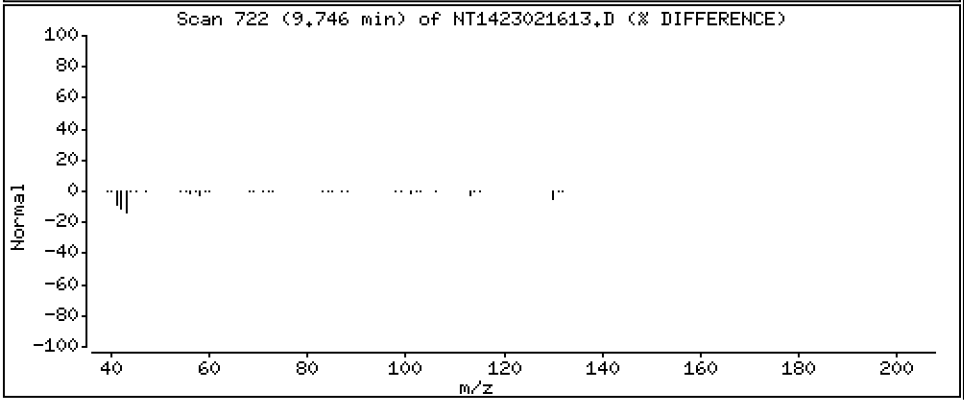












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

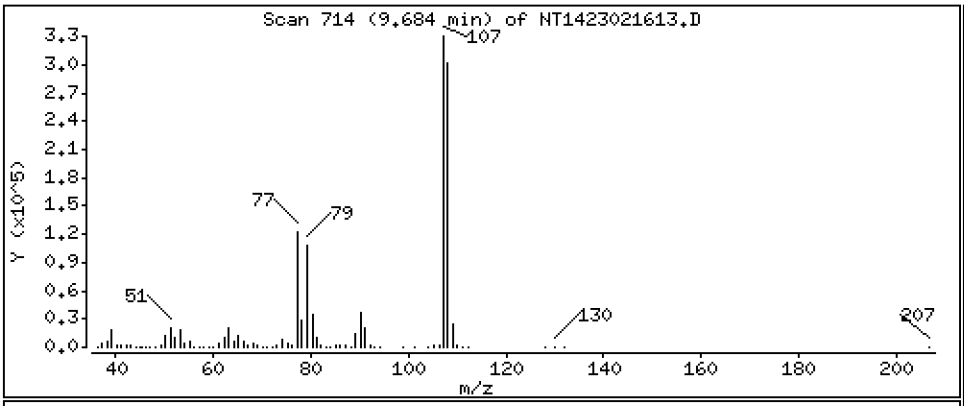
Operator: DSD

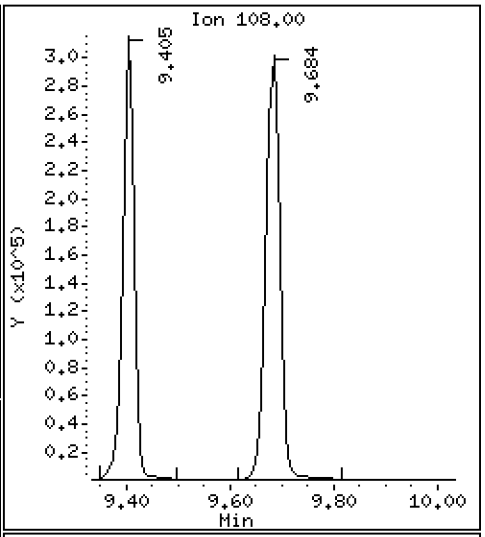
Column phase: ZB-5msi

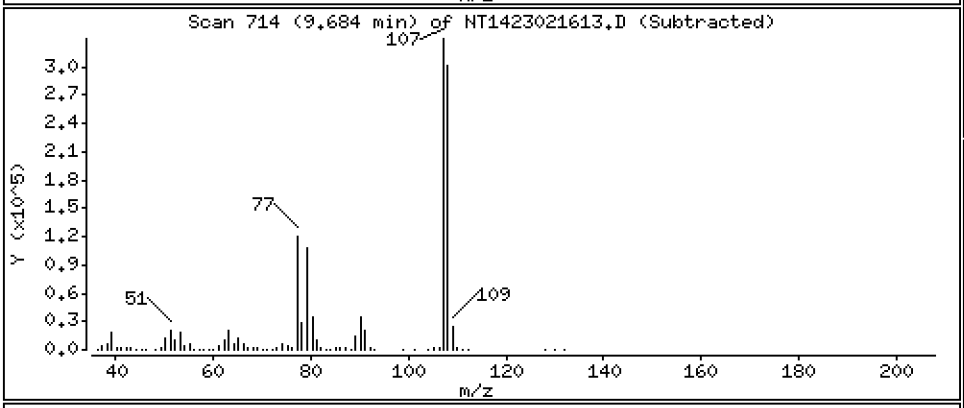
Column diameter: 0.25

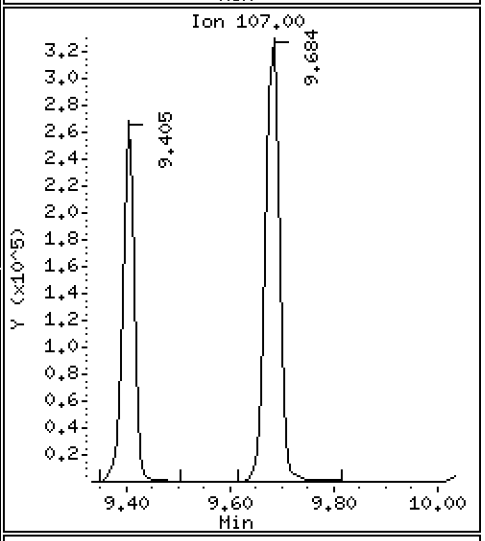
15 4-Methylphenol

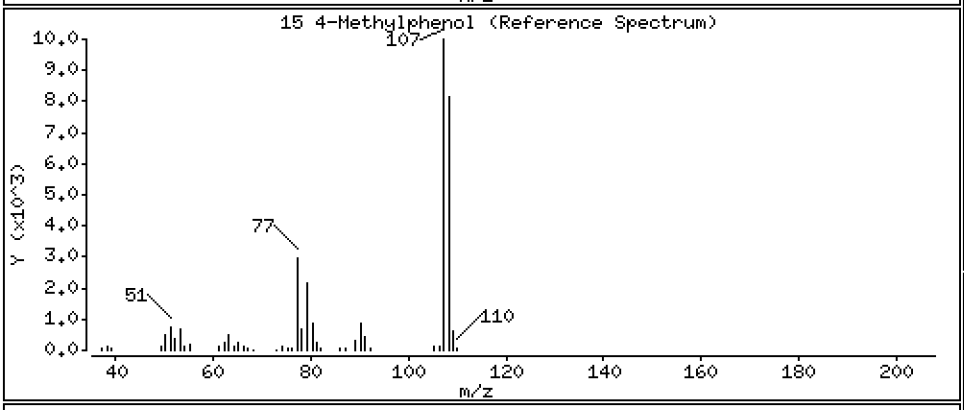
Concentration: 4.591 ug/mL

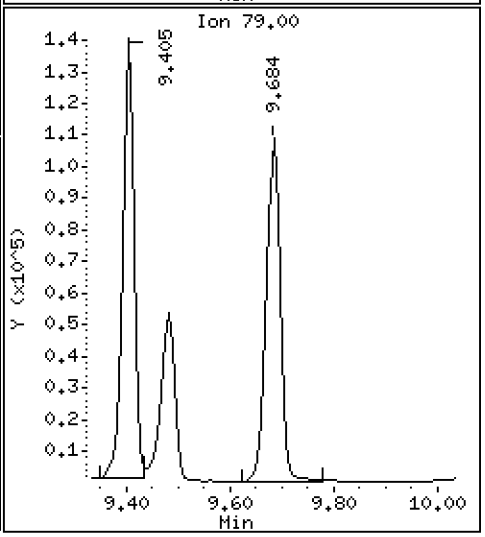


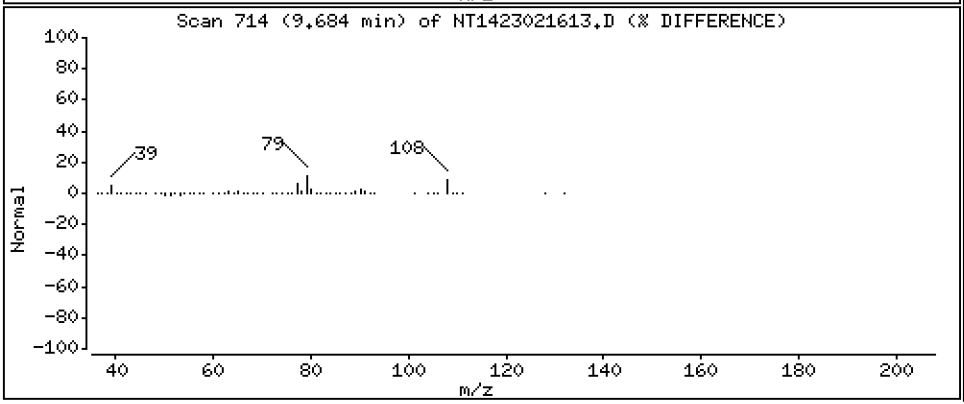












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

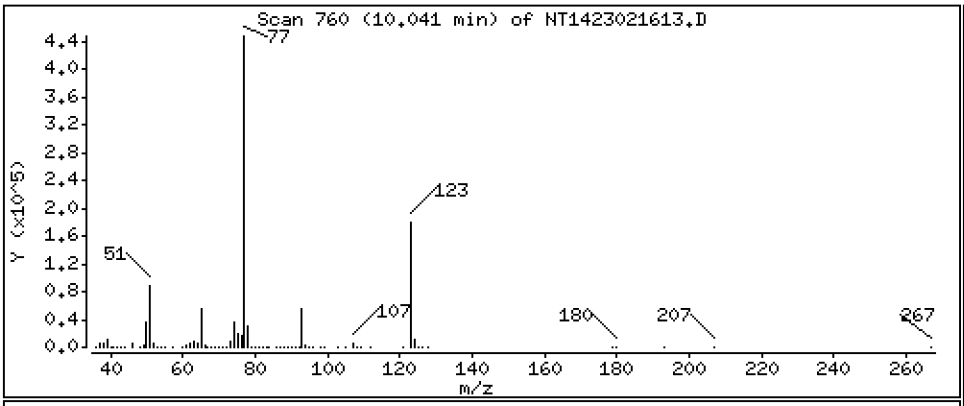
Operator: DSD

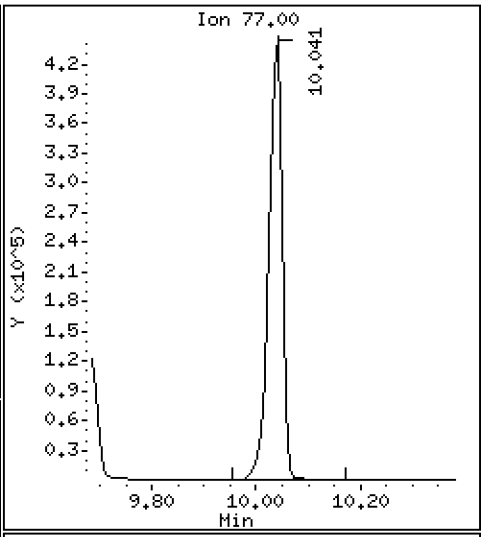
Column phase: ZB-5msi

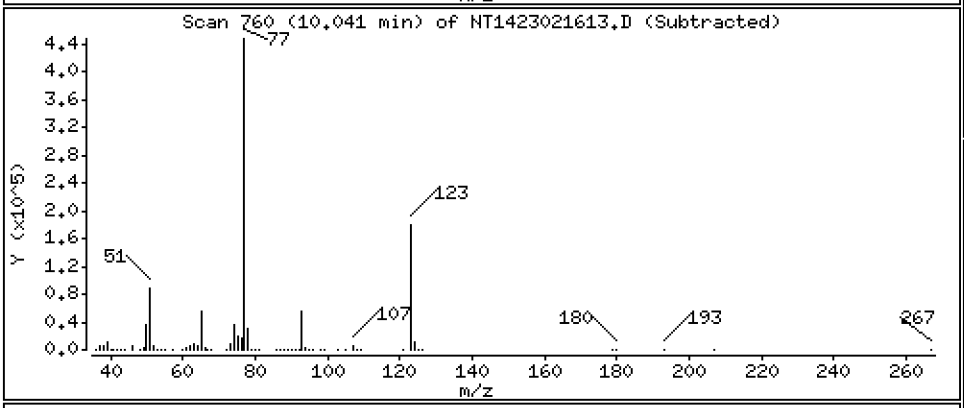
Column diameter: 0.25

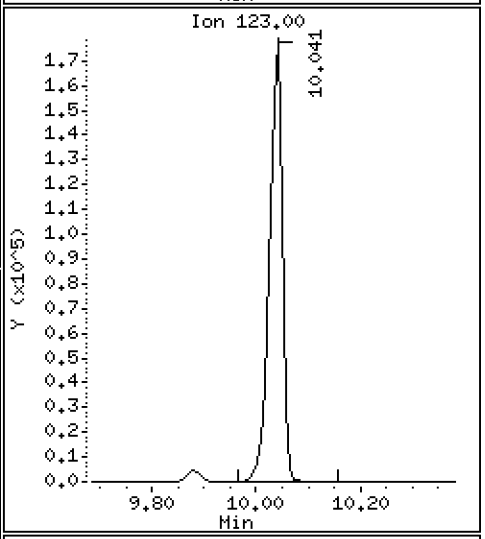
19 Nitrobenzene

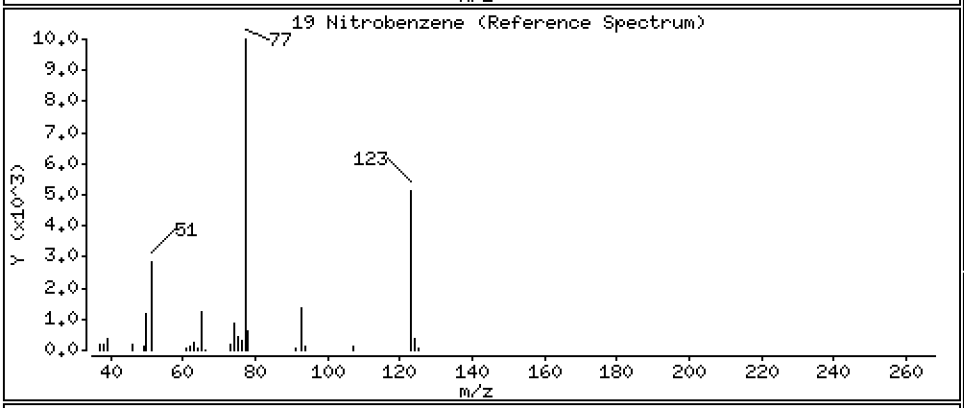
Concentration: 4.949 ug/mL

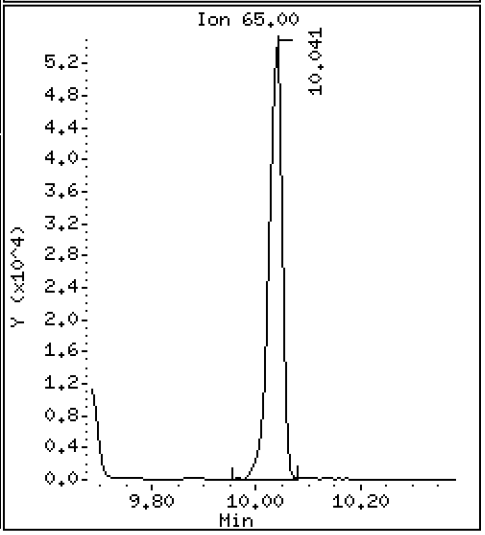


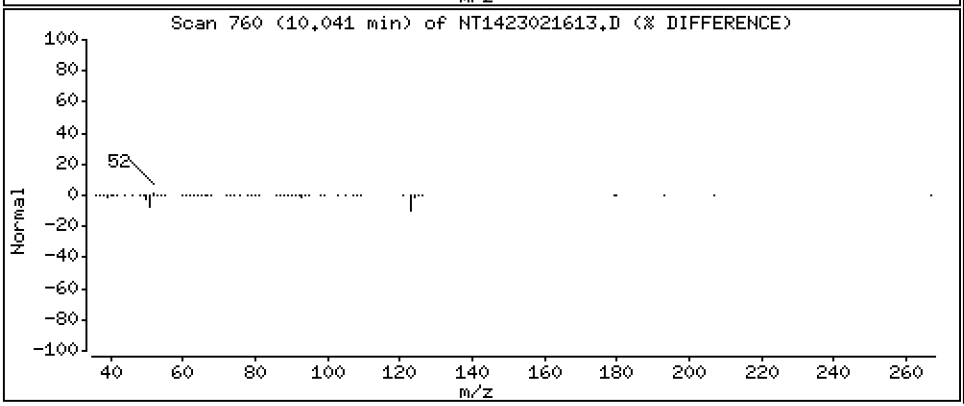












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

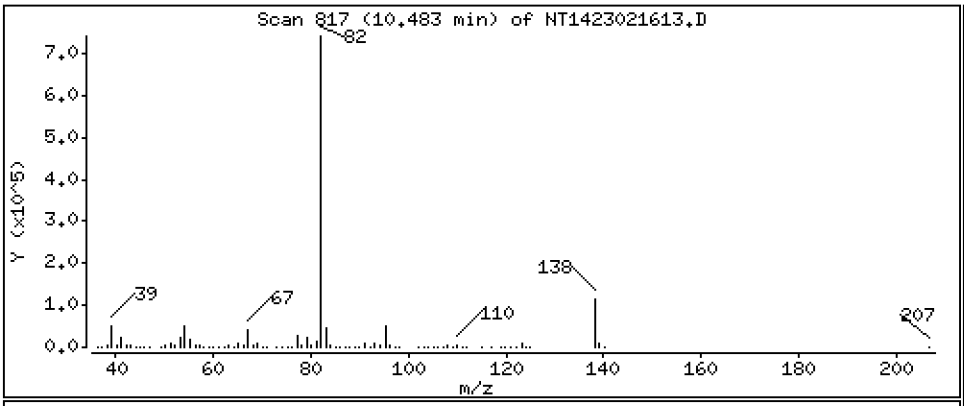
Operator: DSD

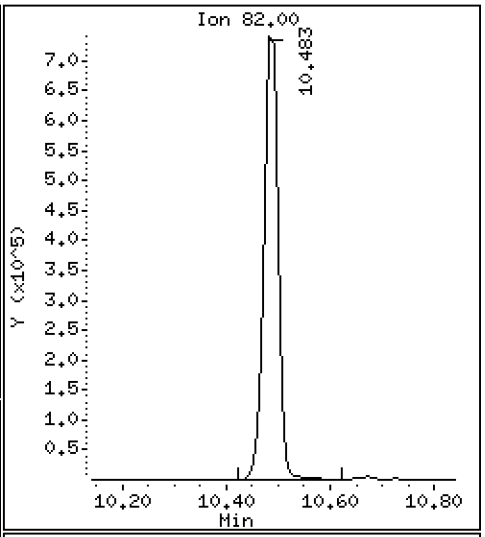
Column phase: ZB-5msi

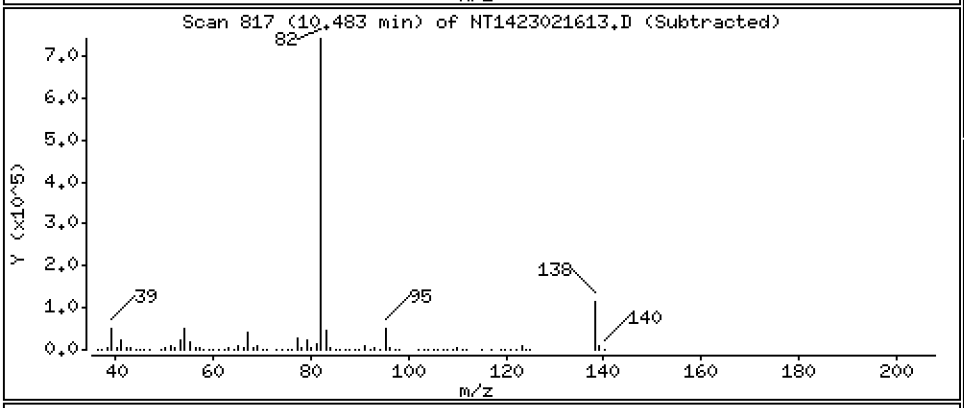
Column diameter: 0.25

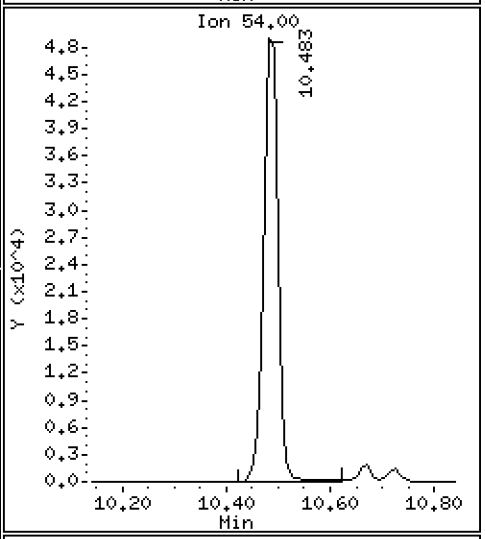
20 Isophorone

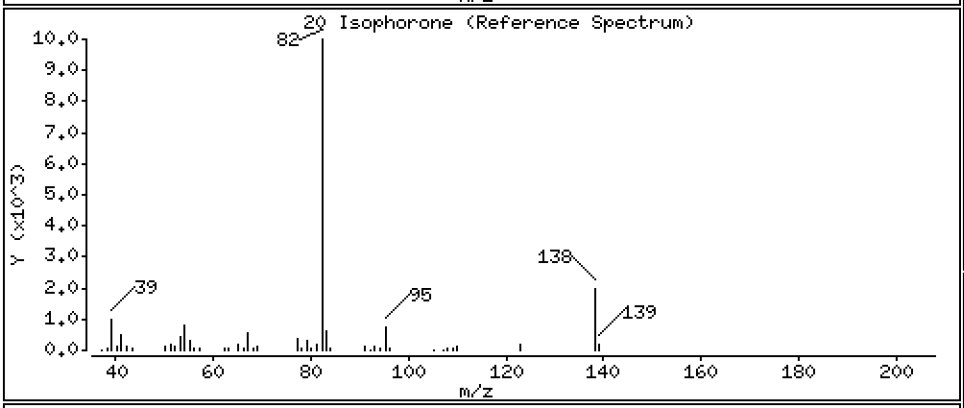
Concentration: 7.094 ug/mL

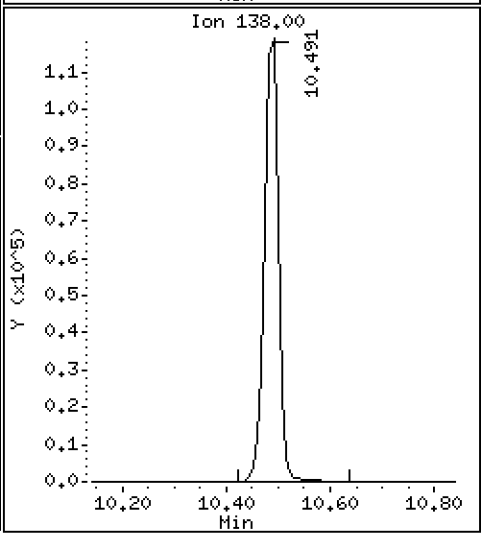


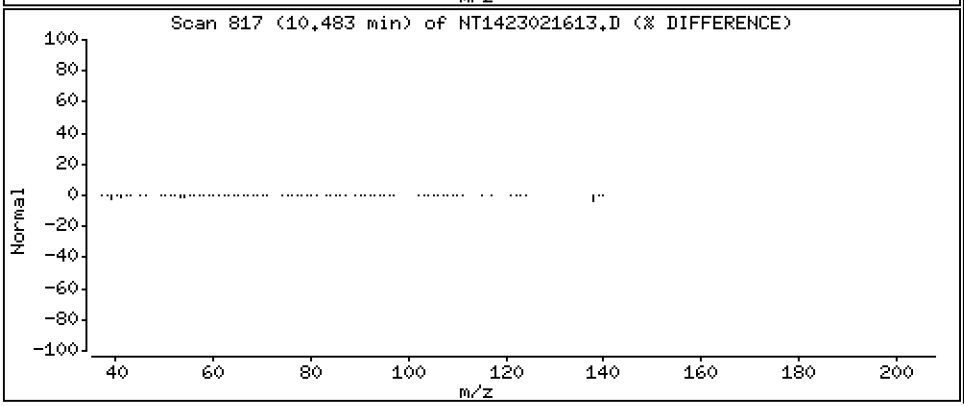












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

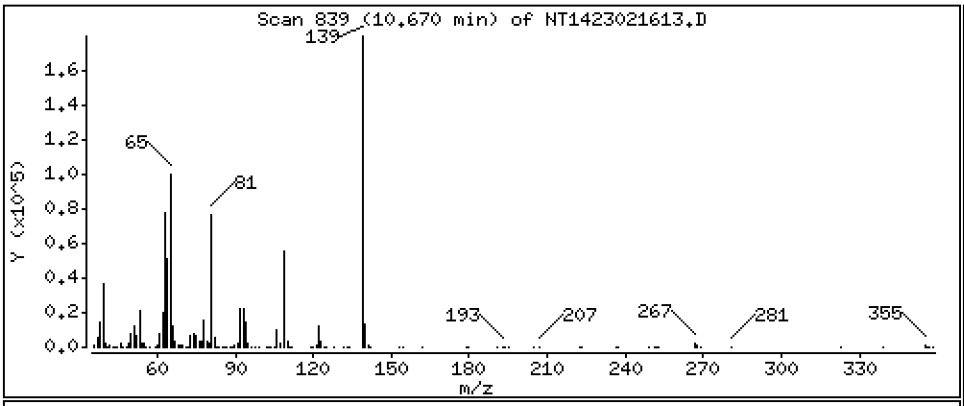
Operator: DSD

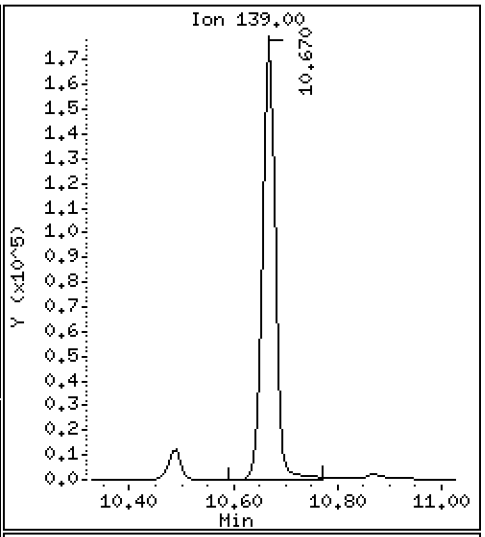
Column phase: ZB-5msi

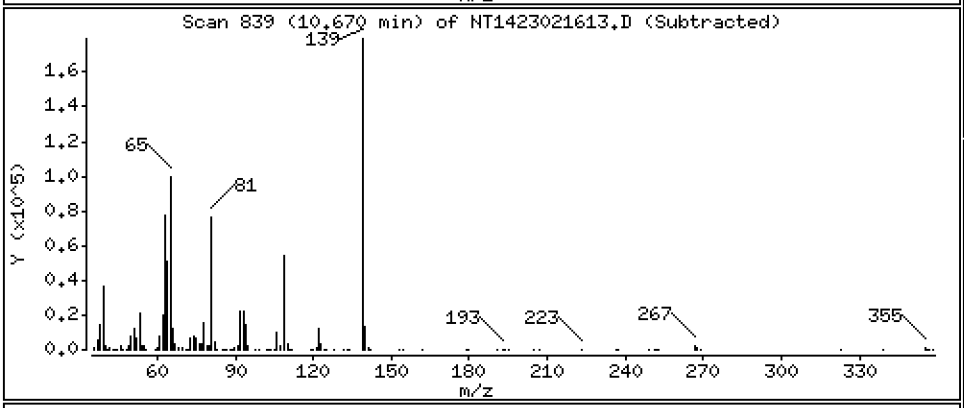
Column diameter: 0.25

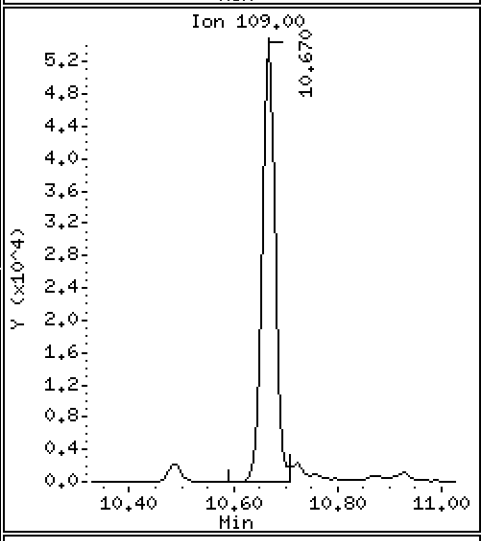
21 2-Nitrophenol

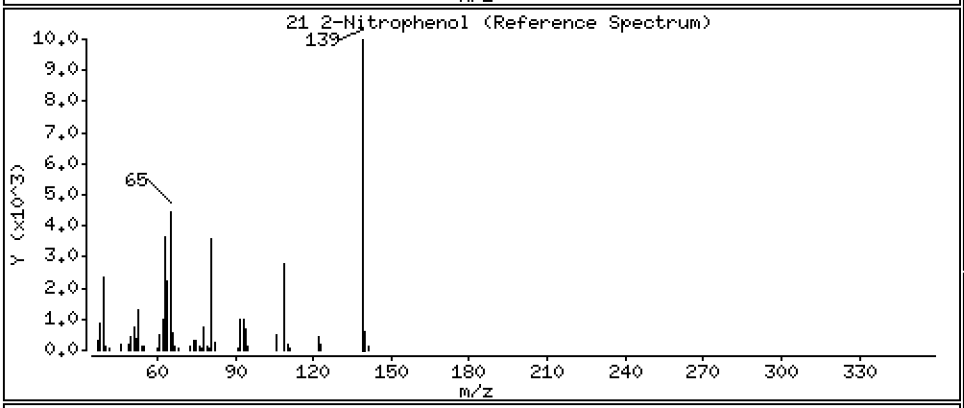
Concentration: 4.453 ug/mL

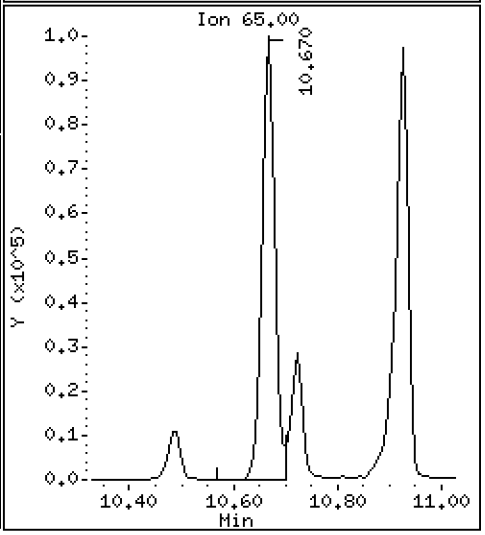


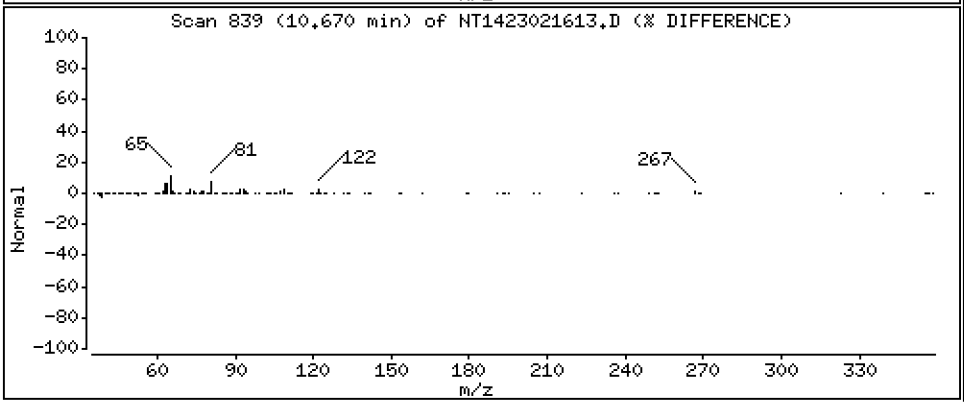












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

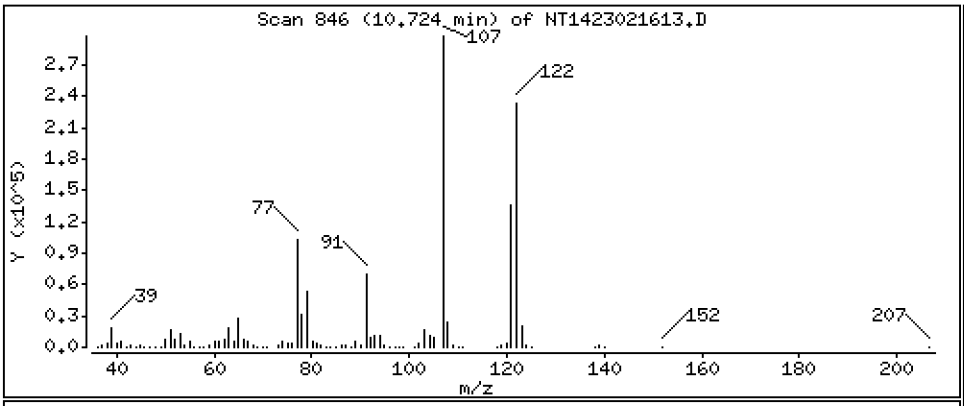
Operator: DSD

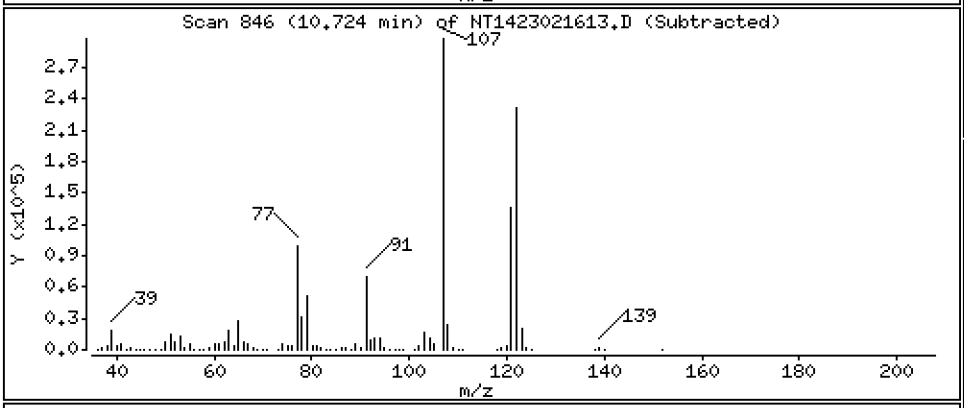
Column phase: ZB-5msi

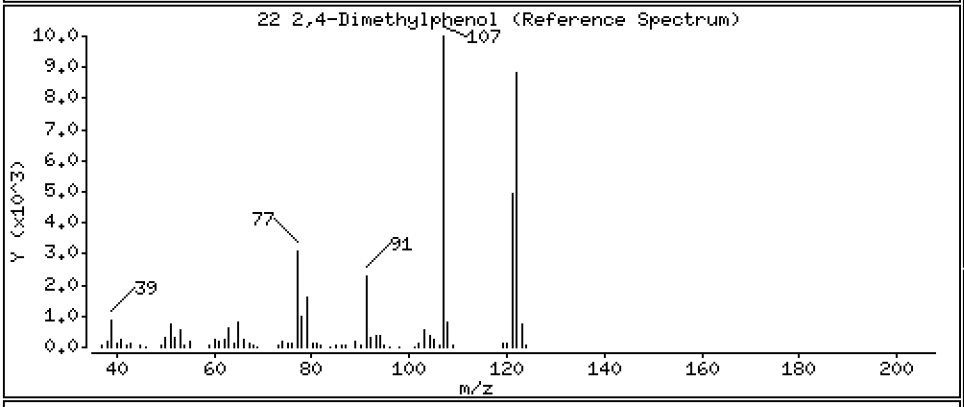
Column diameter: 0.25

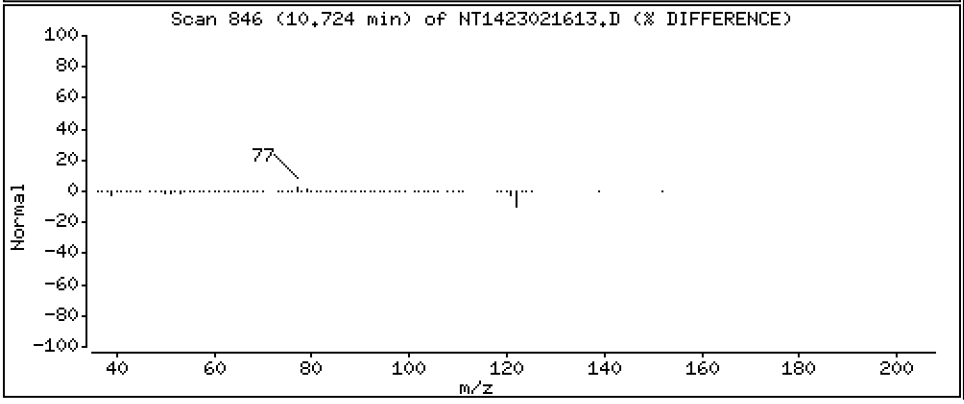
22 2,4-Dimethylphenol

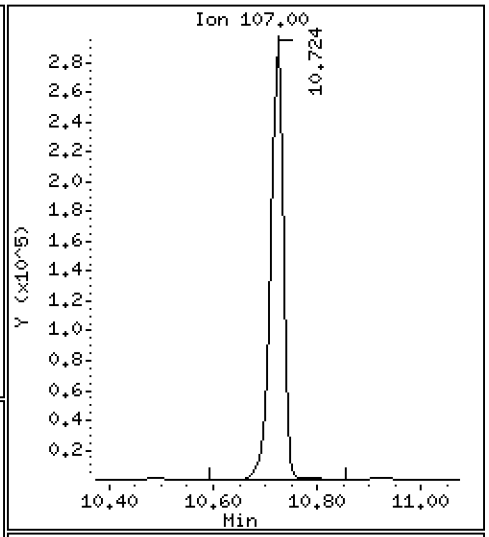
Concentration: 4.274 ug/mL

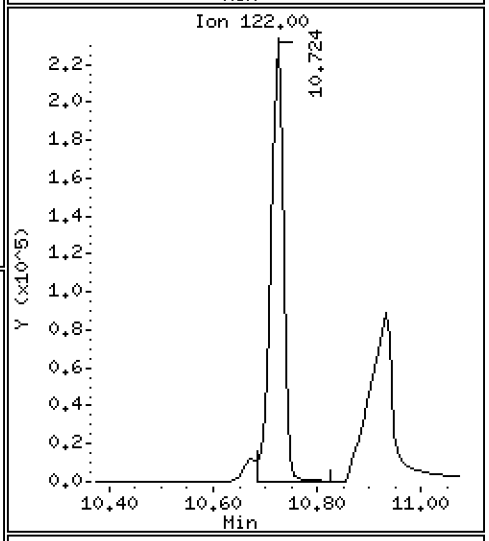


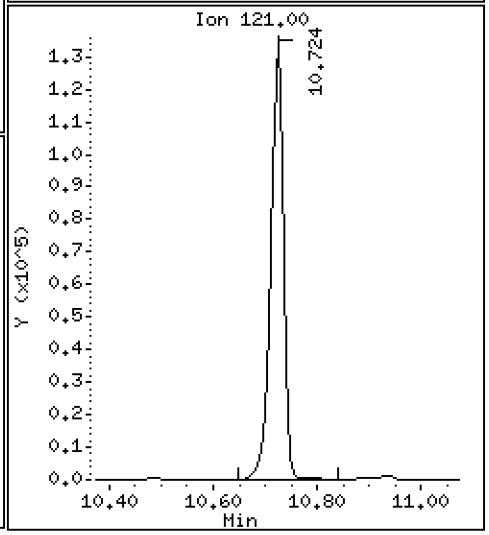












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

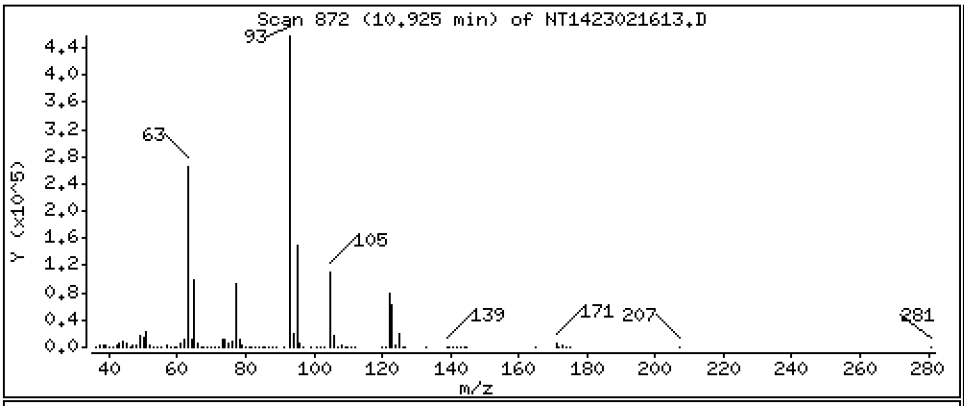
Operator: DSD

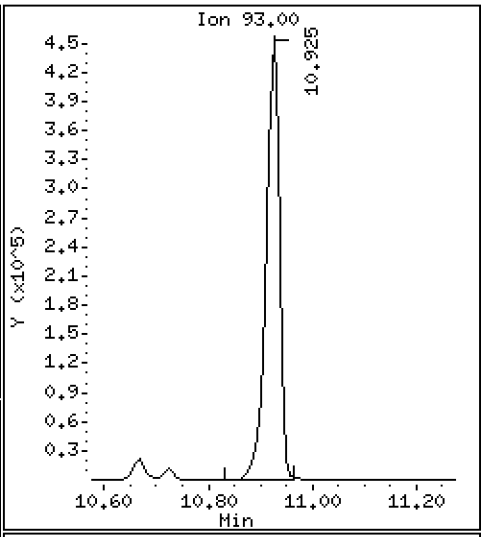
Column phase: ZB-5msi

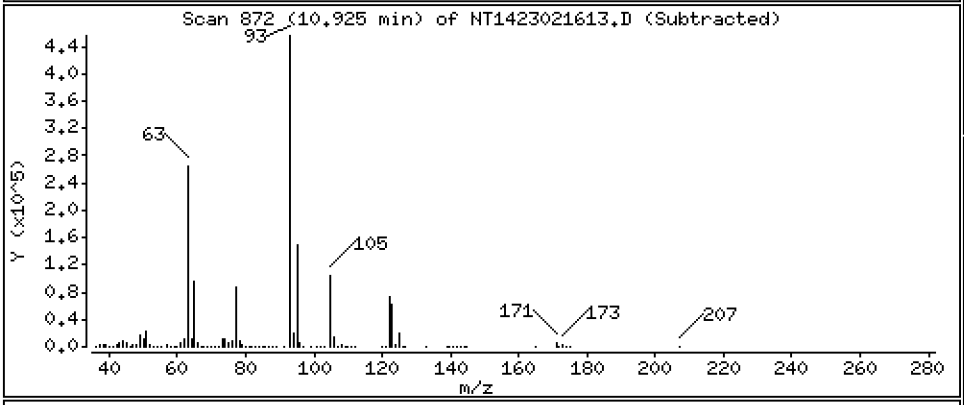
Column diameter: 0.25

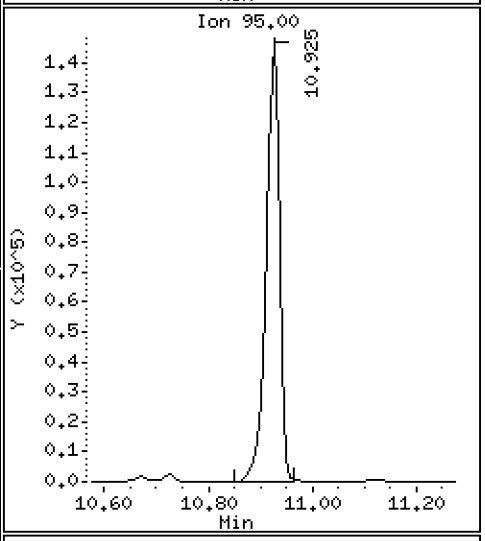
23 Bis(2-Chloroethoxy)methane

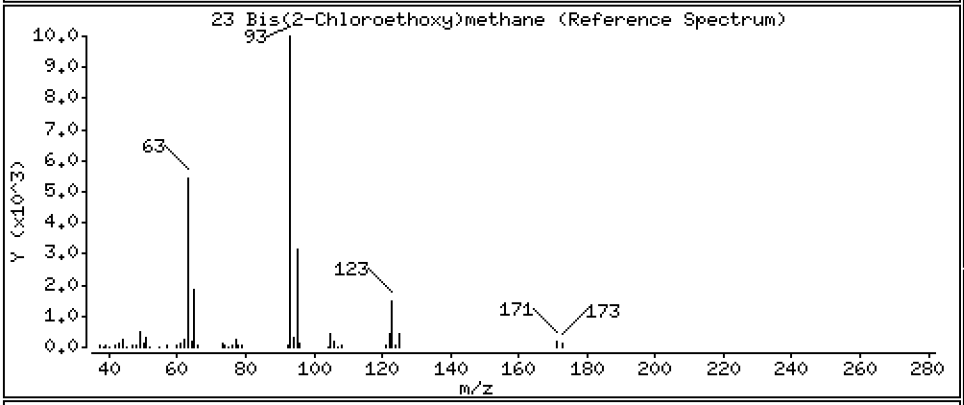
Concentration: 5.740 ug/mL

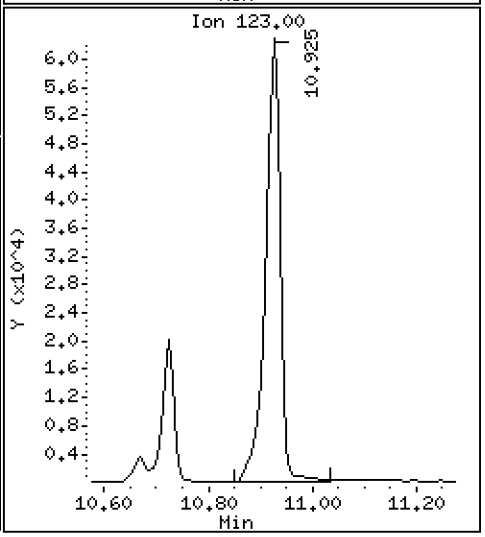


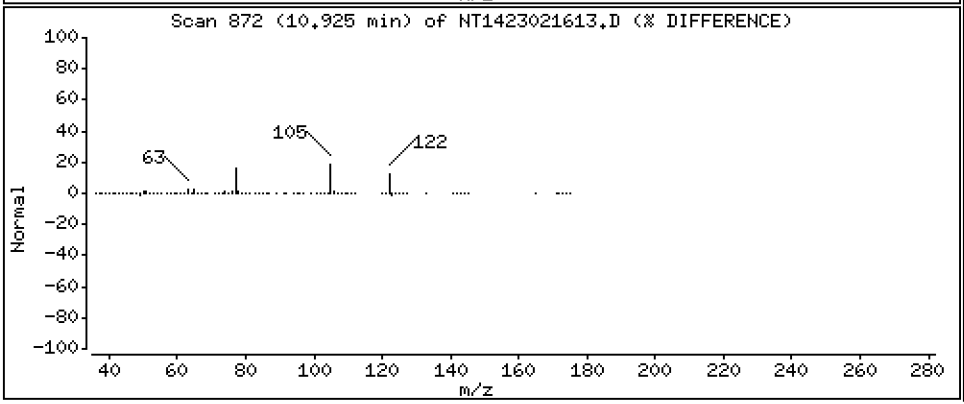












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

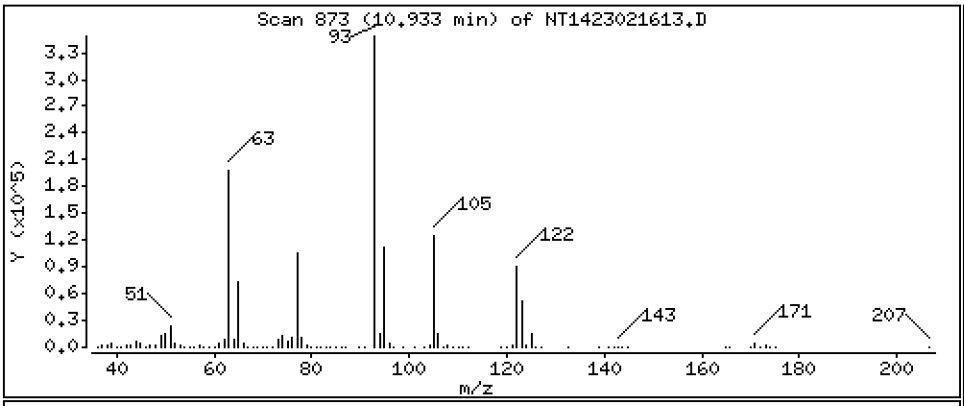
Operator: DSD

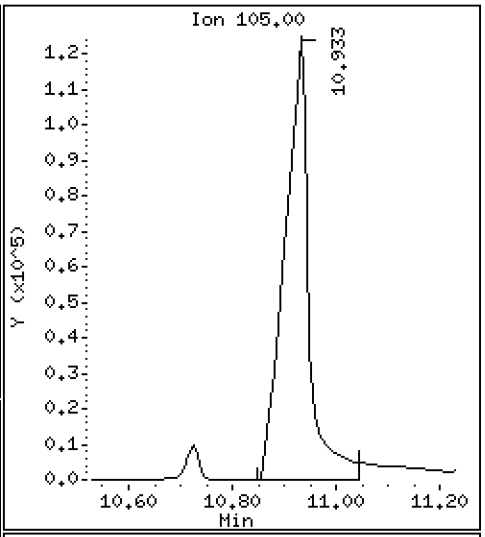
Column phase: ZB-5msi

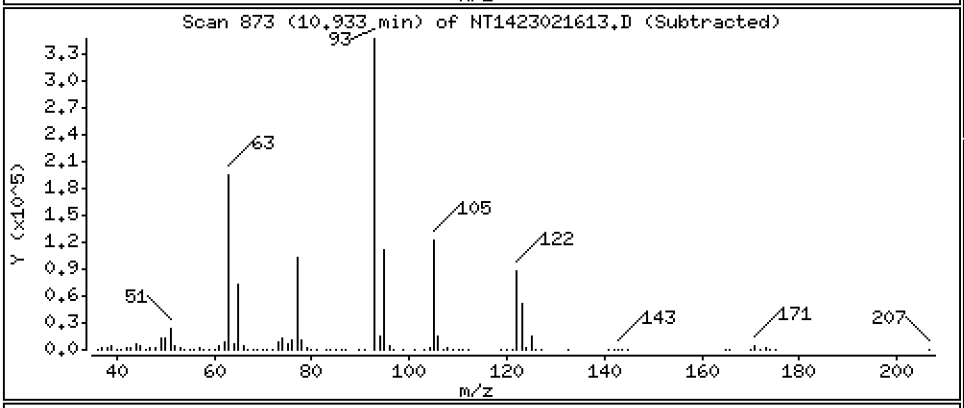
Column diameter: 0.25

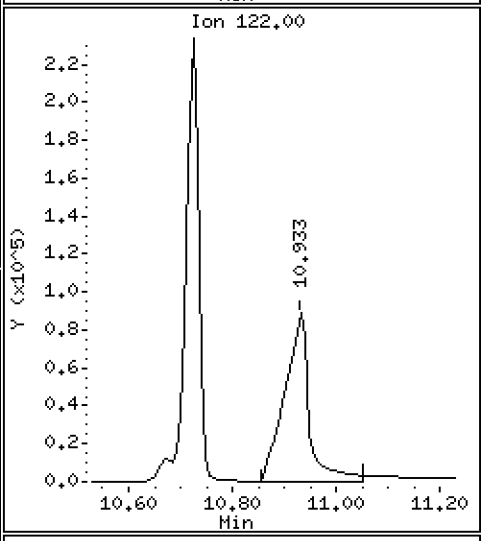
24 Benzoic acid

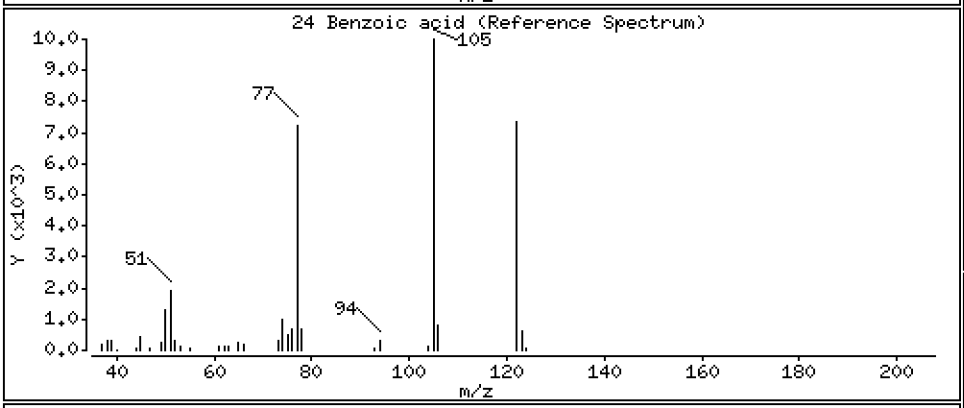
Concentration: 5.510 ug/mL

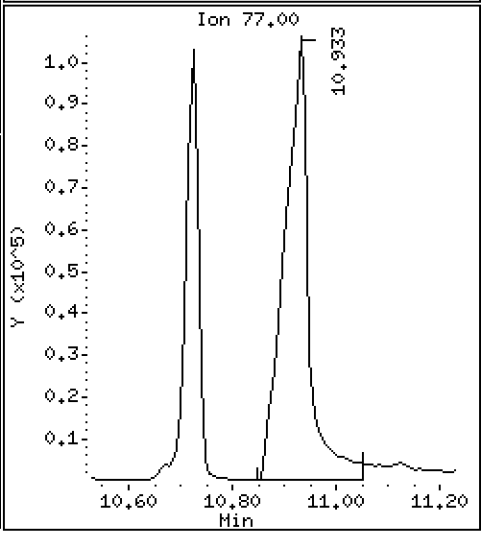


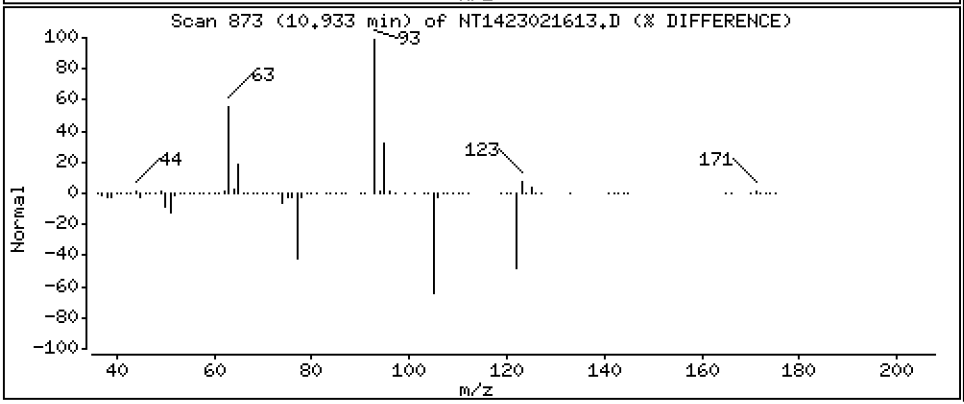












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

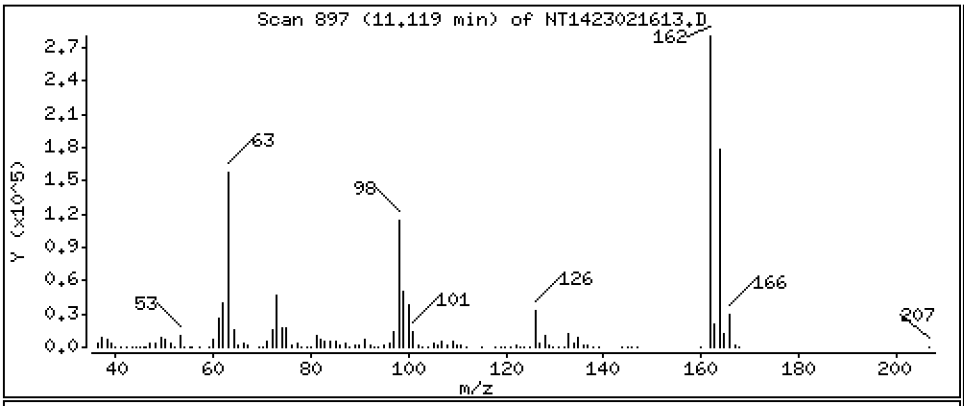
Operator: DSD

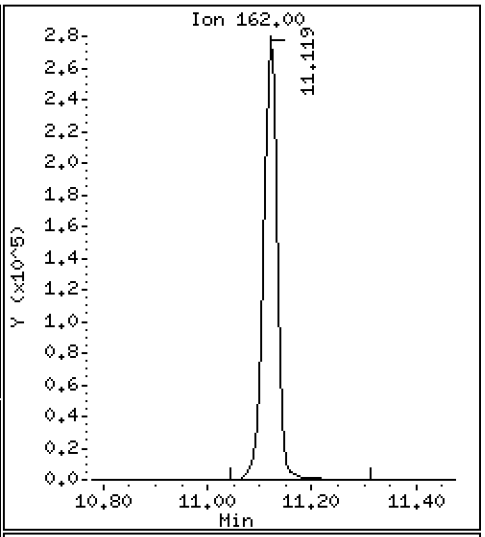
Column phase: ZB-5msi

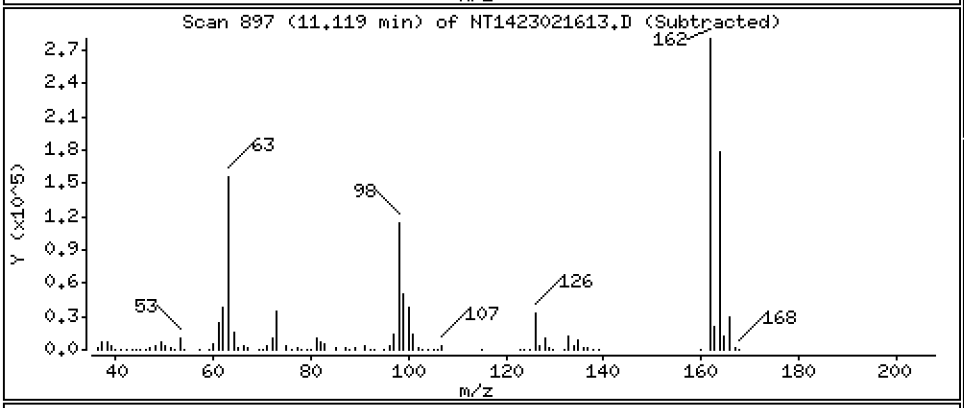
Column diameter: 0.25

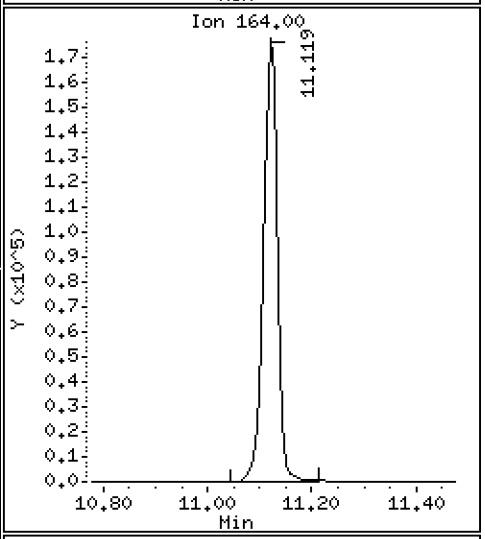
25 2,4-Dichlorophenol

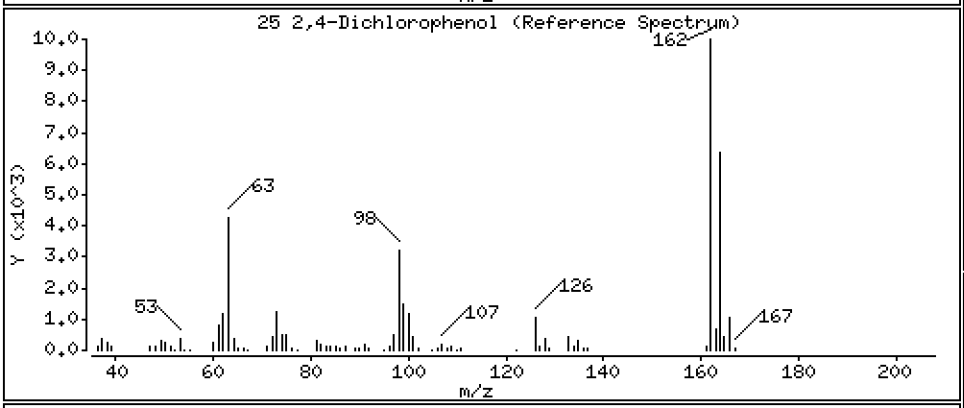
Concentration: 5.124 ug/mL

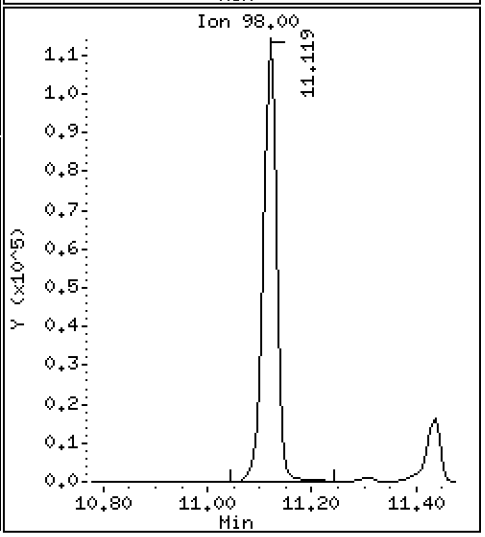


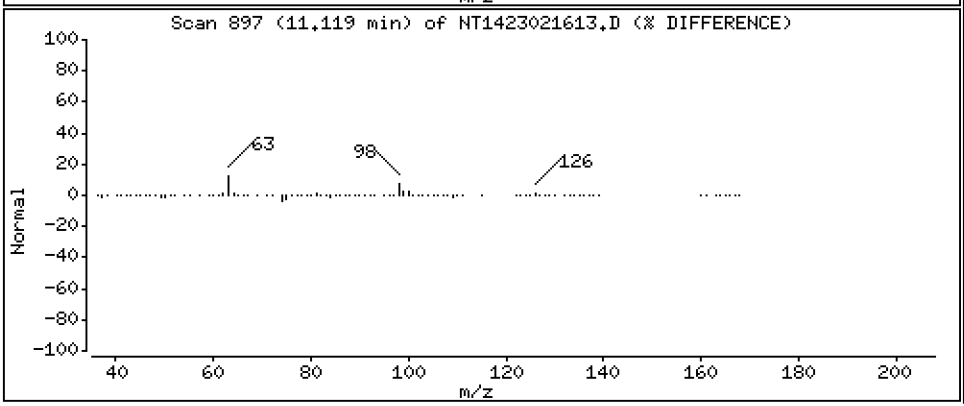












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

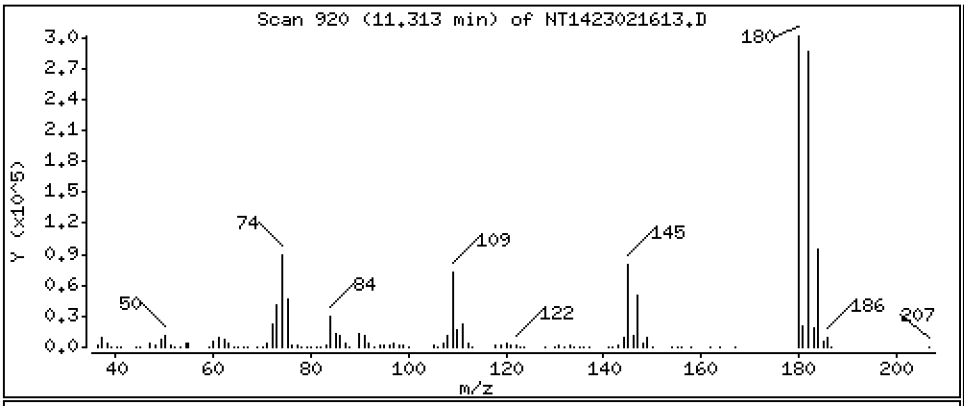
Operator: DSD

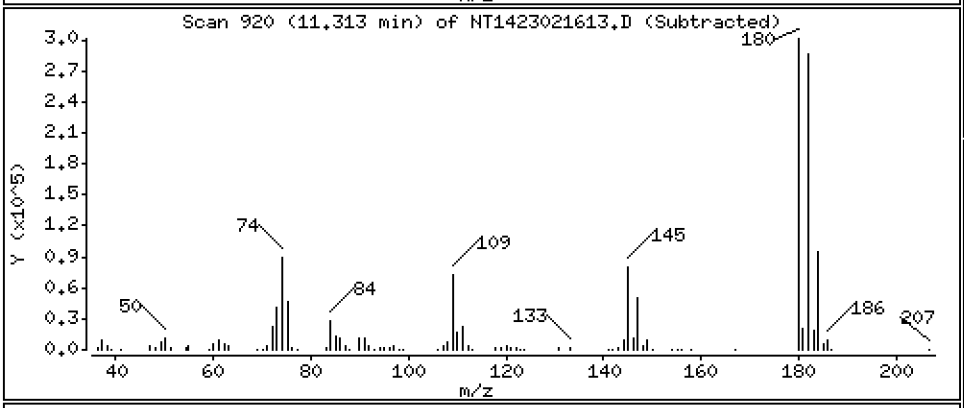
Column phase: ZB-5msi

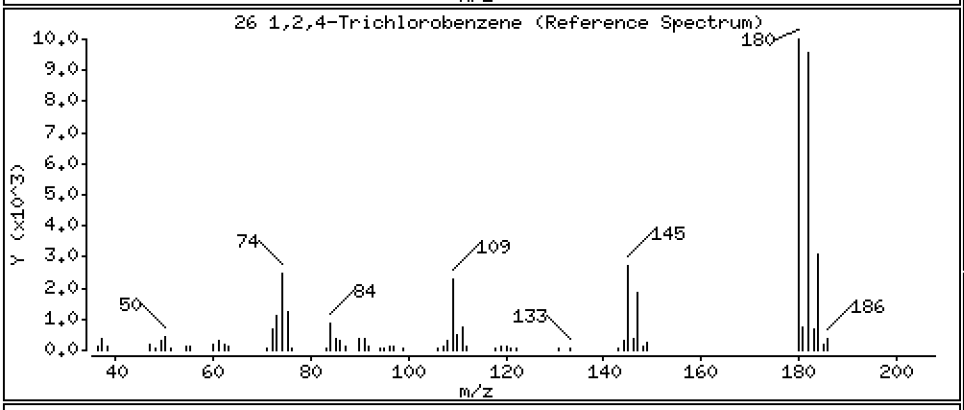
Column diameter: 0.25

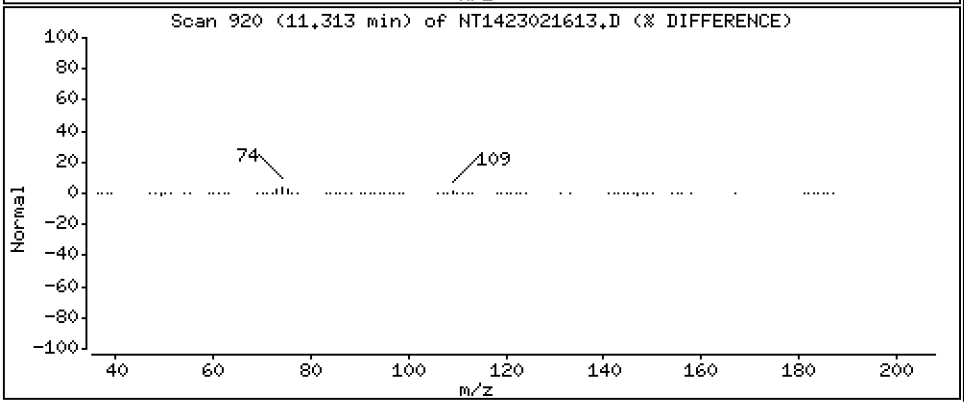
26 1,2,4-Trichlorobenzene

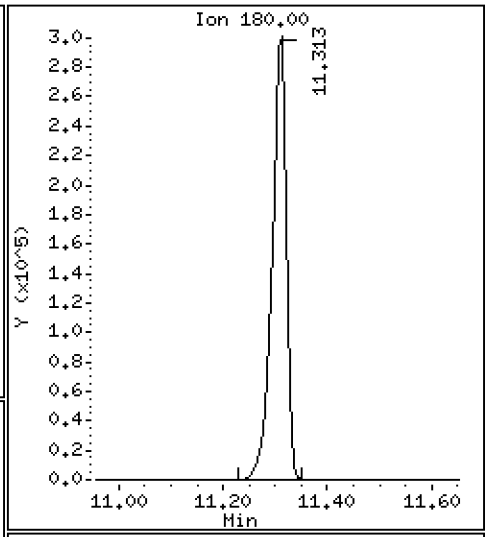
Concentration: 4.650 ug/mL

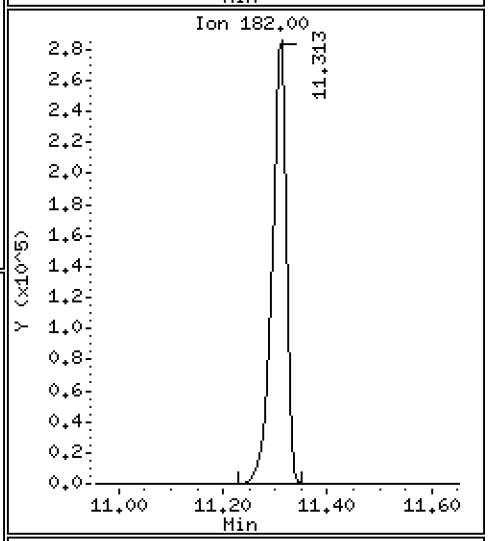


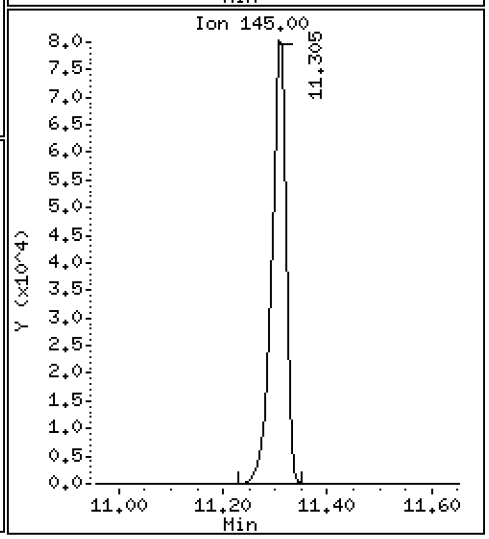












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

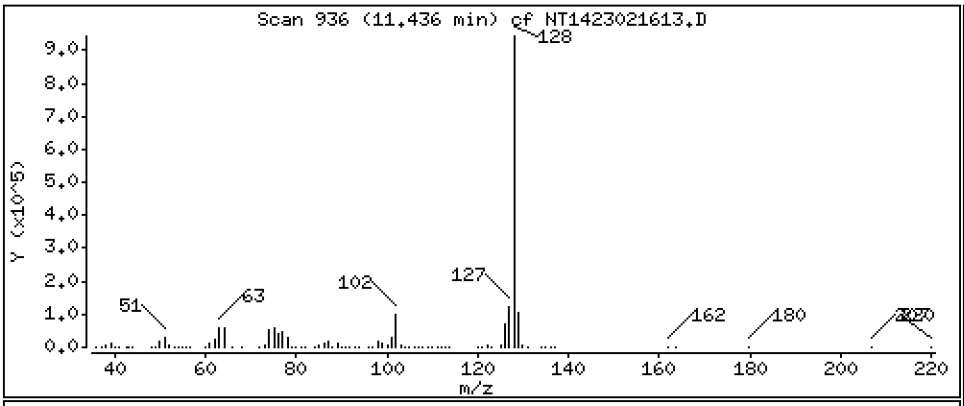
Operator: DSD

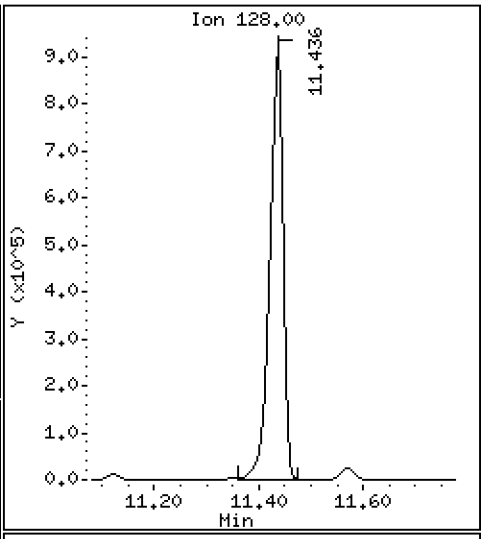
Column phase: ZB-5msi

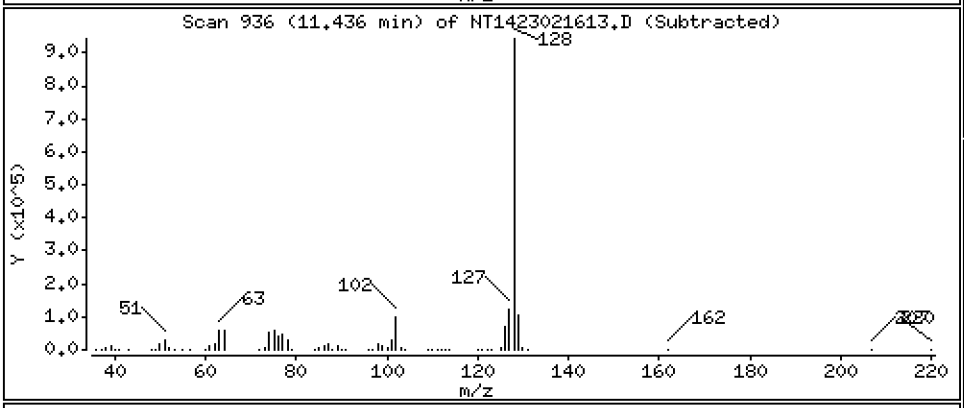
Column diameter: 0.25

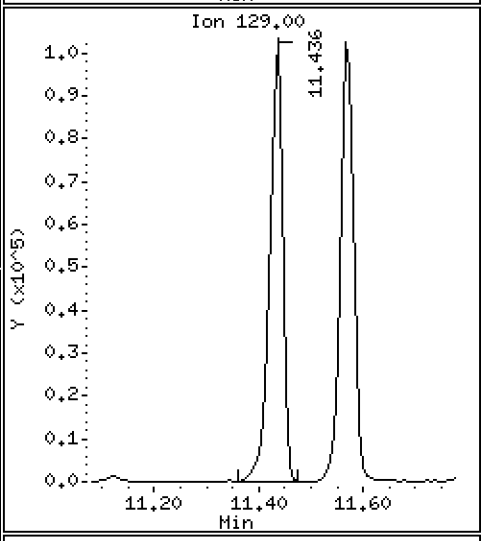
28 Naphthalene

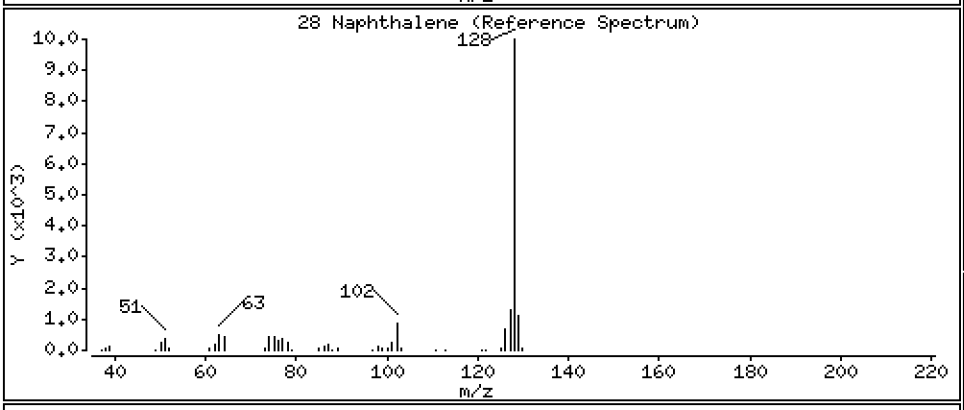
Concentration: 4.736 ug/mL

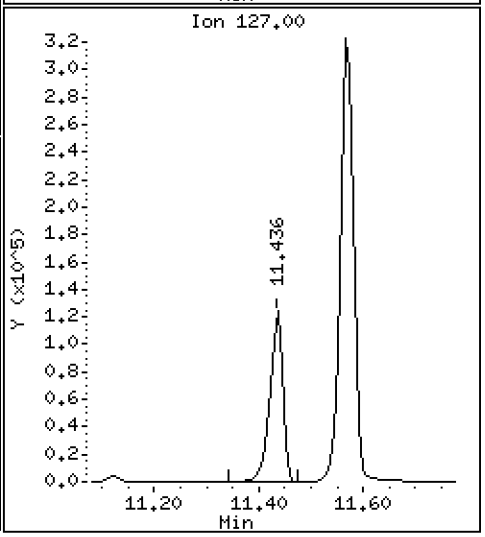


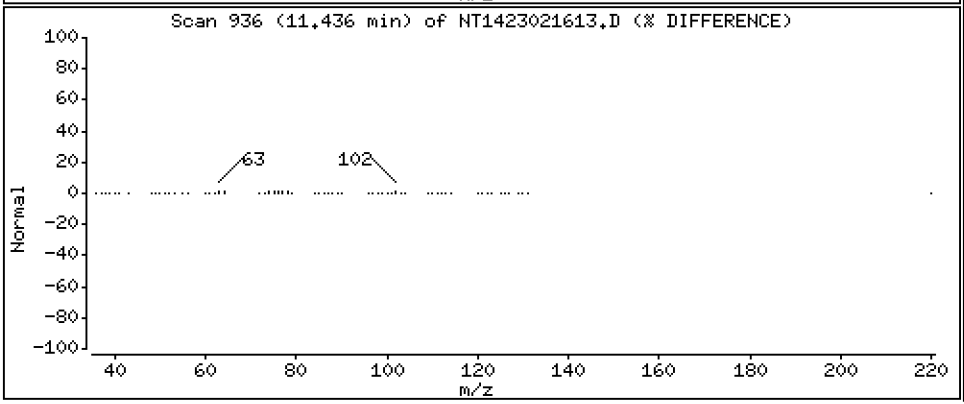












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

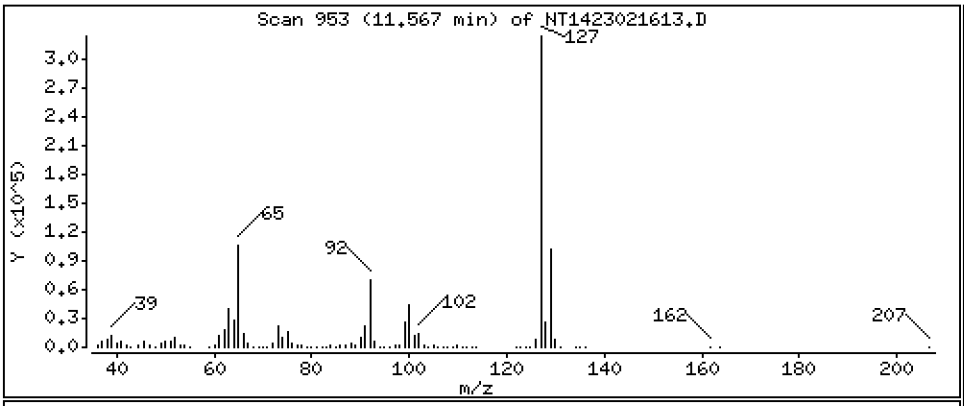
Operator: DSD

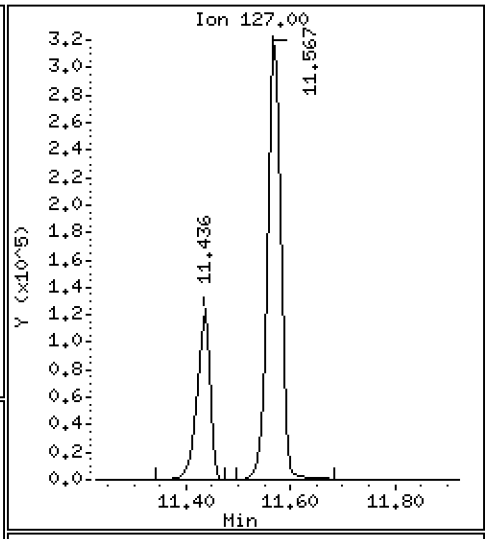
Column phase: ZB-5msi

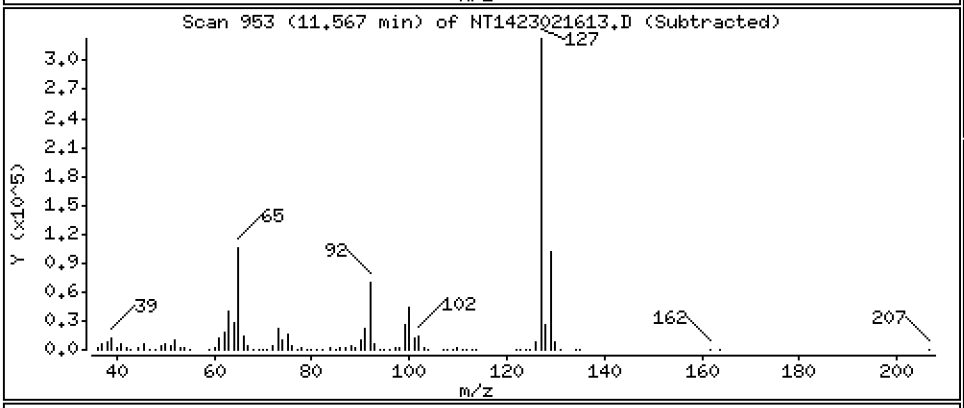
Column diameter: 0.25

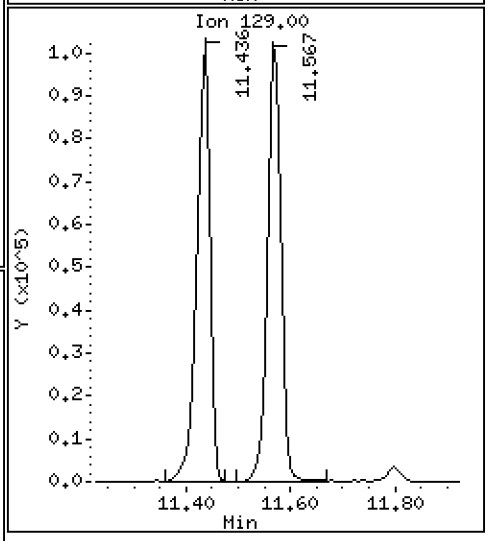
29 4-Chloroaniline

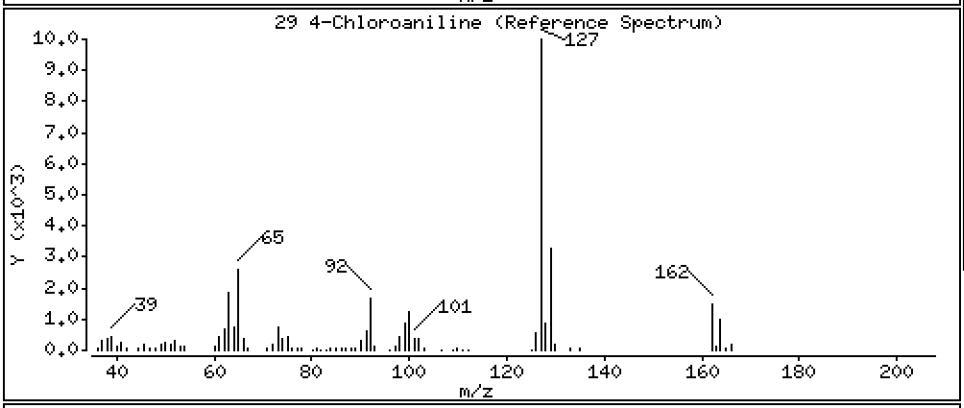
Concentration: 3.911 ug/mL

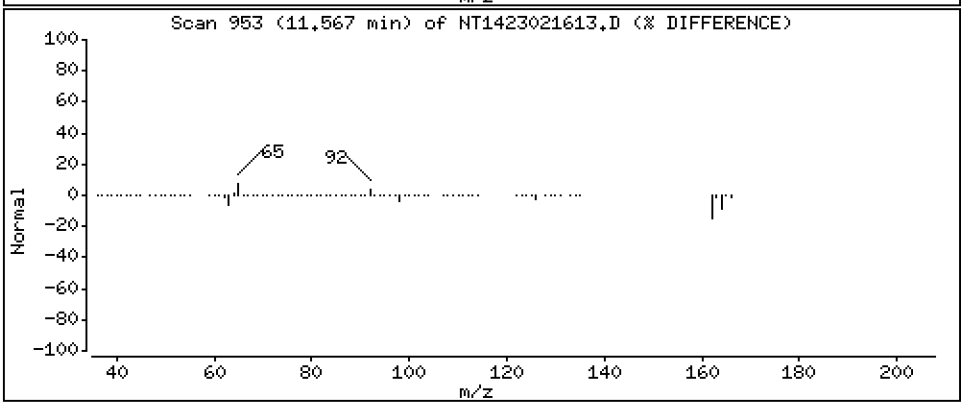












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

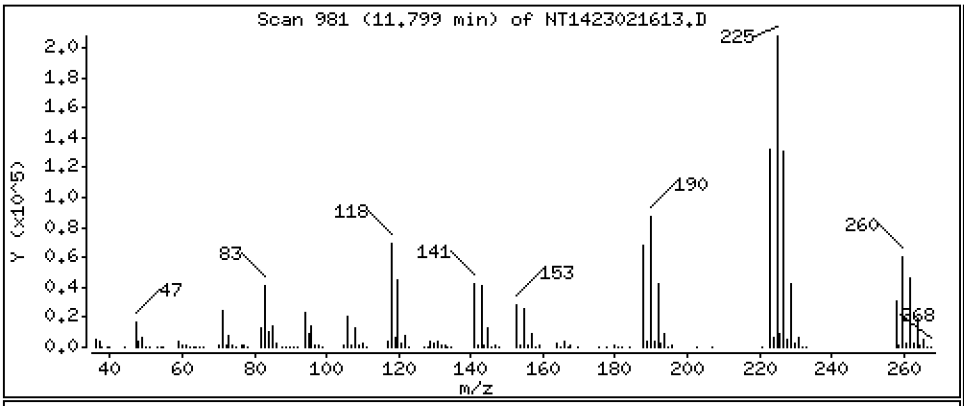
Operator: DSD

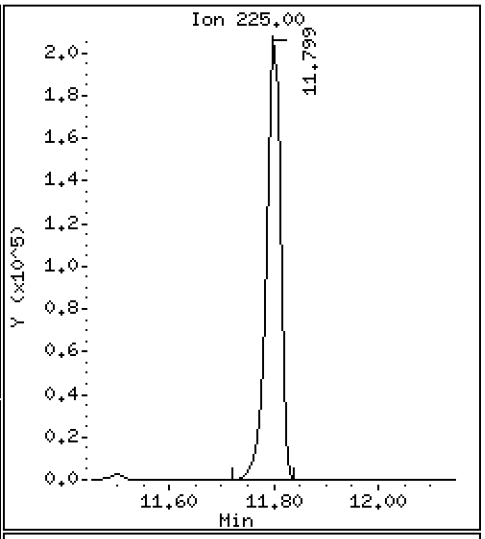
Column phase: ZB-5msi

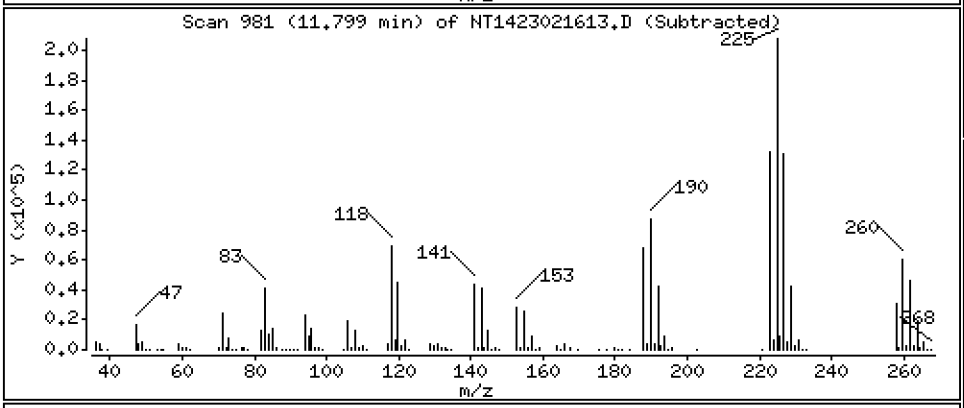
Column diameter: 0.25

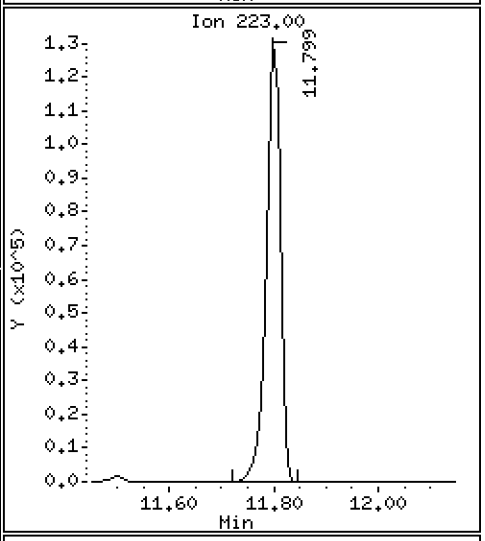
30 Hexachlorobutadiene

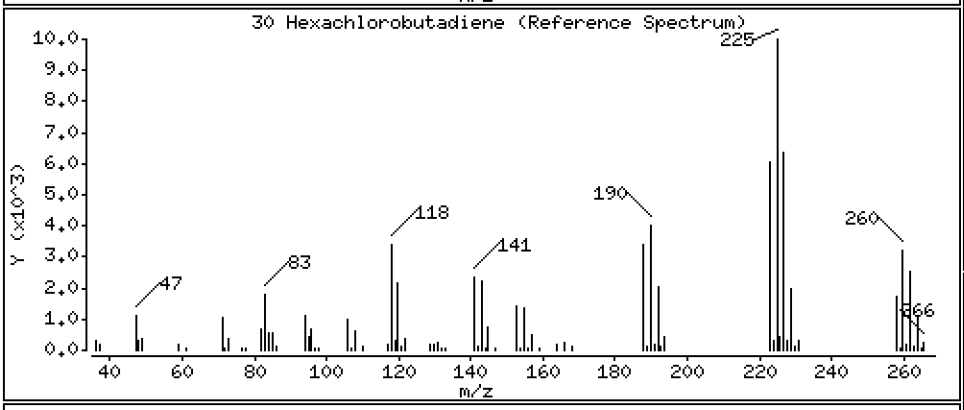
Concentration: 4.917 ug/mL

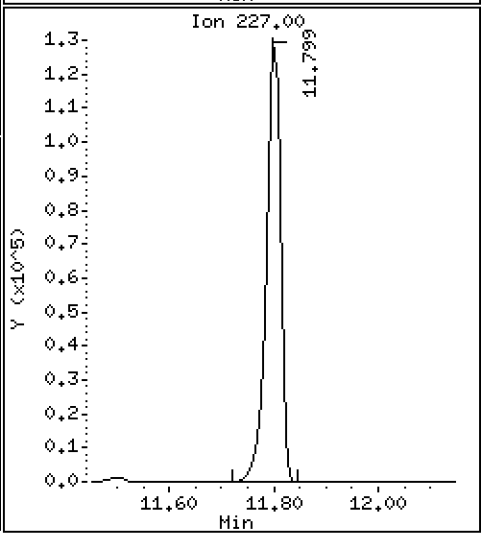


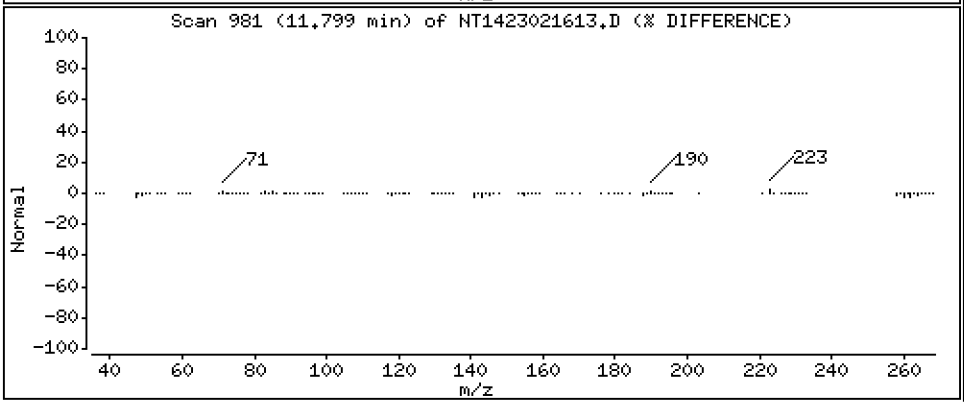












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

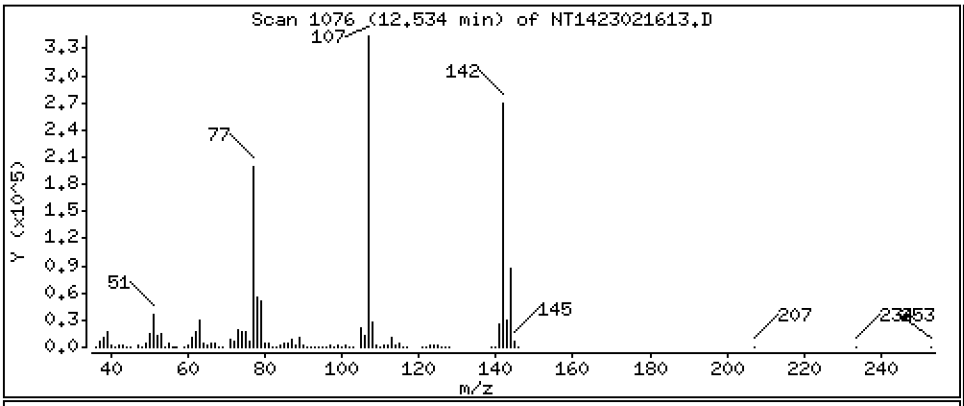
Operator: DSD

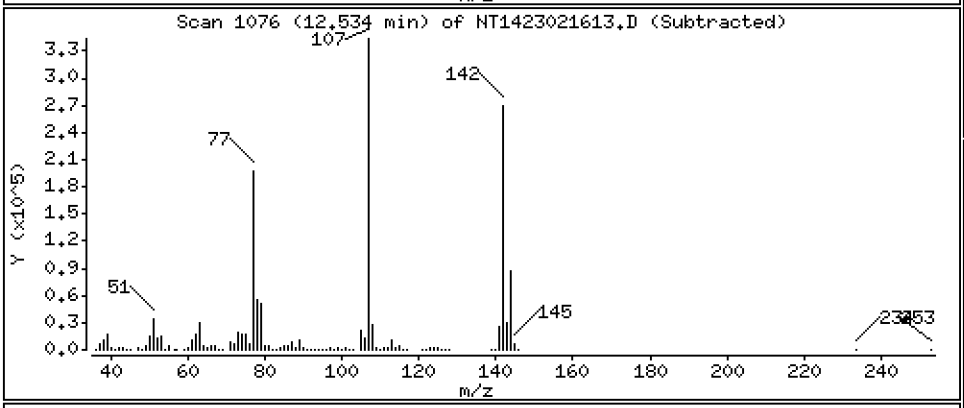
Column phase: ZB-5msi

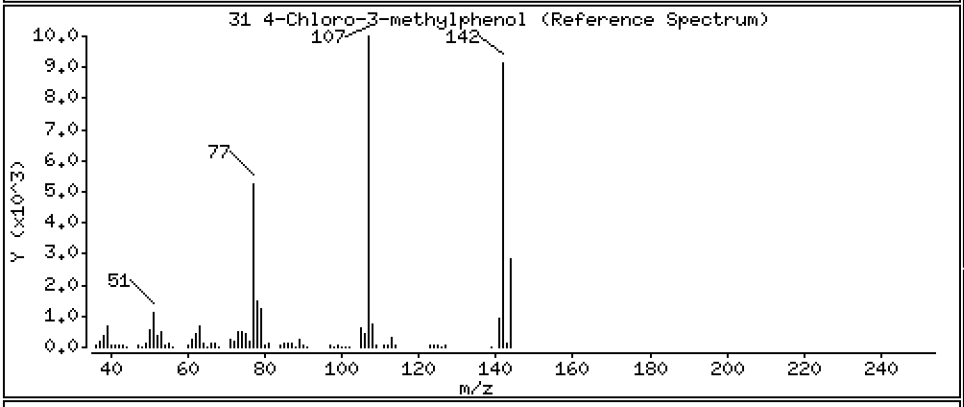
Column diameter: 0.25

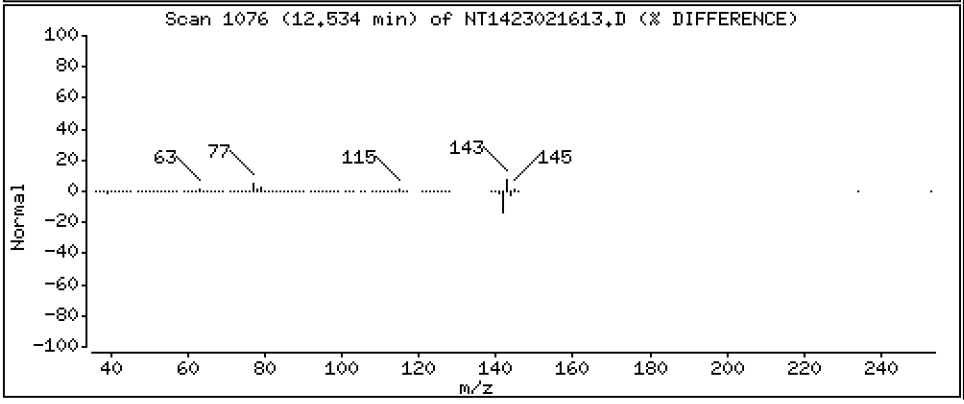
31 4-Chloro-3-methylphenol

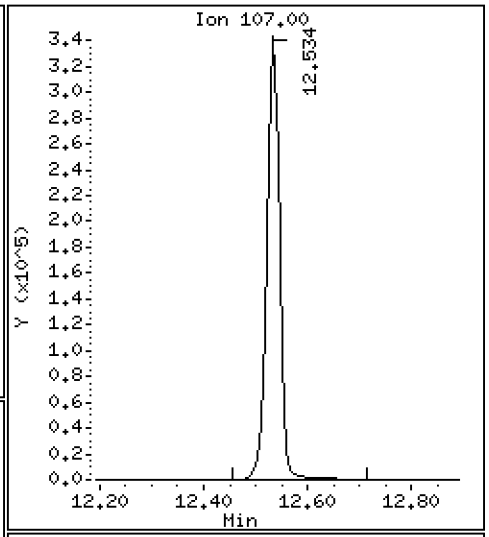
Concentration: 5.045 ug/mL

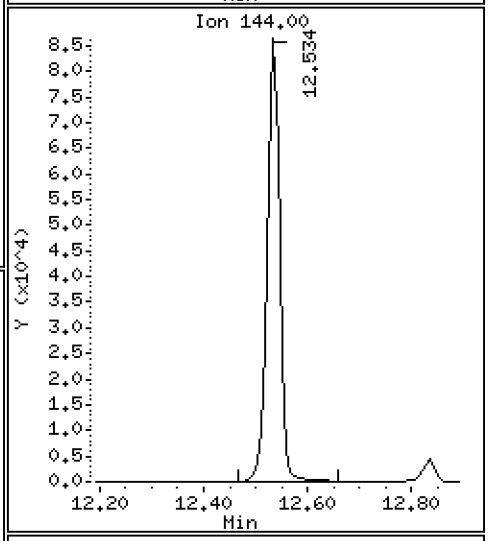


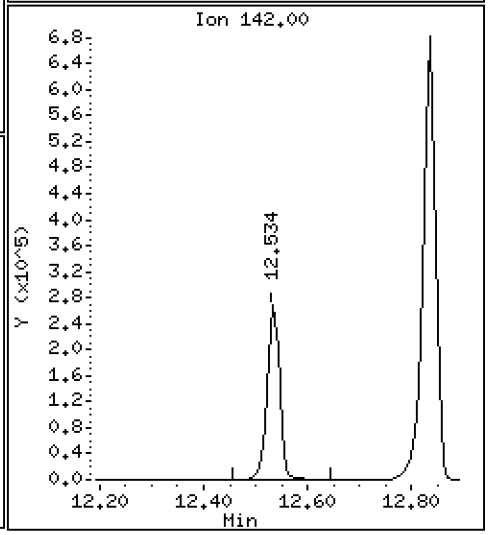












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

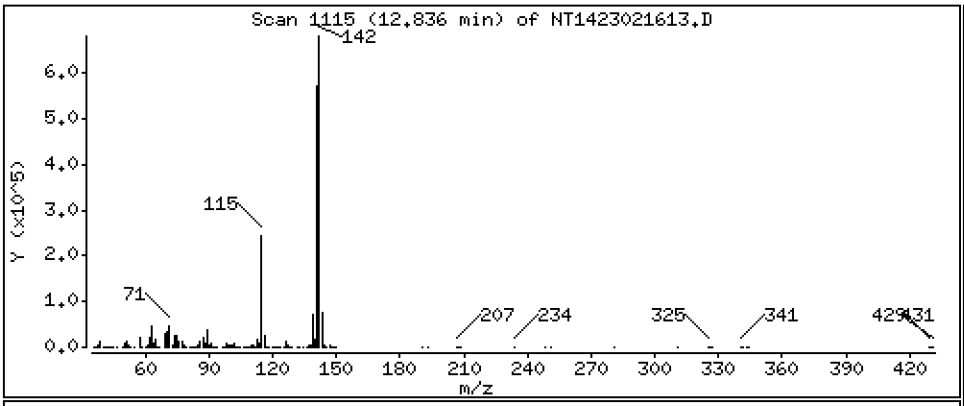
Operator: DSD

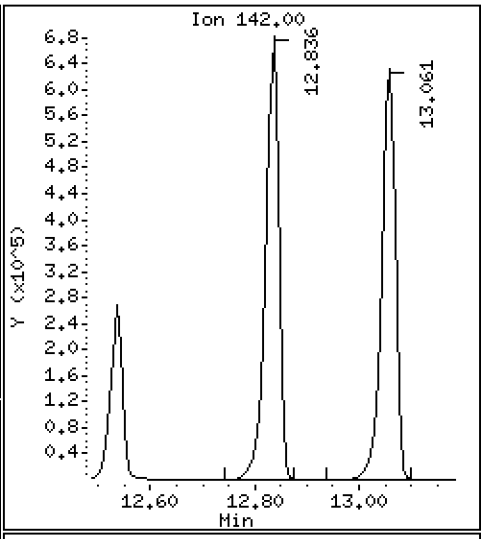
Column phase: ZB-5msi

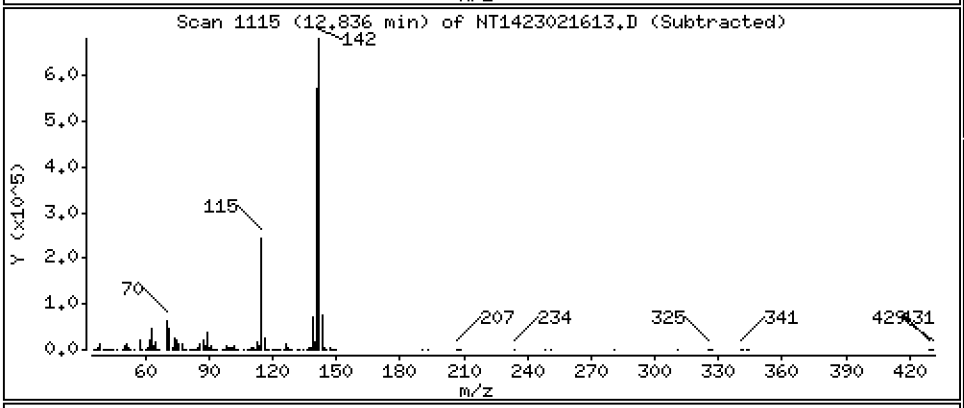
Column diameter: 0.25

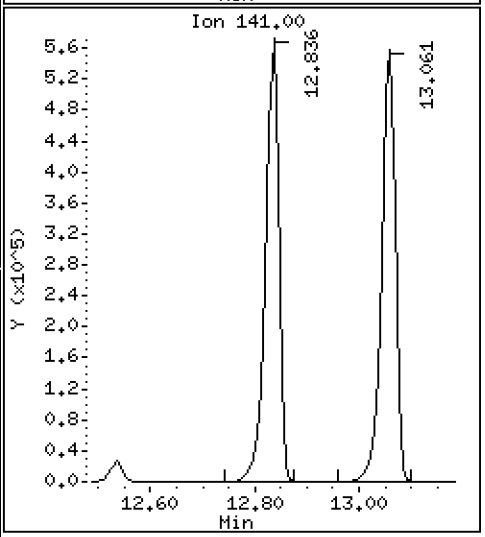
32 2-Methylnaphthalene

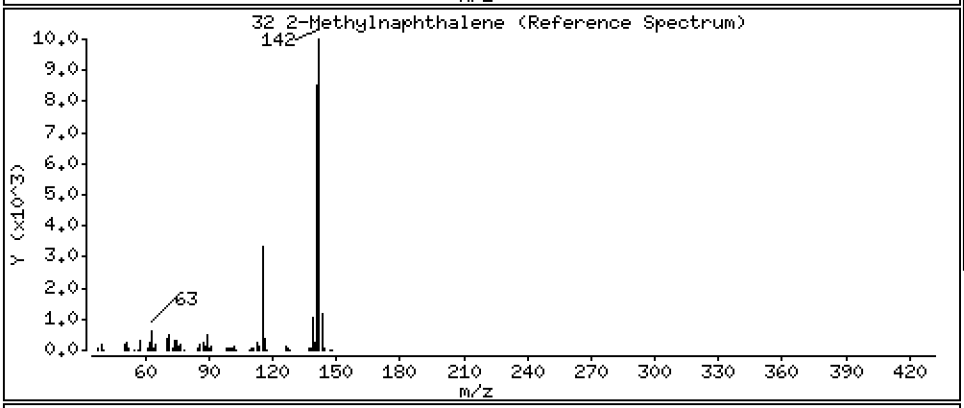
Concentration: 4.606 ug/mL

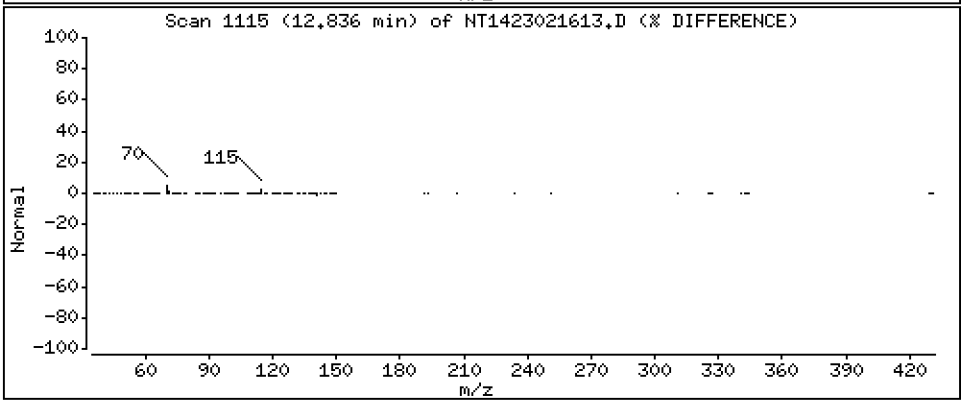












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

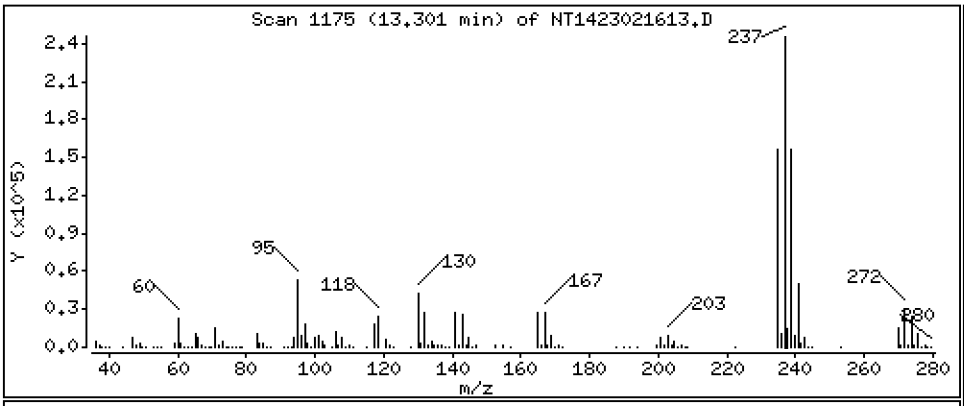
Operator: DSD

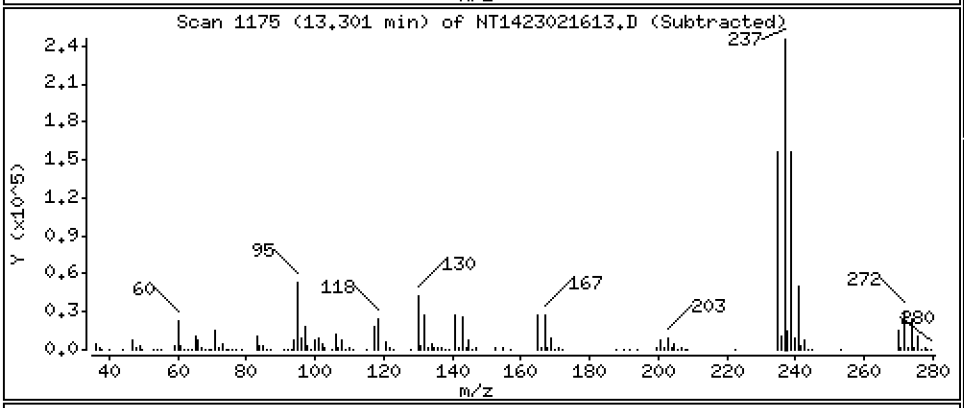
Column phase: ZB-5msi

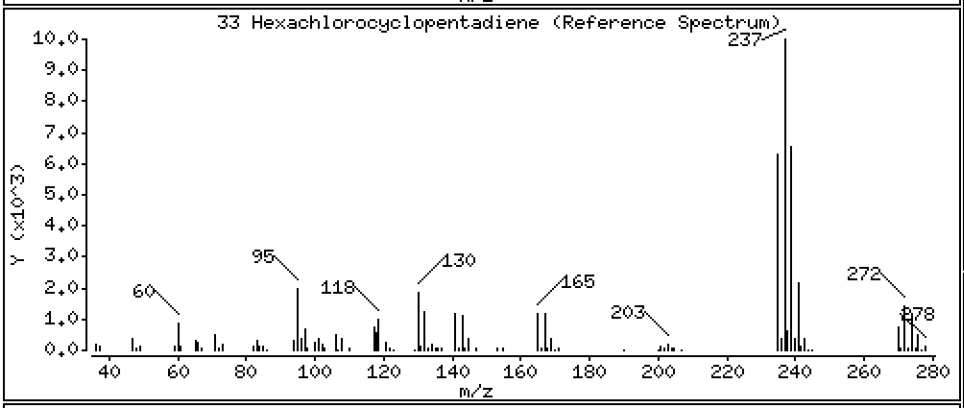
Column diameter: 0.25

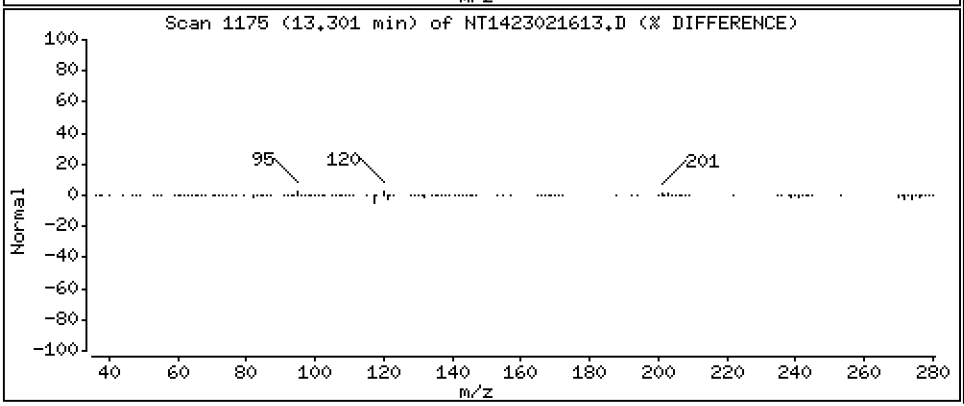
33 Hexachlorocyclopentadiene

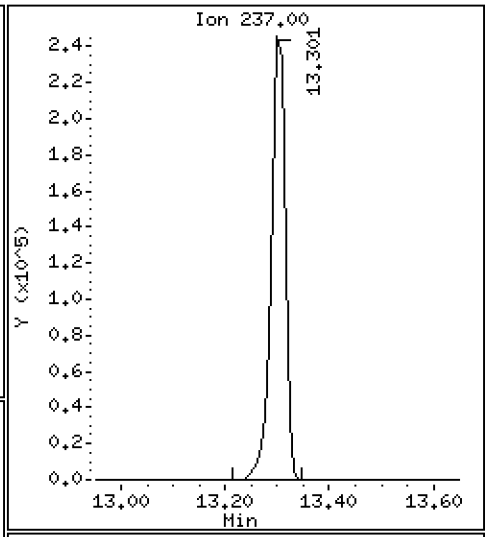
Concentration: 5.301 ug/mL

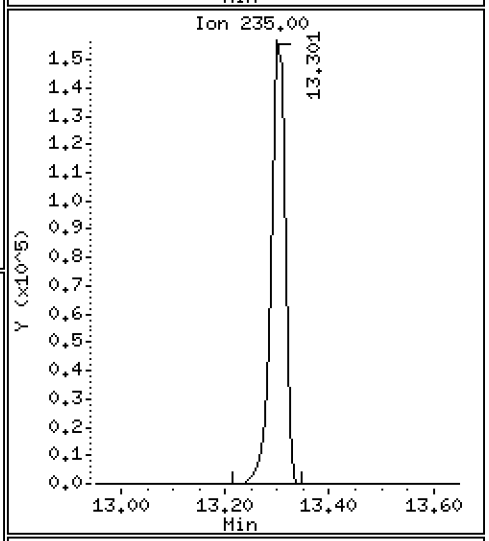


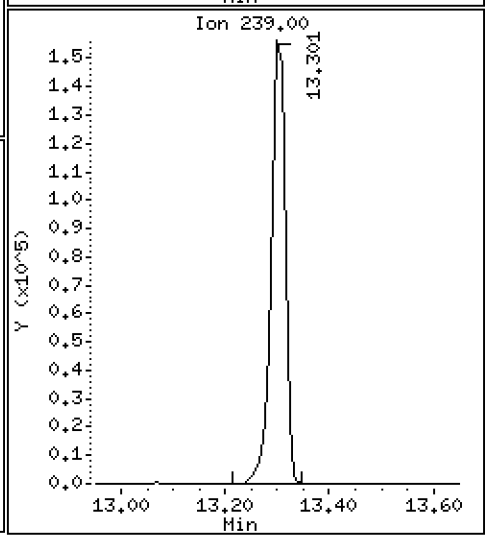












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

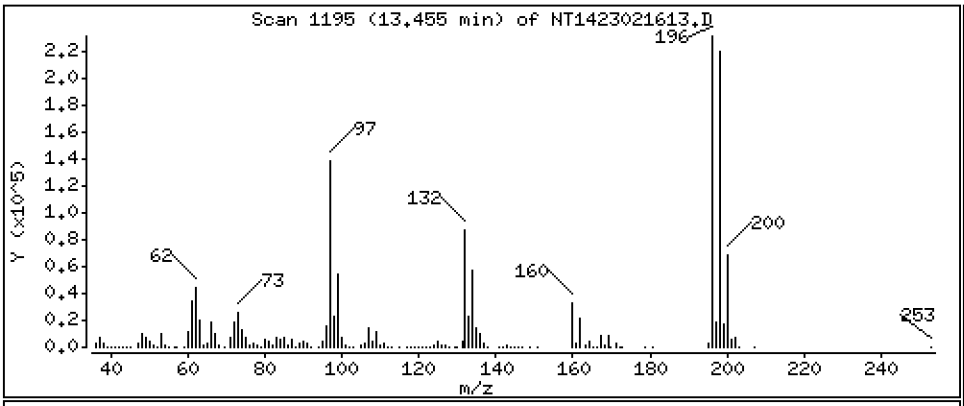
Operator: DSD

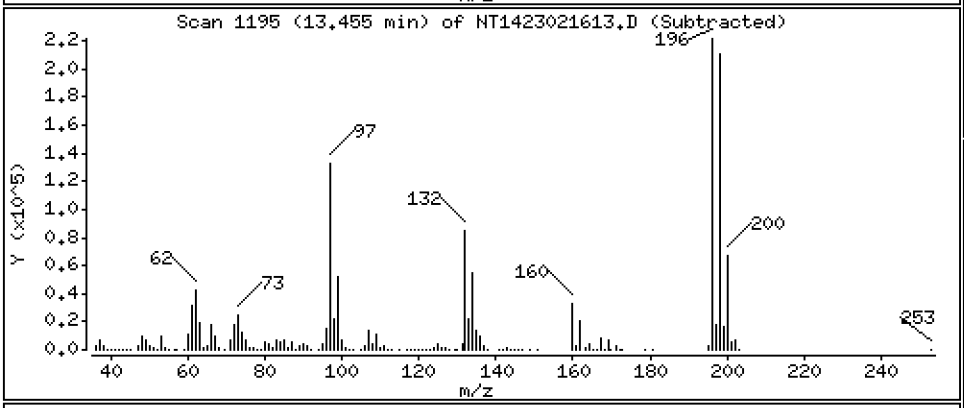
Column phase: ZB-5msi

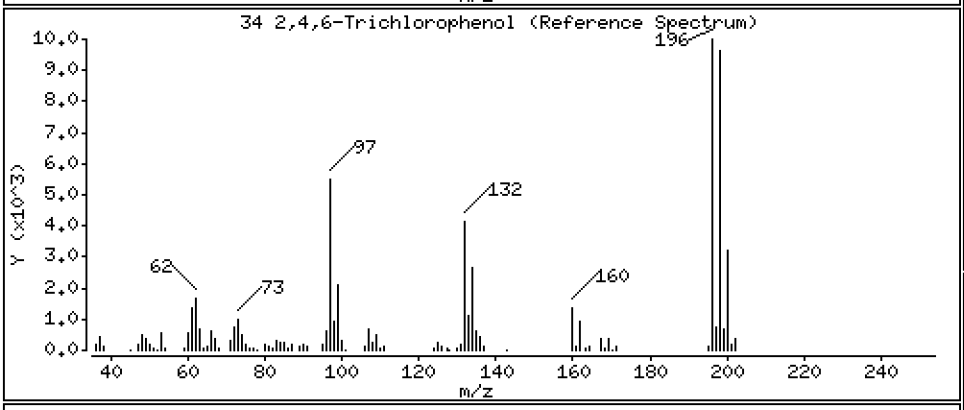
Column diameter: 0.25

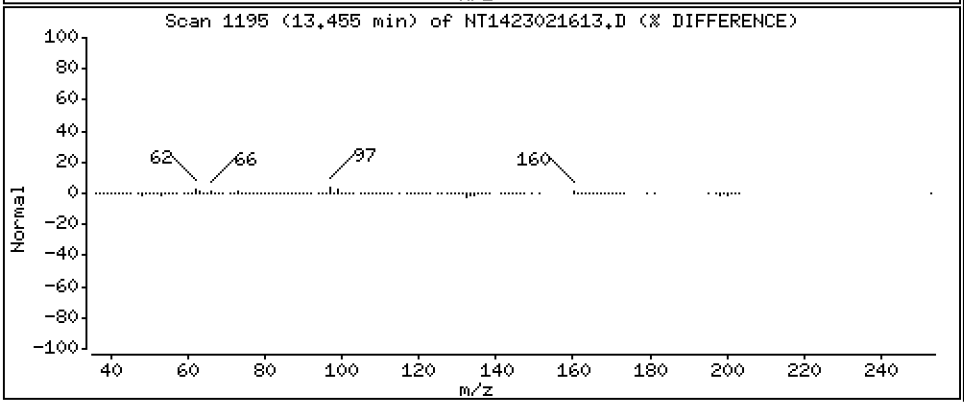
34 2,4,6-Trichlorophenol

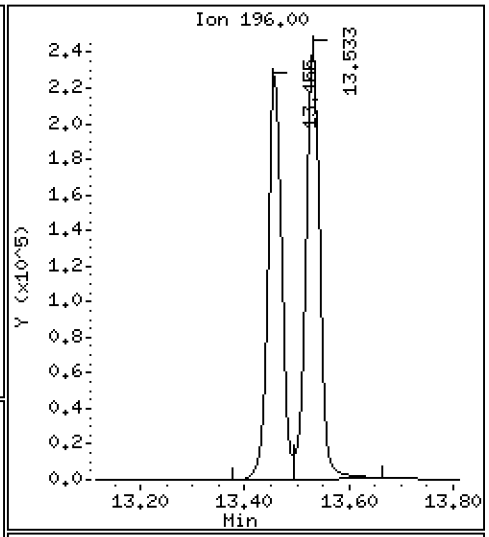
Concentration: 4.808 ug/mL

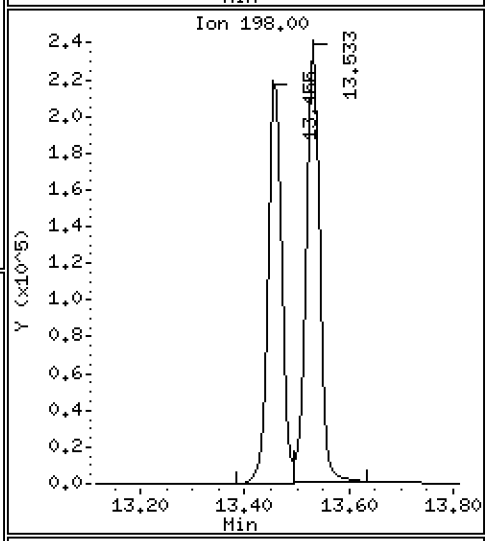


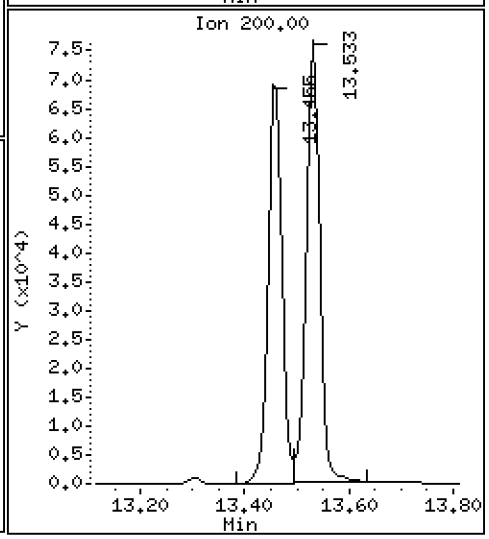












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

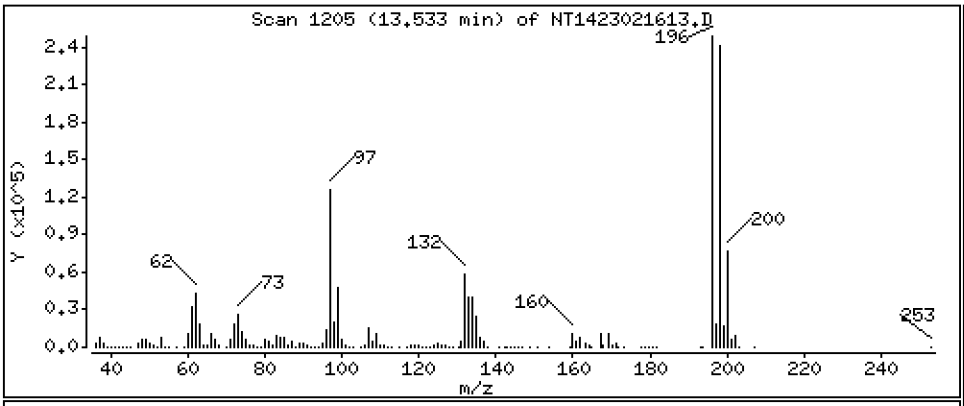
Operator: DSD

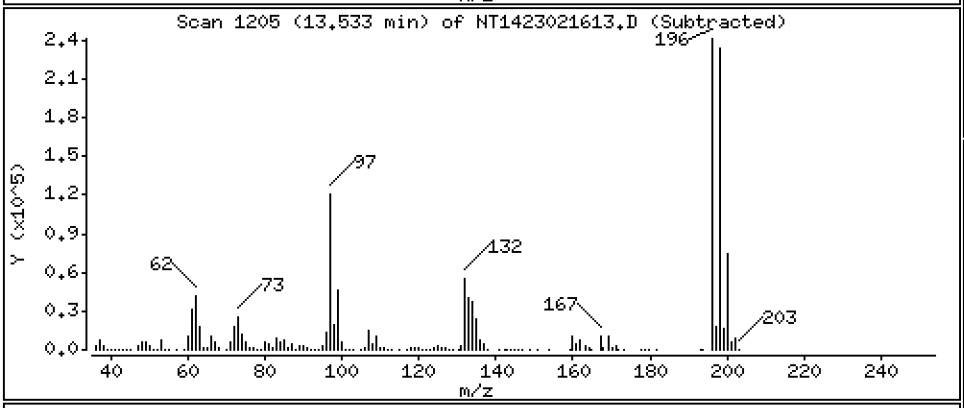
Column phase: ZB-5msi

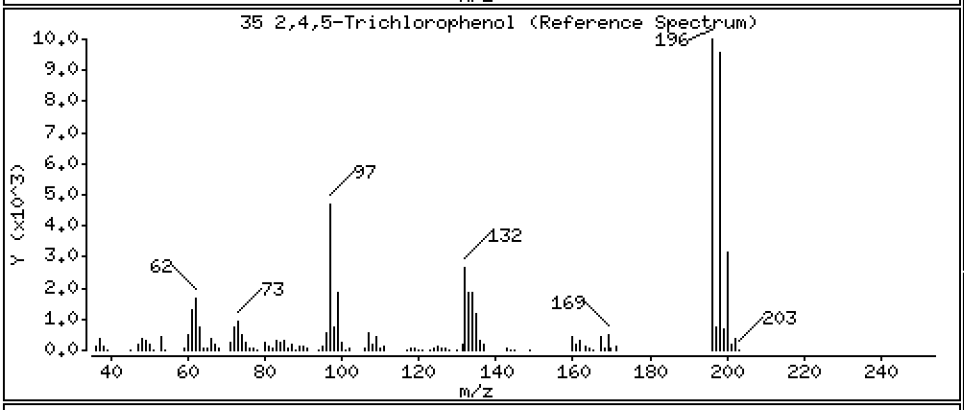
Column diameter: 0.25

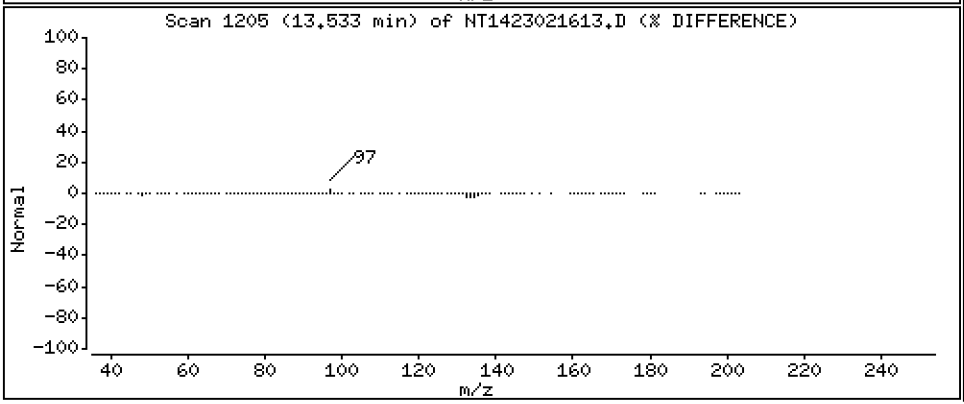
35 2,4,5-Trichlorophenol

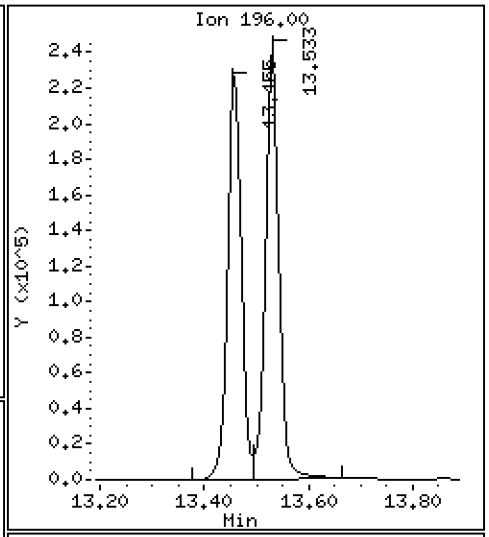
Concentration: 4.707 ug/mL

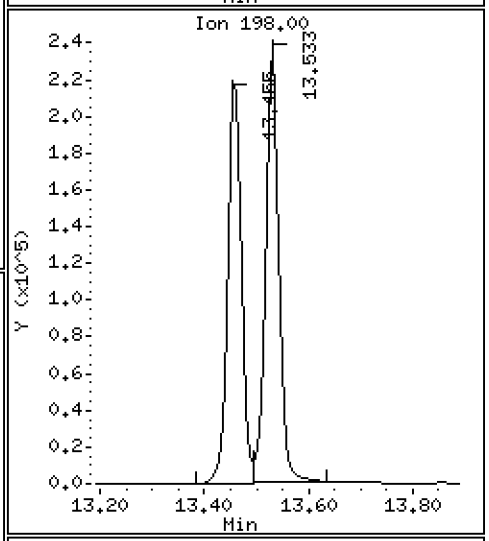


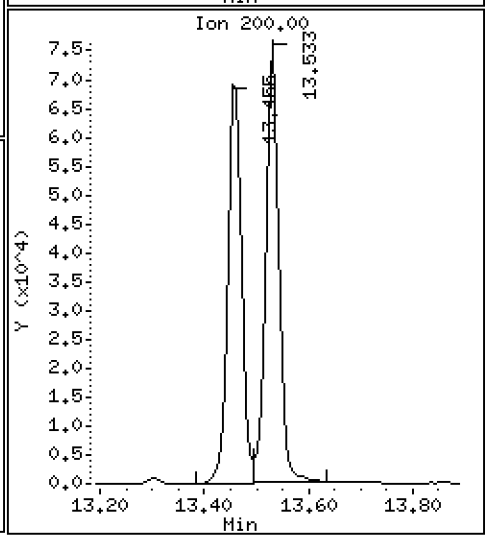












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

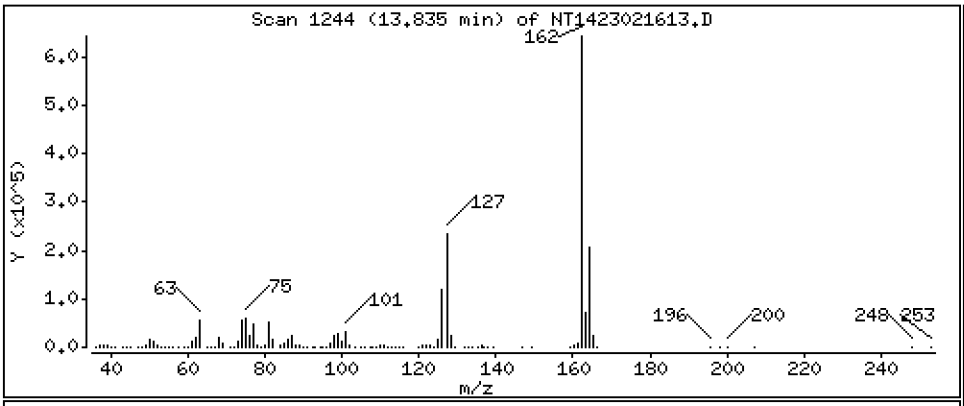
Operator: DSD

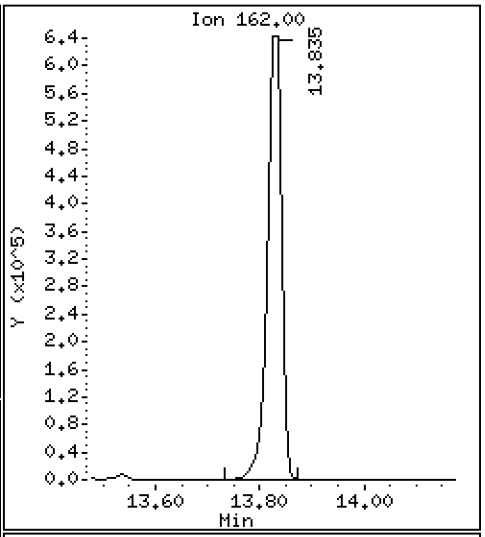
Column phase: ZB-5msi

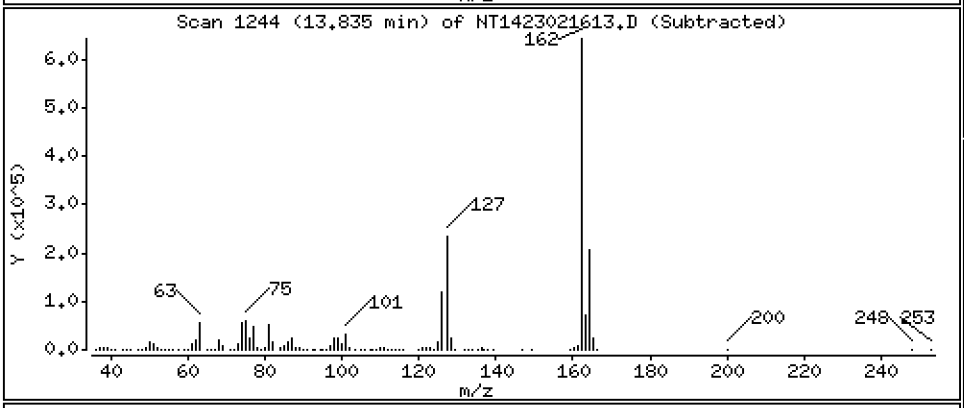
Column diameter: 0.25

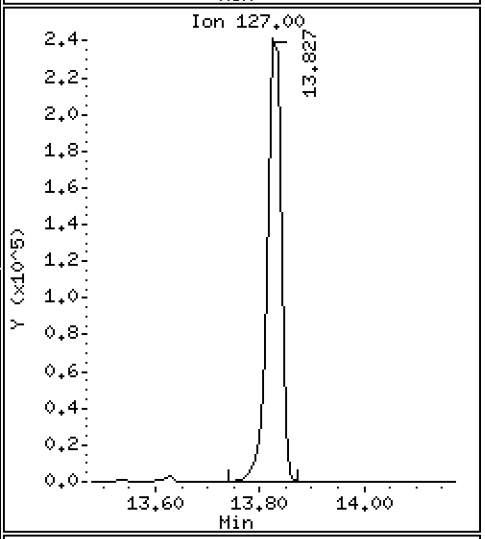
37 2-Chloronaphthalene

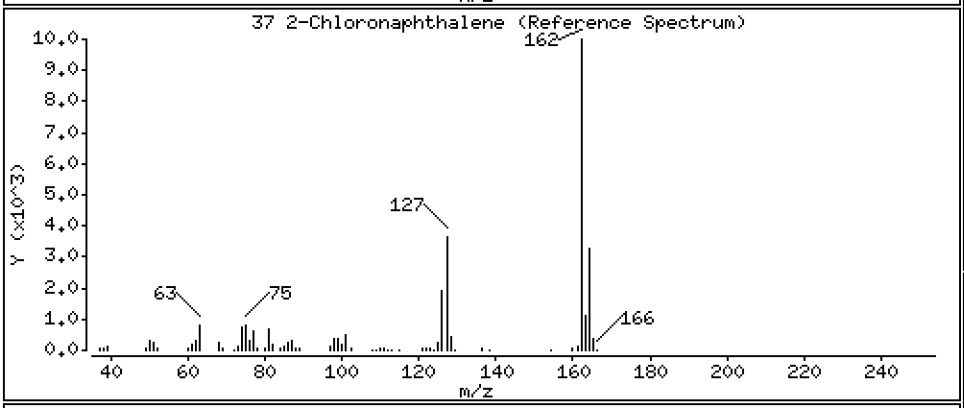
Concentration: 4.639 ug/mL

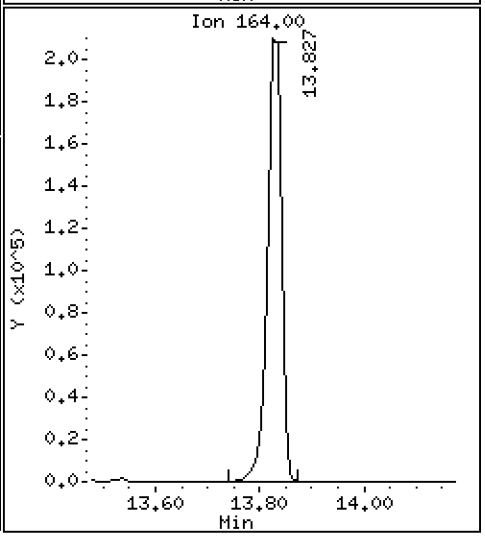


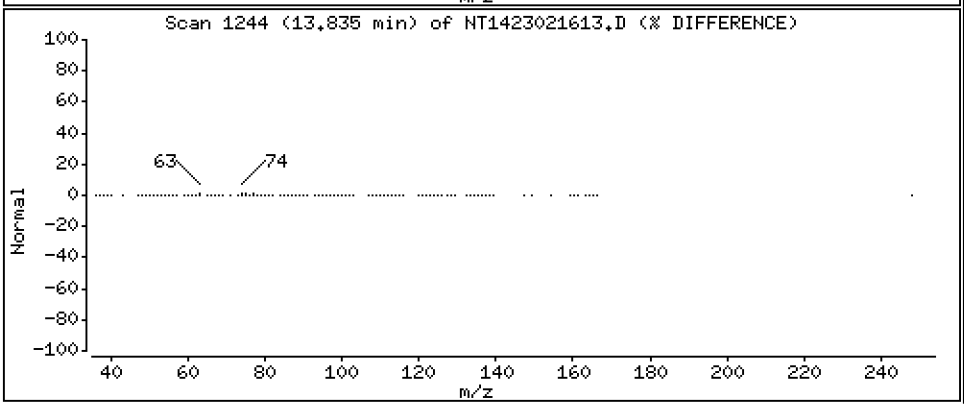












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

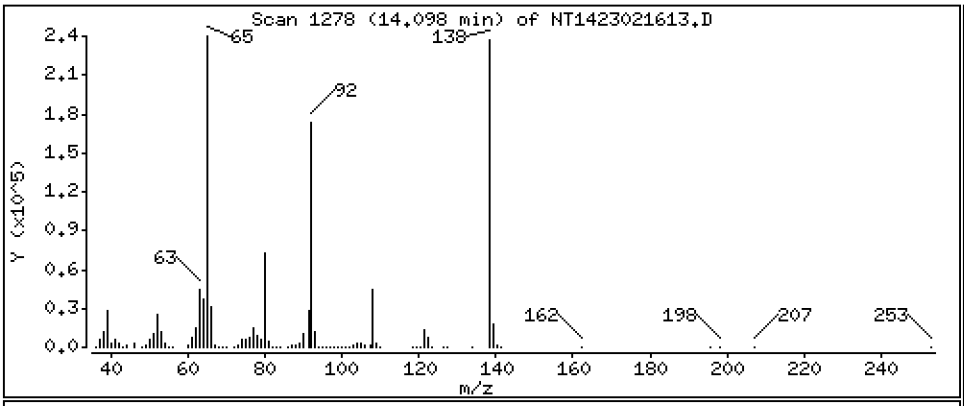
Operator: DSD

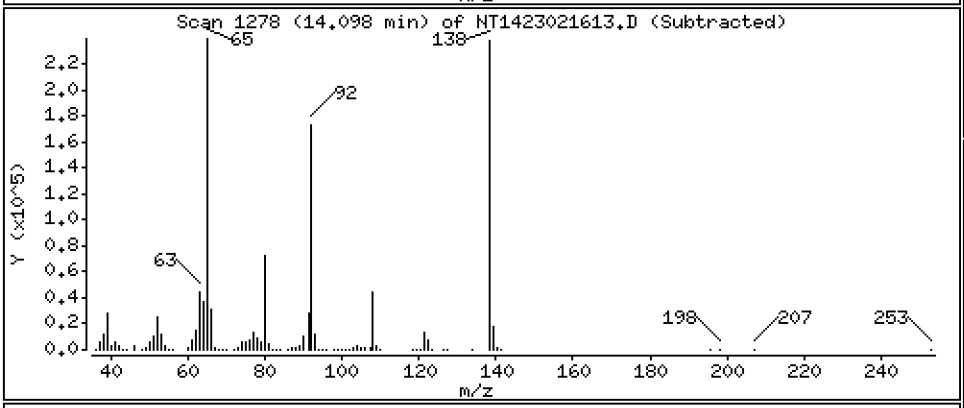
Column phase: ZB-5msi

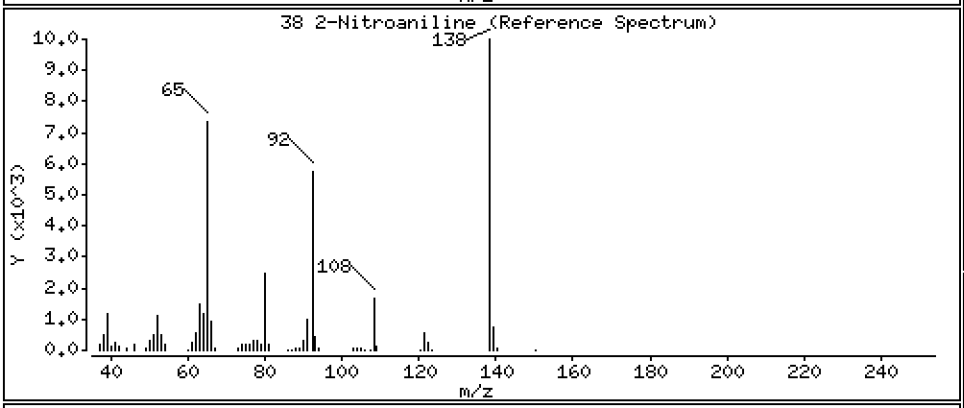
Column diameter: 0.25

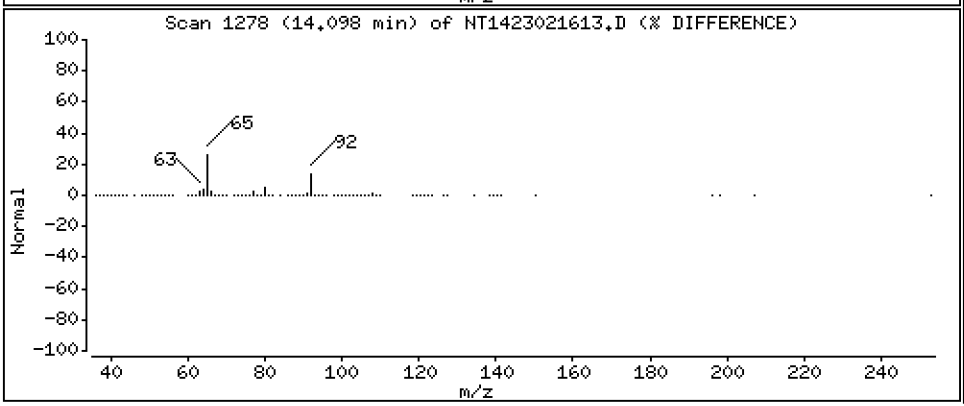
38 2-Nitroaniline

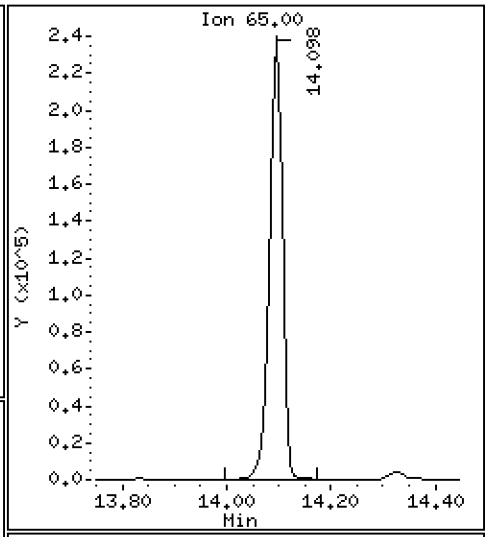
Concentration: 4.852 ug/mL

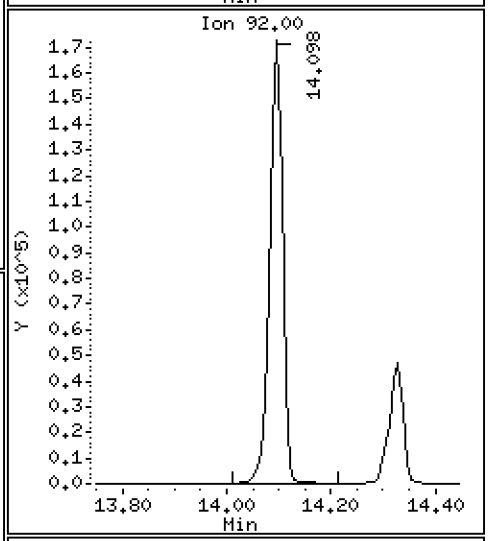


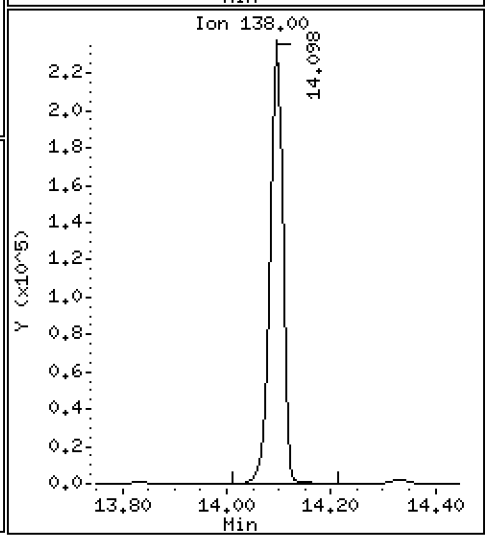












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

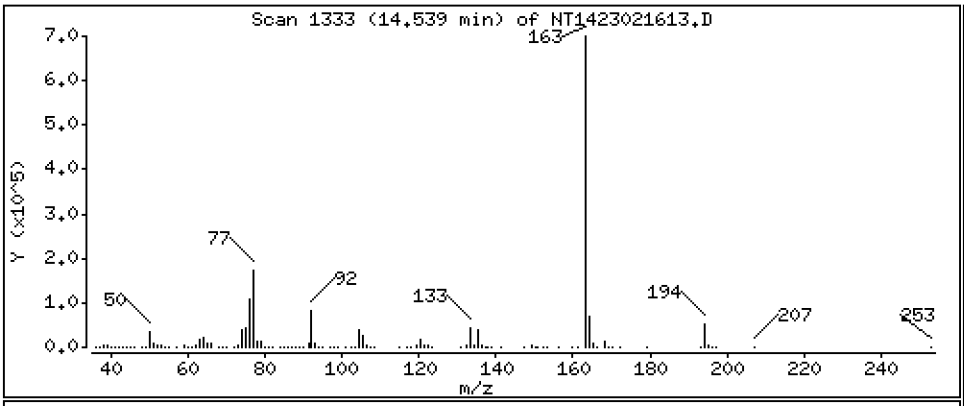
Operator: DSD

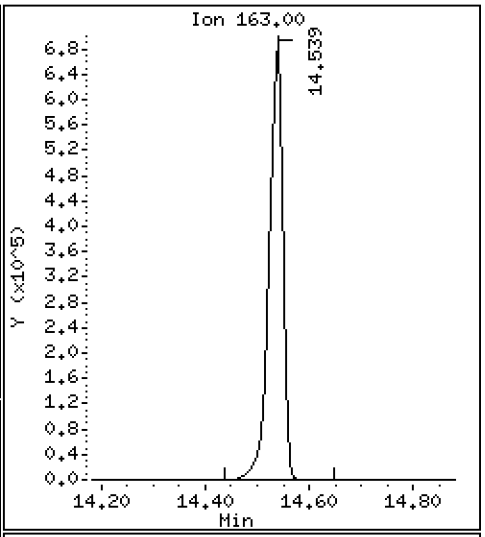
Column phase: ZB-5msi

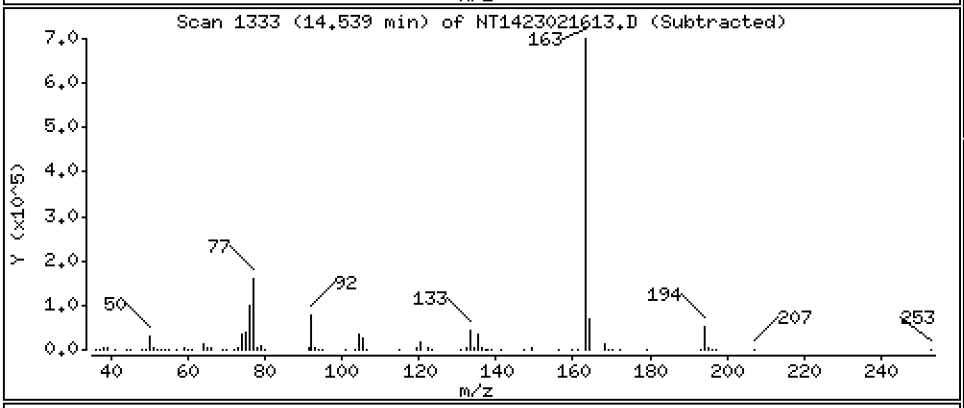
Column diameter: 0.25

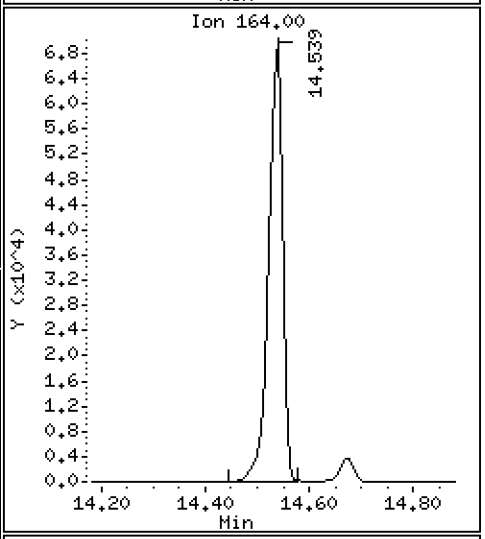
39 Dimethylphthalate

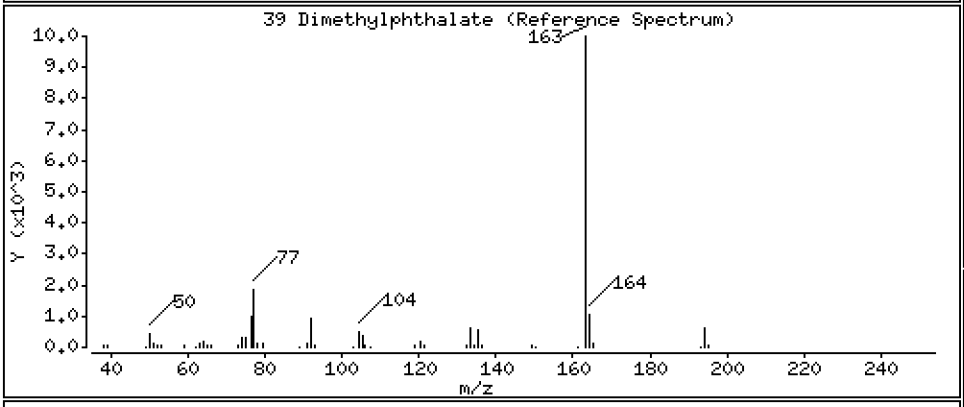
Concentration: 4.693 ug/mL

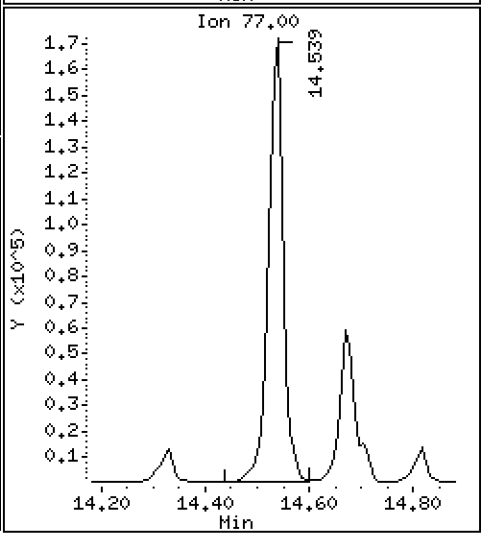


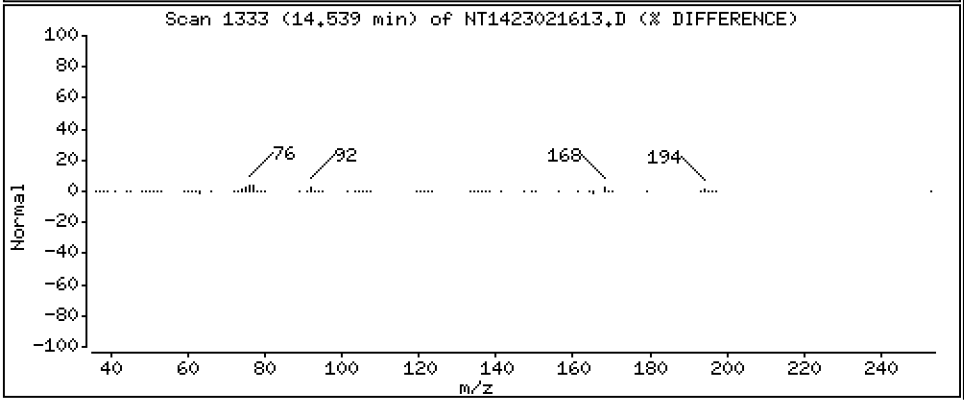












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

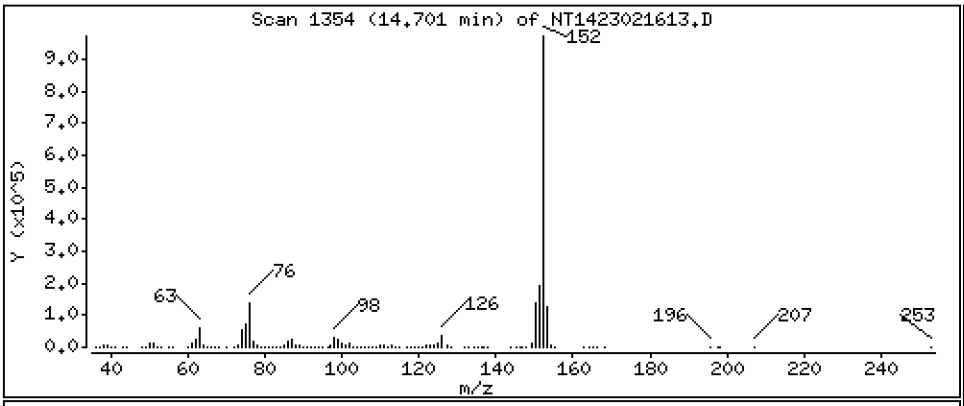
Operator: DSD

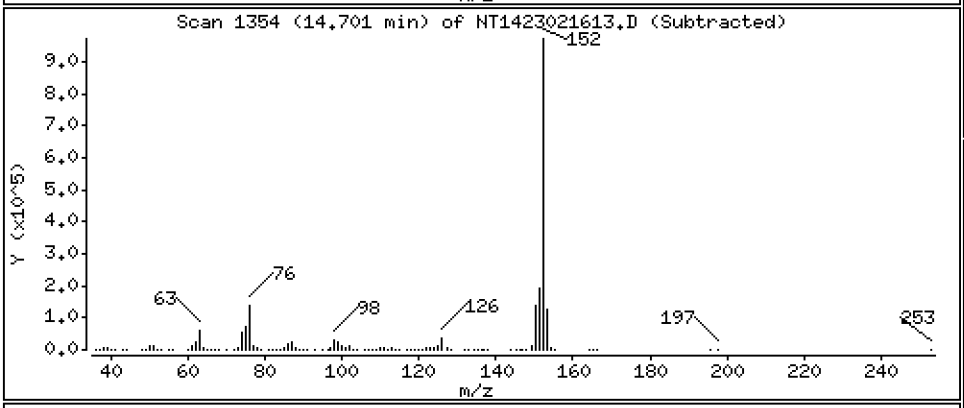
Column phase: ZB-5msi

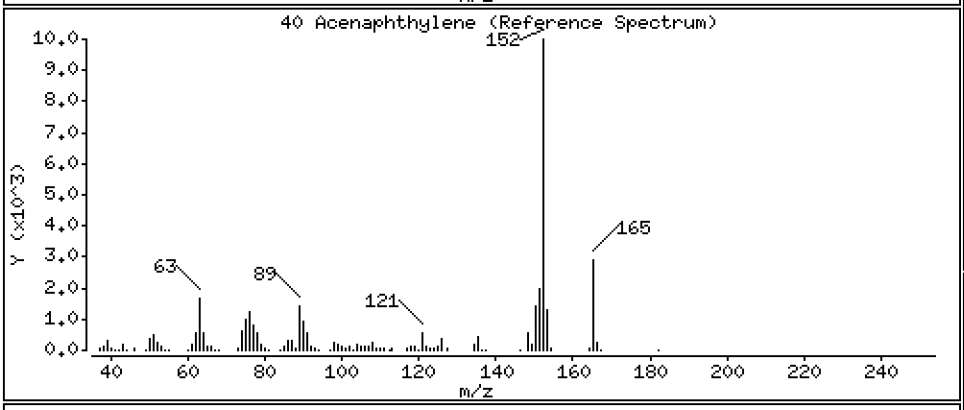
Column diameter: 0.25

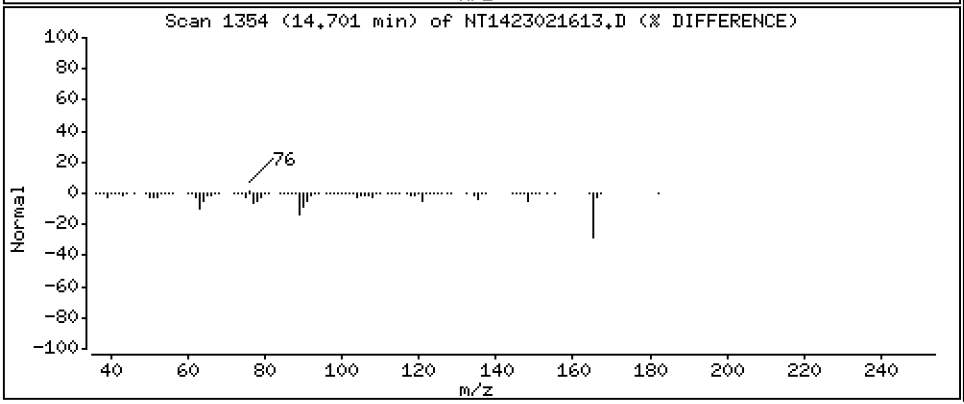
40 Acenaphthylene

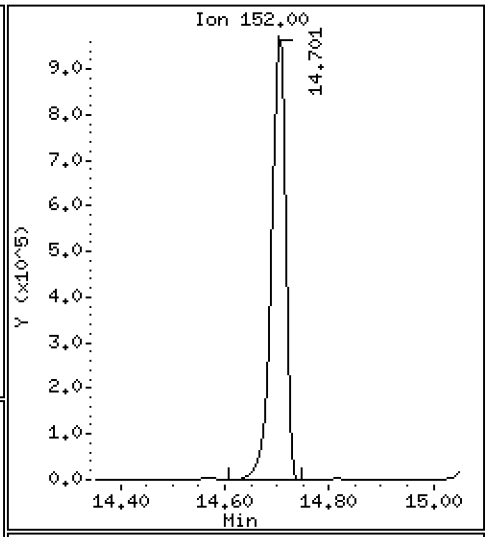
Concentration: 4.657 ug/mL

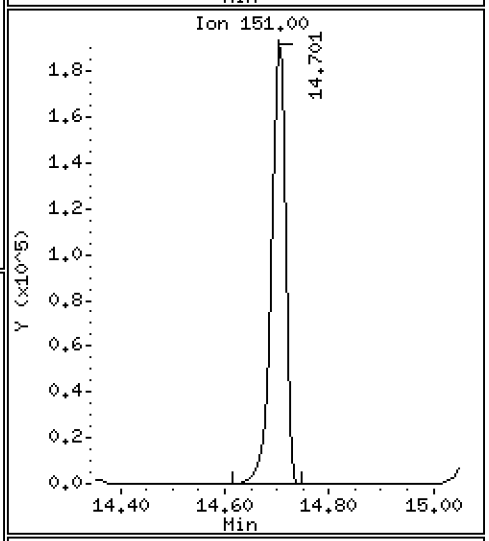


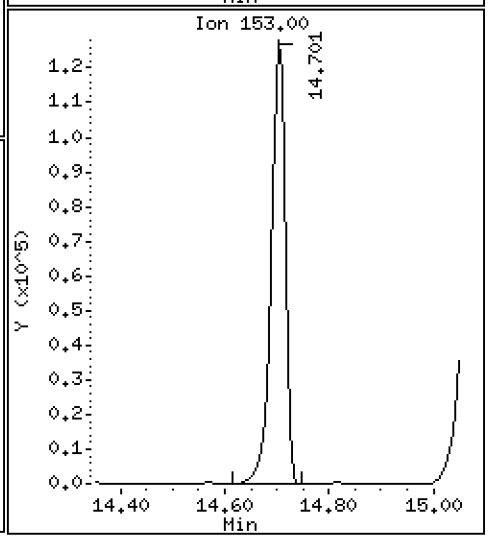












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

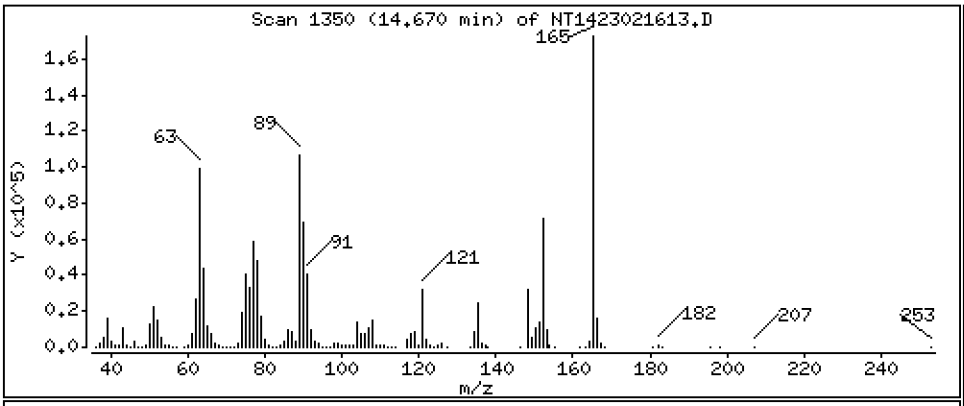
Operator: DSD

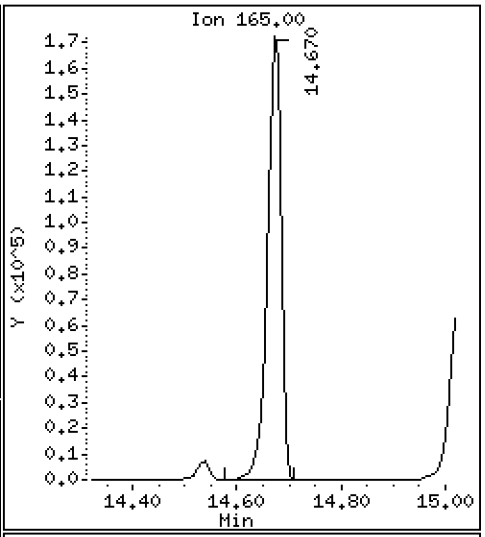
Column phase: ZB-5msi

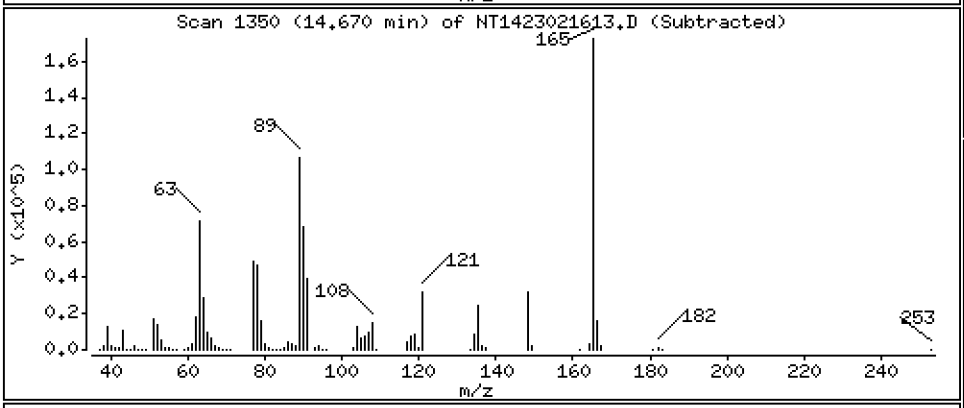
Column diameter: 0.25

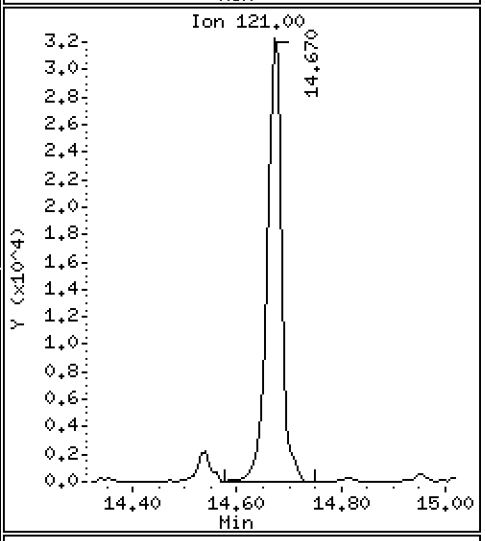
41 2,6-Dinitrotoluene

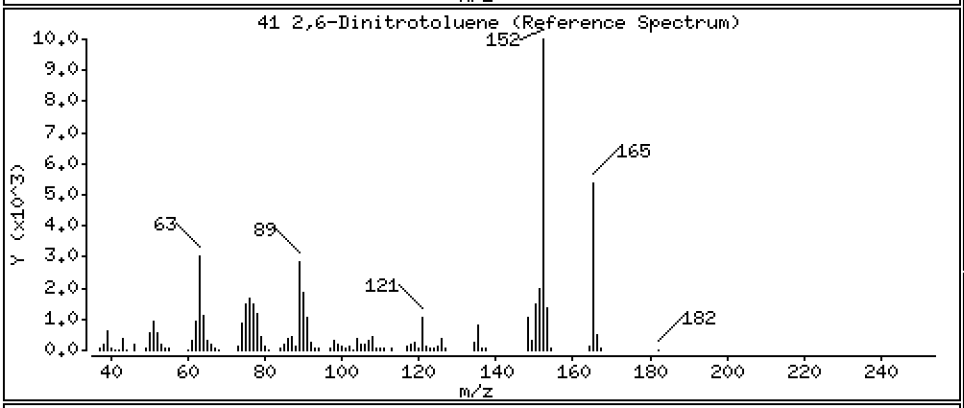
Concentration: 4.935 ug/mL

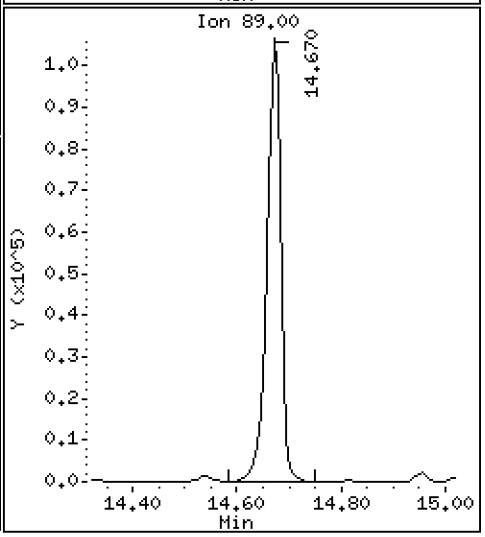


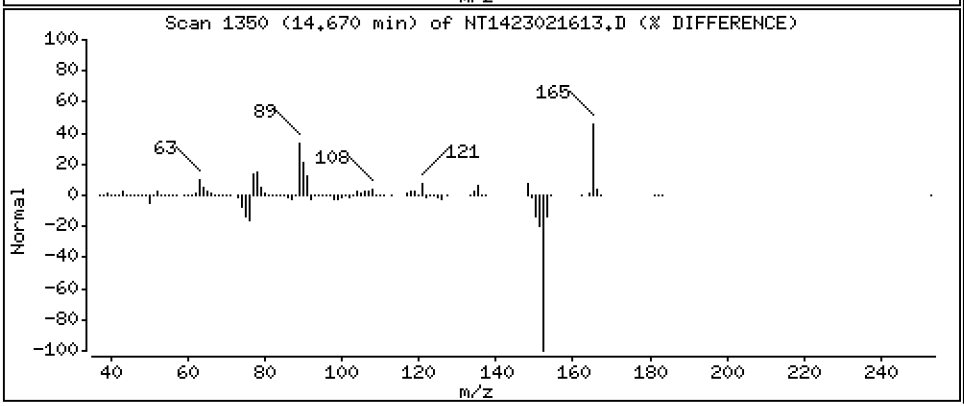












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

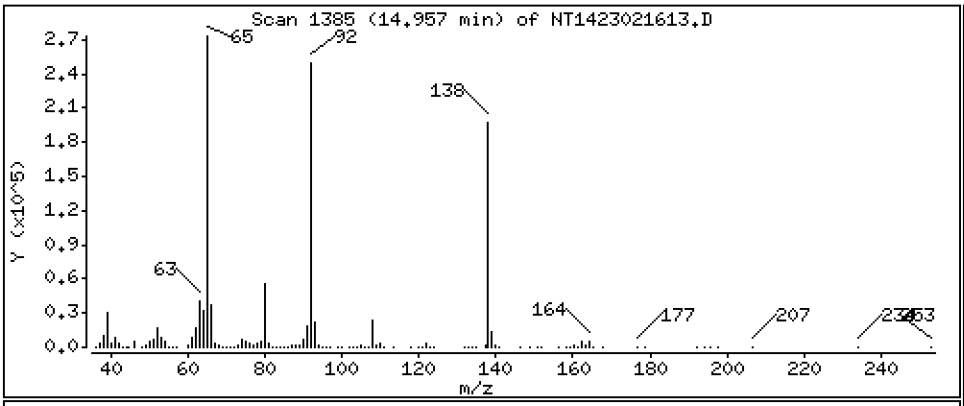
Operator: DSD

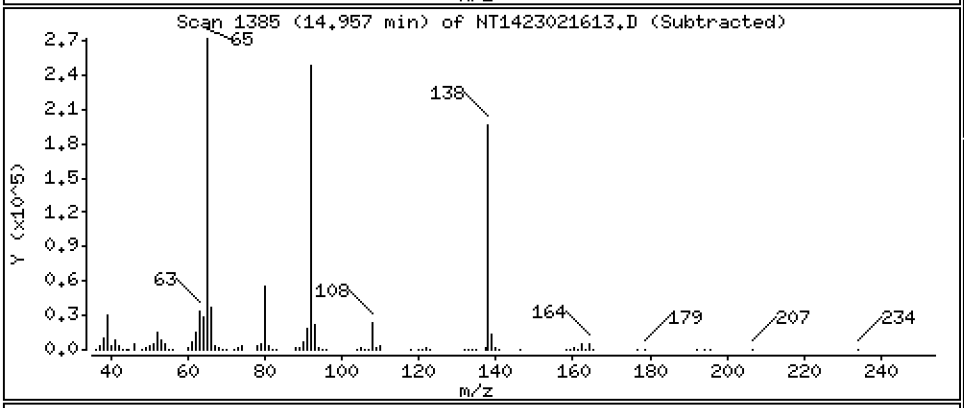
Column phase: ZB-5msi

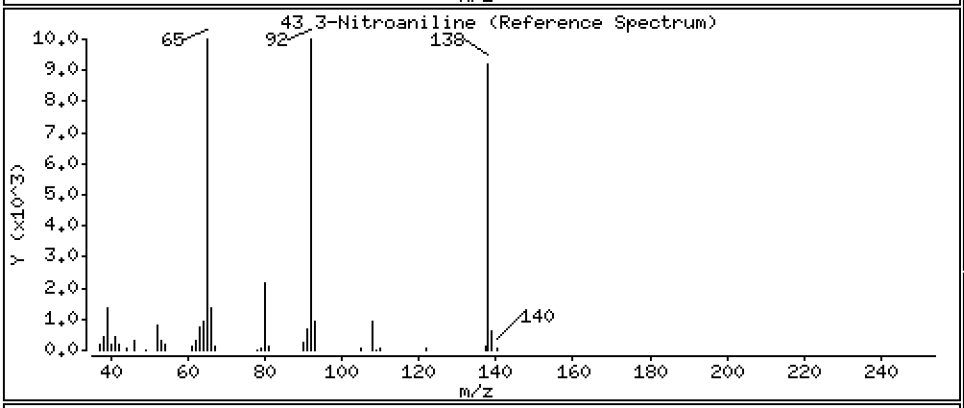
Column diameter: 0.25

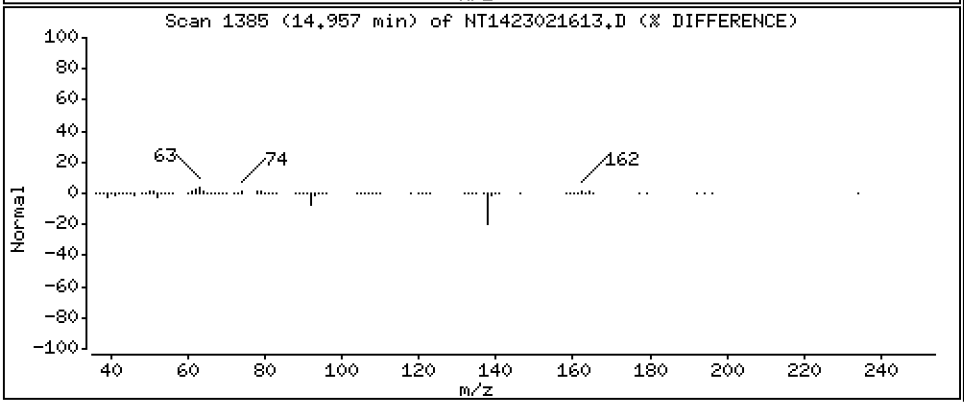
43 3-Nitroaniline

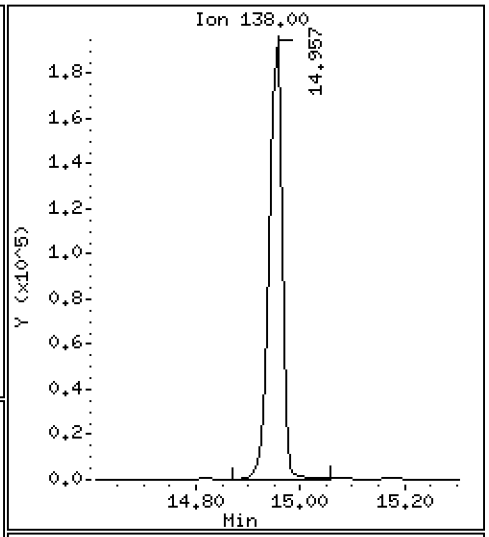
Concentration: 4.922 ug/mL

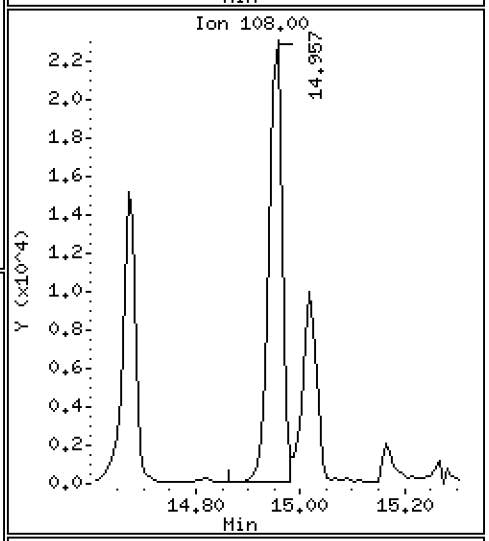


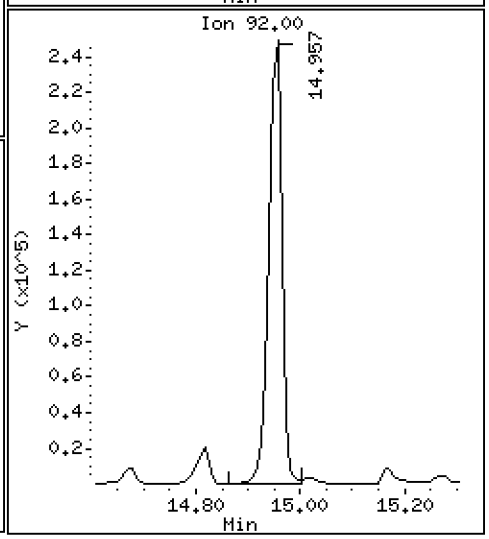












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

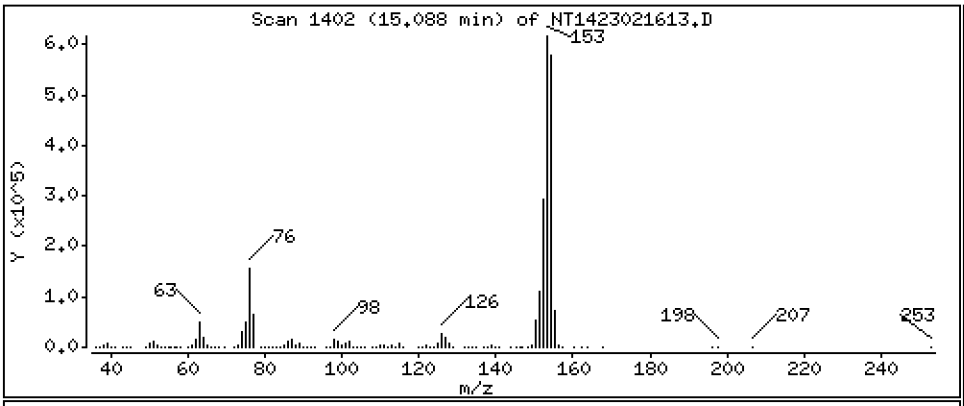
Operator: DSD

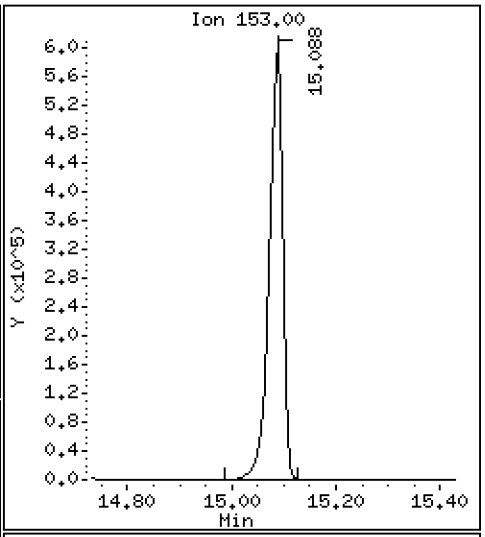
Column phase: ZB-5msi

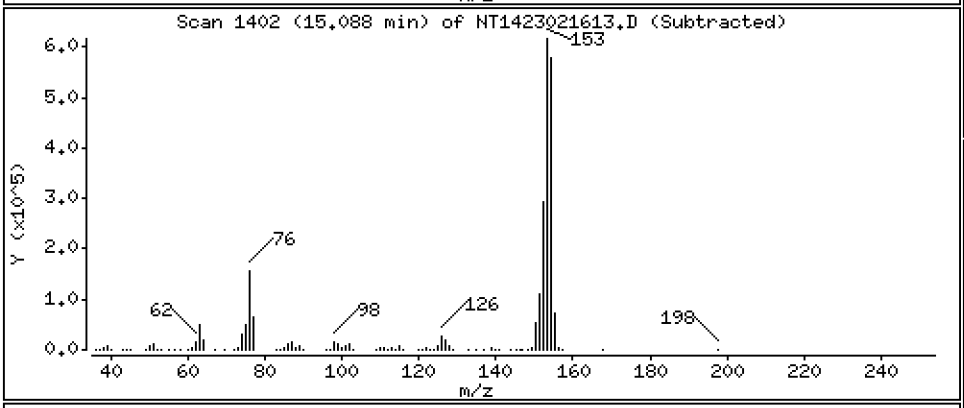
Column diameter: 0.25

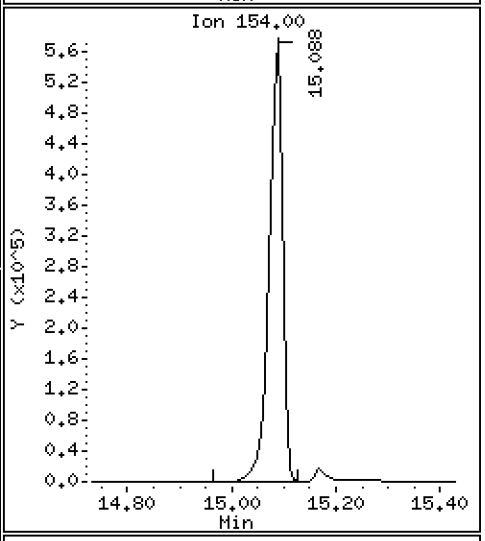
44 Acenaphthene

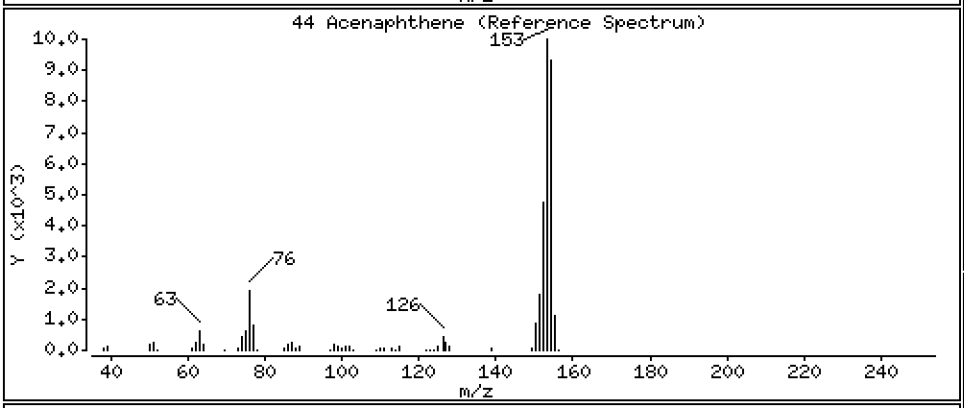
Concentration: 4.633 ug/mL

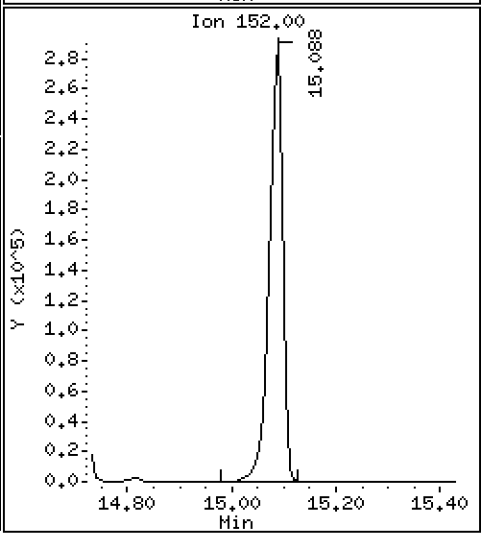


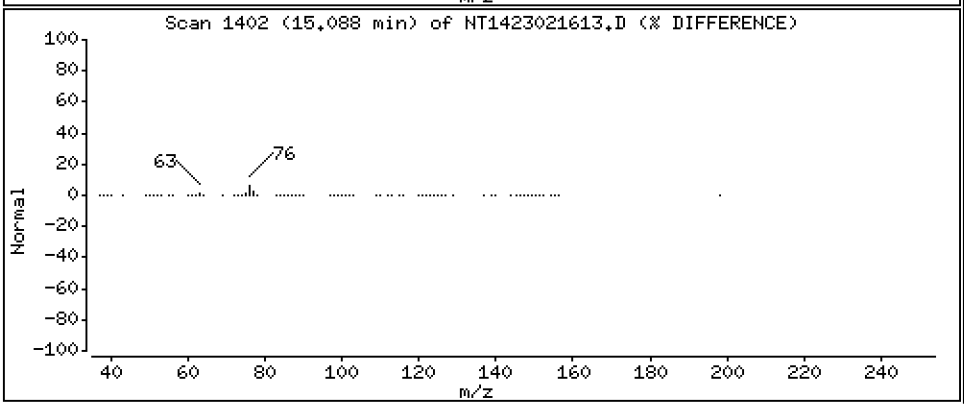












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

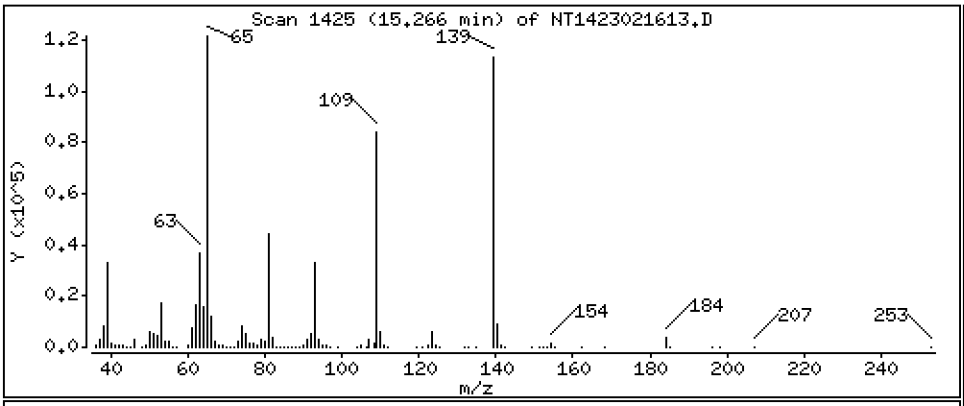
Operator: DSD

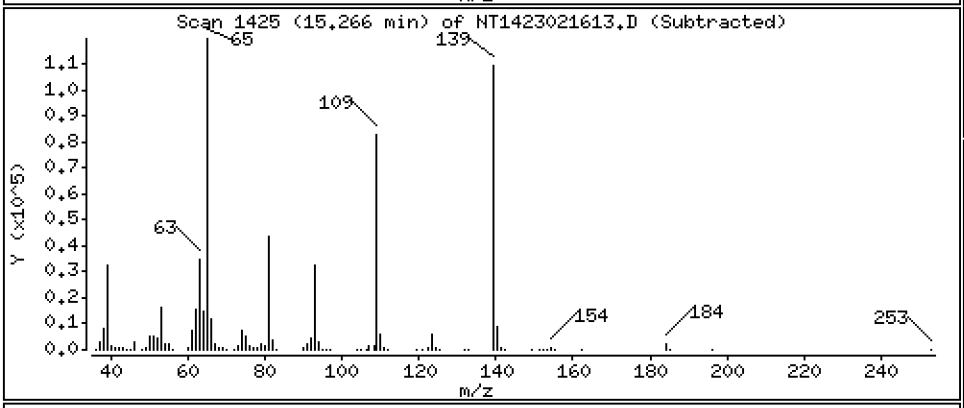
Column phase: ZB-5msi

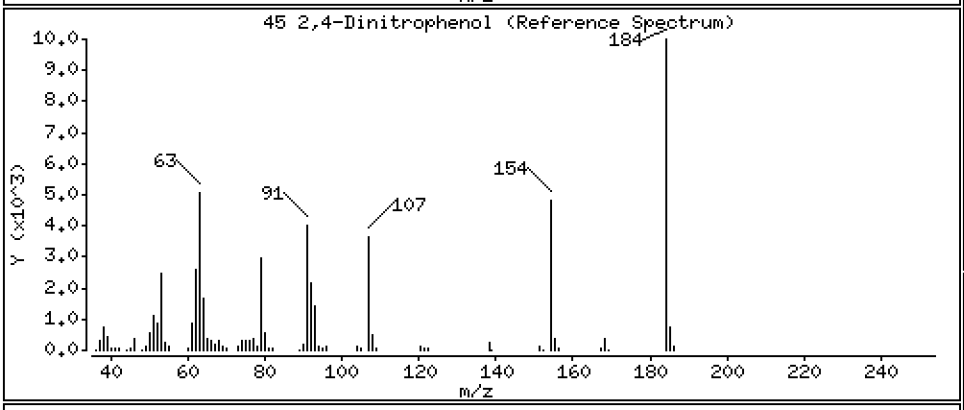
Column diameter: 0.25

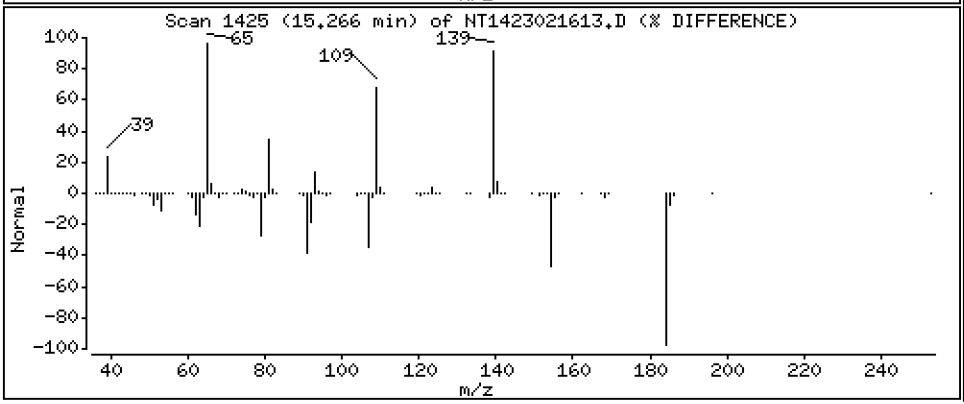
45 2,4-Dinitrophenol

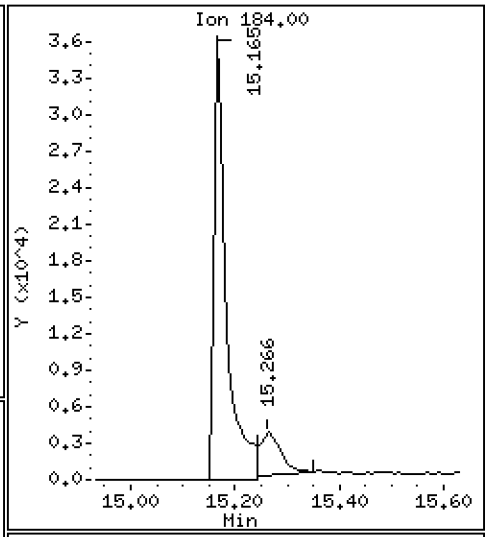
Concentration: 0.2502 ug/mL

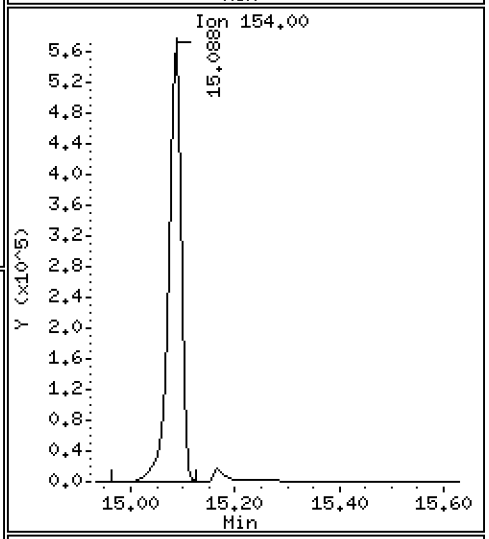


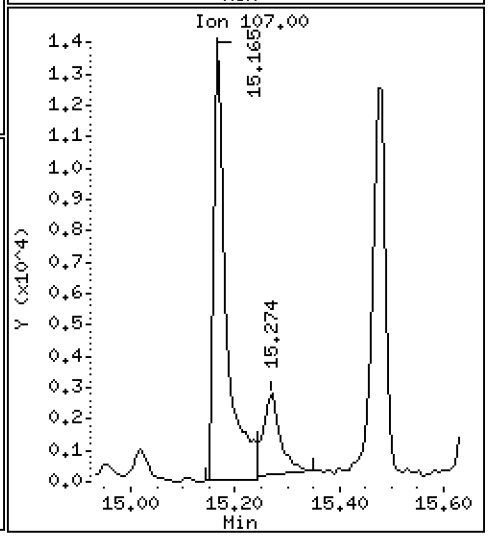












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

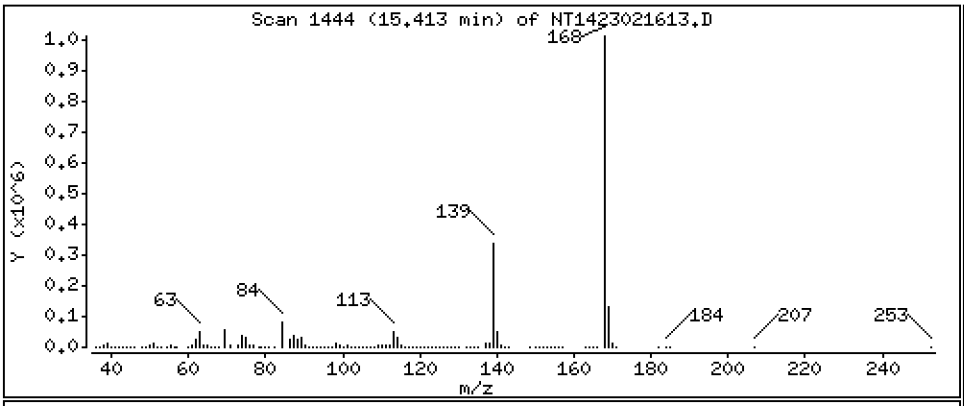
Operator: DSD

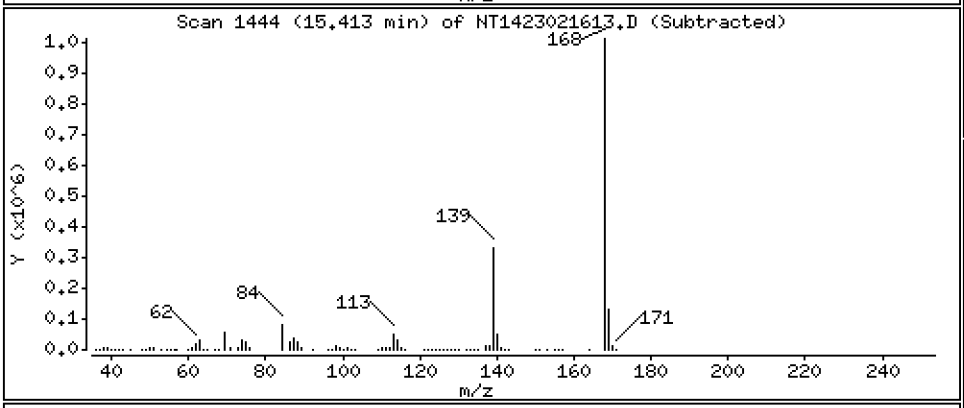
Column phase: ZB-5msi

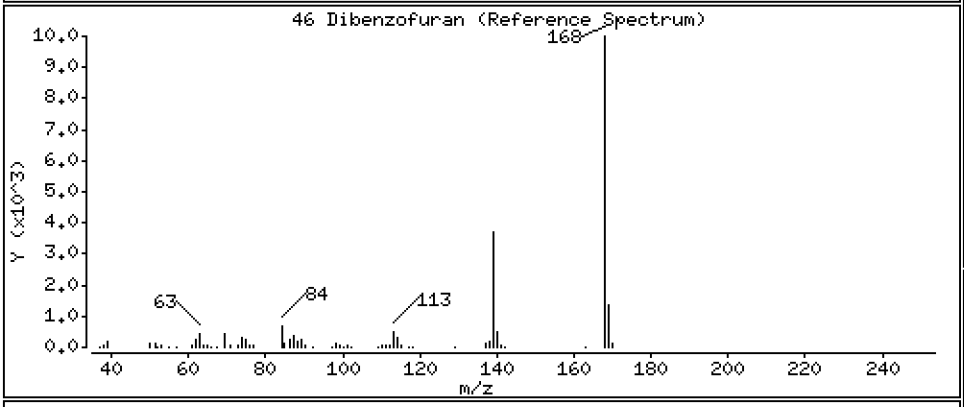
Column diameter: 0.25

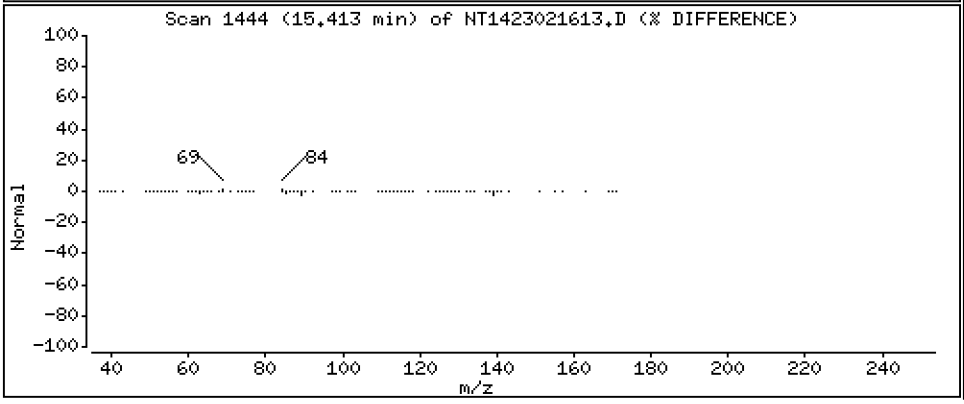
46 Dibenzofuran

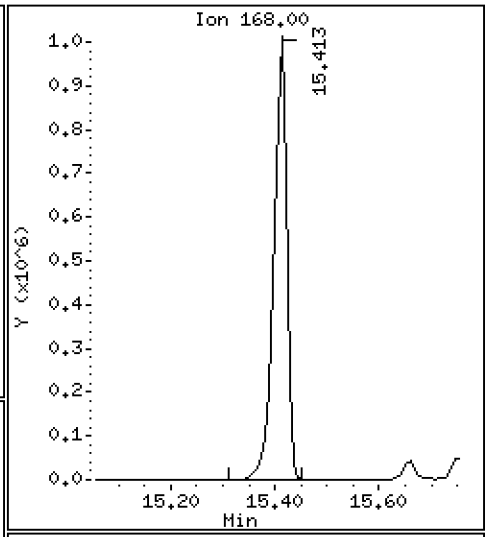
Concentration: 4.548 ug/mL

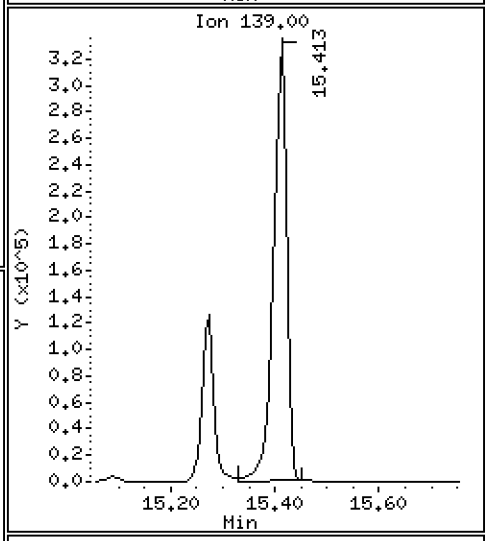


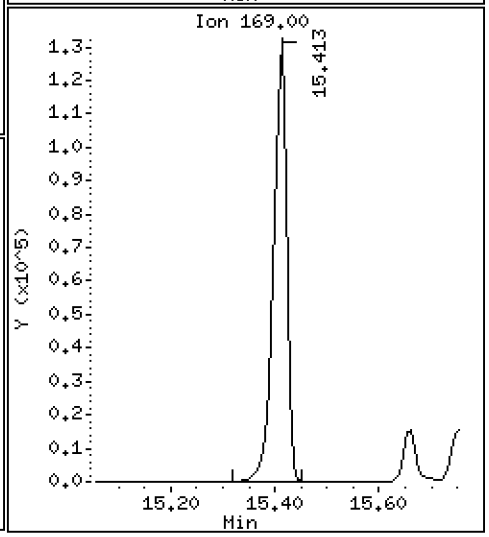












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

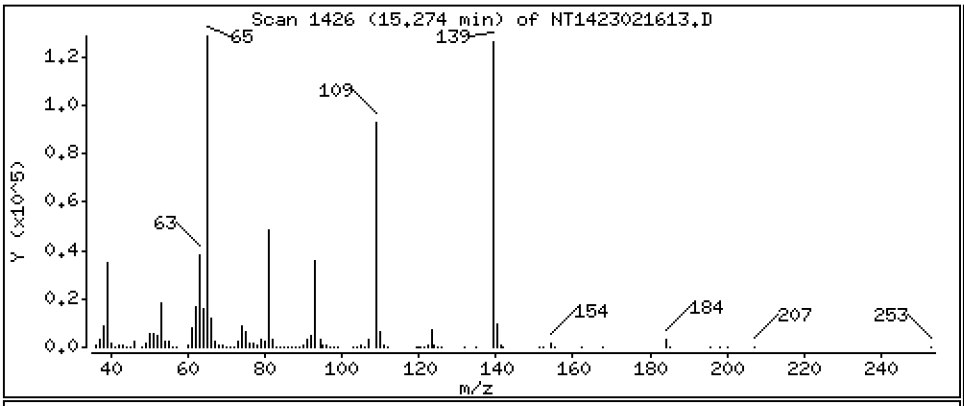
Operator: DSD

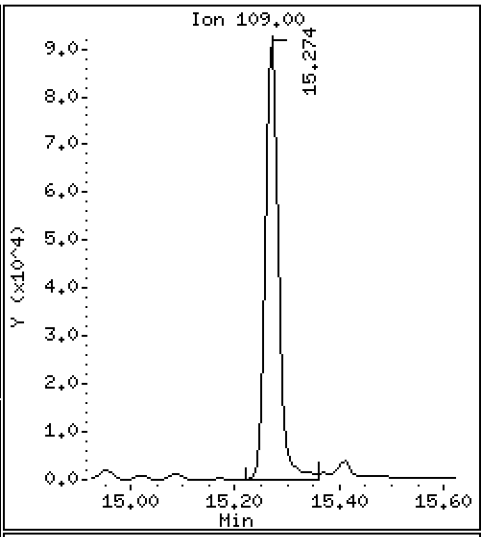
Column phase: ZB-5msi

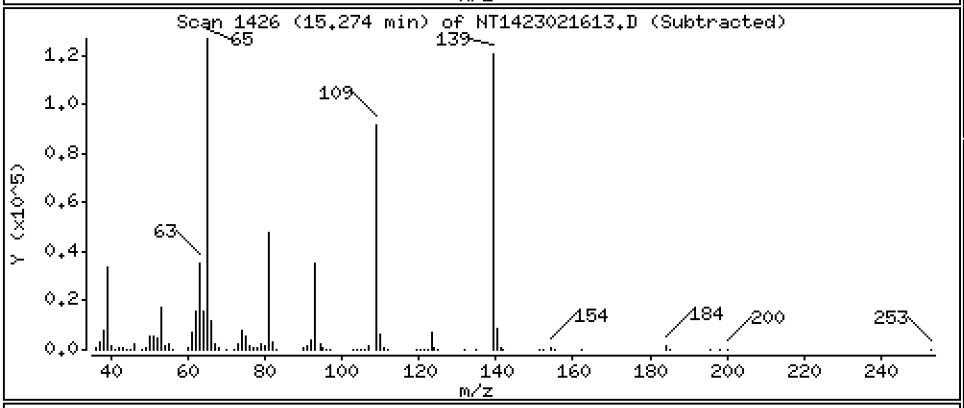
Column diameter: 0.25

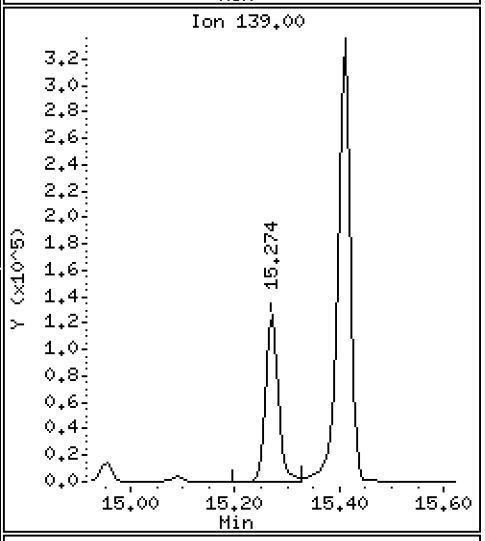
47 4-Nitrophenol

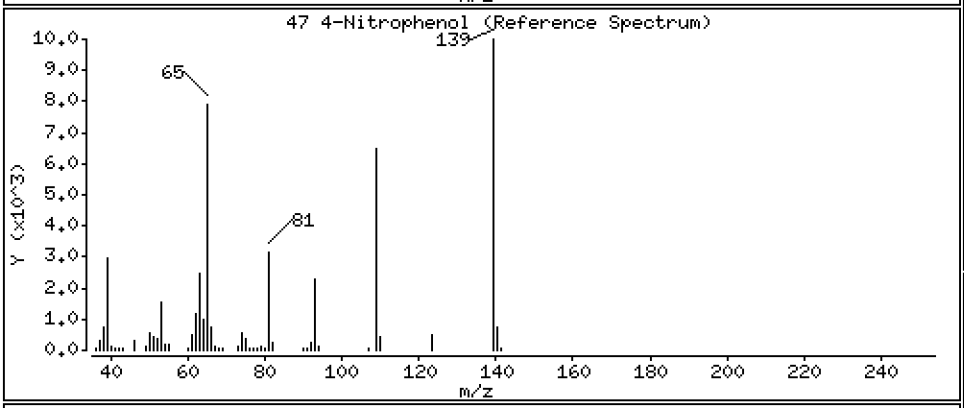
Concentration: 4.052 ug/mL

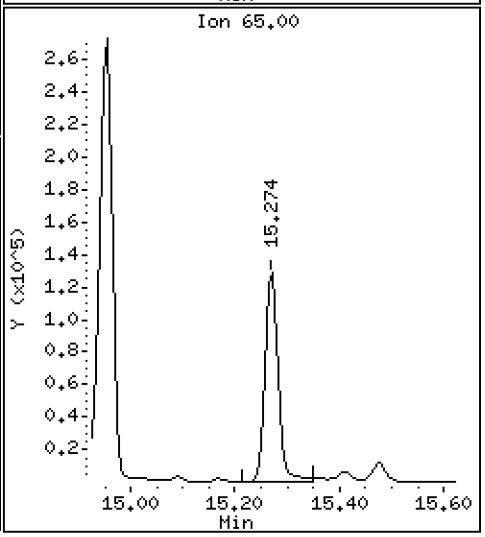


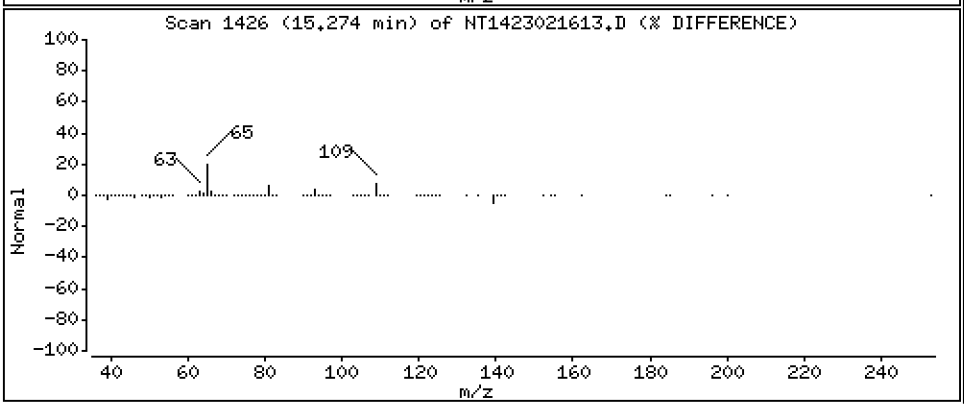












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

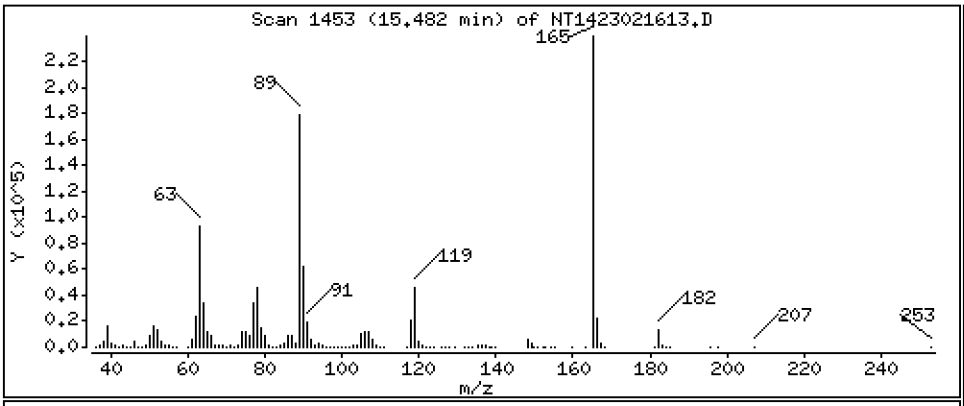
Operator: DSD

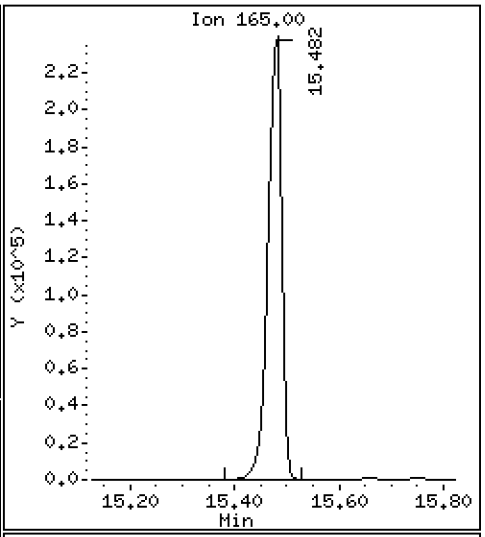
Column phase: ZB-5msi

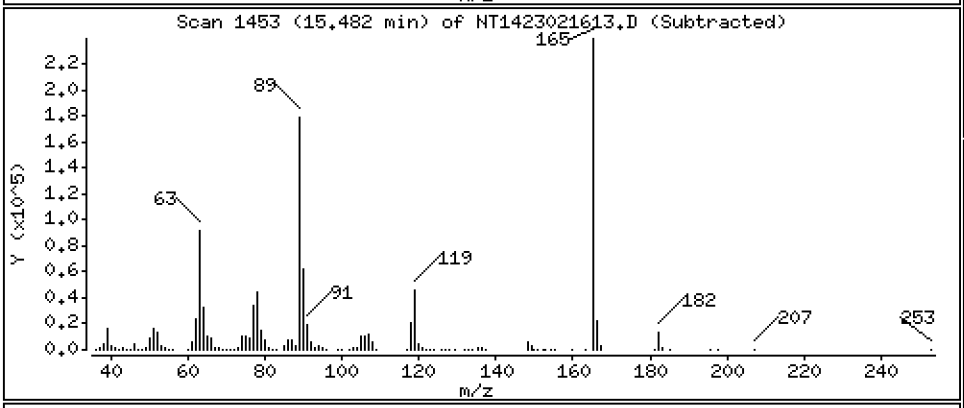
Column diameter: 0.25

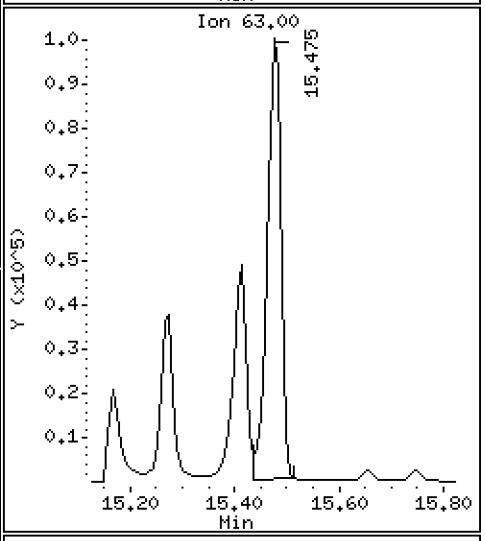
48 2,4-Dinitrotoluene

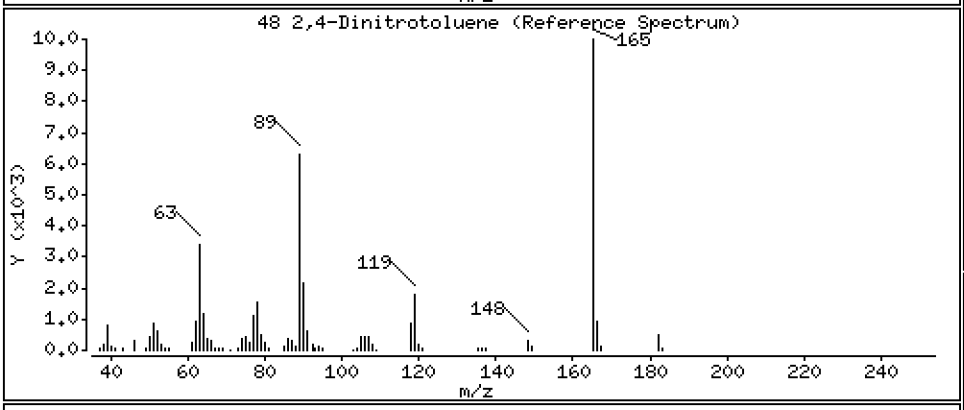
Concentration: 4.855 ug/mL

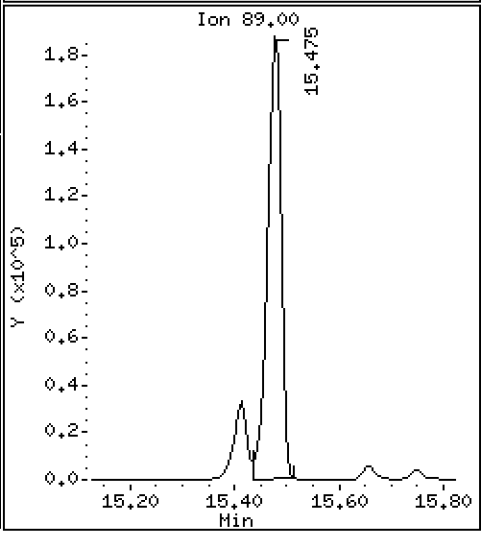


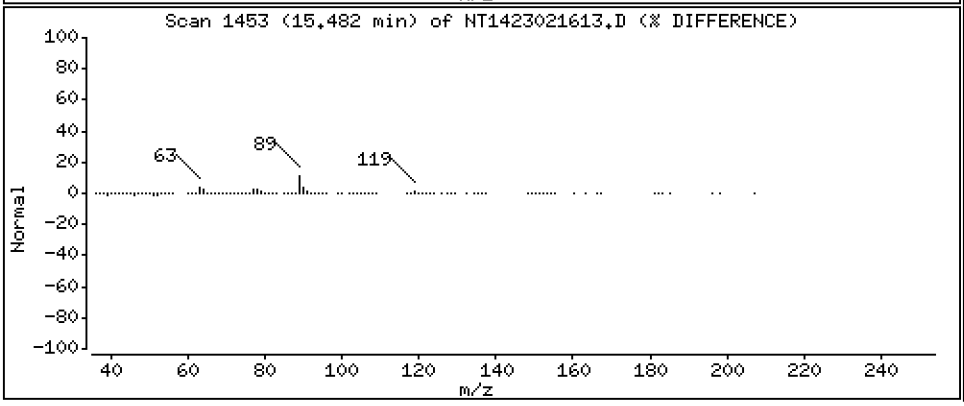












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

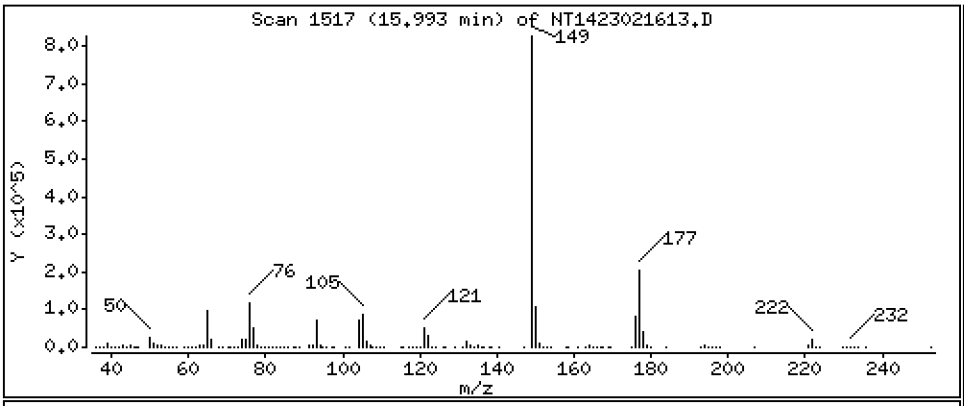
Operator: DSD

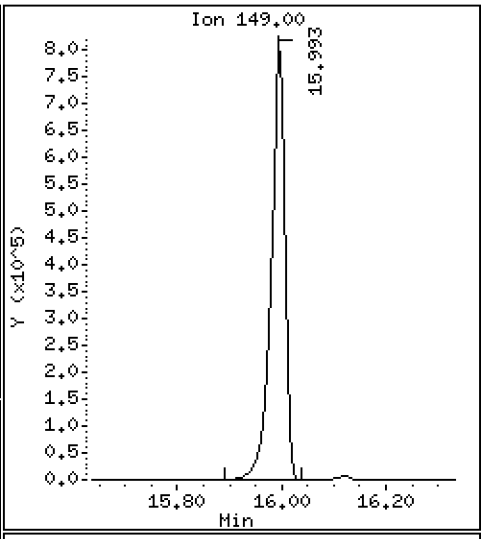
Column phase: ZB-5msi

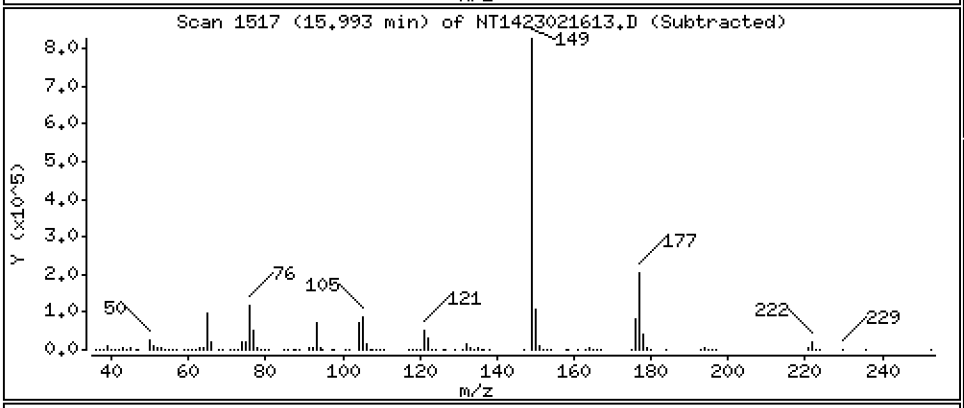
Column diameter: 0.25

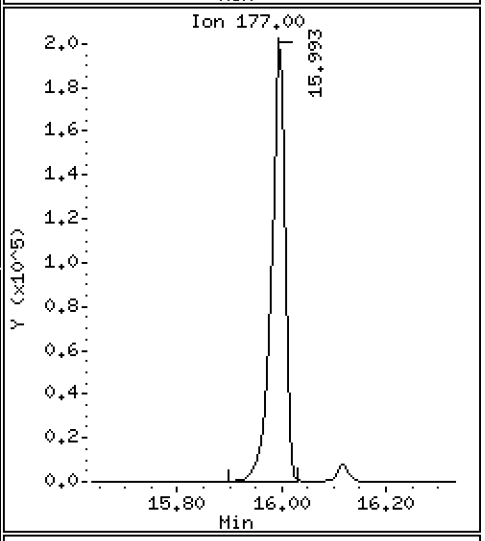
50 Diethylphthalate

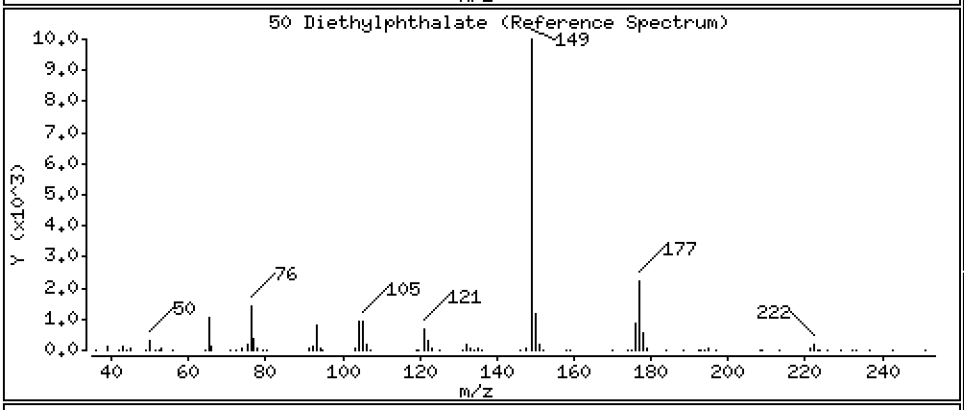
Concentration: 4.722 ug/mL

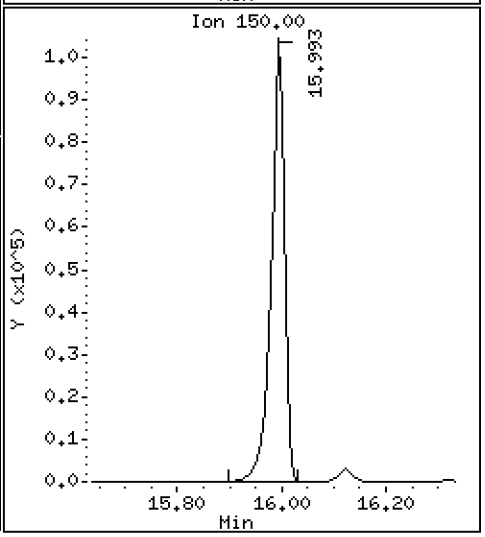


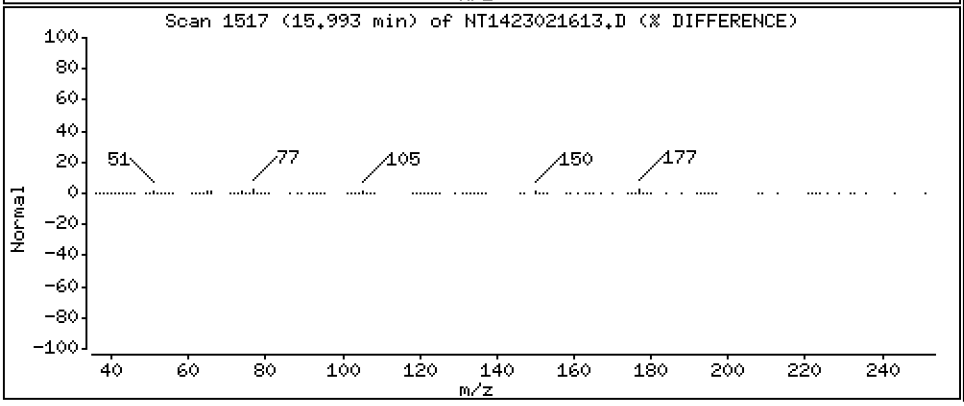












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

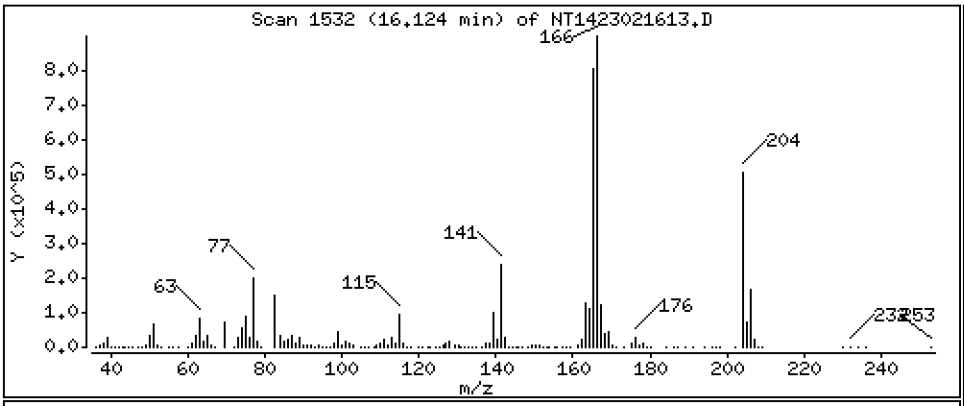
Operator: DSD

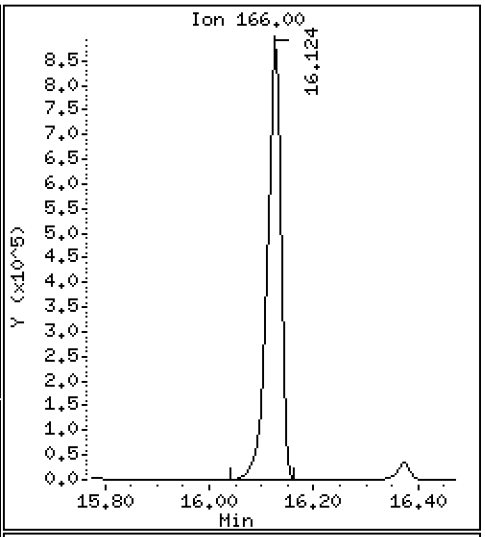
Column phase: ZB-5msi

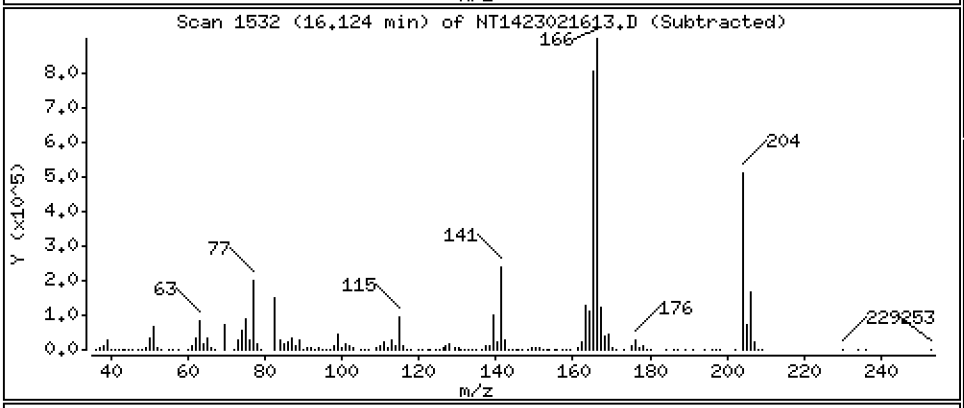
Column diameter: 0.25

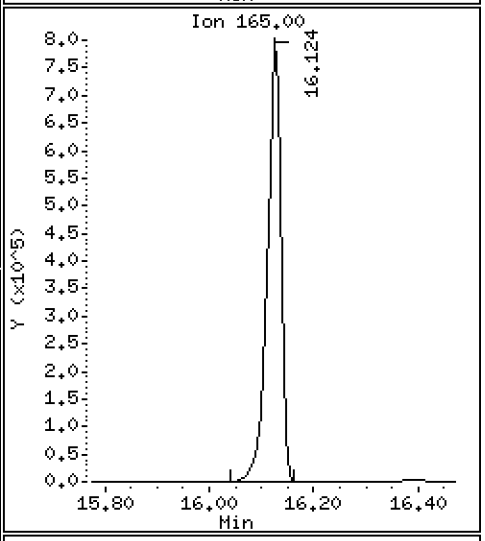
49 Fluorene

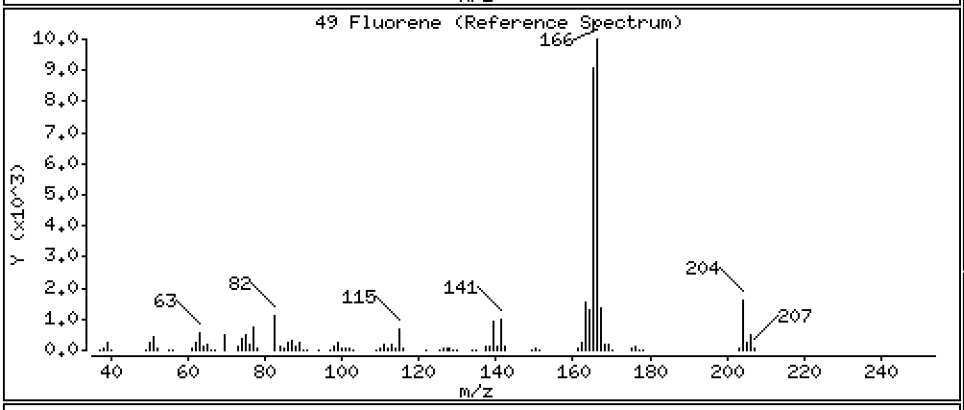
Concentration: 4.638 ug/mL

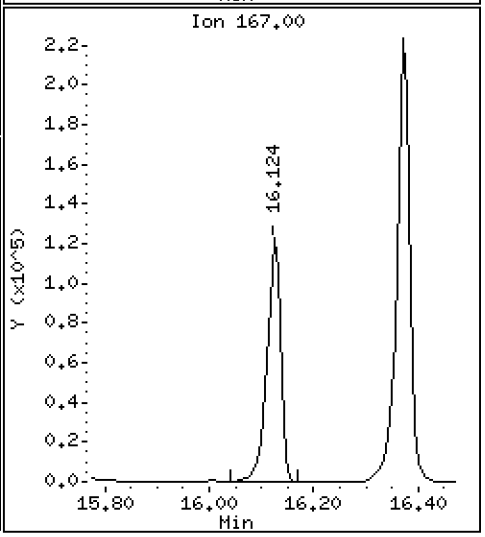


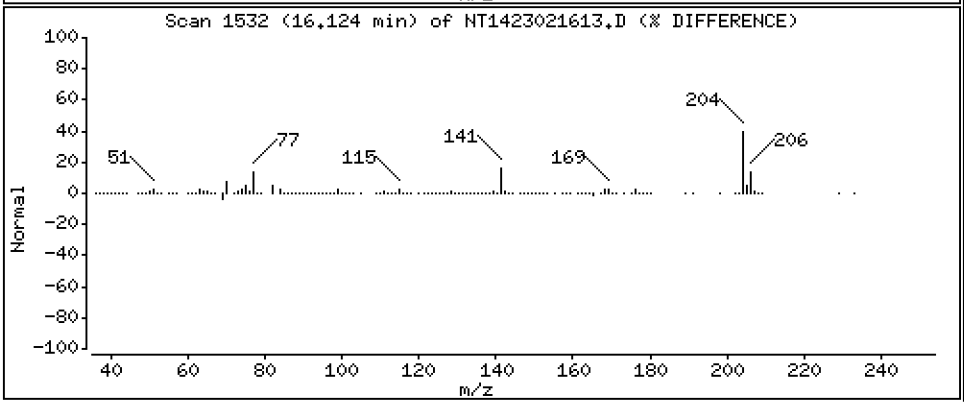












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

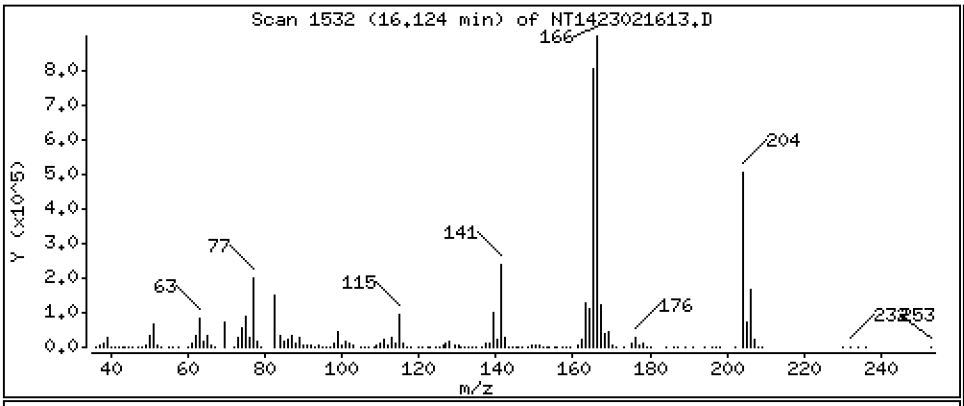
Operator: DSD

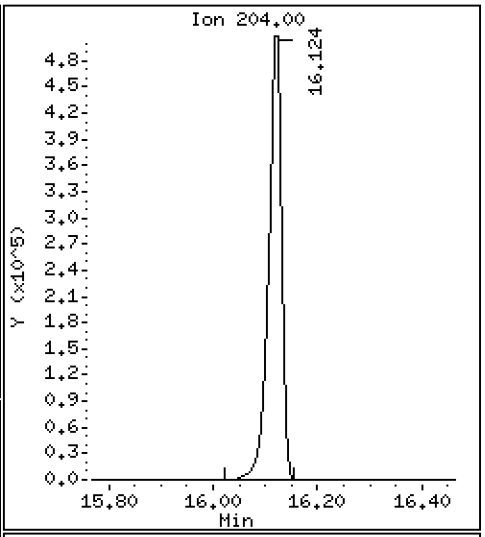
Column phase: ZB-5msi

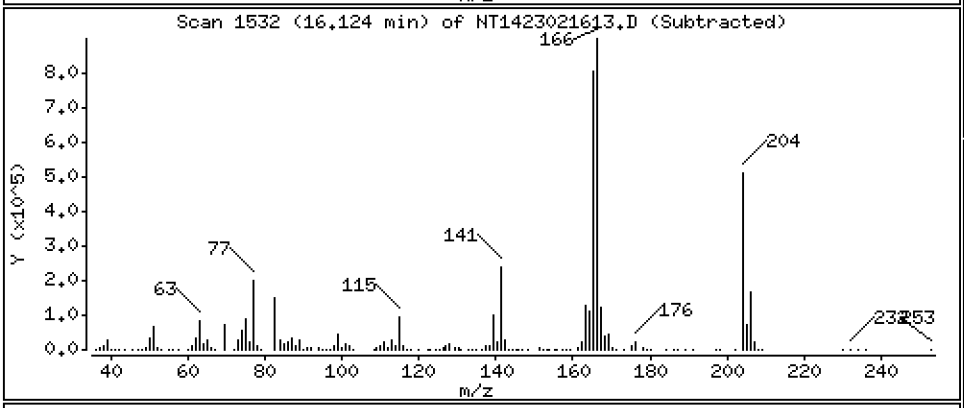
Column diameter: 0.25

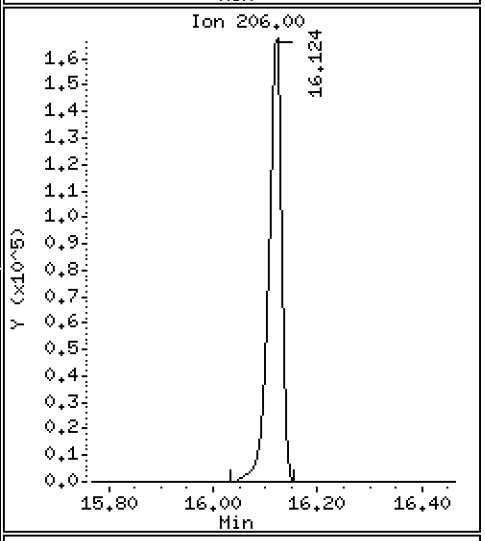
51 4-Chlorophenyl-phenylether

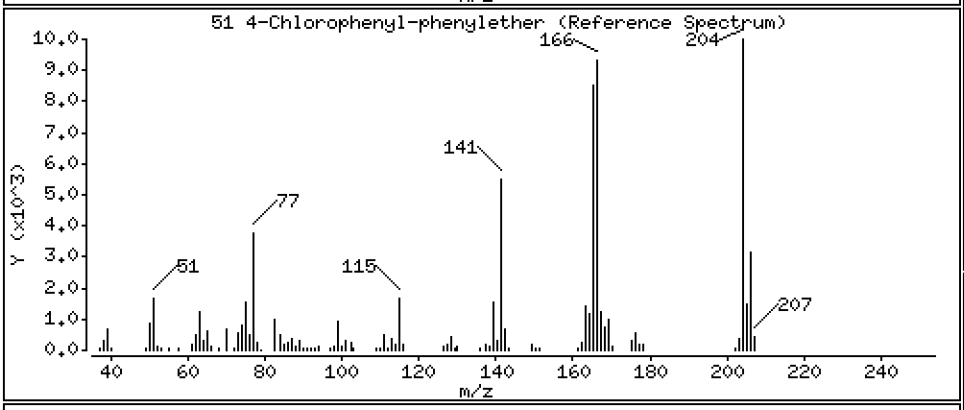
Concentration: 4.754 ug/mL

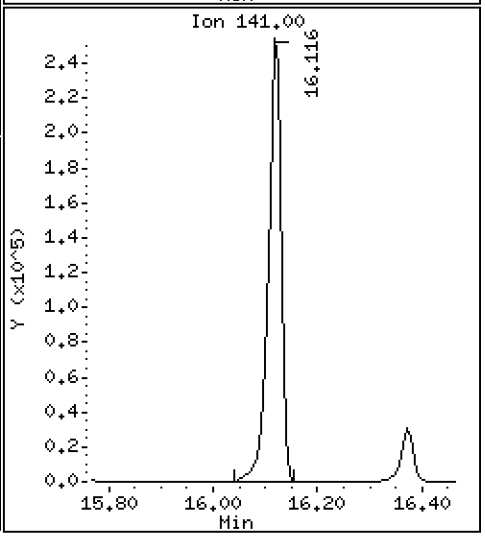


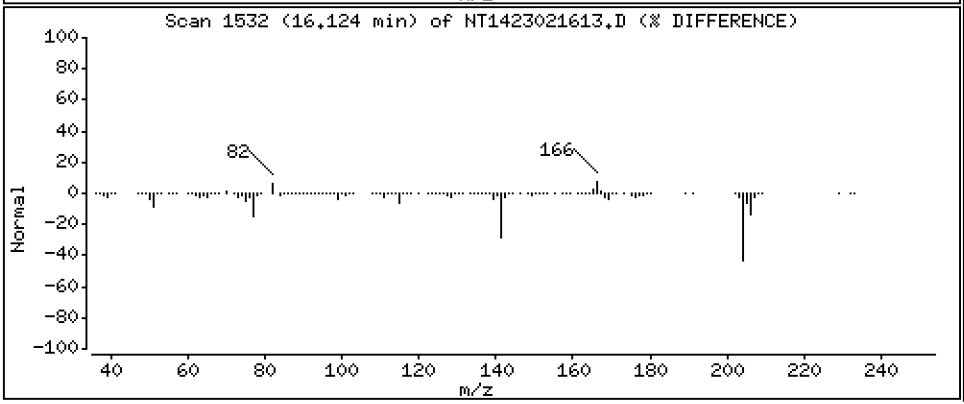












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

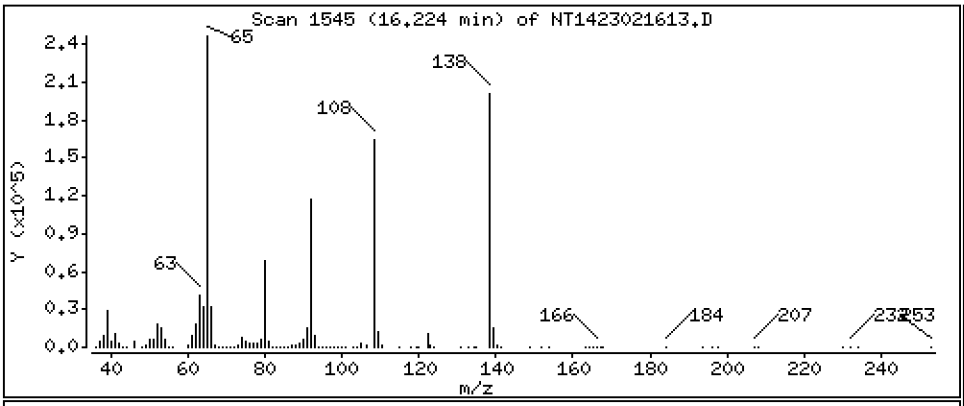
Operator: DSD

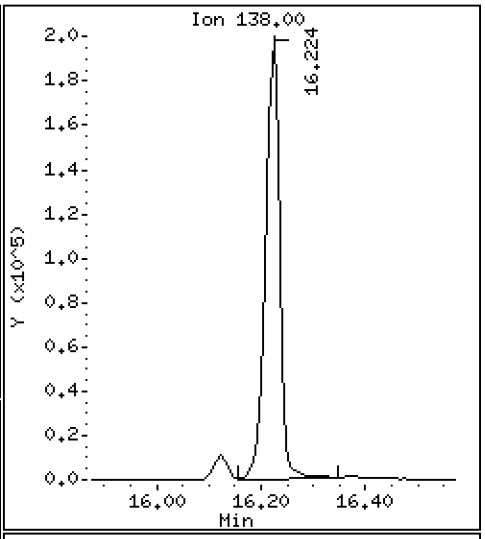
Column phase: ZB-5msi

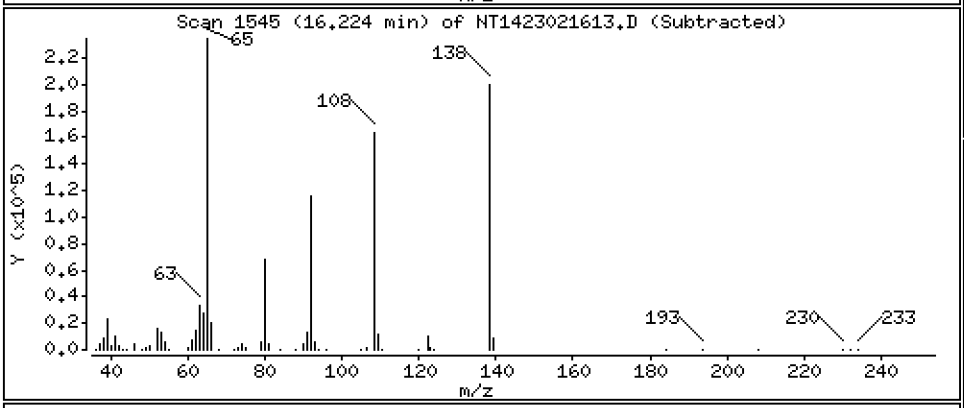
Column diameter: 0.25

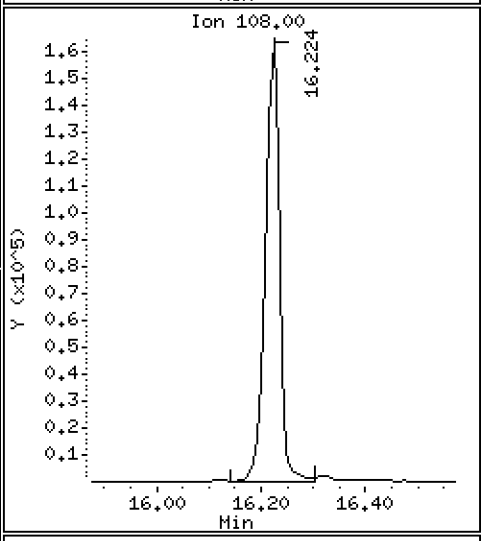
52 4-Nitroaniline

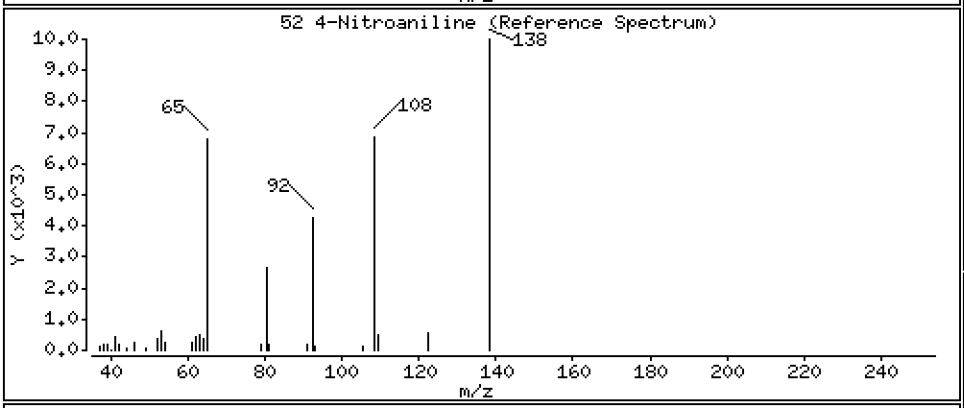
Concentration: 4.762 ug/mL

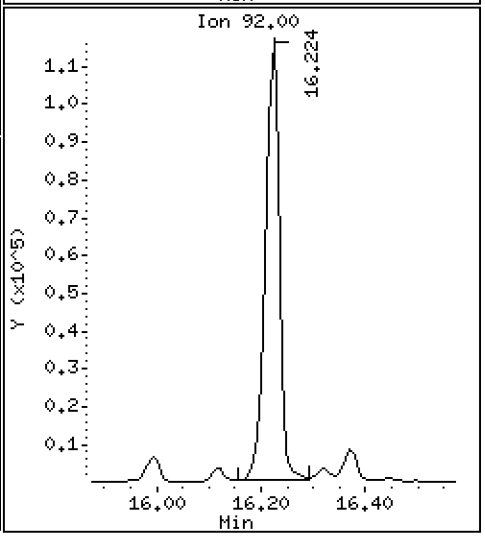


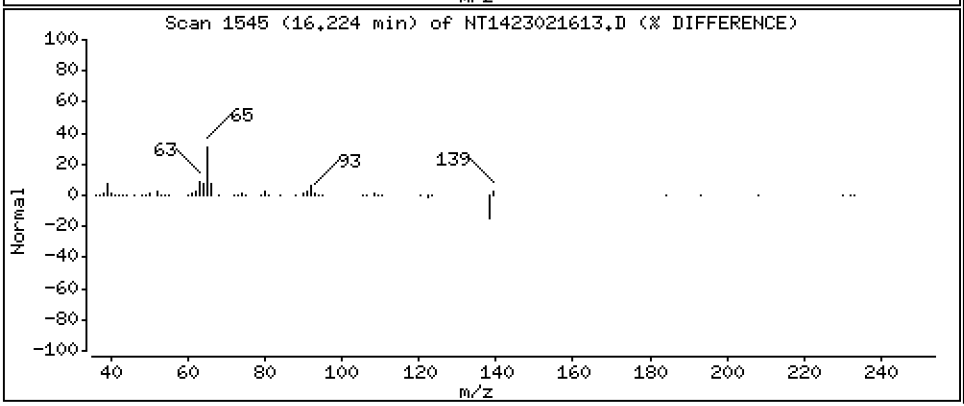












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

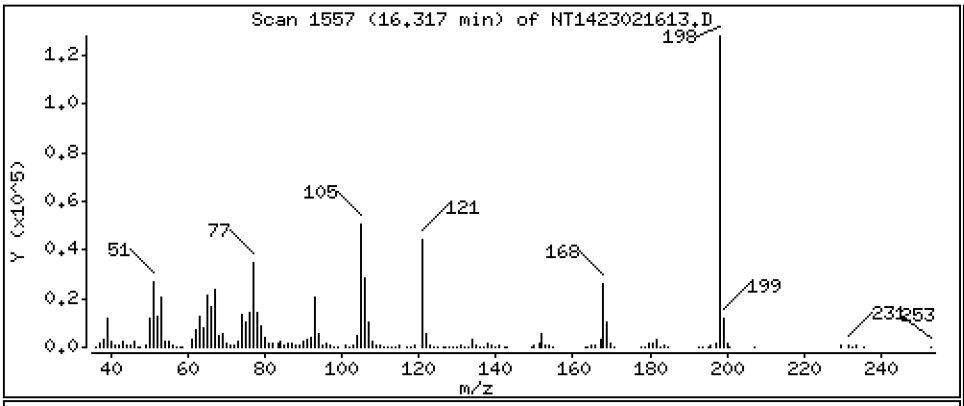
Operator: DSD

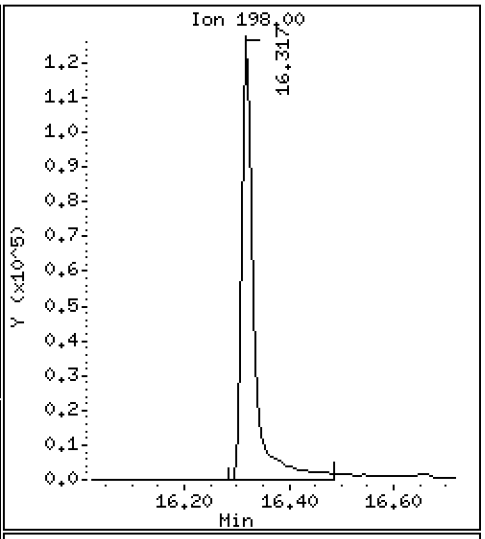
Column phase: ZB-5msi

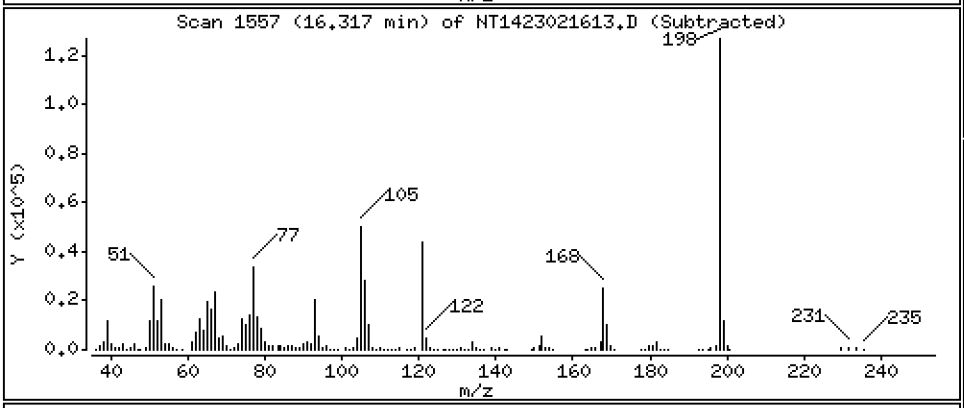
Column diameter: 0.25

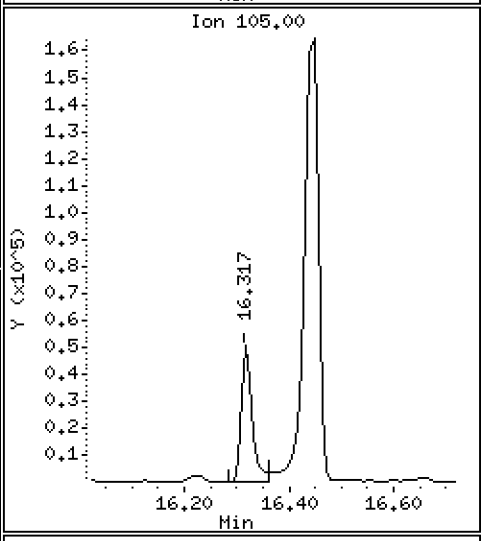
53 4,6-Dinitro-2-methylphenol

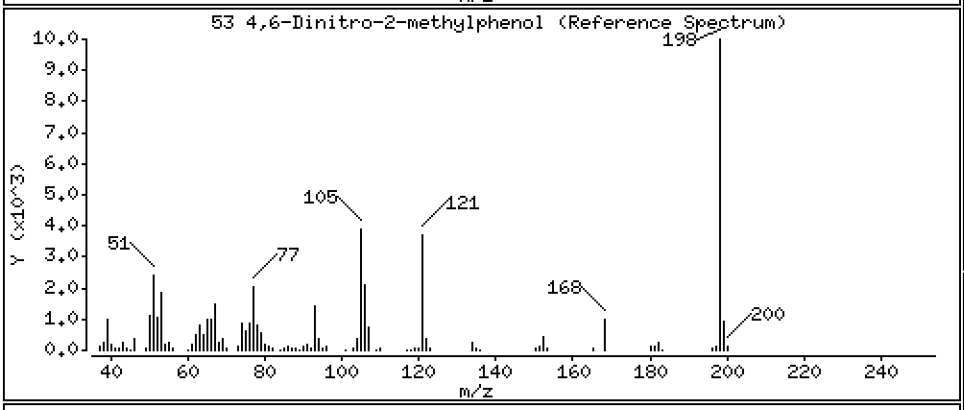
Concentration: 3.653 ug/mL

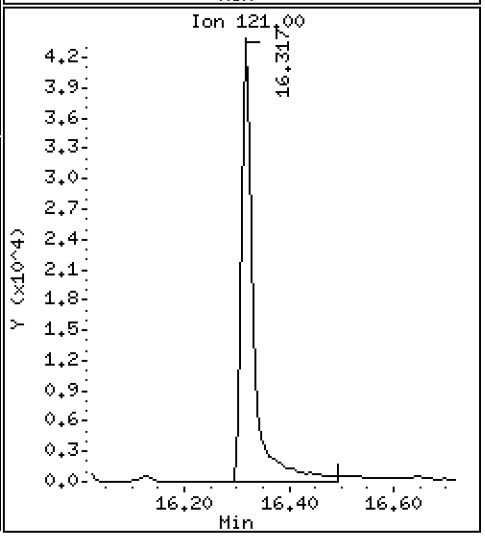


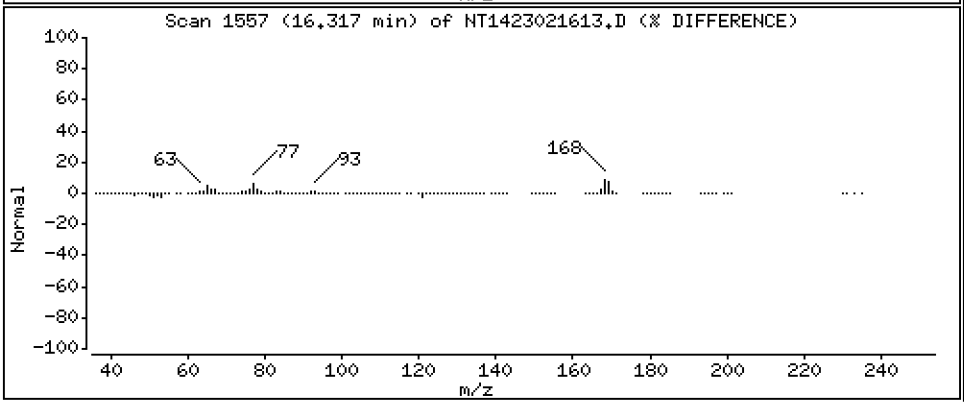












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

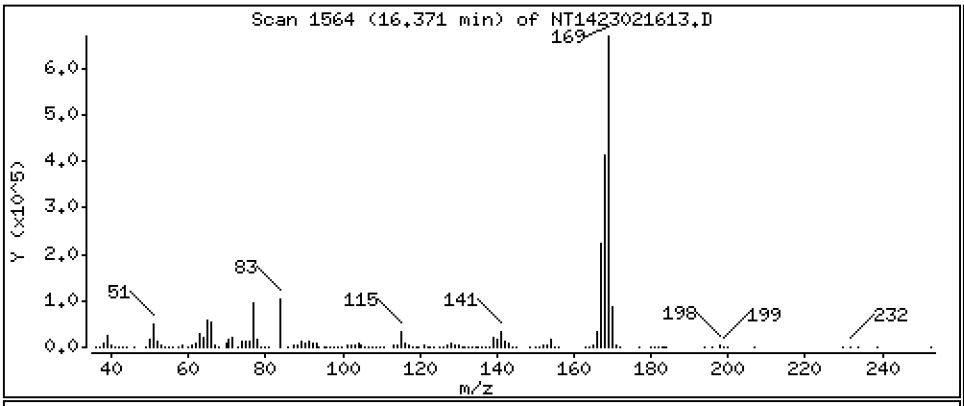
Operator: DSD

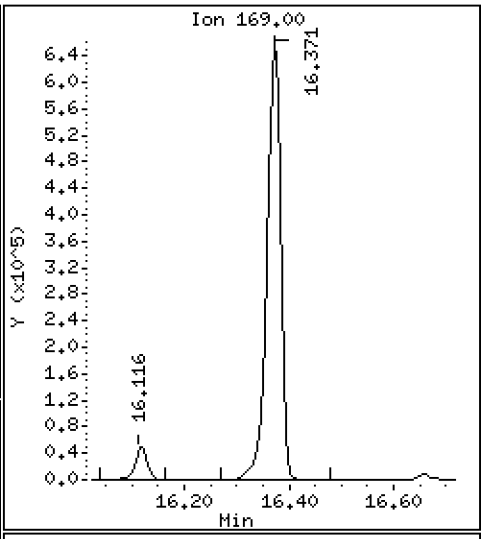
Column phase: ZB-5msi

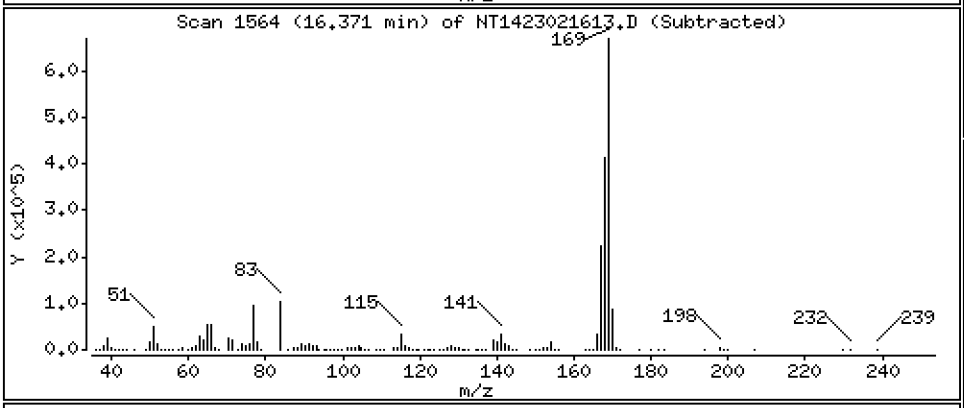
Column diameter: 0.25

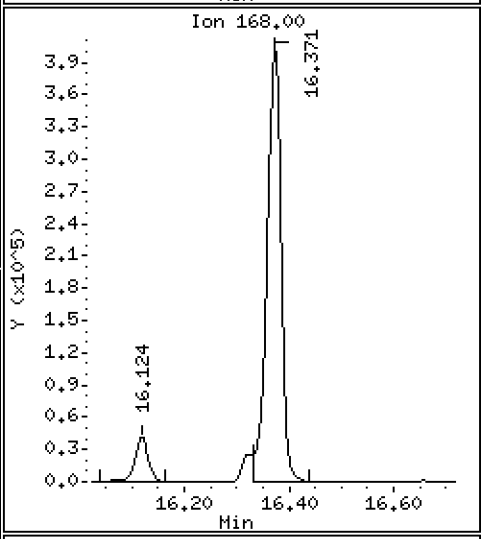
54 N-Nitrosodiphenylamine

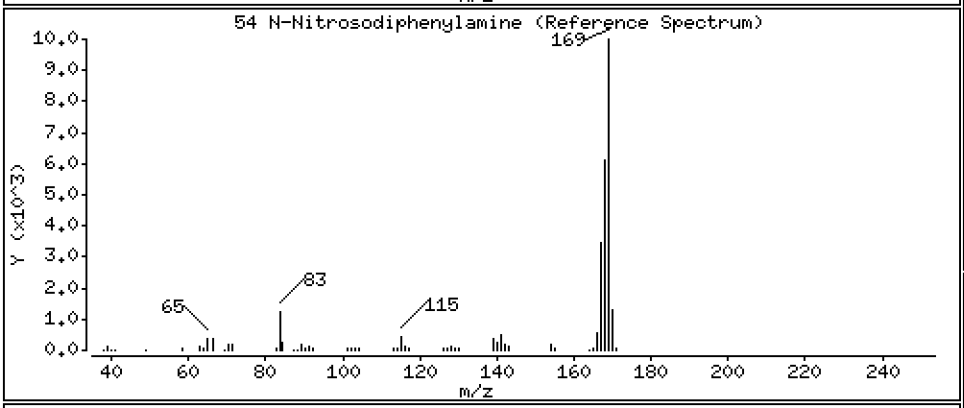
Concentration: 4.907 ug/mL

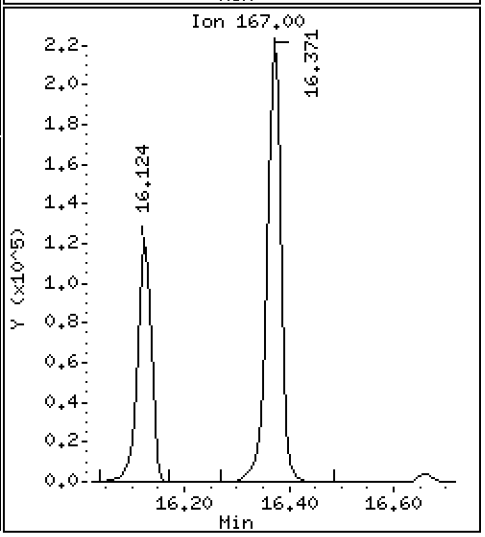


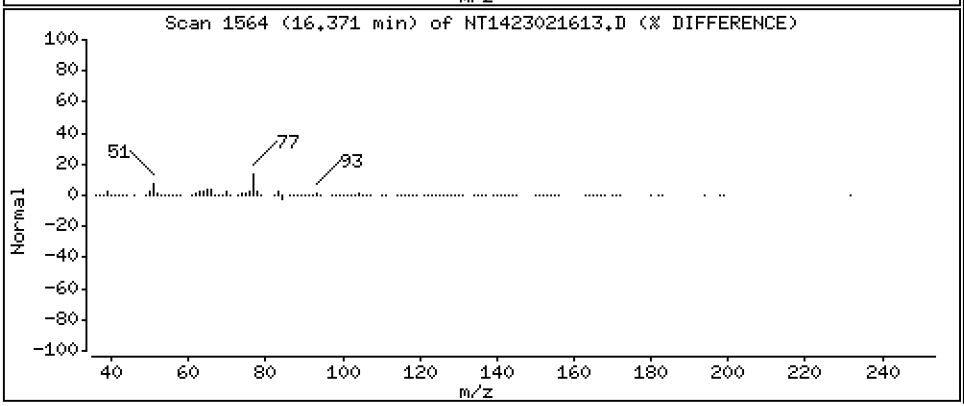












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

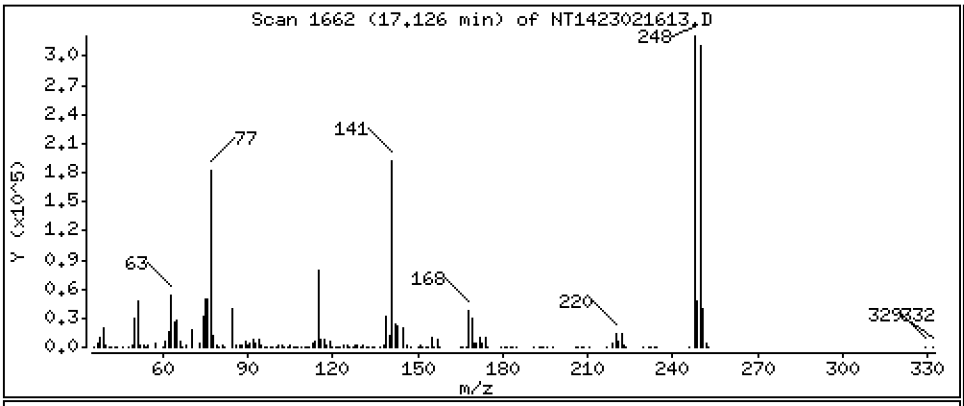
Operator: DSD

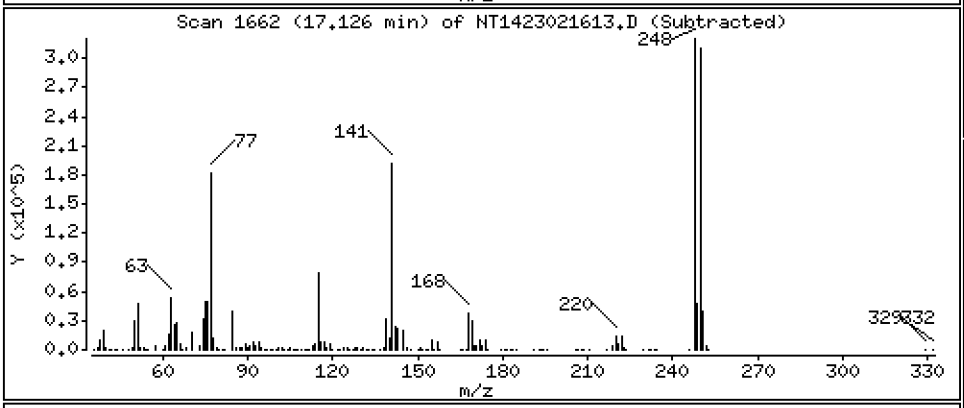
Column phase: ZB-5msi

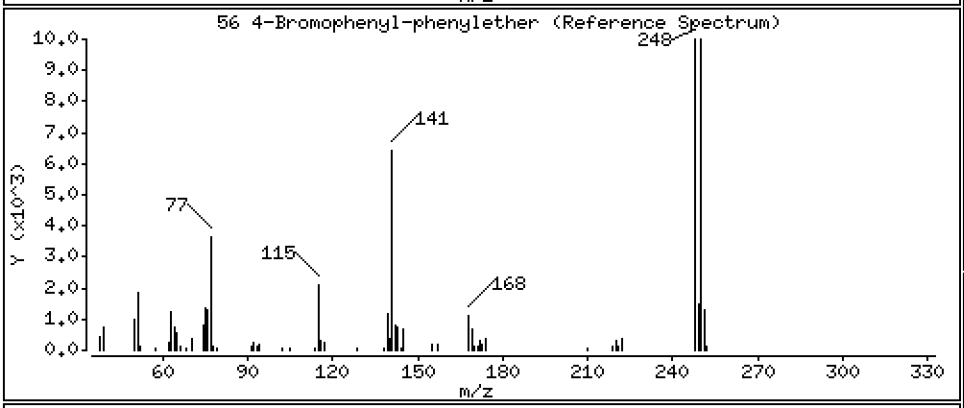
Column diameter: 0.25

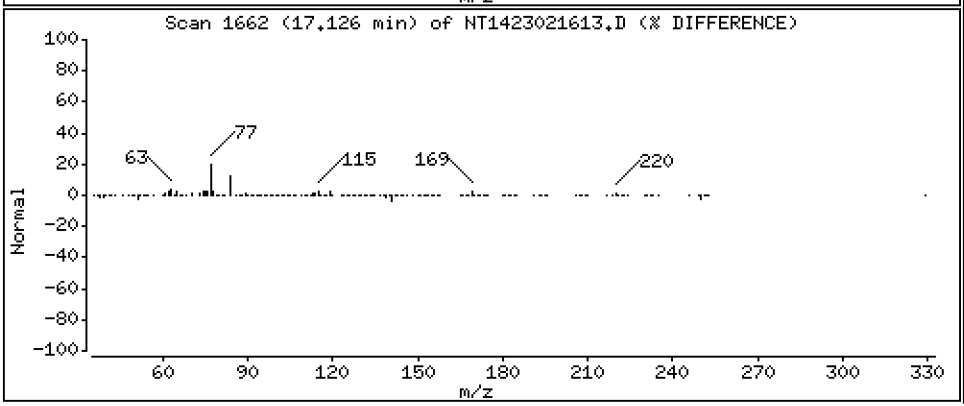
56 4-Bromophenyl-phenylether

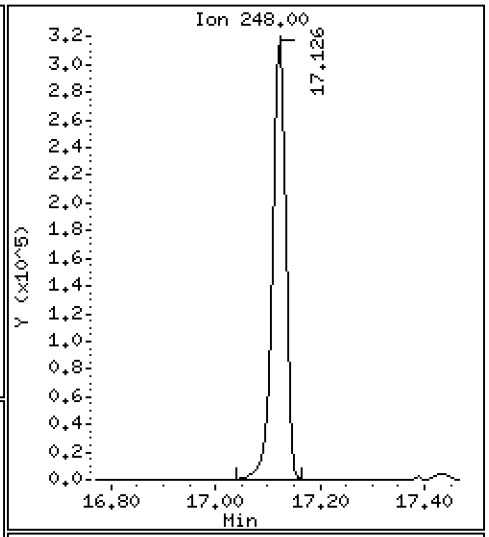
Concentration: 5.153 ug/mL

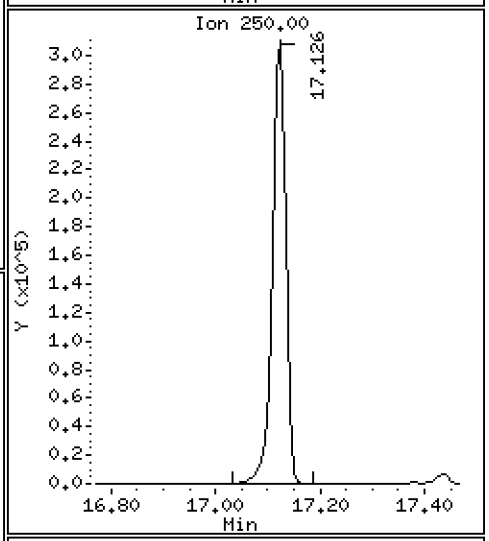


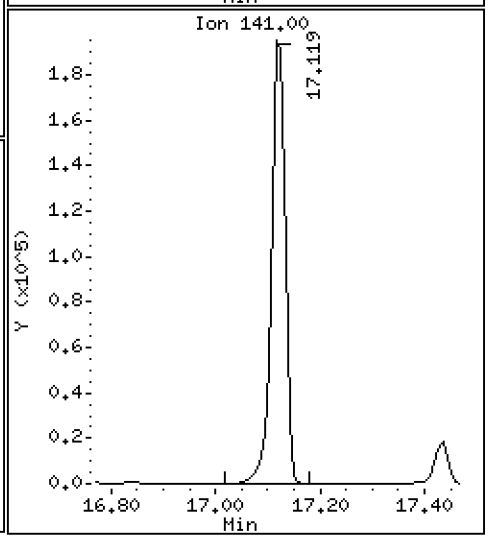












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

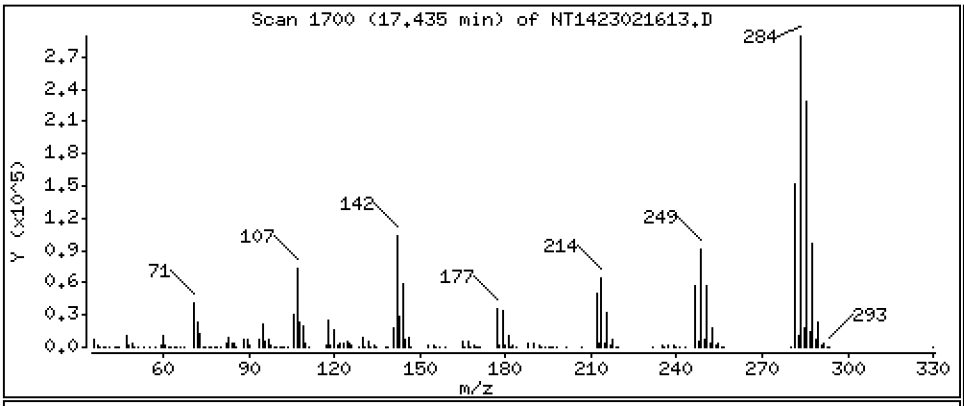
Operator: DSD

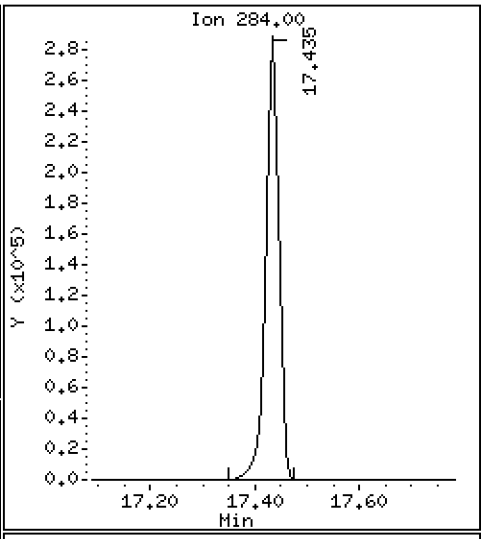
Column phase: ZB-5msi

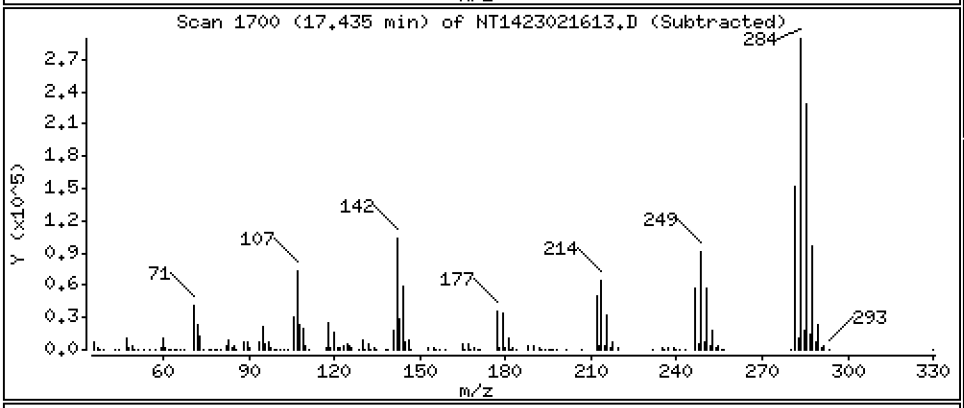
Column diameter: 0.25

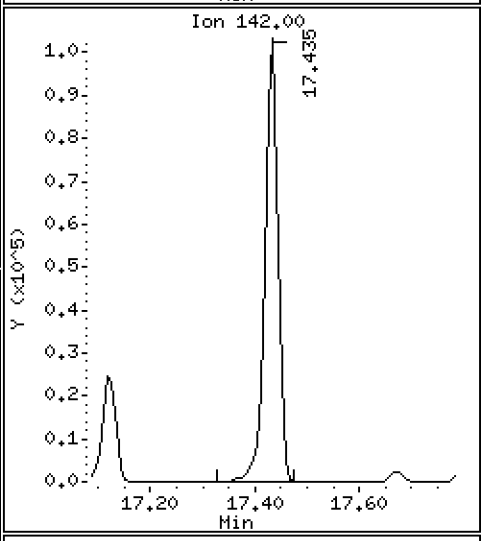
57 Hexachlorobenzene

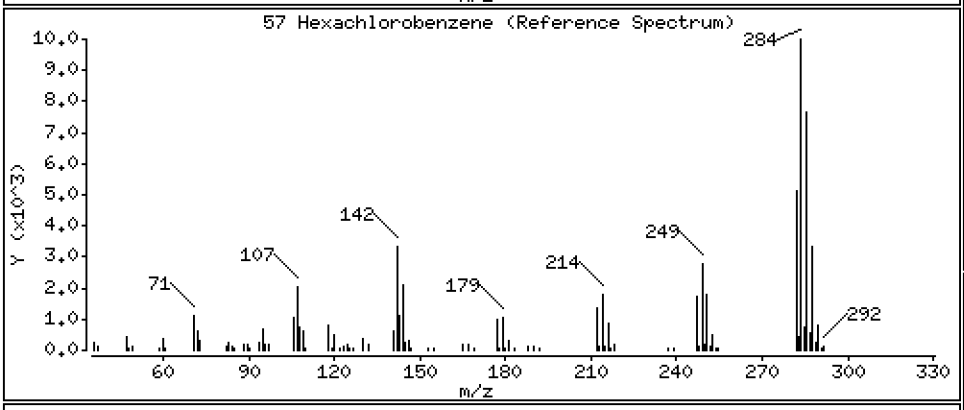
Concentration: 4.679 ug/mL

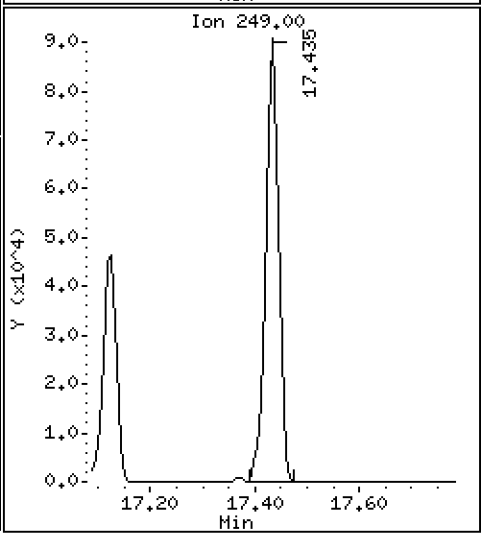


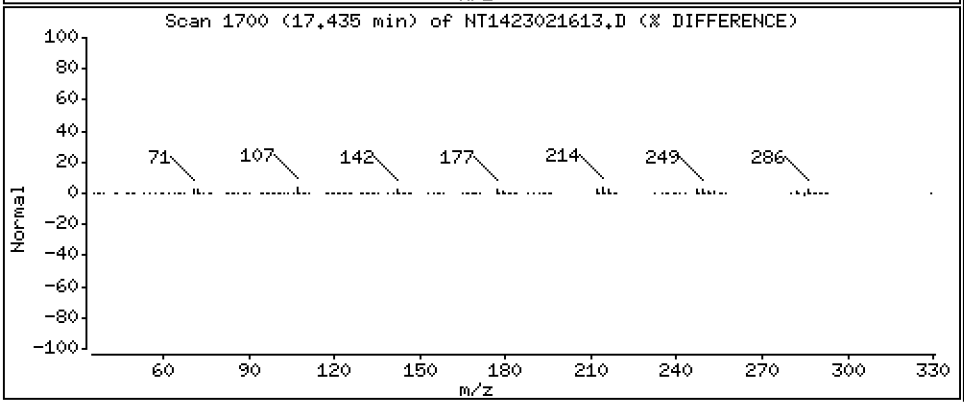












Date : 16-FEB-2023 21:18

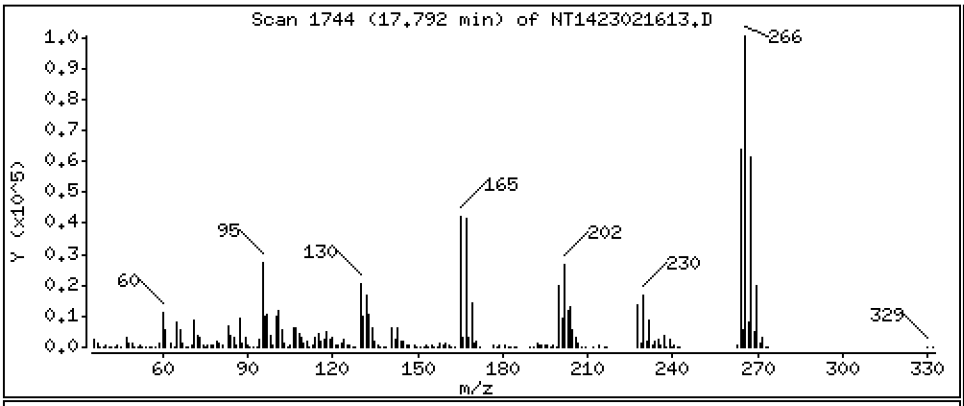
Client ID: Instrument: nt14.i

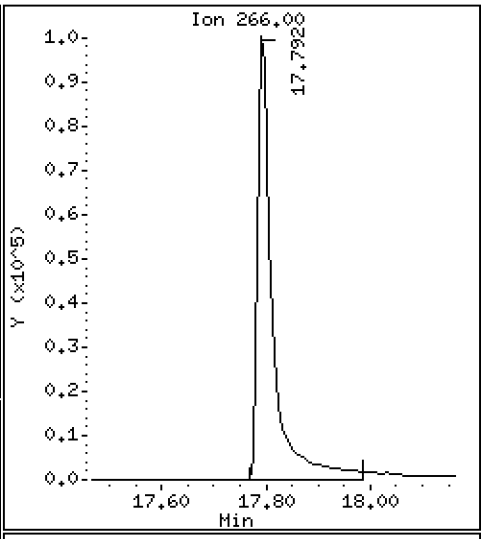
Sample Info: SLB0234-SCV1

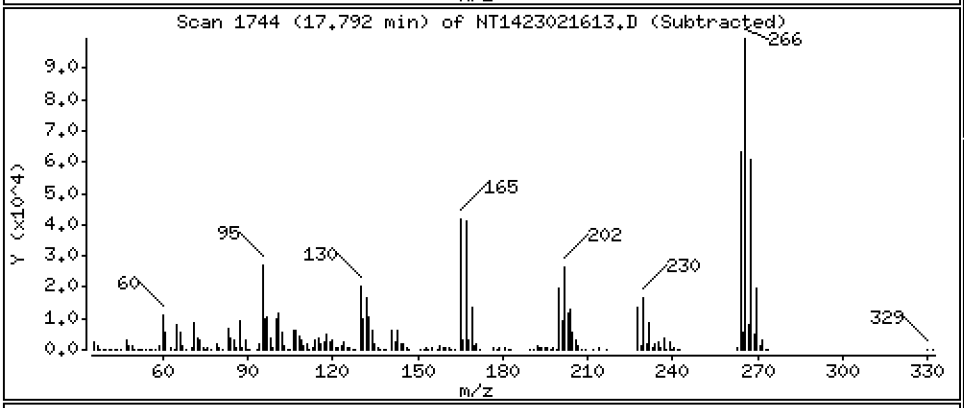
Operator: DSD

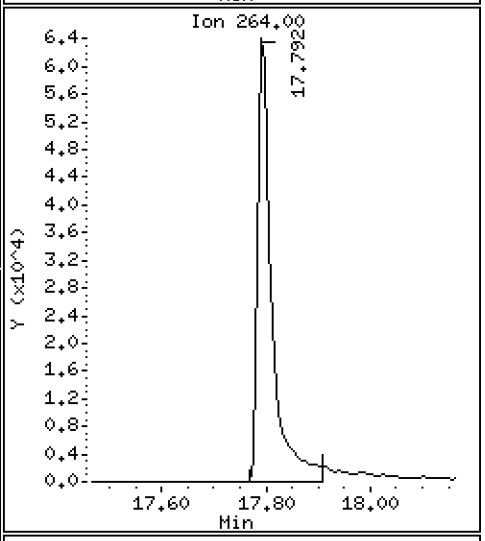
Column phase: ZB-5msi Column diameter: 0.25

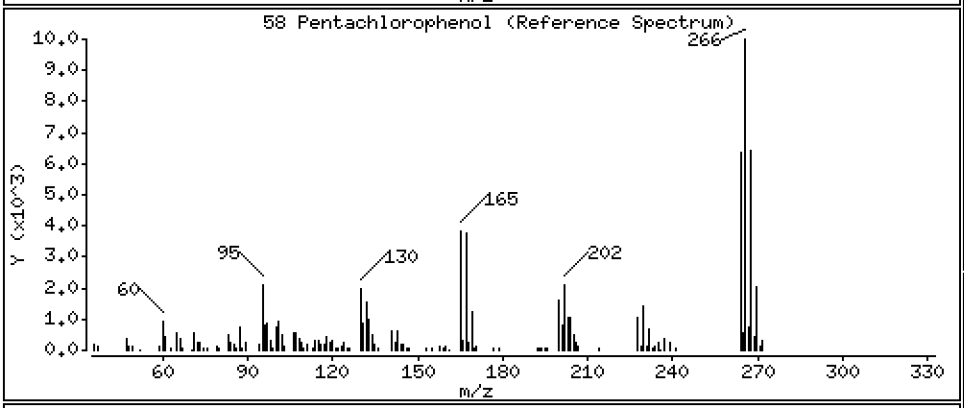
58 Pentachlorophenol Concentration: 3.932 ug/mL

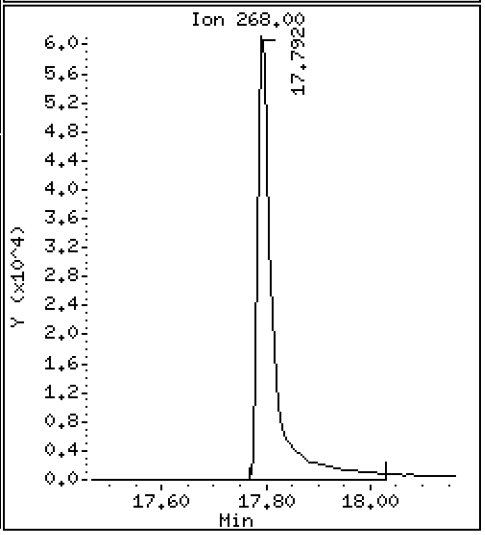


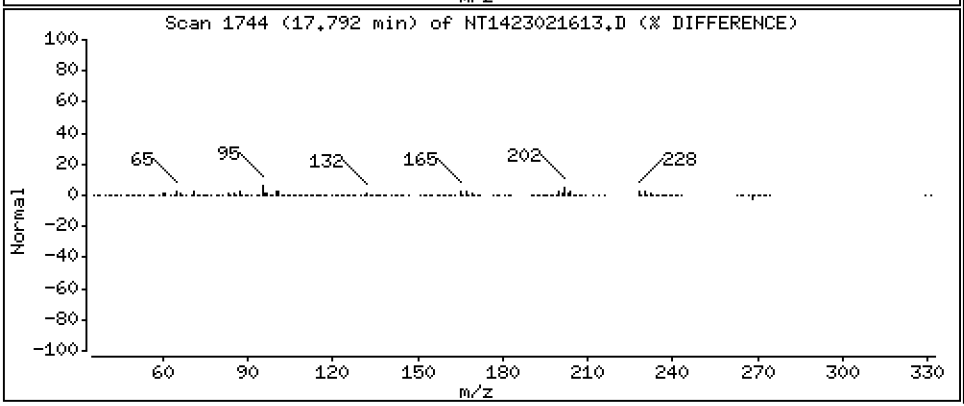












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

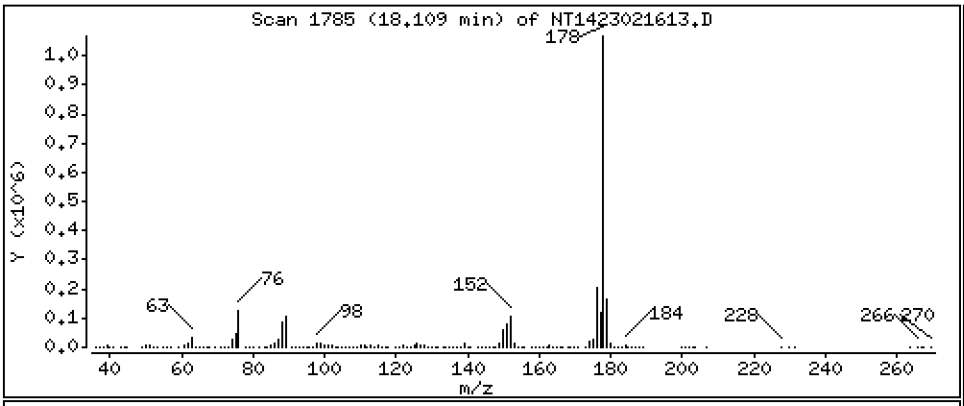
Operator: DSD

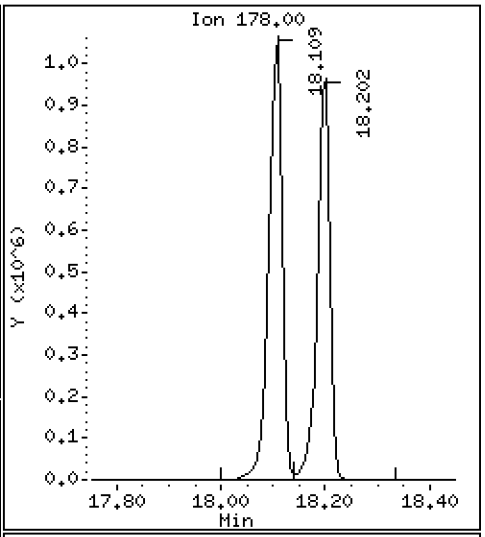
Column phase: ZB-5msi

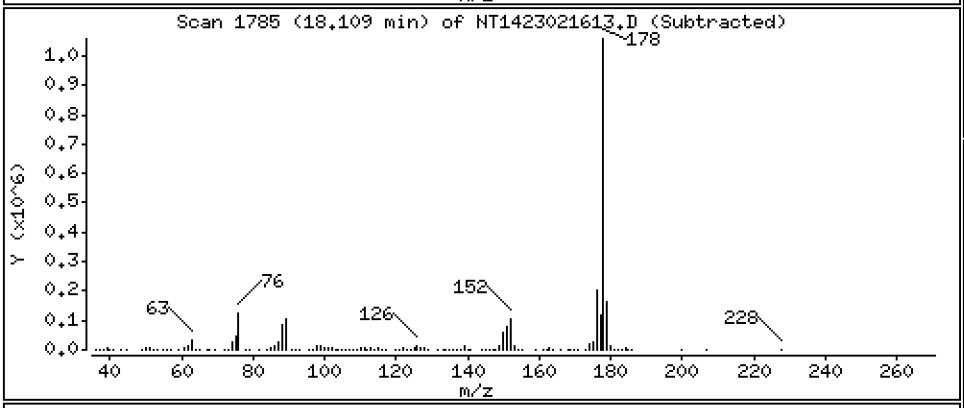
Column diameter: 0.25

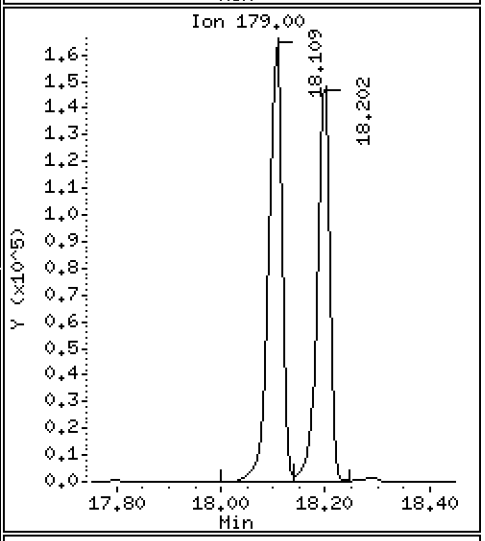
60 Phenanthrene

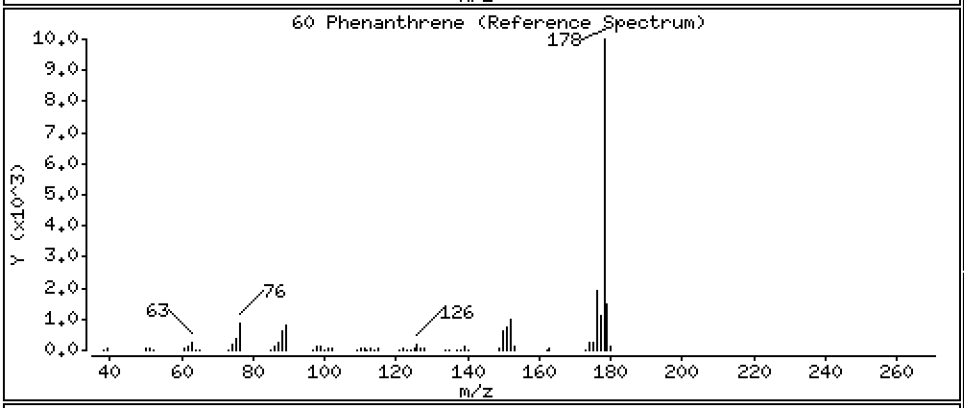
Concentration: 4.690 ug/mL

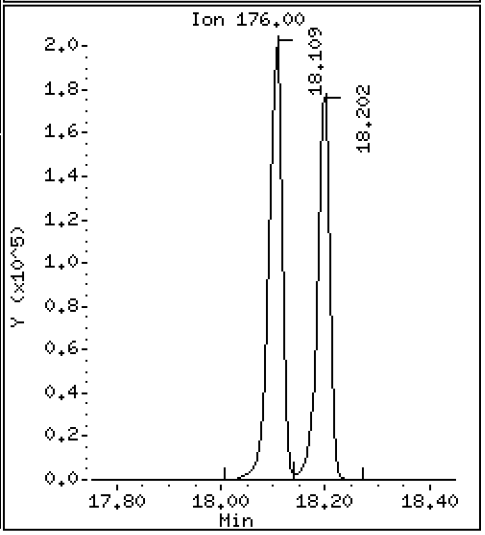


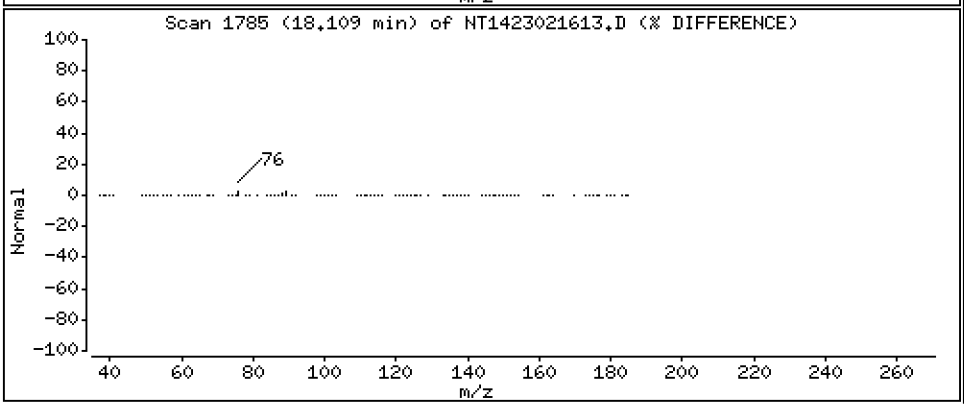












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

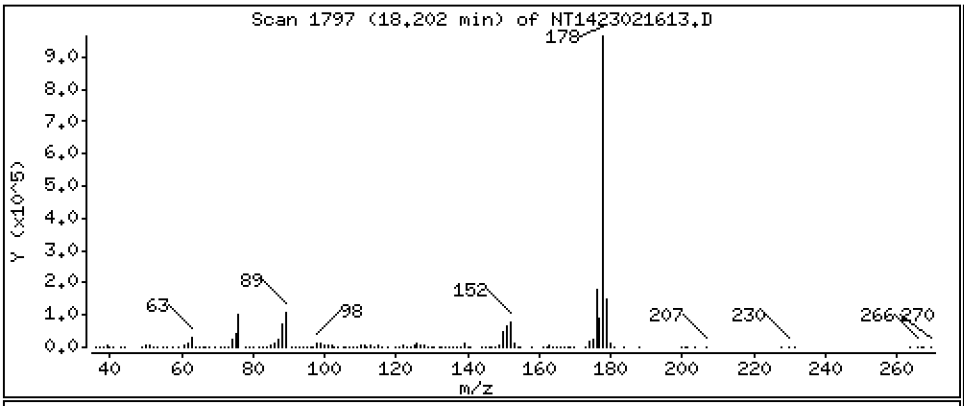
Operator: DSD

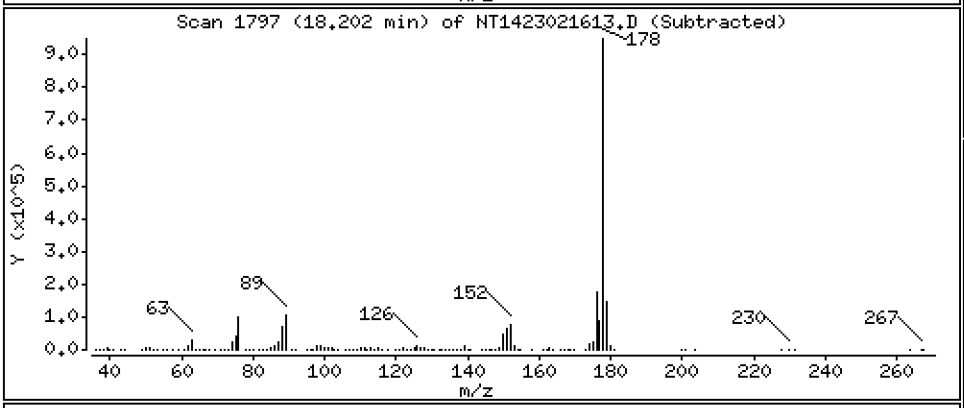
Column phase: ZB-5msi

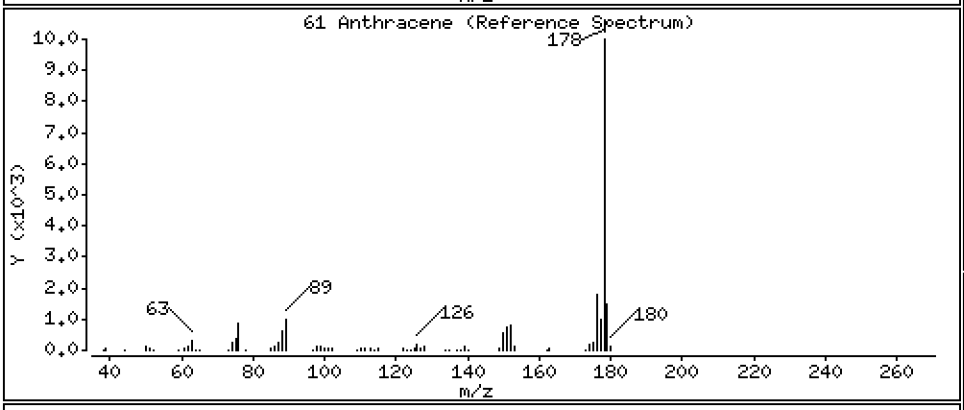
Column diameter: 0.25

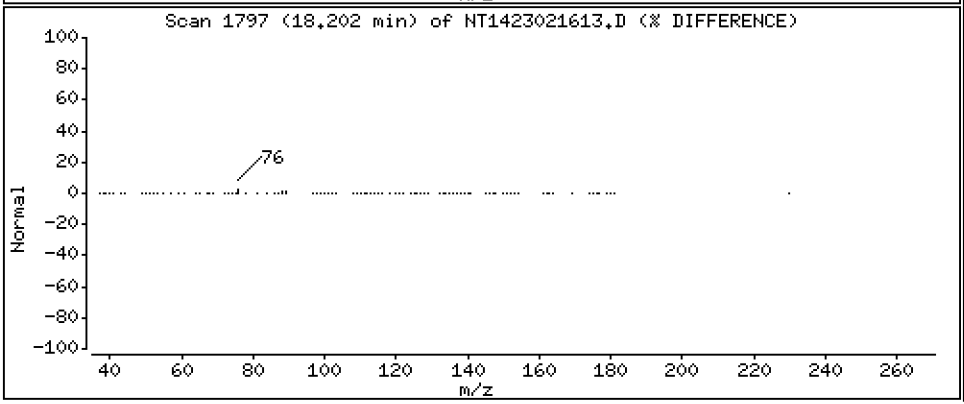
61 Anthracene

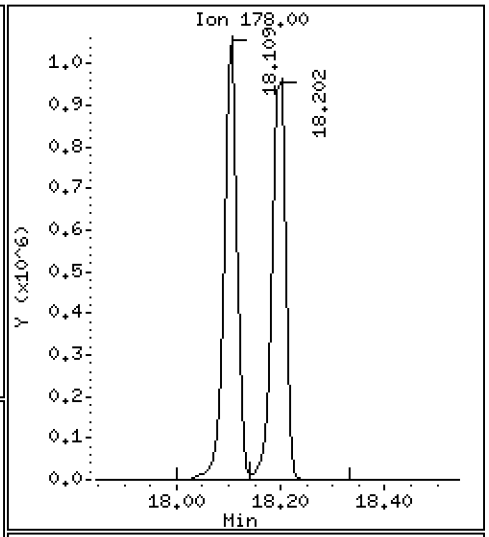
Concentration: 4.304 ug/mL

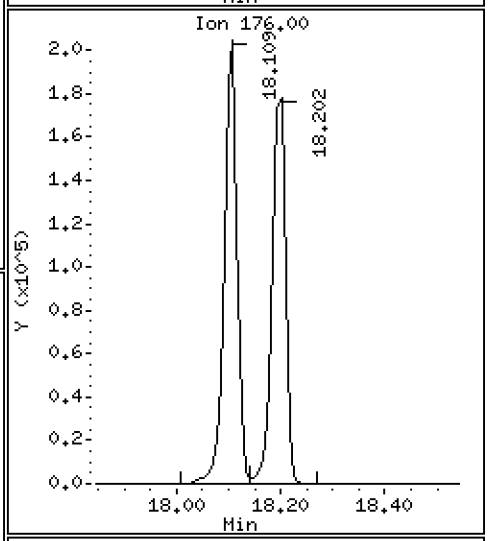


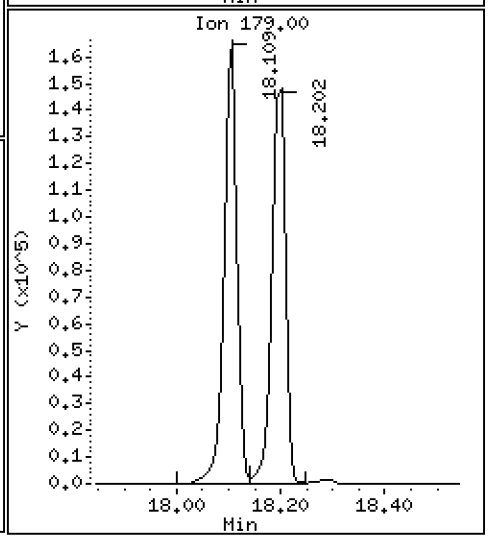












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

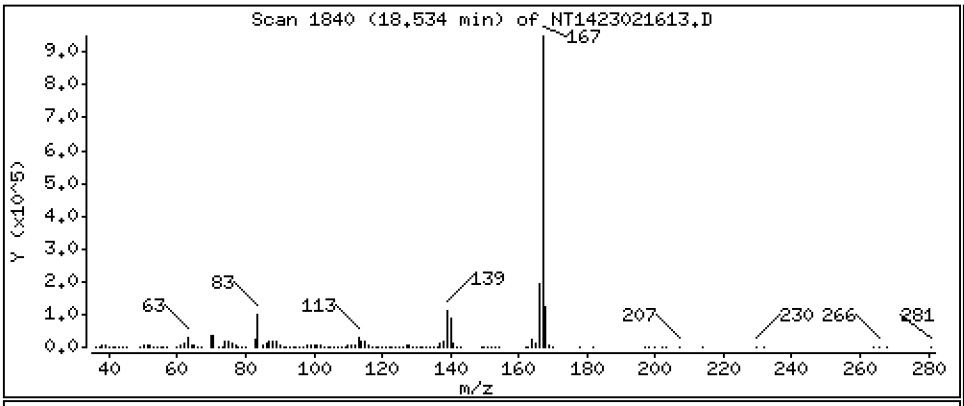
Operator: DSD

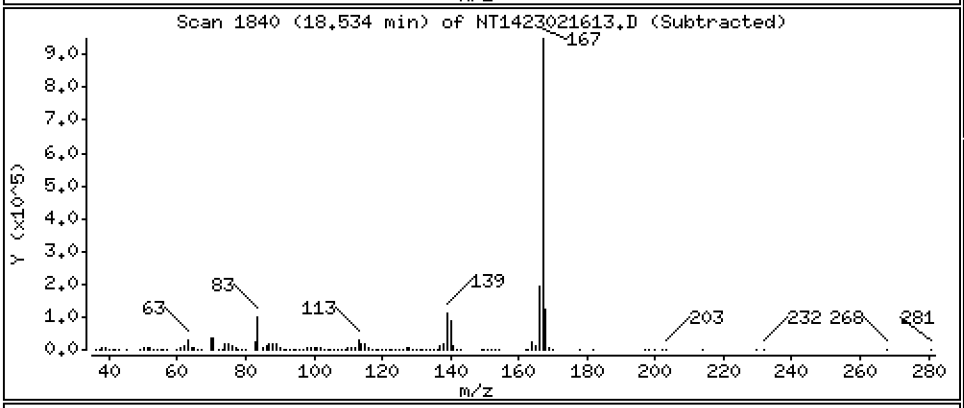
Column phase: ZB-5msi

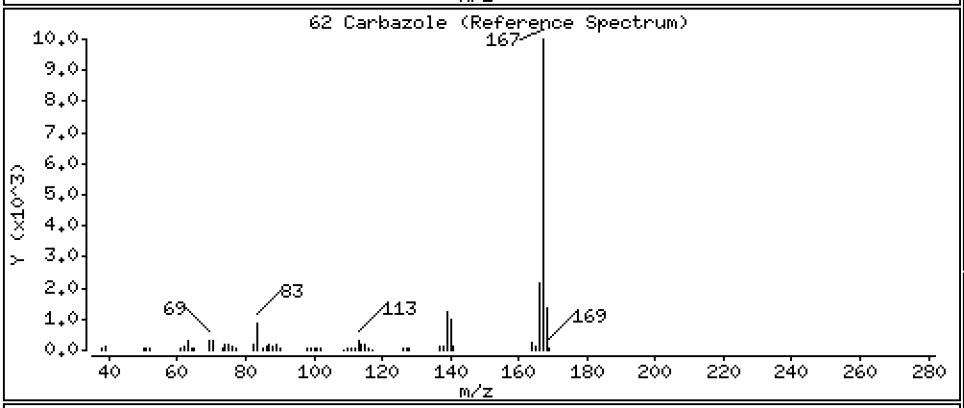
Column diameter: 0.25

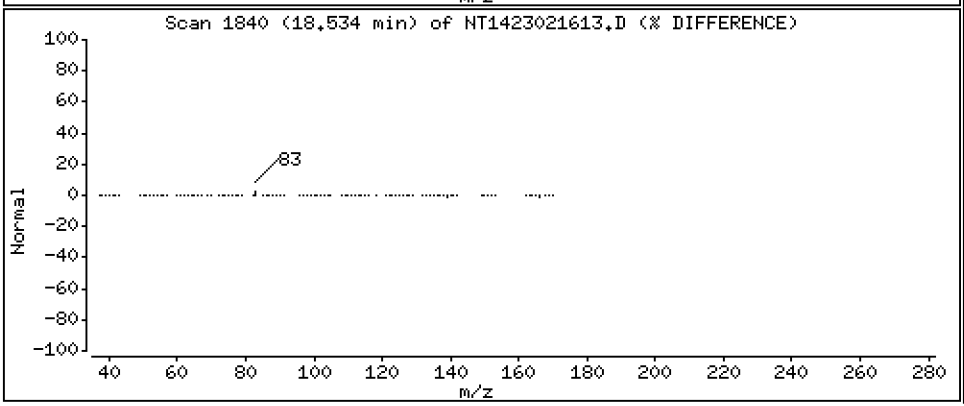
62 Carbazole

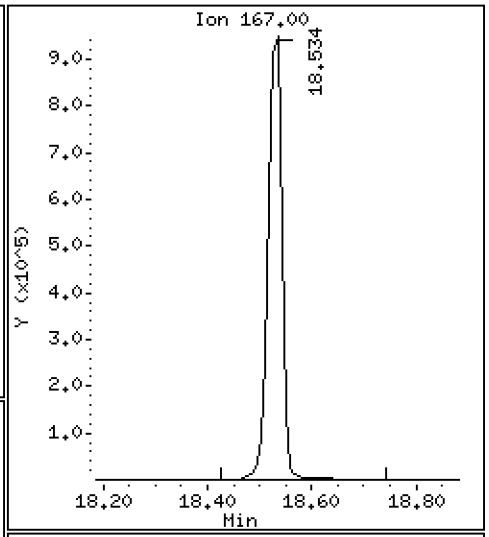
Concentration: 4.792 ug/mL

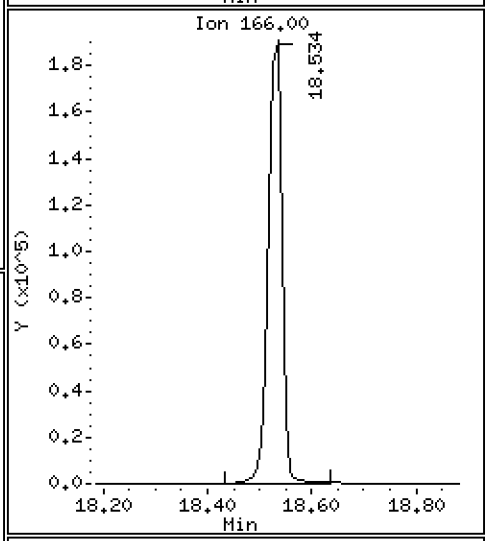


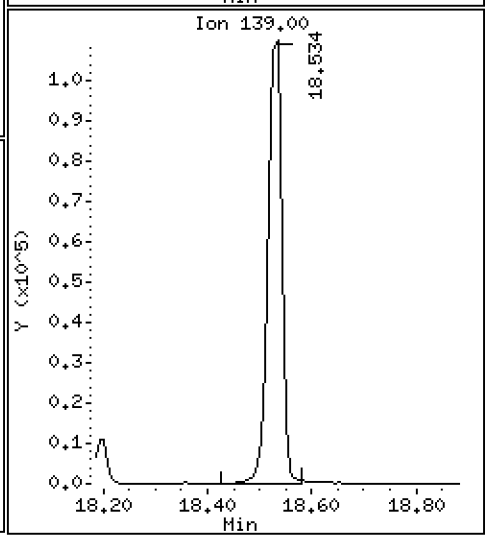












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

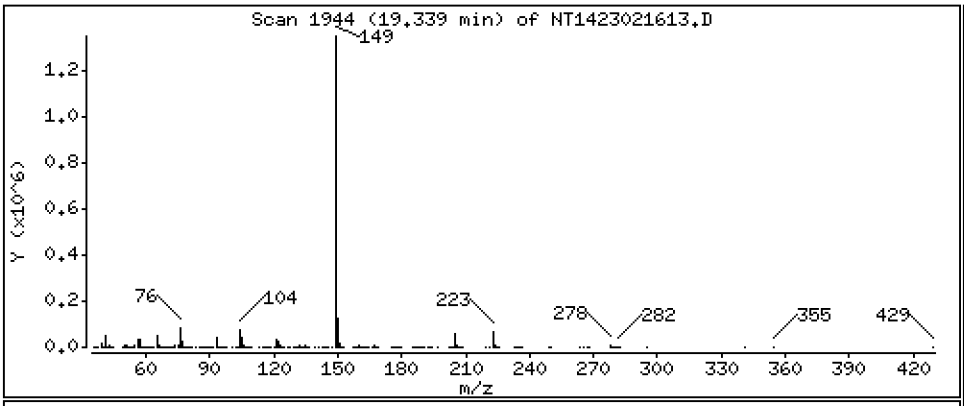
Operator: DSD

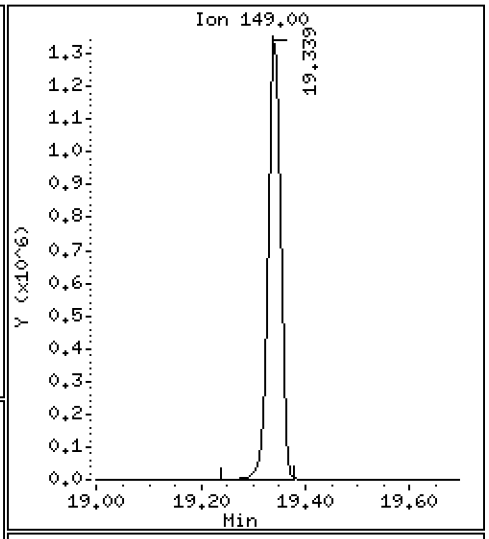
Column phase: ZB-5msi

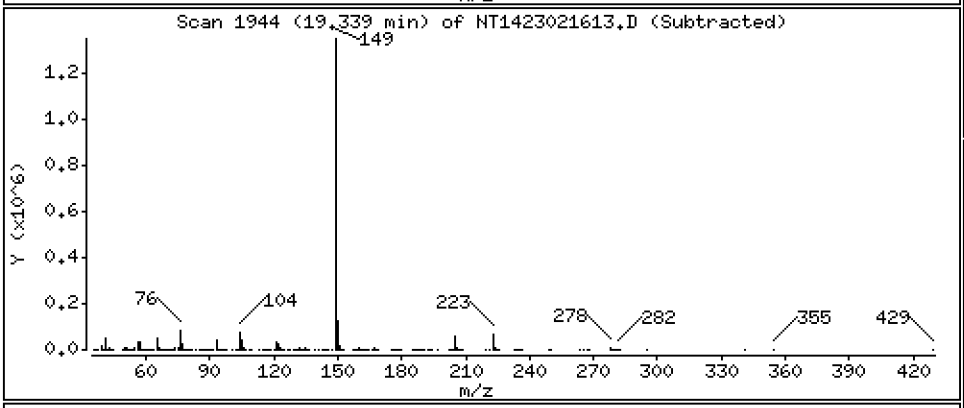
Column diameter: 0.25

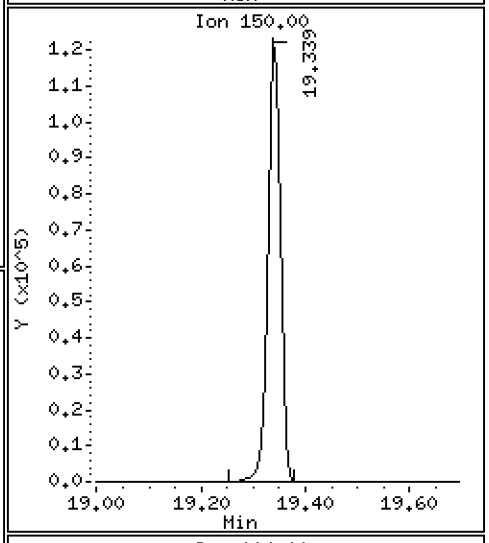
63 Di-n-butylphthalate

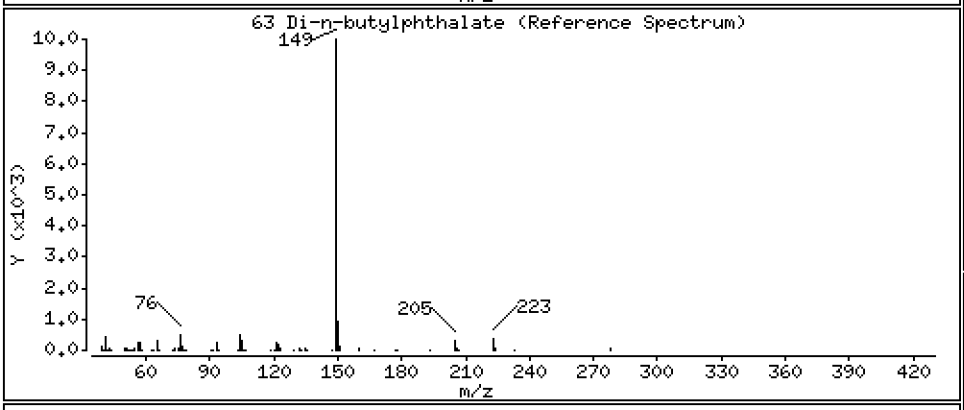
Concentration: 5.515 ug/mL

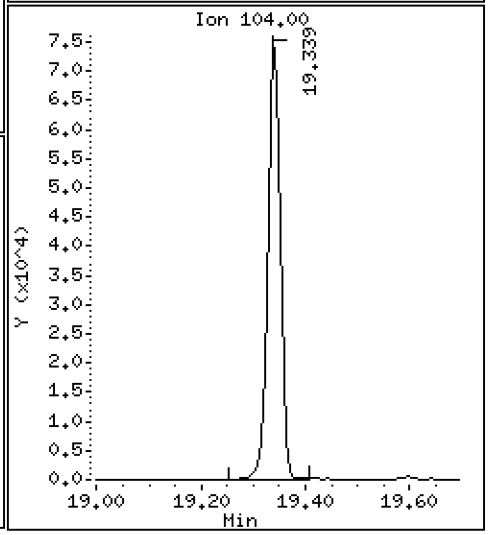


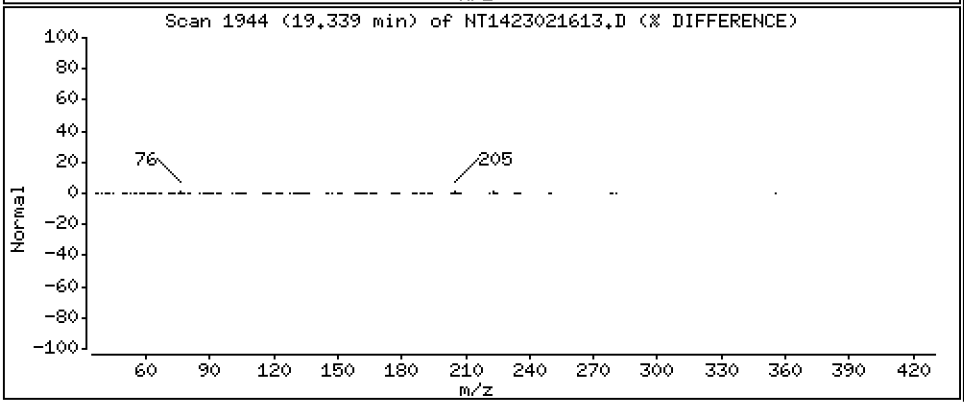












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

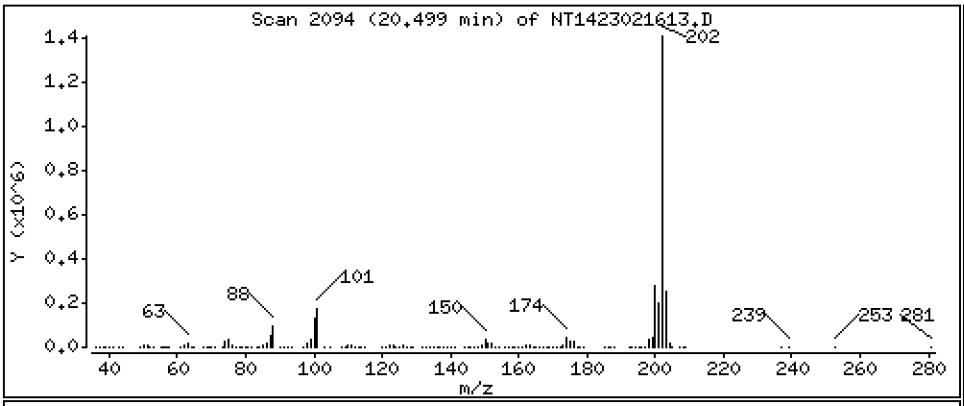
Operator: DSD

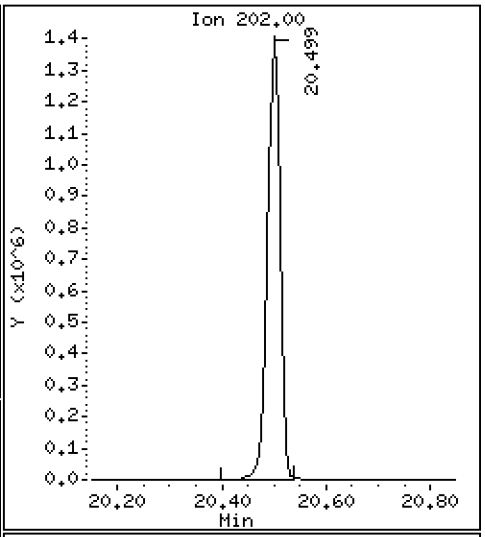
Column phase: ZB-5msi

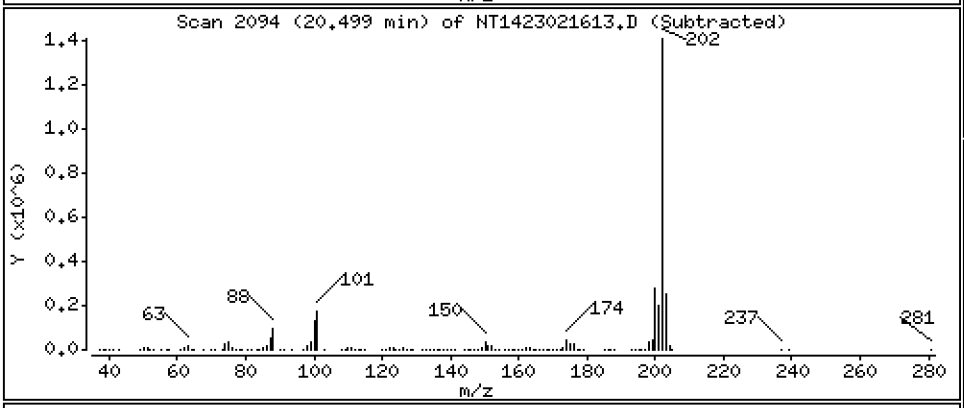
Column diameter: 0.25

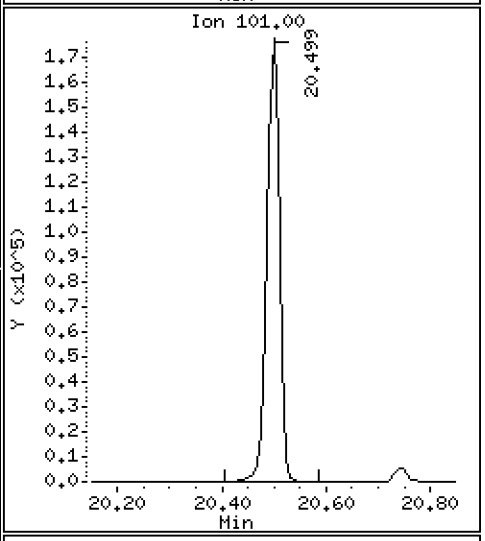
64 Fluoranthene

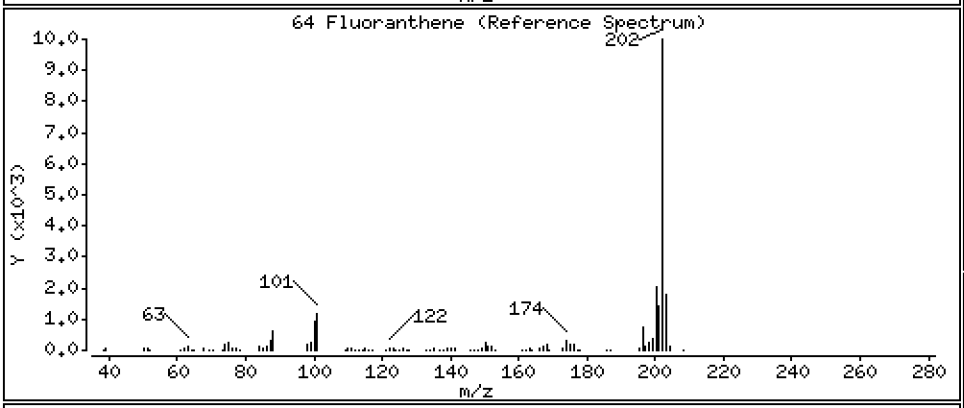
Concentration: 4.682 ug/mL

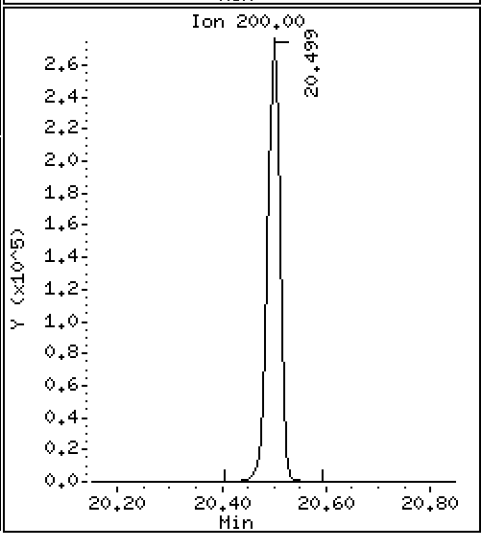


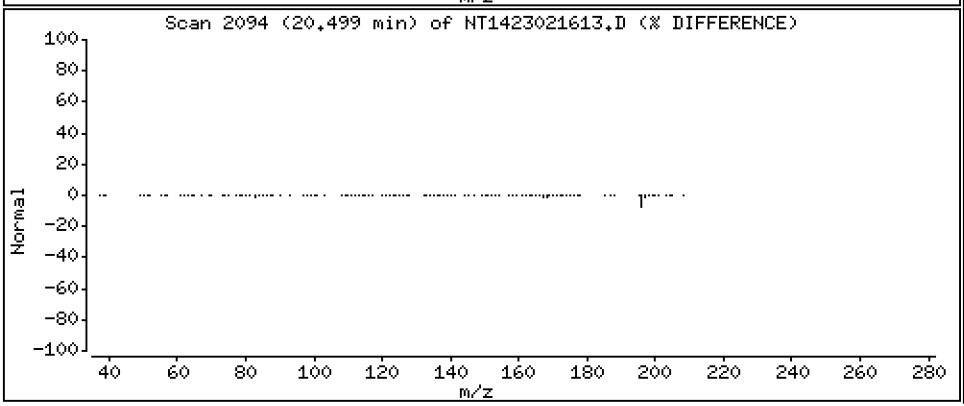












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

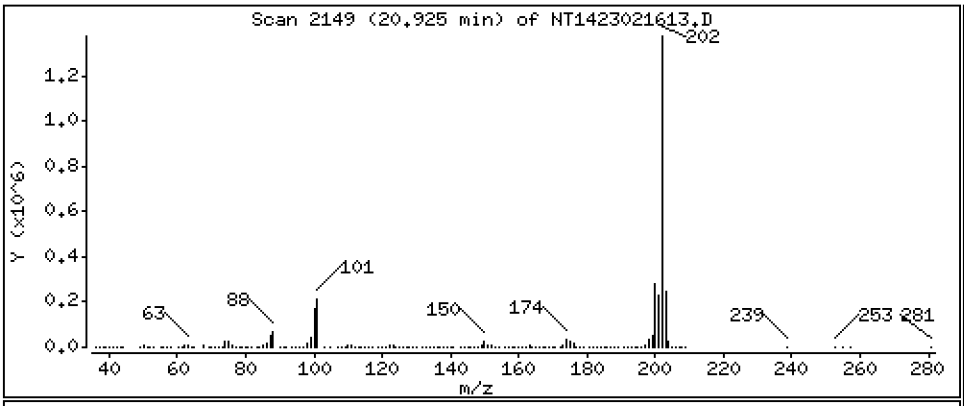
Operator: DSD

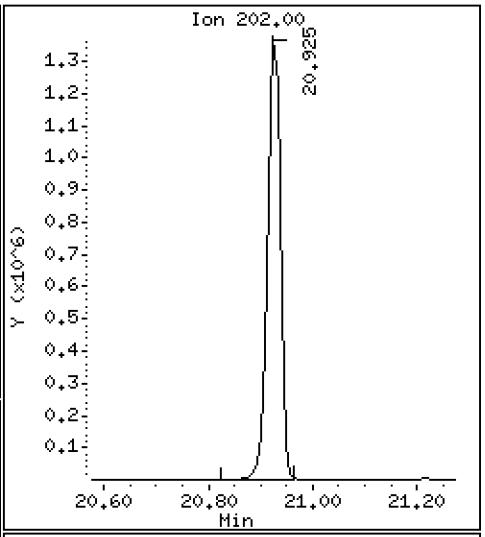
Column phase: ZB-5msi

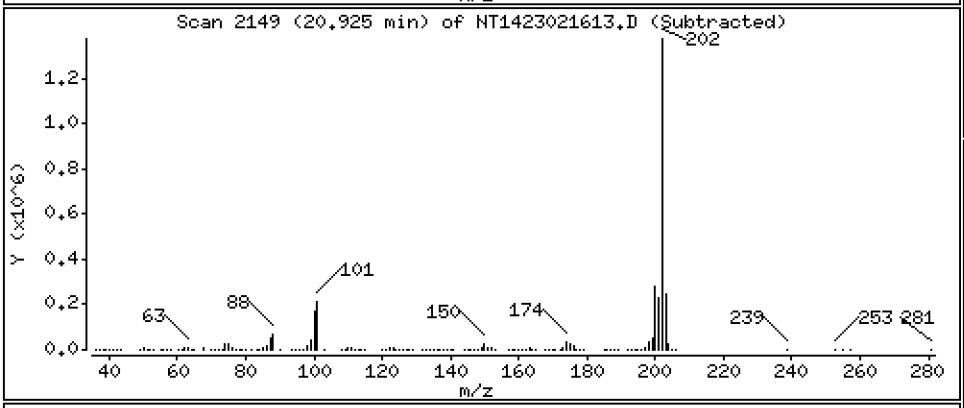
Column diameter: 0.25

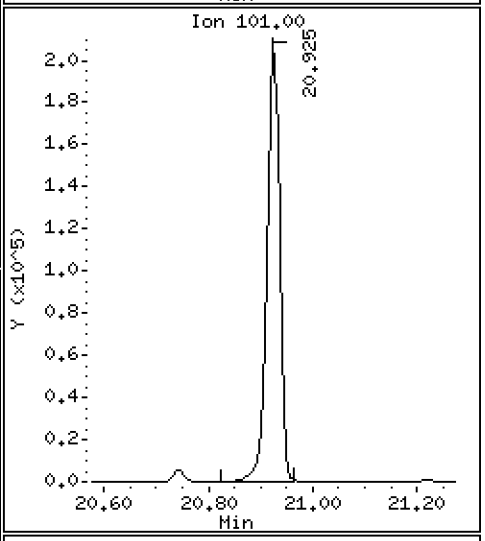
65 Pyrene

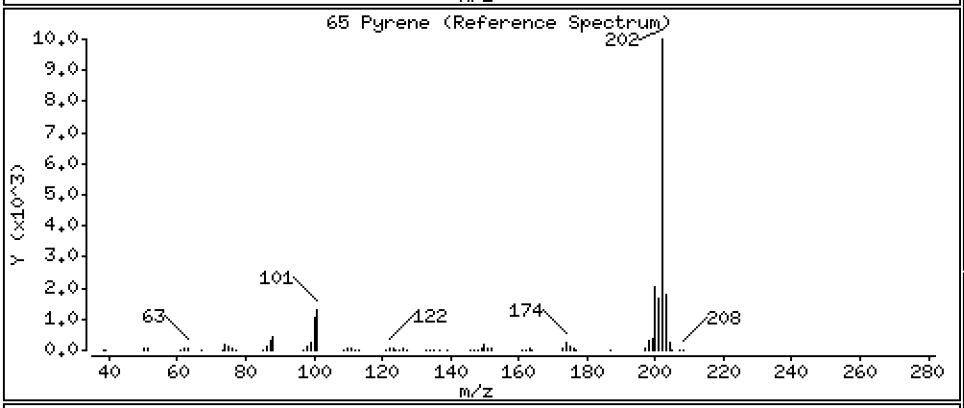
Concentration: 4.400 ug/mL

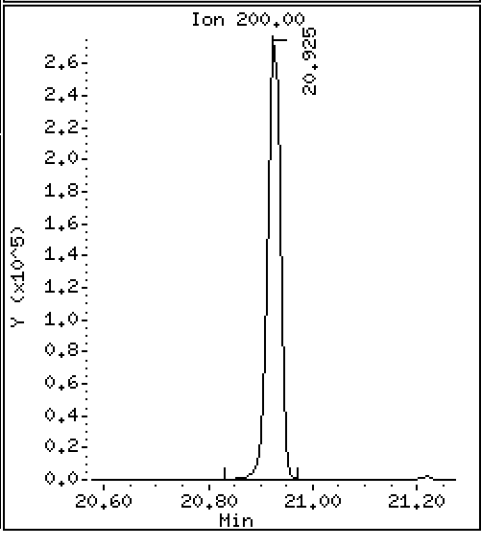


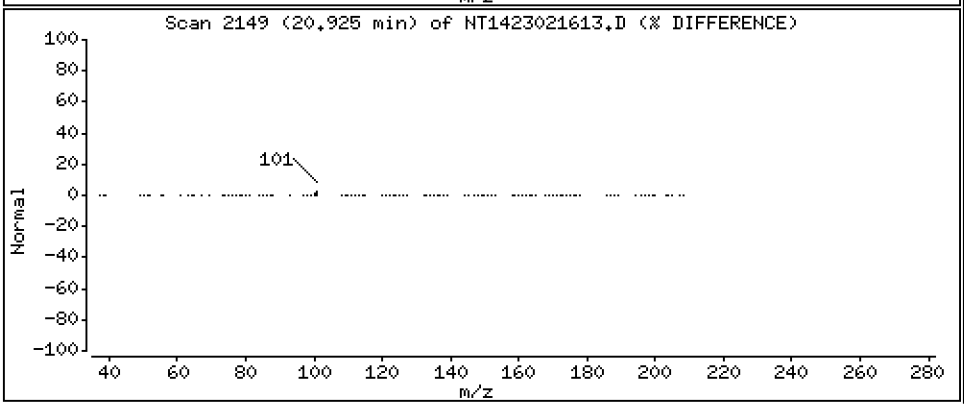












Date : 16-FEB-2023 21:18

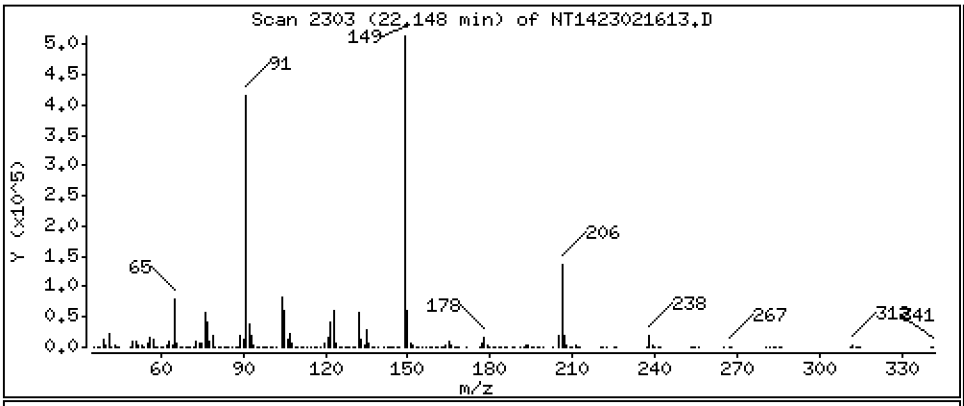
Client ID: Instrument: nt14.i

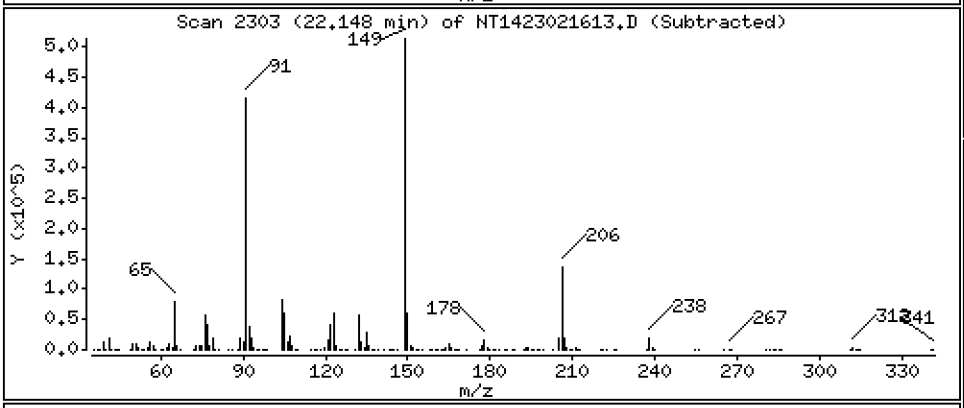
Sample Info: SLB0234-SCV1

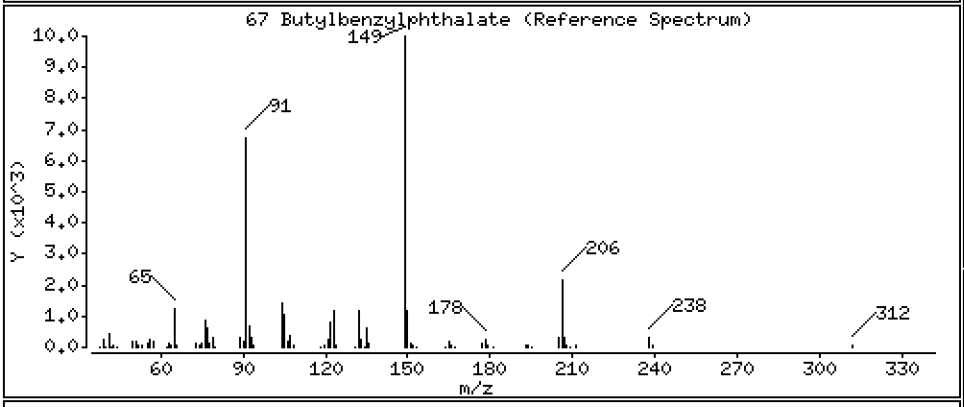
Operator: DSD

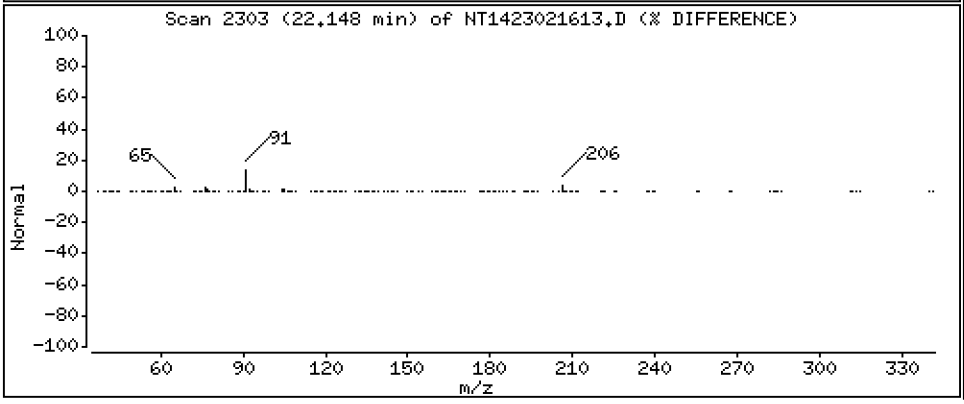
Column phase: ZB-5msi Column diameter: 0.25

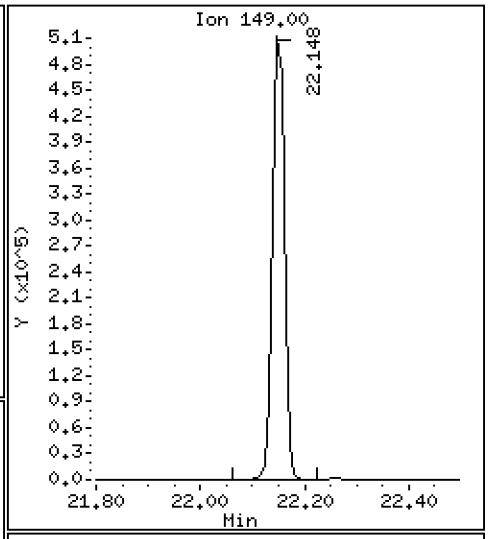
67 Butylbenzylphthalate Concentration: 4.568 ug/mL

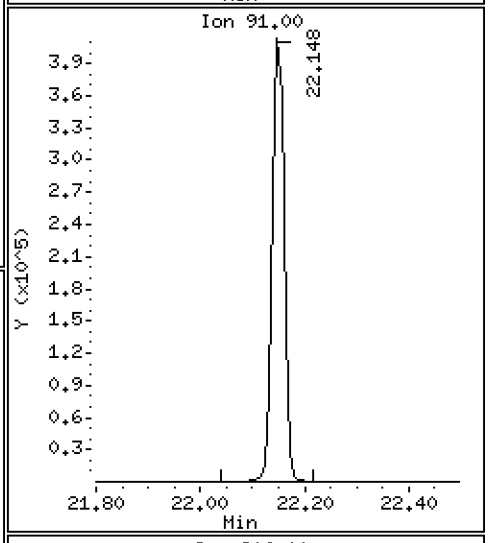


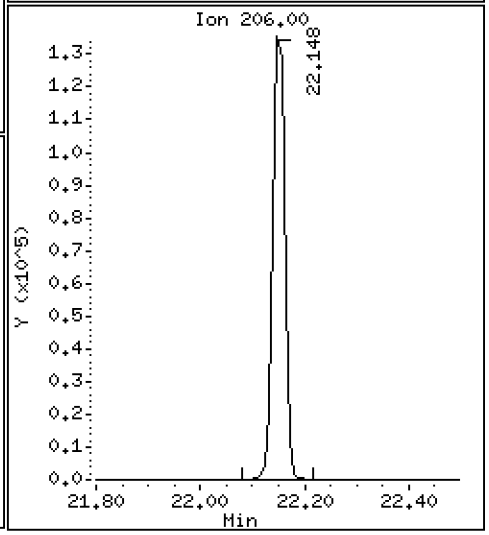












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

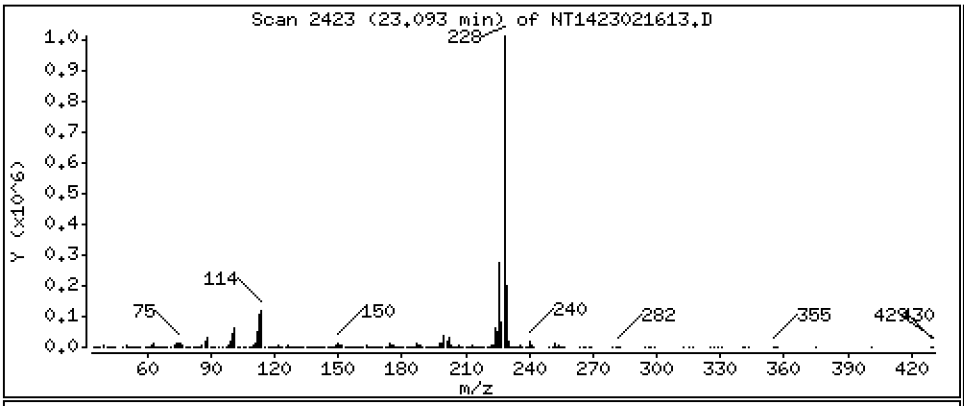
Operator: DSD

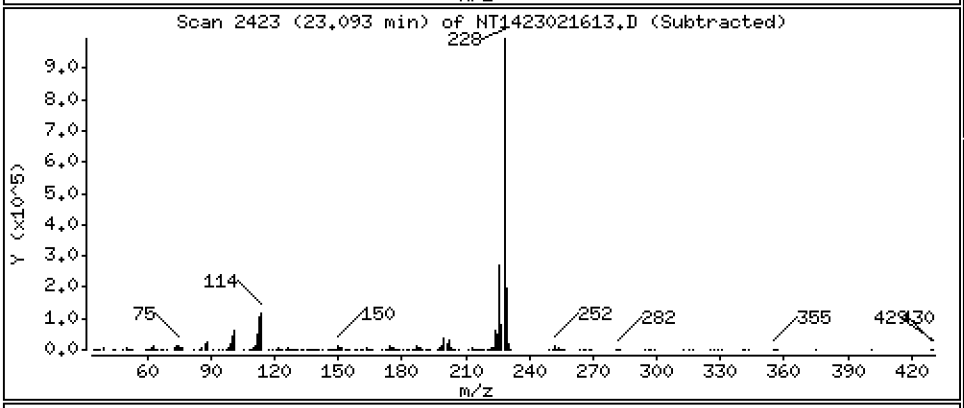
Column phase: ZB-5msi

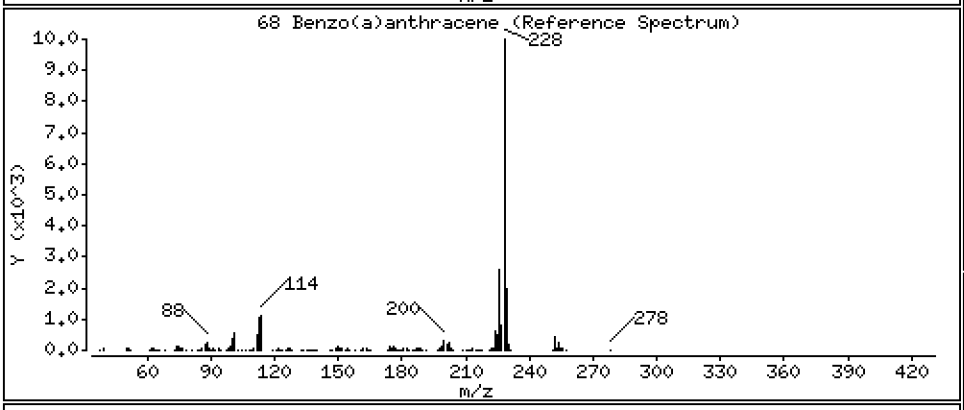
Column diameter: 0.25

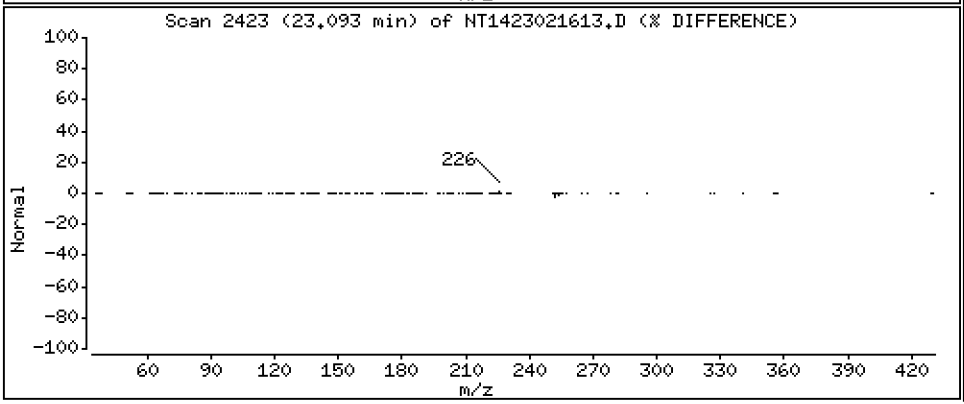
68 Benzo(a)anthracene

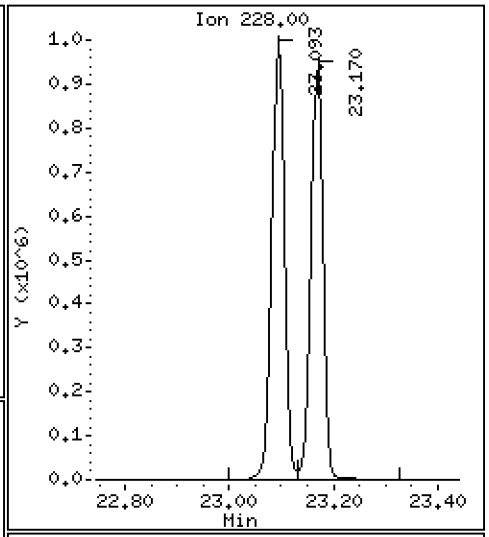
Concentration: 4.530 ug/mL

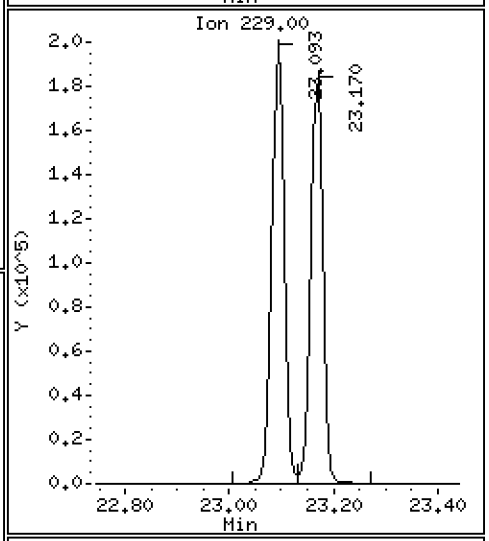


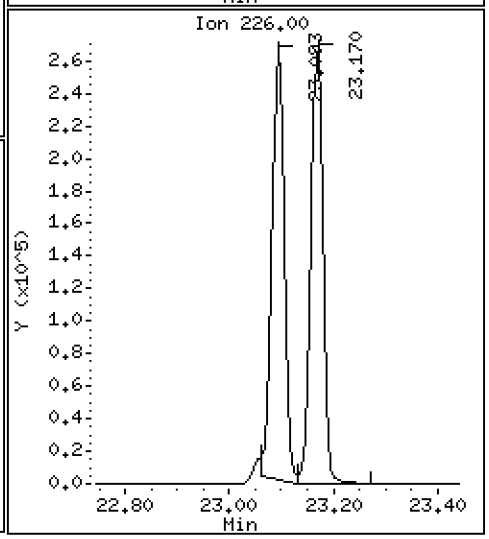












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

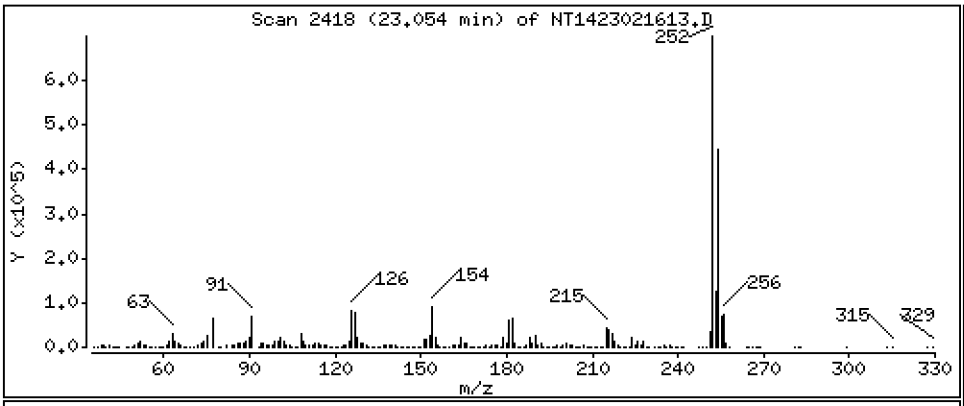
Operator: DSD

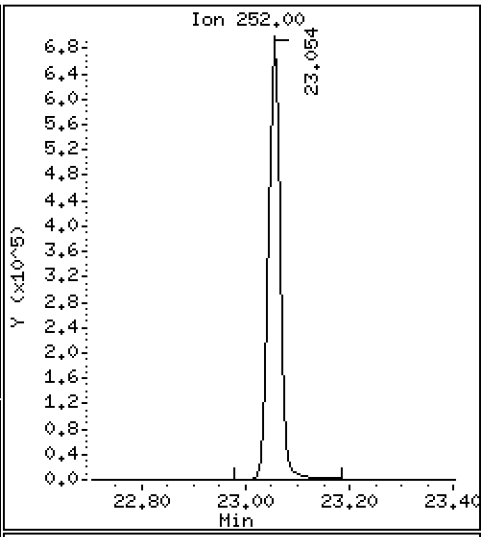
Column phase: ZB-5msi

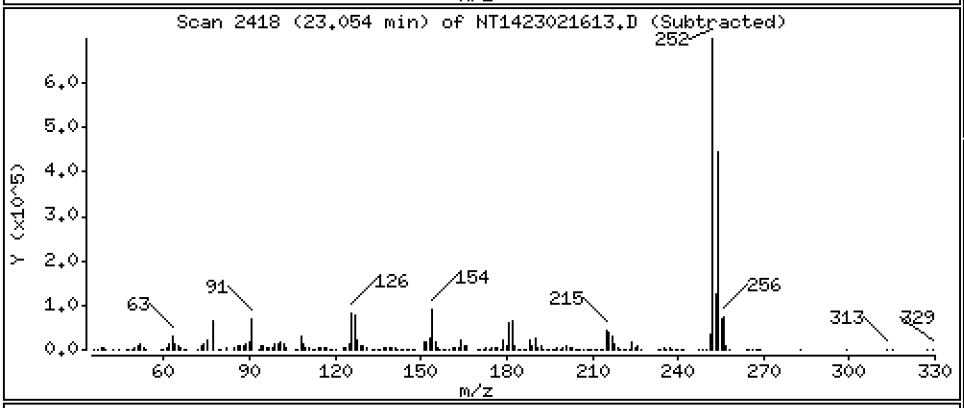
Column diameter: 0.25

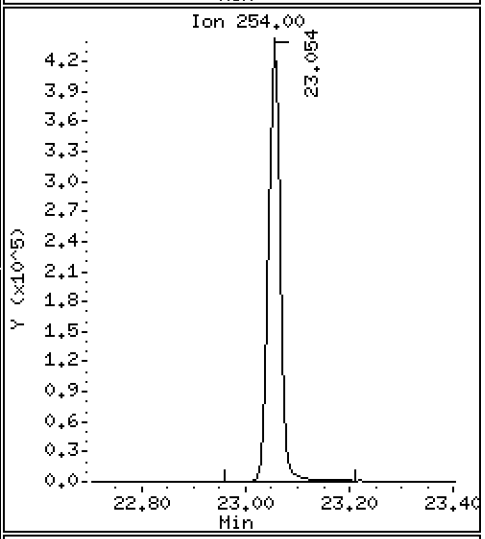
70 3,3'-Dichlorobenzidine

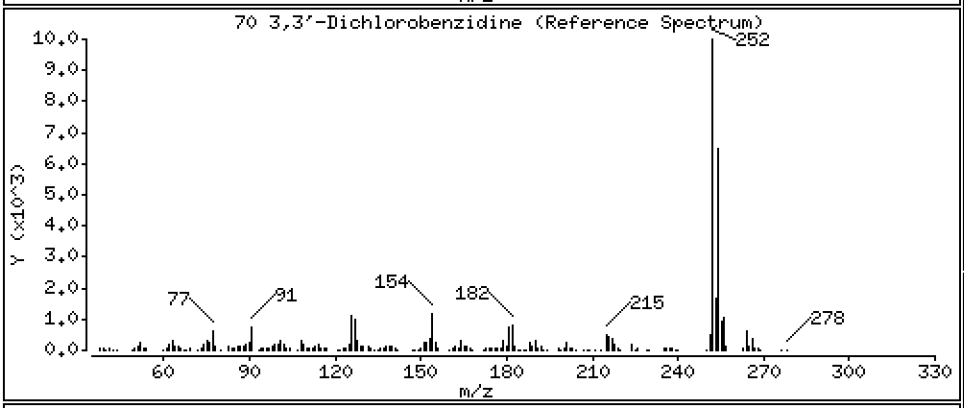
Concentration: 9.328 ug/mL

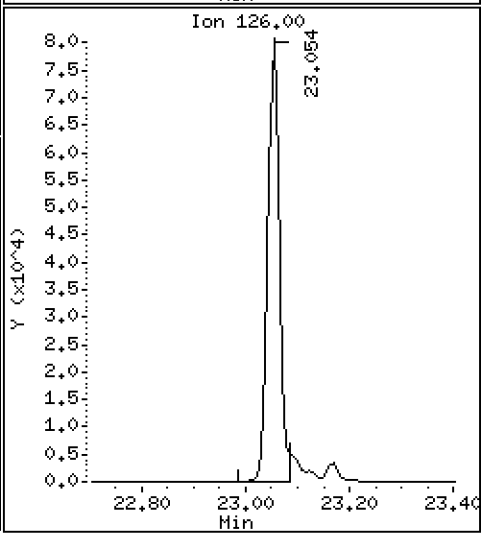


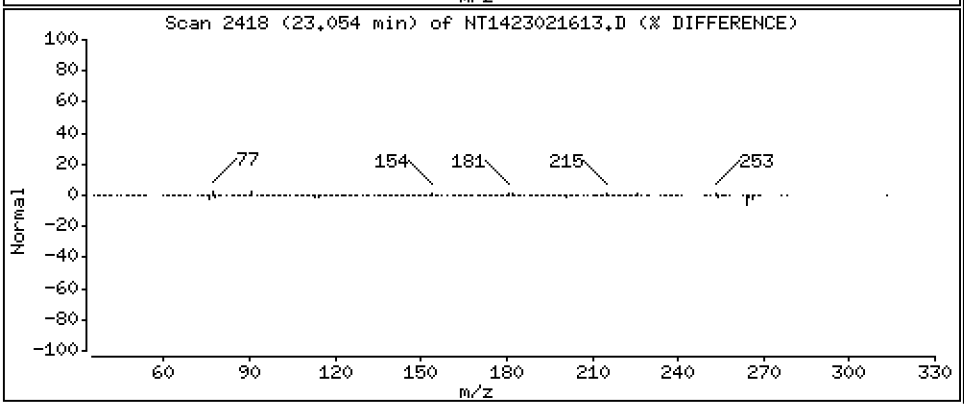












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

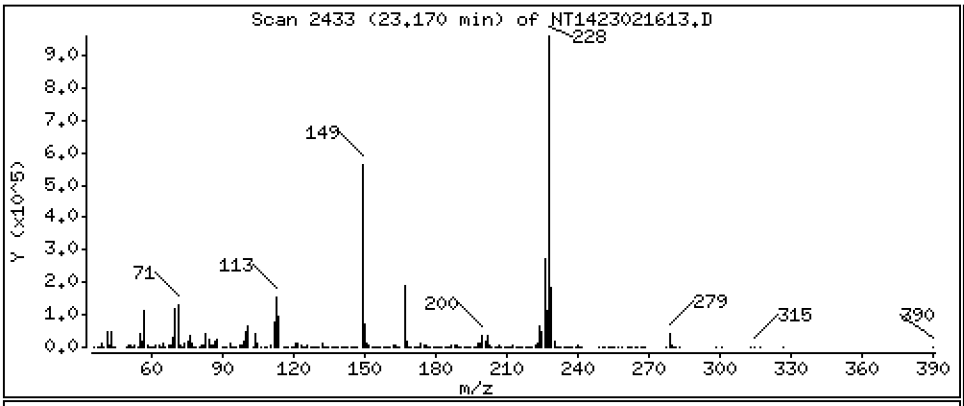
Operator: DSD

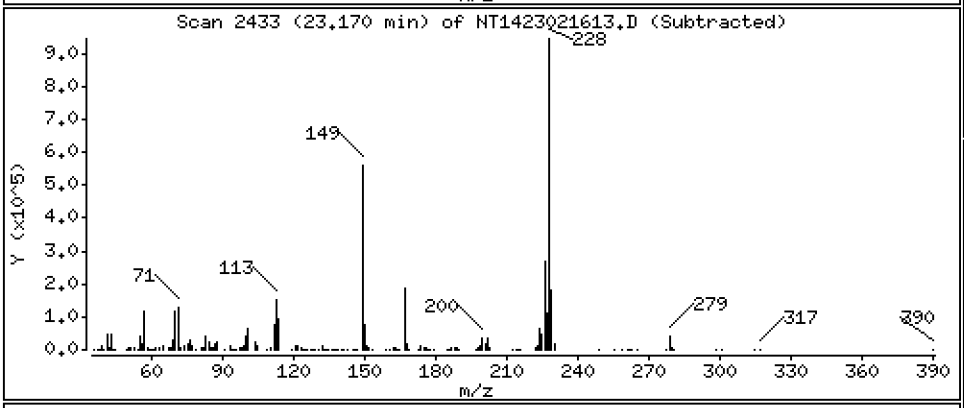
Column phase: ZB-5msi

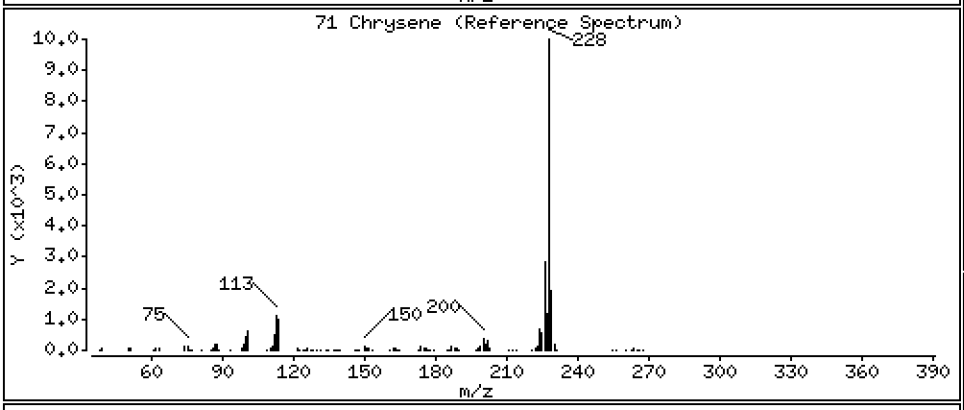
Column diameter: 0.25

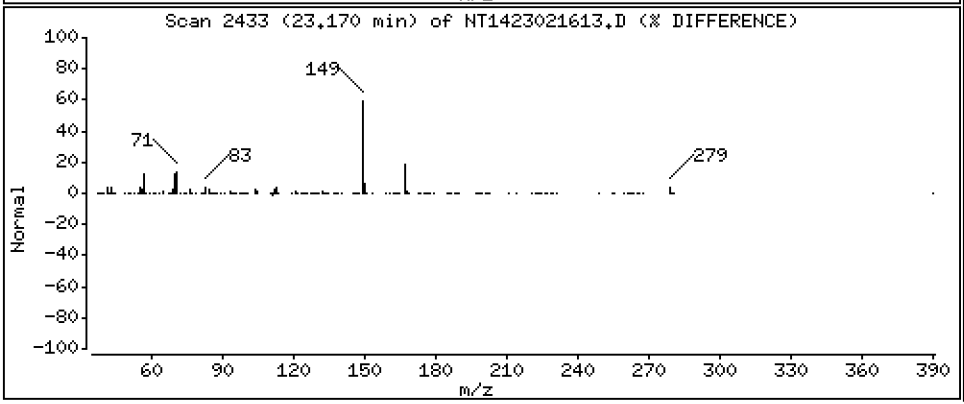
71 Chrysene

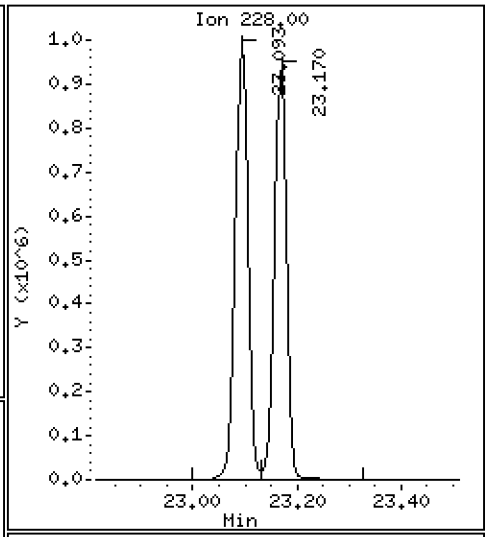
Concentration: 4.474 ug/mL

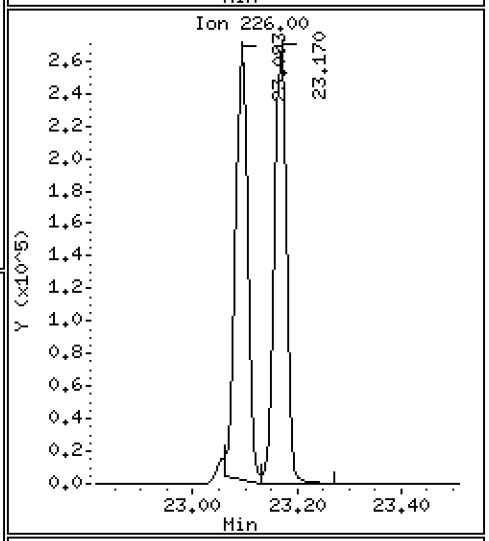


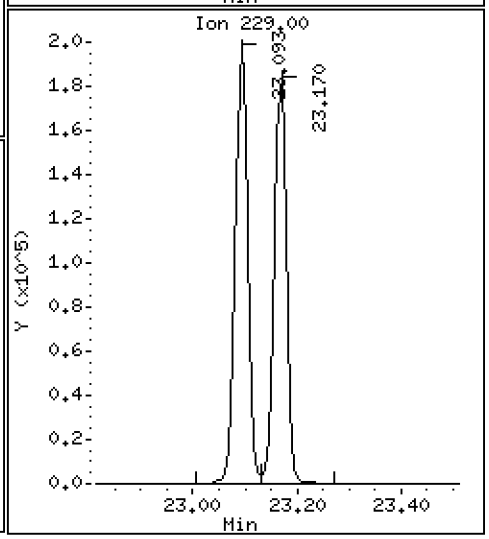












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

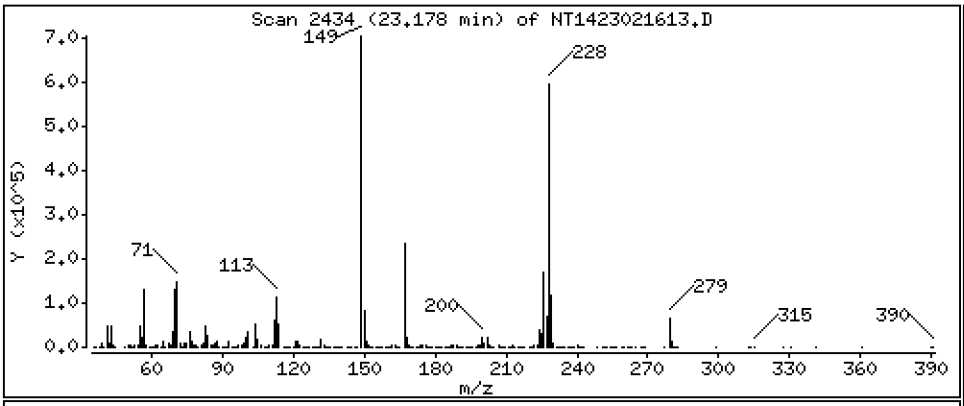
Operator: DSD

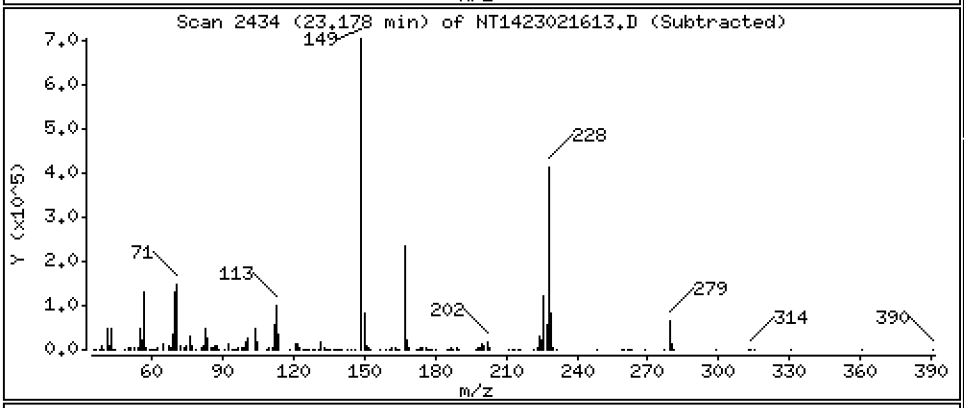
Column phase: ZB-5msi

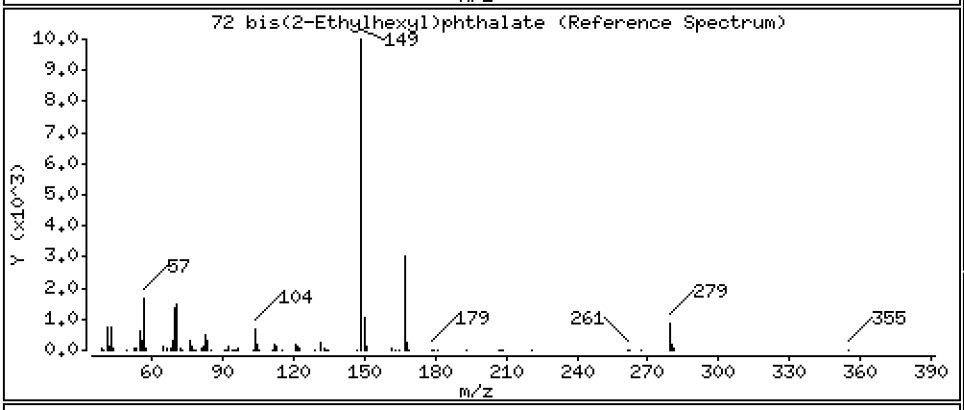
Column diameter: 0.25

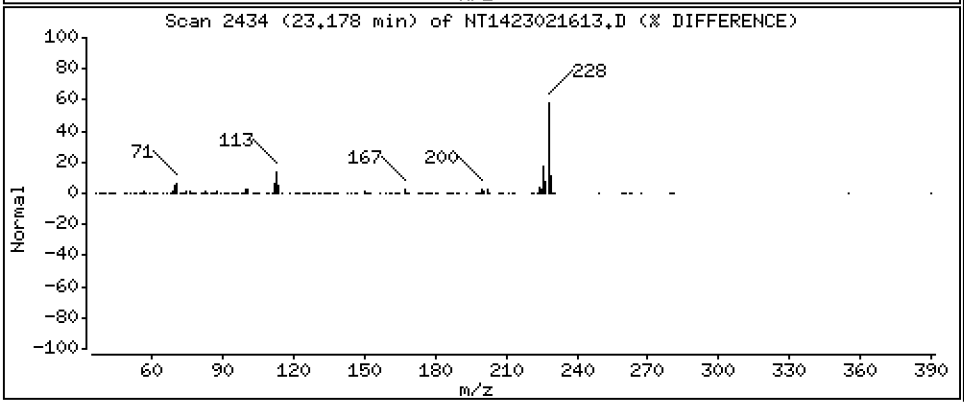
72 bis(2-Ethylhexyl)phthalate

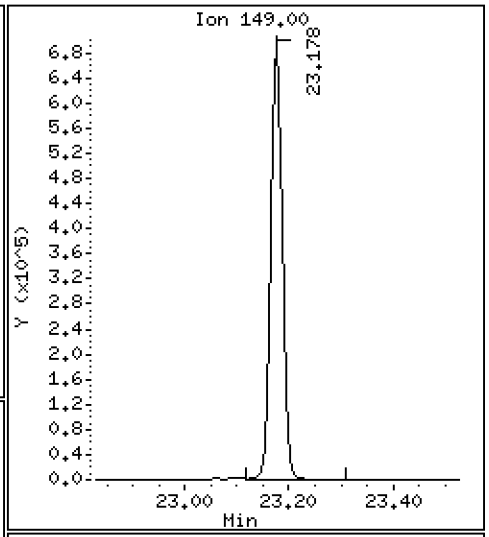
Concentration: 4.649 ug/mL

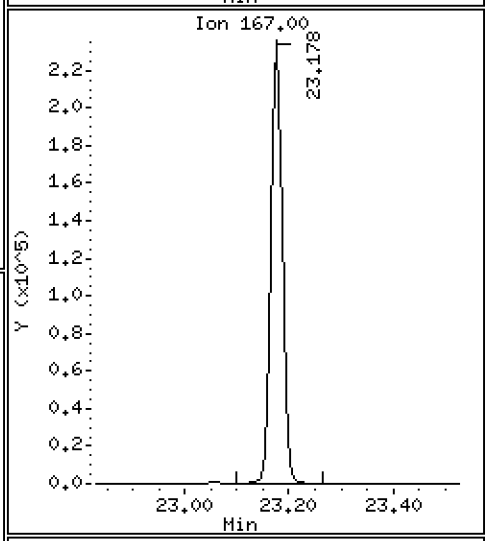


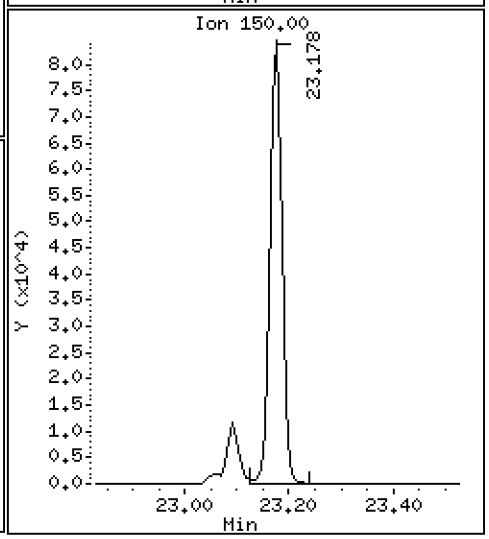












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

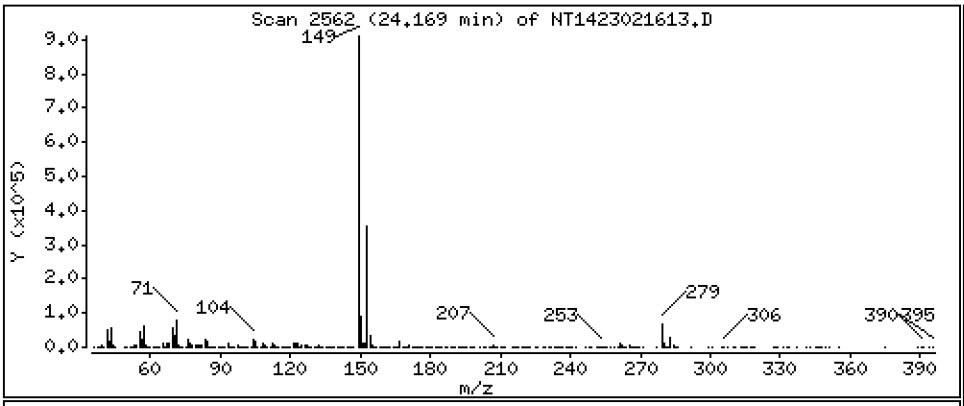
Operator: DSD

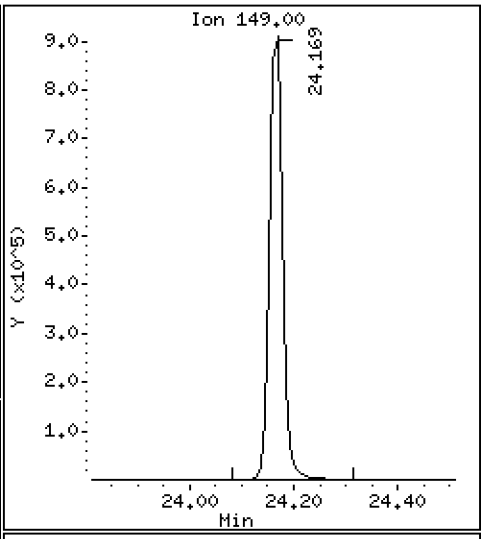
Column phase: ZB-5msi

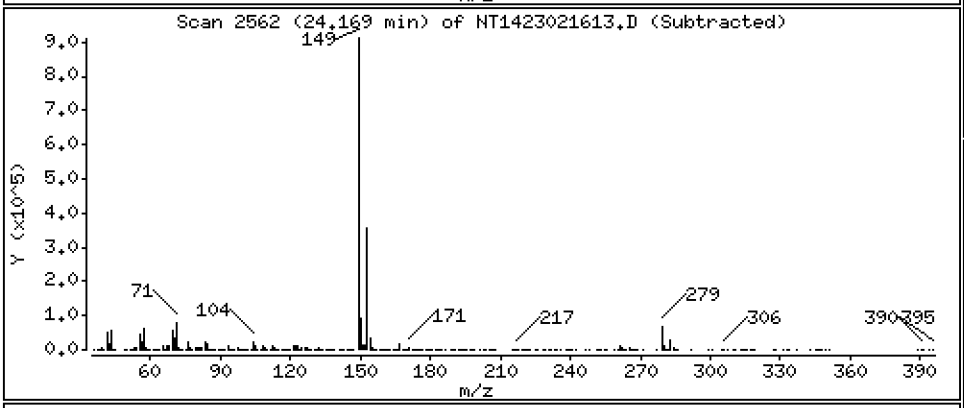
Column diameter: 0.25

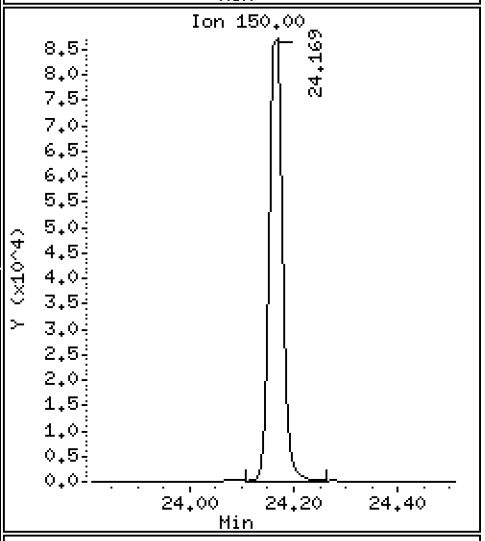
73 Di-n-octylphthalate

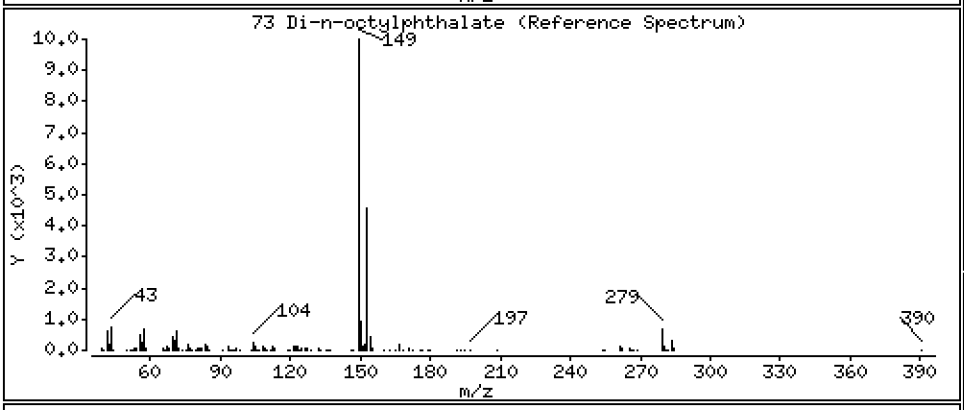
Concentration: 4.962 ug/mL

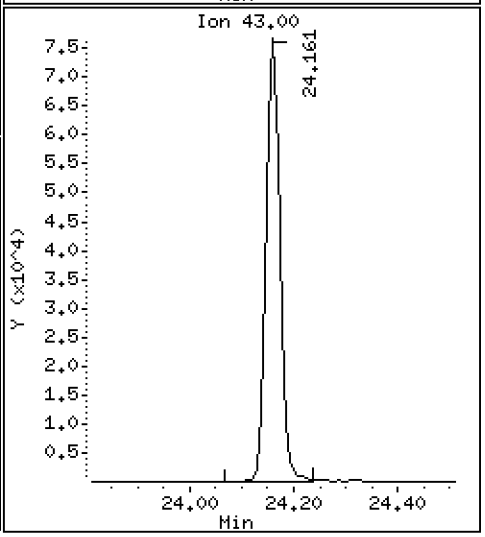


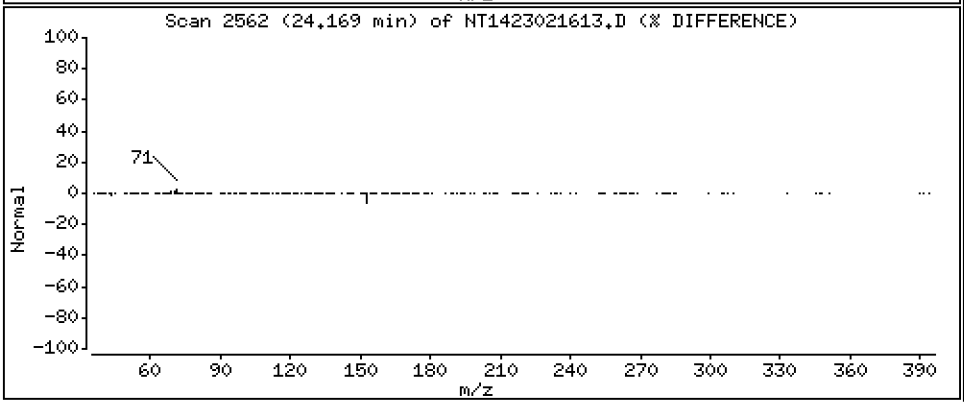












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

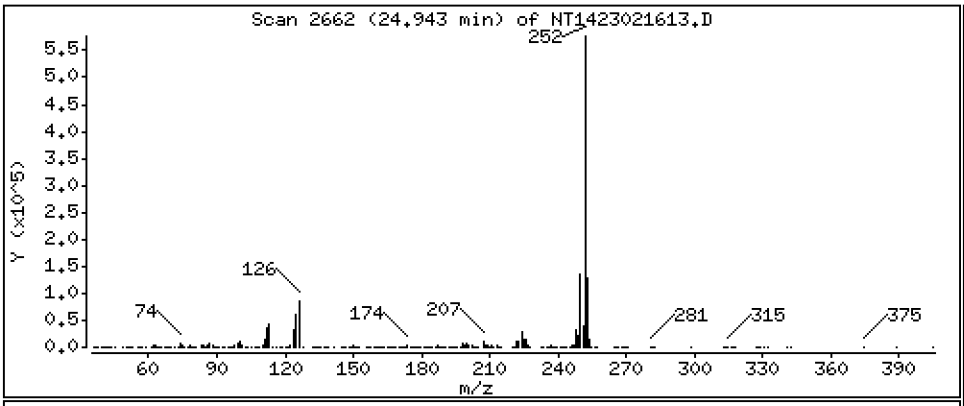
Operator: DSD

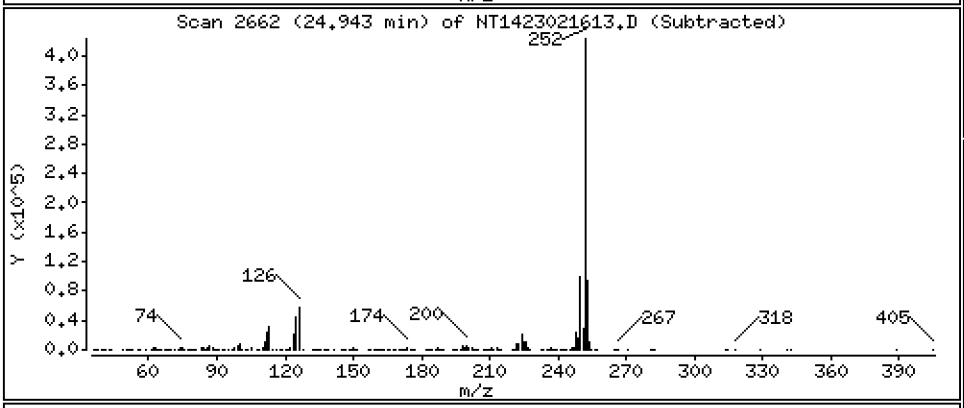
Column phase: ZB-5msi

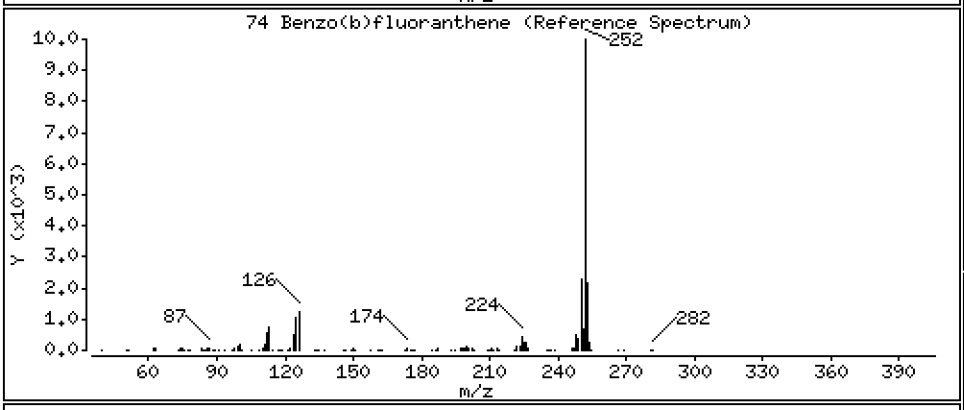
Column diameter: 0.25

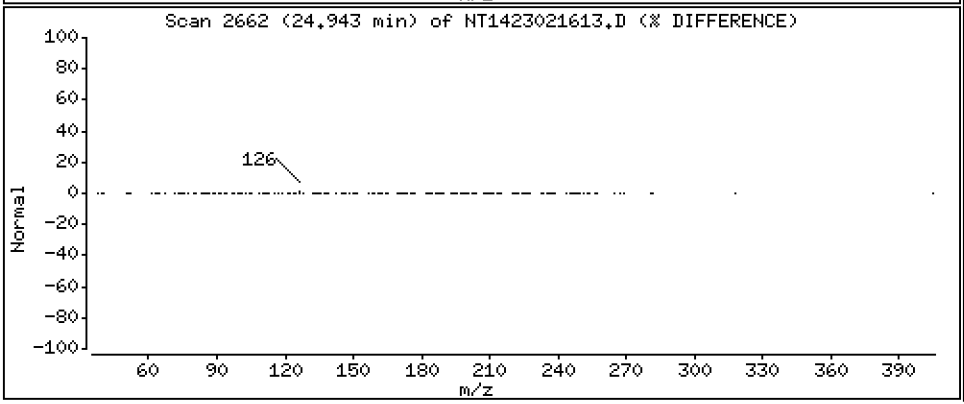
74 Benzo(b)fluoranthene

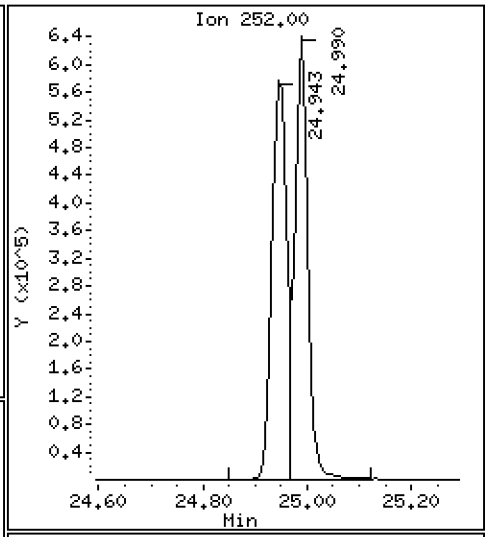
Concentration: 4.813 ug/mL

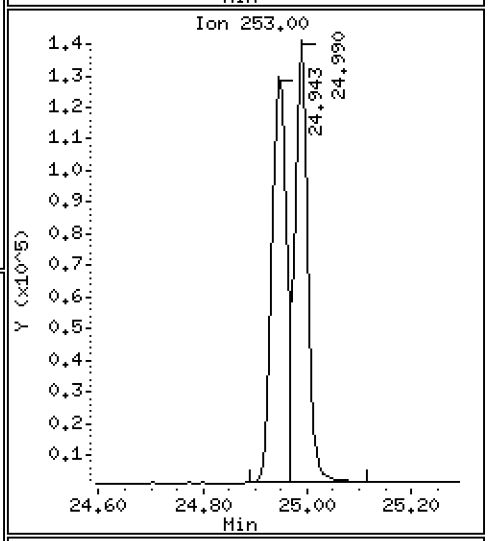


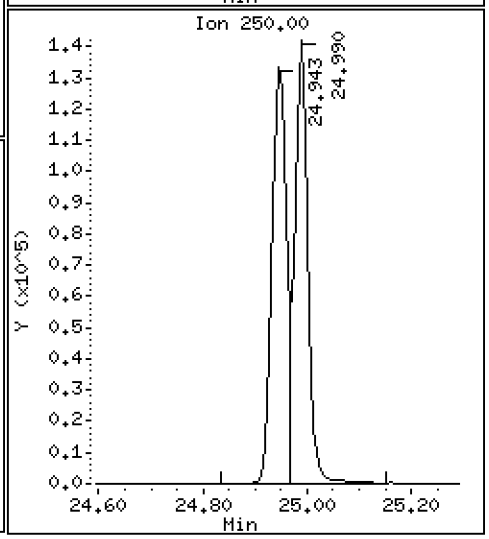












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

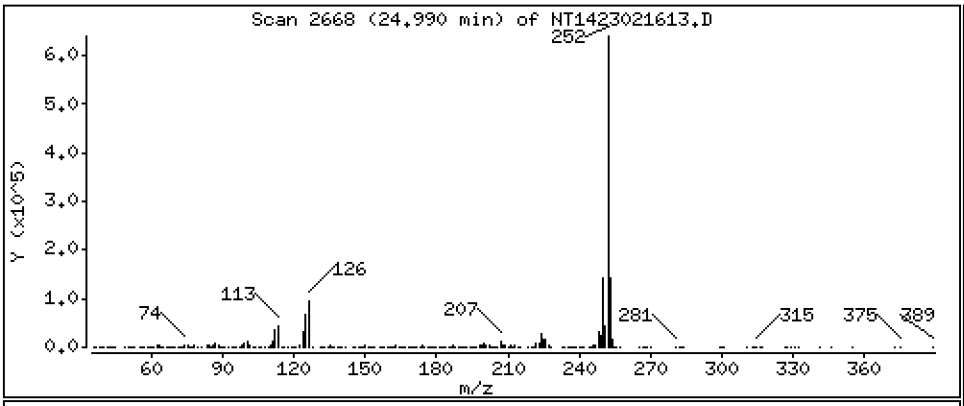
Operator: DSD

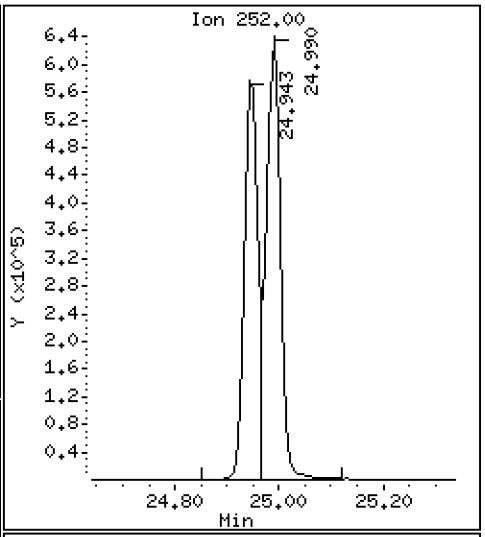
Column phase: ZB-5msi

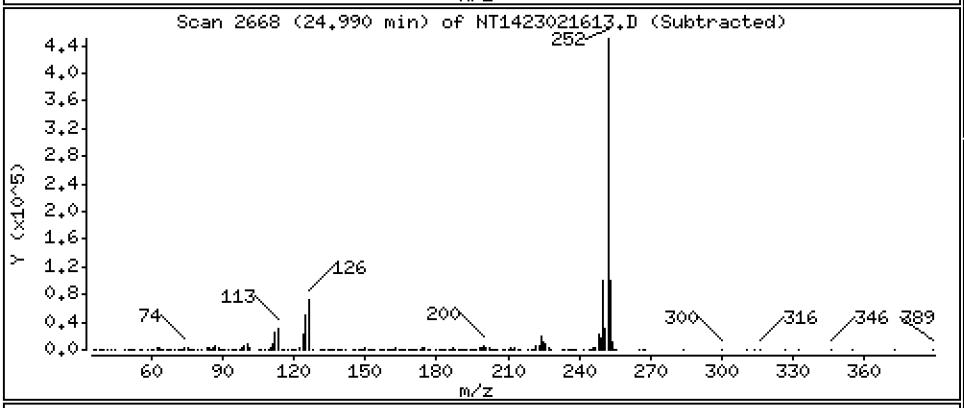
Column diameter: 0.25

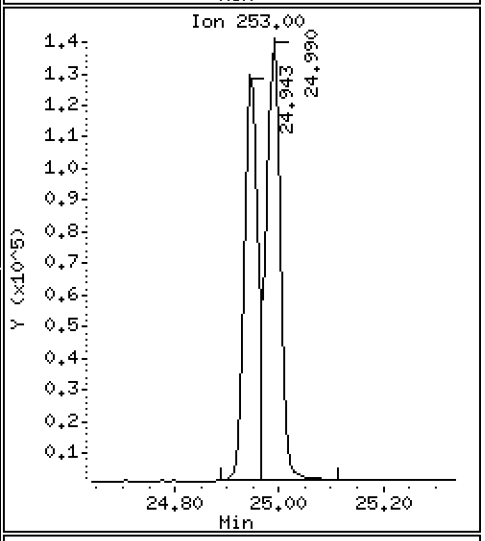
75 Benzo(k)fluoranthene

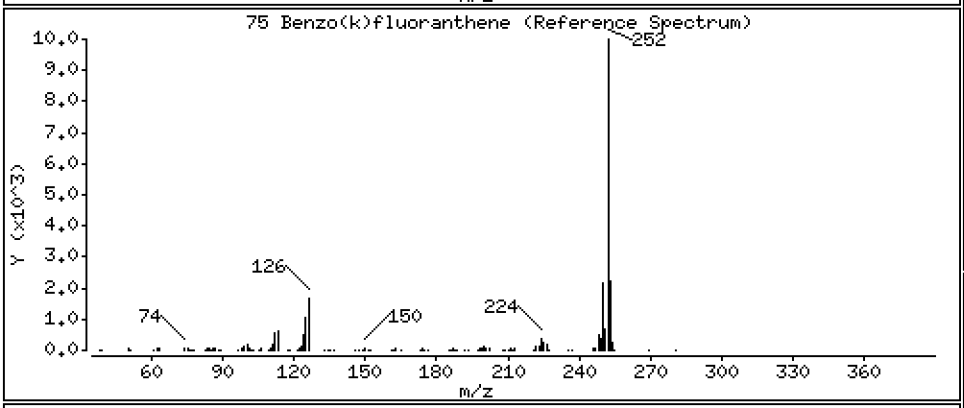
Concentration: 4.838 ug/mL

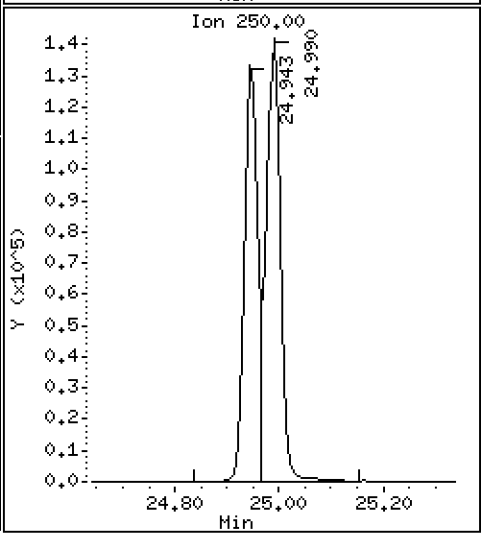


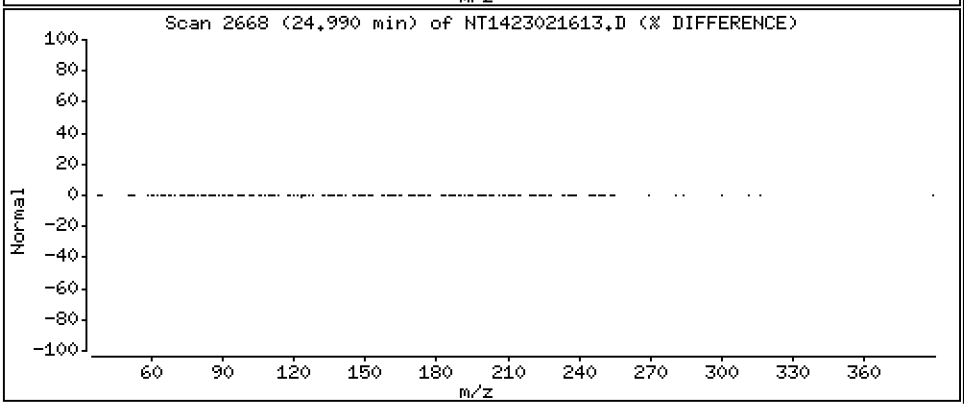












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

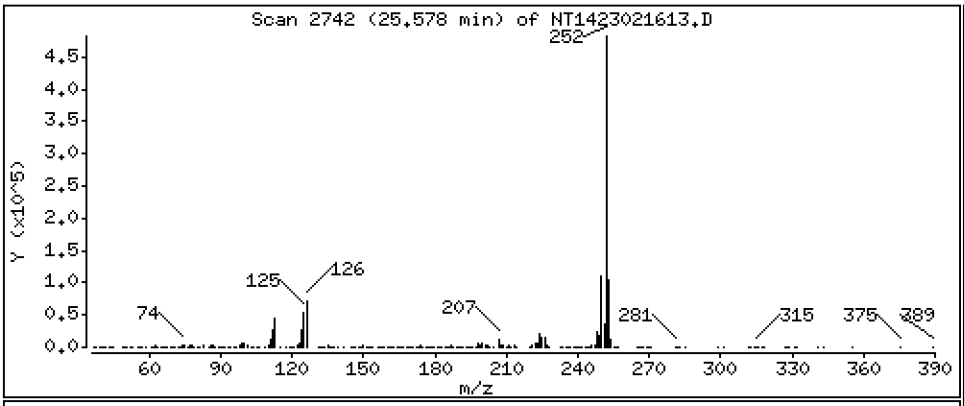
Operator: DSD

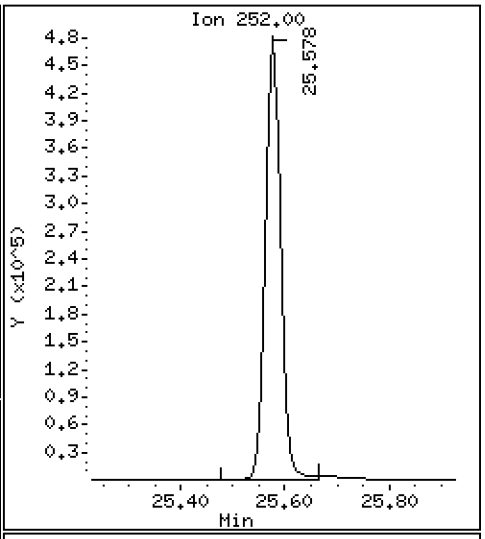
Column phase: ZB-5msi

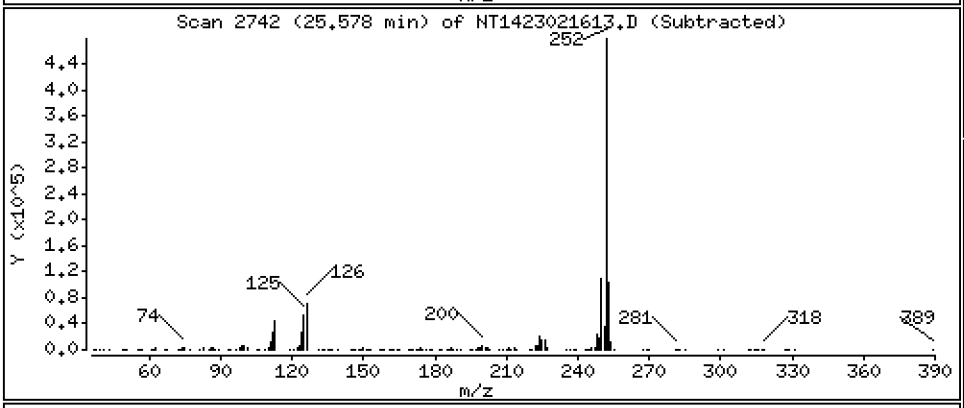
Column diameter: 0.25

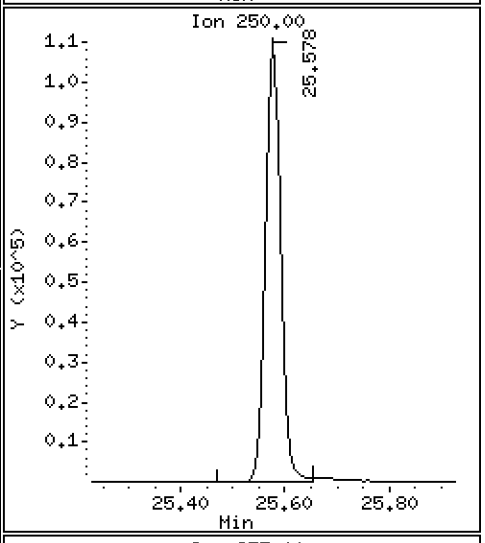
76 Benzo(a)pyrene

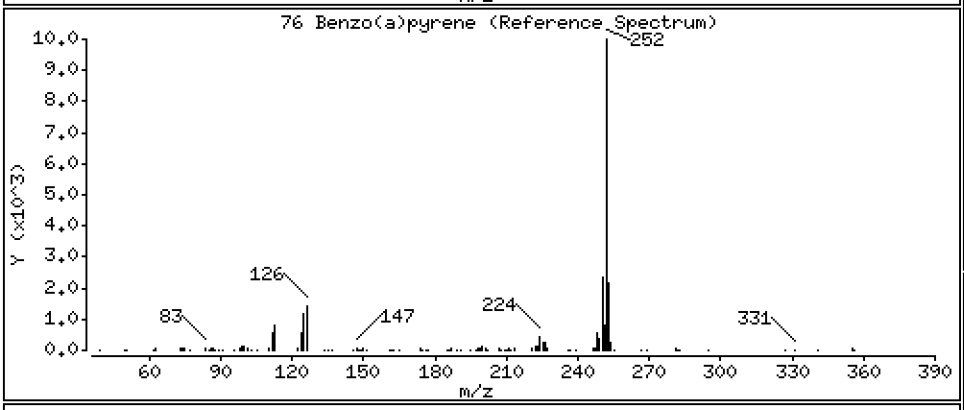
Concentration: 4.607 ug/mL

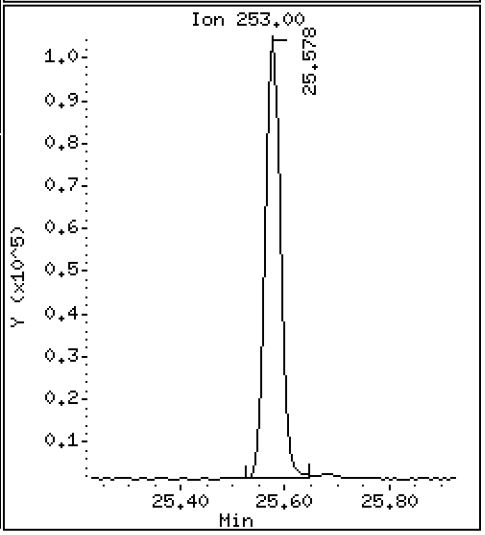


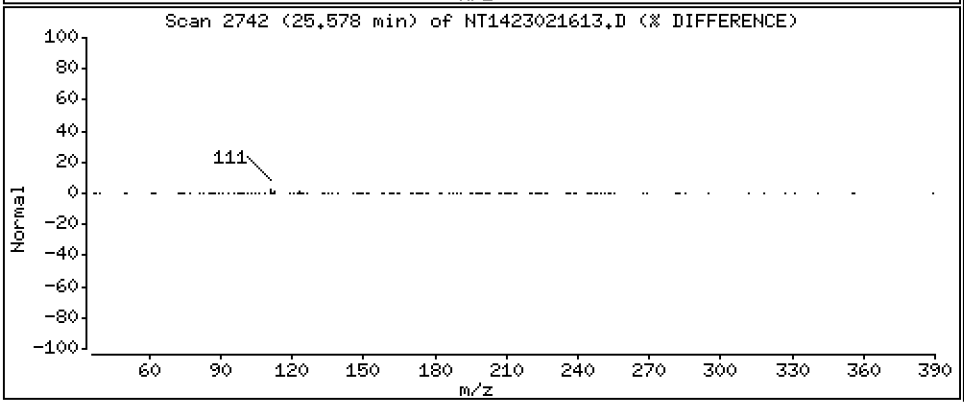












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

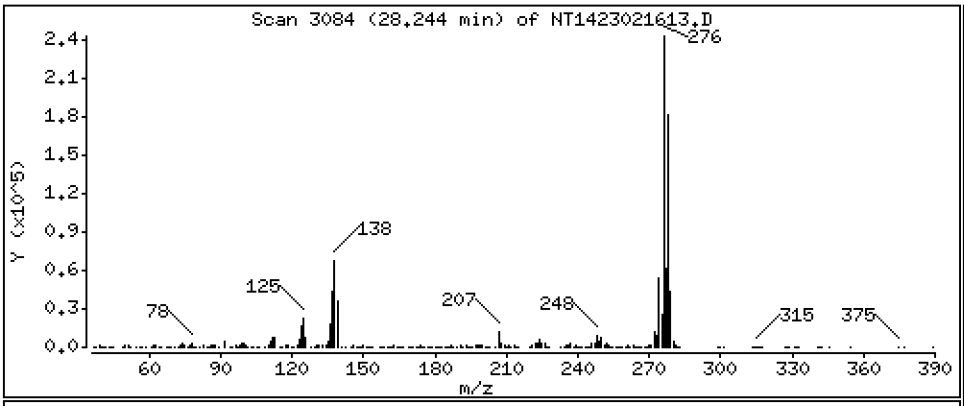
Operator: DSD

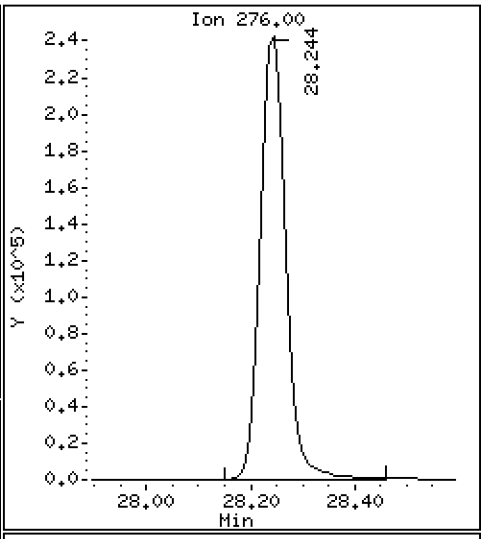
Column phase: ZB-5msi

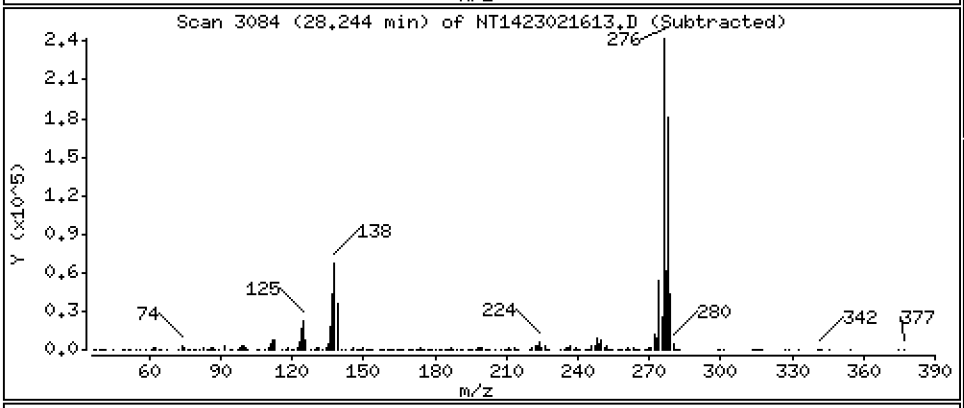
Column diameter: 0.25

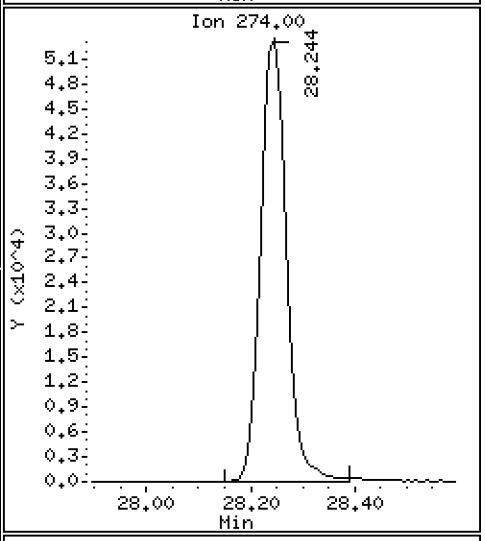
78 Indeno(1,2,3-cd)pyrene

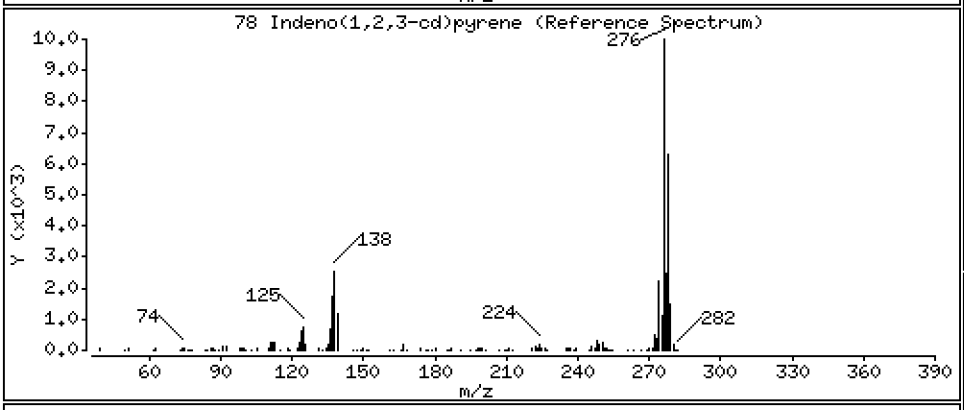
Concentration: 4.395 ug/mL

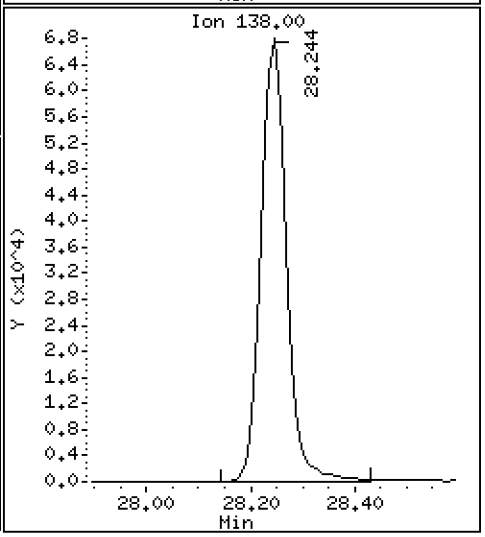


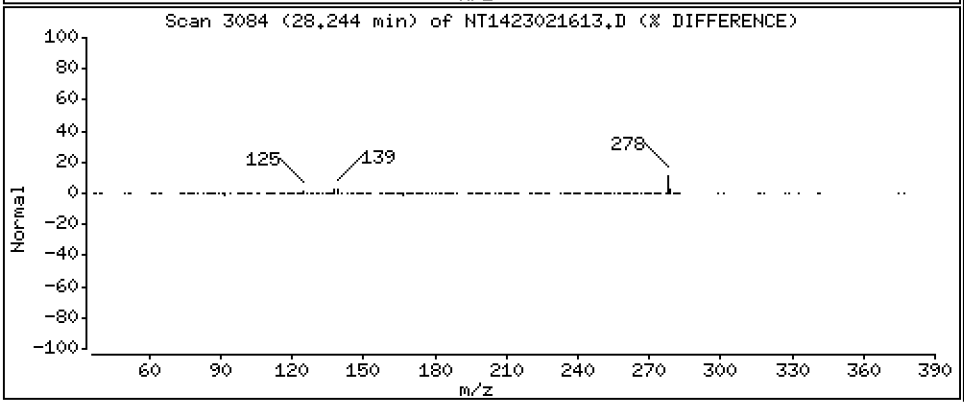












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

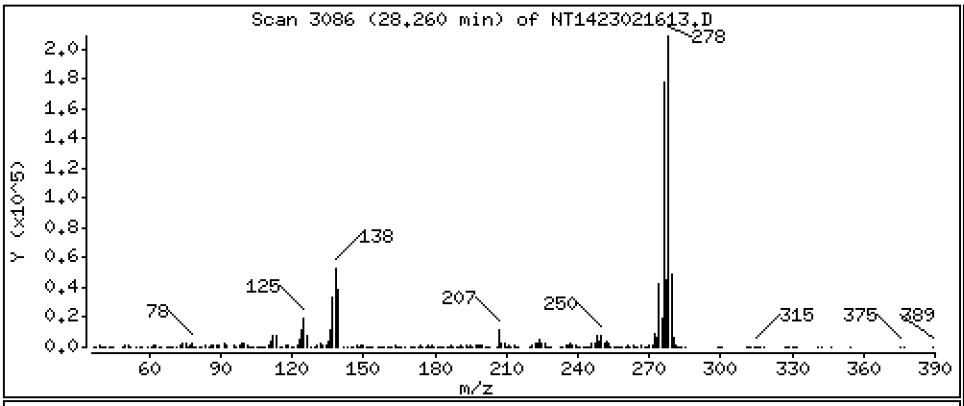
Operator: DSD

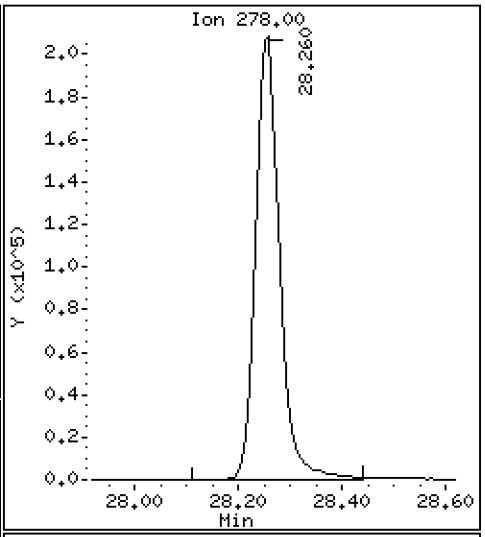
Column phase: ZB-5msi

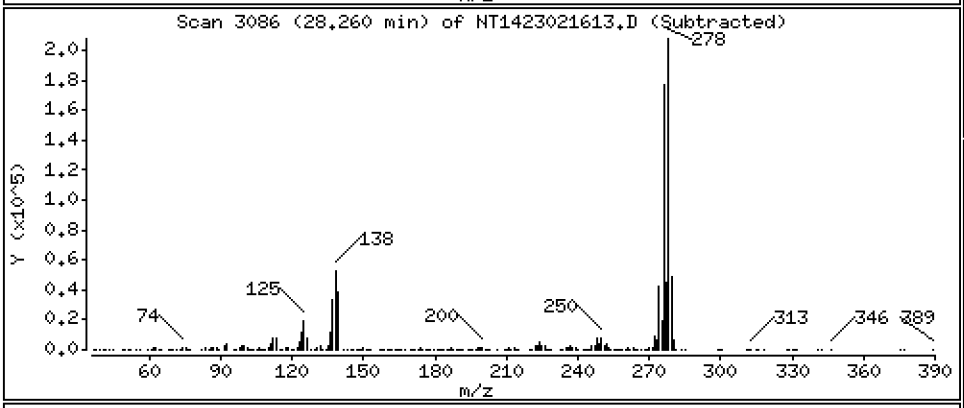
Column diameter: 0.25

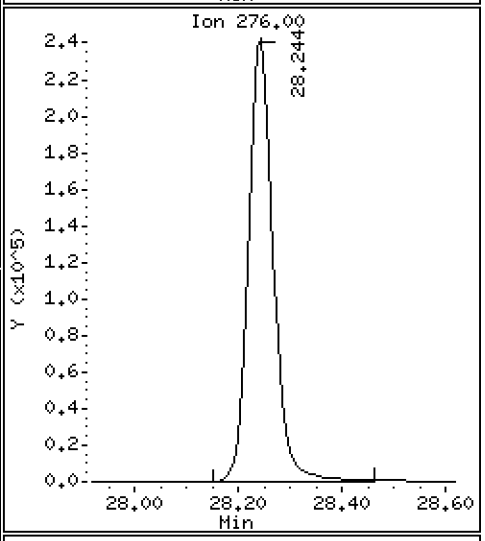
79 Dibenzo(a,h)anthracene

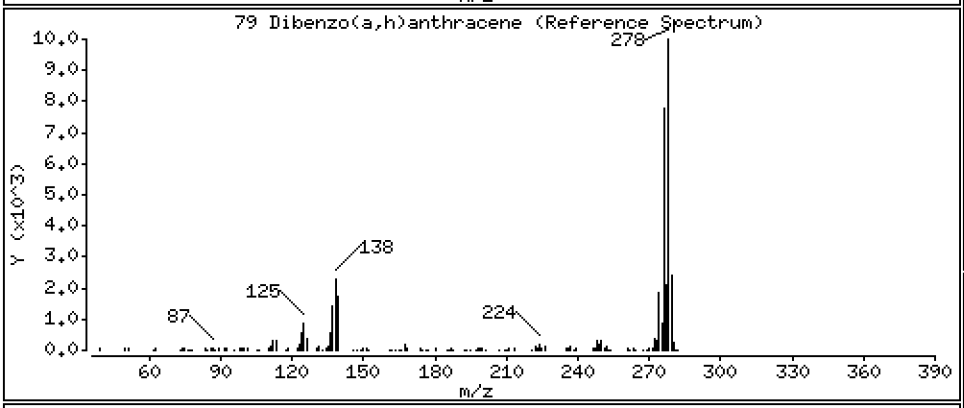
Concentration: 4.365 ug/mL

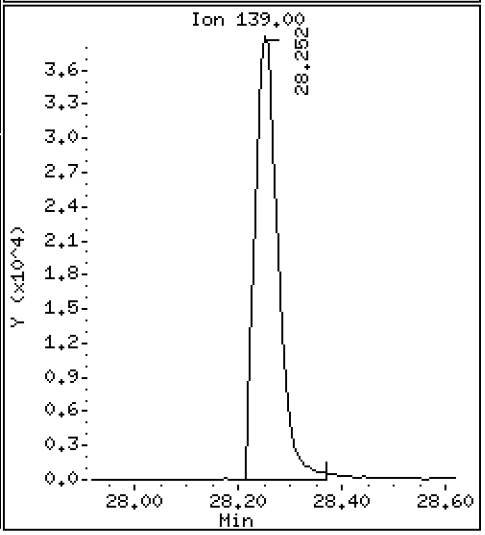


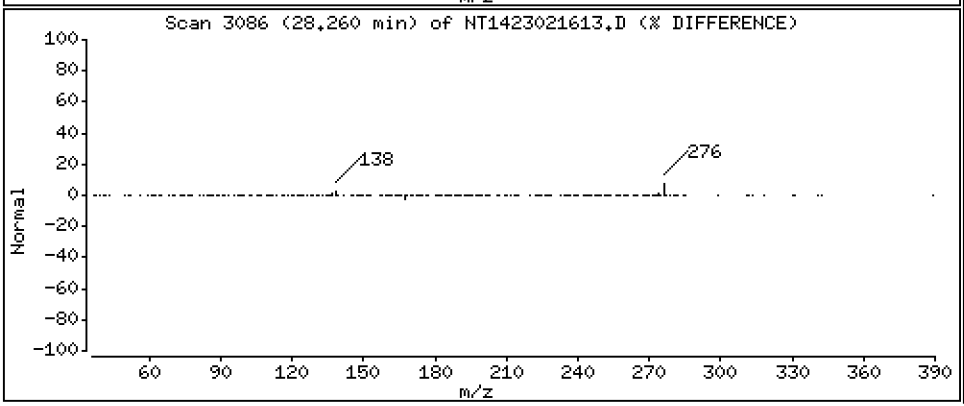












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

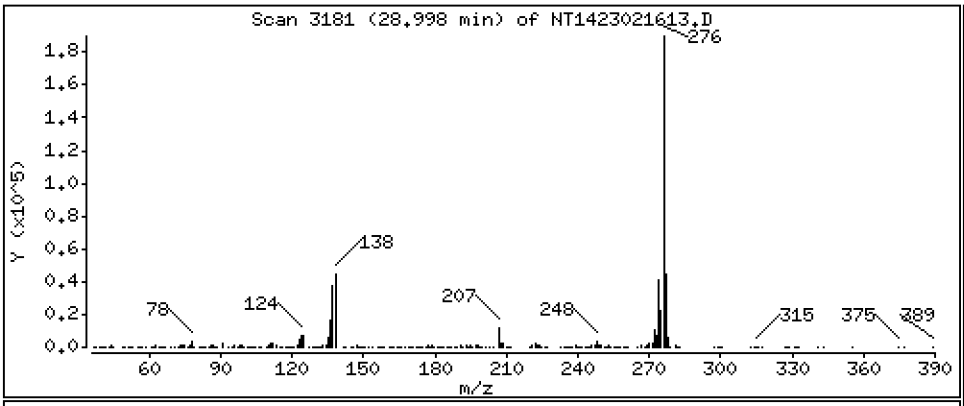
Operator: DSD

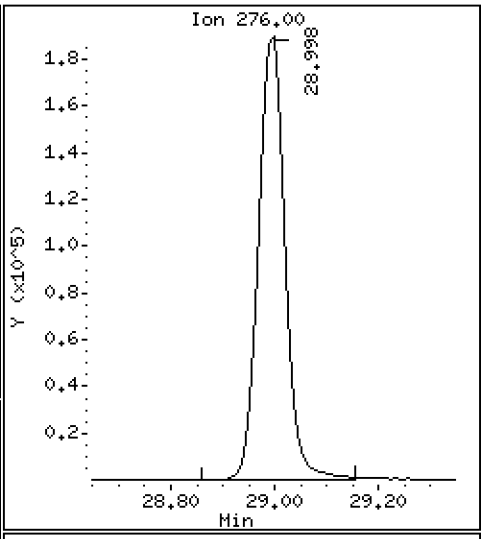
Column phase: ZB-5msi

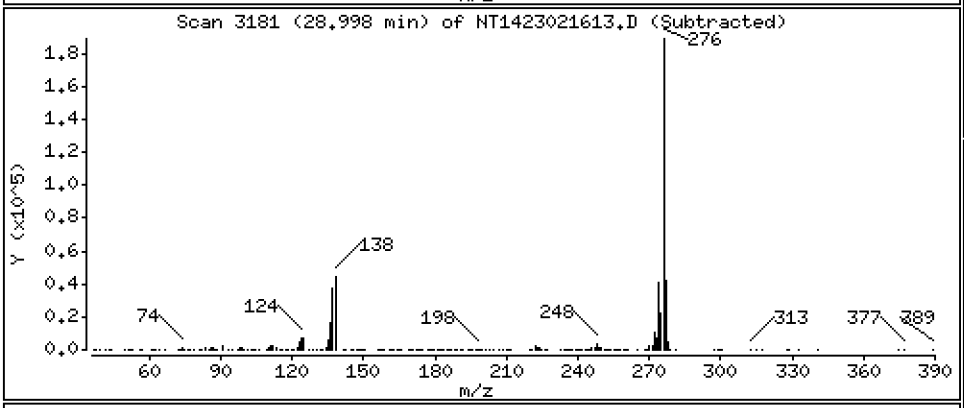
Column diameter: 0.25

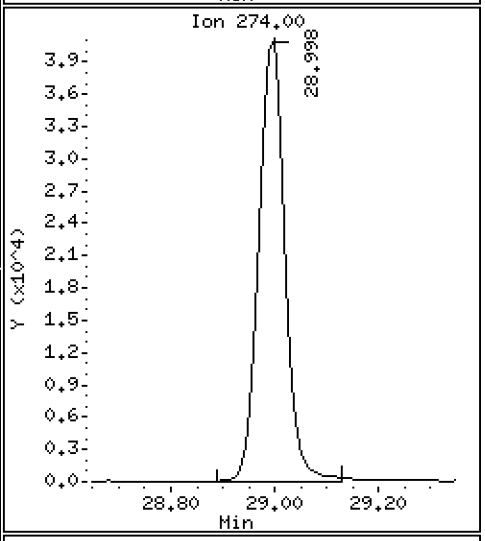
80 Benzo(g,h,i)perylene

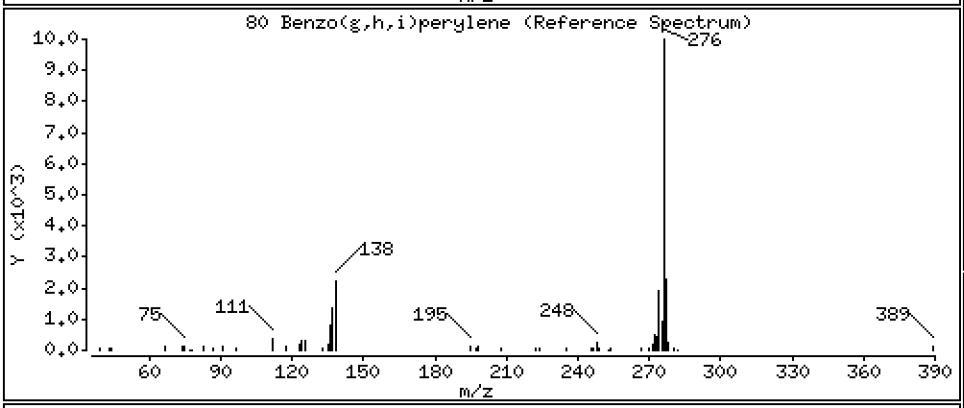
Concentration: 4.380 ug/mL

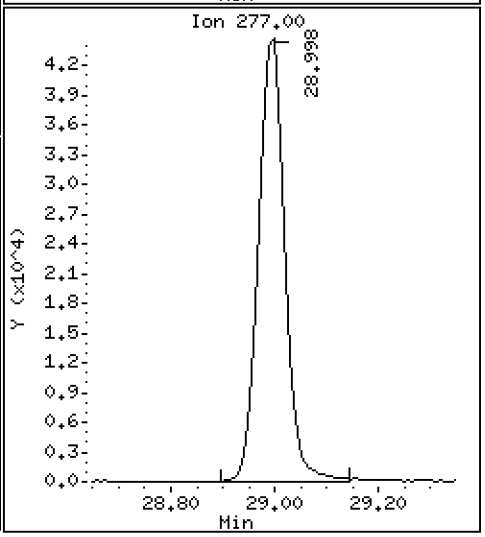


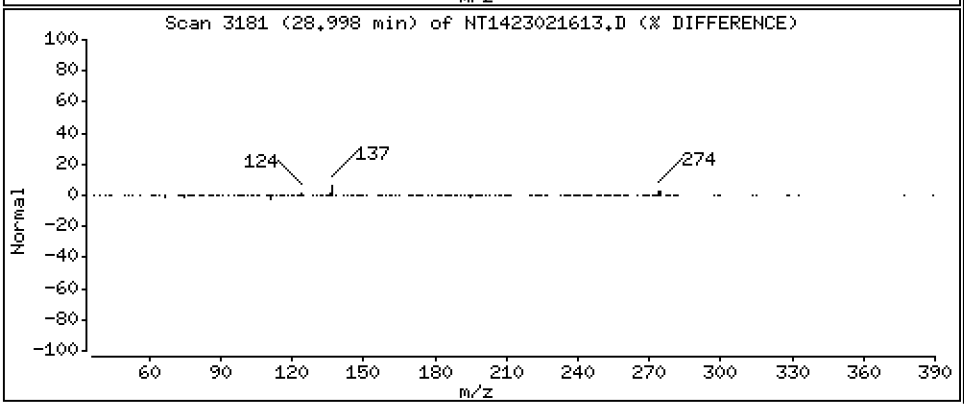












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

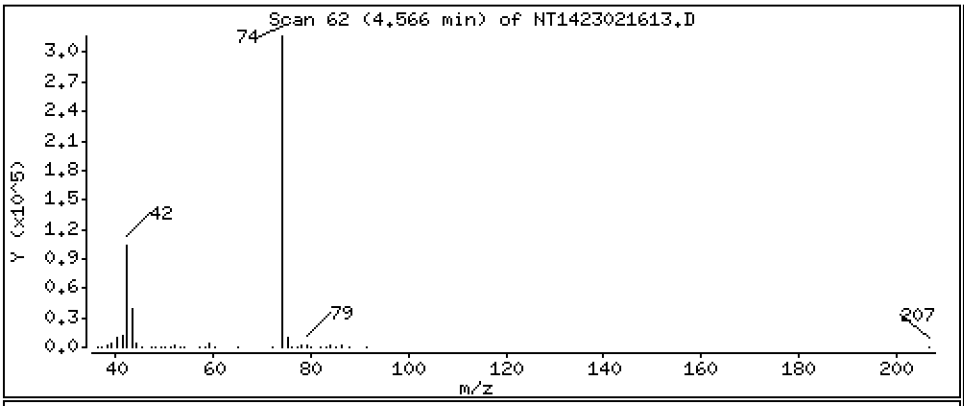
Operator: DSD

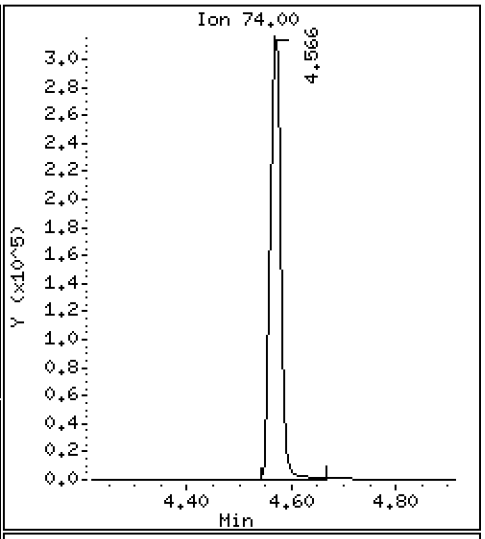
Column phase: ZB-5msi

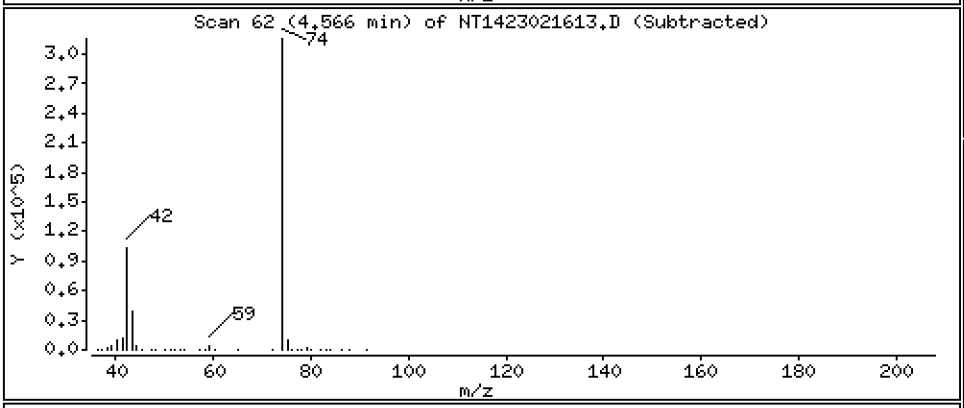
Column diameter: 0.25

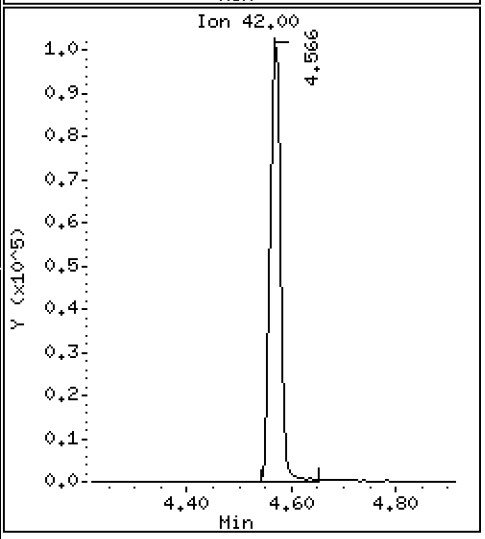
90 N-Nitrosodimethylamine

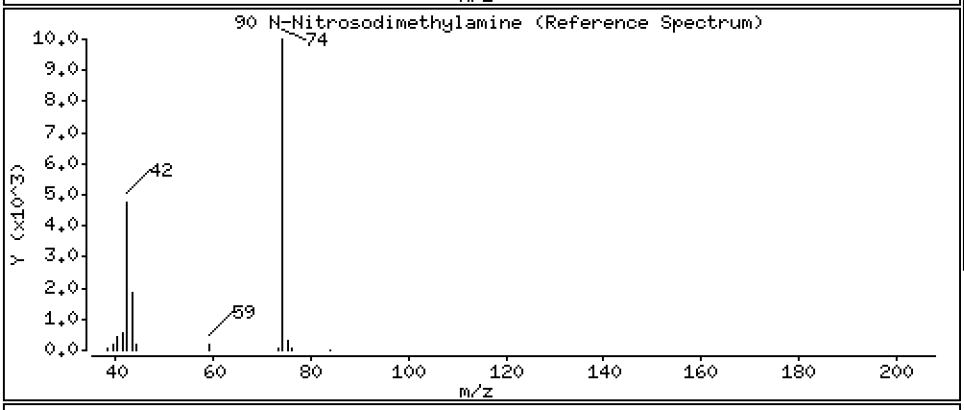
Concentration: 5.632 ug/mL

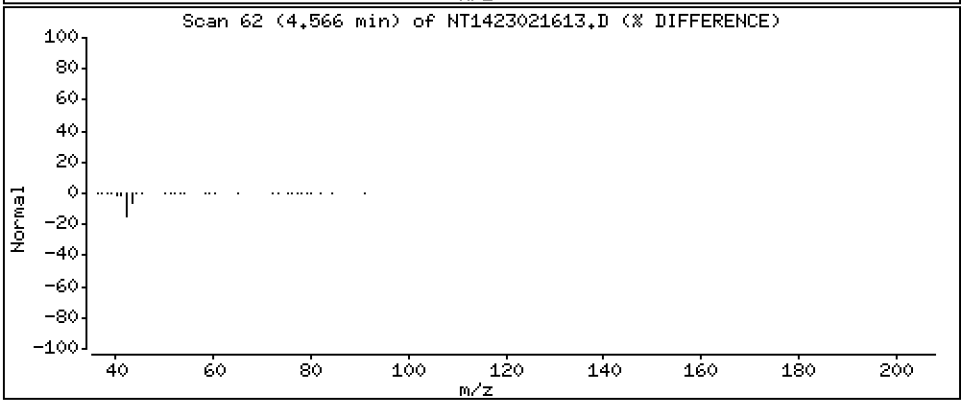












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

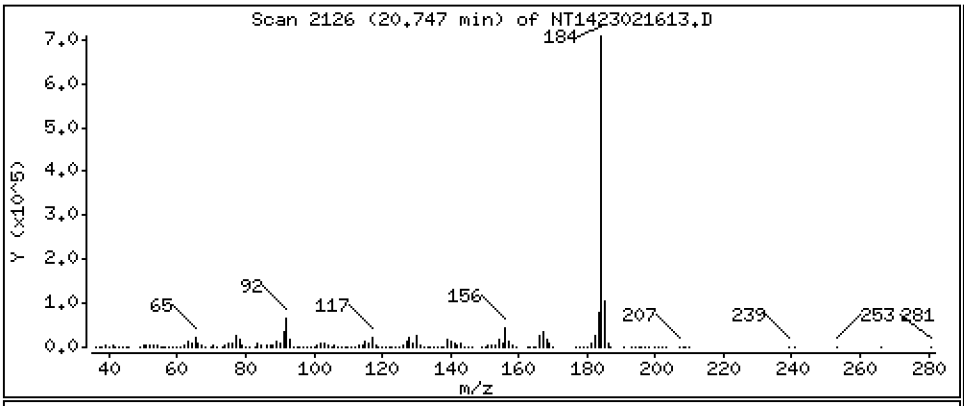
Operator: DSD

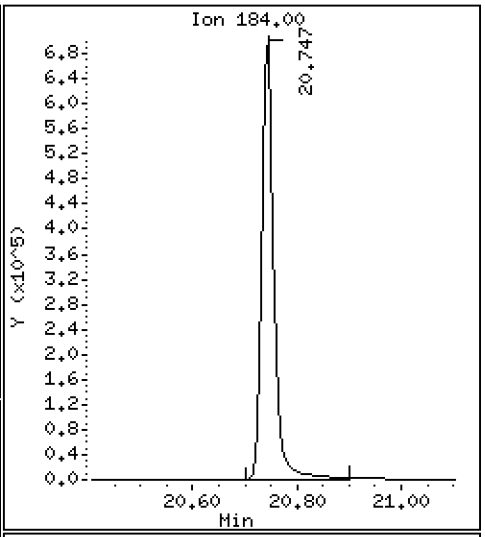
Column phase: ZB-5msi

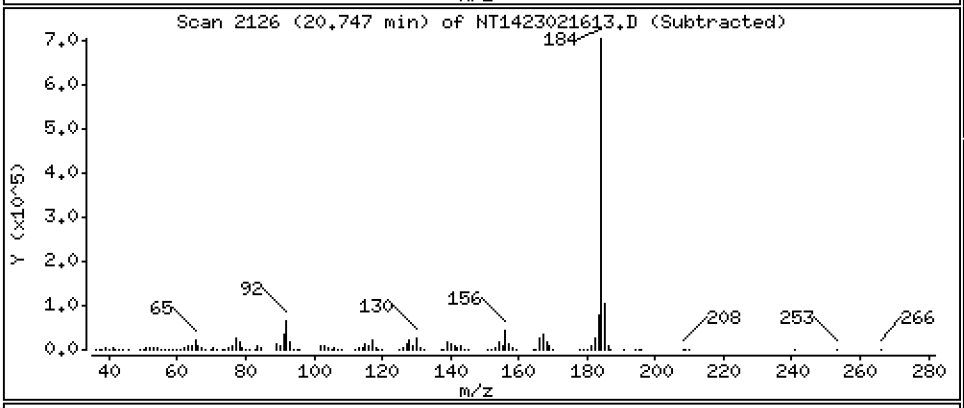
Column diameter: 0.25

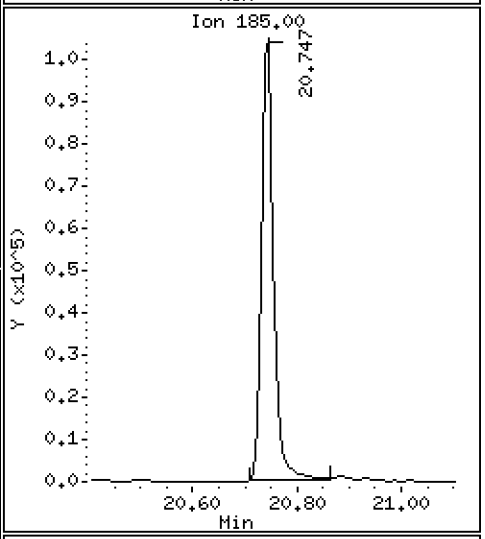
93 Benzidine

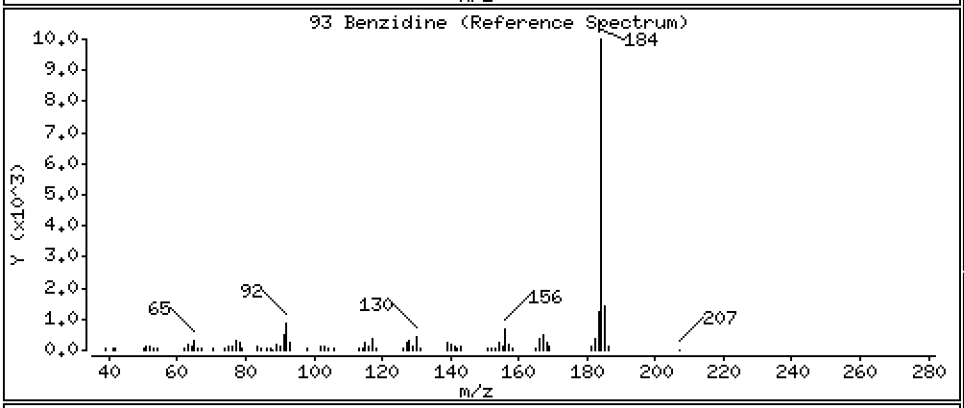
Concentration: 9.984 ug/mL

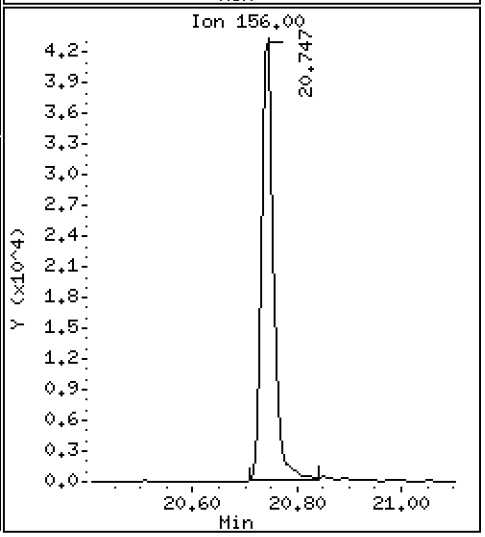


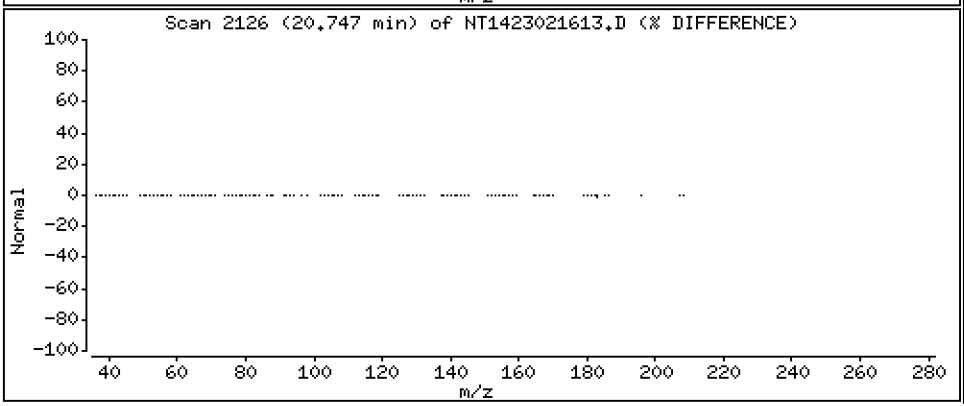












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

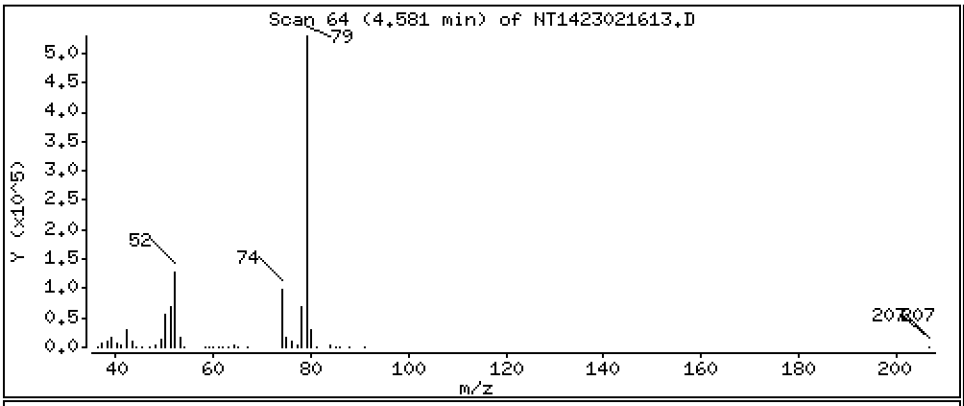
Operator: DSD

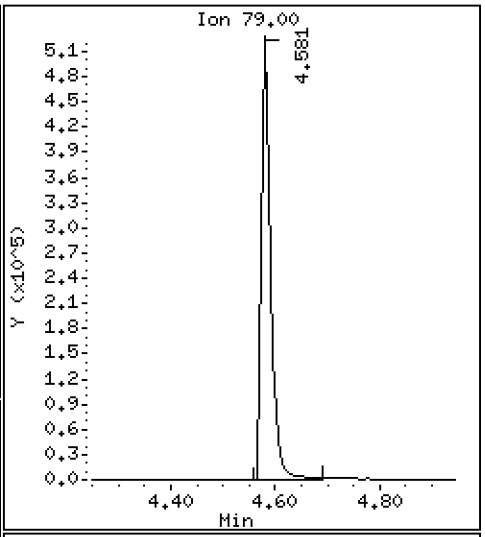
Column phase: ZB-5msi

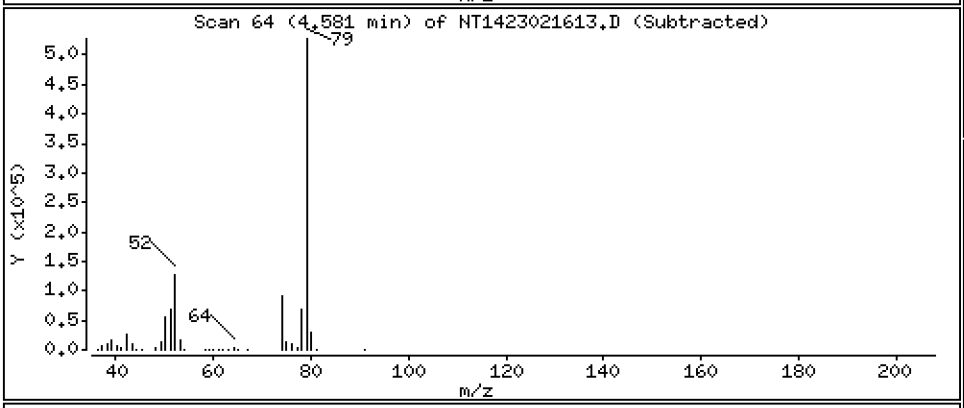
Column diameter: 0.25

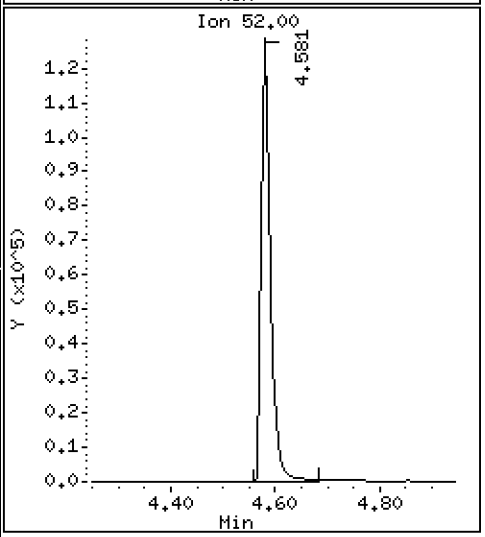
103 Pyridine

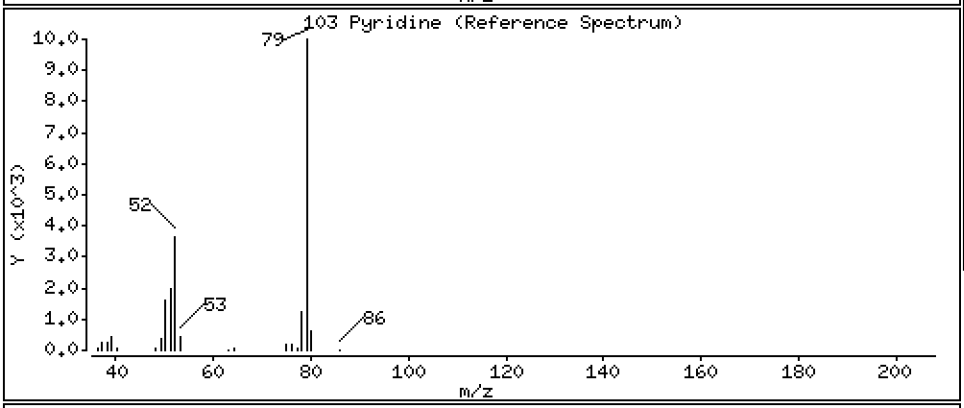
Concentration: 5.566 ug/mL

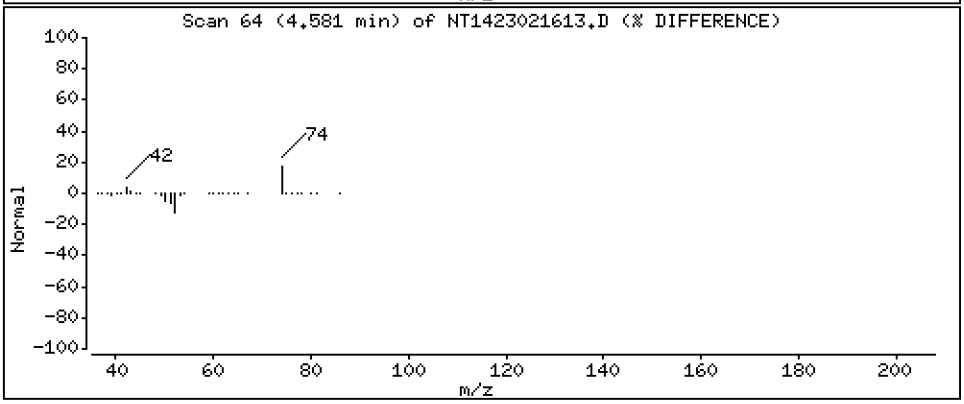












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

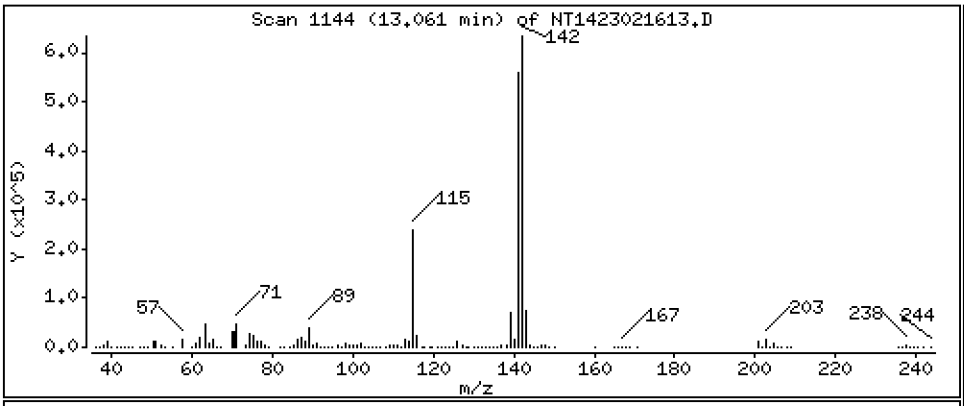
Operator: DSD

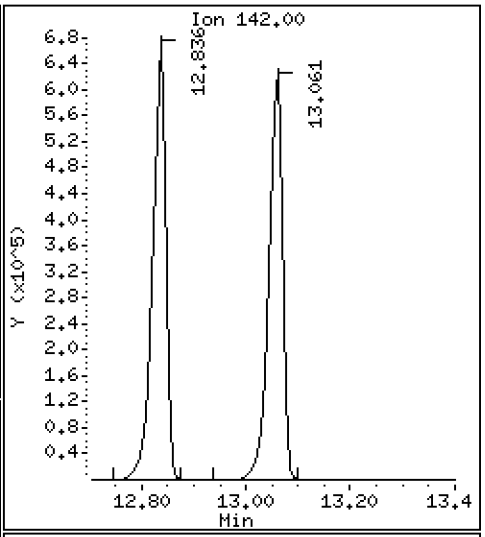
Column phase: ZB-5msi

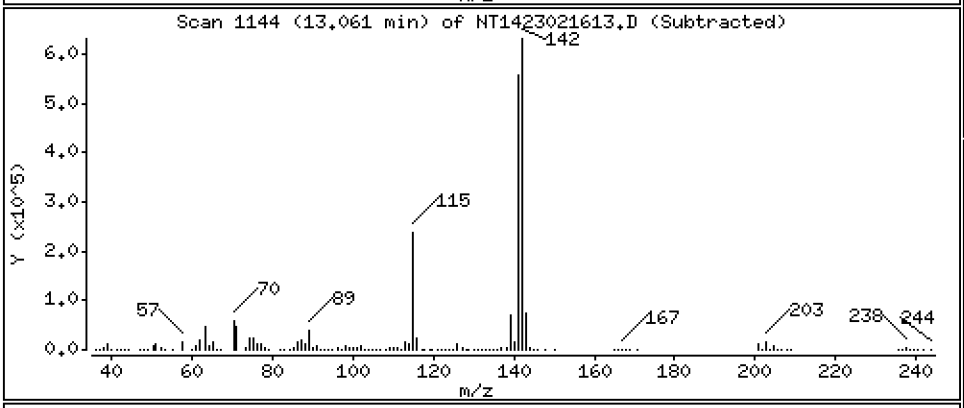
Column diameter: 0.25

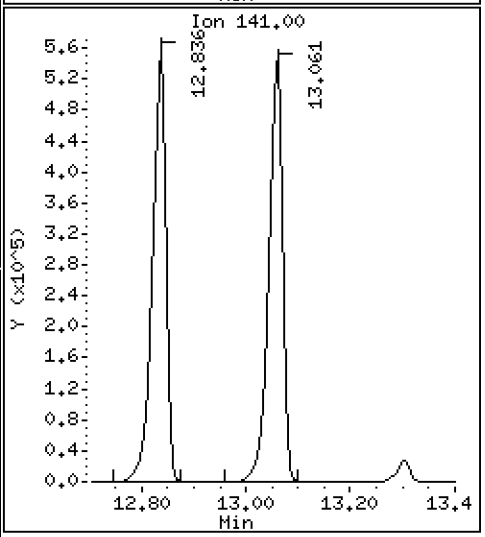
105 1-methylnaphthalene

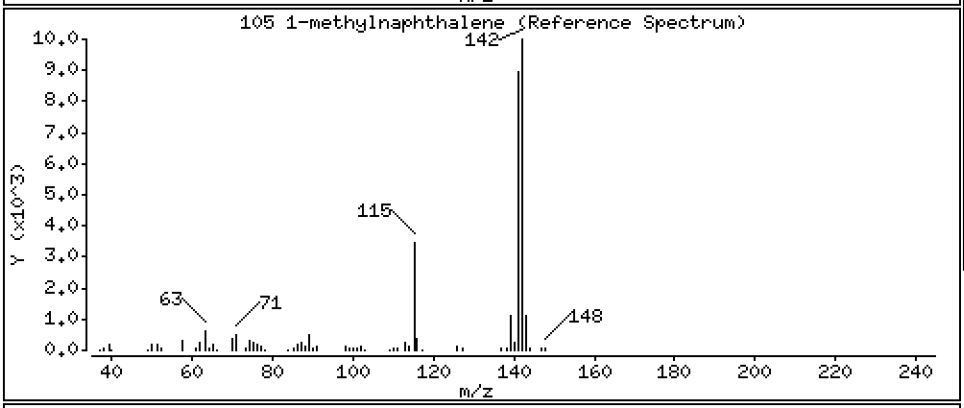
Concentration: 4.760 ug/mL

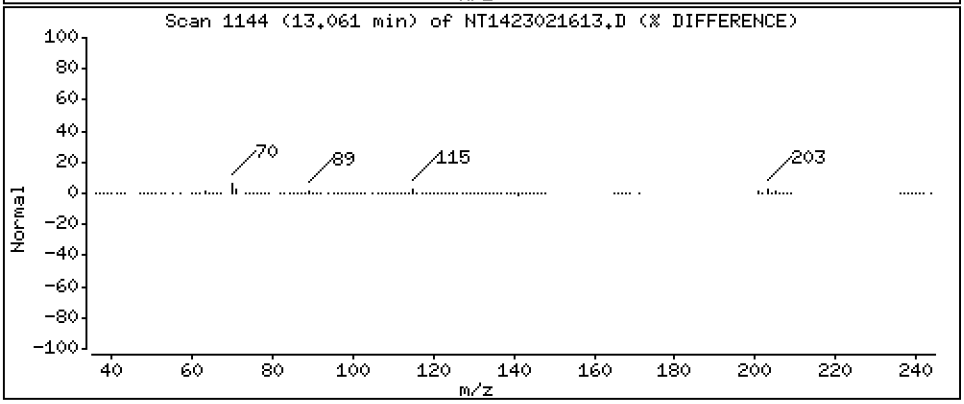












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

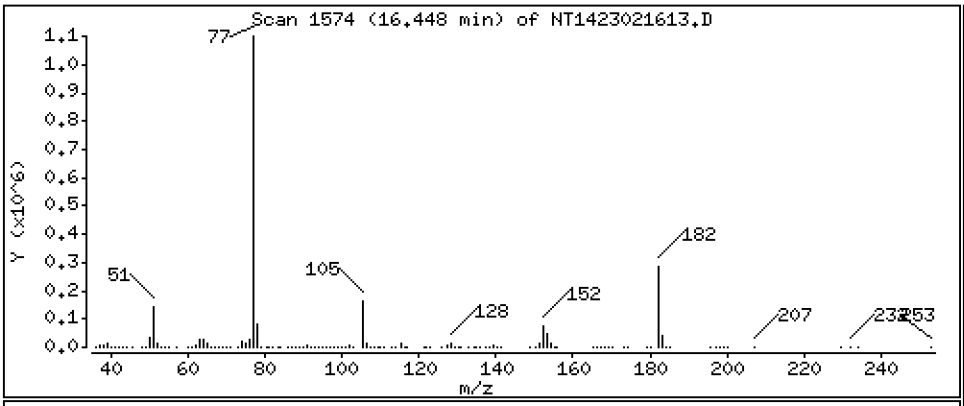
Operator: DSD

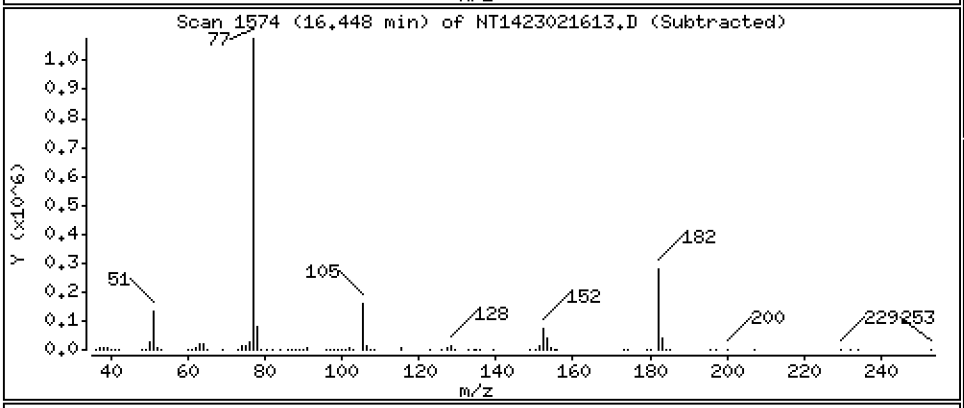
Column phase: ZB-5msi

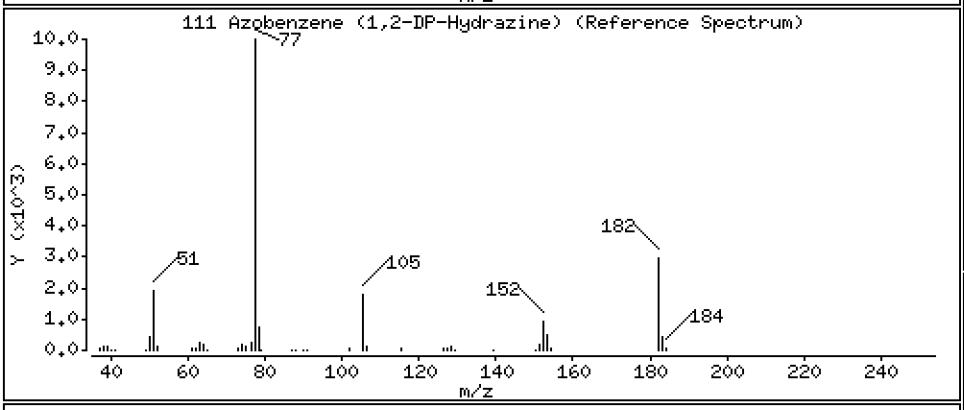
Column diameter: 0.25

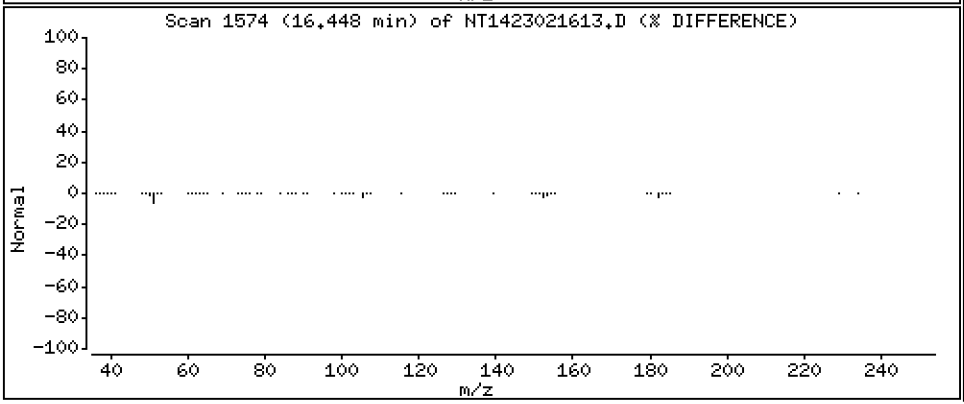
111 Azobenzene (1,2-DP-Hydrazine)

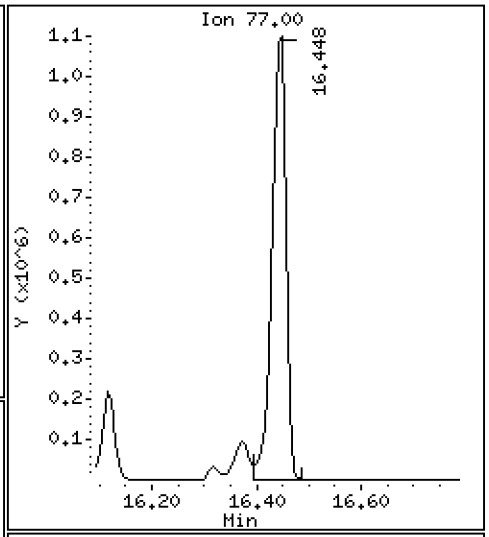
Concentration: 4.655 ug/mL

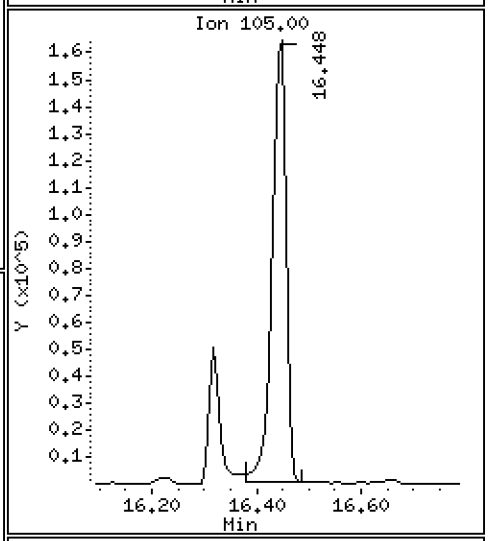


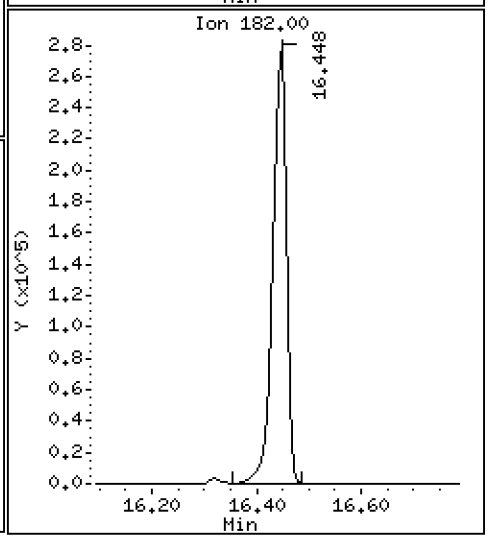












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

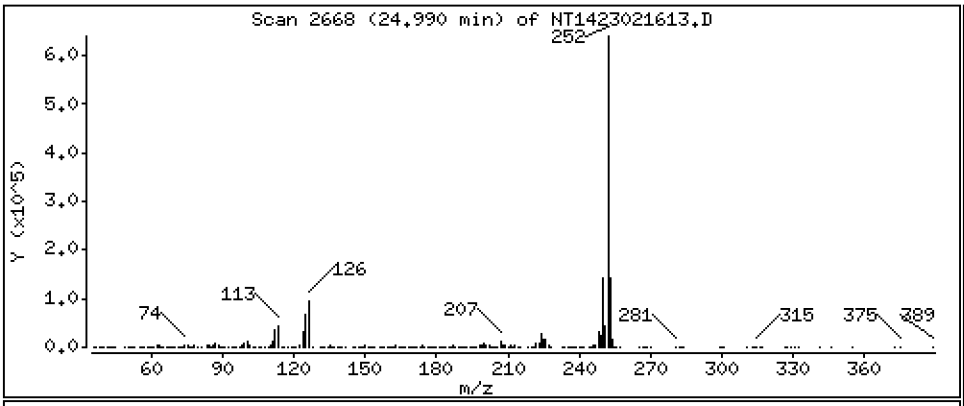
Operator: DSD

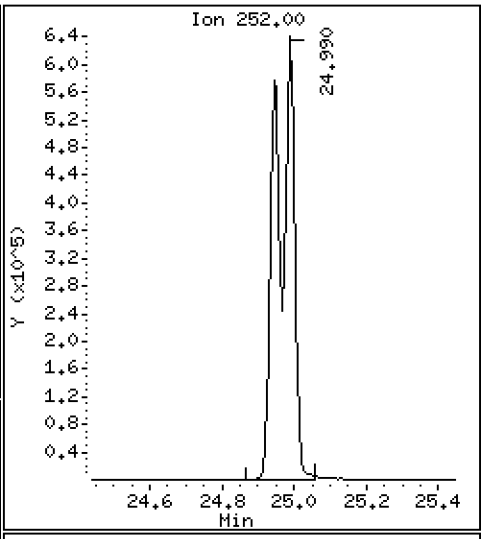
Column phase: ZB-5msi

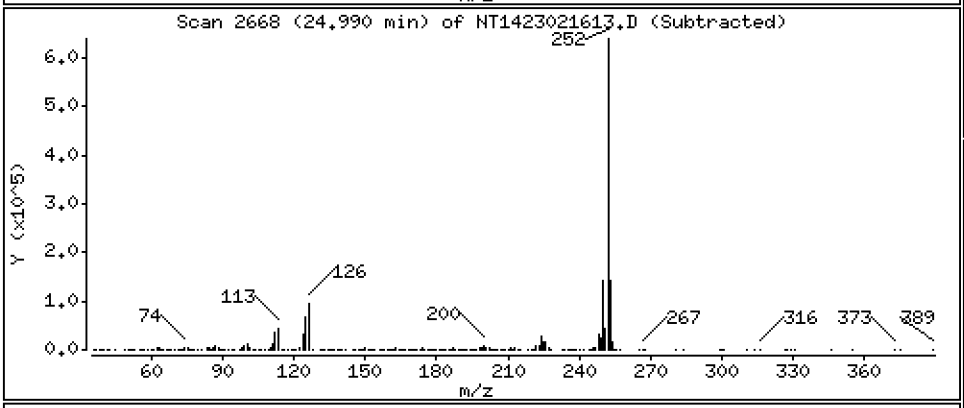
Column diameter: 0.25

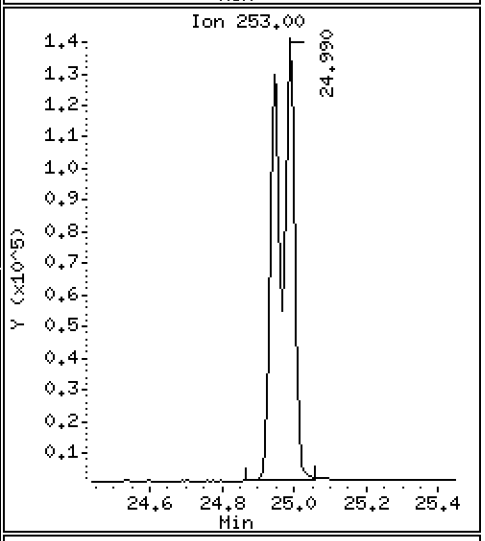
187 Total Benzofluoranthenes

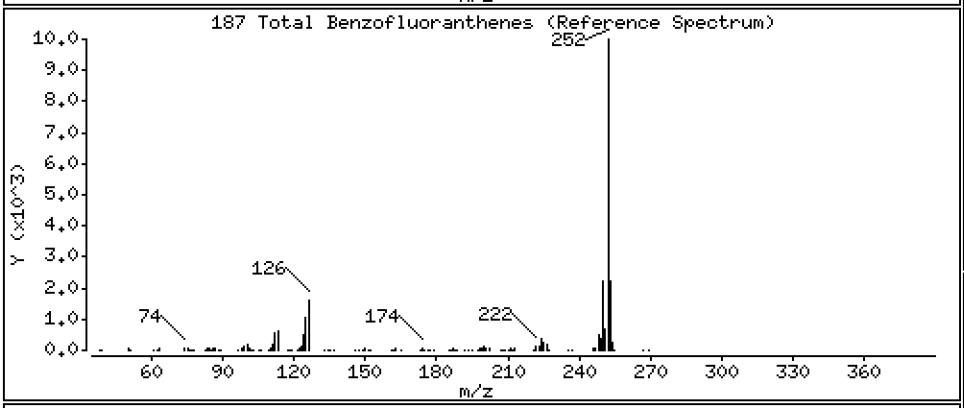
Concentration: 9.712 ug/mL

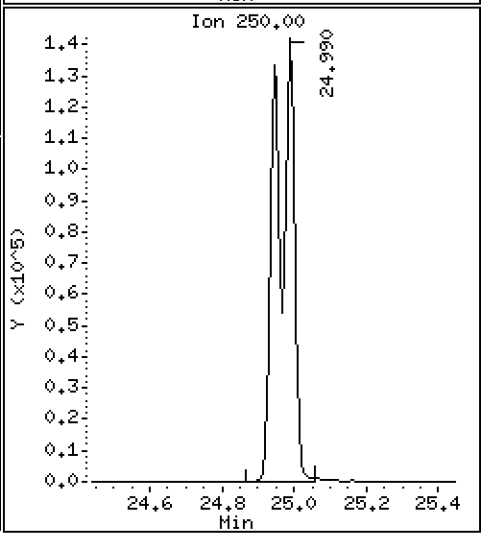


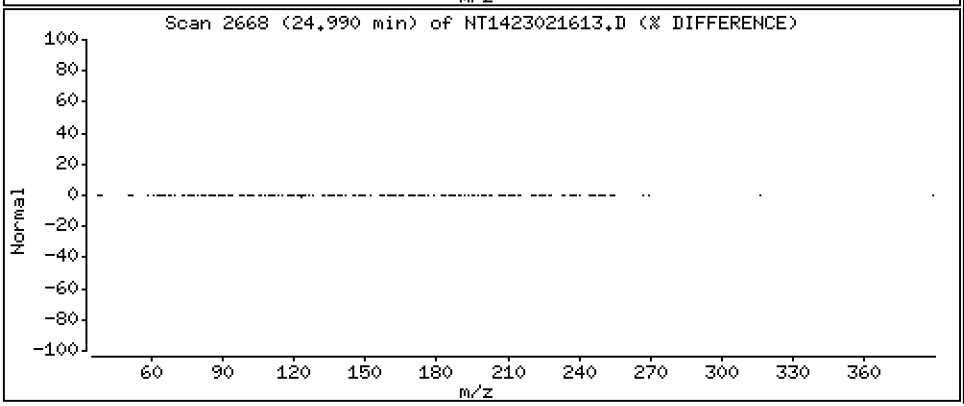












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

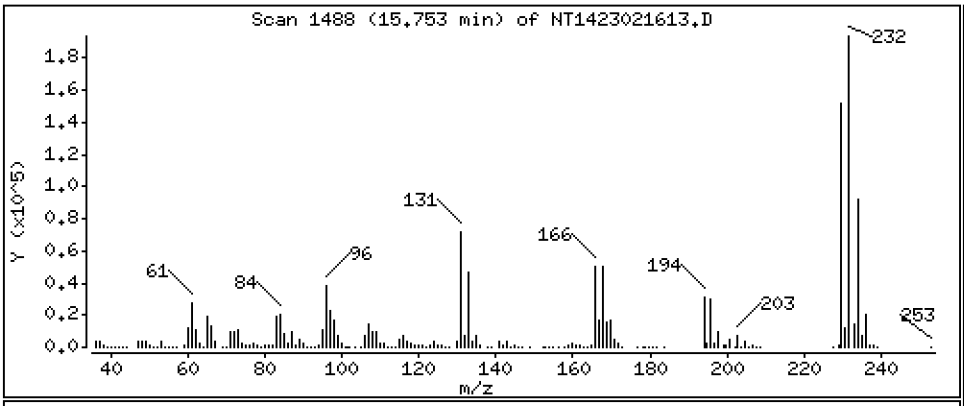
Operator: DSD

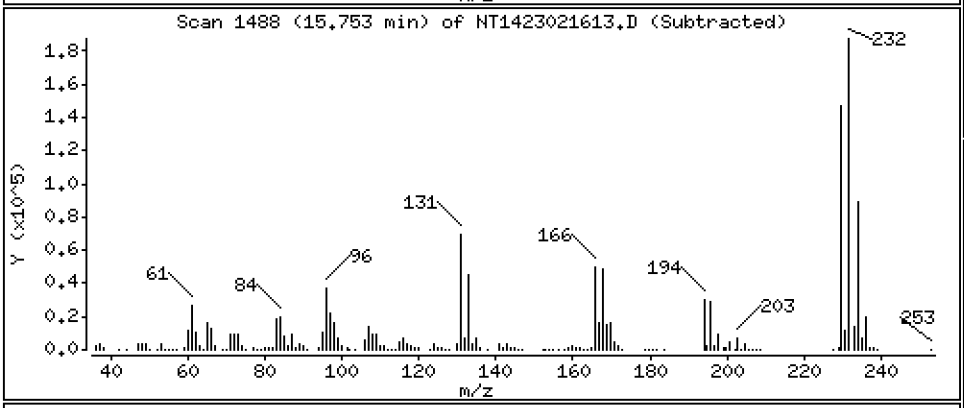
Column phase: ZB-5msi

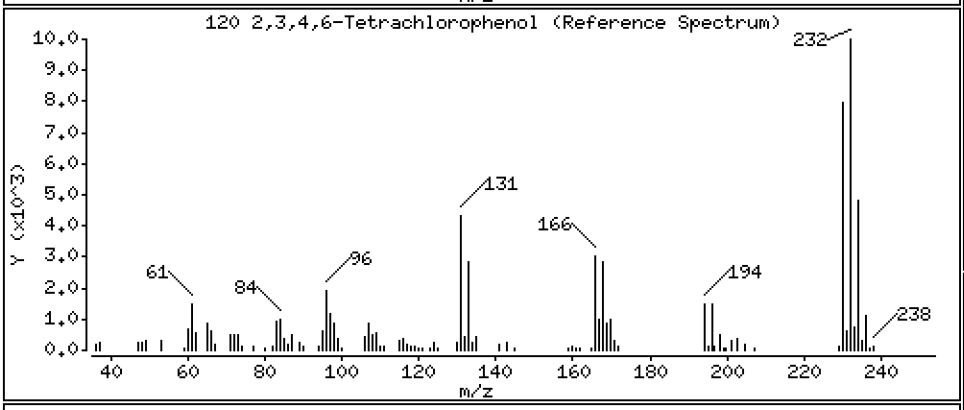
Column diameter: 0.25

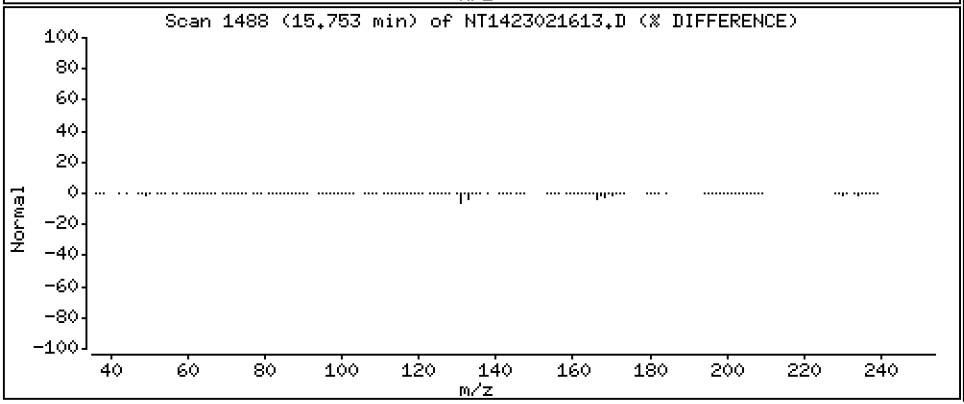
120 2,3,4,6-Tetrachlorophenol

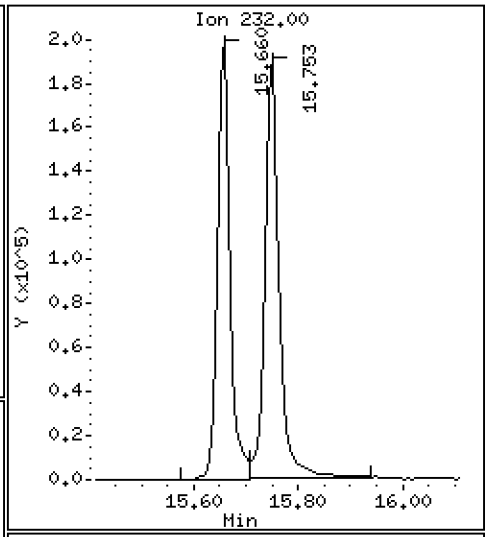
Concentration: 3.875 ug/mL

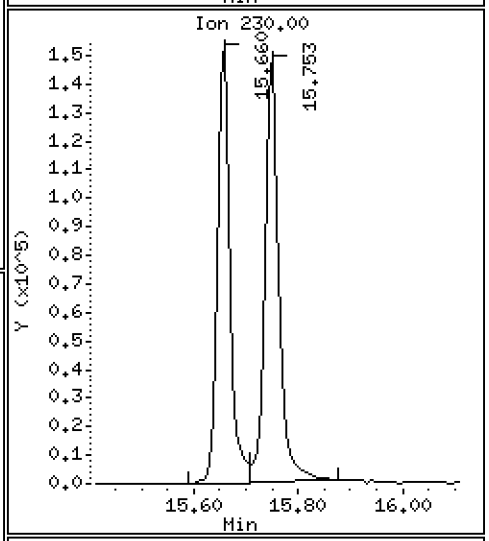


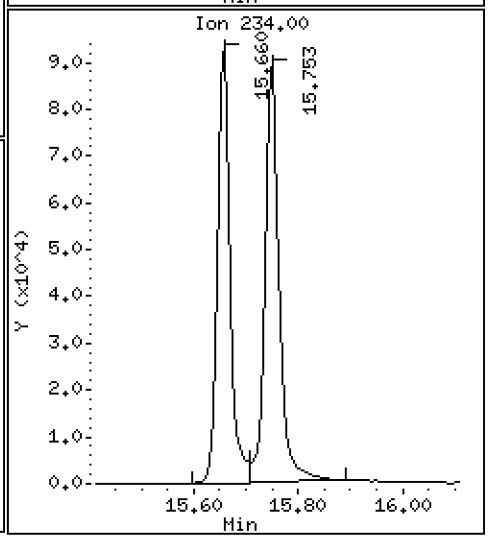












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

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Lab Smp Id: SLB0234-SCV1
Inj Date : 16-FEB-2023 21:18 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0234-SCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230216.b\ABN.m
Meth Date : 17-Feb-2023 15:05 deenayd Quant Type: ISTD
Cal Date : 16-FEB-2023 19:30 Cal File: NT1423021610.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: DEENAY-201905

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.674	6.682	(0.750)	812311	8.37324	8.373
$	2 Phenol-d5	99	8.266	8.266	(0.929)	1229645	7.99013	7.990
	3 Phenol	94	8.289	8.289	(0.931)	753865	4.62726	4.627
$	5 2-Chlorophenol-d4	132	8.536	8.536	(0.959)	852471	7.76321	7.763
	4 Bis(2-Chloroethyl)ether	93	8.459	8.451	(0.950)	642018	5.15867	5.159
	6 2-Chlorophenol	128	8.567	8.567	(0.963)	529676	4.61671	4.617
	7 1,3-Dichlorobenzene	146	8.838	8.838	(0.993)	609215	4.76976	4.770
*	8 1,4-Dichlorobenzene-d4	152	8.900	8.900	(1.000)	362894	4.00000	
	9 1,4-Dichlorobenzene	146	8.931	8.931	(1.003)	580699	4.79061	4.791
$	10 1,2-Dichlorobenzene-d4	152	9.264	9.257	(1.041)	410470	4.98694	4.987
	12 1,2-Dichlorobenzene	146	9.288	9.288	(1.044)	576549	4.75778	4.758
	11 Benzyl alcohol	108	9.179	9.202	(1.031)	425653	4.62539	4.625
	14 2,2'-oxybis(1-Chloropropane)	121	9.482	9.482	(1.065)	192988	5.56690	5.567
	13 2-Methylphenol	108	9.404	9.404	(1.057)	496864	4.36760	4.368
	17 Hexachloroethane	117	9.878	9.878	(1.110)	265463	5.03740	5.037
	16 N-Nitroso-di-n-propylamine	70	9.746	9.738	(1.095)	516514	4.98778	4.988
	15 4-Methylphenol	108	9.684	9.684	(1.088)	551454	4.59064	4.591
$	18 Nitrobenzene-d5	82	10.002	10.002	(0.878)	806144	5.19439	5.194
	19 Nitrobenzene	77	10.041	10.033	(0.881)	770727	4.94878	4.949
	20 Isophorone	82	10.483	10.491	(0.920)	1457561	7.09356	7.094
	21 2-Nitrophenol	139	10.669	10.677	(0.936)	316370	4.45322	4.453
	22 2,4-Dimethylphenol	107	10.723	10.724	(0.941)	502608	4.27378	4.274
	23 Bis(2-Chloroethoxy)methane	93	10.925	10.925	(0.959)	767264	5.74018	5.740
	24 Benzoic acid	105	10.933	10.879	(0.959)	412038	5.51023	5.510
	25 2,4-Dichlorophenol	162	11.119	11.127	(0.976)	515695	5.12362	5.124
	26 1,2,4-Trichlorobenzene	180	11.312	11.305	(0.993)	566926	4.64981	4.650
*	27 Naphthalene-d8	136	11.397	11.389	(1.000)	1343351	4.00000	
	28 Naphthalene	128	11.436	11.428	(1.003)	1568652	4.73587	4.736
	29 4-Chloroaniline	127	11.567	11.575	(1.015)	553475	3.91120	3.911
	30 Hexachlorobutadiene	225	11.799	11.799	(1.035)	369529	4.91651	4.917
	31 4-Chloro-3-methylphenol	107	12.534	12.542	(1.100)	549566	5.04457	5.045
	32 2-Methylnaphthalene	142	12.836	12.836	(1.126)	1142706	4.60635	4.606
	33 Hexachlorocyclopentadiene	237	13.300	13.301	(0.886)	438821	5.30111	5.301

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.455	13.463	(0.896)	404613	4.80795	4.808
	35	2,4,5-Trichlorophenol	196	13.532	13.541	(0.901)	428976	4.70685	4.707
$	36	2-Fluorobiphenyl	172	13.625	13.617	(0.907)	1488825	4.87017	4.870
	37	2-Chloronaphthalene	162	13.834	13.826	(0.921)	1157484	4.63882	4.639
	38	2-Nitroaniline	65	14.097	14.097	(0.939)	393653	4.85233	4.852
	39	Dimethylphthalate	163	14.538	14.531	(0.968)	1224849	4.69299	4.693
	40	Acenaphthylene	152	14.701	14.701	(0.979)	1772439	4.65722	4.657
	41	2,6-Dinitrotoluene	165	14.670	14.670	(0.977)	303057	4.93469	4.935
*	42	Acenaphthene-d10	164	15.018	15.018	(1.000)	854455	4.00000	
	43	3-Nitroaniline	138	14.956	14.957	(0.996)	320818	4.92163	4.922
	44	Acenaphthene	153	15.088	15.080	(1.005)	1055715	4.63322	4.633
	45	2,4-Dinitrophenol	184	15.265	15.282	(1.016)	10046	0.25021	0.2502
	46	Dibenzofuran	168	15.412	15.405	(1.026)	1701574	4.54830	4.548
	47	4-Nitrophenol	109	15.273	15.273	(1.017)	153415	4.05153	4.052
	48	2,4-Dinitrotoluene	165	15.482	15.475	(1.031)	421549	4.85479	4.855
	50	Diethylphthalate	149	15.992	15.984	(1.065)	1638308	4.72171	4.722
	49	Fluorene	166	16.123	16.124	(1.074)	1814406	4.63777	4.638
	51	4-Chlorophenyl-phenylether	204	16.123	16.116	(1.074)	994538	4.75422	4.754
	52	4-Nitroaniline	138	16.224	16.224	(1.080)	356106	4.76155	4.762
	53	4,6-Dinitro-2-methylphenol	198	16.316	16.370	(0.904)	216522	3.65299	3.653
	54	N-Nitrosodiphenylamine	169	16.370	16.370	(0.907)	1149631	4.90725	4.907
$	55	2,4,6-Tribromophenol	330	16.663	16.663	(1.110)	357193	7.14108	7.141
	56	4-Bromophenyl-phenylether	248	17.126	17.118	(0.949)	537640	5.15255	5.153
	57	Hexachlorobenzene	284	17.435	17.434	(0.966)	496114	4.67908	4.679
	58	Pentachlorophenol	266	17.791	17.814	(0.985)	204787	3.93169	3.932
*	59	Phenanthrene-d10	188	18.054	18.054	(1.000)	1630237	4.00000	
	60	Phenanthrene	178	18.108	18.101	(1.003)	1837237	4.68992	4.690
	61	Anthracene	178	18.201	18.193	(1.008)	1670411	4.30397	4.304
	62	Carbazole	167	18.534	18.534	(1.027)	1687690	4.79185	4.792
	63	Di-n-butylphthalate	149	19.338	19.346	(1.071)	2169531	5.51497	5.515
	64	Fluoranthene	202	20.499	20.499	(0.887)	2246209	4.68180	4.682
	65	Pyrene	202	20.924	20.925	(0.905)	2232282	4.40013	4.400
$	66	Terphenyl-d14	244	21.219	21.219	(0.918)	1704165	4.73097	4.731
	67	Butylbenzylphthalate	149	22.148	22.148	(0.958)	770848	4.56767	4.568
	68	Benzo(a)anthracene	228	23.092	23.092	(0.999)	1612232	4.53042	4.530
*	69	Chrysene-d12	240	23.123	23.123	(1.000)	1112056	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.054	23.054	(0.997)	1021005	9.32793	9.328
	71	Chrysene	228	23.170	23.162	(1.002)	1432188	4.47430	4.474
	72	bis(2-Ethylhexyl)phthalate	149	23.178	23.178	(0.960)	1007189	4.64885	4.649
*	134	Di-n-octylphthalate-d4	153	24.153	24.153	(1.000)	1298332	4.00000	
	73	Di-n-octylphthalate	149	24.168	24.161	(1.001)	1506391	4.96217	4.962
	74	Benzo(b)fluoranthene	252	24.943	24.943	(0.971)	1120169	4.81299	4.813
	75	Benzo(k)fluoranthene	252	24.989	24.989	(0.973)	1203272	4.83840	4.838
	76	Benzo(a)pyrene	252	25.577	25.578	(0.996)	1024300	4.60711	4.607
*	77	Perylene-d12	264	25.686	25.686	(1.000)	733476	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.244	28.244	(1.100)	816683	4.39546	4.395
	79	Dibenzo(a,h)anthracene	278	28.259	28.267	(1.100)	668295	4.36484	4.365
	80	Benzo(g,h,i)perylene	276	28.997	28.997	(1.129)	664180	4.38025	4.380
	90	N-Nitrosodimethylamine	74	4.566	4.566	(0.513)	423038	5.63216	5.632
	91	Aniline	93	Compound Not Detected.					
	93	Benzidine	184	20.747	20.754	(0.897)	1133759	9.98385	9.984
	103	Pyridine	79	4.581	4.597	(0.515)	661518	5.56593	5.566
	105	1-methylnaphthalene	142	13.060	13.053	(1.146)	1108498	4.75965	4.760
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.447	16.440	(1.095)	1962985	4.65510	4.655

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.989	24.943	(0.973)	2206870	9.71223	9.712
120 2,3,4,6-Tetrachlorophenol	232	15.752	15.760	(1.049)	382367	3.87456	3.875

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021613.D
Lab Smp Id: SLB0234-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\ABN.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 17:06
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	375798	187899	751596	362894	-3.43
27 Naphthalene-d8	1378169	689085	2756338	1343351	-2.53
42 Acenaphthene-d10	847135	423568	1694270	854455	0.86
59 Phenanthrene-d10	1675180	837590	3350360	1630237	-2.68
69 Chrysene-d12	1073562	536781	2147124	1112056	3.59
134 Di-n-octylphthala	1344129	672065	2688258	1298332	-3.41
77 Perylene-d12	721978	360989	1443956	733476	1.59

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	-0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.40	-0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	-0.00
59 Phenanthrene-d10	18.05	17.55	18.55	18.05	-0.00
69 Chrysene-d12	23.12	22.62	23.62	23.12	-0.00
134 Di-n-octylphthala	24.15	23.65	24.65	24.15	-0.00
77 Perylene-d12	25.69	25.19	26.19	25.69	-0.00

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

REVIEW SUMMARY FOR FILE - NT1423021613.D

Lab ID: SLB0234-SCV1
nt14.i, ABN.m, 16-FEB-2023 21:18

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.959	0.000	0.9593	Benzoic acid
1.016	0.000	1.0165	2,4-Dinitrophenol
1.017	0.000	1.0170	4-Nitrophenol
0.985	0.000	0.9854	Pentachlorophenol

RRT check based on Ccal File: NT1423021610.D

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

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

LOW-CONCENTRATION CALIBRATION VERIFICATION

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GB00046
Laboratory ID: SLB0251-LCV1
Sequence: SLB0251
Standard ID: K011106

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	0.50000	0.5	-9.4	50.00
4-Methylphenol	0.50000	0.5	-8.3	50.00
Naphthalene	0.50000	0.5	-4.0	50.00
2-Methylnaphthalene	0.50000	0.5	-1.8	50.00
Acenaphthylene	0.50000	0.6	11.6	50.00
Dimethylphthalate	0.50000	0.5	0.6	50.00
Acenaphthene	0.50000	0.5	-4.0	50.00
Dibenzofuran	0.50000	0.5	-3.0	50.00
Fluorene	0.50000	0.5	-0.6	50.00
Phenanthrene	0.50000	0.5	-3.8	50.00
Anthracene	0.50000	0.5	-0.4	50.00
Fluoranthene	0.50000	0.6	13.7	50.00
Pyrene	0.50000	0.6	12.8	50.00
Butylbenzylphthalate	0.50000	0.5	7.1	50.00
Benzo(a)anthracene	0.50000	0.5	-2.1	50.00
Chrysene	0.50000	0.5	-3.6	50.00
bis(2-Ethylhexyl)phthalate	0.50000	0.4	-25.4	50.00
Benzofluoranthenes, Total	1.0000	0.9	-6.3	50.00
Benzo(a)pyrene	0.50000	0.4	-10.3	50.00
Indeno(1,2,3-cd)pyrene	0.50000	0.4	-25.5	50.00
Dibenzo(a,h)anthracene	0.50000	0.4	-23.5	50.00
Benzo(g,h,i)perylene	0.50000	0.3	-32.0	50.00
2-Fluorophenol	0.75000	0.692	-7.7	50.00
Phenol-d5	0.75000	0.696	-7.2	50.00
2-Chlorophenol-d4	0.75000	0.751	0.1	50.00
1,2-Dichlorobenzene-d4	0.50000	0.489	-2.2	50.00
Nitrobenzene-d5	0.50000	0.479	-4.1	50.00
2-Fluorobiphenyl	0.50000	0.505	1.0	50.00
2,4,6-Tribromophenol	0.75000	0.594	-20.8	50.00

LOW-CONCENTRATION CALIBRATION VERIFICATION
EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GB00046
Laboratory ID: SLB0251-LCV1
Sequence: SLB0251
Standard ID: K011106

p-Terphenyl-d14	0.50000	0.626	25.3	50.00

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021718.D

Date : 17-FEB-2023 20:55

Client ID:

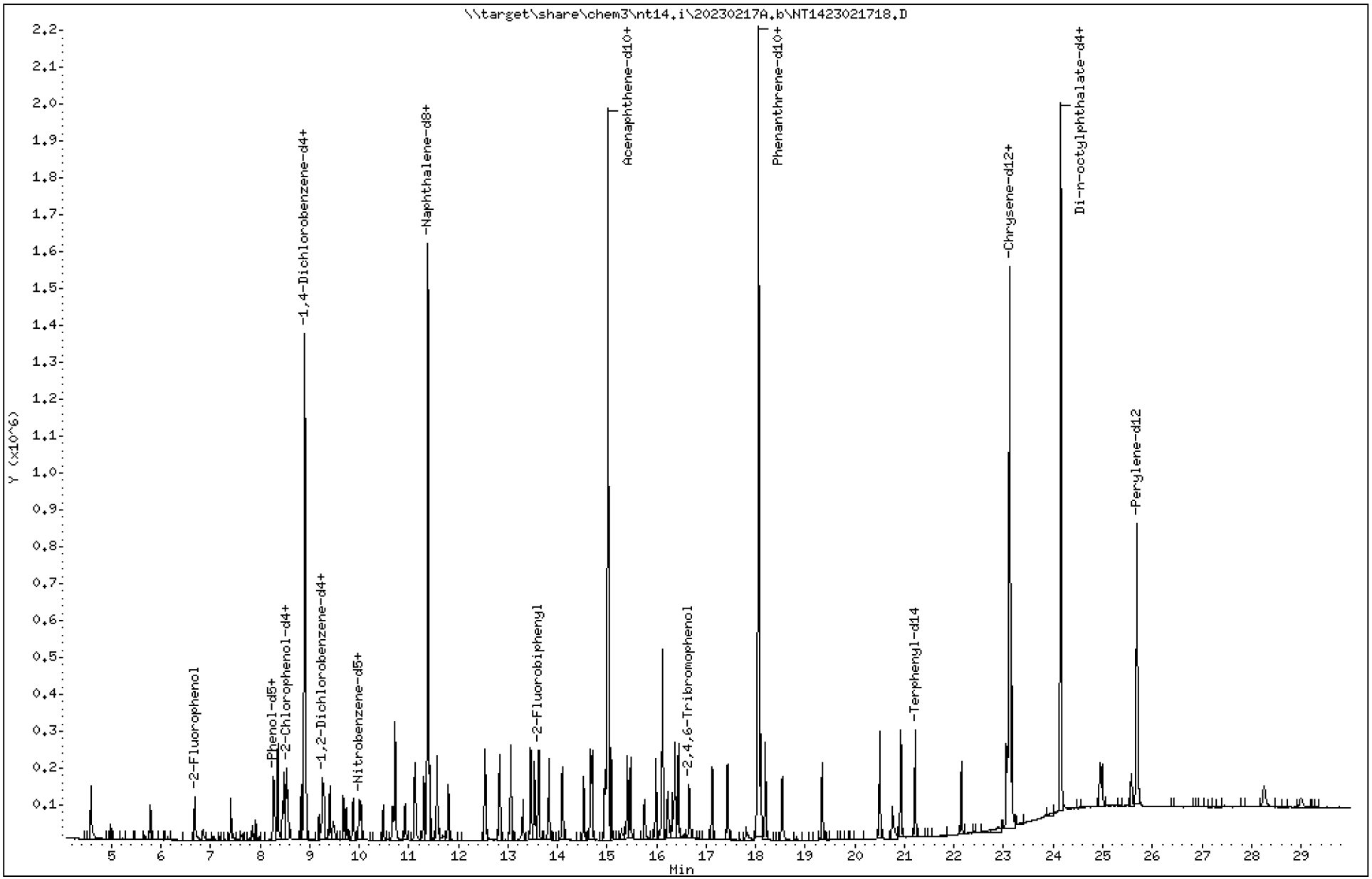
Instrument: nt14.i

Sample Info: SLB0251-LCV1

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

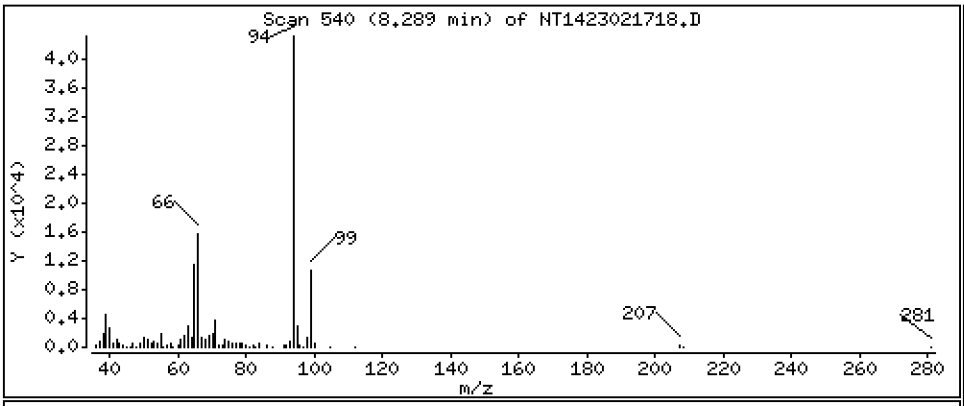
Operator: DSD

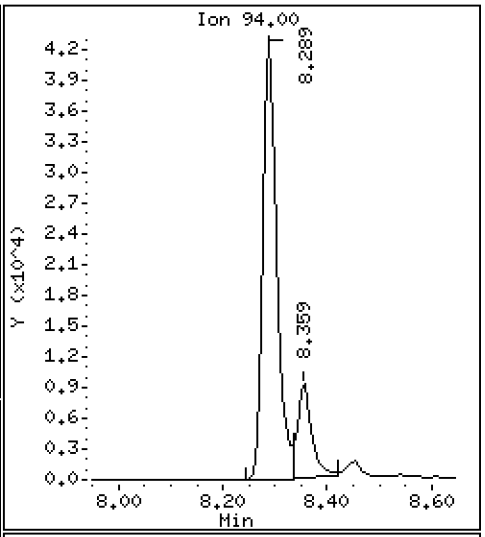
Column phase: ZB-5msi

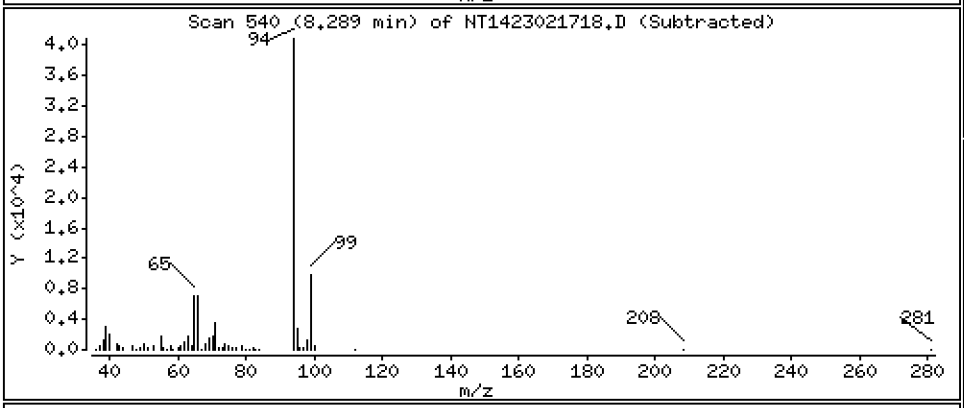
Column diameter: 0.25

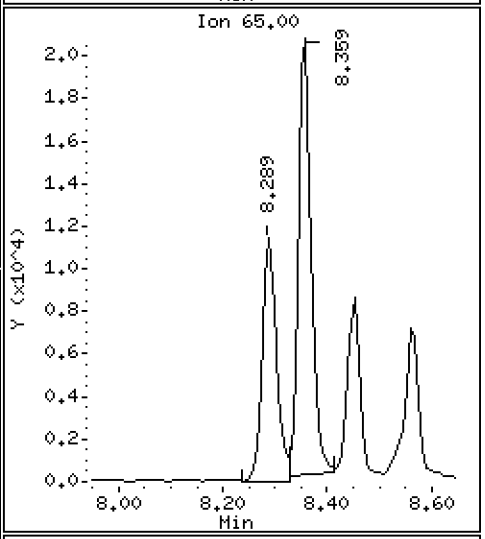
3 Phenol

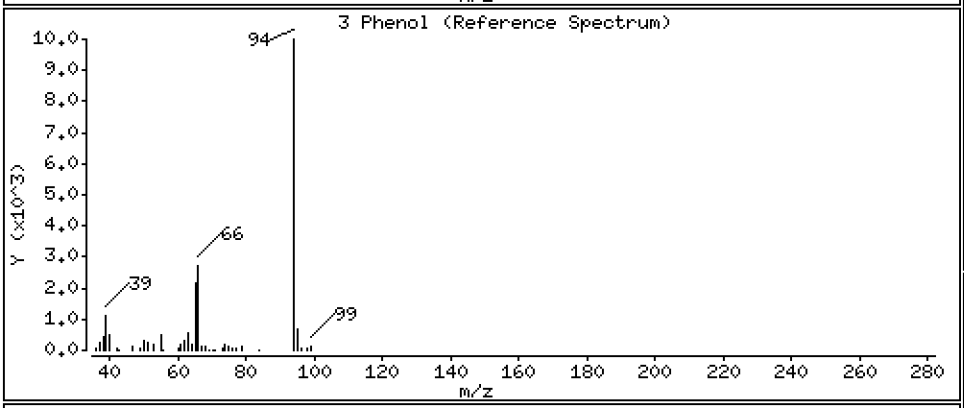
Concentration: 0.4530 ug/mL

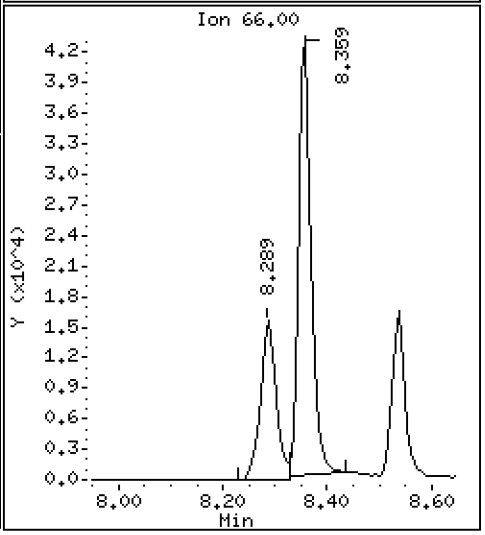


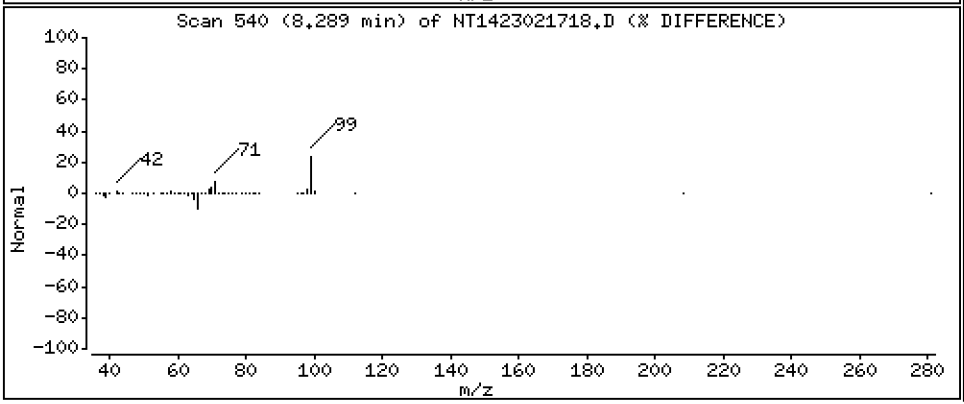












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

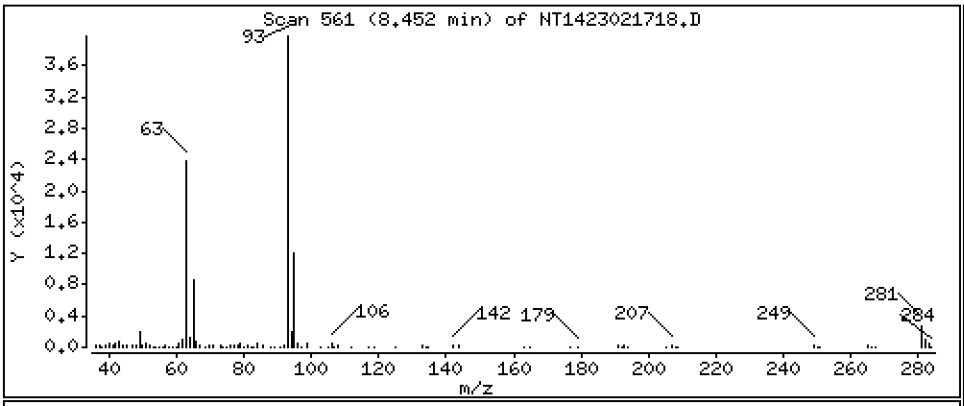
Operator: DSD

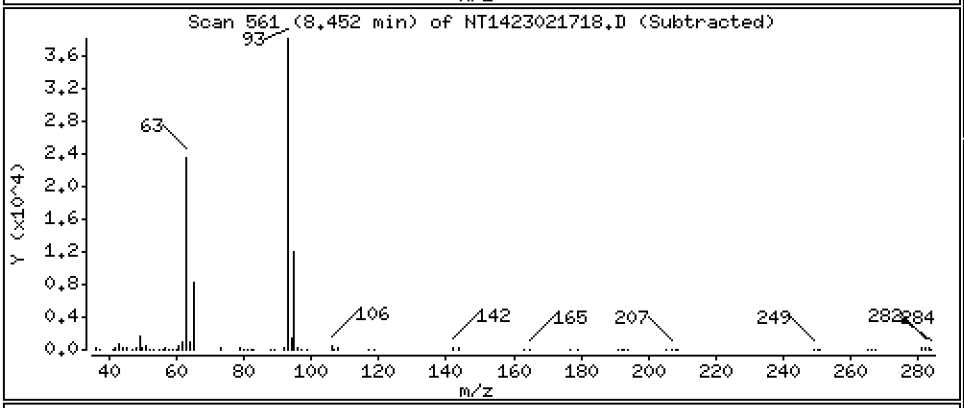
Column phase: ZB-5msi

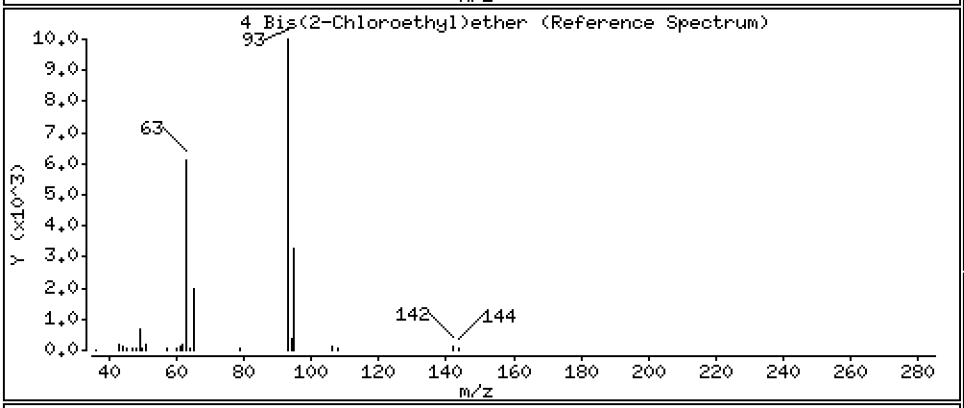
Column diameter: 0.25

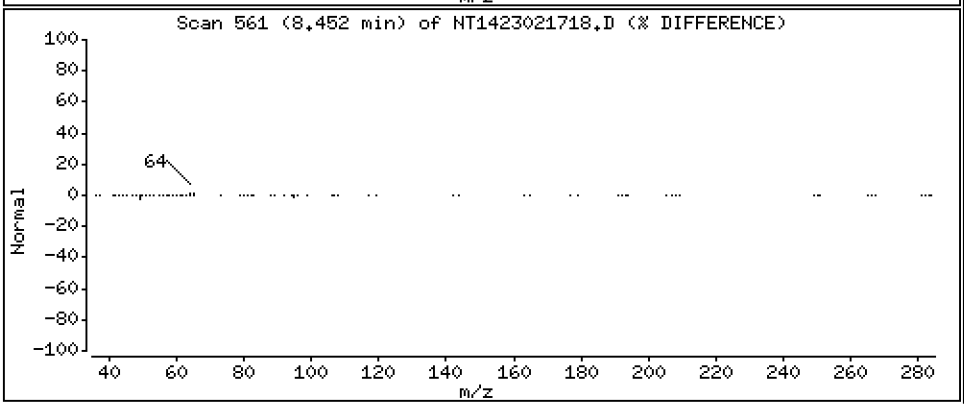
4 Bis(2-Chloroethyl)ether

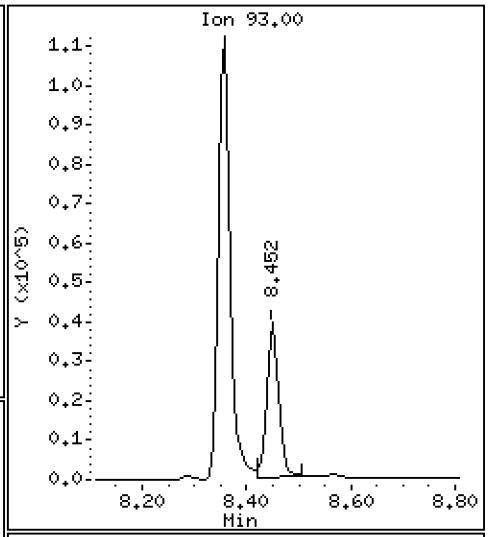
Concentration: 0.4642 ug/mL

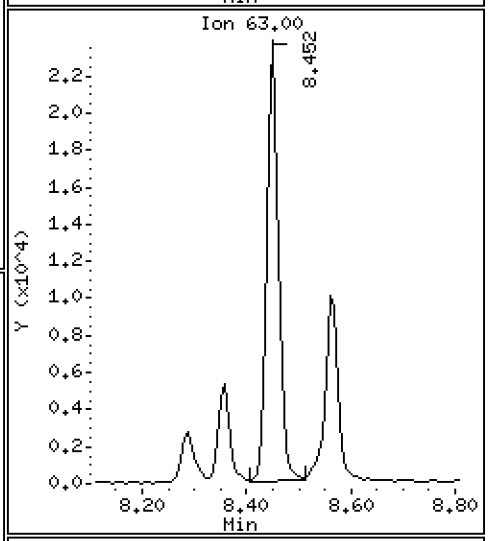


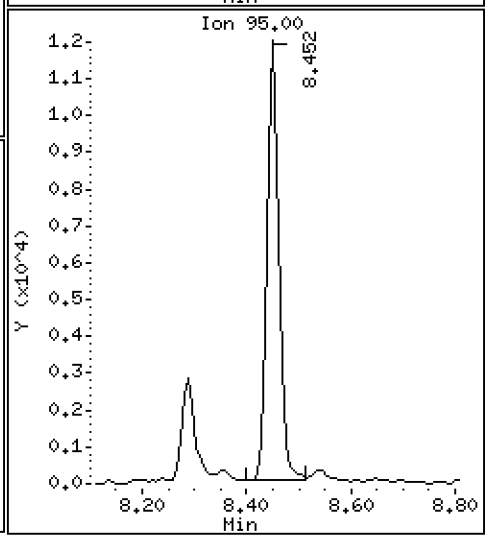












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

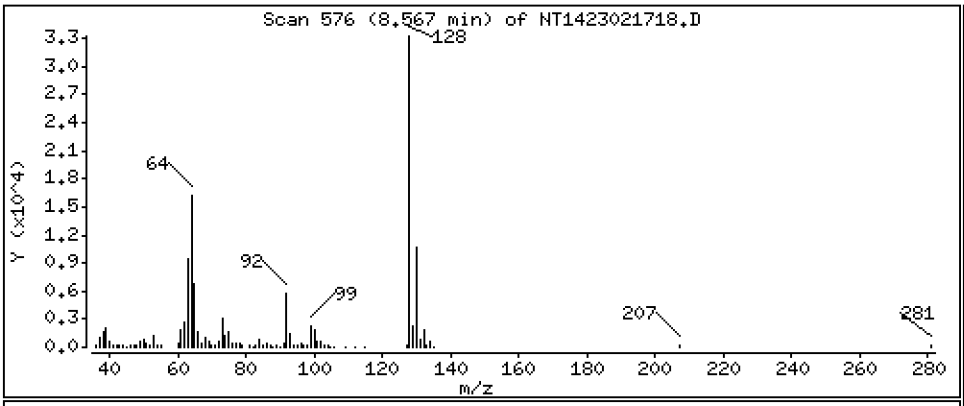
Operator: DSD

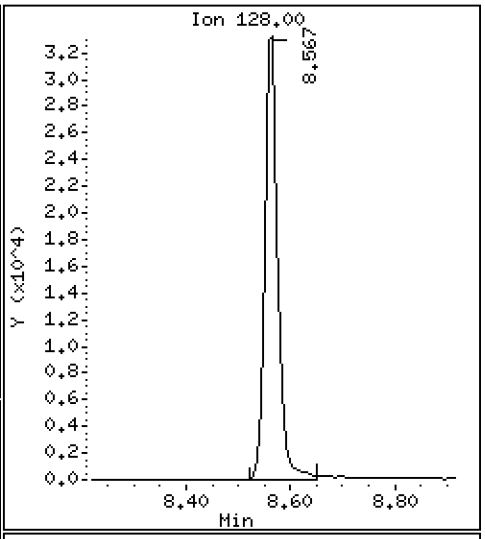
Column phase: ZB-5msi

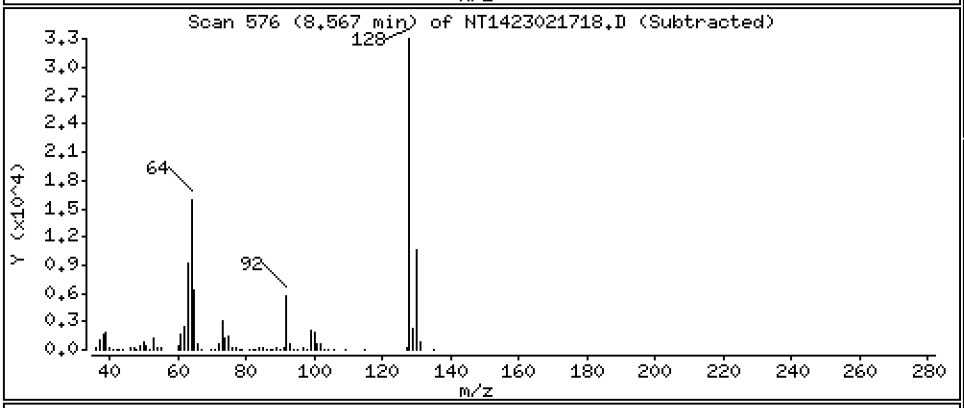
Column diameter: 0.25

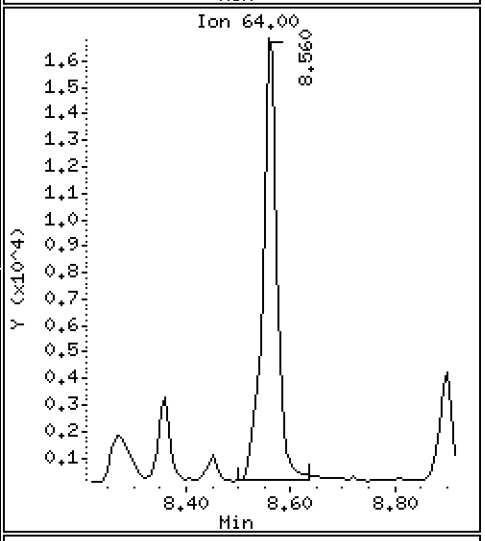
6 2-Chlorophenol

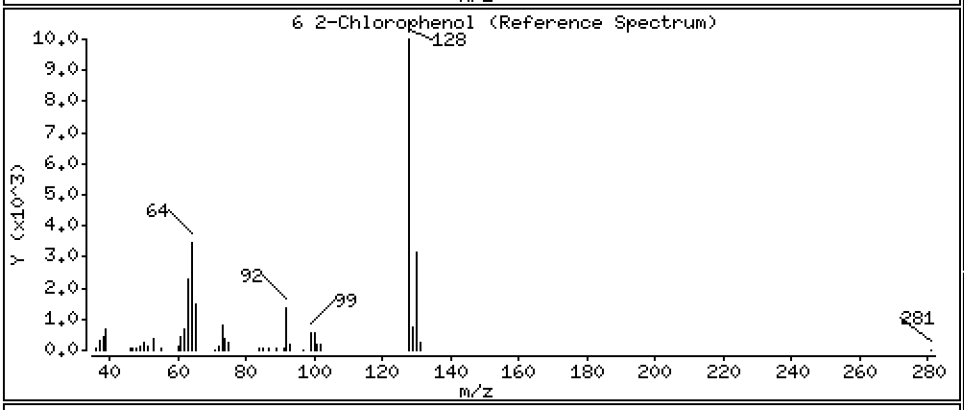
Concentration: 0.4801 ug/mL

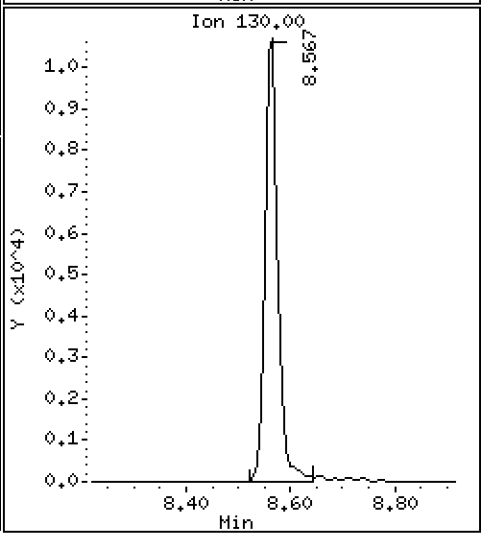


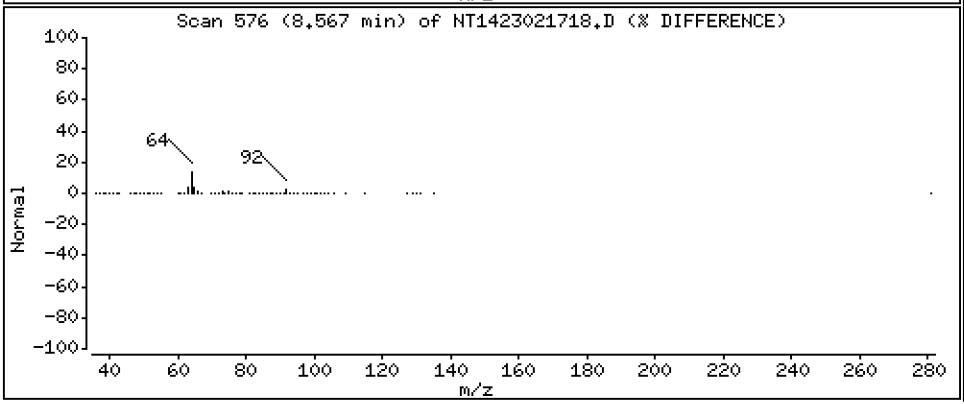












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

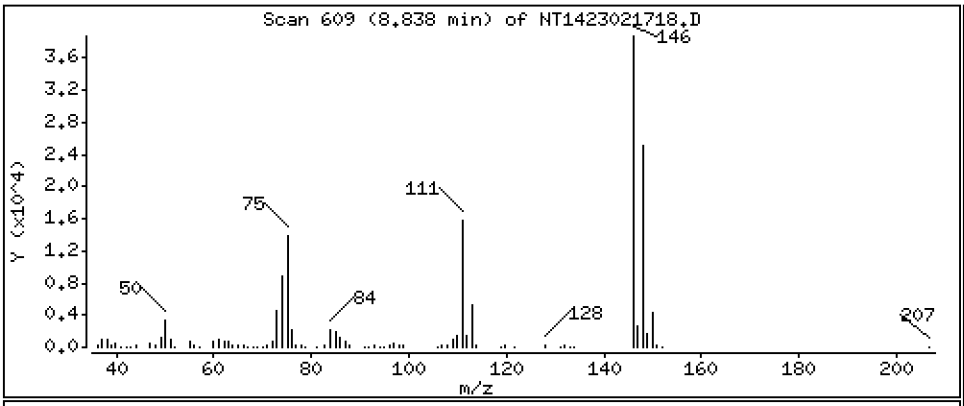
Operator: DSD

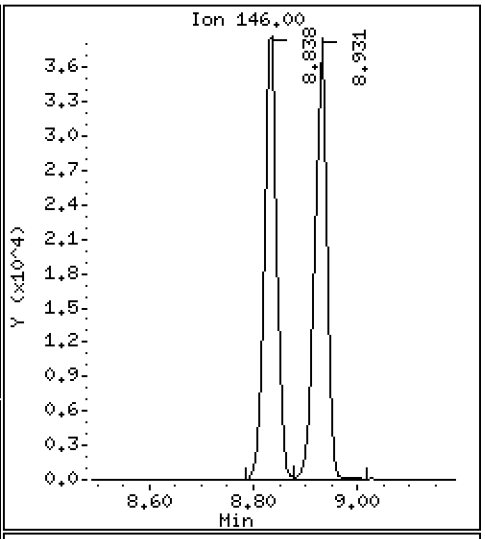
Column phase: ZB-5msi

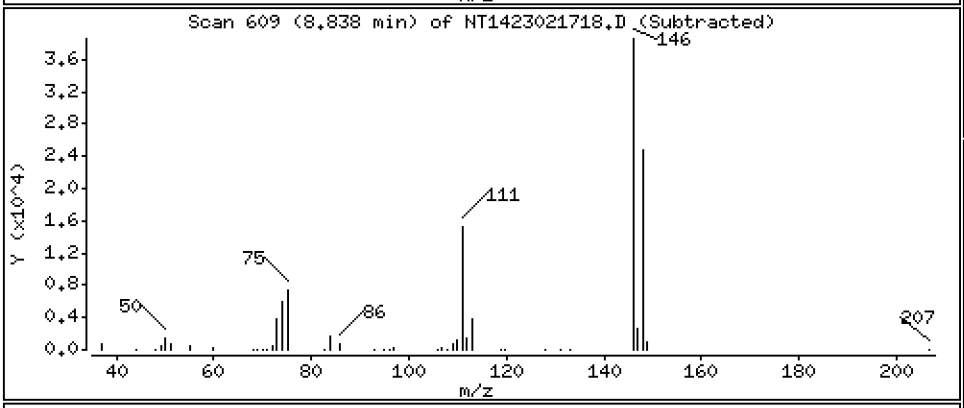
Column diameter: 0.25

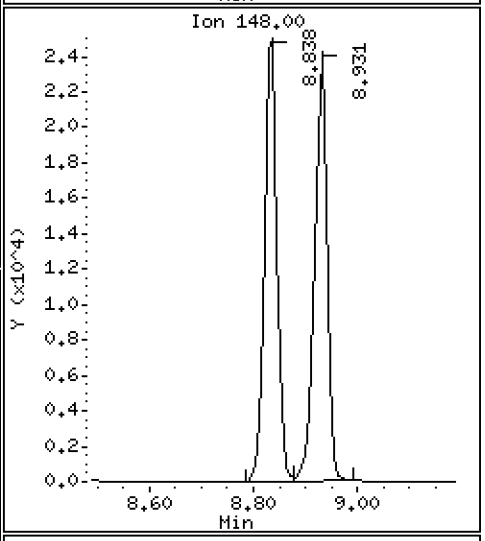
7 1,3-Dichlorobenzene

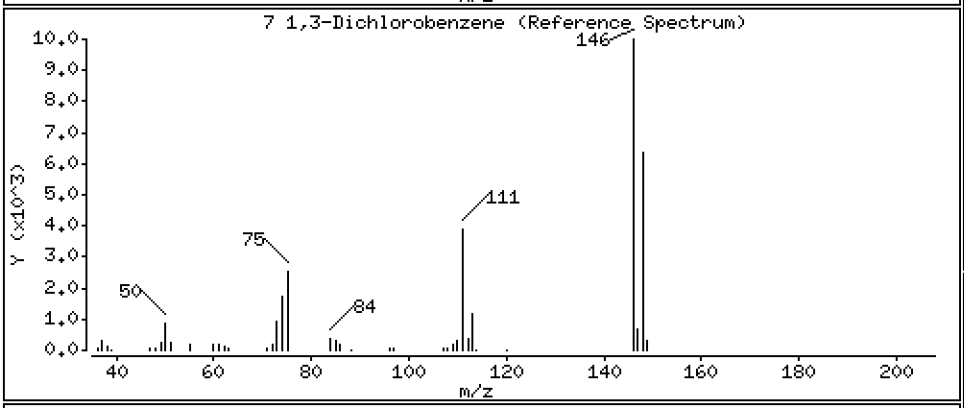
Concentration: 0.4889 ug/mL

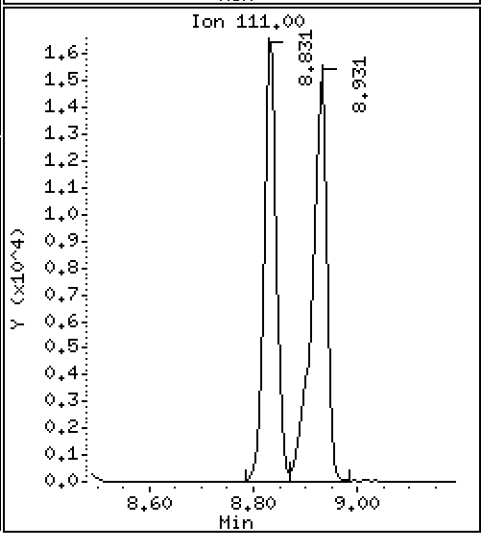


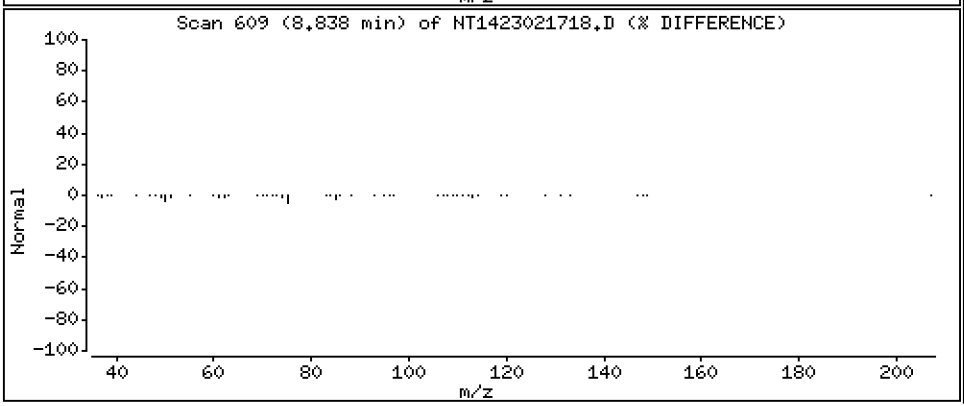












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

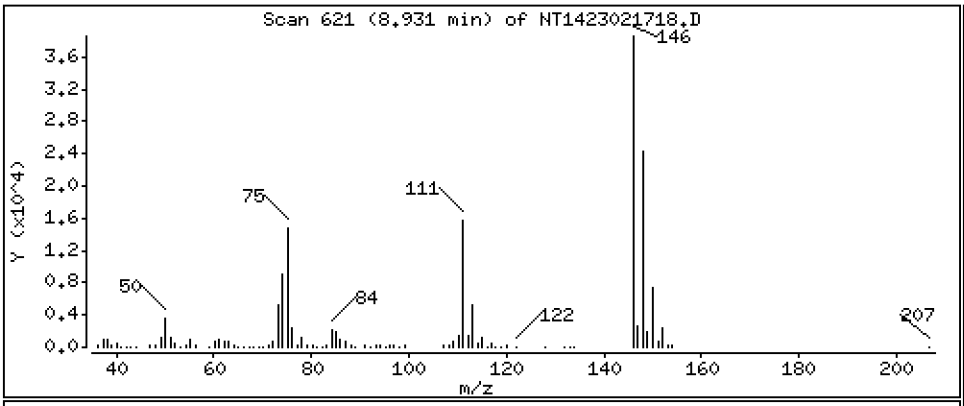
Operator: DSD

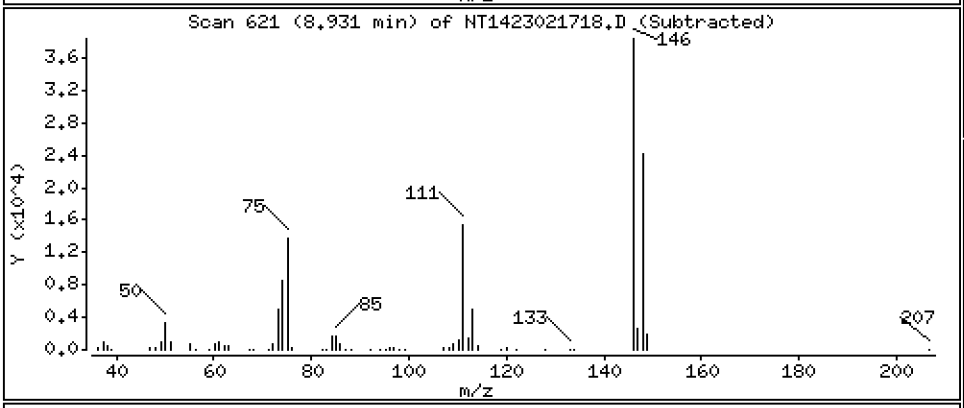
Column phase: ZB-5msi

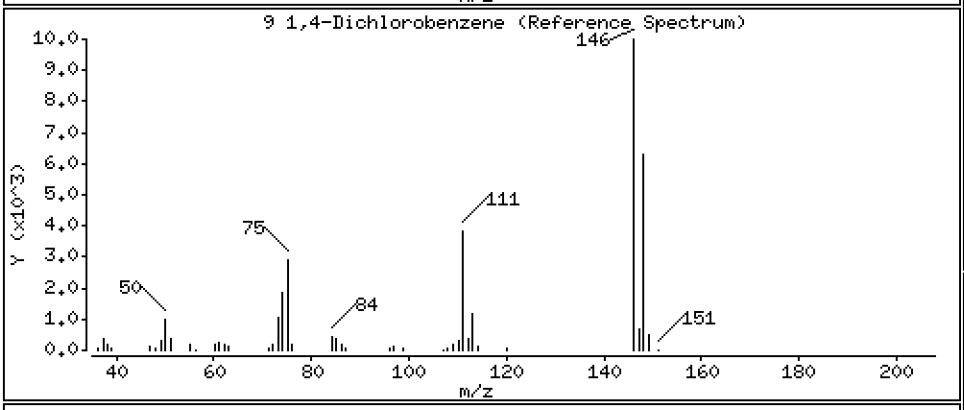
Column diameter: 0.25

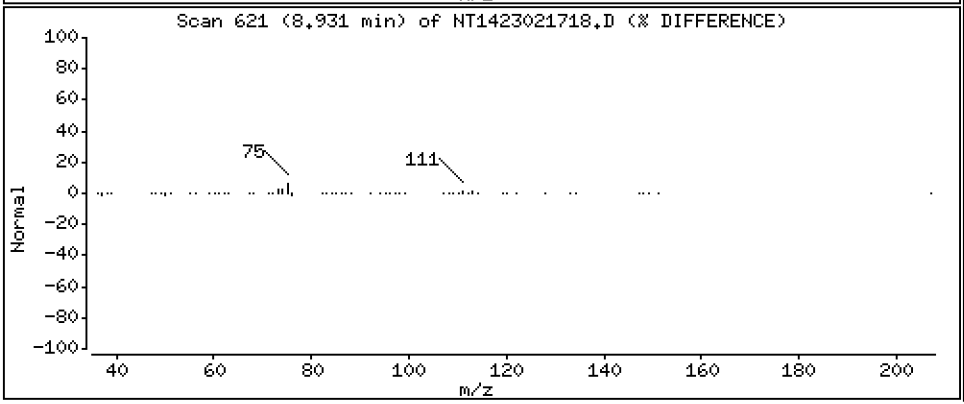
9 1,4-Dichlorobenzene

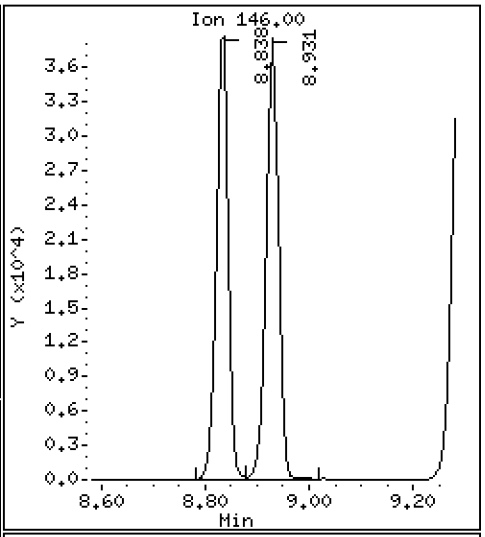
Concentration: 0.4774 ug/mL

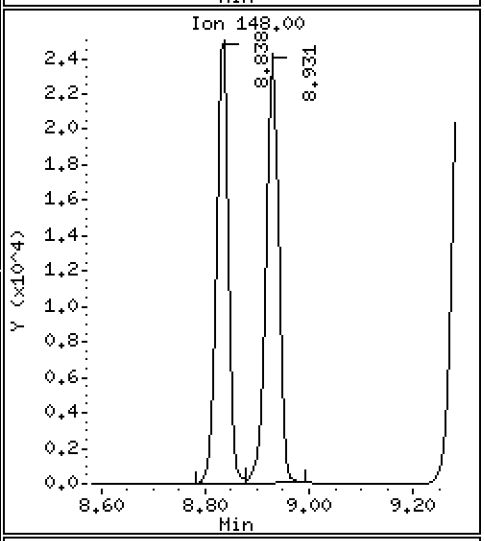


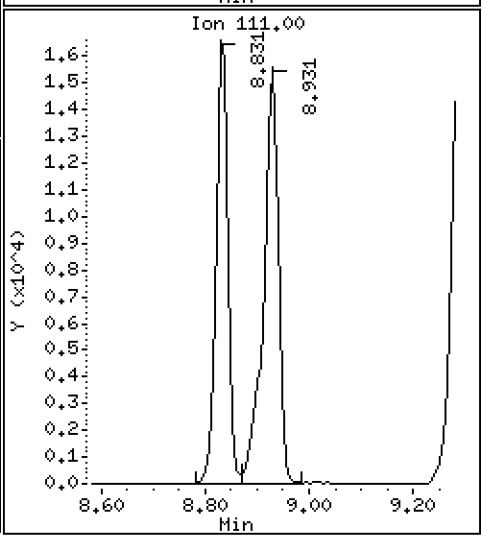












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

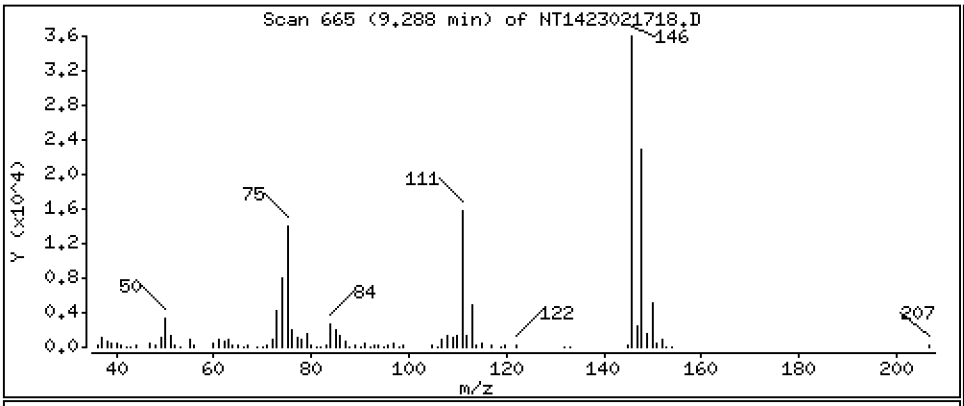
Operator: DSD

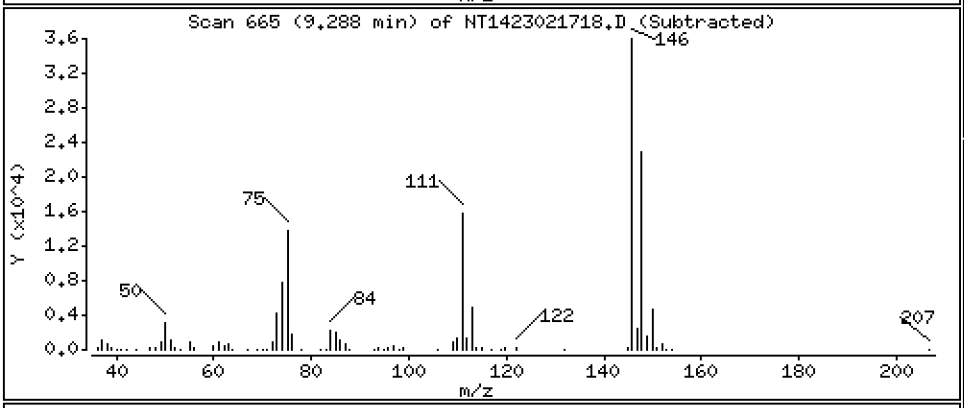
Column phase: ZB-5msi

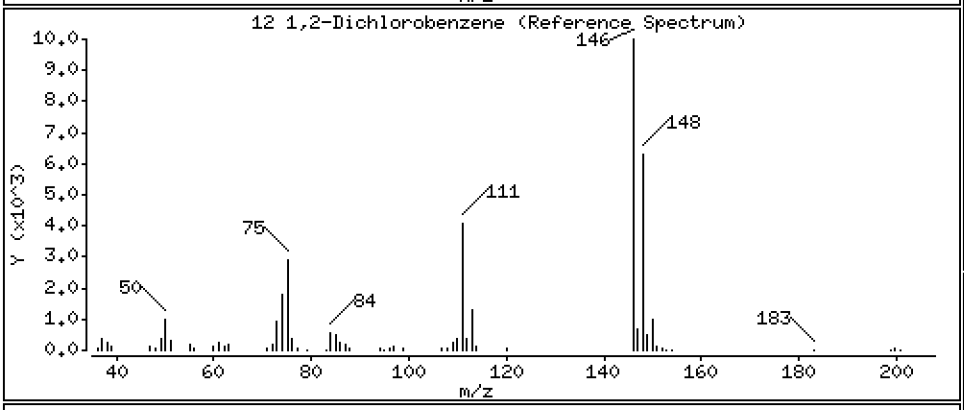
Column diameter: 0.25

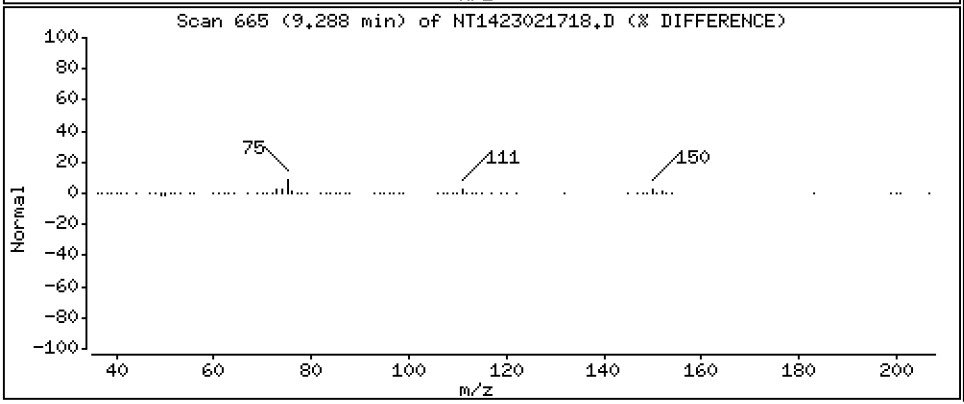
12 1,2-Dichlorobenzene

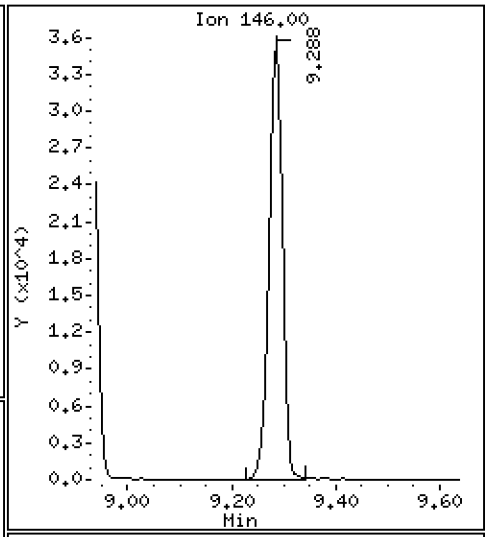
Concentration: 0.4854 ug/mL

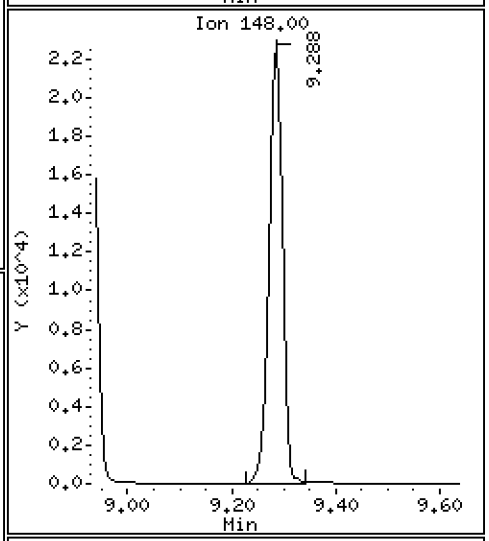


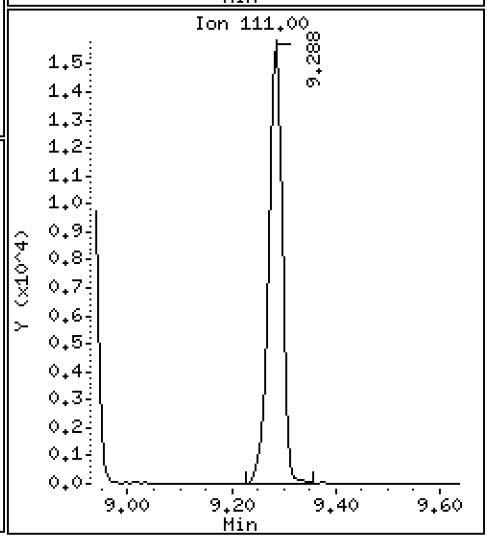












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

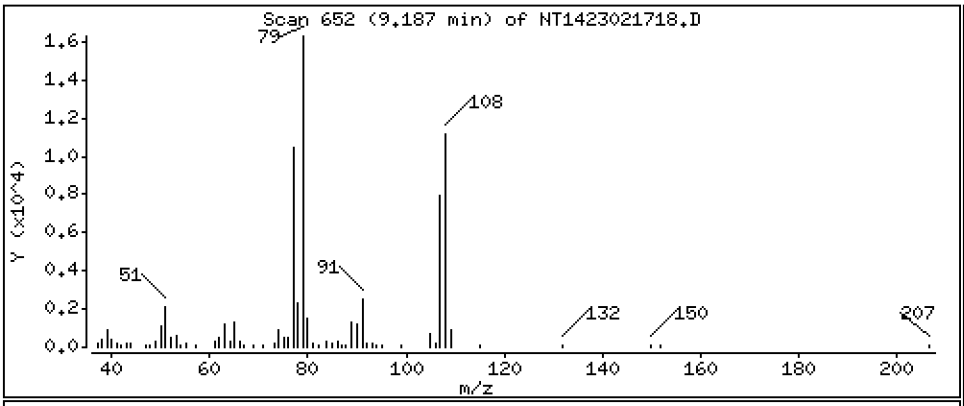
Operator: DSD

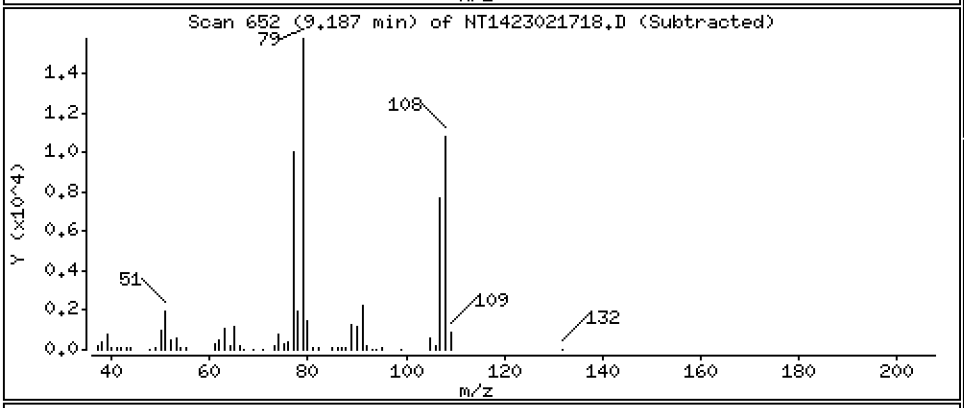
Column phase: ZB-5msi

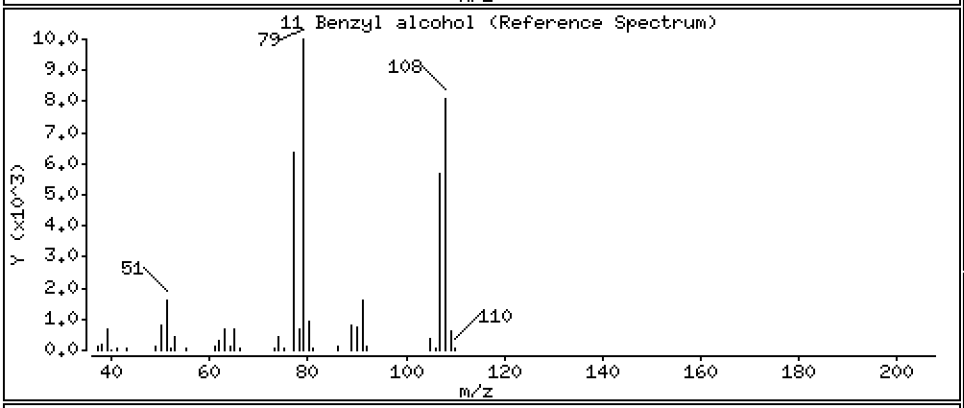
Column diameter: 0.25

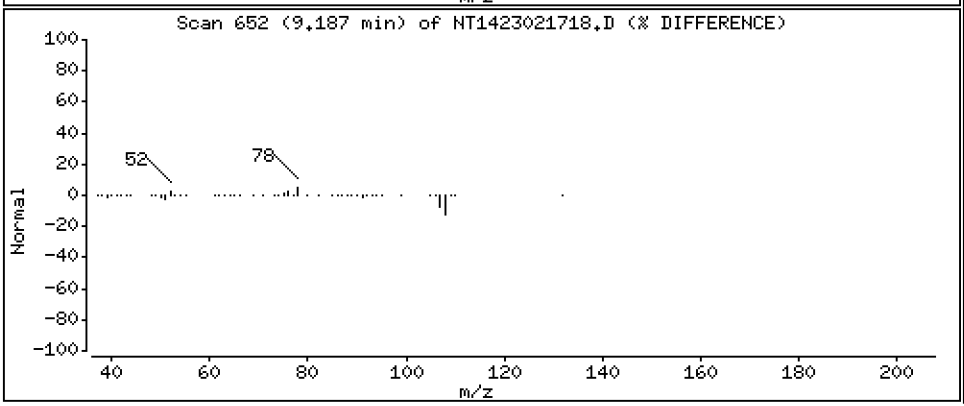
11 Benzyl alcohol

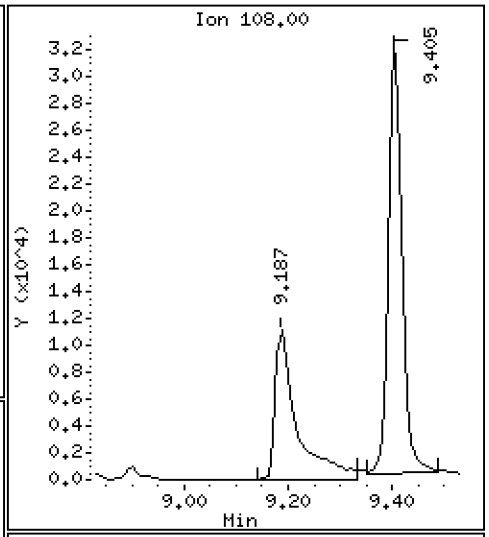
Concentration: 0.3639 ug/mL

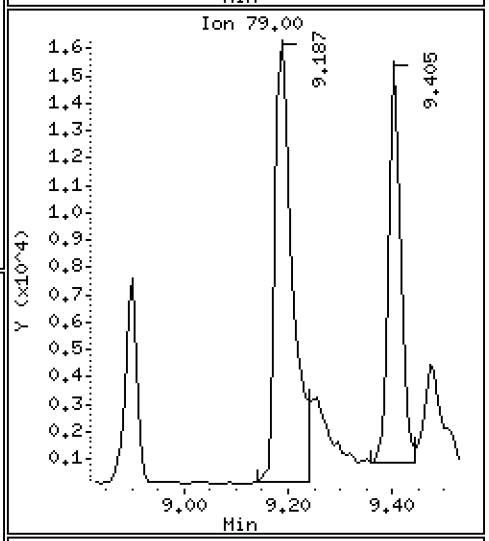


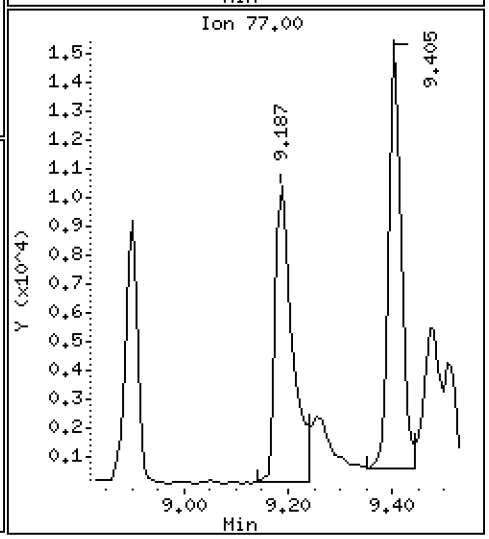












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

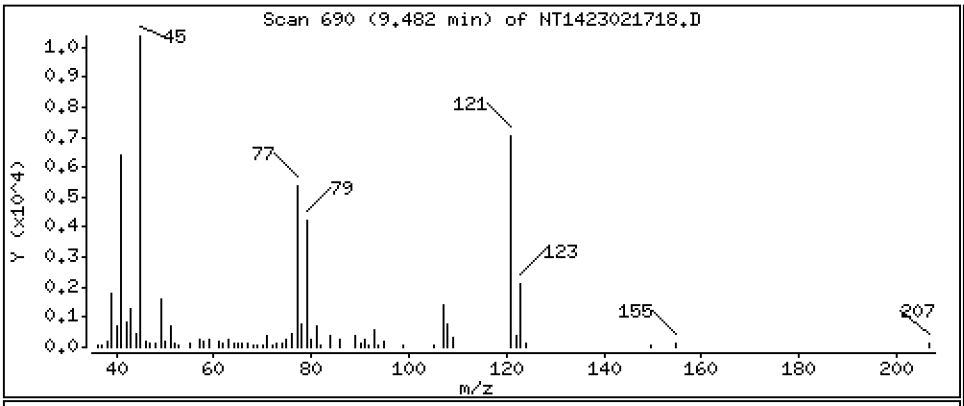
Operator: DSD

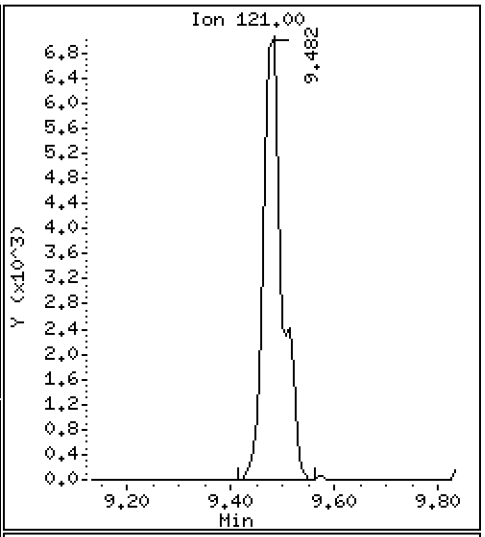
Column phase: ZB-5msi

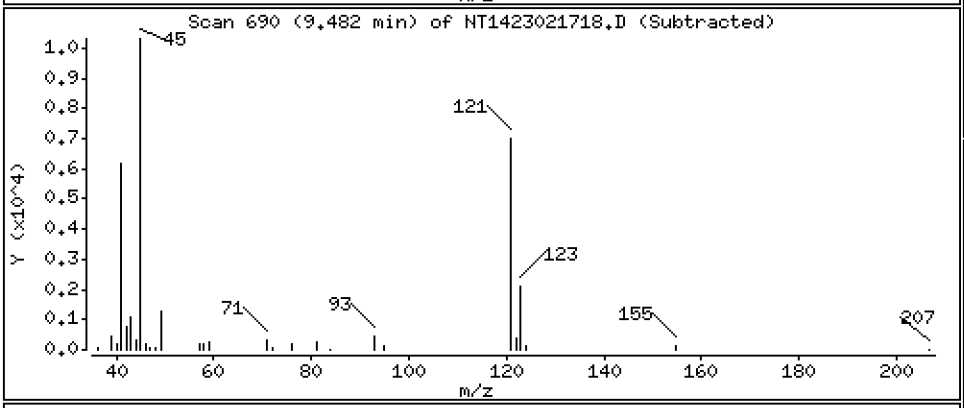
Column diameter: 0.25

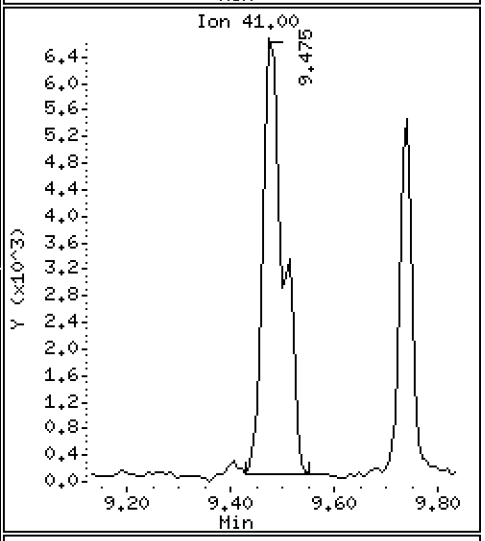
14 2,2'-oxybis(1-Chloropropane)

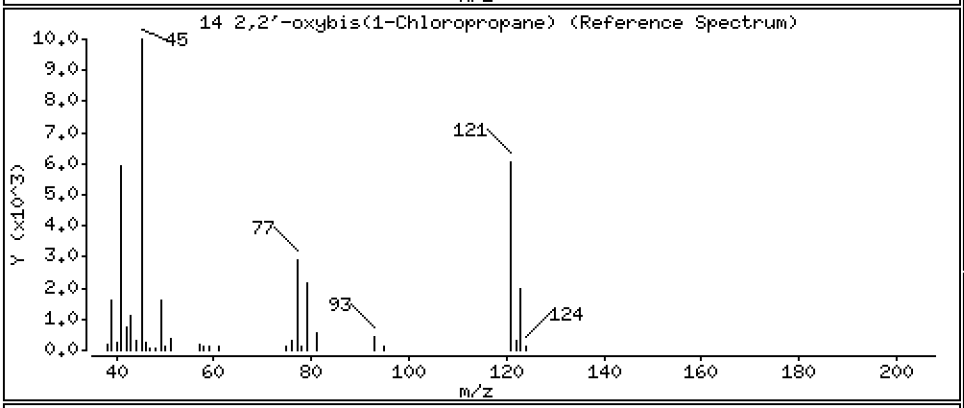
Concentration: 0.4869 ug/mL

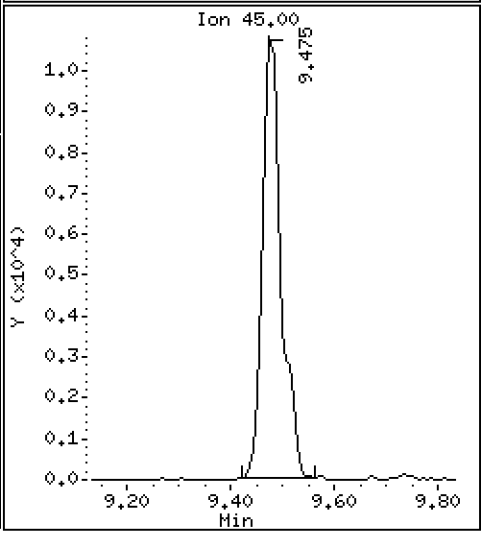


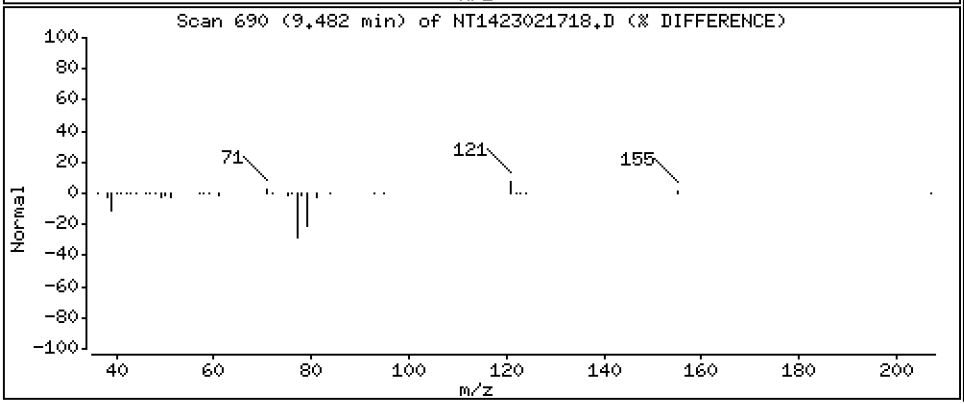












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

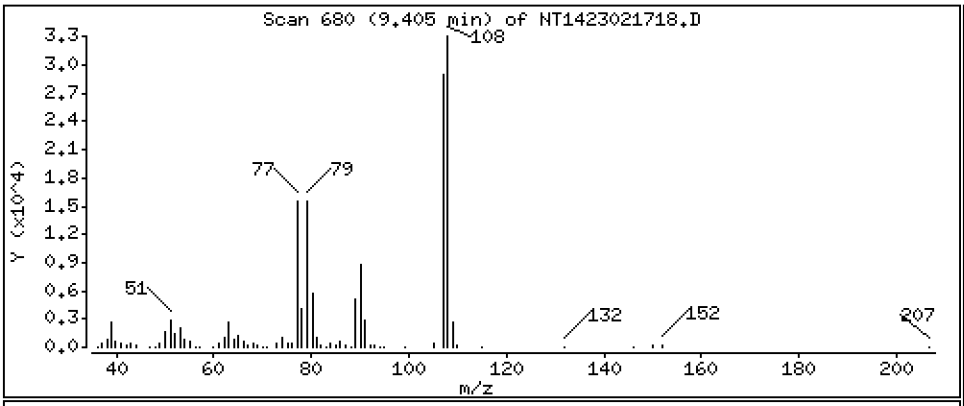
Operator: DSD

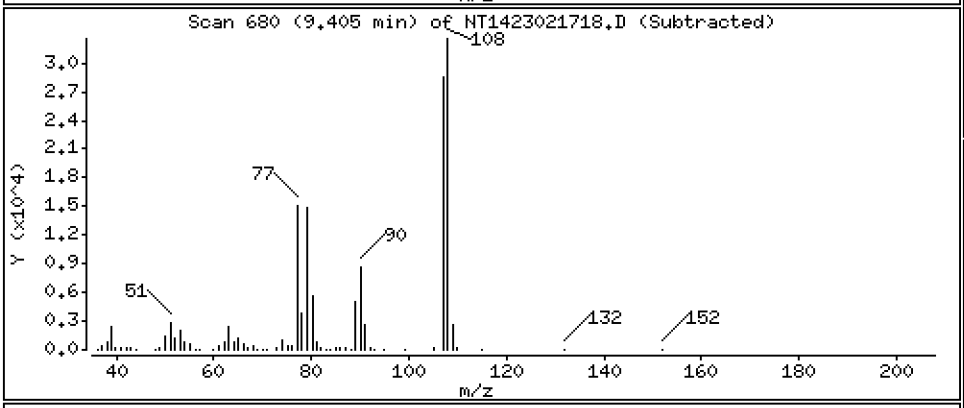
Column phase: ZB-5msi

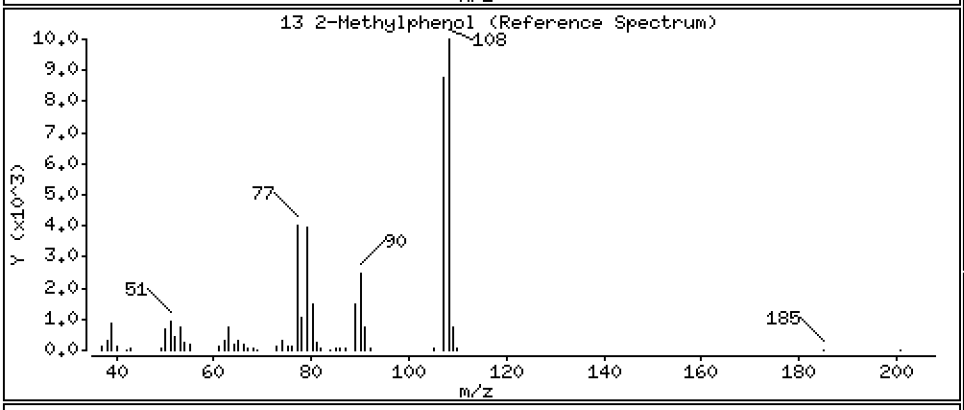
Column diameter: 0.25

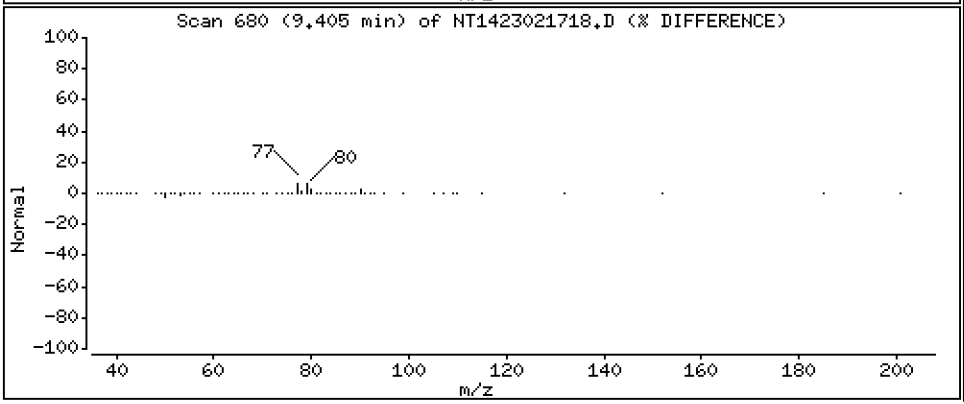
13 2-Methylphenol

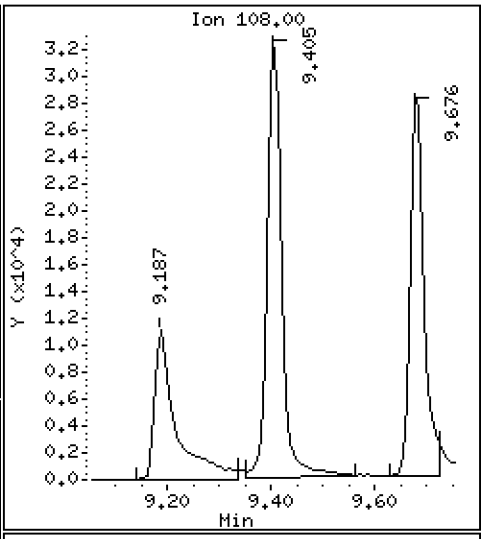
Concentration: 0.5079 ug/mL

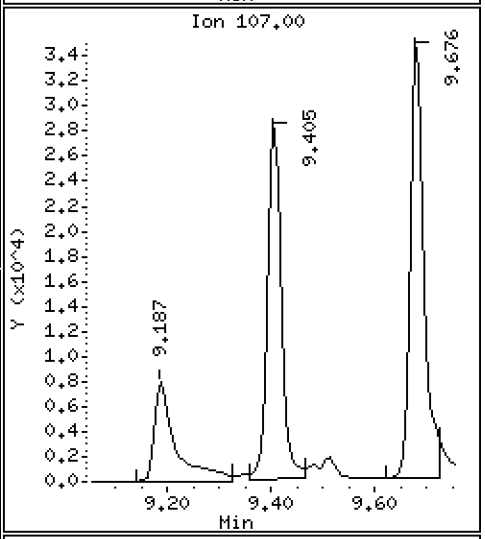


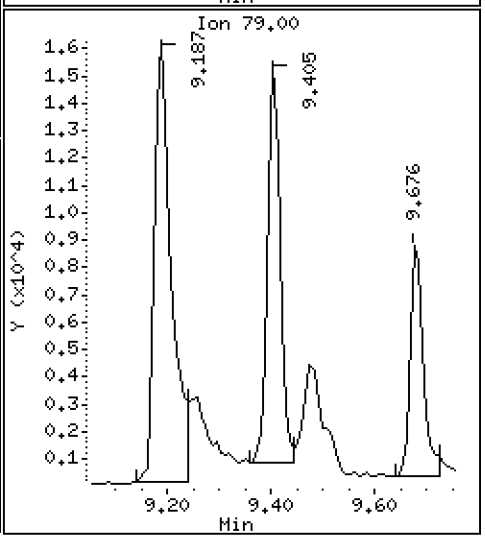












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

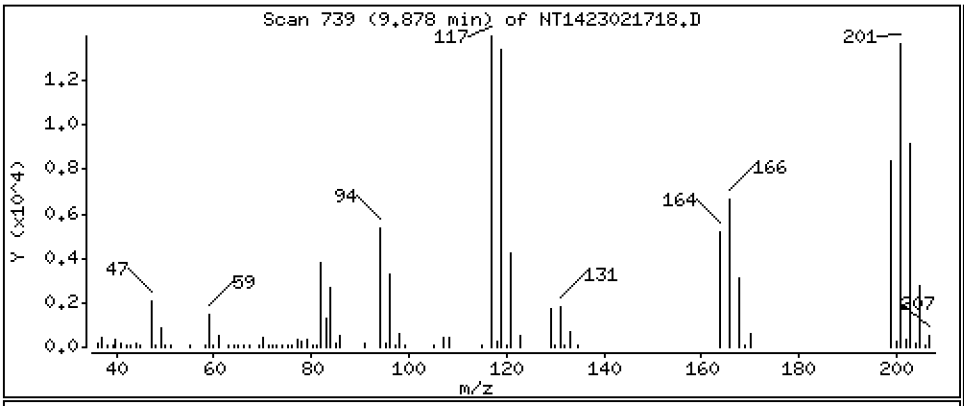
Operator: DSD

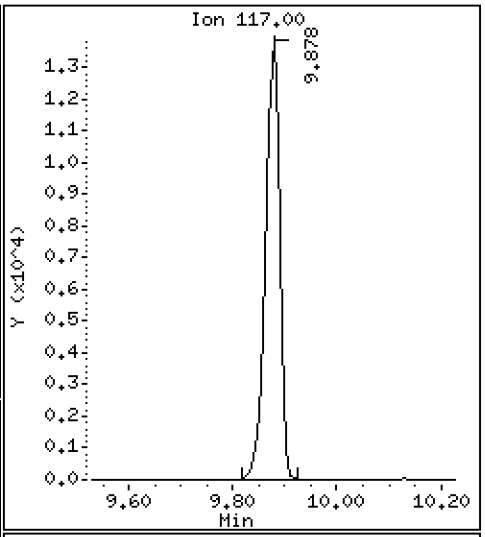
Column phase: ZB-5msi

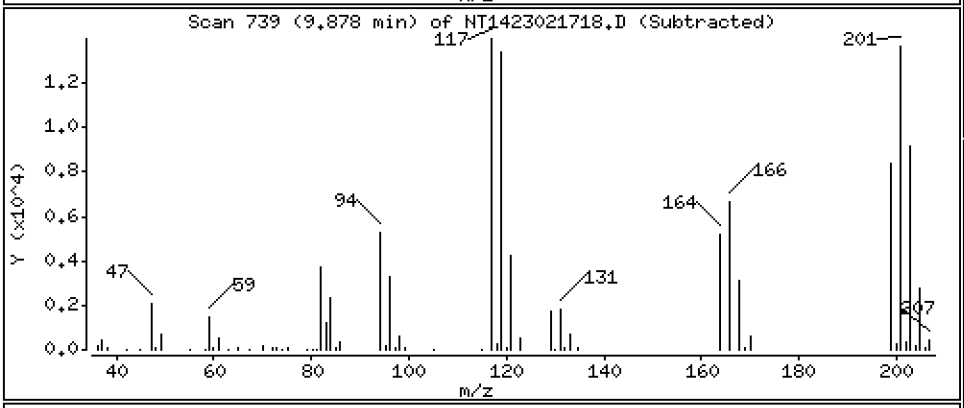
Column diameter: 0.25

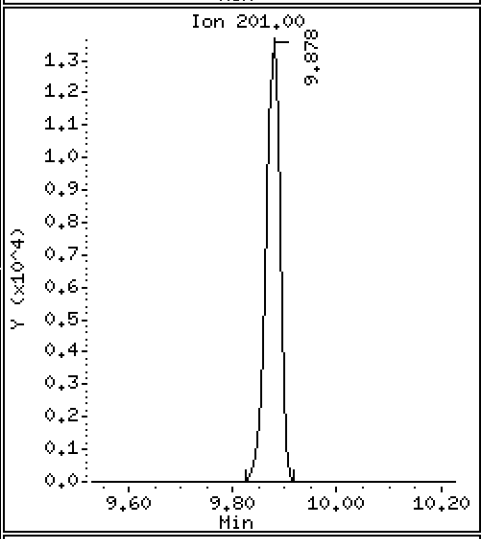
17 Hexachloroethane

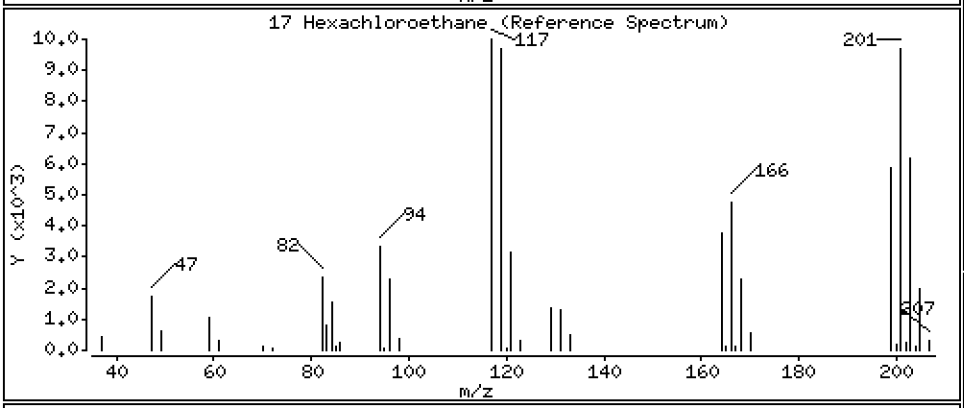
Concentration: 0.4590 ug/mL

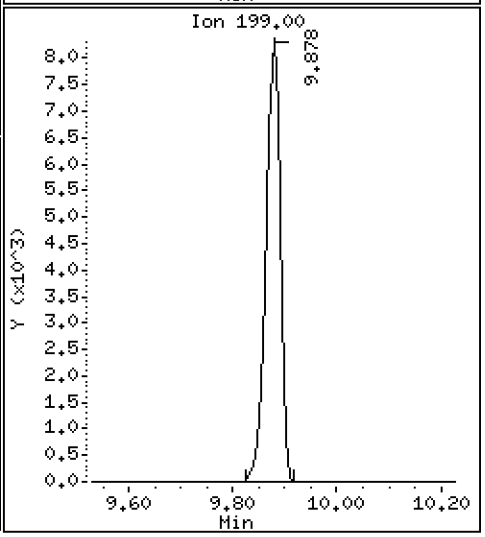


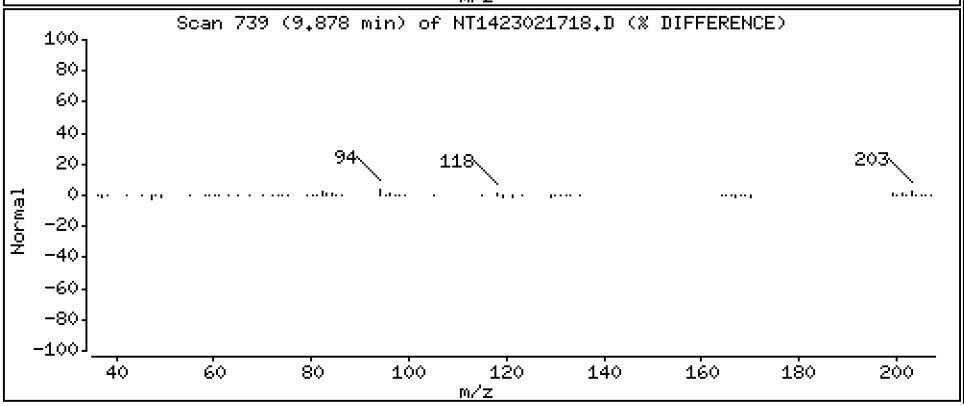












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

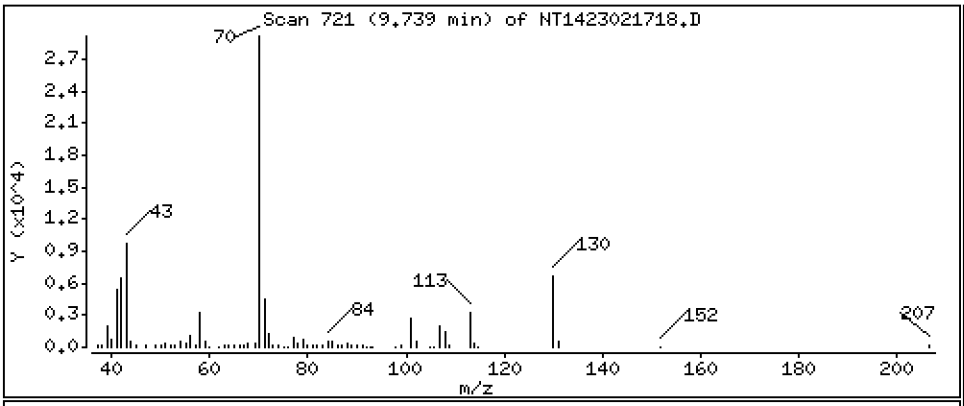
Operator: DSD

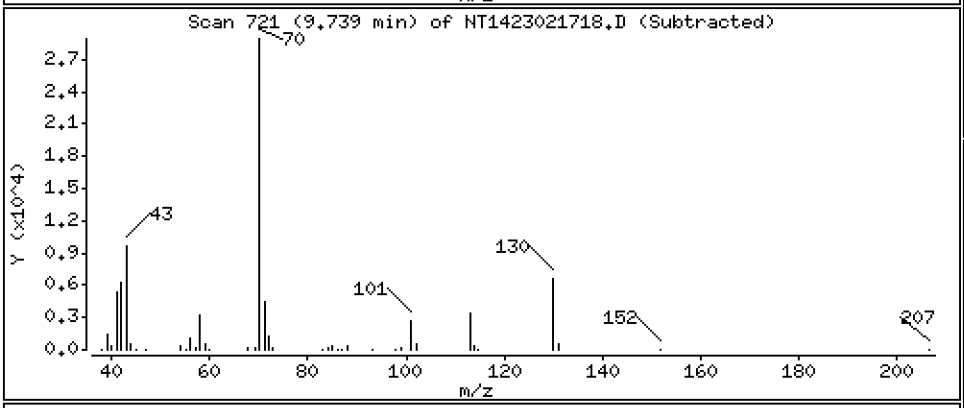
Column phase: ZB-5msi

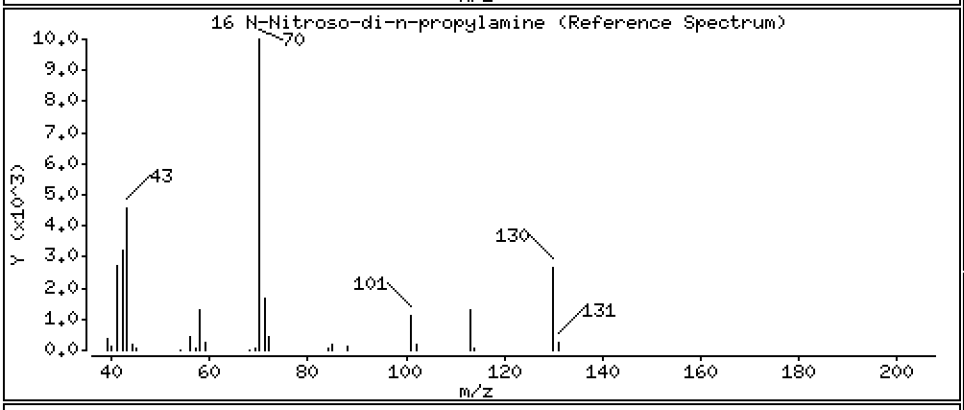
Column diameter: 0.25

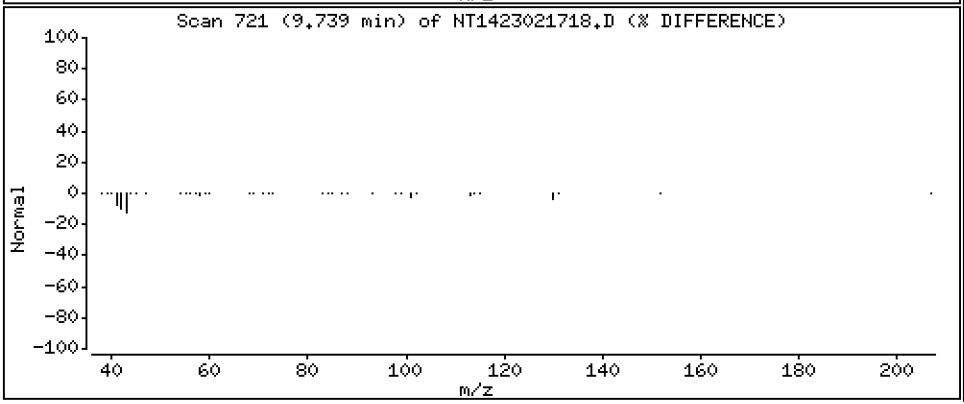
16 N-Nitroso-di-n-propylamine

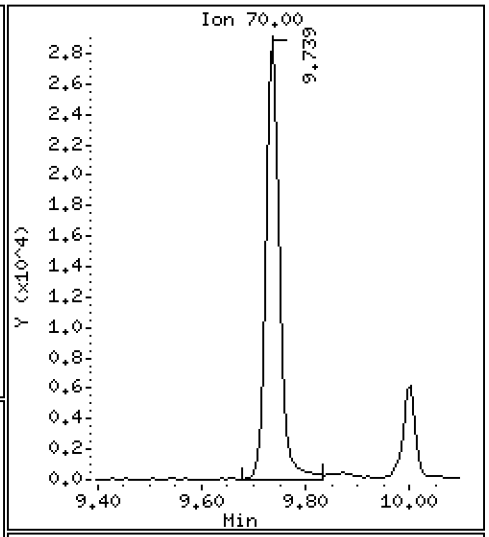
Concentration: 0.4625 ug/mL

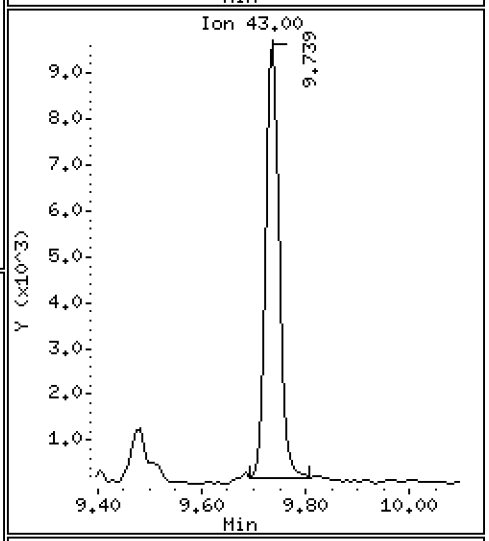


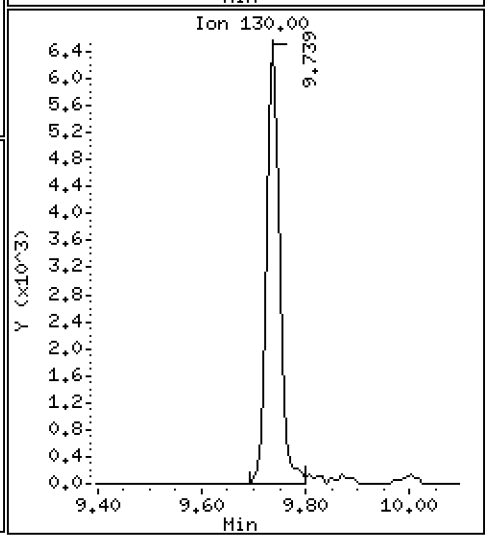












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

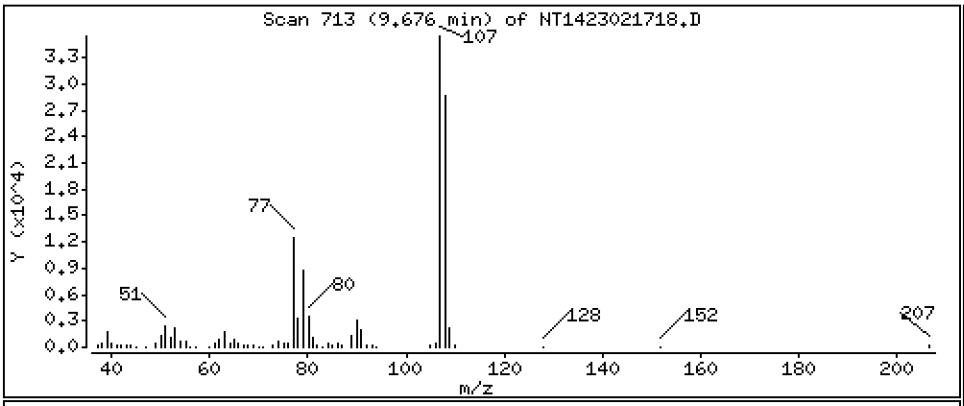
Operator: DSD

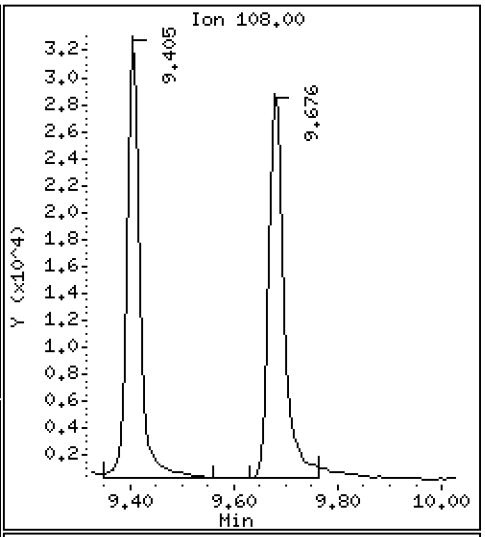
Column phase: ZB-5msi

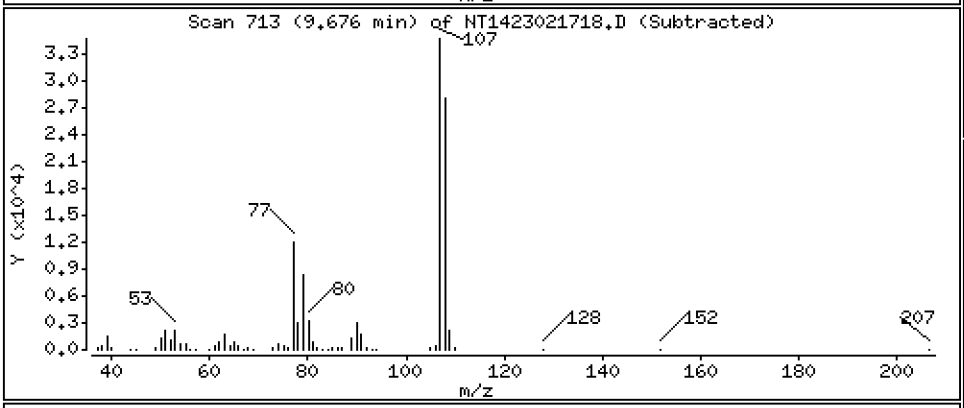
Column diameter: 0.25

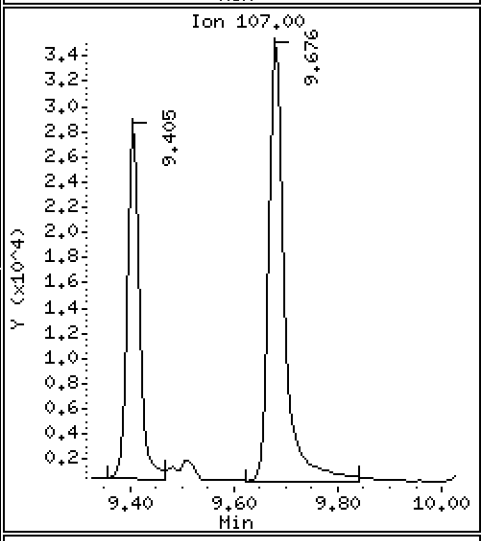
15 4-Methylphenol

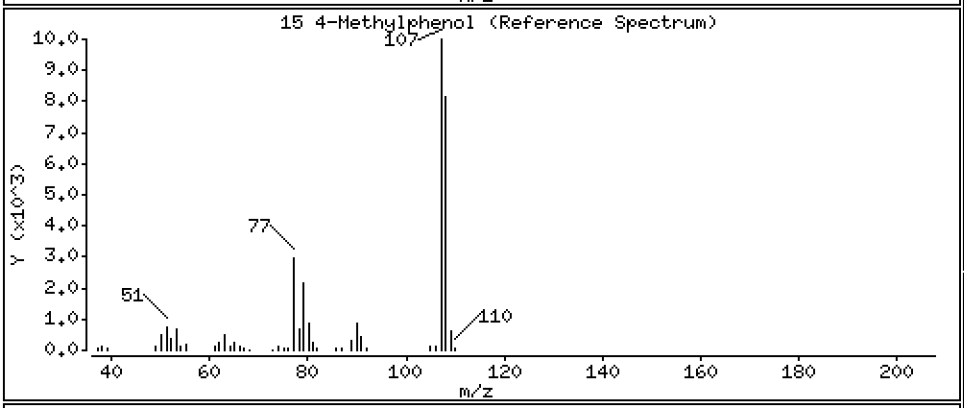
Concentration: 0.4587 ug/mL

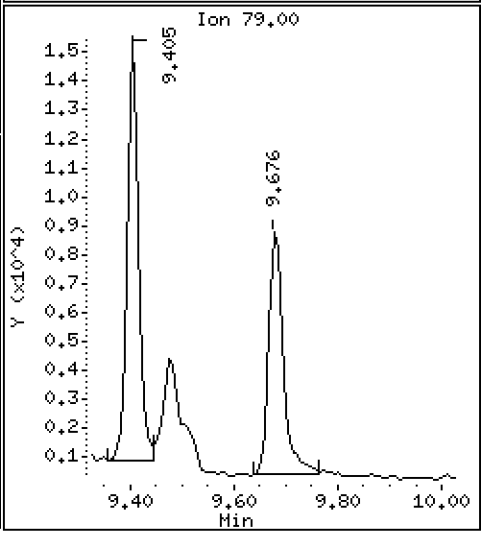


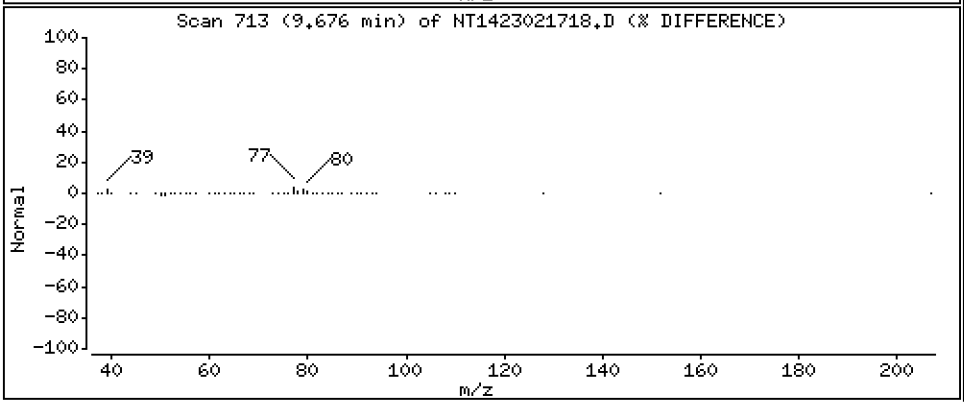












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

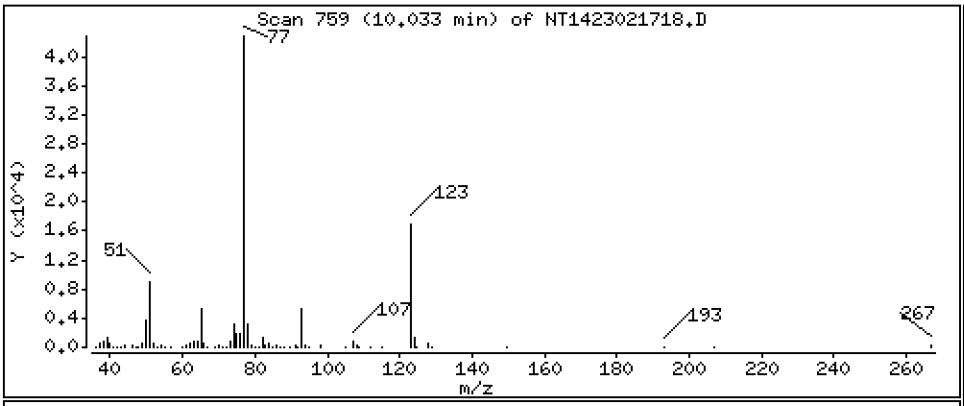
Operator: DSD

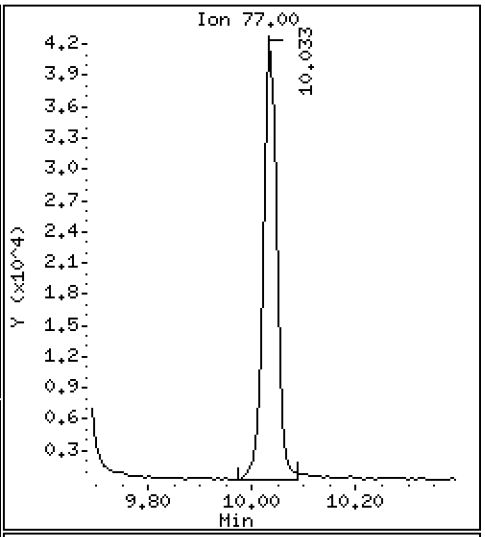
Column phase: ZB-5msi

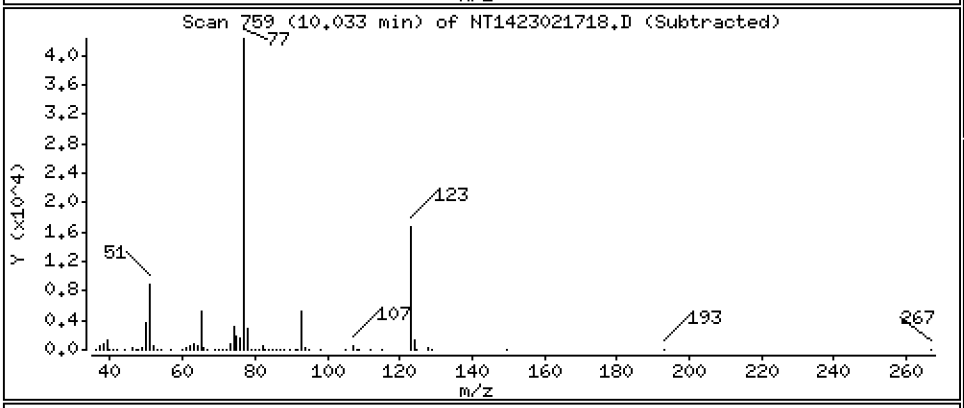
Column diameter: 0.25

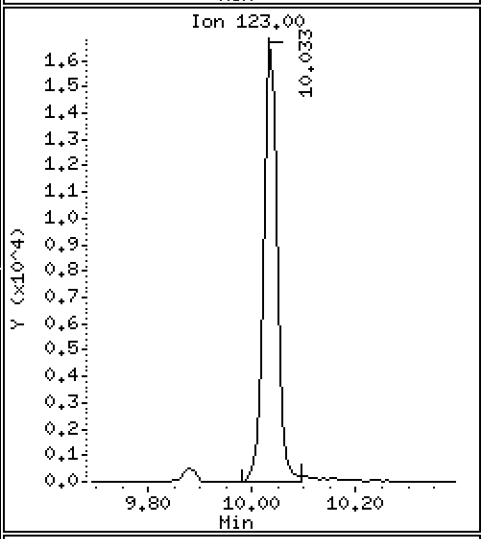
19 Nitrobenzene

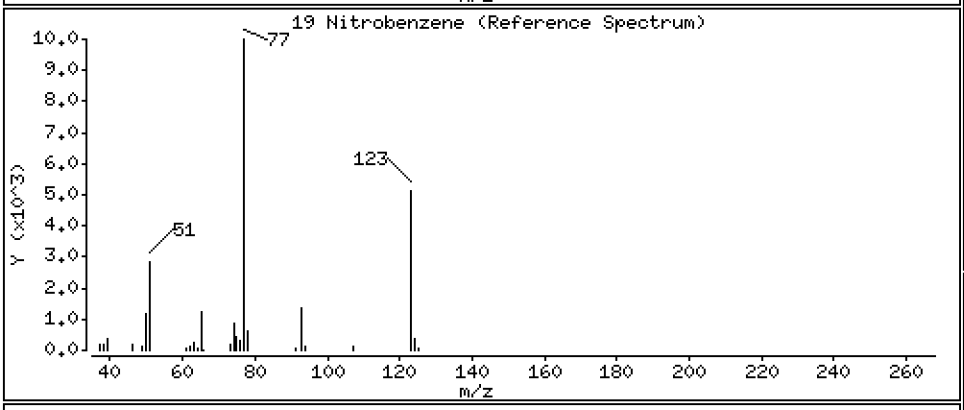
Concentration: 0.4518 ug/mL

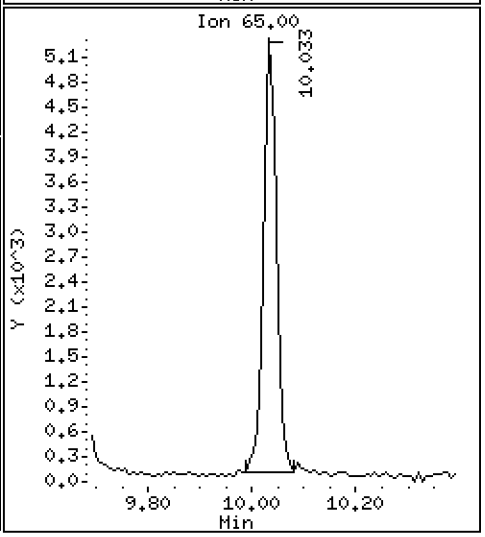


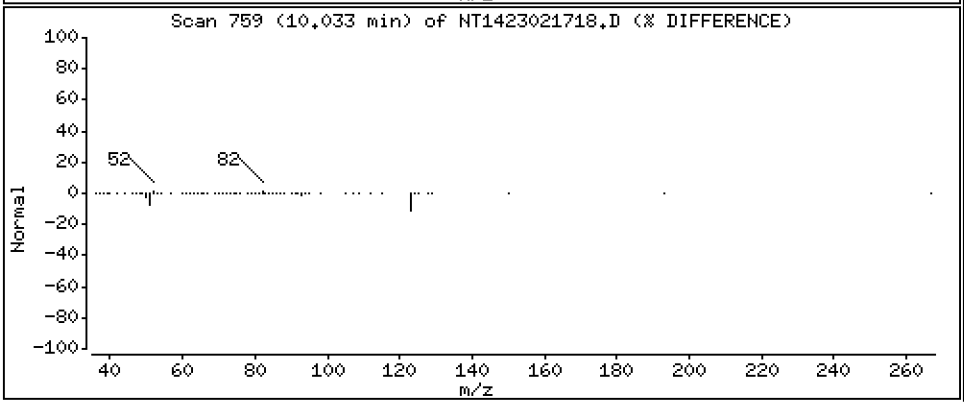












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

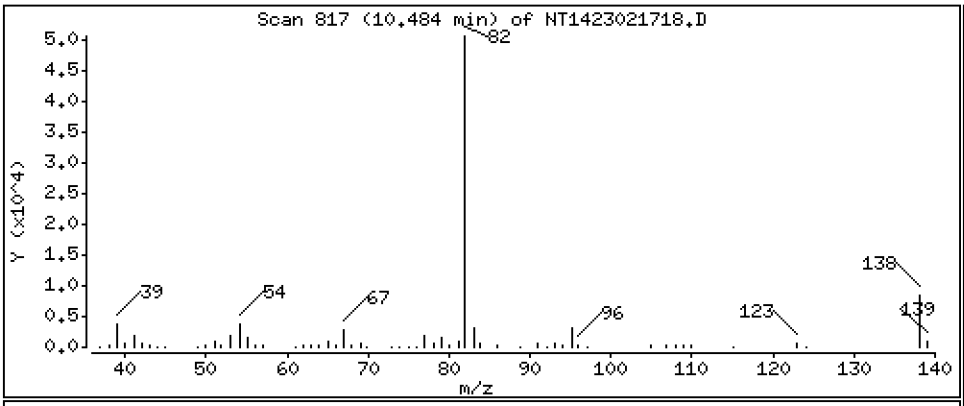
Operator: DSD

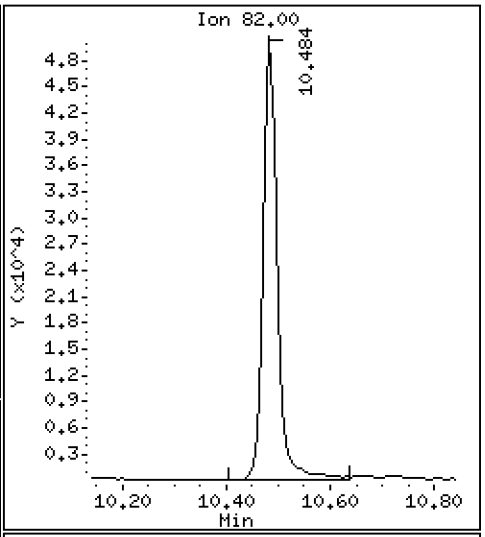
Column phase: ZB-5msi

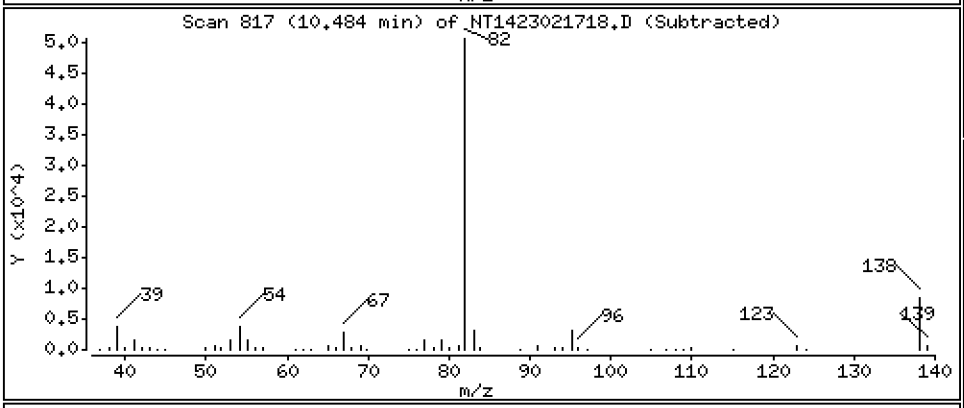
Column diameter: 0.25

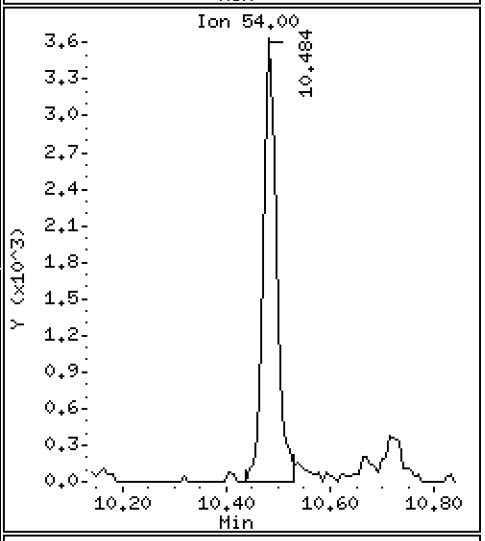
20 Isophorone

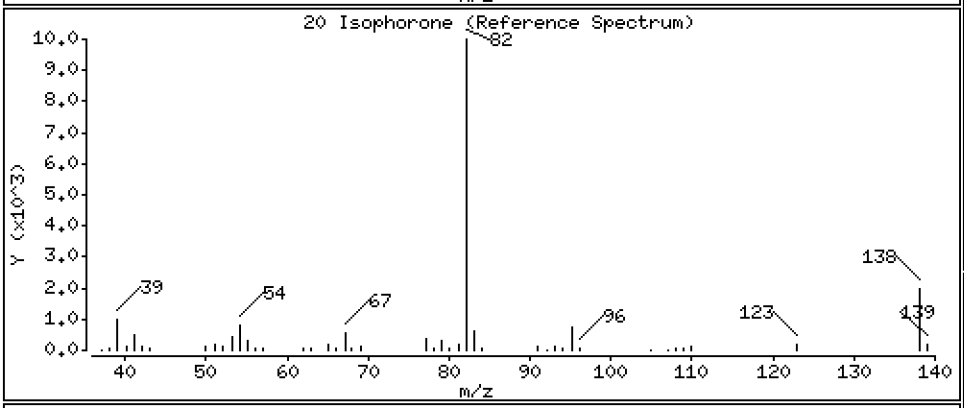
Concentration: 0.4592 ug/mL

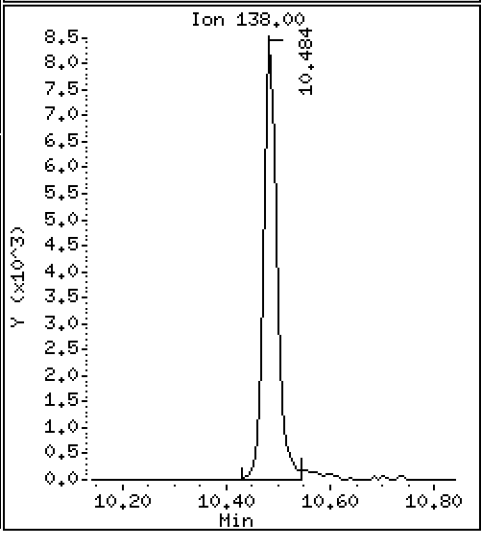


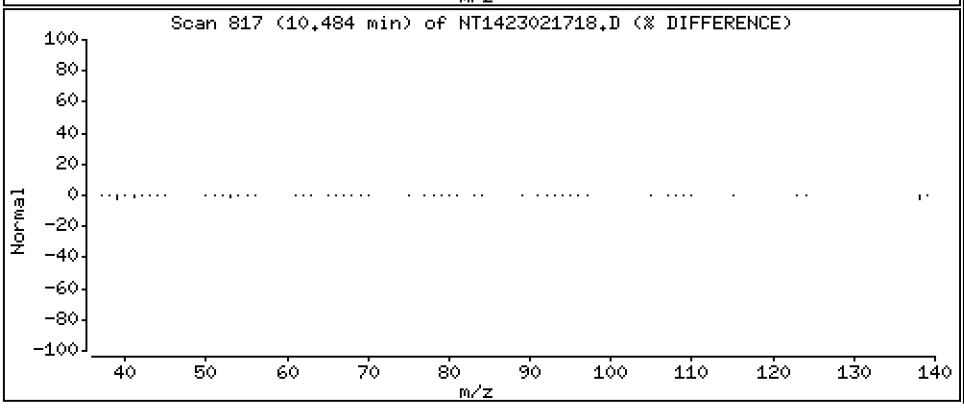












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

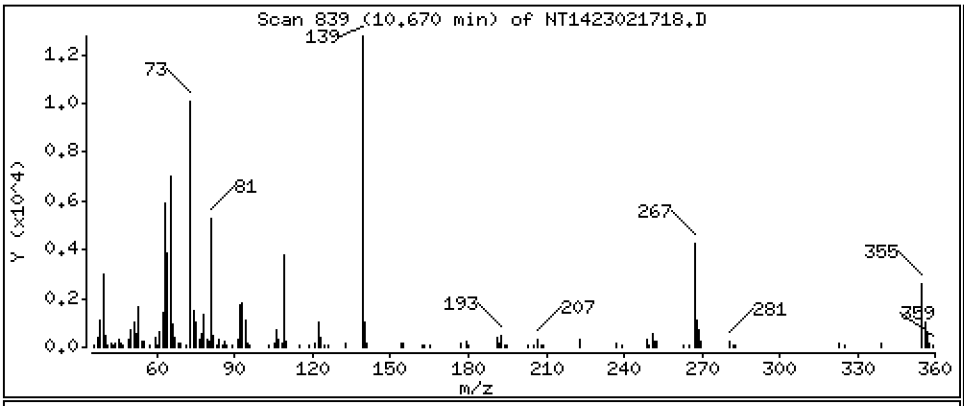
Operator: DSD

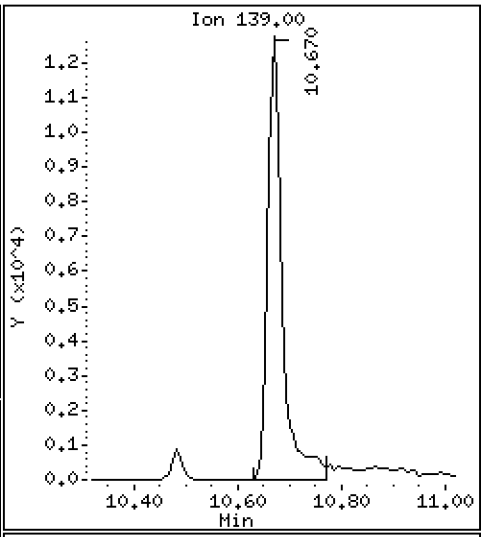
Column phase: ZB-5msi

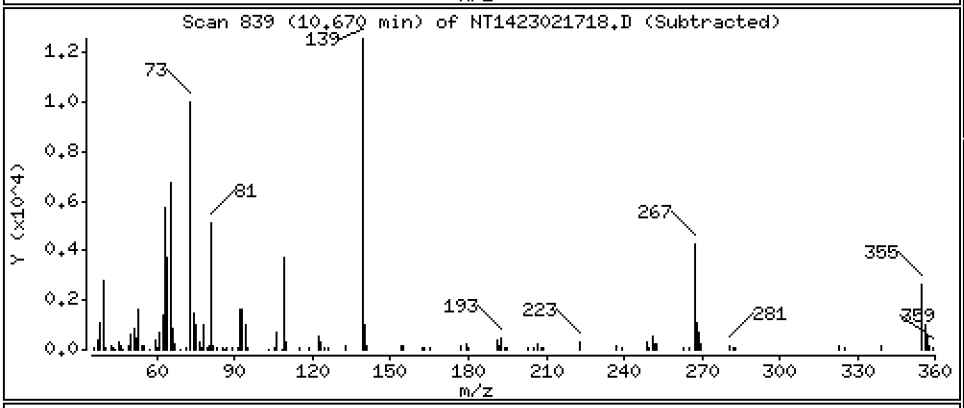
Column diameter: 0.25

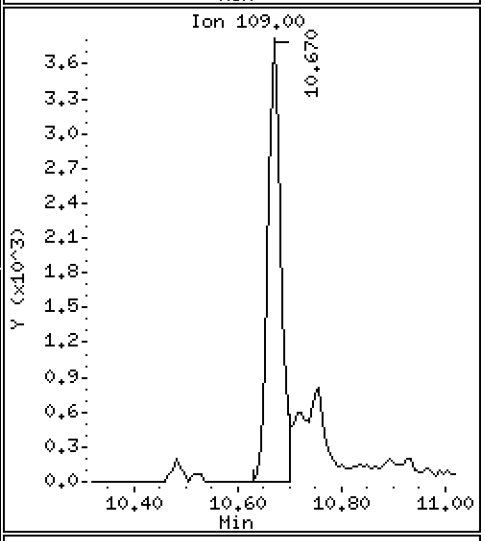
21 2-Nitrophenol

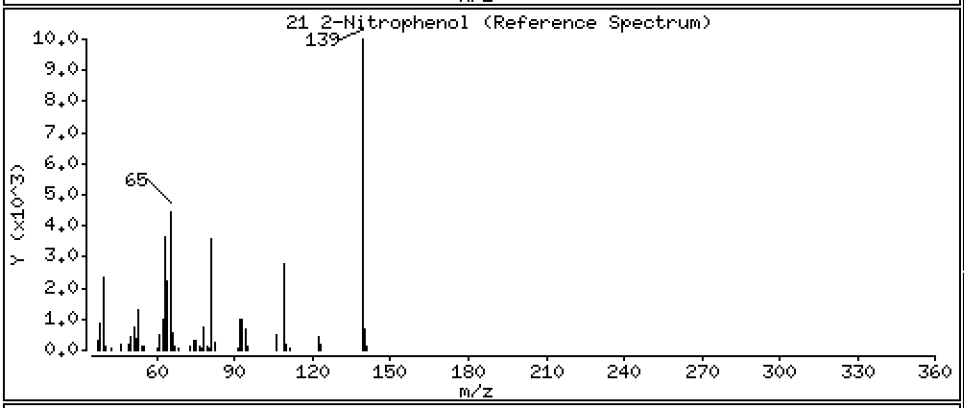
Concentration: 0.3336 ug/mL

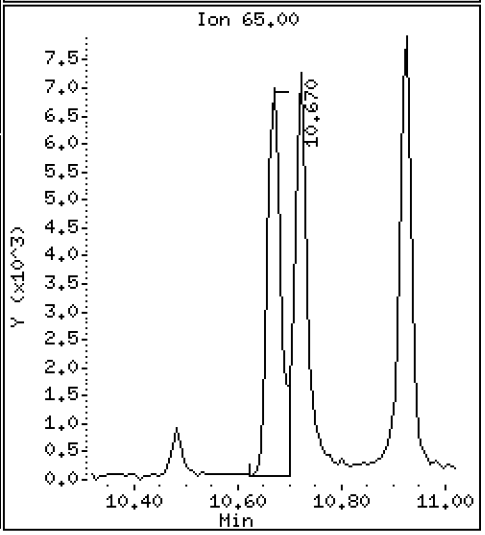


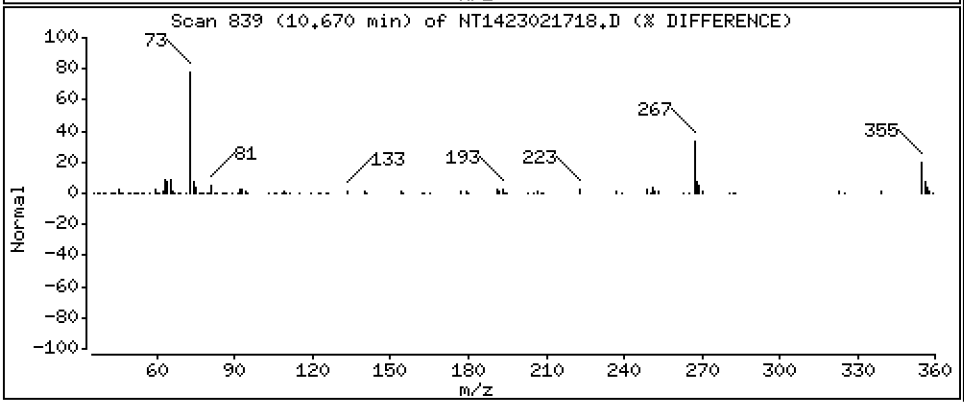












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

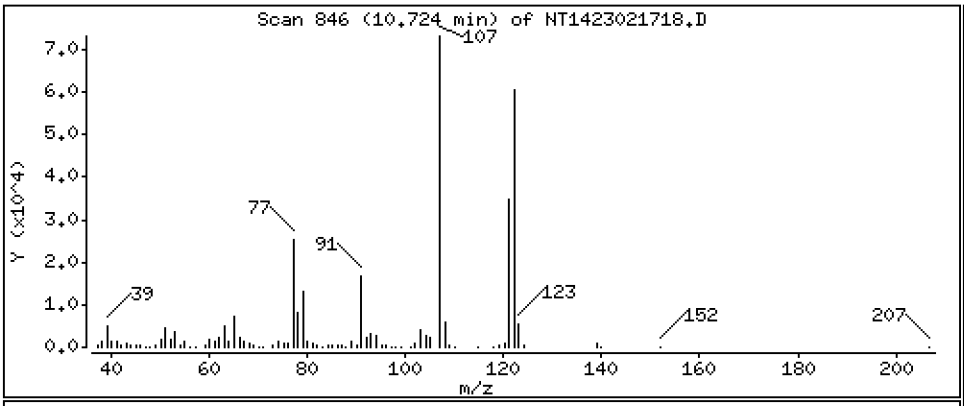
Operator: DSD

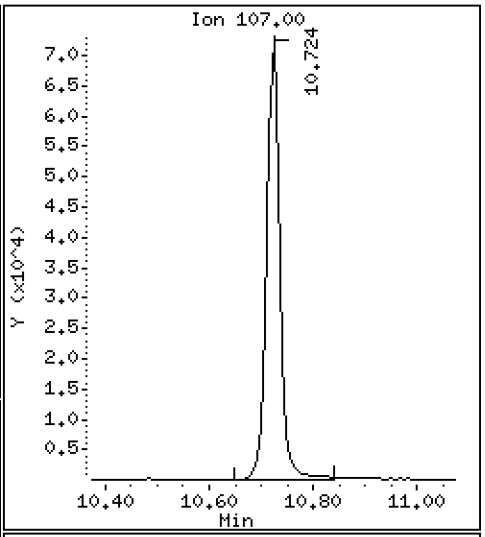
Column phase: ZB-5msi

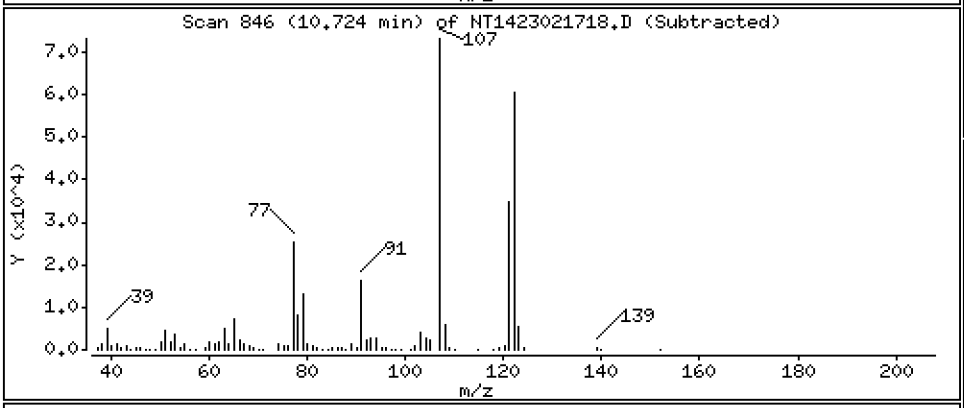
Column diameter: 0.25

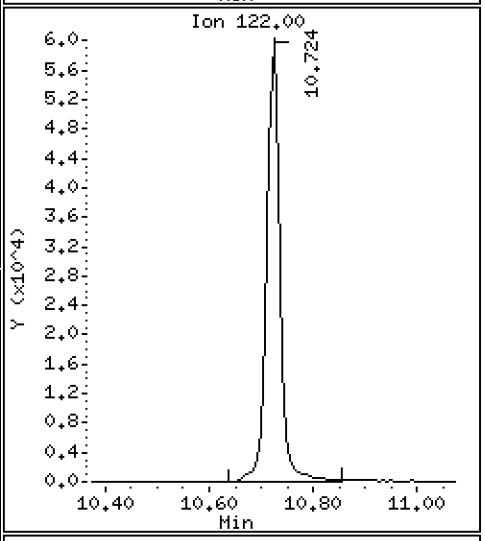
22 2,4-Dimethylphenol

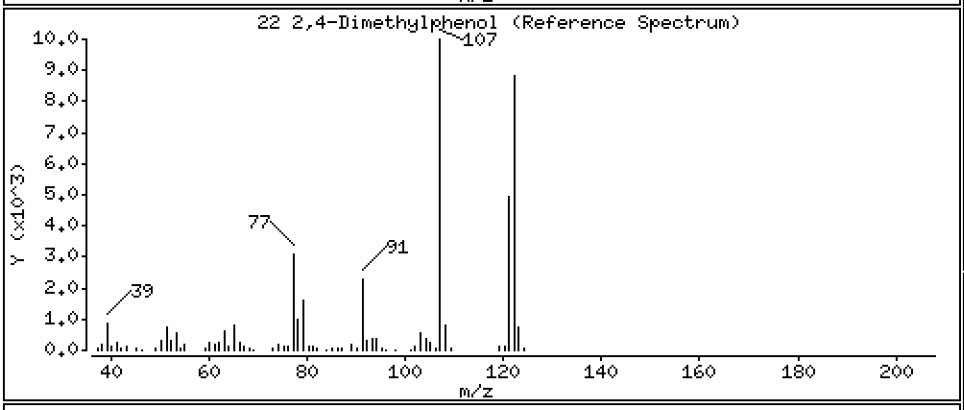
Concentration: 1.004 ug/mL

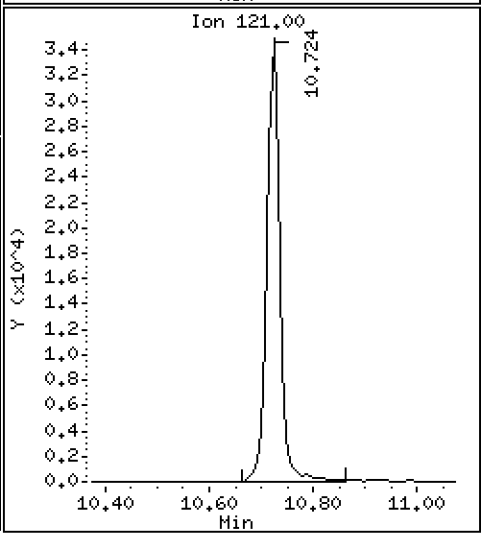


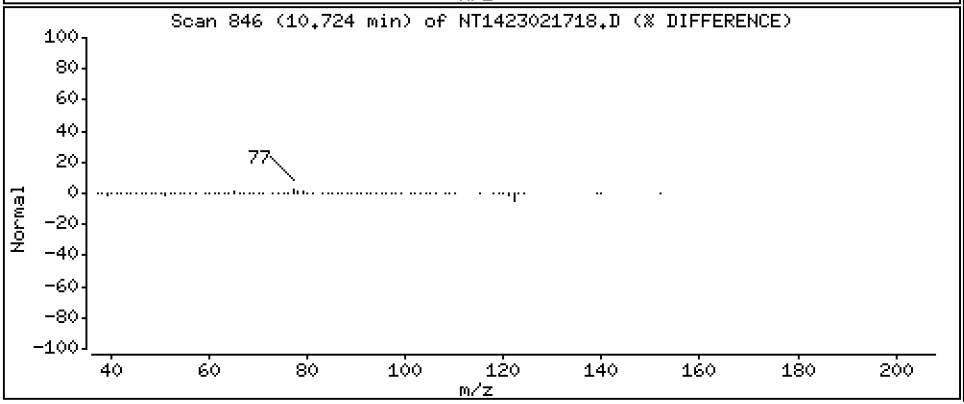












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

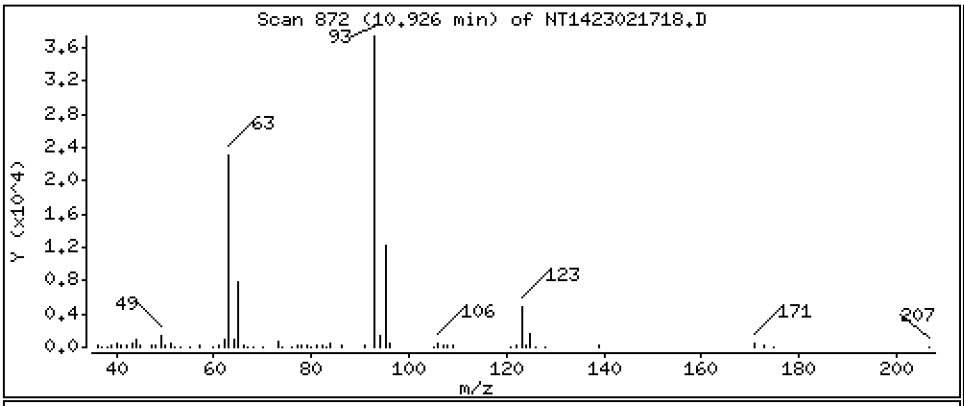
Operator: DSD

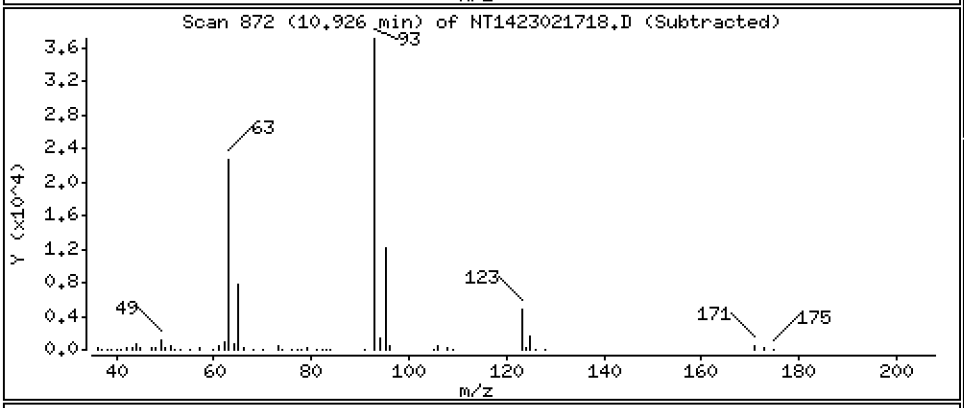
Column phase: ZB-5msi

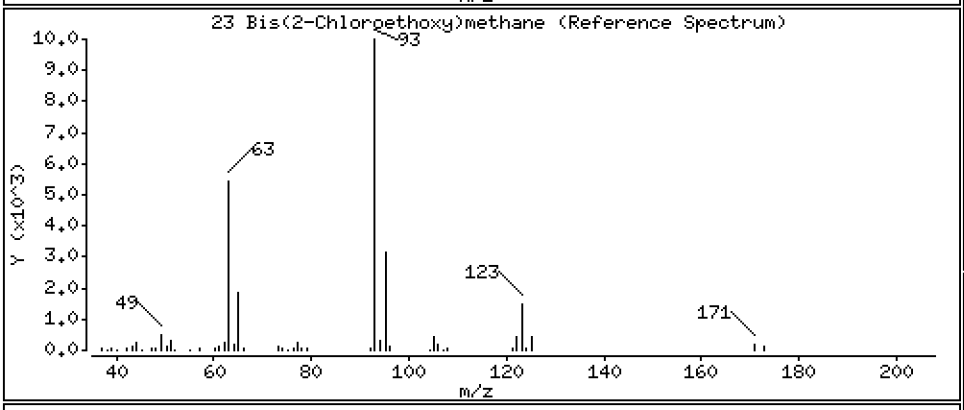
Column diameter: 0.25

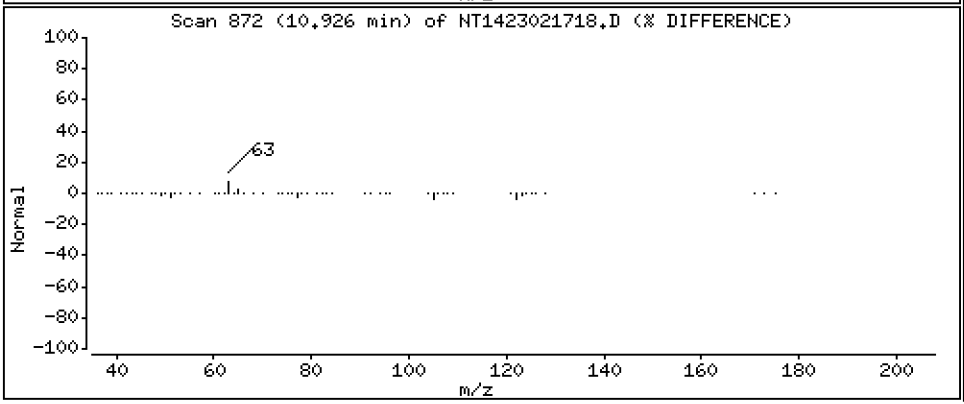
23 Bis(2-Chloroethoxy)methane

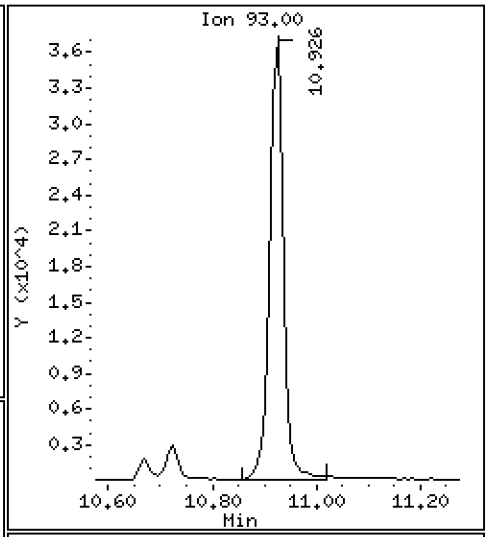
Concentration: 0.4678 ug/mL

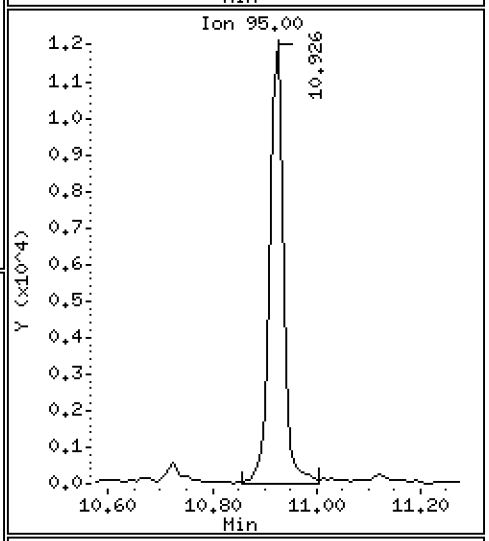


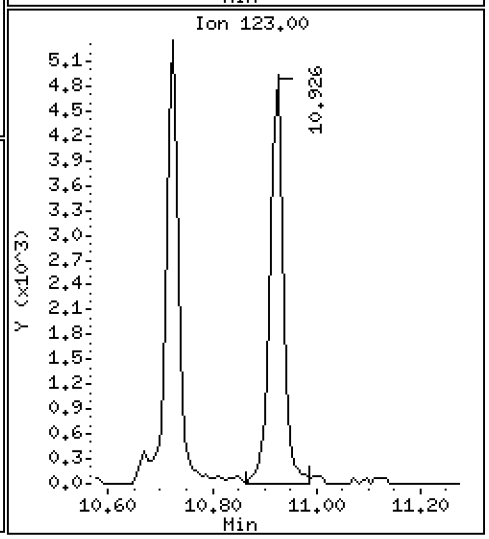












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

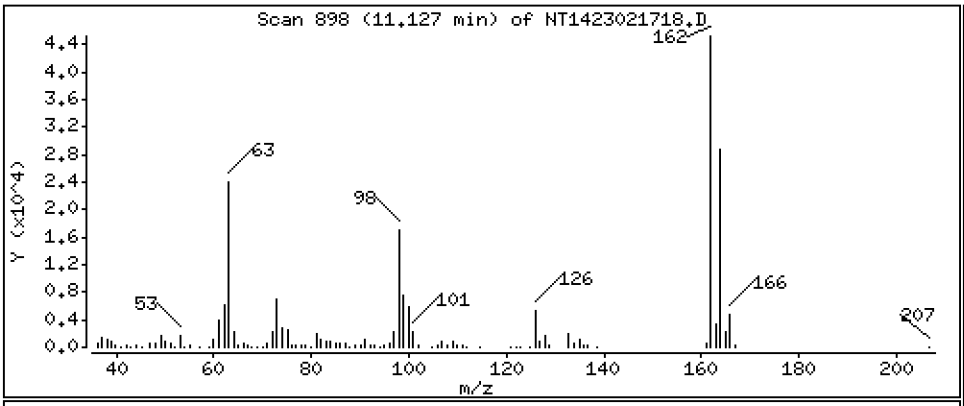
Operator: DSD

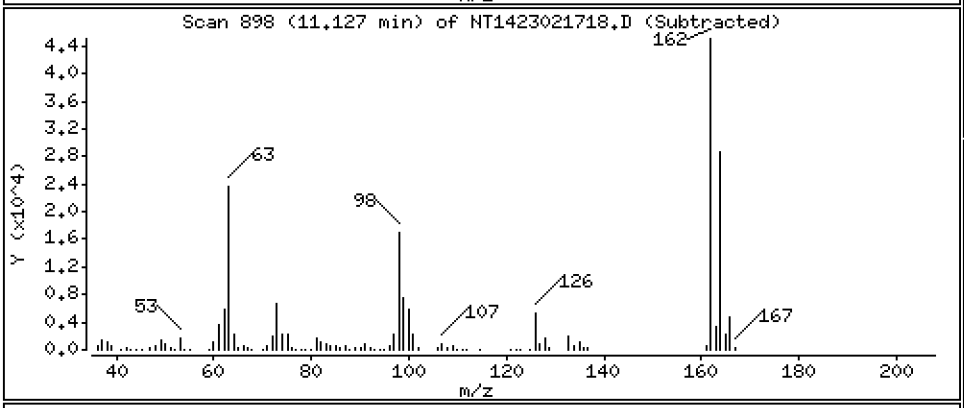
Column phase: ZB-5msi

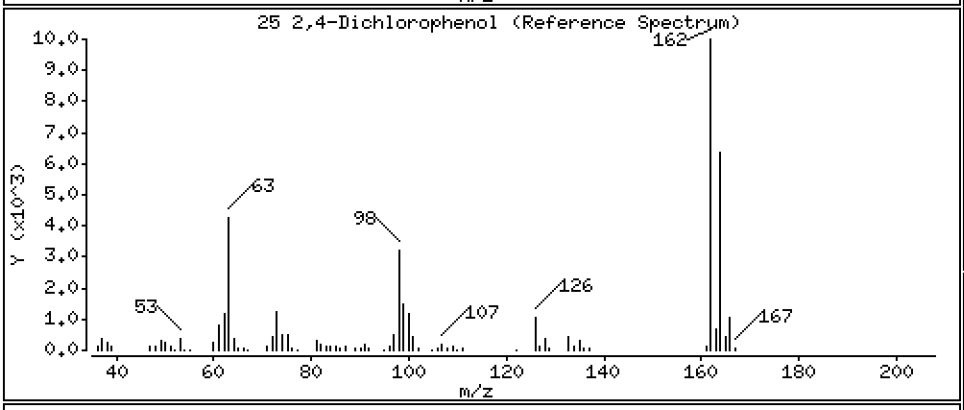
Column diameter: 0.25

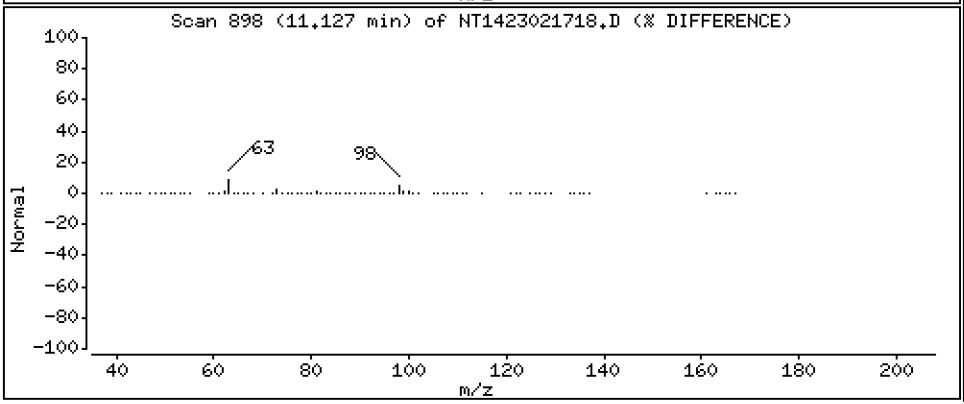
25 2,4-Dichlorophenol

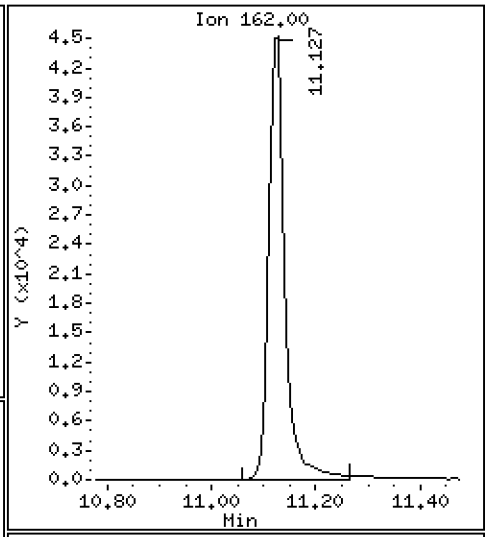
Concentration: 0.9808 ug/mL

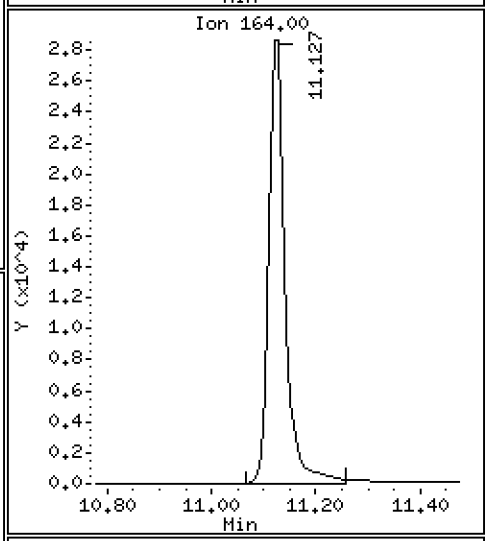


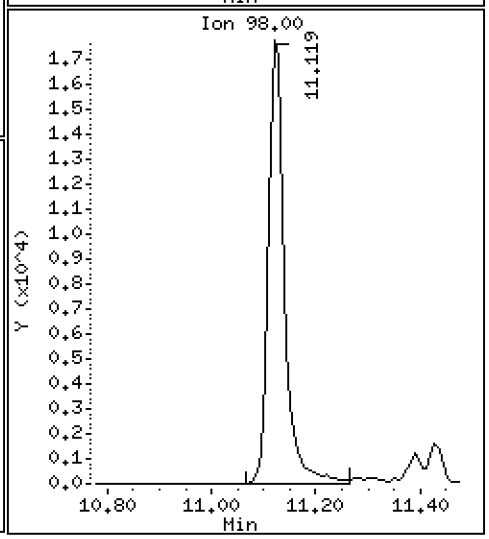












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021718.D

Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

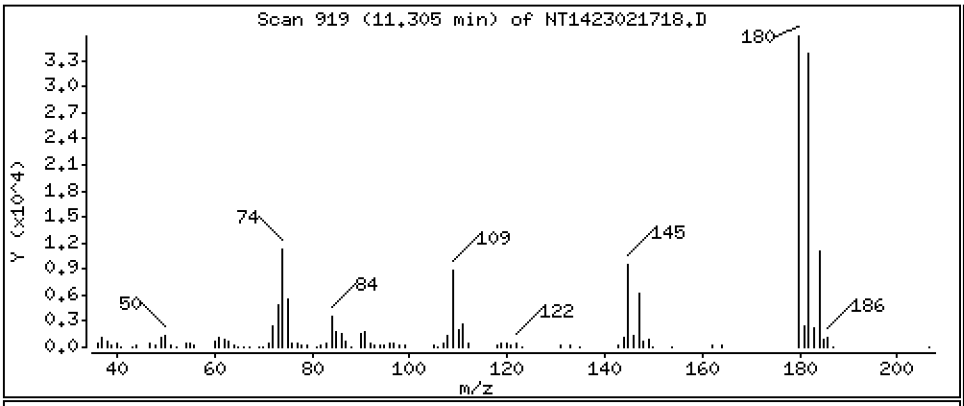
Operator: DSD

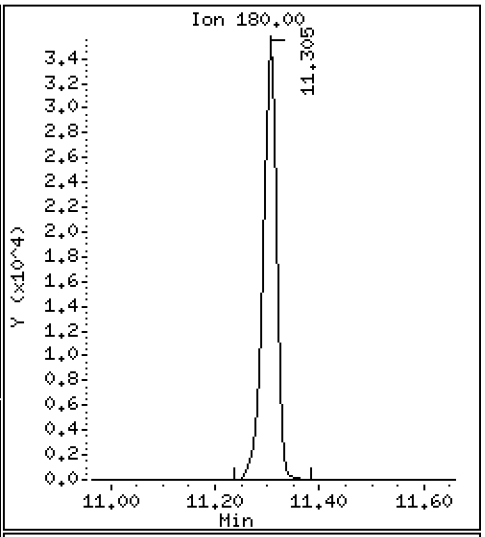
Column phase: ZB-5msi

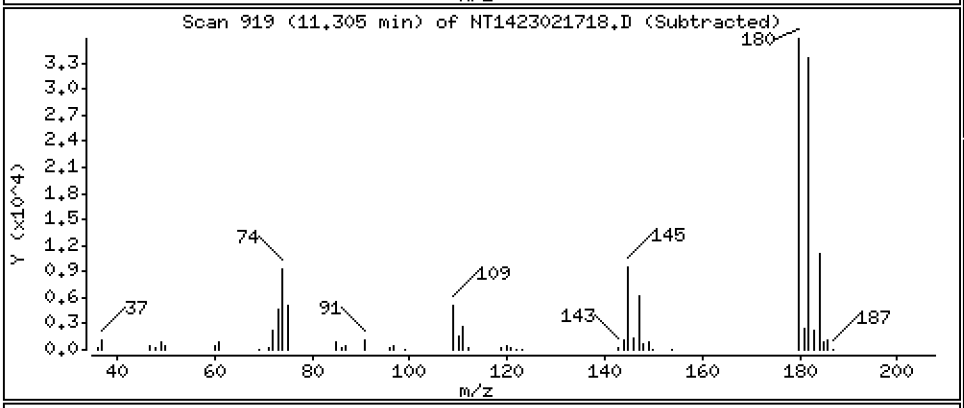
Column diameter: 0.25

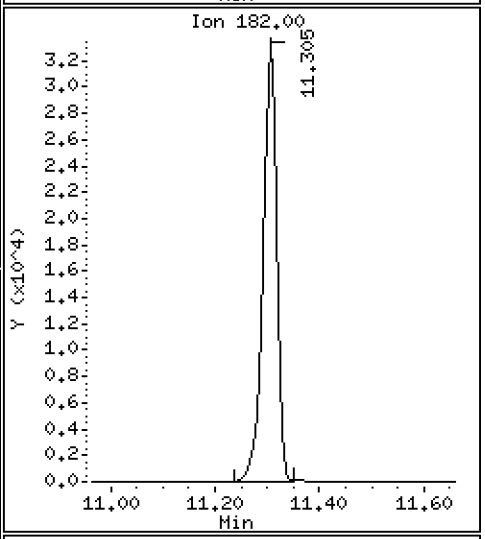
26 1,2,4-Trichlorobenzene

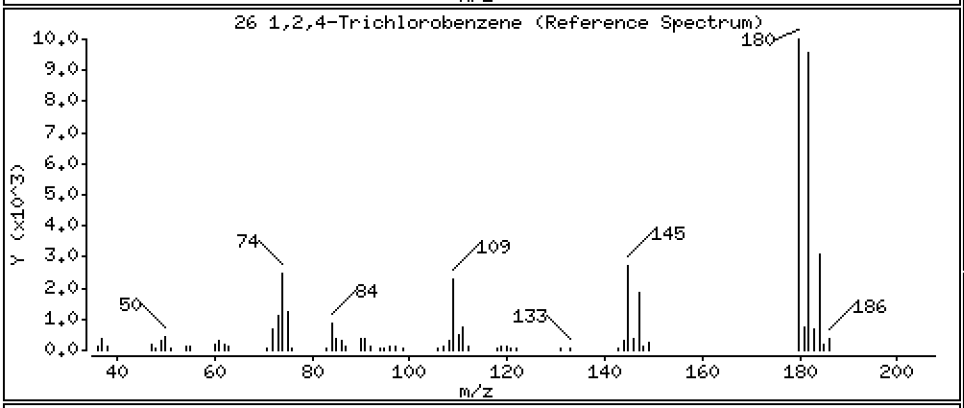
Concentration: 0.4833 ug/mL

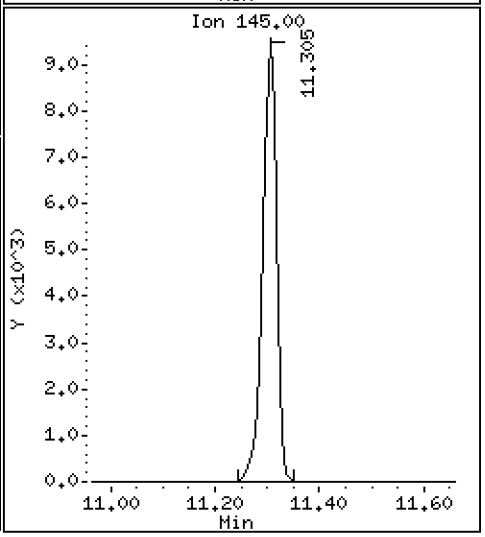


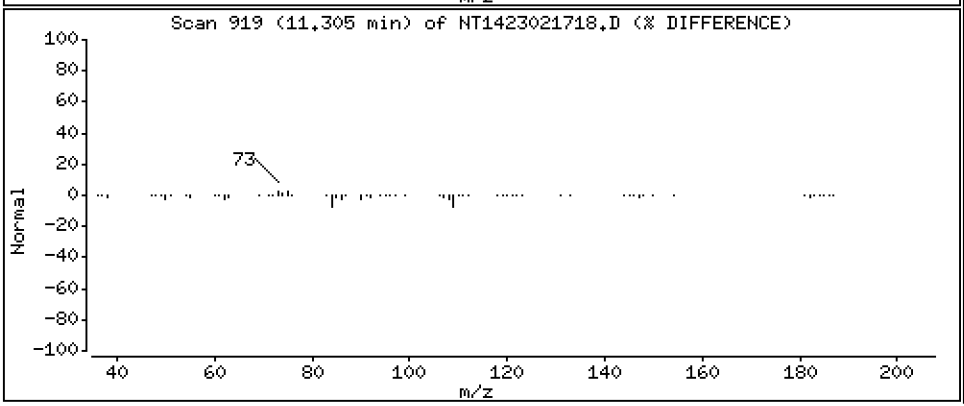












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

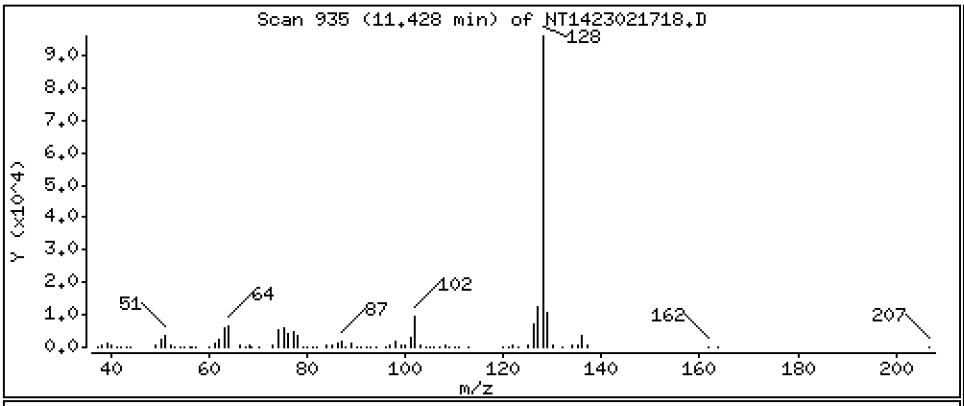
Operator: DSD

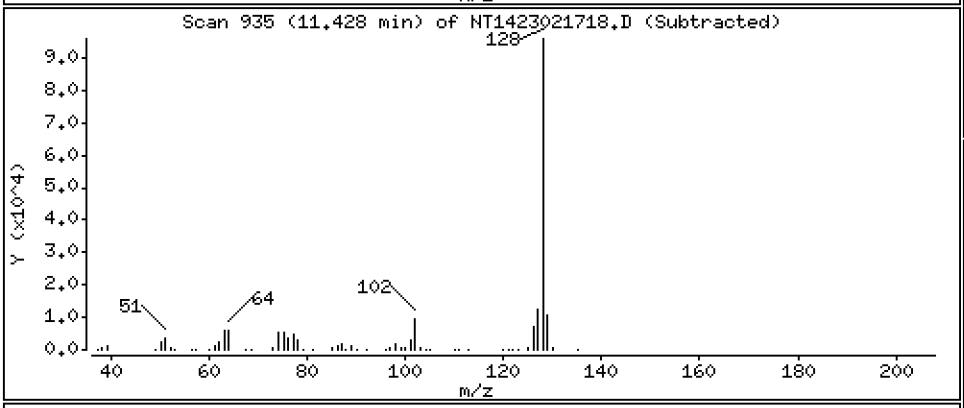
Column phase: ZB-5msi

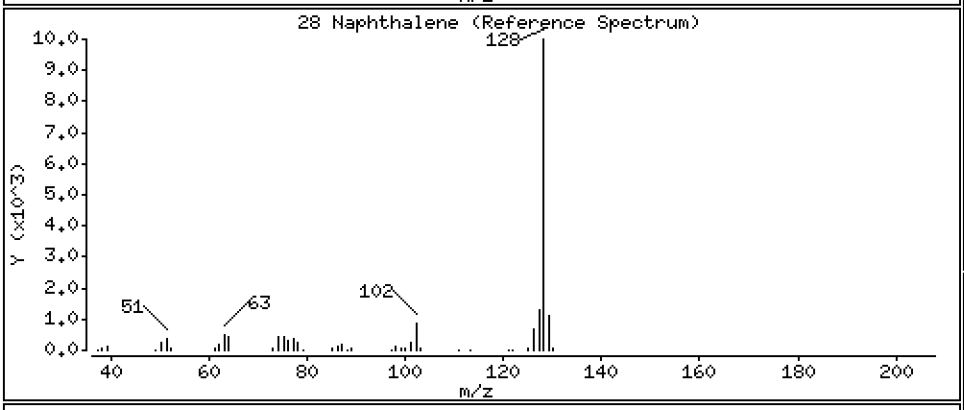
Column diameter: 0.25

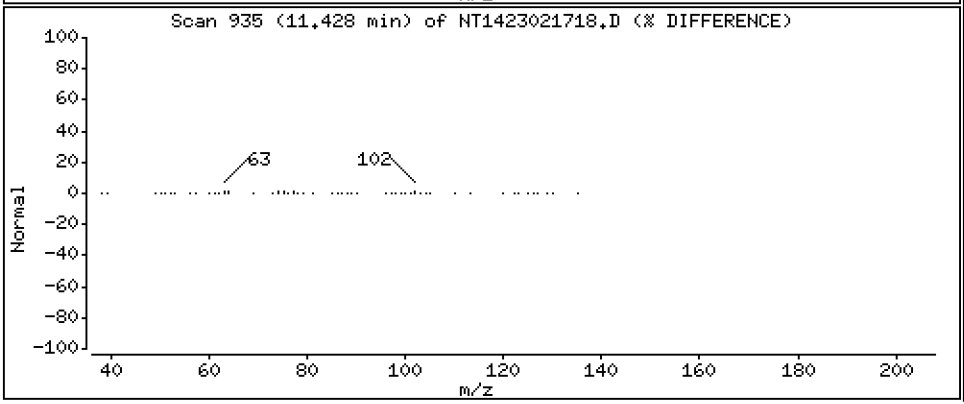
28 Naphthalene

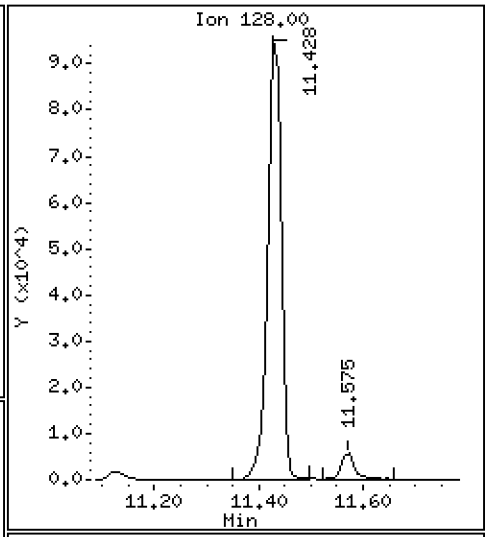
Concentration: 0.4798 ug/mL

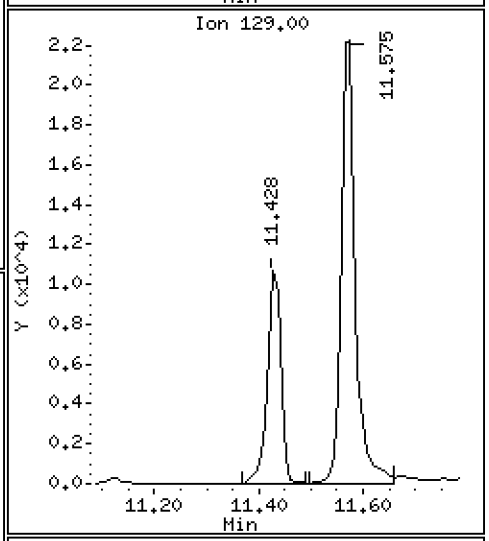


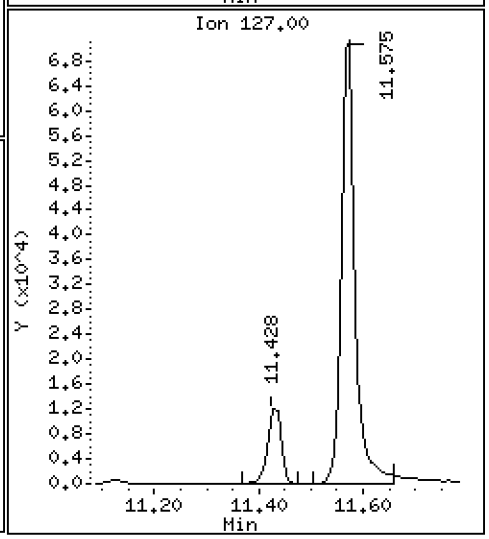












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

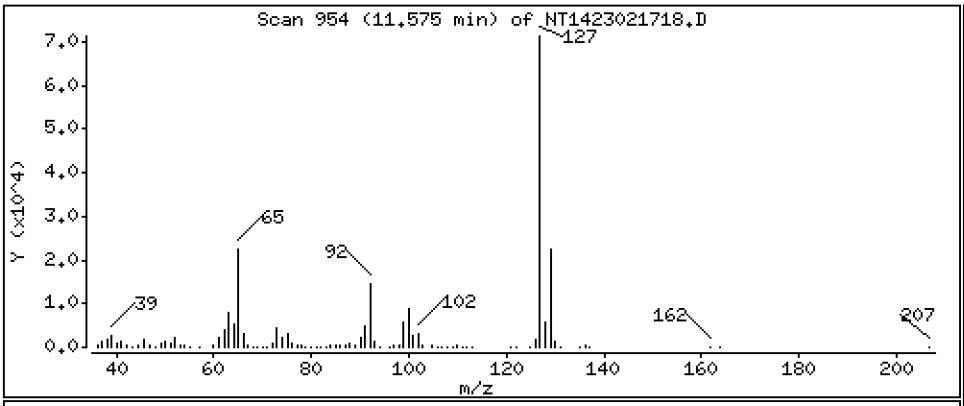
Operator: DSD

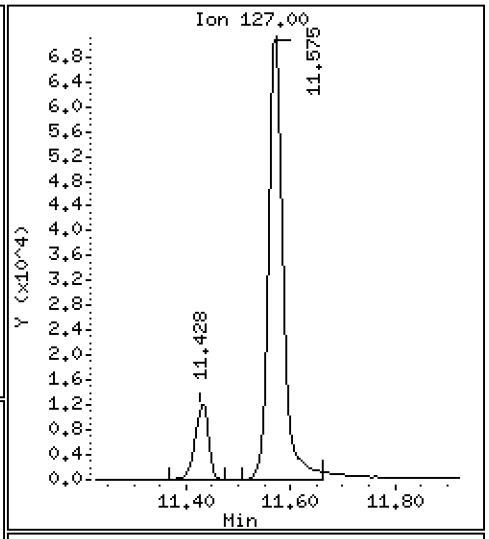
Column phase: ZB-5msi

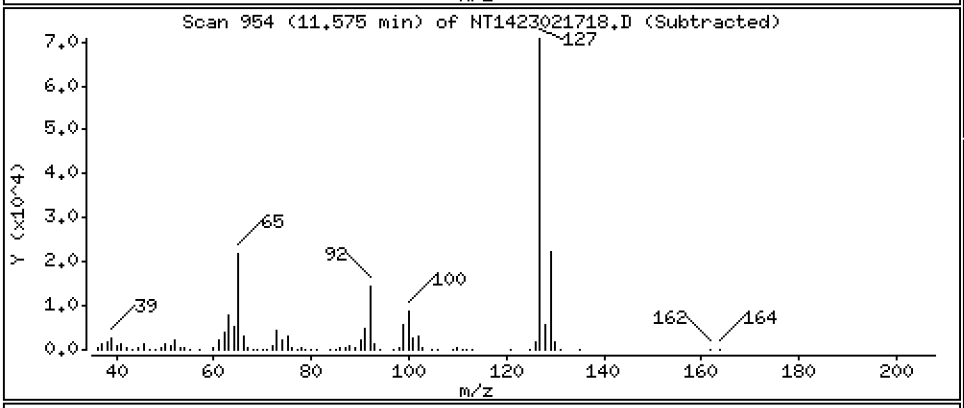
Column diameter: 0.25

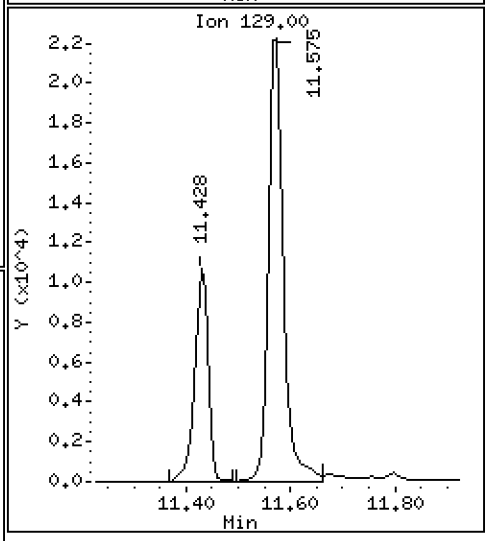
29 4-Chloroaniline

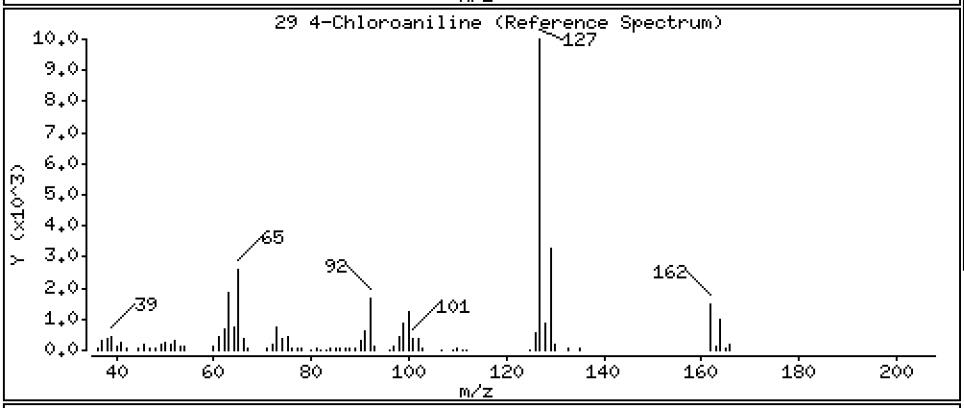
Concentration: 0.9183 ug/mL

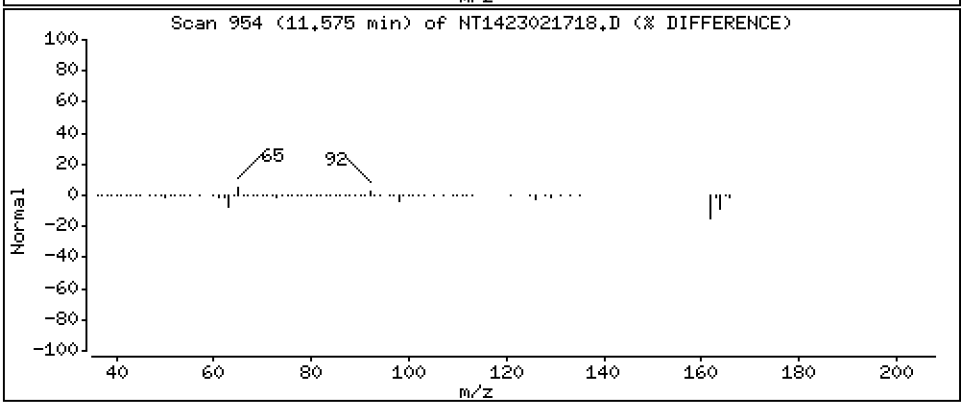












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

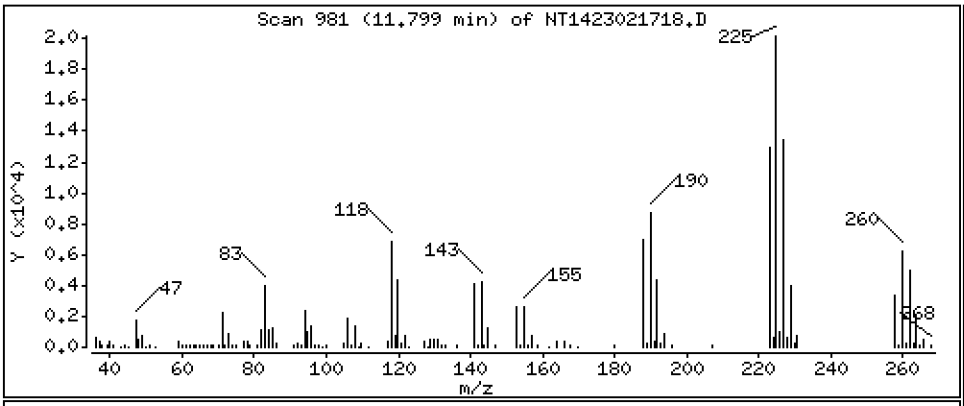
Operator: DSD

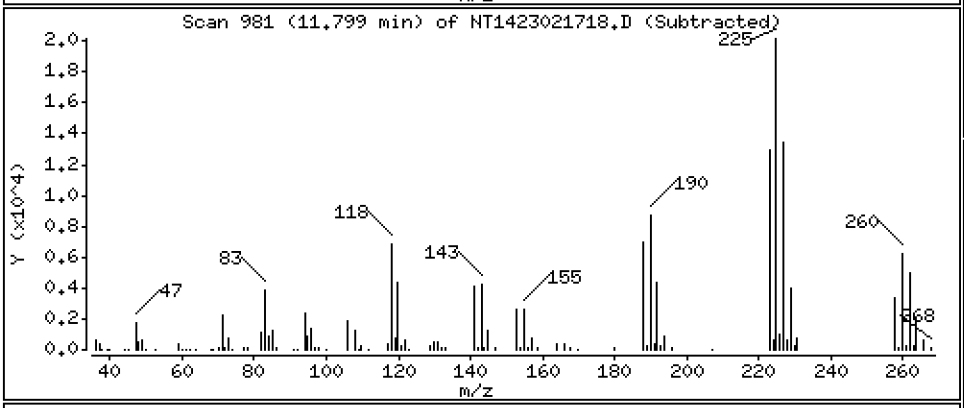
Column phase: ZB-5msi

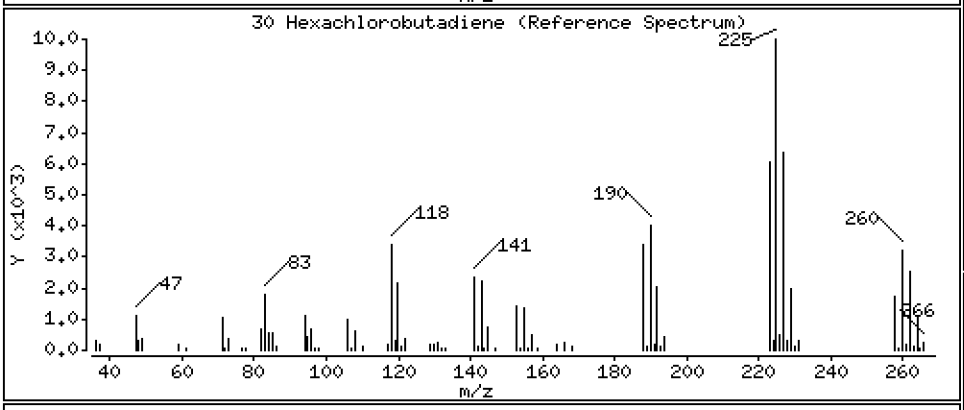
Column diameter: 0.25

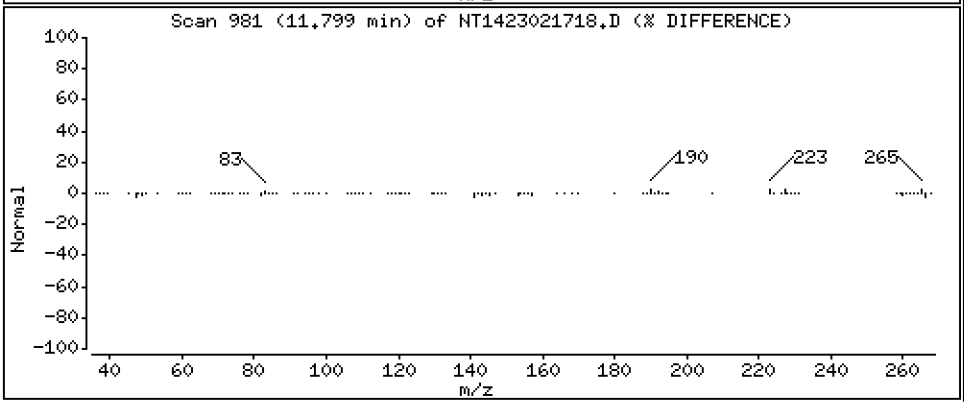
30 Hexachlorobutadiene

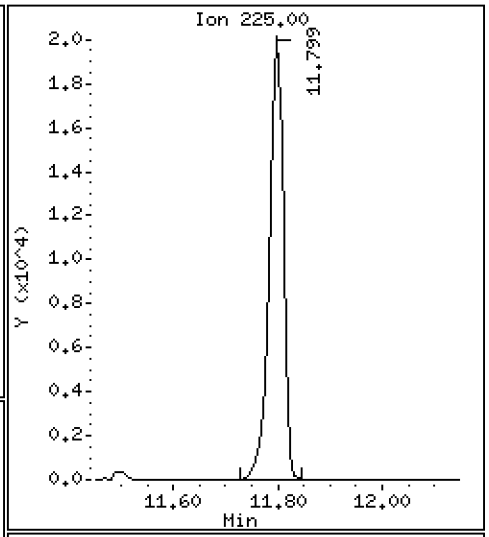
Concentration: 0.4658 ug/mL

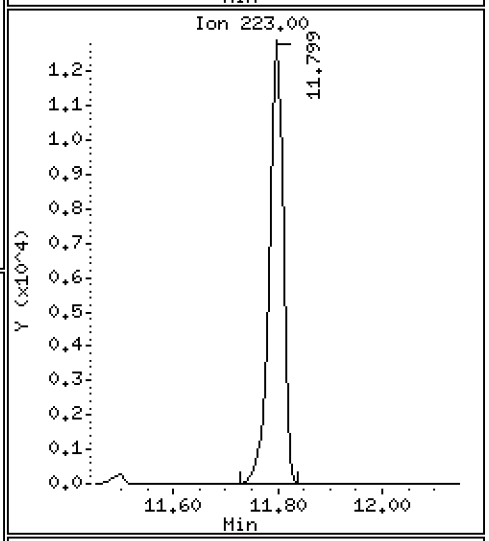


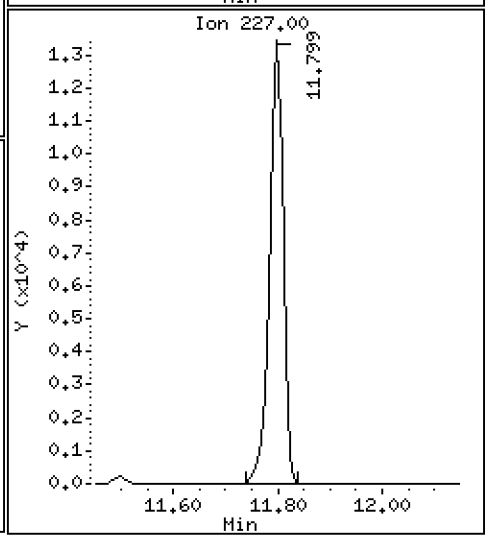












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

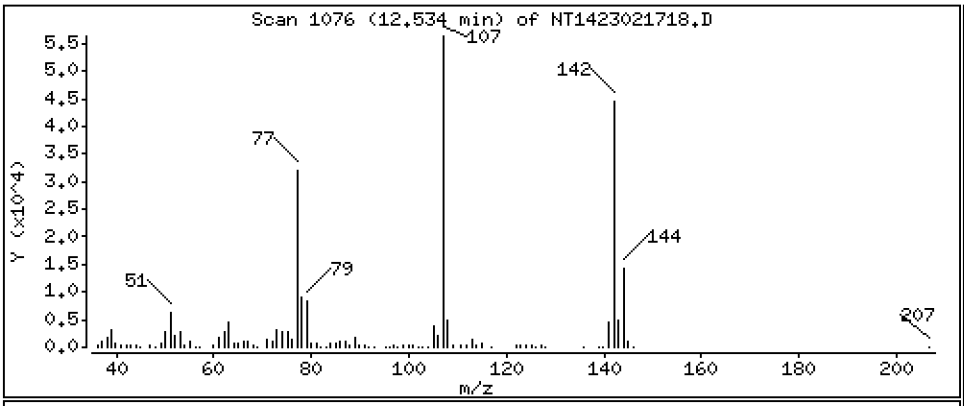
Operator: DSD

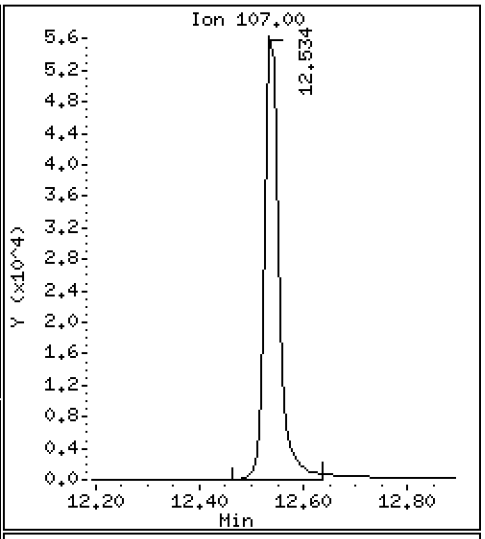
Column phase: ZB-5msi

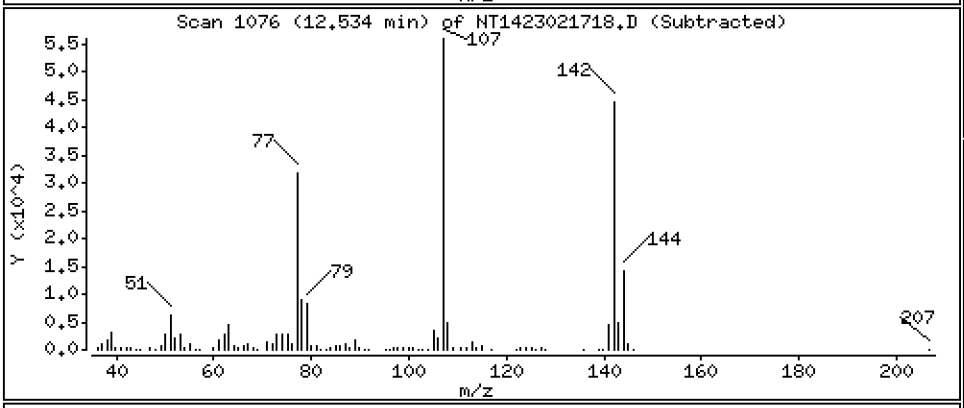
Column diameter: 0.25

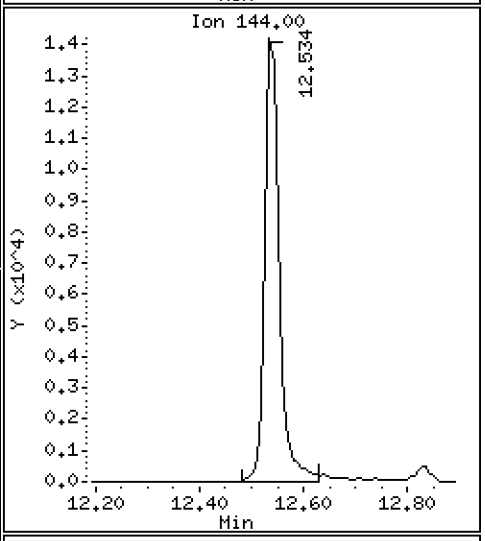
31 4-Chloro-3-methylphenol

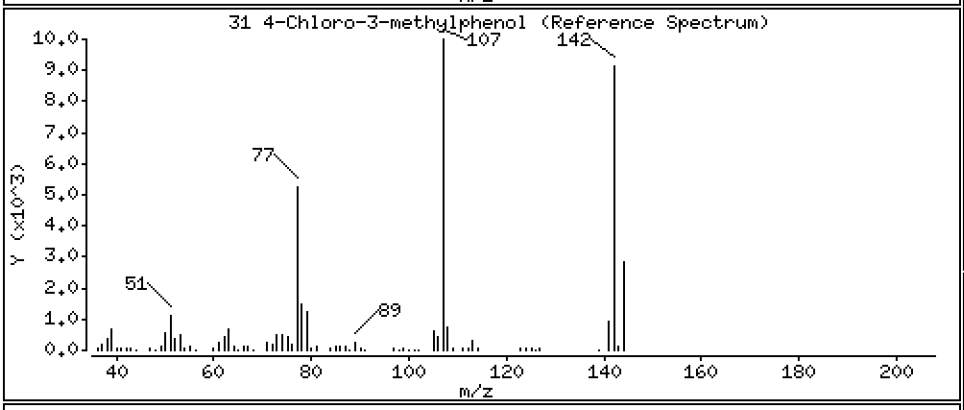
Concentration: 0.9302 ug/mL

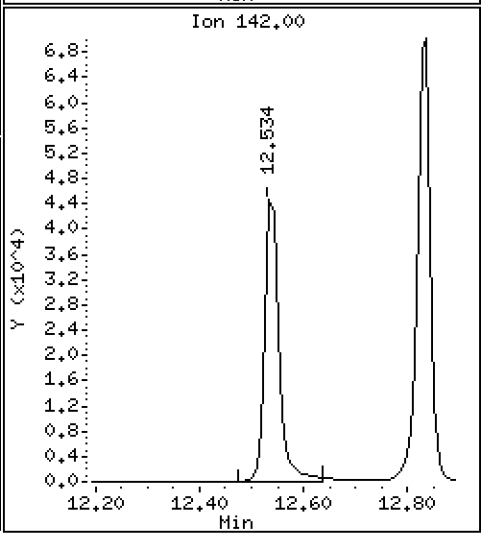


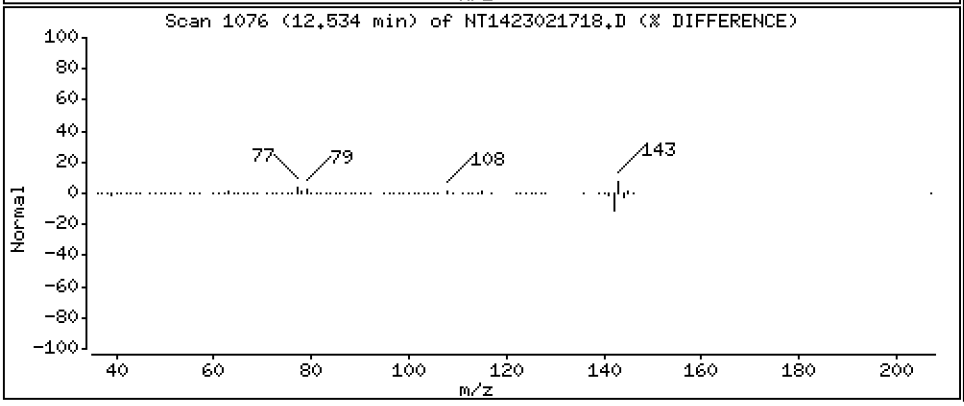












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

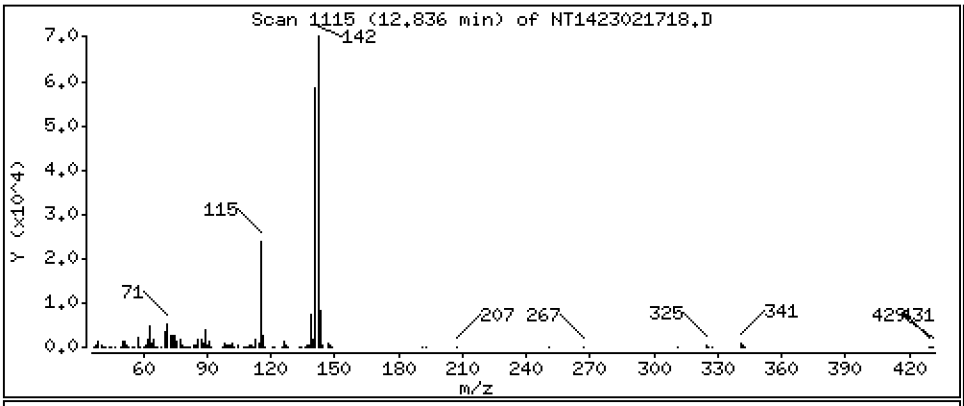
Operator: DSD

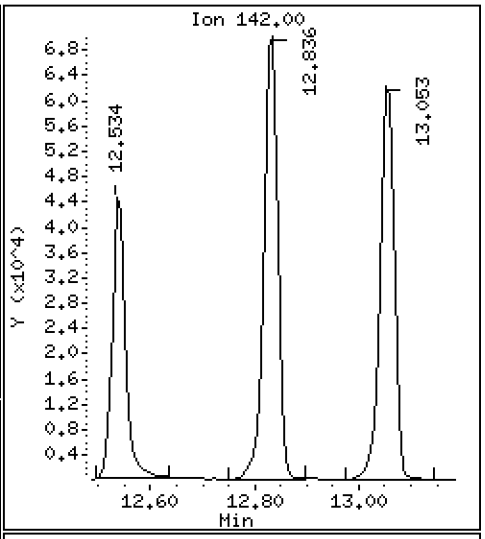
Column phase: ZB-5msi

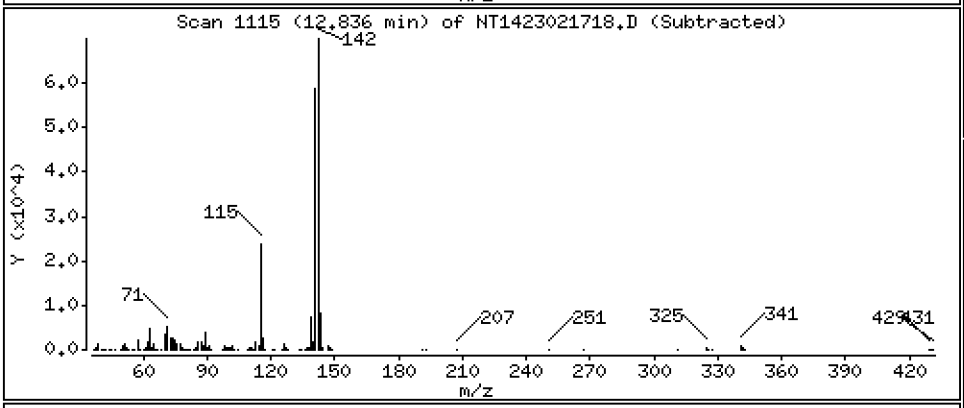
Column diameter: 0.25

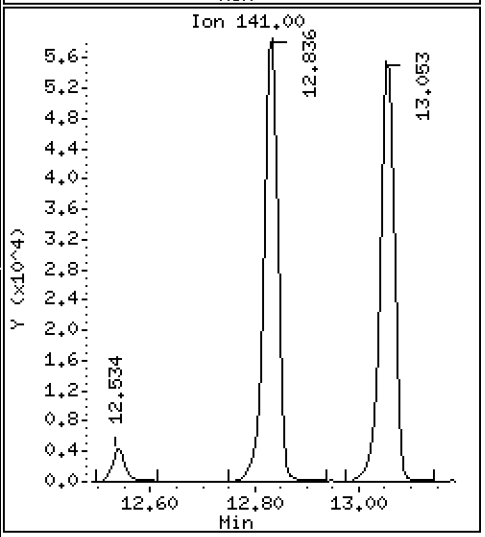
32 2-Methylnaphthalene

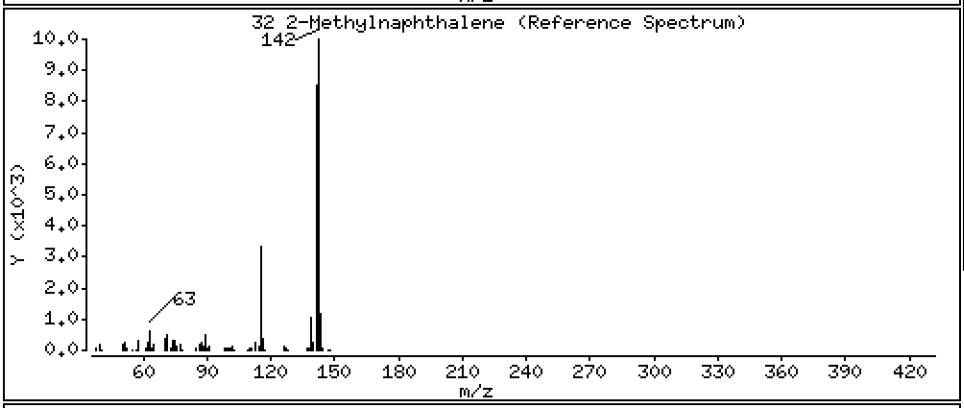
Concentration: 0.4910 ug/mL

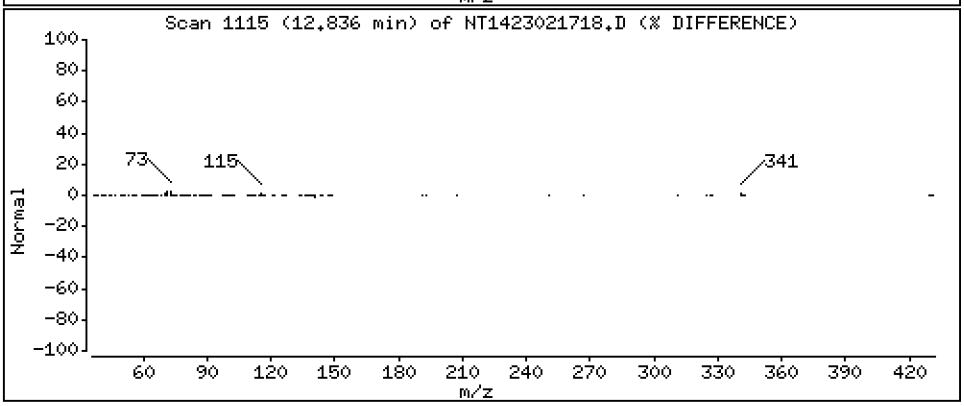












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021718.D

Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

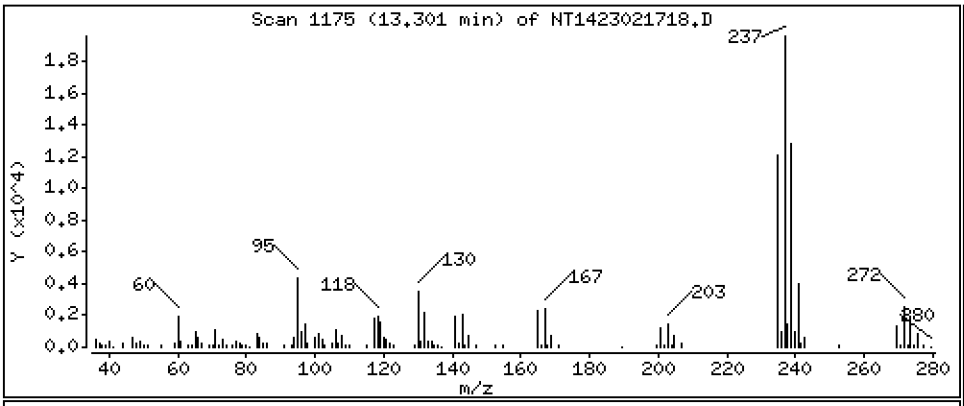
Operator: DSD

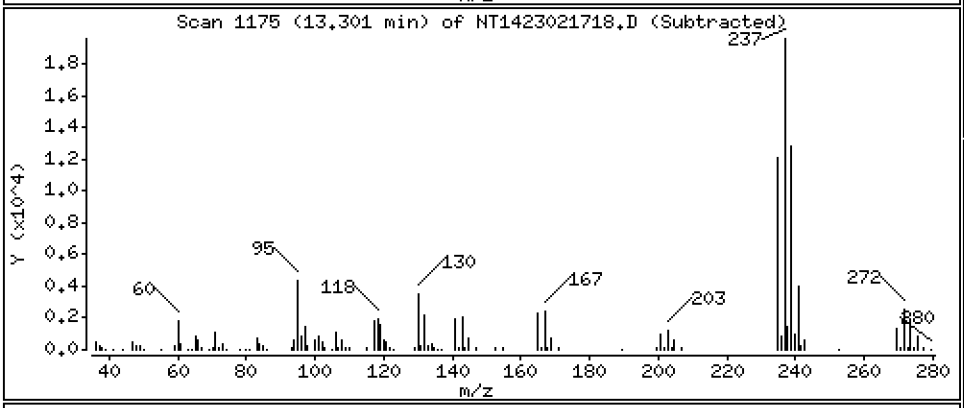
Column phase: ZB-5msi

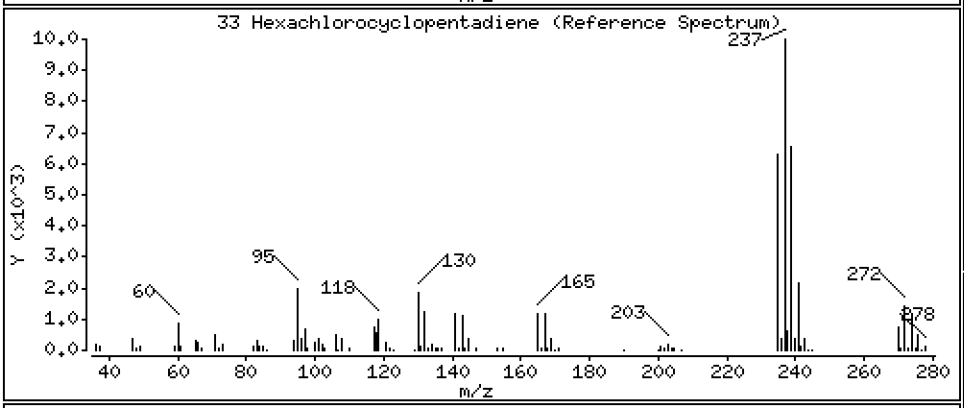
Column diameter: 0.25

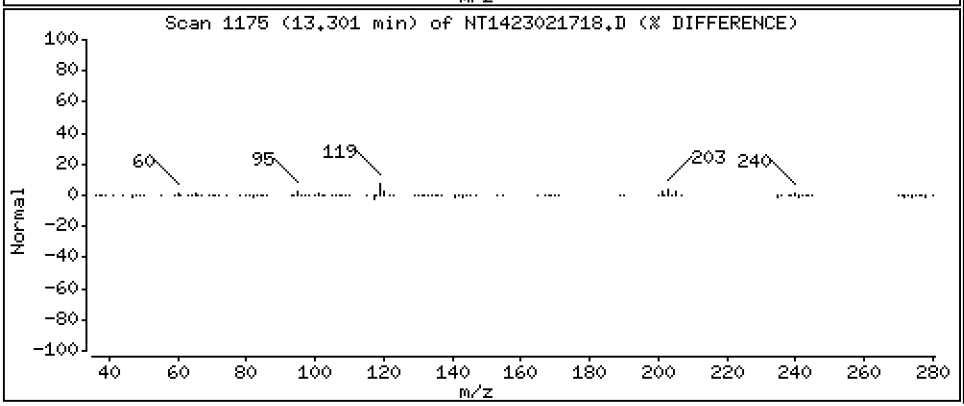
33 Hexachlorocyclopentadiene

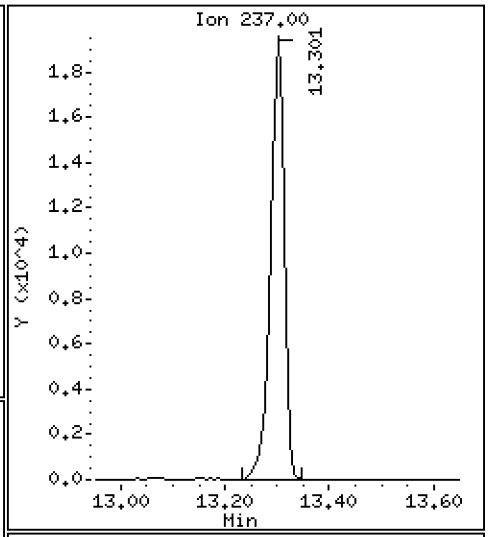
Concentration: 0.4213 ug/mL

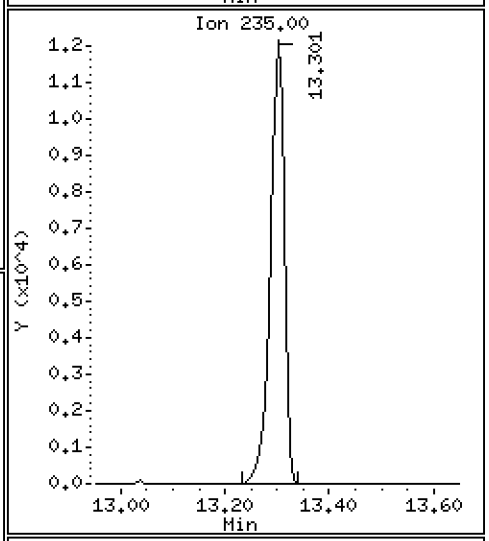


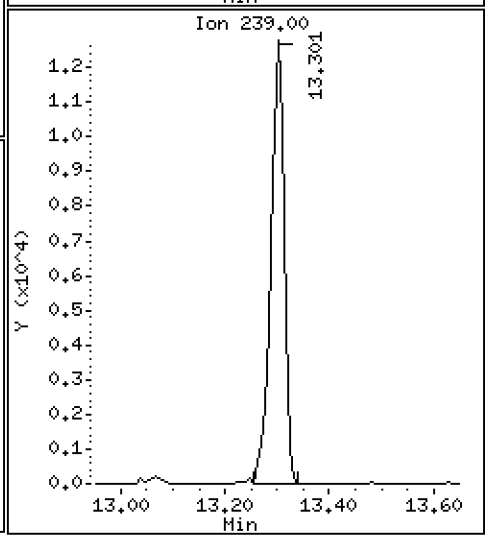












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

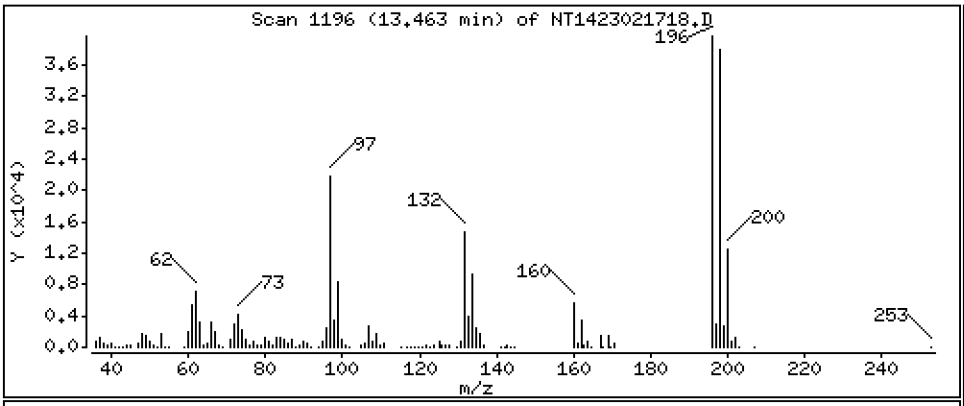
Operator: DSD

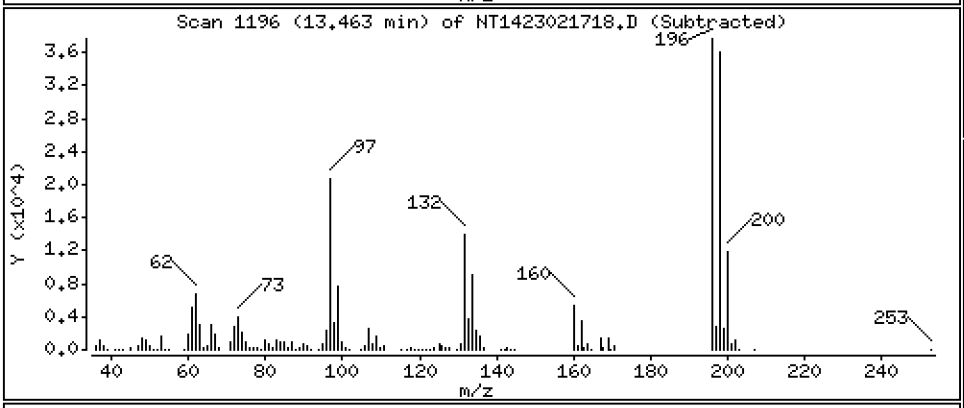
Column phase: ZB-5msi

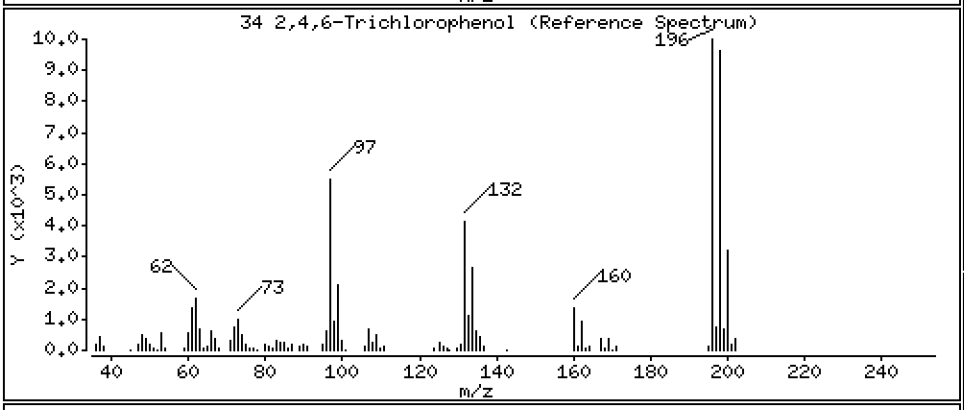
Column diameter: 0.25

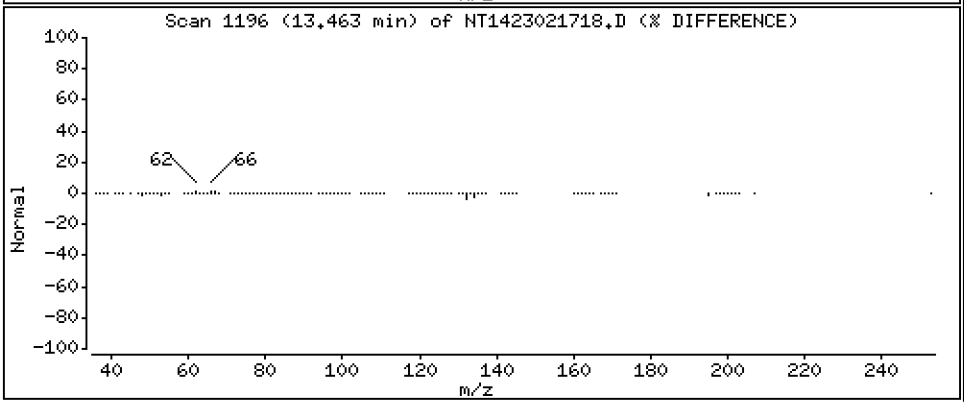
34 2,4,6-Trichlorophenol

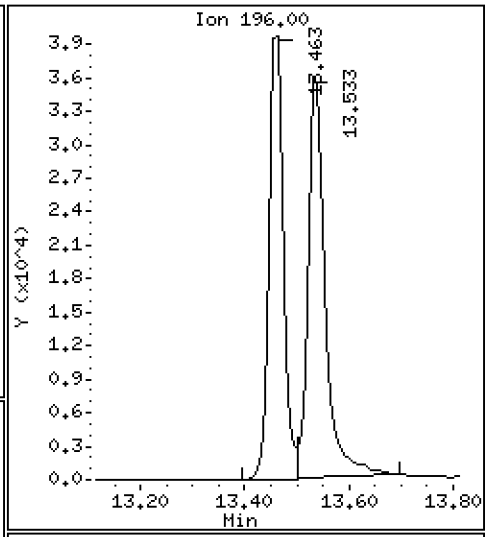
Concentration: 0.8969 ug/mL

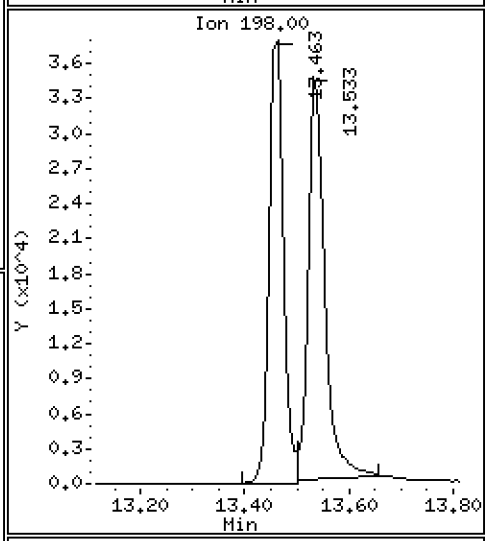


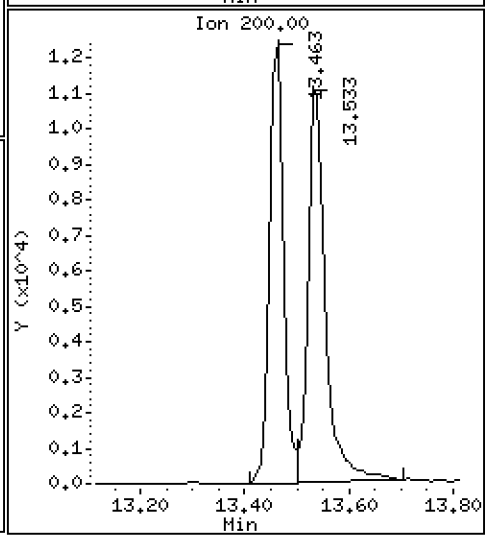












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

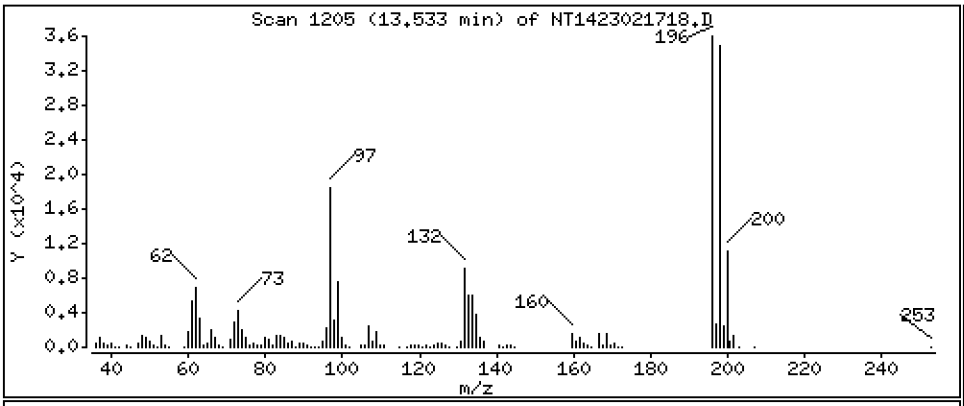
Operator: DSD

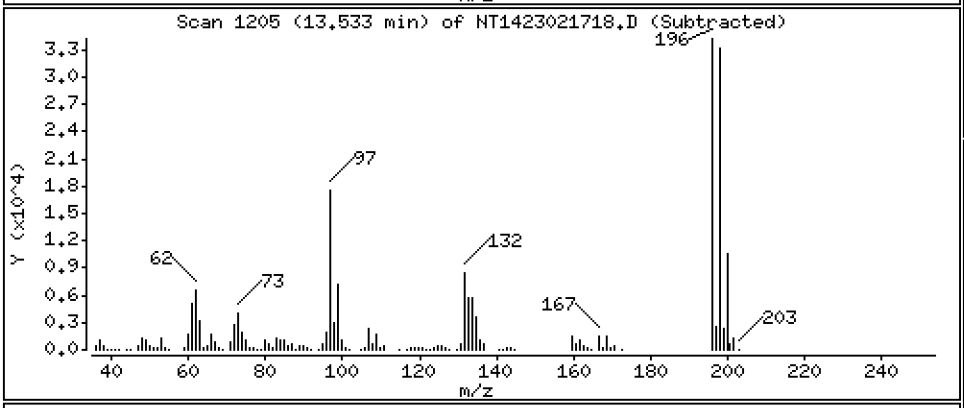
Column phase: ZB-5msi

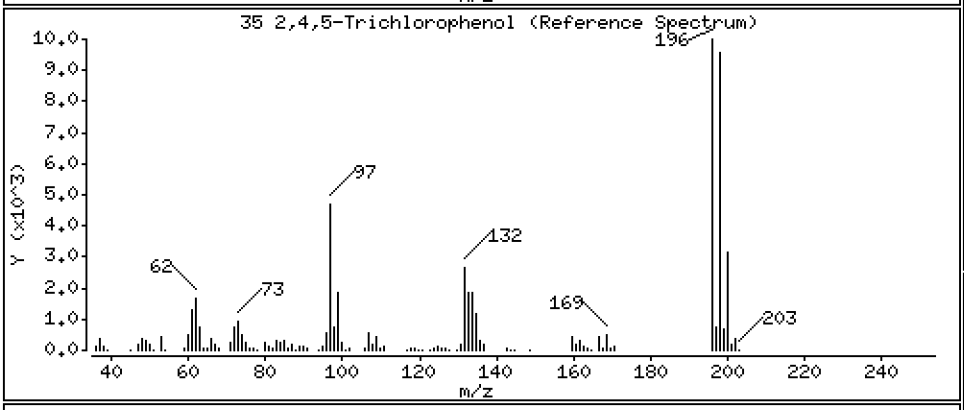
Column diameter: 0.25

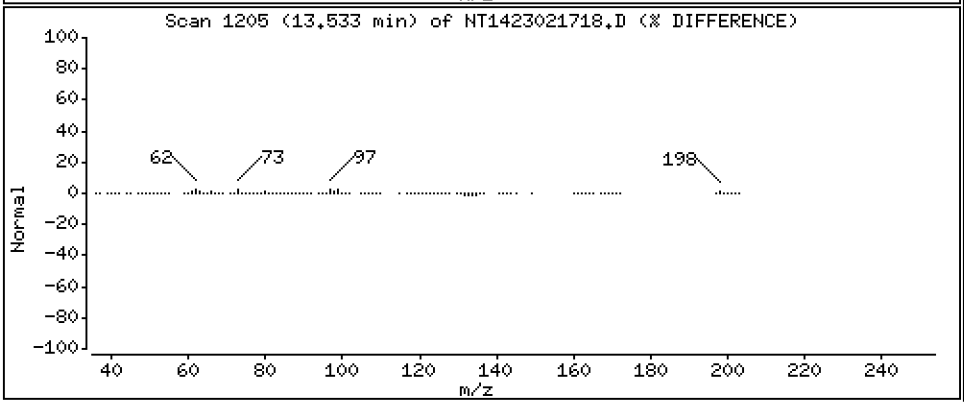
35 2,4,5-Trichlorophenol

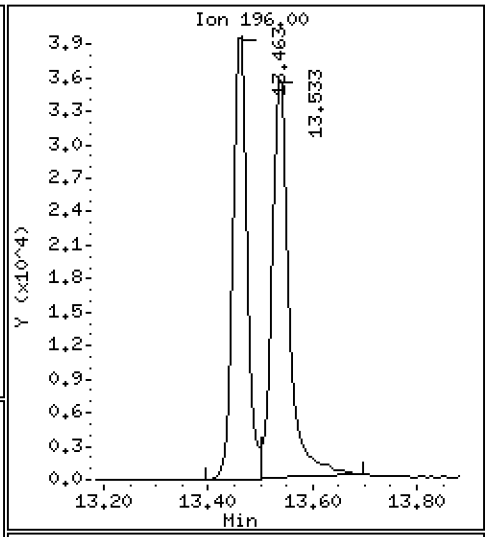
Concentration: 0.8911 ug/mL

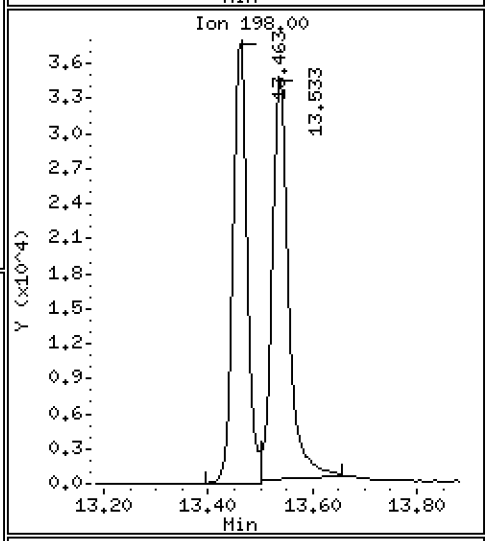


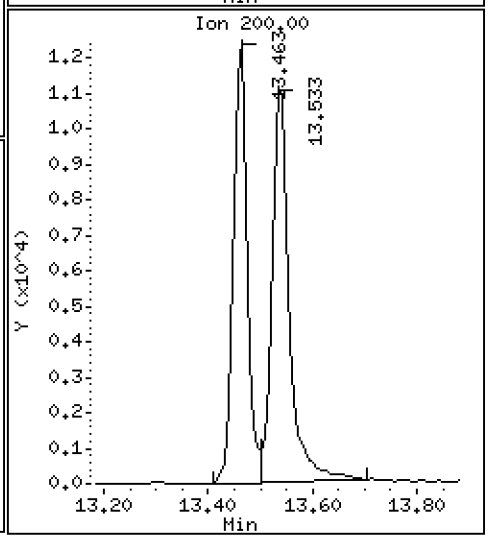












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

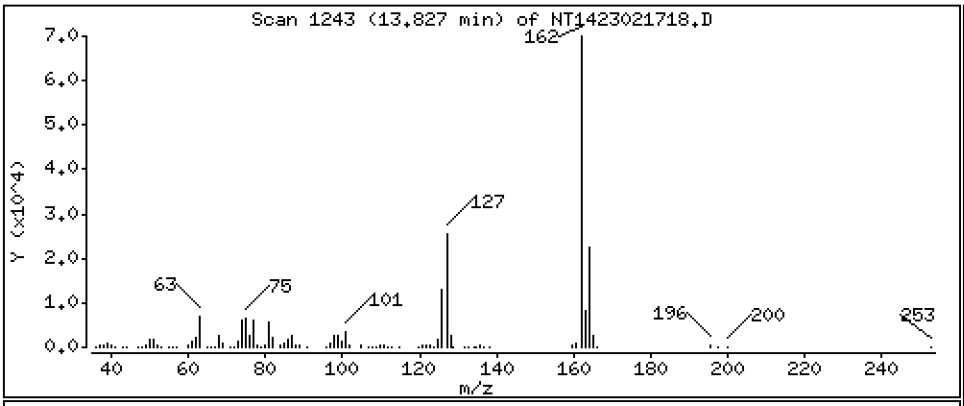
Operator: DSD

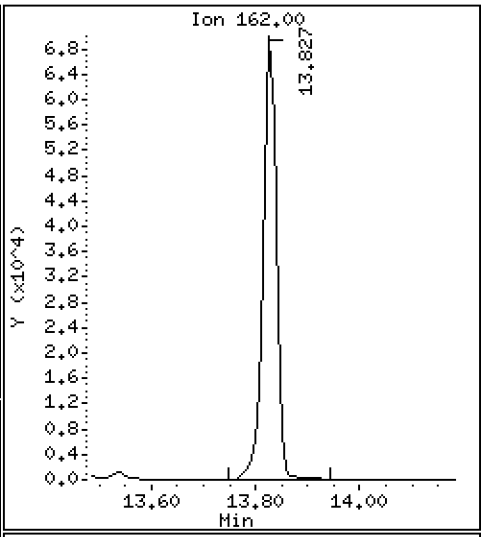
Column phase: ZB-5msi

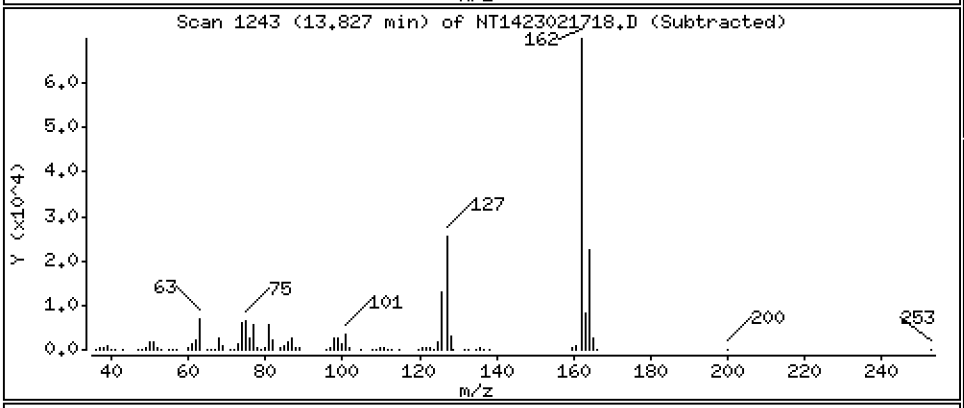
Column diameter: 0.25

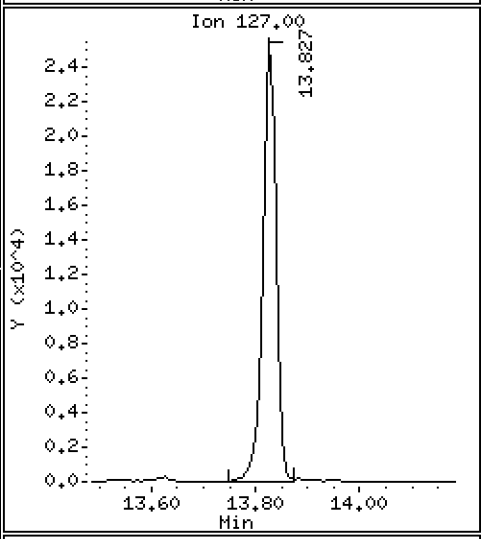
37 2-Chloronaphthalene

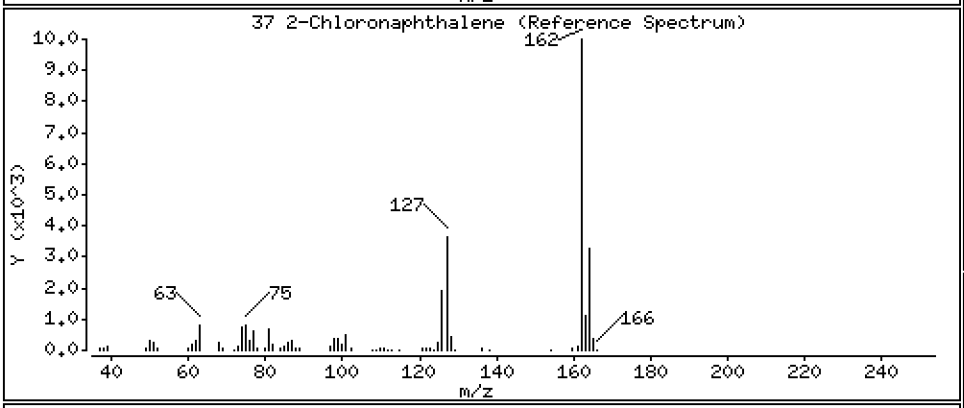
Concentration: 0.4854 ug/mL

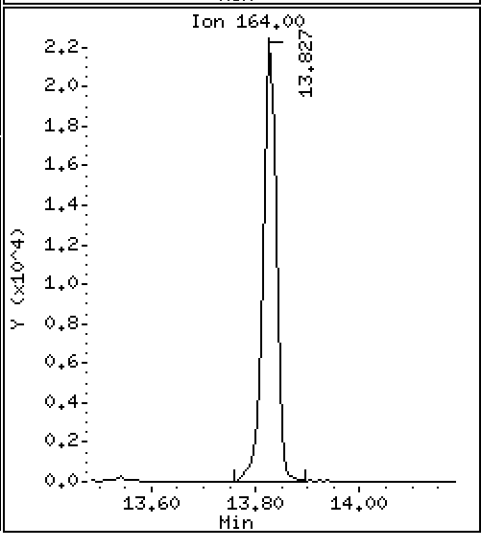


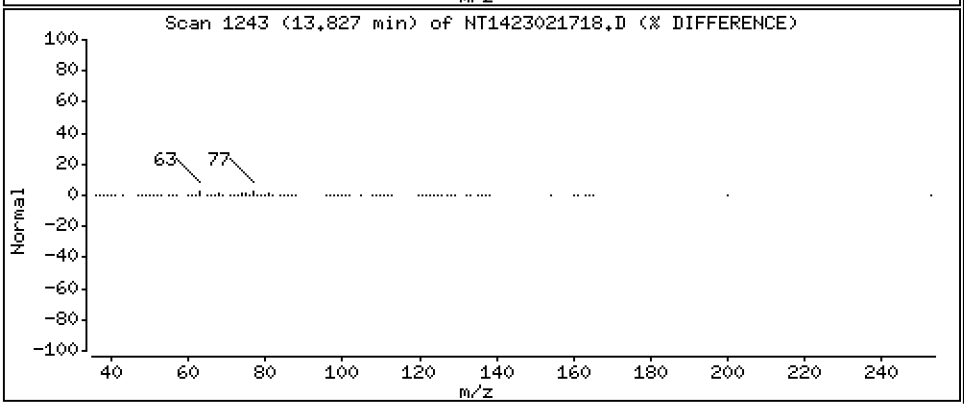












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

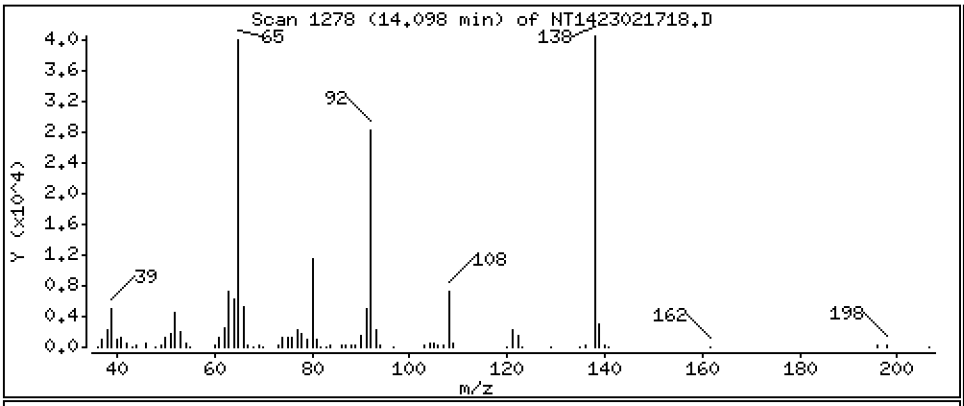
Operator: DSD

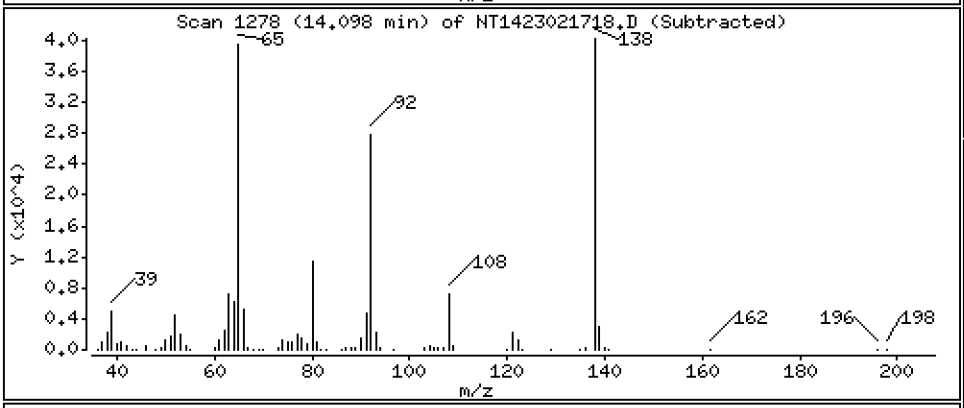
Column phase: ZB-5msi

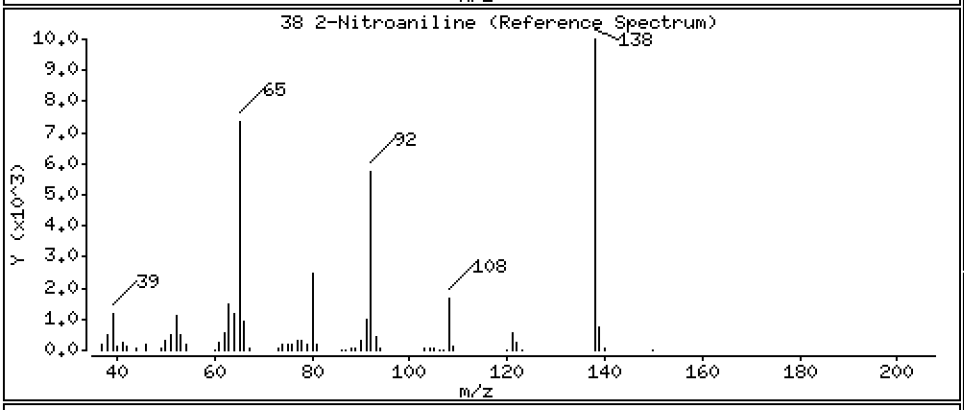
Column diameter: 0.25

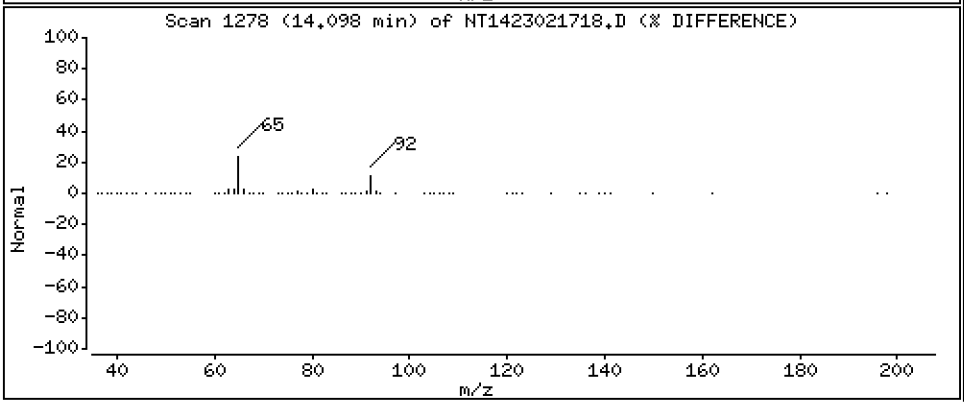
38 2-Nitroaniline

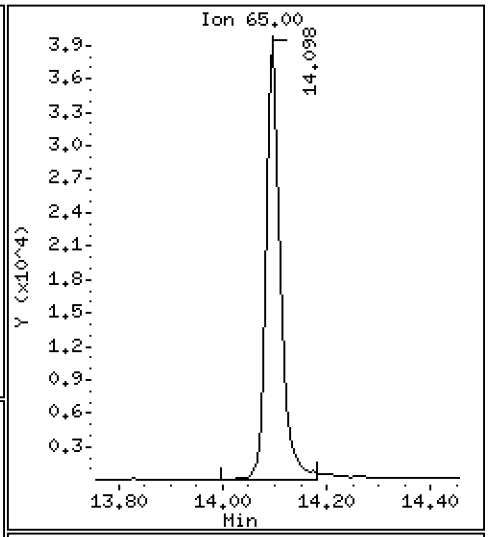
Concentration: 0.9428 ug/mL

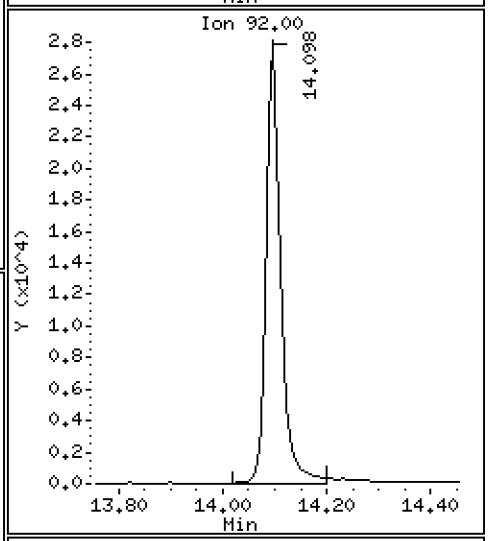


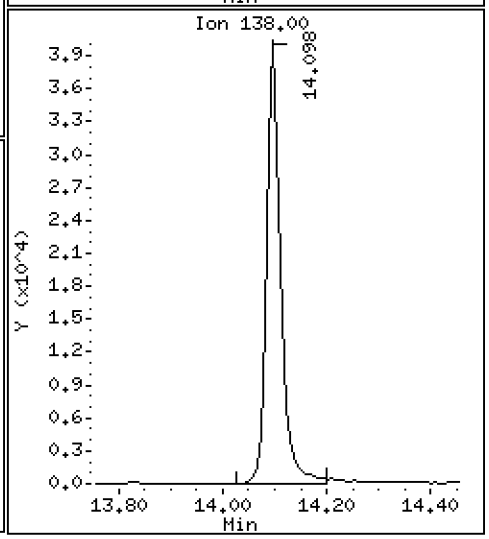












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

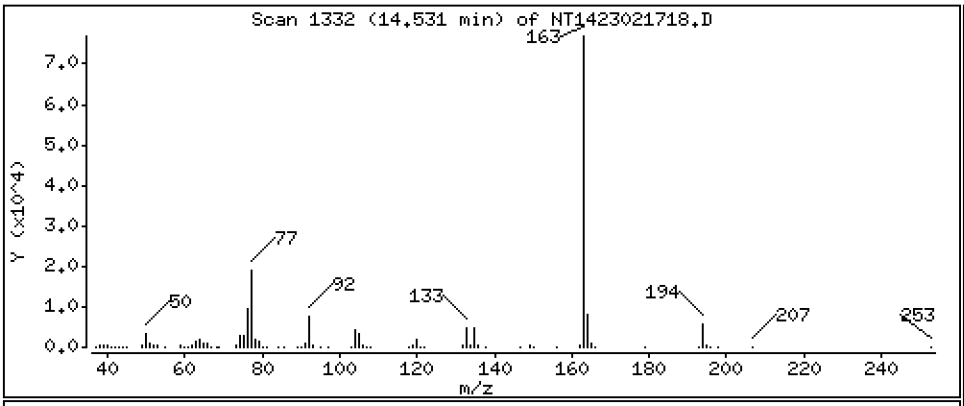
Operator: DSD

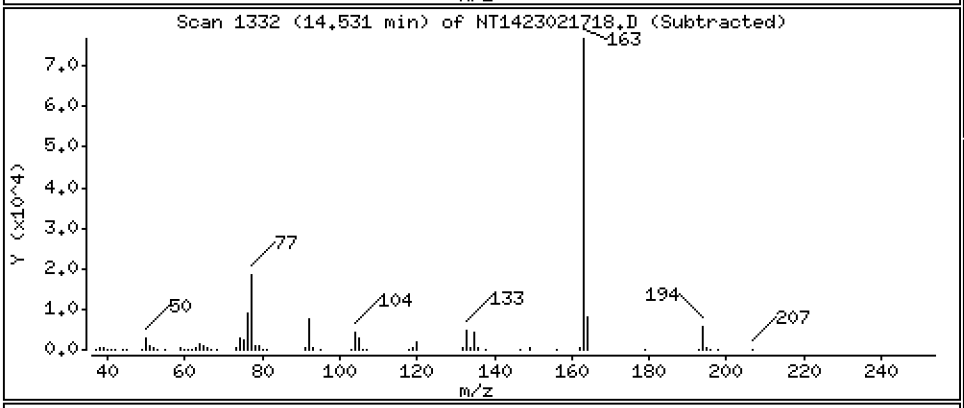
Column phase: ZB-5msi

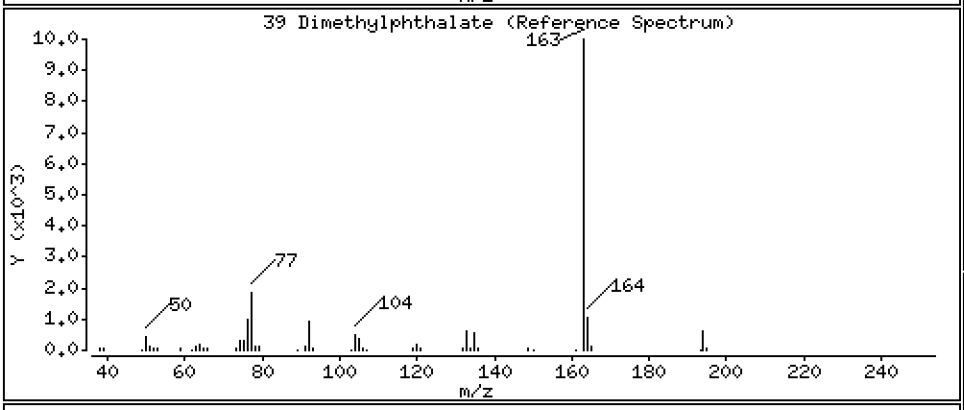
Column diameter: 0.25

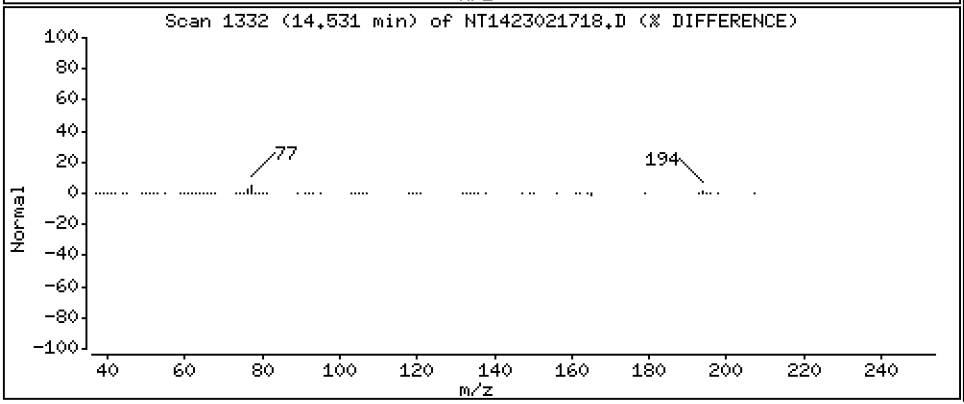
39 Dimethylphthalate

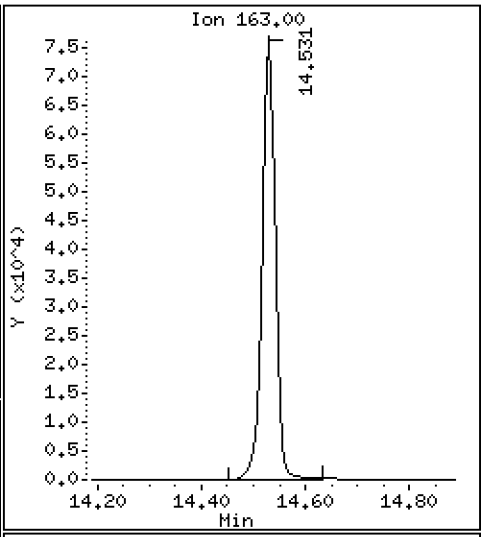
Concentration: 0.5028 ug/mL

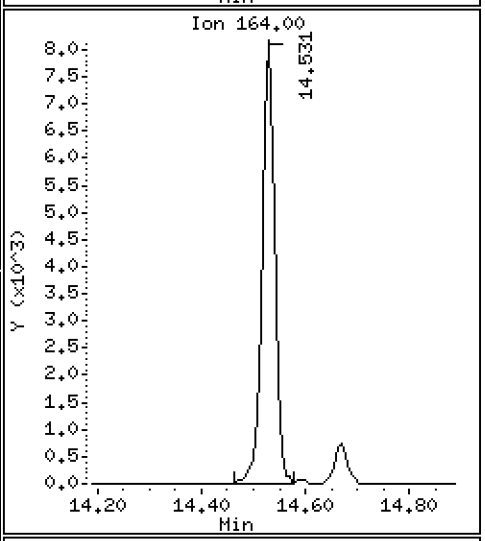


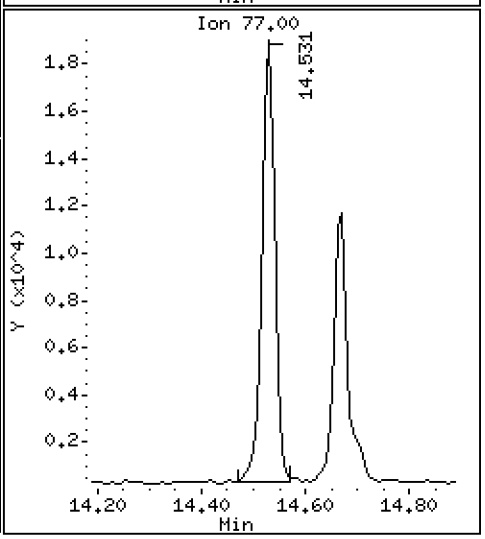












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

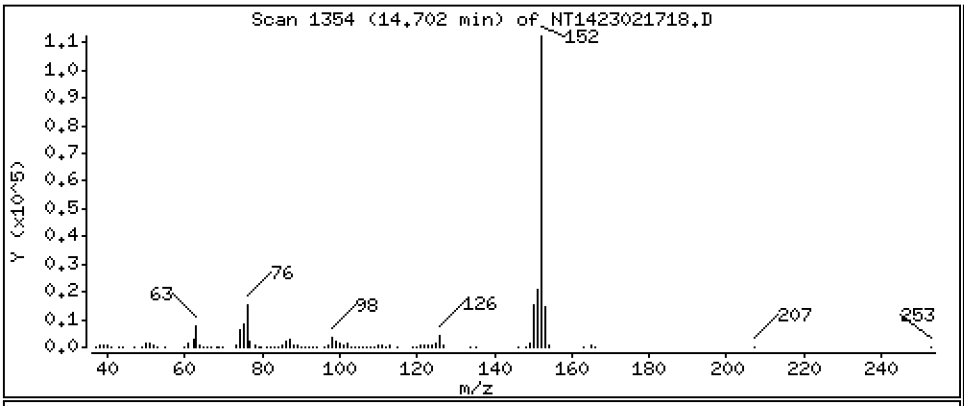
Operator: DSD

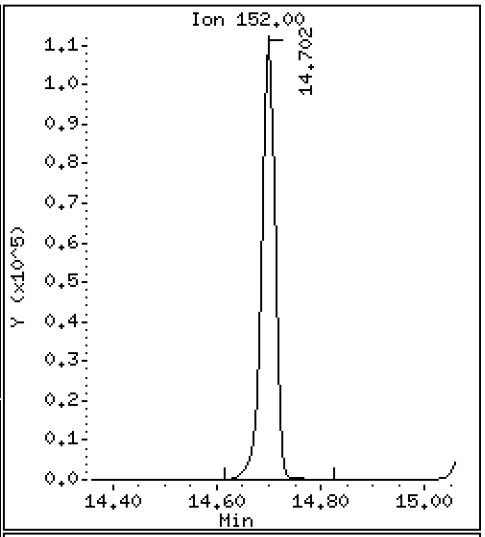
Column phase: ZB-5msi

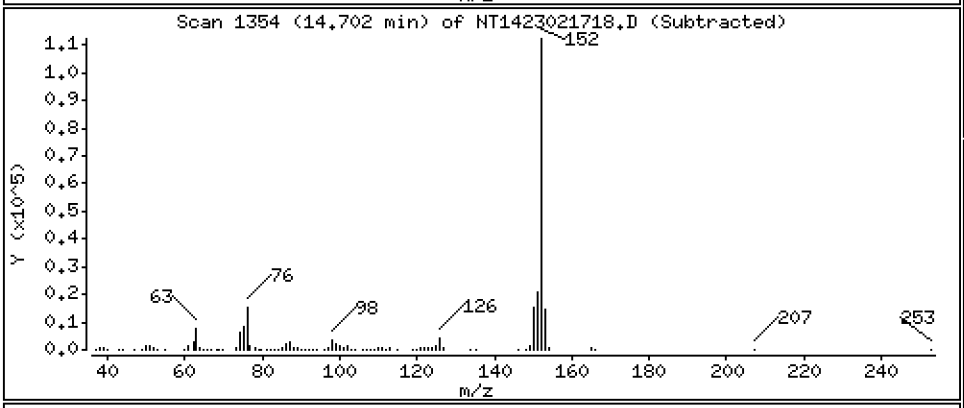
Column diameter: 0.25

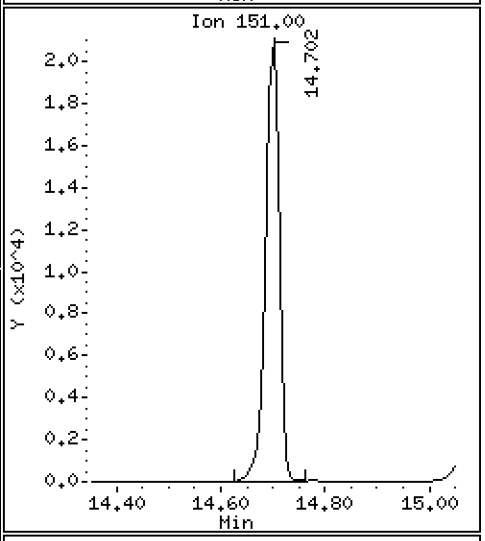
40 Acenaphthylene

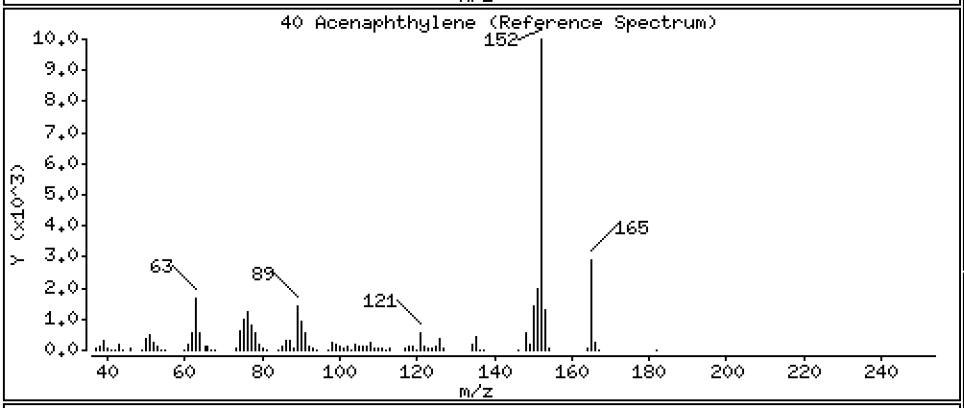
Concentration: 0.5579 ug/mL

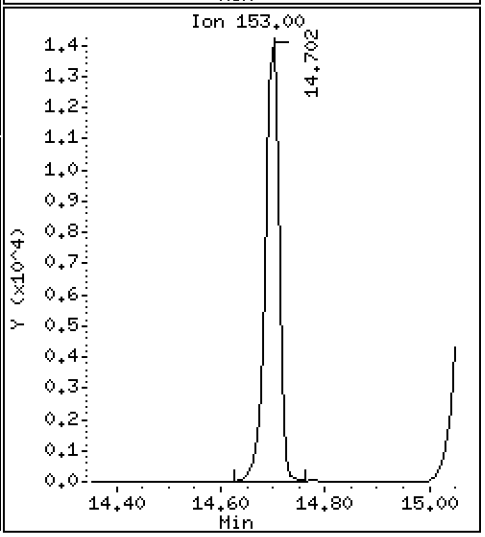


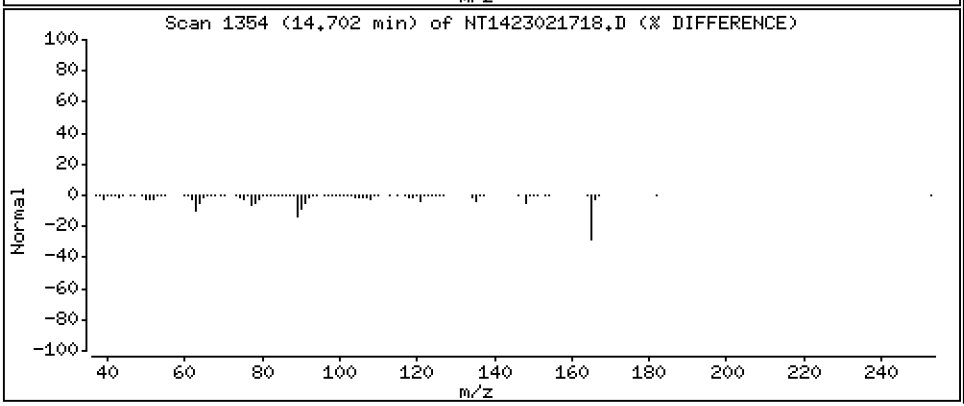












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

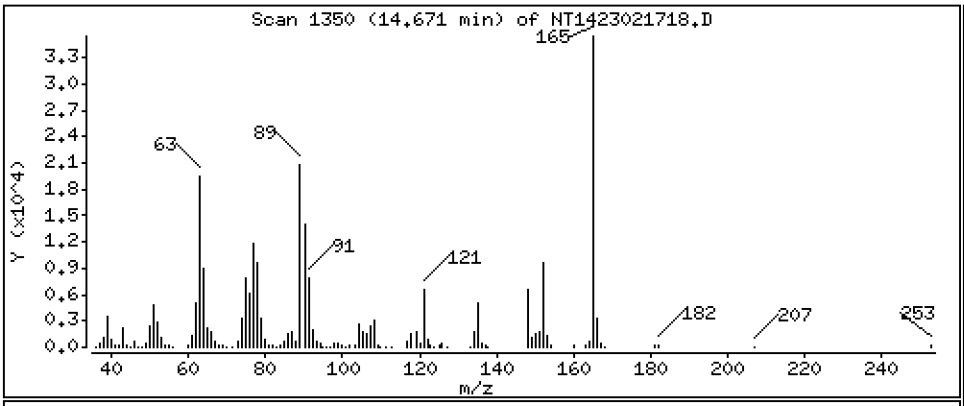
Operator: DSD

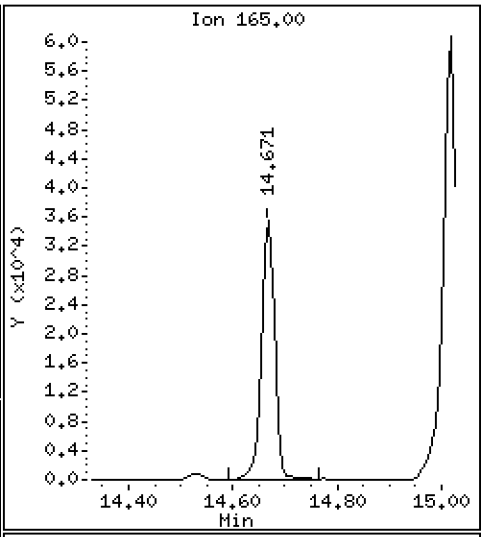
Column phase: ZB-5msi

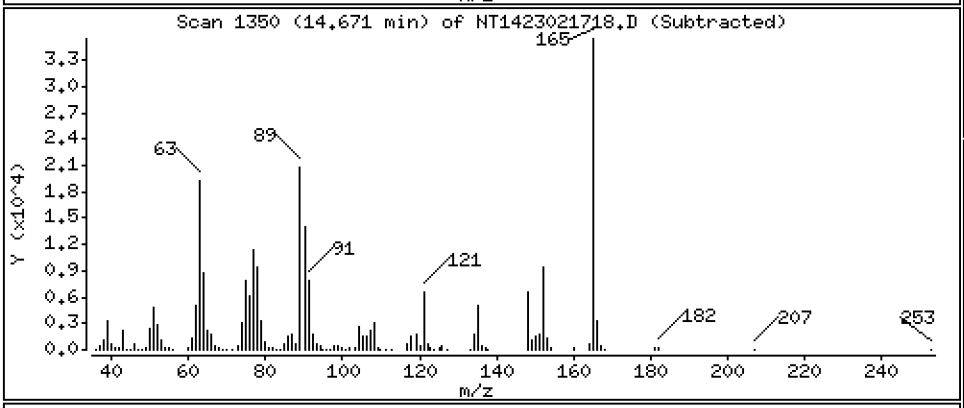
Column diameter: 0.25

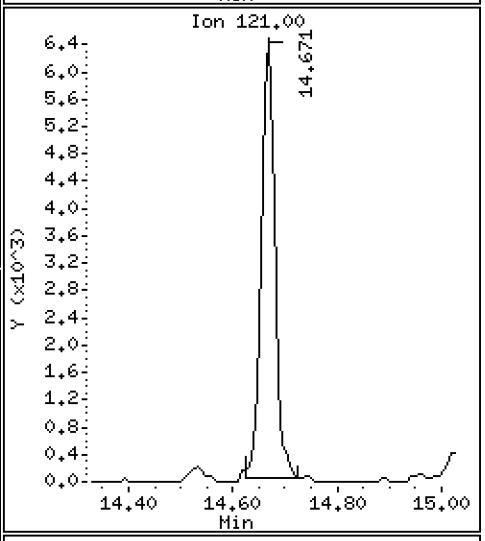
41 2,6-Dinitrotoluene

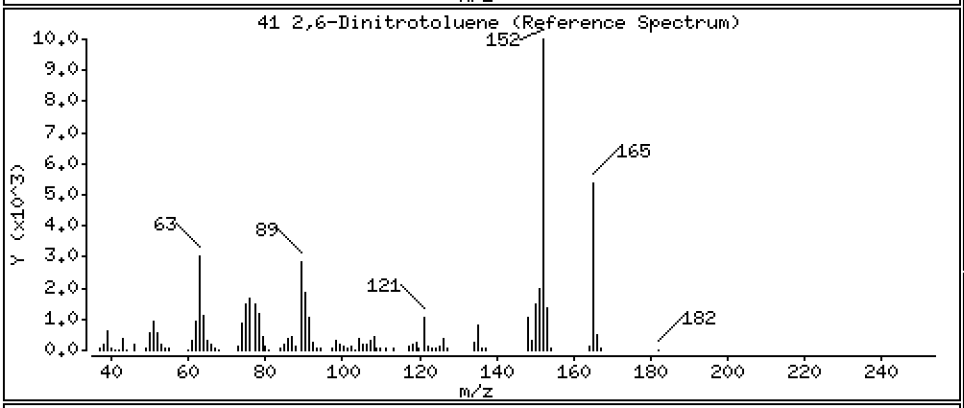
Concentration: 1.005 ug/mL

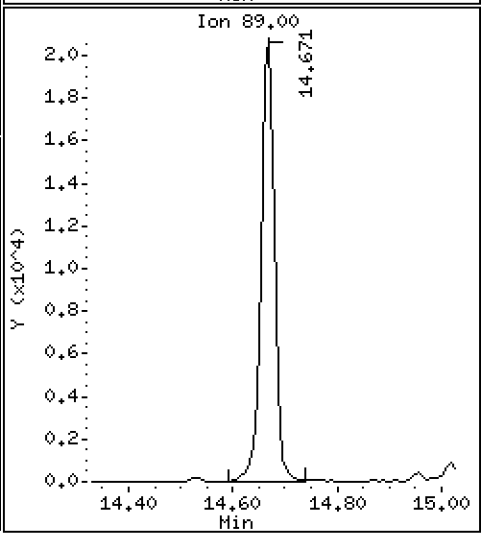


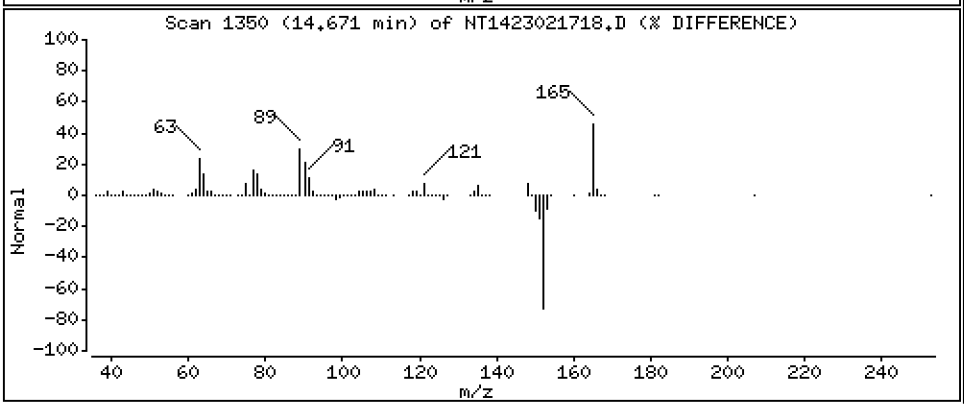












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

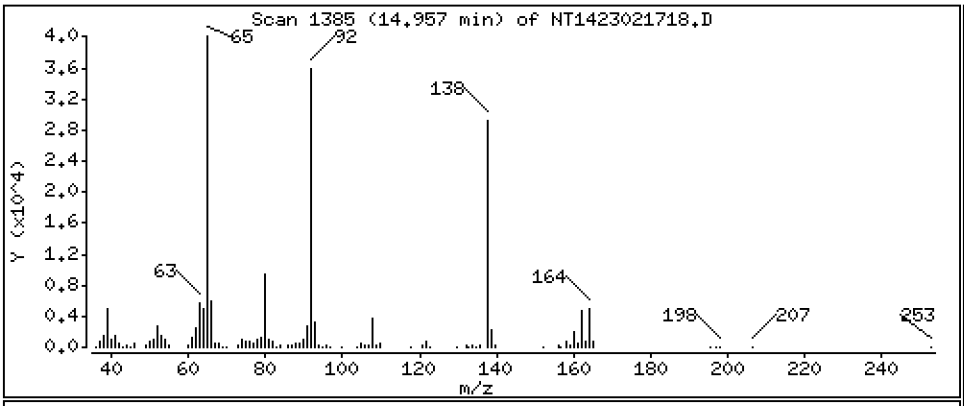
Operator: DSD

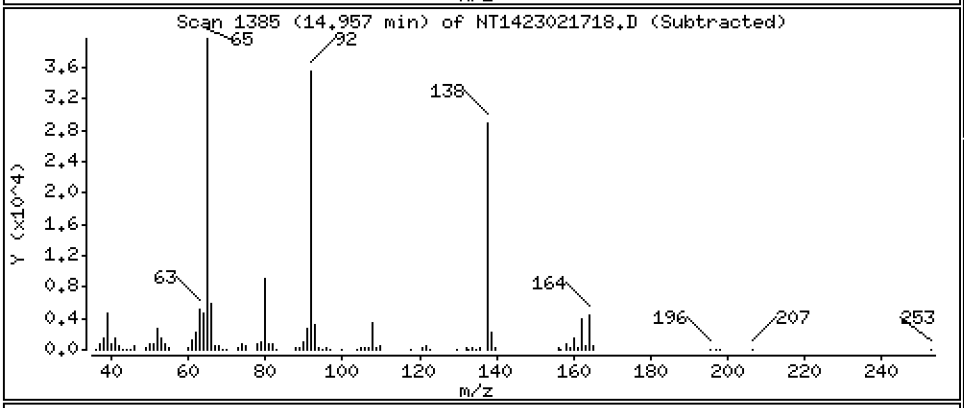
Column phase: ZB-5msi

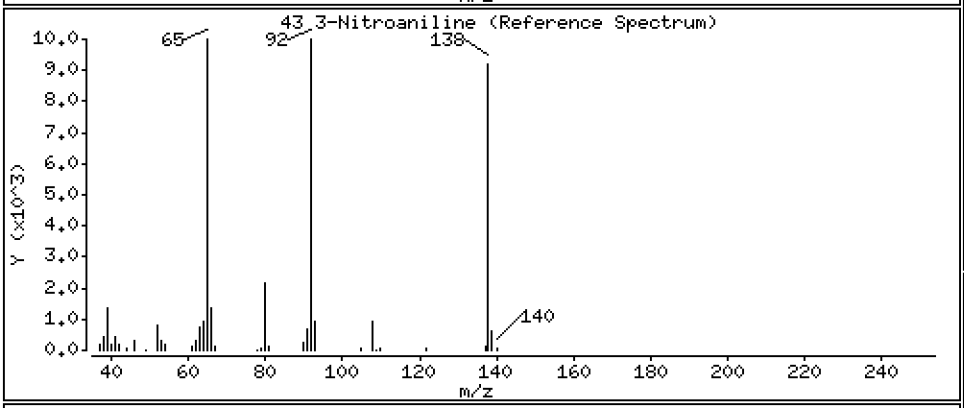
Column diameter: 0.25

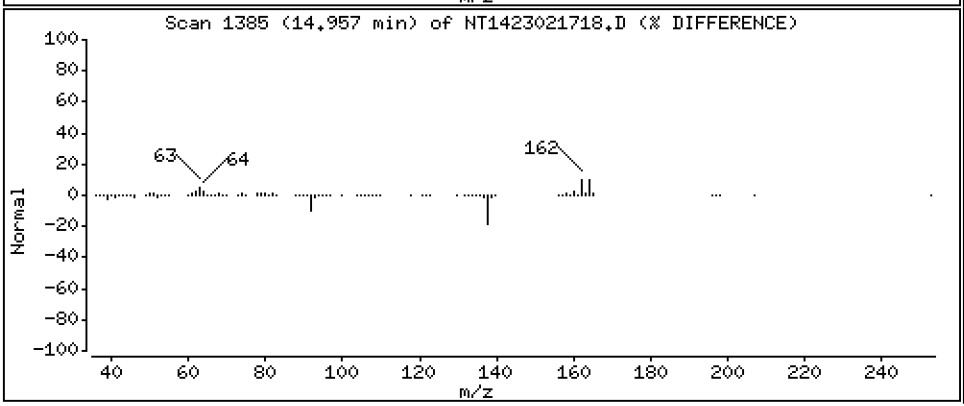
43 3-Nitroaniline

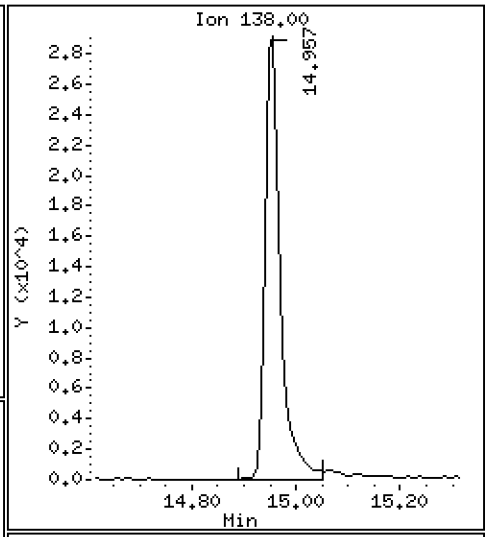
Concentration: 0.9036 ug/mL

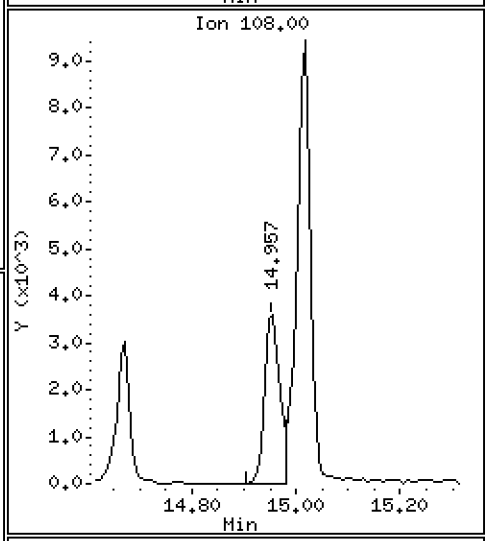


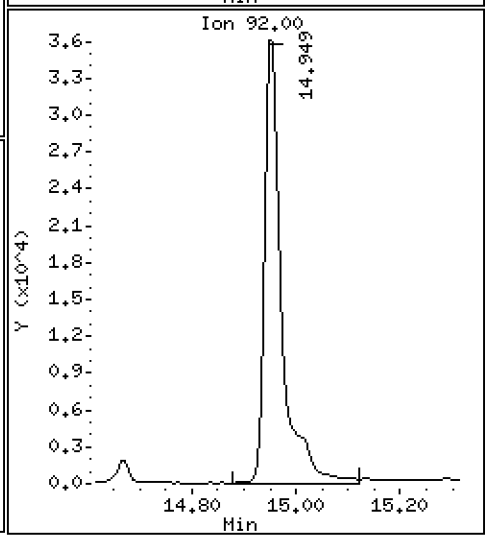












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

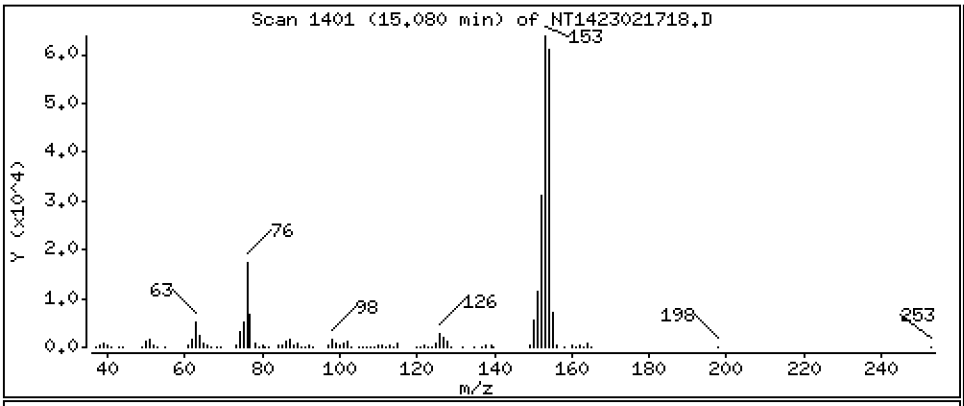
Operator: DSD

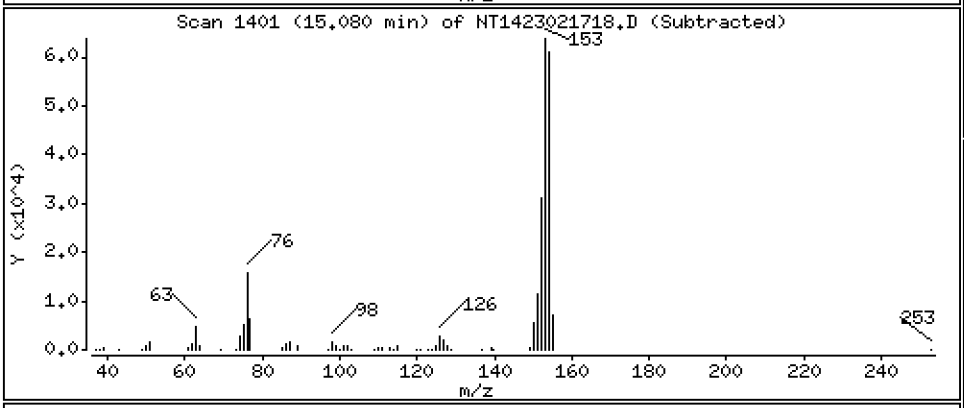
Column phase: ZB-5msi

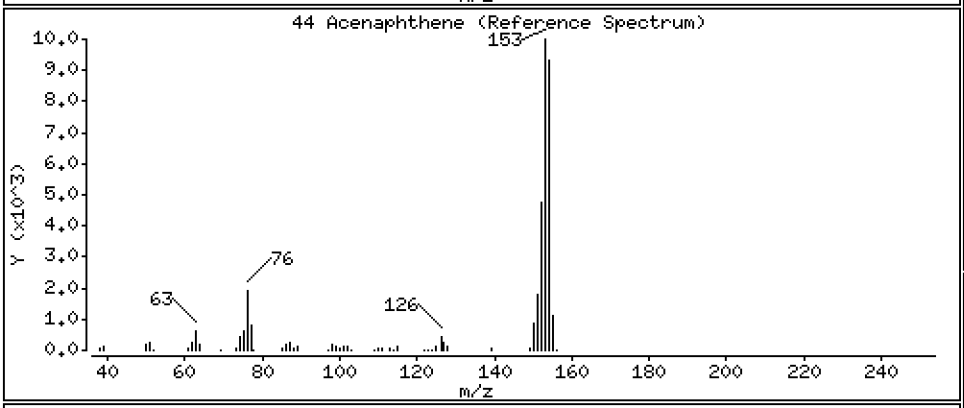
Column diameter: 0.25

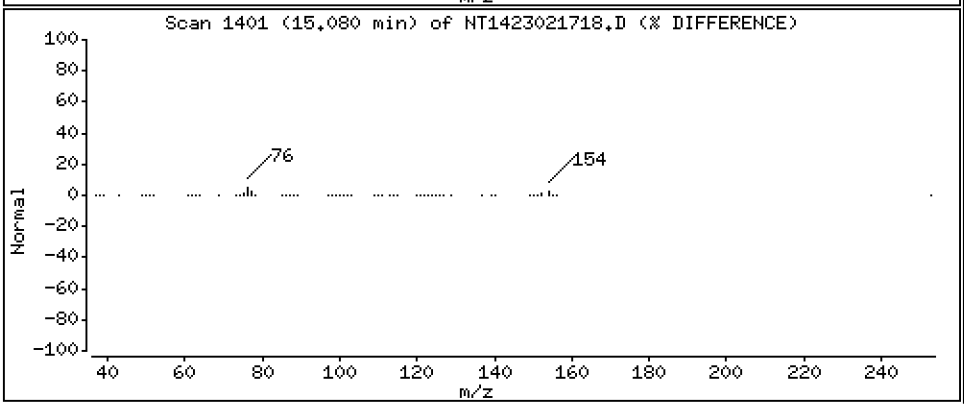
44 Acenaphthene

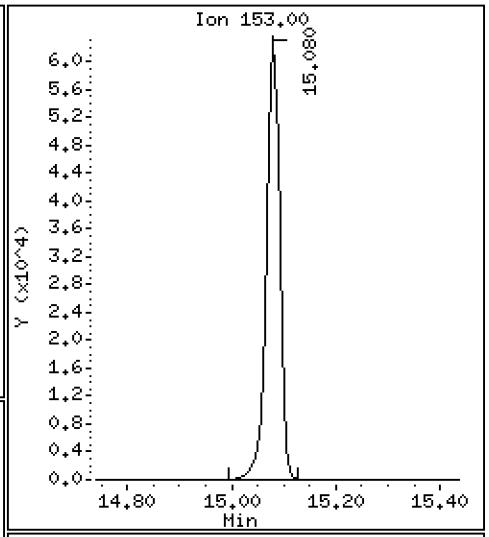
Concentration: 0.4801 ug/mL

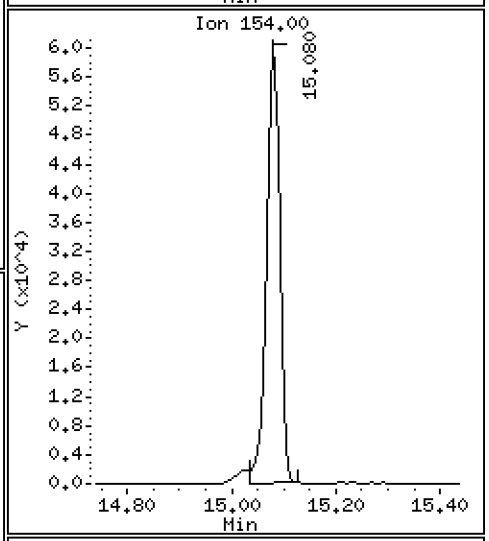


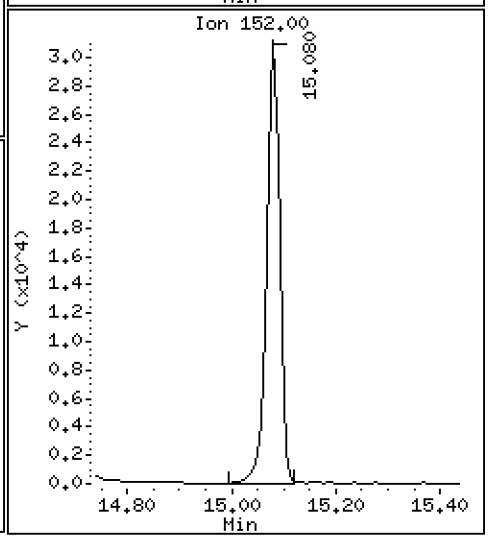












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

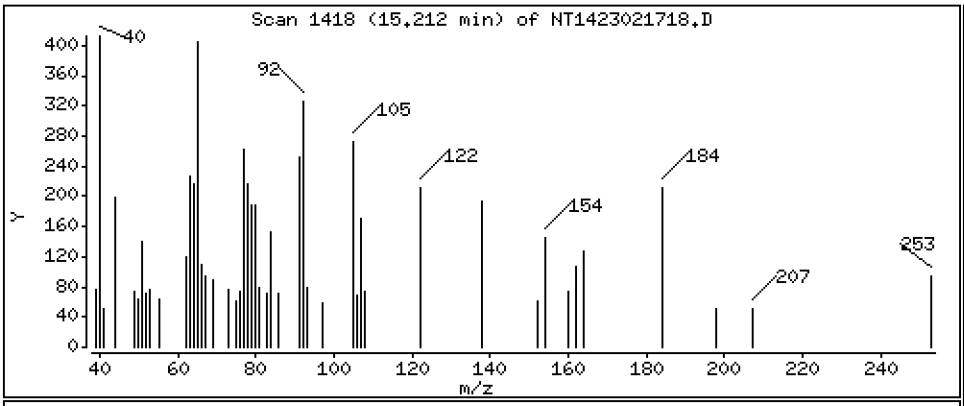
Operator: DSD

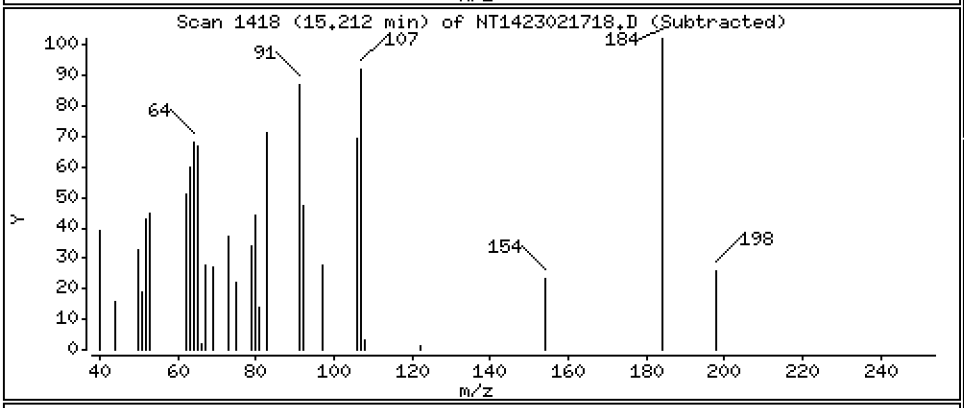
Column phase: ZB-5msi

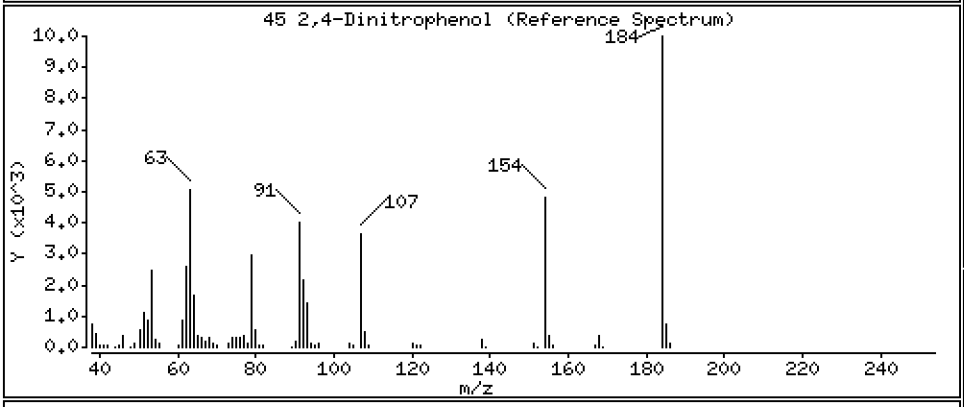
Column diameter: 0.25

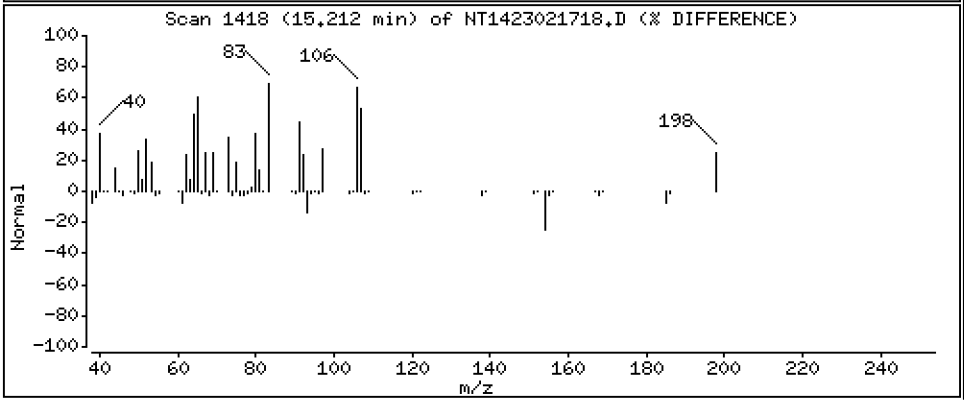
45 2,4-Dinitrophenol

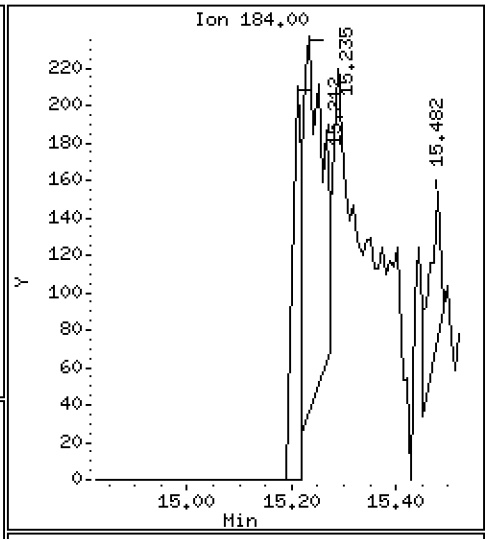
Concentration: 0.007110 ug/mL

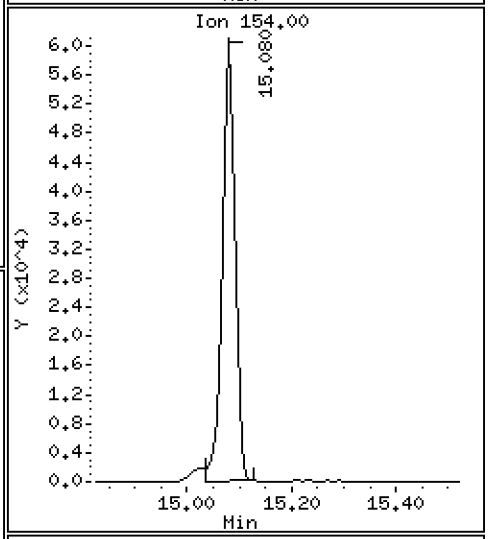


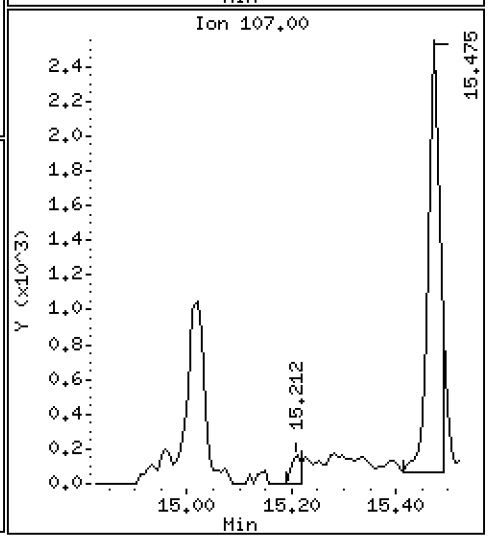












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

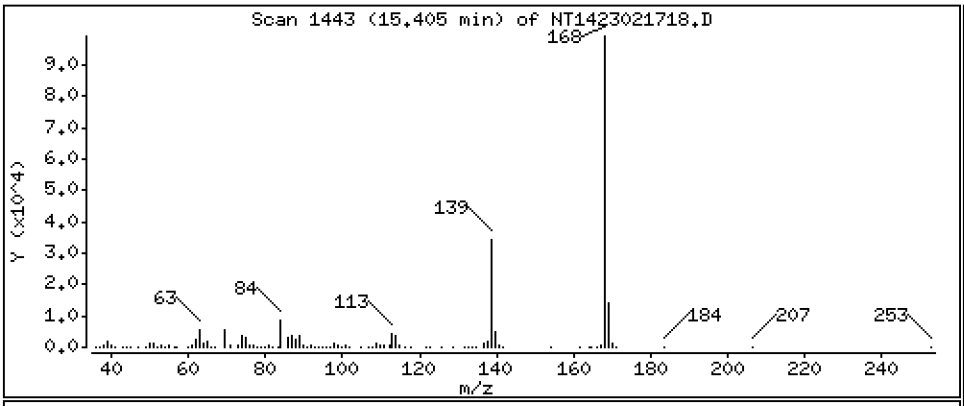
Operator: DSD

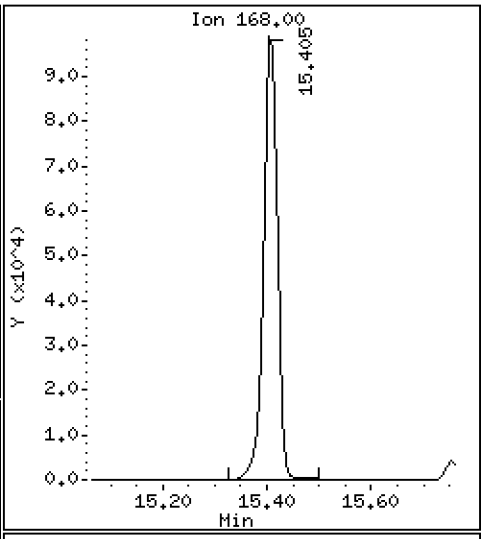
Column phase: ZB-5msi

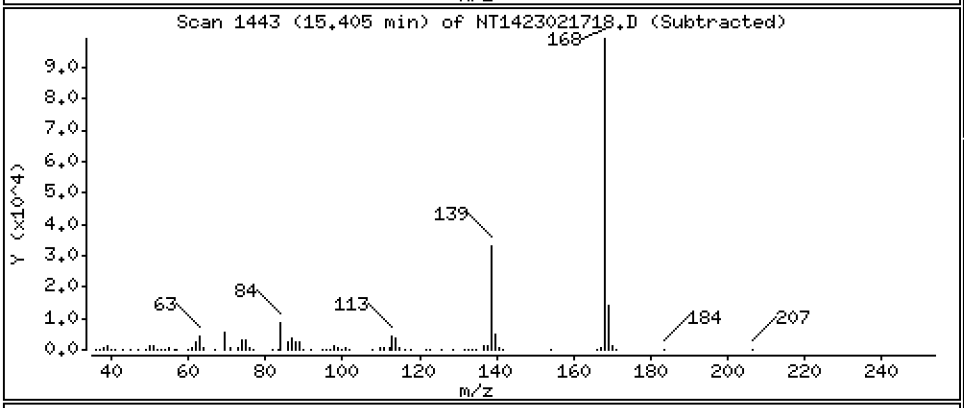
Column diameter: 0.25

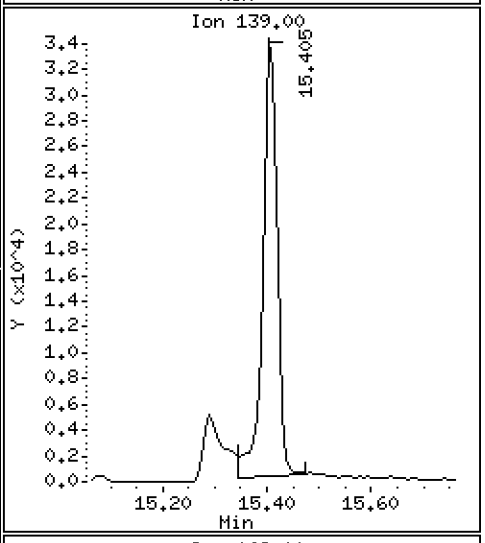
46 Dibenzofuran

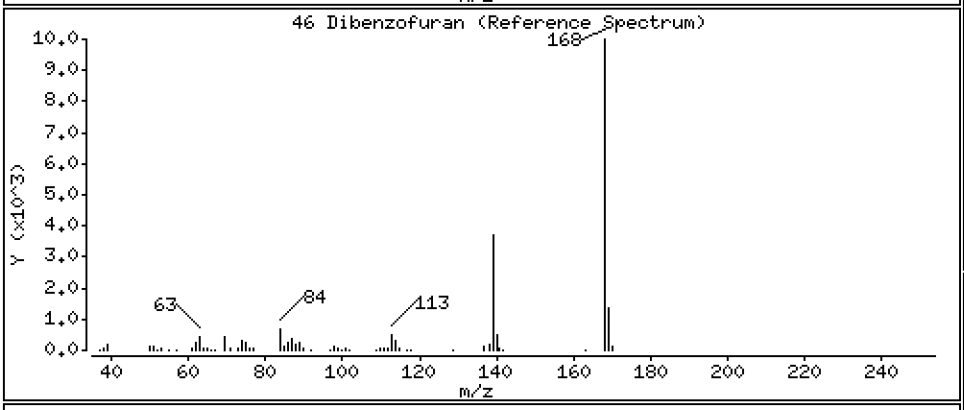
Concentration: 0.4852 ug/mL

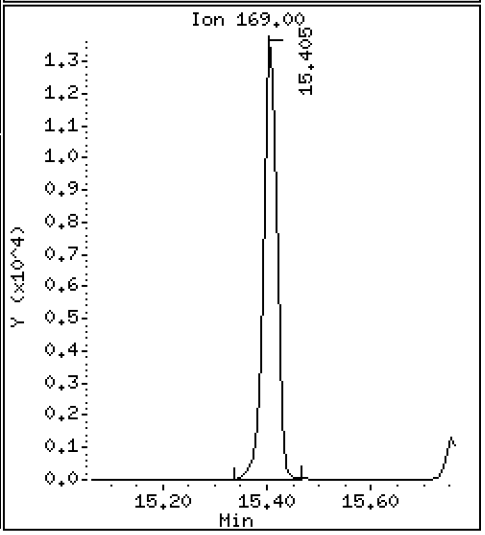


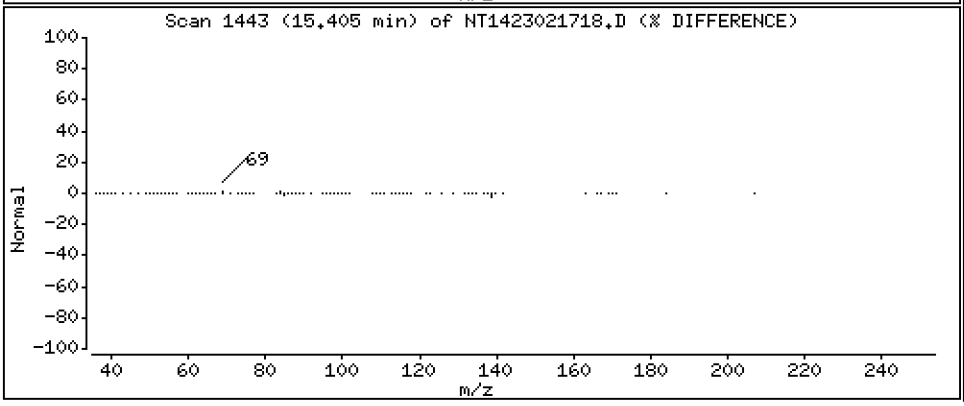












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

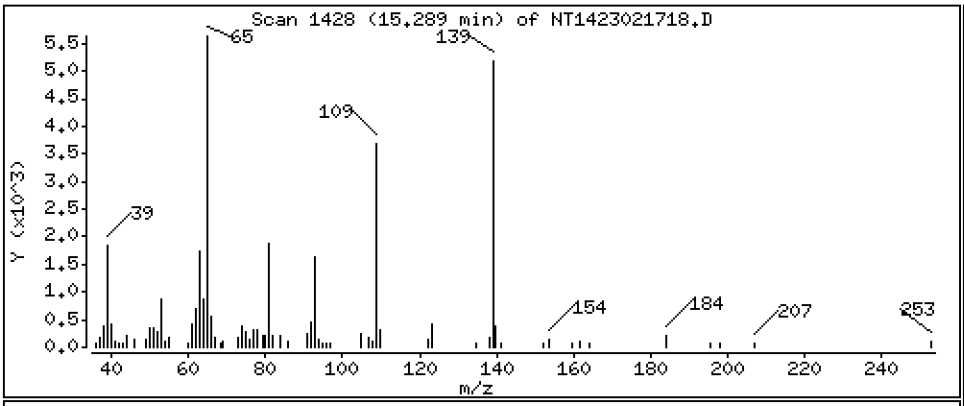
Operator: DSD

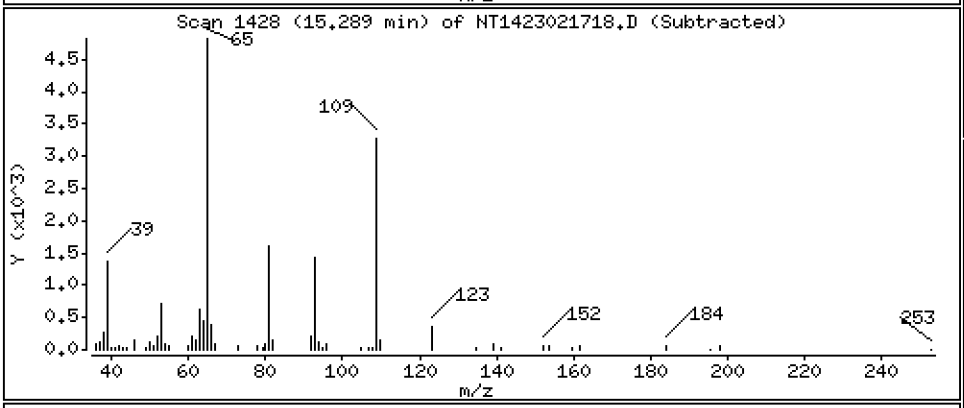
Column phase: ZB-5msi

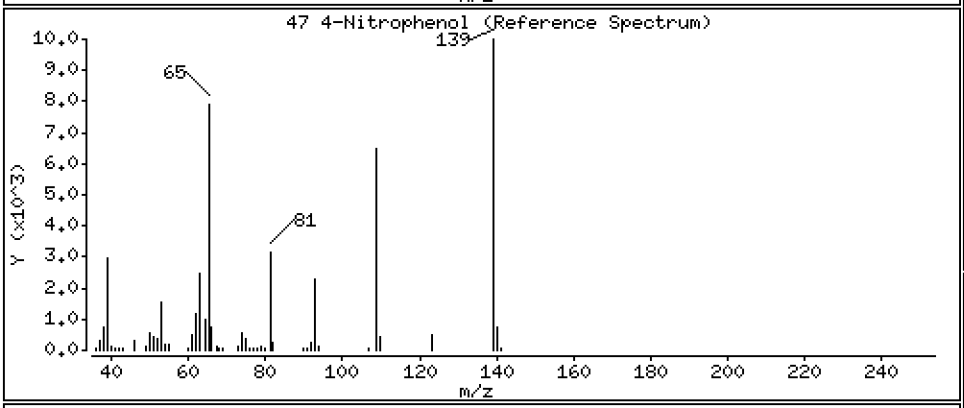
Column diameter: 0.25

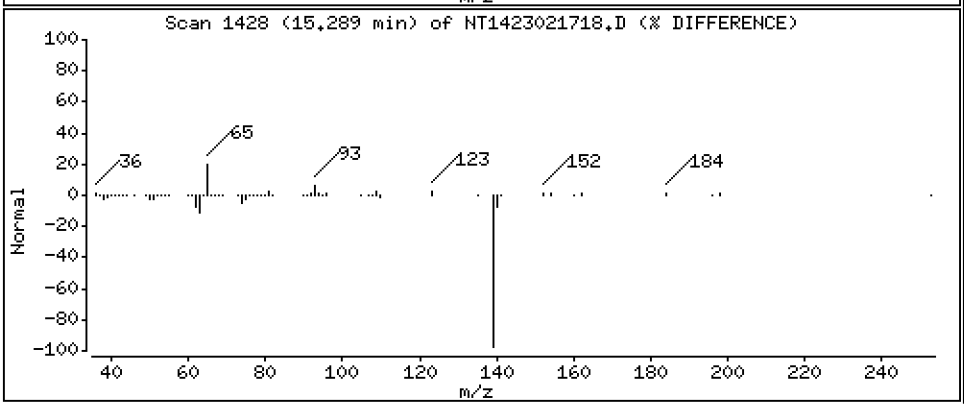
47 4-Nitrophenol

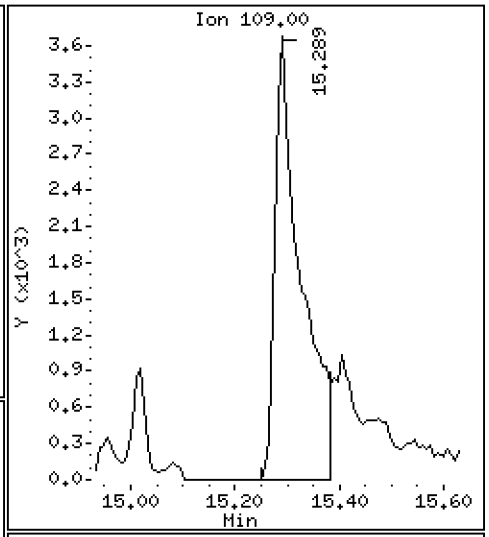
Concentration: 0.3448 ug/mL

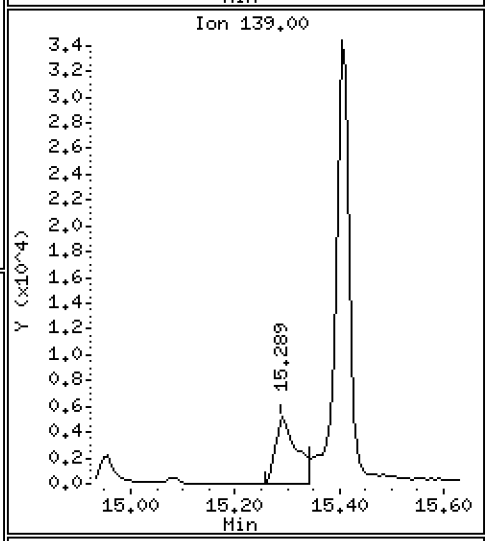


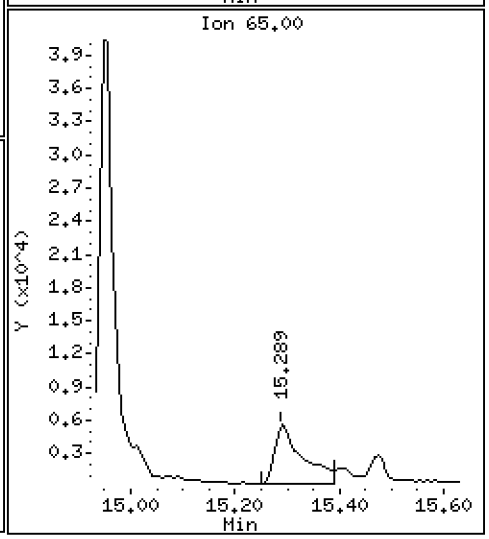












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

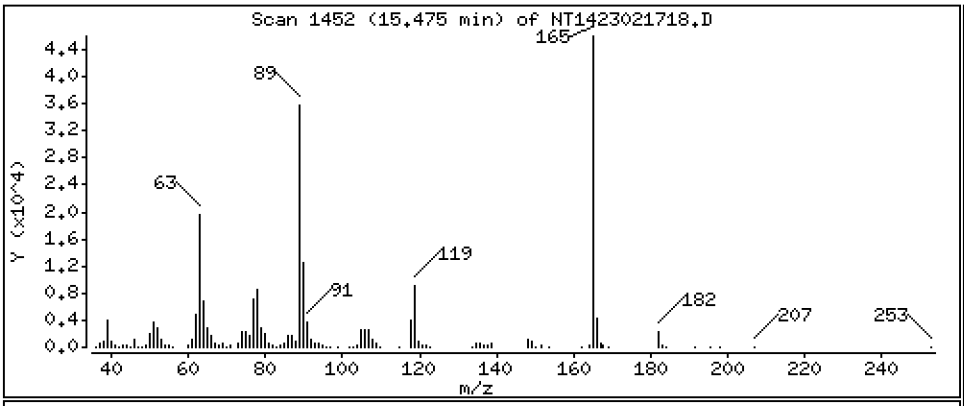
Operator: DSD

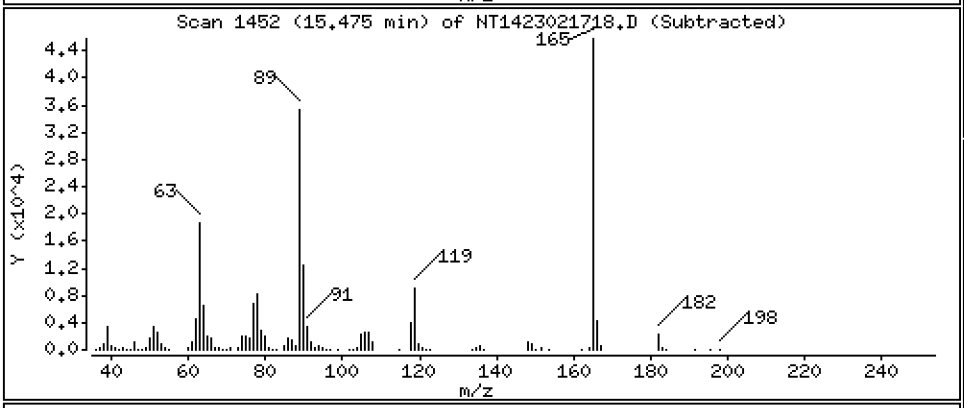
Column phase: ZB-5msi

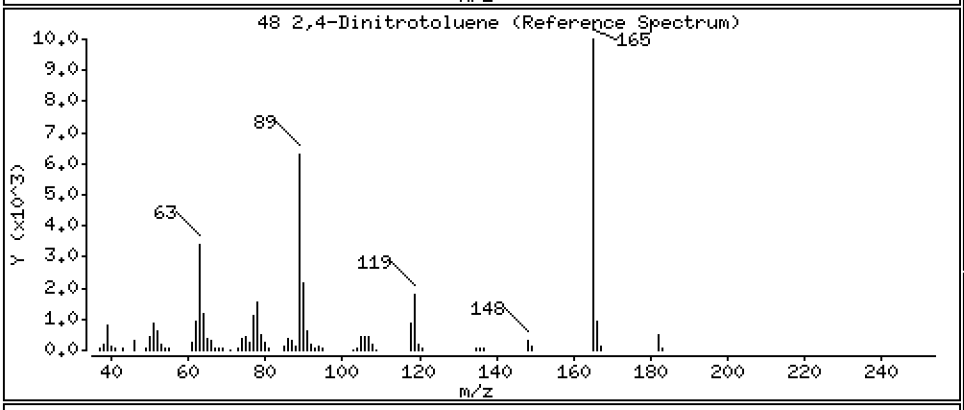
Column diameter: 0.25

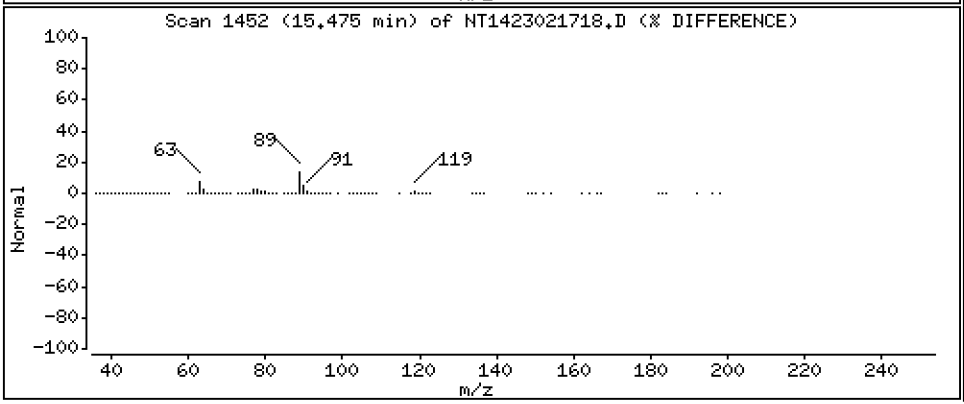
48 2,4-Dinitrotoluene

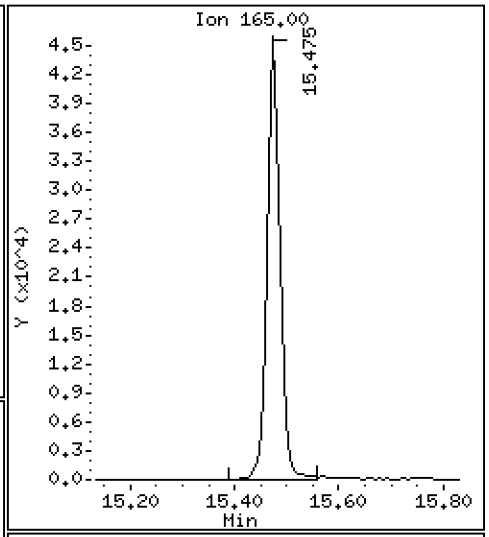
Concentration: 0.9067 ug/mL

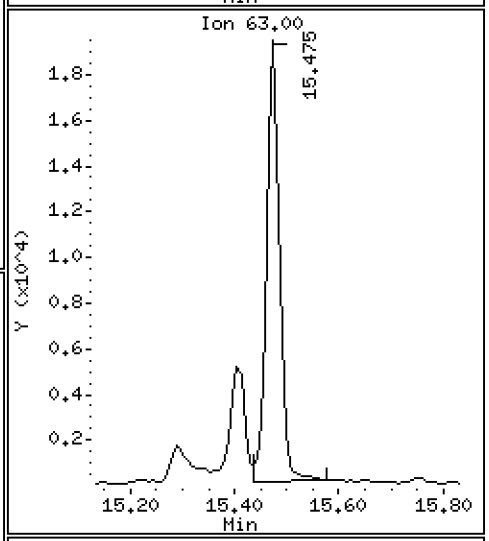


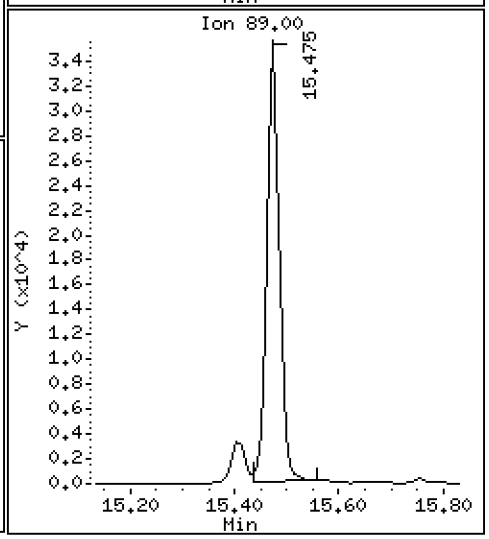












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

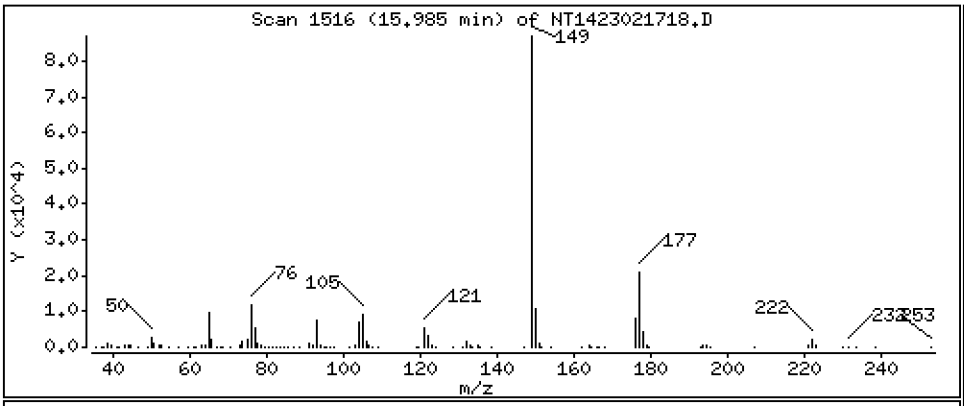
Operator: DSD

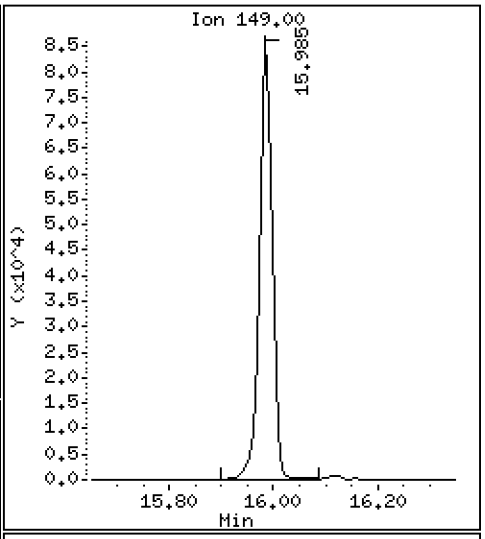
Column phase: ZB-5msi

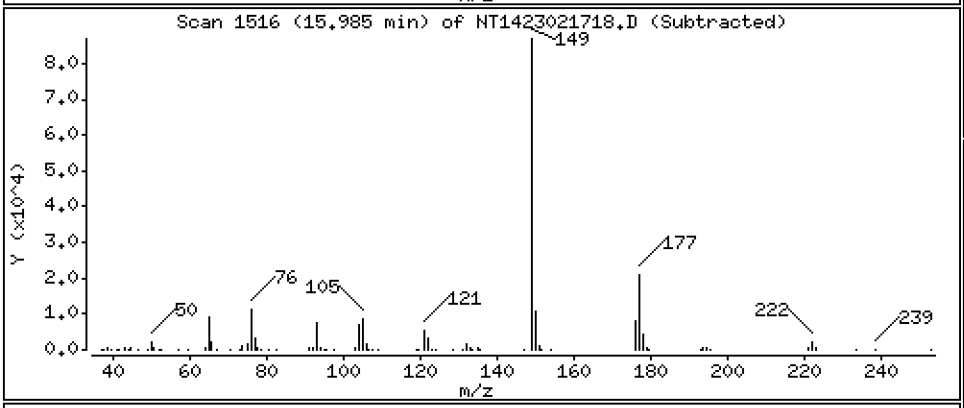
Column diameter: 0.25

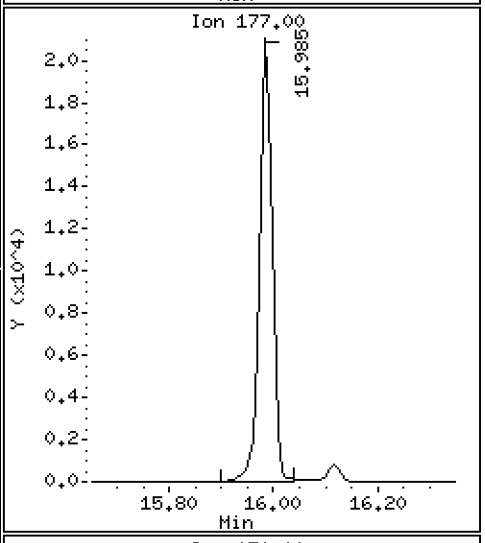
50 Diethylphthalate

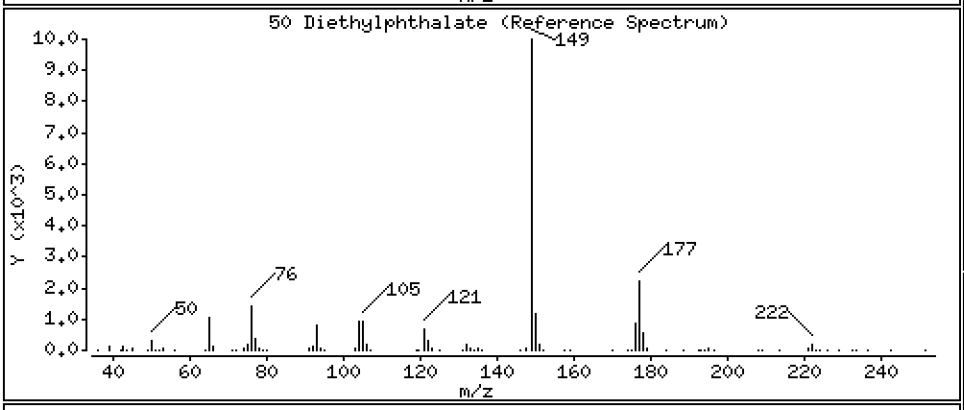
Concentration: 0.5036 ug/mL

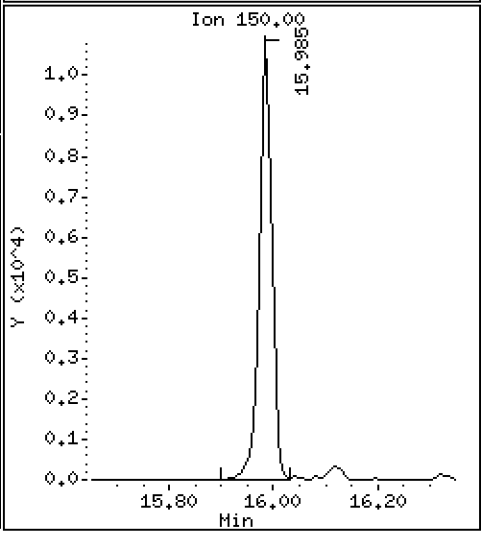


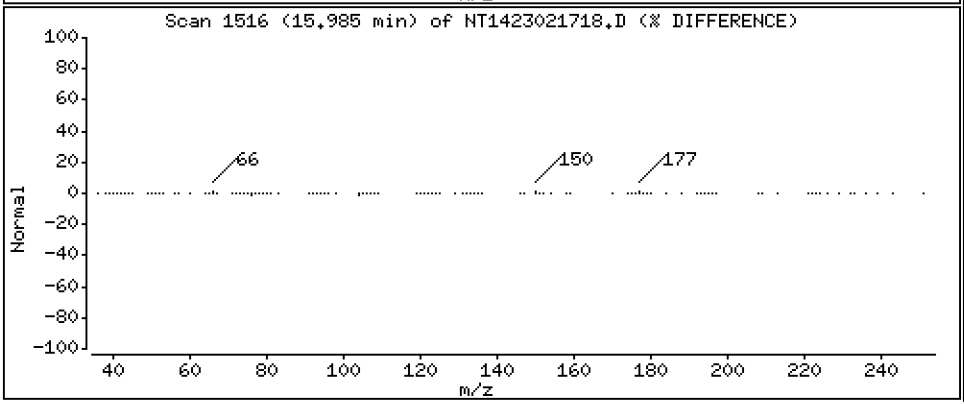












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

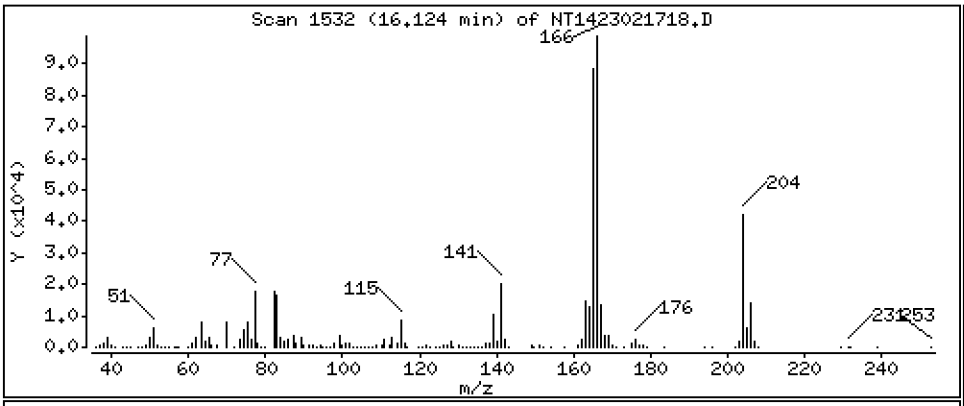
Operator: DSD

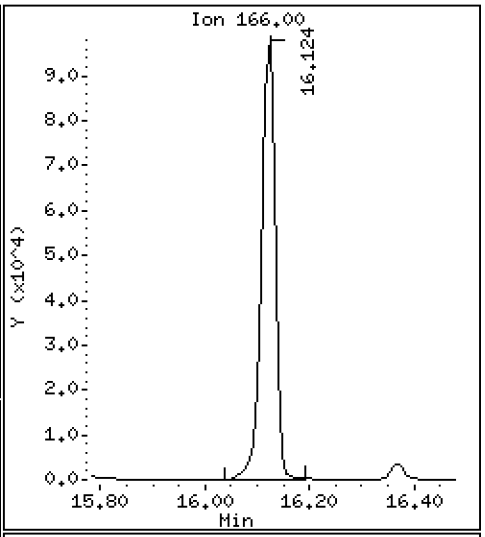
Column phase: ZB-5msi

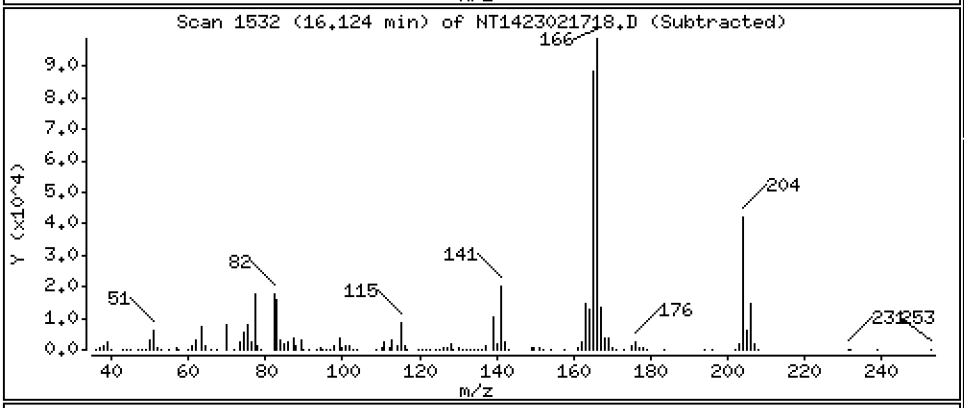
Column diameter: 0.25

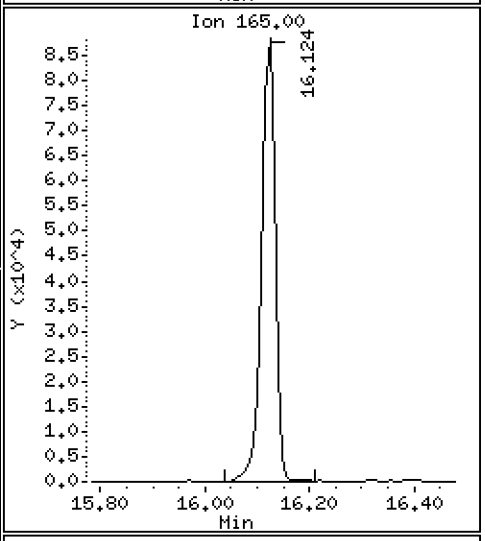
49 Fluorene

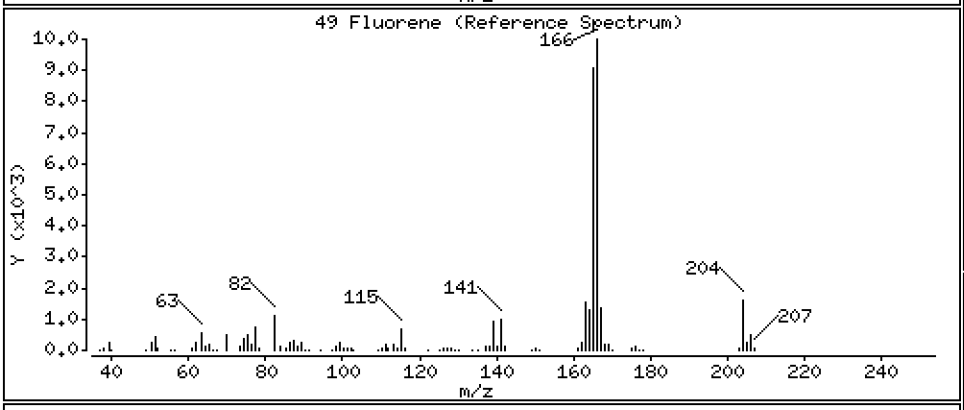
Concentration: 0.4969 ug/mL

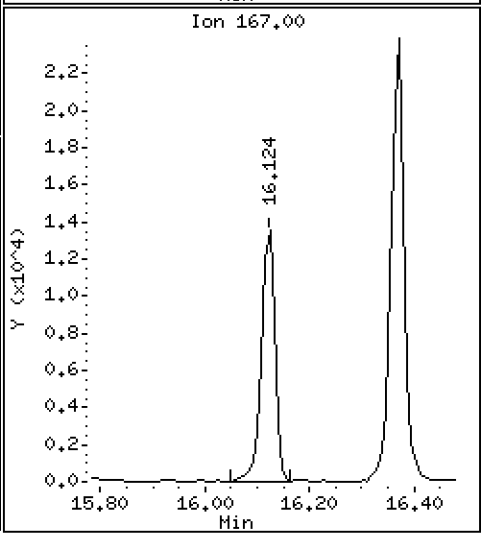


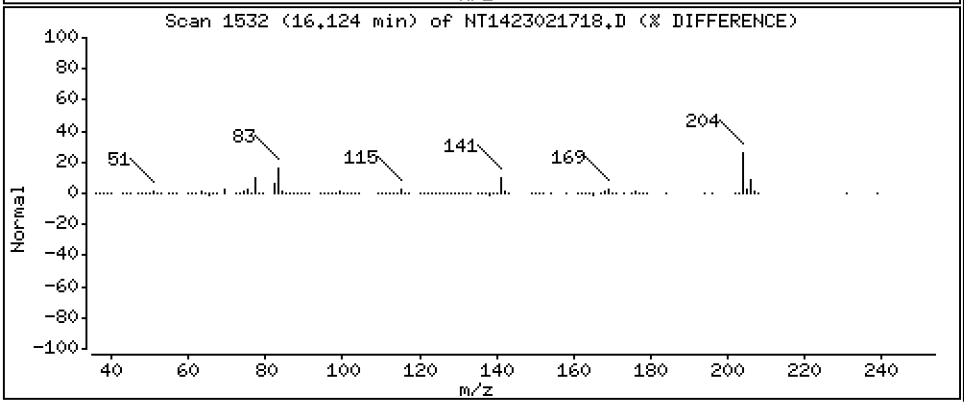












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

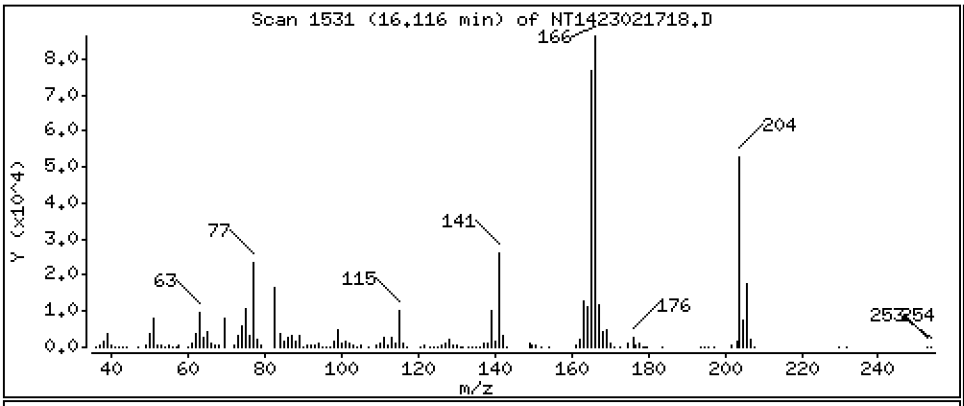
Operator: DSD

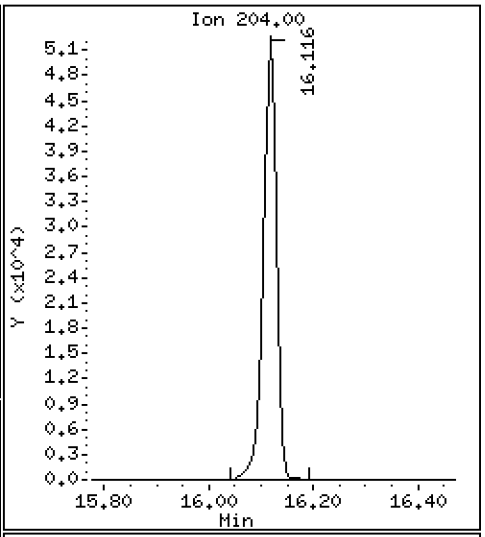
Column phase: ZB-5msi

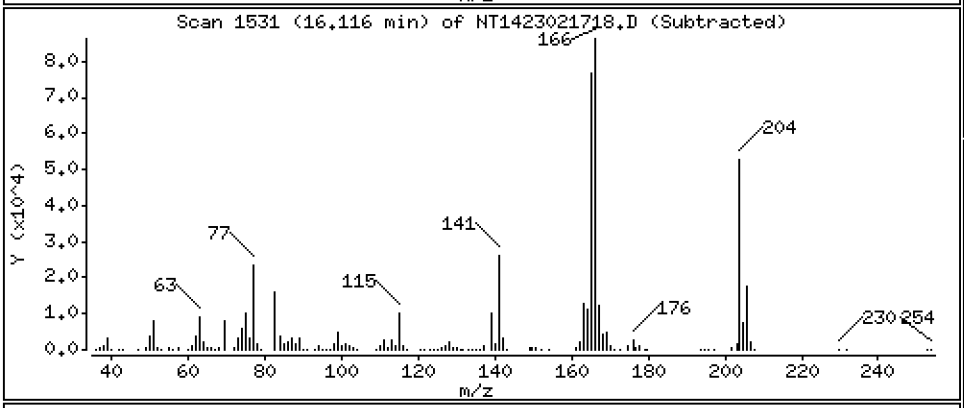
Column diameter: 0.25

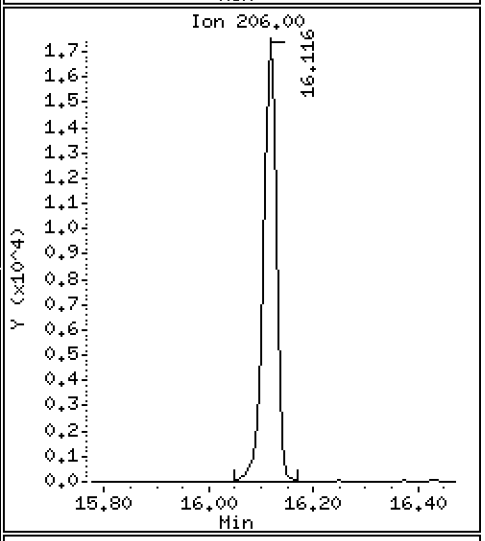
51 4-Chlorophenyl-phenylether

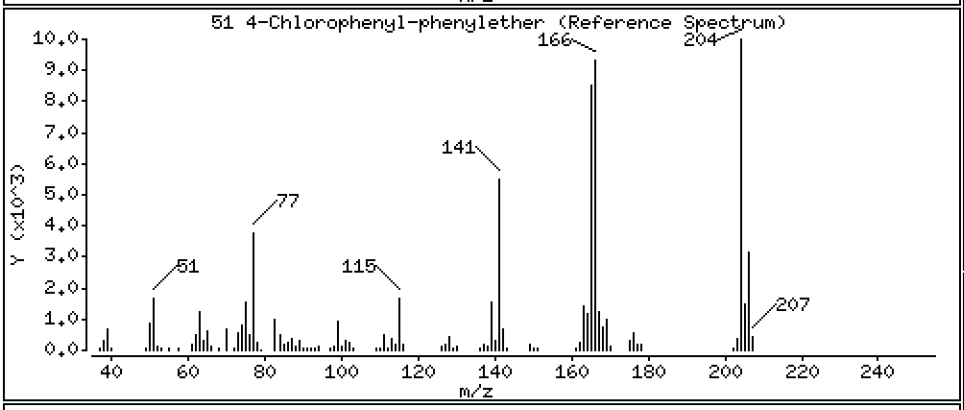
Concentration: 0.4746 ug/mL

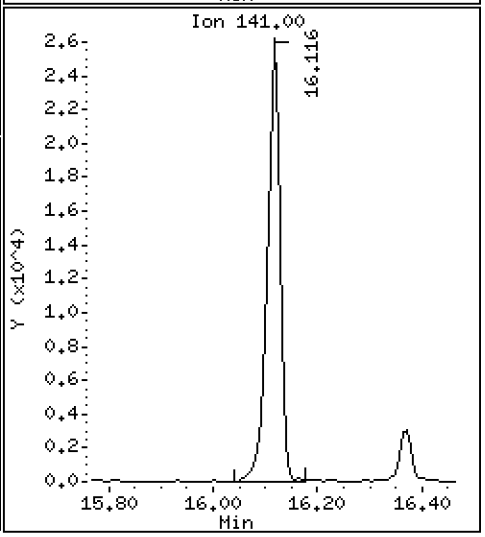


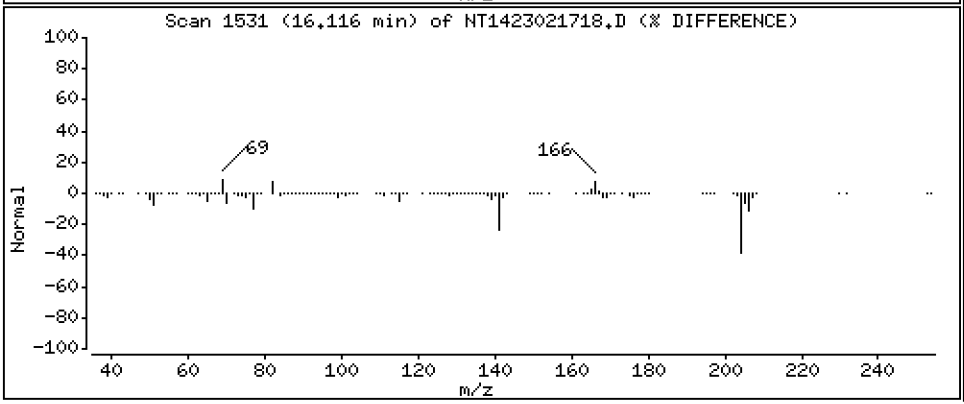












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

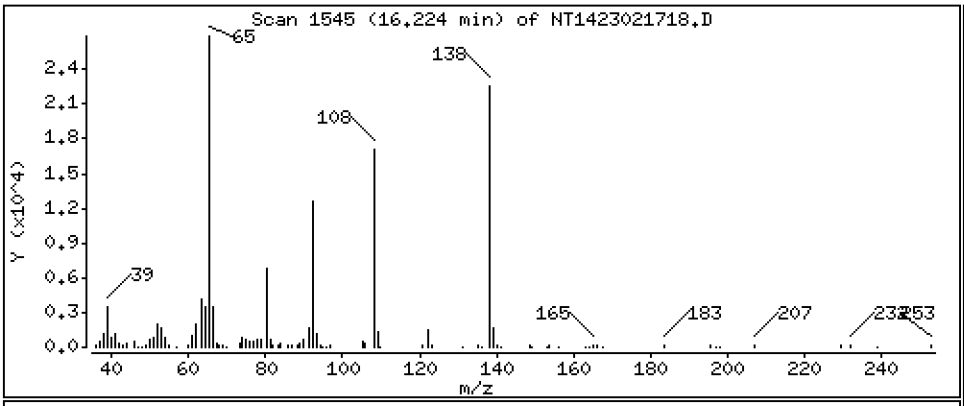
Operator: DSD

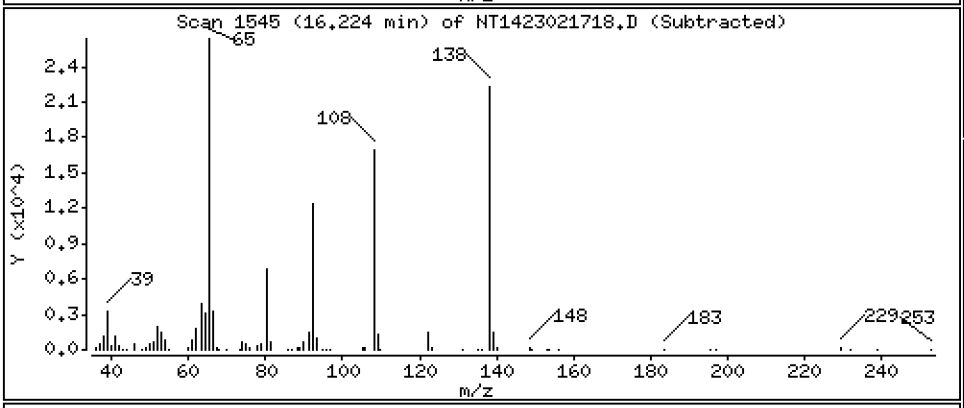
Column phase: ZB-5msi

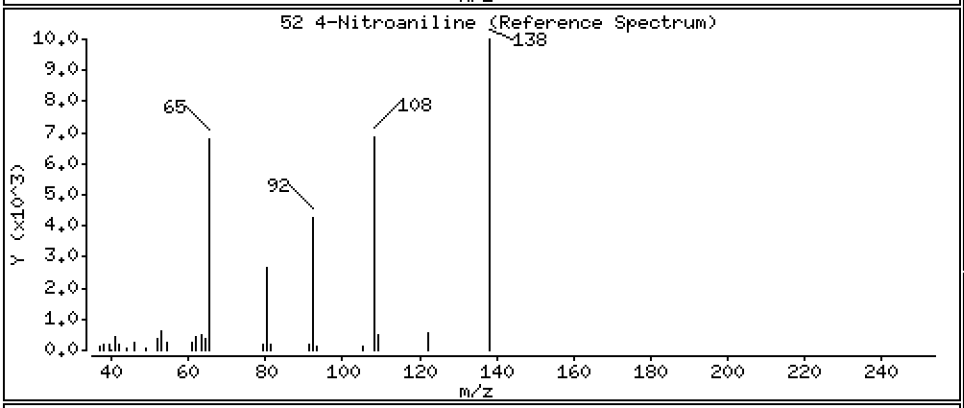
Column diameter: 0.25

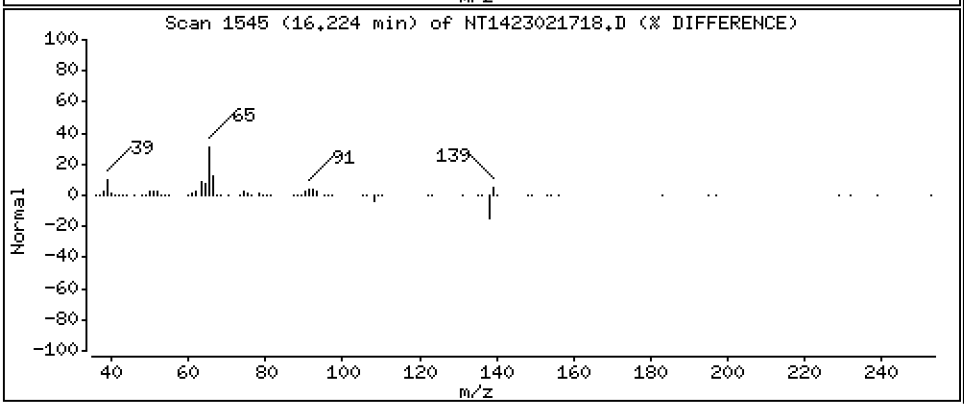
52 4-Nitroaniline

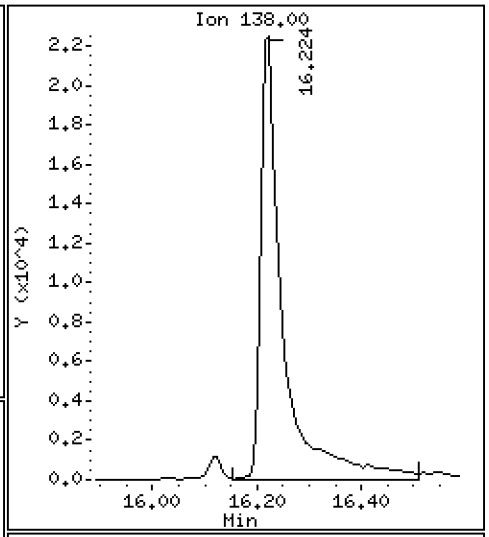
Concentration: 0.9120 ug/mL

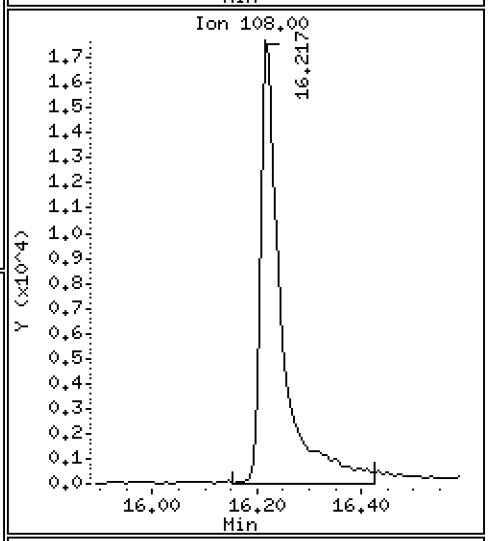


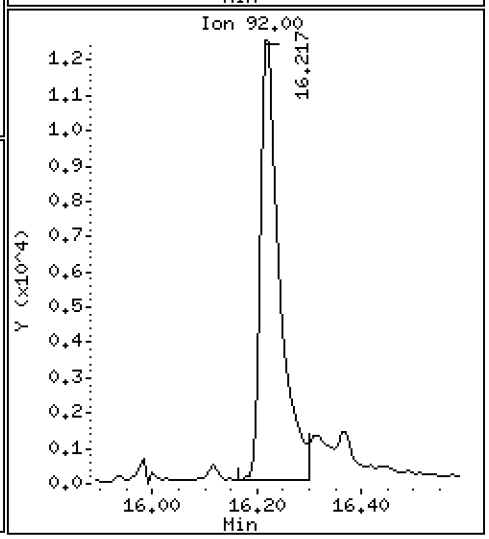












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

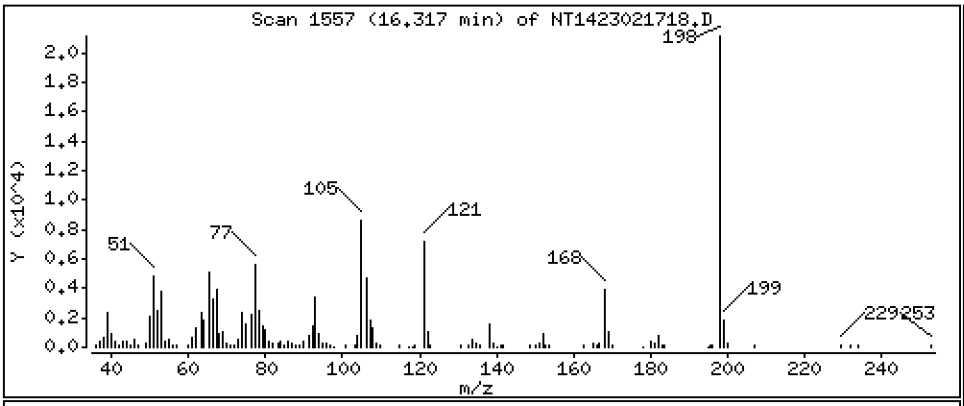
Operator: DSD

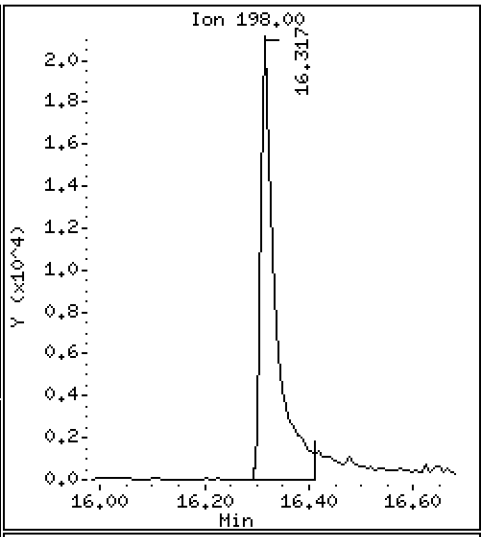
Column phase: ZB-5msi

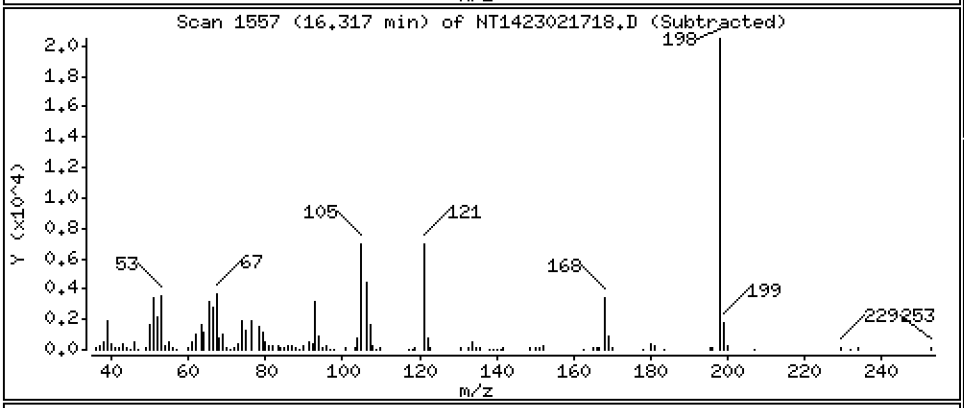
Column diameter: 0.25

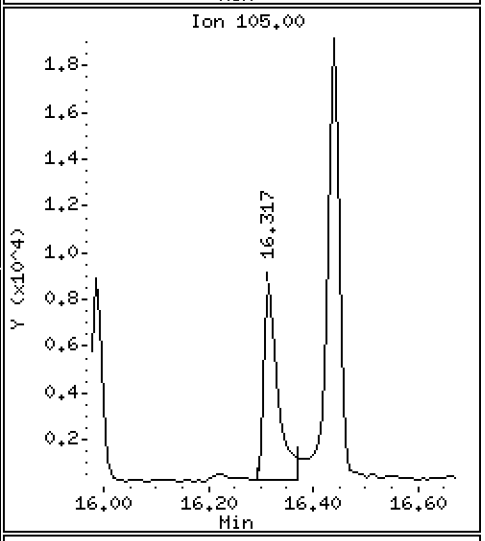
53 4,6-Dinitro-2-methylphenol

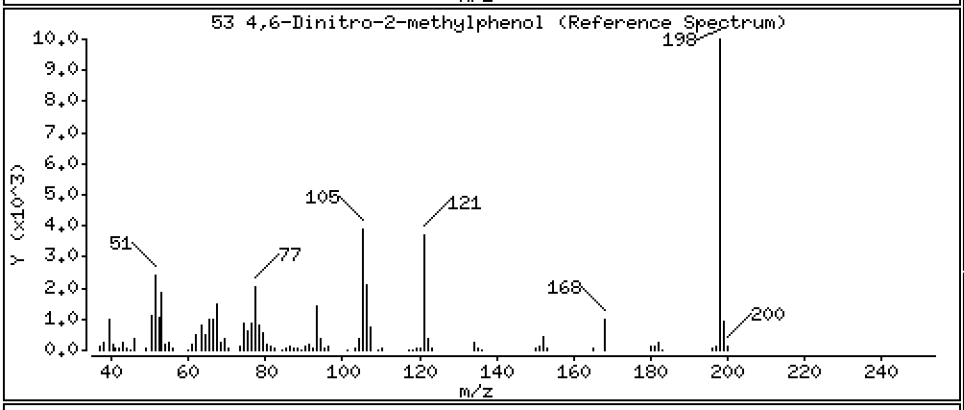
Concentration: 0.6954 ug/mL

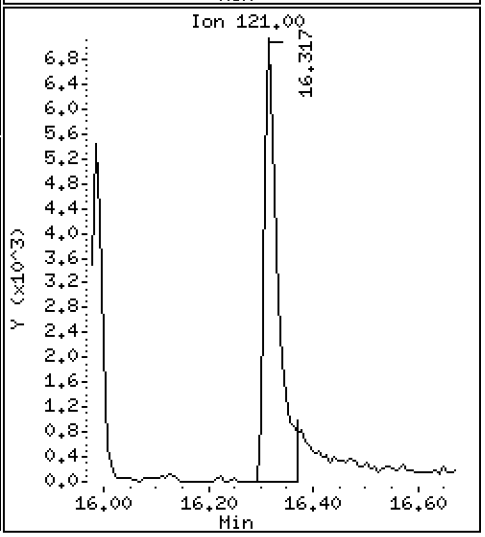


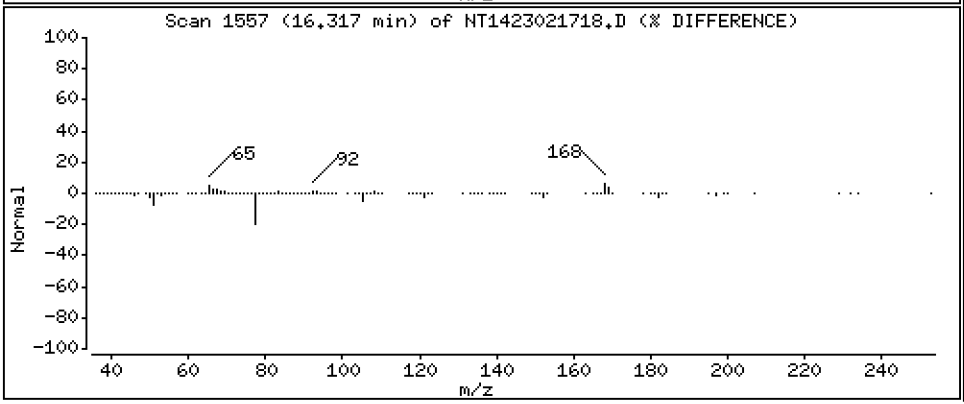












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

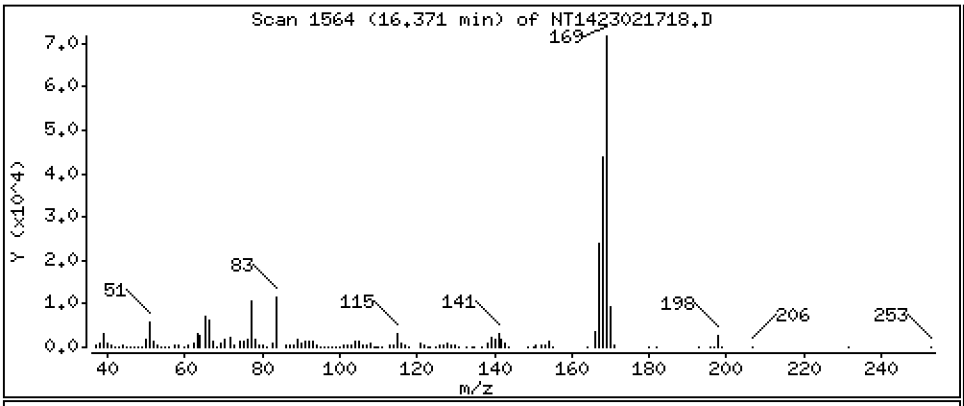
Operator: DSD

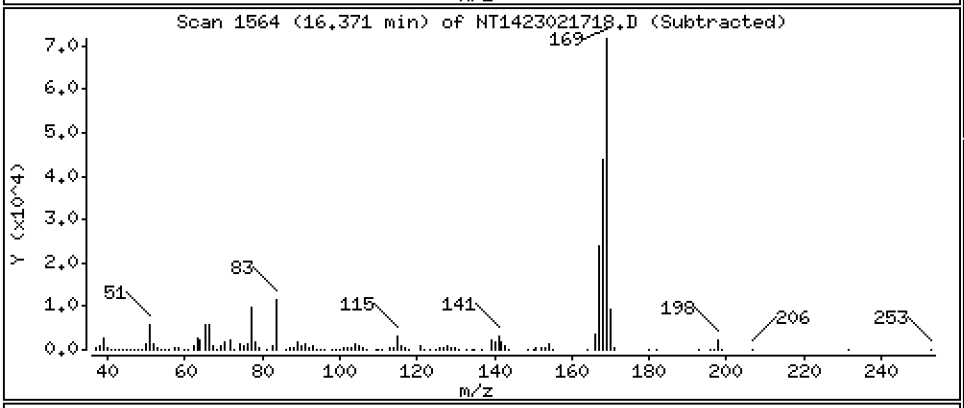
Column phase: ZB-5msi

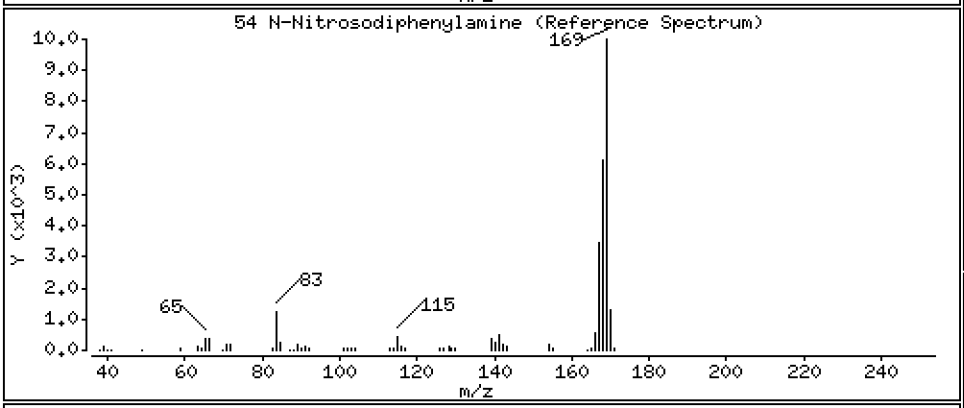
Column diameter: 0.25

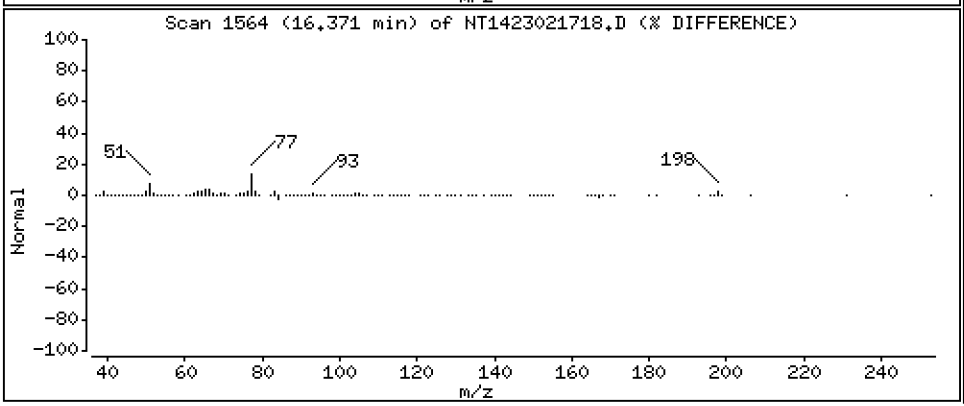
54 N-Nitrosodiphenylamine

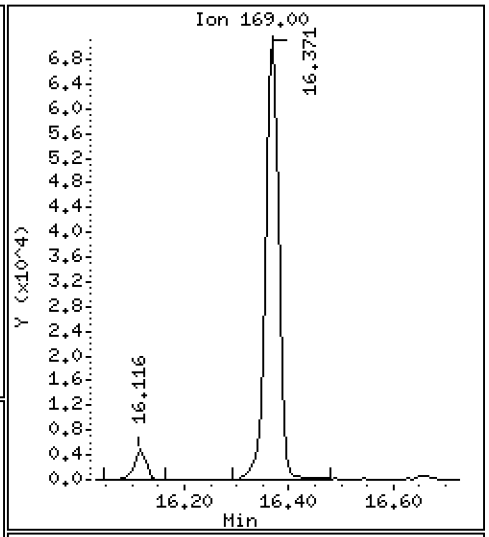
Concentration: 0.5111 ug/mL

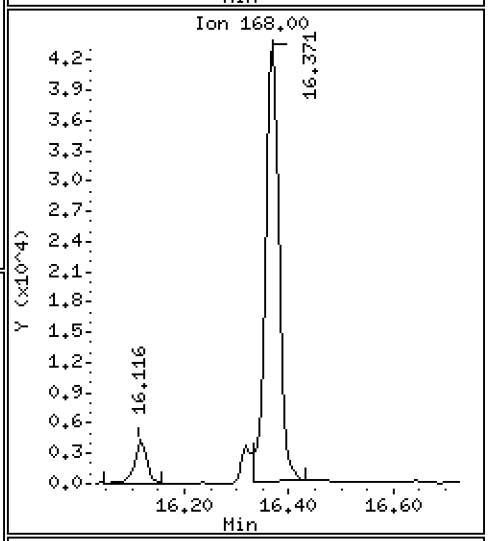


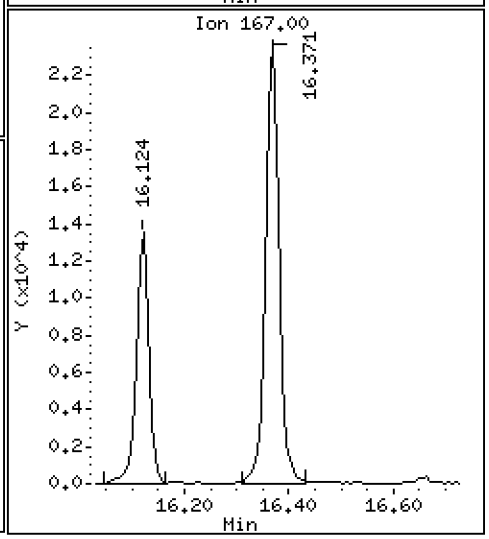












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

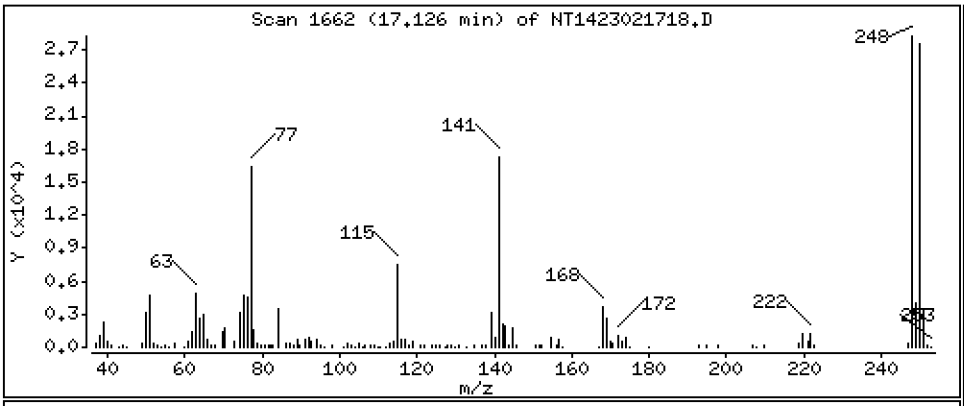
Operator: DSD

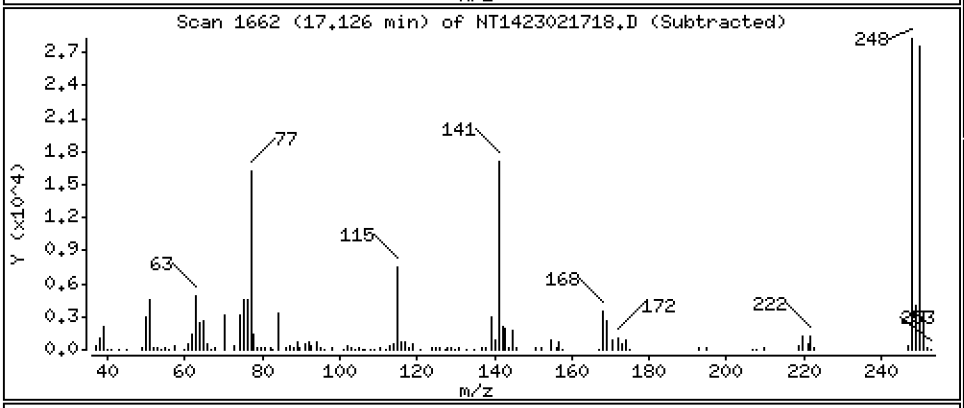
Column phase: ZB-5msi

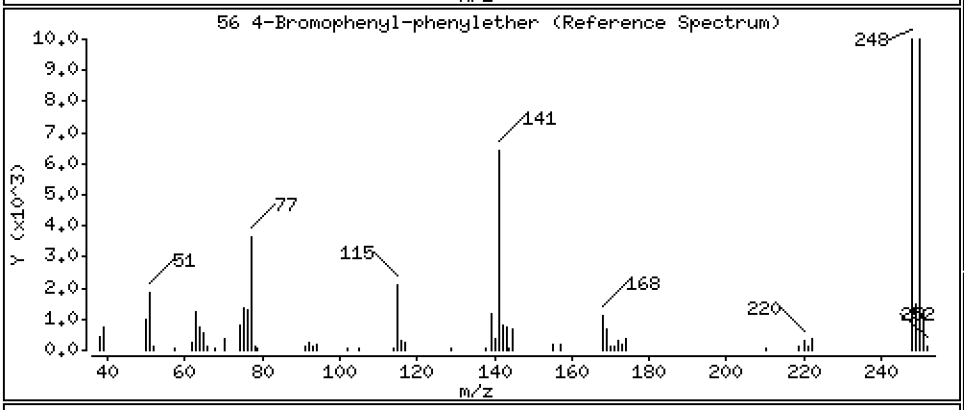
Column diameter: 0.25

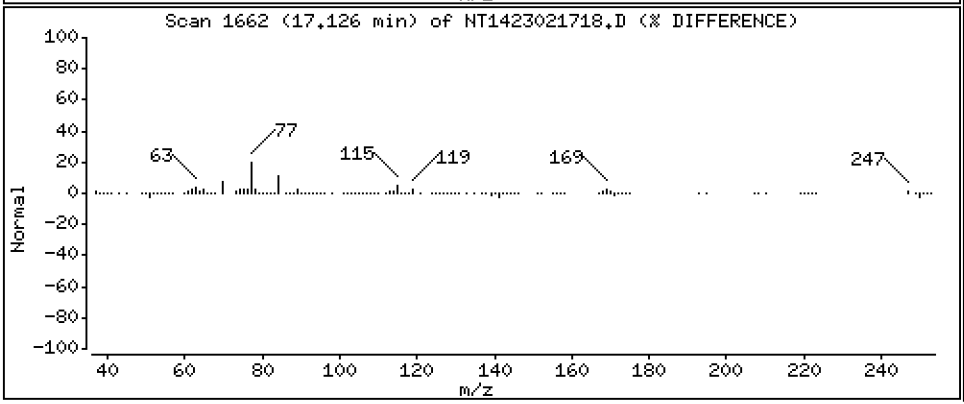
56 4-Bromophenyl-phenylether

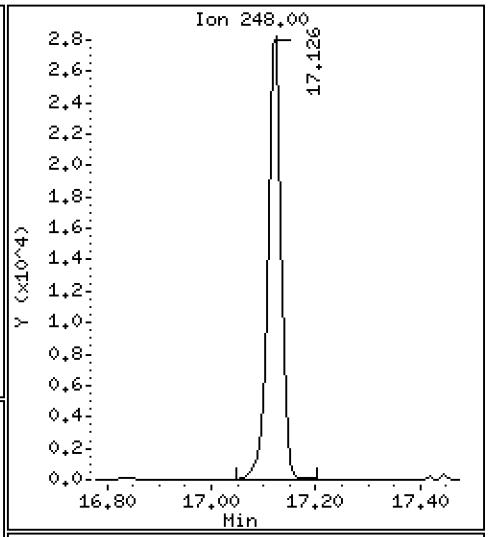
Concentration: 0.4813 ug/mL

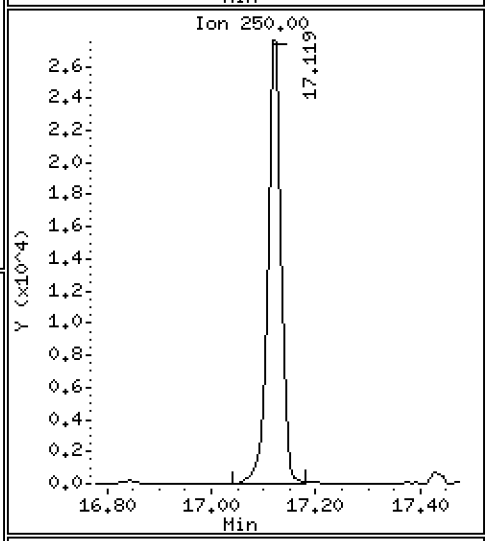


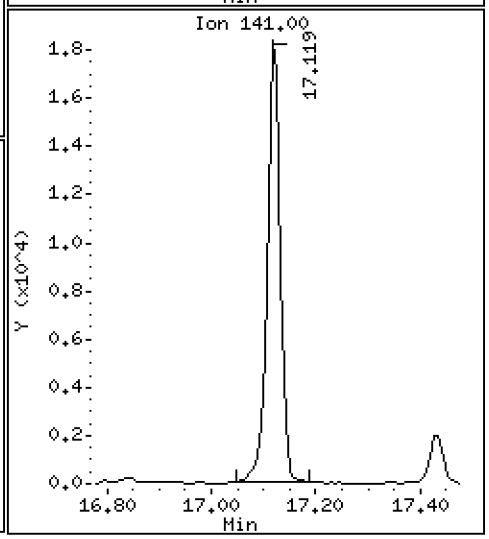












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

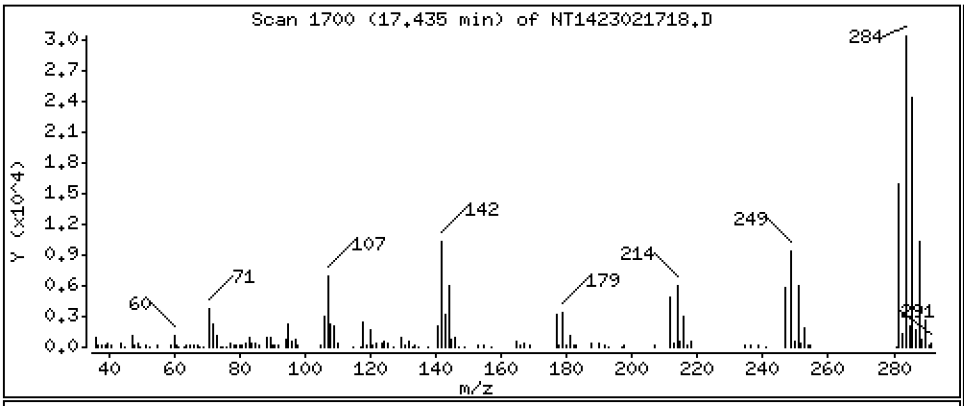
Operator: DSD

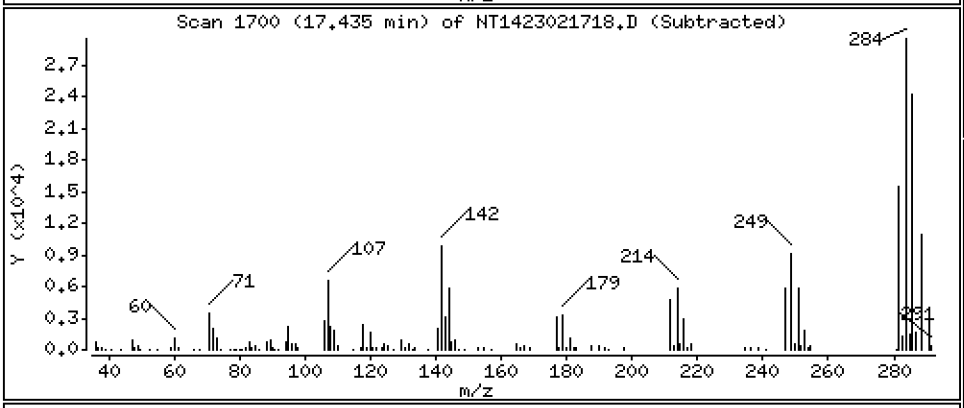
Column phase: ZB-5msi

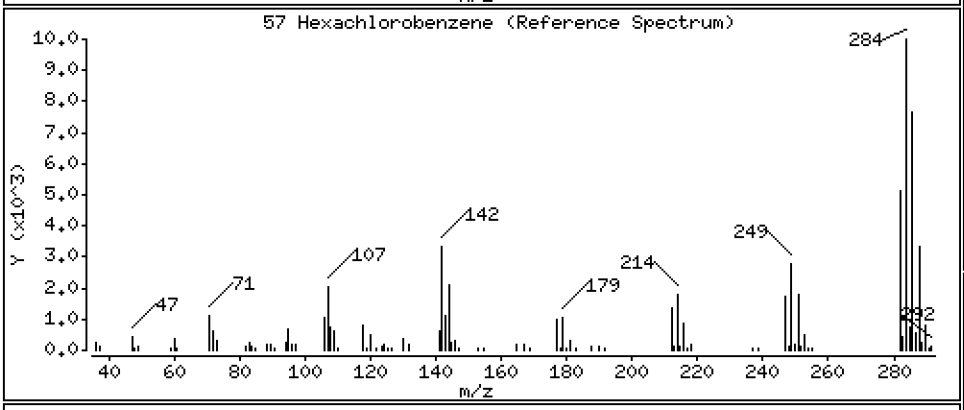
Column diameter: 0.25

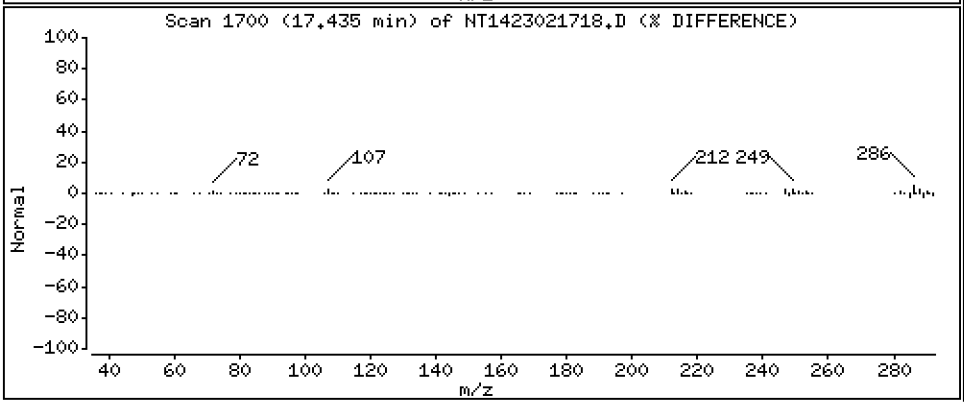
57 Hexachlorobenzene

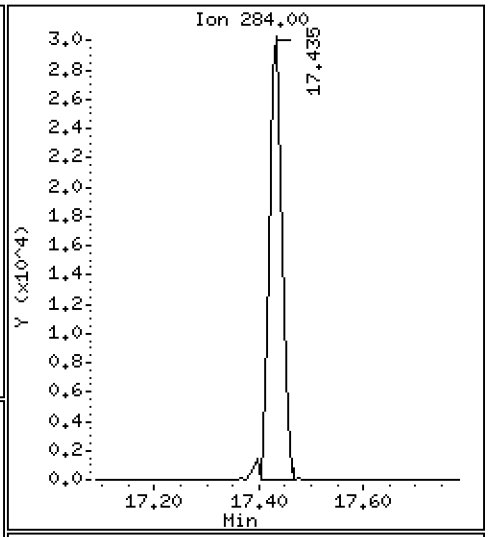
Concentration: 0.4767 ug/mL

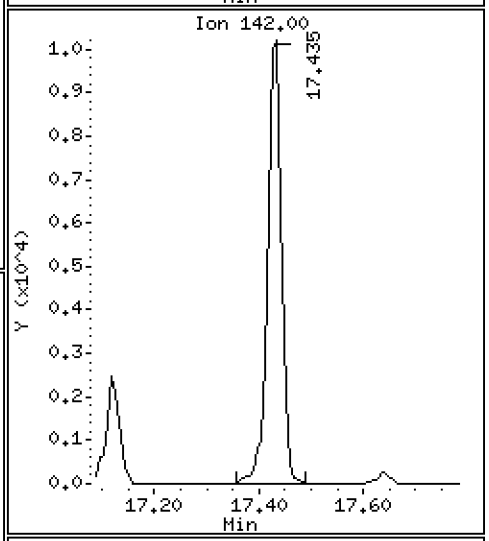


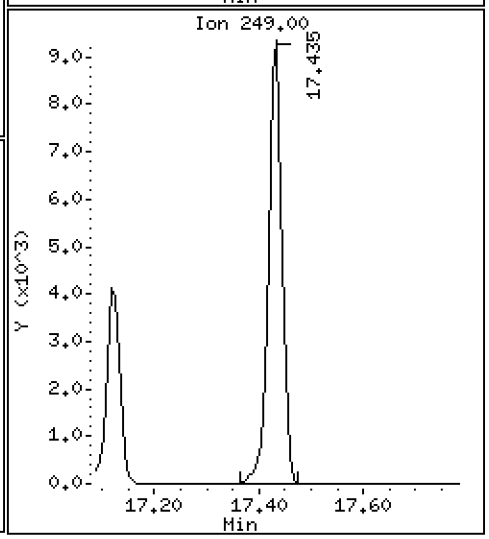












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

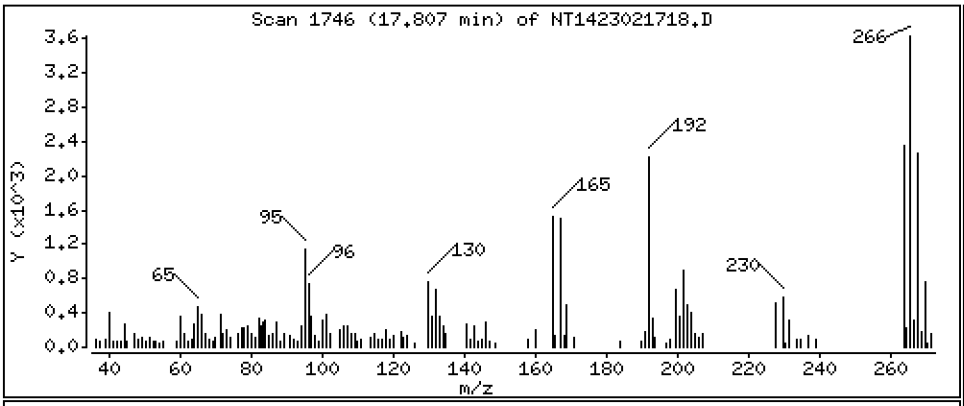
Operator: DSD

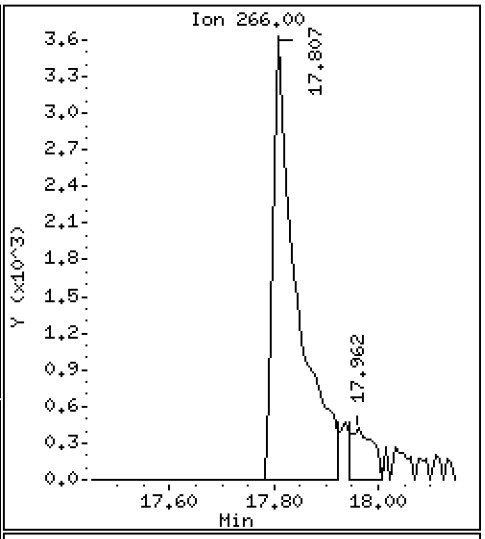
Column phase: ZB-5msi

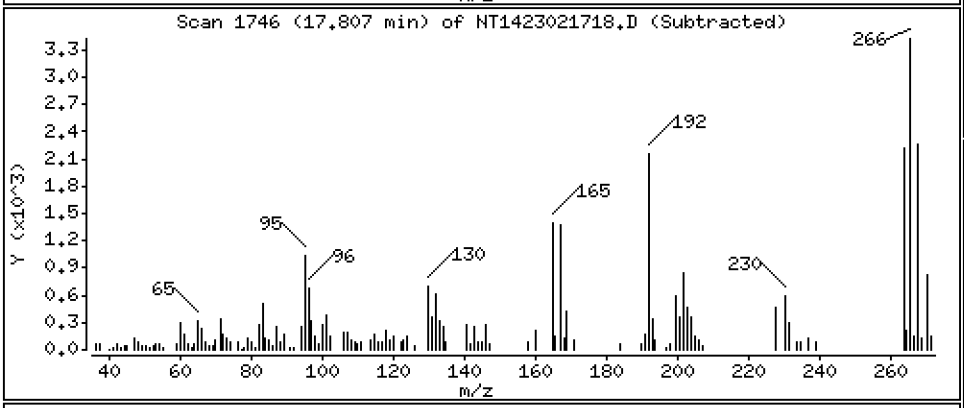
Column diameter: 0.25

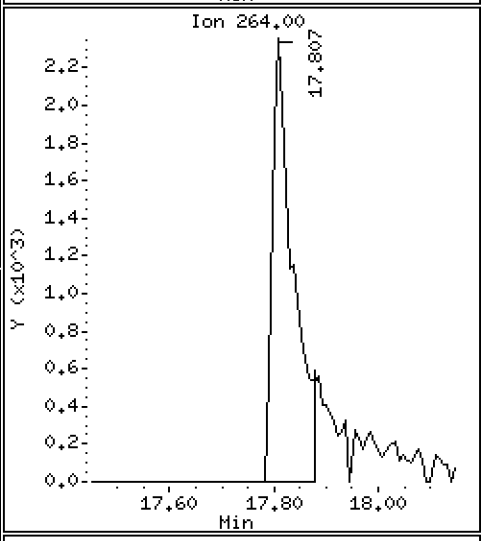
58 Pentachlorophenol

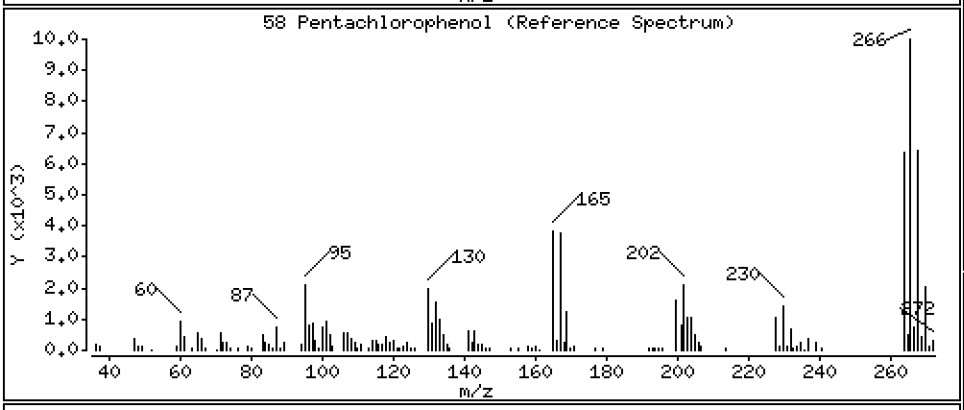
Concentration: 0.2240 ug/mL

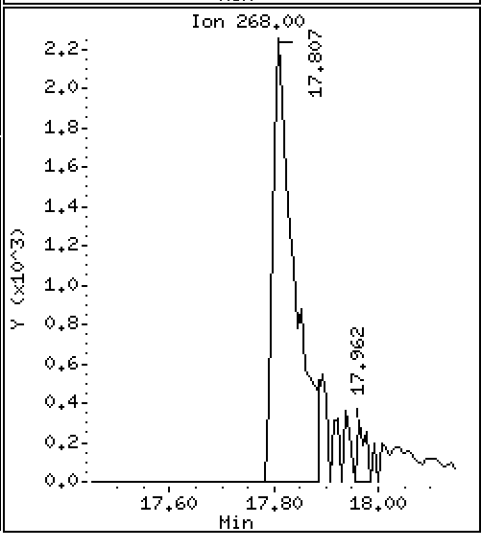


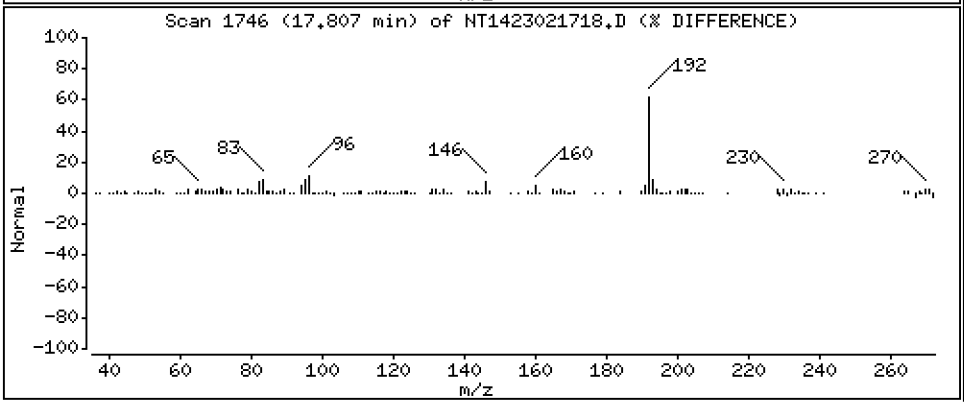












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

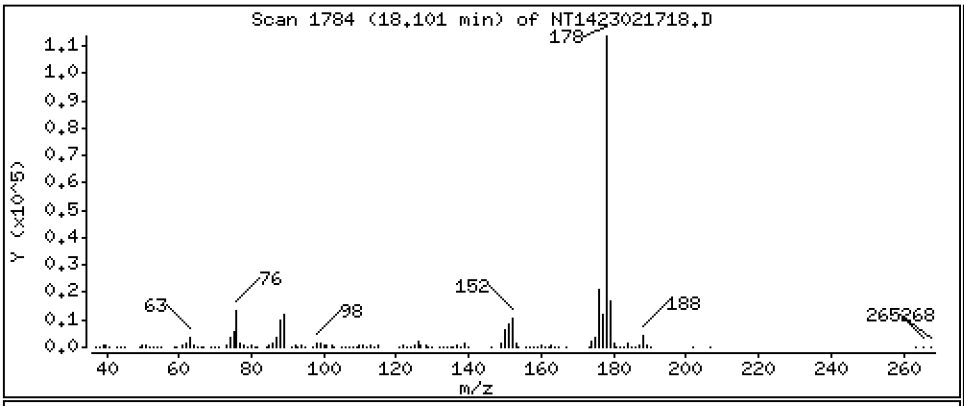
Operator: DSD

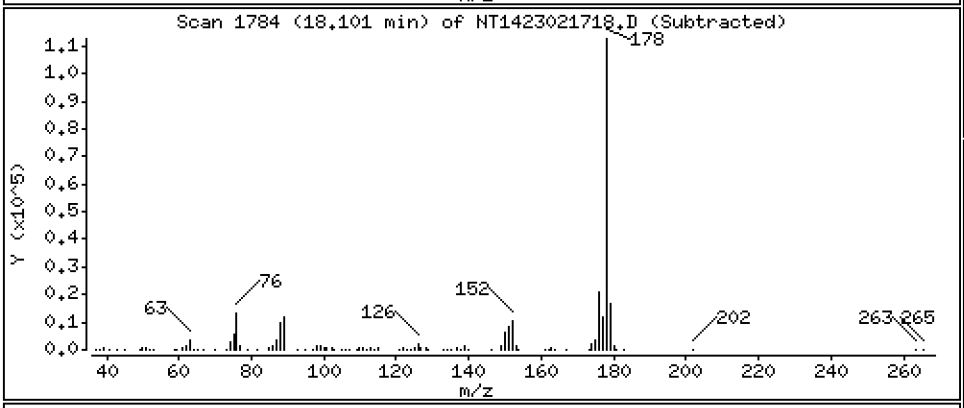
Column phase: ZB-5msi

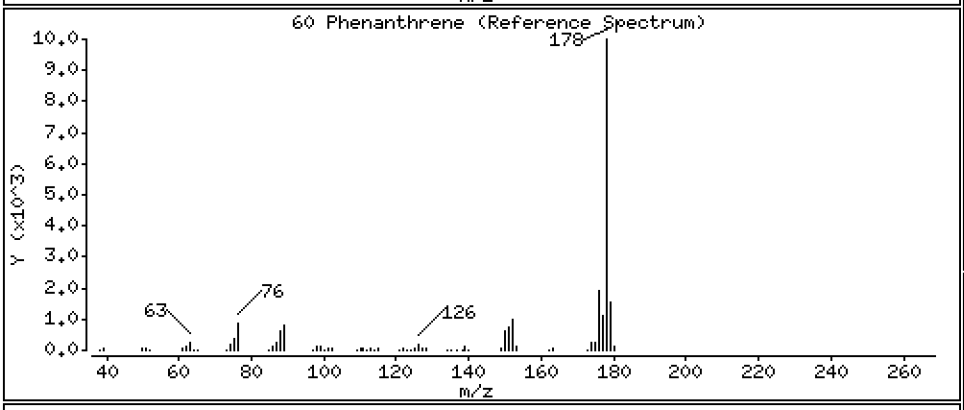
Column diameter: 0.25

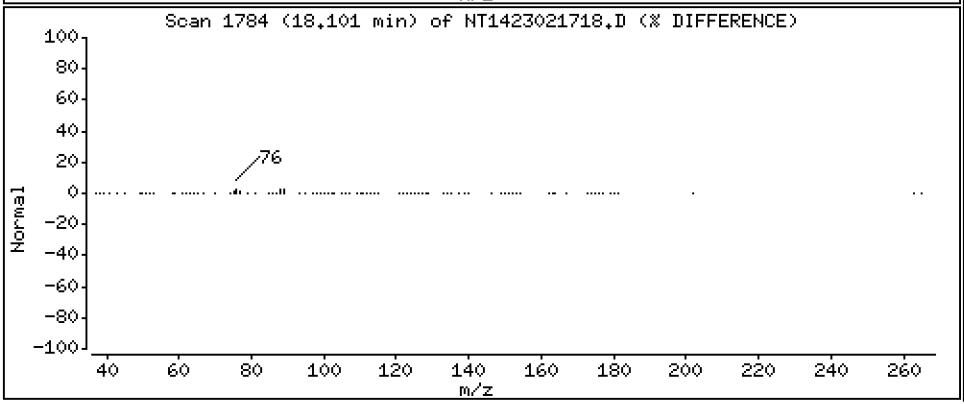
60 Phenanthrene

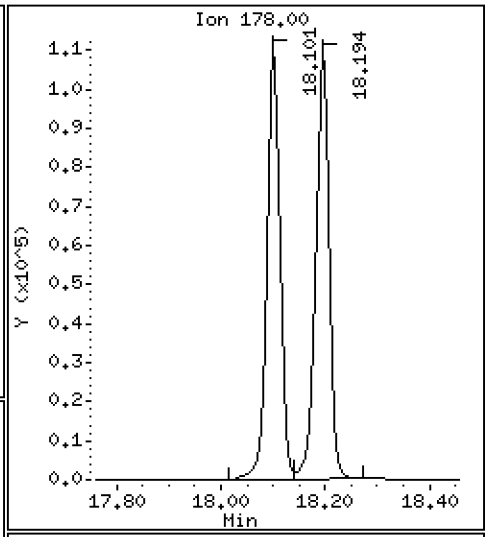
Concentration: 0.4809 ug/mL

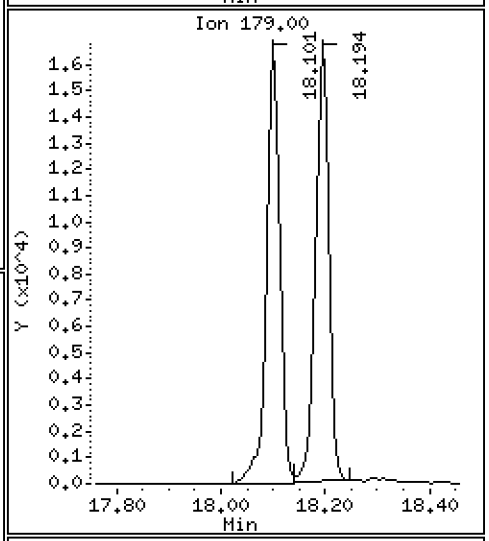


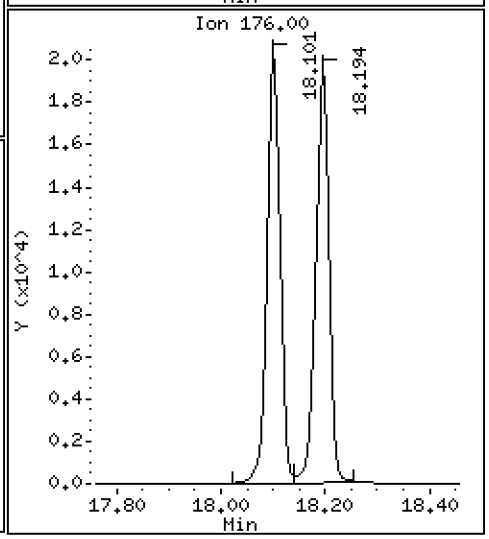












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

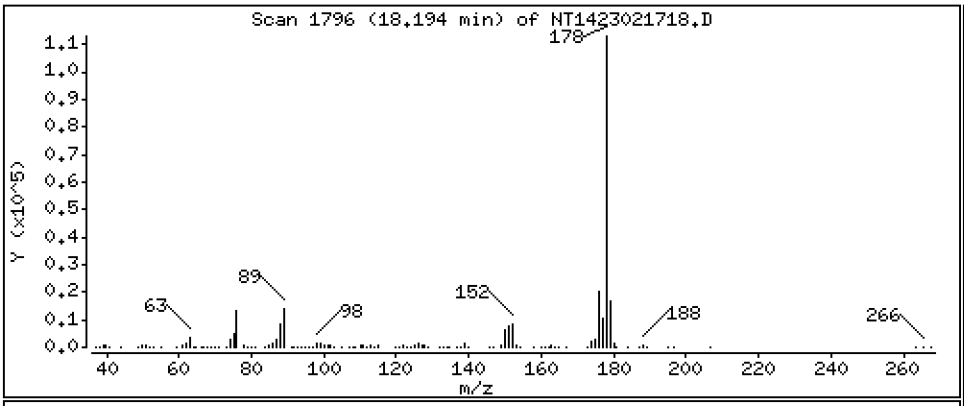
Operator: DSD

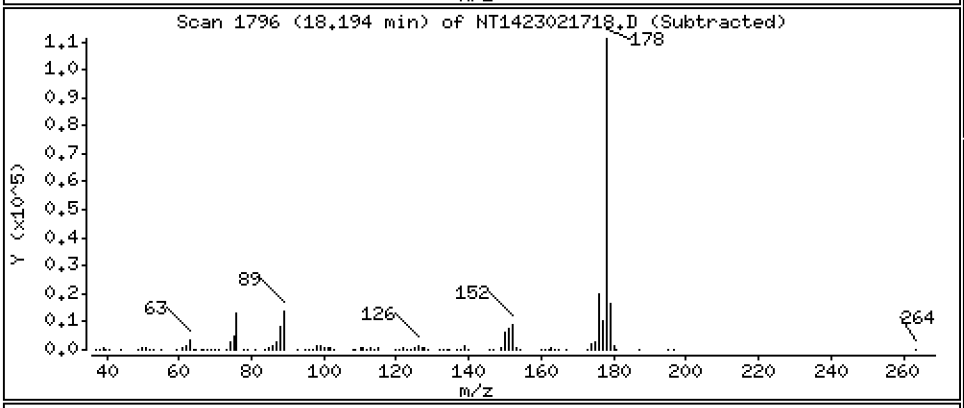
Column phase: ZB-5msi

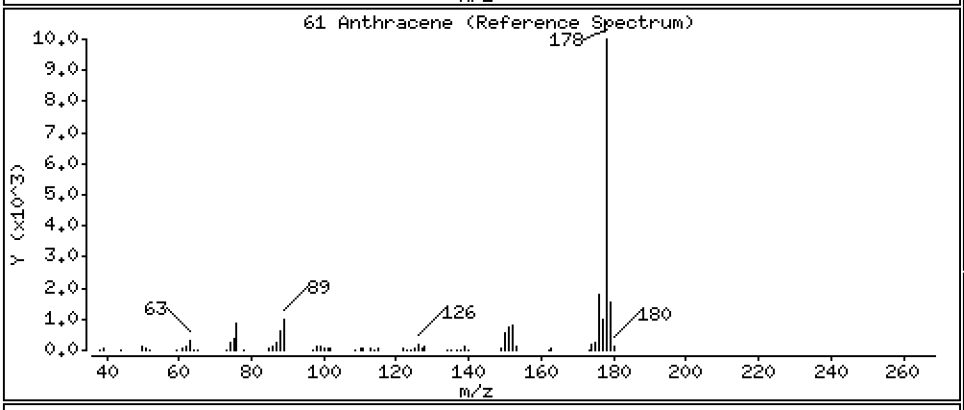
Column diameter: 0.25

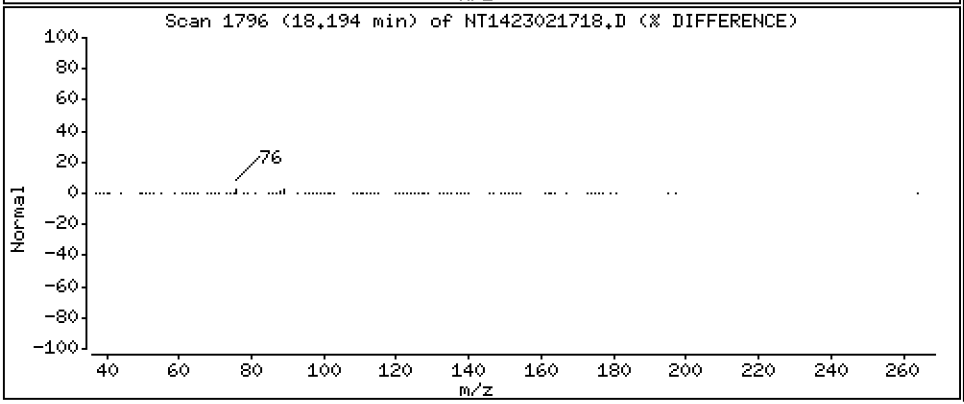
61 Anthracene

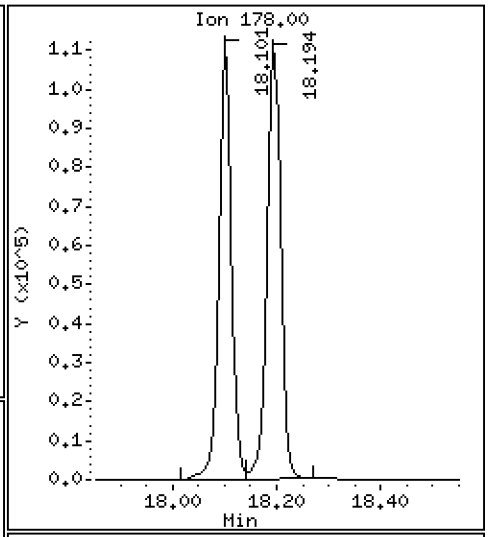
Concentration: 0.4979 ug/mL

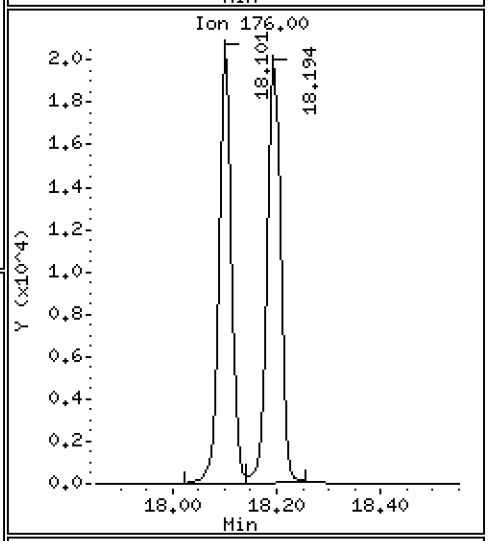


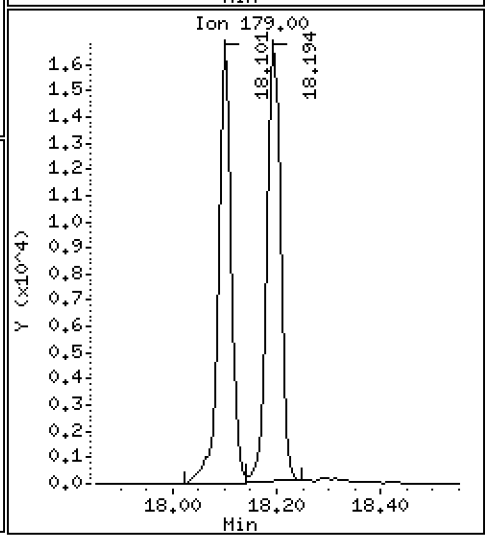












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

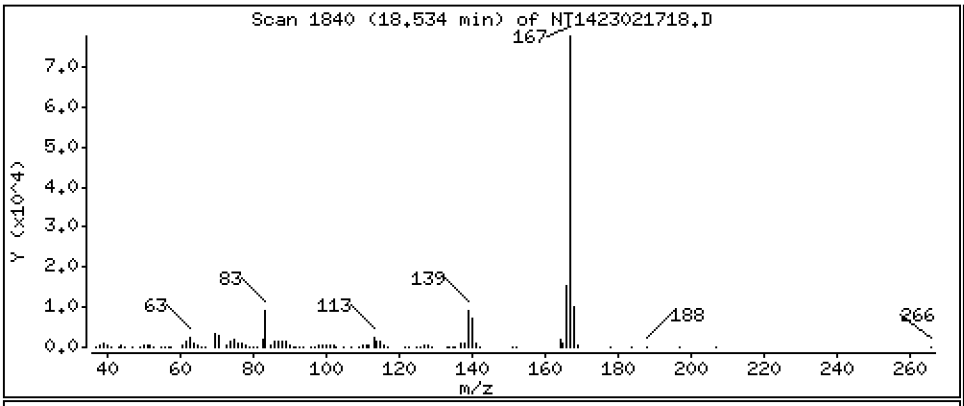
Operator: DSD

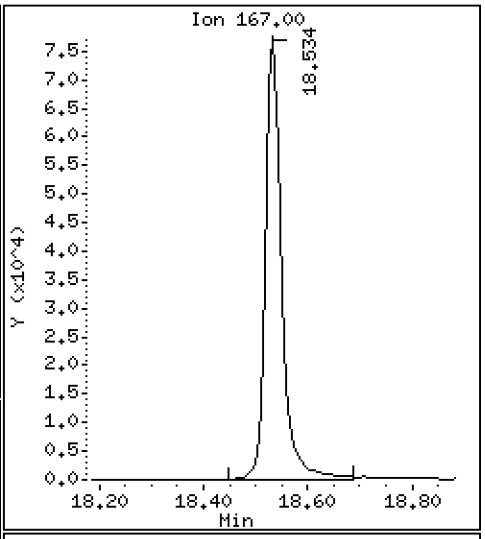
Column phase: ZB-5msi

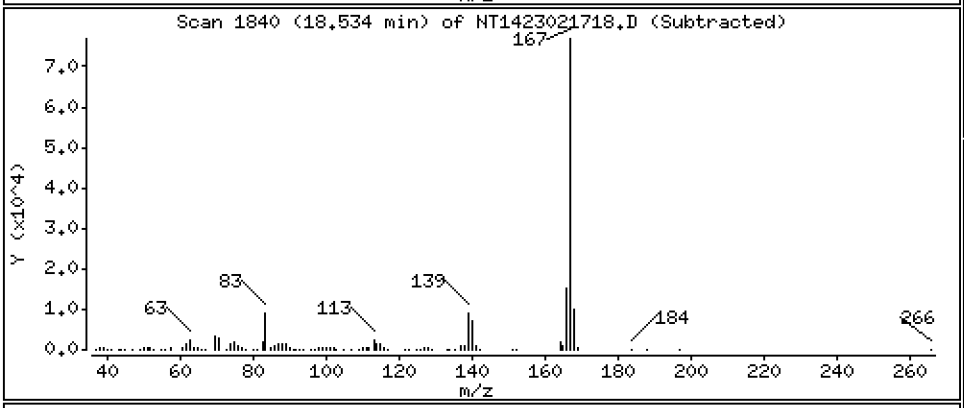
Column diameter: 0.25

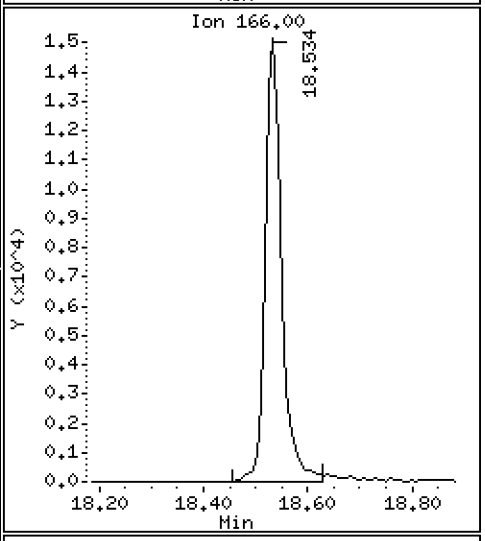
62 Carbazole

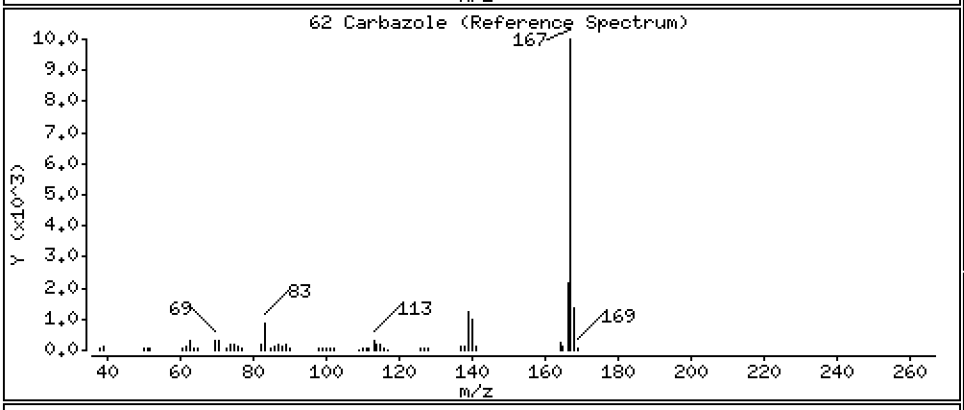
Concentration: 0.4590 ug/mL

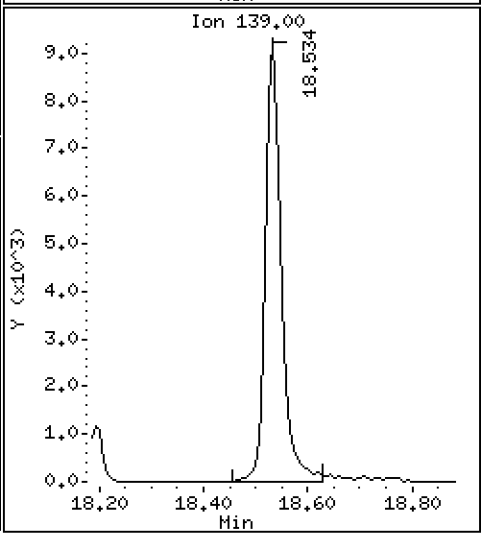


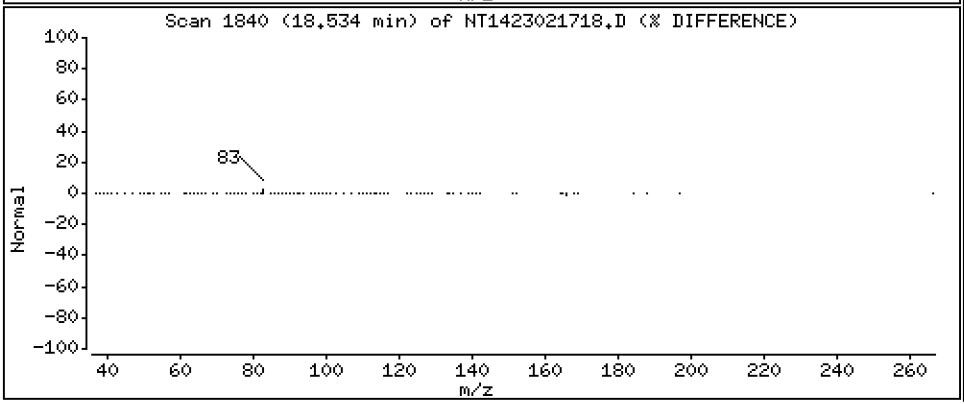












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

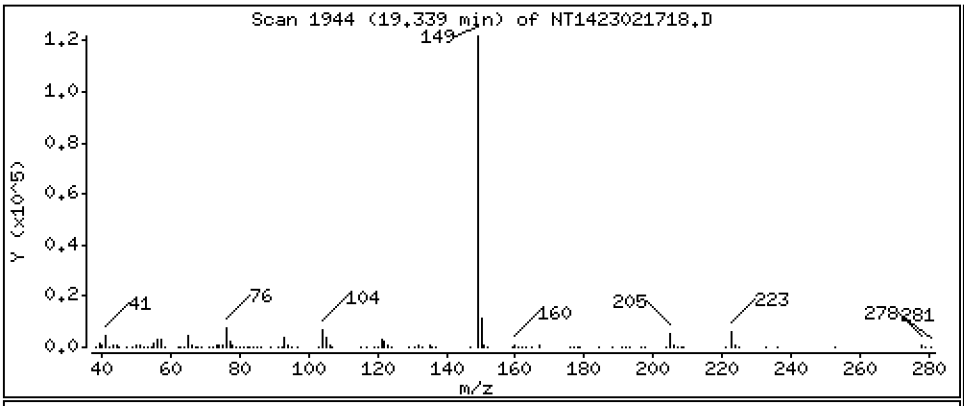
Operator: DSD

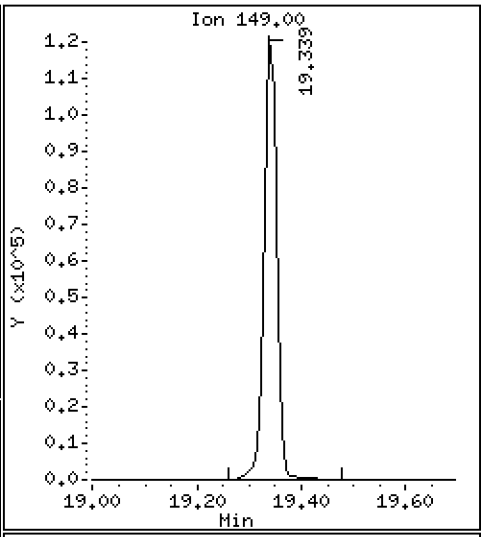
Column phase: ZB-5msi

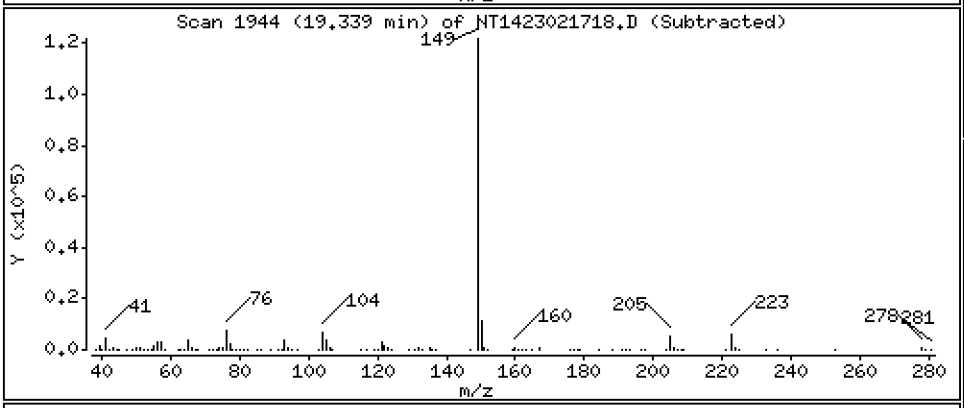
Column diameter: 0.25

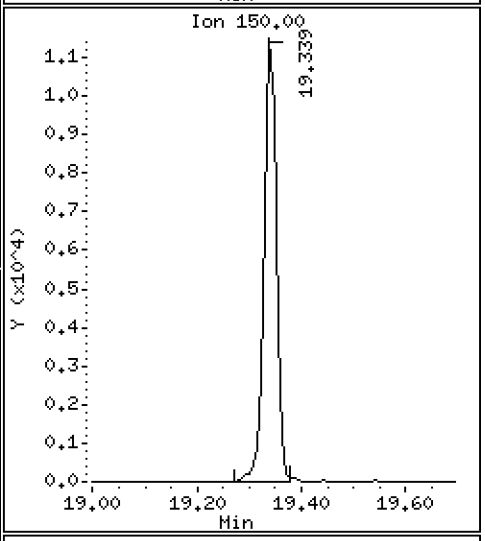
63 Di-n-butylphthalate

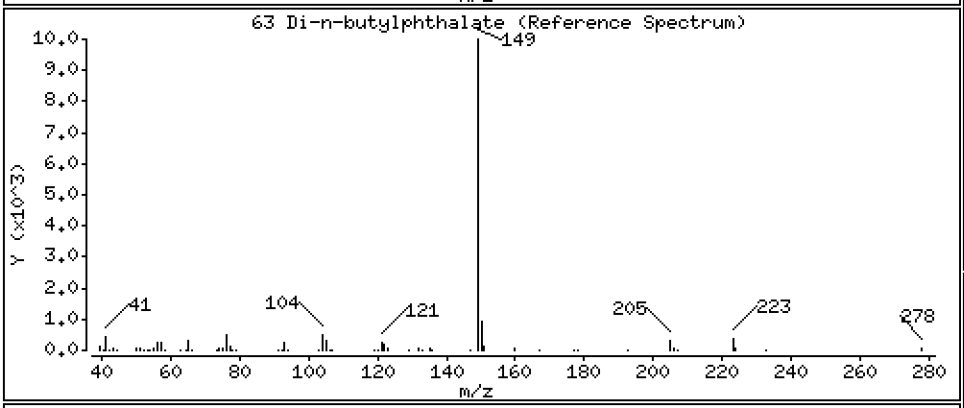
Concentration: 0.4904 ug/mL

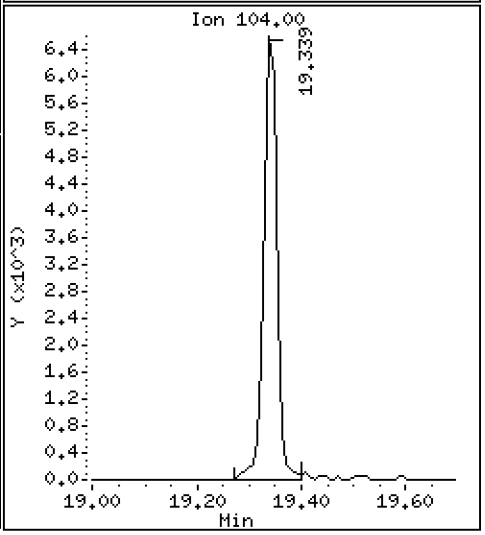


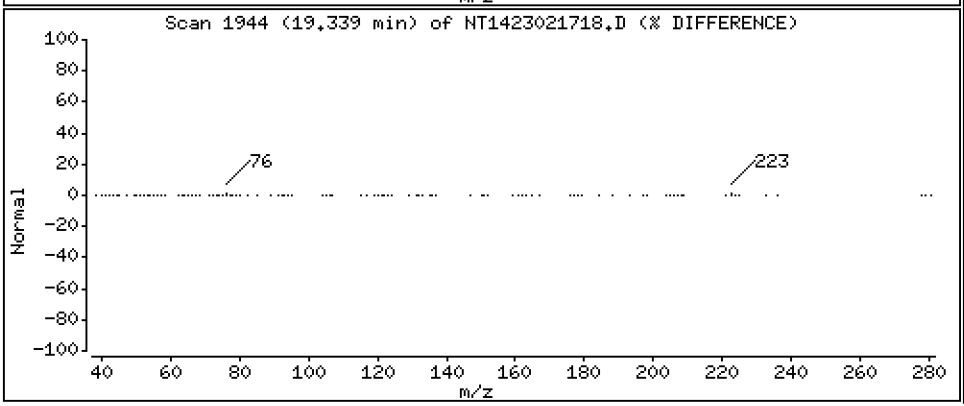












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

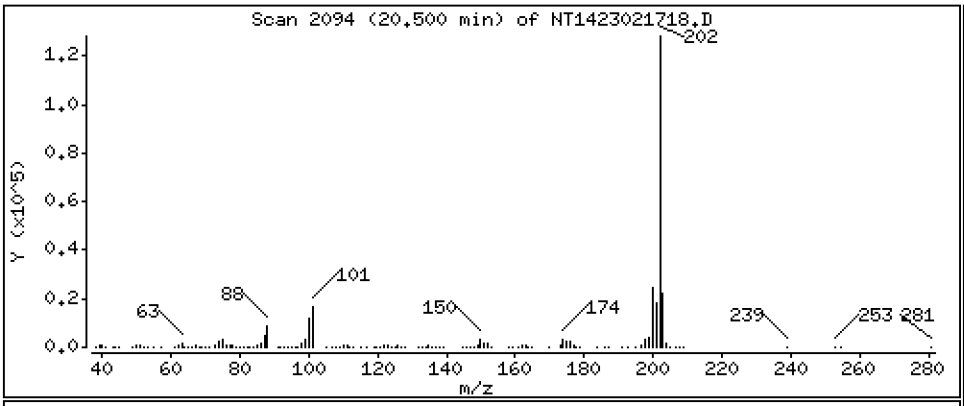
Operator: DSD

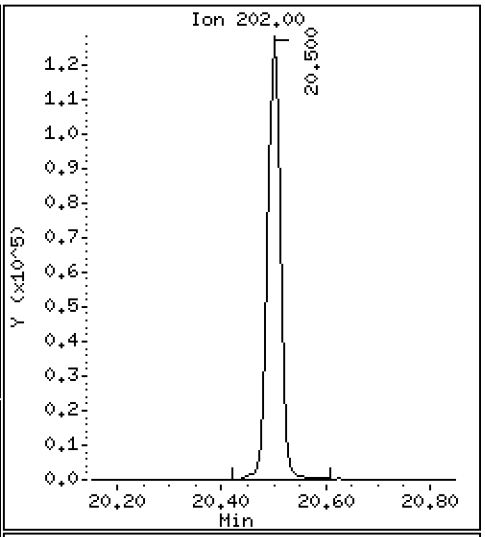
Column phase: ZB-5msi

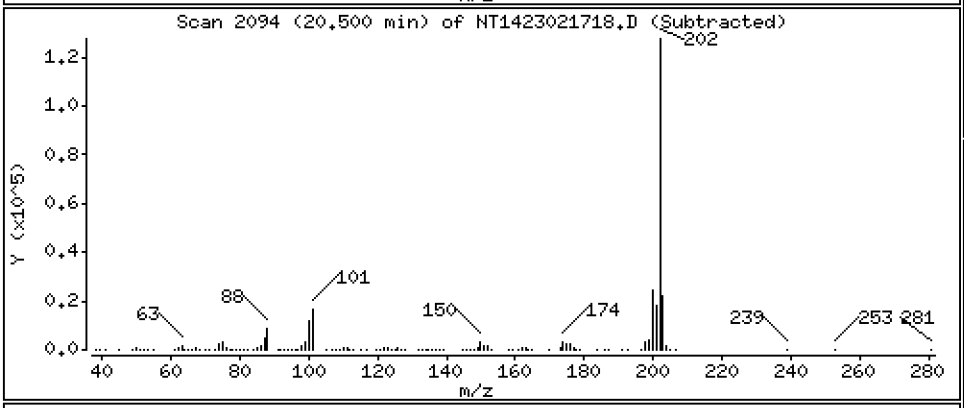
Column diameter: 0.25

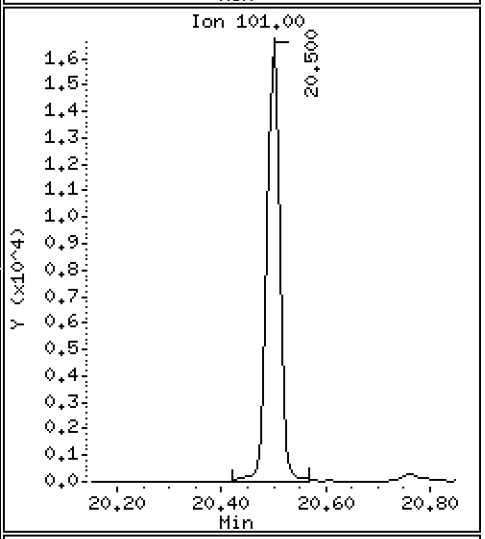
64 Fluoranthene

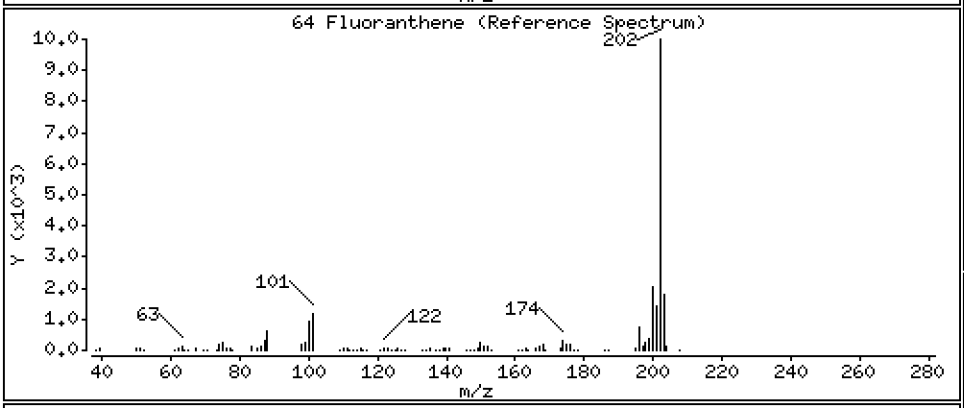
Concentration: 0.5687 ug/mL

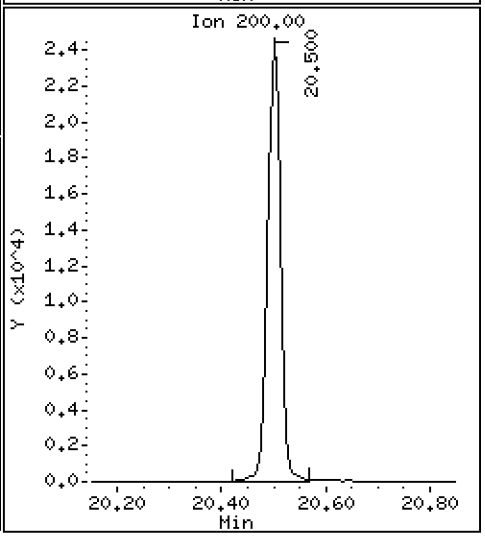


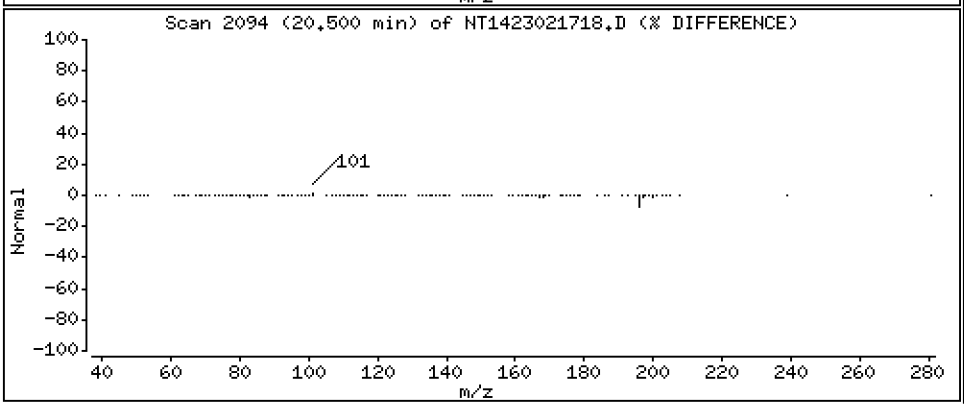












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

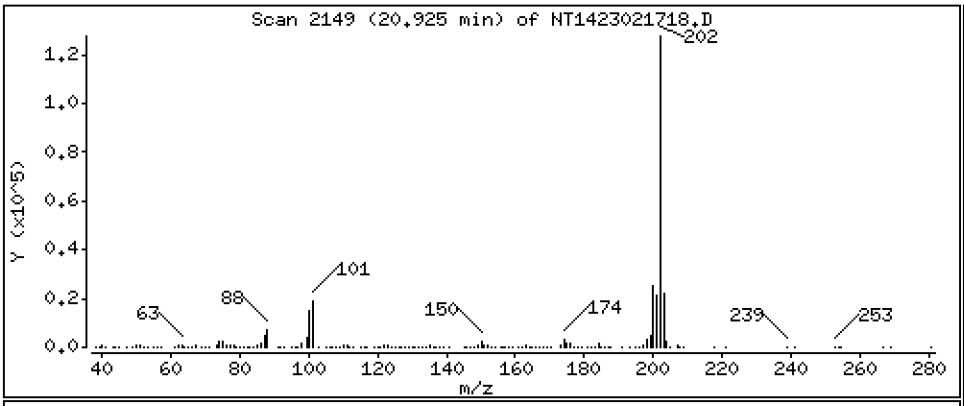
Operator: DSD

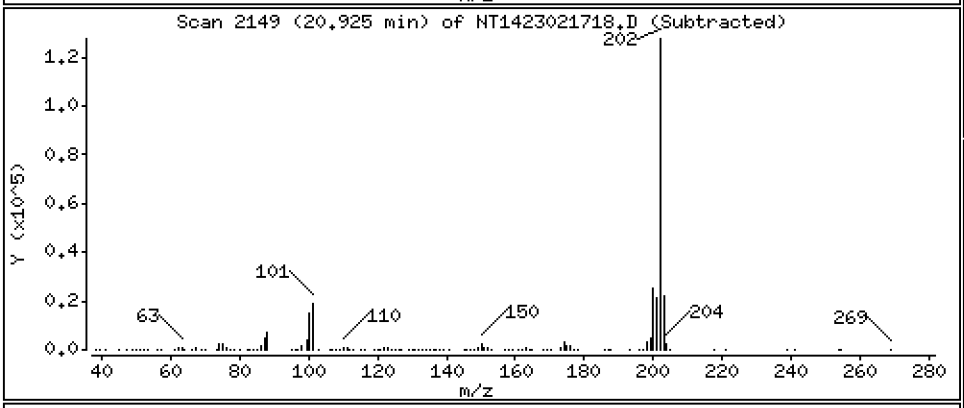
Column phase: ZB-5msi

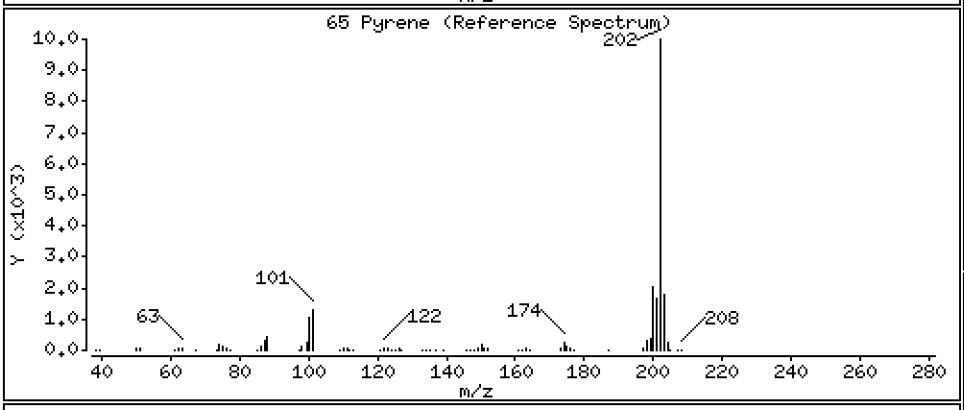
Column diameter: 0.25

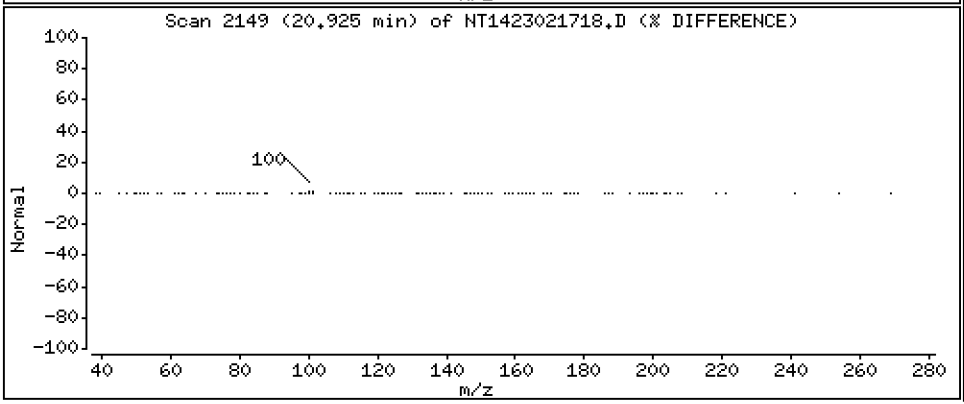
65 Pyrene

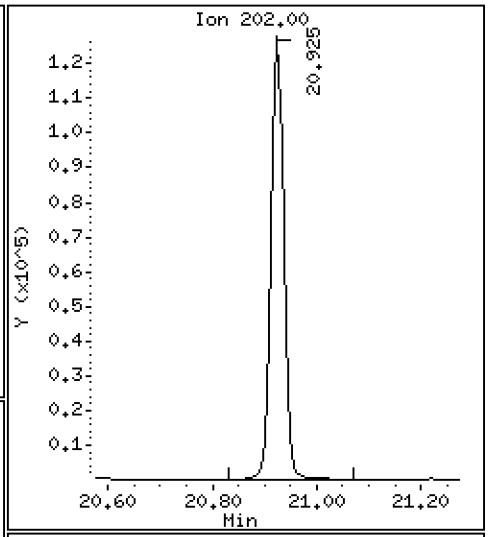
Concentration: 0.5640 ug/mL

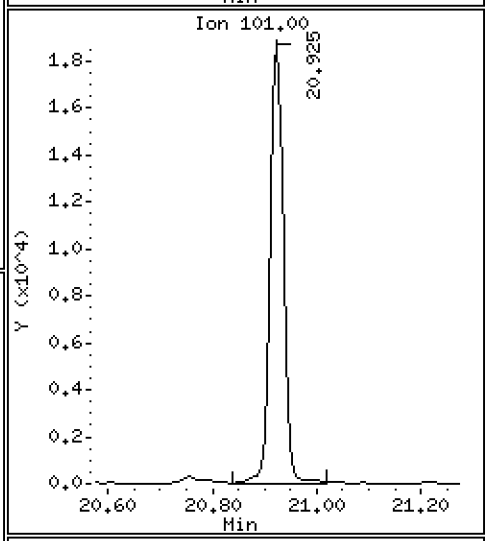


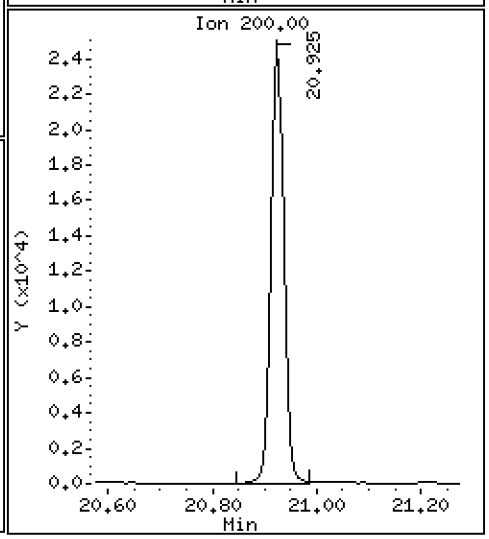












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

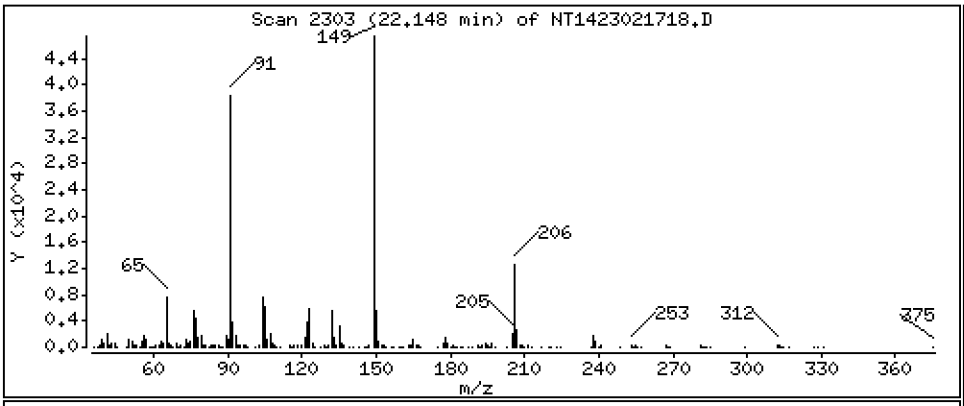
Operator: DSD

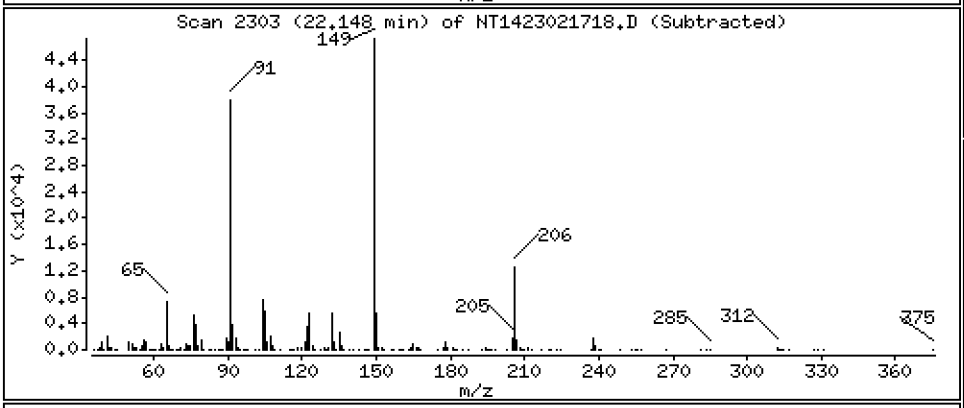
Column phase: ZB-5msi

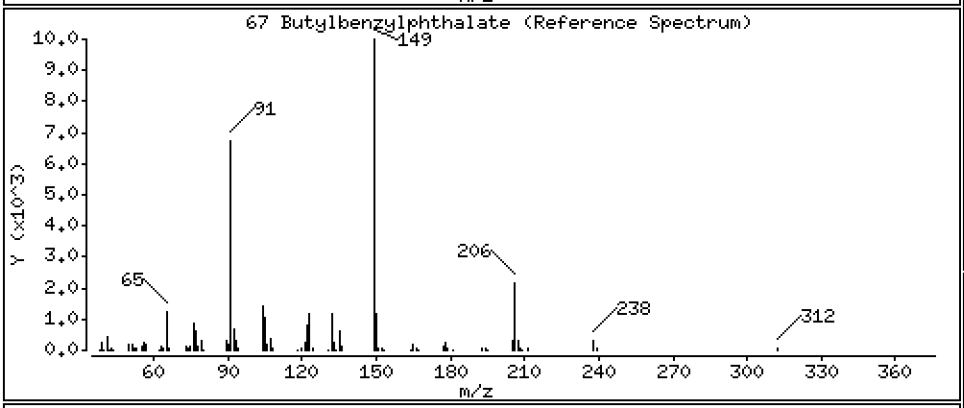
Column diameter: 0.25

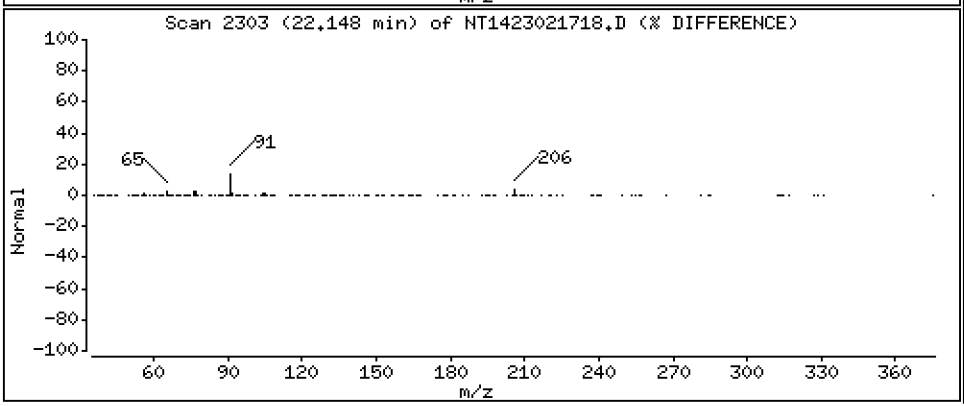
67 Butylbenzylphthalate

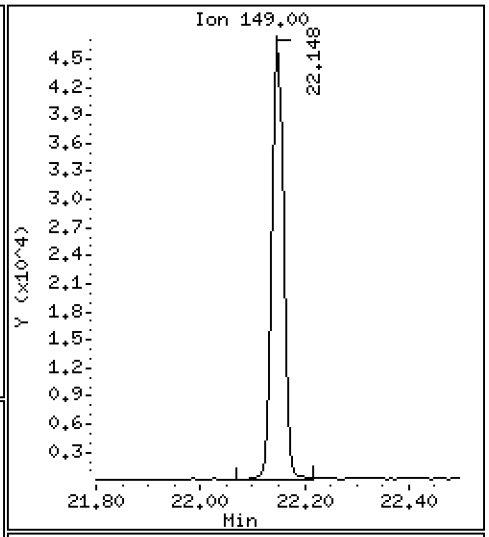
Concentration: 0.5354 ug/mL

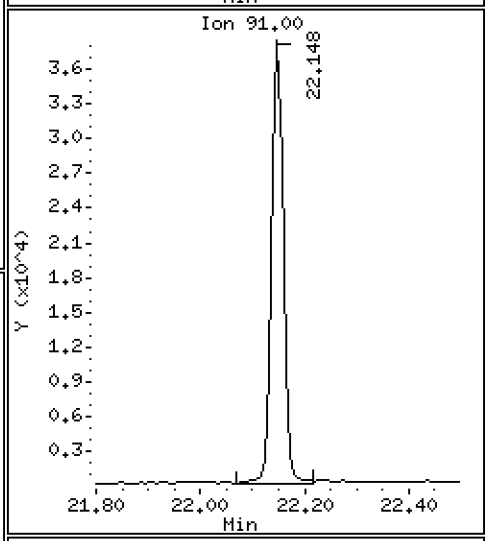


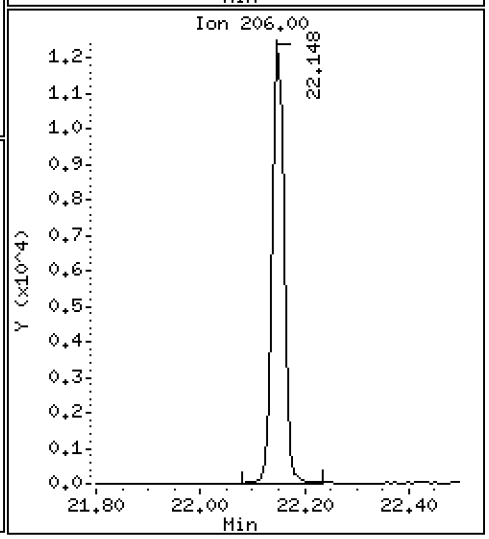












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

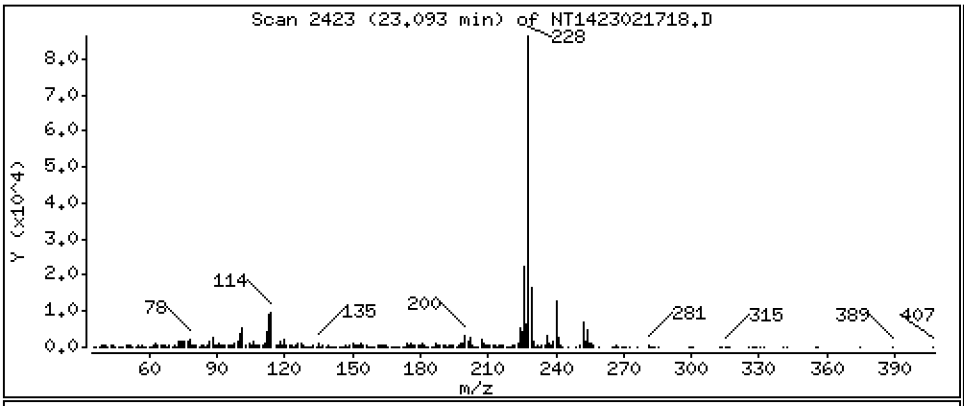
Operator: DSD

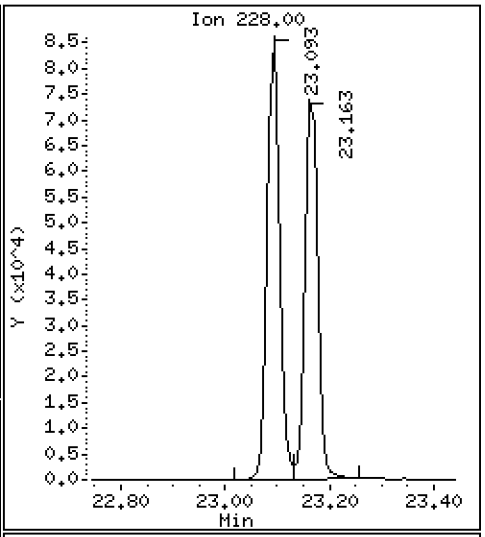
Column phase: ZB-5msi

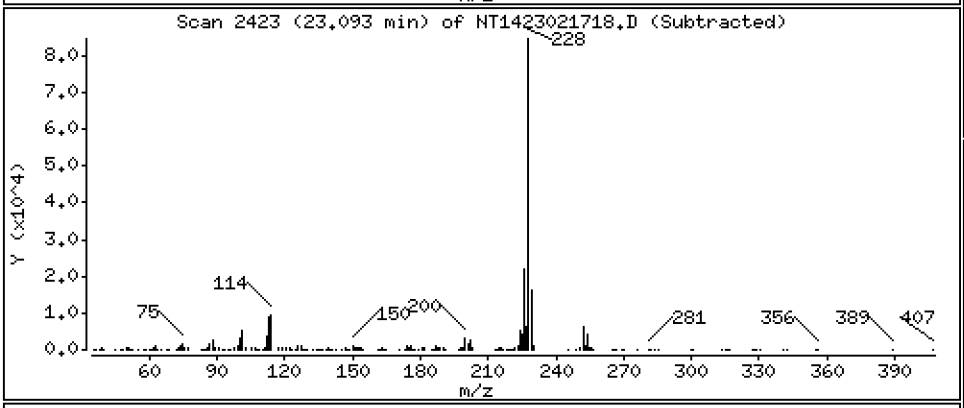
Column diameter: 0.25

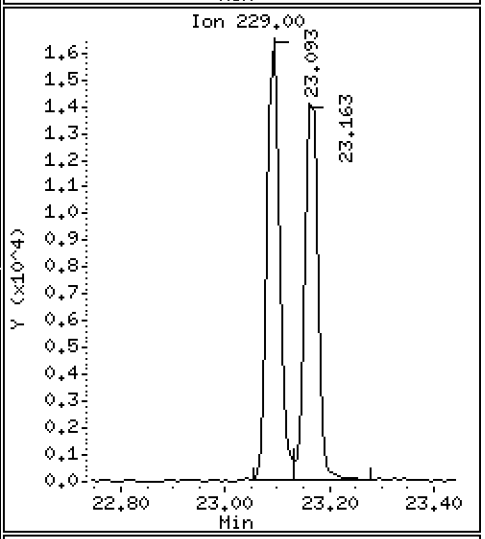
68 Benzo(a)anthracene

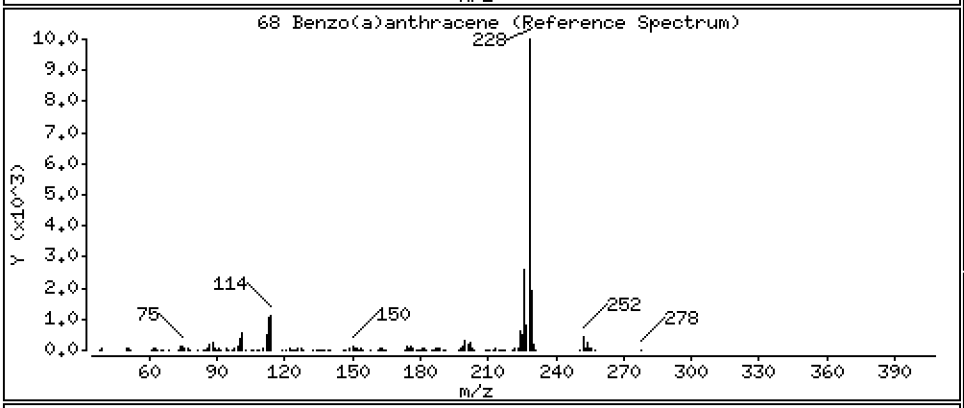
Concentration: 0.4893 ug/mL

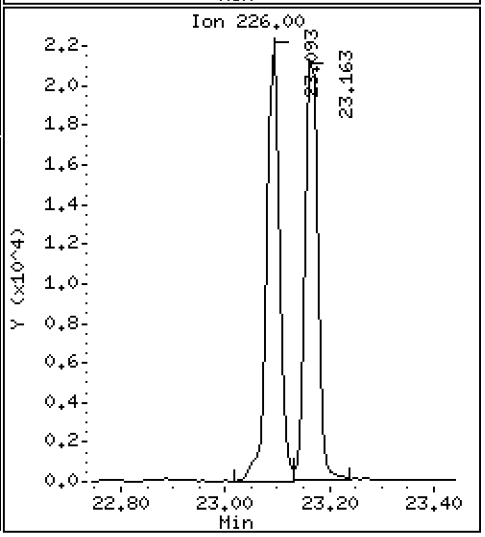


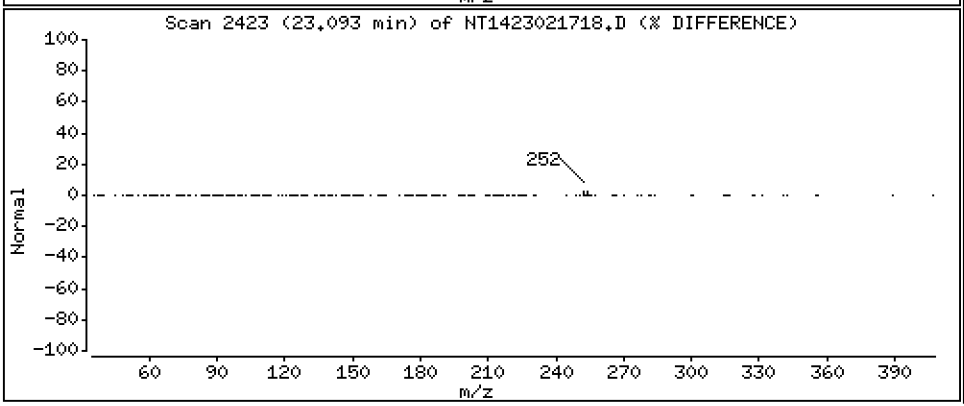












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

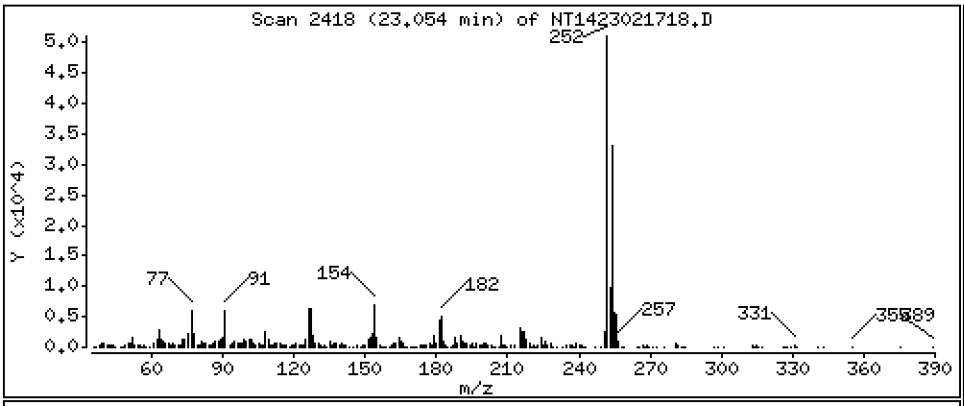
Operator: DSD

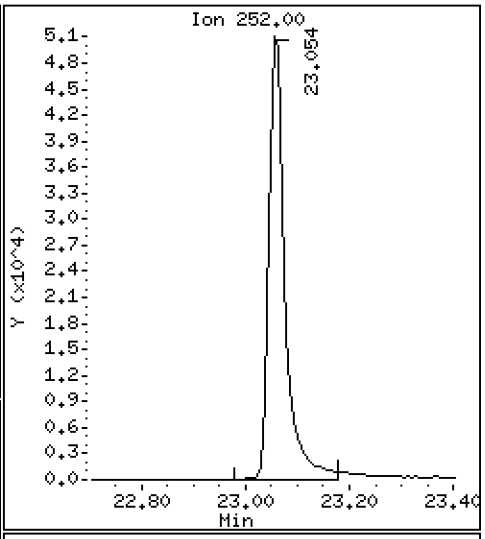
Column phase: ZB-5msi

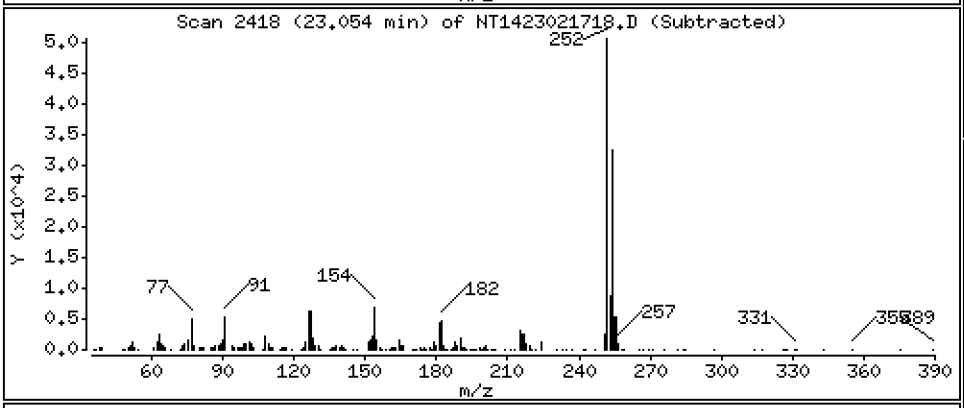
Column diameter: 0.25

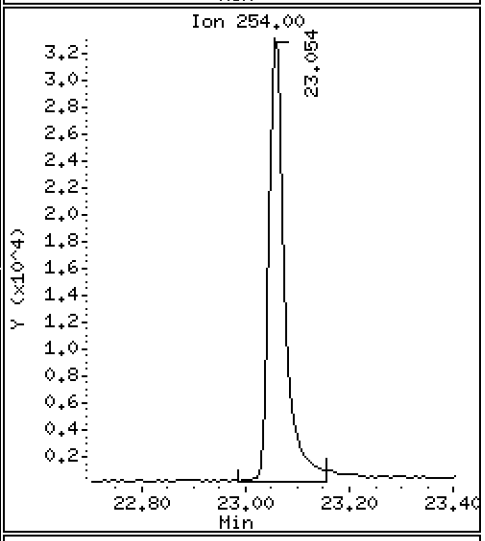
70 3,3'-Dichlorobenzidine

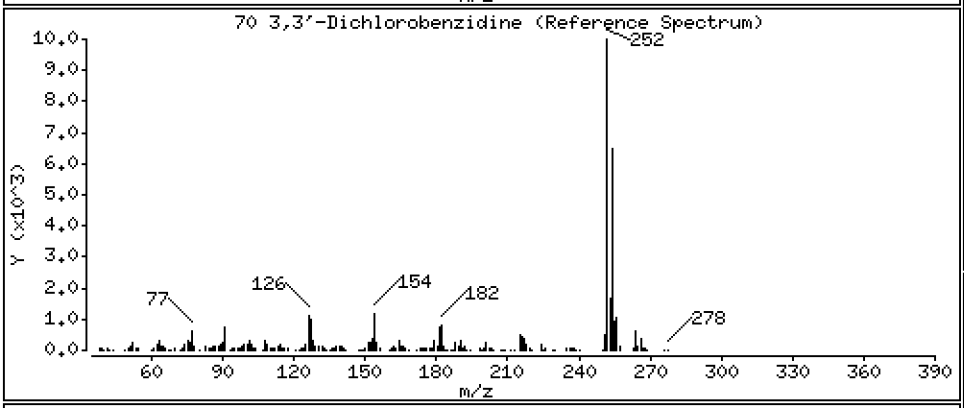
Concentration: 1.271 ug/mL

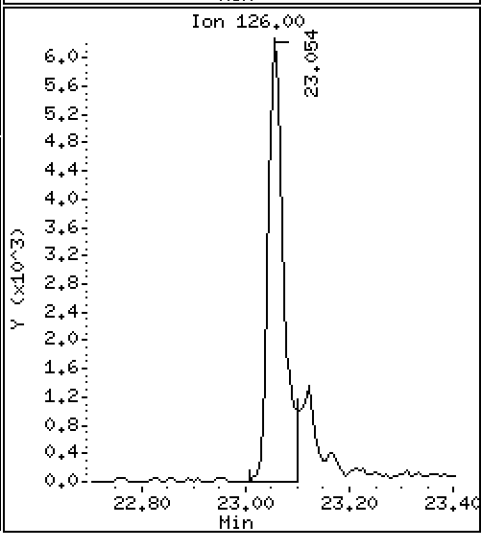


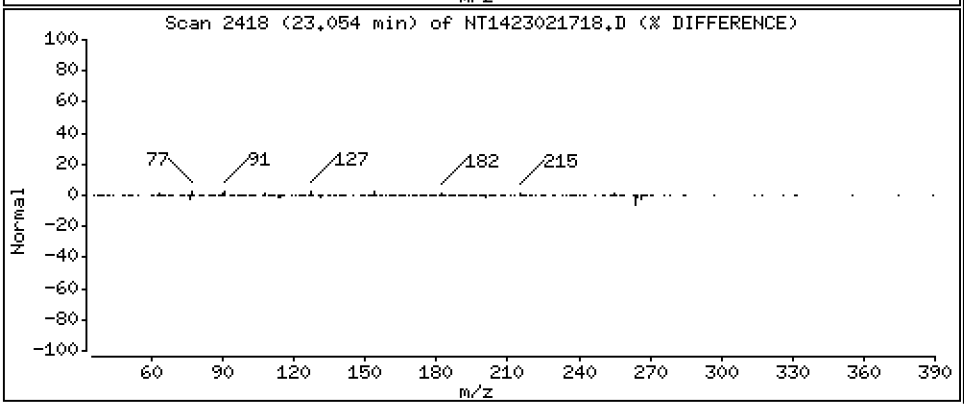












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

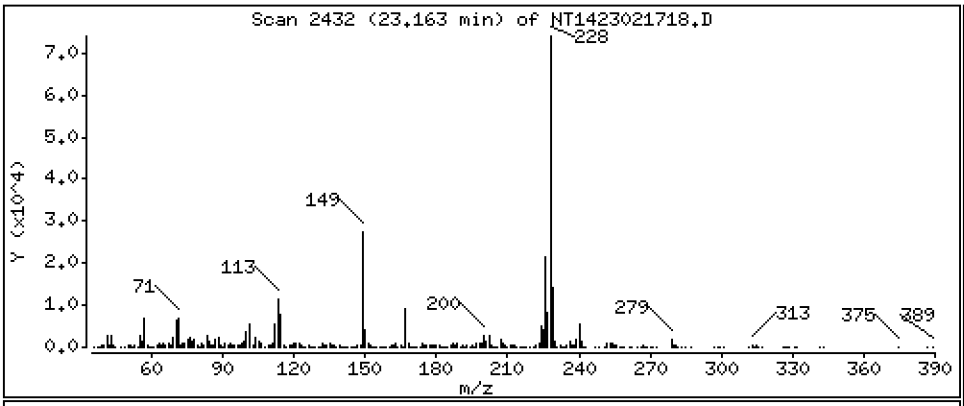
Operator: DSD

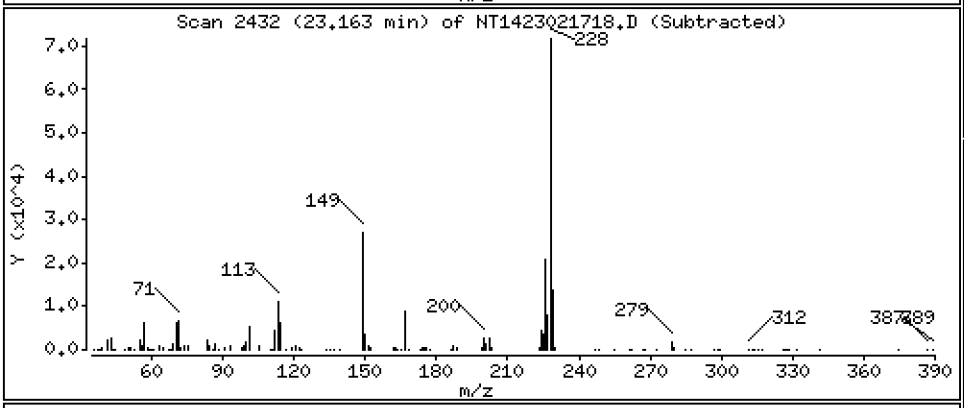
Column phase: ZB-5msi

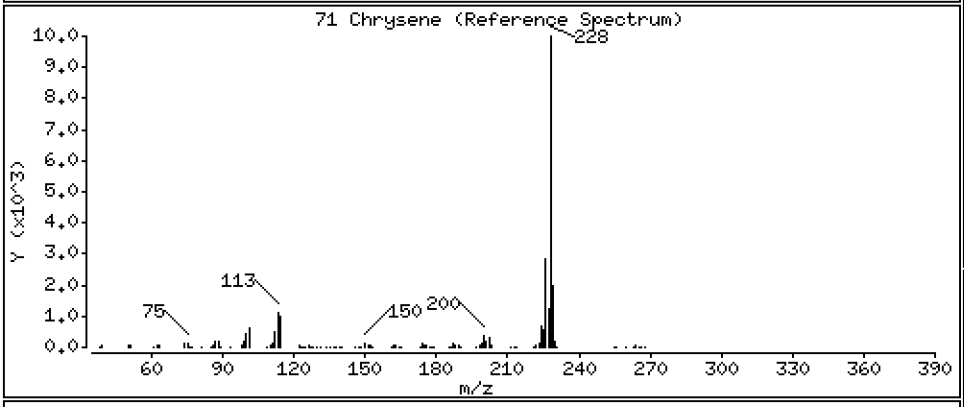
Column diameter: 0.25

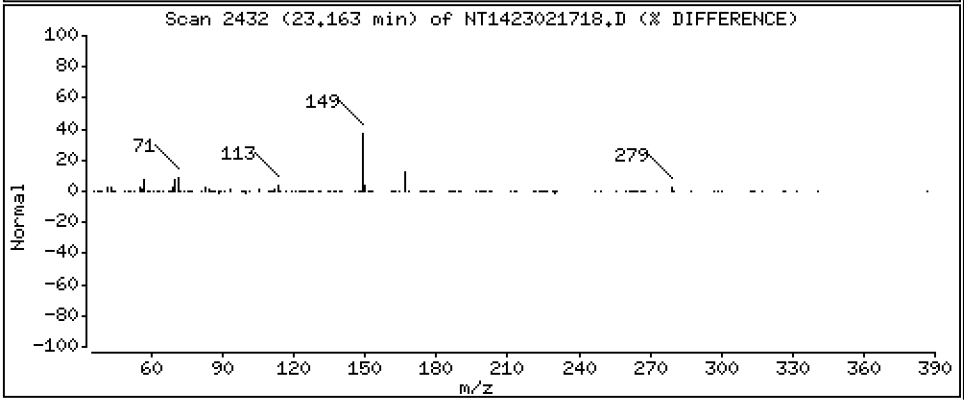
71 Chrysene

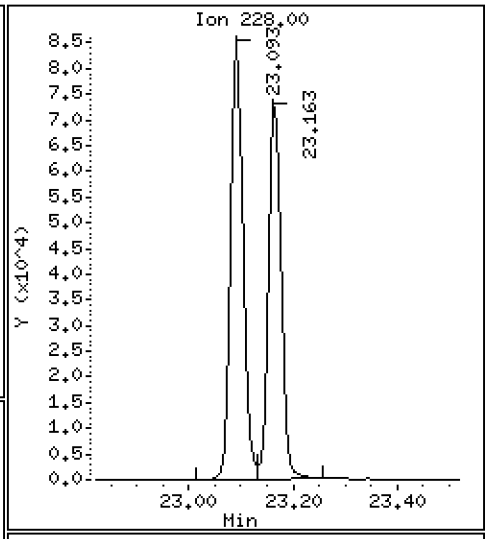
Concentration: 0.4819 ug/mL

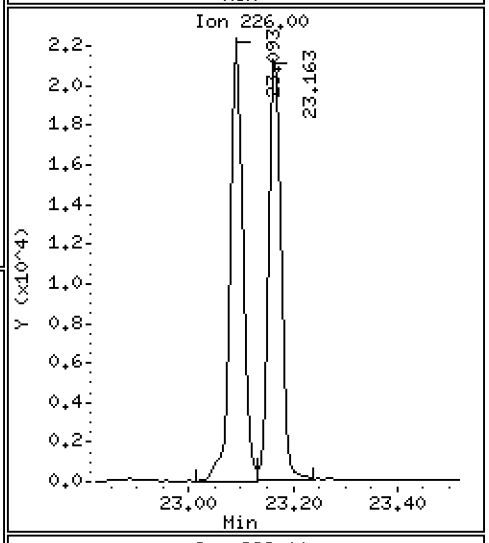


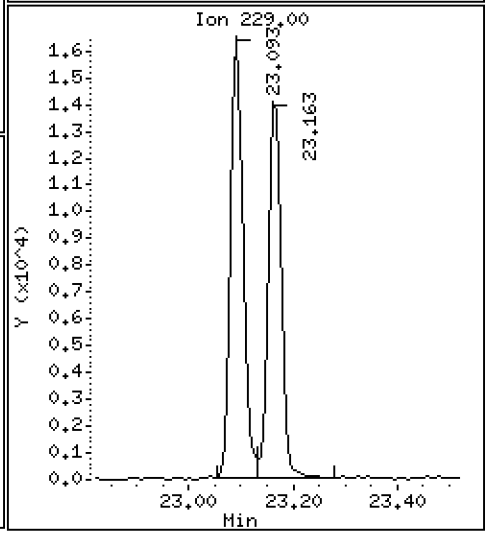












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

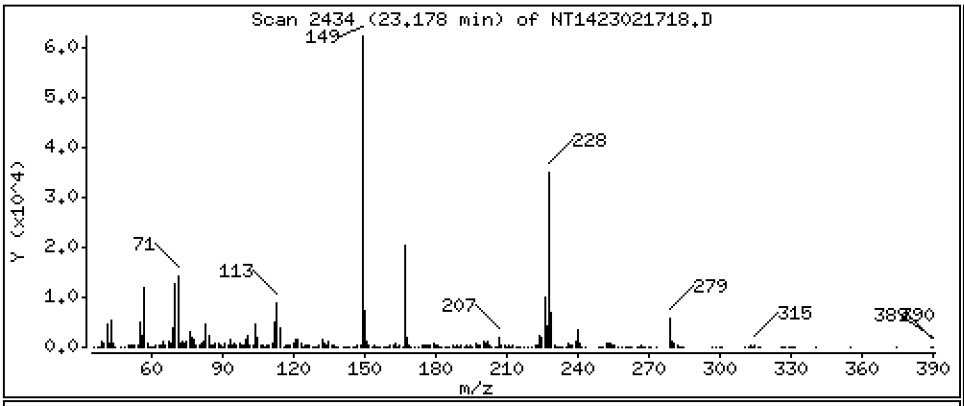
Operator: DSD

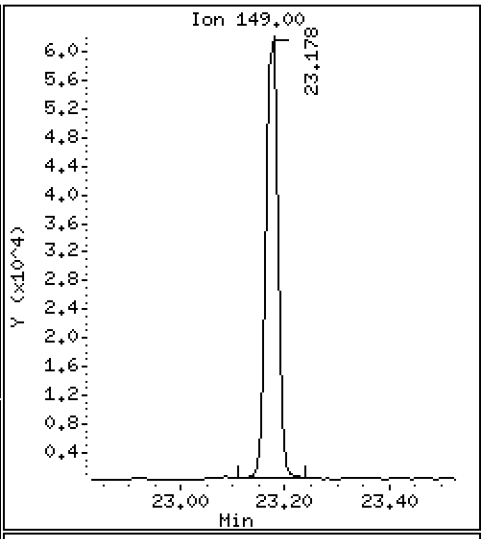
Column phase: ZB-5msi

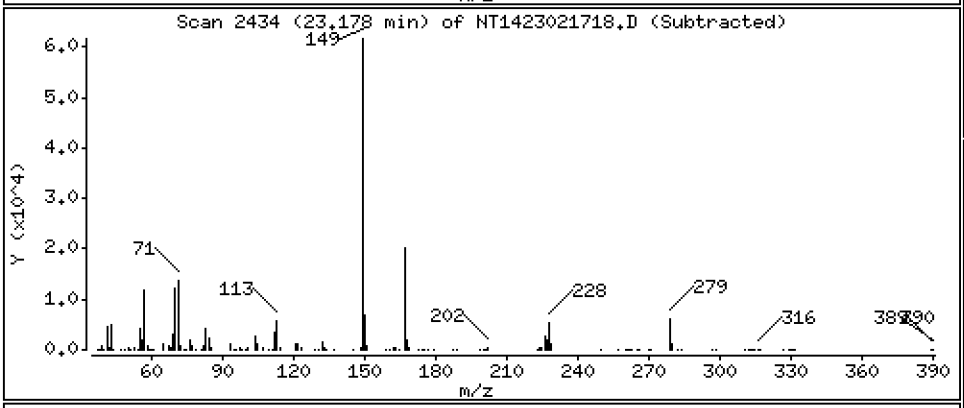
Column diameter: 0.25

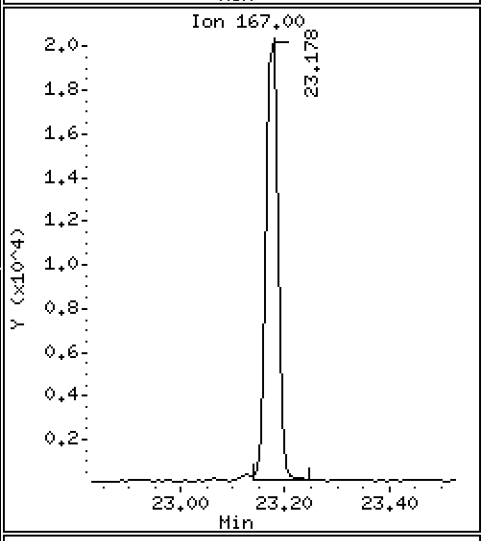
72 bis(2-Ethylhexyl)phthalate

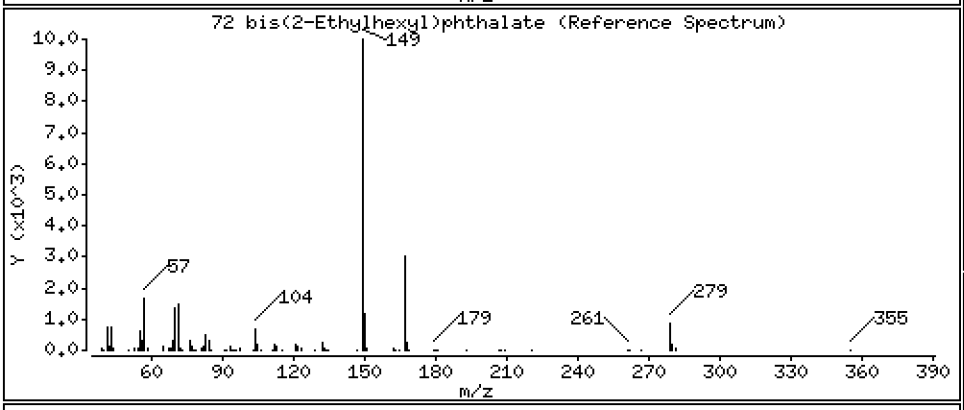
Concentration: 0.3729 ug/mL

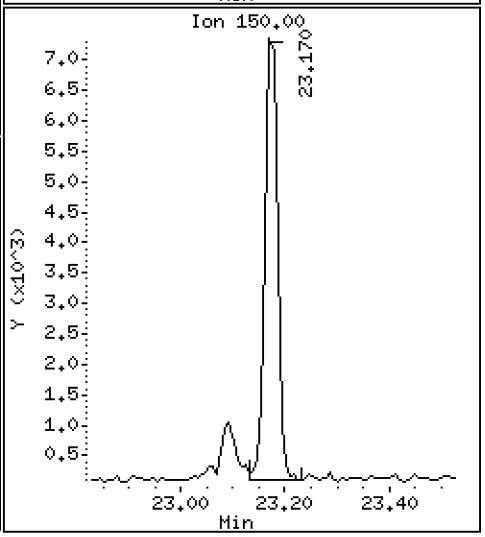


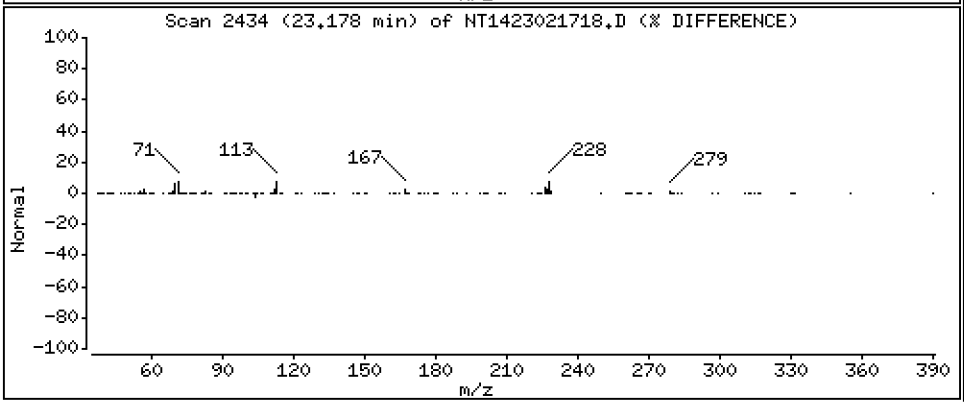












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

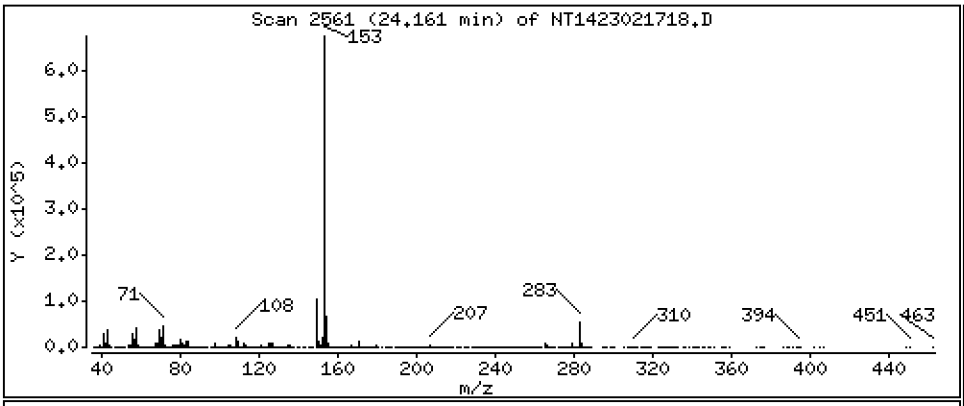
Operator: DSD

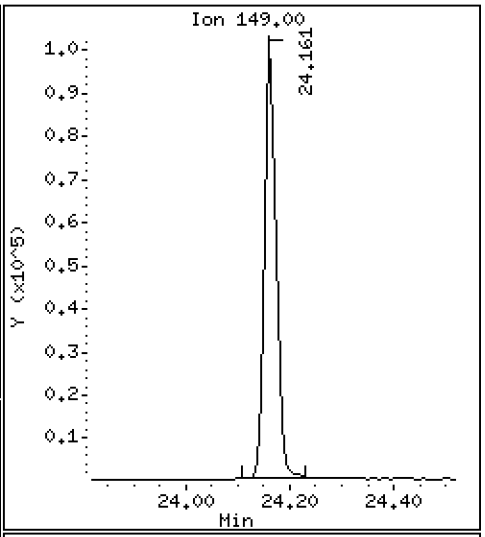
Column phase: ZB-5msi

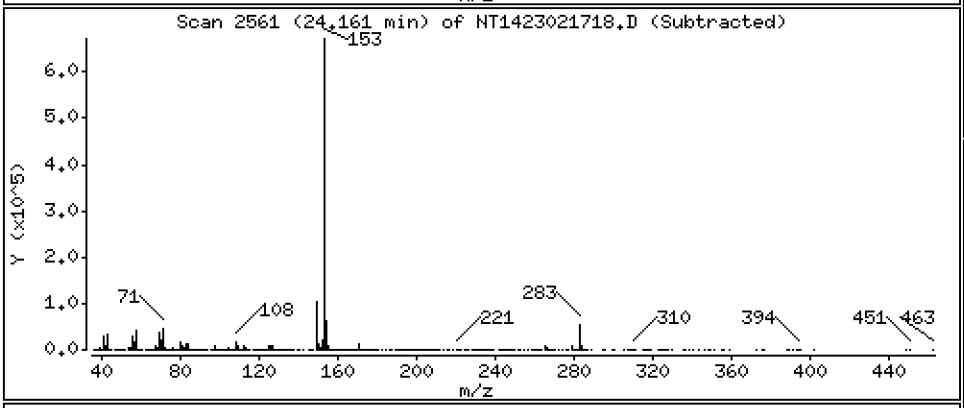
Column diameter: 0.25

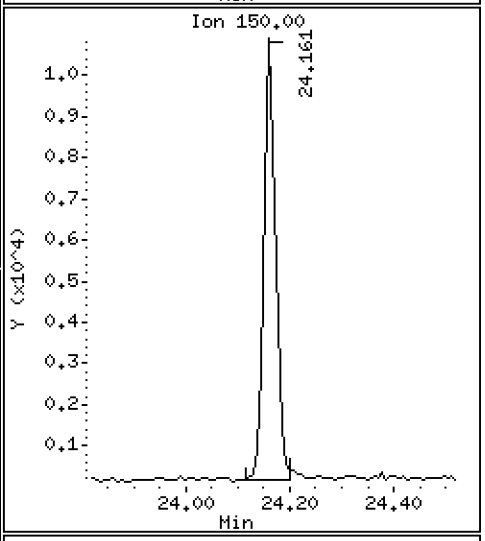
73 Di-n-octylphthalate

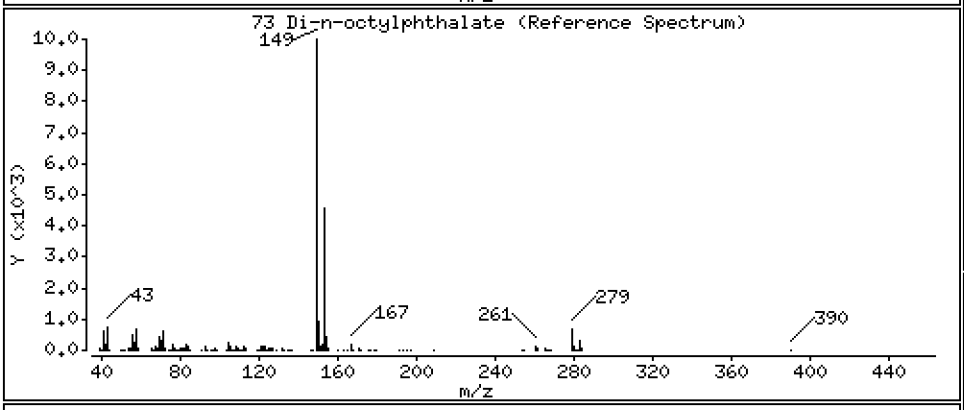
Concentration: 0.4491 ug/mL

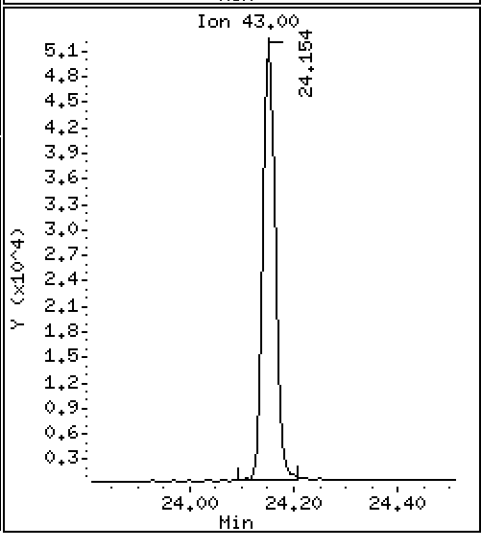


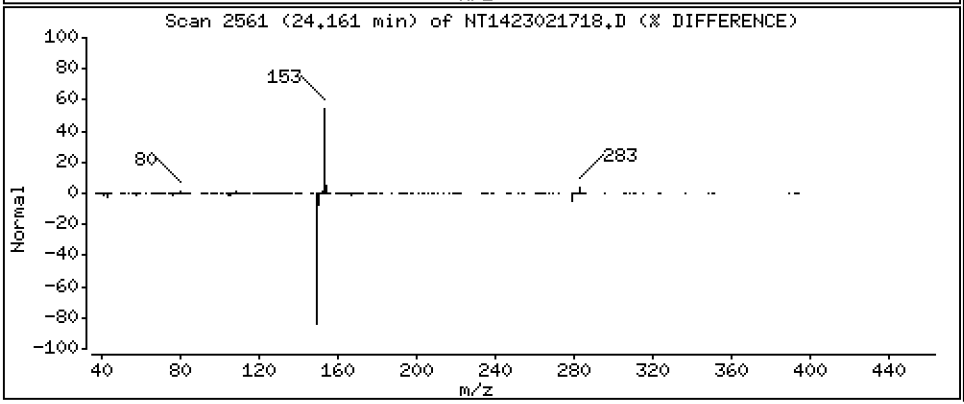












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

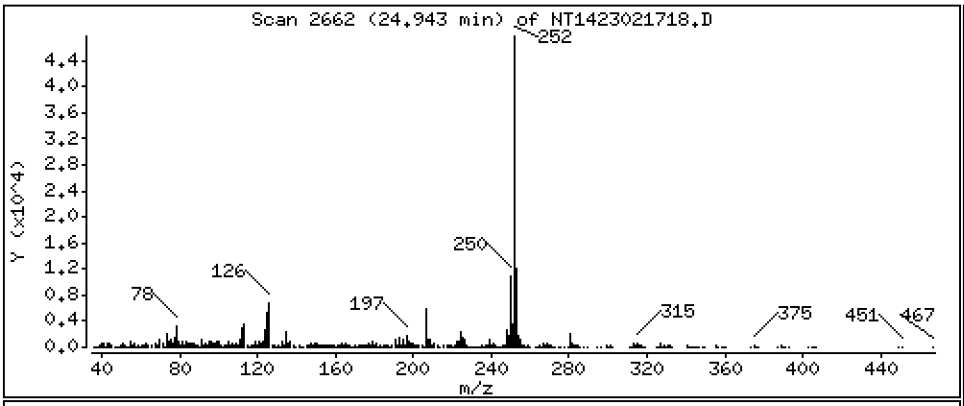
Operator: DSD

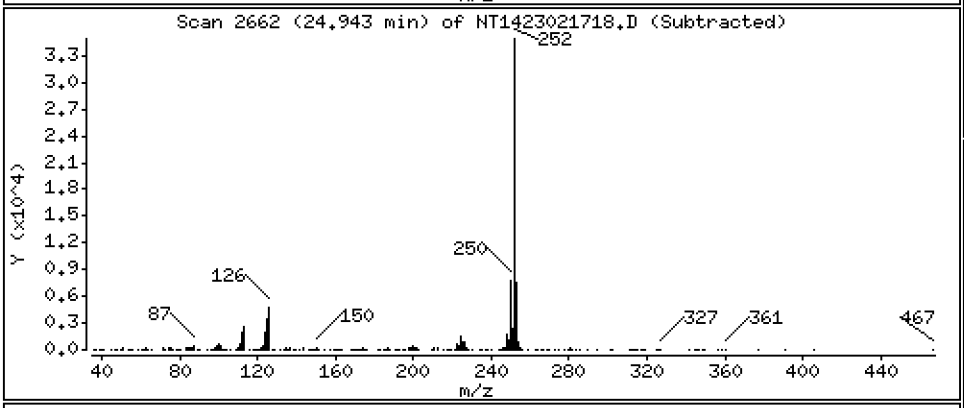
Column phase: ZB-5msi

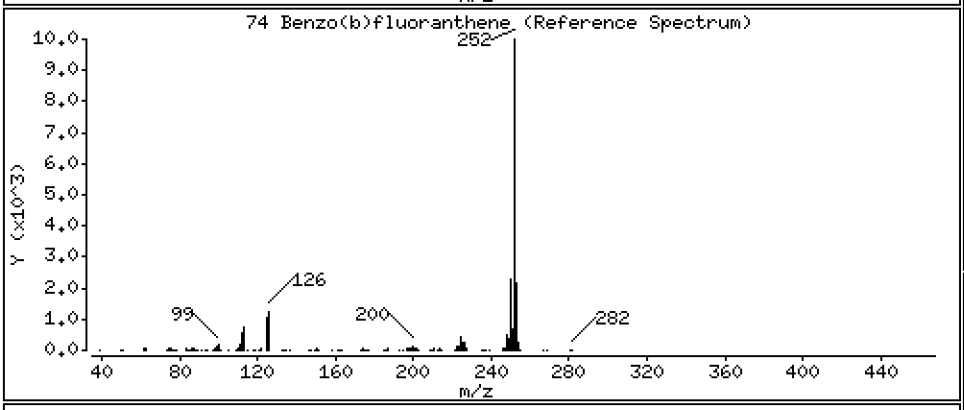
Column diameter: 0.25

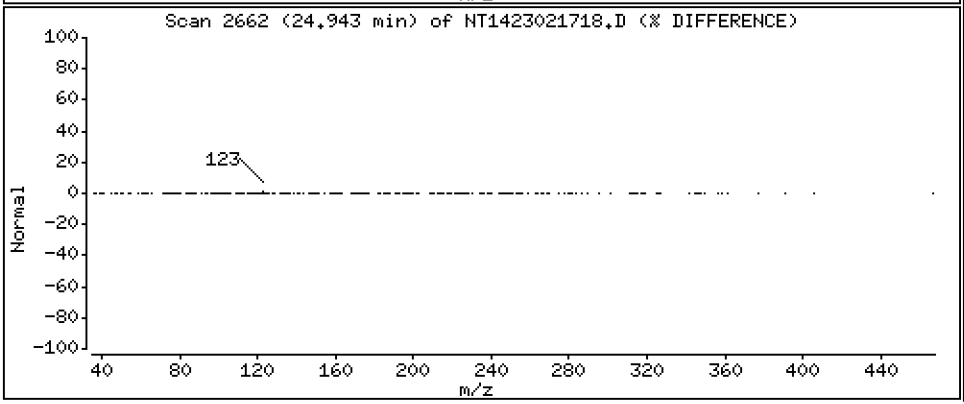
74 Benzo(b)fluoranthene

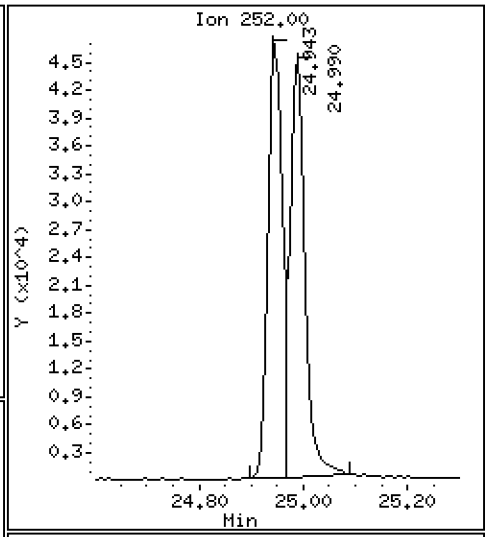
Concentration: 0.4492 ug/mL

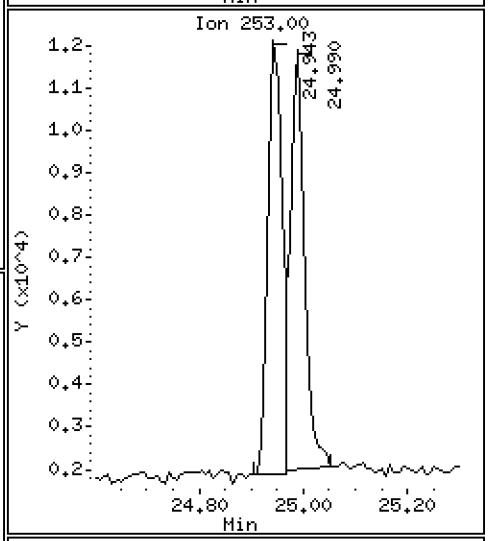


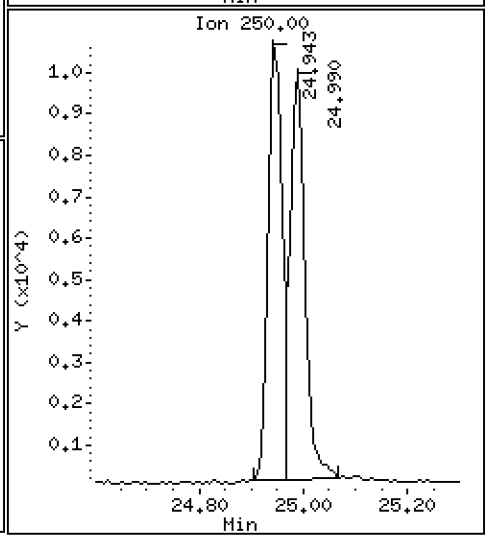












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

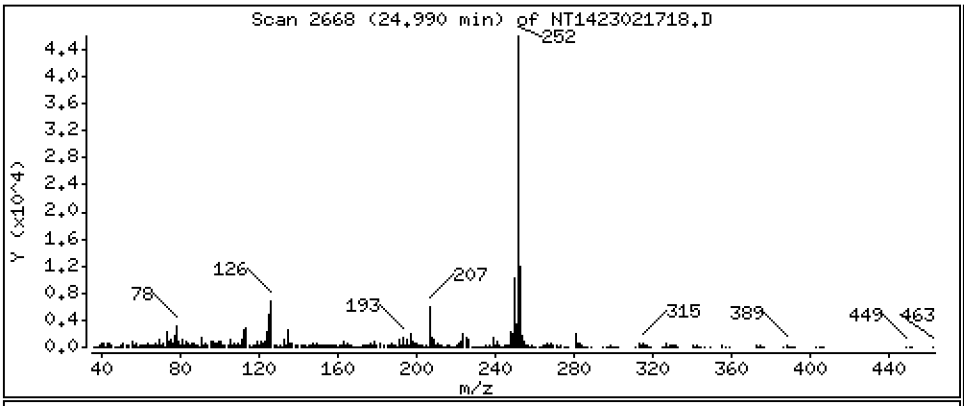
Operator: DSD

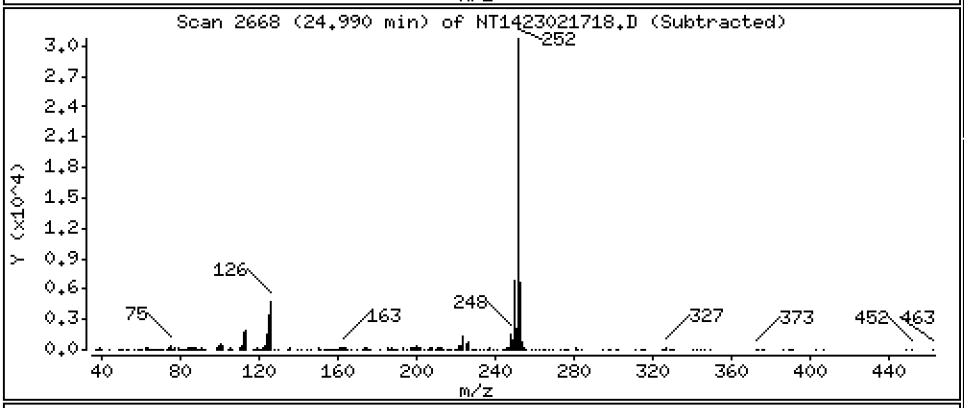
Column phase: ZB-5msi

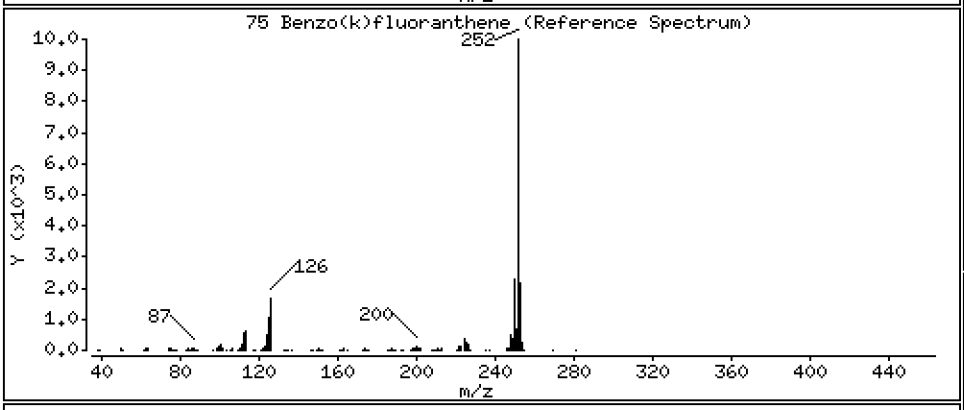
Column diameter: 0.25

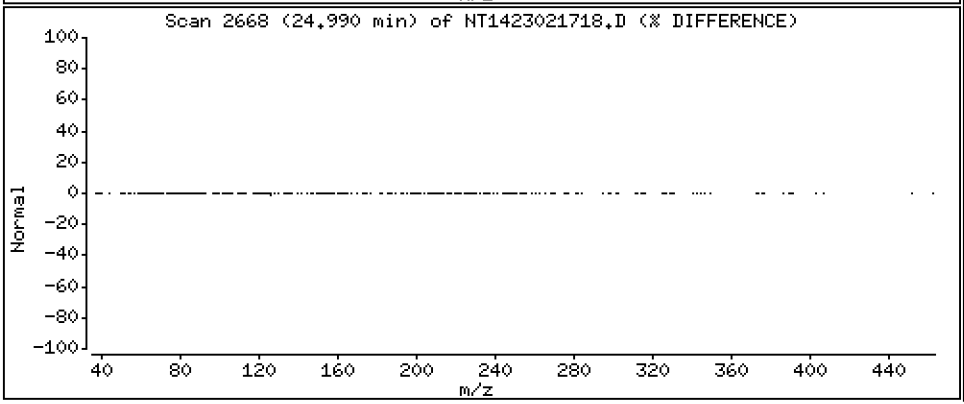
75 Benzo(k)fluoranthene

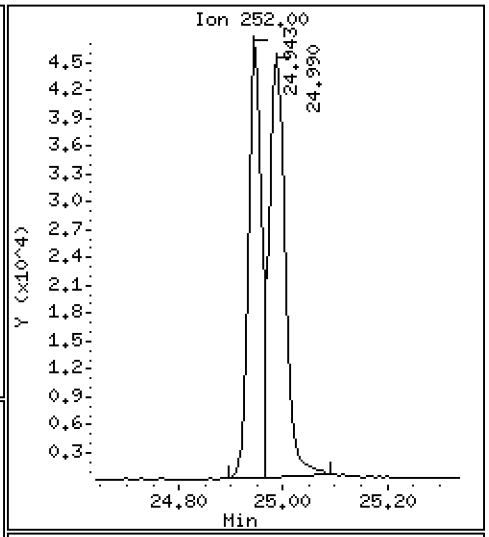
Concentration: 0.4688 ug/mL

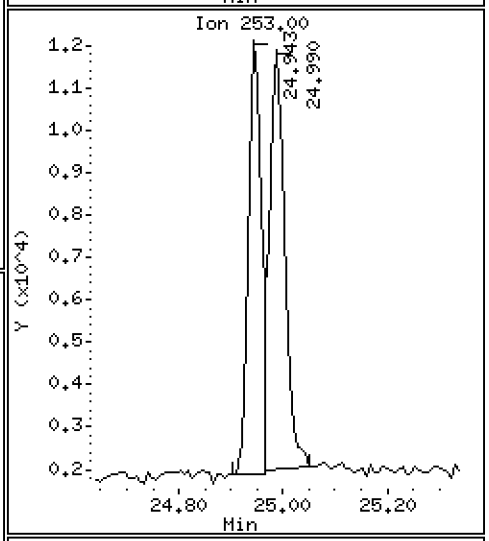


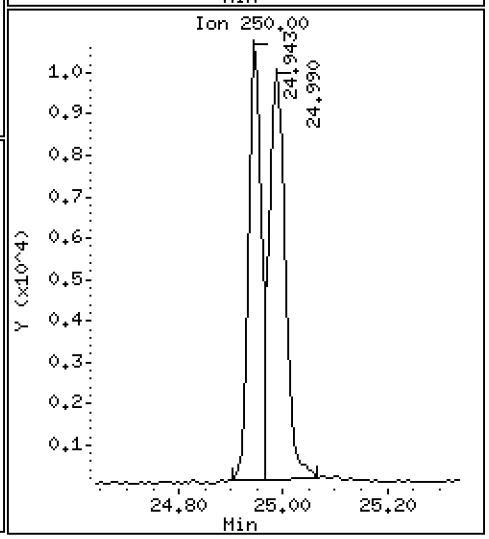












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

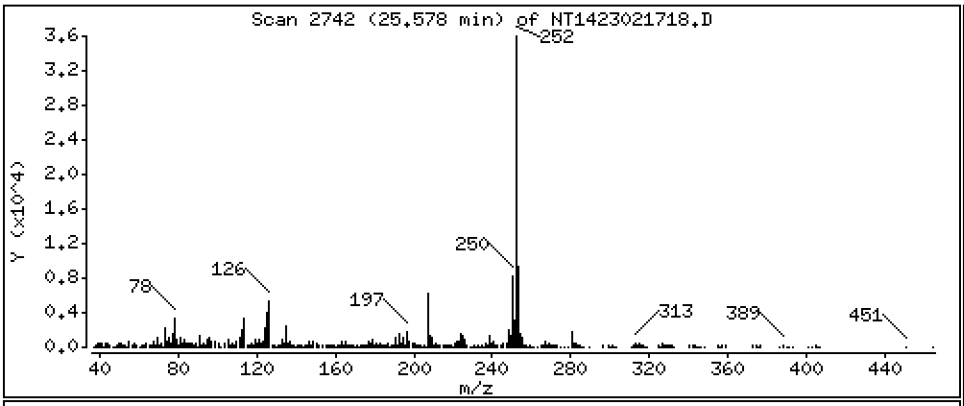
Operator: DSD

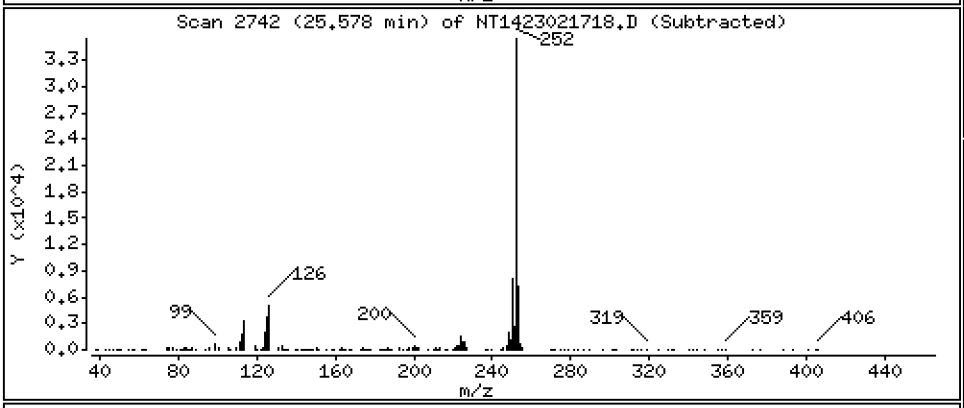
Column phase: ZB-5msi

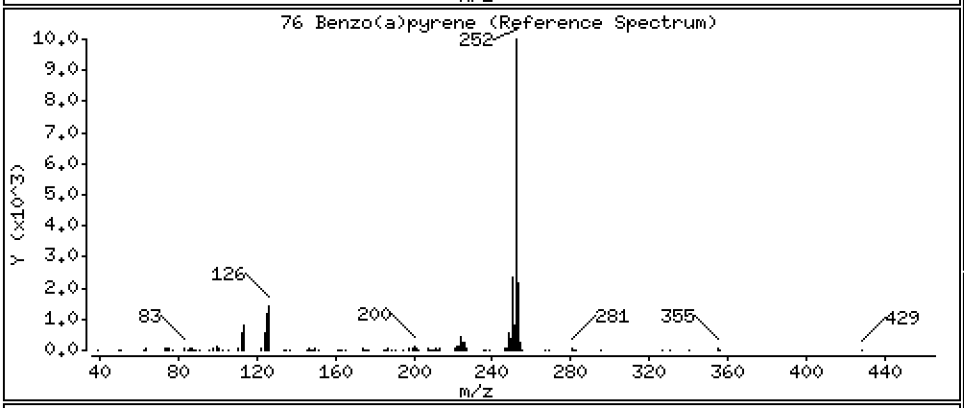
Column diameter: 0.25

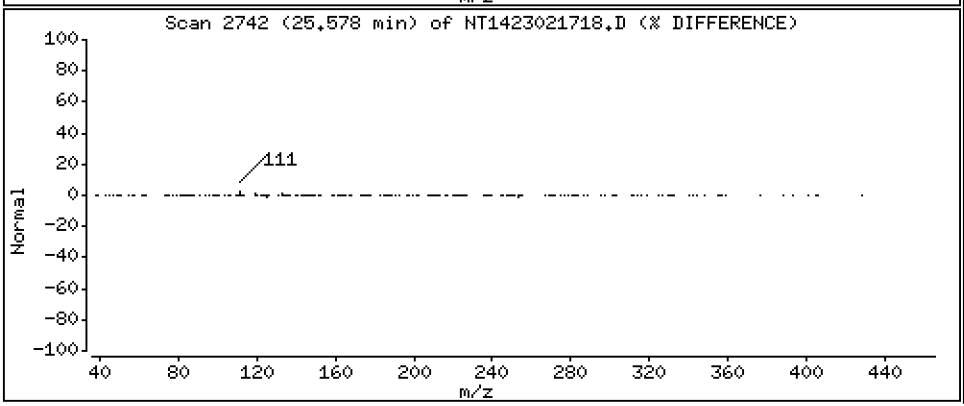
76 Benzo(a)pyrene

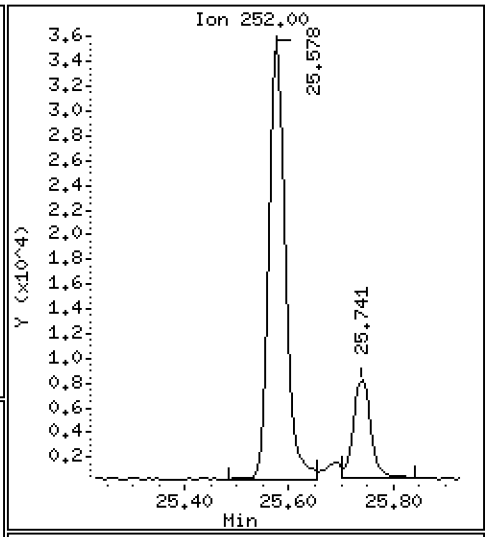
Concentration: 0.4486 ug/mL

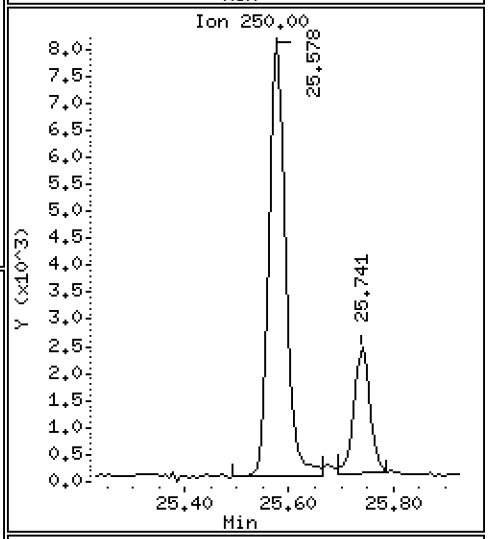


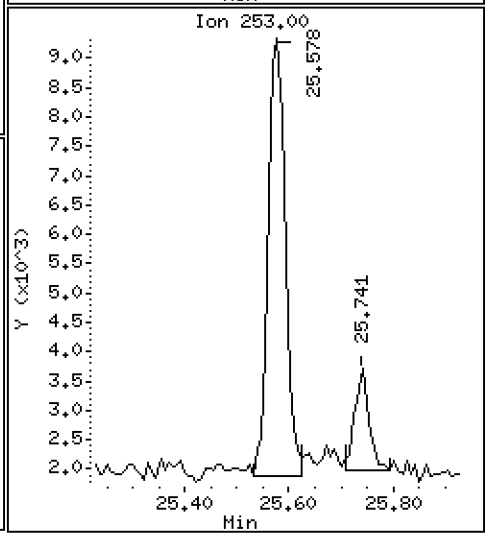












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

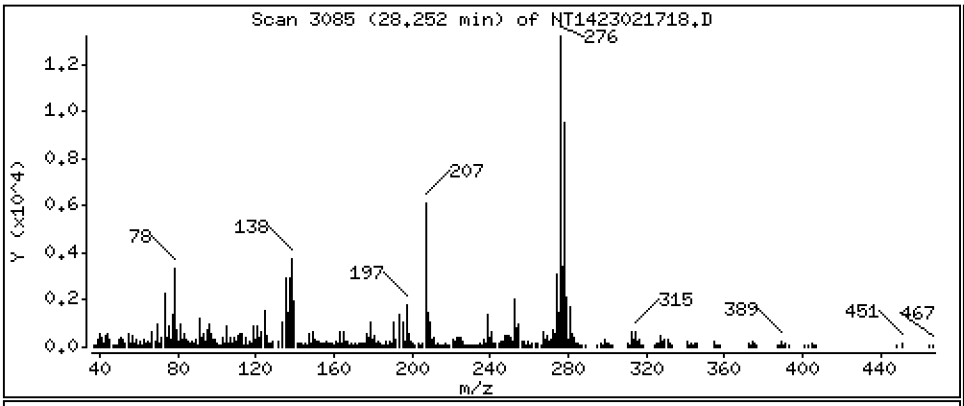
Operator: DSD

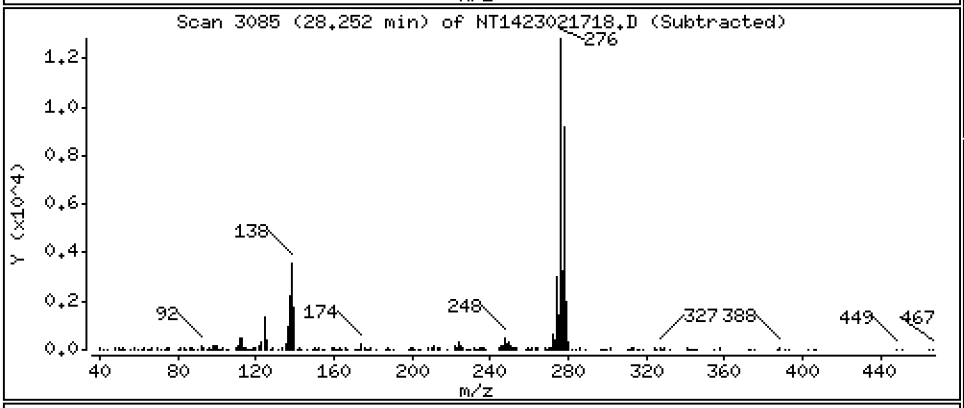
Column phase: ZB-5msi

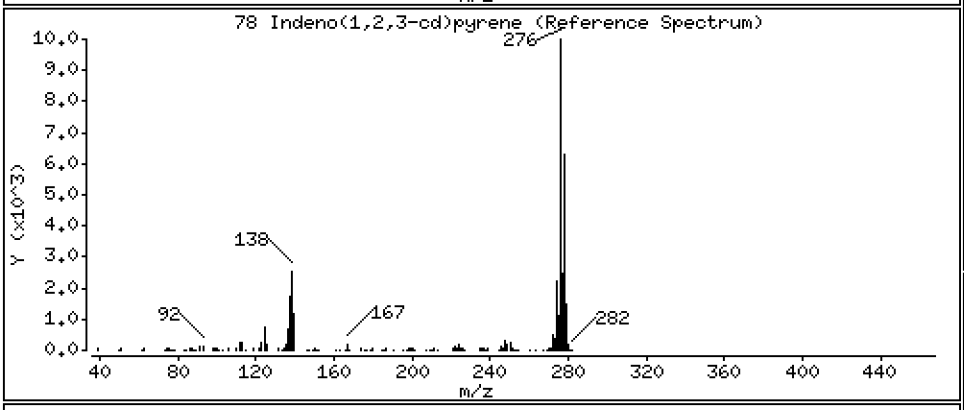
Column diameter: 0.25

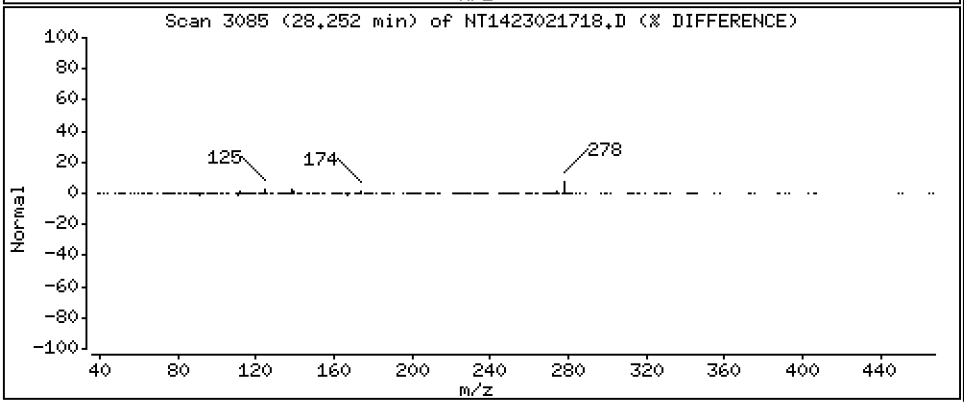
78 Indeno(1,2,3-cd)pyrene

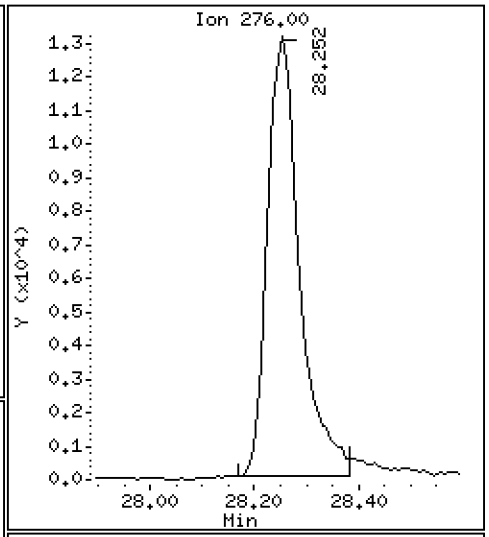
Concentration: 0.3727 ug/mL

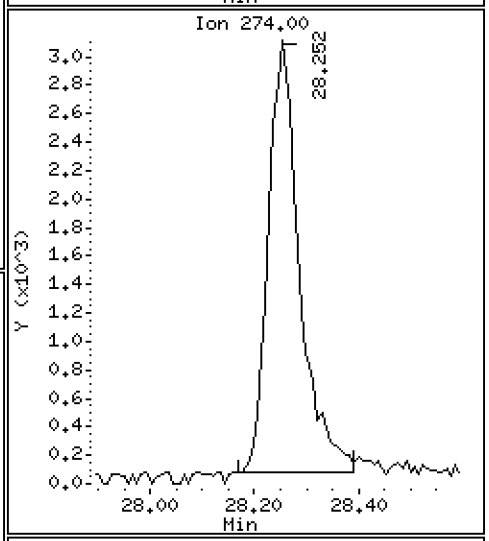


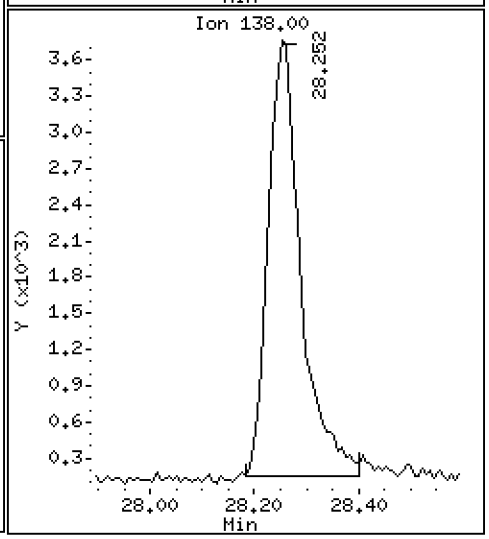












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

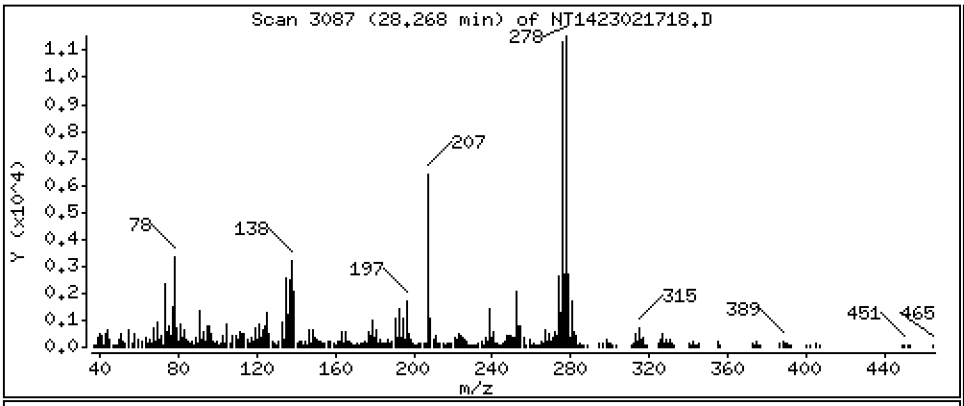
Operator: DSD

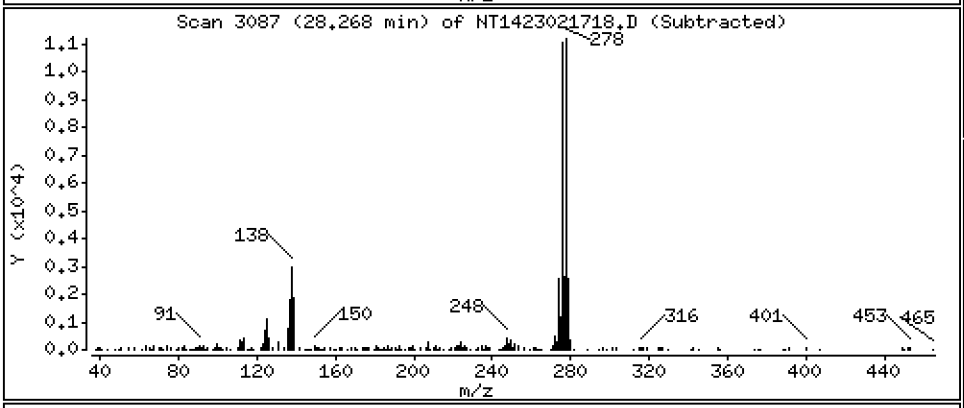
Column phase: ZB-5msi

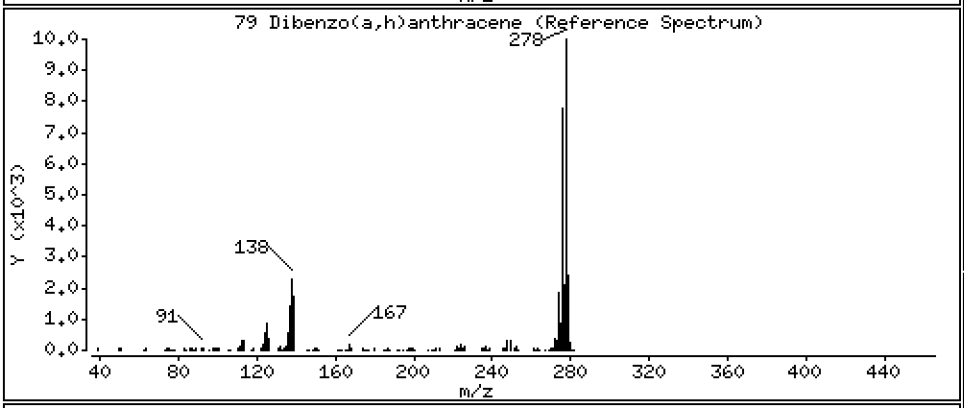
Column diameter: 0.25

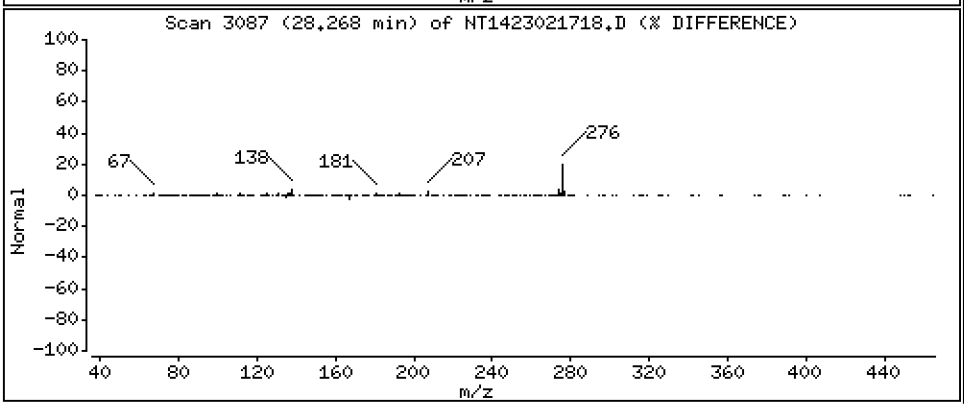
79 Dibenzo(a,h)anthracene

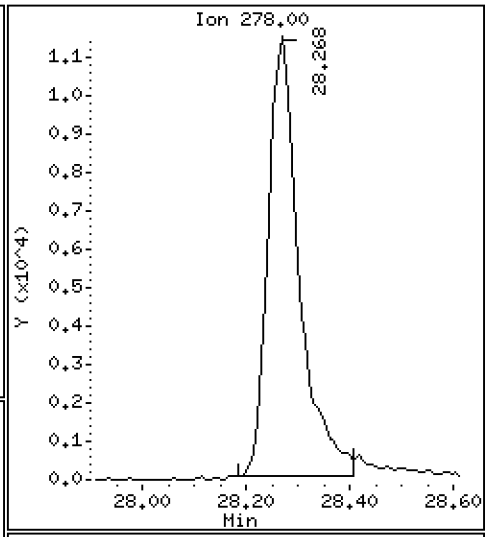
Concentration: 0.3824 ug/mL

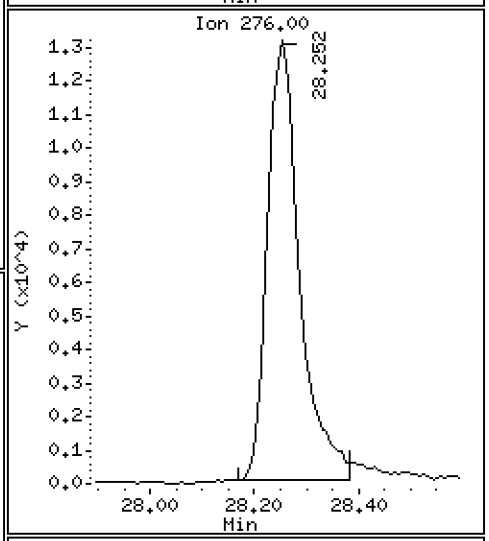


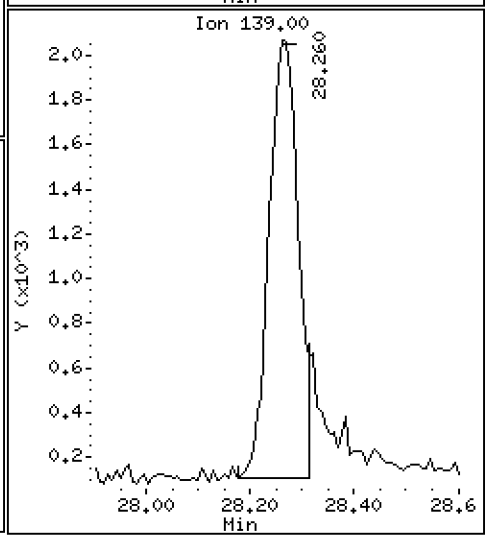












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

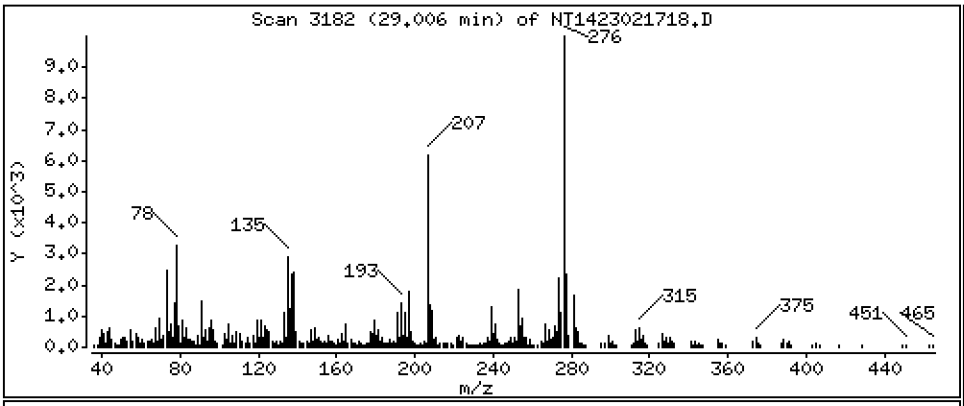
Operator: DSD

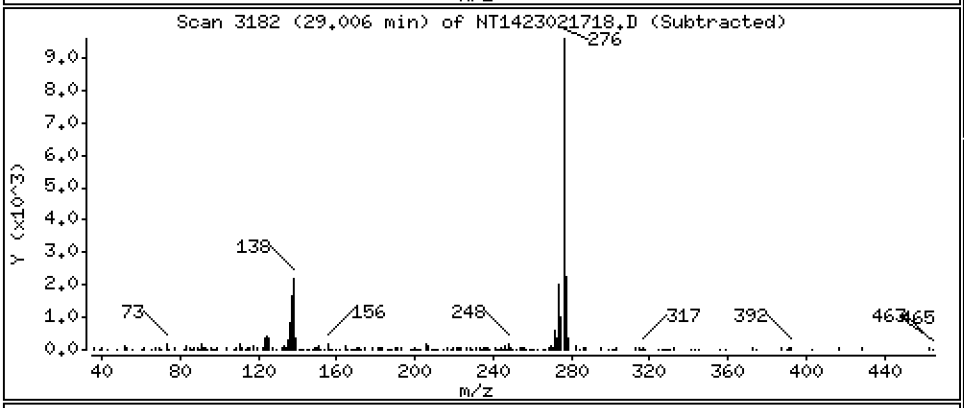
Column phase: ZB-5msi

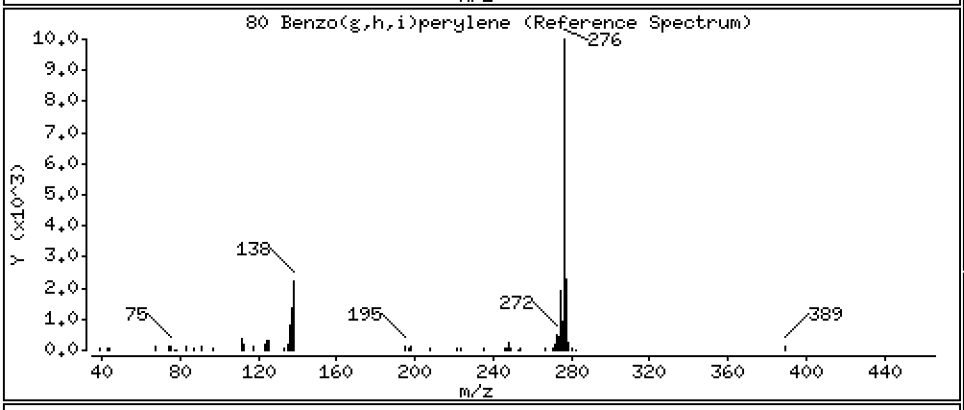
Column diameter: 0.25

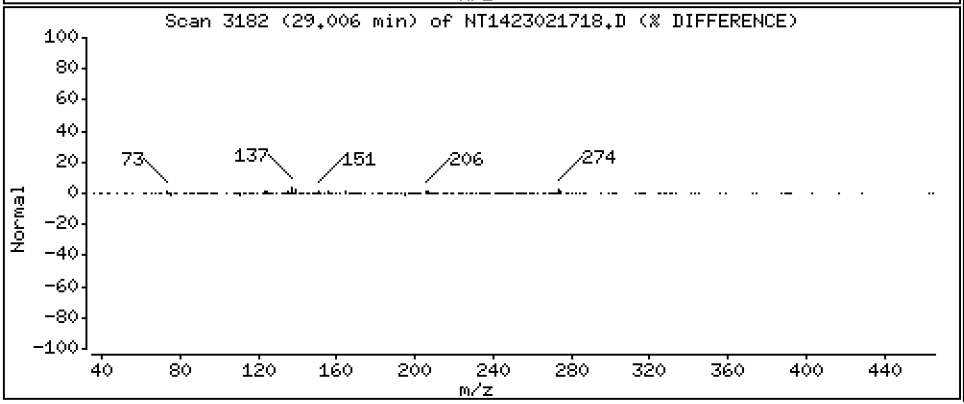
80 Benzo(g,h,i)perylene

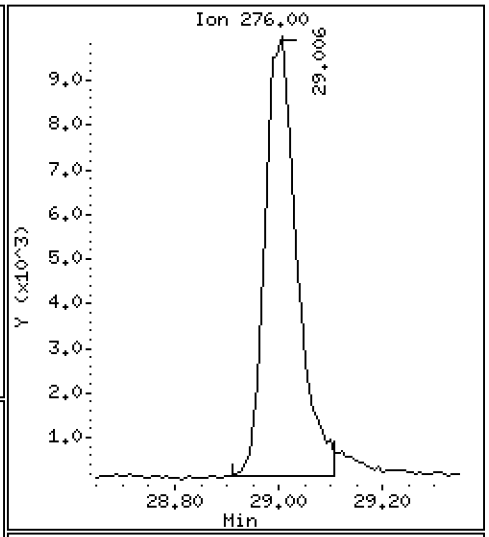
Concentration: 0.3401 ug/mL

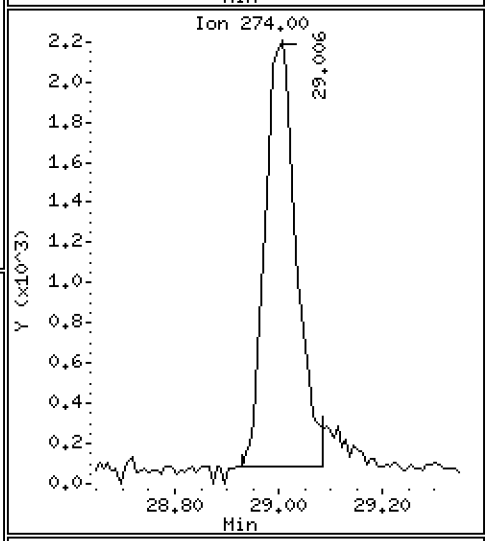


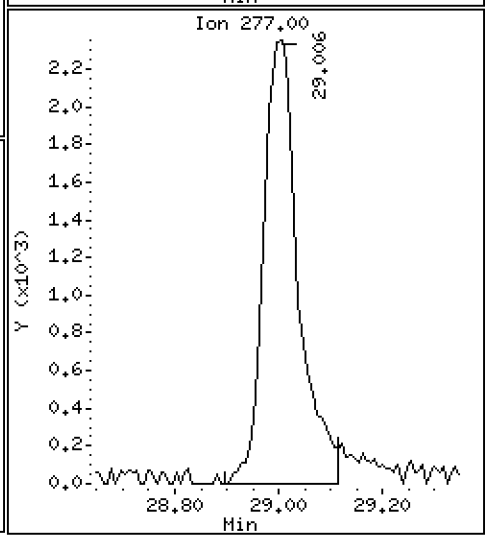












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

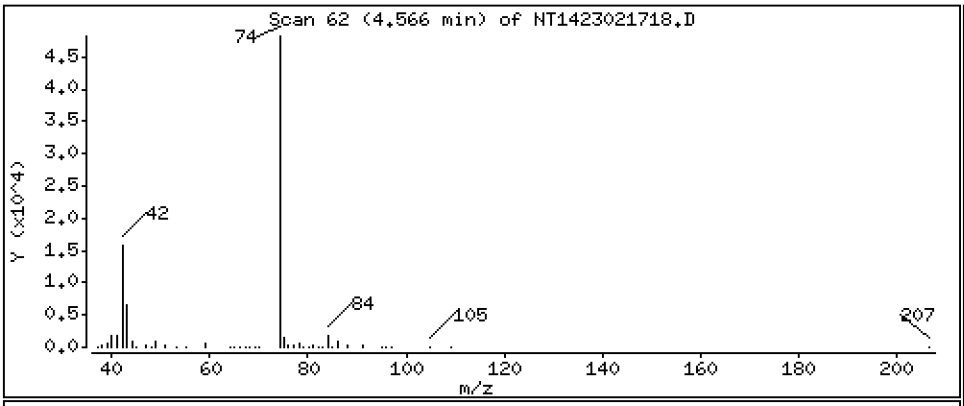
Operator: DSD

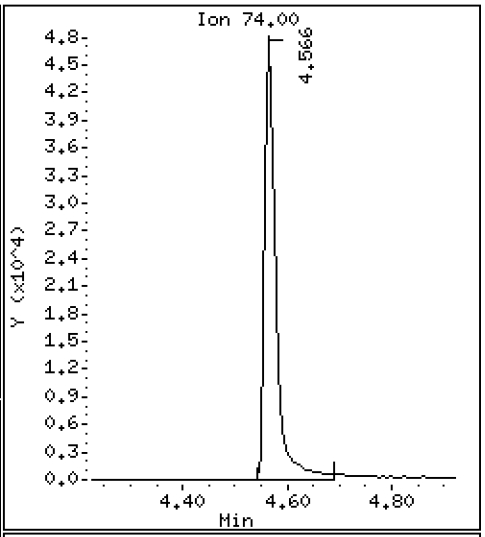
Column phase: ZB-5msi

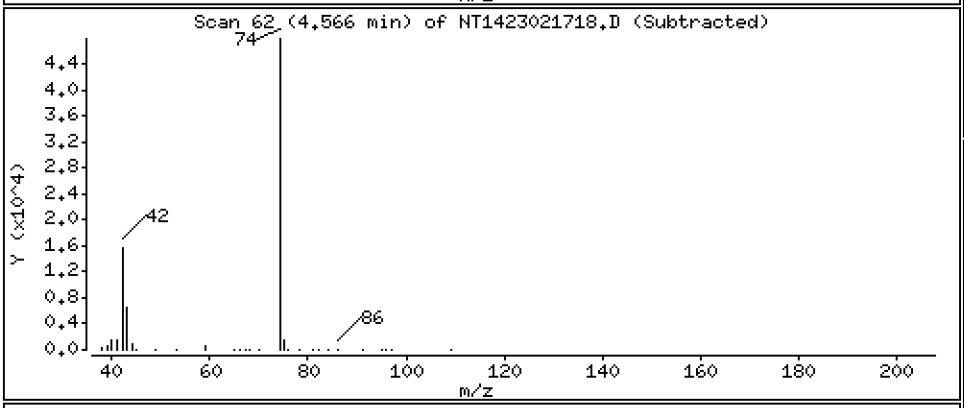
Column diameter: 0.25

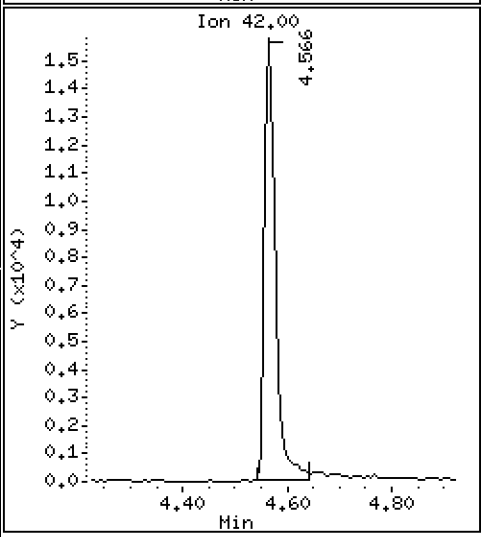
90 N-Nitrosodimethylamine

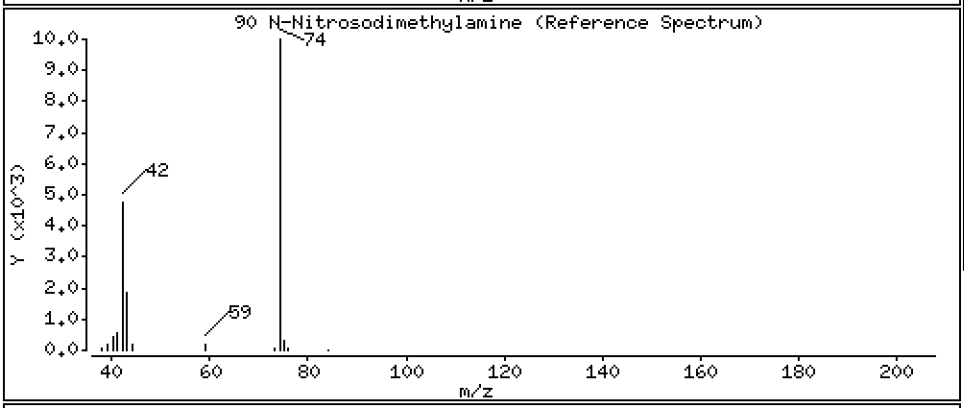
Concentration: 0.8693 ug/mL

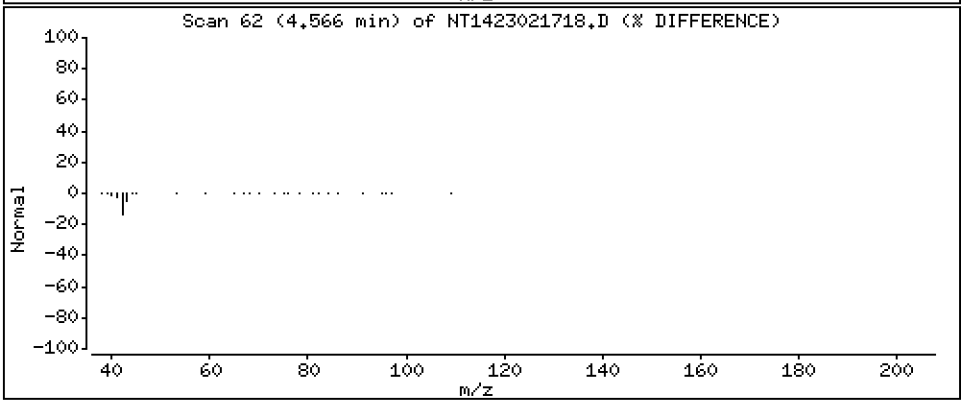












Date : 17-FEB-2023 20:55

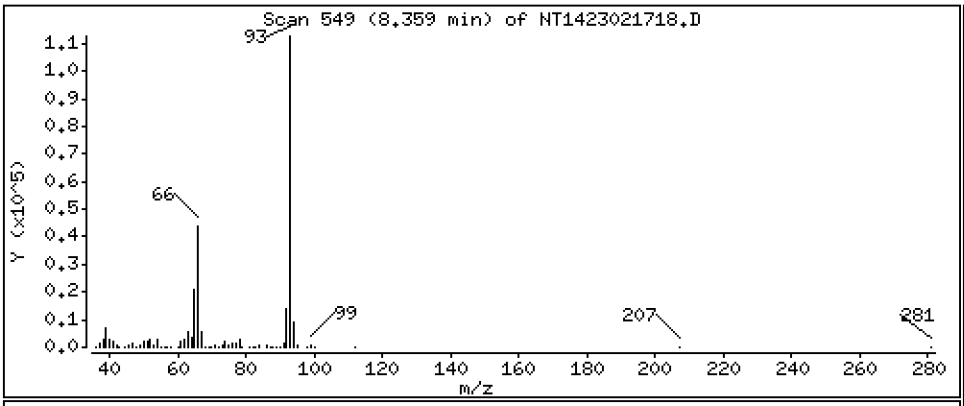
Client ID: Instrument: nt14.i

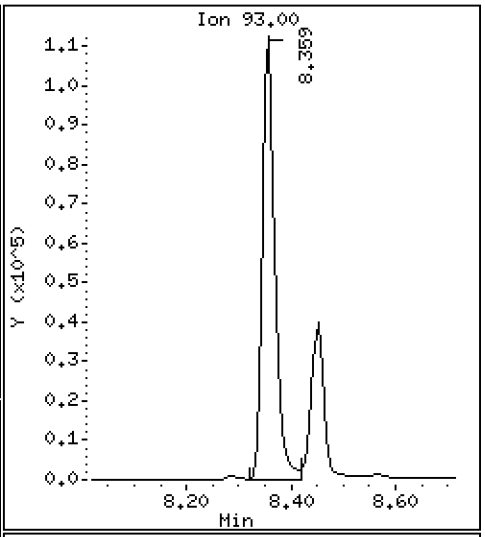
Sample Info: SLB0251-LCV1

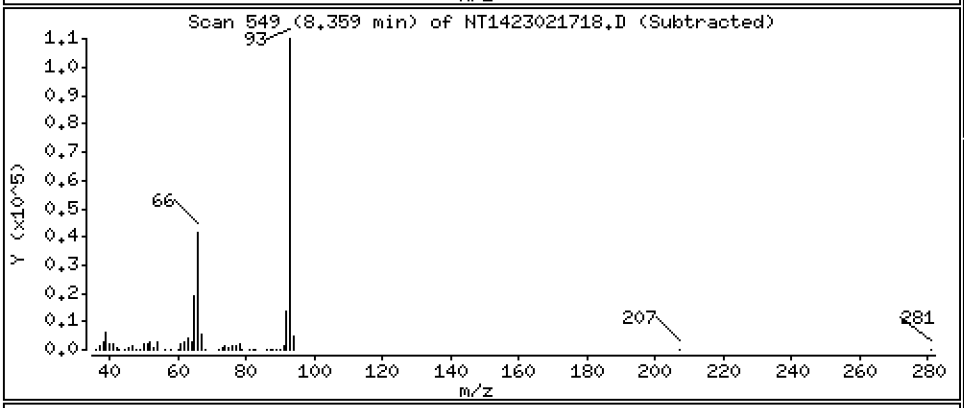
Operator: DSD

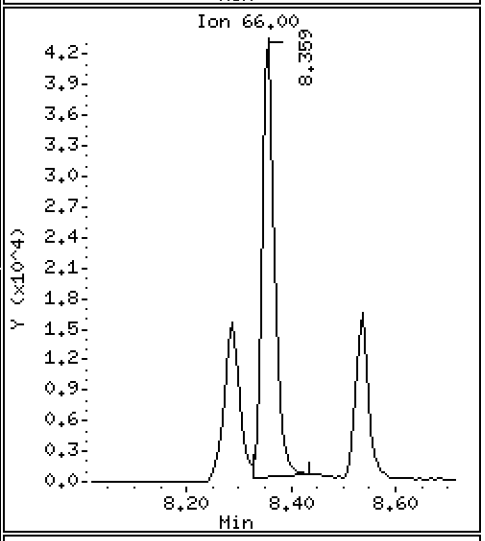
Column phase: ZB-5msi Column diameter: 0.25

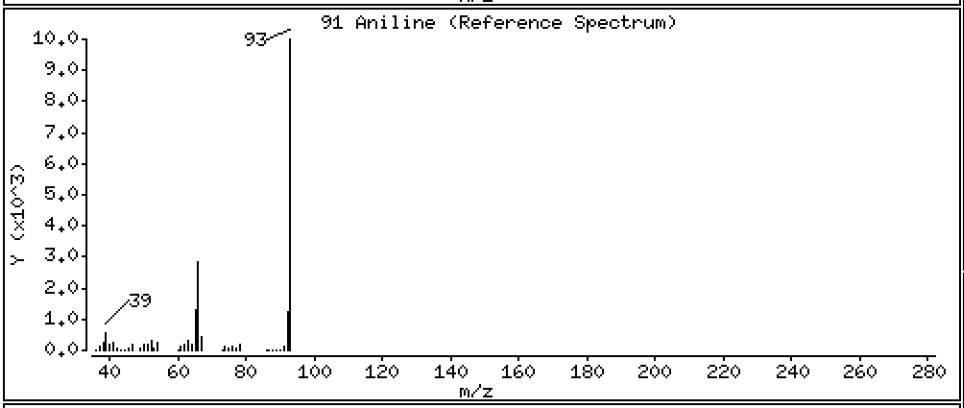
91 Aniline Concentration: 1.020 ug/mL

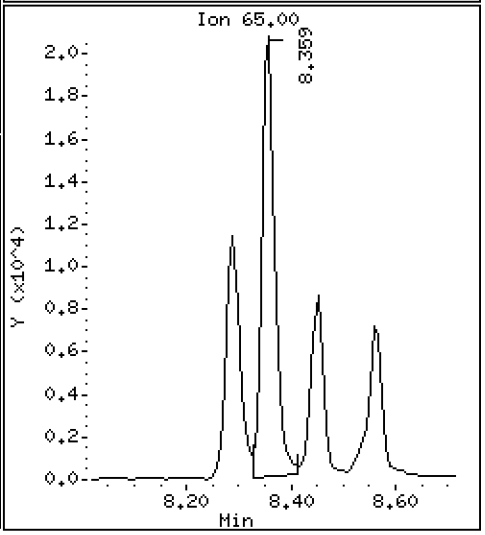


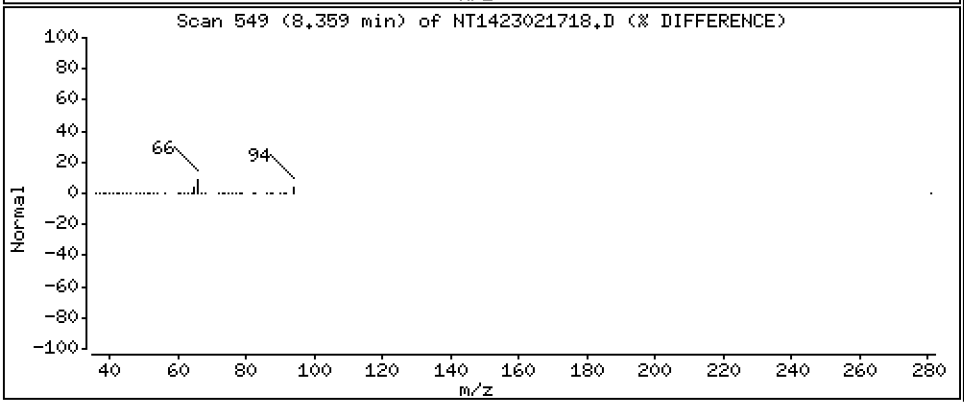












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021718.D

Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

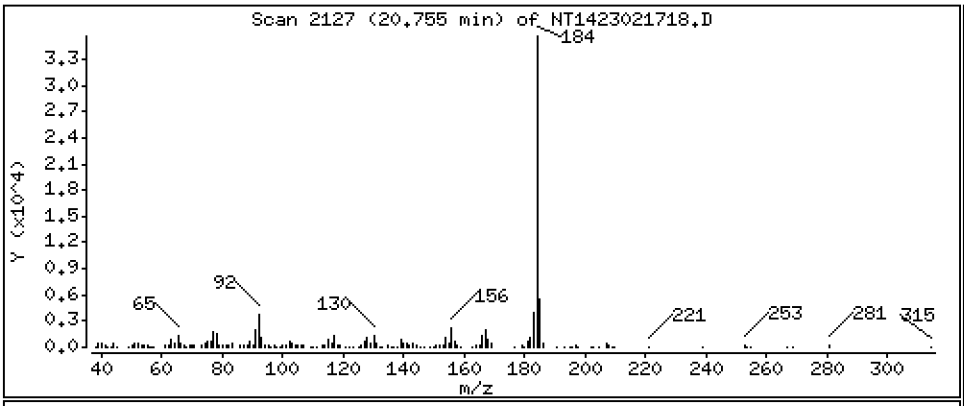
Operator: DSD

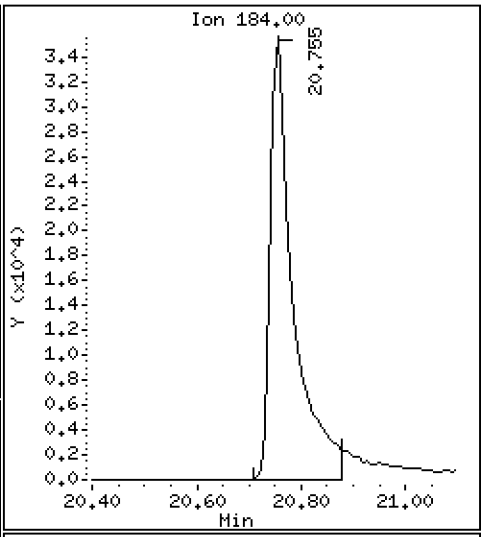
Column phase: ZB-5msi

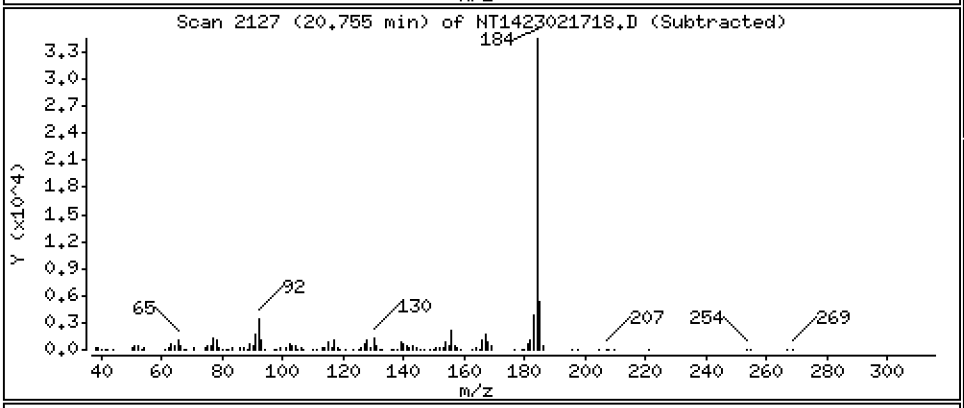
Column diameter: 0.25

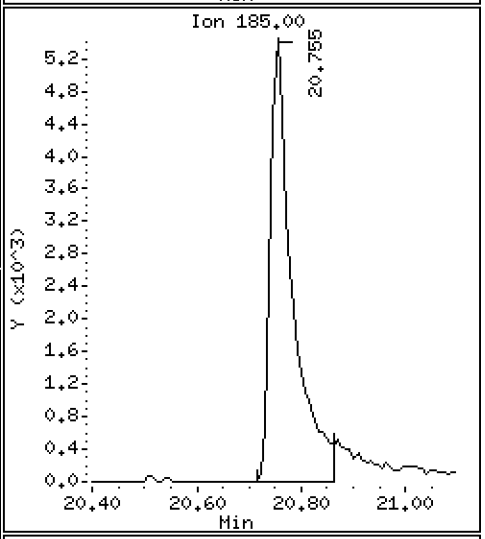
93 Benzidine

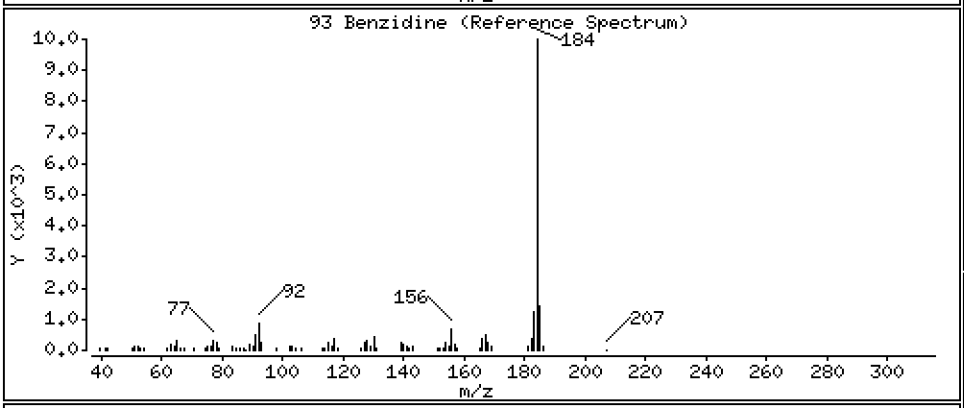
Concentration: 1.079 ug/mL

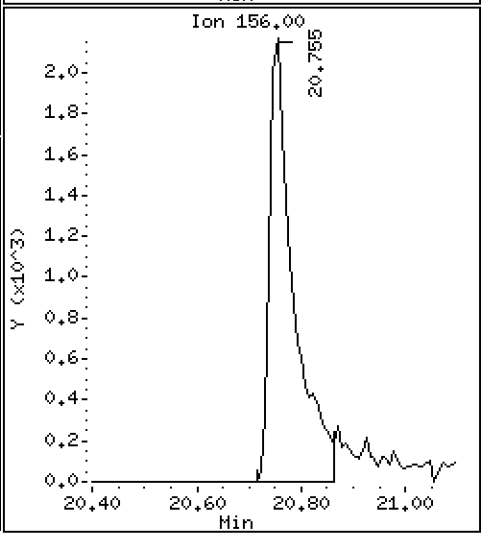


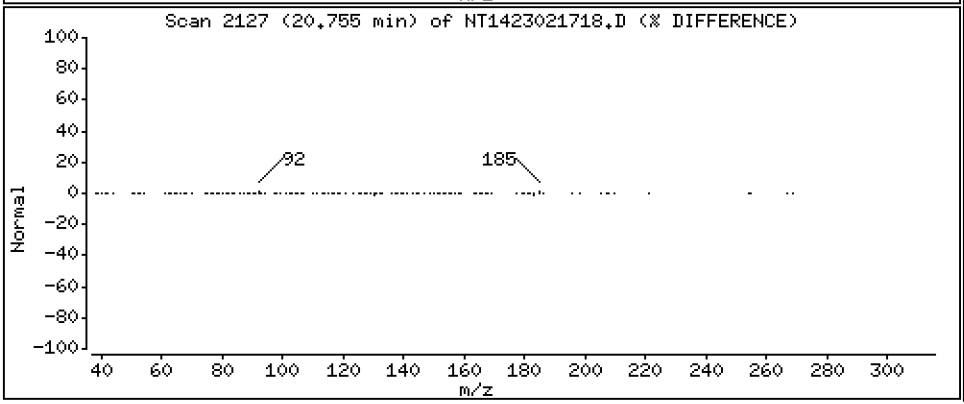












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

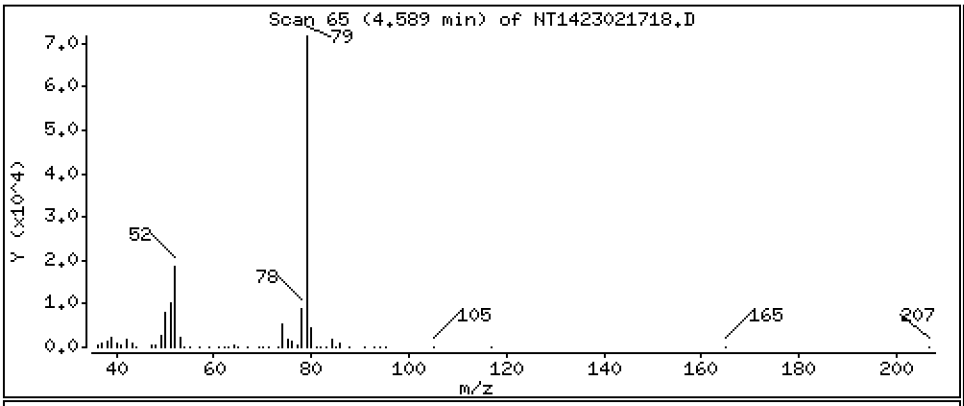
Operator: DSD

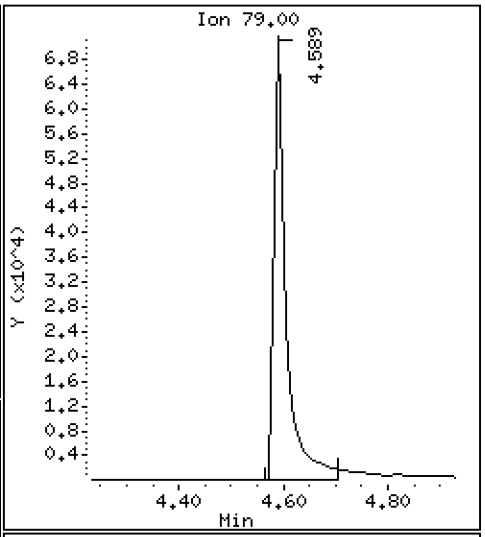
Column phase: ZB-5msi

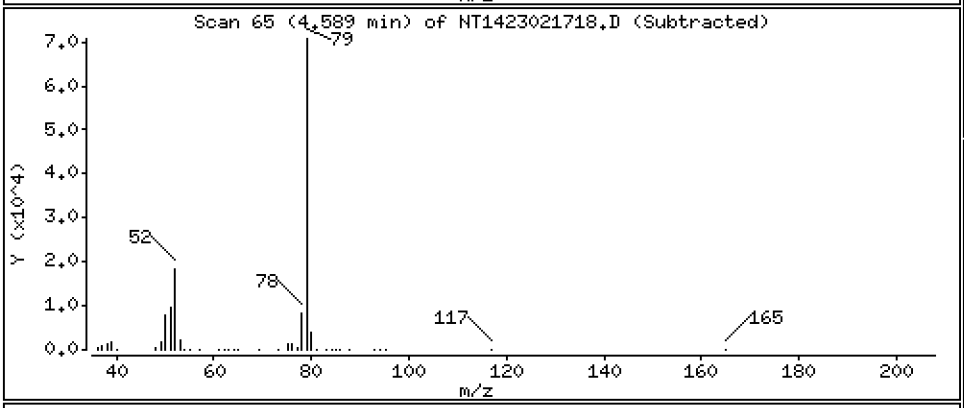
Column diameter: 0.25

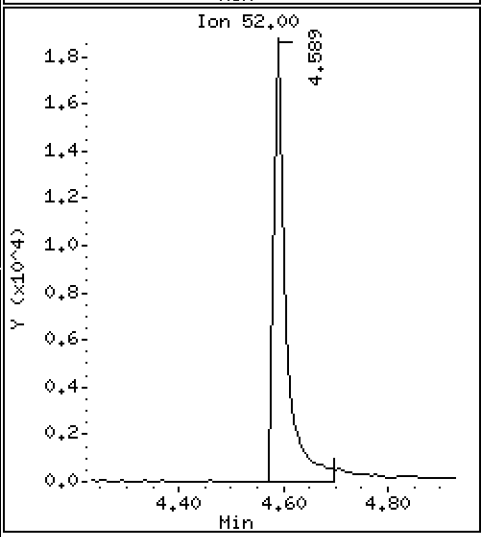
103 Pyridine

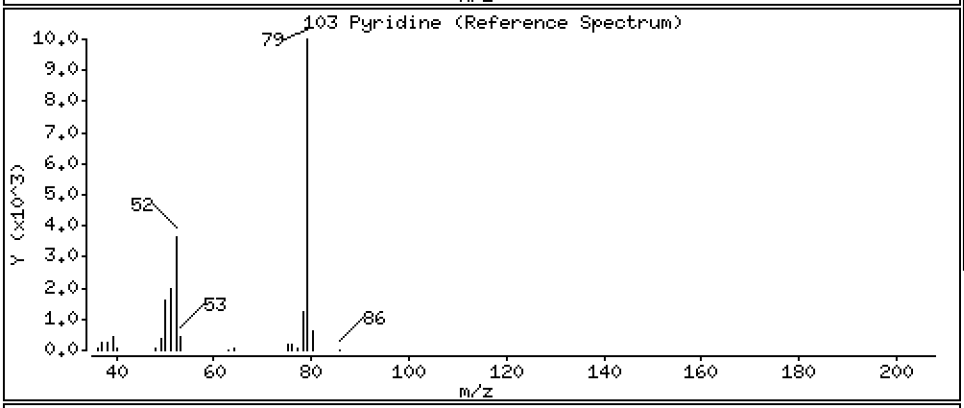
Concentration: 0.8809 ug/mL

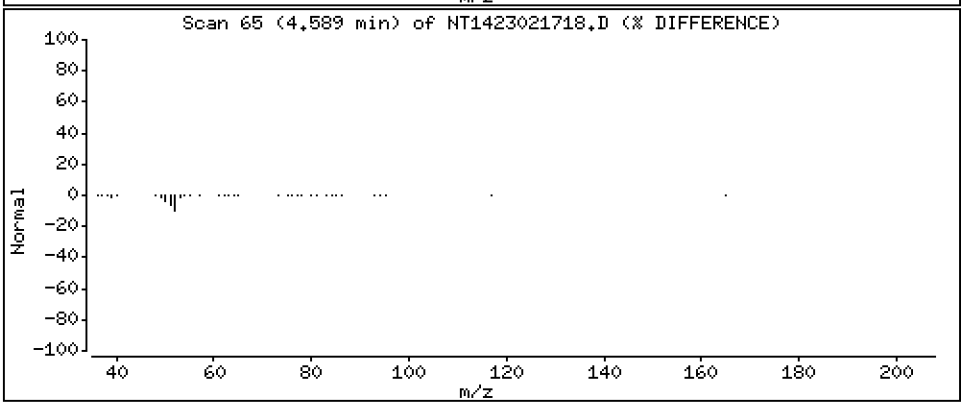












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021718.D

Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

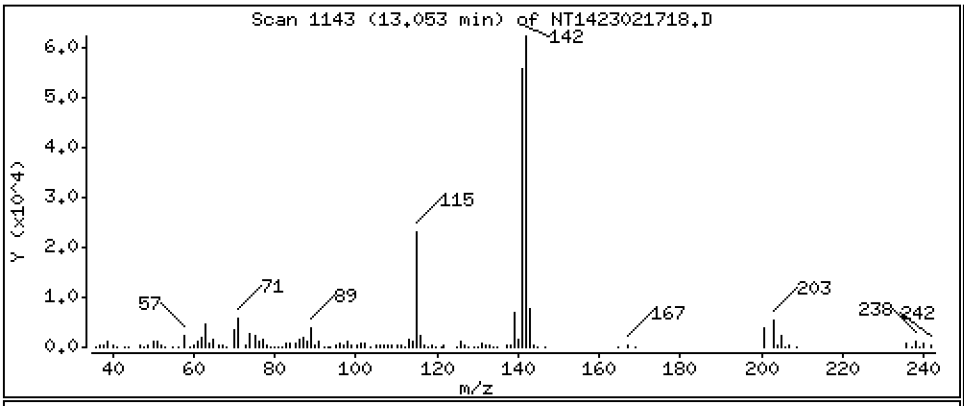
Operator: DSD

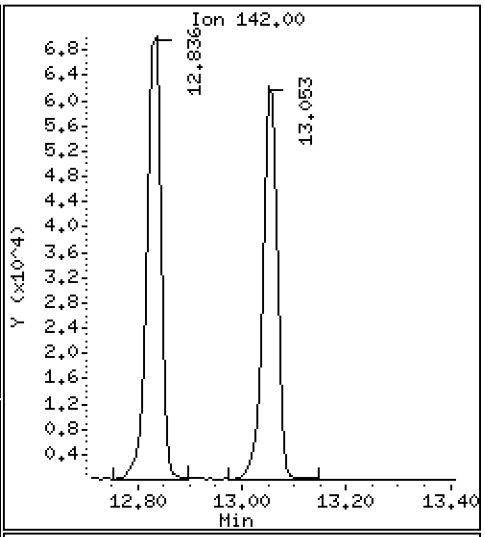
Column phase: ZB-5msi

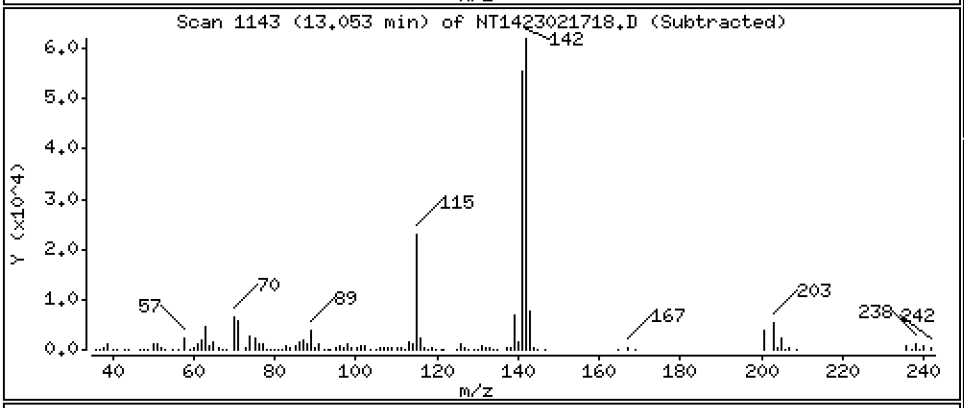
Column diameter: 0.25

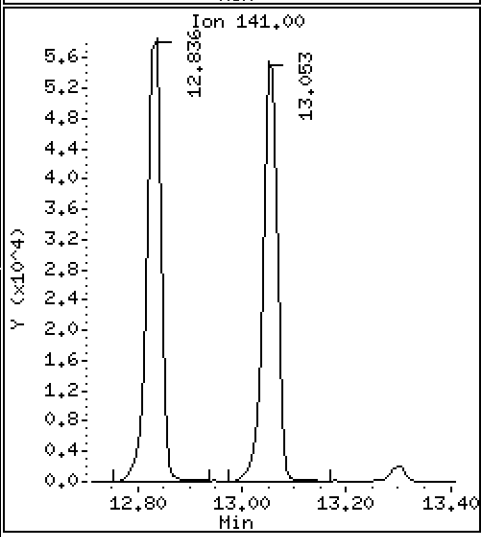
105 1-methylnaphthalene

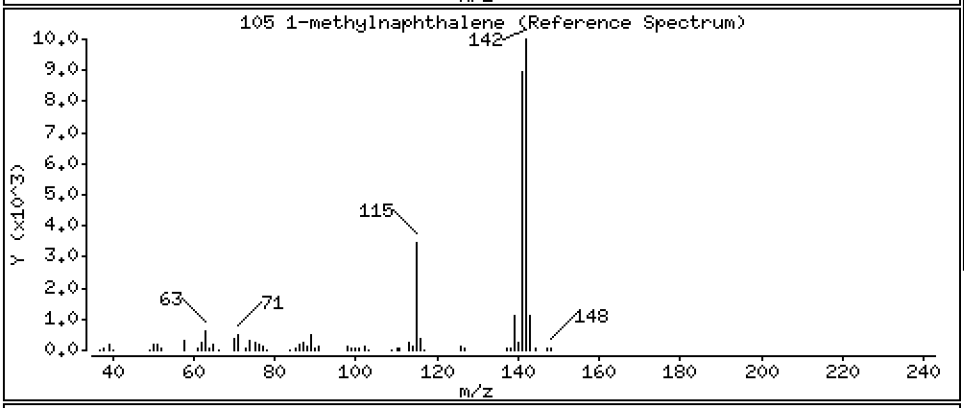
Concentration: 0.4816 ug/mL

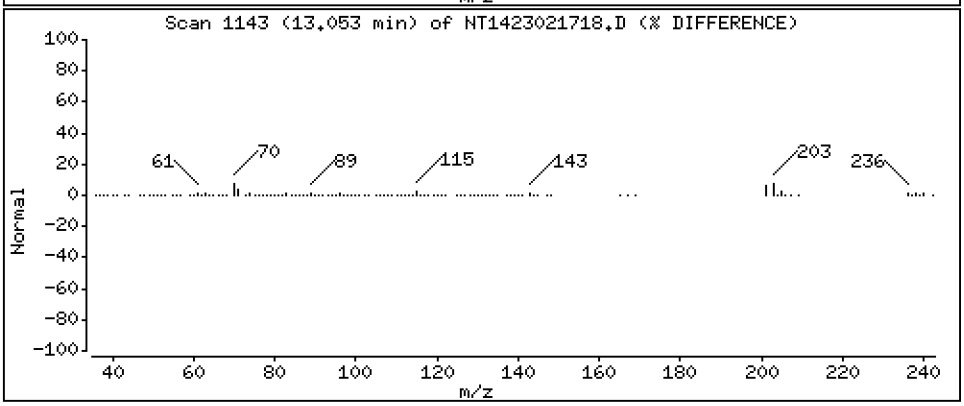












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

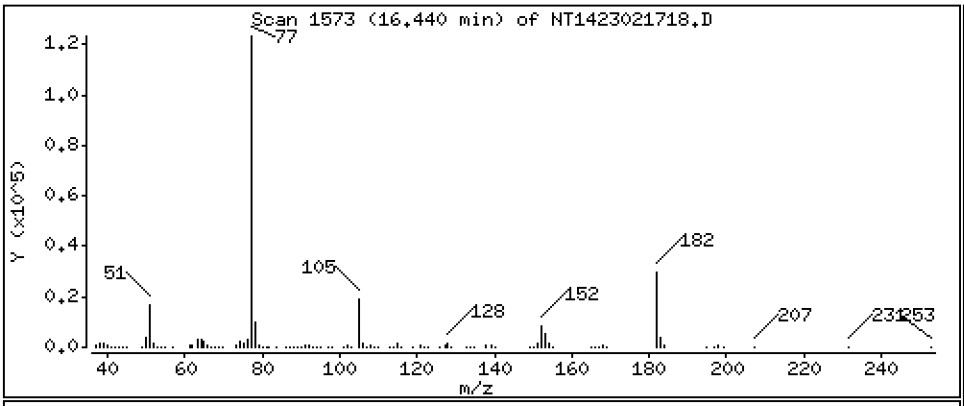
Operator: DSD

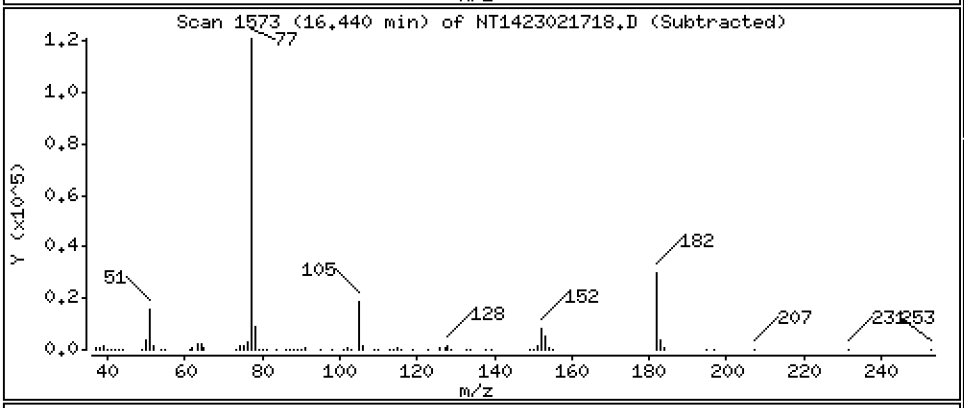
Column phase: ZB-5msi

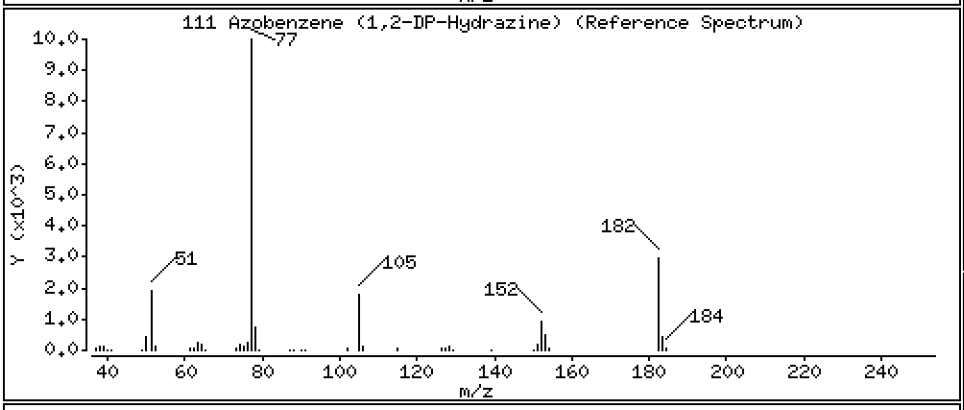
Column diameter: 0.25

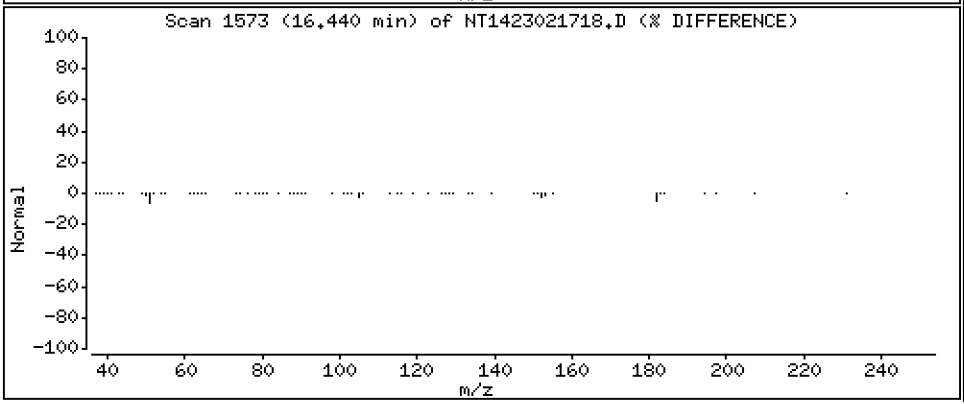
111 Azobenzene (1,2-DP-Hydrazine)

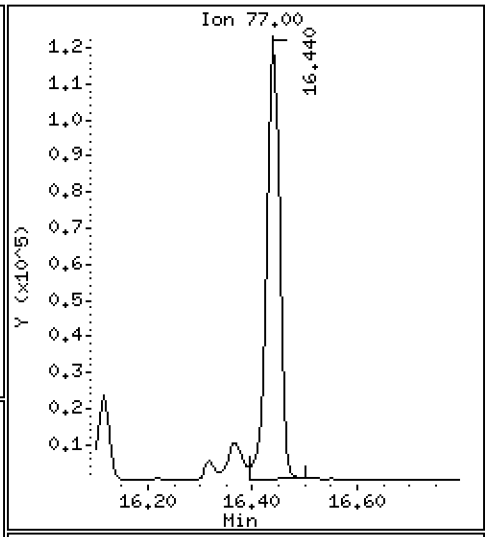
Concentration: 0.4848 ug/mL

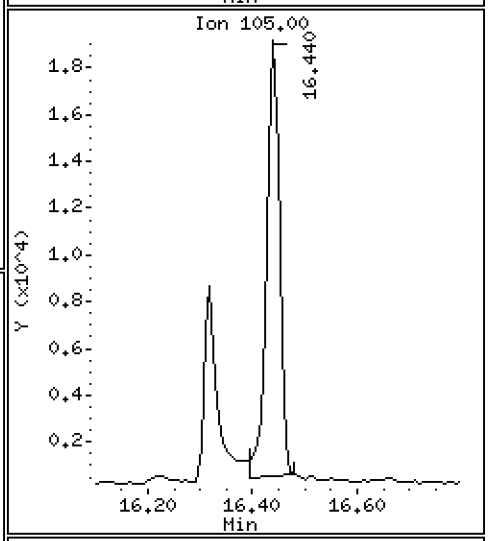


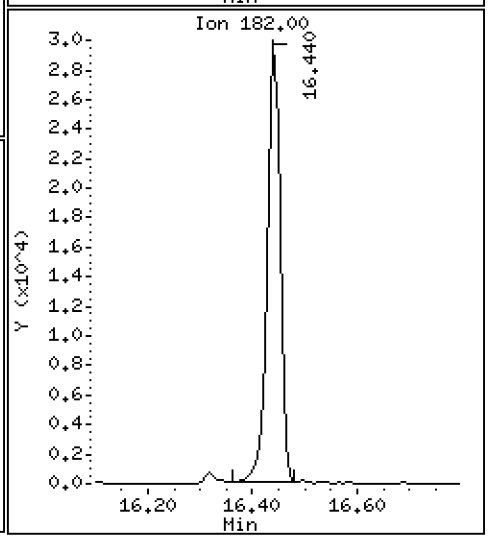












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

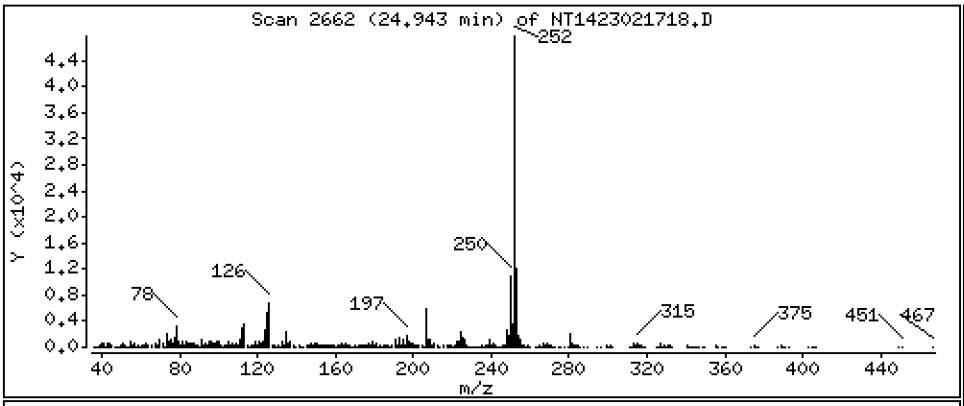
Operator: DSD

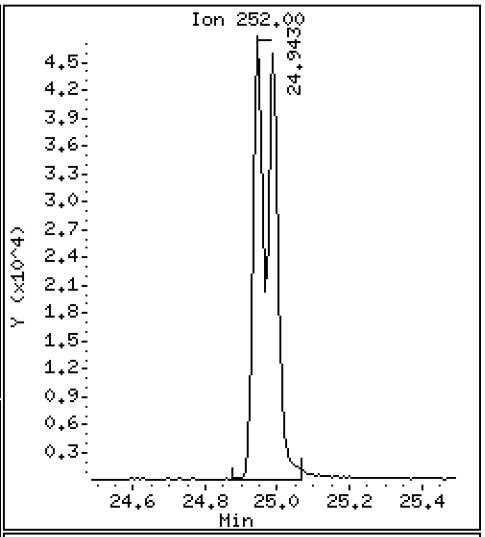
Column phase: ZB-5msi

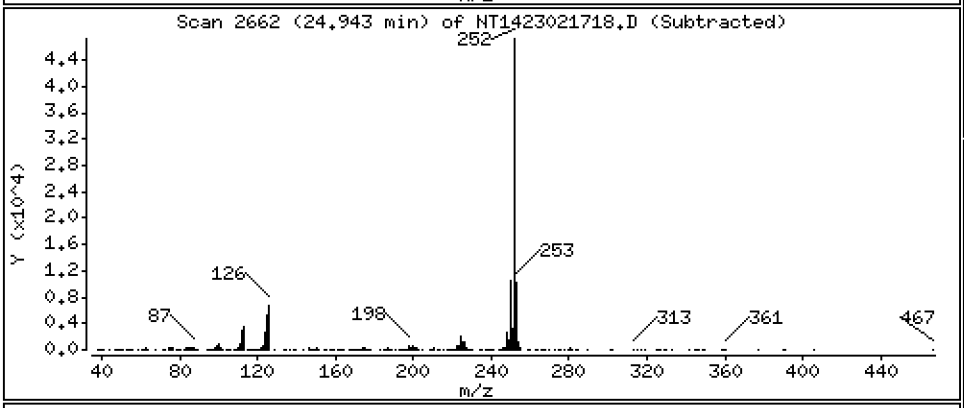
Column diameter: 0.25

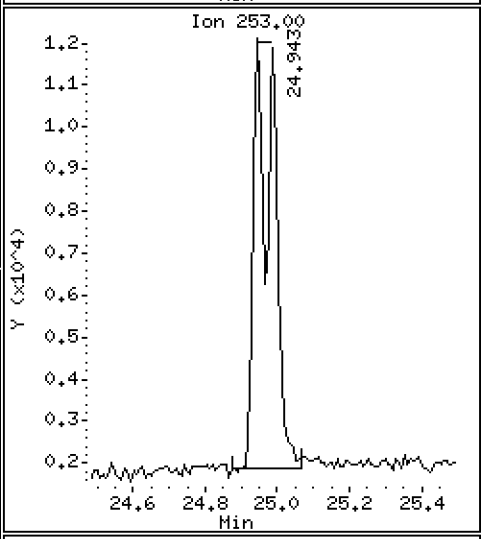
187 Total Benzofluoranthenes

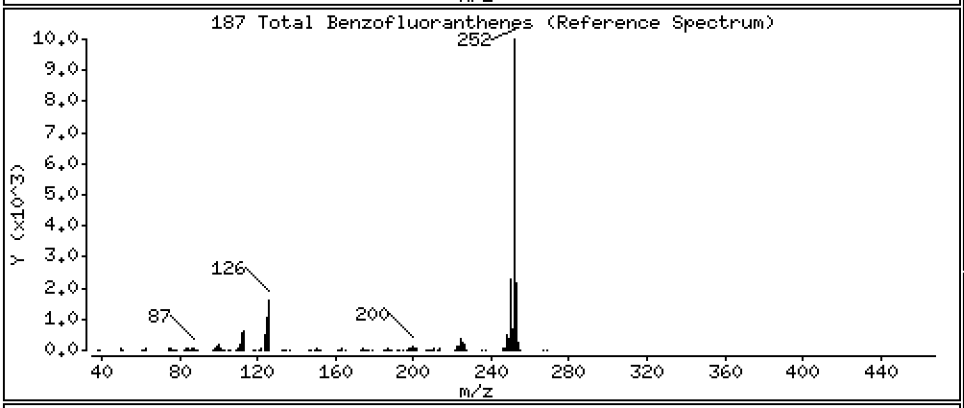
Concentration: 0.9367 ug/mL

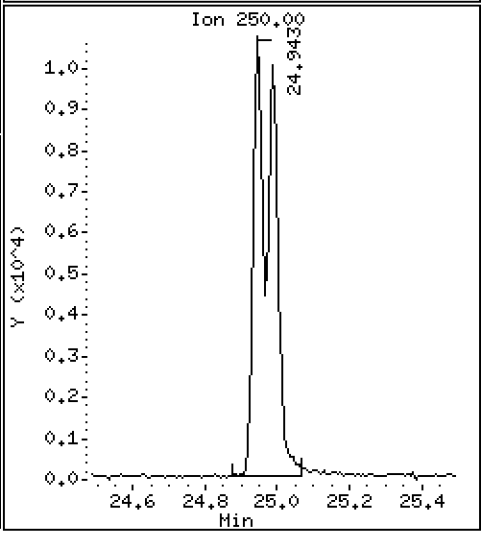


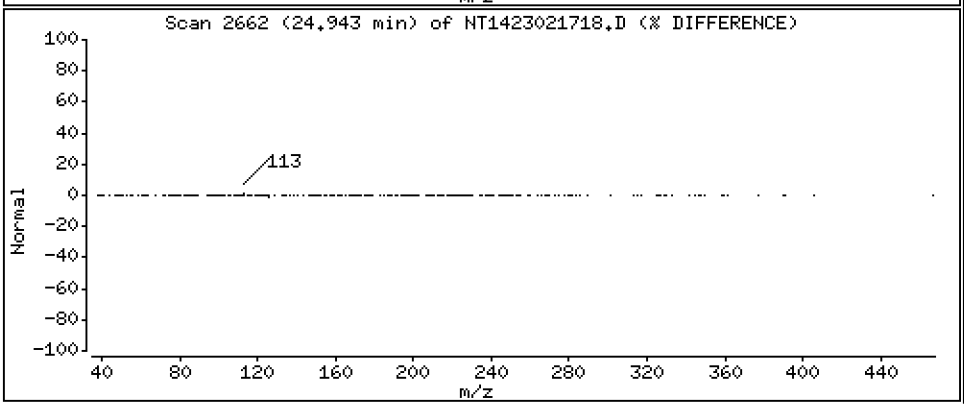












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

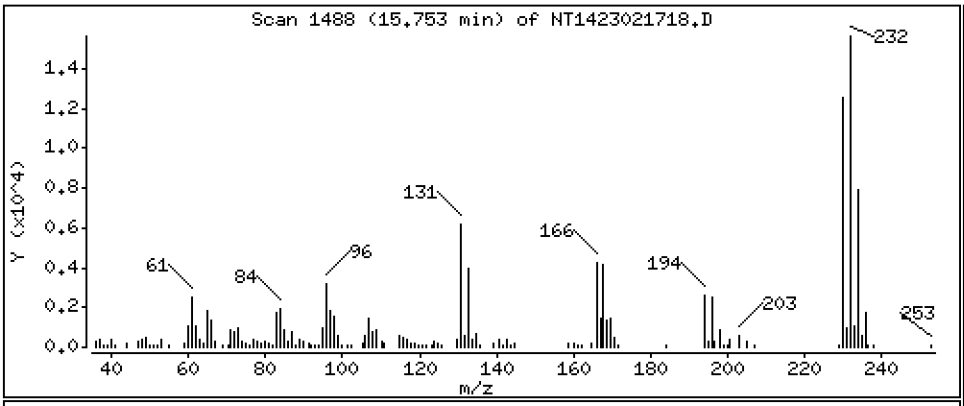
Operator: DSD

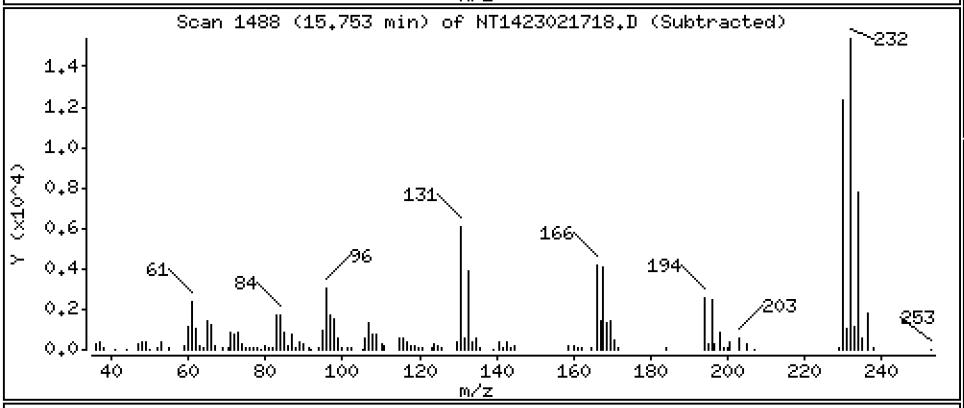
Column phase: ZB-5msi

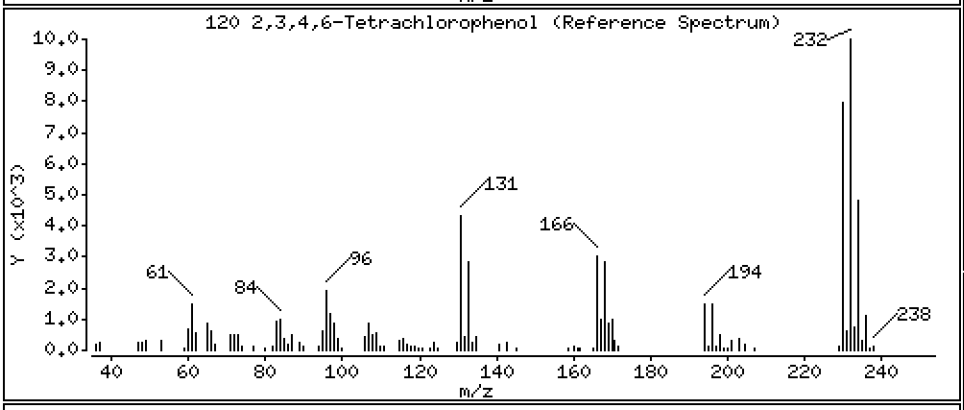
Column diameter: 0.25

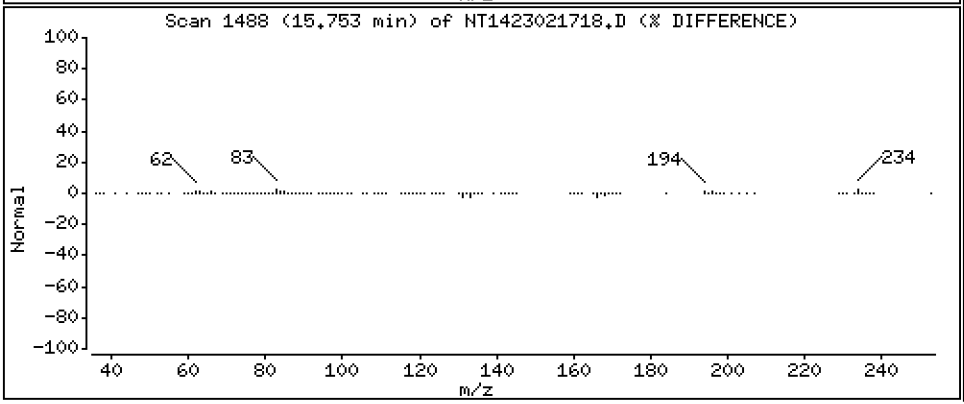
120 2,3,4,6-Tetrachlorophenol

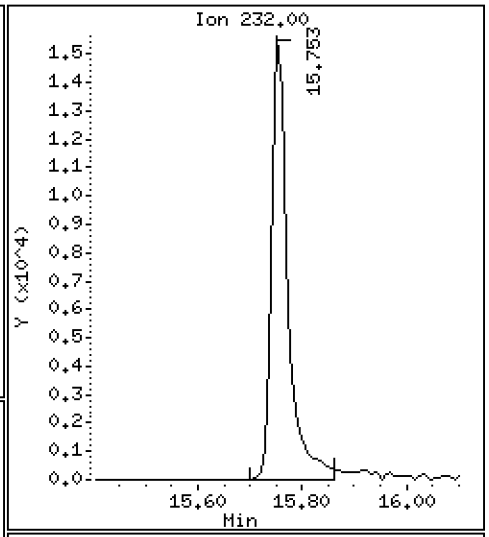
Concentration: 0.3434 ug/mL

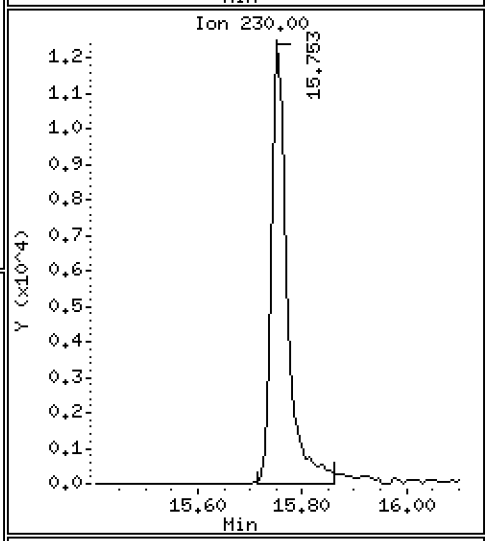


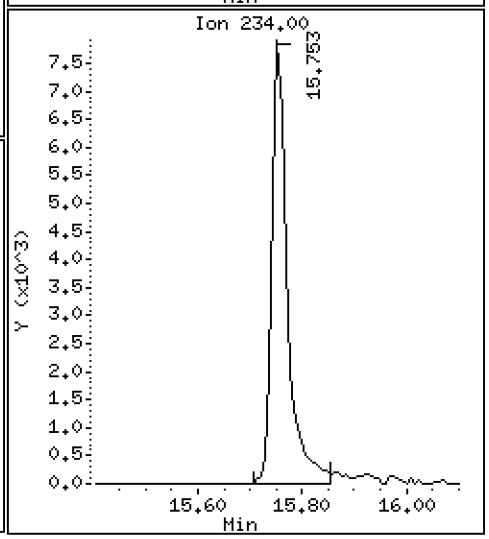












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230217A.b\NT1423021718.D
Lab Smp Id: SLB0251-LCV1
Inj Date : 17-FEB-2023 20:55 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0251-LCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230217A.b\ABN.m
Meth Date : 01-Mar-2023 13:20 van Quant Type: ISTD
Cal Date : 16-FEB-2023 19:30 Cal File: NT1423021610.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.681	6.674	(0.751)	69554	0.69199	0.6920
$	2 Phenol-d5	99	8.266	8.273	(0.929)	110983	0.69604	0.6960
	3 Phenol	94	8.289	8.296	(0.931)	76464	0.45299	0.4530
$	5 2-Chlorophenol-d4	132	8.536	8.536	(0.959)	85434	0.75093	0.7509
	4 Bis(2-Chloroethyl)ether	93	8.451	8.459	(0.950)	59857	0.46421	0.4642
	6 2-Chlorophenol	128	8.567	8.567	(0.963)	57070	0.48010	0.4801
	7 1,3-Dichlorobenzene	146	8.838	8.838	(0.993)	64692	0.48886	0.4889
*	8 1,4-Dichlorobenzene-d4	152	8.900	8.900	(1.000)	375988	4.00000	
	9 1,4-Dichlorobenzene	146	8.931	8.931	(1.003)	59956	0.47740	0.4774
$	10 1,2-Dichlorobenzene-d4	152	9.257	9.264	(1.040)	41698	0.48896	0.4890
	12 1,2-Dichlorobenzene	146	9.288	9.288	(1.044)	60947	0.48543	0.4854
	11 Benzyl alcohol	108	9.187	9.179	(1.032)	34504	0.36394	0.3639
	14 2,2'-oxybis(1-Chloropropane)	121	9.482	9.482	(1.065)	17488	0.48689	0.4869(M)
	13 2-Methylphenol	108	9.404	9.404	(1.057)	59868	0.50793	0.5079
	17 Hexachloroethane	117	9.878	9.878	(1.110)	25060	0.45898	0.4590
	16 N-Nitroso-di-n-propylamine	70	9.738	9.746	(1.094)	49628	0.46255	0.4625
	15 4-Methylphenol	108	9.676	9.676	(1.087)	57093	0.45873	0.4587
$	18 Nitrobenzene-d5	82	10.002	10.002	(0.878)	76550	0.47949	0.4795
	19 Nitrobenzene	77	10.033	10.040	(0.881)	72386	0.45182	0.4518
	20 Isophorone	82	10.483	10.491	(0.920)	97068	0.45922	0.4592
	21 2-Nitrophenol	139	10.669	10.669	(0.937)	23914	0.33365	0.3336
	22 2,4-Dimethylphenol	107	10.723	10.723	(0.942)	121418	1.00363	1.004
	23 Bis(2-Chloroethoxy)methane	93	10.925	10.925	(0.959)	64318	0.46776	0.4678
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	11.127	11.126	(0.977)	101557	0.98085	0.9808
	26 1,2,4-Trichlorobenzene	180	11.304	11.312	(0.993)	60622	0.48334	0.4833
*	27 Naphthalene-d8	136	11.389	11.397	(1.000)	1381913	4.00000	
	28 Naphthalene	128	11.428	11.436	(1.003)	163470	0.47976	0.4798
	29 4-Chloroaniline	127	11.575	11.574	(1.016)	133678	0.91829	0.9183
	30 Hexachlorobutadiene	225	11.799	11.799	(1.036)	36015	0.46580	0.4658
	31 4-Chloro-3-methylphenol	107	12.534	12.542	(1.100)	104244	0.93017	0.9302
	32 2-Methylnaphthalene	142	12.836	12.836	(1.127)	125298	0.49099	0.4910
	33 Hexachlorocyclopentadiene	237	13.300	13.300	(0.886)	33858	0.42132	0.4213

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
34	2,4,6-Trichlorophenol	196	13.463	13.462	(0.896)	73275	0.89691	0.8969
35	2,4,5-Trichlorophenol	196	13.532	13.532	(0.901)	78843	0.89112	0.8911
$ 36	2-Fluorobiphenyl	172	13.625	13.625	(0.907)	149813	0.50481	0.5048
37	2-Chloronaphthalene	162	13.826	13.834	(0.921)	117579	0.48540	0.4854
38	2-Nitroaniline	65	14.097	14.105	(0.939)	74250	0.94277	0.9428
39	Dimethylphthalate	163	14.531	14.538	(0.968)	127390	0.50278	0.5028
40	Acenaphthylene	152	14.701	14.709	(0.979)	206120	0.55789	0.5579
41	2,6-Dinitrotoluene	165	14.670	14.678	(0.977)	59901	1.00472	1.005
* 42	Acenaphthene-d10	164	15.018	15.018	(1.000)	829496	4.00000	
43	3-Nitroaniline	138	14.956	14.964	(0.996)	57184	0.90365	0.9036
44	Acenaphthene	153	15.080	15.088	(1.004)	106204	0.48012	0.4801
45	2,4-Dinitrophenol	184	15.211	15.173	(1.013)	277	0.00711	0.007110
46	Dibenzofuran	168	15.405	15.412	(1.026)	176201	0.48516	0.4852
47	4-Nitrophenol	109	15.289	15.281	(1.018)	12638	0.34483	0.3448
48	2,4-Dinitrotoluene	165	15.474	15.482	(1.030)	76431	0.90671	0.9067
50	Diethylphthalate	149	15.984	16.000	(1.064)	169645	0.50364	0.5036
49	Fluorene	166	16.124	16.131	(1.074)	188728	0.49692	0.4969
51	4-Chlorophenyl-phenylether	204	16.116	16.123	(1.073)	96375	0.47457	0.4746
52	4-Nitroaniline	138	16.224	16.239	(1.080)	66215	0.91201	0.9120
53	4,6-Dinitro-2-methylphenol	198	16.316	16.332	(0.904)	41011	0.69539	0.6954
54	N-Nitrosodiphenylamine	169	16.370	16.378	(0.907)	119665	0.51110	0.5111
$ 55	2,4,6-Tribromophenol	330	16.663	16.663	(1.110)	28319	0.59413	0.5941
56	4-Bromophenyl-phenylether	248	17.126	17.126	(0.949)	50188	0.48127	0.4813
57	Hexachlorobenzene	284	17.435	17.435	(0.966)	50511	0.47668	0.4767
58	Pentachlorophenol	266	17.807	17.799	(0.986)	11531	0.22399	0.2240
* 59	Phenanthrene-d10	188	18.054	18.062	(1.000)	1629266	4.00000	
60	Phenanthrene	178	18.101	18.108	(1.003)	188269	0.48088	0.4809
61	Anthracene	178	18.193	18.201	(1.008)	193108	0.49786	0.4979
62	Carbazole	167	18.534	18.534	(1.027)	161560	0.45899	0.4590
63	Di-n-butylphthalate	149	19.338	19.346	(1.071)	192803	0.49040	0.4904
64	Fluoranthene	202	20.499	20.499	(0.887)	210744	0.56872	0.5687
65	Pyrene	202	20.925	20.924	(0.905)	221001	0.56402	0.5640
$ 66	Terphenyl-d14	244	21.219	21.218	(0.918)	174275	0.62640	0.6264
67	Butylbenzylphthalate	149	22.148	22.148	(0.958)	69205	0.53536	0.5354
68	Benzo(a)anthracene	228	23.092	23.092	(0.999)	134489	0.48930	0.4893
* 69	Chrysene-d12	240	23.123	23.123	(1.000)	858908	4.00000	
70	3,3'-Dichlorobenzidine	252	23.054	23.054	(0.997)	107030	1.27130	1.271
71	Chrysene	228	23.162	23.170	(1.002)	119133	0.48188	0.4819
72	bis(2-Ethylhexyl)phthalate	149	23.178	23.177	(0.960)	92434	0.37286	0.3729
* 134	Di-n-octylphthalate-d4	153	24.153	24.153	(1.000)	1443314	4.00000	
73	Di-n-octylphthalate	149	24.161	24.168	(1.000)	151546	0.44906	0.4491
74	Benzo(b)fluoranthene	252	24.943	24.950	(0.971)	87583	0.44919	0.4492
75	Benzo(k)fluoranthene	252	24.989	24.989	(0.973)	97665	0.46877	0.4688
76	Benzo(a)pyrene	252	25.578	25.577	(0.996)	82890	0.44859	0.4486
* 77	Perylene-d12	264	25.686	25.694	(1.000)	614473	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	28.252	28.244	(1.100)	56684	0.37267	0.3727
79	Dibenzo(a,h)anthracene	278	28.267	28.259	(1.100)	47933	0.38242	0.3824
80	Benzo(g,h,i)perylene	276	29.005	28.997	(1.129)	41941	0.34005	0.3401
90	N-Nitrosodimethylamine	74	4.566	4.573	(0.513)	67653	0.86934	0.8693
91	Aniline	93	8.358	8.366	(0.939)	184174	1.02008	1.020
93	Benzidine	184	20.754	20.746	(0.898)	106324	1.07923	1.079
103	Pyridine	79	4.589	4.581	(0.516)	108469	0.88086	0.8809
105	1-methylnaphthalene	142	13.052	13.060	(1.146)	115392	0.48164	0.4816
111	Azobenzene (1,2-DP-Hydrazine)	77	16.440	16.447	(1.095)	198457	0.48479	0.4848

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.943	24.989	(0.971)	178301	0.93665	0.9367
120 2,3,4,6-Tetrachlorophenol	232	15.752	15.752	(1.049)	32423	0.34338	0.3434

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021718.D
Lab Smp Id: SLB0251-LCV1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230217A.b\ABN.m
Misc Info:

Calibration Date: 17-FEB-2023
Calibration Time: 20:19
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	351756	175878	703512	375988	6.89
27 Naphthalene-d8	1299383	649692	2598766	1381913	6.35
42 Acenaphthene-d10	808045	404023	1616090	829496	2.65
59 Phenanthrene-d10	1607740	803870	3215480	1629266	1.34
69 Chrysene-d12	876381	438191	1752762	858908	-1.99
134 Di-n-octylphthala	1545452	772726	3090904	1443314	-6.61
77 Perylene-d12	639717	319859	1279434	614473	-3.95

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.39	-0.07
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.00
59 Phenanthrene-d10	18.06	17.56	18.56	18.05	-0.04
69 Chrysene-d12	23.12	22.62	23.62	23.12	0.00
134 Di-n-octylphthala	24.15	23.65	24.65	24.15	0.00
77 Perylene-d12	25.69	25.19	26.19	25.69	-0.03

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

REVIEW SUMMARY FOR FILE - NT1423021718.D

Lab ID: SLB0251-LCV1
nt14.i, ABN.m, 17-FEB-2023 20:55

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: NT1423021717.D

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

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

Quant Ion Manual Peak Adjustment Report

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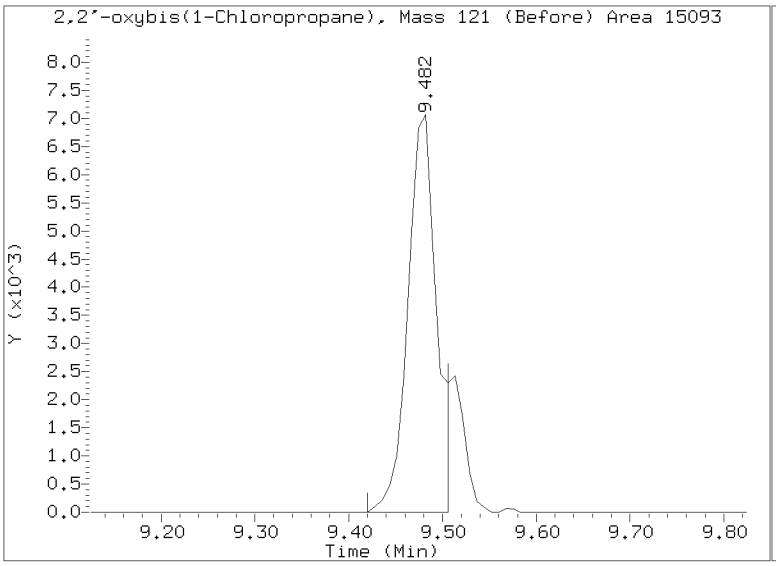
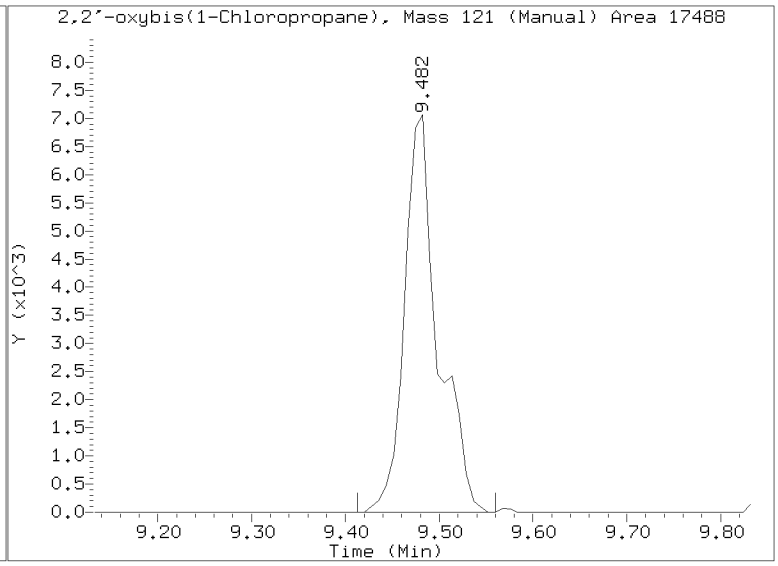
Injection Date: 17-FEB-2023 20:55
Lab ID:SLB0251-LCV1 Client ID:
Report Date: 03/01/2023 13:21





LOW-CONCENTRATION CALIBRATION VERIFICATION

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GB00046
Laboratory ID: SLB0291-LCV1
Sequence: SLB0291
Standard ID: K011106

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	0.50000	0.4	-18.9	50.00
4-Methylphenol	0.50000	0.5	-2.7	50.00
Naphthalene	0.50000	0.5	8.1	50.00
2-Methylnaphthalene	0.50000	0.5	6.9	50.00
Acenaphthylene	0.50000	0.6	14.2	50.00
Dimethylphthalate	0.50000	0.6	10.5	50.00
Acenaphthene	0.50000	0.5	9.2	50.00
Dibenzofuran	0.50000	0.5	10.0	50.00
Fluorene	0.50000	0.5	7.4	50.00
Phenanthrene	0.50000	0.5	8.1	50.00
Anthracene	0.50000	0.6	11.4	50.00
Fluoranthene	0.50000	0.4	-12.5	50.00
Pyrene	0.50000	0.4	-14.5	50.00
Butylbenzylphthalate	0.50000	0.5	-8.2	50.00
Benzo(a)anthracene	0.50000	0.6	14.4	50.00
Chrysene	0.50000	0.6	13.2	50.00
bis(2-Ethylhexyl)phthalate	0.50000	0.4	-25.5	50.00
Benzofluoranthenes, Total	1.0000	1.1	11.6	50.00
Benzo(a)pyrene	0.50000	0.5	-2.0	50.00
Indeno(1,2,3-cd)pyrene	0.50000	0.5	0.3	50.00
Dibenzo(a,h)anthracene	0.50000	0.5	4.2	50.00
Benzo(g,h,i)perylene	0.50000	0.5	-4.0	50.00
2-Fluorophenol	0.75000	0.640	-14.7	50.00
Phenol-d5	0.75000	0.755	0.7	50.00
2-Chlorophenol-d4	0.75000	0.742	-1.1	50.00
1,2-Dichlorobenzene-d4	0.50000	0.503	0.7	50.00
Nitrobenzene-d5	0.50000	0.556	11.1	50.00
2-Fluorobiphenyl	0.50000	0.577	15.3	50.00
2,4,6-Tribromophenol	0.75000	0.506	-32.5	50.00

LOW-CONCENTRATION CALIBRATION VERIFICATION
EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GB00046
Laboratory ID: SLB0291-LCV1
Sequence: SLB0291
Standard ID: K011106

p-Terphenyl-d14	0.50000	0.516	3.2	50.00

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022118.D

Page 1

Date : 21-FEB-2023 23:42

Client ID:

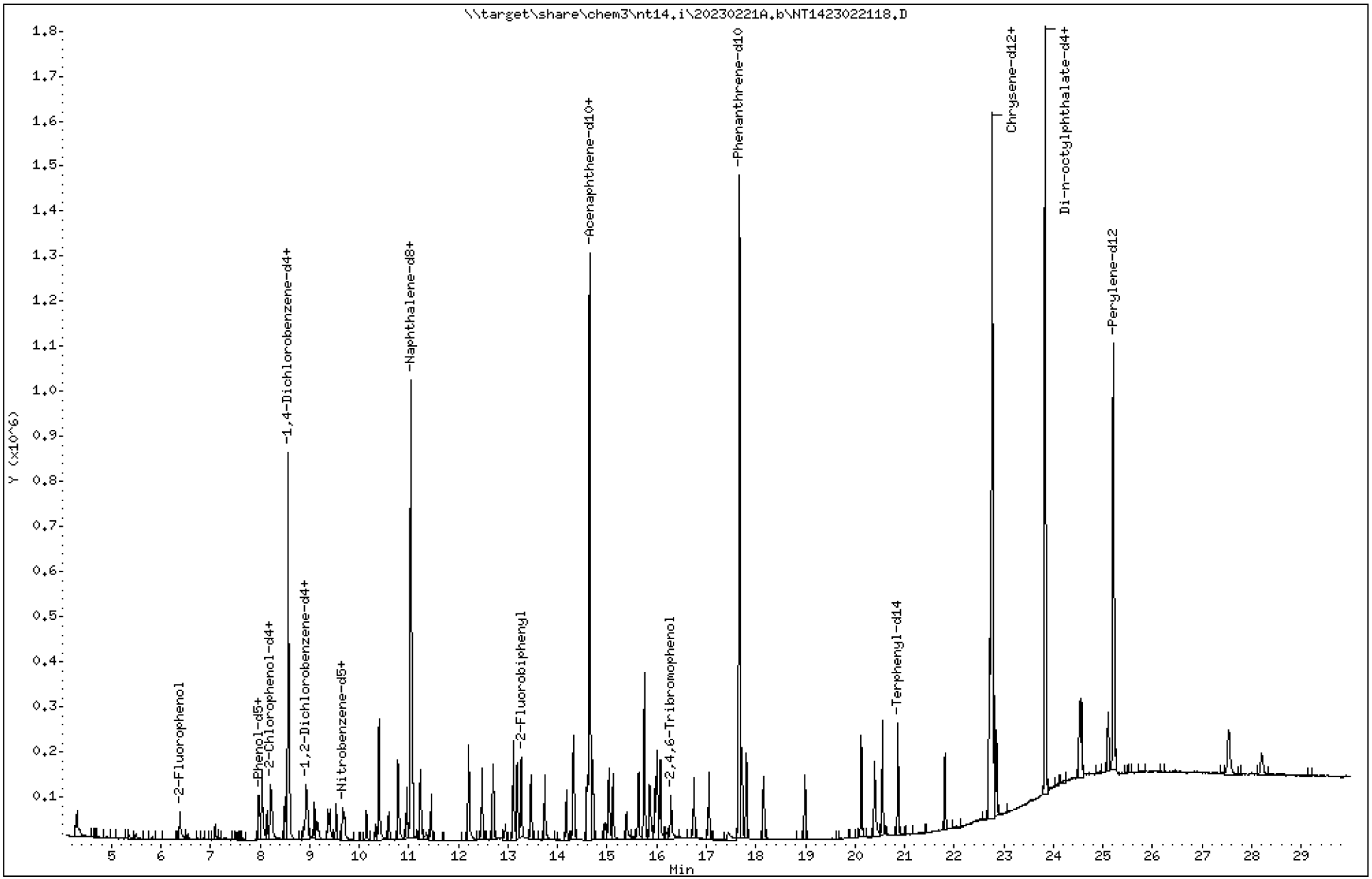
Instrument: nt14.i

Sample Info: SLB0291-LCV1

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

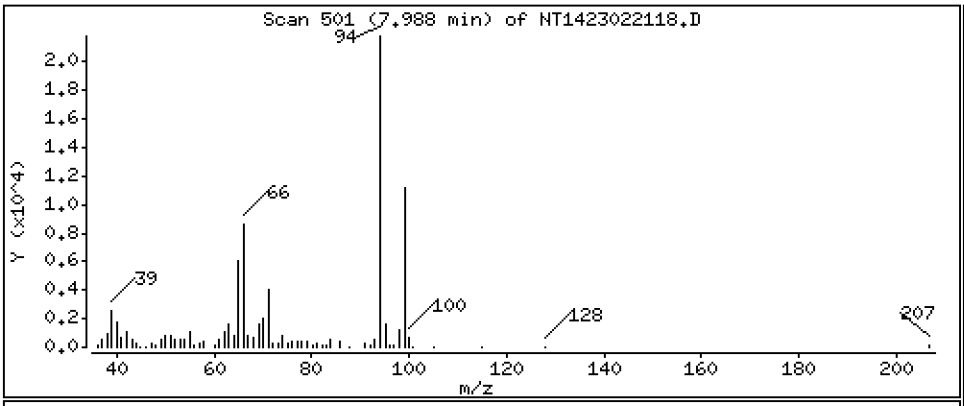
Operator: DSD

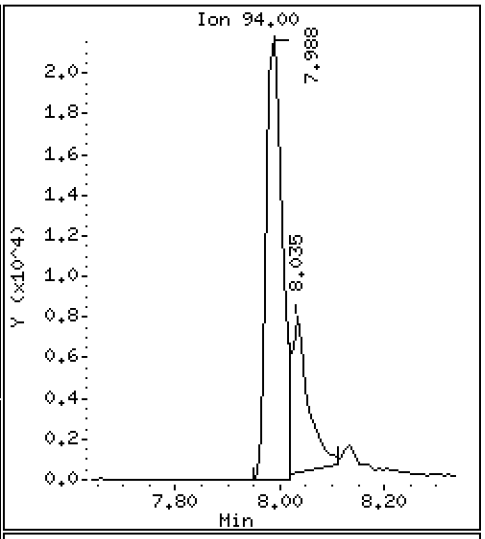
Column phase: ZB-5msi

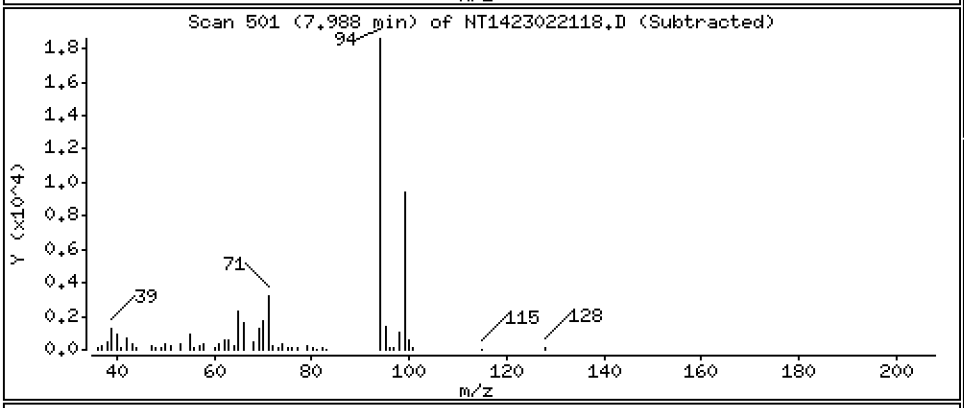
Column diameter: 0.25

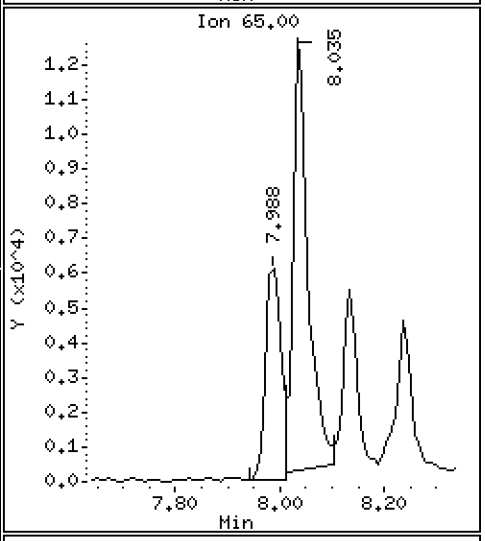
3 Phenol

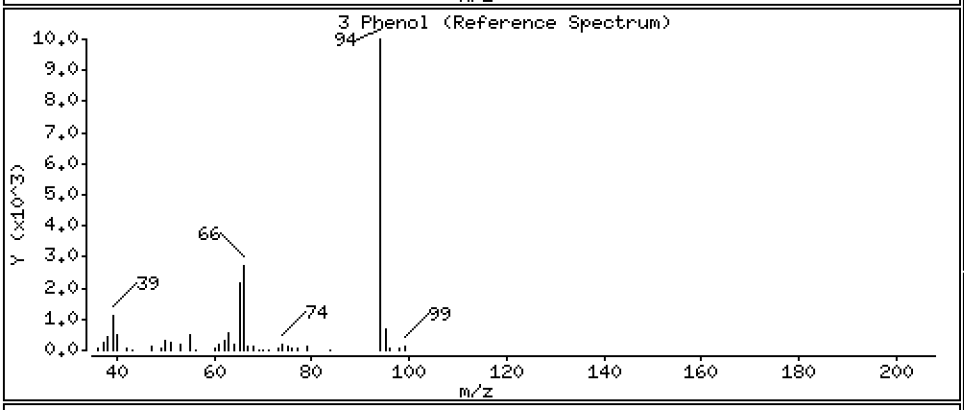
Concentration: 0.4057 ug/mL

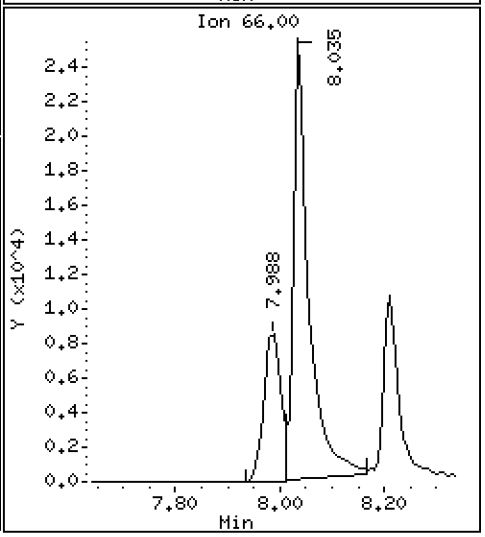


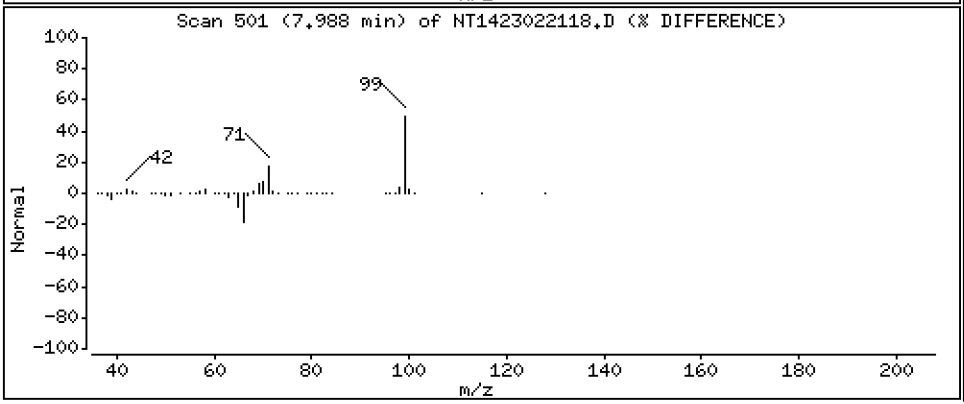












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

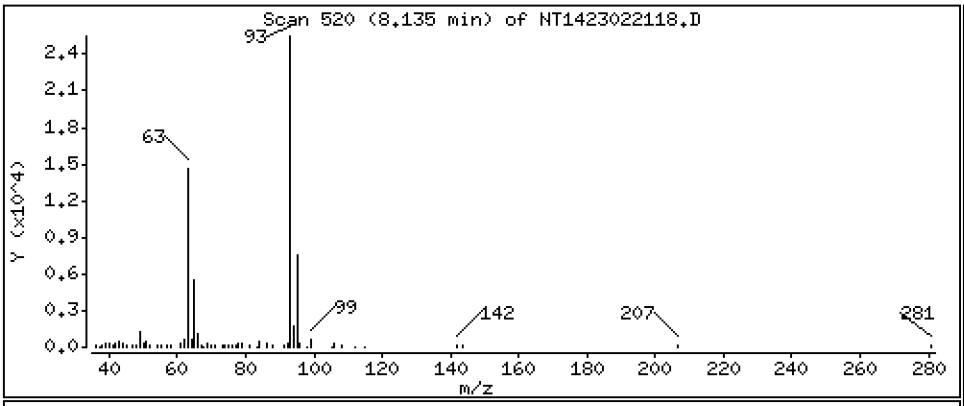
Operator: DSD

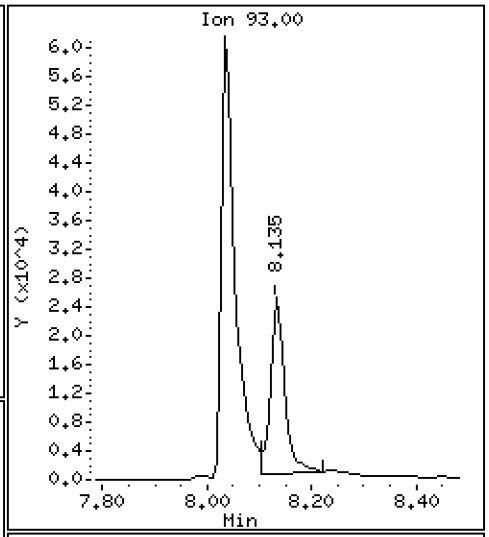
Column phase: ZB-5msi

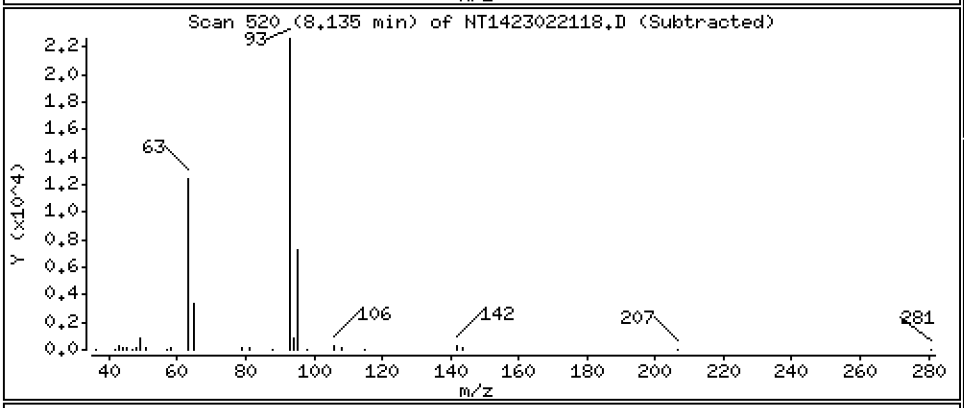
Column diameter: 0.25

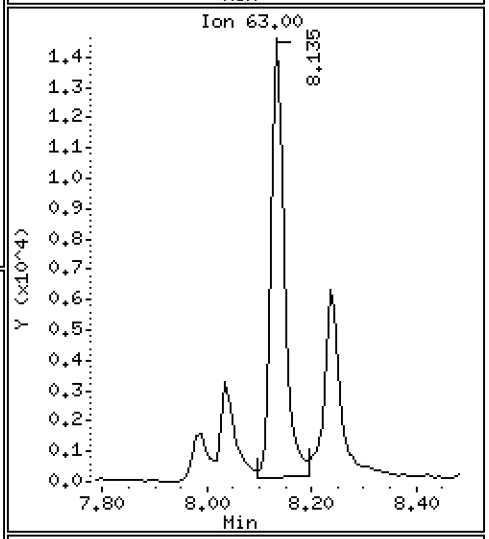
4 Bis(2-Chloroethyl)ether

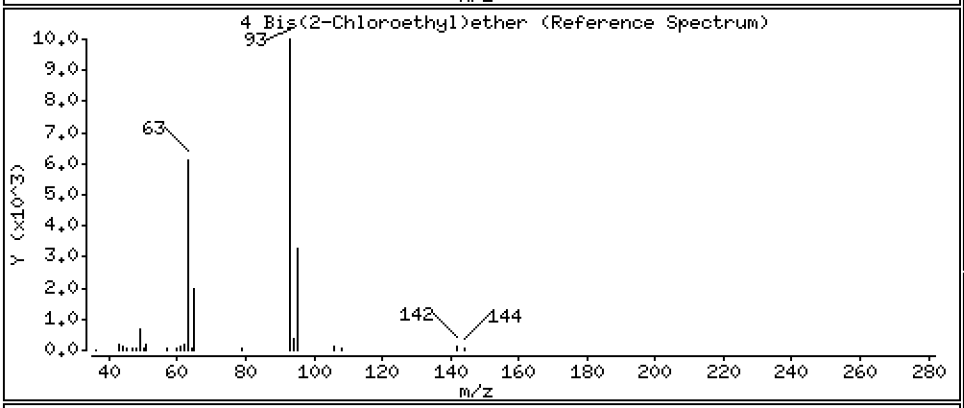
Concentration: 0.5119 ug/mL

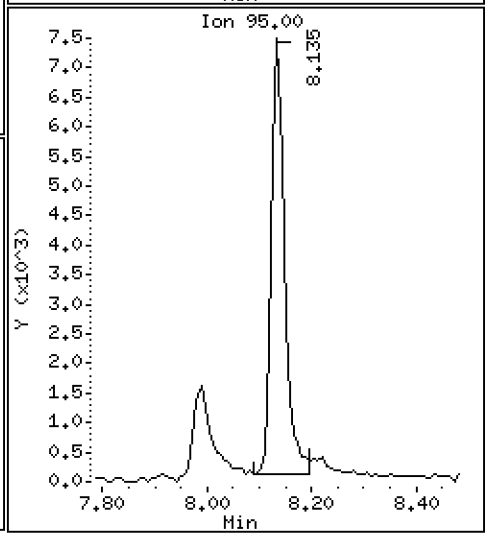


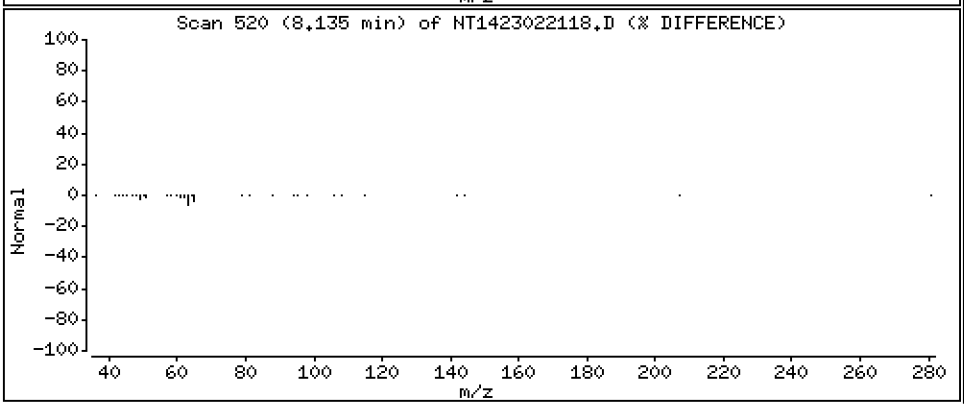












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

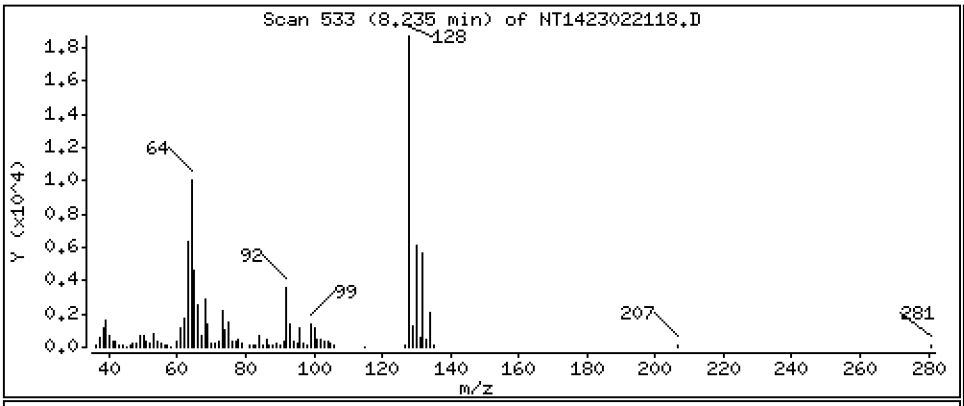
Operator: DSD

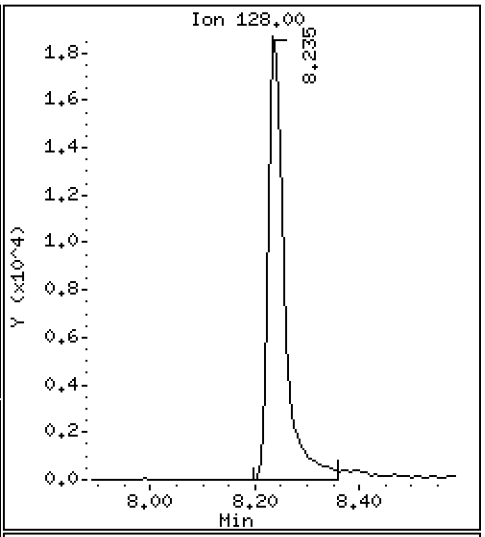
Column phase: ZB-5msi

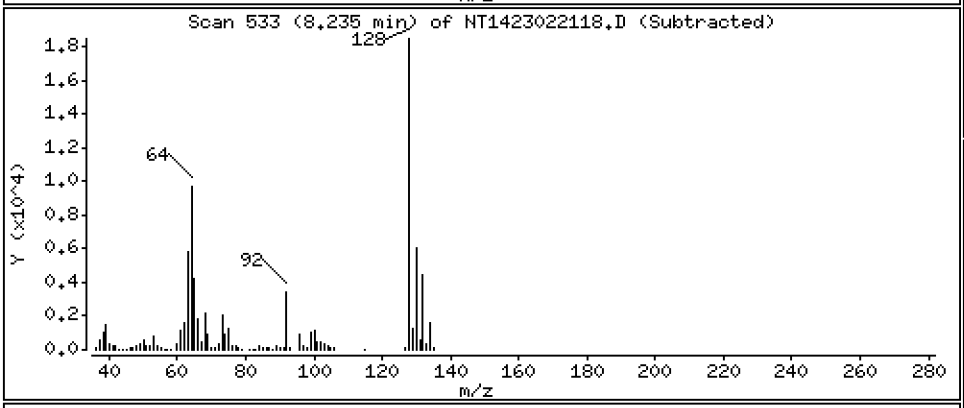
Column diameter: 0.25

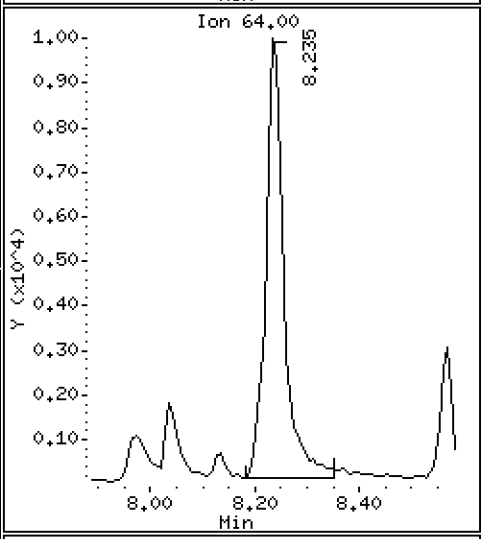
6 2-Chlorophenol

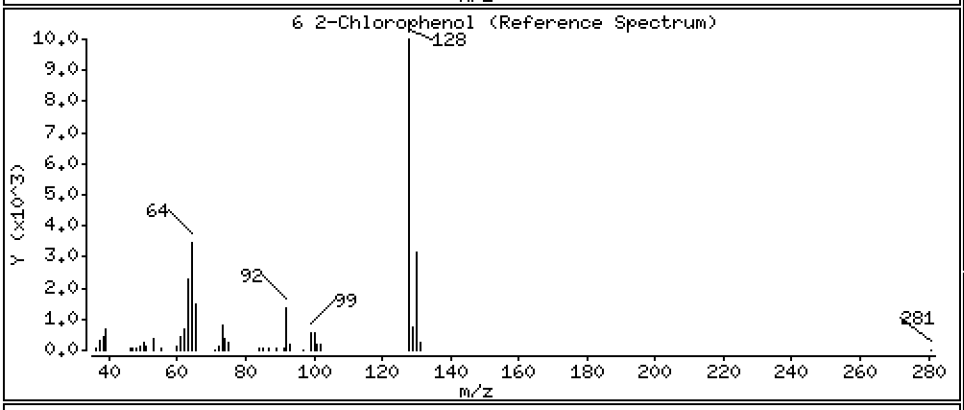
Concentration: 0.5009 ug/mL

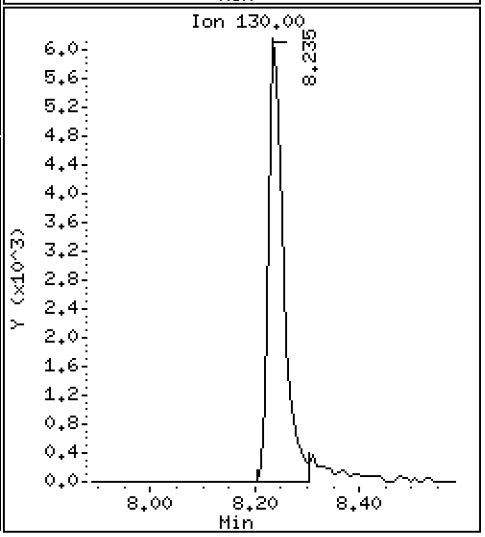


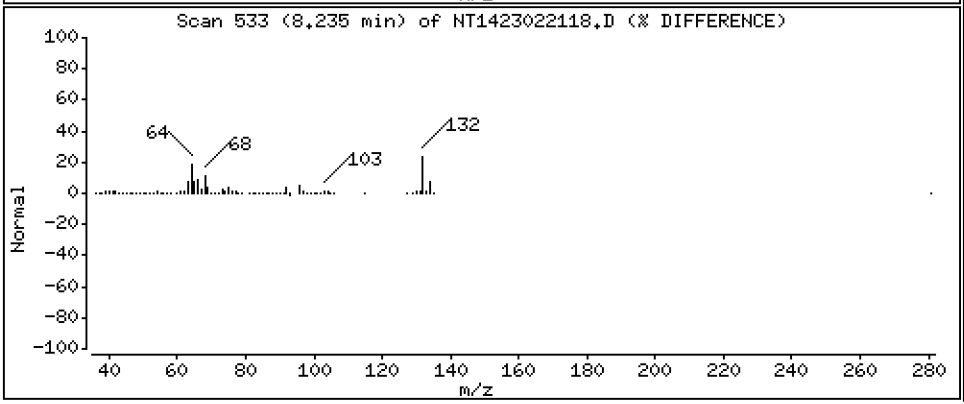












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

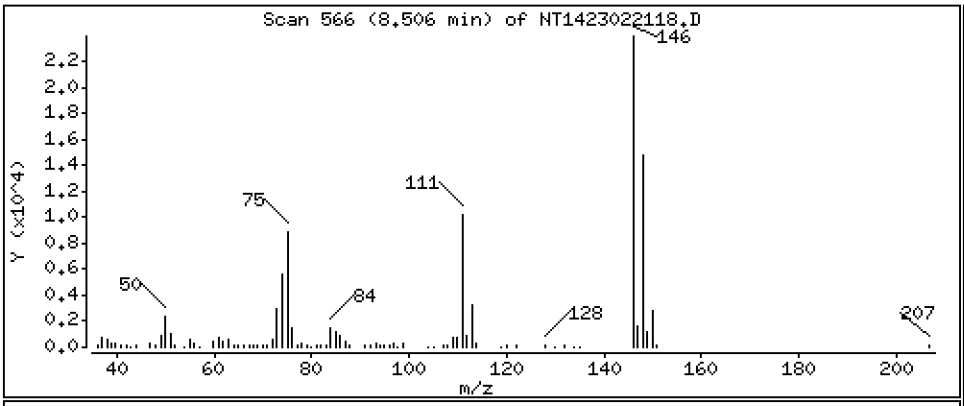
Operator: DSD

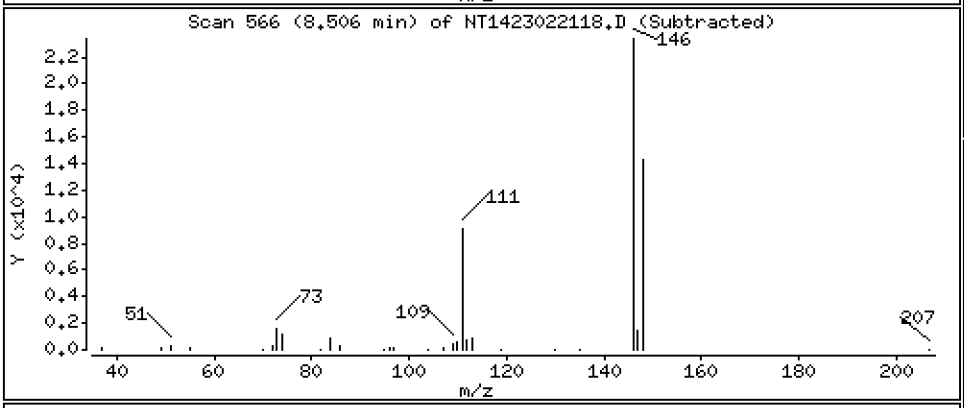
Column phase: ZB-5msi

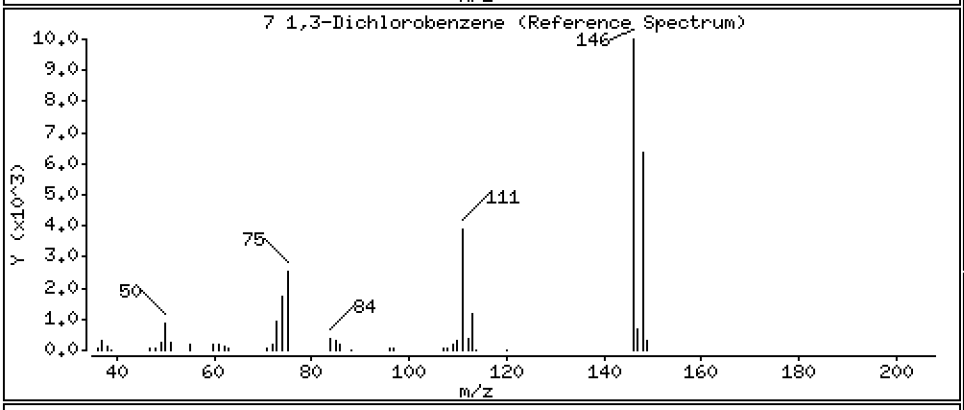
Column diameter: 0.25

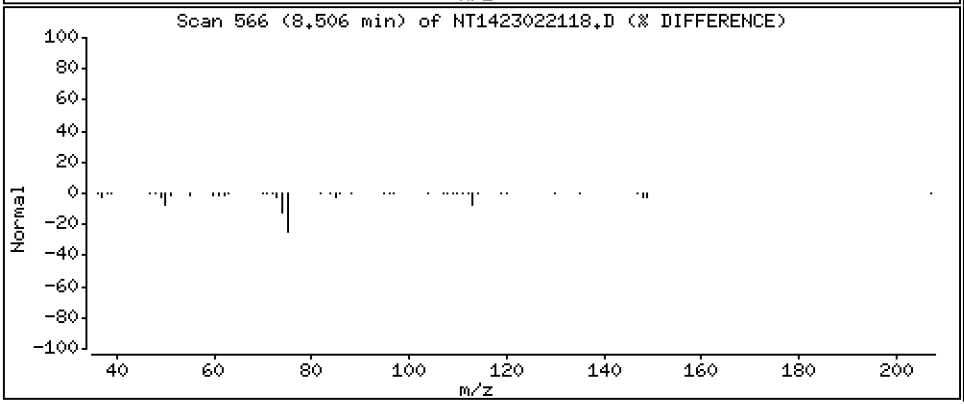
7 1,3-Dichlorobenzene

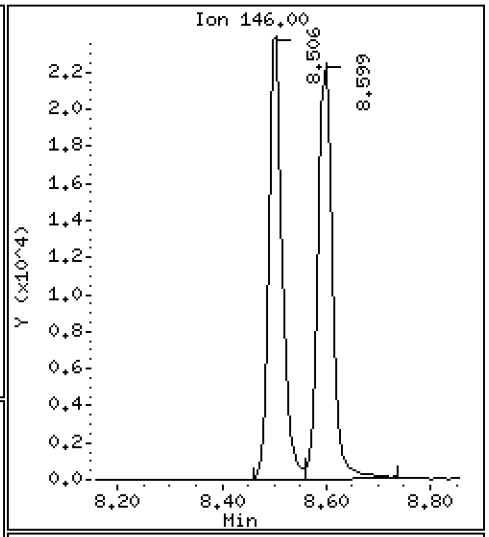
Concentration: 0.4894 ug/mL

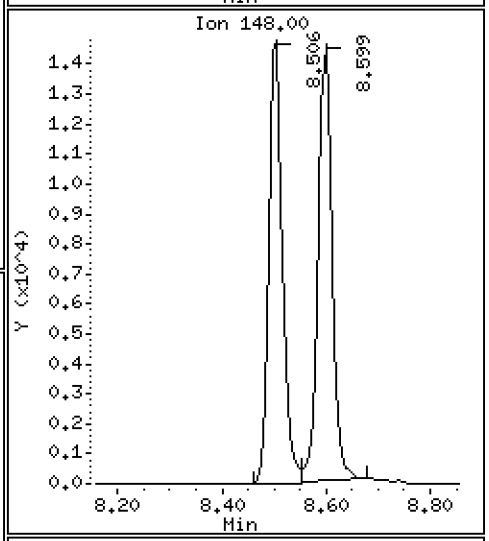


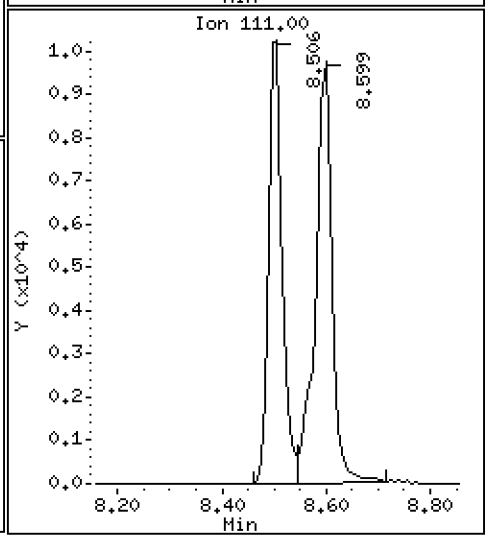












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

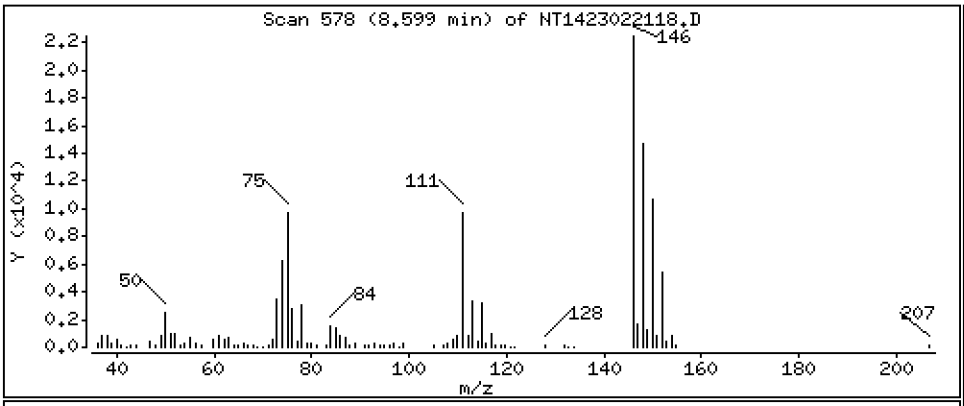
Operator: DSD

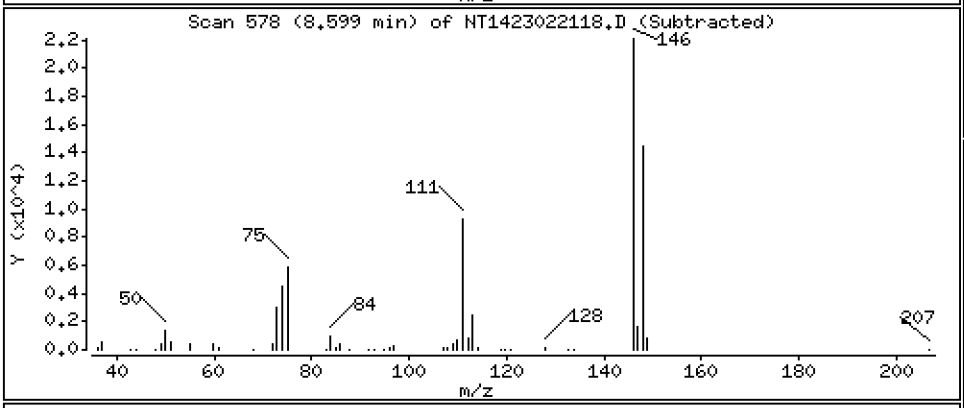
Column phase: ZB-5msi

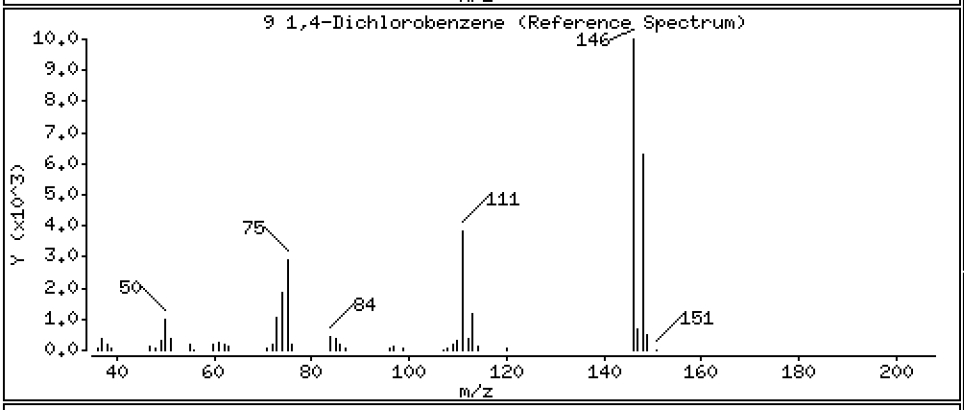
Column diameter: 0.25

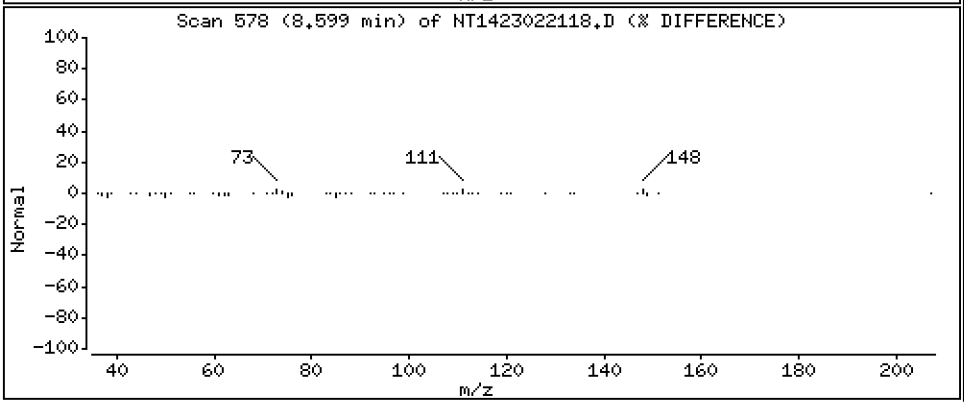
9 1,4-Dichlorobenzene

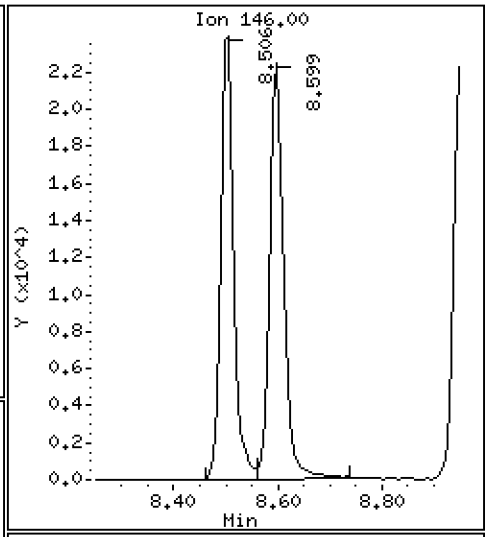
Concentration: 0.5426 ug/mL

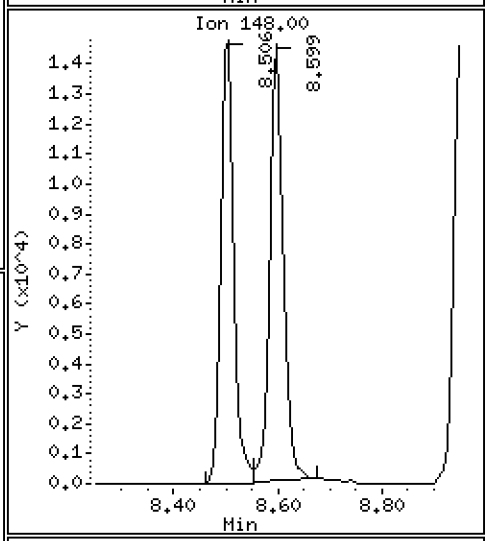


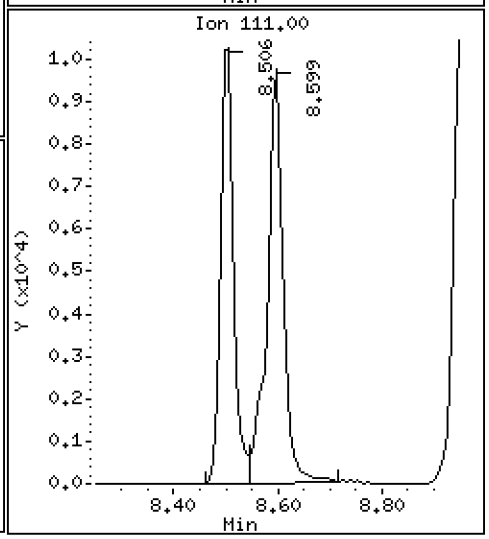












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

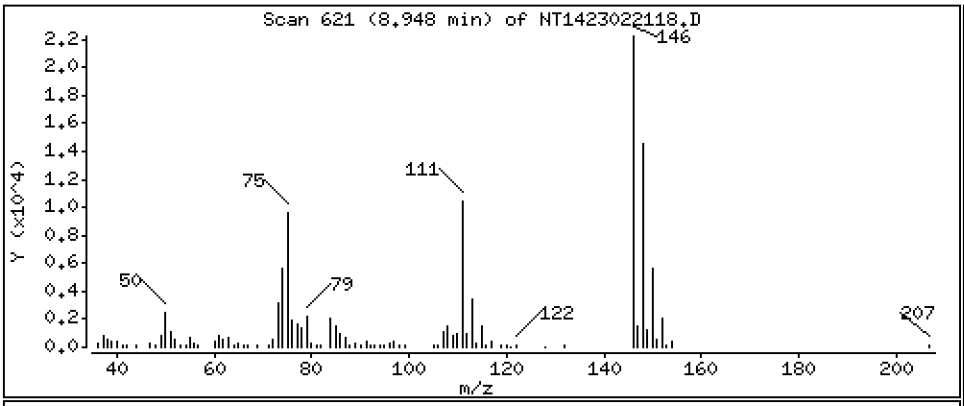
Operator: DSD

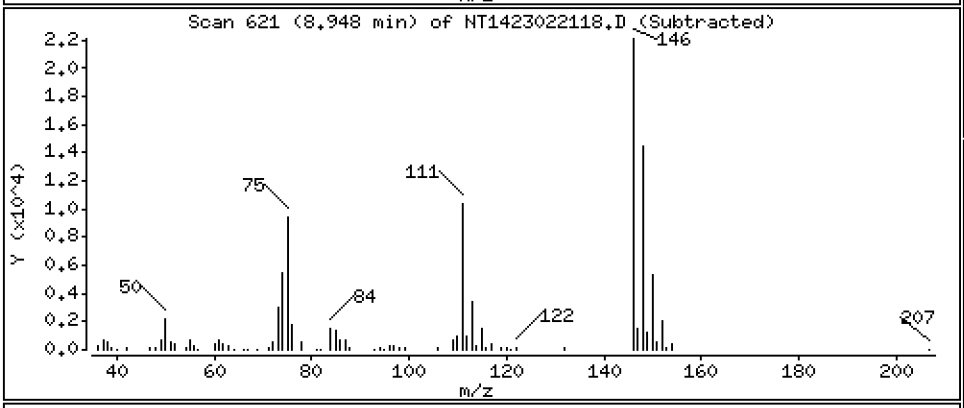
Column phase: ZB-5msi

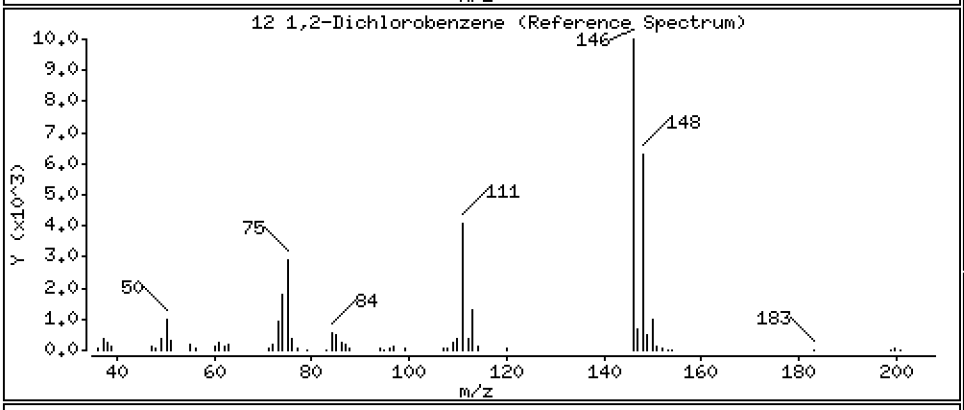
Column diameter: 0.25

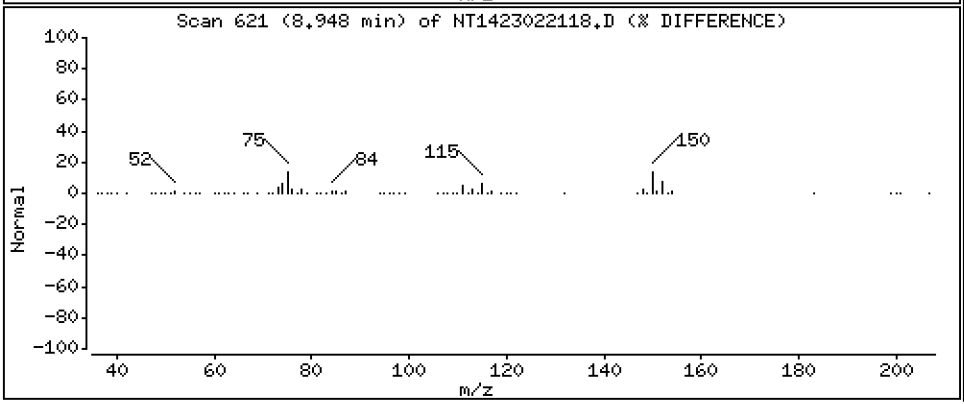
12 1,2-Dichlorobenzene

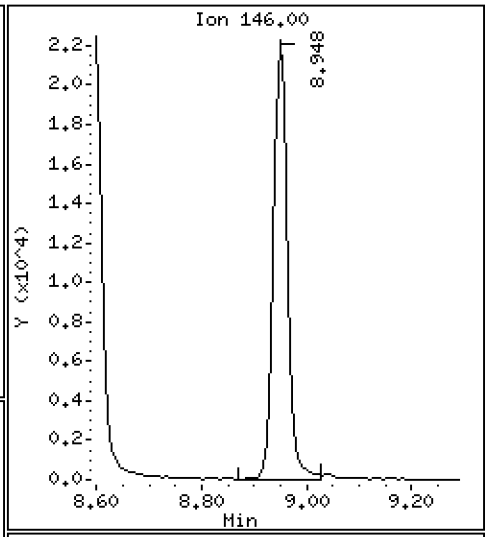
Concentration: 0.4781 ug/mL

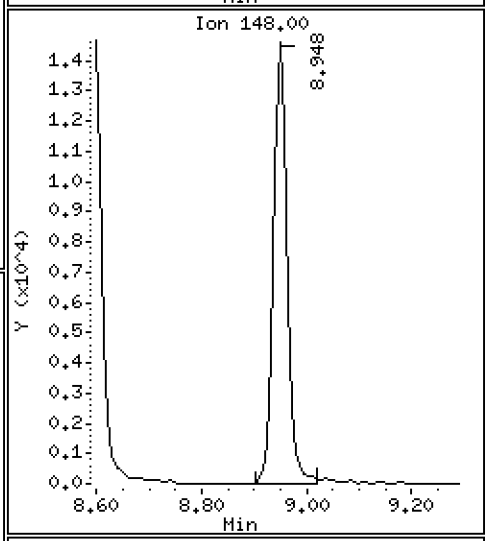


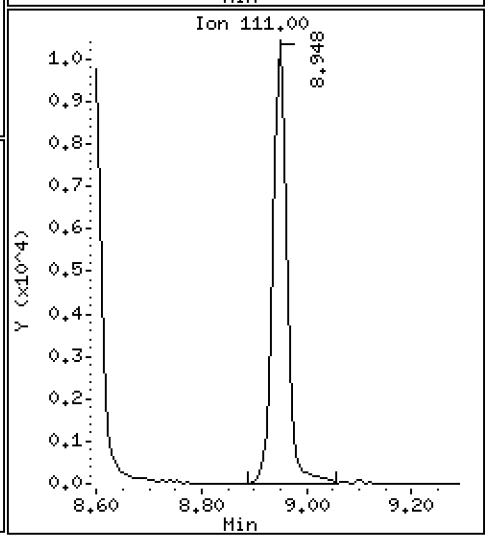












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

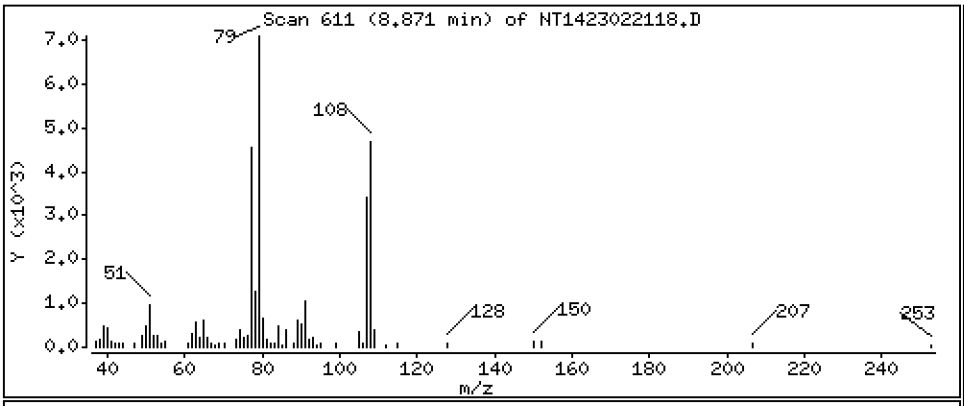
Operator: DSD

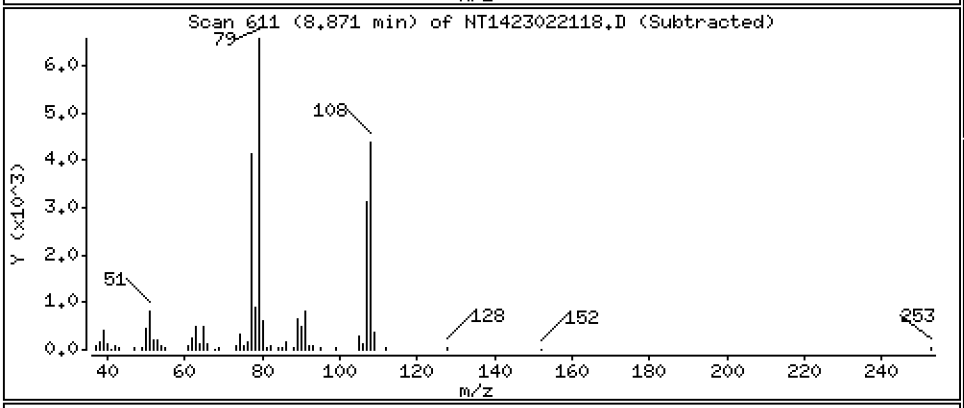
Column phase: ZB-5msi

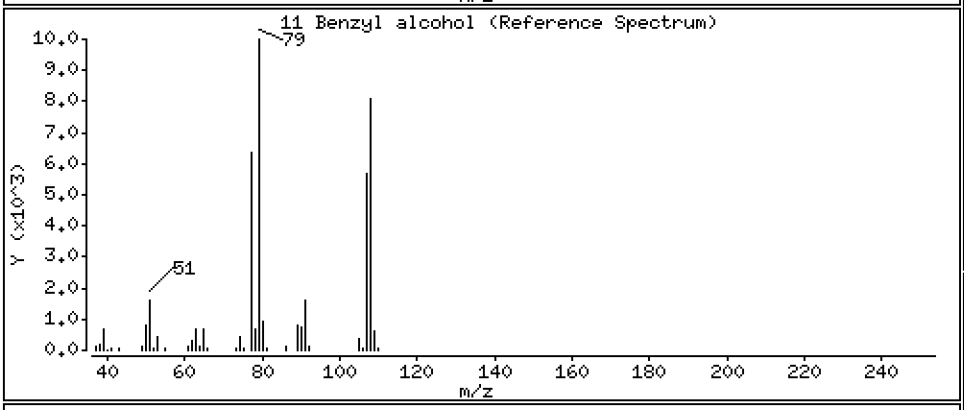
Column diameter: 0.25

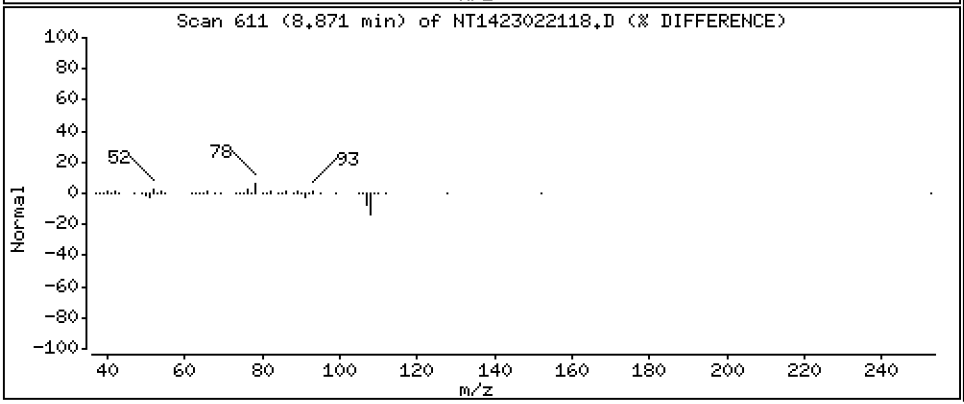
11 Benzyl alcohol

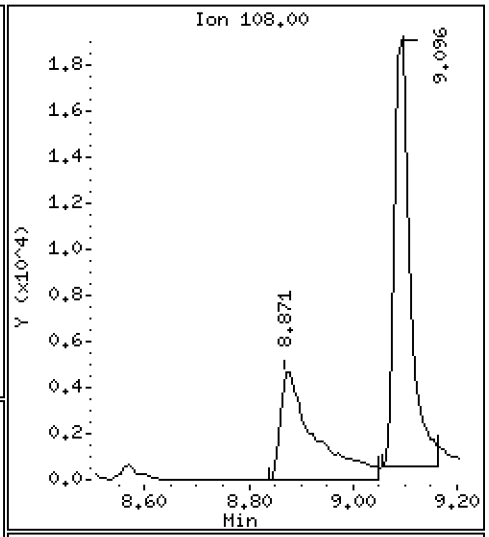
Concentration: 0.3431 ug/mL

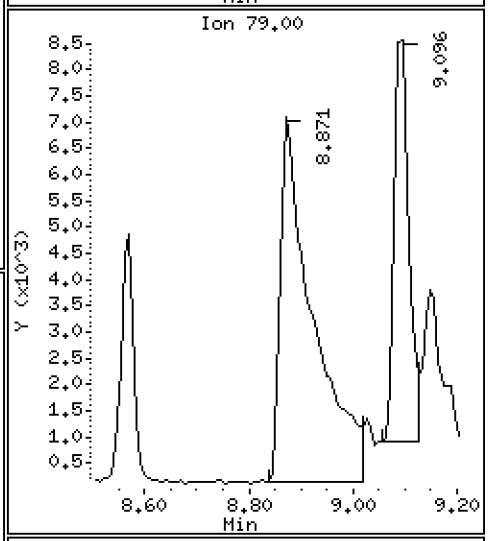


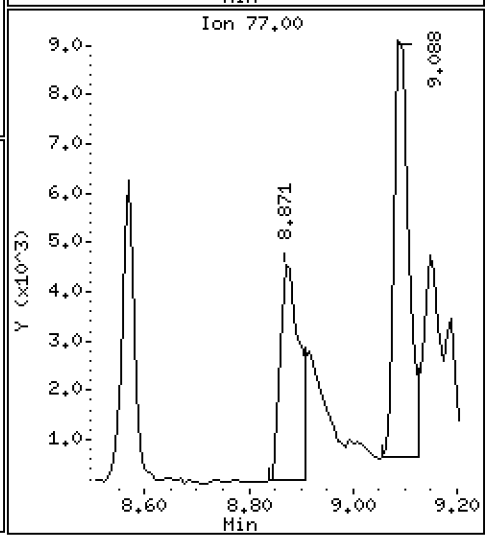












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

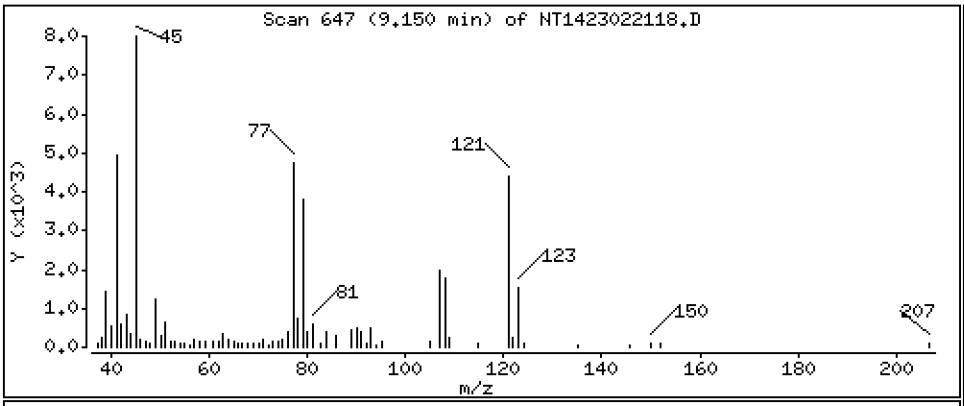
Operator: DSD

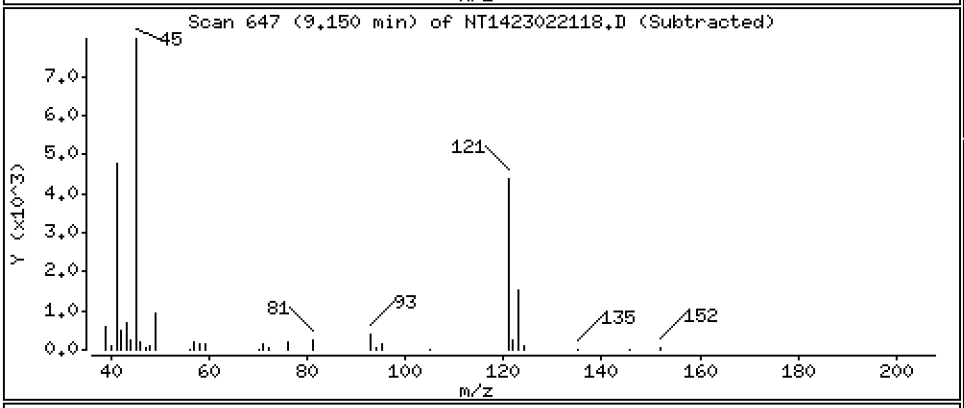
Column phase: ZB-5msi

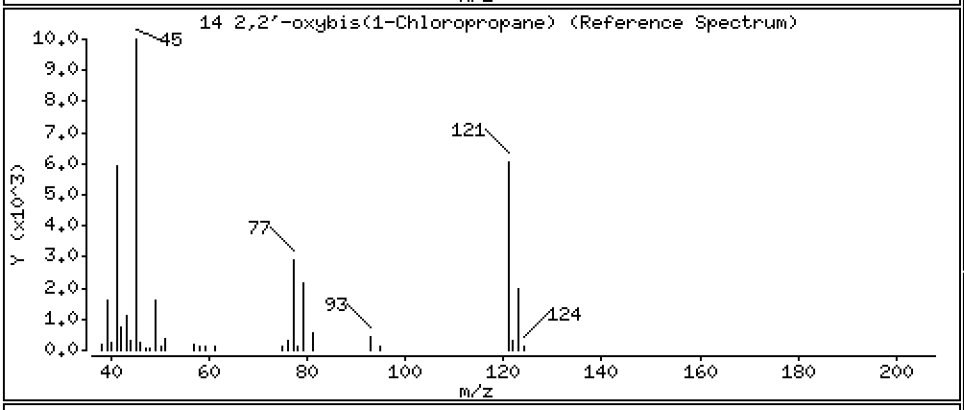
Column diameter: 0.25

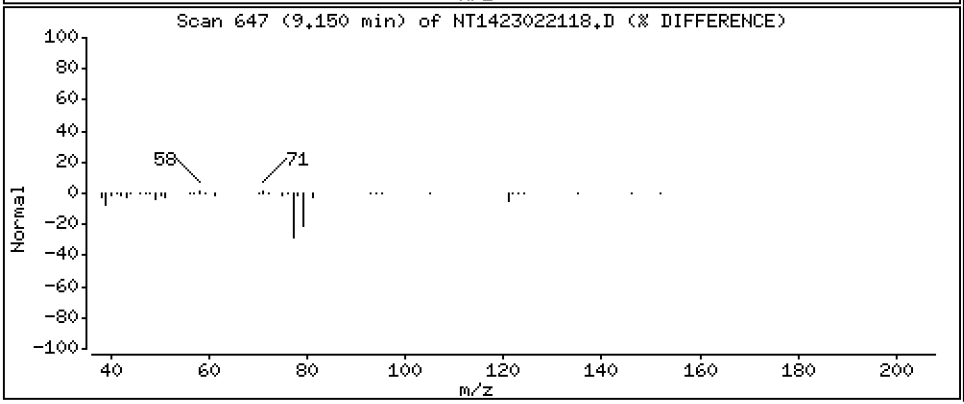
14 2,2'-oxybis(1-Chloropropane)

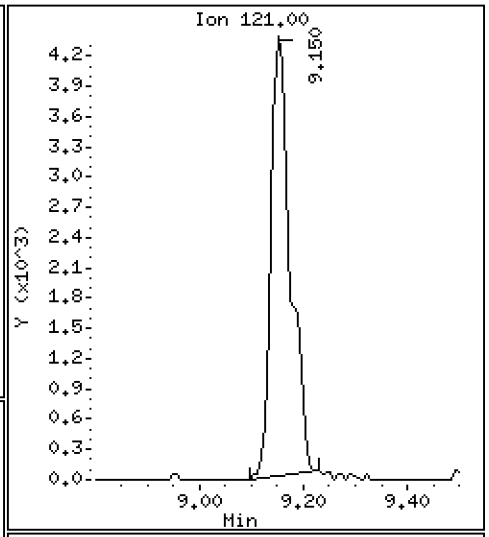
Concentration: 0.4606 ug/mL

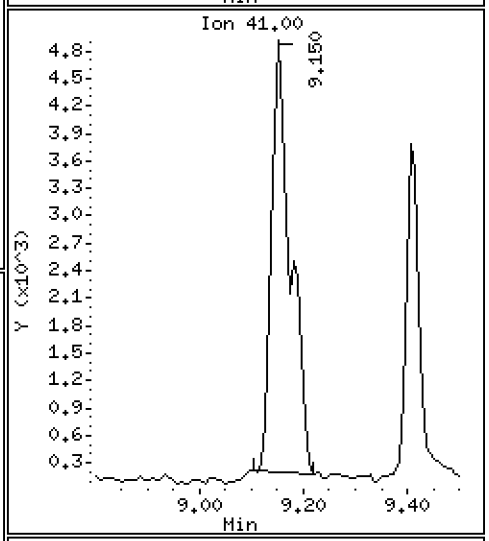


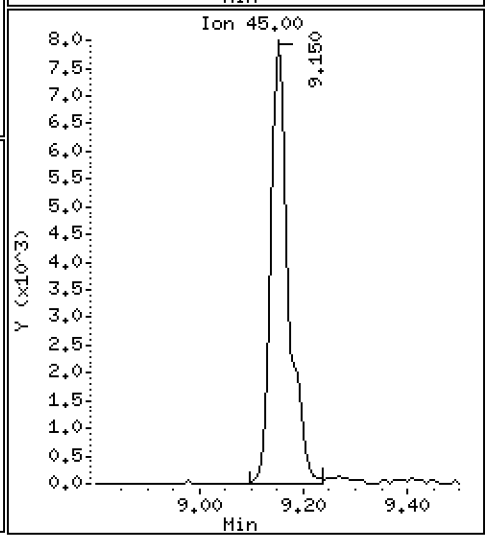












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

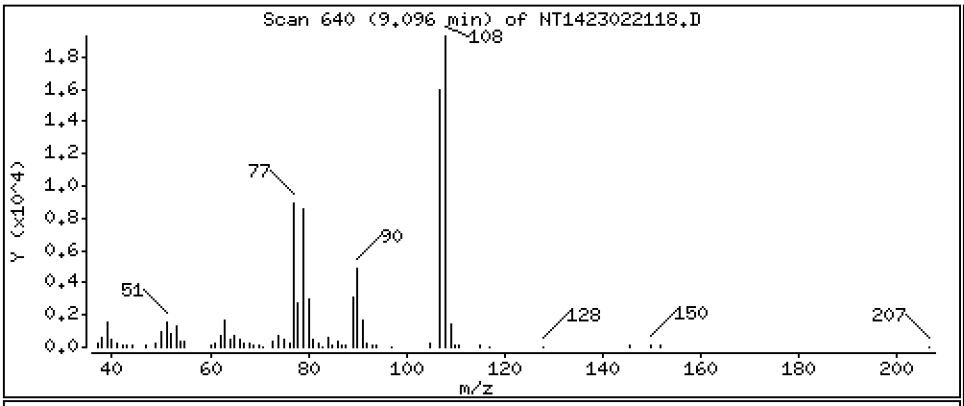
Operator: DSD

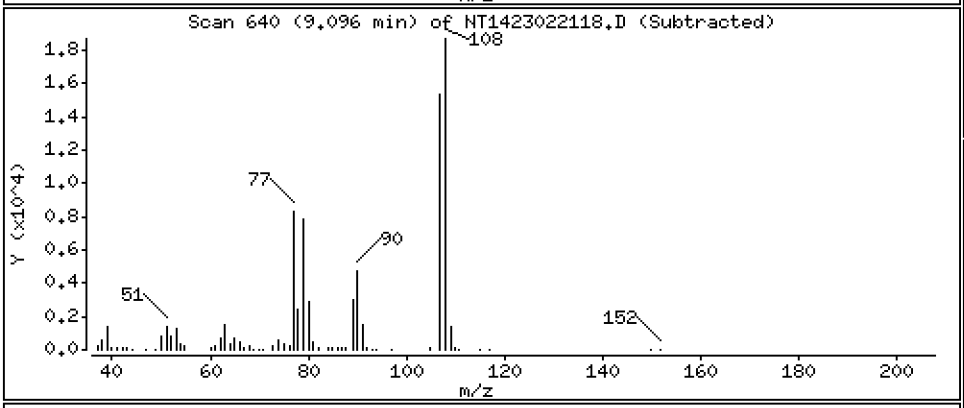
Column phase: ZB-5msi

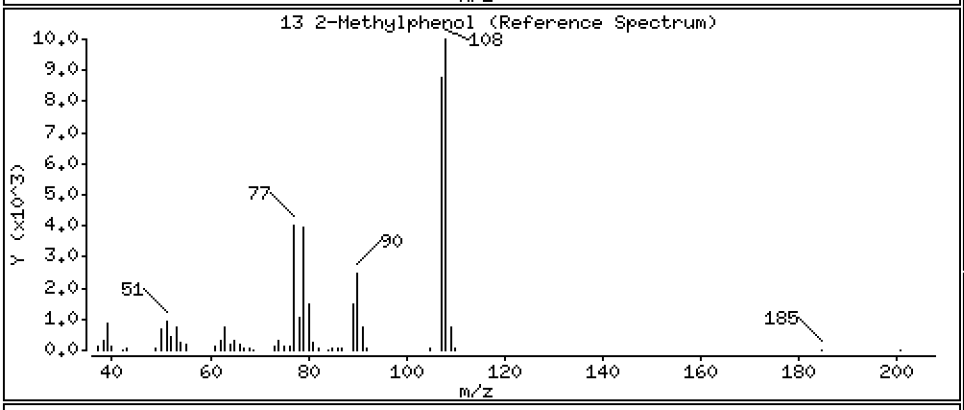
Column diameter: 0.25

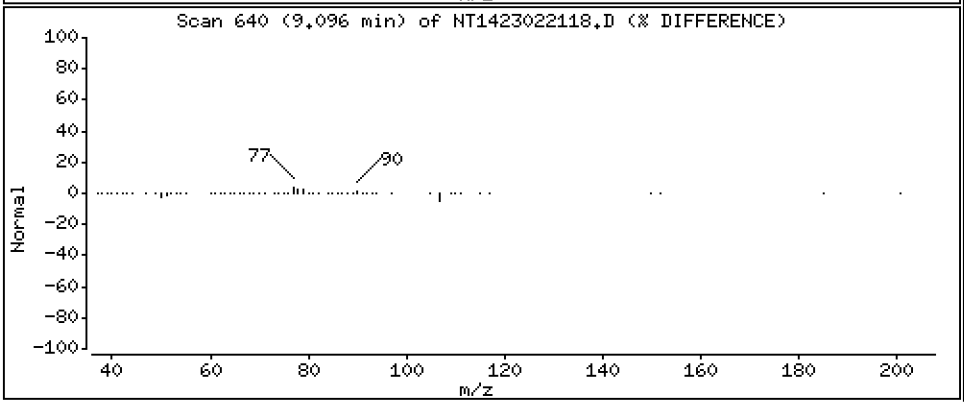
13 2-Methylphenol

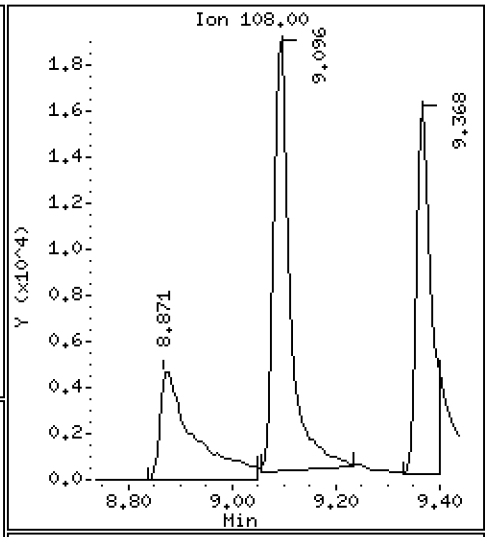
Concentration: 0.5155 ug/mL

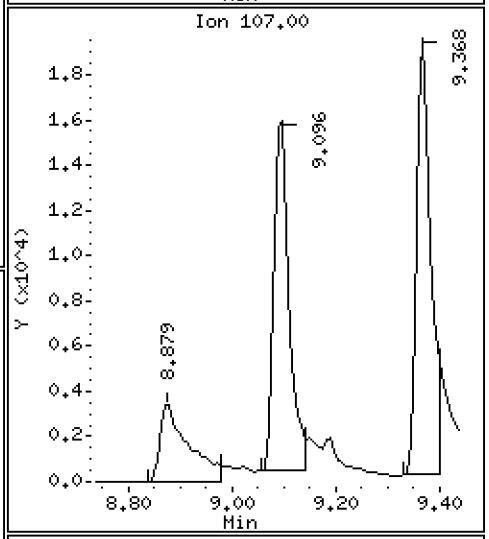


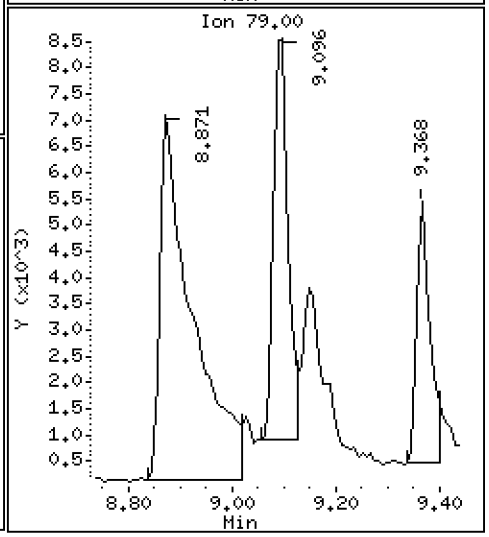












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

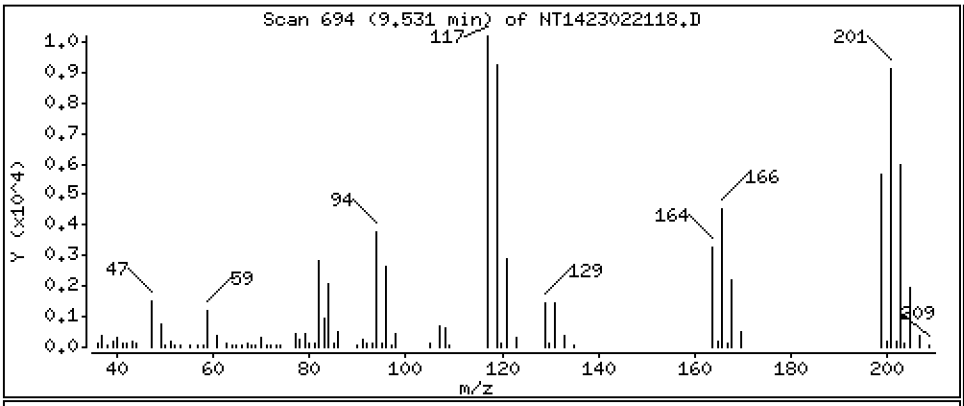
Operator: DSD

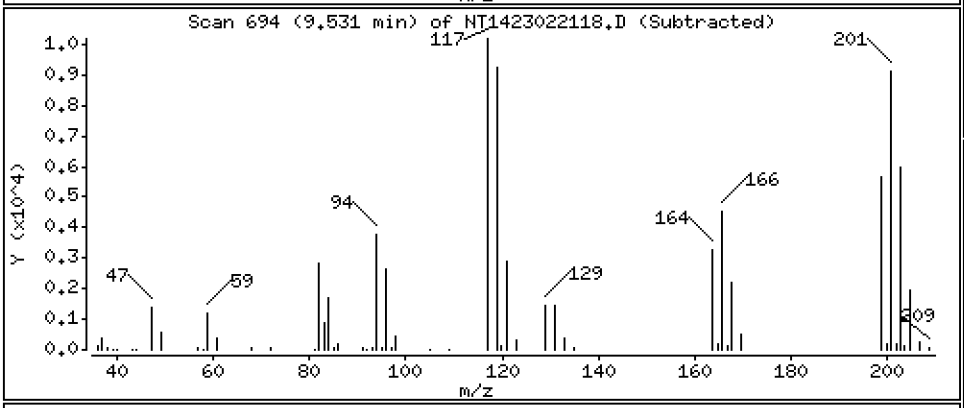
Column phase: ZB-5msi

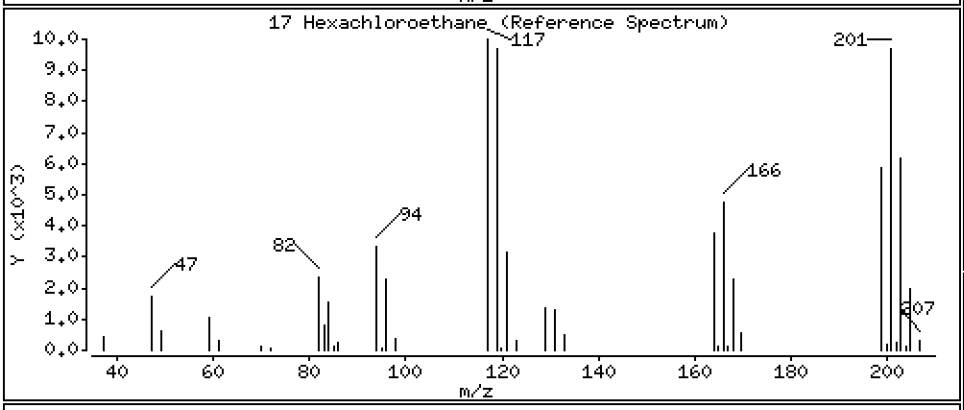
Column diameter: 0.25

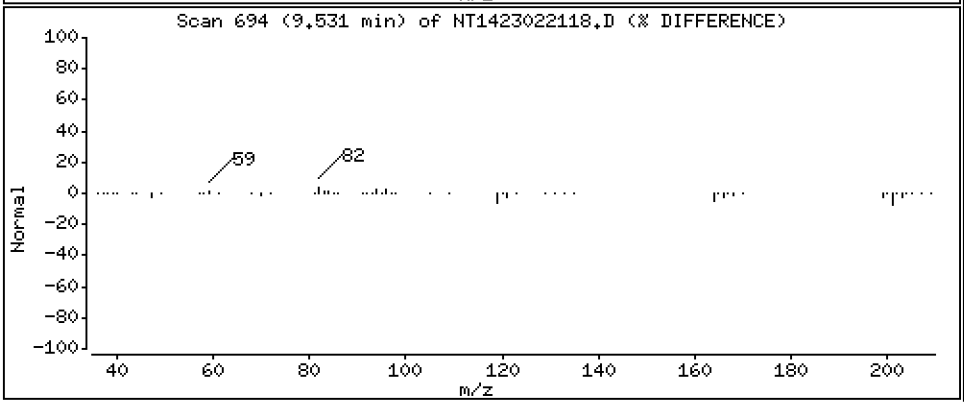
17 Hexachloroethane

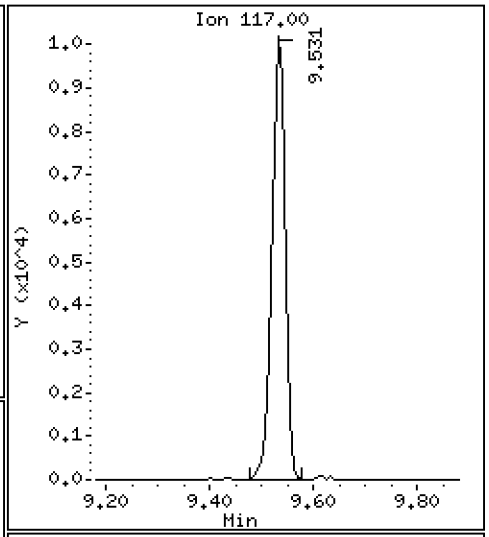
Concentration: 0.4700 ug/mL

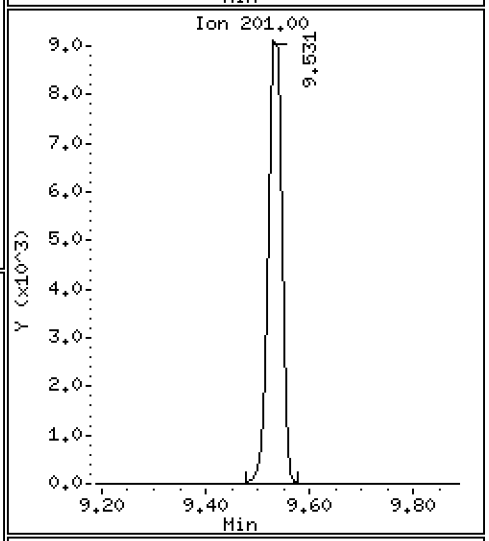


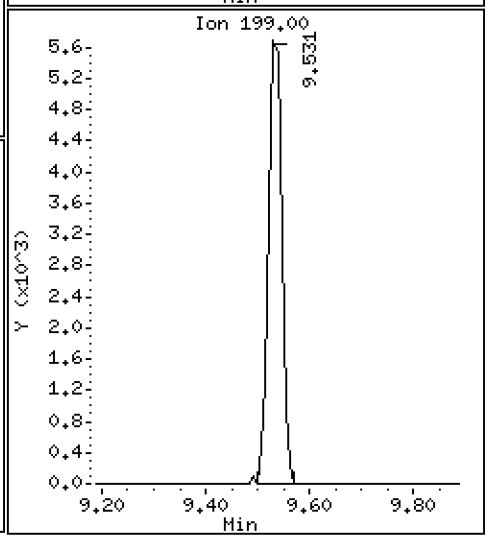












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

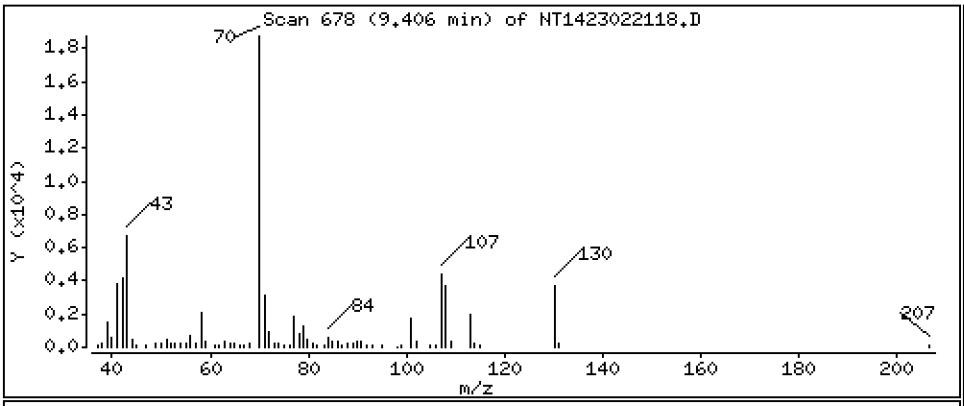
Operator: DSD

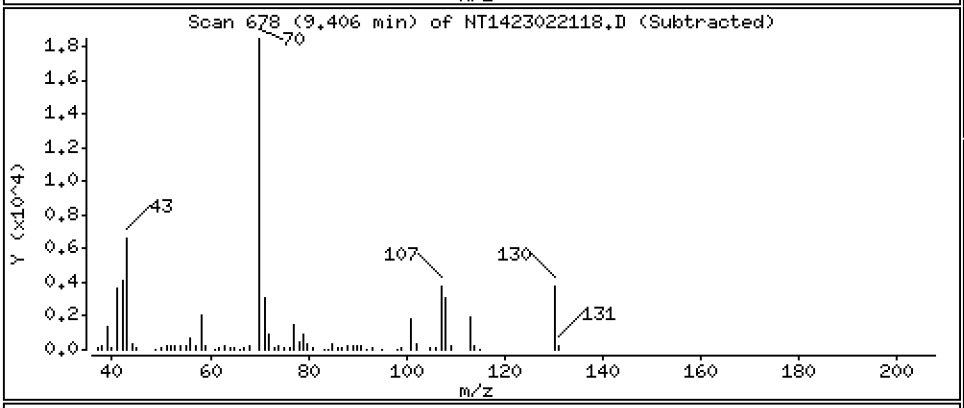
Column phase: ZB-5msi

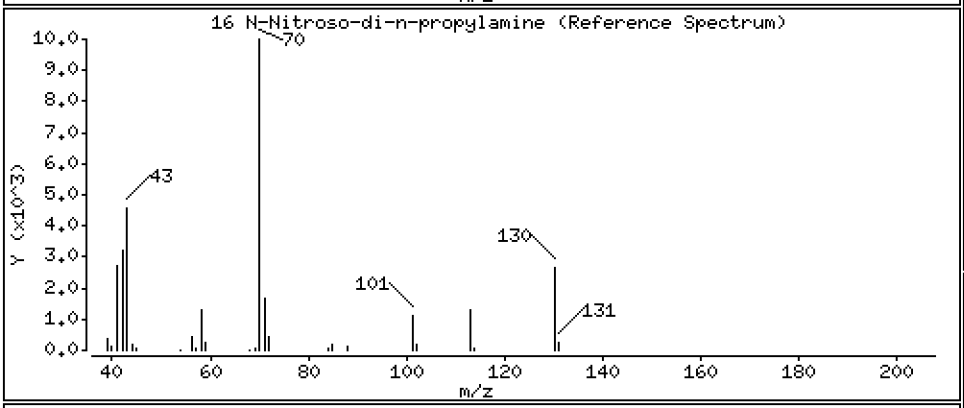
Column diameter: 0.25

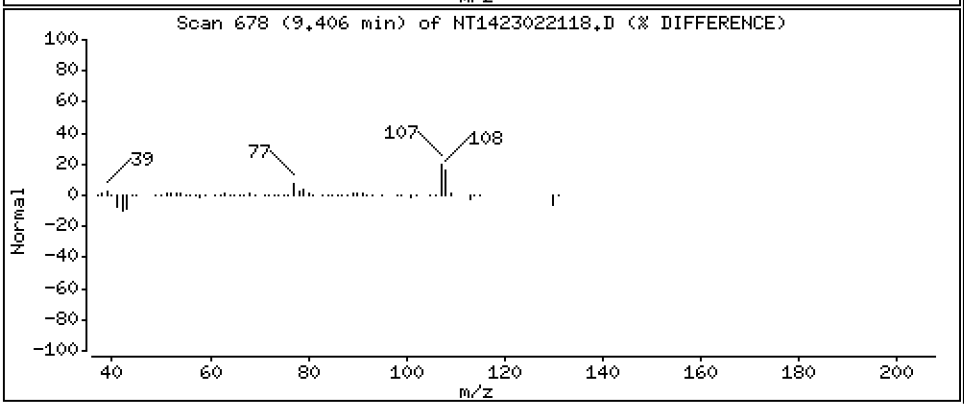
16 N-Nitroso-di-n-propylamine

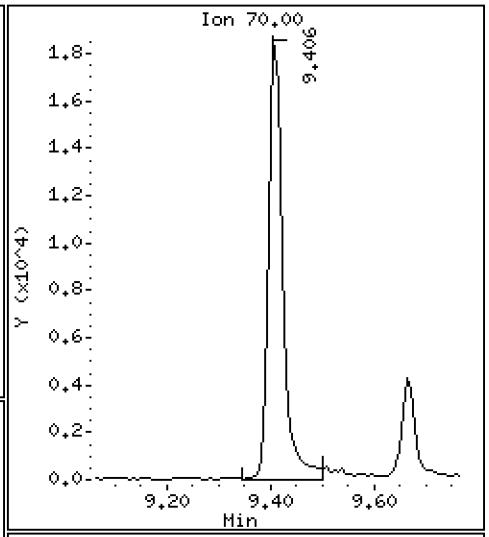
Concentration: 0.4771 ug/mL

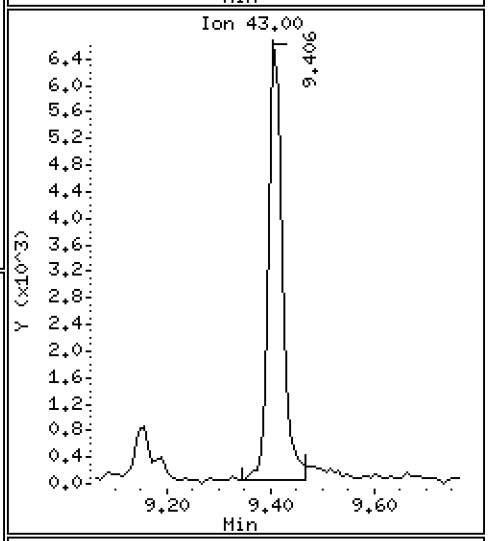


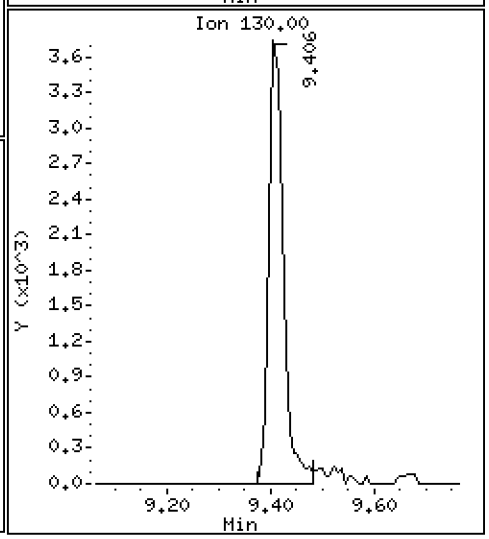












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

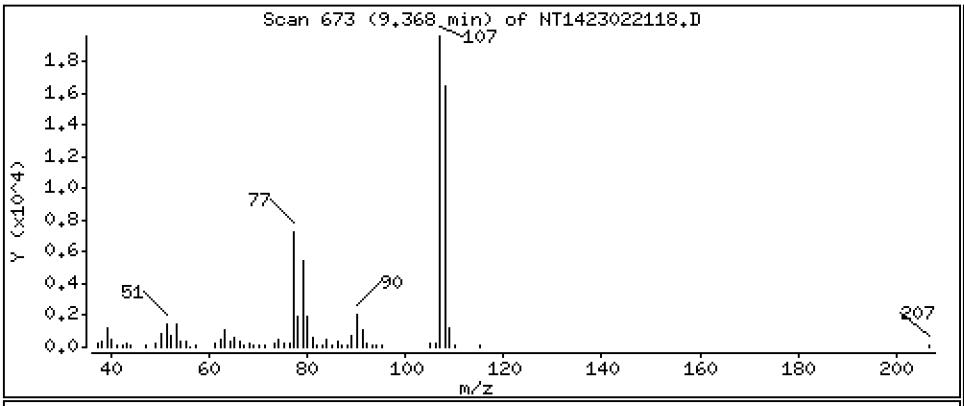
Operator: DSD

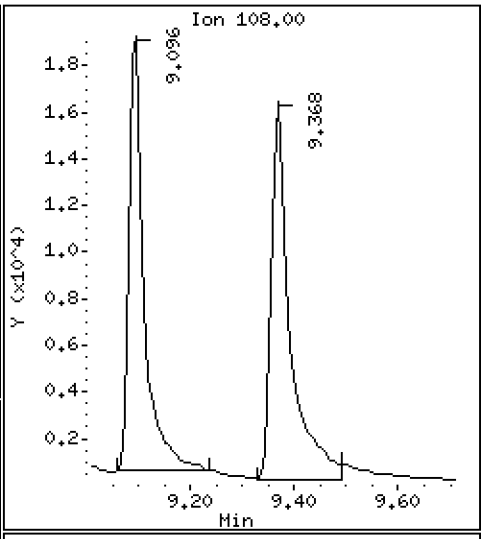
Column phase: ZB-5msi

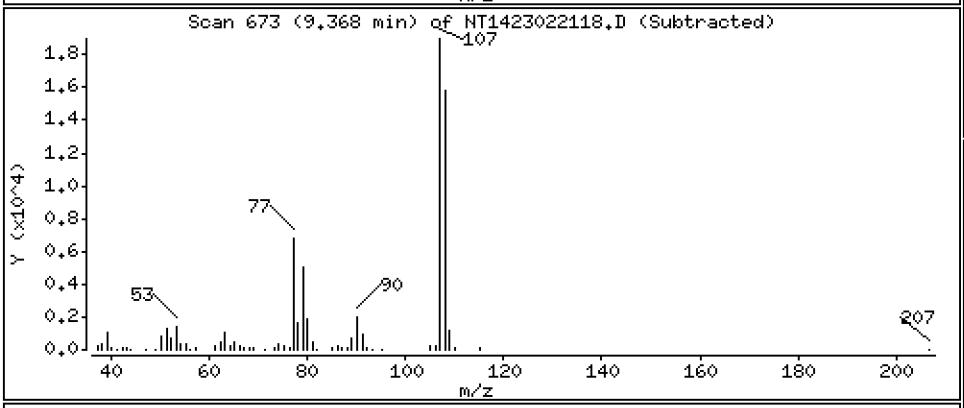
Column diameter: 0.25

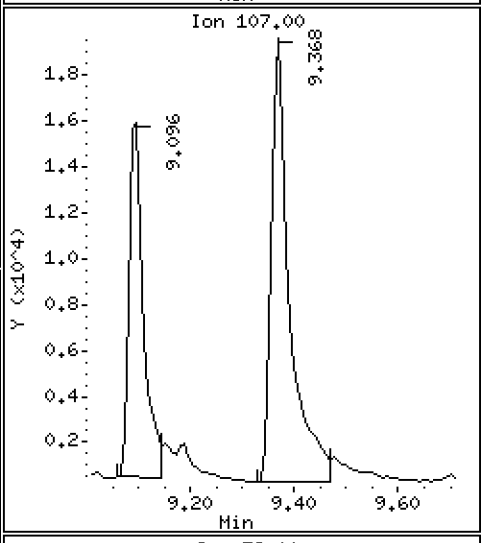
15 4-Methylphenol

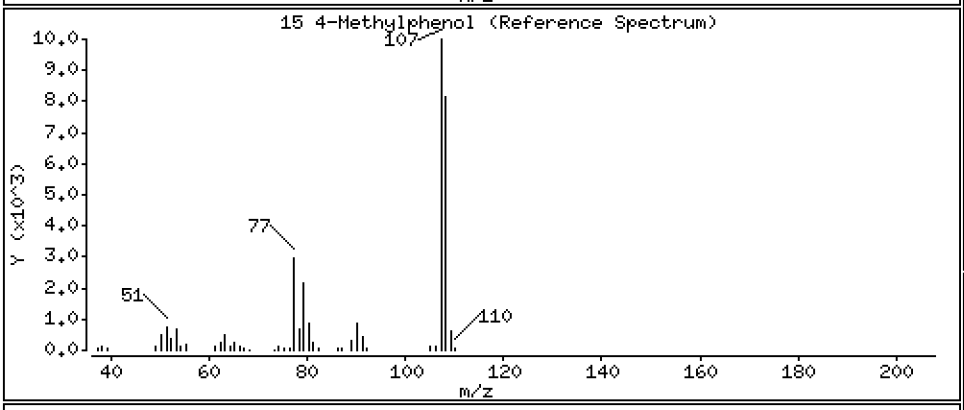
Concentration: 0.4863 ug/mL

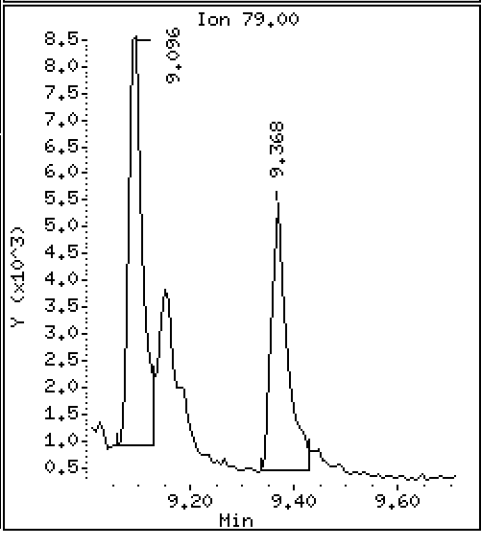


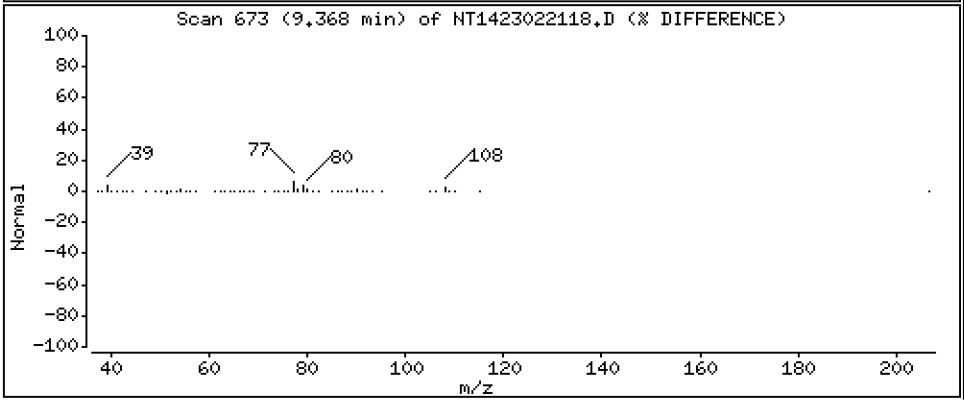












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

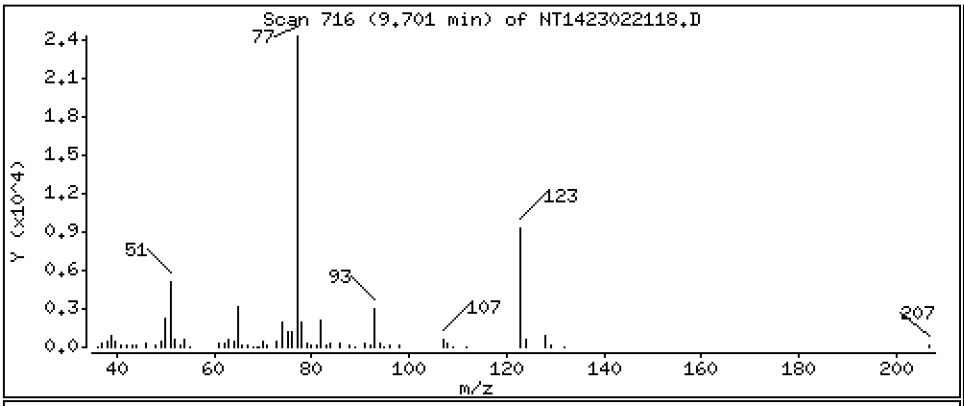
Operator: DSD

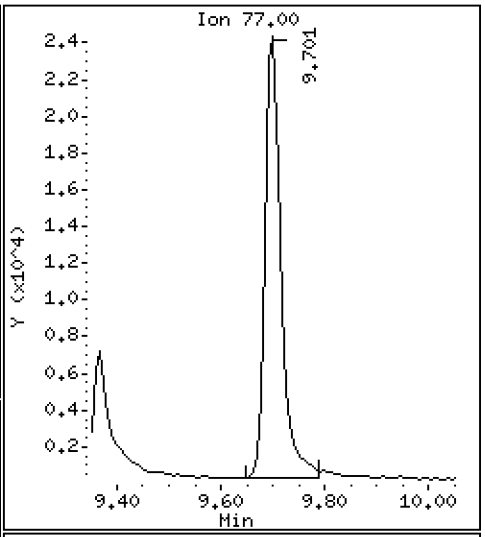
Column phase: ZB-5msi

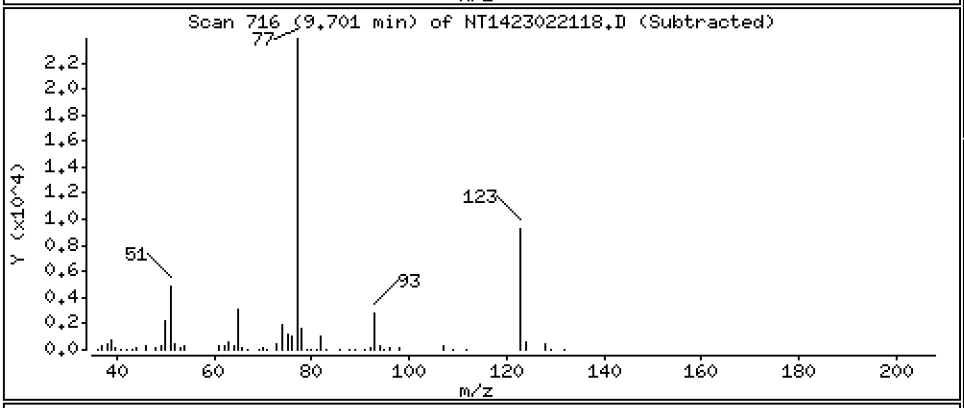
Column diameter: 0.25

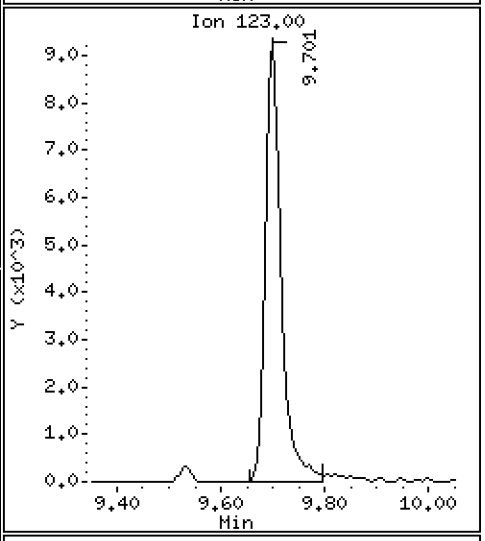
19 Nitrobenzene

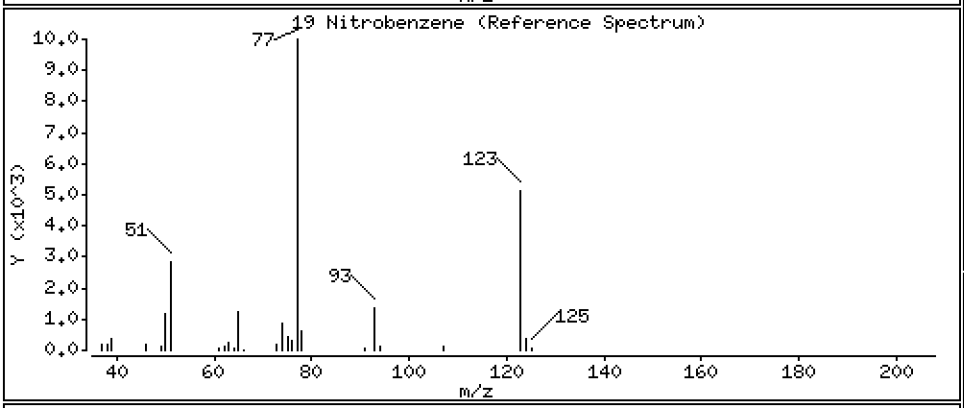
Concentration: 0.5003 ug/mL

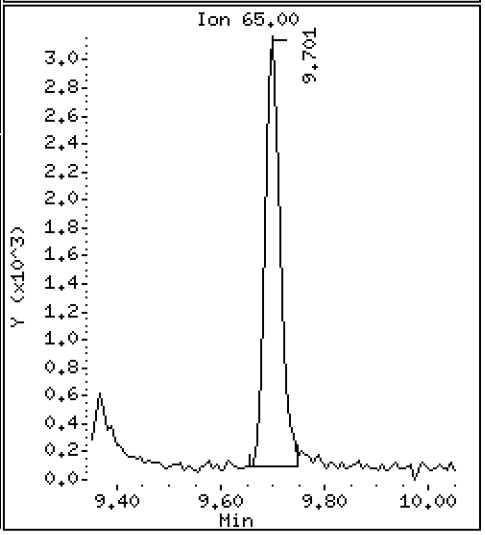


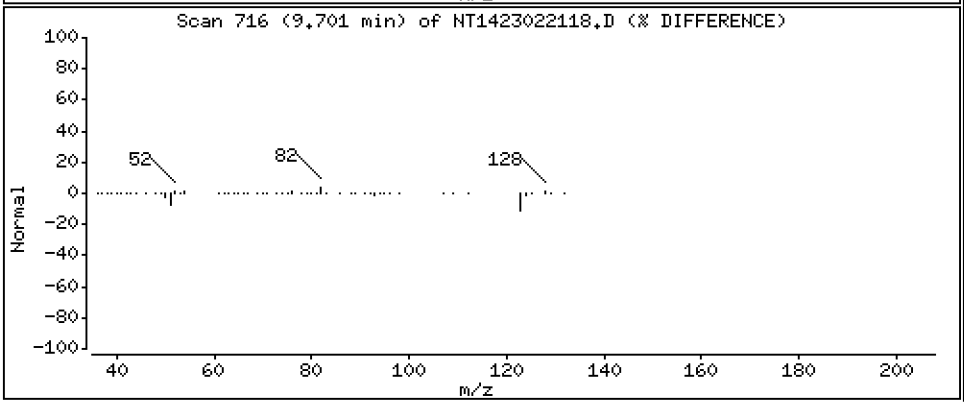












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

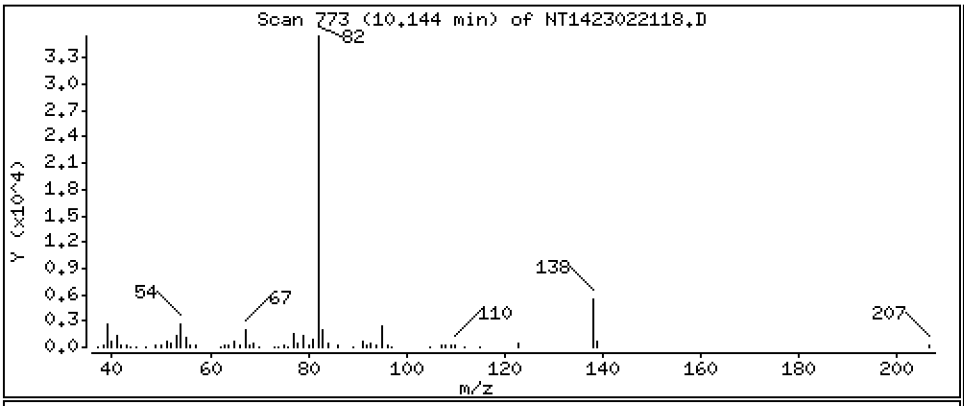
Operator: DSD

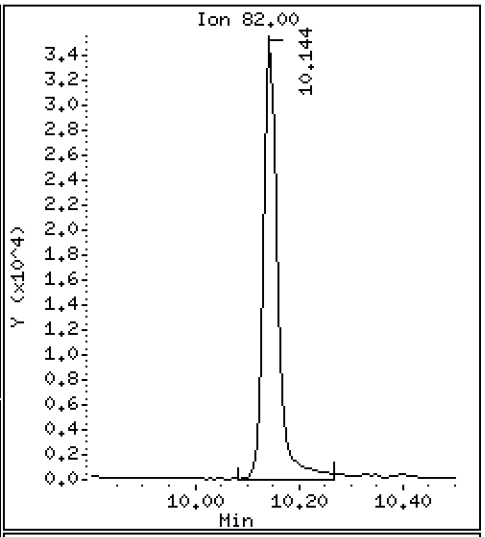
Column phase: ZB-5msi

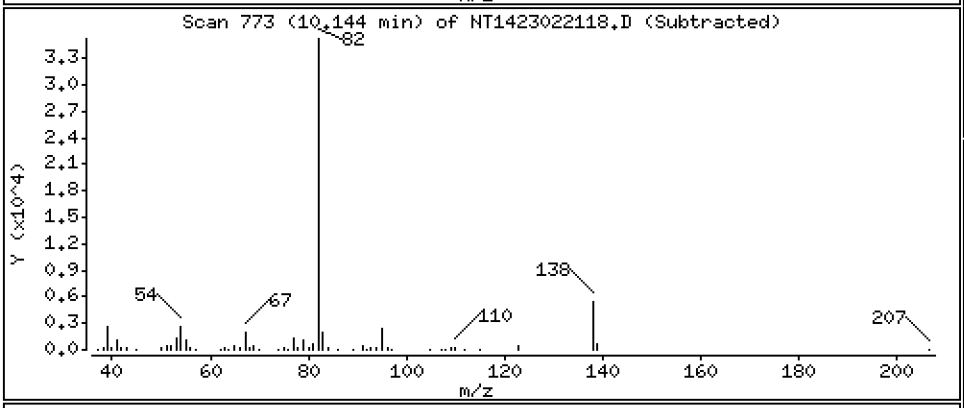
Column diameter: 0.25

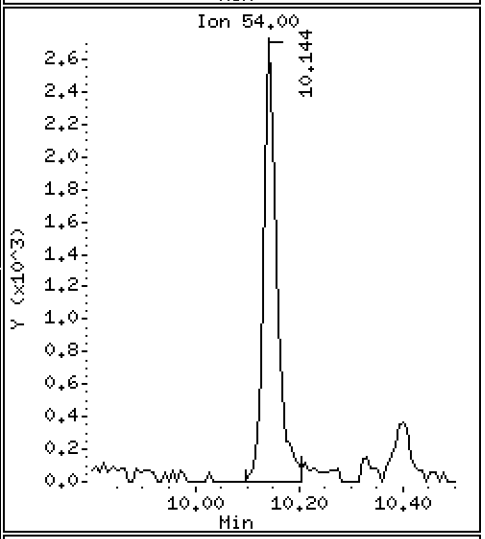
20 Isophorone

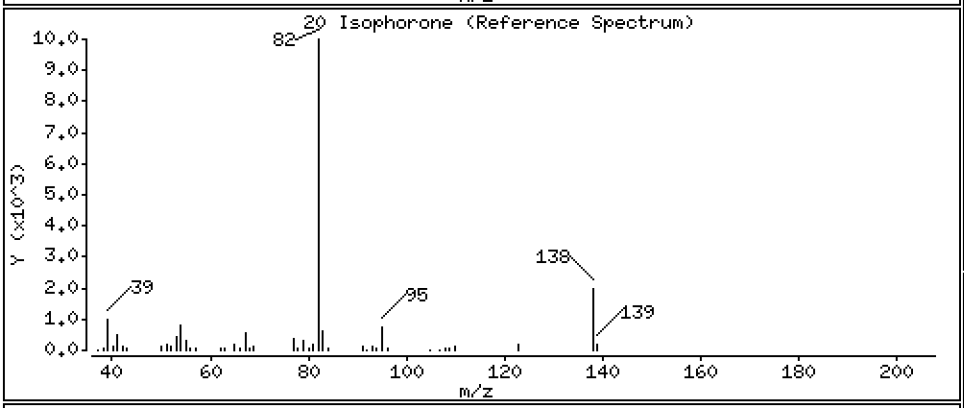
Concentration: 0.5295 ug/mL

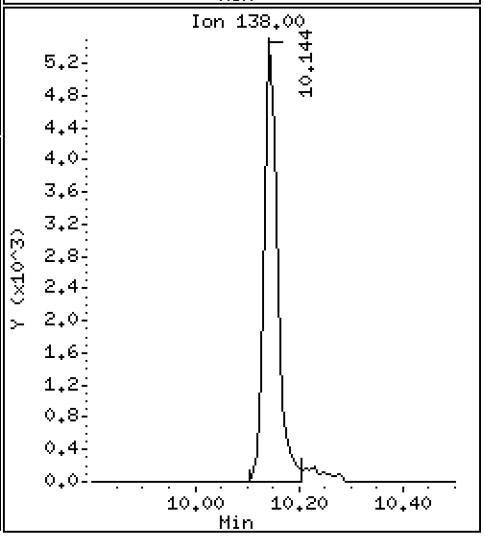


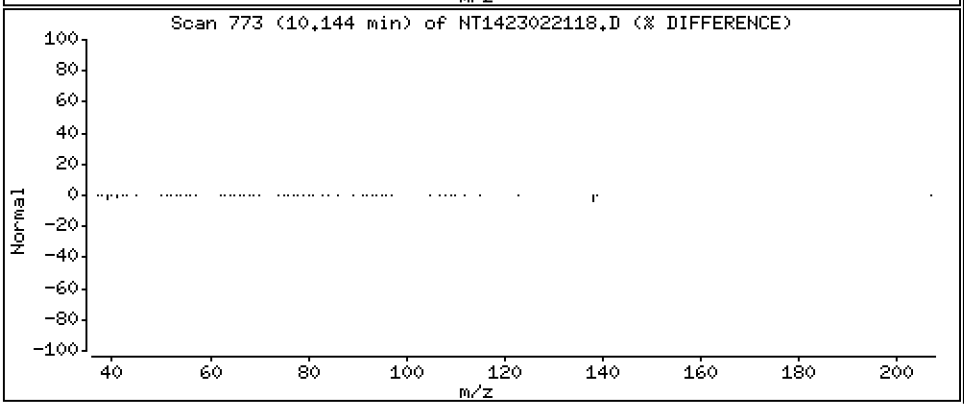












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

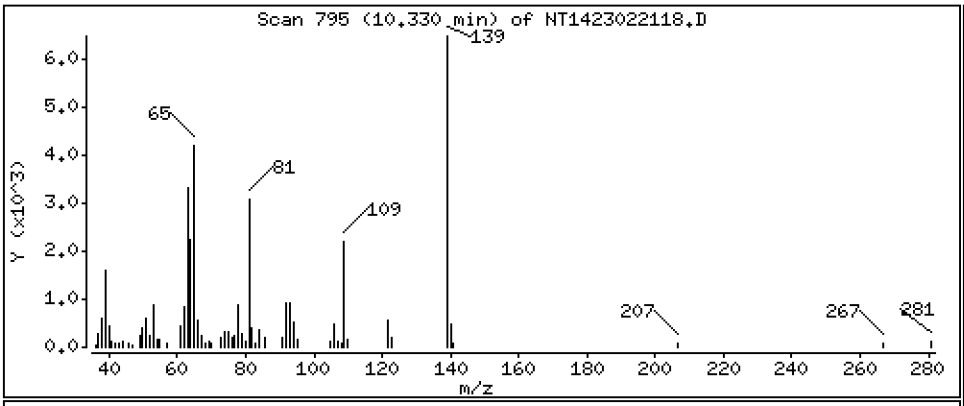
Operator: DSD

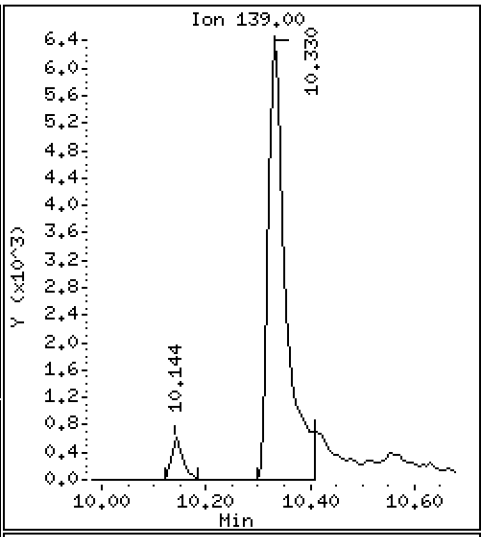
Column phase: ZB-5msi

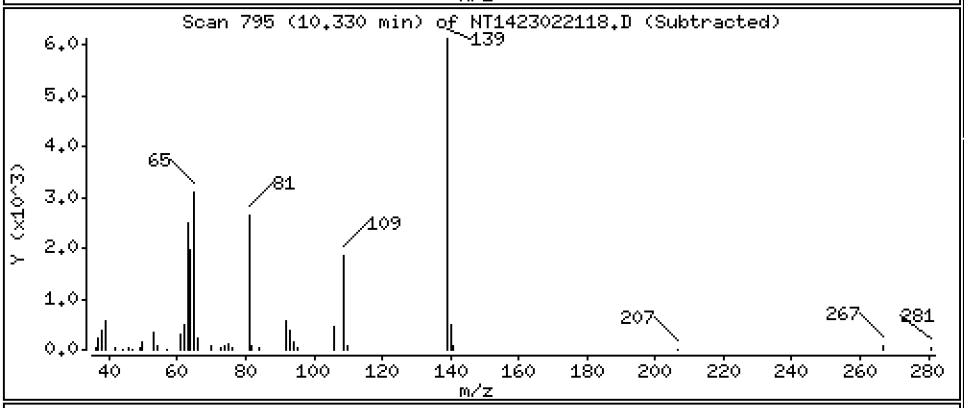
Column diameter: 0.25

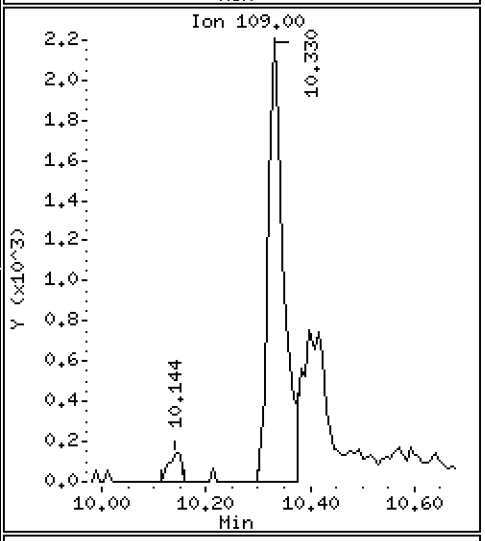
21 2-Nitrophenol

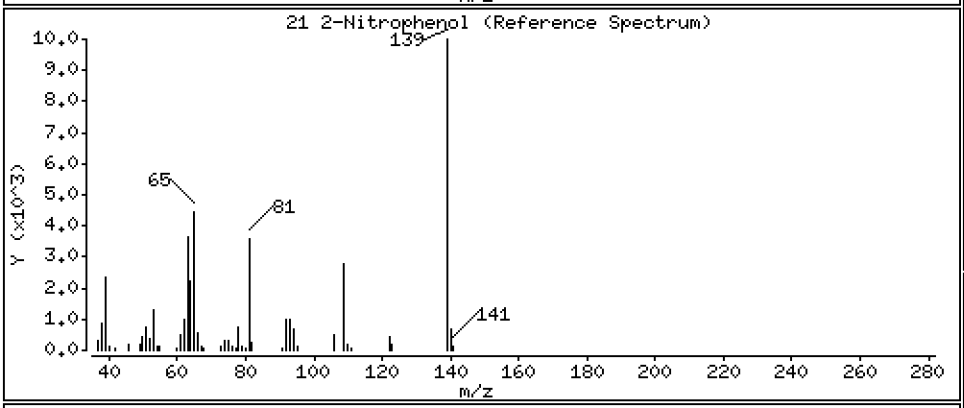
Concentration: 0.3328 ug/mL

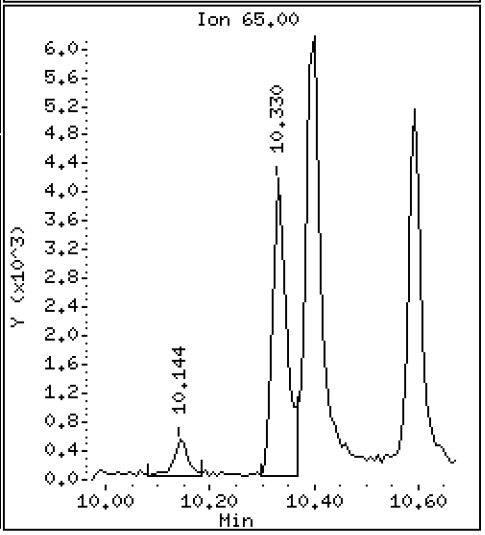


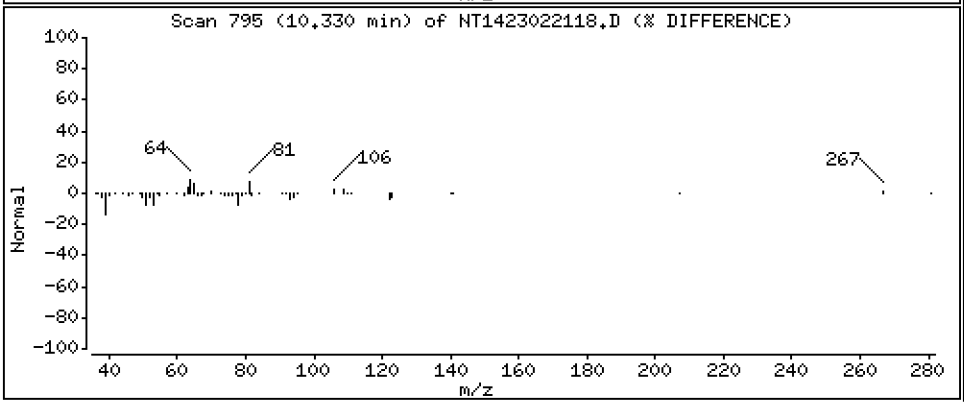












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

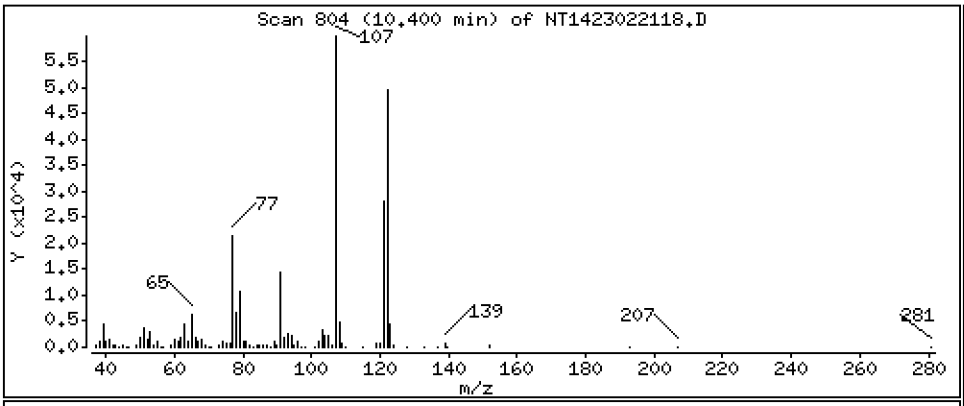
Operator: DSD

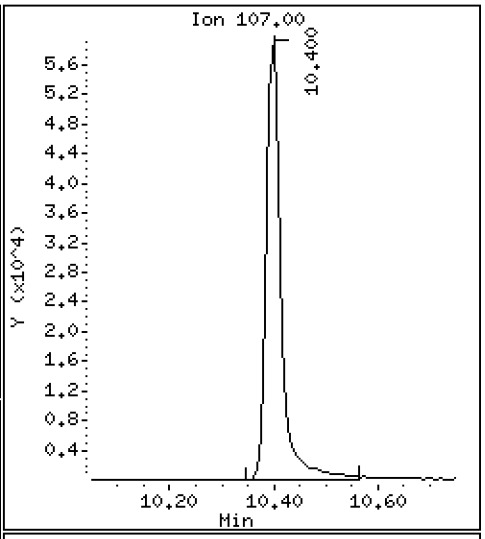
Column phase: ZB-5msi

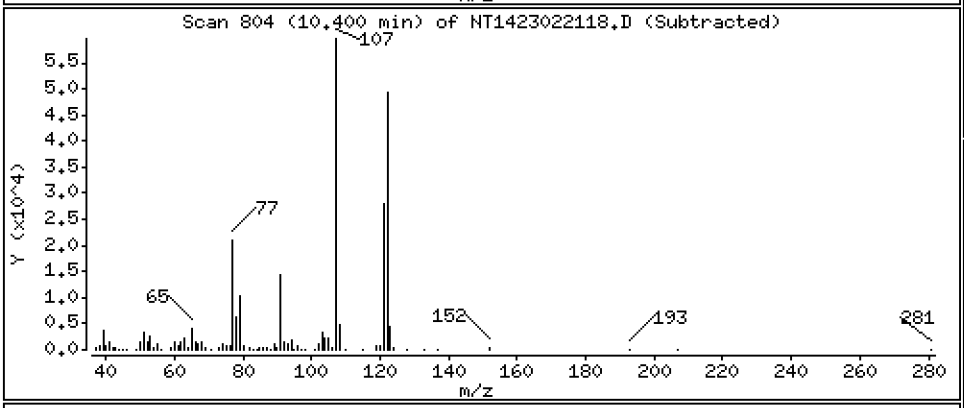
Column diameter: 0.25

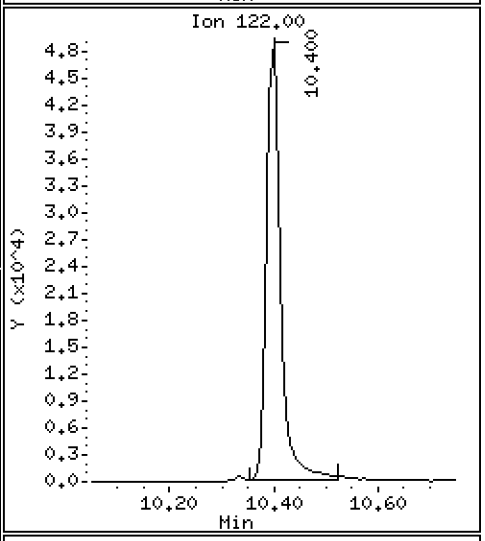
22 2,4-Dimethylphenol

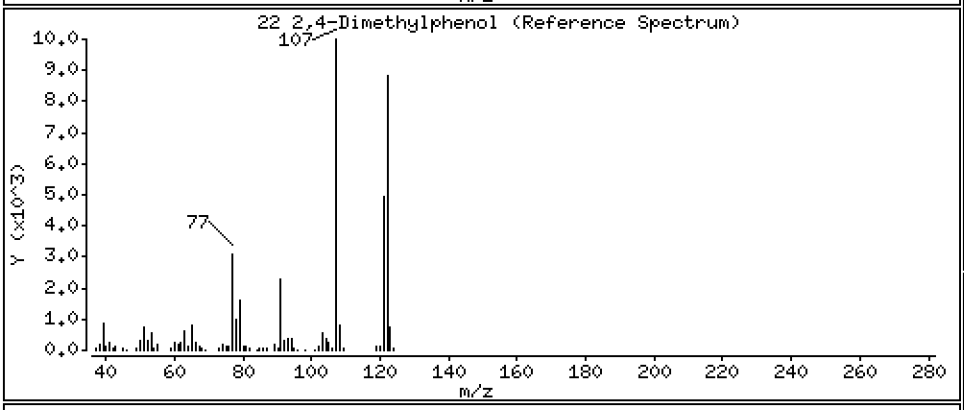
Concentration: 1.489 ug/mL

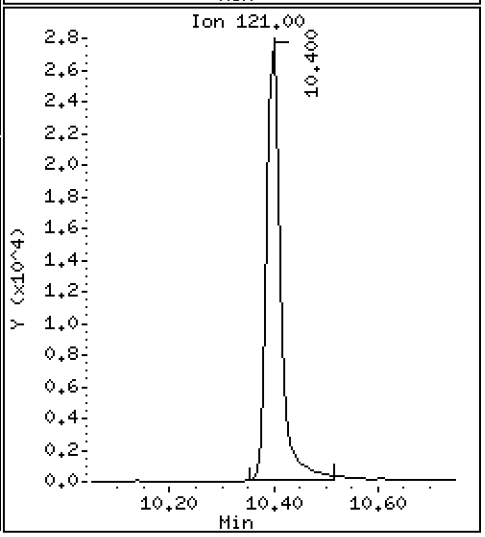


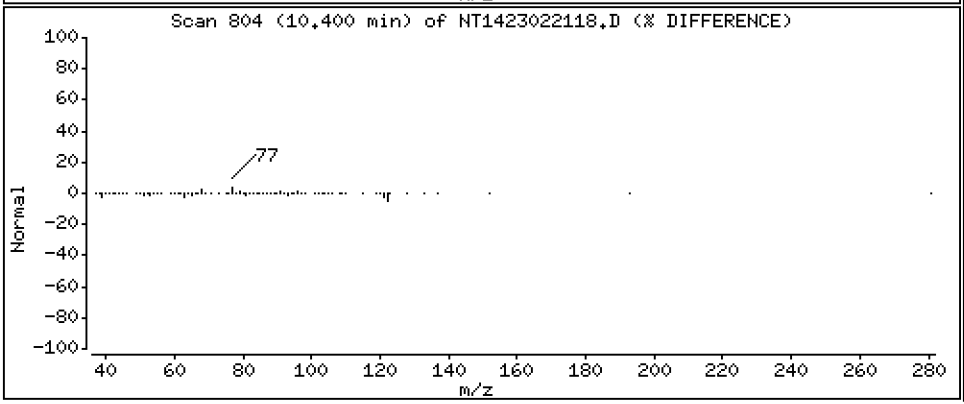












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

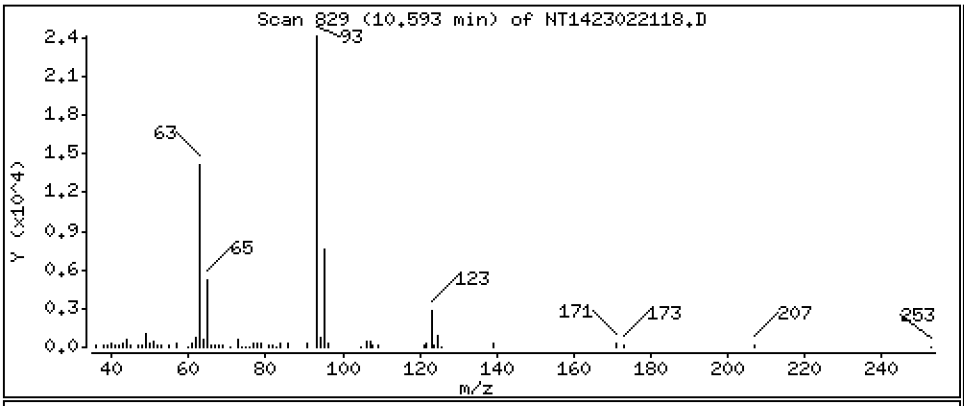
Operator: DSD

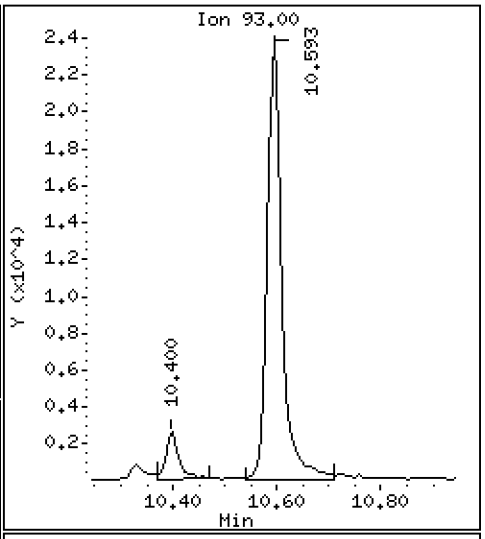
Column phase: ZB-5msi

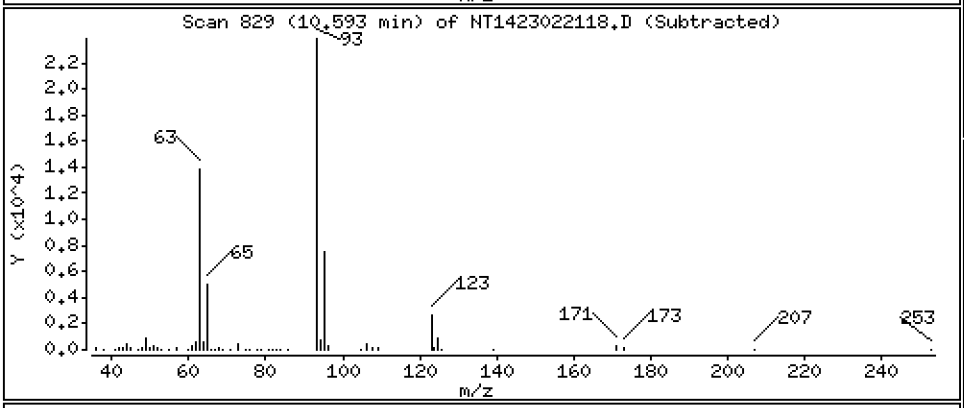
Column diameter: 0.25

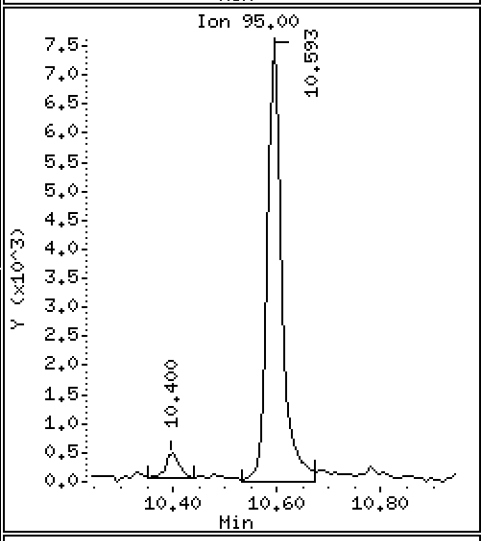
23 Bis(2-Chloroethoxy)methane

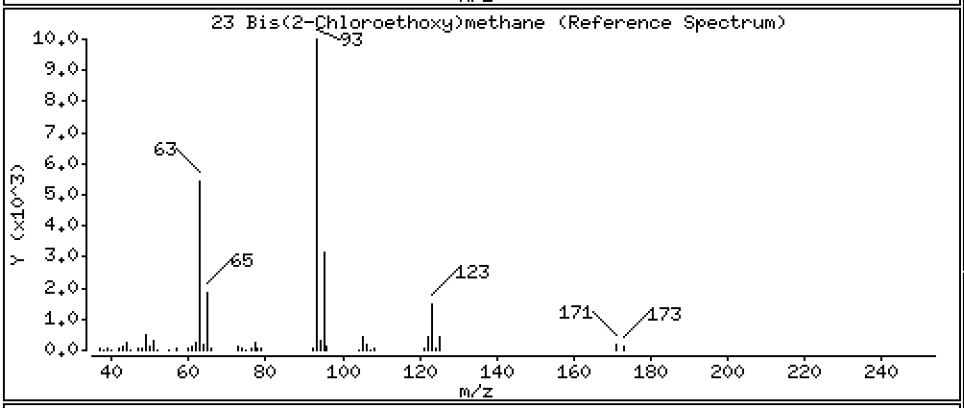
Concentration: 0.5260 ug/mL

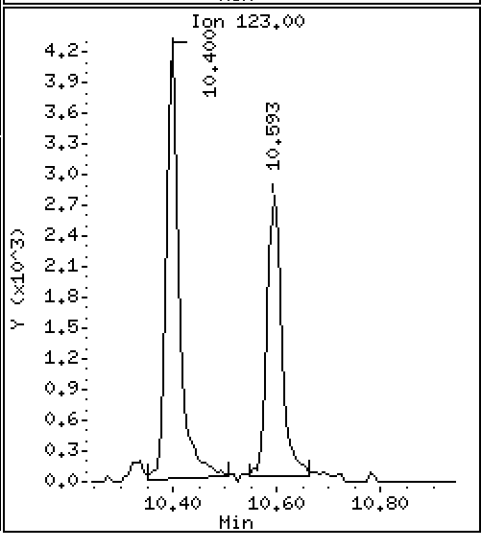


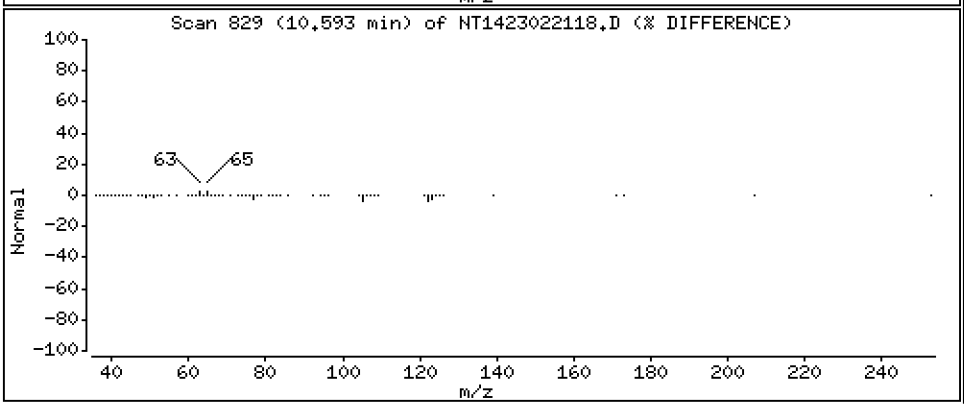












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

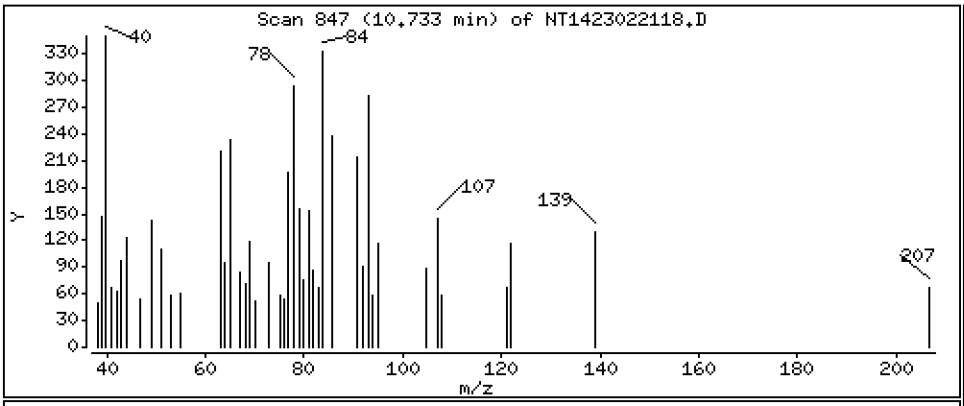
Operator: DSD

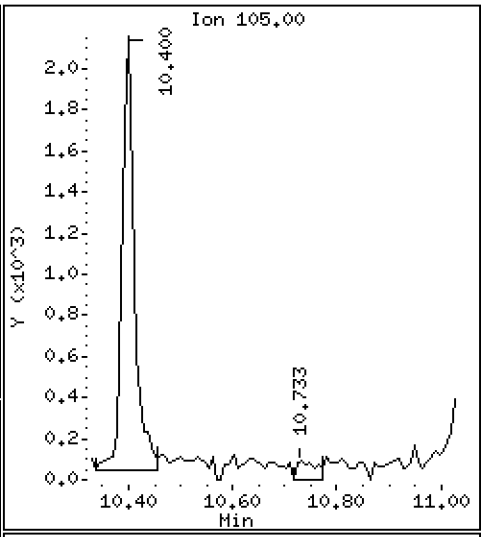
Column phase: ZB-5msi

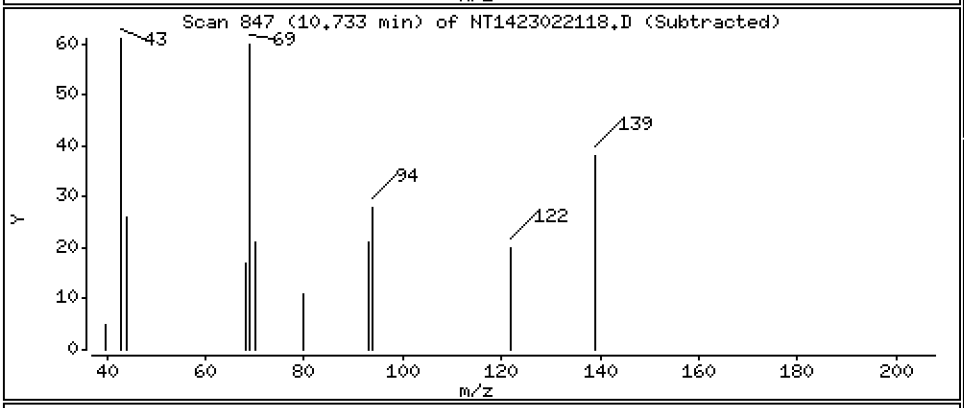
Column diameter: 0.25

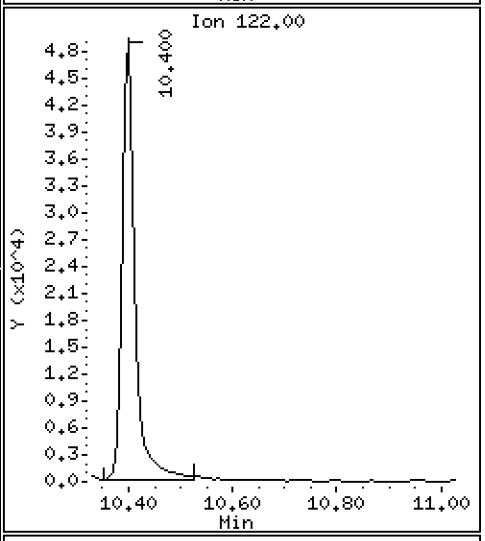
24 Benzoic acid

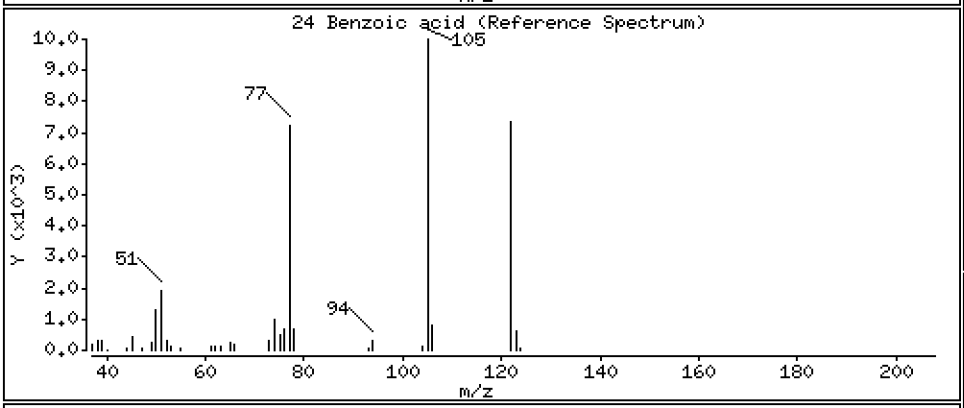
Concentration: 0.005133 ug/mL

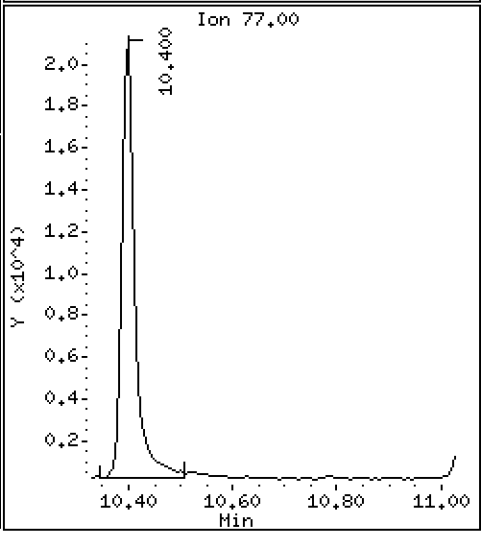


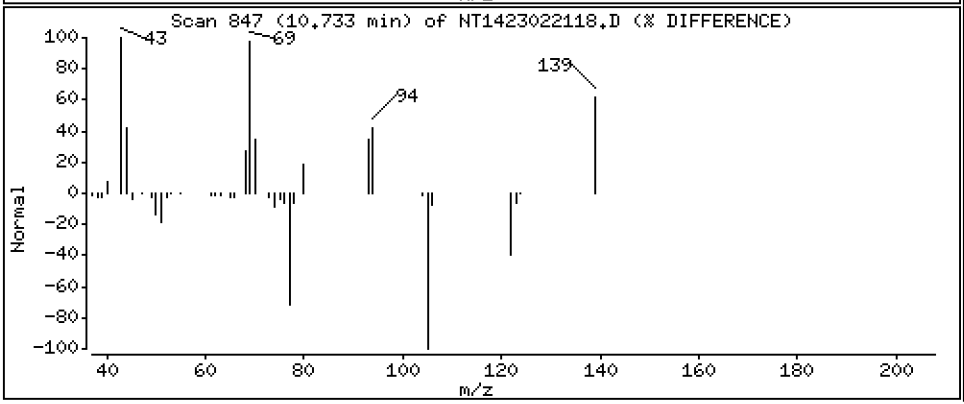












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

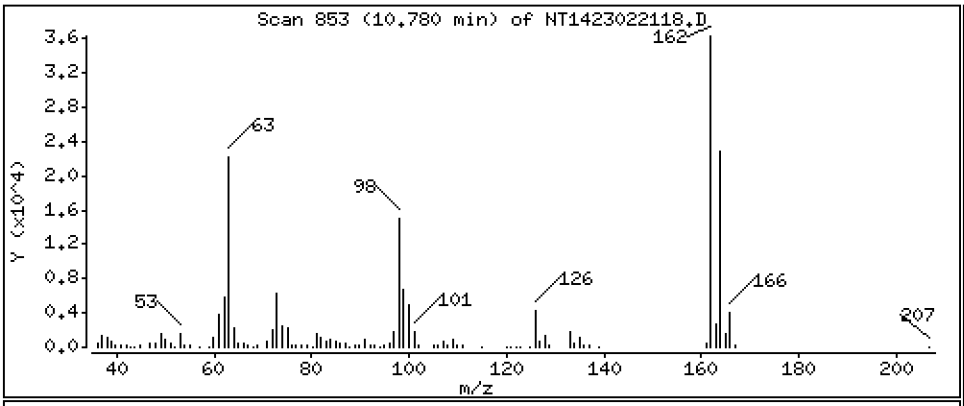
Operator: DSD

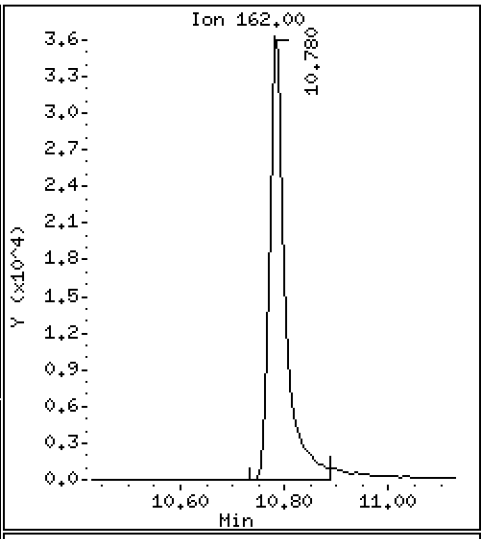
Column phase: ZB-5msi

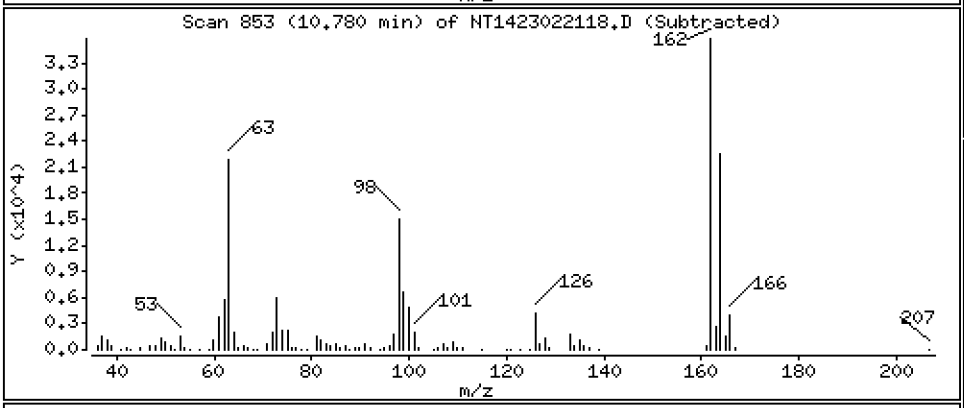
Column diameter: 0.25

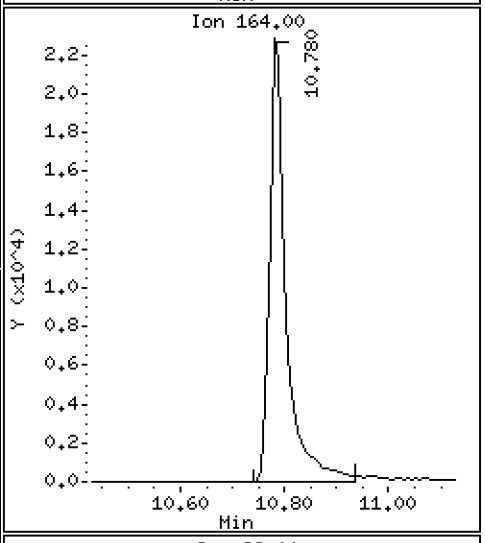
25 2,4-Dichlorophenol

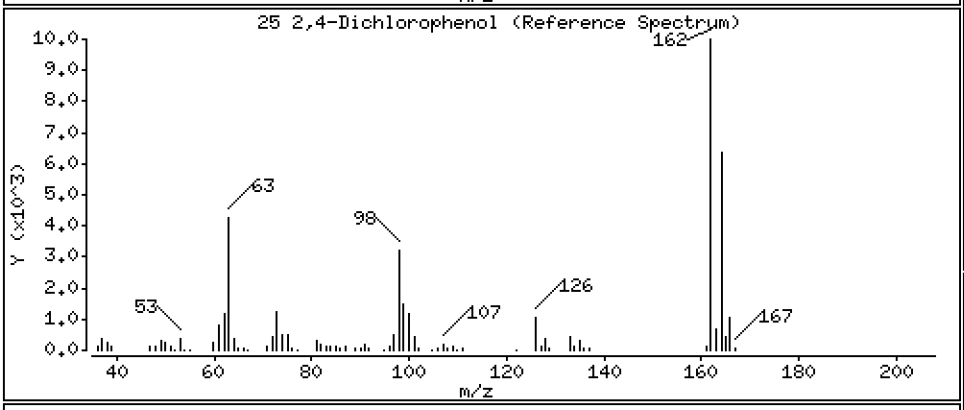
Concentration: 1.203 ug/mL

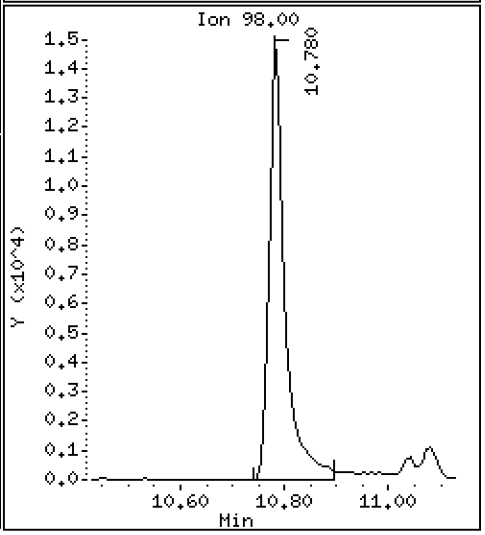


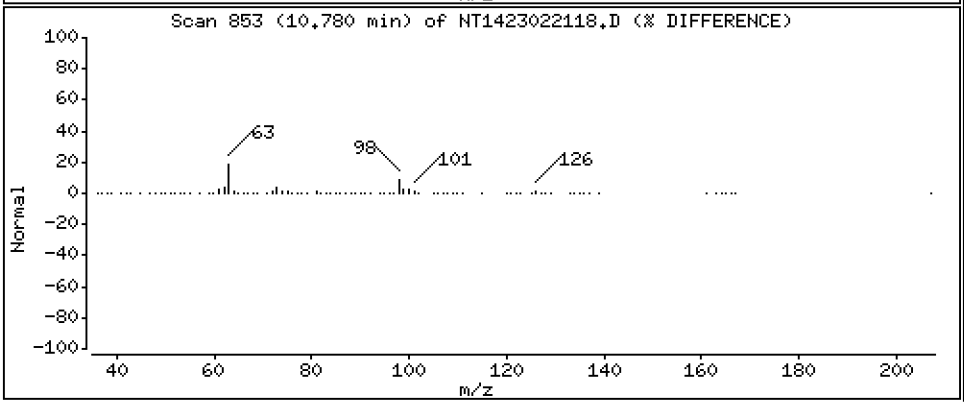












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

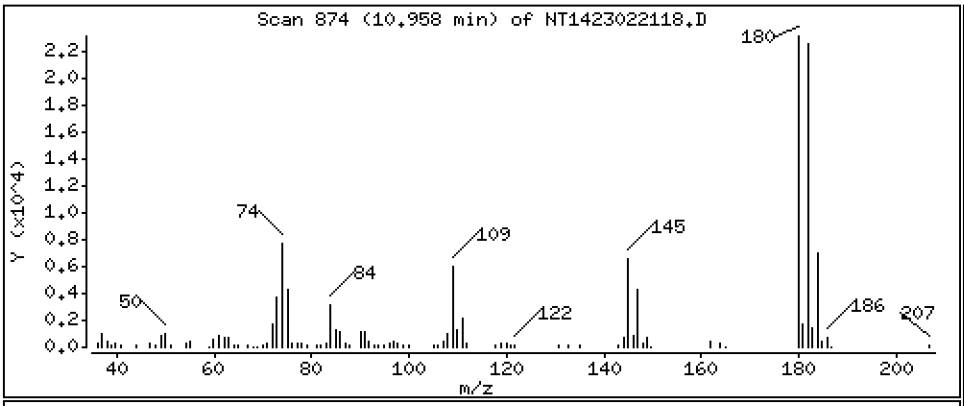
Operator: DSD

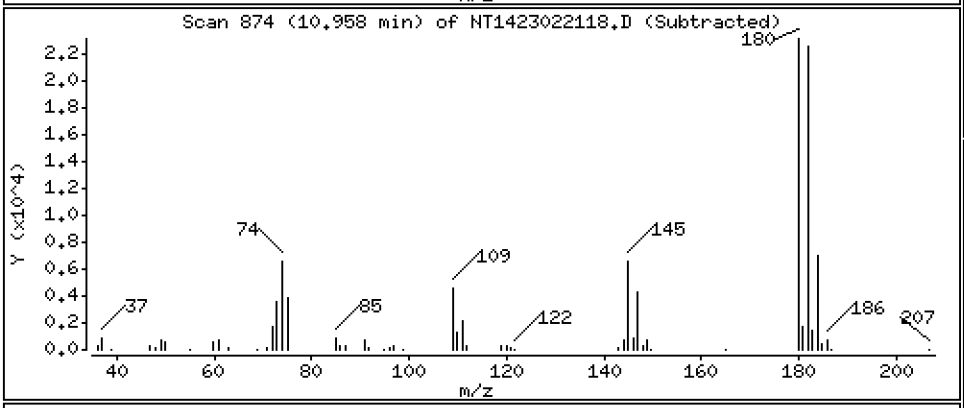
Column phase: ZB-5msi

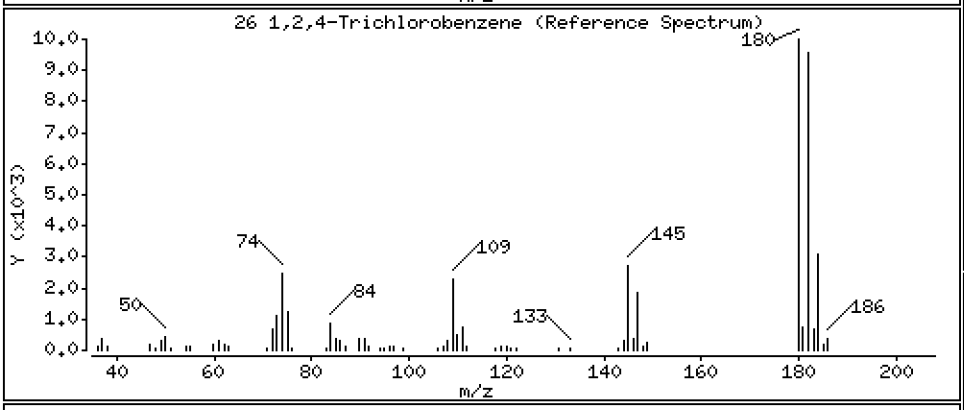
Column diameter: 0.25

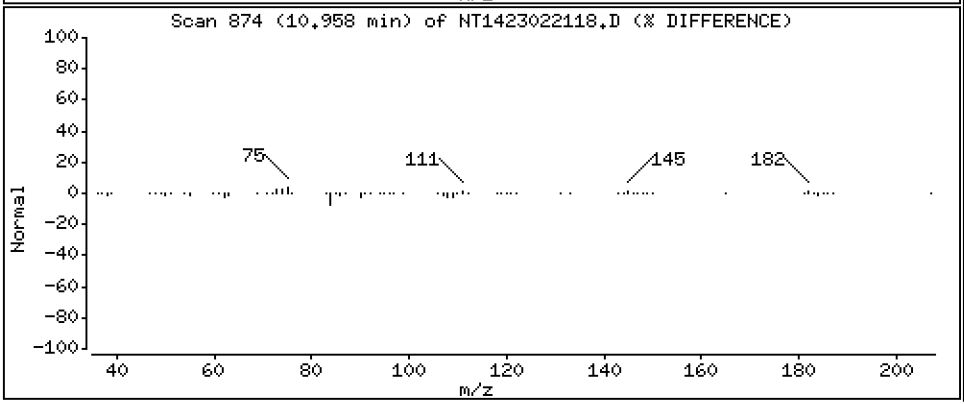
26 1,2,4-Trichlorobenzene

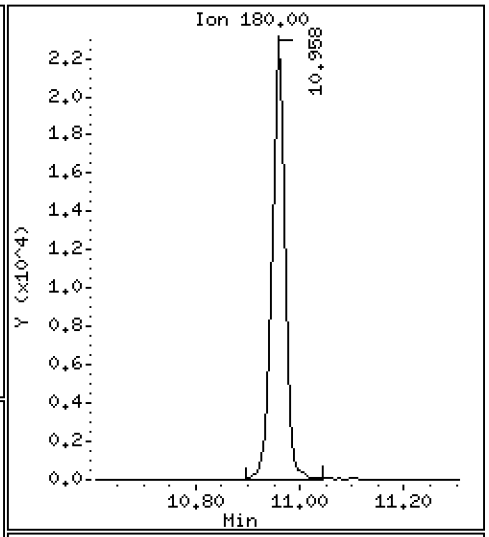
Concentration: 0.5658 ug/mL

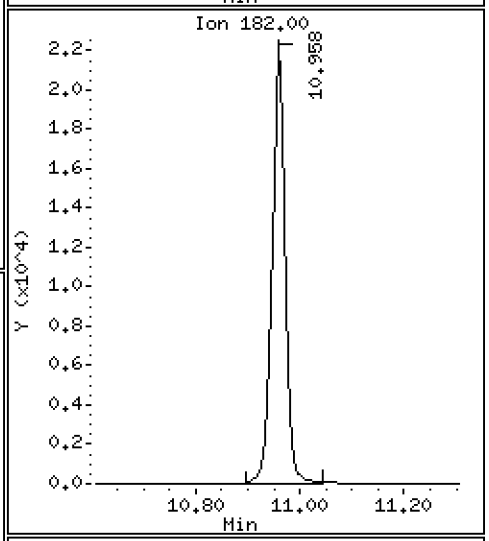


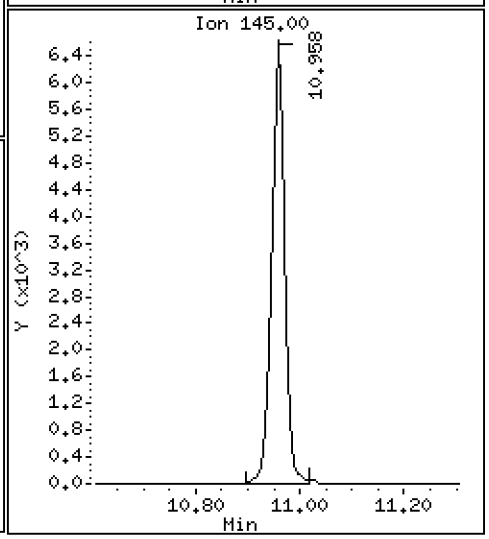












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

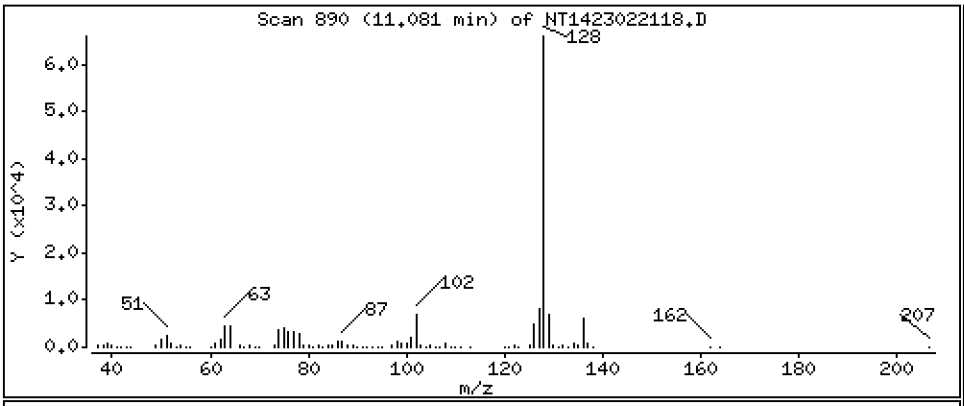
Operator: DSD

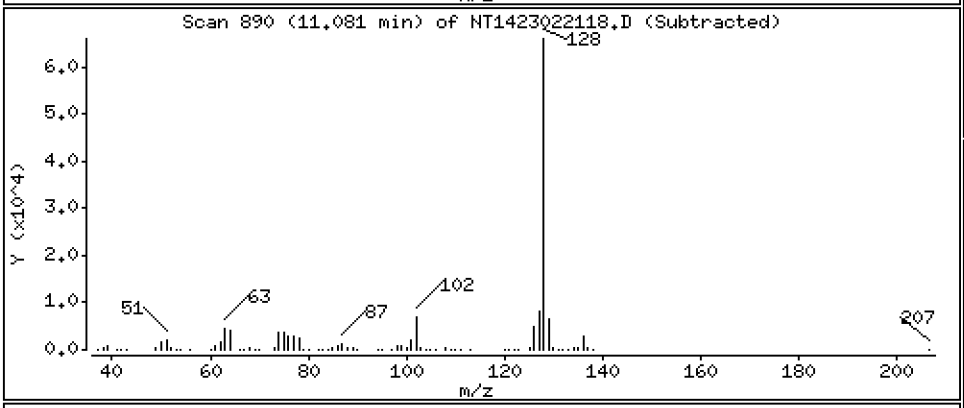
Column phase: ZB-5msi

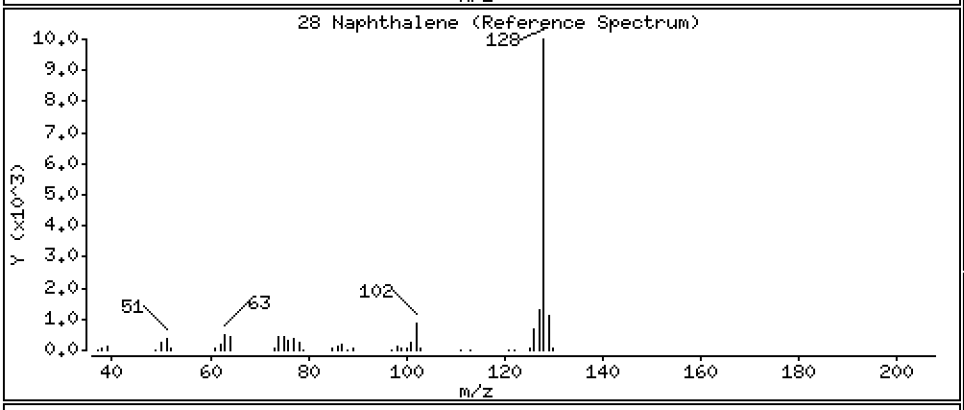
Column diameter: 0.25

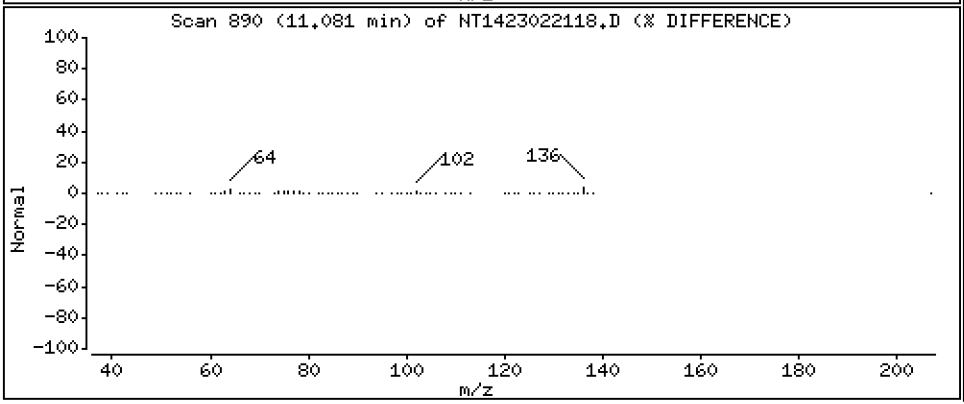
28 Naphthalene

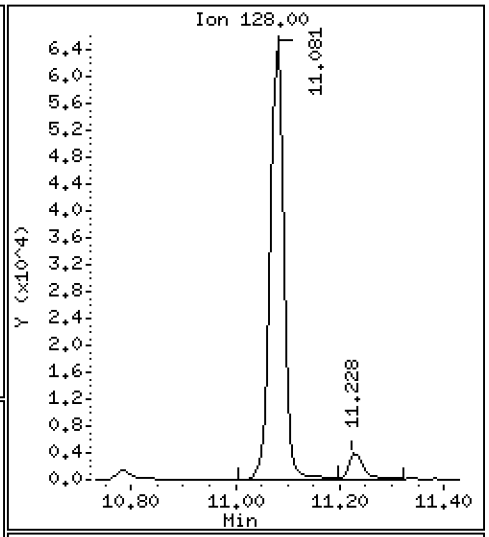
Concentration: 0.5407 ug/mL

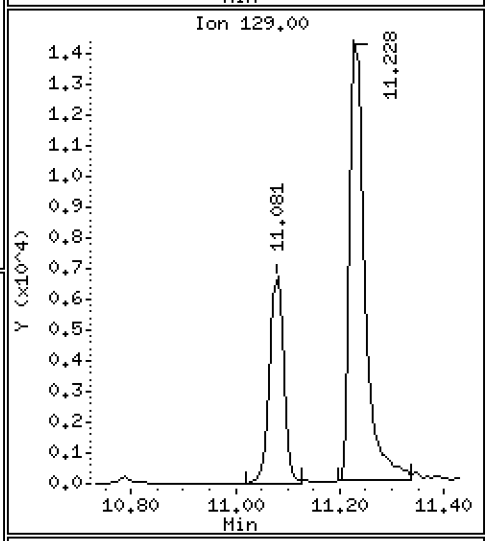


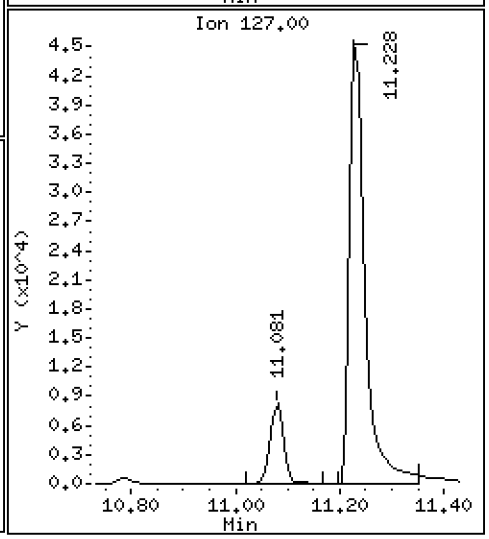












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

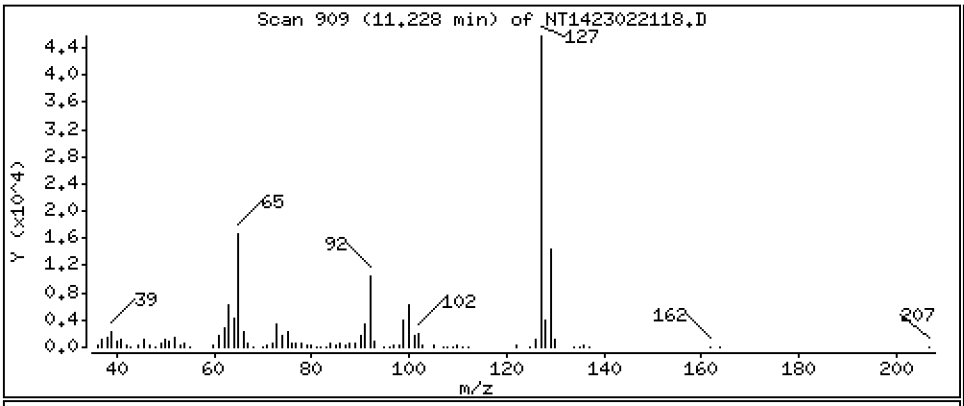
Operator: DSD

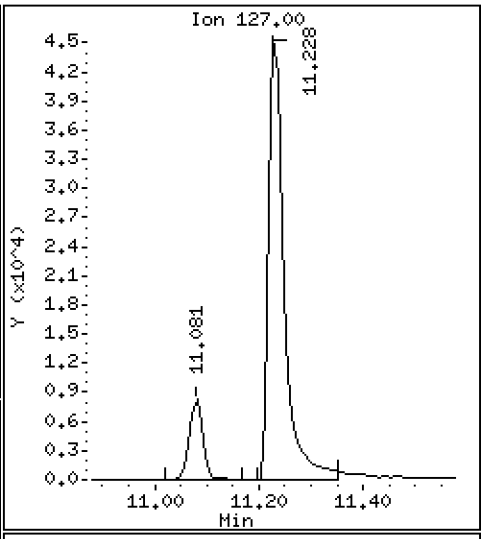
Column phase: ZB-5msi

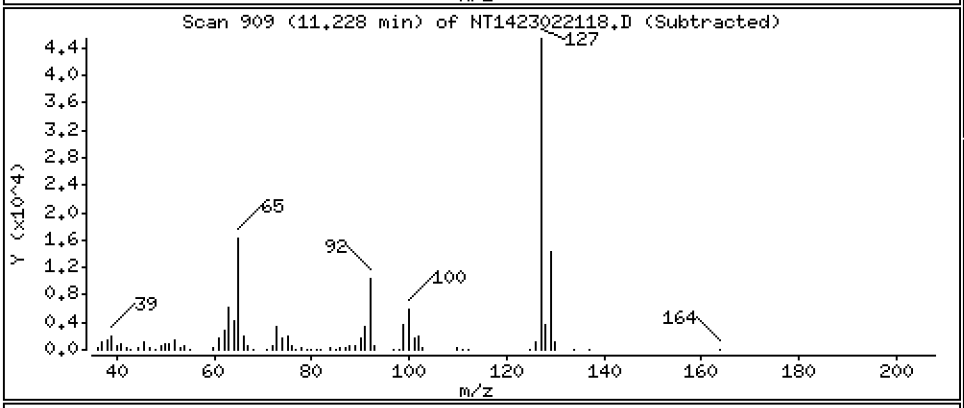
Column diameter: 0.25

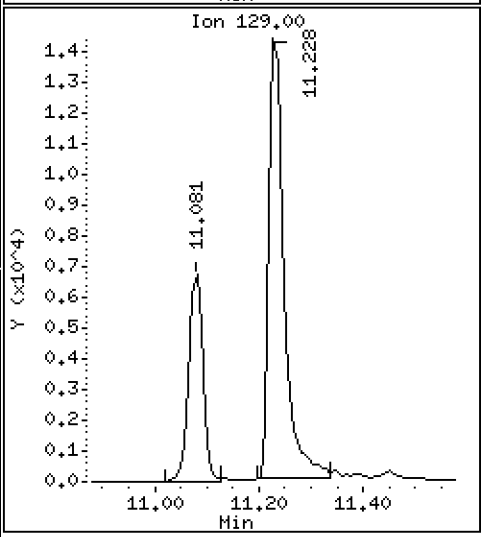
29 4-Chloroaniline

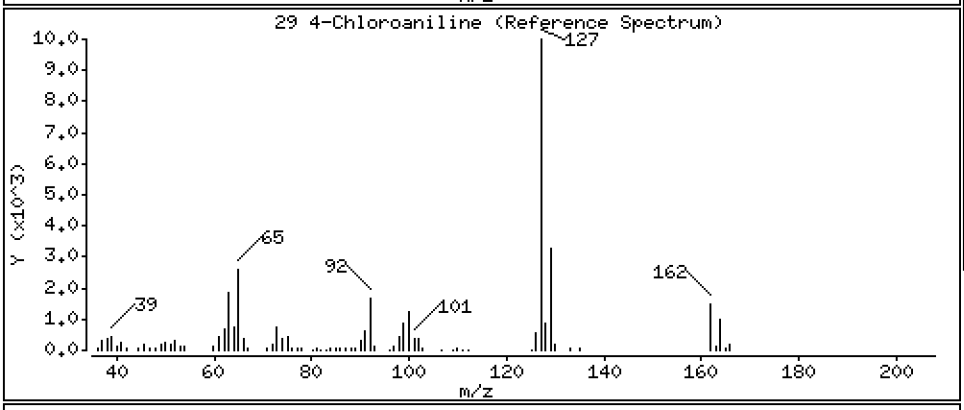
Concentration: 1.013 ug/mL

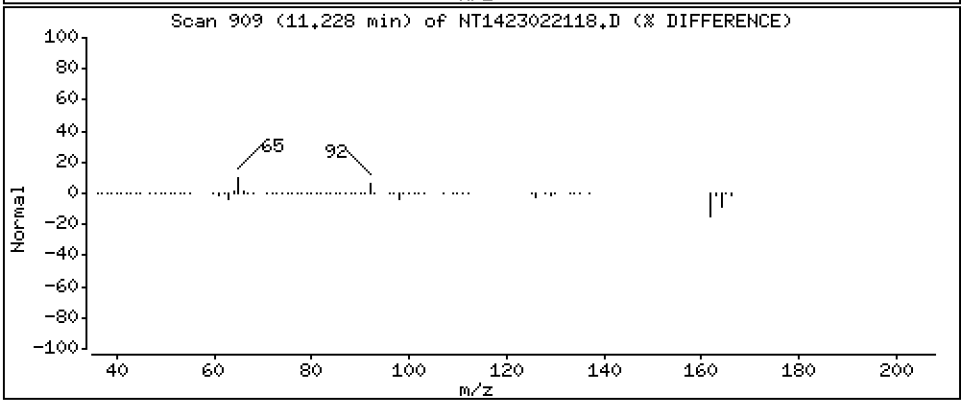












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

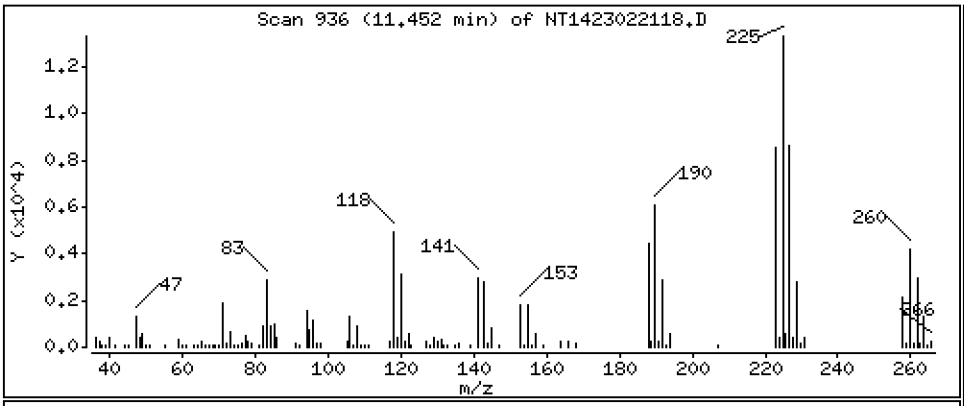
Operator: DSD

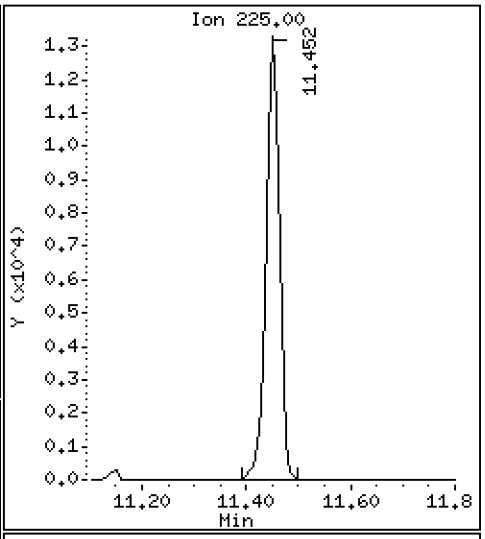
Column phase: ZB-5msi

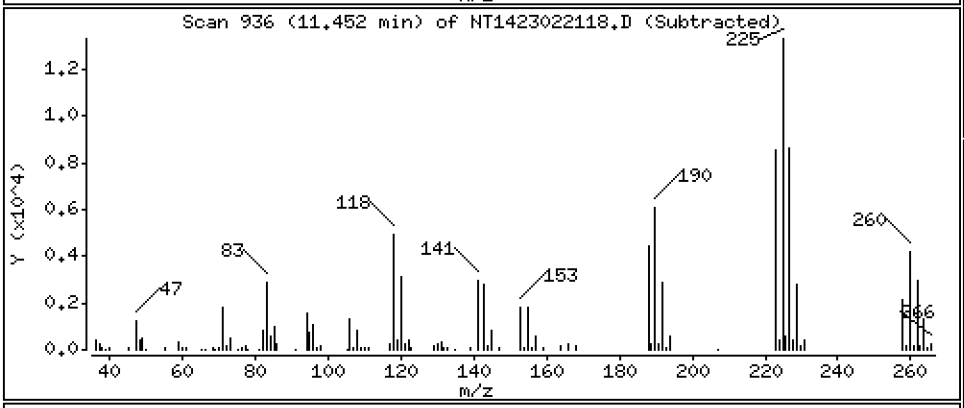
Column diameter: 0.25

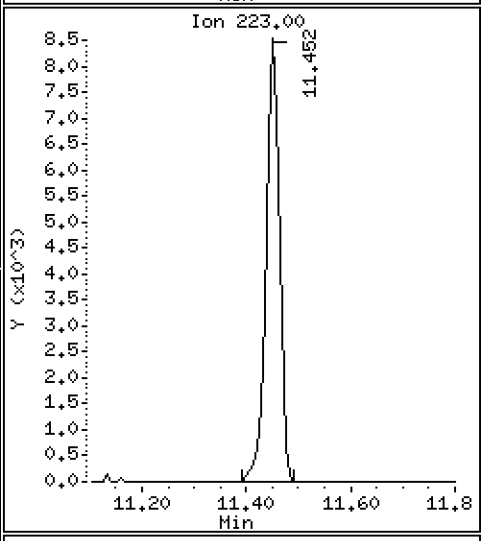
30 Hexachlorobutadiene

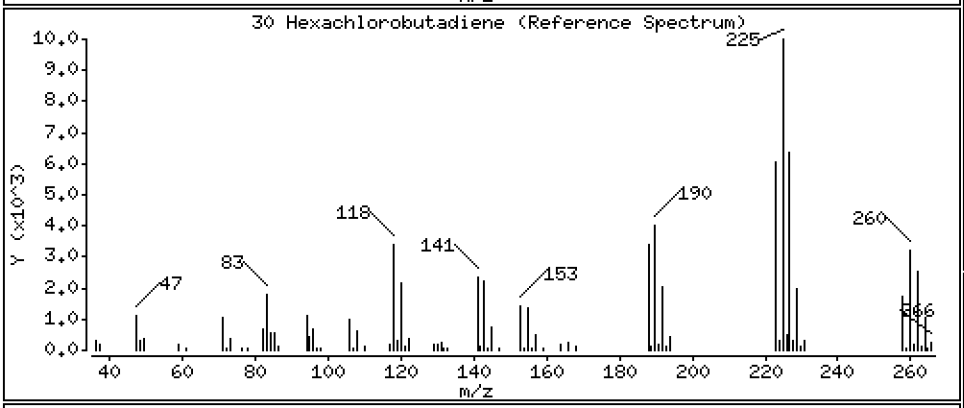
Concentration: 0.5657 ug/mL

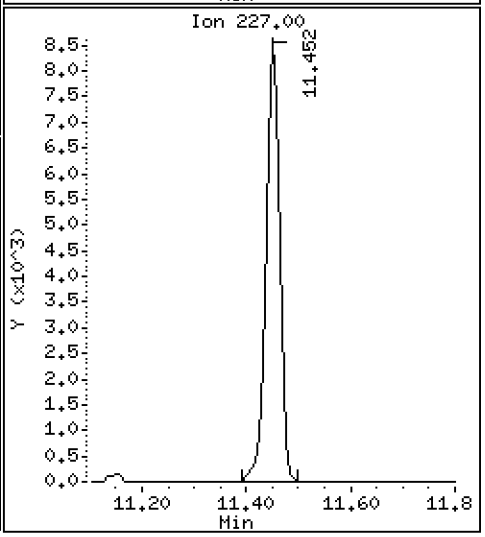


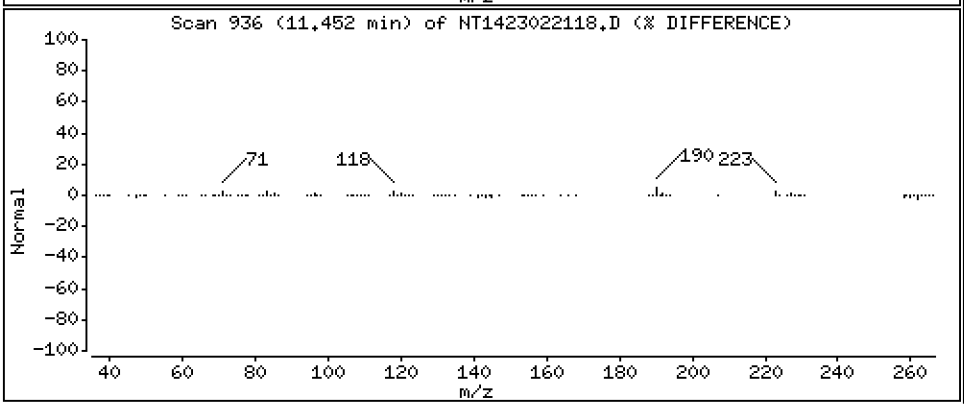












Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022118.D

Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

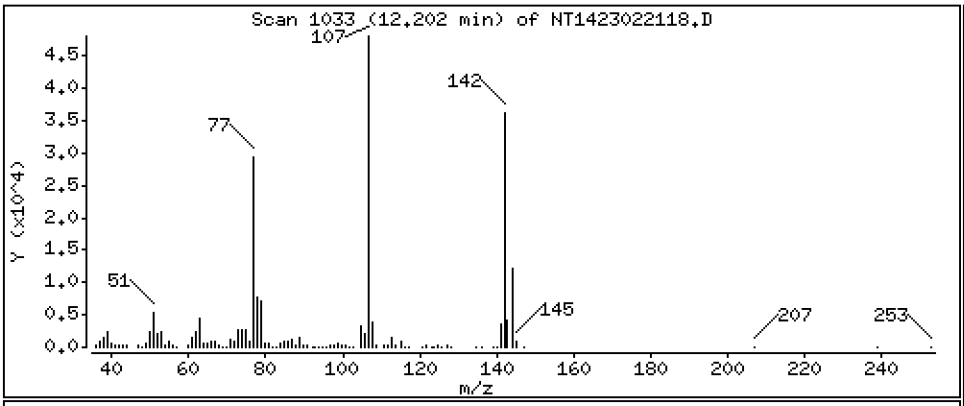
Operator: DSD

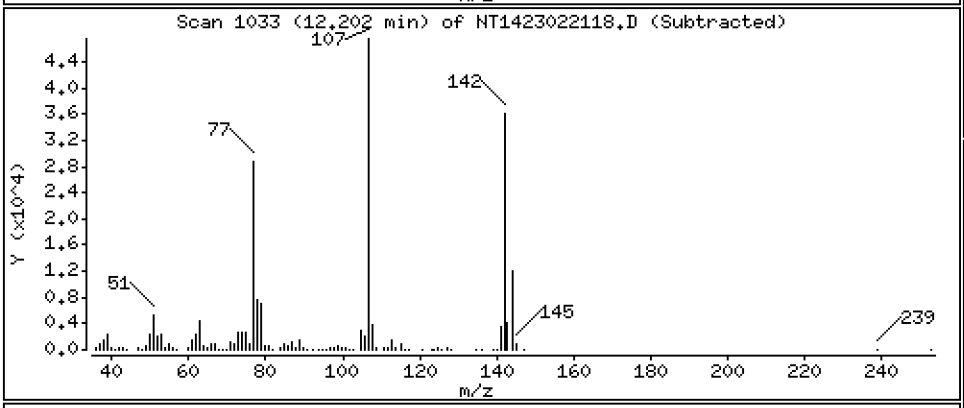
Column phase: ZB-5msi

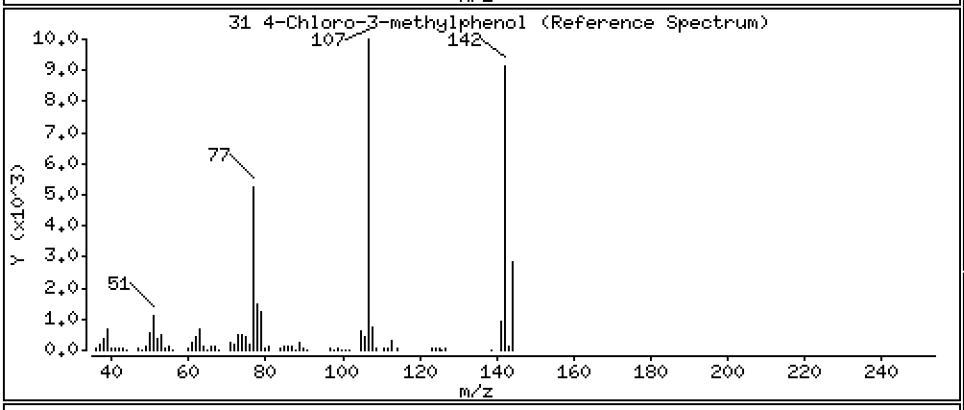
Column diameter: 0.25

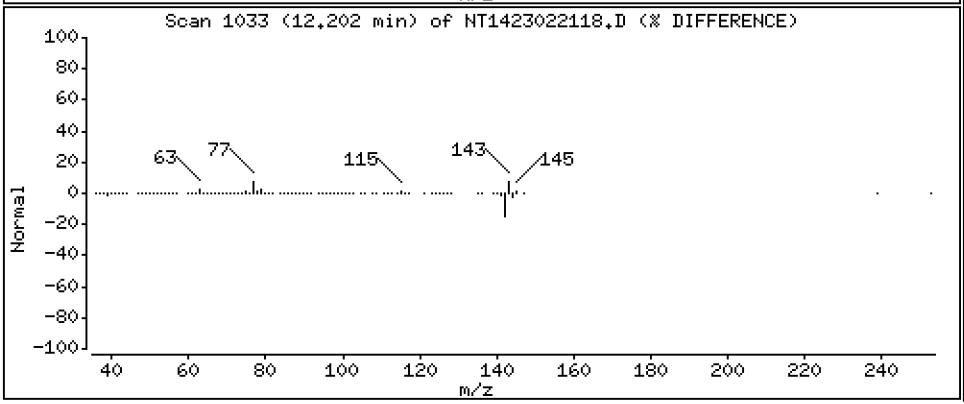
31 4-Chloro-3-methylphenol

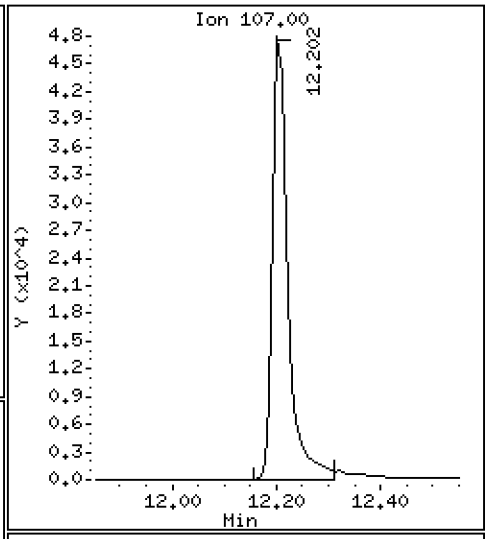
Concentration: 1.357 ug/mL

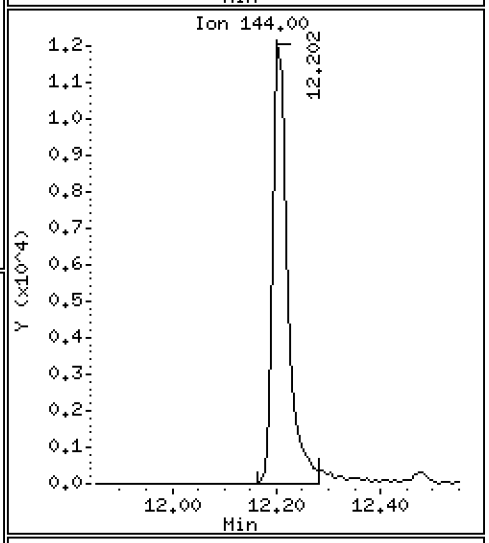


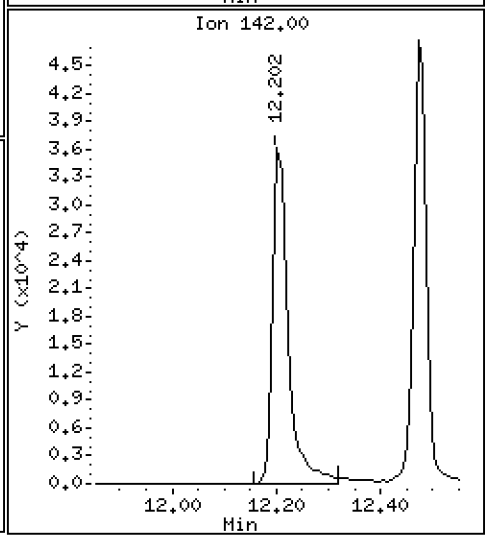












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

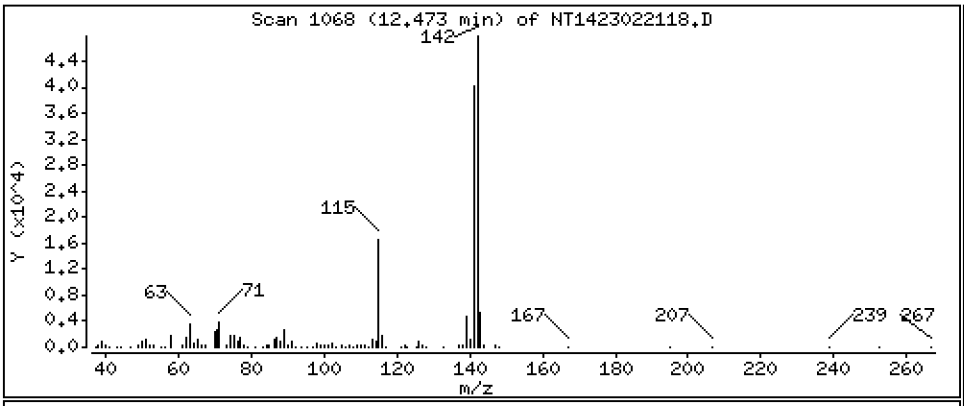
Operator: DSD

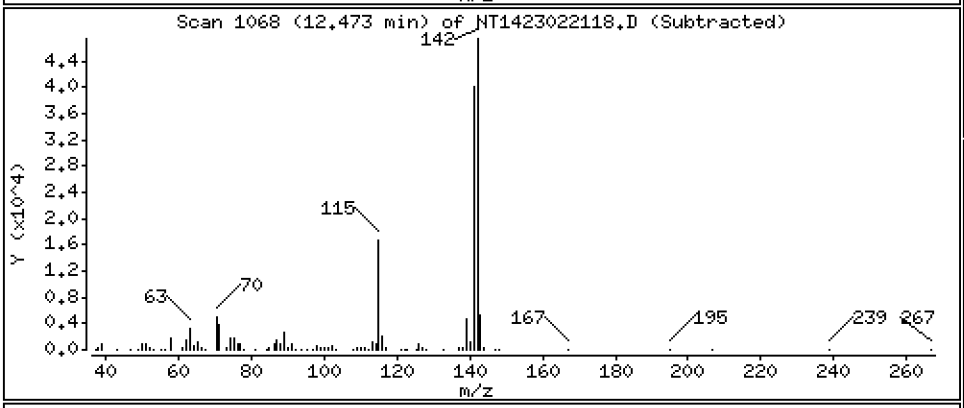
Column phase: ZB-5msi

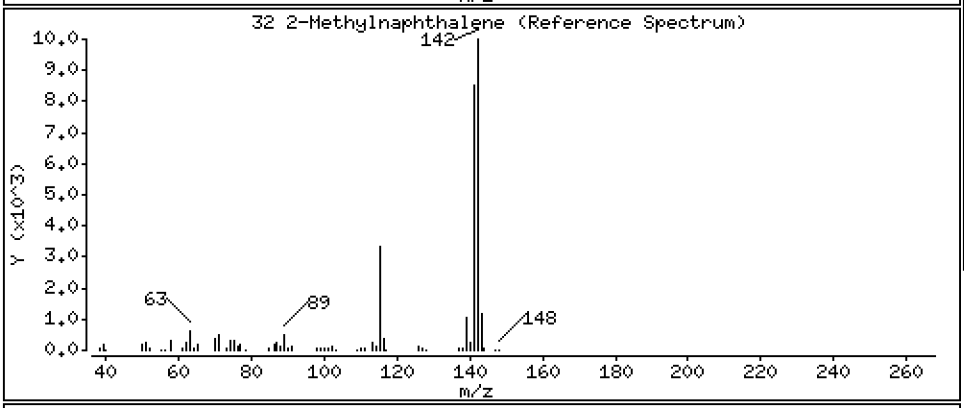
Column diameter: 0.25

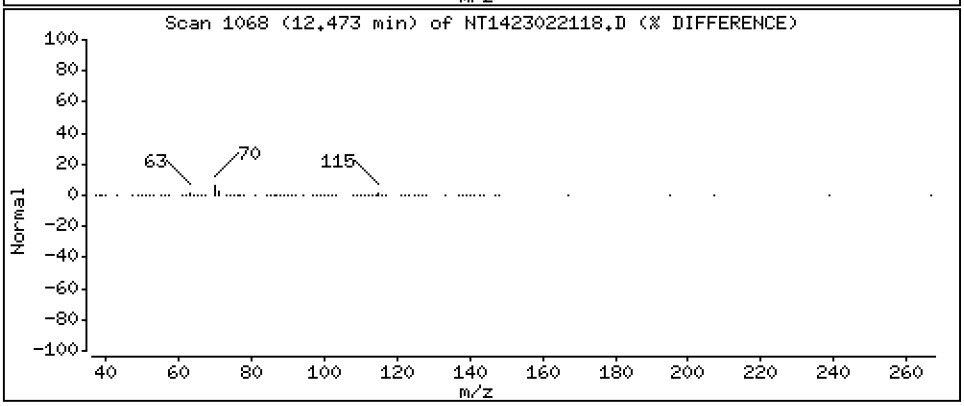
32 2-Methylnaphthalene

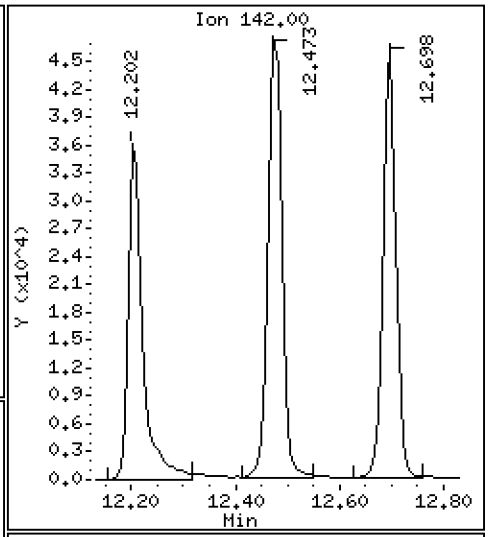
Concentration: 0.5346 ug/mL

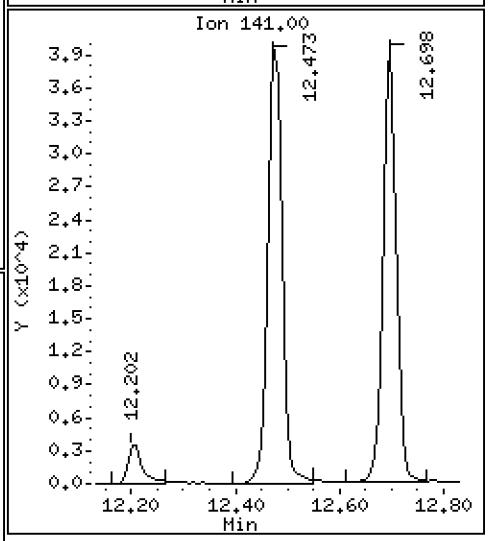












Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022118.D

Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

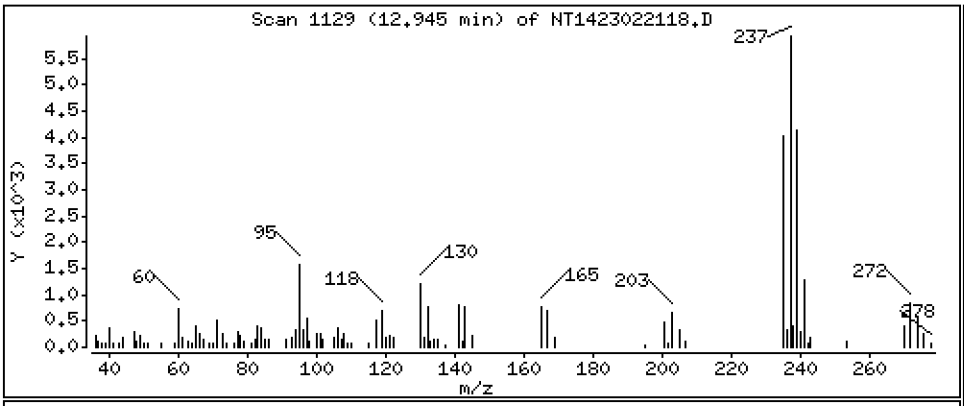
Operator: DSD

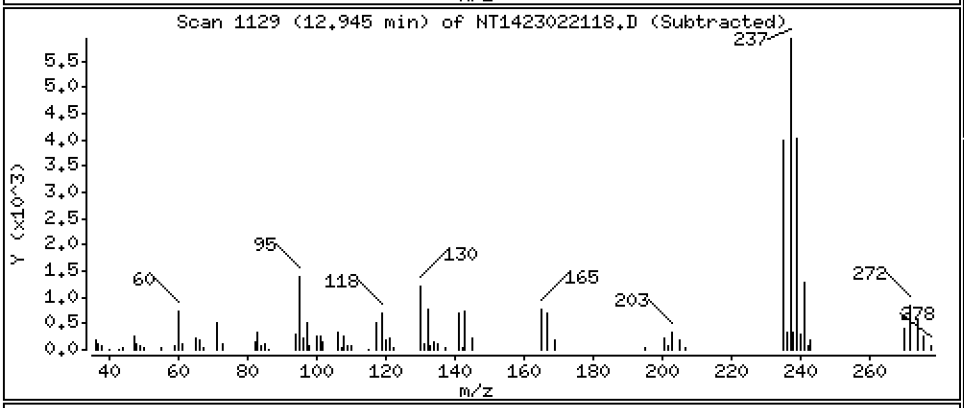
Column phase: ZB-5msi

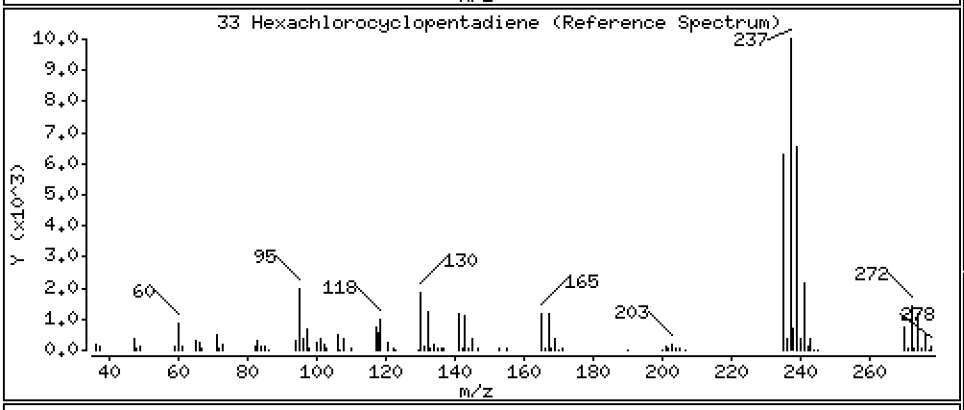
Column diameter: 0.25

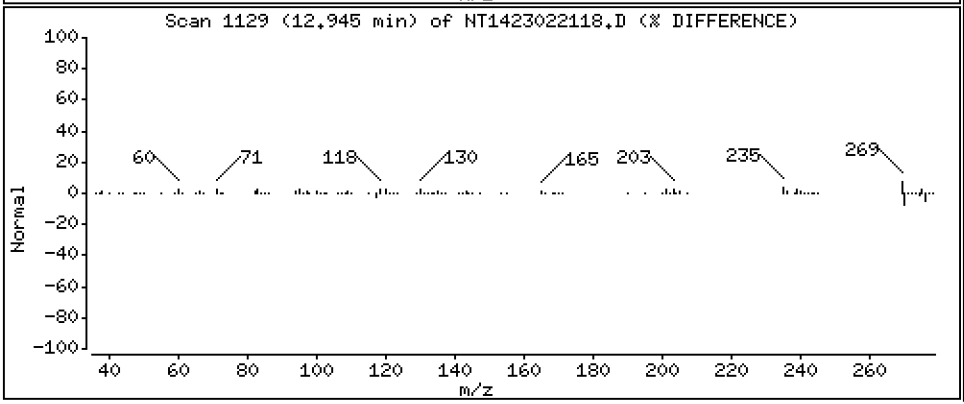
33 Hexachlorocyclopentadiene

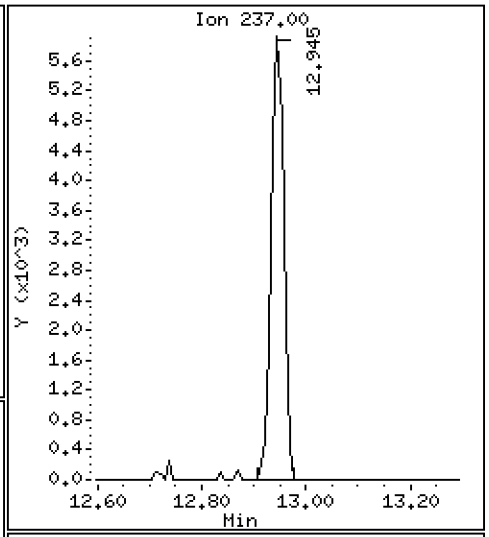
Concentration: 0.1923 ug/mL

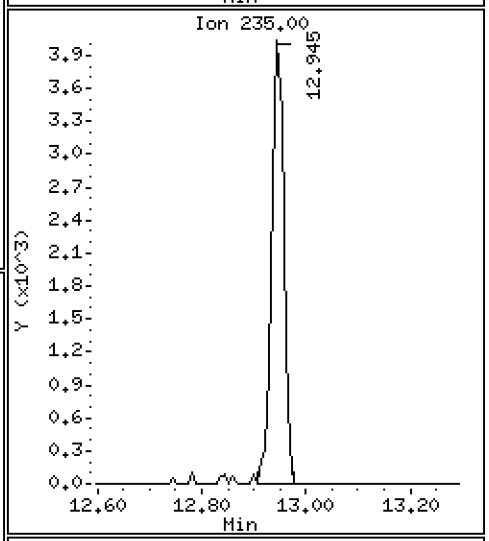


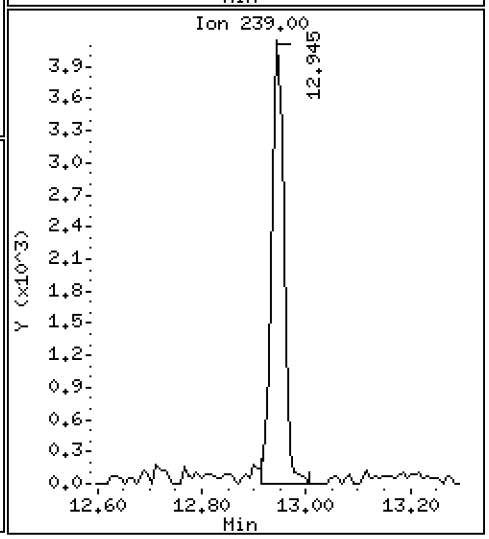












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

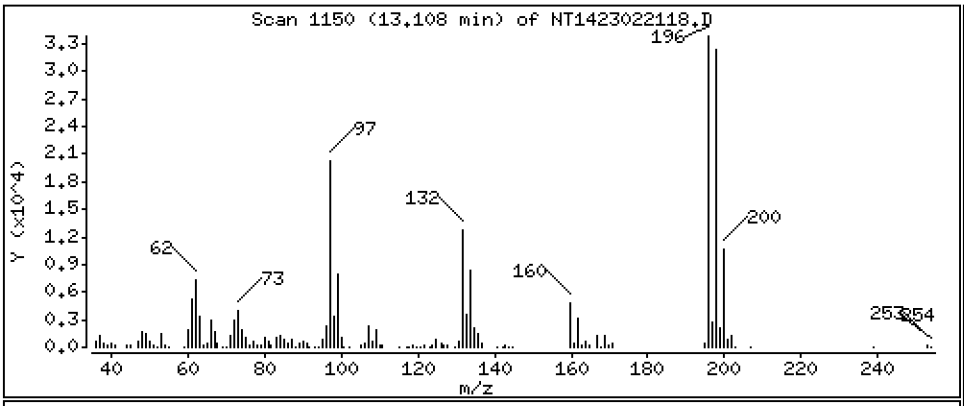
Operator: DSD

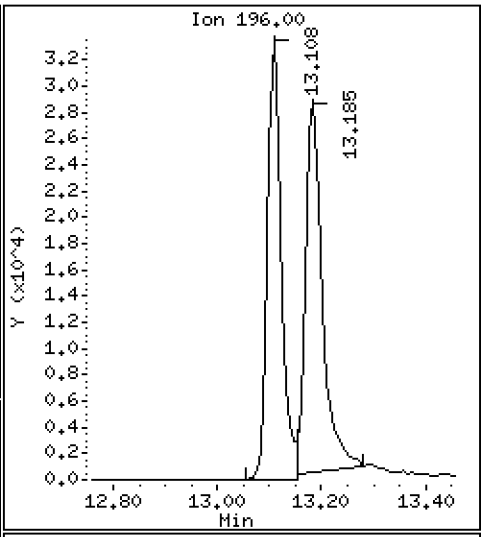
Column phase: ZB-5msi

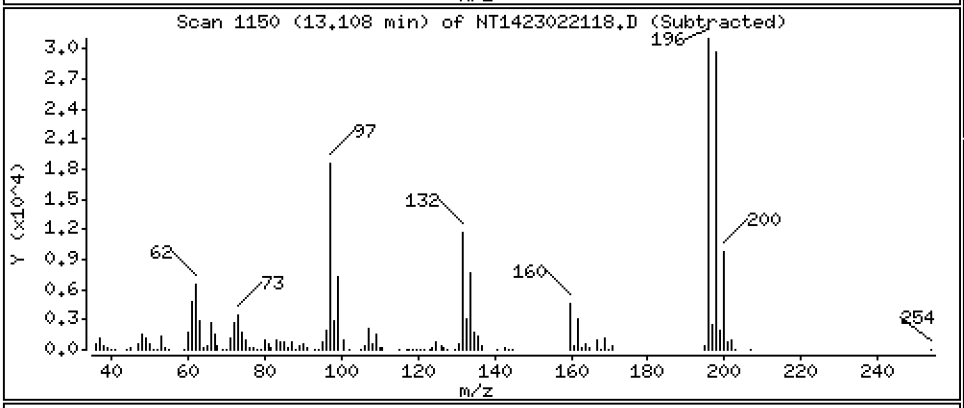
Column diameter: 0.25

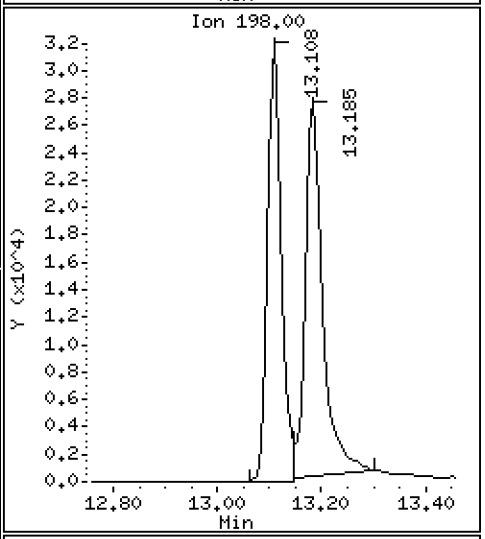
34 2,4,6-Trichlorophenol

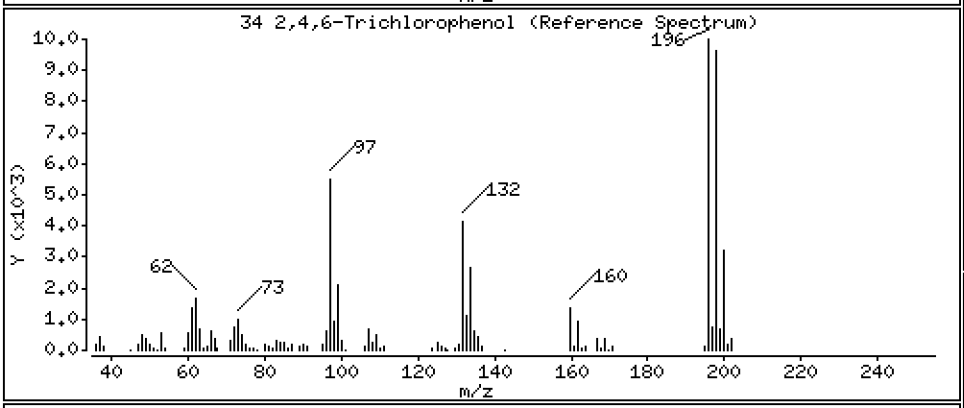
Concentration: 1.198 ug/mL

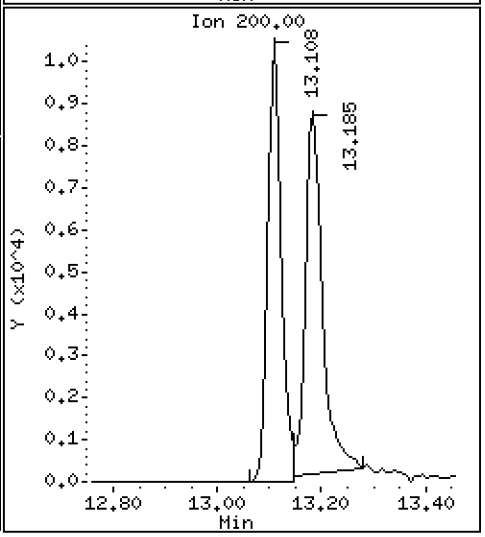


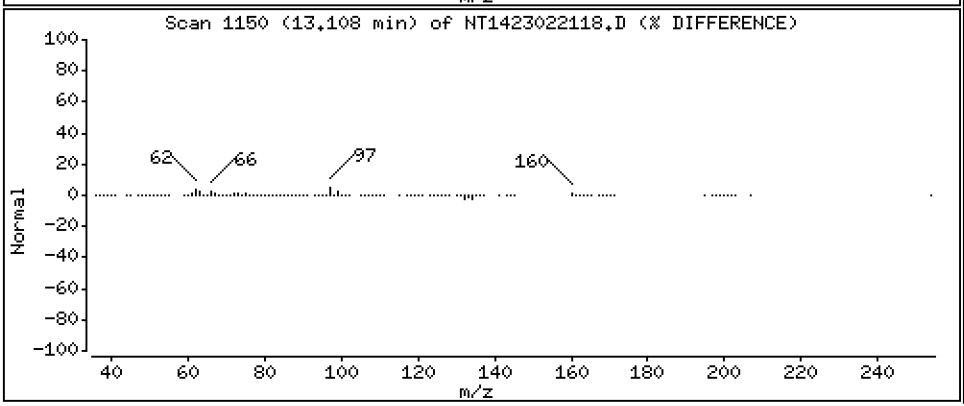












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

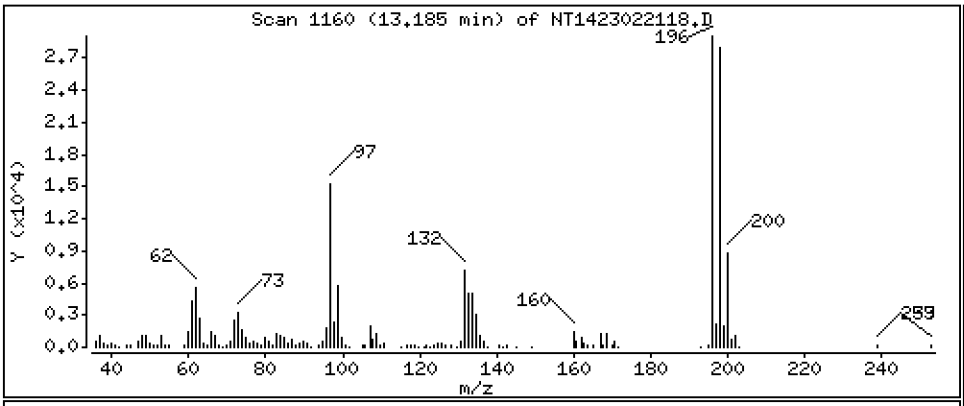
Operator: DSD

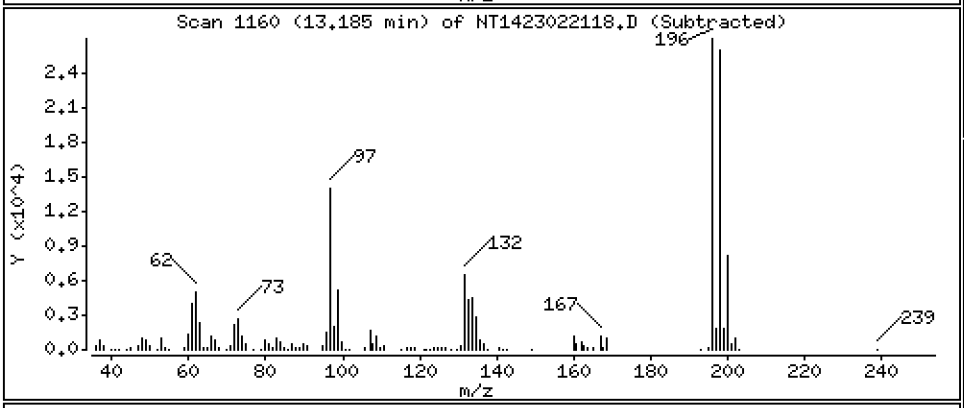
Column phase: ZB-5msi

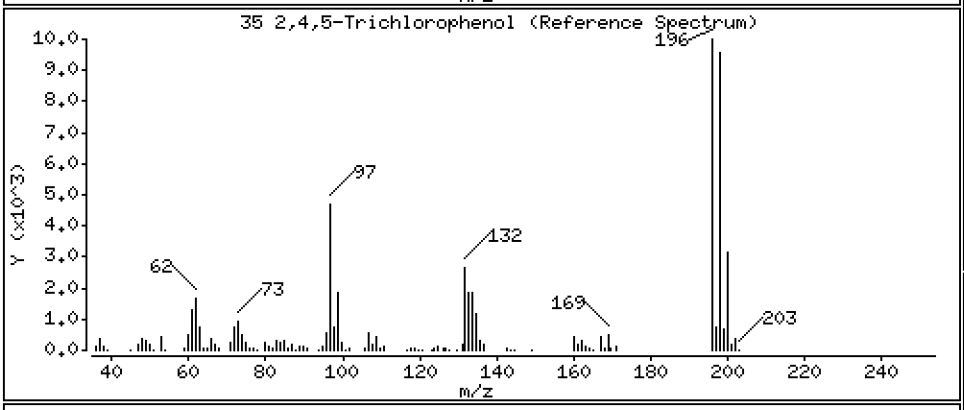
Column diameter: 0.25

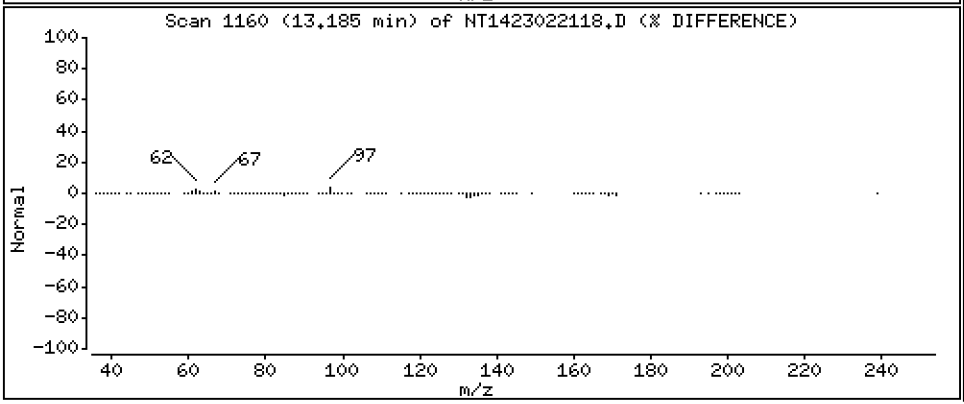
35 2,4,5-Trichlorophenol

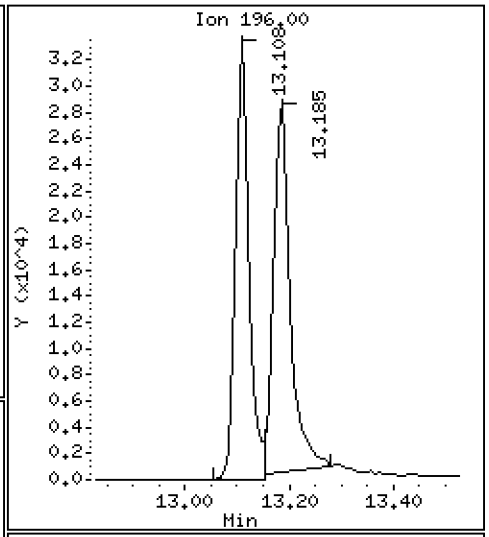
Concentration: 1.128 ug/mL

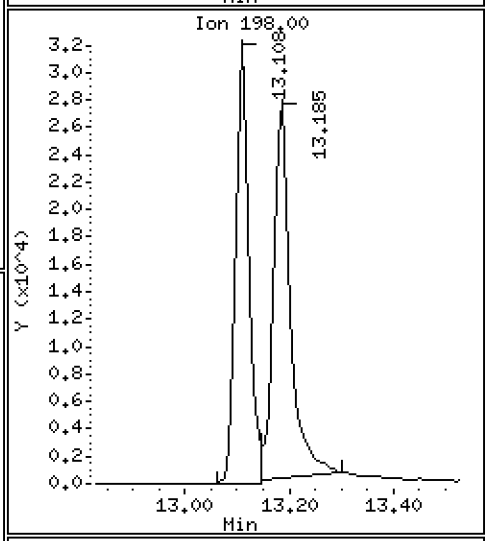


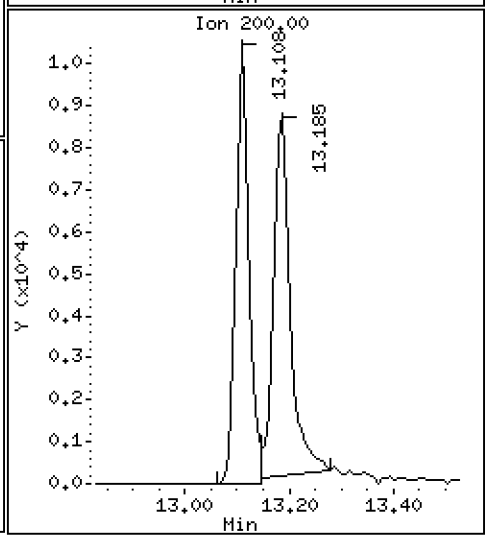












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

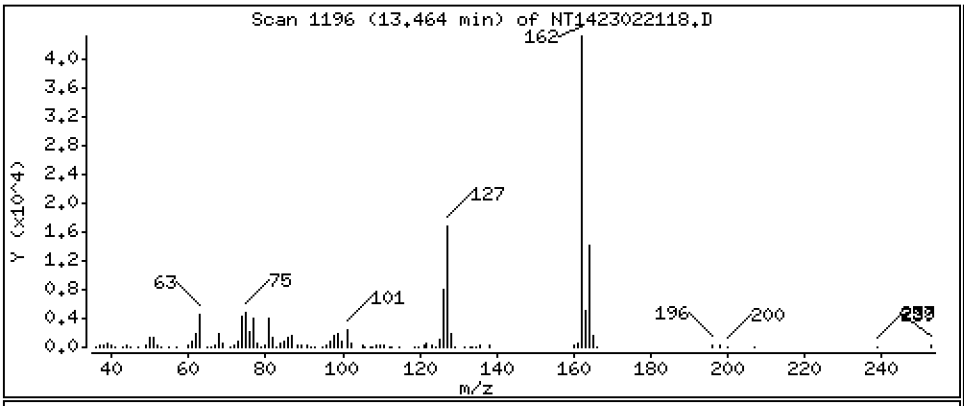
Operator: DSD

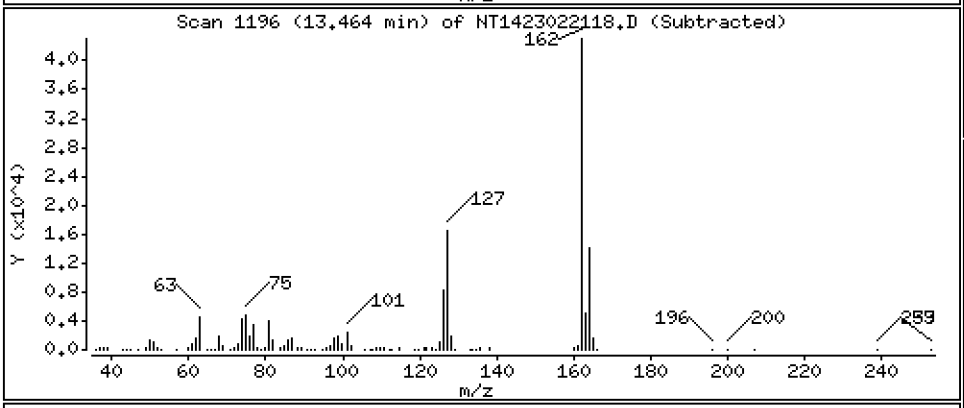
Column phase: ZB-5msi

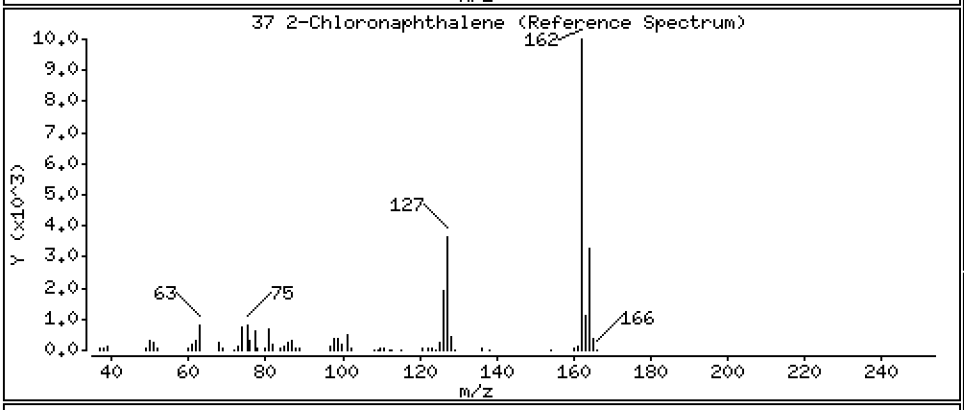
Column diameter: 0.25

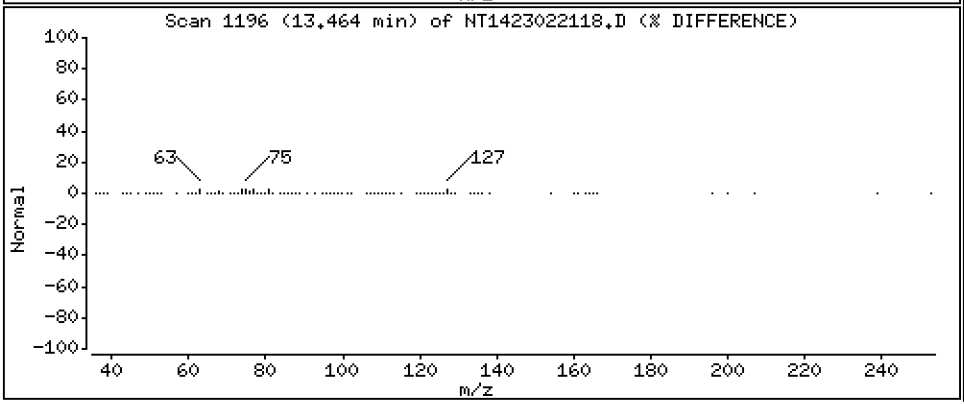
37 2-Chloronaphthalene

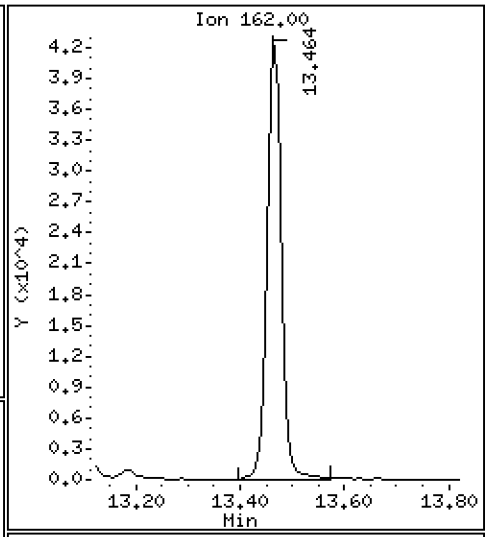
Concentration: 0.5217 ug/mL

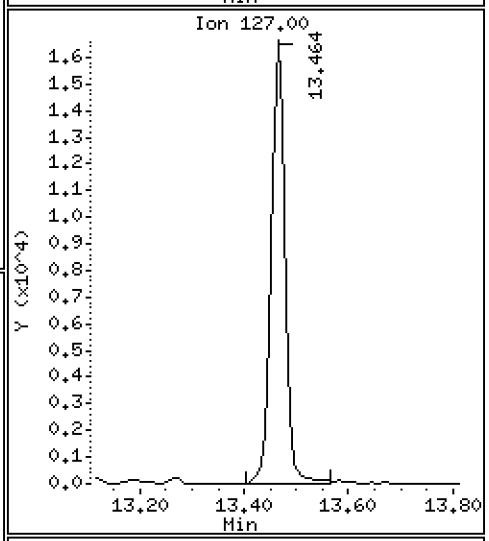


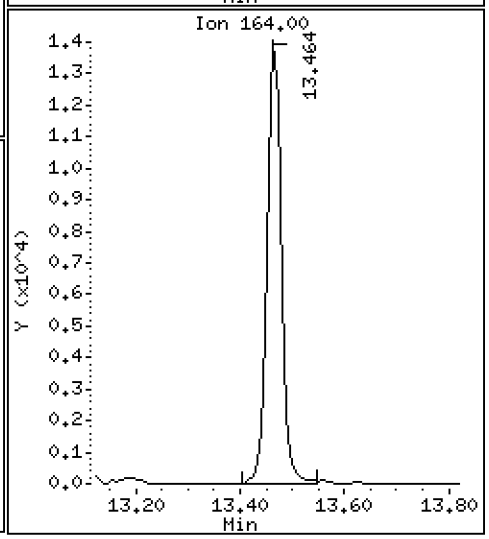












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

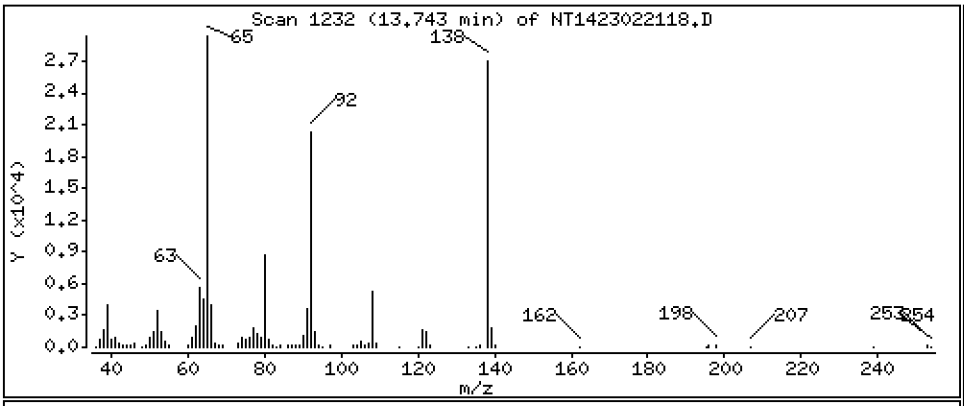
Operator: DSD

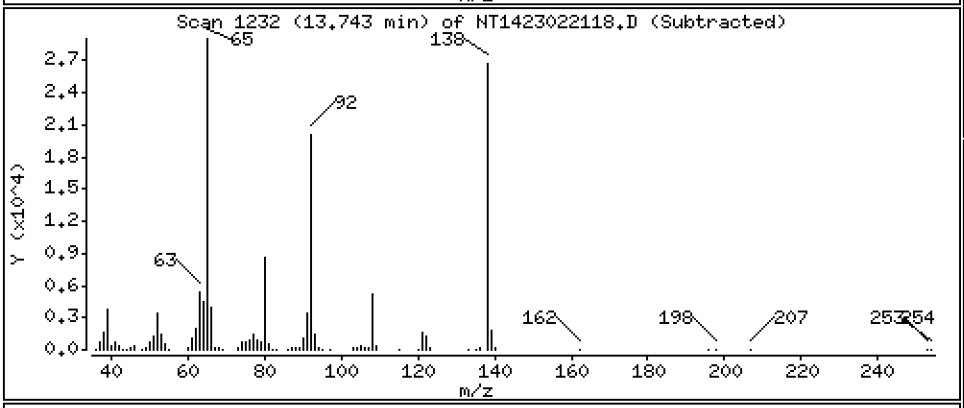
Column phase: ZB-5msi

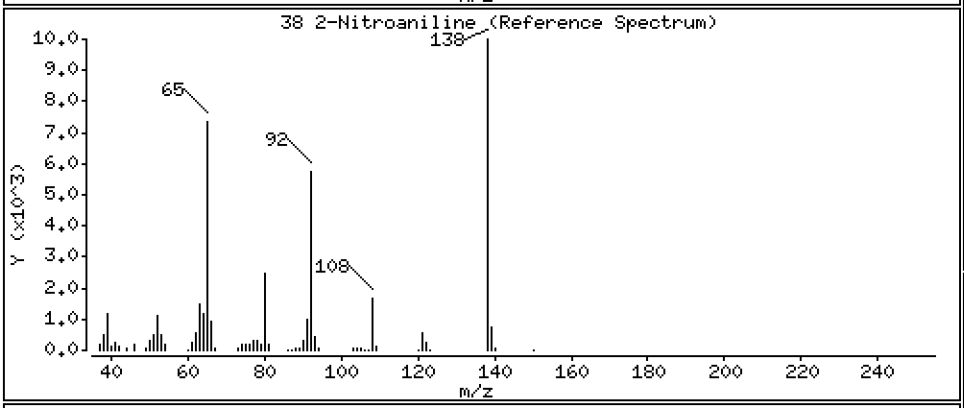
Column diameter: 0.25

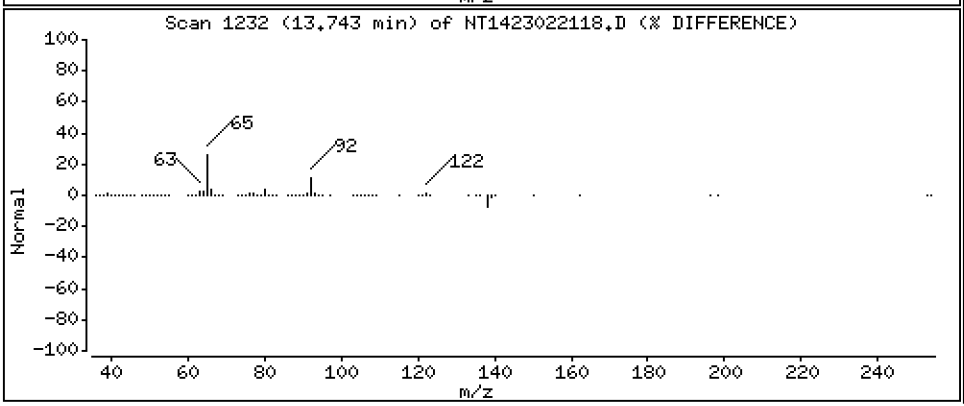
38 2-Nitroaniline

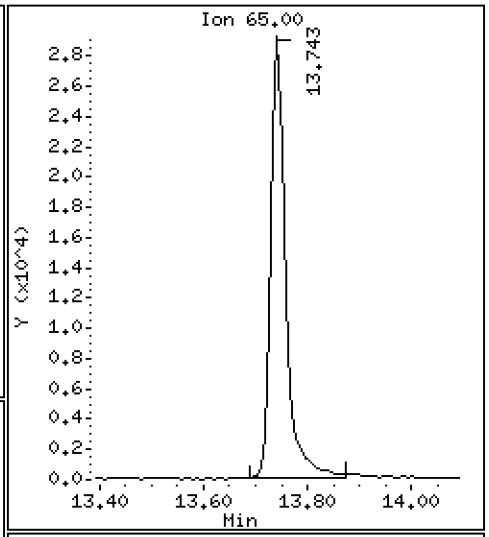
Concentration: 1.161 ug/mL

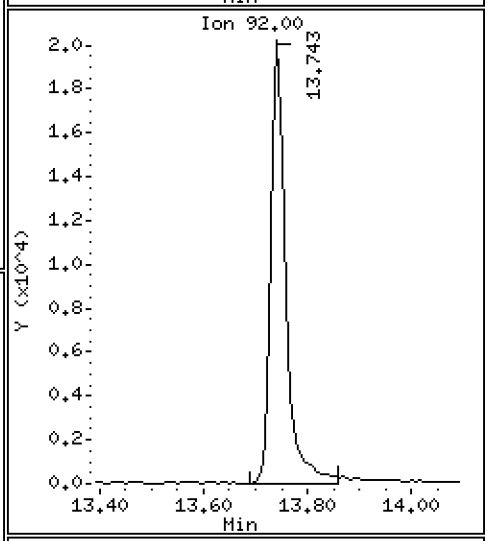


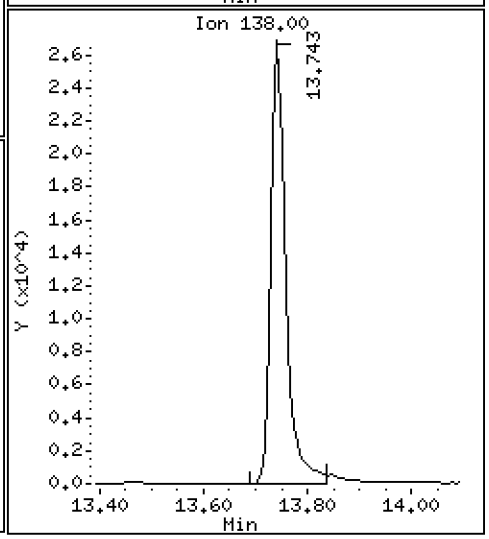












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

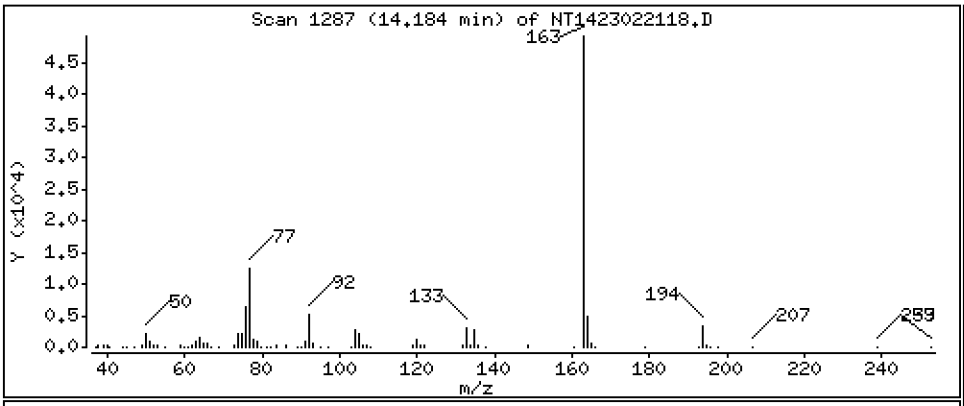
Operator: DSD

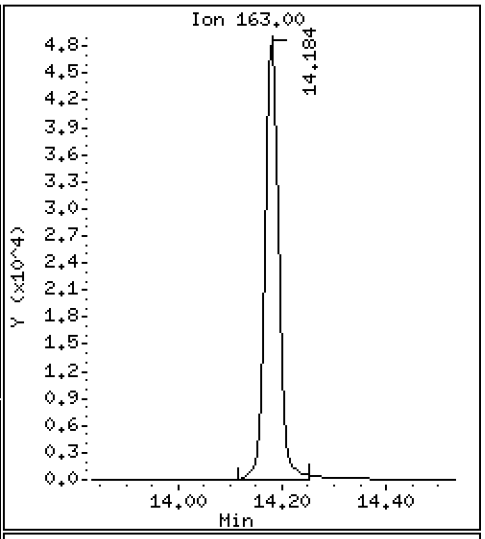
Column phase: ZB-5msi

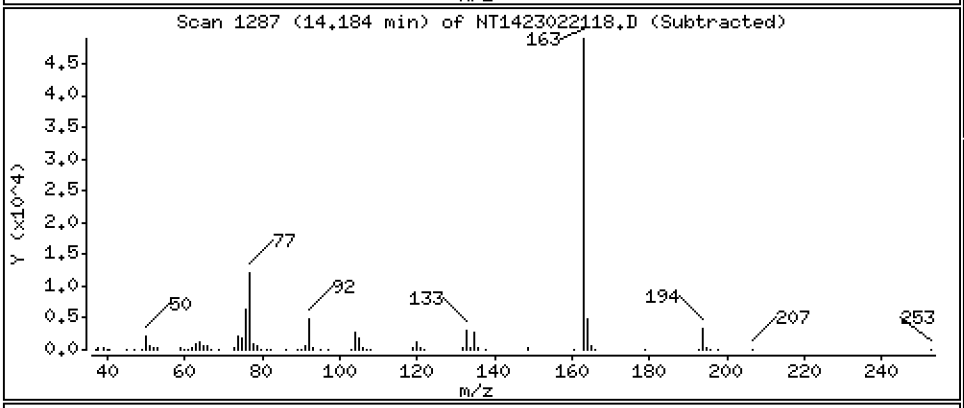
Column diameter: 0.25

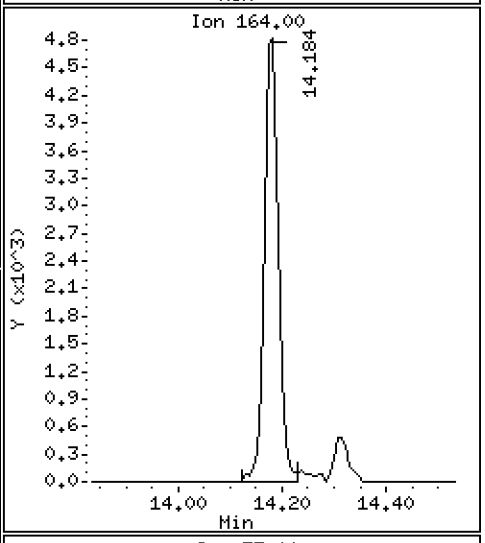
39 Dimethylphthalate

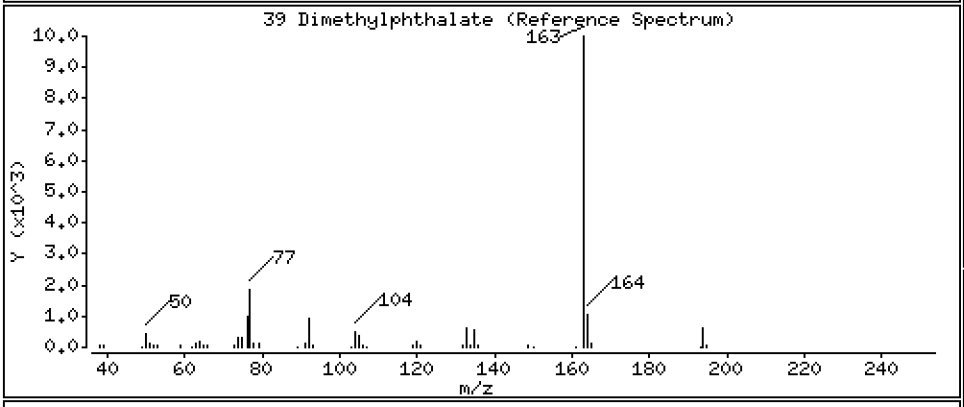
Concentration: 0.5527 ug/mL

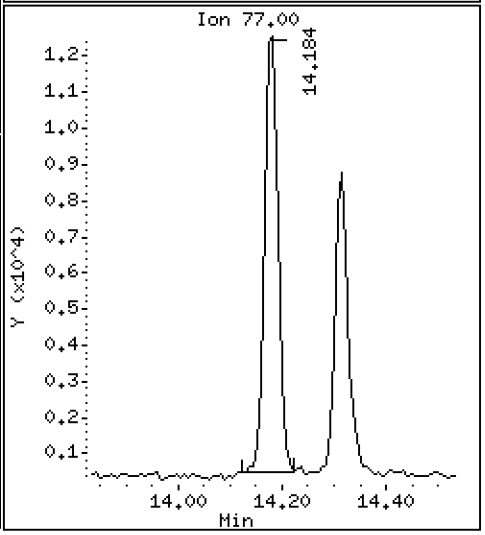


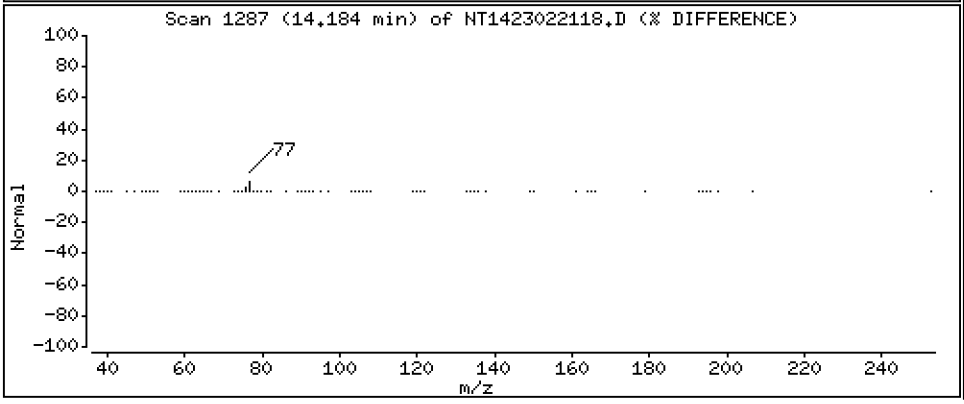












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

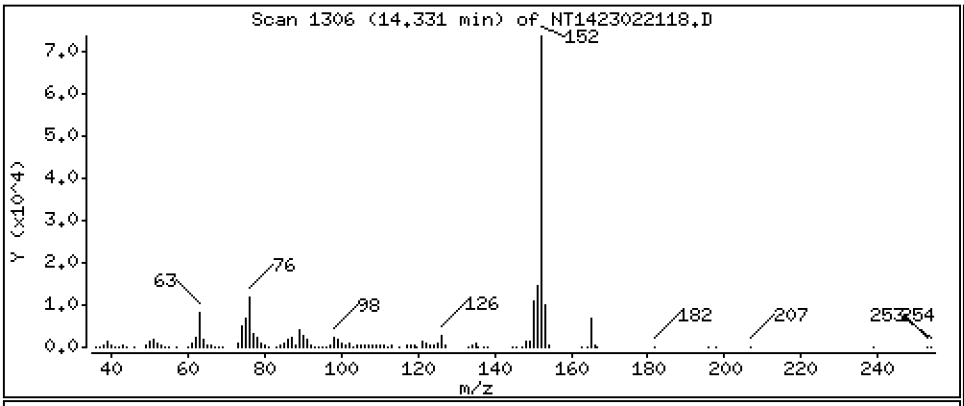
Operator: DSD

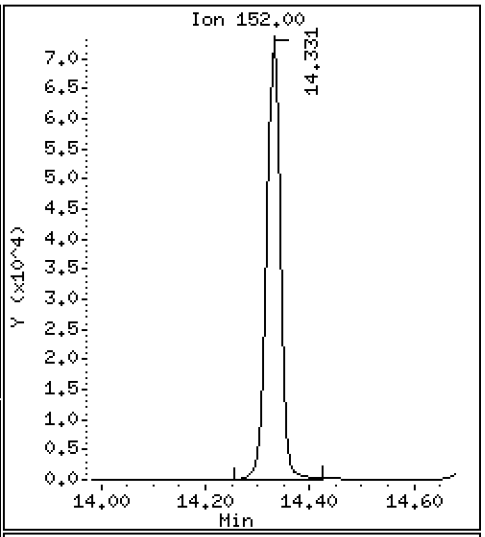
Column phase: ZB-5msi

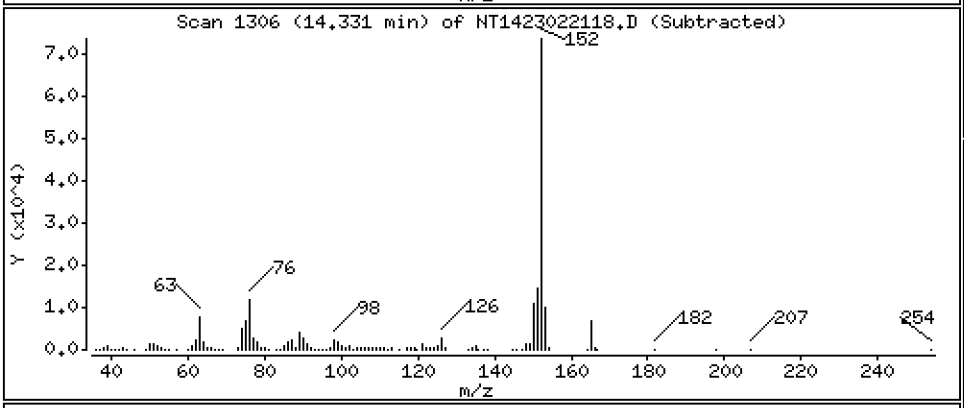
Column diameter: 0.25

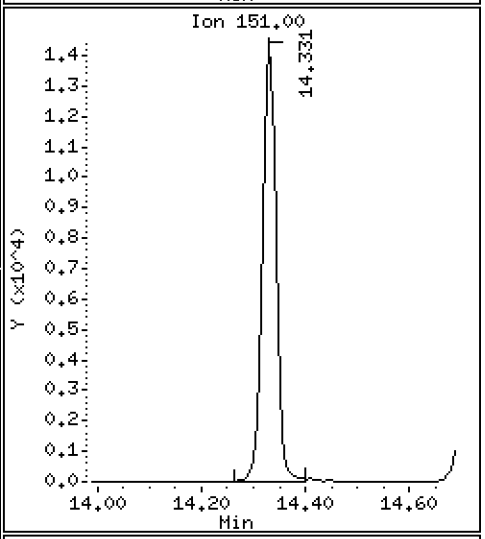
40 Acenaphthylene

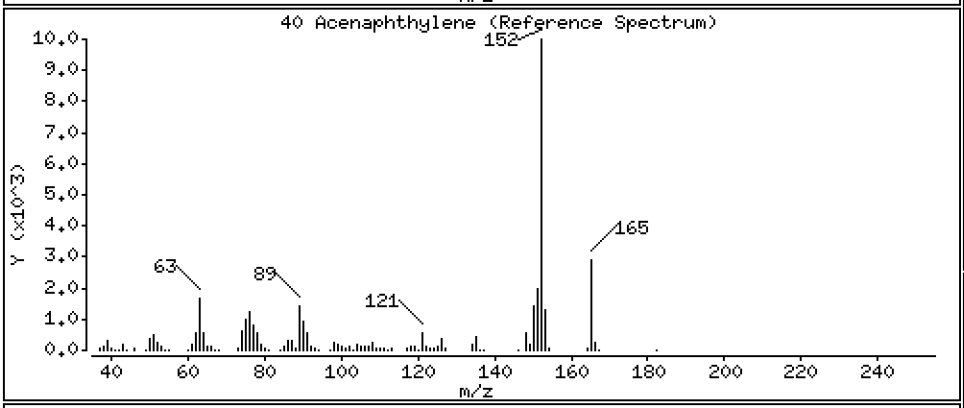
Concentration: 0.5708 ug/mL

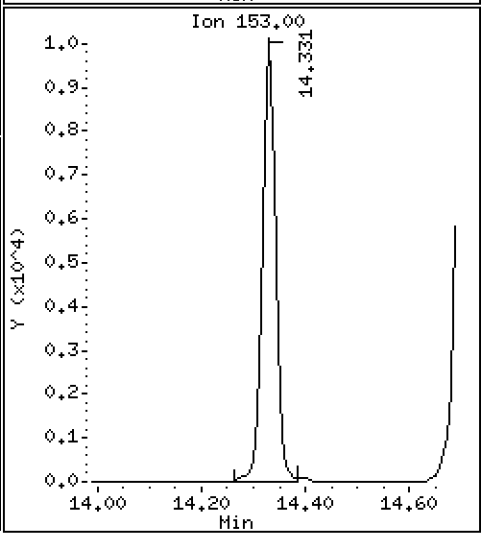


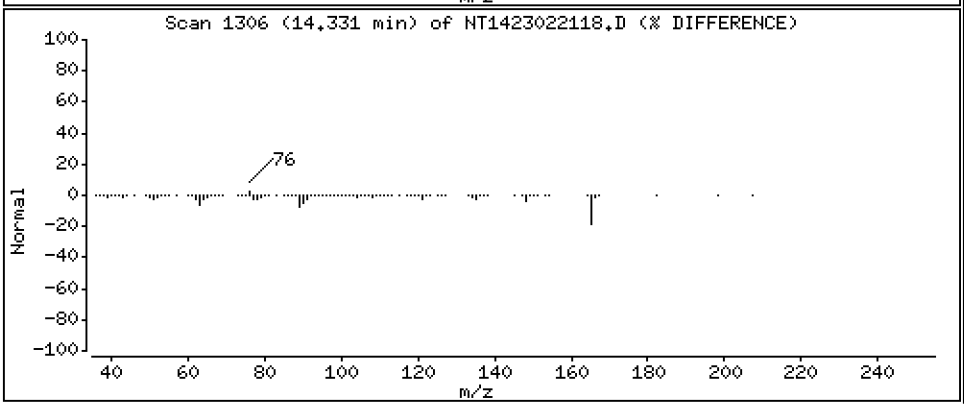












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

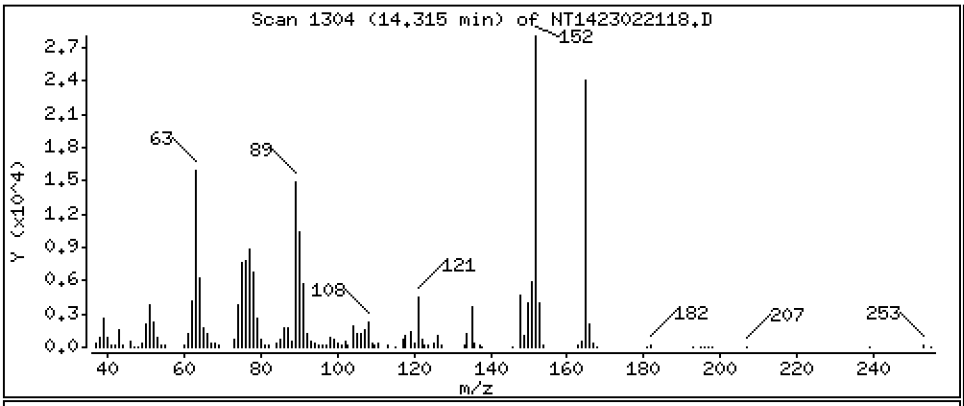
Operator: DSD

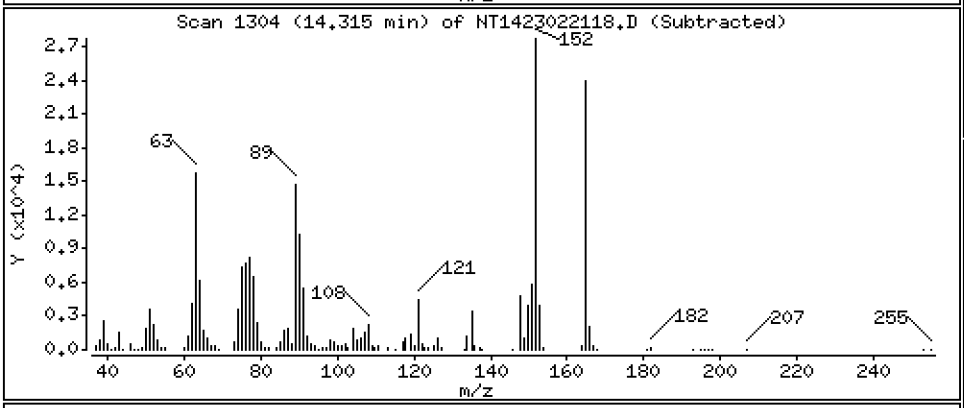
Column phase: ZB-5msi

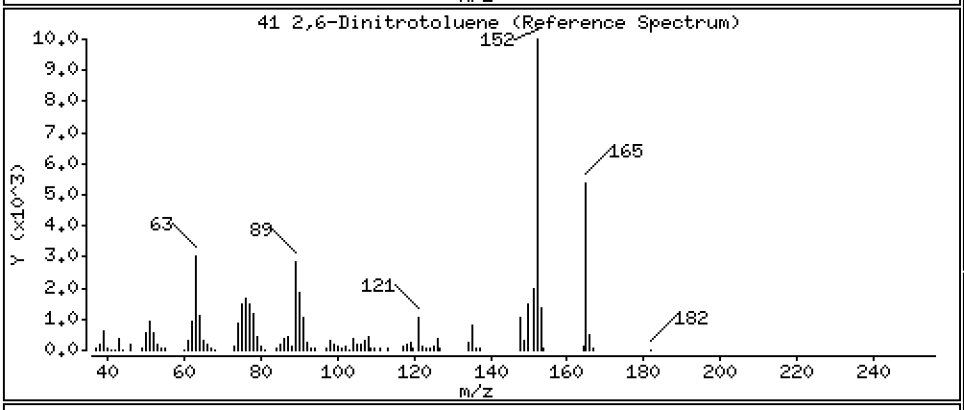
Column diameter: 0.25

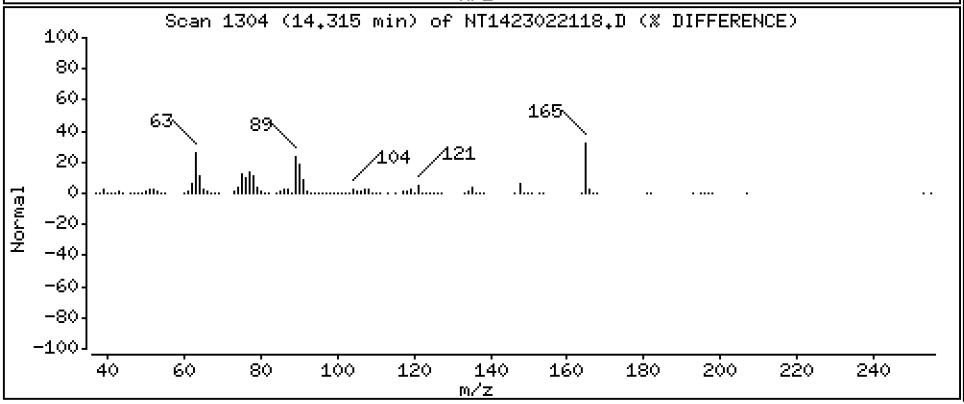
41 2,6-Dinitrotoluene

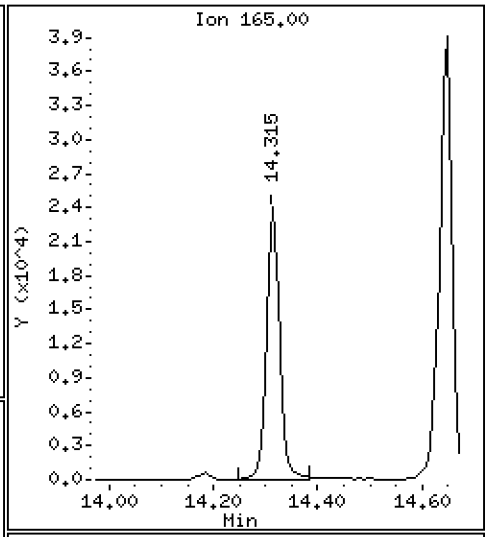
Concentration: 1.084 ug/mL

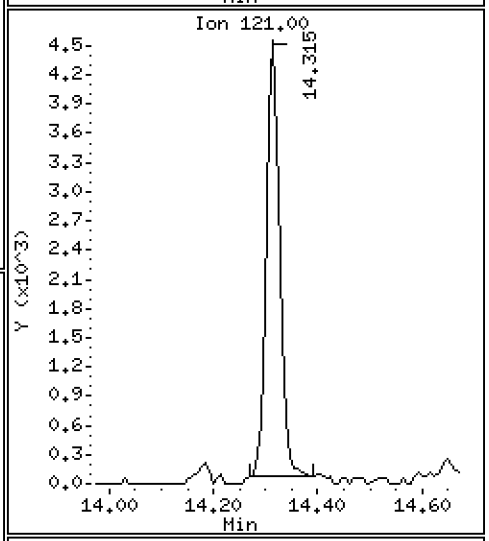


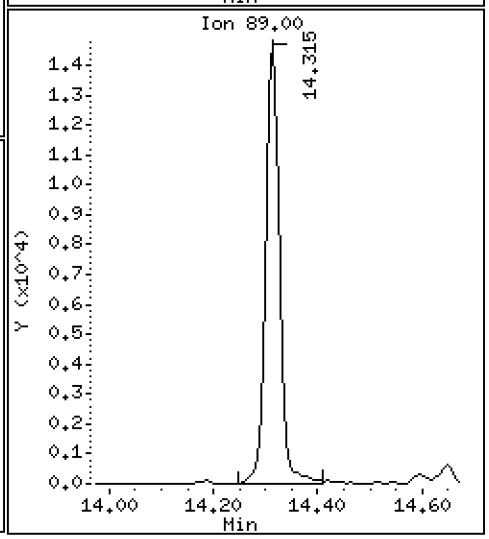












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

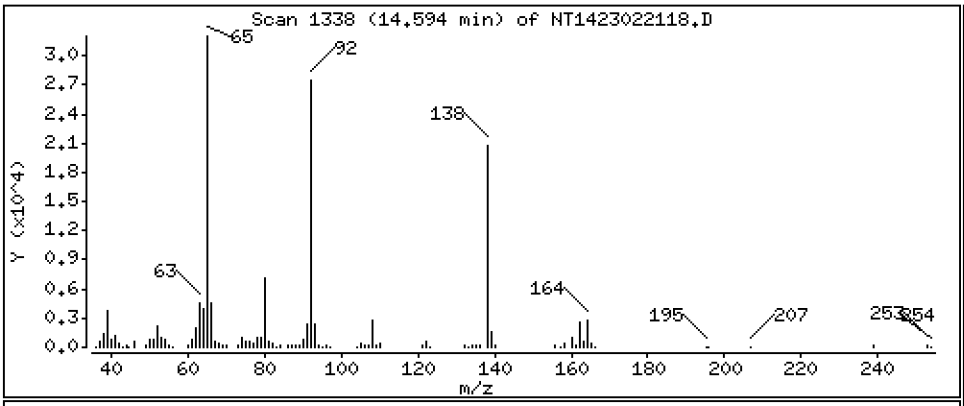
Operator: DSD

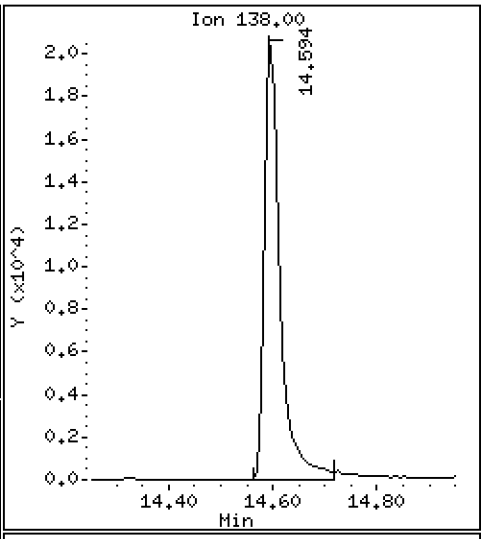
Column phase: ZB-5msi

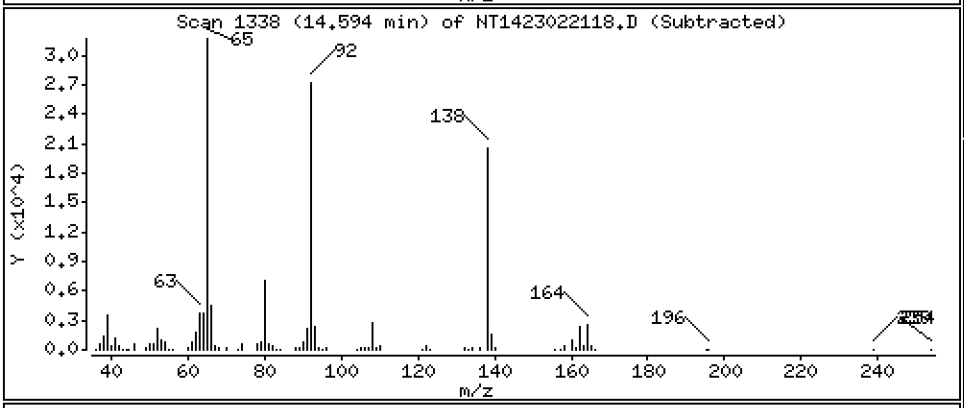
Column diameter: 0.25

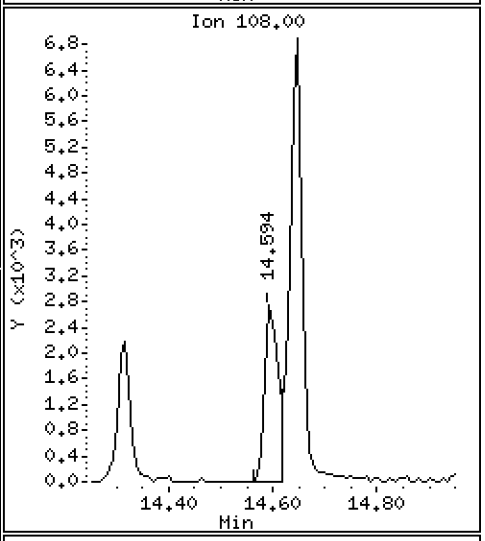
43 3-Nitroaniline

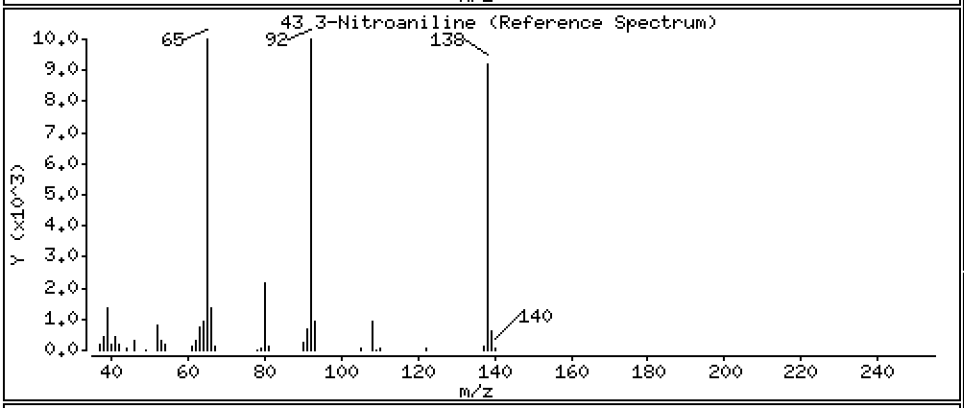
Concentration: 1.074 ug/mL

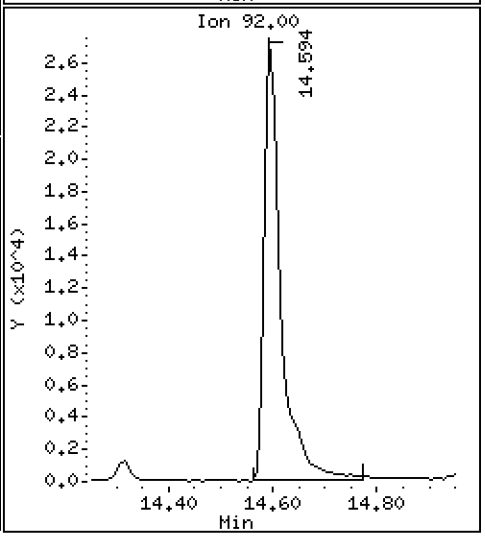


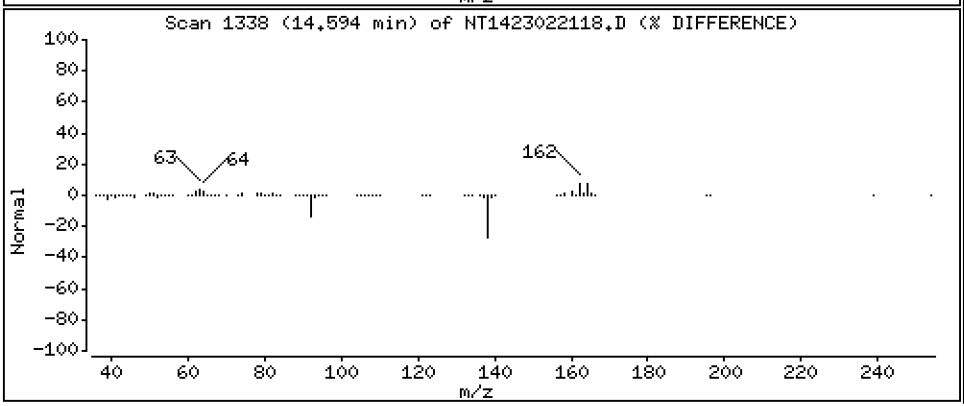












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

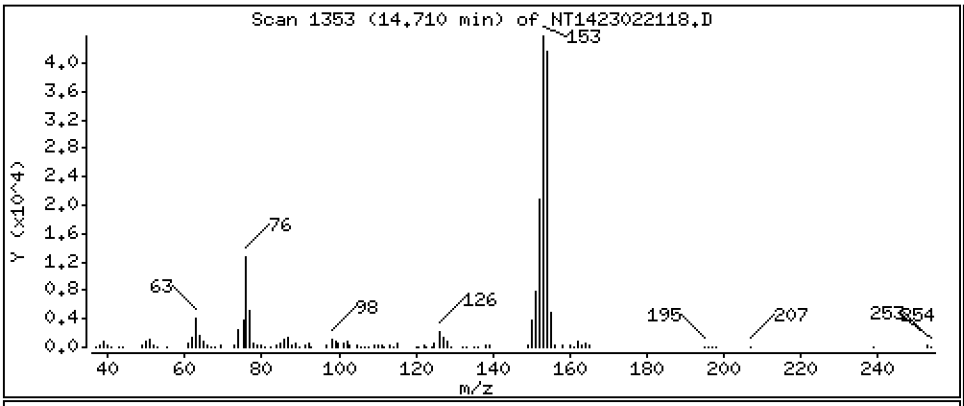
Operator: DSD

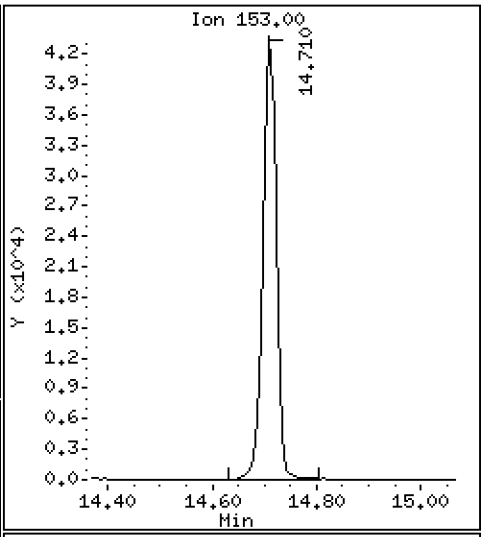
Column phase: ZB-5msi

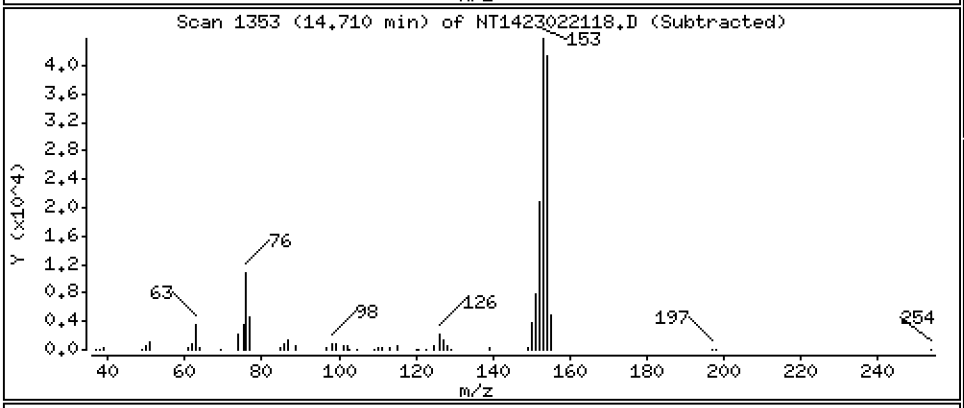
Column diameter: 0.25

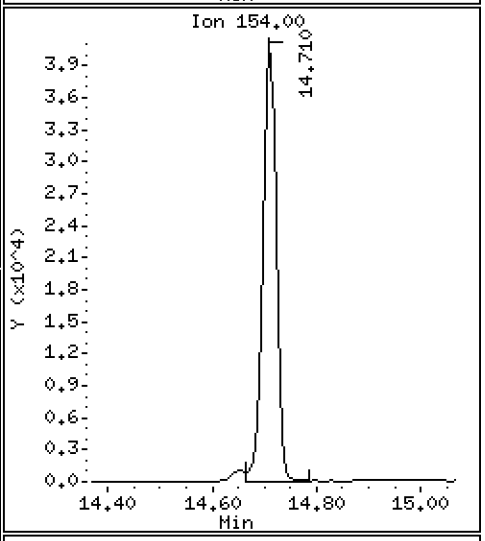
44 Acenaphthene

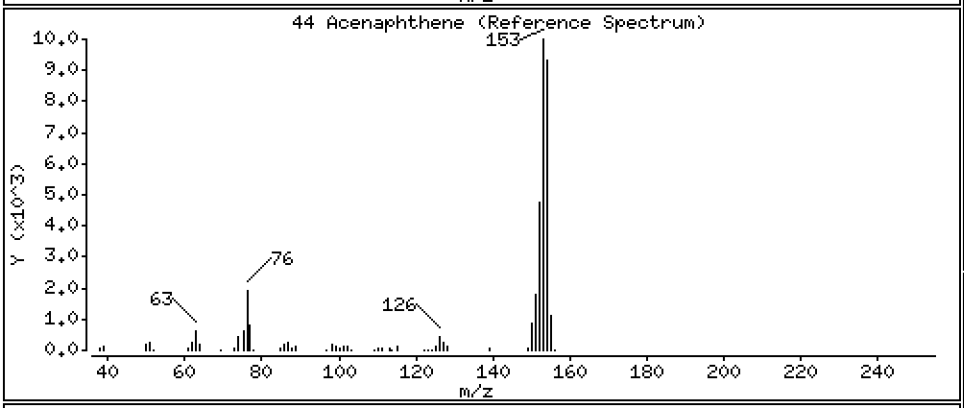
Concentration: 0.5459 ug/mL

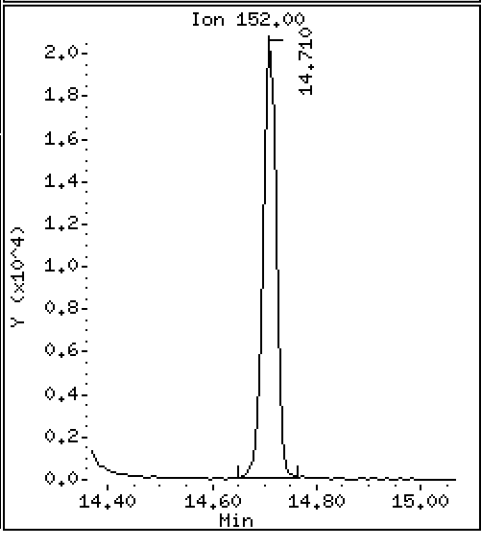


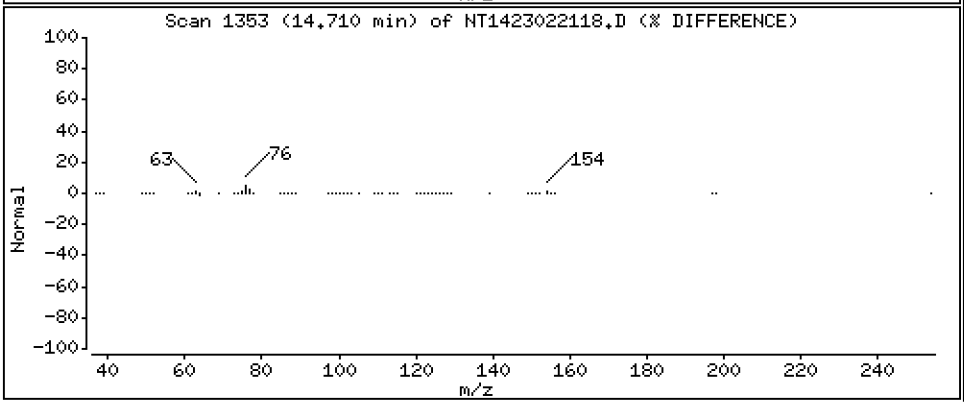












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

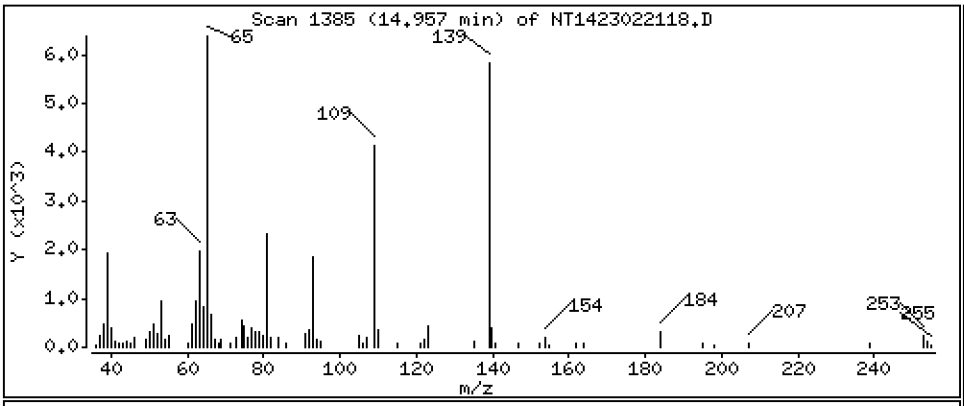
Operator: DSD

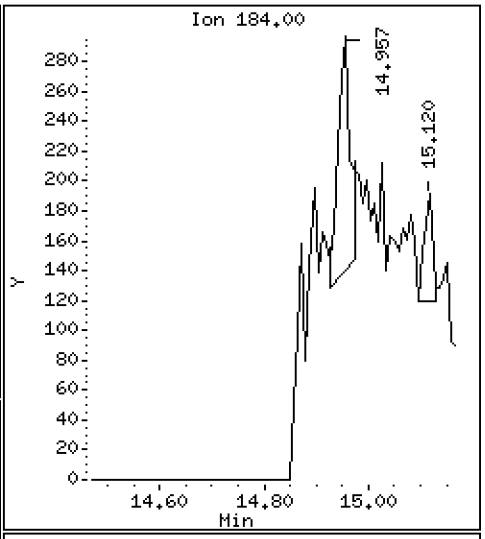
Column phase: ZB-5msi

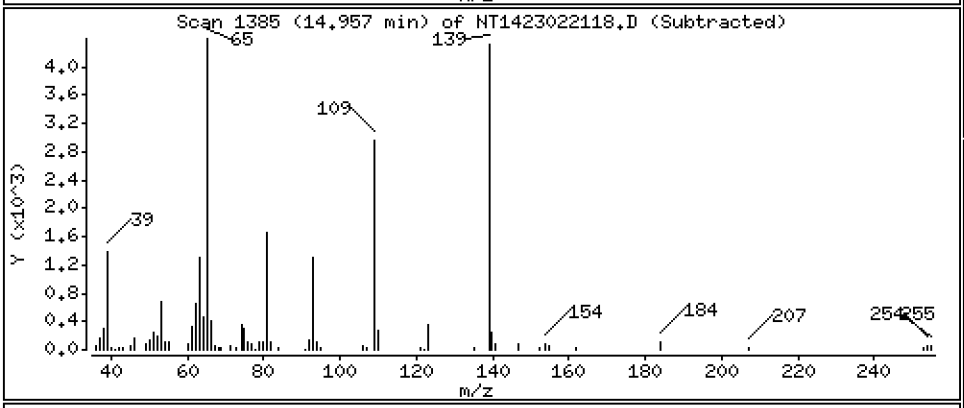
Column diameter: 0.25

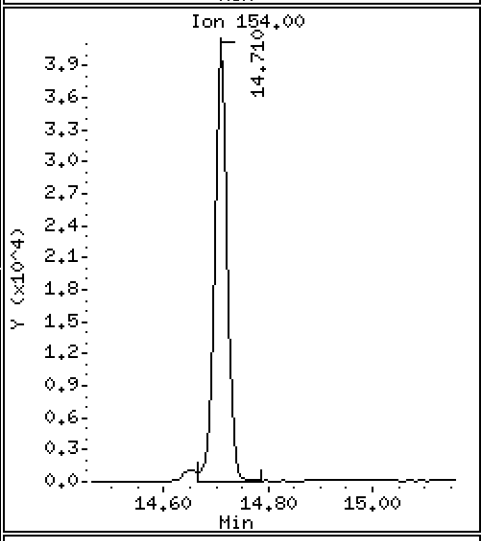
45 2,4-Dinitrophenol

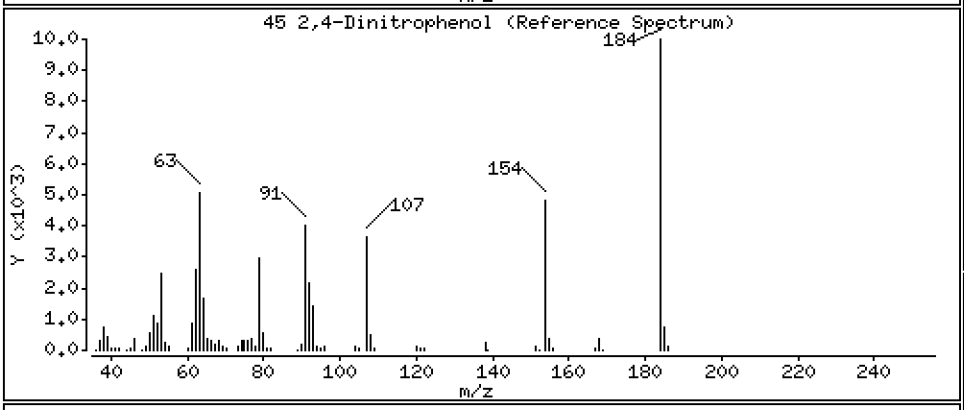
Concentration: 0.01091 ug/mL

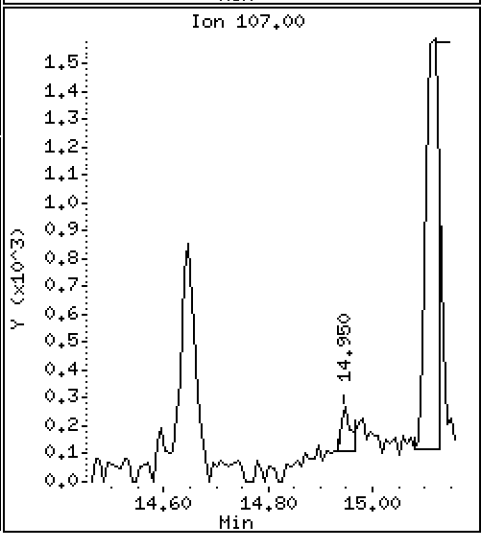


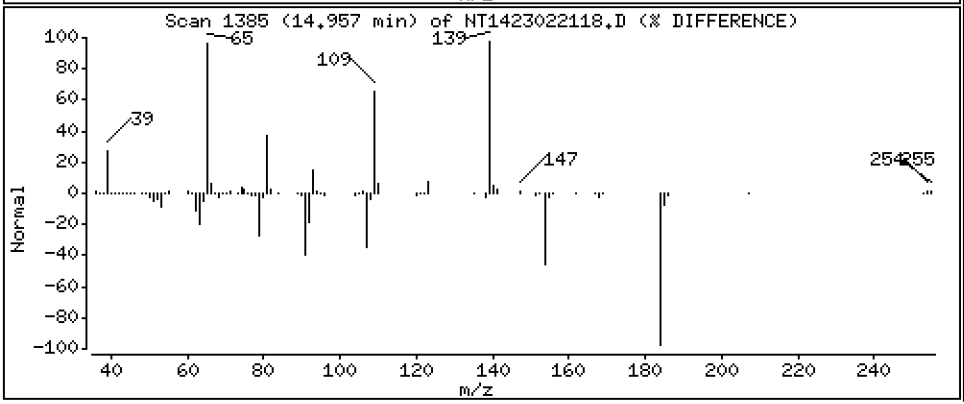












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

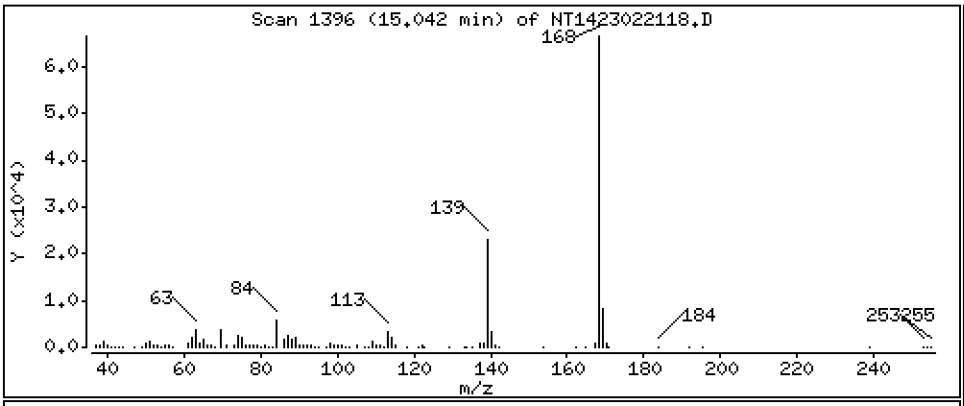
Operator: DSD

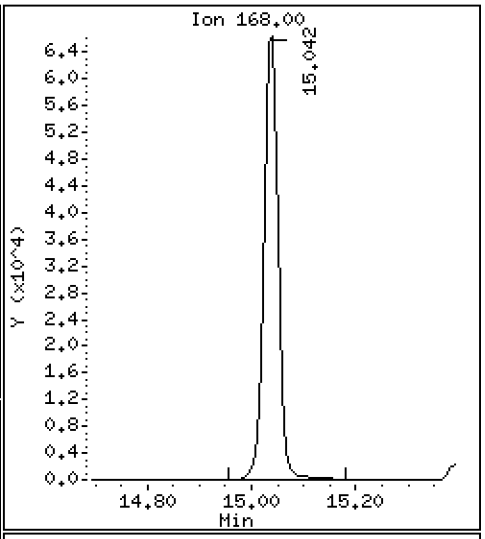
Column phase: ZB-5msi

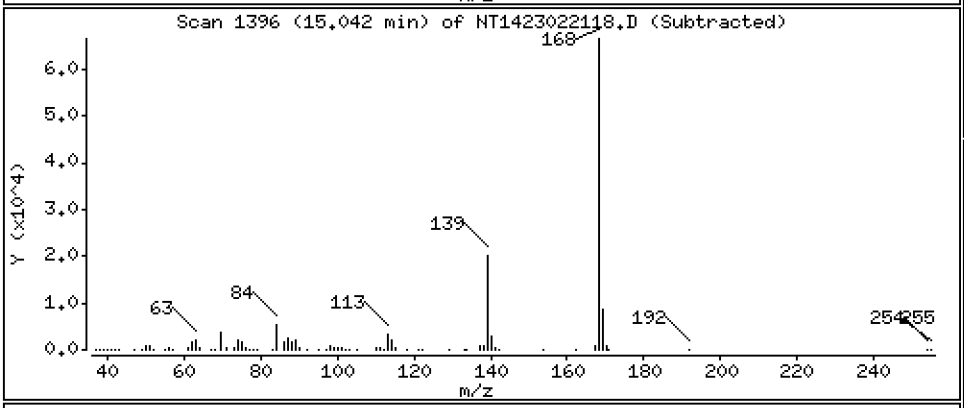
Column diameter: 0.25

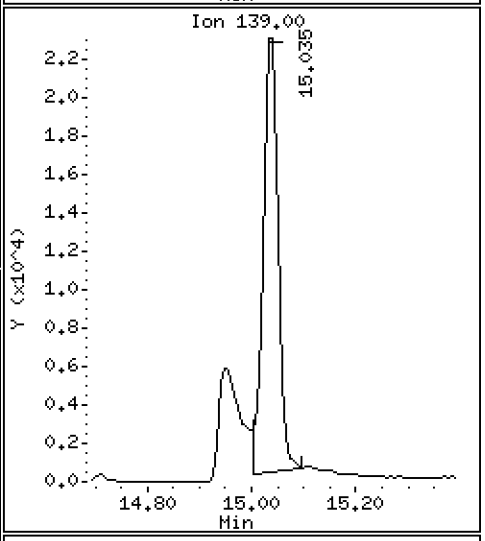
46 Dibenzofuran

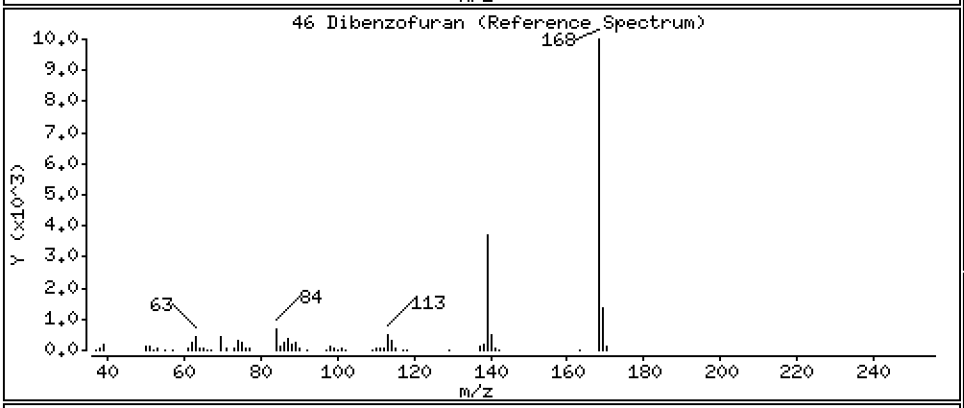
Concentration: 0.5499 ug/mL

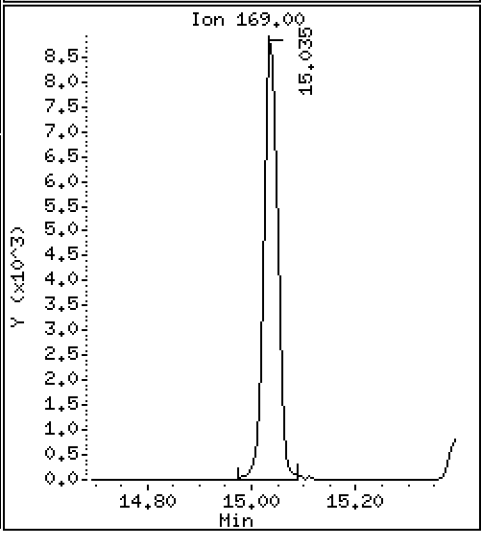


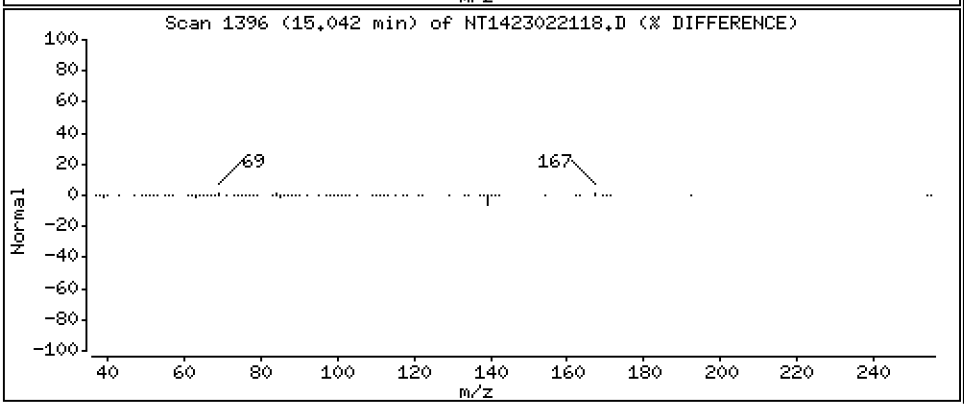












Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022118.D

Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

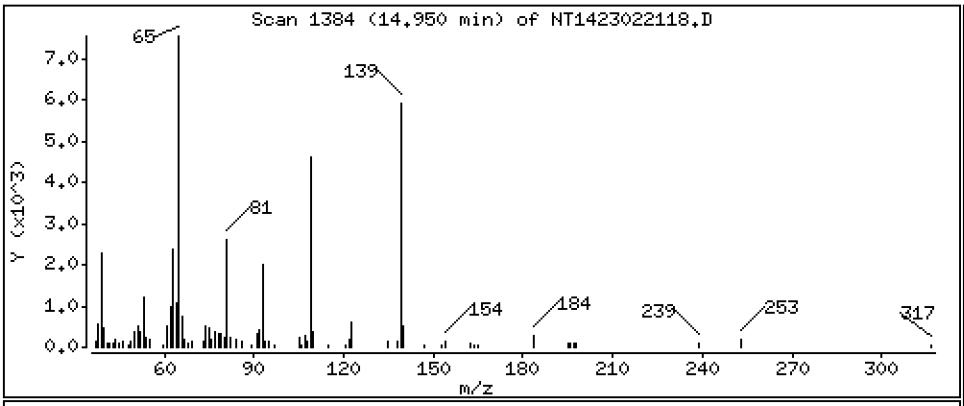
Operator: DSD

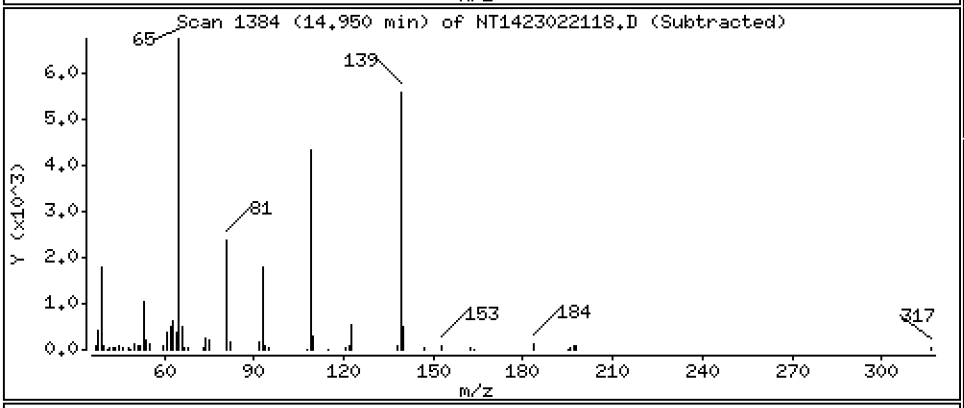
Column phase: ZB-5msi

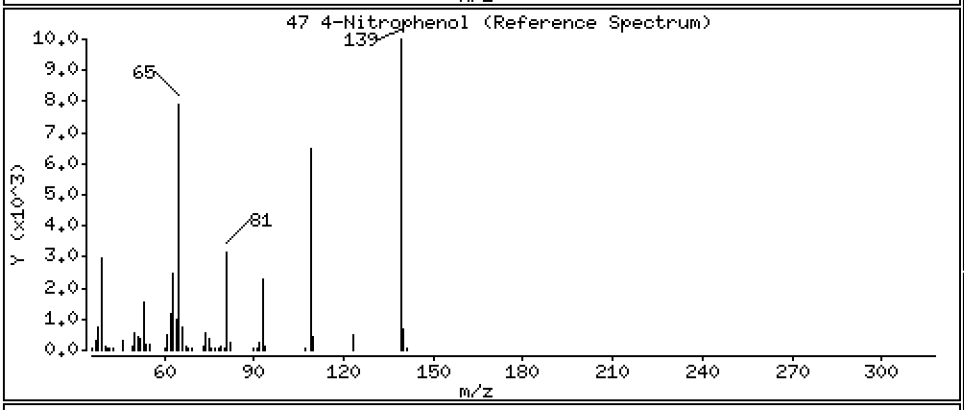
Column diameter: 0.25

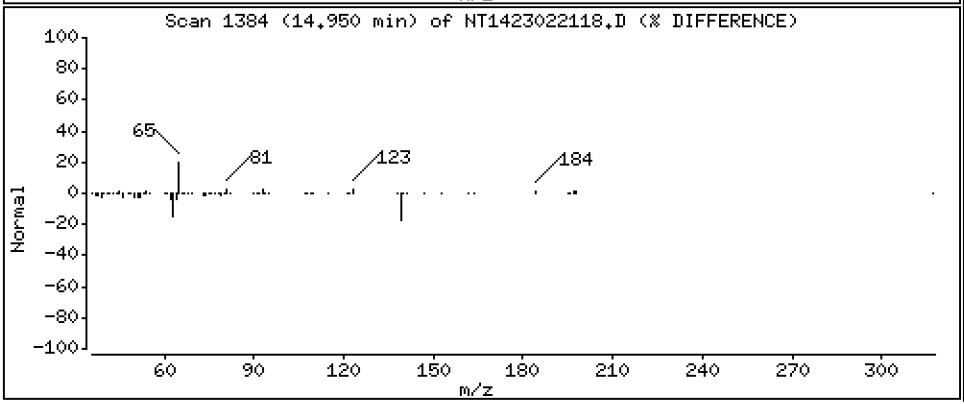
47 4-Nitrophenol

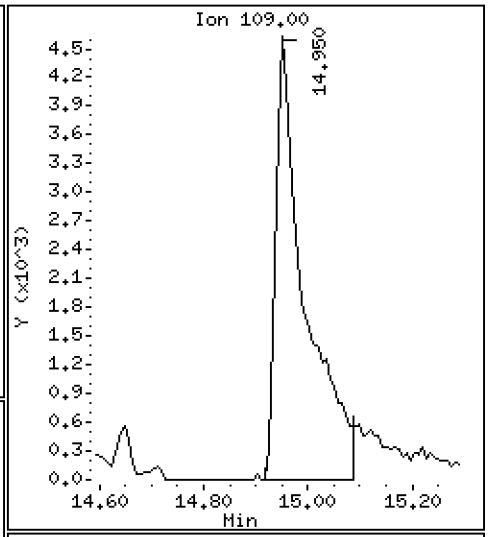
Concentration: 0.7982 ug/mL

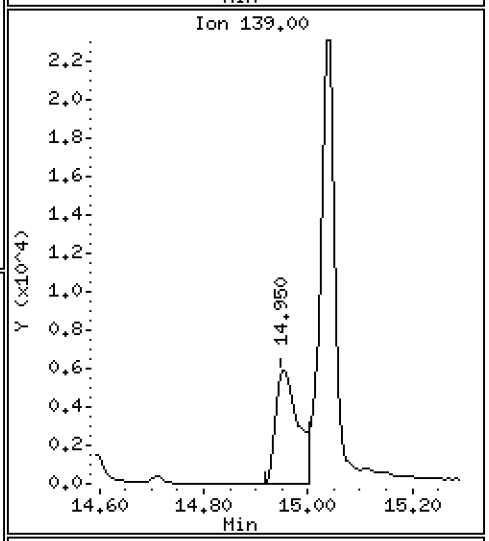


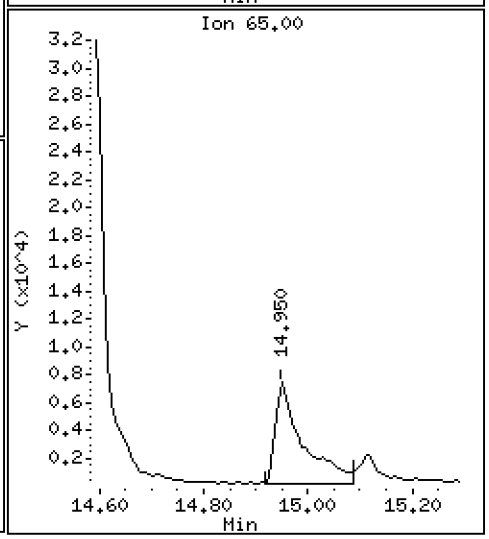












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

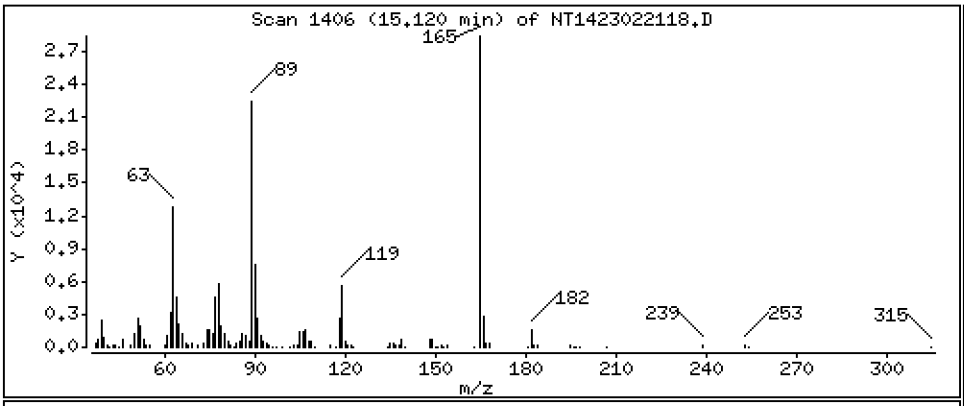
Operator: DSD

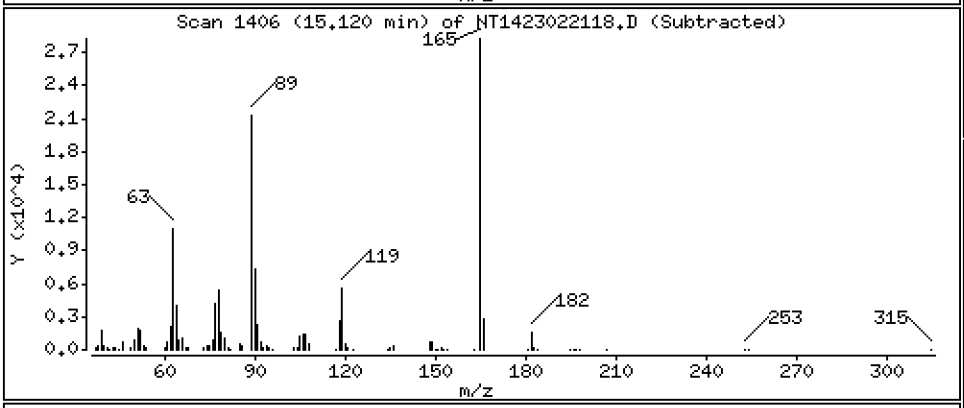
Column phase: ZB-5msi

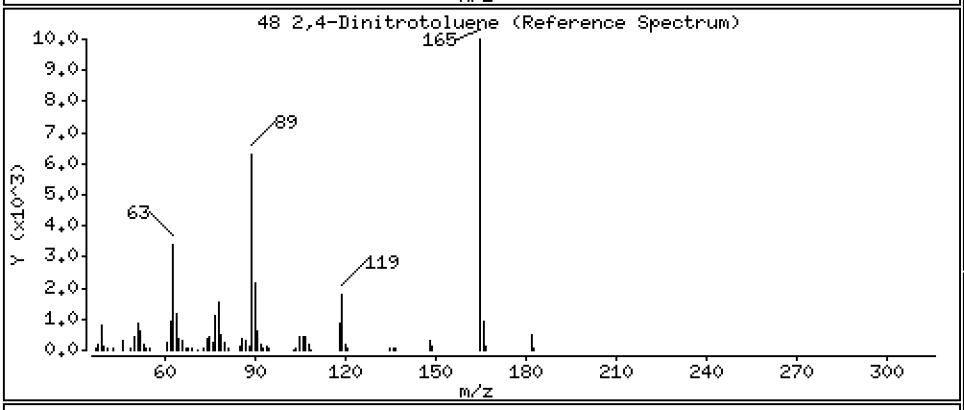
Column diameter: 0.25

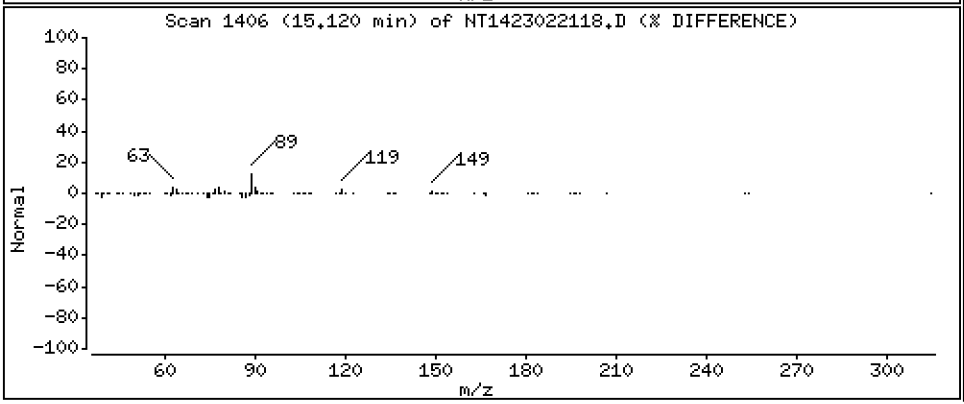
48 2,4-Dinitrotoluene

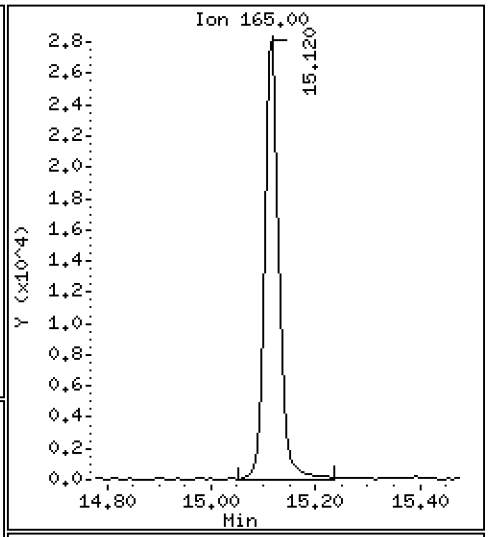
Concentration: 1.029 ug/mL

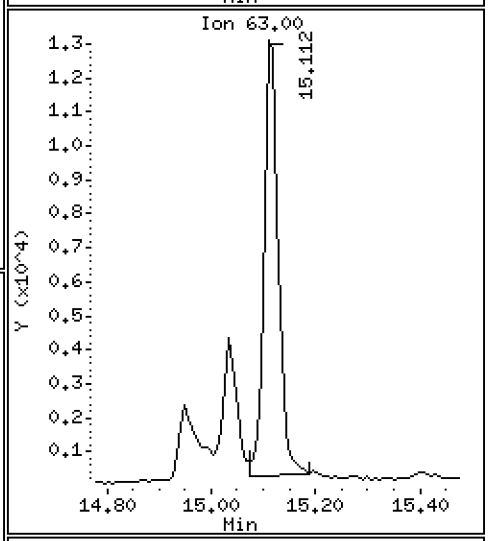


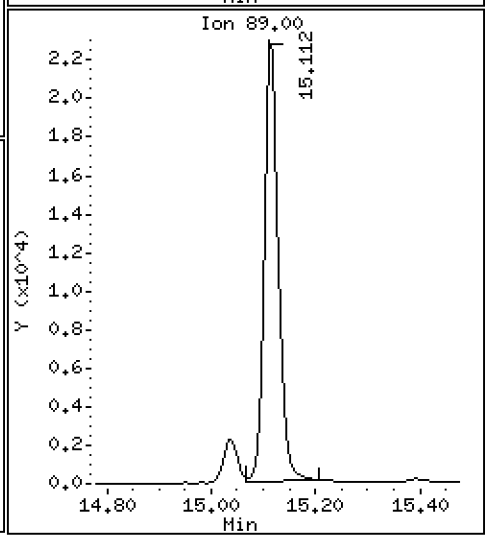












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

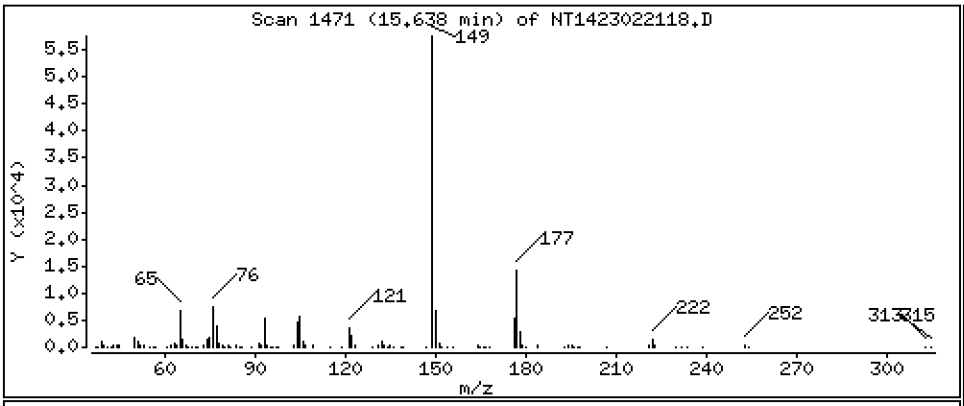
Operator: DSD

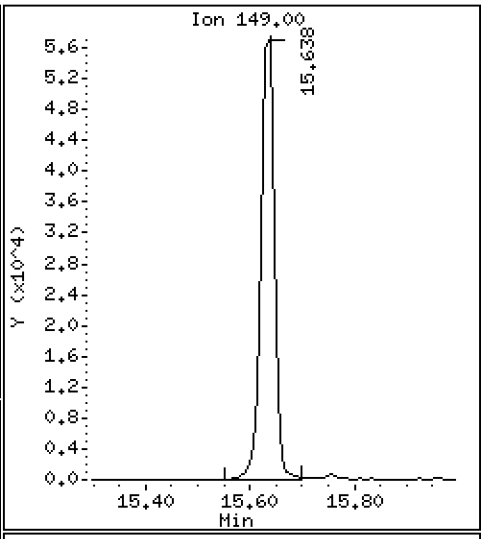
Column phase: ZB-5msi

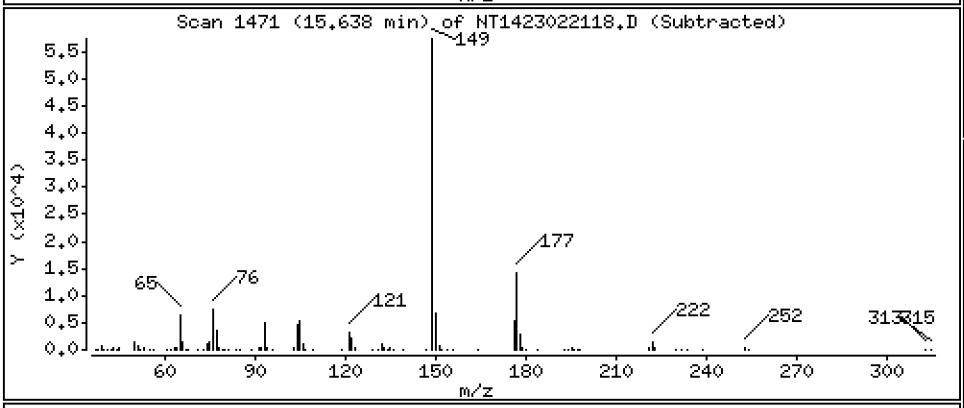
Column diameter: 0.25

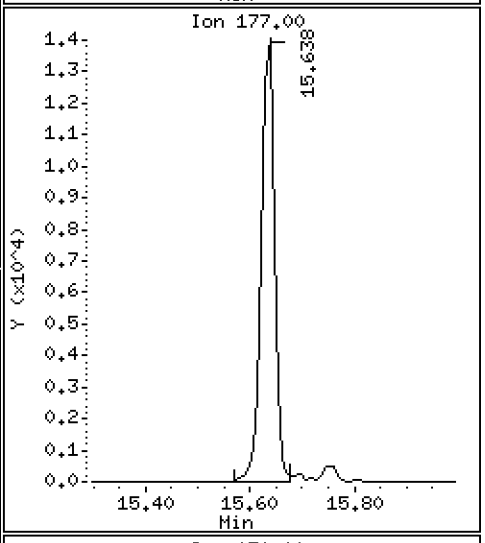
50 Diethylphthalate

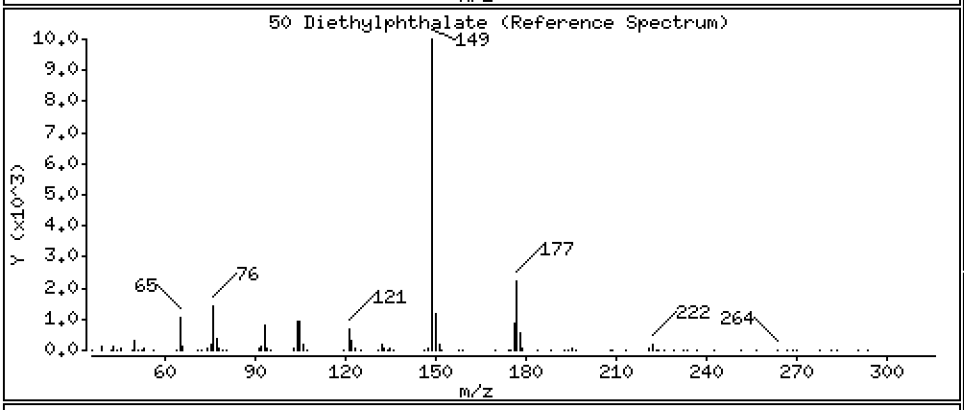
Concentration: 0.5315 ug/mL

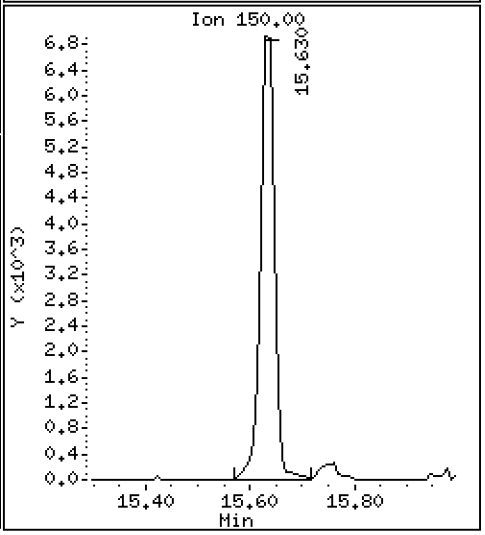


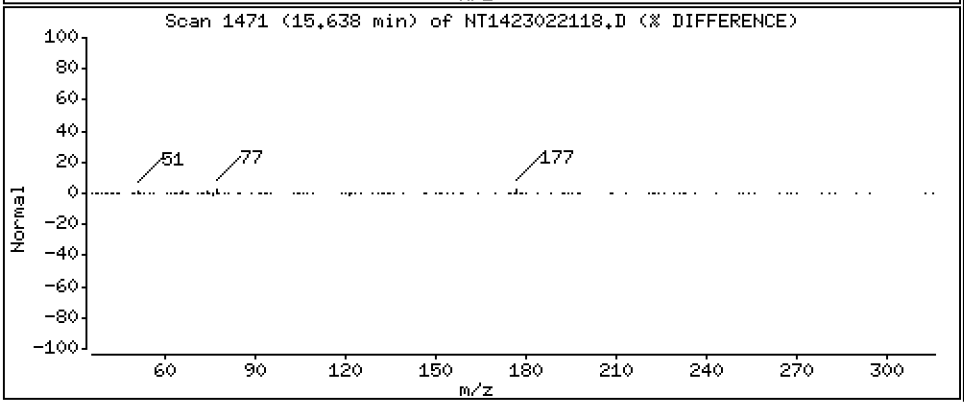












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

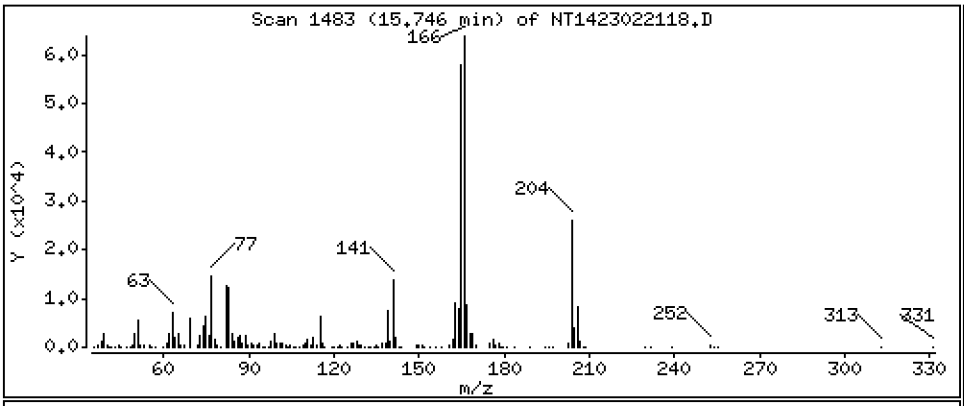
Operator: DSD

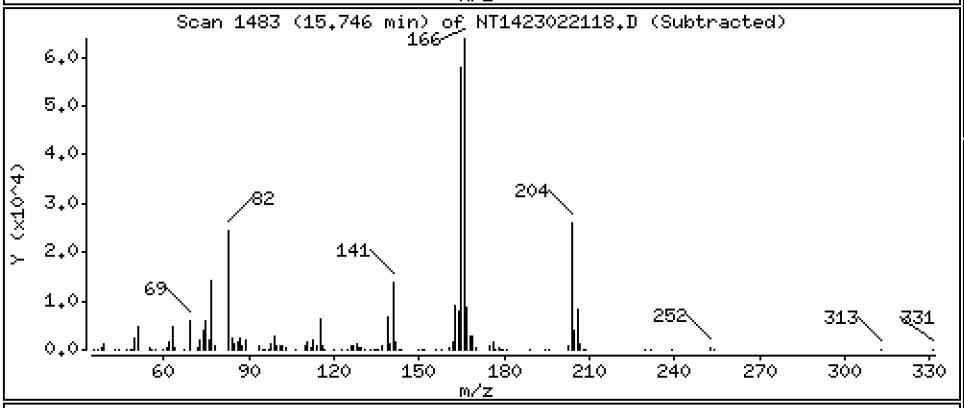
Column phase: ZB-5msi

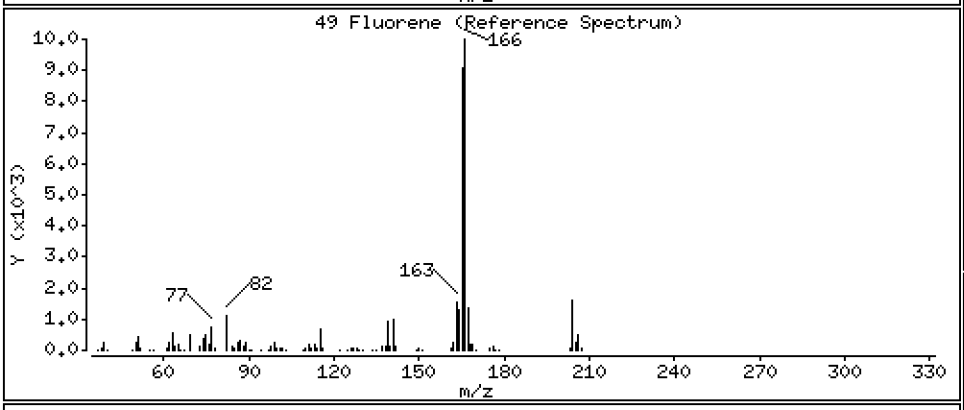
Column diameter: 0.25

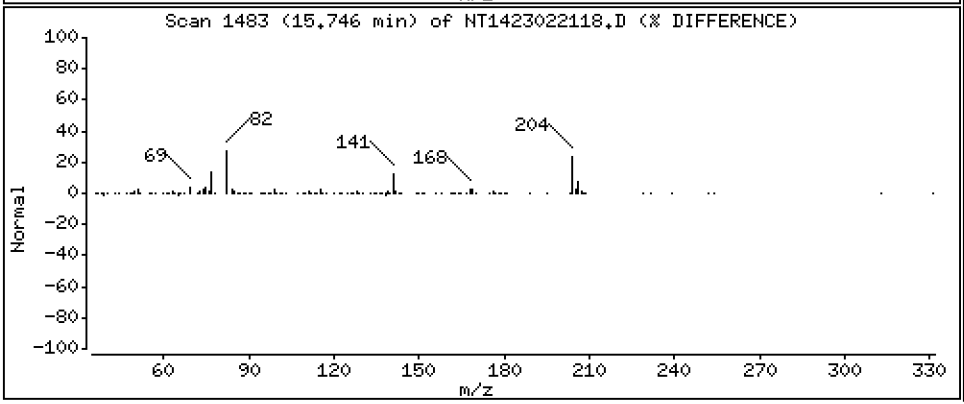
49 Fluorene

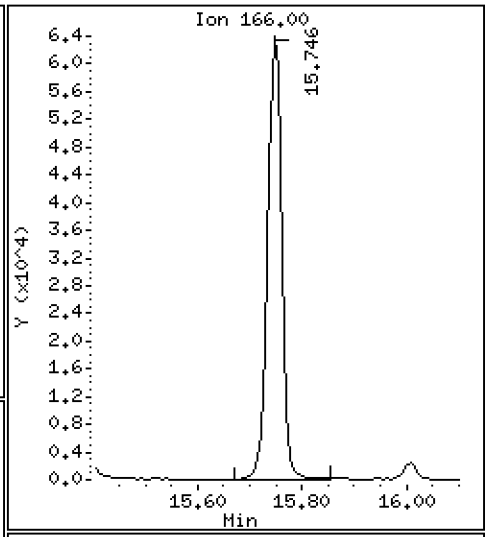
Concentration: 0.5368 ug/mL

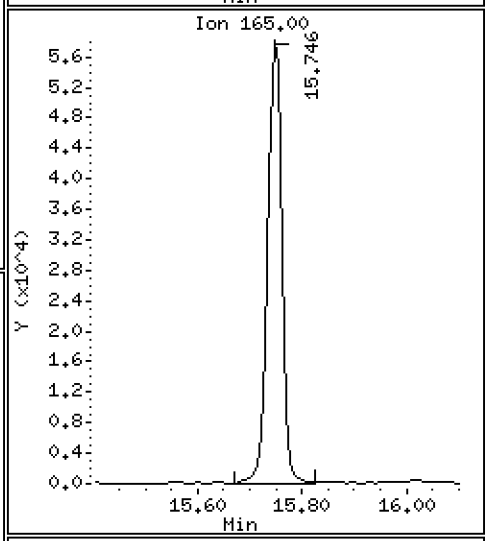


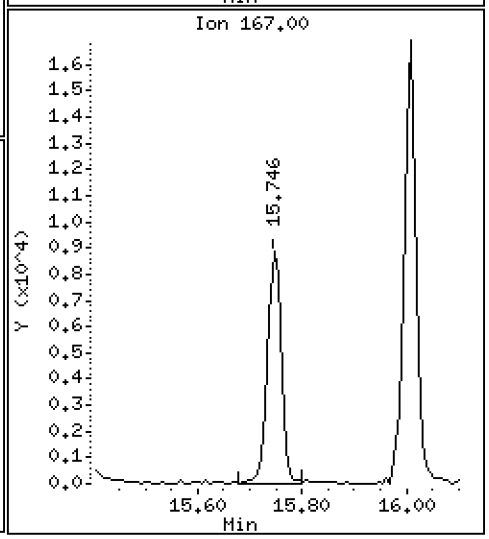












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

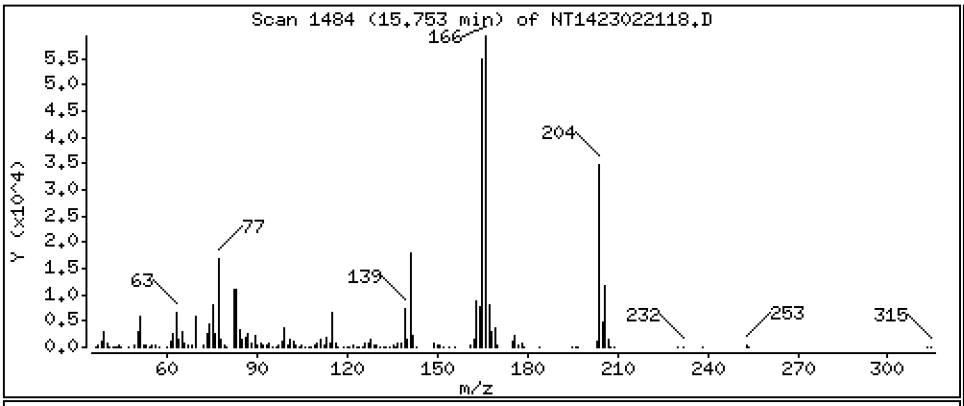
Operator: DSD

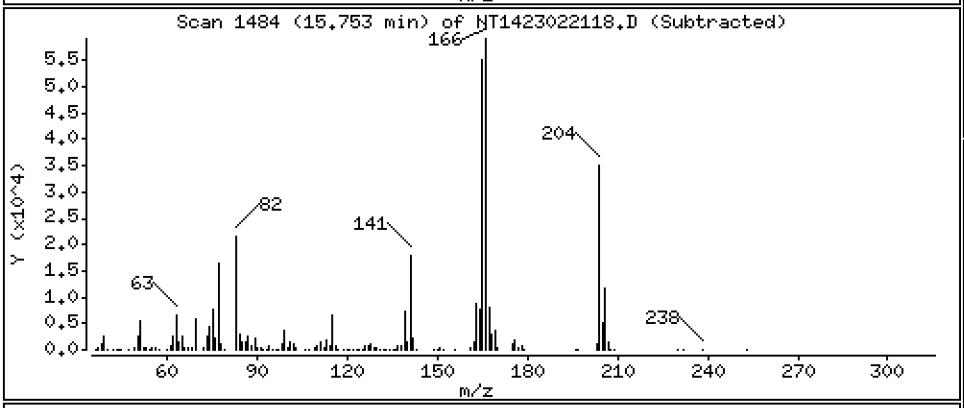
Column phase: ZB-5msi

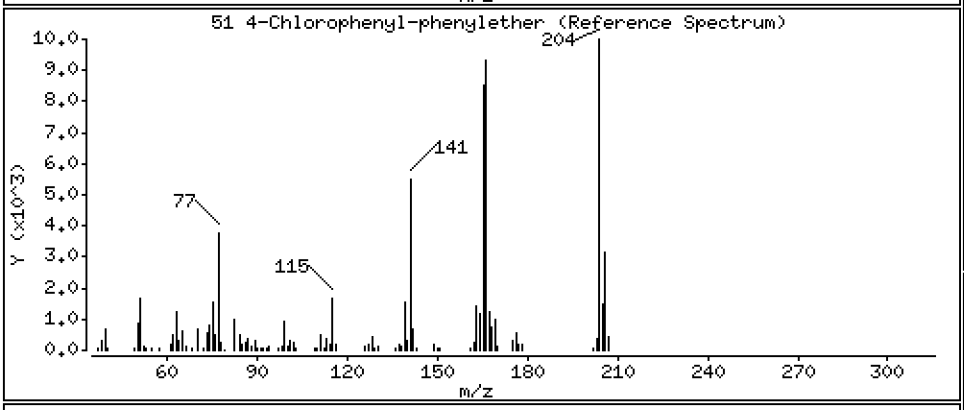
Column diameter: 0.25

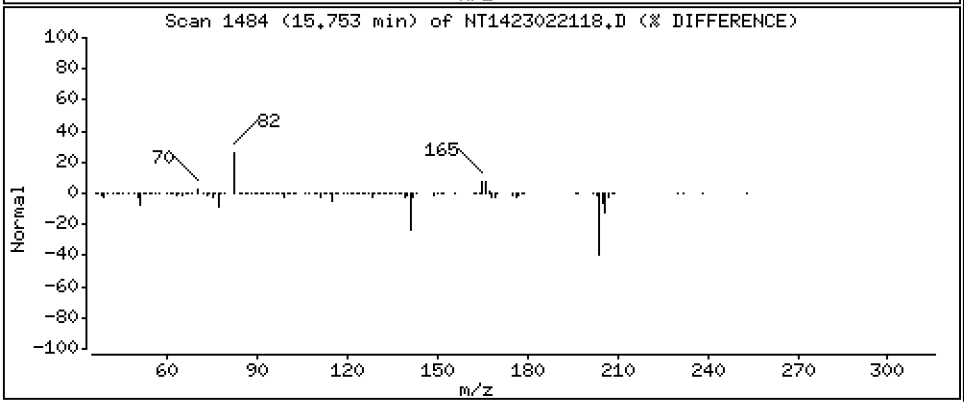
51 4-Chlorophenyl-phenylether

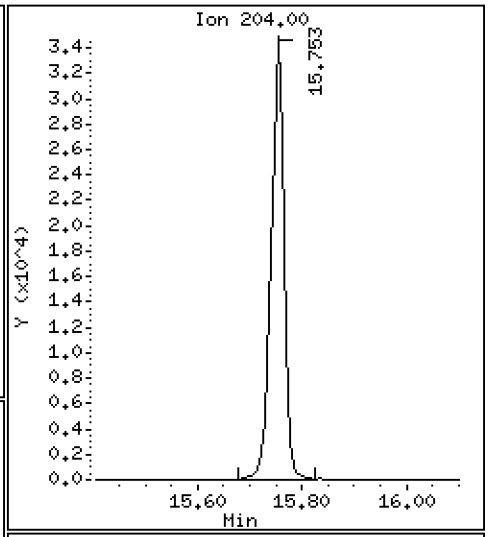
Concentration: 0.5230 ug/mL

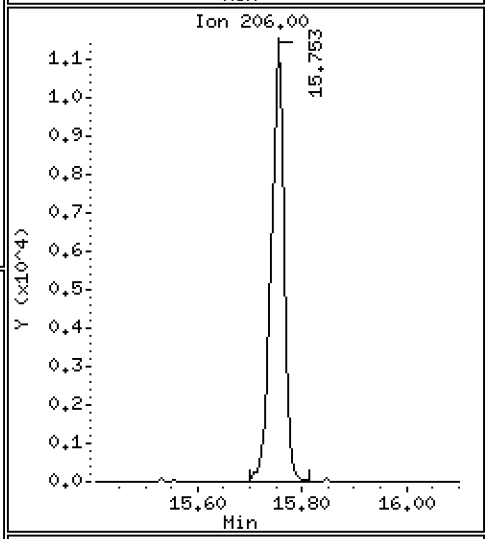


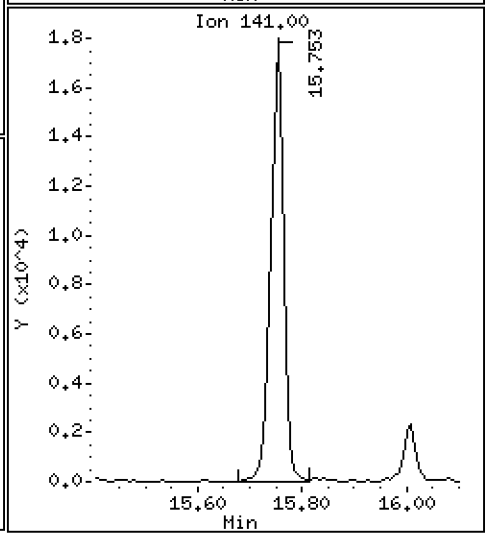












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

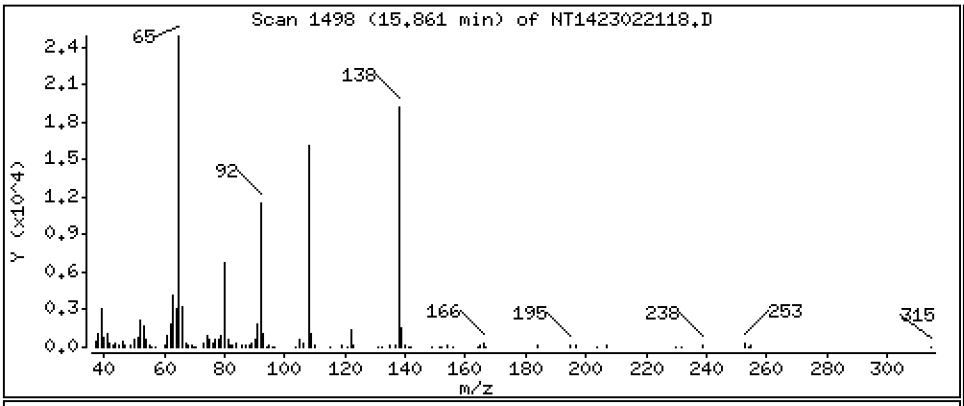
Operator: DSD

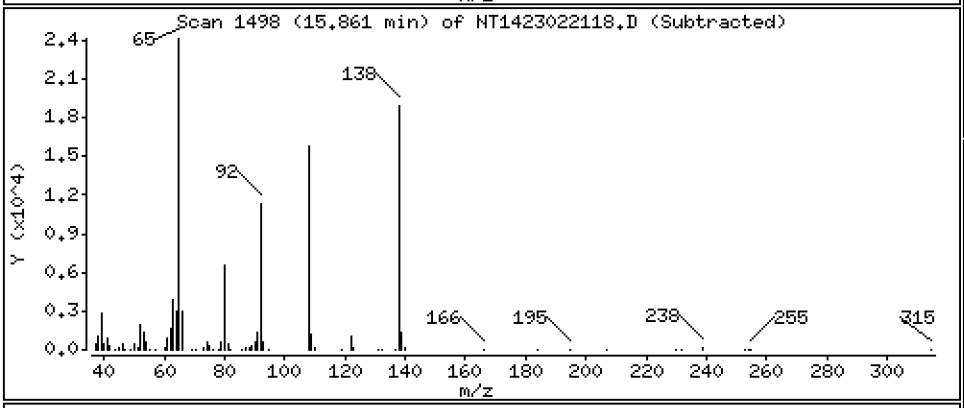
Column phase: ZB-5msi

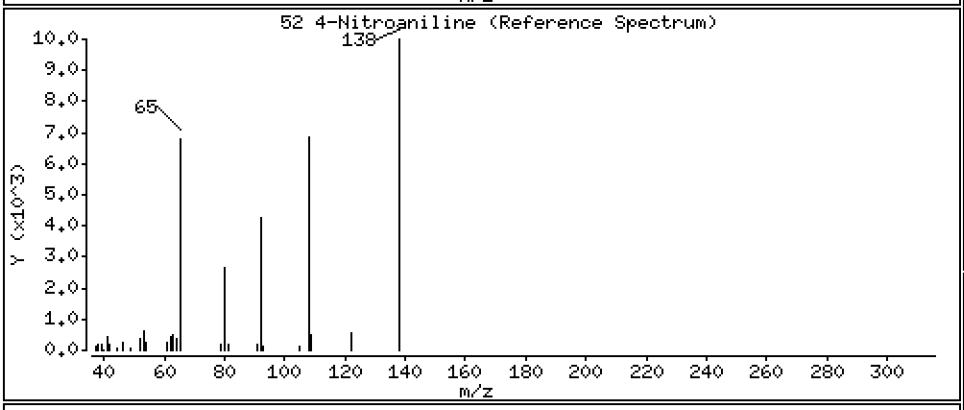
Column diameter: 0.25

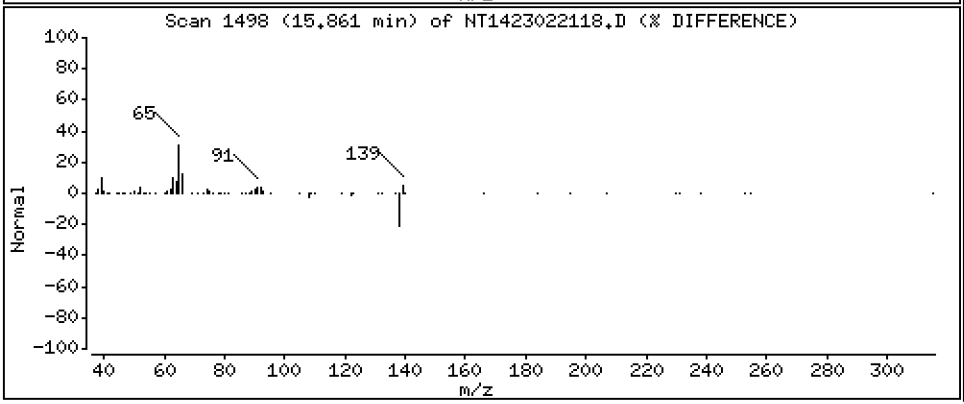
52 4-Nitroaniline

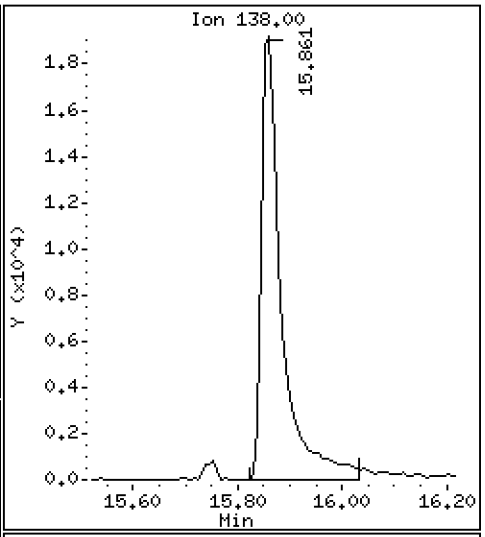
Concentration: 1.129 ug/mL

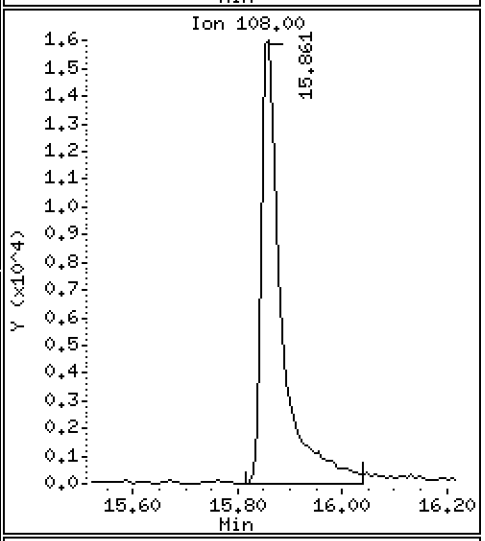


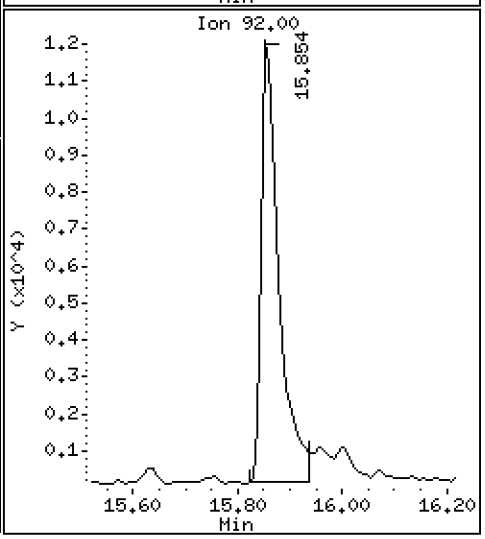












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

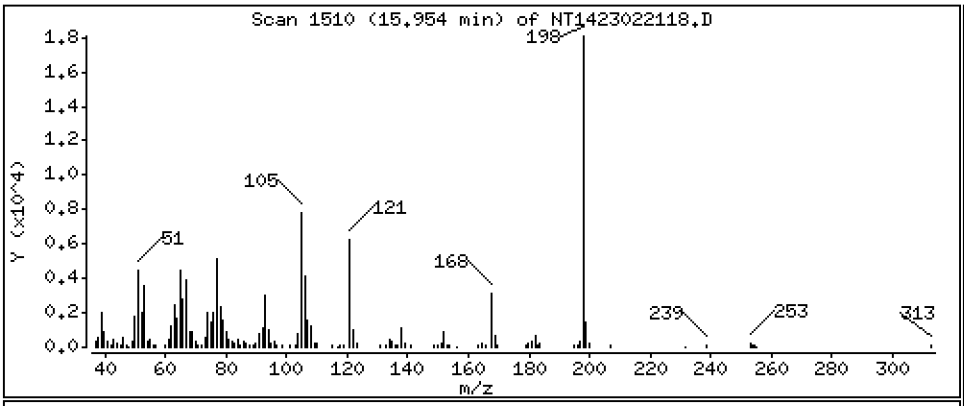
Operator: DSD

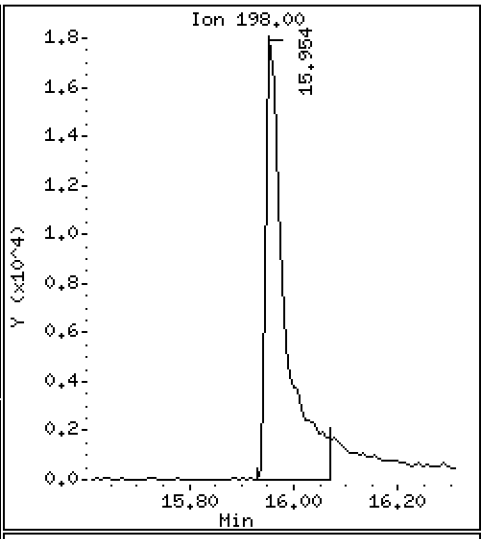
Column phase: ZB-5msi

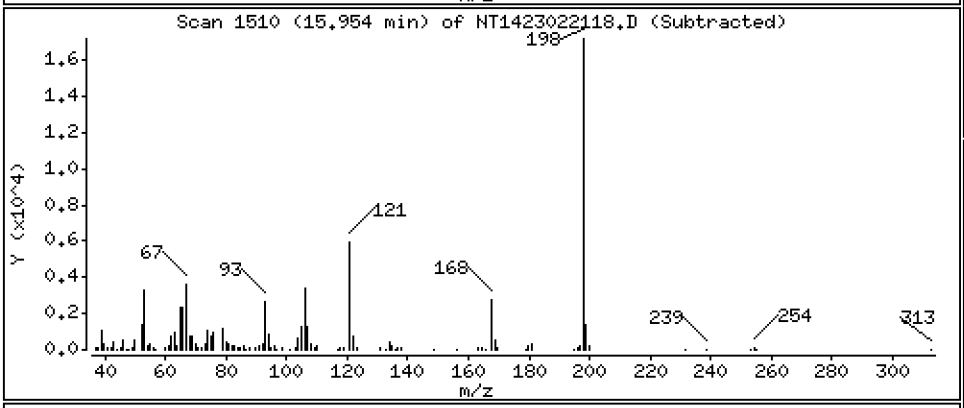
Column diameter: 0.25

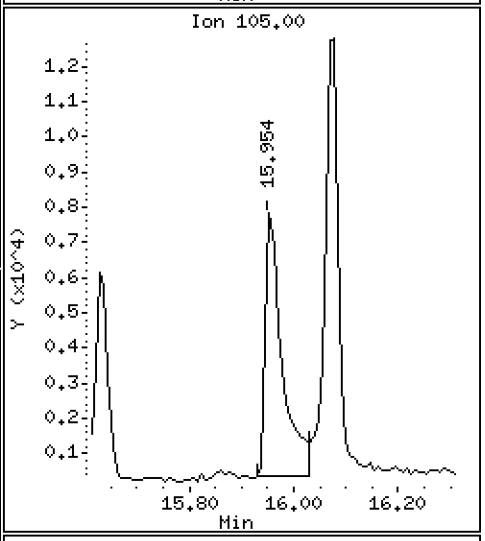
53 4,6-Dinitro-2-methylphenol

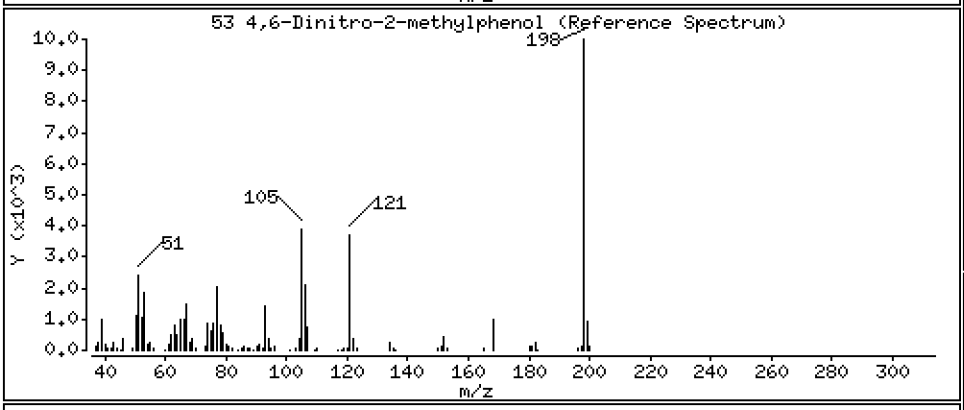
Concentration: 1.193 ug/mL

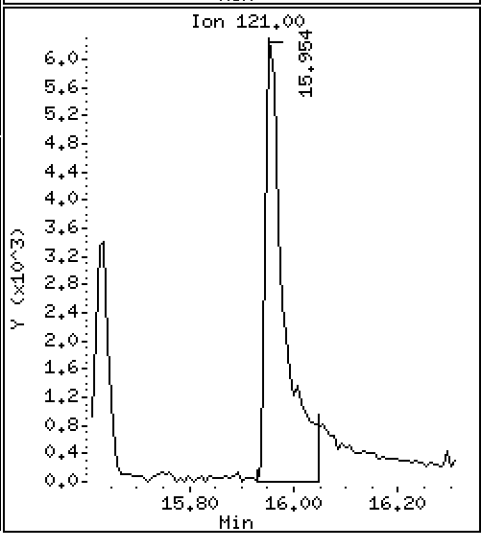


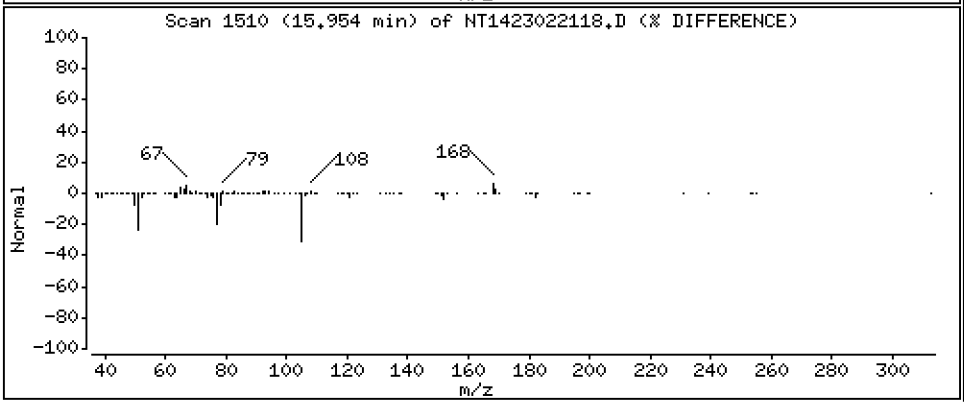












Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022118.D

Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

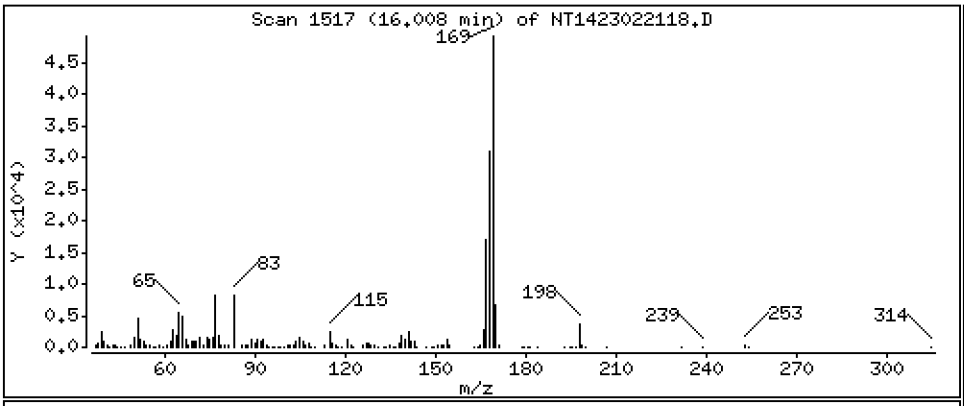
Operator: DSD

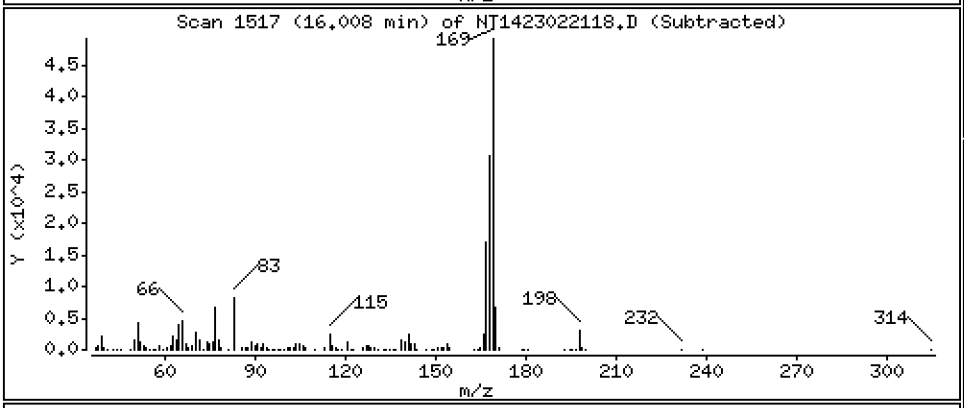
Column phase: ZB-5msi

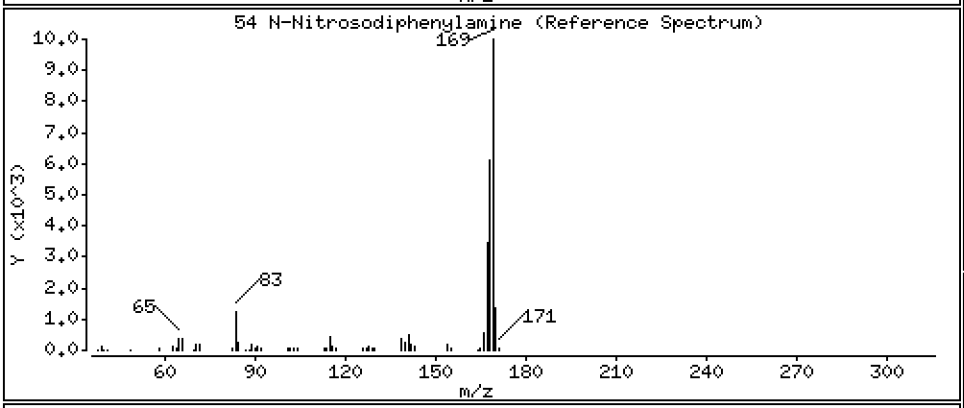
Column diameter: 0.25

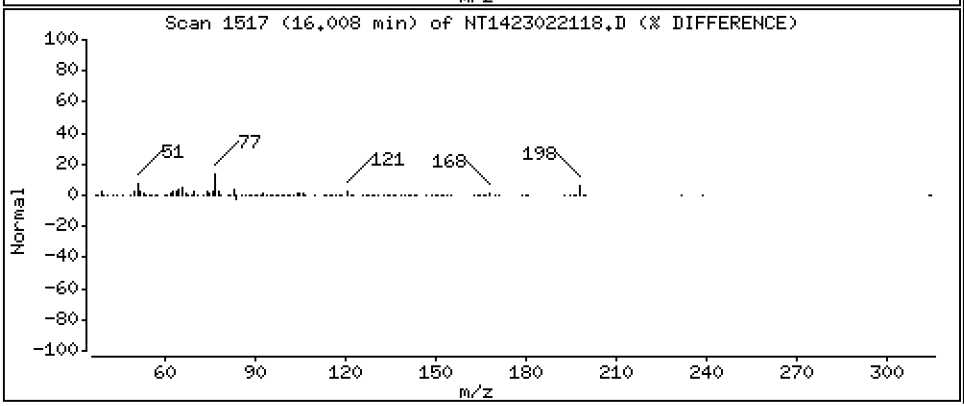
54 N-Nitrosodiphenylamine

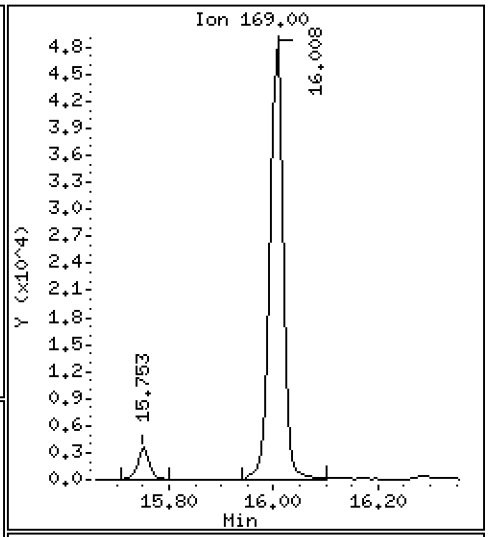
Concentration: 0.5538 ug/mL

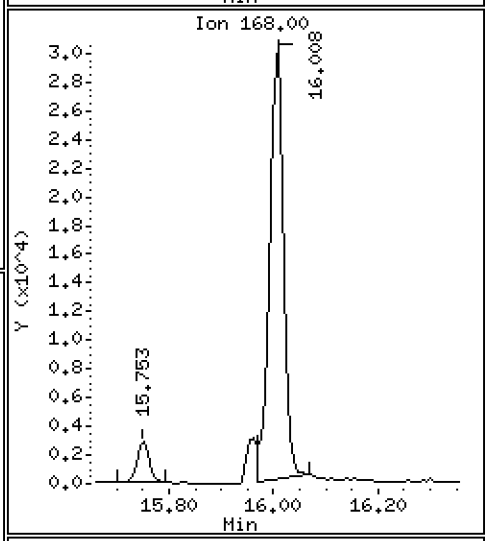


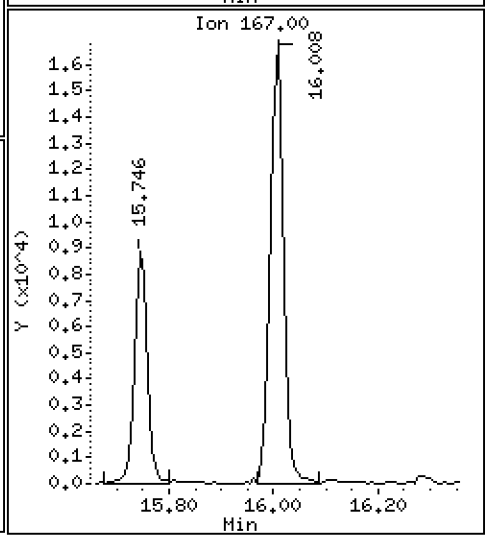












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

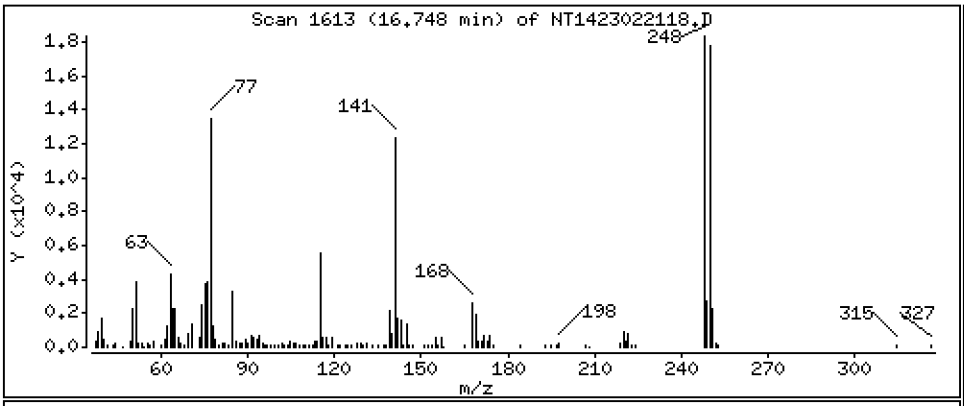
Operator: DSD

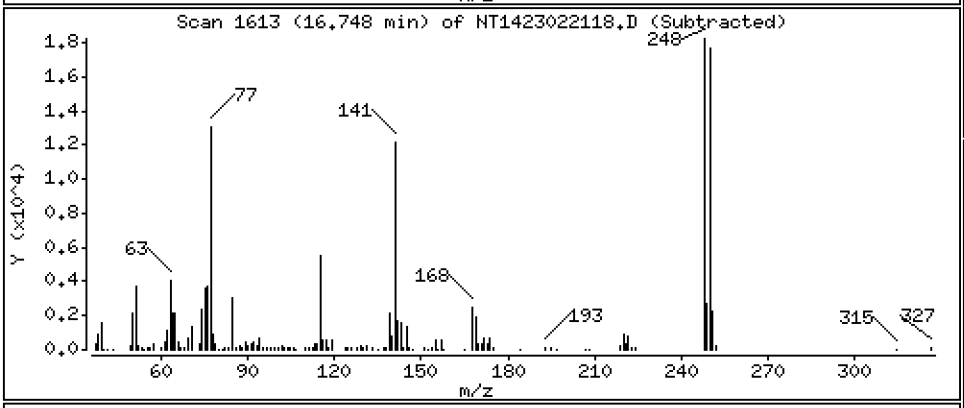
Column phase: ZB-5msi

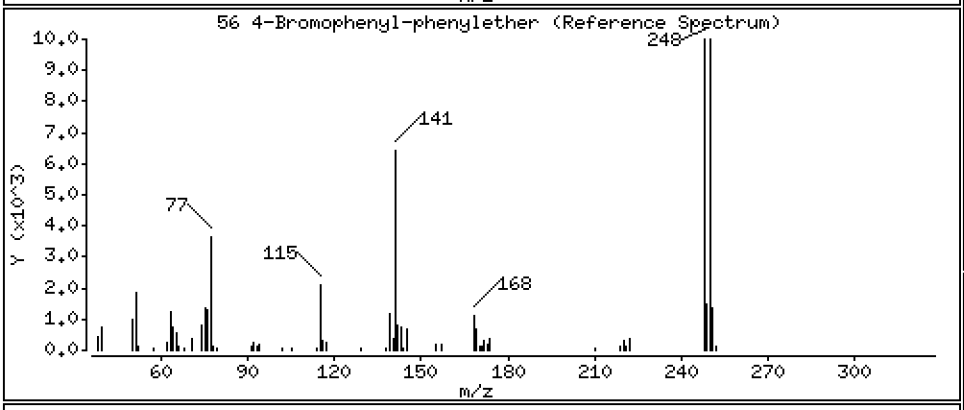
Column diameter: 0.25

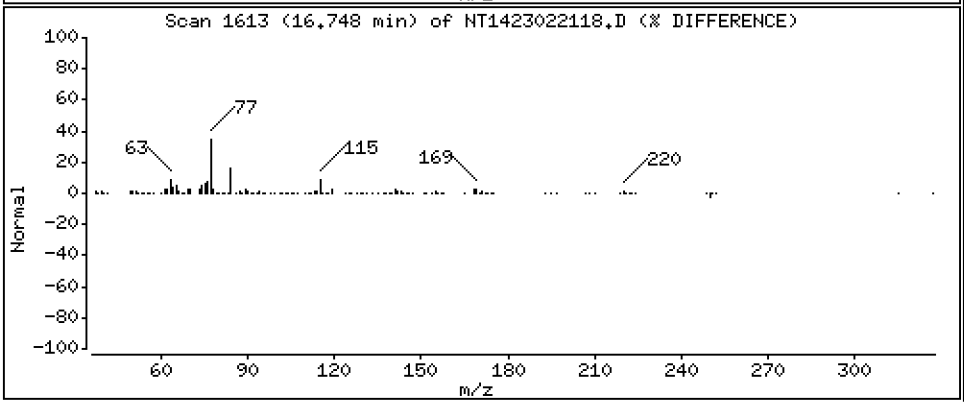
56 4-Bromophenyl-phenylether

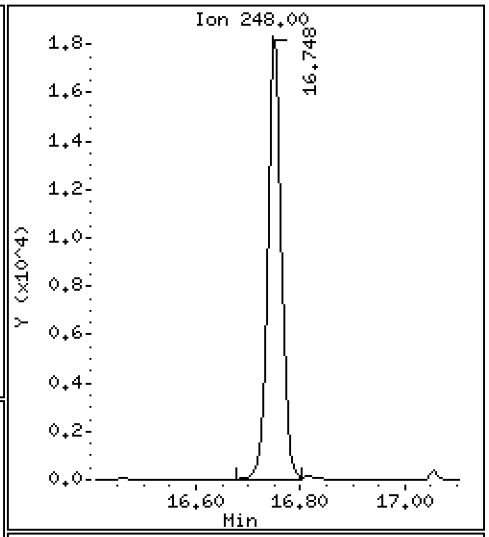
Concentration: 0.5033 ug/mL

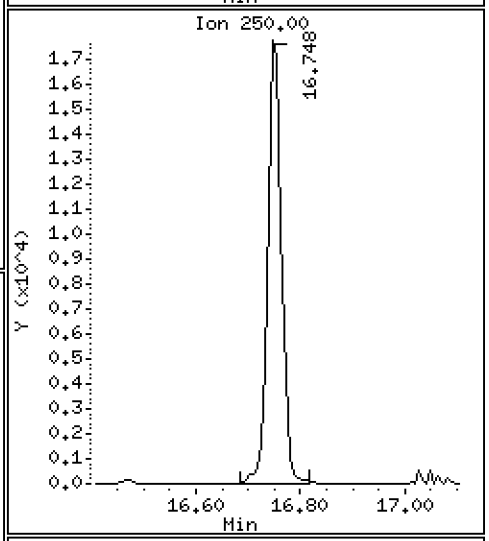


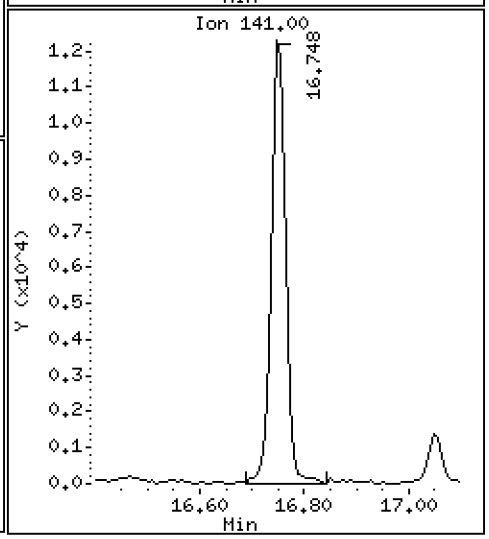












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

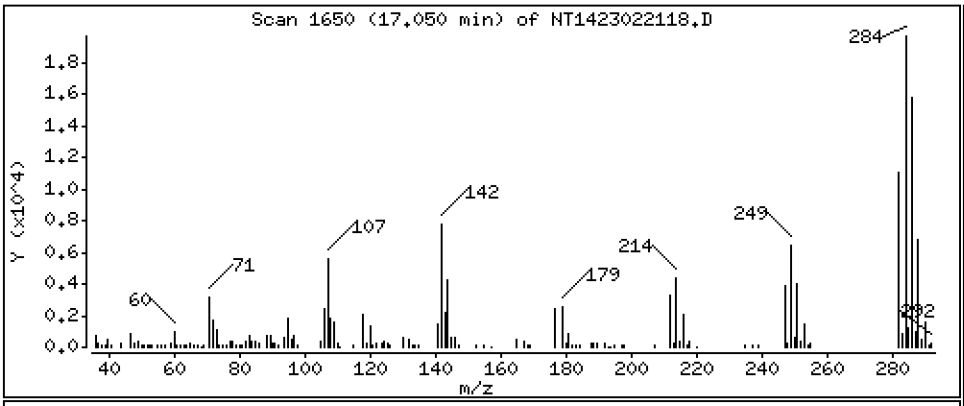
Operator: DSD

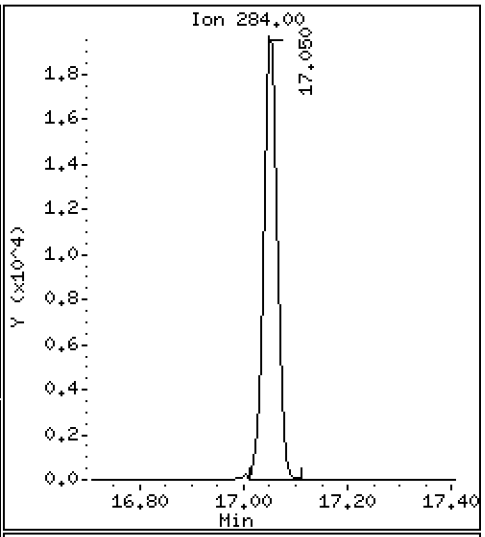
Column phase: ZB-5msi

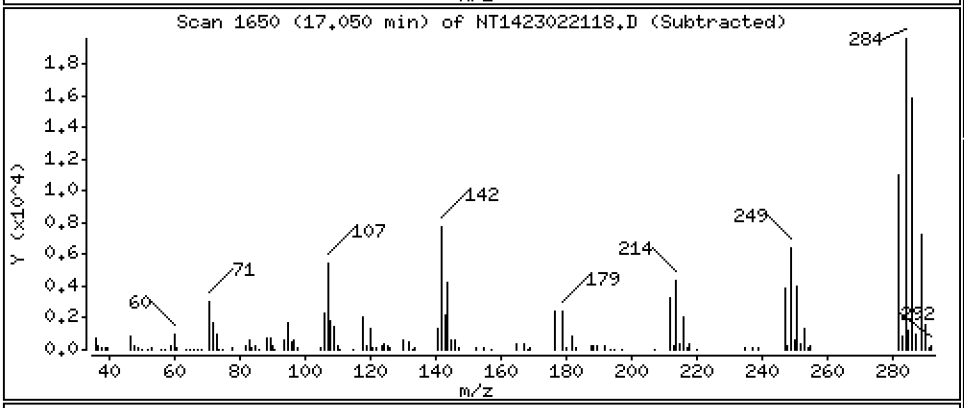
Column diameter: 0.25

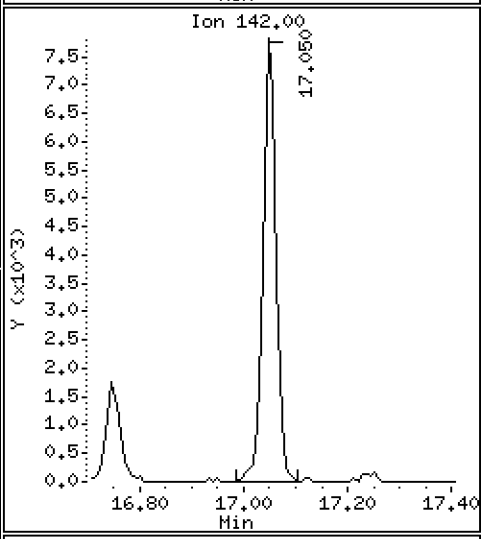
57 Hexachlorobenzene

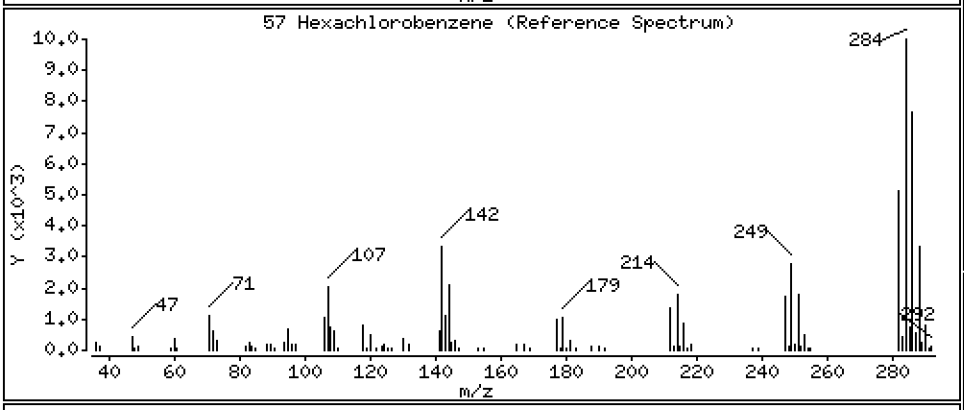
Concentration: 0.5380 ug/mL

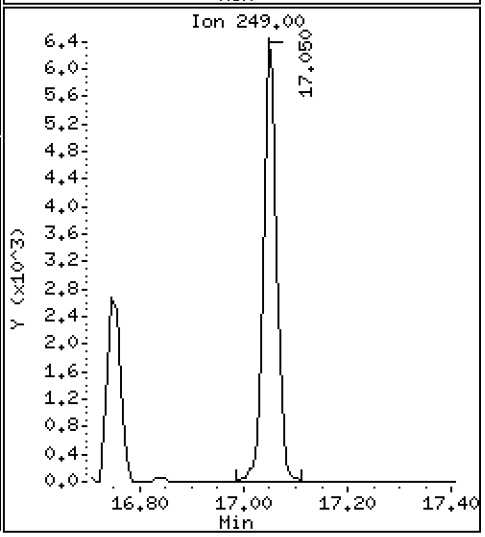


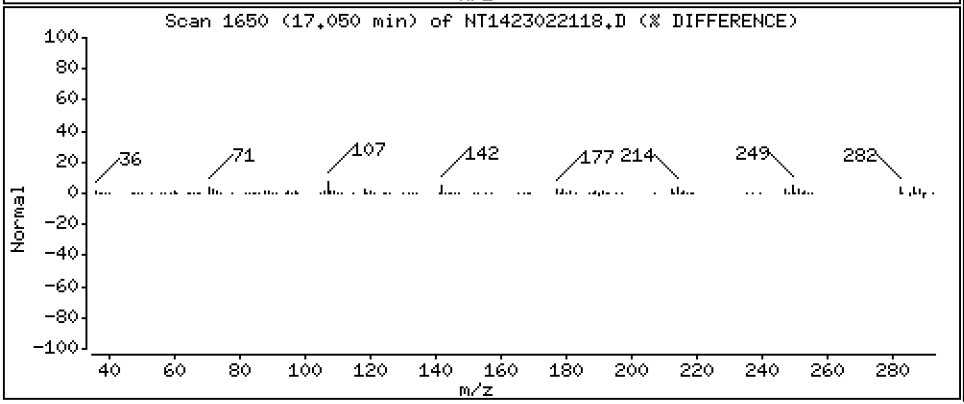












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

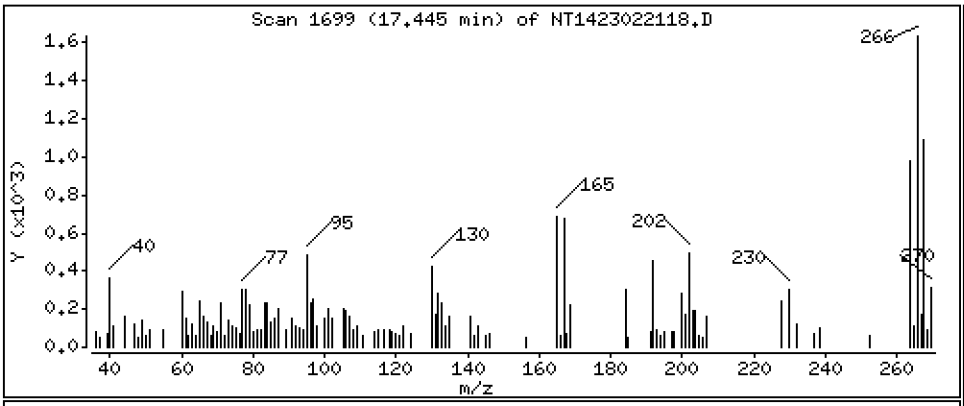
Operator: DSD

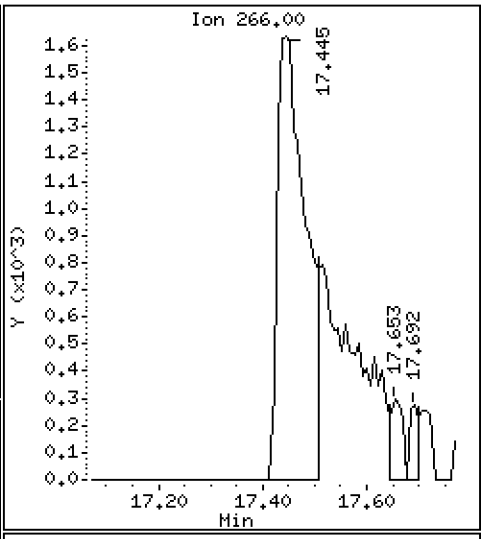
Column phase: ZB-5msi

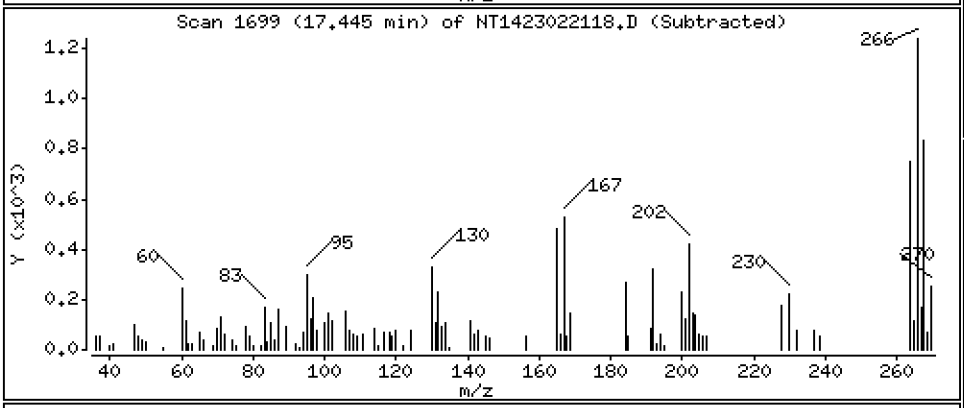
Column diameter: 0.25

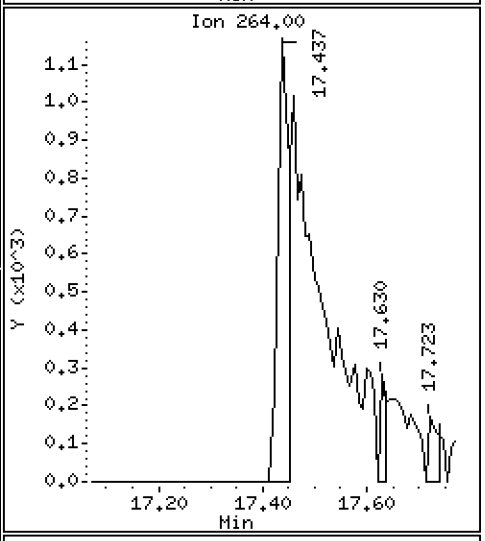
58 Pentachlorophenol

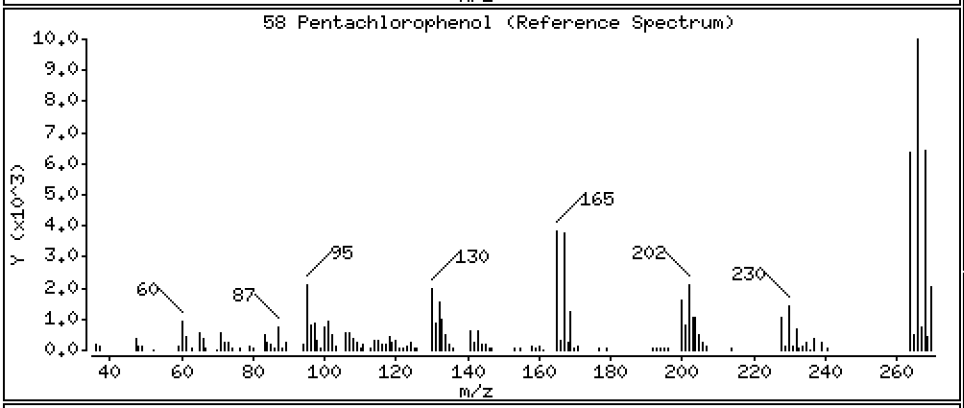
Concentration: 0.1932 ug/mL

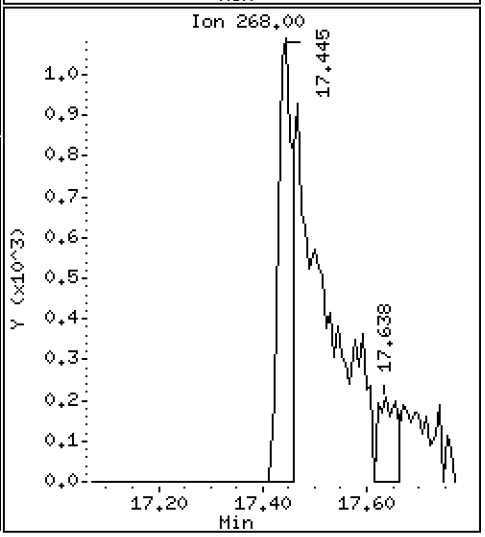


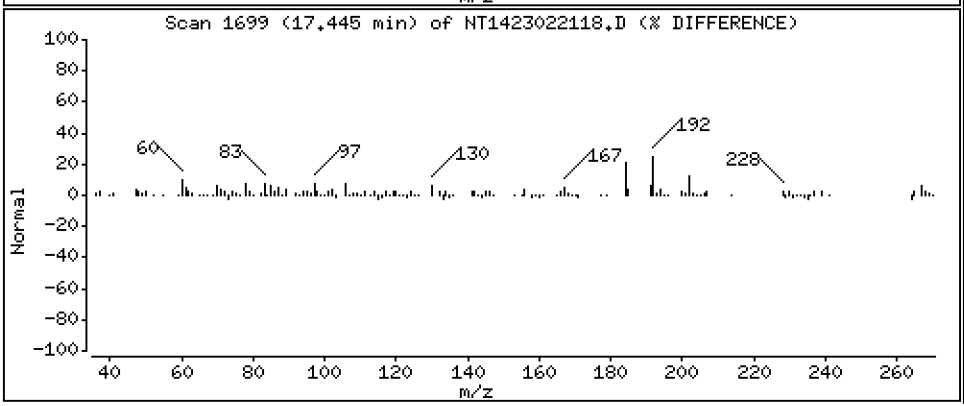












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

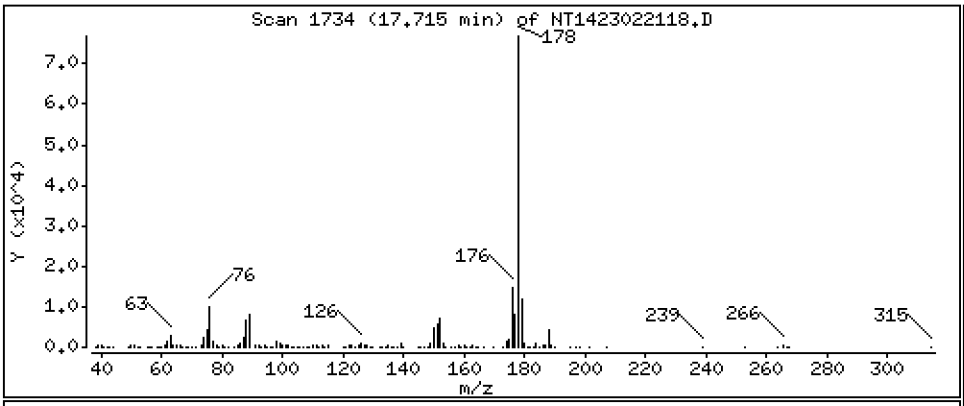
Operator: DSD

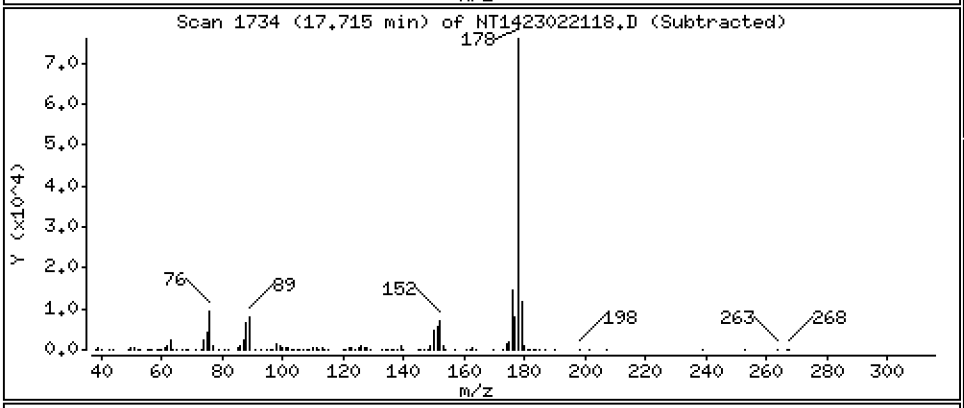
Column phase: ZB-5msi

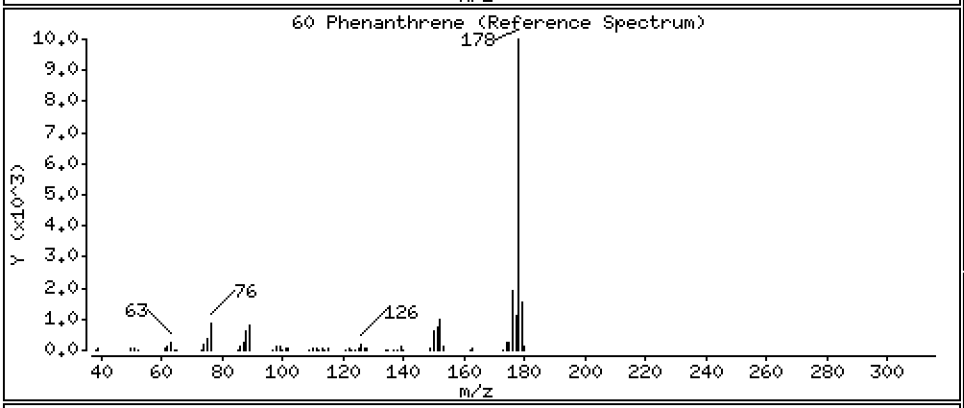
Column diameter: 0.25

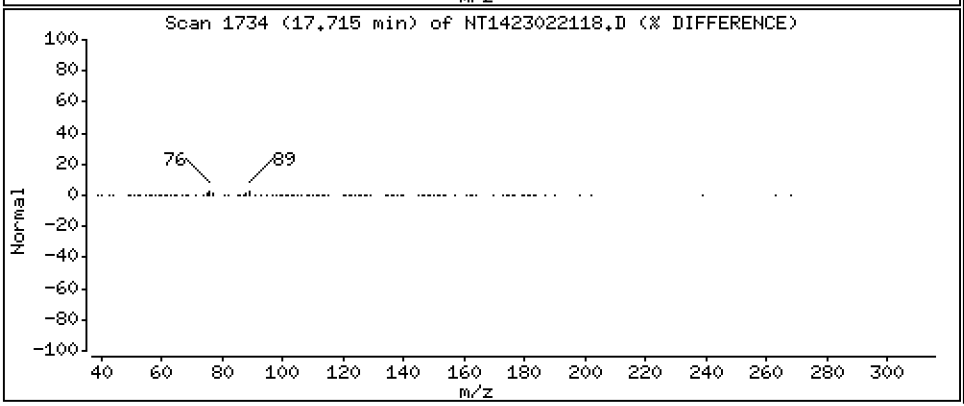
60 Phenanthrene

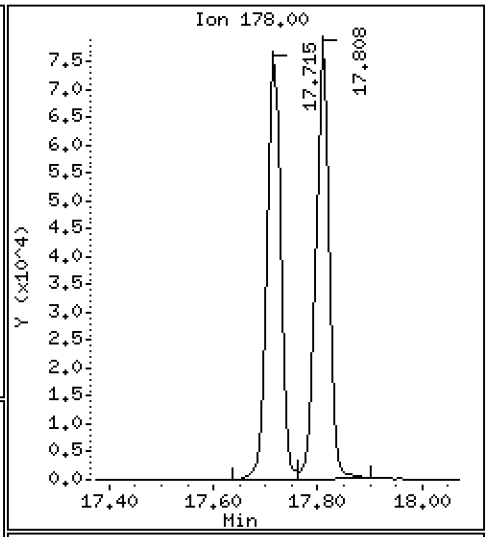
Concentration: 0.5407 ug/mL

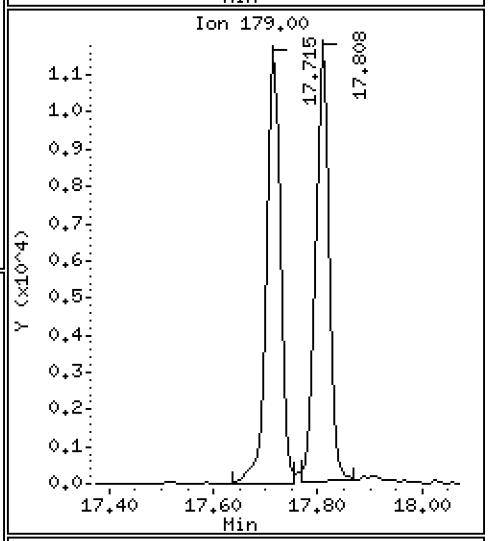


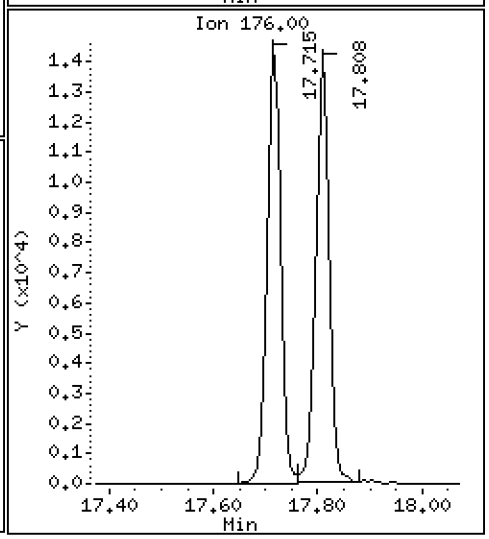












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

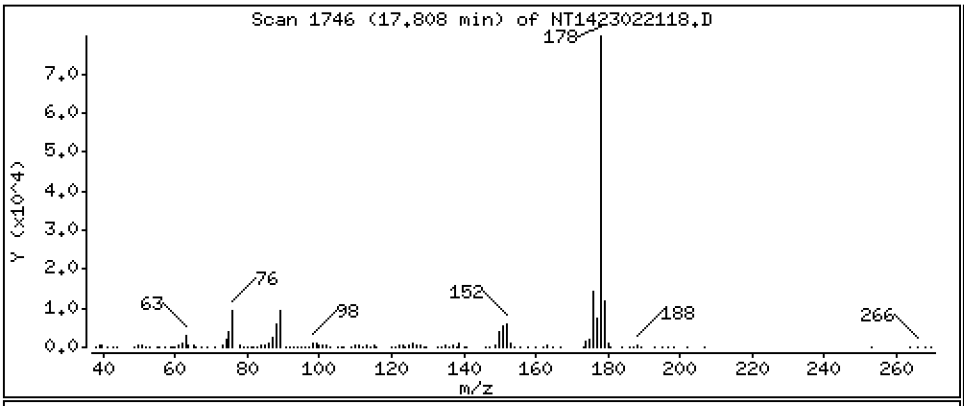
Operator: DSD

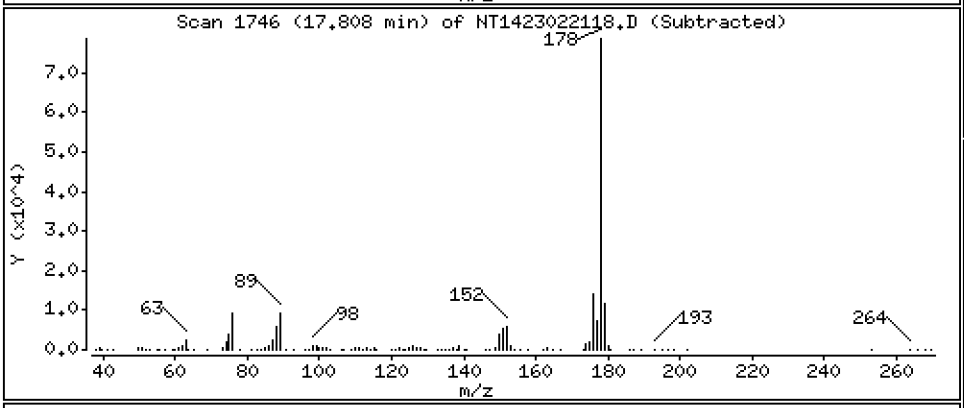
Column phase: ZB-5msi

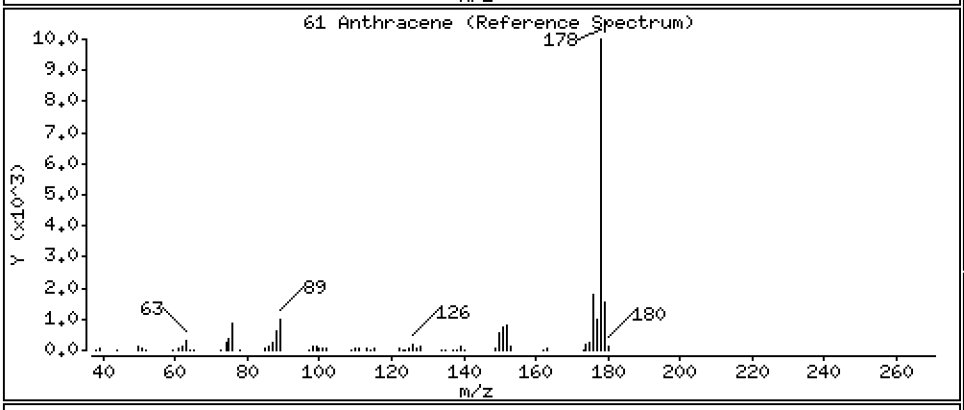
Column diameter: 0.25

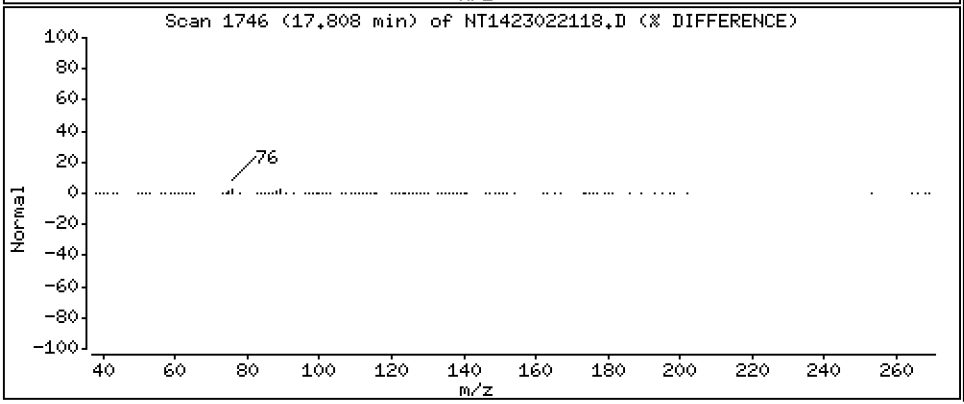
61 Anthracene

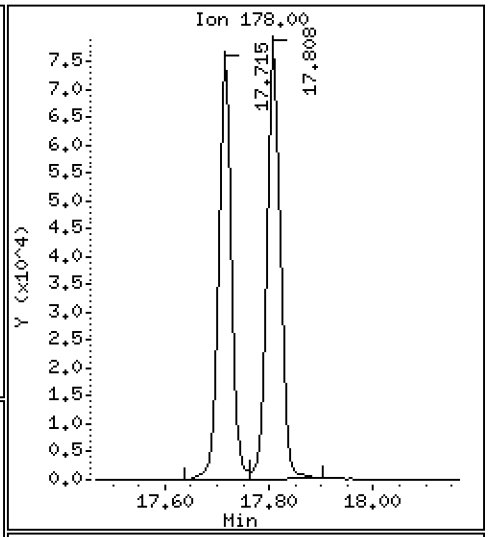
Concentration: 0.5570 ug/mL

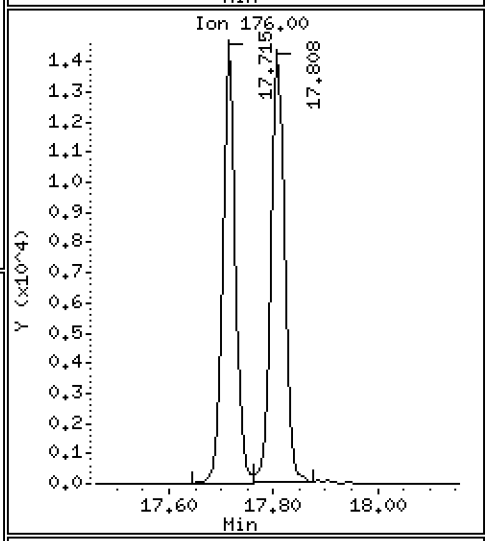


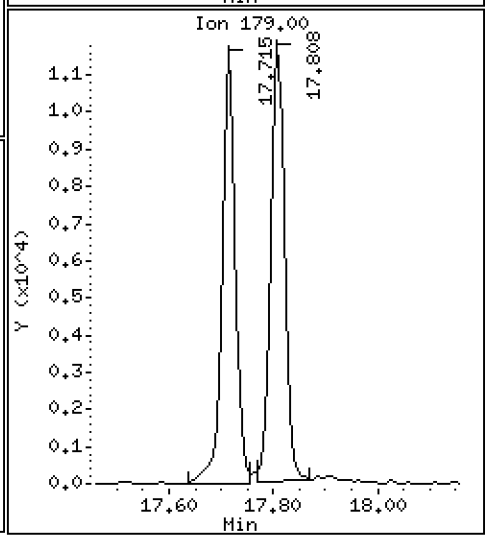












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

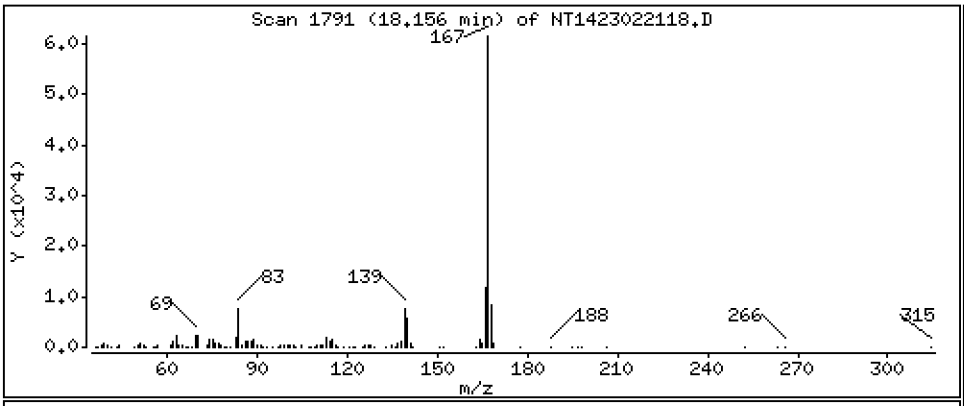
Operator: DSD

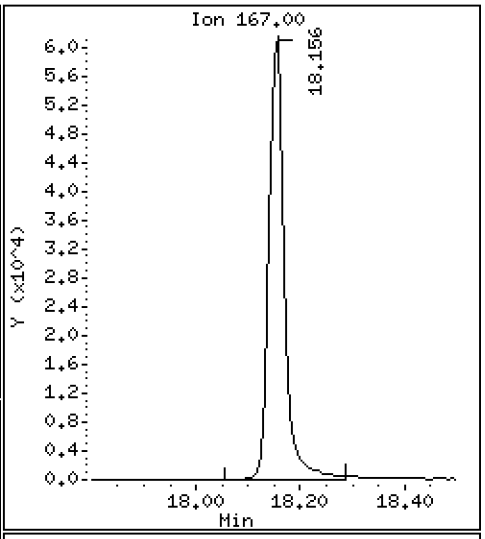
Column phase: ZB-5msi

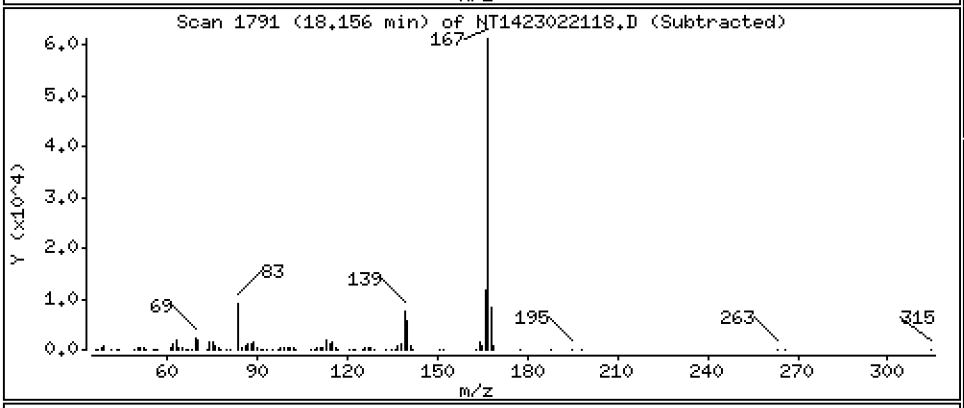
Column diameter: 0.25

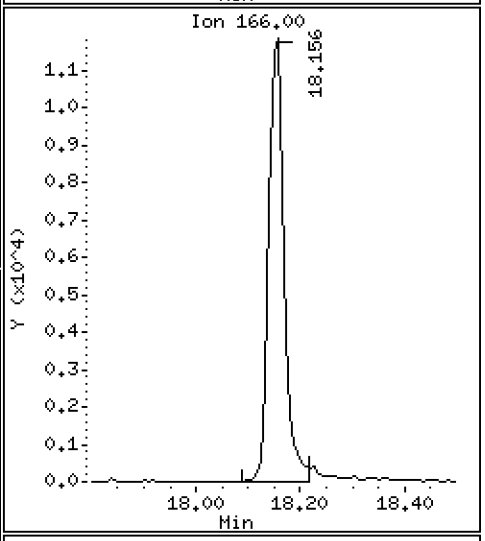
62 Carbazole

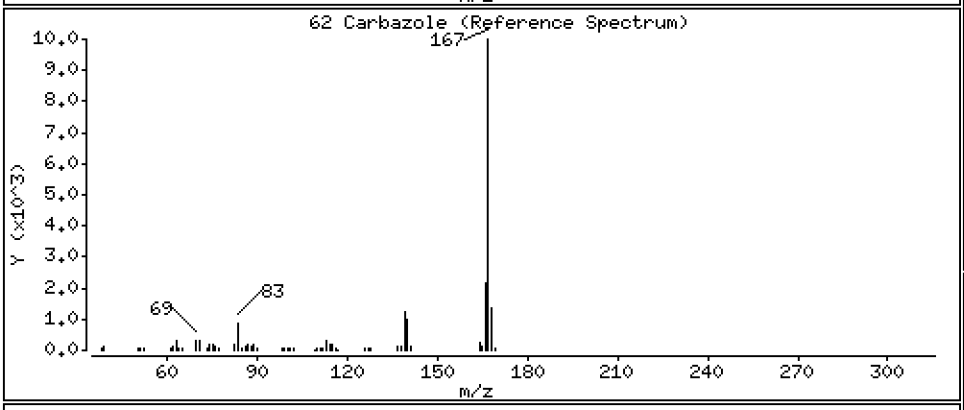
Concentration: 0.5540 ug/mL

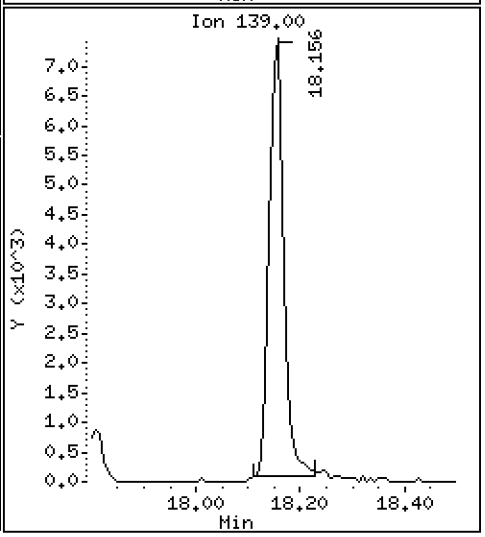


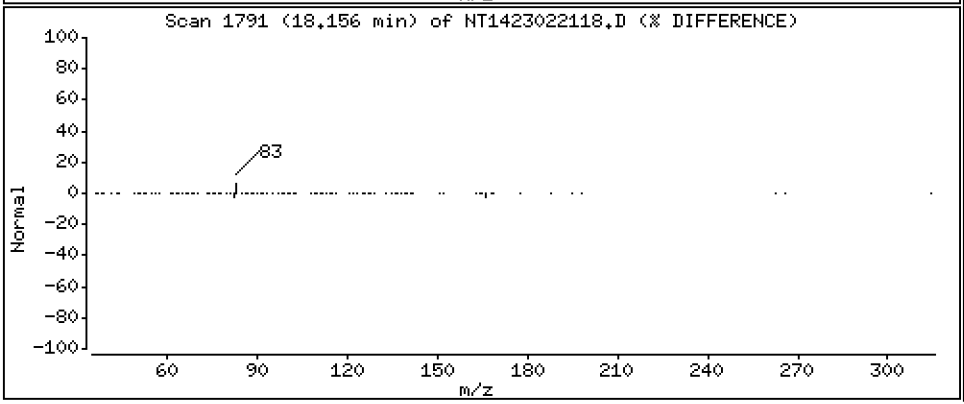












Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022118.D

Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

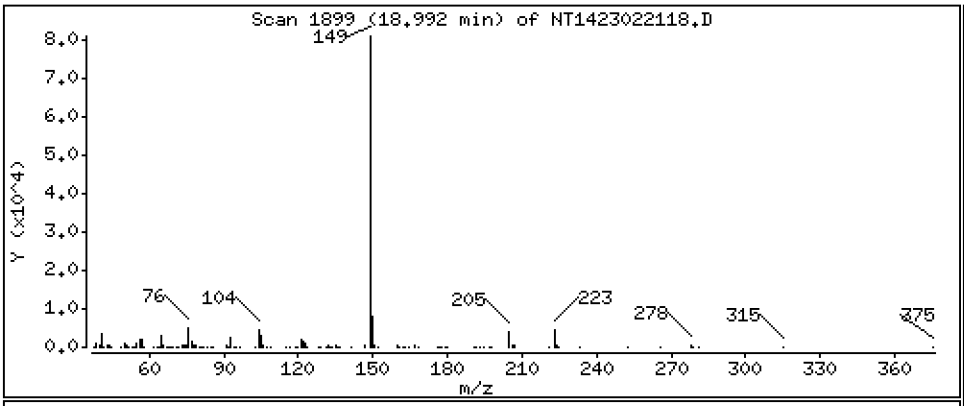
Operator: DSD

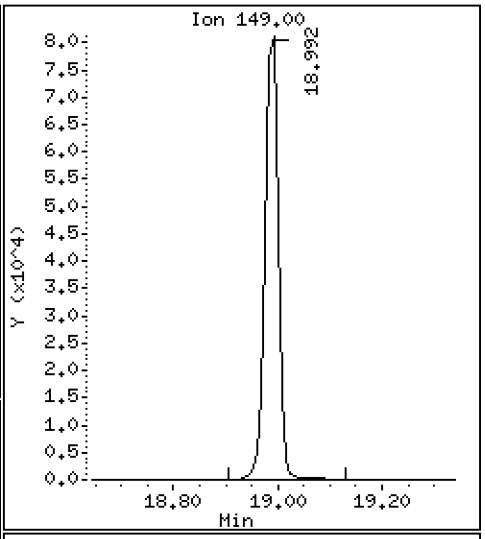
Column phase: ZB-5msi

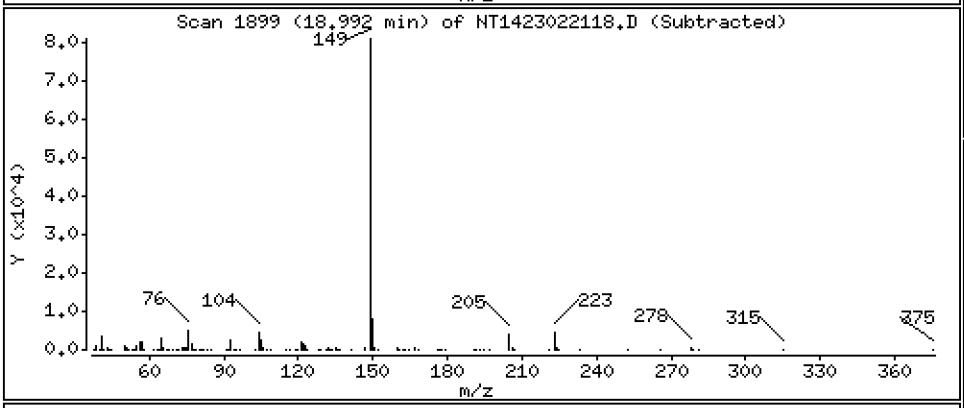
Column diameter: 0.25

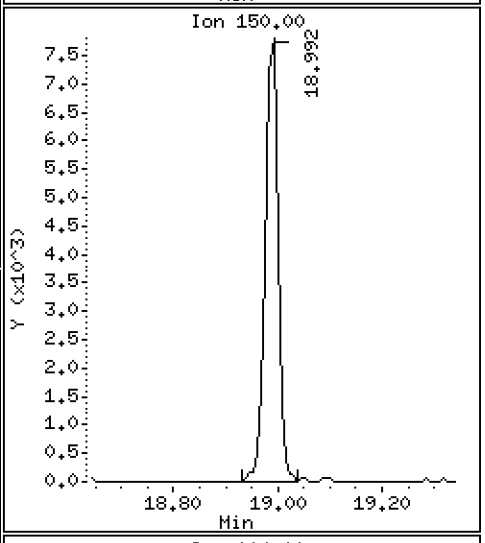
63 Di-n-butylphthalate

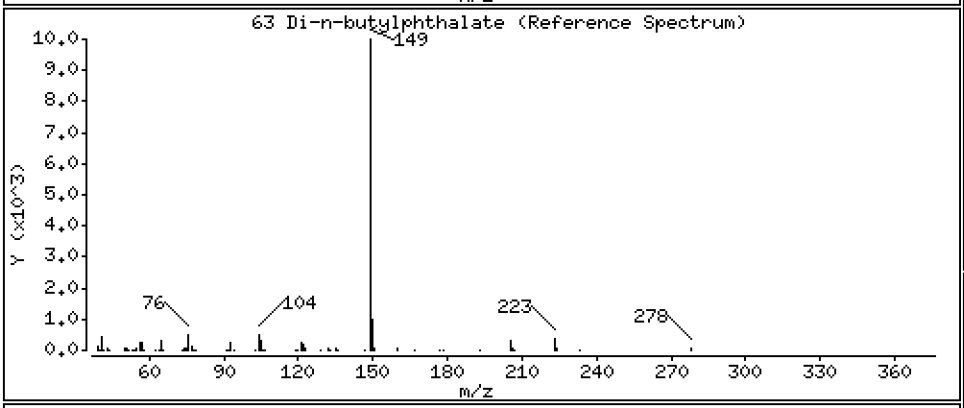
Concentration: 0.5537 ug/mL

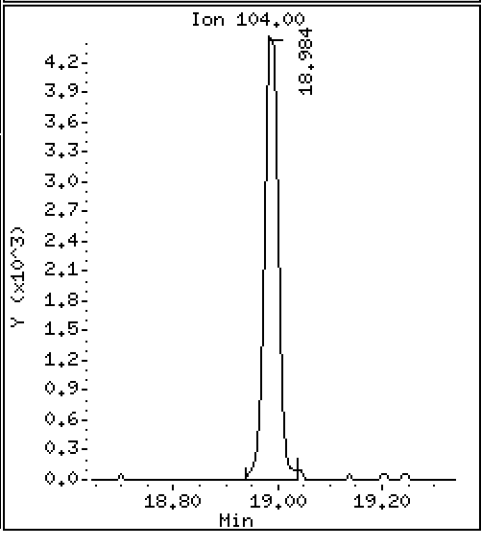


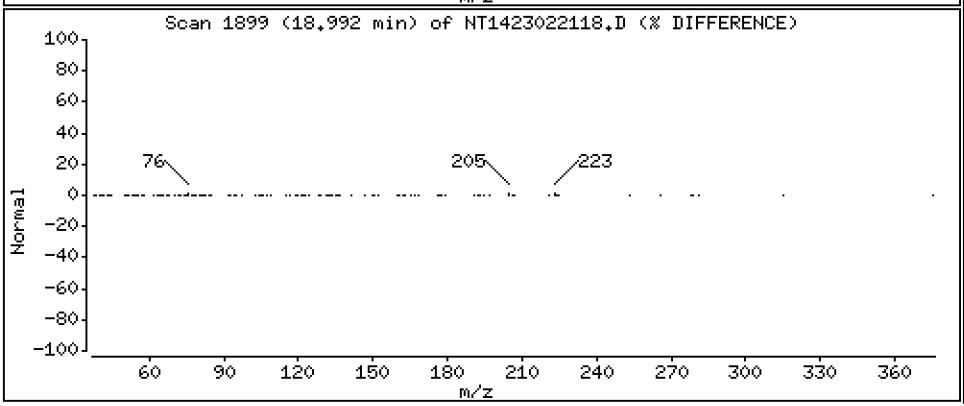












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

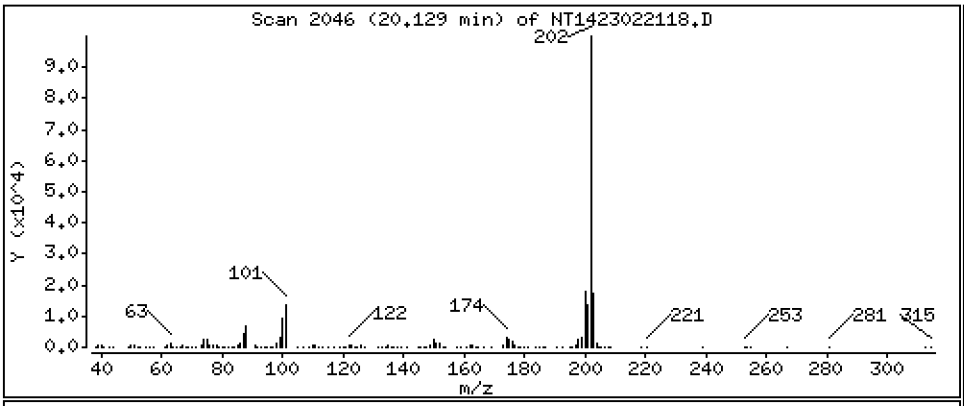
Operator: DSD

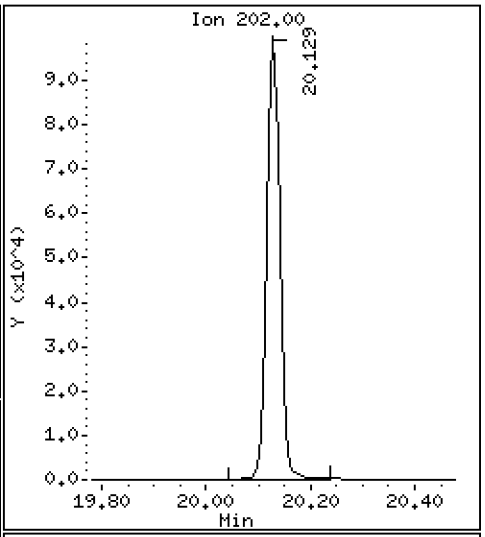
Column phase: ZB-5msi

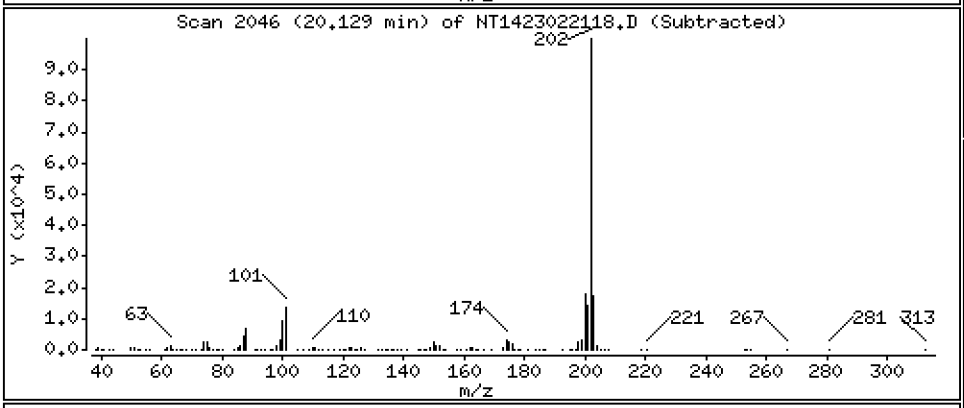
Column diameter: 0.25

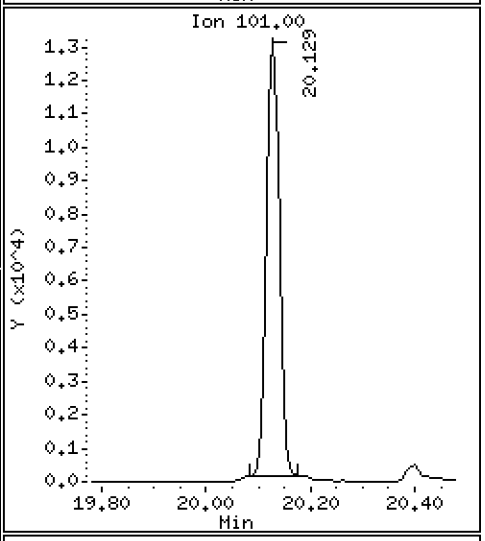
64 Fluoranthene

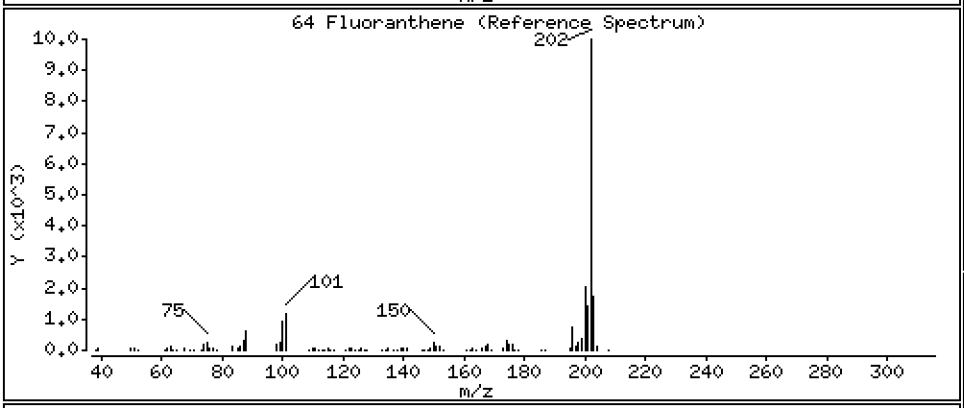
Concentration: 0.4374 ug/mL

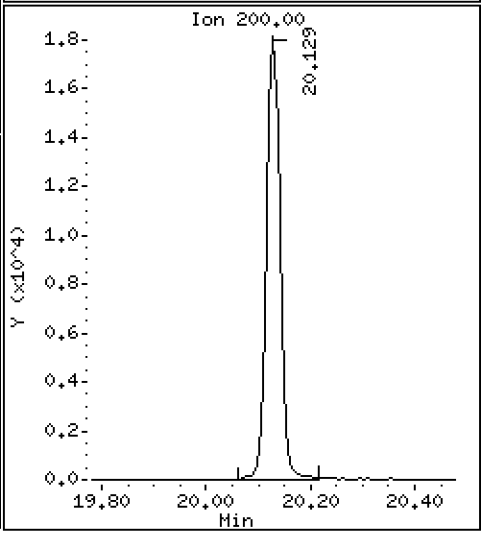


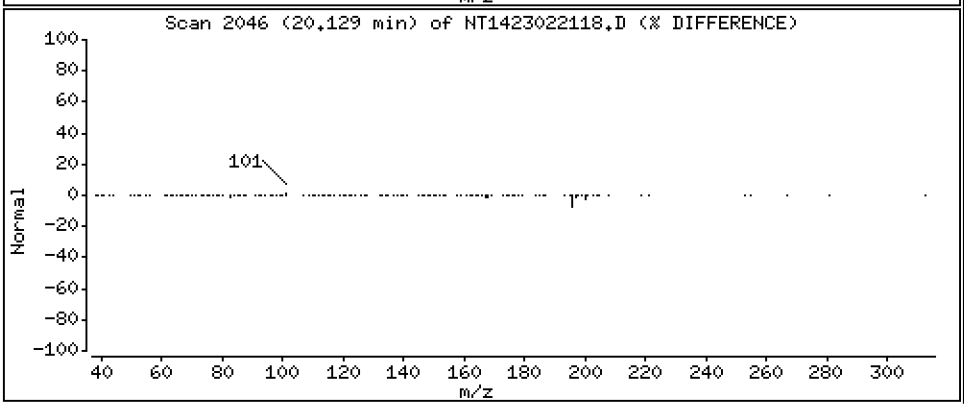












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

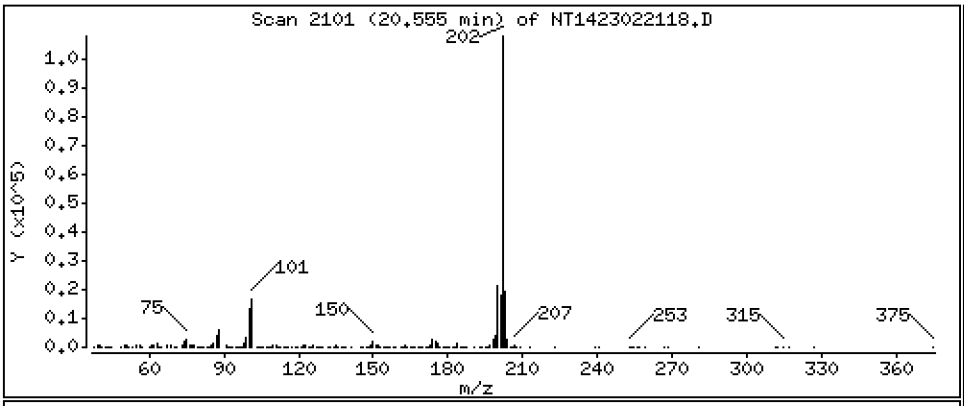
Operator: DSD

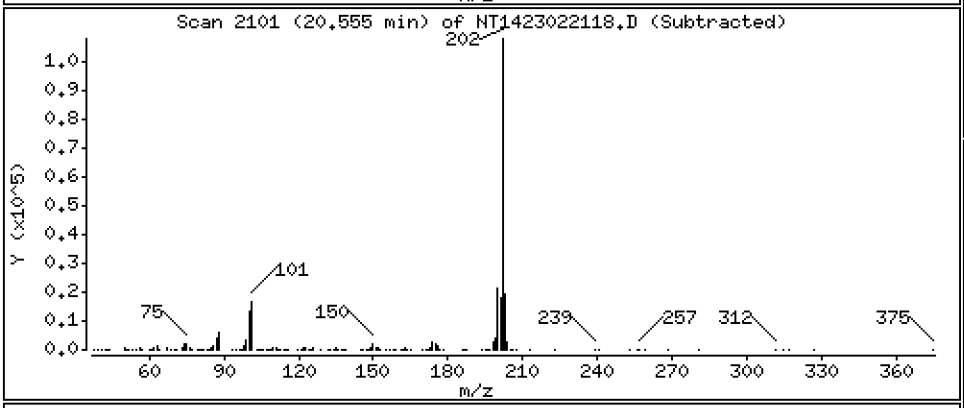
Column phase: ZB-5msi

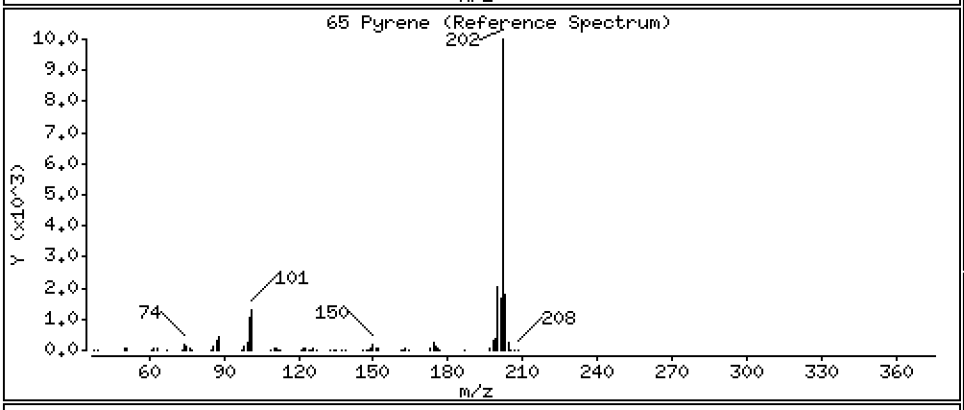
Column diameter: 0.25

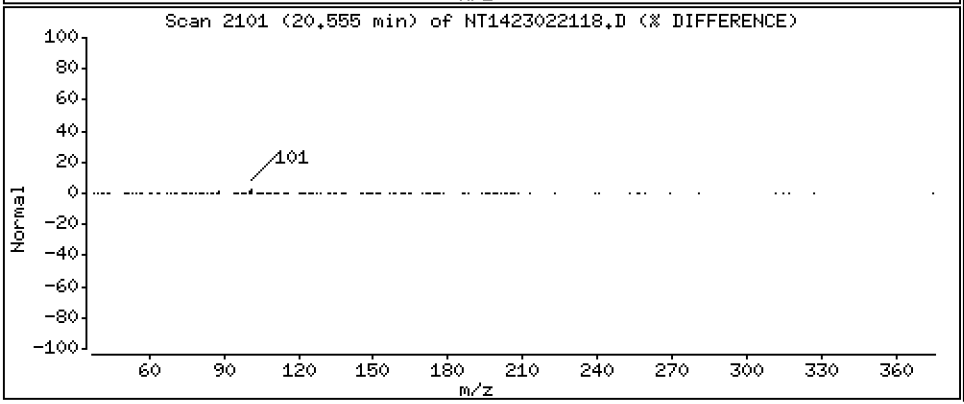
65 Pyrene

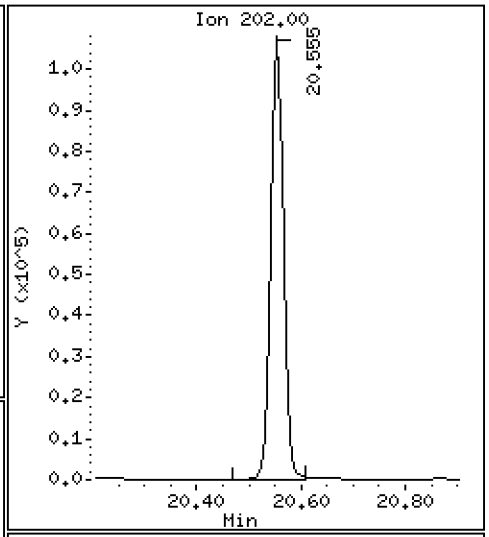
Concentration: 0.4277 ug/mL

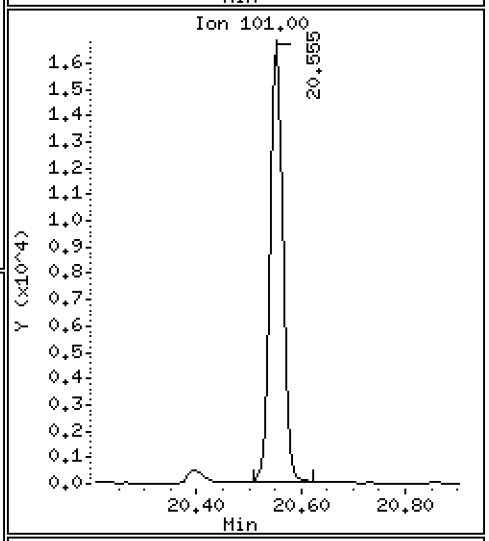


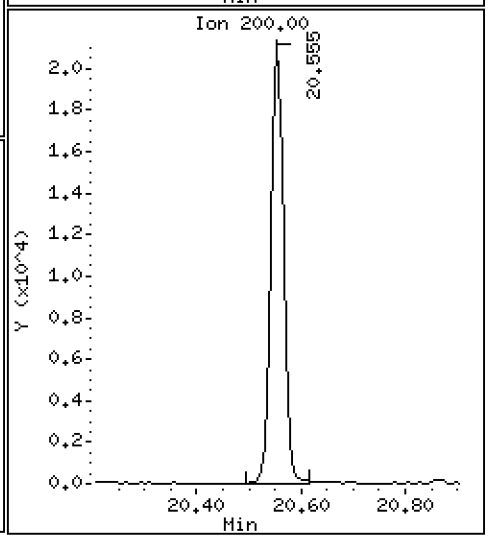












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

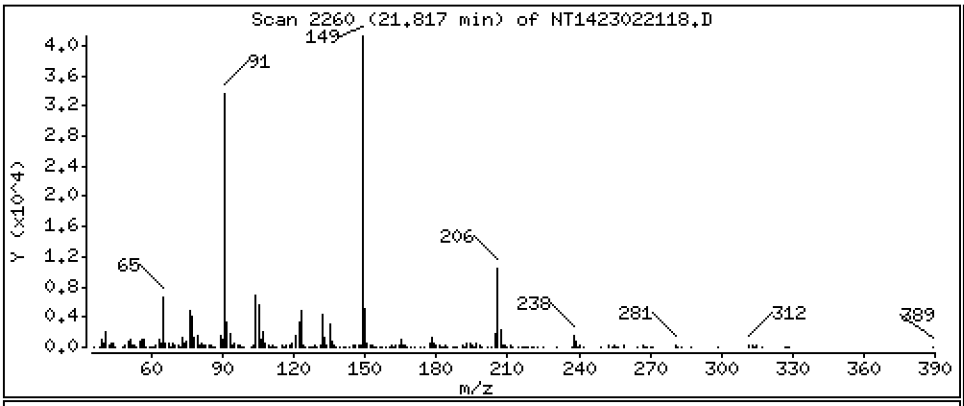
Operator: DSD

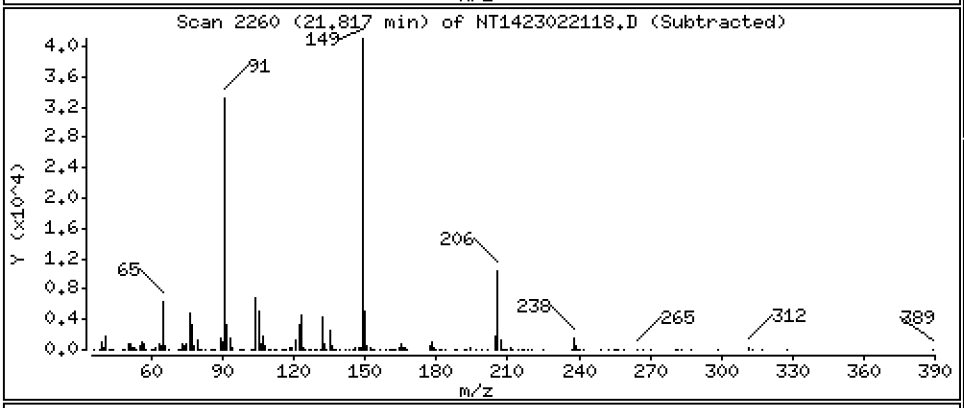
Column phase: ZB-5msi

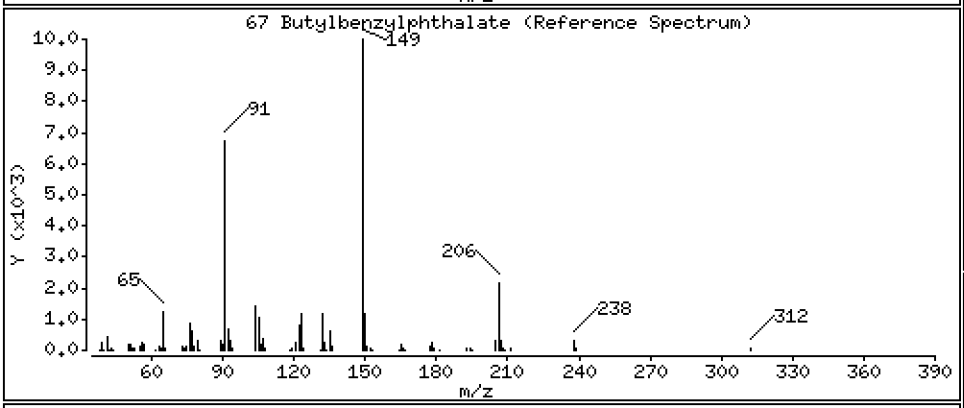
Column diameter: 0.25

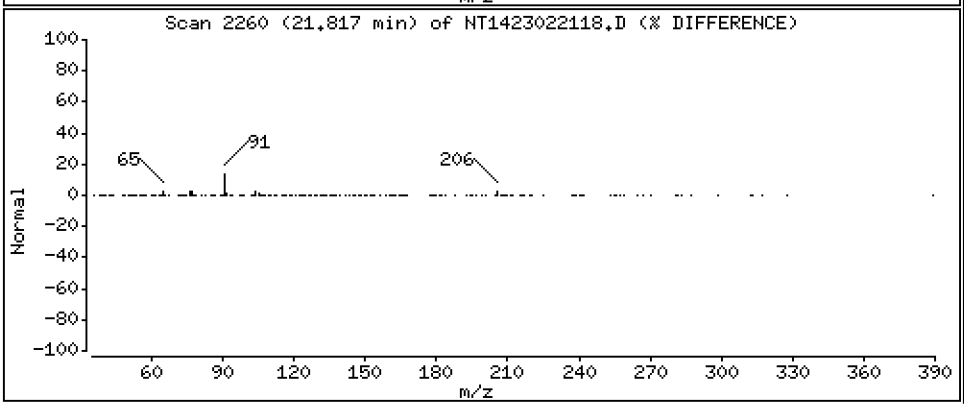
67 Butylbenzylphthalate

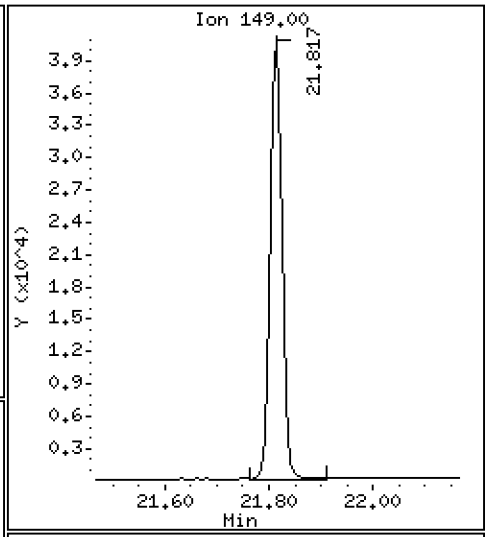
Concentration: 0.4589 ug/mL

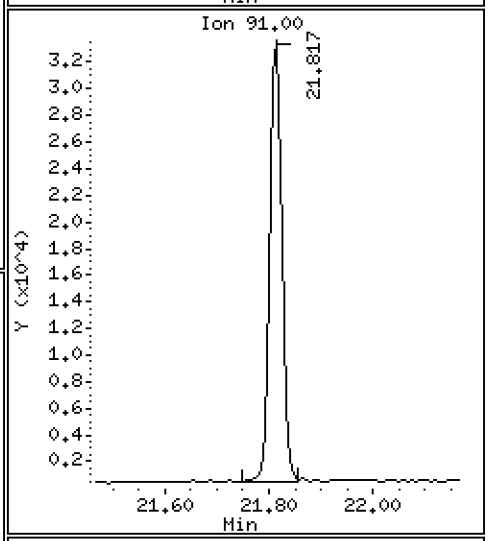


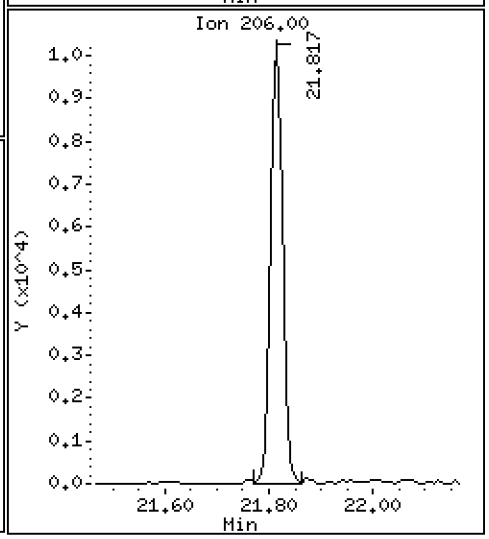












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

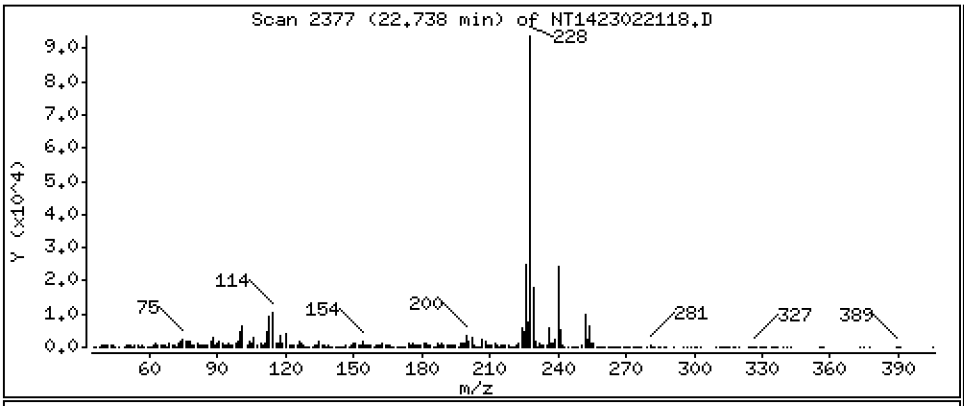
Operator: DSD

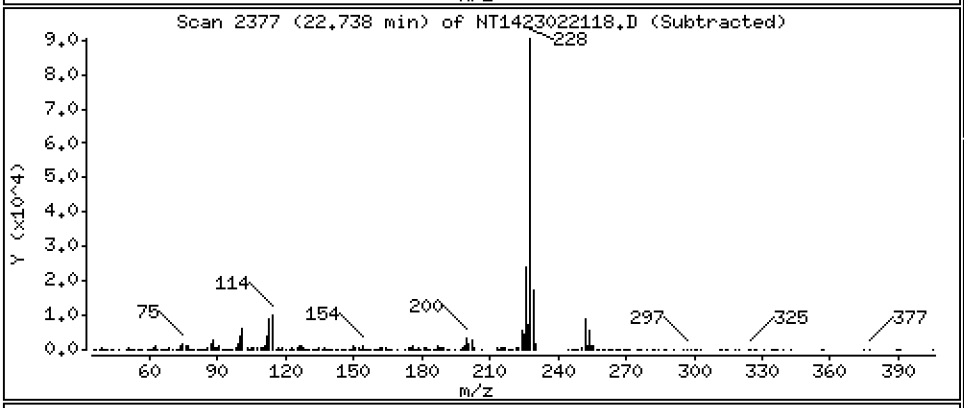
Column phase: ZB-5msi

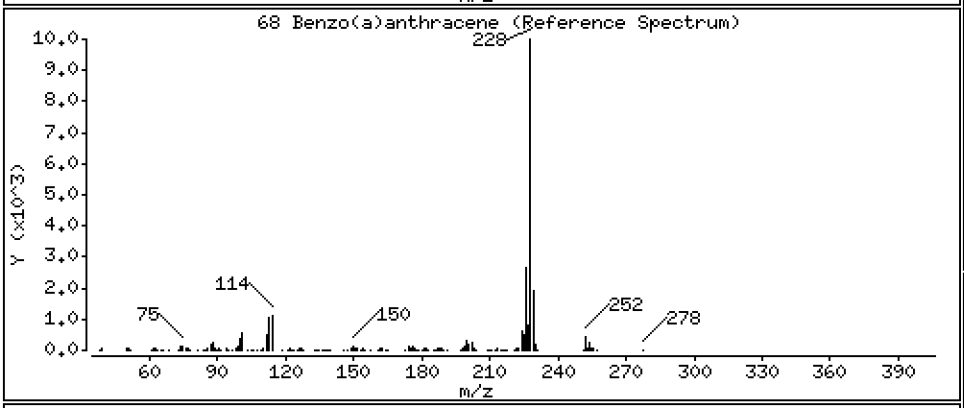
Column diameter: 0.25

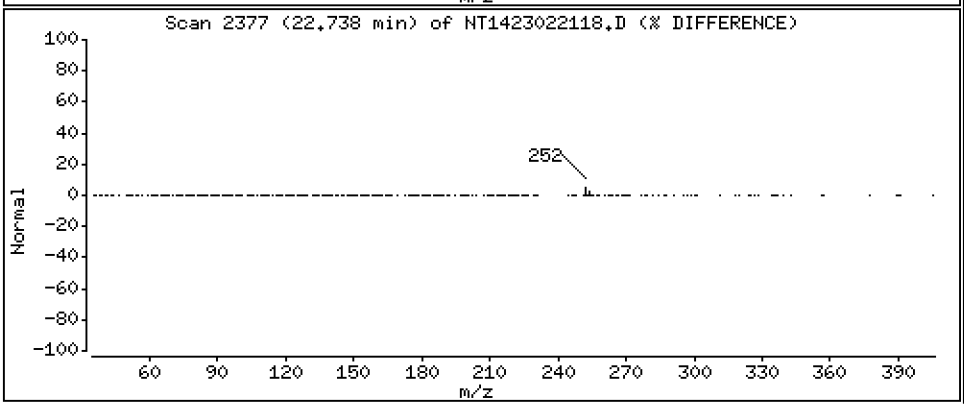
68 Benzo(a)anthracene

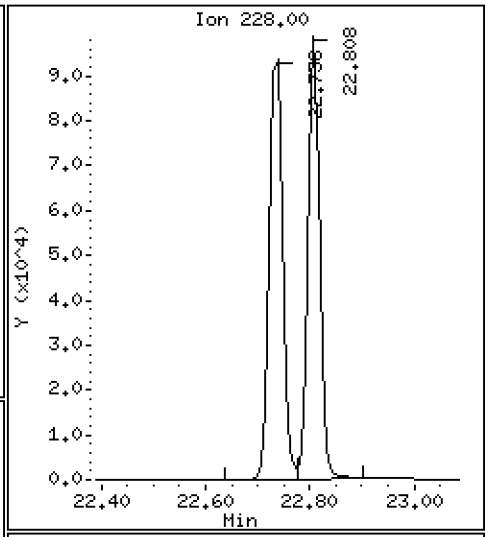
Concentration: 0.5722 ug/mL

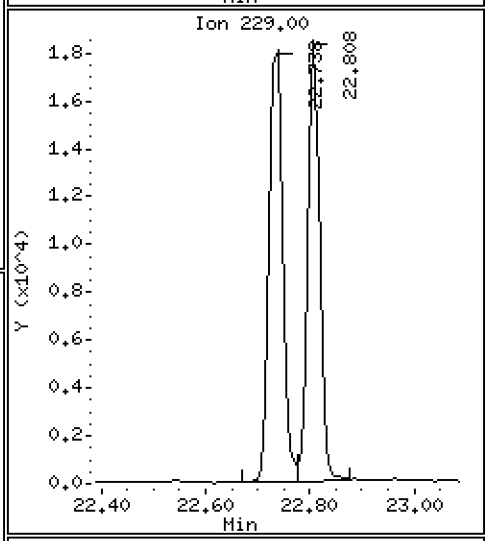


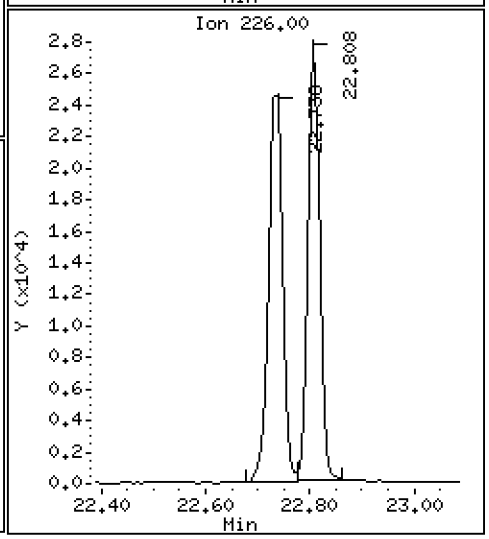












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

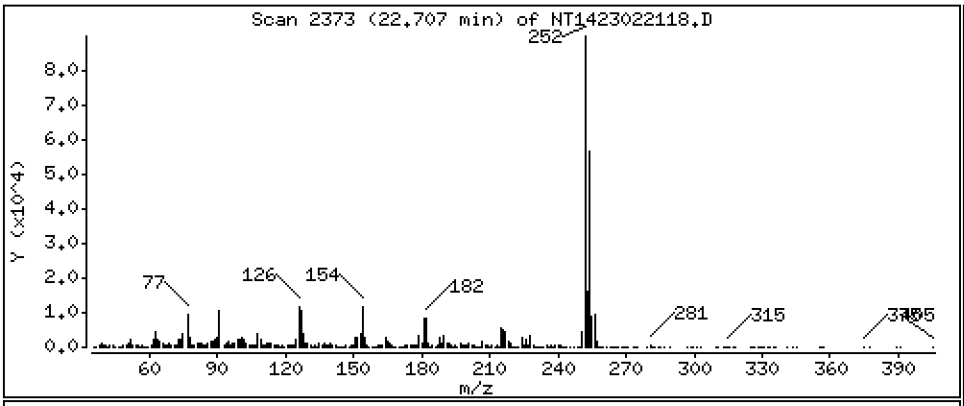
Operator: DSD

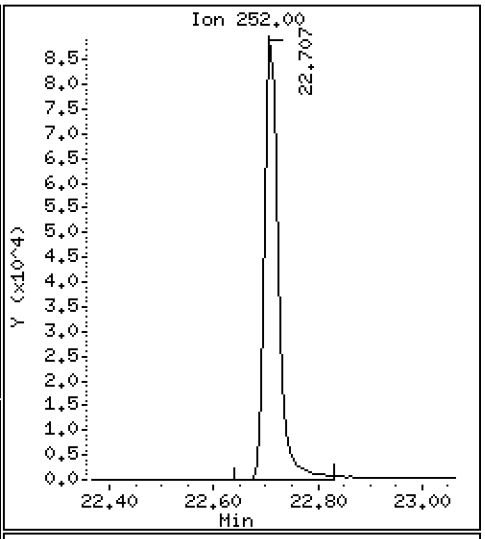
Column phase: ZB-5msi

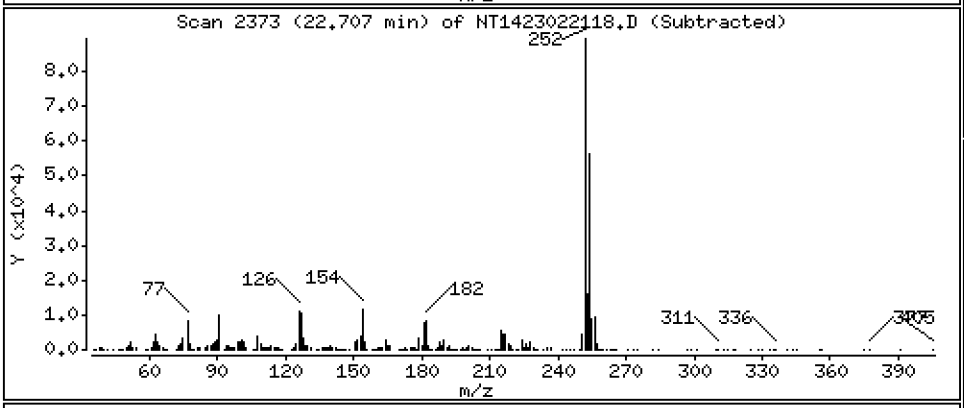
Column diameter: 0.25

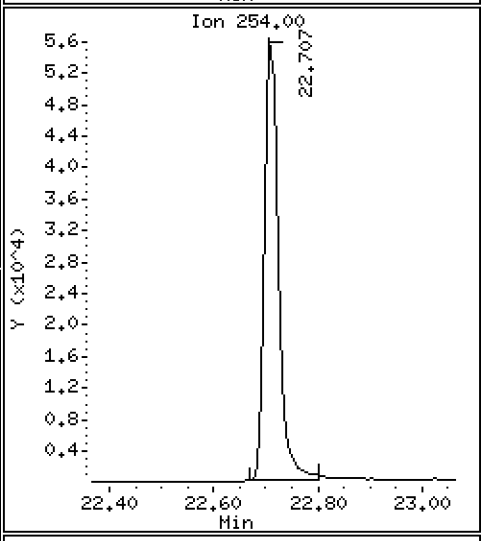
70 3,3'-Dichlorobenzidine

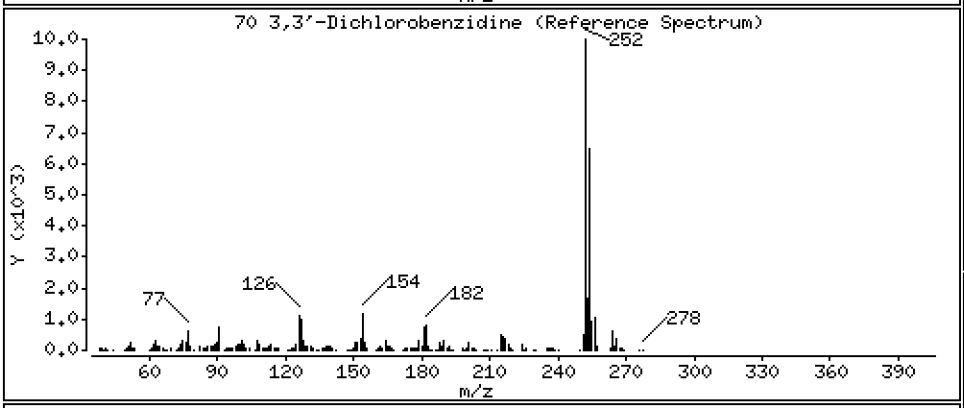
Concentration: 1.828 ug/mL

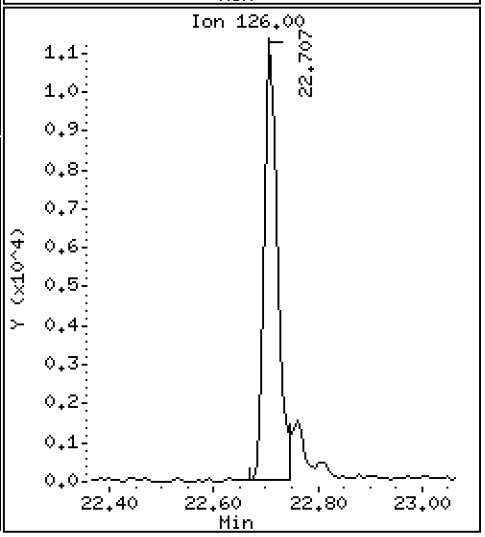


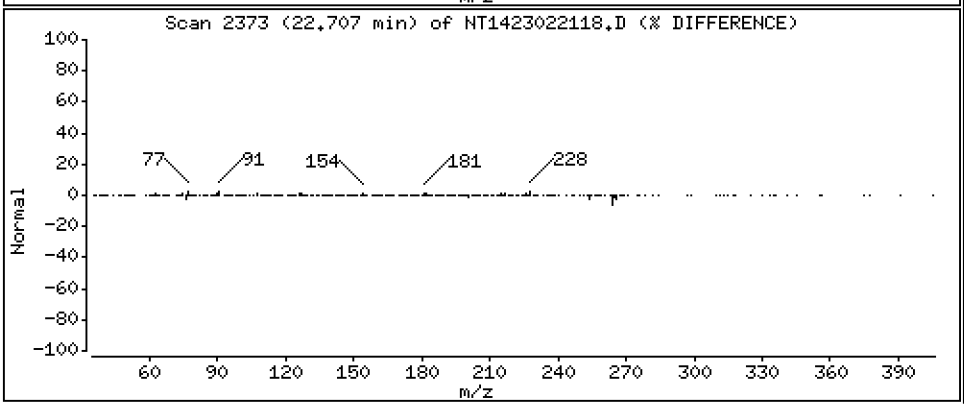












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

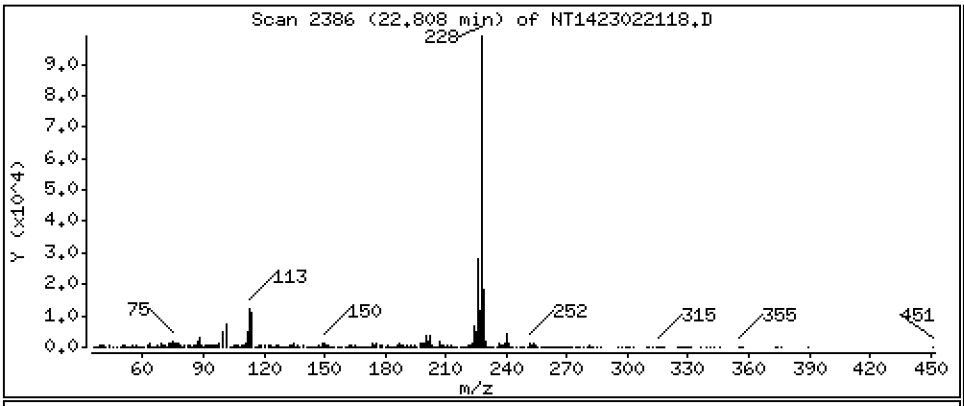
Operator: DSD

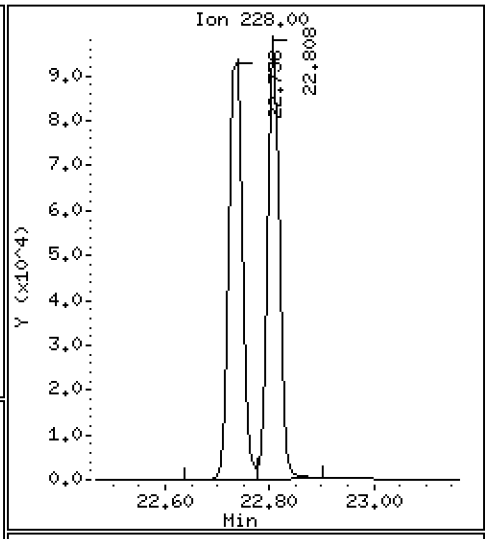
Column phase: ZB-5msi

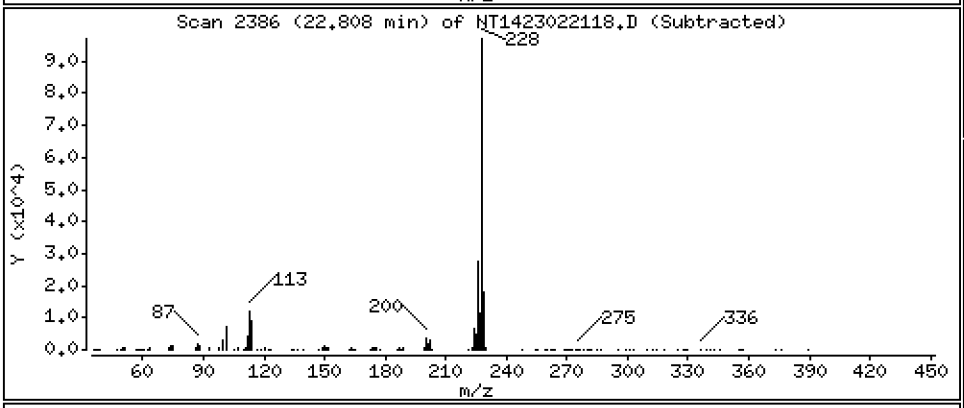
Column diameter: 0.25

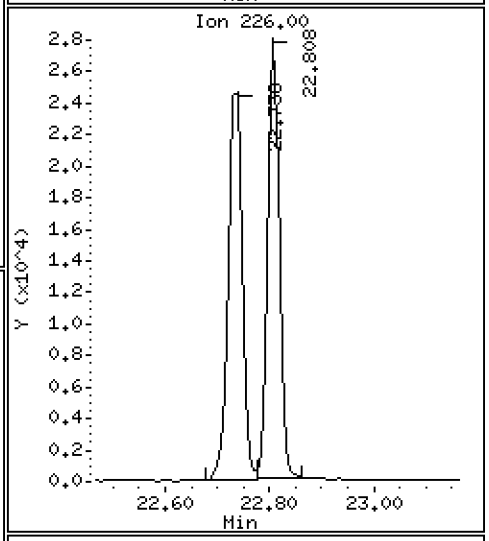
71 Chrysene

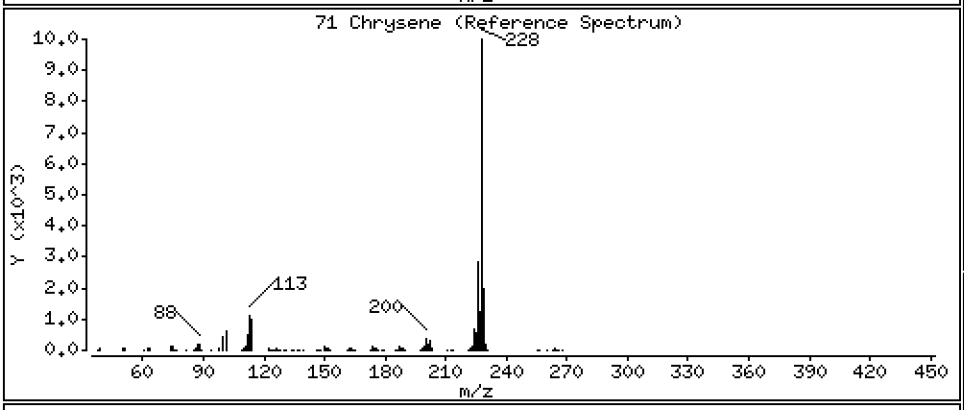
Concentration: 0.5661 ug/mL

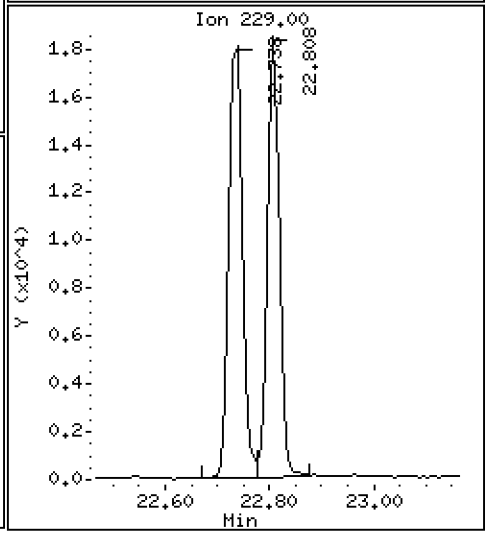


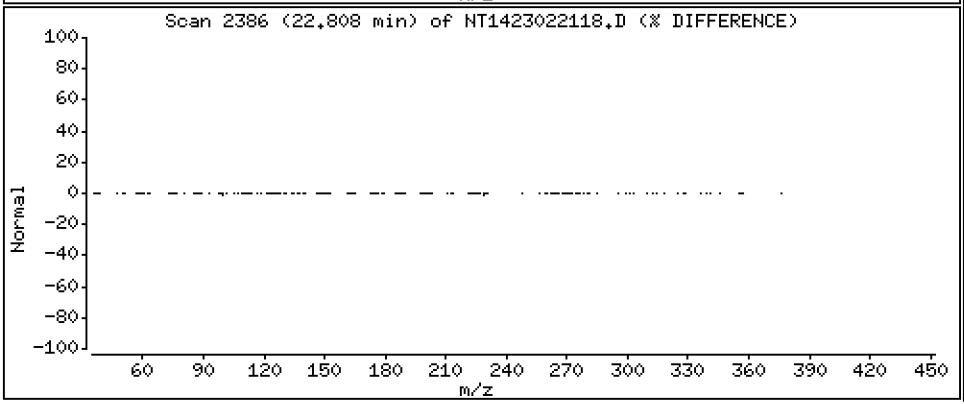












Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022118.D

Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

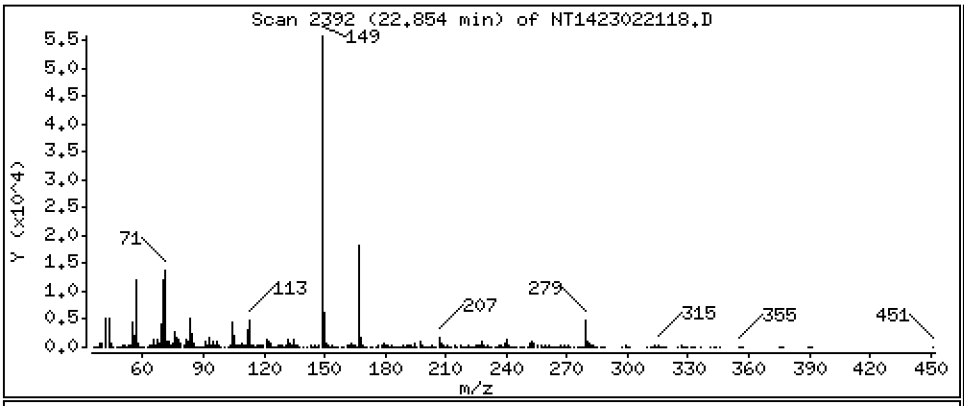
Operator: DSD

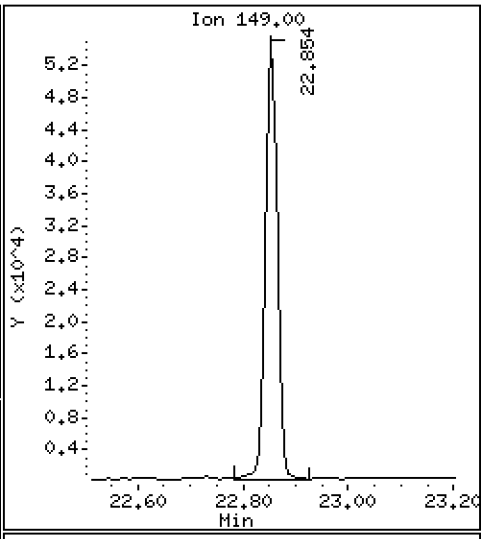
Column phase: ZB-5msi

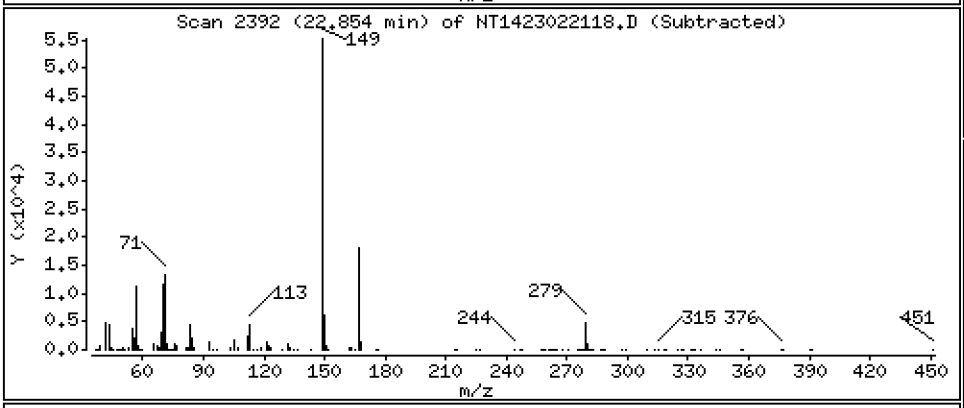
Column diameter: 0.25

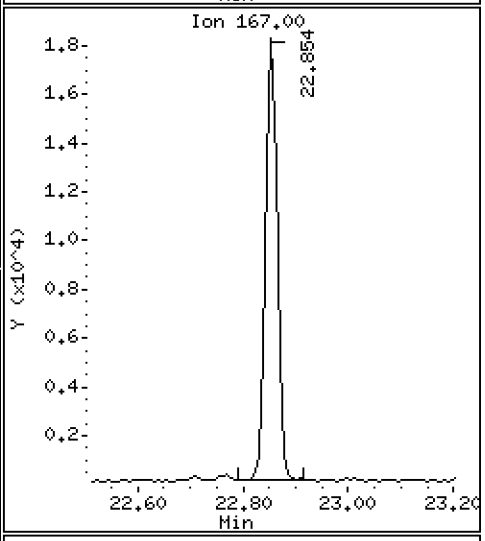
72 bis(2-Ethylhexyl)phthalate

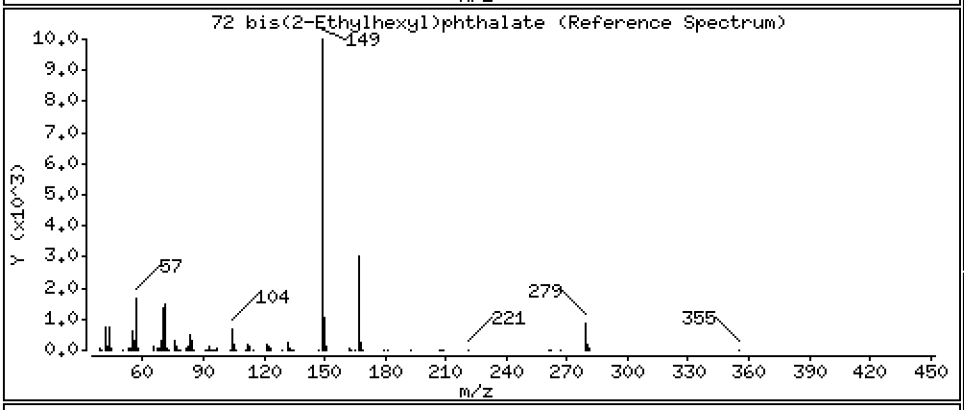
Concentration: 0.3727 ug/mL

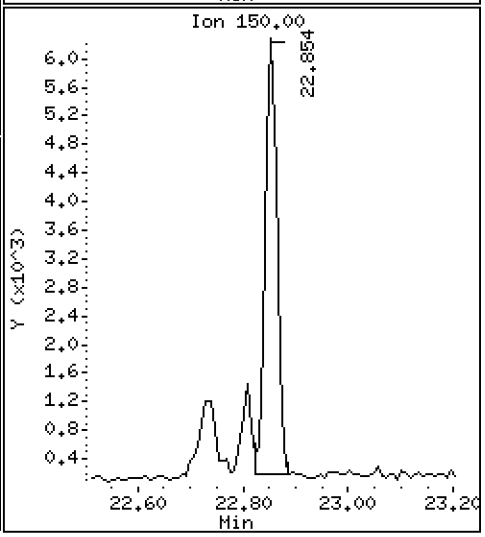


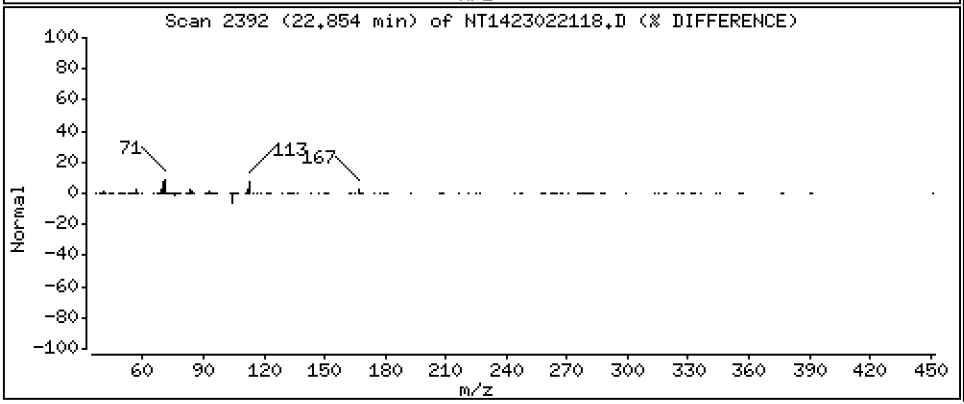












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

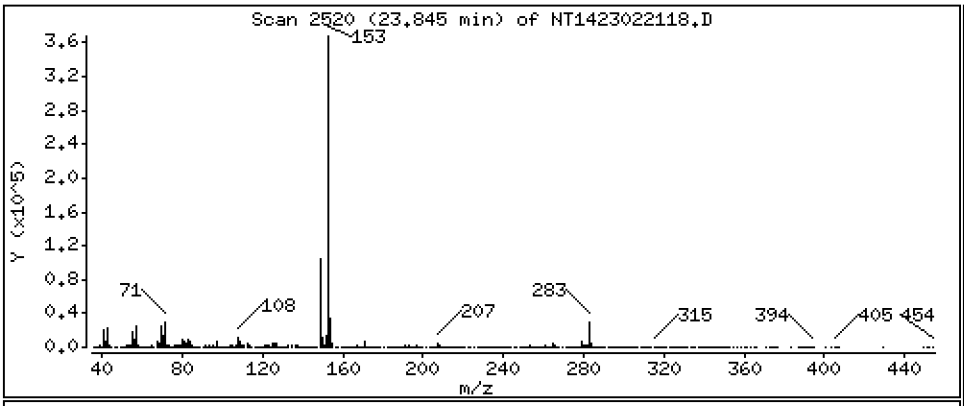
Operator: DSD

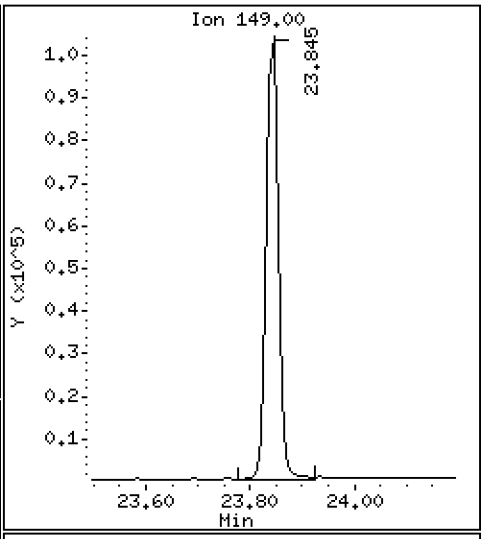
Column phase: ZB-5msi

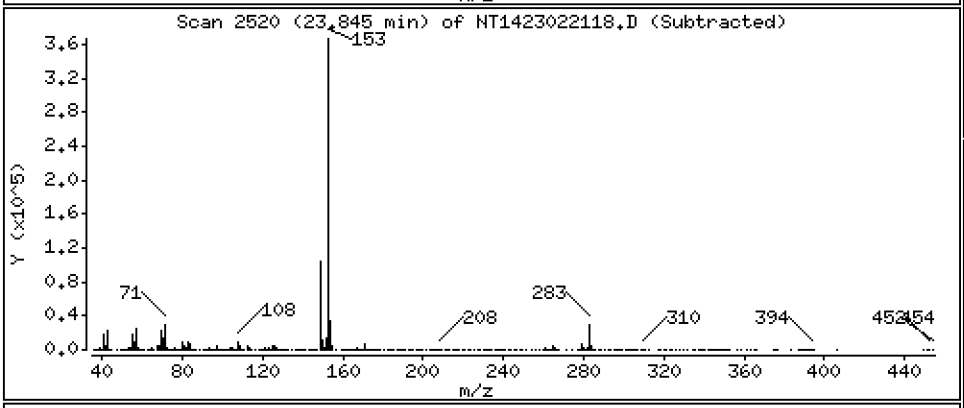
Column diameter: 0.25

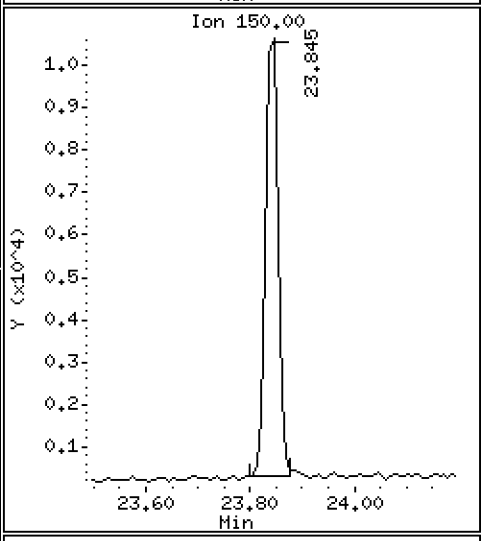
73 Di-n-octylphthalate

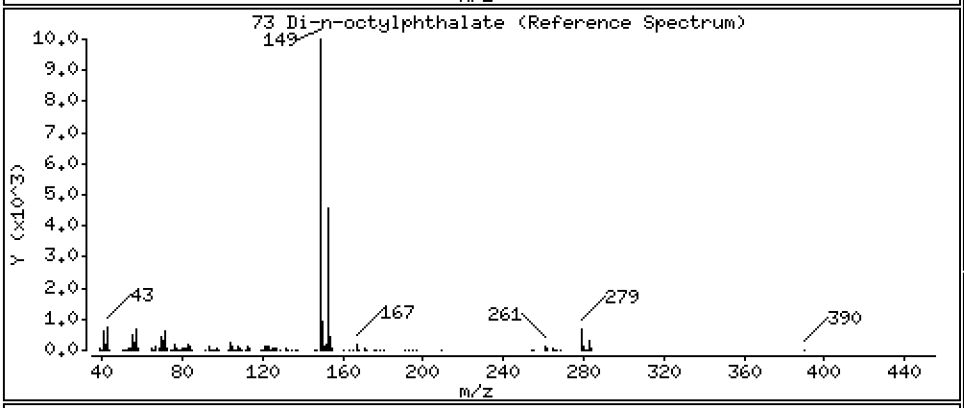
Concentration: 0.5297 ug/mL

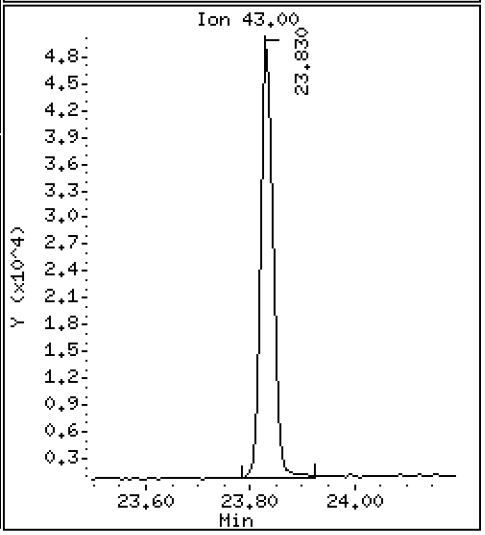


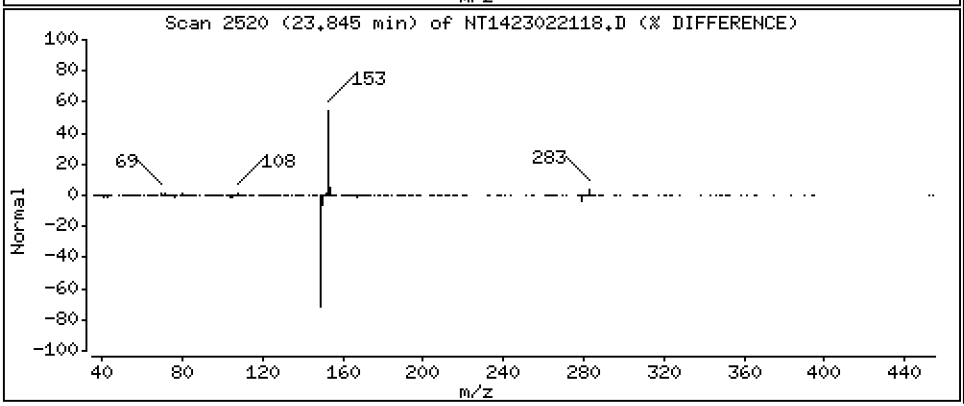












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

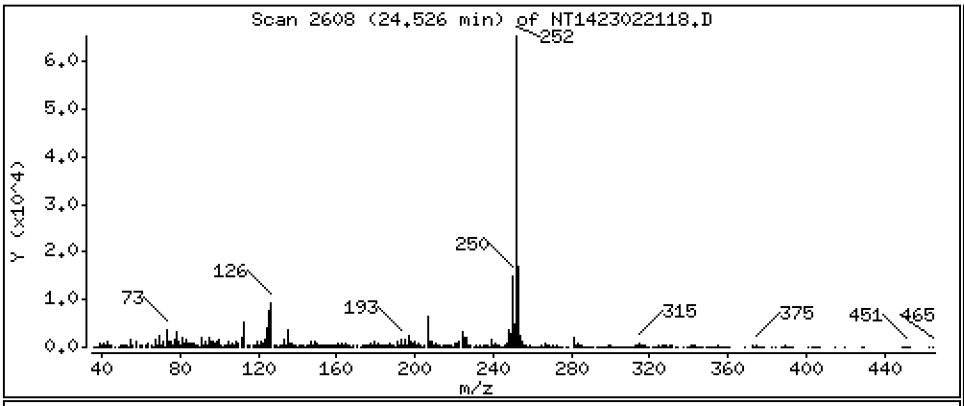
Operator: DSD

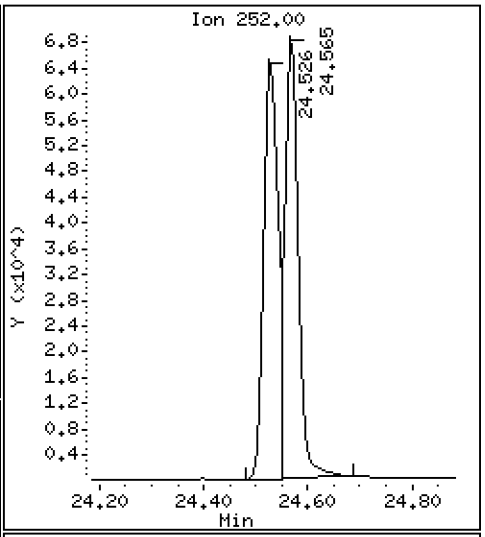
Column phase: ZB-5msi

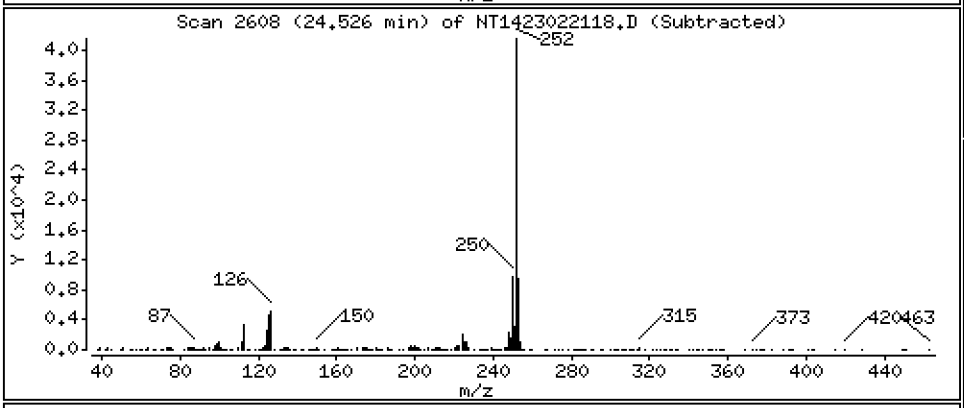
Column diameter: 0.25

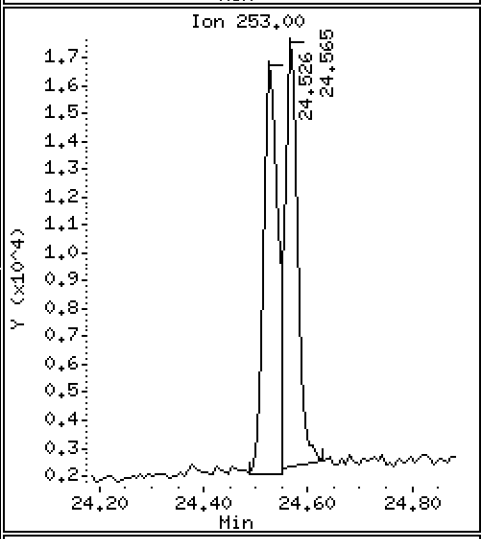
74 Benzo(b)fluoranthene

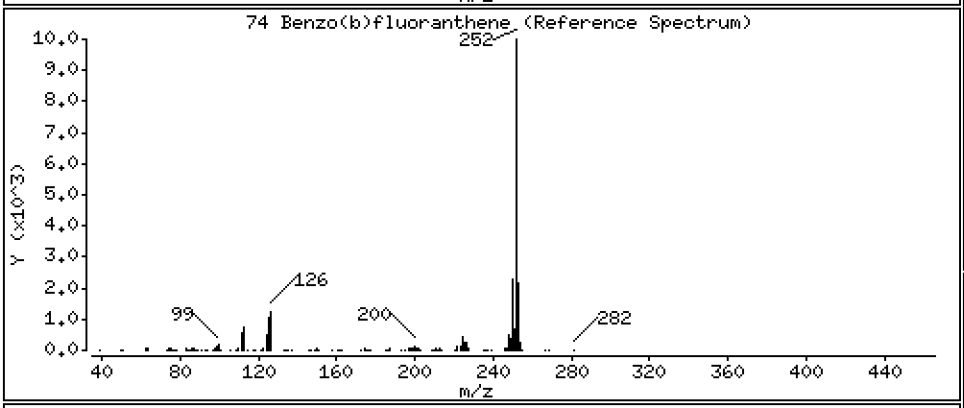
Concentration: 0.5556 ug/mL

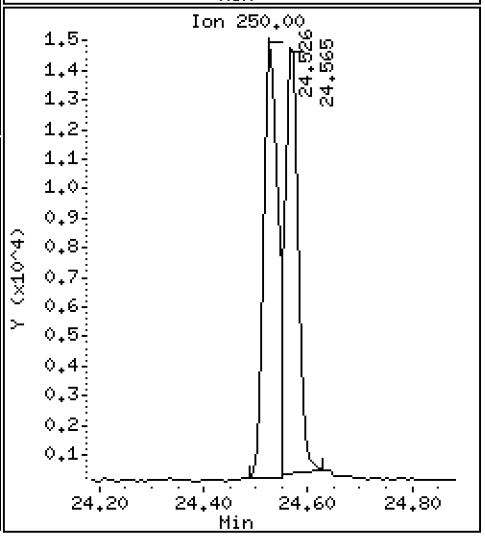


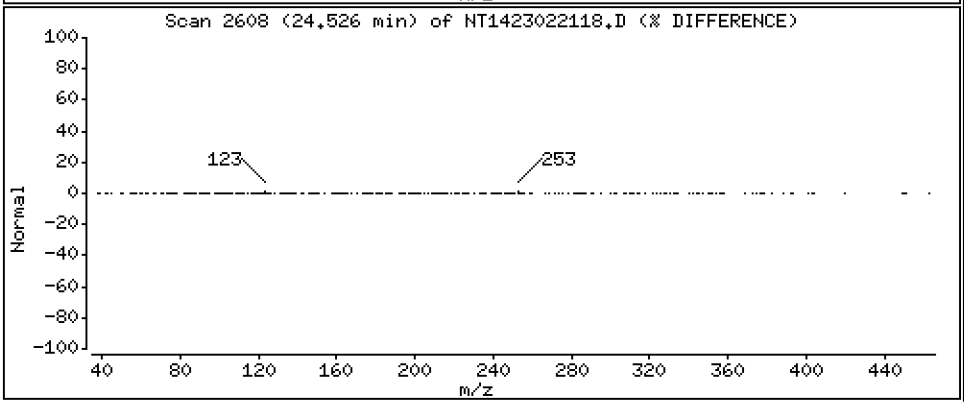












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

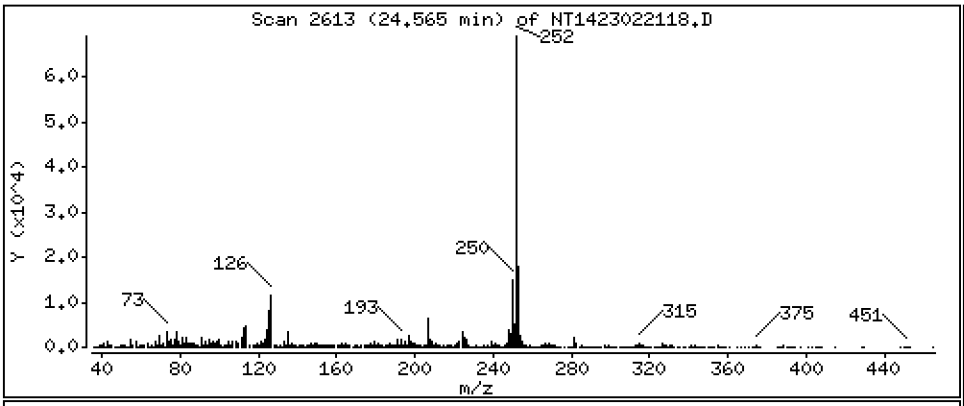
Operator: DSD

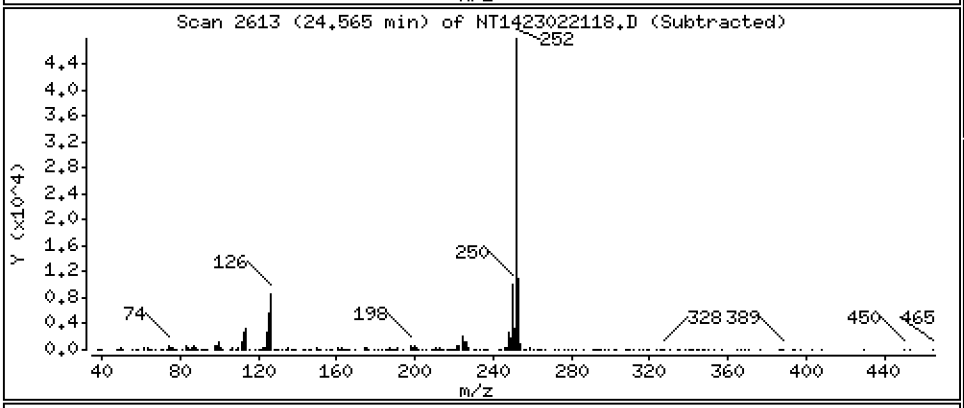
Column phase: ZB-5msi

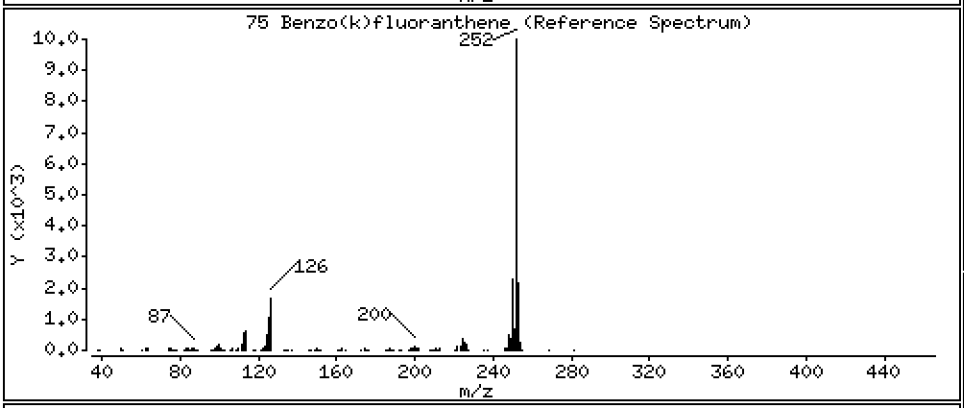
Column diameter: 0.25

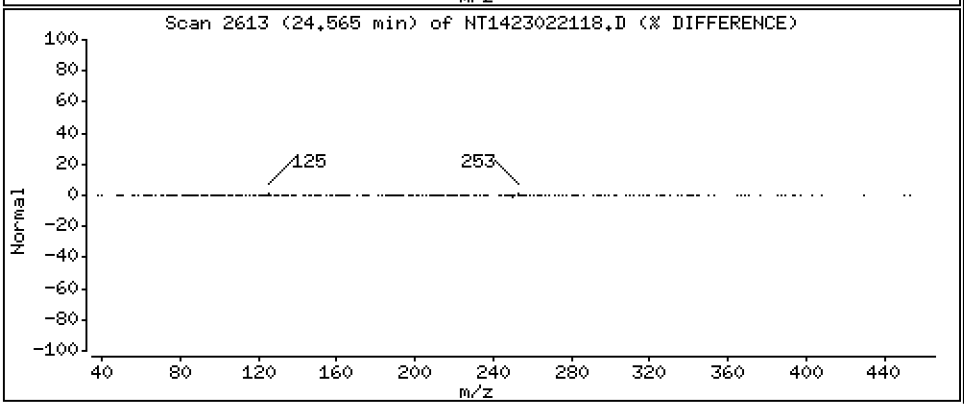
75 Benzo(k)fluoranthene

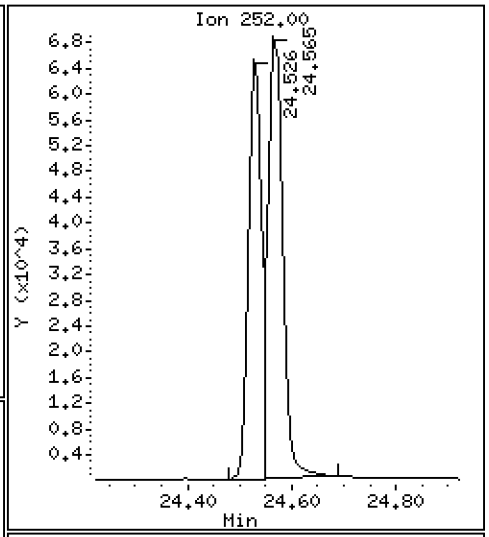
Concentration: 0.5525 ug/mL

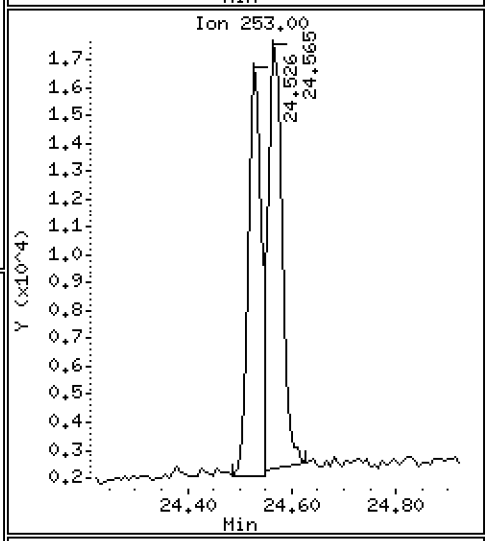


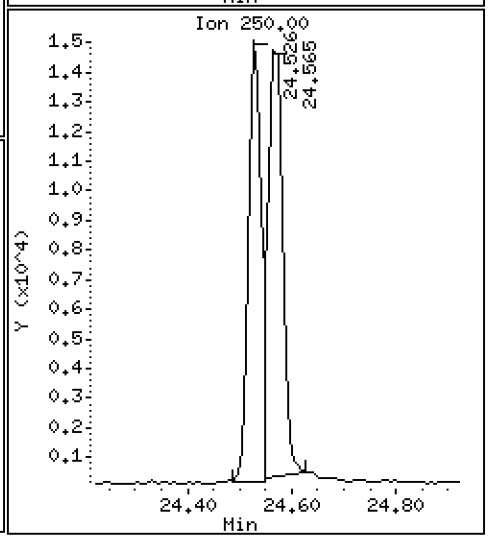












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

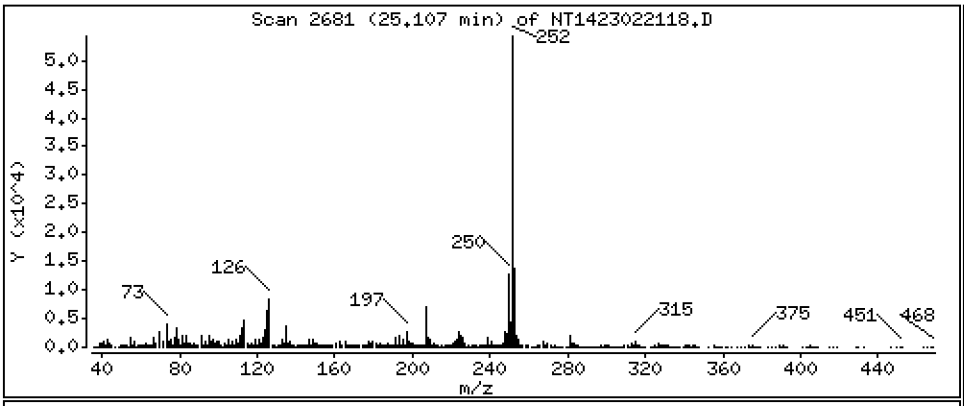
Operator: DSD

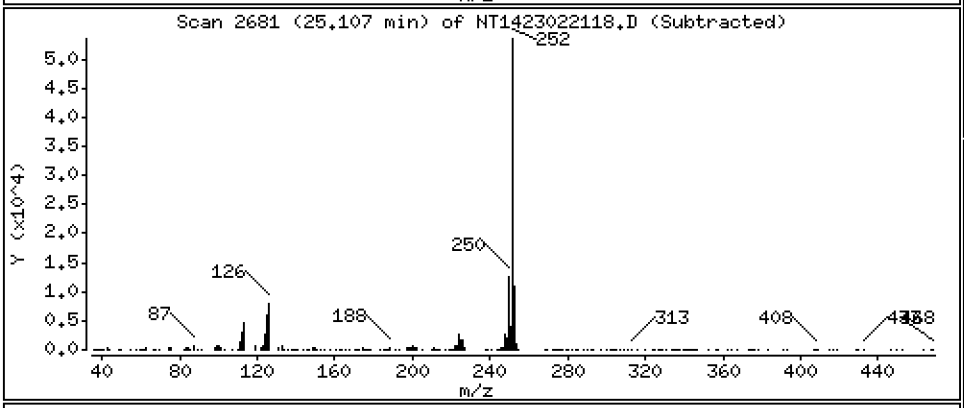
Column phase: ZB-5msi

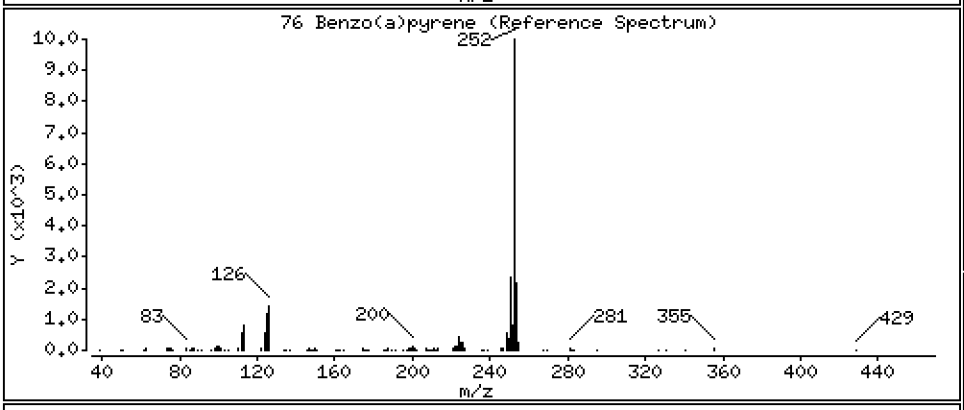
Column diameter: 0.25

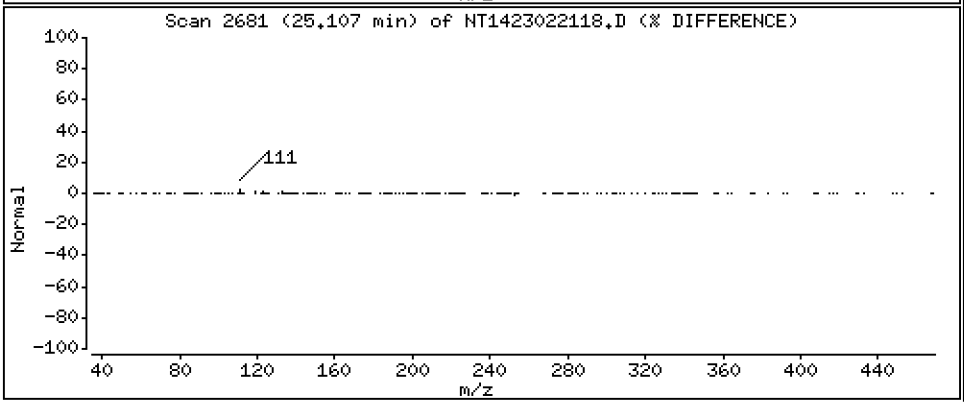
76 Benzo(a)pyrene

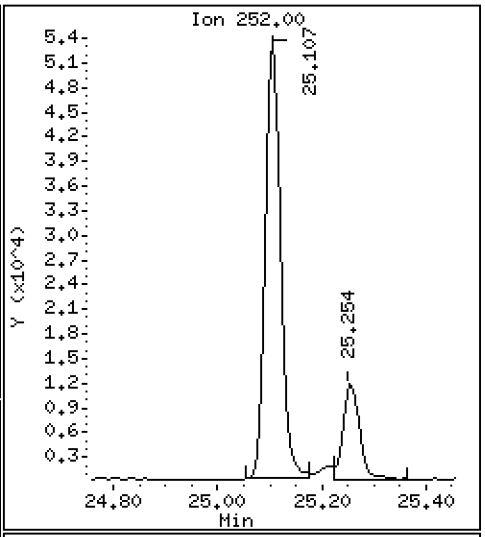
Concentration: 0.4901 ug/mL

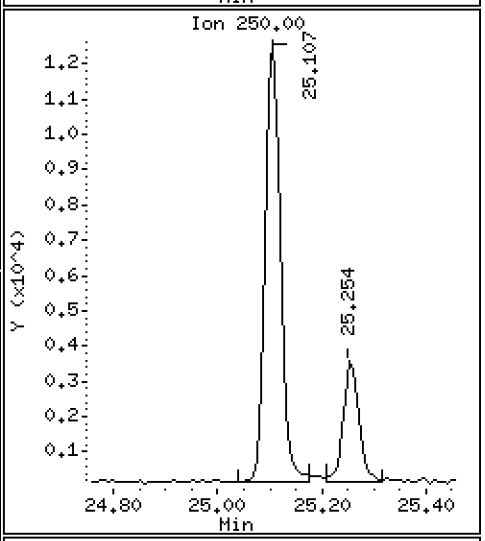


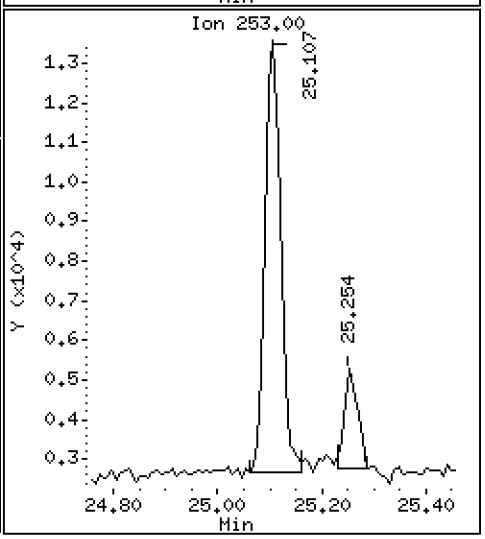












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

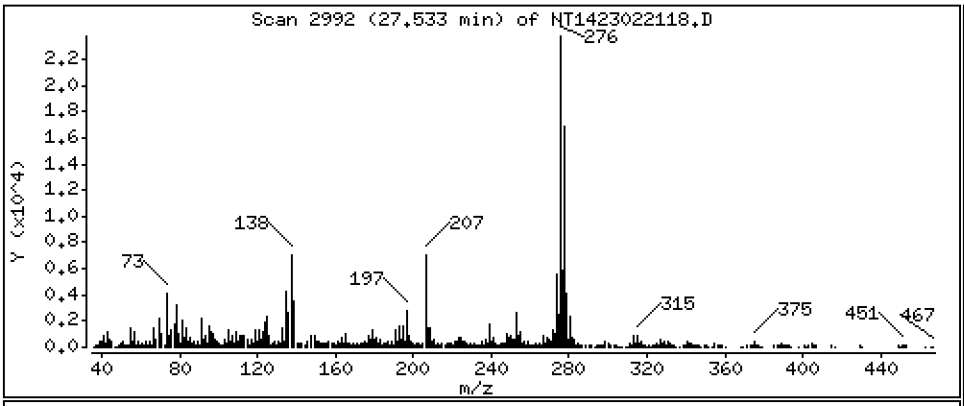
Operator: DSD

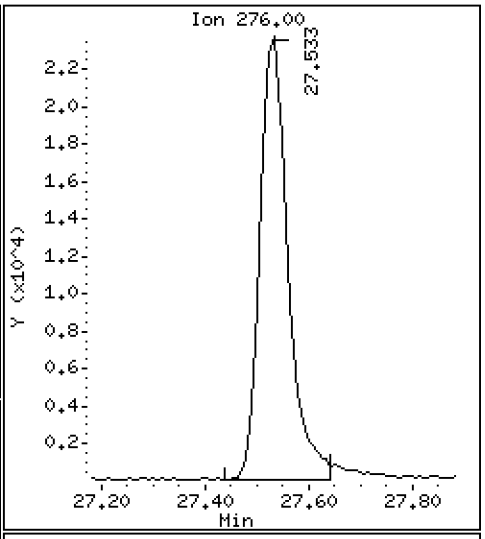
Column phase: ZB-5msi

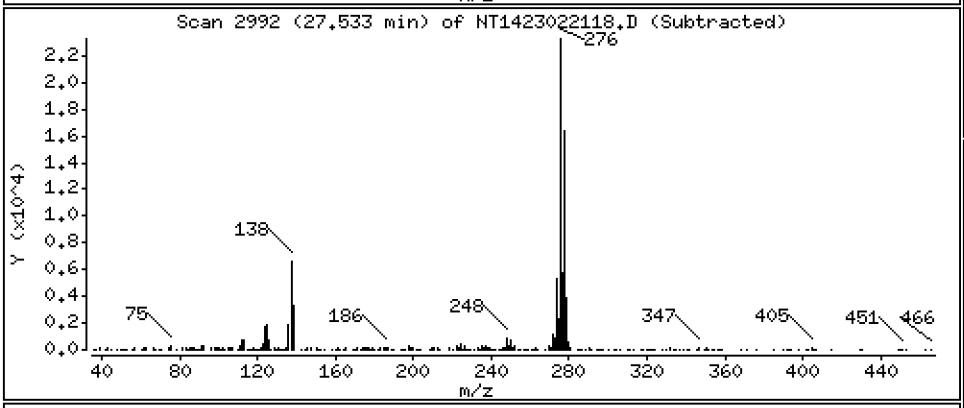
Column diameter: 0.25

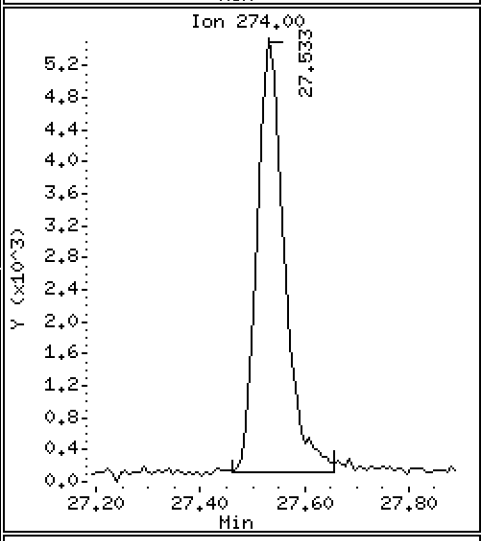
78 Indeno(1,2,3-cd)pyrene

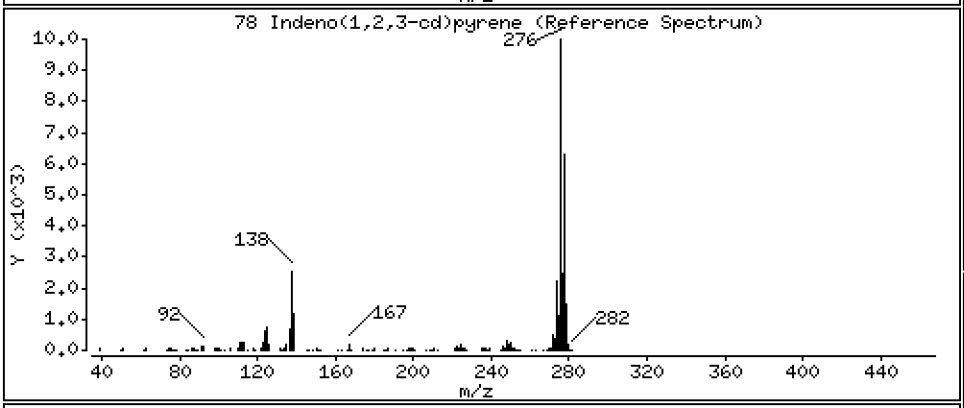
Concentration: 0.5013 ug/mL

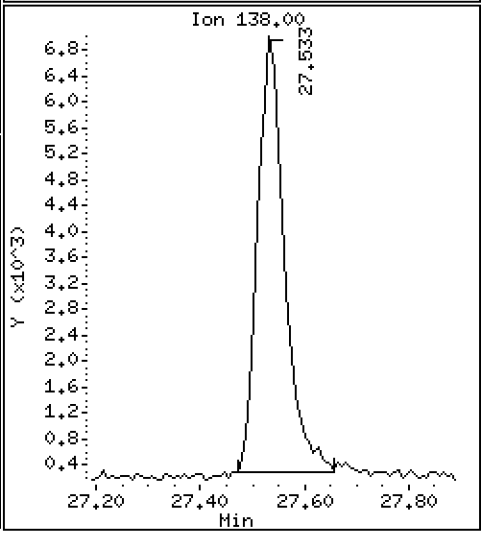


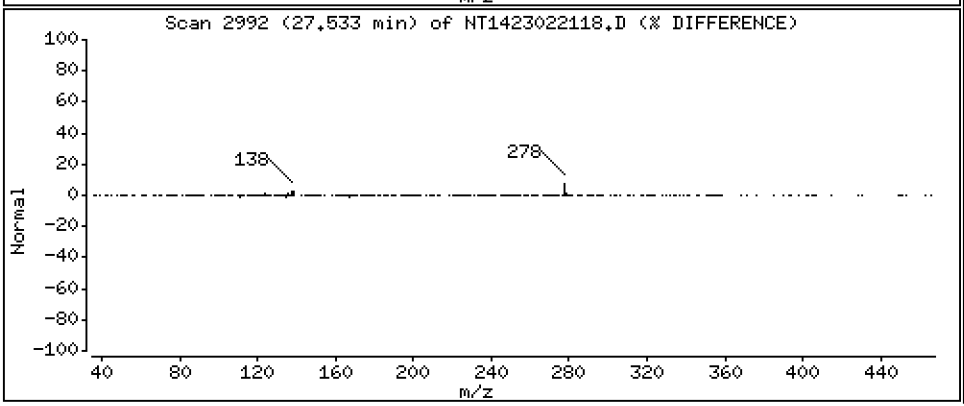












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

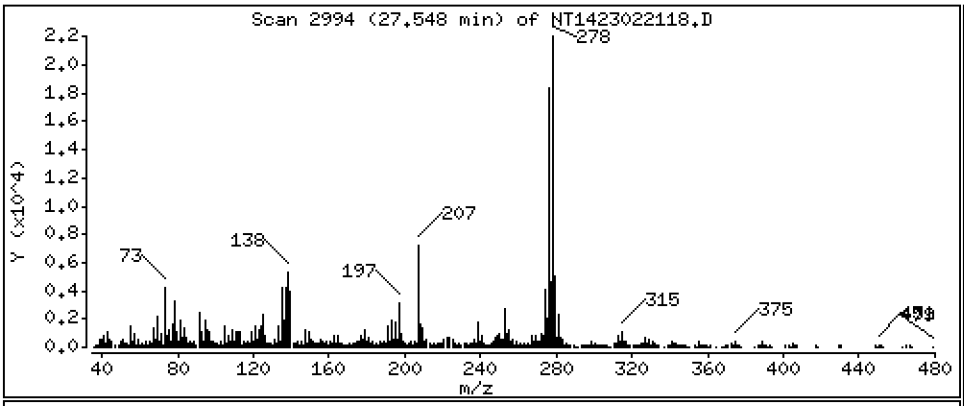
Operator: DSD

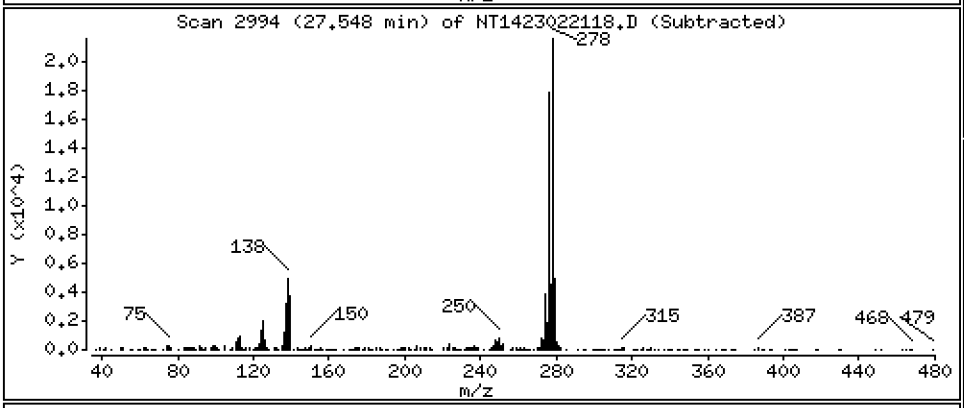
Column phase: ZB-5msi

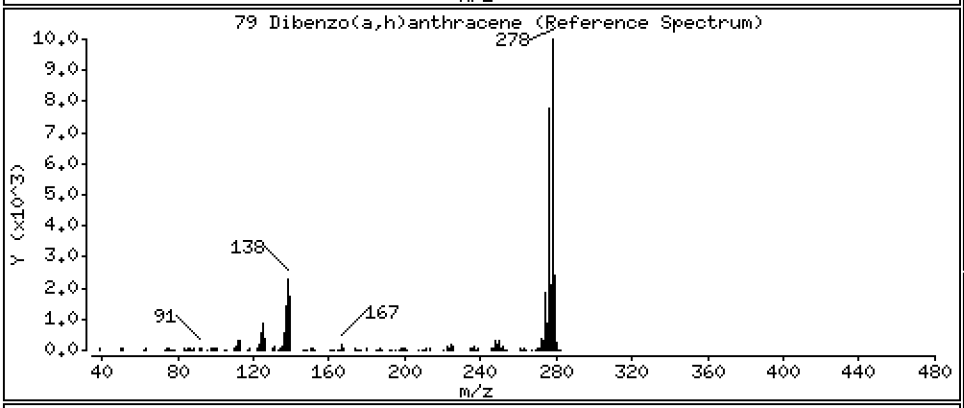
Column diameter: 0.25

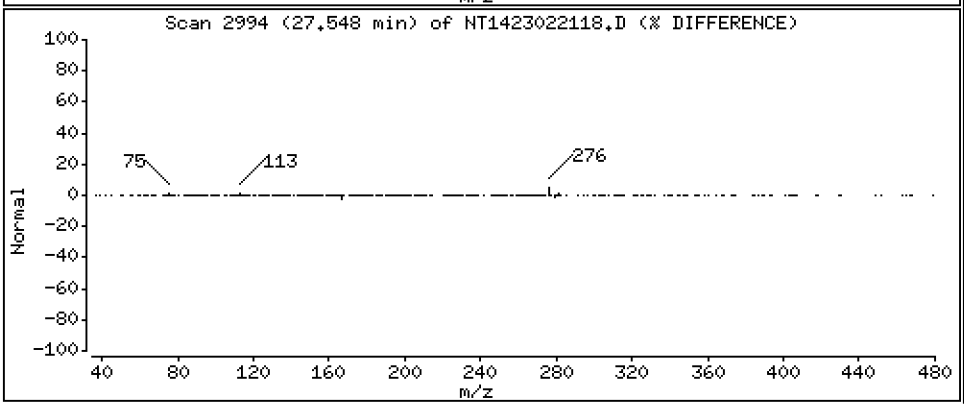
79 Dibenzo(a,h)anthracene

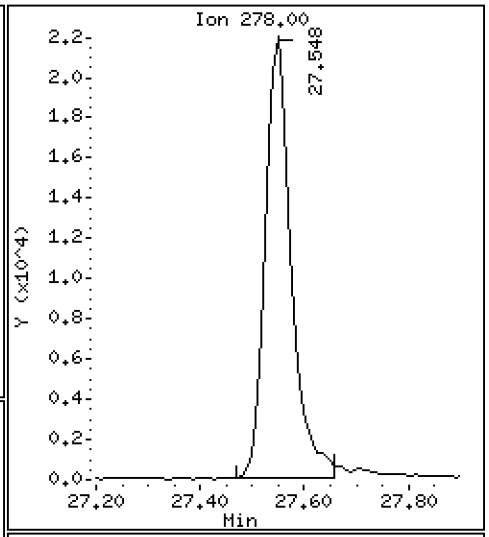
Concentration: 0.5210 ug/mL

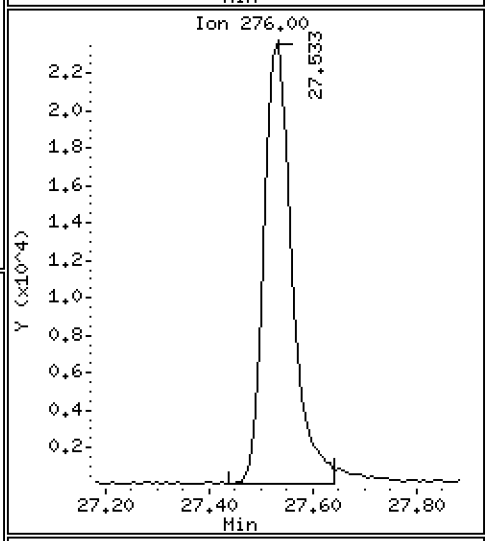


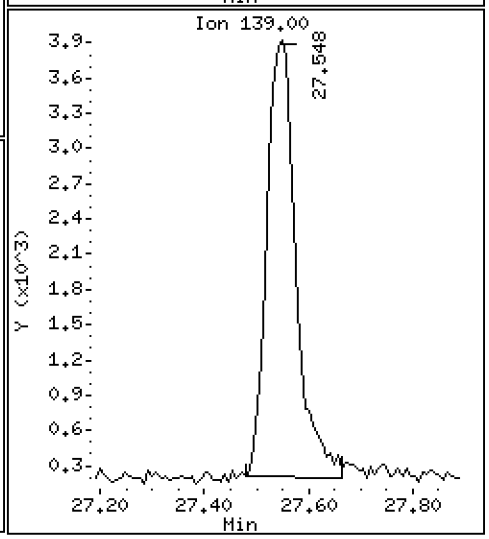












Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022118.D

Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

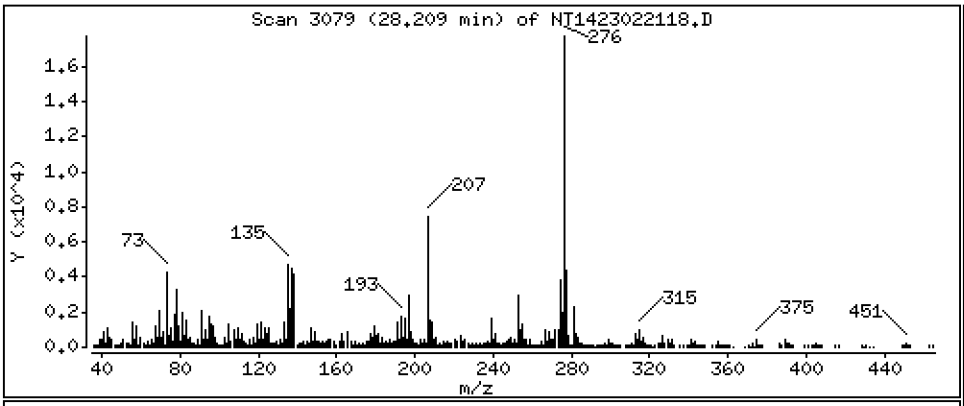
Operator: DSD

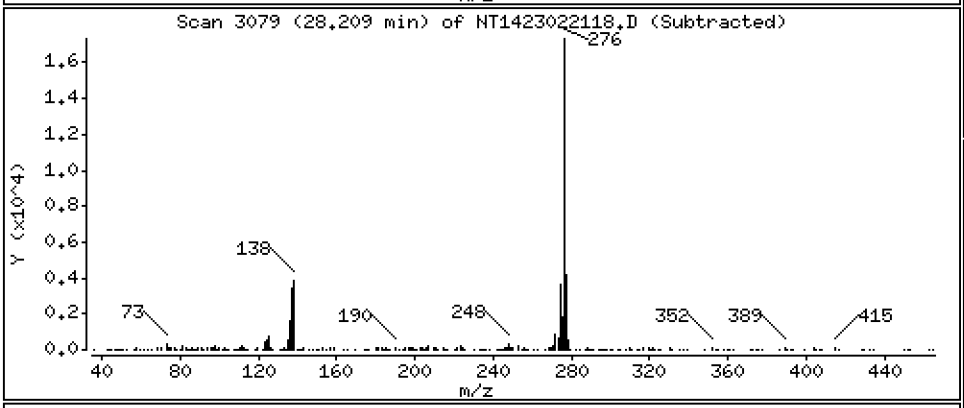
Column phase: ZB-5msi

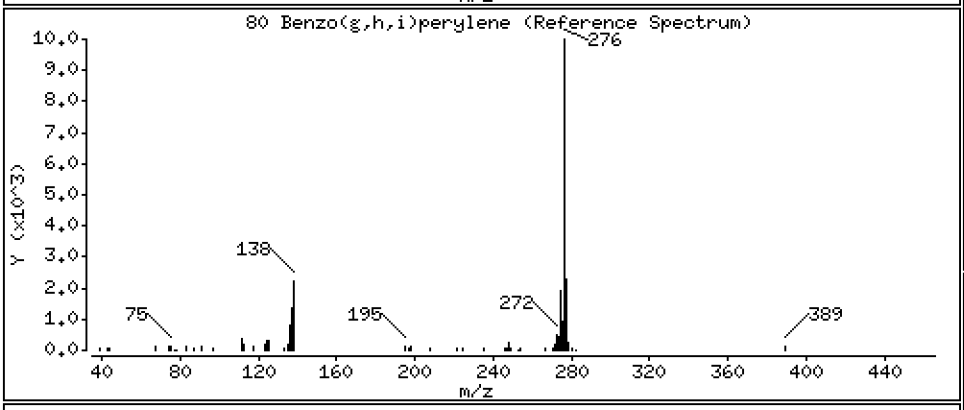
Column diameter: 0.25

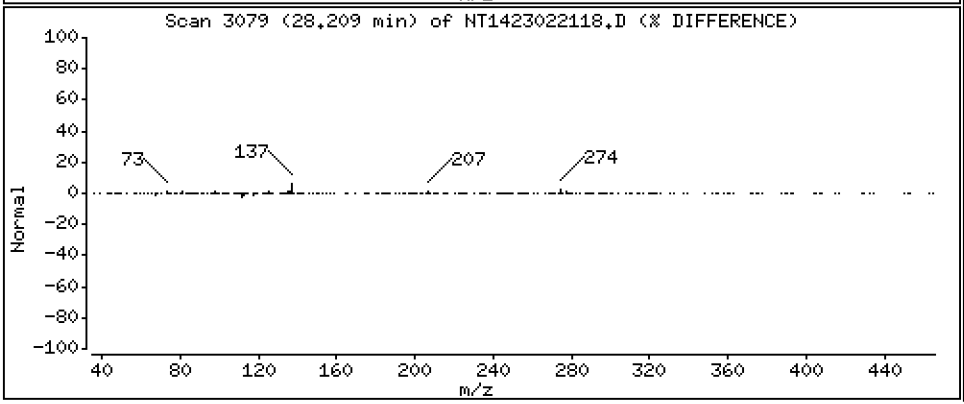
80 Benzo(g,h,i)perylene

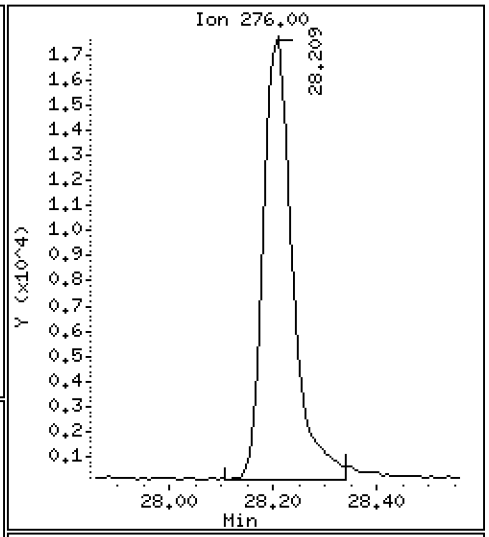
Concentration: 0.4802 ug/mL

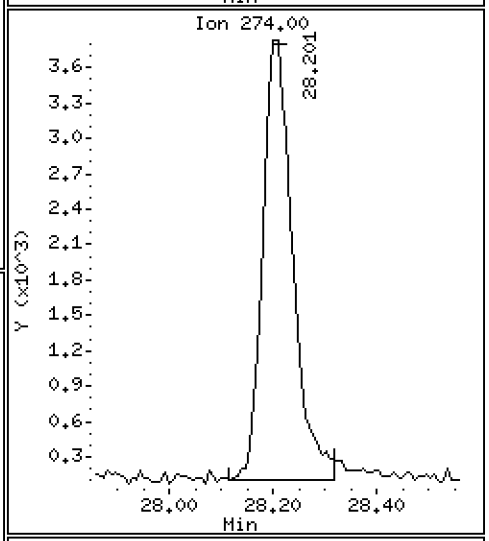


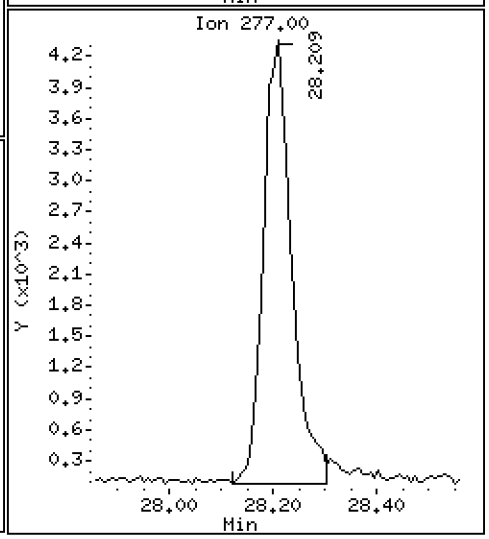












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

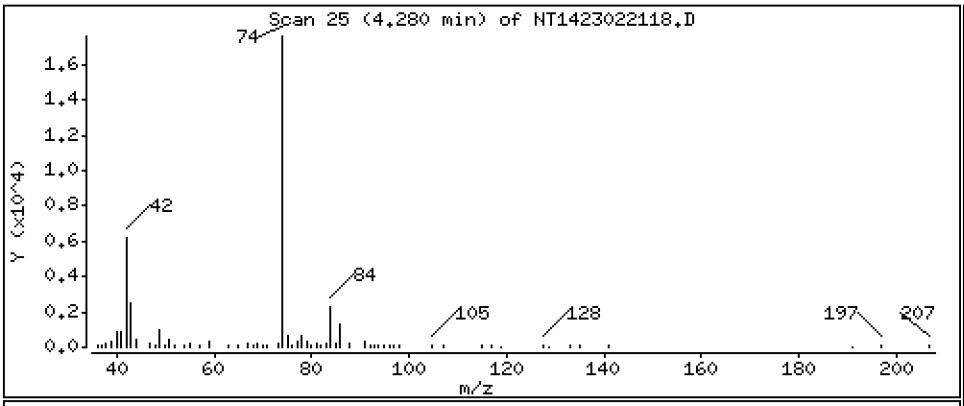
Operator: DSD

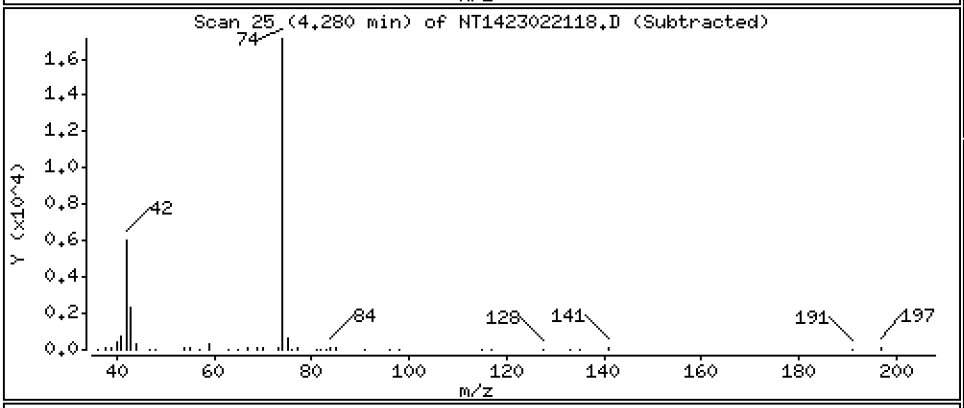
Column phase: ZB-5msi

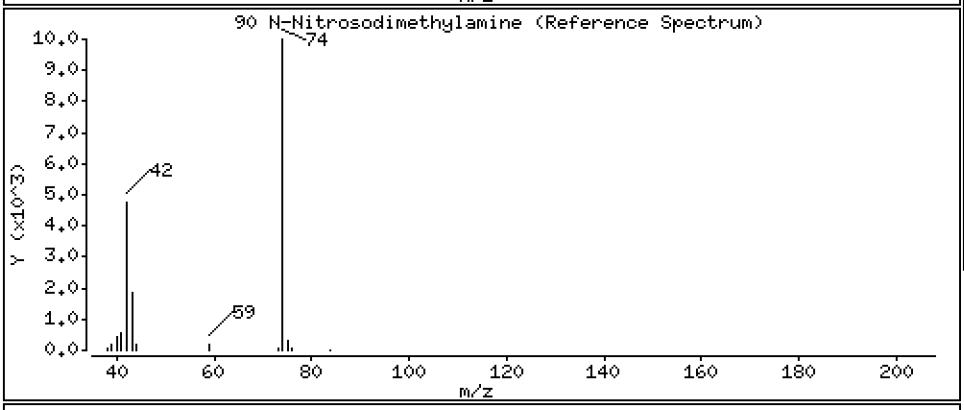
Column diameter: 0.25

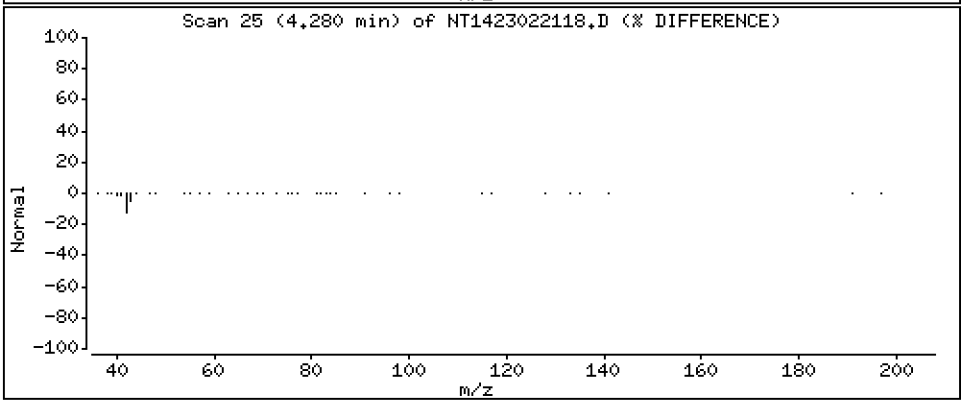
90 N-Nitrosodimethylamine

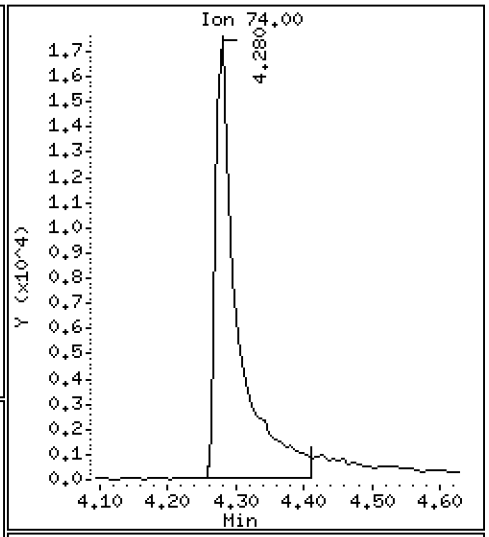
Concentration: 0.7734 ug/mL

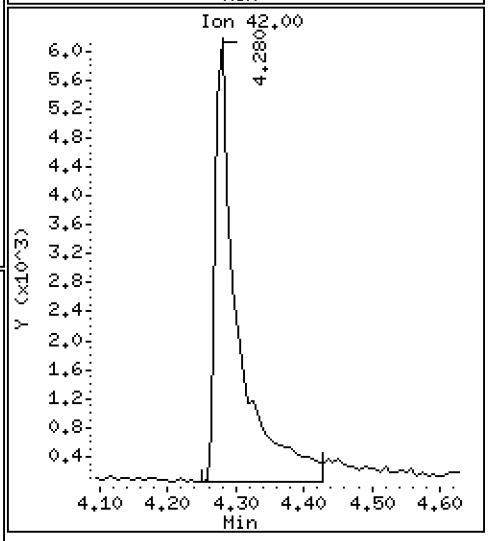












Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022118.D

Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

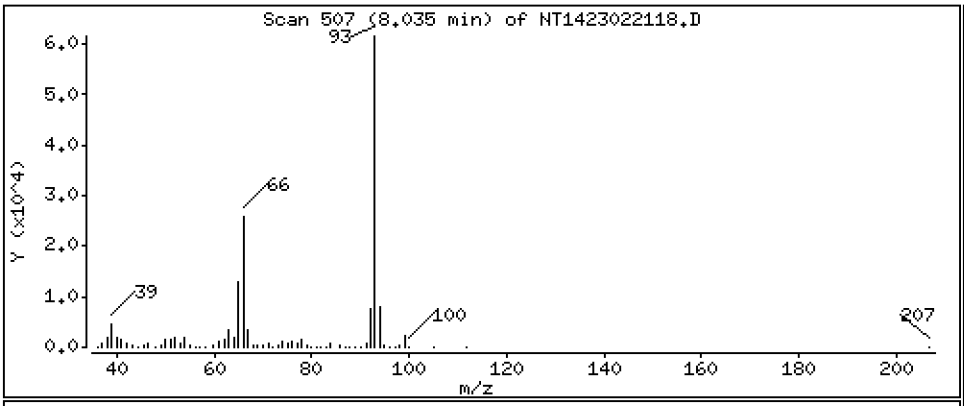
Operator: DSD

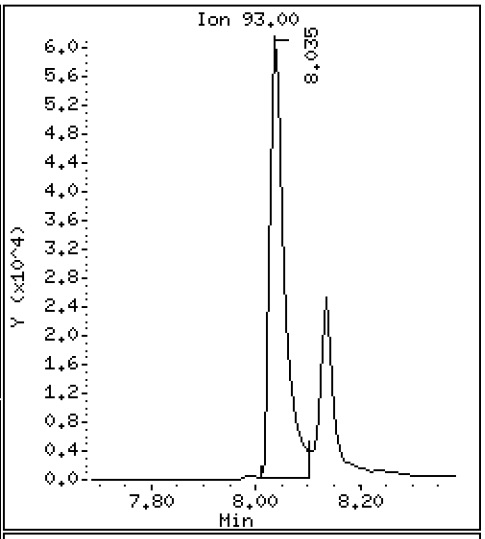
Column phase: ZB-5msi

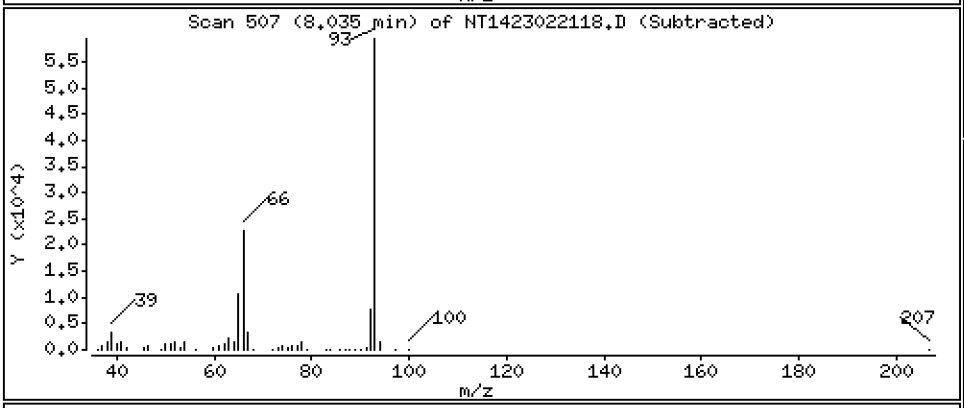
Column diameter: 0.25

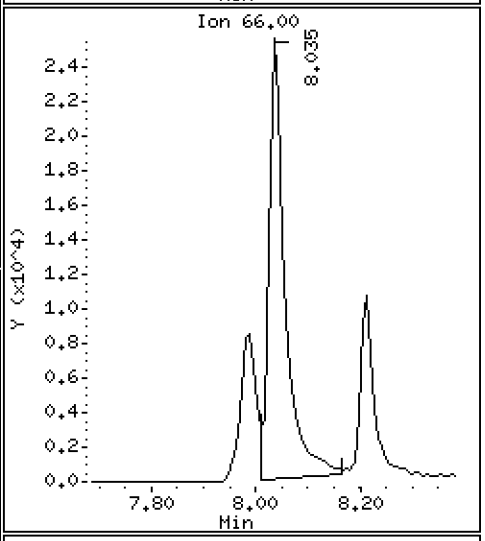
91 Aniline

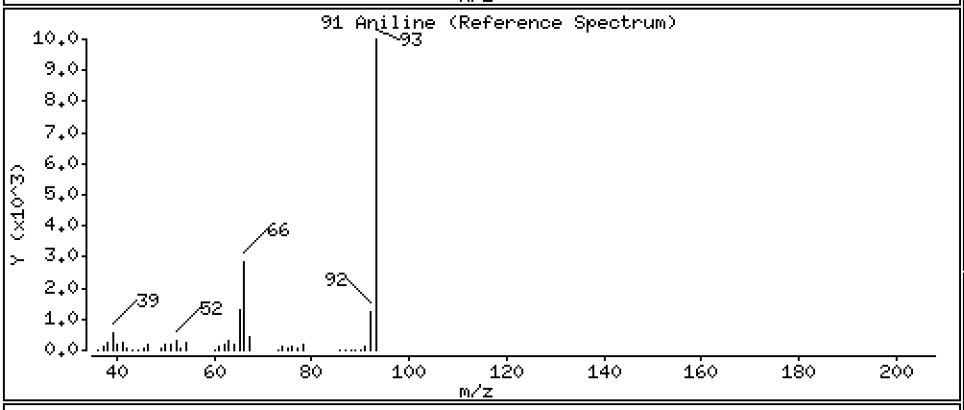
Concentration: 0.9676 ug/mL

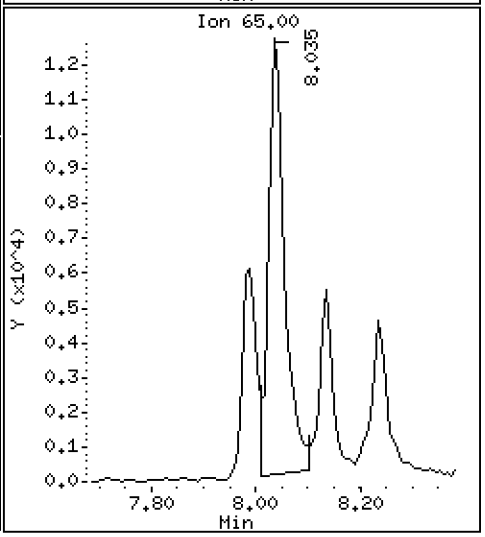


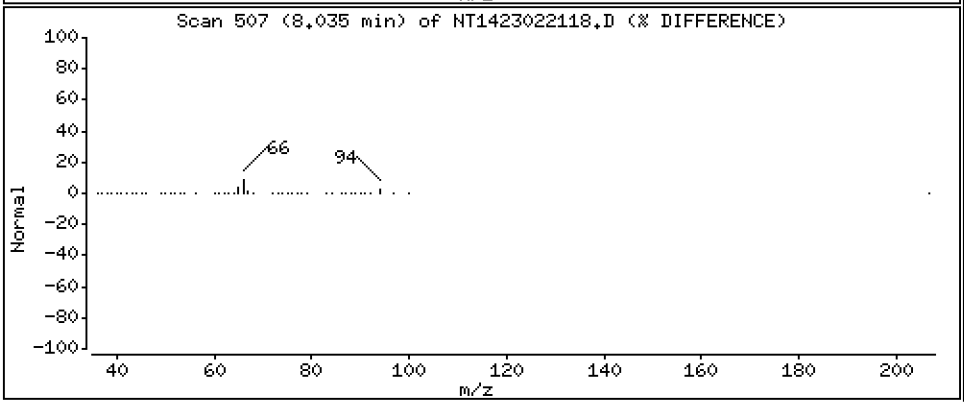












Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022118.D

Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

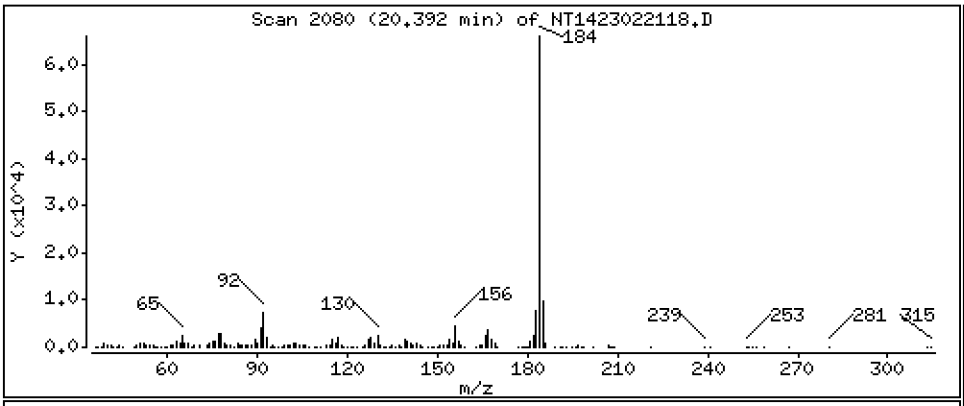
Operator: DSD

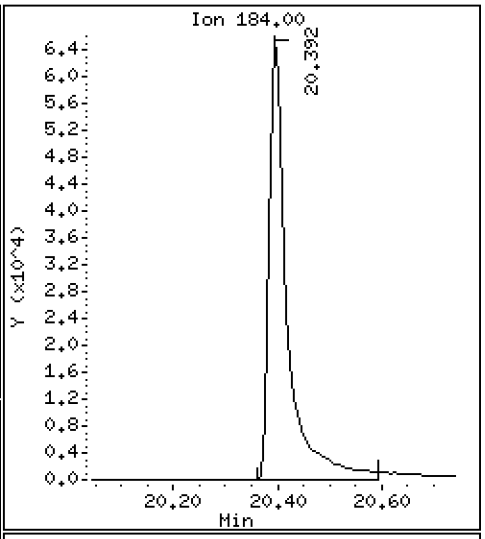
Column phase: ZB-5msi

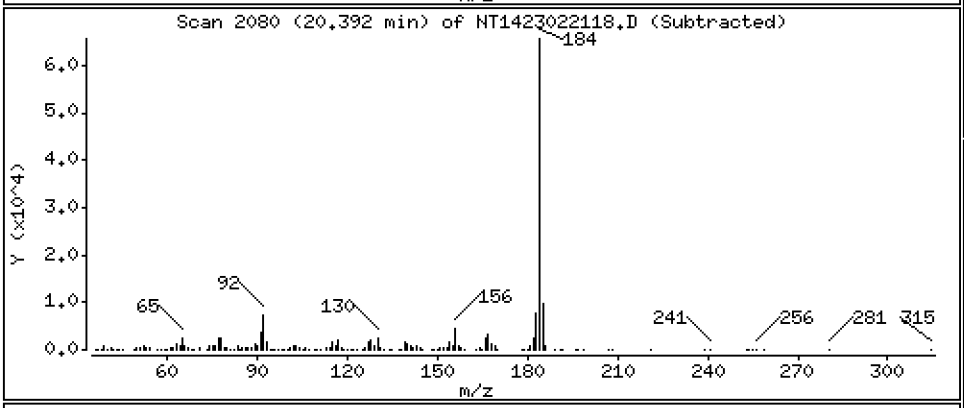
Column diameter: 0.25

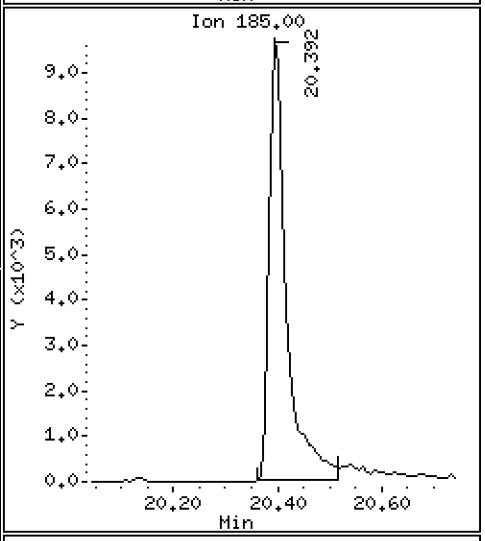
93 Benzidine

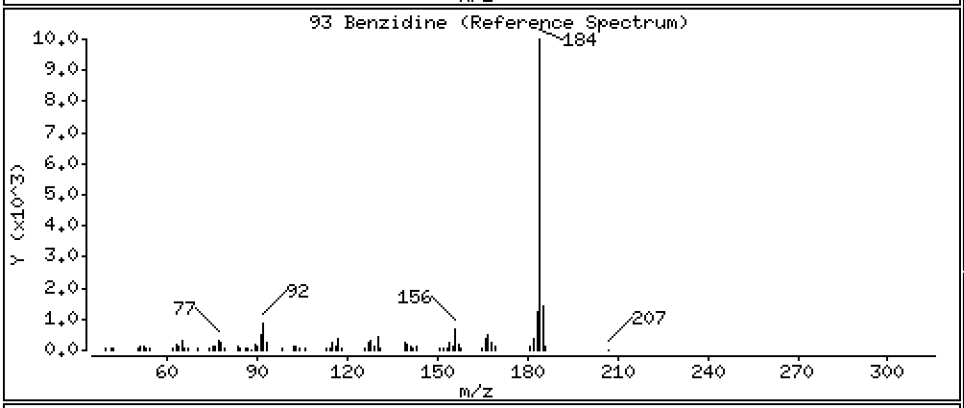
Concentration: 1.539 ug/mL

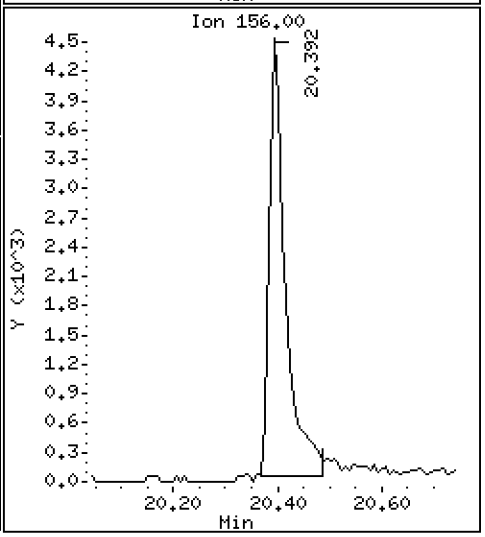


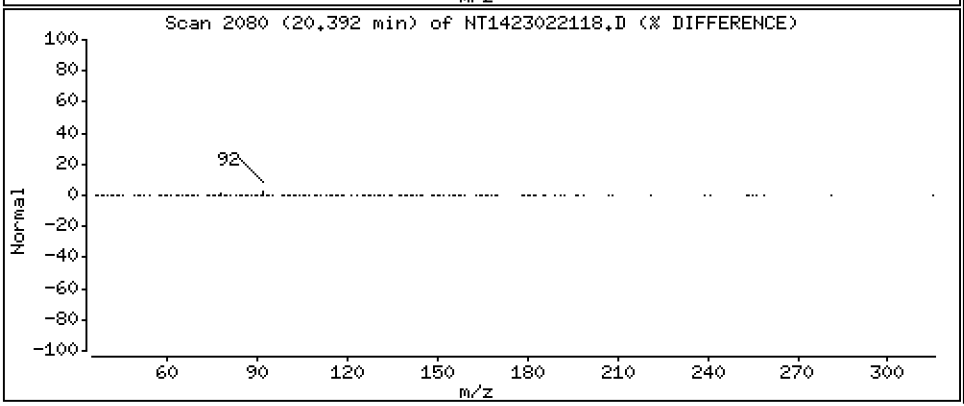












Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022118.D

Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

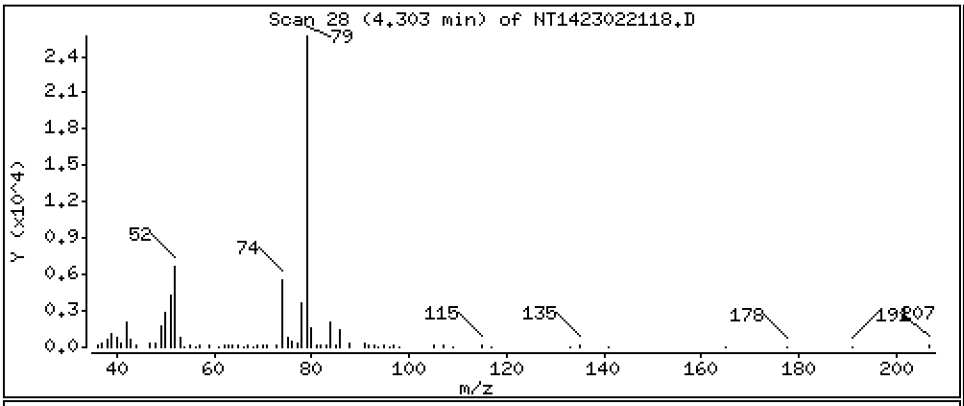
Operator: DSD

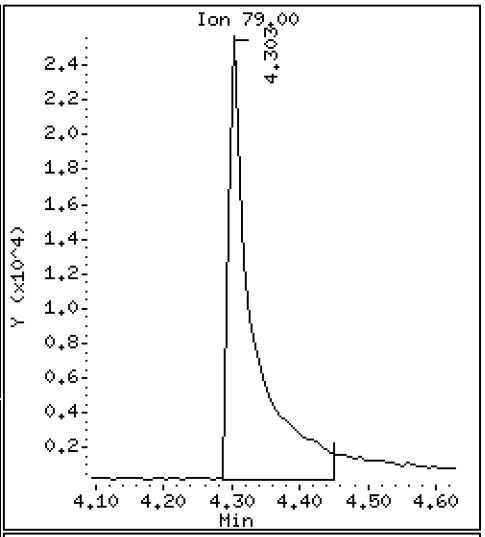
Column phase: ZB-5msi

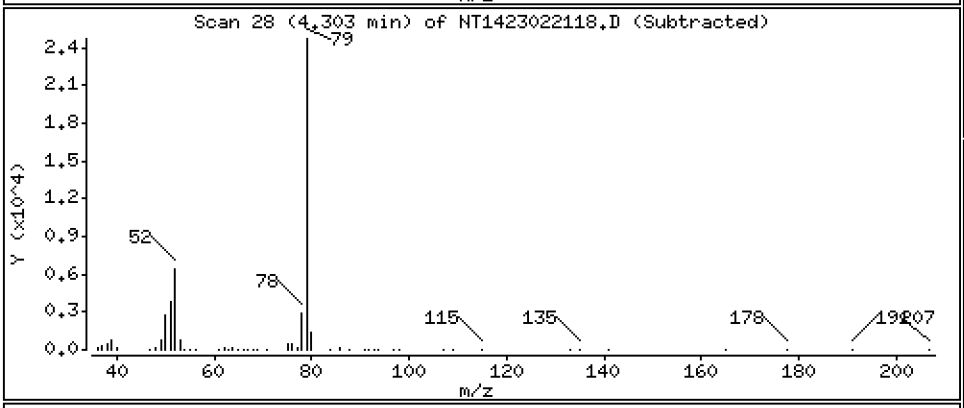
Column diameter: 0.25

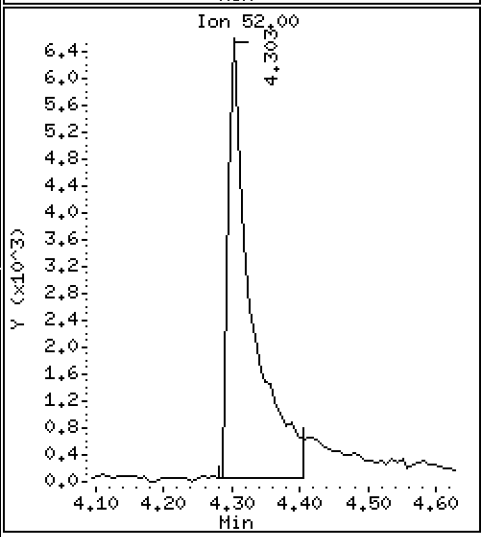
103 Pyridine

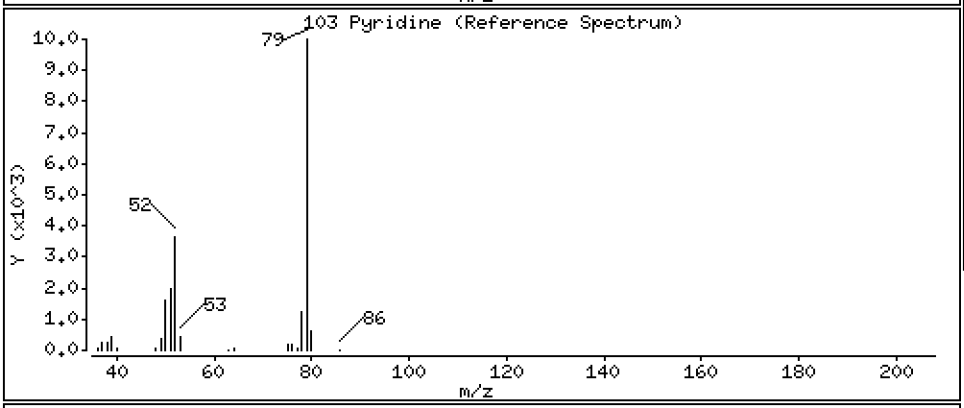
Concentration: 0.7512 ug/mL

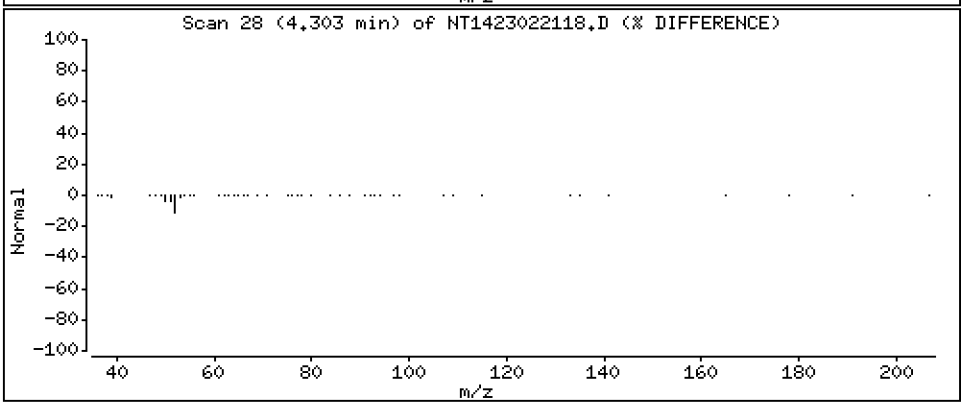












Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022118.D

Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

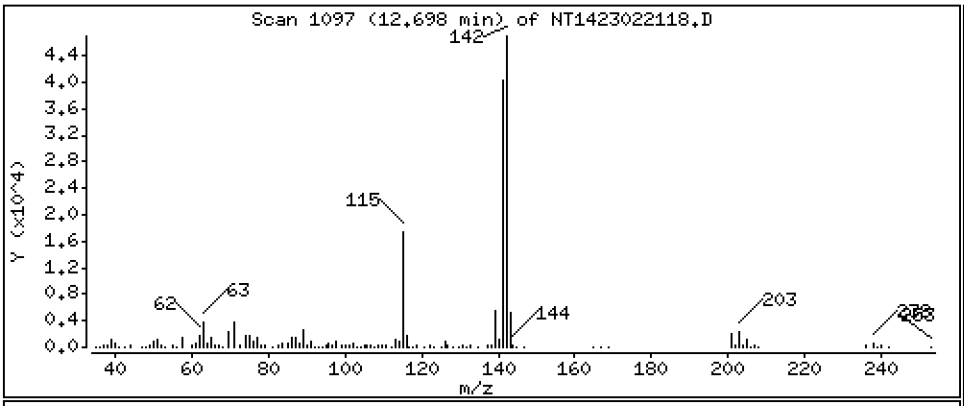
Operator: DSD

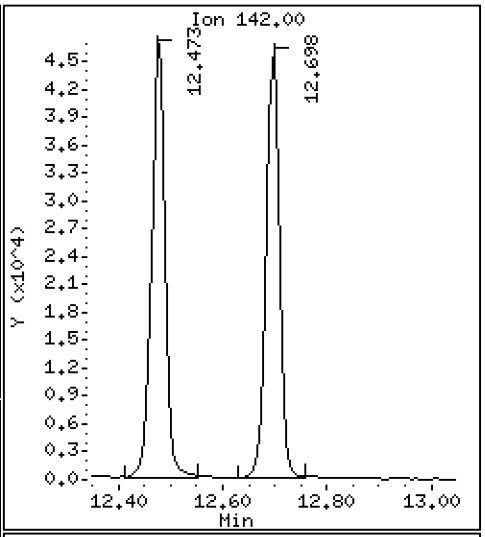
Column phase: ZB-5msi

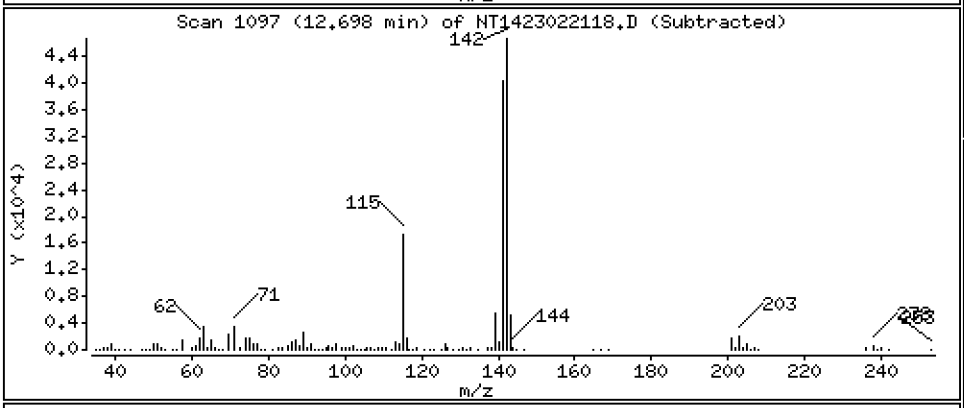
Column diameter: 0.25

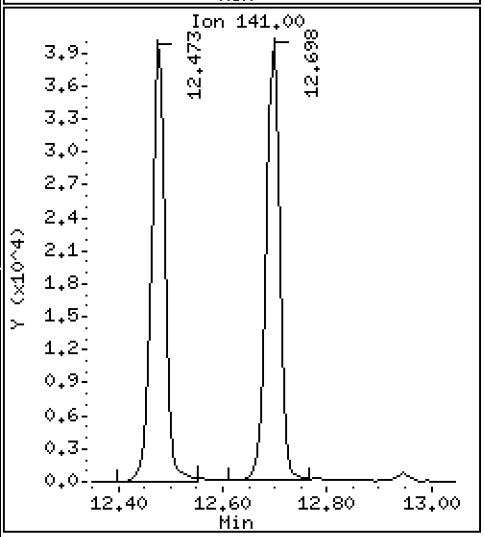
105 1-methylnaphthalene

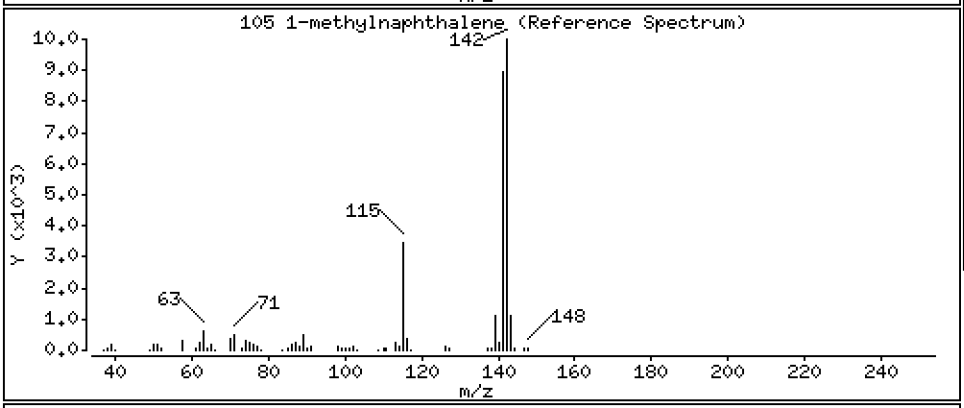
Concentration: 0.5266 ug/mL

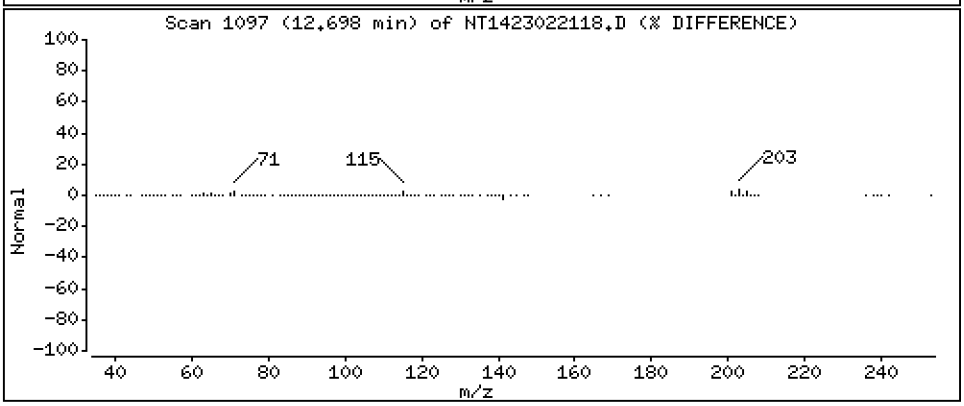












Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022118.D

Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

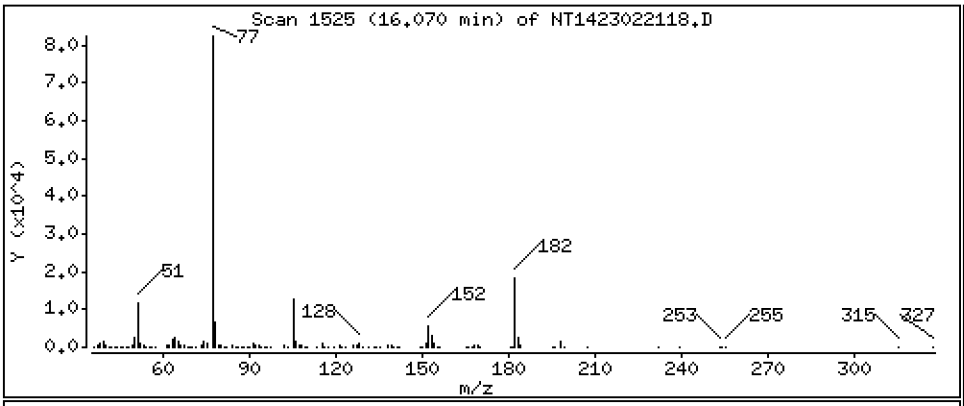
Operator: DSD

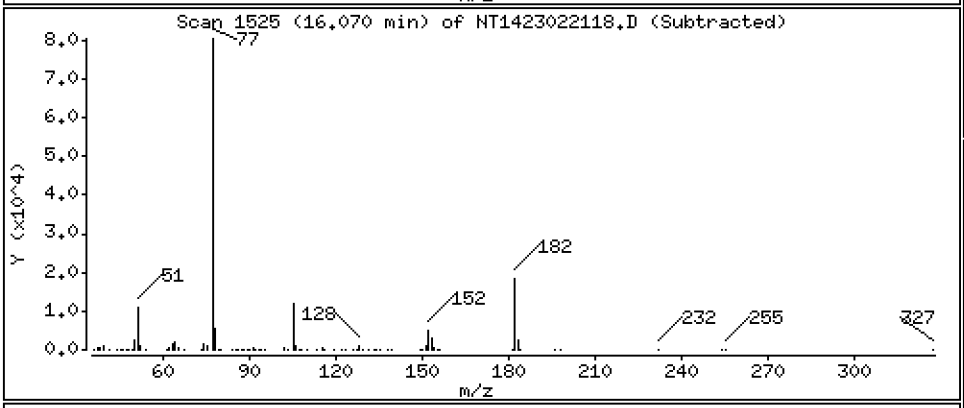
Column phase: ZB-5msi

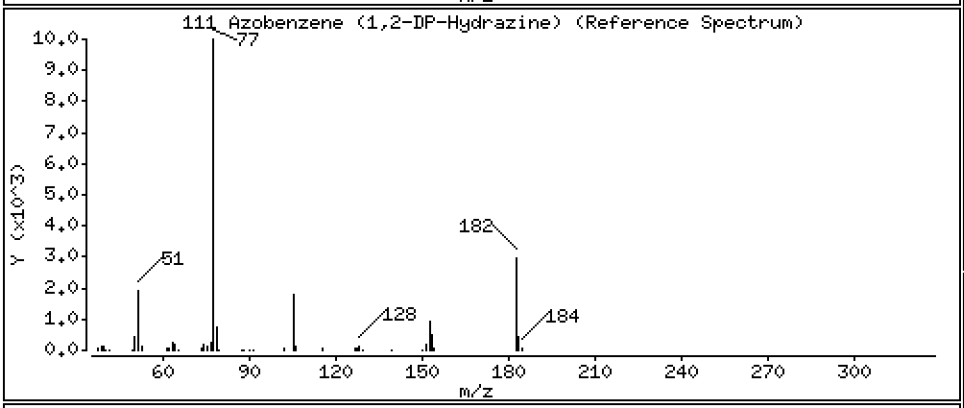
Column diameter: 0.25

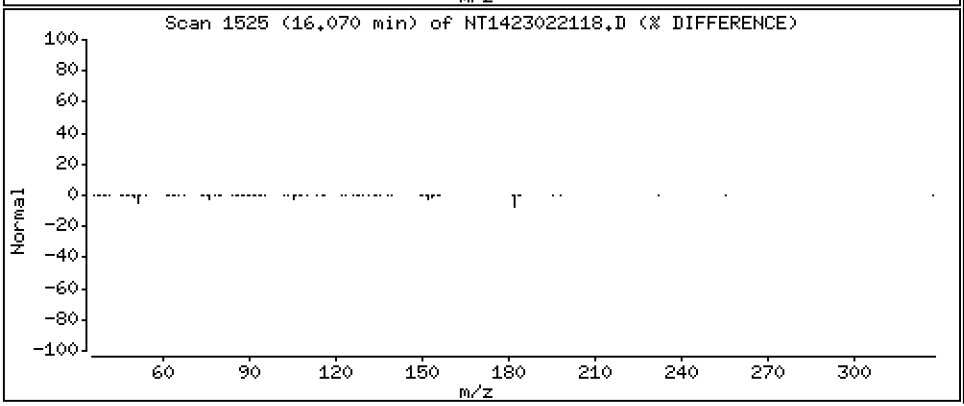
111 Azobenzene (1,2-DP-Hydrazine)

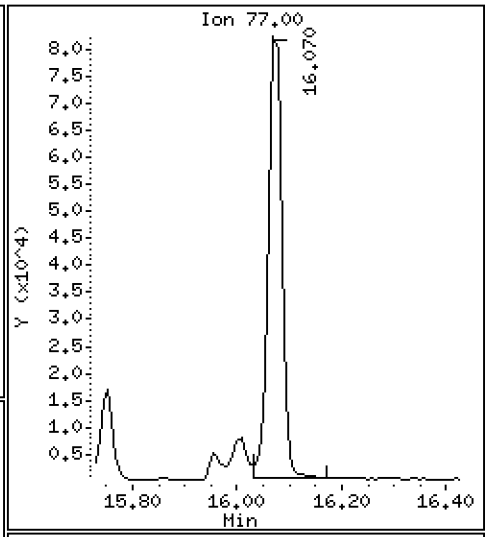
Concentration: 0.5669 ug/mL

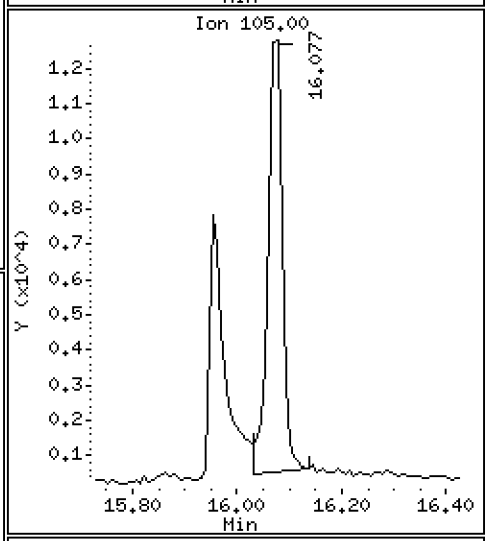


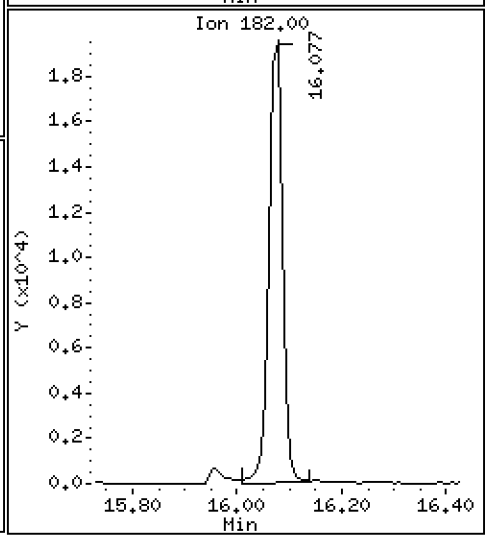












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

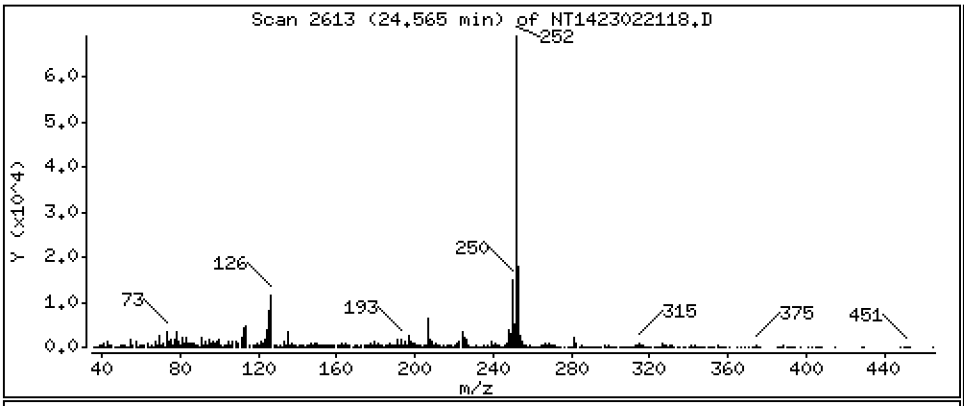
Operator: DSD

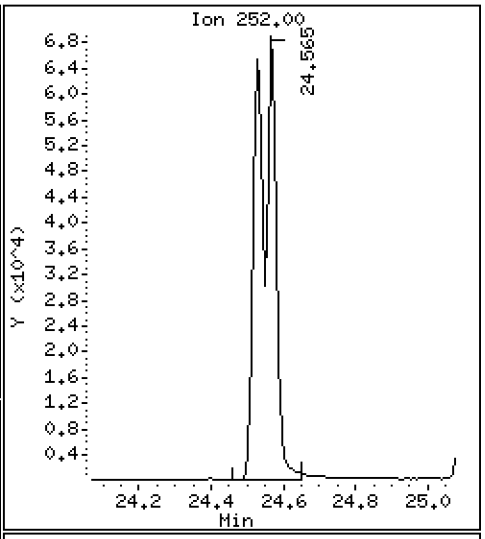
Column phase: ZB-5msi

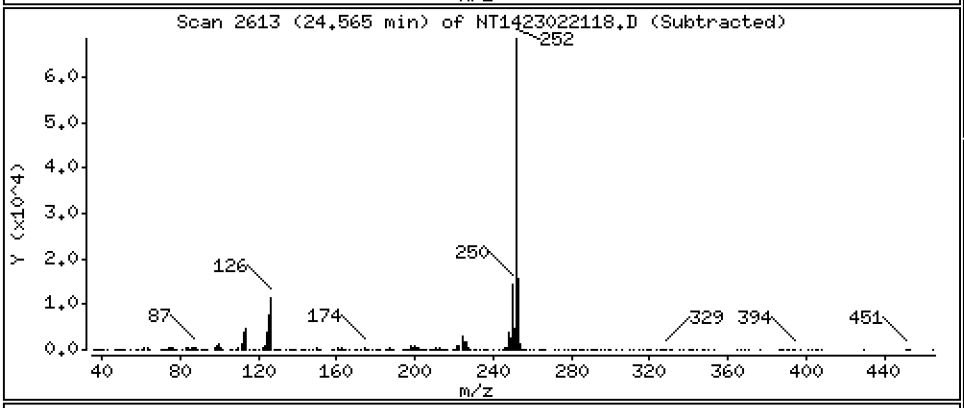
Column diameter: 0.25

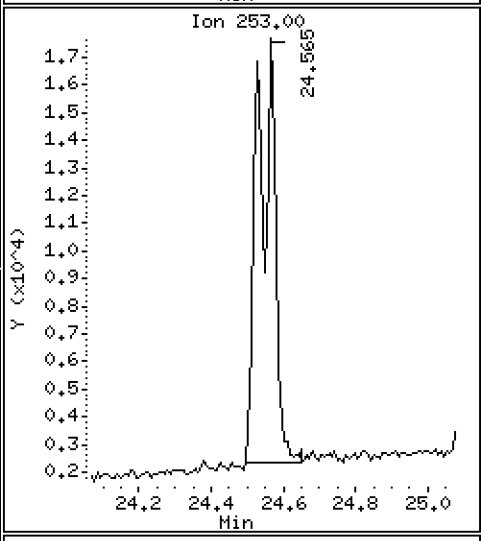
187 Total Benzofluoranthenes

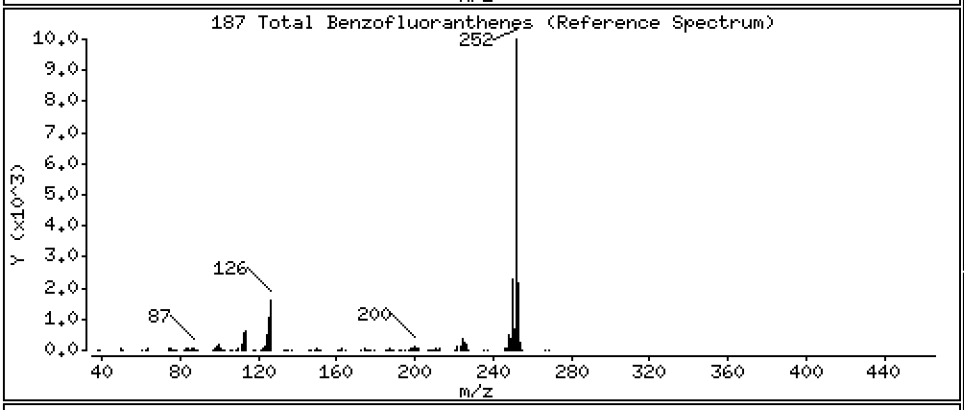
Concentration: 1.116 ug/mL

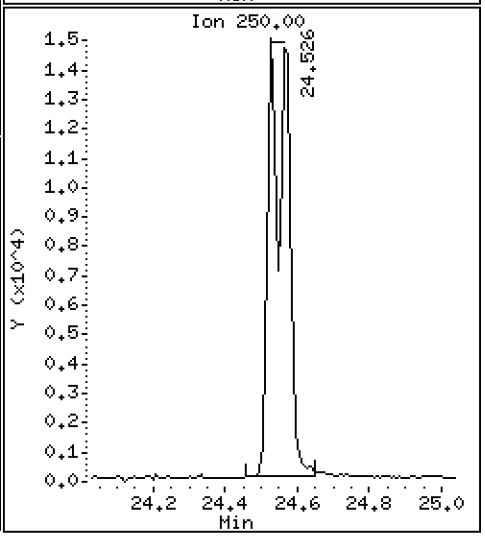


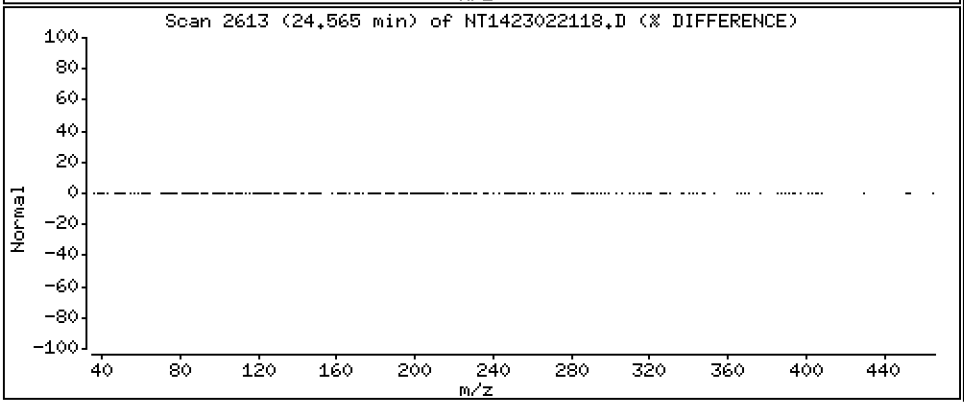












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

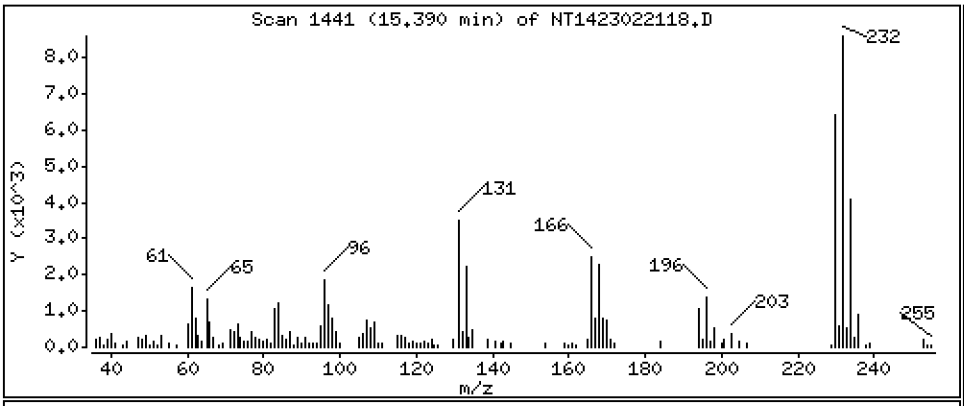
Operator: DSD

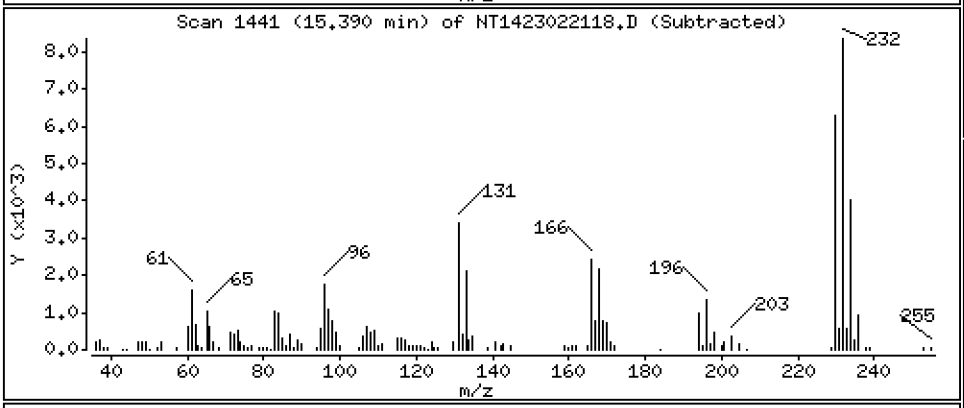
Column phase: ZB-5msi

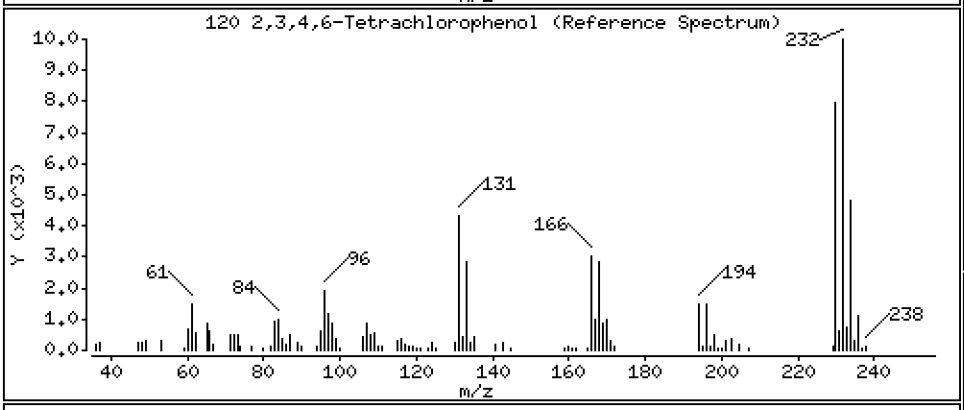
Column diameter: 0.25

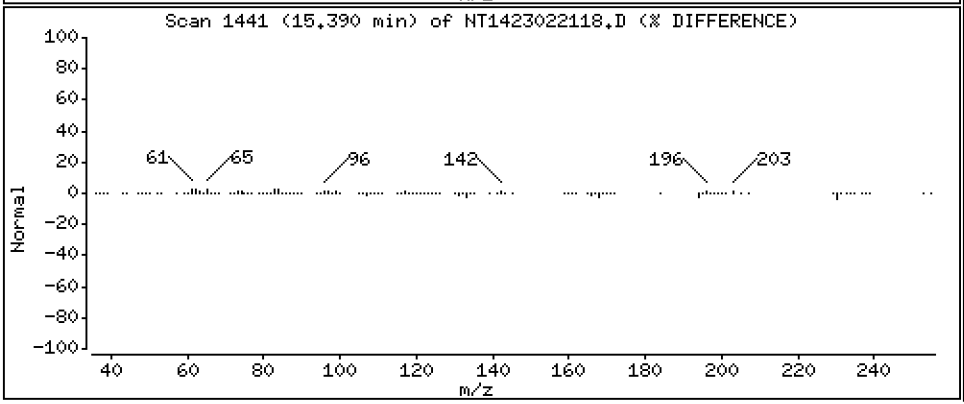
120 2,3,4,6-Tetrachlorophenol

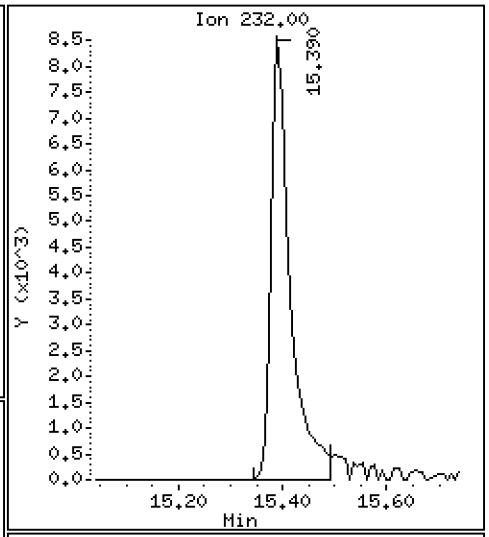
Concentration: 0.3676 ug/mL

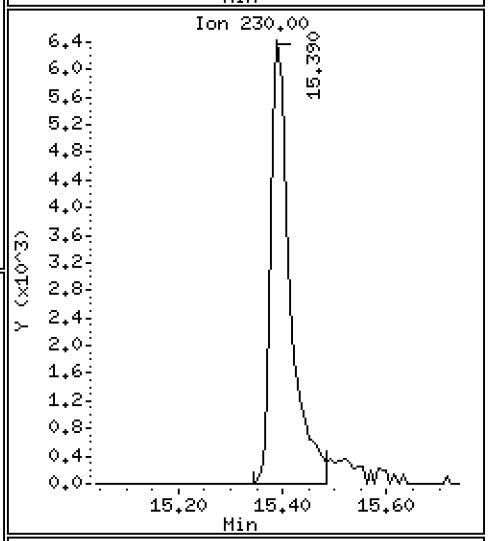


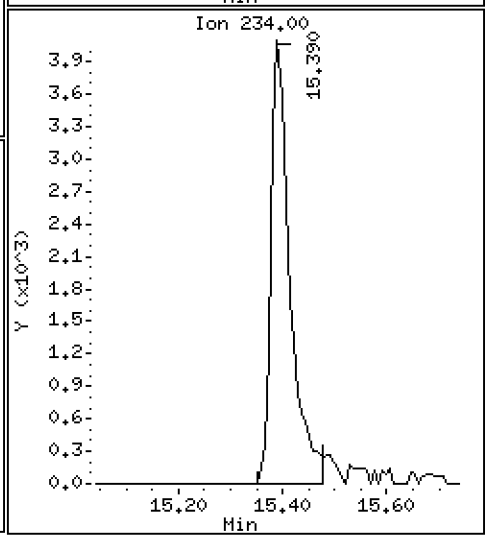












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230221A.b\NT1423022118.D
Lab Smp Id: SLB0291-LCV1
Inj Date : 21-FEB-2023 23:42 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0291-LCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230221A.b\ABN.m
Meth Date : 22-Feb-2023 13:34 deenayd Quant Type: ISTD
Cal Date : 16-FEB-2023 19:30 Cal File: NT1423021610.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: DEENAY-201905

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.380	6.373	(0.745)	42780	0.63978	0.6398
$	2 Phenol-d5	99	7.965	7.965	(0.930)	80116	0.75529	0.7553
	3 Phenol	94	7.988	7.988	(0.932)	45561	0.40574	0.4057
$	5 2-Chlorophenol-d4	132	8.212	8.212	(0.958)	56130	0.74161	0.7416
	4 Bis(2-Chloroethyl)ether	93	8.134	8.135	(0.949)	43913	0.51192	0.5119
	6 2-Chlorophenol	128	8.235	8.235	(0.961)	39607	0.50086	0.5009
	7 1,3-Dichlorobenzene	146	8.506	8.506	(0.993)	43082	0.48938	0.4894
*	8 1,4-Dichlorobenzene-d4	152	8.568	8.568	(1.000)	250126	4.00000	
	9 1,4-Dichlorobenzene	146	8.599	8.599	(1.004)	45333	0.54259	0.5426
$	10 1,2-Dichlorobenzene-d4	152	8.925	8.925	(1.042)	28559	0.50340	0.5034
	12 1,2-Dichlorobenzene	146	8.948	8.948	(1.044)	39934	0.47811	0.4781
	11 Benzyl alcohol	108	8.870	8.855	(1.035)	21641	0.34313	0.3431
	14 2,2'-oxybis(1-Chloropropane)	121	9.150	9.150	(1.068)	11005	0.46057	0.4606(M)
	13 2-Methylphenol	108	9.095	9.088	(1.062)	40423	0.51553	0.5155
	17 Hexachloroethane	117	9.530	9.530	(1.112)	17073	0.47004	0.4700
	16 N-Nitroso-di-n-propylamine	70	9.406	9.414	(1.098)	34054	0.47711	0.4771
	15 4-Methylphenol	108	9.367	9.360	(1.093)	40266	0.48632	0.4863
$	18 Nitrobenzene-d5	82	9.662	9.662	(0.875)	54640	0.55556	0.5556
	19 Nitrobenzene	77	9.701	9.701	(0.879)	49378	0.50030	0.5003
	20 Isophorone	82	10.143	10.151	(0.919)	68952	0.52952	0.5295
	21 2-Nitrophenol	139	10.329	10.329	(0.935)	14696	0.33284	0.3328
	22 2,4-Dimethylphenol	107	10.399	10.399	(0.942)	110959	1.48883	1.489
	23 Bis(2-Chloroethoxy)methane	93	10.593	10.593	(0.959)	44560	0.52605	0.5260
	24 Benzoic acid	105	10.732	10.678	(0.972)	240	0.00513	0.005133
	25 2,4-Dichlorophenol	162	10.779	10.779	(0.976)	76751	1.20328	1.203
	26 1,2,4-Trichlorobenzene	180	10.957	10.957	(0.992)	43721	0.56585	0.5658
*	27 Naphthalene-d8	136	11.042	11.042	(1.000)	851316	4.00000	
	28 Naphthalene	128	11.081	11.081	(1.003)	113501	0.54072	0.5407
	29 4-Chloroaniline	127	11.227	11.227	(1.017)	90813	1.01265	1.013
	30 Hexachlorobutadiene	225	11.451	11.451	(1.037)	26945	0.56570	0.5657
	31 4-Chloro-3-methylphenol	107	12.202	12.202	(1.105)	93665	1.35669	1.357
	32 2-Methylnaphthalene	142	12.473	12.481	(1.130)	84050	0.53464	0.5346
	33 Hexachlorocyclopentadiene	237	12.945	12.945	(0.884)	9452	0.19234	0.1923

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.107	13.108	(0.895)	59859	1.19817	1.198
	35	2,4,5-Trichlorophenol	196	13.185	13.177	(0.900)	61043	1.12824	1.128
$	36	2-Fluorobiphenyl	172	13.270	13.270	(0.906)	104651	0.57665	0.5766
	37	2-Chloronaphthalene	162	13.463	13.471	(0.919)	77275	0.52167	0.5217
	38	2-Nitroaniline	65	13.742	13.742	(0.938)	55925	1.16121	1.161
	39	Dimethylphthalate	163	14.183	14.183	(0.968)	85642	0.55274	0.5527
	40	Acenaphthylene	152	14.330	14.330	(0.978)	128953	0.57076	0.5708
	41	2,6-Dinitrotoluene	165	14.315	14.323	(0.977)	39524	1.08409	1.084
*	42	Acenaphthene-d10	164	14.648	14.648	(1.000)	507249	4.00000	
	43	3-Nitroaniline	138	14.593	14.601	(0.996)	41544	1.07356	1.074
	44	Acenaphthene	153	14.709	14.717	(1.004)	73847	0.54593	0.5459
	45	2,4-Dinitrophenol	184	14.957	14.818	(1.021)	260	0.01091	0.01091
	46	Dibenzofuran	168	15.042	15.042	(1.027)	122118	0.54985	0.5499
	47	4-Nitrophenol	109	14.949	14.941	(1.021)	17896	0.79822	0.7982
	48	2,4-Dinitrotoluene	165	15.119	15.127	(1.032)	53035	1.02885	1.029
	50	Diethylphthalate	149	15.637	15.645	(1.068)	109485	0.53153	0.5315
	49	Fluorene	166	15.745	15.753	(1.075)	124679	0.53683	0.5368
	51	4-Chlorophenyl-phenylether	204	15.753	15.753	(1.075)	64955	0.52304	0.5230
	52	4-Nitroaniline	138	15.861	15.869	(1.083)	50127	1.12904	1.129
	53	4,6-Dinitro-2-methylphenol	198	15.953	15.961	(0.903)	44541	1.19348	1.193
	54	N-Nitrosodiphenylamine	169	16.007	16.008	(0.906)	81992	0.55381	0.5538
$	55	2,4,6-Tribromophenol	330	16.285	16.285	(1.112)	14747	0.50606	0.5061
	56	4-Bromophenyl-phenylether	248	16.748	16.756	(0.948)	33189	0.50331	0.5033
	57	Hexachlorobenzene	284	17.049	17.057	(0.965)	36050	0.53801	0.5380
	58	Pentachlorophenol	266	17.444	17.421	(0.987)	6288	0.19318	0.1932
*	59	Phenanthrene-d10	188	17.668	17.676	(1.000)	1030253	4.00000	
	60	Phenanthrene	178	17.715	17.723	(1.003)	133865	0.54072	0.5407
	61	Anthracene	178	17.808	17.816	(1.008)	136626	0.55704	0.5570
	62	Carbazole	167	18.156	18.148	(1.028)	123313	0.55402	0.5540
	63	Di-n-butylphthalate	149	18.991	18.992	(1.075)	137649	0.55368	0.5537
	64	Fluoranthene	202	20.129	20.129	(0.884)	166353	0.43739	0.4374
	65	Pyrene	202	20.554	20.554	(0.903)	172011	0.42771	0.4277
$	66	Terphenyl-d14	244	20.864	20.864	(0.917)	147356	0.51604	0.5160
	67	Butylbenzylphthalate	149	21.816	21.816	(0.958)	60872	0.45887	0.4589
	68	Benzo(a)anthracene	228	22.738	22.738	(0.999)	161428	0.57222	0.5722
*	69	Chrysene-d12	240	22.761	22.769	(1.000)	881563	4.00000	
	70	3,3'-Dichlorobenzidine	252	22.707	22.715	(0.998)	158018	1.82818	1.828
	71	Chrysene	228	22.807	22.815	(1.002)	143654	0.56613	0.5661
	72	bis(2-Ethylhexyl)phthalate	149	22.854	22.854	(0.959)	81399	0.37265	0.3727
*	134	Di-n-octylphthalate-d4	153	23.829	23.837	(1.000)	1271706	4.00000	
	73	Di-n-octylphthalate	149	23.845	23.845	(1.001)	157515	0.52973	0.5297
	74	Benzo(b)fluoranthene	252	24.526	24.534	(0.973)	124710	0.55563	0.5556
	75	Benzo(k)fluoranthene	252	24.565	24.573	(0.975)	132516	0.55253	0.5525
	76	Benzo(a)pyrene	252	25.107	25.107	(0.996)	104252	0.49008	0.4901
*	77	Perylene-d12	264	25.207	25.215	(1.000)	707350	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	27.532	27.532	(1.092)	87831	0.50127	0.5013
	79	Dibenzo(a,h)anthracene	278	27.548	27.548	(1.093)	75231	0.52100	0.5210
	80	Benzo(g,h,i)perylene	276	28.208	28.208	(1.119)	68241	0.48017	0.4802
	90	N-Nitrosodimethylamine	74	4.280	4.280	(0.500)	40041	0.77343	0.7734
	91	Aniline	93	8.034	8.034	(0.938)	116217	0.96759	0.9676
	93	Benzidine	184	20.392	20.392	(0.896)	154476	1.53851	1.539
	103	Pyridine	79	4.303	4.280	(0.502)	61537	0.75120	0.7512
	105	1-methylnaphthalene	142	12.697	12.697	(1.150)	77726	0.52663	0.5266
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.069	16.077	(1.097)	141924	0.56694	0.5669

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.565	24.573	(0.975)	244633	1.11637	1.116
120 2,3,4,6-Tetrachlorophenol	232	15.390	15.390	(1.051)	21228	0.36760	0.3676

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423022118.D
Lab Smp Id: SLB0291-LCV1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230221A.b\ABN.m
Misc Info:

Calibration Date: 21-FEB-2023
Calibration Time: 23:06
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	247721	123861	495442	250126	0.97
27 Naphthalene-d8	862325	431163	1724650	851316	-1.28
42 Acenaphthene-d10	519526	259763	1039052	507249	-2.36
59 Phenanthrene-d10	1059882	529941	2119764	1030253	-2.80
69 Chrysene-d12	930840	465420	1861680	881563	-5.29
134 Di-n-octylphthala	1343425	671713	2686850	1271706	-5.34
77 Perylene-d12	746835	373418	1493670	707350	-5.29

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.57	8.07	9.07	8.57	-0.00
27 Naphthalene-d8	11.04	10.54	11.54	11.04	-0.00
42 Acenaphthene-d10	14.65	14.15	15.15	14.65	-0.00
59 Phenanthrene-d10	17.68	17.18	18.18	17.67	-0.04
69 Chrysene-d12	22.77	22.27	23.27	22.76	-0.03
134 Di-n-octylphthala	23.84	23.34	24.34	23.83	-0.03
77 Perylene-d12	25.22	24.72	25.72	25.21	-0.03

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

REVIEW SUMMARY FOR FILE - NT1423022118.D

Lab ID: SLB0291-LCV1
nt14.i, ABN.m, 21-FEB-2023 23:42

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.021	1.012	0.0095	2,4-Dinitrophenol

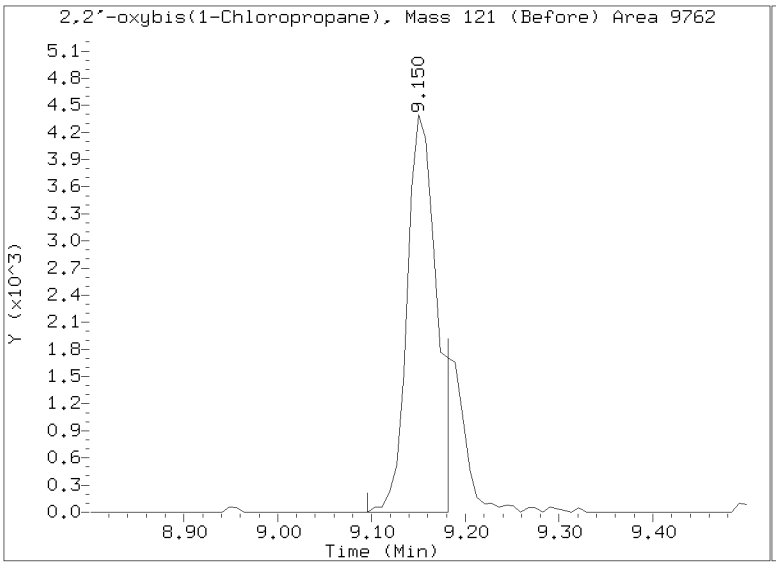
RRT check based on Ccal File: NT1423022117.D

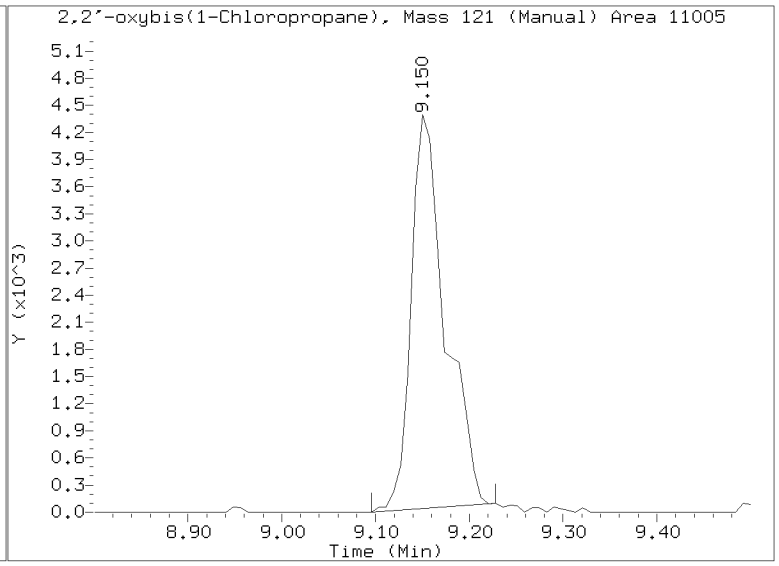
On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230221A.b/NT1423022118.D
Injection Date: 21-FEB-2023 23:42
Lab ID:SLB0291-LCV1 Client ID:
Report Date: 02/23/2023 12:09





APPROVED

By Deenay Dunmore at 12:18 pm, Feb 23, 2023

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT14	Calibration:	GB00046
Lab File ID:	NT1423021717X.D	Calibration Date:	02/16/2023
Sequence:	SLB0251	Injection Date:	02/17/23
Lab Sample ID:	SLB0251-ICV1	Injection Time:	20:19
Sequence Name:	Initial Cal Check		

		CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF		
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT	
Phenol	A	5.0000	4.7	1.7957660	1.6752540		-6.7	+/-20	
4-Methylphenol	A	5.0000	5.0	1.3240860	1.3168260		-0.5	+/-20	
Naphthalene	A	5.0000	4.7	0.9862730	0.9282387		-5.9	+/-20	
2-Methylnaphthalene	A	5.0000	4.7	0.7386653	0.6905973		-6.5	+/-20	
Acenaphthylene	A	5.0000	4.7	1.7816190	1.6853870		-5.4	+/-20	
Dimethylphthalate	A	5.0000	4.6	1.2218100	1.1336030		-7.2	+/-20	
Acenaphthene	A	5.0000	4.7	1.0666800	0.9986186		-6.4	+/-20	
Dibenzofuran	A	5.0000	4.6	1.7513490	1.5947460		-8.9	+/-20	
Fluorene	A	5.0000	4.7	1.8314530	1.7032830		-7.0	+/-20	
Phenanthrene	A	5.0000	4.6	0.9611900	0.8773891		-8.7	+/-20	
Anthracene	A	5.0000	4.8	0.9522768	0.9226089		-3.1	+/-20	
Fluoranthene	A	5.0000	5.4	1.7257220	1.8747270		8.6	+/-20	
Pyrene	A	5.0000	5.4	1.8248060	1.9882990		9.0	+/-20	
Butylbenzylphthalate	A	5.0000	5.4	0.5233989	0.6569115		8.0	+/-20	
Benzo(a)anthracene	A	5.0000	4.7	1.2800360	1.2146910		-5.1	+/-20	
Chrysene	A	5.0000	4.7	1.1513540	1.0722360		-6.9	+/-20	
bis(2-Ethylhexyl)phthalate	A	5.0000	3.9	0.5470542	0.5221266		-22.2	+/-20	*
Benzofluoranthenes, Total	A	10.000	9.3	1.2391730	1.1469850		-7.4	+/-20	
Benzo(a)pyrene	A	5.0000	4.6	1.0848130	1.1071380		-8.7	+/-20	
Indeno(1,2,3-cd)pyrene	A	5.0000	4.3	0.8621891	0.8709764		-14.0	+/-20	
Dibenzo(a,h)anthracene	A	5.0000	4.5	0.7046903	0.7509683		-10.1	+/-20	
Benzo(g,h,i)perylene	A	5.0000	3.9	0.7176031	0.6353872		-22.9	+/-20	*
2-Fluorophenol	A	7.5000	8.01	1.0693230	1.1425860		6.9	+/-20	
Phenol-d5	A	7.5000	7.52	1.6963140	1.7010810		0.3	+/-20	
2-Chlorophenol-d4	A	7.5000	7.59	1.2103710	1.2243940		1.2	+/-20	
1,2-Dichlorobenzene-d4	A	5.0000	4.76	0.9072515	0.8642559		-4.7	+/-20	
Nitrobenzene-d5	A	5.0000	4.76	0.4621137	0.4402262		-4.7	+/-20	
2-Fluorobiphenyl	A	5.0000	4.81	1.4311010	1.3773720		-3.8	+/-20	
2,4,6-Tribromophenol	A	7.5000	7.99	0.2030581	0.2499128		6.5	+/-20	
p-Terphenyl-d14	A	5.0000	5.64	1.2956710	1.4604790		12.7	+/-20	

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021717.D

Date : 17-FEB-2023 20:19

Client ID:

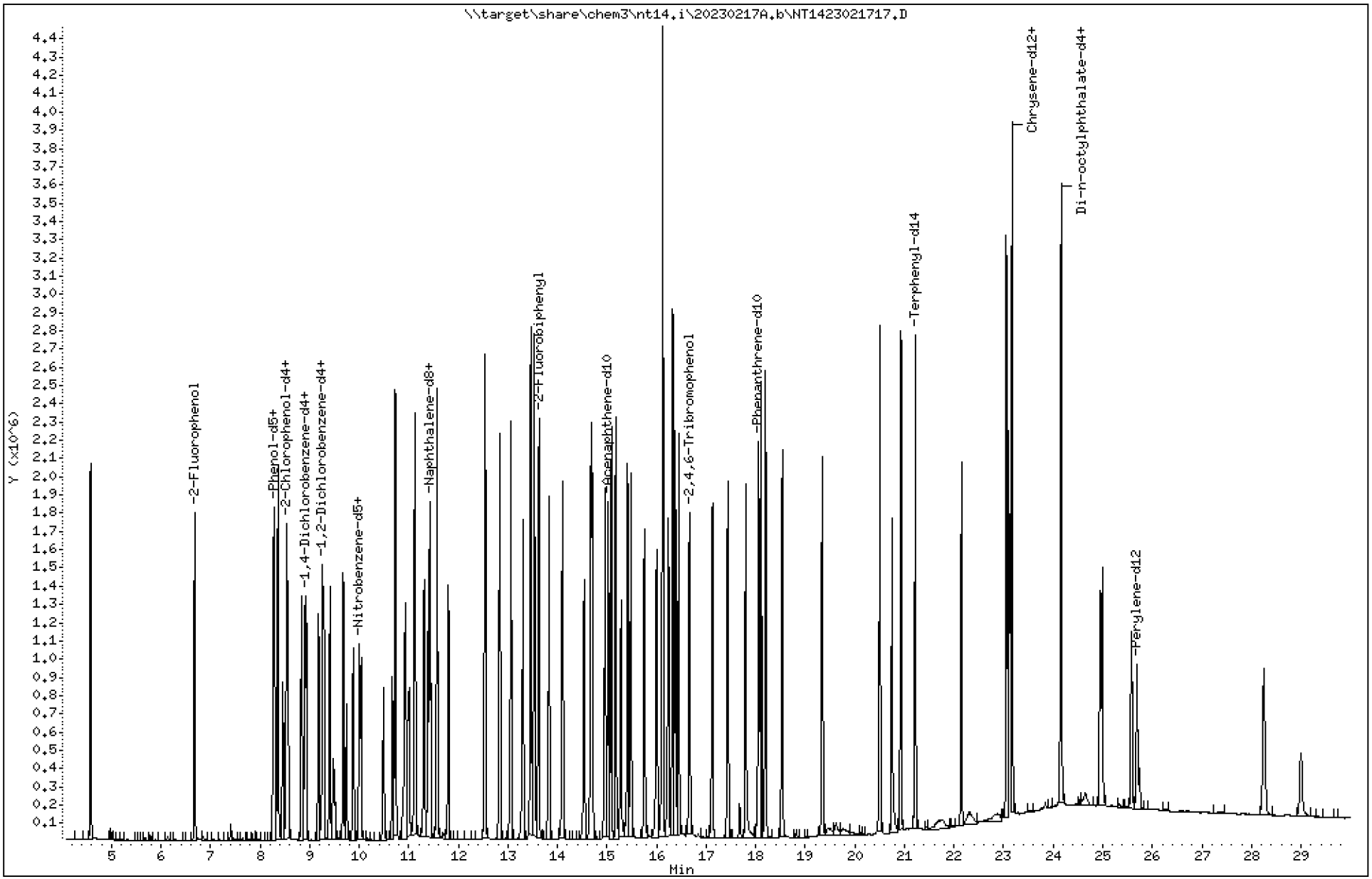
Instrument: nt14.i

Sample Info: SLB0251-ICV1

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

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Lab Smp Id: SLB0251-ICV1
Inj Date : 17-FEB-2023 20:19 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0251-ICV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230217.b\ABN.m
Meth Date : 23-Feb-2023 08:43 deenayd Quant Type: ISTD
Cal Date : 16-FEB-2023 19:30 Cal File: NT1423021610.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: DEENAY-201905

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1	2-Fluorophenol	112	6.674	6.666	(0.750)	753584	7.50000	8.014
$	2	Phenol-d5	99	8.273	8.266	(0.930)	1121935	7.50000	7.521
	3	Phenol	94	8.296	8.289	(0.932)	736601	5.00000	4.664
$	5	2-Chlorophenol-d4	132	8.536	8.536	(0.959)	807540	7.50000	7.587
	4	Bis(2-Chloroethyl)ether	93	8.459	8.451	(0.950)	532971	5.00000	4.418
	6	2-Chlorophenol	128	8.567	8.559	(0.963)	543555	5.00000	4.888
	7	1,3-Dichlorobenzene	146	8.838	8.830	(0.993)	567448	5.00000	4.583
*	8	1,4-Dichlorobenzene-d4	152	8.900	8.900	(1.000)	351756	4.00000	
	9	1,4-Dichlorobenzene	146	8.931	8.931	(1.003)	538283	5.00000	4.581
$	10	1,2-Dichlorobenzene-d4	152	9.264	9.257	(1.041)	380009	5.00000	4.763
	12	1,2-Dichlorobenzene	146	9.288	9.280	(1.044)	543942	5.00000	4.631
	11	Benzyl alcohol	108	9.179	9.171	(1.031)	401367	5.00000	4.500
	14	2,2'-oxybis(1-Chloropropane)	121	9.482	9.474	(1.065)	157422	5.00000	4.685(M)
	13	2-Methylphenol	108	9.404	9.404	(1.057)	535387	5.00000	4.855
	17	Hexachloroethane	117	9.878	9.878	(1.110)	231952	5.00000	4.541
	16	N-Nitroso-di-n-propylamine	70	9.746	9.738	(1.095)	453436	5.00000	4.517
	15	4-Methylphenol	108	9.676	9.676	(1.087)	579002	5.00000	4.973
$	18	Nitrobenzene-d5	82	10.002	10.002	(0.878)	715028	5.00000	4.763
	19	Nitrobenzene	77	10.040	10.033	(0.881)	671589	5.00000	4.458
	20	Isophorone	82	10.491	10.491	(0.920)	972689	5.00000	4.894
	21	2-Nitrophenol	139	10.669	10.662	(0.936)	339065	5.00000	4.923
	22	2,4-Dimethylphenol	107	10.723	10.724	(0.941)	1060803	10.0000	9.325
	23	Bis(2-Chloroethoxy)methane	93	10.925	10.925	(0.959)	590016	5.00000	4.563
	24	Benzoic acid	105	11.010	11.003	(0.966)	1324049	20.0000	17.73
	25	2,4-Dichlorophenol	162	11.126	11.119	(0.976)	967769	10.0000	9.940
	26	1,2,4-Trichlorobenzene	180	11.312	11.305	(0.993)	532250	5.00000	4.513
*	27	Naphthalene-d8	136	11.397	11.389	(1.000)	1299383	4.00000	
	28	Naphthalene	128	11.436	11.428	(1.003)	1507672	5.00000	4.706
	29	4-Chloroaniline	127	11.574	11.567	(1.016)	1378784	10.0000	10.07
	30	Hexachlorobutadiene	225	11.799	11.799	(1.035)	335048	5.00000	4.609
	31	4-Chloro-3-methylphenol	107	12.542	12.534	(1.100)	1042346	10.0000	9.892
	32	2-Methylnaphthalene	142	12.836	12.828	(1.126)	1121688	5.00000	4.675
	33	Hexachlorocyclopentadiene	237	13.300	13.300	(0.886)	622982	10.0000	7.958

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.462	13.455	(0.896)	801264	10.0000	10.07
	35	2,4,5-Trichlorophenol	196	13.532	13.532	(0.901)	864948	10.0000	10.04
$	36	2-Fluorobiphenyl	172	13.625	13.617	(0.907)	1391223	5.00000	4.812
	37	2-Chloronaphthalene	162	13.834	13.826	(0.921)	1100710	5.00000	4.665
	38	2-Nitroaniline	65	14.105	14.097	(0.939)	714388	10.0000	9.312
	39	Dimethylphthalate	163	14.538	14.539	(0.968)	1145003	5.00000	4.639
	40	Acenaphthylene	152	14.709	14.701	(0.979)	1702336	5.00000	4.730
	41	2,6-Dinitrotoluene	165	14.678	14.670	(0.977)	557400	10.0000	9.597
*	42	Acenaphthene-d10	164	15.018	15.018	(1.000)	808045	4.00000	
	43	3-Nitroaniline	138	14.964	14.956	(0.996)	603644	10.0000	9.792
	44	Acenaphthene	153	15.088	15.080	(1.005)	1008661	5.00000	4.681
	45	2,4-Dinitrophenol	184	15.173	15.173	(1.010)	671517	20.0000	17.00
	46	Dibenzofuran	168	15.412	15.412	(1.026)	1610783	5.00000	4.553
	47	4-Nitrophenol	109	15.281	15.273	(1.017)	296232	10.0000	8.244
	48	2,4-Dinitrotoluene	165	15.482	15.482	(1.031)	791388	10.0000	9.638
	50	Diethylphthalate	149	16.000	16.000	(1.065)	1469941	5.00000	4.480
	49	Fluorene	166	16.131	16.124	(1.074)	1720412	5.00000	4.650
	51	4-Chlorophenyl-phenylether	204	16.123	16.116	(1.074)	881804	5.00000	4.457
	52	4-Nitroaniline	138	16.239	16.232	(1.081)	677328	10.0000	9.577
	53	4,6-Dinitro-2-methylphenol	198	16.332	16.324	(0.904)	1129043	20.0000	18.86
	54	N-Nitrosodiphenylamine	169	16.378	16.370	(0.907)	1067885	5.00000	4.622
$	55	2,4,6-Tribromophenol	330	16.663	16.656	(1.110)	378639	7.50000	7.985
	56	4-Bromophenyl-phenylether	248	17.126	17.118	(0.948)	497538	5.00000	4.835
	57	Hexachlorobenzene	284	17.435	17.435	(0.965)	489889	5.00000	4.685
	58	Pentachlorophenol	266	17.799	17.791	(0.985)	467860	10.0000	8.966
*	59	Phenanthrene-d10	188	18.062	18.054	(1.000)	1607740	4.00000	
	60	Phenanthrene	178	18.108	18.101	(1.003)	1763267	5.00000	4.564
	61	Anthracene	178	18.201	18.193	(1.008)	1854144	5.00000	4.844
	62	Carbazole	167	18.534	18.526	(1.026)	1657690	5.00000	4.773
	63	Di-n-butylphthalate	149	19.346	19.339	(1.071)	2002171	5.00000	5.161
	64	Fluoranthene	202	20.499	20.499	(0.887)	2053719	5.00000	5.432
	65	Pyrene	202	20.924	20.925	(0.905)	2178134	5.00000	5.448
$	66	Terphenyl-d14	244	21.218	21.219	(0.918)	1599920	5.00000	5.636
	67	Butylbenzylphthalate	149	22.148	22.148	(0.958)	719631	5.00000	5.401
	68	Benzo(a)anthracene	228	23.092	23.093	(0.999)	1330665	5.00000	4.745
*	69	Chrysene-d12	240	23.123	23.123	(1.000)	876381	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.054	23.054	(0.997)	1229245	15.0000	14.21
	71	Chrysene	228	23.170	23.170	(1.002)	1174609	5.00000	4.656
	72	bis(2-Ethylhexyl)phthalate	149	23.177	23.178	(0.960)	1008652	5.00000	3.892
*	134	Di-n-octylphthalate-d4	153	24.153	24.153	(1.000)	1545452	4.00000	
	73	Di-n-octylphthalate	149	24.168	24.169	(1.001)	1577968	5.00000	4.367
	74	Benzo(b)fluoranthene	252	24.950	24.943	(0.971)	913075	5.00000	4.498
	75	Benzo(k)fluoranthene	252	24.989	24.989	(0.973)	1032553	5.00000	4.760
	76	Benzo(a)pyrene	252	25.577	25.578	(0.995)	885319	5.00000	4.566
*	77	Perylene-d12	264	25.694	25.686	(1.000)	639717	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.244	28.236	(1.099)	696473	5.00000	4.300
	79	Dibenzo(a,h)anthracene	278	28.259	28.252	(1.100)	600509	5.00000	4.493
	80	Benzo(g,h,i)perylene	276	28.997	28.990	(1.129)	508085	5.00000	3.857
	90	N-Nitrosodimethylamine	74	4.573	4.573	(0.514)	668821	10.0000	9.186
	91	Aniline	93	8.366	8.358	(0.940)	1554774	10.0000	9.205
	93	Benzidine	184	20.746	20.747	(0.897)	1242269	10.0000	14.56
	103	Pyridine	79	4.581	4.573	(0.515)	1046359	10.0000	9.083
	105	1-methylnaphthalene	142	13.060	13.053	(1.146)	1032872	5.00000	4.585
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.447	16.447	(1.095)	1744506	5.00000	4.375

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
187 Total Benzofluoranthenes	252	24.989	24.989	(0.973)	1834365	10.0000	9.256
120 2,3,4,6-Tetrachlorophenol	232	15.752	15.745	(1.049)	469558	5.00000	5.007

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021717.D
Lab Smp Id: SLB0251-ICV1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230217.b\ABN.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 17:06
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	357301	178651	714602	351756	-1.55
27 Naphthalene-d8	1308700	654350	2617400	1299383	-0.71
42 Acenaphthene-d10	807001	403501	1614002	808045	0.13
59 Phenanthrene-d10	1630102	815051	3260204	1607740	-1.37
69 Chrysene-d12	1086490	543245	2172980	876381	-19.34
134 Di-n-octylphthala	1602891	801446	3205782	1545452	-3.58
77 Perylene-d12	717214	358607	1434428	639717	-10.81

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	-0.00
27 Naphthalene-d8	11.39	10.89	11.89	11.40	0.07
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	-0.00
59 Phenanthrene-d10	18.05	17.55	18.55	18.06	0.04
69 Chrysene-d12	23.12	22.62	23.62	23.12	-0.00
134 Di-n-octylphthala	24.15	23.65	24.65	24.15	-0.00
77 Perylene-d12	25.69	25.19	26.19	25.69	0.03

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

REVIEW SUMMARY FOR FILE - NT1423021717.D

Lab ID: SLB0251-ICV1
nt14.i, ABN.m, 17-FEB-2023 20:19

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

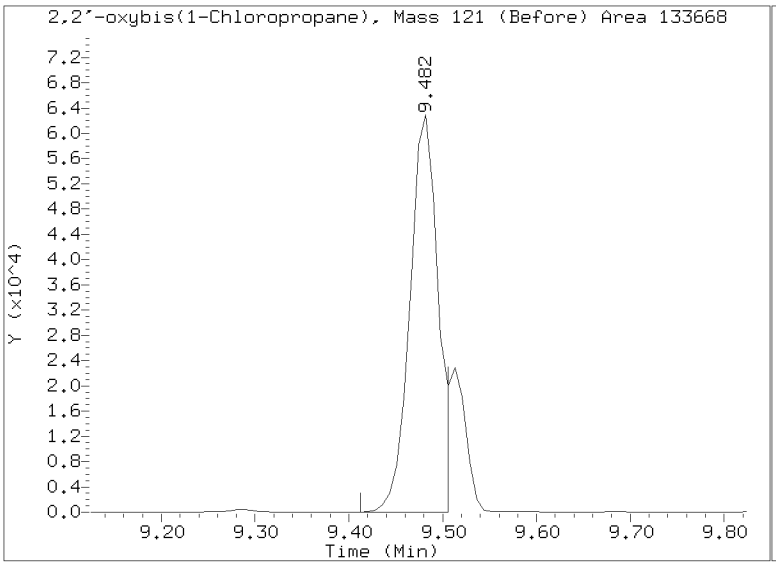
No RRT check. Ccal file.

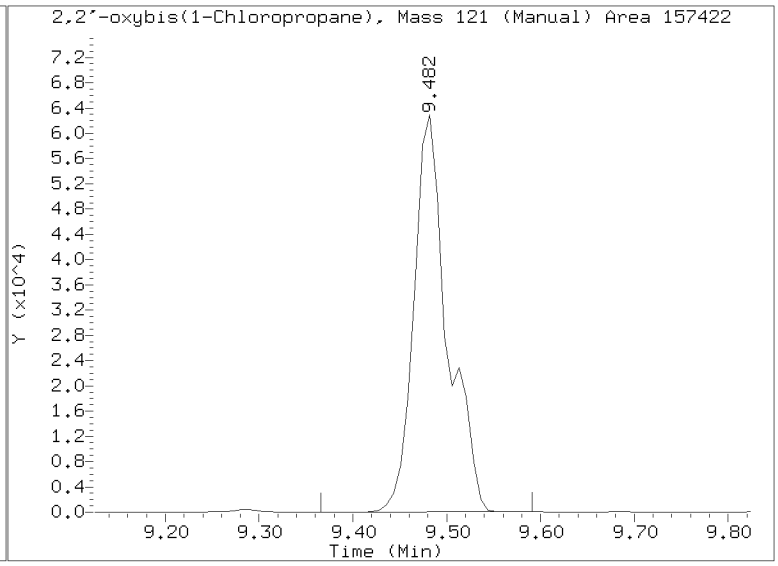
On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230217A.b/NT1423021717.D
Injection Date: 17-FEB-2023 20:19
Lab ID:SLB0251-ICV1 Client ID:
Report Date: 03/01/2023 13:00





Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230217A.b

Instrument: nt14.i Date: 17-FEB-2023 Method: ABN.m

INITIAL CAL: 30-DEC-2022

Compound	%RSD or R^2
Benzidine	0.986

ICV CAL: NT1423021717.D 17-FEB-2023 20:19

Compound	%D
Hexachlorocyclopentadiene	-20.42
bis(2-Ethylhexyl)phthalate	-22.2
Benzo(g,h,i)perylene	-22.9
Benzidine	45.6

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT14	Calibration:	GB00046
Lab File ID:	NT1423022117Z.D	Calibration Date:	02/16/2023
Sequence:	SLB0291	Injection Date:	02/21/23
Lab Sample ID:	SLB0291-ICV1	Injection Time:	23:06
Sequence Name:	Initial Cal Check		

		CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF		
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT	
Phenol	A	5.0000	5.0	1.7957660	1.7842100		-0.6	+/-20	
4-Methylphenol	A	5.0000	5.2	1.3240860	1.3808760		4.3	+/-20	
Naphthalene	A	5.0000	5.2	0.9862730	1.0193540		3.4	+/-20	
2-Methylnaphthalene	A	5.0000	5.0	0.7386653	0.7374723		-0.2	+/-20	
Acenaphthylene	A	5.0000	5.2	1.7816190	1.8572880		4.2	+/-20	
Dimethylphthalate	A	5.0000	5.1	1.2218100	1.2577450		2.9	+/-20	
Acenaphthene	A	5.0000	5.2	1.0666800	1.1178570		4.8	+/-20	
Dibenzofuran	A	5.0000	5.0	1.7513490	1.7350450		-0.9	+/-20	
Fluorene	A	5.0000	4.9	1.8314530	1.8078260		-1.3	+/-20	
Phenanthrene	A	5.0000	5.1	0.9611900	0.9862773		2.6	+/-20	
Anthracene	A	5.0000	5.5	0.9522768	1.0527840		10.6	+/-20	
Fluoranthene	A	5.0000	4.2	1.7257220	1.4465610		-16.2	+/-20	
Pyrene	A	5.0000	4.0	1.8248060	1.4727360		-19.3	+/-20	
Butylbenzylphthalate	A	5.0000	4.4	0.5233989	0.5370685		-11.5	+/-20	
Benzo(a)anthracene	A	5.0000	5.3	1.2800360	1.3649880		6.6	+/-20	
Chrysene	A	5.0000	5.4	1.1513540	1.2432480		8.0	+/-20	
bis(2-Ethylhexyl)phthalate	A	5.0000	3.9	0.5470542	0.5283969		-21.2	+/-20	*
Benzofluoranthenes, Total	A	10.000	10.9	1.2391730	1.3473830		8.7	+/-20	
Benzo(a)pyrene	A	5.0000	4.9	1.0848130	1.1865650		-2.2	+/-20	
Indeno(1,2,3-cd)pyrene	A	5.0000	4.8	0.8621891	0.9781288		-3.7	+/-20	
Dibenzo(a,h)anthracene	A	5.0000	5.0	0.7046903	0.8346583		-0.4	+/-20	
Benzo(g,h,i)perylene	A	5.0000	4.5	0.7176031	0.7530574		-9.0	+/-20	
2-Fluorophenol	A	7.5000	7.76	1.0693230	1.1066940		3.5	+/-20	
Phenol-d5	A	7.5000	7.44	1.6963140	1.6827490		-0.8	+/-20	
2-Chlorophenol-d4	A	7.5000	7.19	1.2103710	1.1606860		-4.1	+/-20	
1,2-Dichlorobenzene-d4	A	5.0000	4.51	0.9072515	0.8174422		-9.9	+/-20	
Nitrobenzene-d5	A	5.0000	5.20	0.4621137	0.4808526		4.1	+/-20	
2-Fluorobiphenyl	A	5.0000	5.06	1.4311010	1.4486960		1.2	+/-20	
2,4,6-Tribromophenol	A	7.5000	6.48	0.2030581	0.2018548		-13.6	+/-20	
p-Terphenyl-d14	A	5.0000	4.17	1.2956710	1.0792570		-16.7	+/-20	

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022117.D

Page 1

Date : 21-FEB-2023 23:06

Client ID:

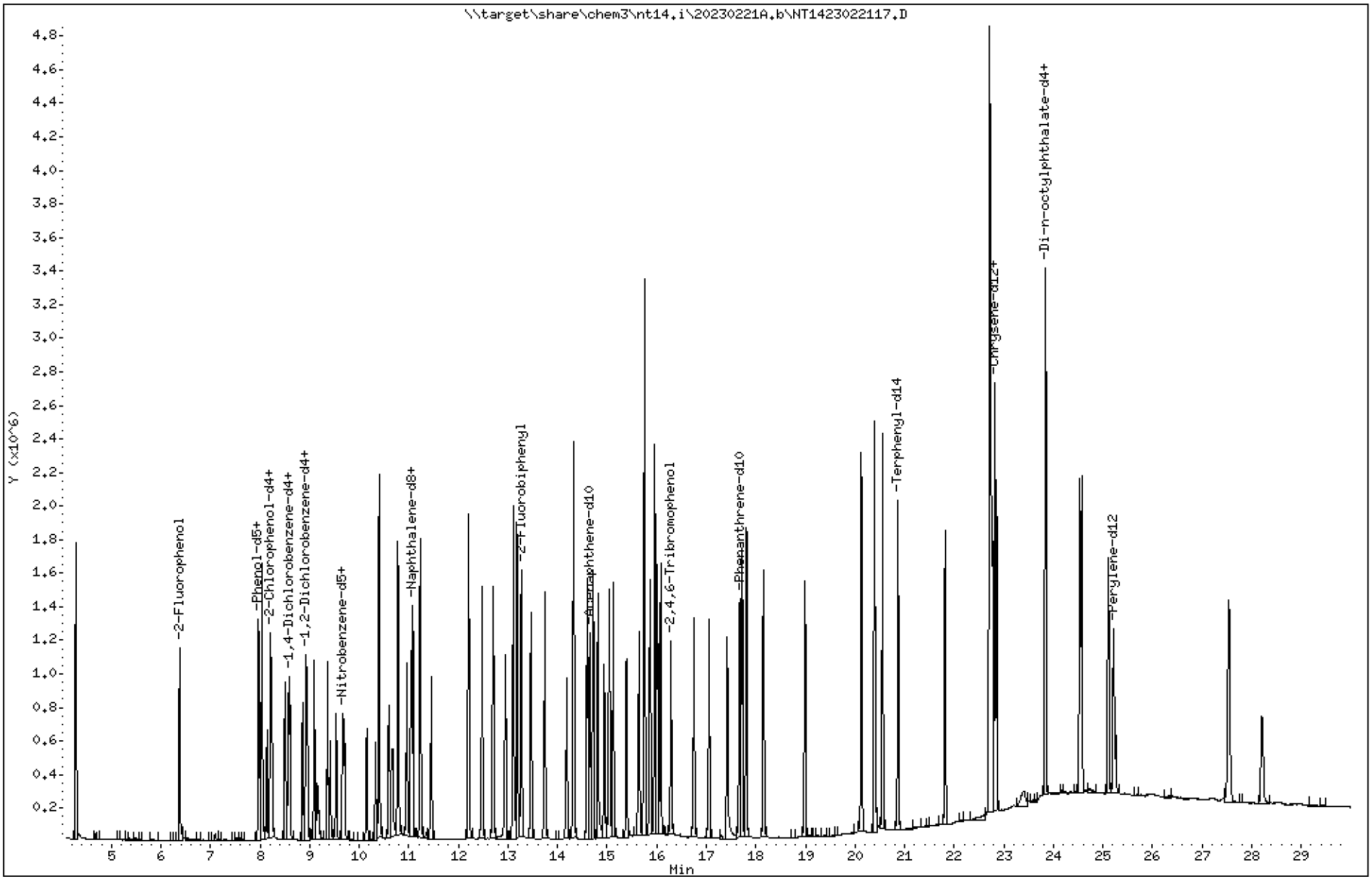
Instrument: nt14.i

Sample Info: SLB0291-ICV1

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230221A.b\NT1423022117.D
Lab Smp Id: SLB0291-ICV1
Inj Date : 21-FEB-2023 23:06 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0291-ICV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230221A.b\ABN.m
Meth Date : 01-Mar-2023 14:54 van Quant Type: ISTD
Cal Date : 16-FEB-2023 19:30 Cal File: NT1423021610.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

							AMOUNTS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.373	6.373	(0.744)	514034	7.50000	7.762
$	2 Phenol-d5	99	7.965	7.965	(0.930)	781598	7.50000	7.440
	3 Phenol	94	7.988	7.988	(0.932)	552483	5.00000	4.968
$	5 2-Chlorophenol-d4	132	8.212	8.212	(0.958)	539112	7.50000	7.192
	4 Bis(2-Chloroethyl)ether	93	8.135	8.135	(0.949)	392649	5.00000	4.622
	6 2-Chlorophenol	128	8.235	8.235	(0.961)	385902	5.00000	4.927
	7 1,3-Dichlorobenzene	146	8.506	8.506	(0.993)	406421	5.00000	4.661
*	8 1,4-Dichlorobenzene-d4	152	8.568	8.568	(1.000)	247721	4.00000	
	9 1,4-Dichlorobenzene	146	8.599	8.599	(1.004)	429926	5.00000	5.196
$	10 1,2-Dichlorobenzene-d4	152	8.925	8.925	(1.042)	253122	5.00000	4.505
	12 1,2-Dichlorobenzene	146	8.948	8.948	(1.044)	385276	5.00000	4.658
	11 Benzyl alcohol	108	8.855	8.855	(1.034)	258154	5.00000	4.112
	14 2,2'-oxybis(1-Chloropropane)	121	9.150	9.150	(1.068)	111544	5.00000	4.714(M)
	13 2-Methylphenol	108	9.088	9.088	(1.061)	396278	5.00000	5.103
	17 Hexachloroethane	117	9.530	9.530	(1.112)	167812	5.00000	4.665
	16 N-Nitroso-di-n-propylamine	70	9.414	9.414	(1.099)	342066	5.00000	4.839
	15 4-Methylphenol	108	9.360	9.360	(1.092)	427590	5.00000	5.214
$	18 Nitrobenzene-d5	82	9.662	9.662	(0.875)	518314	5.00000	5.203
	19 Nitrobenzene	77	9.701	9.701	(0.879)	512804	5.00000	5.129
	20 Isophorone	82	10.151	10.151	(0.919)	729506	5.00000	5.531
	21 2-Nitrophenol	139	10.329	10.329	(0.935)	218952	5.00000	4.793
	22 2,4-Dimethylphenol	107	10.399	10.399	(0.942)	834279	10.0000	11.05
	23 Bis(2-Chloroethoxy)methane	93	10.593	10.593	(0.959)	448365	5.00000	5.226
	24 Benzoic acid	105	10.678	10.678	(0.967)	715138	20.0000	14.56
	25 2,4-Dichlorophenol	162	10.779	10.779	(0.976)	702079	10.0000	10.87
	26 1,2,4-Trichlorobenzene	180	10.957	10.957	(0.992)	406710	5.00000	5.197
*	27 Naphthalene-d8	136	11.042	11.042	(1.000)	862325	4.00000	
	28 Naphthalene	128	11.081	11.081	(1.003)	1098768	5.00000	5.168
	29 4-Chloroaniline	127	11.227	11.227	(1.017)	998183	10.0000	10.99
	30 Hexachlorobutadiene	225	11.451	11.451	(1.037)	263492	5.00000	5.461
	31 4-Chloro-3-methylphenol	107	12.202	12.202	(1.105)	785027	10.0000	11.23
	32 2-Methylnaphthalene	142	12.481	12.481	(1.130)	794926	5.00000	4.992
	33 Hexachlorocyclopentadiene	237	12.945	12.945	(0.884)	357174	10.0000	7.096

		QUANT SIG					AMOUNTS CAL-AMT	AMOUNTS ON-COL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
34	2,4,6-Trichlorophenol	196	13.108	13.108	(0.895)	557192	10.0000	10.89
35	2,4,5-Trichlorophenol	196	13.177	13.177	(0.900)	606674	10.0000	10.95
$ 36	2-Fluorobiphenyl	172	13.270	13.270	(0.906)	940794	5.00000	5.061
37	2-Chloronaphthalene	162	13.471	13.471	(0.920)	771656	5.00000	5.086
38	2-Nitroaniline	65	13.742	13.742	(0.938)	554983	10.0000	11.25
39	Dimethylphthalate	163	14.183	14.183	(0.968)	816789	5.00000	5.147
40	Acenaphthylene	152	14.330	14.330	(0.978)	1206137	5.00000	5.212
41	2,6-Dinitrotoluene	165	14.323	14.323	(0.978)	394726	10.0000	10.57
* 42	Acenaphthene-d10	164	14.648	14.648	(1.000)	519526	4.00000	
43	3-Nitroaniline	138	14.601	14.601	(0.997)	438631	10.0000	11.07
44	Acenaphthene	153	14.717	14.717	(1.005)	725945	5.00000	5.240
45	2,4-Dinitrophenol	184	14.818	14.818	(1.012)	455825	20.0000	17.91
46	Dibenzofuran	168	15.042	15.042	(1.027)	1126751	5.00000	4.953
47	4-Nitrophenol	109	14.941	14.941	(1.020)	228711	10.0000	9.887
48	2,4-Dinitrotoluene	165	15.127	15.127	(1.033)	572562	10.0000	10.84
50	Diethylphthalate	149	15.645	15.645	(1.068)	1056319	5.00000	5.007
49	Fluorene	166	15.753	15.753	(1.075)	1174016	5.00000	4.935
51	4-Chlorophenyl-phenylether	204	15.753	15.753	(1.075)	607761	5.00000	4.778
52	4-Nitroaniline	138	15.869	15.869	(1.083)	535164	10.0000	11.77
53	4,6-Dinitro-2-methylphenol	198	15.961	15.961	(0.903)	830577	20.0000	20.98
54	N-Nitrosodiphenylamine	169	16.008	16.008	(0.906)	775277	5.00000	5.090
$ 55	2,4,6-Tribromophenol	330	16.285	16.285	(1.112)	196629	7.50000	6.478
56	4-Bromophenyl-phenylether	248	16.756	16.756	(0.948)	340646	5.00000	5.021
57	Hexachlorobenzene	284	17.057	17.057	(0.965)	333286	5.00000	4.835
58	Pentachlorophenol	266	17.421	17.421	(0.986)	300291	10.0000	8.736
* 59	Phenanthrene-d10	188	17.676	17.676	(1.000)	1059882	4.00000	
60	Phenanthrene	178	17.723	17.723	(1.003)	1306672	5.00000	5.131
61	Anthracene	178	17.816	17.816	(1.008)	1394783	5.00000	5.528
62	Carbazole	167	18.148	18.148	(1.027)	1286062	5.00000	5.616
63	Di-n-butylphthalate	149	18.992	18.992	(1.074)	1476384	5.00000	5.773
64	Fluoranthene	202	20.129	20.129	(0.884)	1683146	5.00000	4.191
65	Pyrene	202	20.554	20.554	(0.903)	1713602	5.00000	4.035
$ 66	Terphenyl-d14	244	20.864	20.864	(0.916)	1255770	5.00000	4.165
67	Butylbenzylphthalate	149	21.816	21.816	(0.958)	624906	5.00000	4.425
68	Benzo(a)anthracene	228	22.738	22.738	(0.999)	1588232	5.00000	5.332
* 69	Chrysene-d12	240	22.769	22.769	(1.000)	930840	4.00000	
70	3,3'-Dichlorobenzidine	252	22.715	22.715	(0.998)	1621026	15.0000	17.62
71	Chrysene	228	22.815	22.815	(1.002)	1446581	5.00000	5.399
72	bis(2-Ethylhexyl)phthalate	149	22.854	22.854	(0.959)	887327	5.00000	3.940
* 134	Di-n-octylphthalate-d4	153	23.837	23.837	(1.000)	1343425	4.00000	
73	Di-n-octylphthalate	149	23.845	23.845	(1.000)	1572079	5.00000	5.005
74	Benzo(b)fluoranthene	252	24.534	24.534	(0.973)	1384036	5.00000	5.840
75	Benzo(k)fluoranthene	252	24.573	24.573	(0.975)	1289711	5.00000	5.093
76	Benzo(a)pyrene	252	25.107	25.107	(0.996)	1107710	5.00000	4.890
* 77	Perylene-d12	264	25.215	25.215	(1.000)	746835	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	27.532	27.532	(1.092)	913126	5.00000	4.815
79	Dibenzo(a,h)anthracene	278	27.548	27.548	(1.093)	779190	5.00000	4.980
80	Benzo(g,h,i)perylene	276	28.208	28.208	(1.119)	703012	5.00000	4.548
90	N-Nitrosodimethylamine	74	4.280	4.280	(0.500)	522736	10.0000	10.20
91	Aniline	93	8.034	8.034	(0.938)	1152621	10.0000	9.690
93	Benzidine	184	20.392	20.392	(0.896)	1671851	10.0000	19.26
103	Pyridine	79	4.280	4.280	(0.500)	832737	10.0000	10.26
105	1-methylnaphthalene	142	12.697	12.697	(1.150)	726437	5.00000	4.859
111	Azobenzene (1,2-DP-Hydrazine)	77	16.077	16.077	(1.098)	1344383	5.00000	5.243

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	24.573	24.573	(0.975)	2515682	10.0000	10.87
120 2,3,4,6-Tetrachlorophenol	232	15.390	15.390	(1.051)	292529	5.00000	4.855

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423022117.D
Lab Smp Id: SLB0291-ICV1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230221A.b\ABN.m
Misc Info:

Calibration Date: 21-FEB-2023
Calibration Time: 13:44
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	247721	123861	495442	247721	0.00
27 Naphthalene-d8	862325	431163	1724650	862325	0.00
42 Acenaphthene-d10	519526	259763	1039052	519526	0.00
59 Phenanthrene-d10	1059882	529941	2119764	1059882	0.00
69 Chrysene-d12	930840	465420	1861680	930840	0.00
134 Di-n-octylphthala	1343425	671713	2686850	1343425	0.00
77 Perylene-d12	746835	373418	1493670	746835	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.57	8.07	9.07	8.57	0.00
27 Naphthalene-d8	11.04	10.54	11.54	11.04	0.00
42 Acenaphthene-d10	14.65	14.15	15.15	14.65	0.00
59 Phenanthrene-d10	17.68	17.18	18.18	17.68	0.00
69 Chrysene-d12	22.77	22.27	23.27	22.77	0.00
134 Di-n-octylphthala	23.84	23.34	24.34	23.84	0.00
77 Perylene-d12	25.22	24.72	25.72	25.22	0.00

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

REVIEW SUMMARY FOR FILE - NT1423022117.D

Lab ID: SLB0291-ICV1
nt14.i, ABN.m, 21-FEB-2023 23:06

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

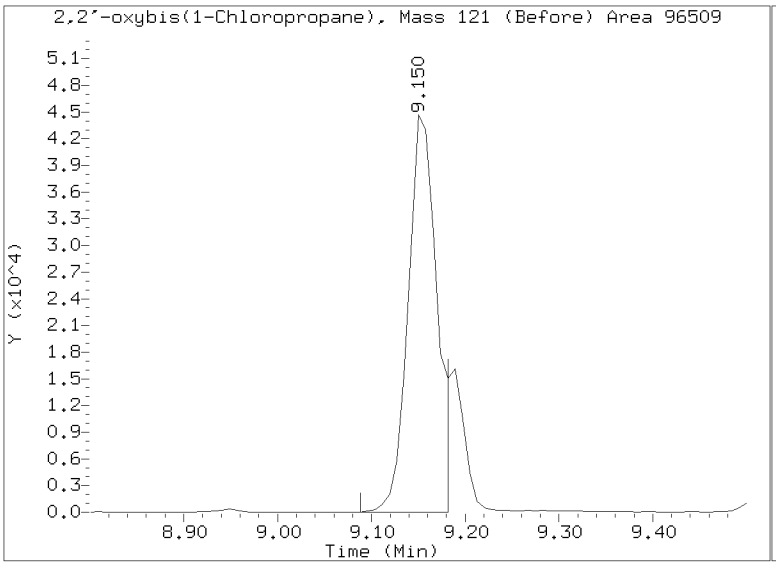
No RRT check. Ccal file.

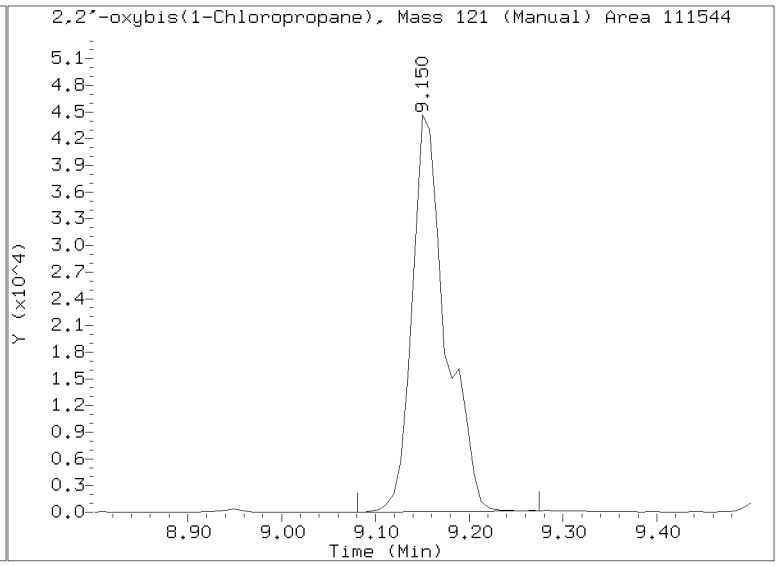
On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230221A.b/NT1423022117.D
Injection Date: 21-FEB-2023 23:06
Lab ID:SLB0291-ICV1 Client ID:
Report Date: 03/01/2023 14:54





APPROVED

By Deenay Dunmore at 11:25 am, Mar 02, 2023

Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230221A.b

Instrument: nt14.i Date: 21-FEB-2023 Method: ABN.m

INITIAL CAL: 30-DEC-2022

Compound	%RSD or R^2
Benzidine	0.986

ICV CAL: NT1423022117.D 21-FEB-2023 23:06

Compound	%D
Benzoic acid	-27.2
Hexachlorocyclopentadiene	-29.04
bis(2-Ethylhexyl)phthalate	-21.2
Benzidine	92.6

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT14	Calibration:	GB00046
Lab File ID:	NT1423021613.D	Calibration Date:	02/16/2023
Sequence:	SLB0234	Injection Date:	02/16/23
Lab Sample ID:	SLB0234-SCV1	Injection Time:	21:18
Sequence Name:	SCV 5.0		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
Phenol	A	5.0000	4.6	1.7957660	1.6618960		-7.5	+/-20	
bis(2-chloroethyl) ether	A	5.0000	5.2	1.3717970	1.4153290		3.2	+/-20	
2-Chlorophenol	A	5.0000	4.6	1.2646140	1.1676710		-7.7	+/-20	
1,3-Dichlorobenzene	A	5.0000	4.8	1.4078420	1.3430150		-4.6	+/-20	
1,4-Dichlorobenzene	A	5.0000	4.8	1.3361040	1.2801510		-4.2	+/-20	
1,2-Dichlorobenzene	A	5.0000	4.8	1.3357080	1.2710030		-4.8	+/-20	
Benzyl Alcohol	A	5.0000	4.6	0.8584087	0.9383522		-7.5	+/-20	
2,2'-Oxybis(1-chloropropane)	A	5.0000	5.6	0.3821177	0.4254421		11.3	+/-20	
2-Methylphenol	A	5.0000	4.4	1.2539360	1.0953370		-12.6	+/-20	
Hexachloroethane	A	5.0000	5.0	0.5808679	0.5852133		0.7	+/-20	
N-Nitroso-di-n-Propylamine	A	5.0000	5.0	1.1414440	1.1386550		-0.2	+/-20	
4-Methylphenol	A	5.0000	4.6	1.3240860	1.2156810		-8.2	+/-20	
Nitrobenzene	A	5.0000	4.9	0.4637383	0.4589877		-1.0	+/-20	
Isophorone	A	5.0000	7.1	0.6118329	0.8680150		41.9	+/-20	*
2-Nitrophenol	A	5.0000	4.5	0.1668667	0.1884065		-10.9	+/-20	
2,4-Dimethylphenol	A	5.0000	4.3	0.3501768	0.2993160		-14.5	+/-20	
Bis(2-Chloroethoxy)methane	A	5.0000	5.7	0.3980063	0.4569254		14.8	+/-20	
2,4-Dichlorophenol	A	5.0000	5.1	0.2996999	0.3071096		2.5	+/-20	
1,2,4-Trichlorobenzene	A	5.0000	4.6	0.3630457	0.3376190		-7.0	+/-20	
Naphthalene	A	5.0000	4.7	0.9862730	0.9341725		-5.3	+/-20	
Benzoic acid	A	10.000	5.5	0.1876532	0.1226896		-44.9	+/-20	*
4-Chloroaniline	A	5.0000	3.9	0.4213649	0.3296086		-21.8	+/-20	*
Hexachlorobutadiene	A	5.0000	4.9	0.2238011	0.2200640		-1.7	+/-20	
4-Chloro-3-Methylphenol	A	5.0000	5.0	0.3243891	0.3272807		0.9	+/-20	
2-Methylnaphthalene	A	5.0000	4.6	0.7386653	0.6805108		-7.9	+/-20	
Hexachlorocyclopentadiene	A	5.0000	5.3	0.3875173	0.4108546		6.0	+/-20	
2,4,6-Trichlorophenol	A	5.0000	4.8	0.3939585	0.3788267		-3.8	+/-20	
2,4,5-Trichlorophenol	A	5.0000	4.7	0.4266518	0.4016371		-5.9	+/-20	
2-Chloronaphthalene	A	5.0000	4.6	1.1680960	1.0837170		-7.2	+/-20	
2-Nitroaniline	A	5.0000	4.9	0.3797818	0.3685652		-3.0	+/-20	
Acenaphthylene	A	5.0000	4.7	1.7816190	1.6594800		-6.9	+/-20	
Dimethylphthalate	A	5.0000	4.7	1.2218100	1.1467890		-6.1	+/-20	
2,6-Dinitrotoluene	A	5.0000	4.9	0.2874984	0.2837430		-1.3	+/-20	

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT14	Calibration:	GB00046
Lab File ID:	NT1423021613.D	Calibration Date:	02/16/2023
Sequence:	SLB0234	Injection Date:	02/16/23
Lab Sample ID:	SLB0234-SCV1	Injection Time:	21:18
Sequence Name:	SCV 5.0		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
Acenaphthene	A	5.0000	4.6	1.0666800	0.9884336		-7.3	+/-20	
3-Nitroaniline	A	5.0000	4.9	0.3051549	0.3003721		-1.6	+/-20	
2,4-Dinitrophenol	A	5.0000	0.3	0.1326177	0.0094058		-95.0	+/-20	*
Dibenzofuran	A	5.0000	4.5	1.7513490	1.5931320		-9.0	+/-20	
4-Nitrophenol	A	5.0000	4.1	0.1470256	0.1436378		-19.0	+/-20	
2,4-Dinitrotoluene	A	5.0000	4.9	0.4064887	0.3946834		-2.9	+/-20	
Fluorene	A	5.0000	4.6	1.8314530	1.6987730		-7.2	+/-20	
4-Chlorophenylphenyl ether	A	5.0000	4.8	0.9792941	0.9311554		-4.9	+/-20	
Diethyl phthalate	A	5.0000	4.7	1.6243010	1.5338980		-5.6	+/-20	
4-Nitroaniline	A	5.0000	4.8	0.3501076	0.3334111		-4.8	+/-20	
4,6-Dinitro-2-methylphenol	A	5.0000	3.7	0.1007578	0.1062530		-26.9	+/-20	*
N-Nitrosodiphenylamine	A	5.0000	4.9	0.5748169	0.5641540		-1.9	+/-20	
4-Bromophenyl phenyl ether	A	5.0000	5.2	0.2560228	0.2638340		3.1	+/-20	
Hexachlorobenzene	A	5.0000	4.7	0.2601536	0.2434561		-6.4	+/-20	
Pentachlorophenol	A	5.0000	3.9	0.1012755	0.1004943		-21.4	+/-20	*
Phenanthrene	A	5.0000	4.7	0.9611900	0.9015803		-6.2	+/-20	
Anthracene	A	5.0000	4.3	0.9522768	0.8197144		-13.9	+/-20	
Carbazole	A	5.0000	4.8	0.8641689	0.8281937		-4.2	+/-20	
Di-n-Butylphthalate	A	5.0000	5.5	0.9652316	1.0646460		10.3	+/-20	
Fluoranthene	A	5.0000	4.7	1.7257220	1.6158960		-6.4	+/-20	
Pyrene	A	5.0000	4.4	1.8248060	1.6058770		-12.0	+/-20	
Butylbenzylphthalate	A	5.0000	4.6	0.5233989	0.5545390		-8.6	+/-20	
Benzo(a)anthracene	A	5.0000	4.5	1.2800360	1.1598210		-9.4	+/-20	
3,3'-Dichlorobenzidine	A	10.000	9.3	0.3395308	0.3672495		-6.7	+/-20	
Chrysene	A	5.0000	4.5	1.1513540	1.0302990		-10.5	+/-20	
bis(2-Ethylhexyl)phthalate	A	5.0000	4.6	0.5470542	0.6206049		-7.0	+/-20	
Di-n-Octylphthalate	A	5.0000	5.0	0.9352762	0.9282008		-0.8	+/-20	
Benzofluoranthenes, Total	A	10.000	9.7	1.2391730	1.2035130		-2.9	+/-20	
Benzo(a)pyrene	A	5.0000	4.6	1.0848130	1.1172010		-7.9	+/-20	
Indeno(1,2,3-cd)pyrene	A	5.0000	4.4	0.8621891	0.8907536		-12.1	+/-20	
Dibenzo(a,h)anthracene	A	5.0000	4.4	0.7046903	0.7289073		-12.7	+/-20	
Benzo(g,h,i)perylene	A	5.0000	4.4	0.7176031	0.7244191		-12.4	+/-20	
1-Methylnaphthalene	A	5.0000	4.8	0.6934747	0.6601390		-4.8	+/-20	
2-Fluorophenol	A	7.5000	8.37	1.0693230	1.1938270		11.6	+/-20	

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT14	Calibration:	GB00046
Lab File ID:	NT1423021613.D	Calibration Date:	02/16/2023
Sequence:	SLB0234	Injection Date:	02/16/23
Lab Sample ID:	SLB0234-SCV1	Injection Time:	21:18
Sequence Name:	SCV 5.0		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol-d5	A	7.5000	7.99	1.6963140	1.8071690		6.5	+/-20
2-Chlorophenol-d4	A	7.5000	7.76	1.2103710	1.2528480		3.5	+/-20
1,2-Dichlorobenzene-d4	A	5.0000	4.99	0.9072515	0.9048813		-0.3	+/-20
Nitrobenzene-d5	A	5.0000	5.19	0.4621137	0.4800794		3.9	+/-20
2-Fluorobiphenyl	A	5.0000	4.87	1.4311010	1.3939410		-2.6	+/-20
2,4,6-Tribromophenol	A	7.5000	7.14	0.2030581	0.2229526		-4.8	+/-20
p-Terphenyl-d14	A	5.0000	4.73	1.2956710	1.2259560		-5.4	+/-20

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D

Date : 16-FEB-2023 21:18

Client ID:

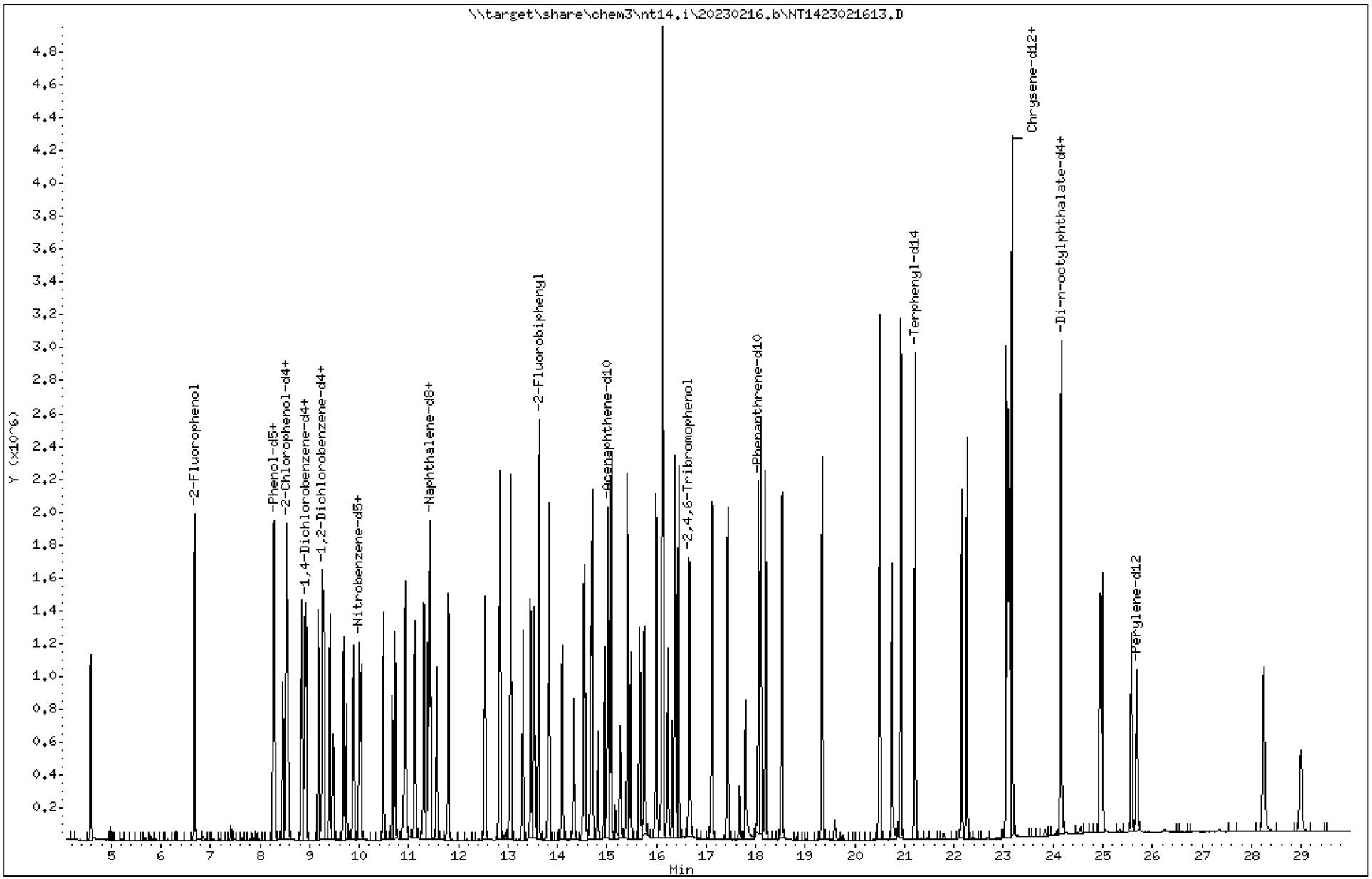
Instrument: nt14.i

Sample Info: SLB0234-SCV1

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

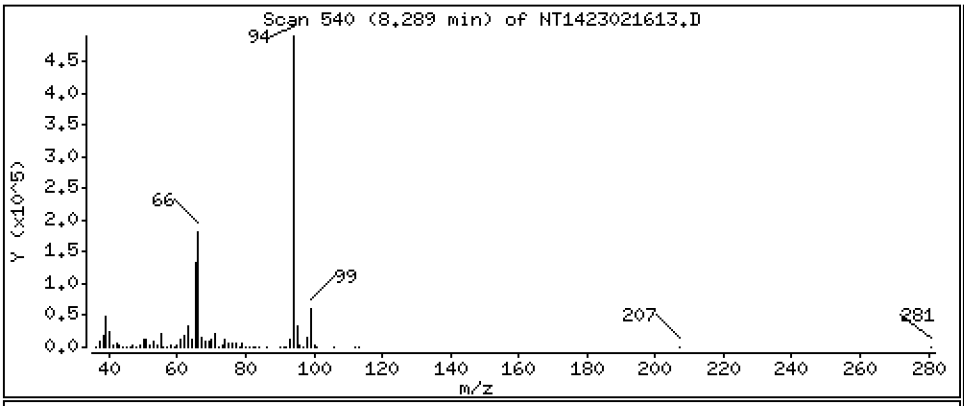
Operator: DSD

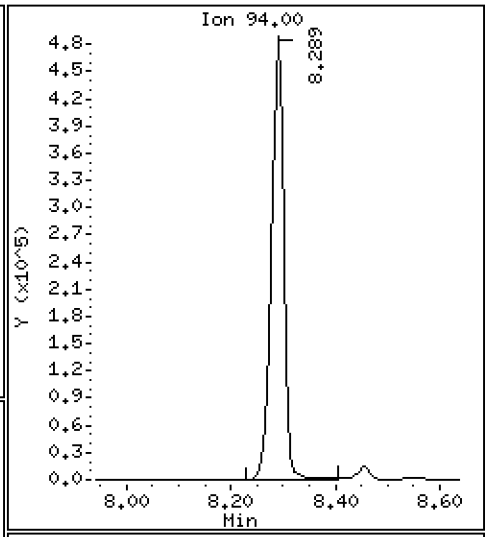
Column phase: ZB-5msi

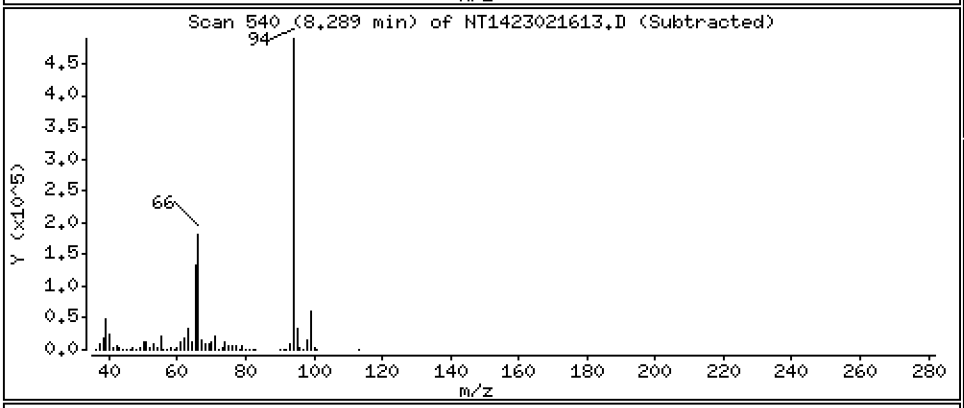
Column diameter: 0.25

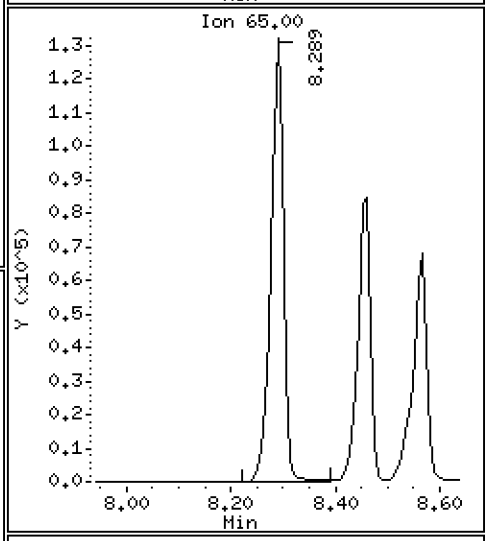
3 Phenol

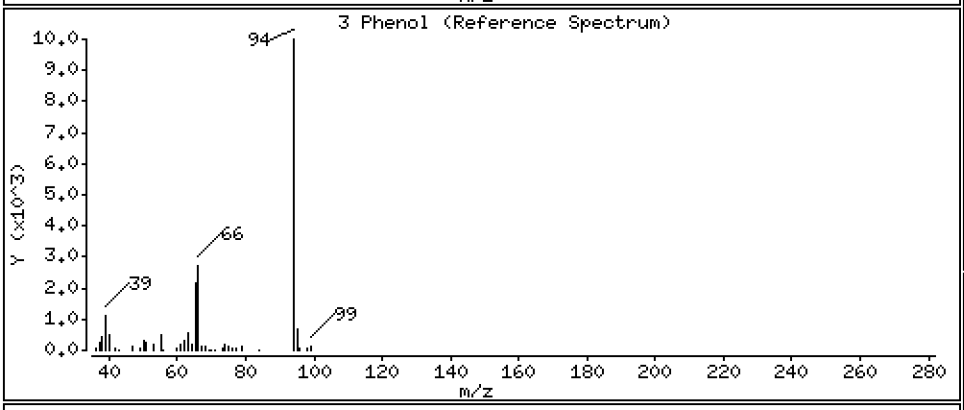
Concentration: 4.627 ug/mL

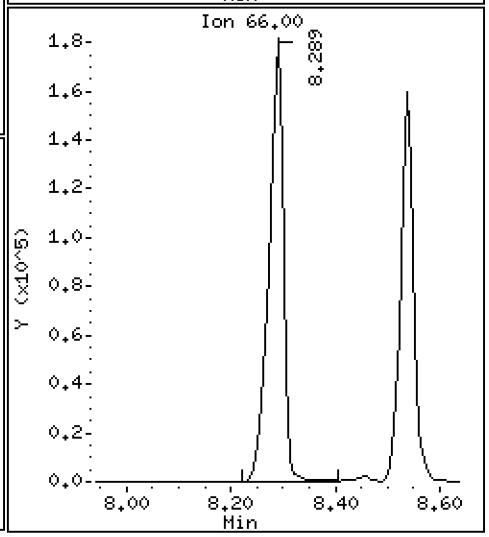


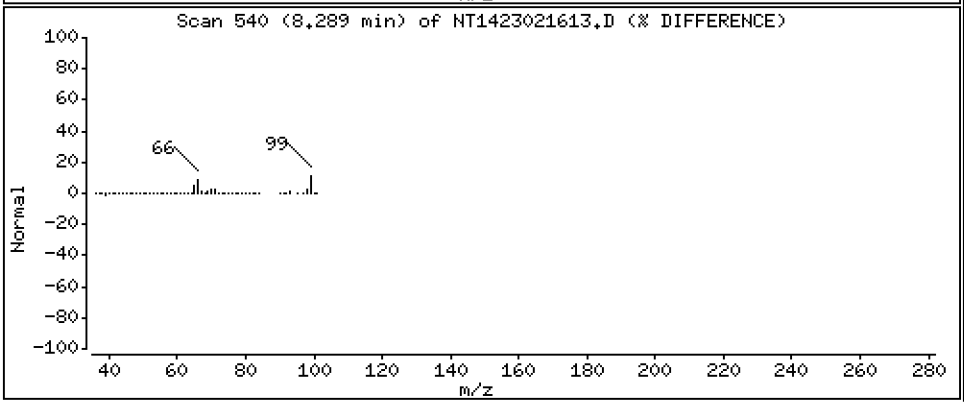












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

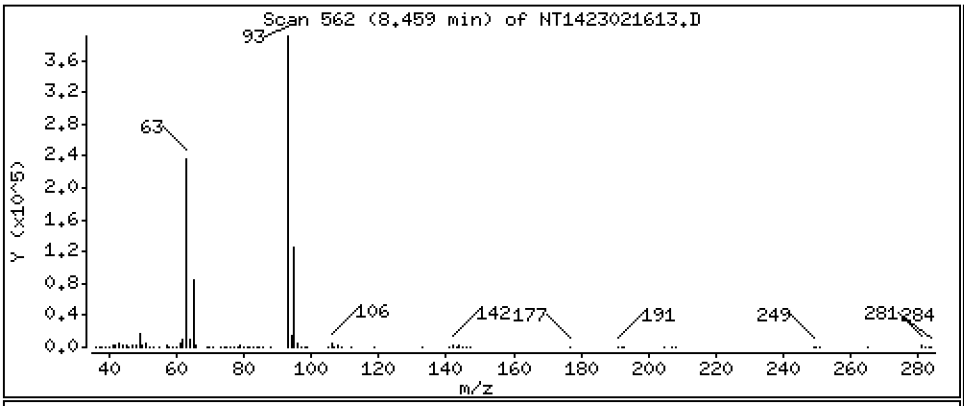
Operator: DSD

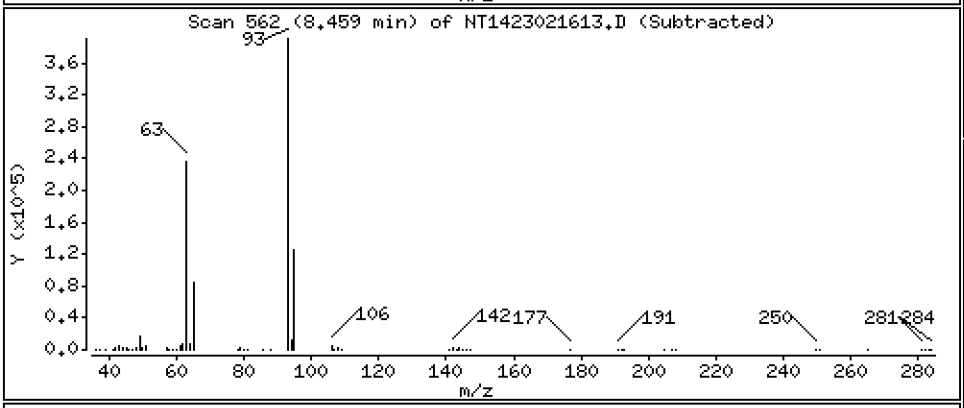
Column phase: ZB-5msi

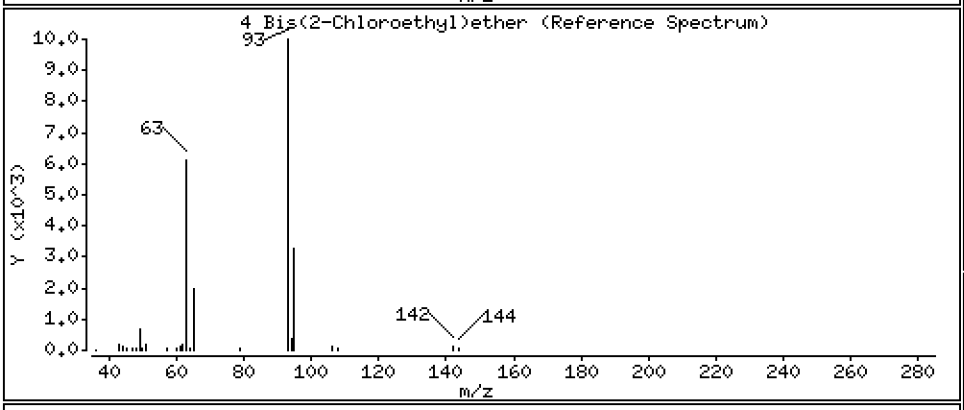
Column diameter: 0.25

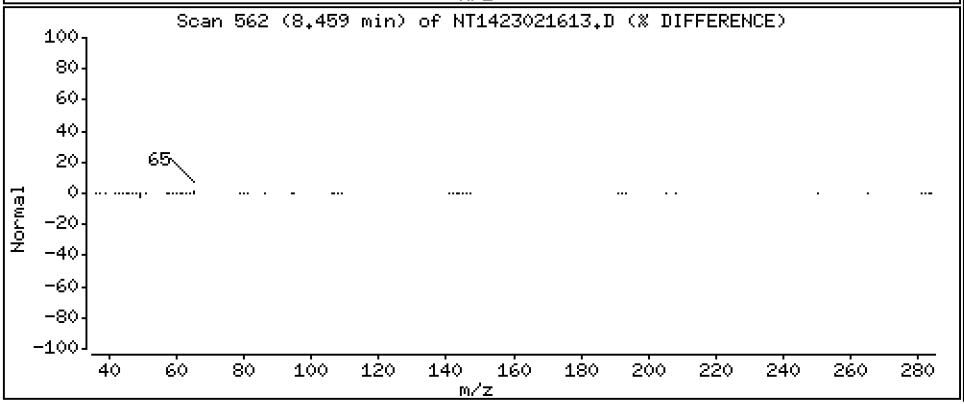
4 Bis(2-Chloroethyl)ether

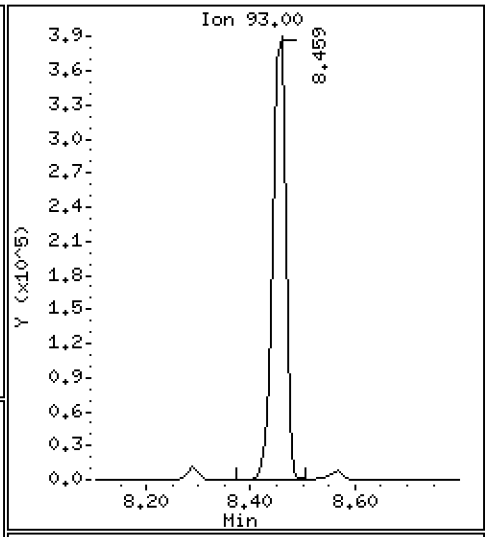
Concentration: 5.159 ug/mL

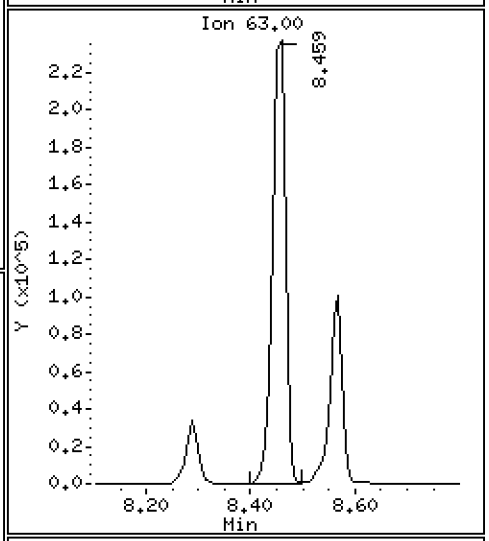


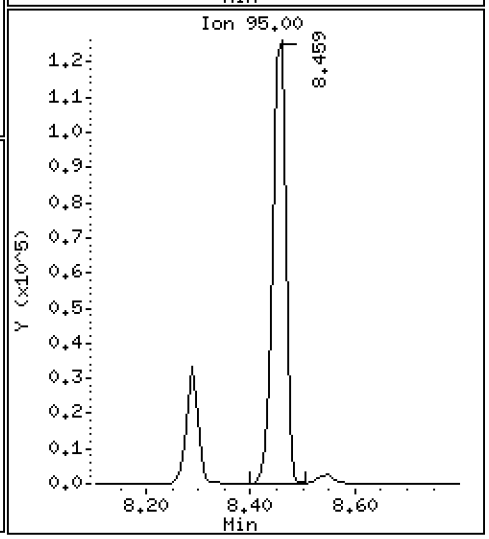












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

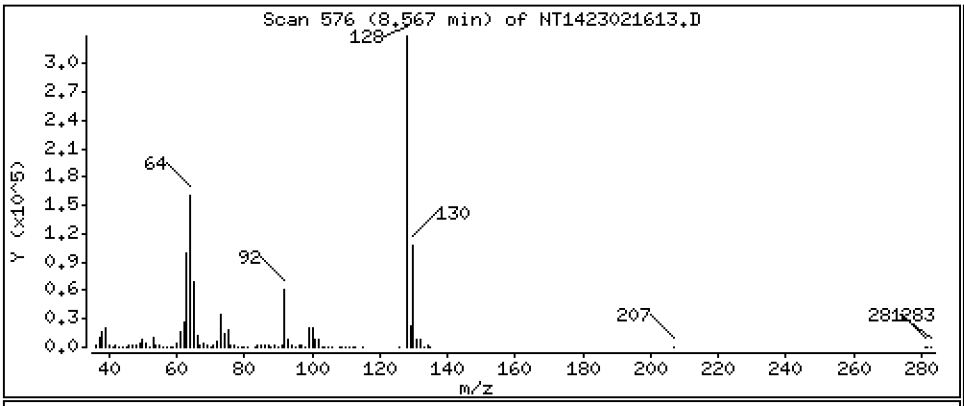
Operator: DSD

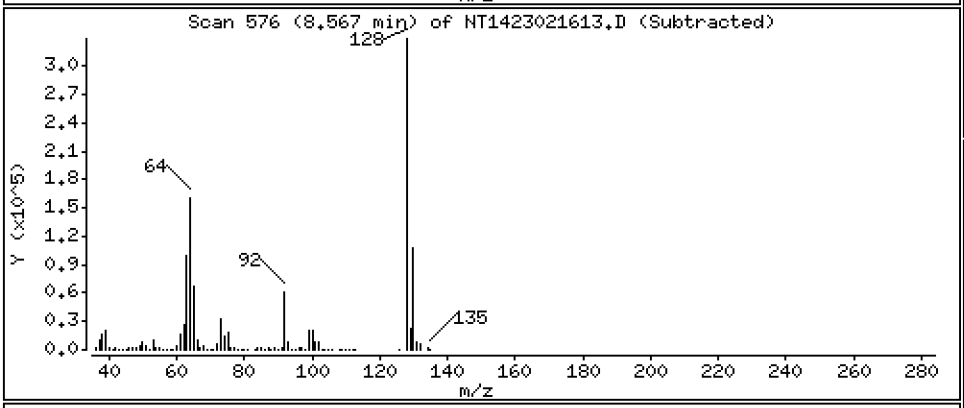
Column phase: ZB-5msi

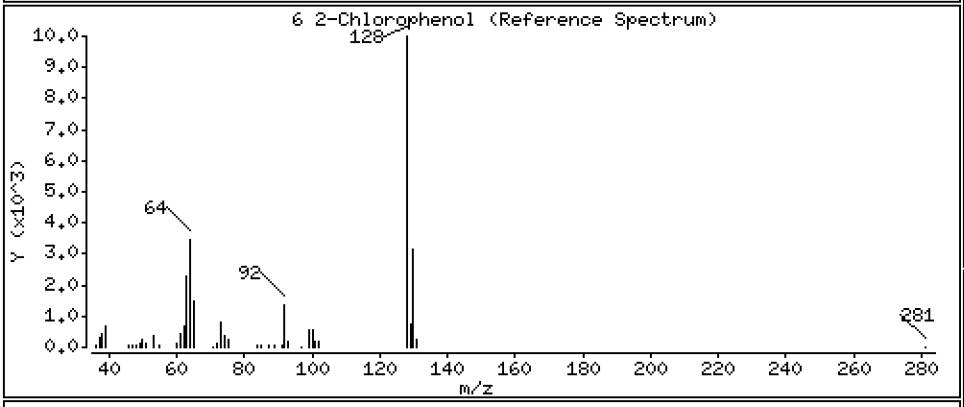
Column diameter: 0.25

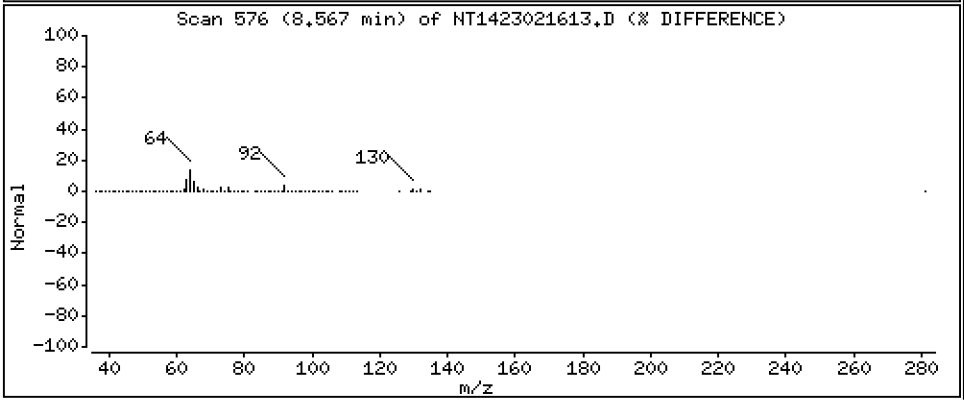
6 2-Chlorophenol

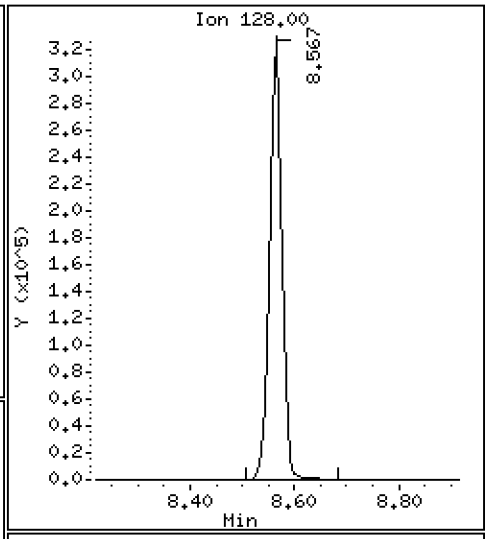
Concentration: 4.617 ug/mL

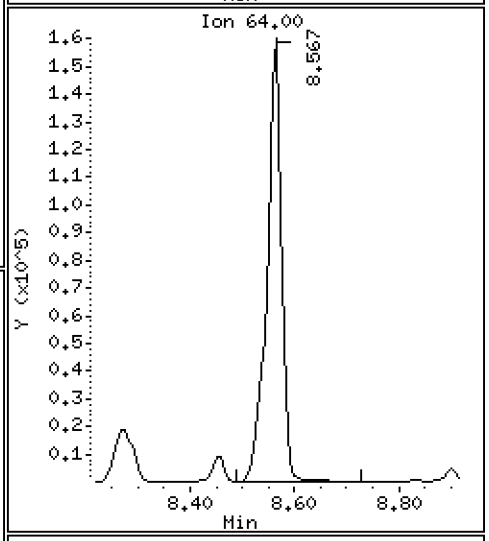


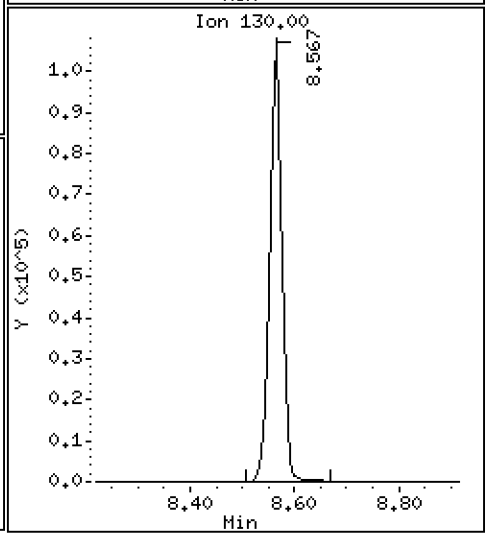












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

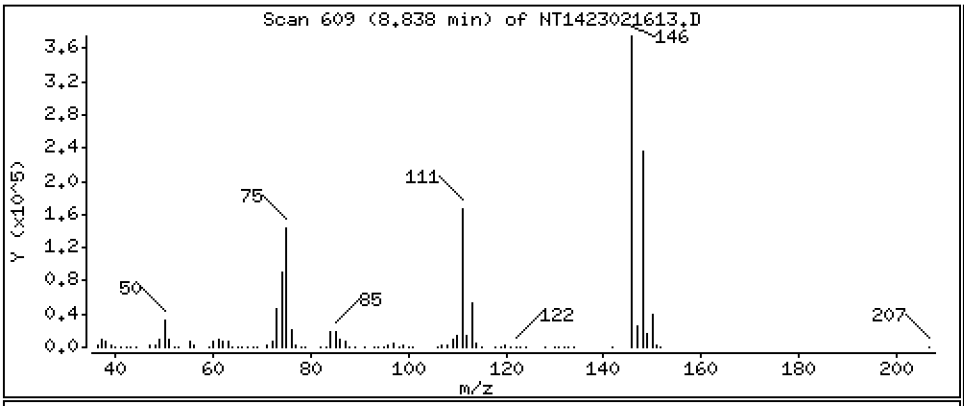
Operator: DSD

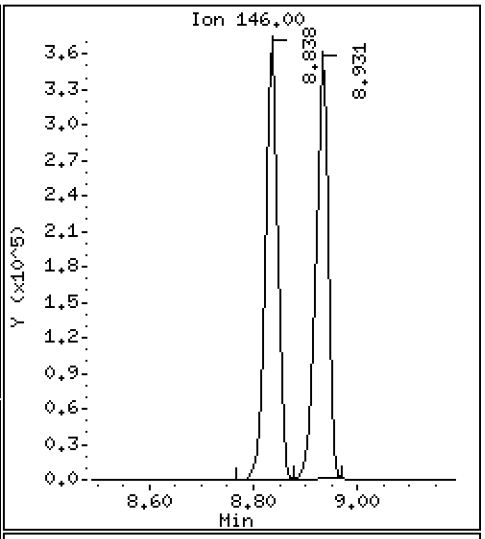
Column phase: ZB-5msi

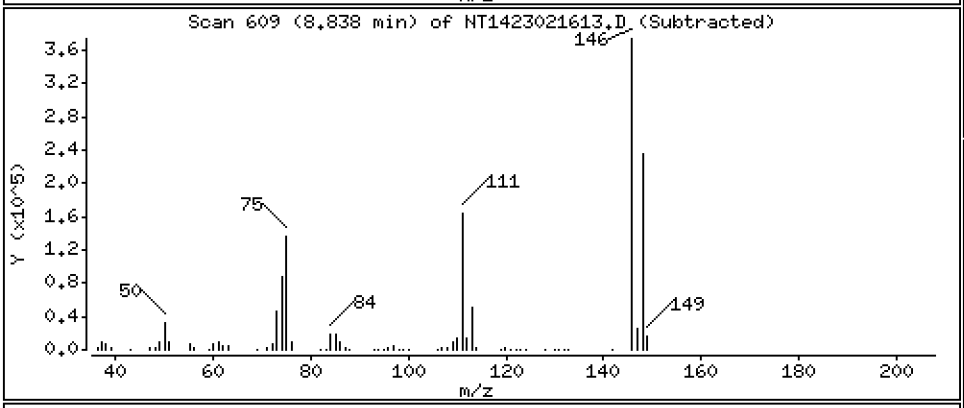
Column diameter: 0.25

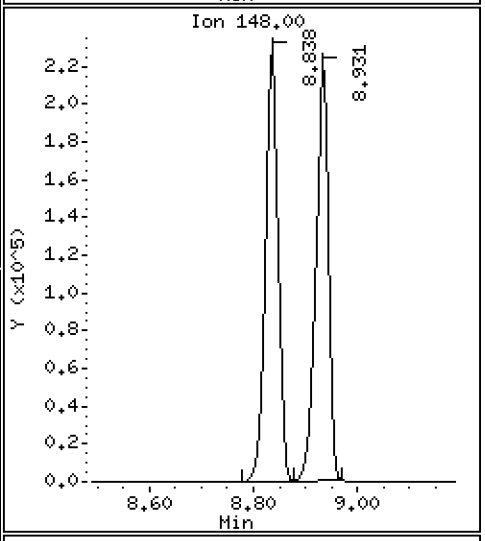
7 1,3-Dichlorobenzene

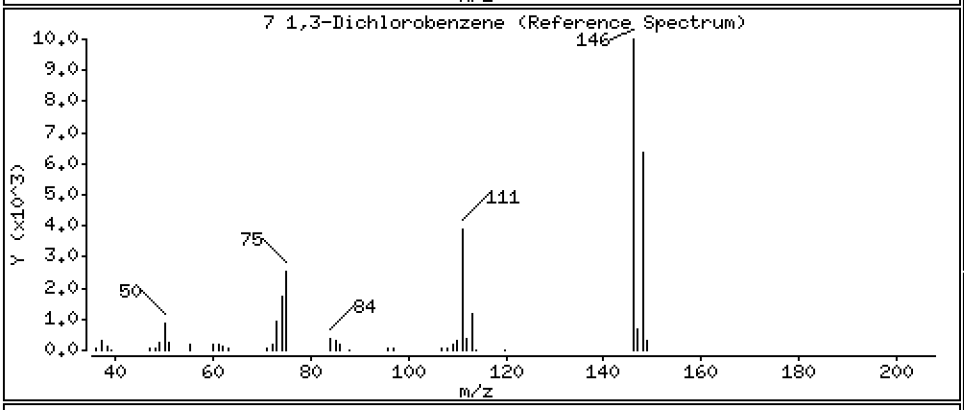
Concentration: 4.770 ug/mL

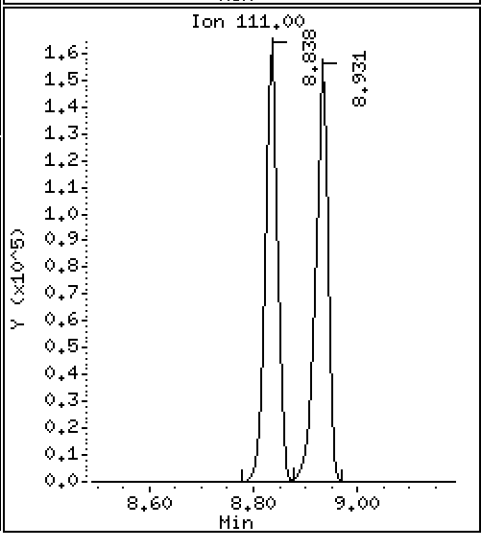


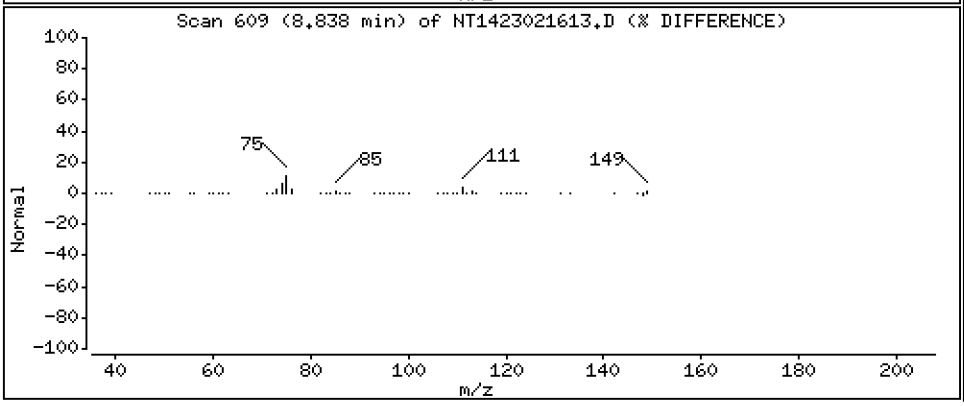












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

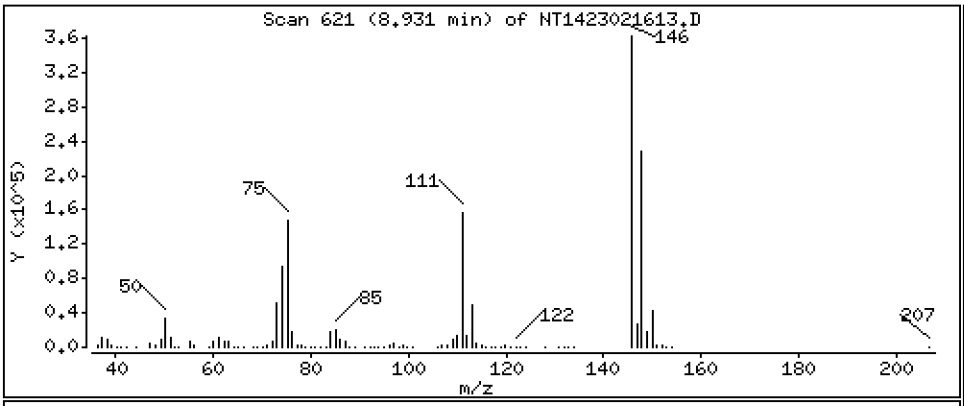
Operator: DSD

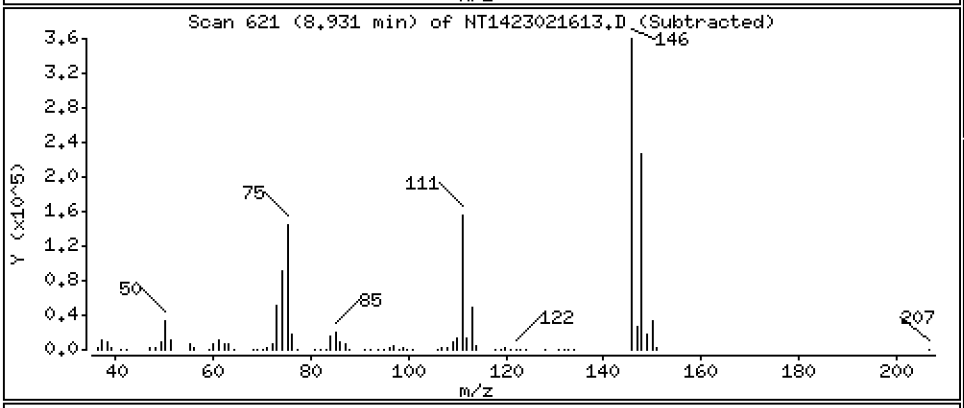
Column phase: ZB-5msi

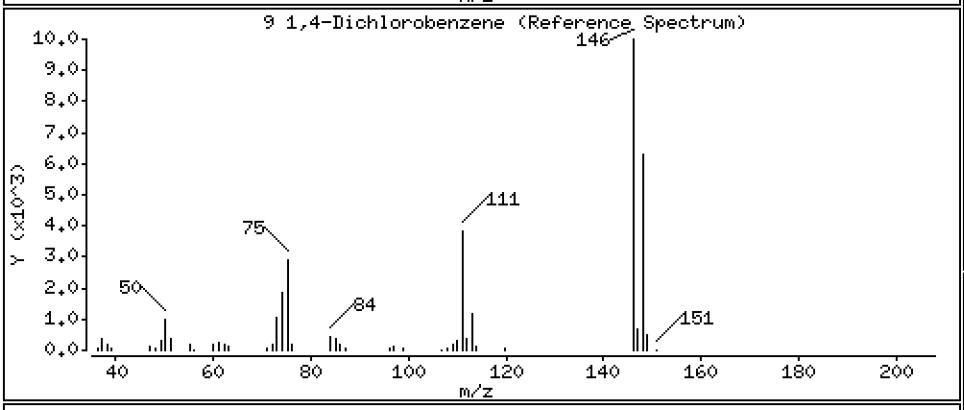
Column diameter: 0.25

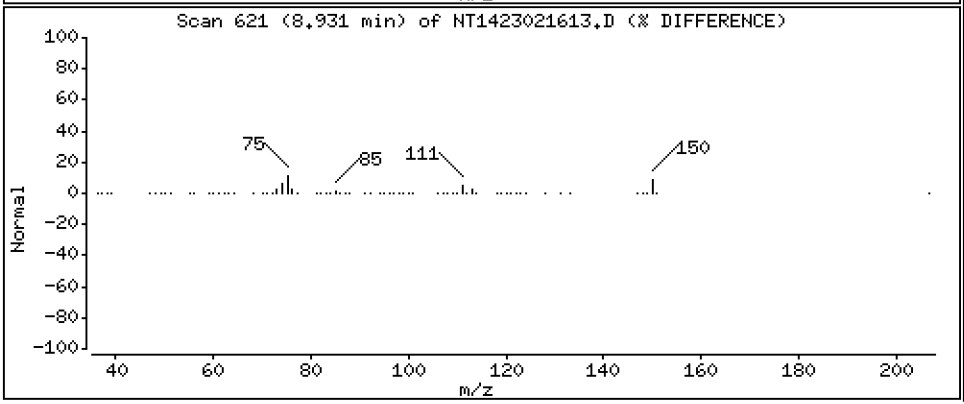
9 1,4-Dichlorobenzene

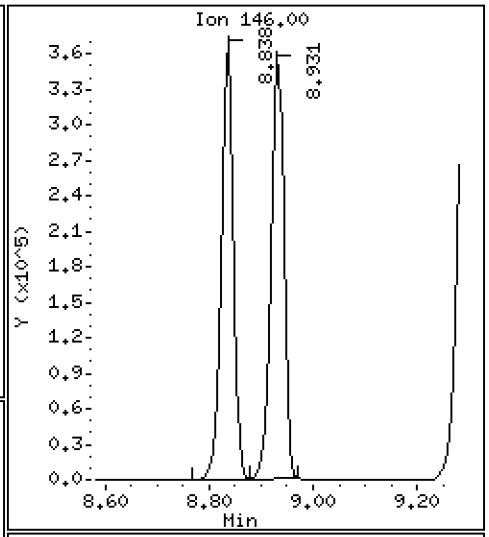
Concentration: 4.791 ug/mL

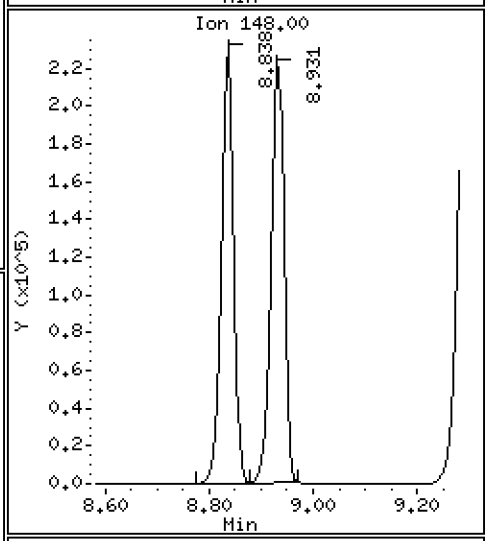


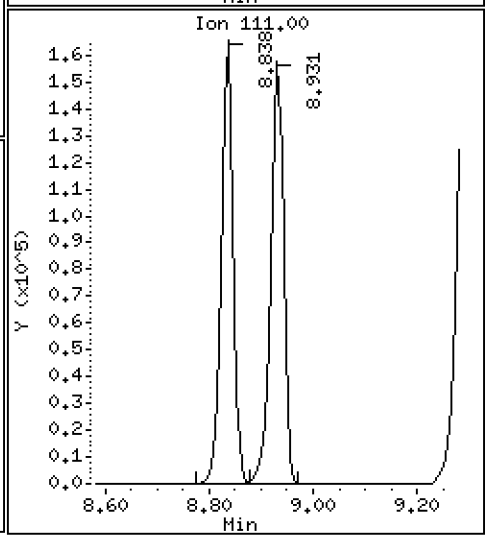












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

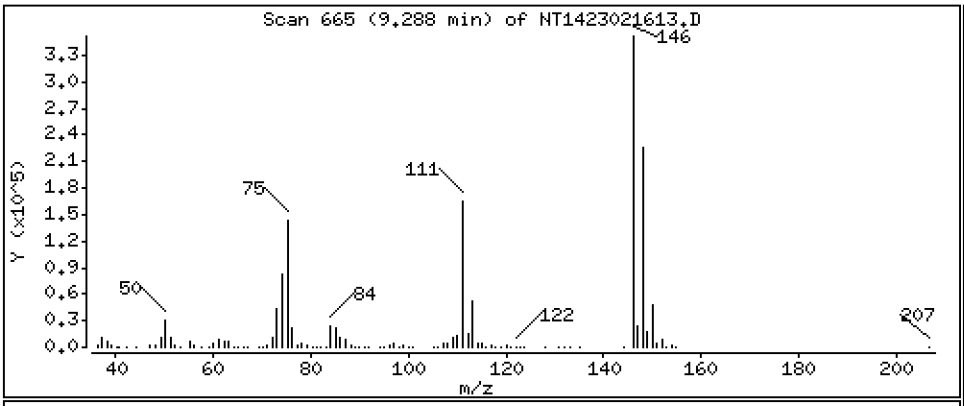
Operator: DSD

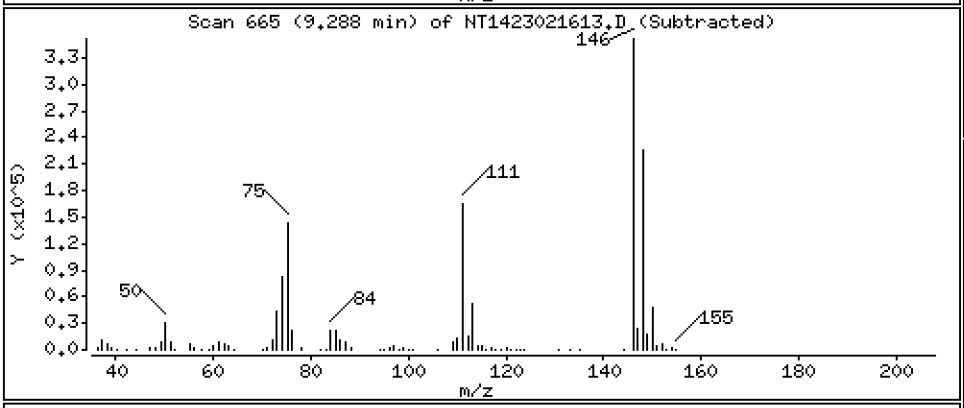
Column phase: ZB-5msi

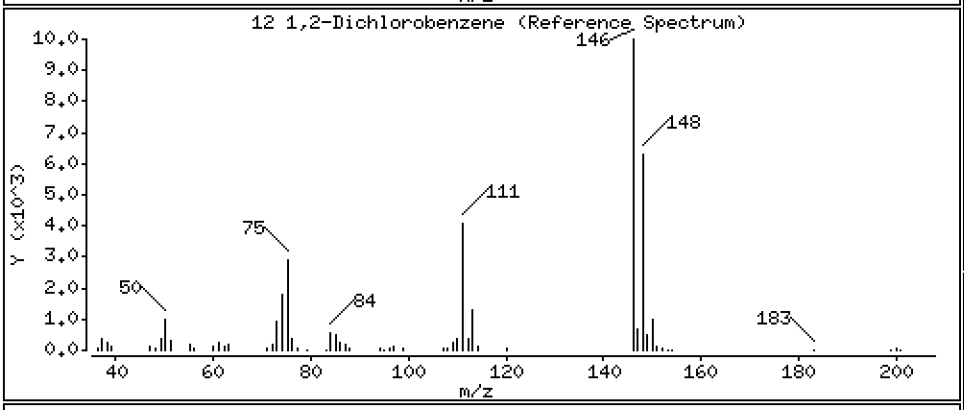
Column diameter: 0.25

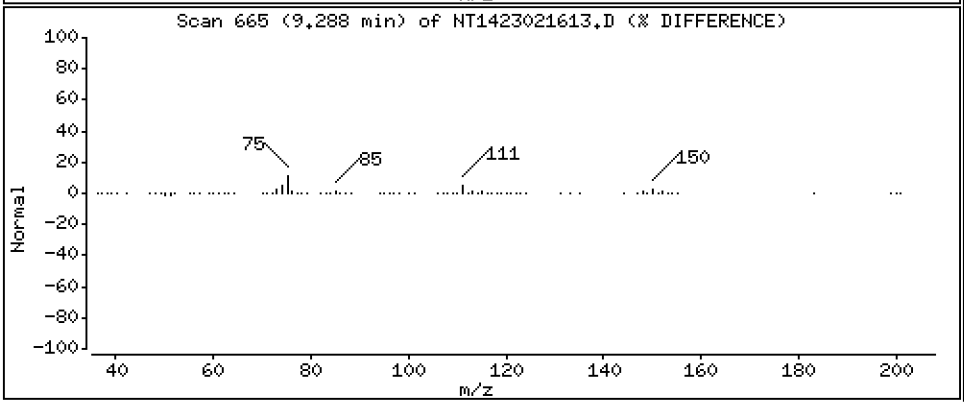
12 1,2-Dichlorobenzene

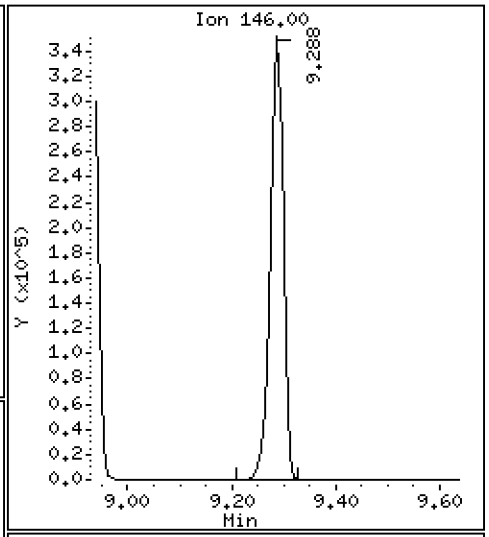
Concentration: 4.758 ug/mL

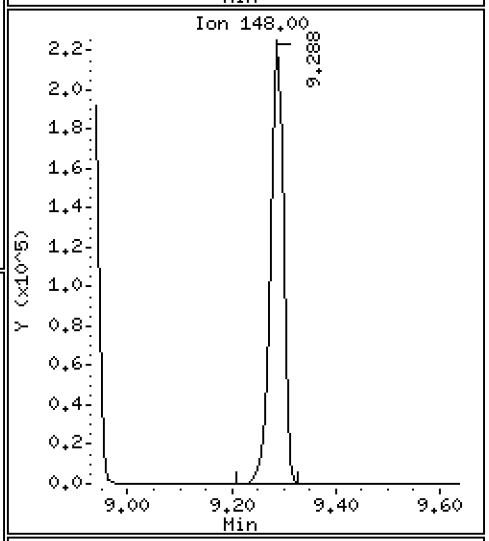


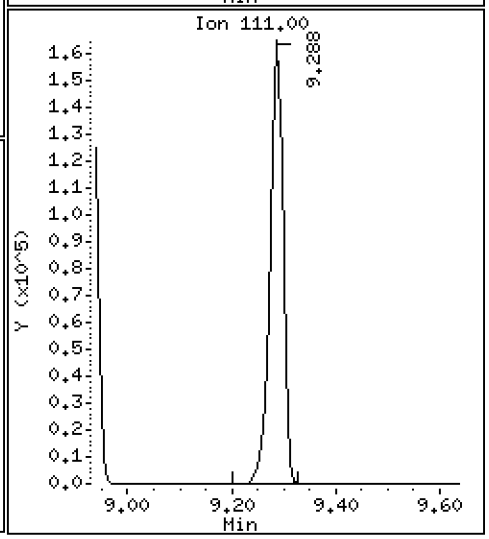












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

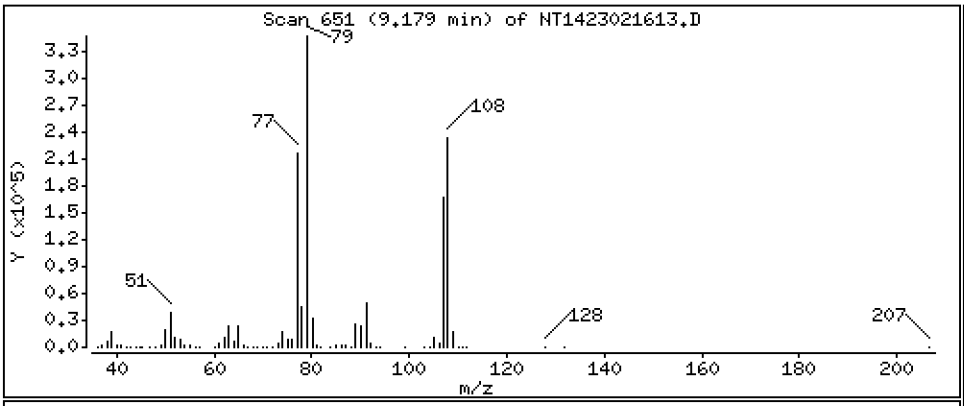
Operator: DSD

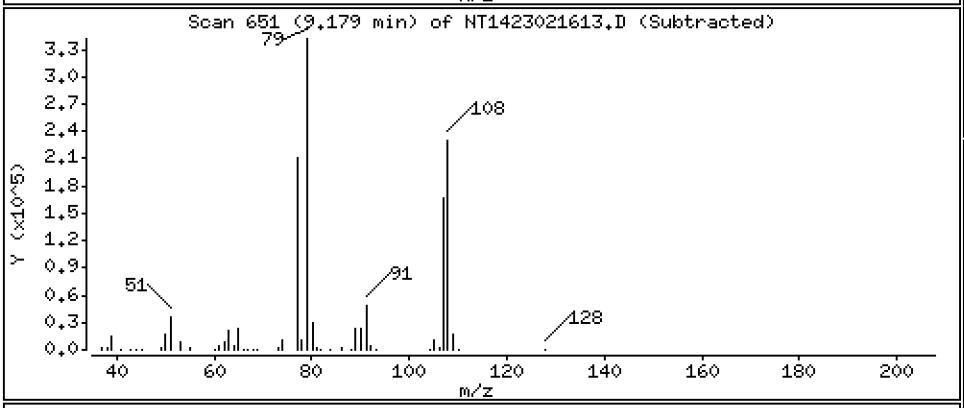
Column phase: ZB-5msi

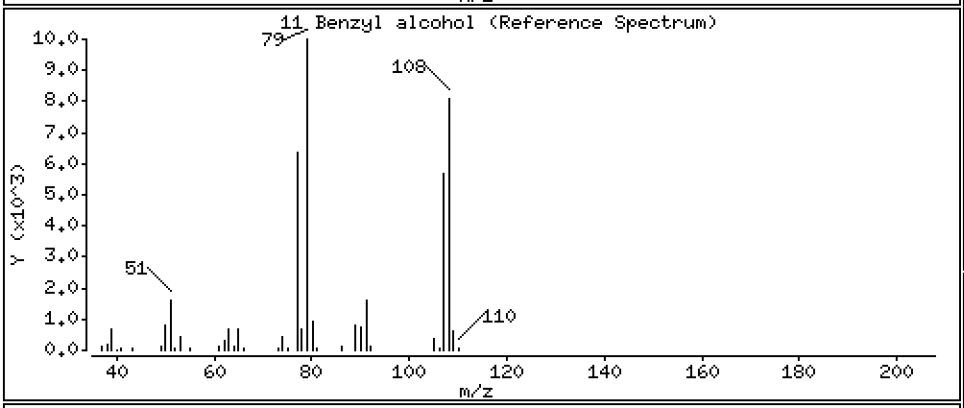
Column diameter: 0.25

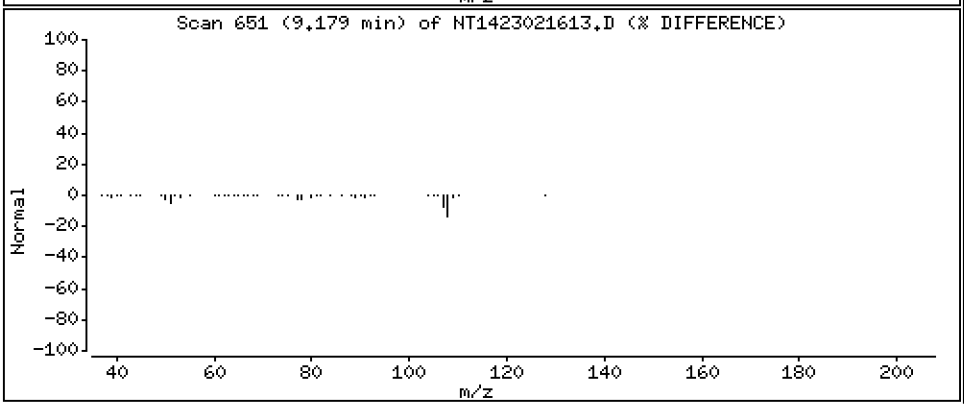
11 Benzyl alcohol

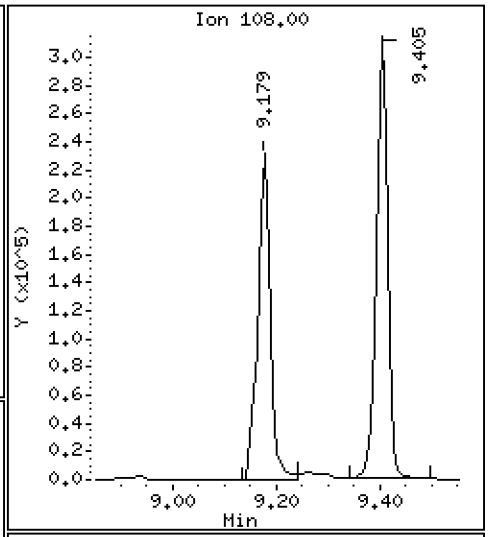
Concentration: 4.625 ug/mL

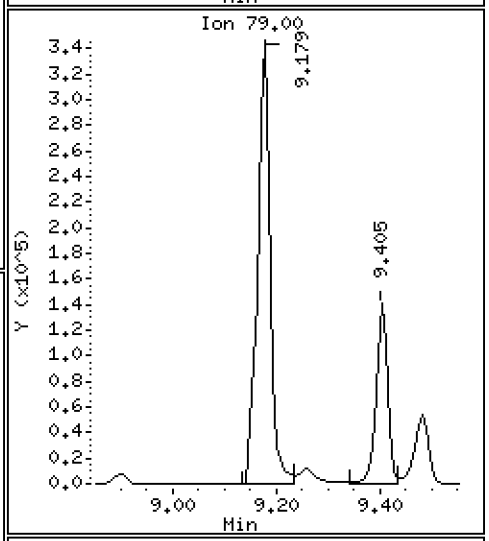


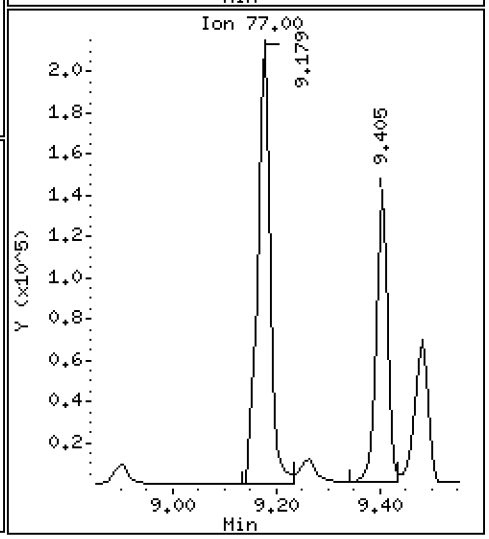












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

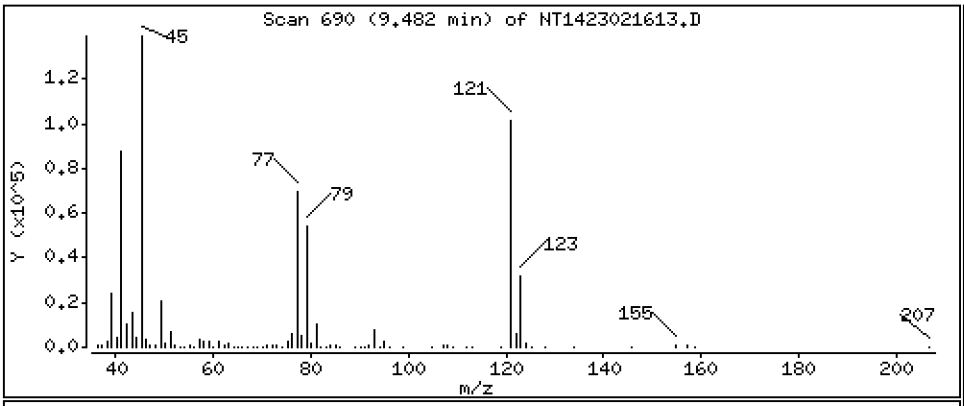
Operator: DSD

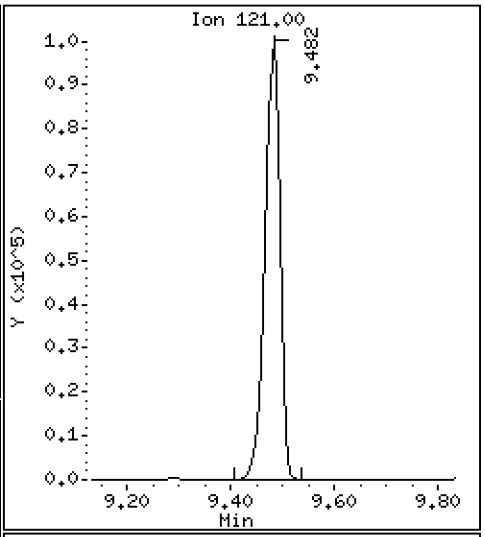
Column phase: ZB-5msi

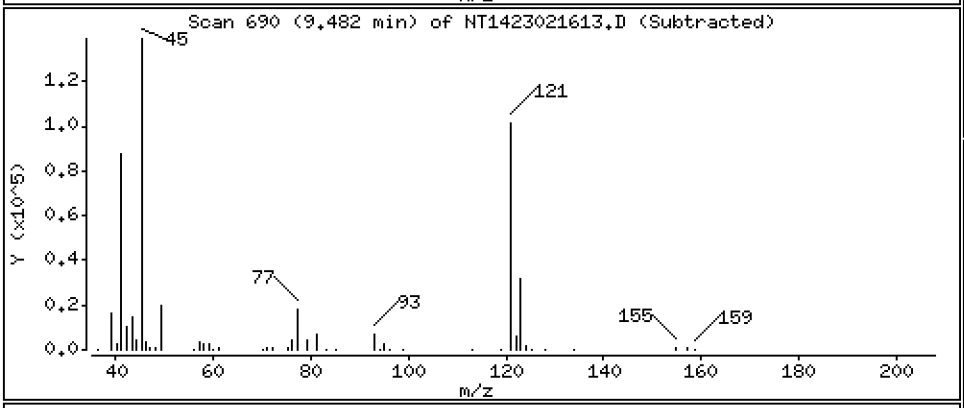
Column diameter: 0.25

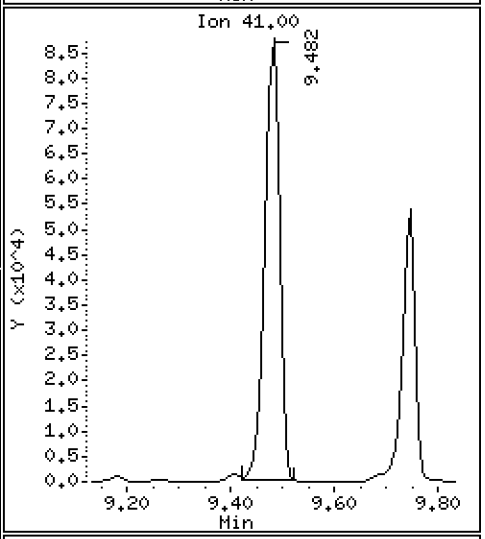
14 2,2'-oxybis(1-Chloropropane)

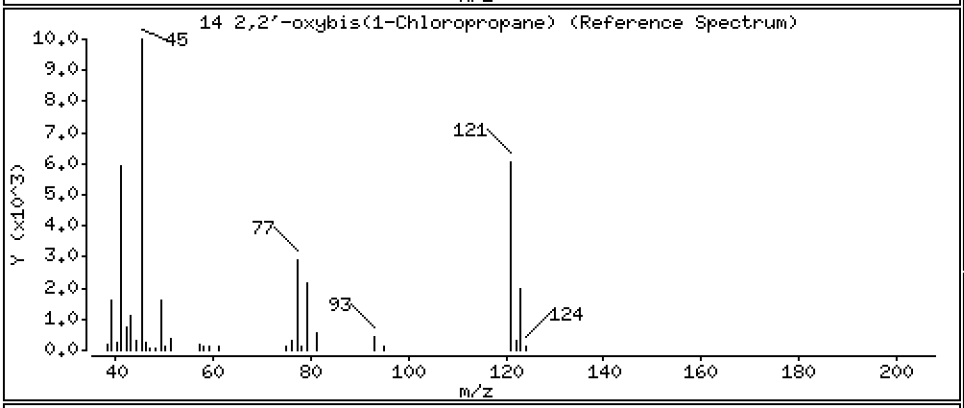
Concentration: 5.567 ug/mL

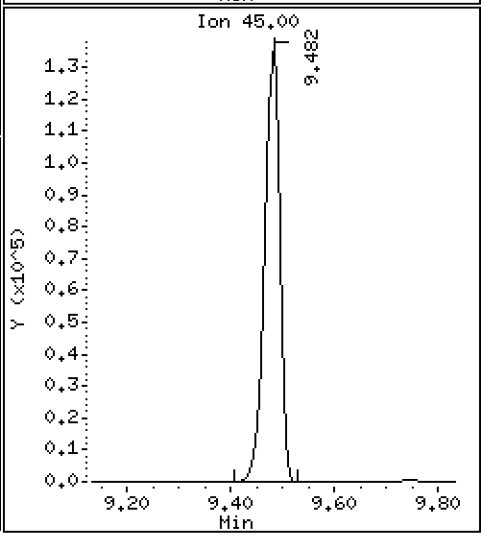


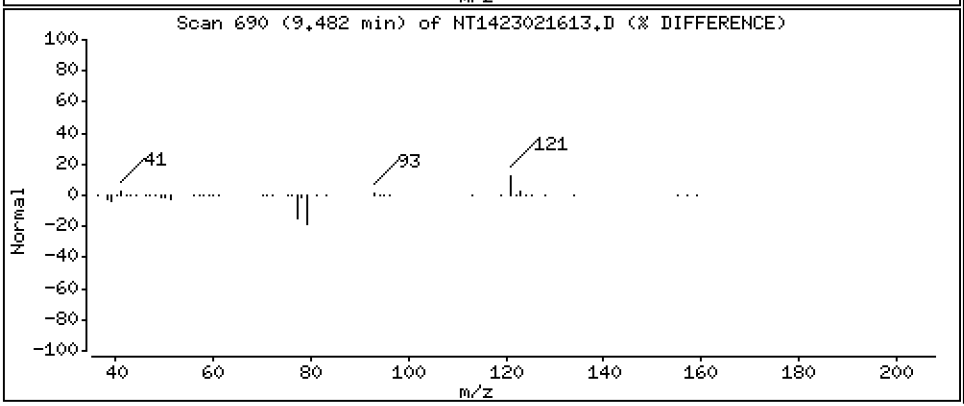












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

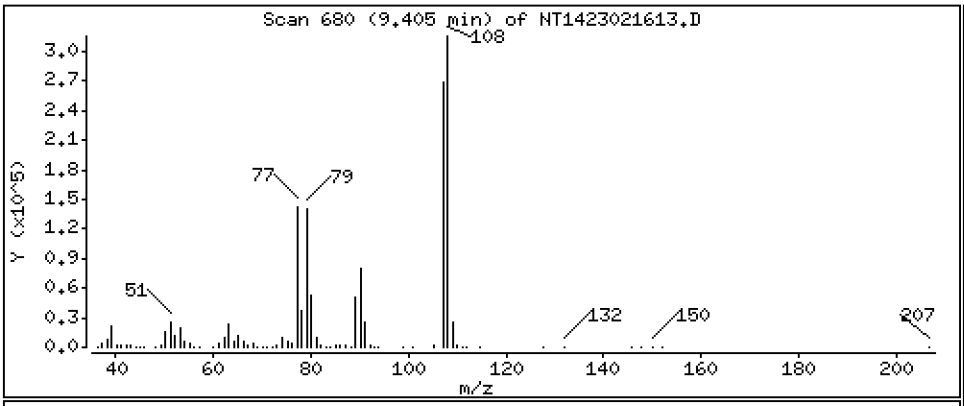
Operator: DSD

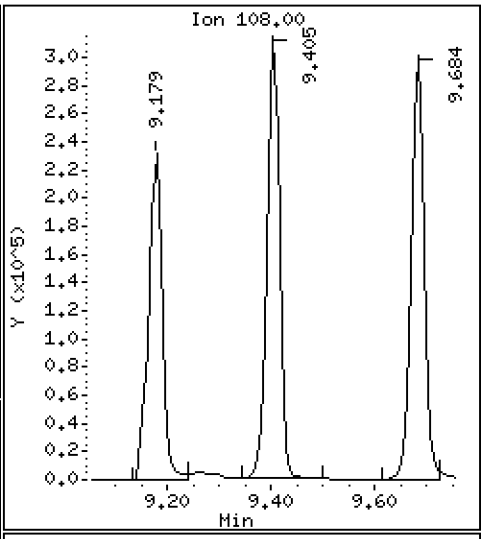
Column phase: ZB-5msi

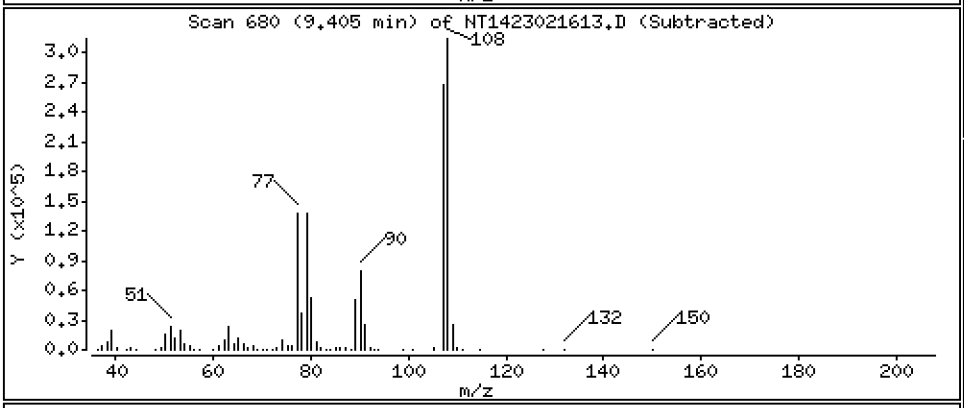
Column diameter: 0.25

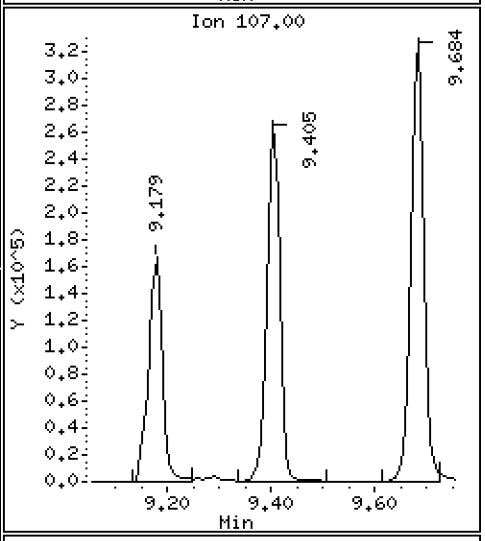
13 2-Methylphenol

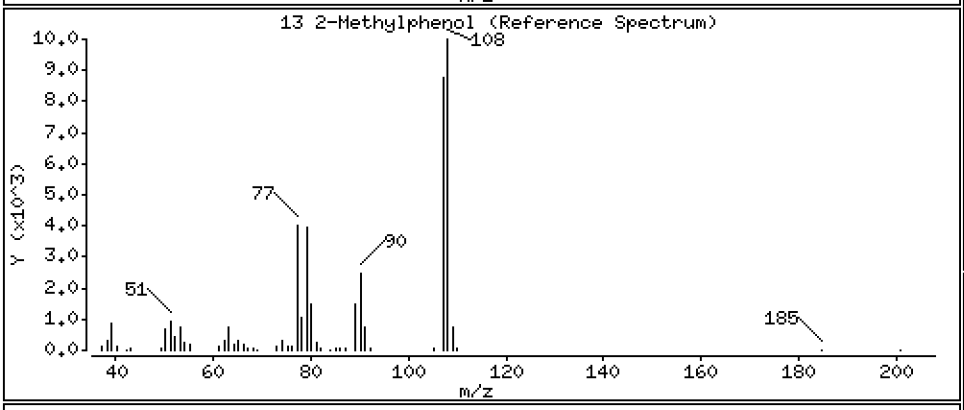
Concentration: 4.368 ug/mL

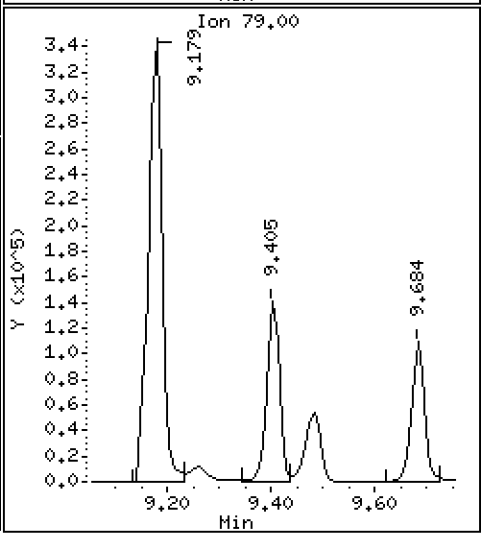


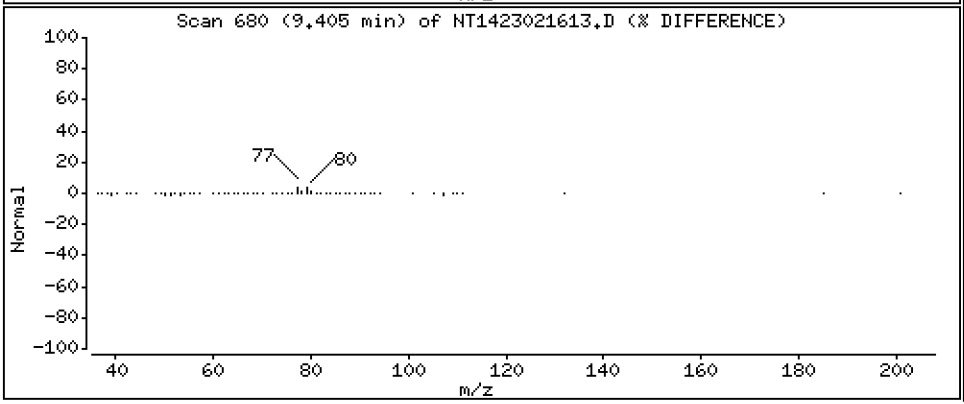












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

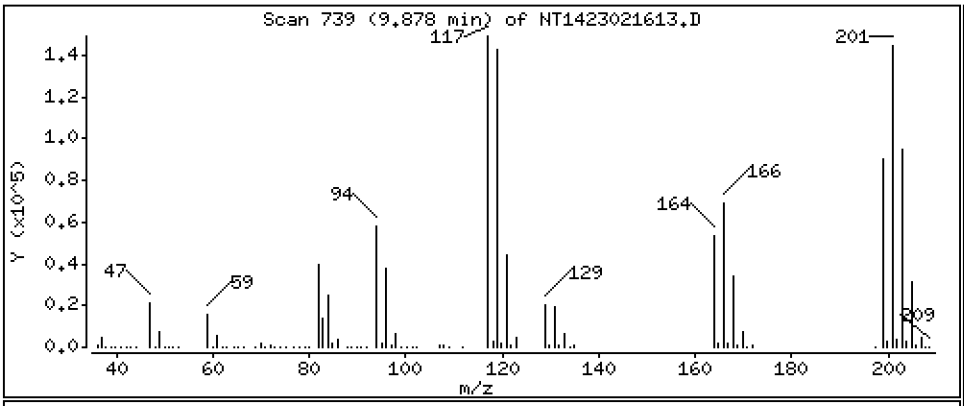
Operator: DSD

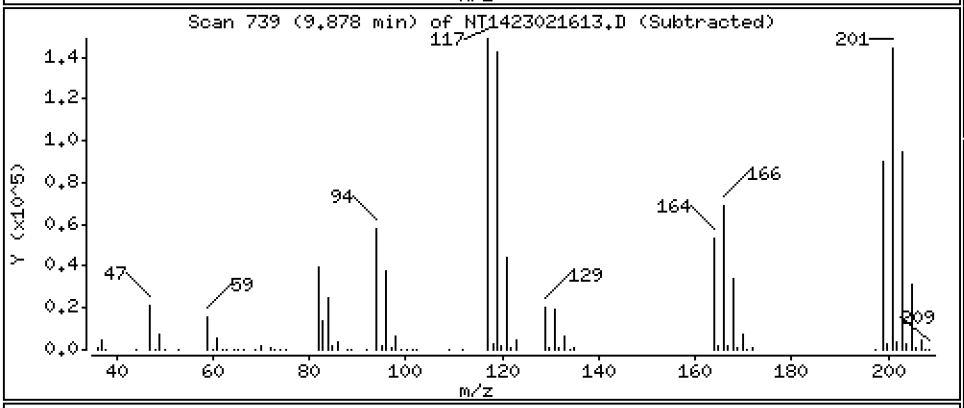
Column phase: ZB-5msi

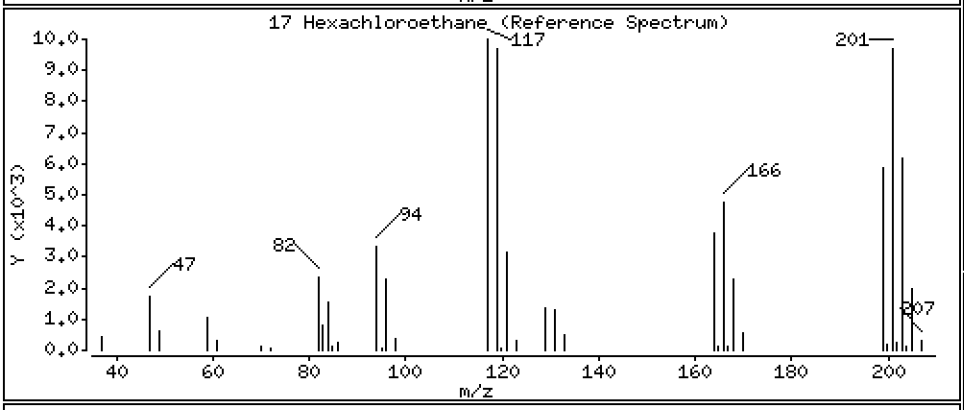
Column diameter: 0.25

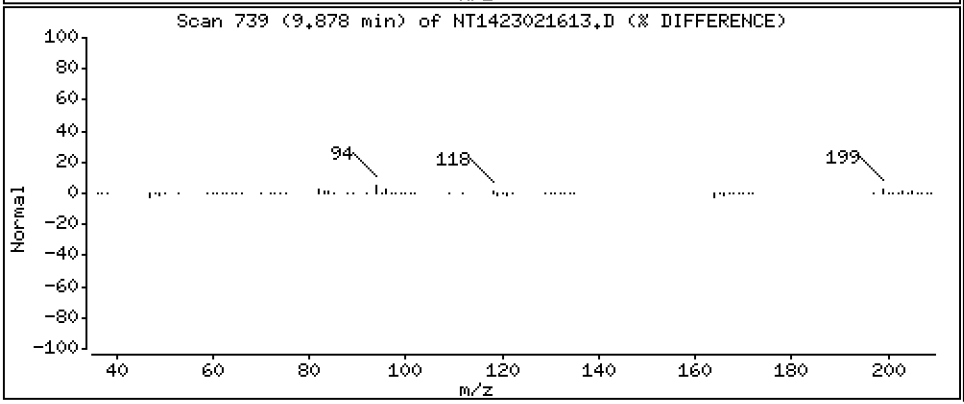
17 Hexachloroethane

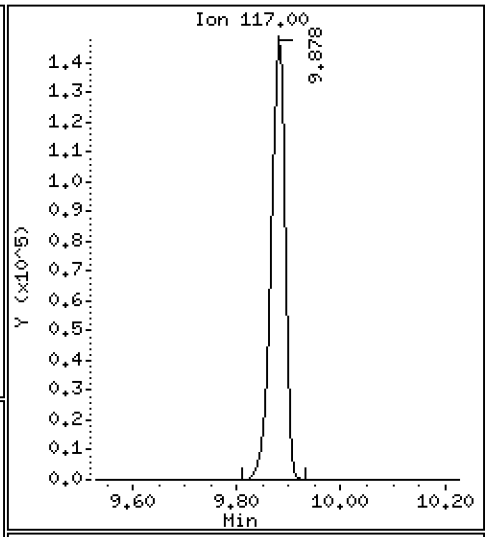
Concentration: 5.037 ug/mL

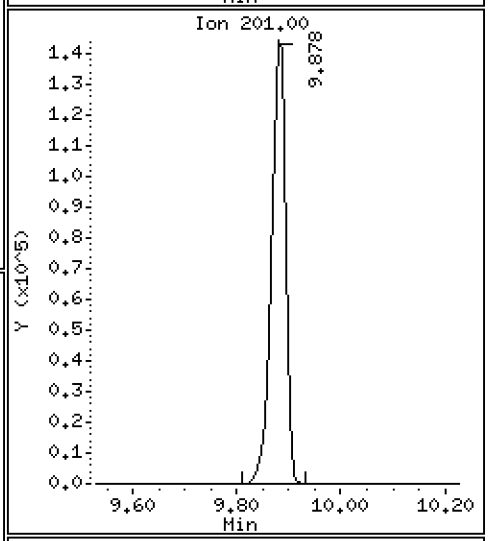


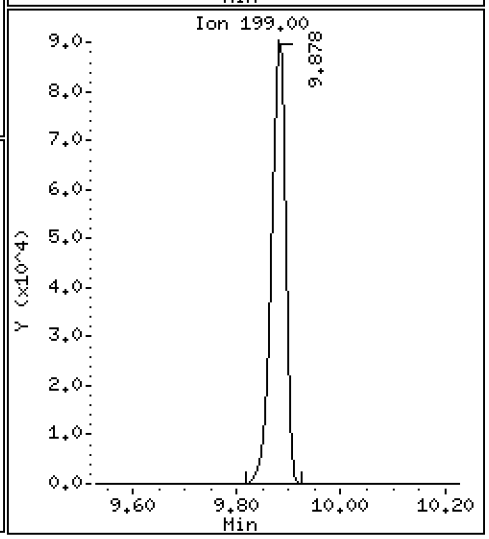












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

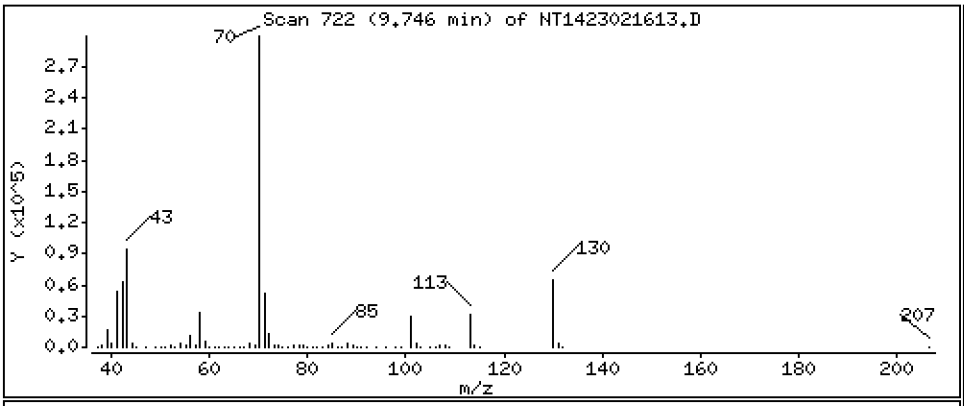
Operator: DSD

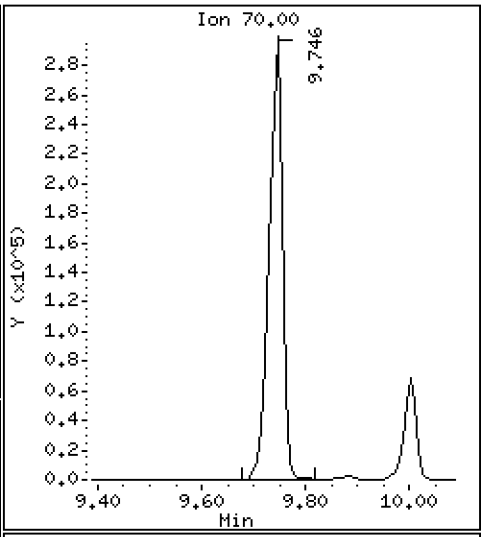
Column phase: ZB-5msi

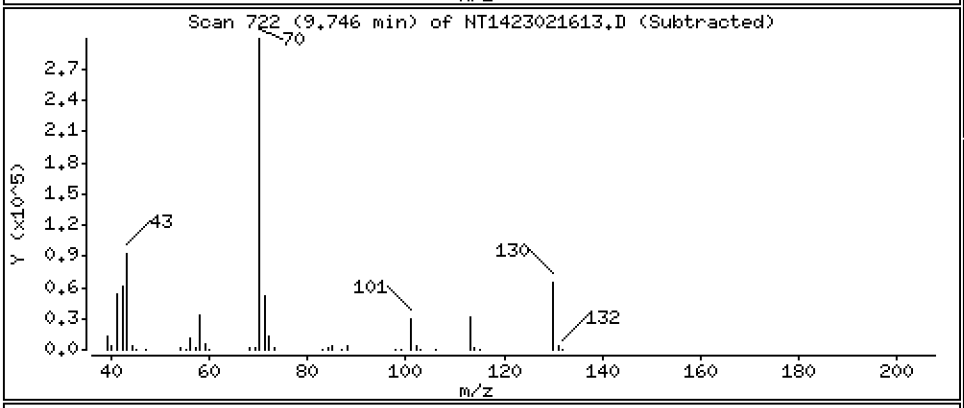
Column diameter: 0.25

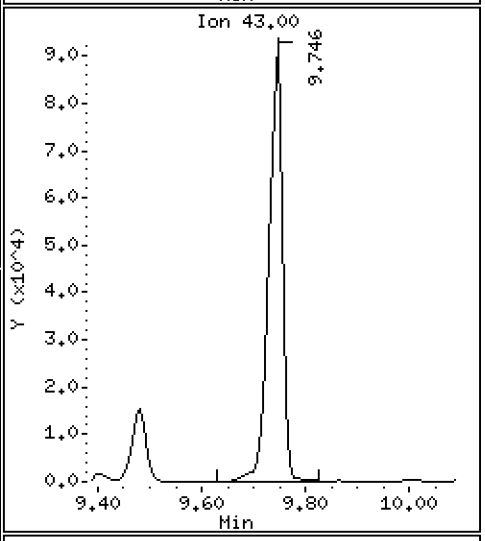
16 N-Nitroso-di-n-propylamine

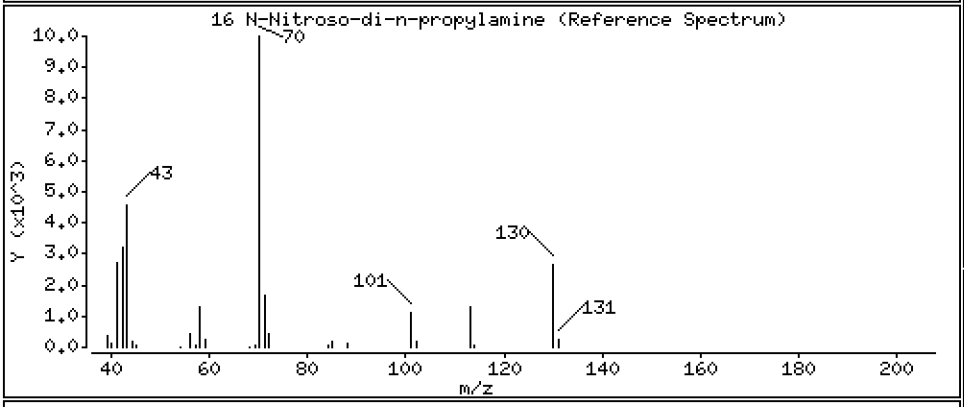
Concentration: 4.988 ug/mL

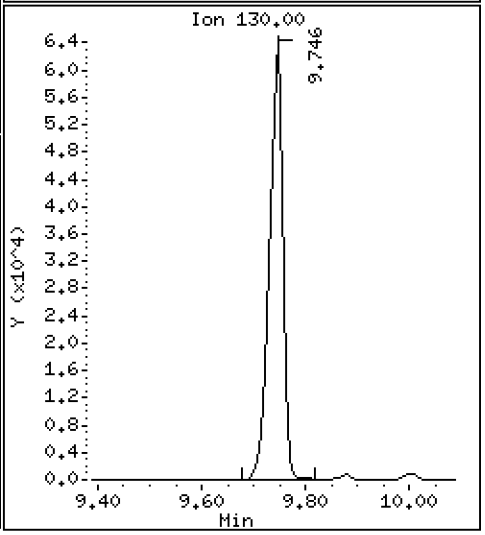


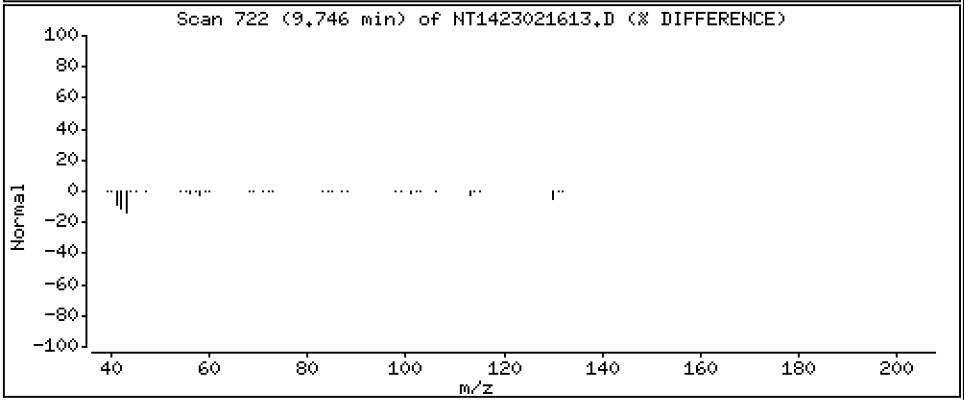












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

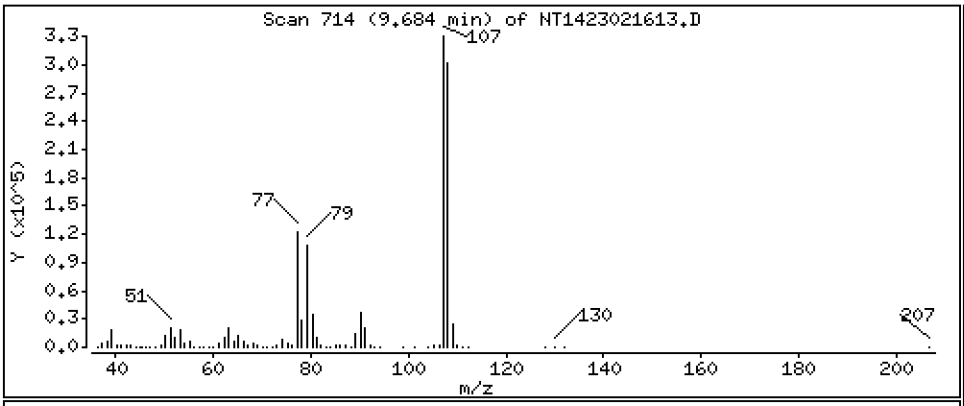
Operator: DSD

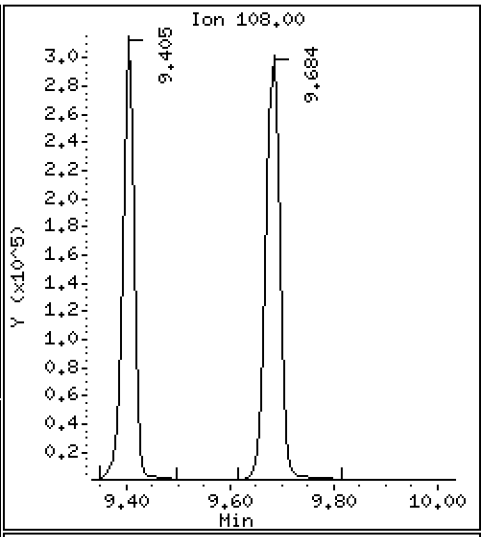
Column phase: ZB-5msi

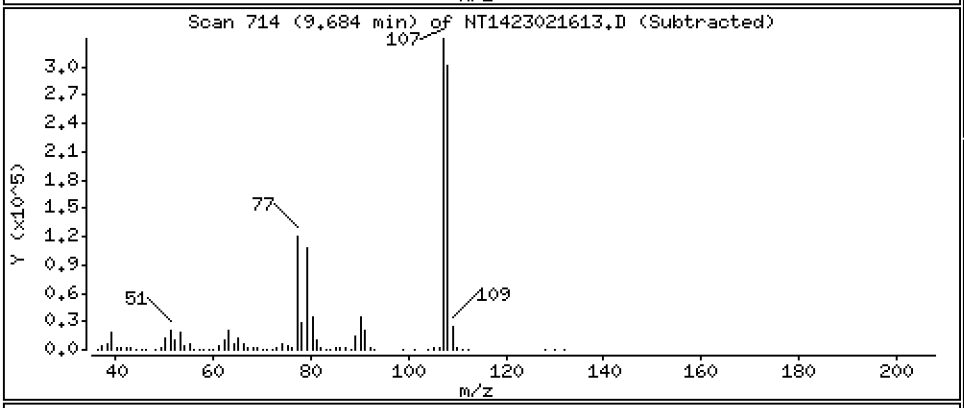
Column diameter: 0.25

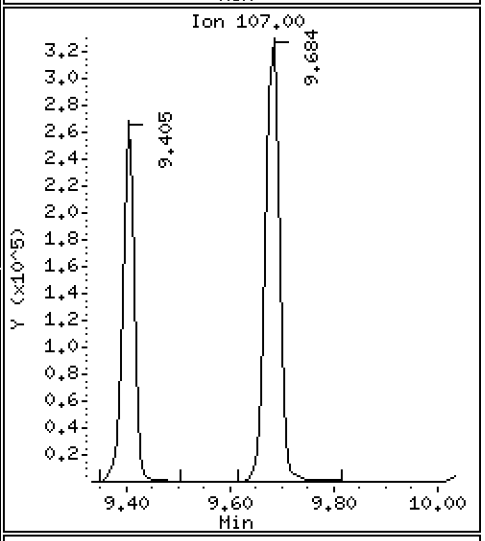
15 4-Methylphenol

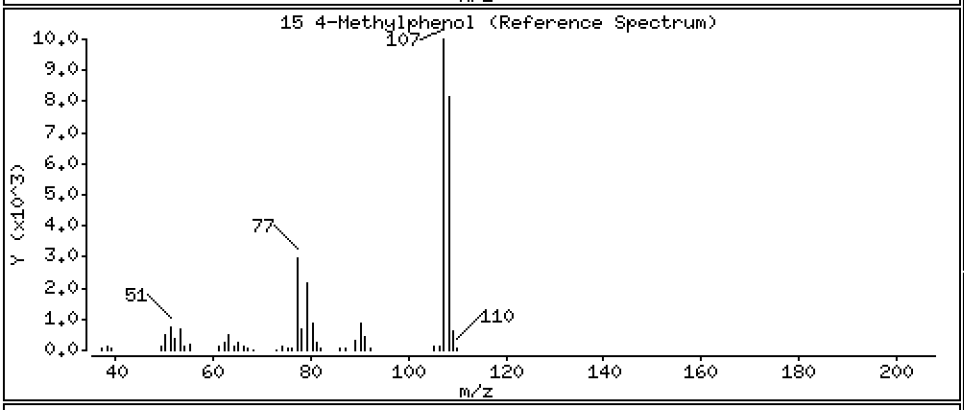
Concentration: 4.591 ug/mL

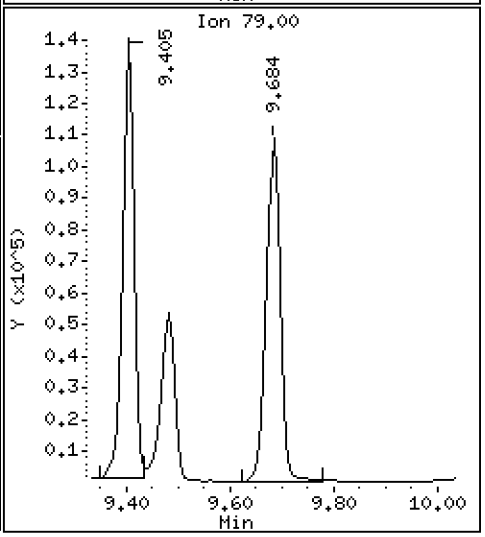


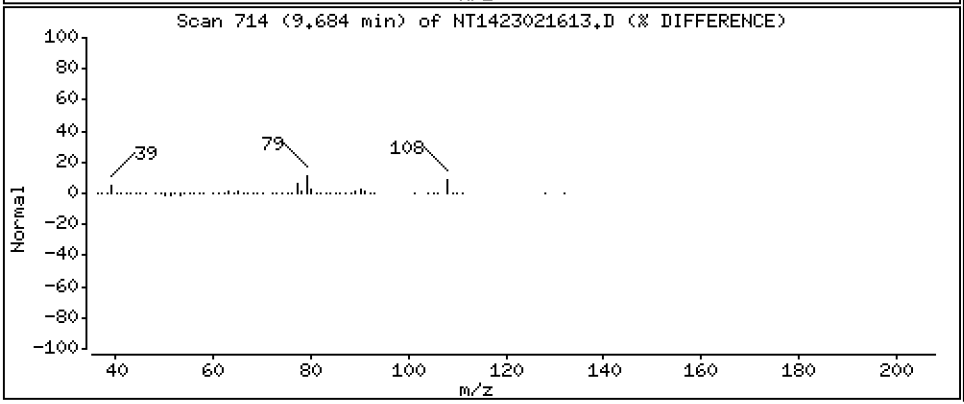












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

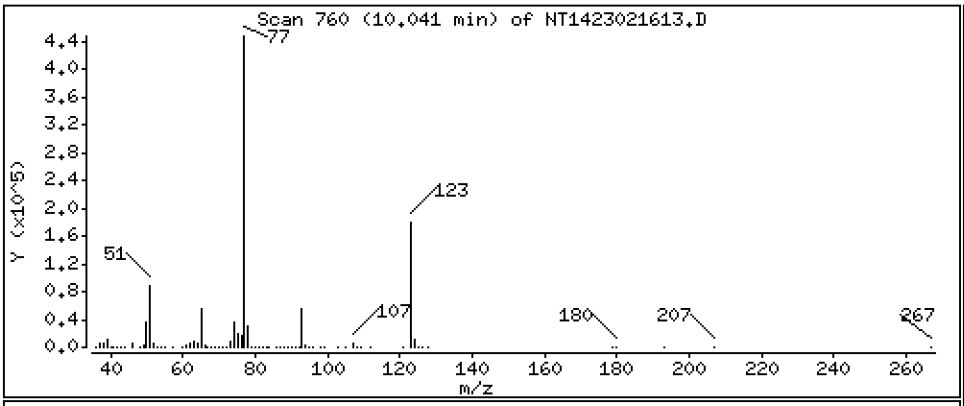
Operator: DSD

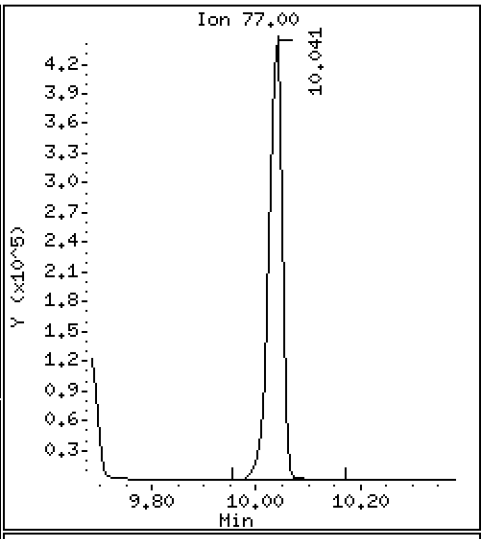
Column phase: ZB-5msi

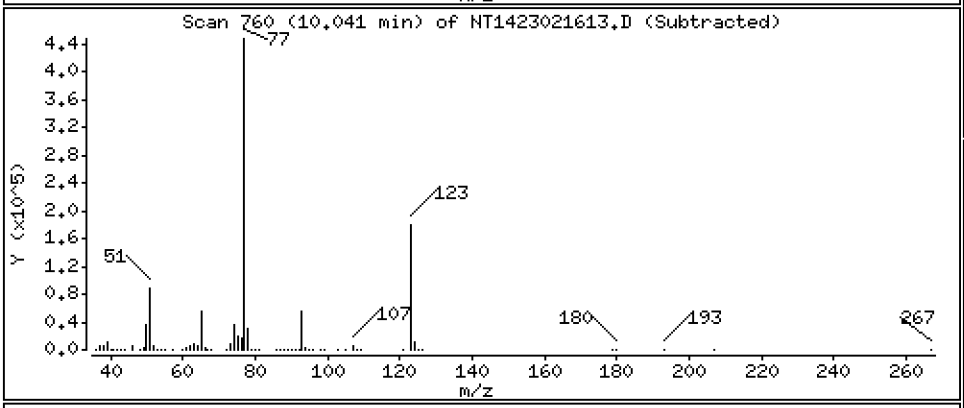
Column diameter: 0.25

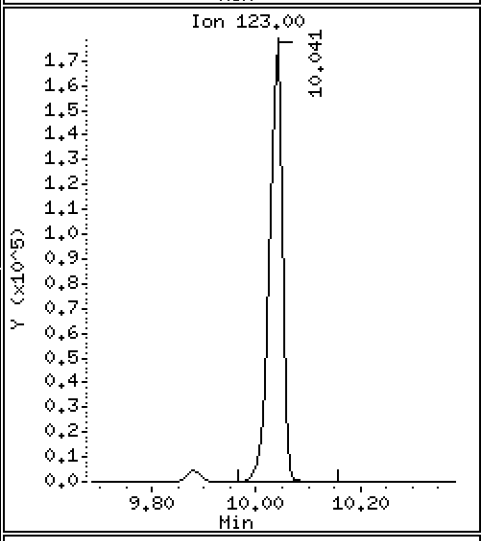
19 Nitrobenzene

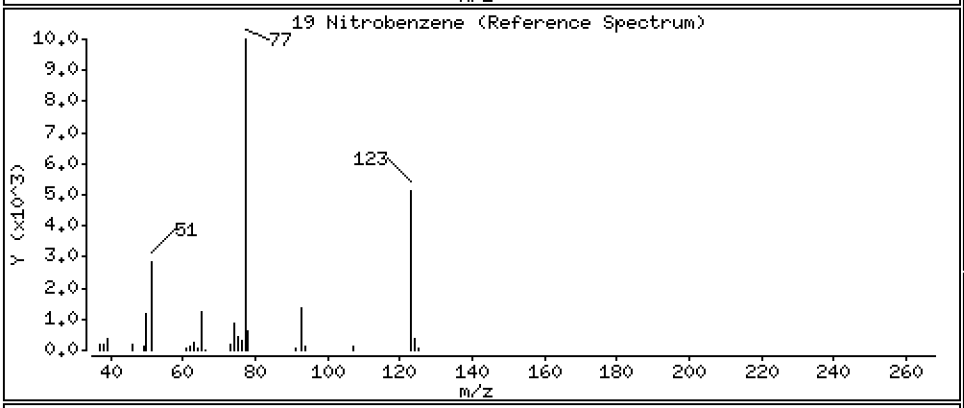
Concentration: 4.949 ug/mL

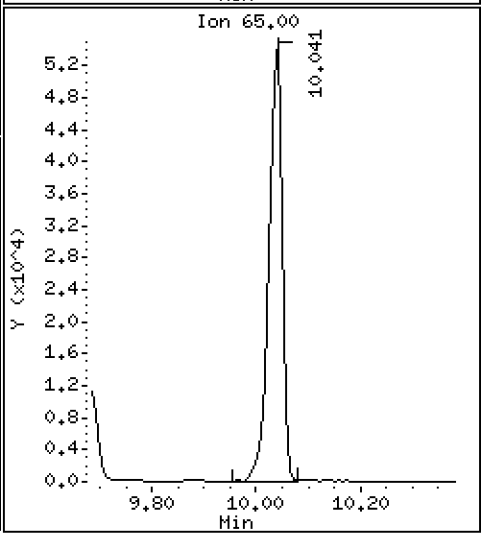


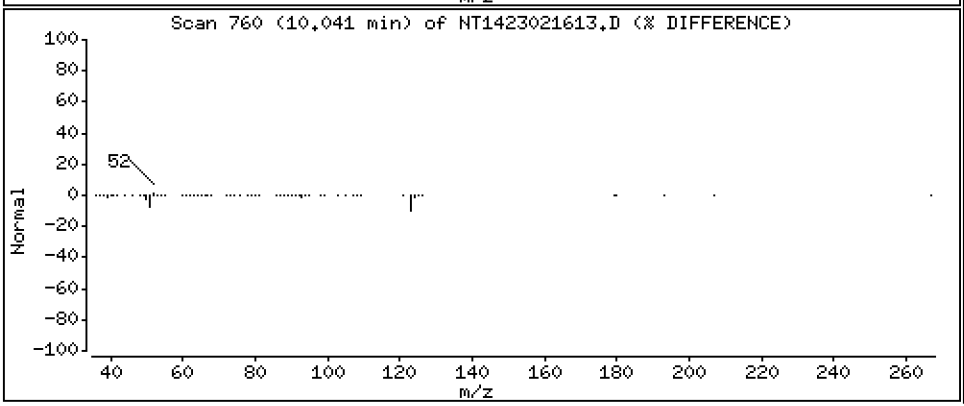












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

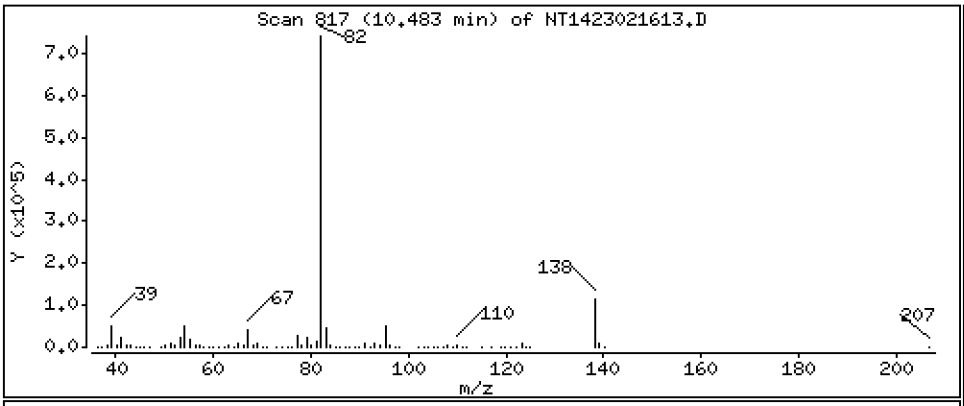
Operator: DSD

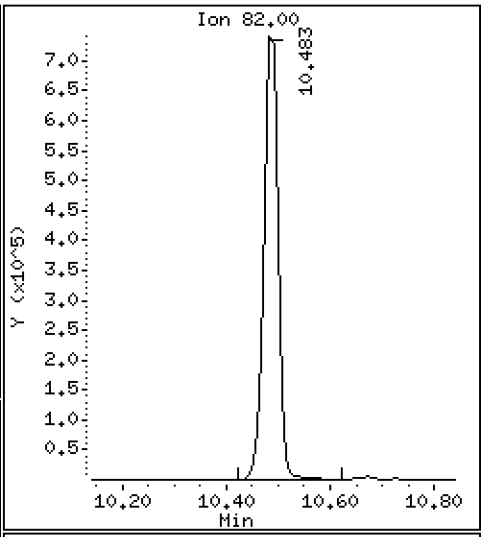
Column phase: ZB-5msi

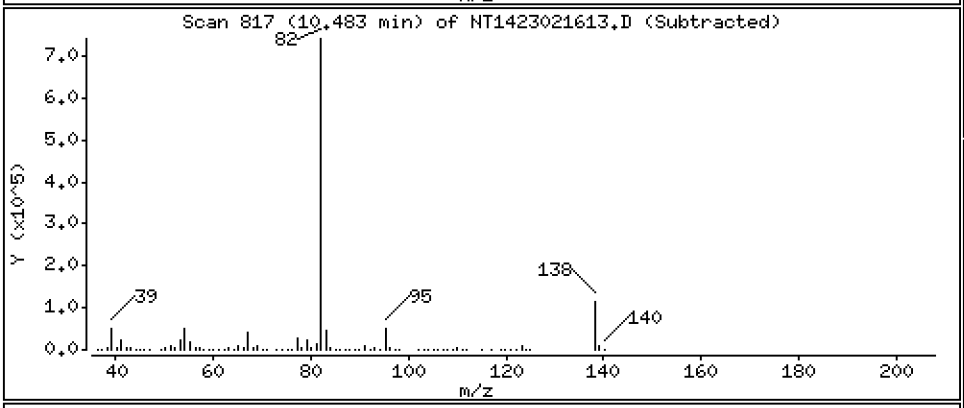
Column diameter: 0.25

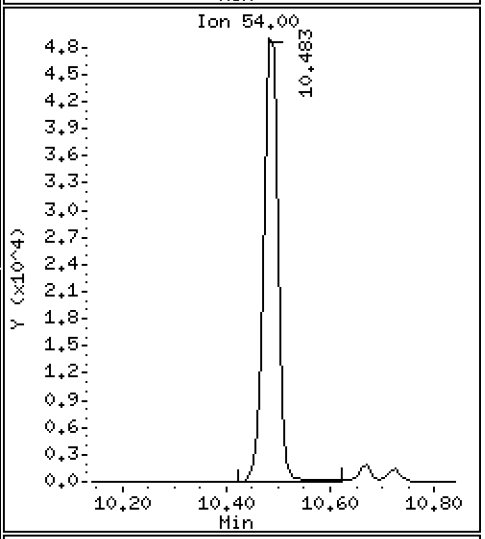
20 Isophorone

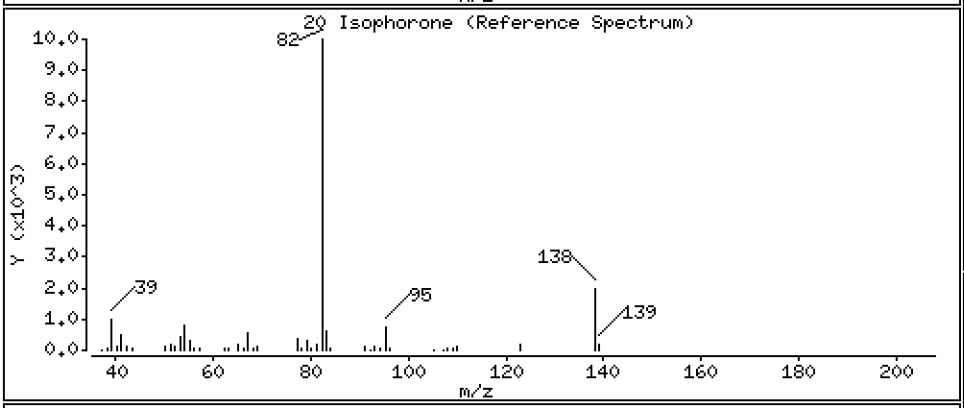
Concentration: 7.094 ug/mL

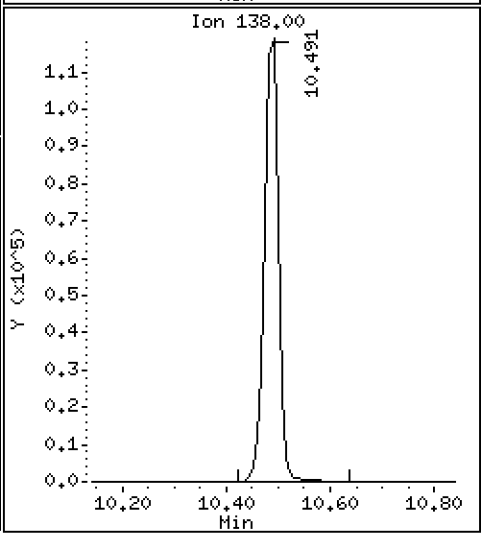


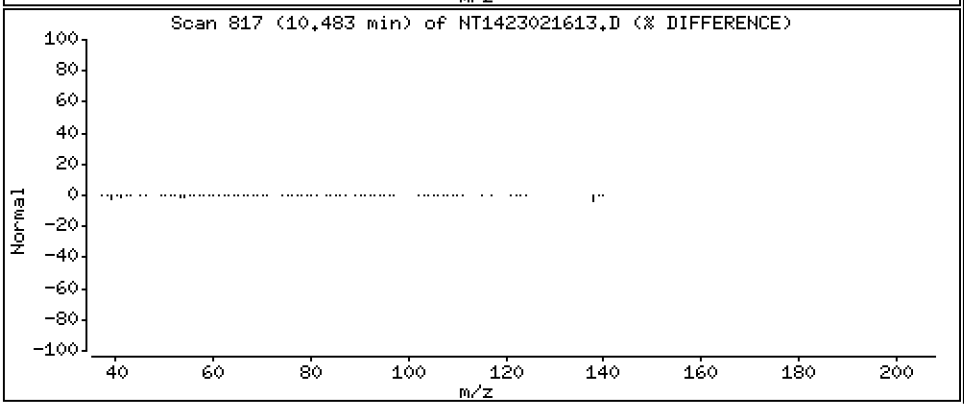












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

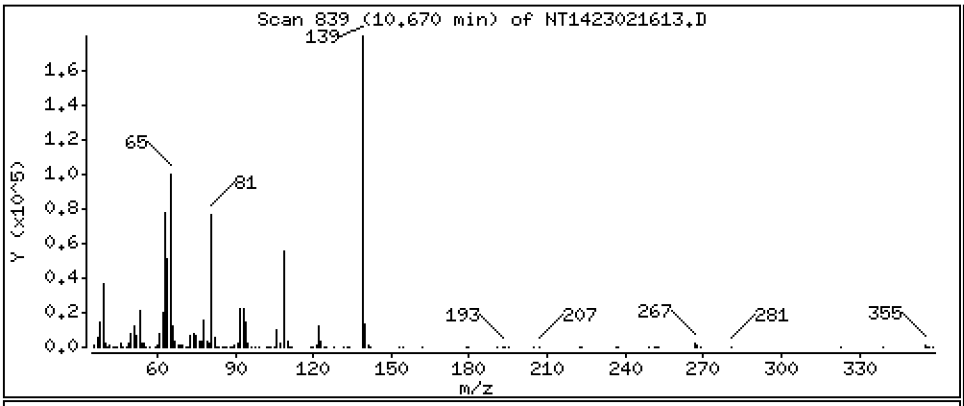
Operator: DSD

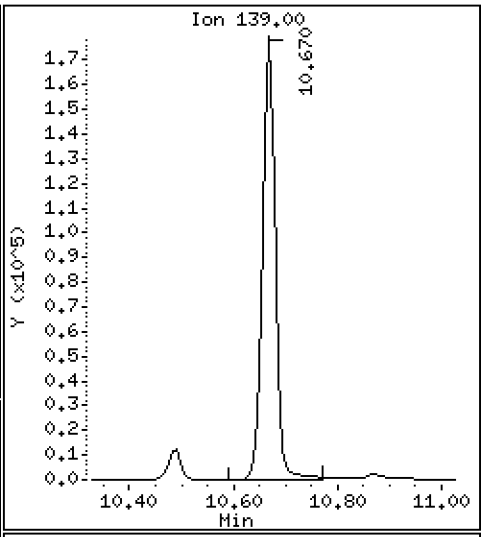
Column phase: ZB-5msi

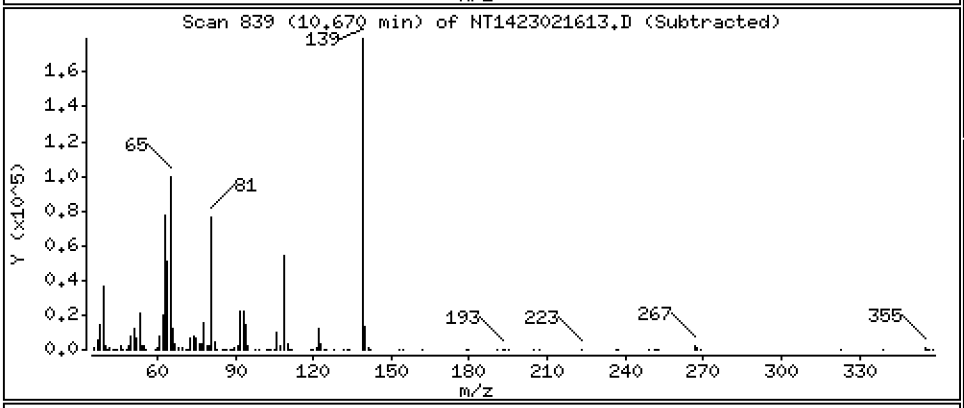
Column diameter: 0.25

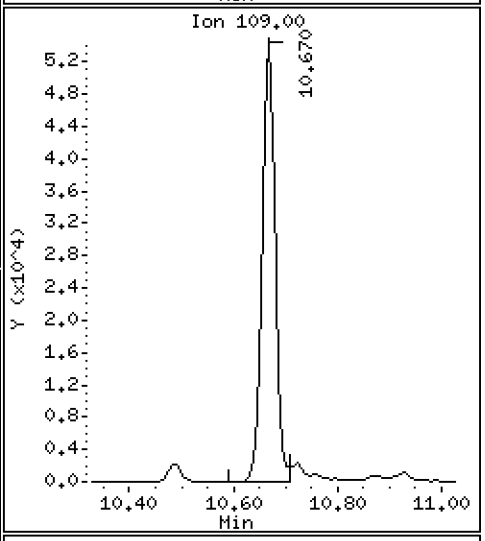
21 2-Nitrophenol

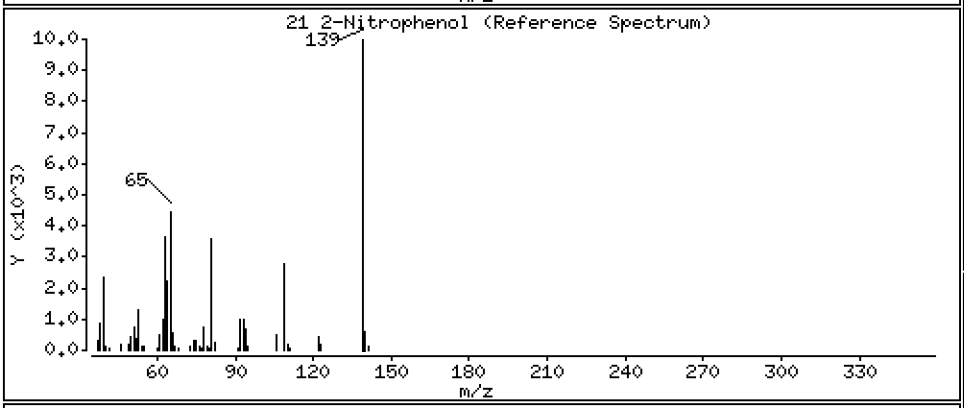
Concentration: 4.453 ug/mL

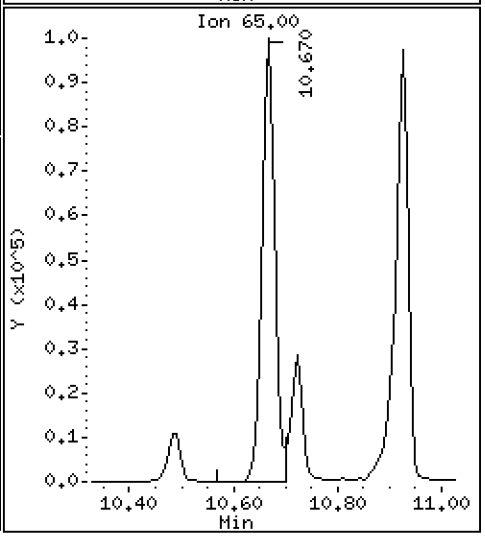


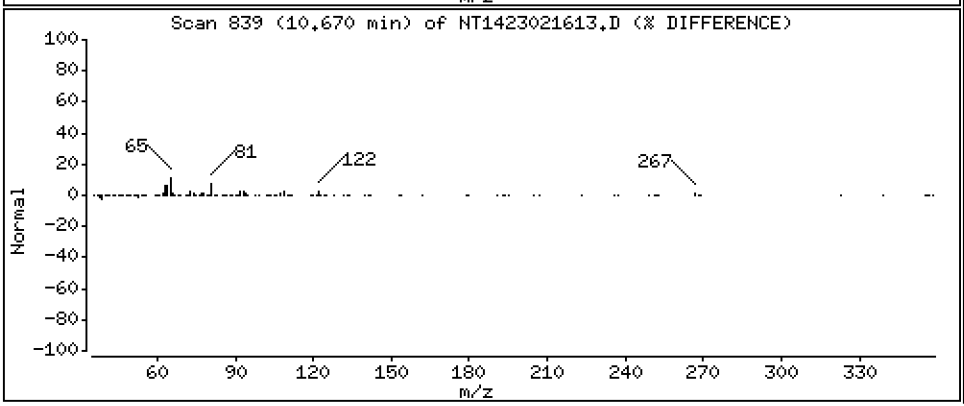












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

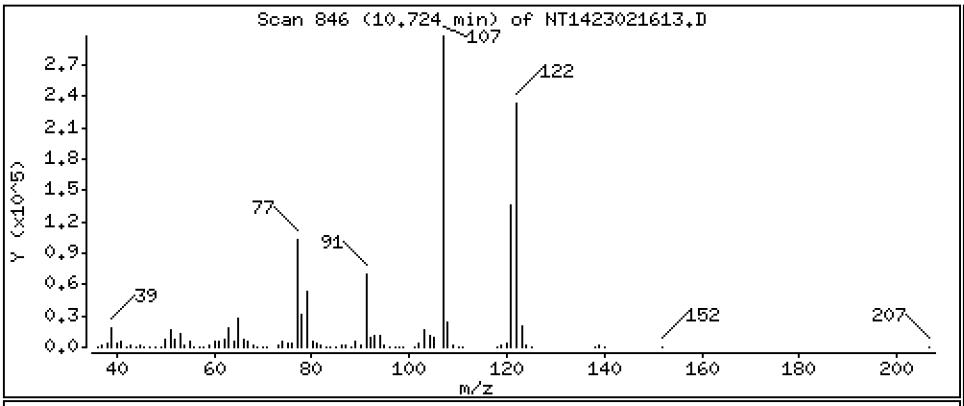
Operator: DSD

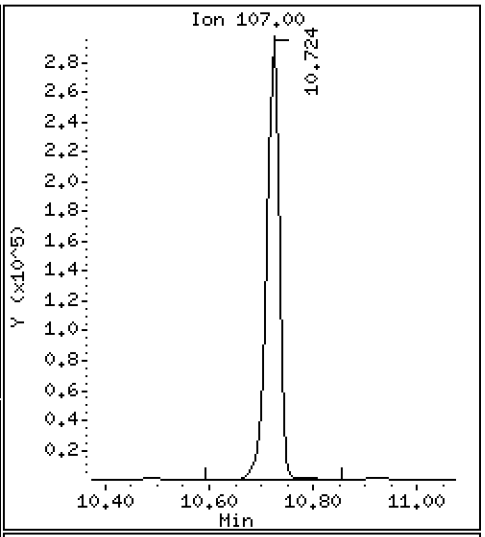
Column phase: ZB-5msi

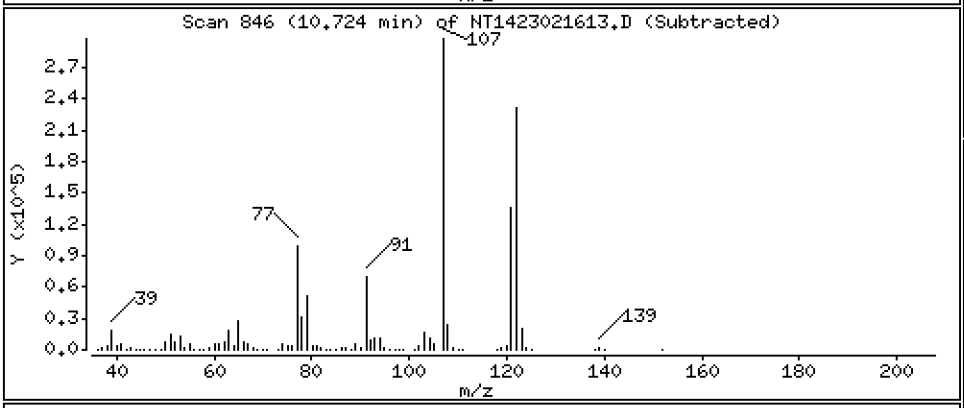
Column diameter: 0.25

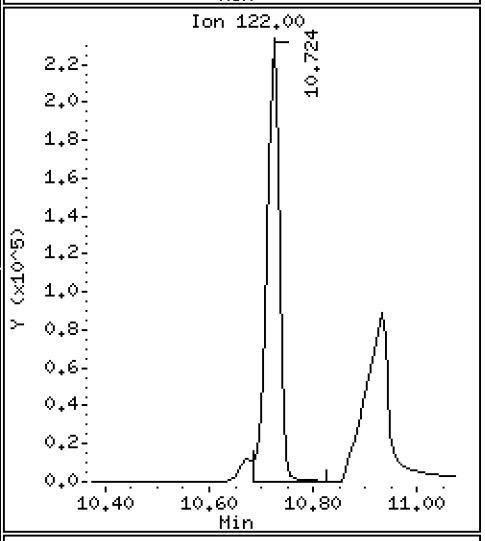
22 2,4-Dimethylphenol

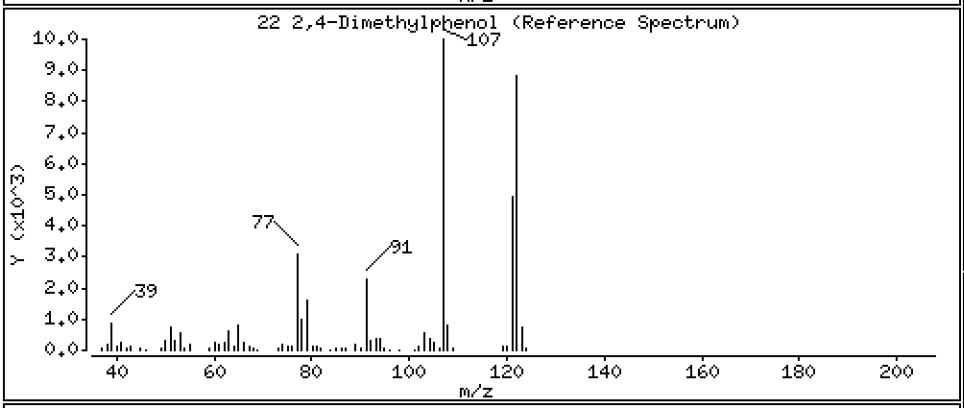
Concentration: 4.274 ug/mL

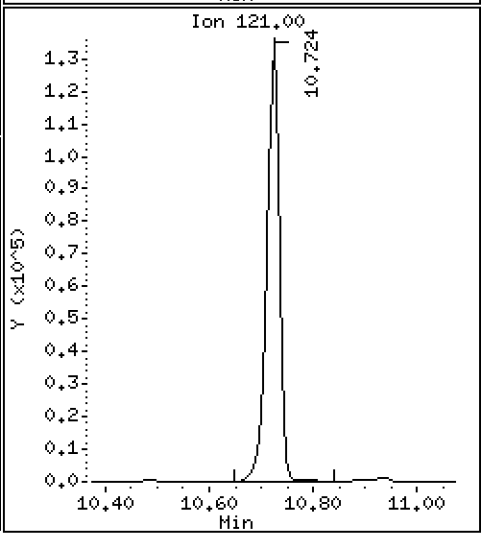


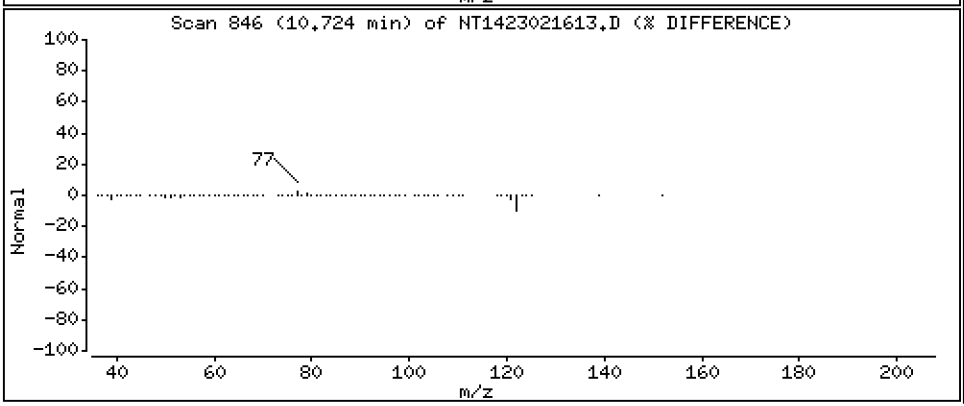












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

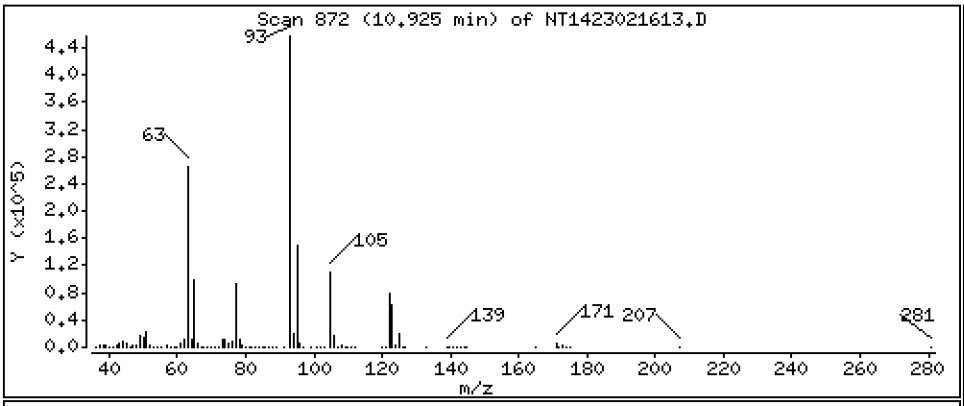
Operator: DSD

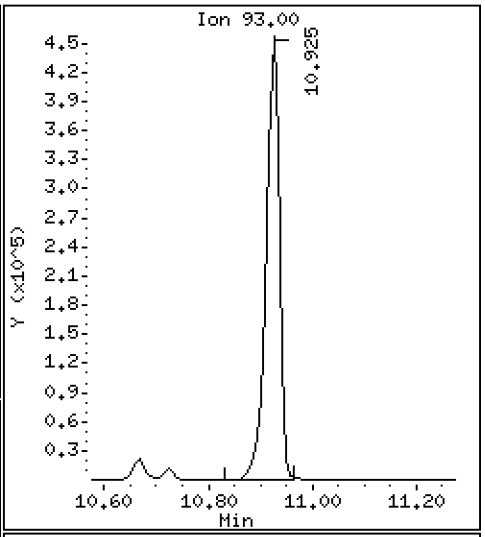
Column phase: ZB-5msi

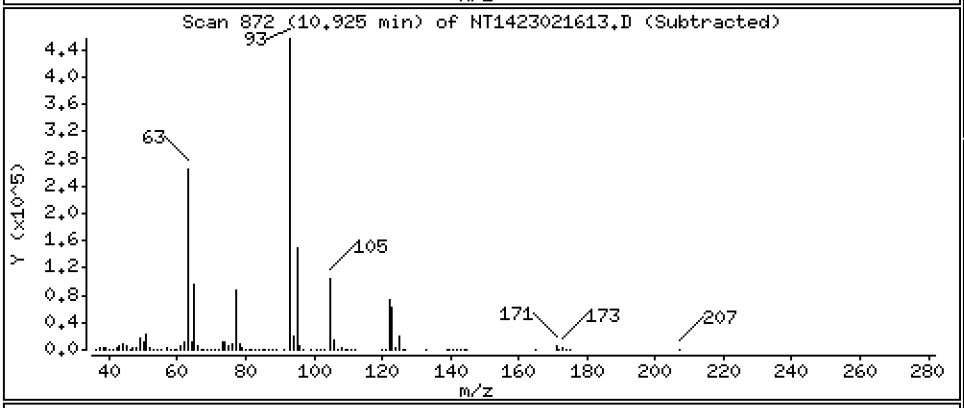
Column diameter: 0.25

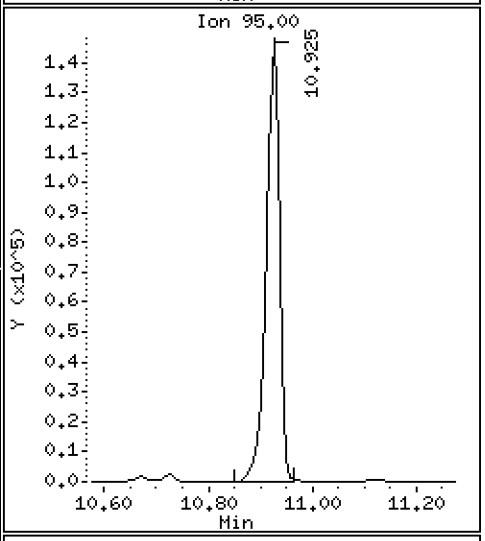
23 Bis(2-Chloroethoxy)methane

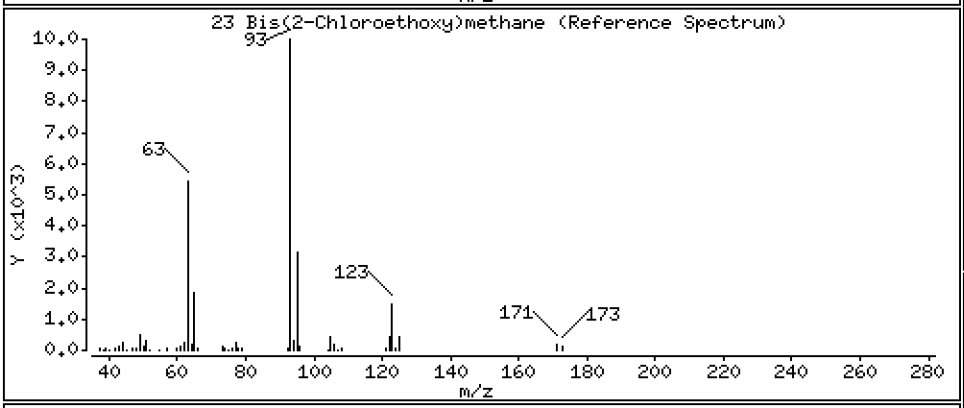
Concentration: 5.740 ug/mL

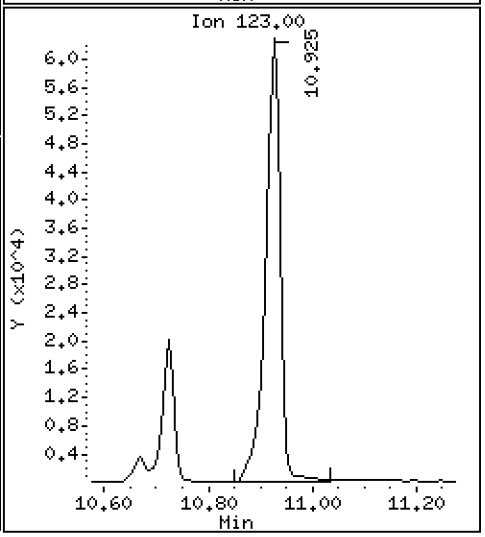


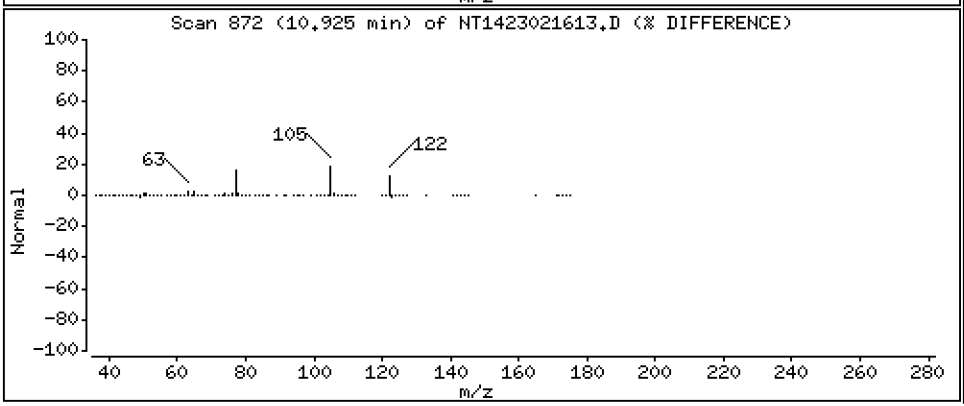












Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

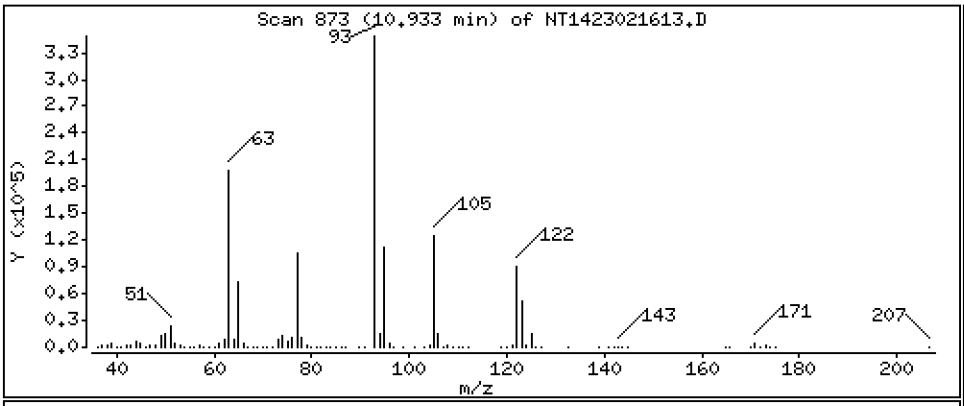
Operator: DSD

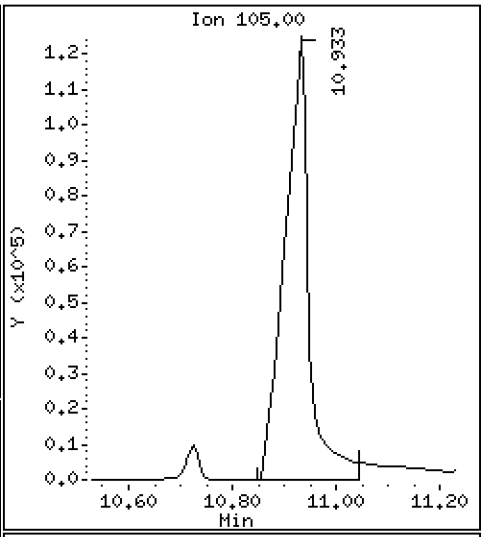
Column phase: ZB-5msi

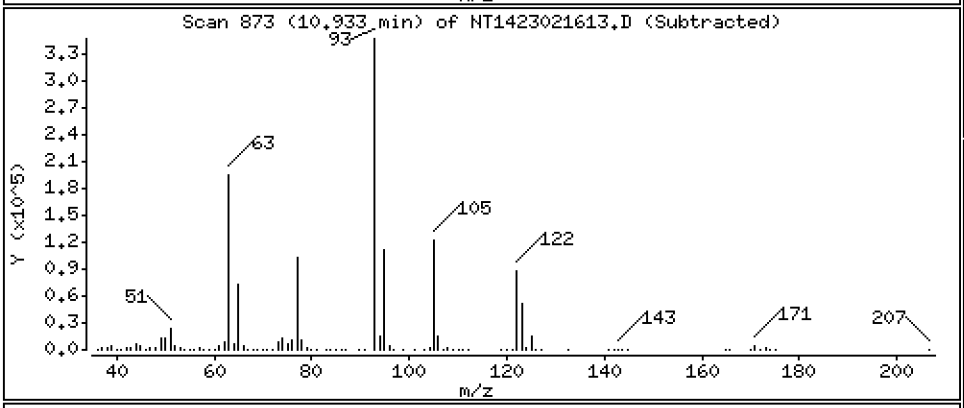
Column diameter: 0.25

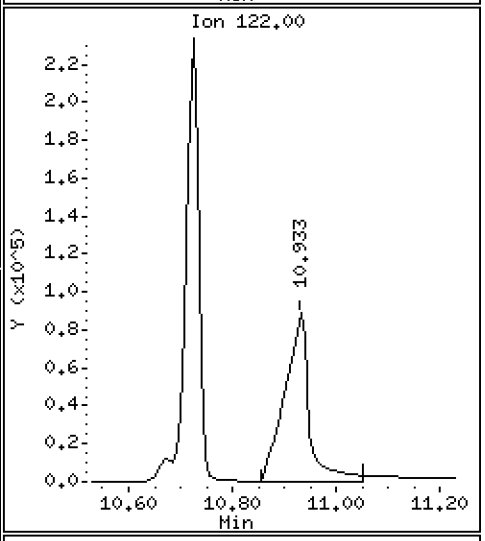
24 Benzoic acid

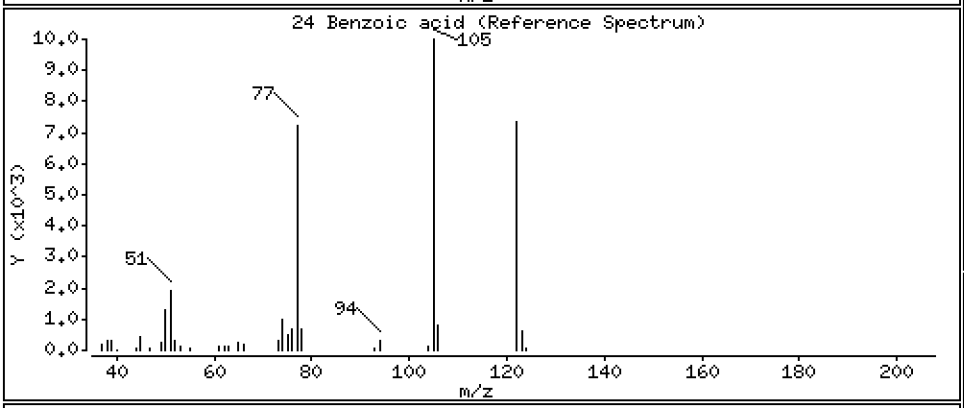
Concentration: 5.510 ug/mL

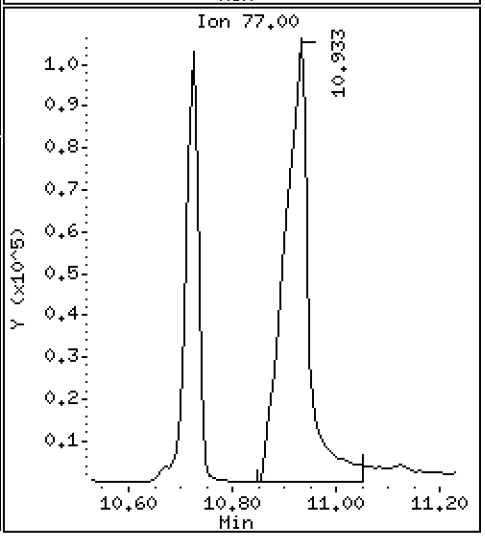


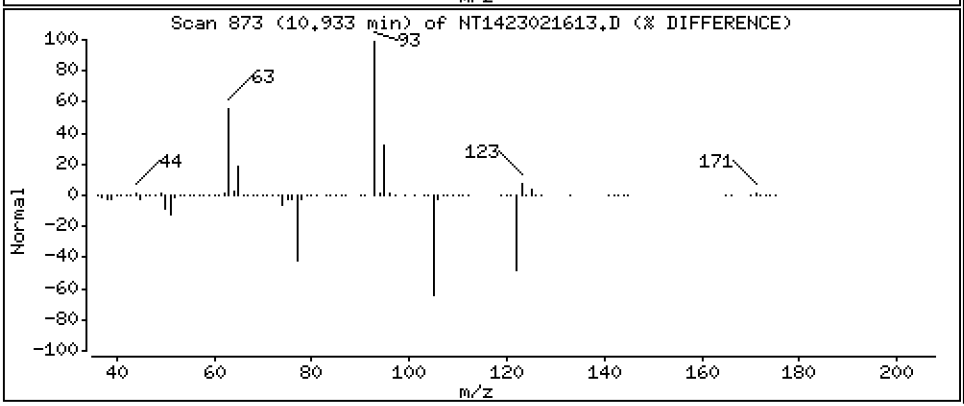












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

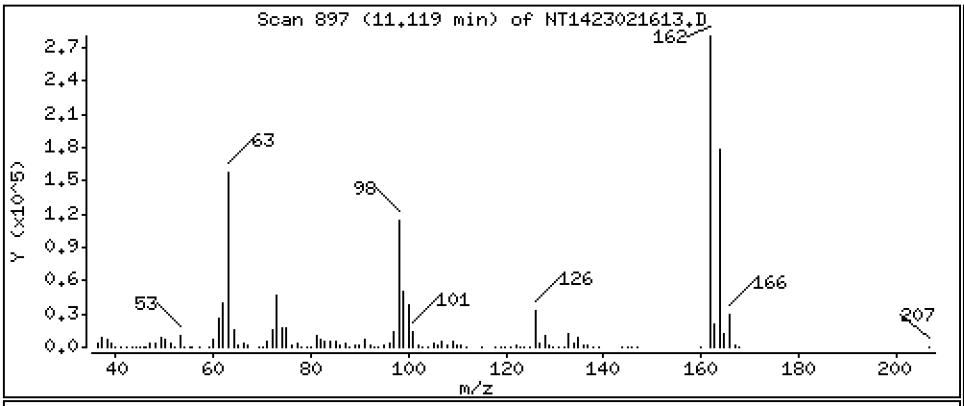
Operator: DSD

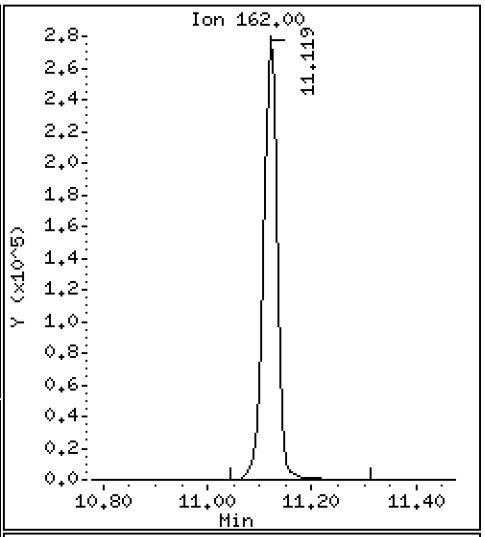
Column phase: ZB-5msi

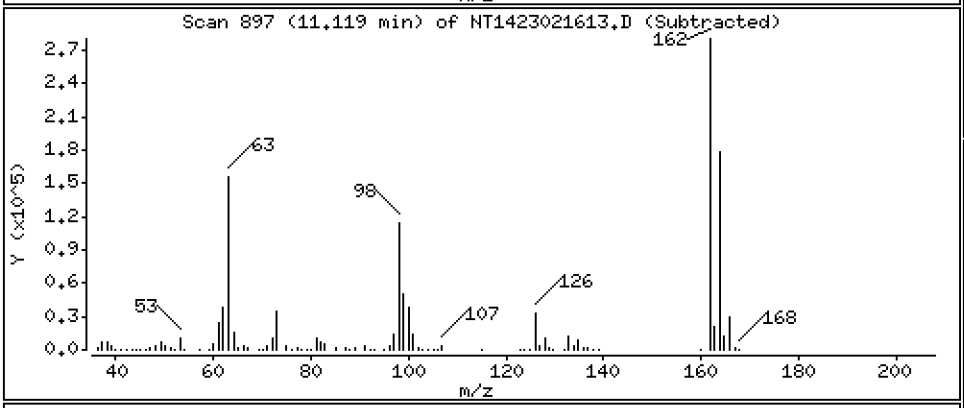
Column diameter: 0.25

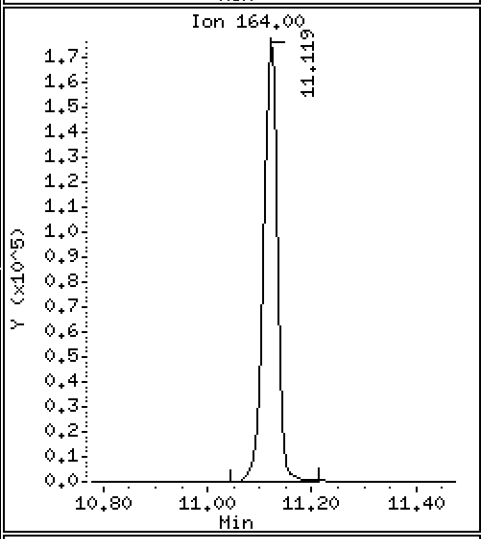
25 2,4-Dichlorophenol

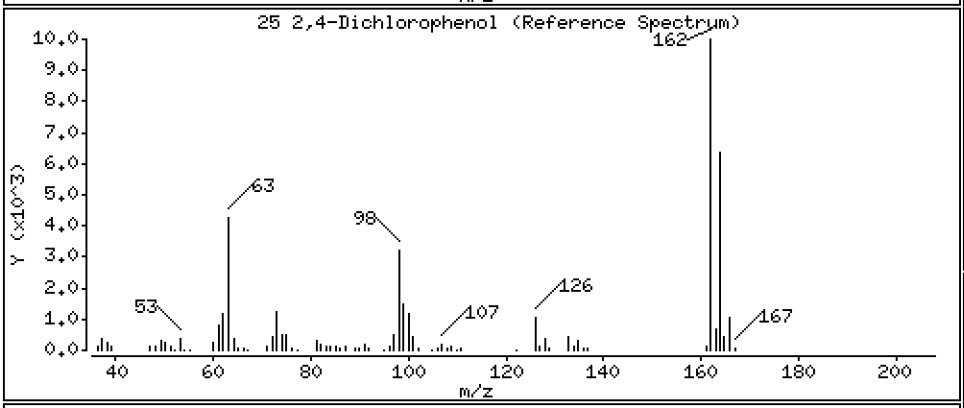
Concentration: 5.124 ug/mL

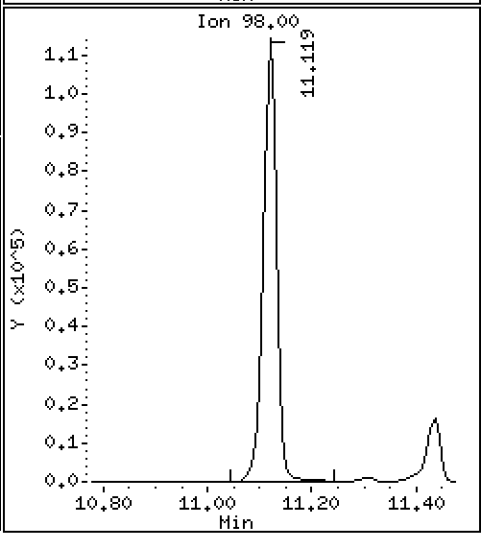


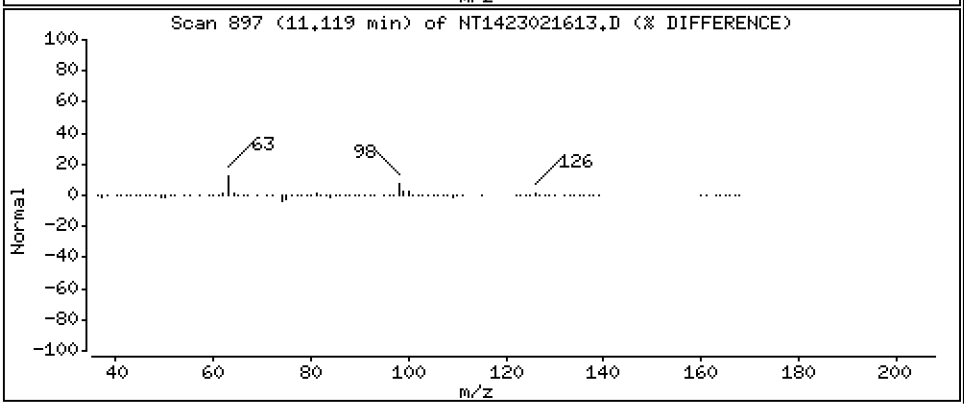












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

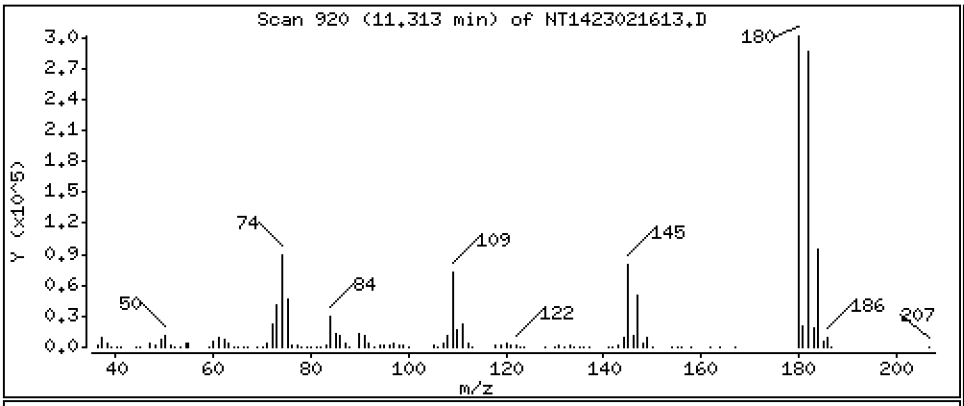
Operator: DSD

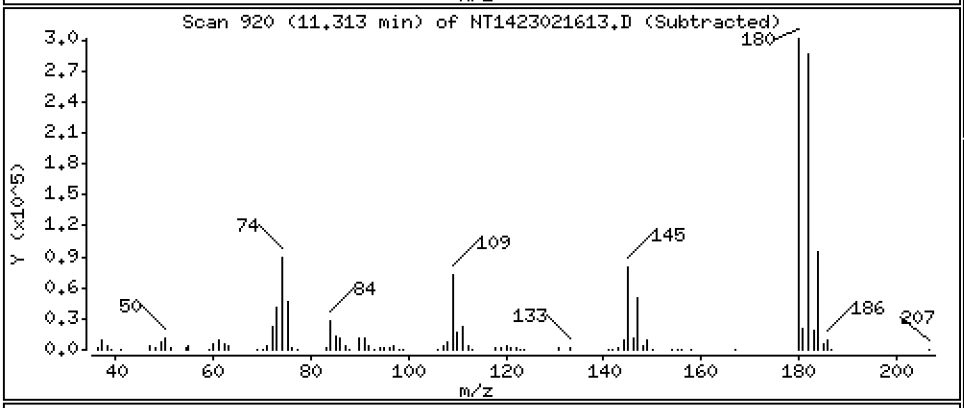
Column phase: ZB-5msi

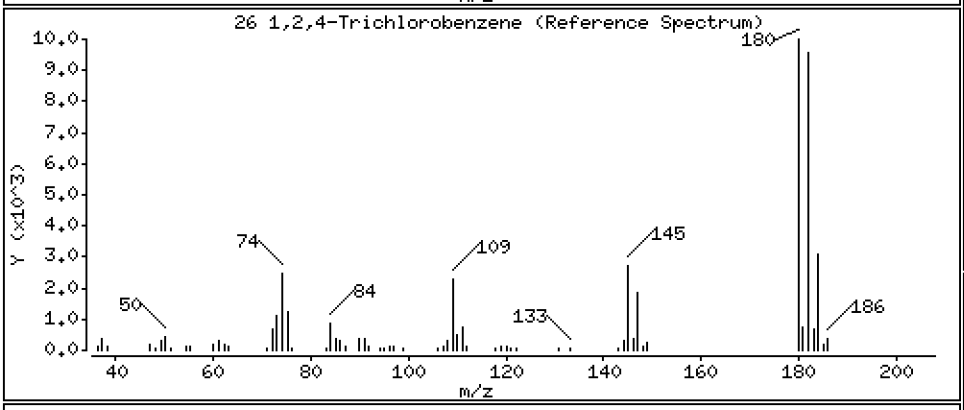
Column diameter: 0.25

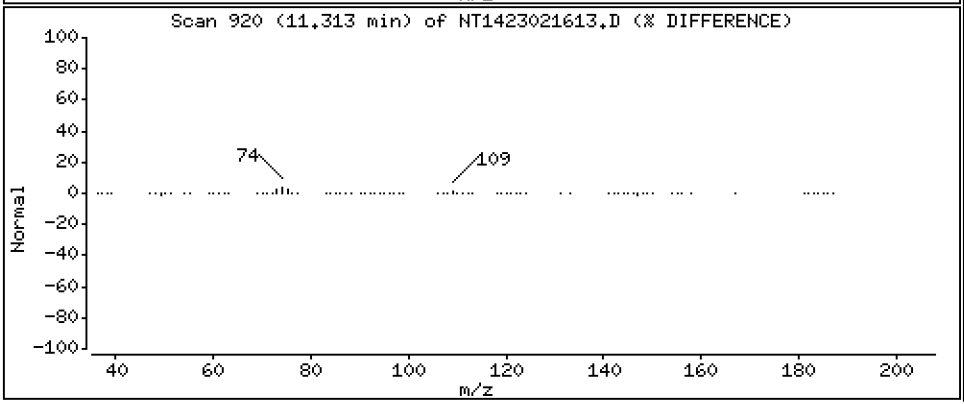
26 1,2,4-Trichlorobenzene

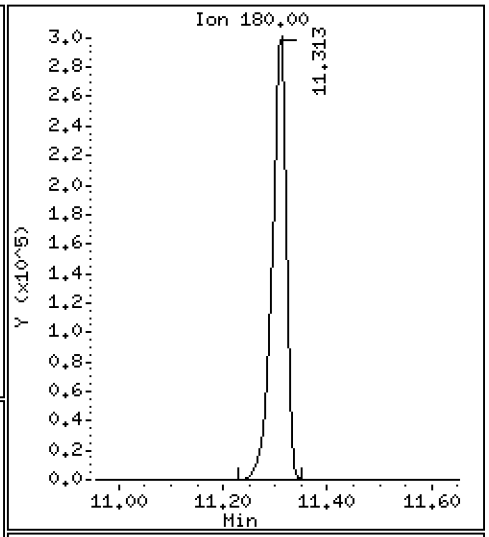
Concentration: 4.650 ug/mL

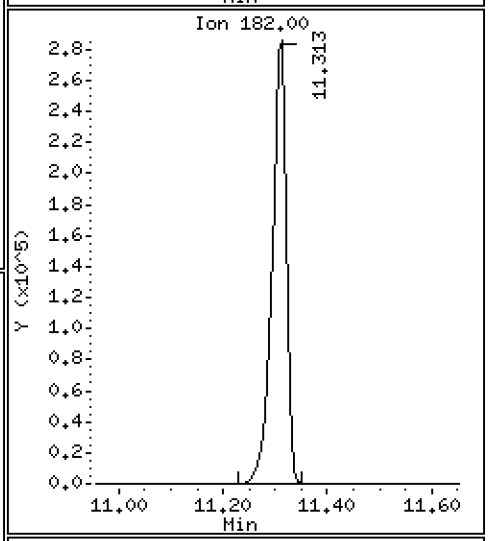


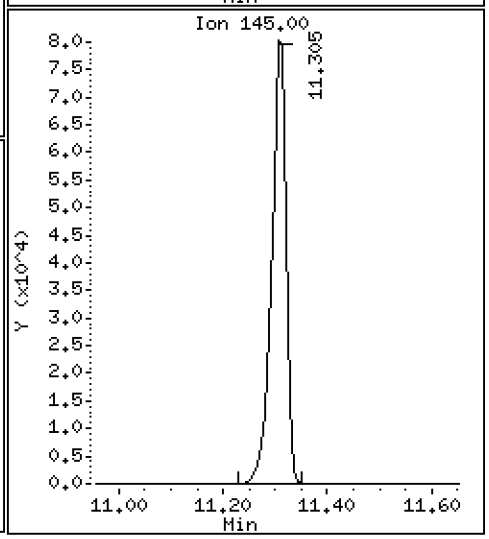












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

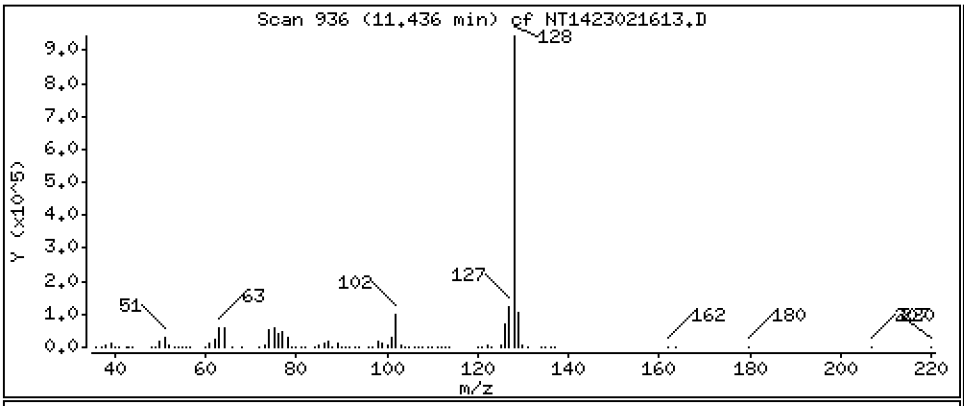
Operator: DSD

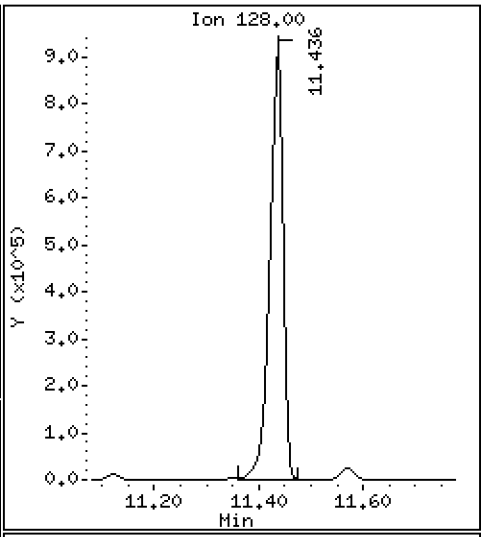
Column phase: ZB-5msi

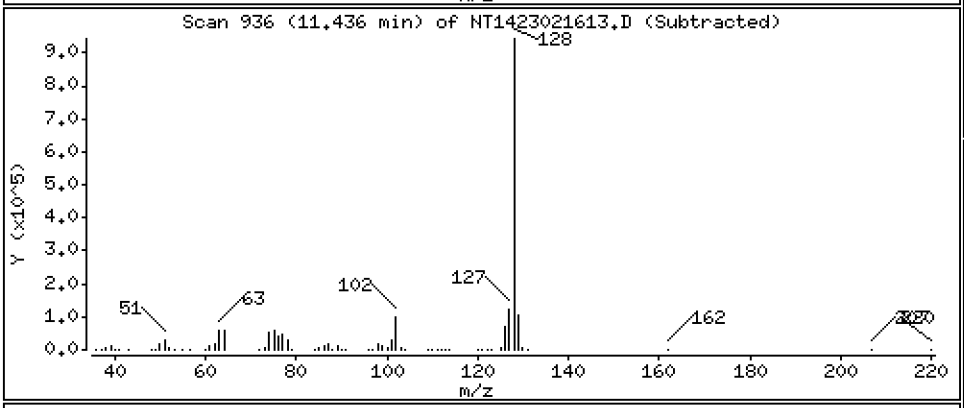
Column diameter: 0.25

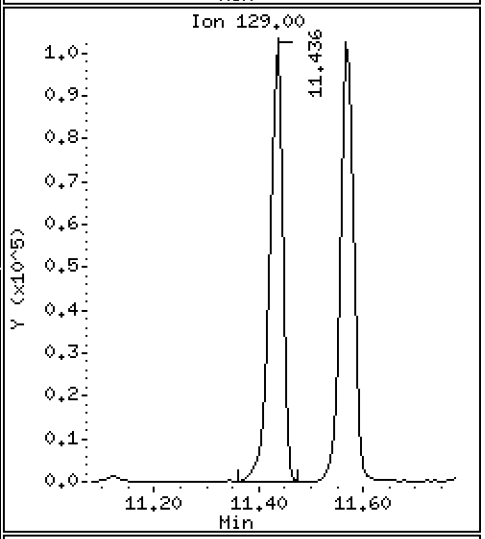
28 Naphthalene

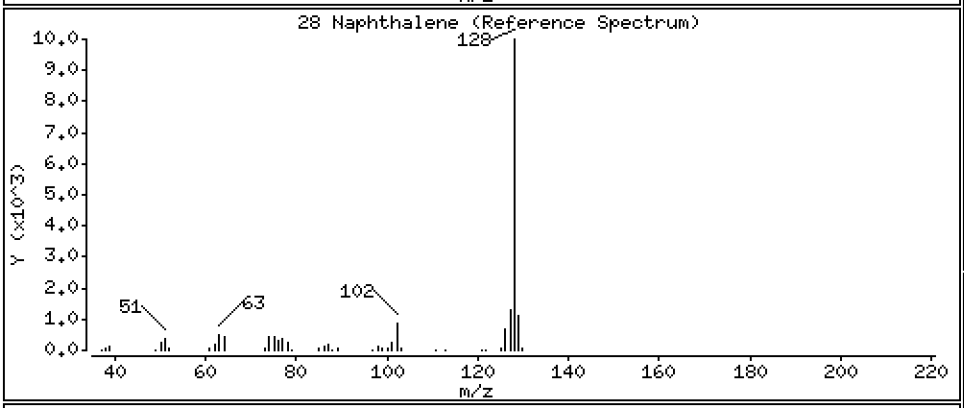
Concentration: 4.736 ug/mL

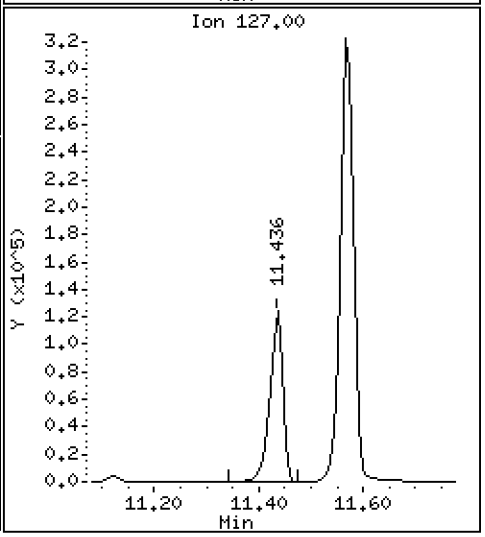


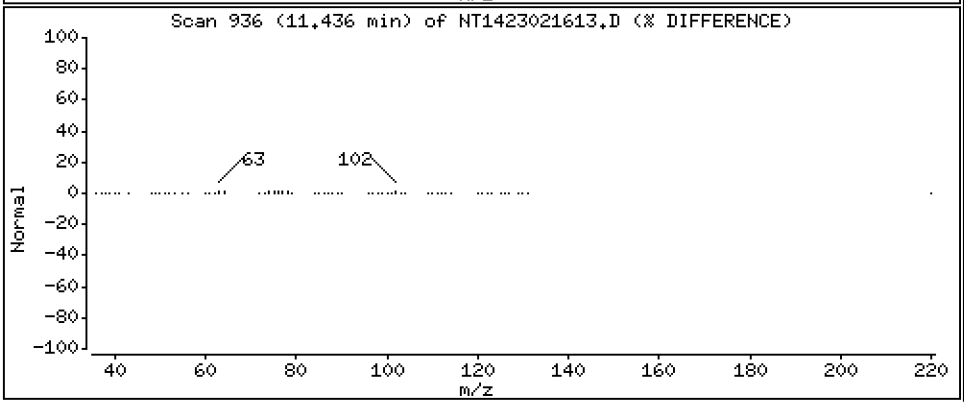












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

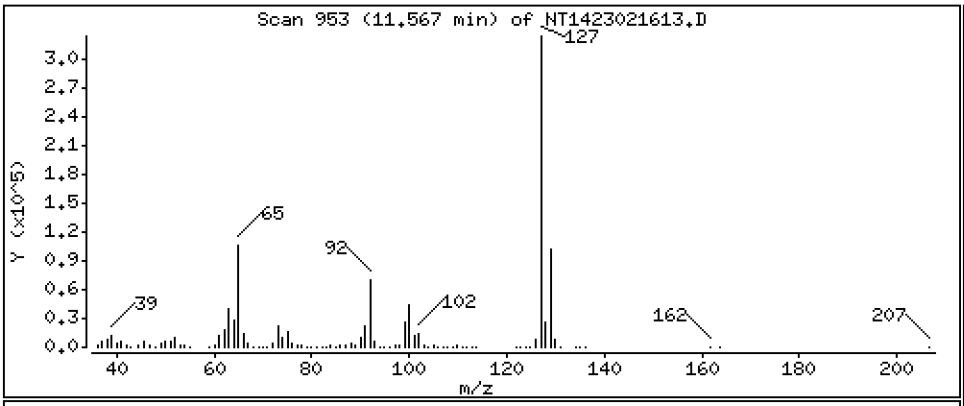
Operator: DSD

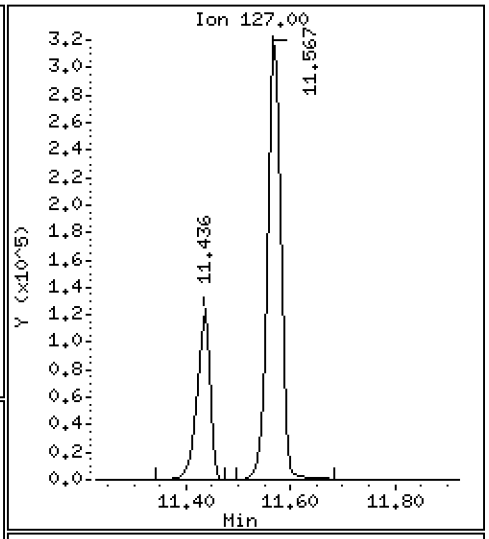
Column phase: ZB-5msi

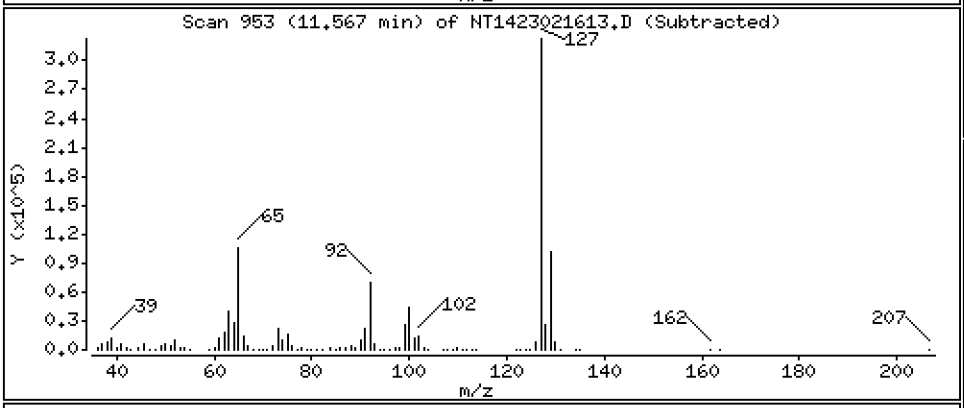
Column diameter: 0.25

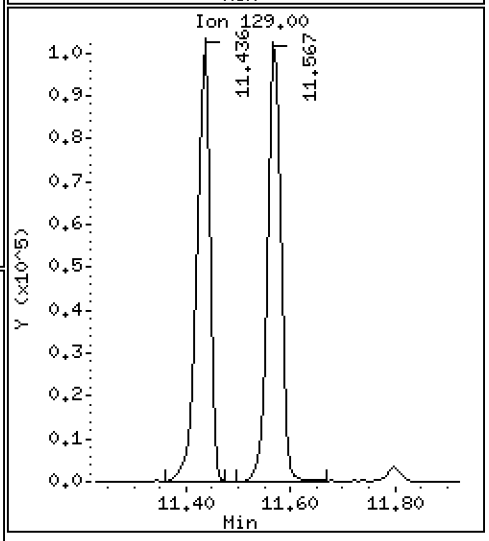
29 4-Chloroaniline

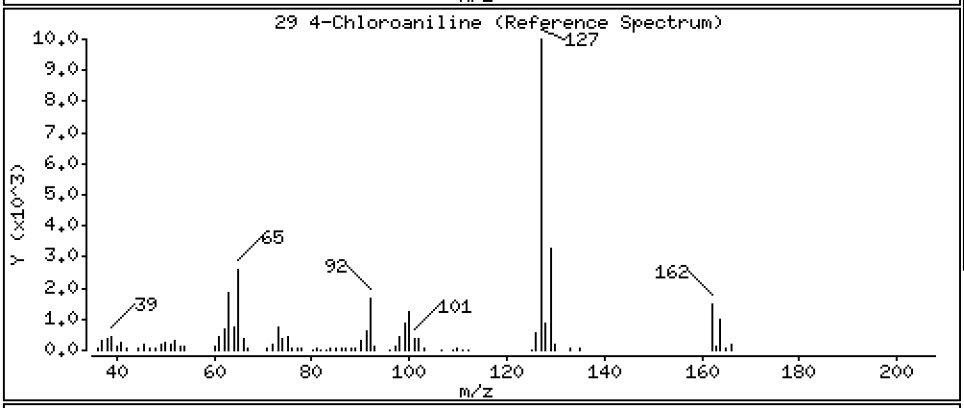
Concentration: 3.911 ug/mL

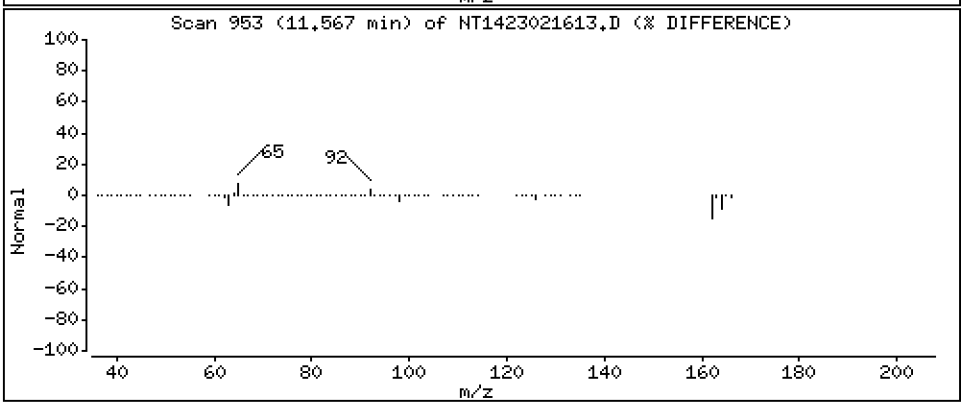












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

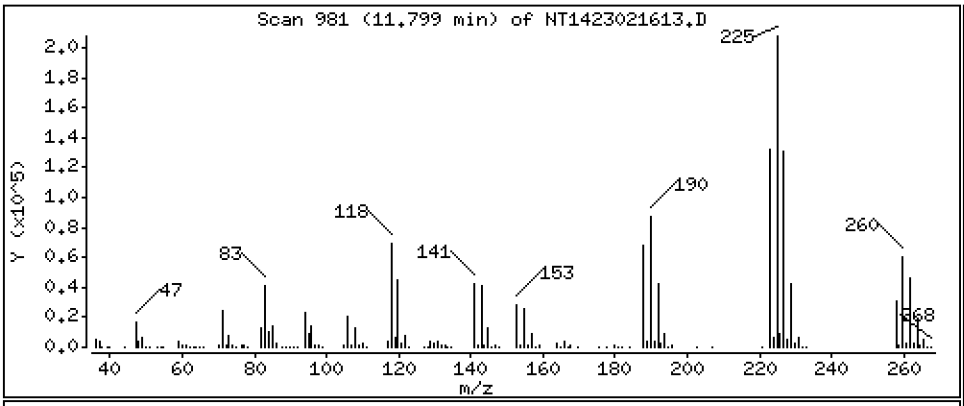
Operator: DSD

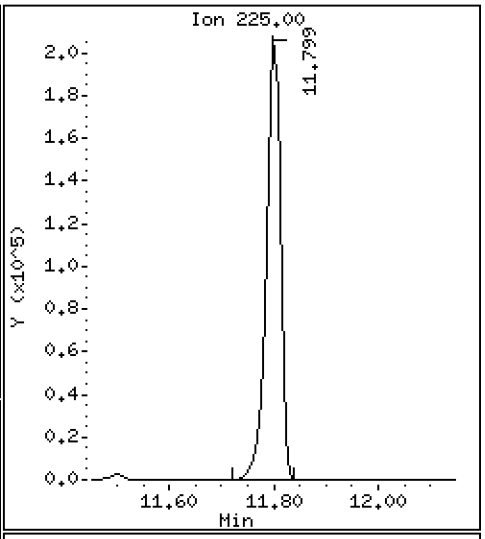
Column phase: ZB-5msi

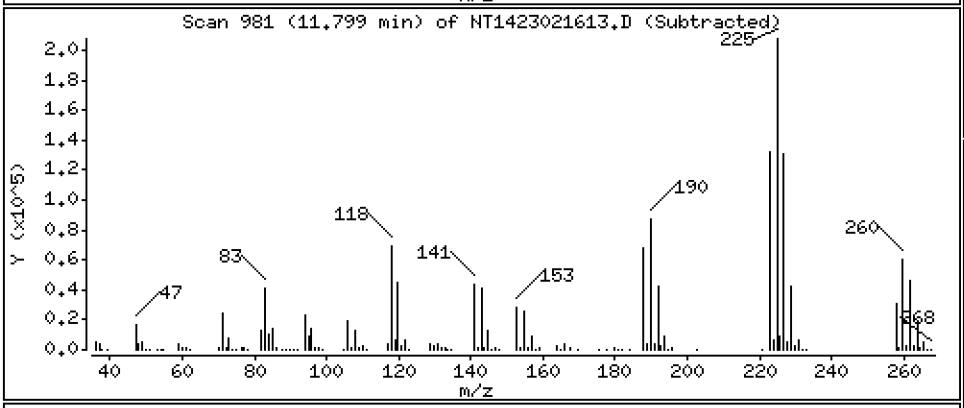
Column diameter: 0.25

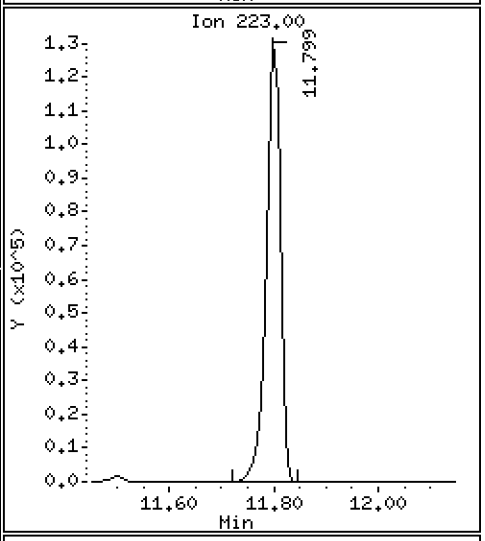
30 Hexachlorobutadiene

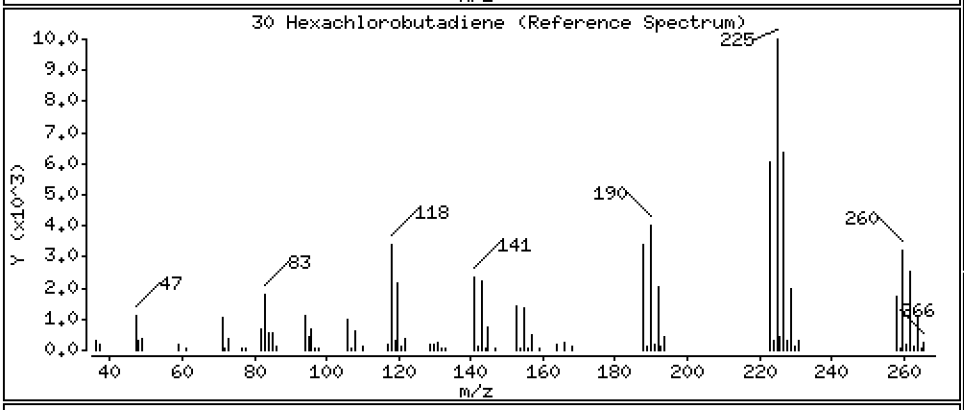
Concentration: 4.917 ug/mL

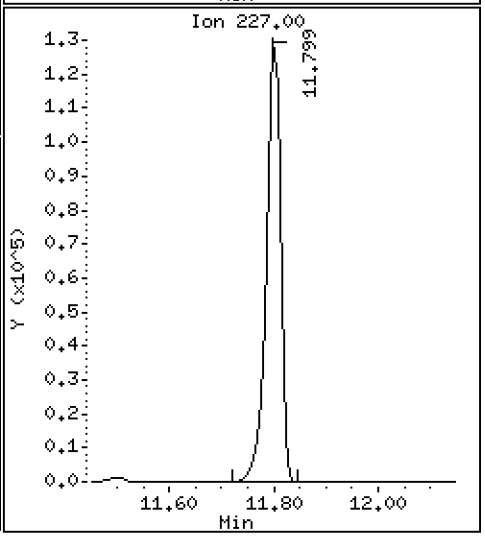


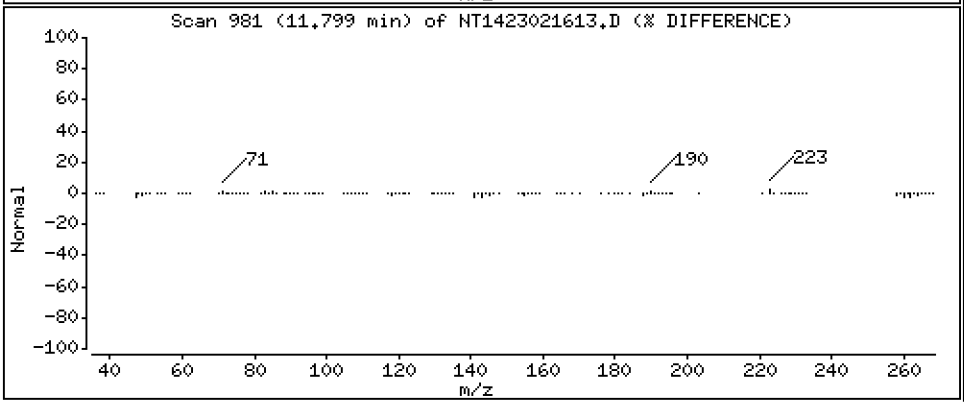












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

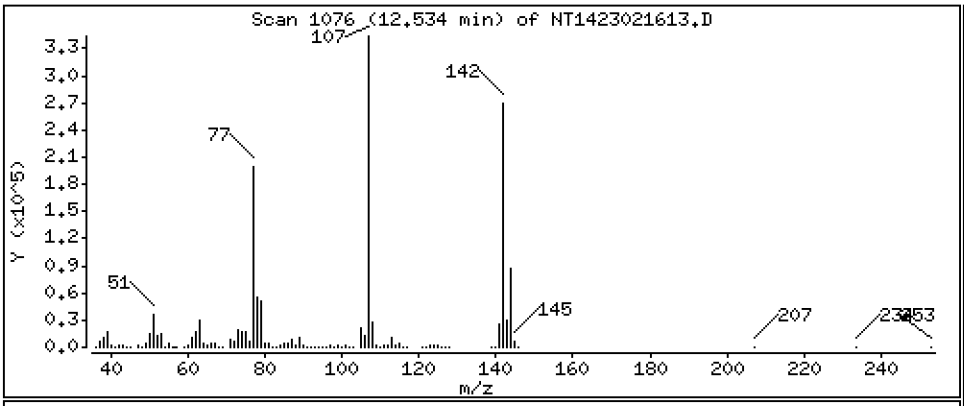
Operator: DSD

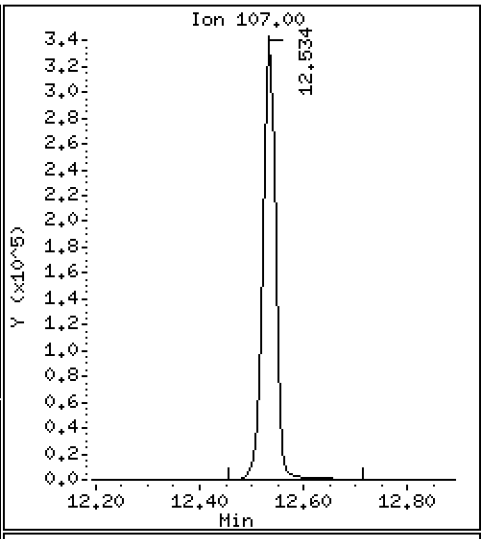
Column phase: ZB-5msi

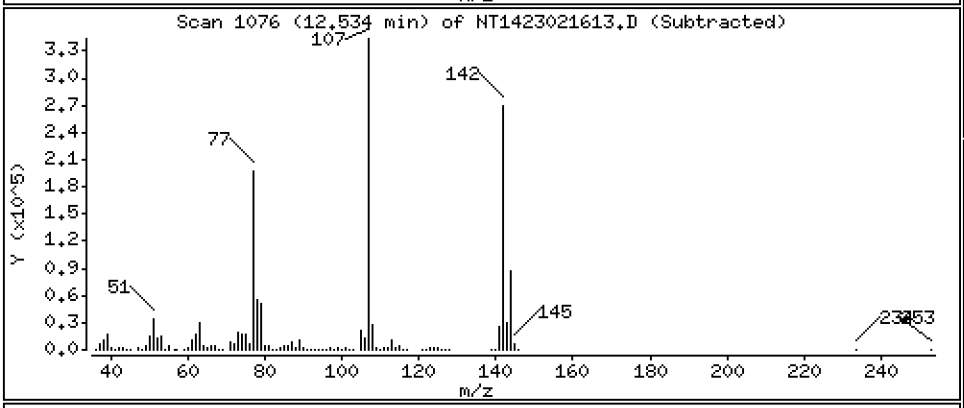
Column diameter: 0.25

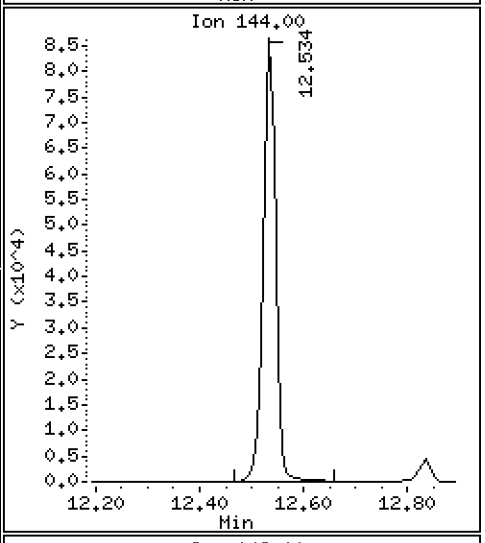
31 4-Chloro-3-methylphenol

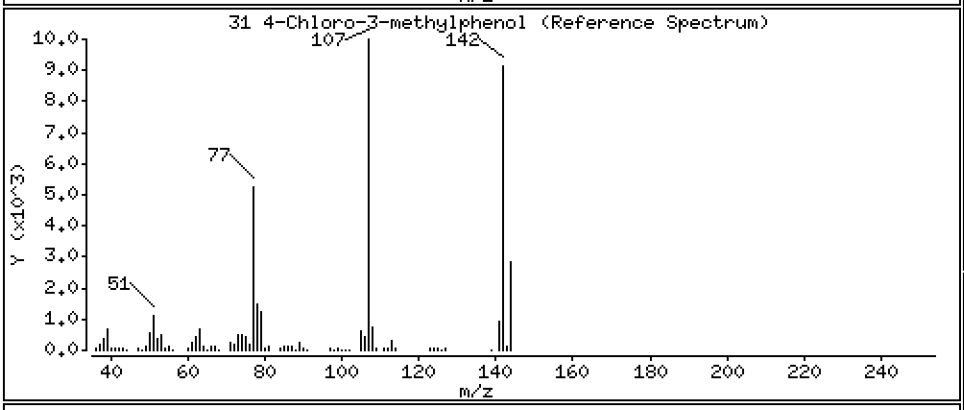
Concentration: 5.045 ug/mL

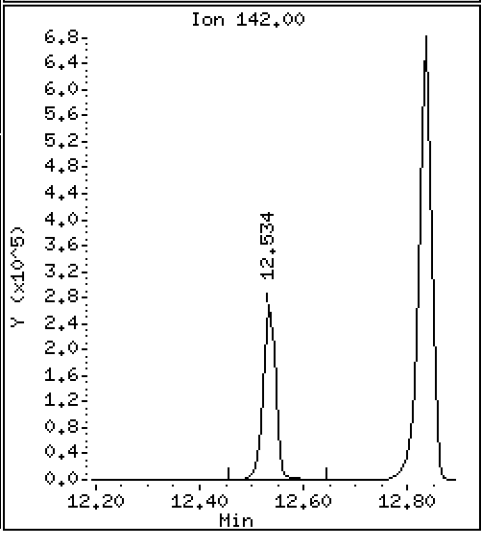


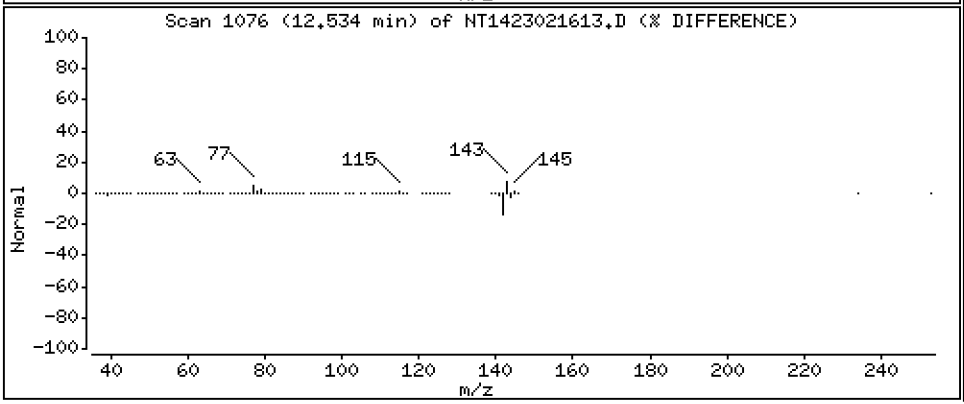












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

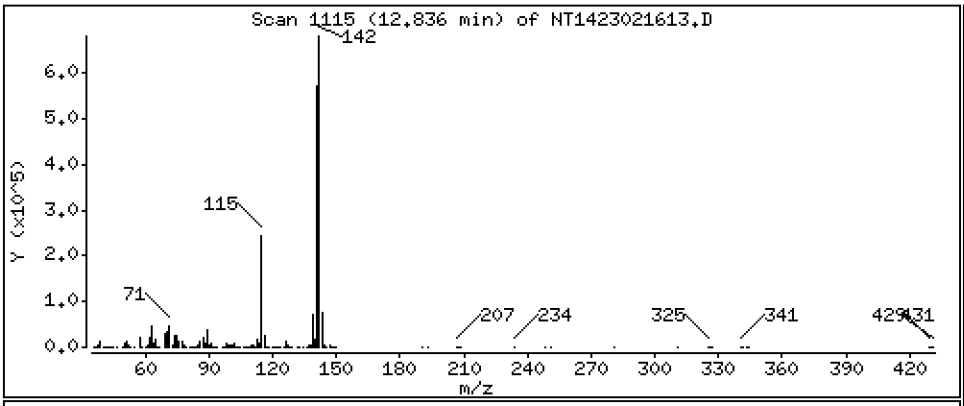
Operator: DSD

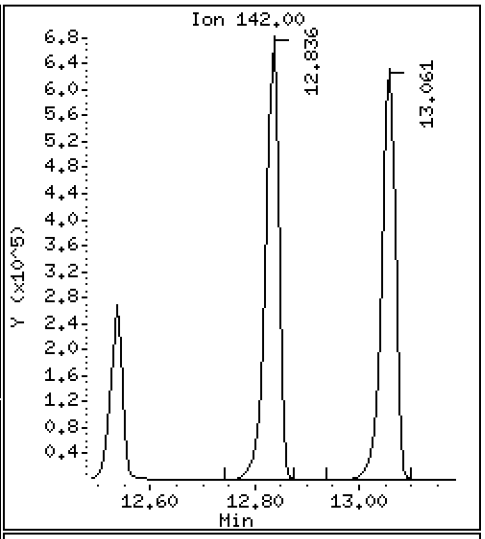
Column phase: ZB-5msi

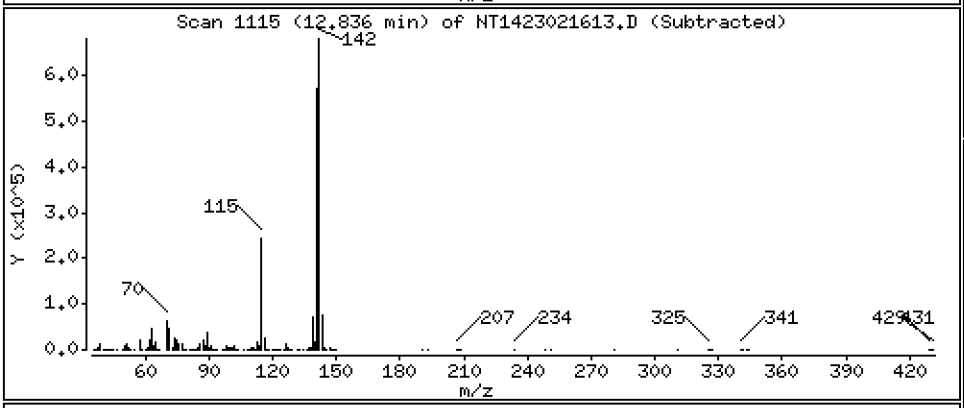
Column diameter: 0.25

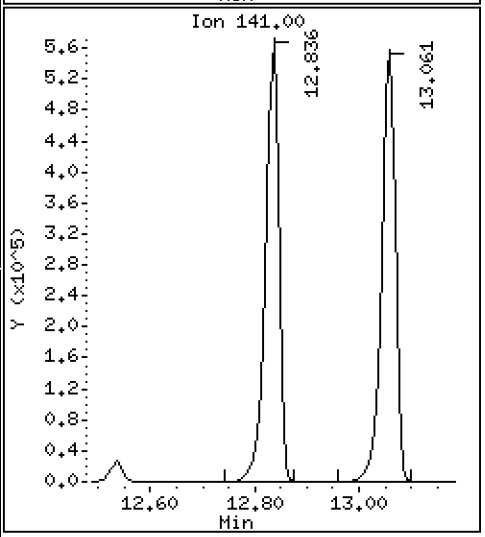
32 2-Methylnaphthalene

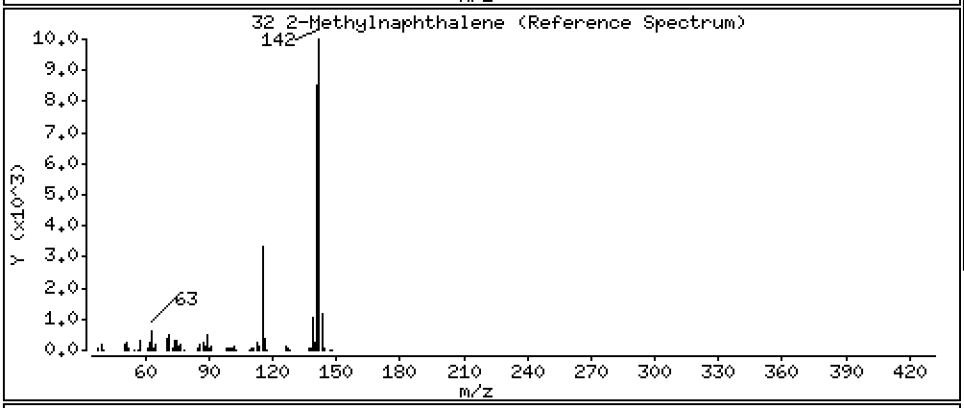
Concentration: 4.606 ug/mL

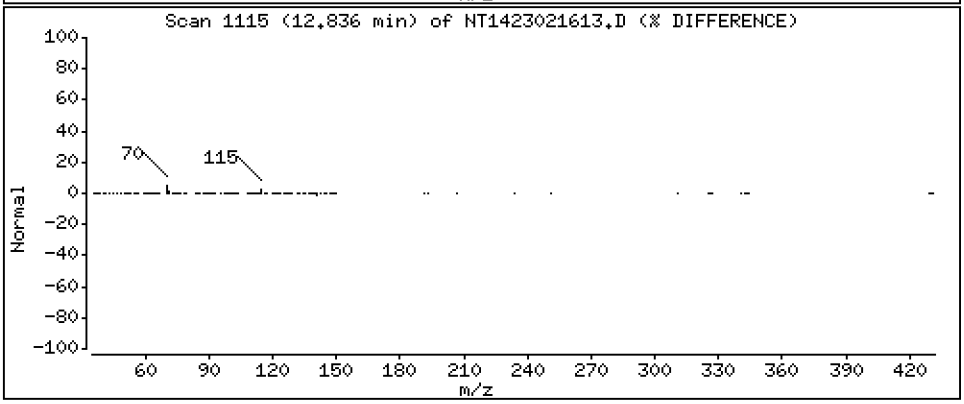












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

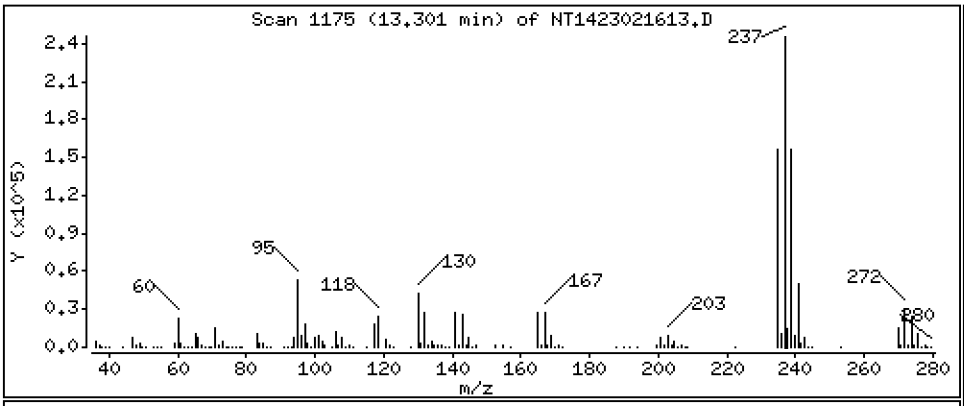
Operator: DSD

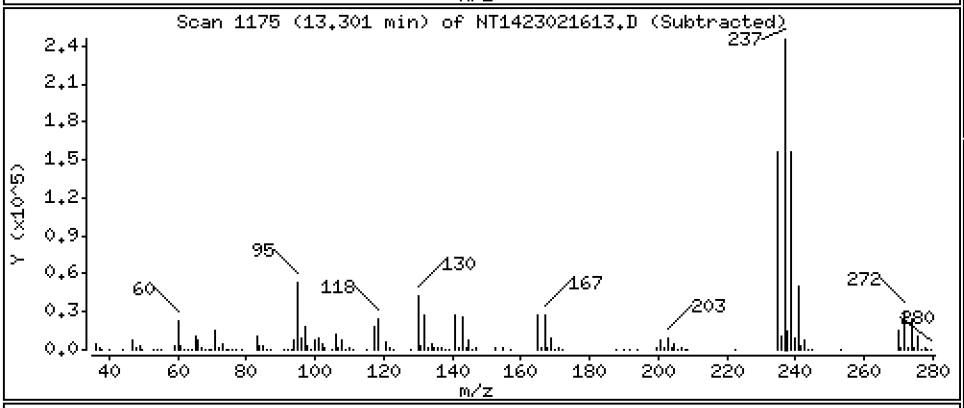
Column phase: ZB-5msi

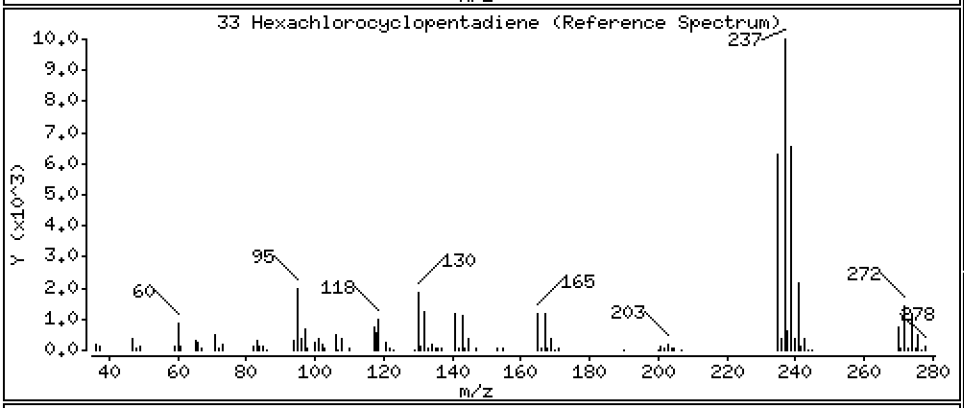
Column diameter: 0.25

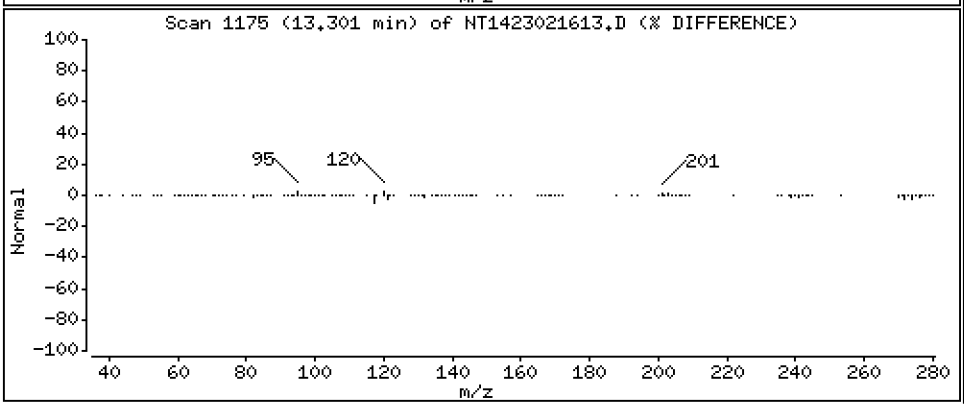
33 Hexachlorocyclopentadiene

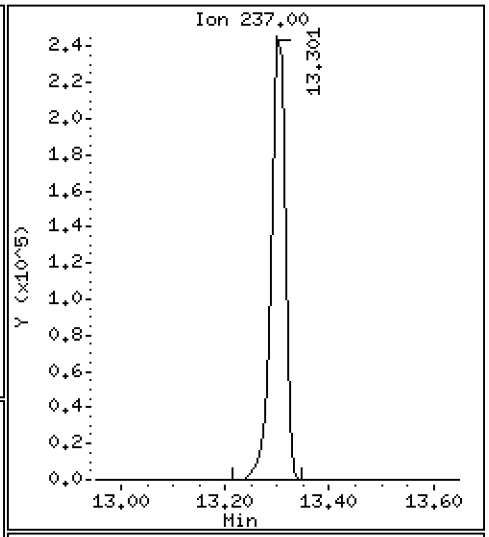
Concentration: 5.301 ug/mL

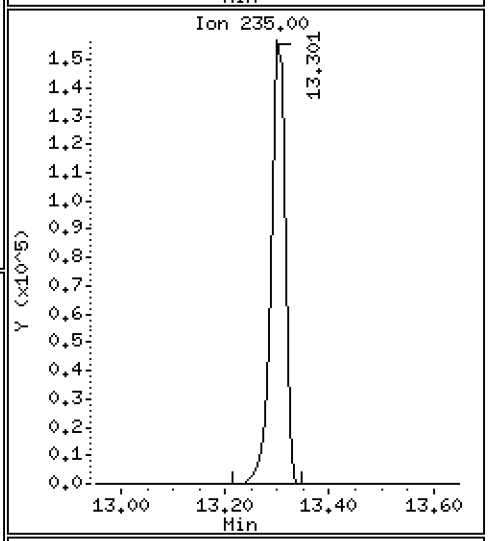


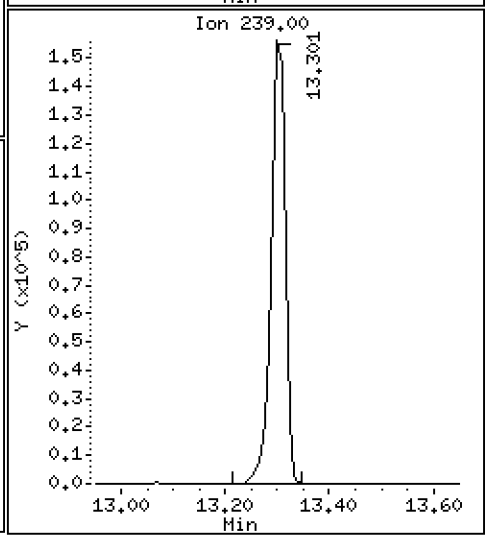












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

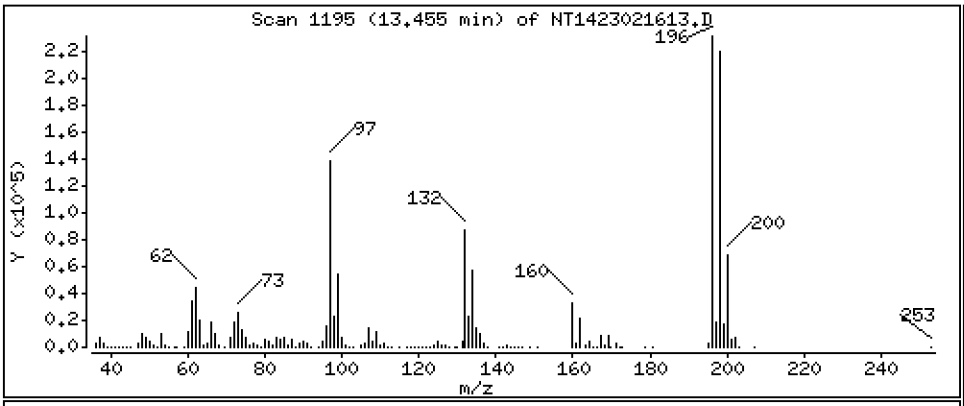
Operator: DSD

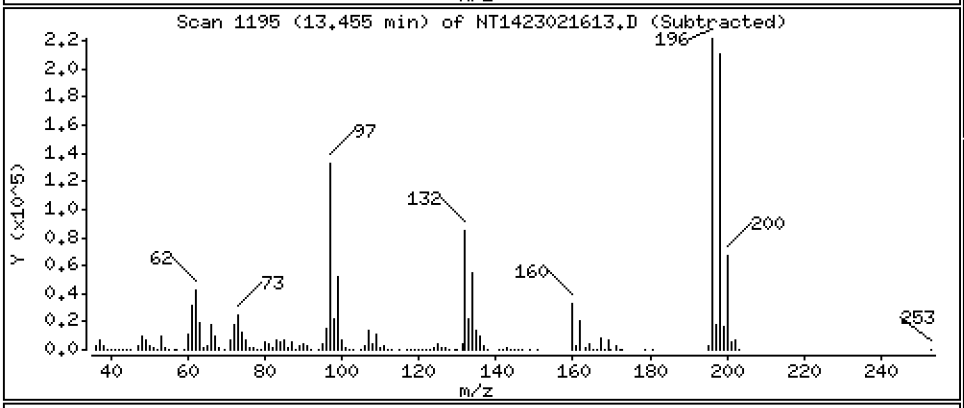
Column phase: ZB-5msi

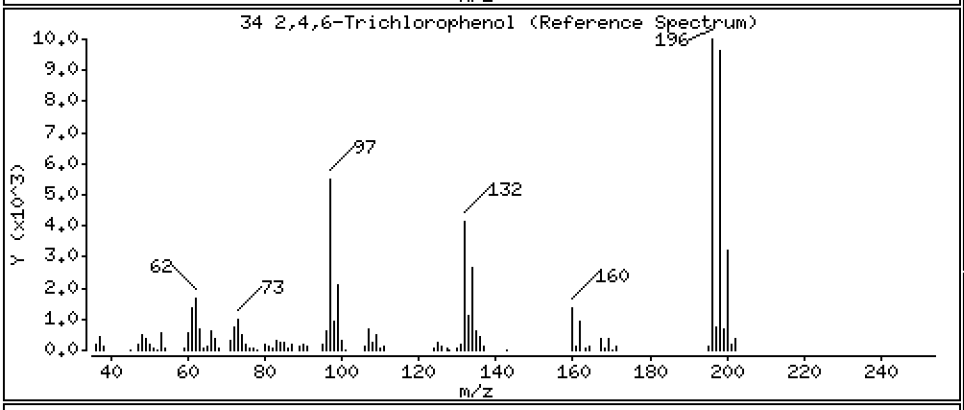
Column diameter: 0.25

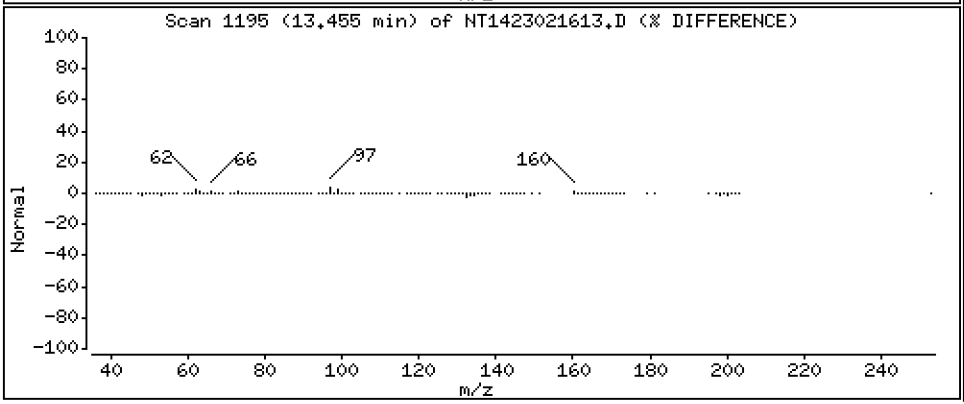
34 2,4,6-Trichlorophenol

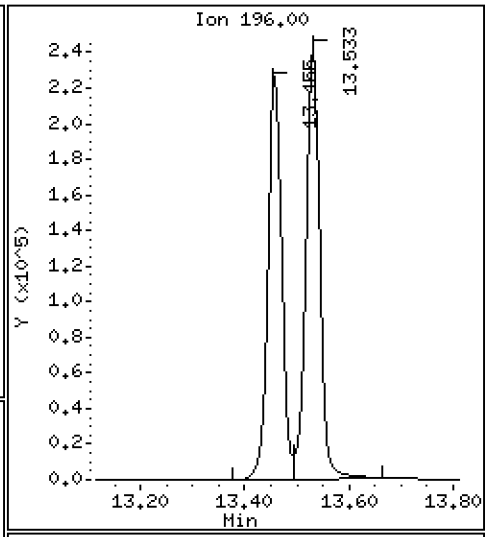
Concentration: 4.808 ug/mL

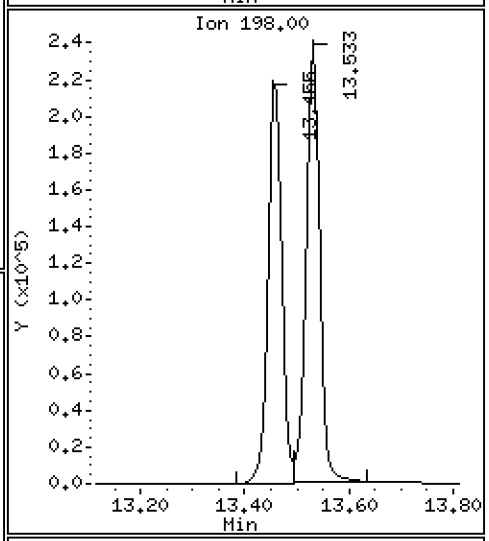


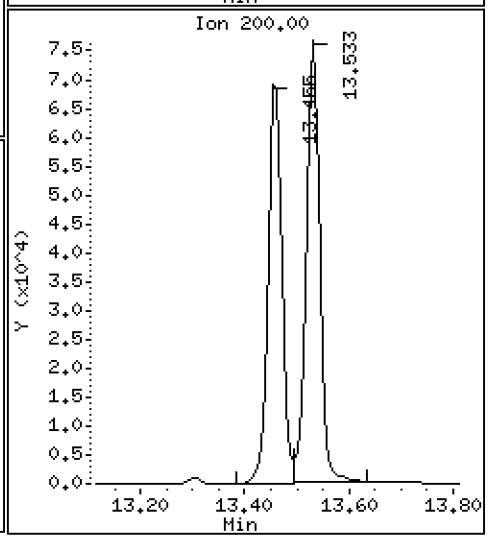












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

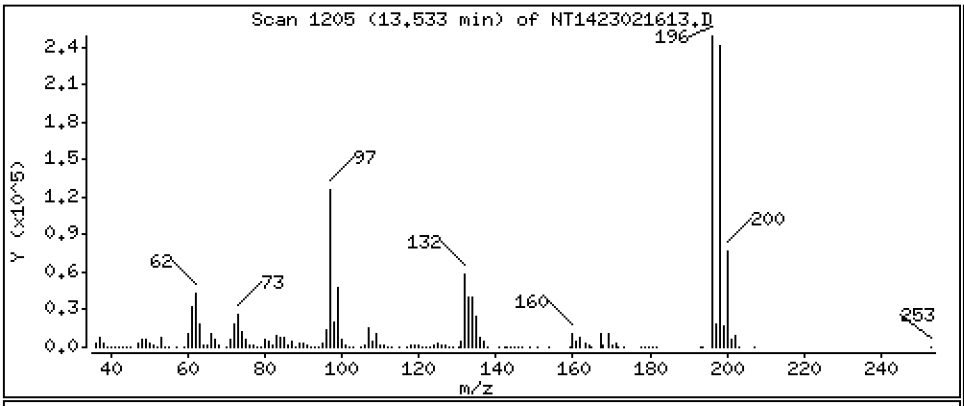
Operator: DSD

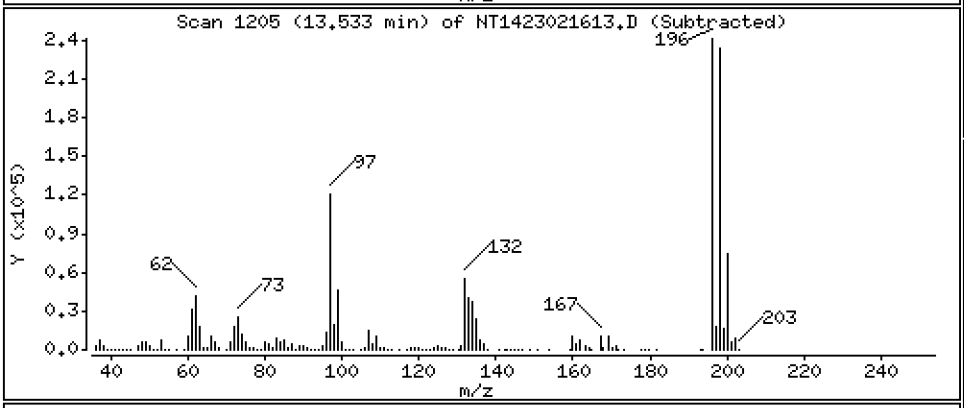
Column phase: ZB-5msi

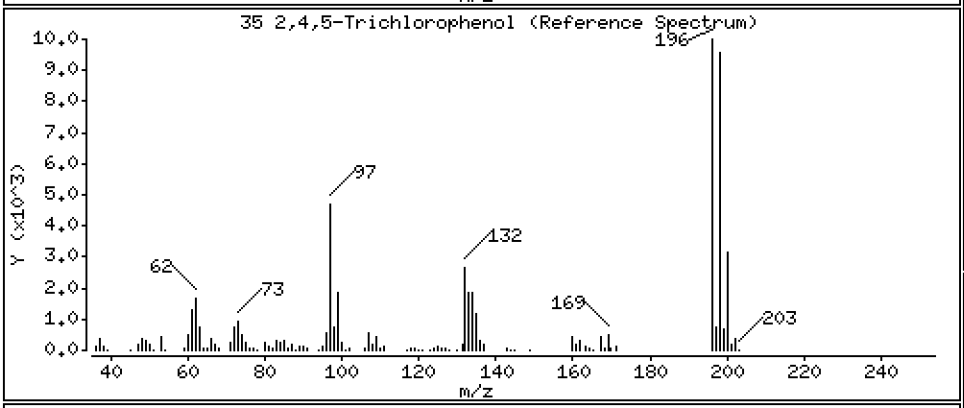
Column diameter: 0.25

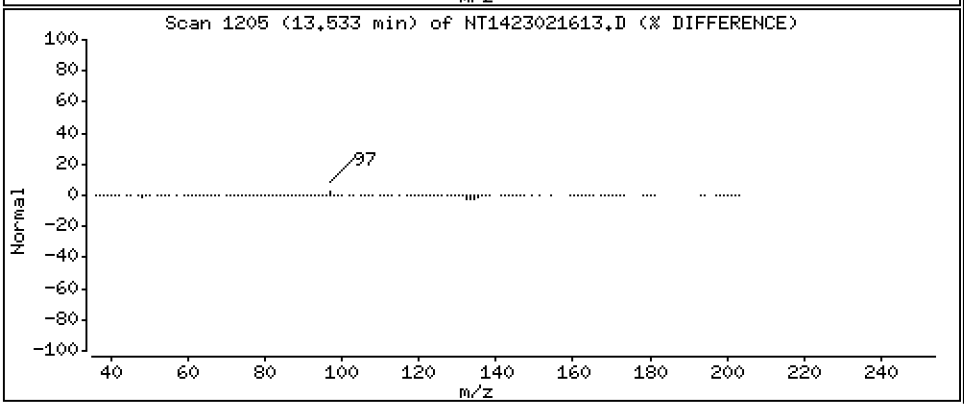
35 2,4,5-Trichlorophenol

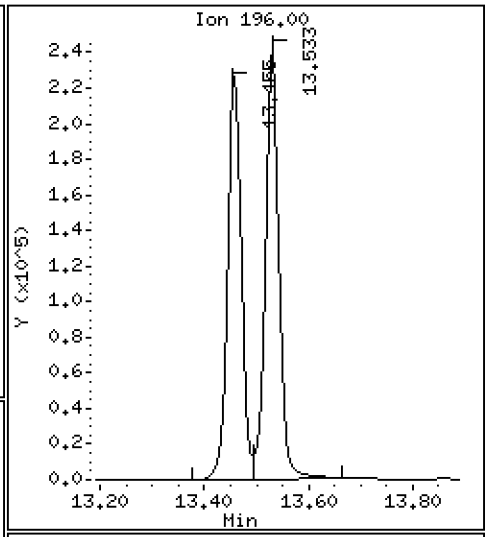
Concentration: 4.707 ug/mL

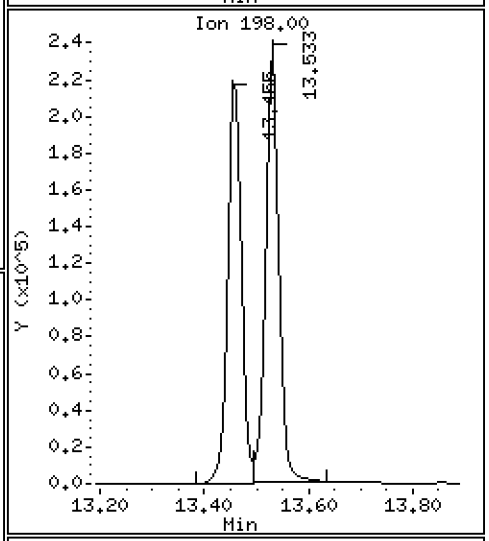


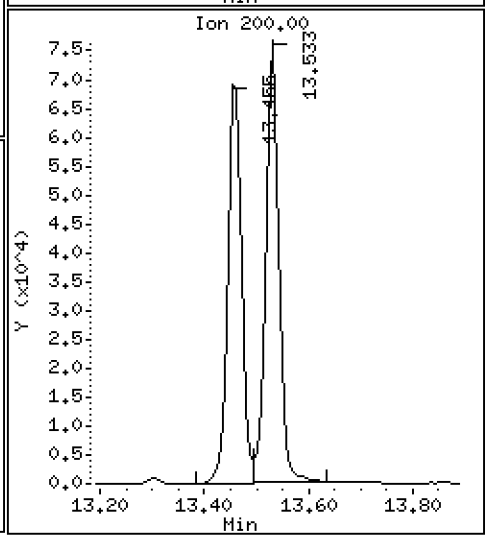












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

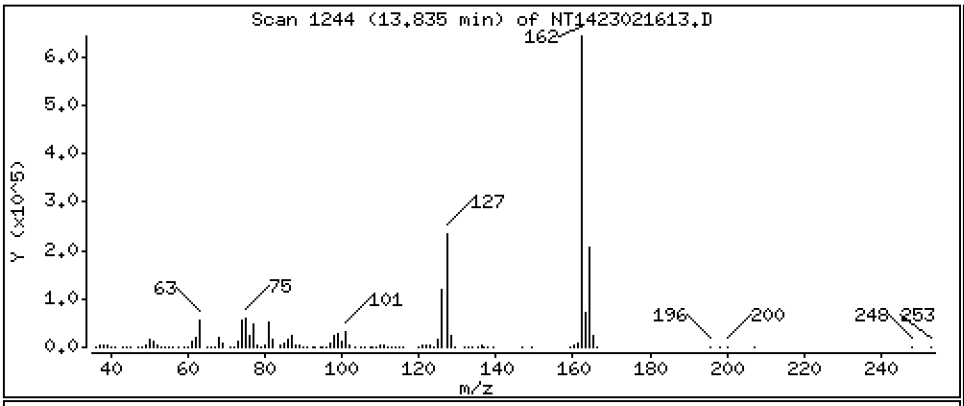
Operator: DSD

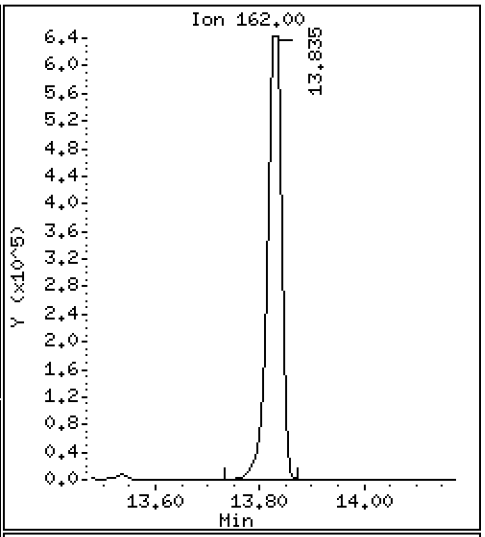
Column phase: ZB-5msi

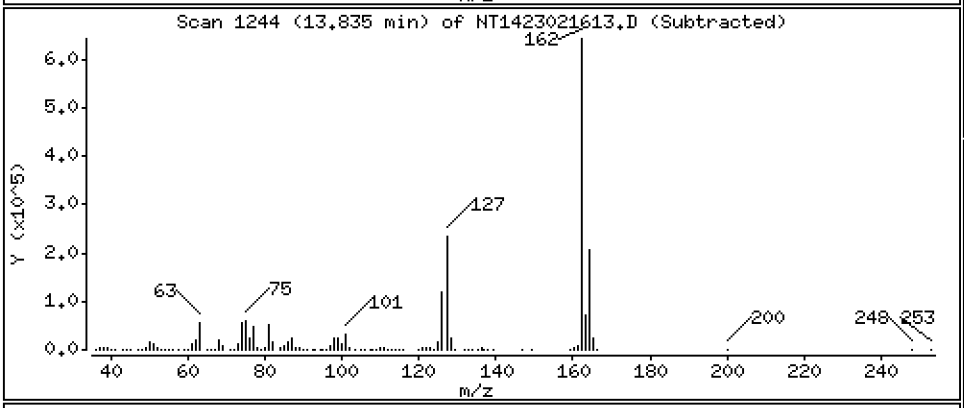
Column diameter: 0.25

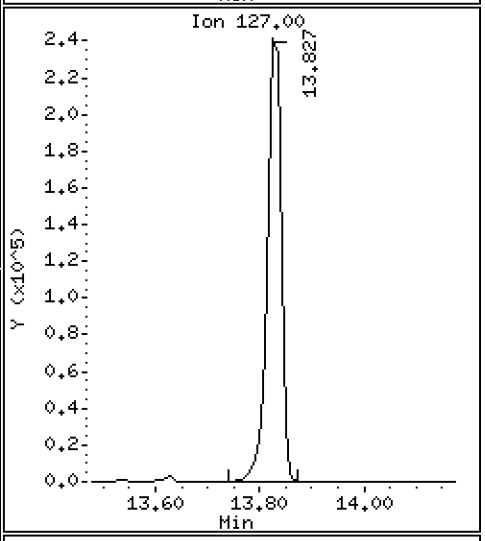
37 2-Chloronaphthalene

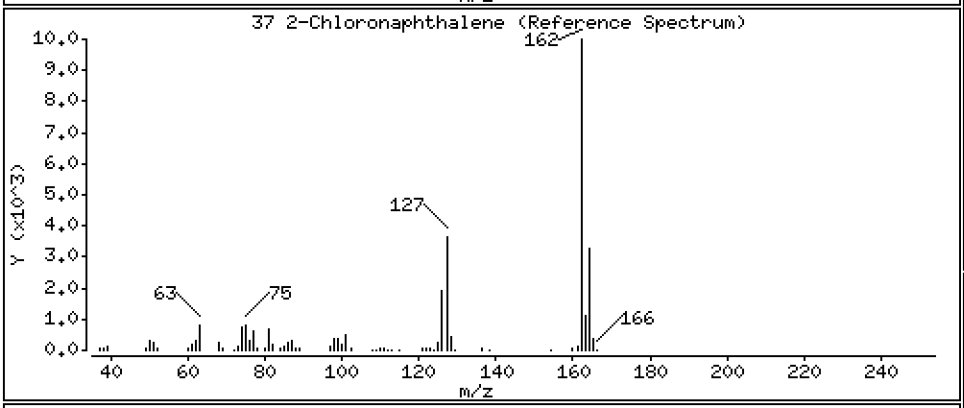
Concentration: 4.639 ug/mL

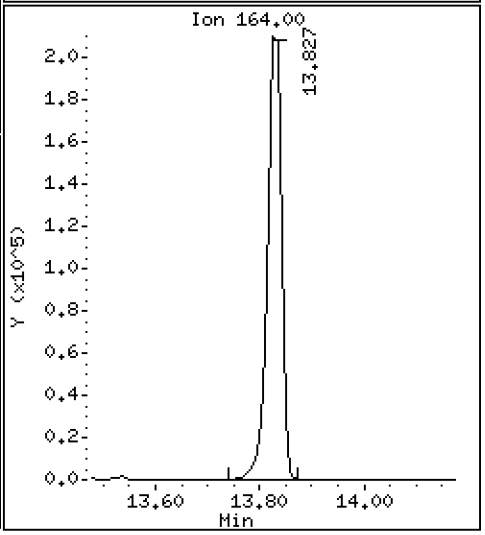


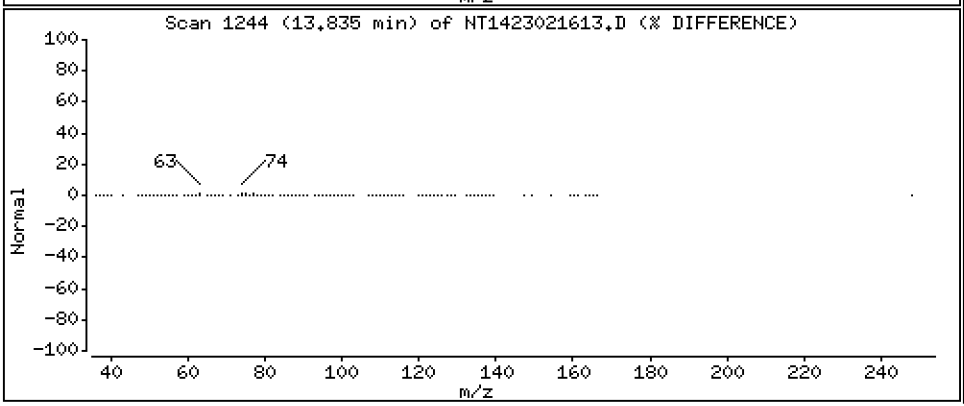












Date : 16-FEB-2023 21:18

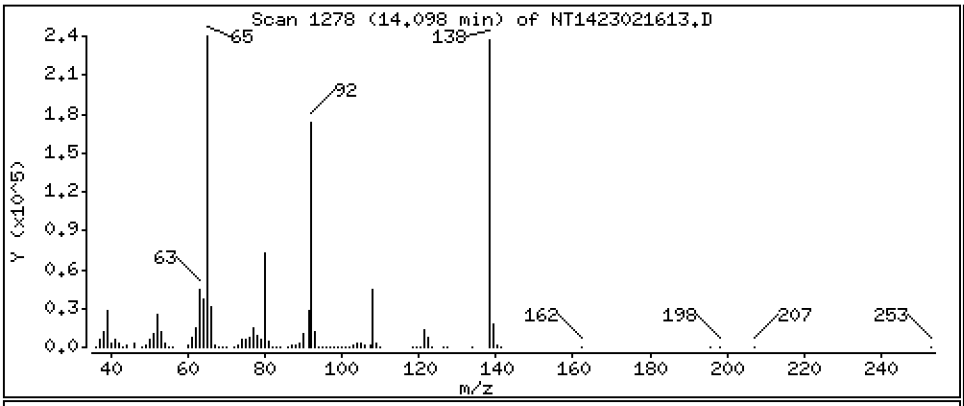
Client ID: Instrument: nt14.i

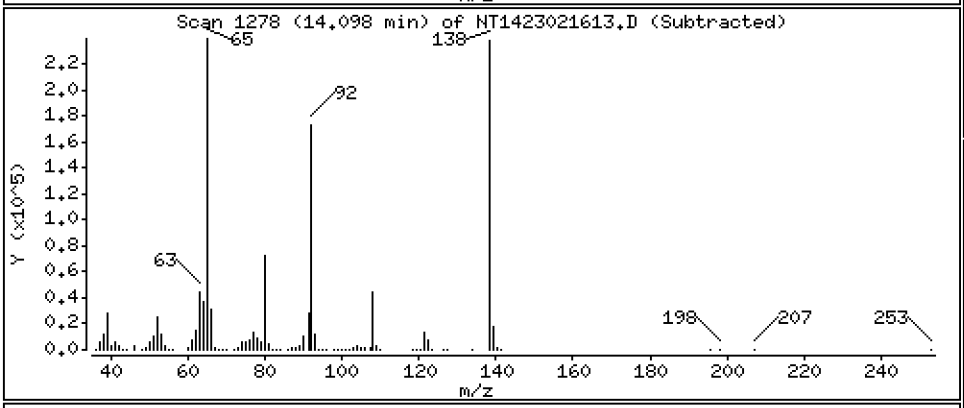
Sample Info: SLB0234-SCV1

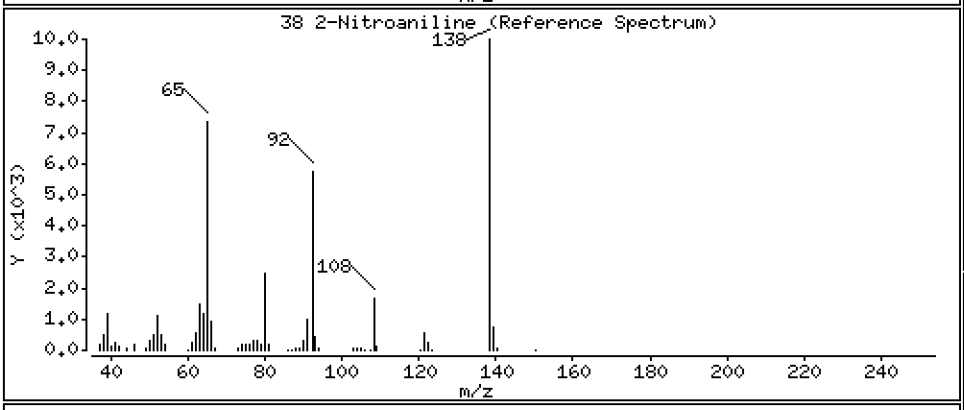
Operator: DSD

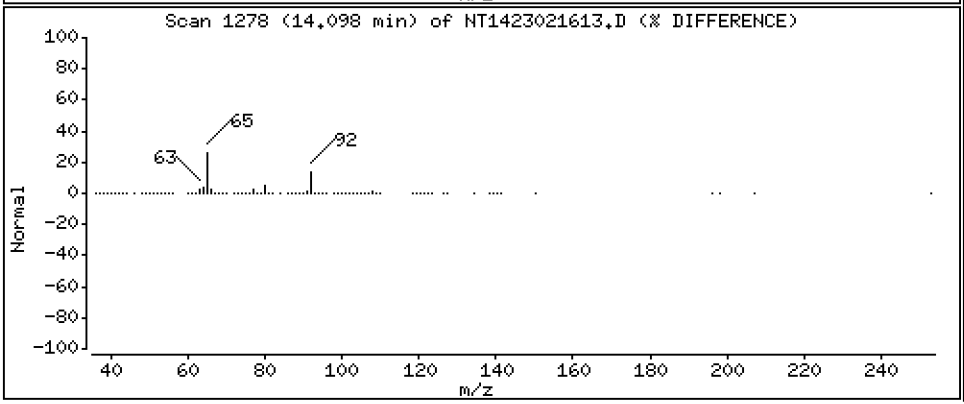
Column phase: ZB-5msi Column diameter: 0.25

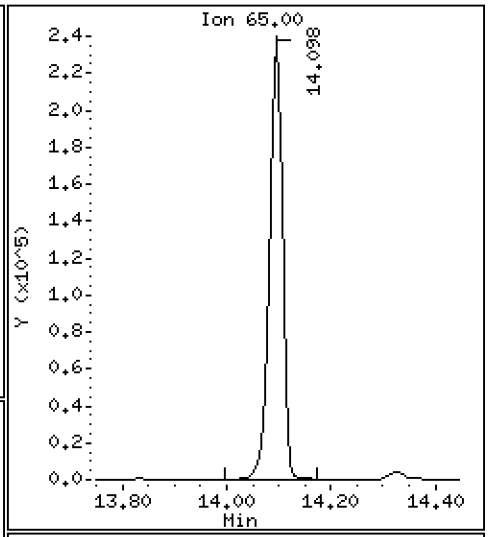
38 2-Nitroaniline Concentration: 4.852 ug/mL

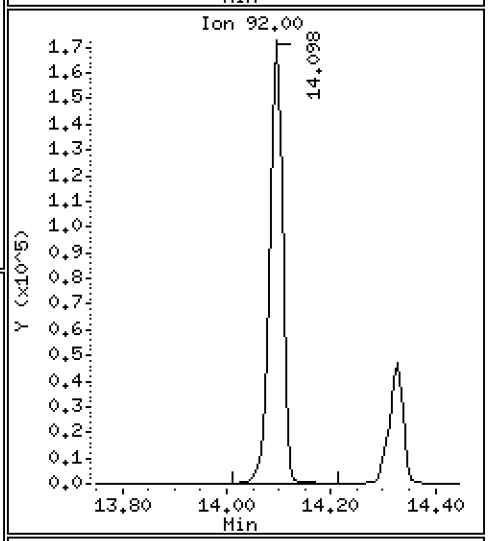


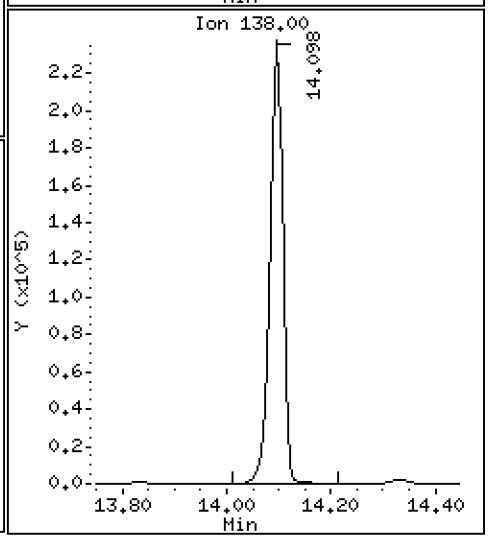












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

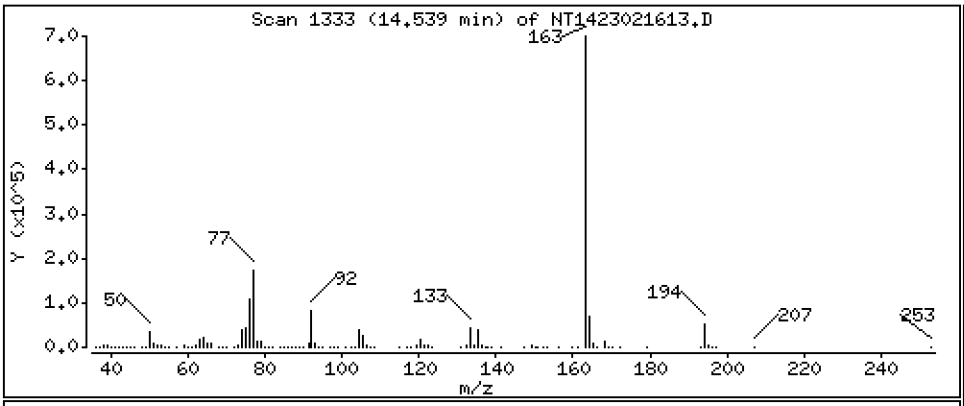
Operator: DSD

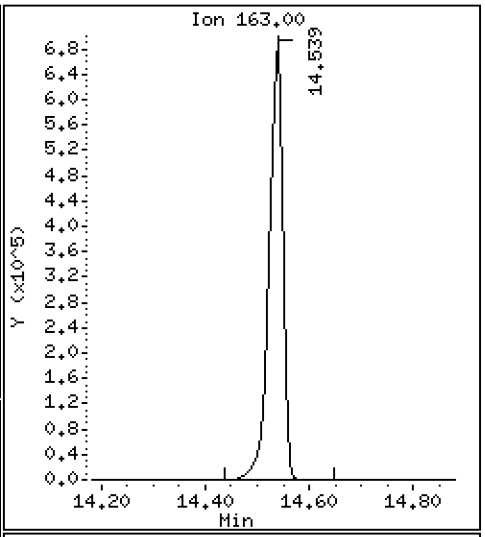
Column phase: ZB-5msi

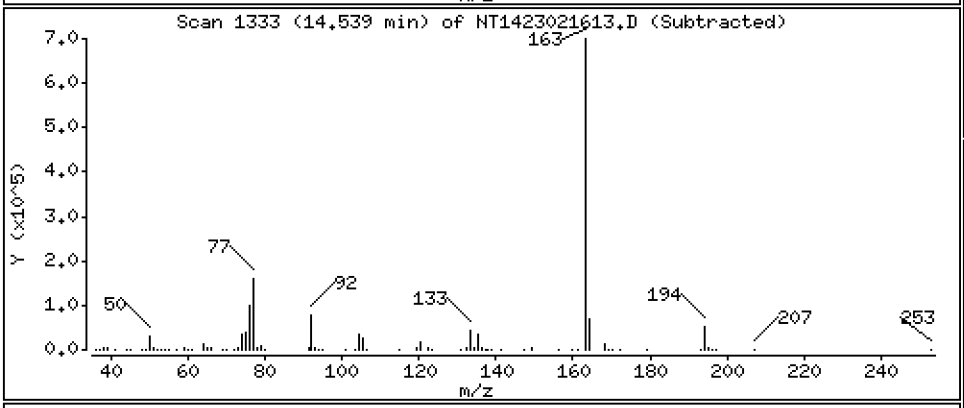
Column diameter: 0.25

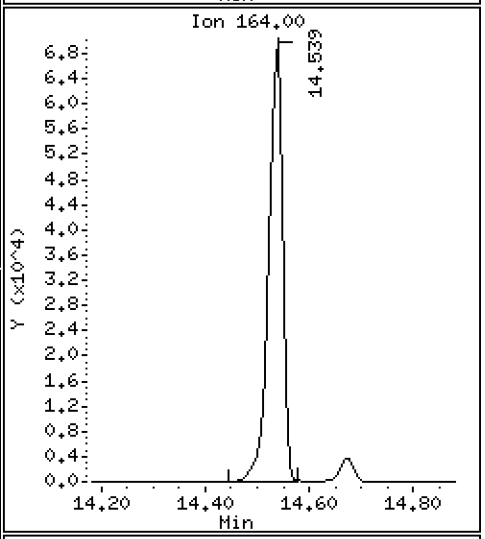
39 Dimethylphthalate

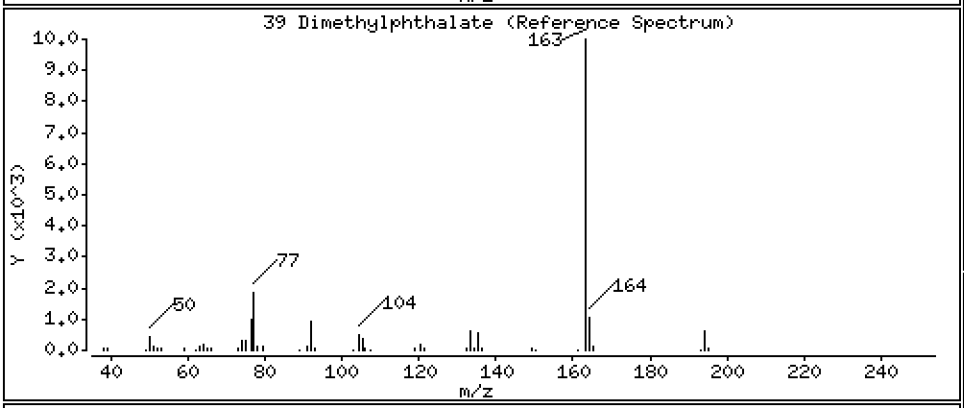
Concentration: 4.693 ug/mL

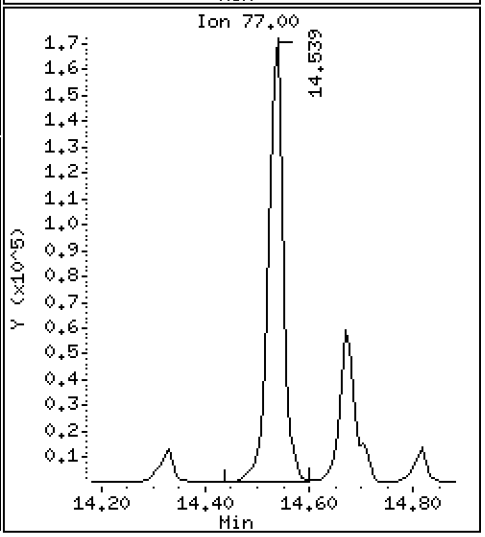


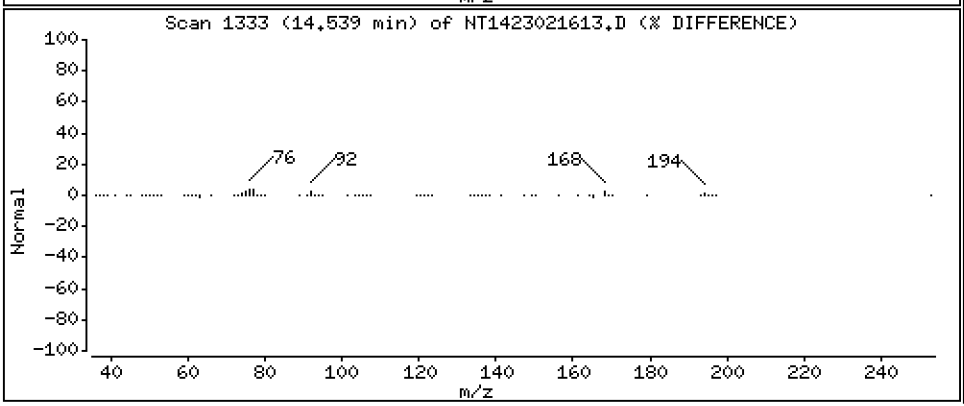












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

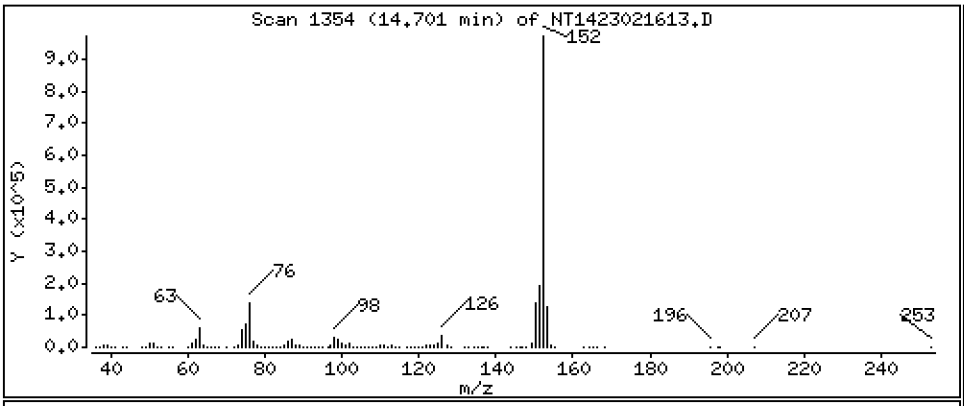
Operator: DSD

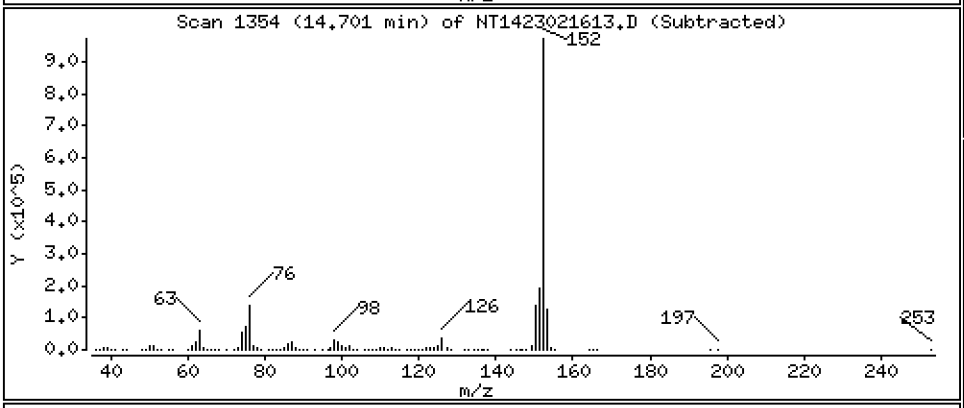
Column phase: ZB-5msi

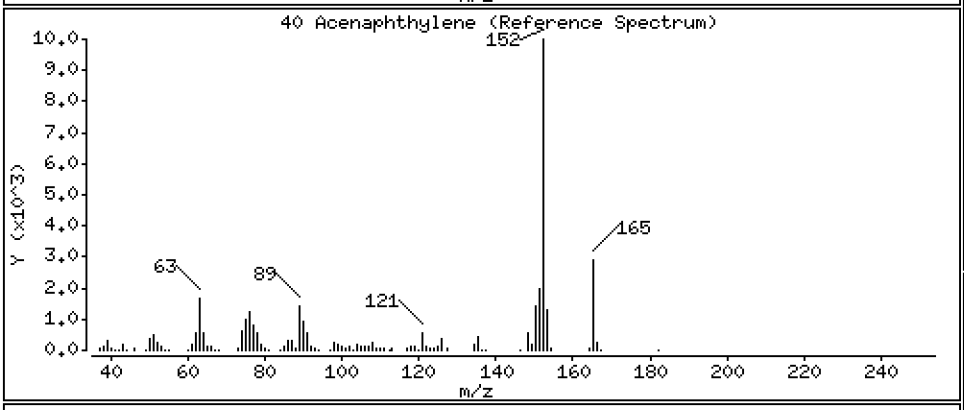
Column diameter: 0.25

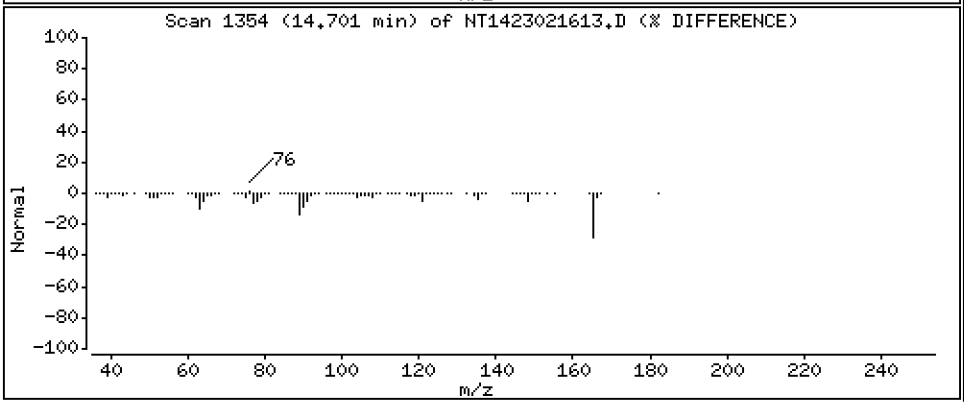
40 Acenaphthylene

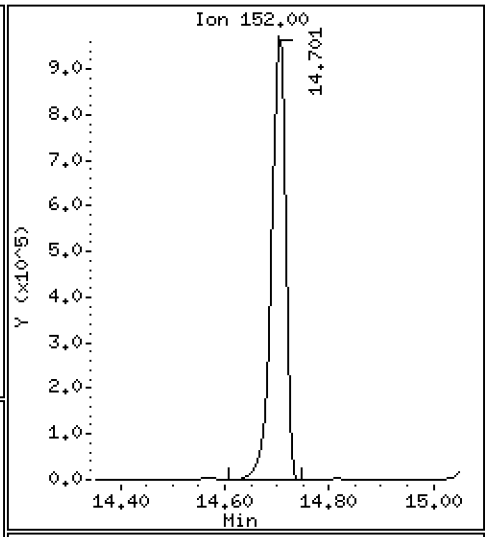
Concentration: 4.657 ug/mL

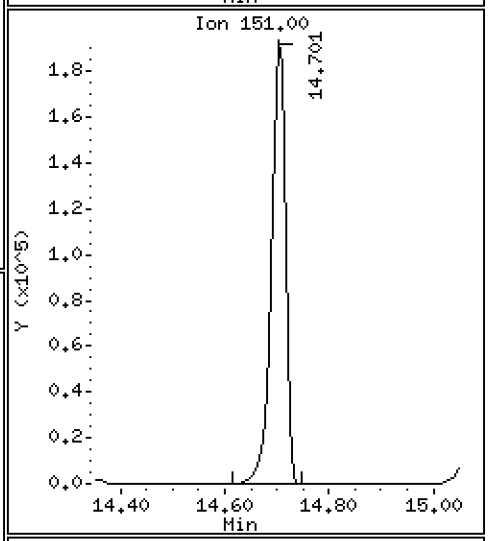


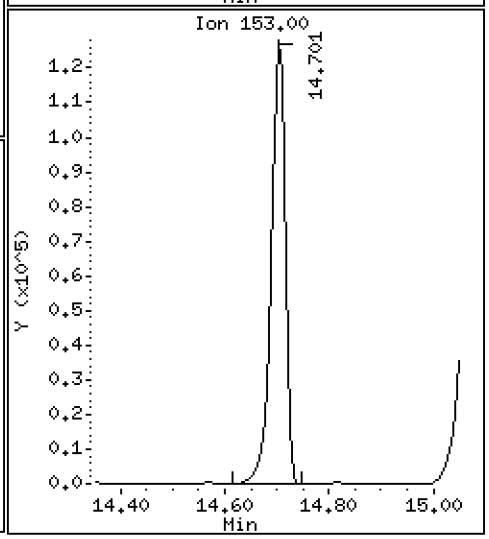












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

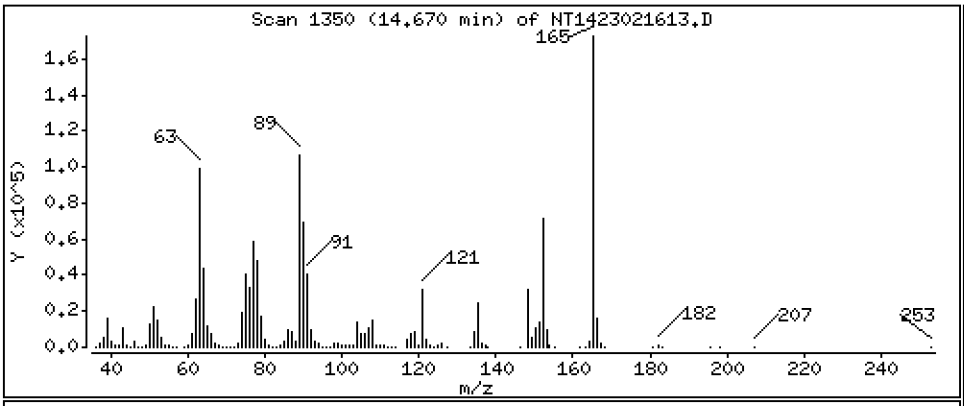
Operator: DSD

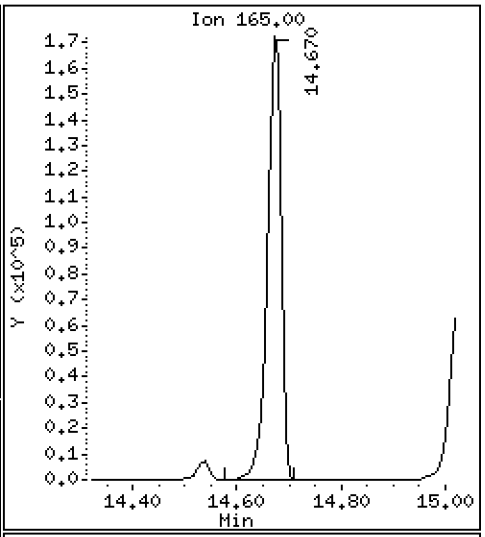
Column phase: ZB-5msi

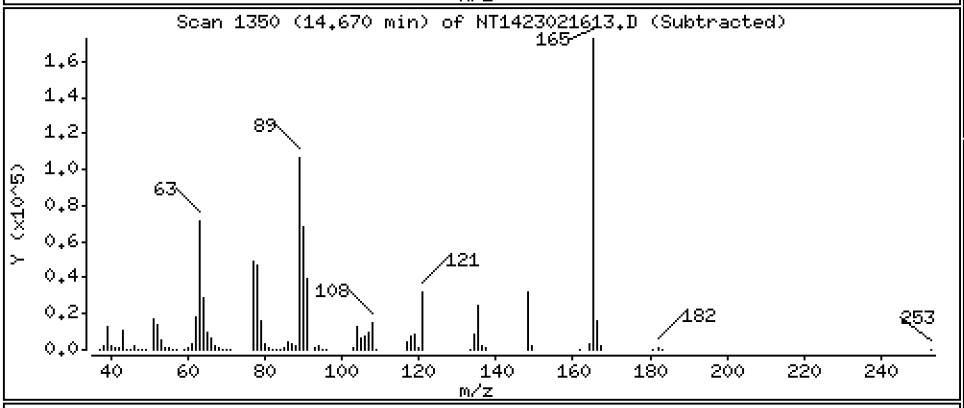
Column diameter: 0.25

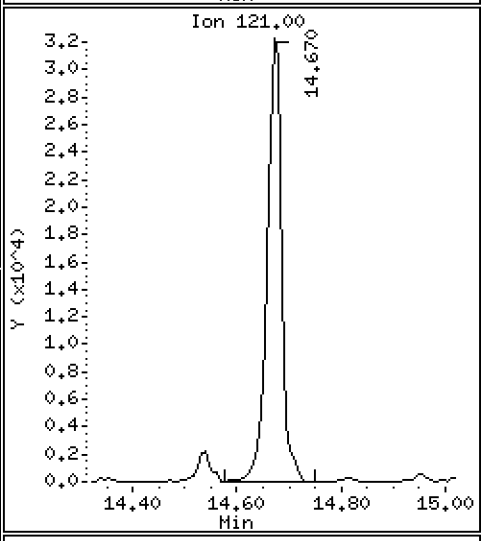
41 2,6-Dinitrotoluene

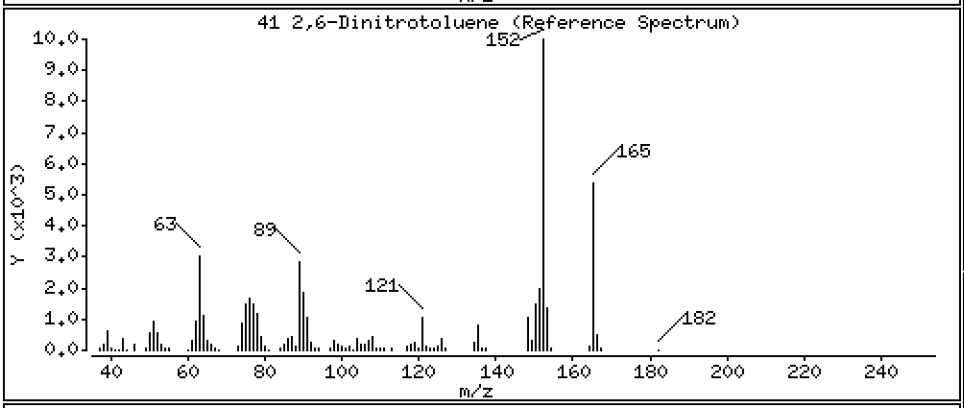
Concentration: 4.935 ug/mL

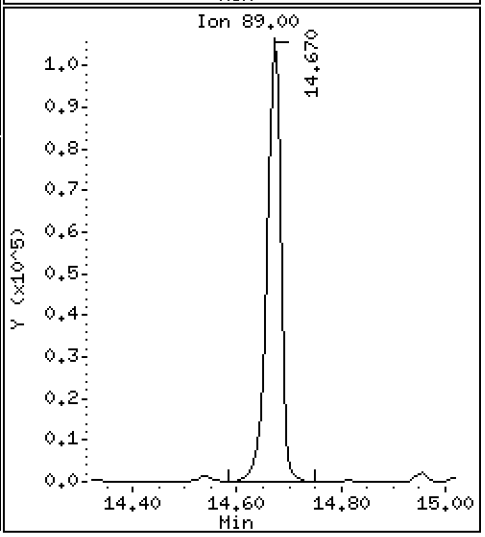


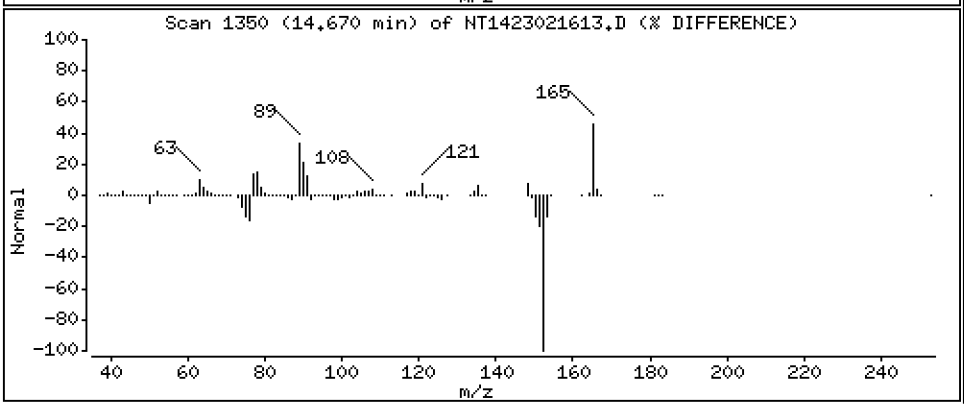












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

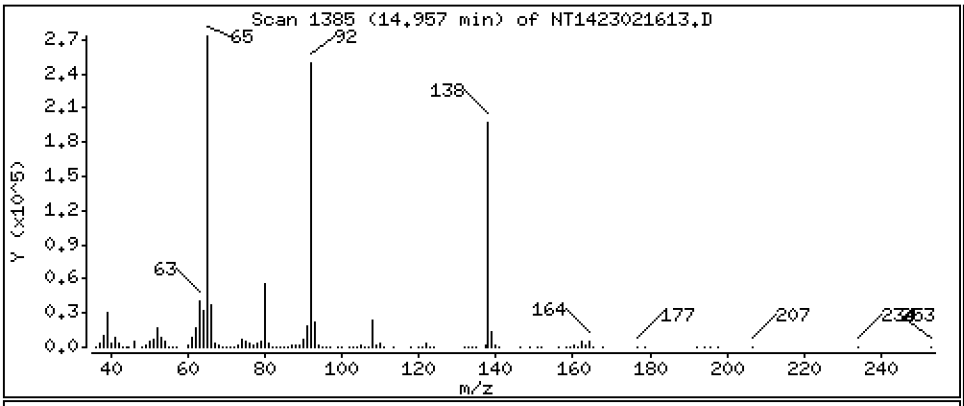
Operator: DSD

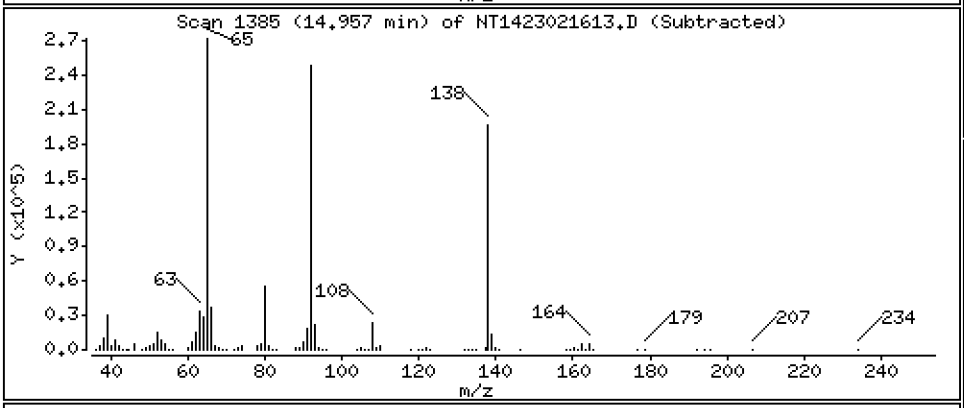
Column phase: ZB-5msi

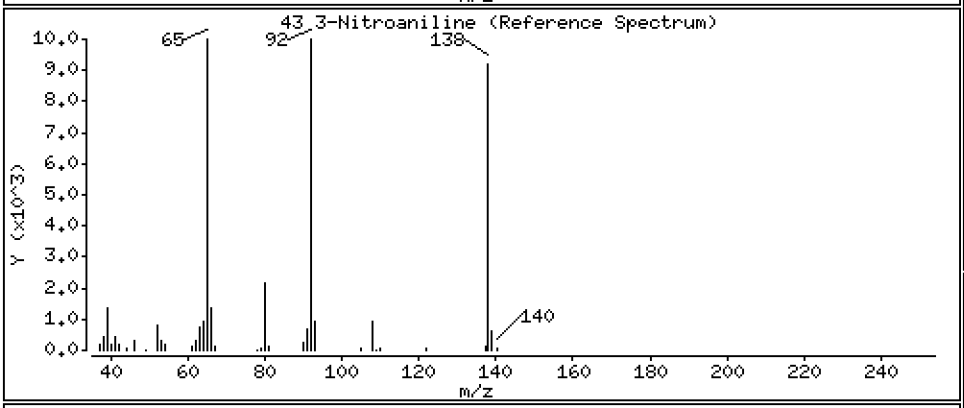
Column diameter: 0.25

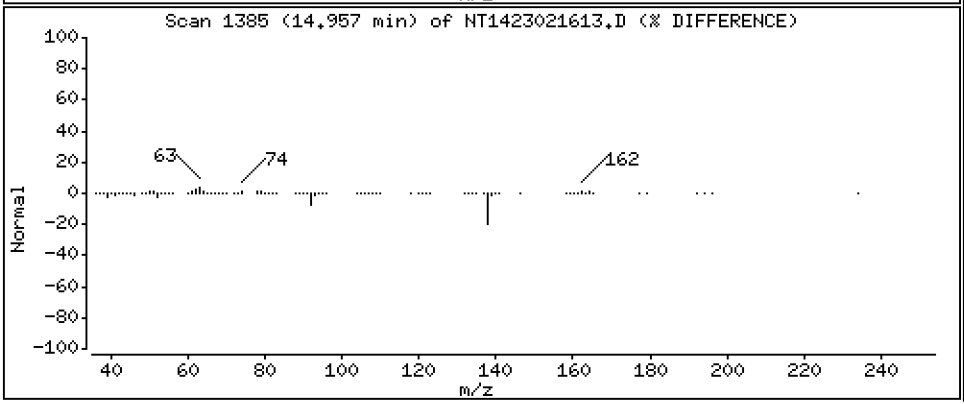
43 3-Nitroaniline

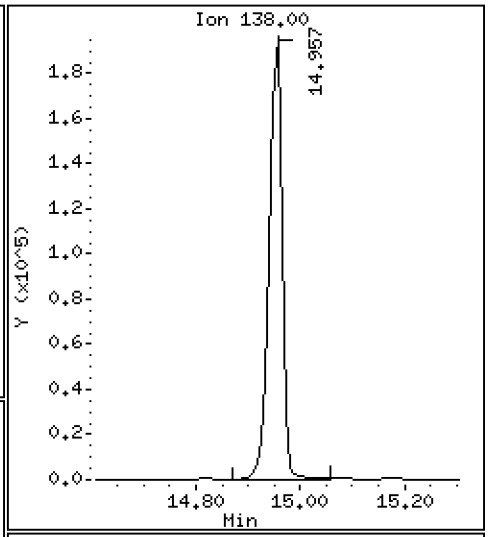
Concentration: 4.922 ug/mL

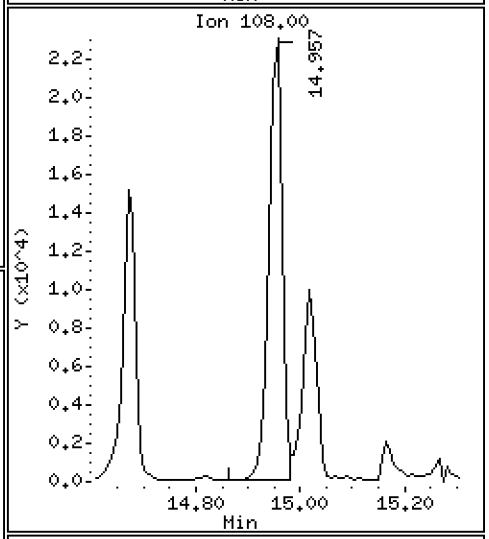


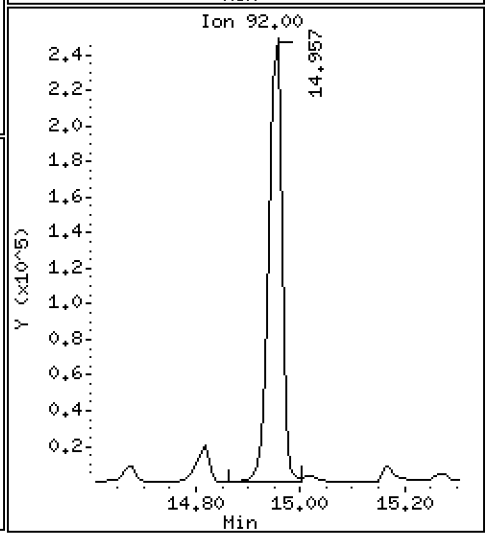












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

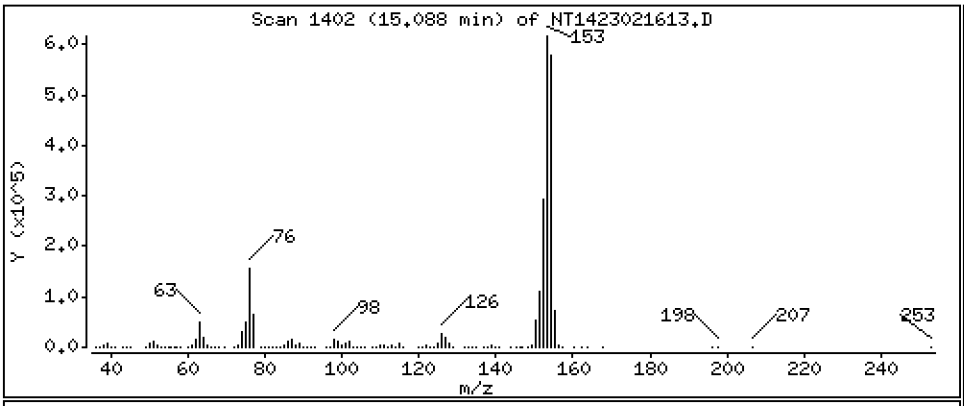
Operator: DSD

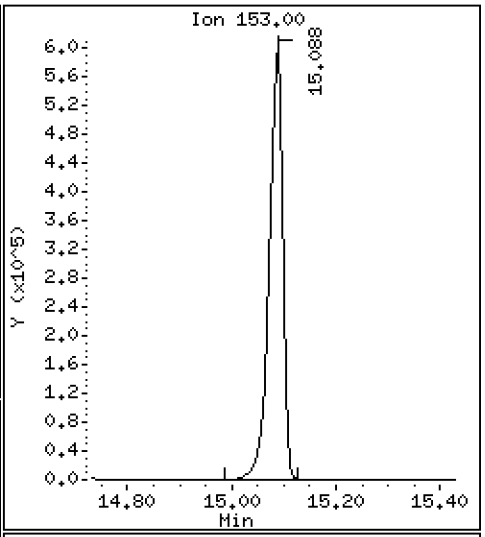
Column phase: ZB-5msi

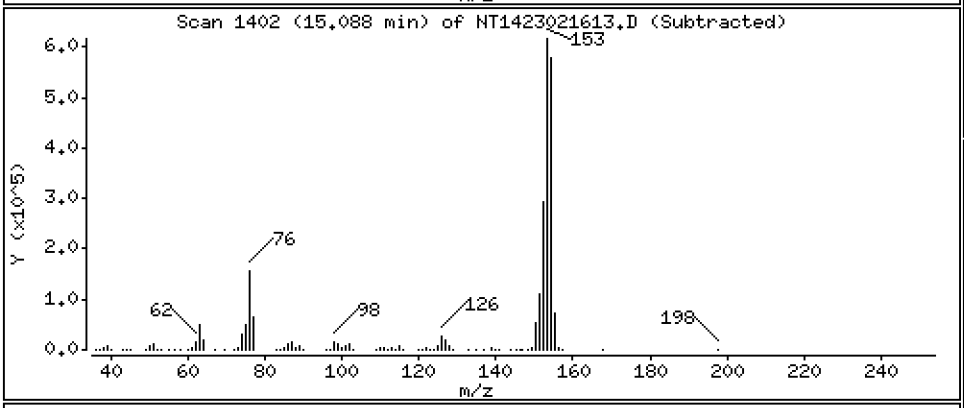
Column diameter: 0.25

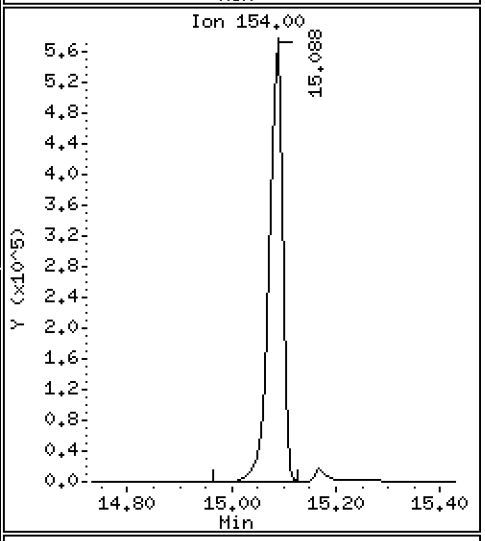
44 Acenaphthene

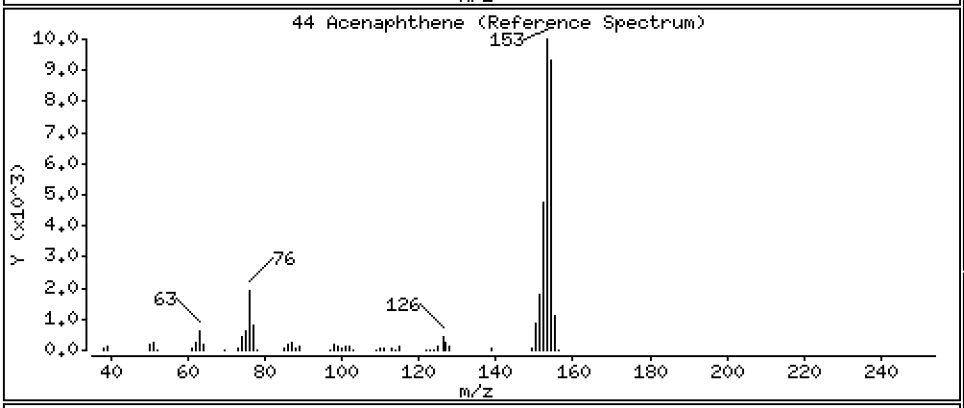
Concentration: 4.633 ug/mL

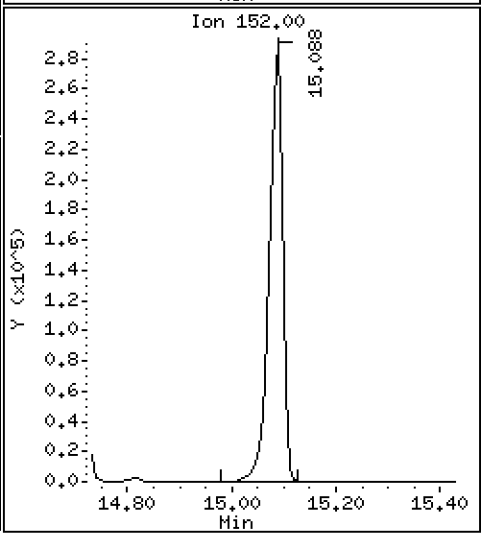


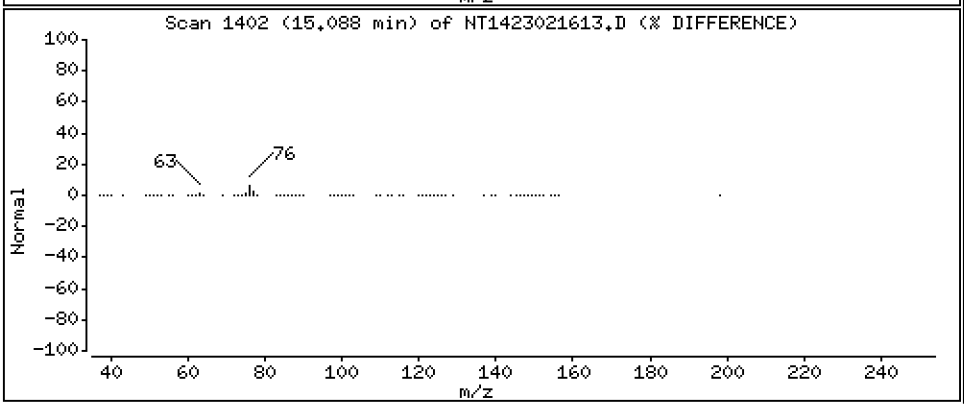












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

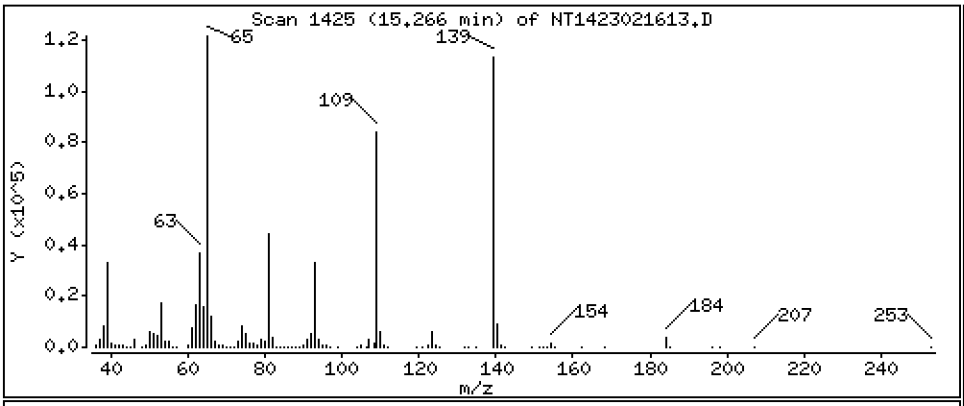
Operator: DSD

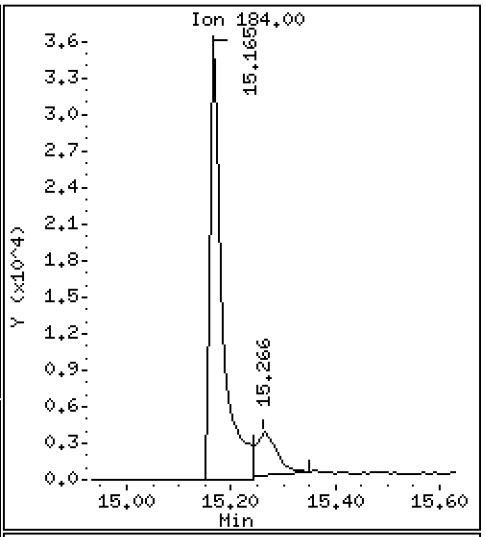
Column phase: ZB-5msi

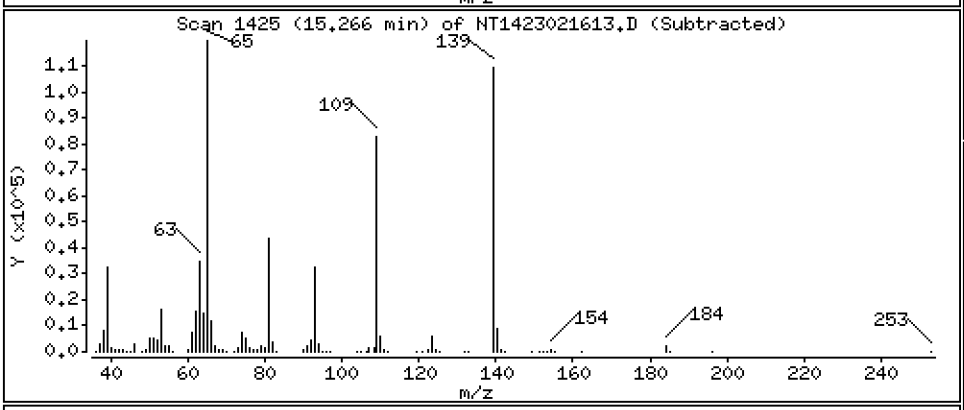
Column diameter: 0.25

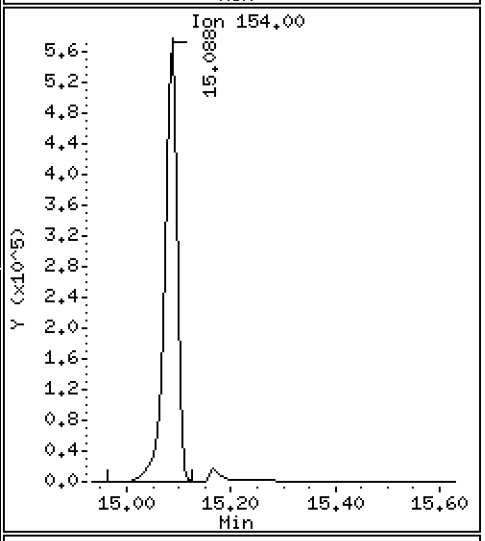
45 2,4-Dinitrophenol

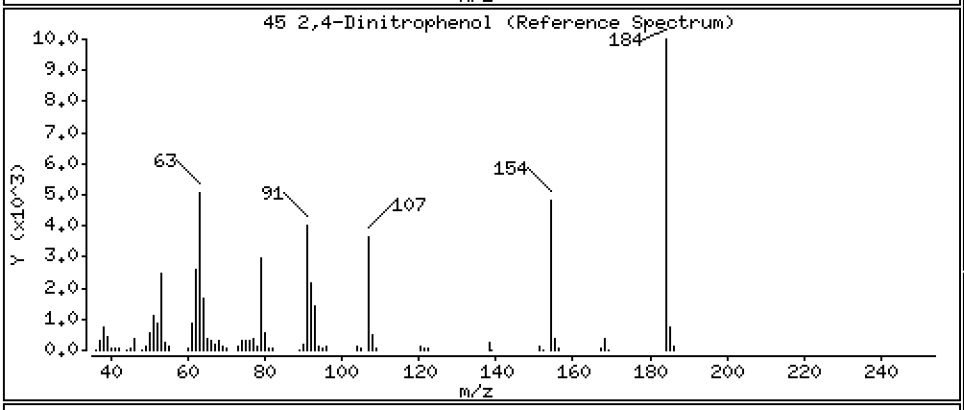
Concentration: 0.2502 ug/mL

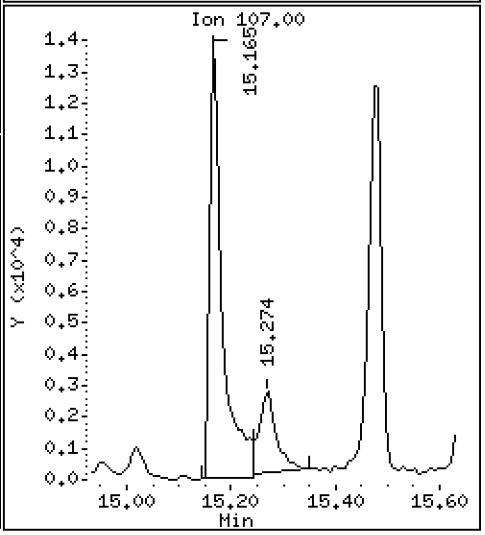


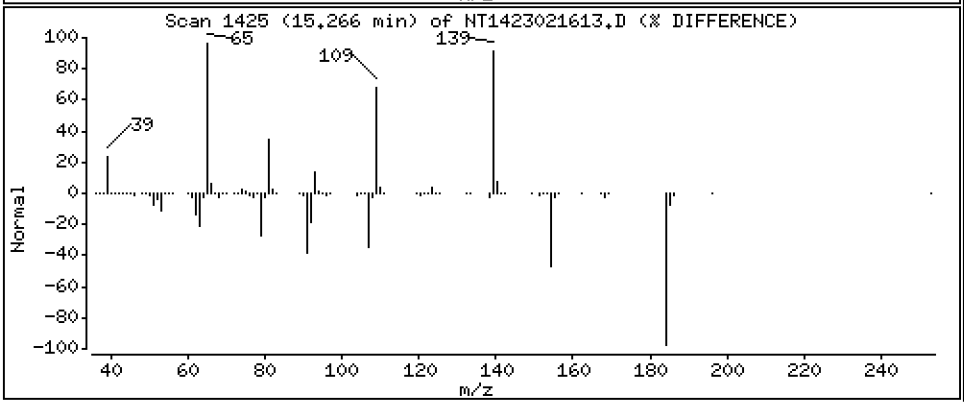












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

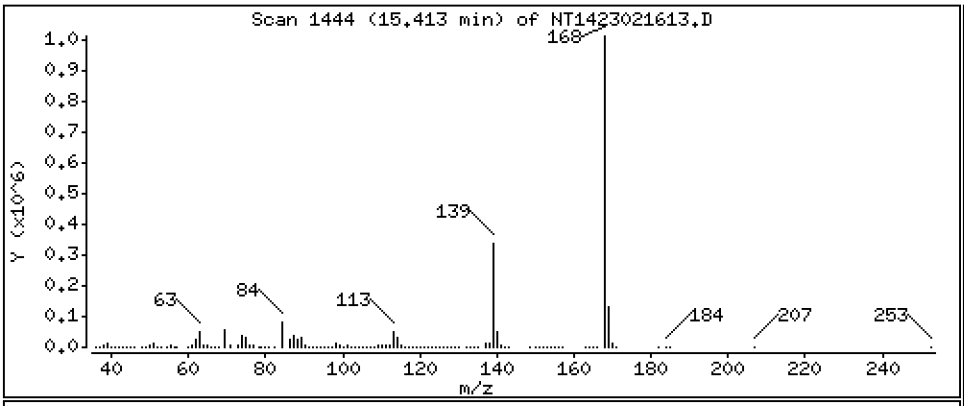
Operator: DSD

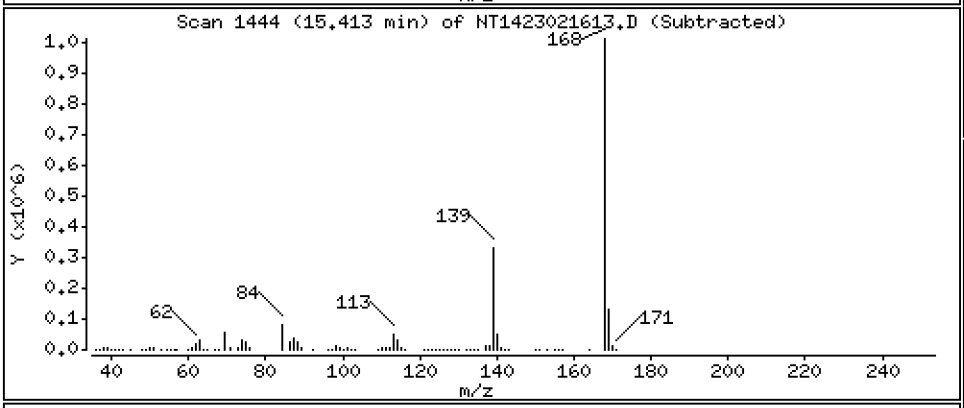
Column phase: ZB-5msi

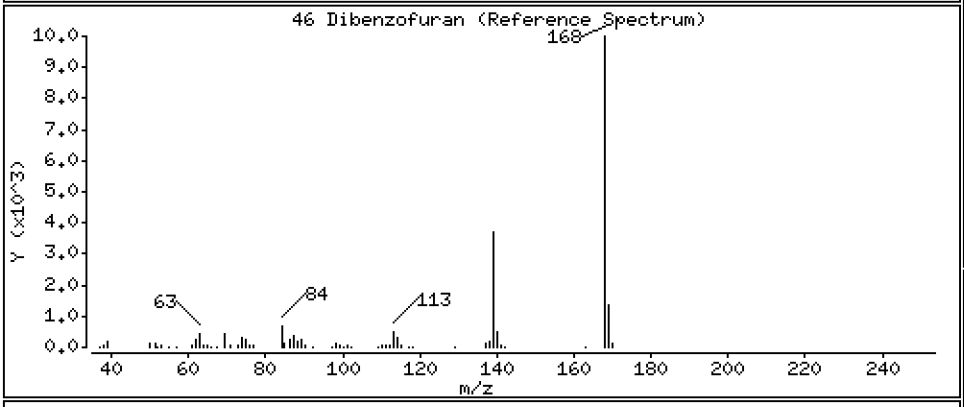
Column diameter: 0.25

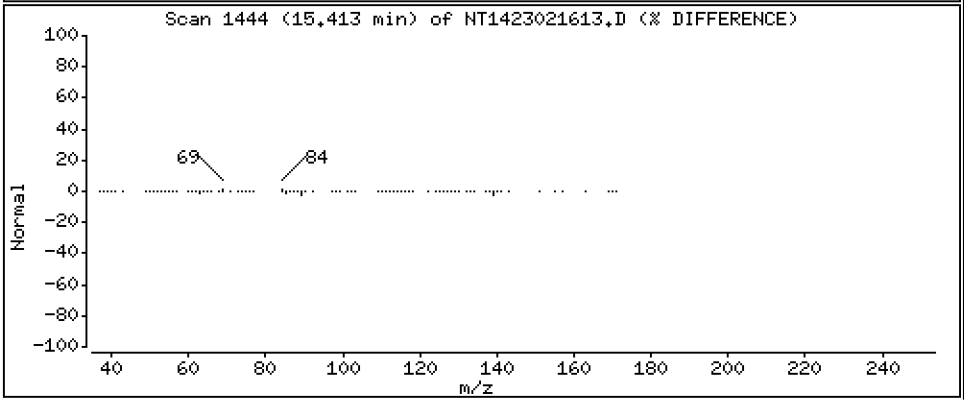
46 Dibenzofuran

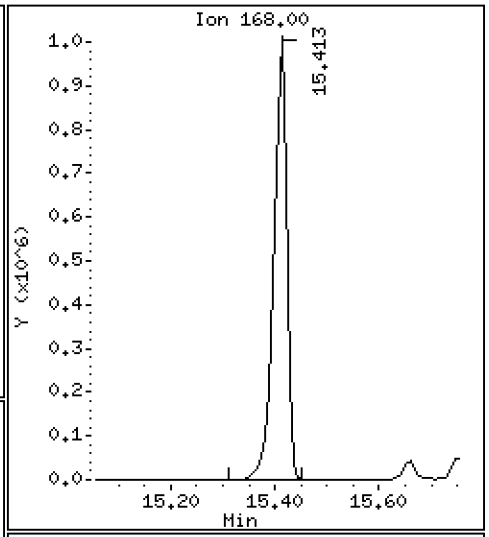
Concentration: 4.548 ug/mL

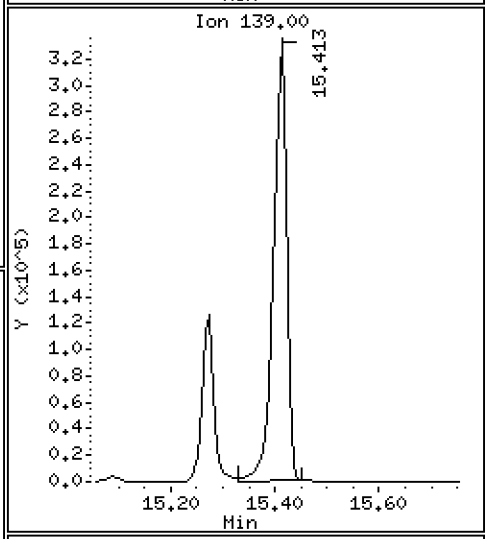


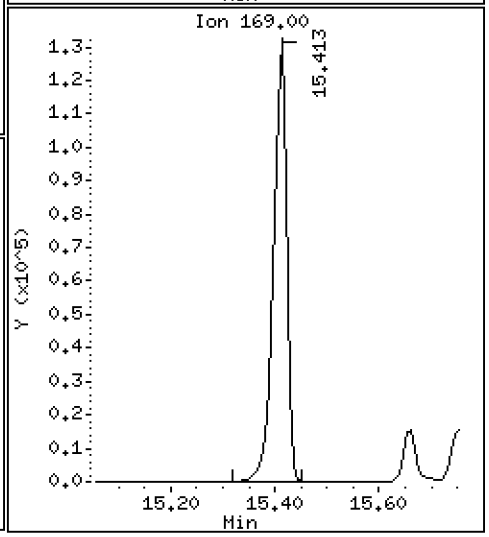












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

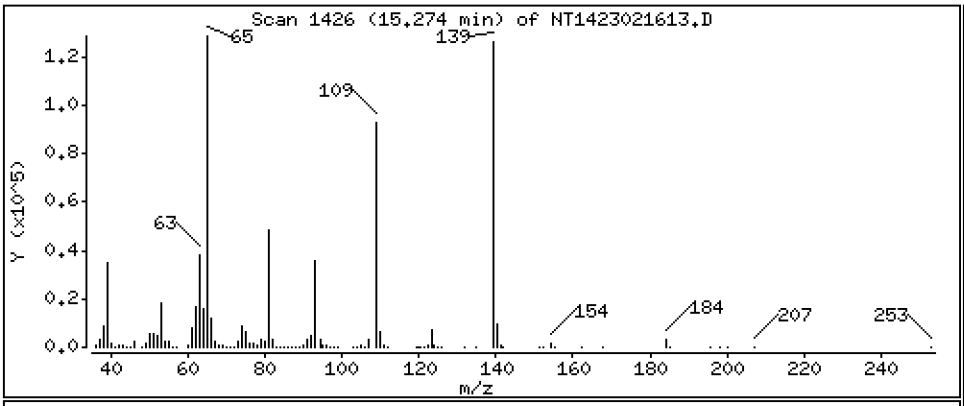
Operator: DSD

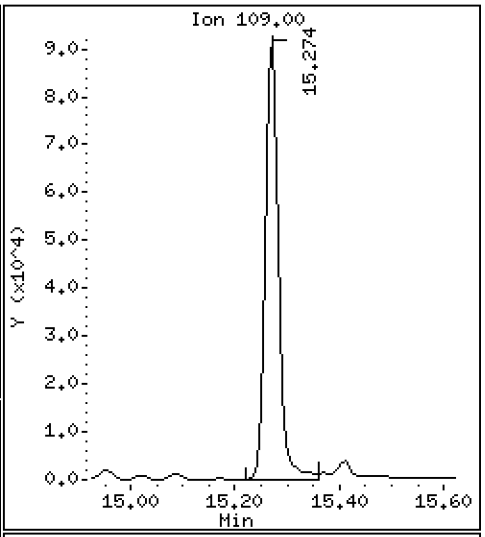
Column phase: ZB-5msi

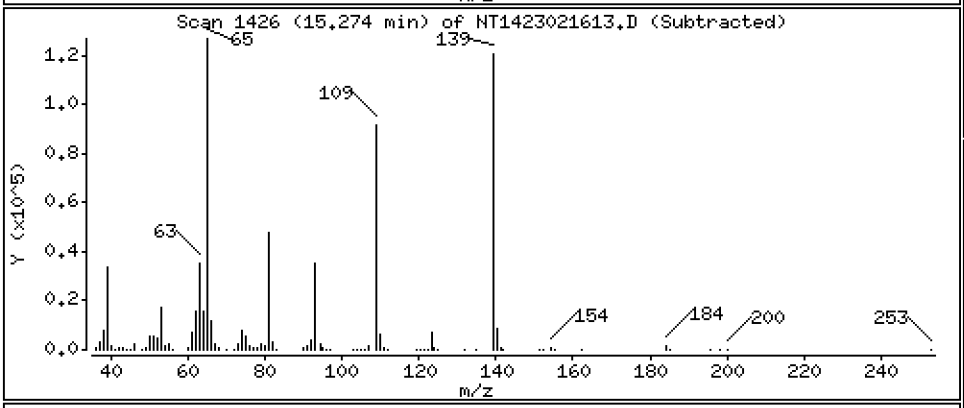
Column diameter: 0.25

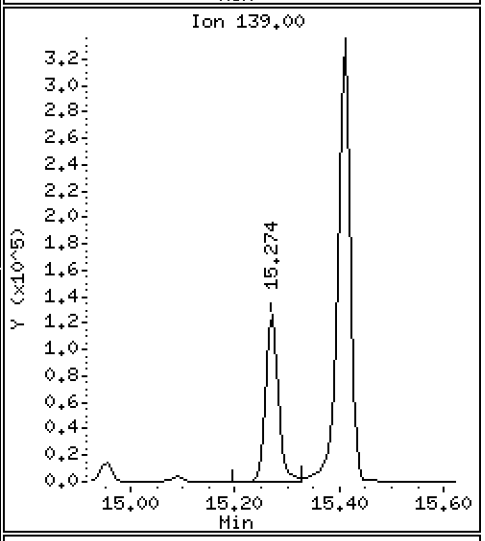
47 4-Nitrophenol

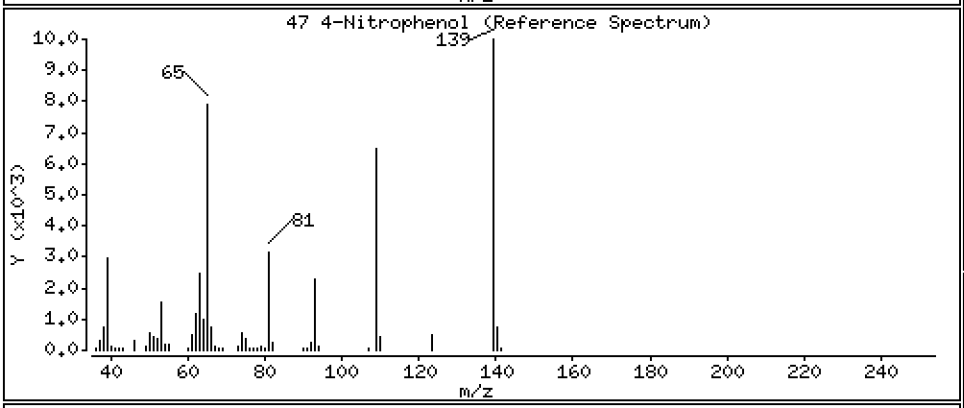
Concentration: 4.052 ug/mL

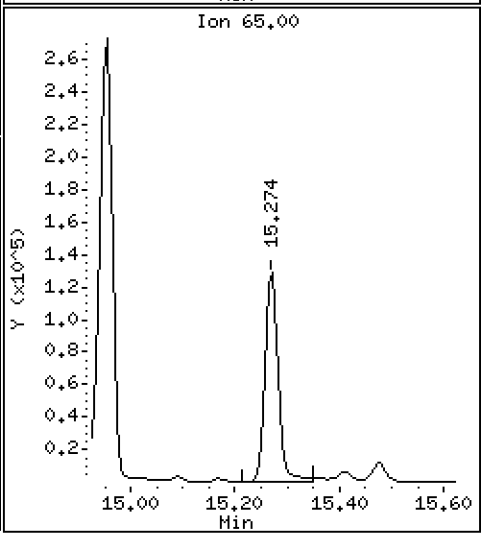


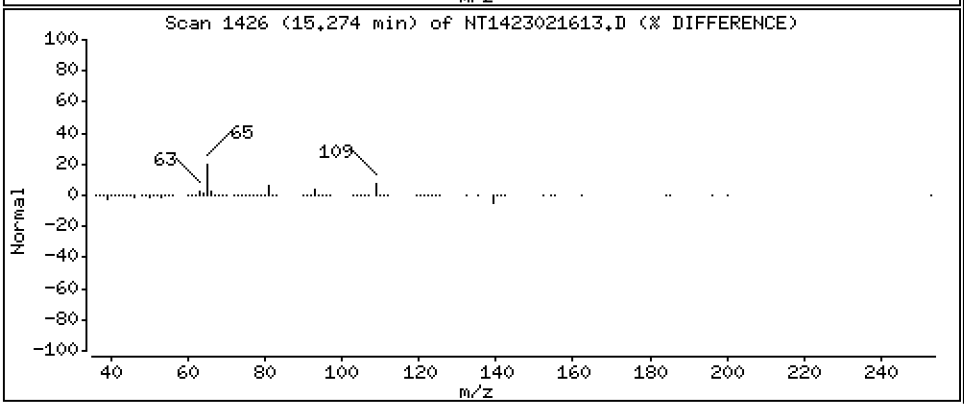












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

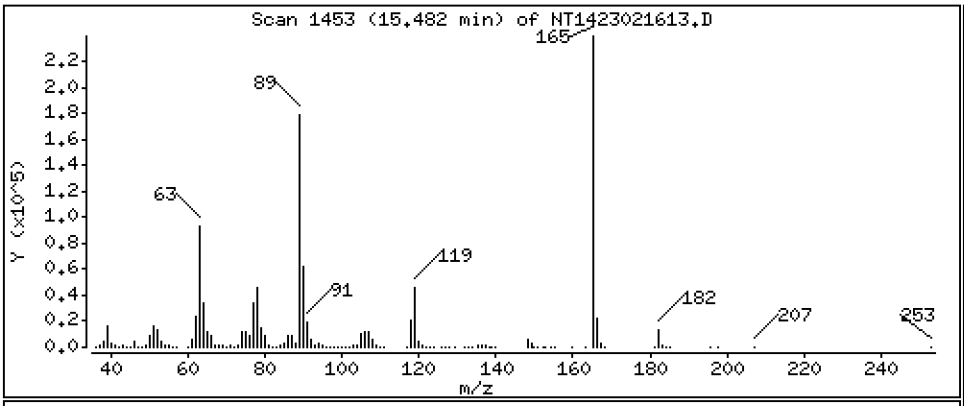
Operator: DSD

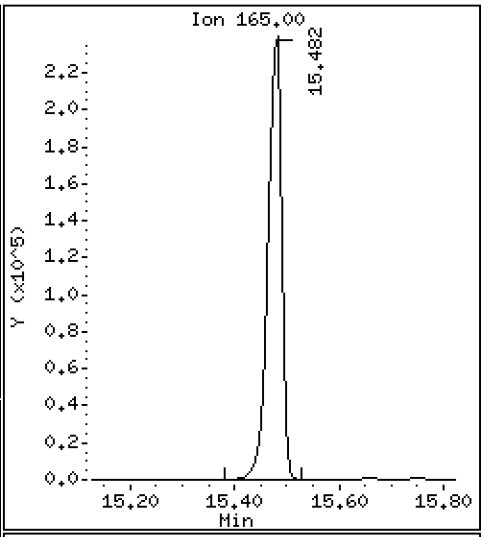
Column phase: ZB-5msi

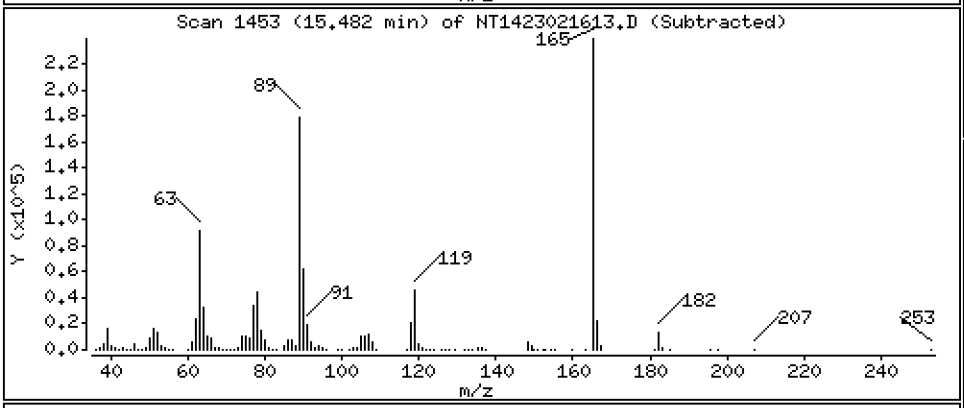
Column diameter: 0.25

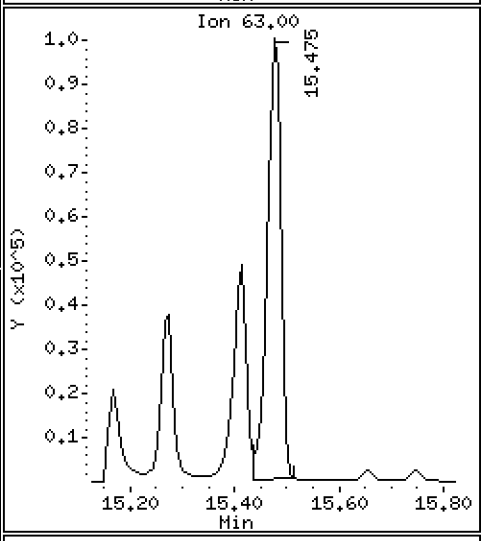
48 2,4-Dinitrotoluene

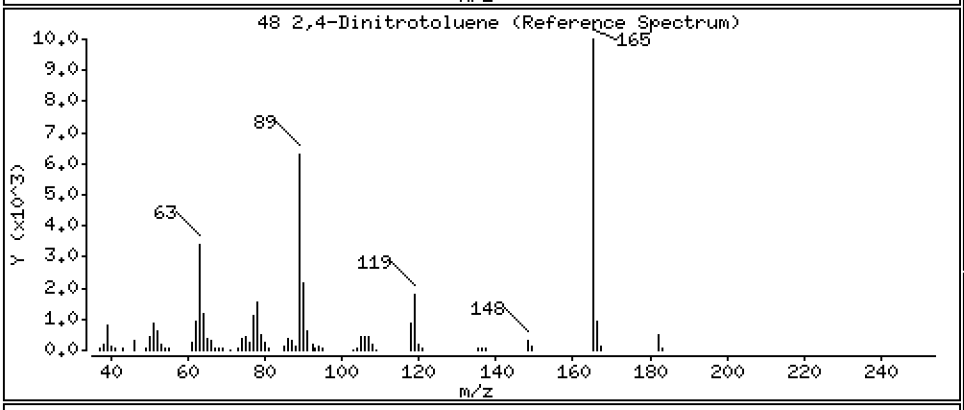
Concentration: 4.855 ug/mL

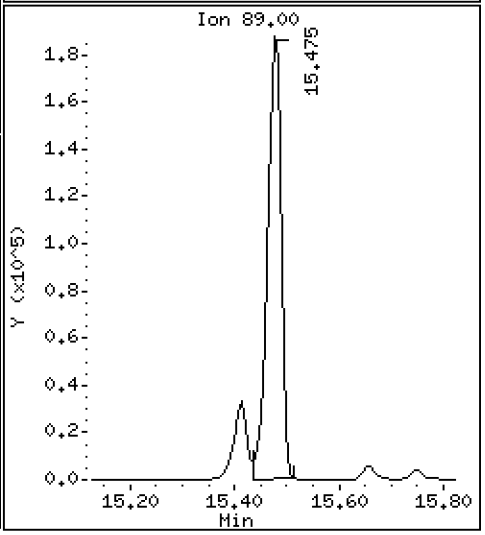


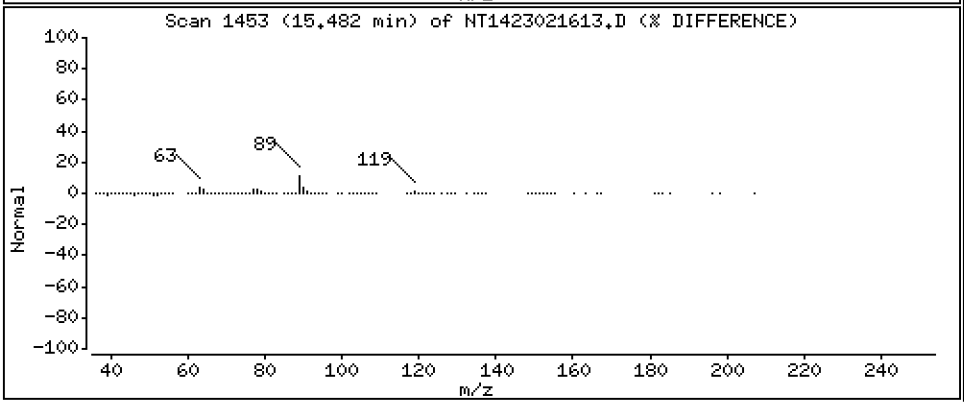












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

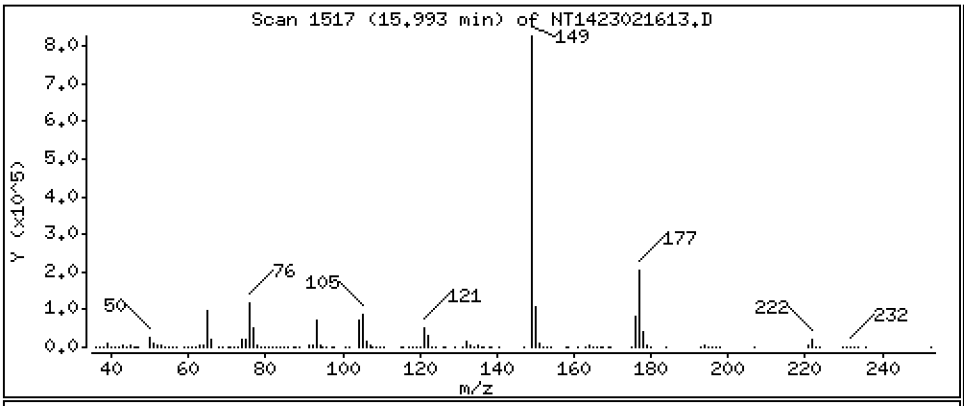
Operator: DSD

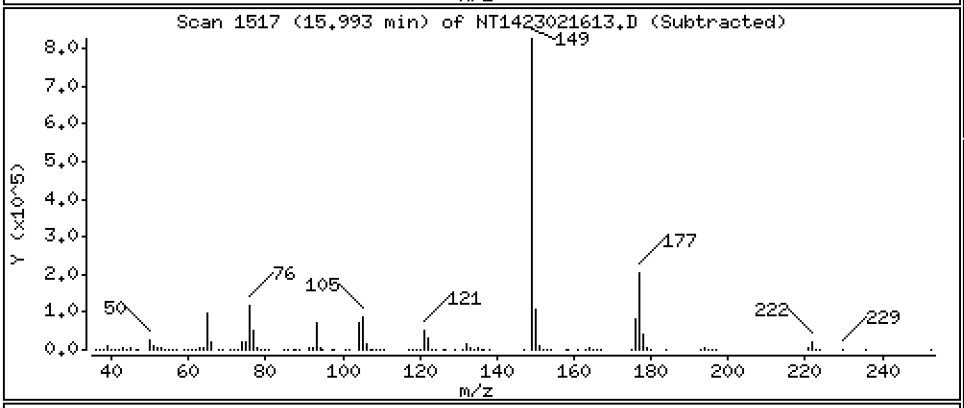
Column phase: ZB-5msi

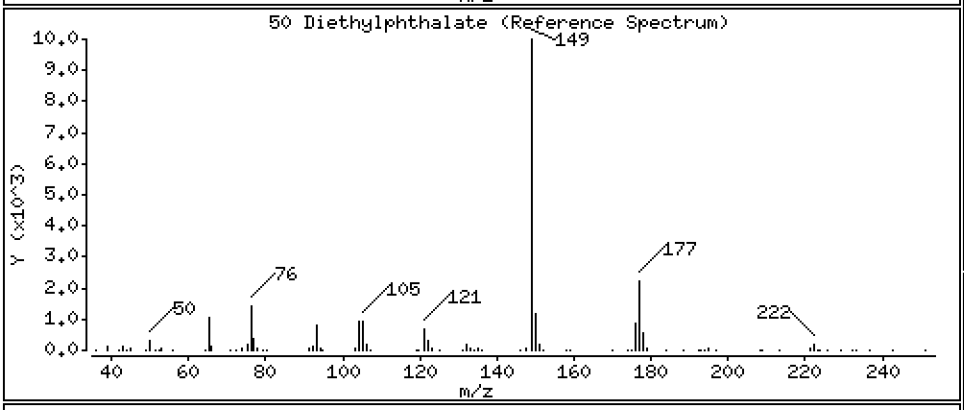
Column diameter: 0.25

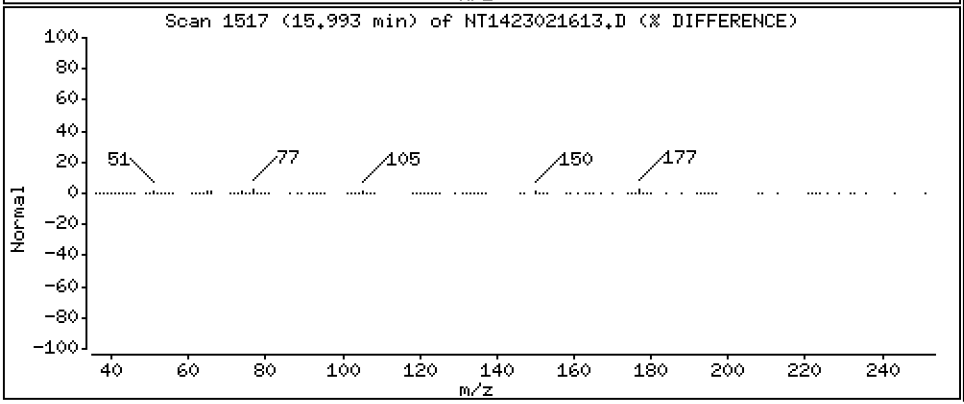
50 Diethylphthalate

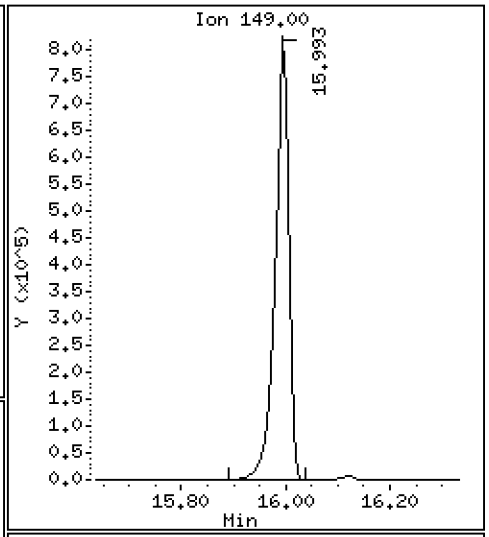
Concentration: 4.722 ug/mL

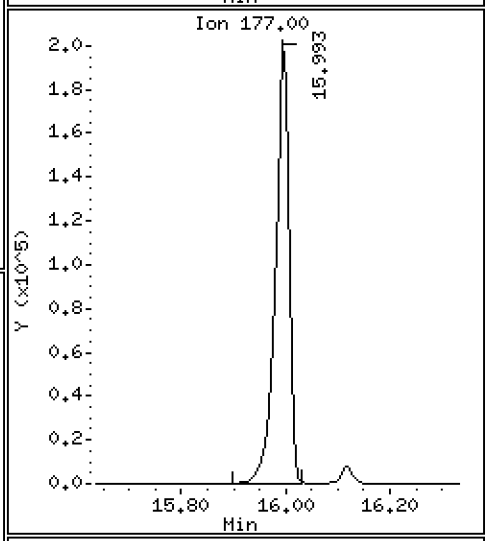


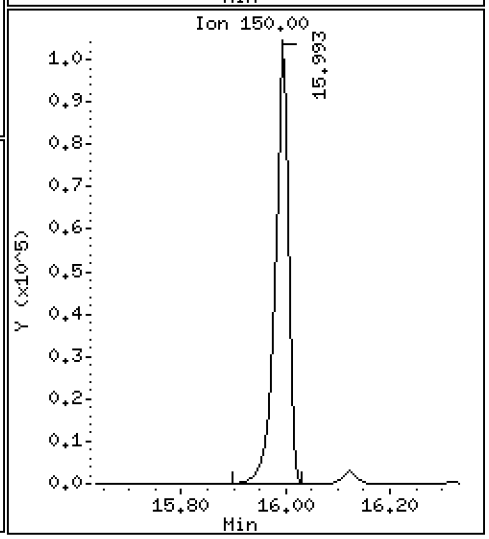












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

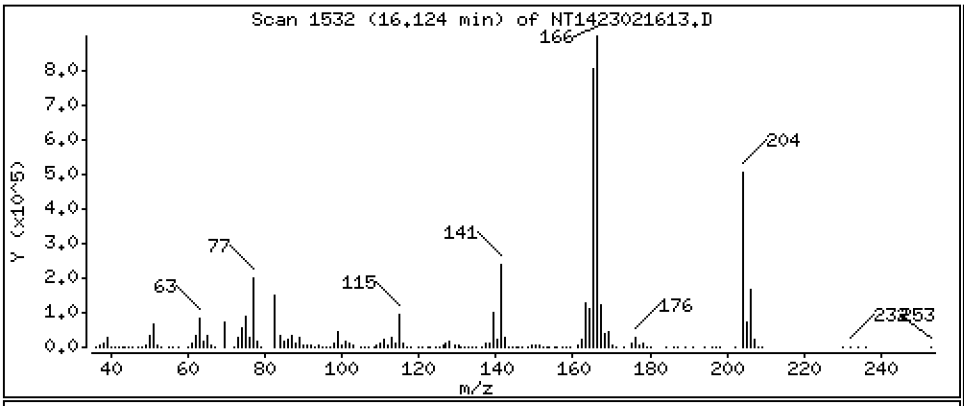
Operator: DSD

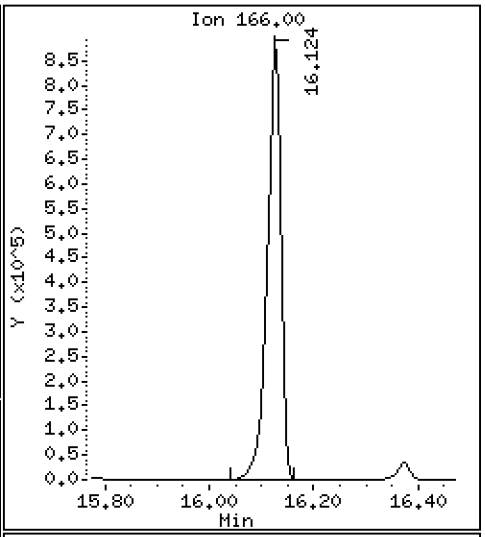
Column phase: ZB-5msi

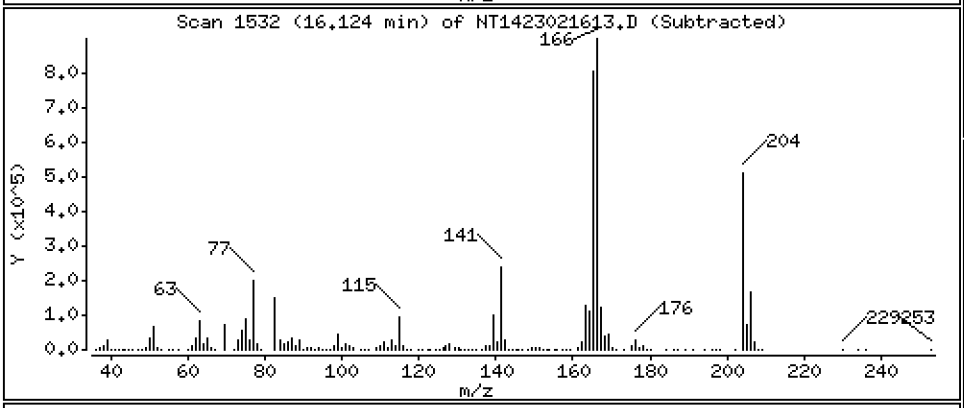
Column diameter: 0.25

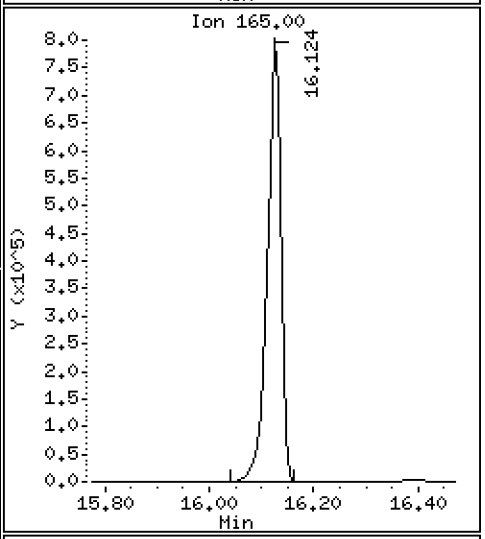
49 Fluorene

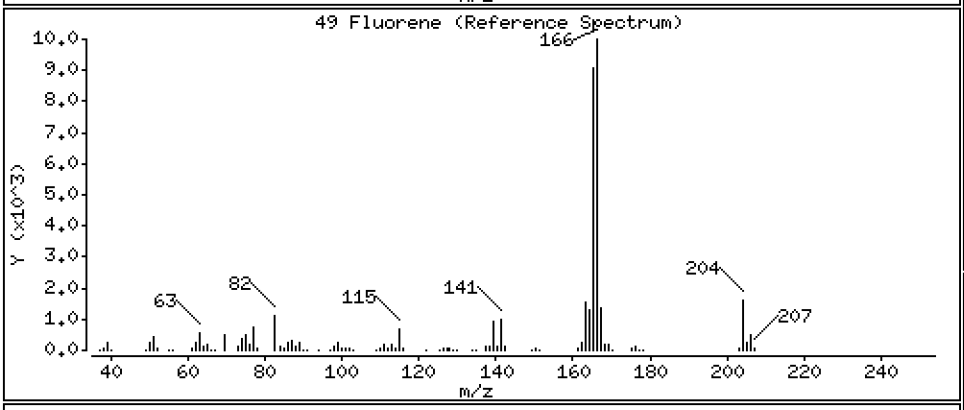
Concentration: 4.638 ug/mL

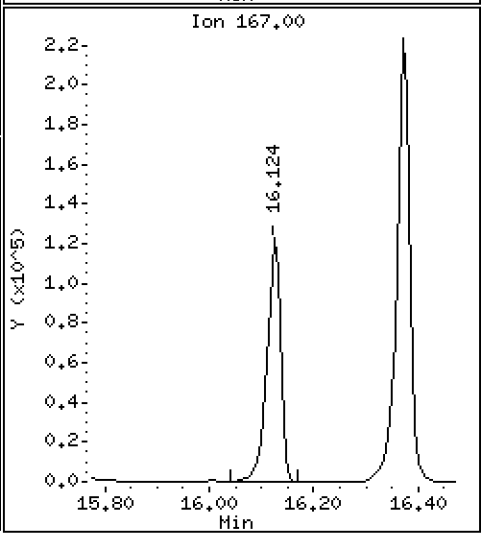


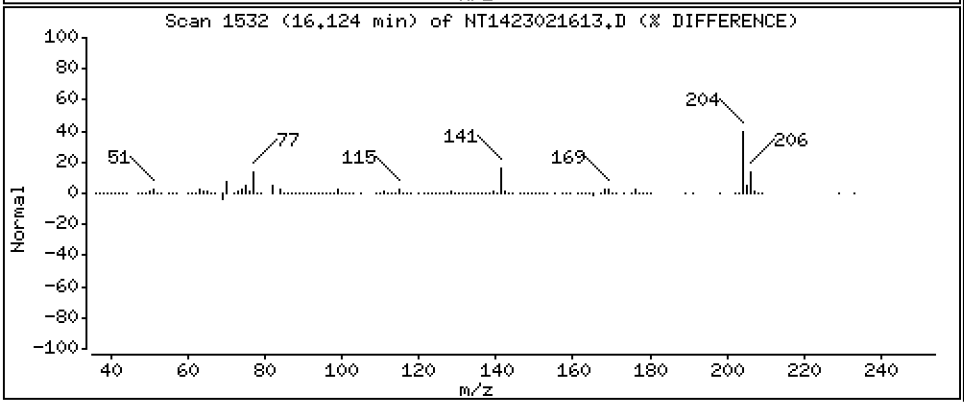












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

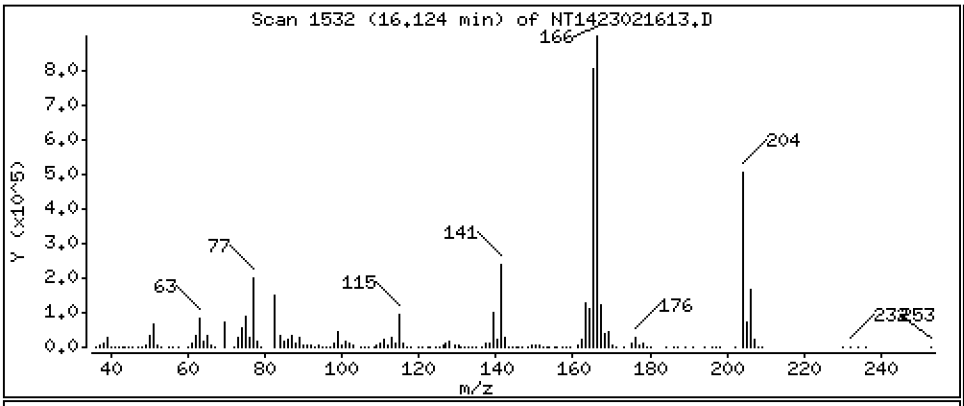
Operator: DSD

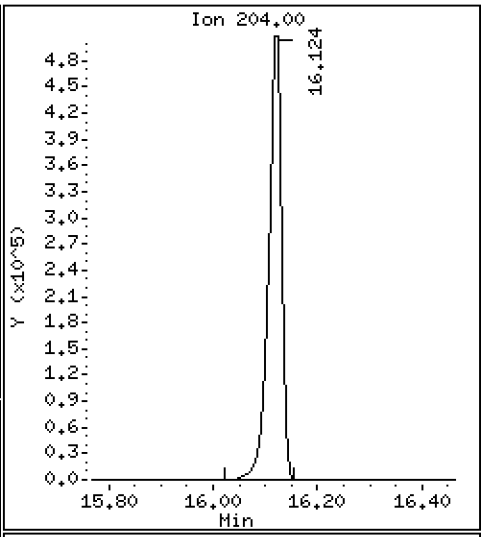
Column phase: ZB-5msi

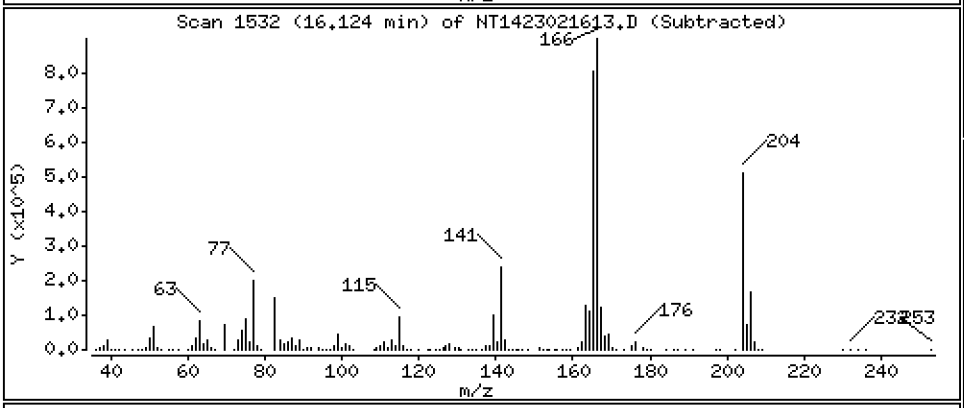
Column diameter: 0.25

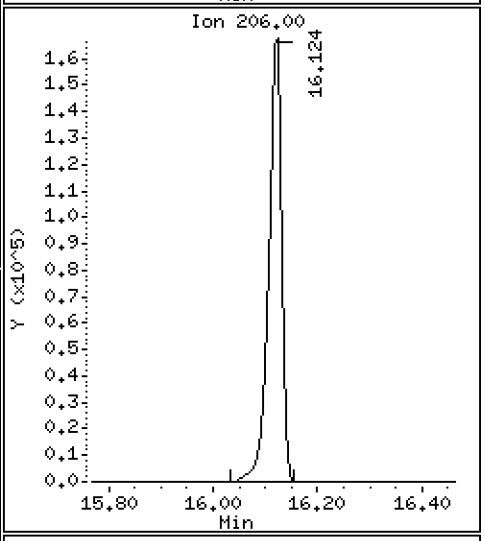
51 4-Chlorophenyl-phenylether

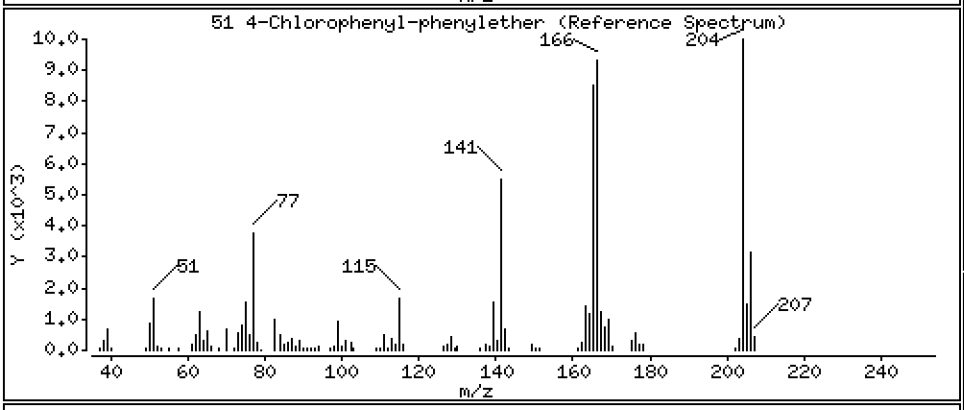
Concentration: 4.754 ug/mL

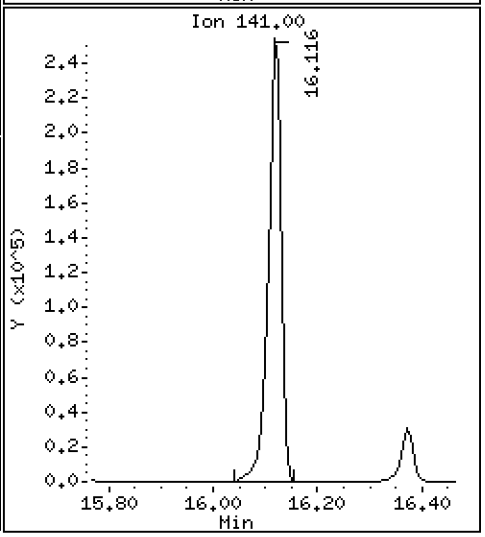


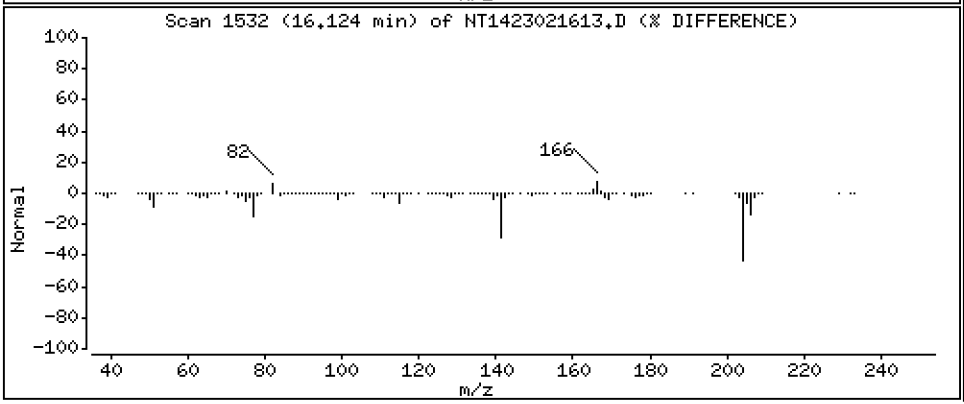












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

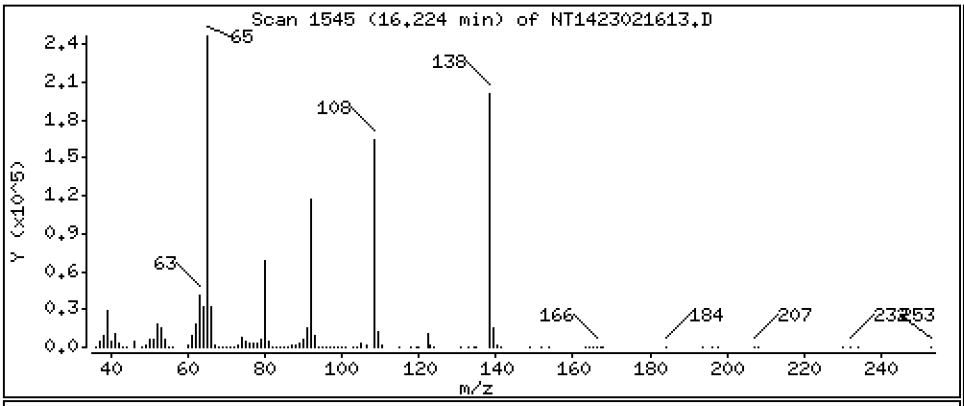
Operator: DSD

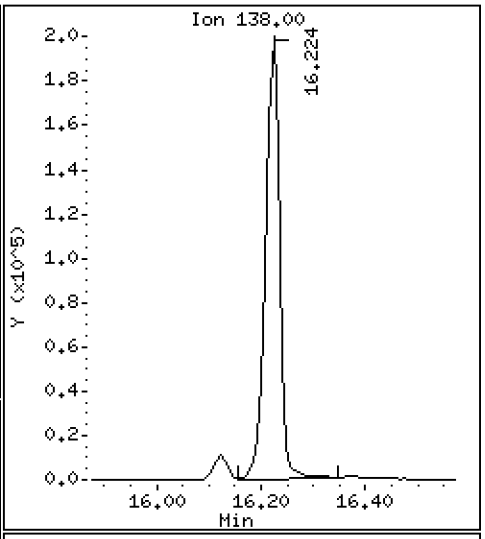
Column phase: ZB-5msi

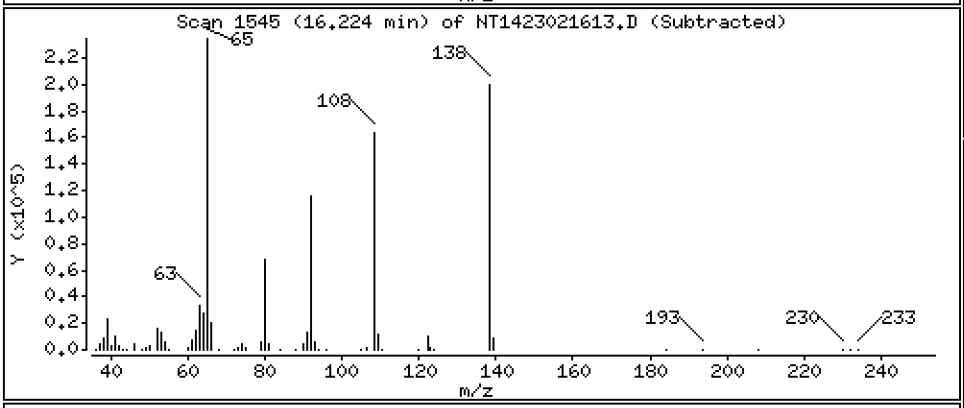
Column diameter: 0.25

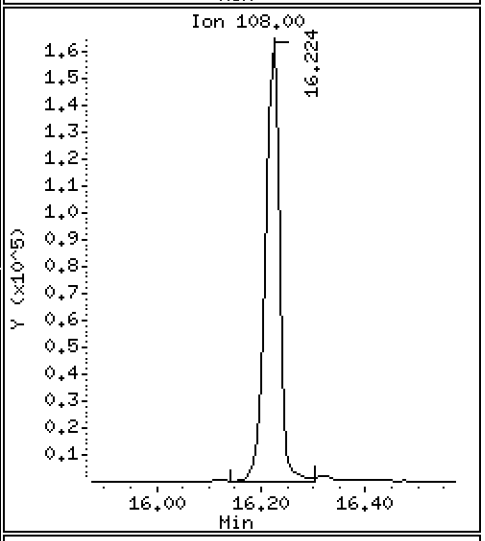
52 4-Nitroaniline

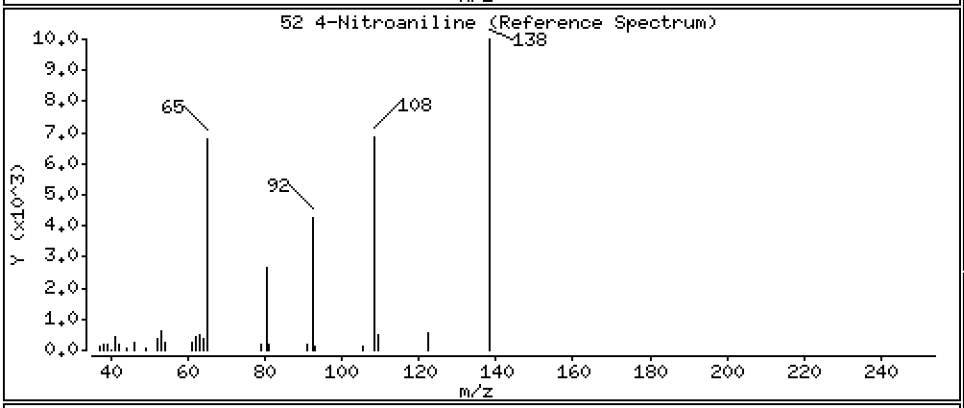
Concentration: 4.762 ug/mL

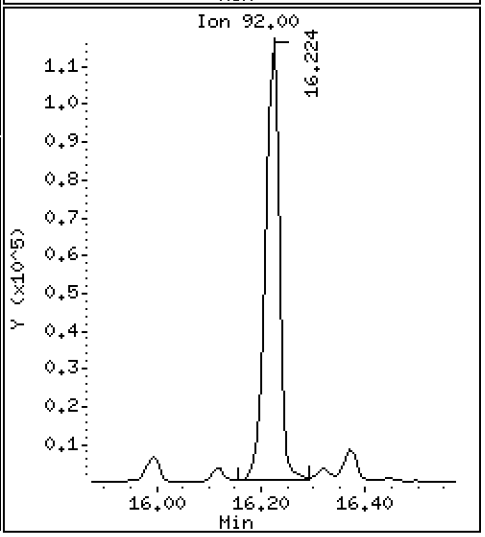


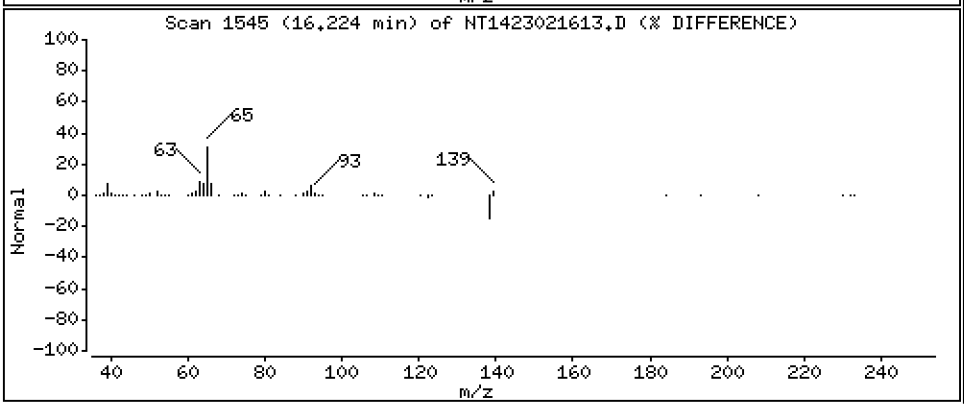












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

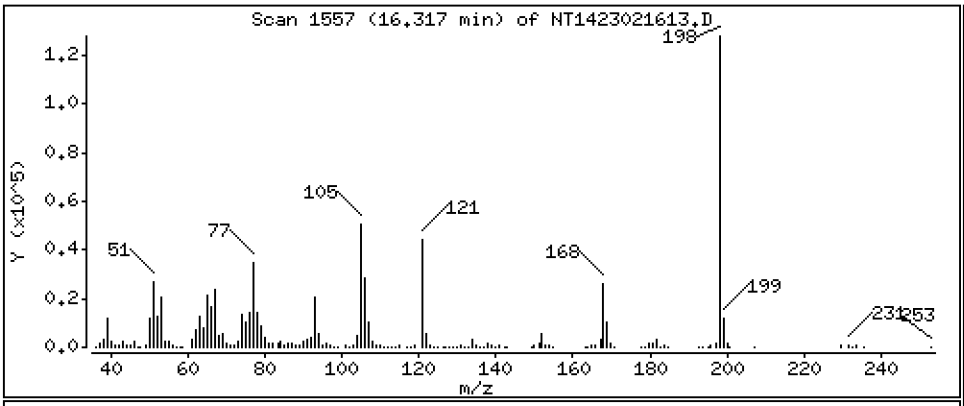
Operator: DSD

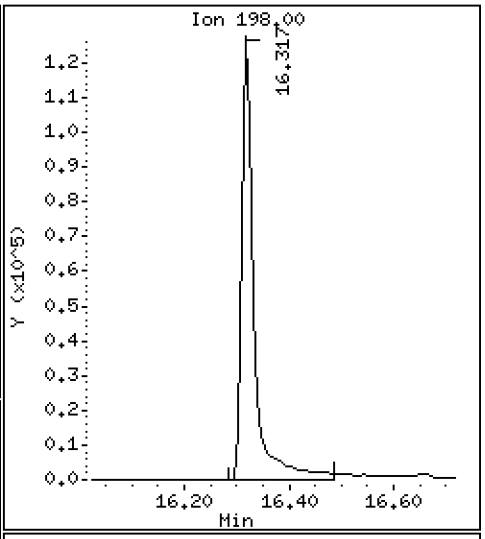
Column phase: ZB-5msi

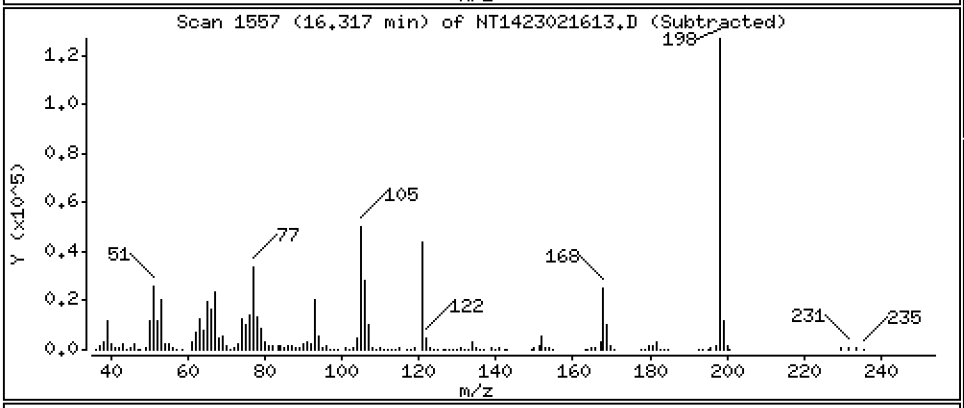
Column diameter: 0.25

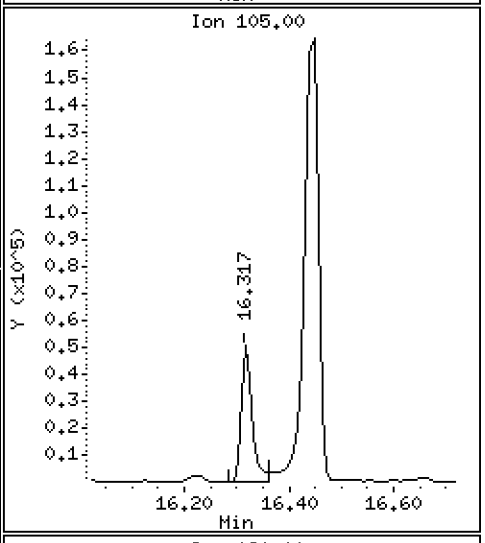
53 4,6-Dinitro-2-methylphenol

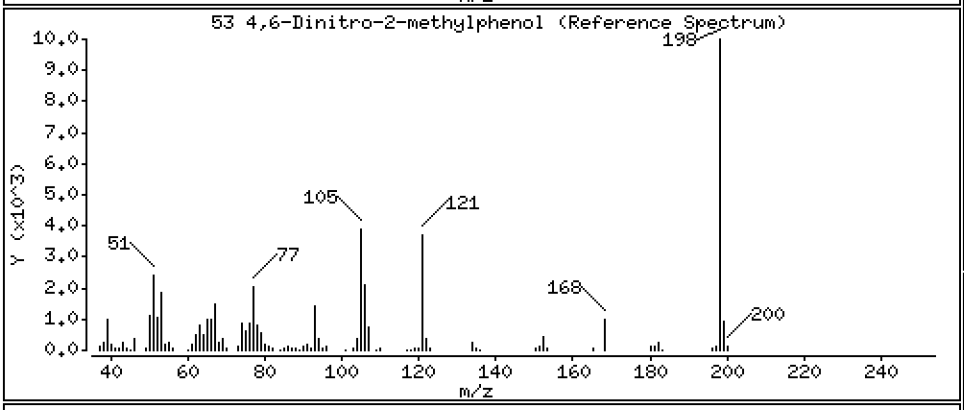
Concentration: 3.653 ug/mL

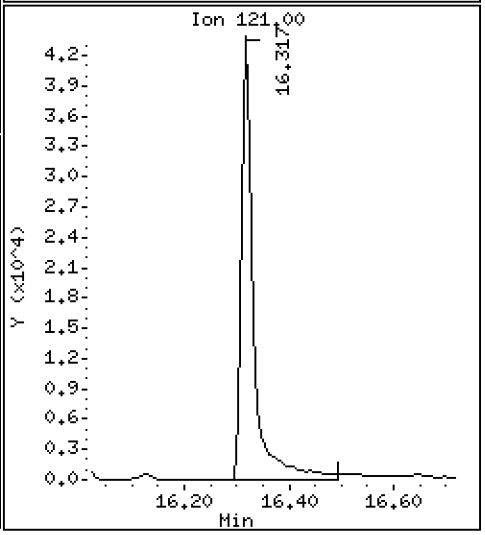


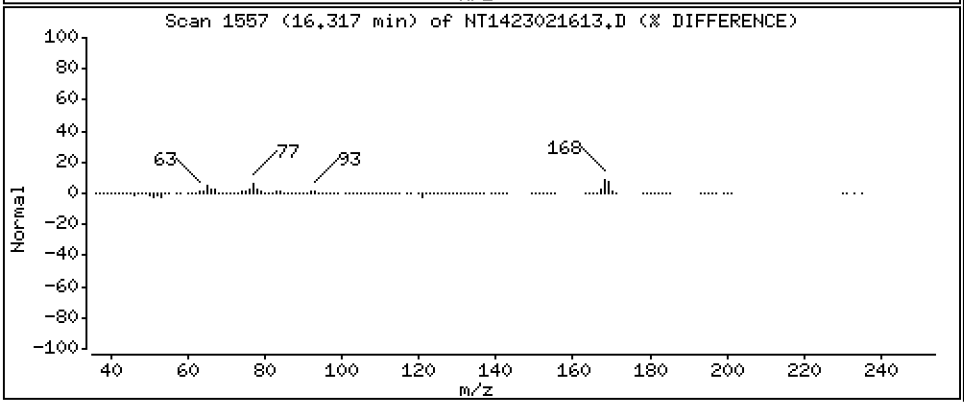












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

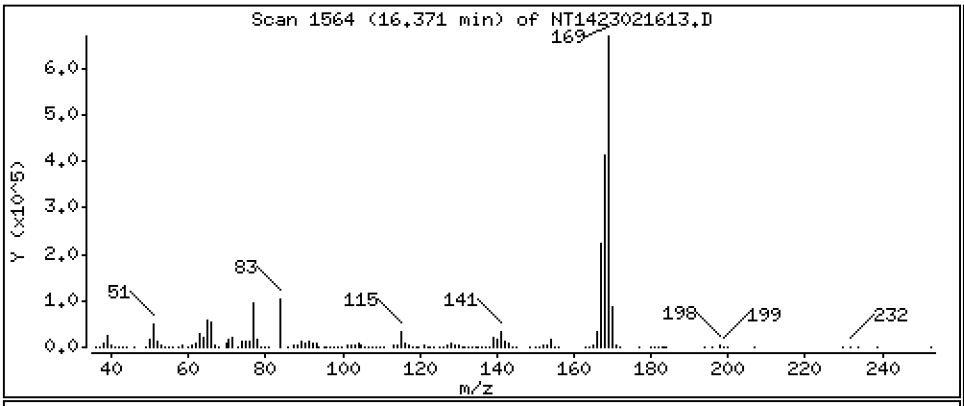
Operator: DSD

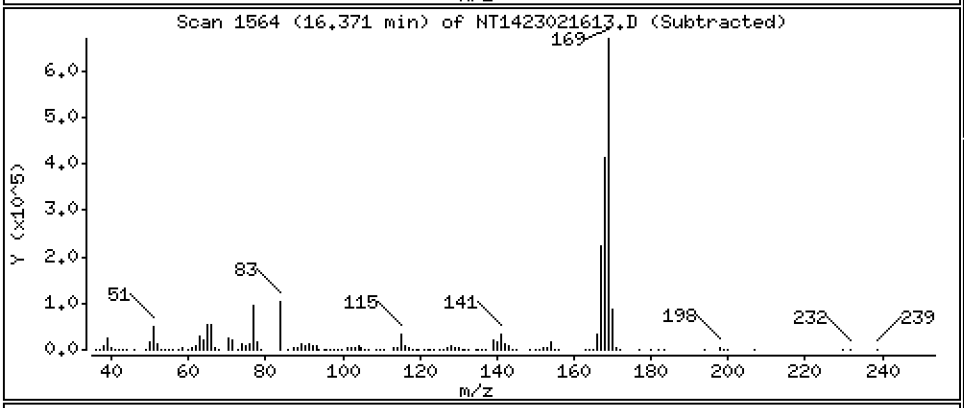
Column phase: ZB-5msi

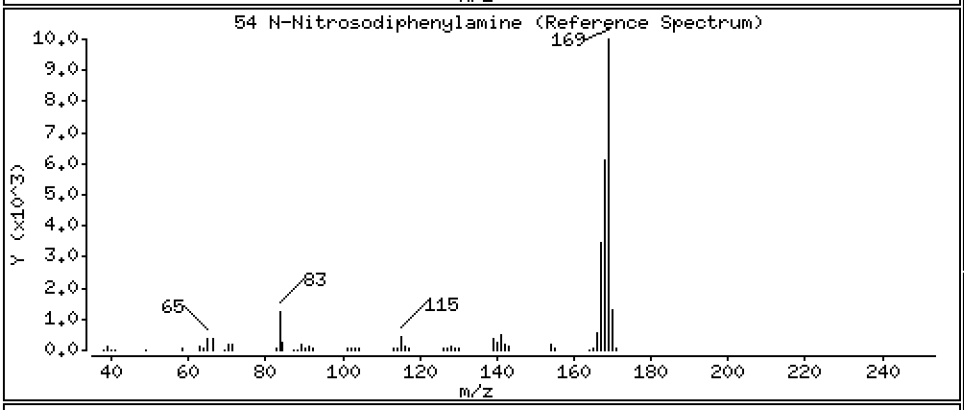
Column diameter: 0.25

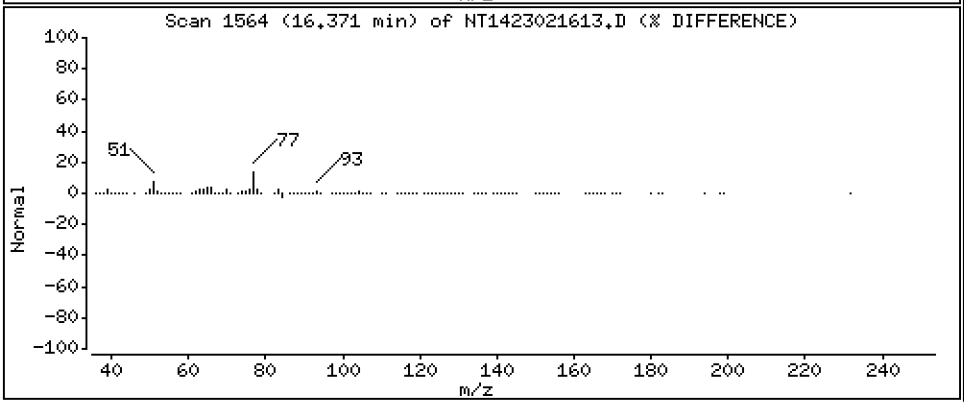
54 N-Nitrosodiphenylamine

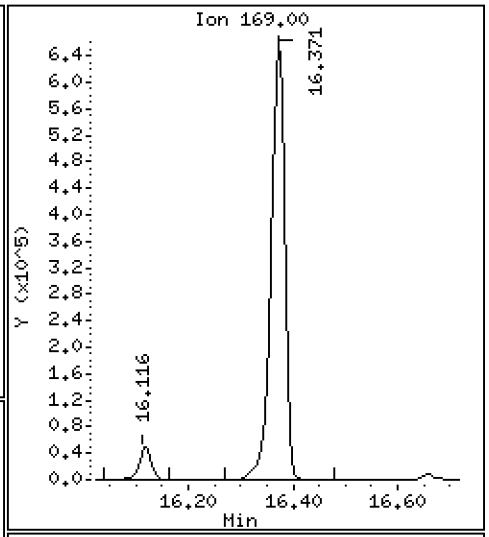
Concentration: 4.907 ug/mL

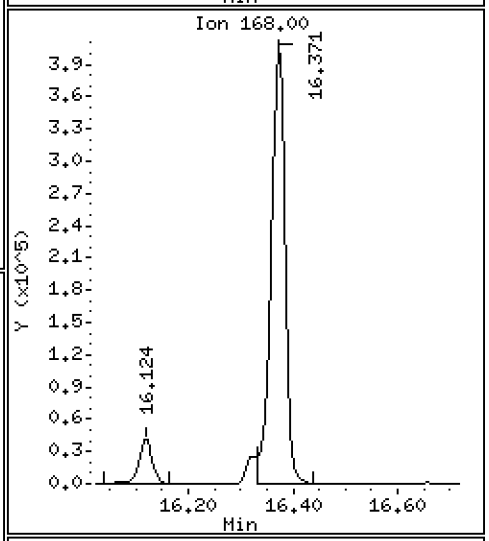


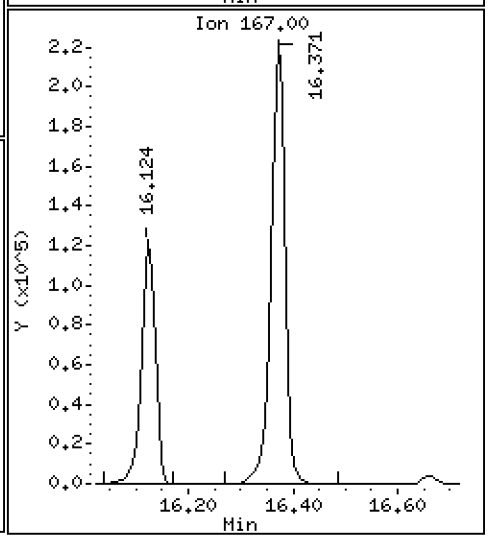












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

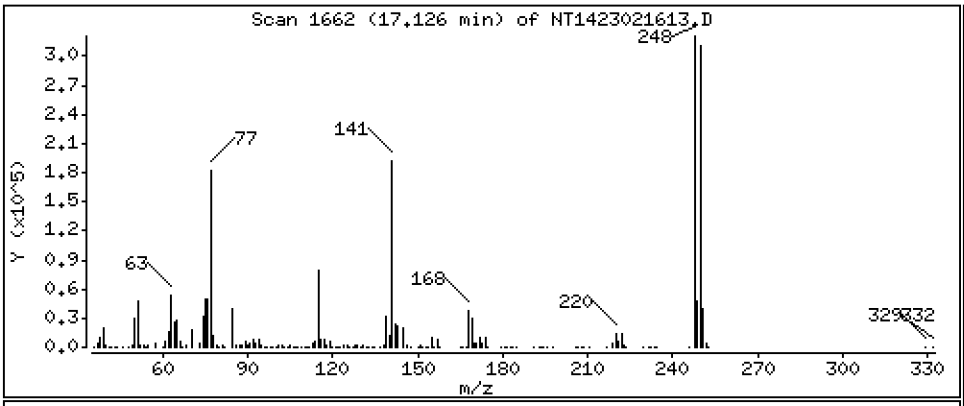
Operator: DSD

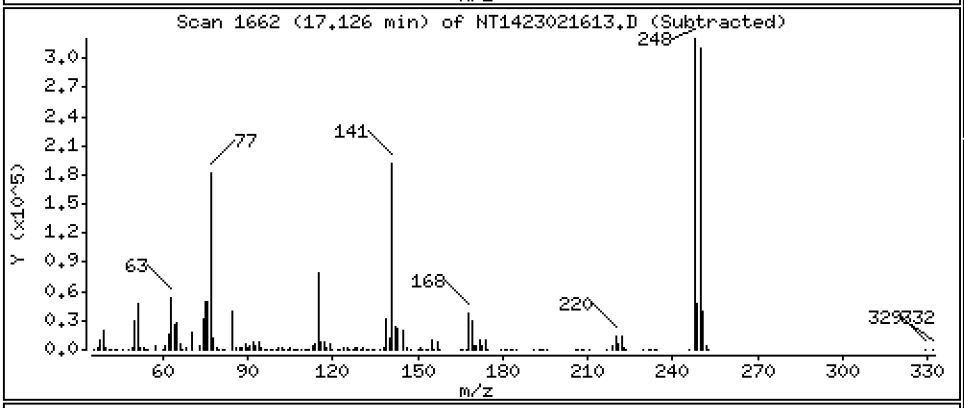
Column phase: ZB-5msi

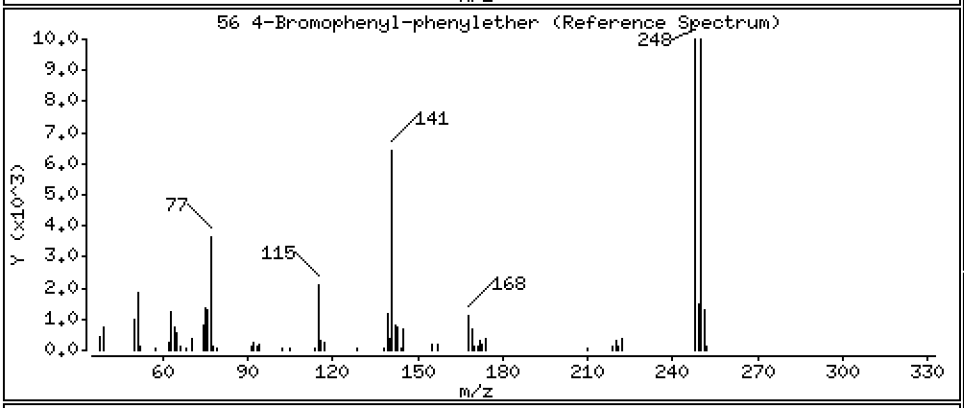
Column diameter: 0.25

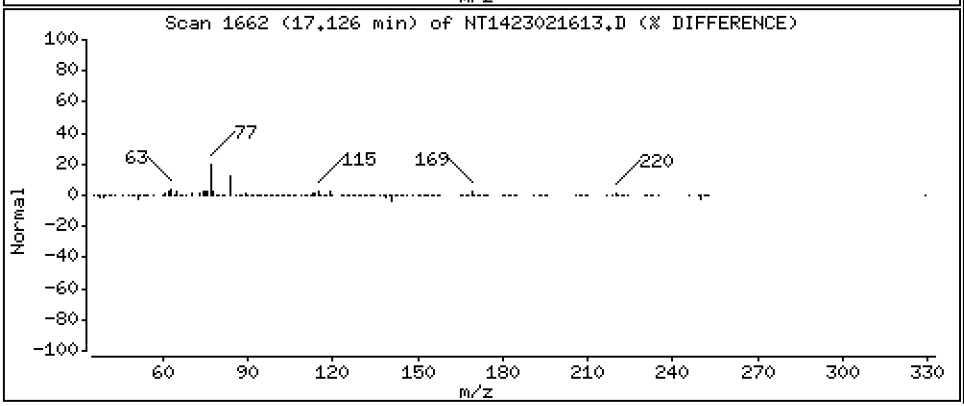
56 4-Bromophenyl-phenylether

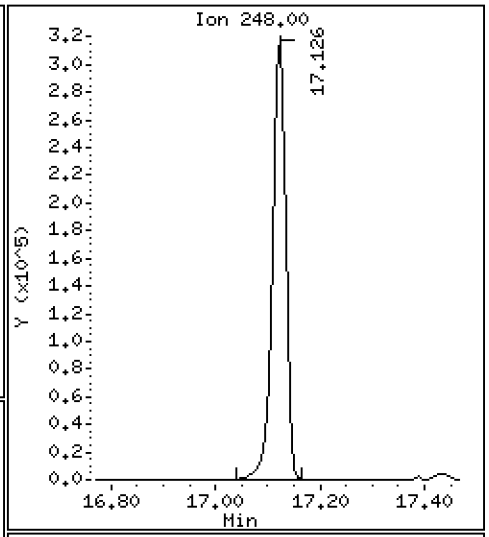
Concentration: 5.153 ug/mL

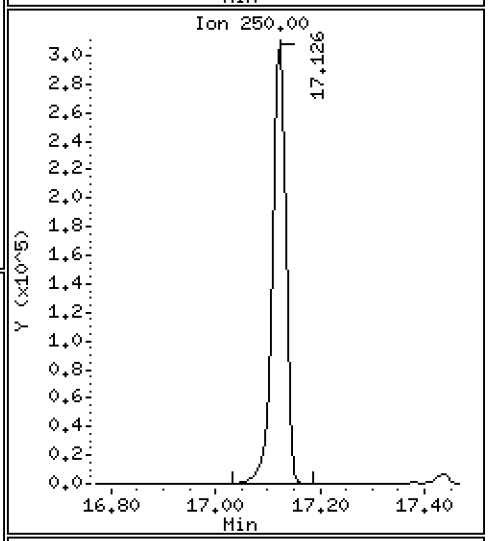


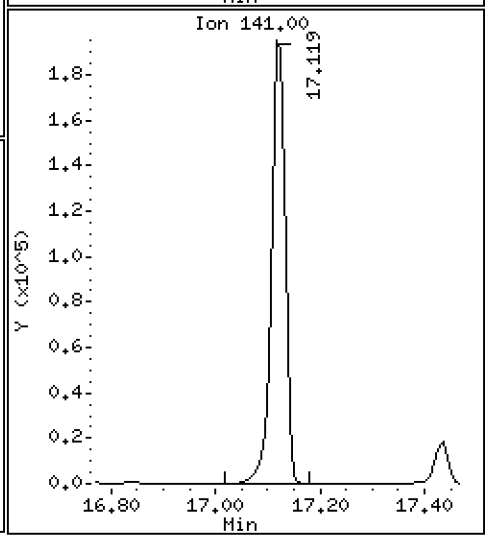












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

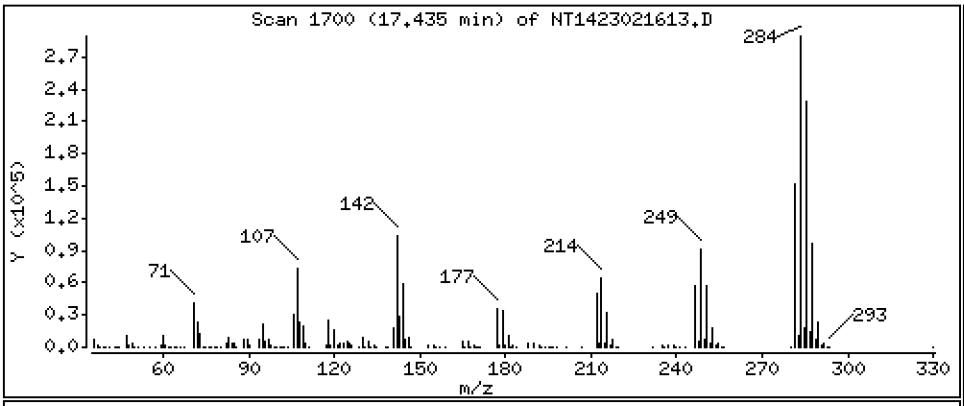
Operator: DSD

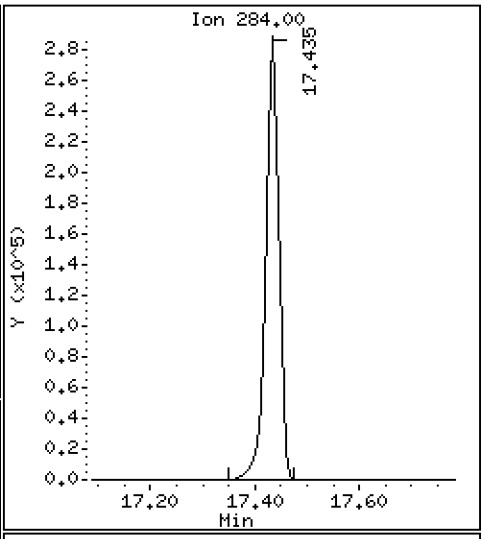
Column phase: ZB-5msi

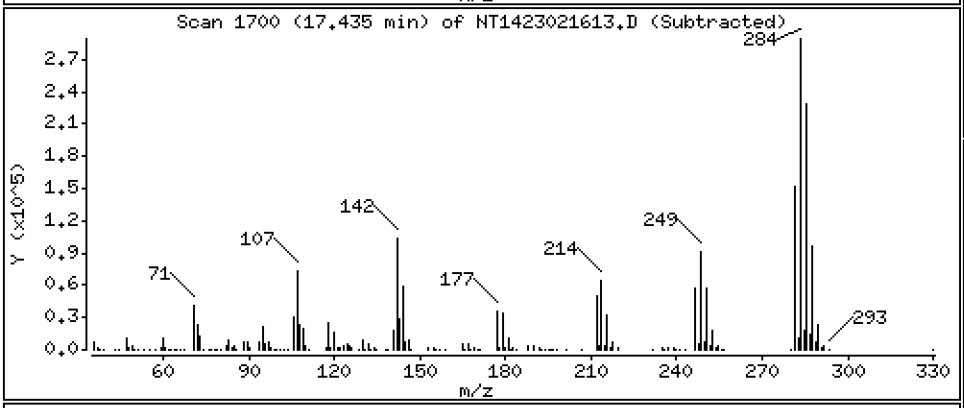
Column diameter: 0.25

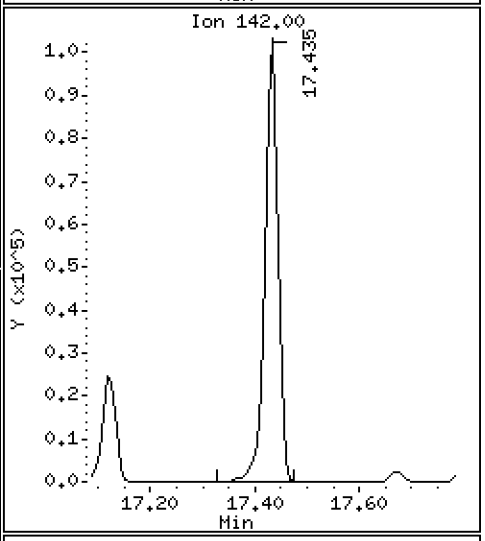
57 Hexachlorobenzene

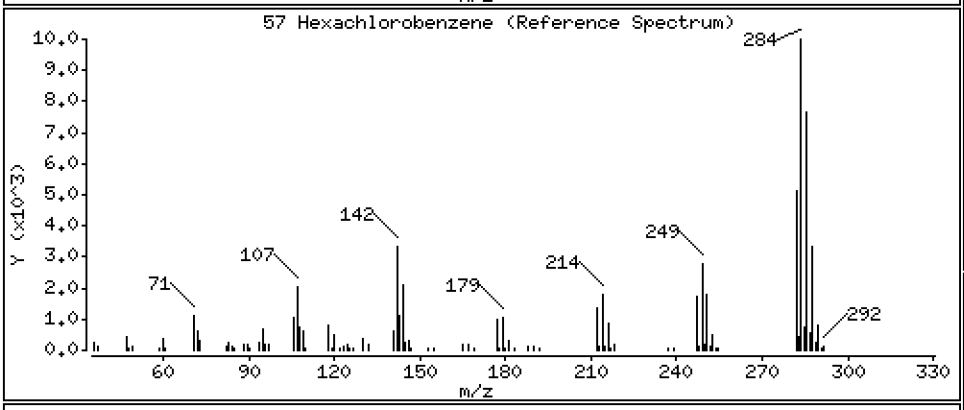
Concentration: 4.679 ug/mL

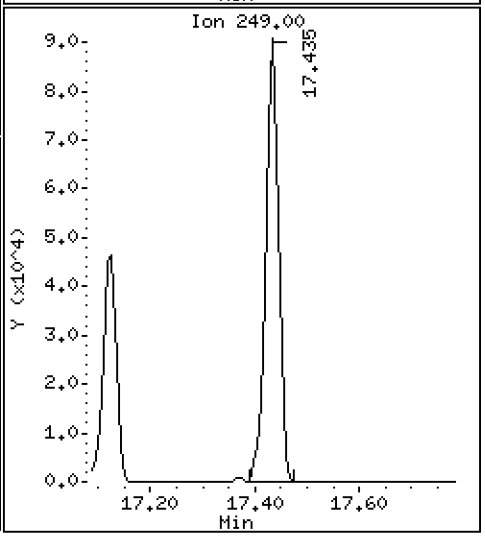


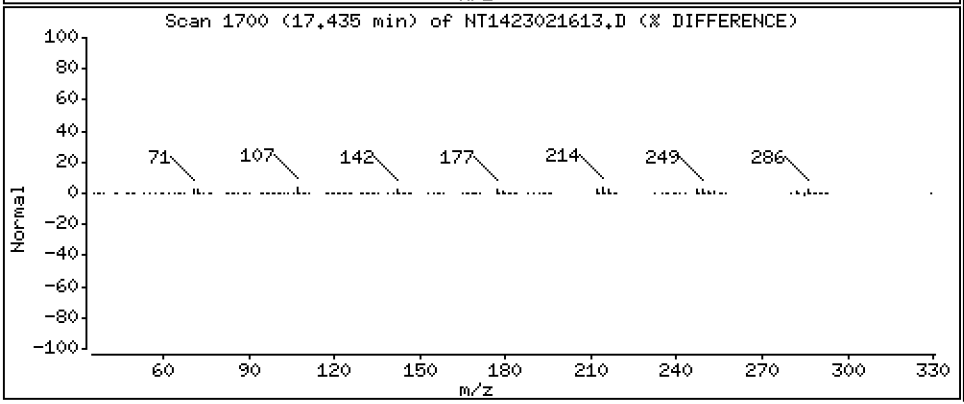












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

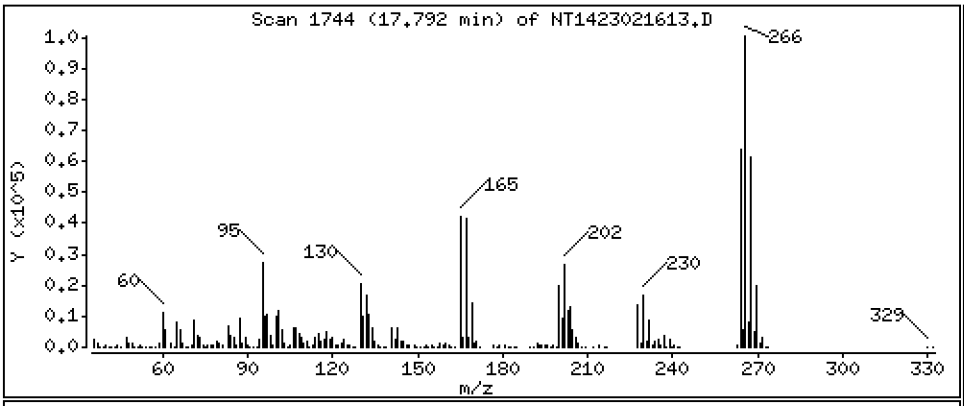
Operator: DSD

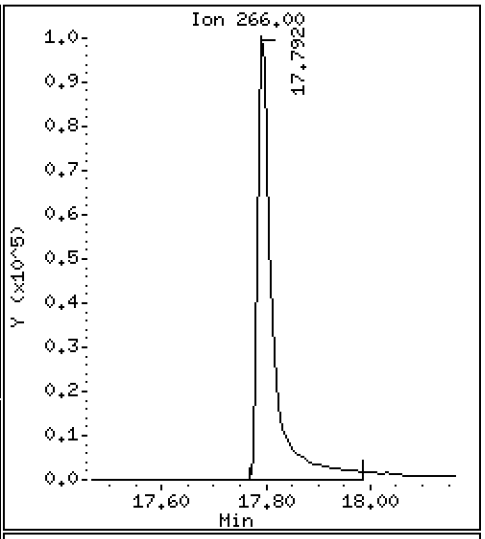
Column phase: ZB-5msi

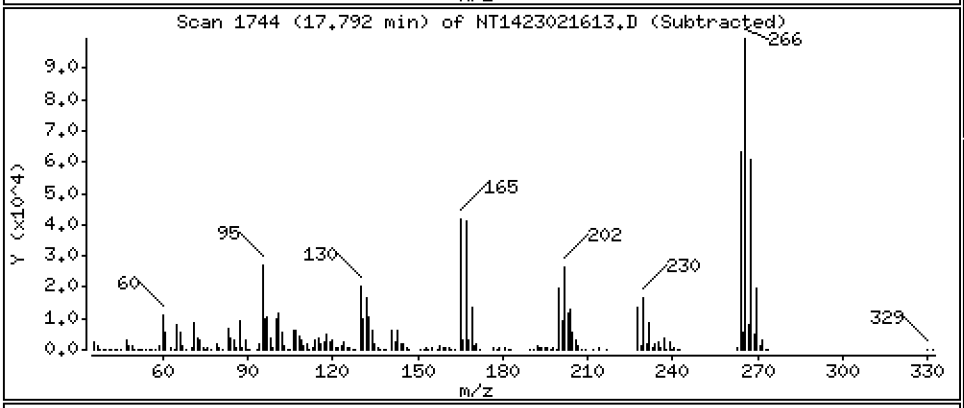
Column diameter: 0.25

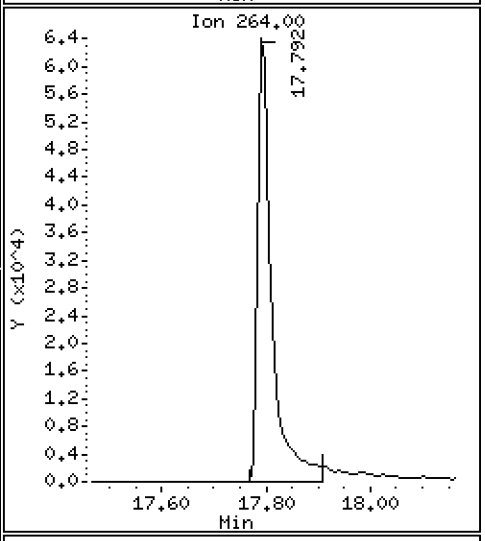
58 Pentachlorophenol

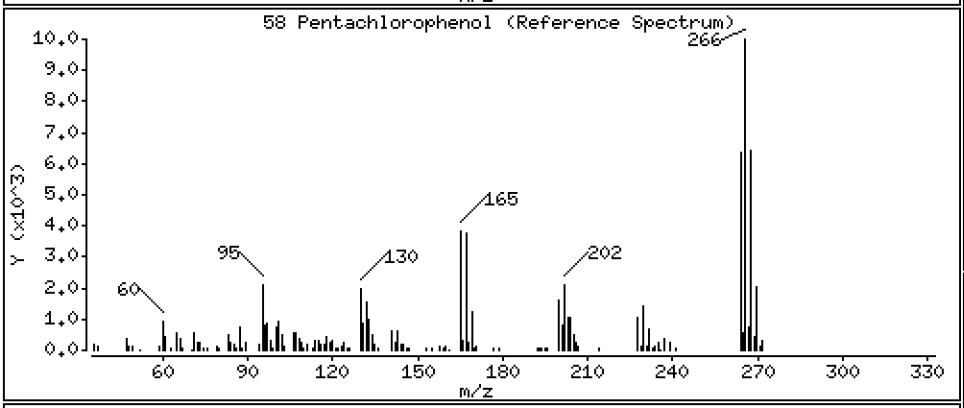
Concentration: 3.932 ug/mL

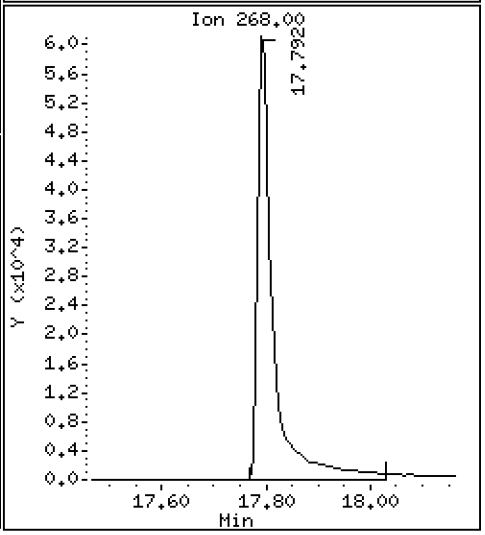


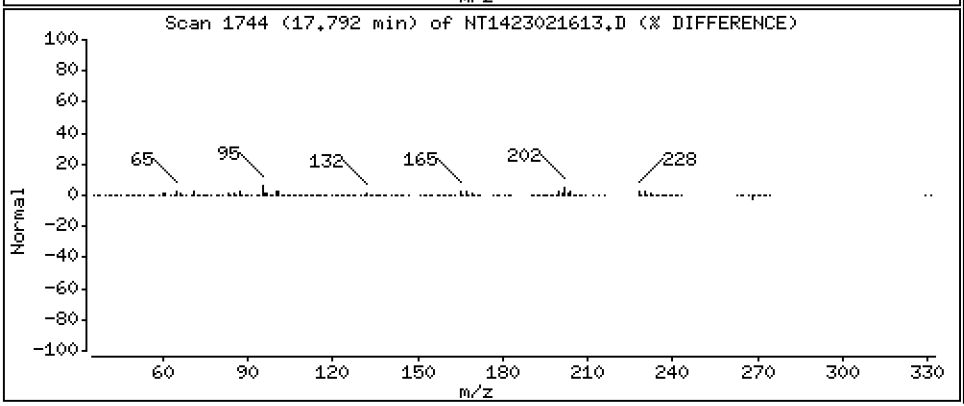












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

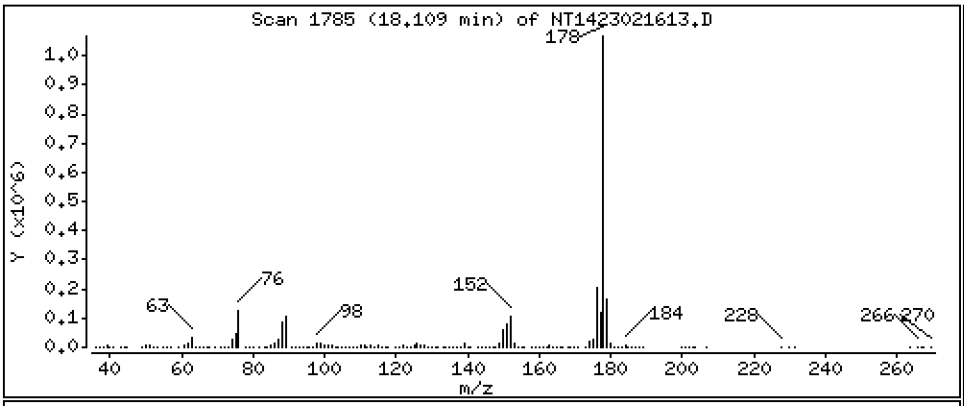
Operator: DSD

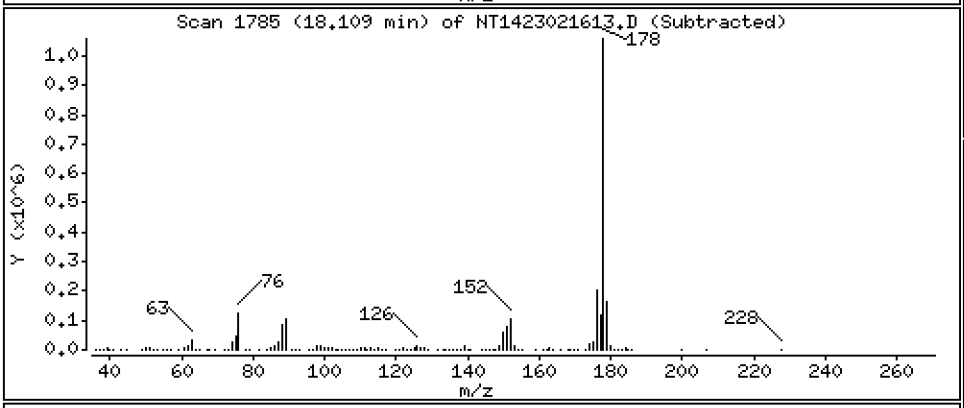
Column phase: ZB-5msi

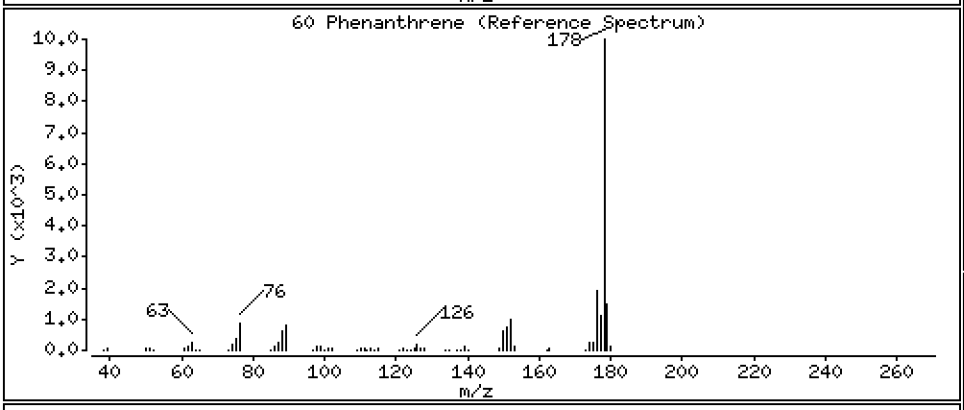
Column diameter: 0.25

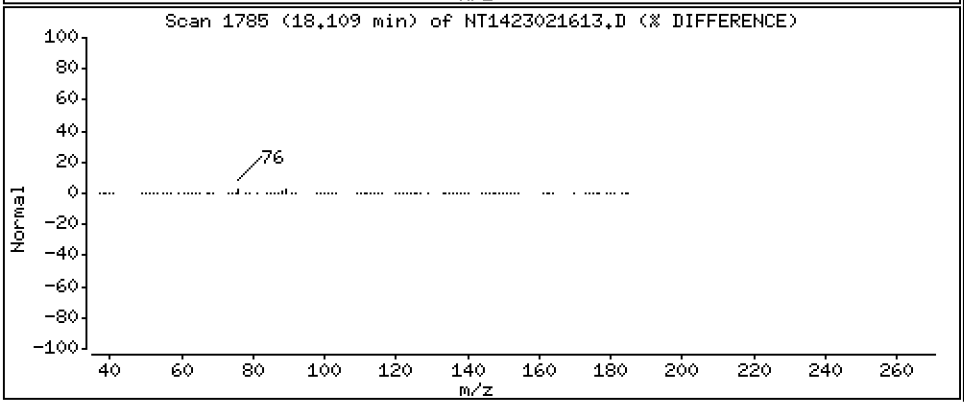
60 Phenanthrene

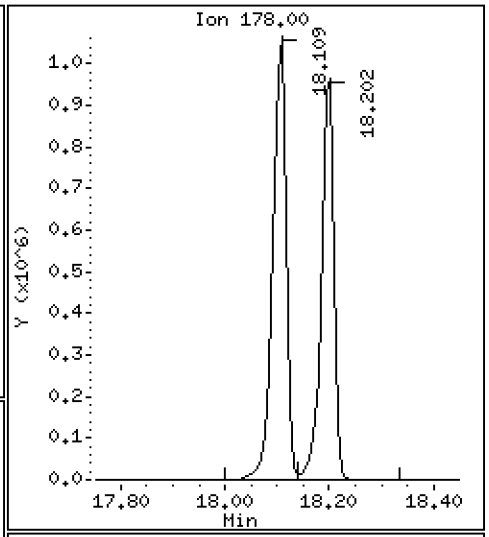
Concentration: 4.690 ug/mL

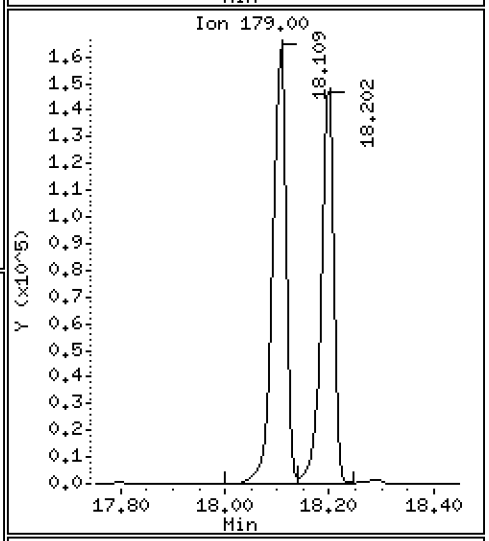


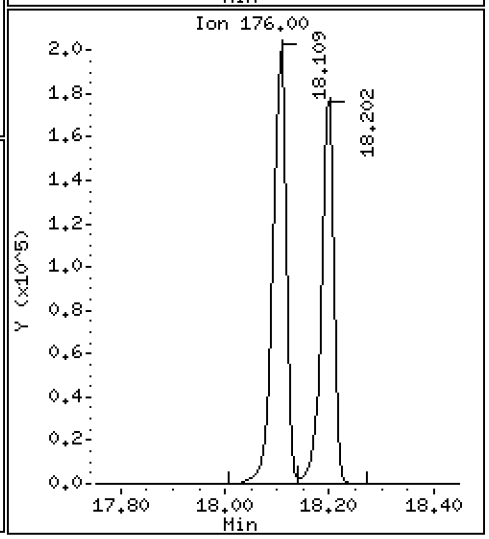












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

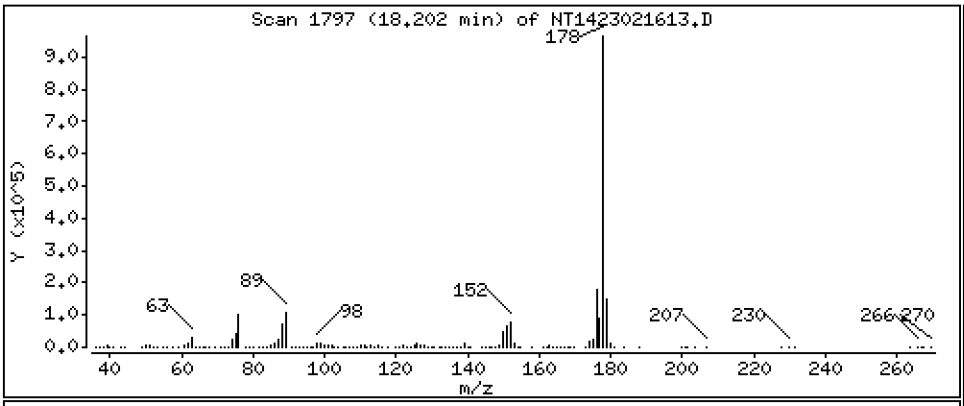
Operator: DSD

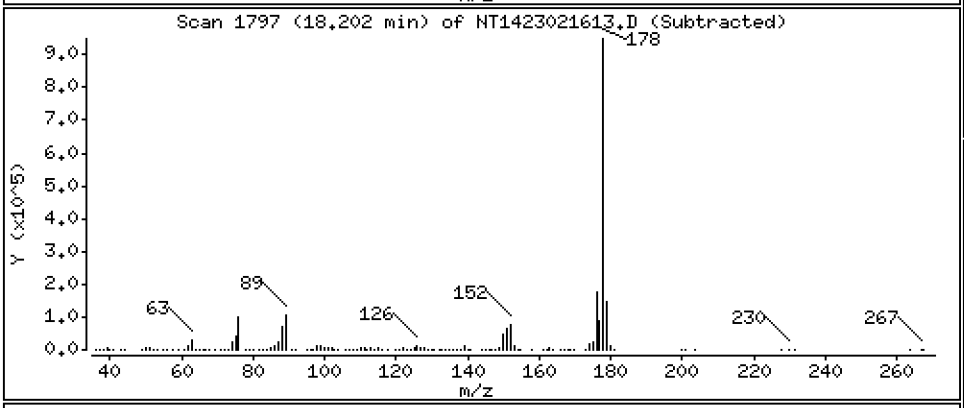
Column phase: ZB-5msi

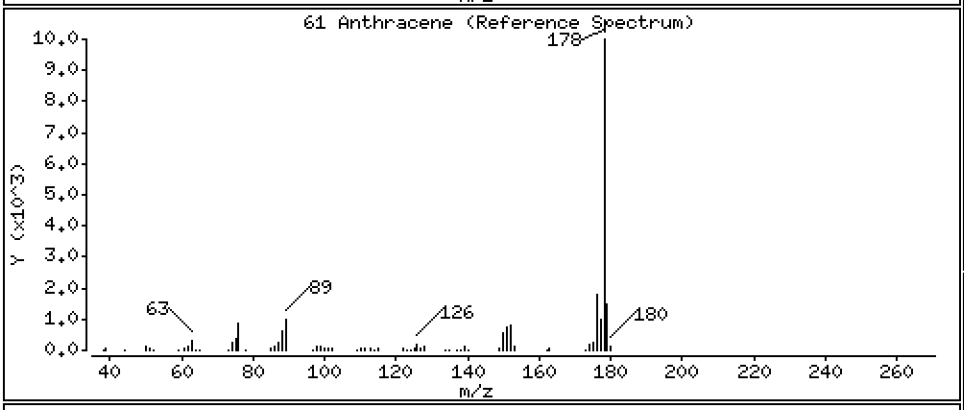
Column diameter: 0.25

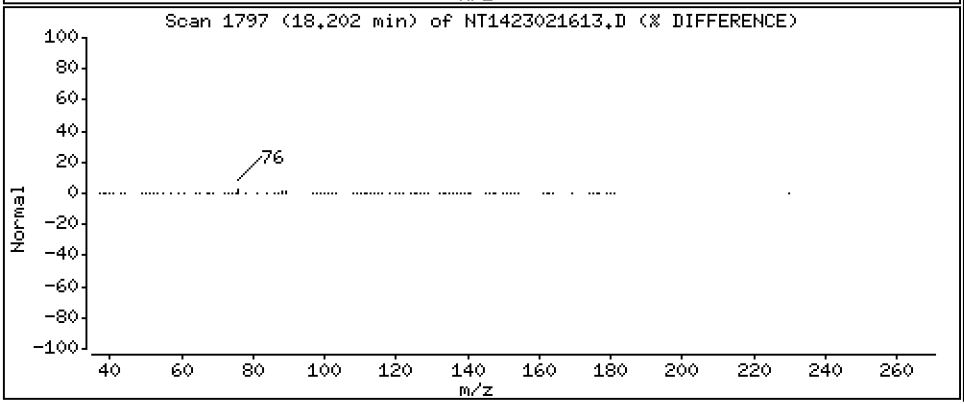
61 Anthracene

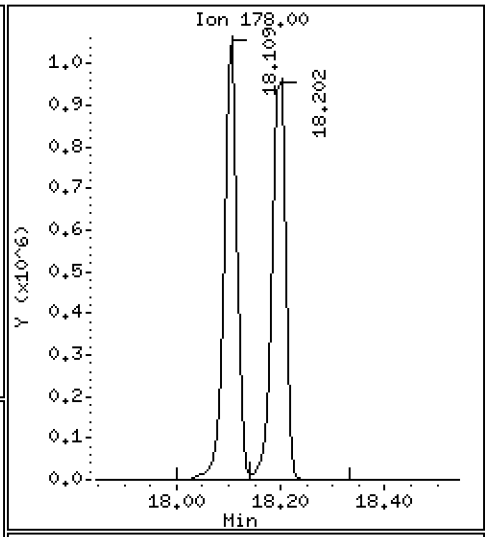
Concentration: 4.304 ug/mL

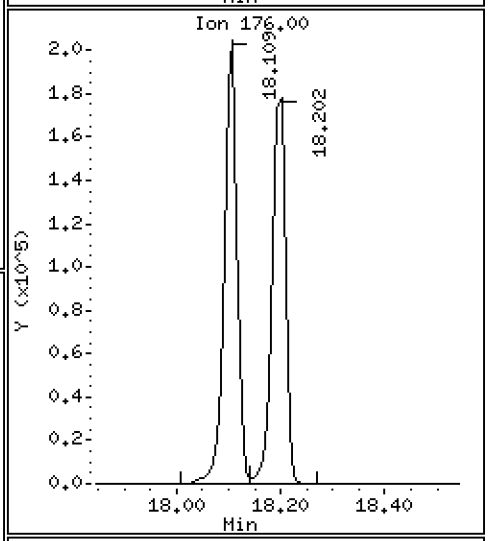


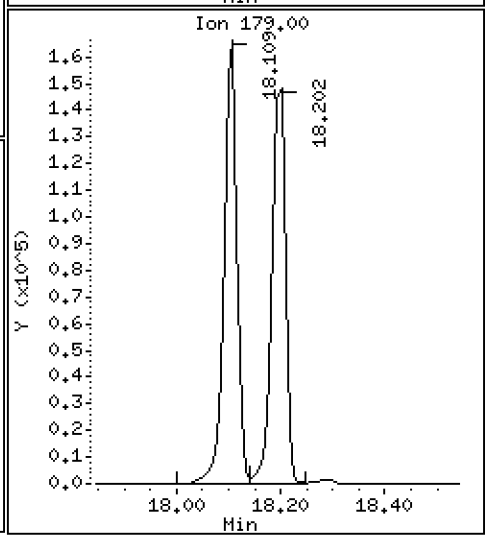












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

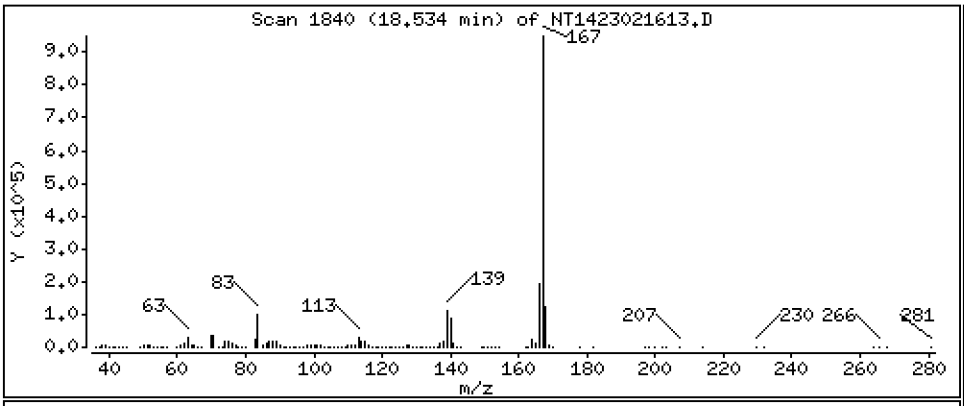
Operator: DSD

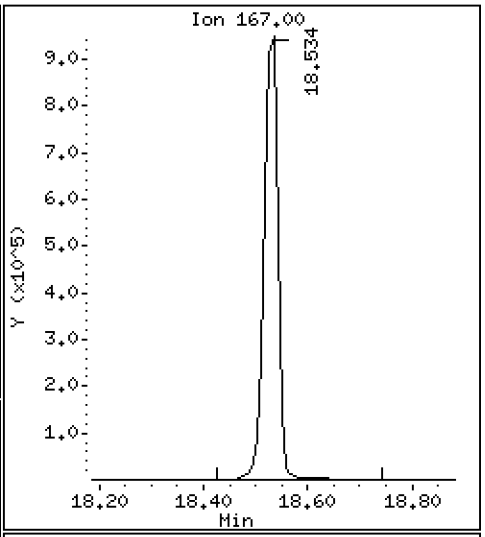
Column phase: ZB-5msi

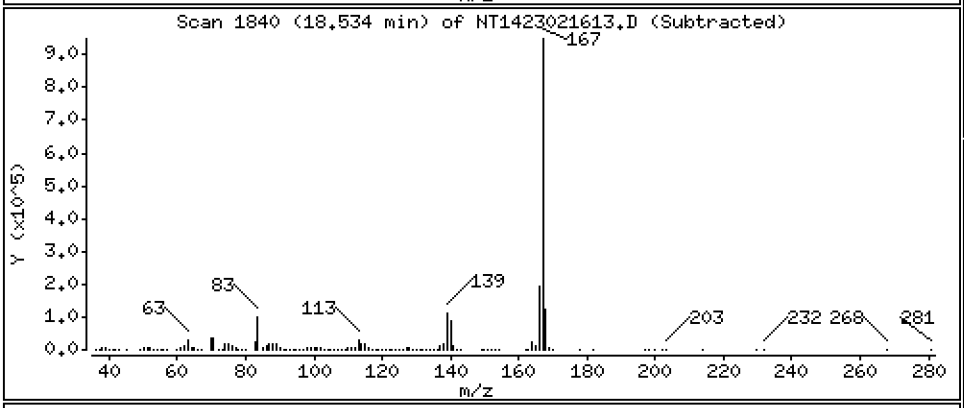
Column diameter: 0.25

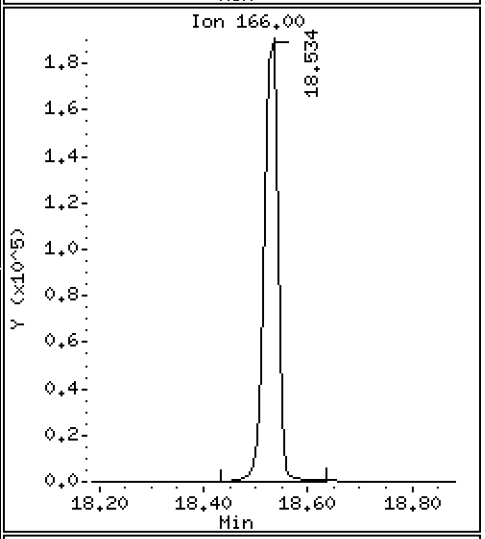
62 Carbazole

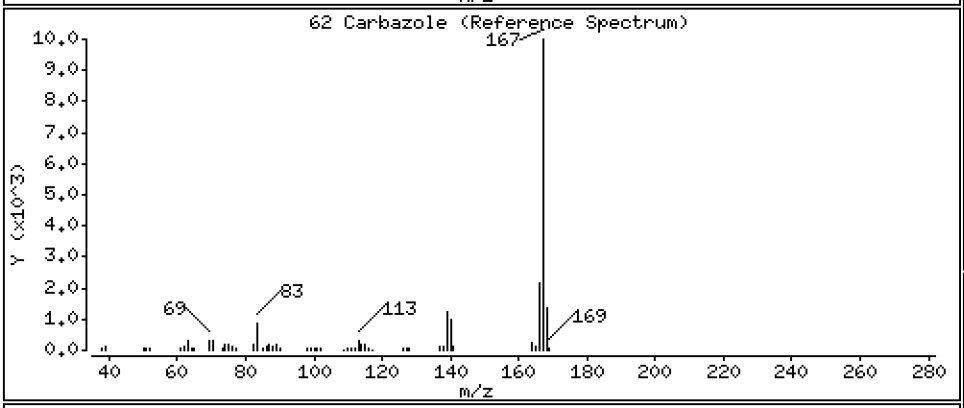
Concentration: 4.792 ug/mL

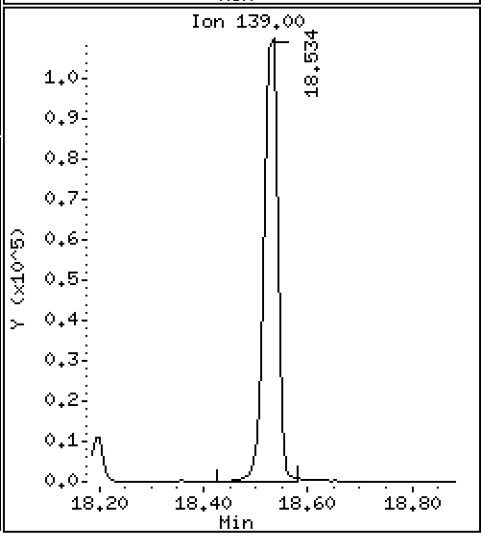


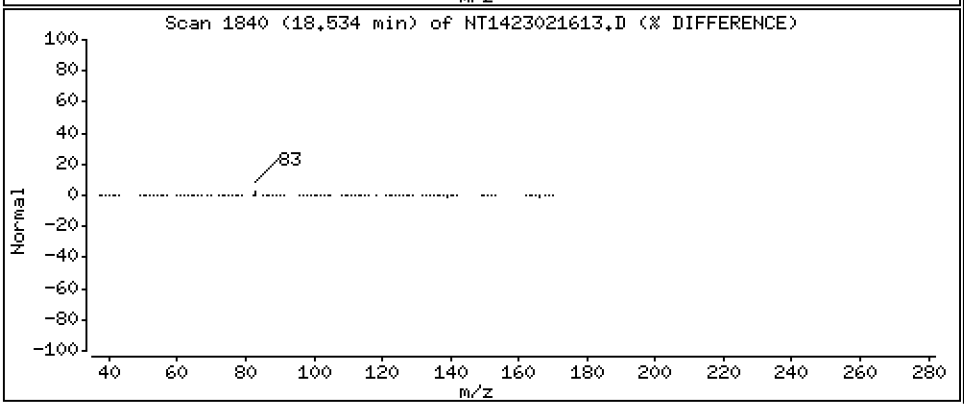












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

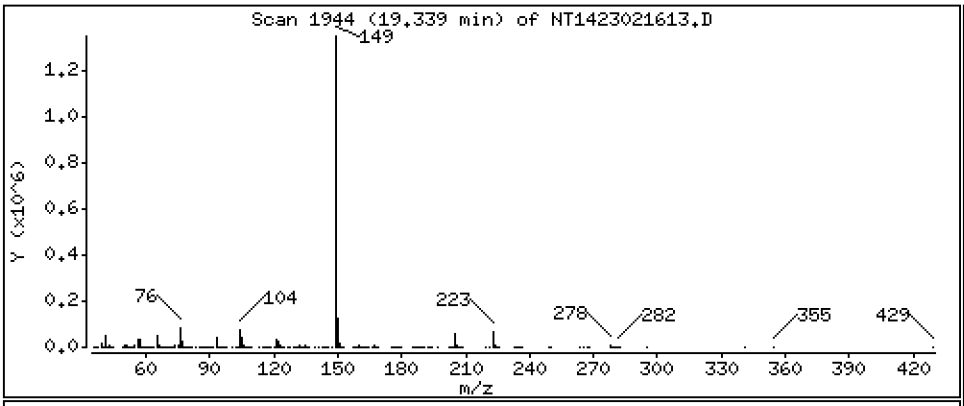
Operator: DSD

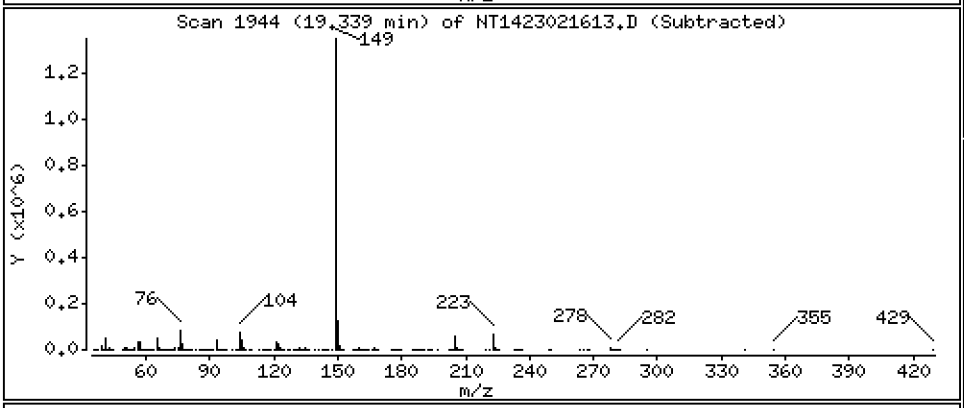
Column phase: ZB-5msi

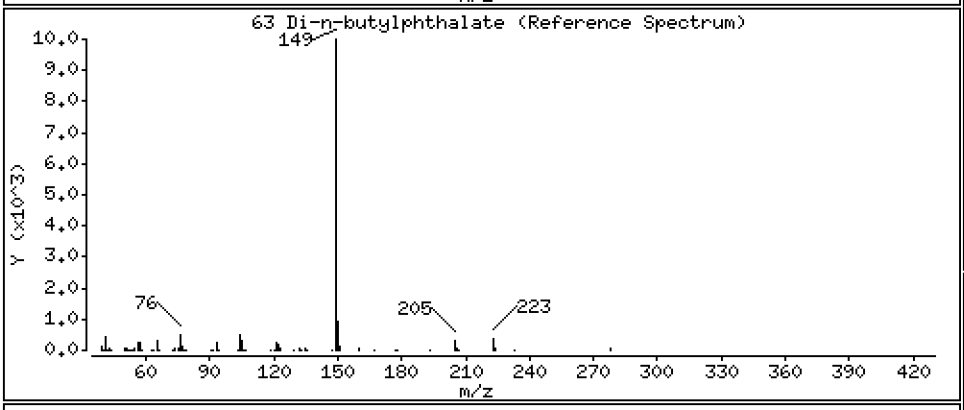
Column diameter: 0.25

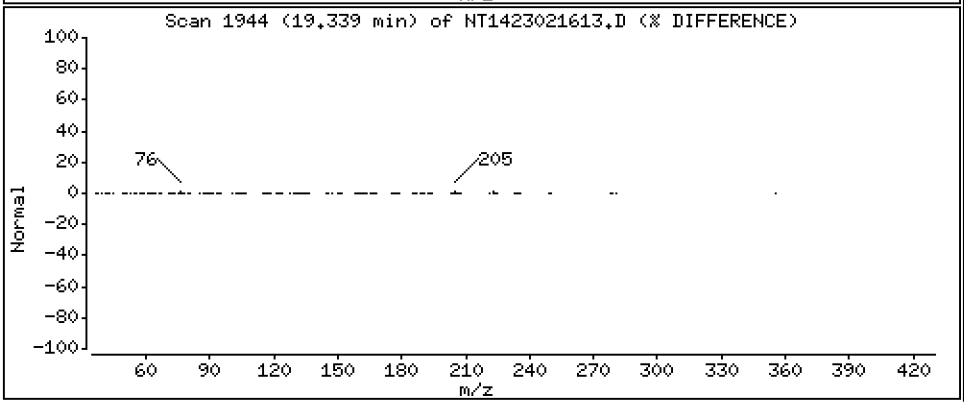
63 Di-n-butylphthalate

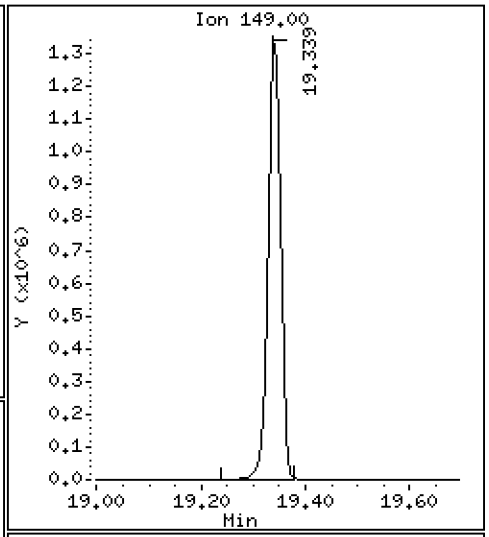
Concentration: 5.515 ug/mL

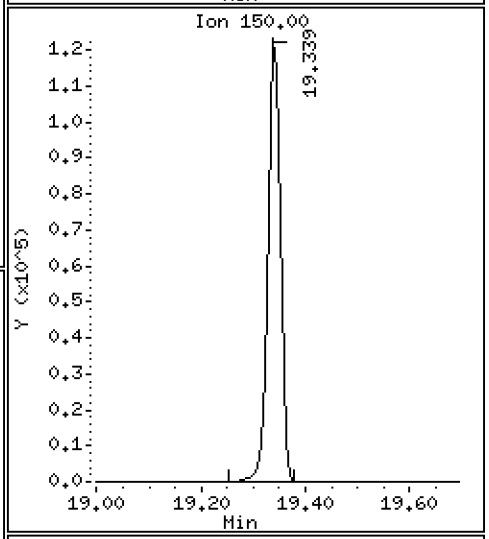


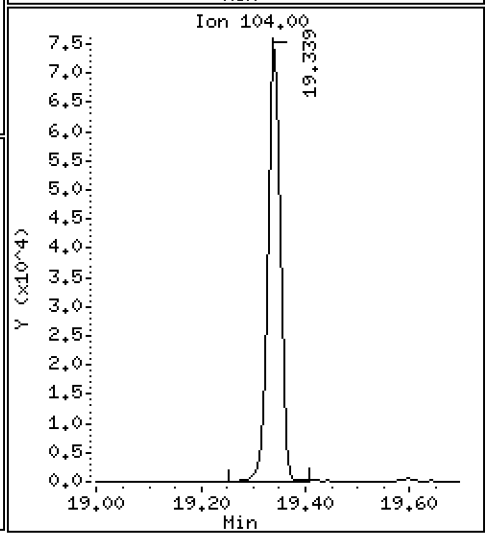












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

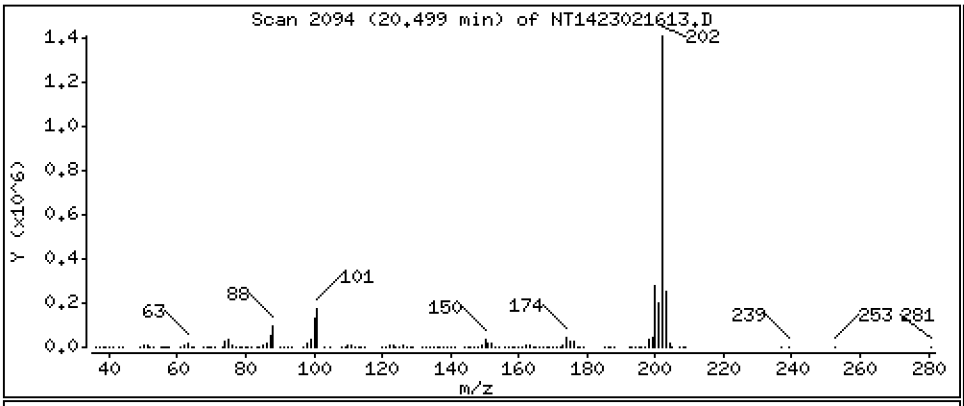
Operator: DSD

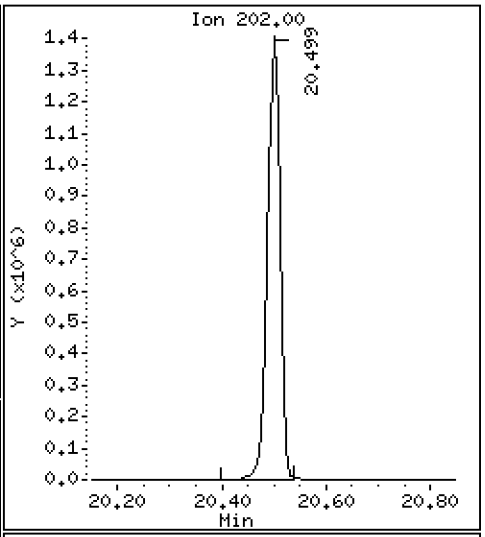
Column phase: ZB-5msi

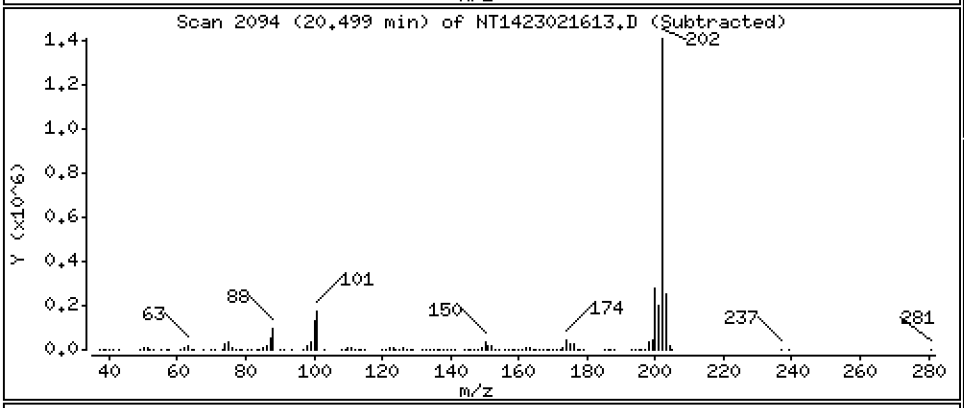
Column diameter: 0.25

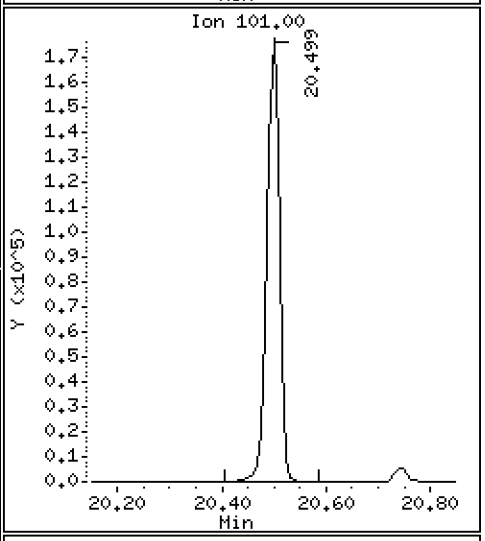
64 Fluoranthene

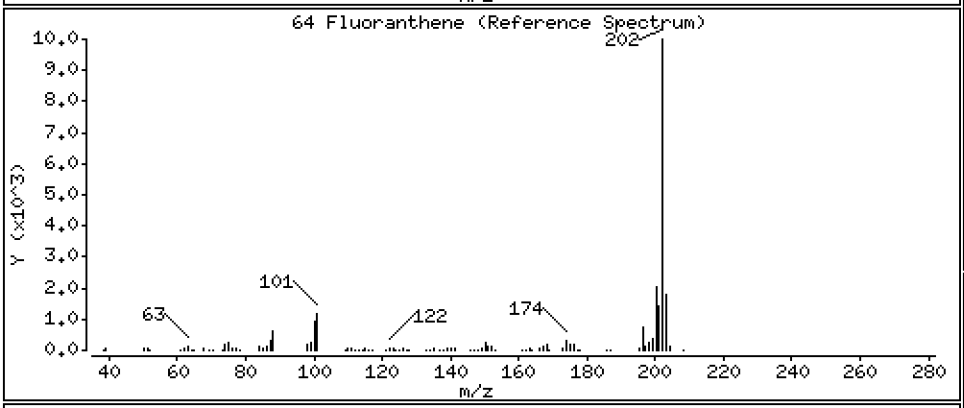
Concentration: 4.682 ug/mL

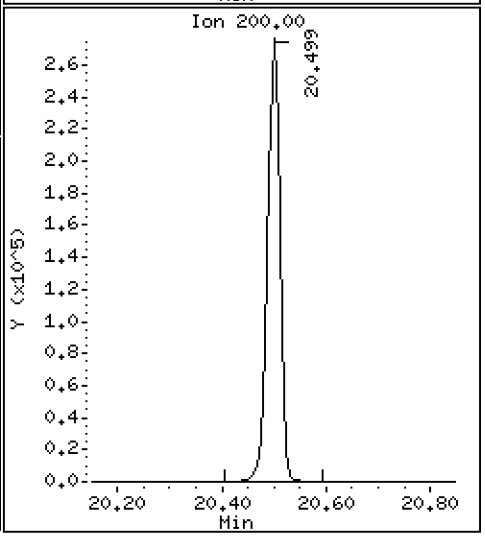


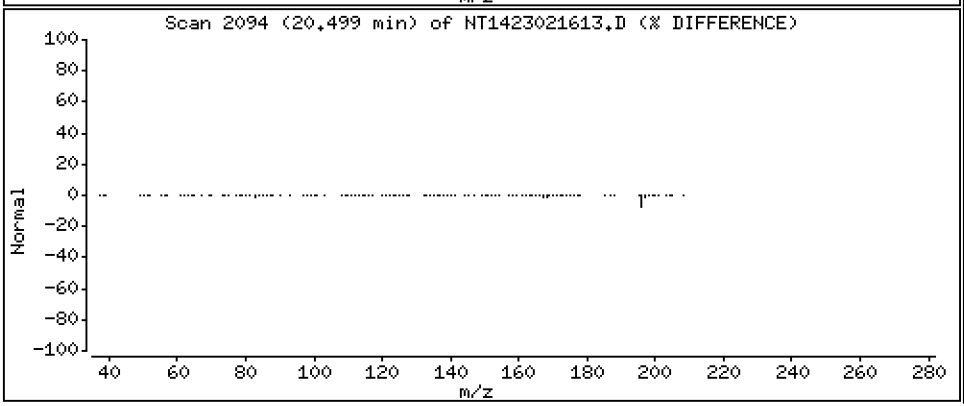












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

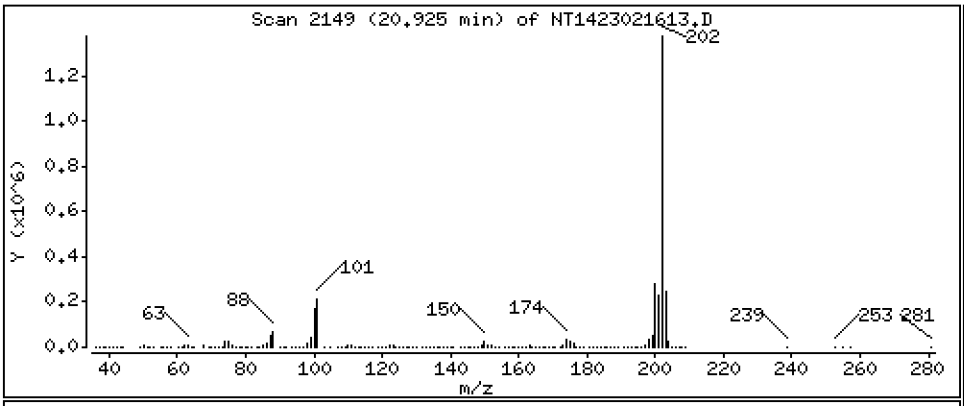
Operator: DSD

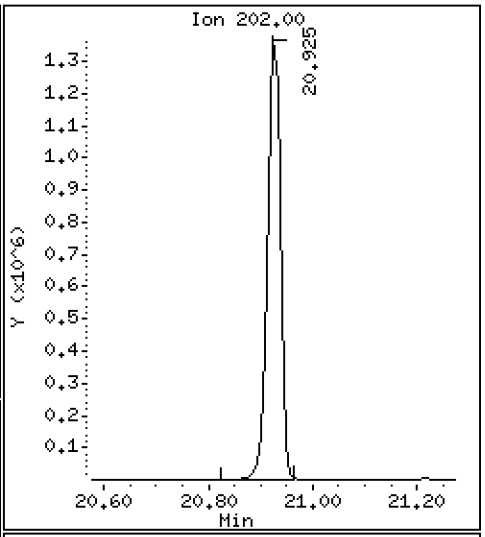
Column phase: ZB-5msi

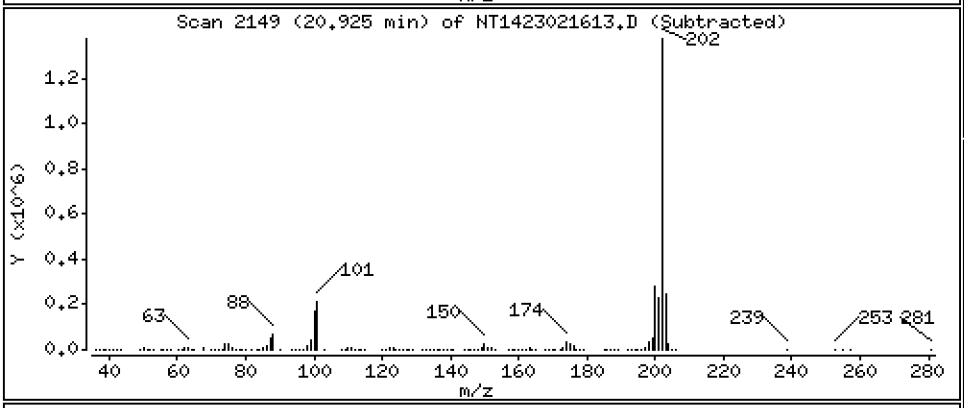
Column diameter: 0.25

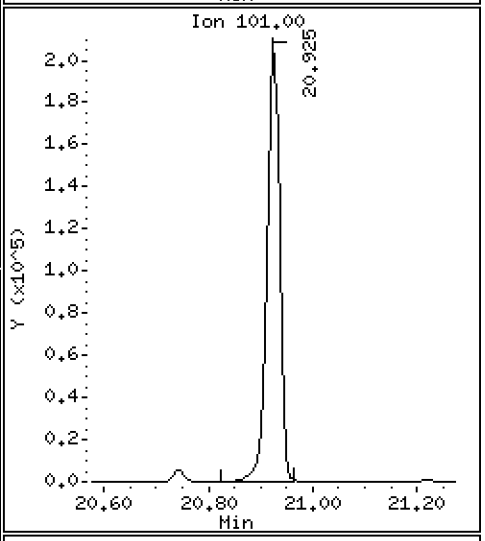
65 Pyrene

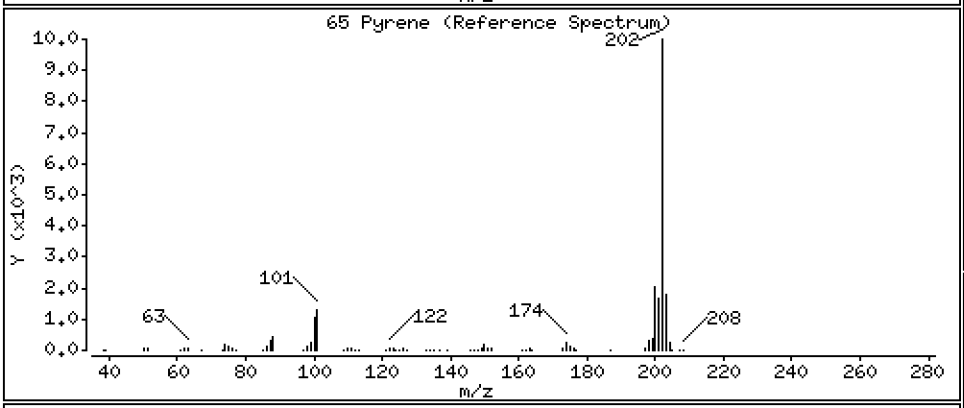
Concentration: 4.400 ug/mL

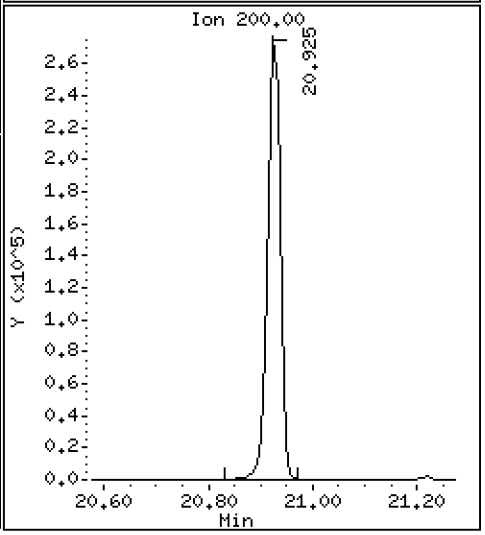


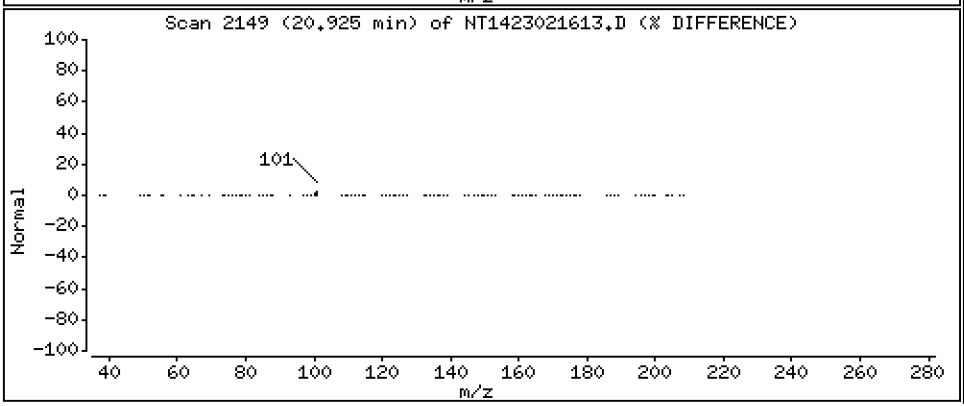












Date : 16-FEB-2023 21:18

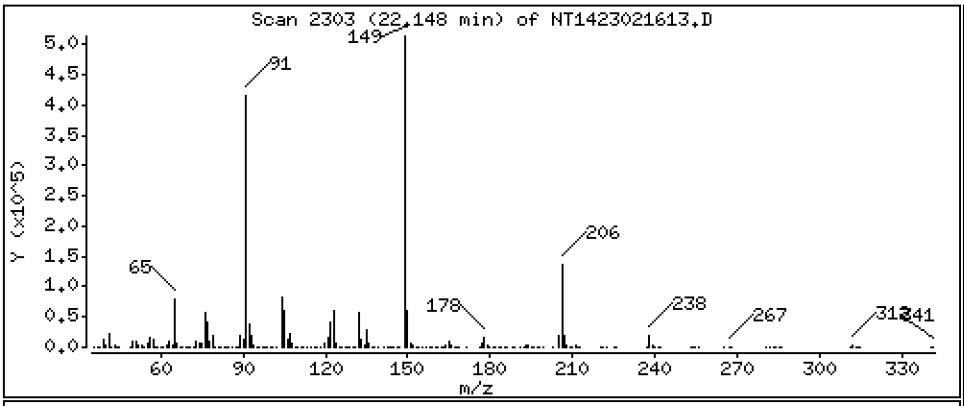
Client ID: Instrument: nt14.i

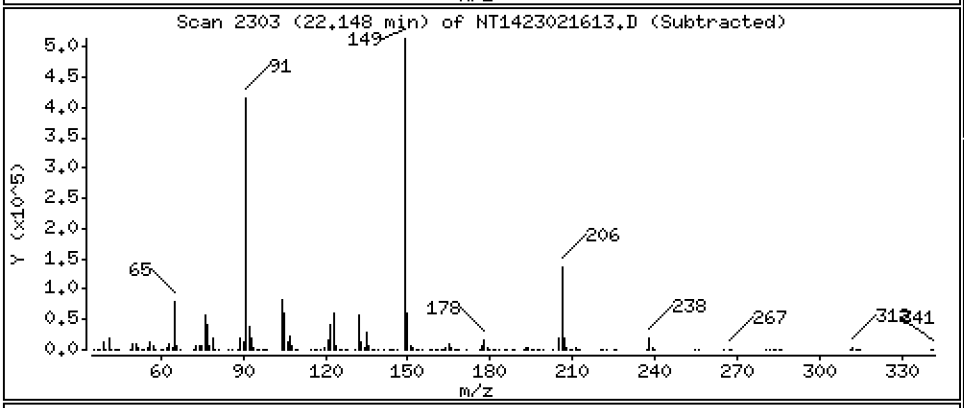
Sample Info: SLB0234-SCV1

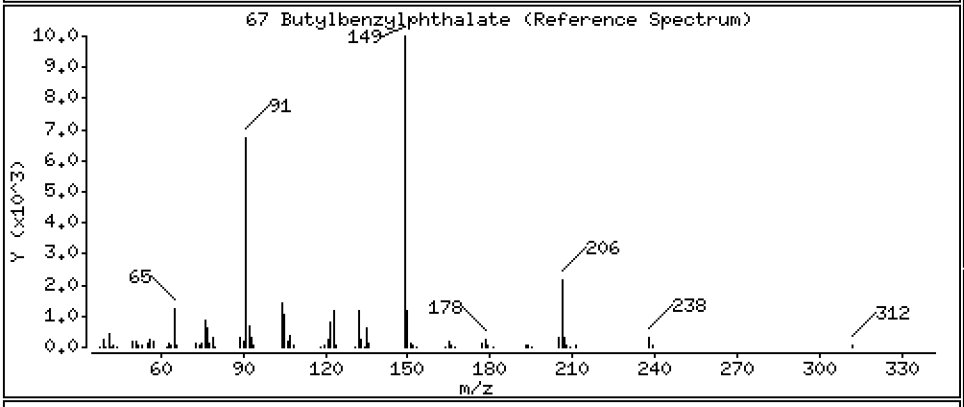
Operator: DSD

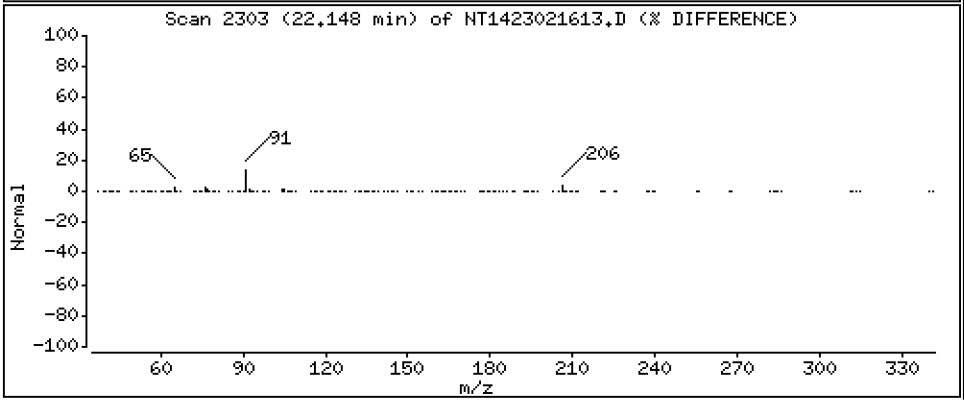
Column phase: ZB-5msi Column diameter: 0.25

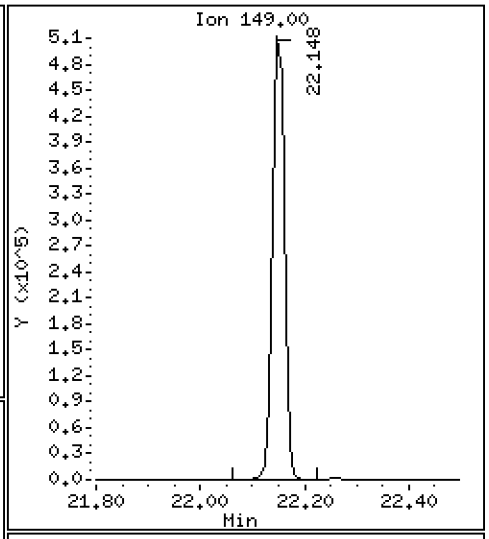
67 Butylbenzylphthalate Concentration: 4.568 ug/mL

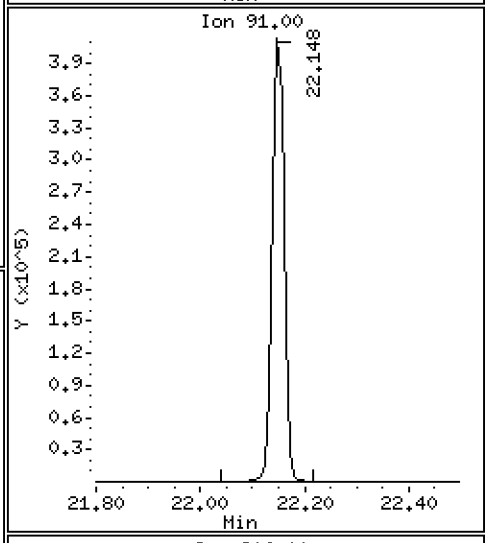


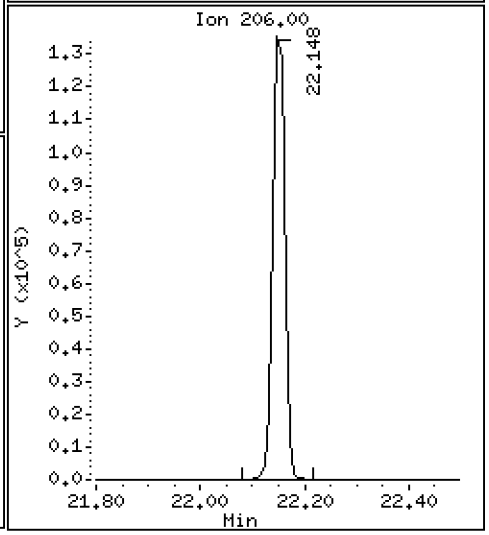












Date : 16-FEB-2023 21:18

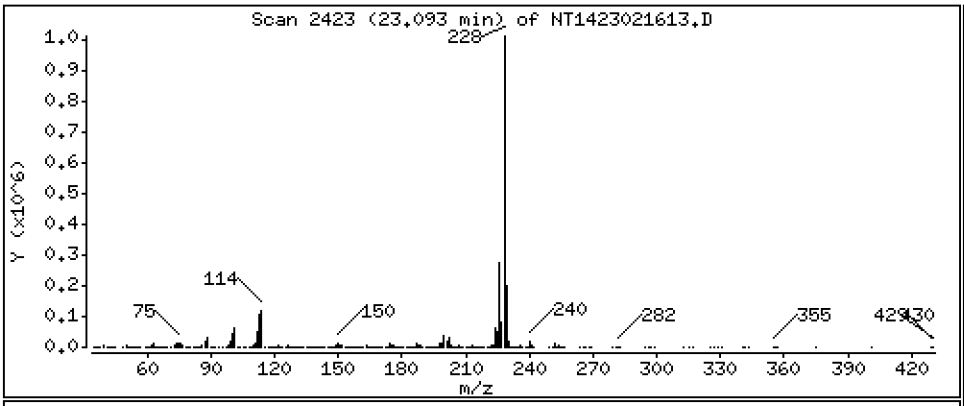
Client ID: Instrument: nt14.i

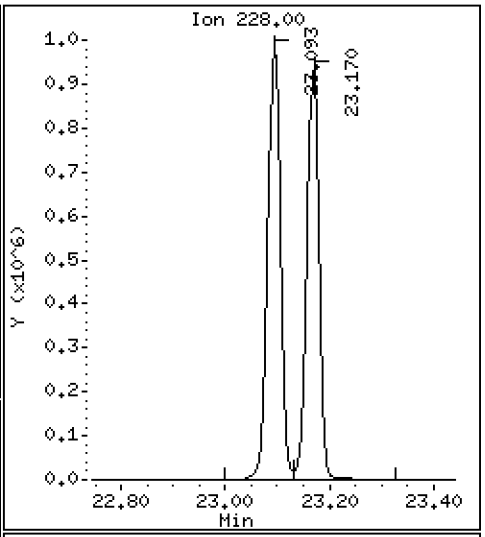
Sample Info: SLB0234-SCV1

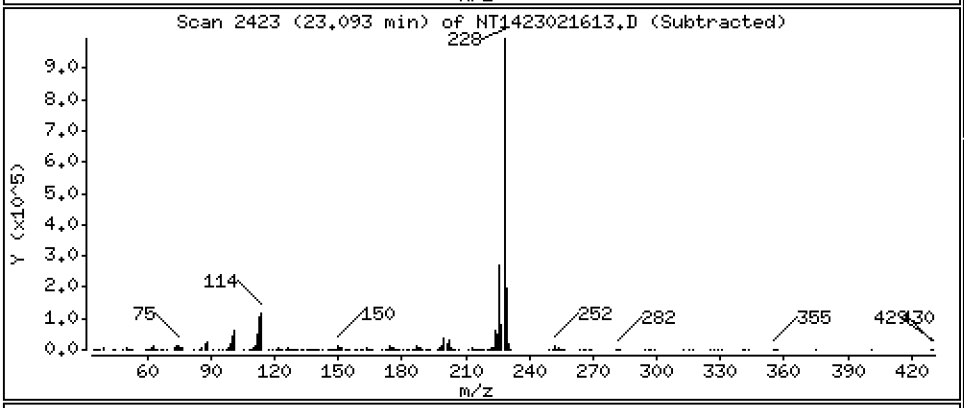
Operator: DSD

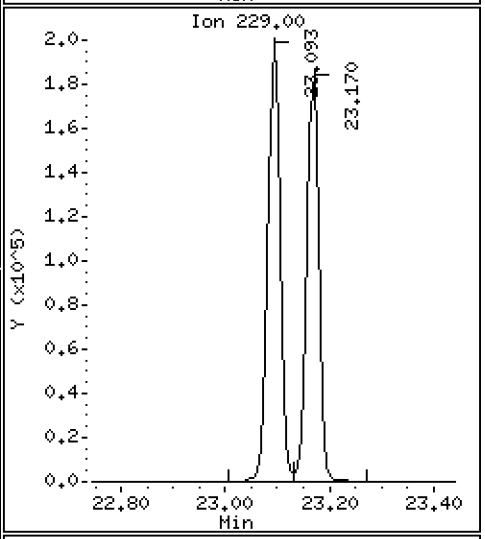
Column phase: ZB-5msi Column diameter: 0.25

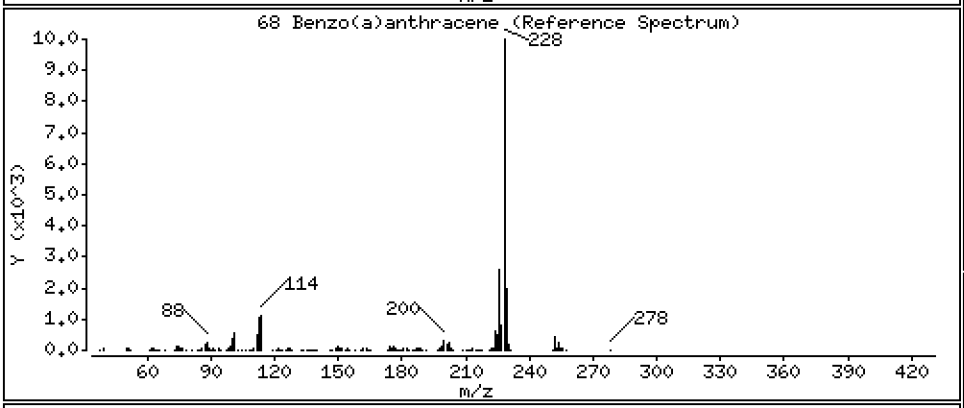
68 Benzo(a)anthracene Concentration: 4.530 ug/mL

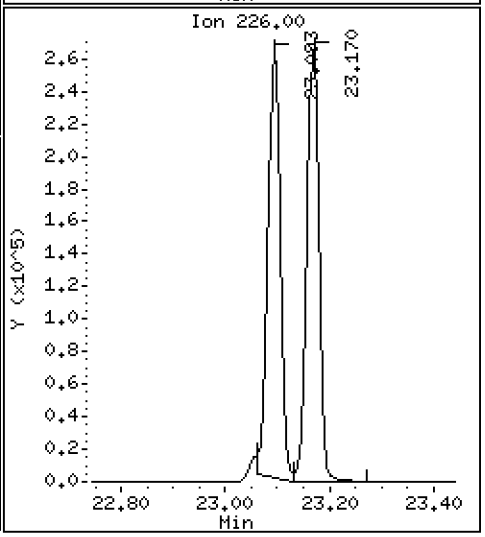


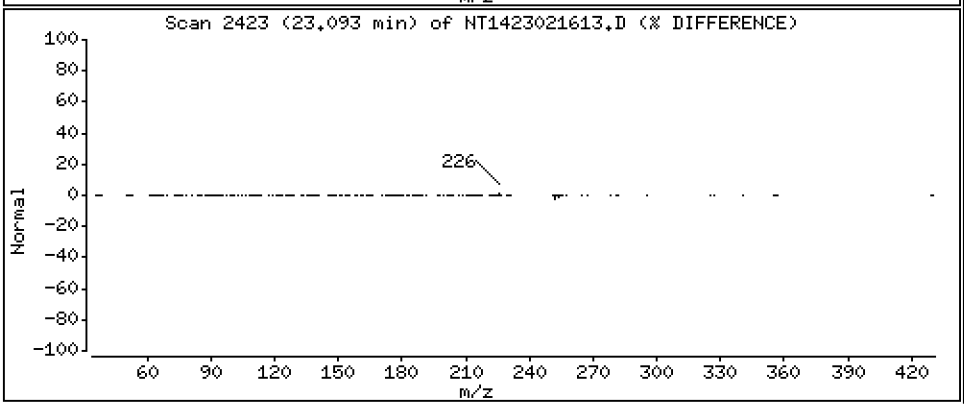












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

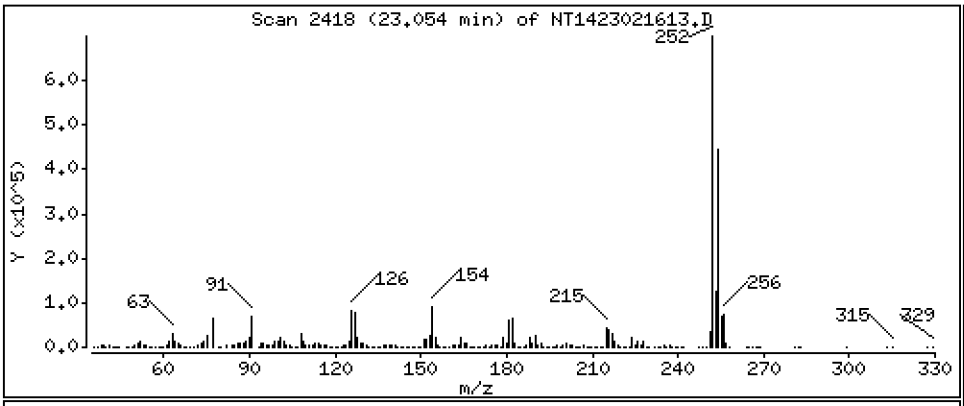
Operator: DSD

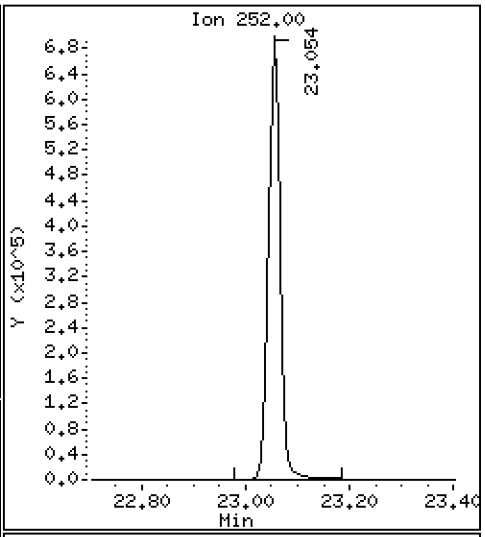
Column phase: ZB-5msi

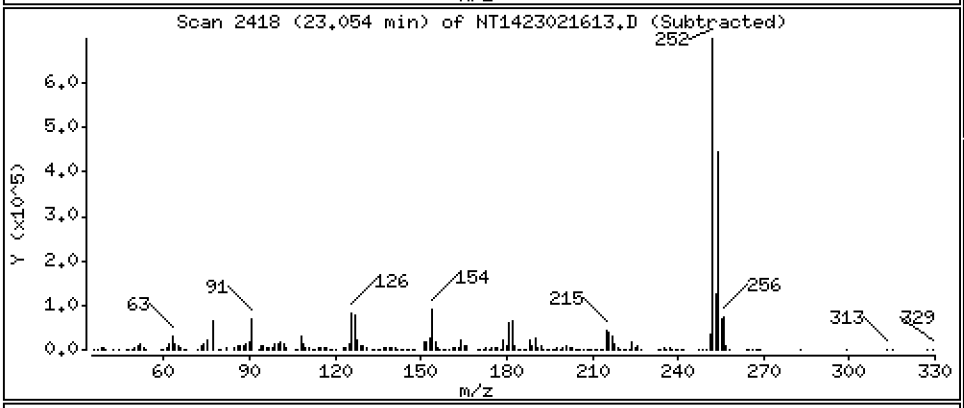
Column diameter: 0.25

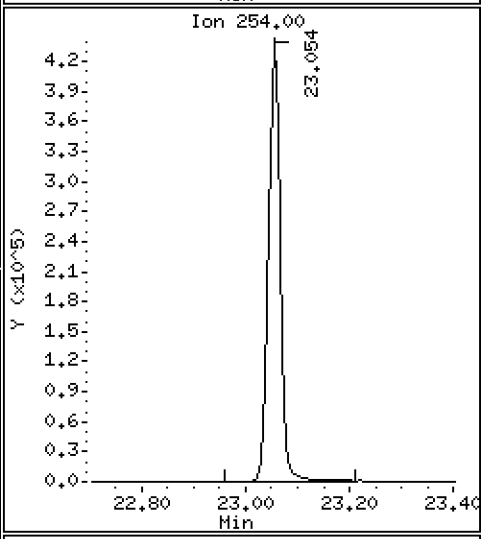
70 3,3'-Dichlorobenzidine

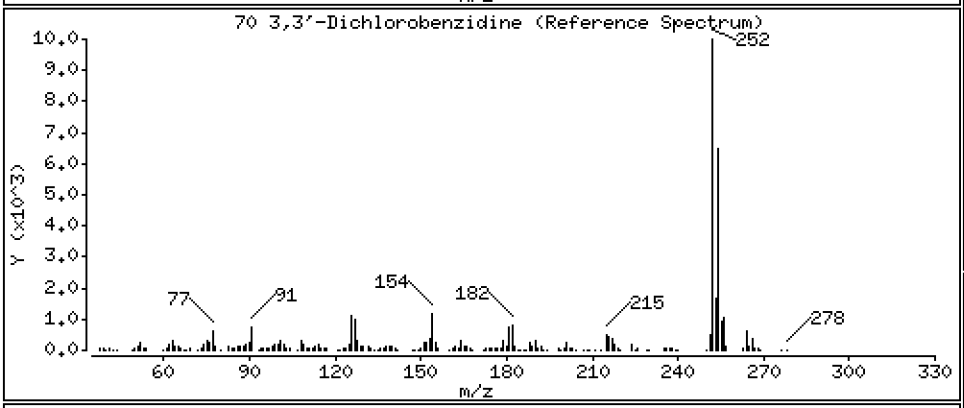
Concentration: 9.328 ug/mL

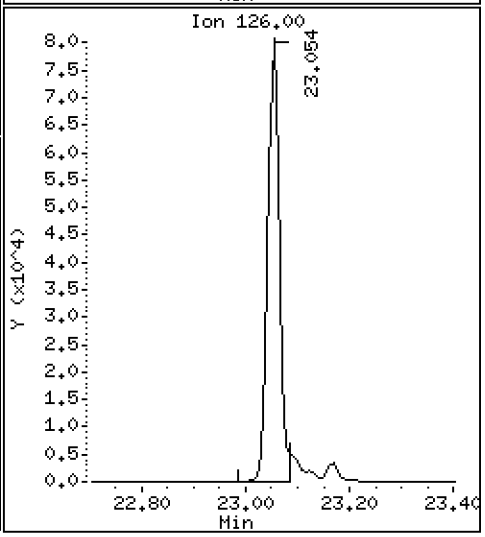


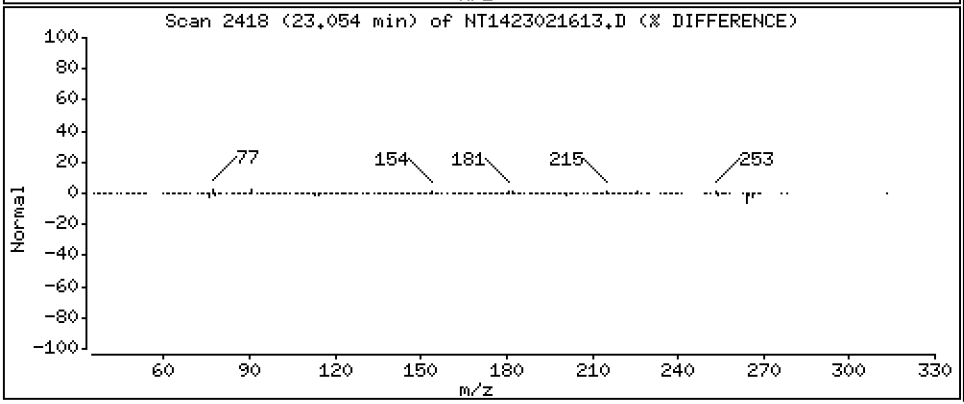












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

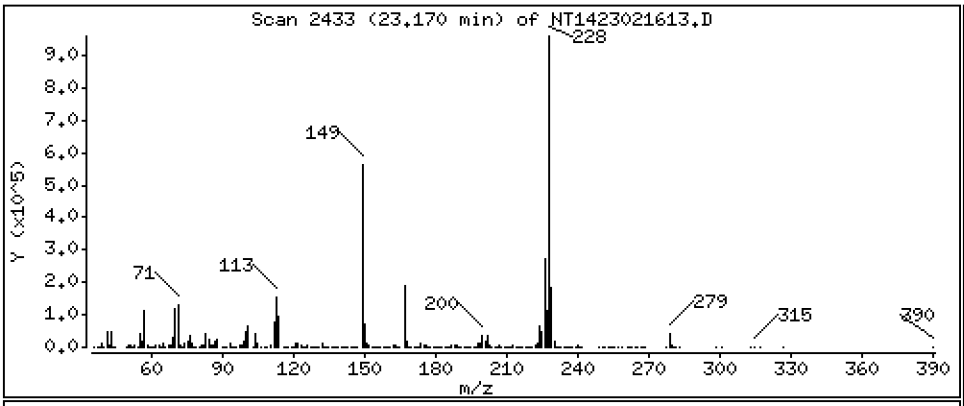
Operator: DSD

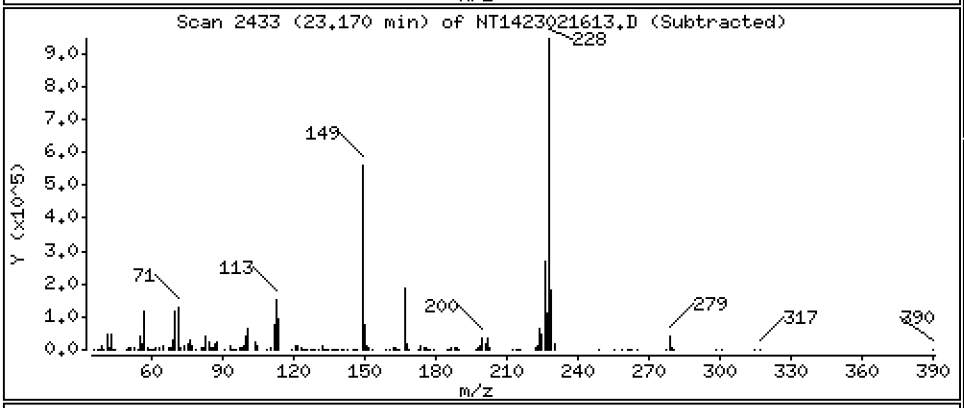
Column phase: ZB-5msi

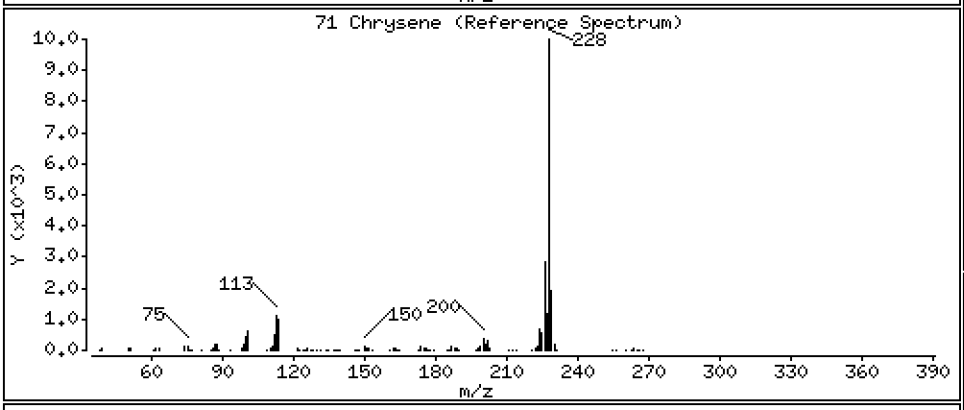
Column diameter: 0.25

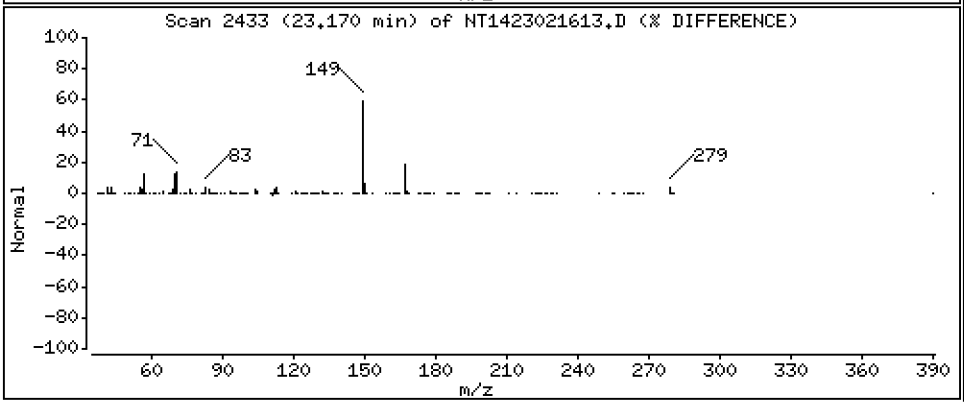
71 Chrysene

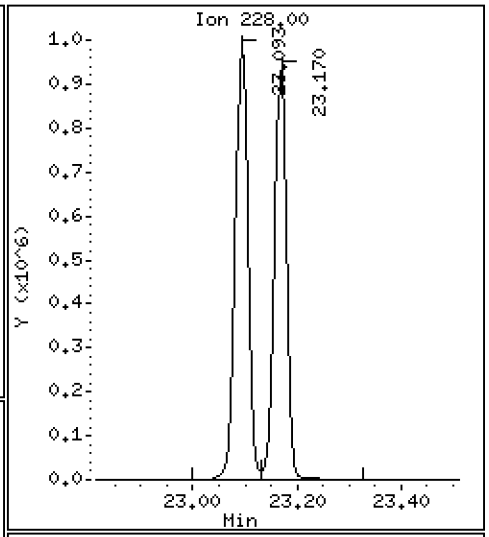
Concentration: 4.474 ug/mL

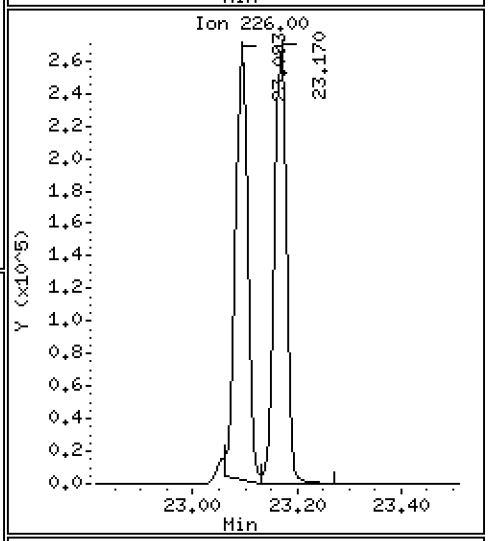


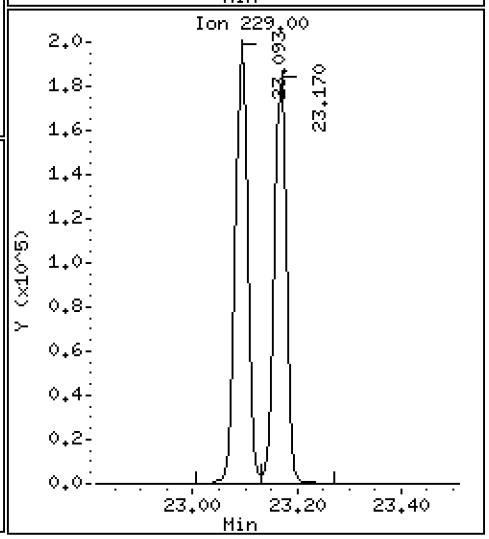












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

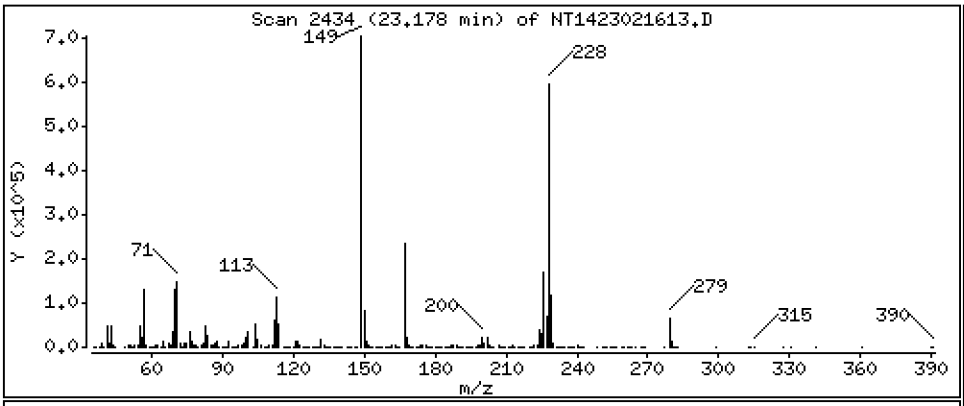
Operator: DSD

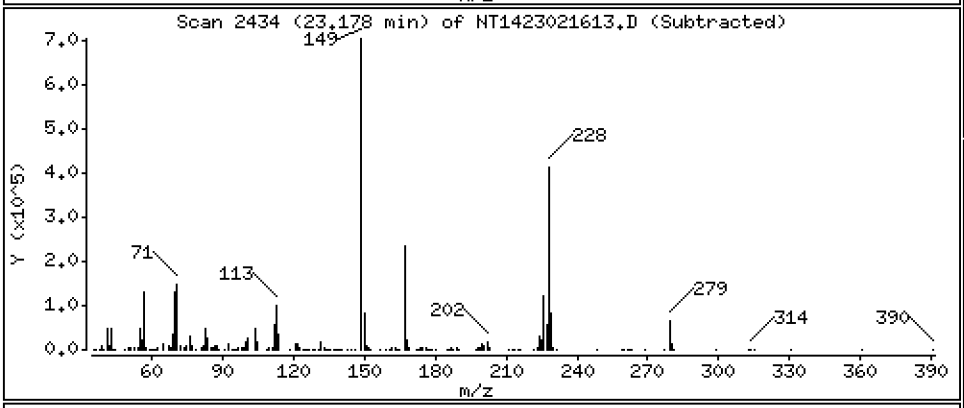
Column phase: ZB-5msi

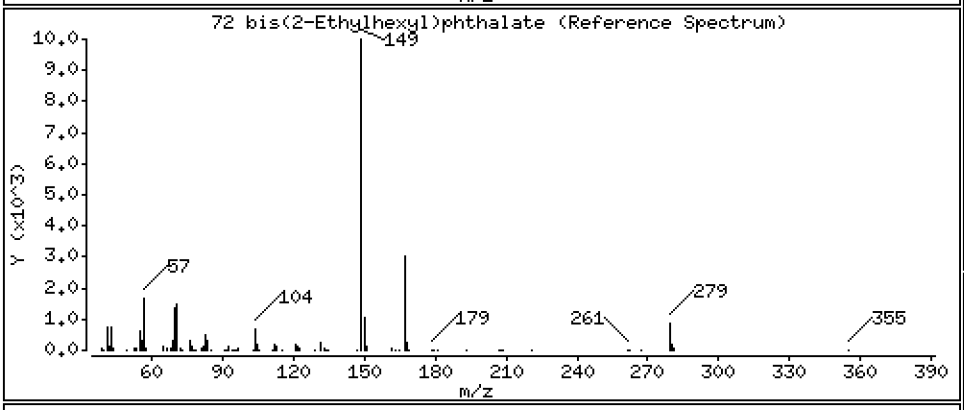
Column diameter: 0.25

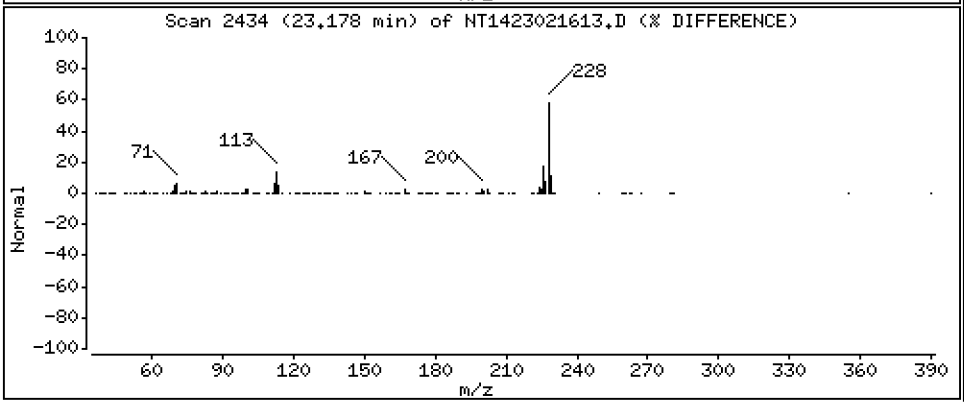
72 bis(2-Ethylhexyl)phthalate

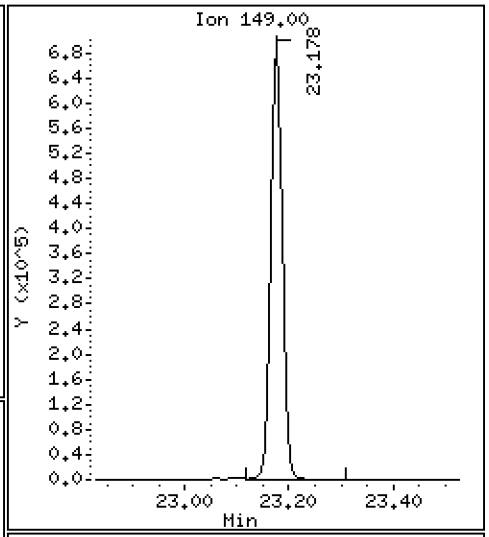
Concentration: 4.649 ug/mL

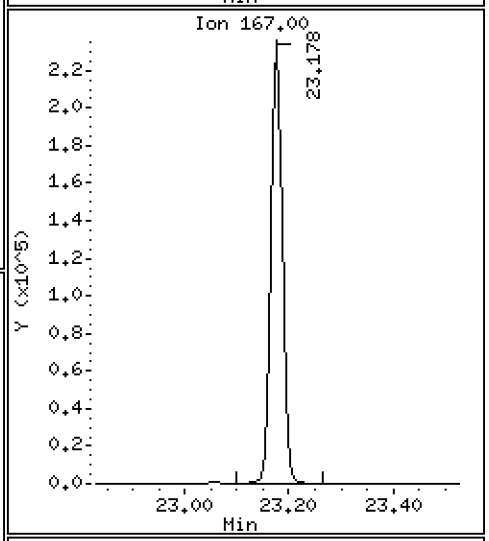


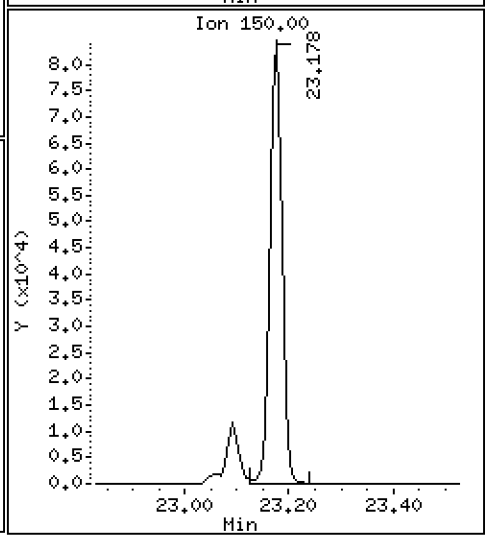












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

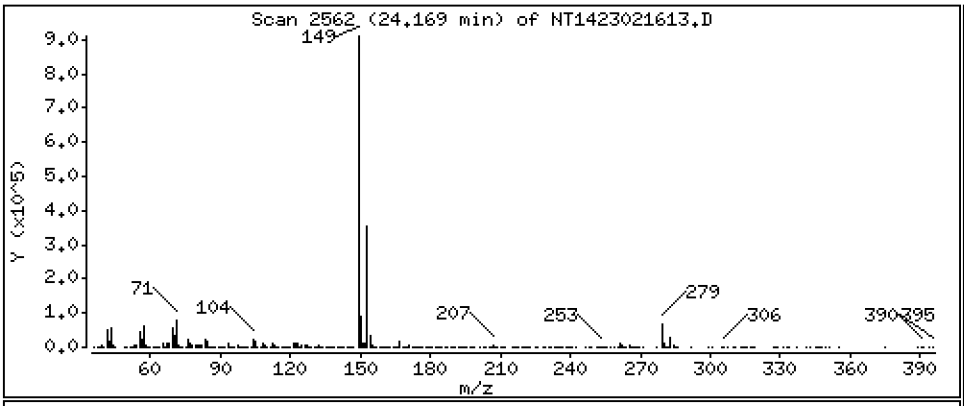
Operator: DSD

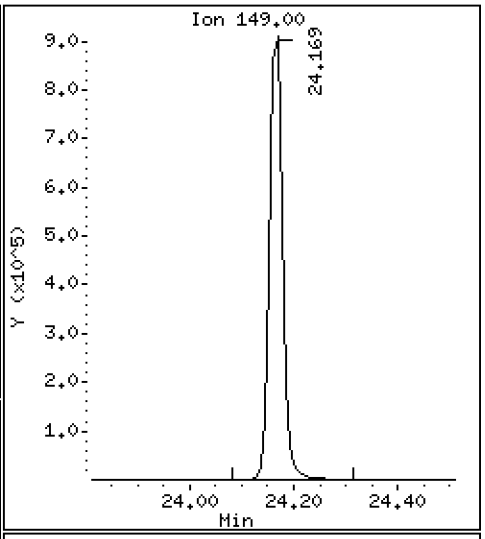
Column phase: ZB-5msi

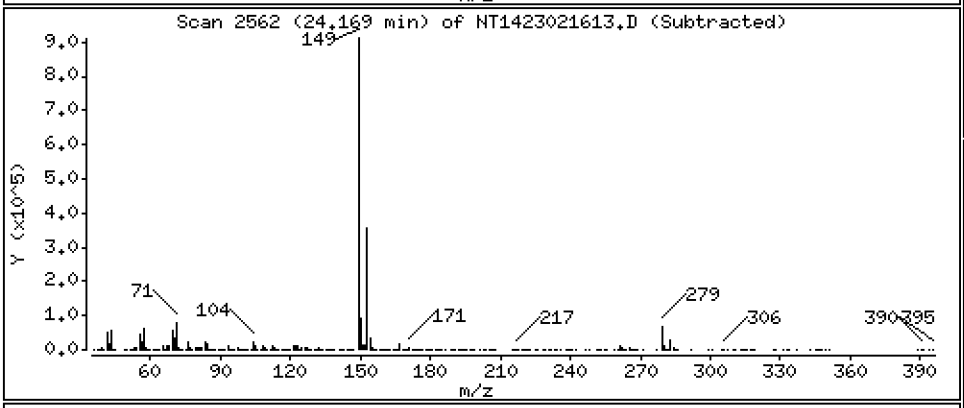
Column diameter: 0.25

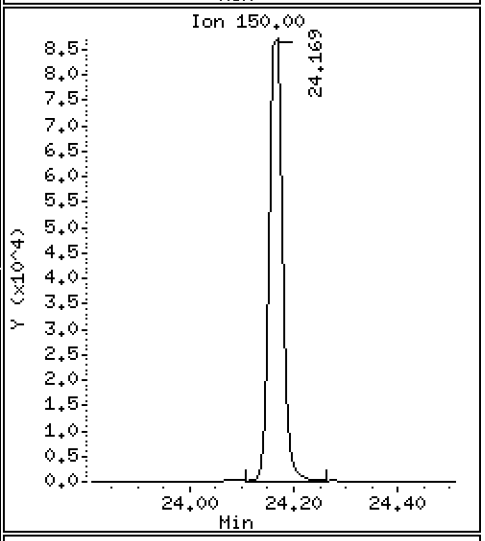
73 Di-n-octylphthalate

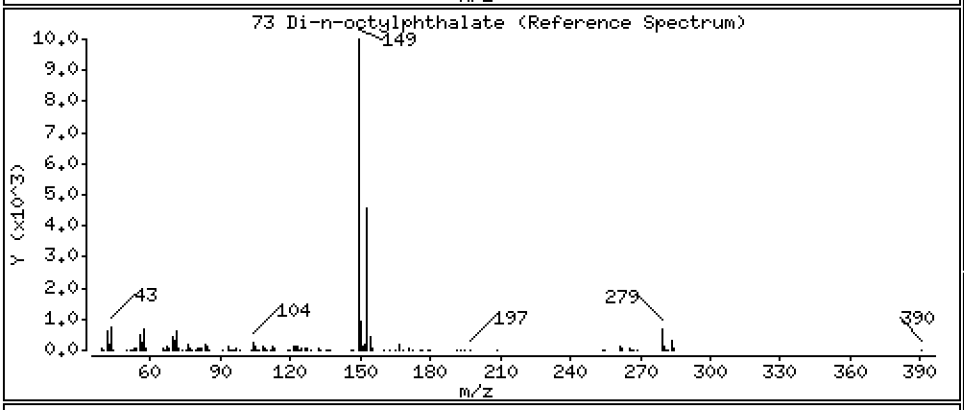
Concentration: 4.962 ug/mL

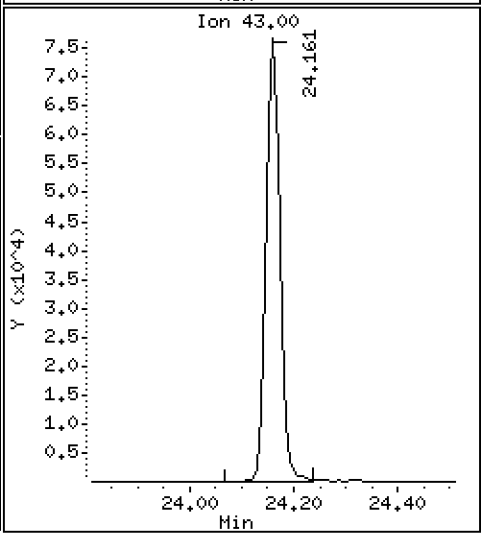


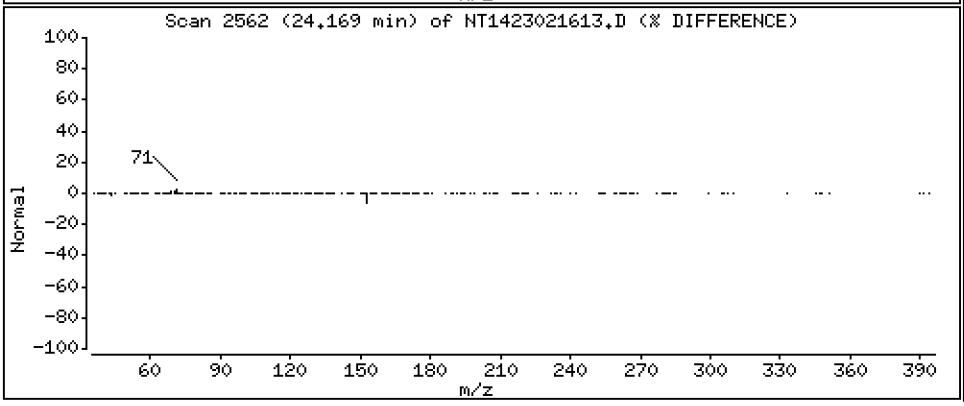












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

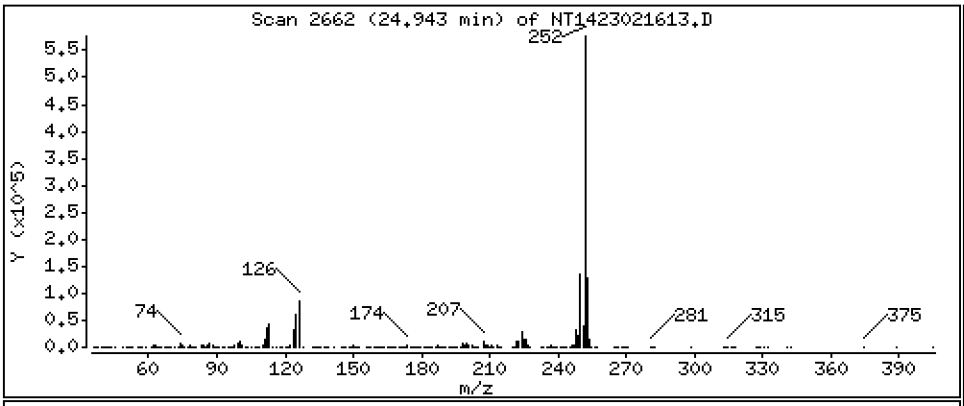
Operator: DSD

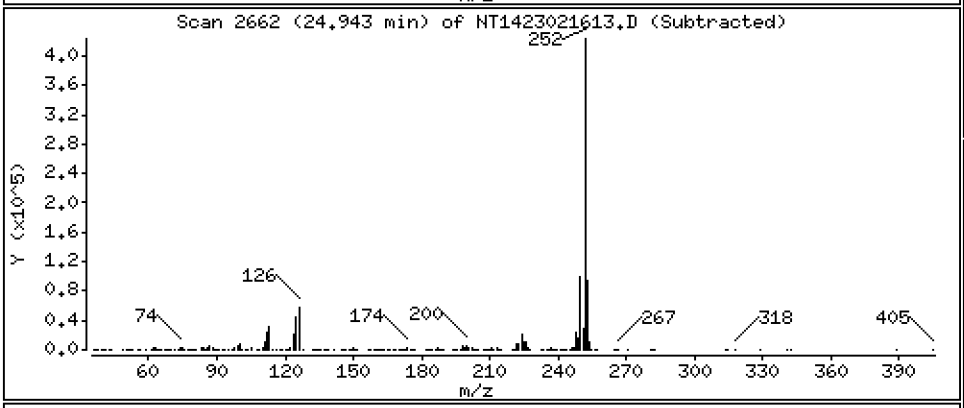
Column phase: ZB-5msi

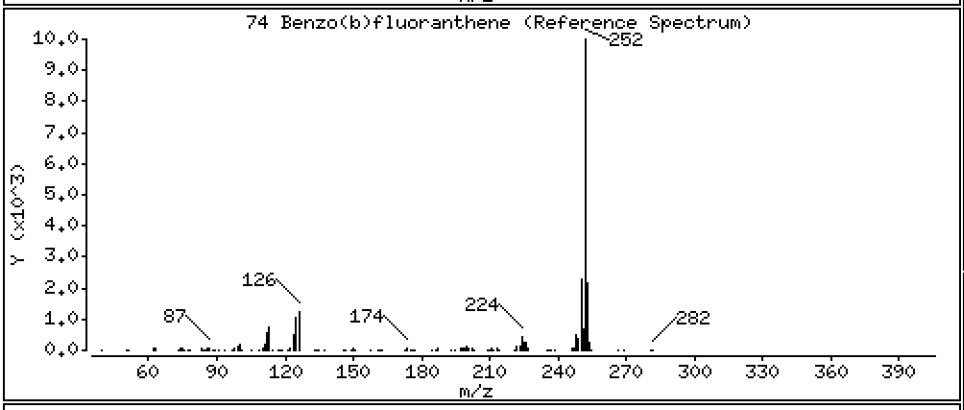
Column diameter: 0.25

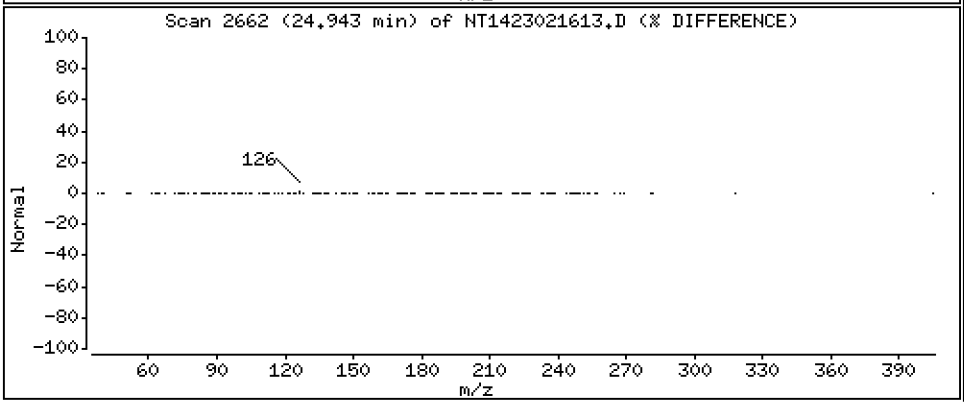
74 Benzo(b)fluoranthene

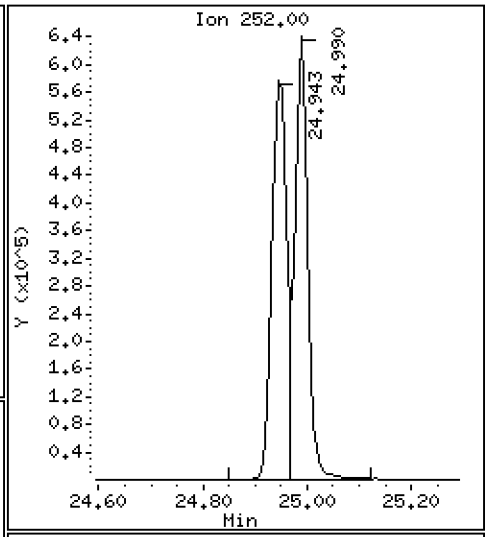
Concentration: 4.813 ug/mL

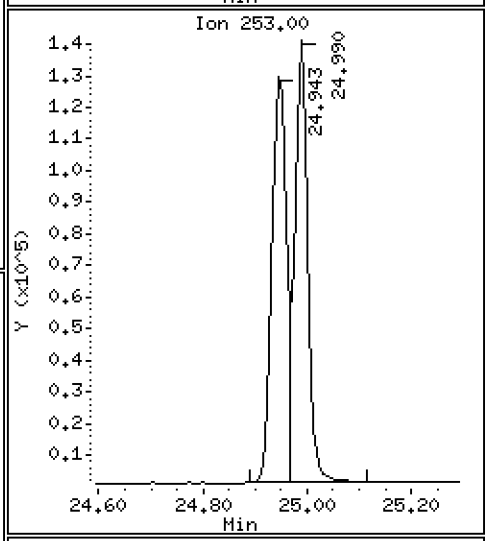


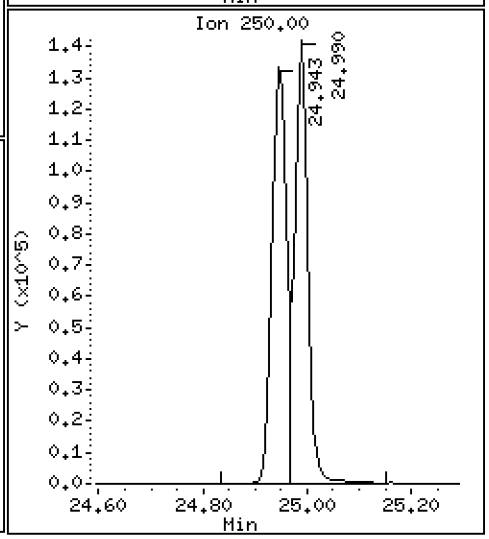












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

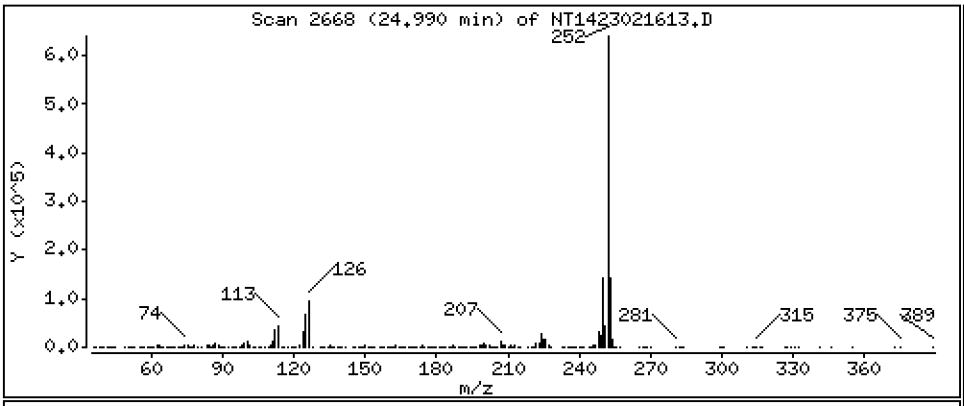
Operator: DSD

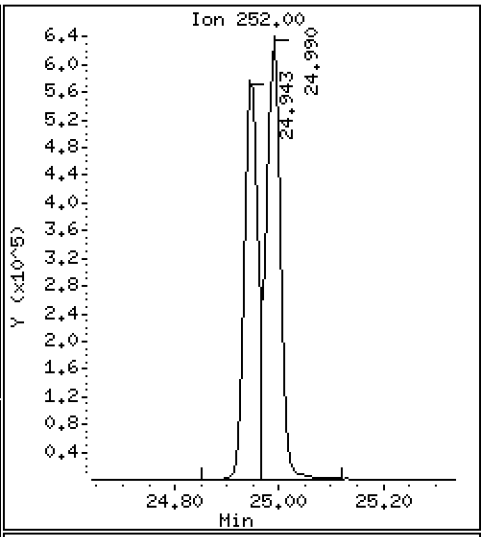
Column phase: ZB-5msi

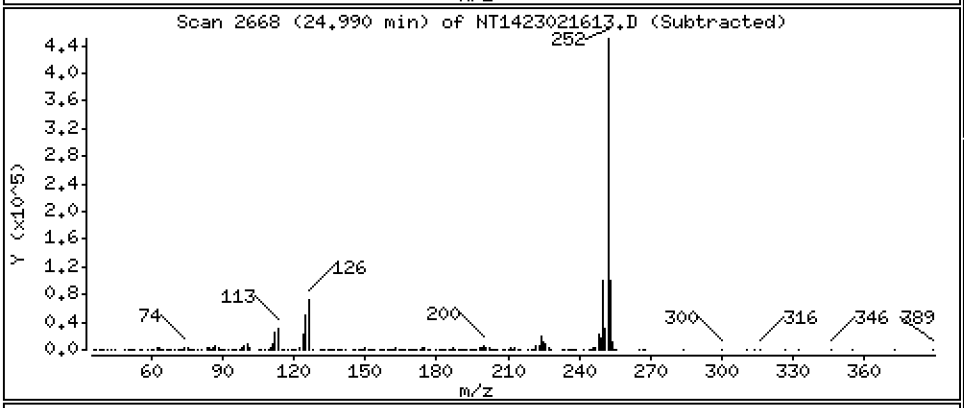
Column diameter: 0.25

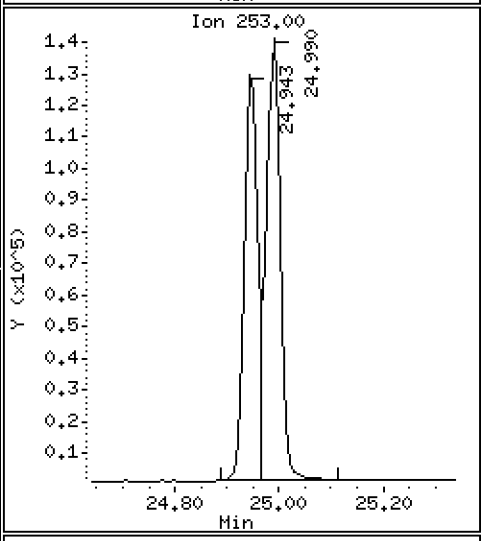
75 Benzo(k)fluoranthene

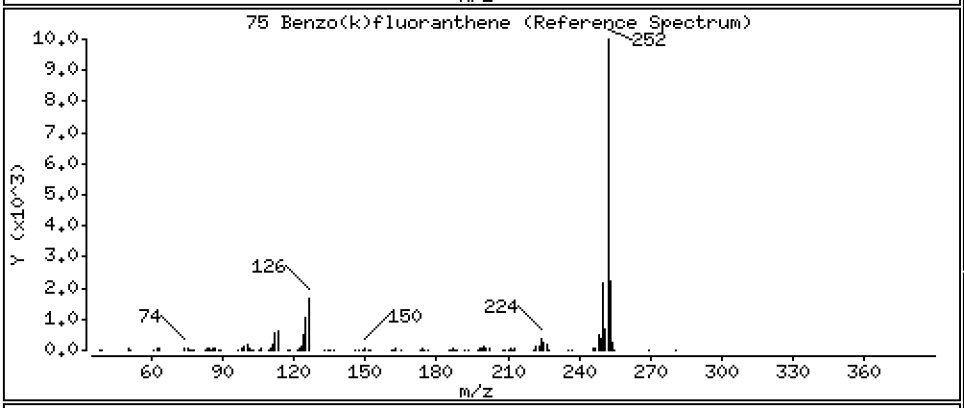
Concentration: 4.838 ug/mL

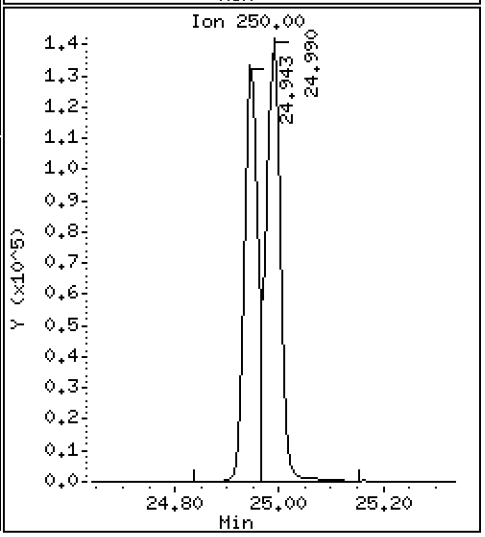


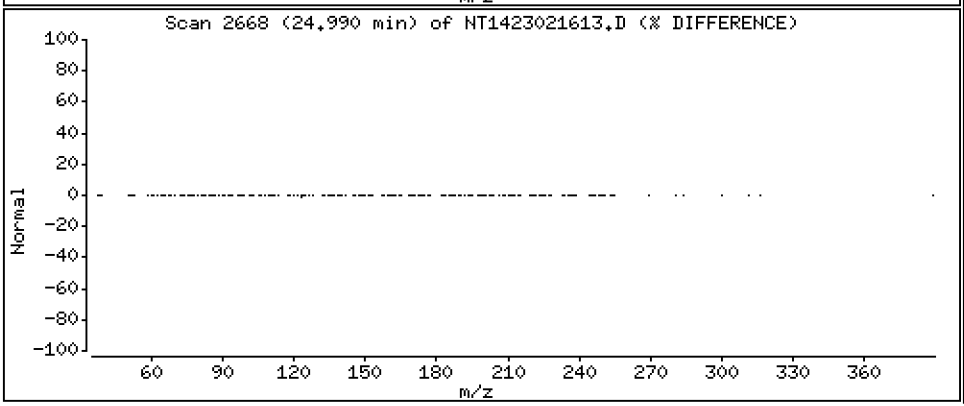












Data File: \\target\share\chem3\nt14.i\20230216.b\NT1423021613.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

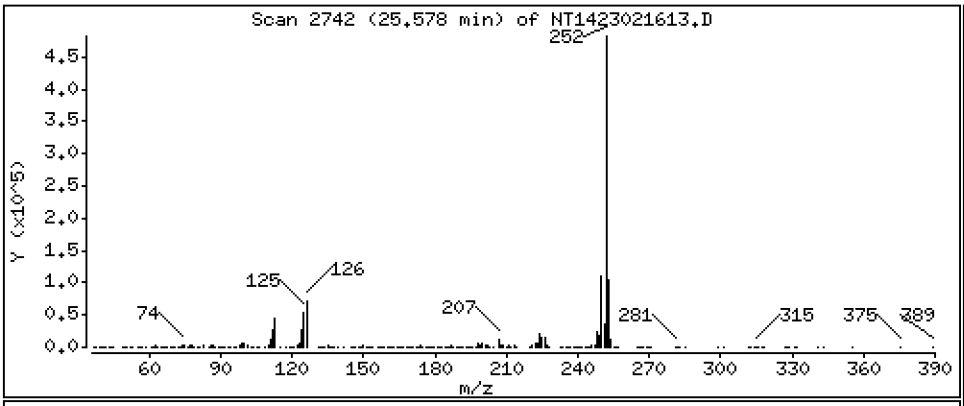
Operator: DSD

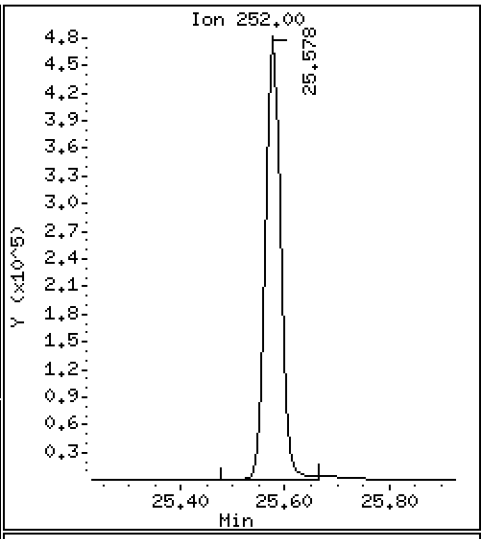
Column phase: ZB-5msi

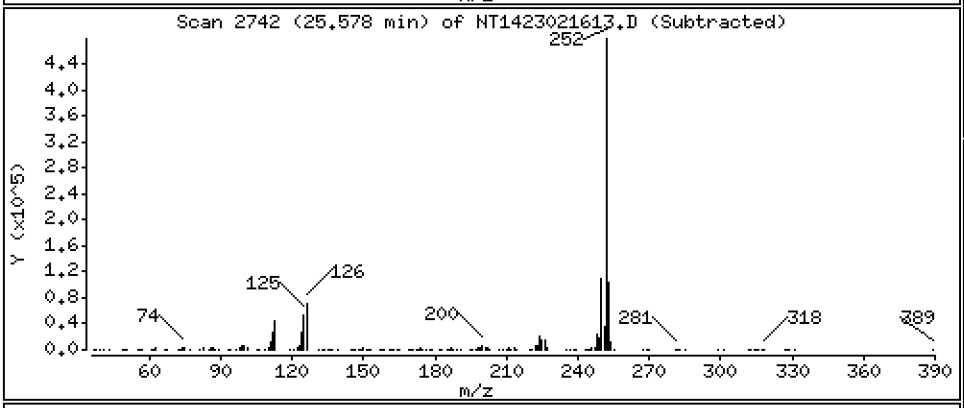
Column diameter: 0.25

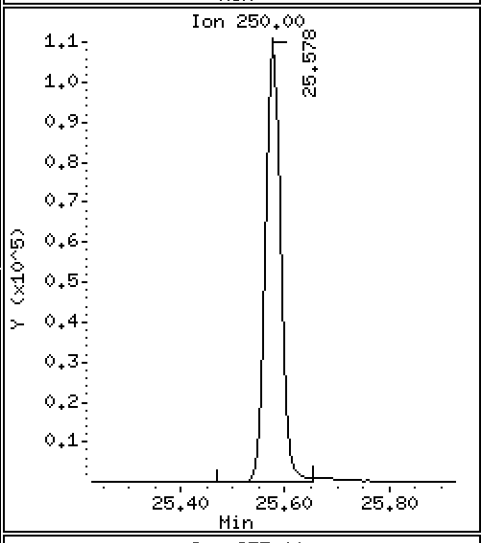
76 Benzo(a)pyrene

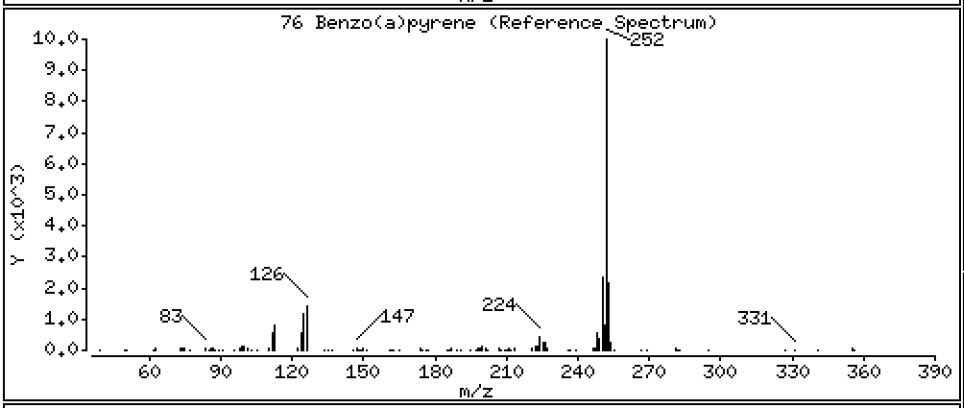
Concentration: 4.607 ug/mL

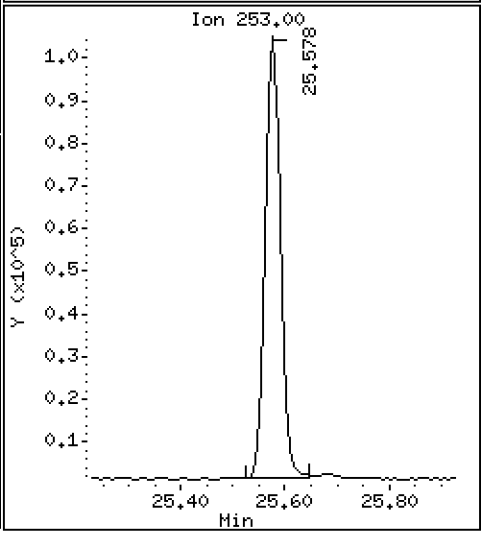


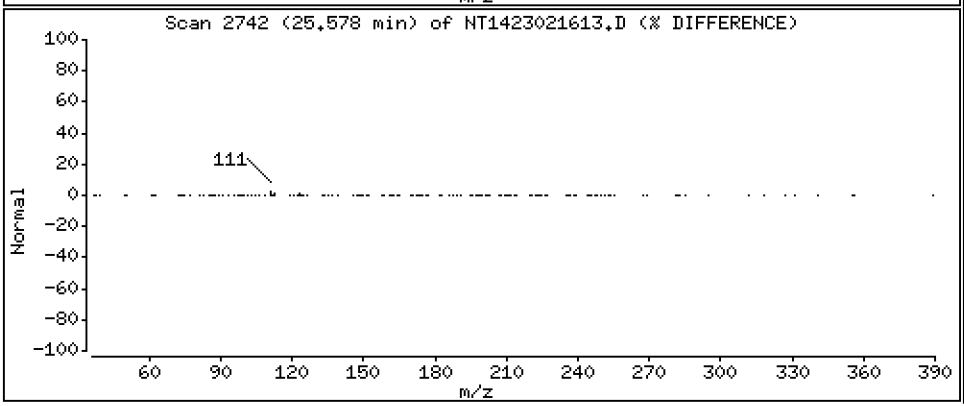












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

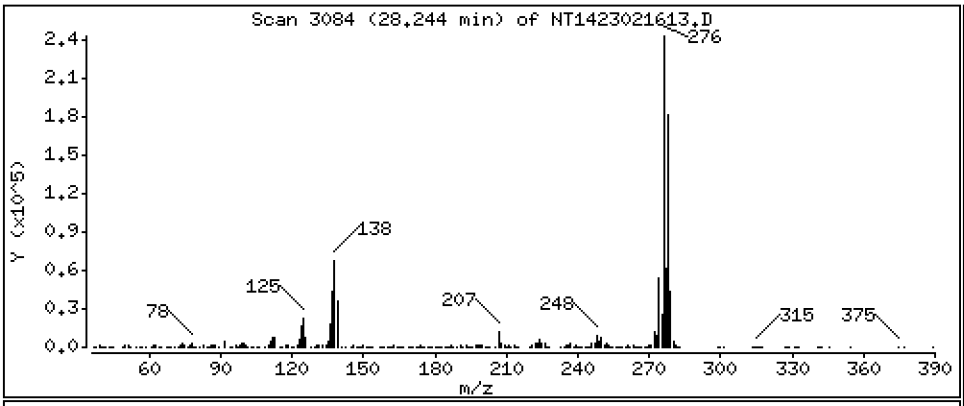
Operator: DSD

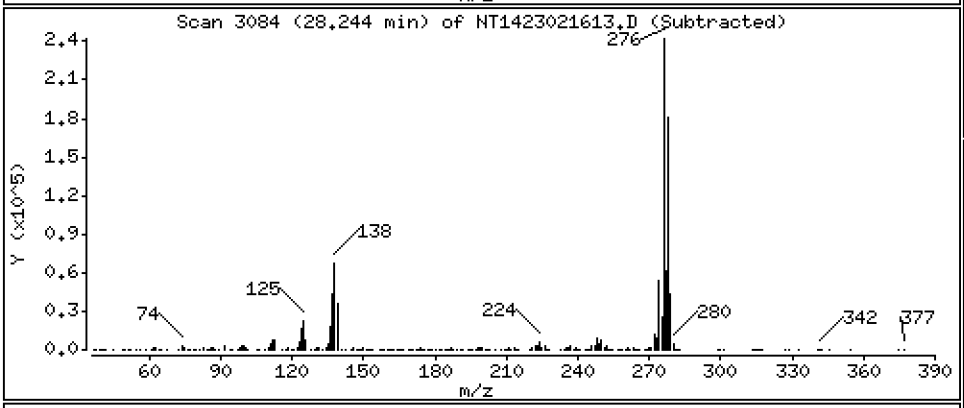
Column phase: ZB-5msi

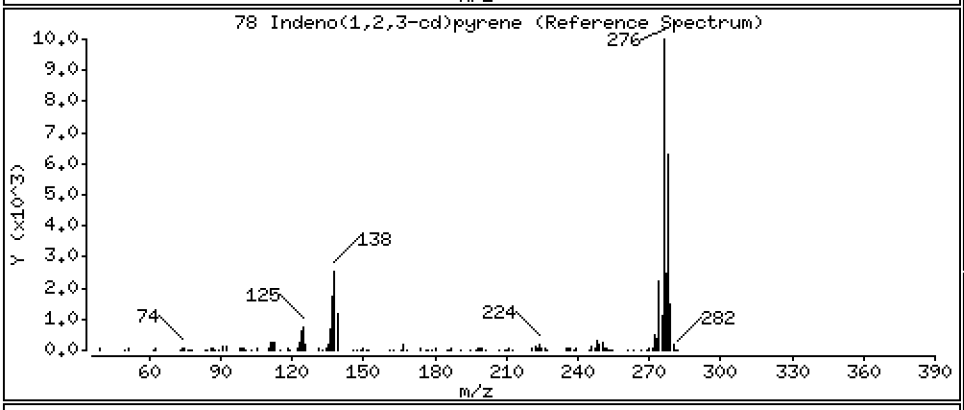
Column diameter: 0.25

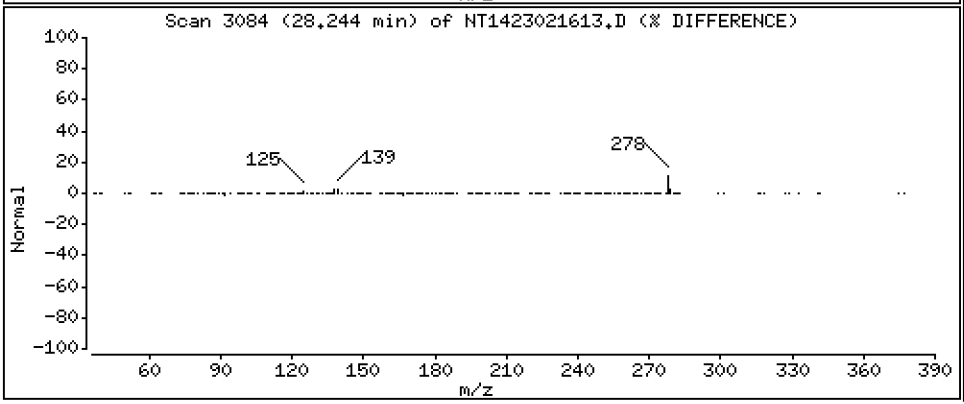
78 Indeno(1,2,3-cd)pyrene

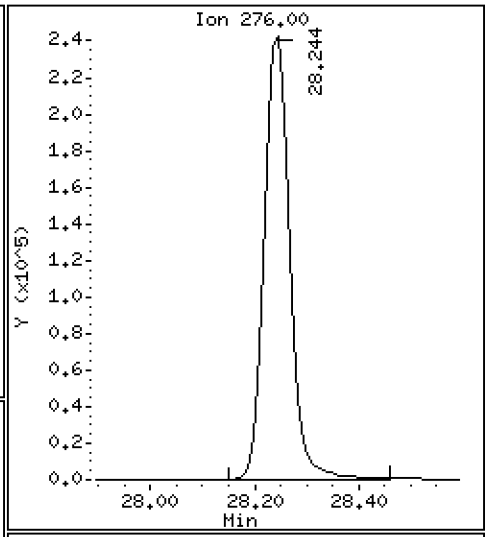
Concentration: 4.395 ug/mL

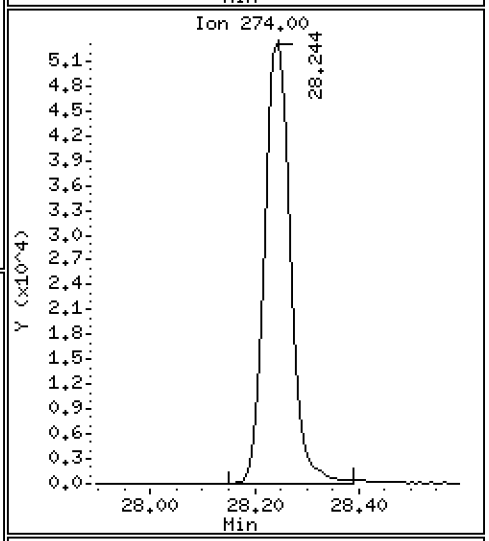


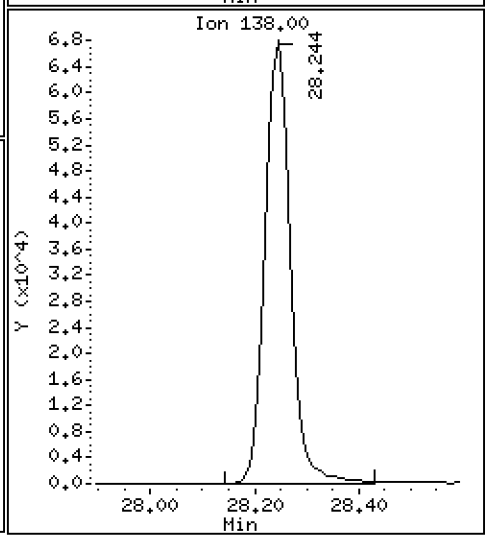












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

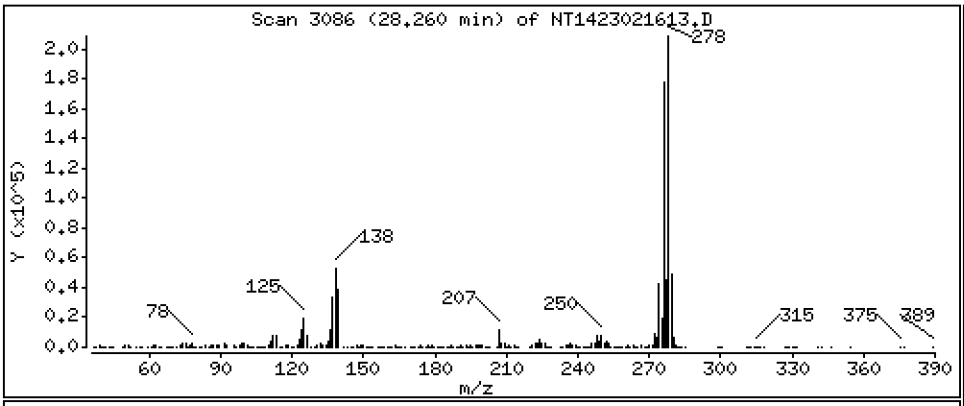
Operator: DSD

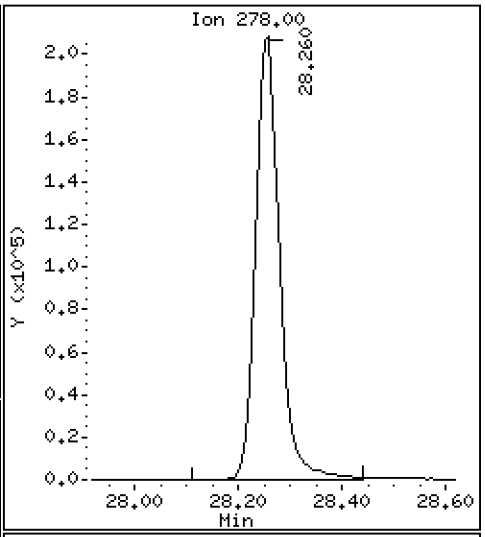
Column phase: ZB-5msi

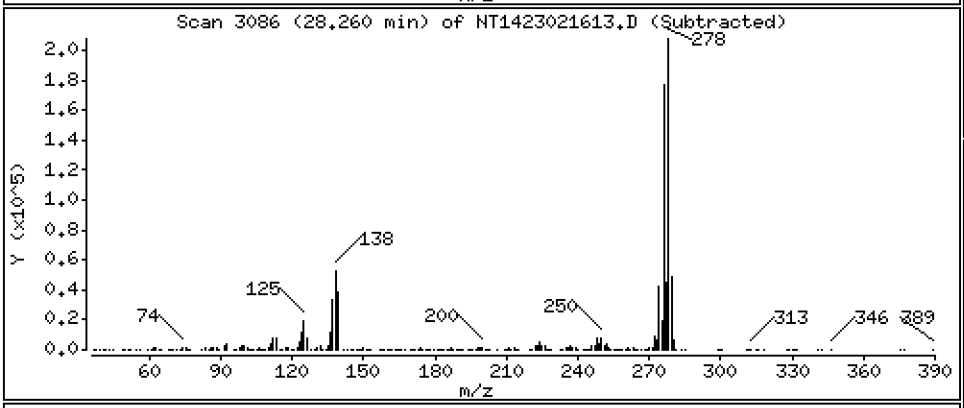
Column diameter: 0.25

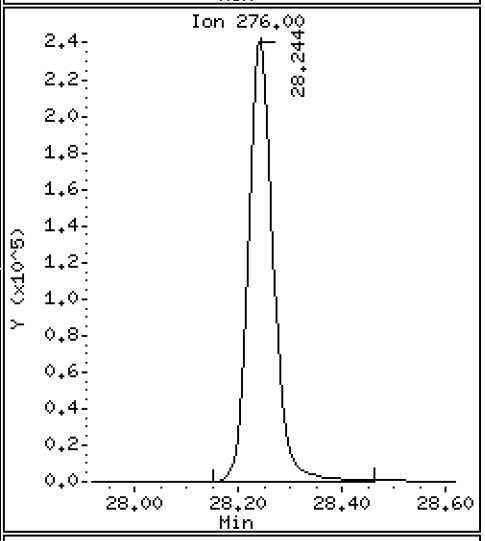
79 Dibenzo(a,h)anthracene

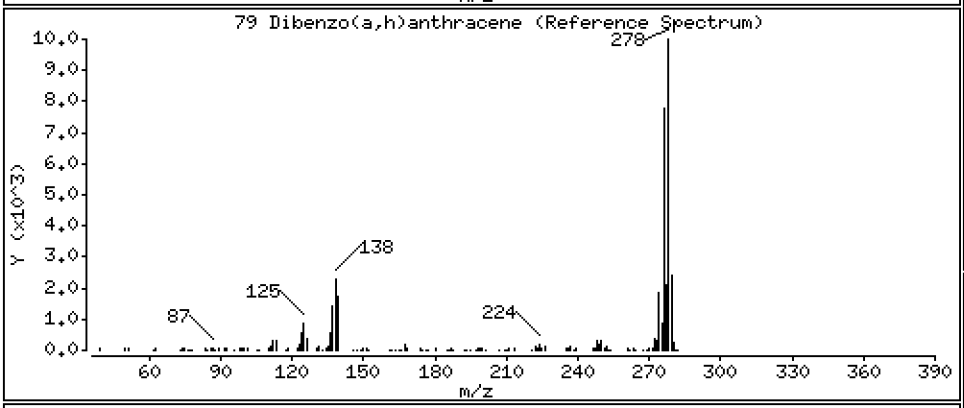
Concentration: 4.365 ug/mL

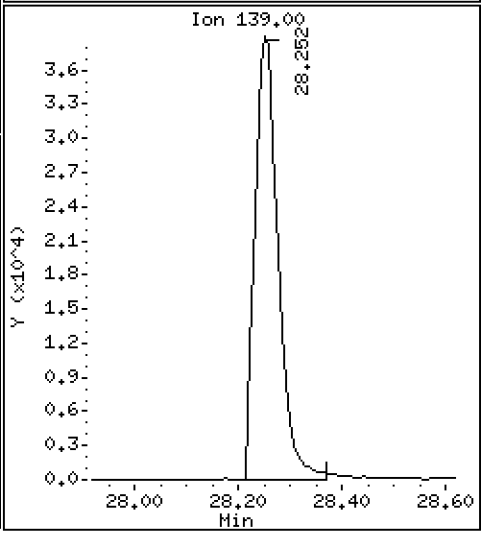


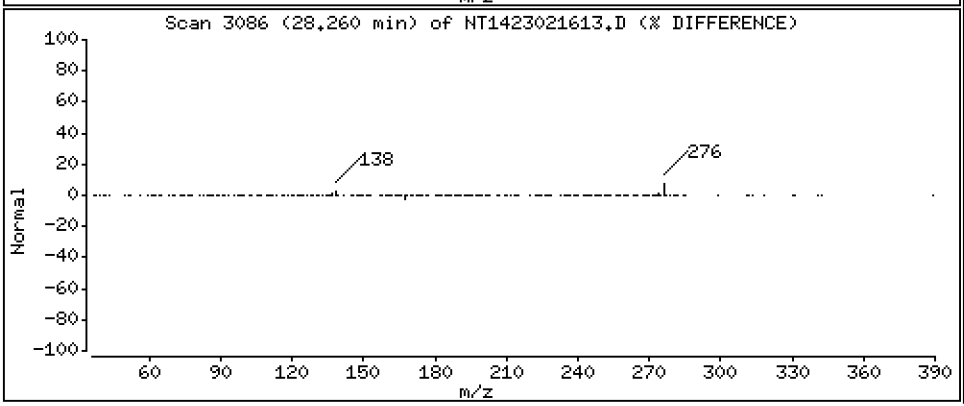












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

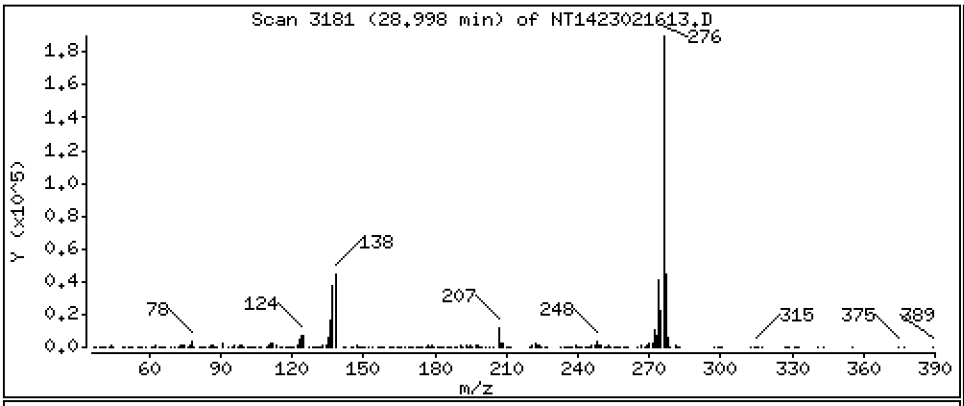
Operator: DSD

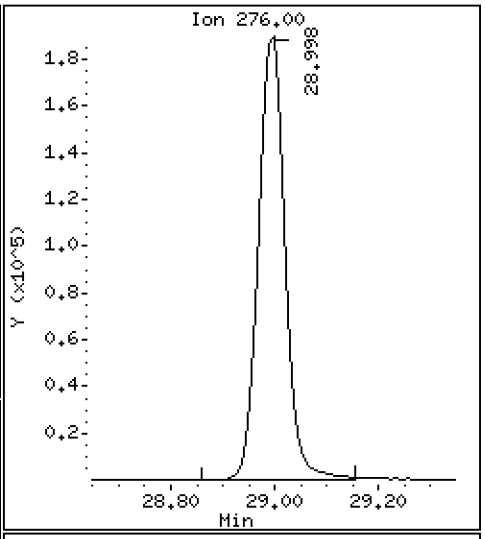
Column phase: ZB-5msi

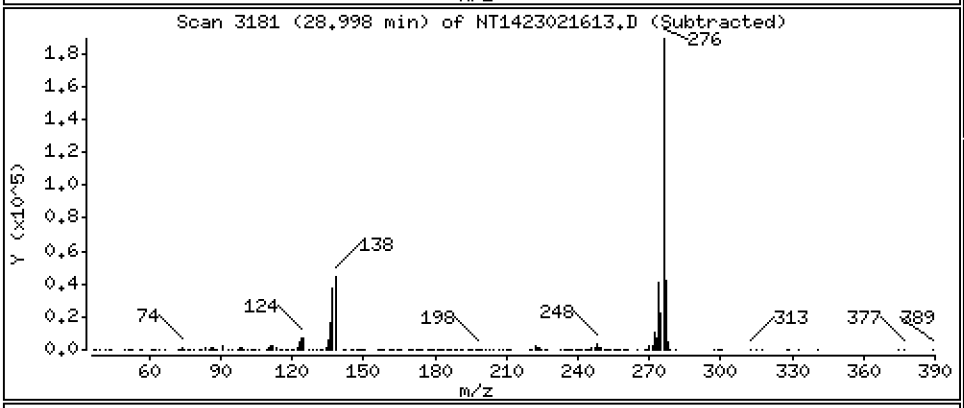
Column diameter: 0.25

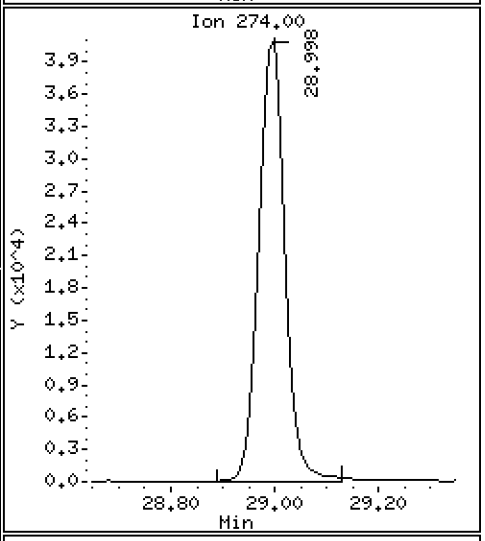
80 Benzo(g,h,i)perylene

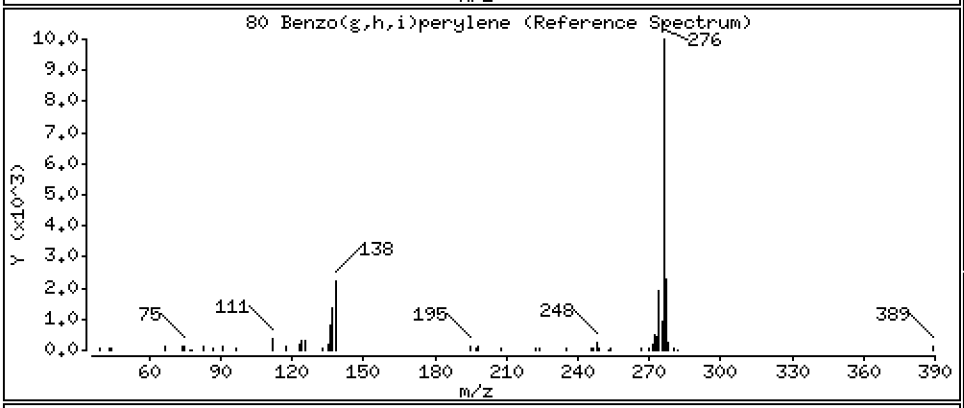
Concentration: 4.380 ug/mL

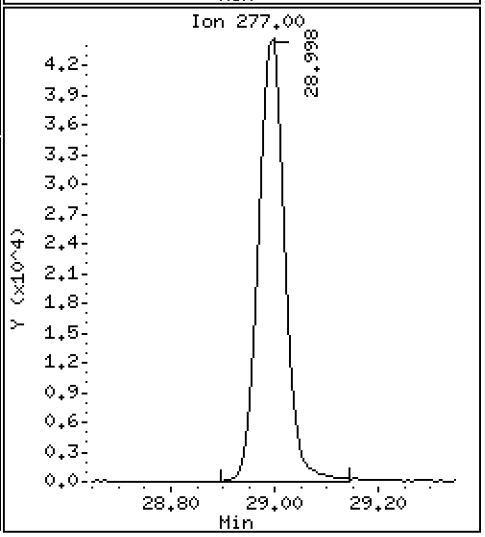


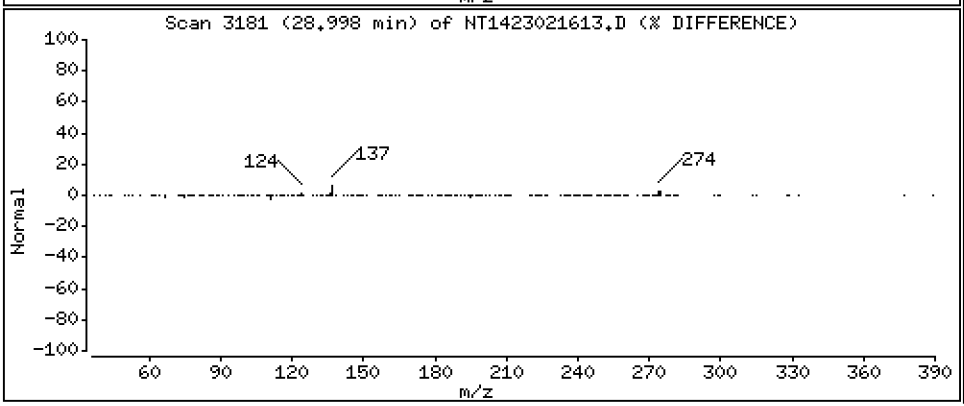












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

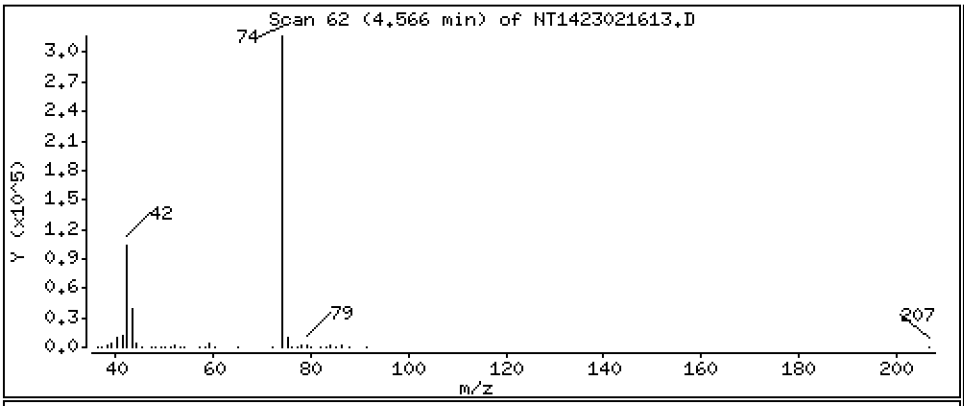
Operator: DSD

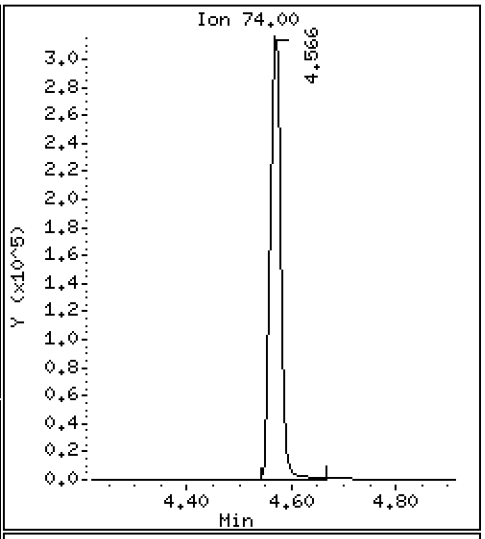
Column phase: ZB-5msi

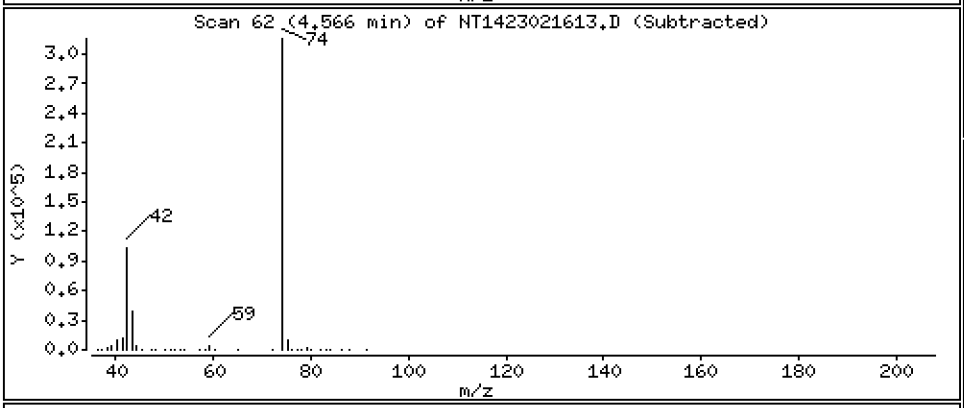
Column diameter: 0.25

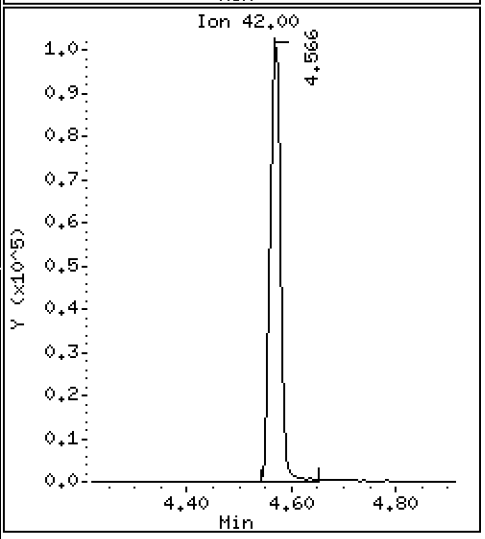
90 N-Nitrosodimethylamine

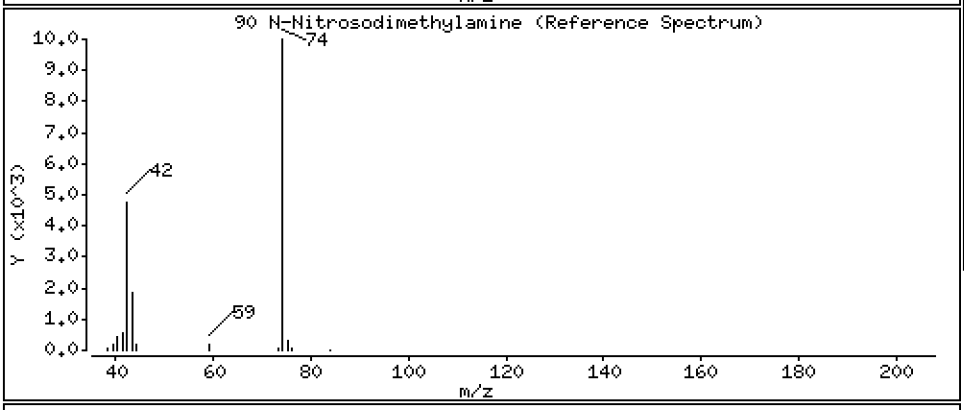
Concentration: 5.632 ug/mL

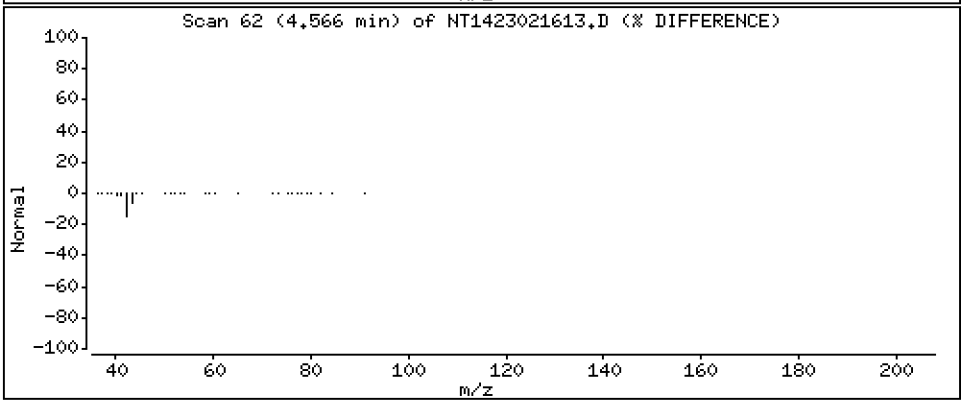












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

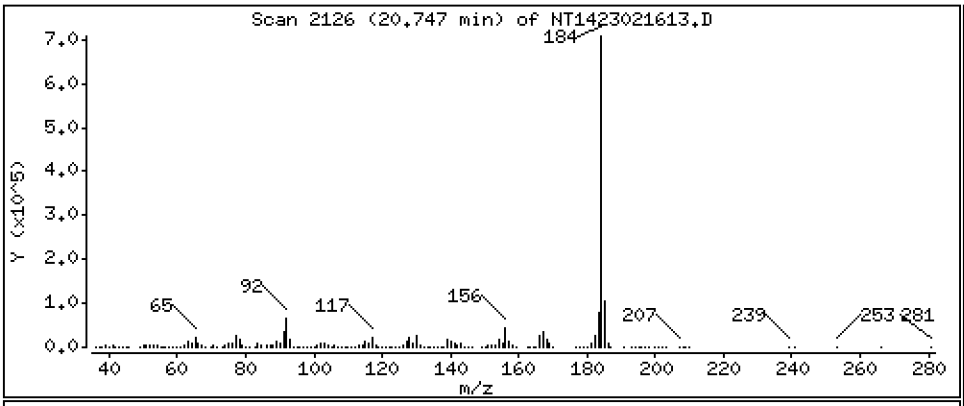
Operator: DSD

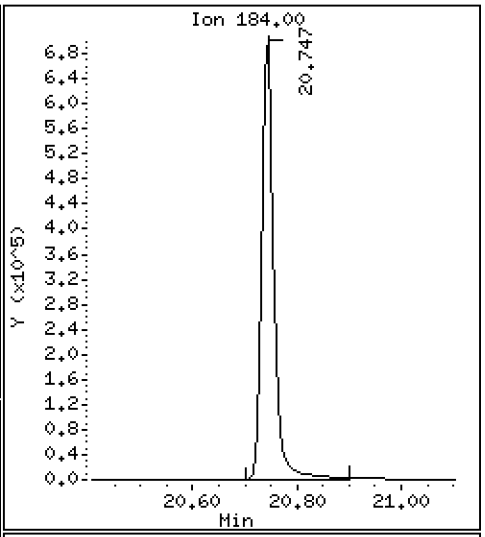
Column phase: ZB-5msi

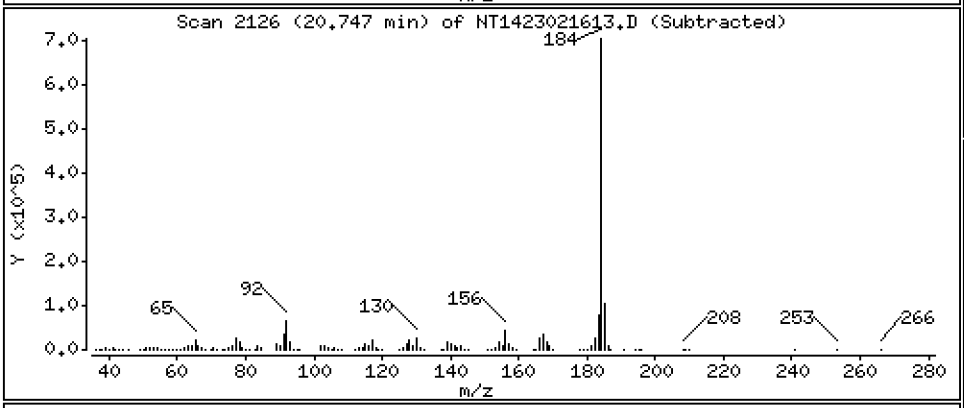
Column diameter: 0.25

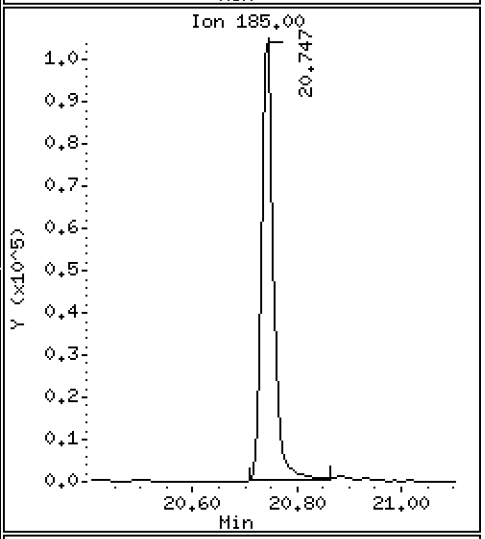
93 Benzidine

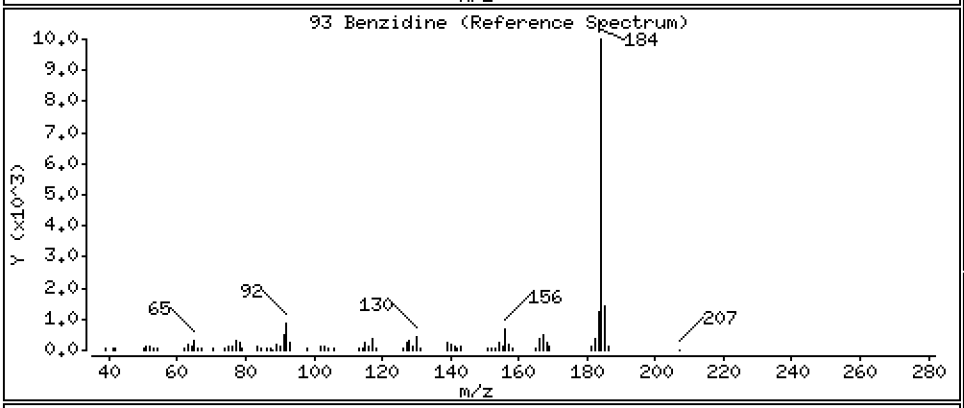
Concentration: 9.984 ug/mL

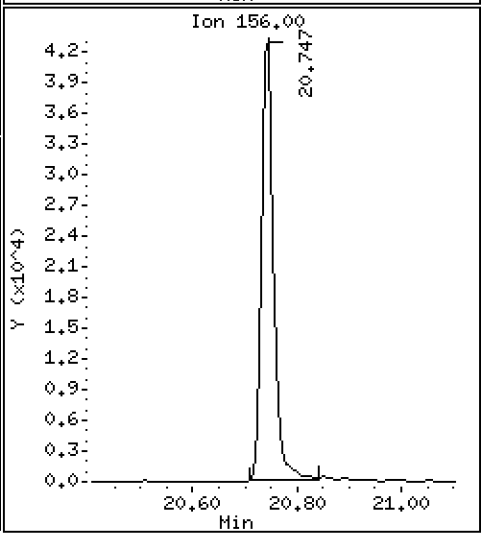


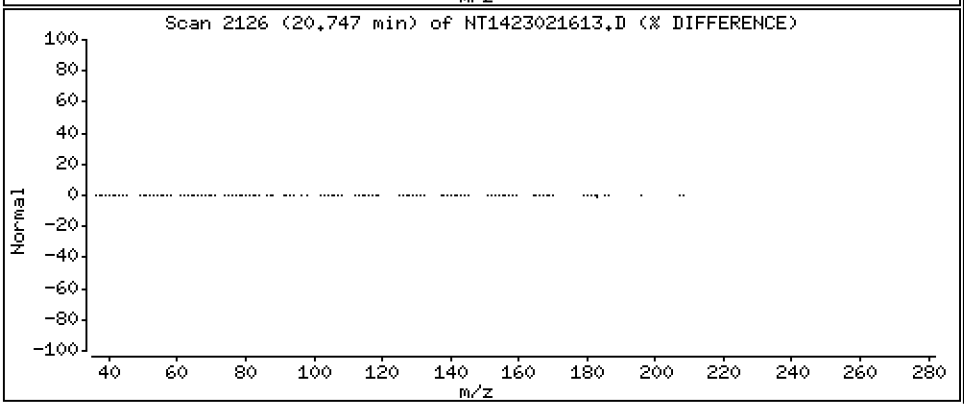












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

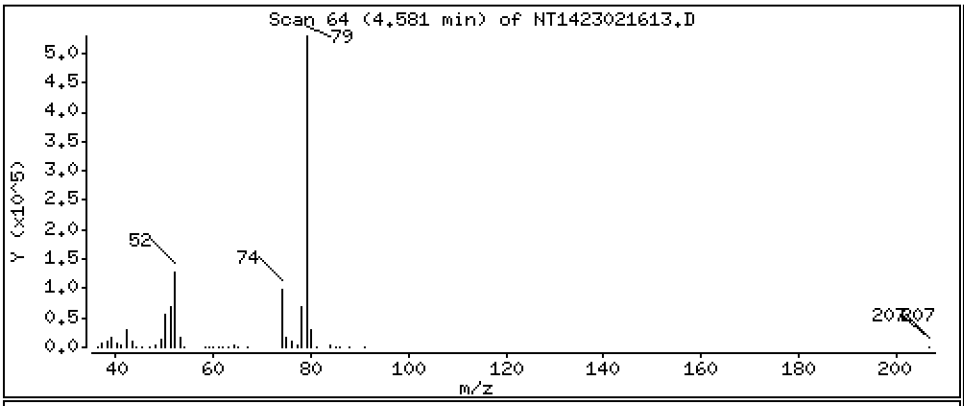
Operator: DSD

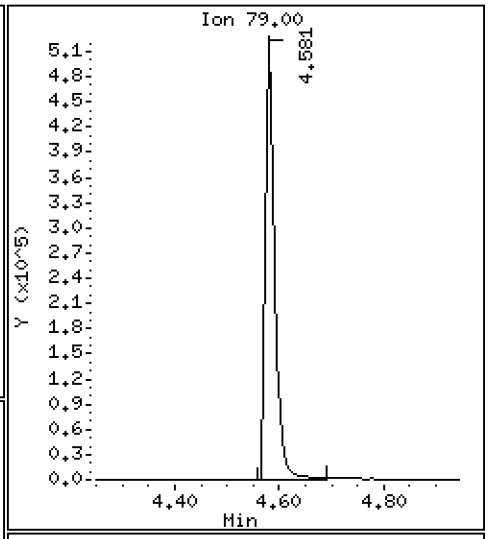
Column phase: ZB-5msi

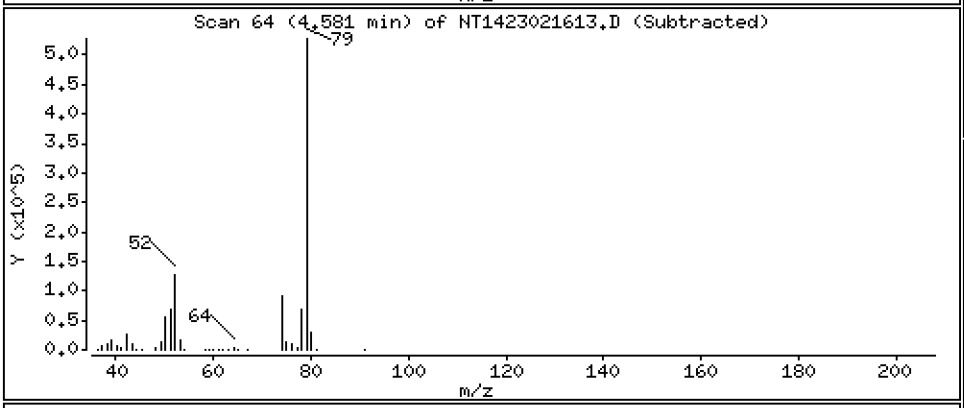
Column diameter: 0.25

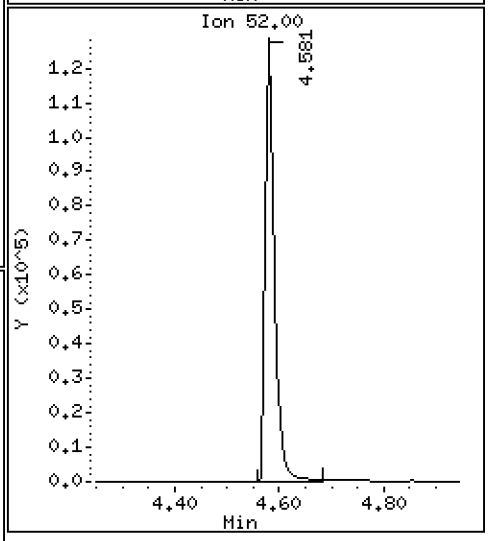
103 Pyridine

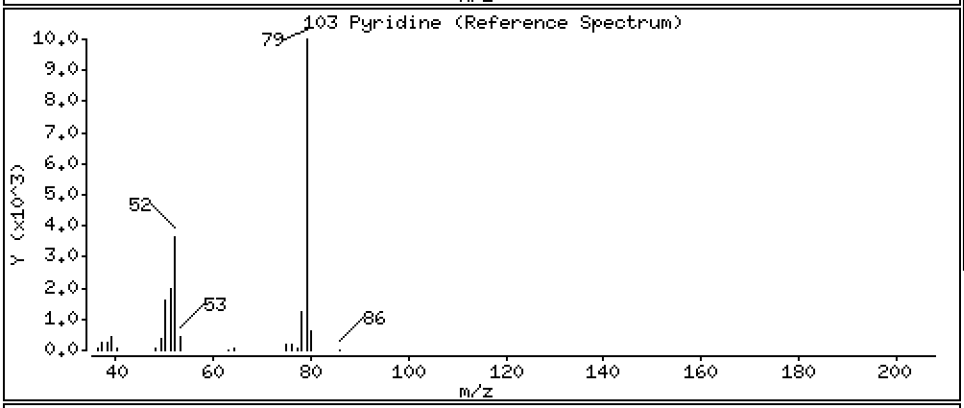
Concentration: 5.566 ug/mL

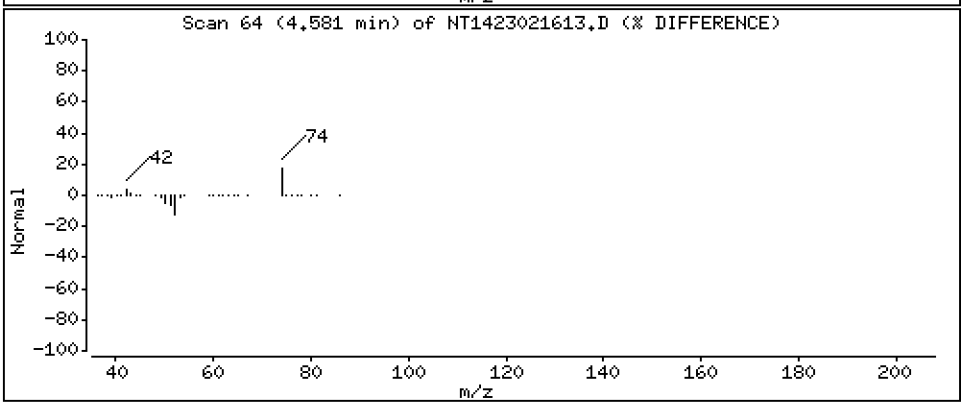












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

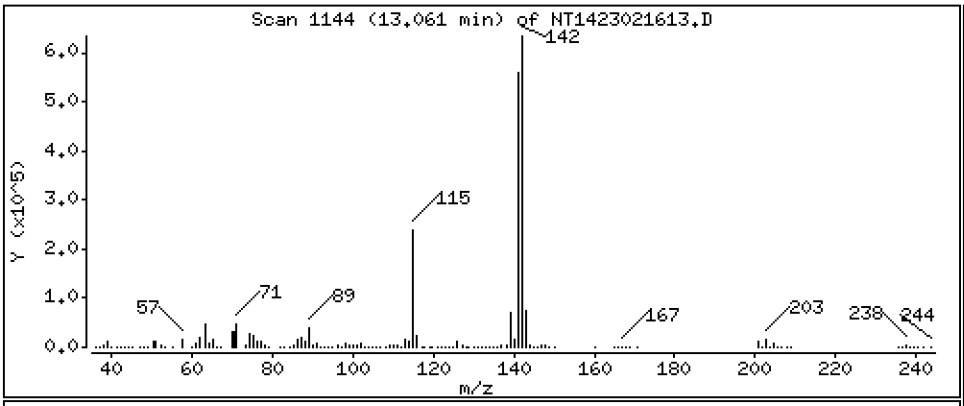
Operator: DSD

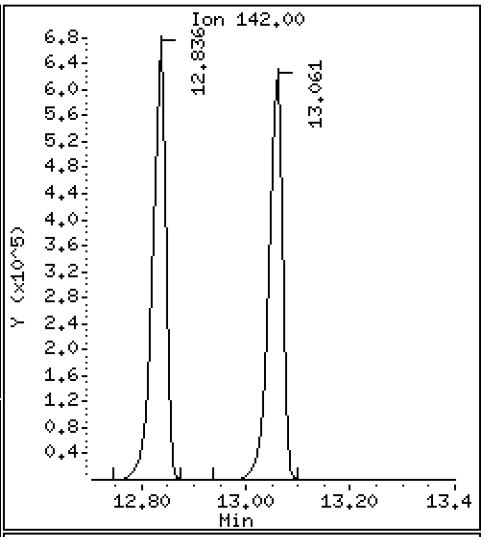
Column phase: ZB-5msi

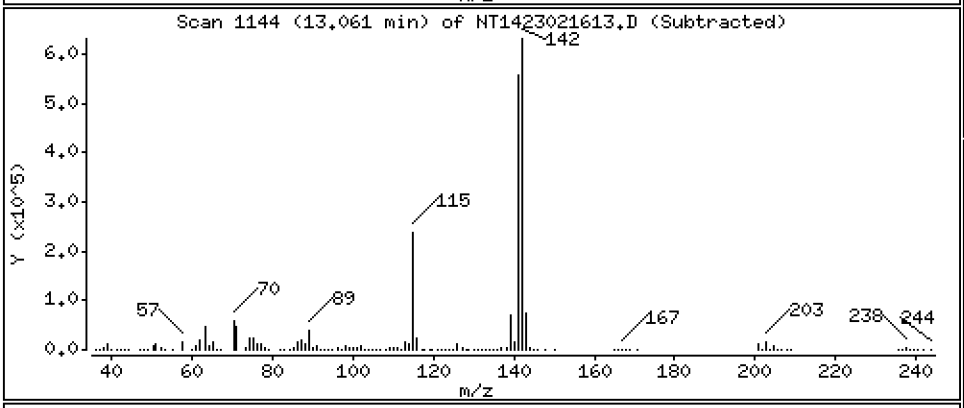
Column diameter: 0.25

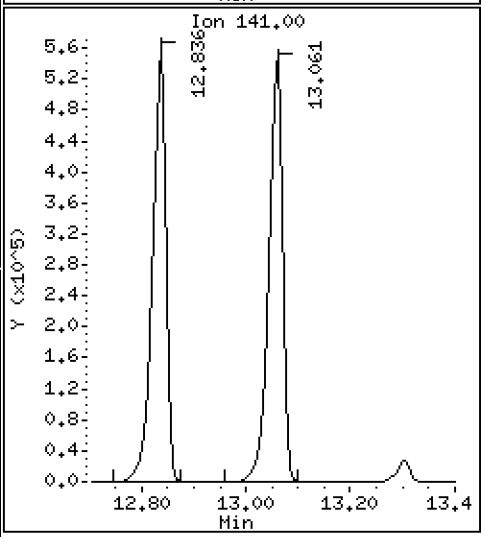
105 1-methylnaphthalene

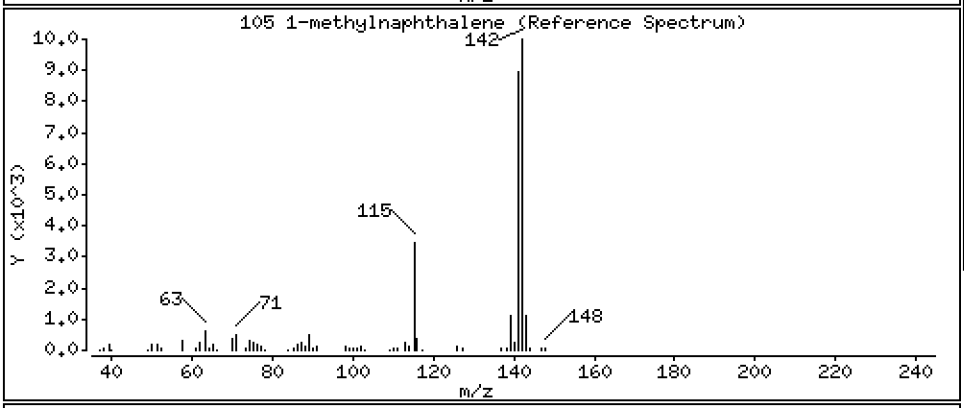
Concentration: 4.760 ug/mL

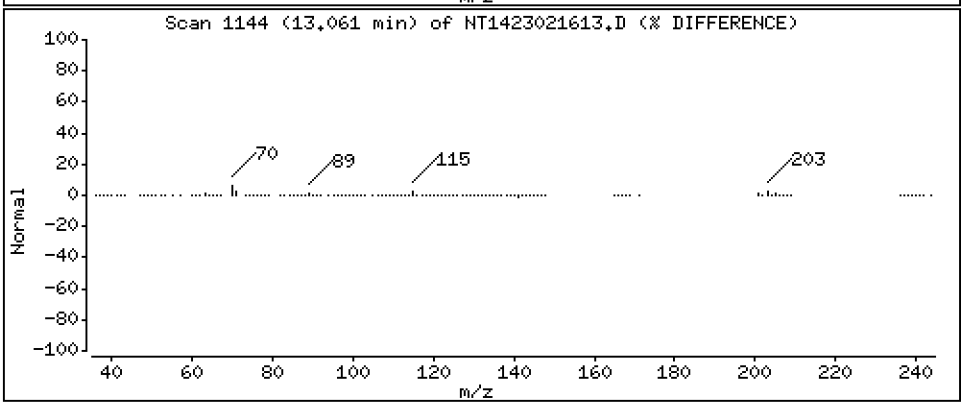












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

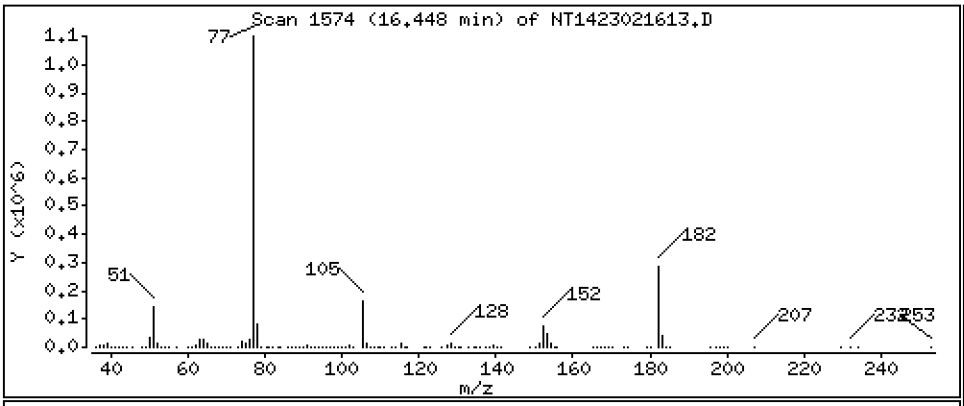
Operator: DSD

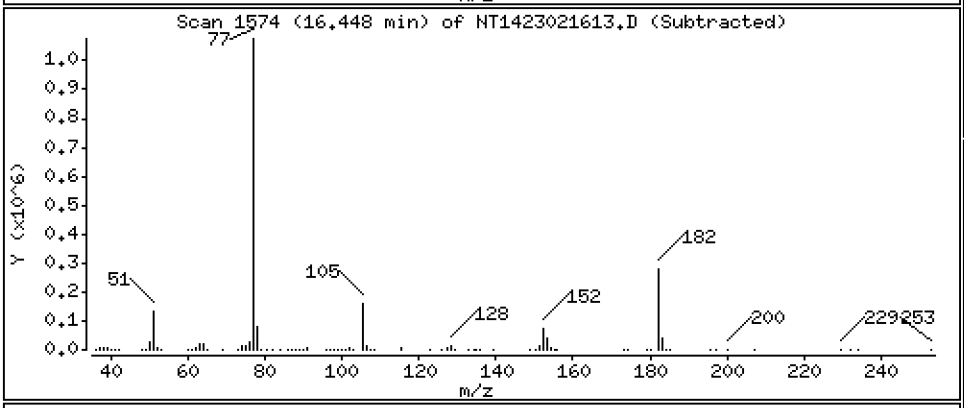
Column phase: ZB-5msi

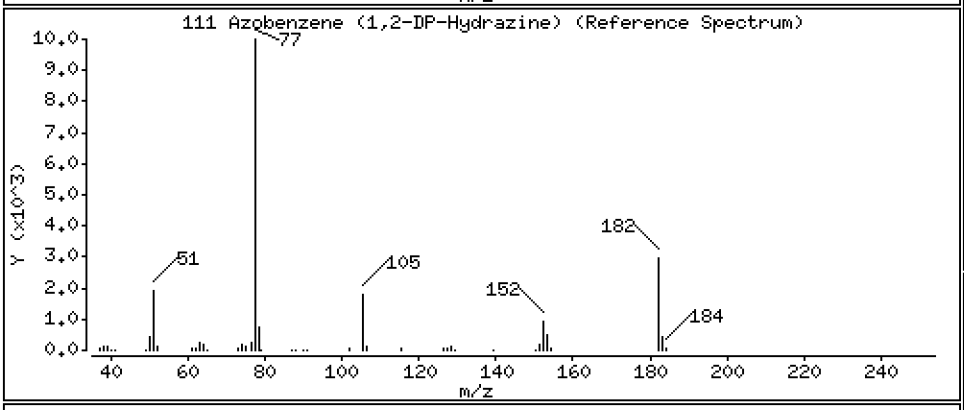
Column diameter: 0.25

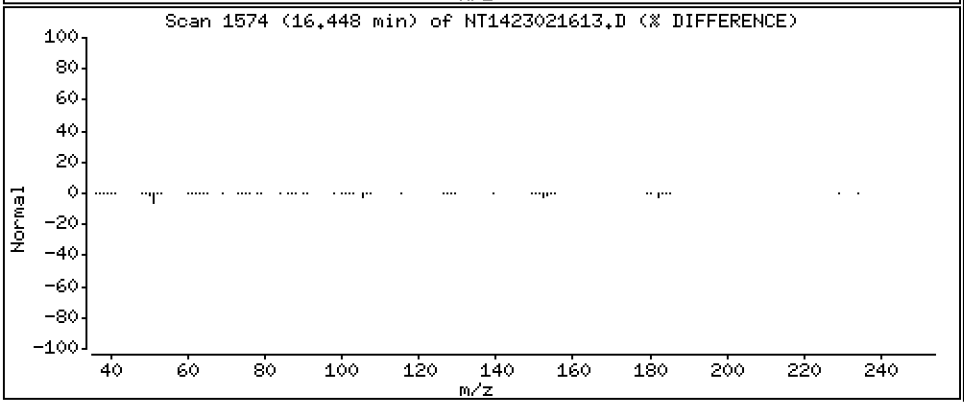
111 Azobenzene (1,2-DP-Hydrazine)

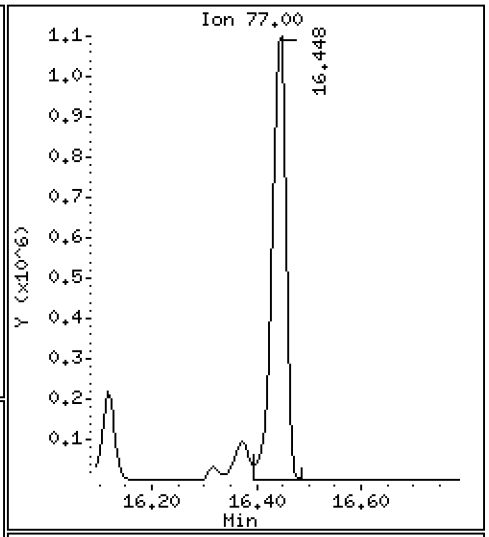
Concentration: 4.655 ug/mL

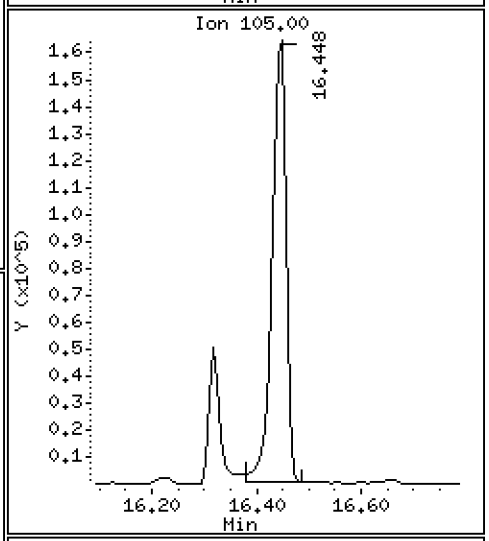


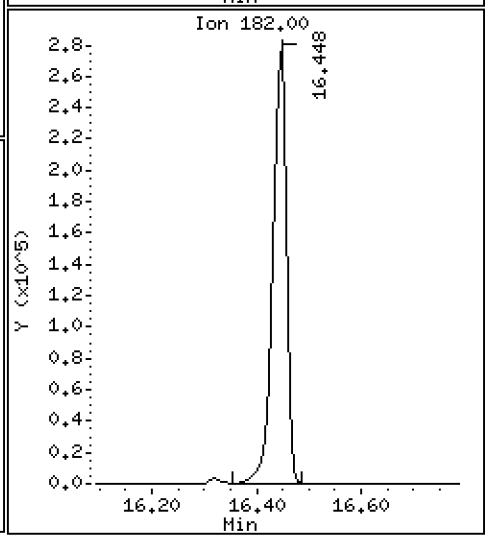












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

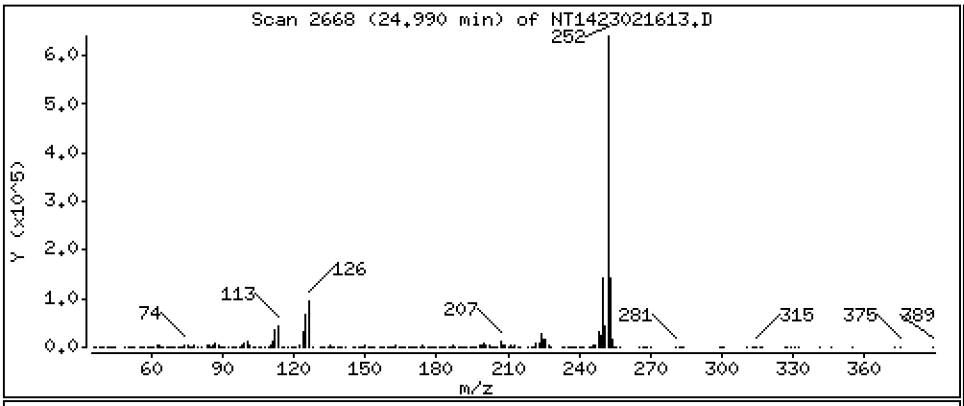
Operator: DSD

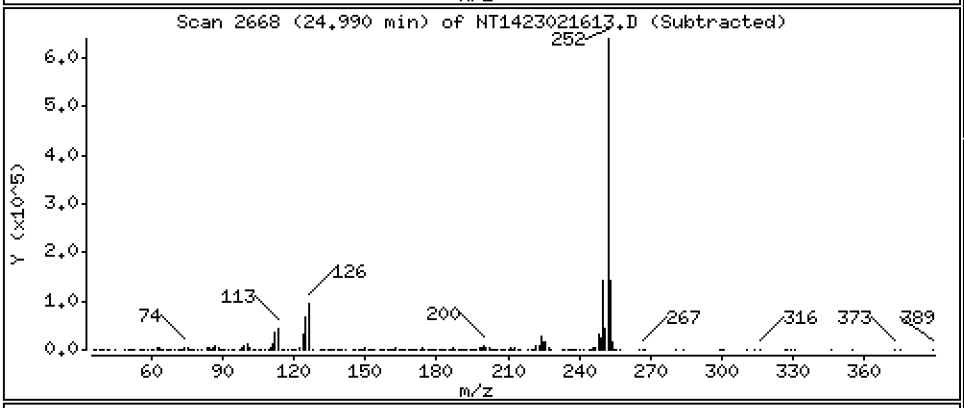
Column phase: ZB-5msi

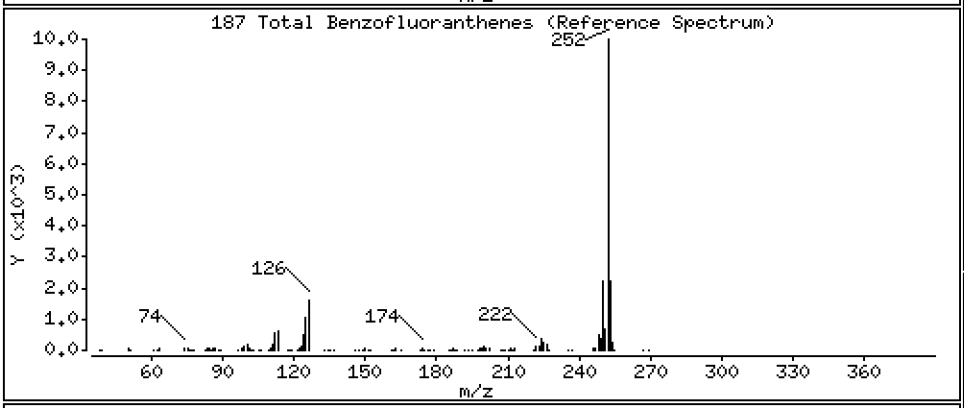
Column diameter: 0.25

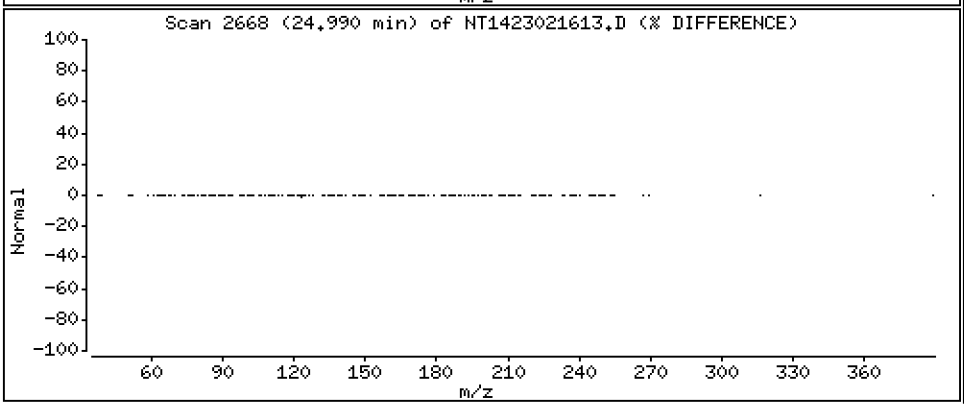
187 Total Benzofluoranthenes

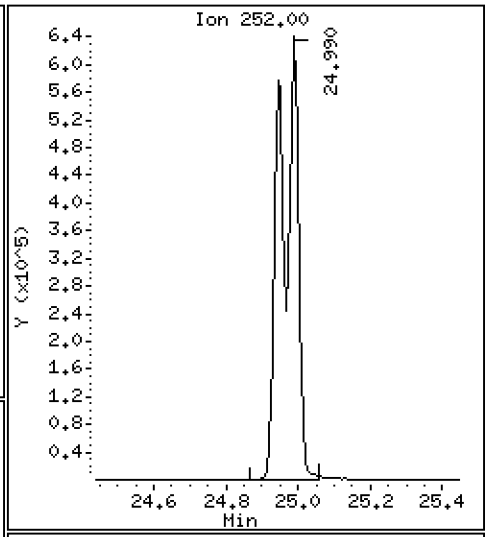
Concentration: 9.712 ug/mL

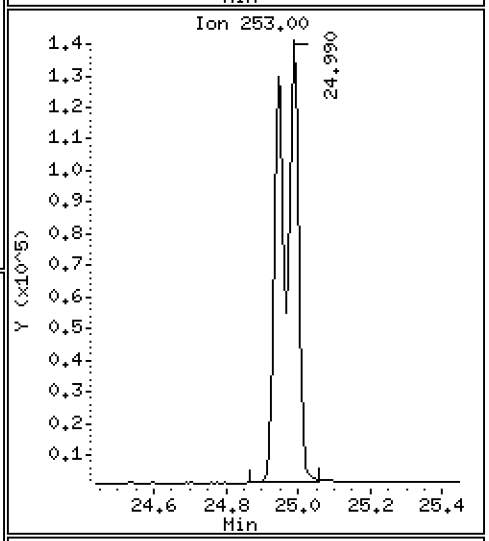


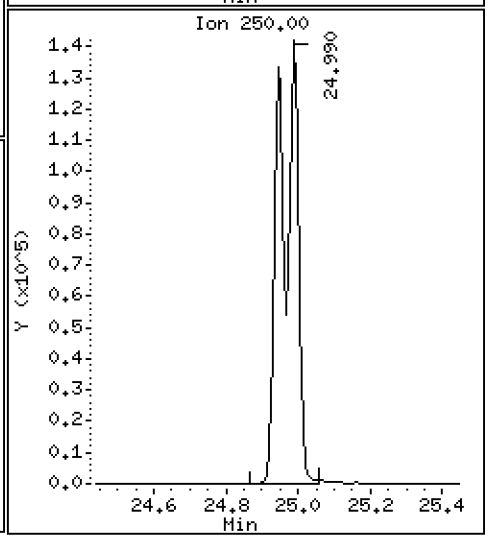












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0234-SCV1

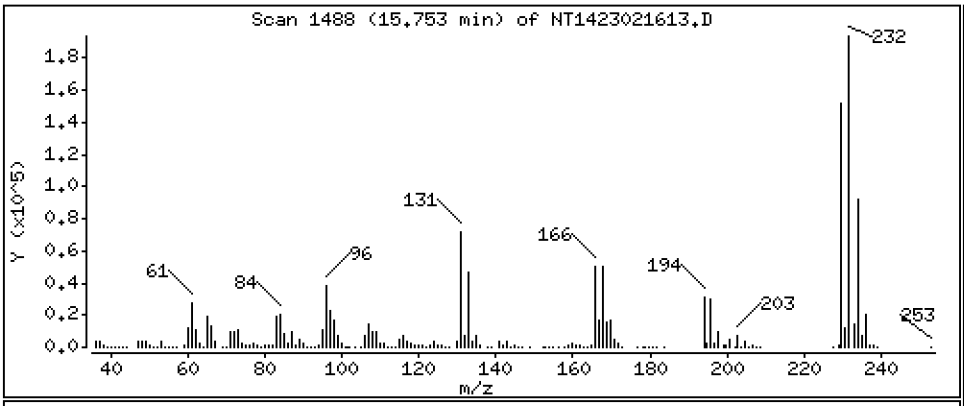
Operator: DSD

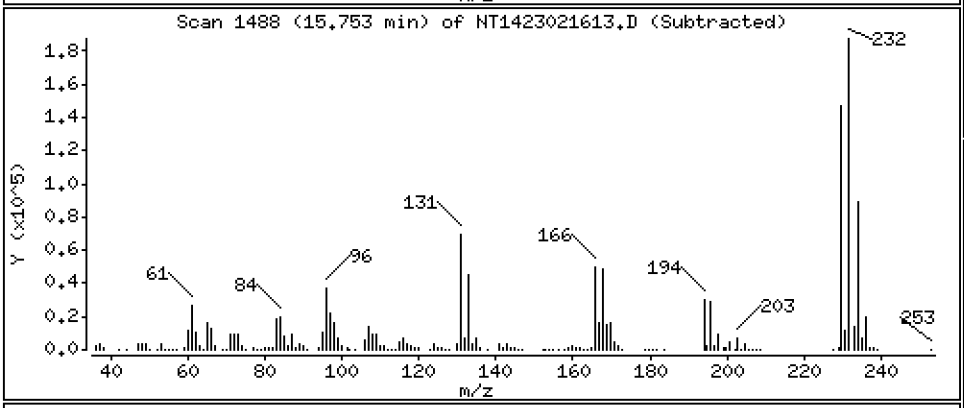
Column phase: ZB-5msi

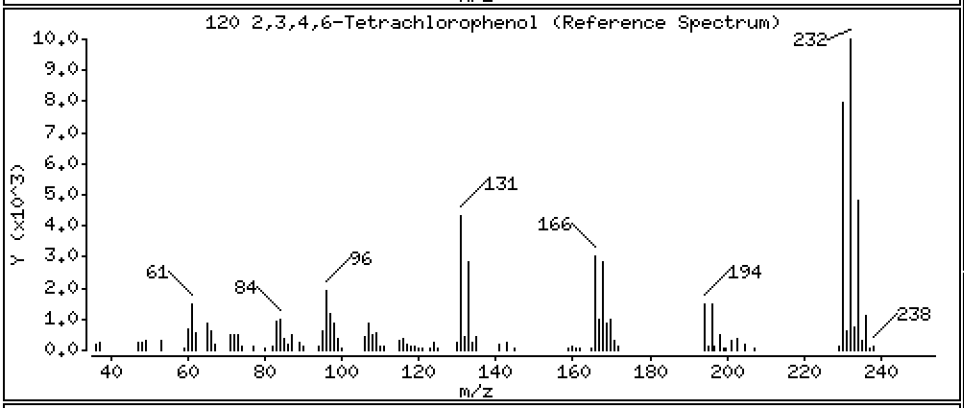
Column diameter: 0.25

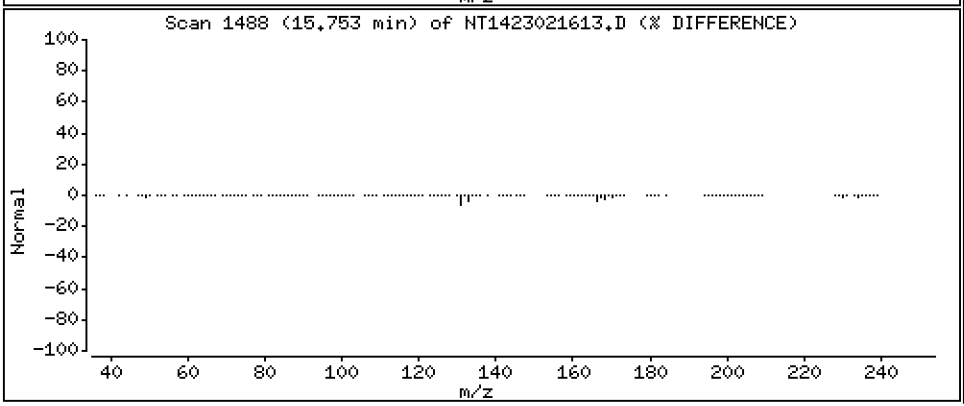
120 2,3,4,6-Tetrachlorophenol

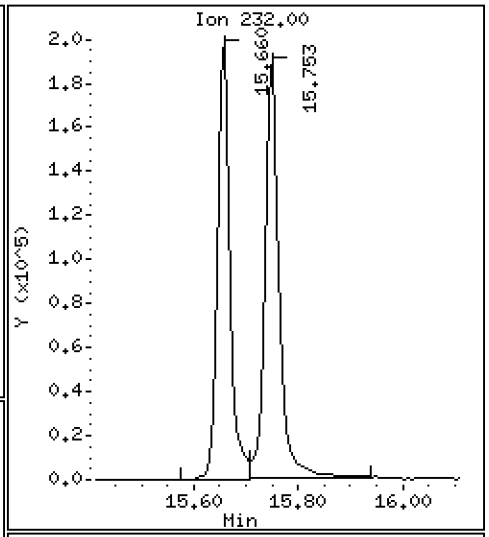
Concentration: 3.875 ug/mL

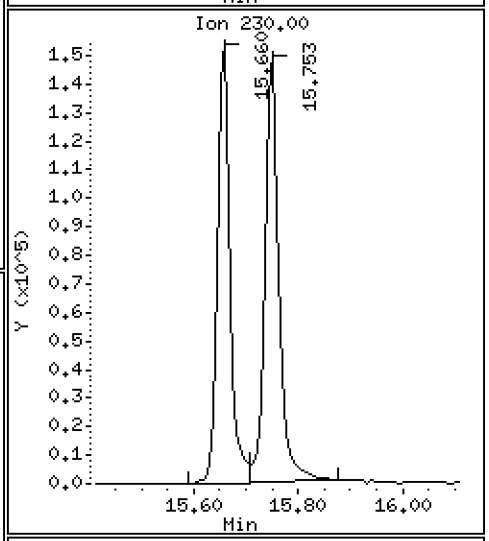


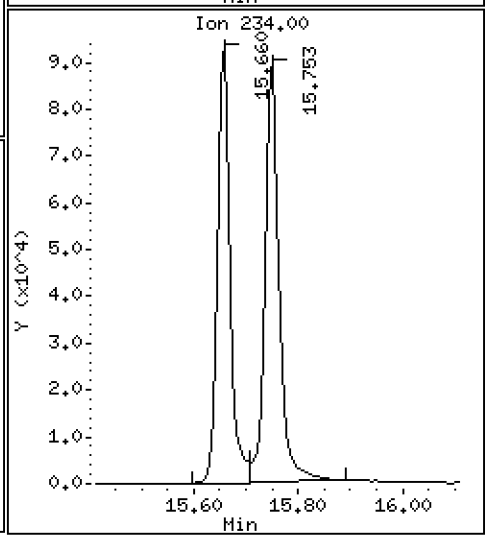












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

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Lab Smp Id: SLB0234-SCV1
Inj Date : 16-FEB-2023 21:18 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0234-SCV1
Misc Info :
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Method : \\target\share\chem3\nt14.i\20230216.b\ABN.m
Meth Date : 17-Feb-2023 15:05 deenayd Quant Type: ISTD
Cal Date : 16-FEB-2023 19:30 Cal File: NT1423021610.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: DEENAY-201905

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.674	6.682	(0.750)	812311	8.37324	8.373
$	2 Phenol-d5	99	8.266	8.266	(0.929)	1229645	7.99013	7.990
	3 Phenol	94	8.289	8.289	(0.931)	753865	4.62726	4.627
$	5 2-Chlorophenol-d4	132	8.536	8.536	(0.959)	852471	7.76321	7.763
	4 Bis(2-Chloroethyl)ether	93	8.459	8.451	(0.950)	642018	5.15867	5.159
	6 2-Chlorophenol	128	8.567	8.567	(0.963)	529676	4.61671	4.617
	7 1,3-Dichlorobenzene	146	8.838	8.838	(0.993)	609215	4.76976	4.770
*	8 1,4-Dichlorobenzene-d4	152	8.900	8.900	(1.000)	362894	4.00000	
	9 1,4-Dichlorobenzene	146	8.931	8.931	(1.003)	580699	4.79061	4.791
$	10 1,2-Dichlorobenzene-d4	152	9.264	9.257	(1.041)	410470	4.98694	4.987
	12 1,2-Dichlorobenzene	146	9.288	9.288	(1.044)	576549	4.75778	4.758
	11 Benzyl alcohol	108	9.179	9.202	(1.031)	425653	4.62539	4.625
	14 2,2'-oxybis(1-Chloropropane)	121	9.482	9.482	(1.065)	192988	5.56690	5.567
	13 2-Methylphenol	108	9.404	9.404	(1.057)	496864	4.36760	4.368
	17 Hexachloroethane	117	9.878	9.878	(1.110)	265463	5.03740	5.037
	16 N-Nitroso-di-n-propylamine	70	9.746	9.738	(1.095)	516514	4.98778	4.988
	15 4-Methylphenol	108	9.684	9.684	(1.088)	551454	4.59064	4.591
$	18 Nitrobenzene-d5	82	10.002	10.002	(0.878)	806144	5.19439	5.194
	19 Nitrobenzene	77	10.041	10.033	(0.881)	770727	4.94878	4.949
	20 Isophorone	82	10.483	10.491	(0.920)	1457561	7.09356	7.094
	21 2-Nitrophenol	139	10.669	10.677	(0.936)	316370	4.45322	4.453
	22 2,4-Dimethylphenol	107	10.723	10.724	(0.941)	502608	4.27378	4.274
	23 Bis(2-Chloroethoxy)methane	93	10.925	10.925	(0.959)	767264	5.74018	5.740
	24 Benzoic acid	105	10.933	10.879	(0.959)	412038	5.51023	5.510
	25 2,4-Dichlorophenol	162	11.119	11.127	(0.976)	515695	5.12362	5.124
	26 1,2,4-Trichlorobenzene	180	11.312	11.305	(0.993)	566926	4.64981	4.650
*	27 Naphthalene-d8	136	11.397	11.389	(1.000)	1343351	4.00000	
	28 Naphthalene	128	11.436	11.428	(1.003)	1568652	4.73587	4.736
	29 4-Chloroaniline	127	11.567	11.575	(1.015)	553475	3.91120	3.911
	30 Hexachlorobutadiene	225	11.799	11.799	(1.035)	369529	4.91651	4.917
	31 4-Chloro-3-methylphenol	107	12.534	12.542	(1.100)	549566	5.04457	5.045
	32 2-Methylnaphthalene	142	12.836	12.836	(1.126)	1142706	4.60635	4.606
	33 Hexachlorocyclopentadiene	237	13.300	13.301	(0.886)	438821	5.30111	5.301

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.455	13.463	(0.896)	404613	4.80795	4.808
	35	2,4,5-Trichlorophenol	196	13.532	13.541	(0.901)	428976	4.70685	4.707
$	36	2-Fluorobiphenyl	172	13.625	13.617	(0.907)	1488825	4.87017	4.870
	37	2-Chloronaphthalene	162	13.834	13.826	(0.921)	1157484	4.63882	4.639
	38	2-Nitroaniline	65	14.097	14.097	(0.939)	393653	4.85233	4.852
	39	Dimethylphthalate	163	14.538	14.531	(0.968)	1224849	4.69299	4.693
	40	Acenaphthylene	152	14.701	14.701	(0.979)	1772439	4.65722	4.657
	41	2,6-Dinitrotoluene	165	14.670	14.670	(0.977)	303057	4.93469	4.935
*	42	Acenaphthene-d10	164	15.018	15.018	(1.000)	854455	4.00000	
	43	3-Nitroaniline	138	14.956	14.957	(0.996)	320818	4.92163	4.922
	44	Acenaphthene	153	15.088	15.080	(1.005)	1055715	4.63322	4.633
	45	2,4-Dinitrophenol	184	15.265	15.282	(1.016)	10046	0.25021	0.2502
	46	Dibenzofuran	168	15.412	15.405	(1.026)	1701574	4.54830	4.548
	47	4-Nitrophenol	109	15.273	15.273	(1.017)	153415	4.05153	4.052
	48	2,4-Dinitrotoluene	165	15.482	15.475	(1.031)	421549	4.85479	4.855
	50	Diethylphthalate	149	15.992	15.984	(1.065)	1638308	4.72171	4.722
	49	Fluorene	166	16.123	16.124	(1.074)	1814406	4.63777	4.638
	51	4-Chlorophenyl-phenylether	204	16.123	16.116	(1.074)	994538	4.75422	4.754
	52	4-Nitroaniline	138	16.224	16.224	(1.080)	356106	4.76155	4.762
	53	4,6-Dinitro-2-methylphenol	198	16.316	16.370	(0.904)	216522	3.65299	3.653
	54	N-Nitrosodiphenylamine	169	16.370	16.370	(0.907)	1149631	4.90725	4.907
$	55	2,4,6-Tribromophenol	330	16.663	16.663	(1.110)	357193	7.14108	7.141
	56	4-Bromophenyl-phenylether	248	17.126	17.118	(0.949)	537640	5.15255	5.153
	57	Hexachlorobenzene	284	17.435	17.434	(0.966)	496114	4.67908	4.679
	58	Pentachlorophenol	266	17.791	17.814	(0.985)	204787	3.93169	3.932
*	59	Phenanthrene-d10	188	18.054	18.054	(1.000)	1630237	4.00000	
	60	Phenanthrene	178	18.108	18.101	(1.003)	1837237	4.68992	4.690
	61	Anthracene	178	18.201	18.193	(1.008)	1670411	4.30397	4.304
	62	Carbazole	167	18.534	18.534	(1.027)	1687690	4.79185	4.792
	63	Di-n-butylphthalate	149	19.338	19.346	(1.071)	2169531	5.51497	5.515
	64	Fluoranthene	202	20.499	20.499	(0.887)	2246209	4.68180	4.682
	65	Pyrene	202	20.924	20.925	(0.905)	2232282	4.40013	4.400
$	66	Terphenyl-d14	244	21.219	21.219	(0.918)	1704165	4.73097	4.731
	67	Butylbenzylphthalate	149	22.148	22.148	(0.958)	770848	4.56767	4.568
	68	Benzo(a)anthracene	228	23.092	23.092	(0.999)	1612232	4.53042	4.530
*	69	Chrysene-d12	240	23.123	23.123	(1.000)	1112056	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.054	23.054	(0.997)	1021005	9.32793	9.328
	71	Chrysene	228	23.170	23.162	(1.002)	1432188	4.47430	4.474
	72	bis(2-Ethylhexyl)phthalate	149	23.178	23.178	(0.960)	1007189	4.64885	4.649
*	134	Di-n-octylphthalate-d4	153	24.153	24.153	(1.000)	1298332	4.00000	
	73	Di-n-octylphthalate	149	24.168	24.161	(1.001)	1506391	4.96217	4.962
	74	Benzo(b)fluoranthene	252	24.943	24.943	(0.971)	1120169	4.81299	4.813
	75	Benzo(k)fluoranthene	252	24.989	24.989	(0.973)	1203272	4.83840	4.838
	76	Benzo(a)pyrene	252	25.577	25.578	(0.996)	1024300	4.60711	4.607
*	77	Perylene-d12	264	25.686	25.686	(1.000)	733476	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.244	28.244	(1.100)	816683	4.39546	4.395
	79	Dibenzo(a,h)anthracene	278	28.259	28.267	(1.100)	668295	4.36484	4.365
	80	Benzo(g,h,i)perylene	276	28.997	28.997	(1.129)	664180	4.38025	4.380
	90	N-Nitrosodimethylamine	74	4.566	4.566	(0.513)	423038	5.63216	5.632
	91	Aniline	93	Compound Not Detected.					
	93	Benzidine	184	20.747	20.754	(0.897)	1133759	9.98385	9.984
	103	Pyridine	79	4.581	4.597	(0.515)	661518	5.56593	5.566
	105	1-methylnaphthalene	142	13.060	13.053	(1.146)	1108498	4.75965	4.760
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.447	16.440	(1.095)	1962985	4.65510	4.655

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.989	24.943	(0.973)	2206870	9.71223	9.712
120 2,3,4,6-Tetrachlorophenol	232	15.752	15.760	(1.049)	382367	3.87456	3.875

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021613.D
Lab Smp Id: SLB0234-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\ABN.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 17:06
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	375798	187899	751596	362894	-3.43
27 Naphthalene-d8	1378169	689085	2756338	1343351	-2.53
42 Acenaphthene-d10	847135	423568	1694270	854455	0.86
59 Phenanthrene-d10	1675180	837590	3350360	1630237	-2.68
69 Chrysene-d12	1073562	536781	2147124	1112056	3.59
134 Di-n-octylphthala	1344129	672065	2688258	1298332	-3.41
77 Perylene-d12	721978	360989	1443956	733476	1.59

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	-0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.40	-0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	-0.00
59 Phenanthrene-d10	18.05	17.55	18.55	18.05	-0.00
69 Chrysene-d12	23.12	22.62	23.62	23.12	-0.00
134 Di-n-octylphthala	24.15	23.65	24.65	24.15	-0.00
77 Perylene-d12	25.69	25.19	26.19	25.69	-0.00

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

REVIEW SUMMARY FOR FILE - NT1423021613.D

Lab ID: SLB0234-SCV1
nt14.i, ABN.m, 16-FEB-2023 21:18

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.959	0.000	0.9593	Benzoic acid
1.016	0.000	1.0165	2,4-Dinitrophenol
1.017	0.000	1.0170	4-Nitrophenol
0.985	0.000	0.9854	Pentachlorophenol

RRT check based on Ccal File: NT1423021610.D

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

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

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT14	Calibration:	GB00046
Lab File ID:	NT1423021734.D	Calibration Date:	02/16/2023
Sequence:	SLB0251	Injection Date:	02/18/23
Lab Sample ID:	SLB0251-CCV1	Injection Time:	06:30
Sequence Name:	Calibration Check		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	5.0000	4.6	1.7957660	1.6615340		-7.5	+/-50
4-Methylphenol	A	5.0000	4.9	1.3240860	1.2989560		-1.9	+/-50
Naphthalene	A	5.0000	4.7	0.9862730	0.9251632		-6.2	+/-50
2-Methylnaphthalene	A	5.0000	4.6	0.7386653	0.6844756		-7.3	+/-50
Acenaphthylene	A	5.0000	4.7	1.7816190	1.6783110		-5.8	+/-50
Dimethylphthalate	A	5.0000	4.6	1.2218100	1.1305270		-7.5	+/-50
Acenaphthene	A	5.0000	4.7	1.0666800	1.0041830		-5.9	+/-50
Dibenzofuran	A	5.0000	4.5	1.7513490	1.5728880		-10.2	+/-50
Fluorene	A	5.0000	4.6	1.8314530	1.6705950		-8.8	+/-50
Phenanthrene	A	5.0000	4.6	0.9611900	0.8904708		-7.4	+/-50
Anthracene	A	5.0000	4.9	0.9522768	0.9391131		-1.4	+/-50
Fluoranthene	A	5.0000	5.7	1.7257220	1.9644610		13.8	+/-50
Pyrene	A	5.0000	5.5	1.8248060	2.0004860		9.6	+/-50
Butylbenzylphthalate	A	5.0000	5.7	0.5233989	0.6969723		14.5	+/-50
Benzo(a)anthracene	A	5.0000	4.7	1.2800360	1.2062510		-5.8	+/-50
Chrysene	A	5.0000	4.7	1.1513540	1.0729070		-6.8	+/-50
bis(2-Ethylhexyl)phthalate	A	5.0000	4.3	0.5470542	0.5818073		-13.0	+/-50
Benzofluoranthenes, Total	A	10.000	9.1	1.2391730	1.1252440		-9.2	+/-50
Benzo(a)pyrene	A	5.0000	4.5	1.0848130	1.0943430		-9.7	+/-50
Indeno(1,2,3-cd)pyrene	A	5.0000	3.9	0.8621891	0.7845328		-22.3	+/-50
Dibenzo(a,h)anthracene	A	5.0000	4.1	0.7046903	0.6906915		-17.2	+/-50
Benzo(g,h,i)perylene	A	5.0000	3.3	0.7176031	0.5472725		-33.3	+/-50
2-Fluorophenol	A	7.5000	7.95	1.0693230	1.1332680		6.0	+/-50
Phenol-d5	A	7.5000	7.43	1.6963140	1.6798930		-1.0	+/-50
2-Chlorophenol-d4	A	7.5000	7.55	1.2103710	1.2187510		0.7	+/-50
1,2-Dichlorobenzene-d4	A	5.0000	4.75	0.9072515	0.8618622		-5.0	+/-50
Nitrobenzene-d5	A	5.0000	4.83	0.4621137	0.4459865		-3.5	+/-50
2-Fluorobiphenyl	A	5.0000	4.90	1.4311010	1.4014970		-2.1	+/-50
2,4,6-Tribromophenol	A	7.5000	7.12	0.2030581	0.2222422		-5.1	+/-50
p-Terphenyl-d14	A	5.0000	6.03	1.2956710	1.5619890		20.6	+/-50

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021734.D

Page 1

Date : 18-FEB-2023 06:30

Client ID:

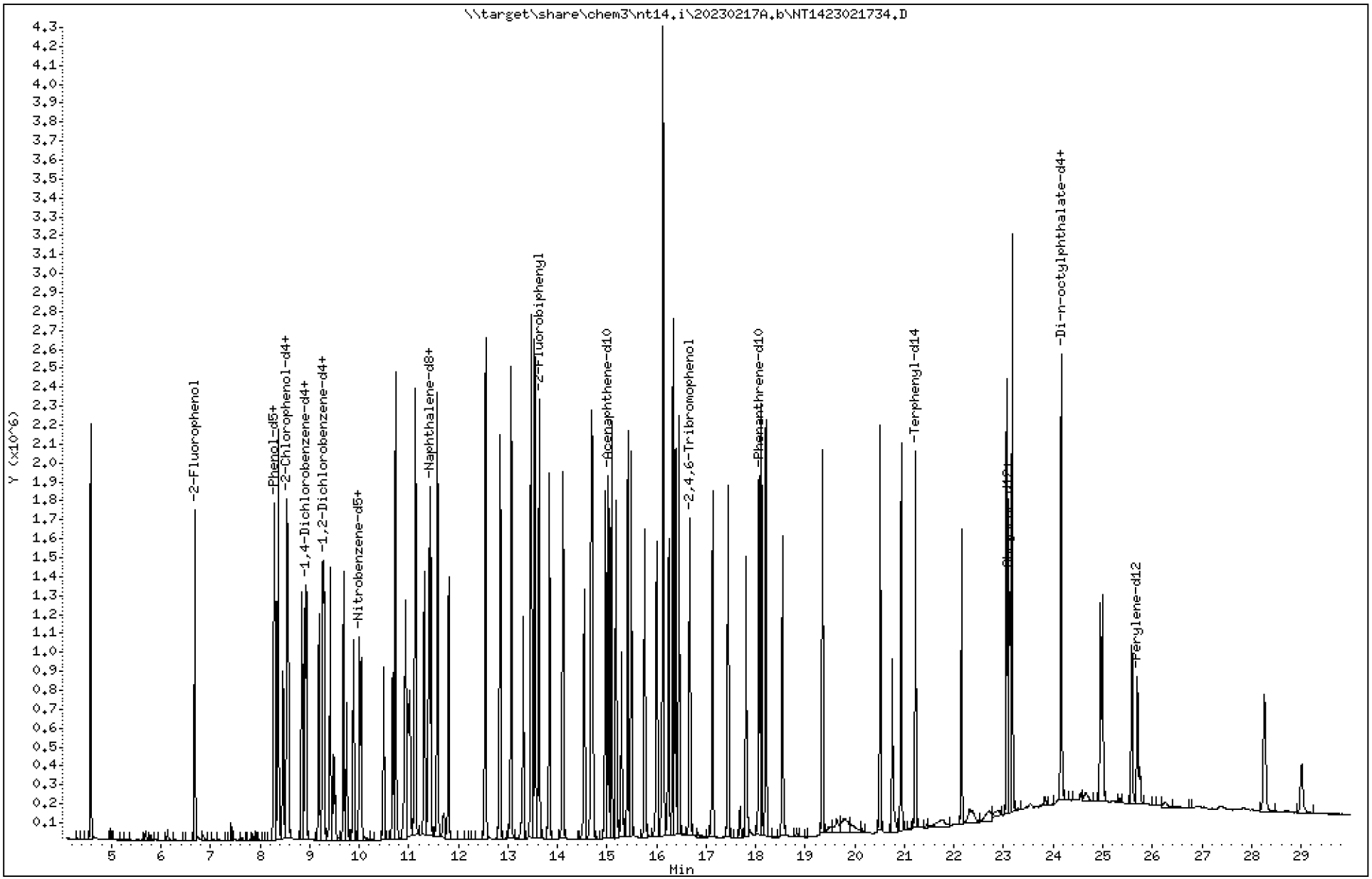
Instrument: nt14.i

Sample Info: SLB0251-CCV1

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

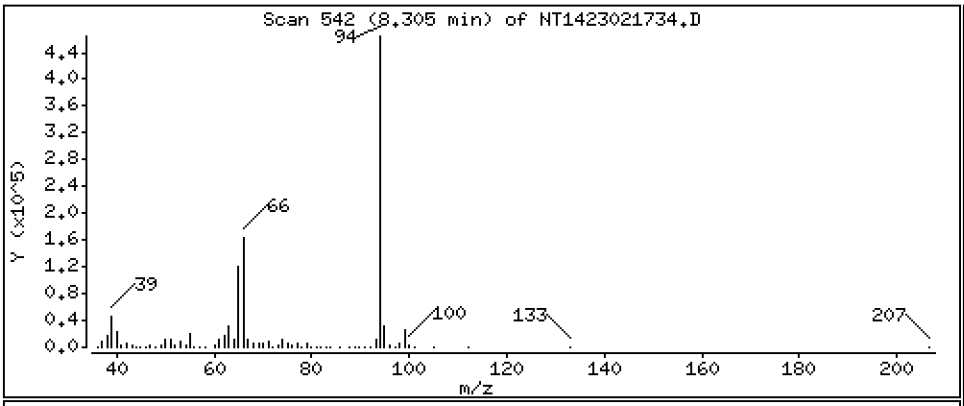
Operator: DSD

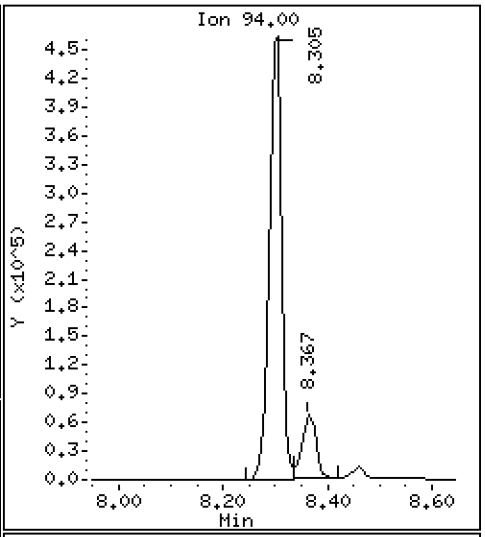
Column phase: ZB-5msi

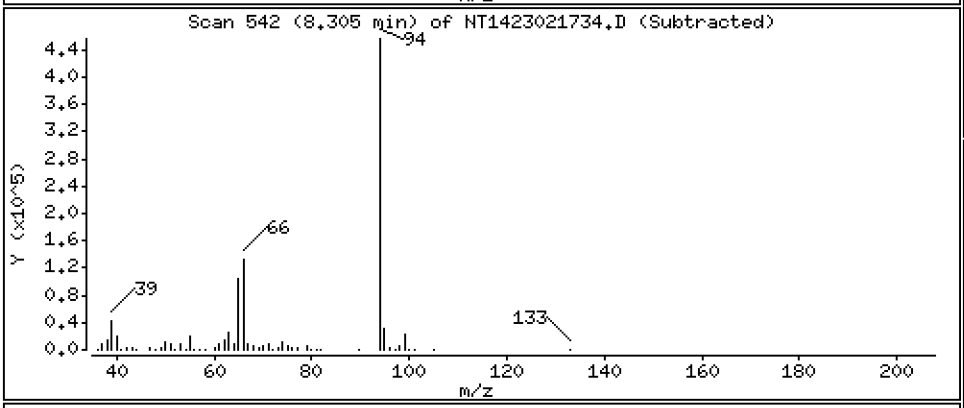
Column diameter: 0.25

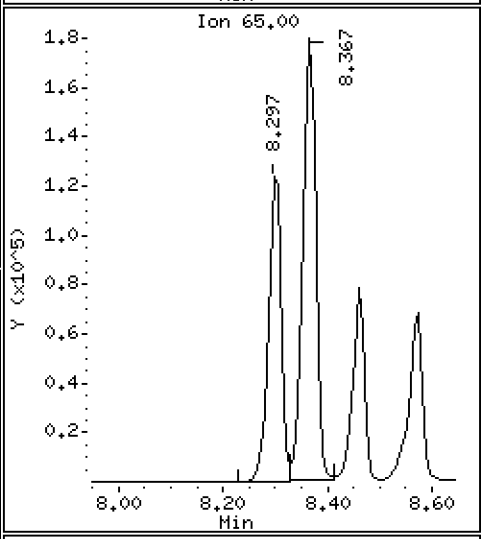
3 Phenol

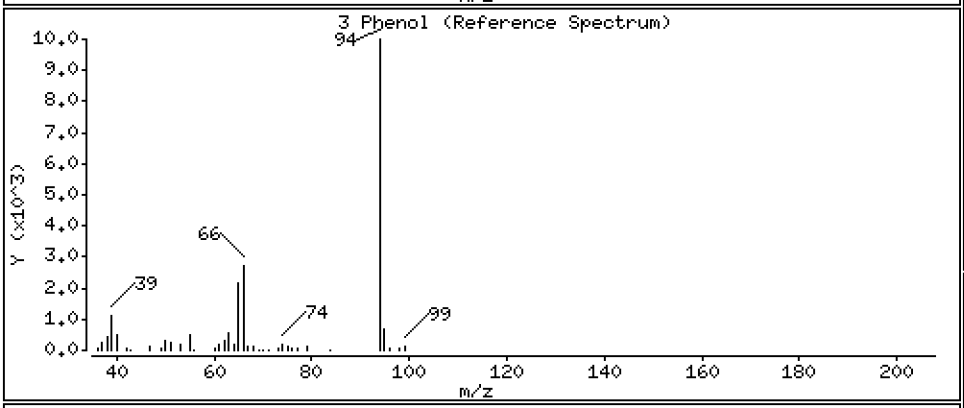
Concentration: 4.626 ug/mL

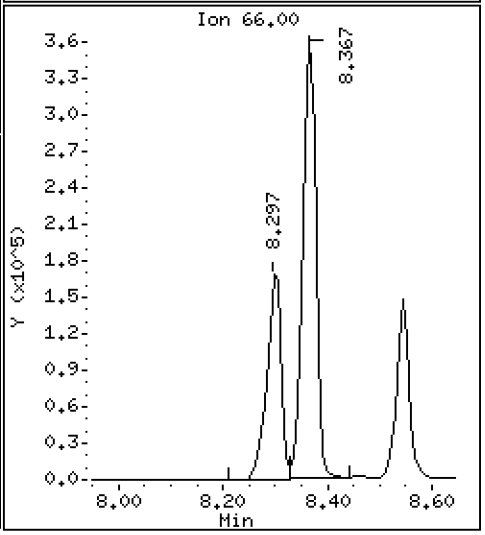


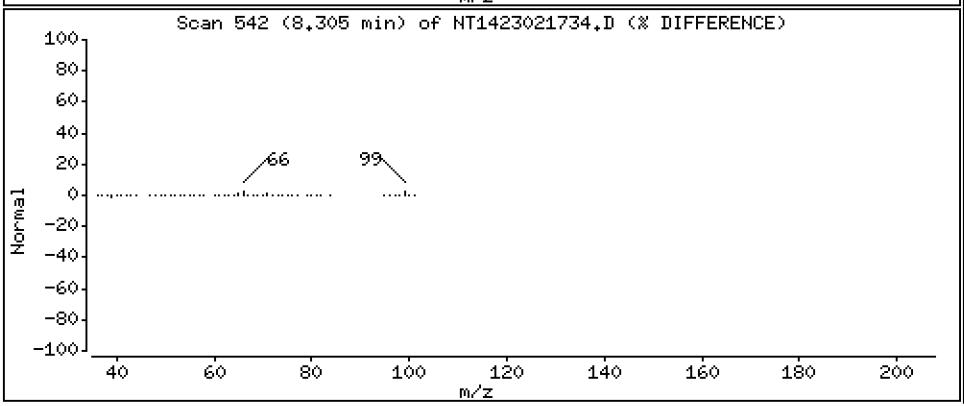












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

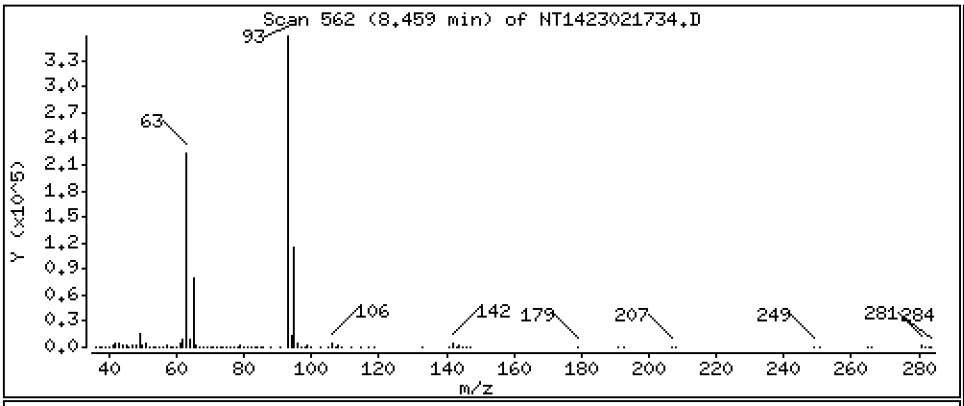
Operator: DSD

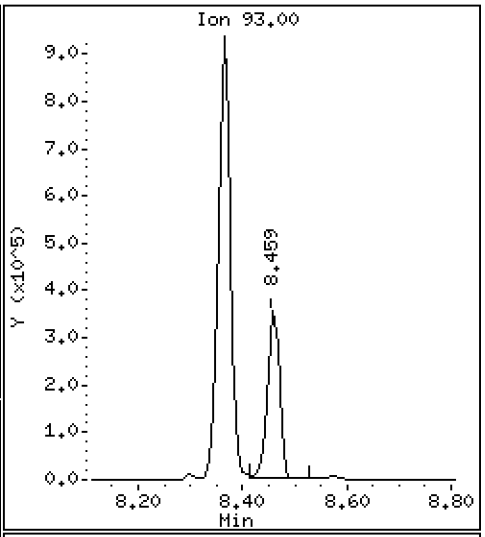
Column phase: ZB-5msi

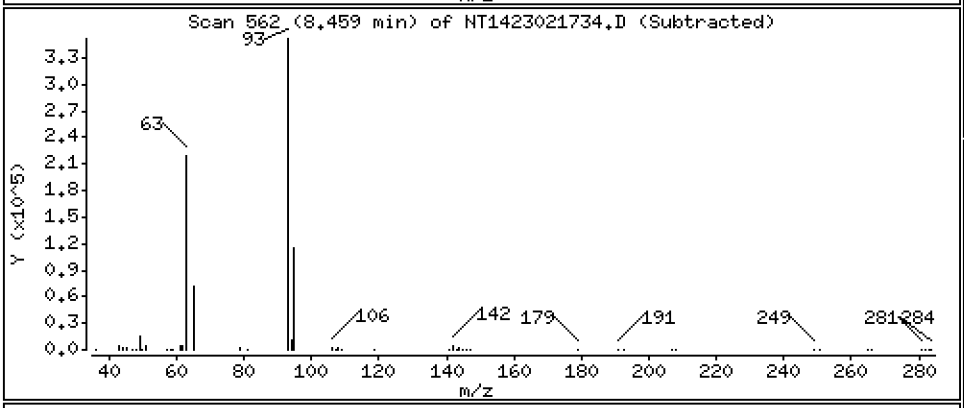
Column diameter: 0.25

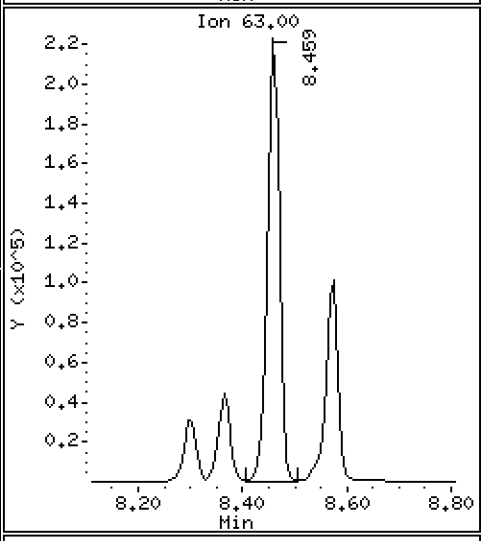
4 Bis(2-Chloroethyl)ether

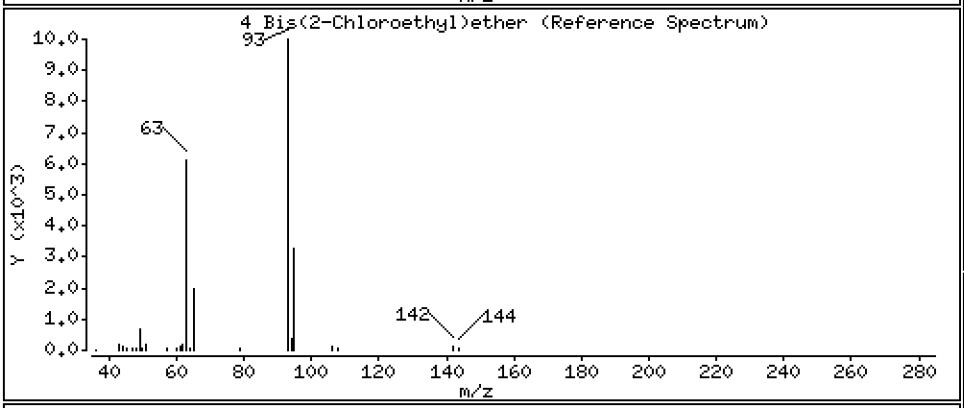
Concentration: 4.500 ug/mL

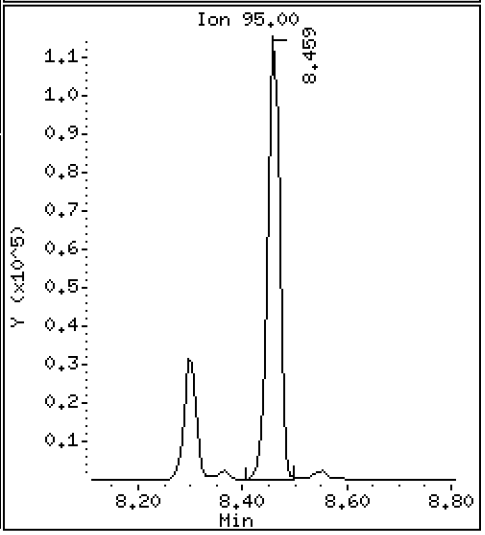


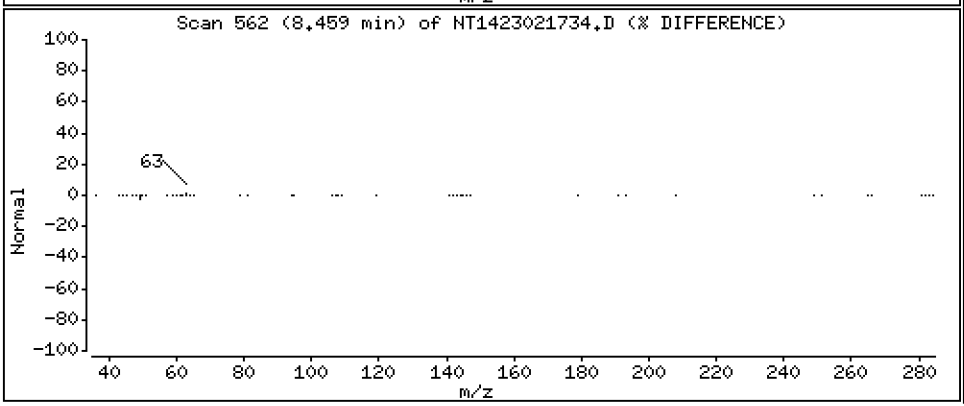












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

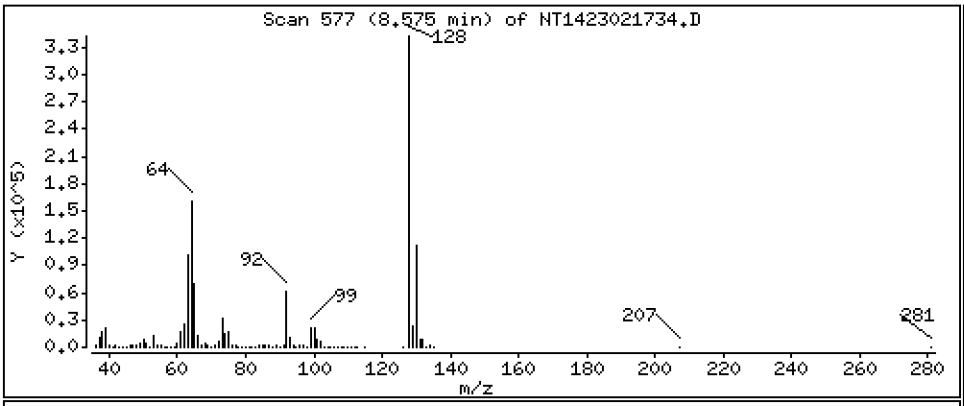
Operator: DSD

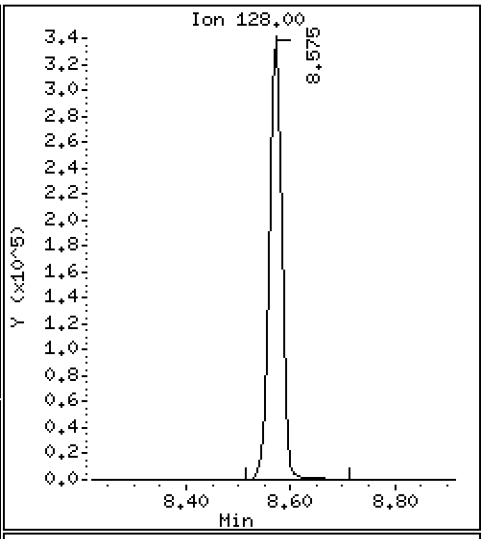
Column phase: ZB-5msi

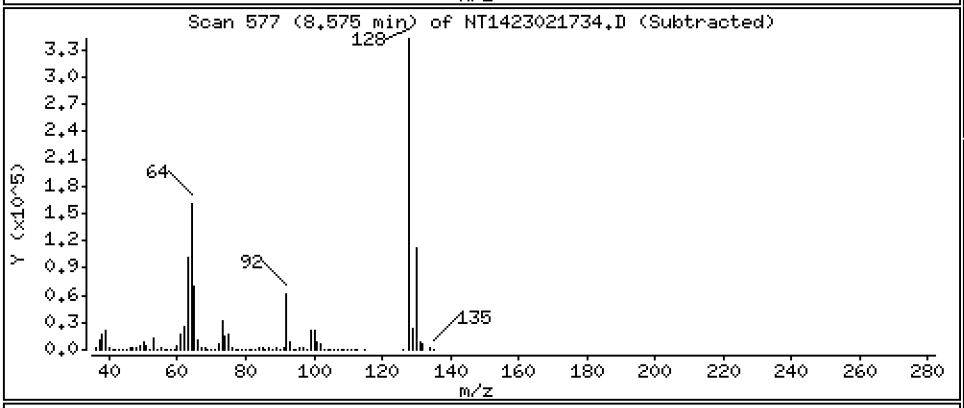
Column diameter: 0.25

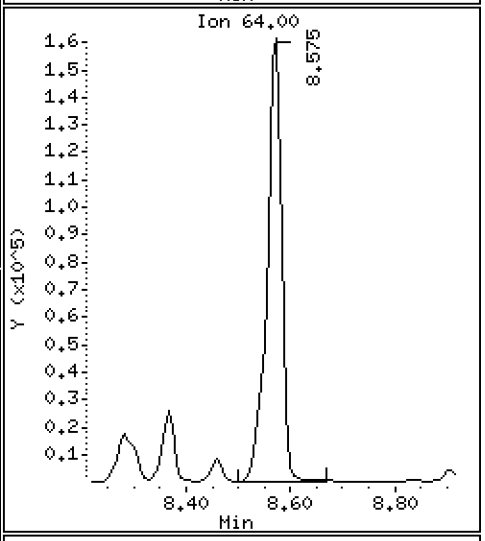
6 2-Chlorophenol

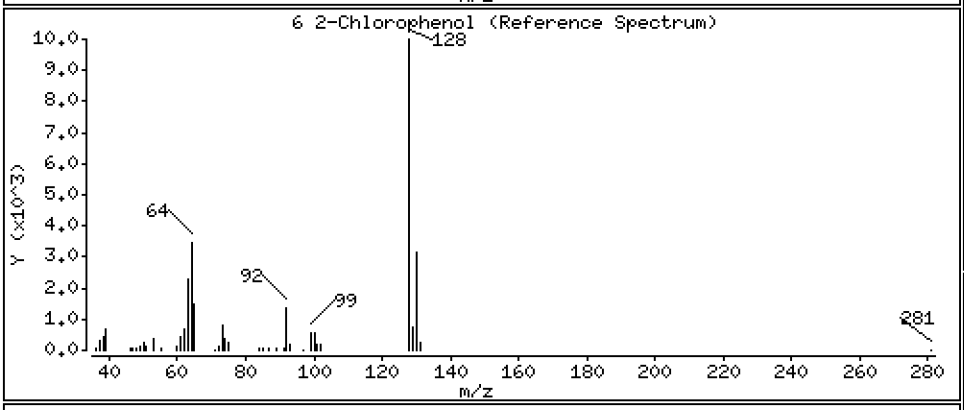
Concentration: 5.265 ug/mL

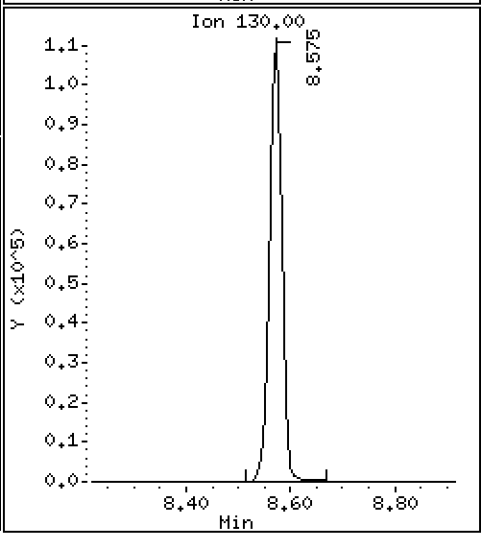


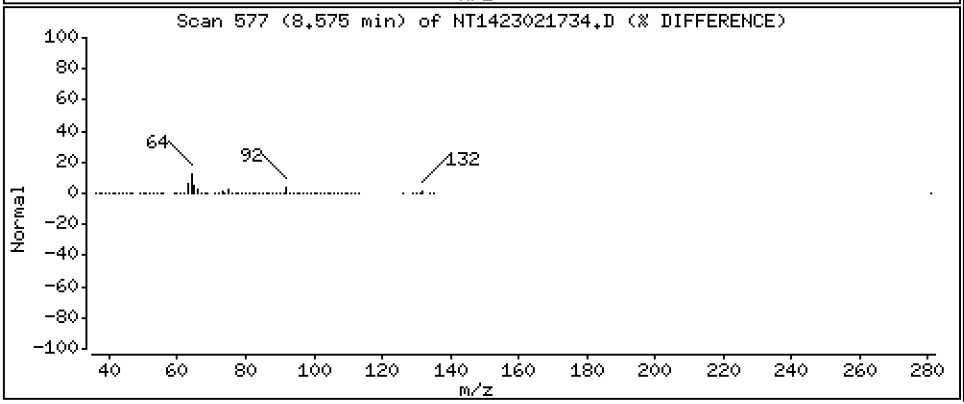












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

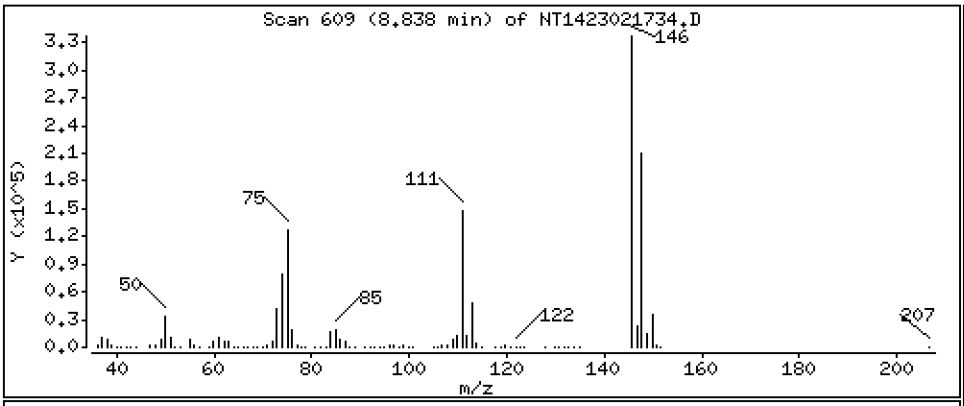
Operator: DSD

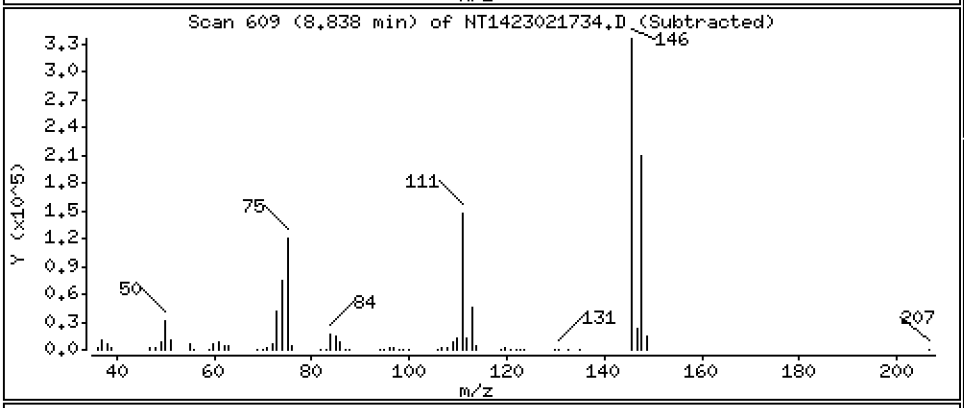
Column phase: ZB-5msi

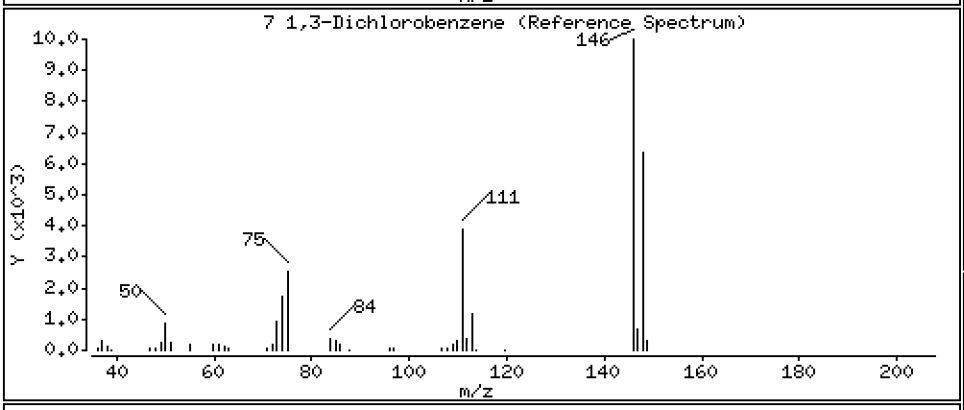
Column diameter: 0.25

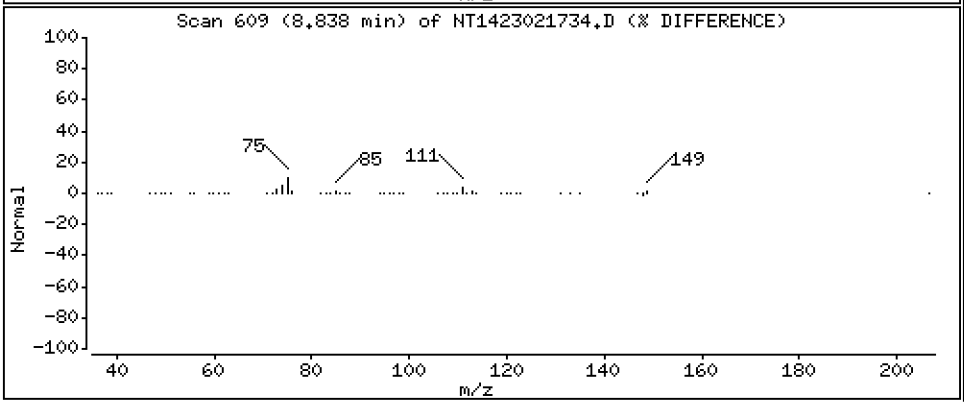
7 1,3-Dichlorobenzene

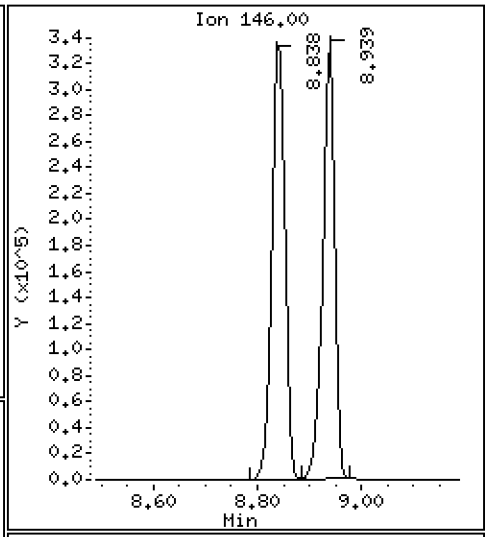
Concentration: 4.591 ug/mL

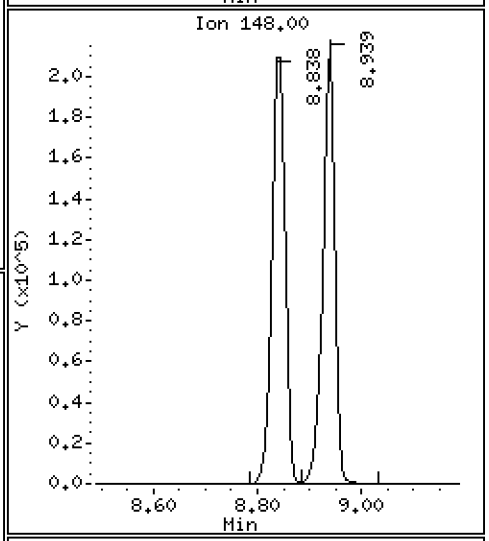


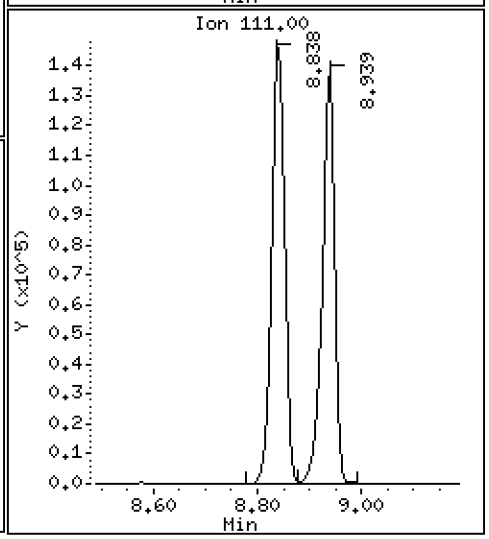












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

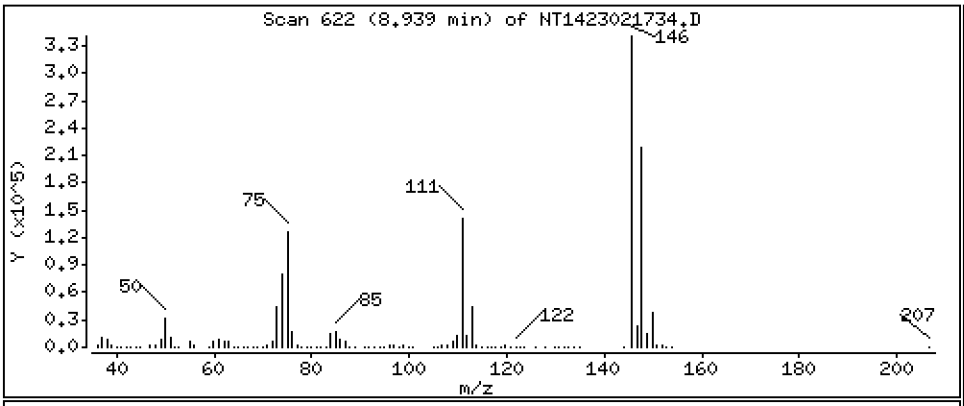
Operator: DSD

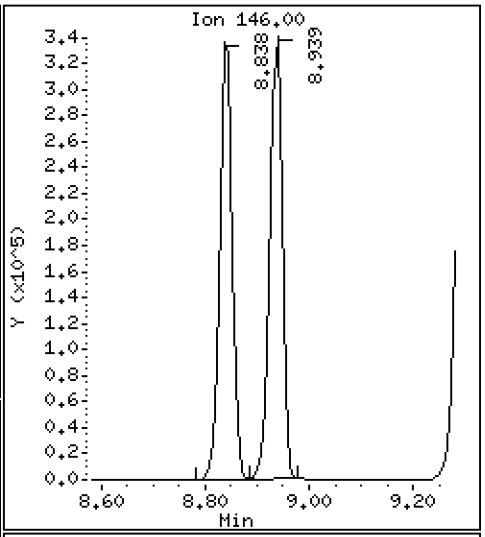
Column phase: ZB-5msi

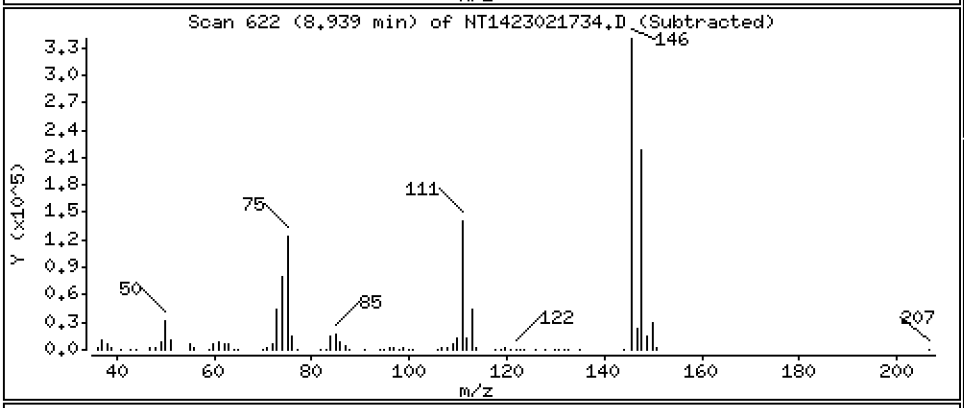
Column diameter: 0.25

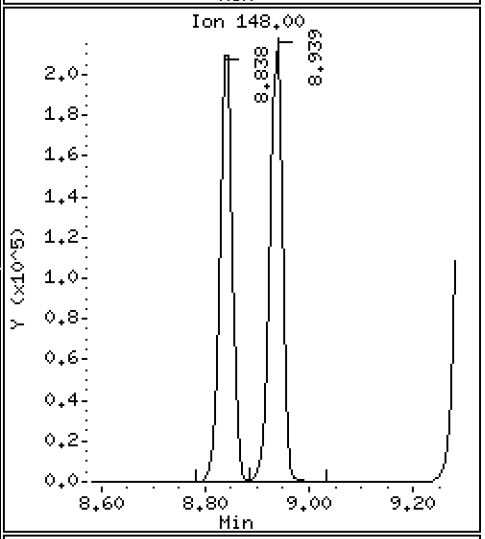
9 1,4-Dichlorobenzene

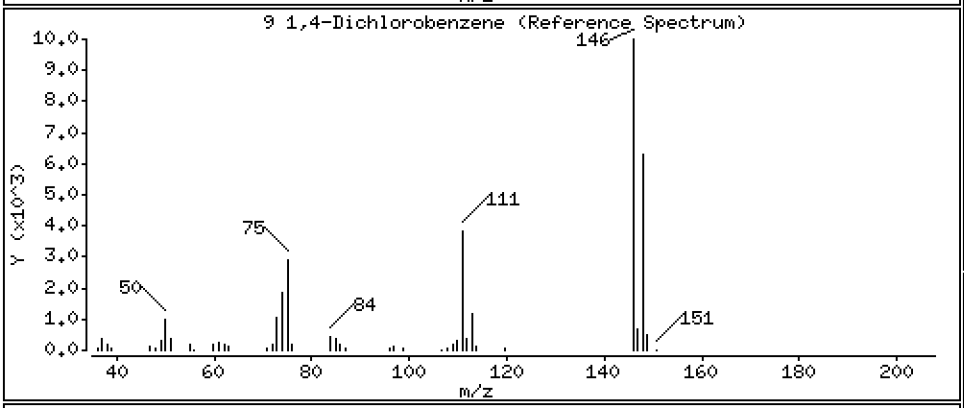
Concentration: 4.580 ug/mL

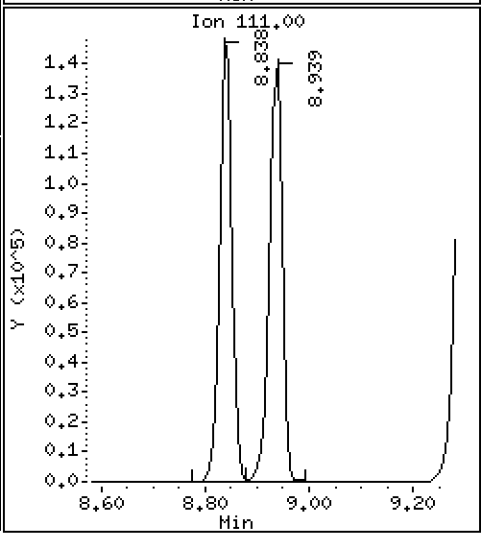


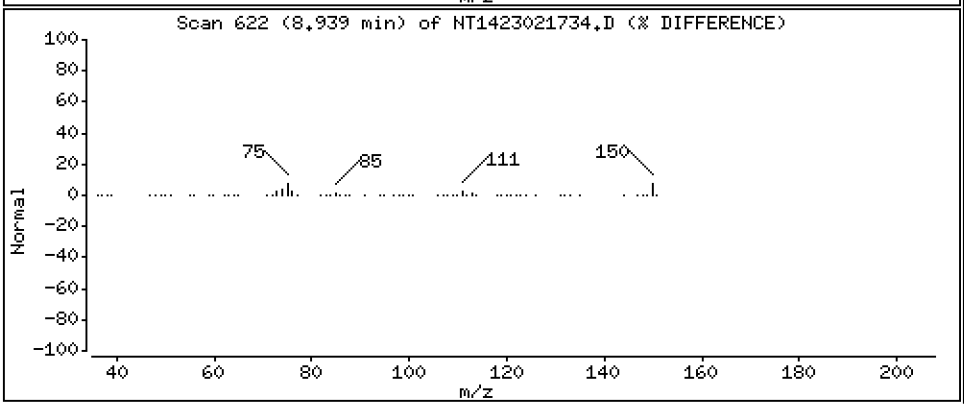












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

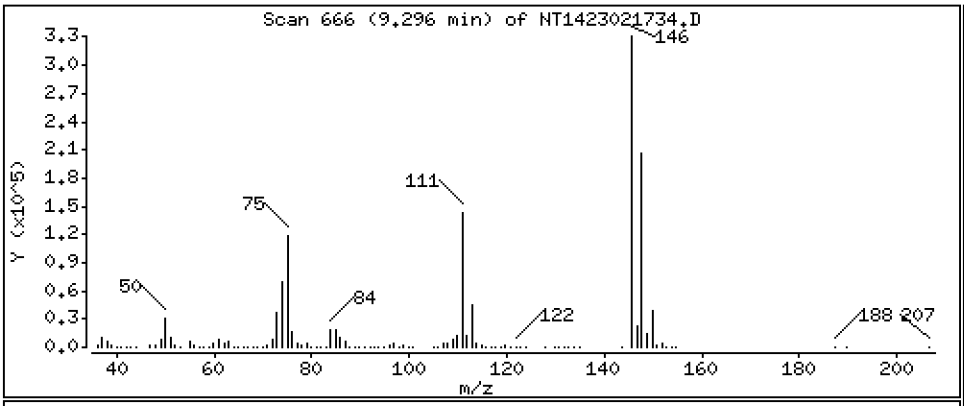
Operator: DSD

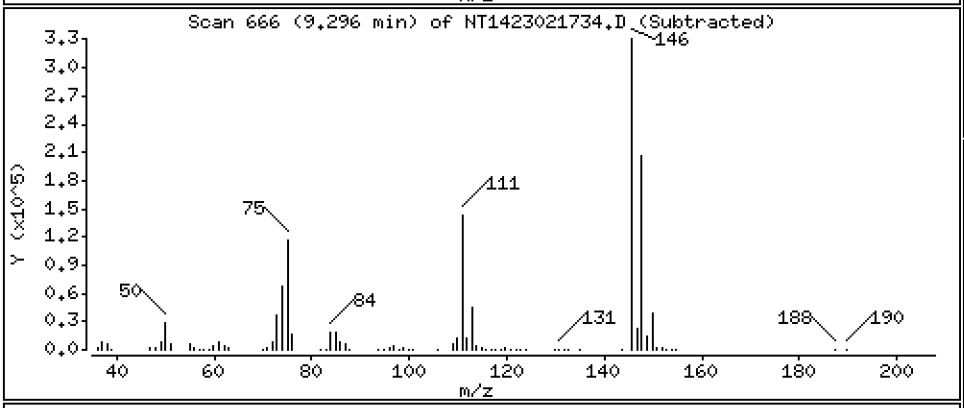
Column phase: ZB-5msi

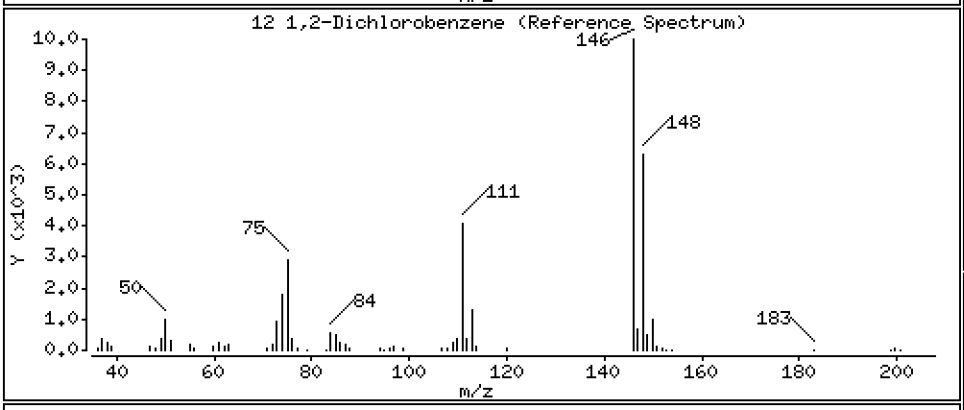
Column diameter: 0.25

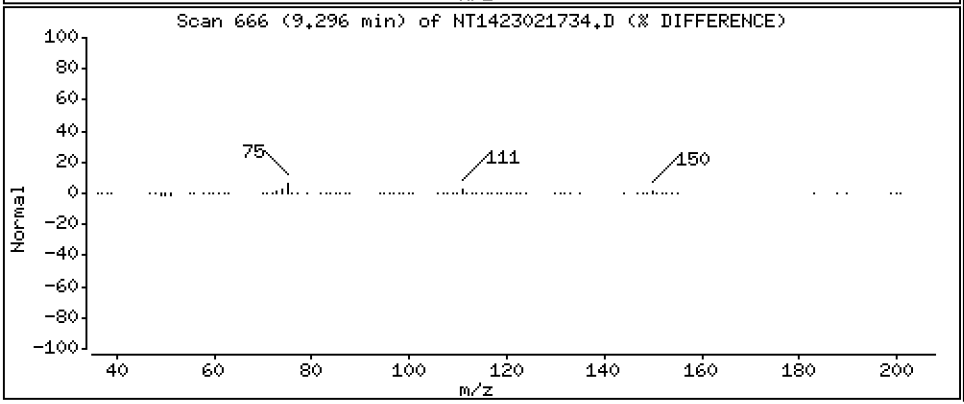
12 1,2-Dichlorobenzene

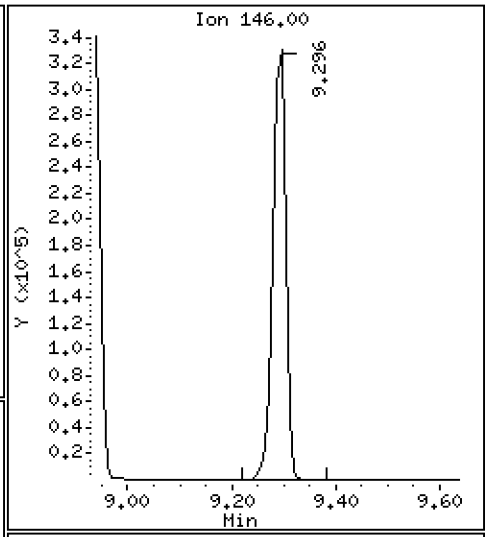
Concentration: 4.618 ug/mL

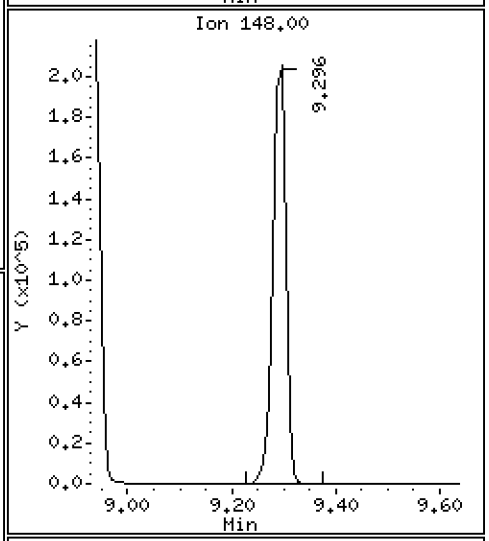


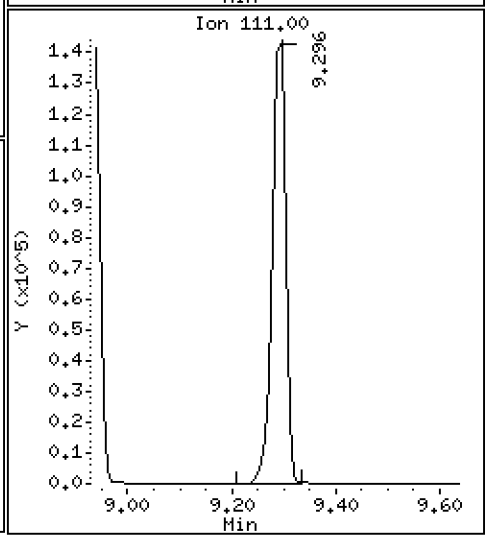












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

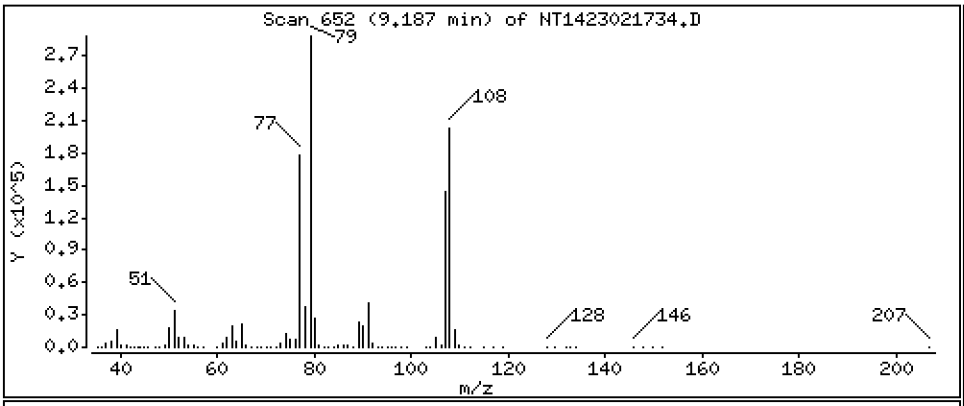
Operator: DSD

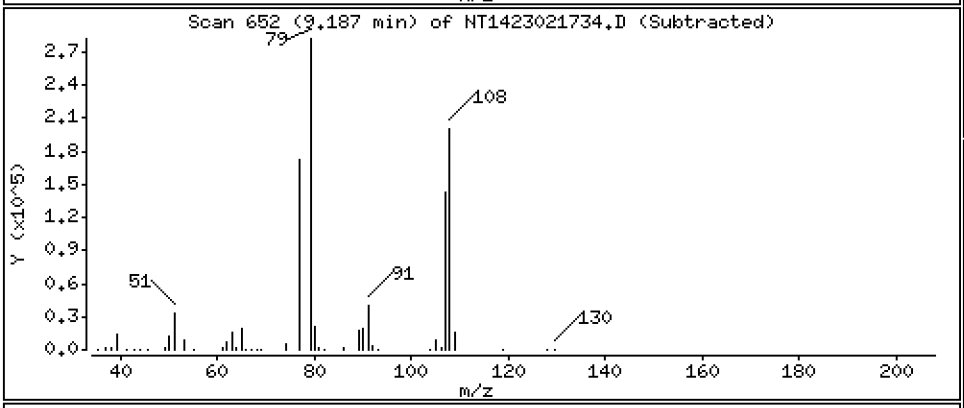
Column phase: ZB-5msi

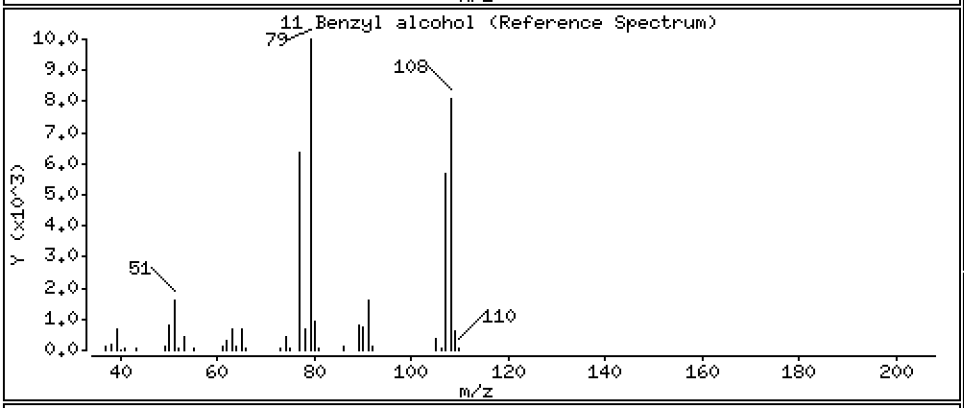
Column diameter: 0.25

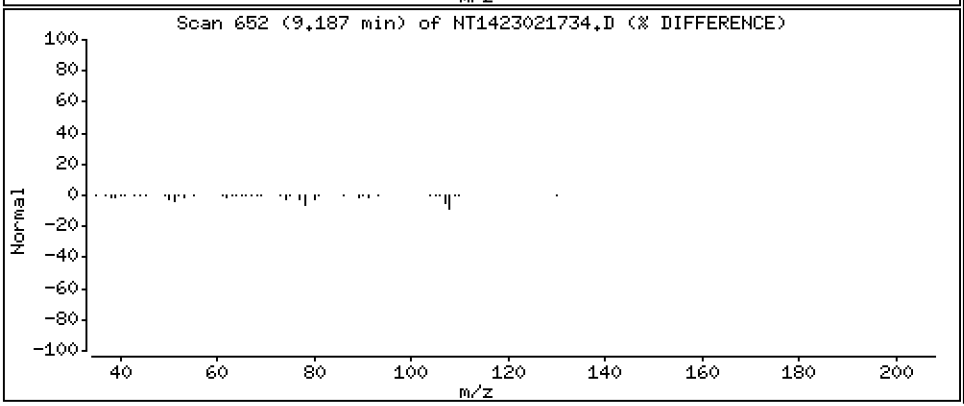
11 Benzyl alcohol

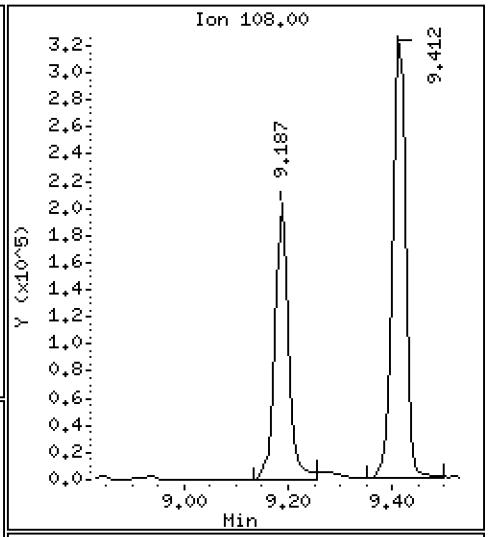
Concentration: 4.426 ug/mL

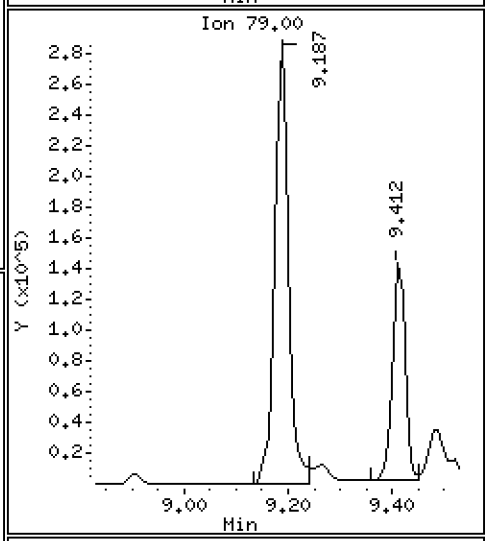


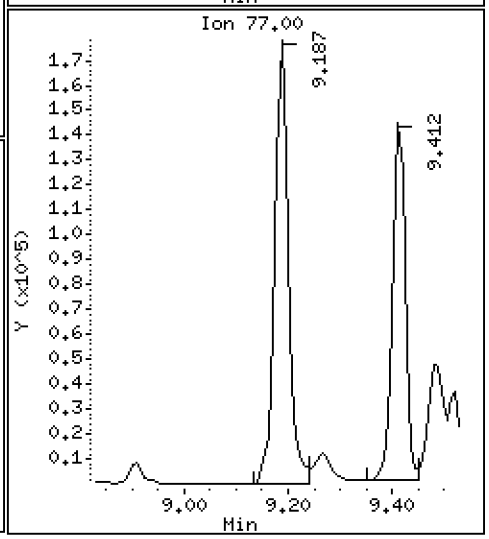












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

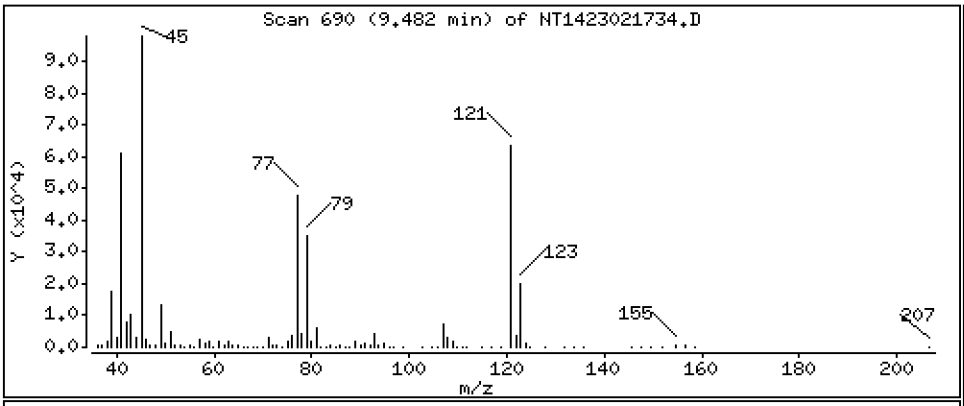
Operator: DSD

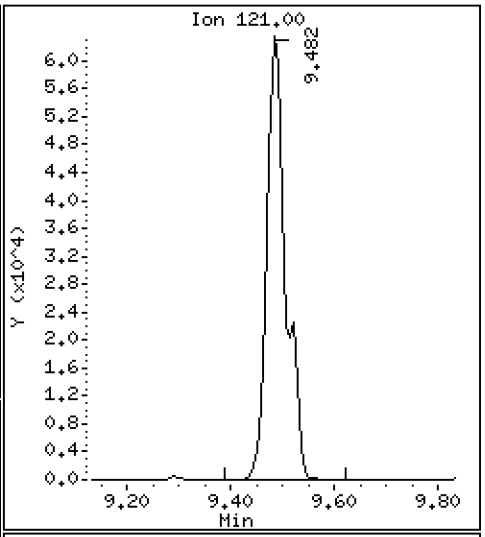
Column phase: ZB-5msi

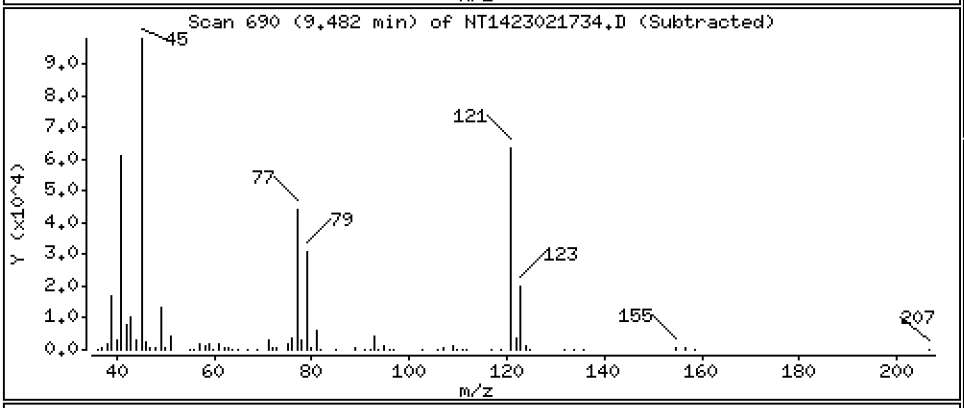
Column diameter: 0.25

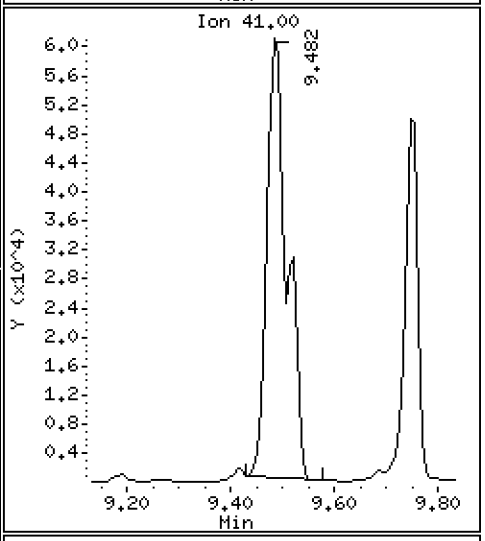
14 2,2'-oxybis(1-Chloropropane)

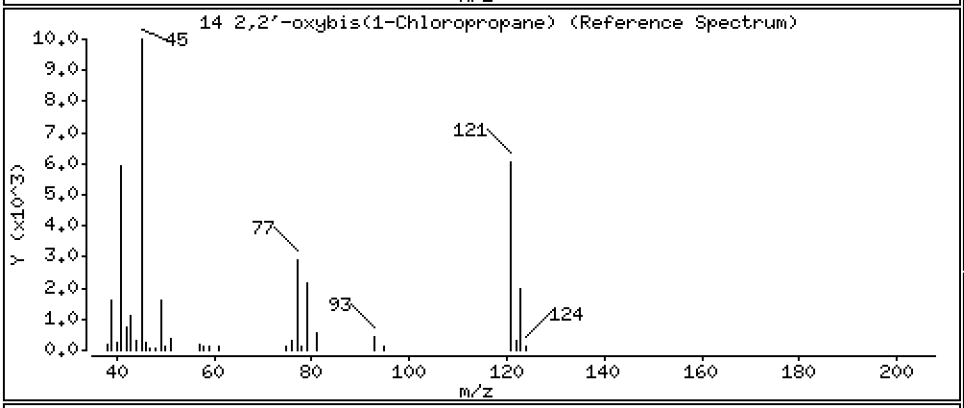
Concentration: 5.002 ug/mL

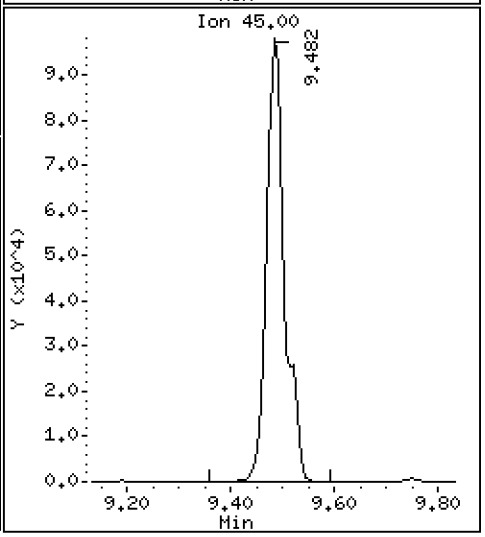


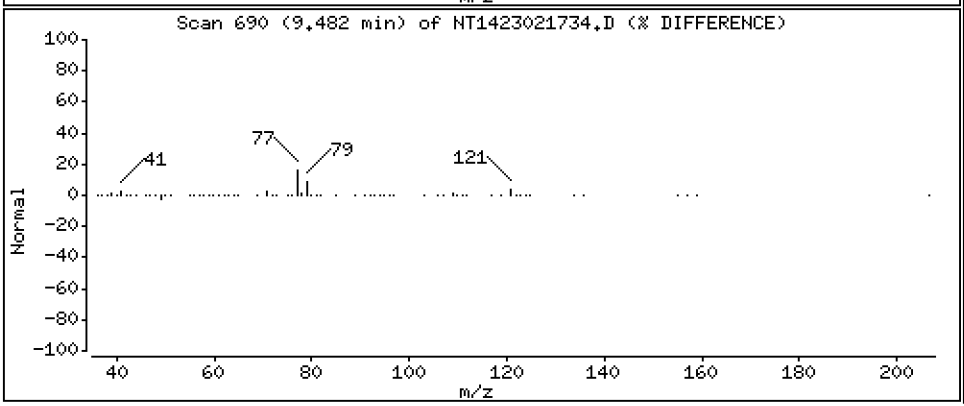












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

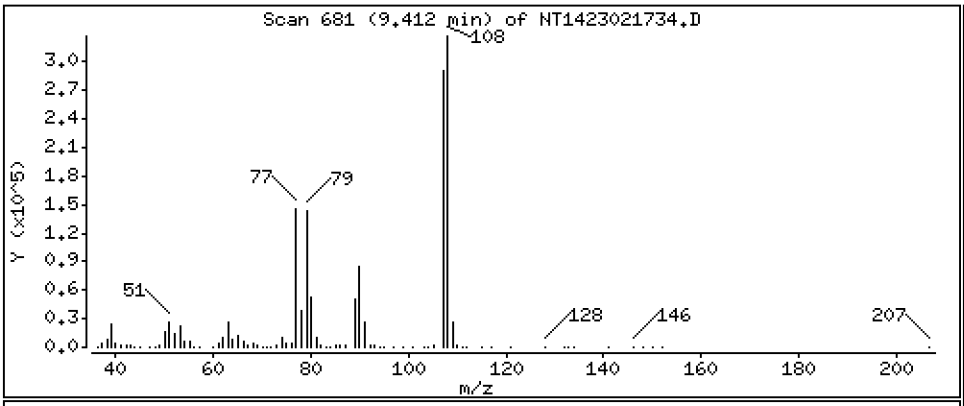
Operator: DSD

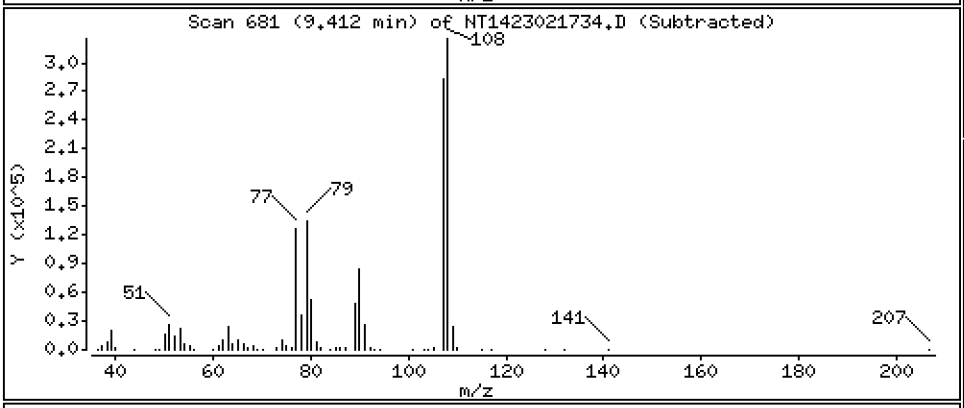
Column phase: ZB-5msi

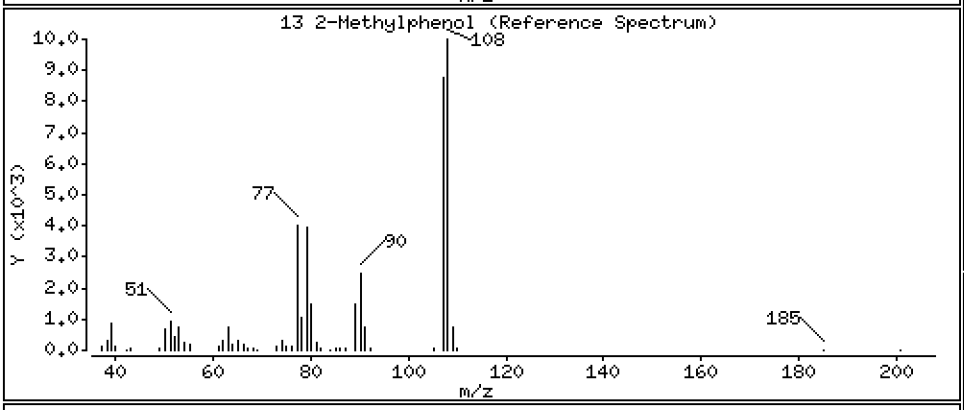
Column diameter: 0.25

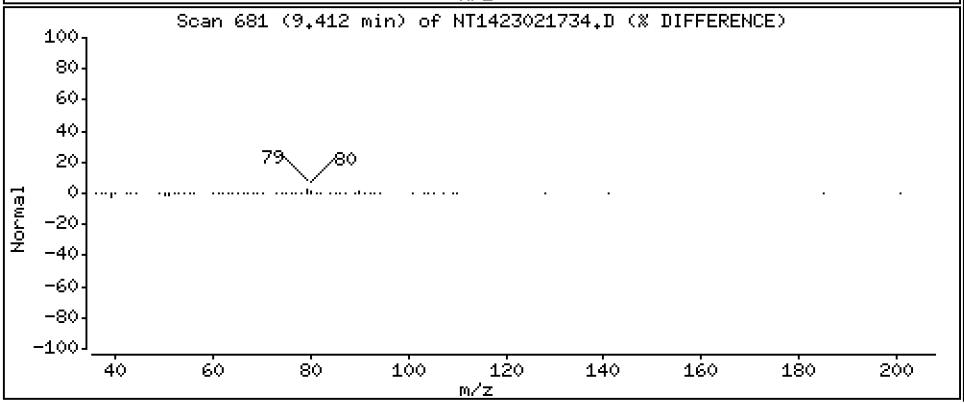
13 2-Methylphenol

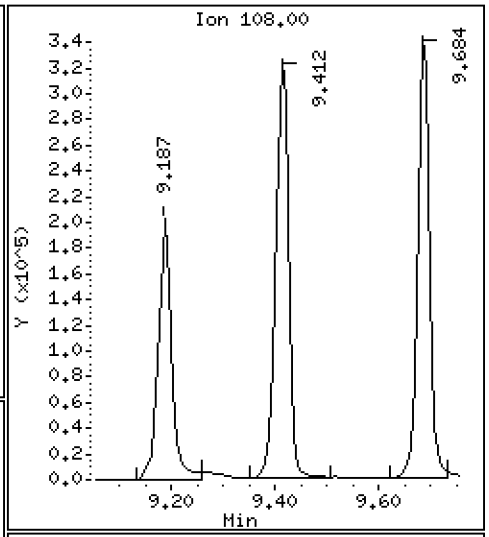
Concentration: 4.862 ug/mL

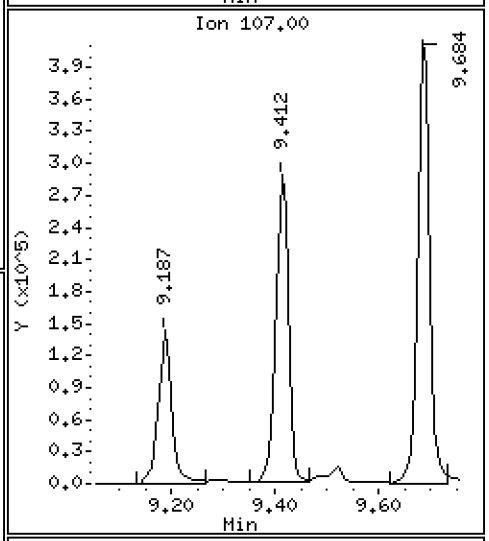


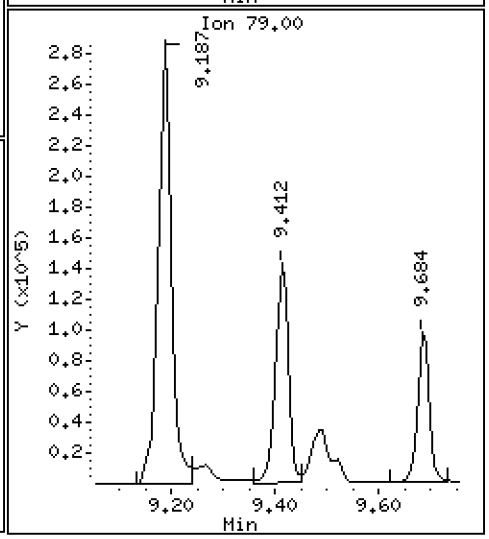












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

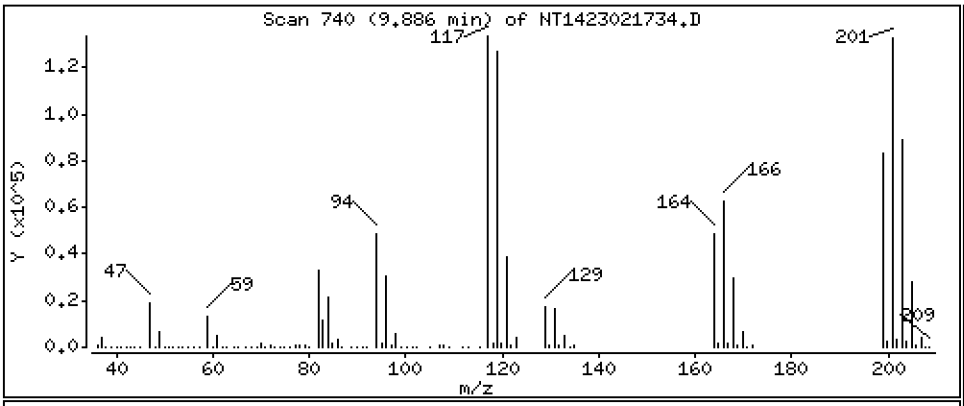
Operator: DSD

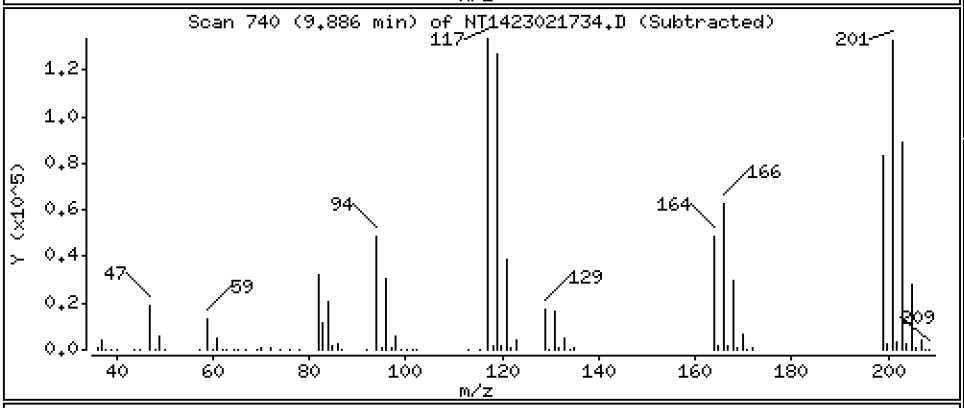
Column phase: ZB-5msi

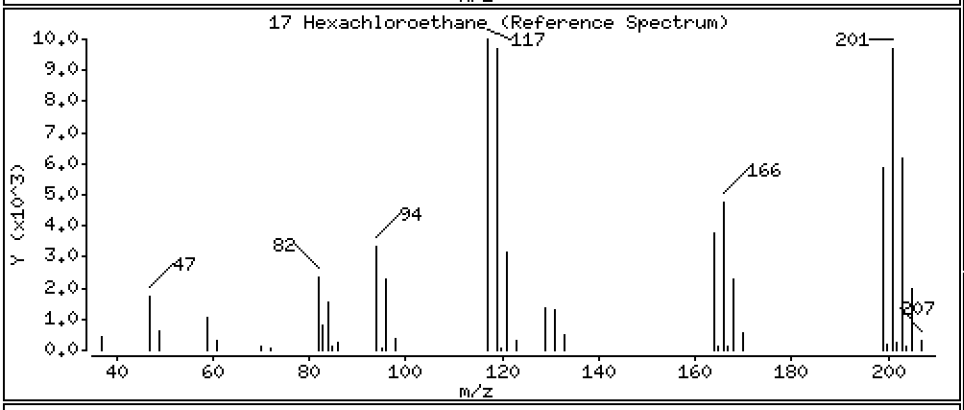
Column diameter: 0.25

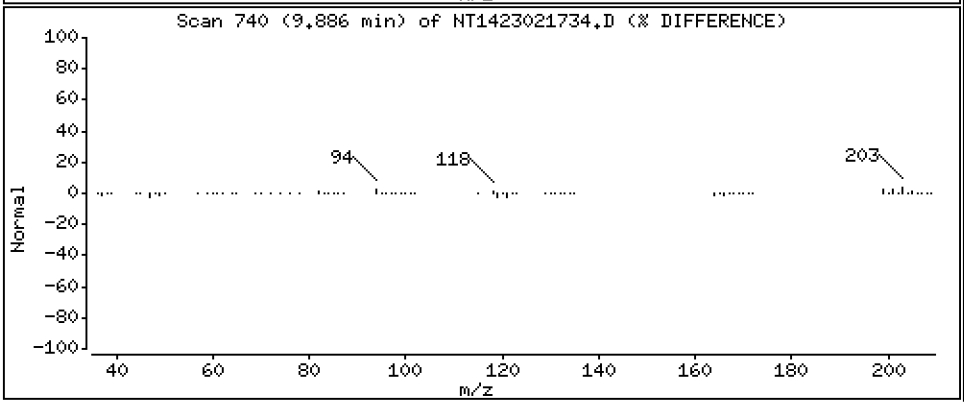
17 Hexachloroethane

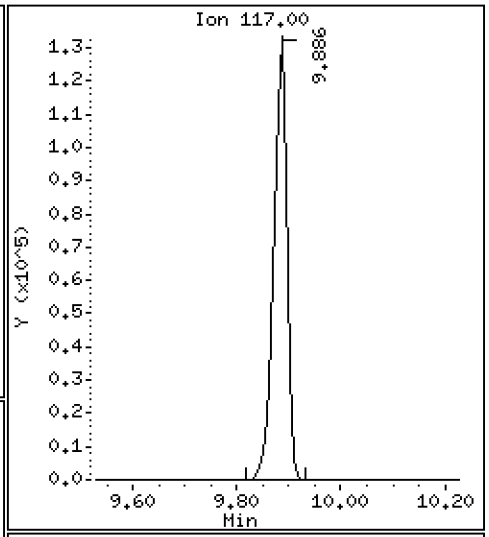
Concentration: 4.441 ug/mL

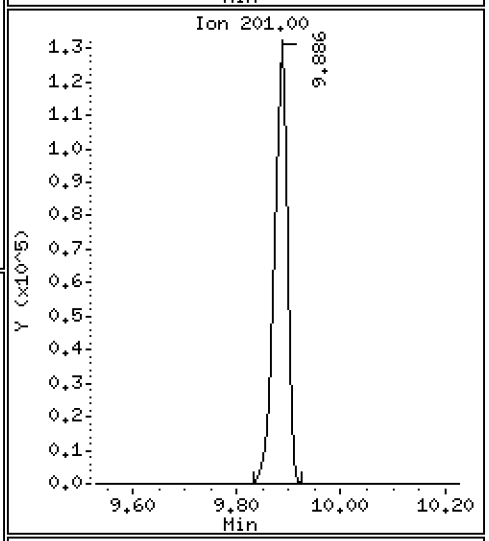


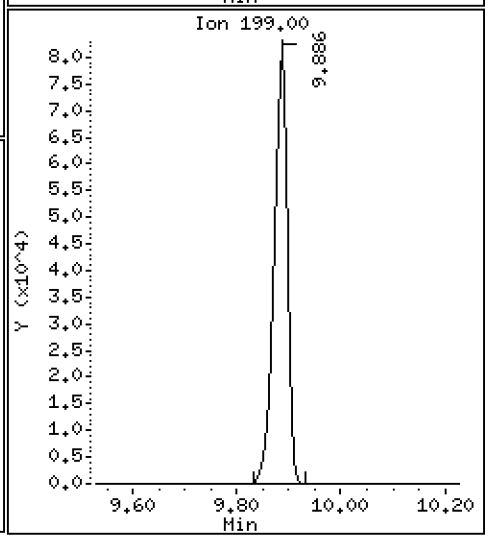












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

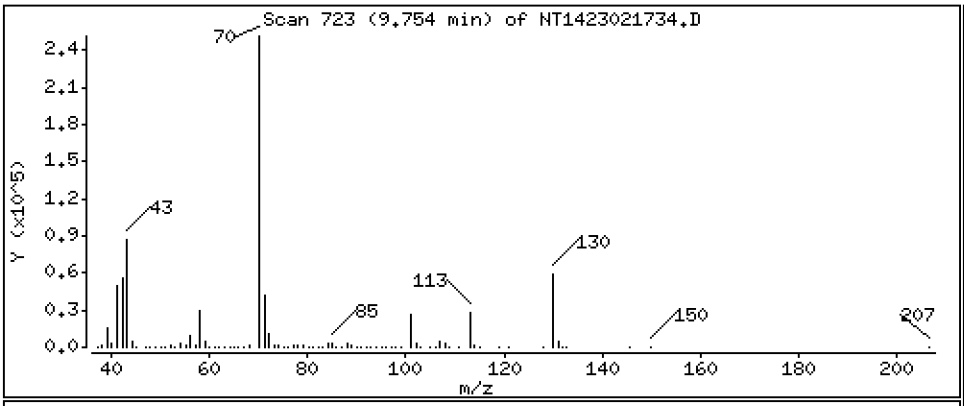
Operator: DSD

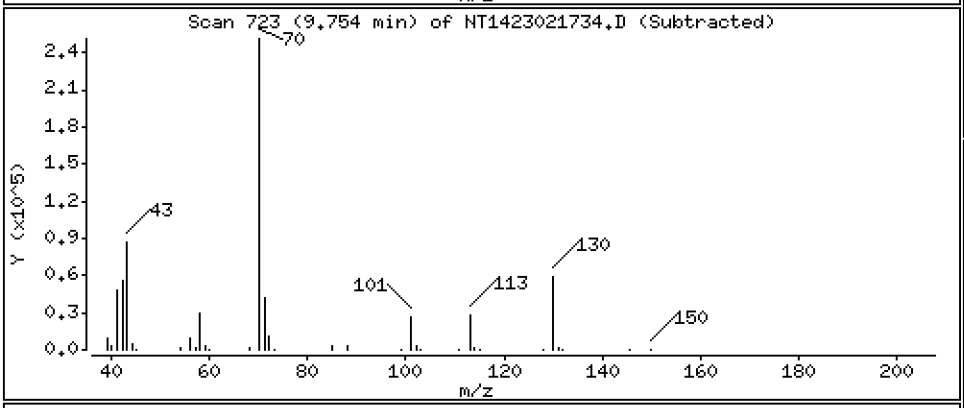
Column phase: ZB-5msi

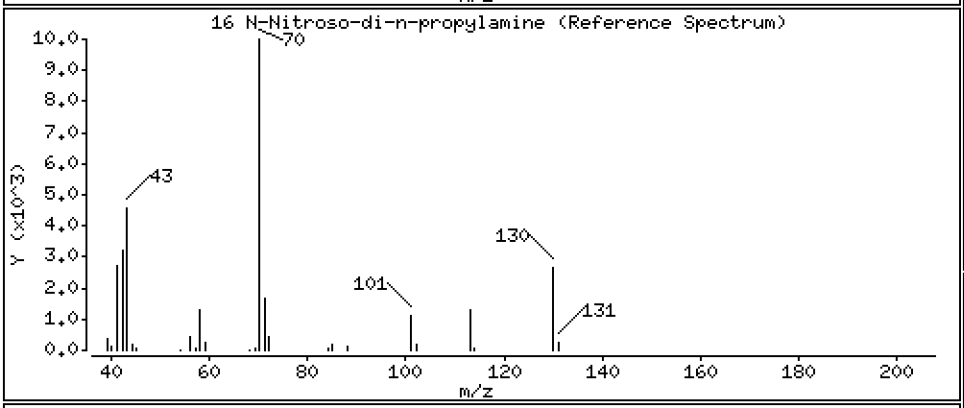
Column diameter: 0.25

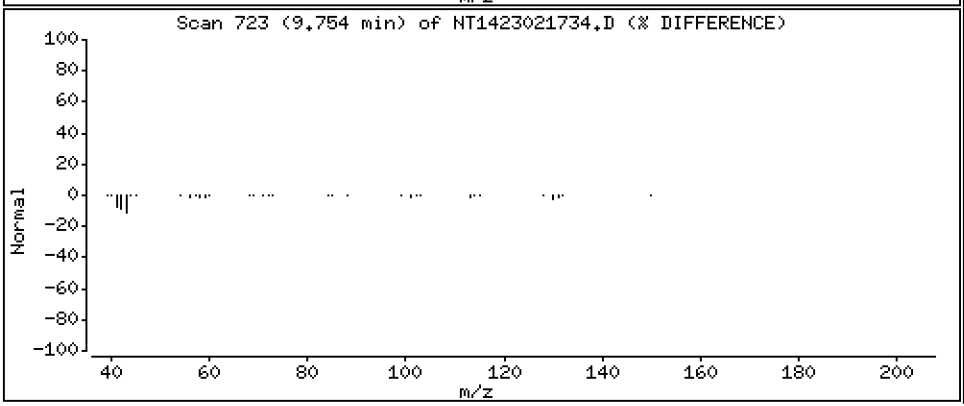
16 N-Nitroso-di-n-propylamine

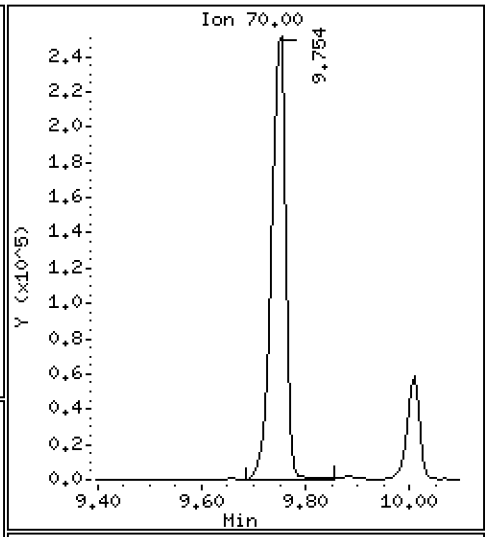
Concentration: 4.577 ug/mL

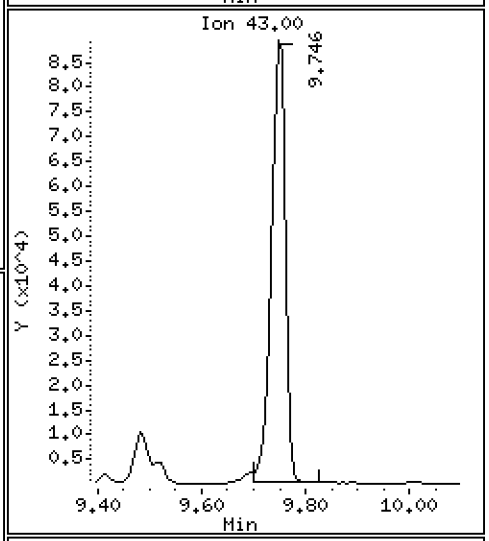


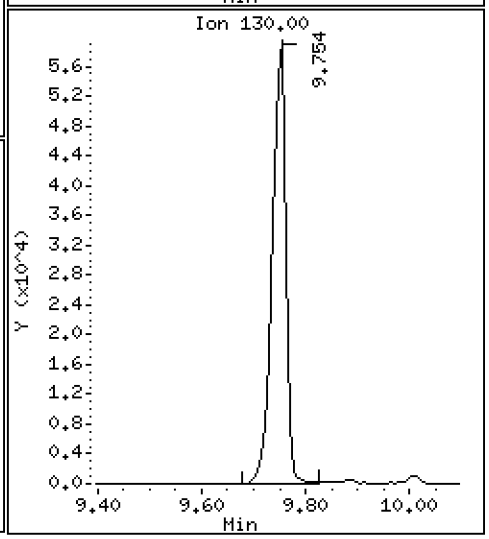












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

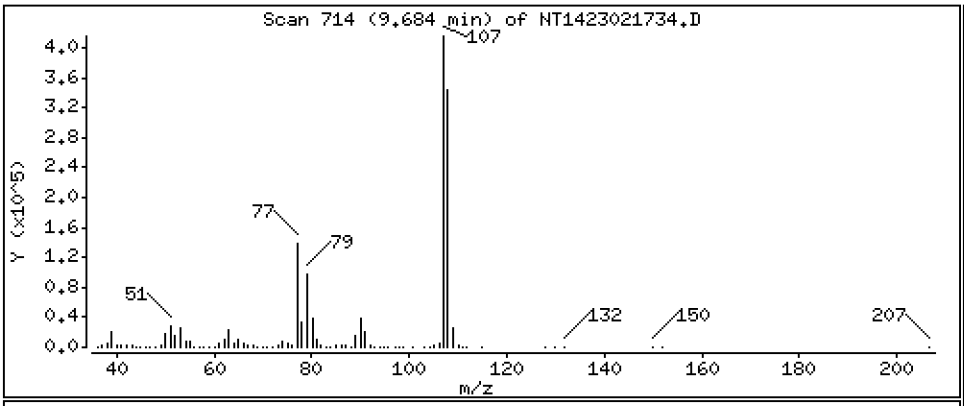
Operator: DSD

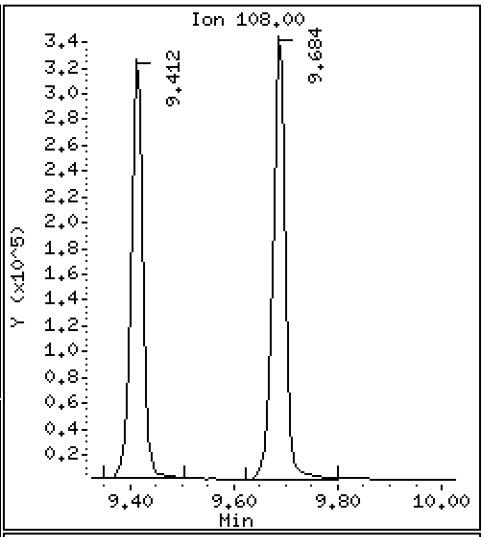
Column phase: ZB-5msi

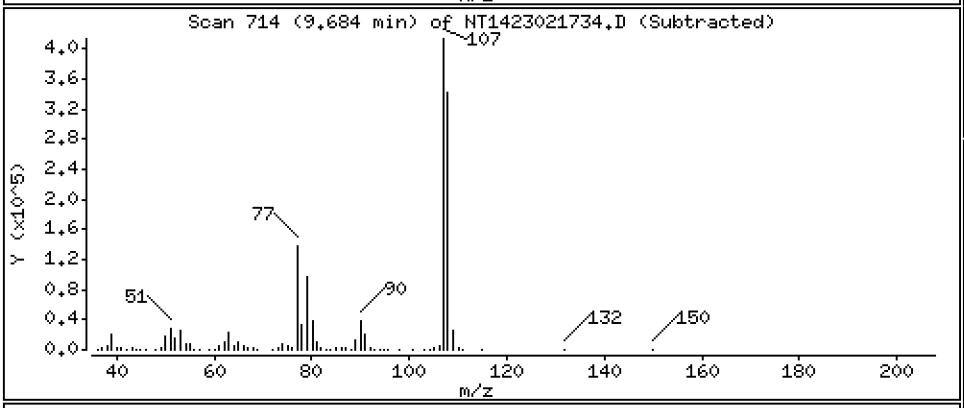
Column diameter: 0.25

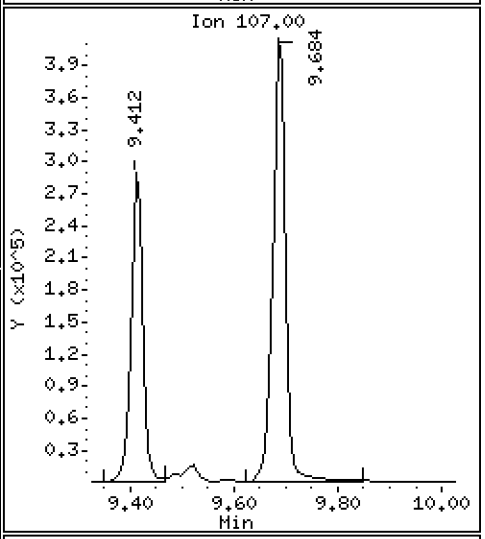
15 4-Methylphenol

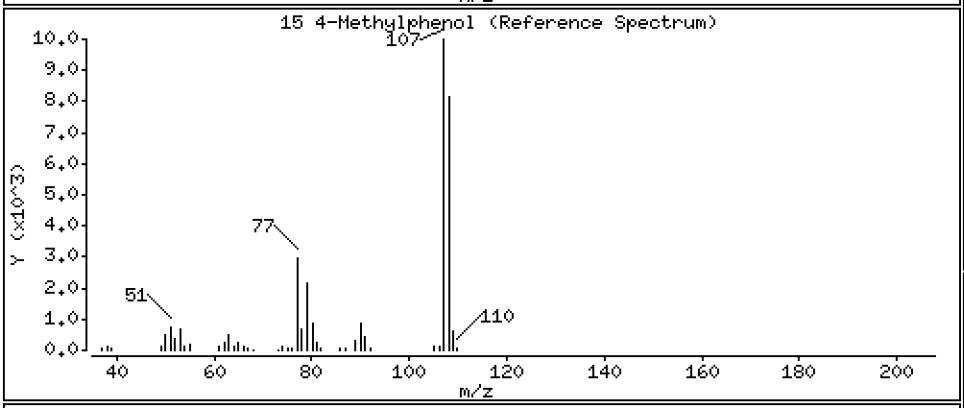
Concentration: 4.905 ug/mL

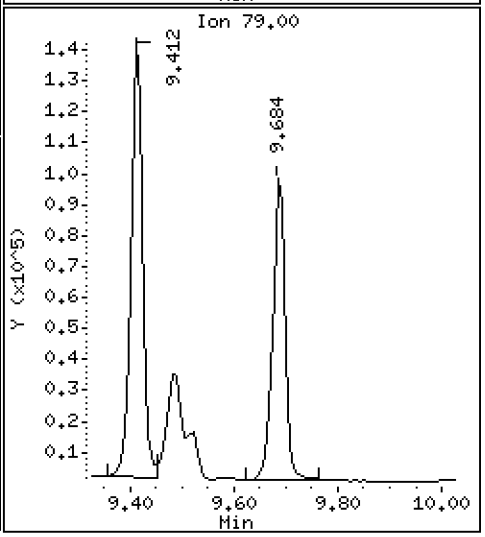


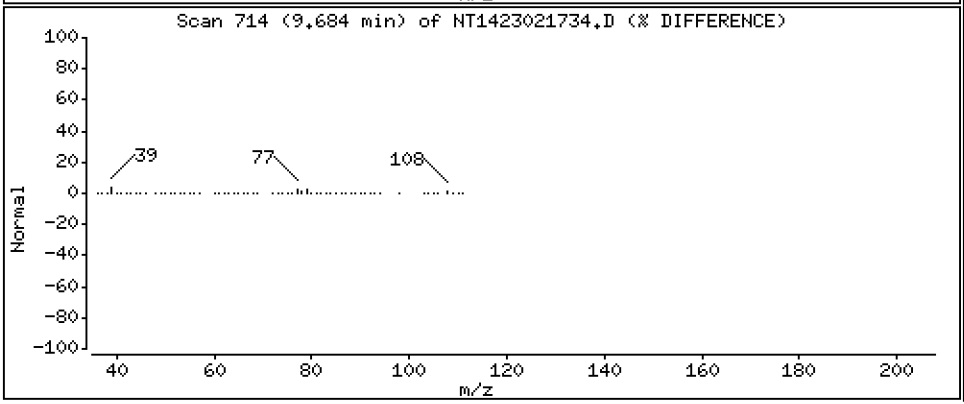












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

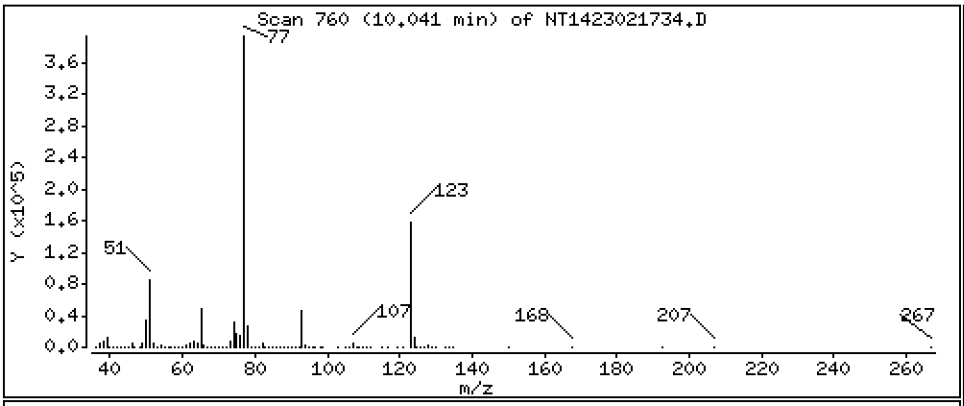
Operator: DSD

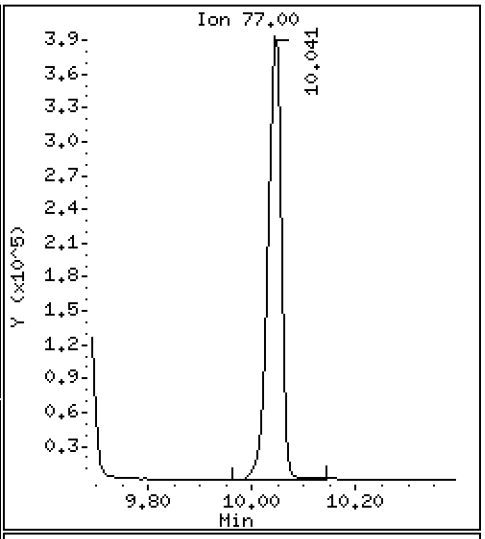
Column phase: ZB-5msi

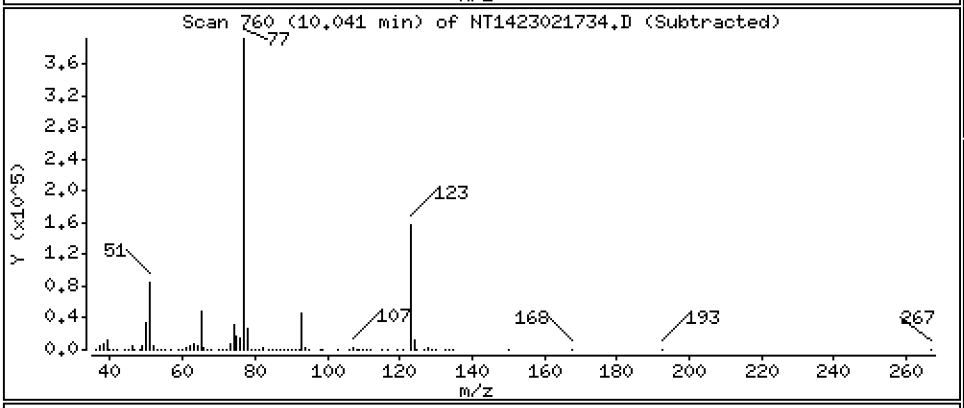
Column diameter: 0.25

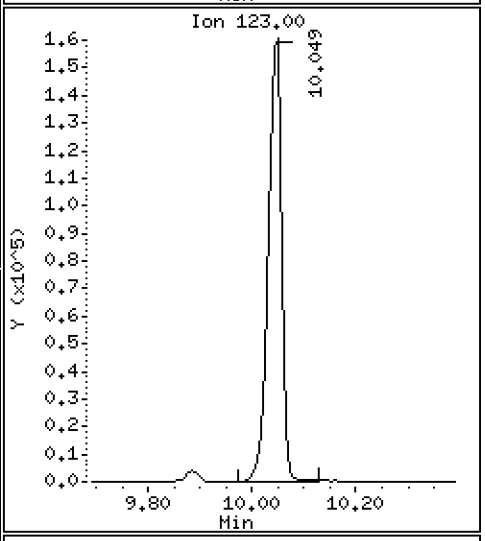
19 Nitrobenzene

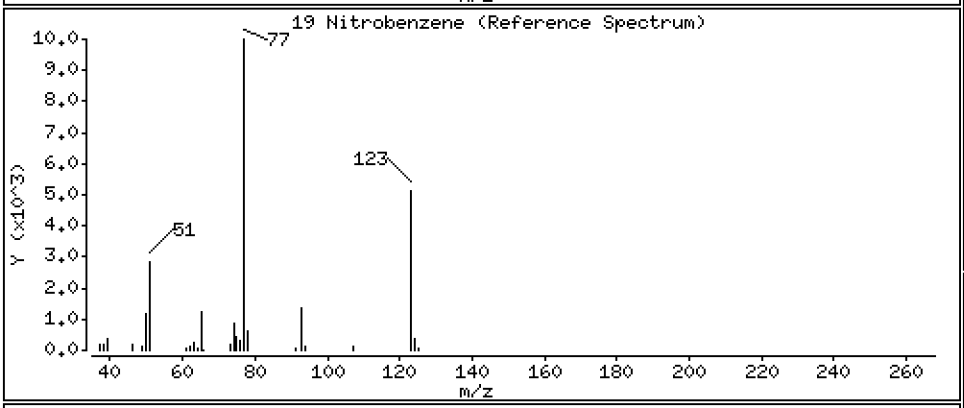
Concentration: 4.499 ug/mL

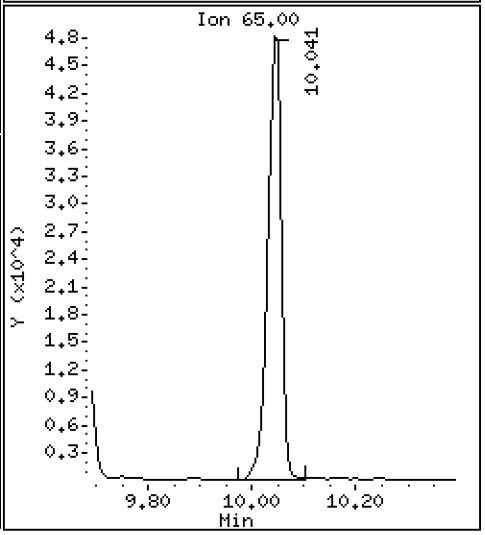


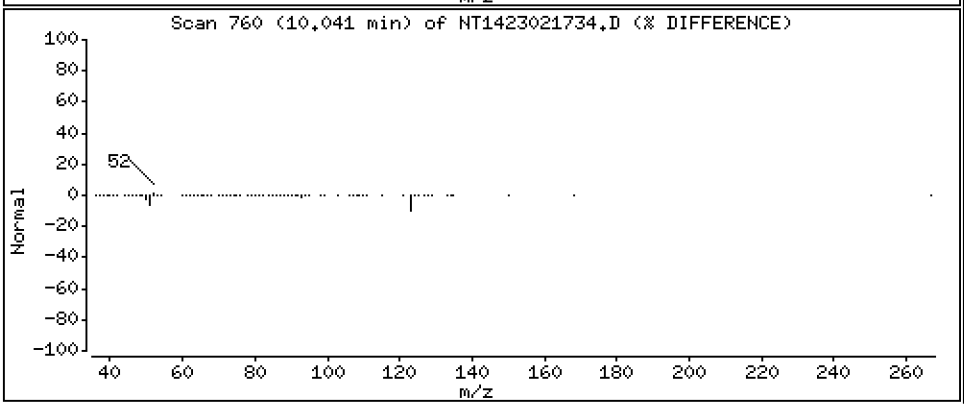












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

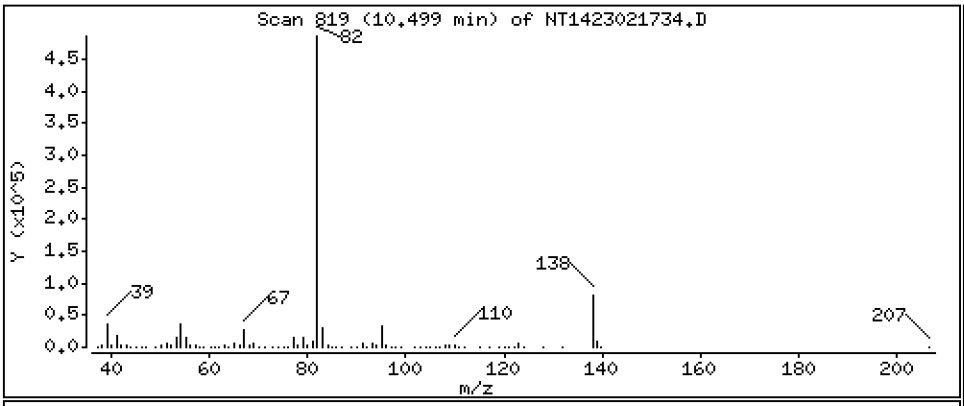
Operator: DSD

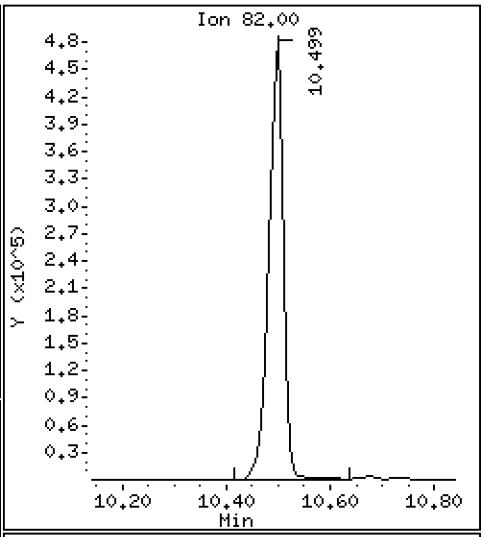
Column phase: ZB-5msi

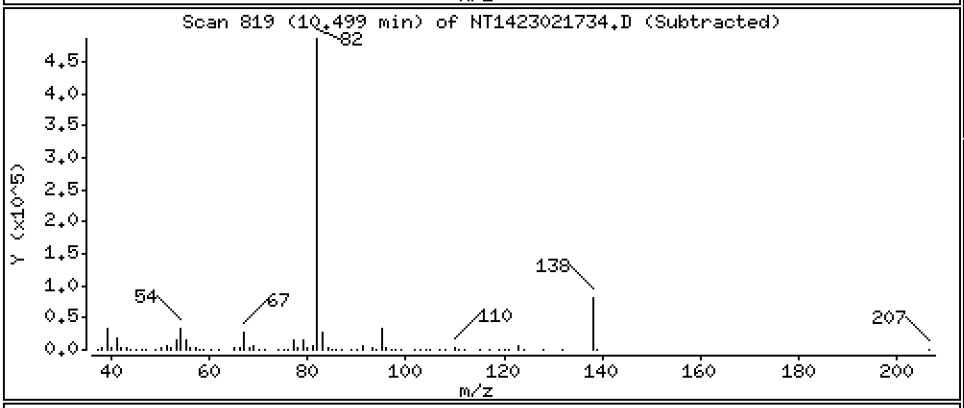
Column diameter: 0.25

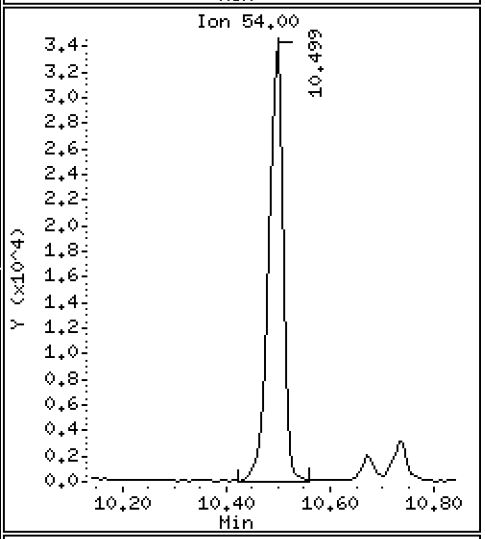
20 Isophorone

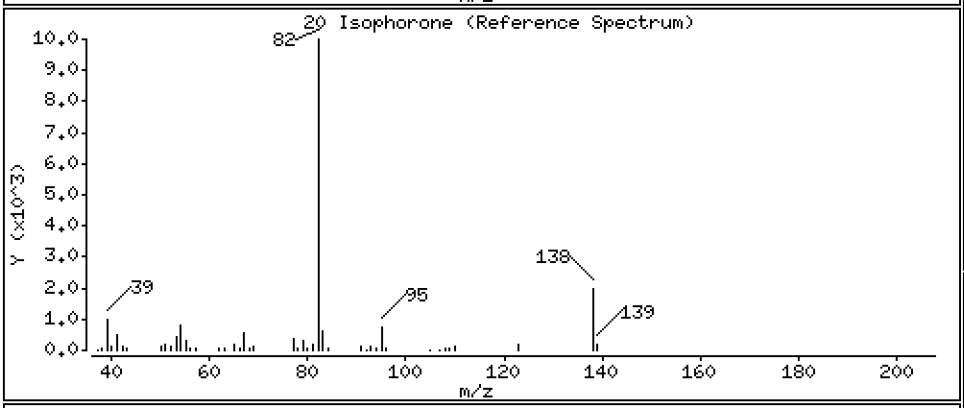
Concentration: 4.889 ug/mL

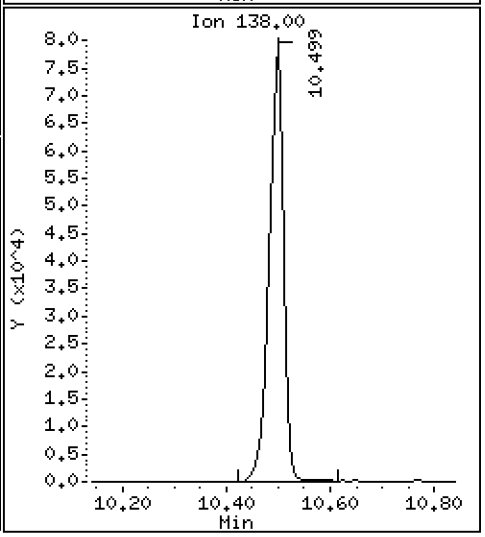


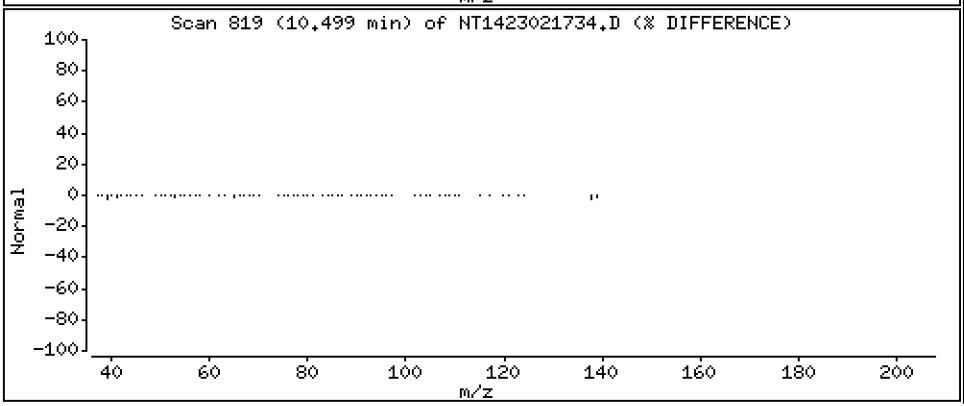












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

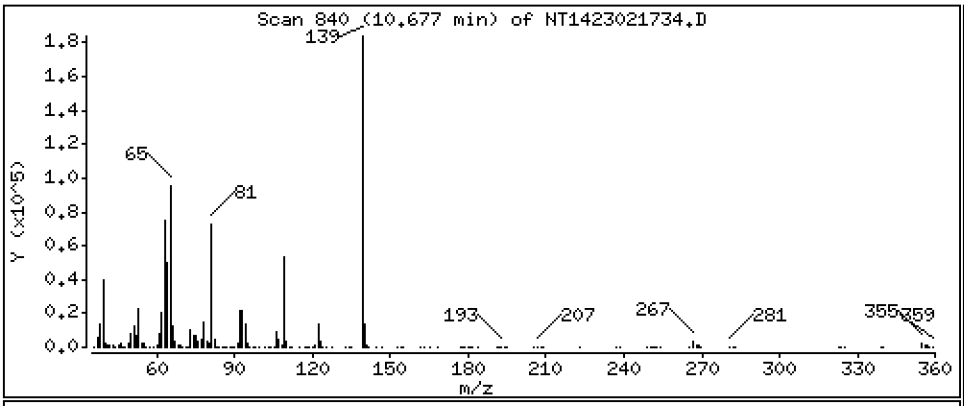
Operator: DSD

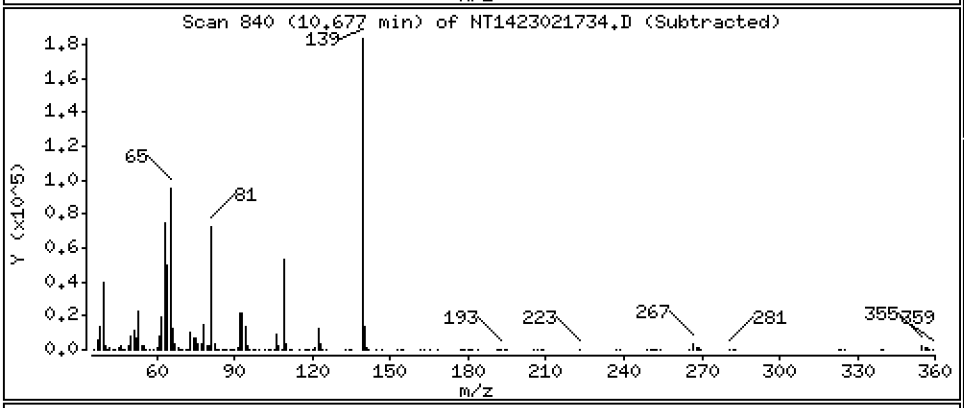
Column phase: ZB-5msi

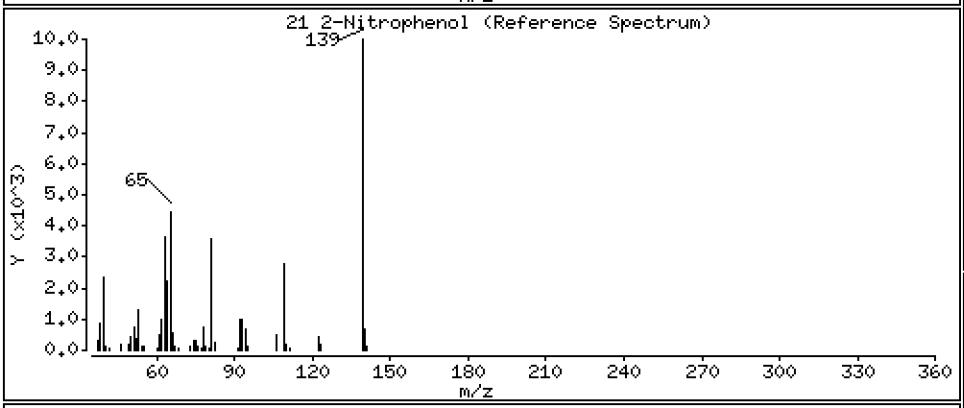
Column diameter: 0.25

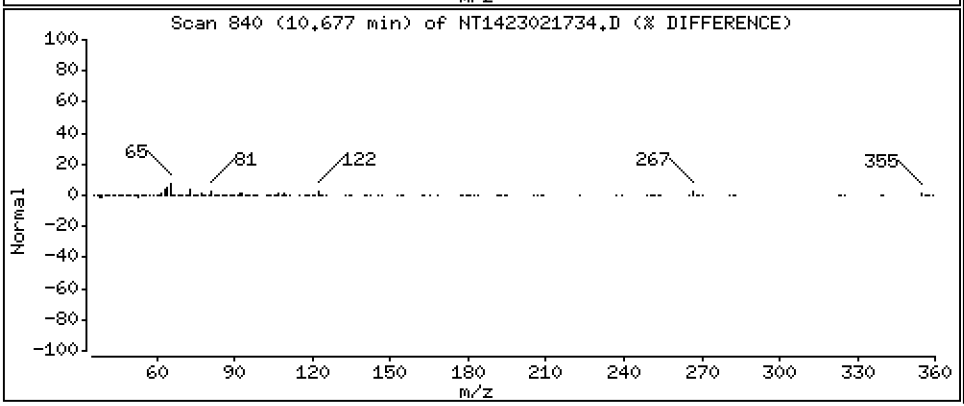
21 2-Nitrophenol

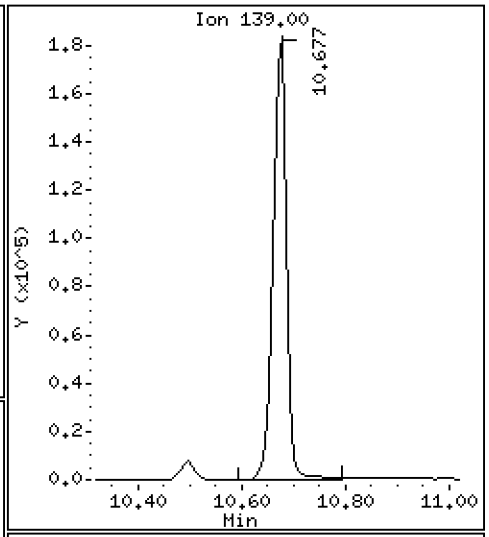
Concentration: 4.943 ug/mL

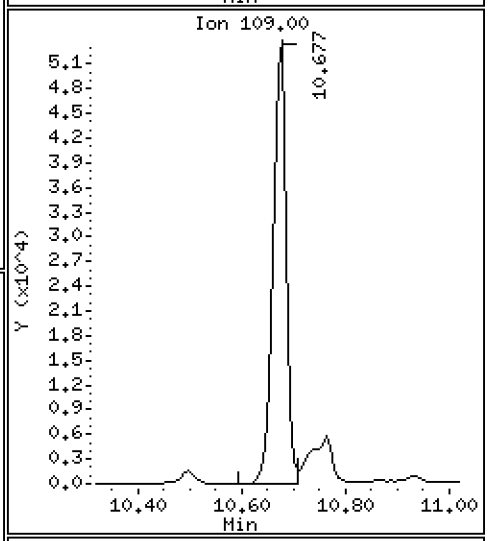


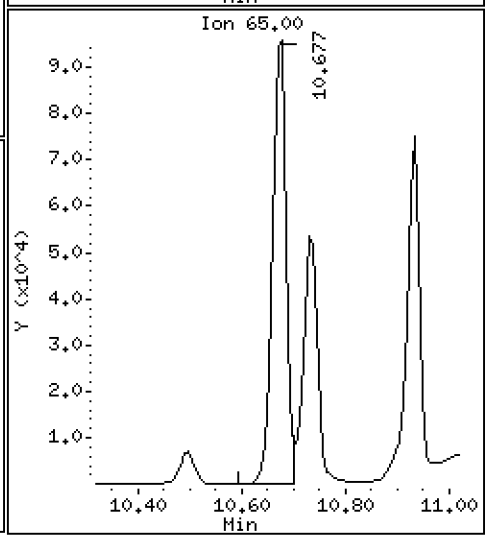












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

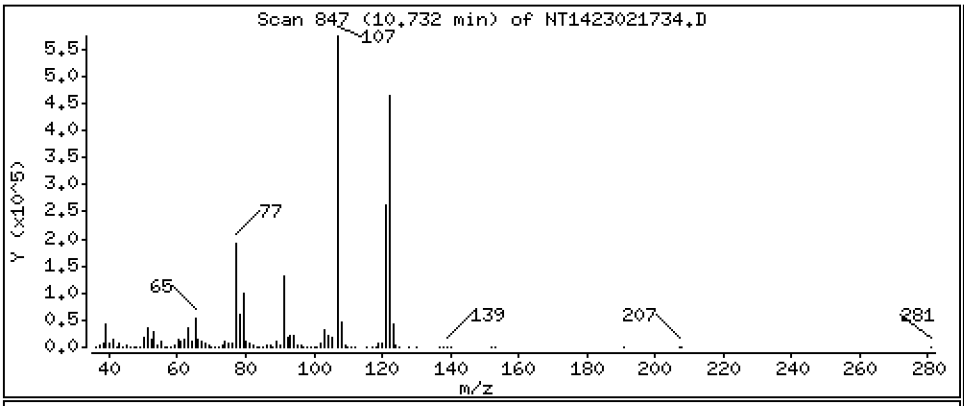
Operator: DSD

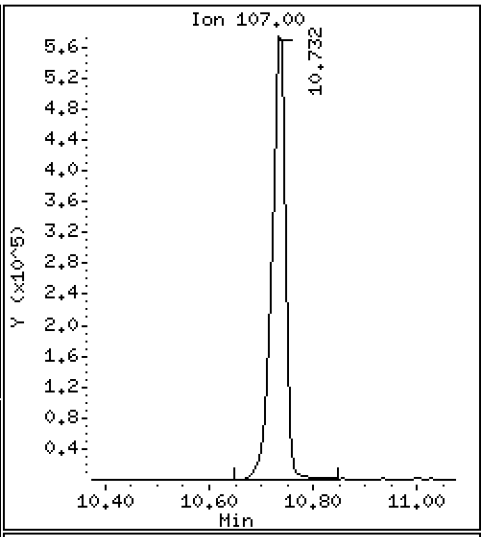
Column phase: ZB-5msi

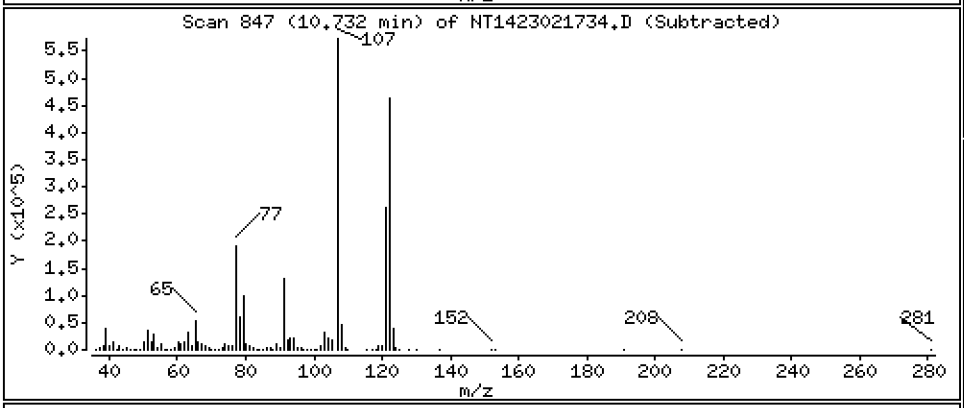
Column diameter: 0.25

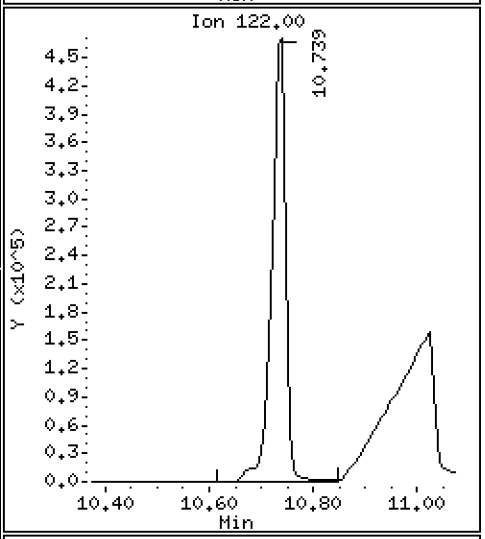
22 2,4-Dimethylphenol

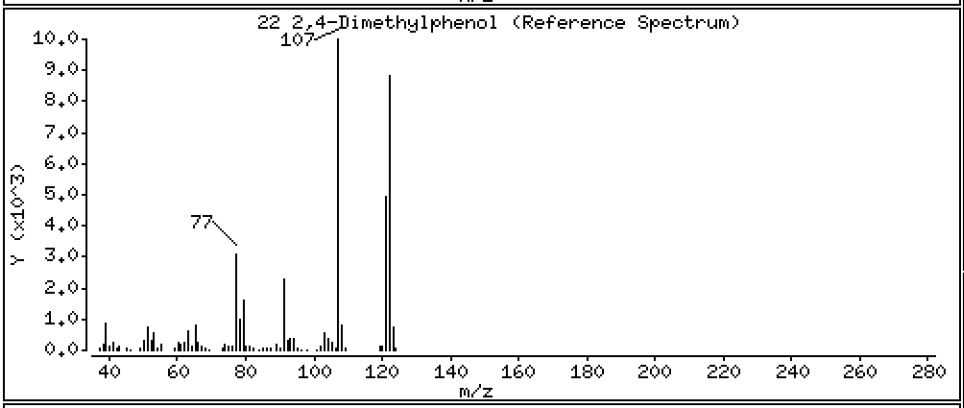
Concentration: 9.213 ug/mL

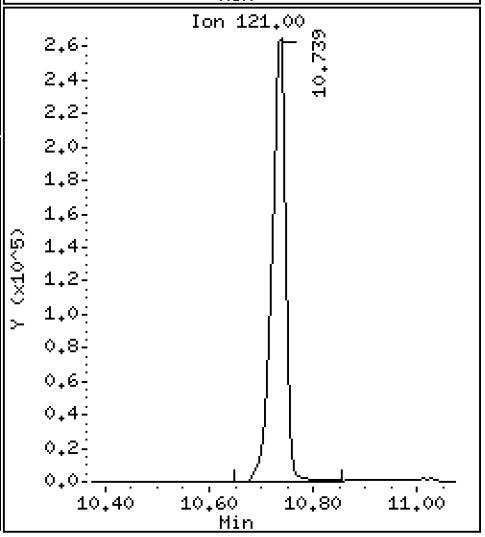


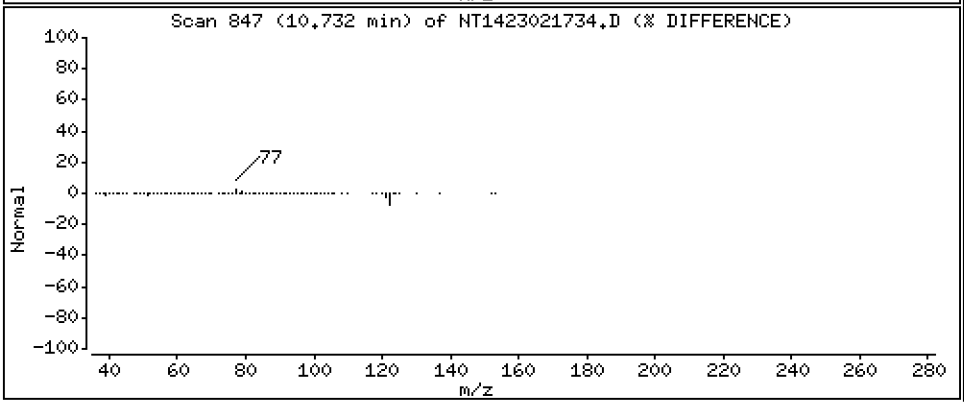












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

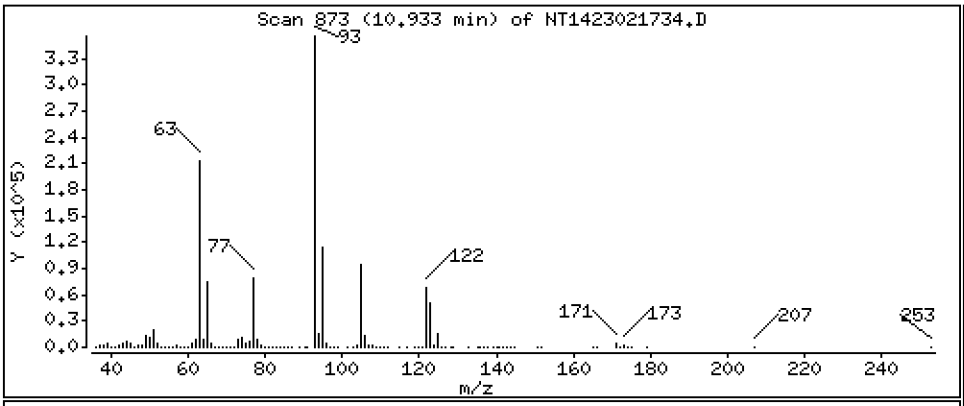
Operator: DSD

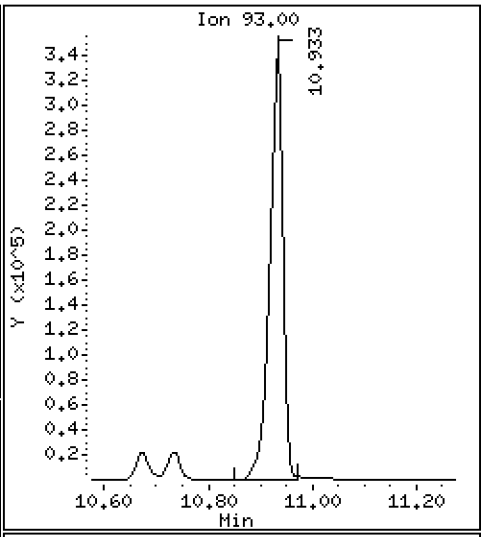
Column phase: ZB-5msi

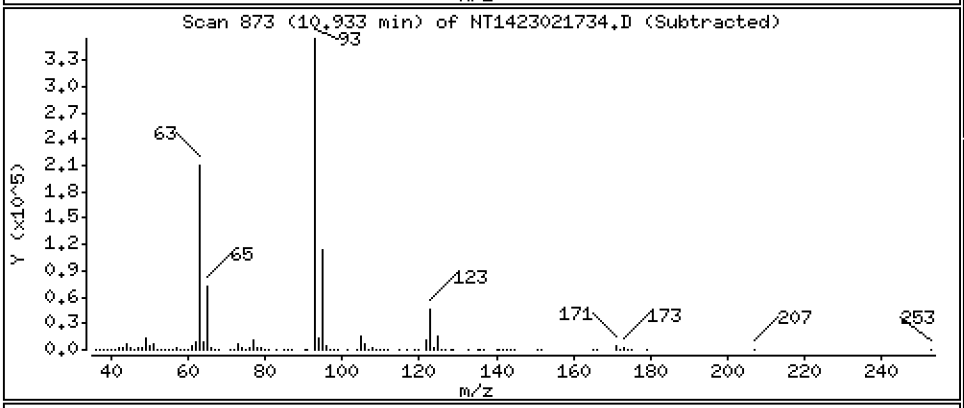
Column diameter: 0.25

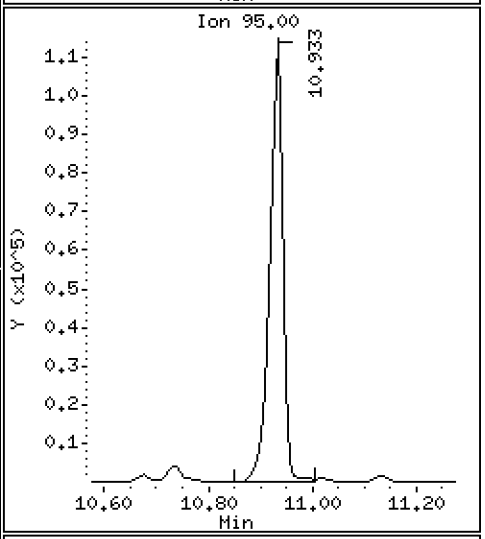
23 Bis(2-Chloroethoxy)methane

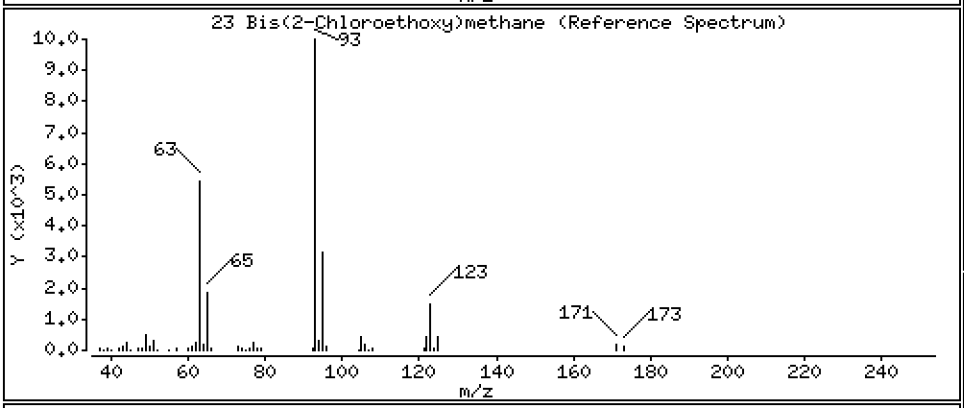
Concentration: 4.550 ug/mL

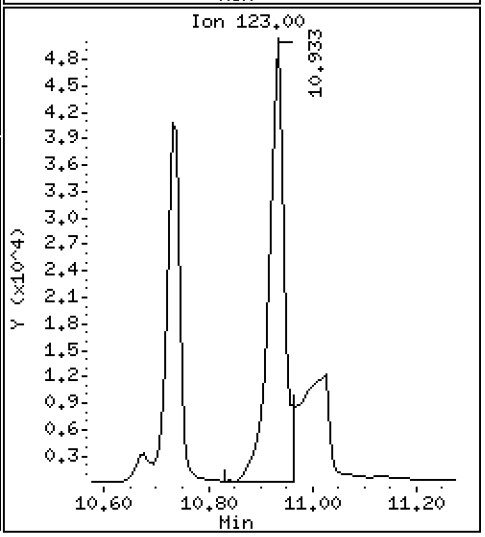


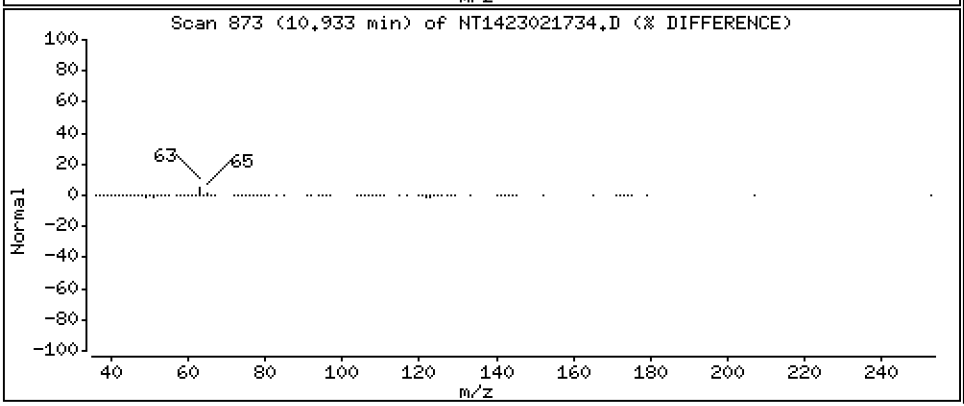












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

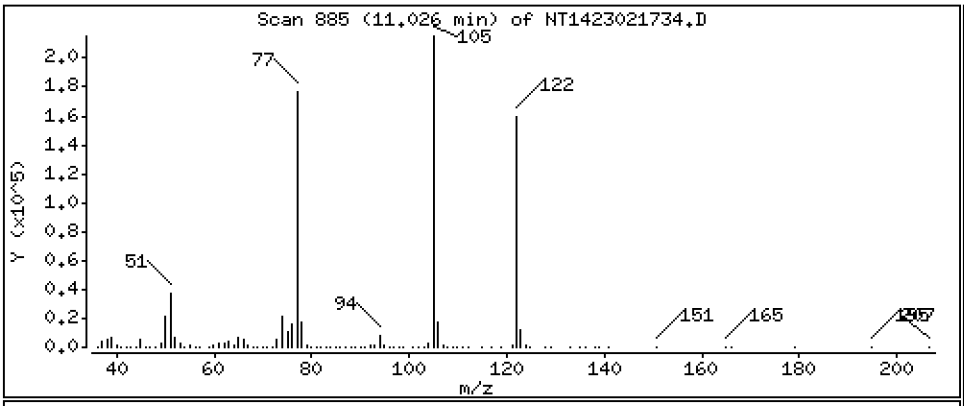
Operator: DSD

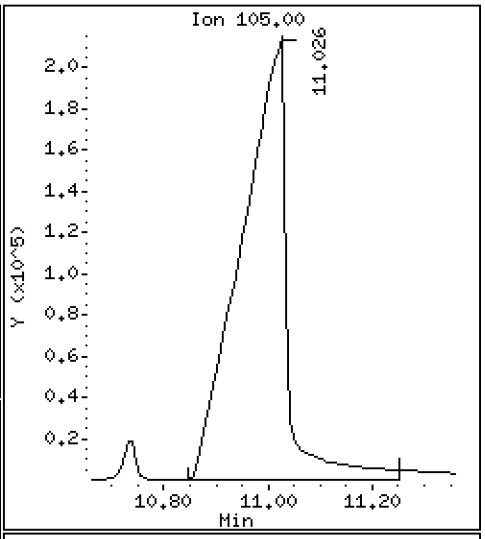
Column phase: ZB-5msi

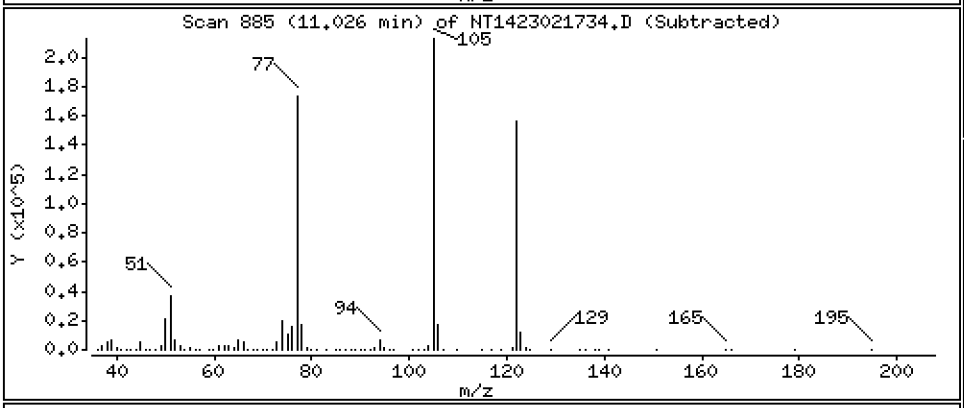
Column diameter: 0.25

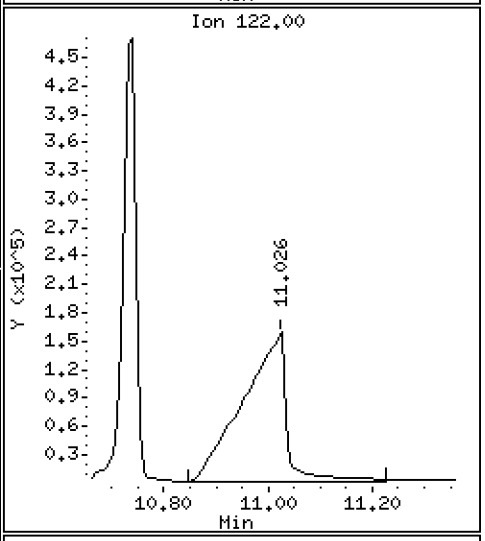
24 Benzoic acid

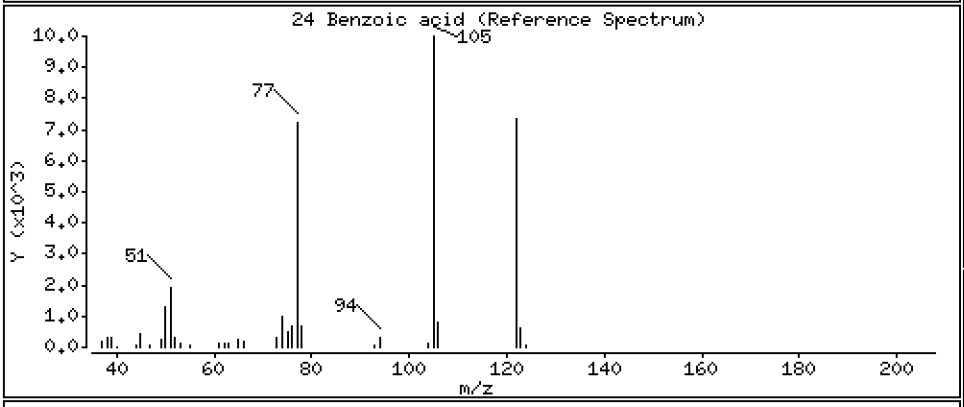
Concentration: 18.03 ug/mL

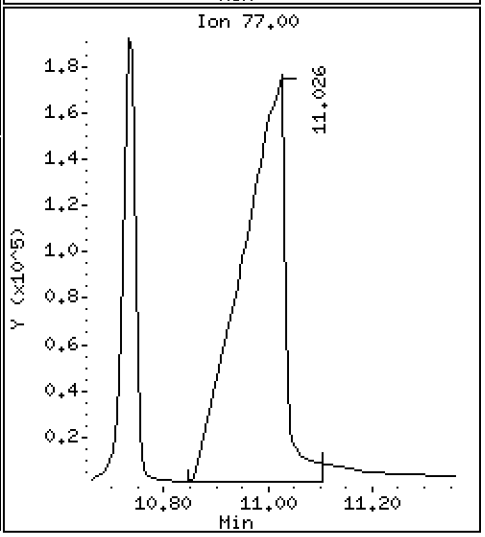


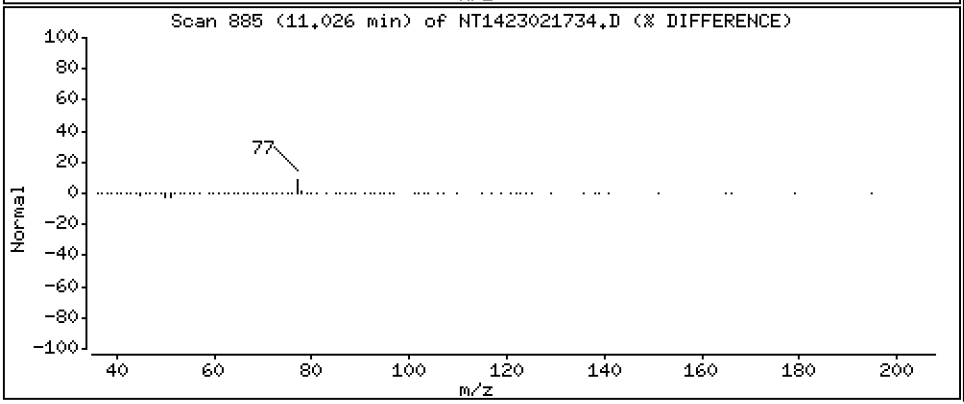












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

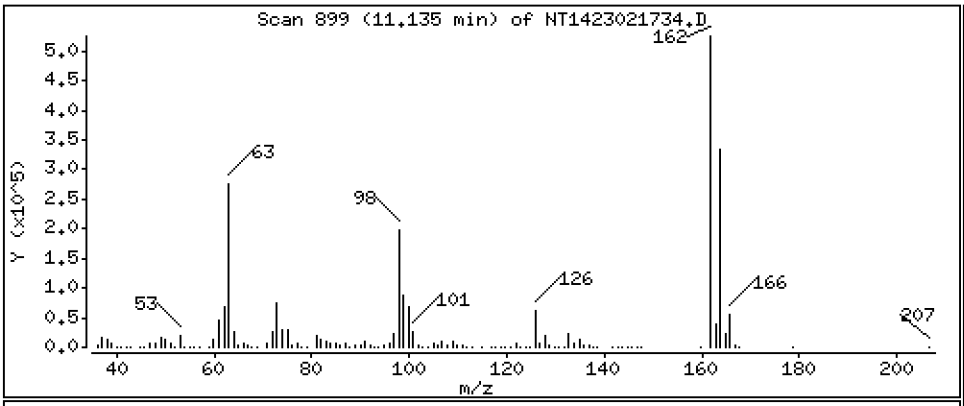
Operator: DSD

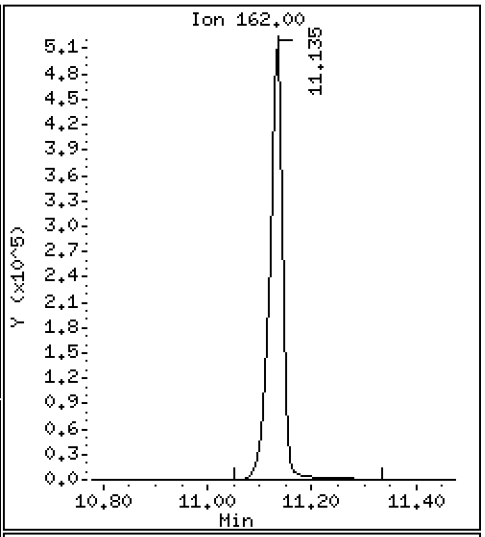
Column phase: ZB-5msi

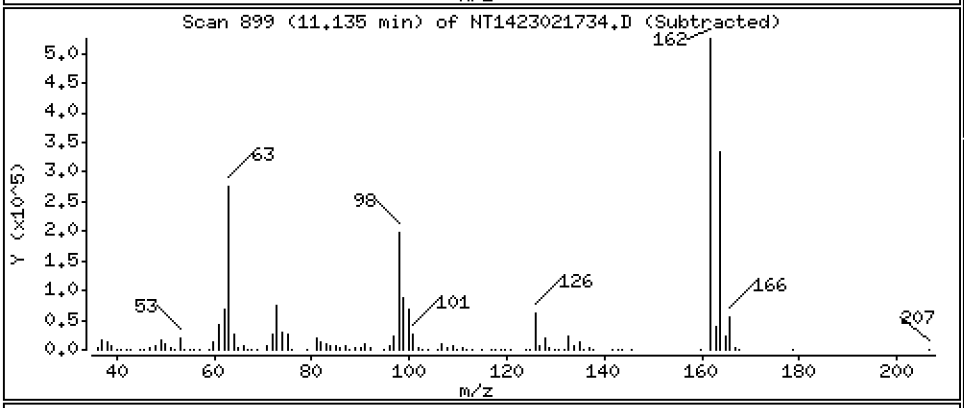
Column diameter: 0.25

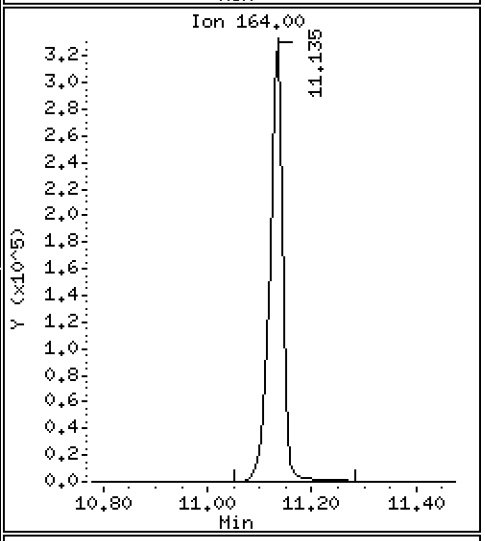
25 2,4-Dichlorophenol

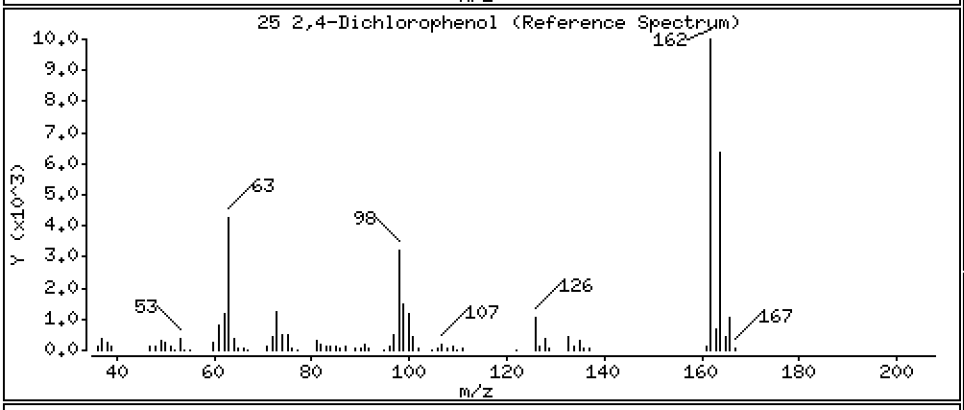
Concentration: 9.814 ug/mL

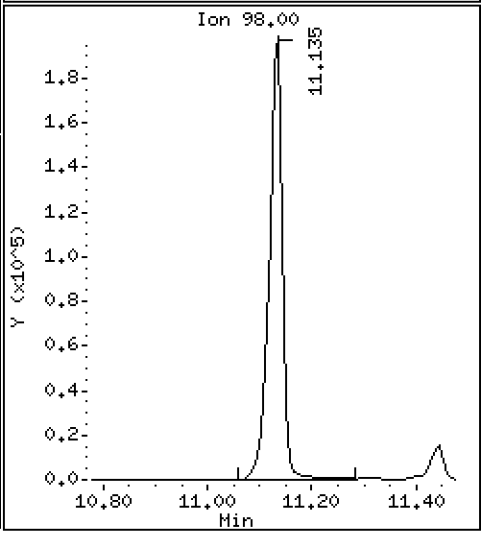


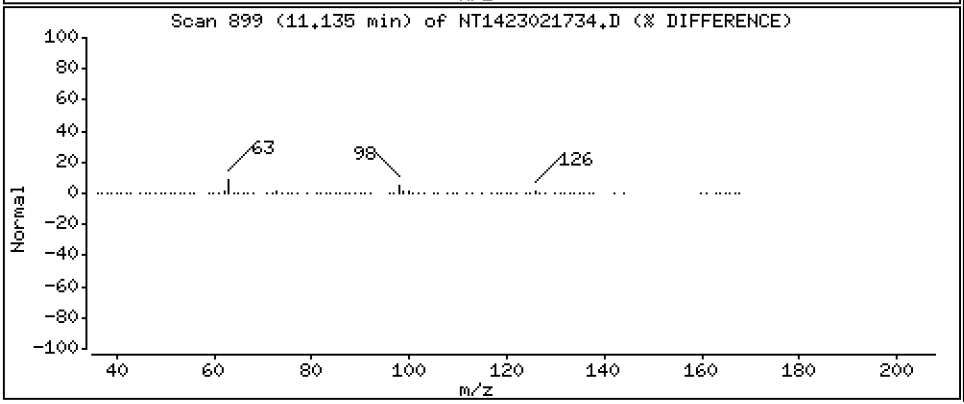












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

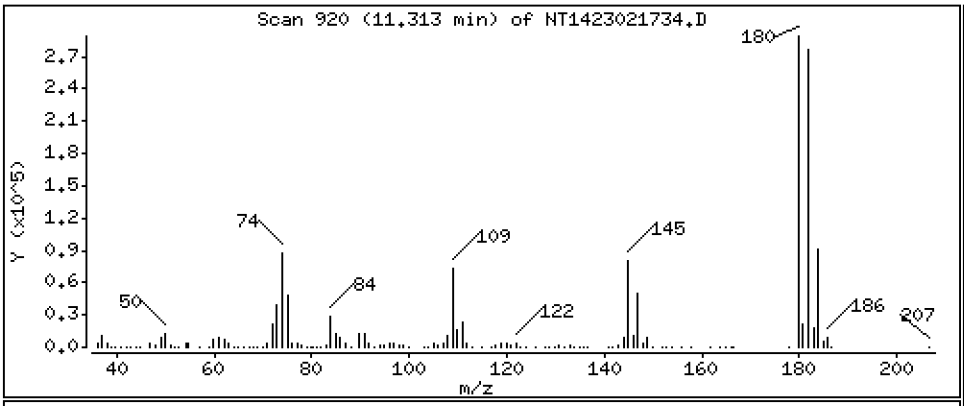
Operator: DSD

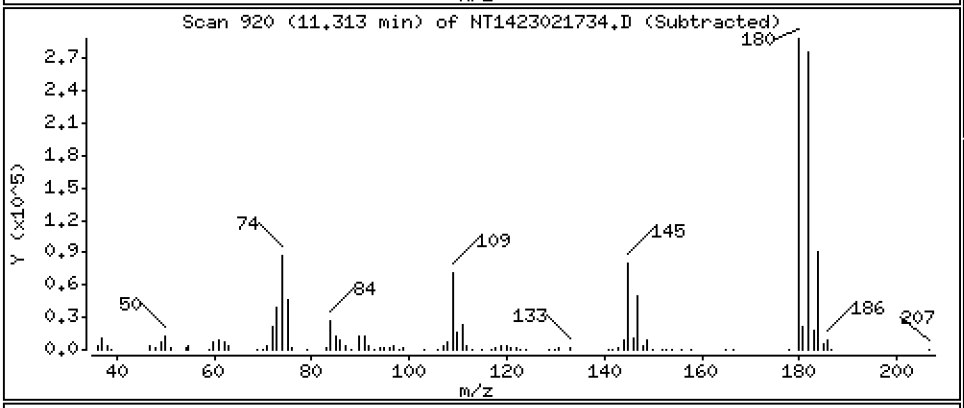
Column phase: ZB-5msi

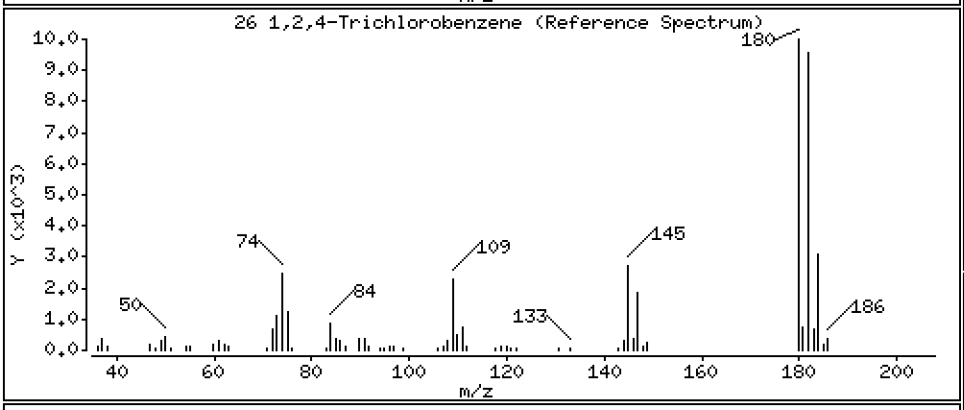
Column diameter: 0.25

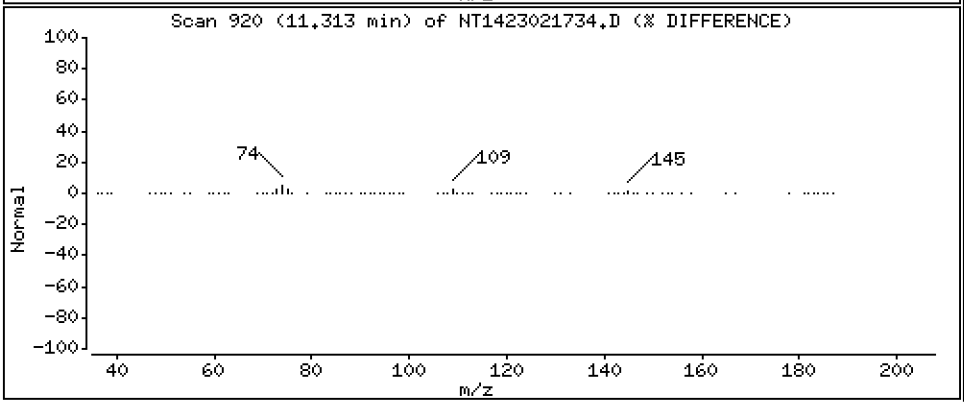
26 1,2,4-Trichlorobenzene

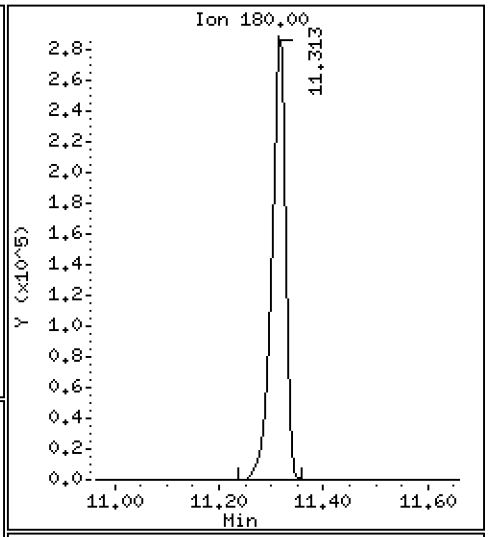
Concentration: 4.462 ug/mL

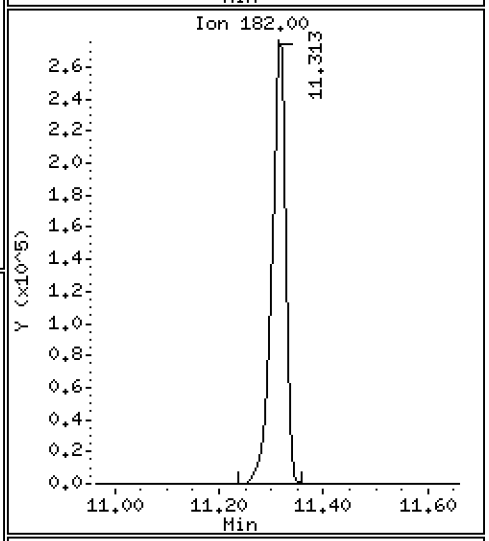


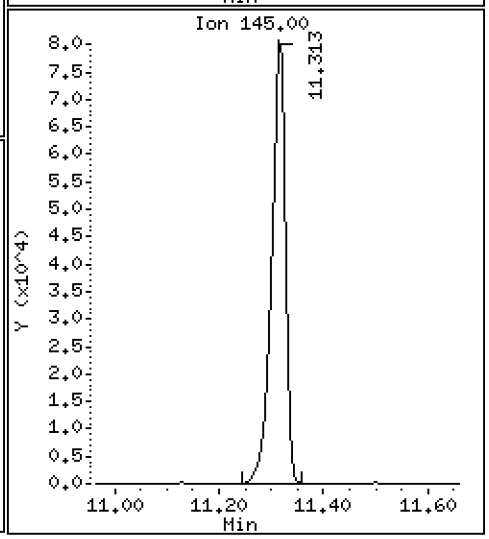












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

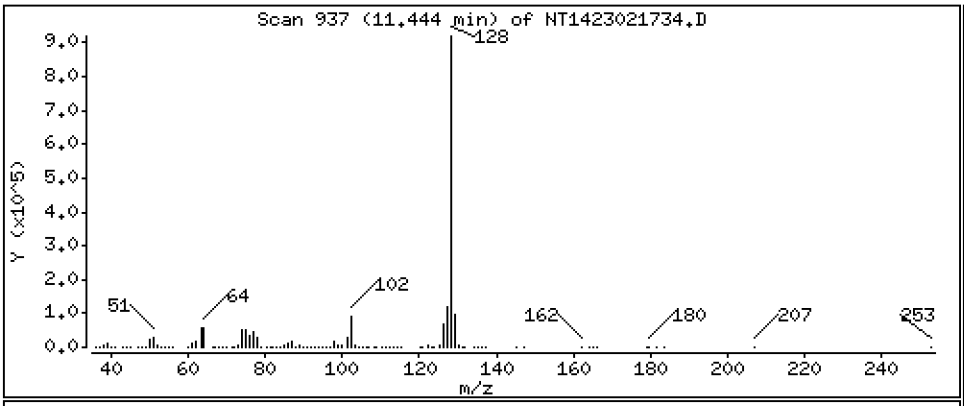
Operator: DSD

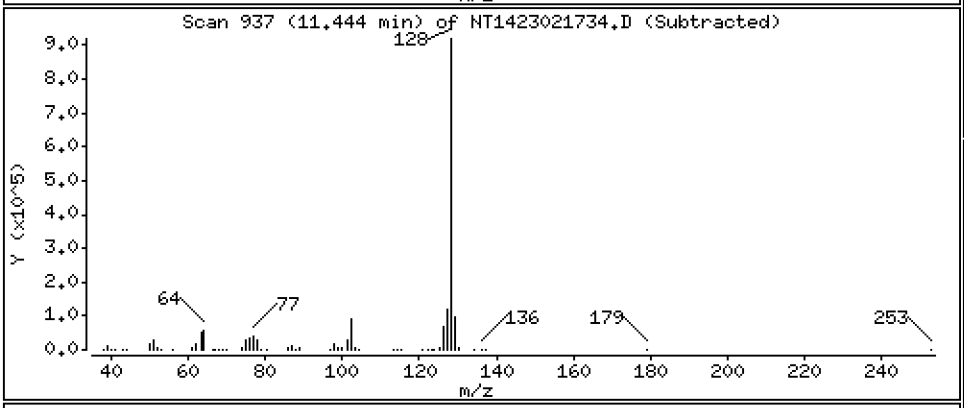
Column phase: ZB-5msi

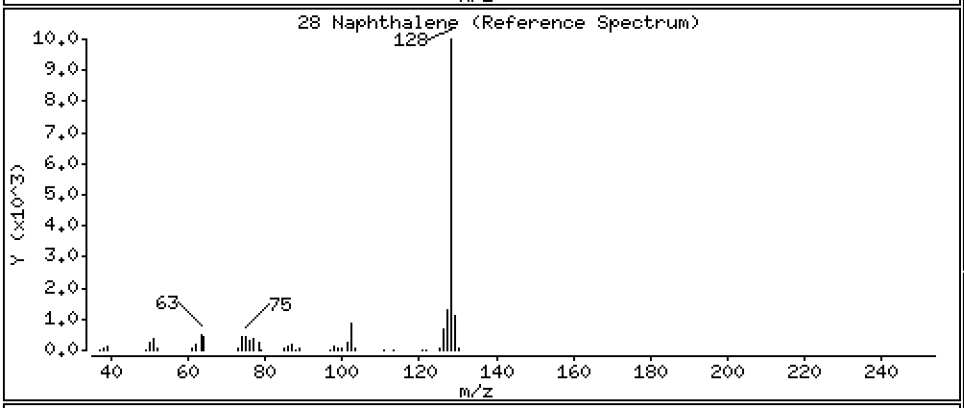
Column diameter: 0.25

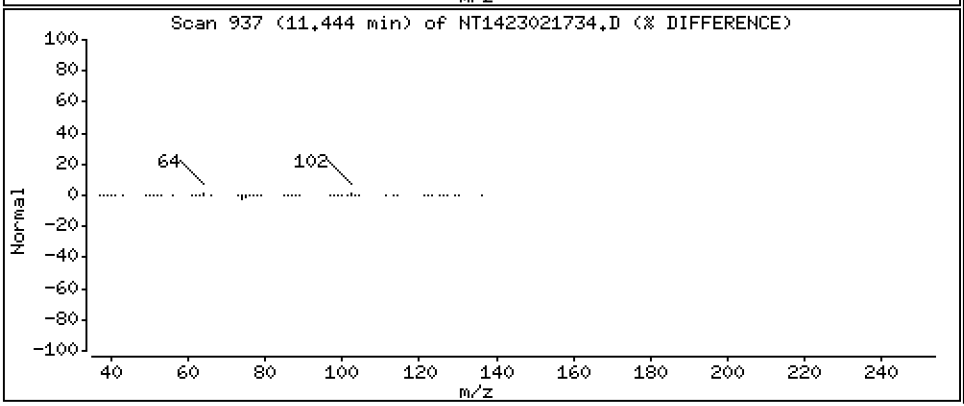
28 Naphthalene

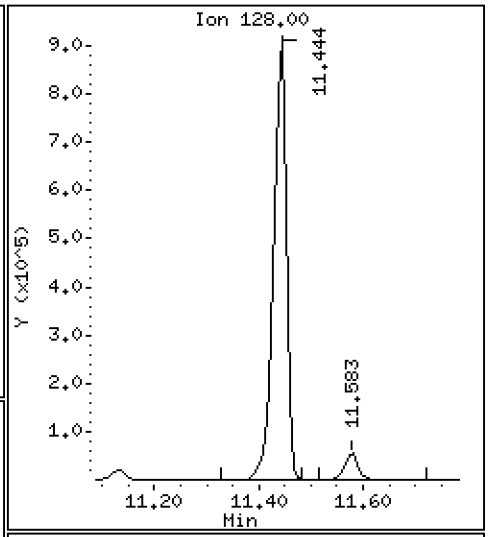
Concentration: 4.690 ug/mL

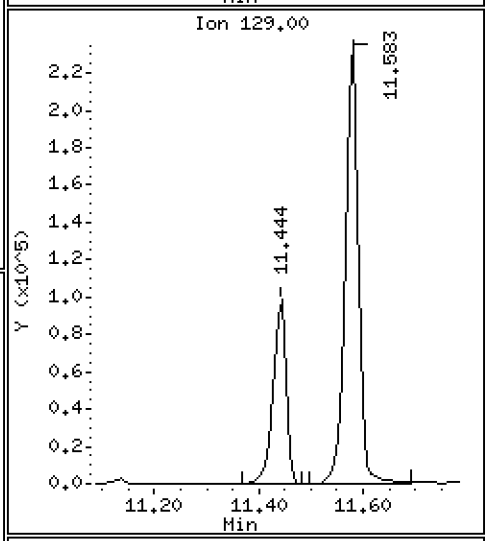


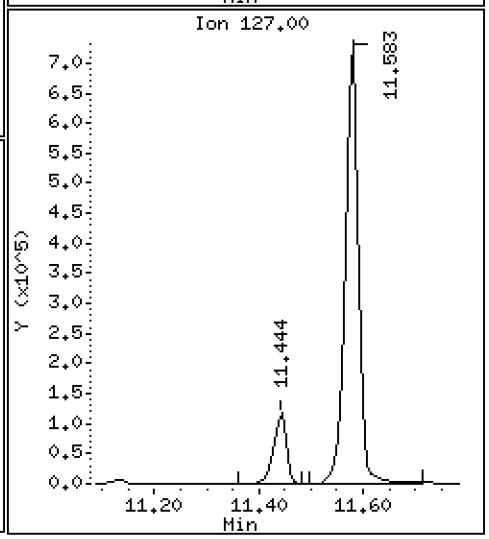












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

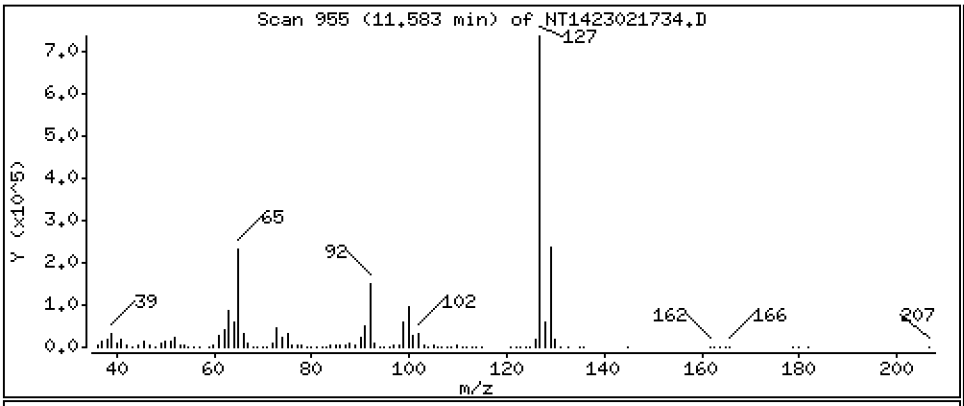
Operator: DSD

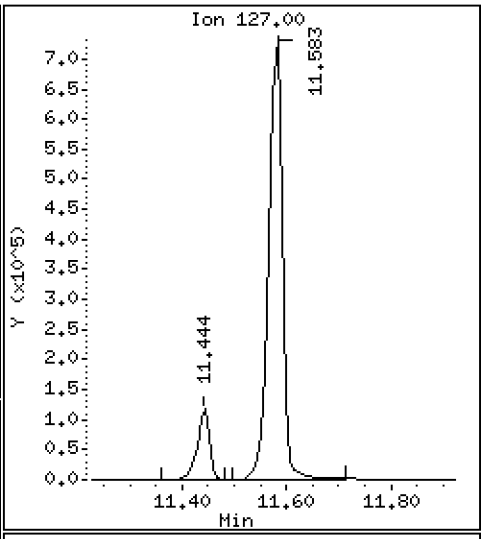
Column phase: ZB-5msi

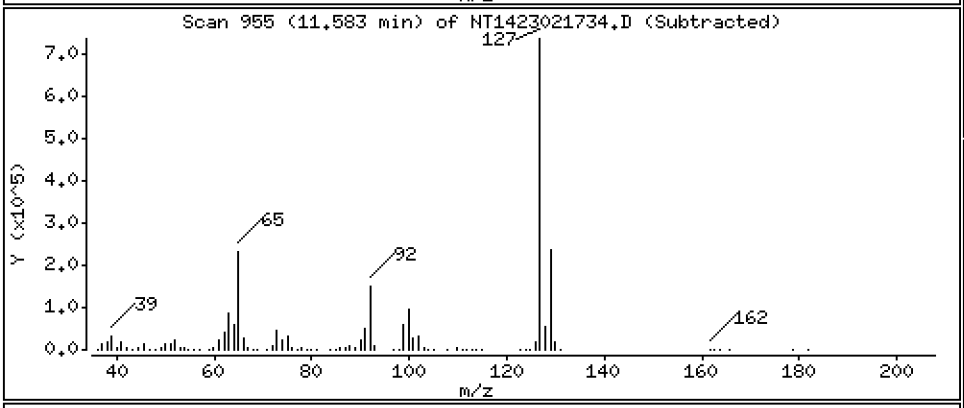
Column diameter: 0.25

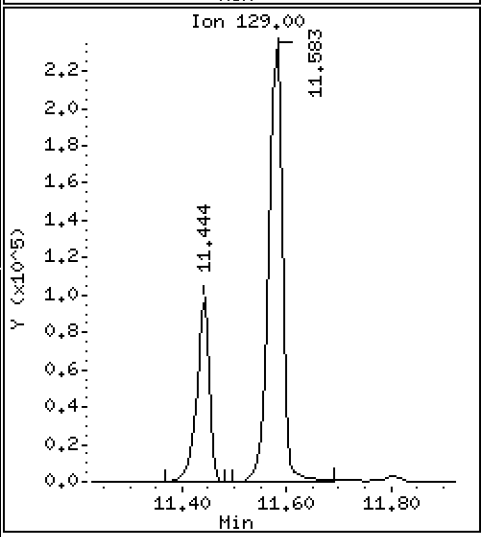
29 4-Chloroaniline

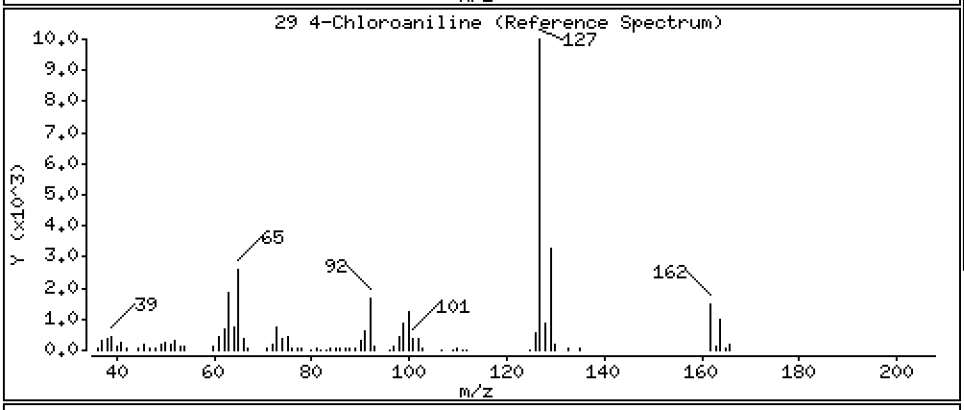
Concentration: 10.08 ug/mL

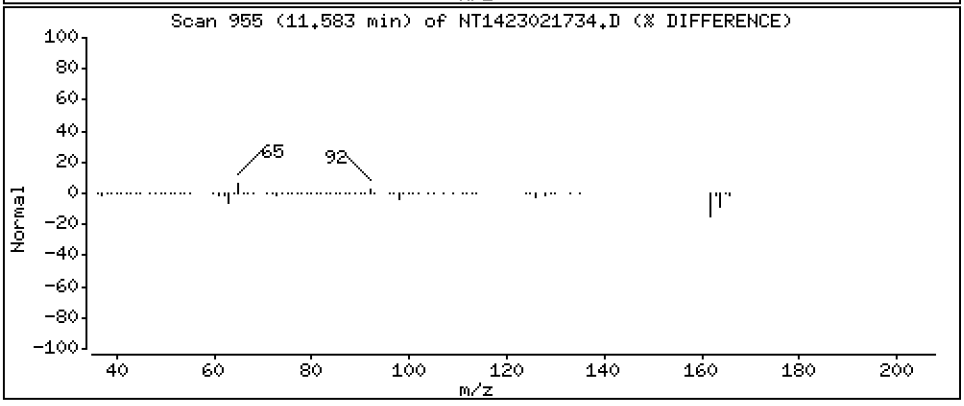












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

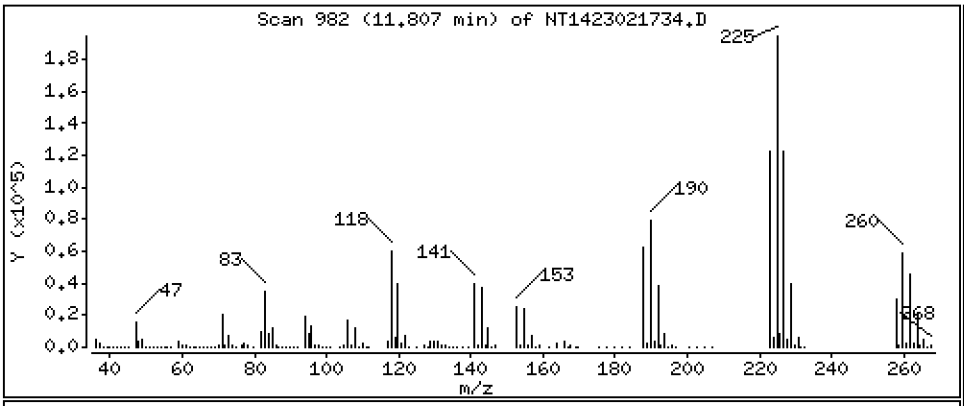
Operator: DSD

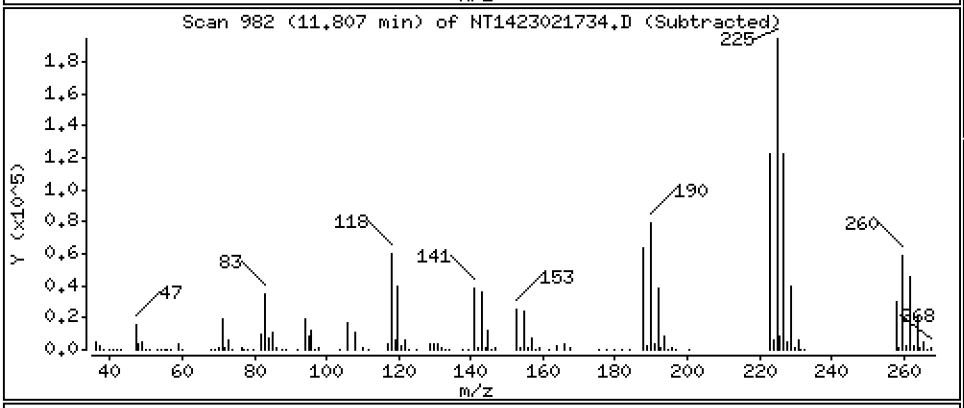
Column phase: ZB-5msi

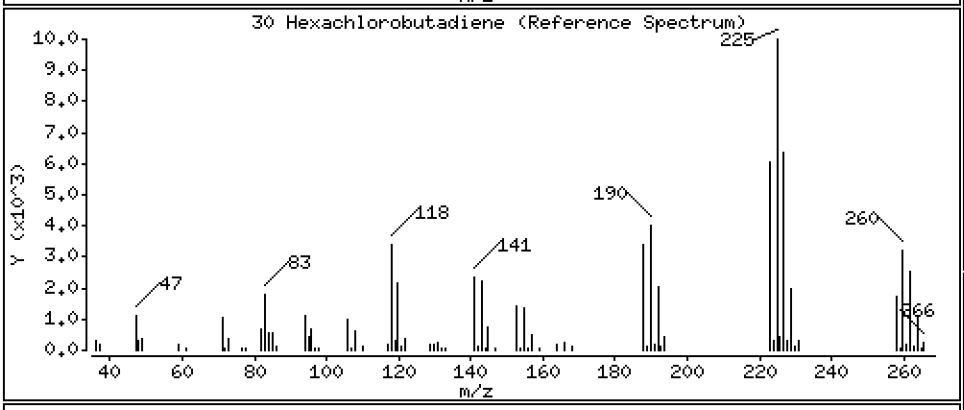
Column diameter: 0.25

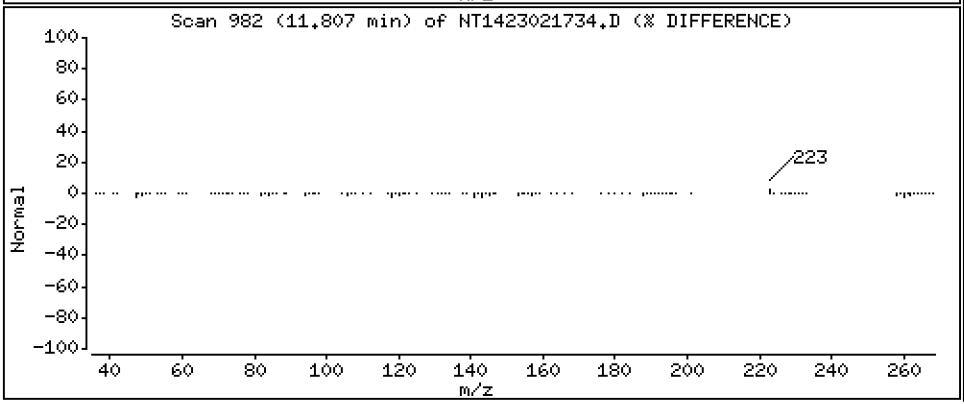
30 Hexachlorobutadiene

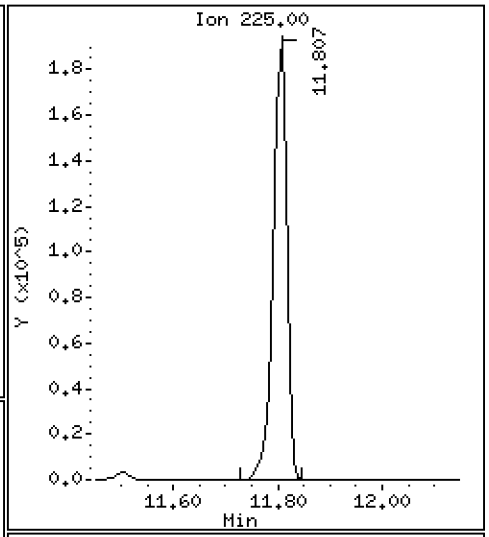
Concentration: 4.567 ug/mL

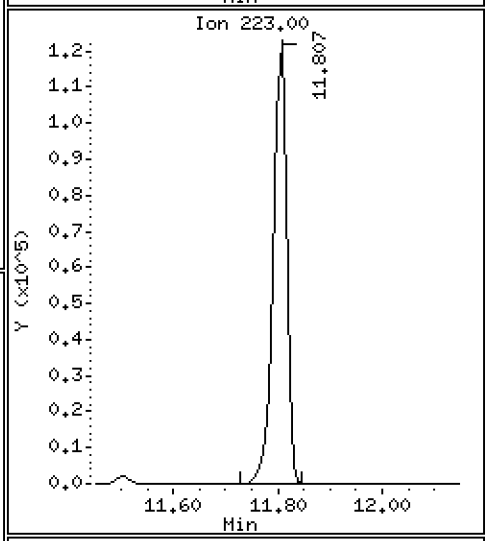


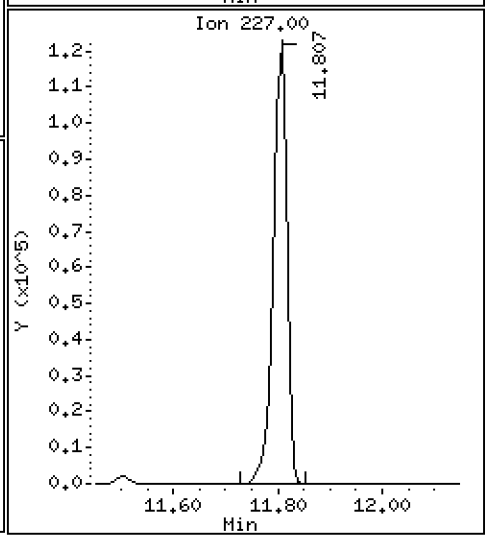












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

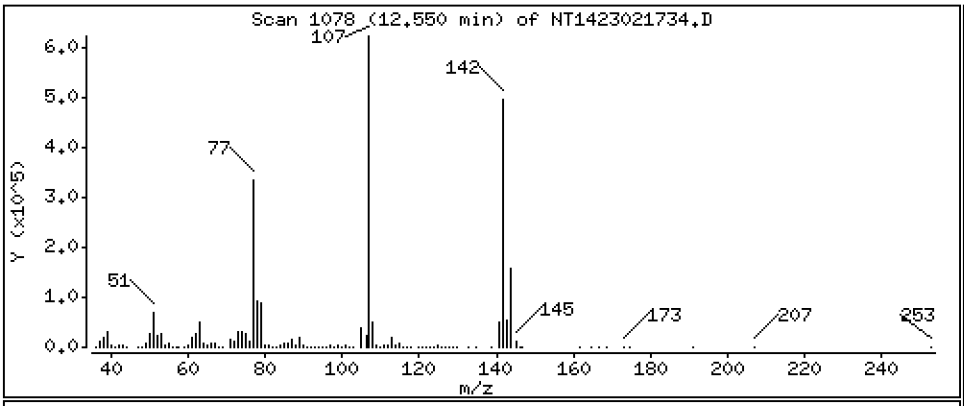
Operator: DSD

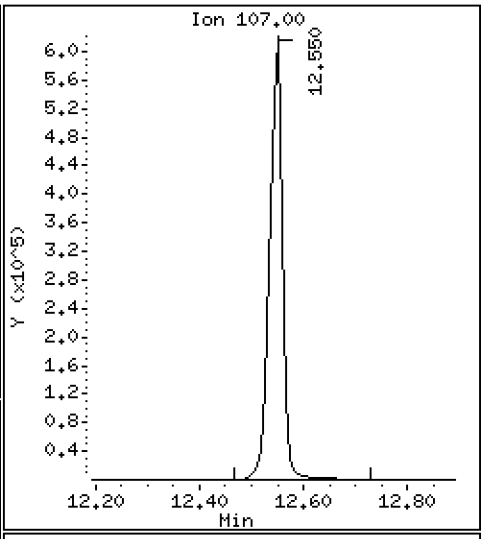
Column phase: ZB-5msi

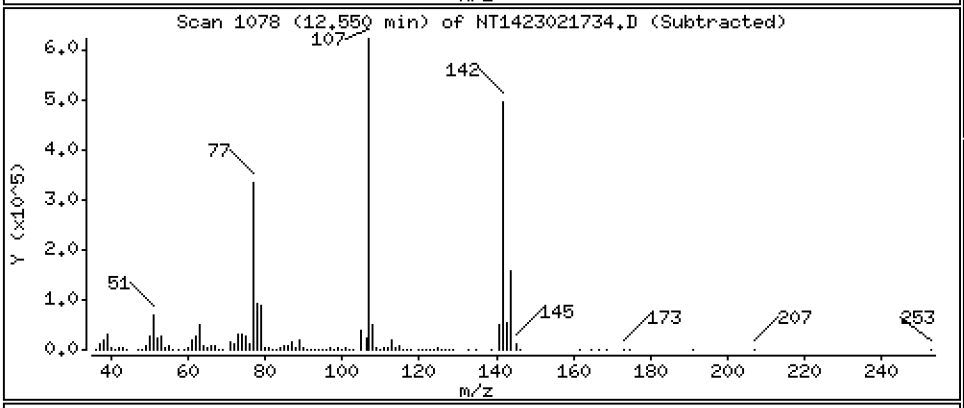
Column diameter: 0.25

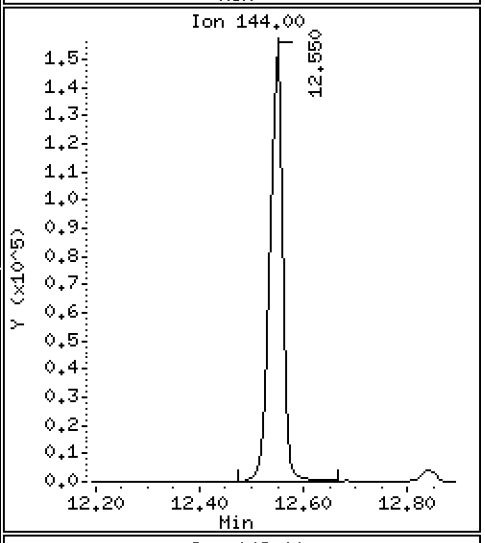
31 4-Chloro-3-methylphenol

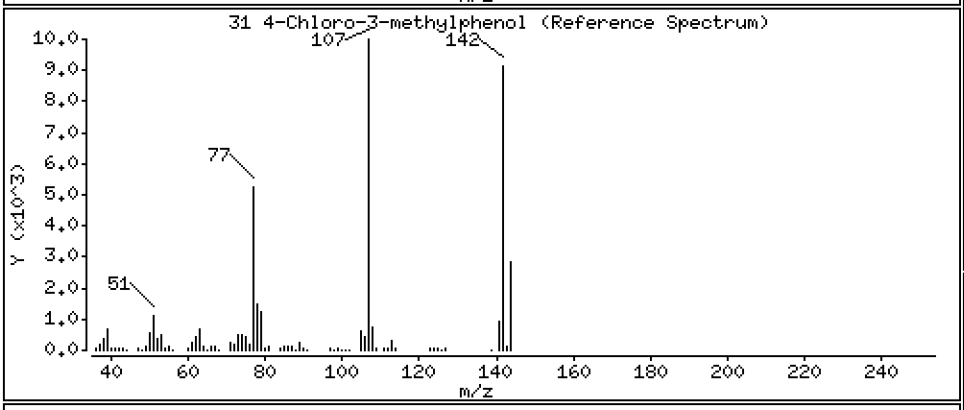
Concentration: 9.702 ug/mL

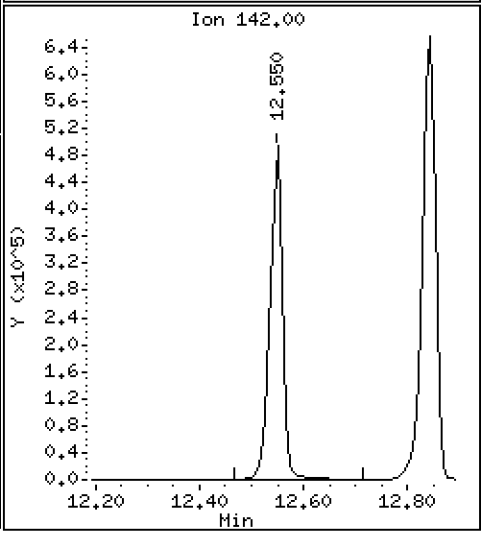


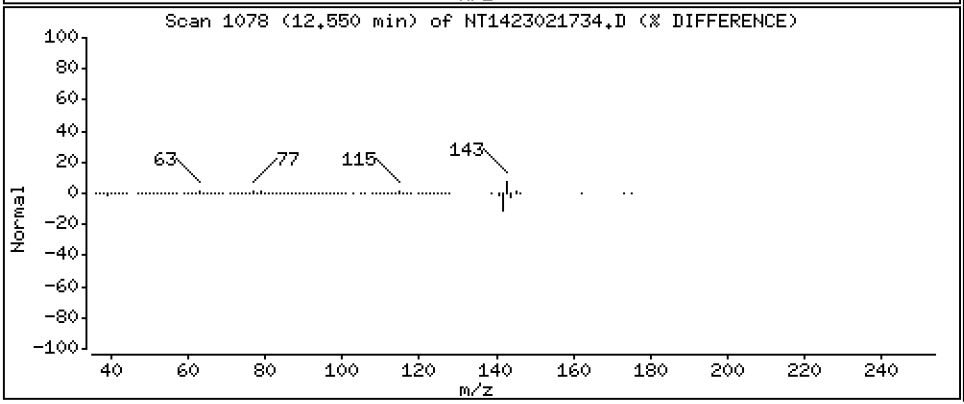












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

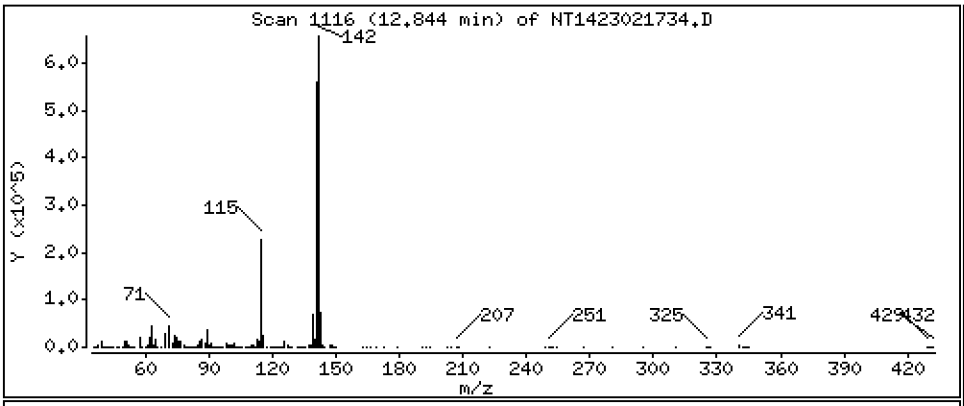
Operator: DSD

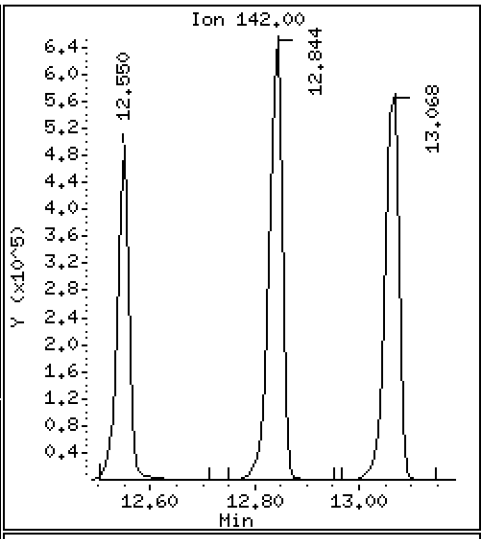
Column phase: ZB-5msi

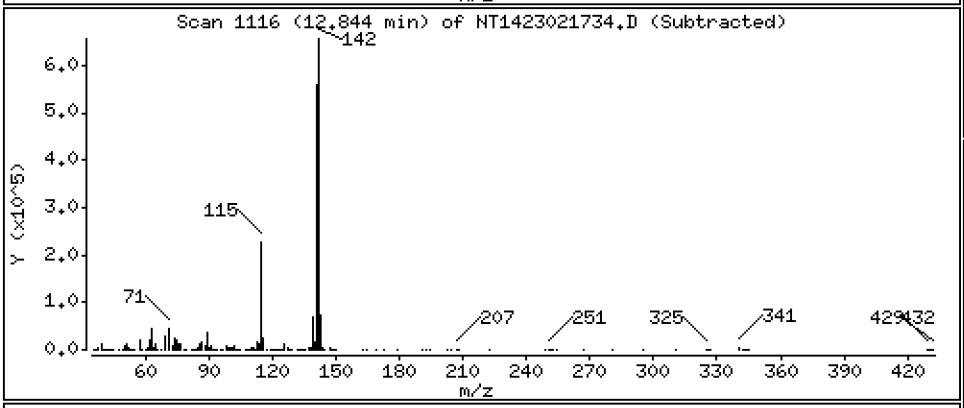
Column diameter: 0.25

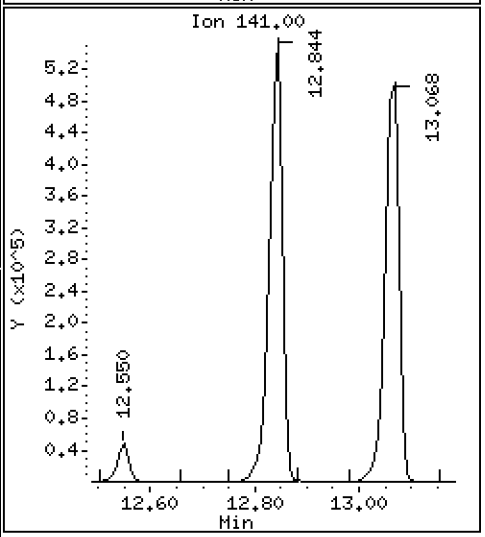
32 2-Methylnaphthalene

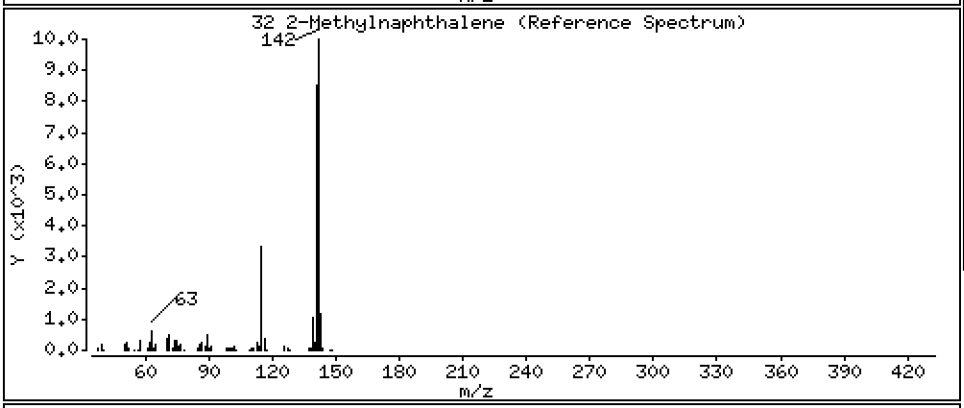
Concentration: 4.633 ug/mL

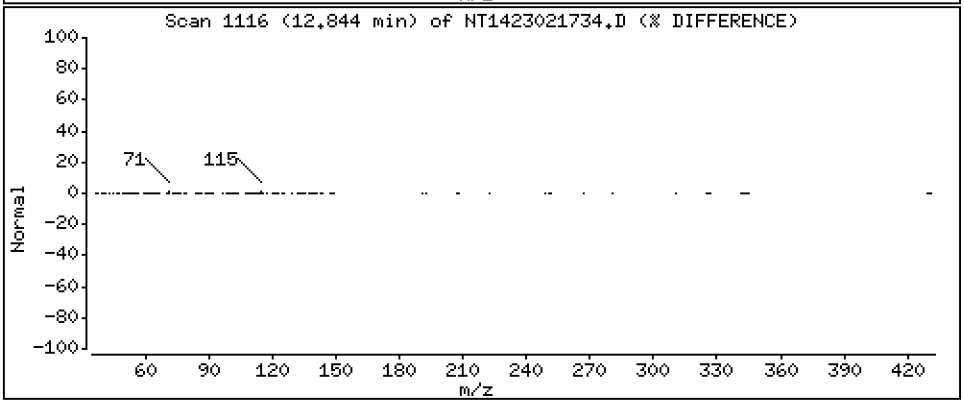












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021734.D

Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

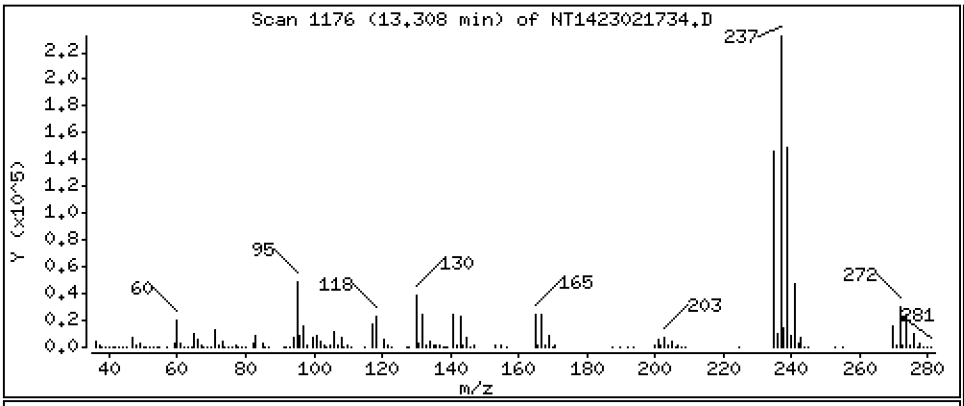
Operator: DSD

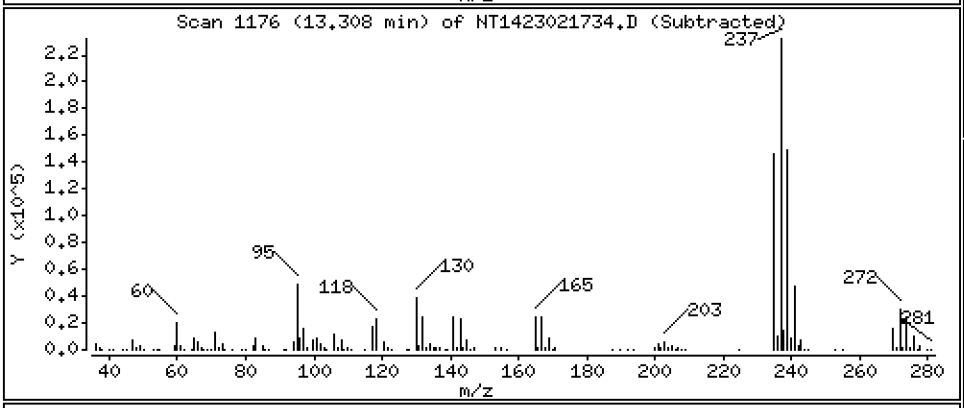
Column phase: ZB-5msi

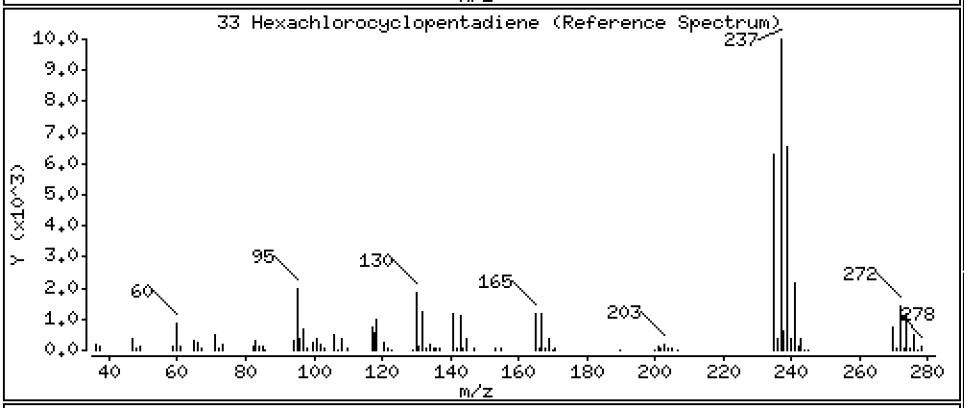
Column diameter: 0.25

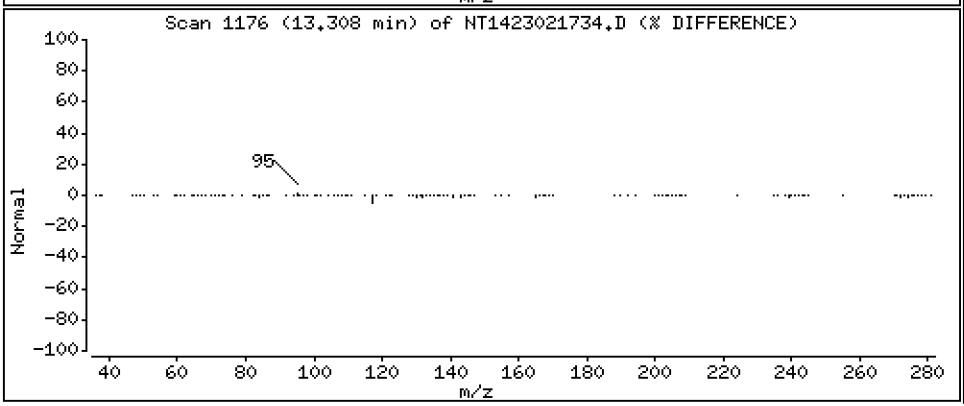
33 Hexachlorocyclopentadiene

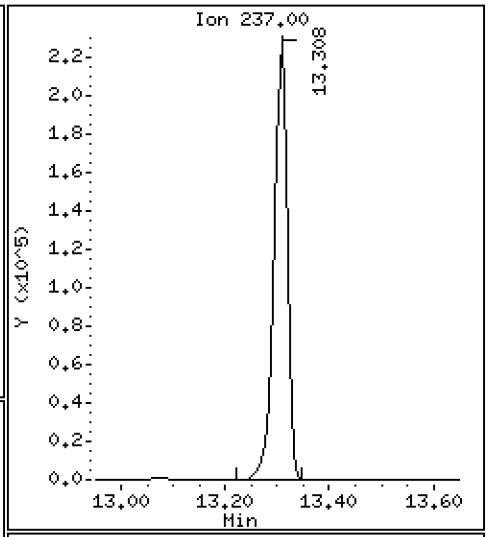
Concentration: 5.016 ug/mL

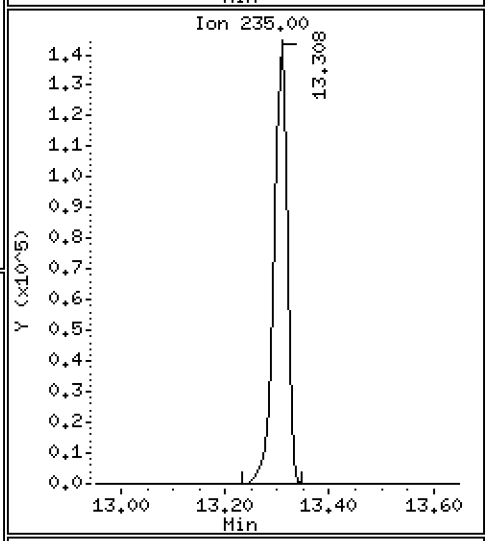


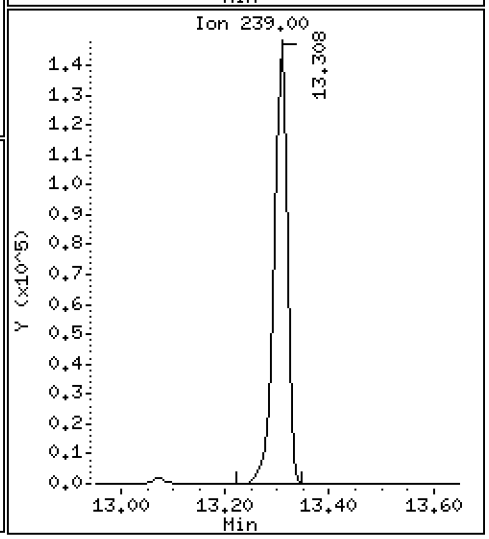












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

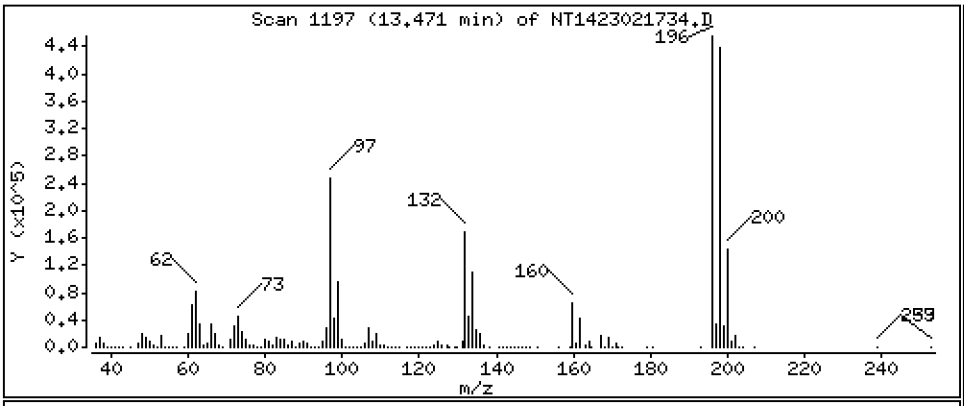
Operator: DSD

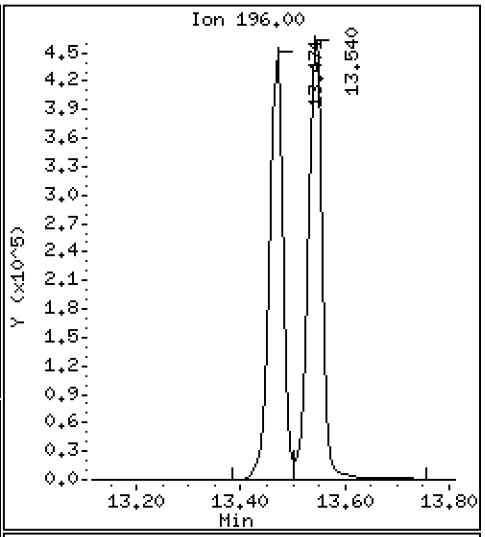
Column phase: ZB-5msi

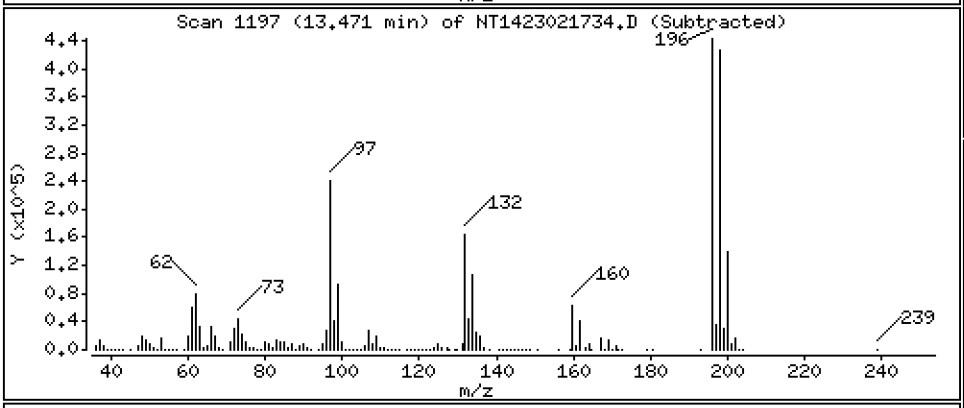
Column diameter: 0.25

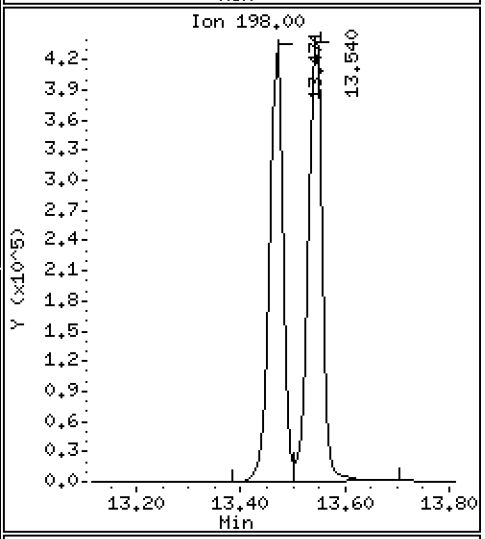
34 2,4,6-Trichlorophenol

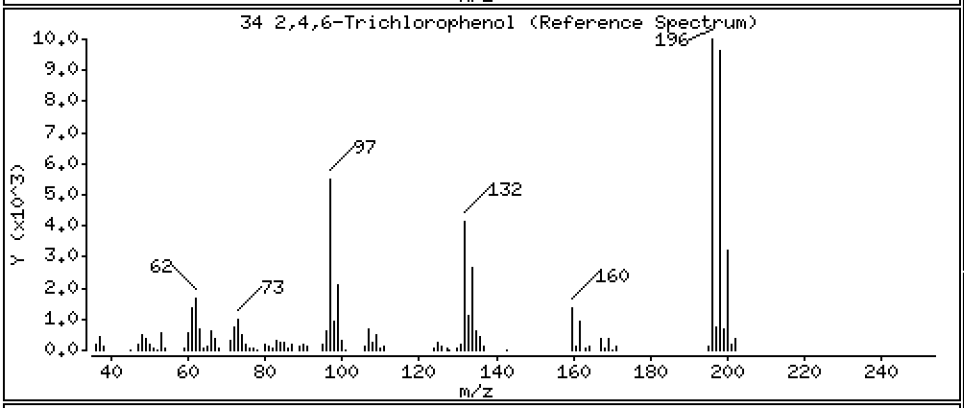
Concentration: 10.01 ug/mL

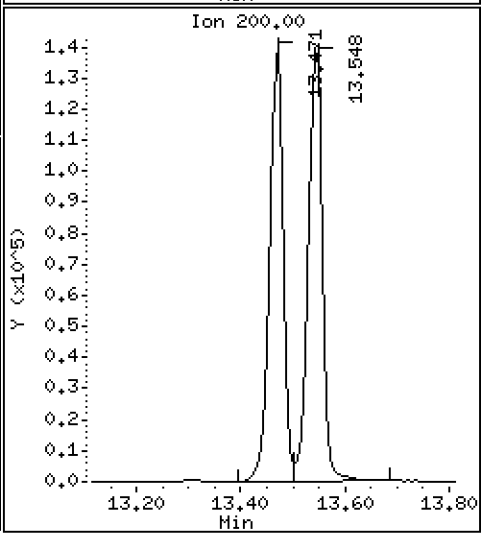


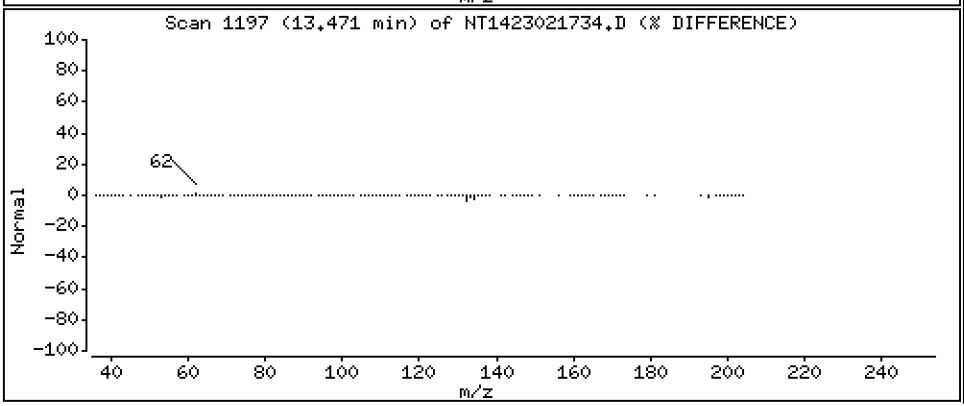












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

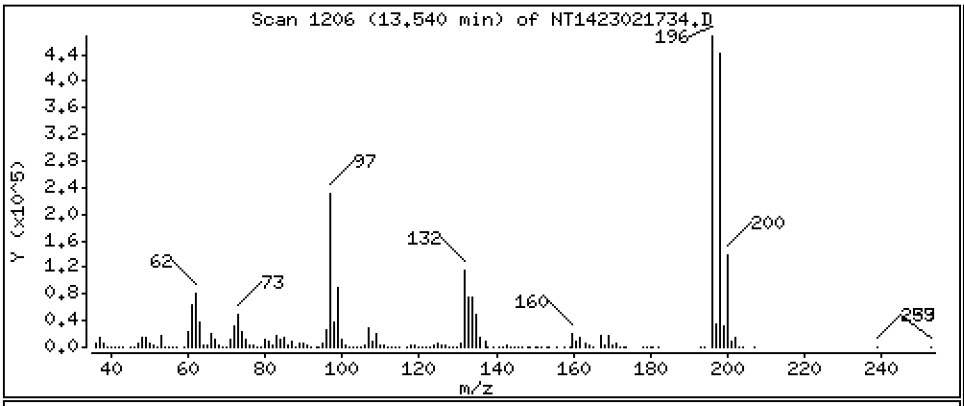
Operator: DSD

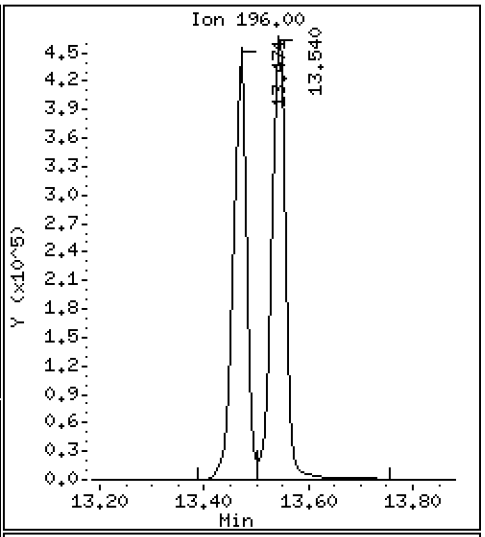
Column phase: ZB-5msi

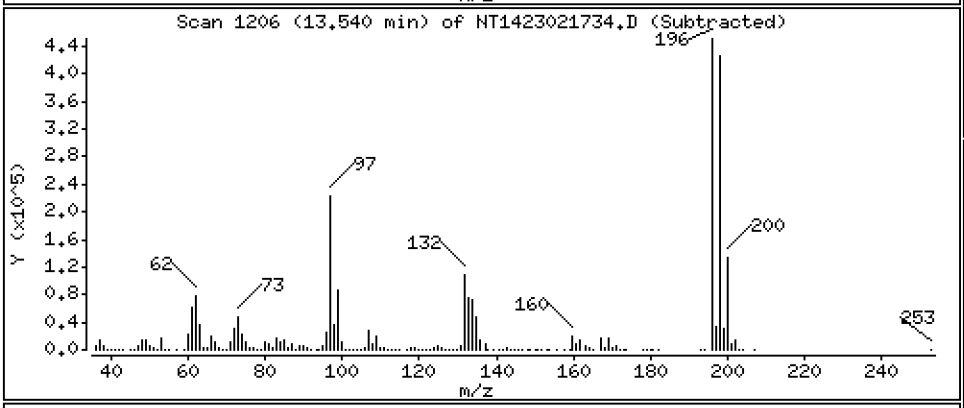
Column diameter: 0.25

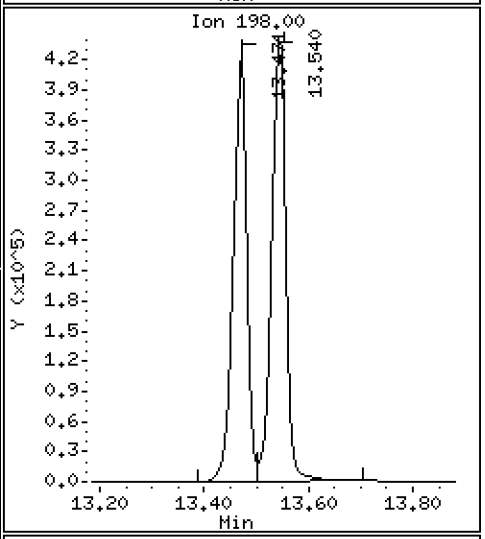
35 2,4,5-Trichlorophenol

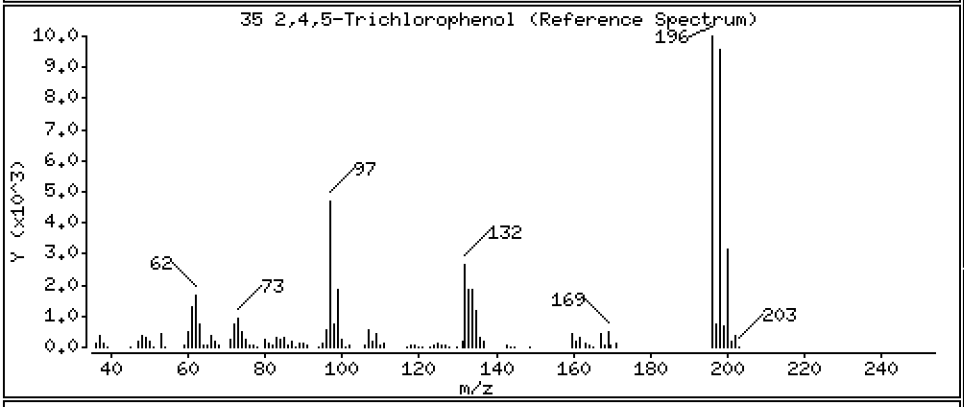
Concentration: 9.996 ug/mL

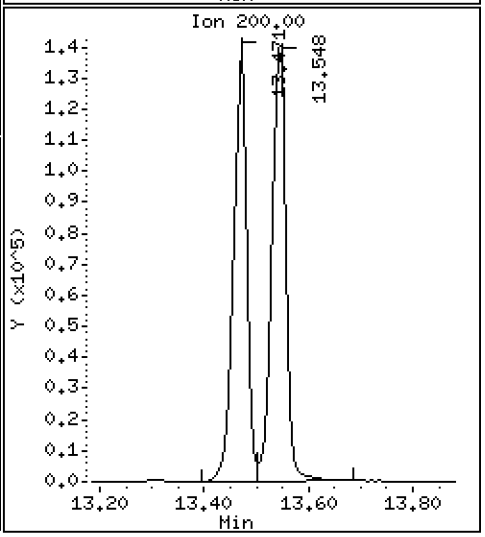


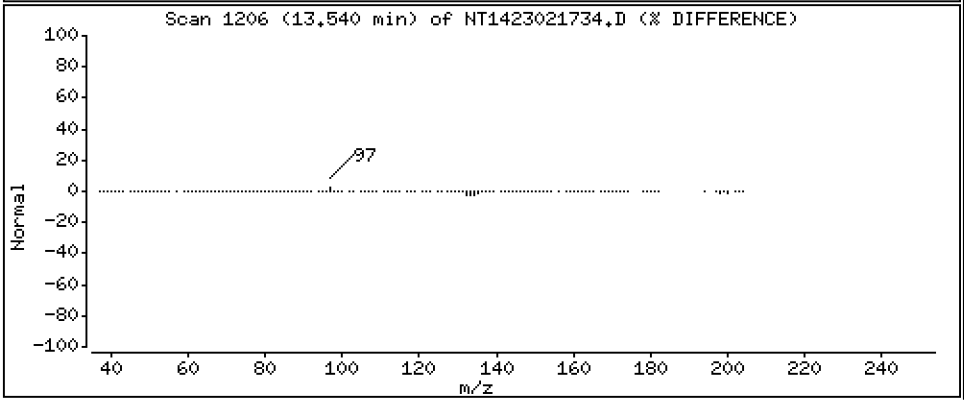












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

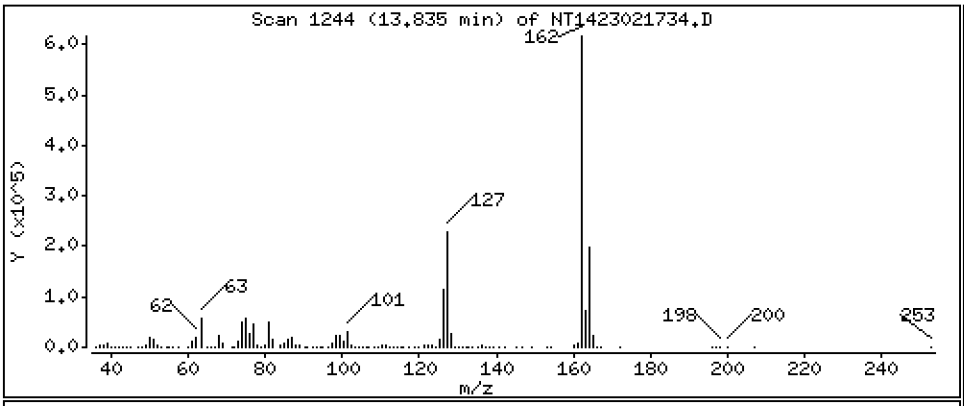
Operator: DSD

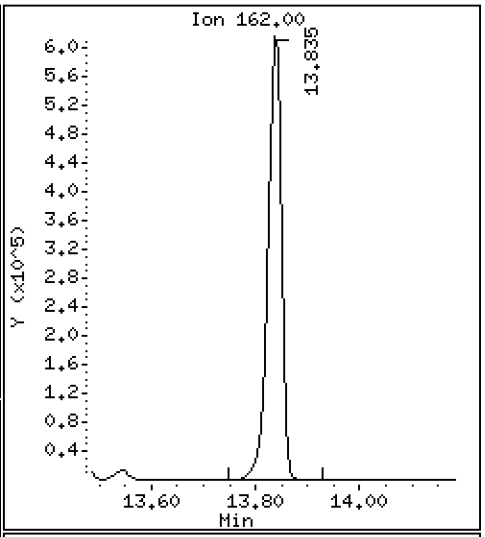
Column phase: ZB-5msi

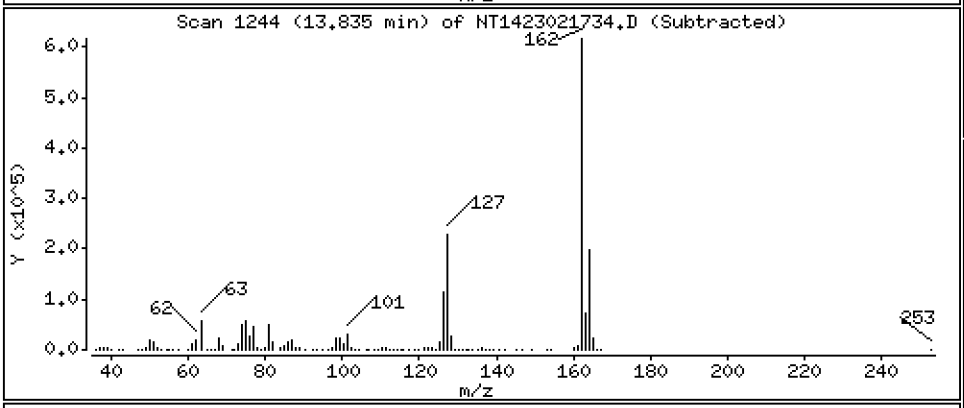
Column diameter: 0.25

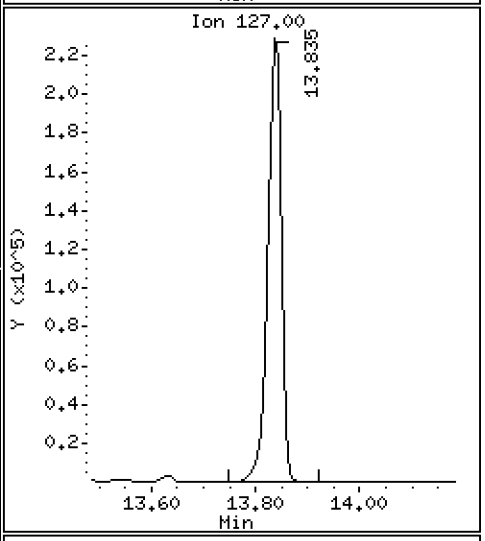
37 2-Chloronaphthalene

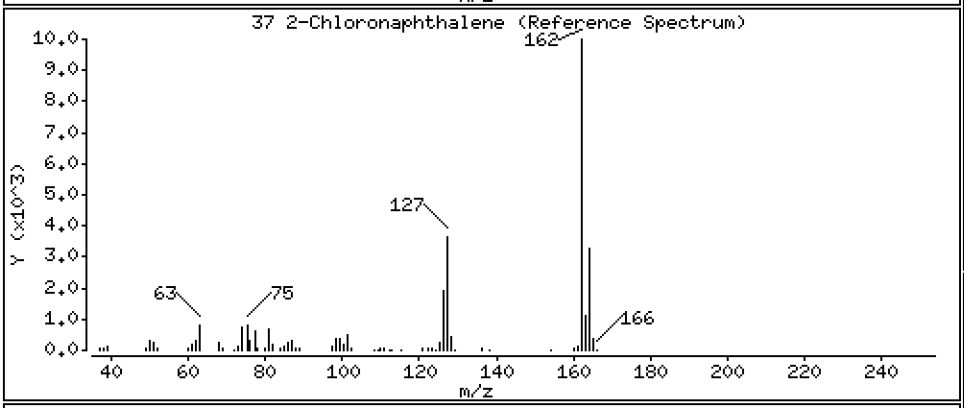
Concentration: 4.662 ug/mL

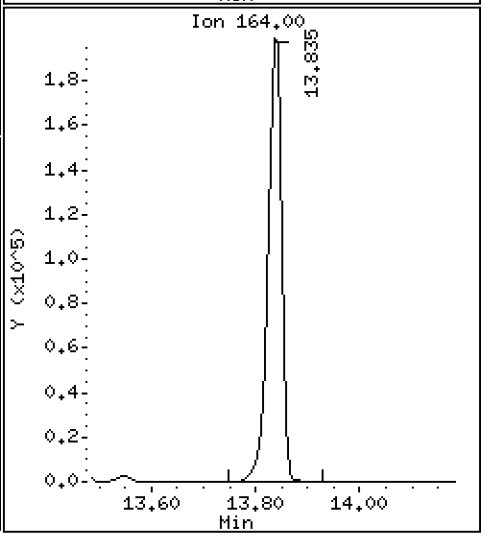


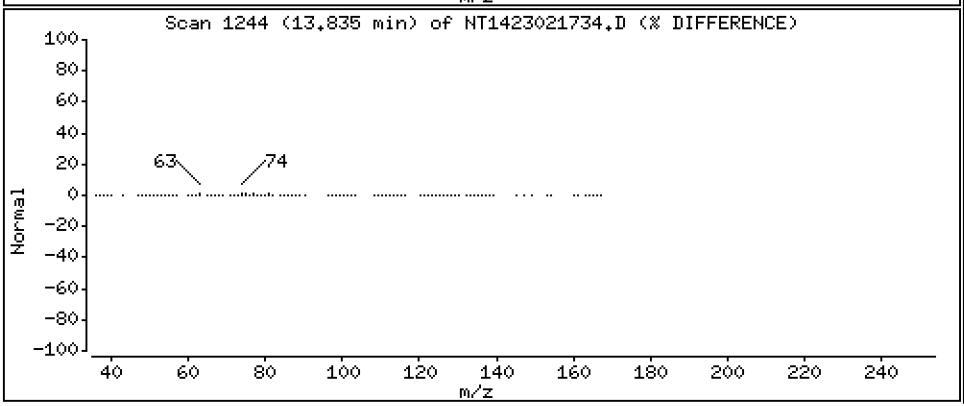












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

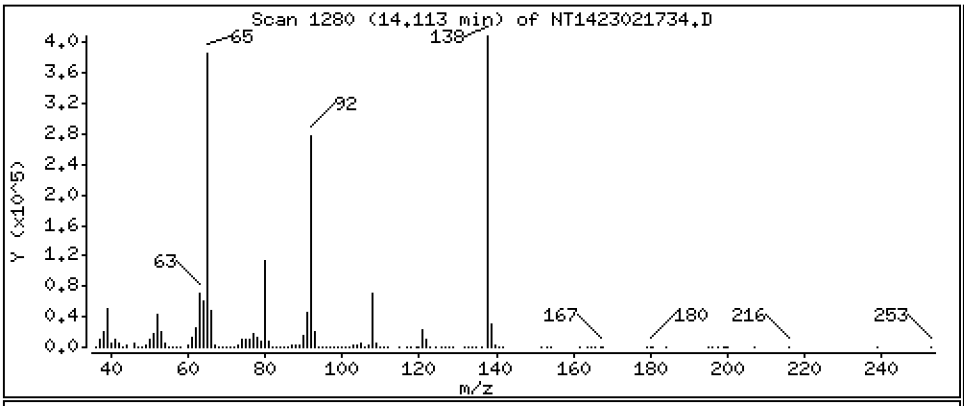
Operator: DSD

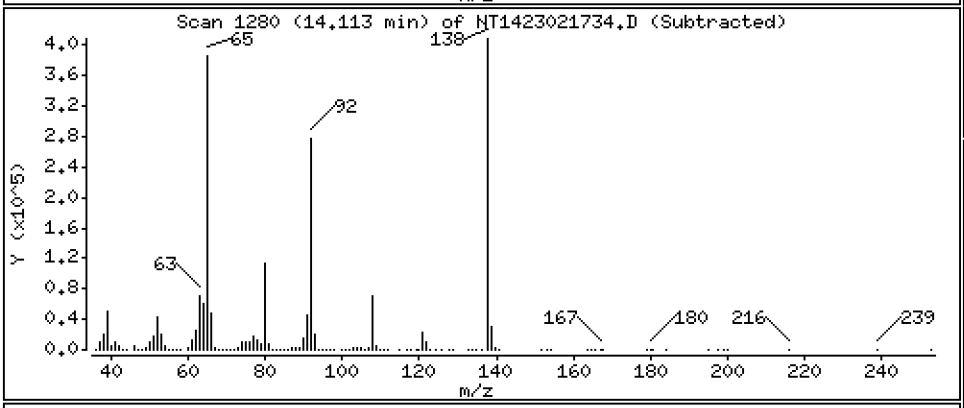
Column phase: ZB-5msi

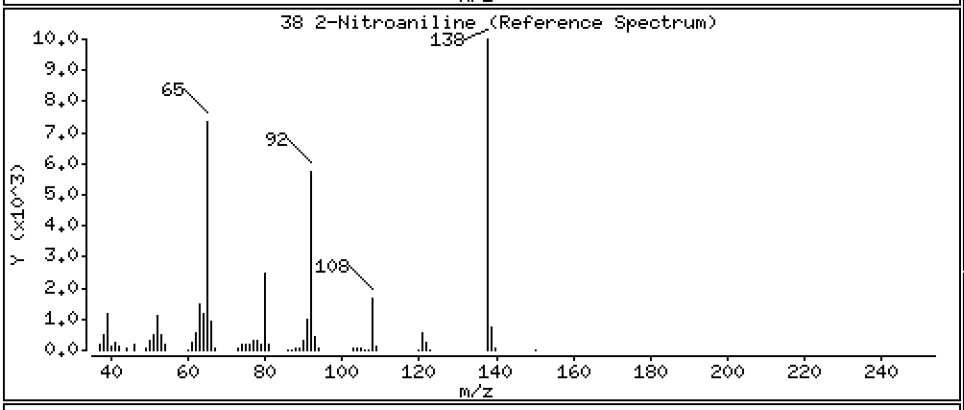
Column diameter: 0.25

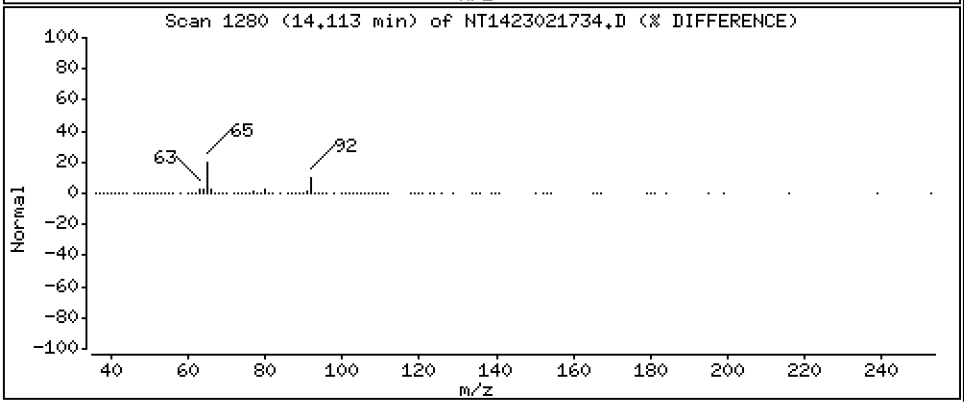
38 2-Nitroaniline

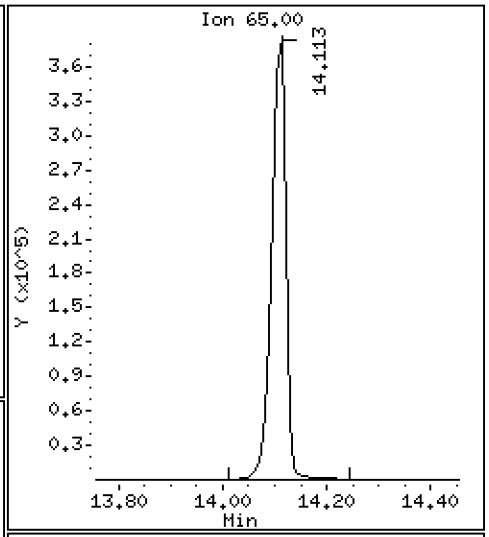
Concentration: 9.350 ug/mL

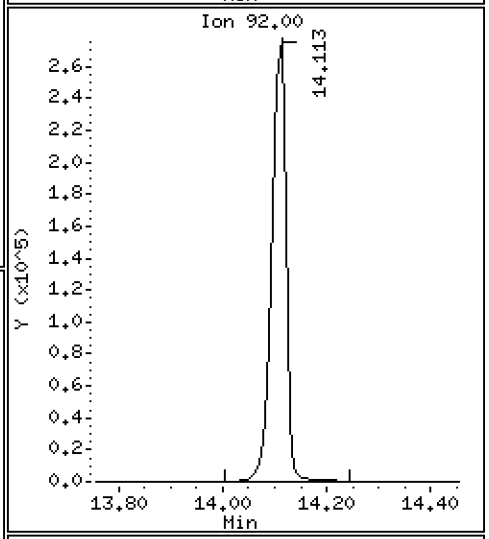


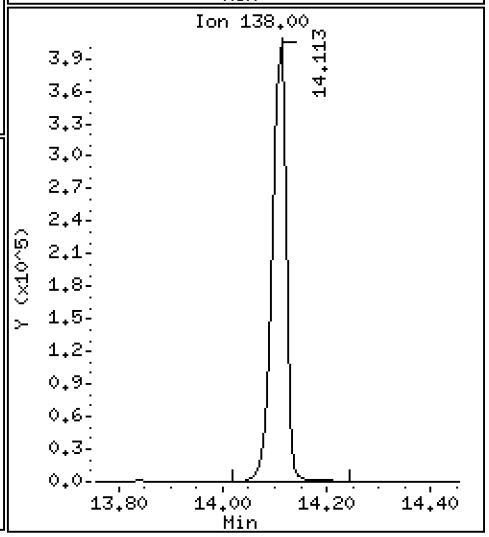












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

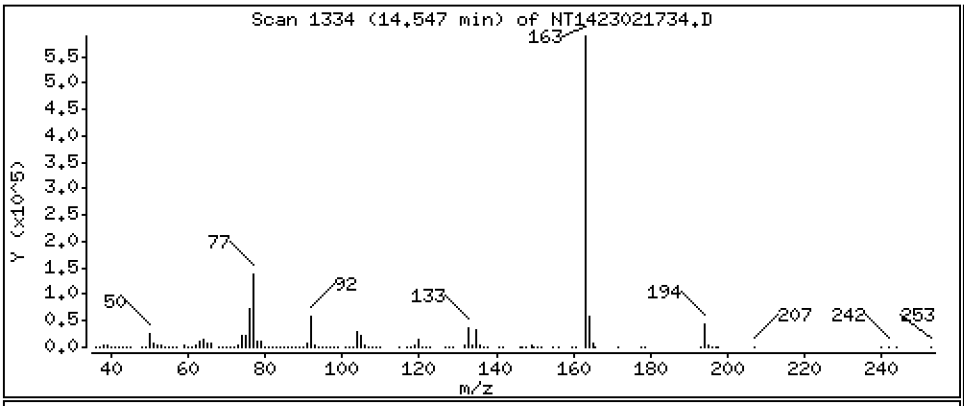
Operator: DSD

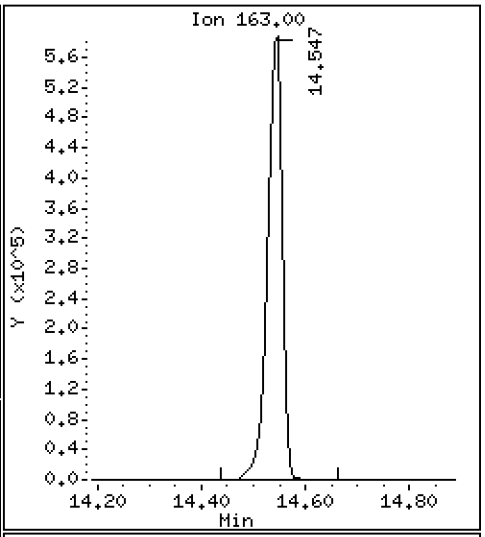
Column phase: ZB-5msi

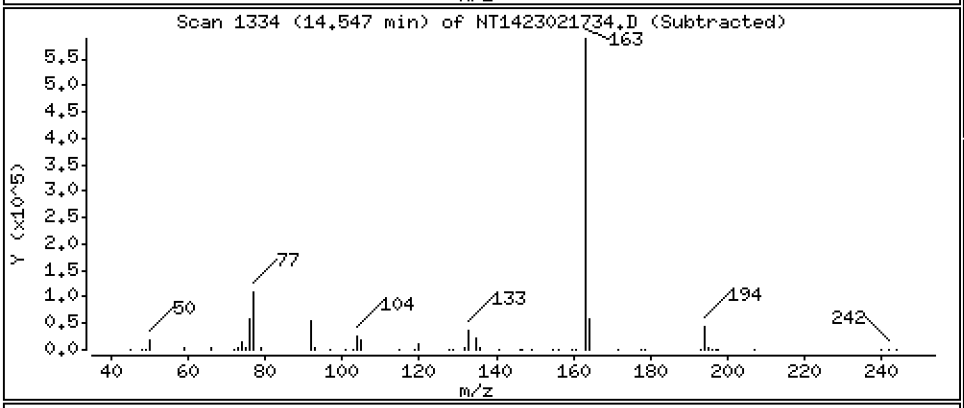
Column diameter: 0.25

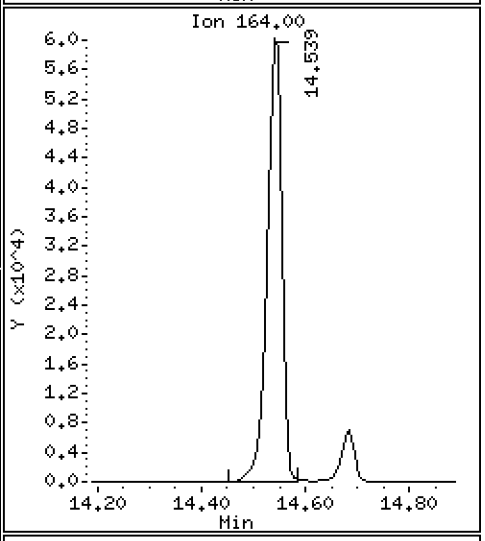
39 Dimethylphthalate

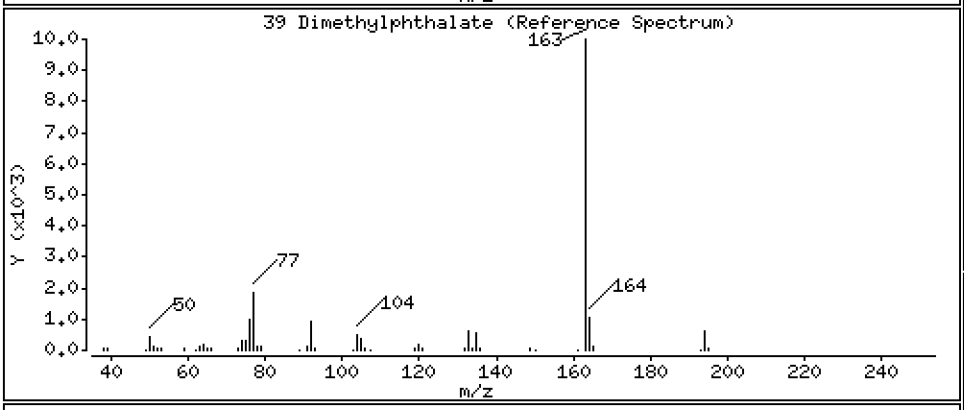
Concentration: 4.626 ug/mL

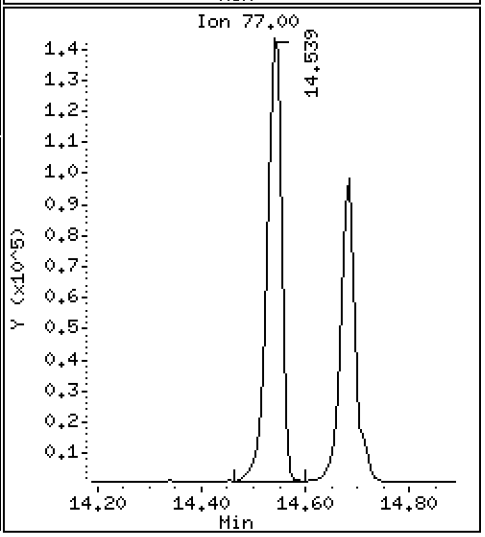


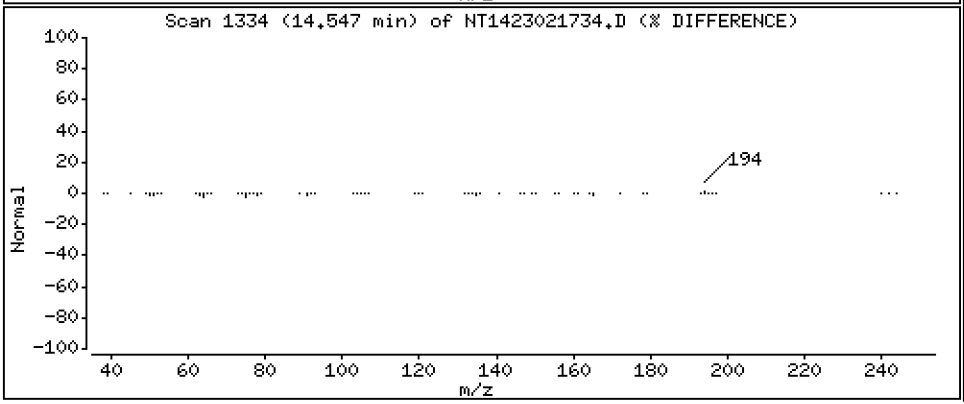












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

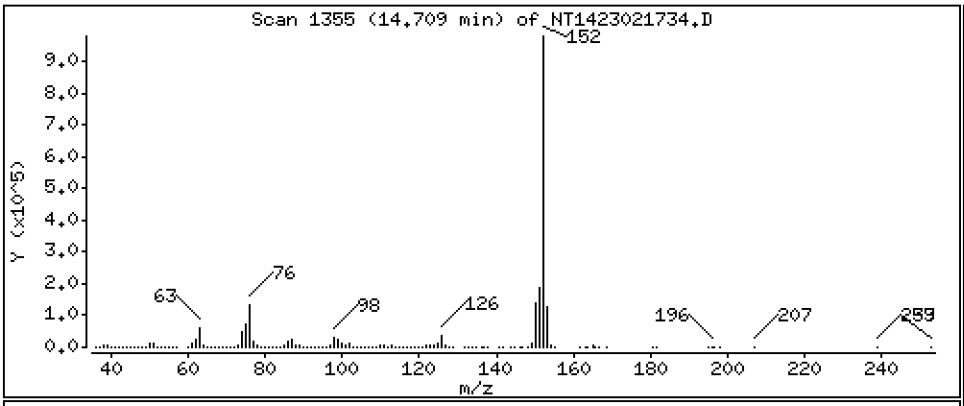
Operator: DSD

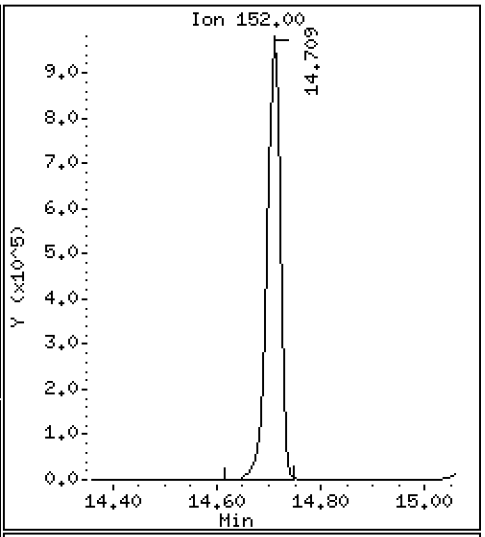
Column phase: ZB-5msi

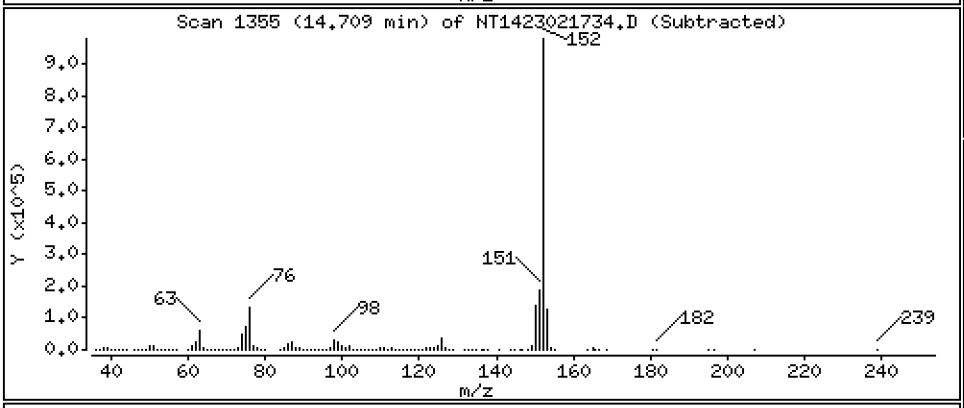
Column diameter: 0.25

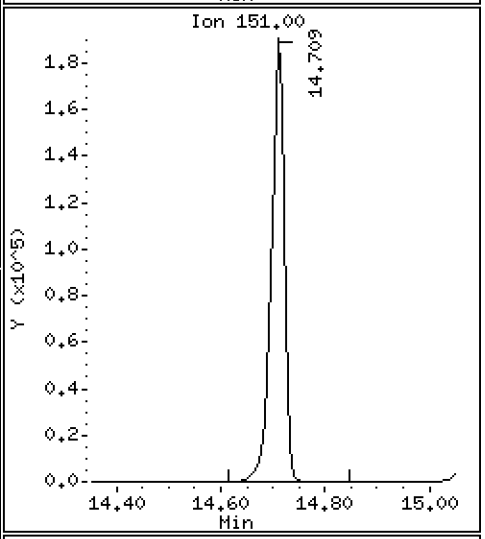
40 Acenaphthylene

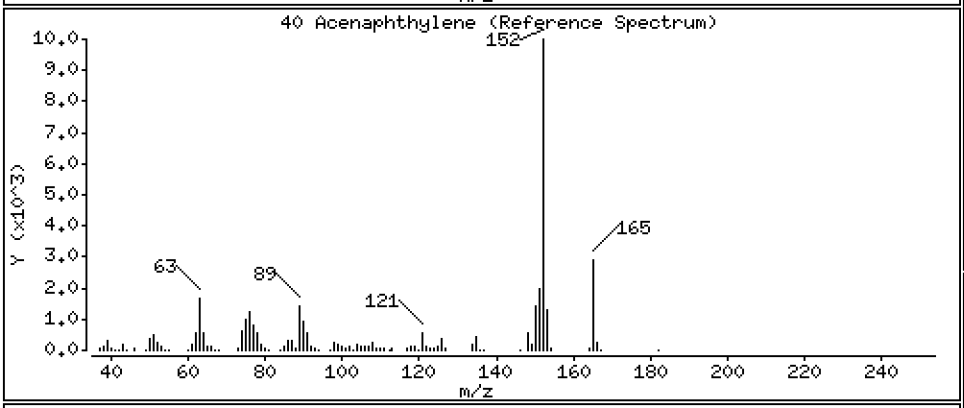
Concentration: 4.710 ug/mL

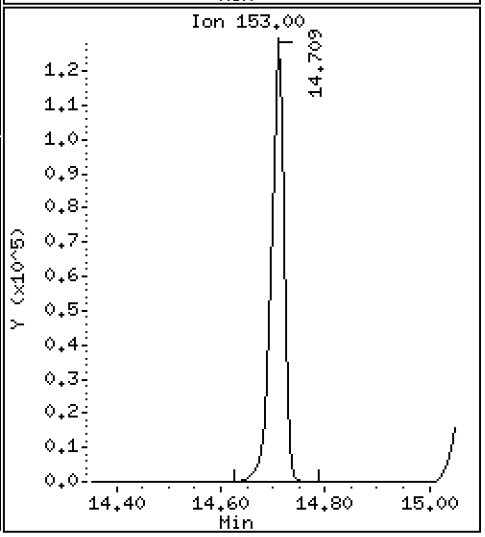


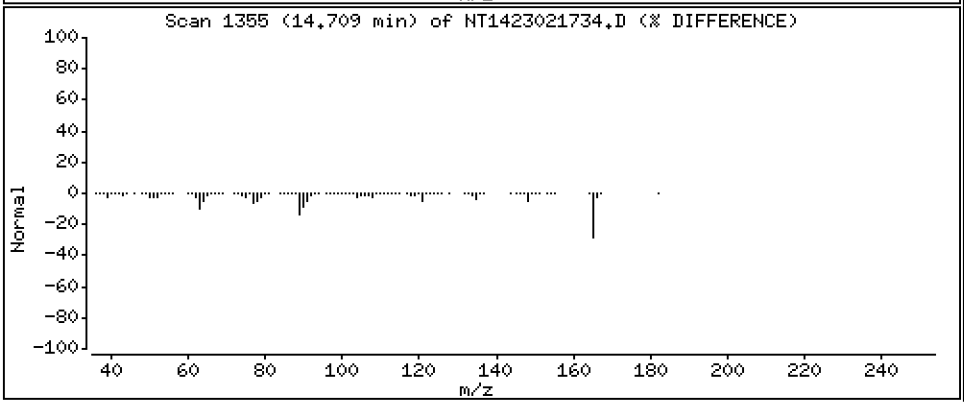












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021734.D

Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

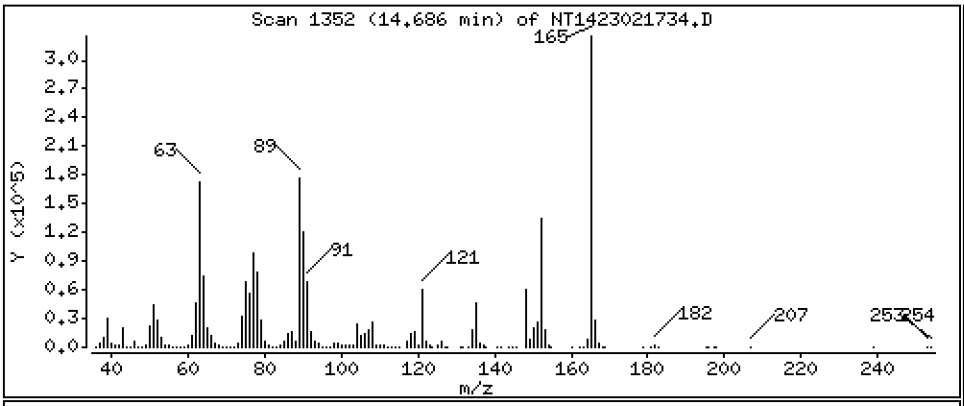
Operator: DSD

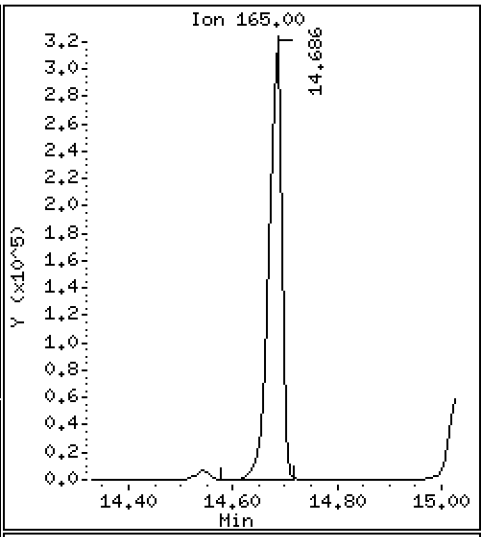
Column phase: ZB-5msi

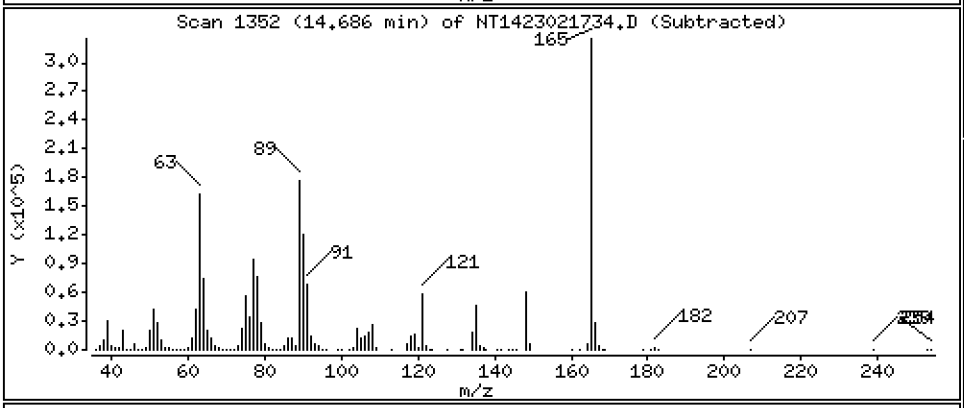
Column diameter: 0.25

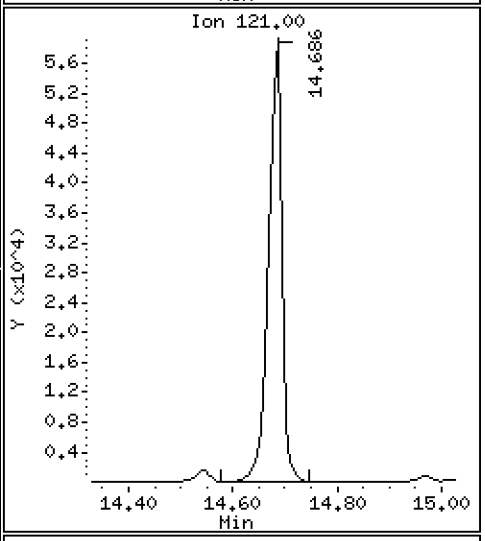
41 2,6-Dinitrotoluene

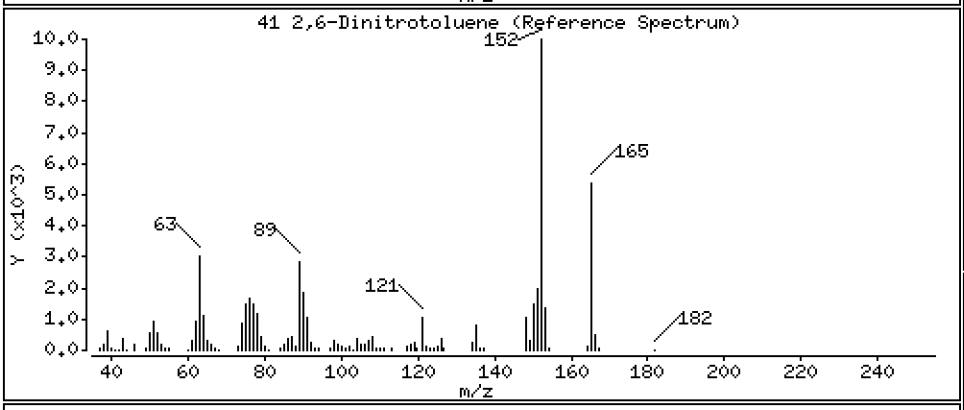
Concentration: 9.363 ug/mL

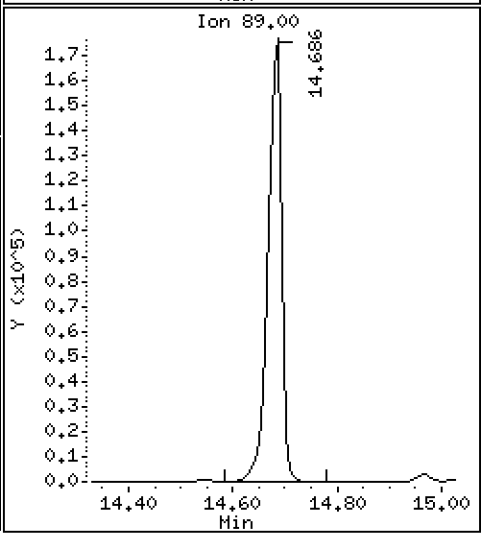


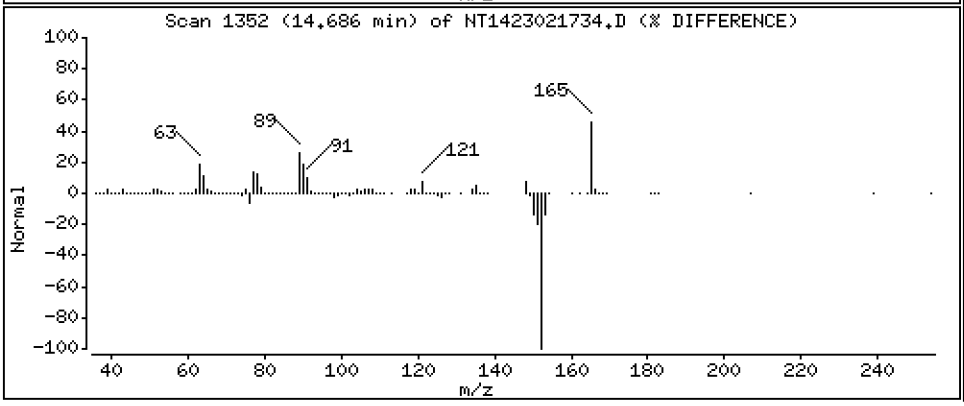












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

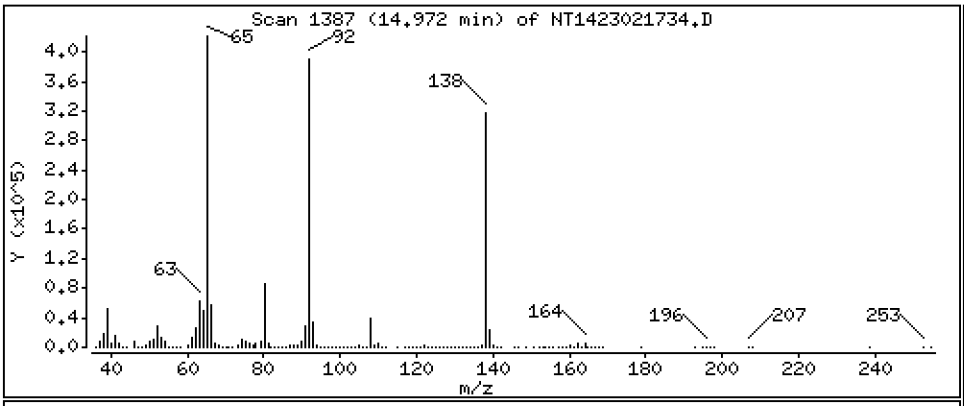
Operator: DSD

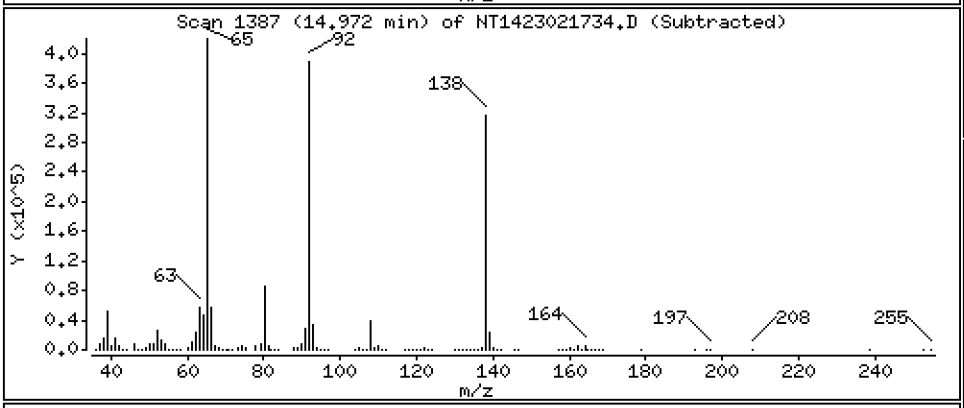
Column phase: ZB-5msi

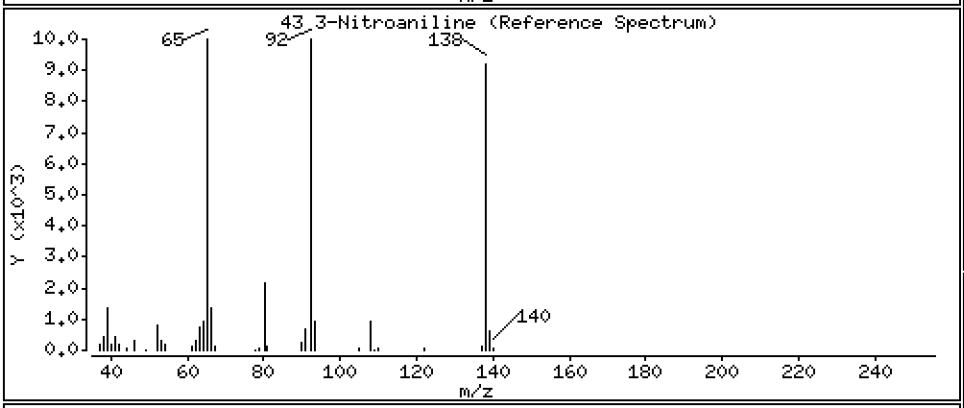
Column diameter: 0.25

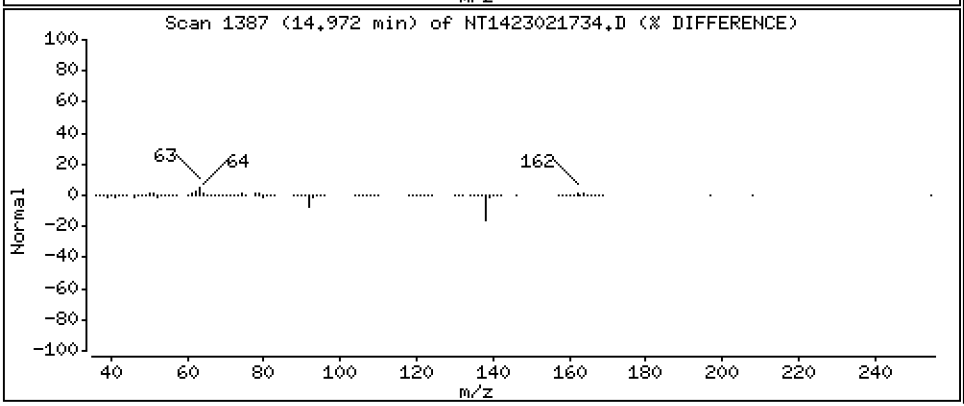
43 3-Nitroaniline

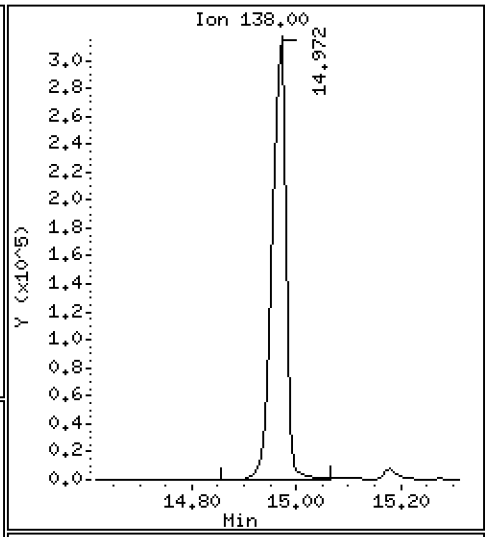
Concentration: 9.414 ug/mL

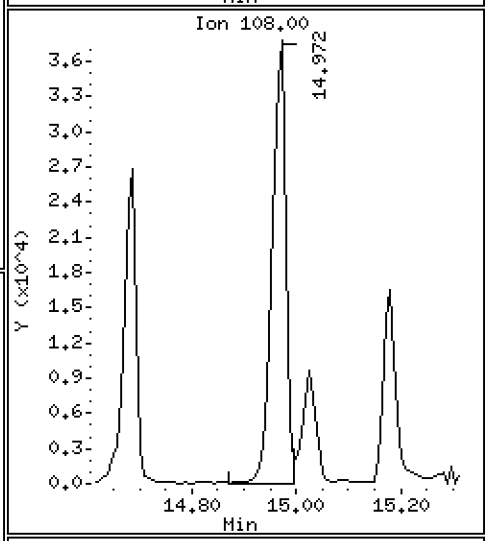


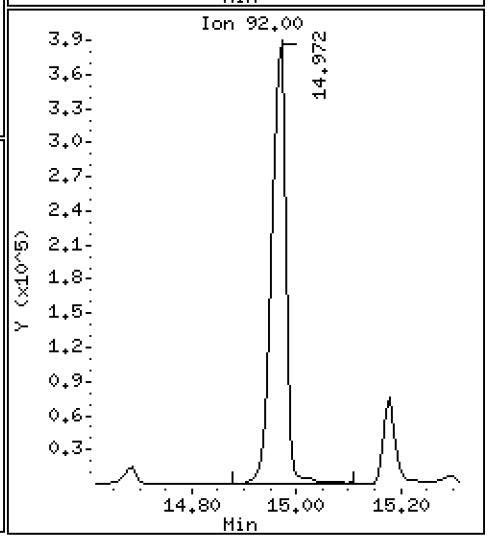












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

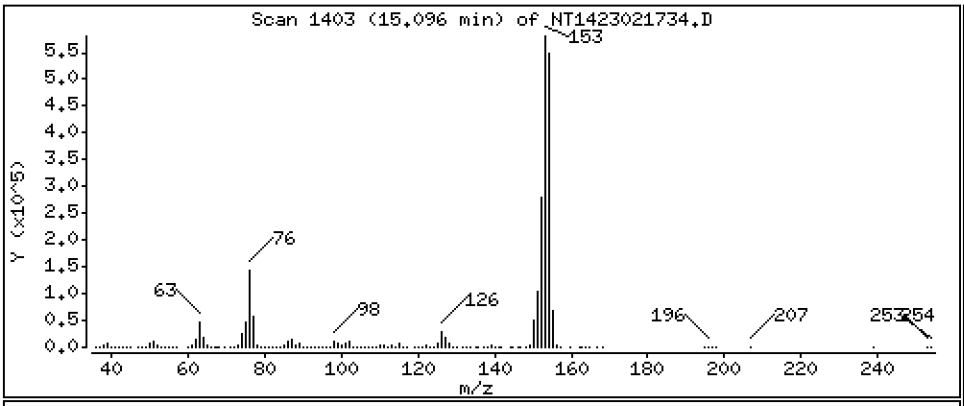
Operator: DSD

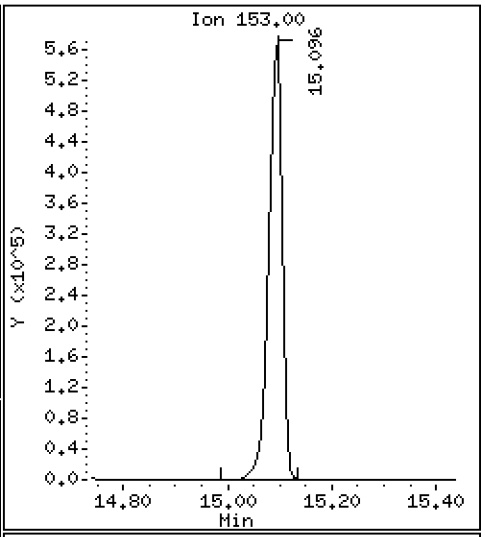
Column phase: ZB-5msi

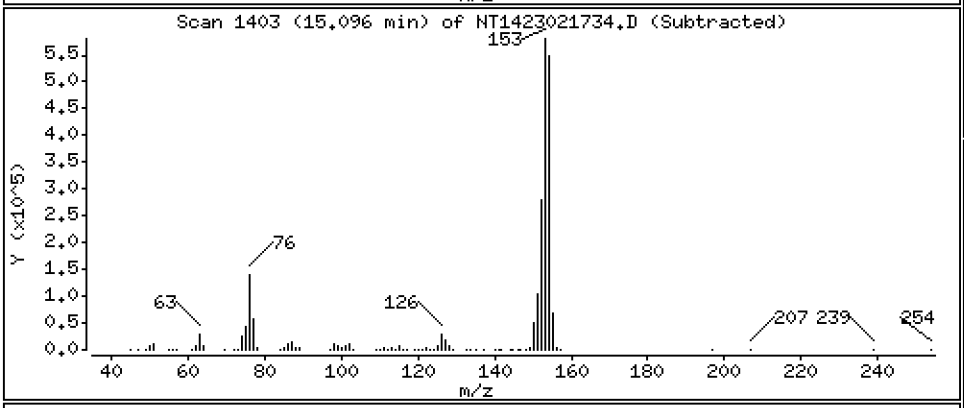
Column diameter: 0.25

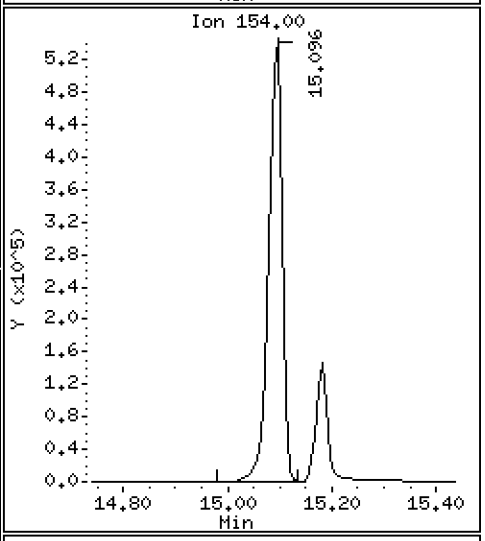
44 Acenaphthene

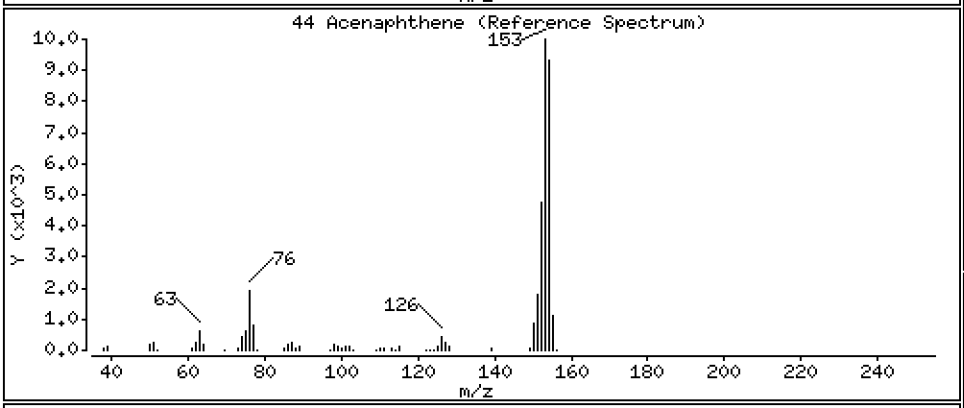
Concentration: 4.707 ug/mL

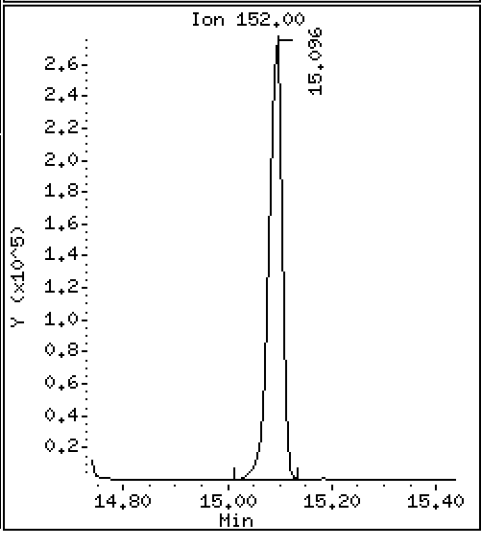


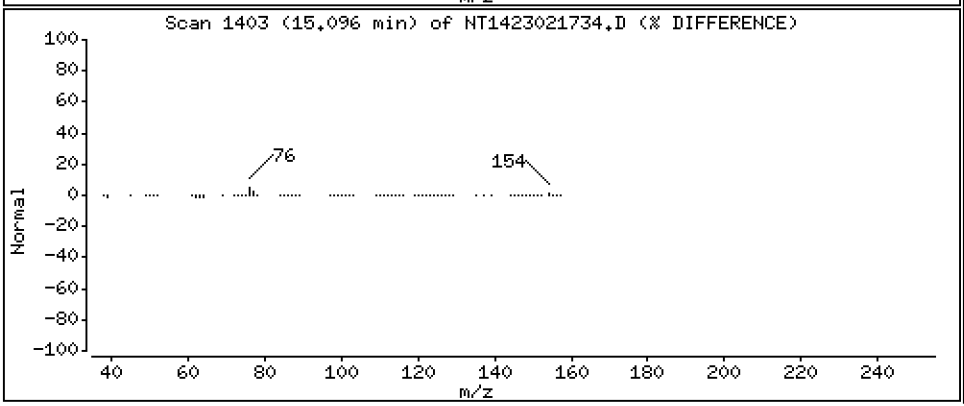












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

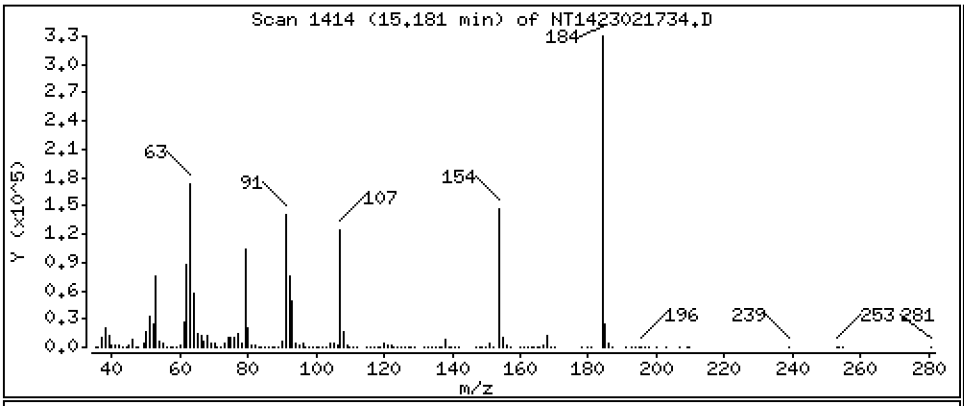
Operator: DSD

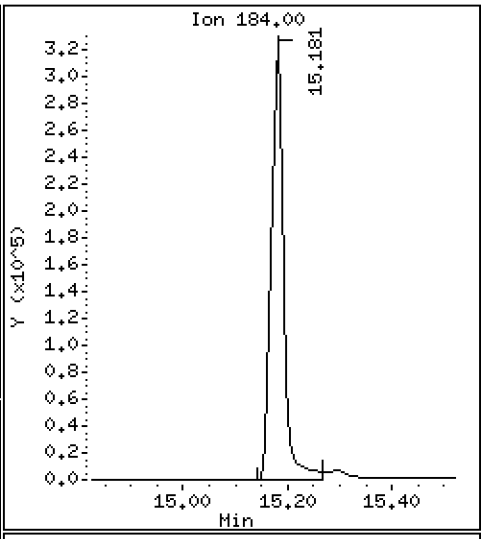
Column phase: ZB-5msi

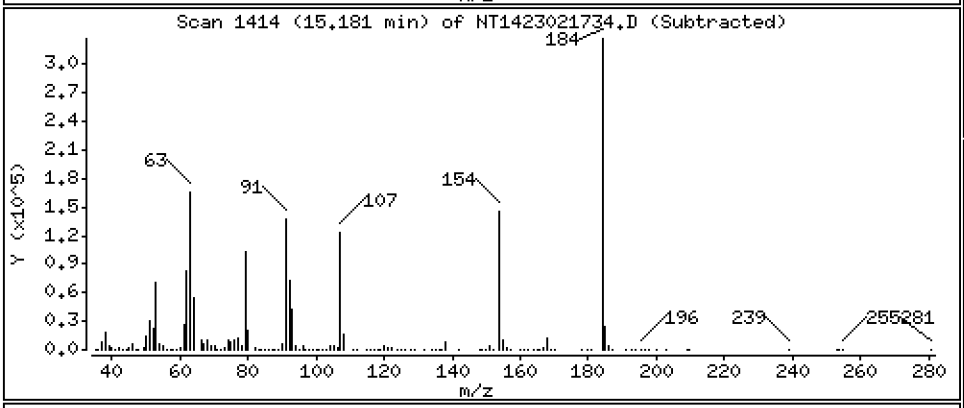
Column diameter: 0.25

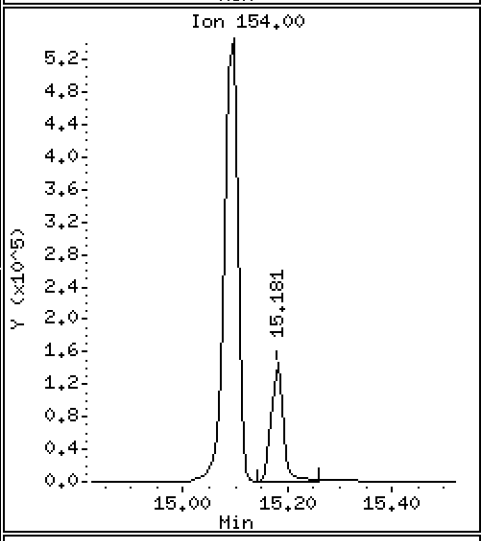
45 2,4-Dinitrophenol

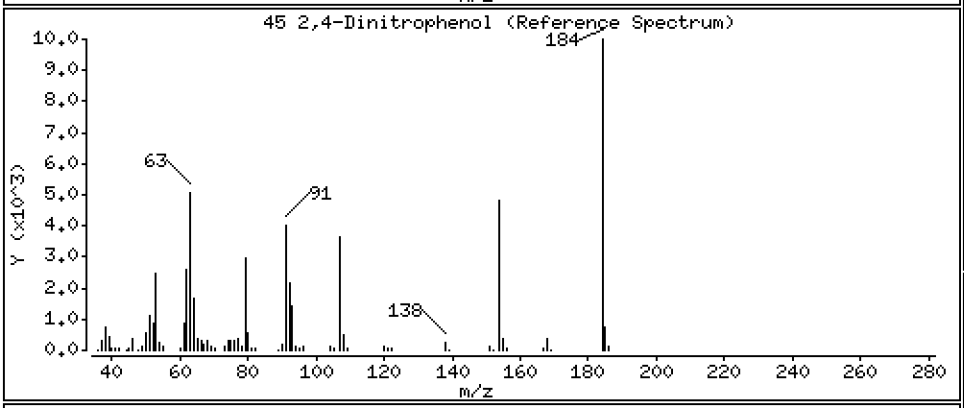
Concentration: 13.64 ug/mL

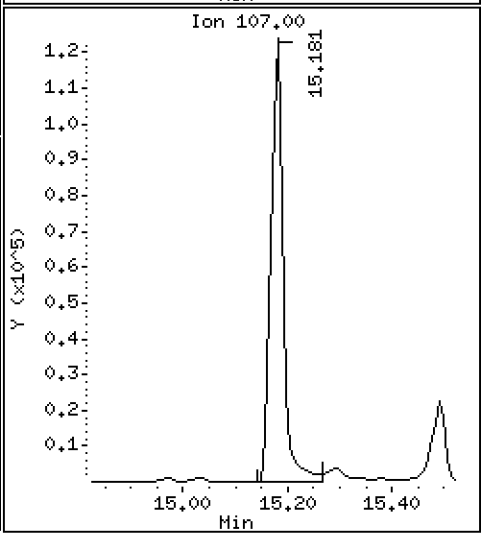


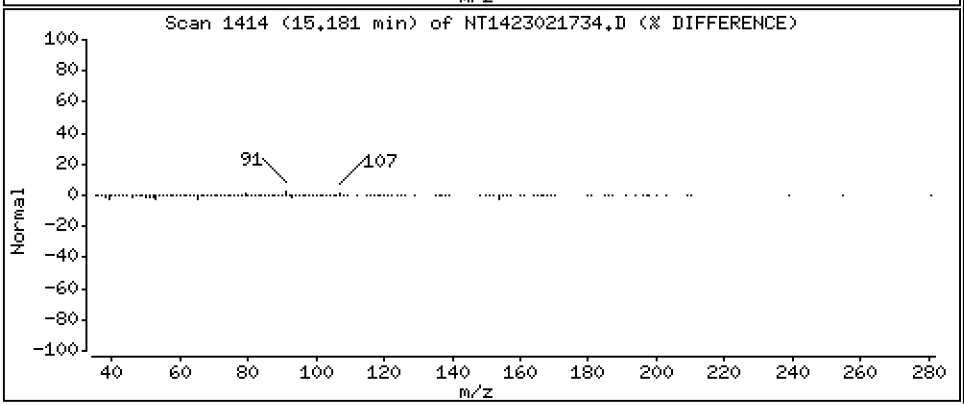












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

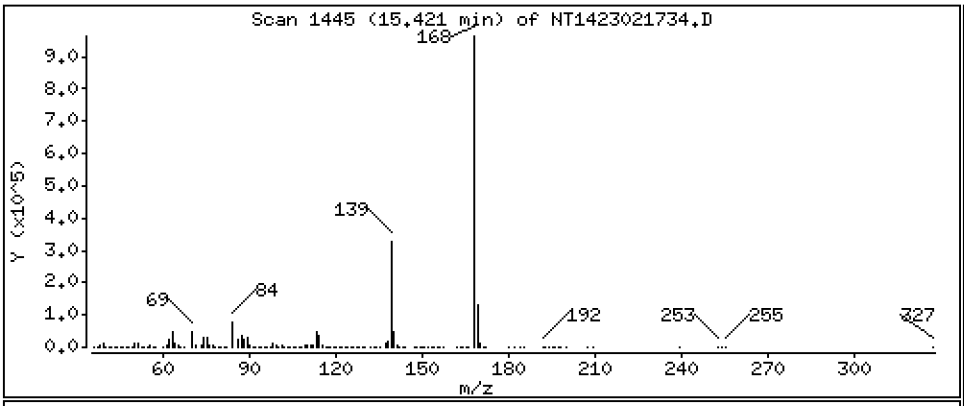
Operator: DSD

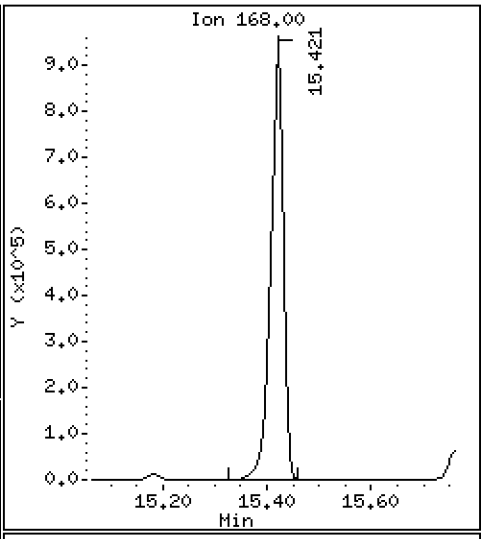
Column phase: ZB-5msi

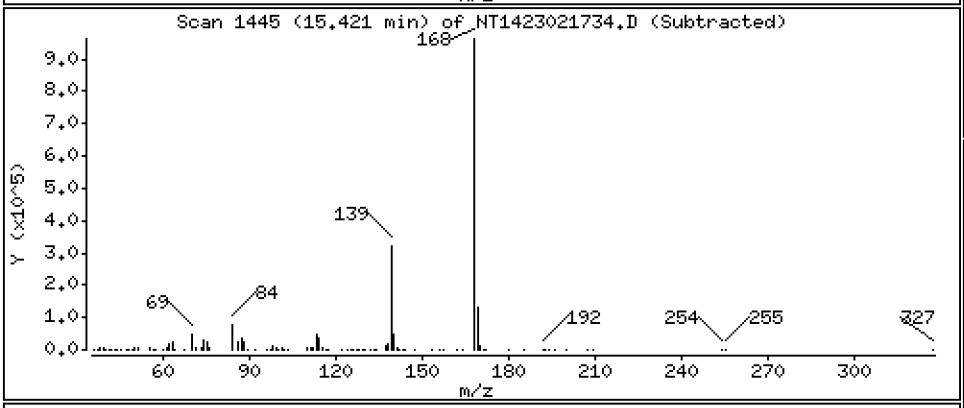
Column diameter: 0.25

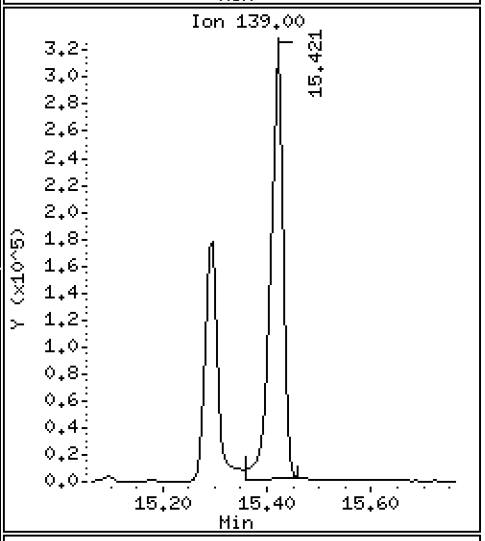
46 Dibenzofuran

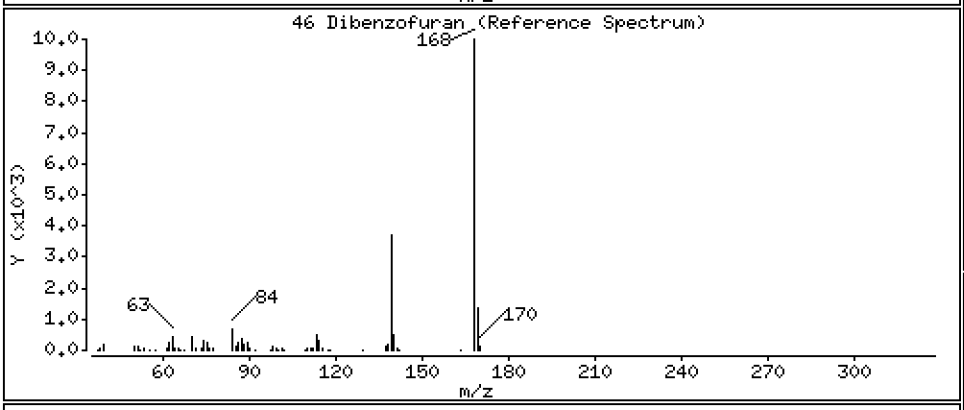
Concentration: 4.491 ug/mL

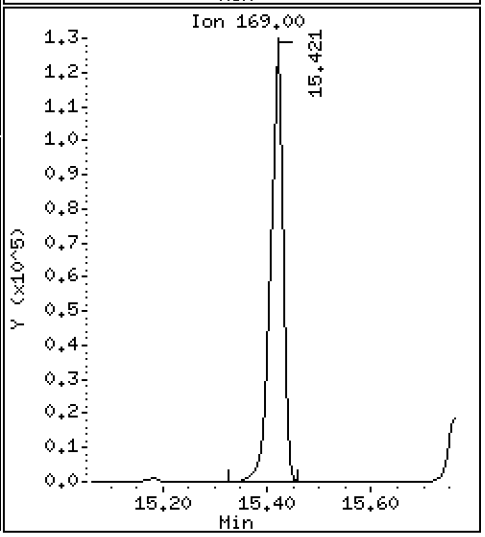


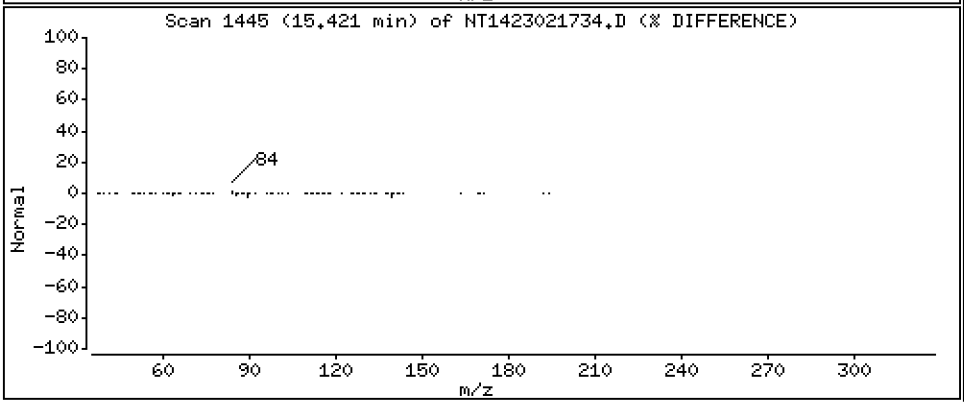












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

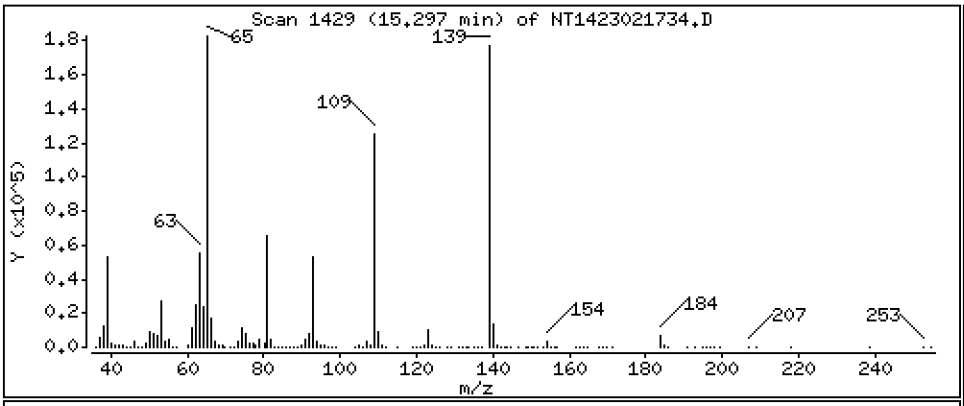
Operator: DSD

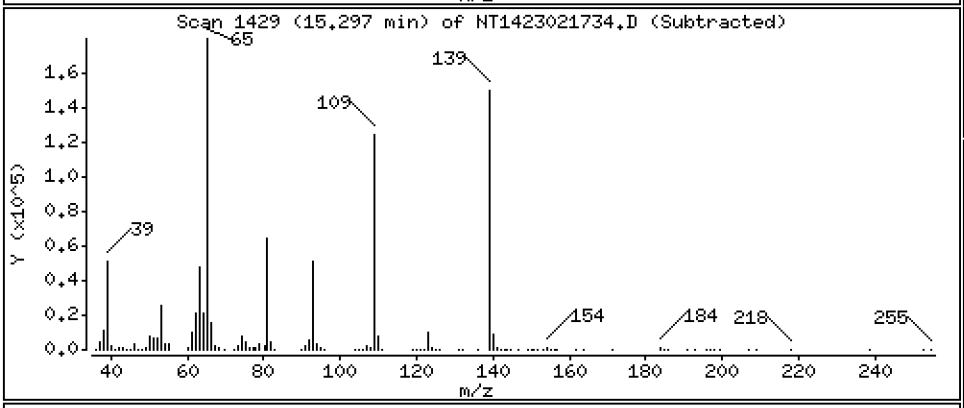
Column phase: ZB-5msi

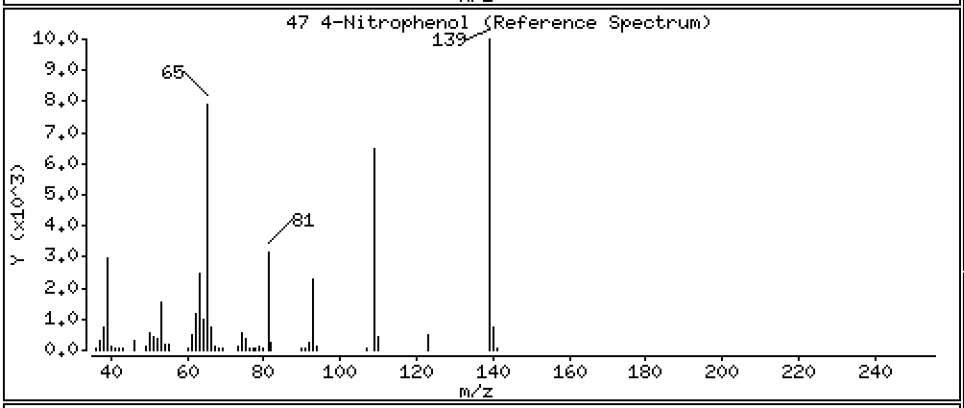
Column diameter: 0.25

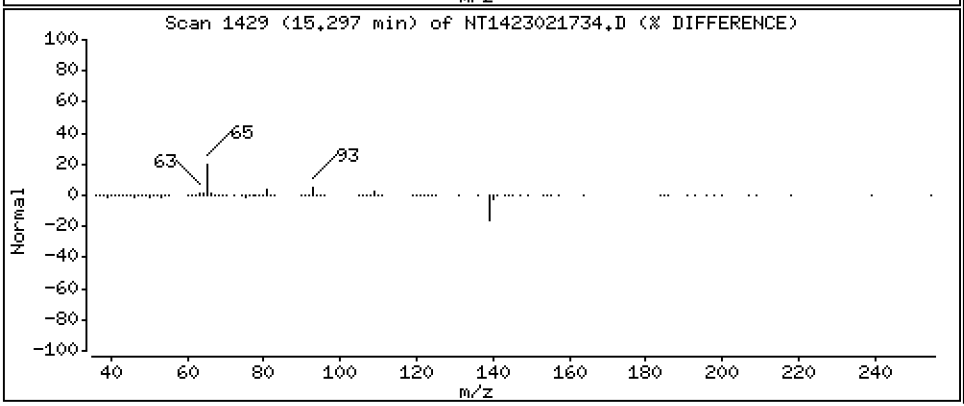
47 4-Nitrophenol

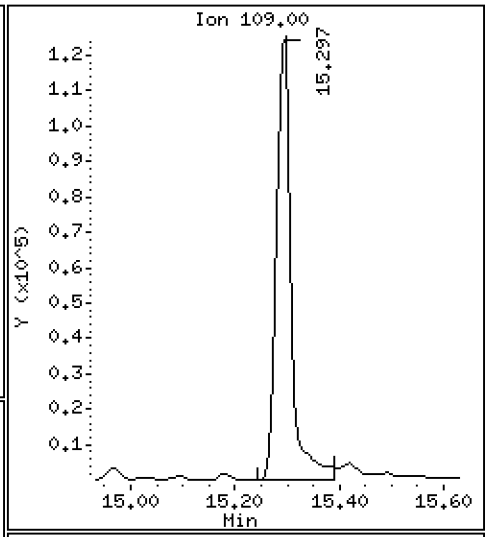
Concentration: 6.713 ug/mL

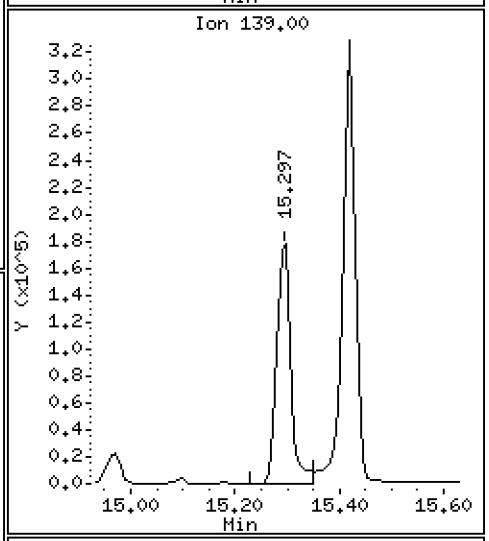


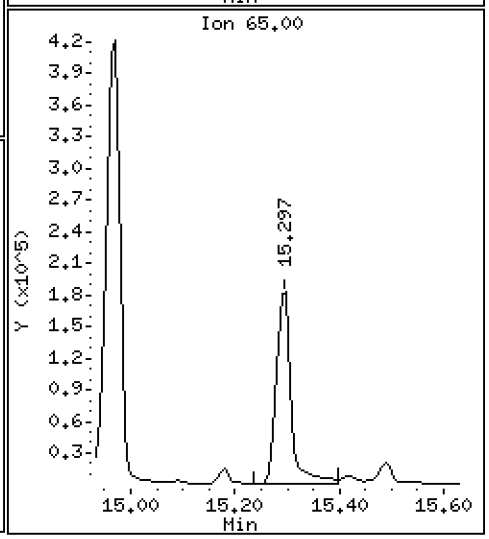












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

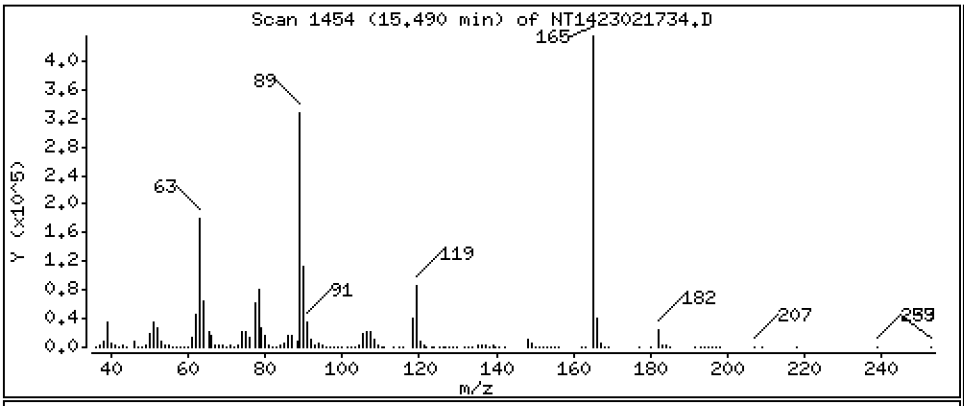
Operator: DSD

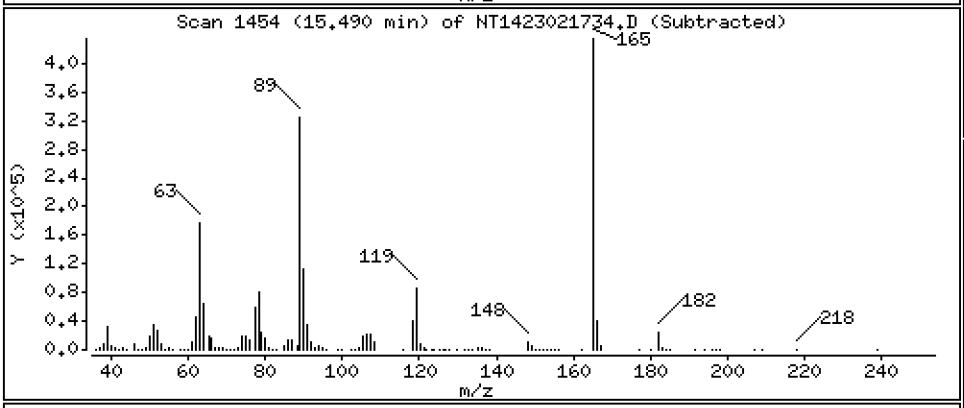
Column phase: ZB-5msi

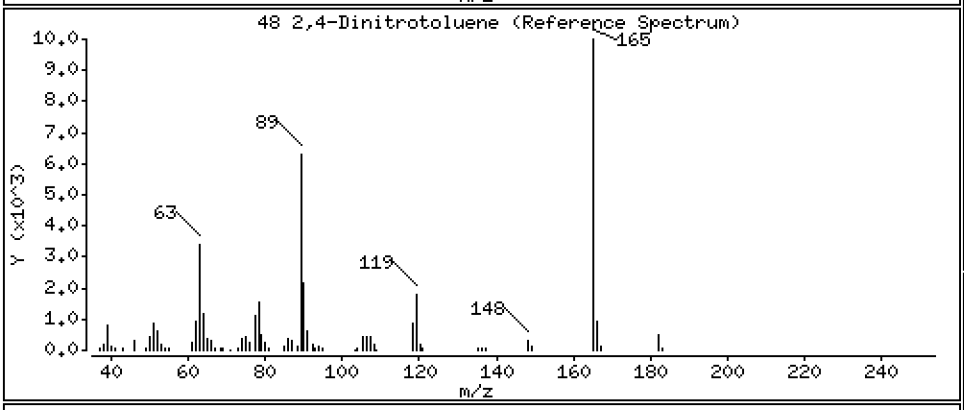
Column diameter: 0.25

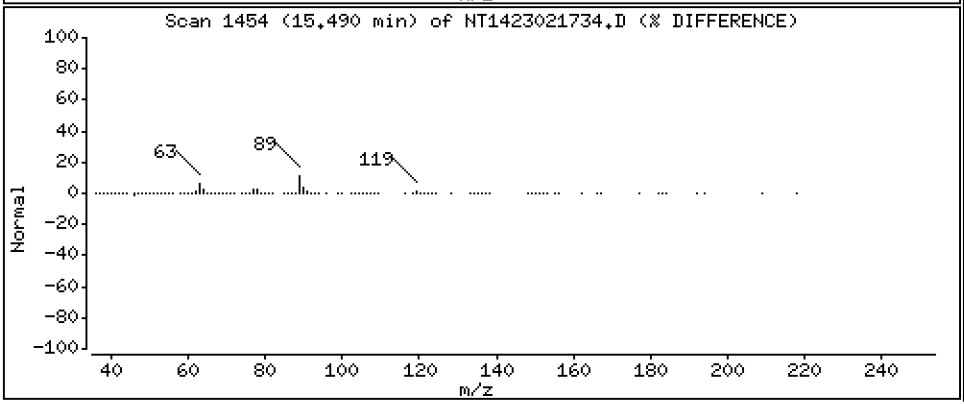
48 2,4-Dinitrotoluene

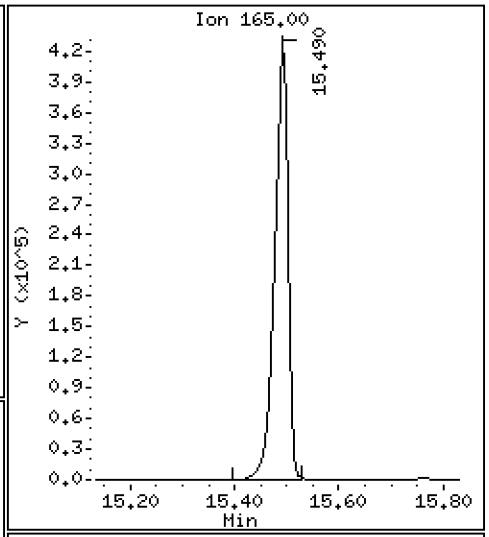
Concentration: 9.274 ug/mL

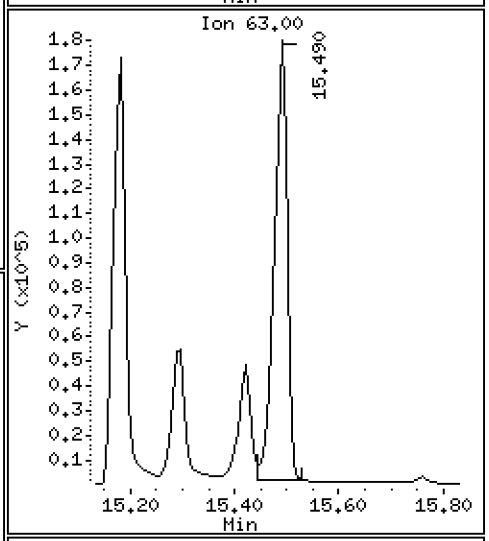


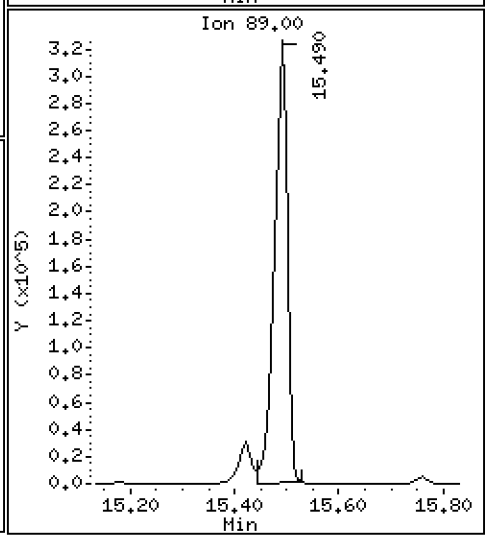












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

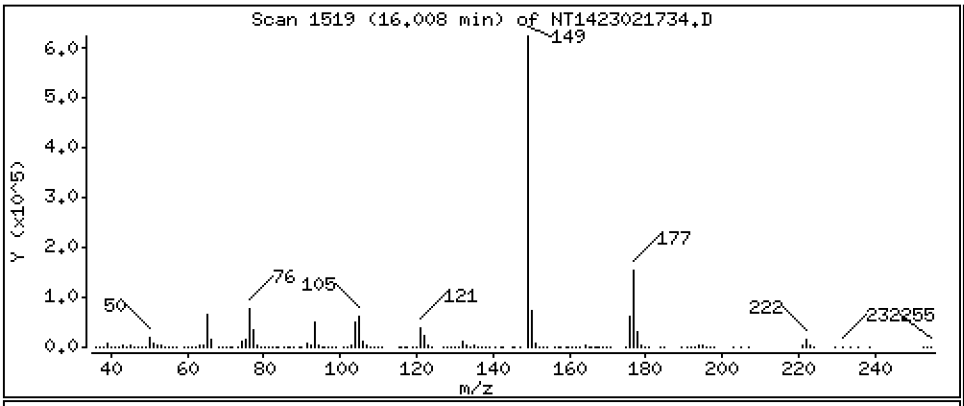
Operator: DSD

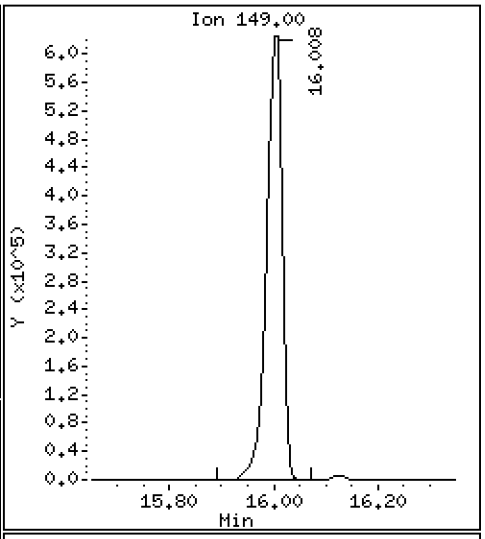
Column phase: ZB-5msi

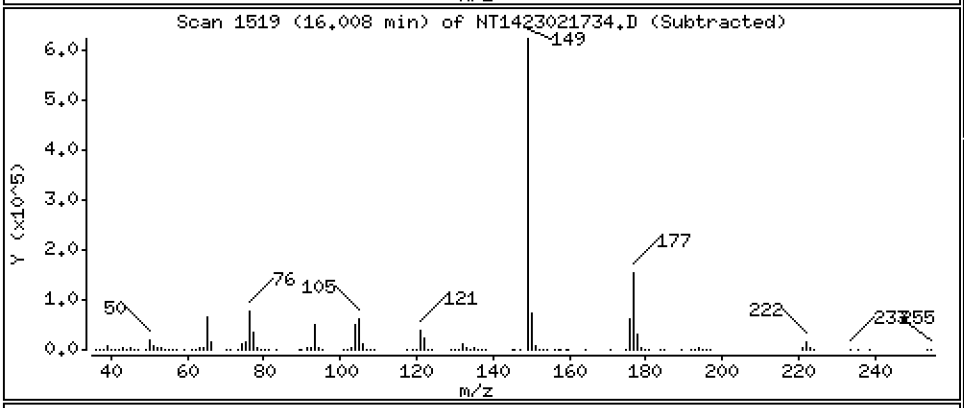
Column diameter: 0.25

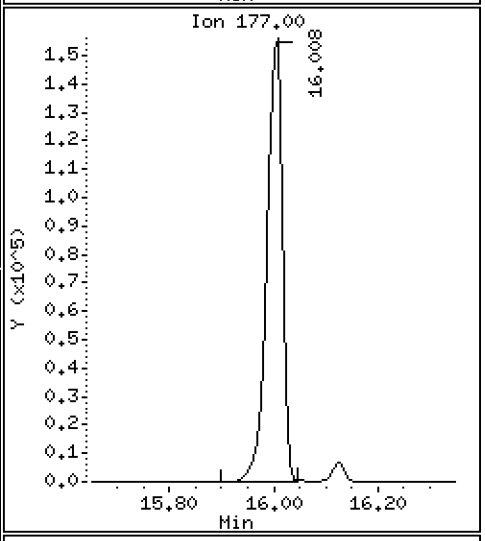
50 Diethylphthalate

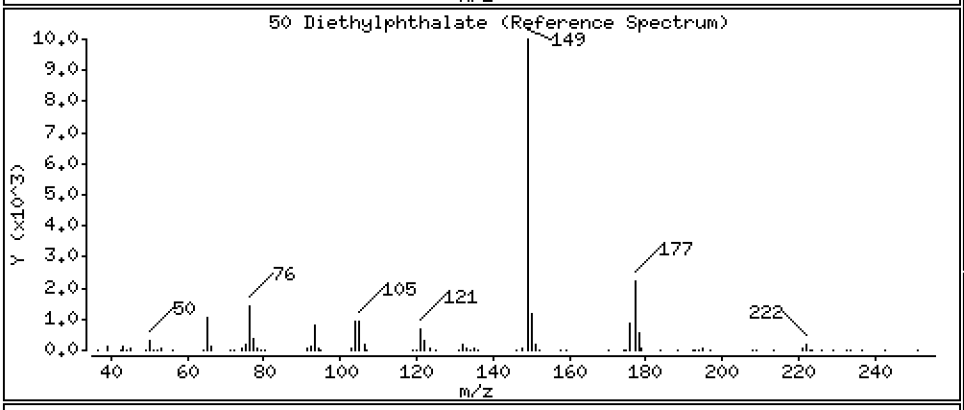
Concentration: 4.795 ug/mL

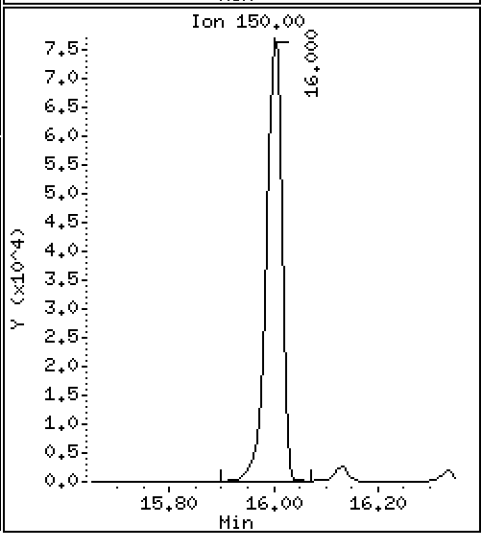


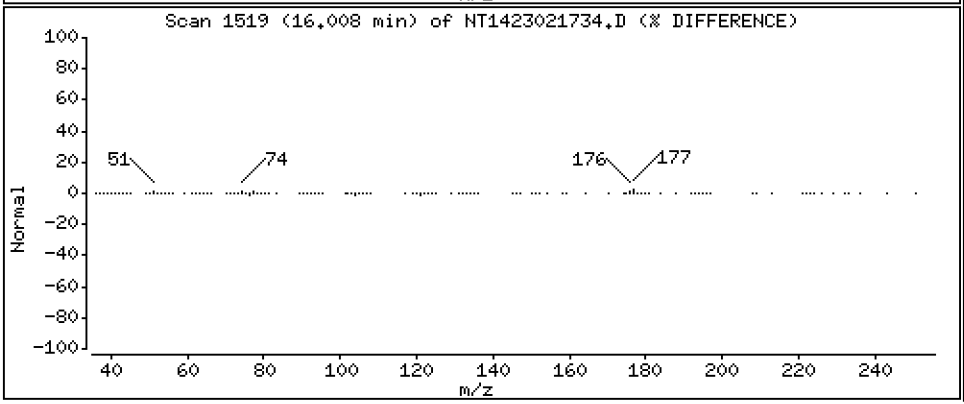












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

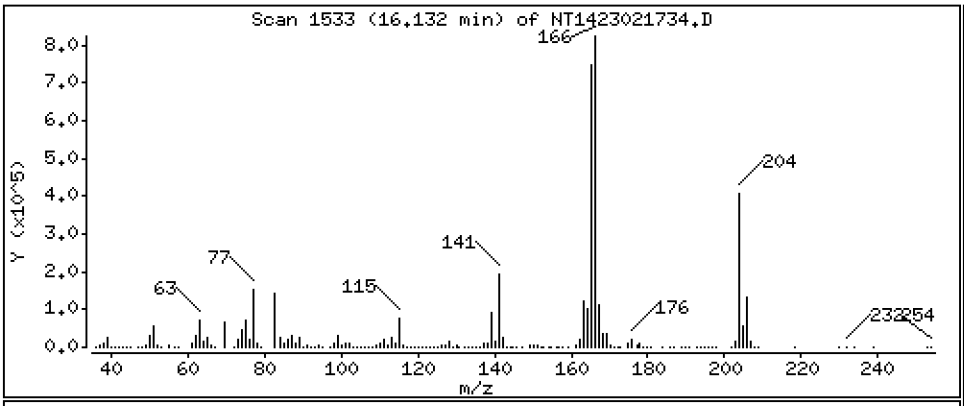
Operator: DSD

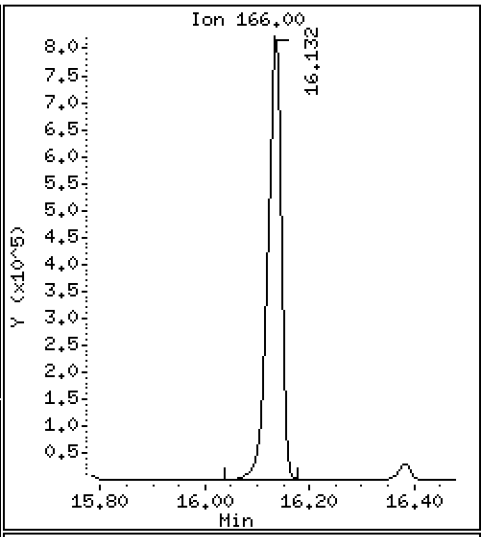
Column phase: ZB-5msi

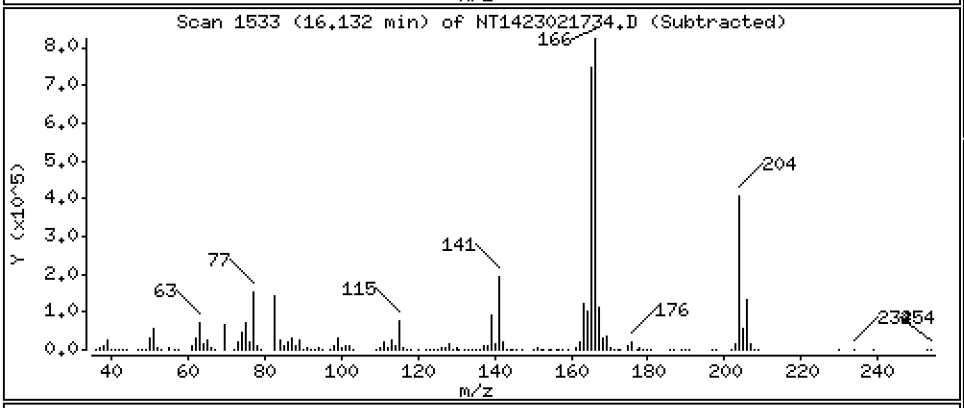
Column diameter: 0.25

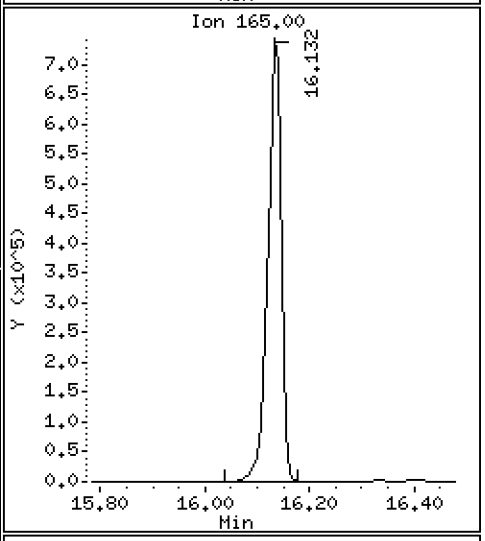
49 Fluorene

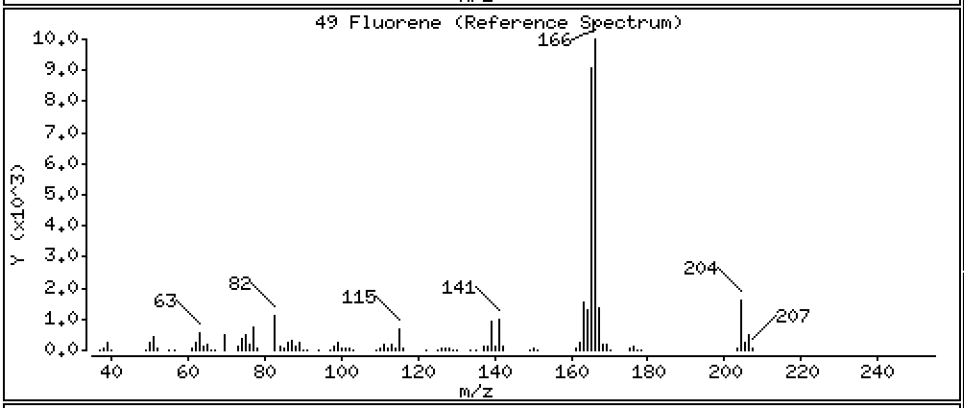
Concentration: 4.561 ug/mL

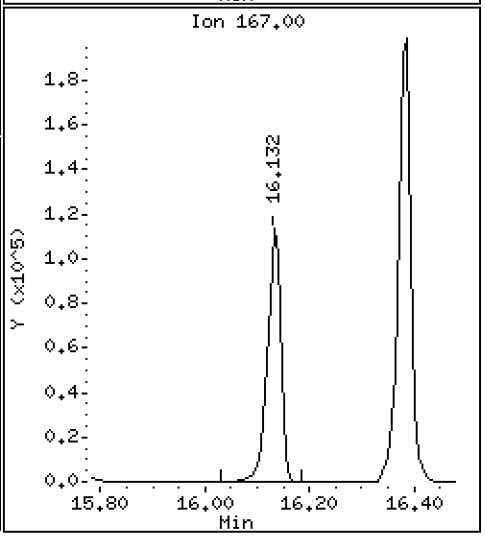


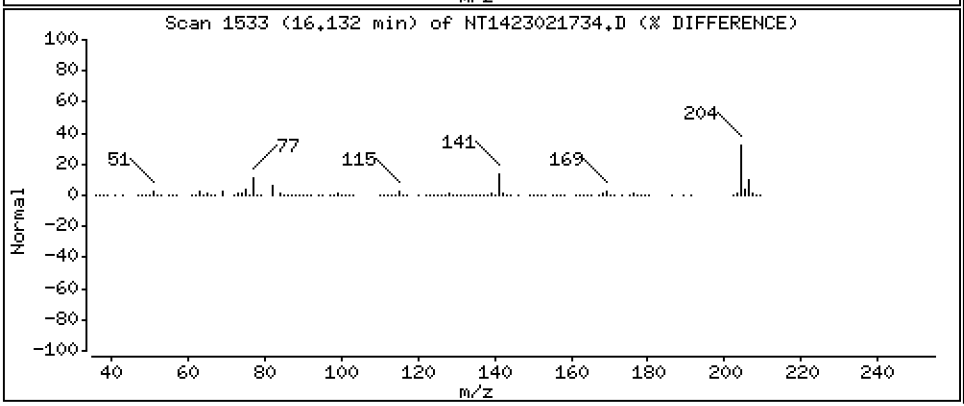












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

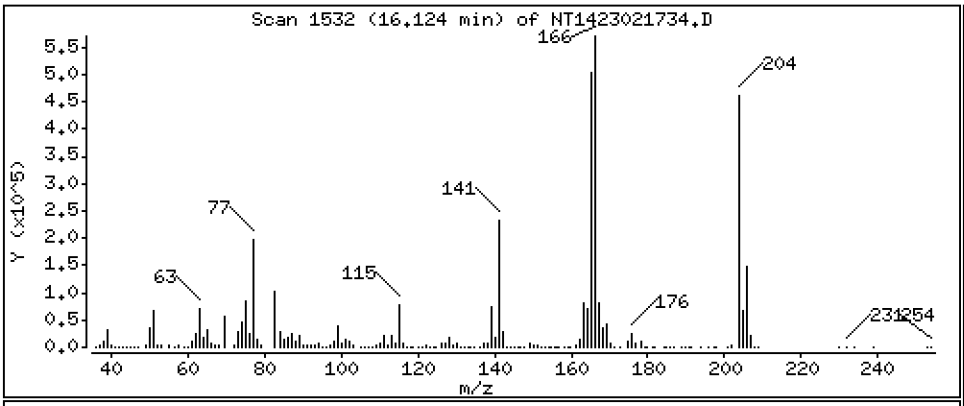
Operator: DSD

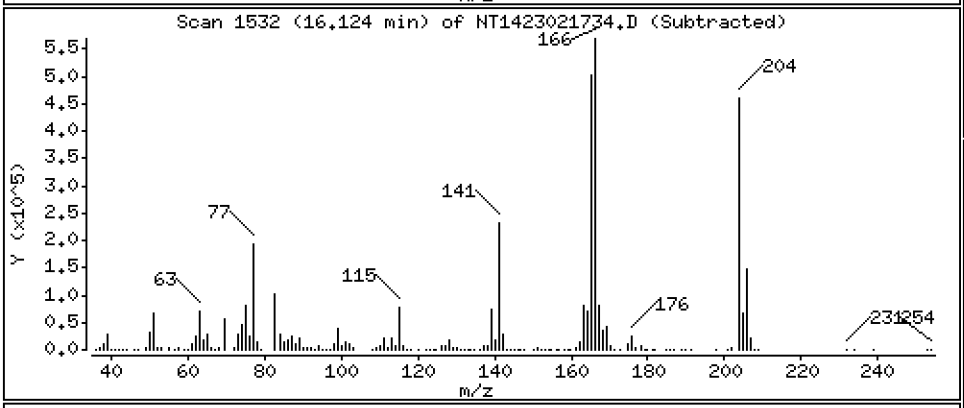
Column phase: ZB-5msi

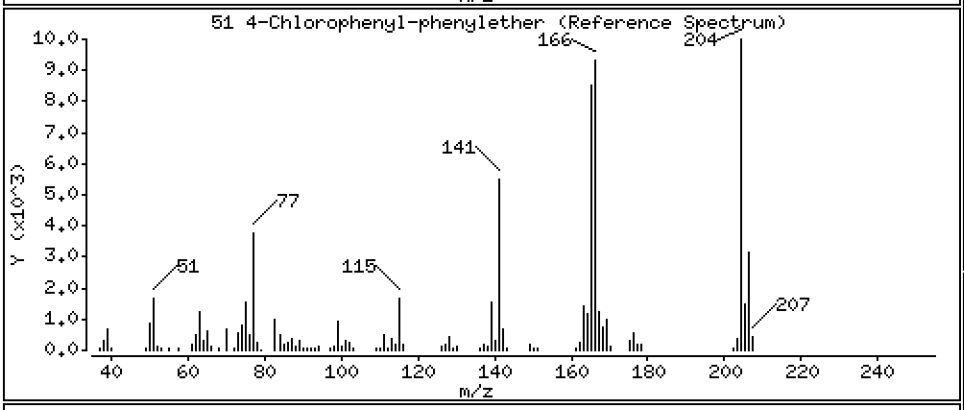
Column diameter: 0.25

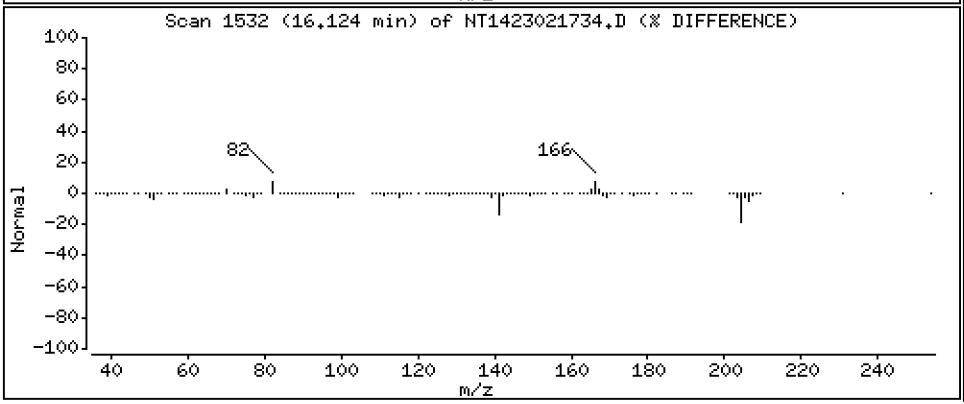
51 4-Chlorophenyl-phenylether

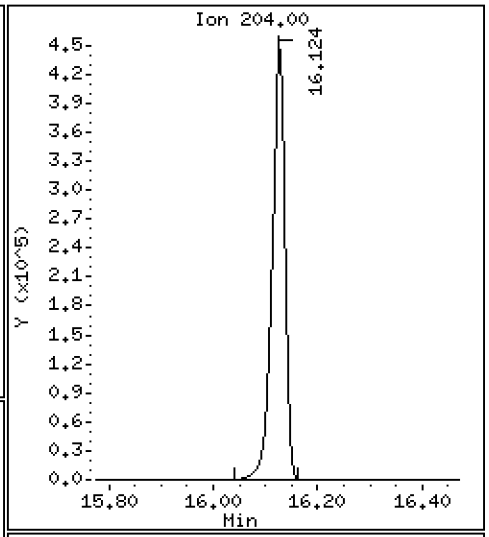
Concentration: 4.467 ug/mL

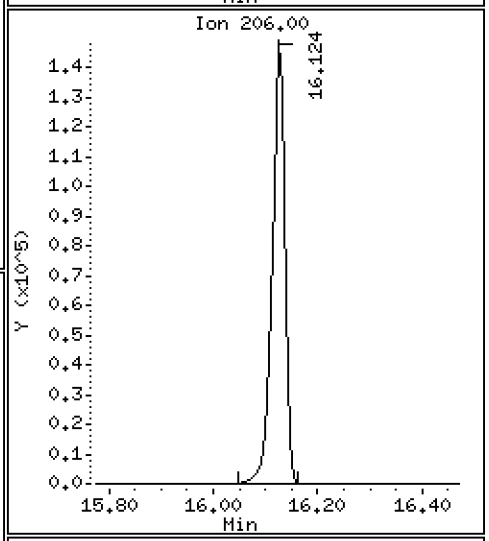


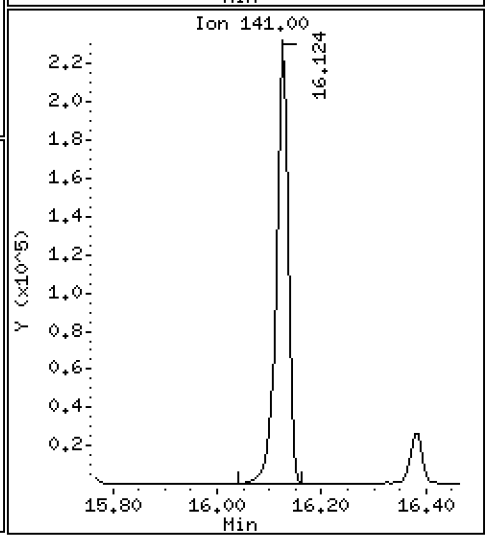












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

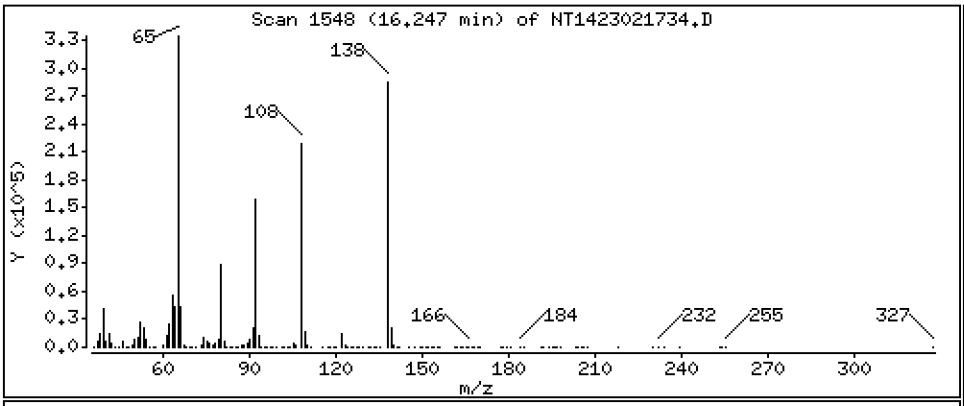
Operator: DSD

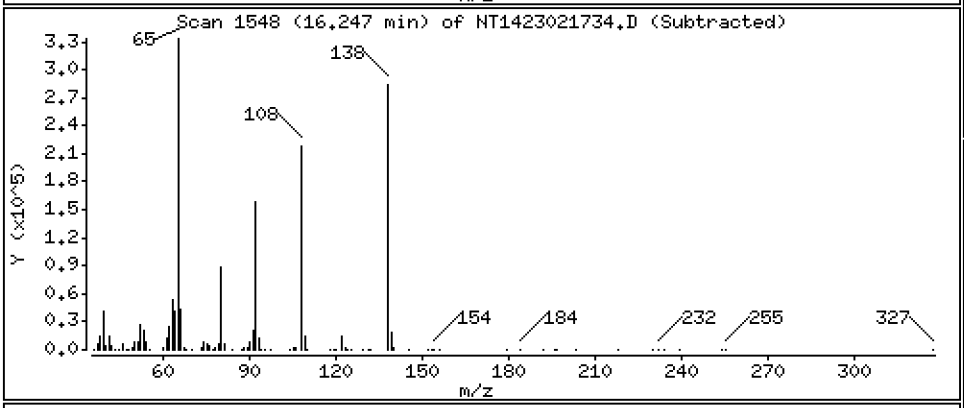
Column phase: ZB-5msi

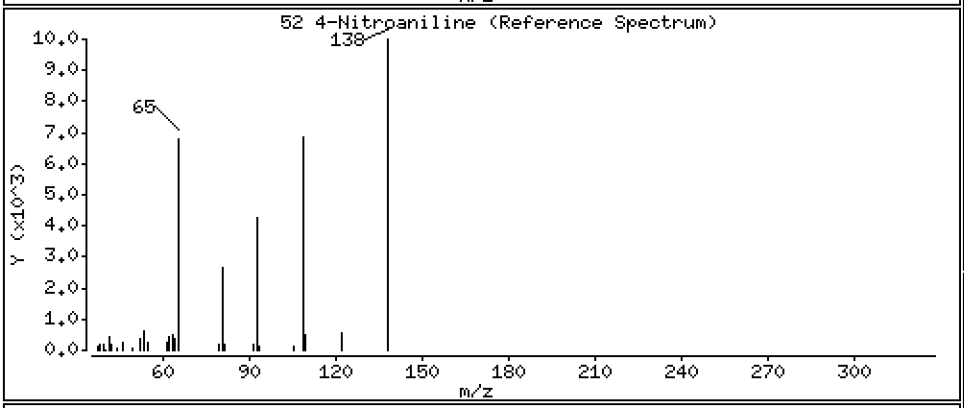
Column diameter: 0.25

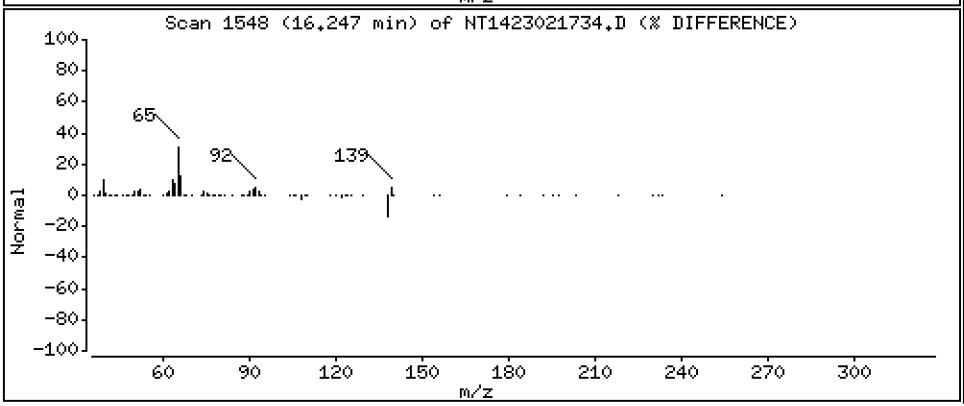
52 4-Nitroaniline

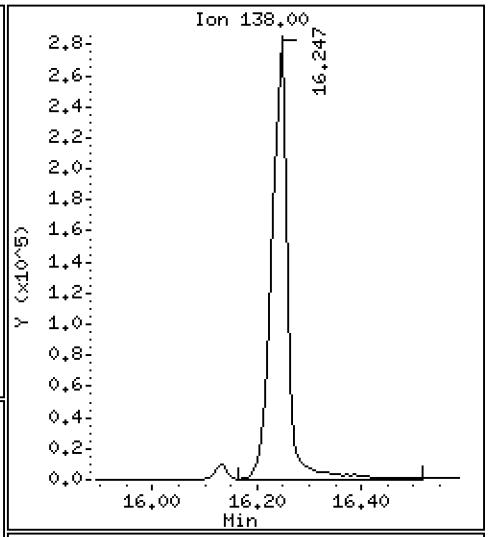
Concentration: 8.533 ug/mL

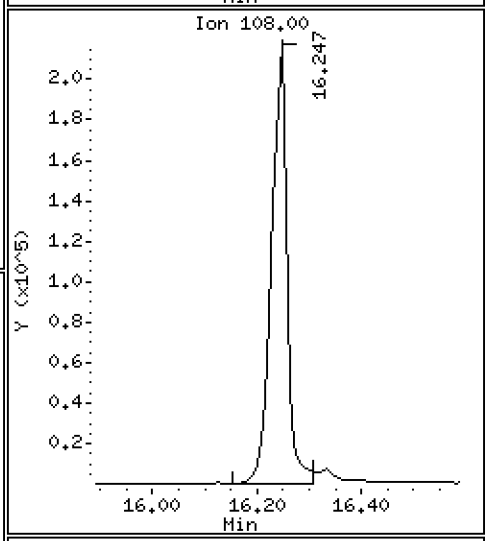


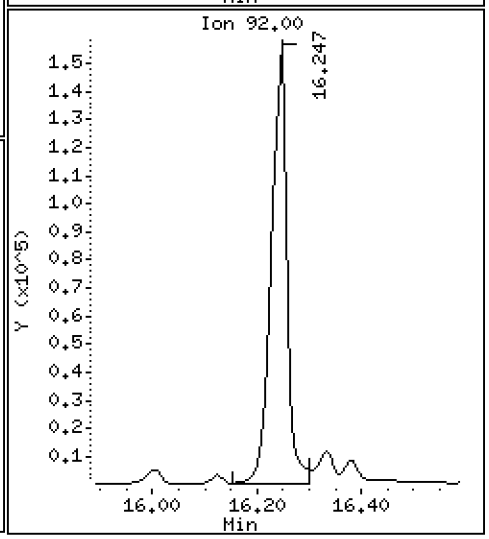












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

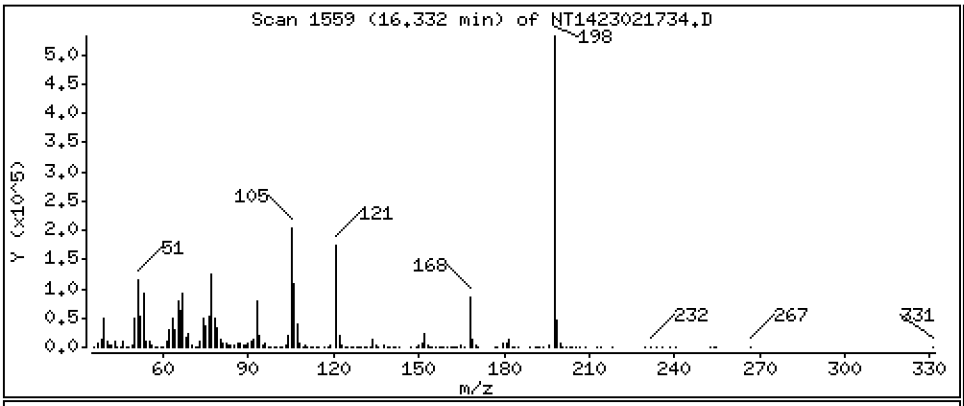
Operator: DSD

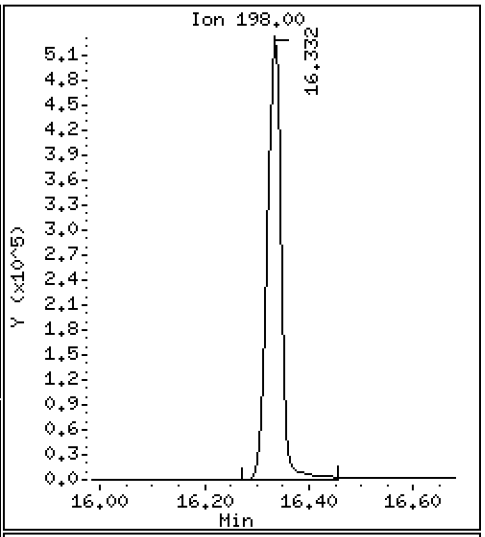
Column phase: ZB-5msi

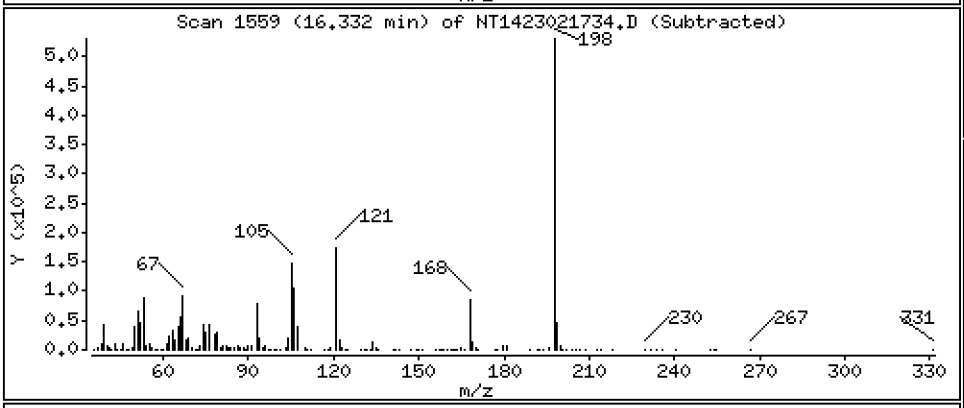
Column diameter: 0.25

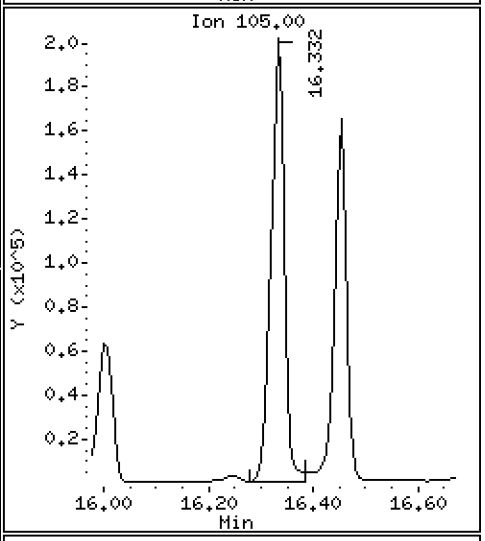
53 4,6-Dinitro-2-methylphenol

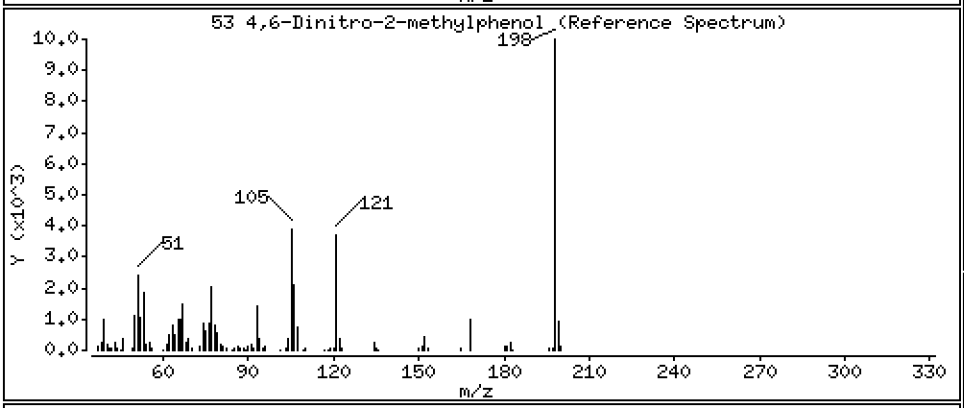
Concentration: 17.74 ug/mL

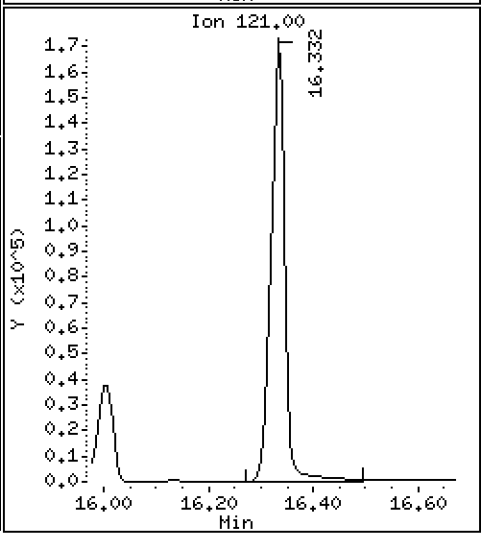


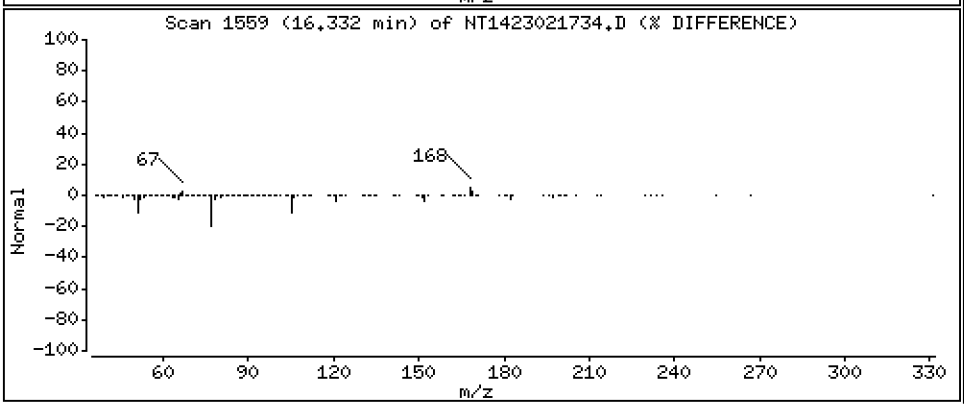












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

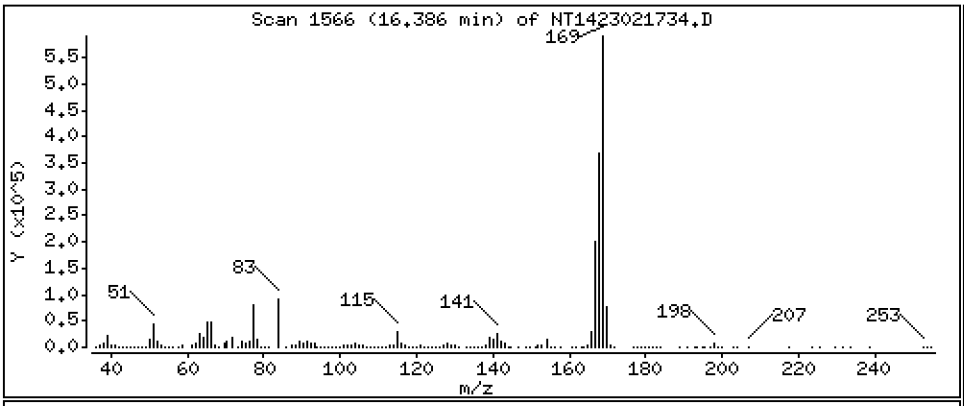
Operator: DSD

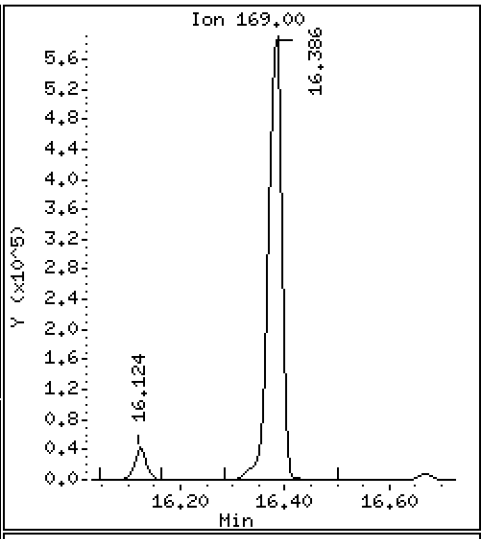
Column phase: ZB-5msi

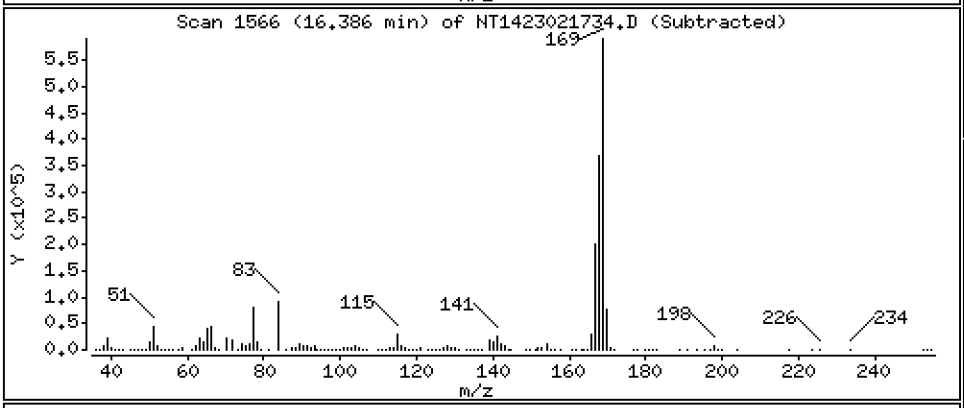
Column diameter: 0.25

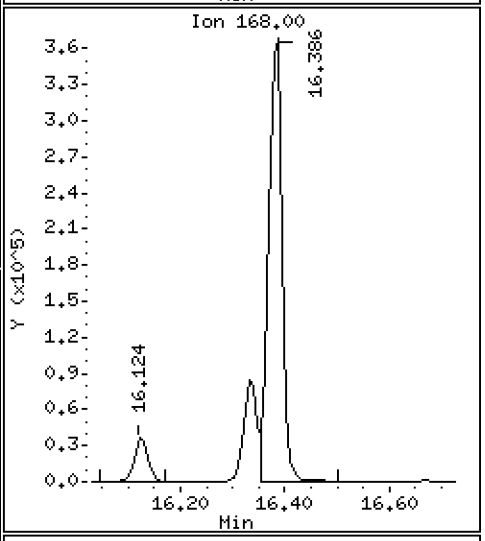
54 N-Nitrosodiphenylamine

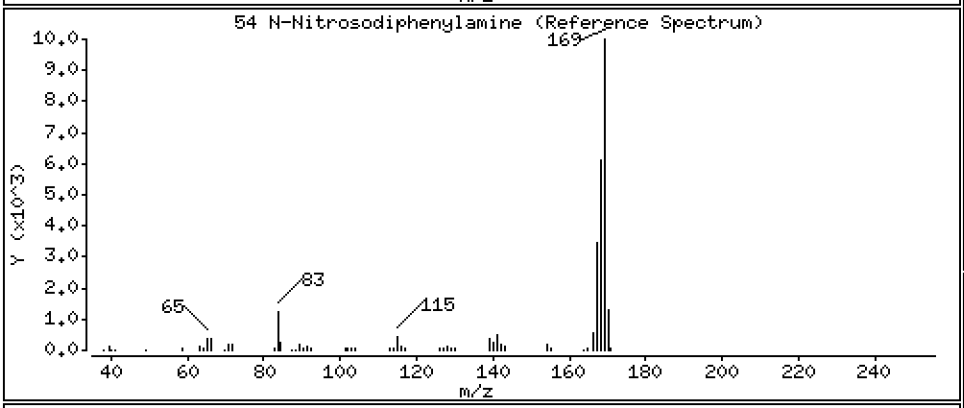
Concentration: 4.968 ug/mL

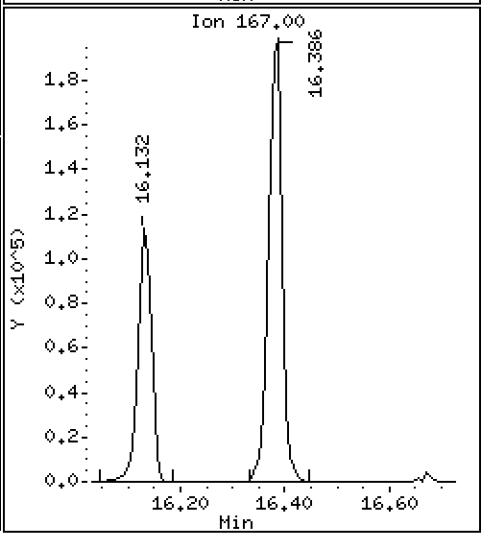


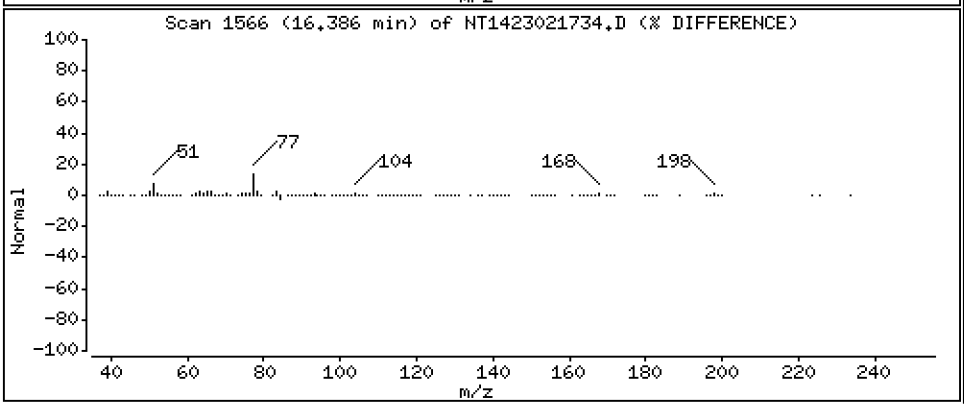












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

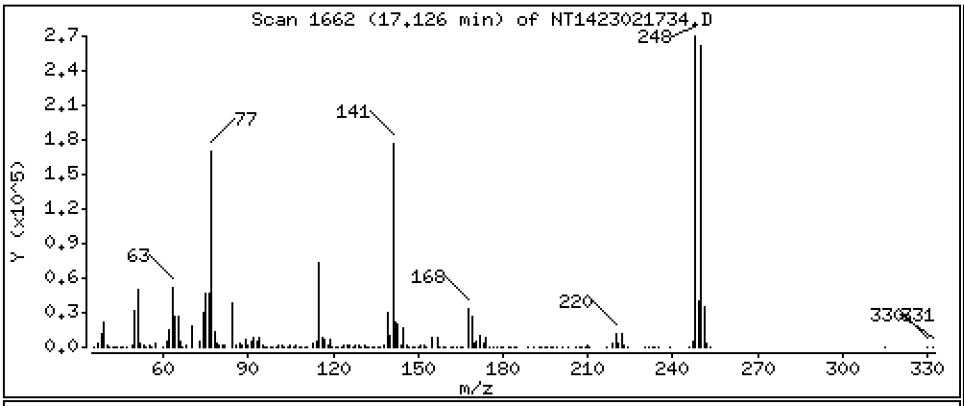
Operator: DSD

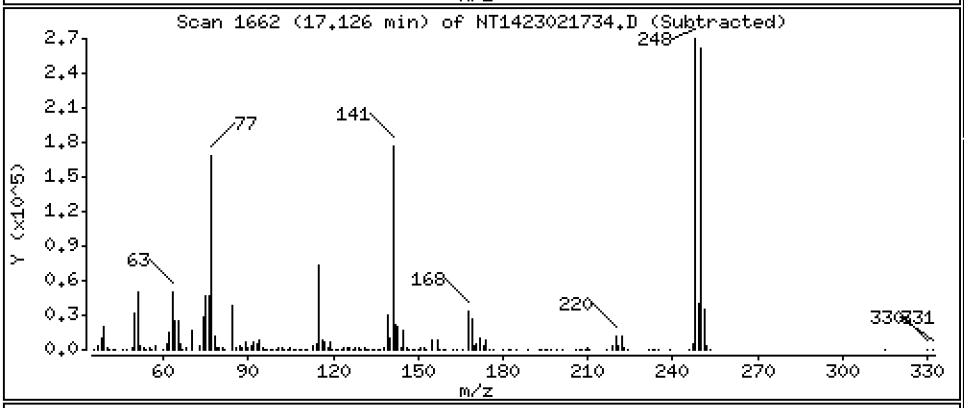
Column phase: ZB-5msi

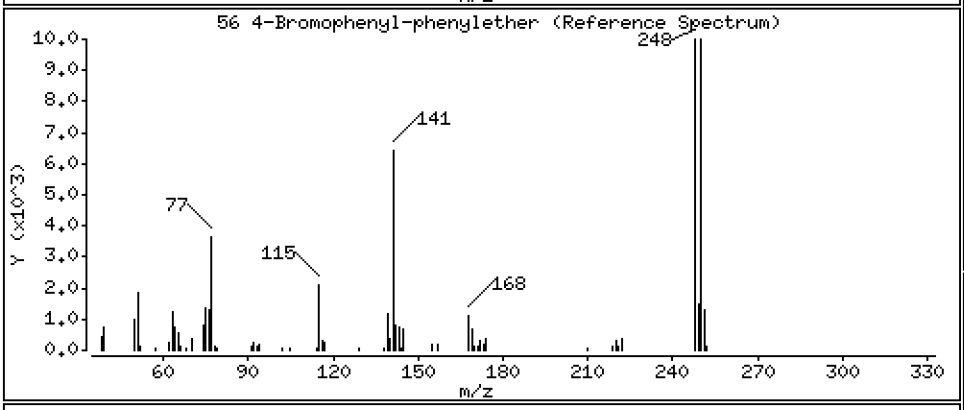
Column diameter: 0.25

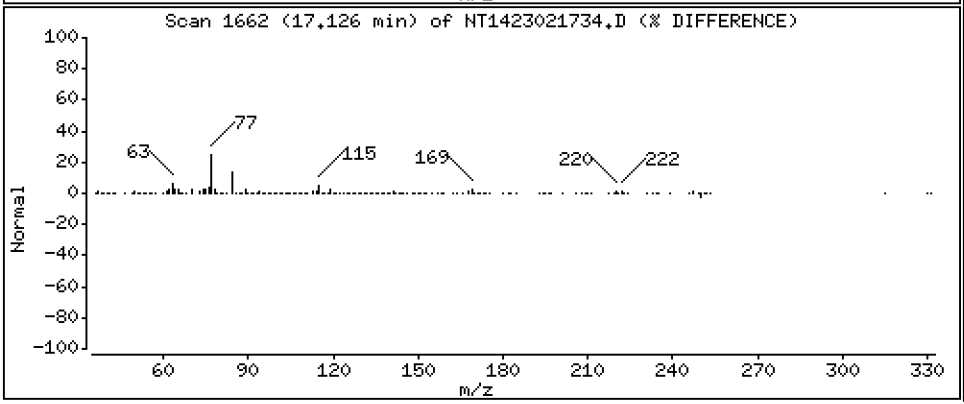
56 4-Bromophenyl-phenylether

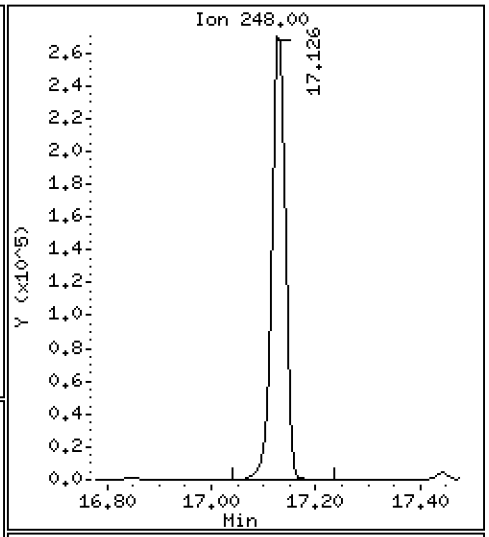
Concentration: 5.134 ug/mL

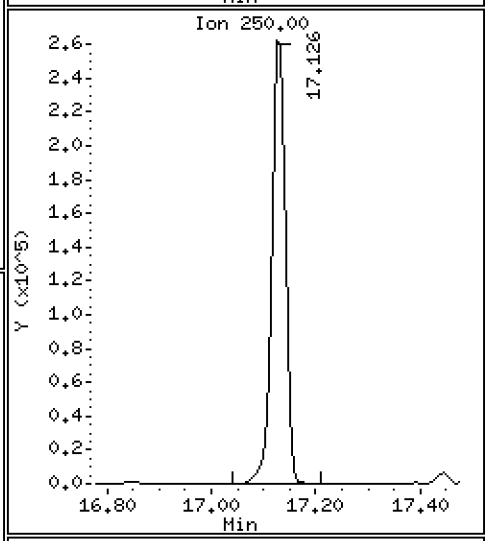


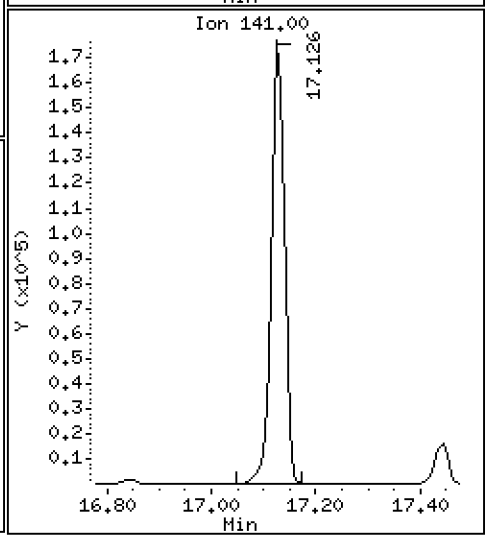












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

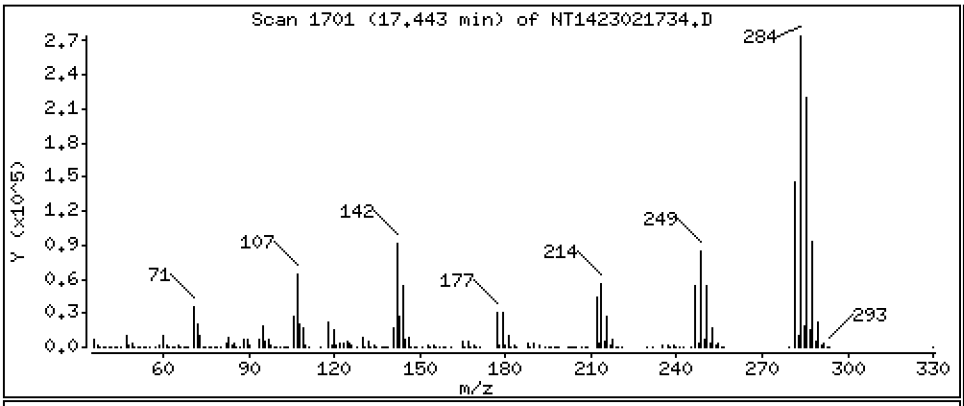
Operator: DSD

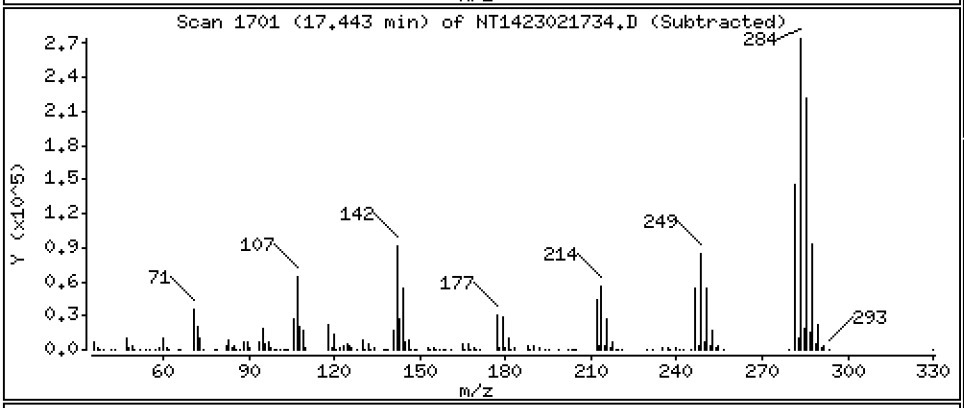
Column phase: ZB-5msi

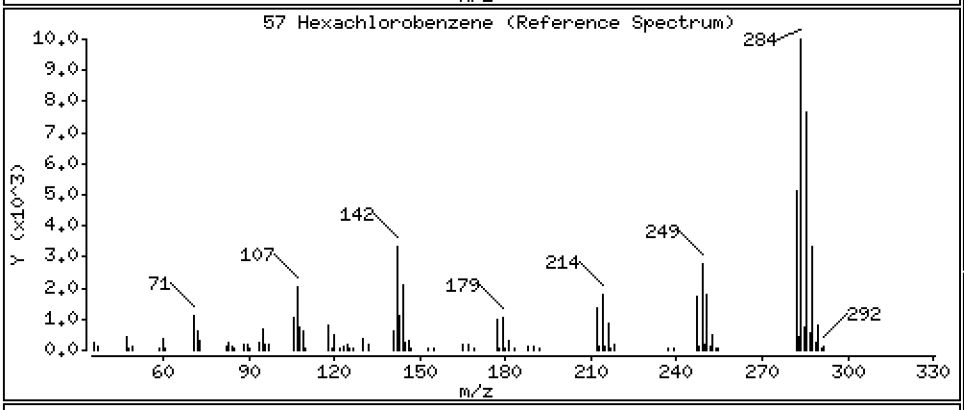
Column diameter: 0.25

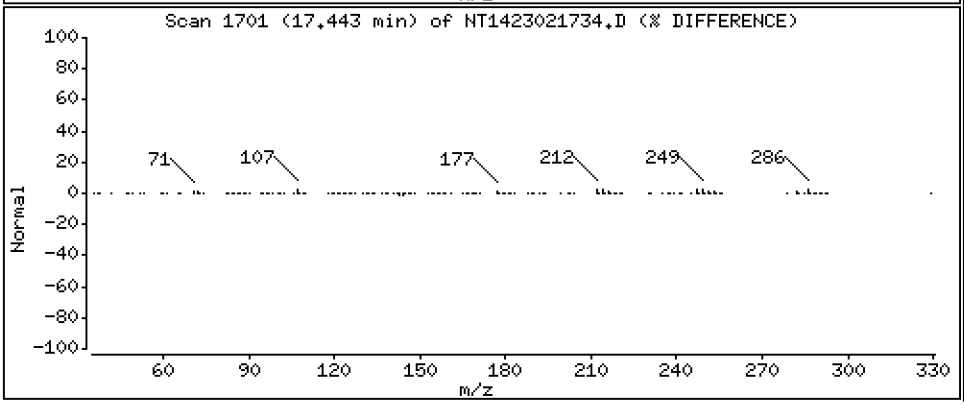
57 Hexachlorobenzene

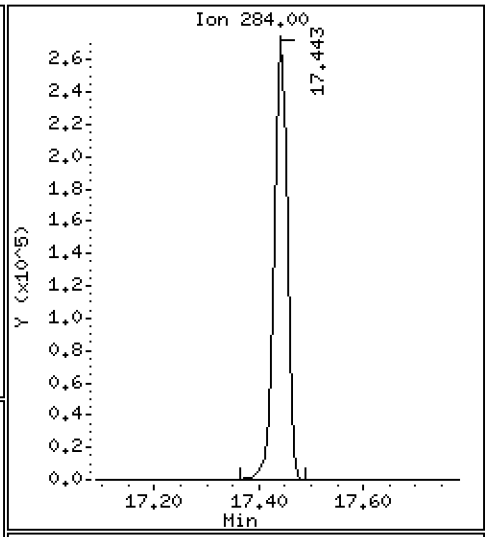
Concentration: 4.852 ug/mL

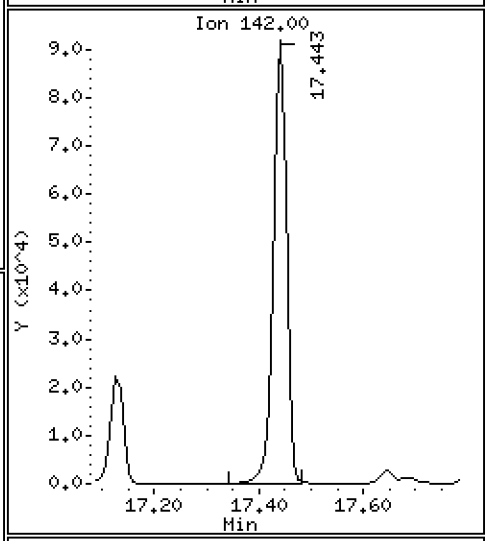


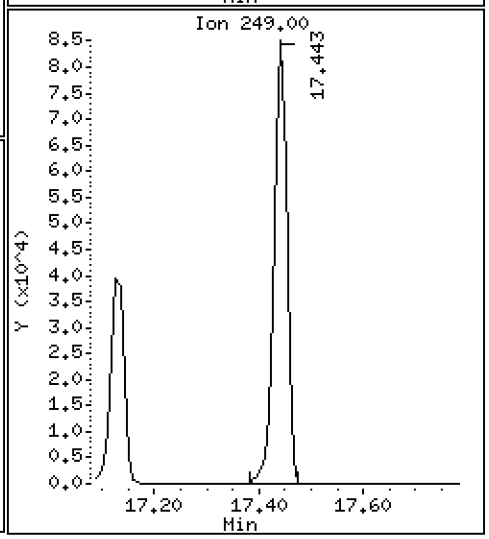












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

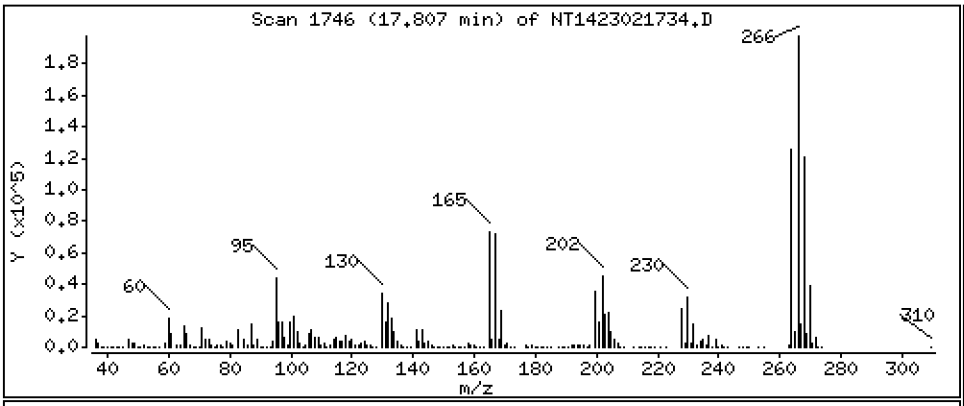
Operator: DSD

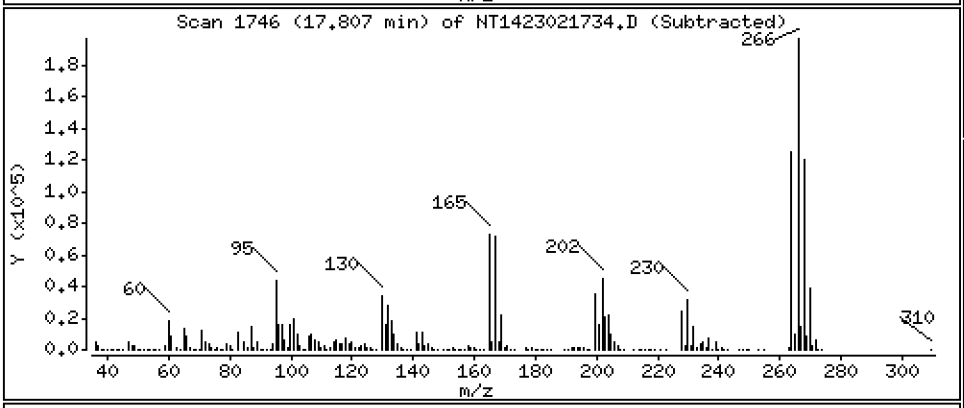
Column phase: ZB-5msi

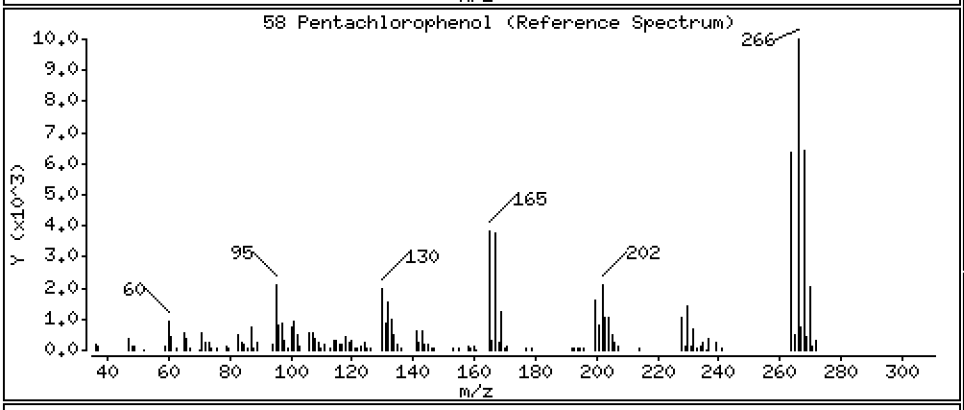
Column diameter: 0.25

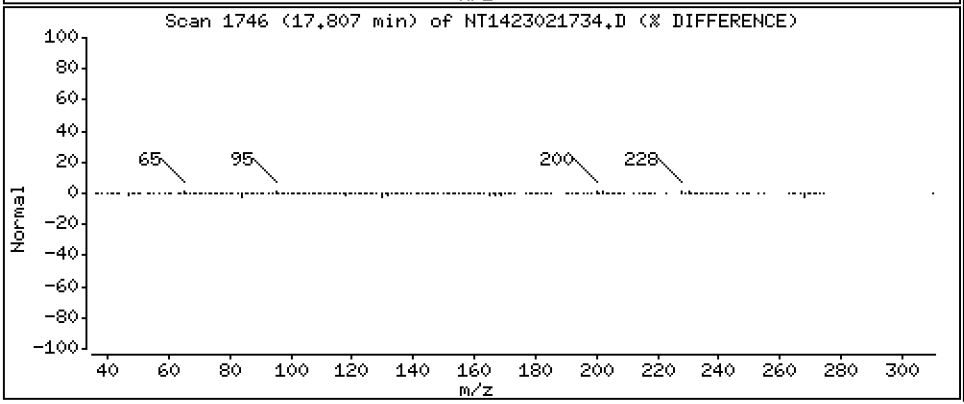
58 Pentachlorophenol

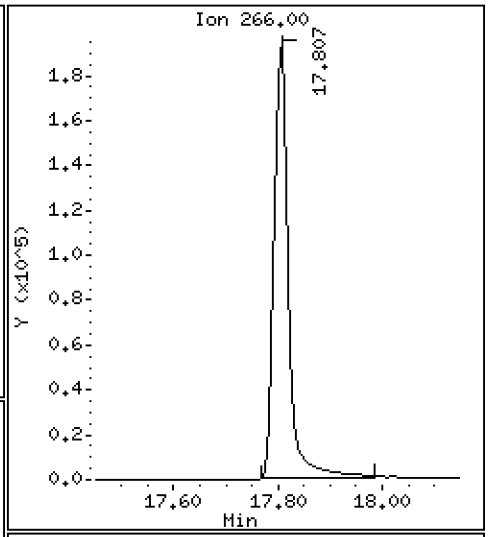
Concentration: 7.895 ug/mL

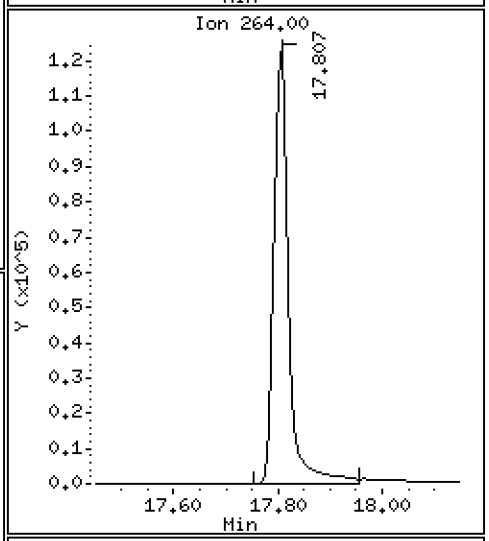


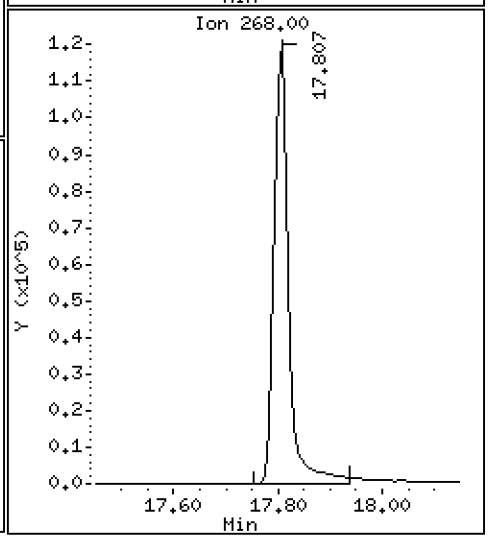












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

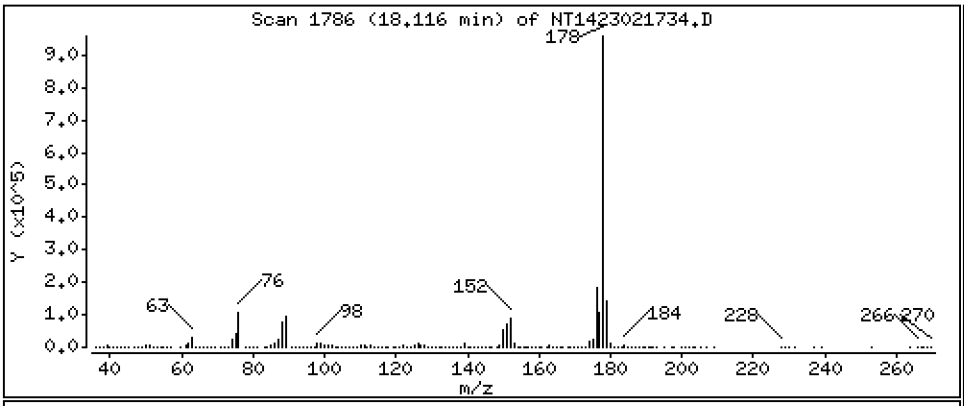
Operator: DSD

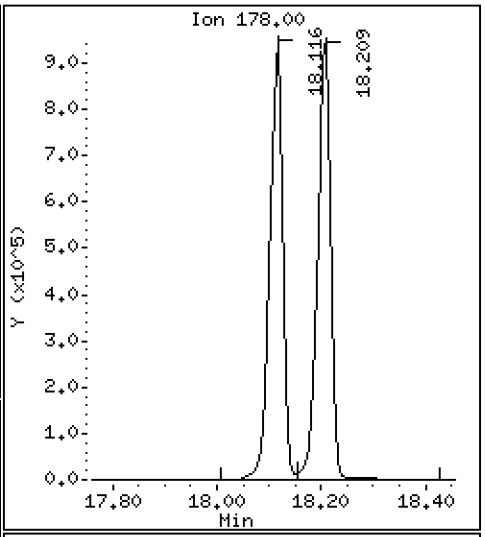
Column phase: ZB-5msi

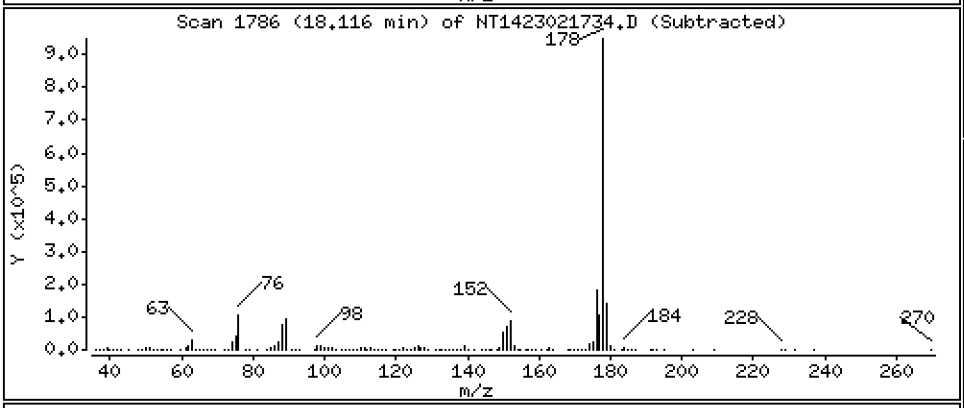
Column diameter: 0.25

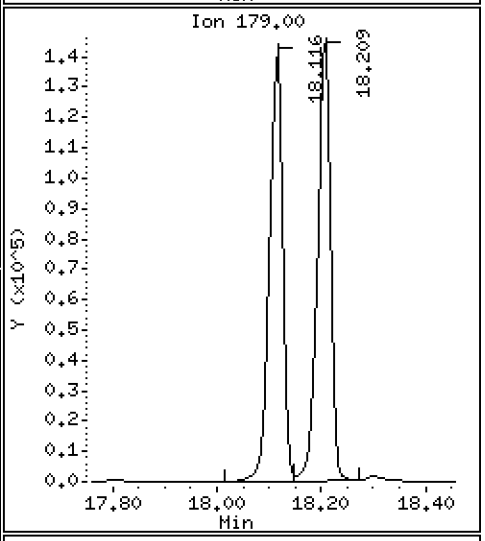
60 Phenanthrene

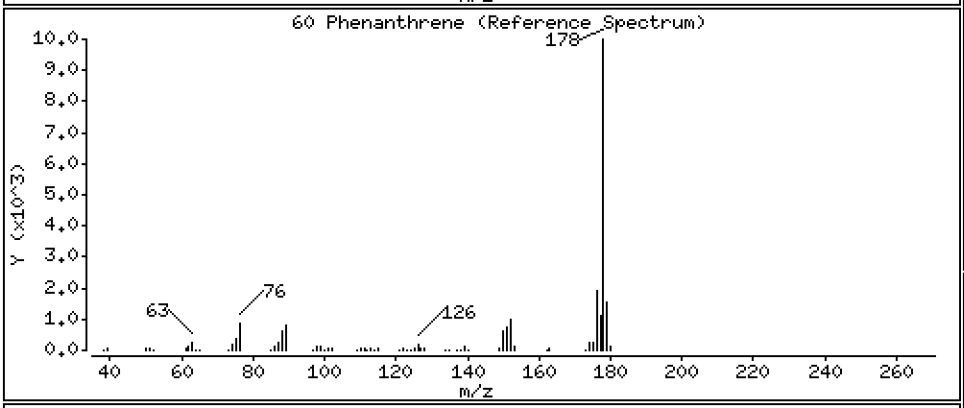
Concentration: 4.632 ug/mL

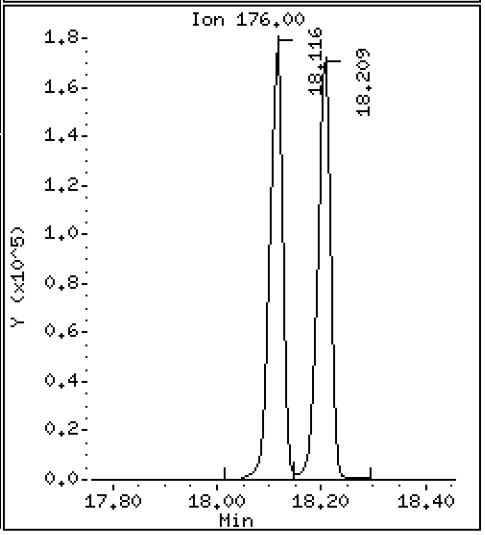


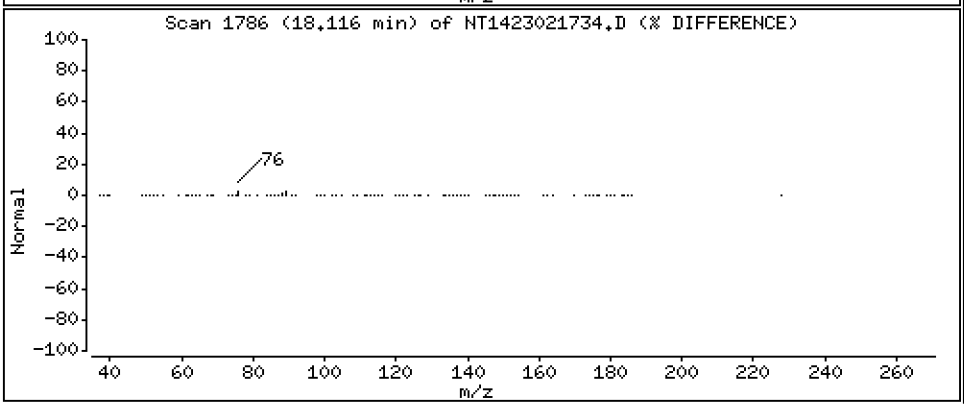












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

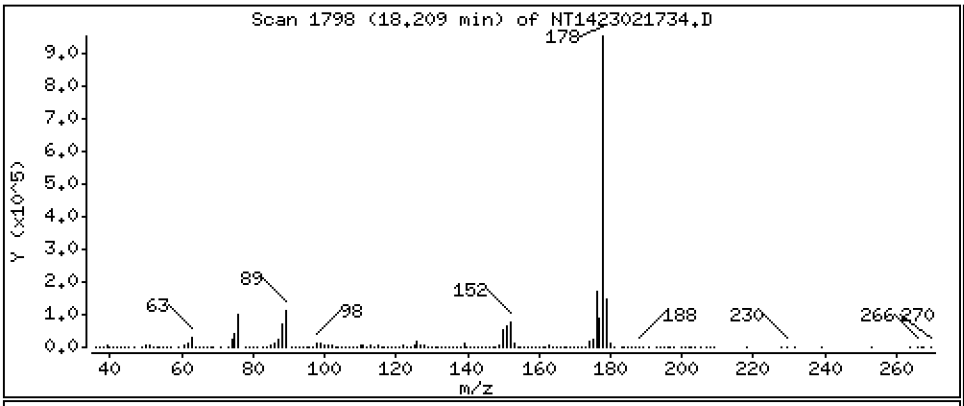
Operator: DSD

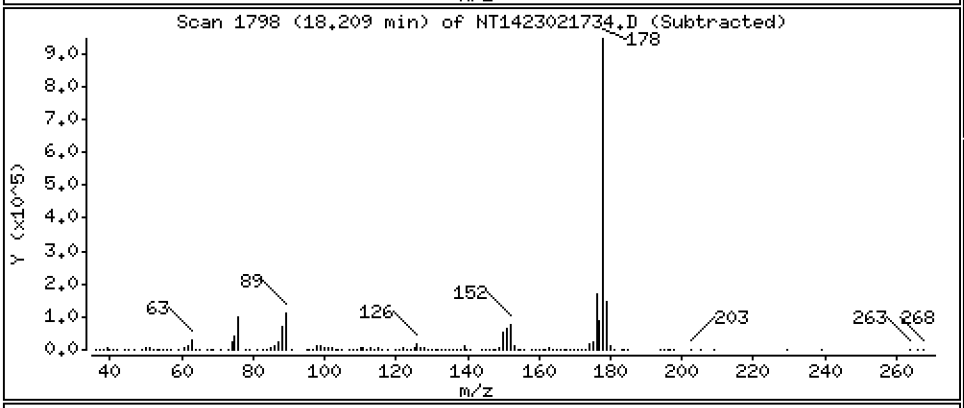
Column phase: ZB-5msi

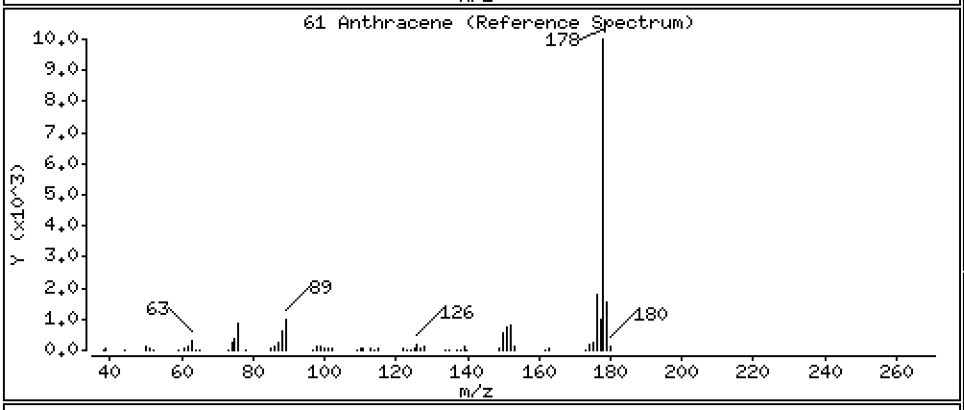
Column diameter: 0.25

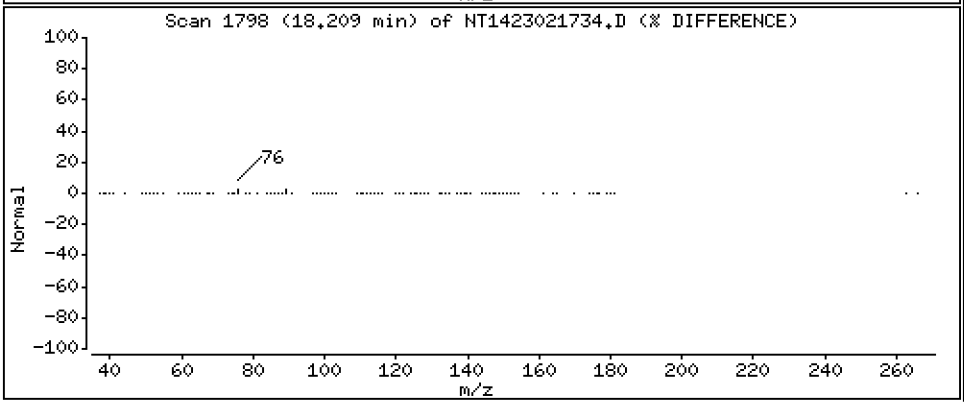
61 Anthracene

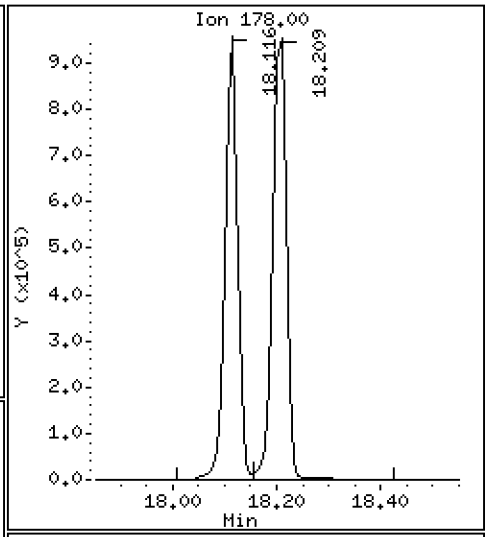
Concentration: 4.931 ug/mL

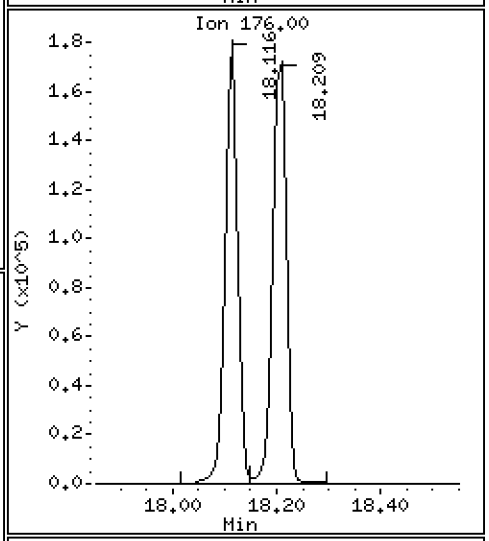


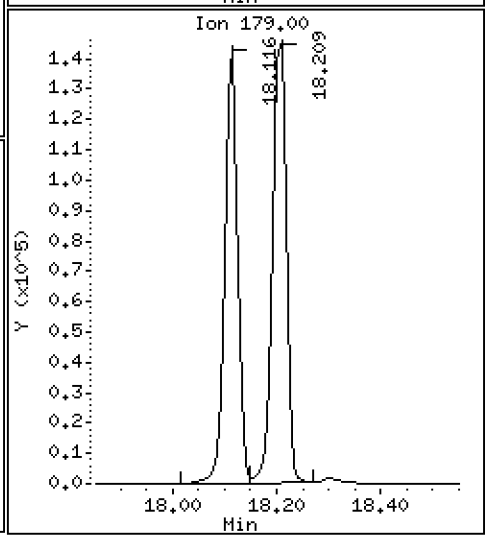












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

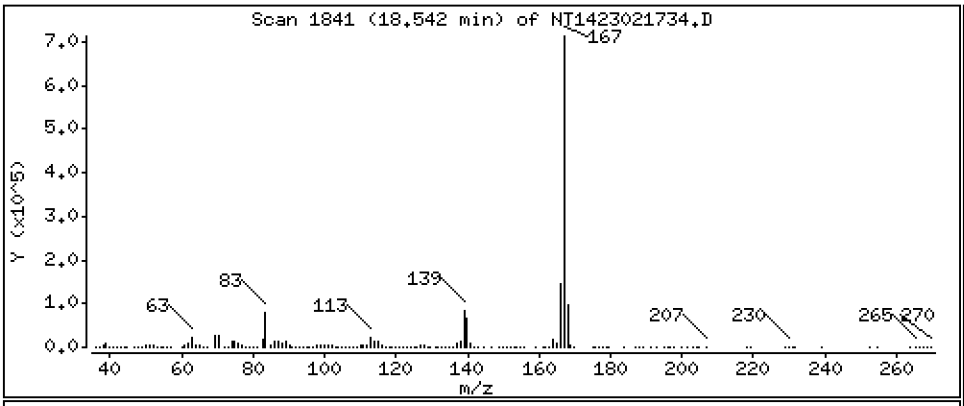
Operator: DSD

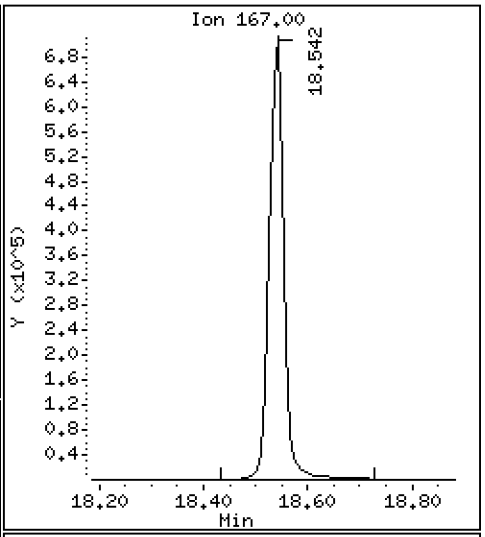
Column phase: ZB-5msi

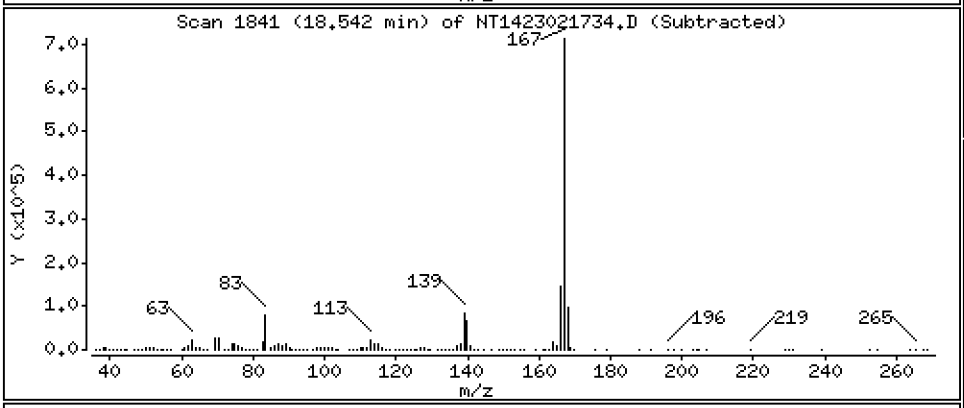
Column diameter: 0.25

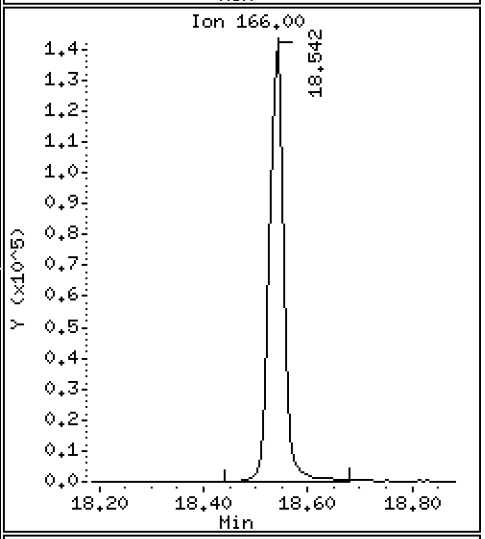
62 Carbazole

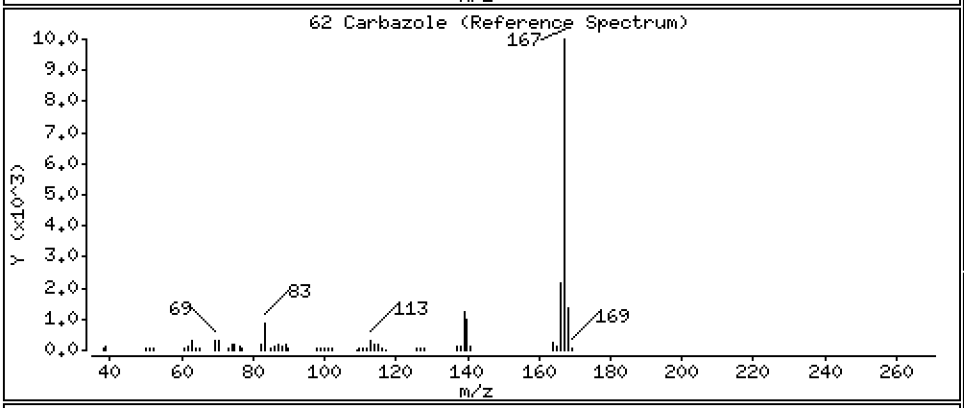
Concentration: 4.340 ug/mL

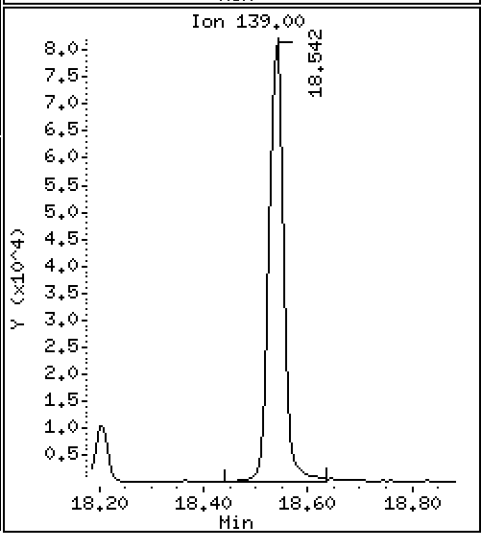


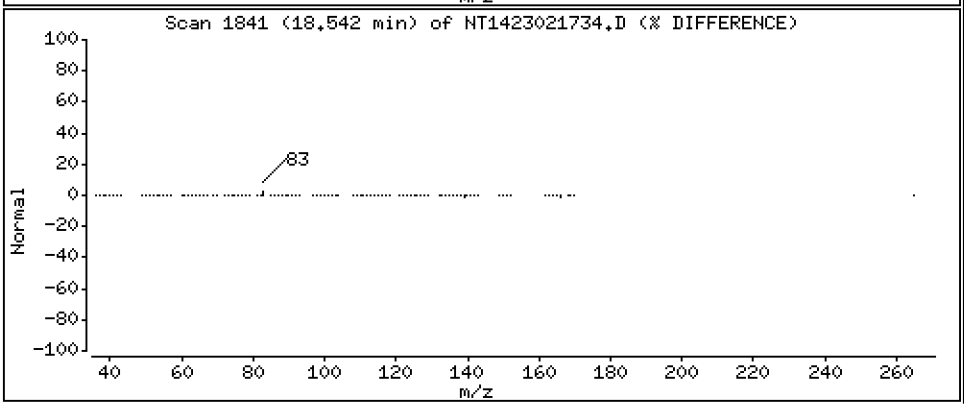












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

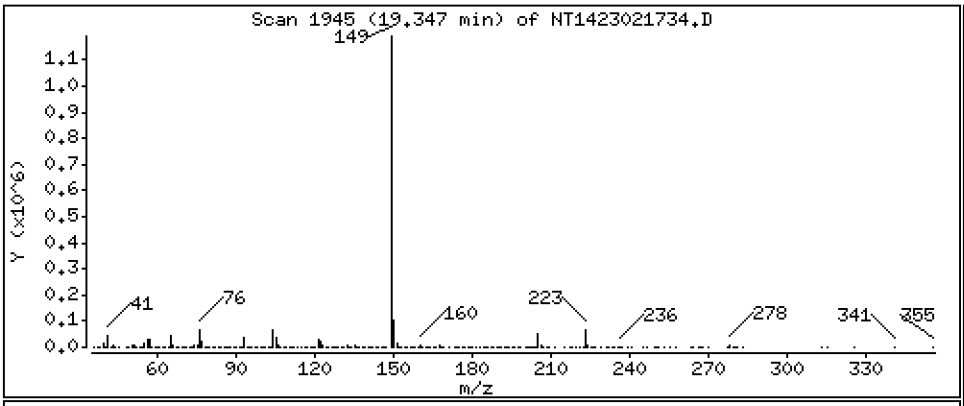
Operator: DSD

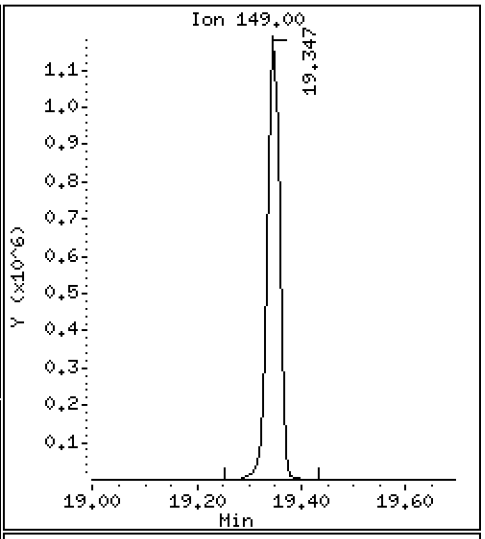
Column phase: ZB-5msi

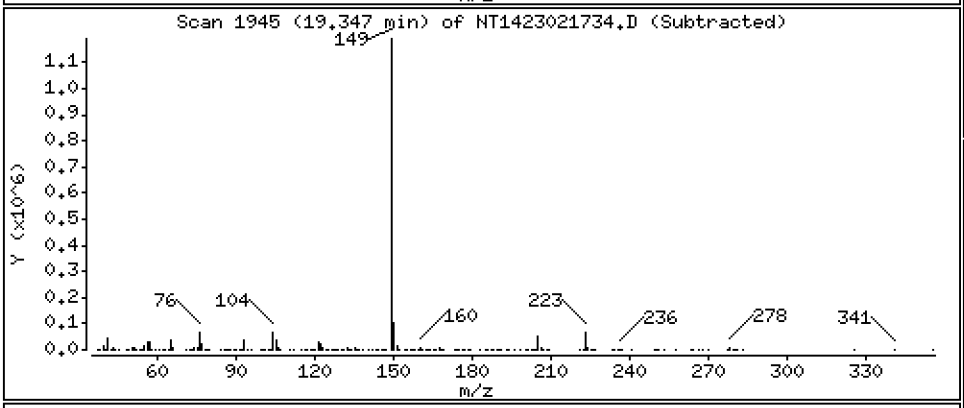
Column diameter: 0.25

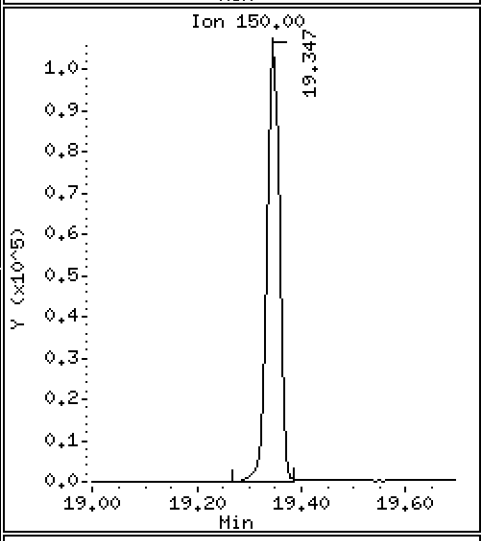
63 Di-n-butylphthalate

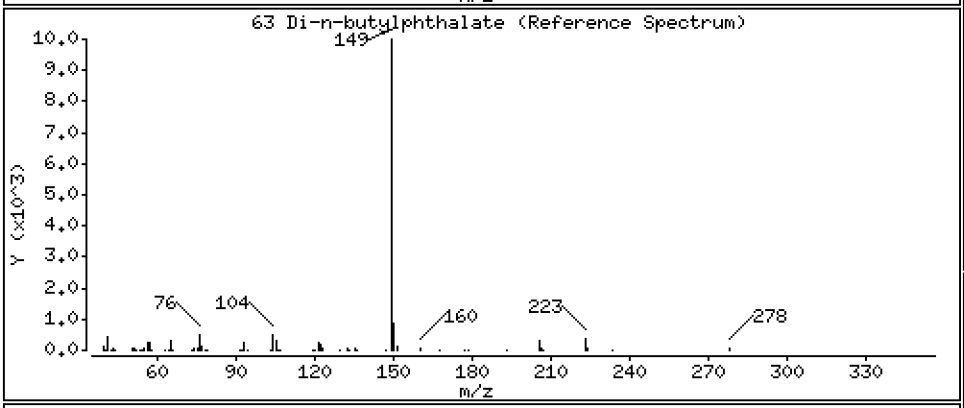
Concentration: 5.363 ug/mL

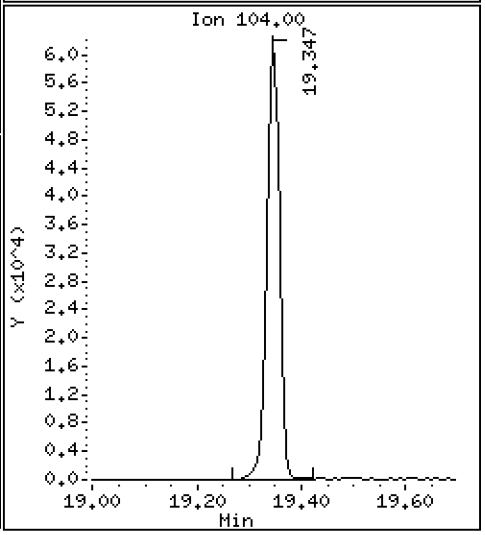


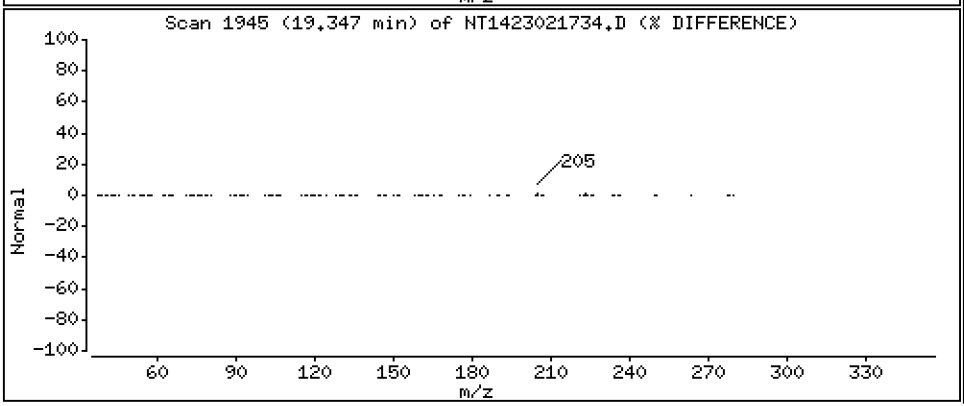












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

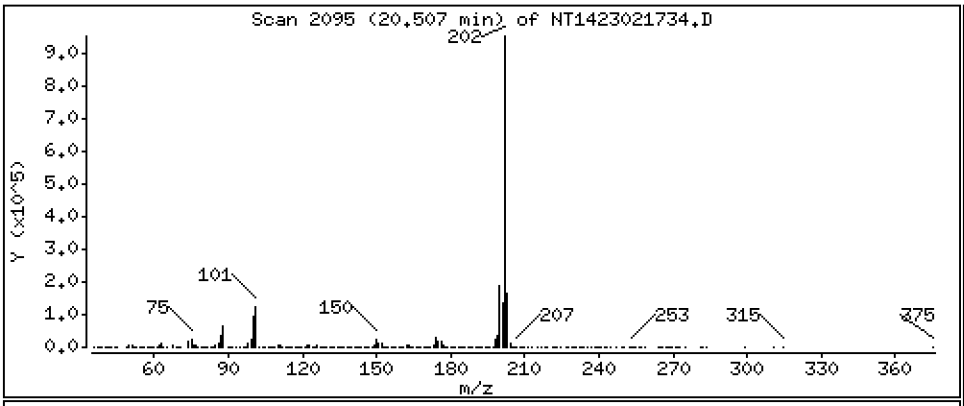
Operator: DSD

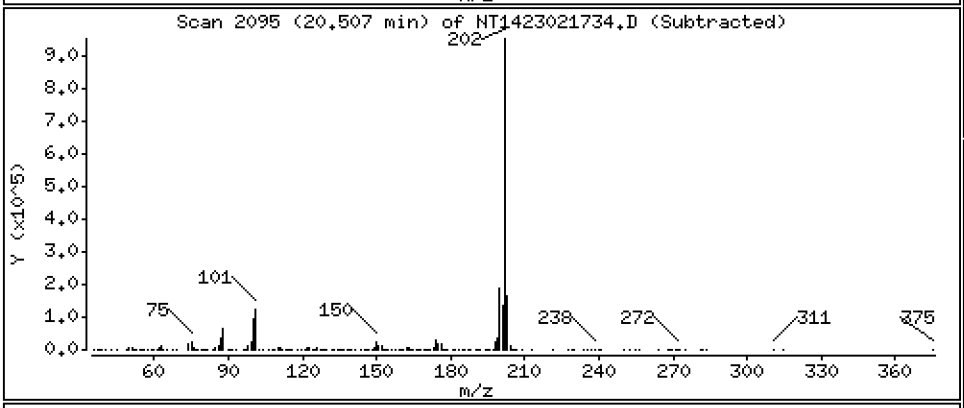
Column phase: ZB-5msi

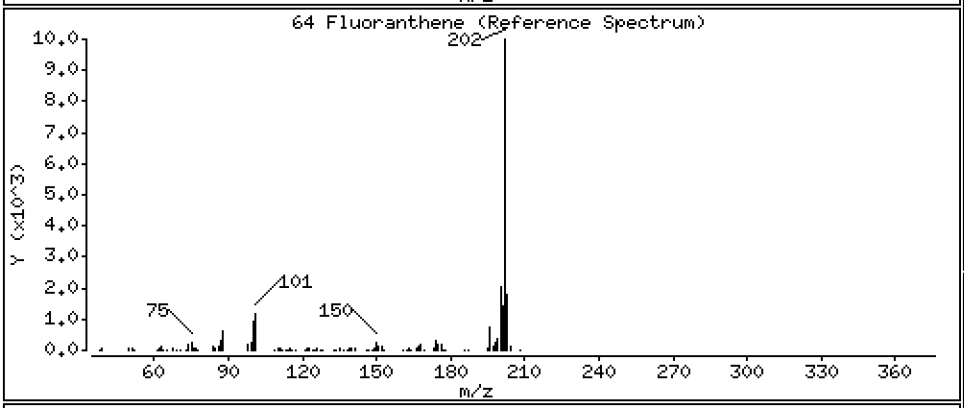
Column diameter: 0.25

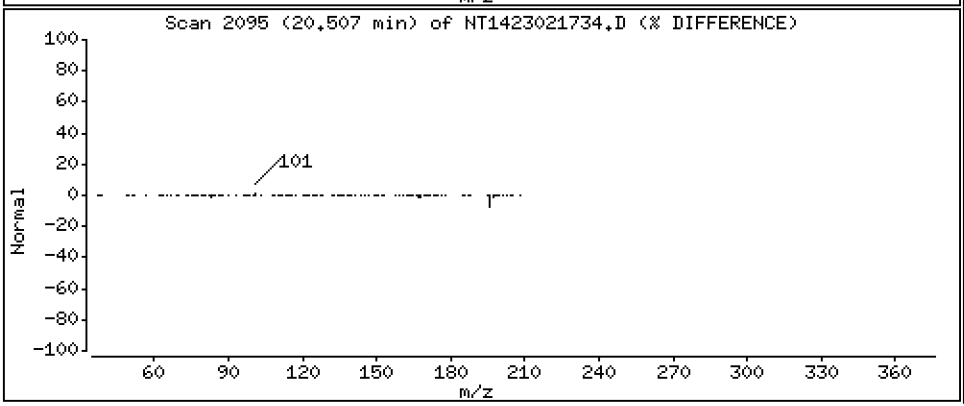
64 Fluoranthene

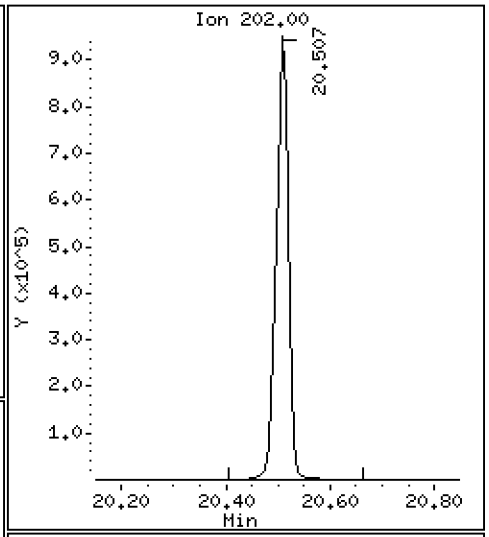
Concentration: 5.692 ug/mL

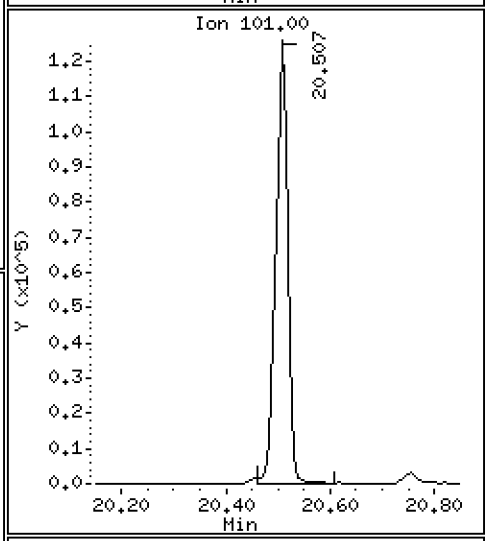


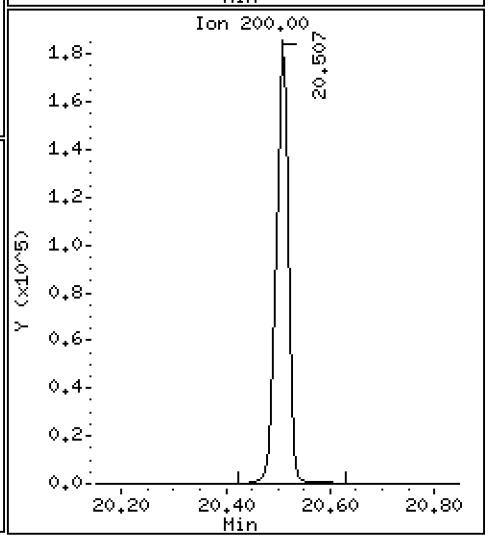












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021734.D

Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

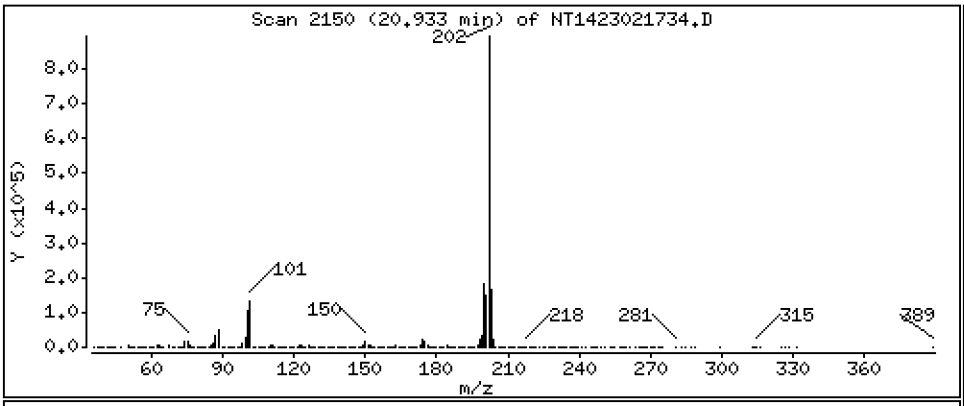
Operator: DSD

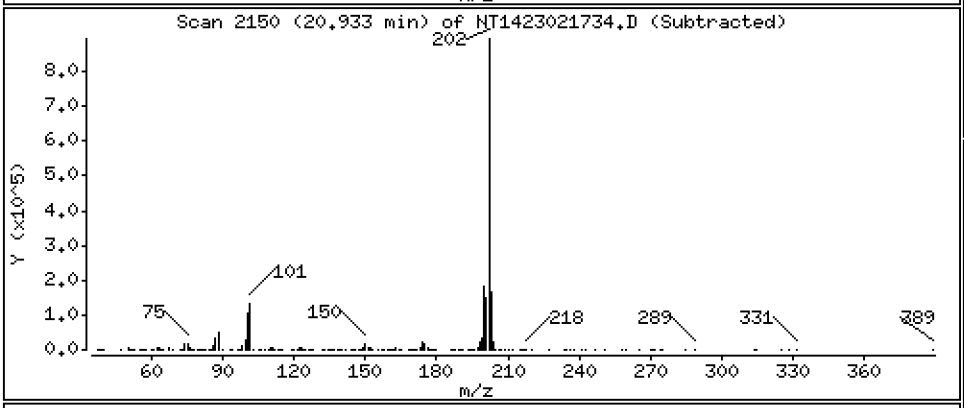
Column phase: ZB-5msi

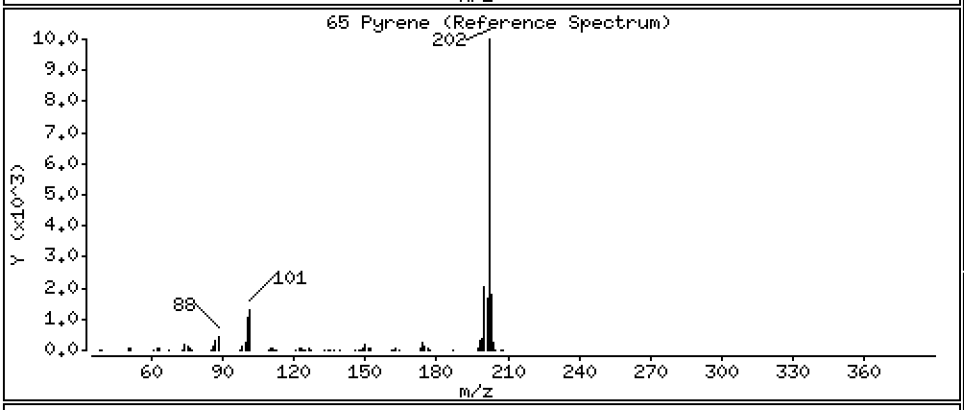
Column diameter: 0.25

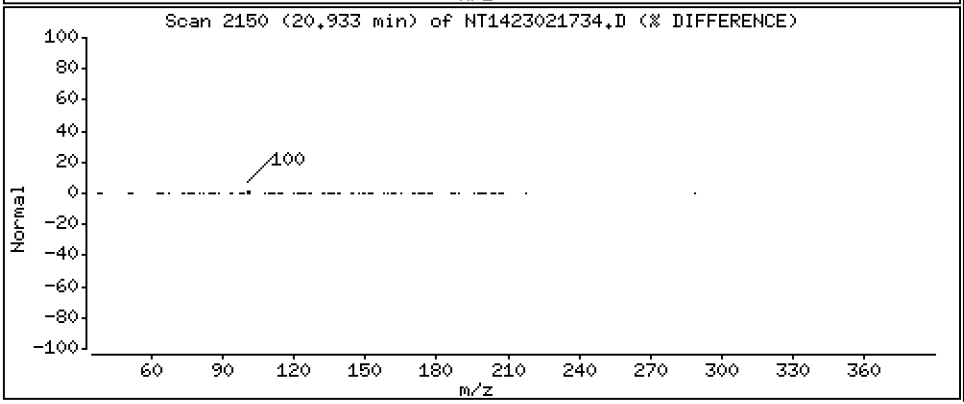
65 Pyrene

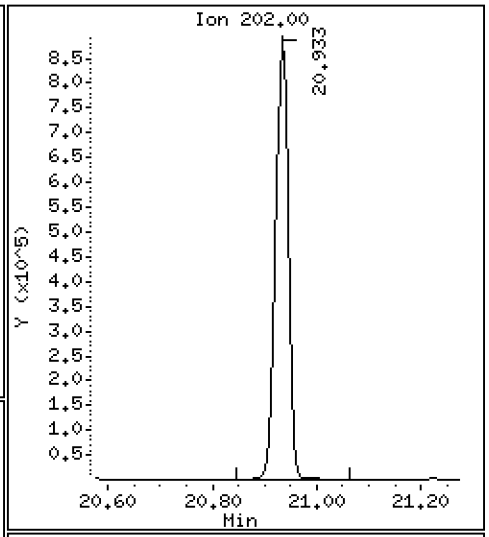
Concentration: 5.481 ug/mL

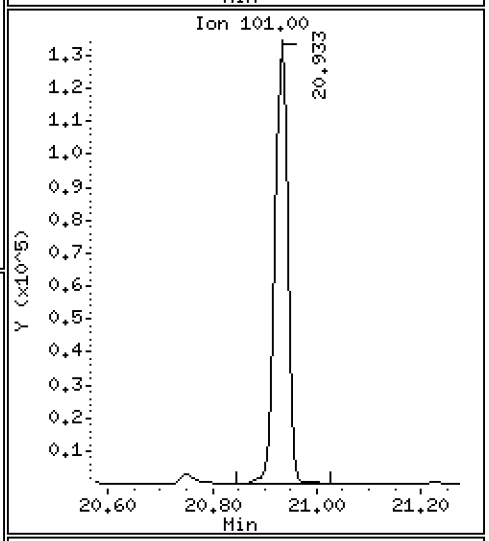


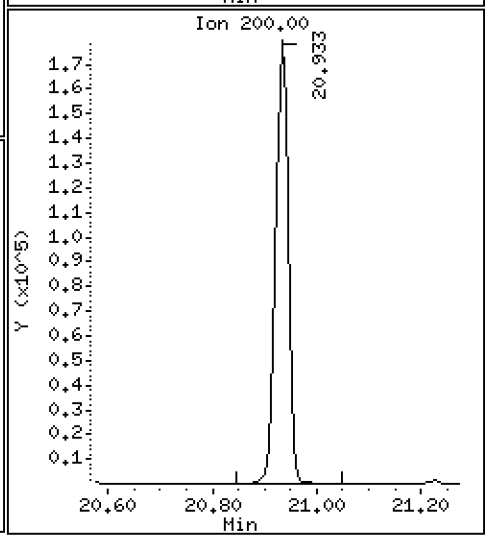












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

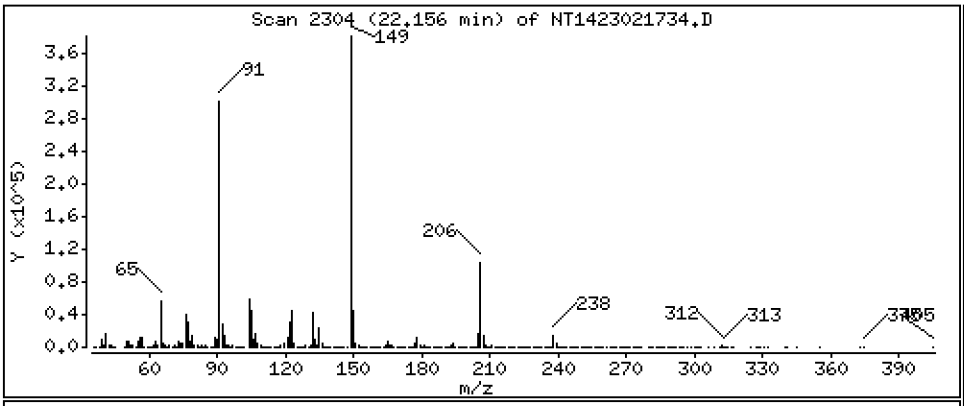
Operator: DSD

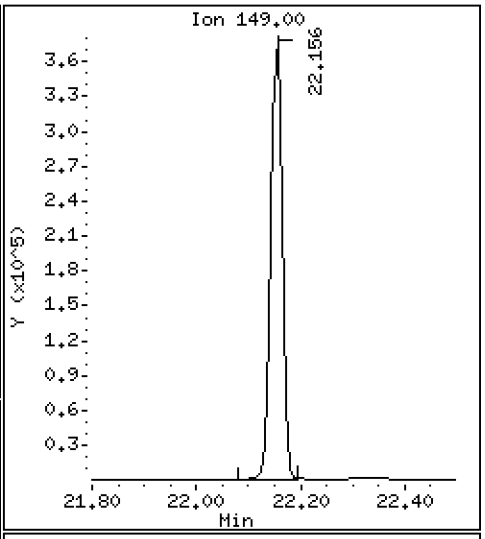
Column phase: ZB-5msi

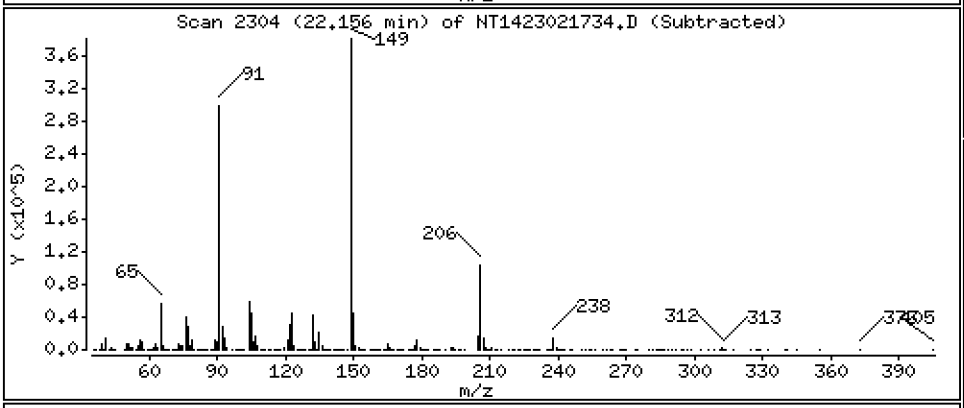
Column diameter: 0.25

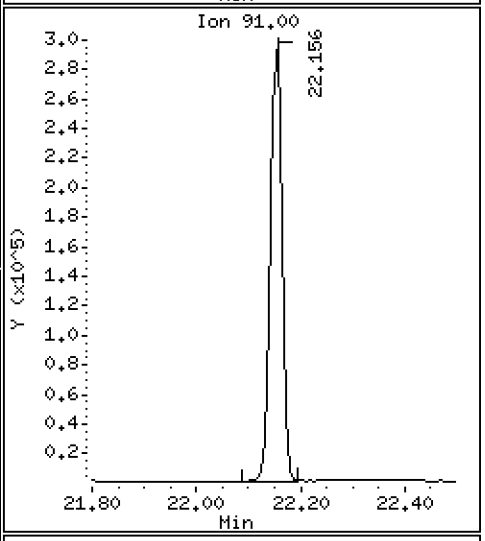
67 Butylbenzylphthalate

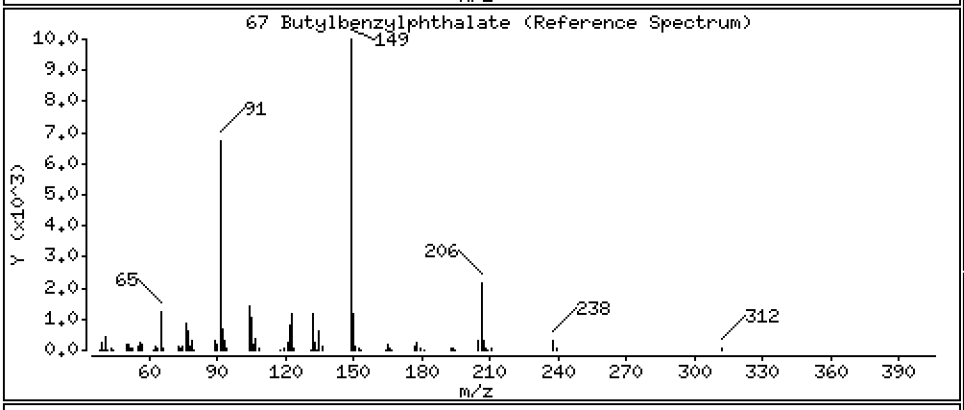
Concentration: 5.727 ug/mL

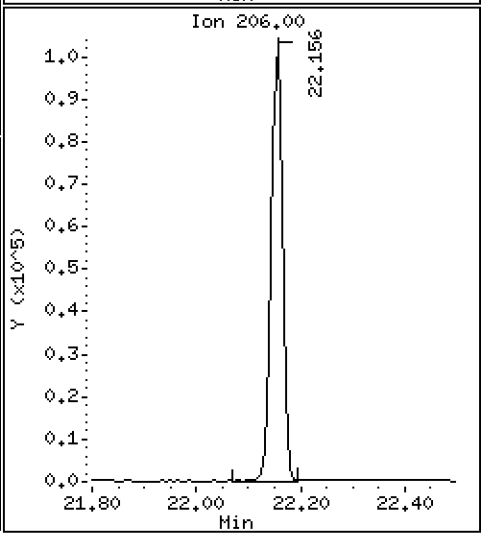


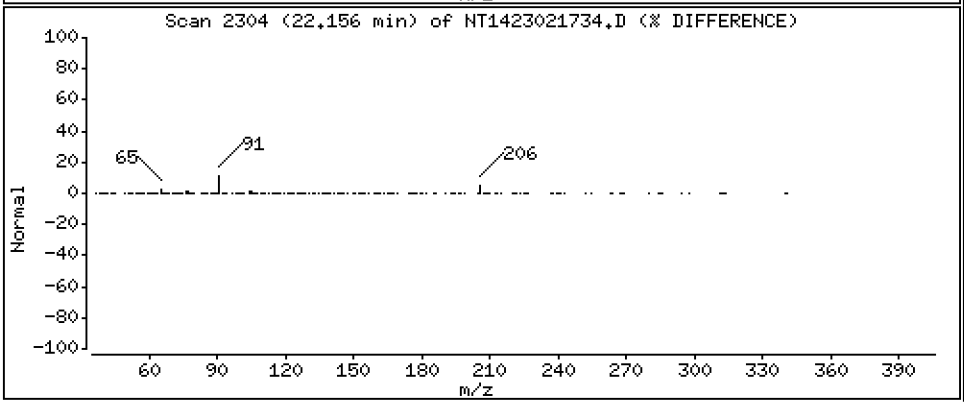












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

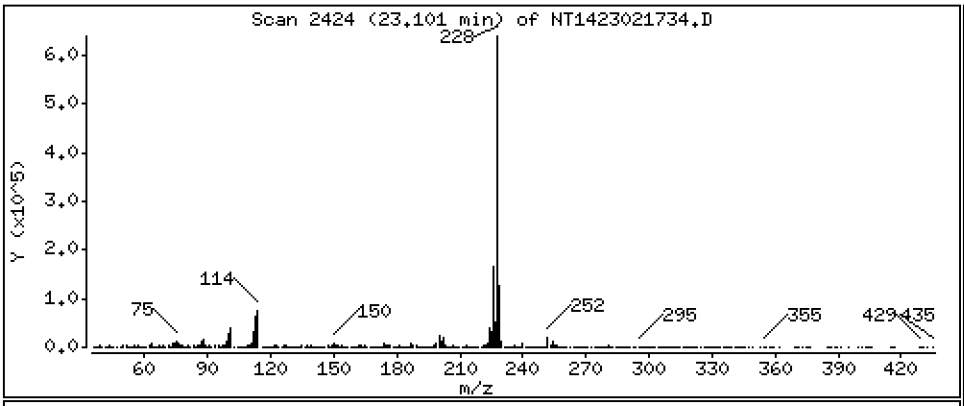
Operator: DSD

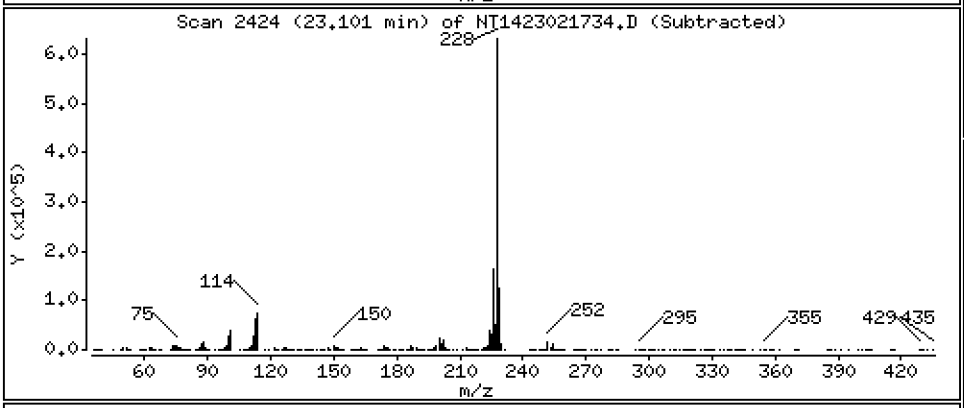
Column phase: ZB-5msi

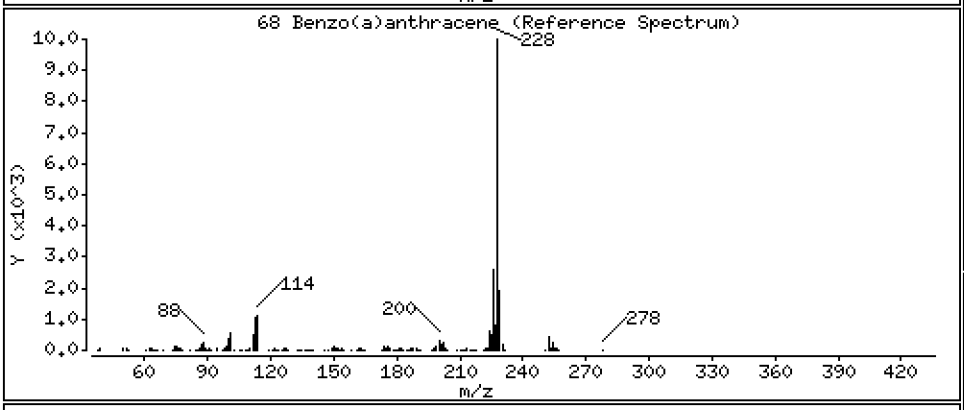
Column diameter: 0.25

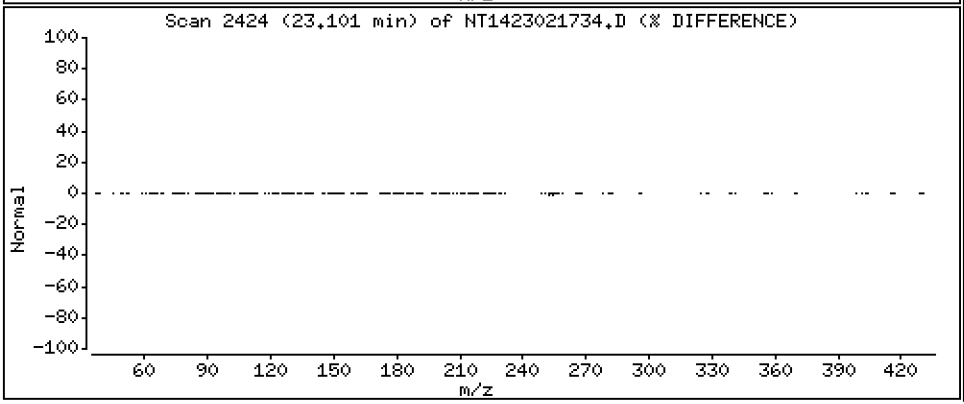
68 Benzo(a)anthracene

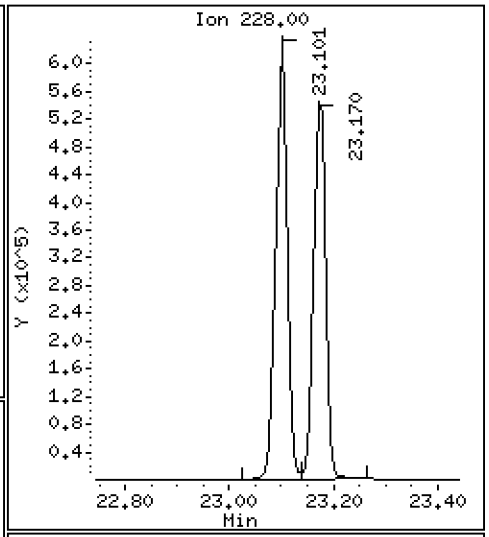
Concentration: 4.712 ug/mL

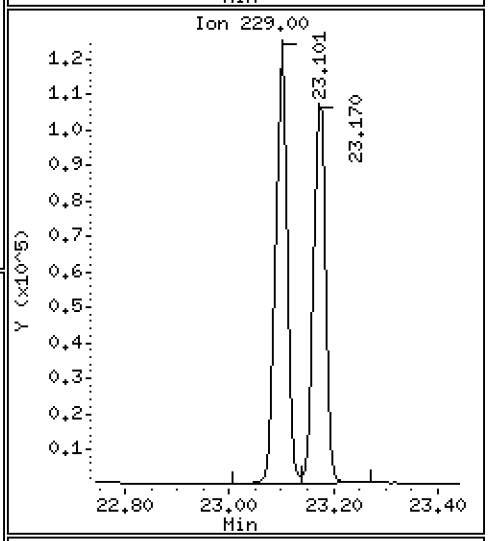


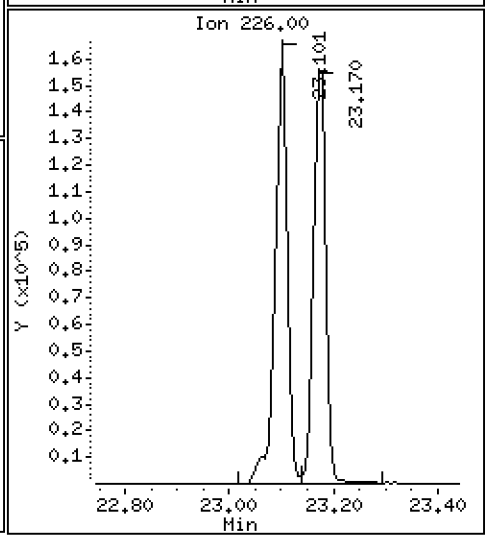












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

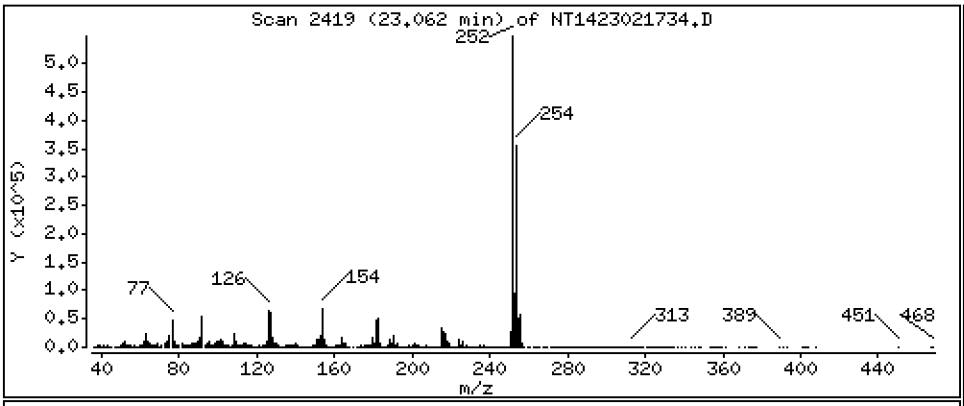
Operator: DSD

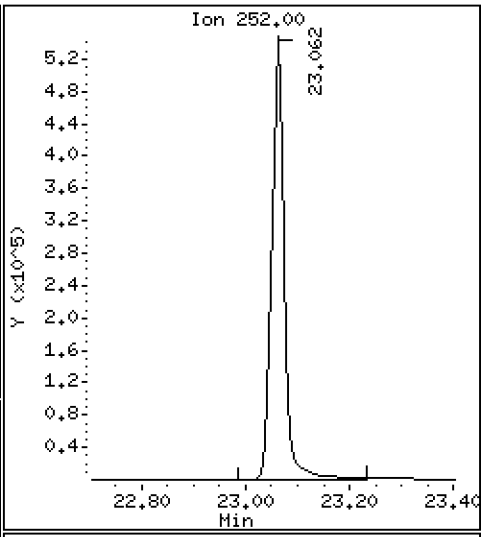
Column phase: ZB-5msi

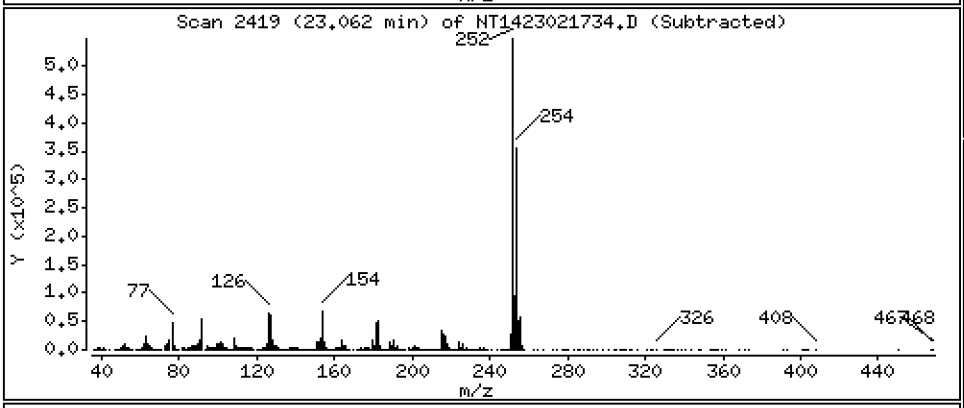
Column diameter: 0.25

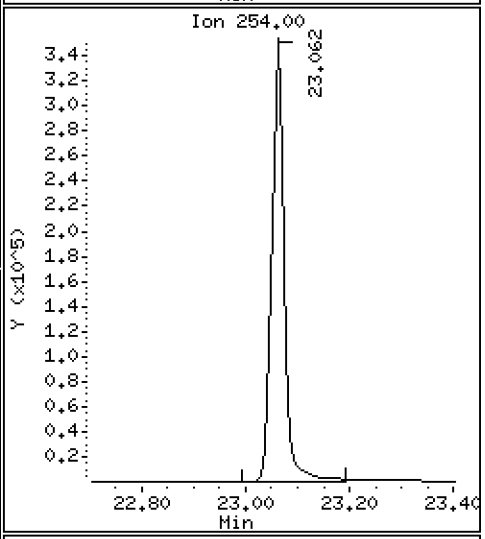
70 3,3'-Dichlorobenzidine

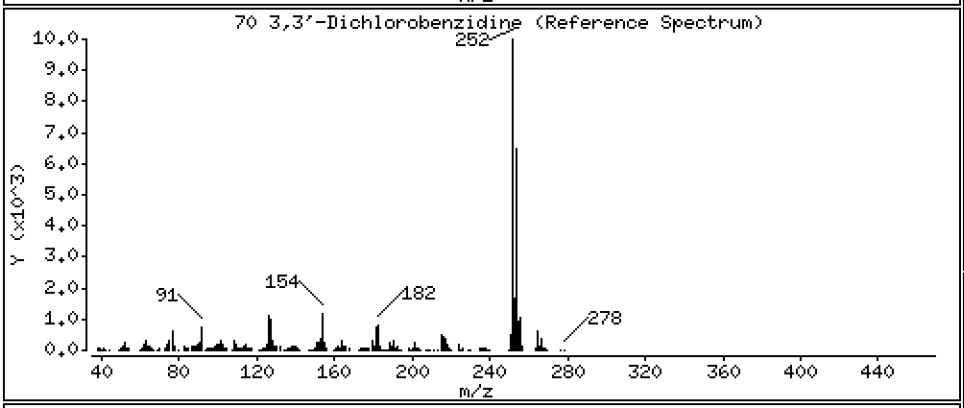
Concentration: 14.44 ug/mL

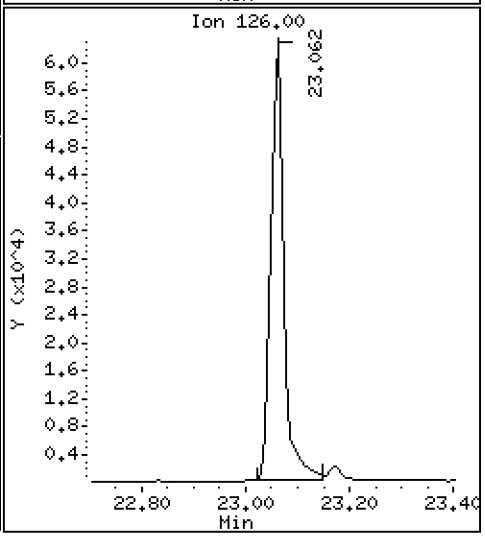


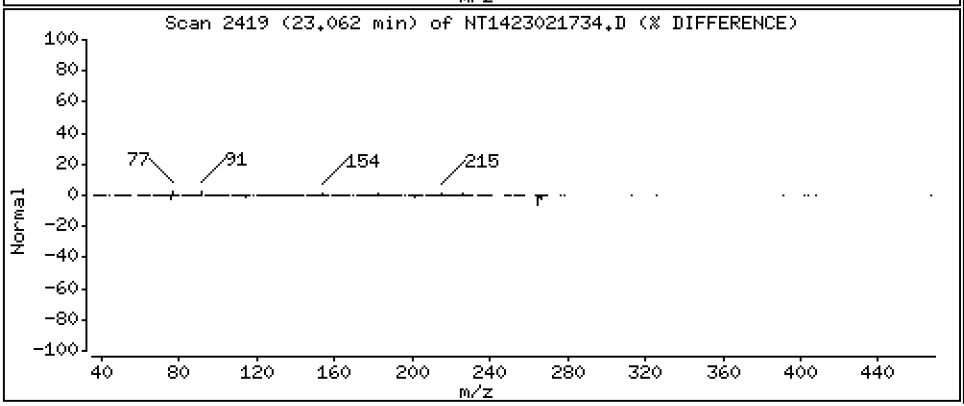












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

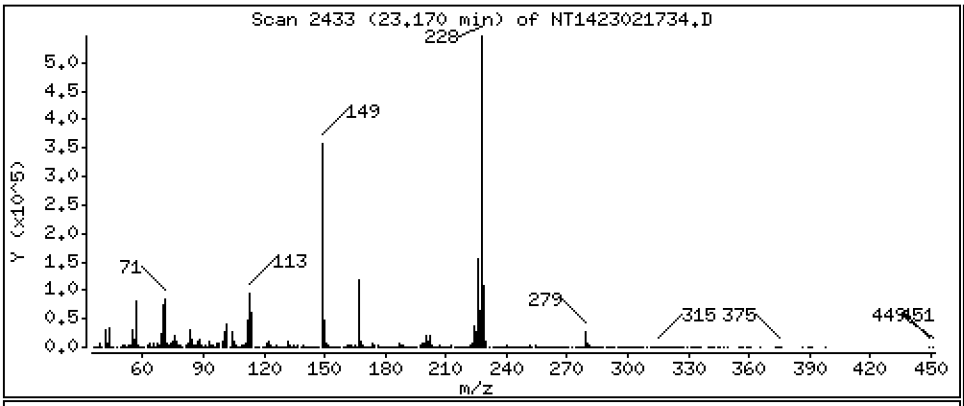
Operator: DSD

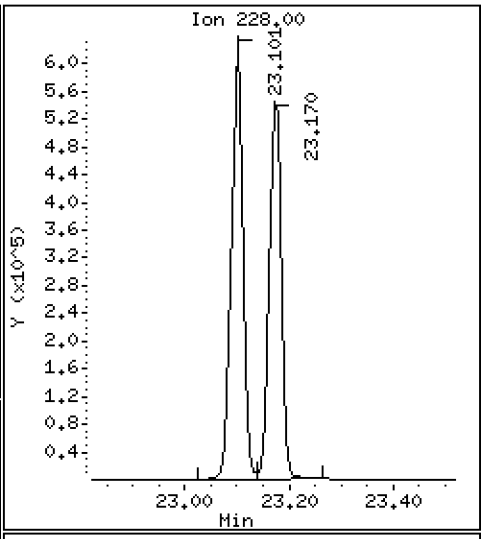
Column phase: ZB-5msi

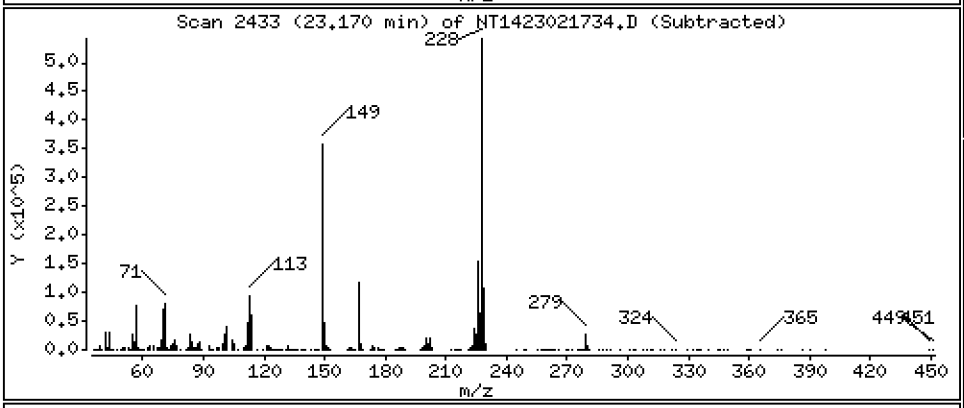
Column diameter: 0.25

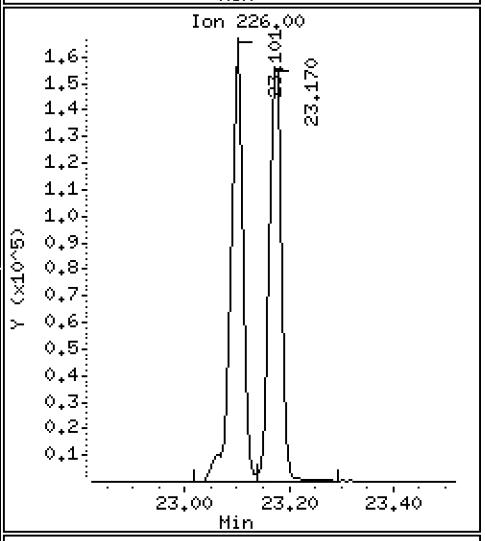
71 Chrysene

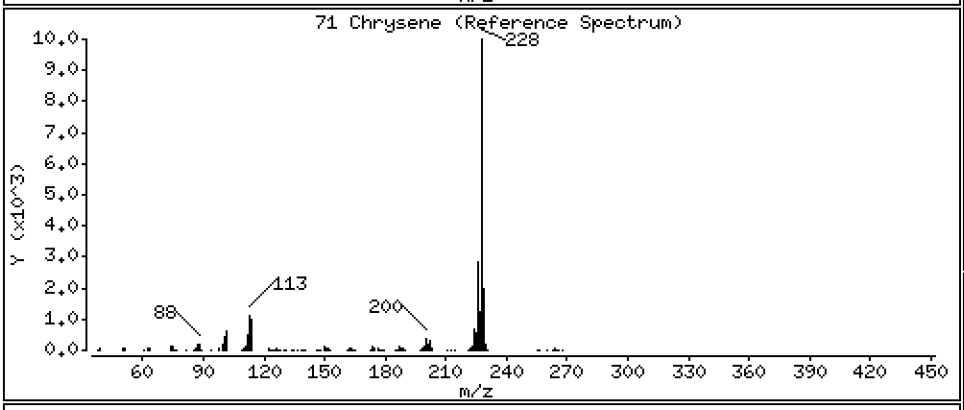
Concentration: 4.659 ug/mL

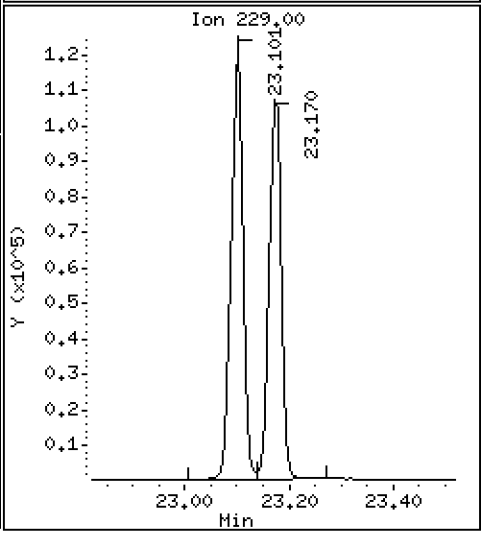


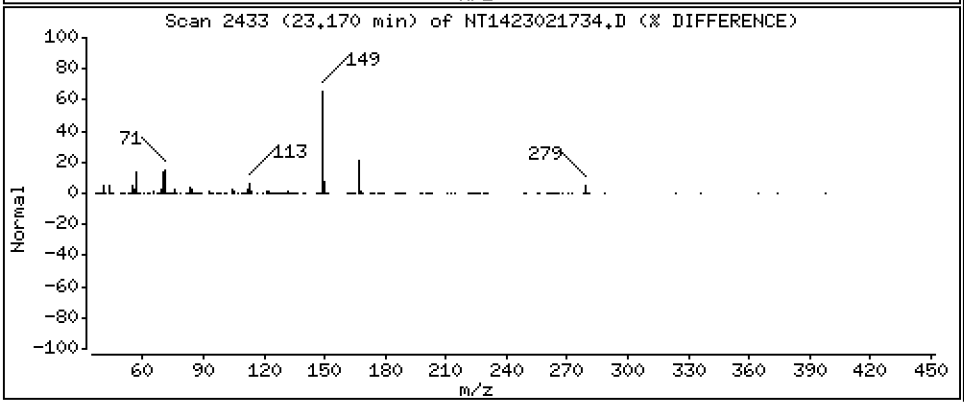












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

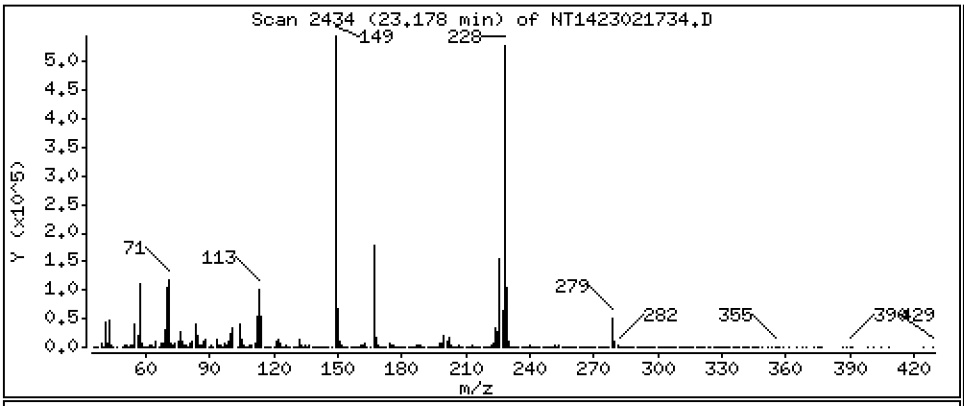
Operator: DSD

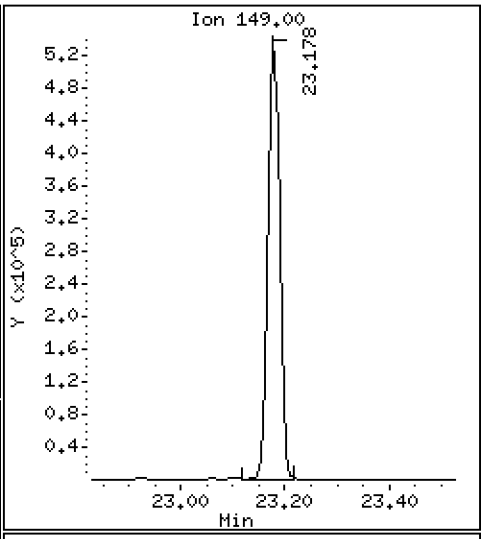
Column phase: ZB-5msi

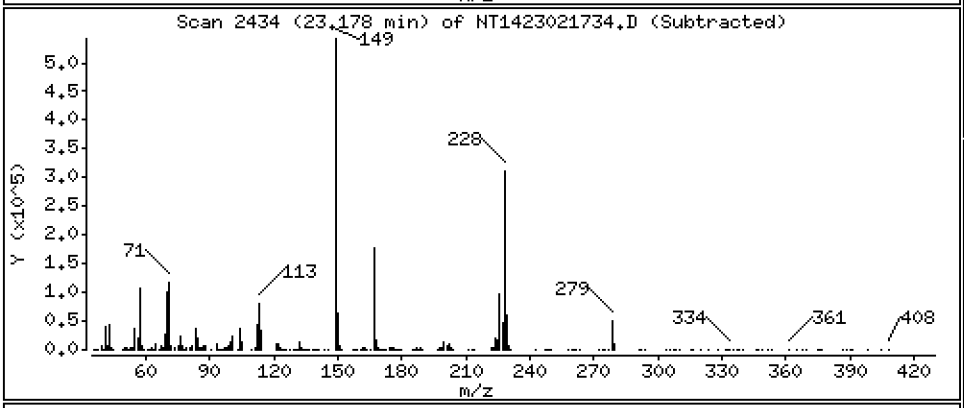
Column diameter: 0.25

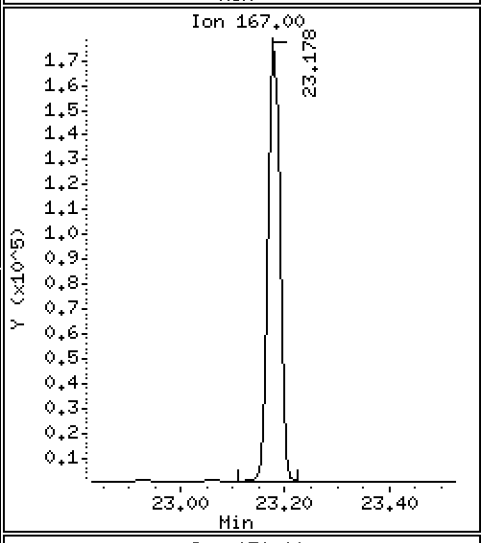
72 bis(2-Ethylhexyl)phthalate

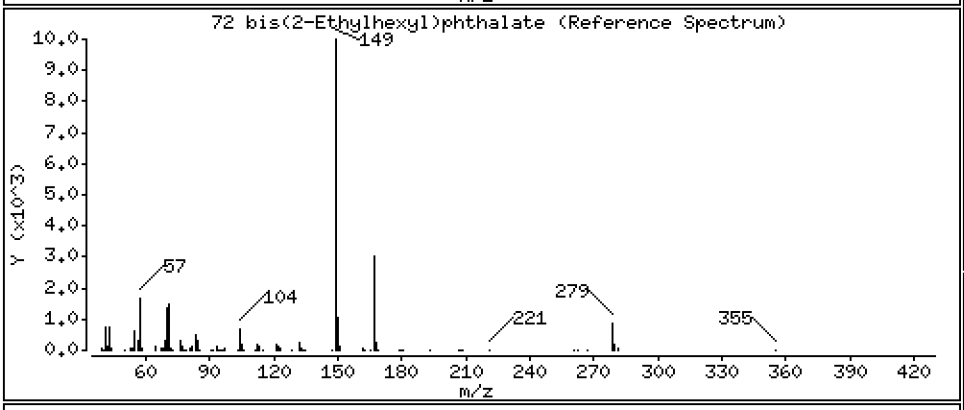
Concentration: 4.350 ug/mL

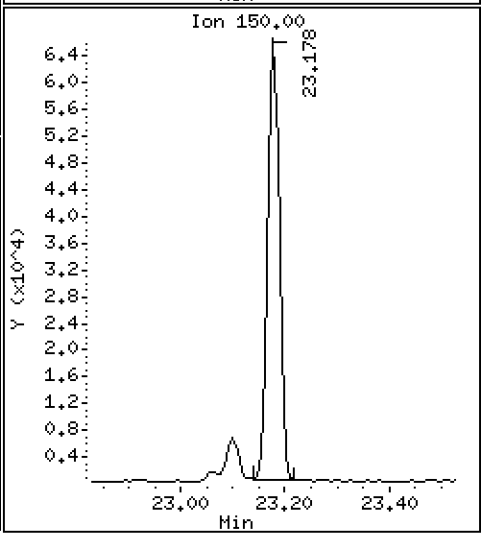


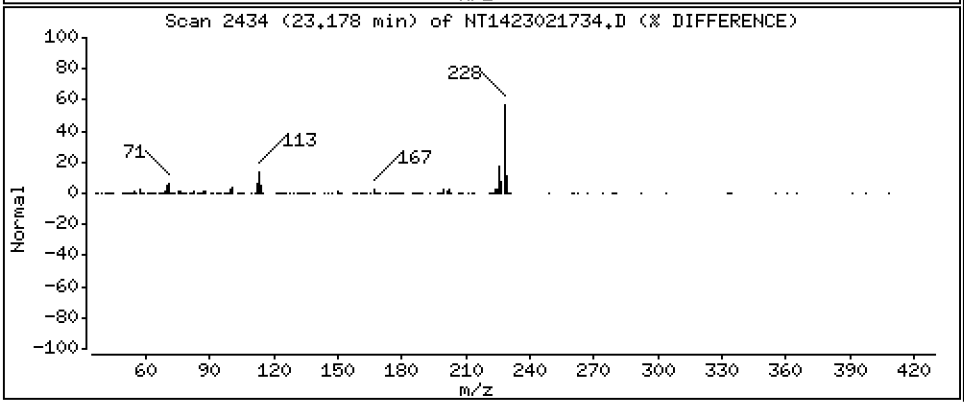












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

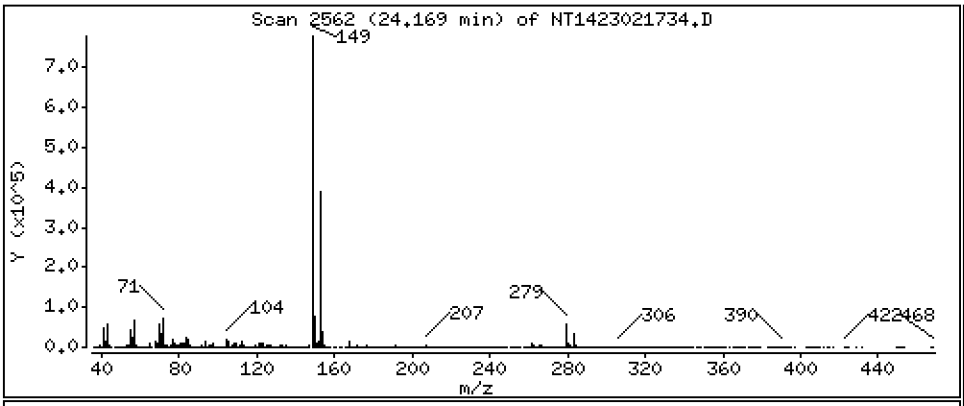
Operator: DSD

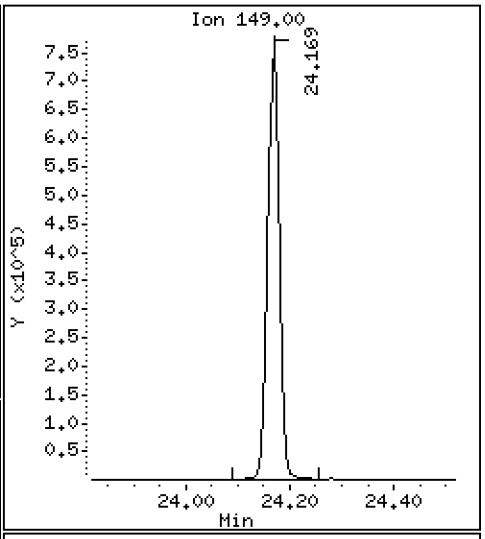
Column phase: ZB-5msi

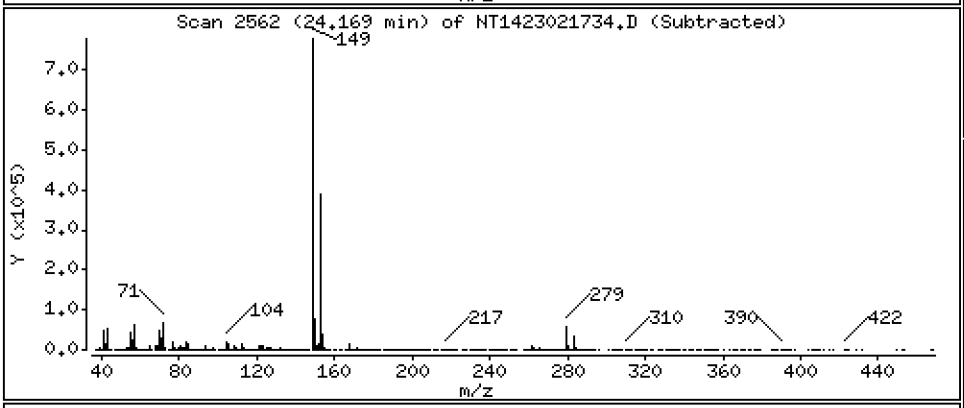
Column diameter: 0.25

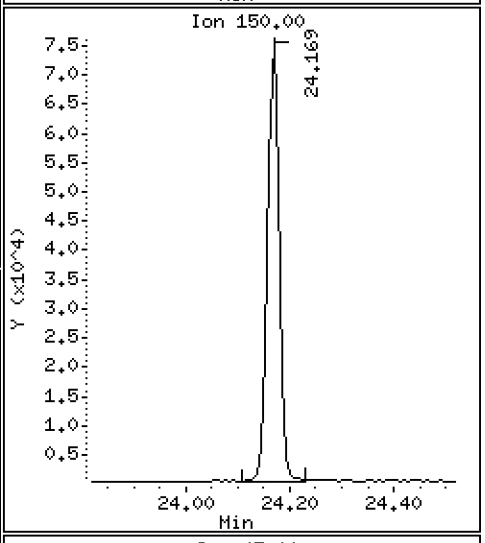
73 Di-n-octylphthalate

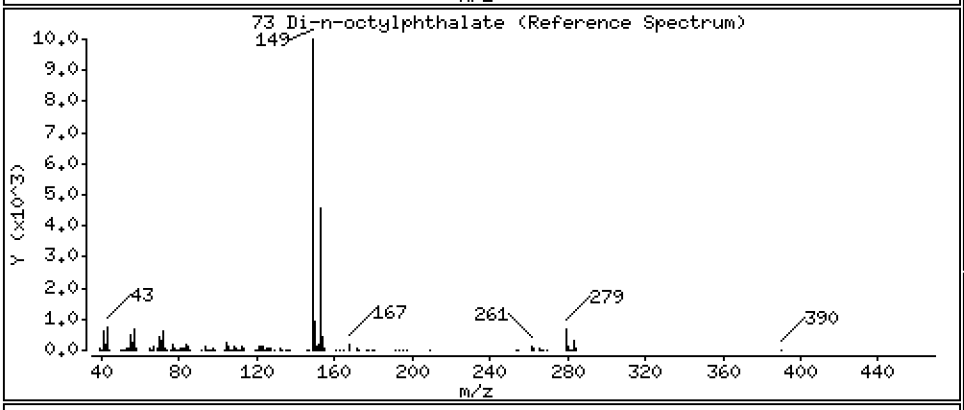
Concentration: 4.386 ug/mL

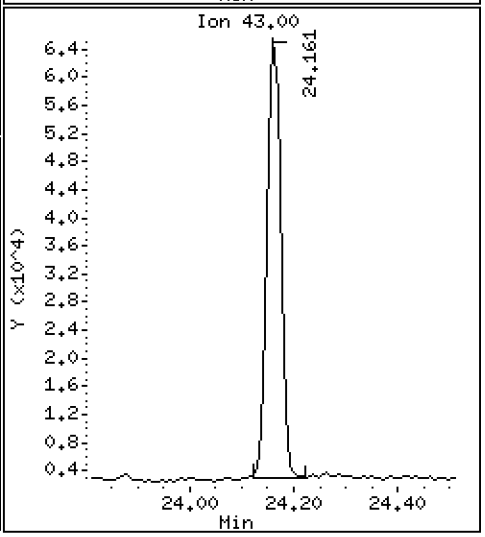


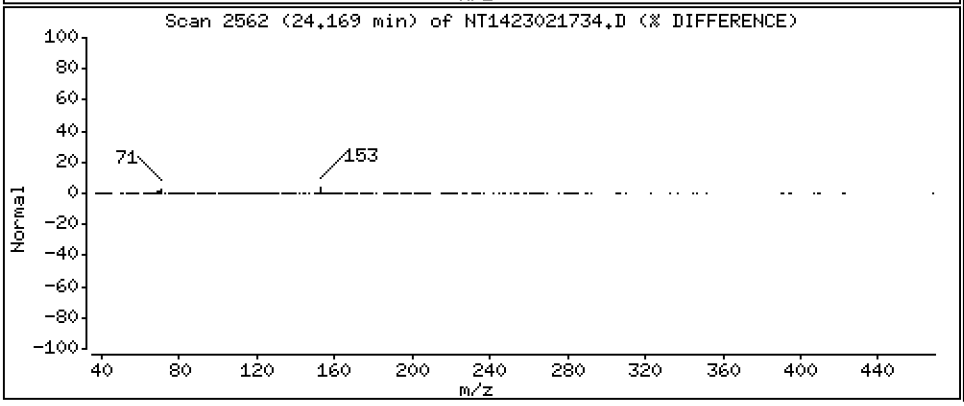












Date : 18-FEB-2023 06:30

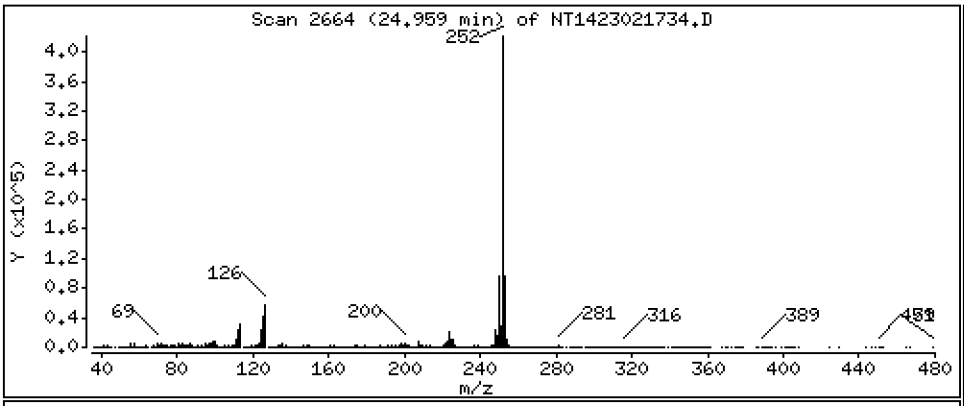
Client ID: Instrument: nt14.i

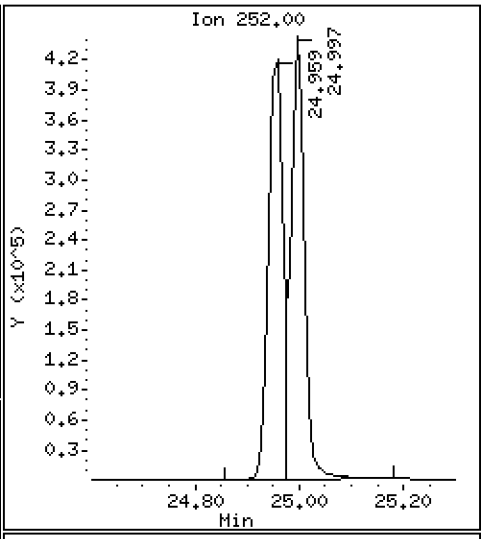
Sample Info: SLB0251-CCV1

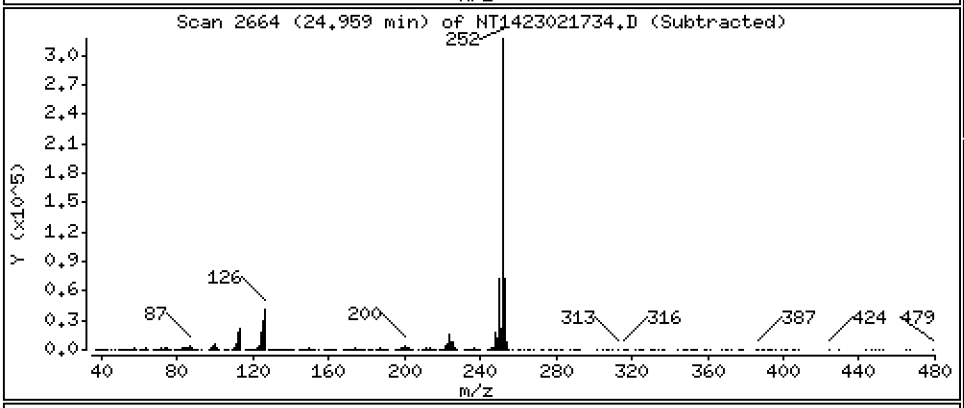
Operator: DSD

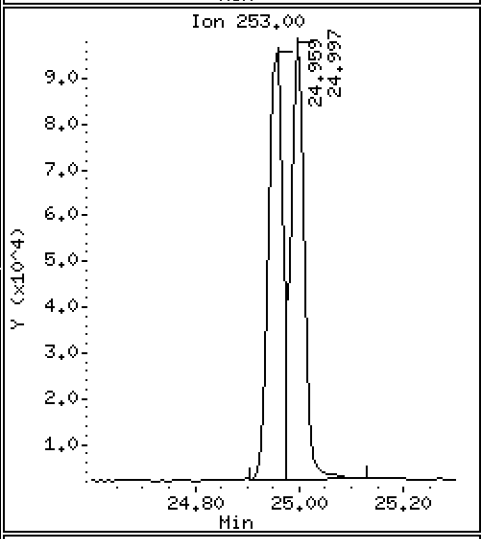
Column phase: ZB-5msi Column diameter: 0.25

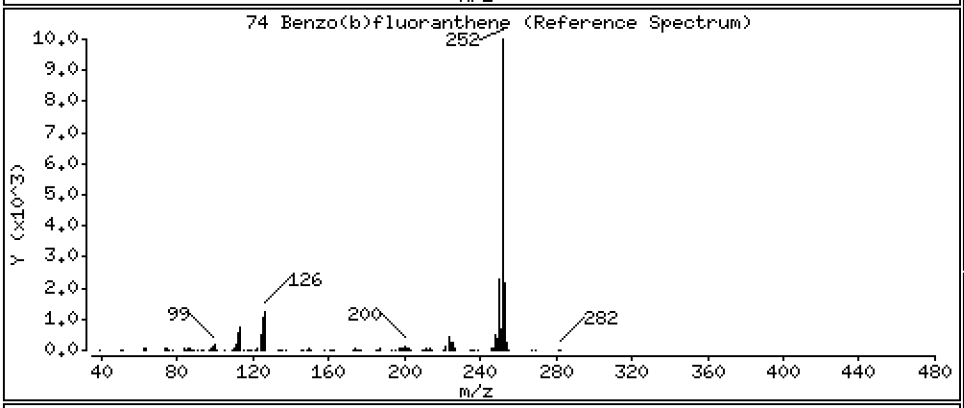
74 Benzo(b)fluoranthene Concentration: 4.421 ug/mL

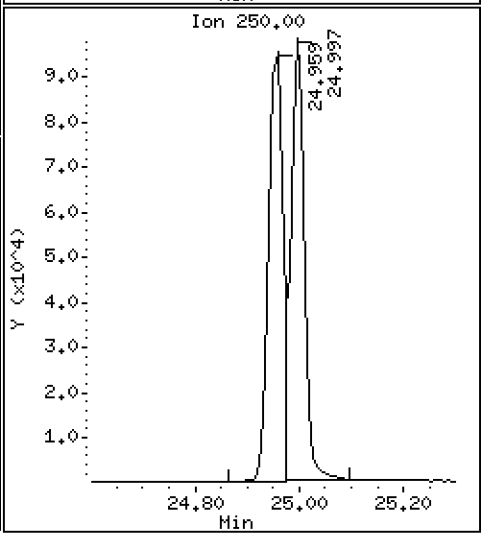


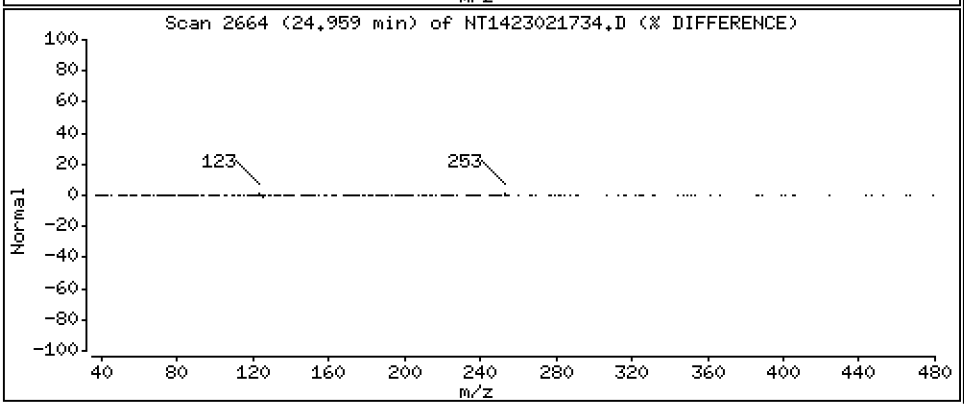












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

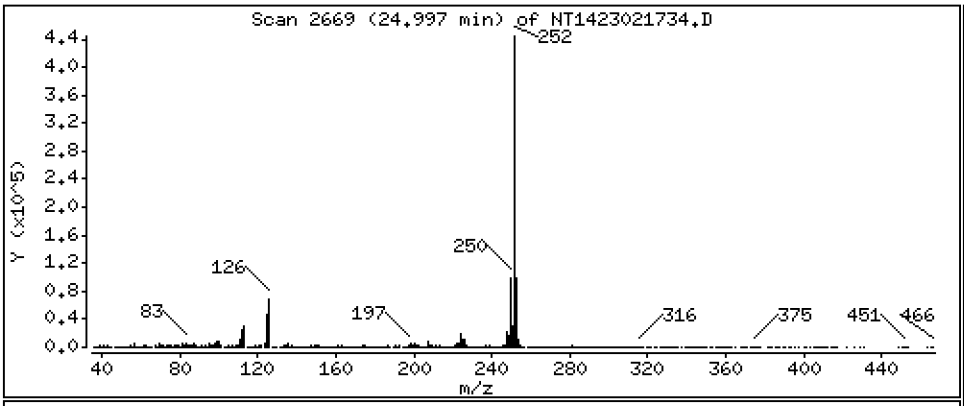
Operator: DSD

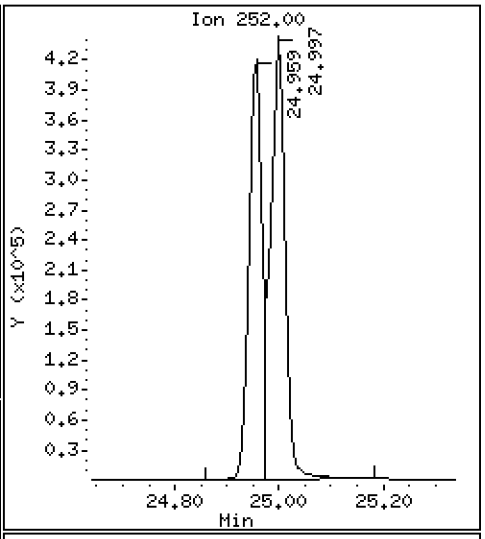
Column phase: ZB-5msi

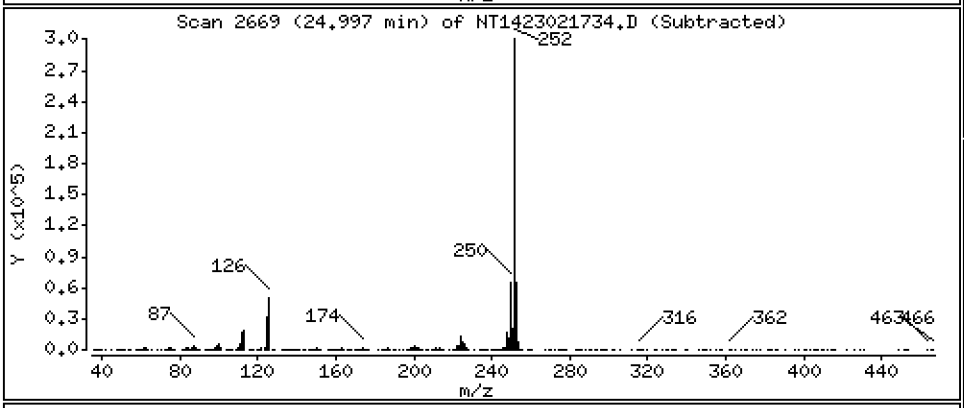
Column diameter: 0.25

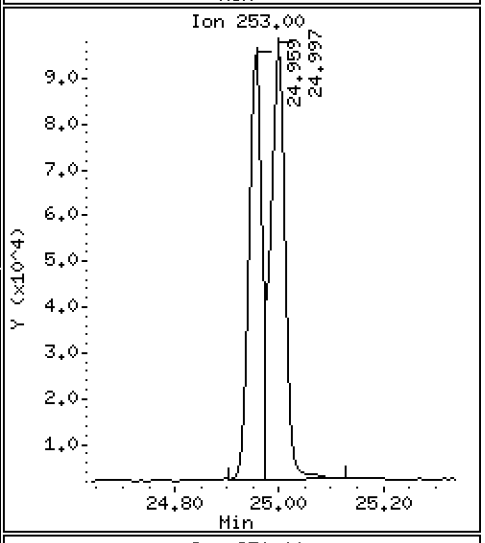
75 Benzo(k)fluoranthene

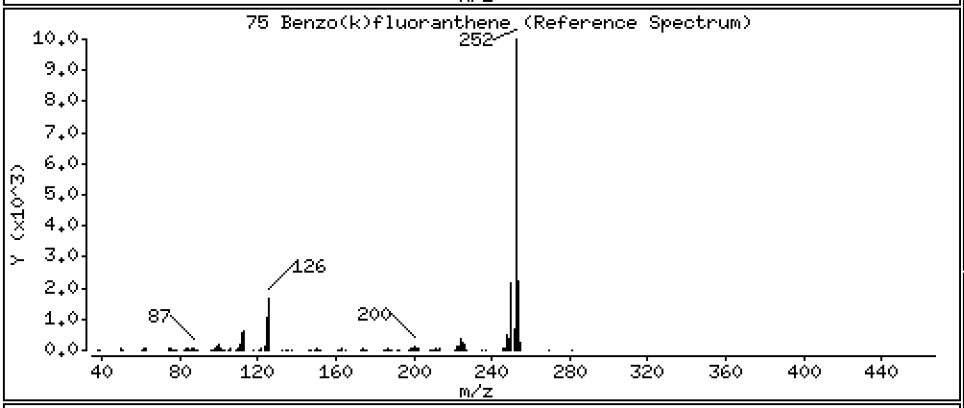
Concentration: 4.632 ug/mL

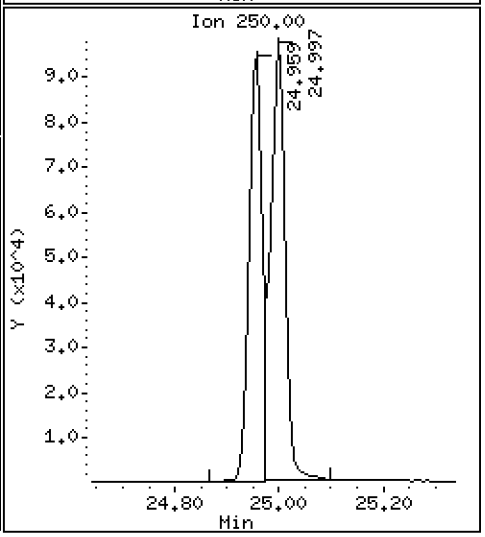


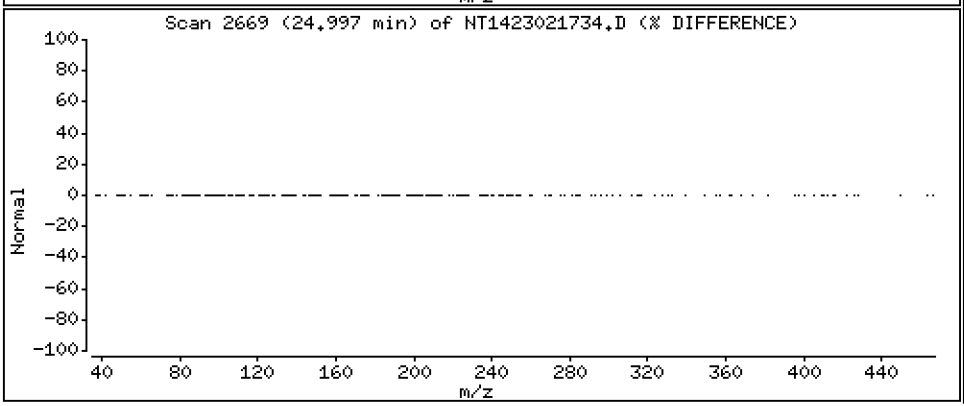












Date : 18-FEB-2023 06:30

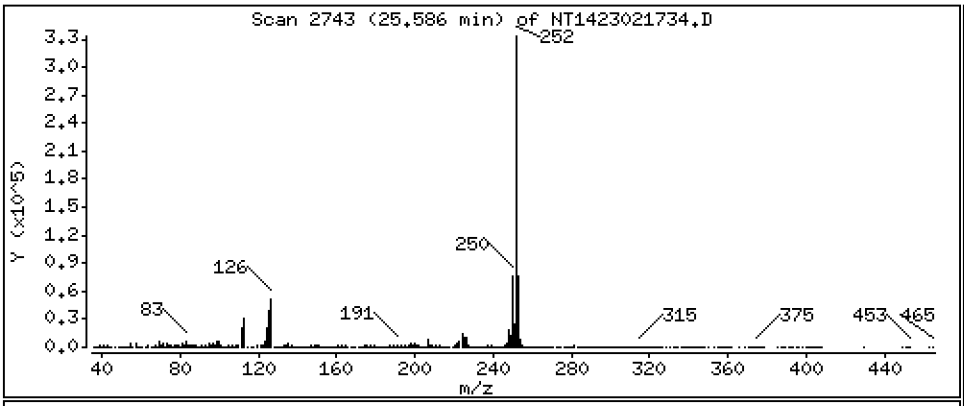
Client ID: Instrument: nt14.i

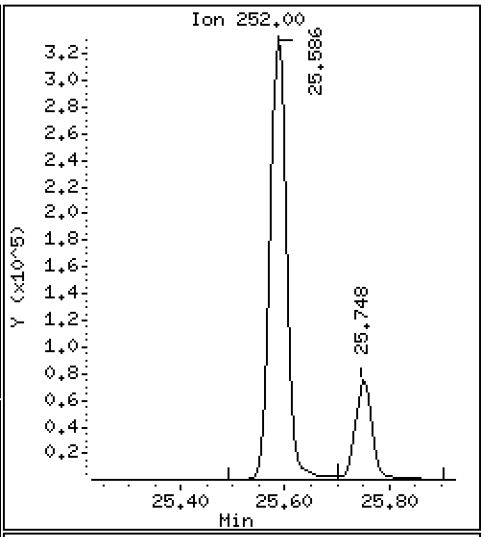
Sample Info: SLB0251-CCV1

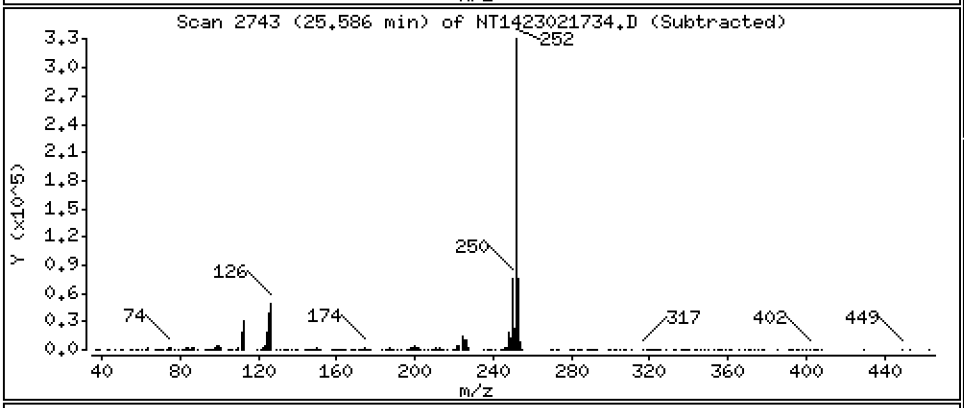
Operator: DSD

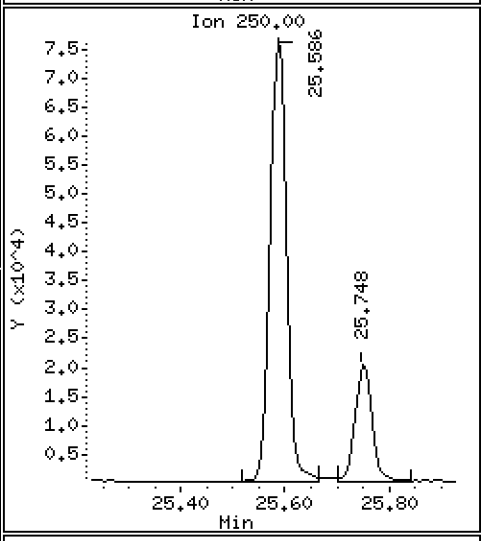
Column phase: ZB-5msi Column diameter: 0.25

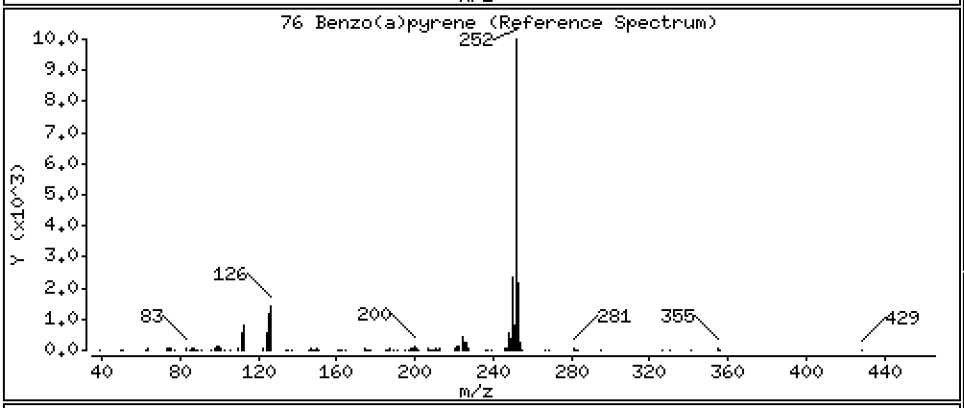
76 Benzo(a)pyrene Concentration: 4.514 ug/mL

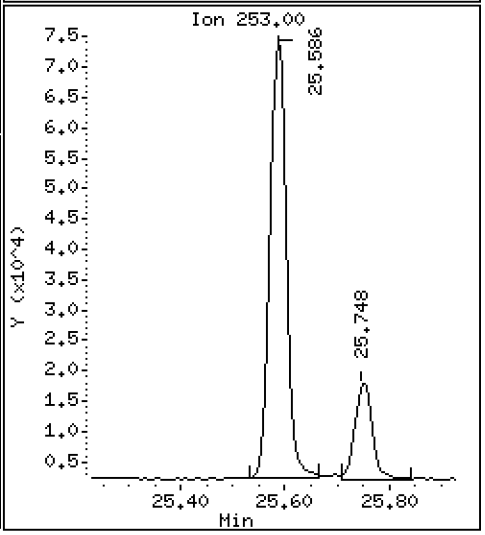


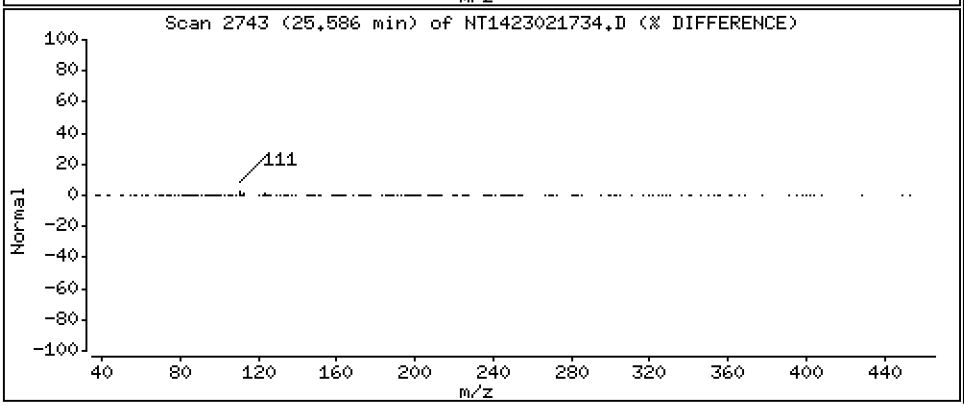












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

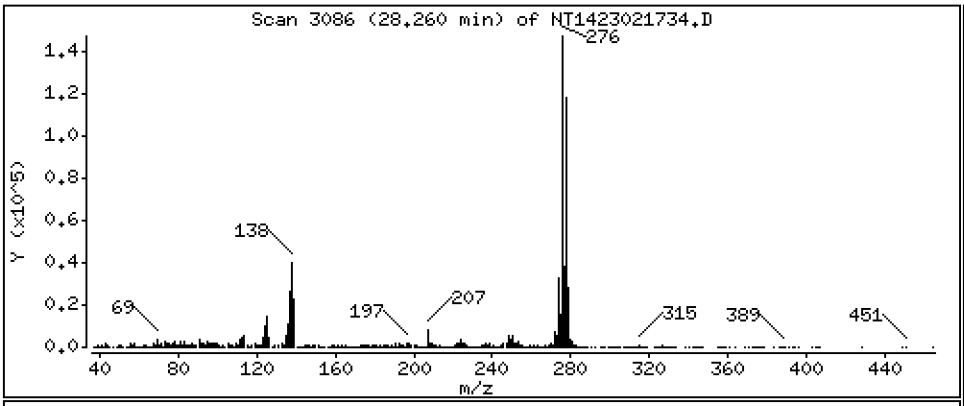
Operator: DSD

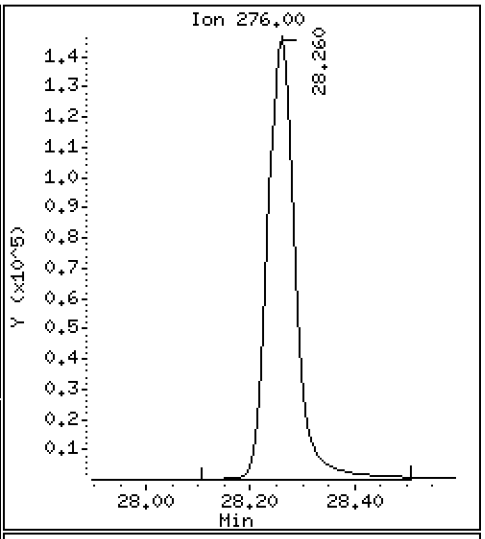
Column phase: ZB-5msi

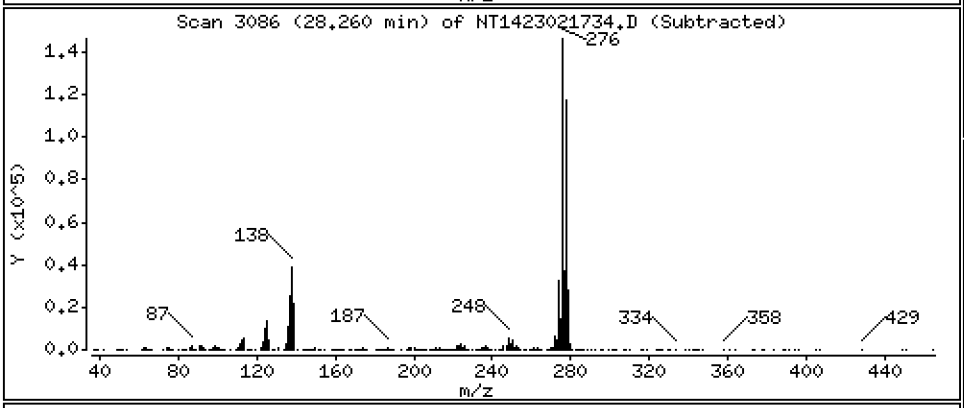
Column diameter: 0.25

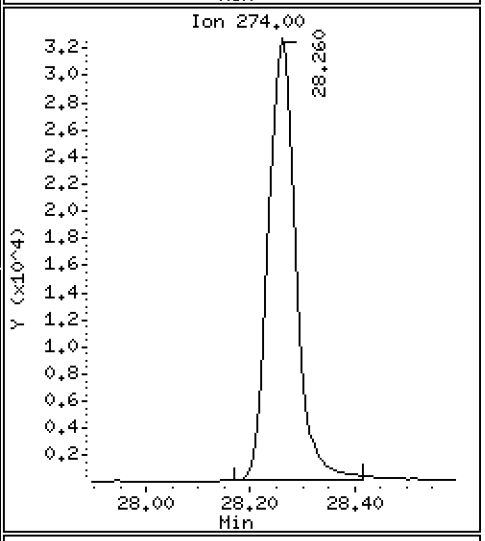
78 Indeno(1,2,3-cd)pyrene

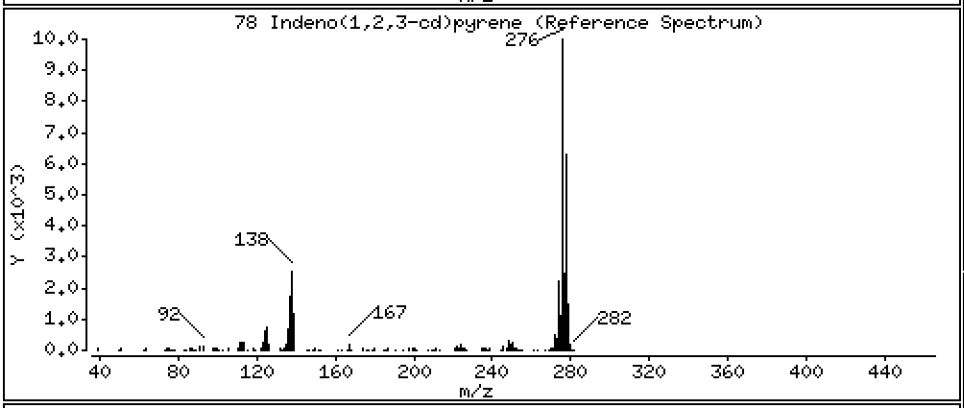
Concentration: 3.883 ug/mL

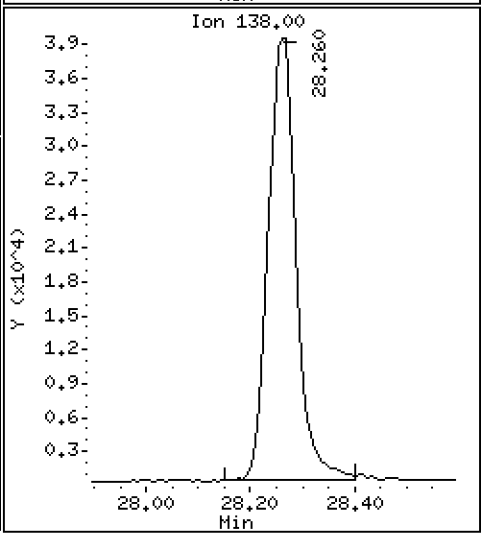


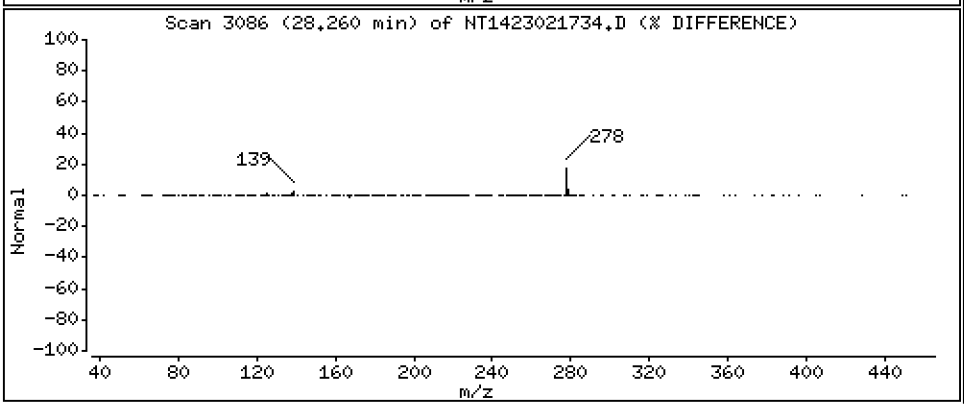












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

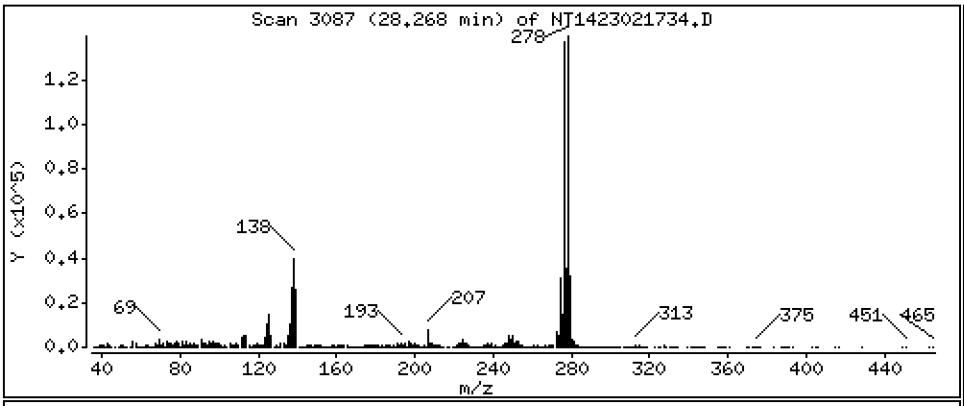
Operator: DSD

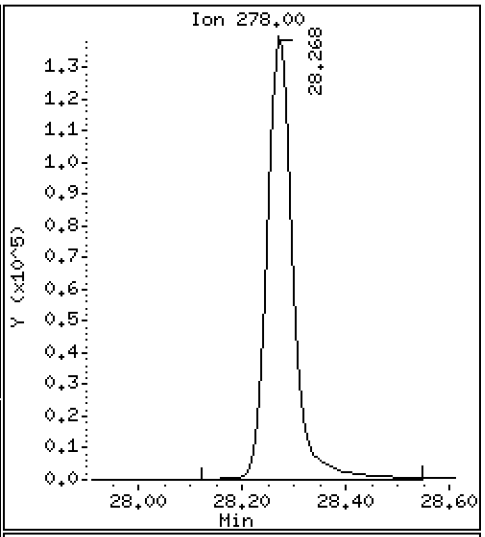
Column phase: ZB-5msi

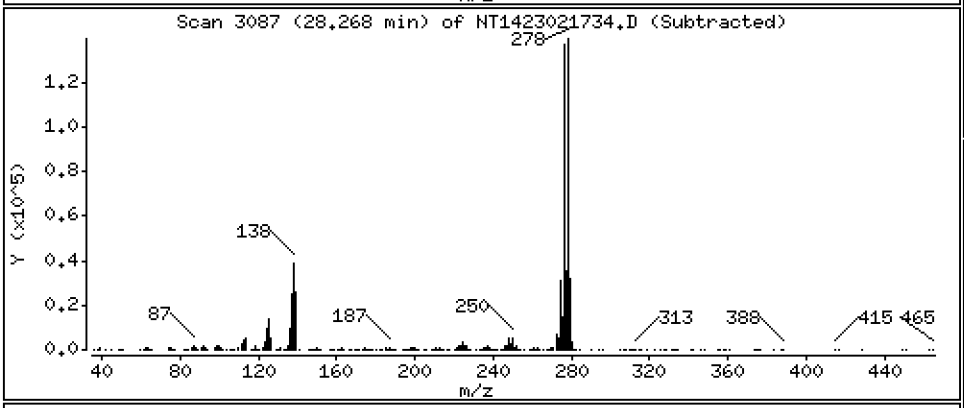
Column diameter: 0.25

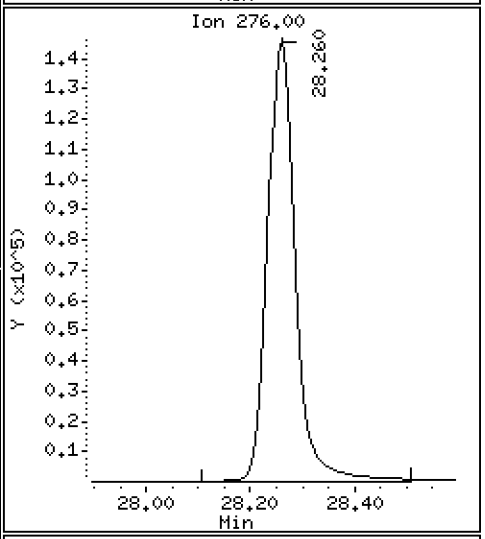
79 Dibenzo(a,h)anthracene

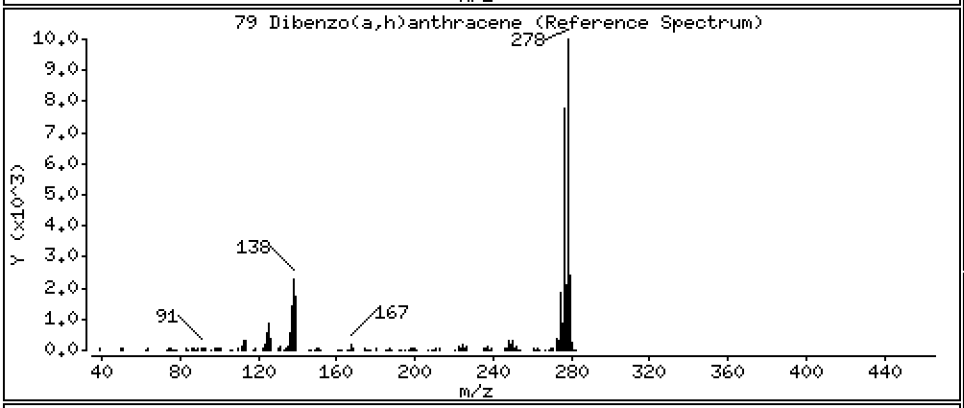
Concentration: 4.142 ug/mL

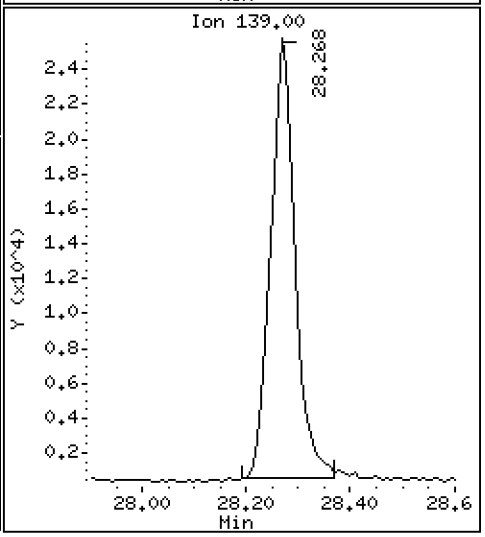


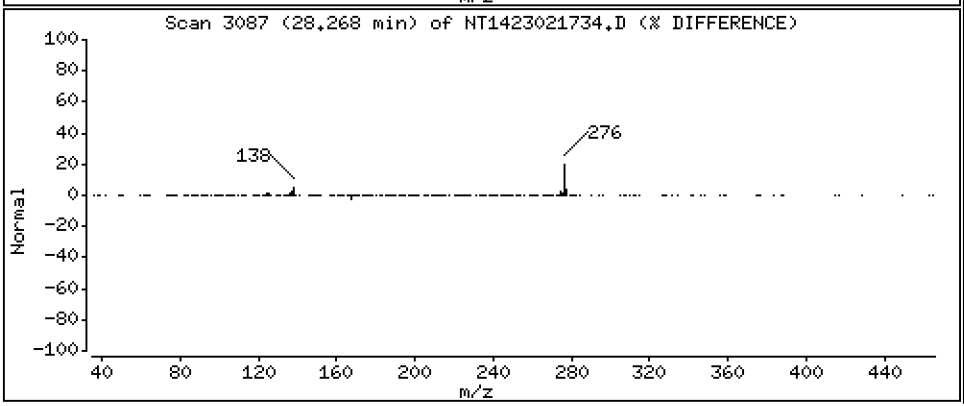












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

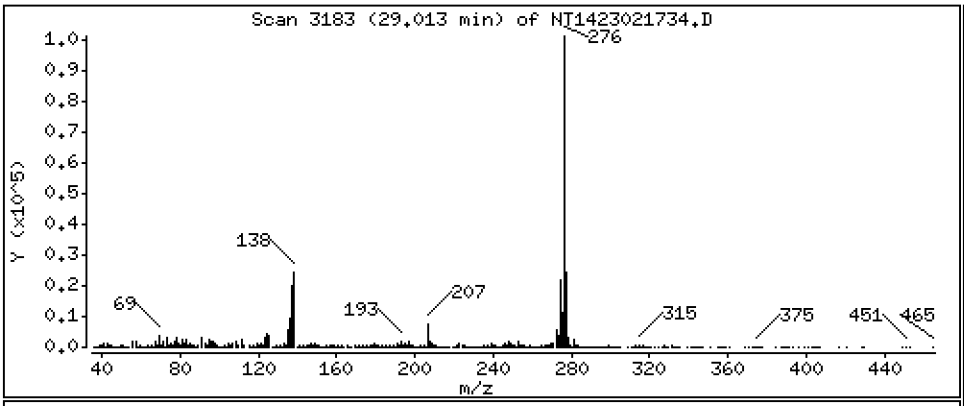
Operator: DSD

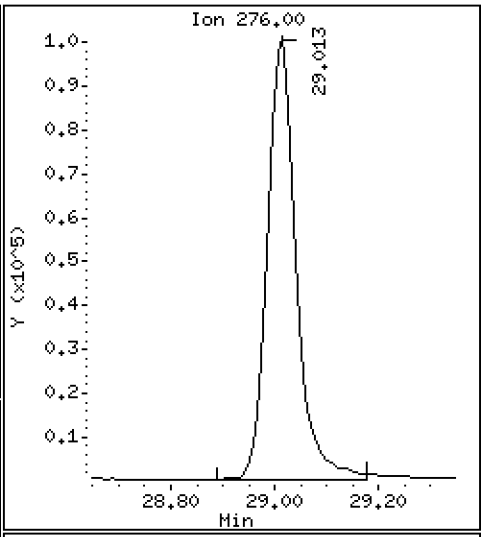
Column phase: ZB-5msi

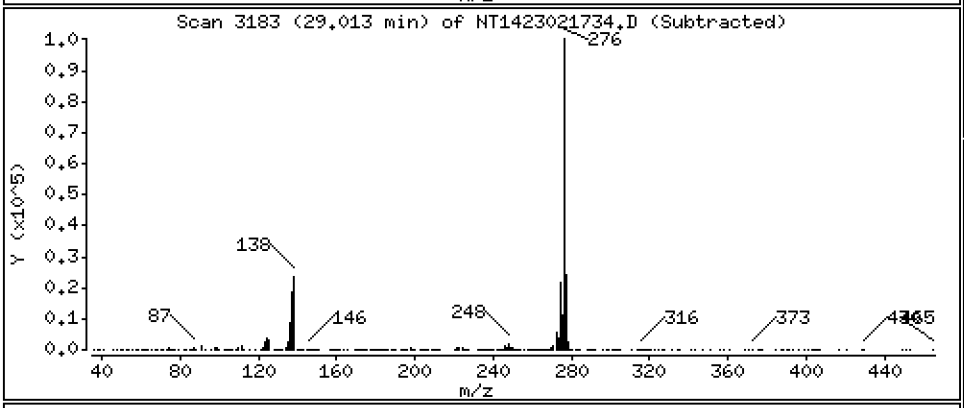
Column diameter: 0.25

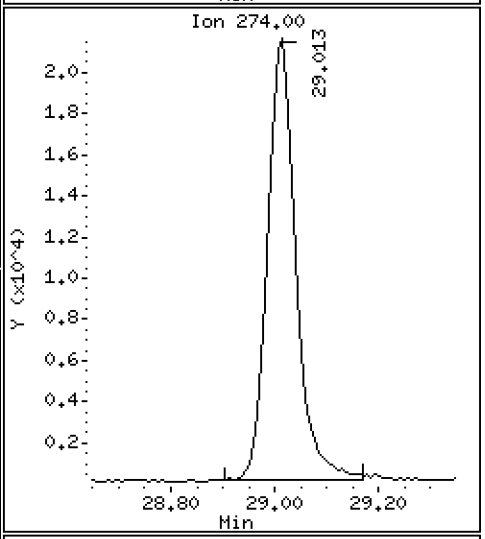
80 Benzo(g,h,i)perylene

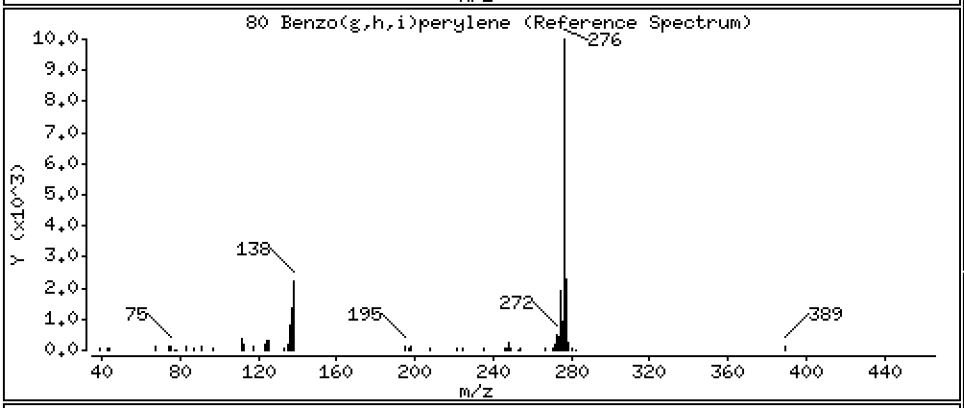
Concentration: 3.335 ug/mL

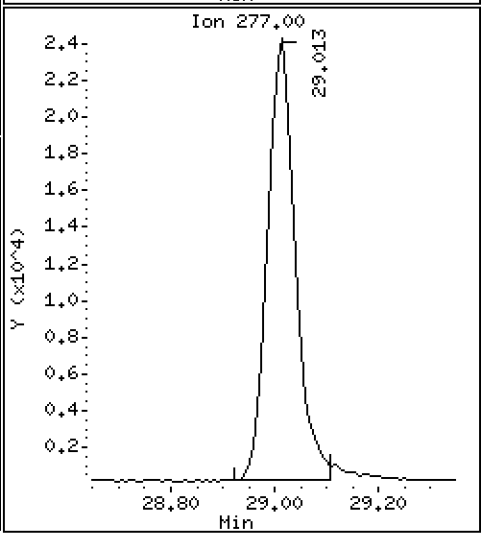


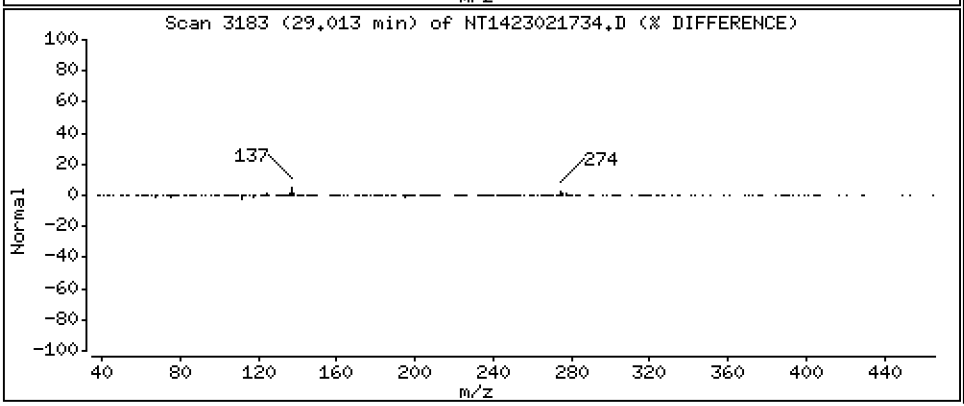












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

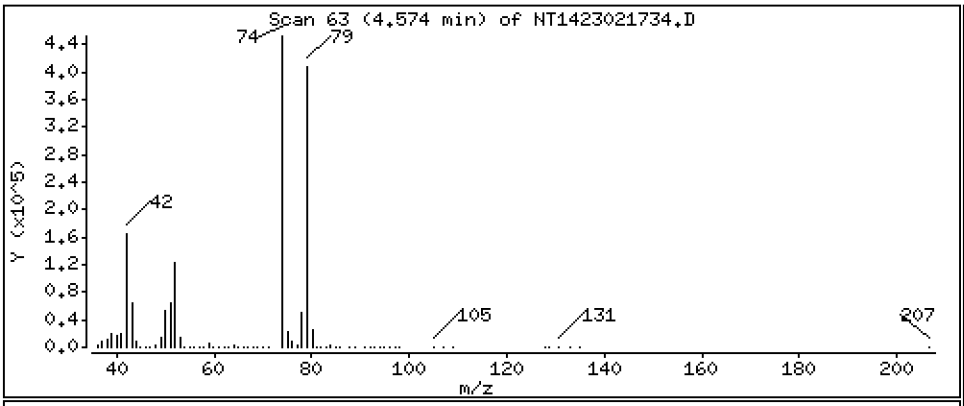
Operator: DSD

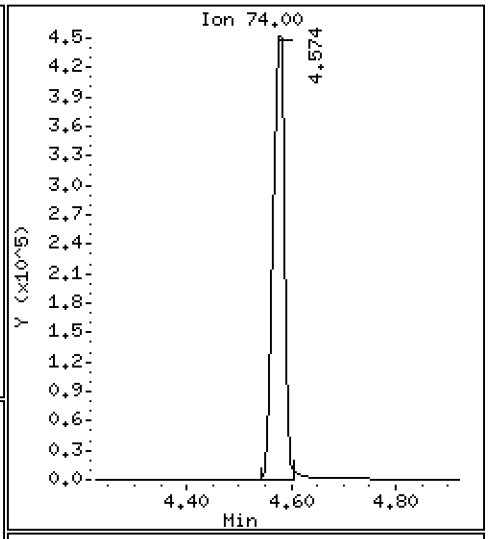
Column phase: ZB-5msi

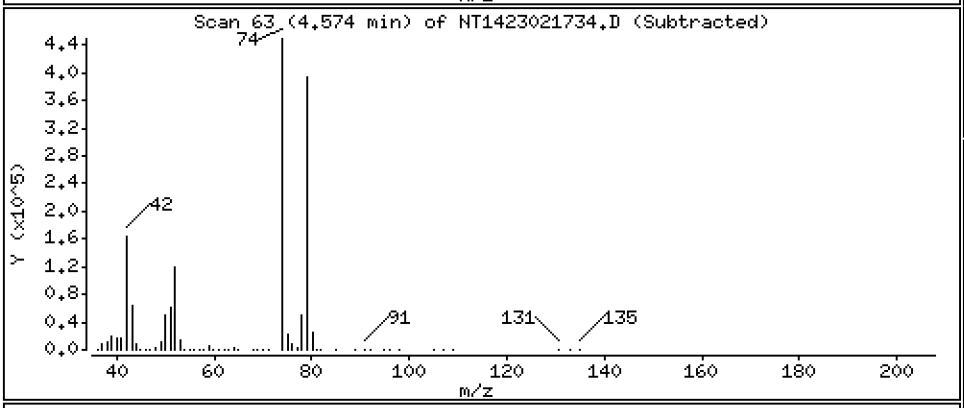
Column diameter: 0.25

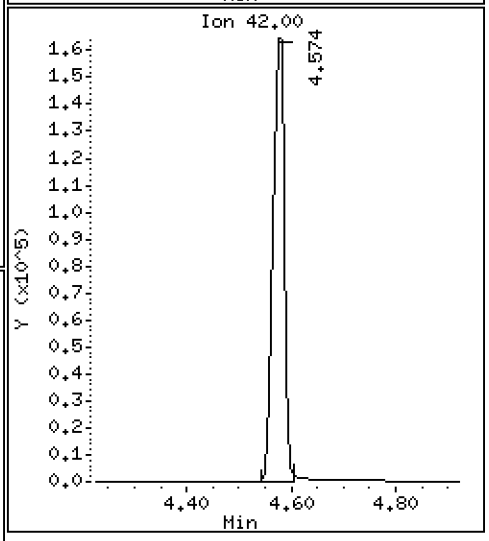
90 N-Nitrosodimethylamine

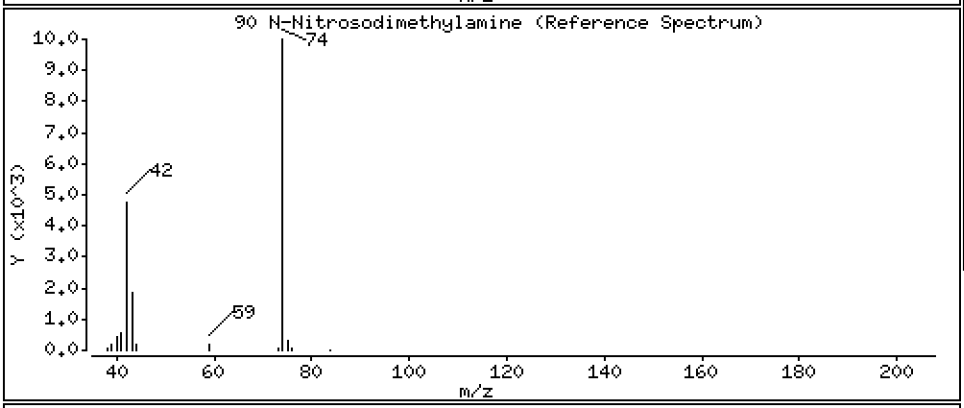
Concentration: 8.953 ug/mL

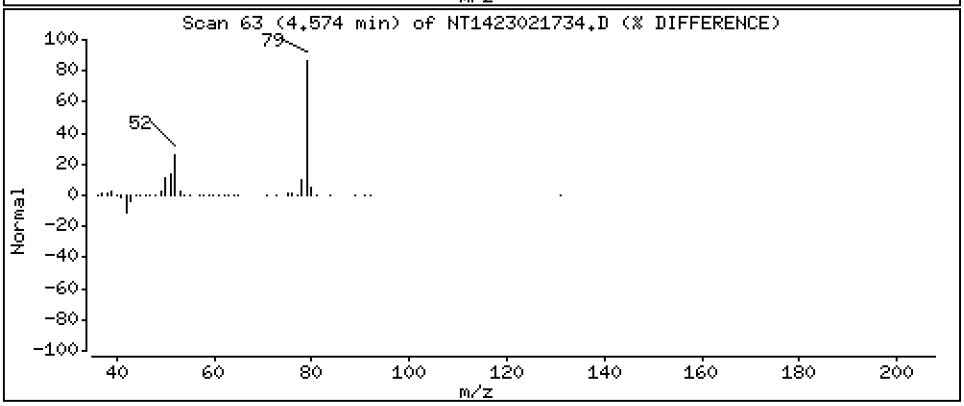












Date : 18-FEB-2023 06:30

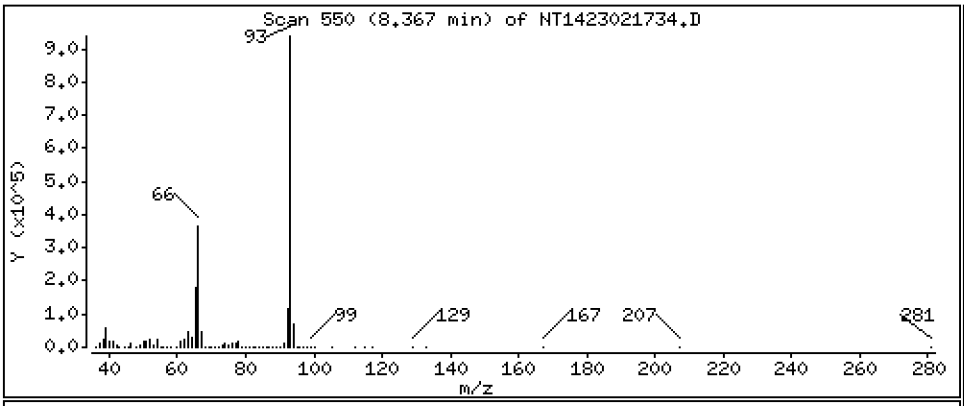
Client ID: Instrument: nt14.i

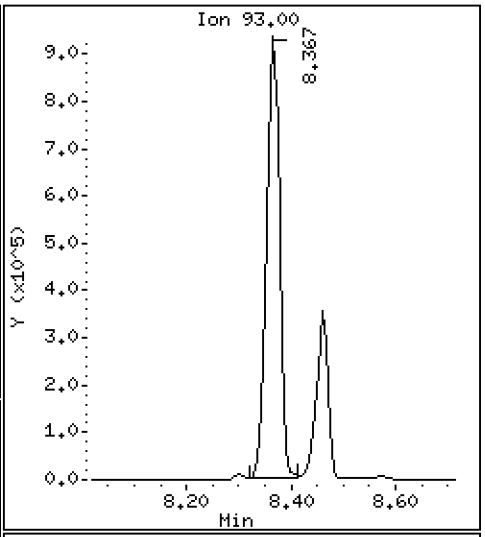
Sample Info: SLB0251-CCV1

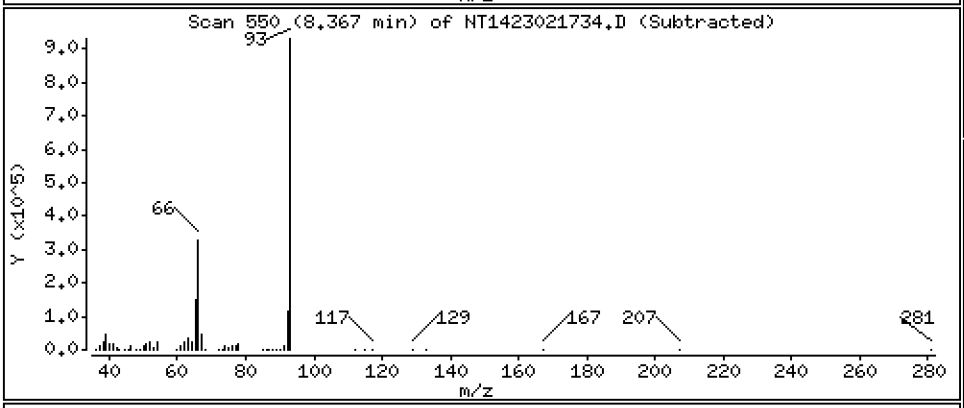
Operator: DSD

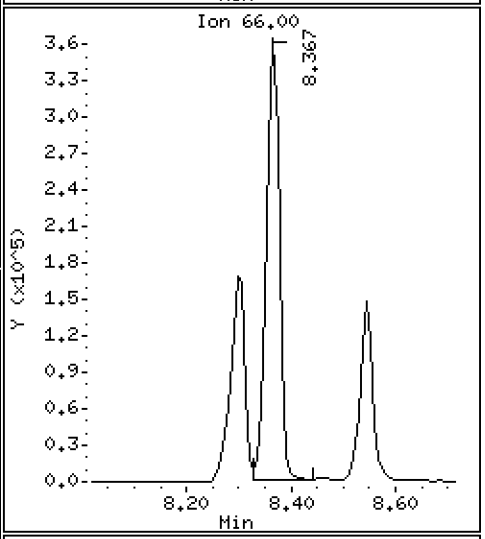
Column phase: ZB-5msi Column diameter: 0.25

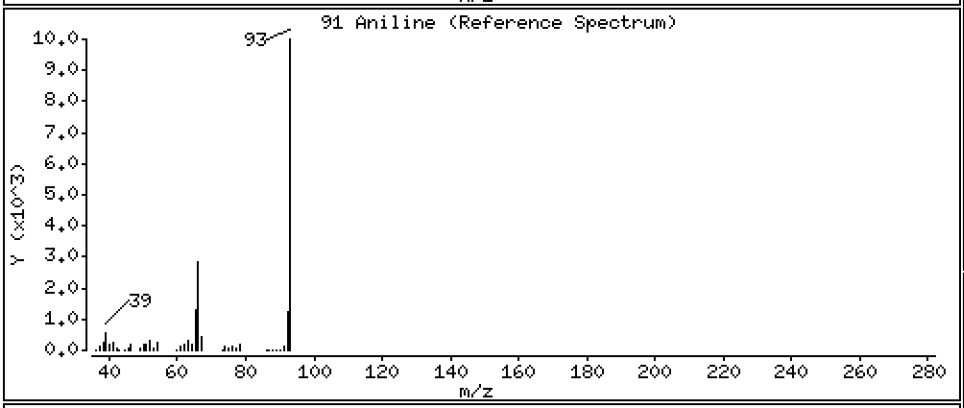
91 Aniline Concentration: 9.130 ug/mL

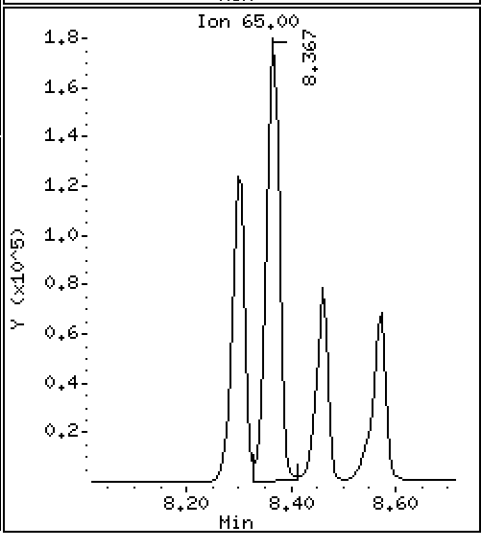


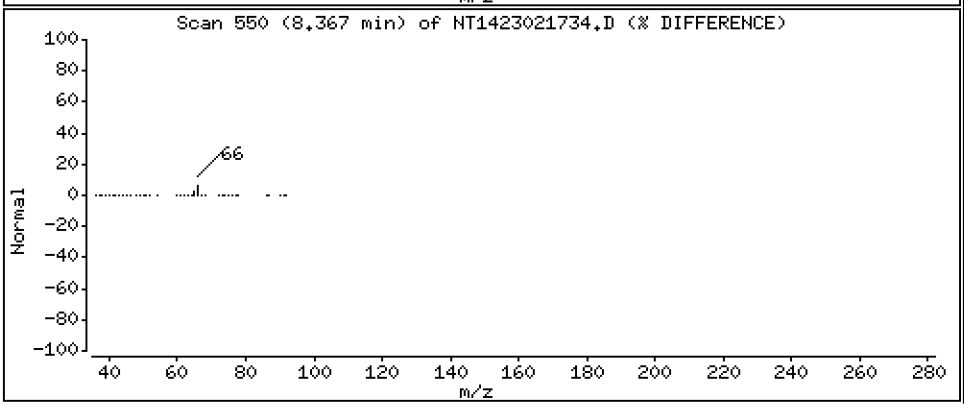












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021734.D

Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

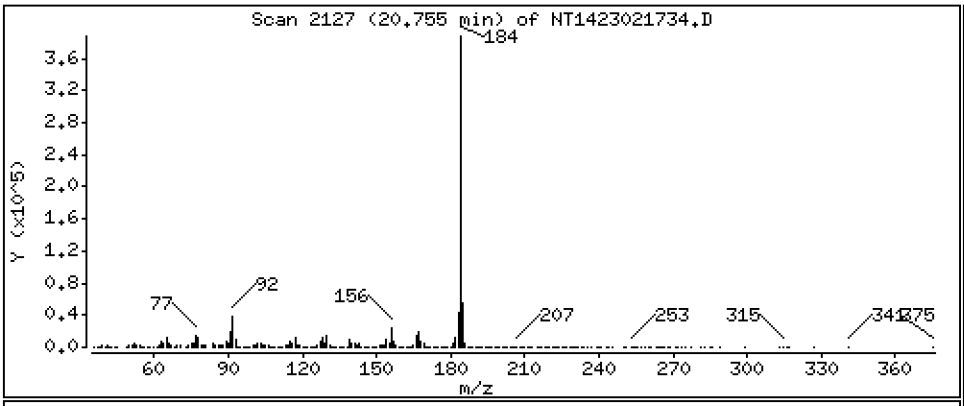
Operator: DSD

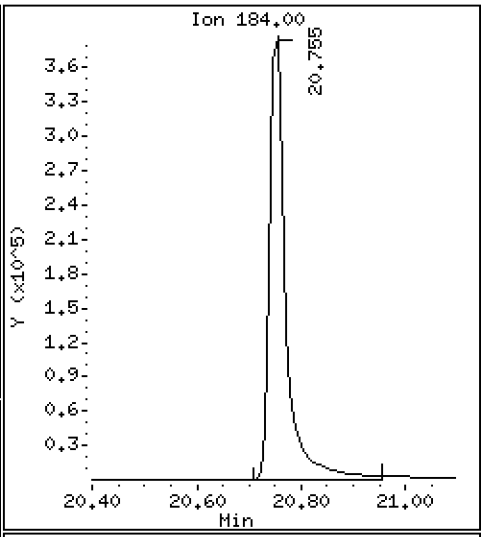
Column phase: ZB-5msi

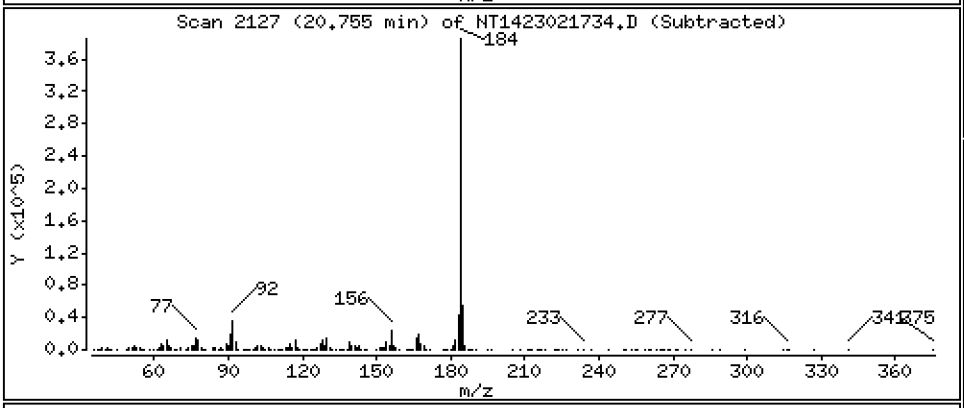
Column diameter: 0.25

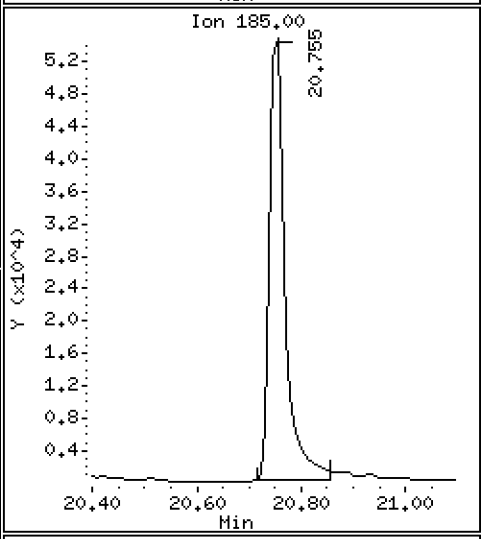
93 Benzidine

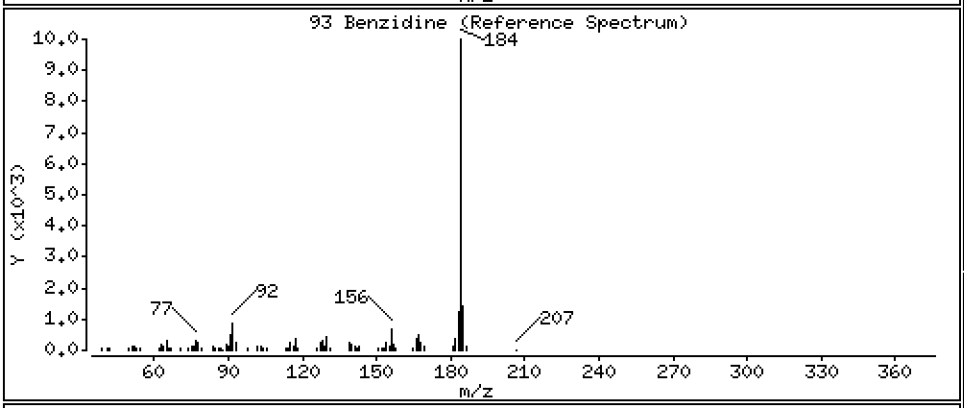
Concentration: 12.89 ug/mL

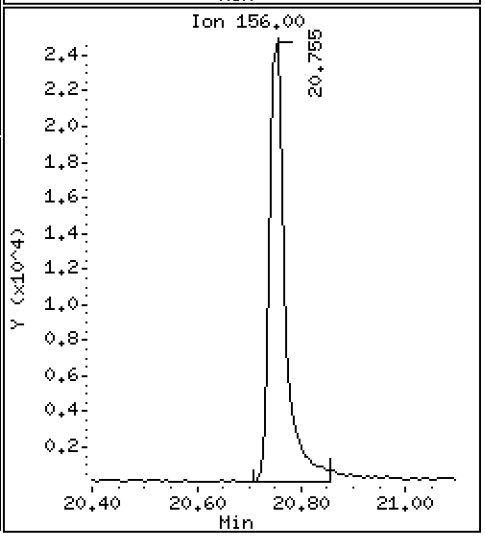


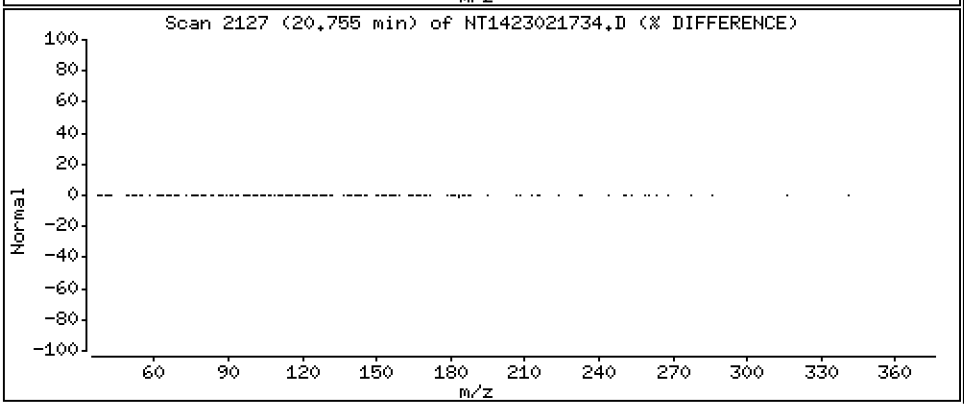












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021734.D

Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

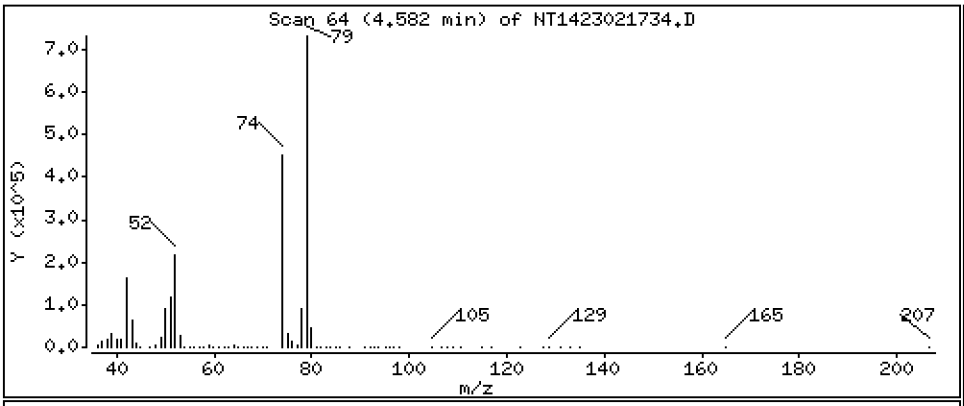
Operator: DSD

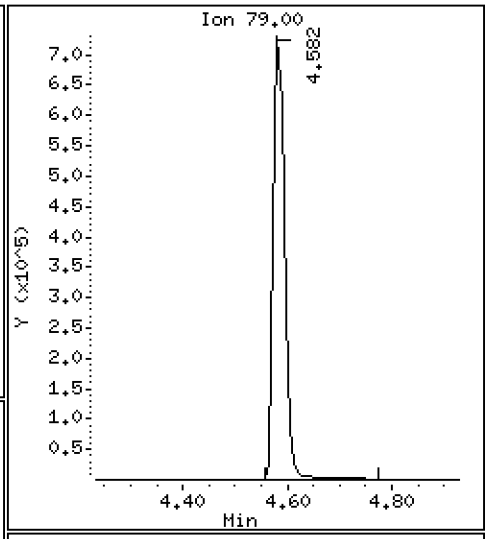
Column phase: ZB-5msi

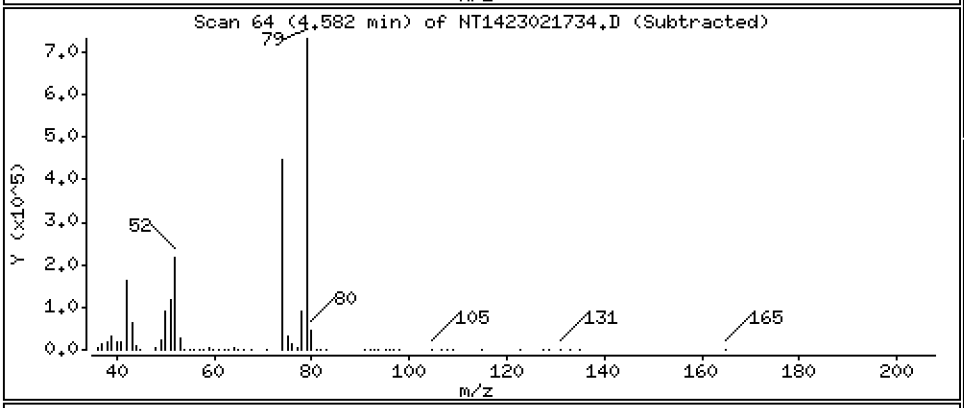
Column diameter: 0.25

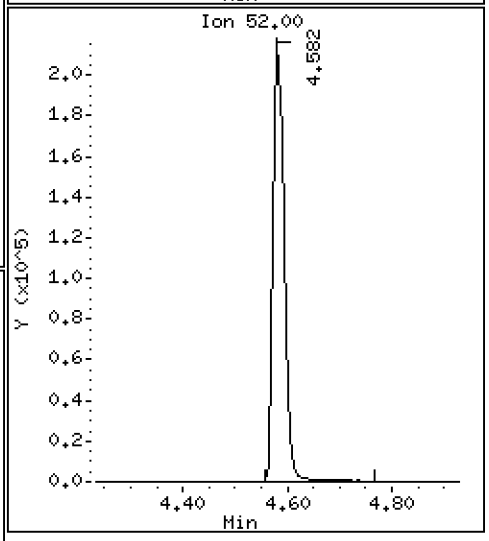
103 Pyridine

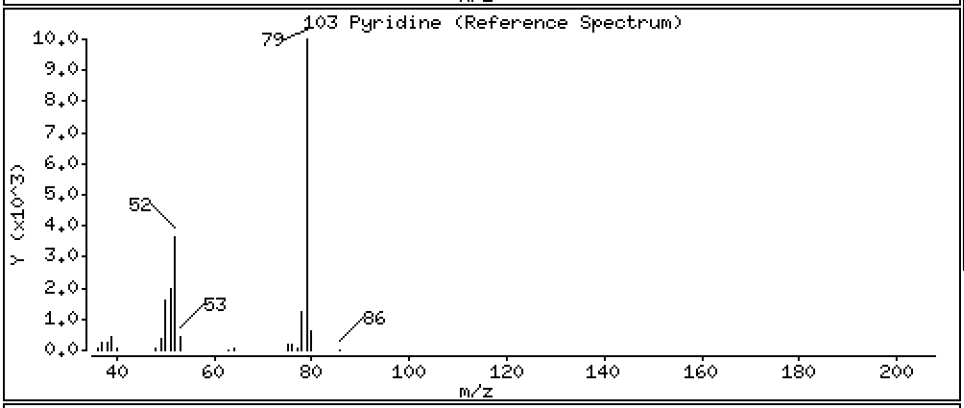
Concentration: 9.067 ug/mL

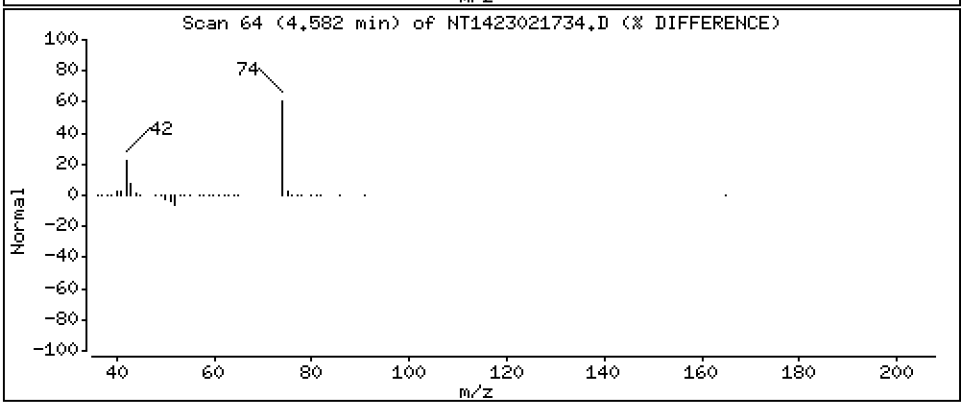












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021734.D

Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

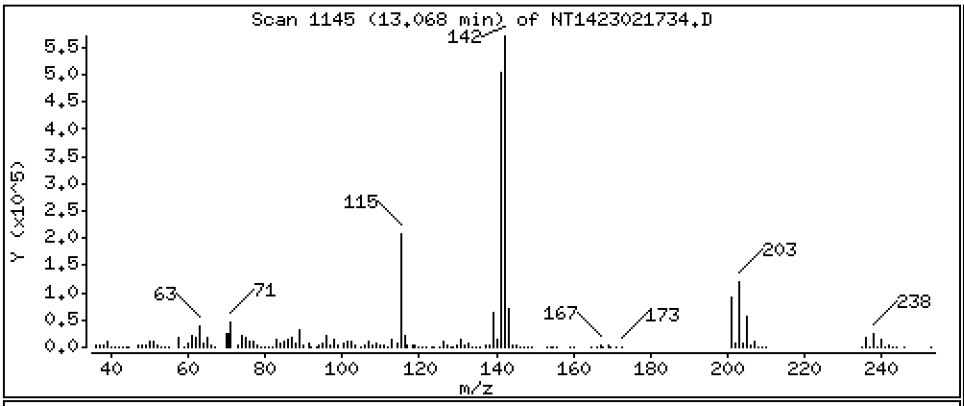
Operator: DSD

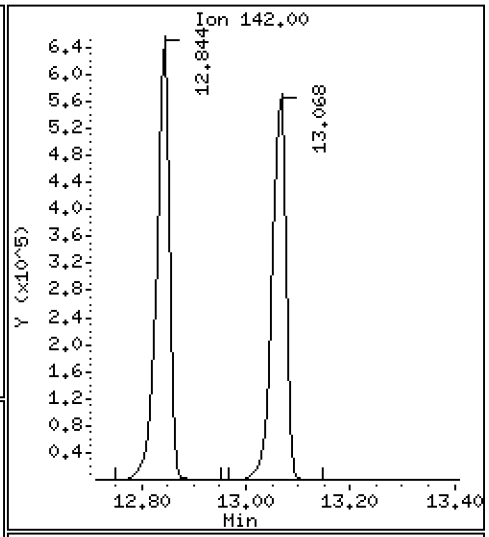
Column phase: ZB-5msi

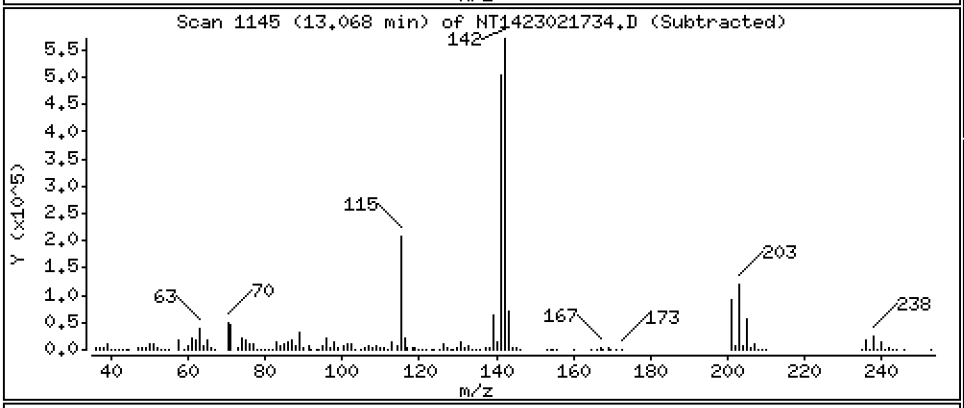
Column diameter: 0.25

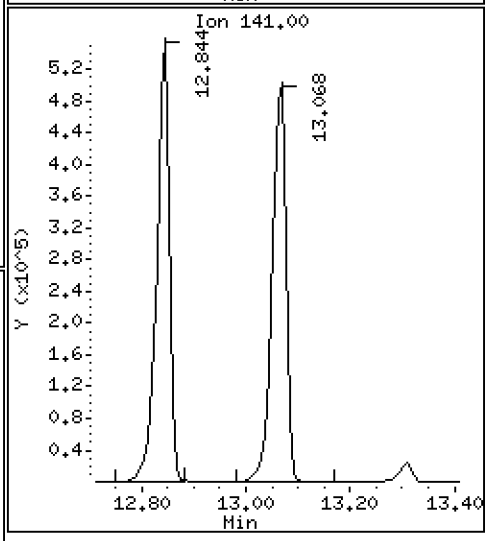
105 1-methylnaphthalene

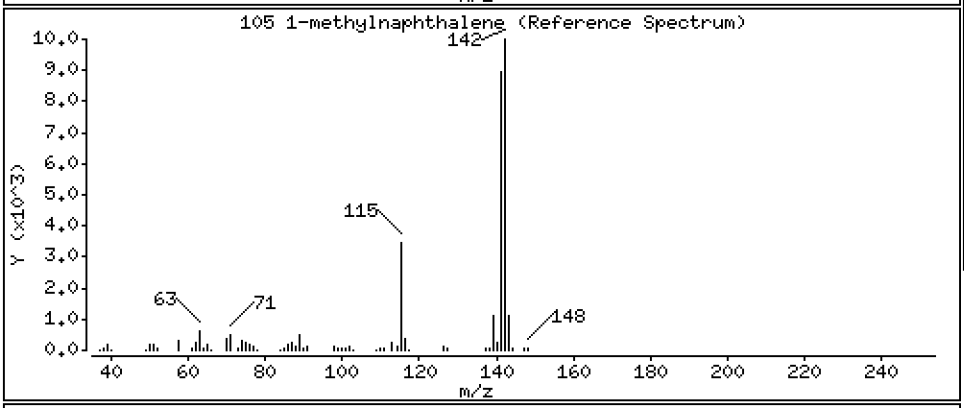
Concentration: 4.495 ug/mL

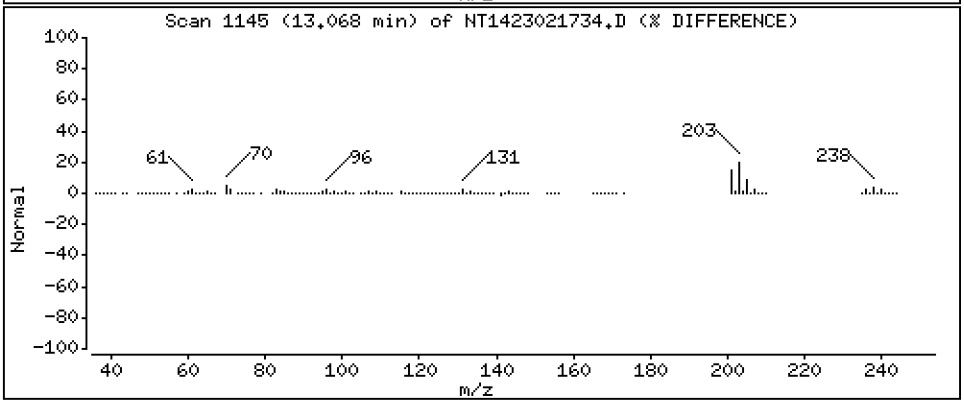












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

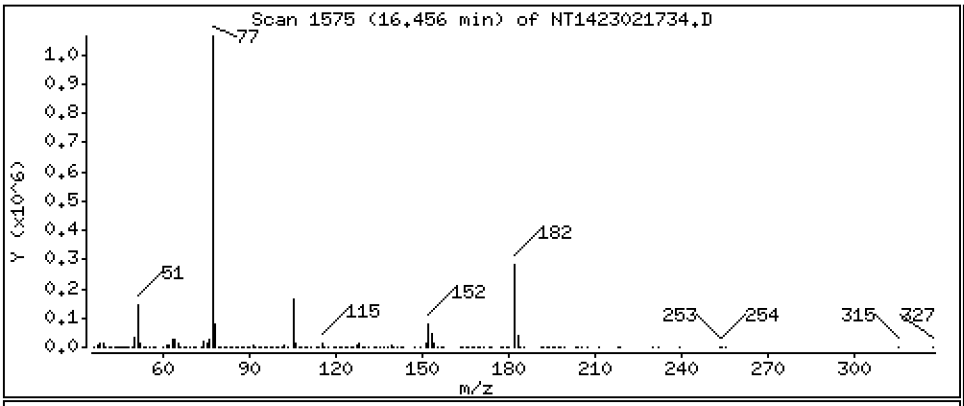
Operator: DSD

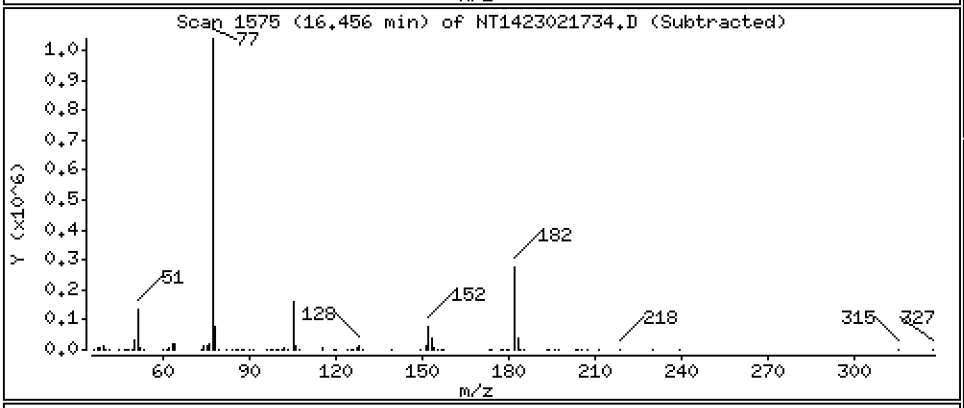
Column phase: ZB-5msi

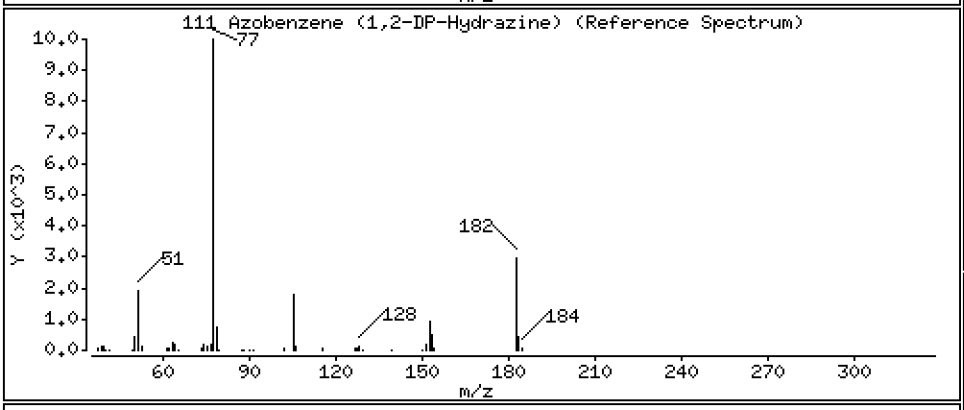
Column diameter: 0.25

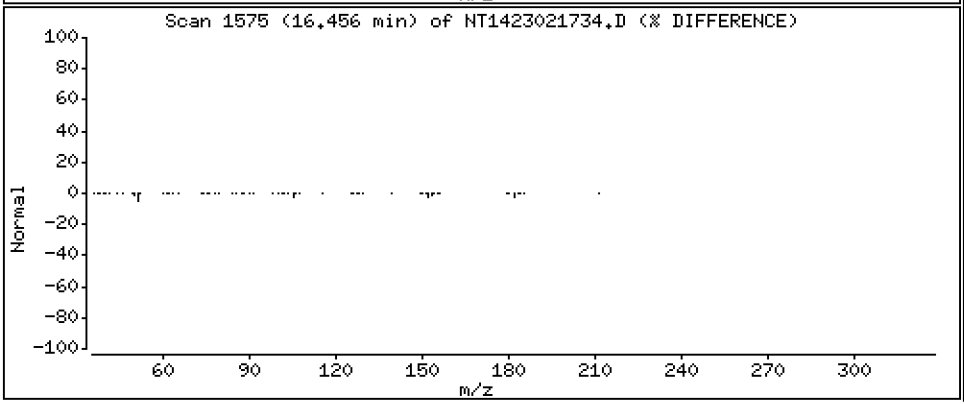
111 Azobenzene (1,2-DP-Hydrazine)

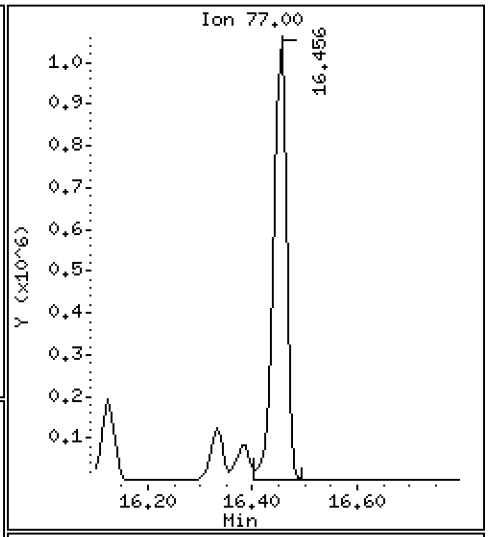
Concentration: 4.419 ug/mL

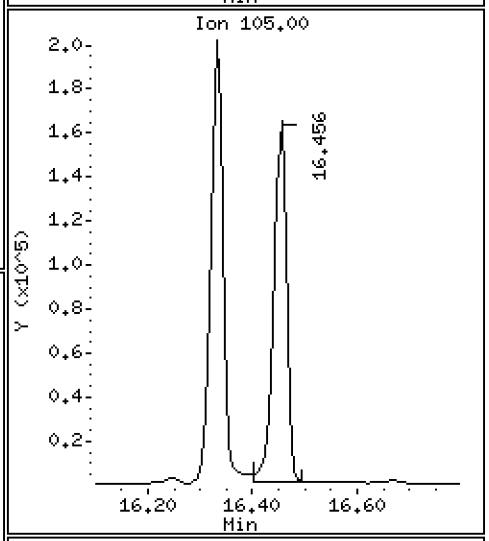


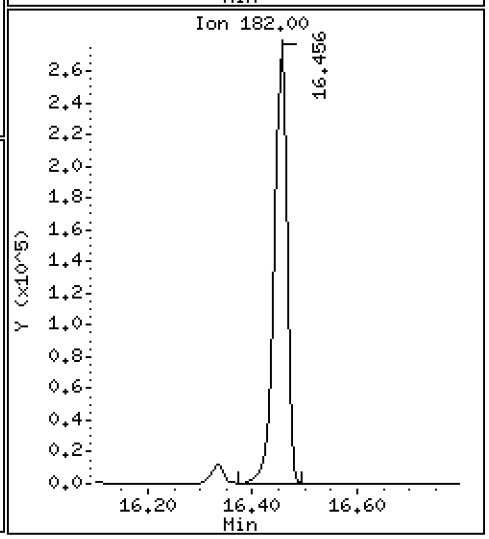












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Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

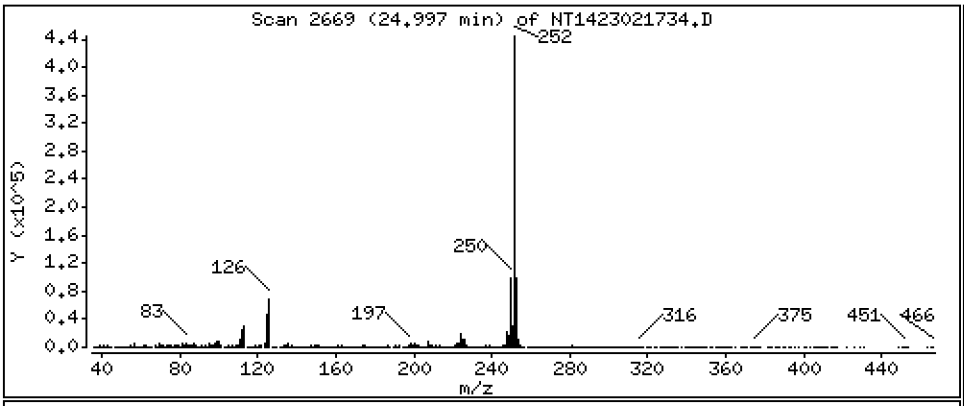
Operator: DSD

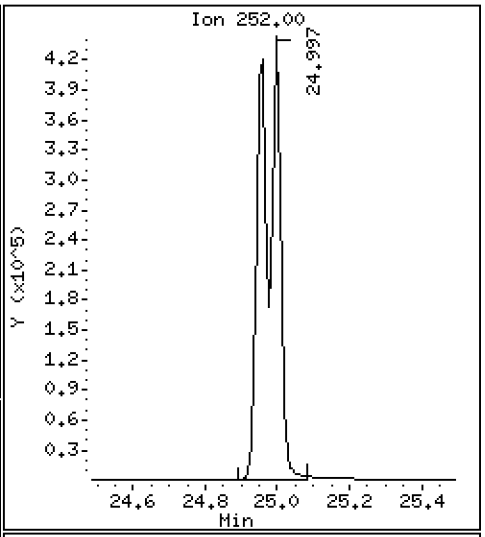
Column phase: ZB-5msi

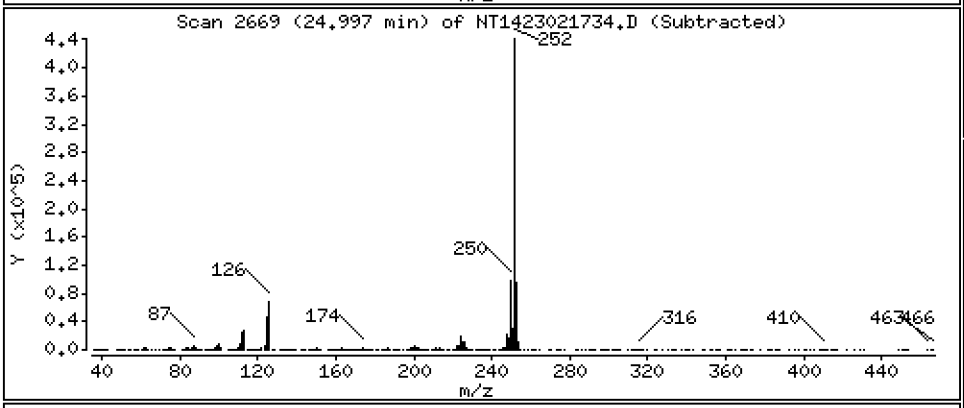
Column diameter: 0.25

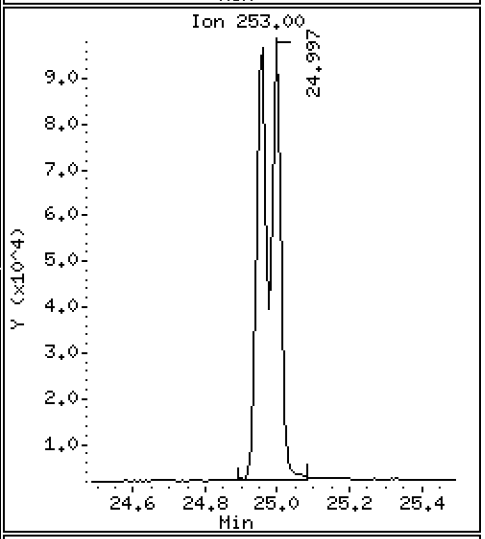
187 Total Benzofluoranthenes

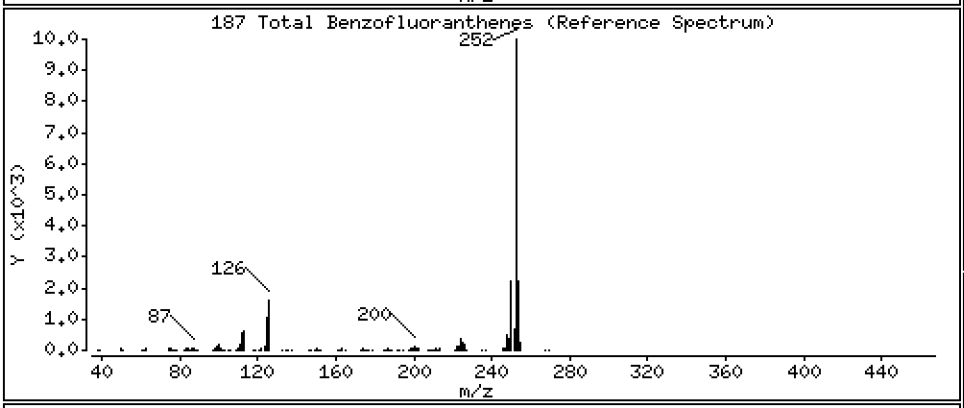
Concentration: 9.081 ug/mL

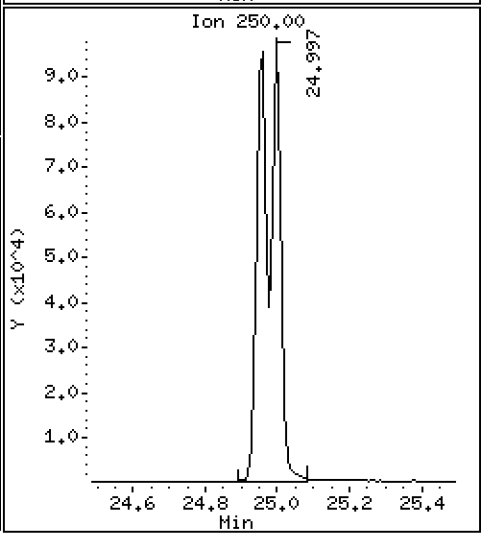


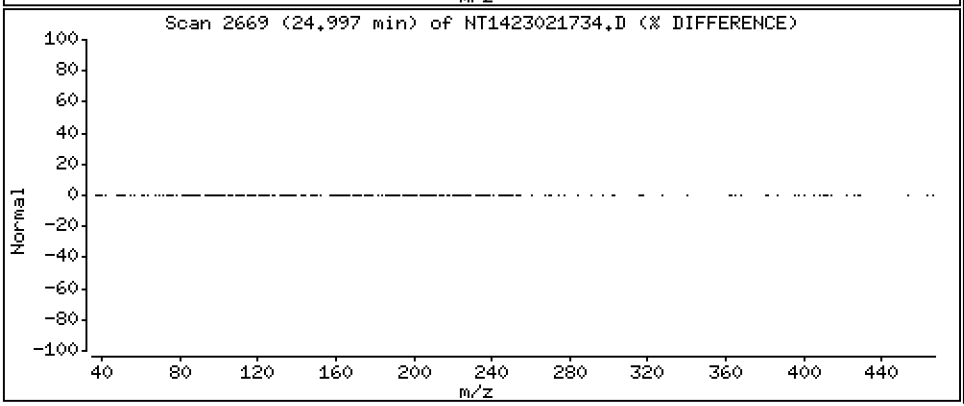












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021734.D

Date : 18-FEB-2023 06:30

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-CCV1

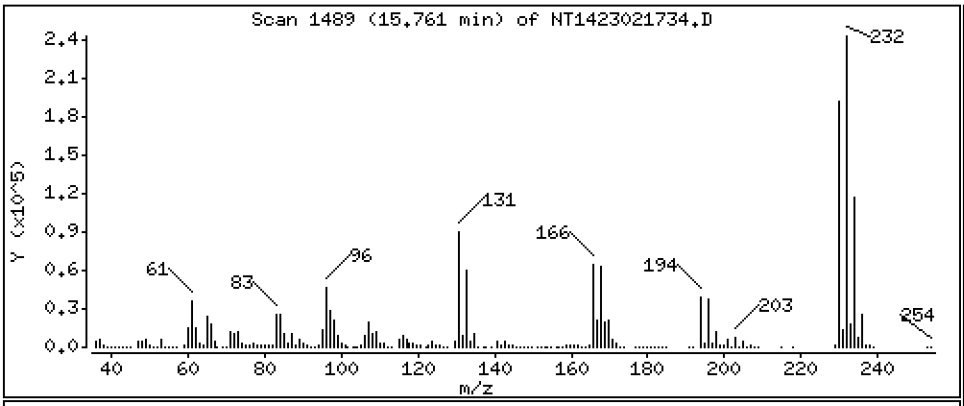
Operator: DSD

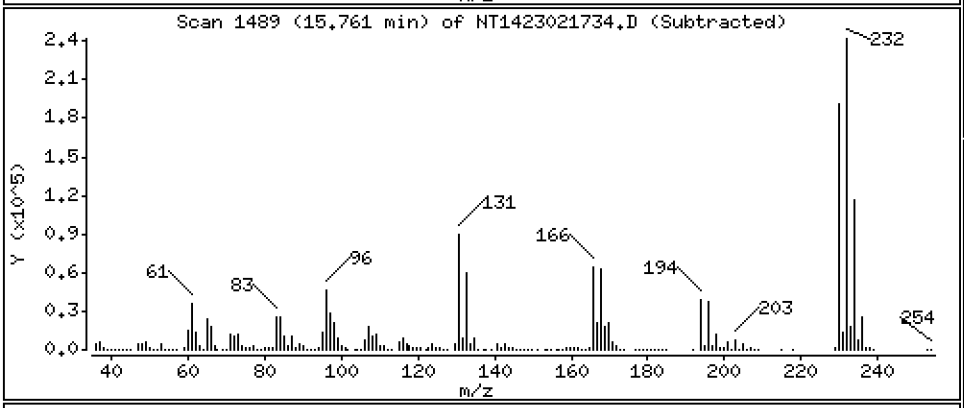
Column phase: ZB-5msi

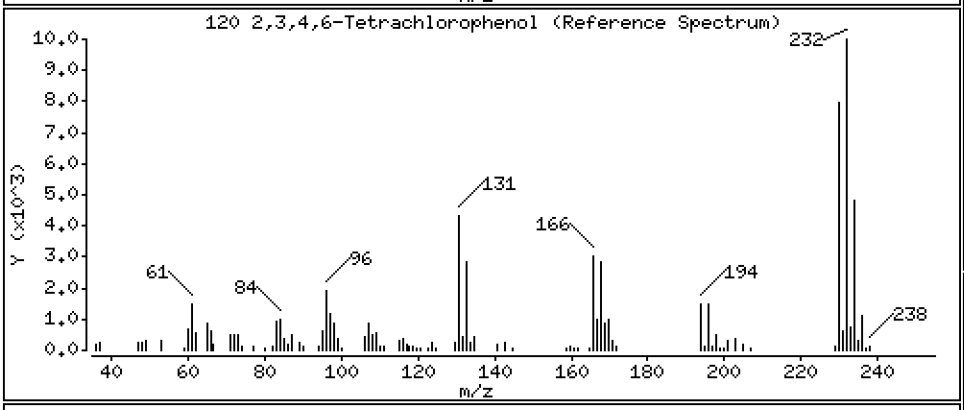
Column diameter: 0.25

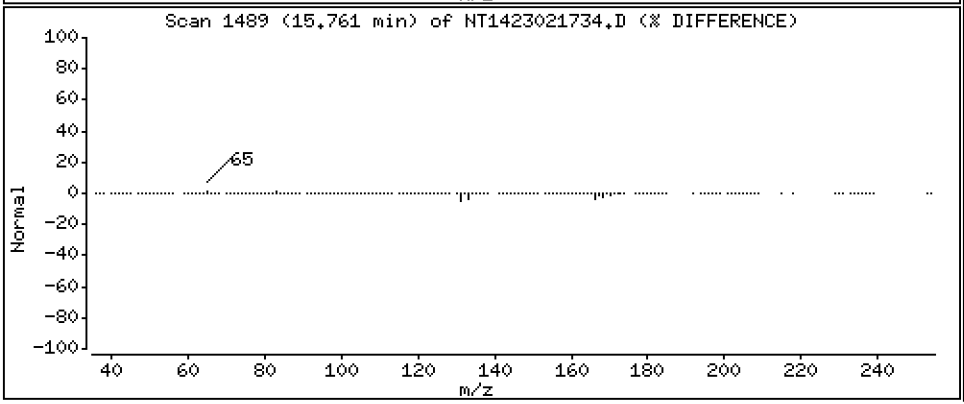
120 2,3,4,6-Tetrachlorophenol

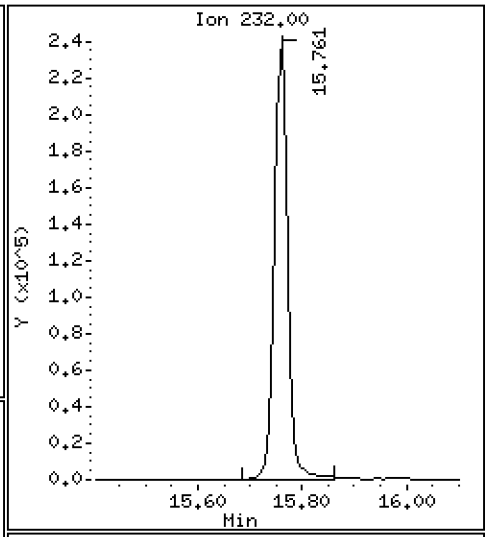
Concentration: 4.467 ug/mL

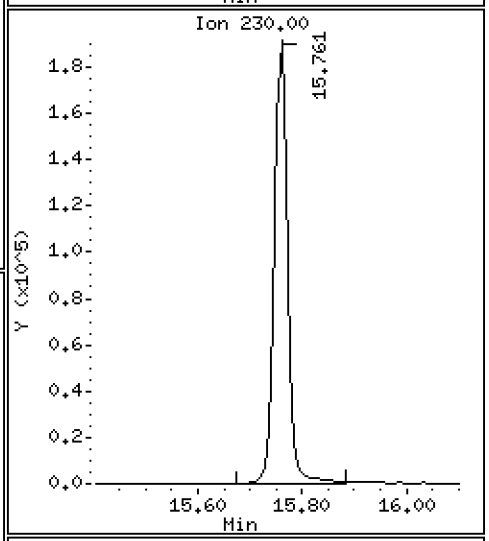


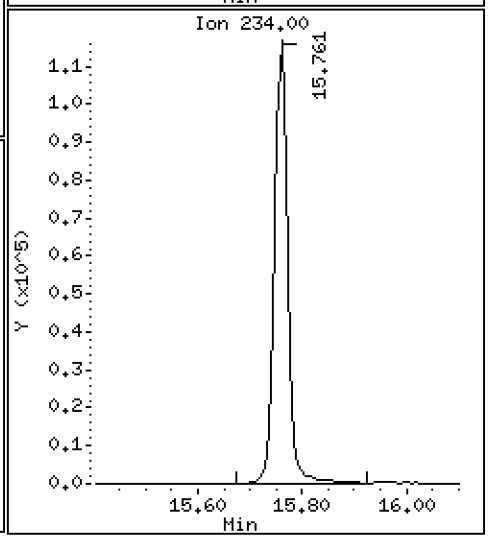












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230217A.b\NT1423021734.D
Lab Smp Id: SLB0251-CCV1
Inj Date : 18-FEB-2023 06:30 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0251-CCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230217A.b\ABN.m
Meth Date : 01-Mar-2023 13:20 van Quant Type: ISTD
Cal Date : 16-FEB-2023 19:30 Cal File: NT1423021610.D
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.681	6.674	(0.750)	744814	7.94850	7.948
$	2 Phenol-d5	99	8.281	8.273	(0.930)	1104071	7.42740	7.427
	3 Phenol	94	8.304	8.296	(0.932)	728003	4.62625	4.626
$	5 2-Chlorophenol-d4	132	8.544	8.536	(0.959)	800996	7.55193	7.552
	4 Bis(2-Chloroethyl)ether	93	8.459	8.459	(0.950)	540930	4.49984	4.500
	6 2-Chlorophenol	128	8.575	8.567	(0.963)	583431	5.26475	5.265
	7 1,3-Dichlorobenzene	146	8.838	8.838	(0.992)	566424	4.59128	4.591
*	8 1,4-Dichlorobenzene-d4	152	8.908	8.900	(1.000)	350521	4.00000	
	9 1,4-Dichlorobenzene	146	8.939	8.931	(1.003)	536297	4.58048	4.580
$	10 1,2-Dichlorobenzene-d4	152	9.264	9.264	(1.040)	377626	4.74985	4.750
	12 1,2-Dichlorobenzene	146	9.295	9.288	(1.044)	540567	4.61832	4.618
	11 Benzyl alcohol	108	9.187	9.179	(1.031)	393341	4.42633	4.426
	14 2,2'-oxybis(1-Chloropropane)	121	9.482	9.482	(1.064)	167507	5.00244	5.002(M)
	13 2-Methylphenol	108	9.412	9.404	(1.057)	534247	4.86198	4.862
	17 Hexachloroethane	117	9.885	9.878	(1.110)	226070	4.44131	4.441
	16 N-Nitroso-di-n-propylamine	70	9.754	9.746	(1.095)	457822	4.57707	4.577
	15 4-Methylphenol	108	9.684	9.676	(1.087)	569139	4.90510	4.905
$	18 Nitrobenzene-d5	82	10.010	10.002	(0.878)	724820	4.82551	4.826
	19 Nitrobenzene	77	10.041	10.040	(0.881)	678152	4.49900	4.499
	20 Isophorone	82	10.498	10.491	(0.921)	972362	4.88941	4.889
	21 2-Nitrophenol	139	10.677	10.669	(0.937)	340724	4.94348	4.943
	22 2,4-Dimethylphenol	107	10.731	10.723	(0.942)	1048654	9.21311	9.213
	23 Bis(2-Chloroethoxy)methane	93	10.933	10.925	(0.959)	588681	4.55042	4.550
	24 Benzoic acid	105	11.026	11.010	(0.967)	1348093	18.0299	18.03
	25 2,4-Dichlorophenol	162	11.134	11.126	(0.977)	956074	9.81446	9.814
	26 1,2,4-Trichlorobenzene	180	11.312	11.312	(0.993)	526514	4.46180	4.462
*	27 Naphthalene-d8	136	11.397	11.397	(1.000)	1300165	4.00000	
	28 Naphthalene	128	11.443	11.436	(1.004)	1503581	4.69020	4.690
	29 4-Chloroaniline	127	11.582	11.574	(1.016)	1380696	10.0809	10.08
	30 Hexachlorobutadiene	225	11.806	11.799	(1.036)	332233	4.56712	4.567
	31 4-Chloro-3-methylphenol	107	12.549	12.542	(1.101)	1023024	9.70244	9.702
	32 2-Methylnaphthalene	142	12.843	12.836	(1.127)	1112414	4.63319	4.633
	33 Hexachlorocyclopentadiene	237	13.308	13.300	(0.886)	382932	5.01589	5.016

		QUANT SIG					CONCENTRATIONS	
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
	34 2,4,6-Trichlorophenol	196	13.470	13.462	(0.896)	776673	10.0070	10.01
	35 2,4,5-Trichlorophenol	196	13.540	13.532	(0.901)	840234	9.99642	9.996
$	36 2-Fluorobiphenyl	172	13.633	13.625	(0.907)	1380525	4.89657	4.897
	37 2-Chloronaphthalene	162	13.834	13.834	(0.921)	1072883	4.66221	4.662
	38 2-Nitroaniline	65	14.113	14.105	(0.939)	699529	9.34952	9.350
	39 Dimethylphthalate	163	14.546	14.538	(0.968)	1113610	4.62644	4.626
	40 Acenaphthylene	152	14.709	14.709	(0.979)	1653197	4.71007	4.710
	41 2,6-Dinitrotoluene	165	14.685	14.678	(0.977)	530341	9.36348	9.363
*	42 Acenaphthene-d10	164	15.026	15.018	(1.000)	788029	4.00000	
	43 3-Nitroaniline	138	14.972	14.964	(0.996)	565971	9.41438	9.414
	44 Acenaphthene	153	15.095	15.088	(1.005)	989157	4.70705	4.707
	45 2,4-Dinitrophenol	184	15.180	15.173	(1.010)	520892	13.6368	13.64
	46 Dibenzofuran	168	15.420	15.412	(1.026)	1549352	4.49051	4.491
	47 4-Nitrophenol	109	15.296	15.281	(1.018)	234932	6.71269	6.713
	48 2,4-Dinitrotoluene	165	15.490	15.482	(1.031)	742643	9.27362	9.274
	50 Diethylphthalate	149	16.008	16.000	(1.065)	1534388	4.79498	4.795
	49 Fluorene	166	16.131	16.131	(1.074)	1645597	4.56085	4.561
	51 4-Chlorophenyl-phenylether	204	16.123	16.123	(1.073)	861900	4.46747	4.467
	52 4-Nitroaniline	138	16.247	16.239	(1.081)	588552	8.53299	8.533
	53 4,6-Dinitro-2-methylphenol	198	16.332	16.332	(0.904)	942791	17.7380	17.74
	54 N-Nitrosodiphenylamine	169	16.386	16.378	(0.907)	1021018	4.96808	4.968
$	55 2,4,6-Tribromophenol	330	16.671	16.663	(1.109)	328375	7.11879	7.119
	56 4-Bromophenyl-phenylether	248	17.126	17.126	(0.948)	469972	5.13427	5.134
	57 Hexachlorobenzene	284	17.443	17.435	(0.965)	451343	4.85246	4.852
	58 Pentachlorophenol	266	17.807	17.799	(0.985)	365189	7.89451	7.895
*	59 Phenanthrene-d10	188	18.070	18.062	(1.000)	1430128	4.00000	
	60 Phenanthrene	178	18.116	18.108	(1.003)	1591859	4.63213	4.632
	61 Anthracene	178	18.209	18.201	(1.008)	1678815	4.93088	4.931
	62 Carbazole	167	18.542	18.534	(1.026)	1340984	4.34020	4.340
	63 Di-n-butylphthalate	149	19.346	19.346	(1.071)	1850639	5.36260	5.363
	64 Fluoranthene	202	20.507	20.499	(0.887)	1533011	5.69171	5.692
	65 Pyrene	202	20.932	20.924	(0.905)	1561124	5.48137	5.481
$	66 Terphenyl-d14	244	21.226	21.218	(0.918)	1218933	6.02772	6.028
	67 Butylbenzylphthalate	149	22.155	22.148	(0.958)	543898	5.72696	5.727
	68 Benzo(a)anthracene	228	23.100	23.092	(0.999)	941325	4.71178	4.712
*	69 Chrysene-d12	240	23.131	23.123	(1.000)	624298	4.00000	
	70 3,3'-Dichlorobenzidine	252	23.061	23.054	(0.997)	889721	14.4407	14.44
	71 Chrysene	228	23.170	23.170	(1.002)	837267	4.65933	4.659
	72 bis(2-Ethylhexyl)phthalate	149	23.178	23.177	(0.959)	788162	4.34977	4.350
*	134 Di-n-octylphthalate-d4	153	24.161	24.153	(1.000)	1083743	4.00000	
	73 Di-n-octylphthalate	149	24.168	24.168	(1.000)	1111349	4.38575	4.386
	74 Benzo(b)fluoranthene	252	24.958	24.950	(0.971)	782590	4.42051	4.421
	75 Benzo(k)fluoranthene	252	24.997	24.989	(0.973)	876168	4.63161	4.632
	76 Benzo(a)pyrene	252	25.585	25.577	(0.995)	763207	4.51367	4.514
*	77 Perylene-d12	264	25.701	25.694	(1.000)	557929	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	28.259	28.244	(1.100)	547142	3.88307	3.883
	79 Dibenzo(a,h)anthracene	278	28.267	28.259	(1.100)	481696	4.14153	4.142
	80 Benzo(g,h,i)perylene	276	29.013	28.997	(1.129)	381674	3.33531	3.335
	90 N-Nitrosodimethylamine	74	4.573	4.573	(0.513)	649526	8.95278	8.953
	91 Aniline	93	8.366	8.366	(0.939)	1536689	9.12958	9.130
	93 Benzidine	184	20.754	20.746	(0.897)	796599	12.8880	12.89
	103 Pyridine	79	4.581	4.581	(0.514)	1040888	9.06704	9.067
	105 1-methylnaphthalene	142	13.068	13.060	(1.147)	1013221	4.49506	4.495
	111 Azobenzene (1,2-DP-Hydrazine)	77	16.455	16.447	(1.095)	1718394	4.41857	4.419

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.997	24.989	(0.973)	1569515	9.08060	9.081
120 2,3,4,6-Tetrachlorophenol	232	15.760	15.752	(1.049)	407612	4.46734	4.467

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021734.D
Lab Smp Id: SLB0251-CCV1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230217A.b\ABN.m
Misc Info:

Calibration Date: 17-FEB-2023
Calibration Time: 20:19
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	351756	175878	703512	350521	-0.35
27 Naphthalene-d8	1299383	649692	2598766	1300165	0.06
42 Acenaphthene-d10	808045	404023	1616090	788029	-2.48
59 Phenanthrene-d10	1607740	803870	3215480	1430128	-11.05
69 Chrysene-d12	876381	438191	1752762	624298	-28.76
134 Di-n-octylphthala	1545452	772726	3090904	1083743	-29.88
77 Perylene-d12	639717	319859	1279434	557929	-12.79

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.91	0.09
27 Naphthalene-d8	11.40	10.90	11.90	11.40	0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.03	0.05
59 Phenanthrene-d10	18.06	17.56	18.56	18.07	0.04
69 Chrysene-d12	23.12	22.62	23.62	23.13	0.03
134 Di-n-octylphthala	24.15	23.65	24.65	24.16	0.03
77 Perylene-d12	25.69	25.19	26.19	25.70	0.03

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

REVIEW SUMMARY FOR FILE - NT1423021734.D

Lab ID: SLB0251-CCV1
nt14.i, ABN.m, 18-FEB-2023 06:30

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

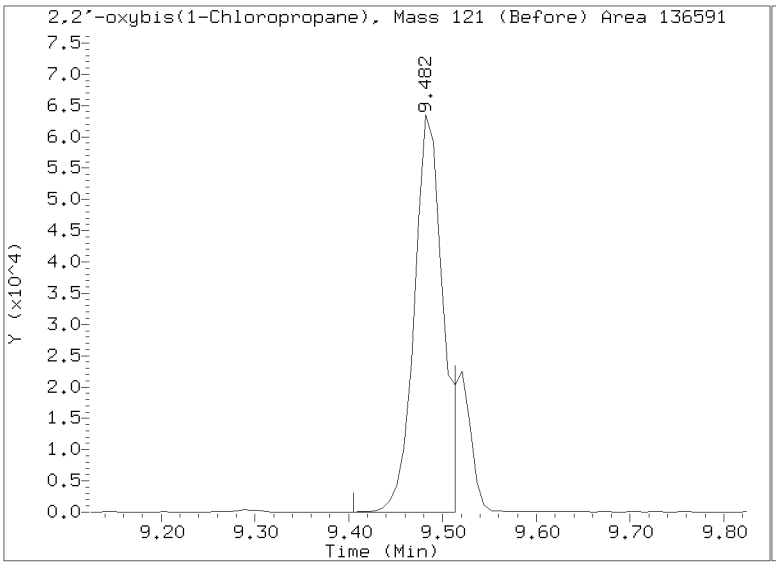
RRT check based on Ccal File: NT1423021717.D

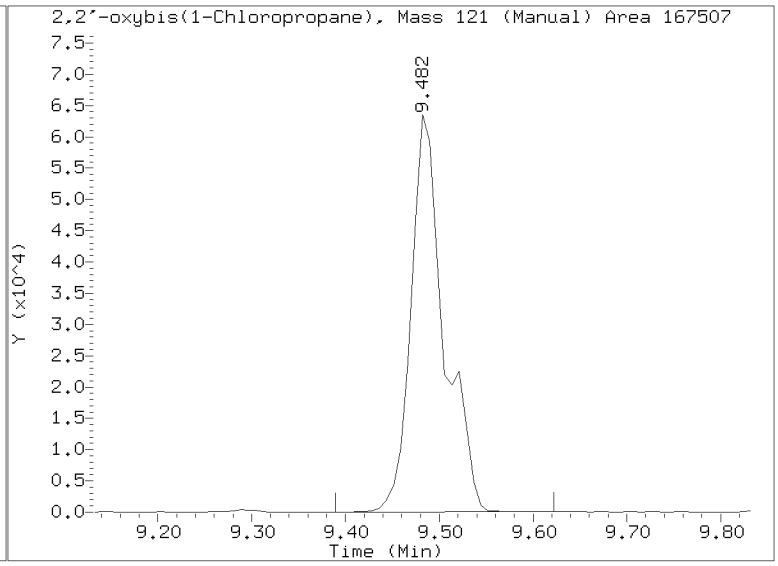
On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230217A.b/NT1423021734.D
Injection Date: 18-FEB-2023 06:30
Lab ID:SLB0251-CCV1 Client ID:
Report Date: 03/01/2023 13:23





Analytical Resources, LLC
Analytical Chemists and Consultants

LOW-CONCENTRATION CONTINUING CALIBRATION CHECK

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT14	Calibration:	GB00046
Lab File ID:	NT1423021718.D	Calibration Date:	02/16/2023
Sequence:	SLB0251	Injection Date:	02/17/23
Lab Sample ID:	SLB0251-LCV1	Injection Time:	20:55
Sequence Name:	ABN 0.2		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	0.50000	0.5	1.7957660	1.6269460		-9.4	+/-50
4-Methylphenol	A	0.50000	0.5	1.3240860	1.2147830		-8.3	+/-50
Naphthalene	A	0.50000	0.5	0.9862730	0.9463403		-4.0	+/-50
2-Methylnaphthalene	A	0.50000	0.5	0.7386653	0.7253597		-1.8	+/-50
Acenaphthylene	A	0.50000	0.6	1.7816190	1.9879060		11.6	+/-50
Dimethylphthalate	A	0.50000	0.5	1.2218100	1.2286010		0.6	+/-50
Acenaphthene	A	0.50000	0.5	1.0666800	1.0242750		-4.0	+/-50
Dibenzofuran	A	0.50000	0.5	1.7513490	1.6993550		-3.0	+/-50
Fluorene	A	0.50000	0.5	1.8314530	1.8201700		-0.6	+/-50
Phenanthrene	A	0.50000	0.5	0.9611900	0.9244359		-3.8	+/-50
Anthracene	A	0.50000	0.5	0.9522768	0.9481963		-0.4	+/-50
Fluoranthene	A	0.50000	0.6	1.7257220	1.9629020		13.7	+/-50
Pyrene	A	0.50000	0.6	1.8248060	2.0584370		12.8	+/-50
Butylbenzylphthalate	A	0.50000	0.5	0.5233989	0.6445859		7.1	+/-50
Benzo(a)anthracene	A	0.50000	0.5	1.2800360	1.2526510		-2.1	+/-50
Chrysene	A	0.50000	0.5	1.1513540	1.1096230		-3.6	+/-50
bis(2-Ethylhexyl)phthalate	A	0.50000	0.4	0.5470542	0.5123431		-25.4	+/-50
Benzofluoranthenes, Total	A	1.0000	0.9	1.2391730	1.1606760		-6.3	+/-50
Benzo(a)pyrene	A	0.50000	0.4	1.0848130	1.0791690		-10.3	+/-50
Indeno(1,2,3-cd)pyrene	A	0.50000	0.4	0.8621891	0.7379852		-25.5	+/-50
Dibenzo(a,h)anthracene	A	0.50000	0.4	0.7046903	0.6240535		-23.5	+/-50
Benzo(g,h,i)perylene	A	0.50000	0.3	0.7176031	0.5460419		-32.0	+/-50
2-Fluorophenol	A	0.75000	0.692	1.0693230	0.9866130		-7.7	+/-50
Phenol-d5	A	0.75000	0.696	1.6963140	1.5742770		-7.2	+/-50
2-Chlorophenol-d4	A	0.75000	0.751	1.2103710	1.2118680		0.1	+/-50
1,2-Dichlorobenzene-d4	A	0.50000	0.489	0.9072515	0.8872198		-2.2	+/-50
Nitrobenzene-d5	A	0.50000	0.479	0.4621137	0.4431538		-4.1	+/-50
2-Fluorobiphenyl	A	0.50000	0.505	1.4311010	1.4448580		1.0	+/-50
2,4,6-Tribromophenol	A	0.75000	0.594	0.2030581	0.1820800		-20.8	+/-50
p-Terphenyl-d14	A	0.50000	0.626	1.2956710	1.6232240		25.3	+/-50

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021718.D

Date : 17-FEB-2023 20:55

Client ID:

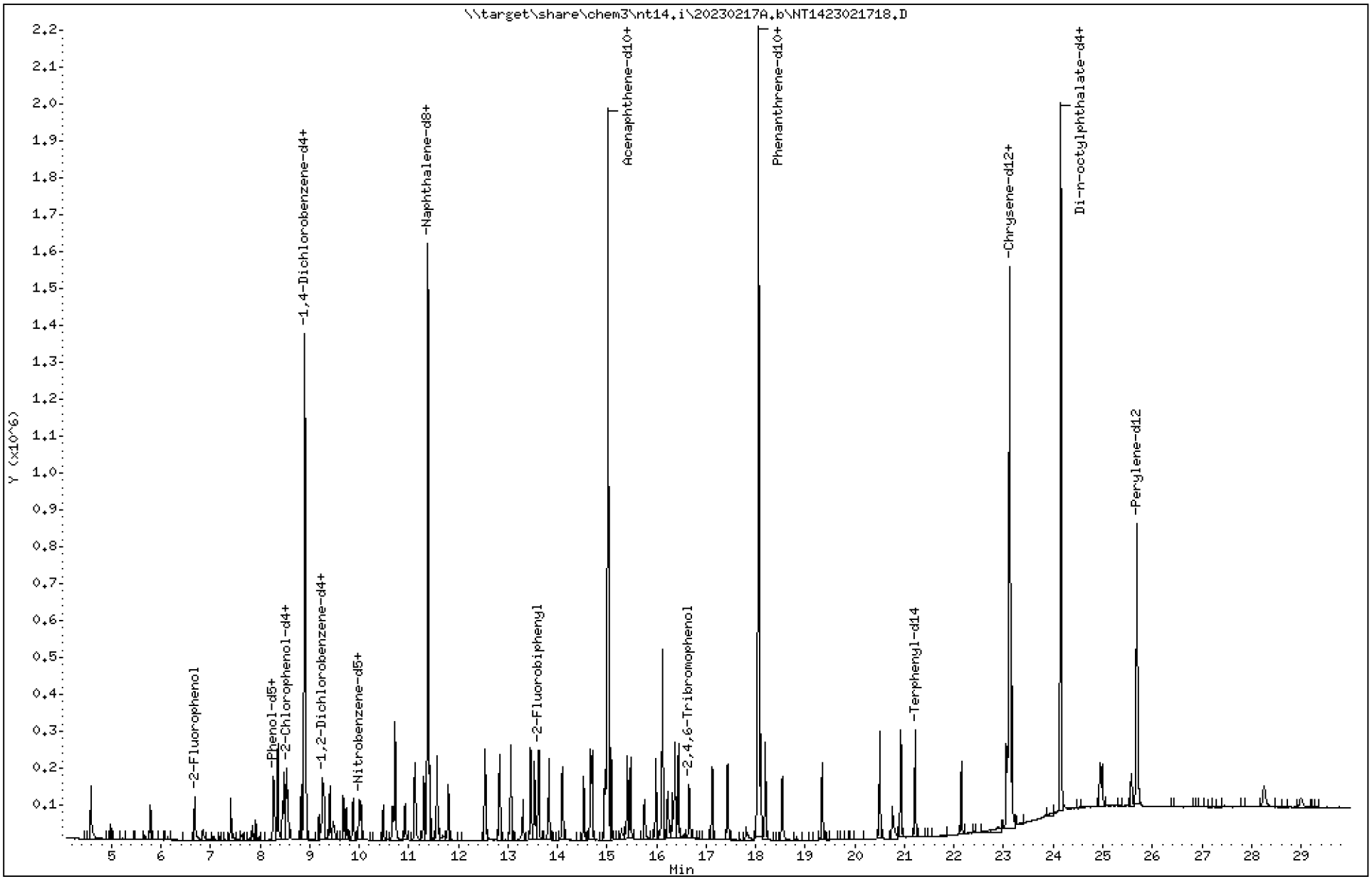
Instrument: nt14.i

Sample Info: SLB0251-LCV1

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

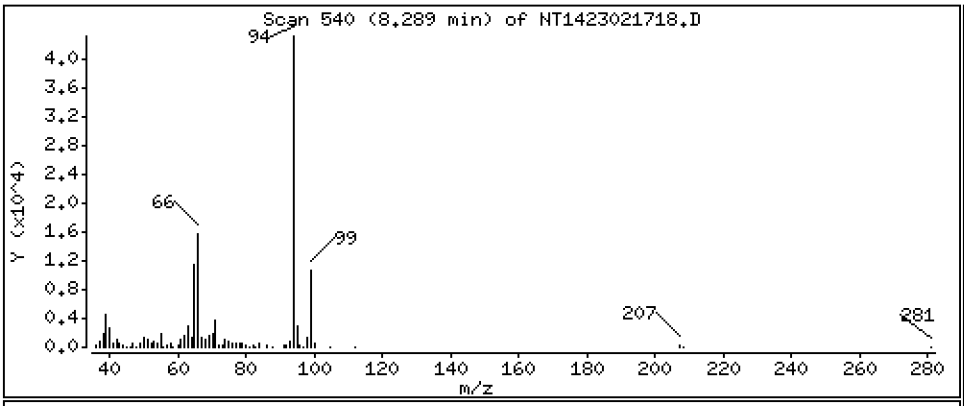
Operator: DSD

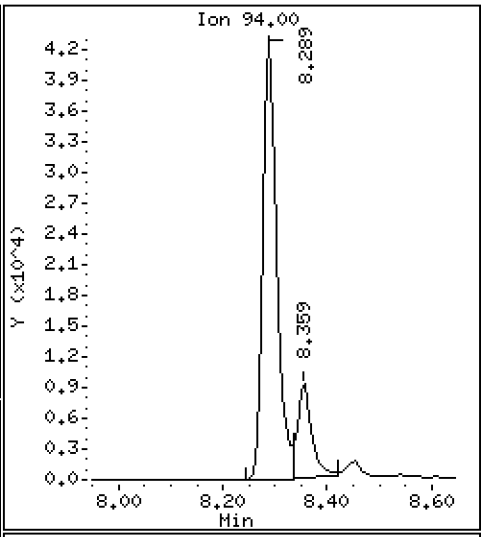
Column phase: ZB-5msi

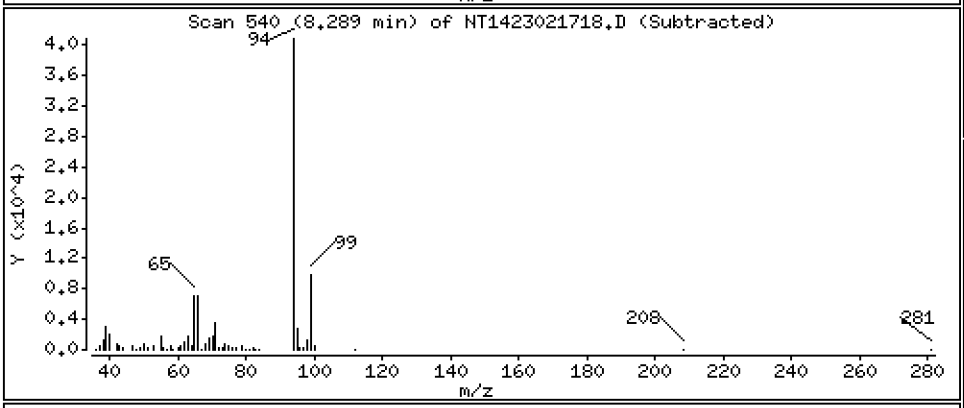
Column diameter: 0.25

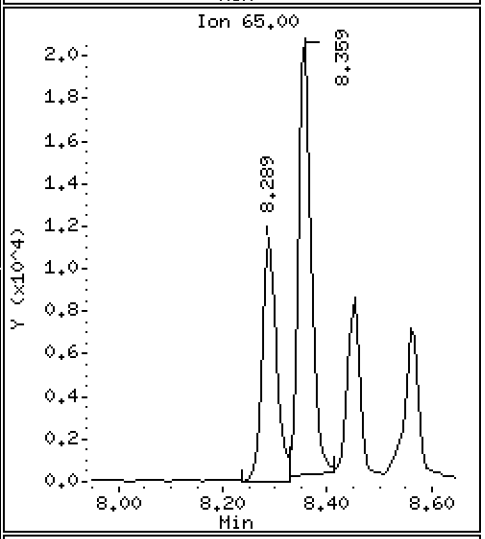
3 Phenol

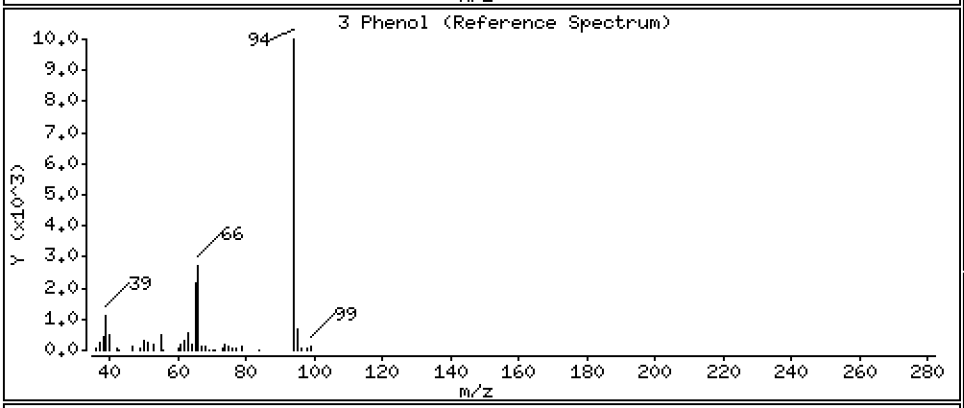
Concentration: 0.4530 ug/mL

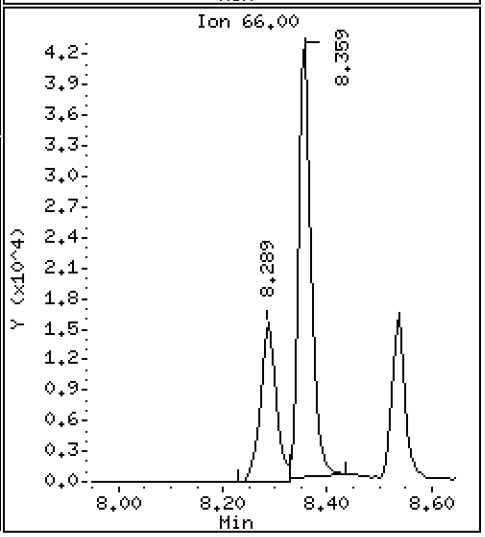


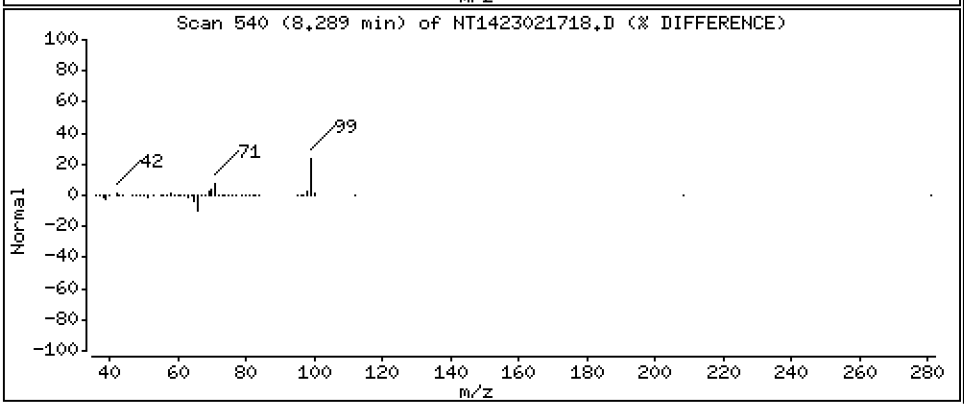












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

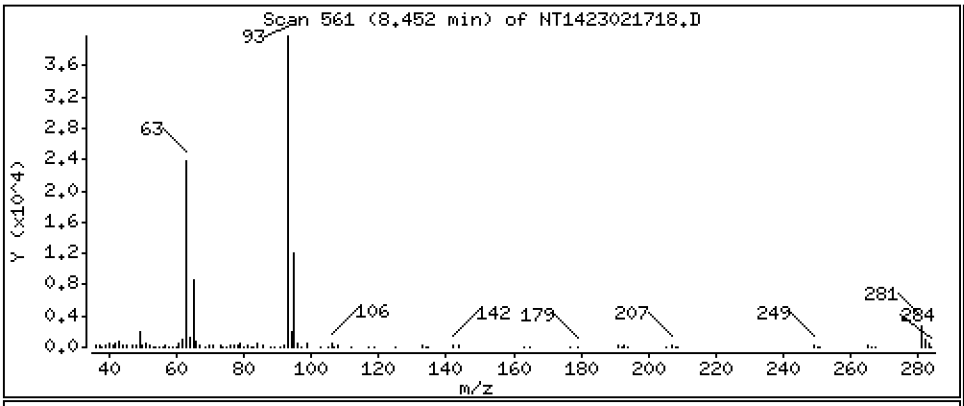
Operator: DSD

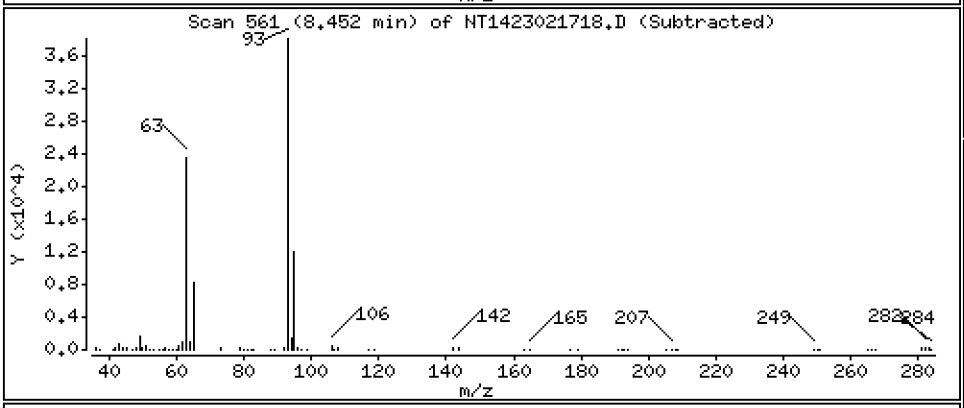
Column phase: ZB-5msi

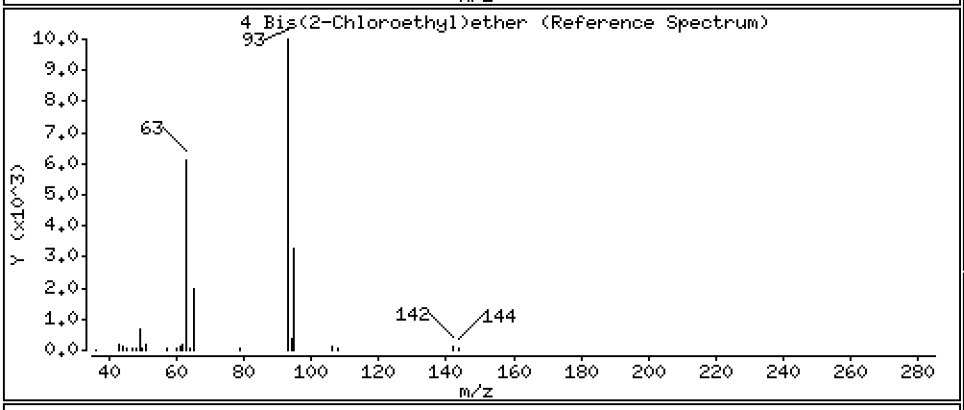
Column diameter: 0.25

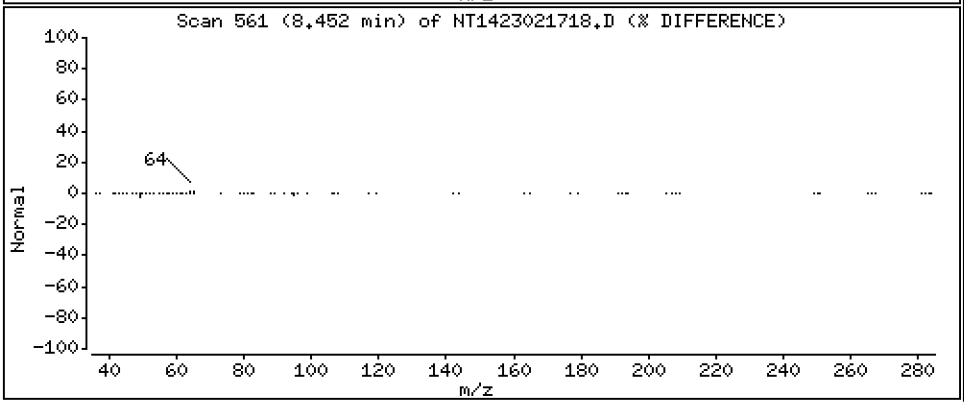
4 Bis(2-Chloroethyl)ether

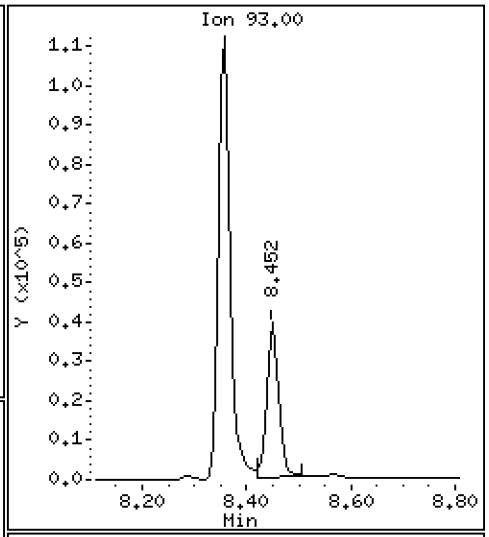
Concentration: 0.4642 ug/mL

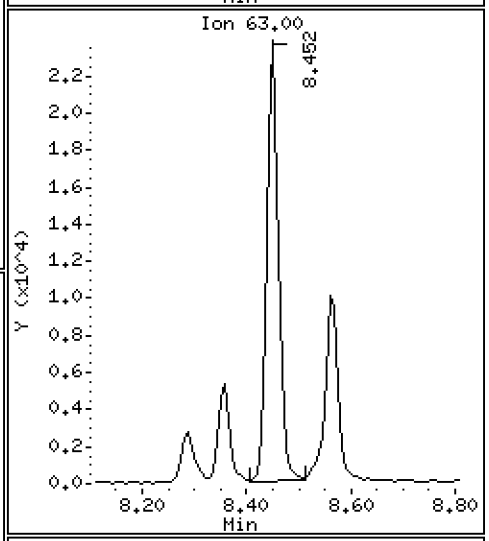


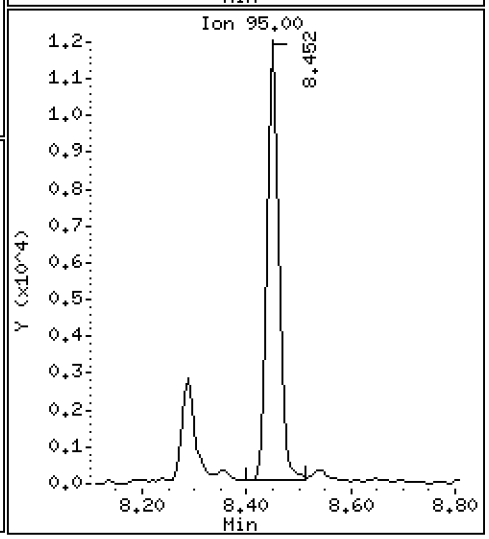












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

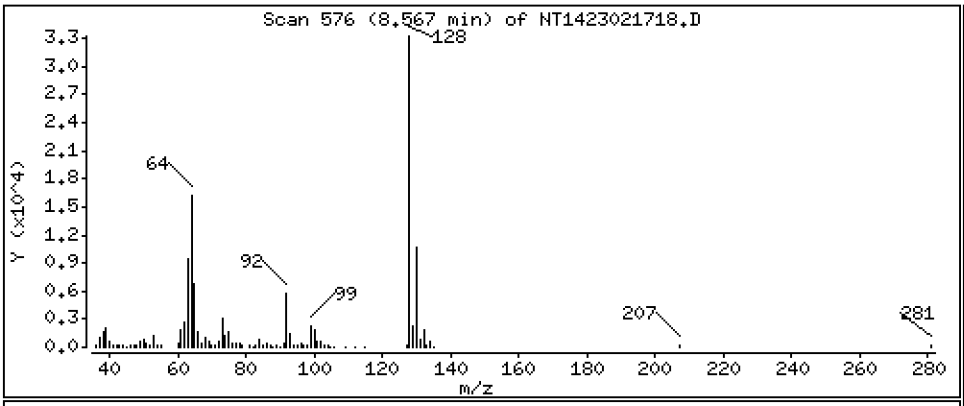
Operator: DSD

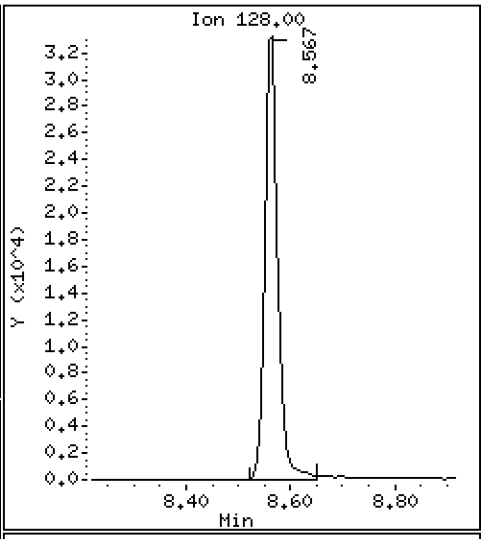
Column phase: ZB-5msi

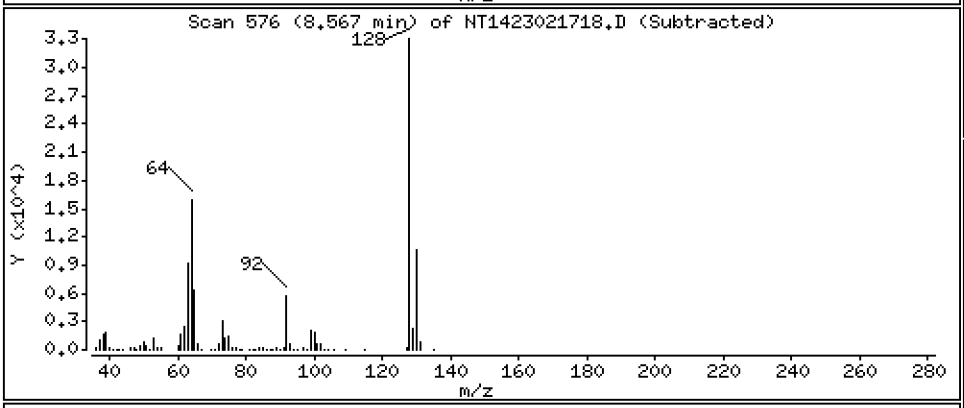
Column diameter: 0.25

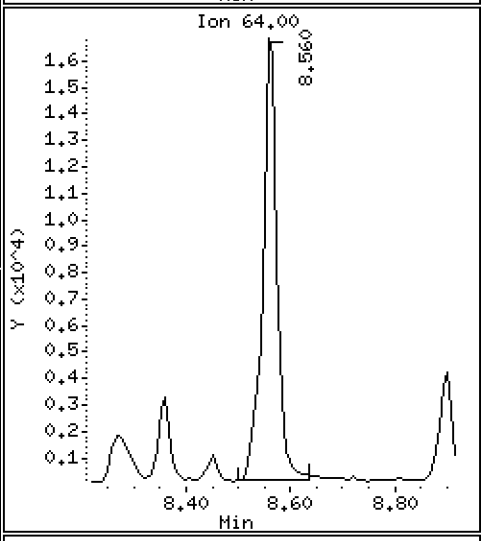
6 2-Chlorophenol

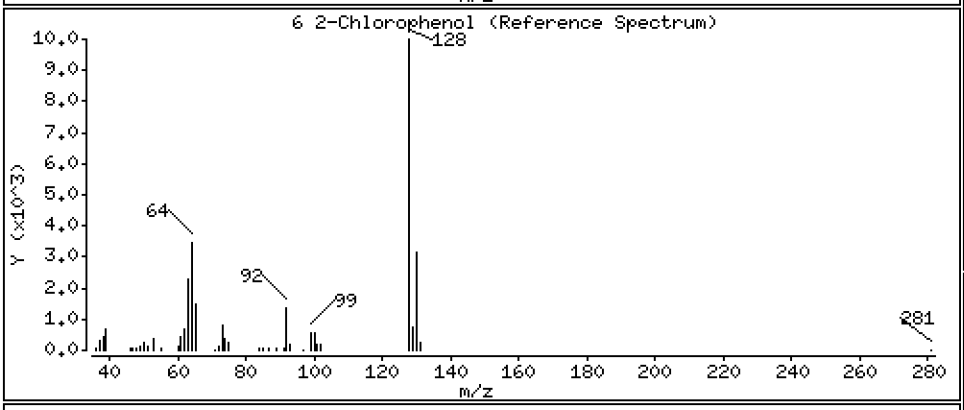
Concentration: 0.4801 ug/mL

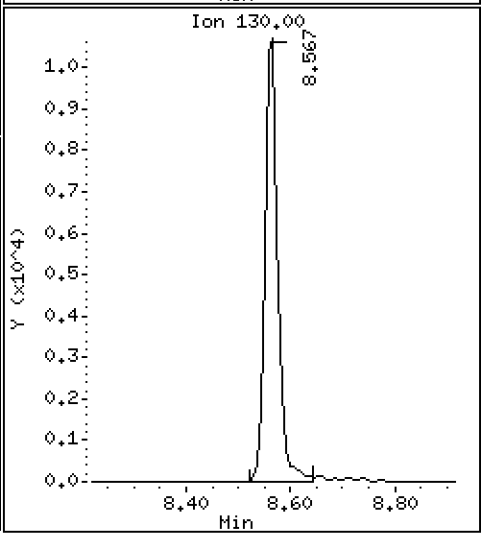


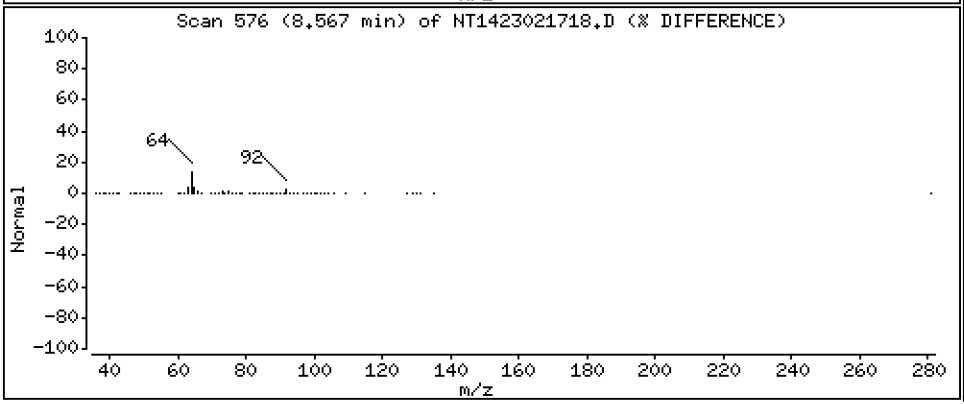












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

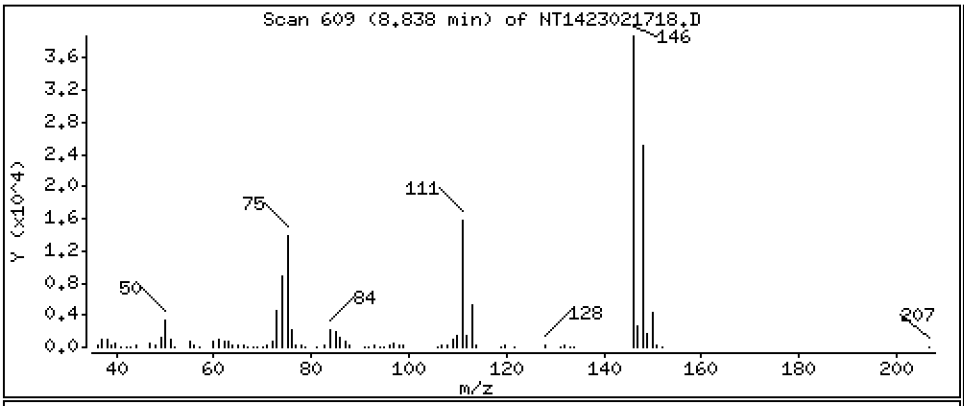
Operator: DSD

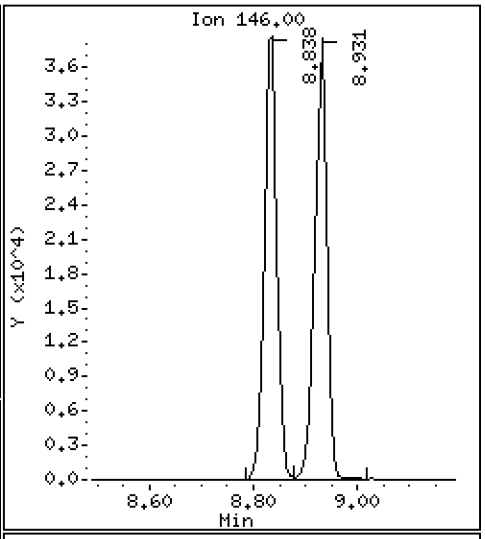
Column phase: ZB-5msi

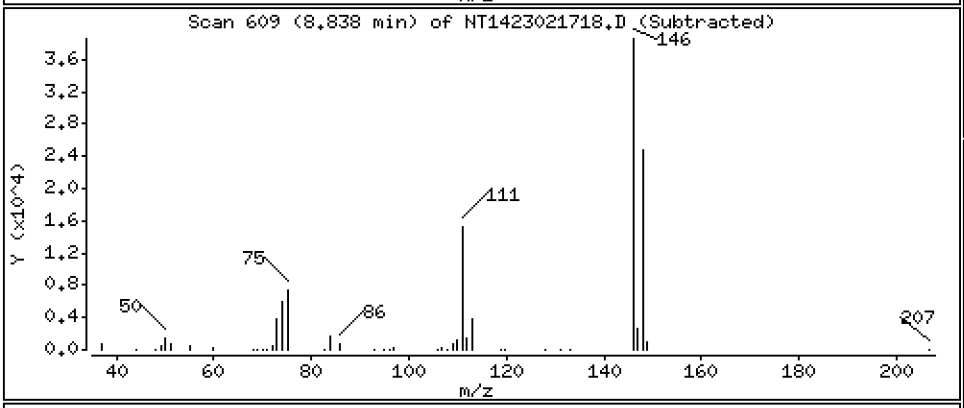
Column diameter: 0.25

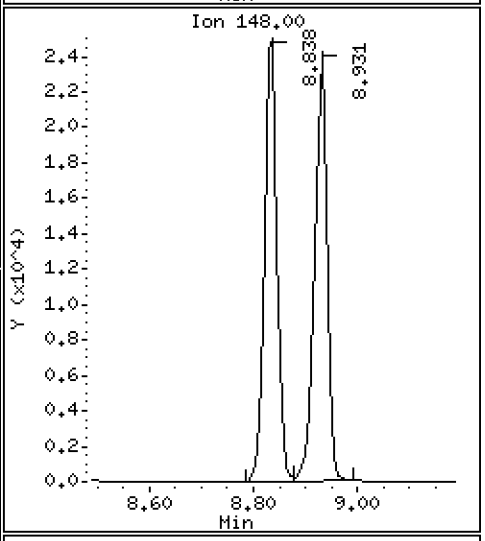
7 1,3-Dichlorobenzene

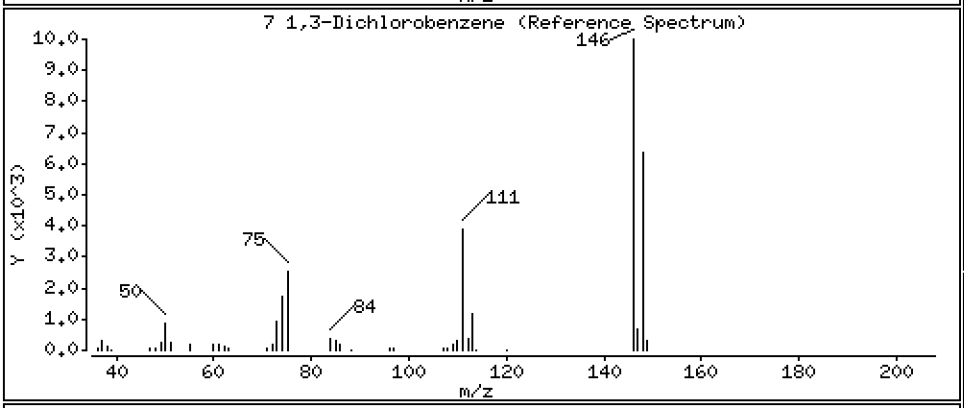
Concentration: 0.4889 ug/mL

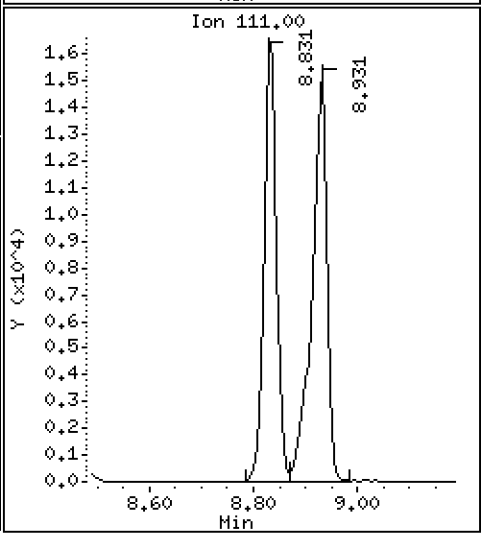


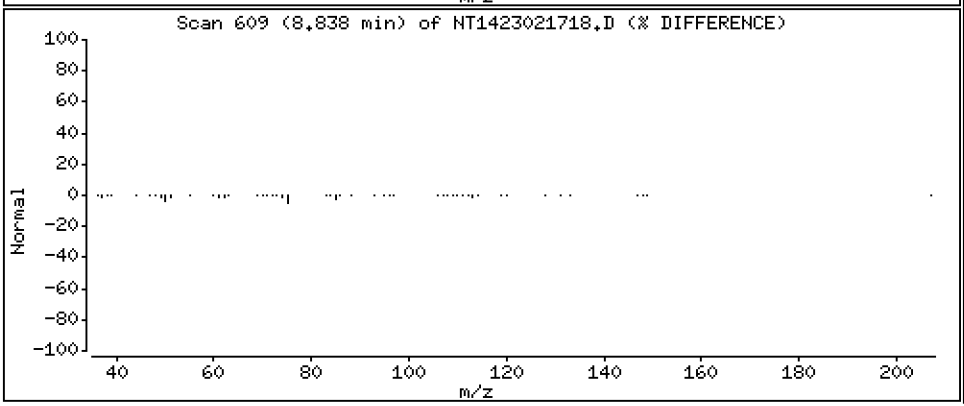












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

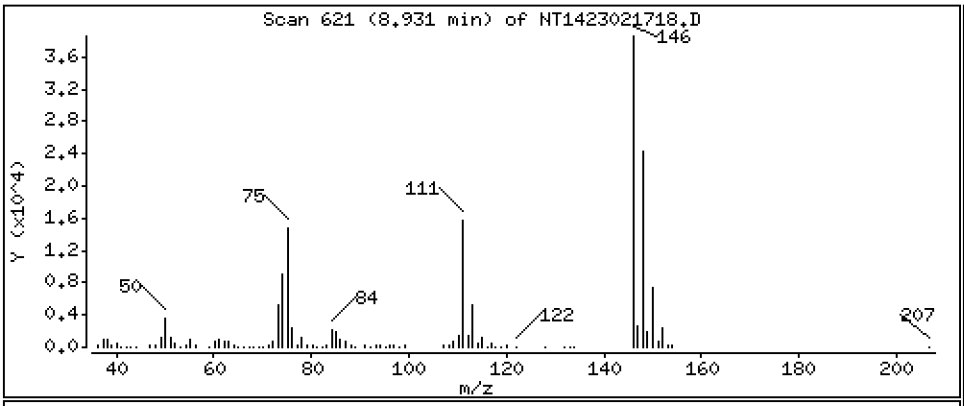
Operator: DSD

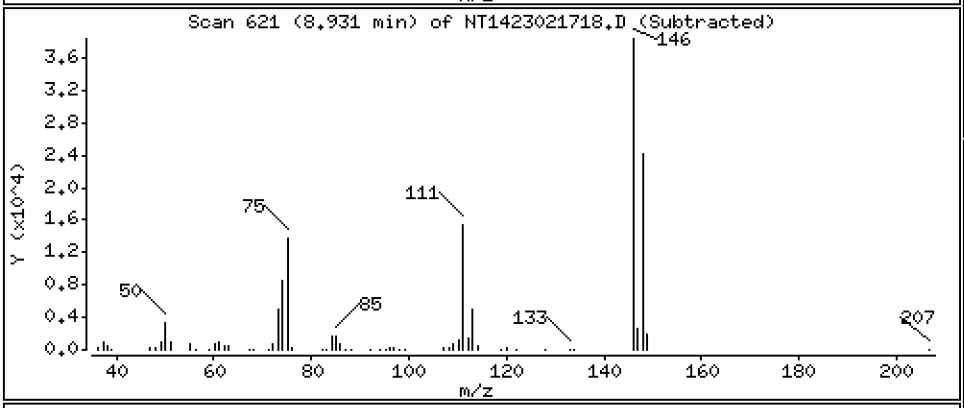
Column phase: ZB-5msi

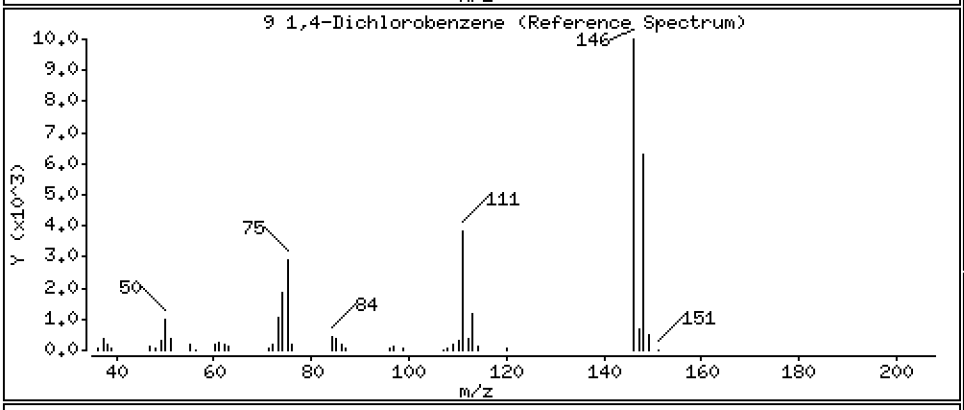
Column diameter: 0.25

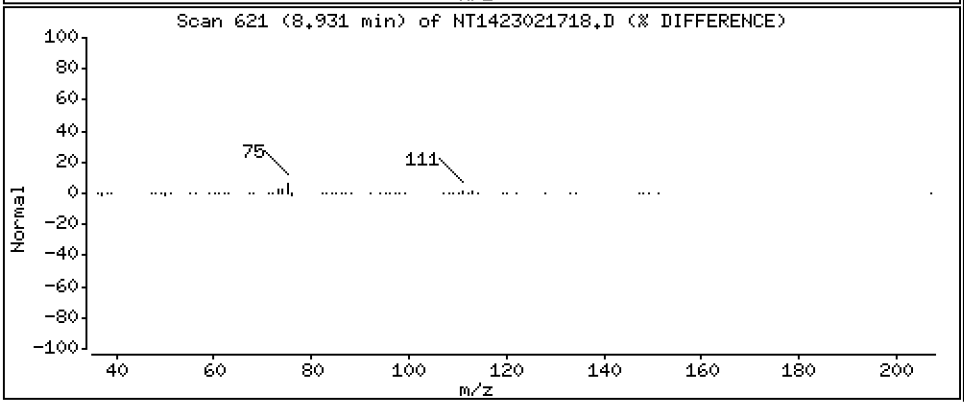
9 1,4-Dichlorobenzene

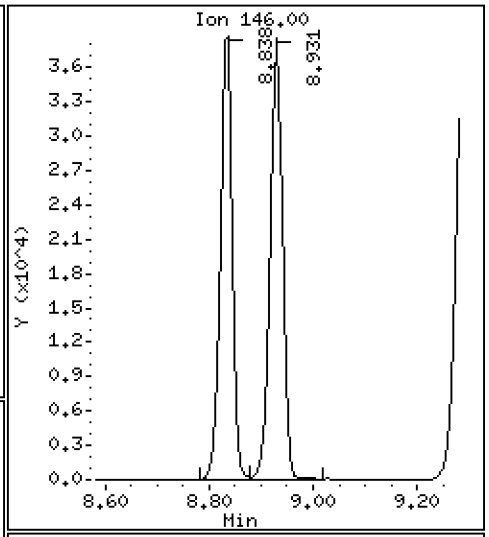
Concentration: 0.4774 ug/mL

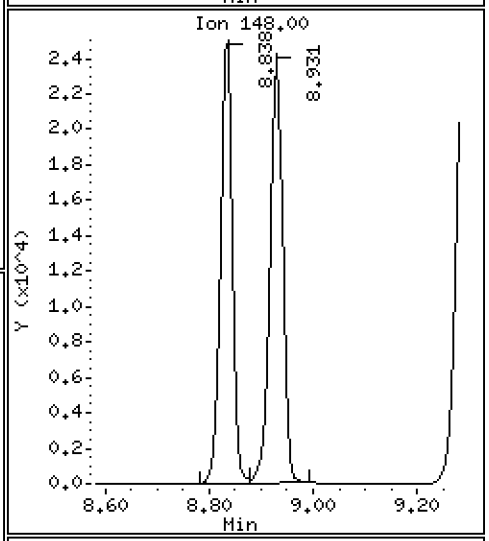


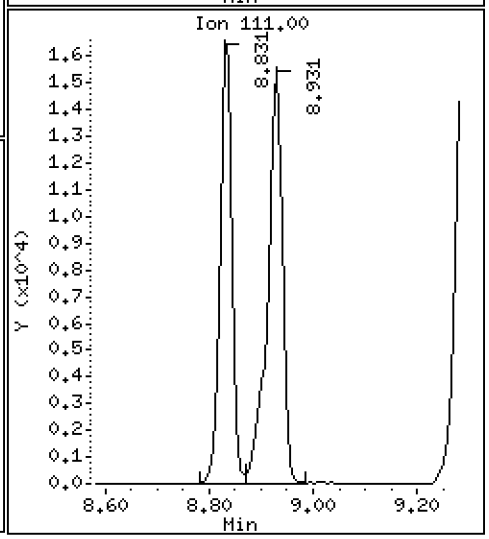












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

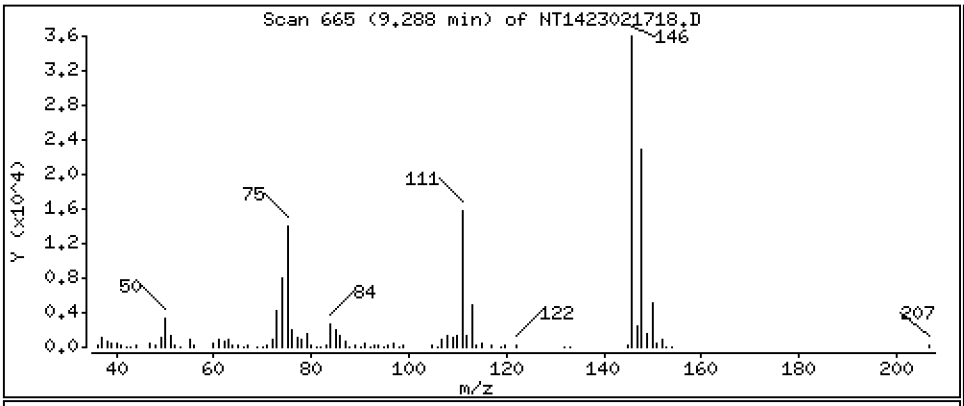
Operator: DSD

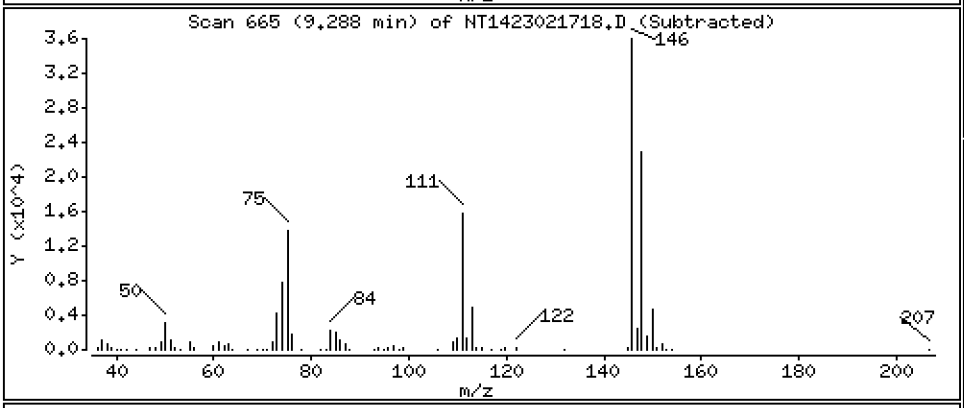
Column phase: ZB-5msi

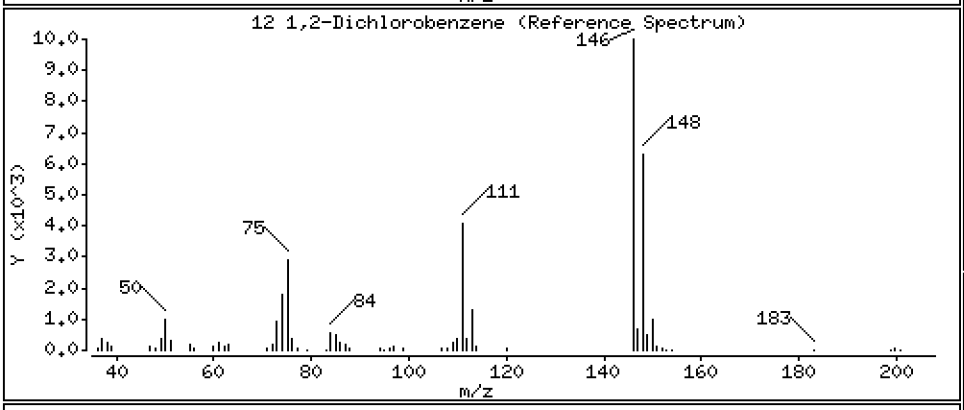
Column diameter: 0.25

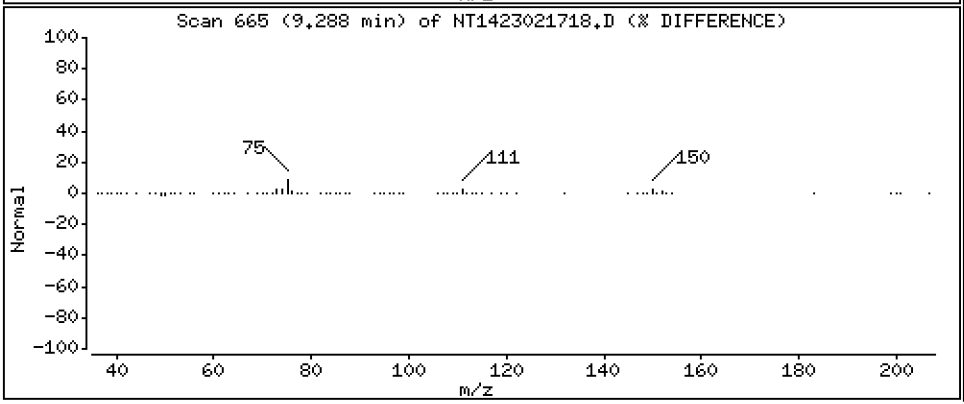
12 1,2-Dichlorobenzene

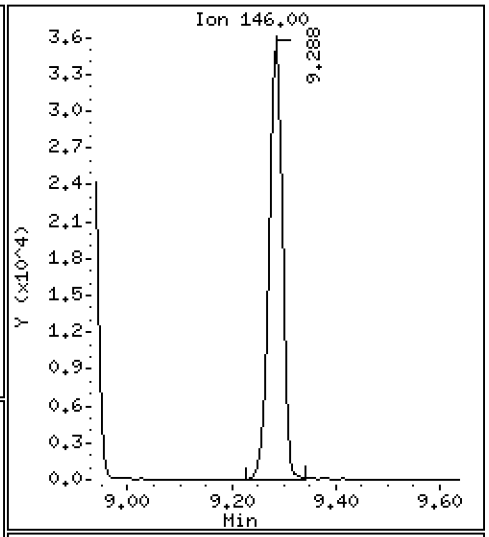
Concentration: 0.4854 ug/mL

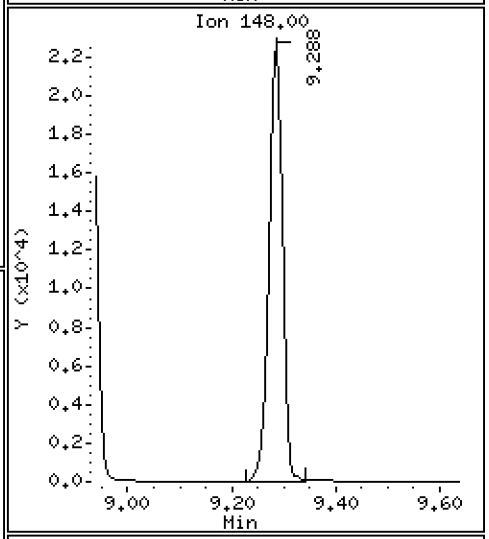


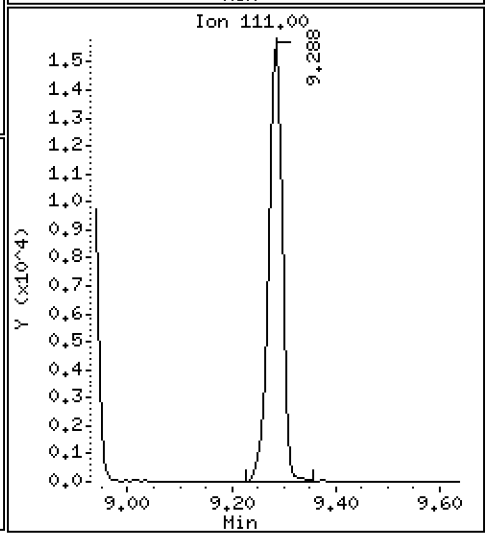












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

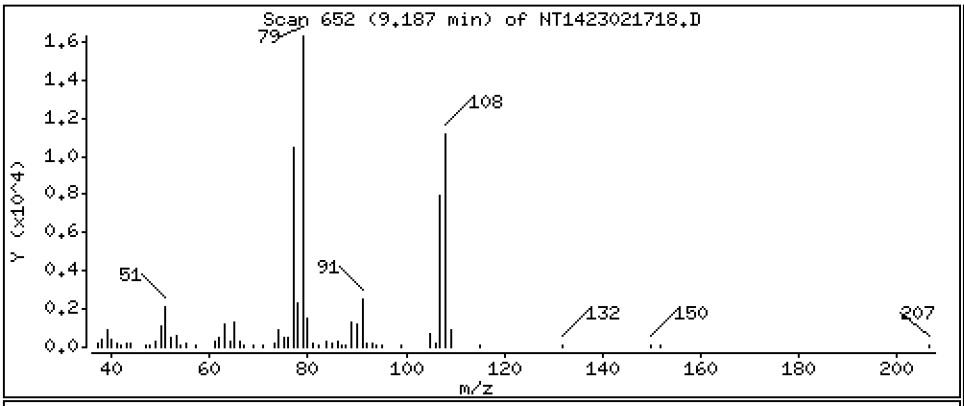
Operator: DSD

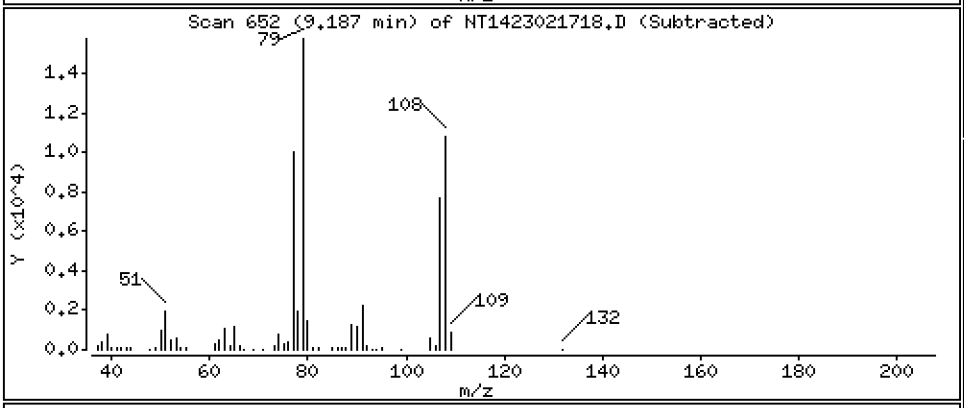
Column phase: ZB-5msi

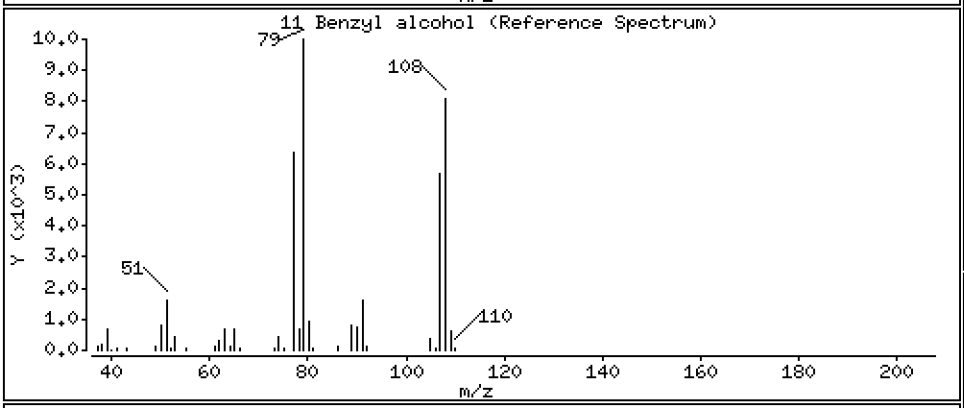
Column diameter: 0.25

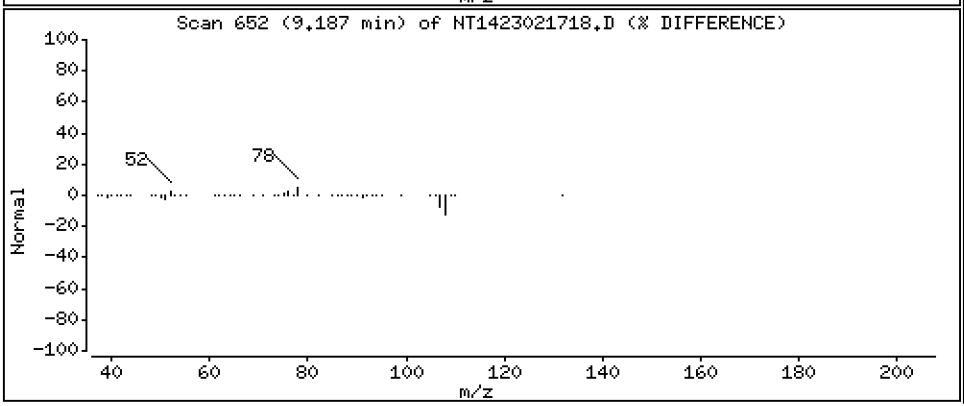
11 Benzyl alcohol

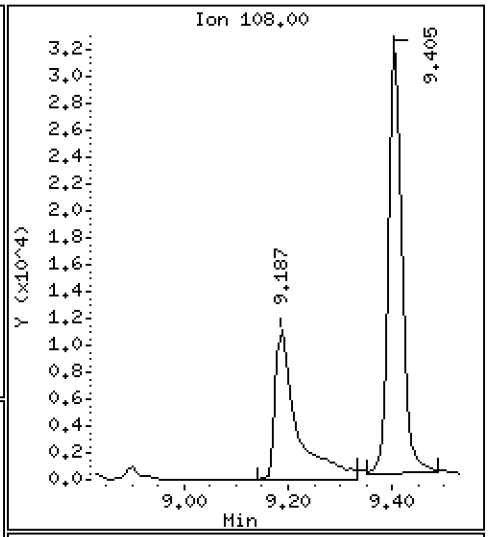
Concentration: 0.3639 ug/mL

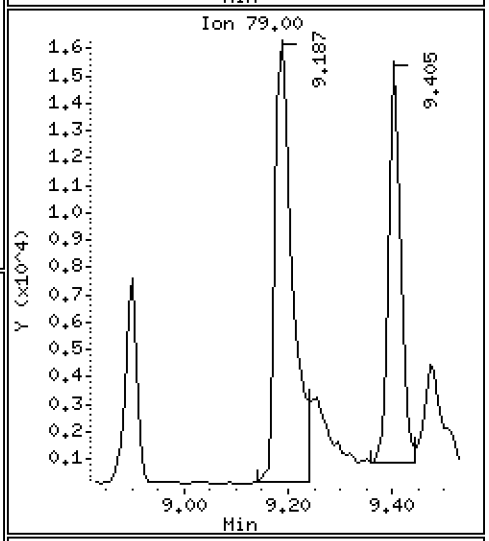


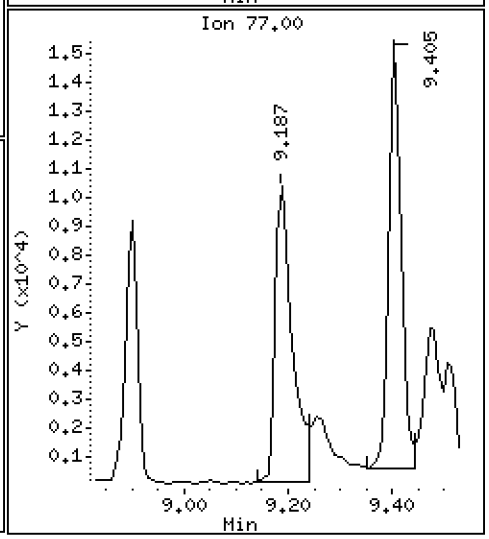












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

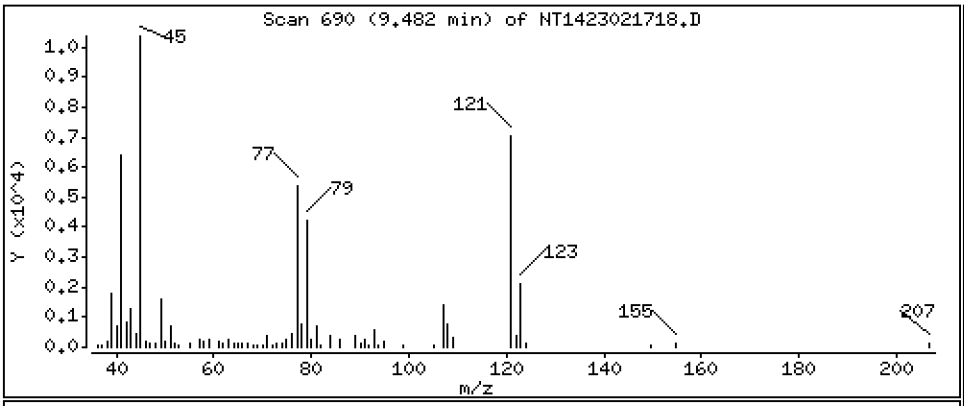
Operator: DSD

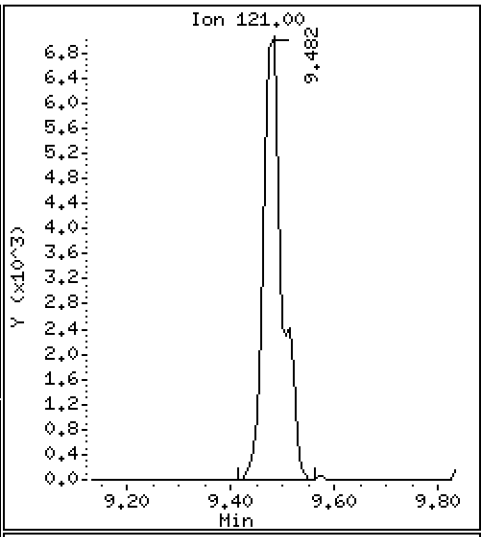
Column phase: ZB-5msi

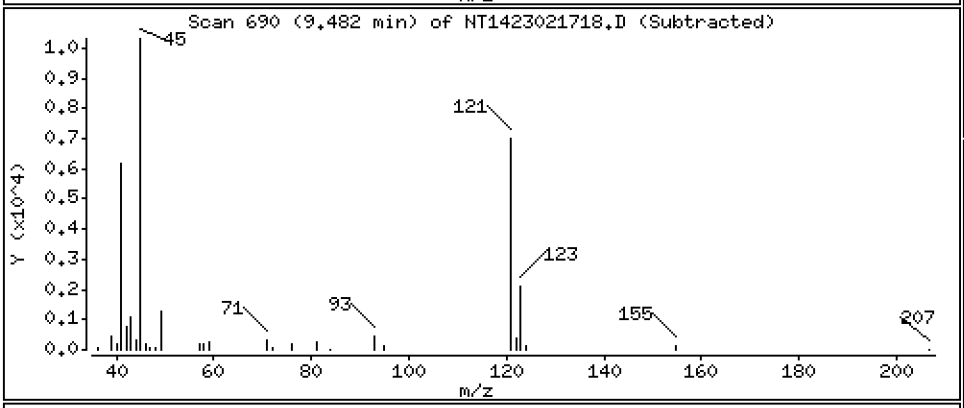
Column diameter: 0.25

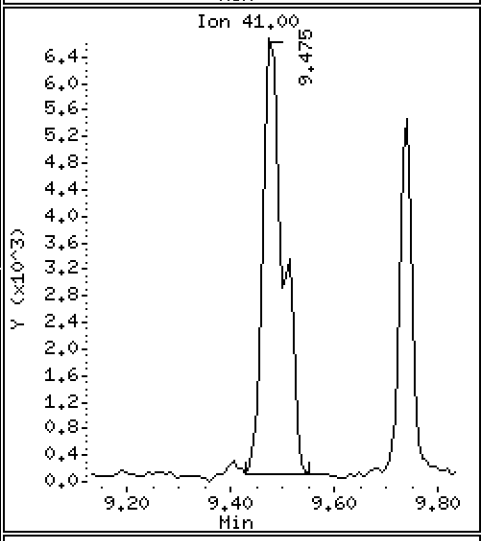
14 2,2'-oxybis(1-Chloropropane)

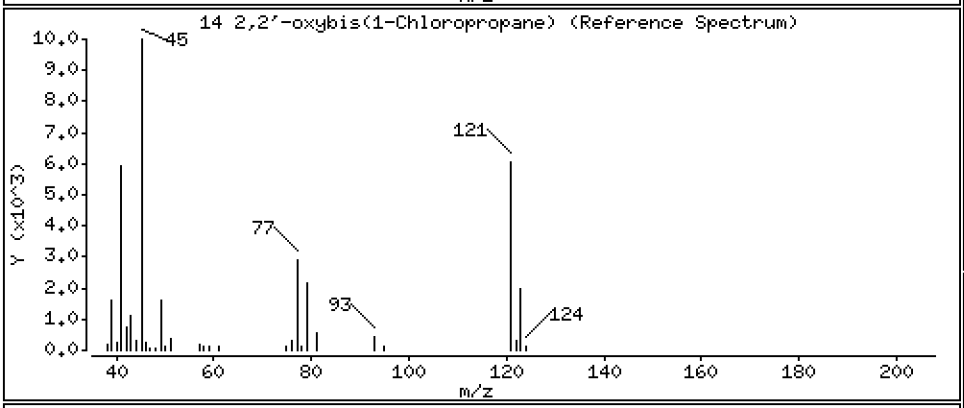
Concentration: 0.4869 ug/mL

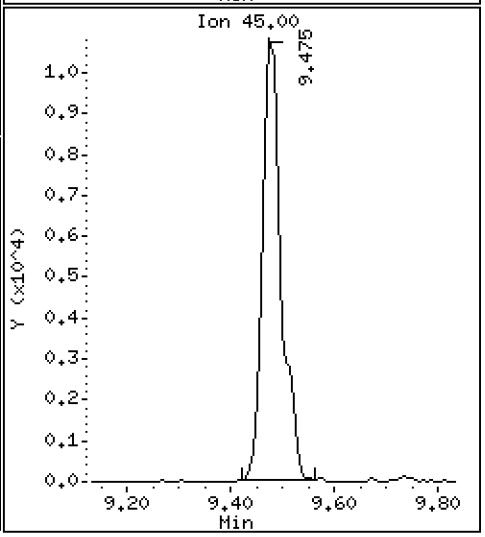


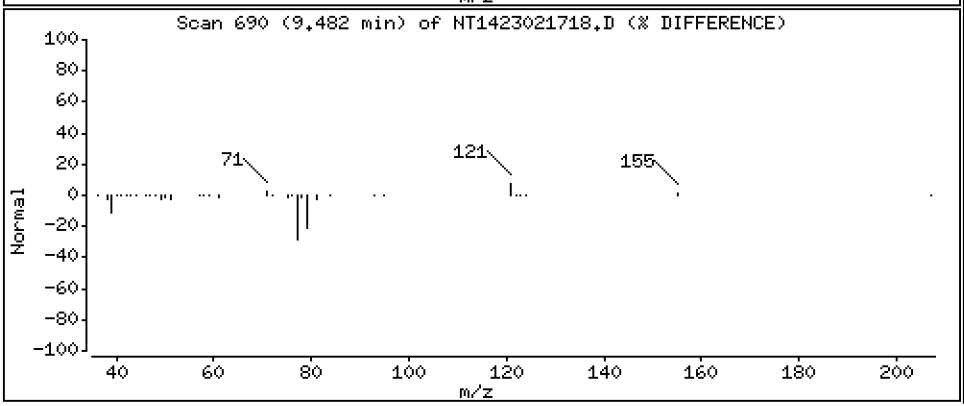












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

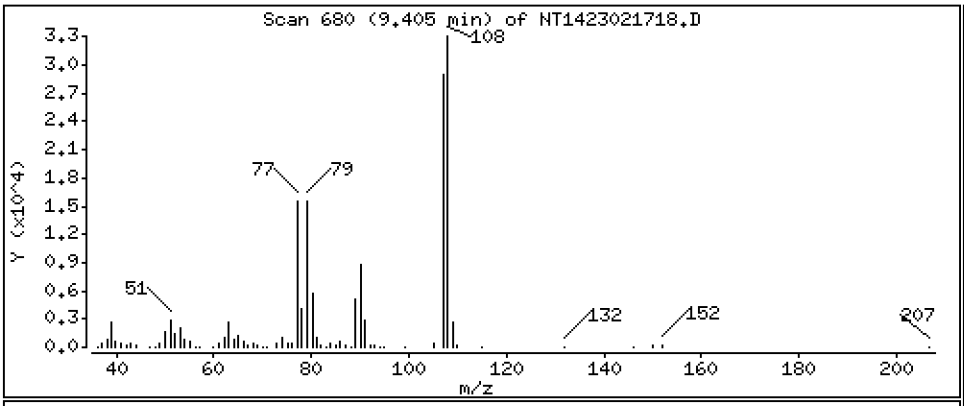
Operator: DSD

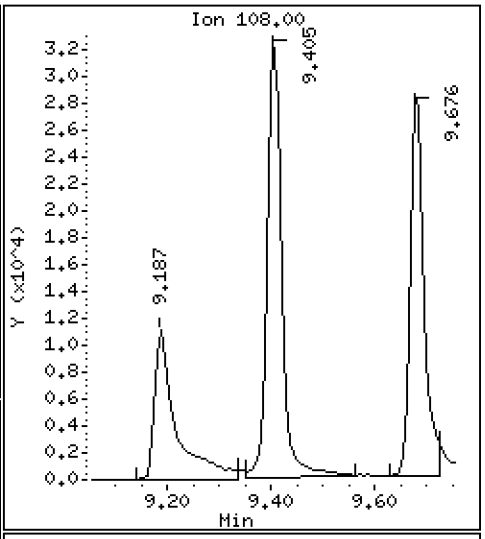
Column phase: ZB-5msi

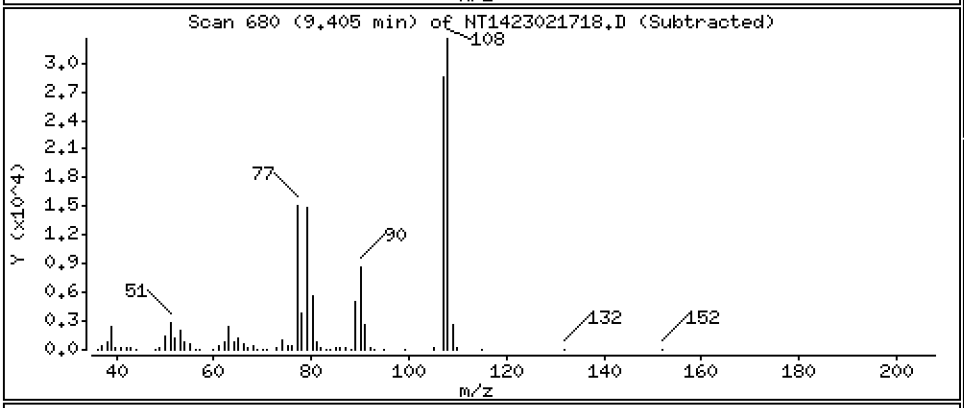
Column diameter: 0.25

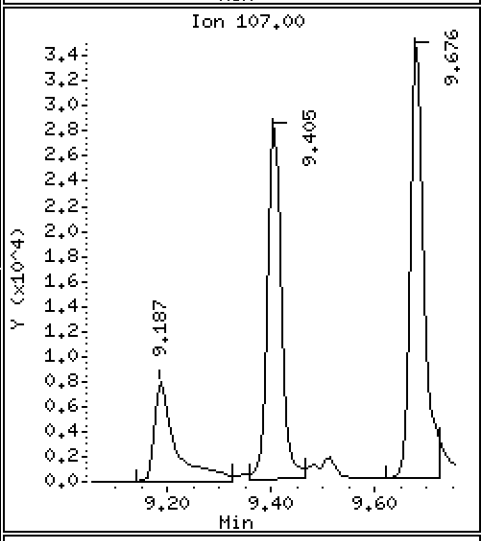
13 2-Methylphenol

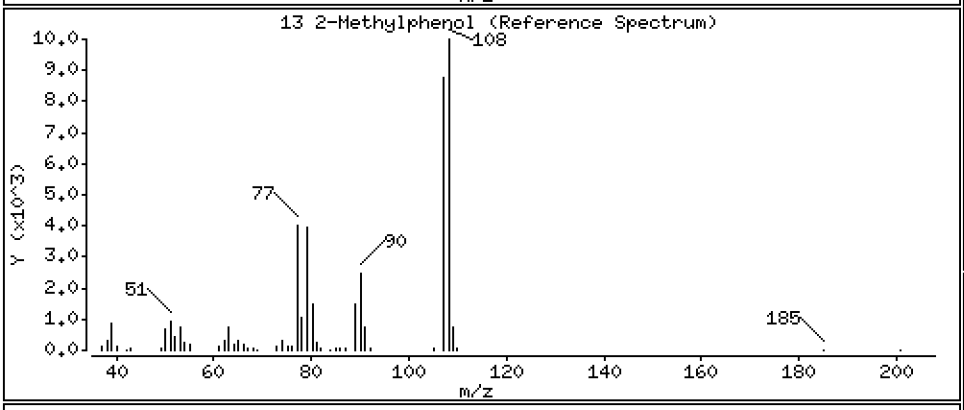
Concentration: 0.5079 ug/mL

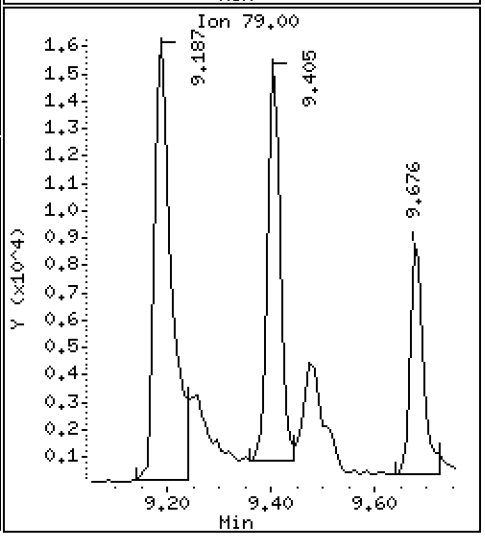


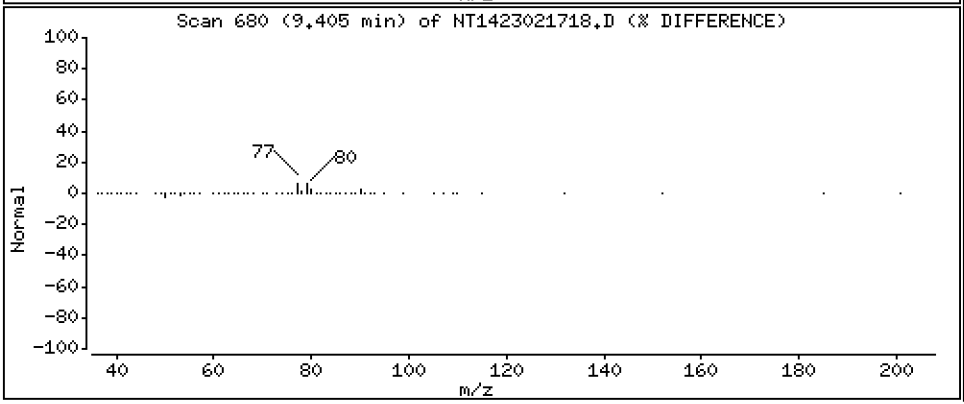












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

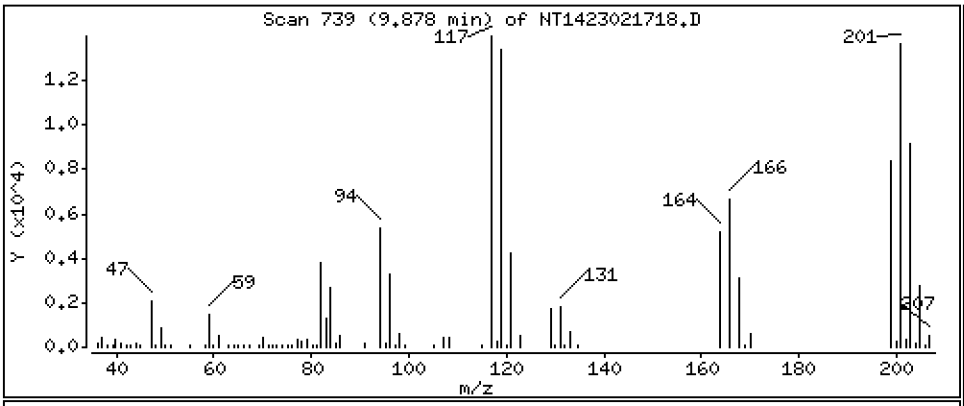
Operator: DSD

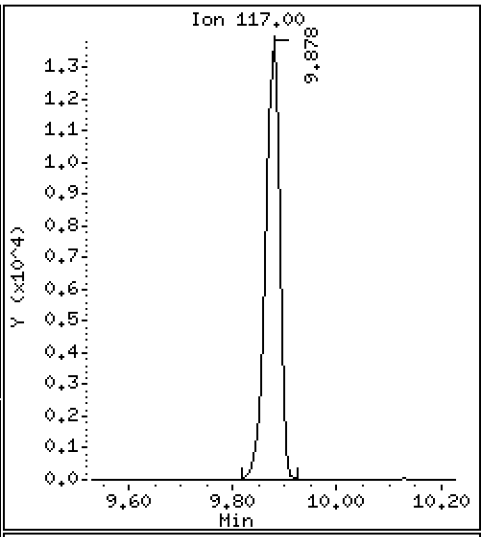
Column phase: ZB-5msi

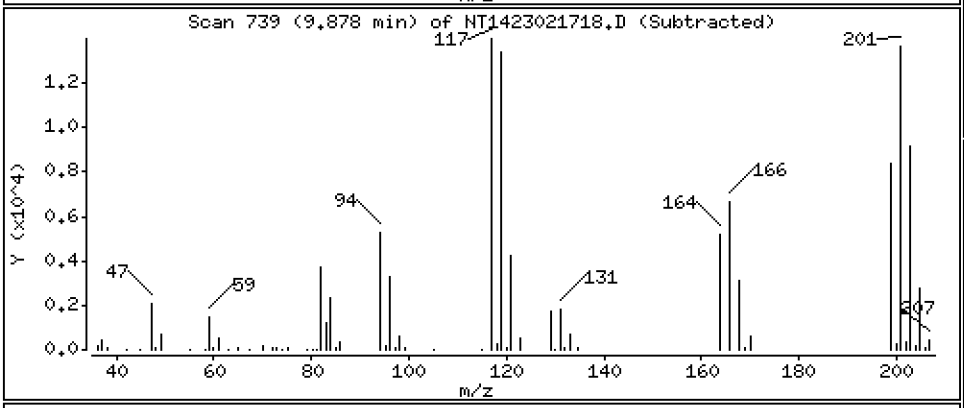
Column diameter: 0.25

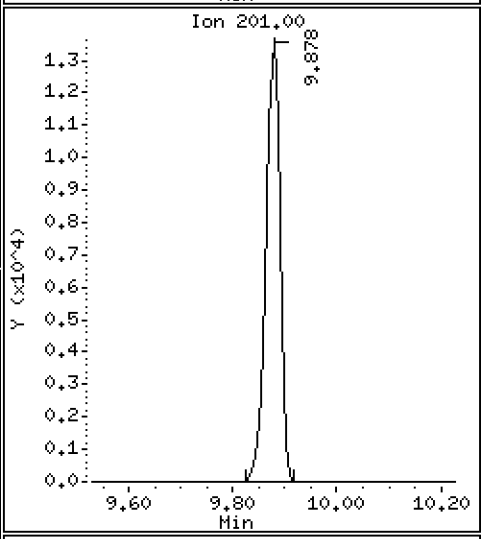
17 Hexachloroethane

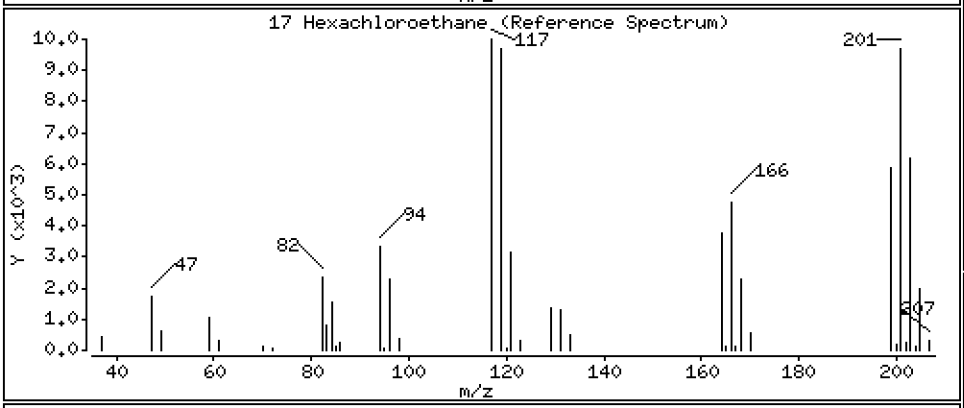
Concentration: 0.4590 ug/mL

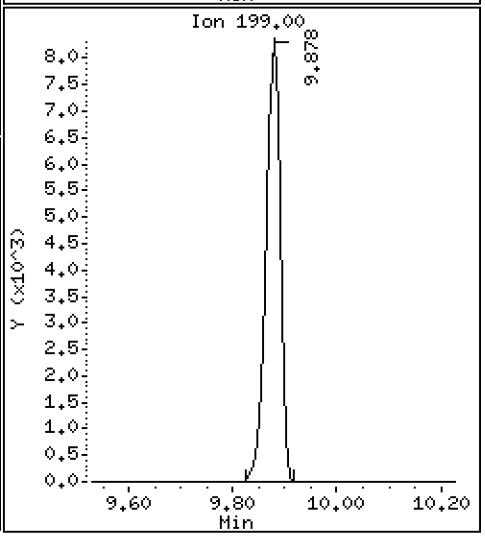


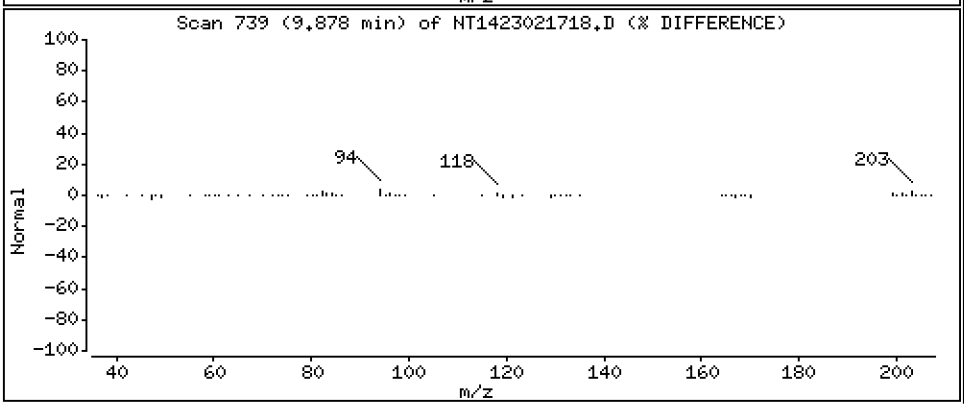












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

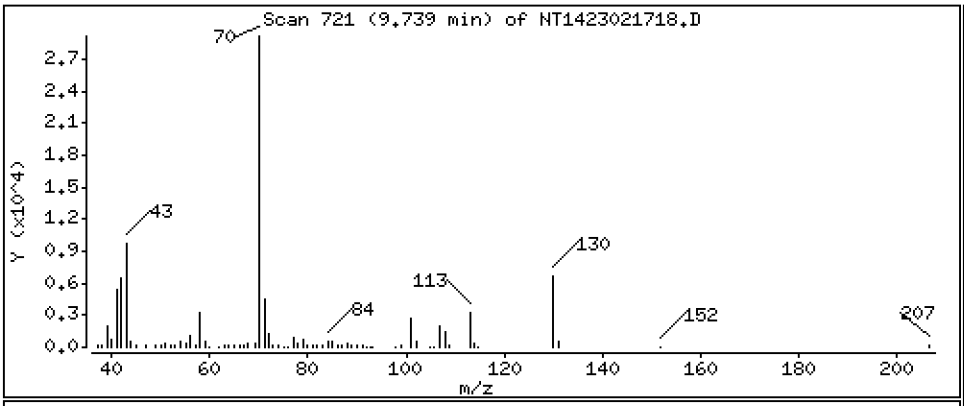
Operator: DSD

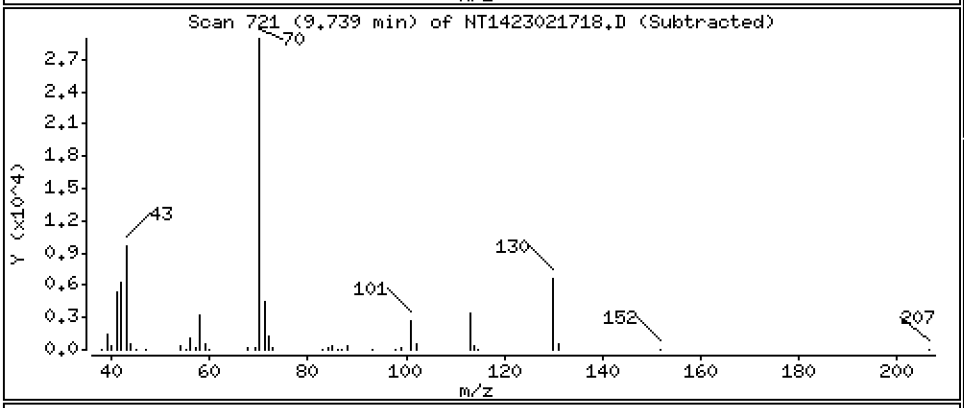
Column phase: ZB-5msi

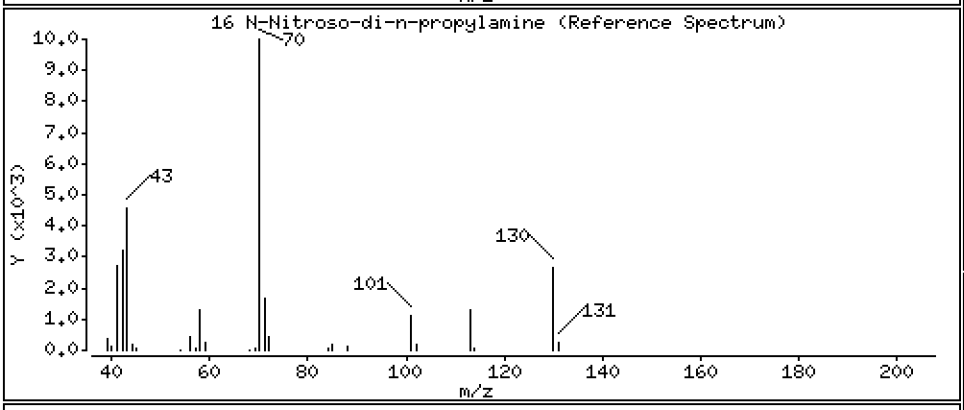
Column diameter: 0.25

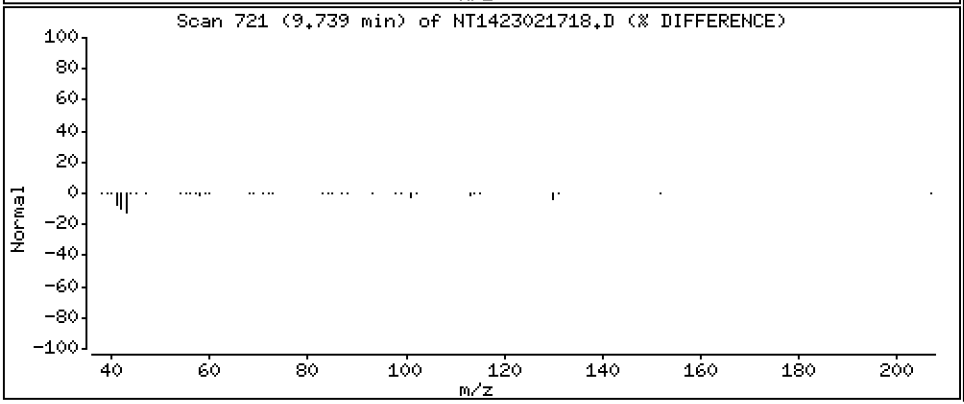
16 N-Nitroso-di-n-propylamine

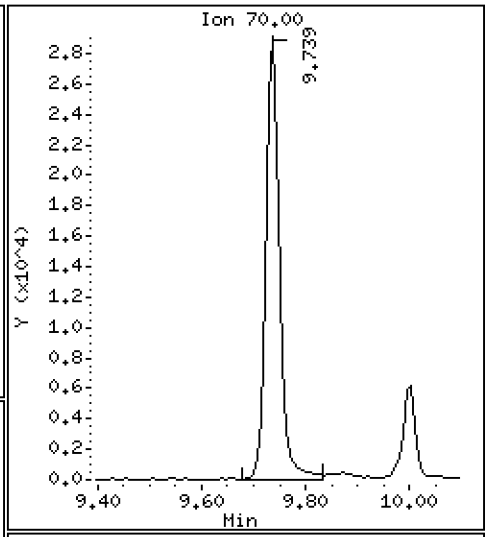
Concentration: 0.4625 ug/mL

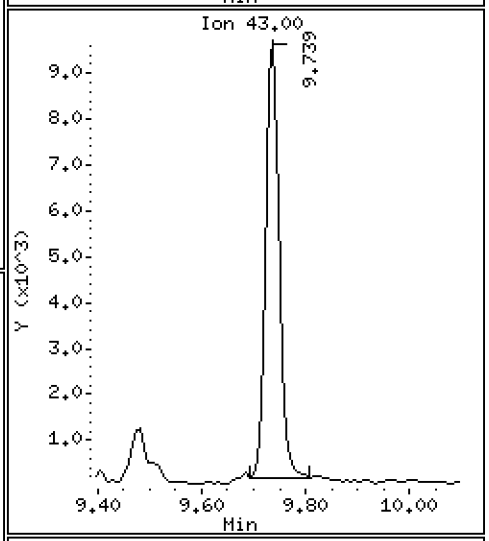


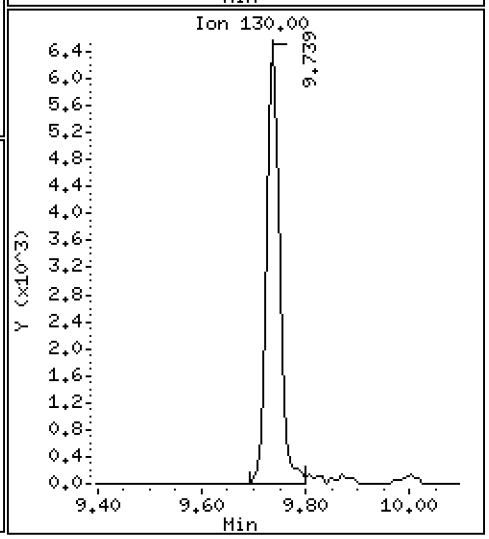












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

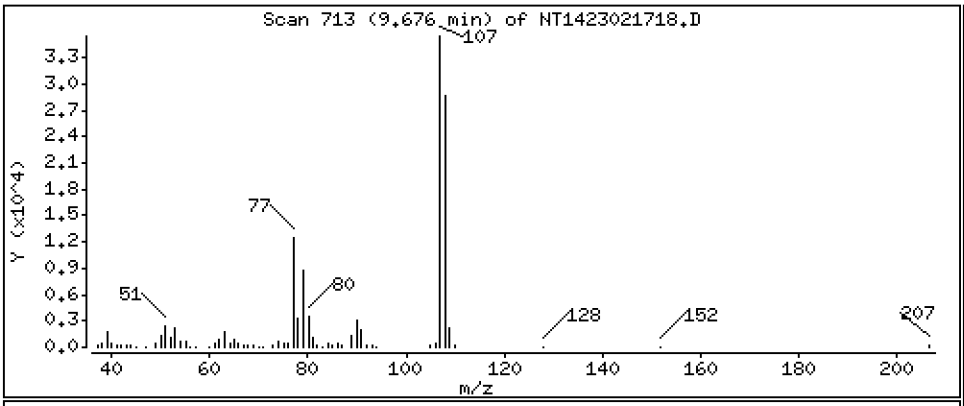
Operator: DSD

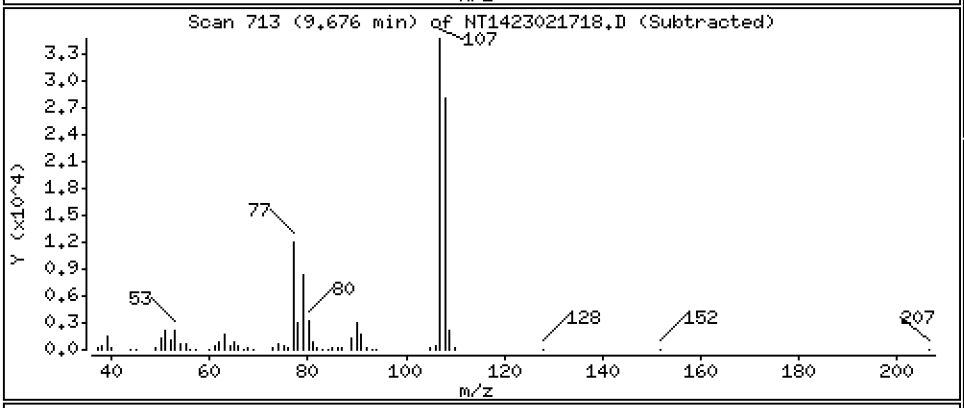
Column phase: ZB-5msi

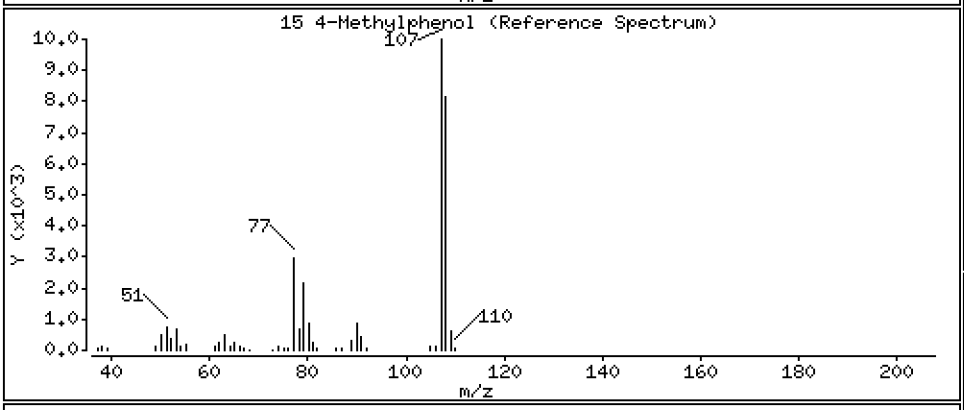
Column diameter: 0.25

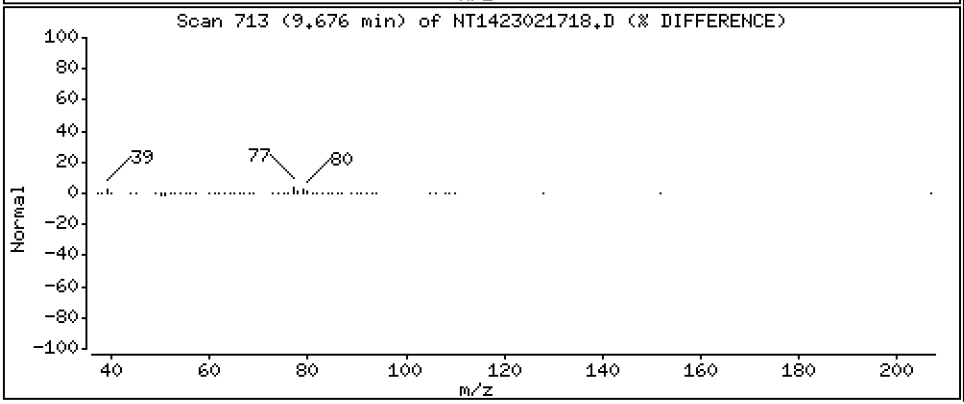
15 4-Methylphenol

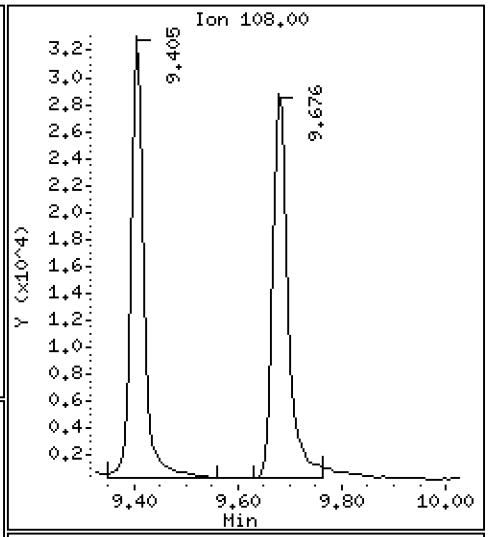
Concentration: 0.4587 ug/mL

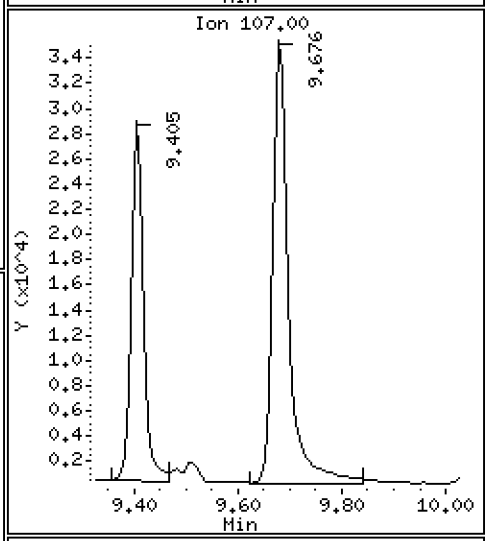


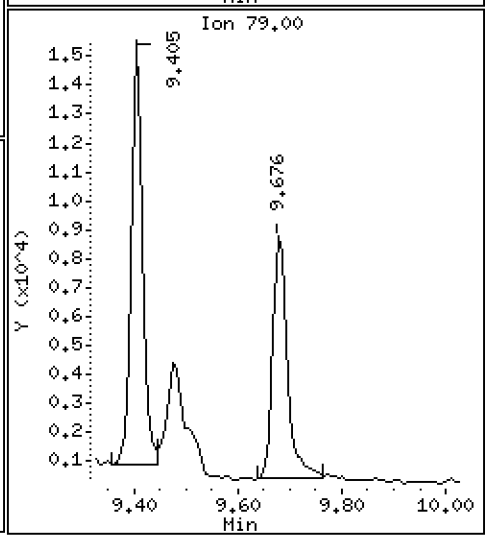












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

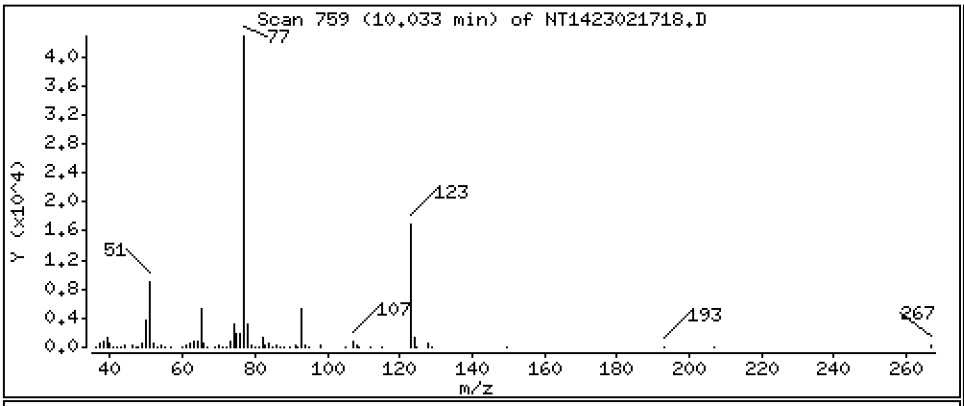
Operator: DSD

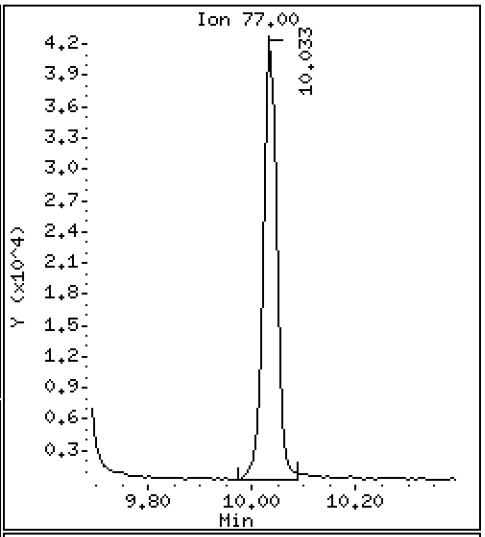
Column phase: ZB-5msi

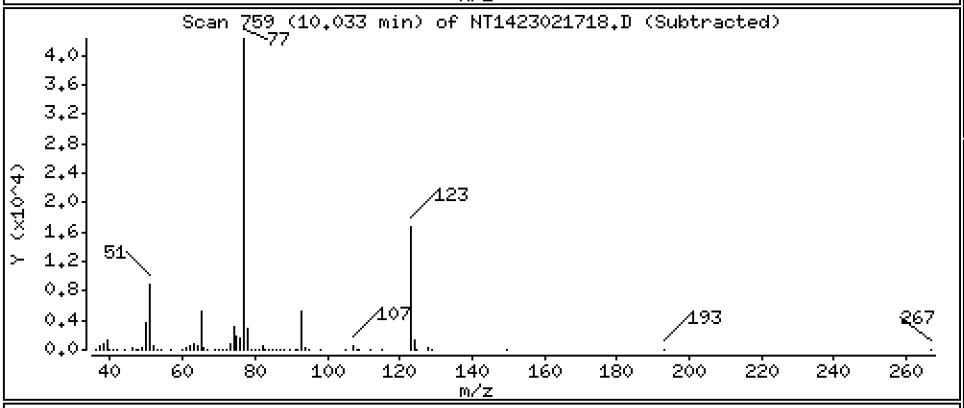
Column diameter: 0.25

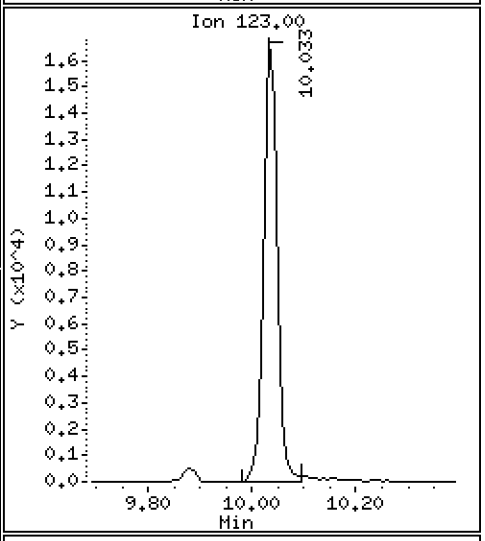
19 Nitrobenzene

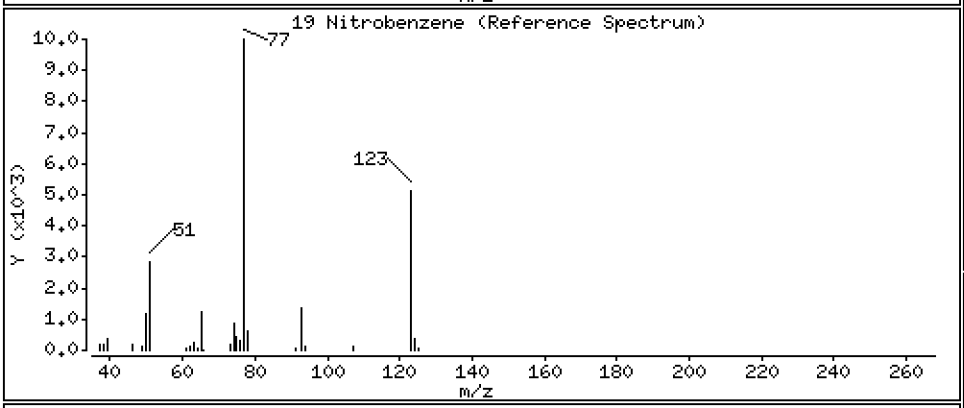
Concentration: 0.4518 ug/mL

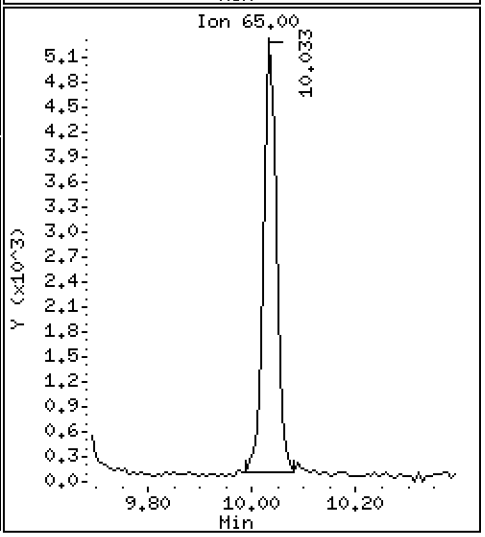


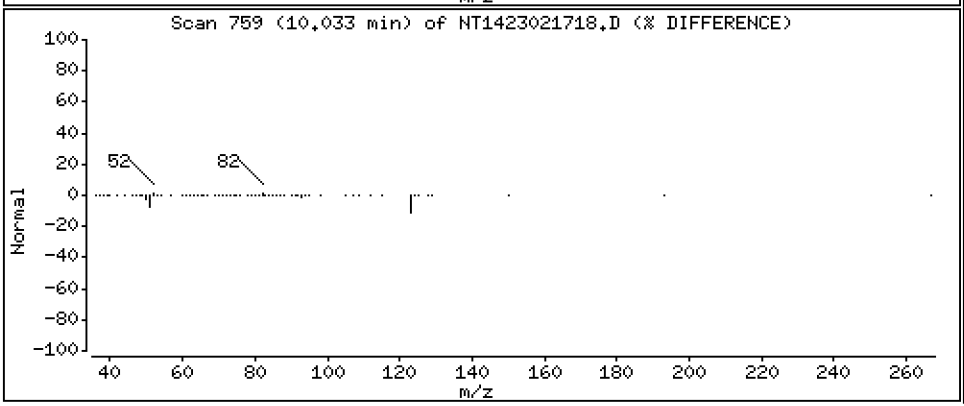












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

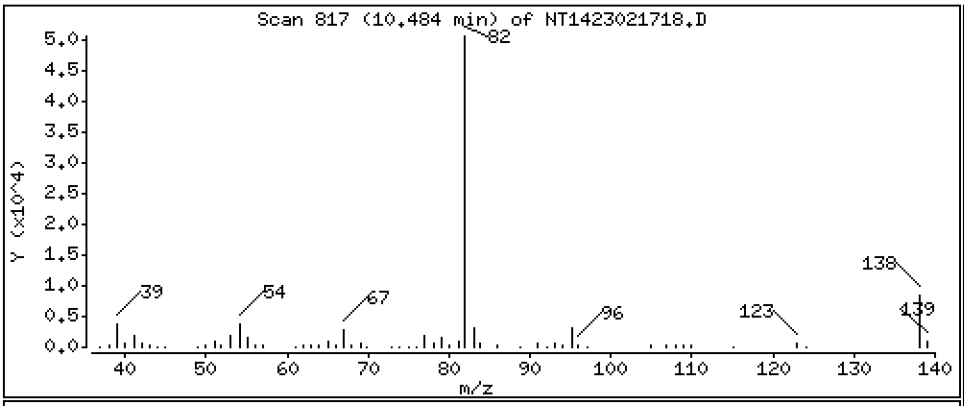
Operator: DSD

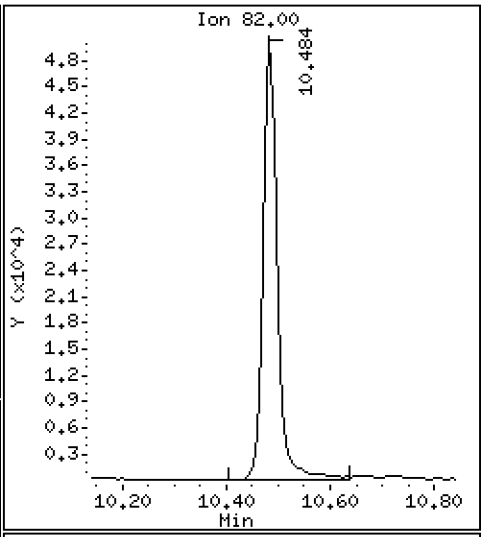
Column phase: ZB-5msi

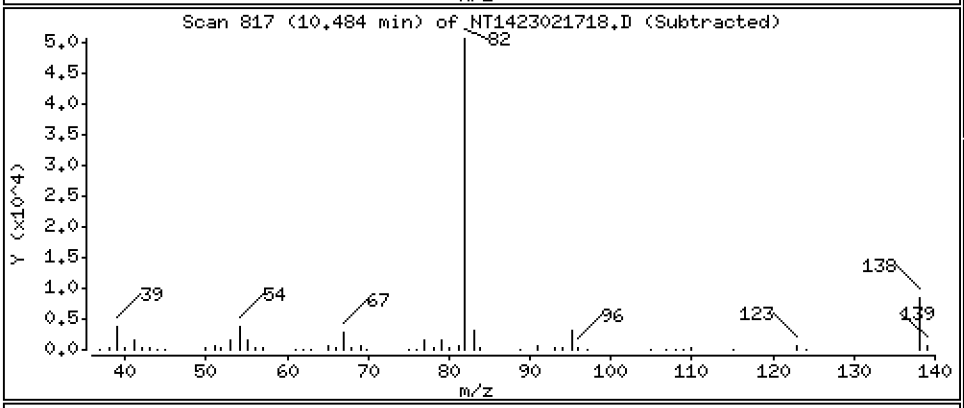
Column diameter: 0.25

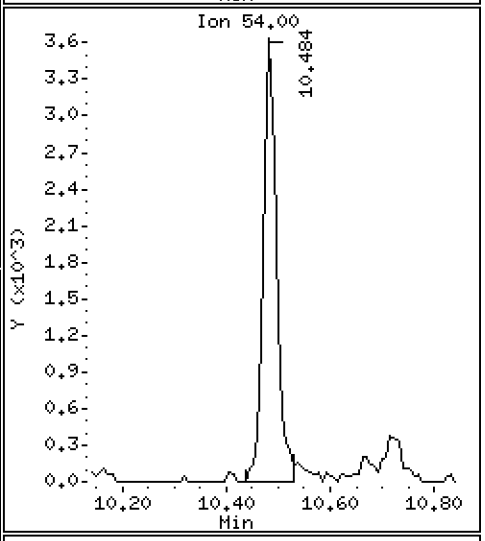
20 Isophorone

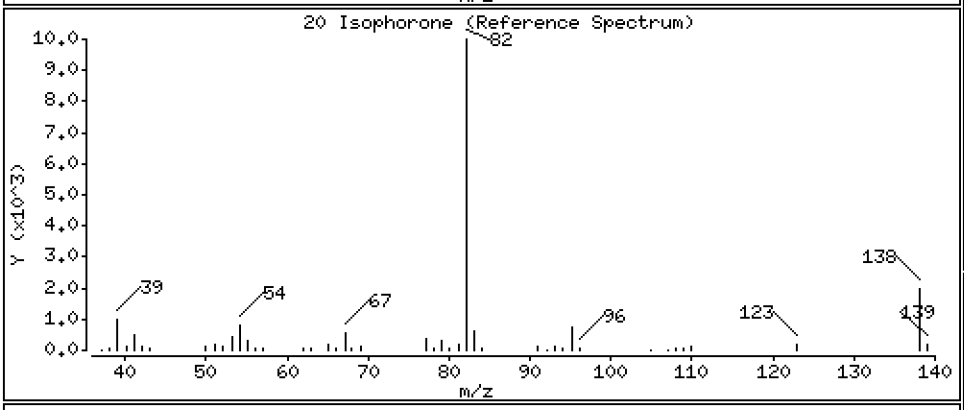
Concentration: 0.4592 ug/mL

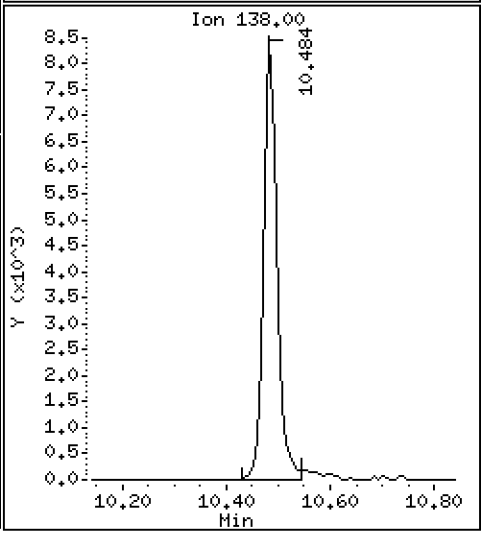


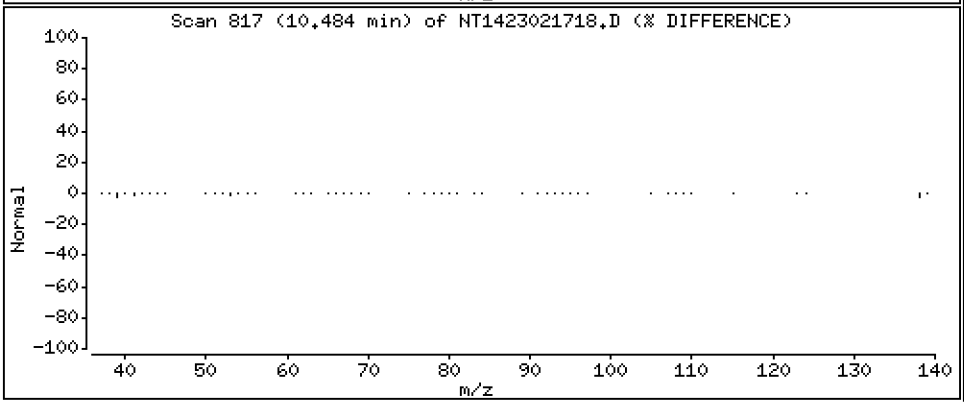












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

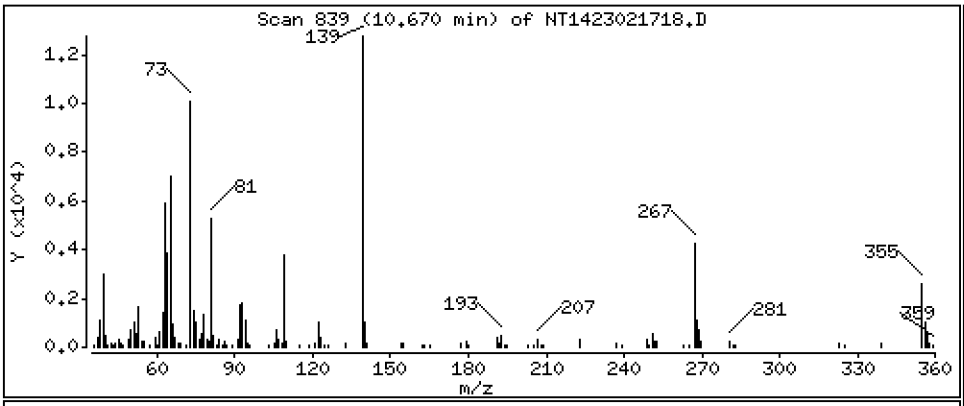
Operator: DSD

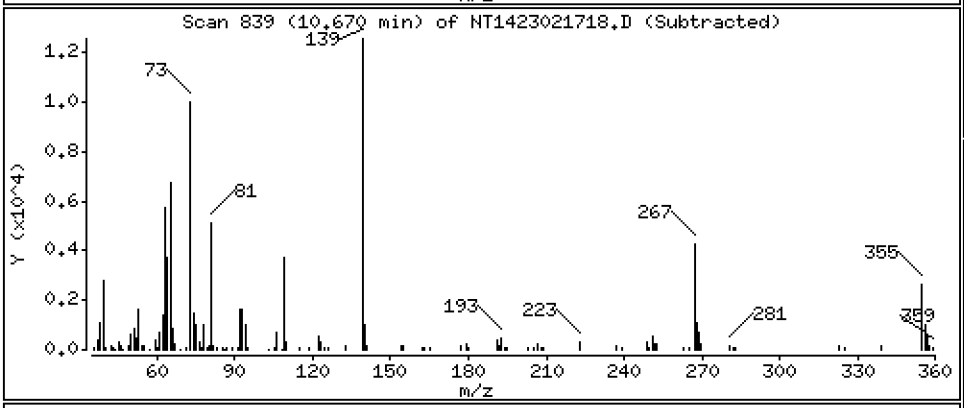
Column phase: ZB-5msi

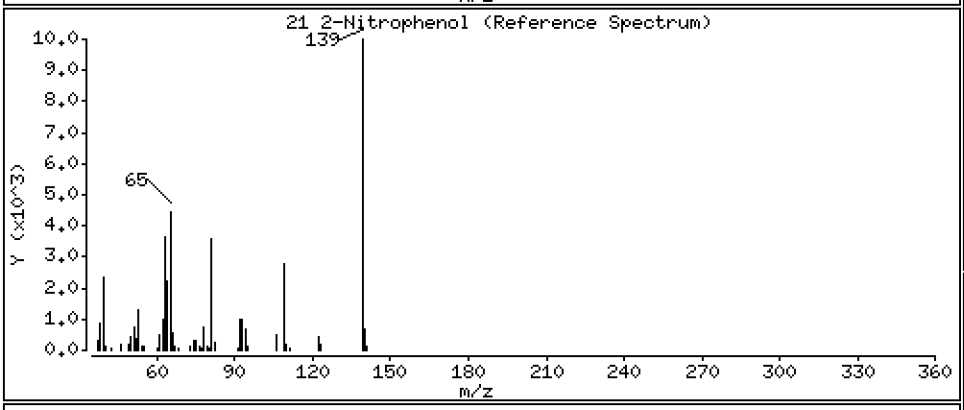
Column diameter: 0.25

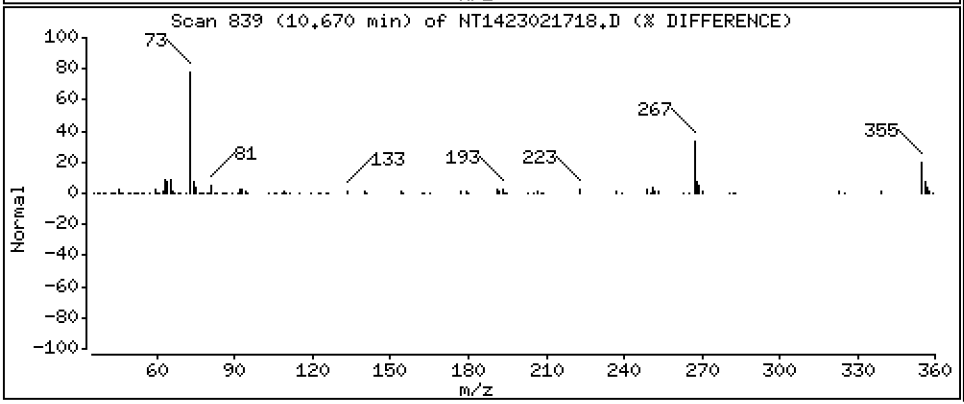
21 2-Nitrophenol

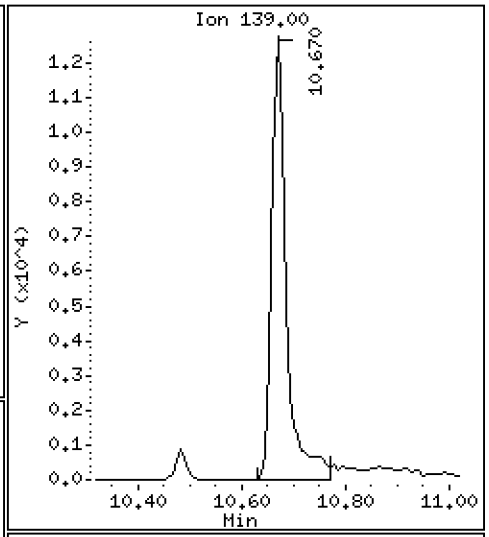
Concentration: 0.3336 ug/mL

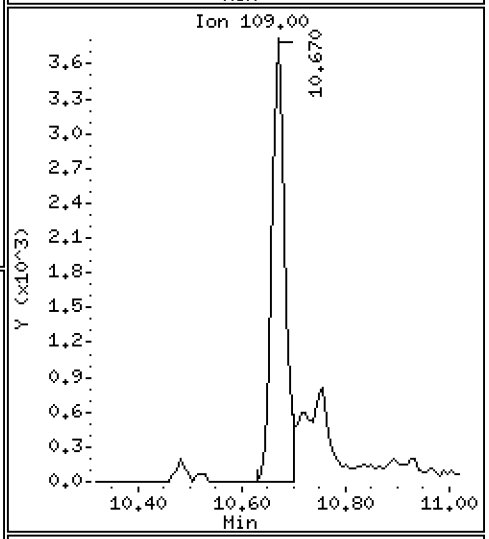


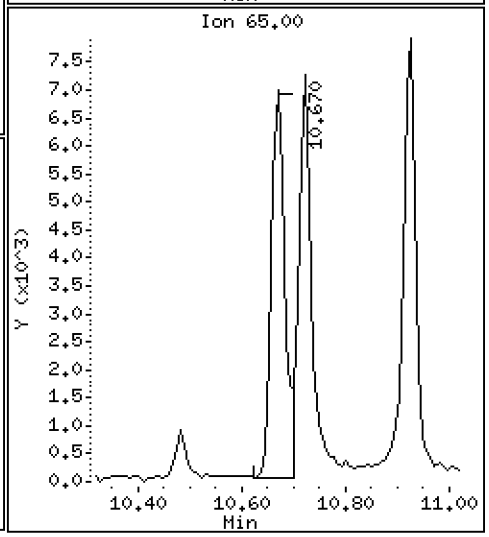












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

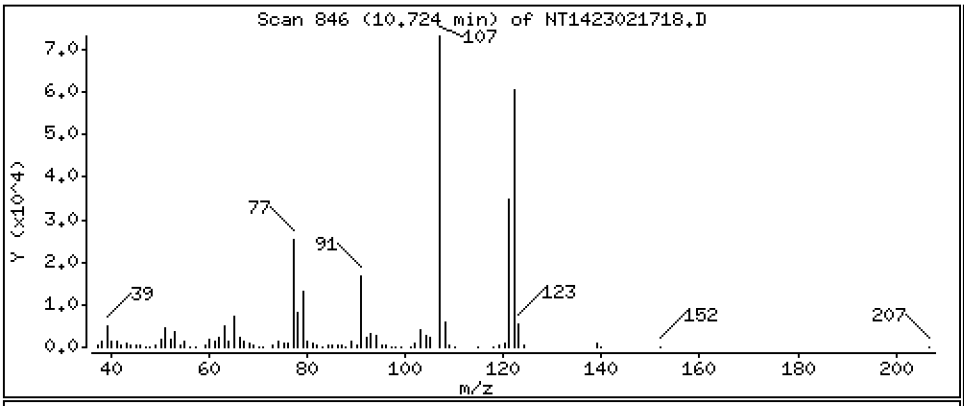
Operator: DSD

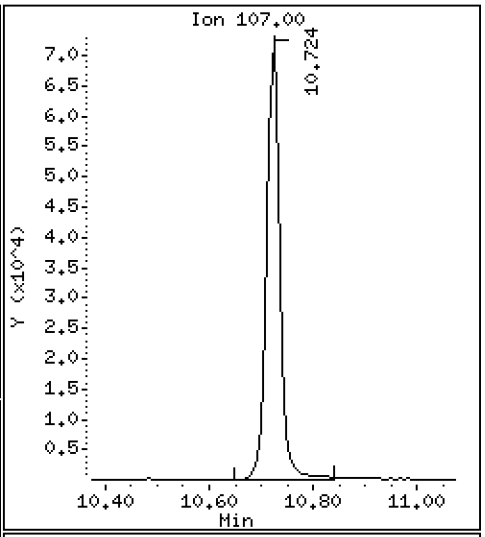
Column phase: ZB-5msi

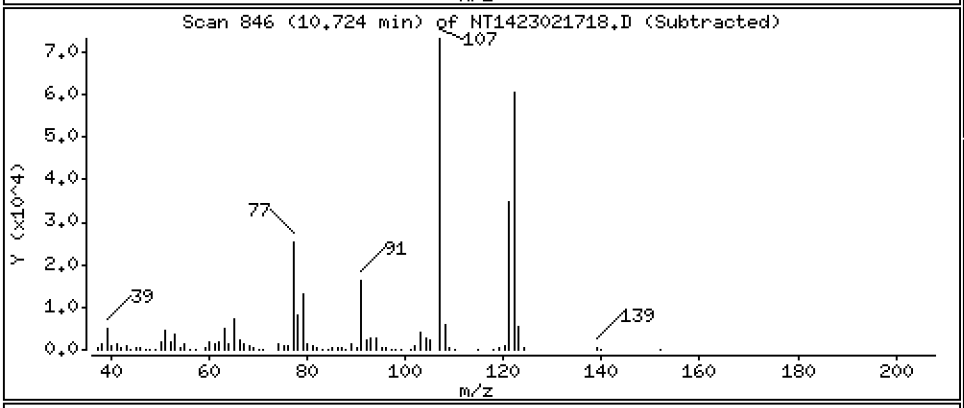
Column diameter: 0.25

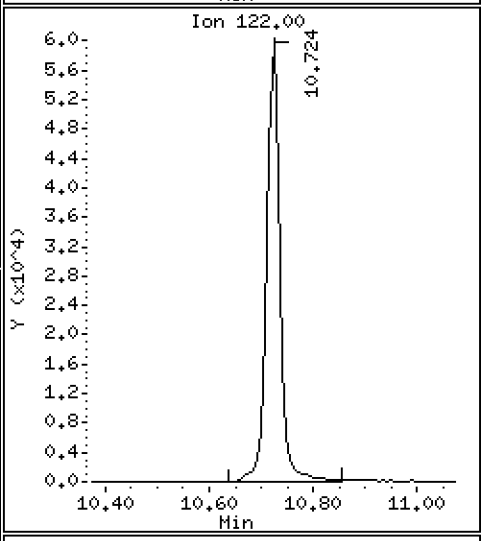
22 2,4-Dimethylphenol

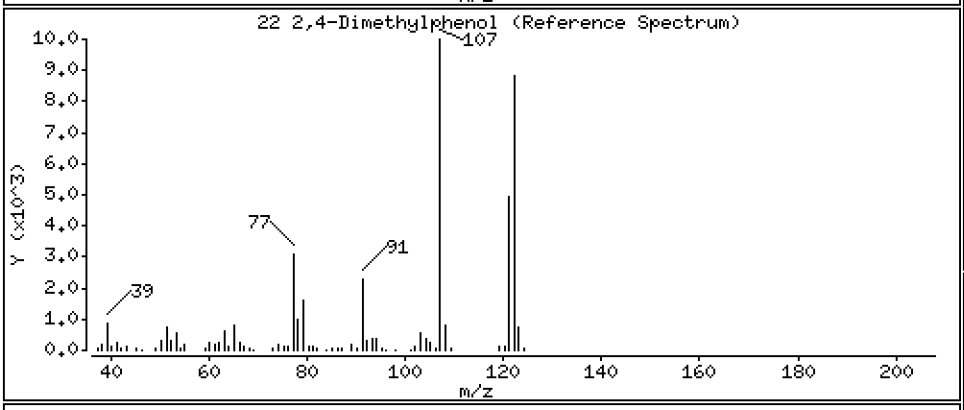
Concentration: 1.004 ug/mL

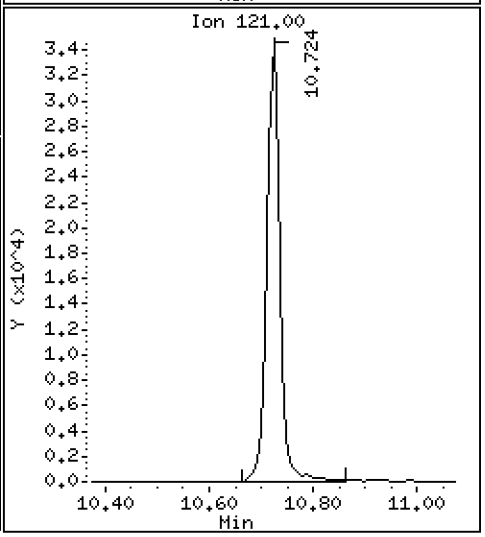


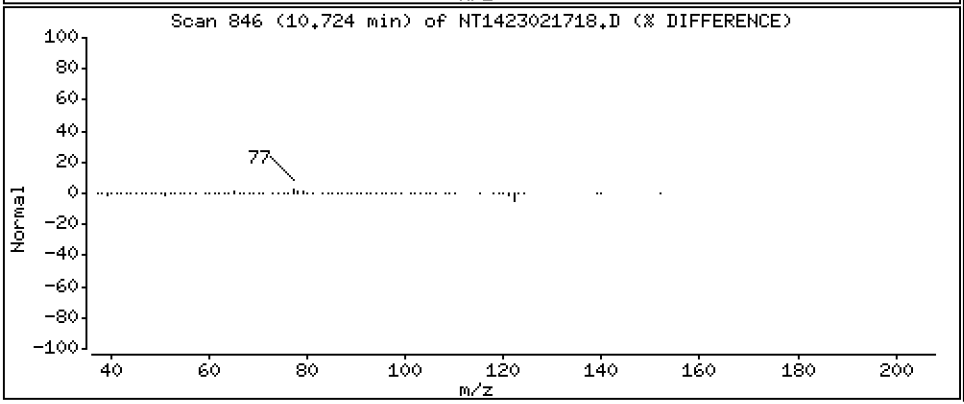












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

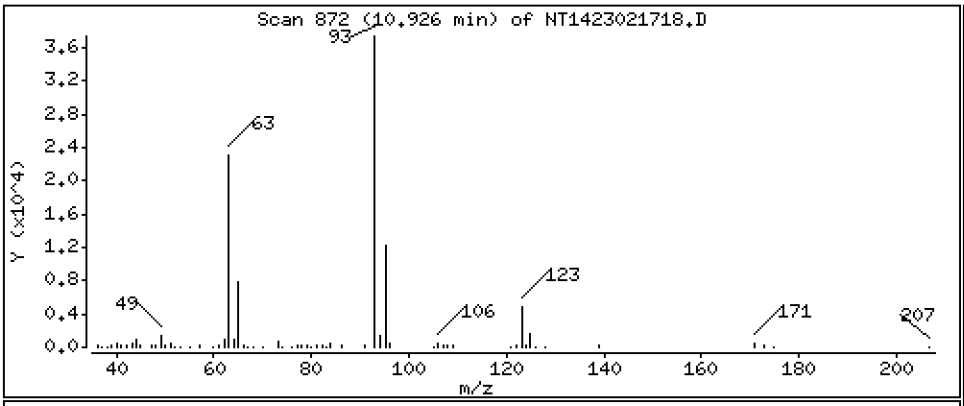
Operator: DSD

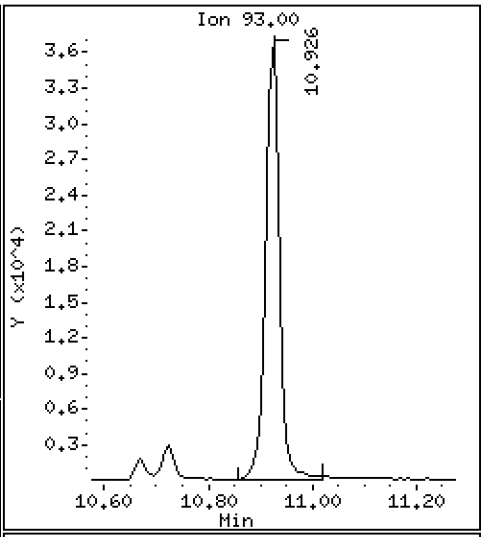
Column phase: ZB-5msi

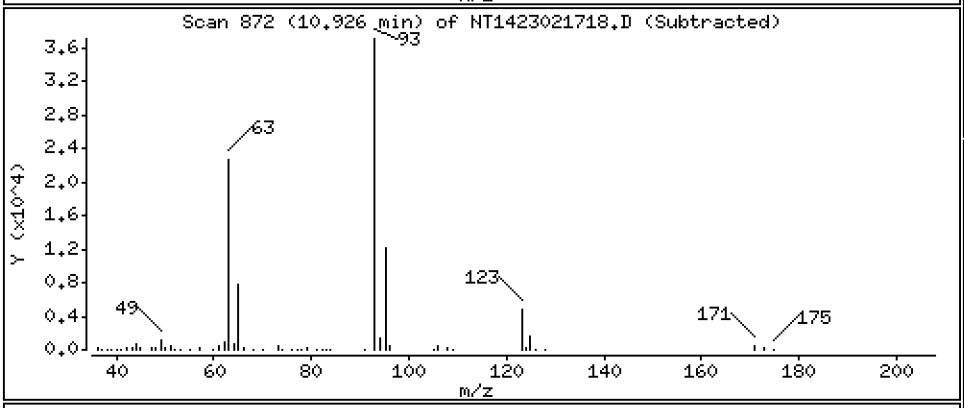
Column diameter: 0.25

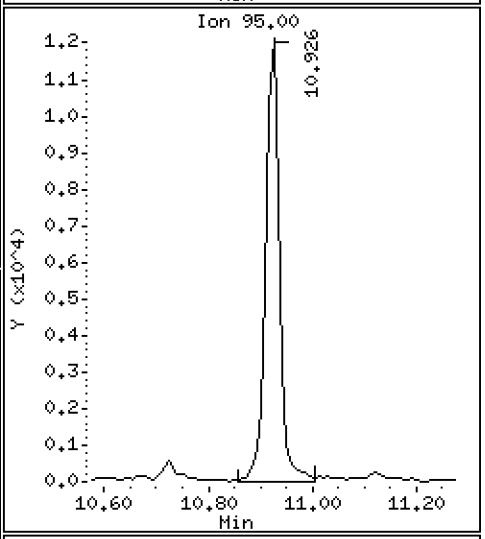
23 Bis(2-Chloroethoxy)methane

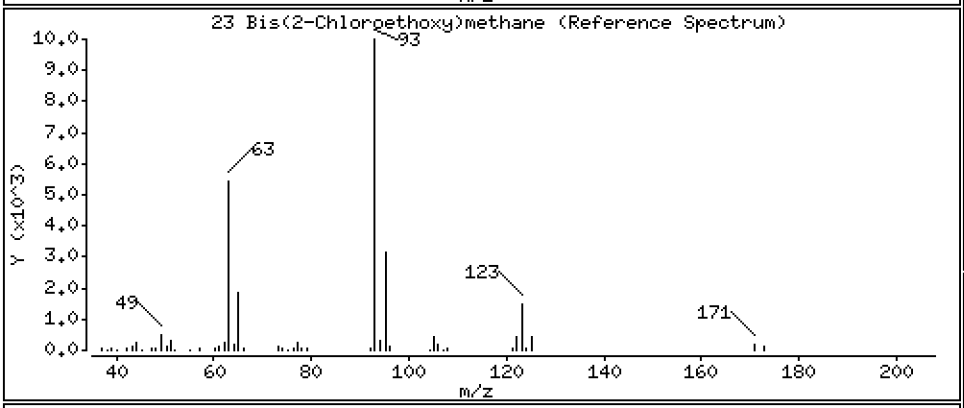
Concentration: 0.4678 ug/mL

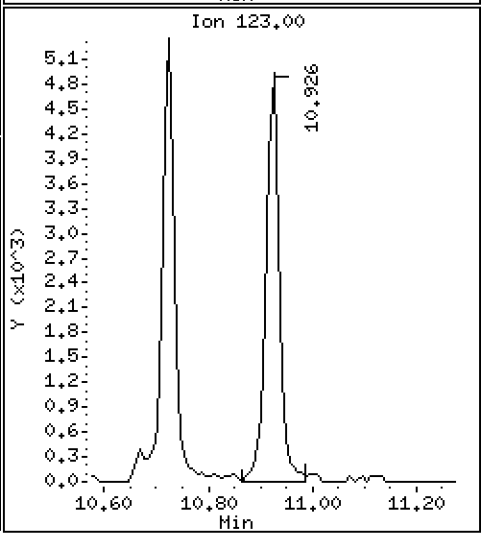


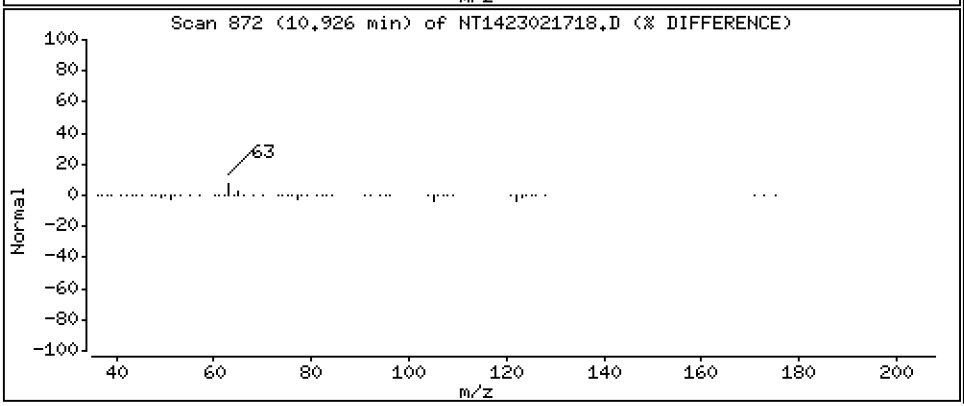












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

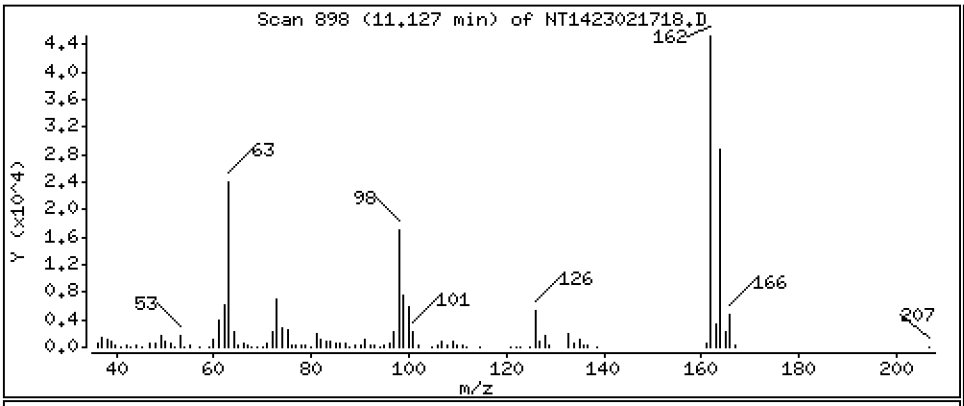
Operator: DSD

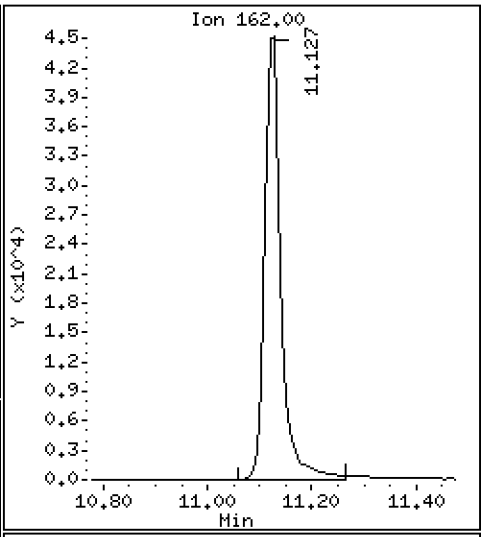
Column phase: ZB-5msi

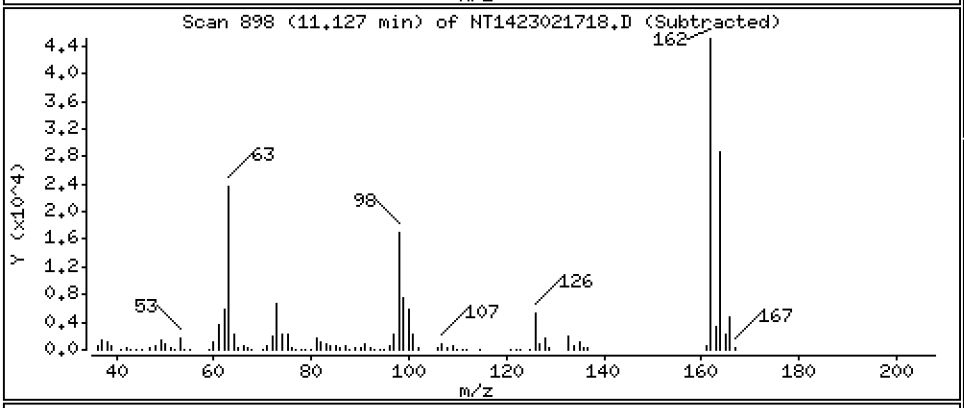
Column diameter: 0.25

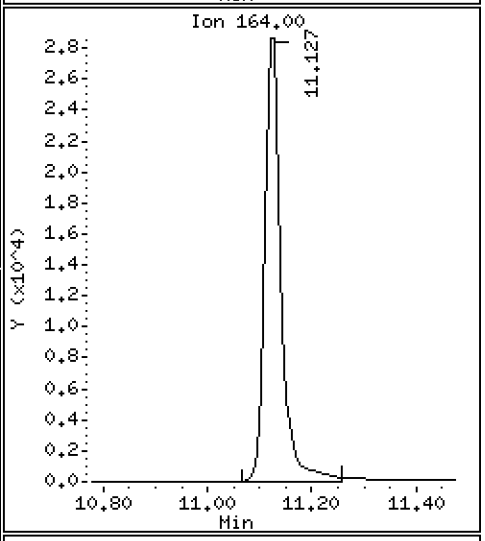
25 2,4-Dichlorophenol

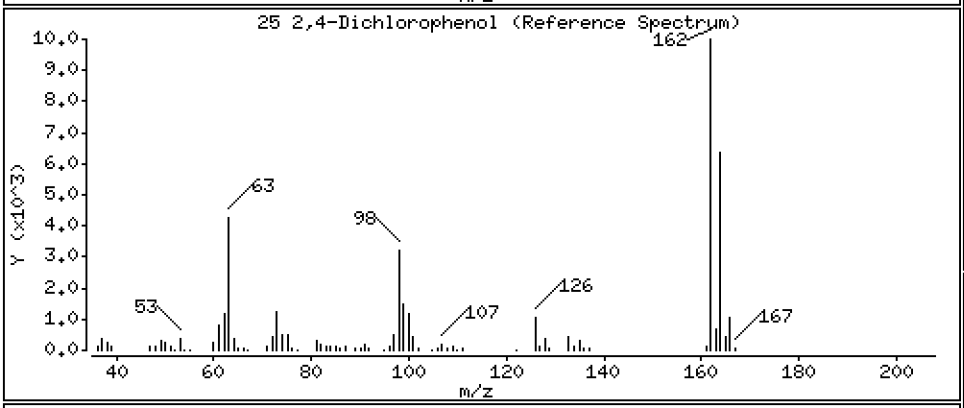
Concentration: 0.9808 ug/mL

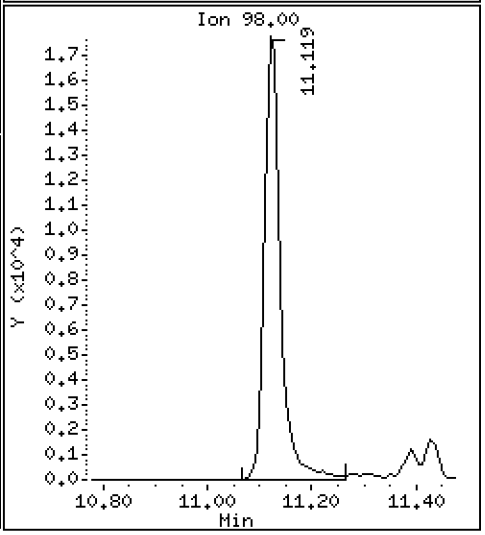


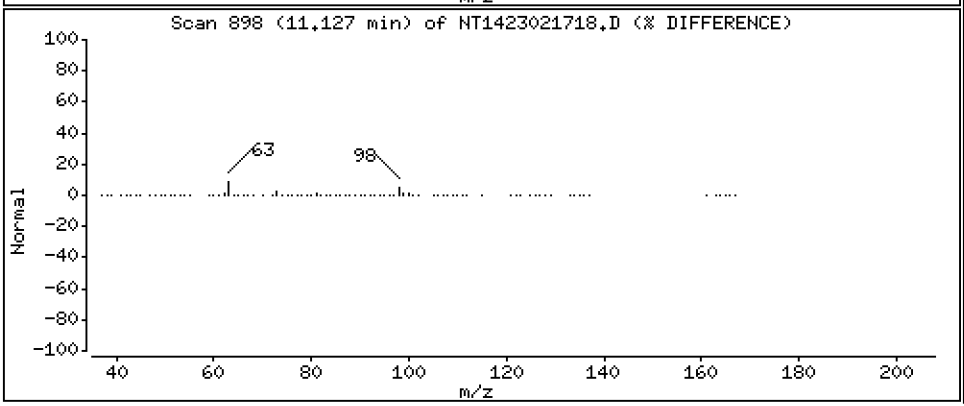












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

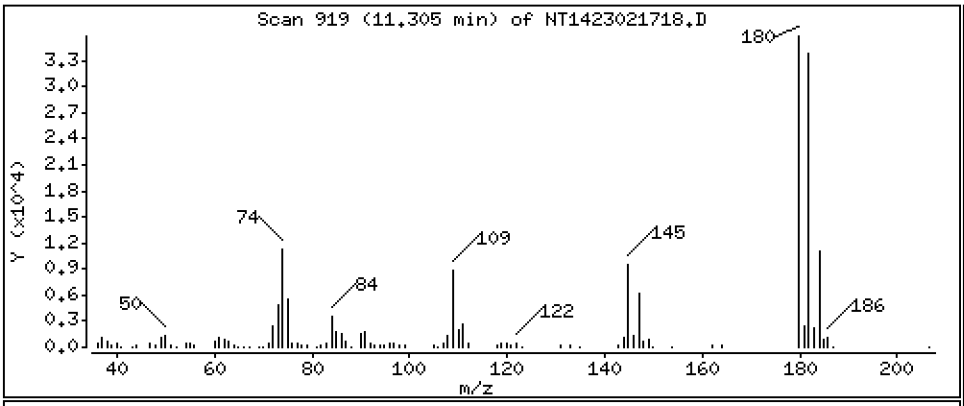
Operator: DSD

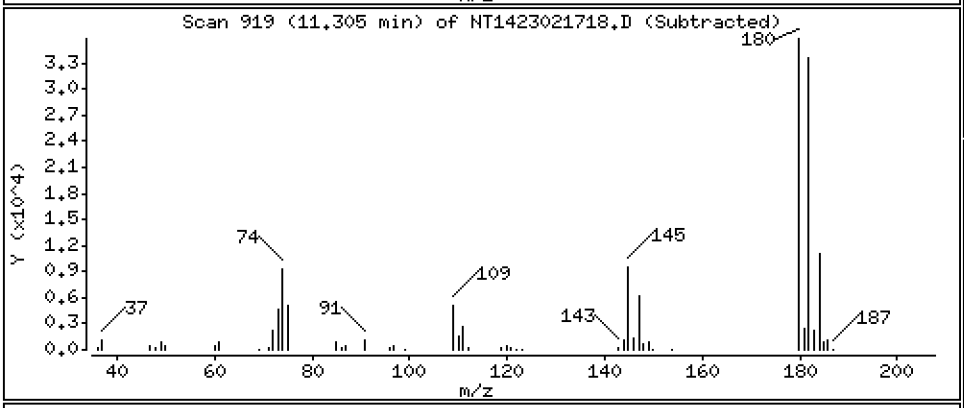
Column phase: ZB-5msi

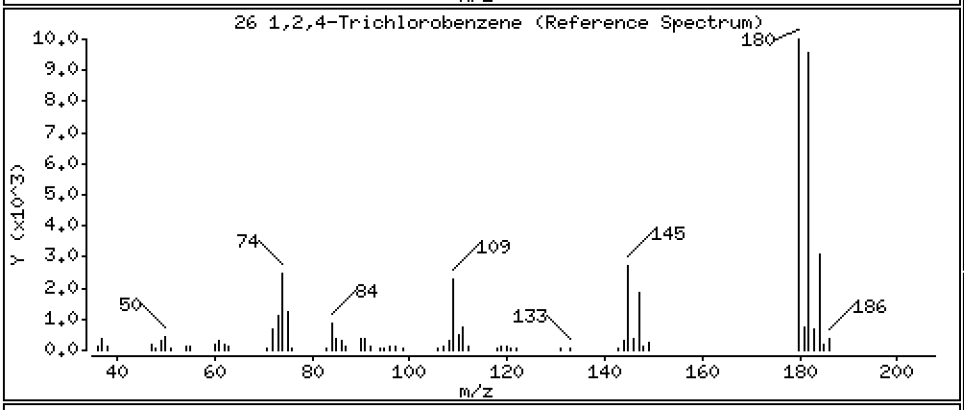
Column diameter: 0.25

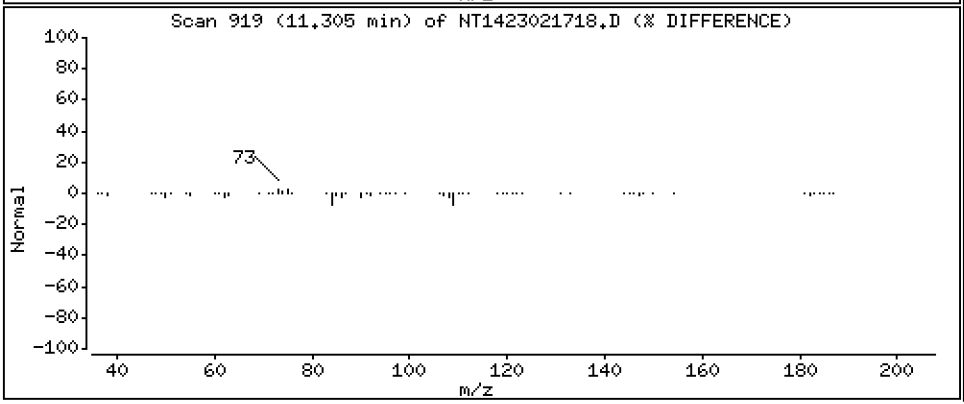
26 1,2,4-Trichlorobenzene

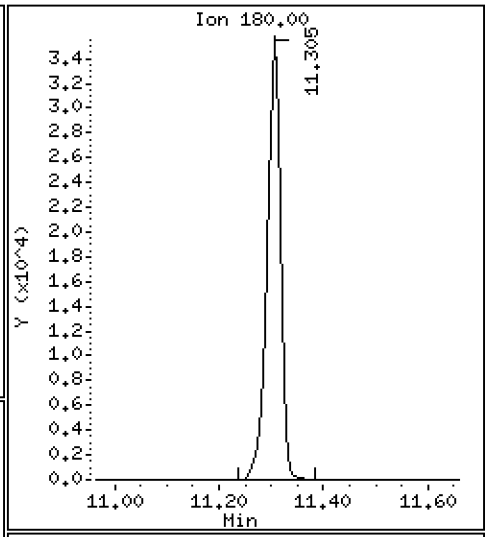
Concentration: 0.4833 ug/mL

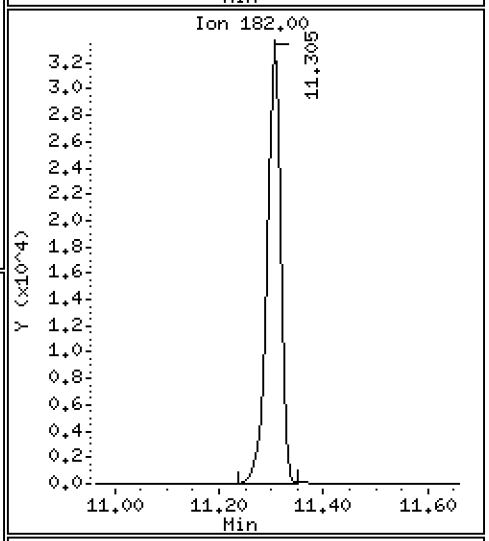


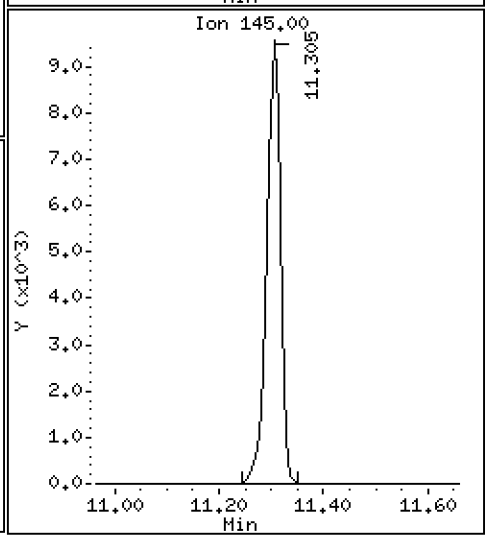












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

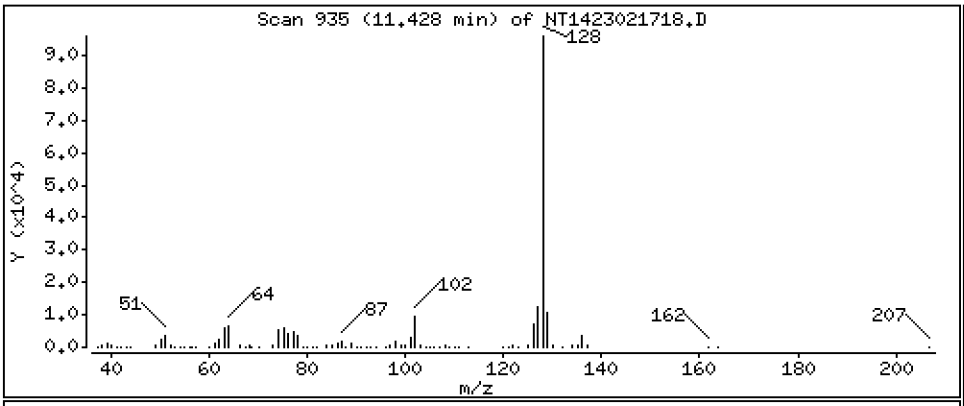
Operator: DSD

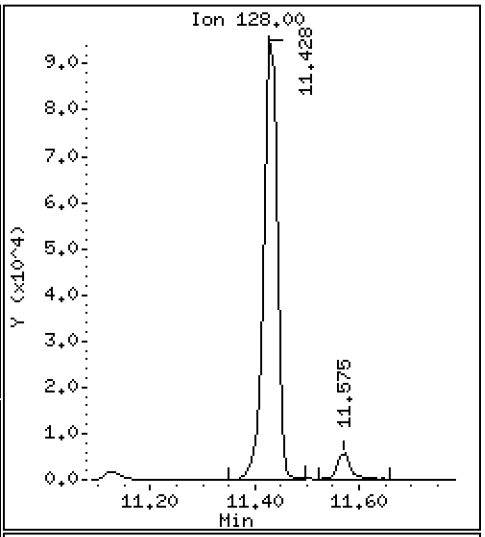
Column phase: ZB-5msi

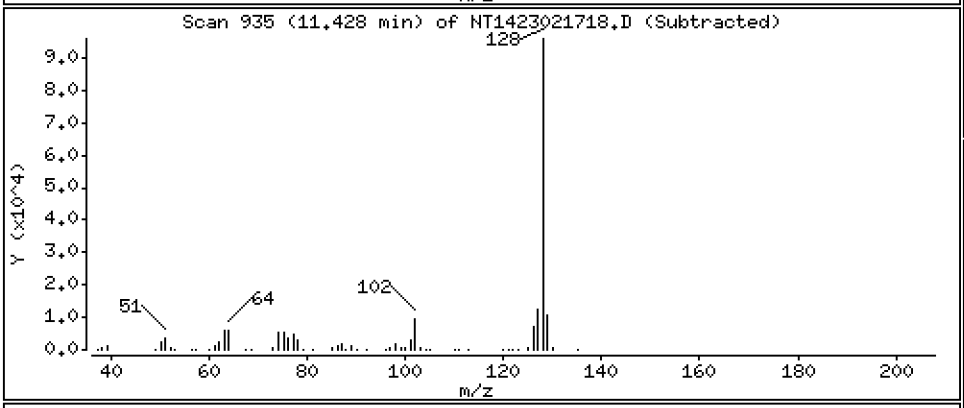
Column diameter: 0.25

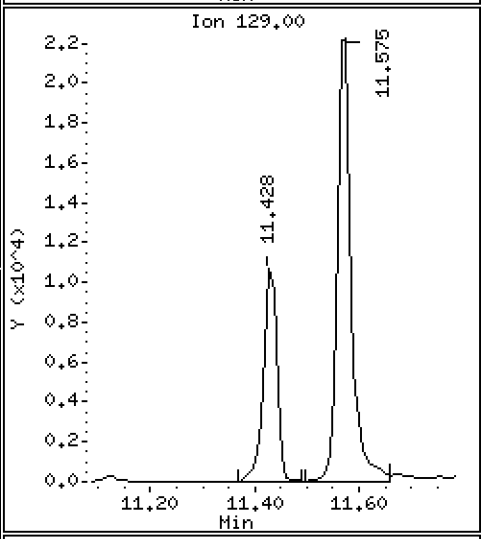
28 Naphthalene

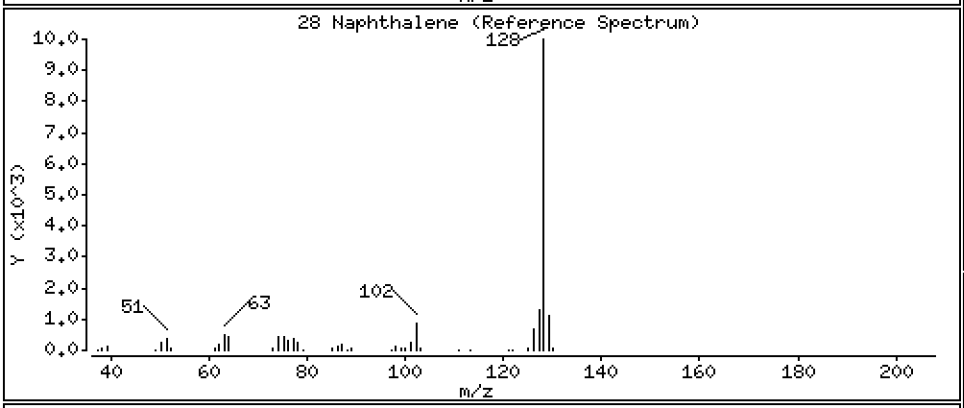
Concentration: 0.4798 ug/mL

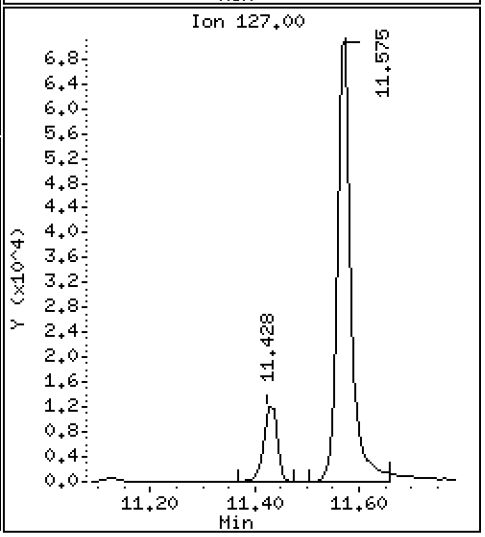


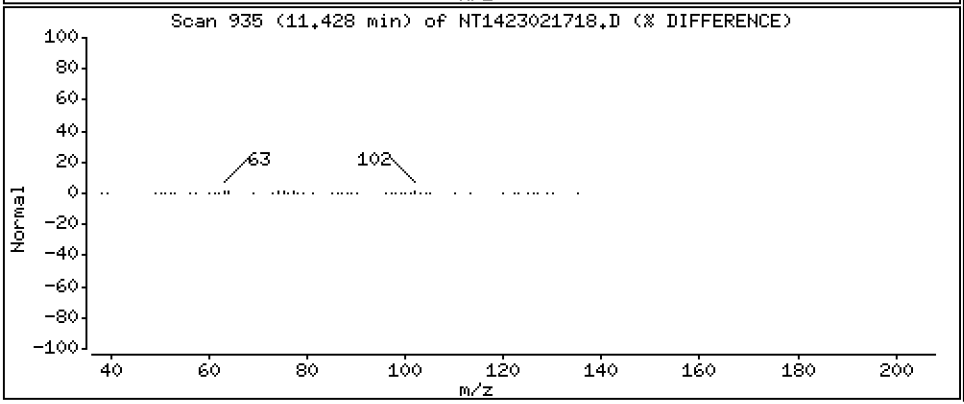












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

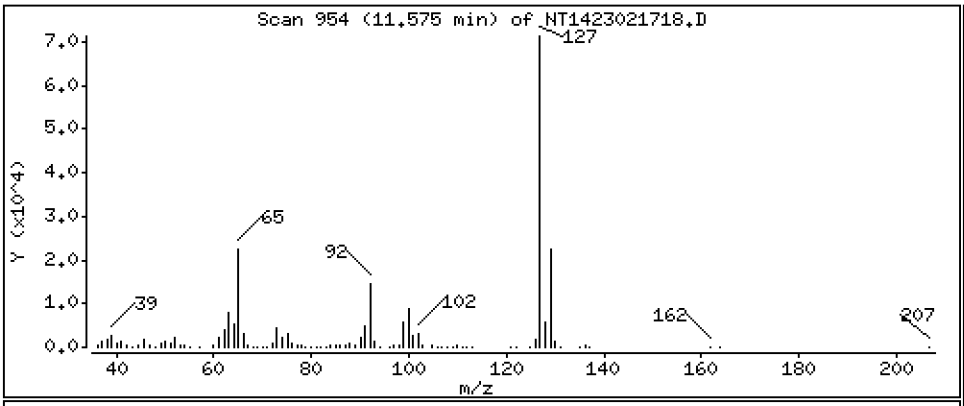
Operator: DSD

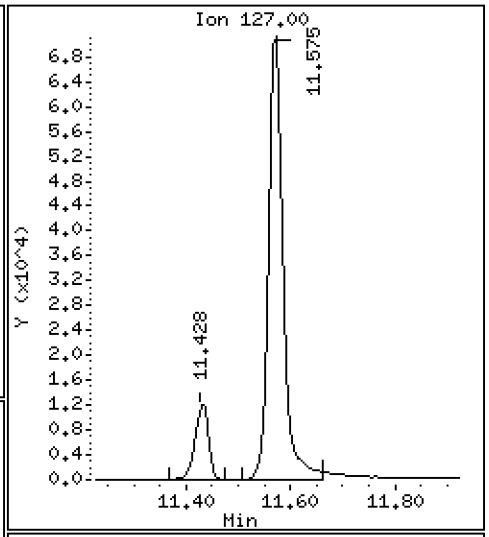
Column phase: ZB-5msi

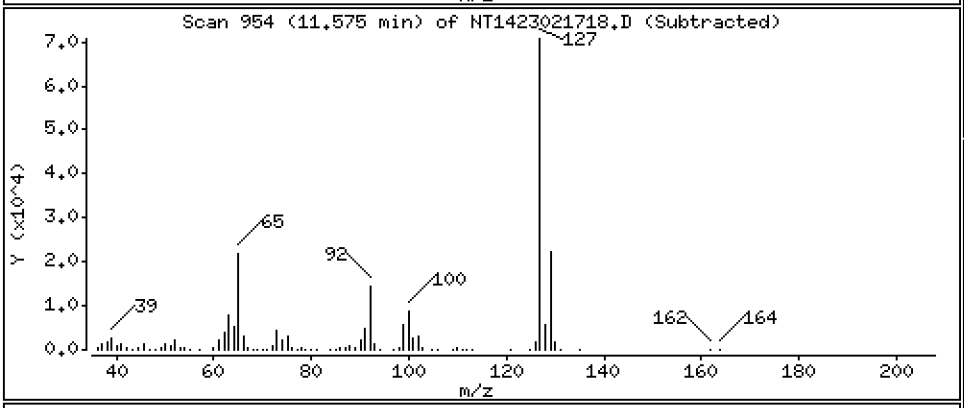
Column diameter: 0.25

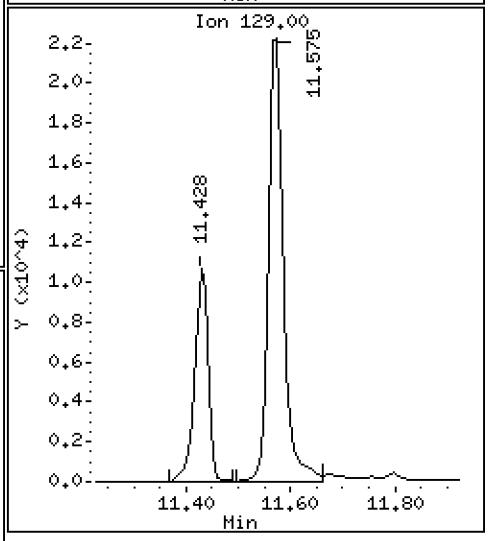
29 4-Chloroaniline

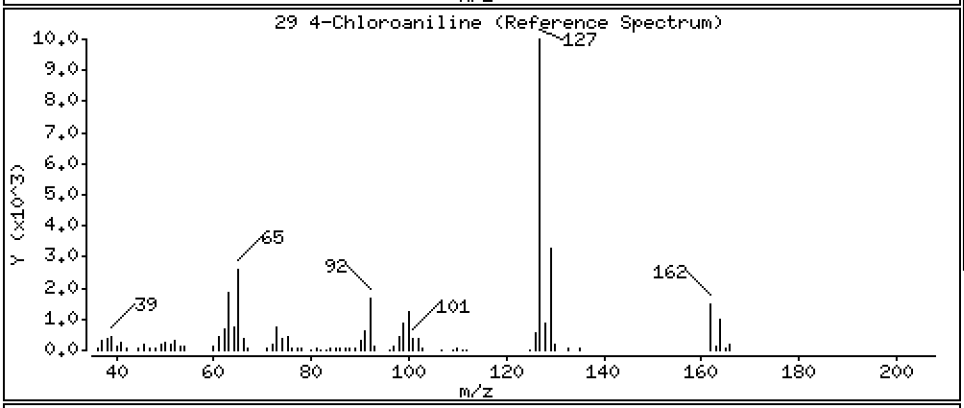
Concentration: 0.9183 ug/mL

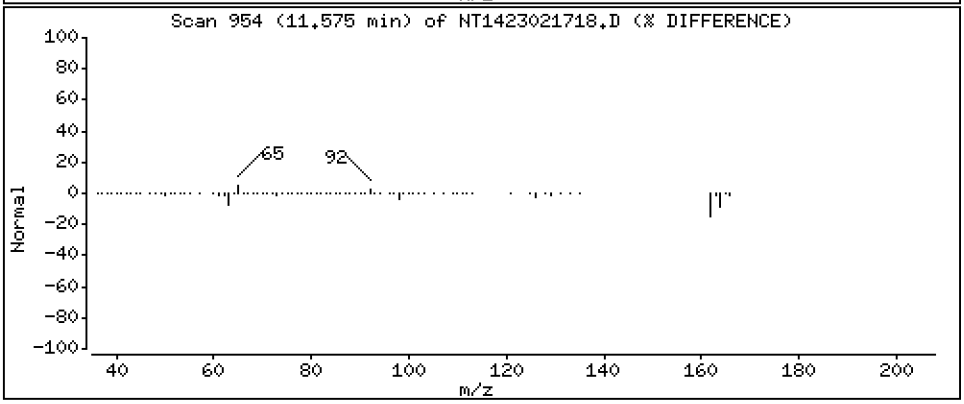












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

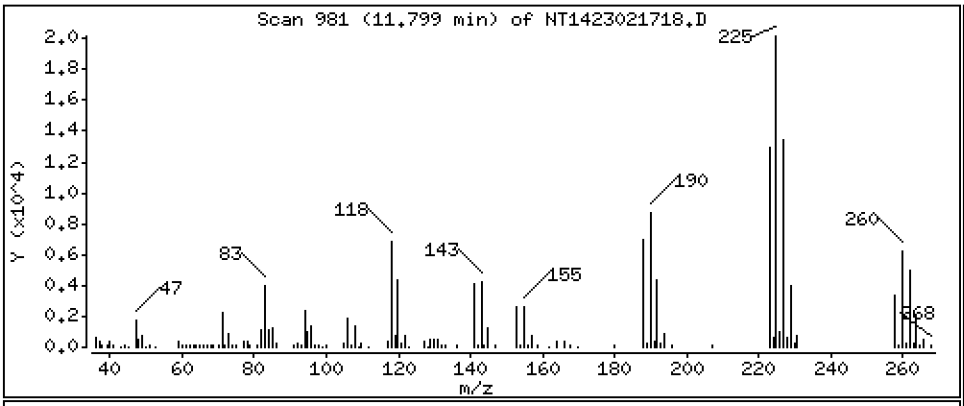
Operator: DSD

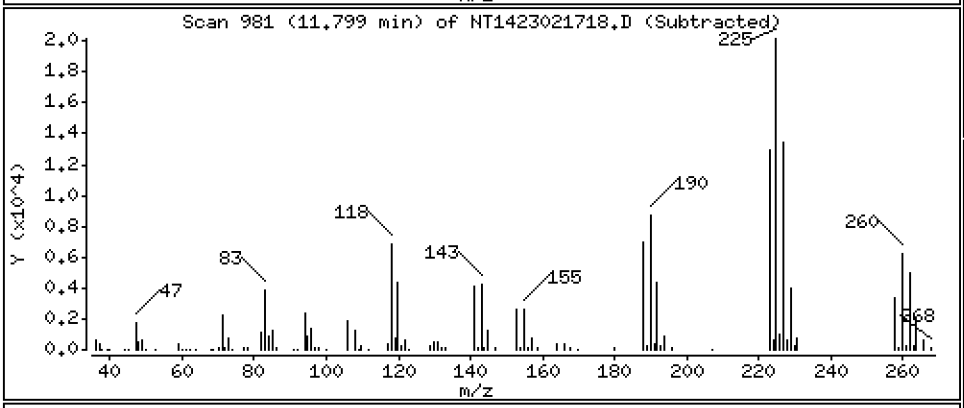
Column phase: ZB-5msi

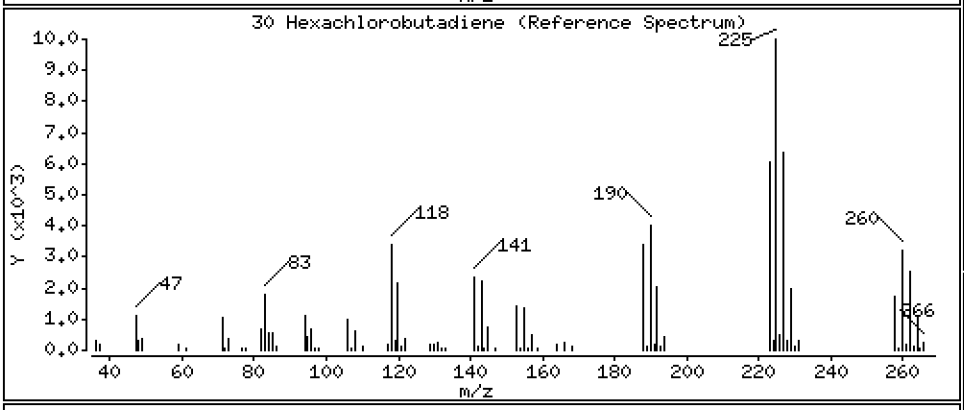
Column diameter: 0.25

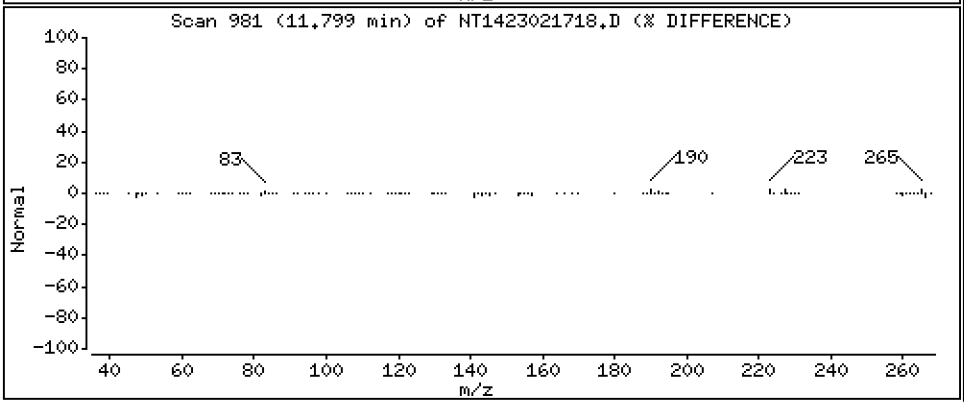
30 Hexachlorobutadiene

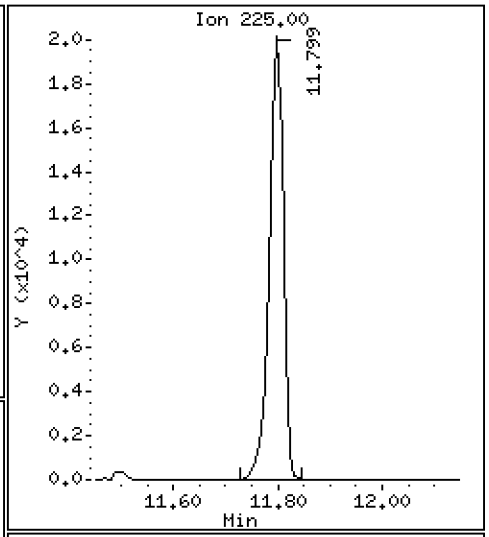
Concentration: 0.4658 ug/mL

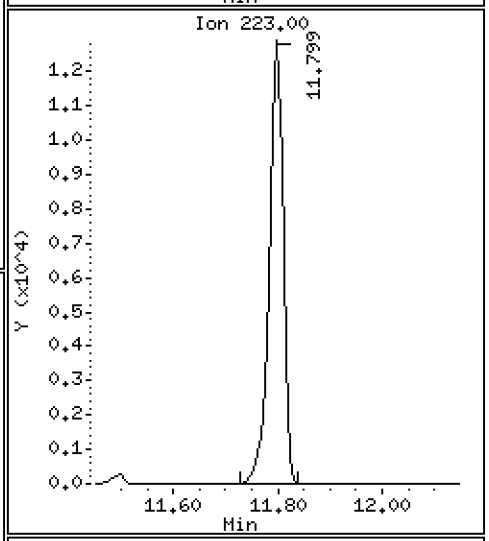


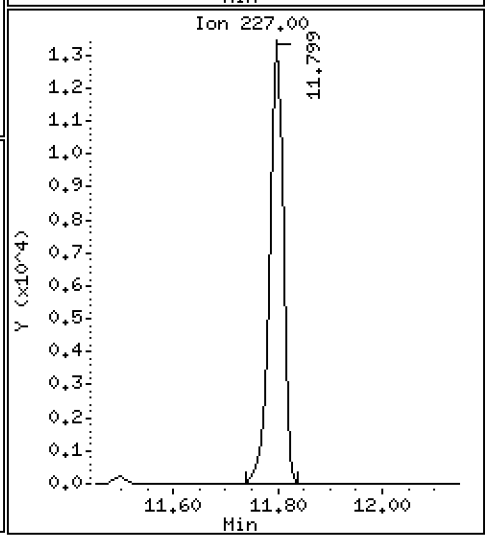












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021718.D

Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

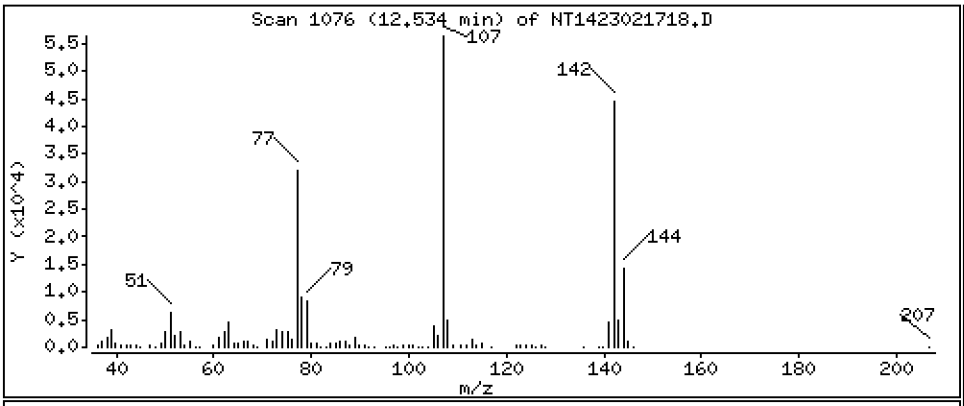
Operator: DSD

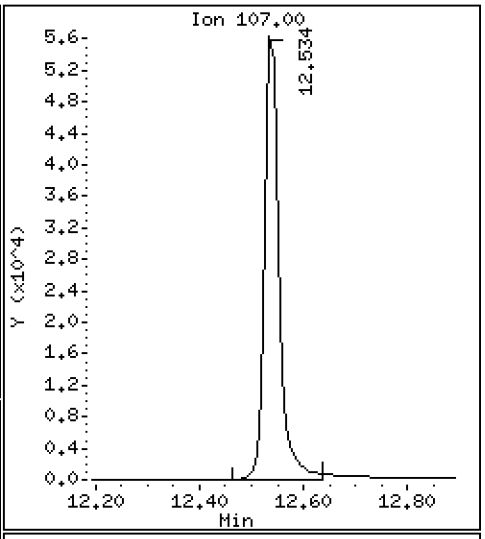
Column phase: ZB-5msi

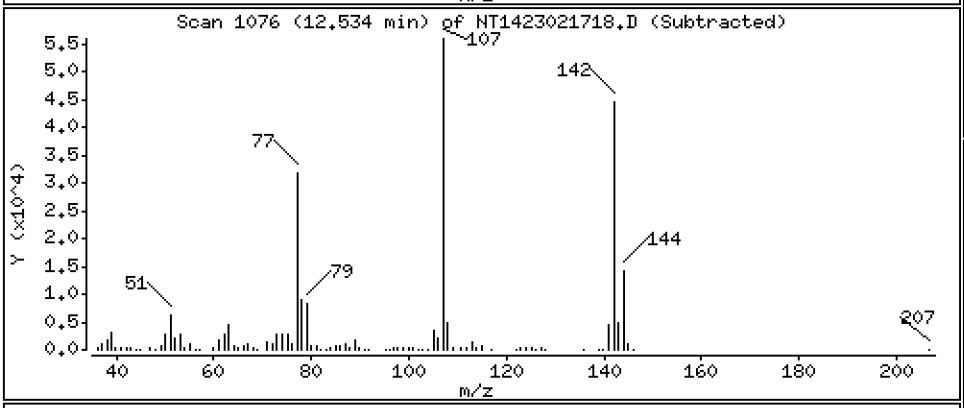
Column diameter: 0.25

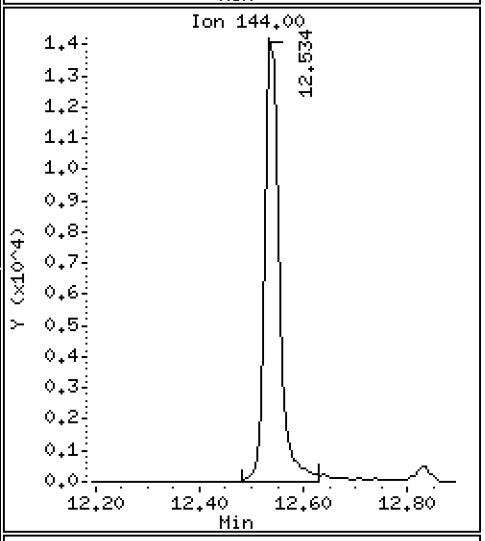
31 4-Chloro-3-methylphenol

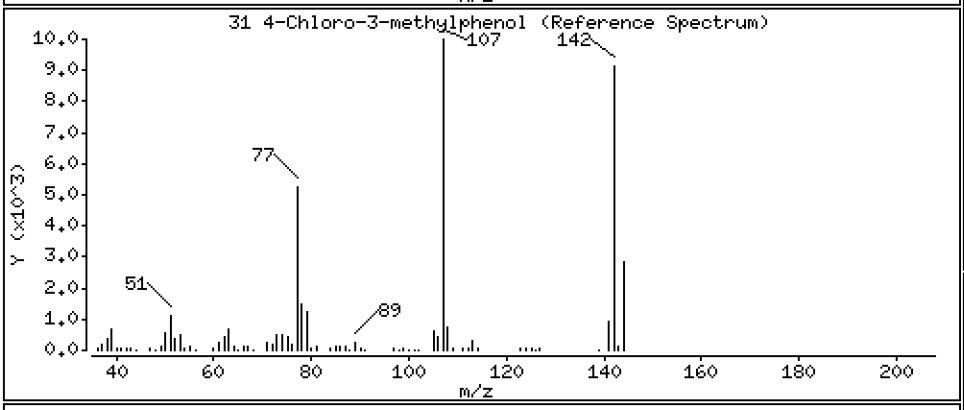
Concentration: 0.9302 ug/mL

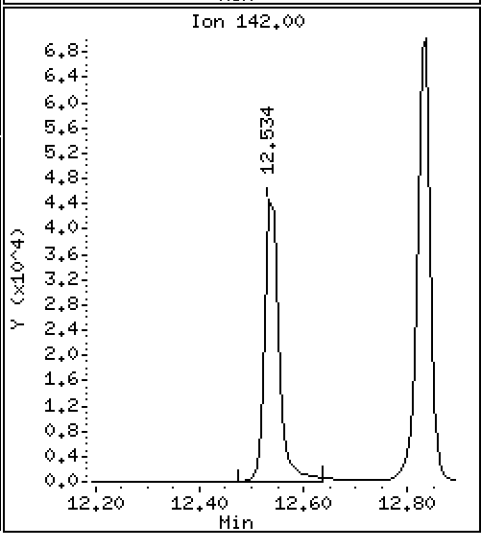


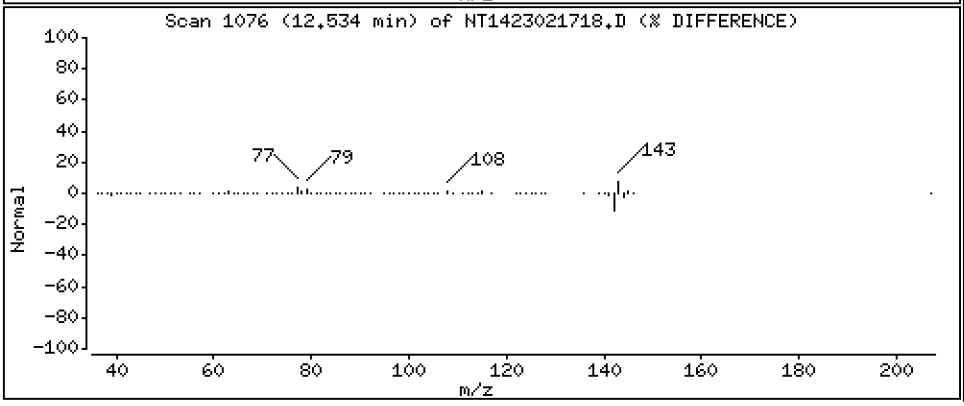












Date : 17-FEB-2023 20:55

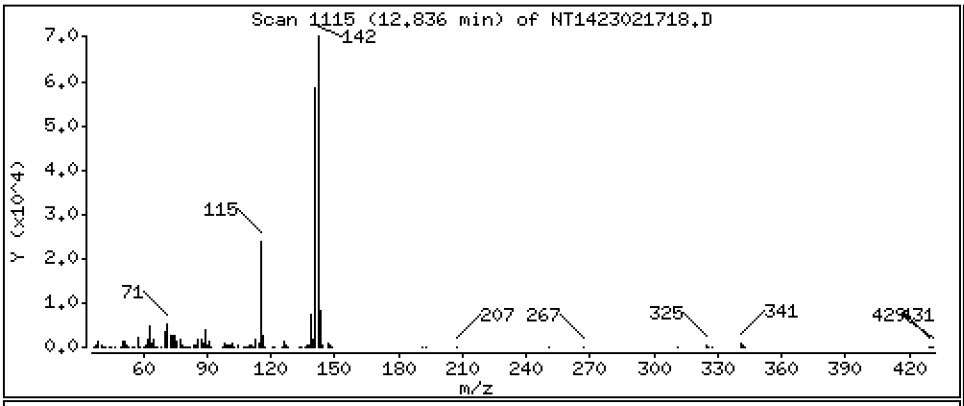
Client ID: Instrument: nt14.i

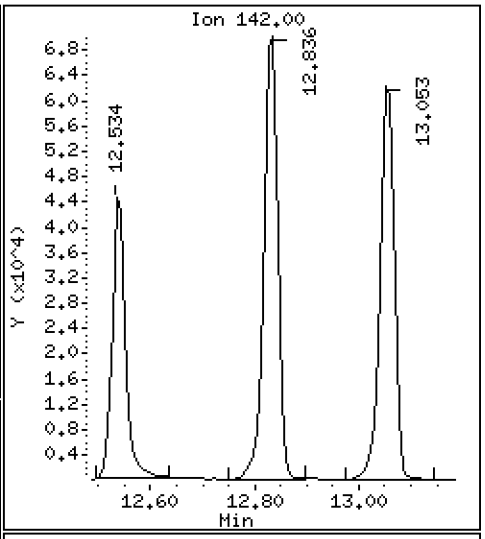
Sample Info: SLB0251-LCV1

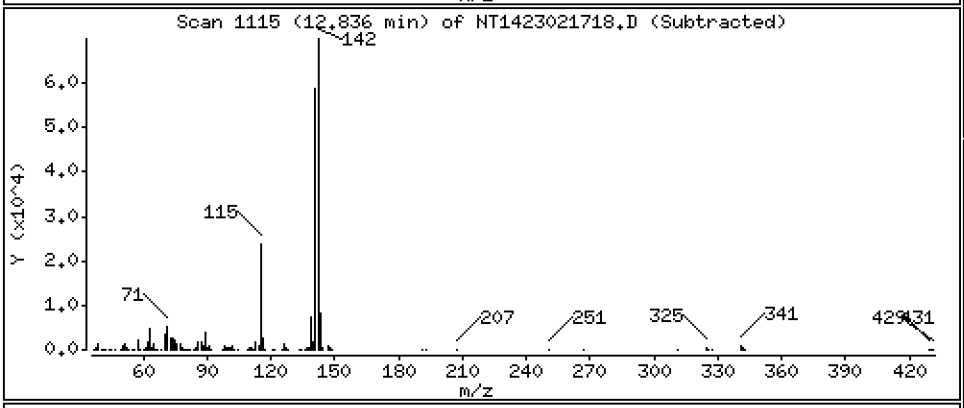
Operator: DSD

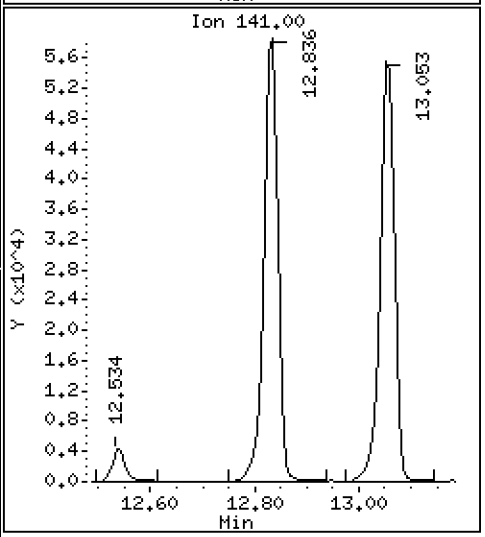
Column phase: ZB-5msi Column diameter: 0.25

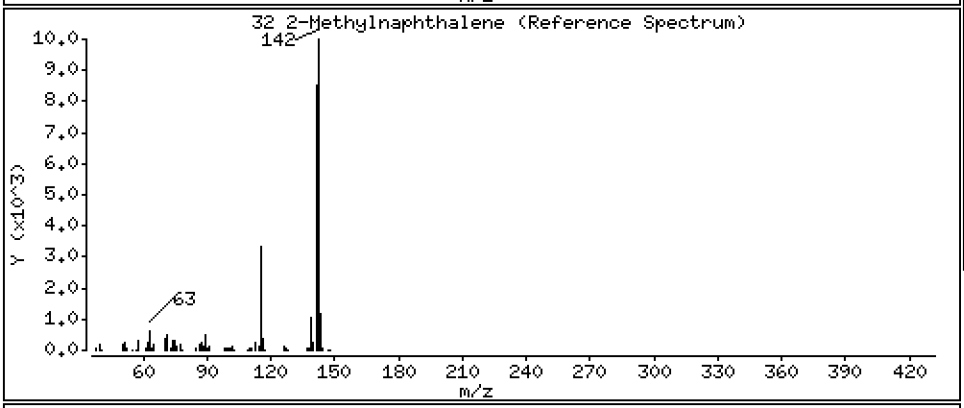
32 2-Methylnaphthalene Concentration: 0.4910 ug/mL

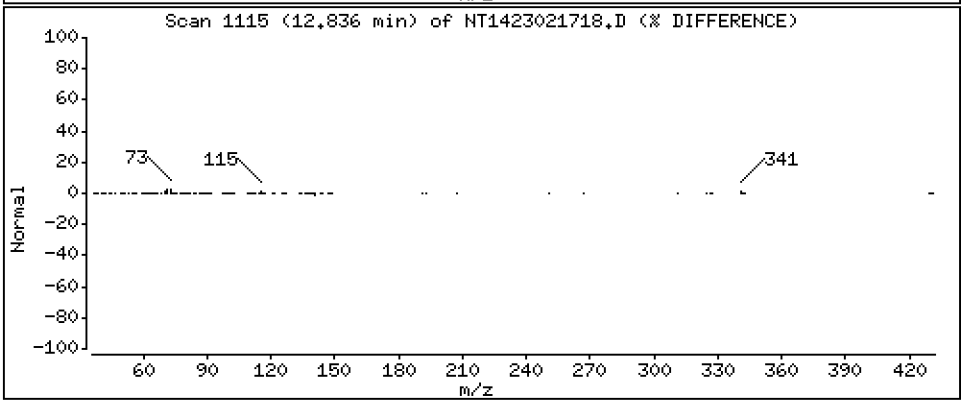












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

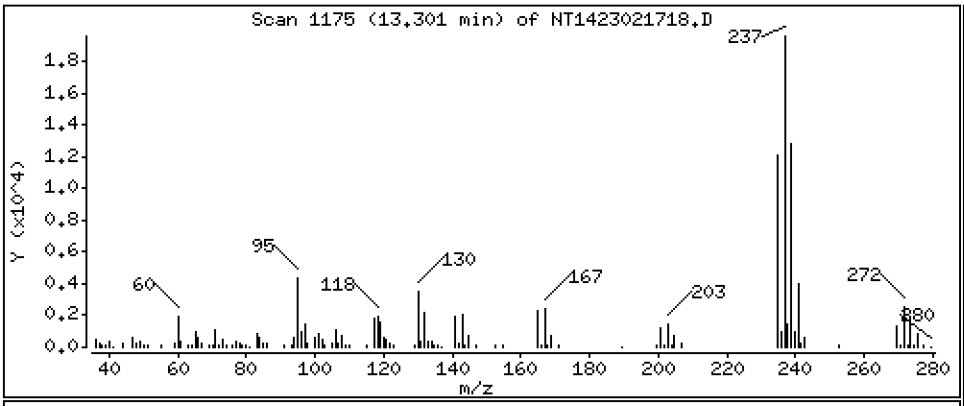
Operator: DSD

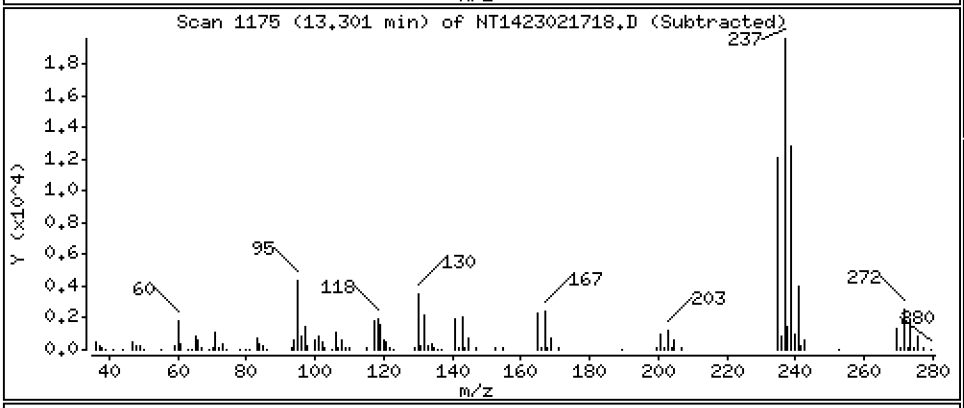
Column phase: ZB-5msi

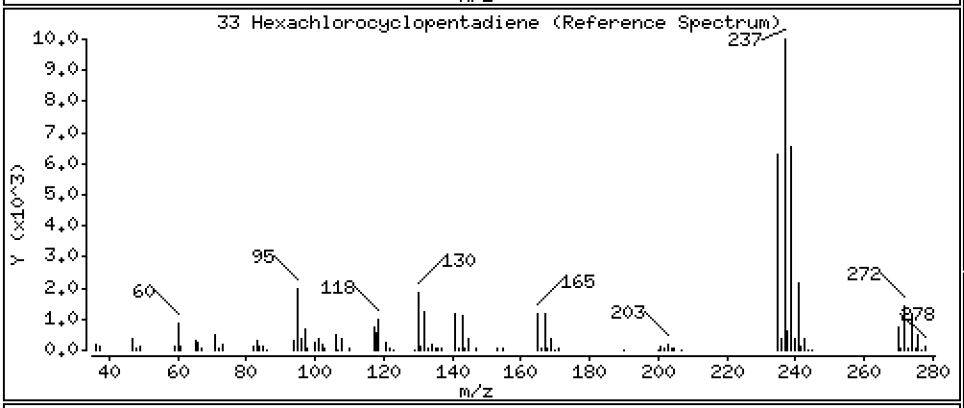
Column diameter: 0.25

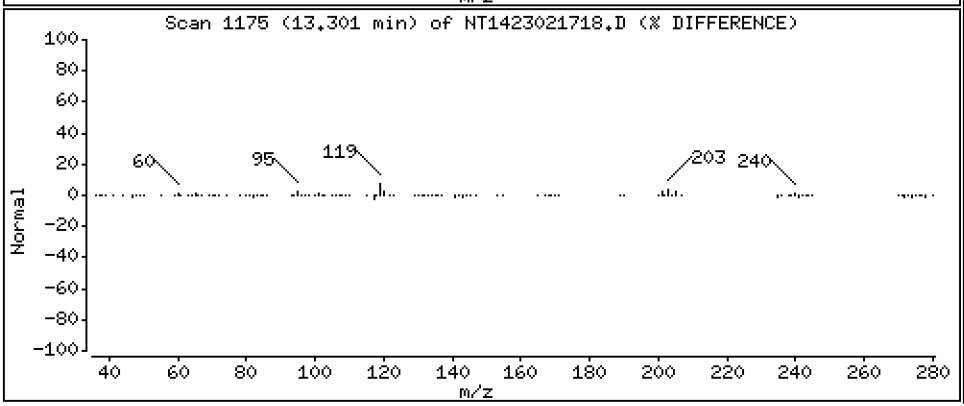
33 Hexachlorocyclopentadiene

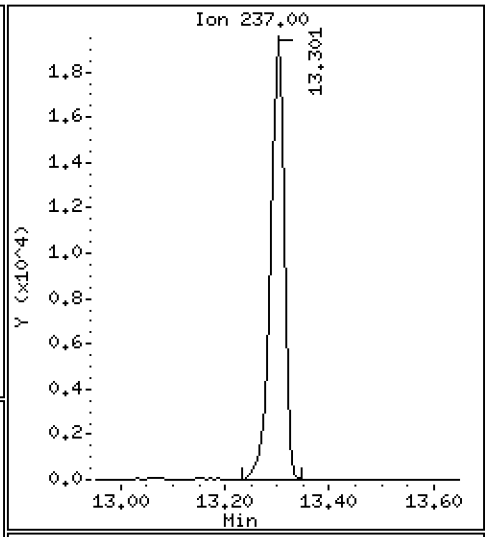
Concentration: 0.4213 ug/mL

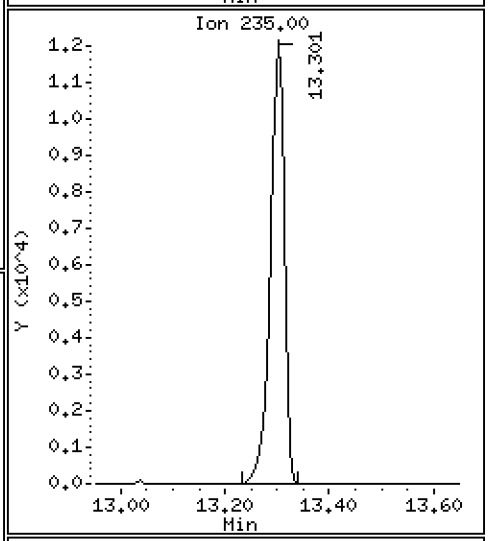


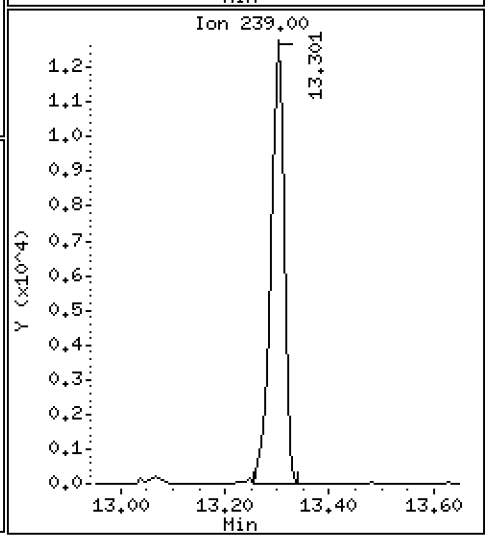












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

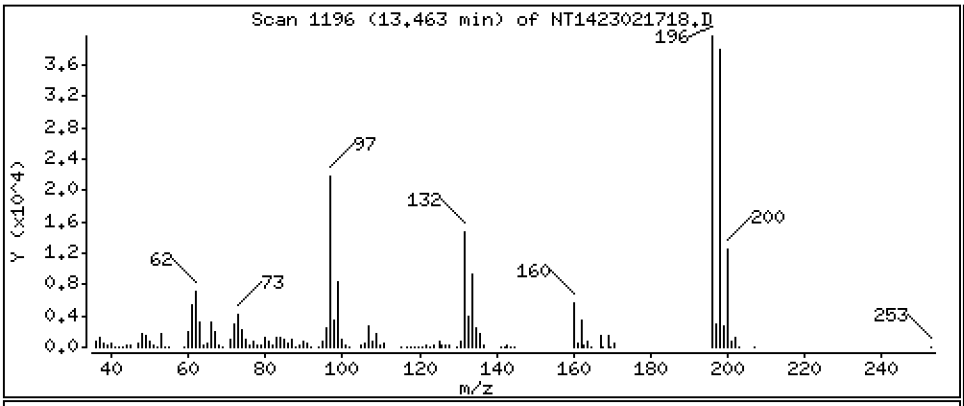
Operator: DSD

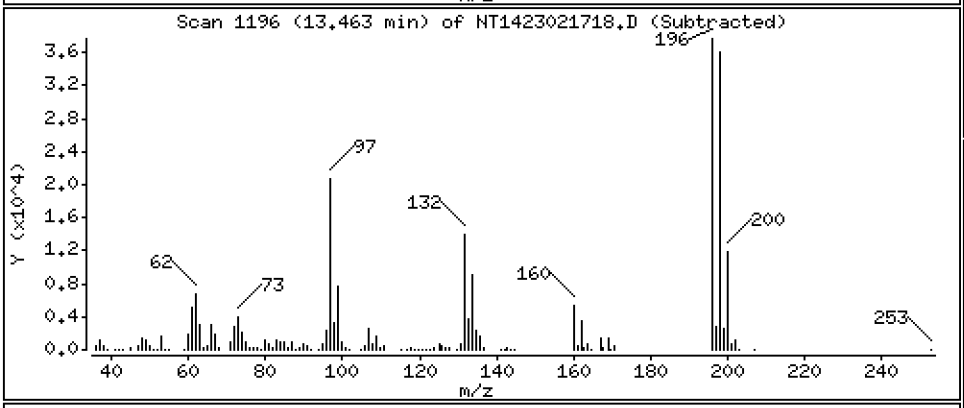
Column phase: ZB-5msi

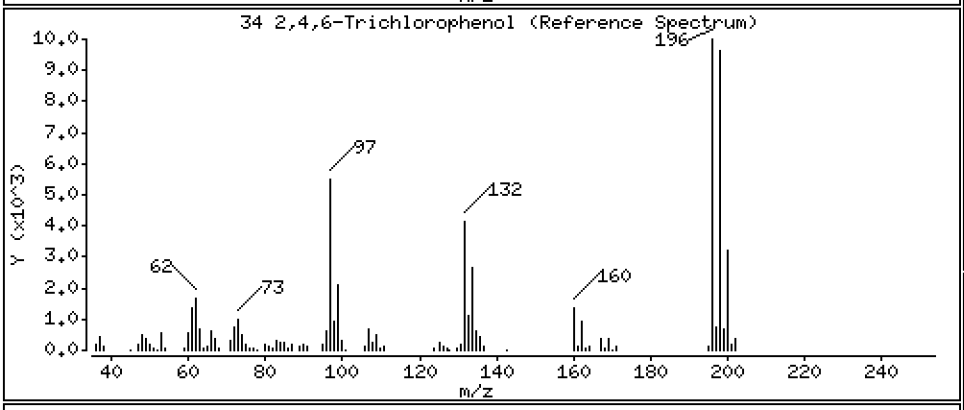
Column diameter: 0.25

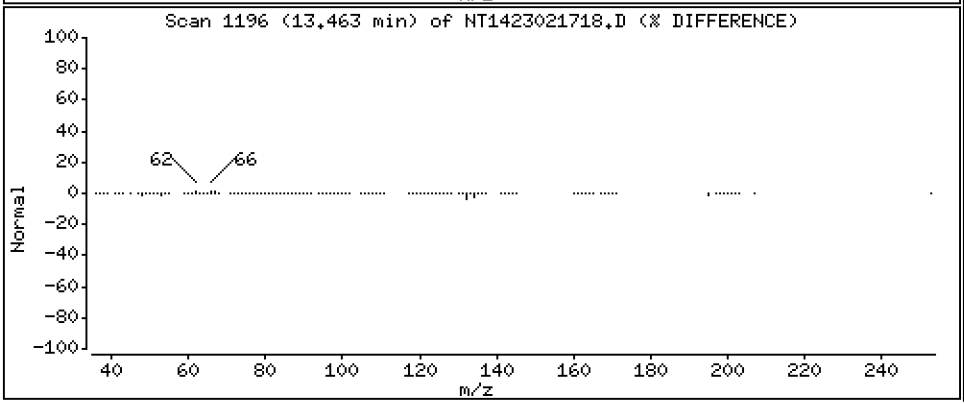
34 2,4,6-Trichlorophenol

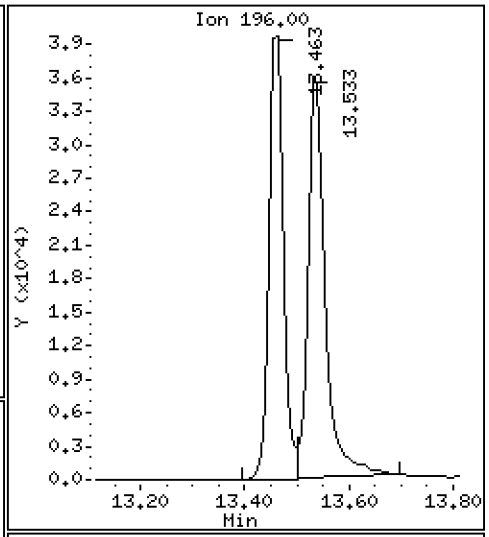
Concentration: 0.8969 ug/mL

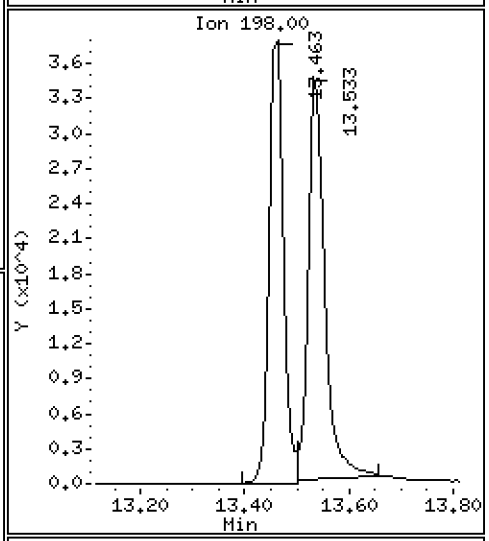


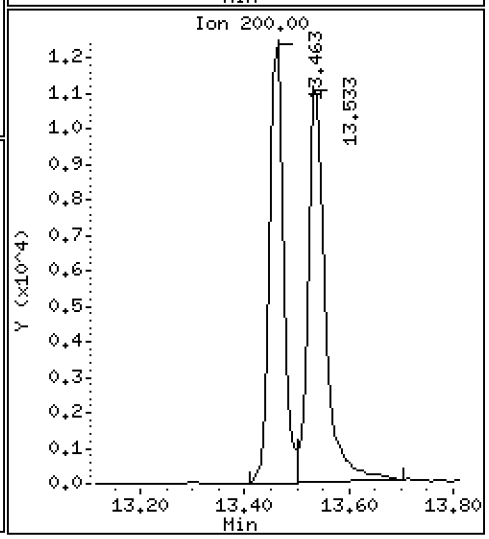












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

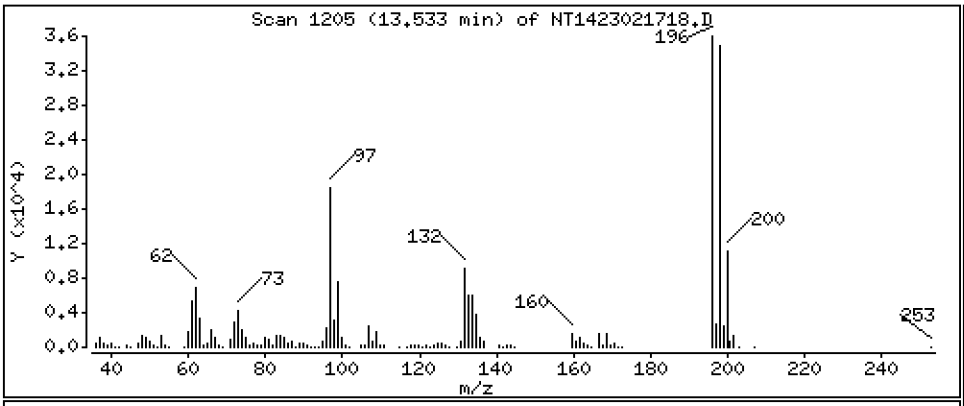
Operator: DSD

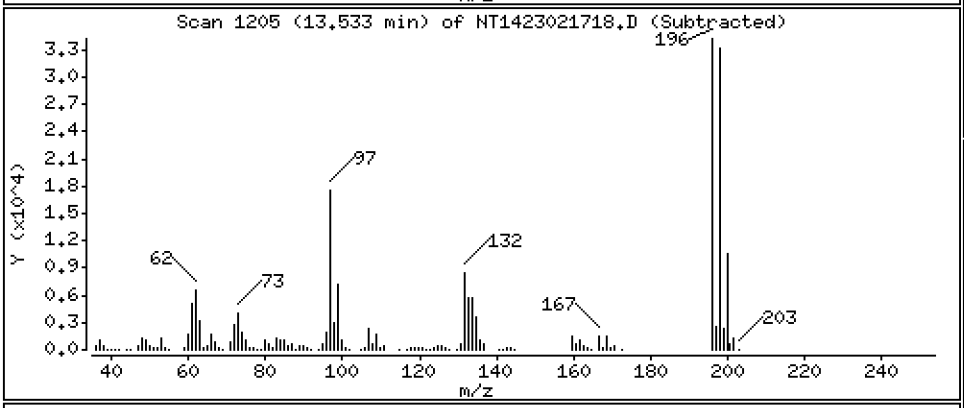
Column phase: ZB-5msi

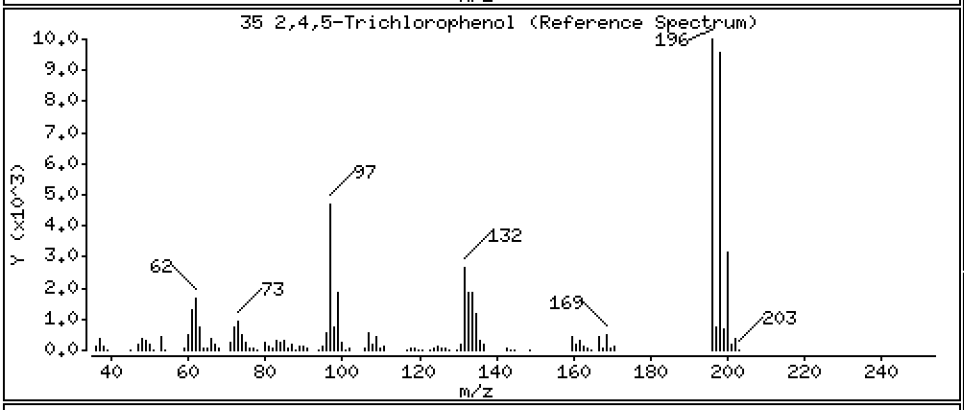
Column diameter: 0.25

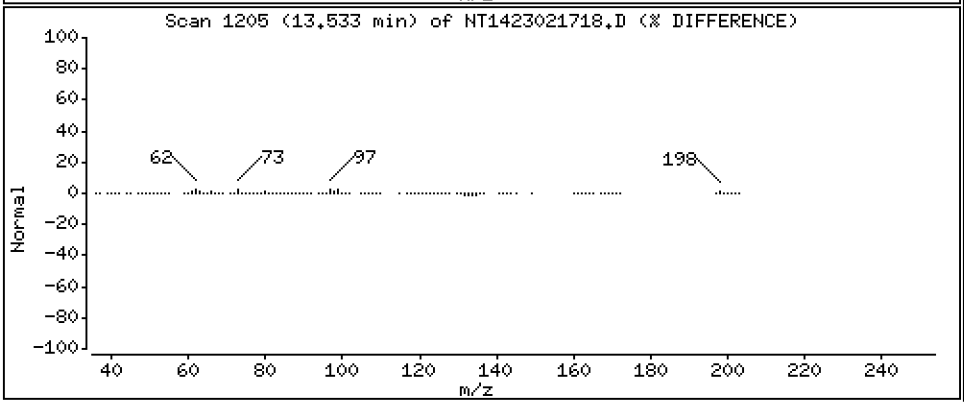
35 2,4,5-Trichlorophenol

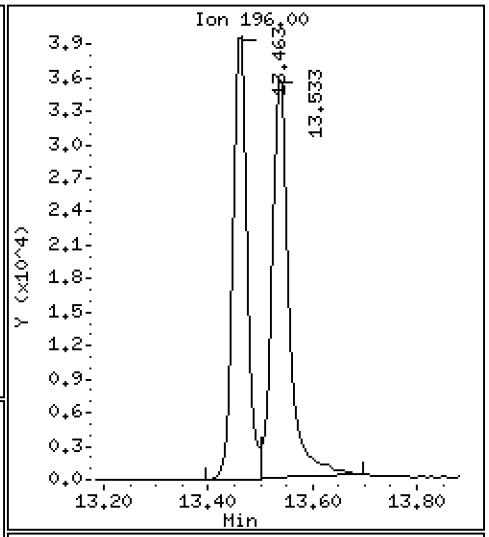
Concentration: 0.8911 ug/mL

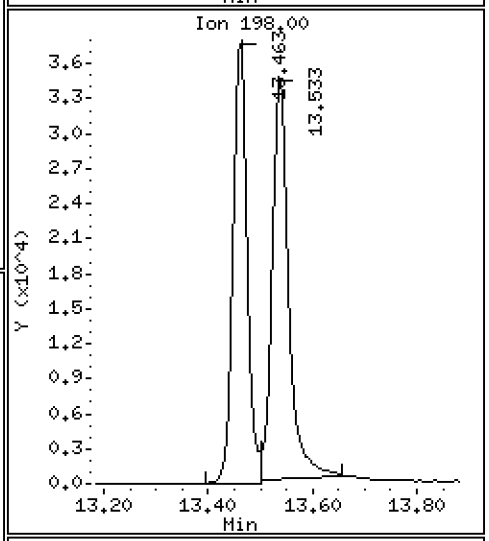


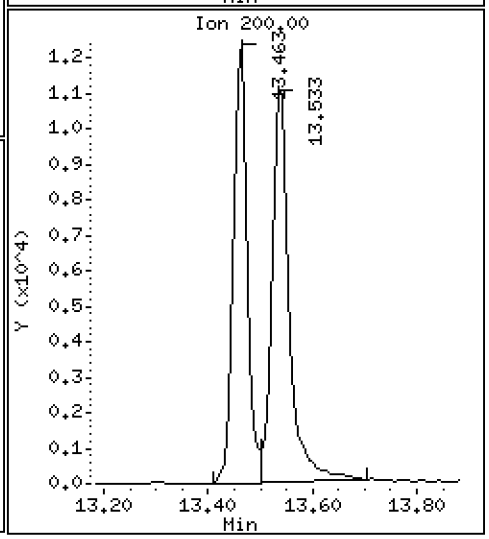












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

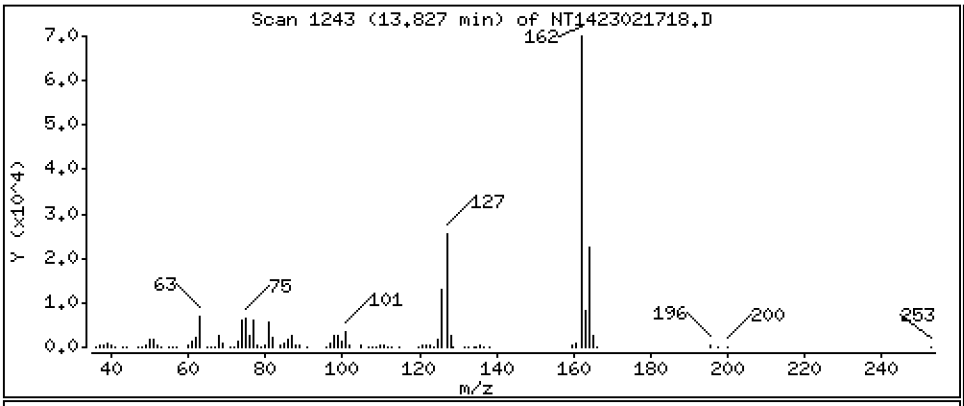
Operator: DSD

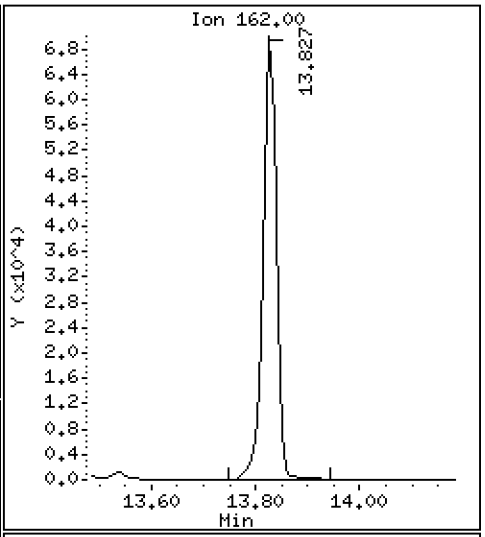
Column phase: ZB-5msi

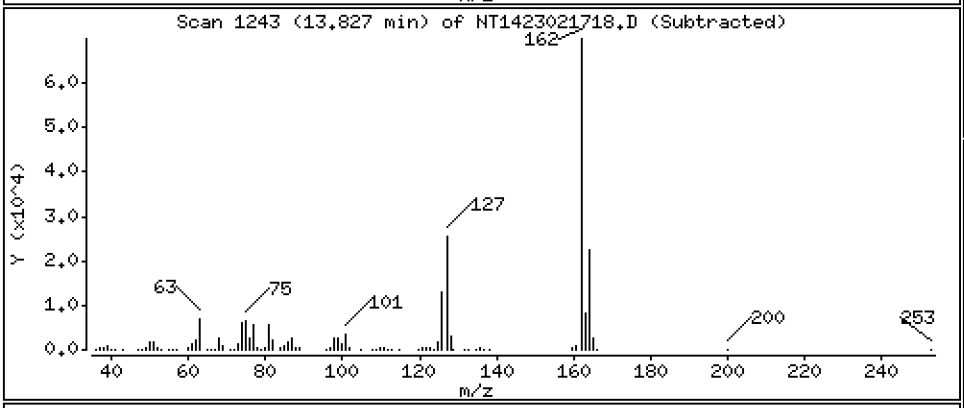
Column diameter: 0.25

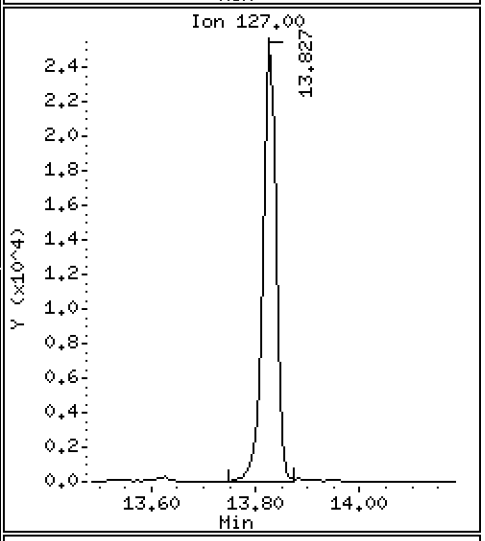
37 2-Chloronaphthalene

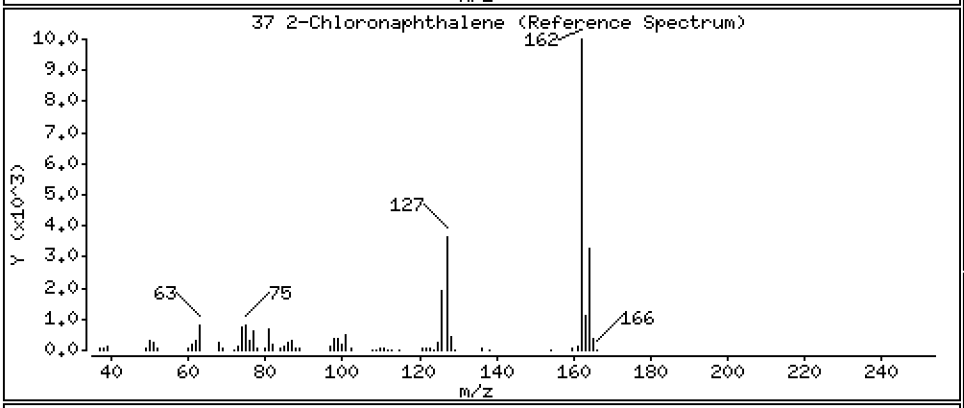
Concentration: 0.4854 ug/mL

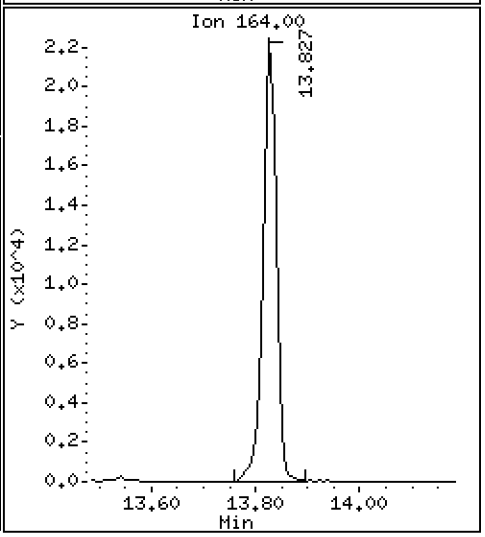


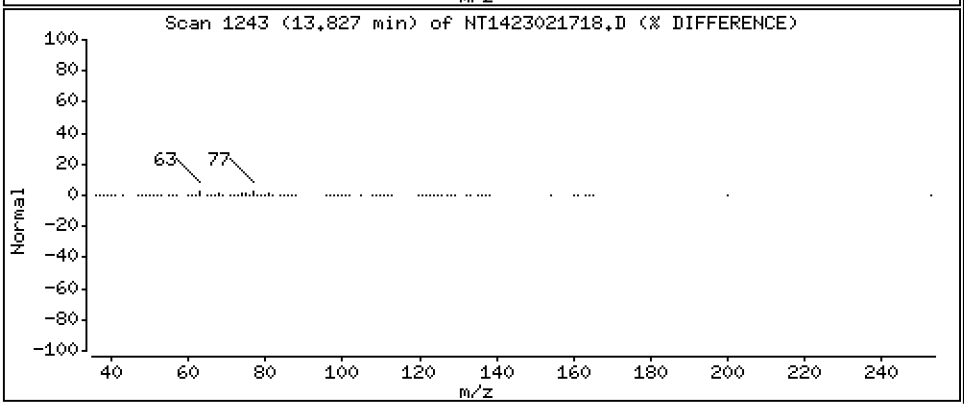












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

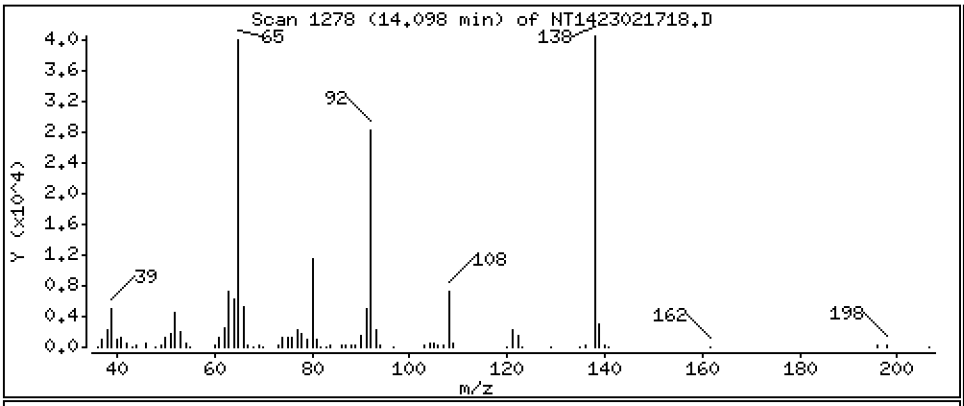
Operator: DSD

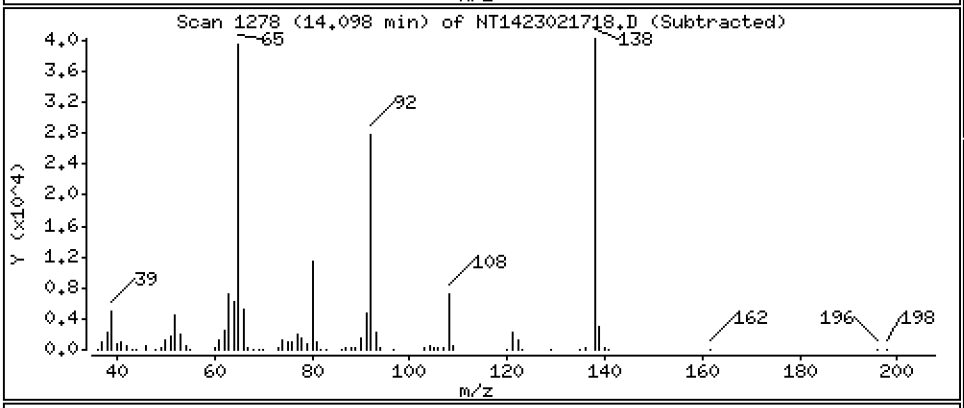
Column phase: ZB-5msi

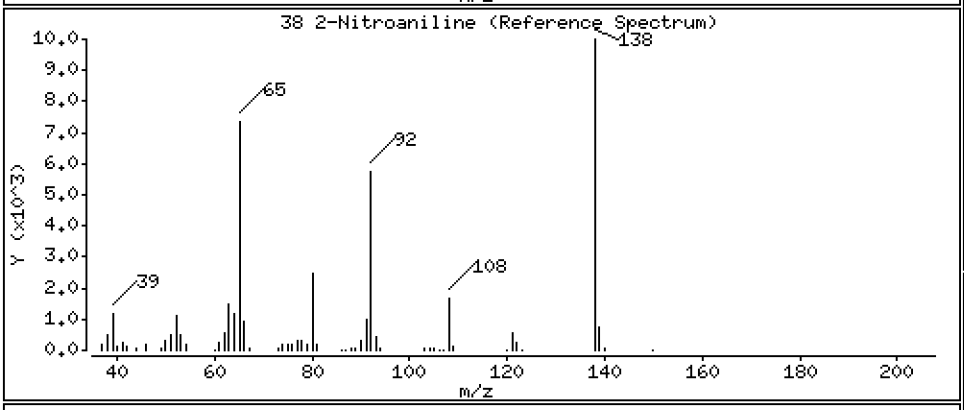
Column diameter: 0.25

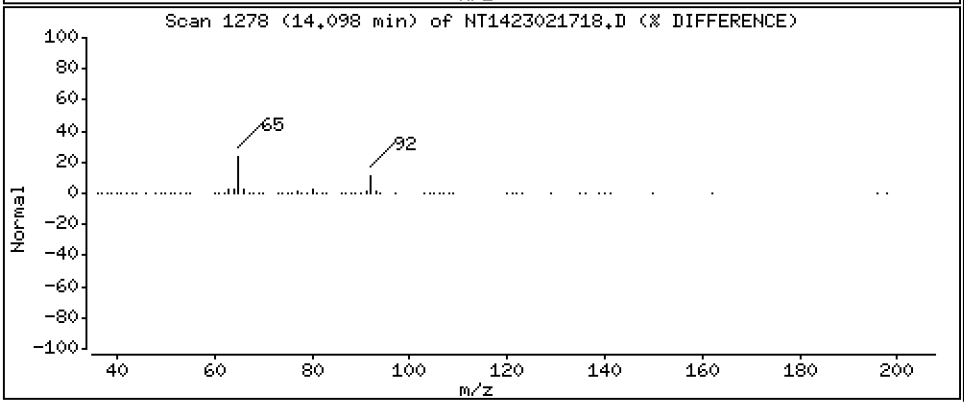
38 2-Nitroaniline

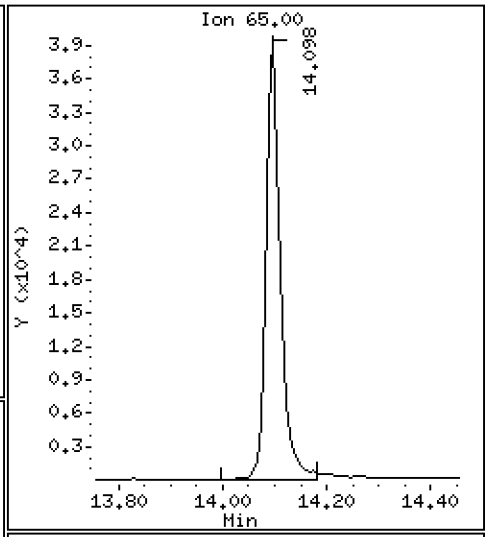
Concentration: 0.9428 ug/mL

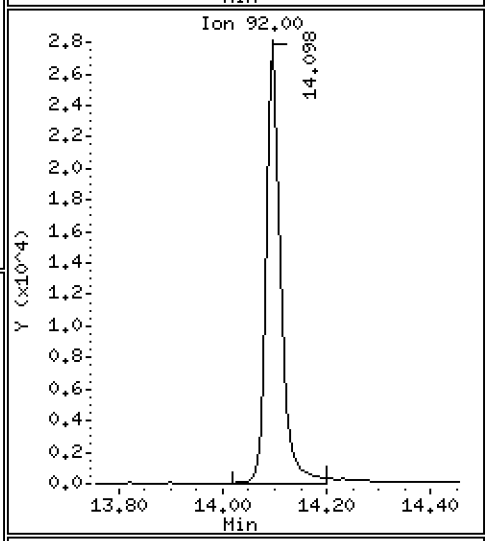


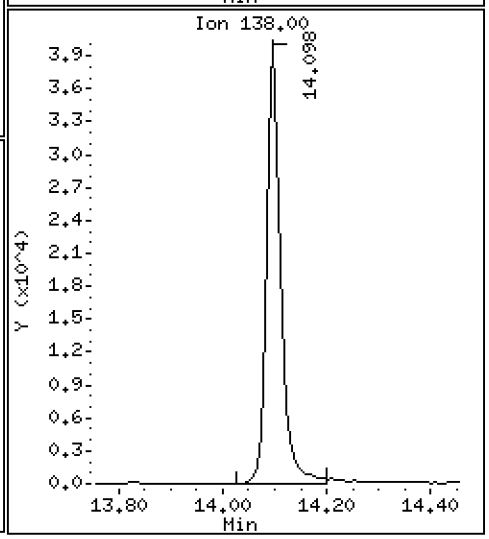












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

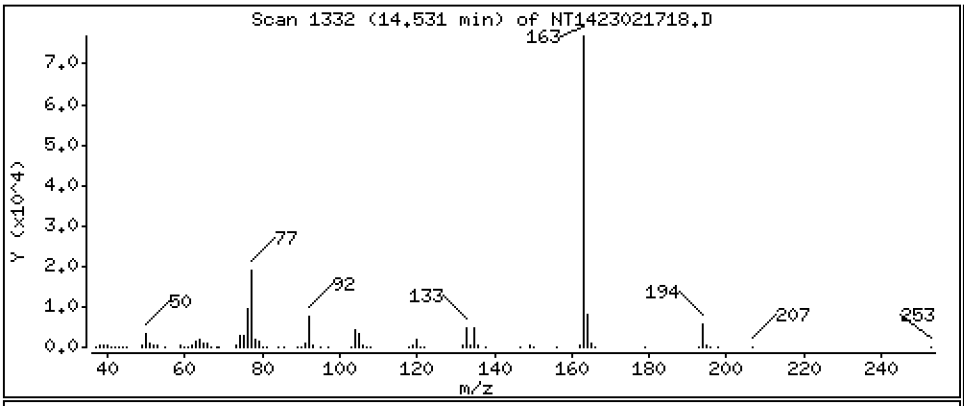
Operator: DSD

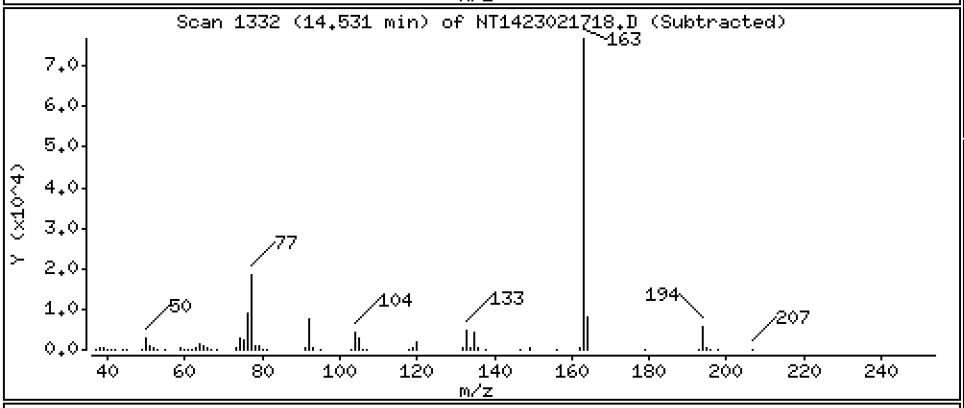
Column phase: ZB-5msi

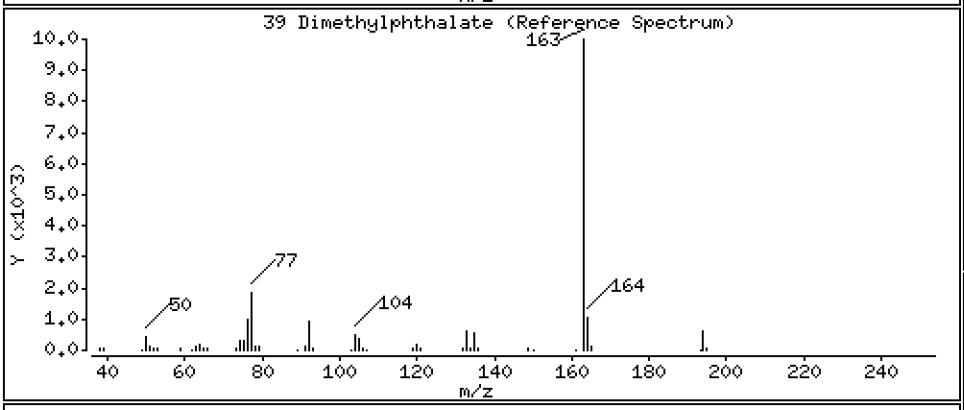
Column diameter: 0.25

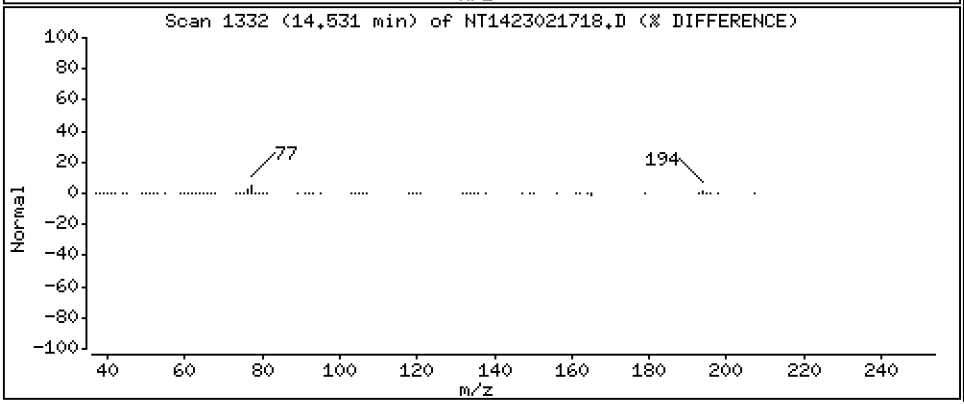
39 Dimethylphthalate

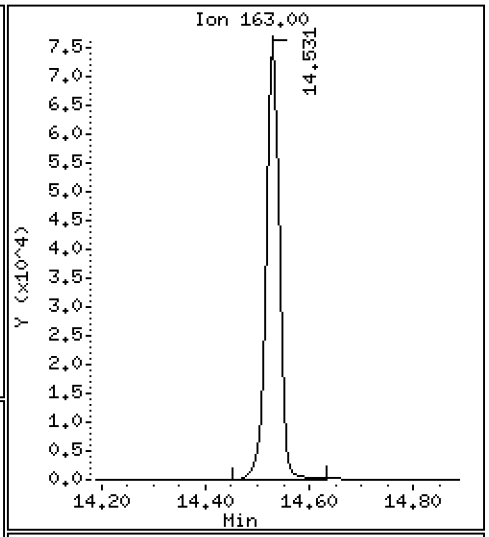
Concentration: 0.5028 ug/mL

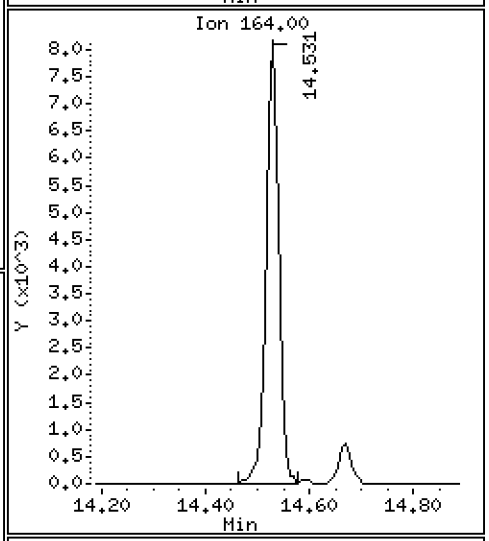


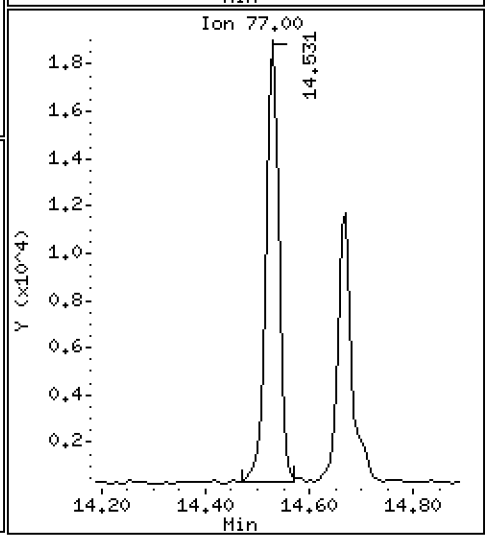












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

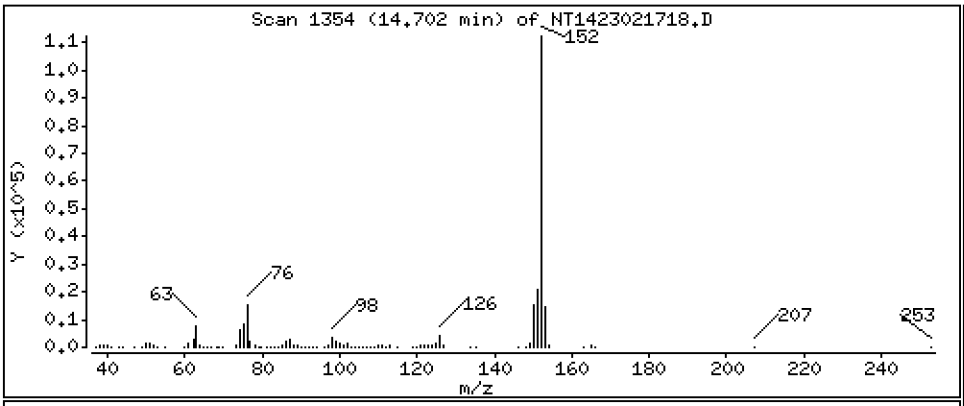
Operator: DSD

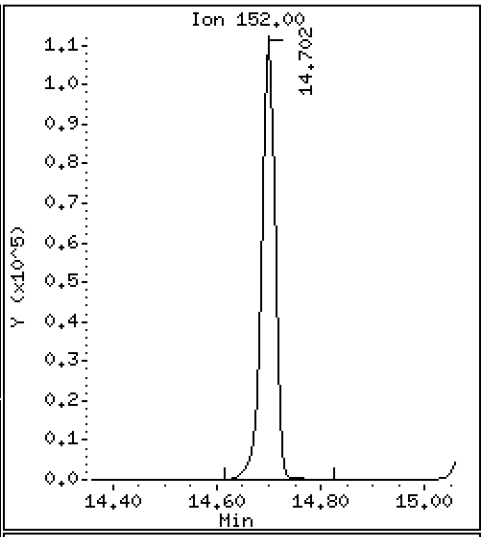
Column phase: ZB-5msi

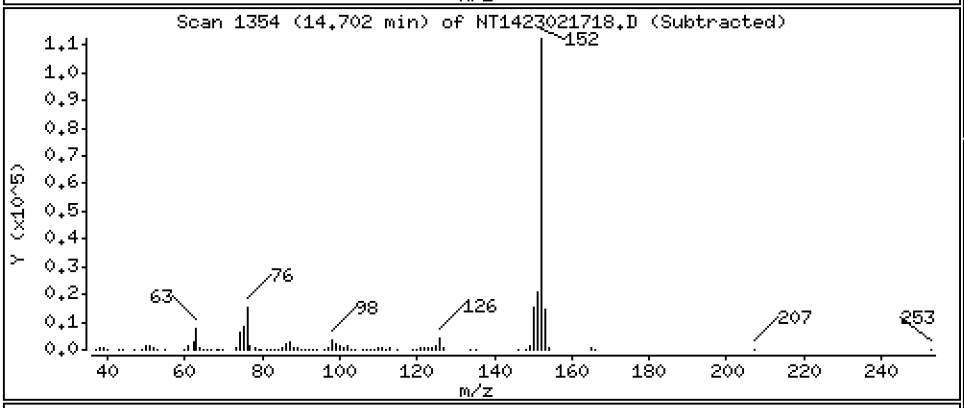
Column diameter: 0.25

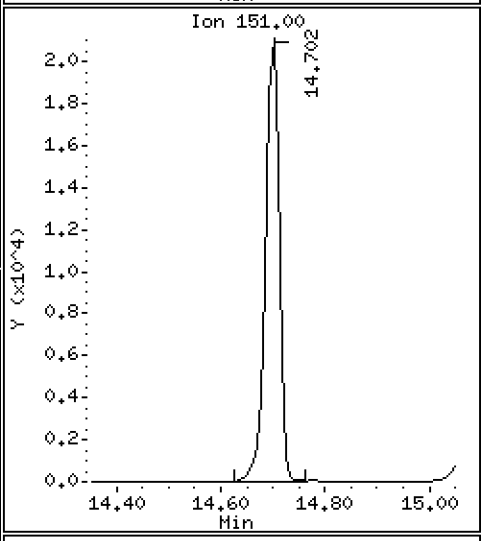
40 Acenaphthylene

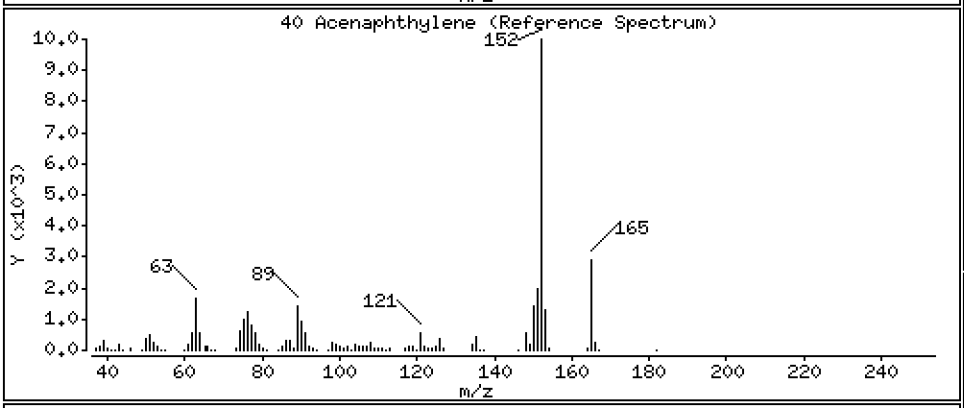
Concentration: 0.5579 ug/mL

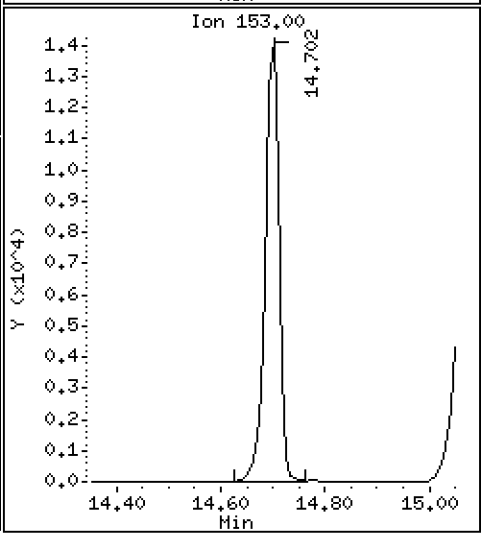


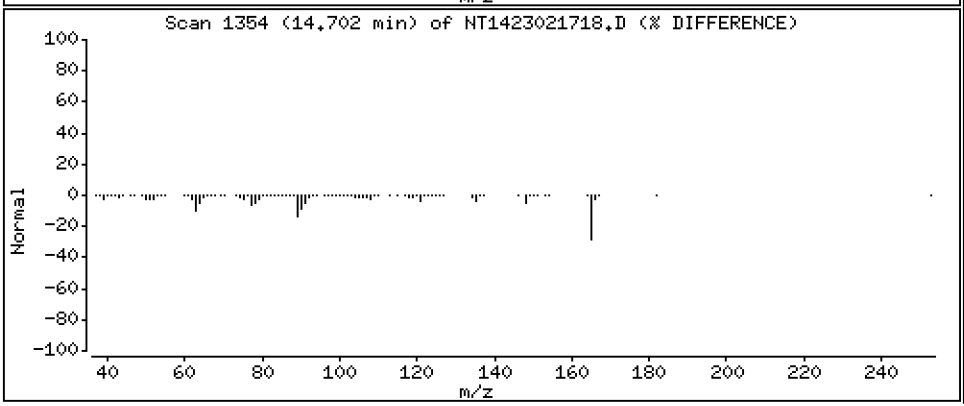












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

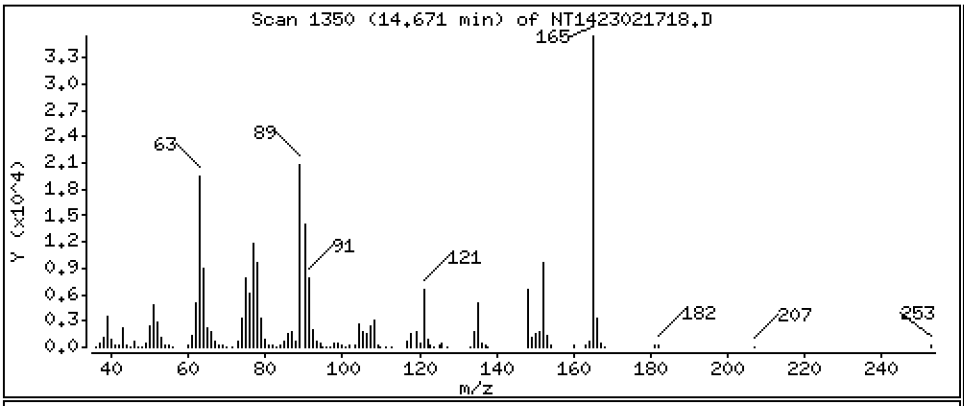
Operator: DSD

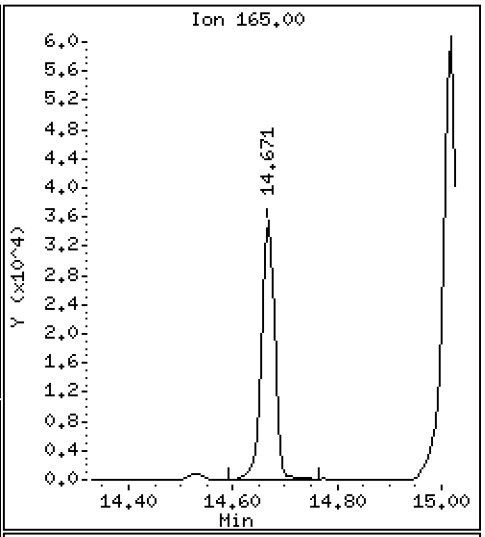
Column phase: ZB-5msi

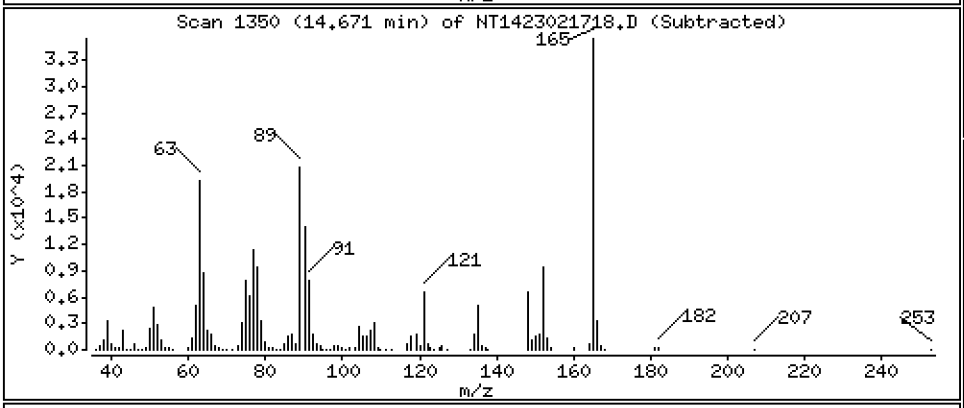
Column diameter: 0.25

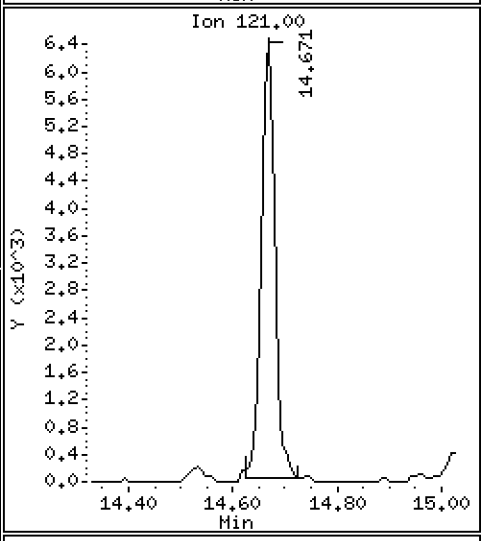
41 2,6-Dinitrotoluene

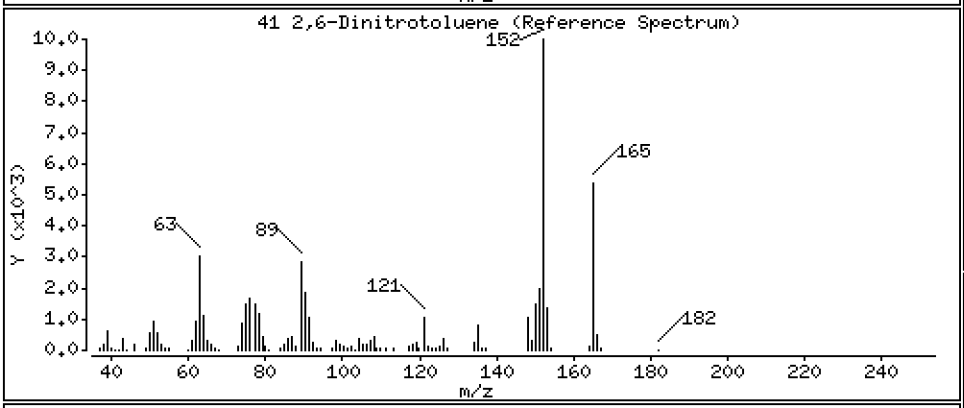
Concentration: 1.005 ug/mL

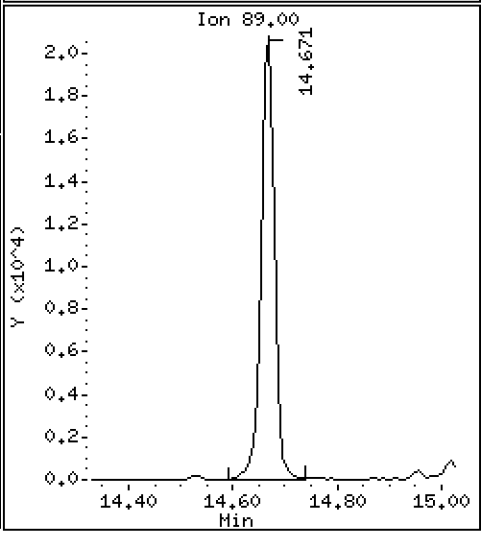


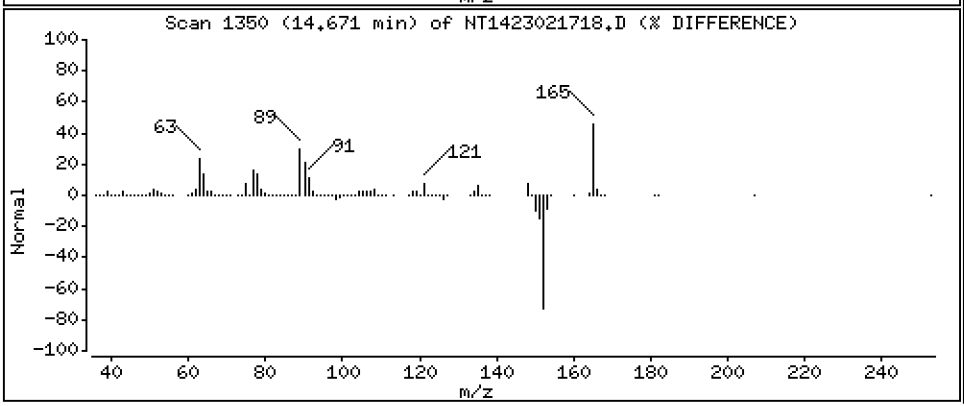












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

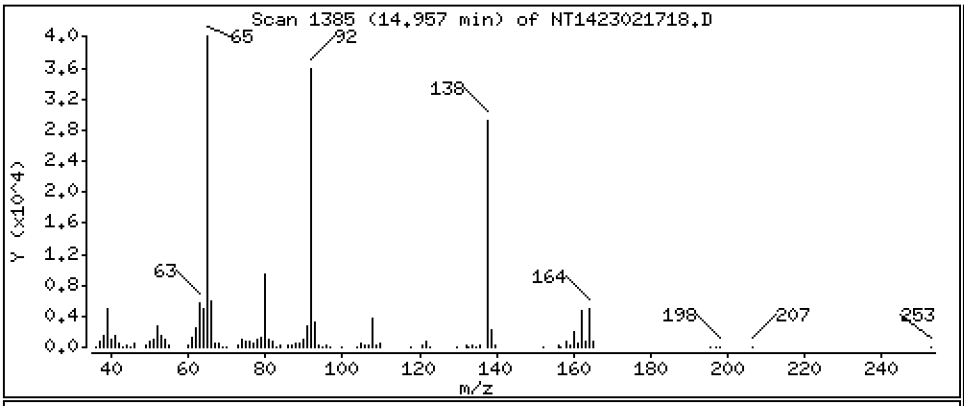
Operator: DSD

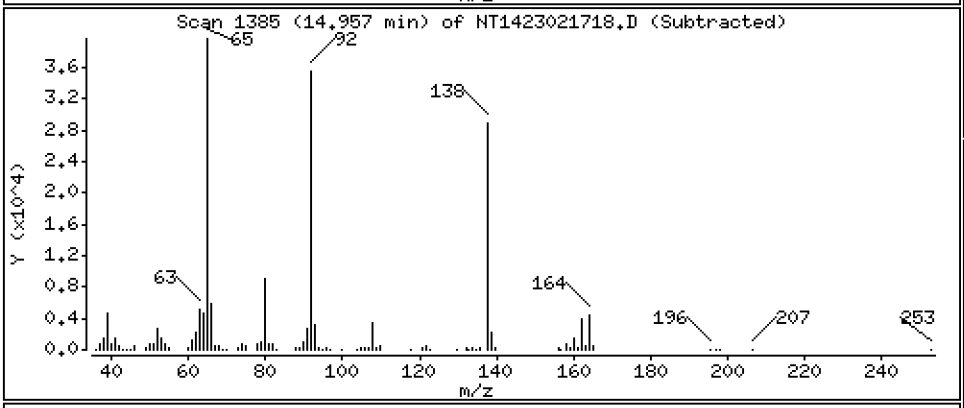
Column phase: ZB-5msi

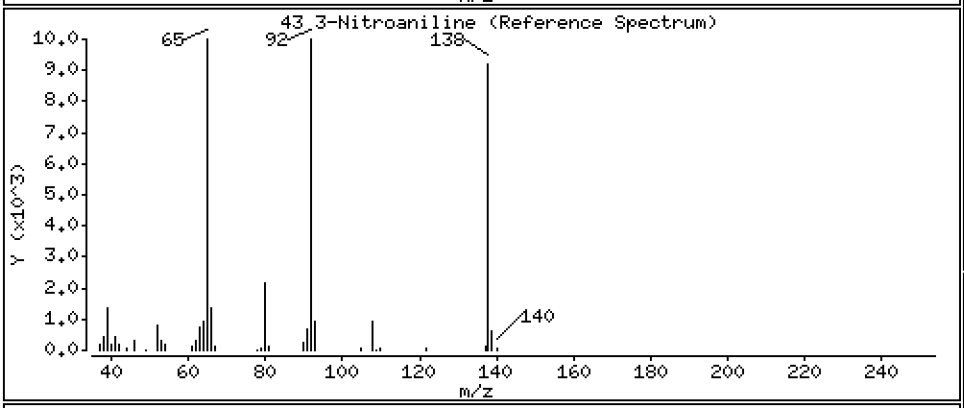
Column diameter: 0.25

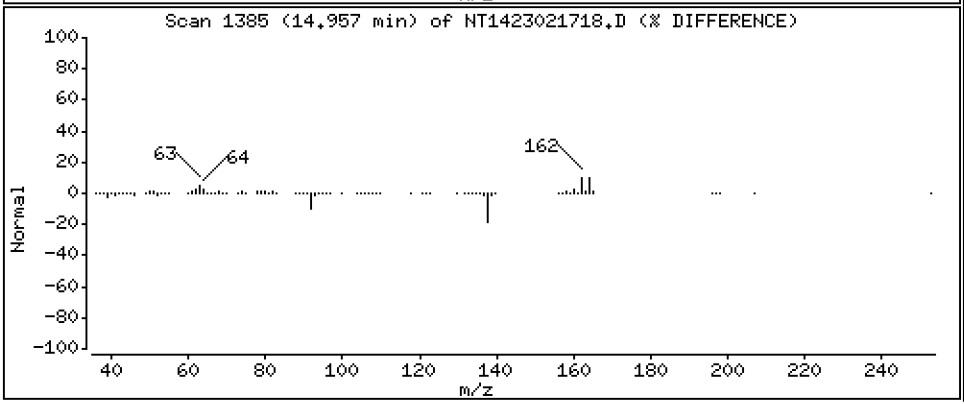
43 3-Nitroaniline

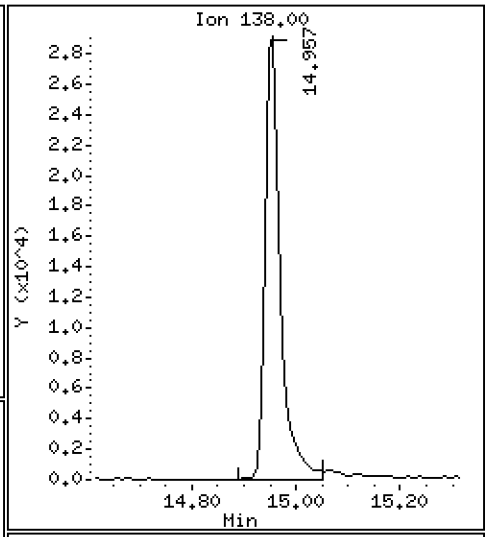
Concentration: 0.9036 ug/mL

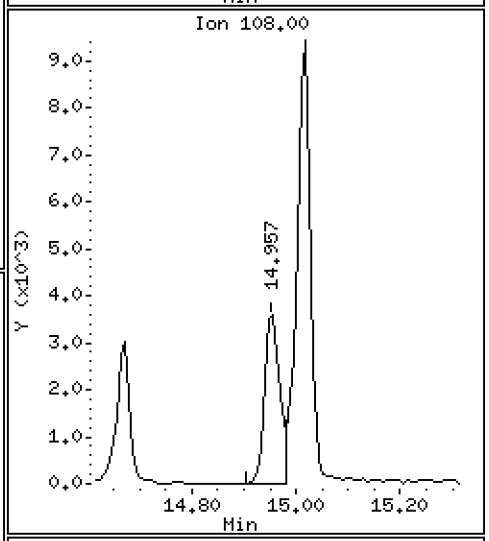


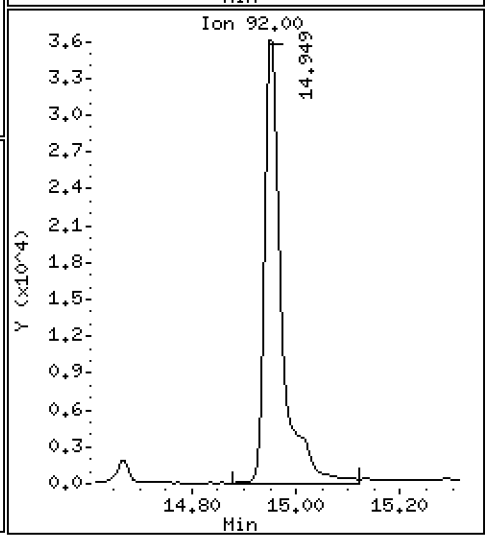












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

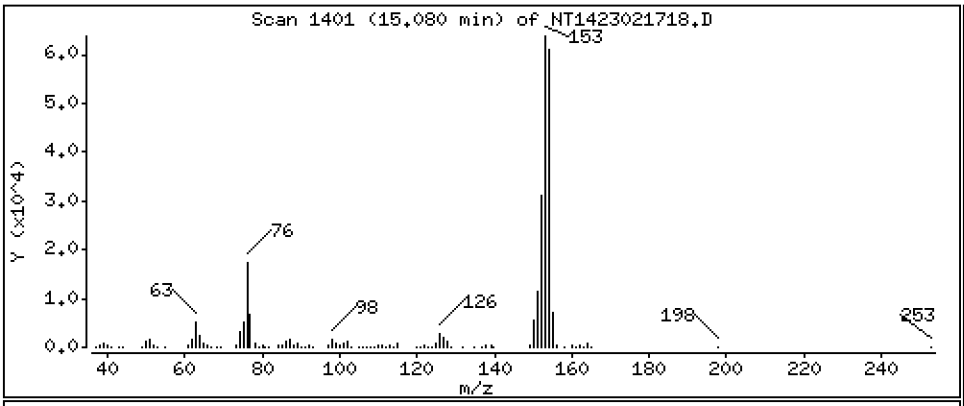
Operator: DSD

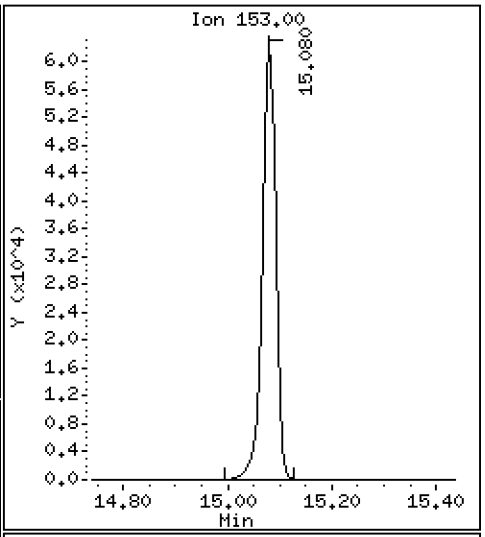
Column phase: ZB-5msi

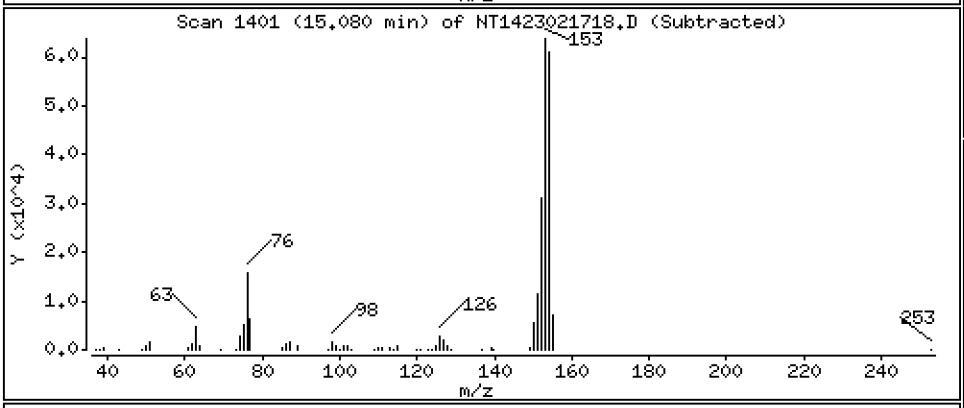
Column diameter: 0.25

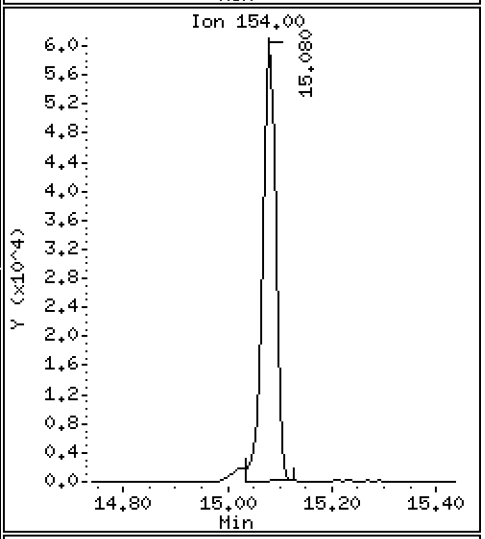
44 Acenaphthene

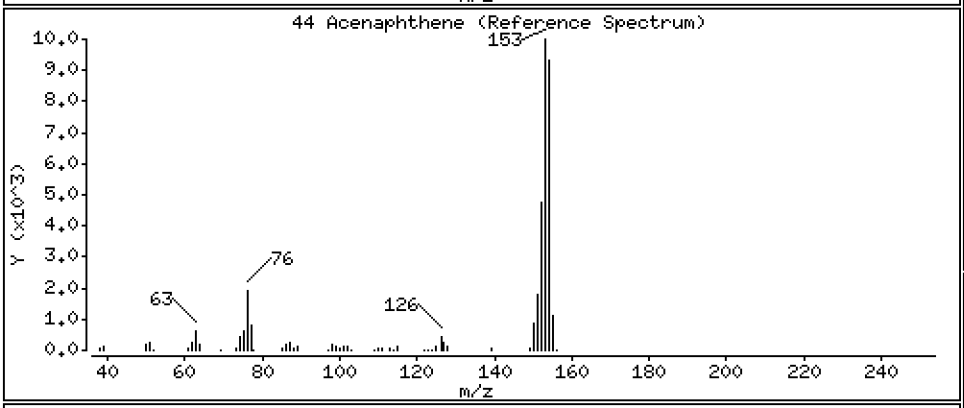
Concentration: 0.4801 ug/mL

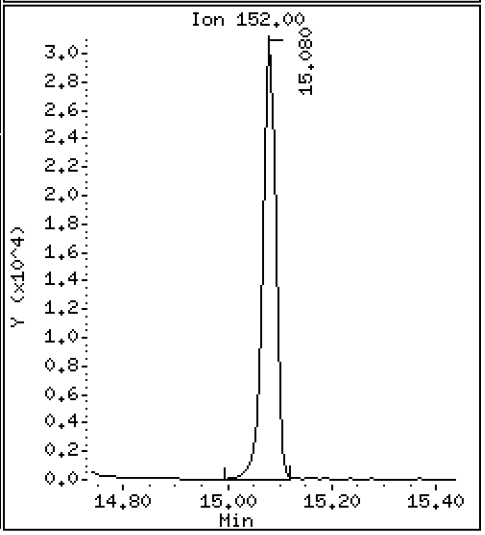


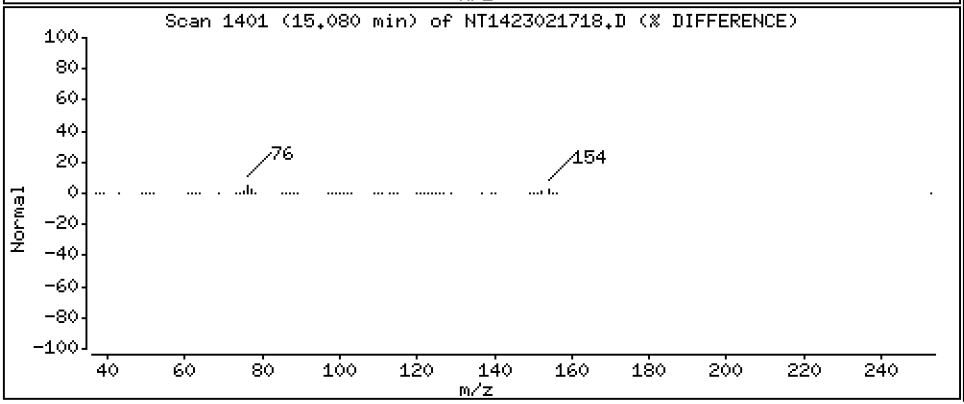












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

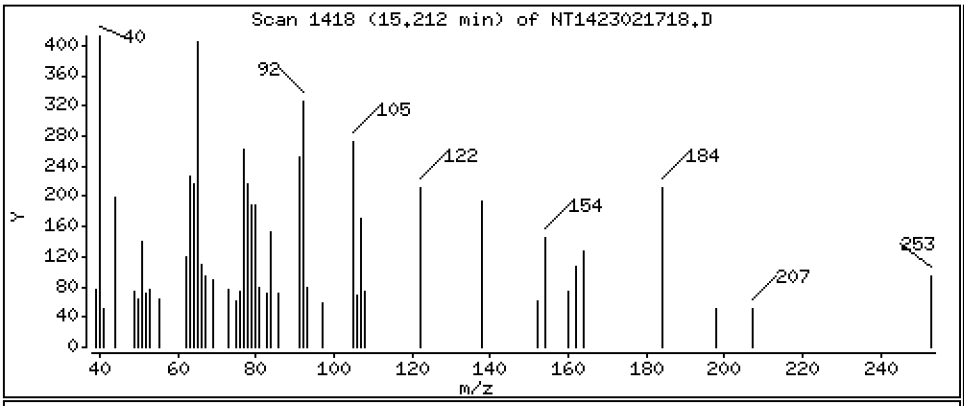
Operator: DSD

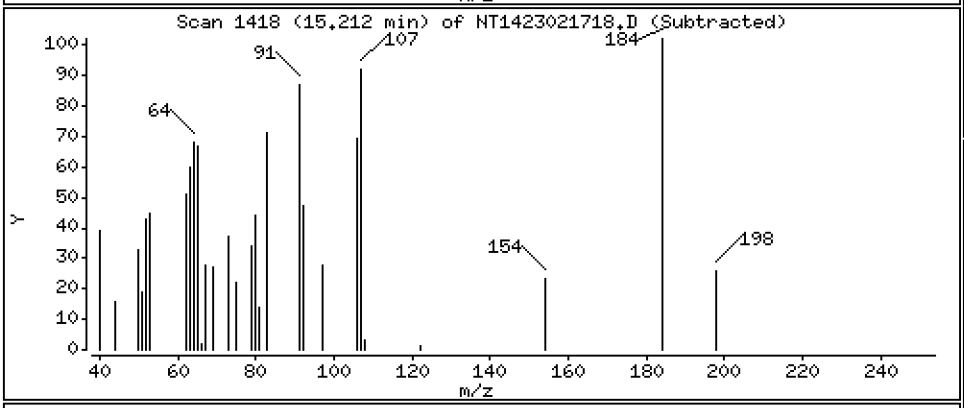
Column phase: ZB-5msi

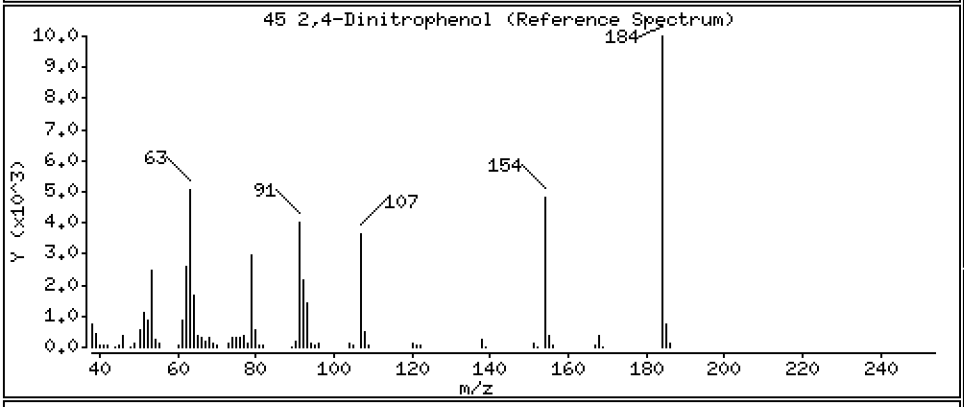
Column diameter: 0.25

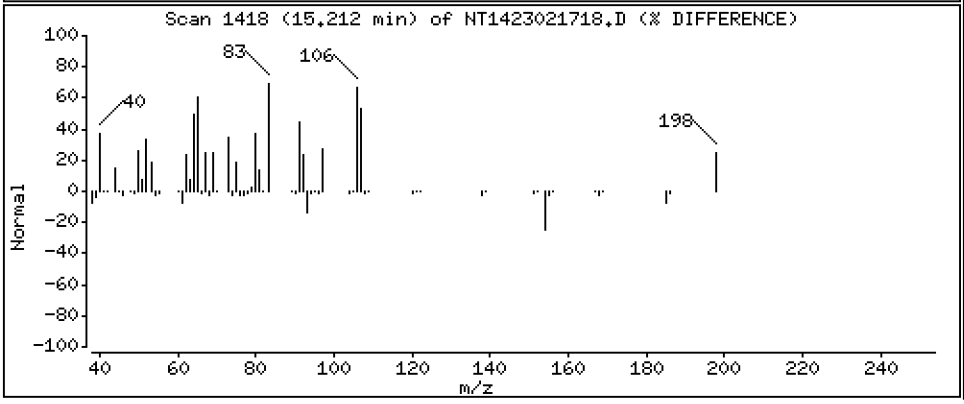
45 2,4-Dinitrophenol

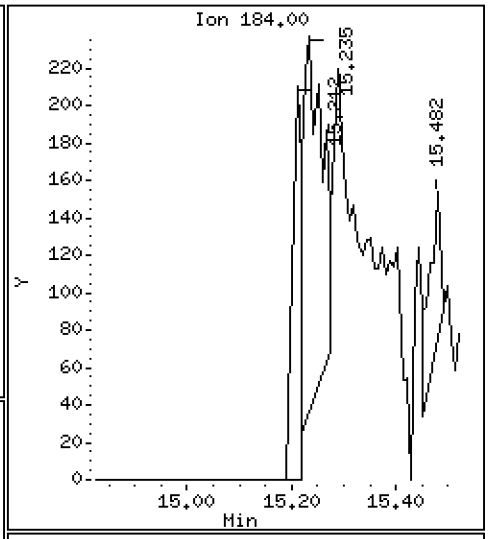
Concentration: 0.007110 ug/mL

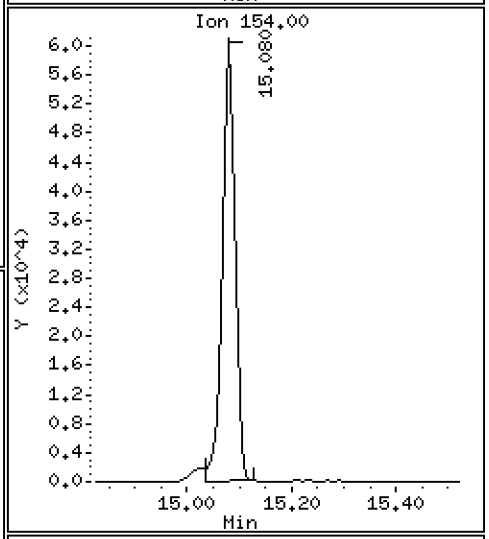


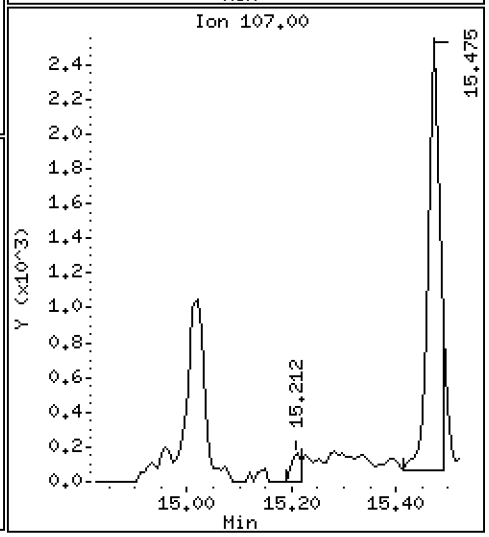












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

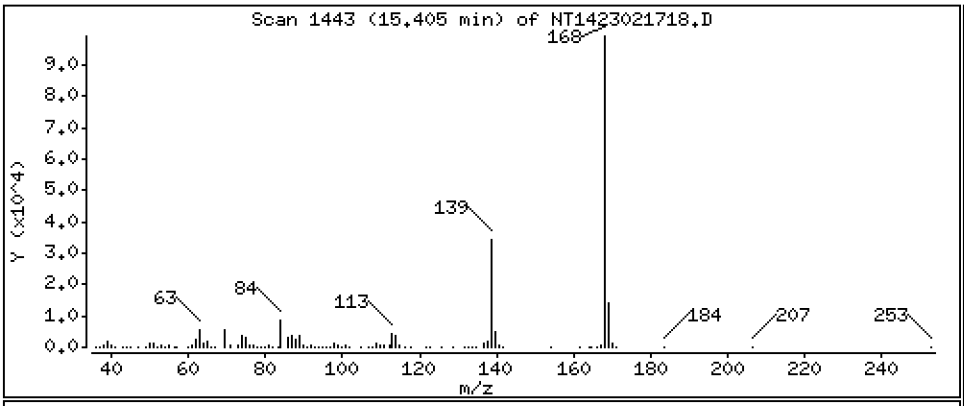
Operator: DSD

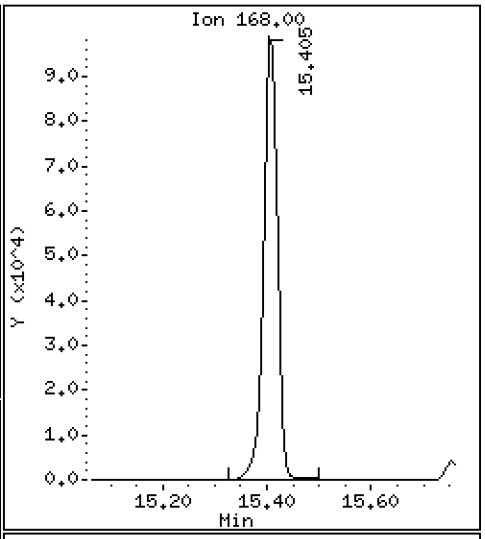
Column phase: ZB-5msi

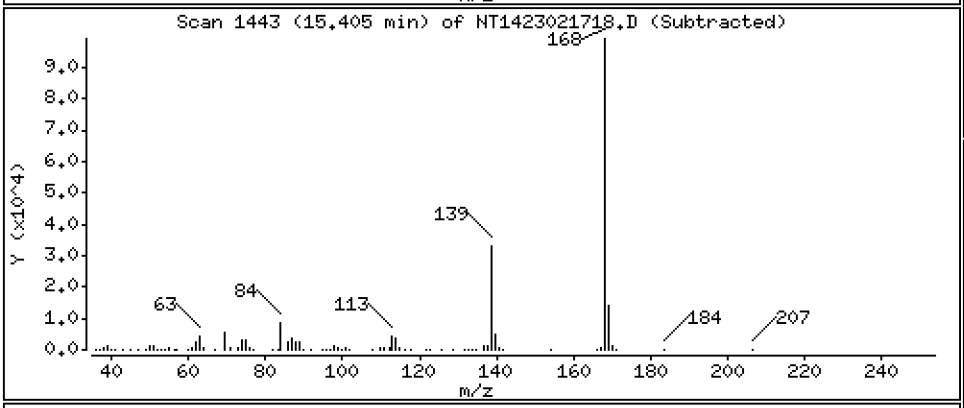
Column diameter: 0.25

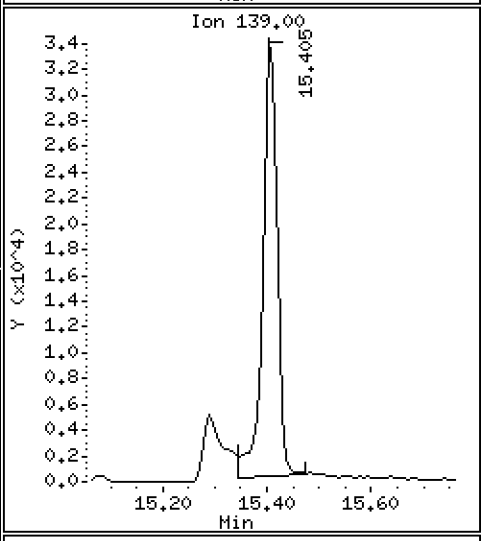
46 Dibenzofuran

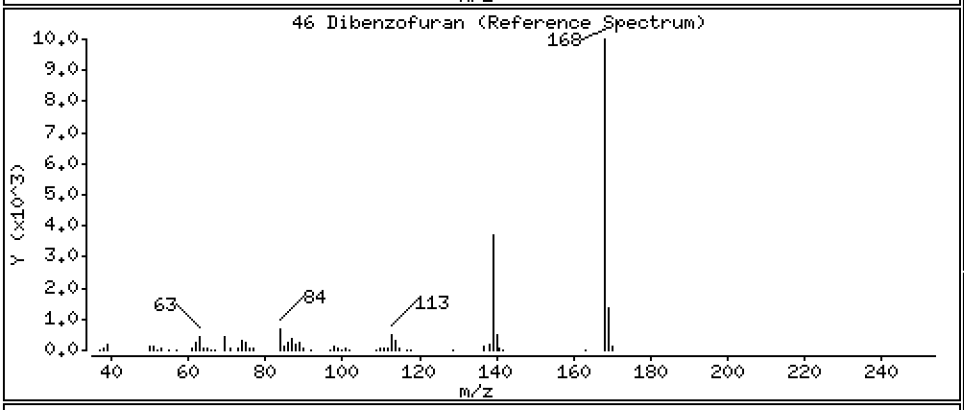
Concentration: 0.4852 ug/mL

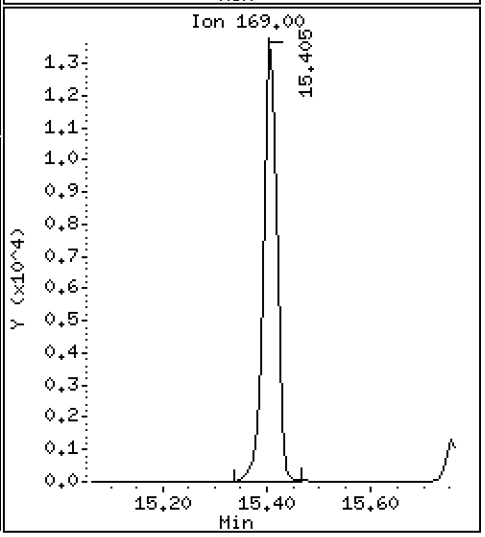


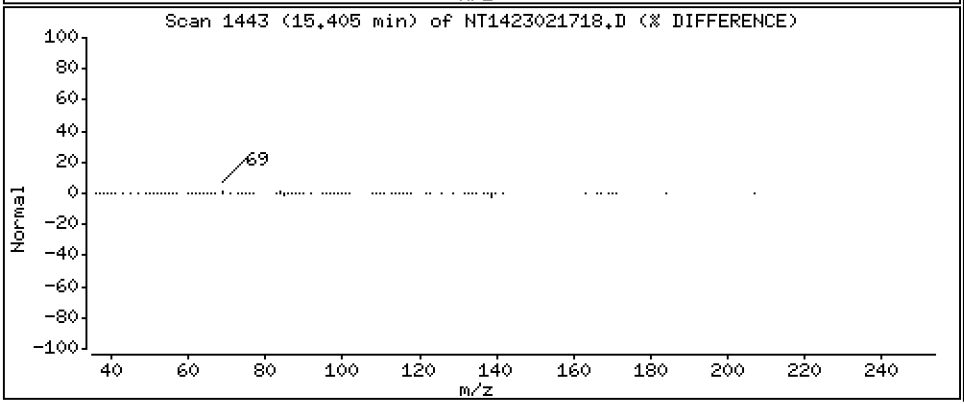












Date : 17-FEB-2023 20:55

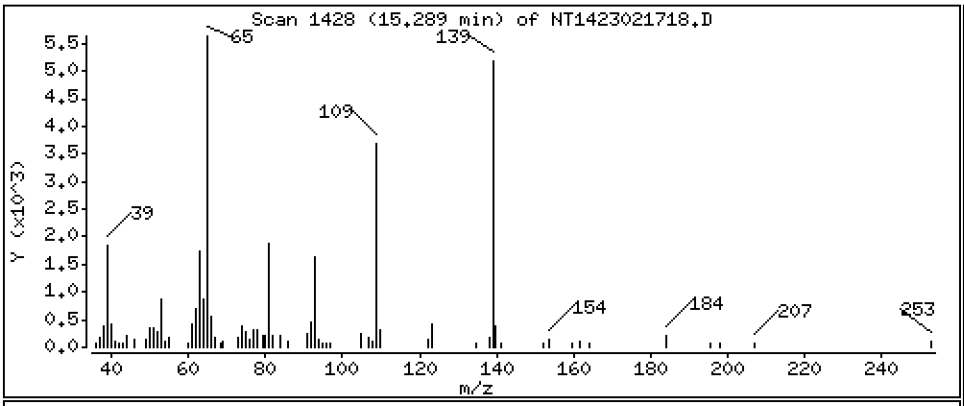
Client ID: Instrument: nt14.i

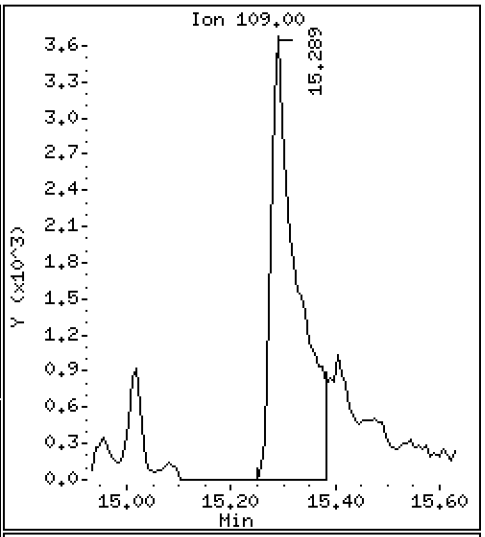
Sample Info: SLB0251-LCV1

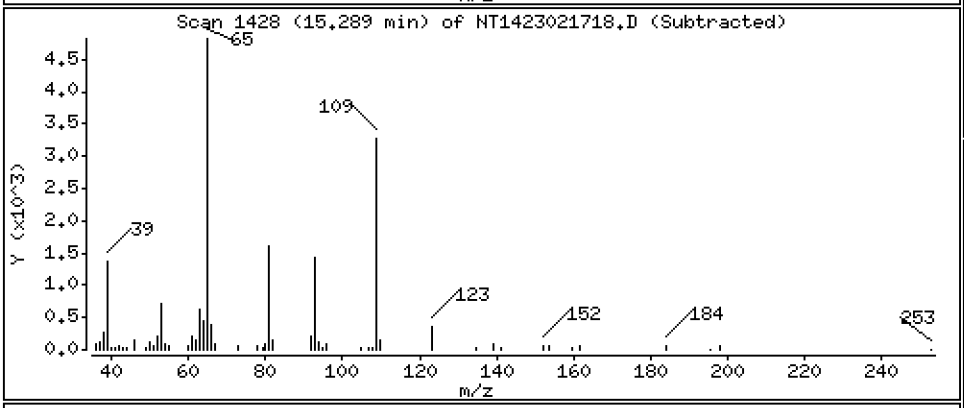
Operator: DSD

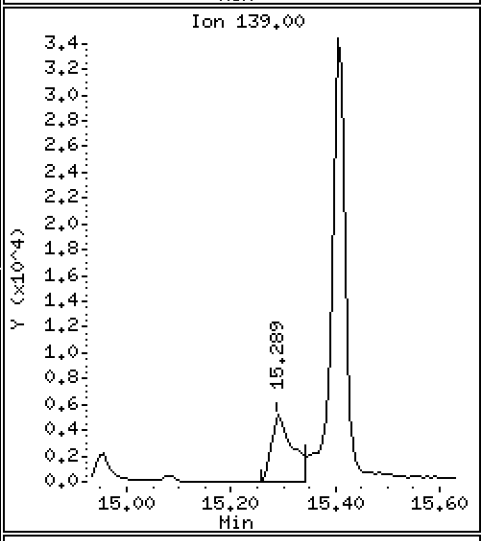
Column phase: ZB-5msi Column diameter: 0.25

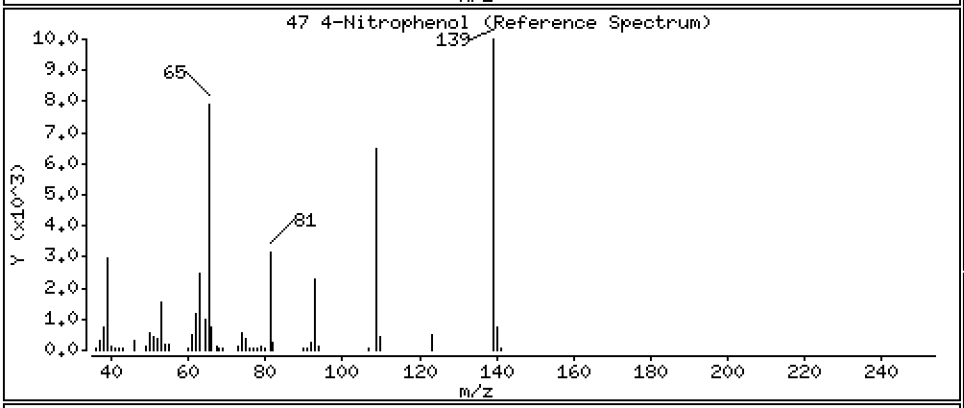
47 4-Nitrophenol Concentration: 0.3448 ug/mL

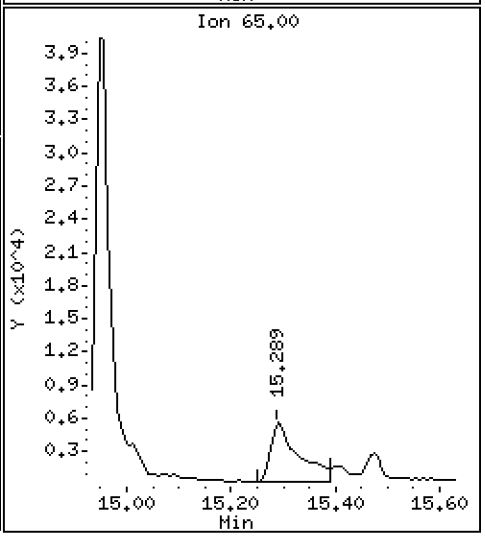


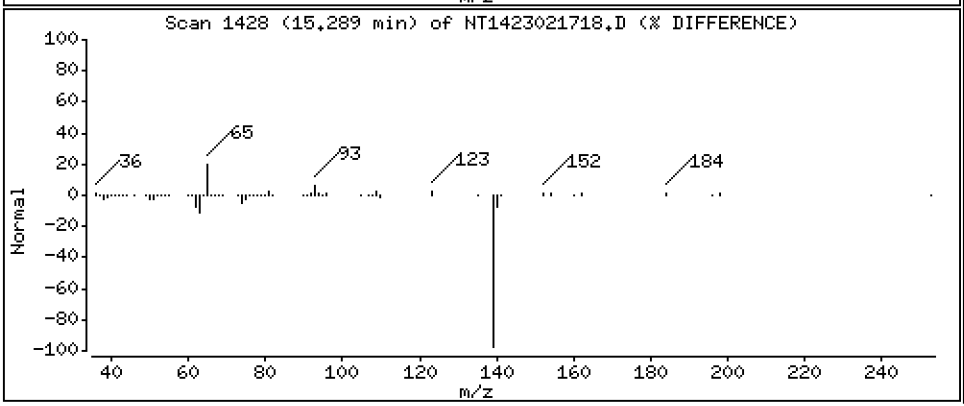












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

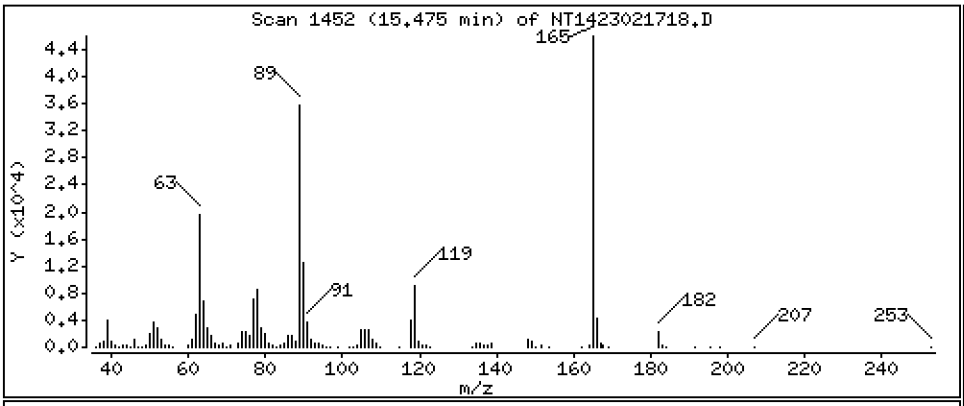
Operator: DSD

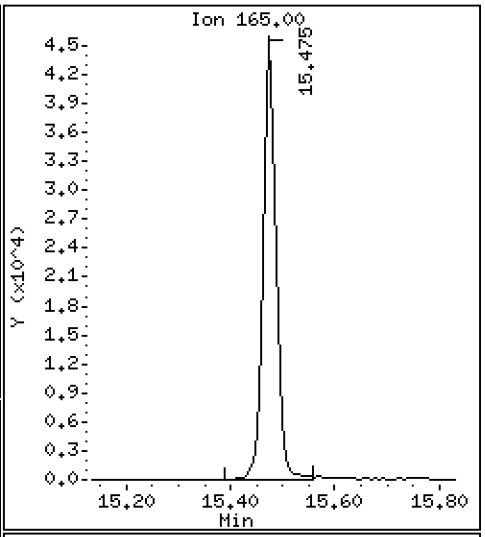
Column phase: ZB-5msi

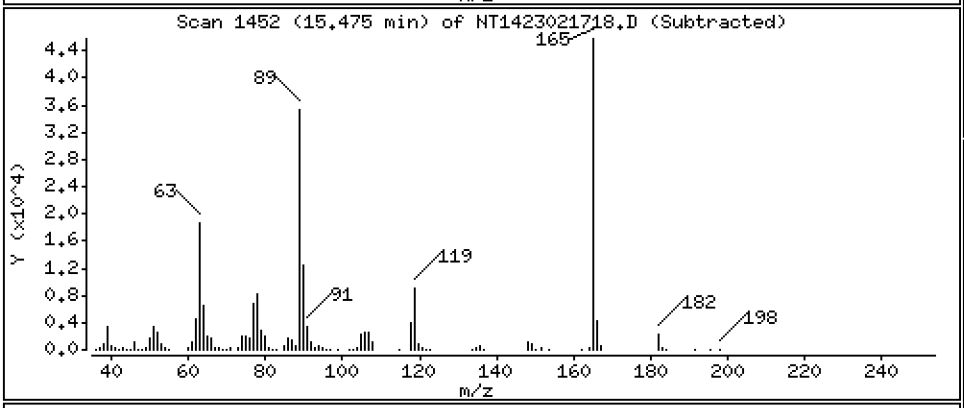
Column diameter: 0.25

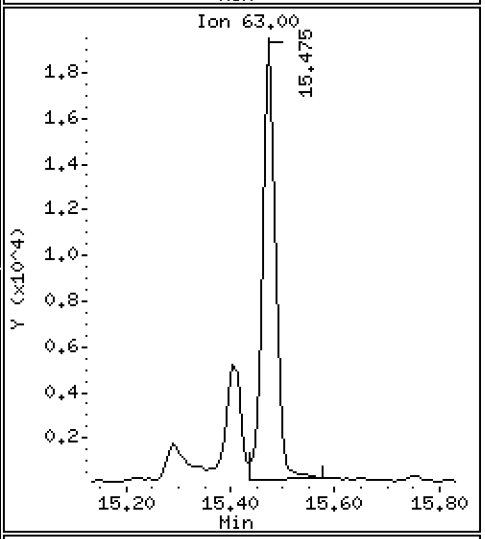
48 2,4-Dinitrotoluene

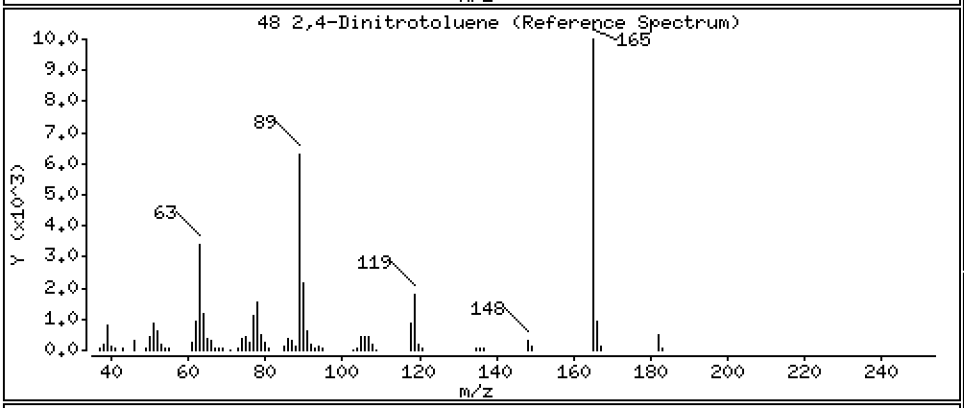
Concentration: 0.9067 ug/mL

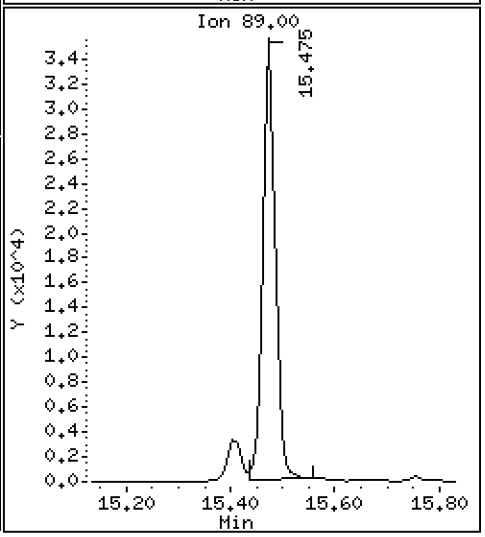


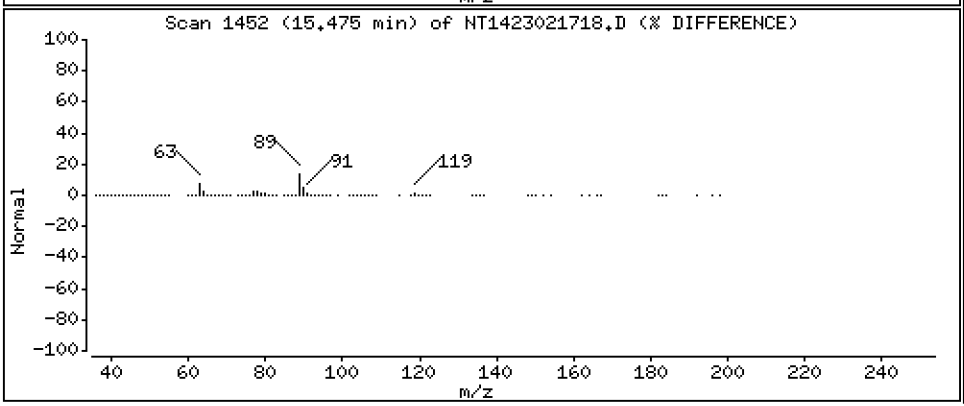












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

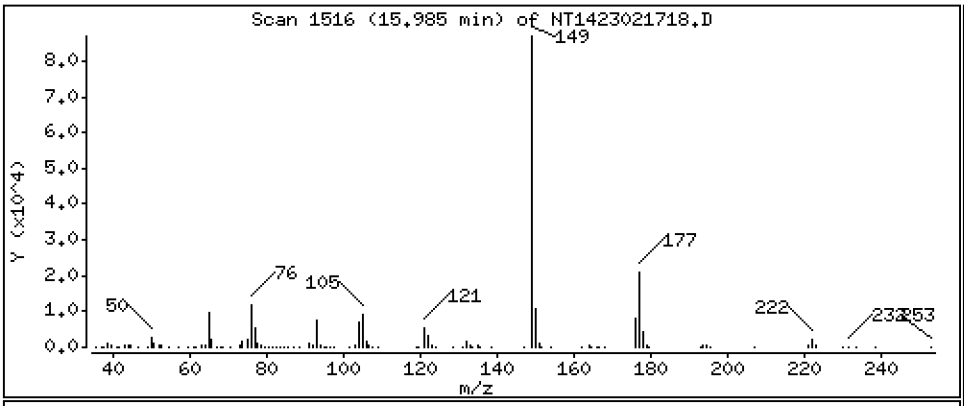
Operator: DSD

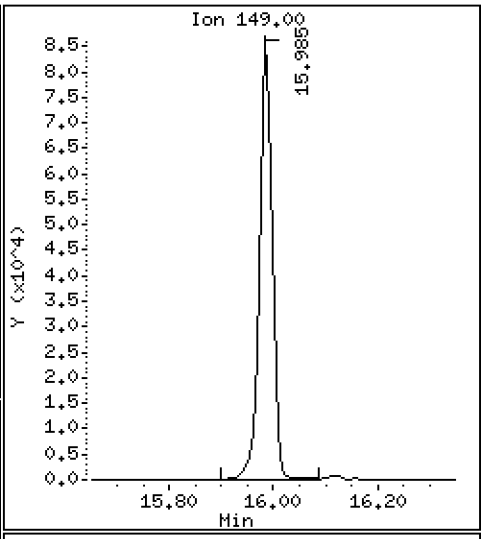
Column phase: ZB-5msi

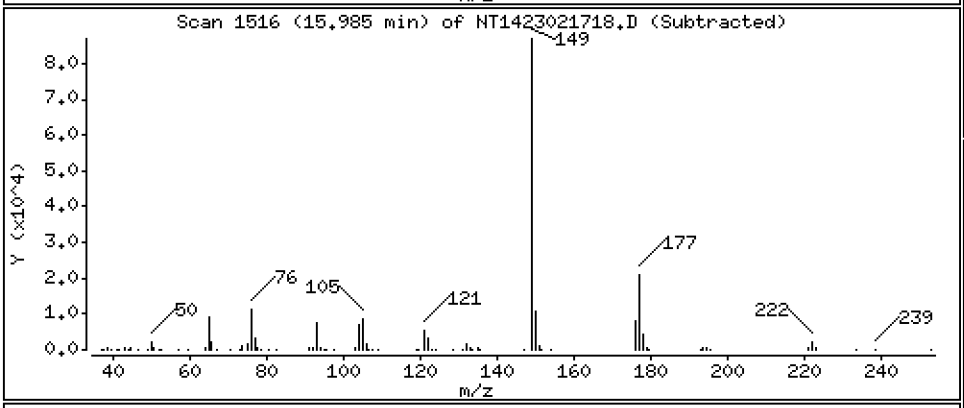
Column diameter: 0.25

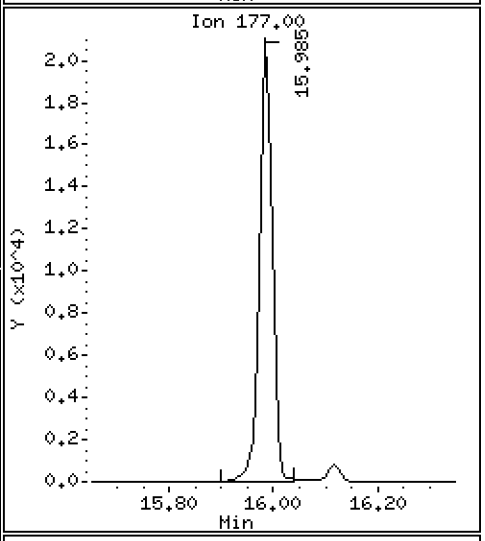
50 Diethylphthalate

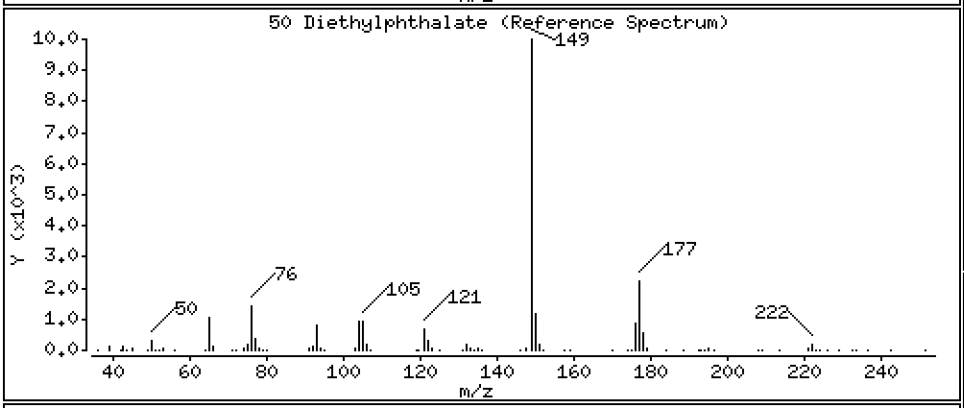
Concentration: 0.5036 ug/mL

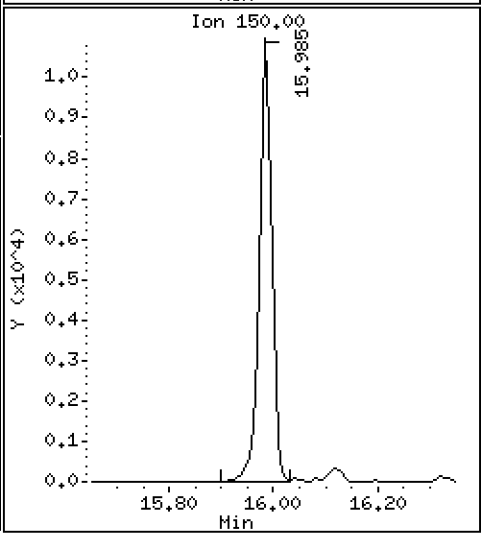


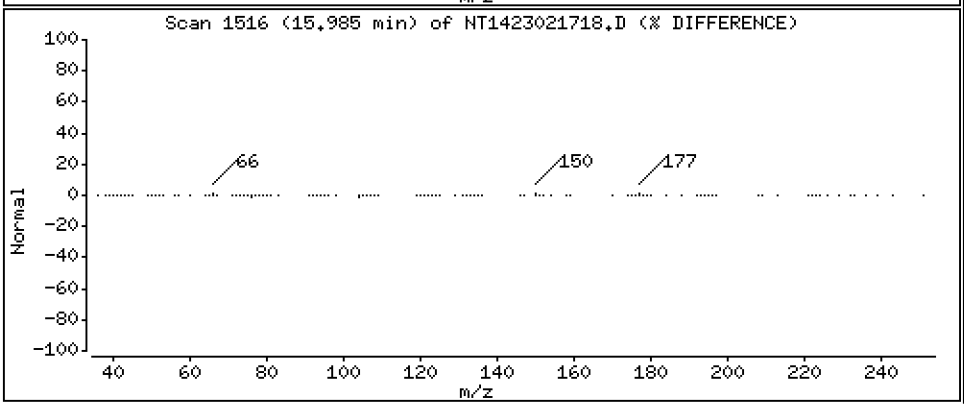












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

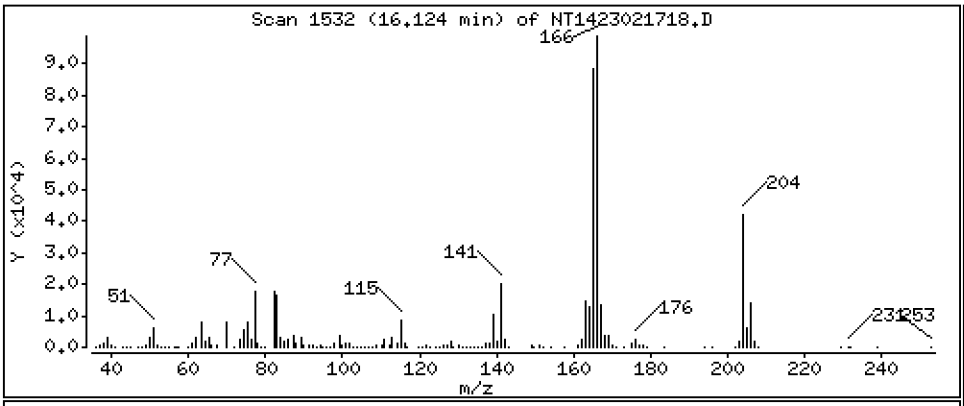
Operator: DSD

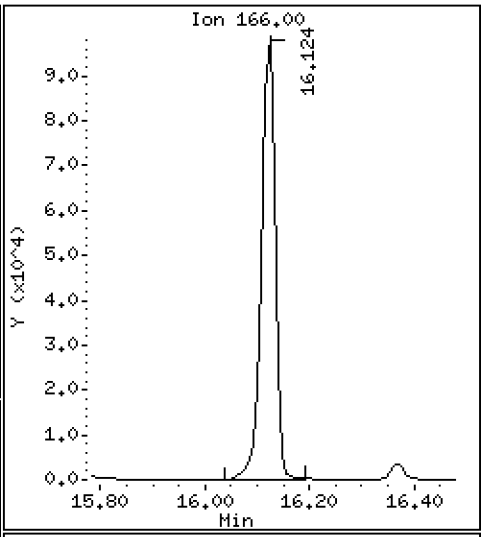
Column phase: ZB-5msi

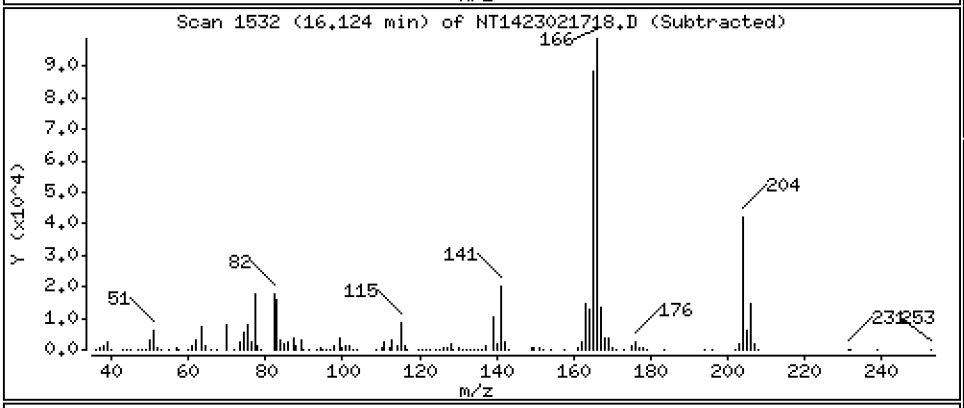
Column diameter: 0.25

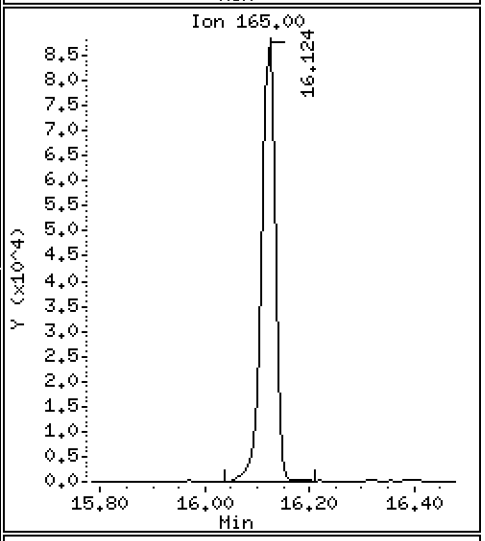
49 Fluorene

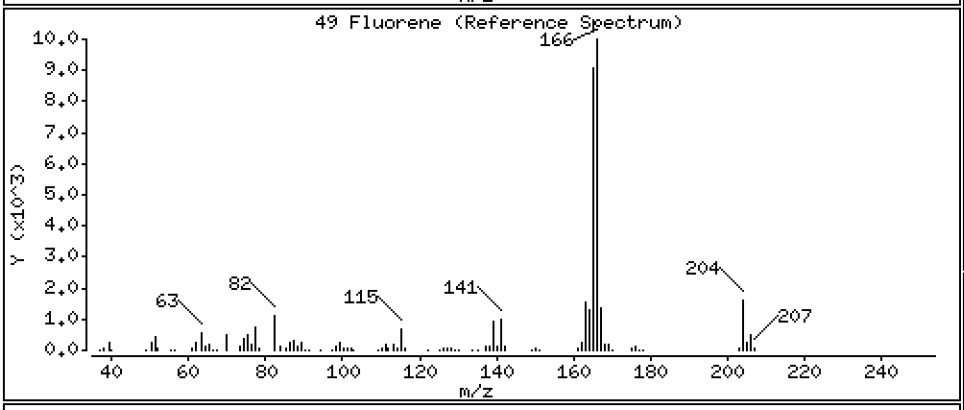
Concentration: 0.4969 ug/mL

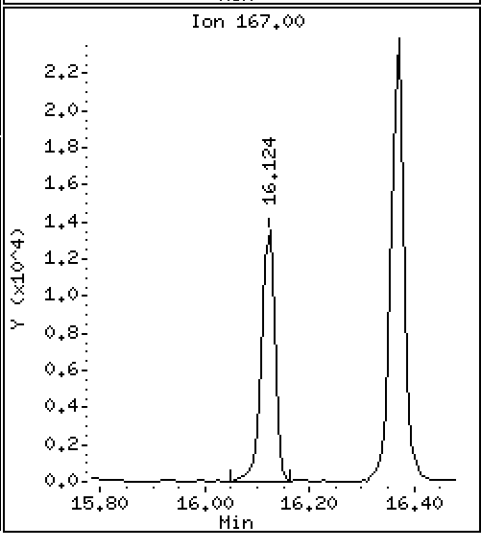


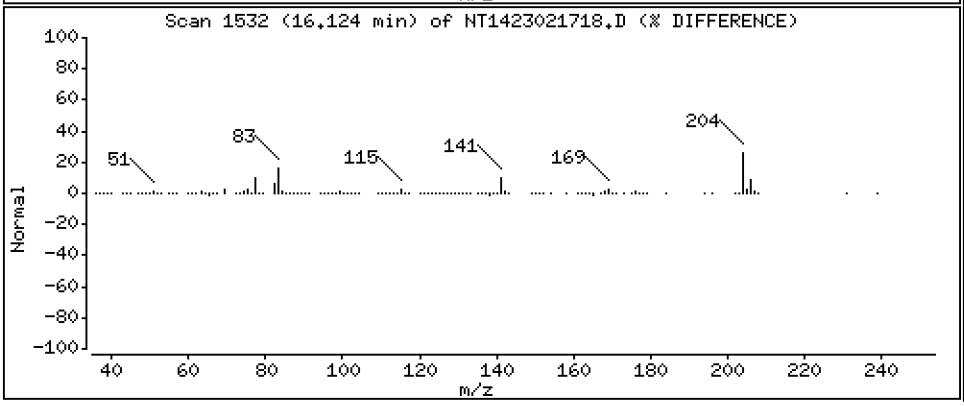












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

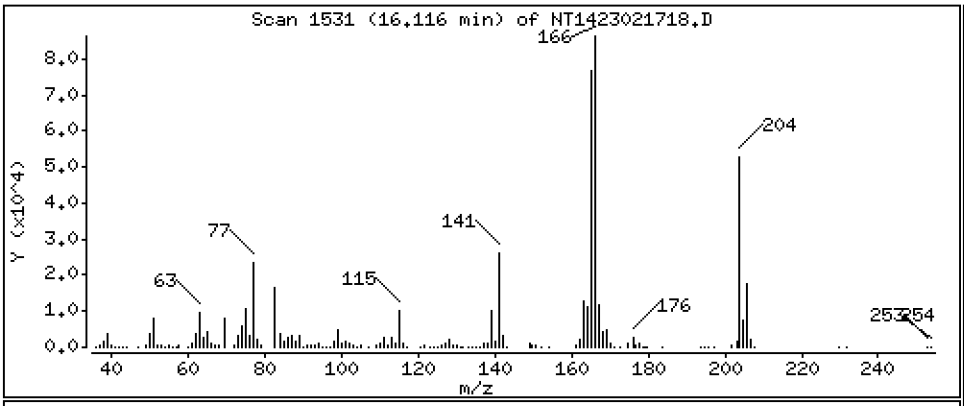
Operator: DSD

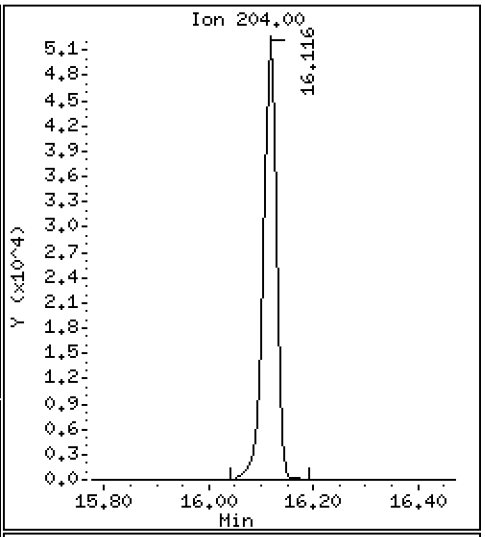
Column phase: ZB-5msi

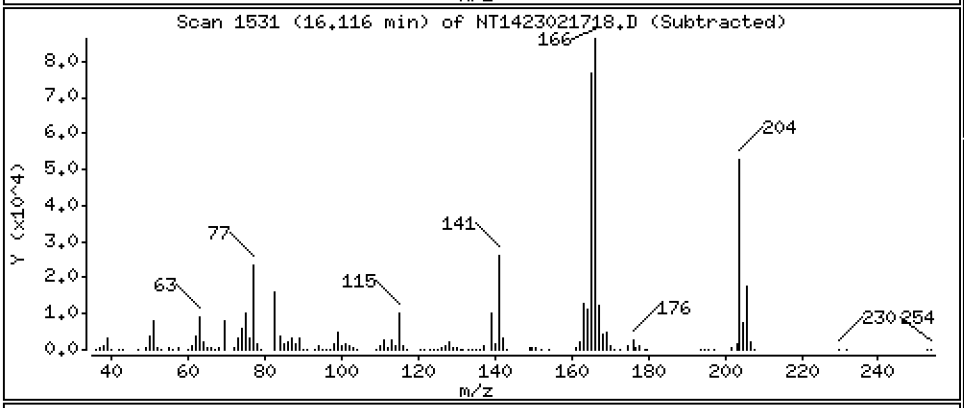
Column diameter: 0.25

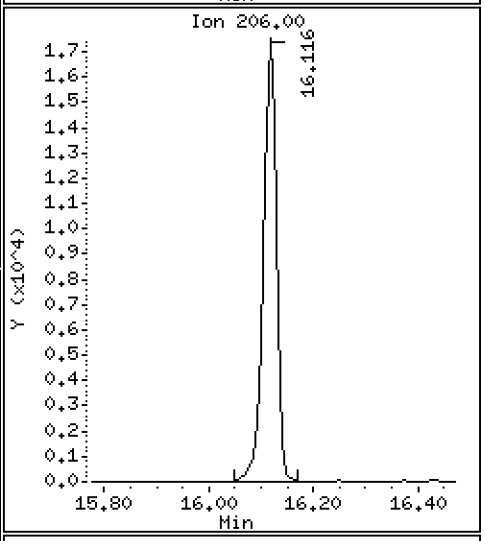
51 4-Chlorophenyl-phenylether

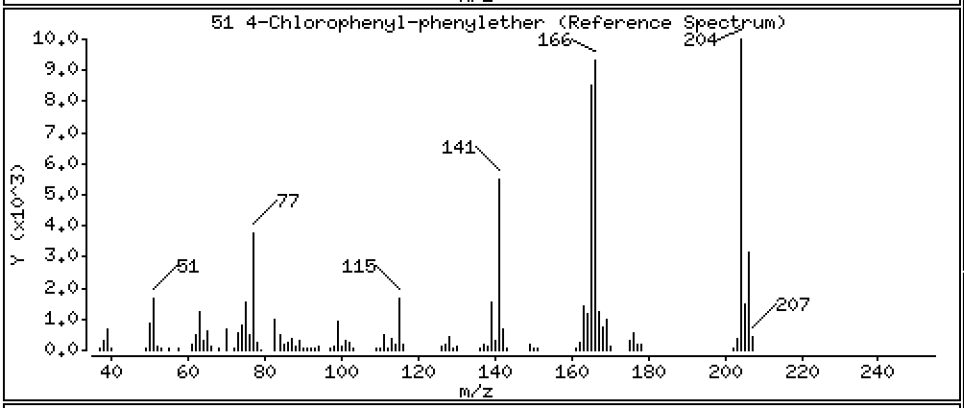
Concentration: 0.4746 ug/mL

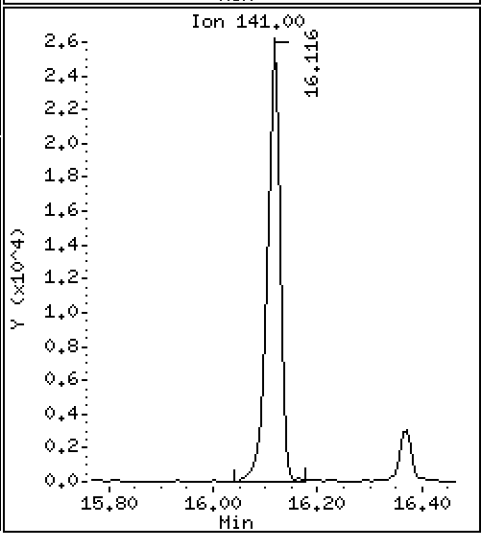


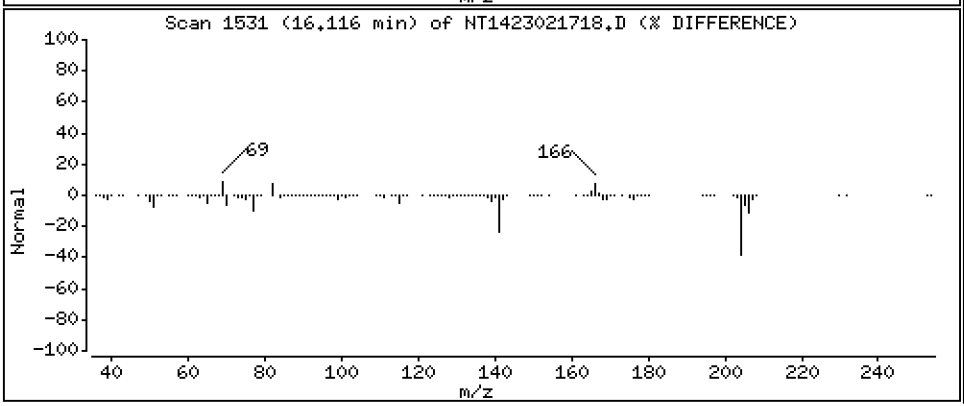












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

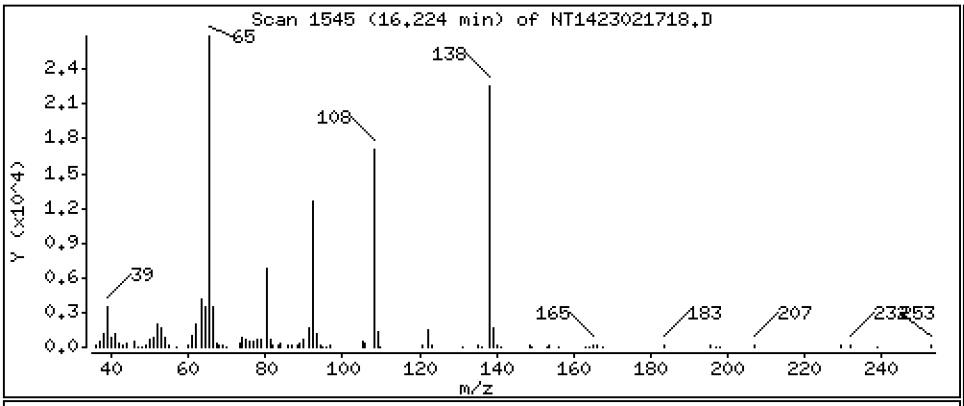
Operator: DSD

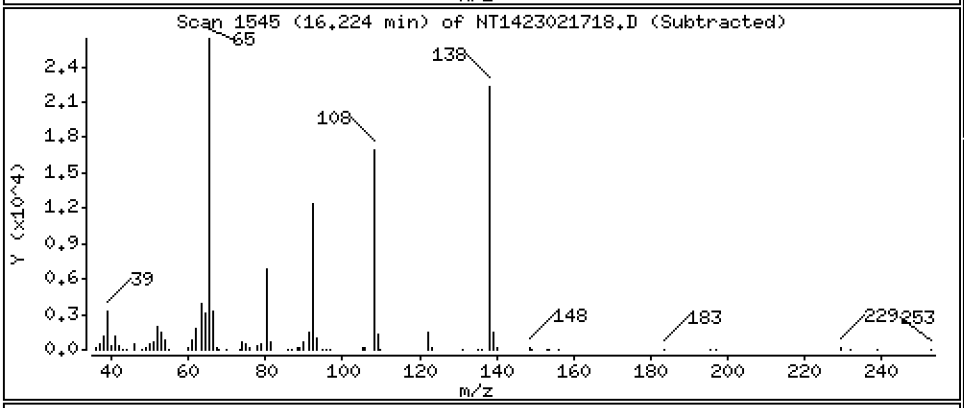
Column phase: ZB-5msi

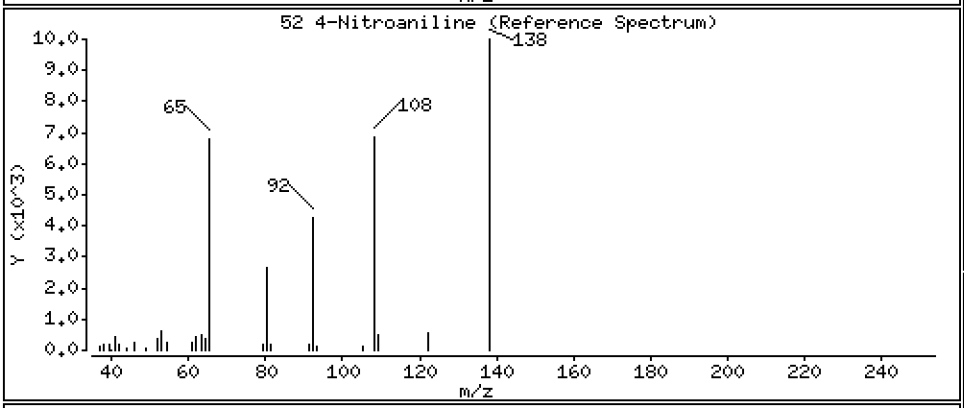
Column diameter: 0.25

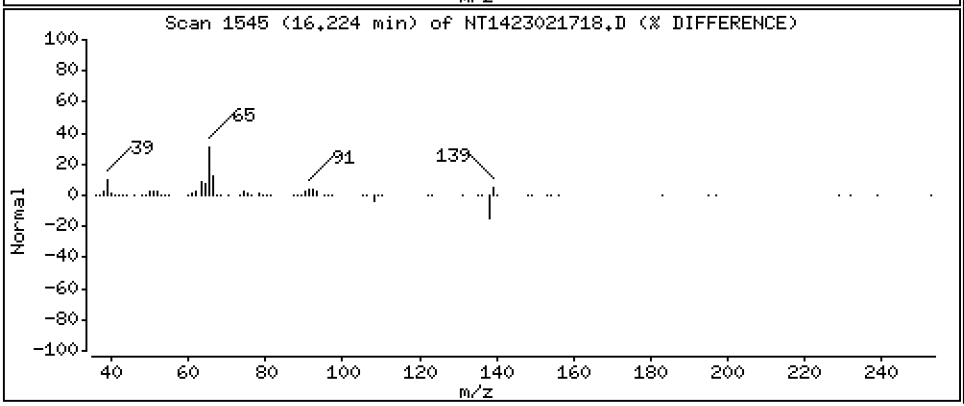
52 4-Nitroaniline

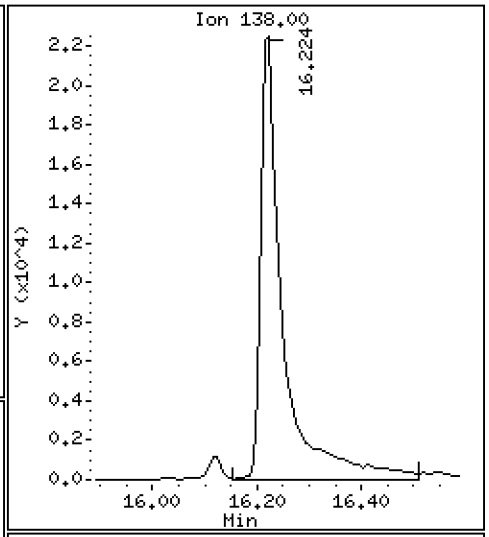
Concentration: 0.9120 ug/mL

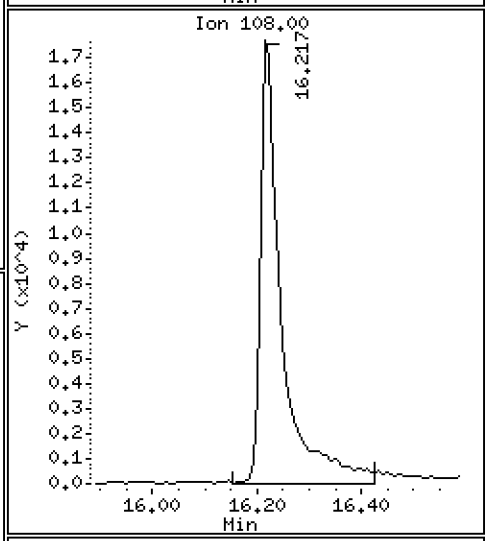


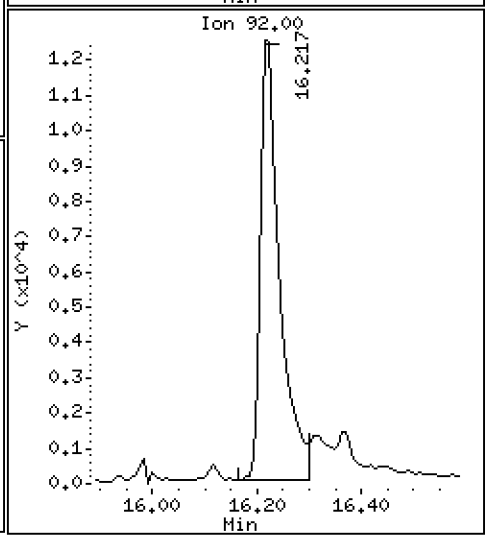












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

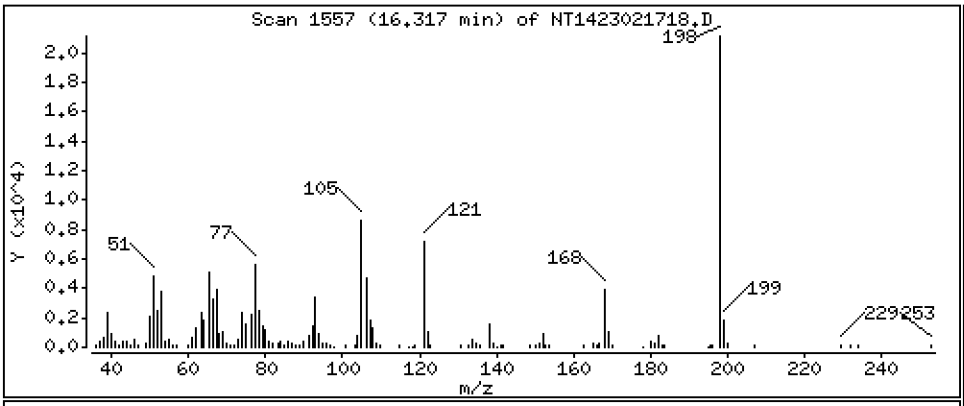
Operator: DSD

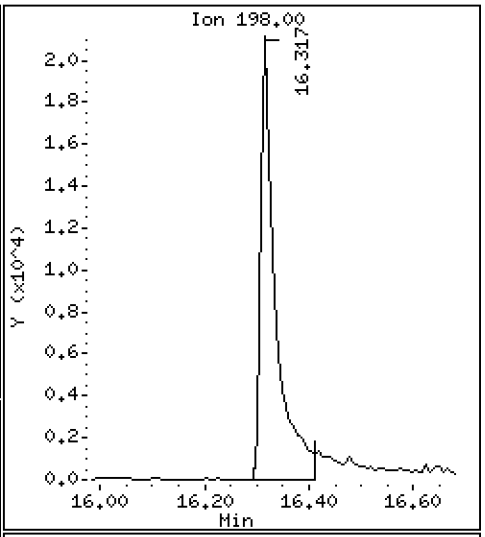
Column phase: ZB-5msi

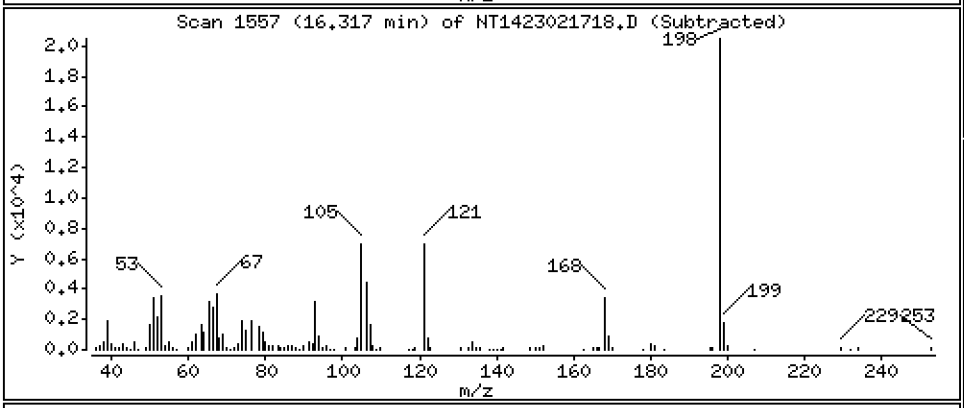
Column diameter: 0.25

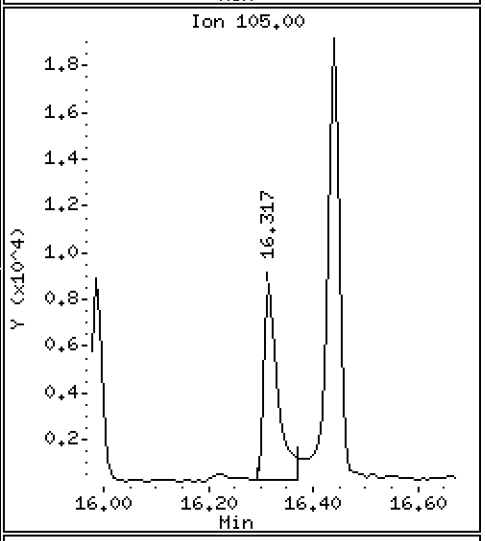
53 4,6-Dinitro-2-methylphenol

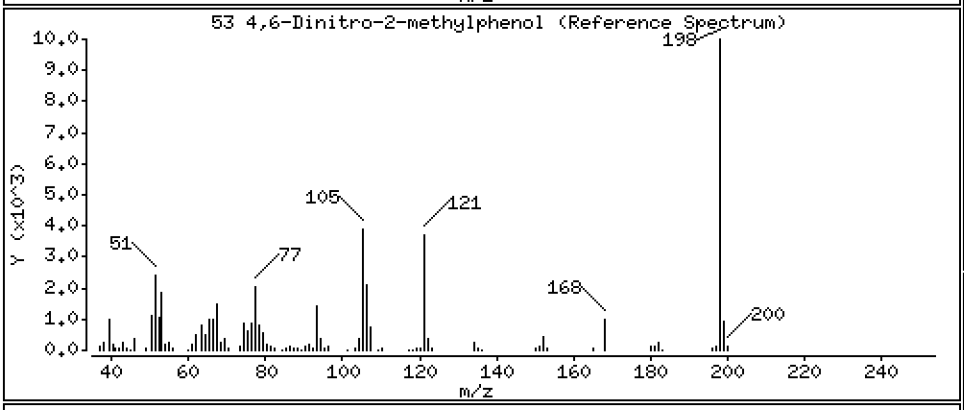
Concentration: 0.6954 ug/mL

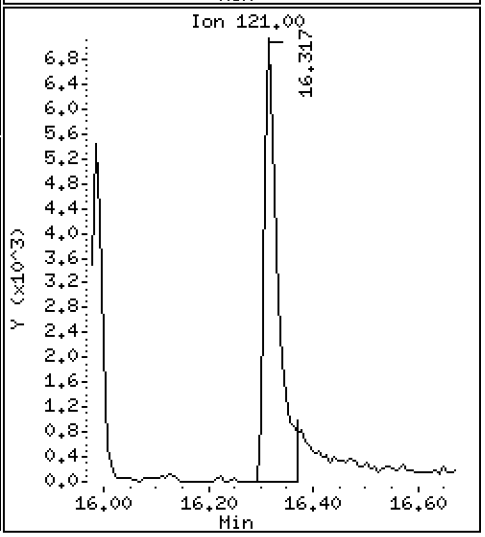


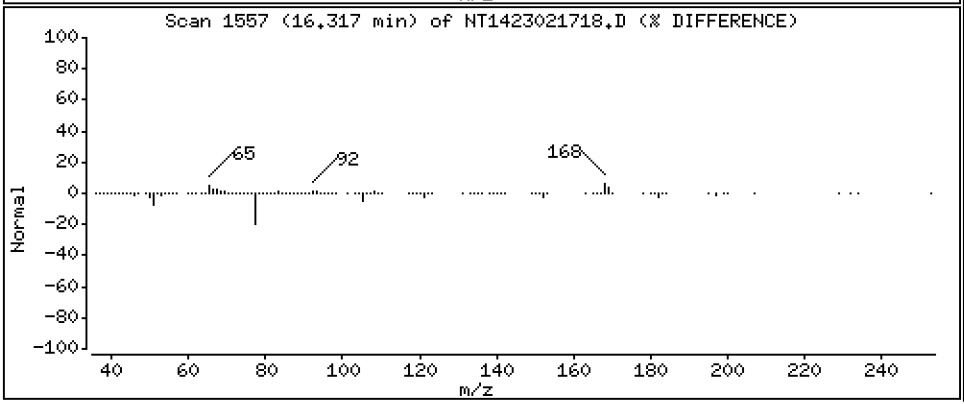












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

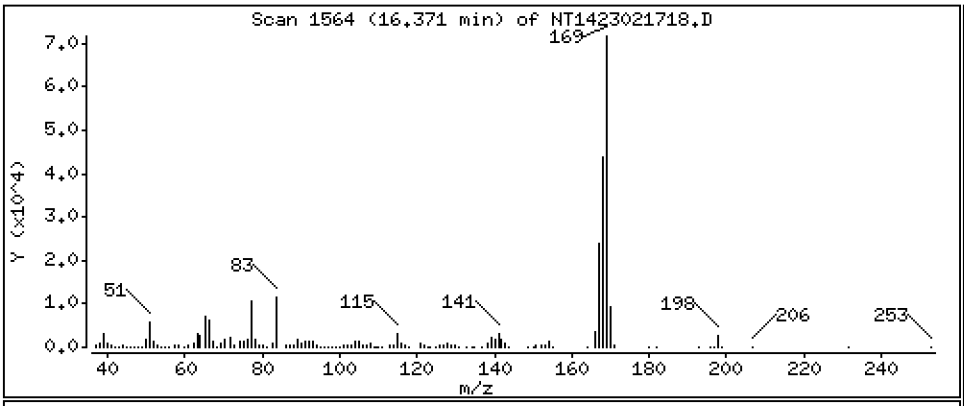
Operator: DSD

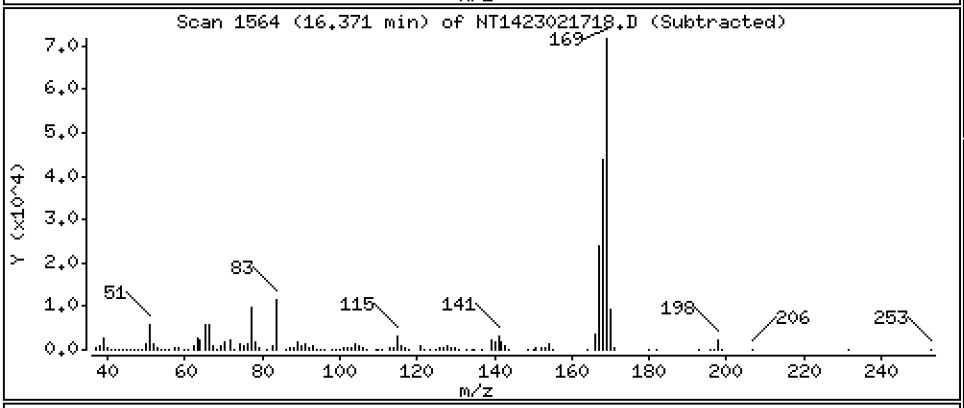
Column phase: ZB-5msi

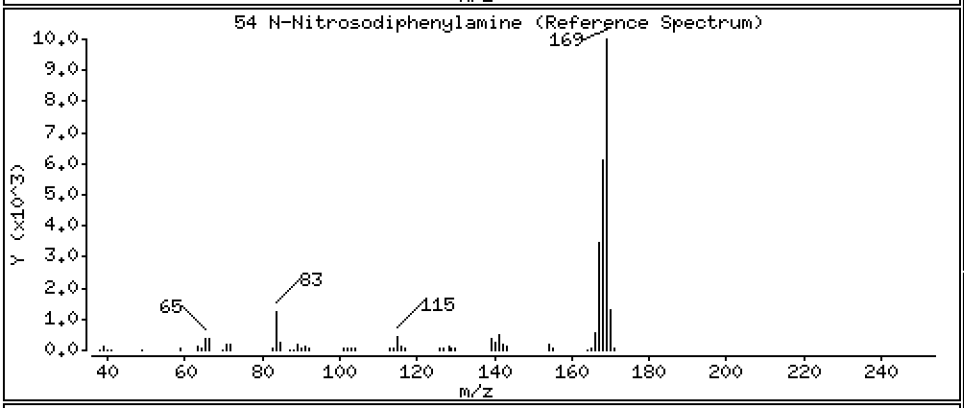
Column diameter: 0.25

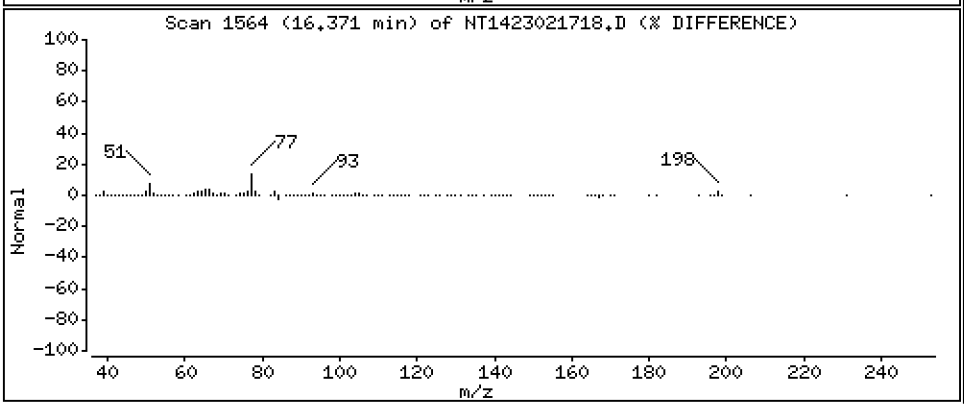
54 N-Nitrosodiphenylamine

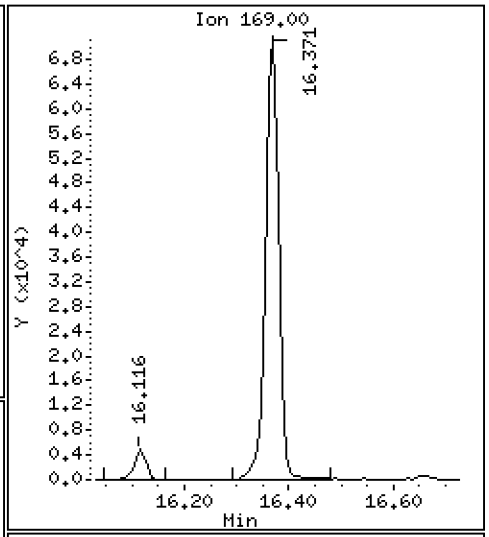
Concentration: 0.5111 ug/mL

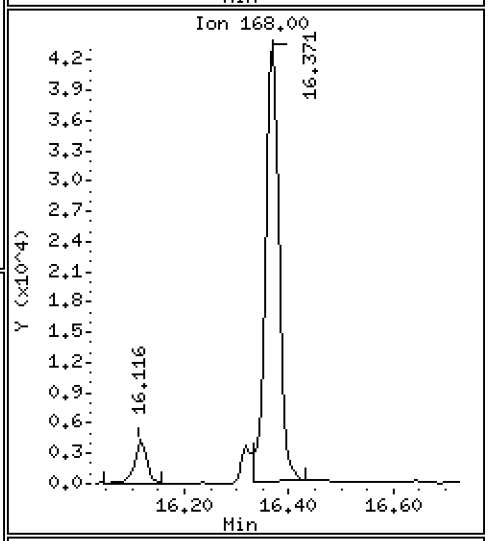


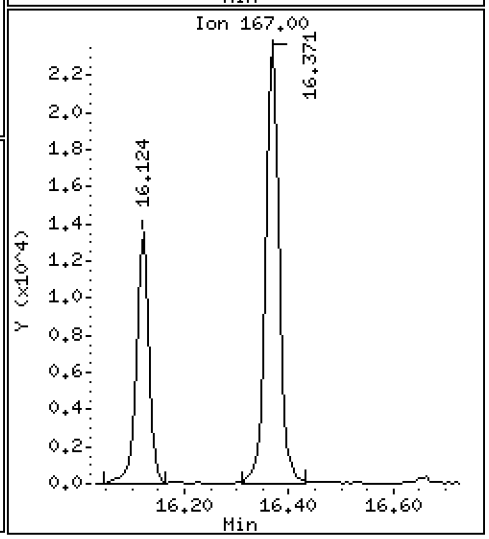












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

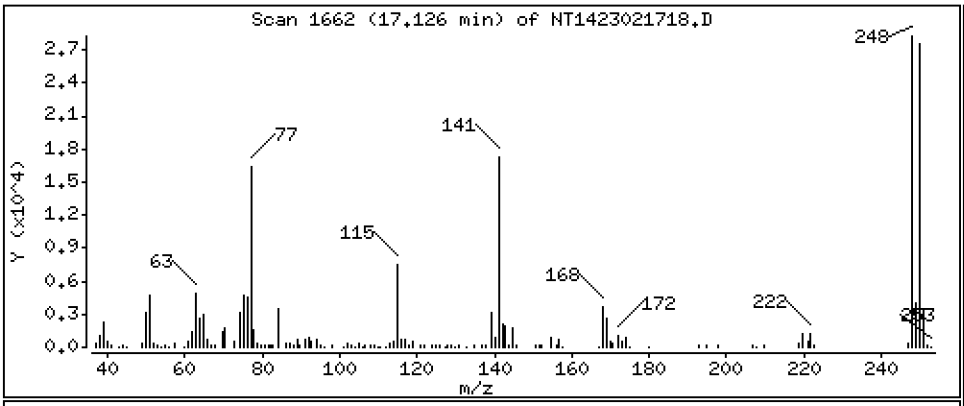
Operator: DSD

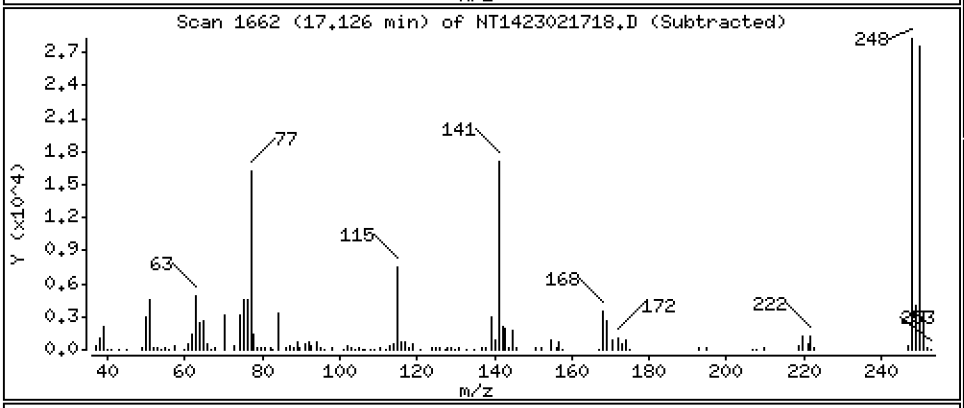
Column phase: ZB-5msi

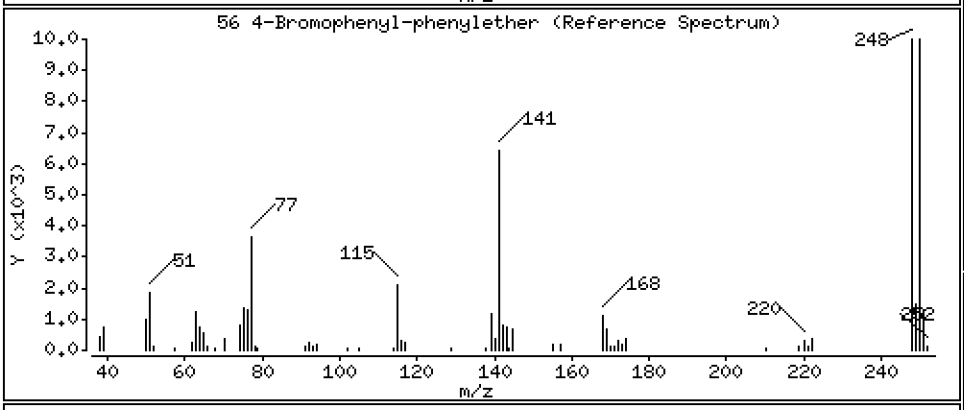
Column diameter: 0.25

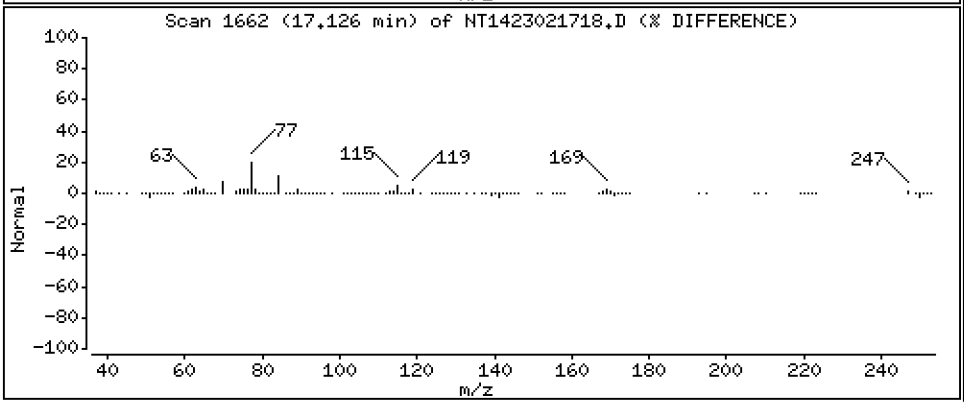
56 4-Bromophenyl-phenylether

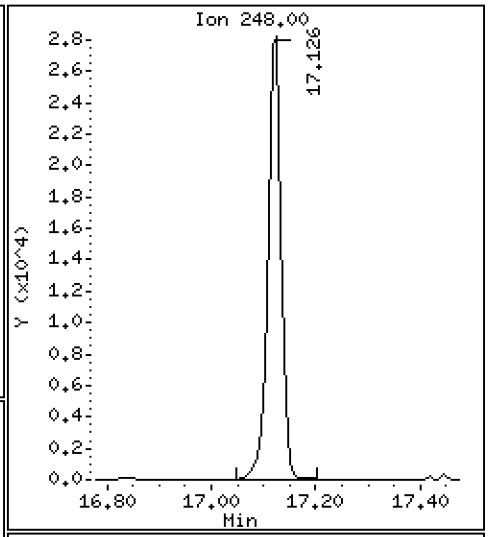
Concentration: 0.4813 ug/mL

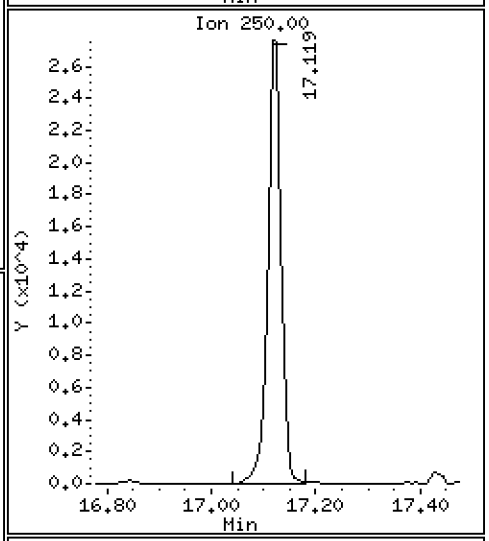


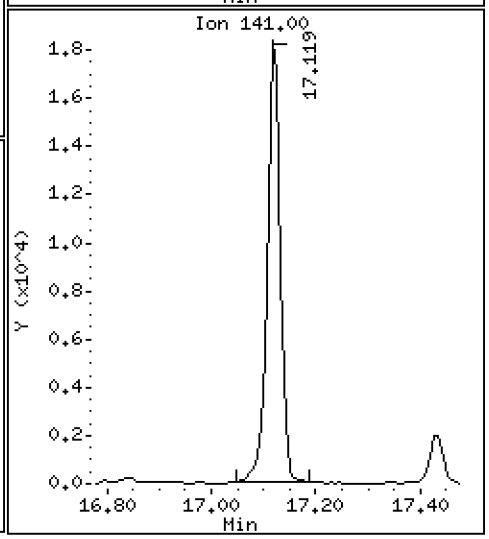












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

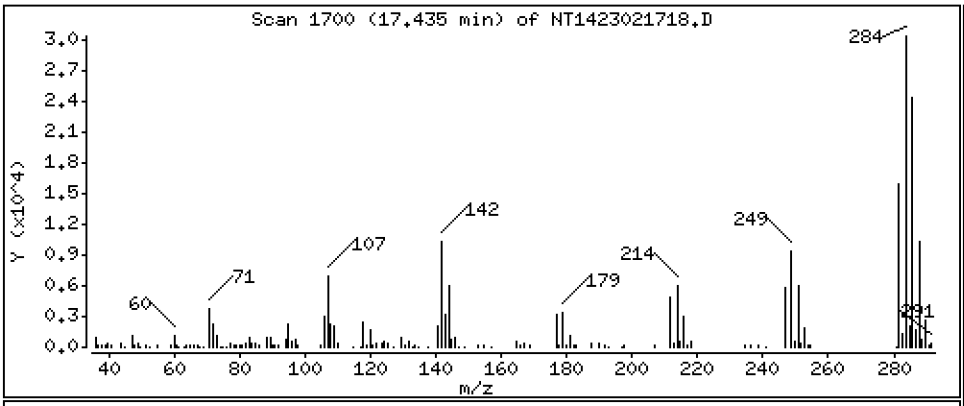
Operator: DSD

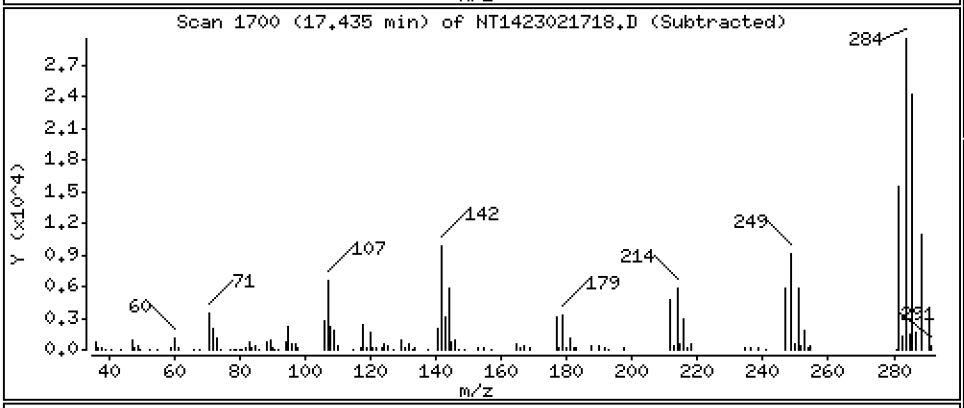
Column phase: ZB-5msi

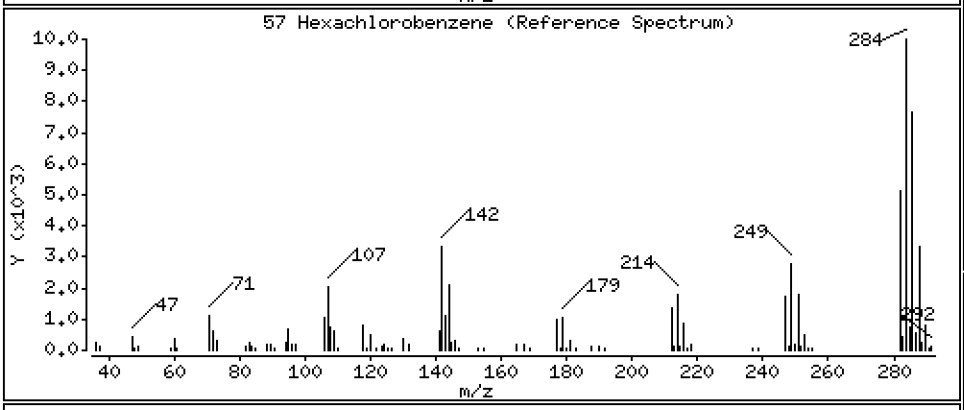
Column diameter: 0.25

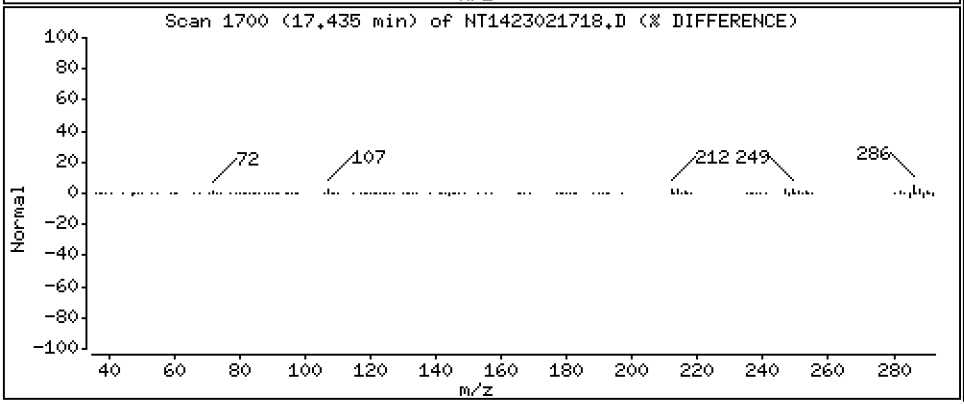
57 Hexachlorobenzene

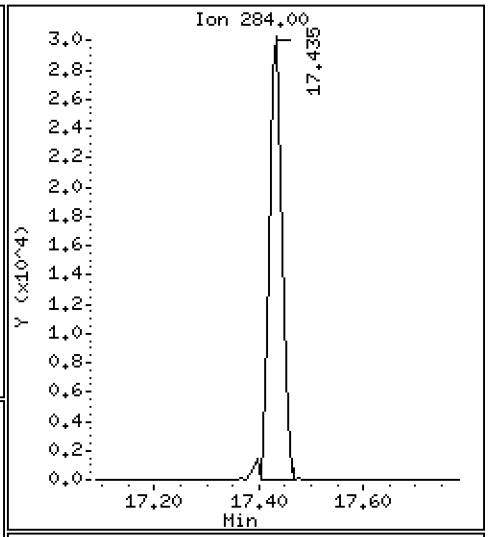
Concentration: 0.4767 ug/mL

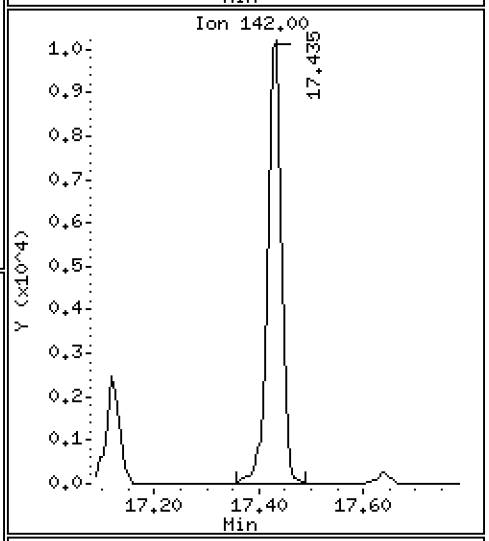


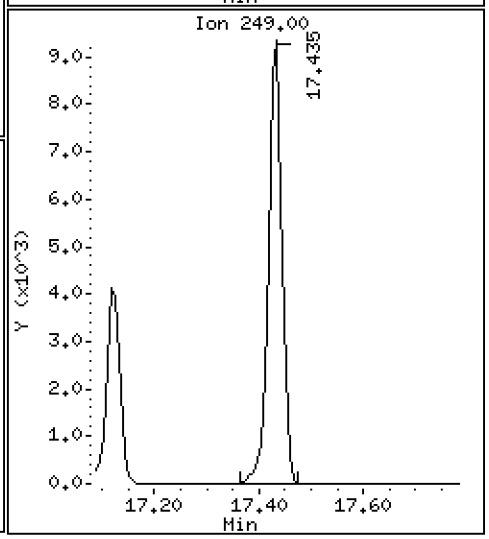












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

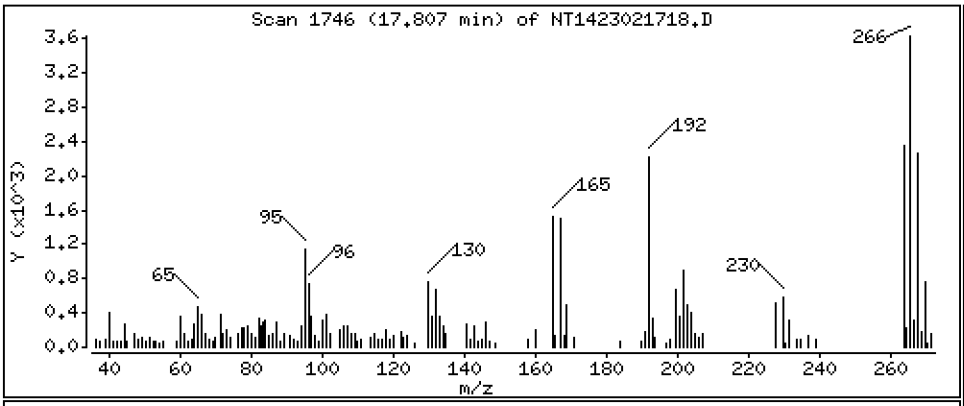
Operator: DSD

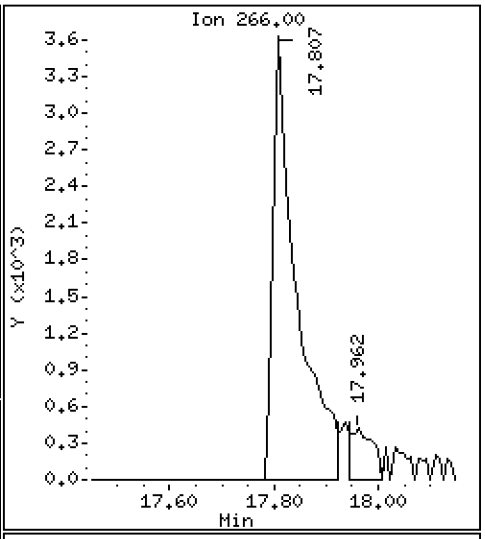
Column phase: ZB-5msi

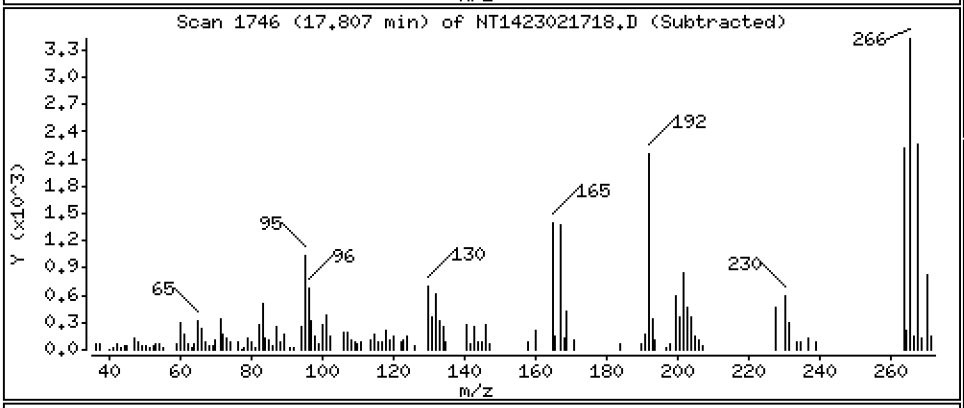
Column diameter: 0.25

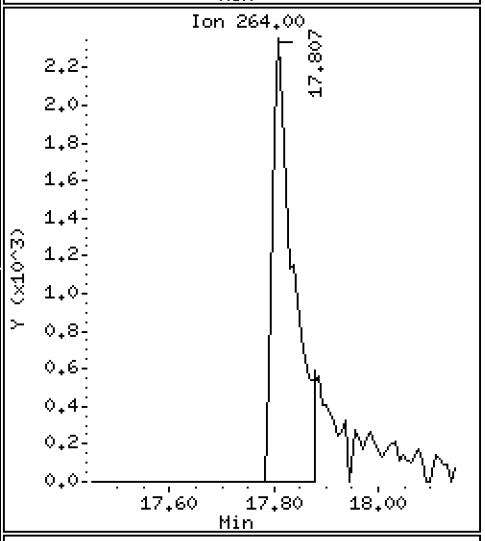
58 Pentachlorophenol

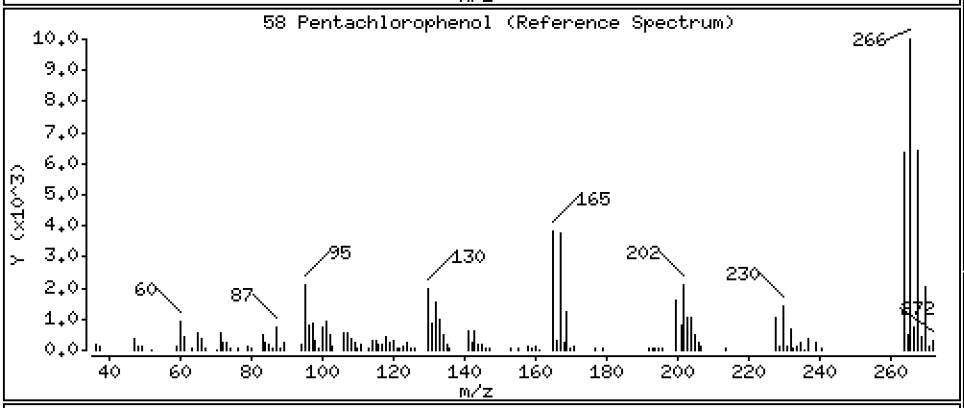
Concentration: 0.2240 ug/mL

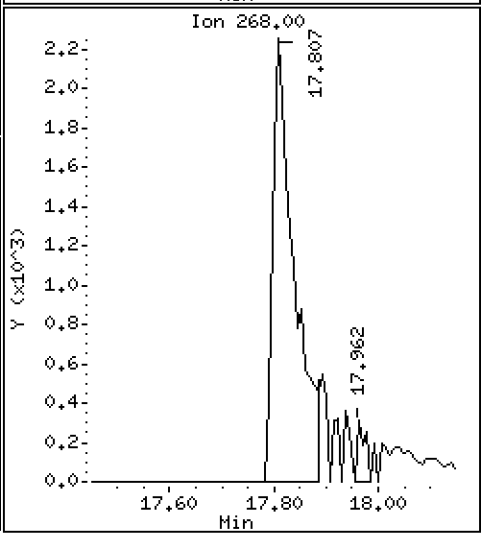


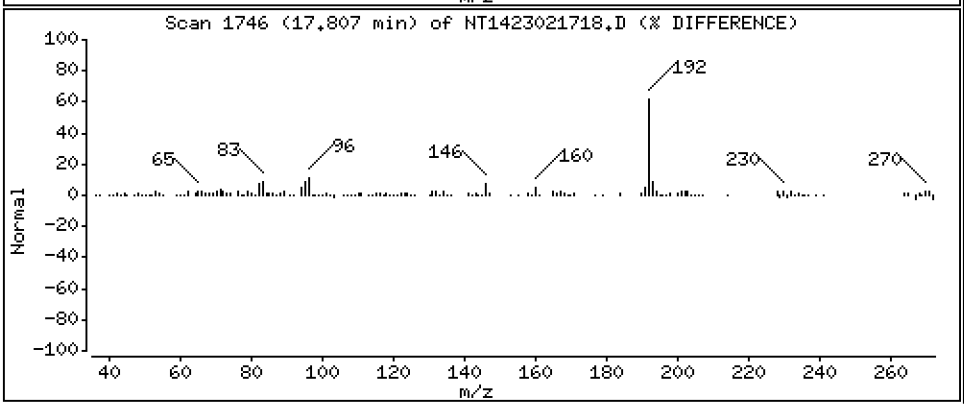












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

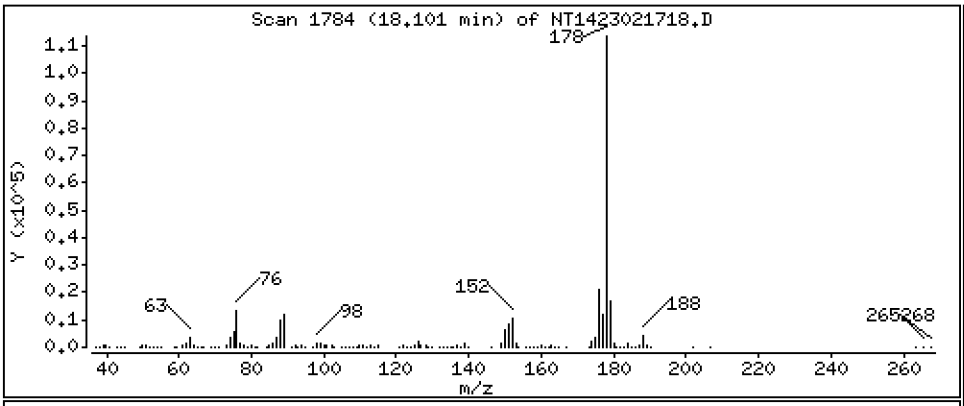
Operator: DSD

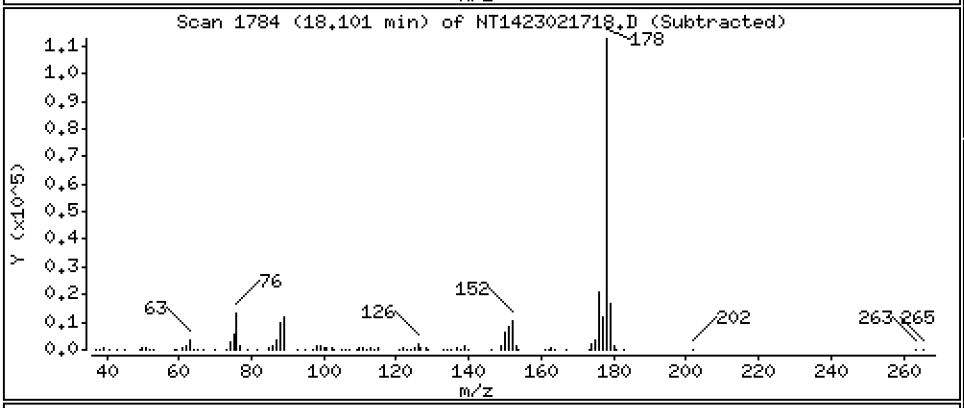
Column phase: ZB-5msi

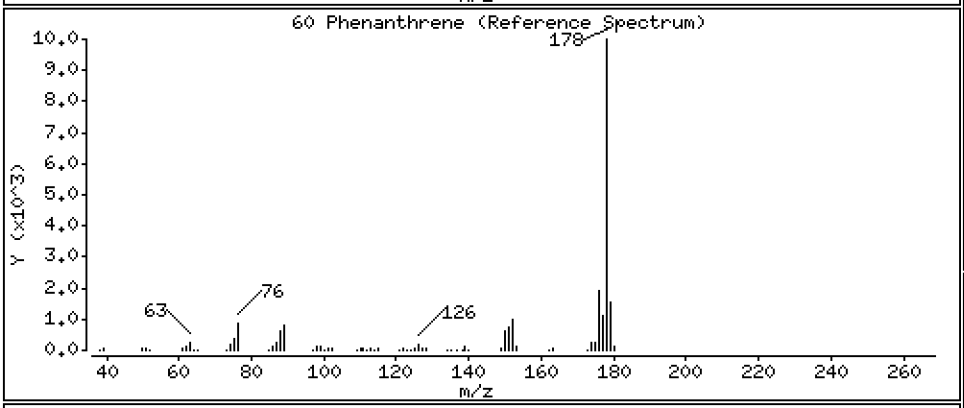
Column diameter: 0.25

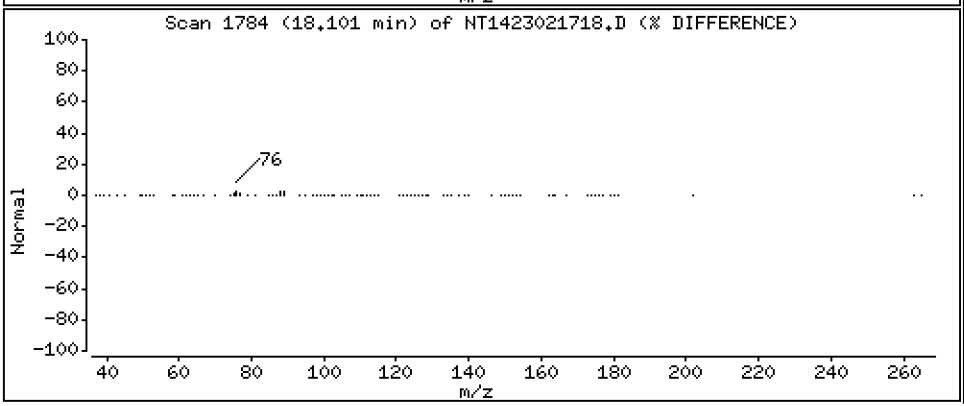
60 Phenanthrene

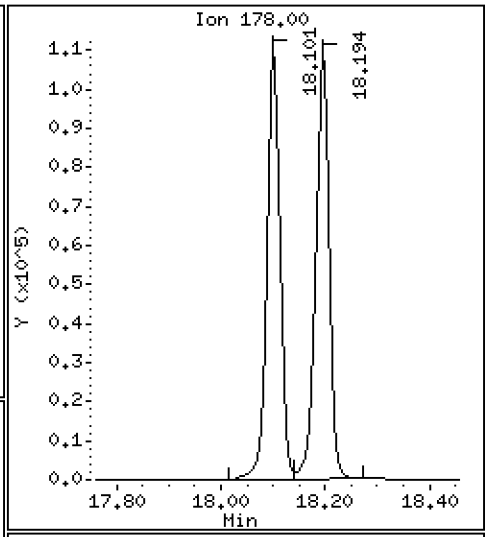
Concentration: 0.4809 ug/mL

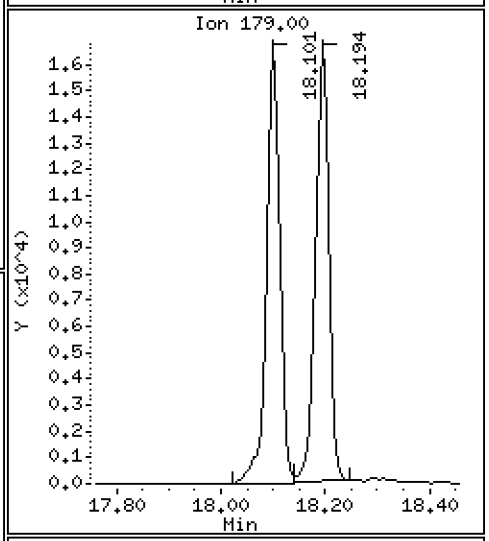


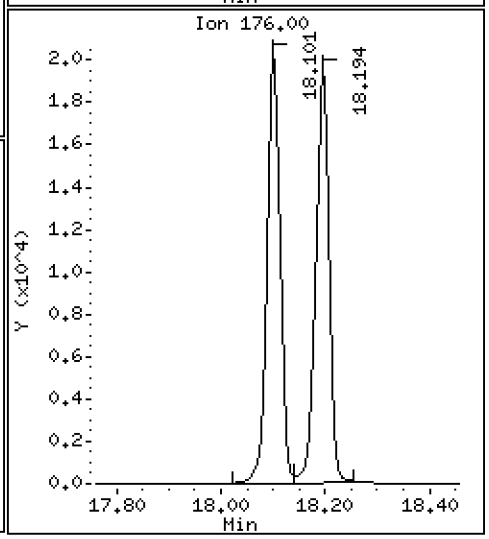












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

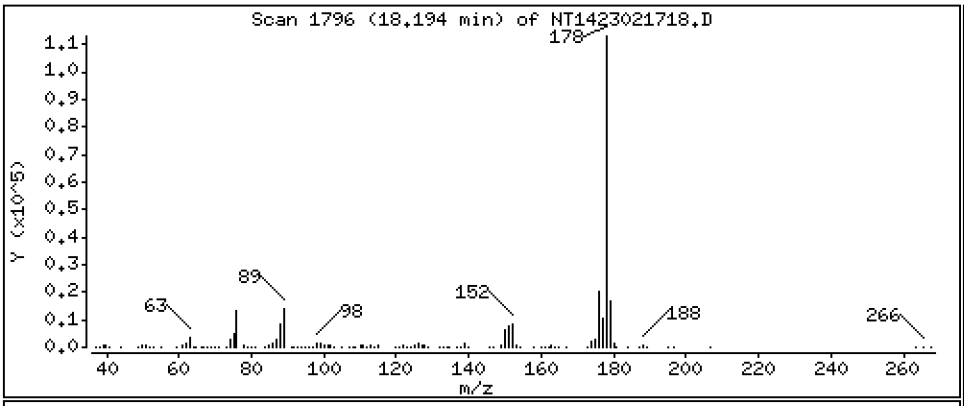
Operator: DSD

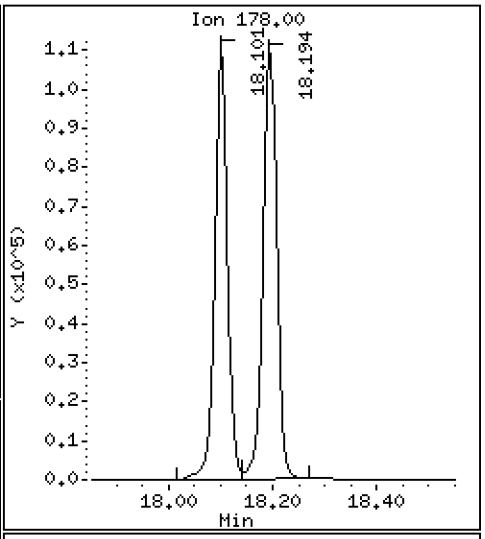
Column phase: ZB-5msi

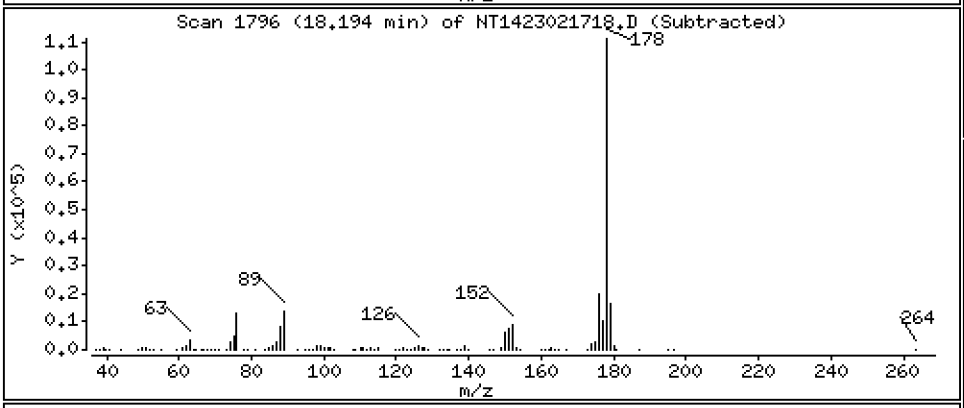
Column diameter: 0.25

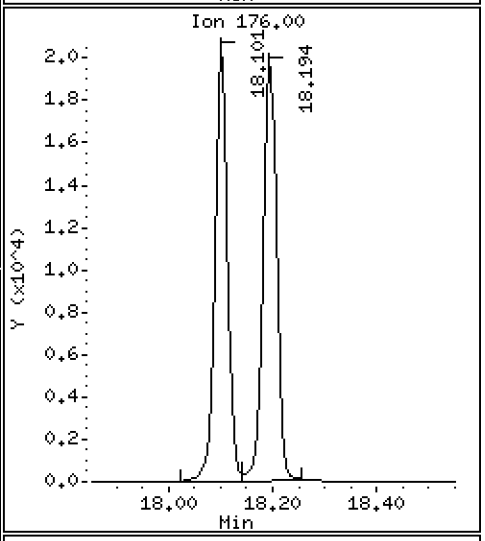
61 Anthracene

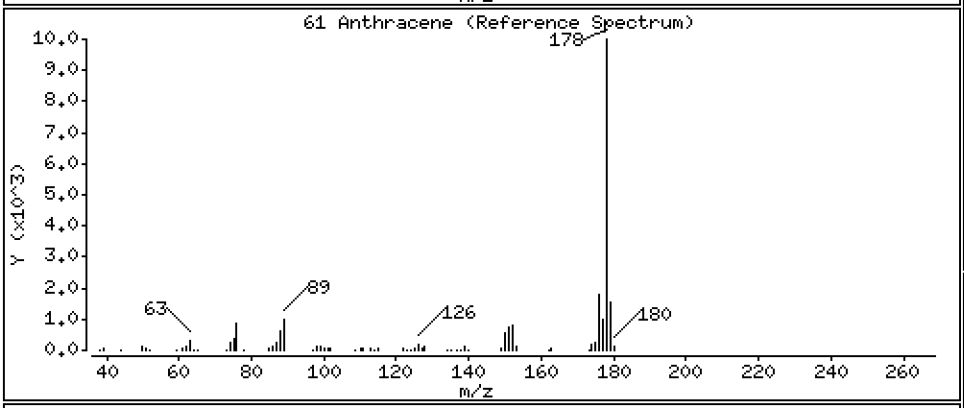
Concentration: 0.4979 ug/mL

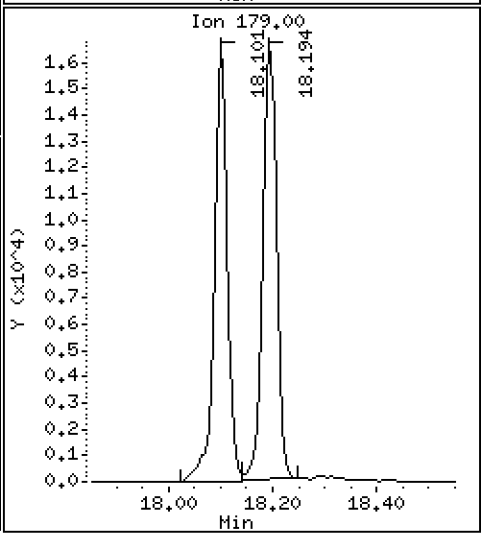


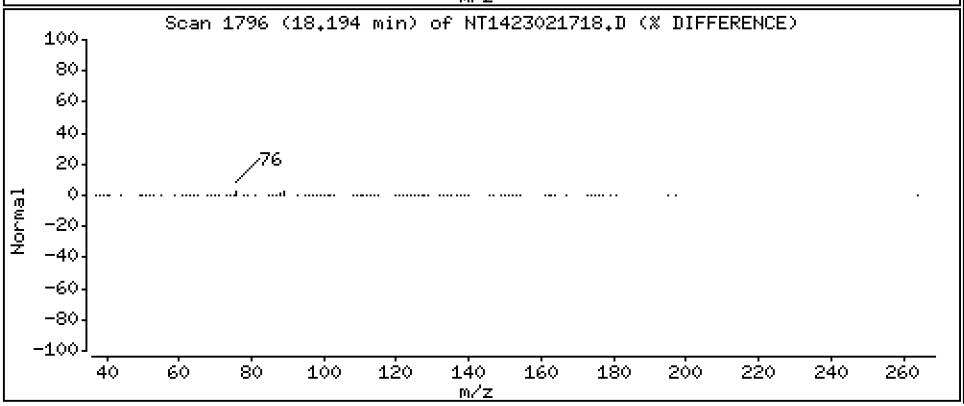












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

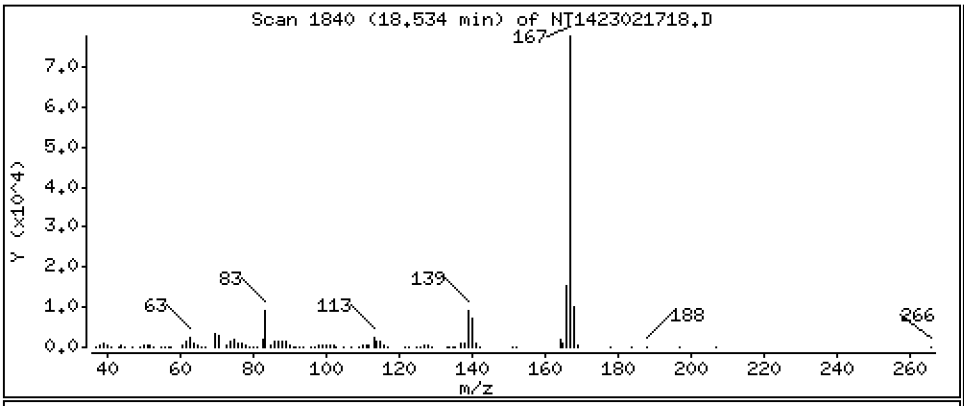
Operator: DSD

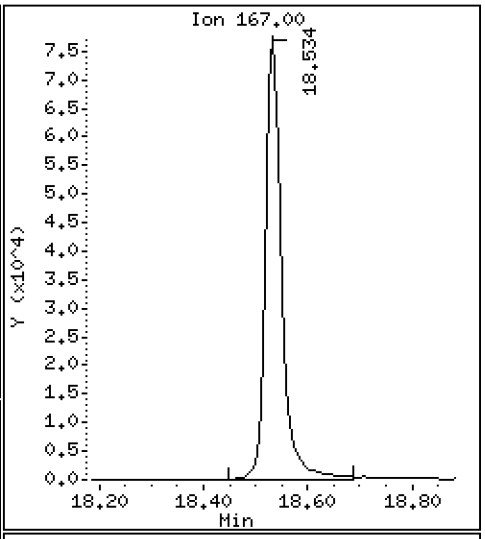
Column phase: ZB-5msi

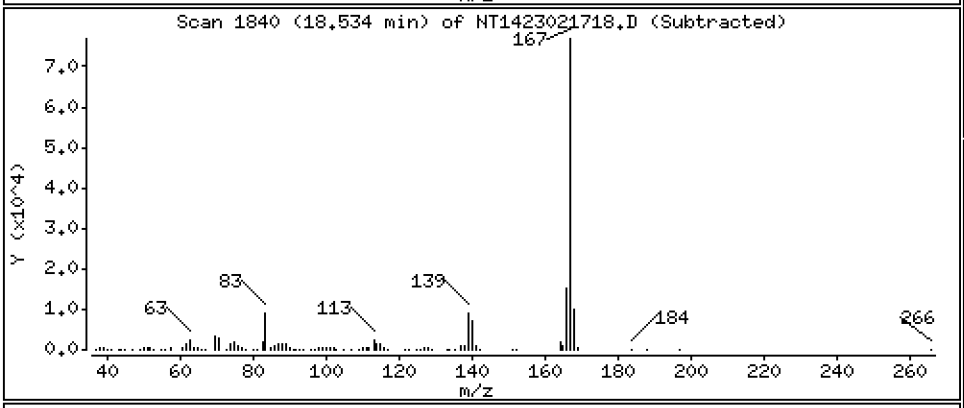
Column diameter: 0.25

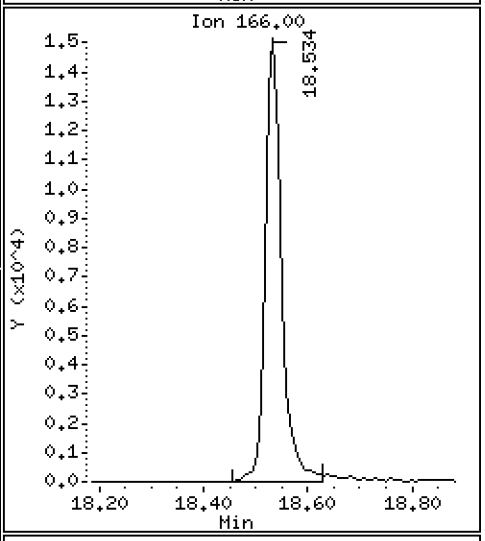
62 Carbazole

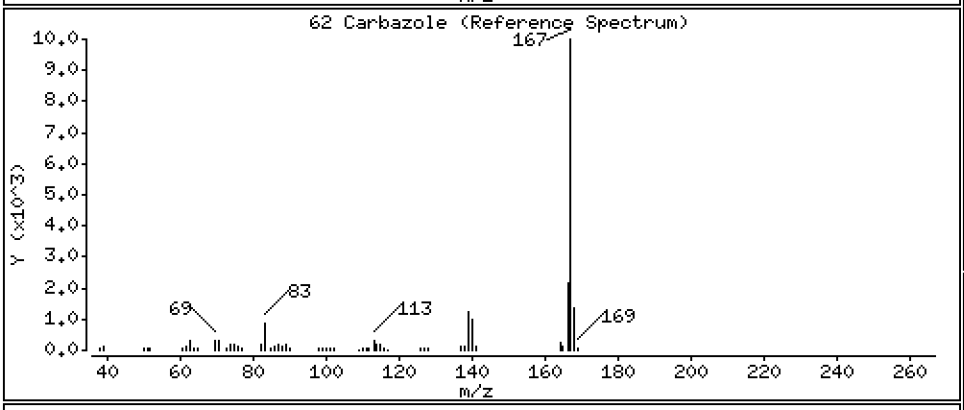
Concentration: 0.4590 ug/mL

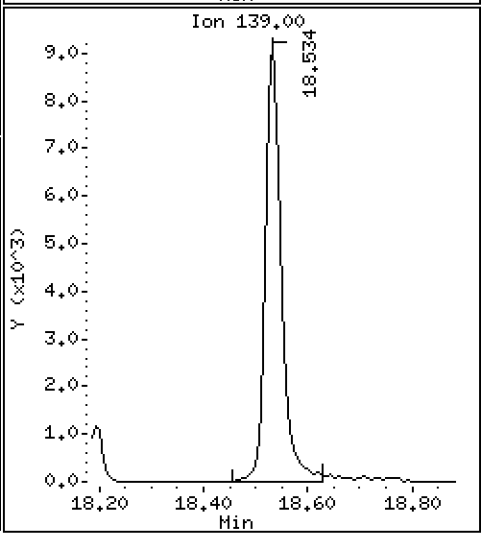


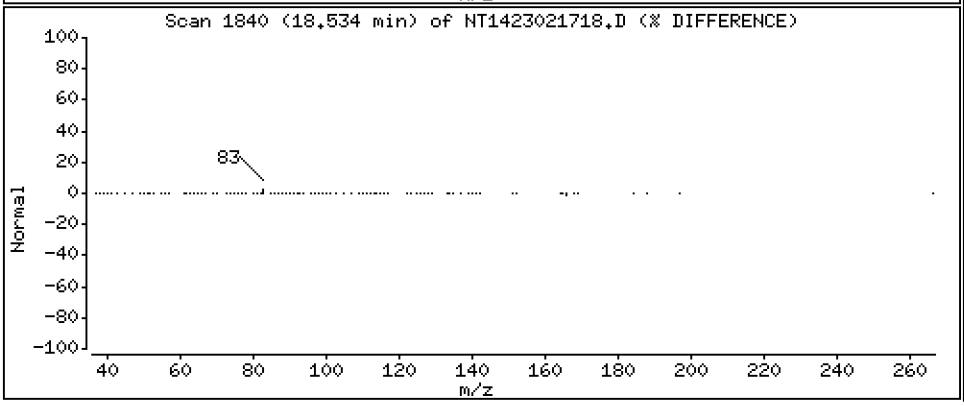












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021718.D

Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

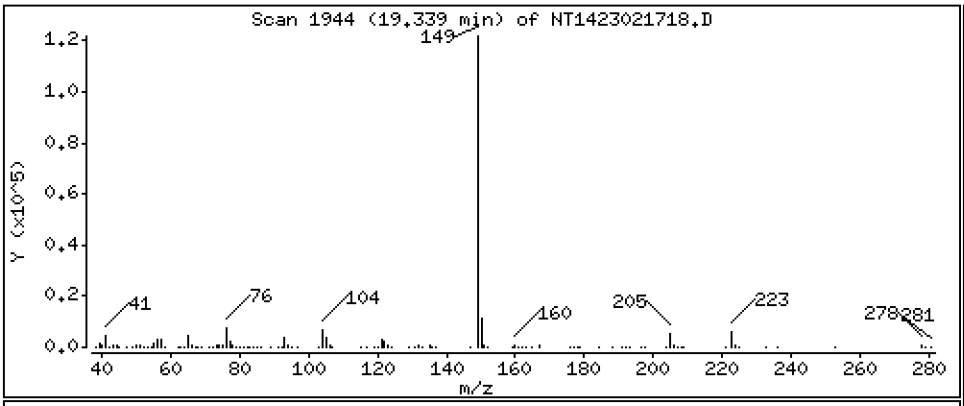
Operator: DSD

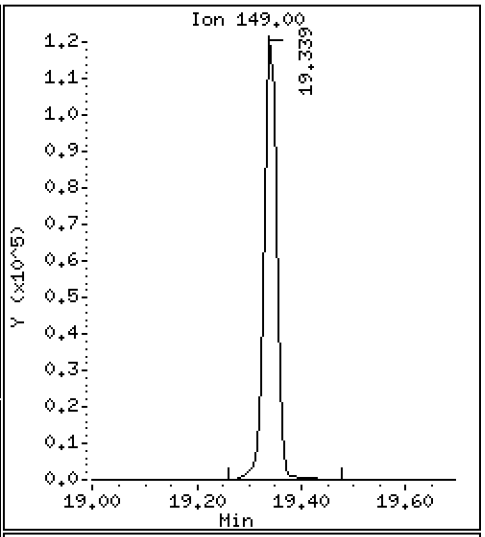
Column phase: ZB-5msi

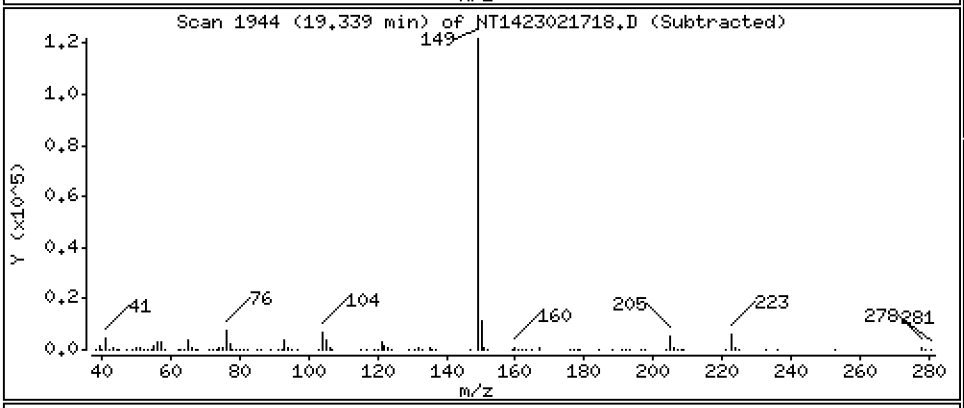
Column diameter: 0.25

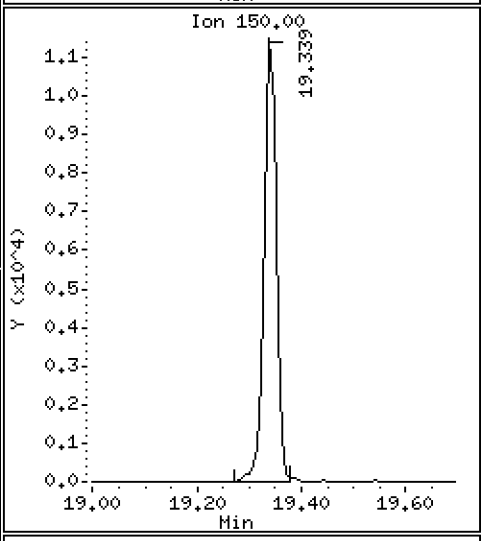
63 Di-n-butylphthalate

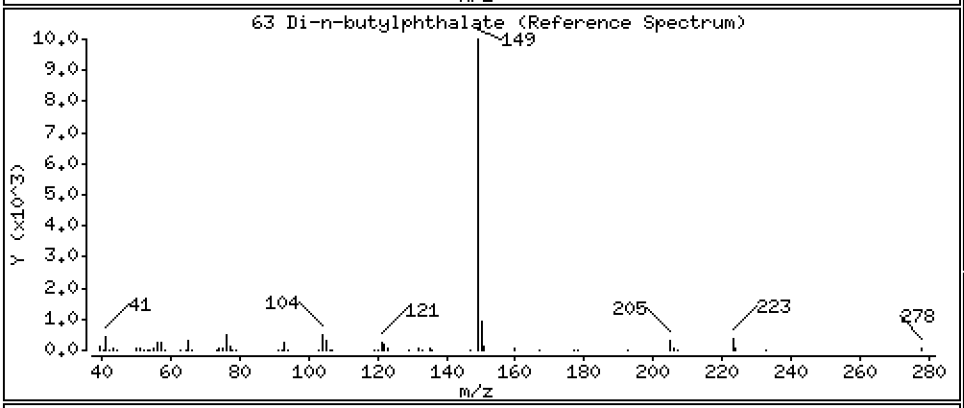
Concentration: 0.4904 ug/mL

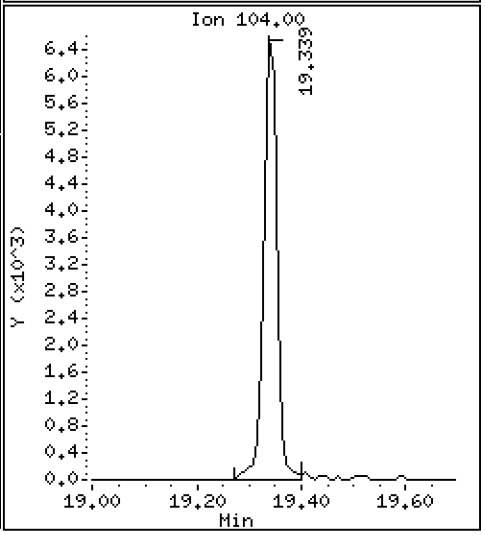


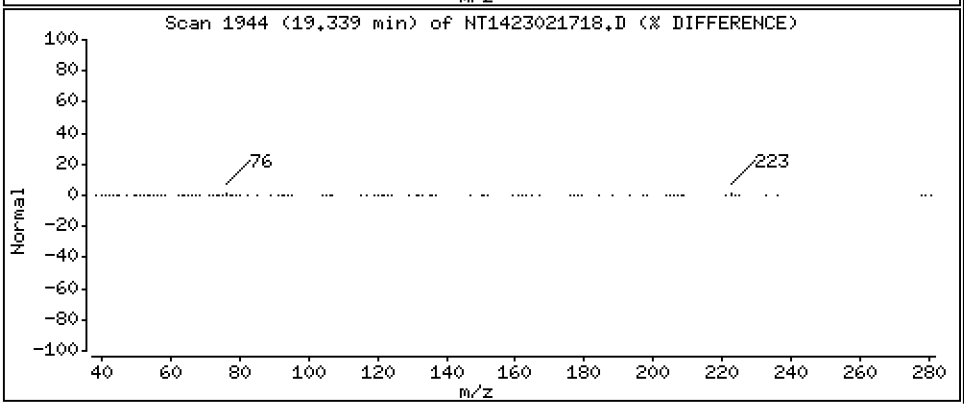












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

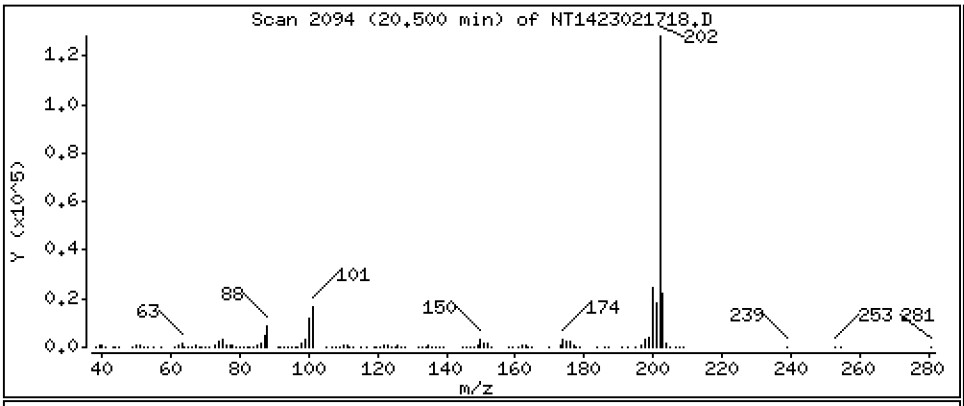
Operator: DSD

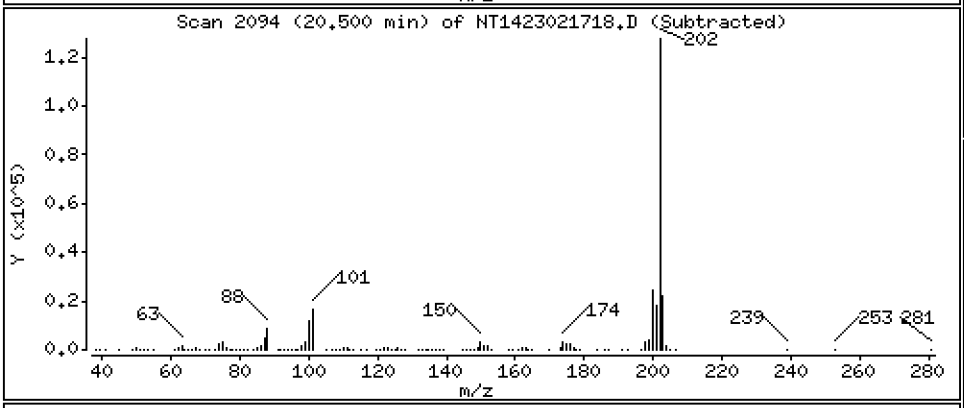
Column phase: ZB-5msi

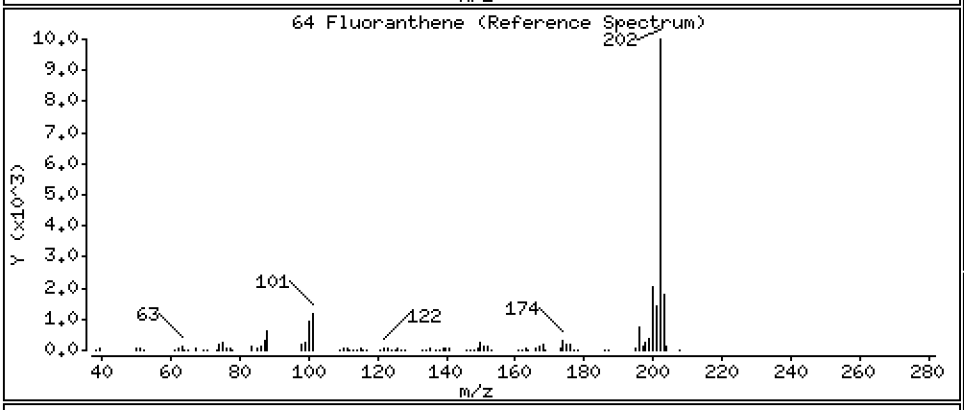
Column diameter: 0.25

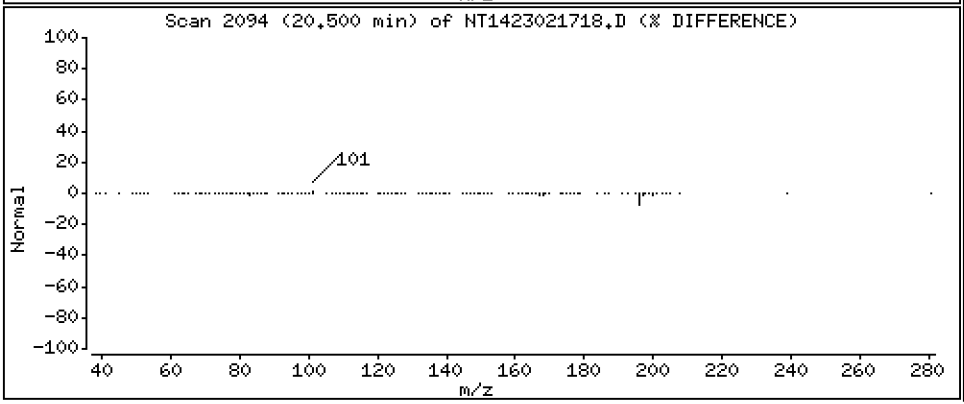
64 Fluoranthene

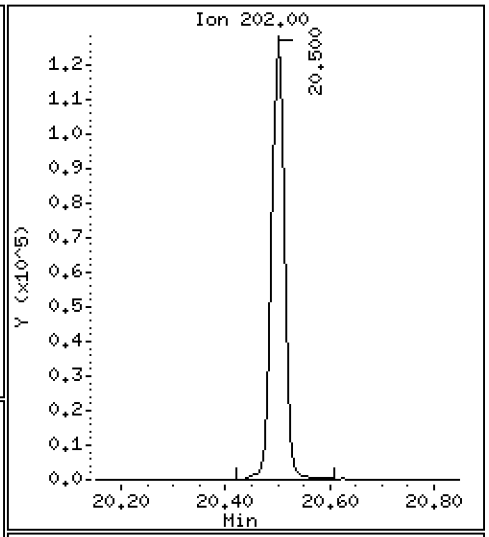
Concentration: 0.5687 ug/mL

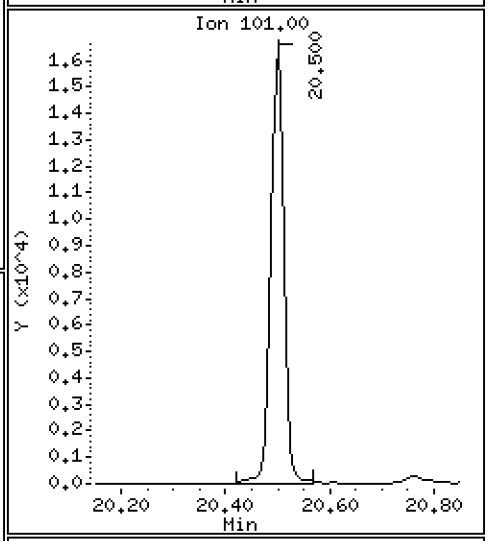


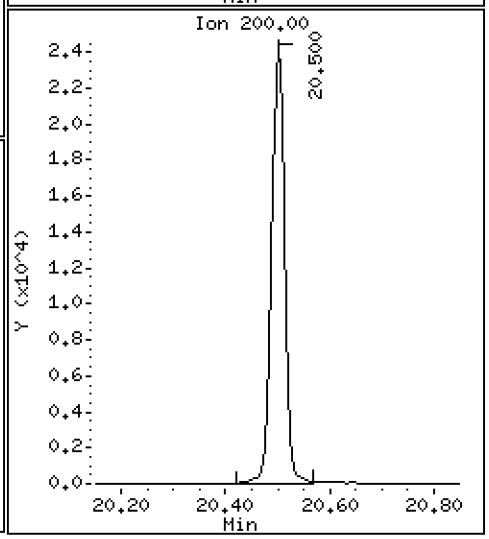












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

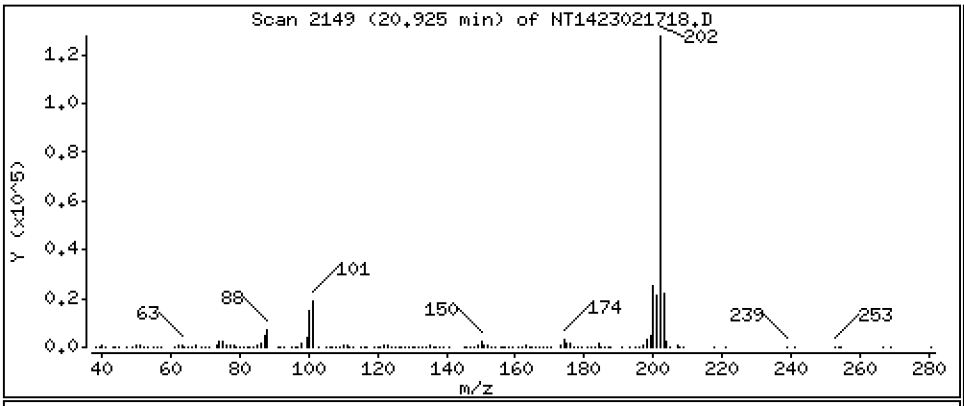
Operator: DSD

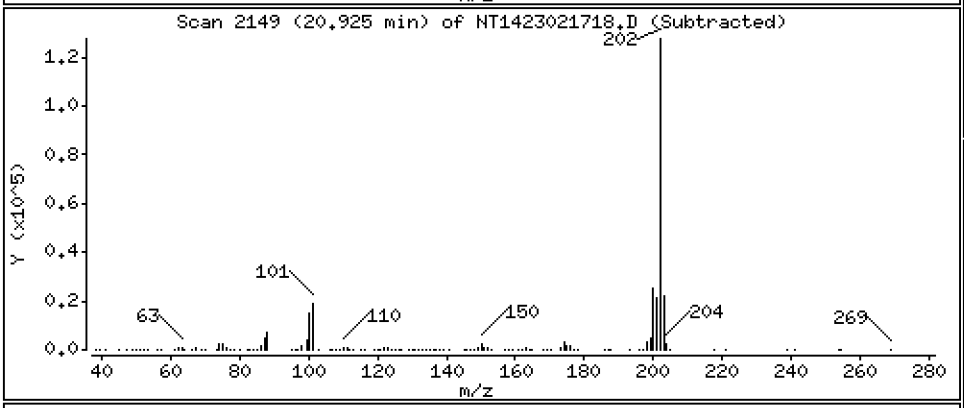
Column phase: ZB-5msi

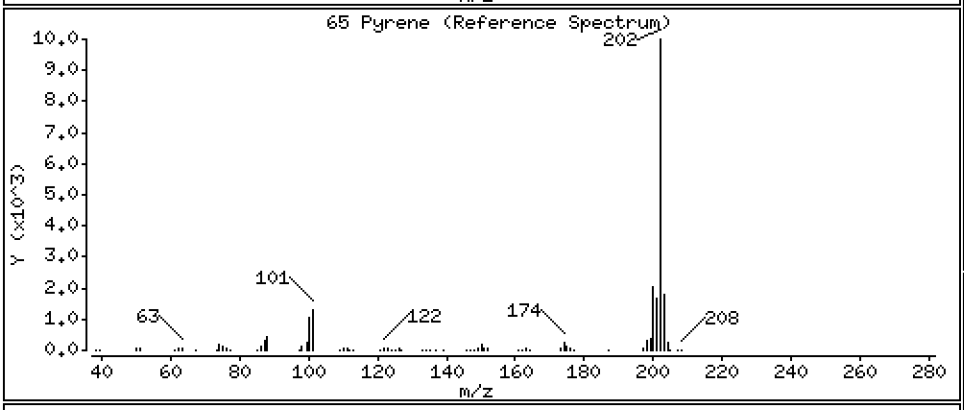
Column diameter: 0.25

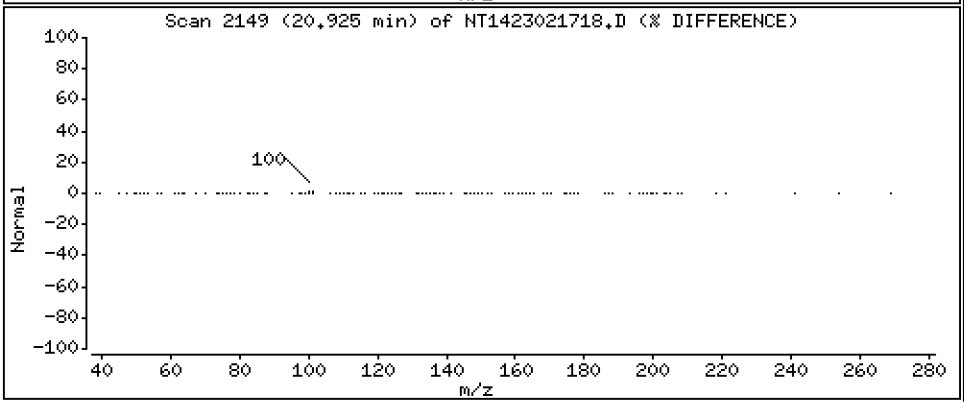
65 Pyrene

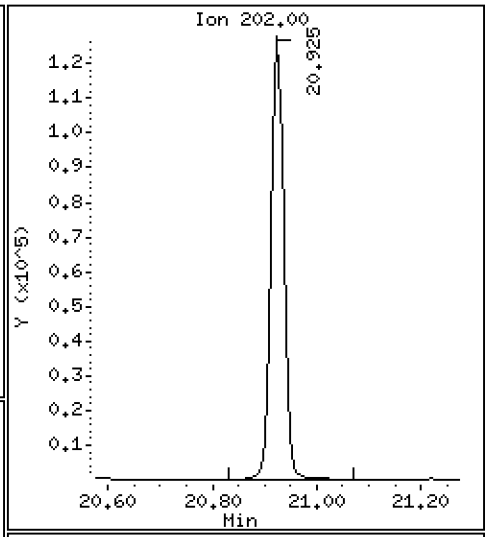
Concentration: 0.5640 ug/mL

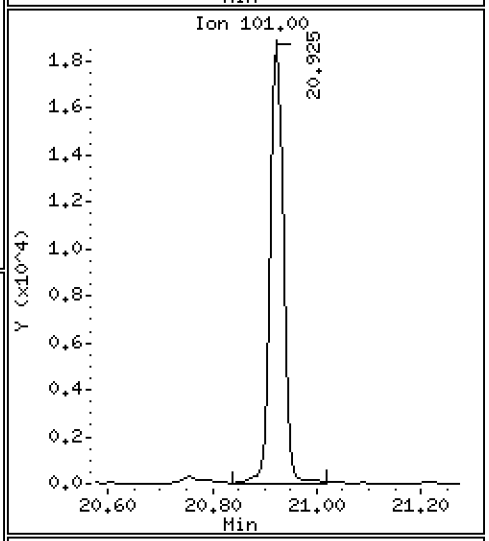


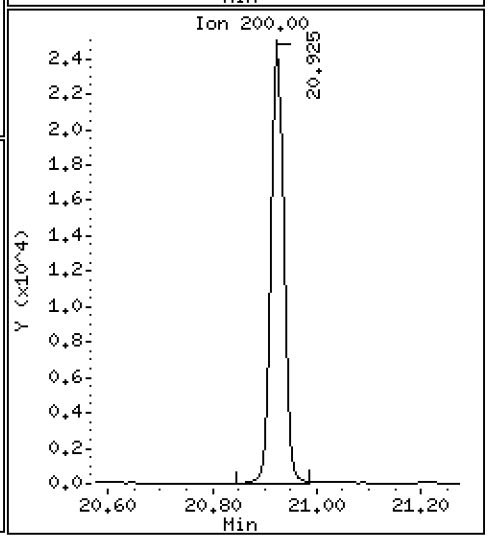












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

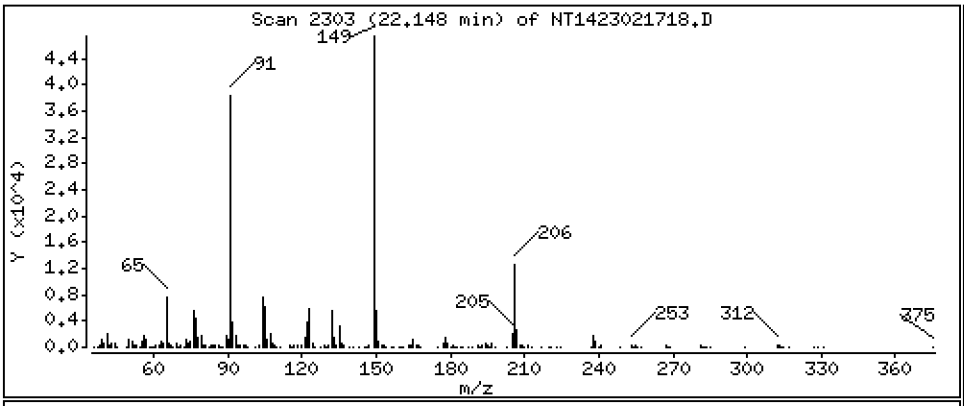
Operator: DSD

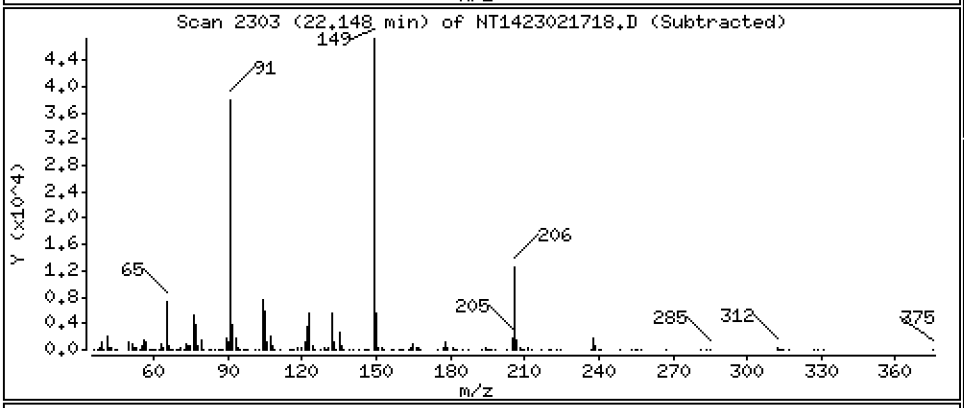
Column phase: ZB-5msi

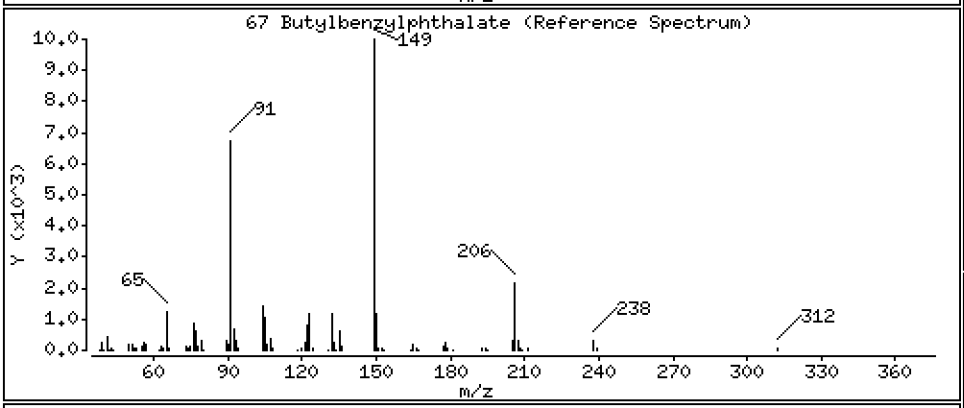
Column diameter: 0.25

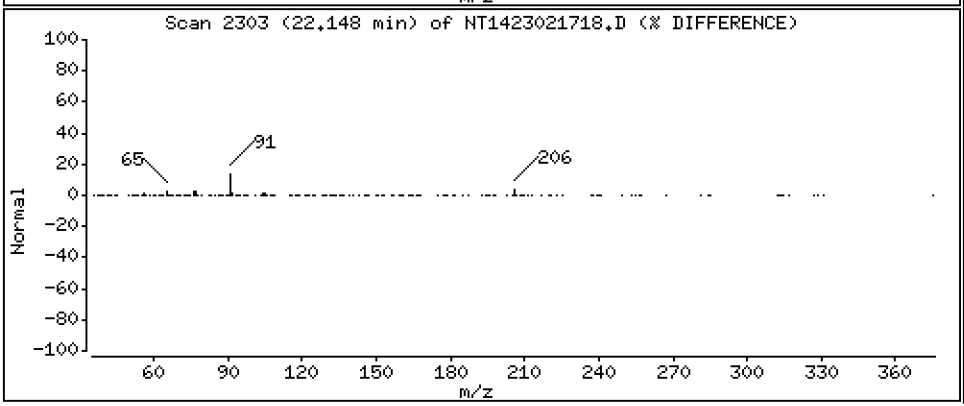
67 Butylbenzylphthalate

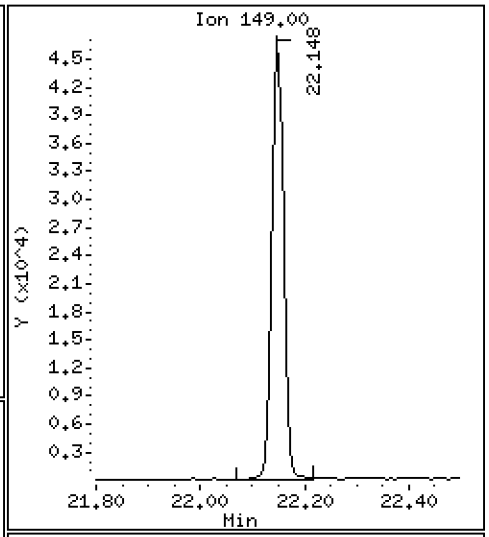
Concentration: 0.5354 ug/mL

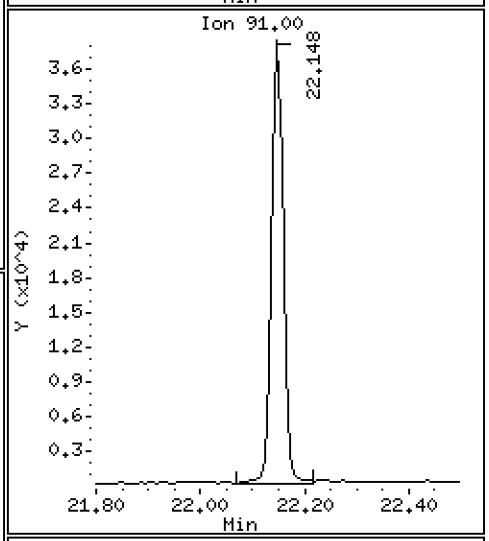


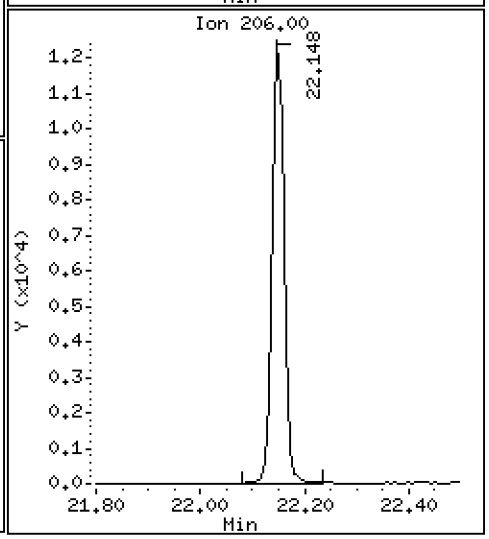












Date : 17-FEB-2023 20:55

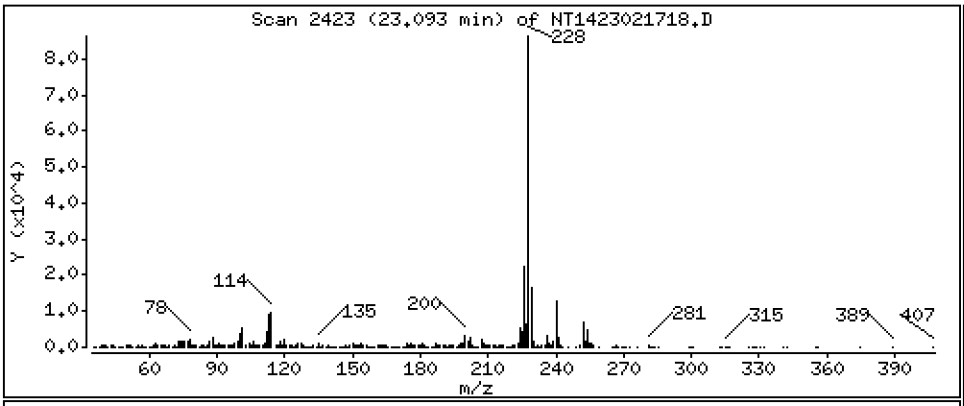
Client ID: Instrument: nt14.i

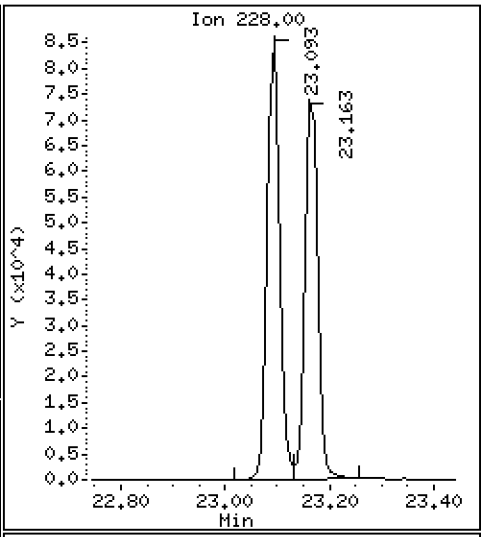
Sample Info: SLB0251-LCV1

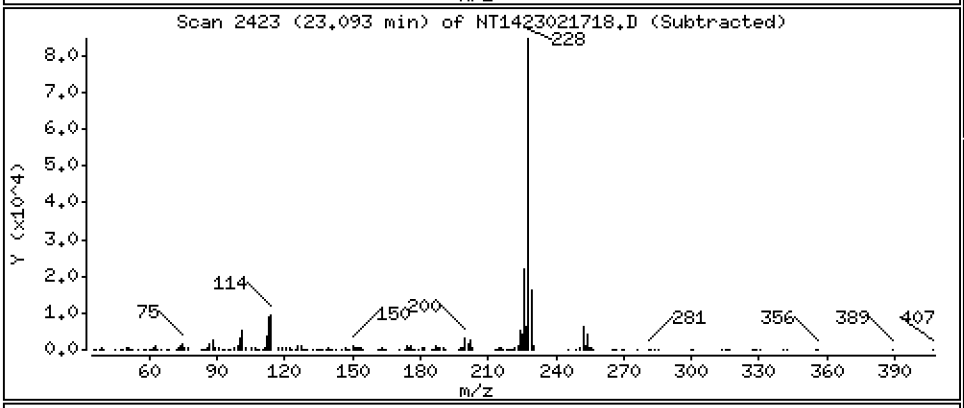
Operator: DSD

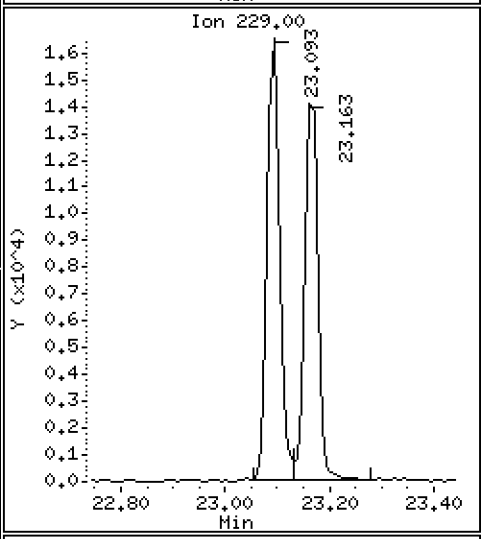
Column phase: ZB-5msi Column diameter: 0.25

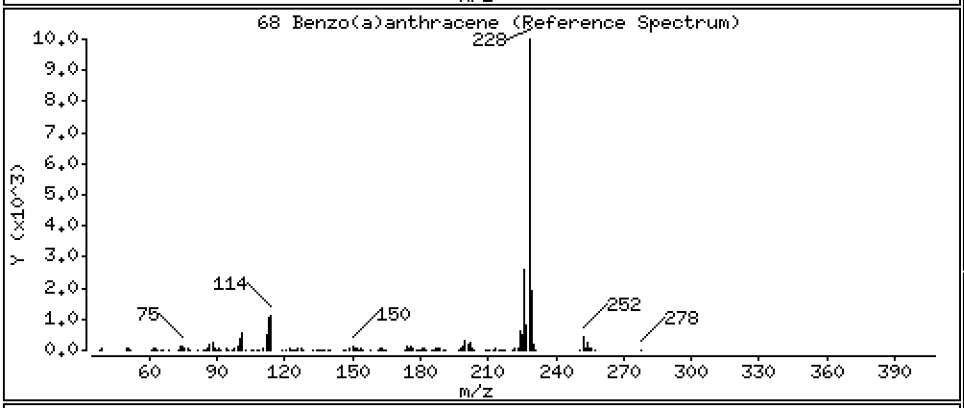
68 Benzo(a)anthracene Concentration: 0.4893 ug/mL

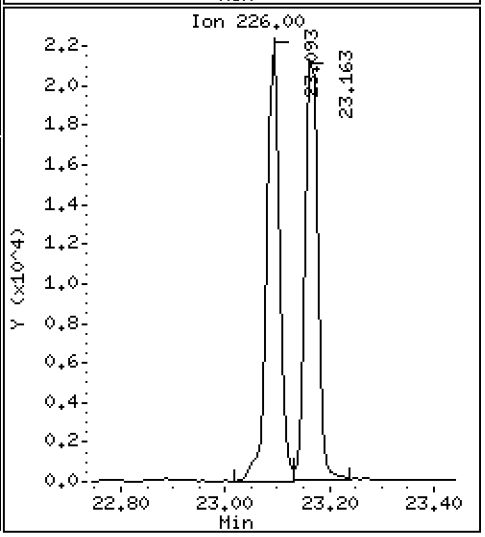


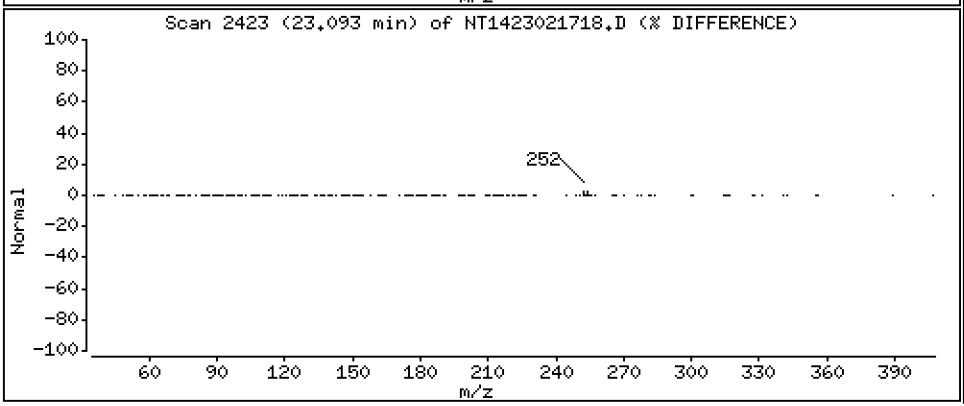












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

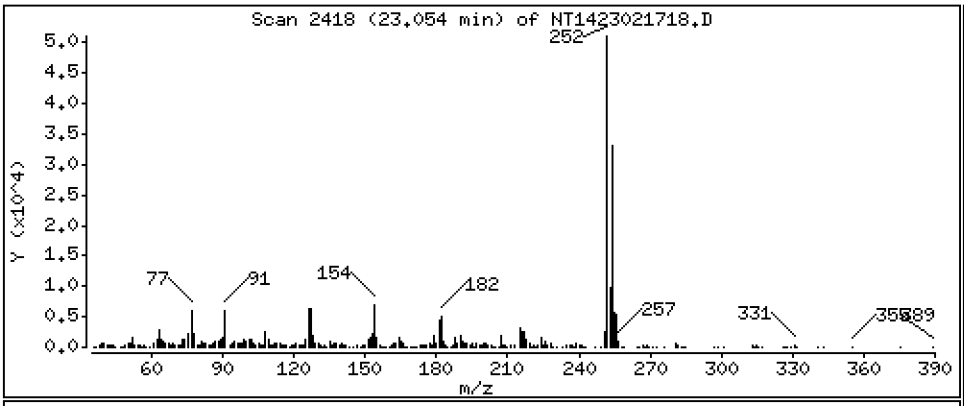
Operator: DSD

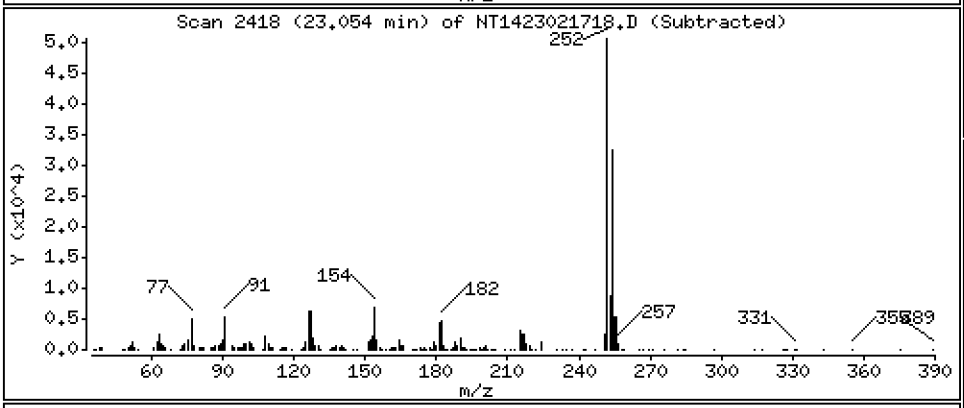
Column phase: ZB-5msi

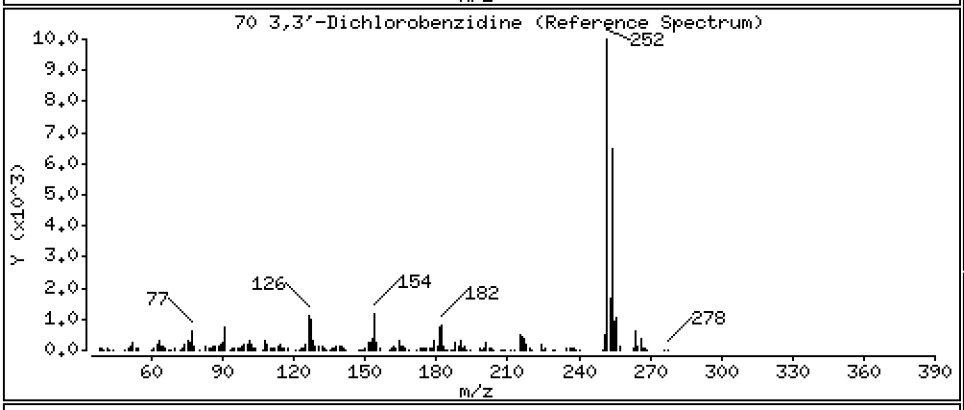
Column diameter: 0.25

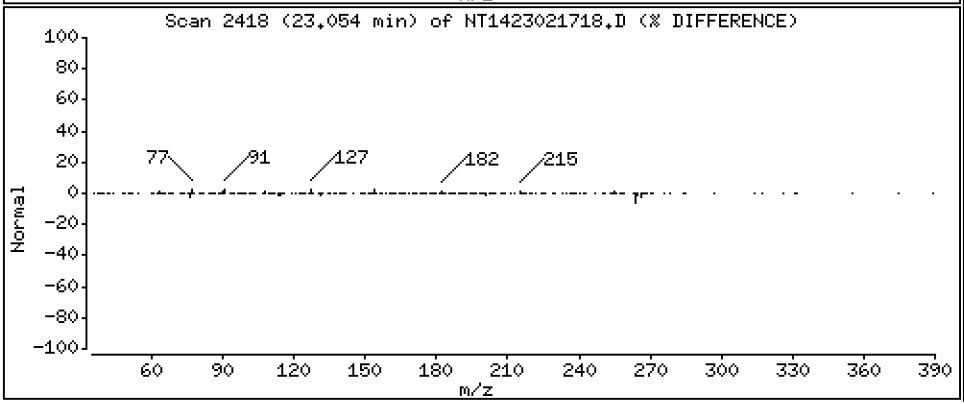
70 3,3'-Dichlorobenzidine

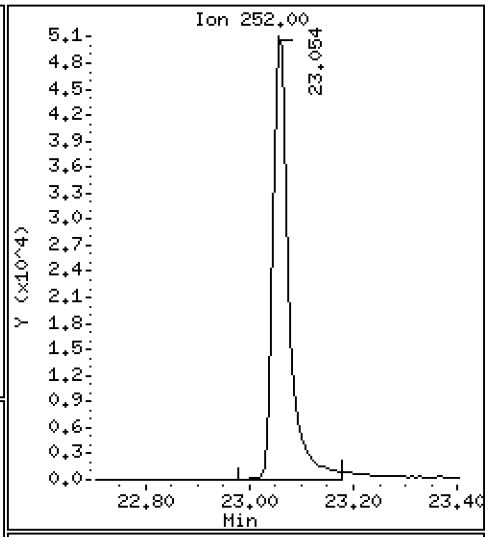
Concentration: 1.271 ug/mL

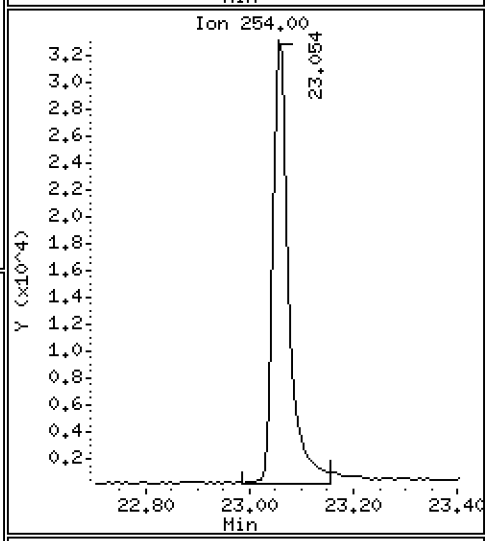


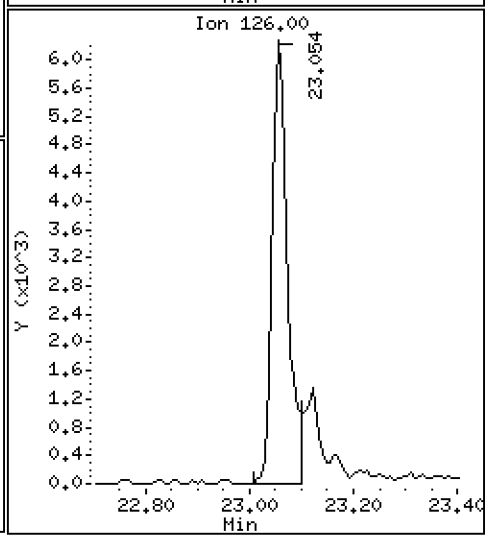












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

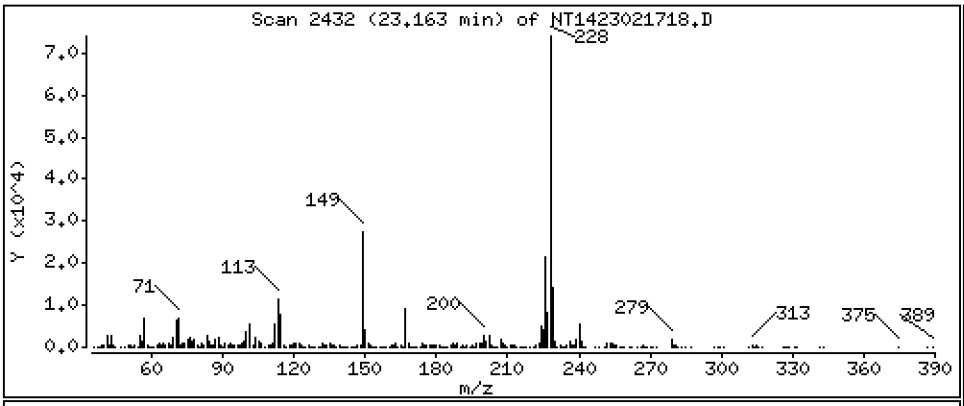
Operator: DSD

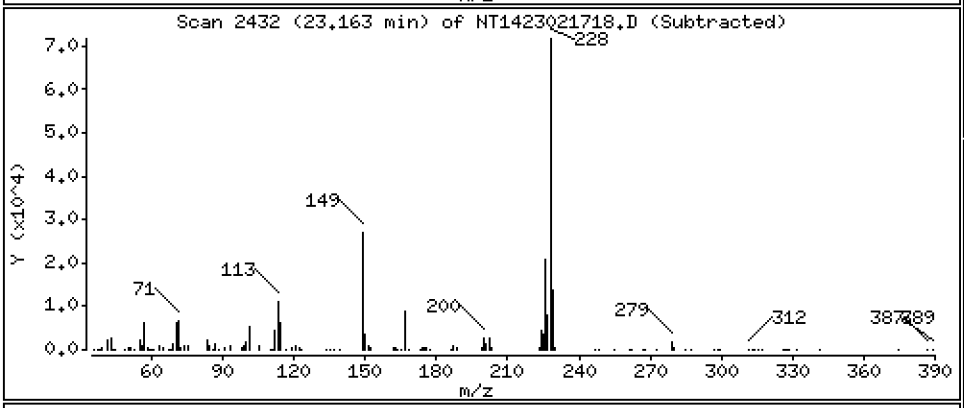
Column phase: ZB-5msi

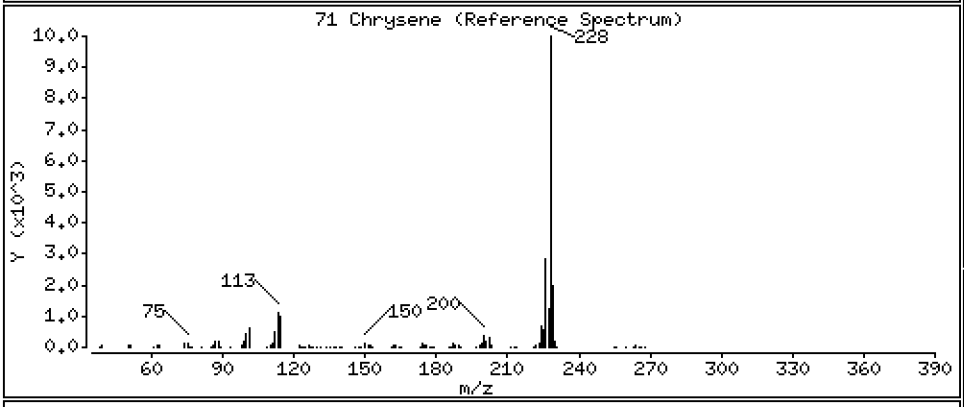
Column diameter: 0.25

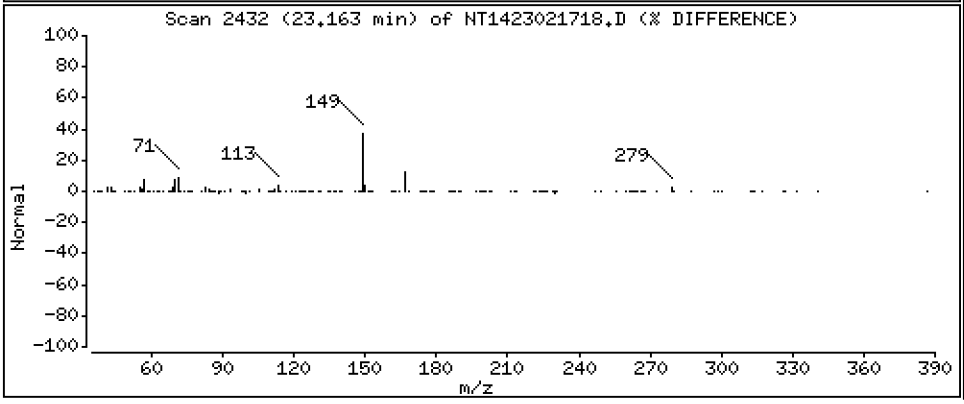
71 Chrysene

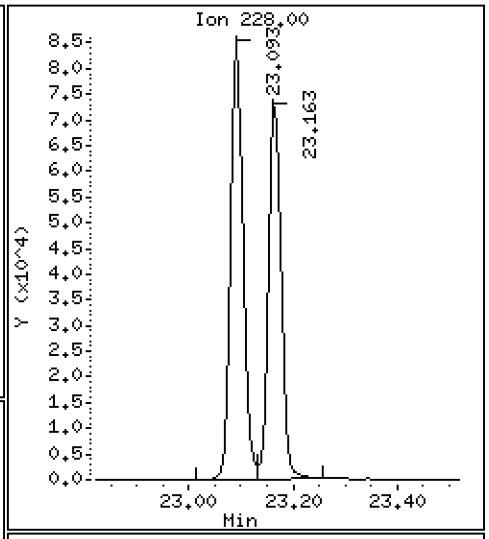
Concentration: 0.4819 ug/mL

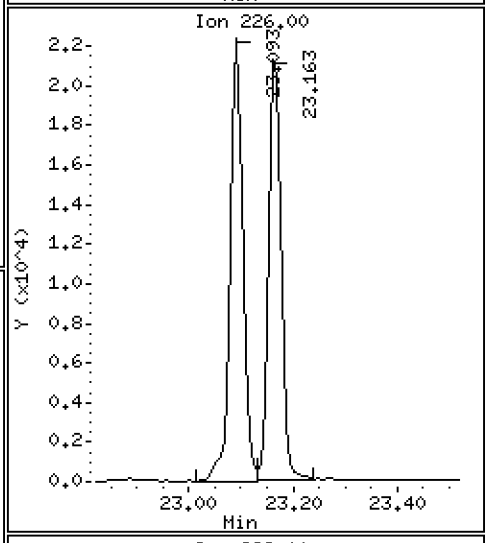


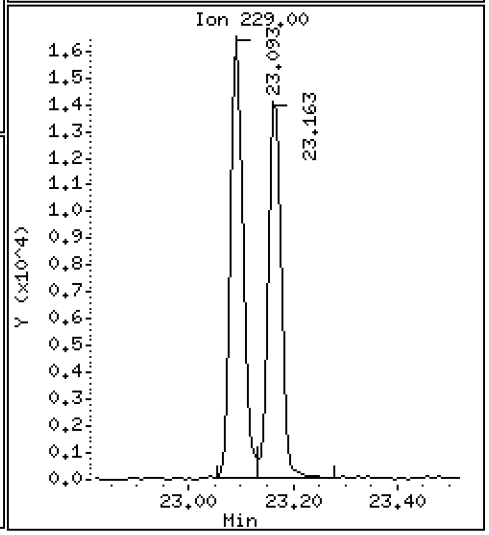












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

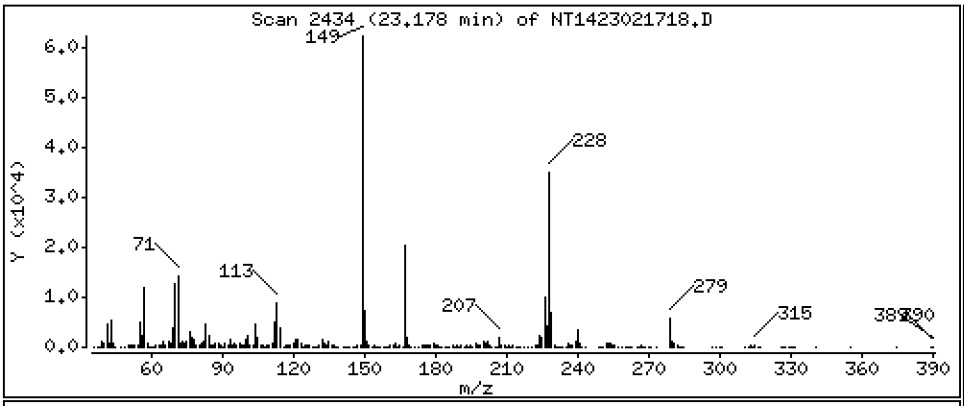
Operator: DSD

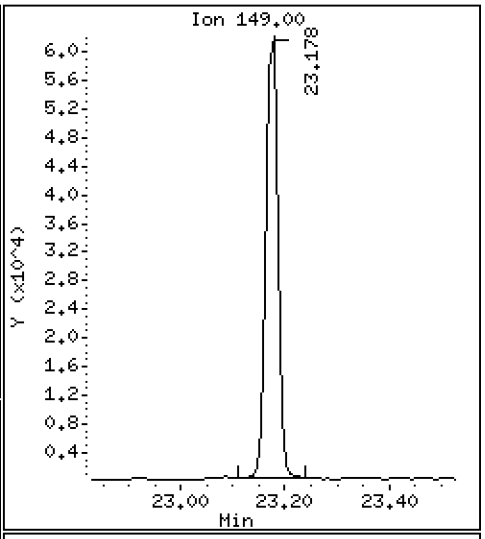
Column phase: ZB-5msi

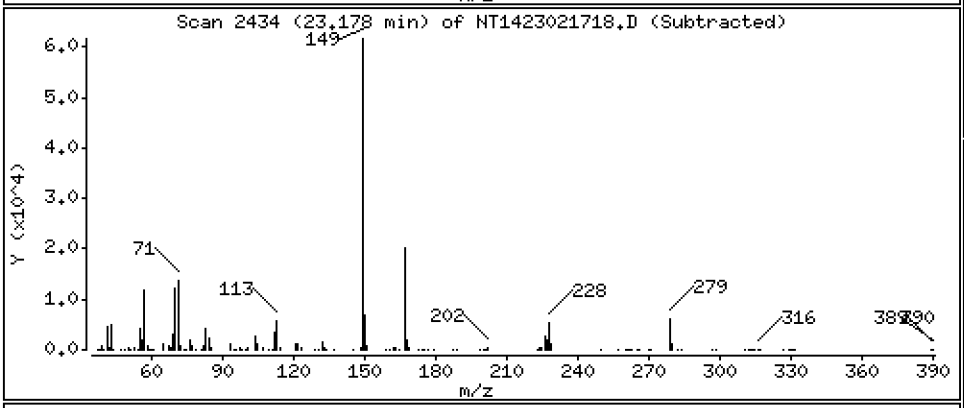
Column diameter: 0.25

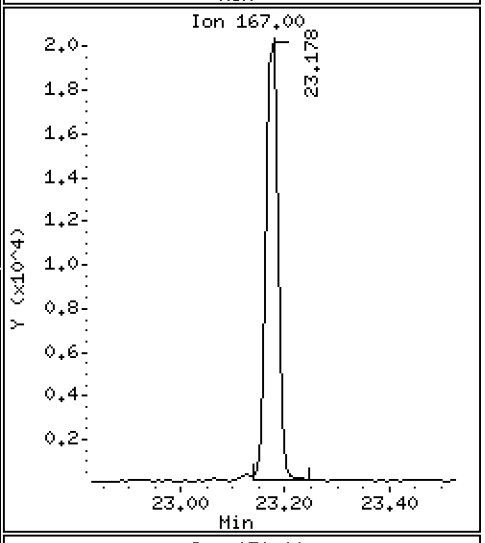
72 bis(2-Ethylhexyl)phthalate

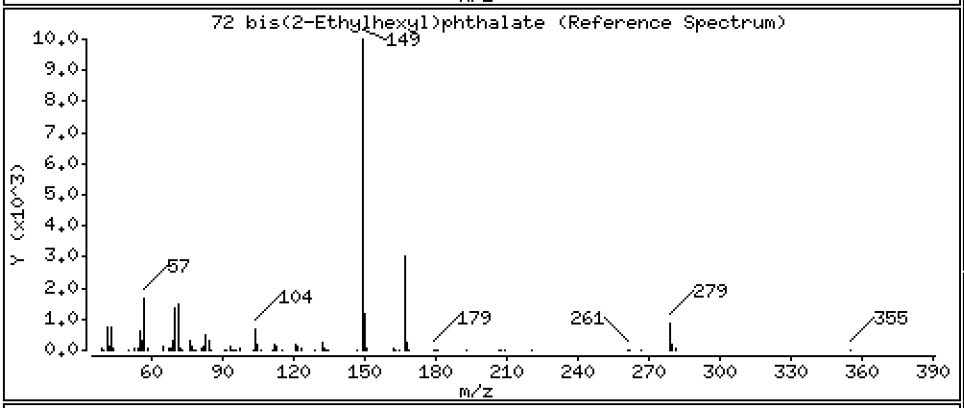
Concentration: 0.3729 ug/mL

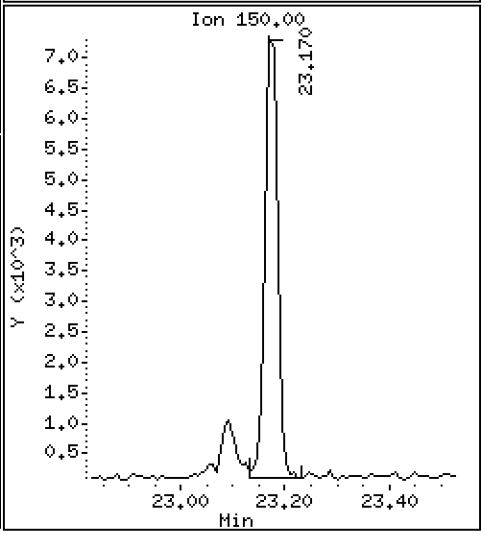


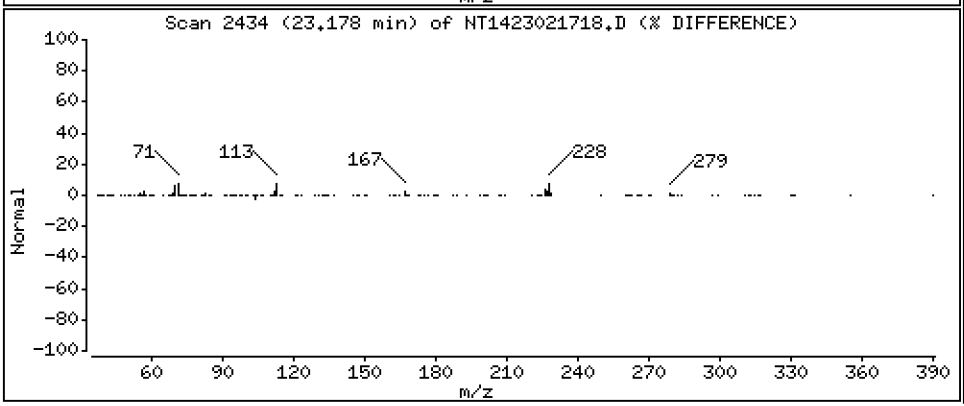












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

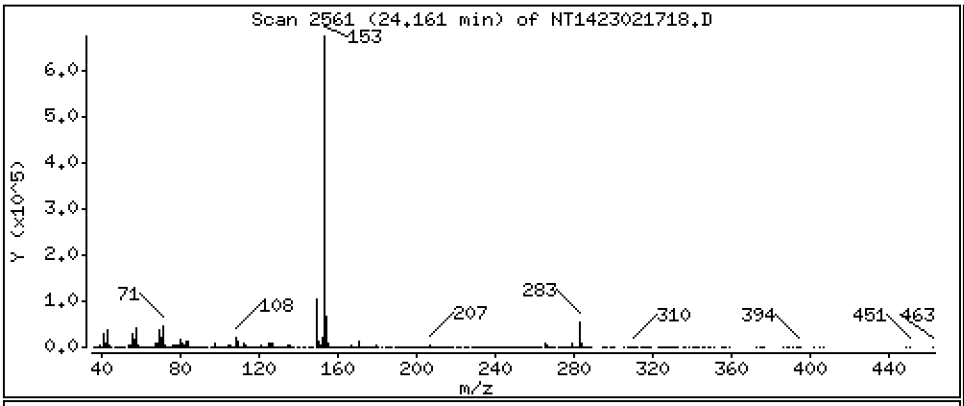
Operator: DSD

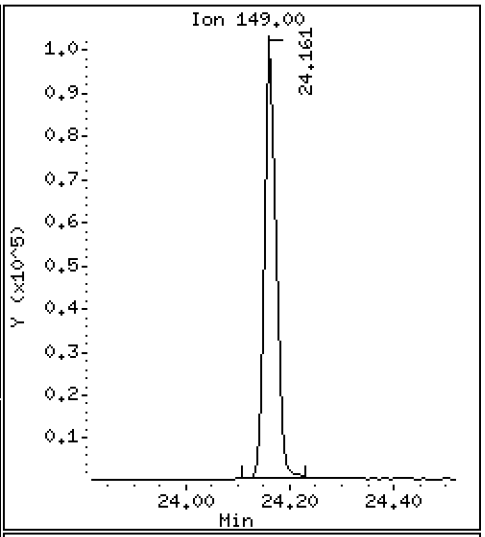
Column phase: ZB-5msi

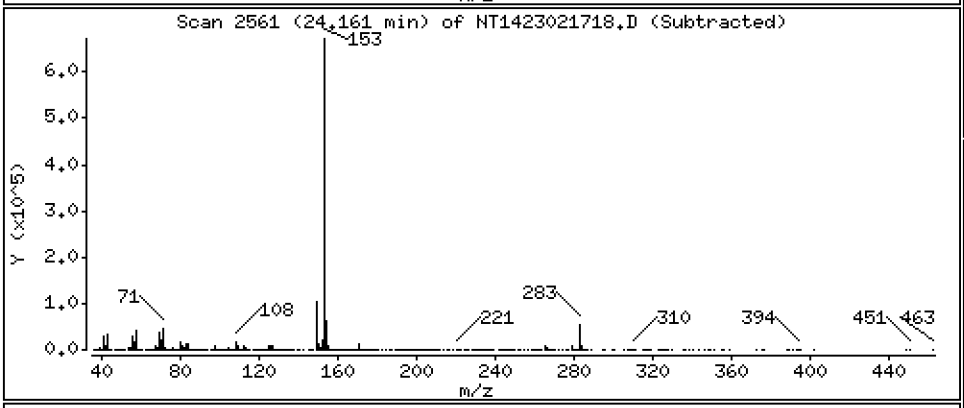
Column diameter: 0.25

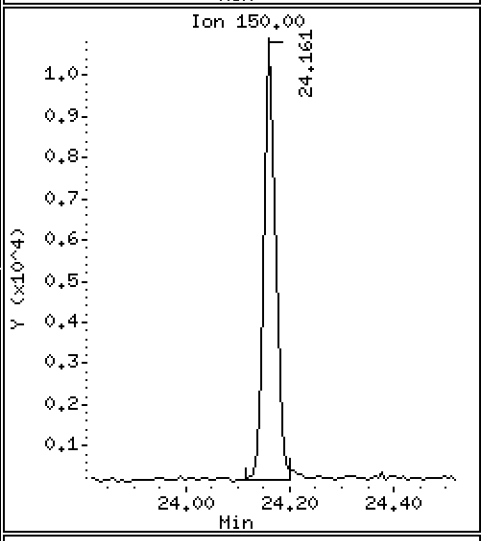
73 Di-n-octylphthalate

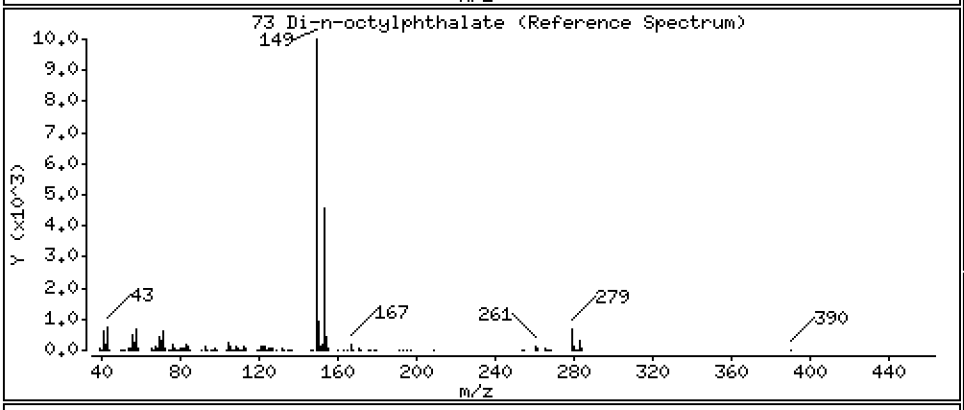
Concentration: 0.4491 ug/mL

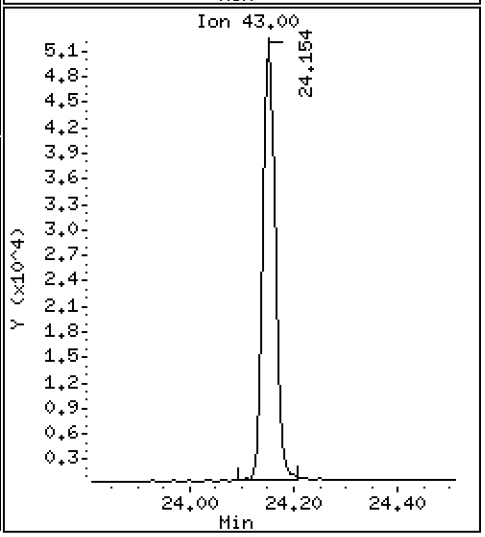


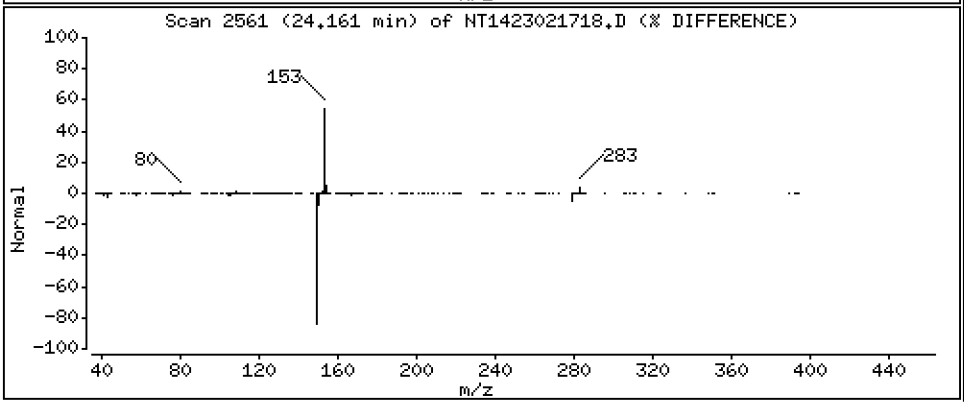












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

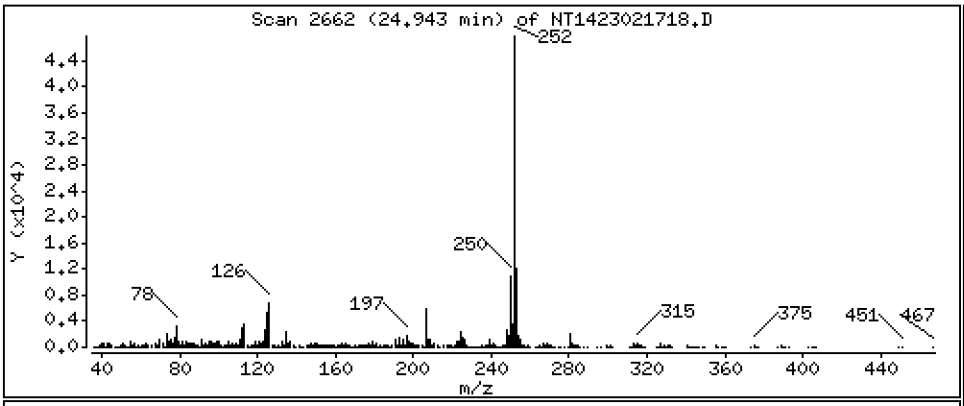
Operator: DSD

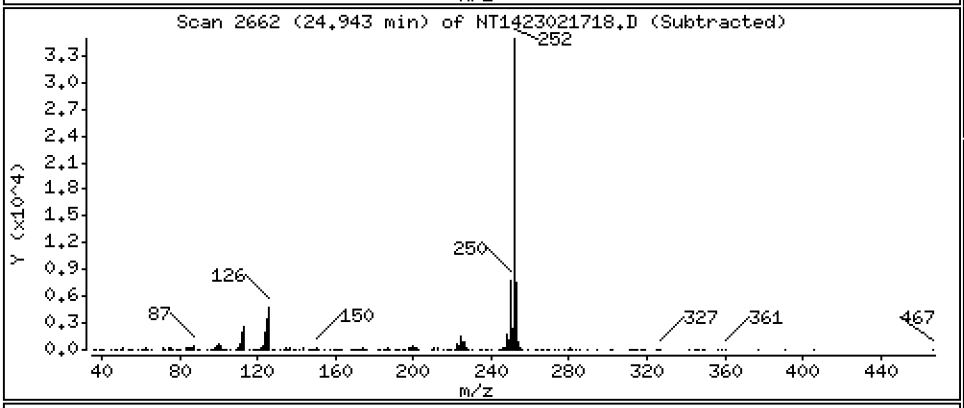
Column phase: ZB-5msi

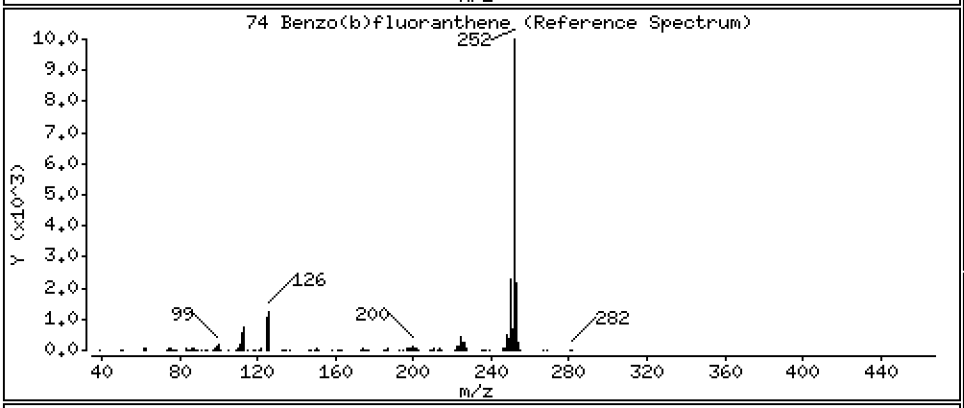
Column diameter: 0.25

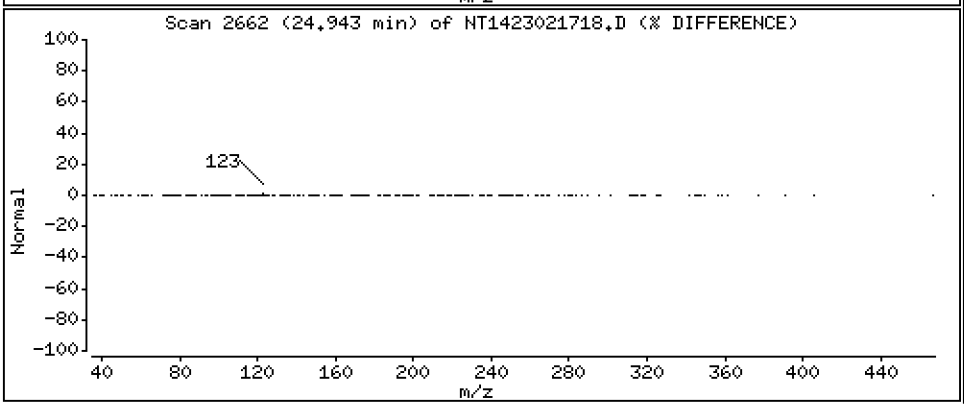
74 Benzo(b)fluoranthene

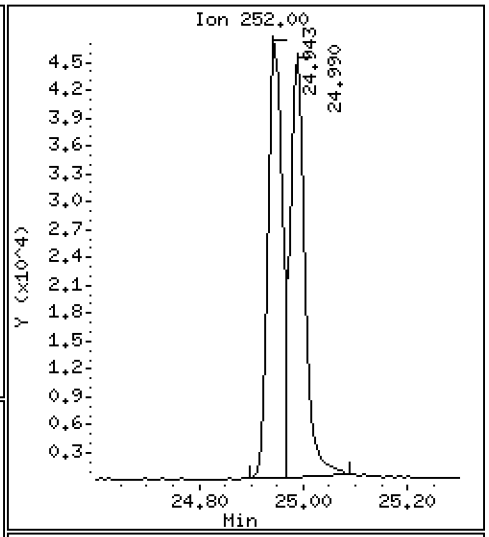
Concentration: 0.4492 ug/mL

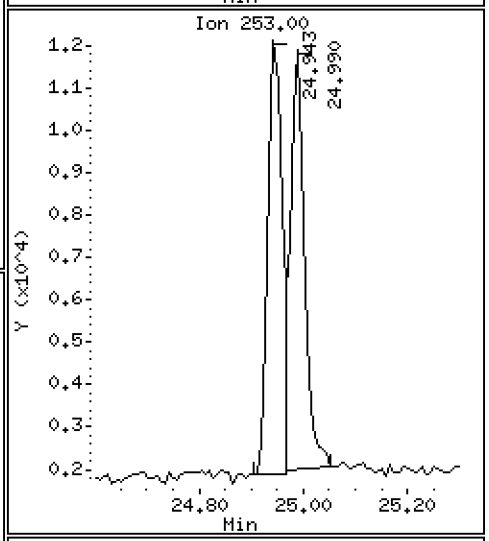


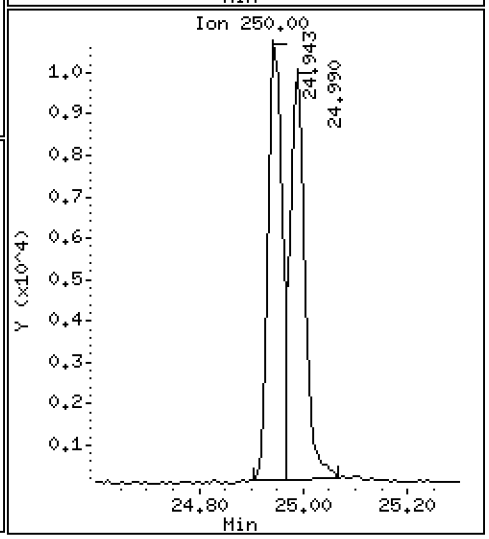












Date : 17-FEB-2023 20:55

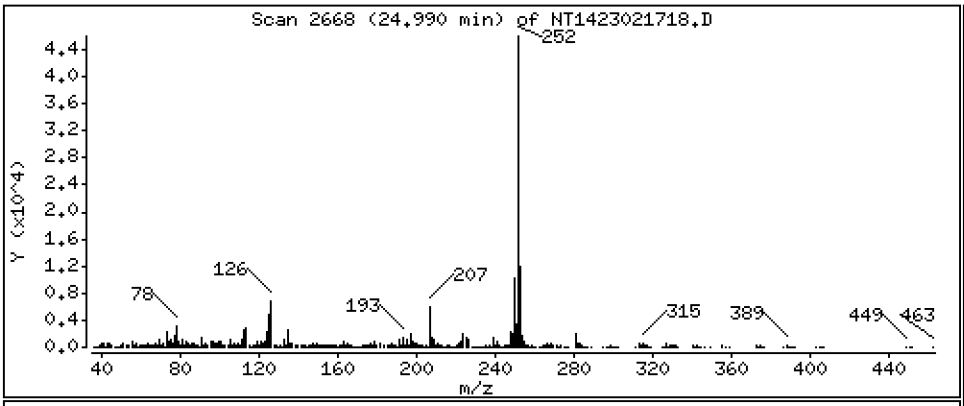
Client ID: Instrument: nt14.i

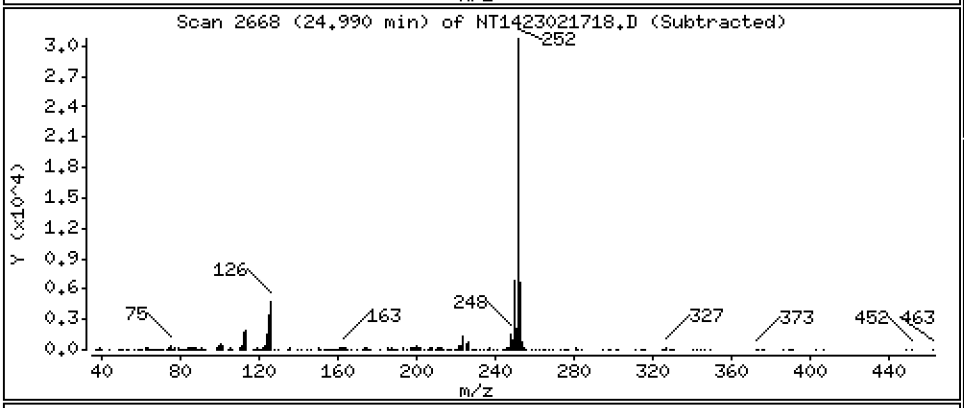
Sample Info: SLB0251-LCV1

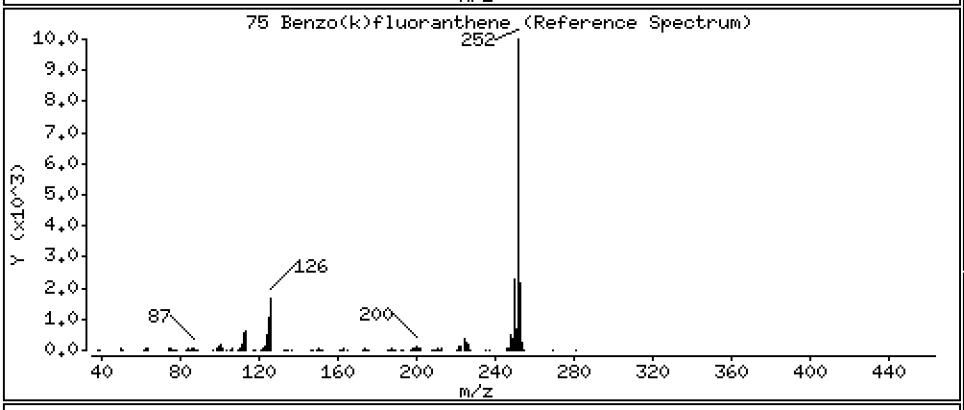
Operator: DSD

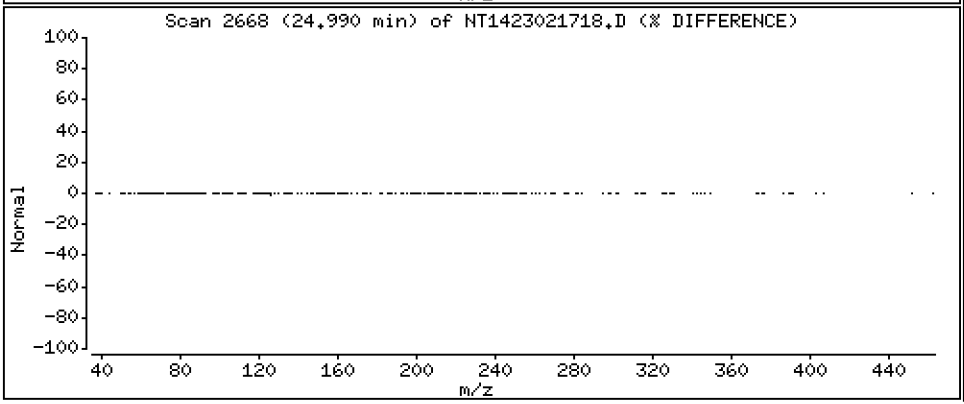
Column phase: ZB-5msi Column diameter: 0.25

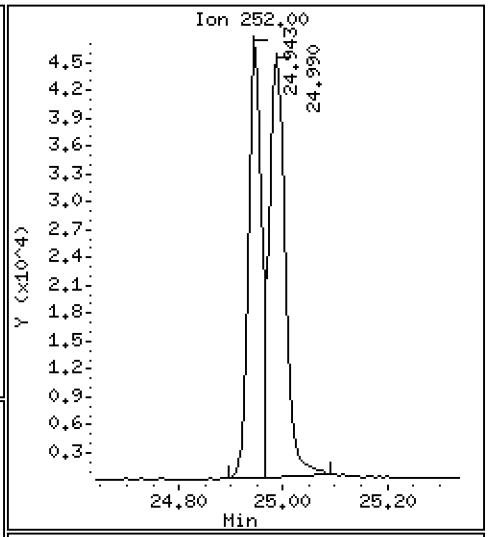
75 Benzo(k)fluoranthene Concentration: 0.4688 ug/mL

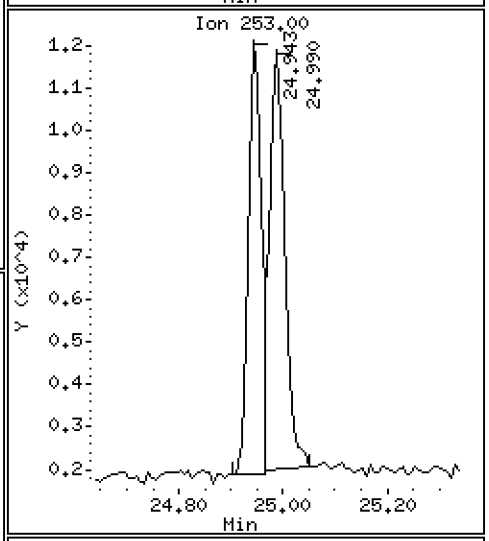


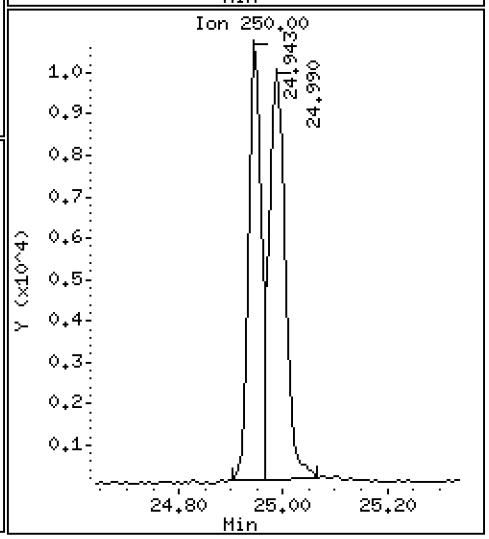












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

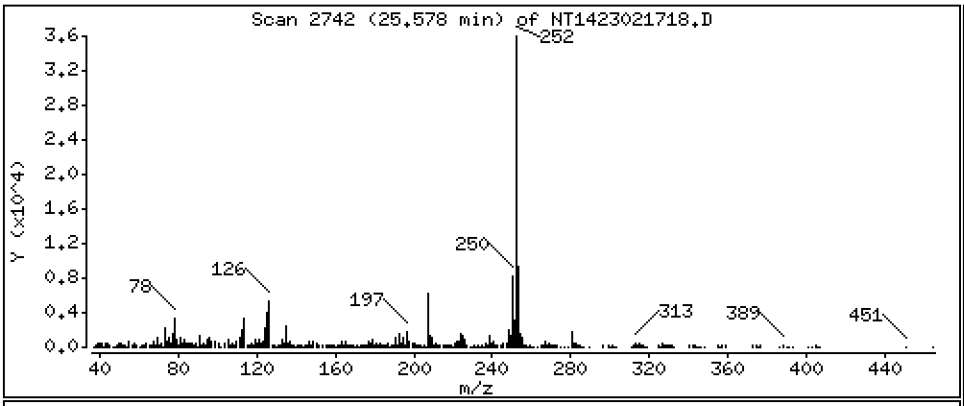
Operator: DSD

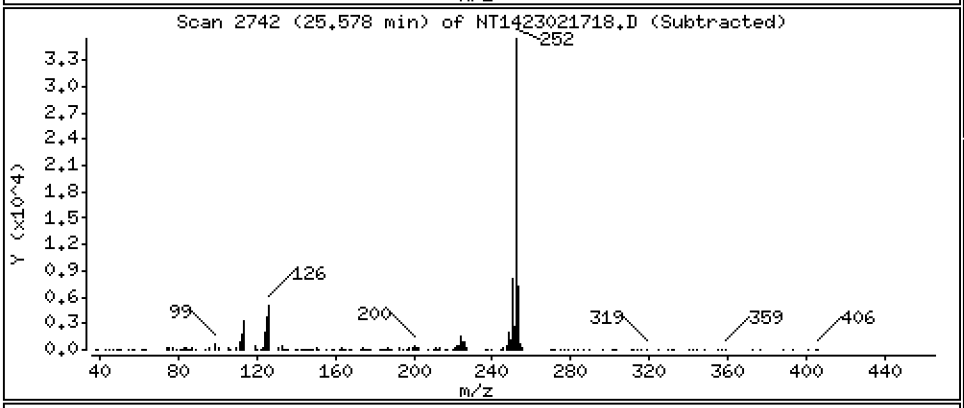
Column phase: ZB-5msi

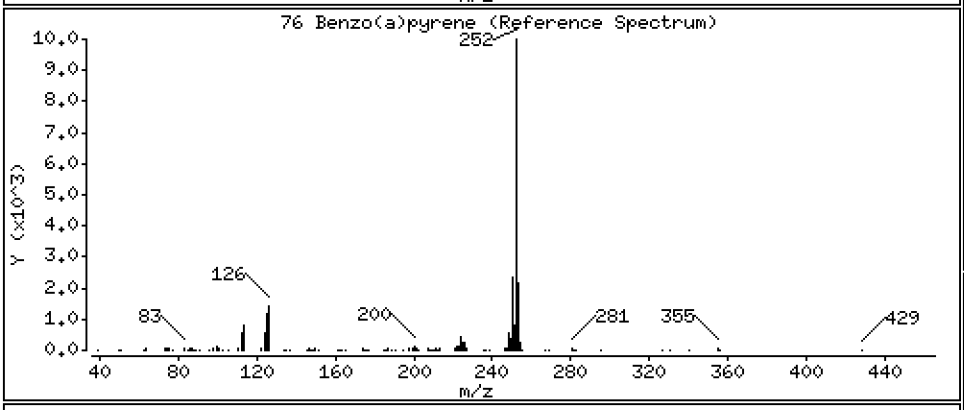
Column diameter: 0.25

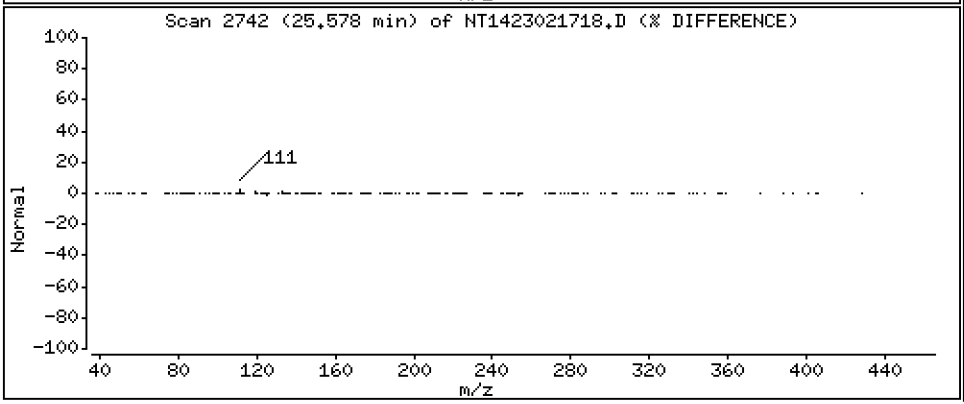
76 Benzo(a)pyrene

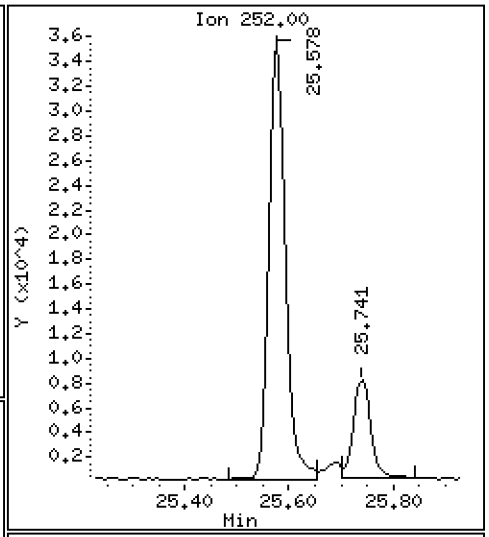
Concentration: 0.4486 ug/mL

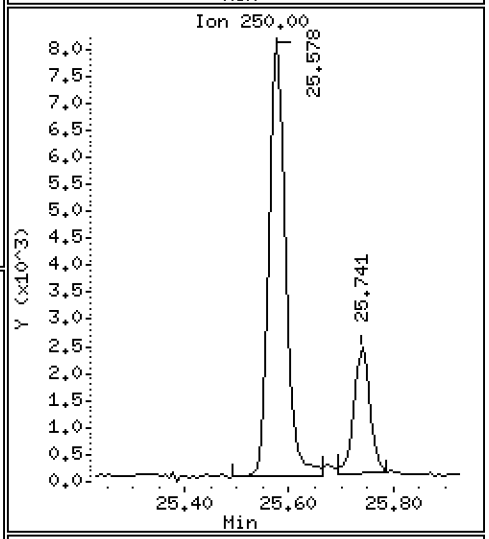


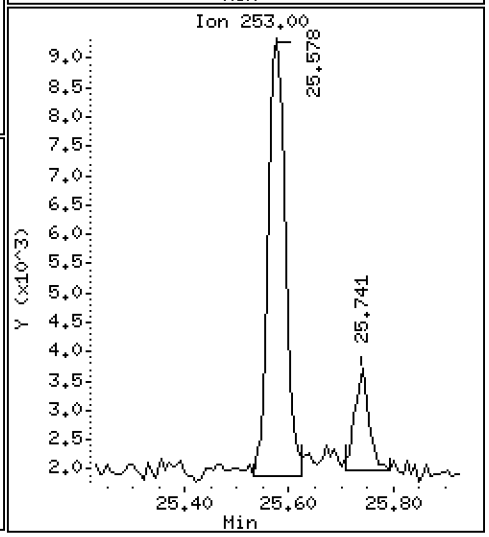












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

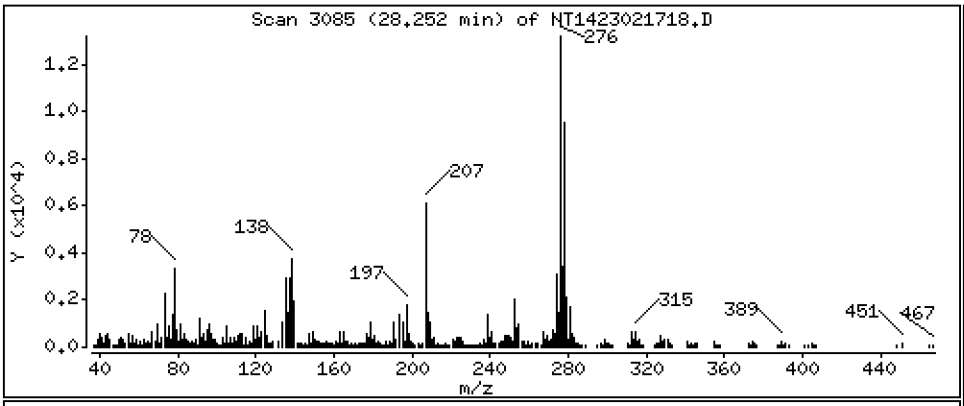
Operator: DSD

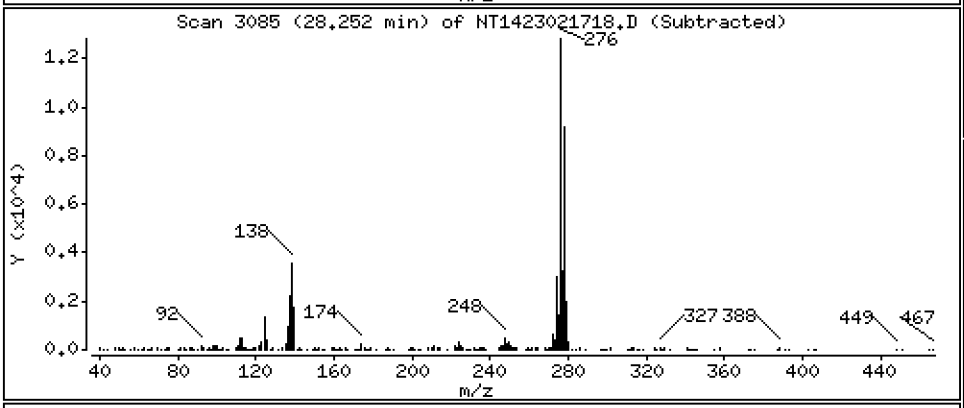
Column phase: ZB-5msi

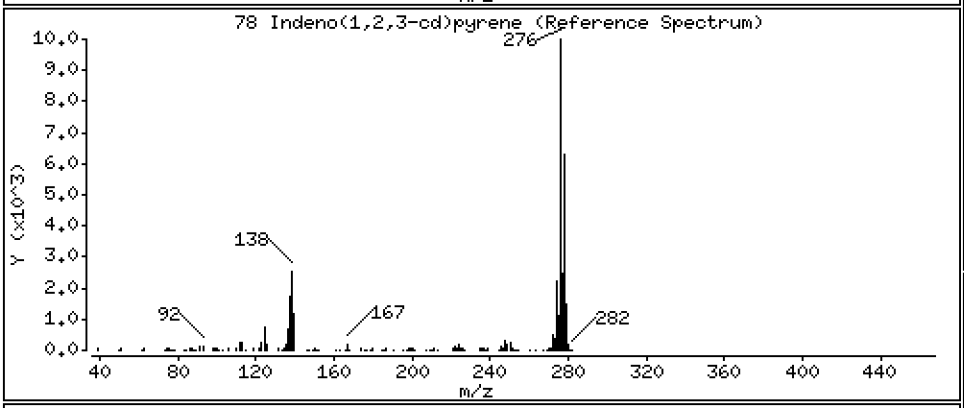
Column diameter: 0.25

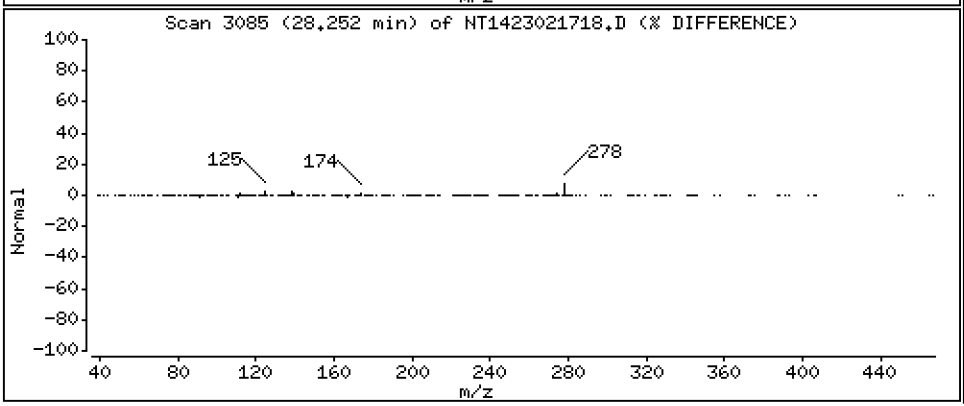
78 Indeno(1,2,3-cd)pyrene

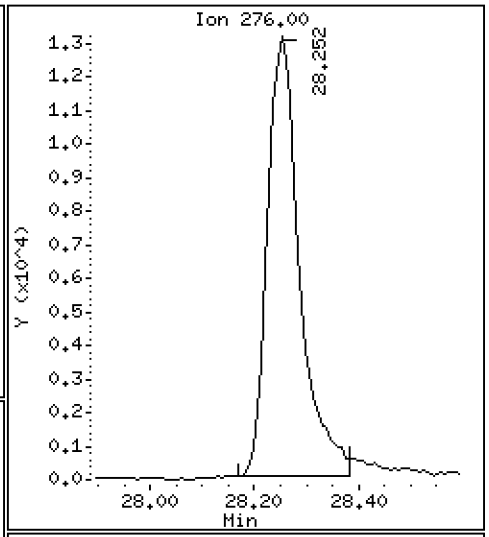
Concentration: 0.3727 ug/mL

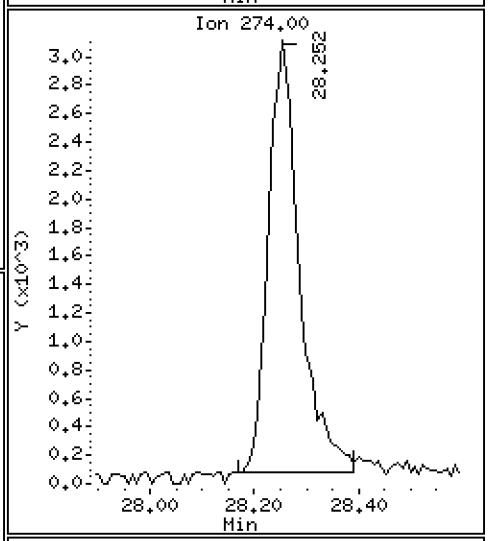


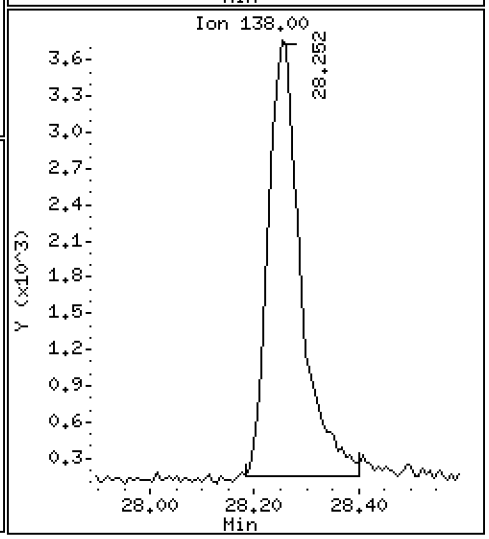












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

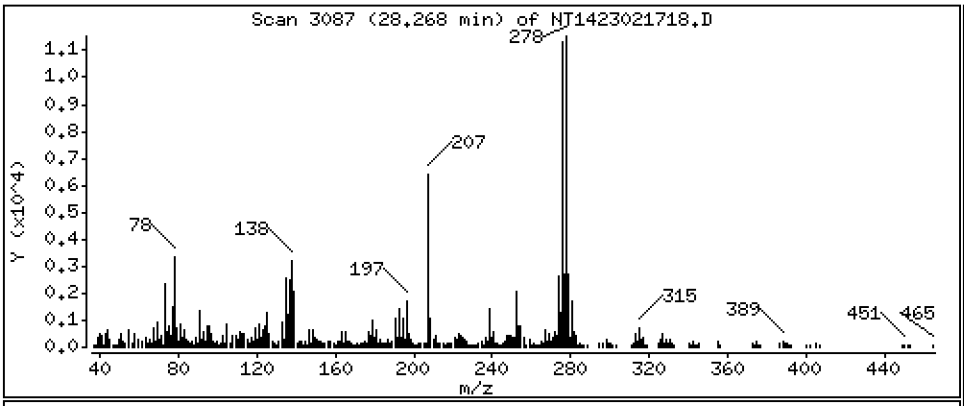
Operator: DSD

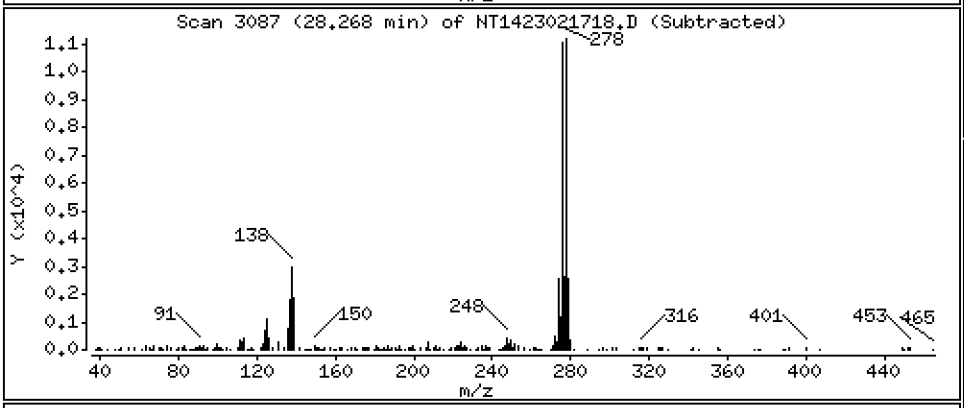
Column phase: ZB-5msi

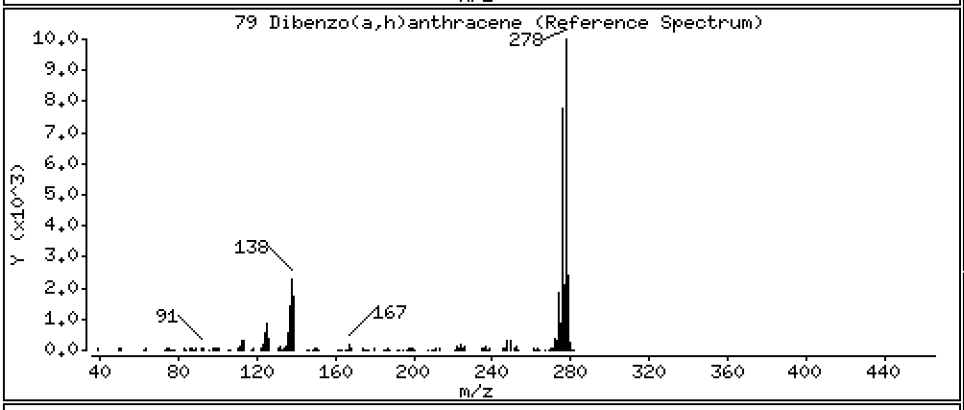
Column diameter: 0.25

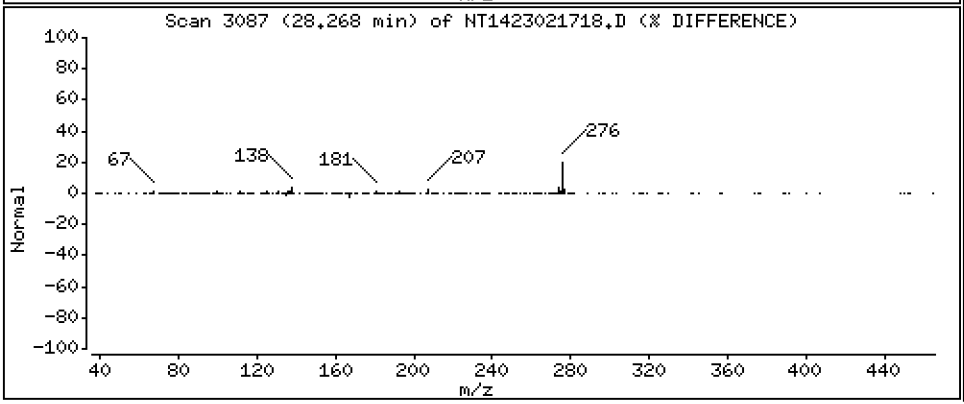
79 Dibenzo(a,h)anthracene

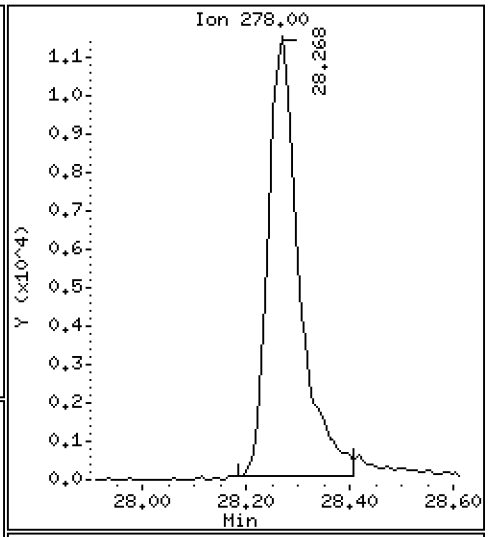
Concentration: 0.3824 ug/mL

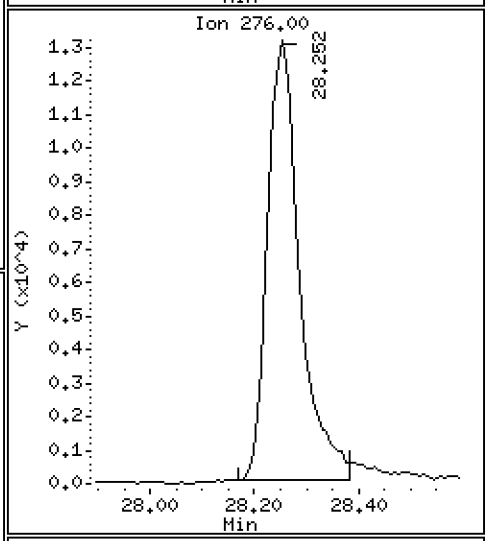


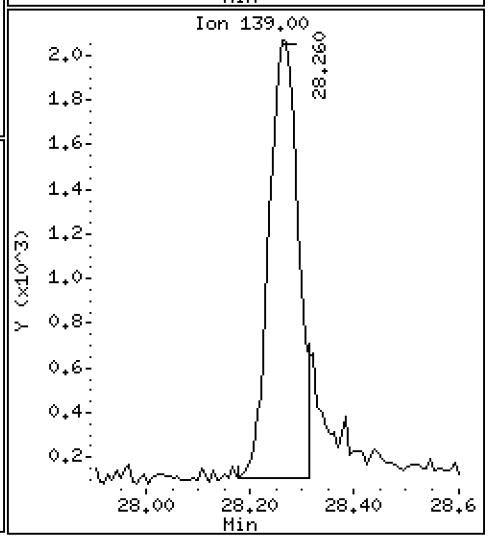












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021718.D

Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

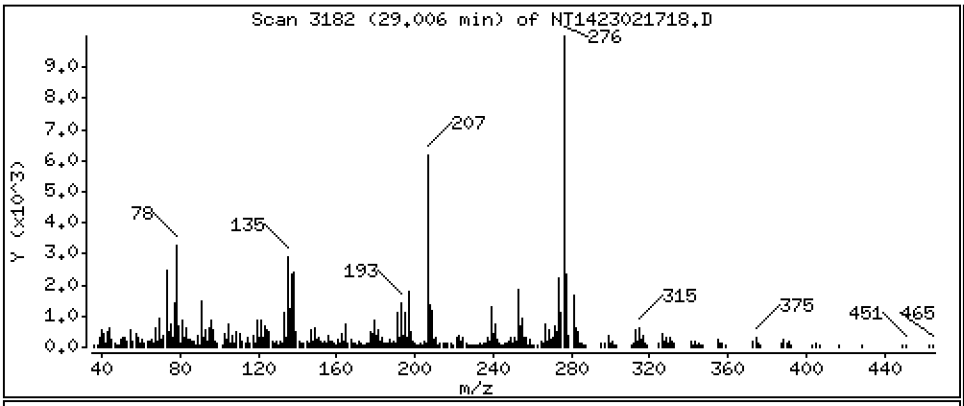
Operator: DSD

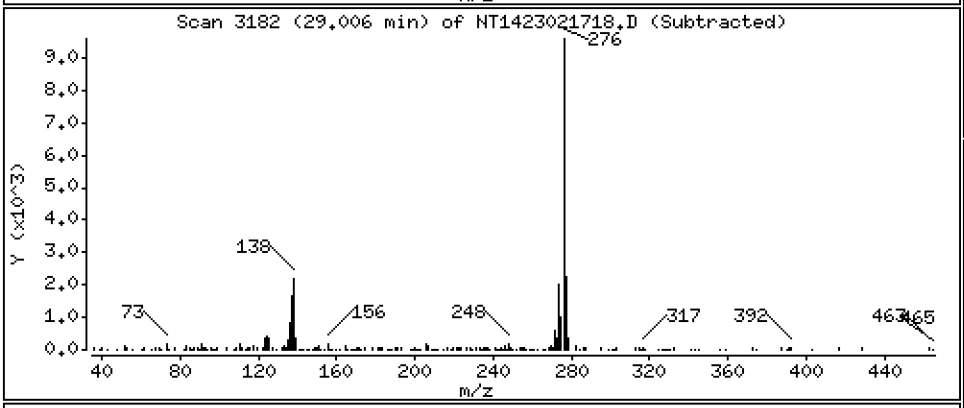
Column phase: ZB-5msi

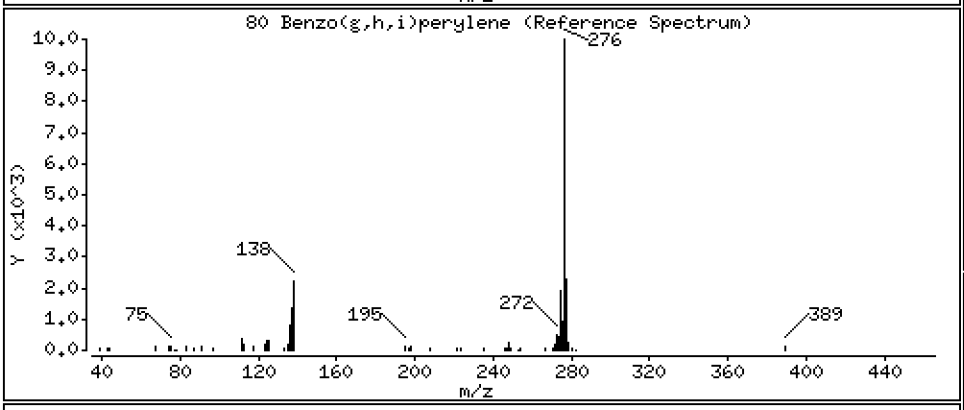
Column diameter: 0.25

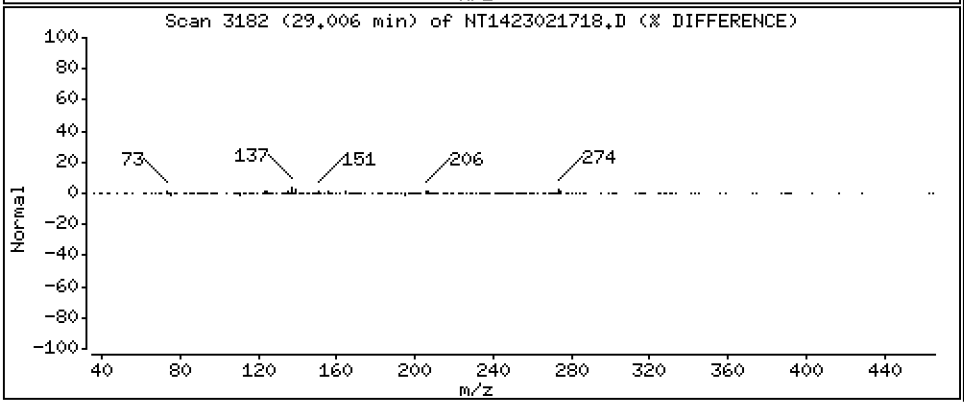
80 Benzo(g,h,i)perylene

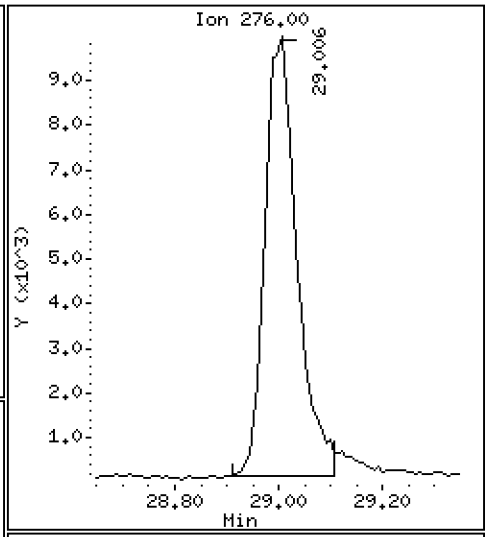
Concentration: 0.3401 ug/mL

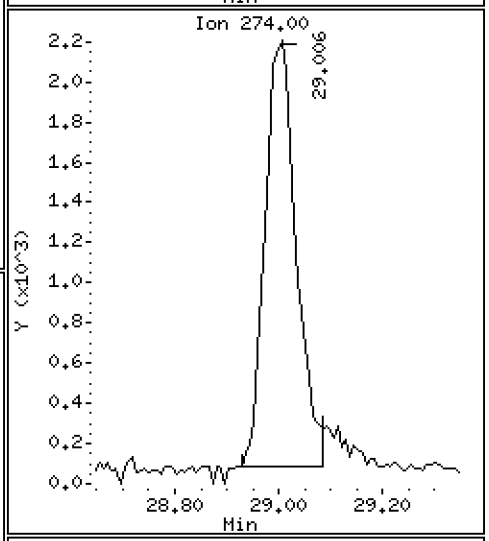


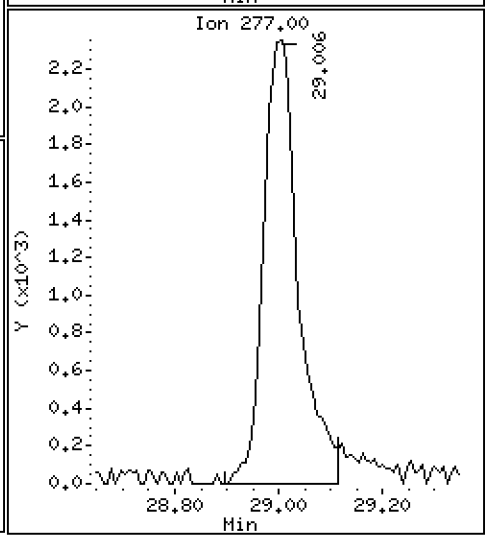












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

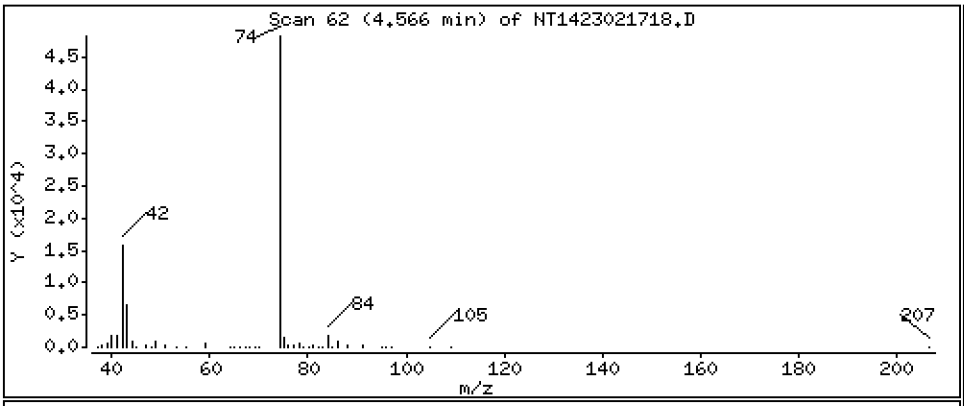
Operator: DSD

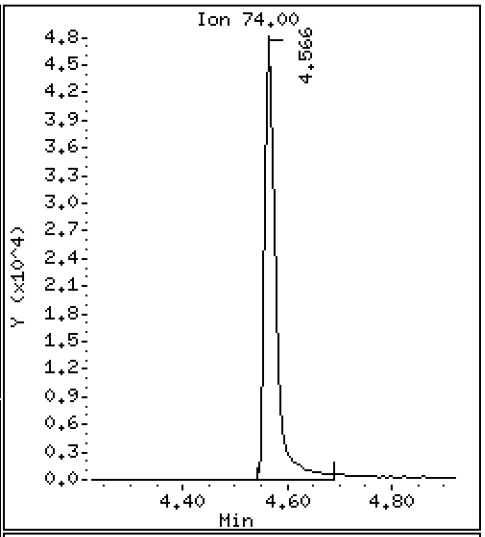
Column phase: ZB-5msi

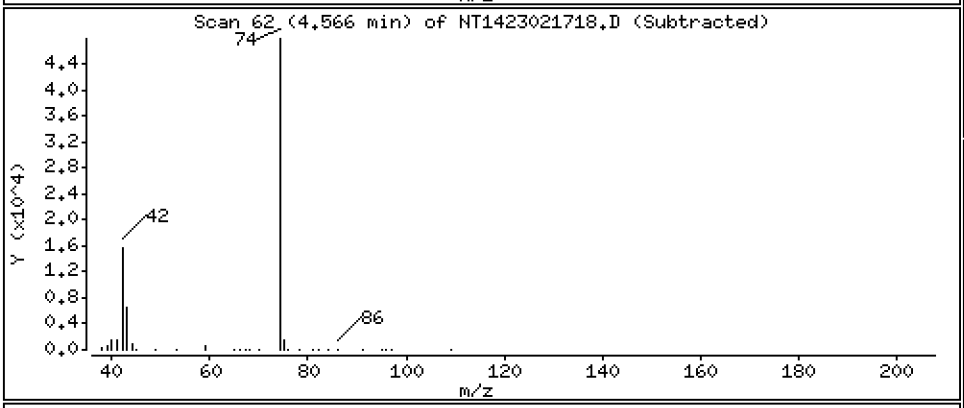
Column diameter: 0.25

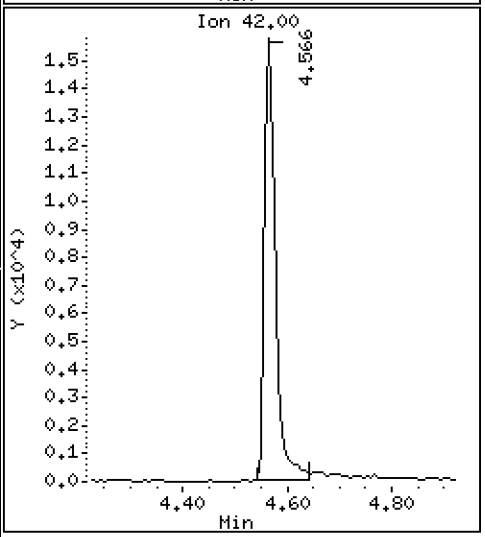
90 N-Nitrosodimethylamine

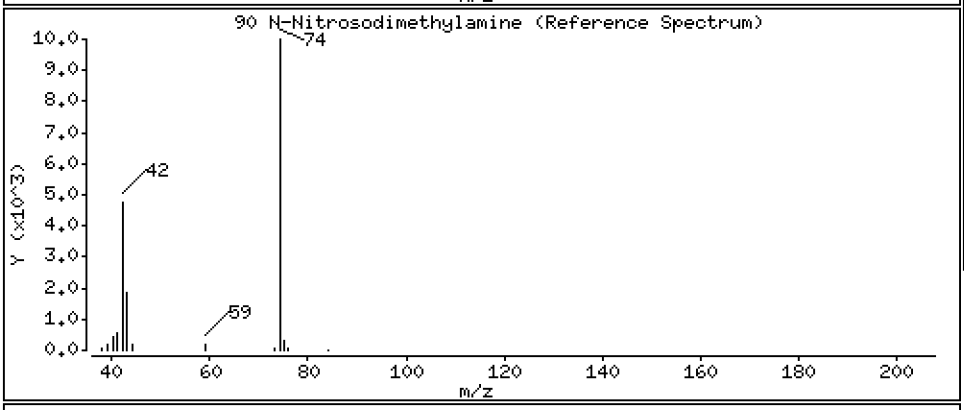
Concentration: 0.8693 ug/mL

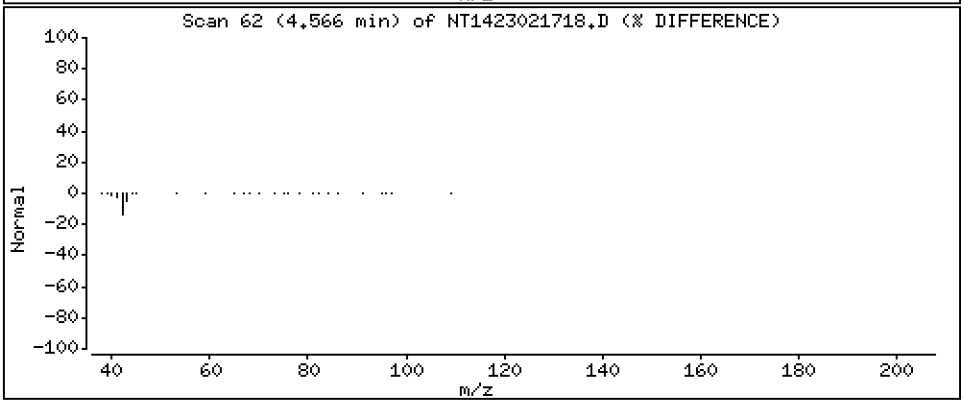












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021718.D

Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

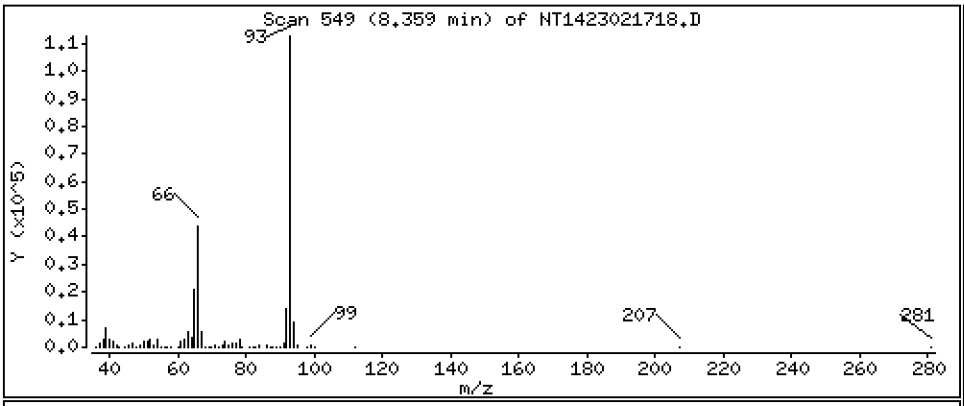
Operator: DSD

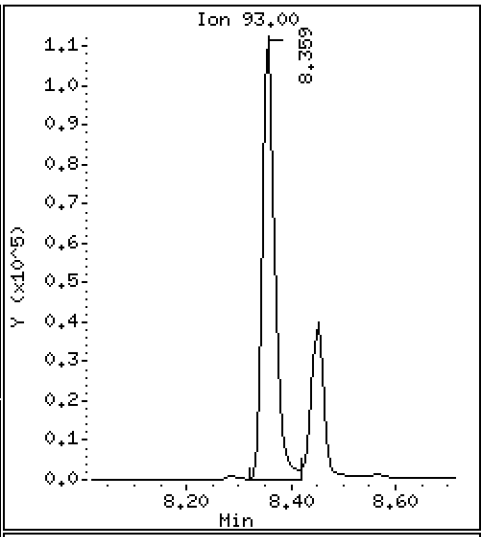
Column phase: ZB-5msi

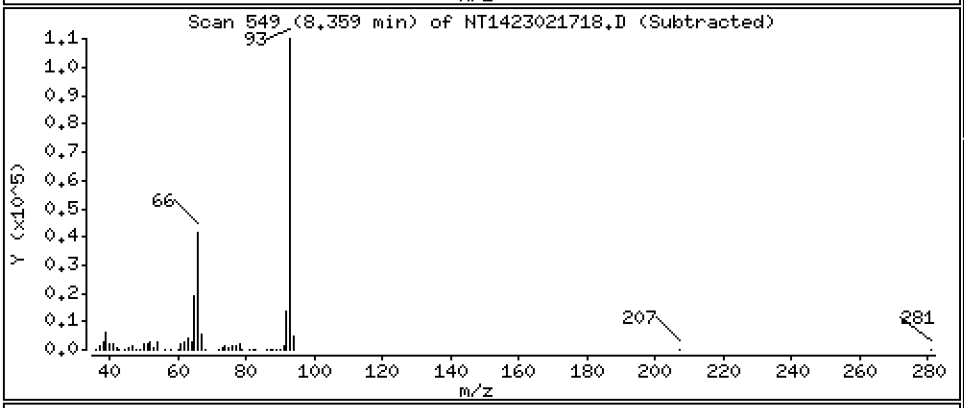
Column diameter: 0.25

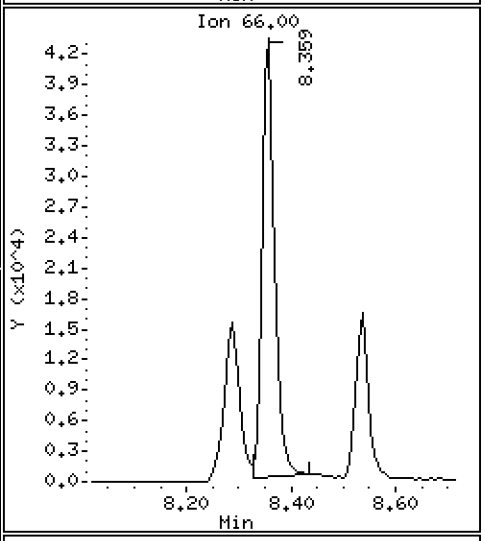
91 Aniline

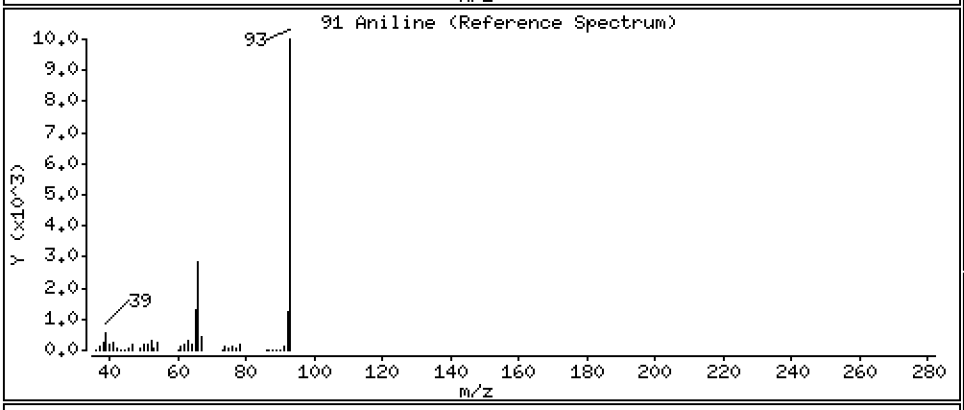
Concentration: 1.020 ug/mL

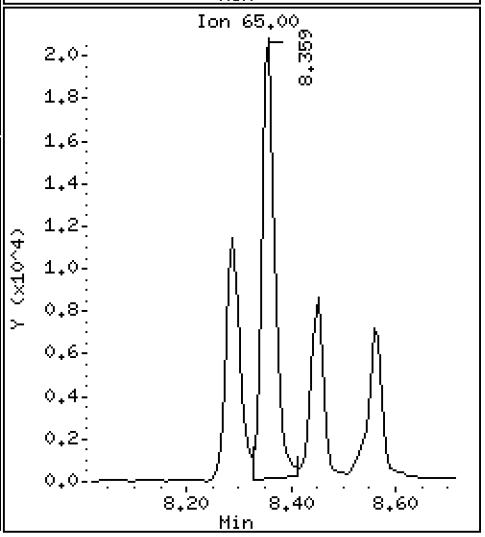


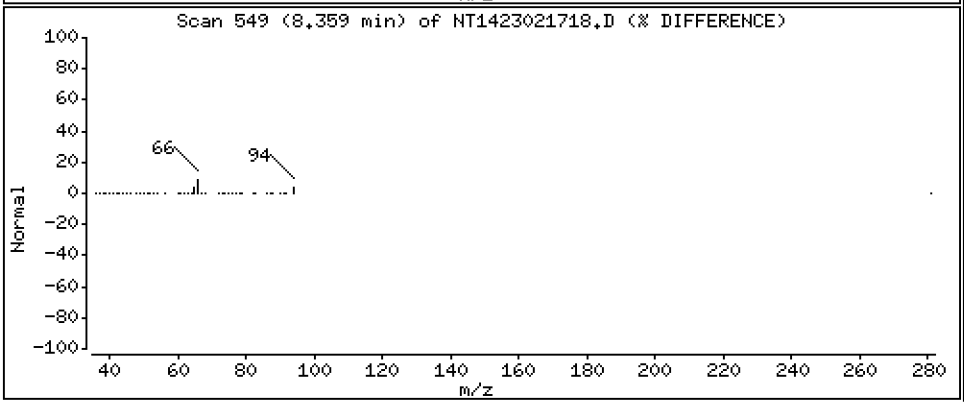












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021718.D

Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

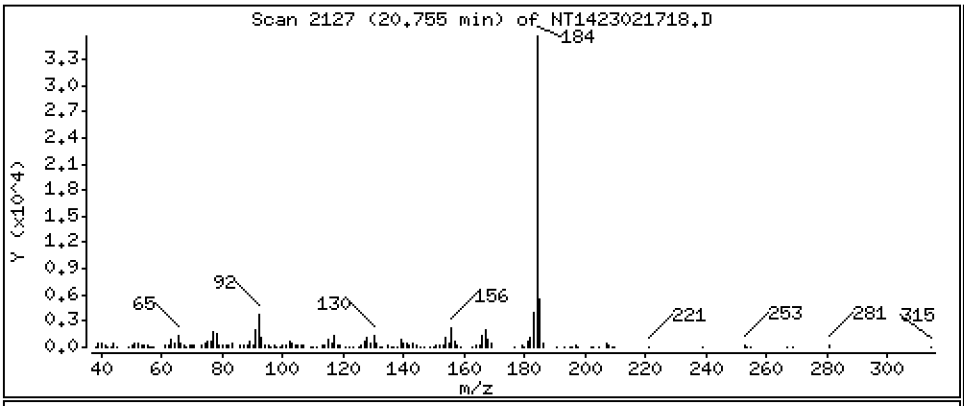
Operator: DSD

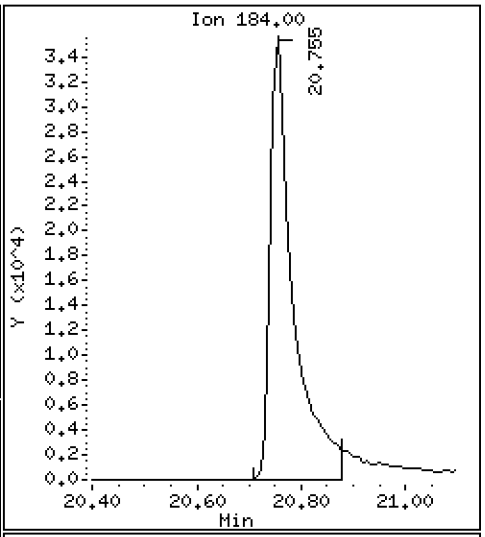
Column phase: ZB-5msi

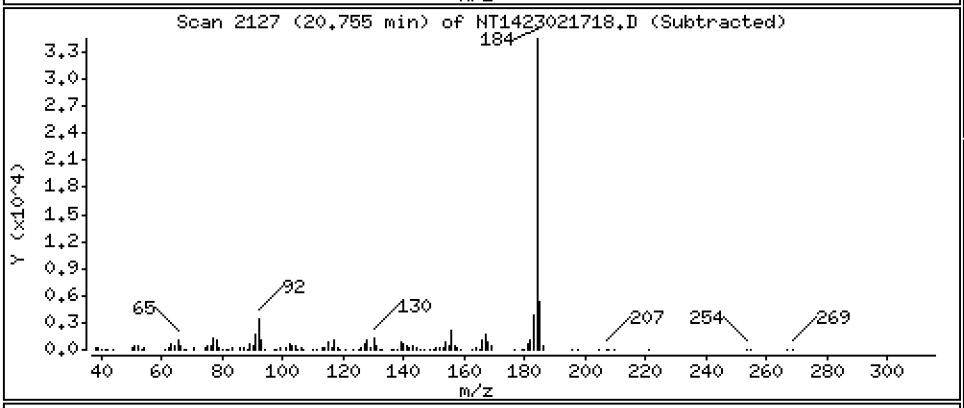
Column diameter: 0.25

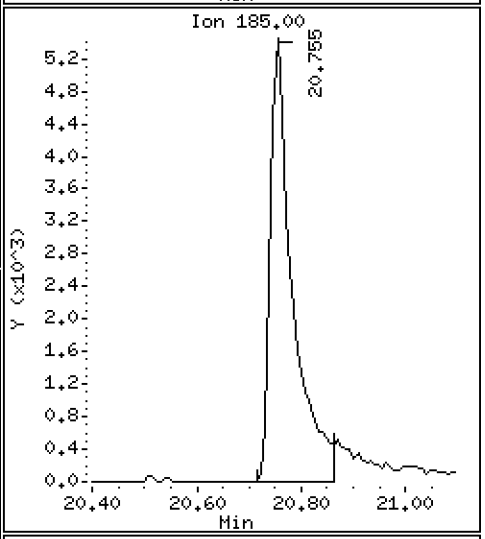
93 Benzidine

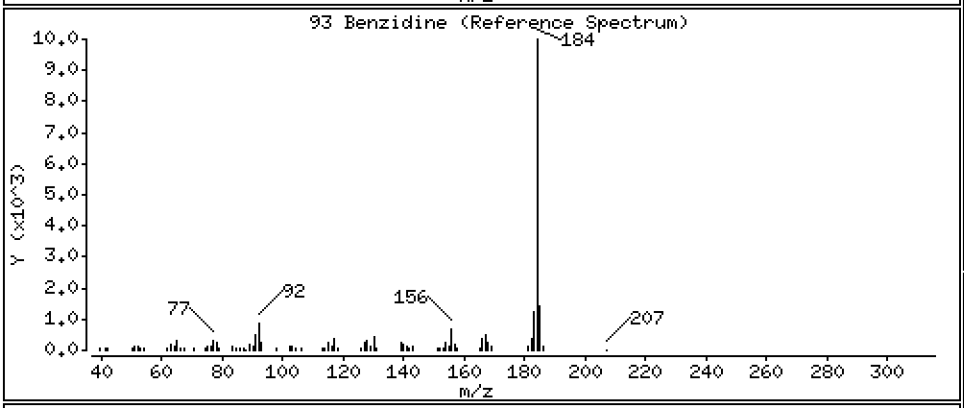
Concentration: 1.079 ug/mL

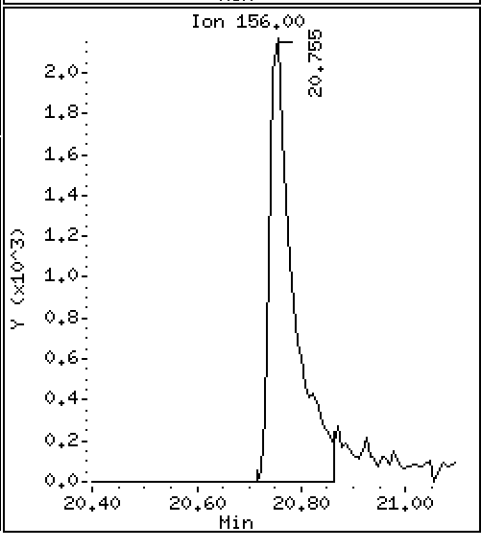


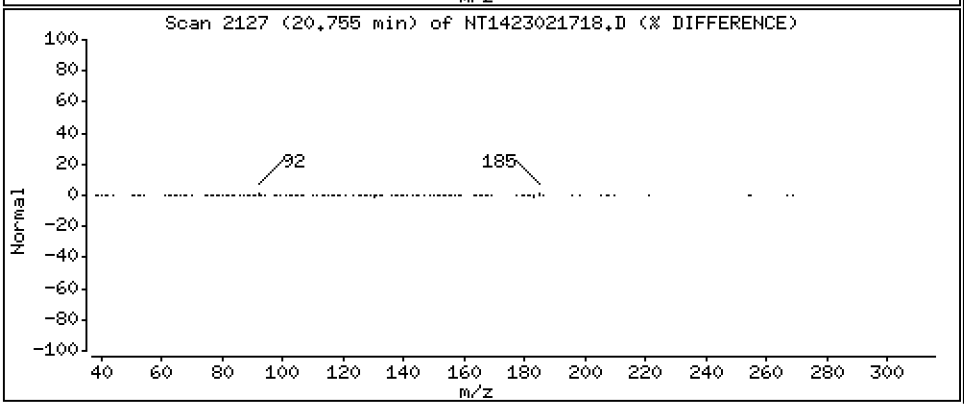












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021718.D

Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

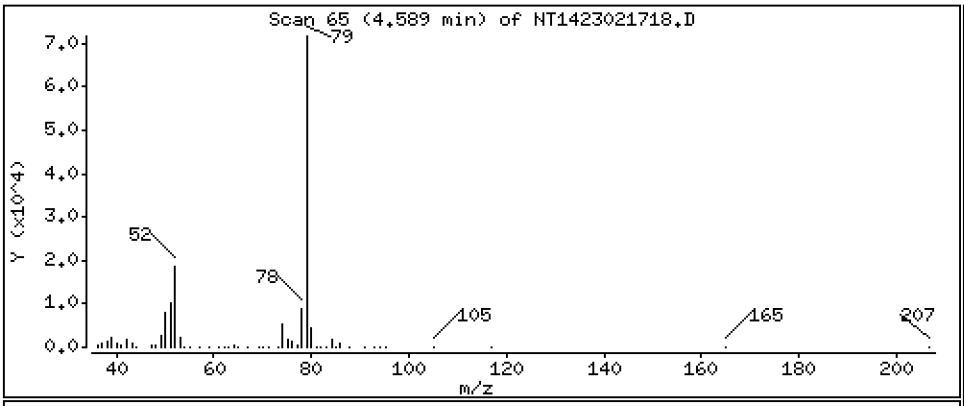
Operator: DSD

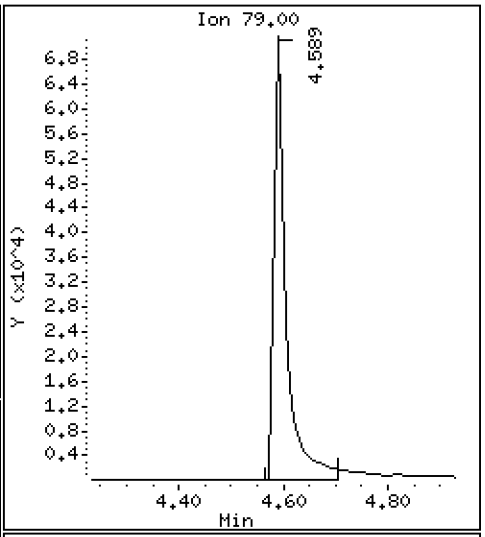
Column phase: ZB-5msi

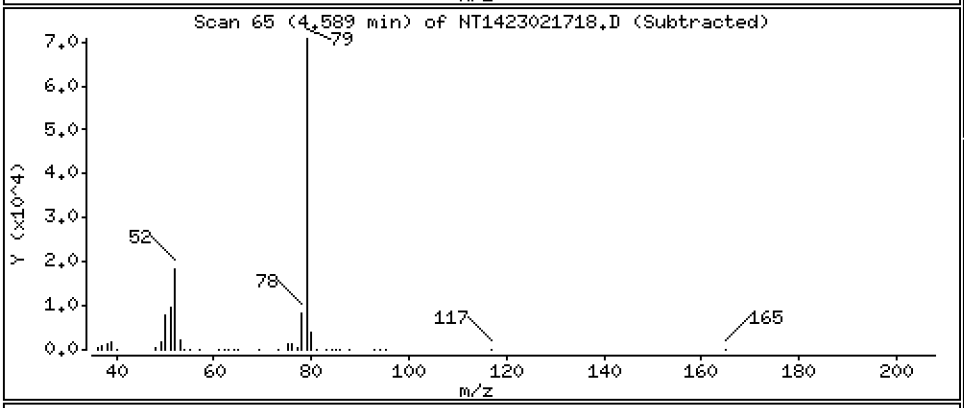
Column diameter: 0.25

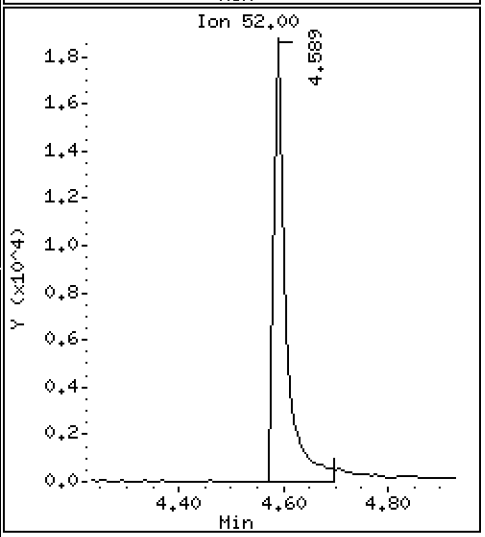
103 Pyridine

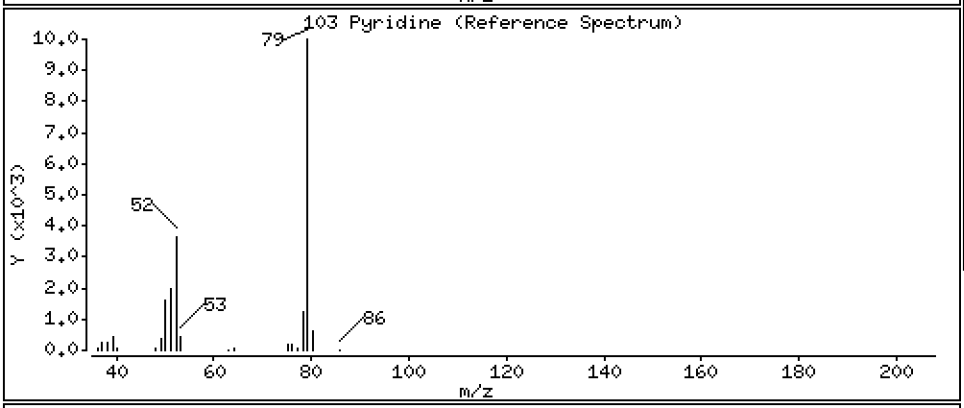
Concentration: 0.8809 ug/mL

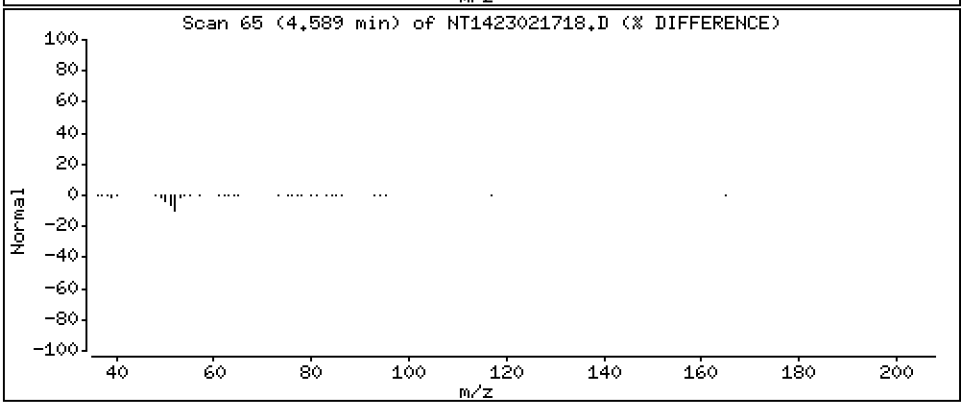












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021718.D

Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

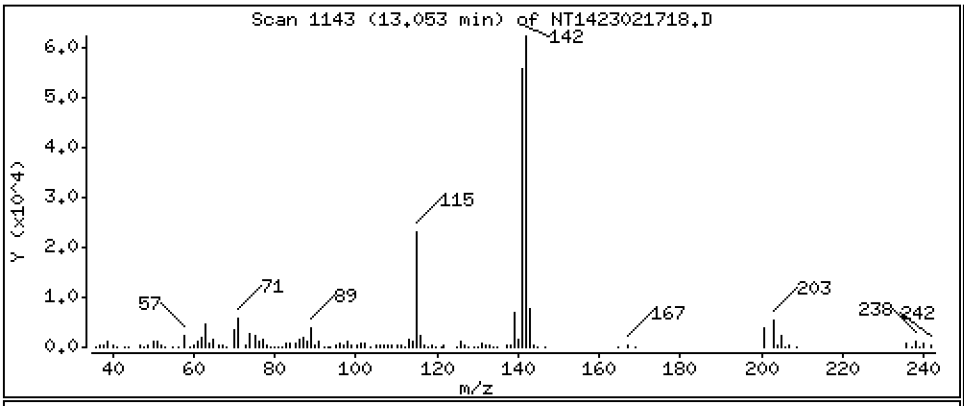
Operator: DSD

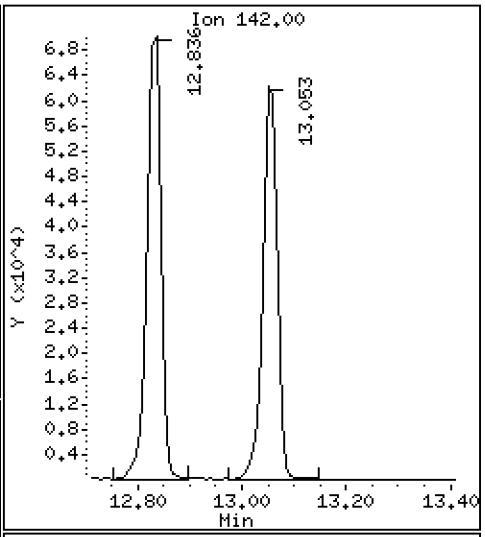
Column phase: ZB-5msi

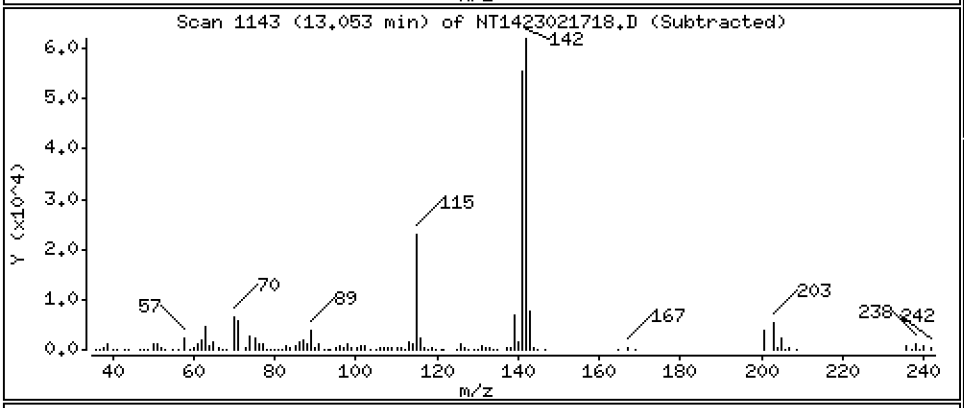
Column diameter: 0.25

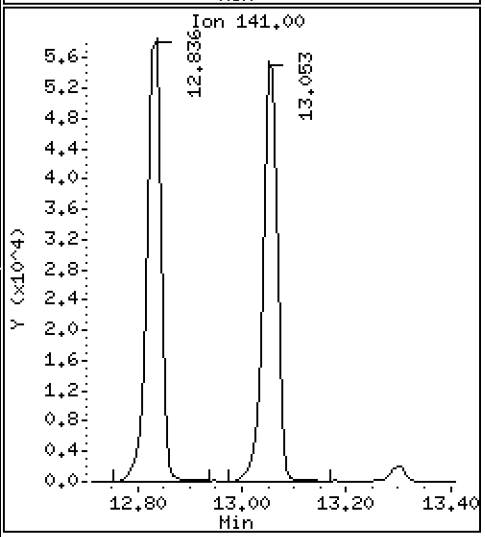
105 1-methylnaphthalene

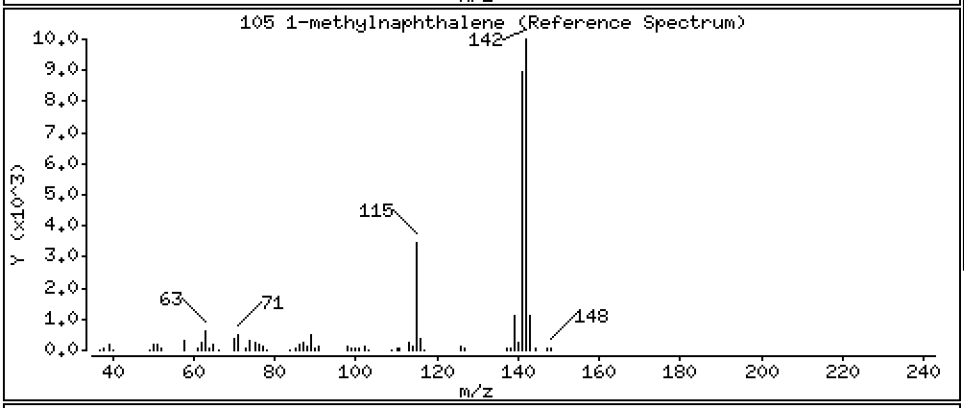
Concentration: 0.4816 ug/mL

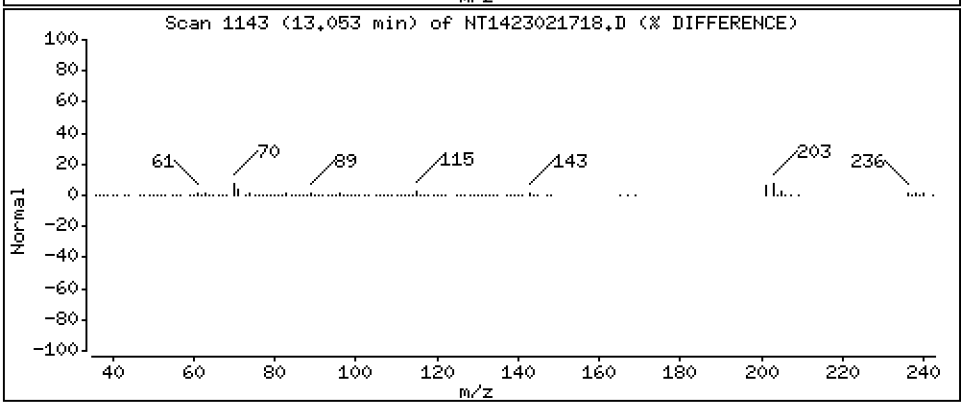












Data File: \\target\share\chem3\nt14.i\20230217A.b\NT1423021718.D

Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

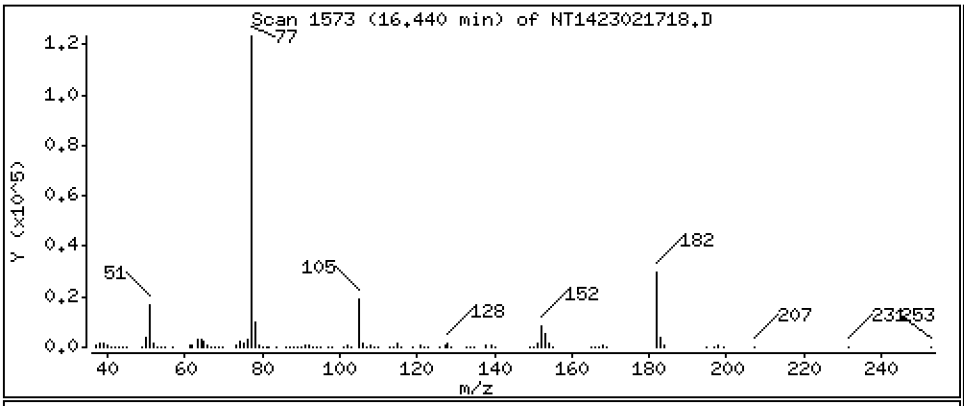
Operator: DSD

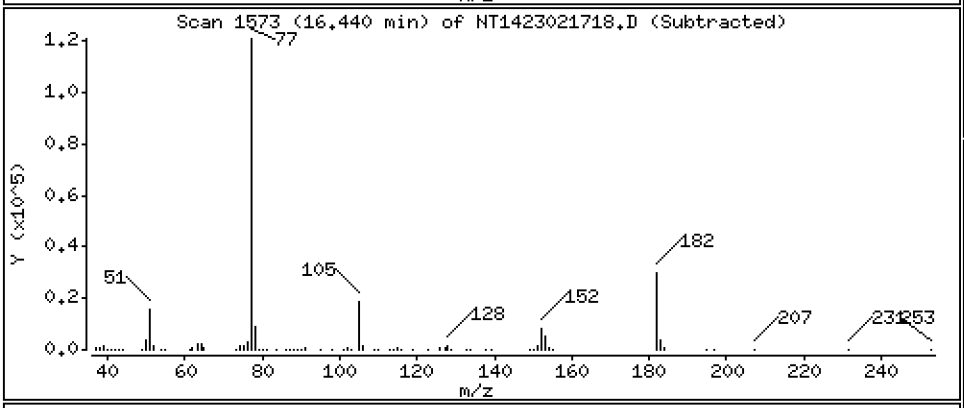
Column phase: ZB-5msi

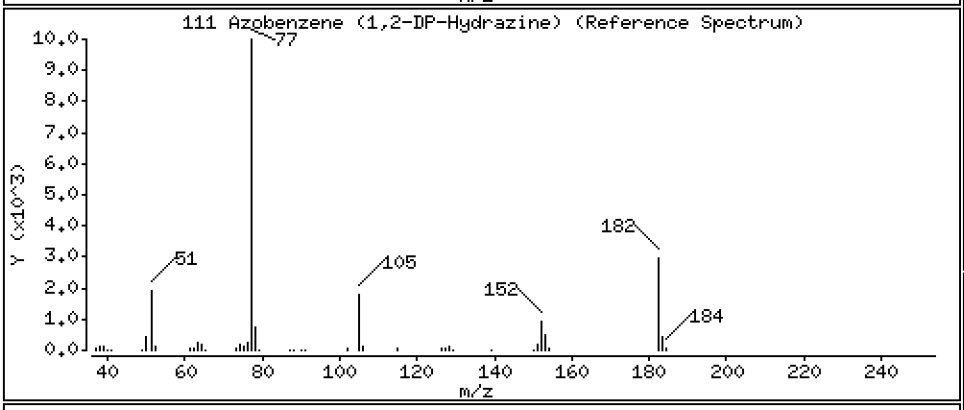
Column diameter: 0.25

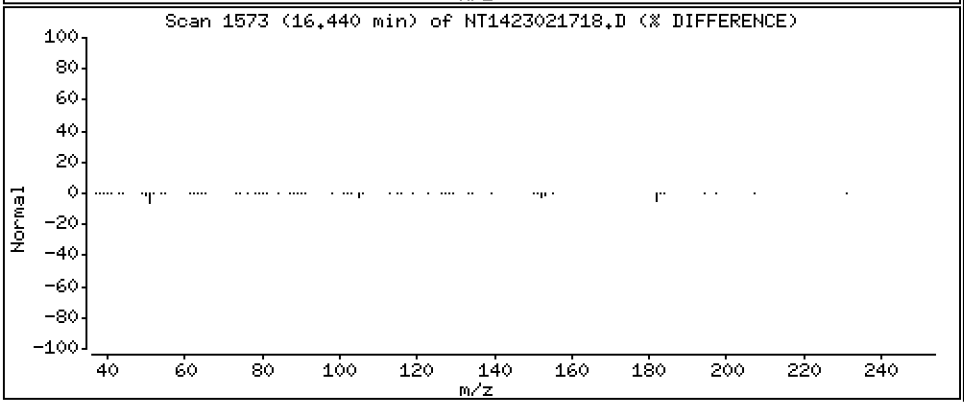
111 Azobenzene (1,2-DP-Hydrazine)

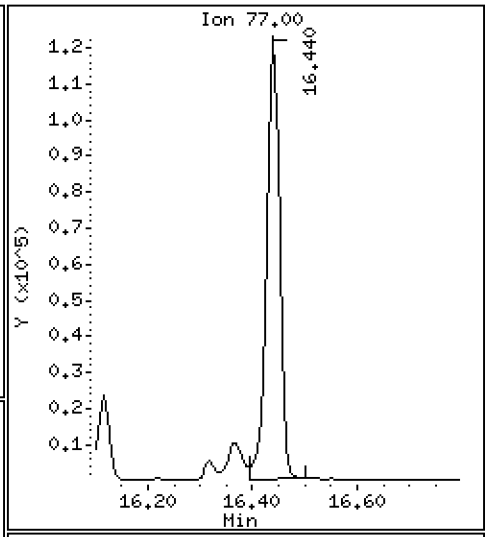
Concentration: 0.4848 ug/mL

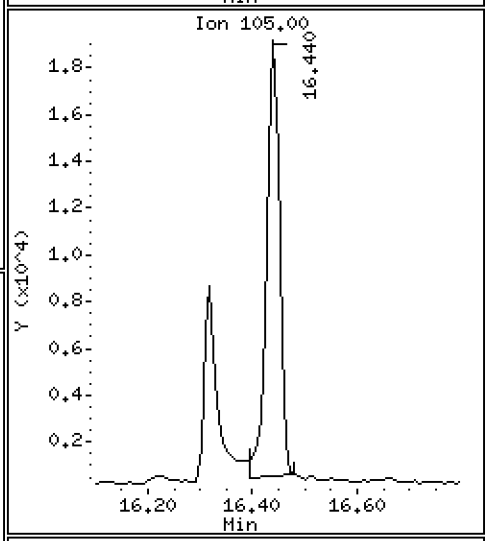


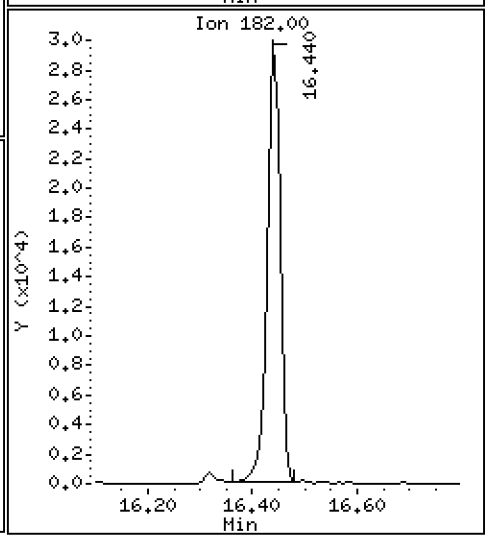












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

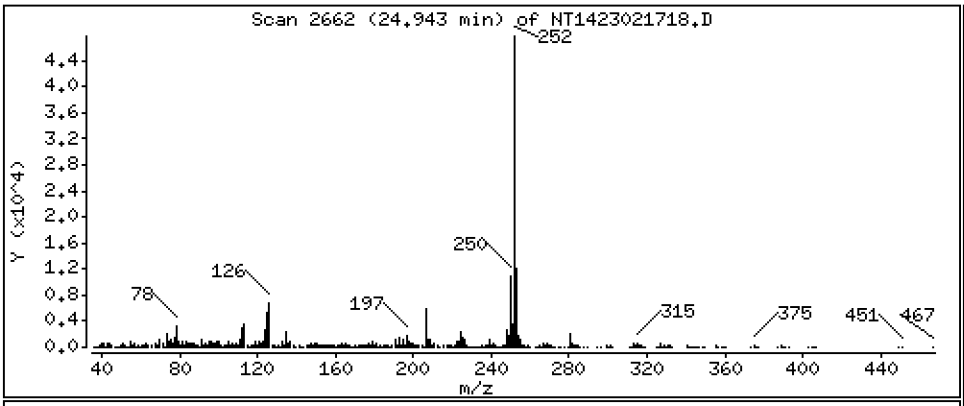
Operator: DSD

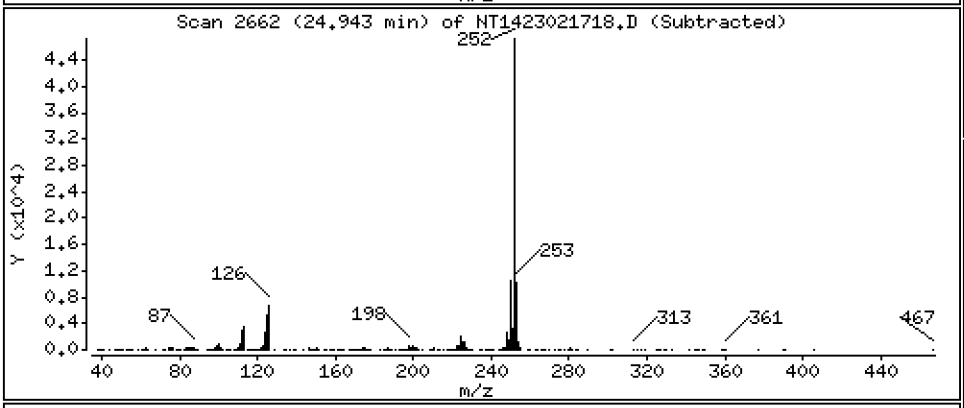
Column phase: ZB-5msi

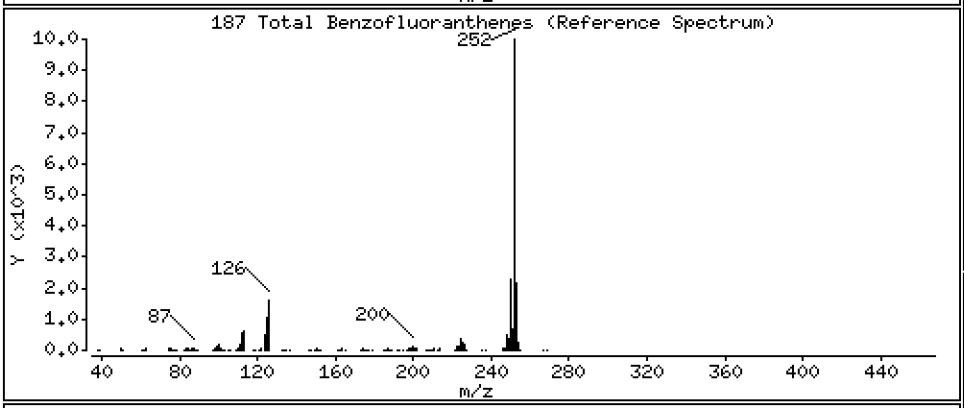
Column diameter: 0.25

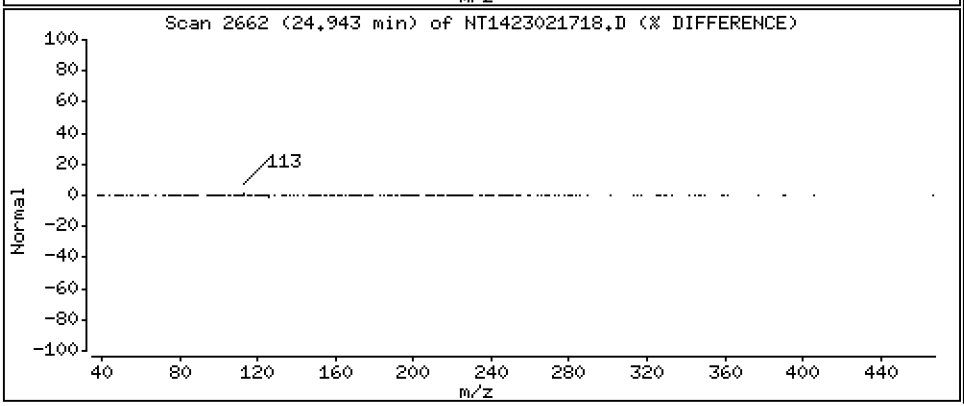
187 Total Benzofluoranthenes

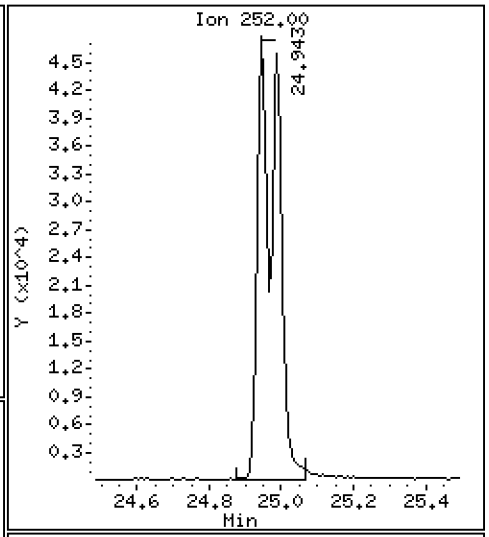
Concentration: 0.9367 ug/mL

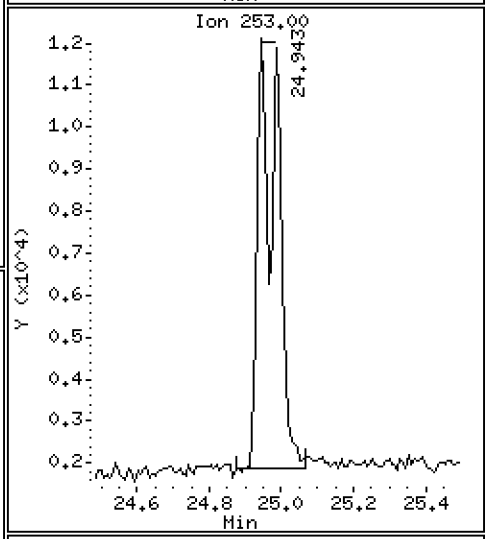


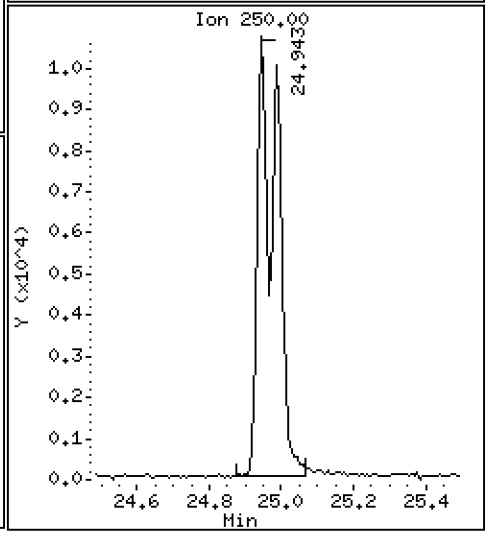












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Date : 17-FEB-2023 20:55

Client ID:

Instrument: nt14.i

Sample Info: SLB0251-LCV1

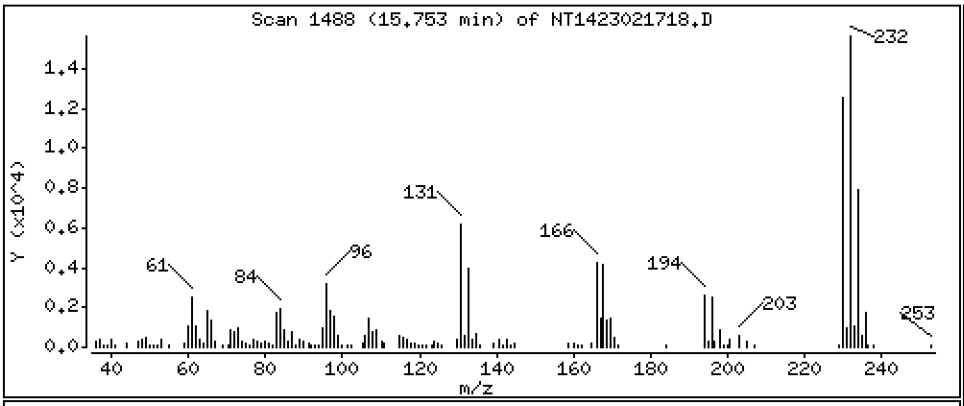
Operator: DSD

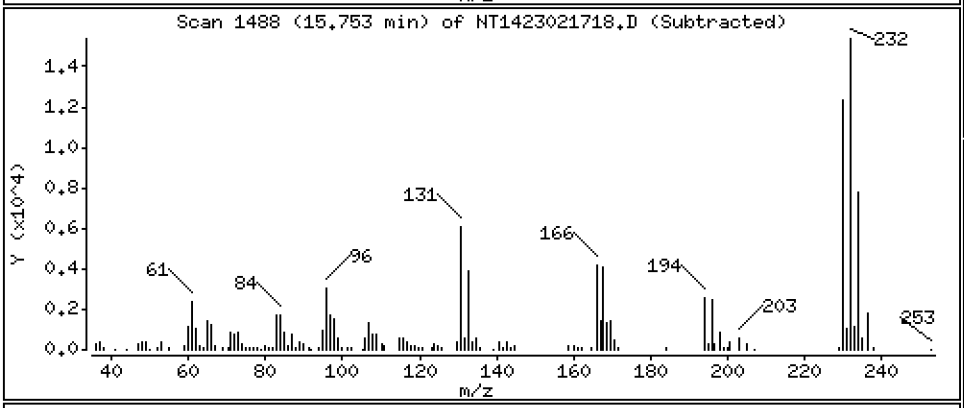
Column phase: ZB-5msi

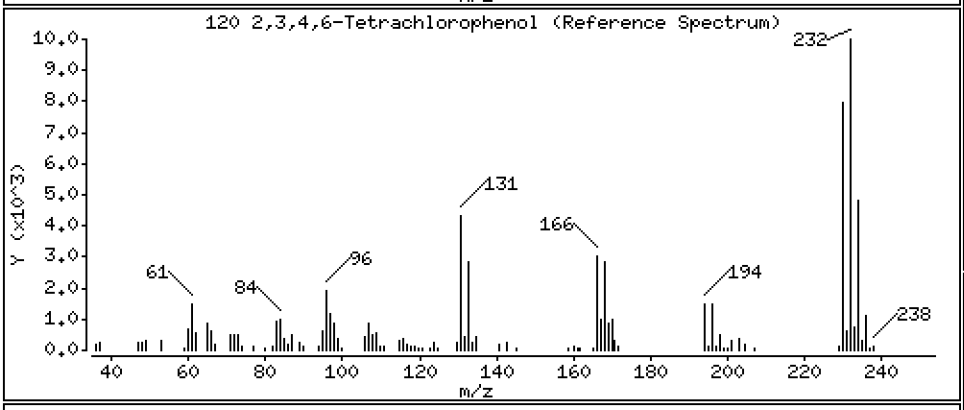
Column diameter: 0.25

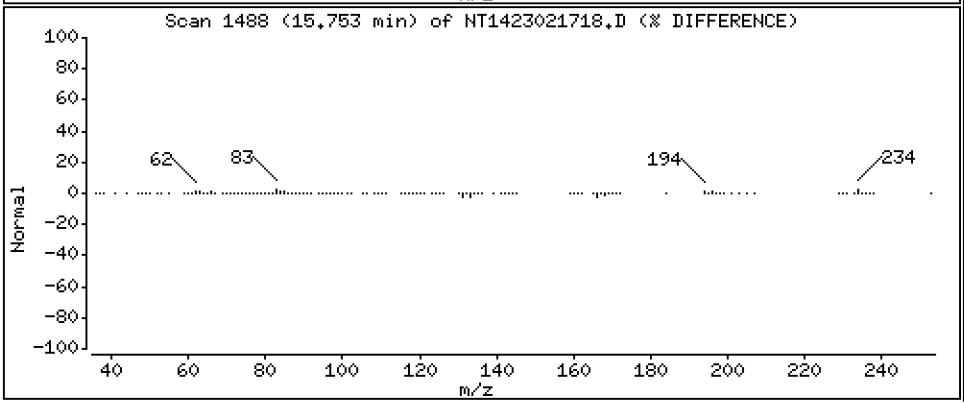
120 2,3,4,6-Tetrachlorophenol

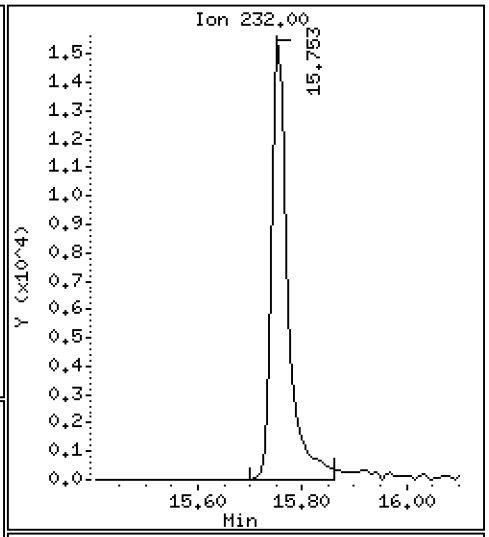
Concentration: 0.3434 ug/mL

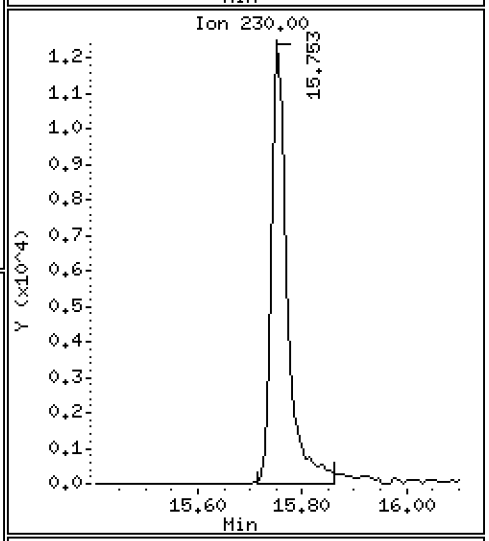


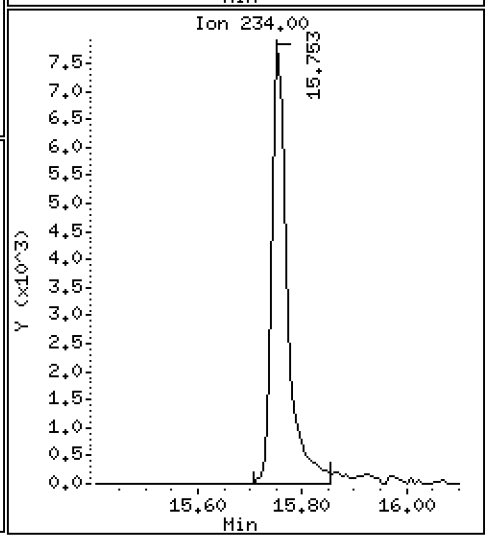












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

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Lab Smp Id: SLB0251-LCV1
Inj Date : 17-FEB-2023 20:55 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0251-LCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230217A.b\ABN.m
Meth Date : 01-Mar-2023 13:20 van Quant Type: ISTD
Cal Date : 16-FEB-2023 19:30 Cal File: NT1423021610.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.681	6.674	(0.751)	69554	0.69199	0.6920
$	2 Phenol-d5	99	8.266	8.273	(0.929)	110983	0.69604	0.6960
	3 Phenol	94	8.289	8.296	(0.931)	76464	0.45299	0.4530
$	5 2-Chlorophenol-d4	132	8.536	8.536	(0.959)	85434	0.75093	0.7509
	4 Bis(2-Chloroethyl)ether	93	8.451	8.459	(0.950)	59857	0.46421	0.4642
	6 2-Chlorophenol	128	8.567	8.567	(0.963)	57070	0.48010	0.4801
	7 1,3-Dichlorobenzene	146	8.838	8.838	(0.993)	64692	0.48886	0.4889
*	8 1,4-Dichlorobenzene-d4	152	8.900	8.900	(1.000)	375988	4.00000	
	9 1,4-Dichlorobenzene	146	8.931	8.931	(1.003)	59956	0.47740	0.4774
$	10 1,2-Dichlorobenzene-d4	152	9.257	9.264	(1.040)	41698	0.48896	0.4890
	12 1,2-Dichlorobenzene	146	9.288	9.288	(1.044)	60947	0.48543	0.4854
	11 Benzyl alcohol	108	9.187	9.179	(1.032)	34504	0.36394	0.3639
	14 2,2'-oxybis(1-Chloropropane)	121	9.482	9.482	(1.065)	17488	0.48689	0.4869(M)
	13 2-Methylphenol	108	9.404	9.404	(1.057)	59868	0.50793	0.5079
	17 Hexachloroethane	117	9.878	9.878	(1.110)	25060	0.45898	0.4590
	16 N-Nitroso-di-n-propylamine	70	9.738	9.746	(1.094)	49628	0.46255	0.4625
	15 4-Methylphenol	108	9.676	9.676	(1.087)	57093	0.45873	0.4587
$	18 Nitrobenzene-d5	82	10.002	10.002	(0.878)	76550	0.47949	0.4795
	19 Nitrobenzene	77	10.033	10.040	(0.881)	72386	0.45182	0.4518
	20 Isophorone	82	10.483	10.491	(0.920)	97068	0.45922	0.4592
	21 2-Nitrophenol	139	10.669	10.669	(0.937)	23914	0.33365	0.3336
	22 2,4-Dimethylphenol	107	10.723	10.723	(0.942)	121418	1.00363	1.004
	23 Bis(2-Chloroethoxy)methane	93	10.925	10.925	(0.959)	64318	0.46776	0.4678
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	11.127	11.126	(0.977)	101557	0.98085	0.9808
	26 1,2,4-Trichlorobenzene	180	11.304	11.312	(0.993)	60622	0.48334	0.4833
*	27 Naphthalene-d8	136	11.389	11.397	(1.000)	1381913	4.00000	
	28 Naphthalene	128	11.428	11.436	(1.003)	163470	0.47976	0.4798
	29 4-Chloroaniline	127	11.575	11.574	(1.016)	133678	0.91829	0.9183
	30 Hexachlorobutadiene	225	11.799	11.799	(1.036)	36015	0.46580	0.4658
	31 4-Chloro-3-methylphenol	107	12.534	12.542	(1.100)	104244	0.93017	0.9302
	32 2-Methylnaphthalene	142	12.836	12.836	(1.127)	125298	0.49099	0.4910
	33 Hexachlorocyclopentadiene	237	13.300	13.300	(0.886)	33858	0.42132	0.4213

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
34	2,4,6-Trichlorophenol	196	13.463	13.462	(0.896)	73275	0.89691	0.8969
35	2,4,5-Trichlorophenol	196	13.532	13.532	(0.901)	78843	0.89112	0.8911
$ 36	2-Fluorobiphenyl	172	13.625	13.625	(0.907)	149813	0.50481	0.5048
37	2-Chloronaphthalene	162	13.826	13.834	(0.921)	117579	0.48540	0.4854
38	2-Nitroaniline	65	14.097	14.105	(0.939)	74250	0.94277	0.9428
39	Dimethylphthalate	163	14.531	14.538	(0.968)	127390	0.50278	0.5028
40	Acenaphthylene	152	14.701	14.709	(0.979)	206120	0.55789	0.5579
41	2,6-Dinitrotoluene	165	14.670	14.678	(0.977)	59901	1.00472	1.005
* 42	Acenaphthene-d10	164	15.018	15.018	(1.000)	829496	4.00000	
43	3-Nitroaniline	138	14.956	14.964	(0.996)	57184	0.90365	0.9036
44	Acenaphthene	153	15.080	15.088	(1.004)	106204	0.48012	0.4801
45	2,4-Dinitrophenol	184	15.211	15.173	(1.013)	277	0.00711	0.007110
46	Dibenzofuran	168	15.405	15.412	(1.026)	176201	0.48516	0.4852
47	4-Nitrophenol	109	15.289	15.281	(1.018)	12638	0.34483	0.3448
48	2,4-Dinitrotoluene	165	15.474	15.482	(1.030)	76431	0.90671	0.9067
50	Diethylphthalate	149	15.984	16.000	(1.064)	169645	0.50364	0.5036
49	Fluorene	166	16.124	16.131	(1.074)	188728	0.49692	0.4969
51	4-Chlorophenyl-phenylether	204	16.116	16.123	(1.073)	96375	0.47457	0.4746
52	4-Nitroaniline	138	16.224	16.239	(1.080)	66215	0.91201	0.9120
53	4,6-Dinitro-2-methylphenol	198	16.316	16.332	(0.904)	41011	0.69539	0.6954
54	N-Nitrosodiphenylamine	169	16.370	16.378	(0.907)	119665	0.51110	0.5111
$ 55	2,4,6-Tribromophenol	330	16.663	16.663	(1.110)	28319	0.59413	0.5941
56	4-Bromophenyl-phenylether	248	17.126	17.126	(0.949)	50188	0.48127	0.4813
57	Hexachlorobenzene	284	17.435	17.435	(0.966)	50511	0.47668	0.4767
58	Pentachlorophenol	266	17.807	17.799	(0.986)	11531	0.22399	0.2240
* 59	Phenanthrene-d10	188	18.054	18.062	(1.000)	1629266	4.00000	
60	Phenanthrene	178	18.101	18.108	(1.003)	188269	0.48088	0.4809
61	Anthracene	178	18.193	18.201	(1.008)	193108	0.49786	0.4979
62	Carbazole	167	18.534	18.534	(1.027)	161560	0.45899	0.4590
63	Di-n-butylphthalate	149	19.338	19.346	(1.071)	192803	0.49040	0.4904
64	Fluoranthene	202	20.499	20.499	(0.887)	210744	0.56872	0.5687
65	Pyrene	202	20.925	20.924	(0.905)	221001	0.56402	0.5640
$ 66	Terphenyl-d14	244	21.219	21.218	(0.918)	174275	0.62640	0.6264
67	Butylbenzylphthalate	149	22.148	22.148	(0.958)	69205	0.53536	0.5354
68	Benzo(a)anthracene	228	23.092	23.092	(0.999)	134489	0.48930	0.4893
* 69	Chrysene-d12	240	23.123	23.123	(1.000)	858908	4.00000	
70	3,3'-Dichlorobenzidine	252	23.054	23.054	(0.997)	107030	1.27130	1.271
71	Chrysene	228	23.162	23.170	(1.002)	119133	0.48188	0.4819
72	bis(2-Ethylhexyl)phthalate	149	23.178	23.177	(0.960)	92434	0.37286	0.3729
* 134	Di-n-octylphthalate-d4	153	24.153	24.153	(1.000)	1443314	4.00000	
73	Di-n-octylphthalate	149	24.161	24.168	(1.000)	151546	0.44906	0.4491
74	Benzo(b)fluoranthene	252	24.943	24.950	(0.971)	87583	0.44919	0.4492
75	Benzo(k)fluoranthene	252	24.989	24.989	(0.973)	97665	0.46877	0.4688
76	Benzo(a)pyrene	252	25.578	25.577	(0.996)	82890	0.44859	0.4486
* 77	Perylene-d12	264	25.686	25.694	(1.000)	614473	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	28.252	28.244	(1.100)	56684	0.37267	0.3727
79	Dibenzo(a,h)anthracene	278	28.267	28.259	(1.100)	47933	0.38242	0.3824
80	Benzo(g,h,i)perylene	276	29.005	28.997	(1.129)	41941	0.34005	0.3401
90	N-Nitrosodimethylamine	74	4.566	4.573	(0.513)	67653	0.86934	0.8693
91	Aniline	93	8.358	8.366	(0.939)	184174	1.02008	1.020
93	Benzidine	184	20.754	20.746	(0.898)	106324	1.07923	1.079
103	Pyridine	79	4.589	4.581	(0.516)	108469	0.88086	0.8809
105	1-methylnaphthalene	142	13.052	13.060	(1.146)	115392	0.48164	0.4816
111	Azobenzene (1,2-DP-Hydrazine)	77	16.440	16.447	(1.095)	198457	0.48479	0.4848

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.943	24.989	(0.971)	178301	0.93665	0.9367
120 2,3,4,6-Tetrachlorophenol	232	15.752	15.752	(1.049)	32423	0.34338	0.3434

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021718.D
Lab Smp Id: SLB0251-LCV1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230217A.b\ABN.m
Misc Info:

Calibration Date: 17-FEB-2023
Calibration Time: 20:19
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	351756	175878	703512	375988	6.89
27 Naphthalene-d8	1299383	649692	2598766	1381913	6.35
42 Acenaphthene-d10	808045	404023	1616090	829496	2.65
59 Phenanthrene-d10	1607740	803870	3215480	1629266	1.34
69 Chrysene-d12	876381	438191	1752762	858908	-1.99
134 Di-n-octylphthala	1545452	772726	3090904	1443314	-6.61
77 Perylene-d12	639717	319859	1279434	614473	-3.95

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.39	-0.07
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.00
59 Phenanthrene-d10	18.06	17.56	18.56	18.05	-0.04
69 Chrysene-d12	23.12	22.62	23.62	23.12	0.00
134 Di-n-octylphthala	24.15	23.65	24.65	24.15	0.00
77 Perylene-d12	25.69	25.19	26.19	25.69	-0.03

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

REVIEW SUMMARY FOR FILE - NT1423021718.D

Lab ID: SLB0251-LCV1
nt14.i, ABN.m, 17-FEB-2023 20:55

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

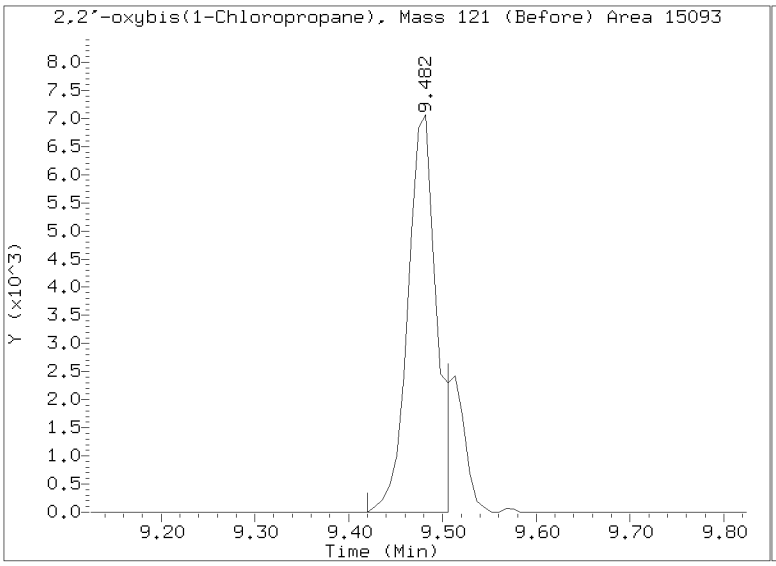
RRT check based on Ccal File: NT1423021717.D

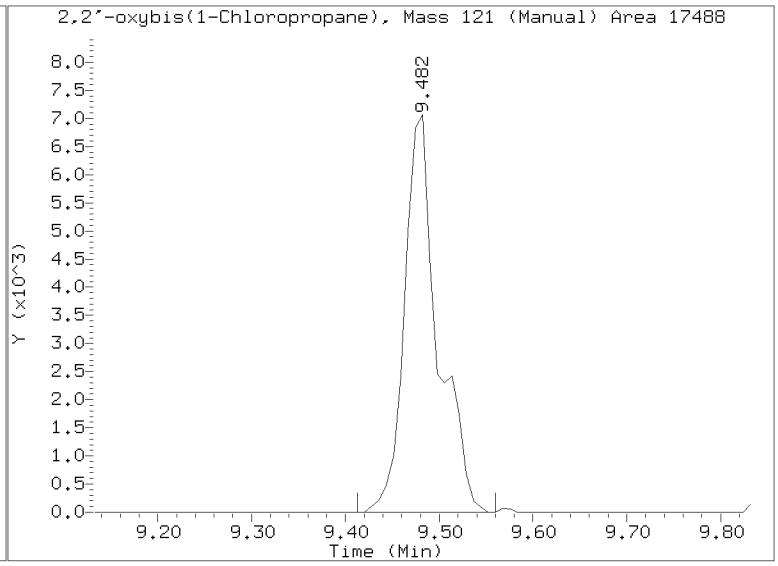
On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230217A.b/NT1423021718.D
Injection Date: 17-FEB-2023 20:55
Lab ID:SLB0251-LCV1 Client ID:
Report Date: 03/01/2023 13:21





Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT14	Calibration:	GB00046
Lab File ID:	NT1423022130.D	Calibration Date:	02/16/2023
Sequence:	SLB0291	Injection Date:	02/22/23
Lab Sample ID:	SLB0291-CCV1	Injection Time:	06:55
Sequence Name:	Calibration Check		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	5.0000	5.2	1.7957660	1.8668840		4.0	+/-50
4-Methylphenol	A	5.0000	5.5	1.3240860	1.4663080		10.7	+/-50
Naphthalene	A	5.0000	5.1	0.9862730	1.0133810		2.7	+/-50
2-Methylnaphthalene	A	5.0000	5.0	0.7386653	0.7394599		0.1	+/-50
Acenaphthylene	A	5.0000	5.2	1.7816190	1.8517480		3.9	+/-50
Dimethylphthalate	A	5.0000	5.1	1.2218100	1.2552690		2.7	+/-50
Acenaphthene	A	5.0000	5.2	1.0666800	1.1118320		4.2	+/-50
Dibenzofuran	A	5.0000	4.9	1.7513490	1.7256910		-1.5	+/-50
Fluorene	A	5.0000	5.0	1.8314530	1.8420610		0.6	+/-50
Phenanthrene	A	5.0000	5.2	0.9611900	0.9920664		3.2	+/-50
Anthracene	A	5.0000	5.7	0.9522768	1.0787300		13.3	+/-50
Fluoranthene	A	5.0000	4.7	1.7257220	1.6382410		-5.1	+/-50
Pyrene	A	5.0000	4.8	1.8248060	1.7681230		-3.1	+/-50
Butylbenzylphthalate	A	5.0000	5.1	0.5233989	0.6203340		2.1	+/-50
Benzo(a)anthracene	A	5.0000	5.3	1.2800360	1.3505160		5.5	+/-50
Chrysene	A	5.0000	5.4	1.1513540	1.2495890		8.5	+/-50
bis(2-Ethylhexyl)phthalate	A	5.0000	4.1	0.5470542	0.5461720		-18.5	+/-50
Benzofluoranthenes, Total	A	10.000	10.9	1.2391730	1.3476750		8.8	+/-50
Benzo(a)pyrene	A	5.0000	4.8	1.0848130	1.1736210		-3.2	+/-50
Indeno(1,2,3-cd)pyrene	A	5.0000	4.8	0.8621891	0.9725829		-4.2	+/-50
Dibenzo(a,h)anthracene	A	5.0000	5.0	0.7046903	0.8390104		0.1	+/-50
Benzo(g,h,i)perylene	A	5.0000	4.5	0.7176031	0.7472291		-9.7	+/-50
2-Fluorophenol	A	7.5000	8.26	1.0693230	1.1779060		10.2	+/-50
Phenol-d5	A	7.5000	7.79	1.6963140	1.7620110		3.9	+/-50
2-Chlorophenol-d4	A	7.5000	7.73	1.2103710	1.2475360		3.1	+/-50
1,2-Dichlorobenzene-d4	A	5.0000	4.87	0.9072515	0.8832238		-2.6	+/-50
Nitrobenzene-d5	A	5.0000	5.17	0.4621137	0.4778590		3.4	+/-50
2-Fluorobiphenyl	A	5.0000	5.01	1.4311010	1.4352900		0.3	+/-50
2,4,6-Tribromophenol	A	7.5000	7.39	0.2030581	0.2309704		-1.4	+/-50
p-Terphenyl-d14	A	5.0000	4.76	1.2956710	1.2325400		-4.9	+/-50

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20230221B.b\NT1423022130.D

Page 1

Date : 22-FEB-2023 06:55

Client ID:

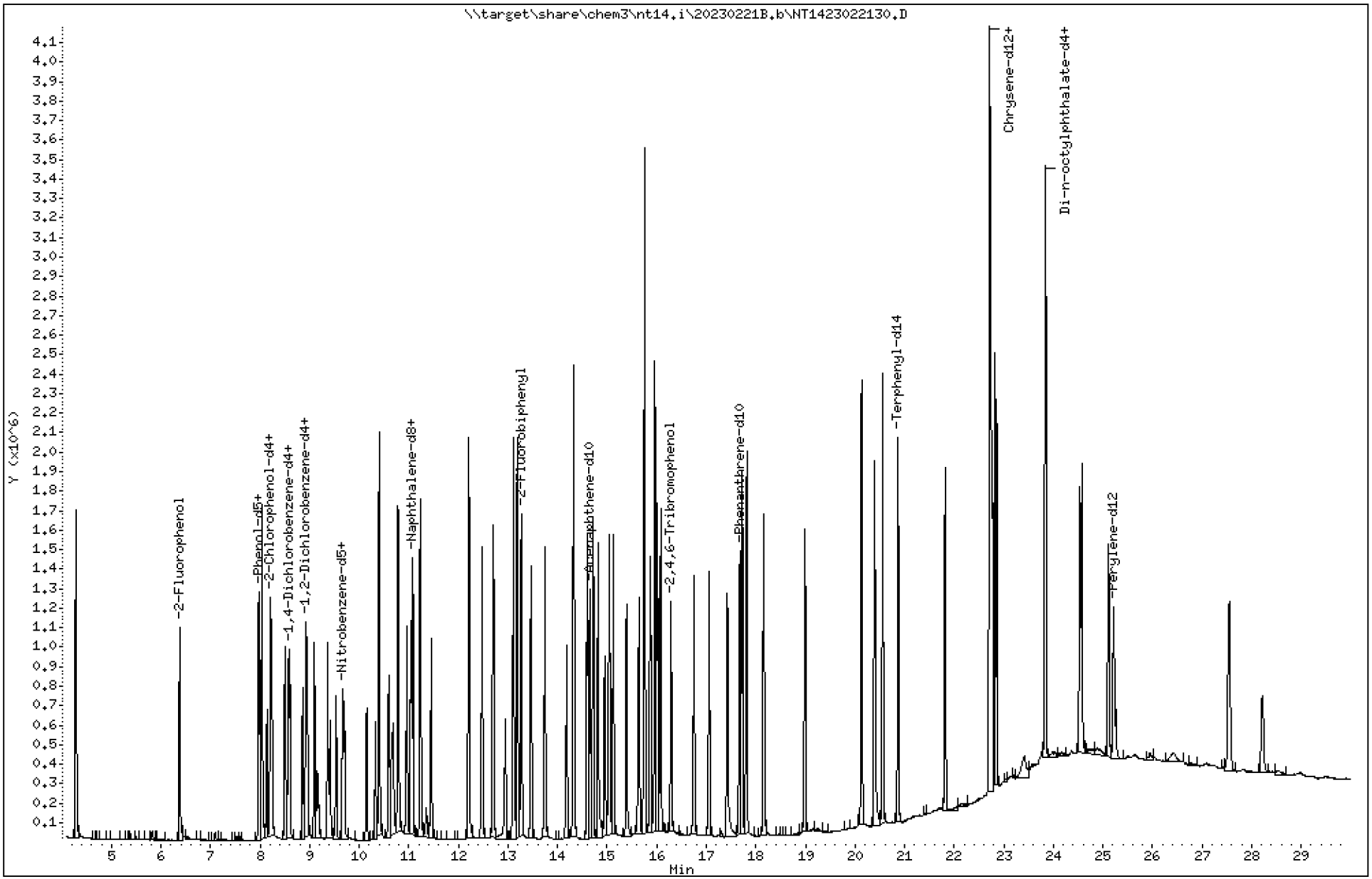
Instrument: nt14.i

Sample Info: SLB0305-ICV1

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230221B.b\NT1423022130.D
Lab Smp Id: SLB0305-ICV1
Inj Date : 22-FEB-2023 06:55 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0305-ICV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230221B.b\ABN.m
Meth Date : 23-Feb-2023 09:59 deenayd Quant Type: ISTD
Cal Date : 16-FEB-2023 19:30 Cal File: NT1423021610.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: DEENAY-201905

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.373	6.373	(0.744)	519291	7.50000	8.262
$	2 Phenol-d5	99	7.965	7.965	(0.930)	776799	7.50000	7.790
	3 Phenol	94	7.988	7.988	(0.932)	548689	5.00000	5.198
$	5 2-Chlorophenol-d4	132	8.212	8.212	(0.958)	549988	7.50000	7.730
	4 Bis(2-Chloroethyl)ether	93	8.135	8.135	(0.949)	399284	5.00000	4.952
	6 2-Chlorophenol	128	8.235	8.235	(0.961)	396347	5.00000	5.332
	7 1,3-Dichlorobenzene	146	8.498	8.498	(0.992)	416805	5.00000	5.037
*	8 1,4-Dichlorobenzene-d4	152	8.568	8.568	(1.000)	235125	4.00000	
	9 1,4-Dichlorobenzene	146	8.599	8.599	(1.004)	436312	5.00000	5.555
$	10 1,2-Dichlorobenzene-d4	152	8.925	8.925	(1.042)	259585	5.00000	4.868
	12 1,2-Dichlorobenzene	146	8.948	8.948	(1.044)	393306	5.00000	5.009
	11 Benzyl alcohol	108	8.855	8.855	(1.034)	263305	5.00000	4.417
	14 2,2'-oxybis(1-Chloropropane)	121	9.150	9.150	(1.068)	113296	5.00000	5.044(M)
	13 2-Methylphenol	108	9.096	9.096	(1.062)	409164	5.00000	5.551
	17 Hexachloroethane	117	9.530	9.530	(1.112)	163237	5.00000	4.781
	16 N-Nitroso-di-n-propylamine	70	9.414	9.414	(1.099)	350930	5.00000	5.230
	15 4-Methylphenol	108	9.367	9.367	(1.093)	430957	5.00000	5.537
$	18 Nitrobenzene-d5	82	9.662	9.662	(0.875)	527499	5.00000	5.170
	19 Nitrobenzene	77	9.701	9.701	(0.879)	523944	5.00000	5.118
	20 Isophorone	82	10.151	10.151	(0.919)	745982	5.00000	5.523
	21 2-Nitrophenol	139	10.322	10.322	(0.935)	245043	5.00000	5.227
	22 2,4-Dimethylphenol	107	10.399	10.399	(0.942)	857539	10.0000	11.09
	23 Bis(2-Chloroethoxy)methane	93	10.593	10.593	(0.959)	457241	5.00000	5.204
	24 Benzoic acid	105	10.686	10.686	(0.968)	883712	20.0000	17.43
	25 2,4-Dichlorophenol	162	10.787	10.787	(0.977)	721300	10.0000	10.90
	26 1,2,4-Trichlorobenzene	180	10.957	10.957	(0.992)	415256	5.00000	5.181
*	27 Naphthalene-d8	136	11.042	11.042	(1.000)	883104	4.00000	
	28 Naphthalene	128	11.081	11.081	(1.003)	1118651	5.00000	5.137
	29 4-Chloroaniline	127	11.228	11.228	(1.017)	1022070	10.0000	10.99
	30 Hexachlorobutadiene	225	11.452	11.452	(1.037)	268042	5.00000	5.425
	31 4-Chloro-3-methylphenol	107	12.210	12.210	(1.106)	811392	10.0000	11.33
	32 2-Methylnaphthalene	142	12.481	12.481	(1.130)	816275	5.00000	5.005
	33 Hexachlorocyclopentadiene	237	12.945	12.945	(0.884)	187881	10.0000	3.606

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.108	13.108	(0.895)	573714	10.0000	10.83
	35	2,4,5-Trichlorophenol	196	13.185	13.185	(0.900)	637089	10.0000	11.11
$	36	2-Fluorobiphenyl	172	13.270	13.270	(0.906)	964854	5.00000	5.015
	37	2-Chloronaphthalene	162	13.471	13.471	(0.920)	799103	5.00000	5.088
	38	2-Nitroaniline	65	13.750	13.750	(0.939)	573956	10.0000	11.24
	39	Dimethylphthalate	163	14.184	14.184	(0.968)	843837	5.00000	5.137
	40	Acenaphthylene	152	14.331	14.331	(0.978)	1244812	5.00000	5.197
	41	2,6-Dinitrotoluene	165	14.323	14.323	(0.978)	402088	10.0000	10.40
*	42	Acenaphthene-d10	164	14.648	14.648	(1.000)	537789	4.00000	
	43	3-Nitroaniline	138	14.601	14.601	(0.997)	452978	10.0000	11.04
	44	Acenaphthene	153	14.717	14.717	(1.005)	747414	5.00000	5.212
	45	2,4-Dinitrophenol	184	14.818	14.818	(1.012)	469721	20.0000	17.83
	46	Dibenzofuran	168	15.042	15.042	(1.027)	1160072	5.00000	4.927
	47	4-Nitrophenol	109	14.949	14.949	(1.021)	223006	10.0000	9.317
	48	2,4-Dinitrotoluene	165	15.127	15.127	(1.033)	587363	10.0000	10.75
	50	Diethylphthalate	149	15.645	15.645	(1.068)	1094767	5.00000	5.013
	49	Fluorene	166	15.753	15.753	(1.075)	1238300	5.00000	5.029
	51	4-Chlorophenyl-phenylether	204	15.753	15.753	(1.075)	623567	5.00000	4.736
	52	4-Nitroaniline	138	15.869	15.869	(1.083)	542604	10.0000	11.53
	53	4,6-Dinitro-2-methylphenol	198	15.961	15.961	(0.903)	860378	20.0000	21.32
	54	N-Nitrosodiphenylamine	169	16.008	16.008	(0.906)	796863	5.00000	5.137
$	55	2,4,6-Tribromophenol	330	16.293	16.293	(1.112)	232900	7.50000	7.392
	56	4-Bromophenyl-phenylether	248	16.756	16.756	(0.948)	350716	5.00000	5.076
	57	Hexachlorobenzene	284	17.057	17.057	(0.965)	346104	5.00000	4.929
	58	Pentachlorophenol	266	17.421	17.421	(0.986)	325841	10.0000	9.290
*	59	Phenanthrene-d10	188	17.676	17.676	(1.000)	1079531	4.00000	
	60	Phenanthrene	178	17.723	17.723	(1.003)	1338708	5.00000	5.161
	61	Anthracene	178	17.816	17.816	(1.008)	1455653	5.00000	5.664
	62	Carbazole	167	18.156	18.156	(1.027)	1321363	5.00000	5.666
	63	Di-n-butylphthalate	149	18.992	18.992	(1.074)	1537298	5.00000	5.901
	64	Fluoranthene	202	20.137	20.137	(0.884)	1692321	5.00000	4.747
	65	Pyrene	202	20.562	20.562	(0.903)	1826491	5.00000	4.845
$	66	Terphenyl-d14	244	20.872	20.872	(0.917)	1273228	5.00000	4.756
	67	Butylbenzylphthalate	149	21.816	21.816	(0.958)	640812	5.00000	5.104
	68	Benzo(a)anthracene	228	22.738	22.738	(0.999)	1395098	5.00000	5.275
*	69	Chrysene-d12	240	22.769	22.769	(1.000)	826409	4.00000	
	70	3,3'-Dichlorobenzidine	252	22.715	22.715	(0.998)	1366156	15.0000	16.73
	71	Chrysene	228	22.815	22.815	(1.002)	1290840	5.00000	5.427
	72	bis(2-Ethylhexyl)phthalate	149	22.854	22.854	(0.959)	914539	5.00000	4.076
*	134	Di-n-octylphthalate-d4	153	23.837	23.837	(1.000)	1339562	4.00000	
	73	Di-n-octylphthalate	149	23.845	23.845	(1.000)	1563296	5.00000	4.991
	74	Benzo(b)fluoranthene	252	24.534	24.534	(0.973)	1040613	5.00000	5.555
	75	Benzo(k)fluoranthene	252	24.573	24.573	(0.975)	1070552	5.00000	5.349
	76	Benzo(a)pyrene	252	25.115	25.115	(0.996)	866022	5.00000	4.838
*	77	Perylene-d12	264	25.215	25.215	(1.000)	590325	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	27.540	27.540	(1.092)	717675	5.00000	4.788
	79	Dibenzo(a,h)anthracene	278	27.556	27.556	(1.093)	619111	5.00000	5.005
	80	Benzo(g,h,i)perylene	276	28.216	28.216	(1.119)	551385	5.00000	4.514
	90	N-Nitrosodimethylamine	74	4.280	4.280	(0.500)	520024	10.0000	10.69
	91	Aniline	93	8.034	8.034	(0.938)	1155678	10.0000	10.24
	93	Benzidine	184	20.392	20.392	(0.896)	1497120	10.0000	19.46
	103	Pyridine	79	4.288	4.288	(0.500)	830029	10.0000	10.78
	105	1-methylnaphthalene	142	12.698	12.698	(1.150)	746138	5.00000	4.873
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.077	16.077	(1.098)	1402908	5.00000	5.286

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	24.573	24.573	(0.975)	1988916	10.0000	10.88
120 2,3,4,6-Tetrachlorophenol	232	15.390	15.390	(1.051)	338869	5.00000	5.420

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423022130.D
Lab Smp Id: SLB0305-ICV1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230221B.b\ABN.m
Misc Info:

Calibration Date: 21-FEB-2023
Calibration Time: 23:06
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	235125	117563	470250	235125	0.00
27 Naphthalene-d8	883104	441552	1766208	883104	0.00
42 Acenaphthene-d10	537789	268895	1075578	537789	0.00
59 Phenanthrene-d10	1079531	539766	2159062	1079531	0.00
69 Chrysene-d12	826409	413205	1652818	826409	0.00
134 Di-n-octylphthala	1339562	669781	2679124	1339562	0.00
77 Perylene-d12	590325	295163	1180650	590325	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.57	8.07	9.07	8.57	0.00
27 Naphthalene-d8	11.04	10.54	11.54	11.04	0.00
42 Acenaphthene-d10	14.65	14.15	15.15	14.65	0.00
59 Phenanthrene-d10	17.68	17.18	18.18	17.68	0.00
69 Chrysene-d12	22.77	22.27	23.27	22.77	0.00
134 Di-n-octylphthala	23.84	23.34	24.34	23.84	0.00
77 Perylene-d12	25.22	24.72	25.72	25.22	0.00

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

REVIEW SUMMARY FOR FILE - NT1423022130.D

Lab ID: SLB0305-ICV1
nt14.i, ABN.m, 22-FEB-2023 06:55

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

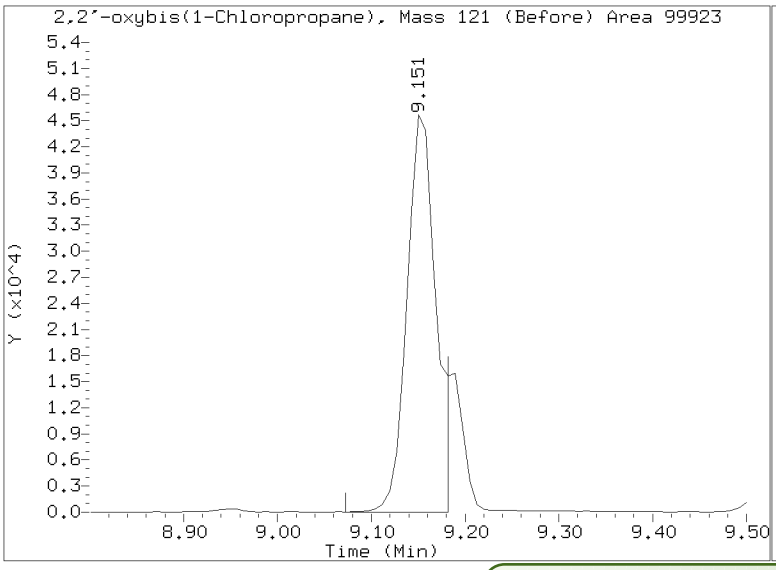
No RRT check. Ccal file.

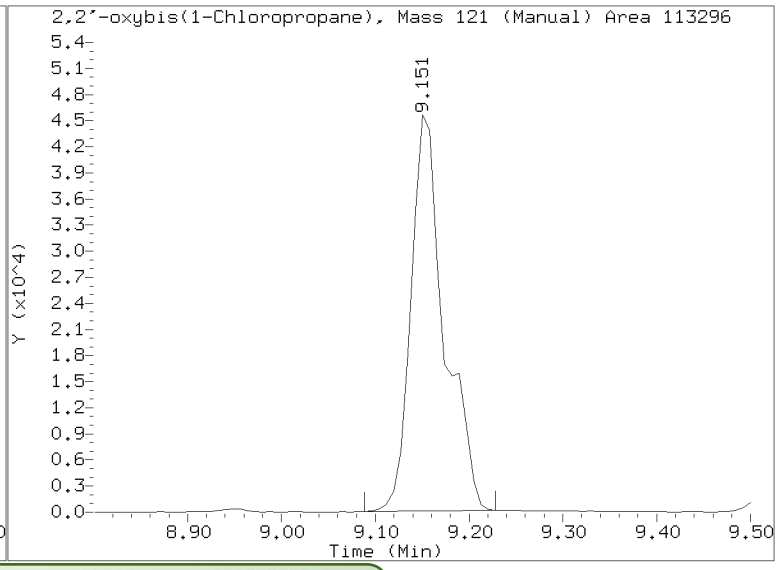
On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230221B.b/NT1423022130.D
Injection Date: 22-FEB-2023 06:55
Lab ID:SLB0305-ICV1 Client ID:
Report Date: 02/24/2023 15:22





APPROVED

By Deenay Dunmore at 3:23 pm, Feb 24, 2023

Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230221B.b

Instrument: nt14.i Date: 22-FEB-2023 Method: ABN.m

INITIAL CAL: 30-DEC-2022

Compound	%RSD or R^2
Benzidine	0.986

ICV CAL: NT1423022130.D 22-FEB-2023 06:55

Compound	%D
Hexachlorocyclopentadiene	-63.94
Benzidine	94.6

Analytical Resources, LLC
Analytical Chemists and Consultants

LOW-CONCENTRATION CONTINUING CALIBRATION CHECK

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT14	Calibration:	GB00046
Lab File ID:	NT1423022118.D	Calibration Date:	02/16/2023
Sequence:	SLB0291	Injection Date:	02/21/23
Lab Sample ID:	SLB0291-LCV1	Injection Time:	23:42
Sequence Name:	ABN 0.2		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	0.50000	0.4	1.7957660	1.4572180		-18.9	+/-50
4-Methylphenol	A	0.50000	0.5	1.3240860	1.2878630		-2.7	+/-50
Naphthalene	A	0.50000	0.5	0.9862730	1.0665930		8.1	+/-50
2-Methylnaphthalene	A	0.50000	0.5	0.7386653	0.7898360		6.9	+/-50
Acenaphthylene	A	0.50000	0.6	1.7816190	2.0337630		14.2	+/-50
Dimethylphthalate	A	0.50000	0.6	1.2218100	1.3506900		10.5	+/-50
Acenaphthene	A	0.50000	0.5	1.0666800	1.1646670		9.2	+/-50
Dibenzofuran	A	0.50000	0.5	1.7513490	1.9259650		10.0	+/-50
Fluorene	A	0.50000	0.5	1.8314530	1.9663560		7.4	+/-50
Phenanthrene	A	0.50000	0.5	0.9611900	1.0394730		8.1	+/-50
Anthracene	A	0.50000	0.6	0.9522768	1.0609120		11.4	+/-50
Fluoranthene	A	0.50000	0.4	1.7257220	1.5096190		-12.5	+/-50
Pyrene	A	0.50000	0.4	1.8248060	1.5609640		-14.5	+/-50
Butylbenzylphthalate	A	0.50000	0.5	0.5233989	0.5524007		-8.2	+/-50
Benzo(a)anthracene	A	0.50000	0.6	1.2800360	1.4649250		14.4	+/-50
Chrysene	A	0.50000	0.6	1.1513540	1.3036300		13.2	+/-50
bis(2-Ethylhexyl)phthalate	A	0.50000	0.4	0.5470542	0.5120618		-25.5	+/-50
Benzofluoranthenes, Total	A	1.0000	1.1	1.2391730	1.3833770		11.6	+/-50
Benzo(a)pyrene	A	0.50000	0.5	1.0848130	1.1790710		-2.0	+/-50
Indeno(1,2,3-cd)pyrene	A	0.50000	0.5	0.8621891	0.9933527		0.3	+/-50
Dibenzo(a,h)anthracene	A	0.50000	0.5	0.7046903	0.8508489		4.2	+/-50
Benzo(g,h,i)perylene	A	0.50000	0.5	0.7176031	0.7717933		-4.0	+/-50
2-Fluorophenol	A	0.75000	0.640	1.0693230	0.9121803		-14.7	+/-50
Phenol-d5	A	0.75000	0.755	1.6963140	1.7082800		0.7	+/-50
2-Chlorophenol-d4	A	0.75000	0.742	1.2103710	1.1968370		-1.1	+/-50
1,2-Dichlorobenzene-d4	A	0.50000	0.503	0.9072515	0.9134276		0.7	+/-50
Nitrobenzene-d5	A	0.50000	0.556	0.4621137	0.5134639		11.1	+/-50
2-Fluorobiphenyl	A	0.50000	0.577	1.4311010	1.6504870		15.3	+/-50
2,4,6-Tribromophenol	A	0.75000	0.506	0.2030581	0.1550534		-32.5	+/-50
p-Terphenyl-d14	A	0.50000	0.516	1.2956710	1.3372250		3.2	+/-50

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022118.D

Page 1

Date : 21-FEB-2023 23:42

Client ID:

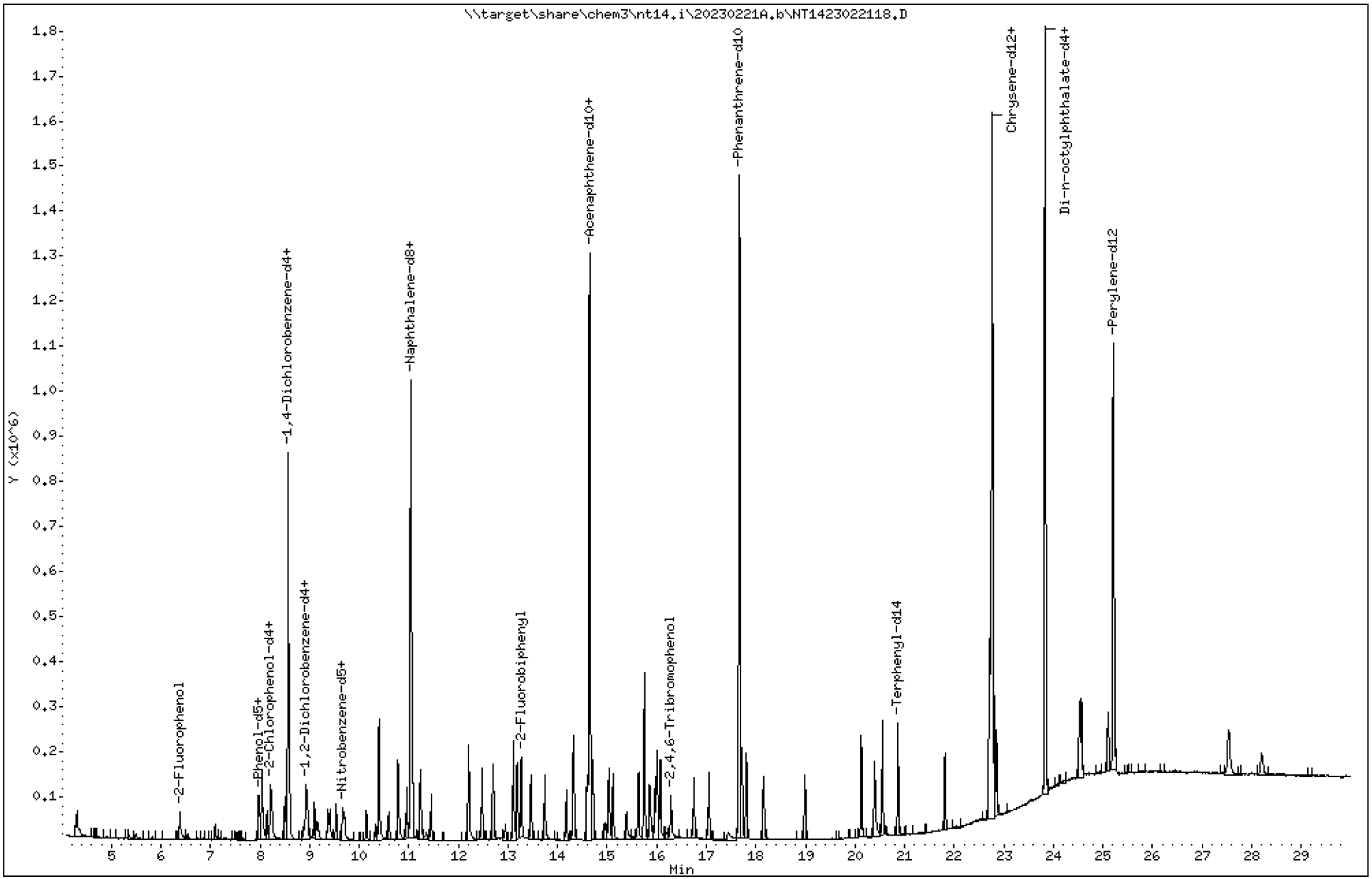
Instrument: nt14.i

Sample Info: SLB0291-LCV1

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

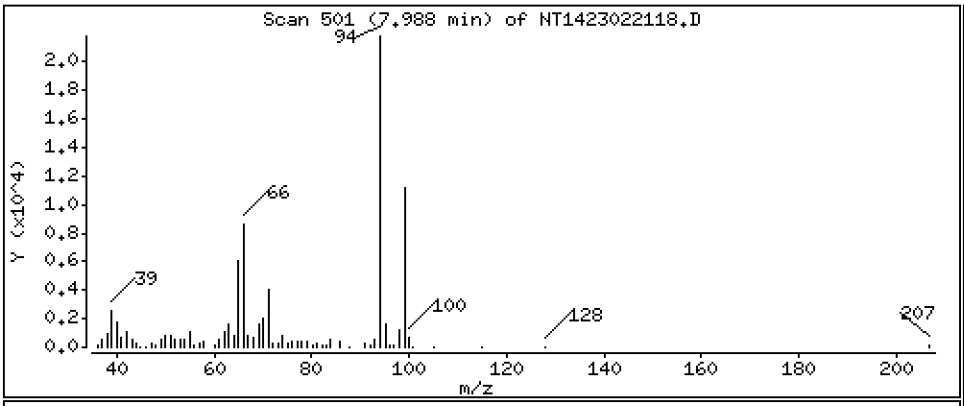
Operator: DSD

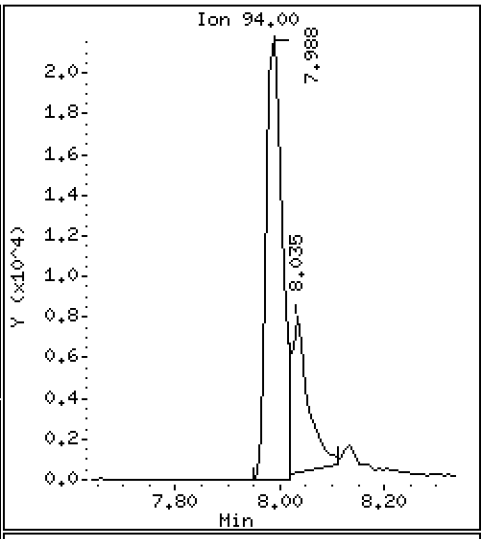
Column phase: ZB-5msi

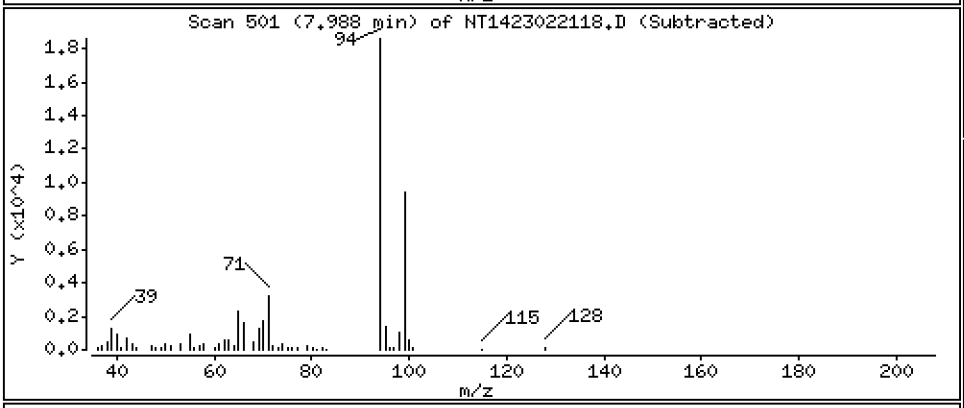
Column diameter: 0.25

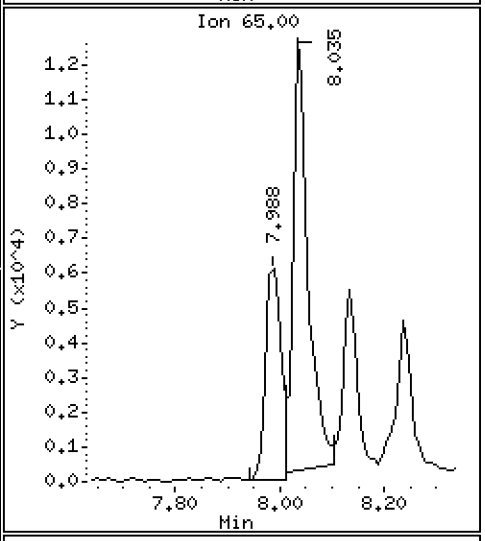
3 Phenol

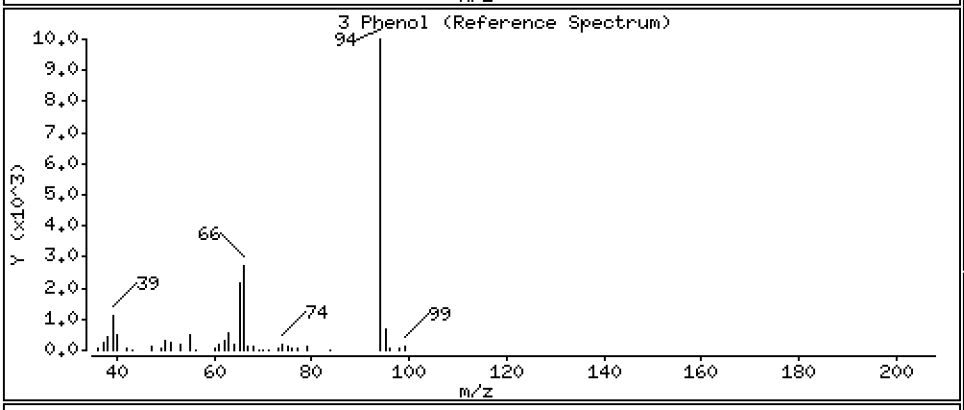
Concentration: 0.4057 ug/mL

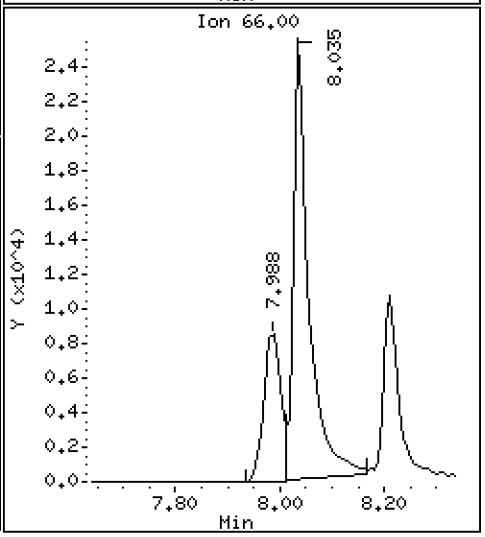


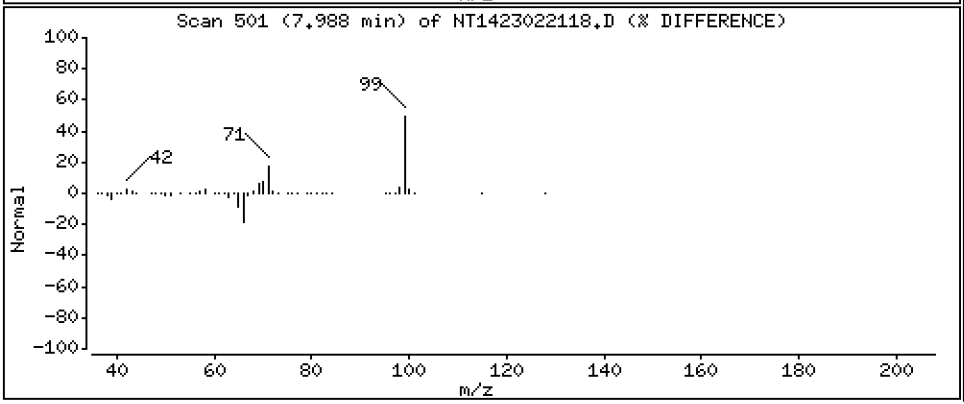












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

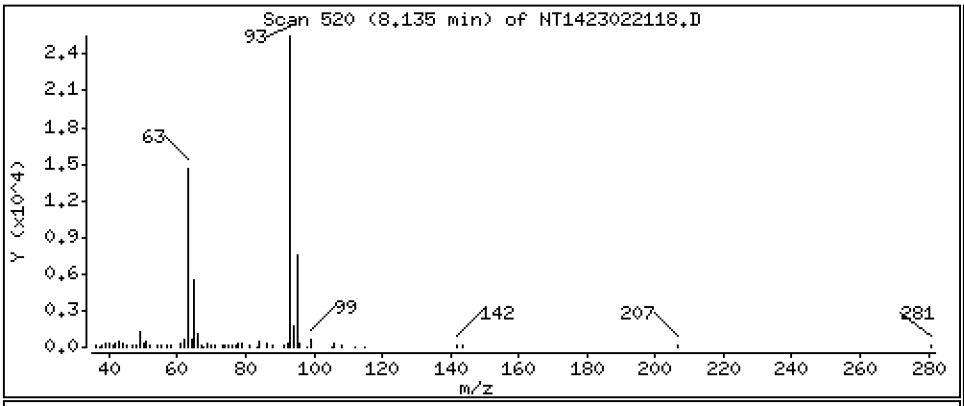
Operator: DSD

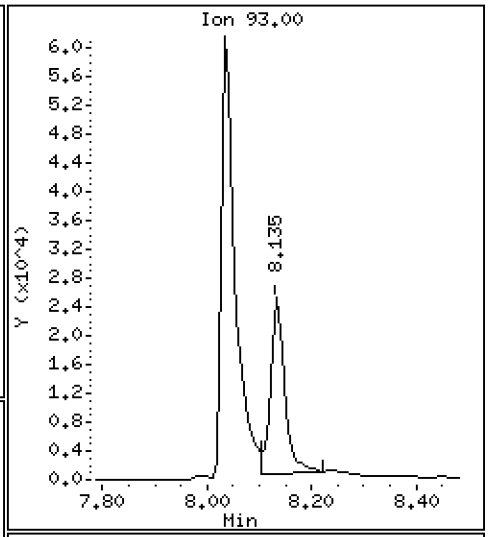
Column phase: ZB-5msi

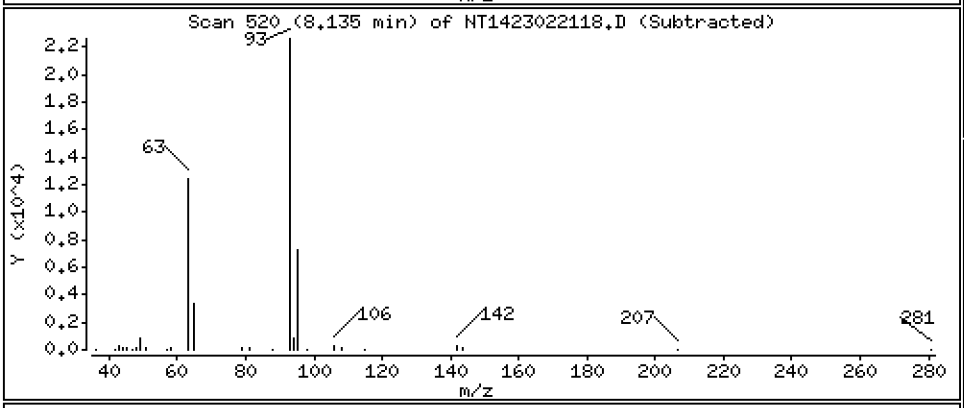
Column diameter: 0.25

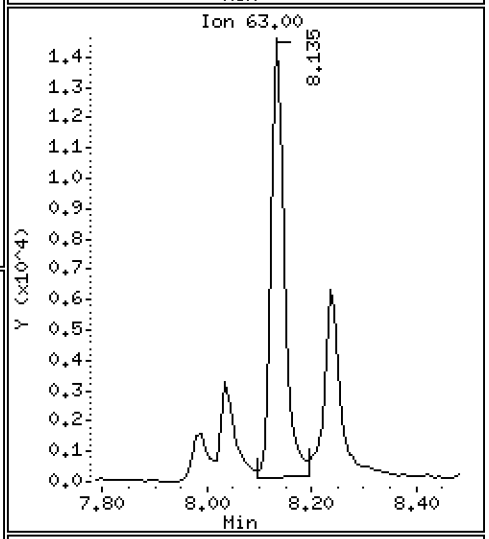
4 Bis(2-Chloroethyl)ether

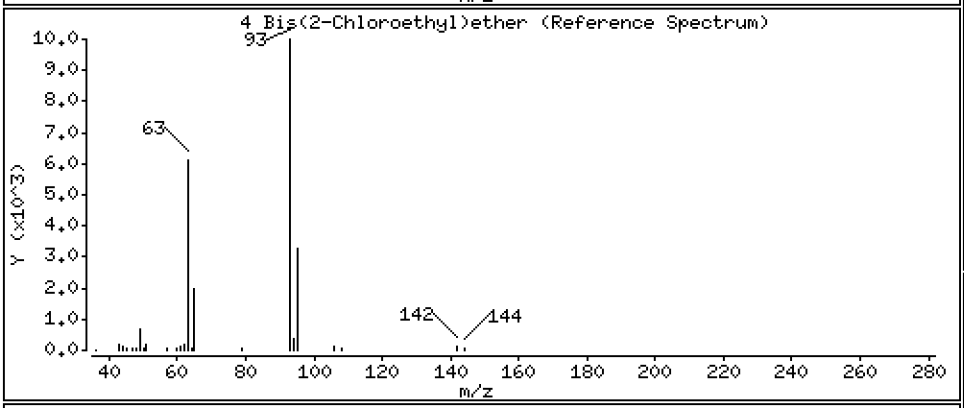
Concentration: 0.5119 ug/mL

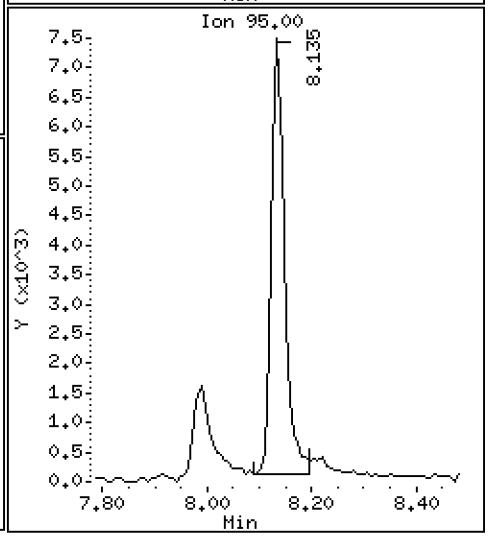


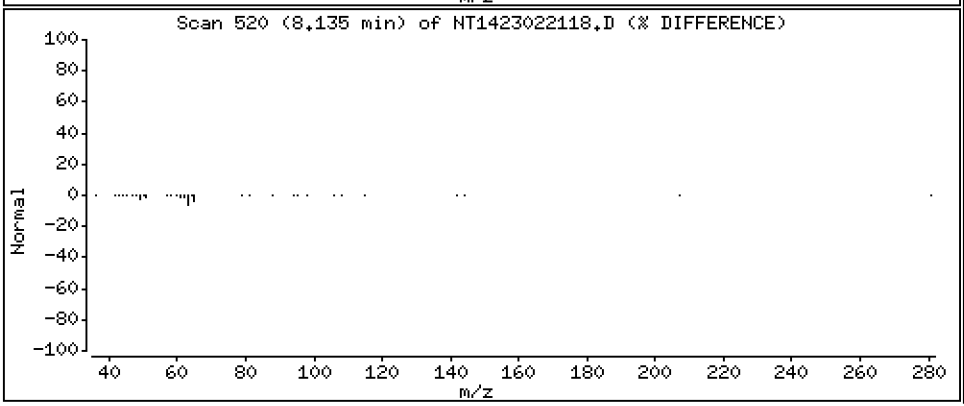












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

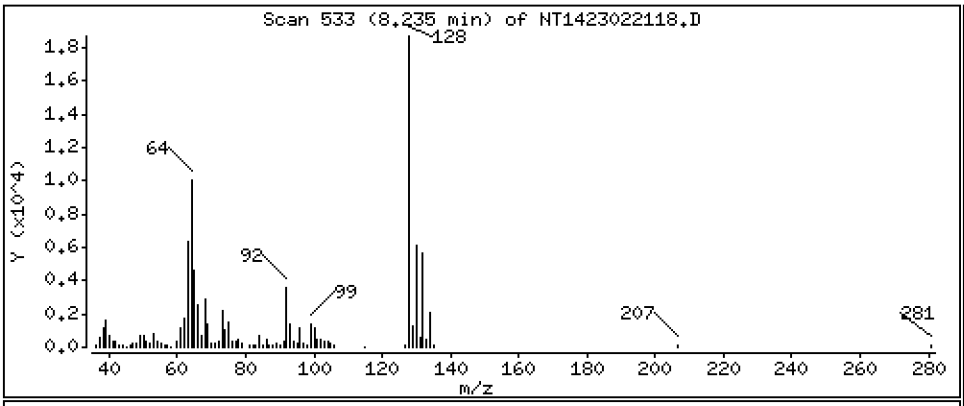
Operator: DSD

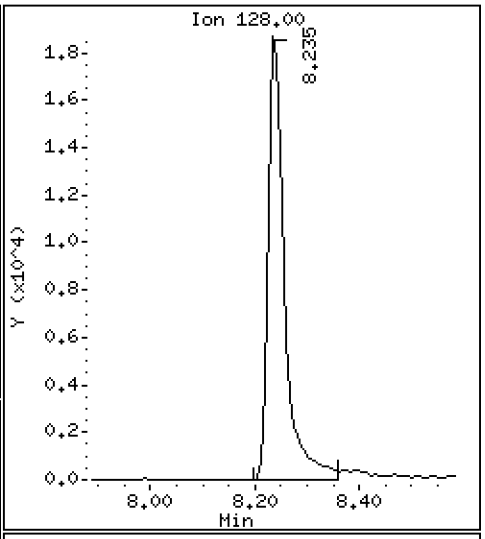
Column phase: ZB-5msi

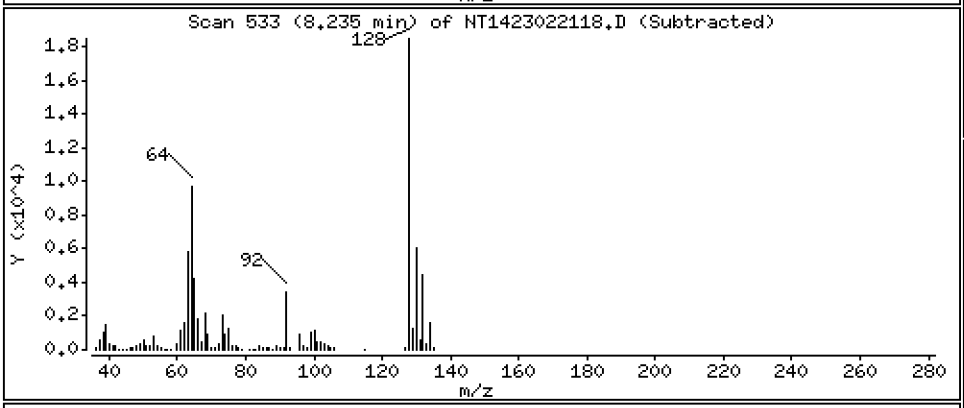
Column diameter: 0.25

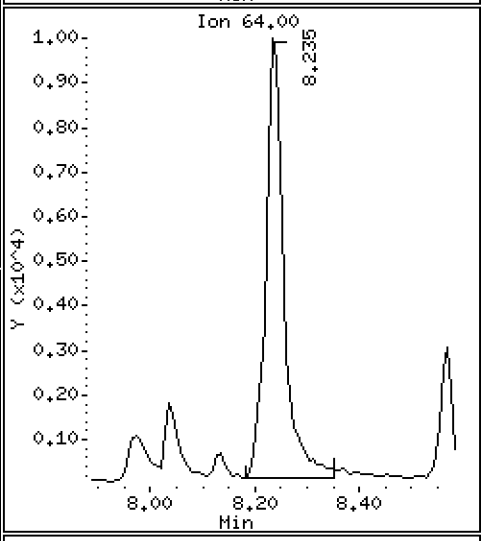
6 2-Chlorophenol

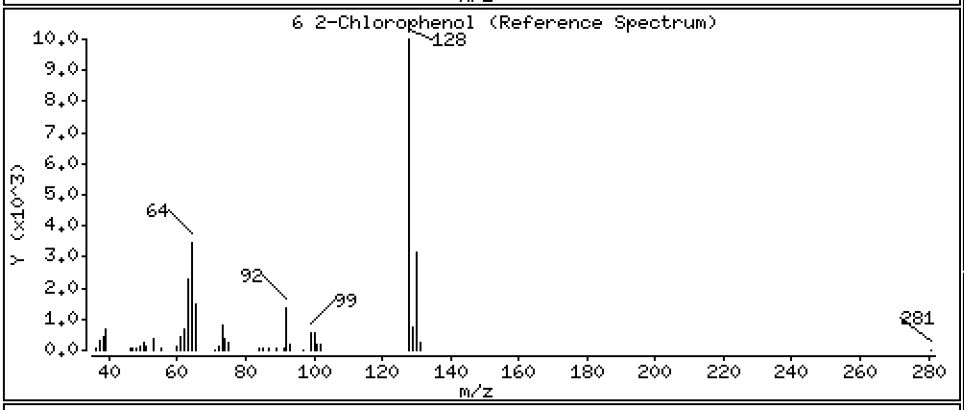
Concentration: 0.5009 ug/mL

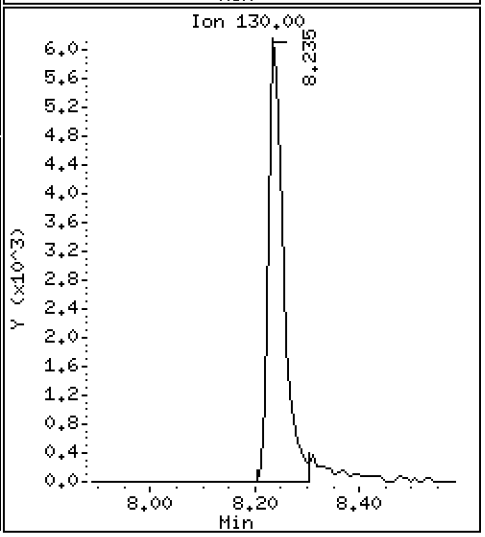


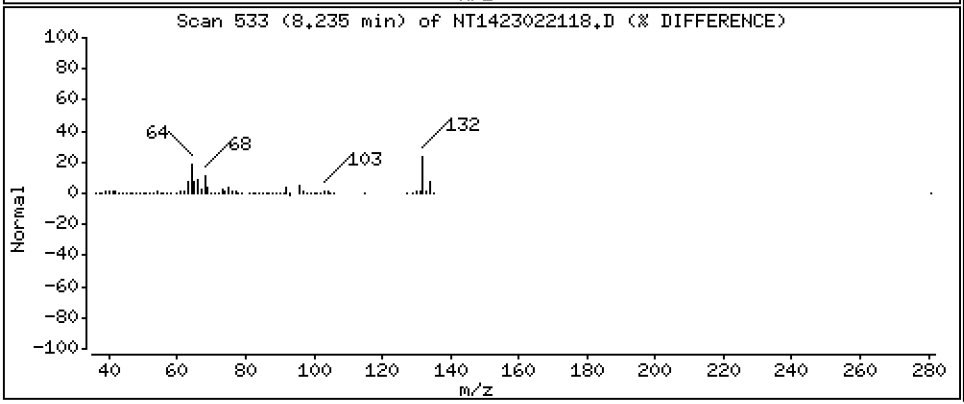












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

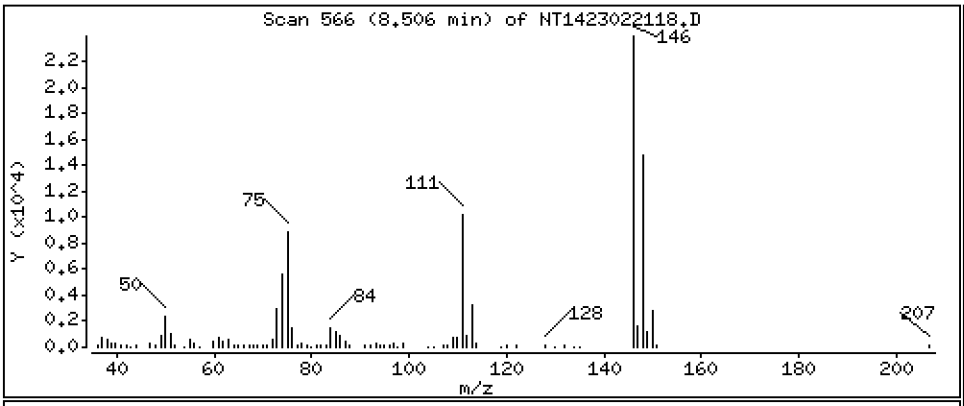
Operator: DSD

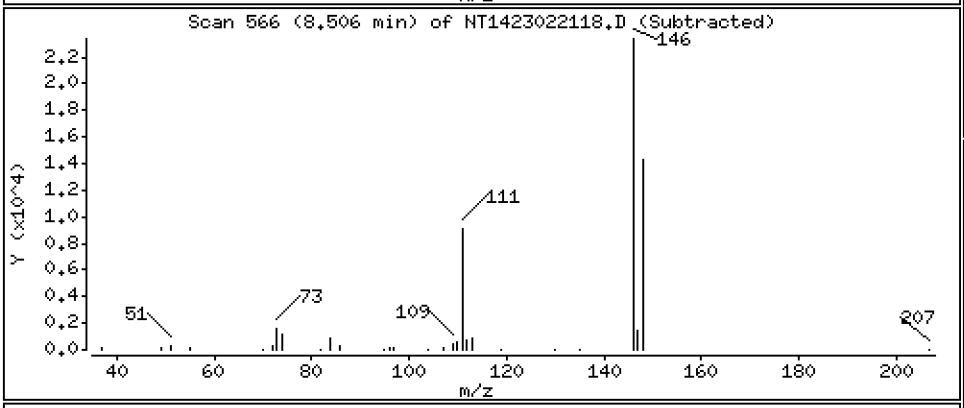
Column phase: ZB-5msi

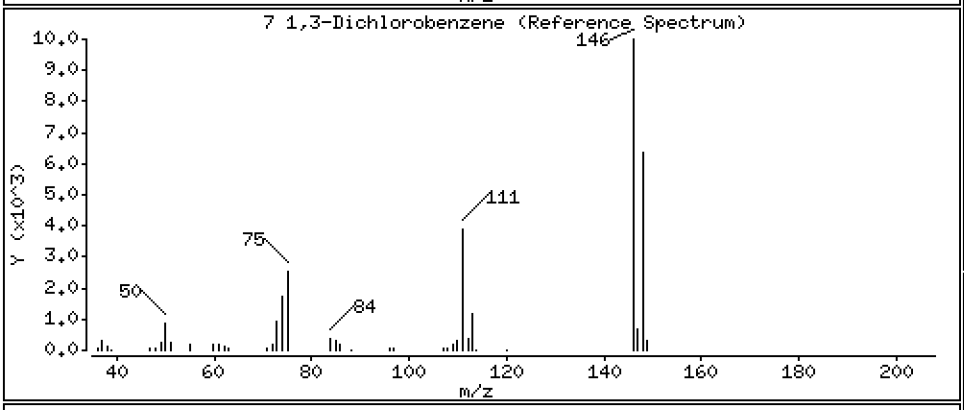
Column diameter: 0.25

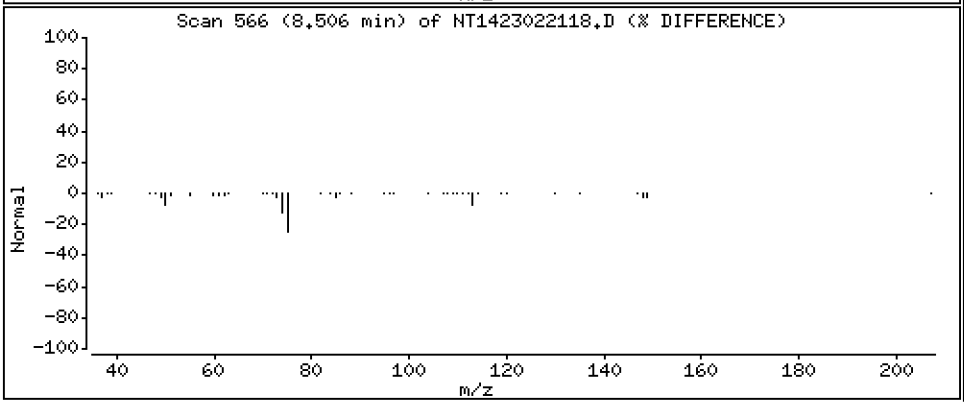
7 1,3-Dichlorobenzene

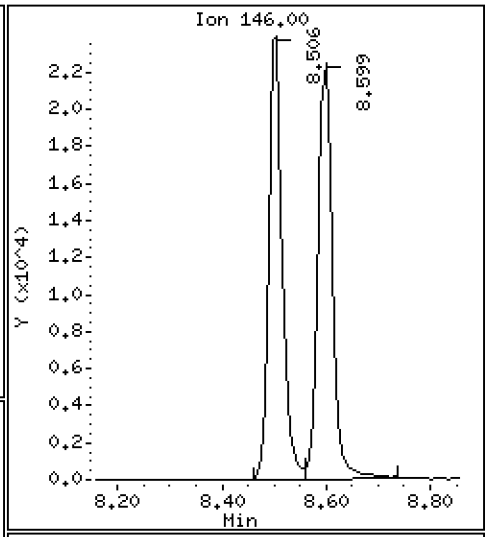
Concentration: 0.4894 ug/mL

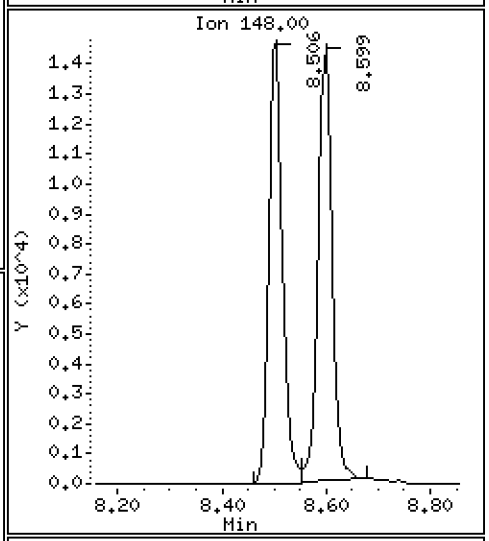


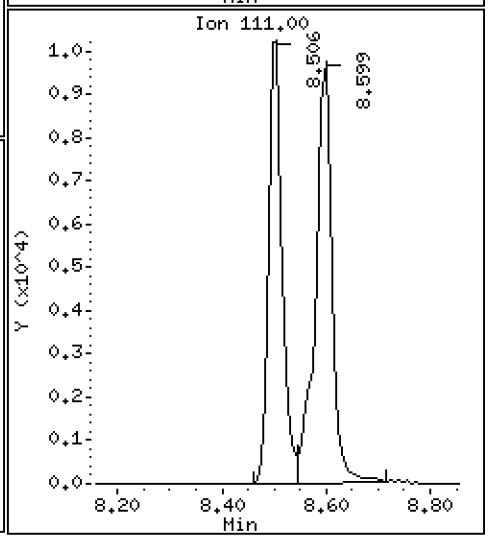












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

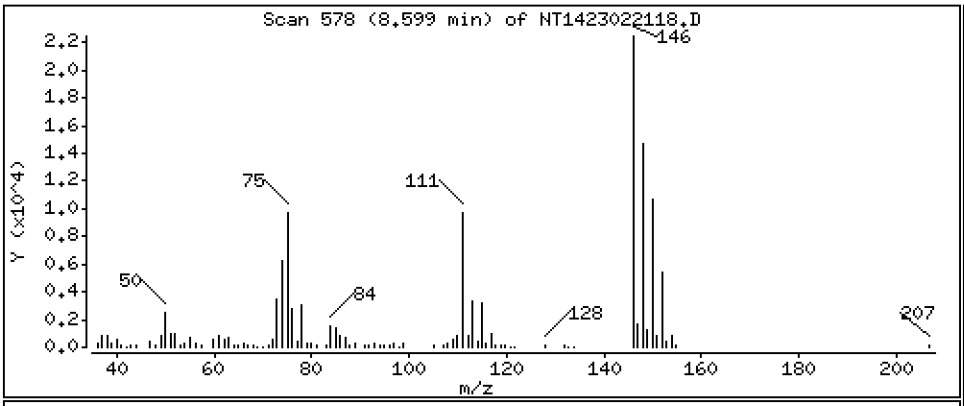
Operator: DSD

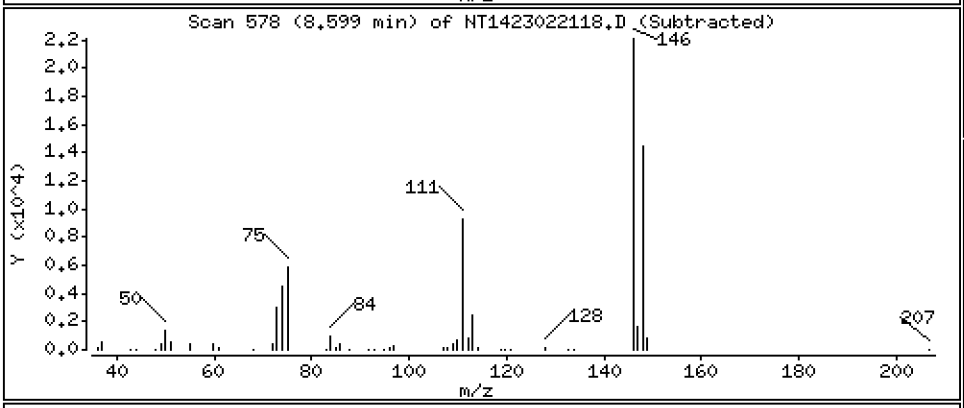
Column phase: ZB-5msi

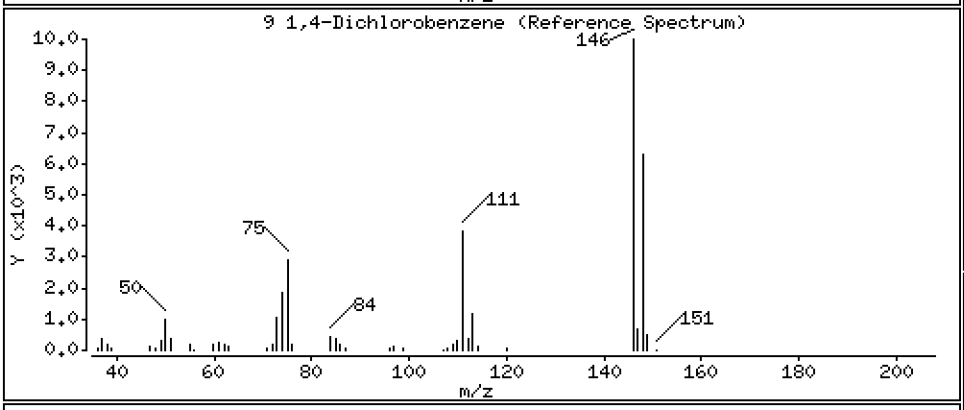
Column diameter: 0.25

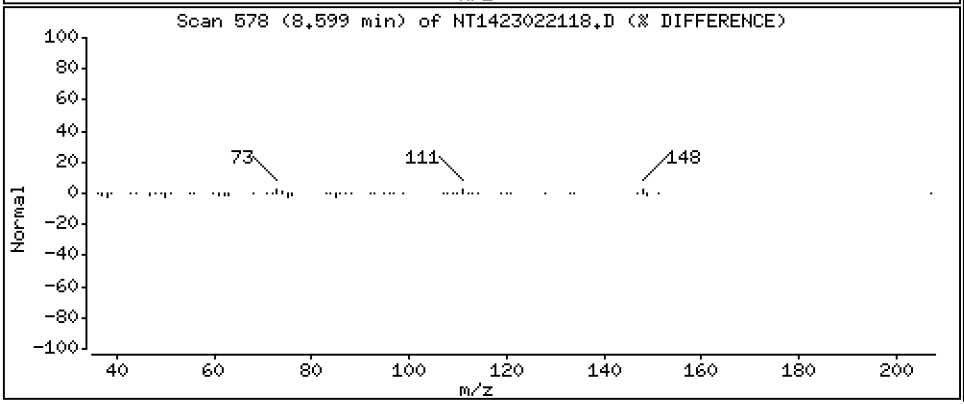
9 1,4-Dichlorobenzene

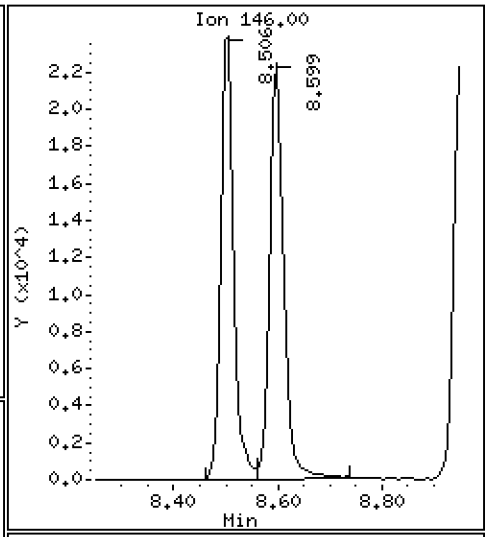
Concentration: 0.5426 ug/mL

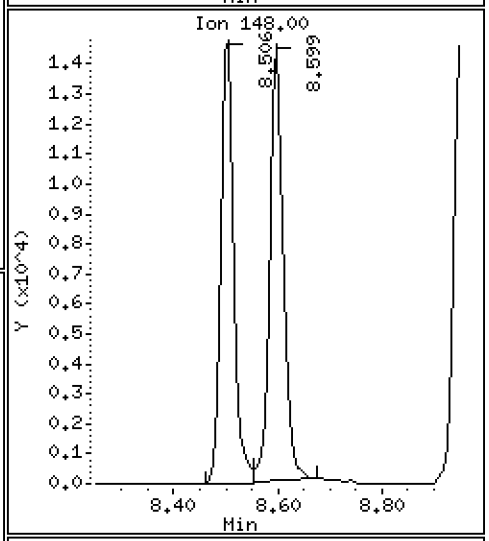


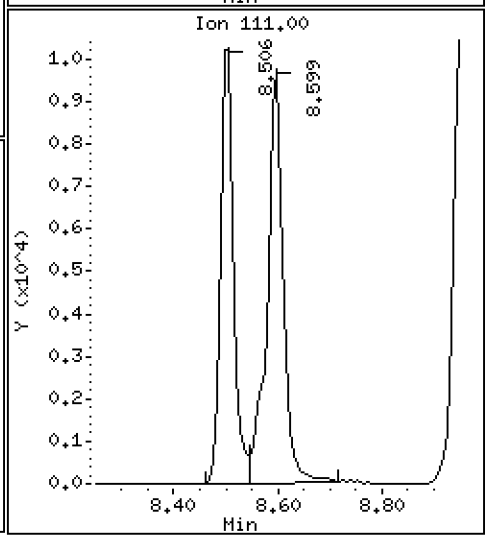












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

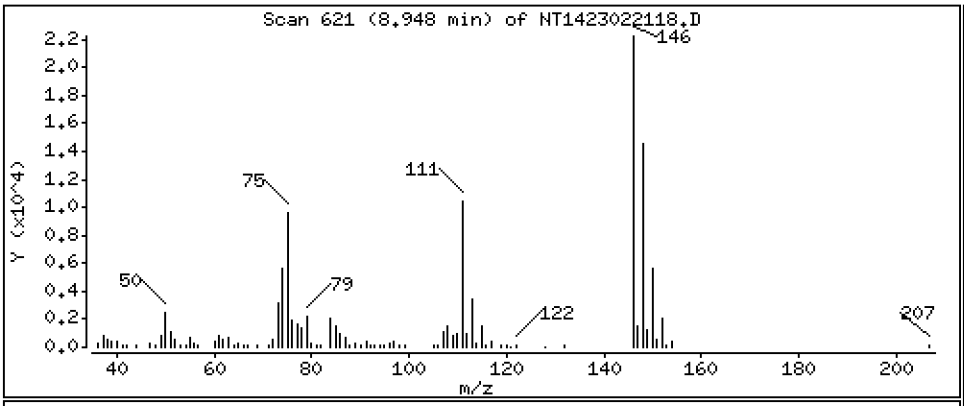
Operator: DSD

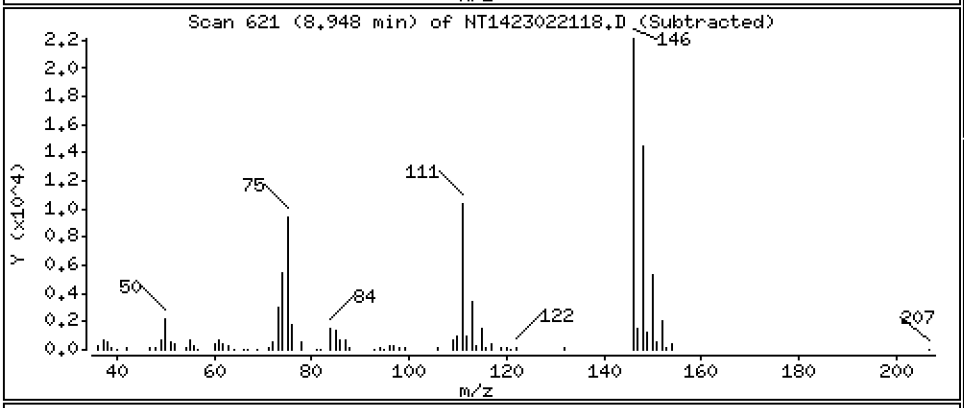
Column phase: ZB-5msi

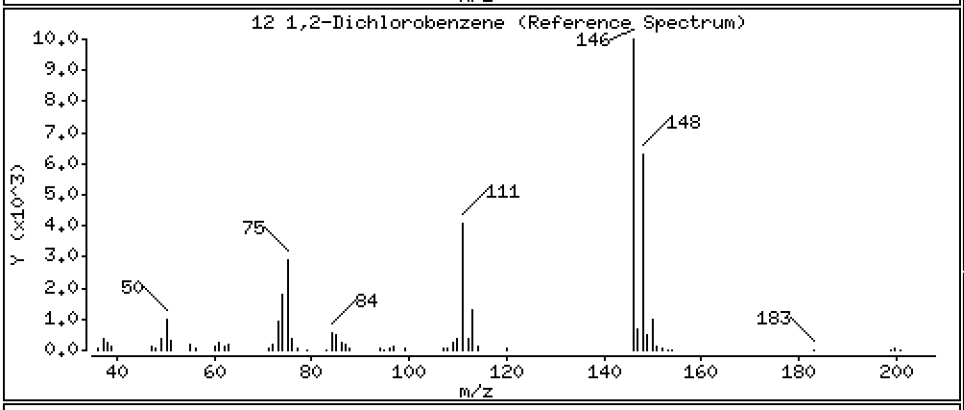
Column diameter: 0.25

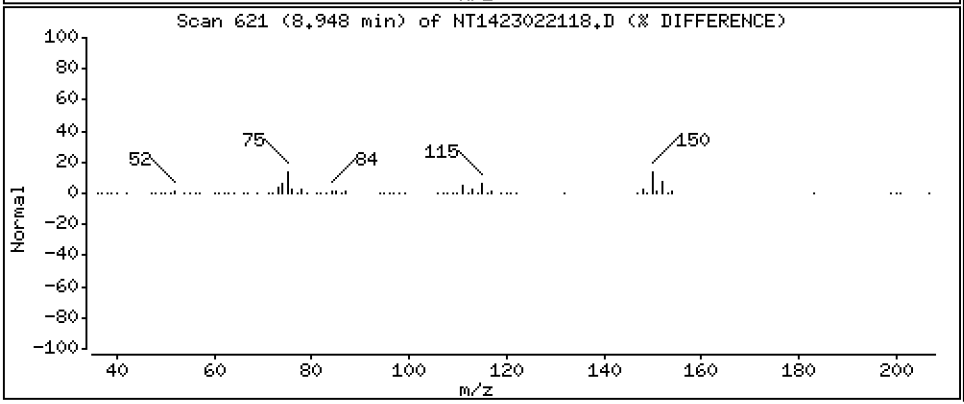
12 1,2-Dichlorobenzene

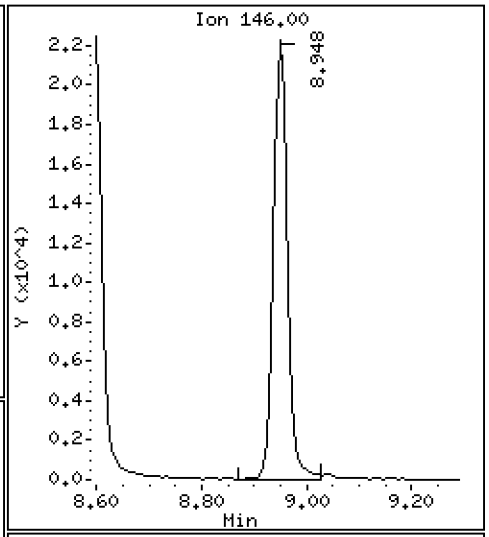
Concentration: 0.4781 ug/mL

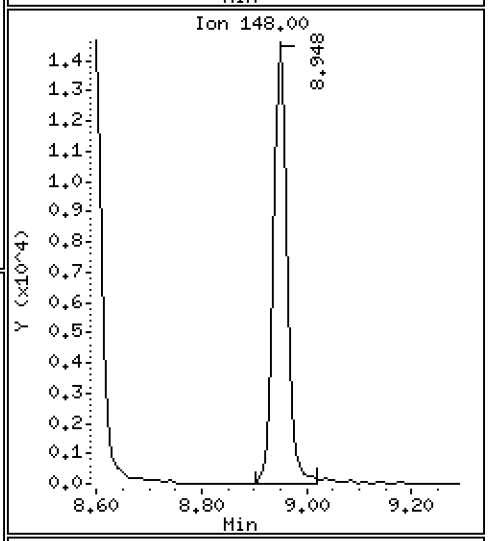


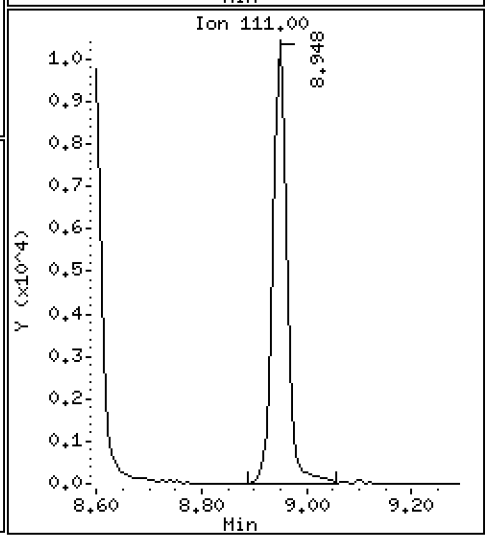












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

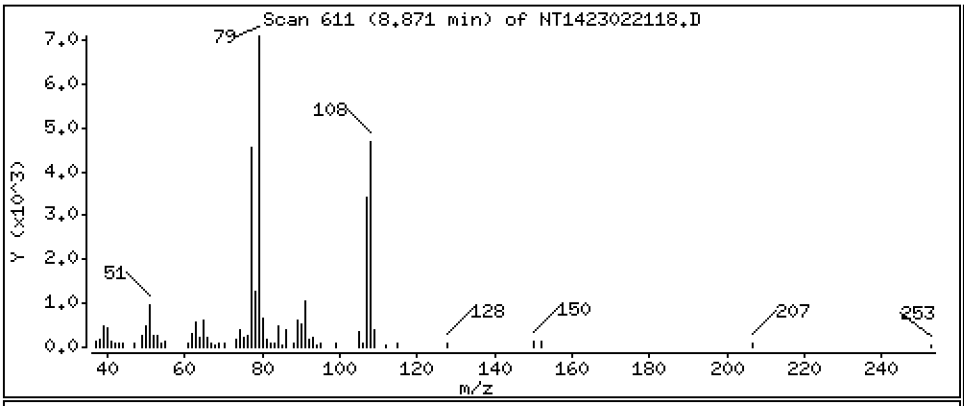
Operator: DSD

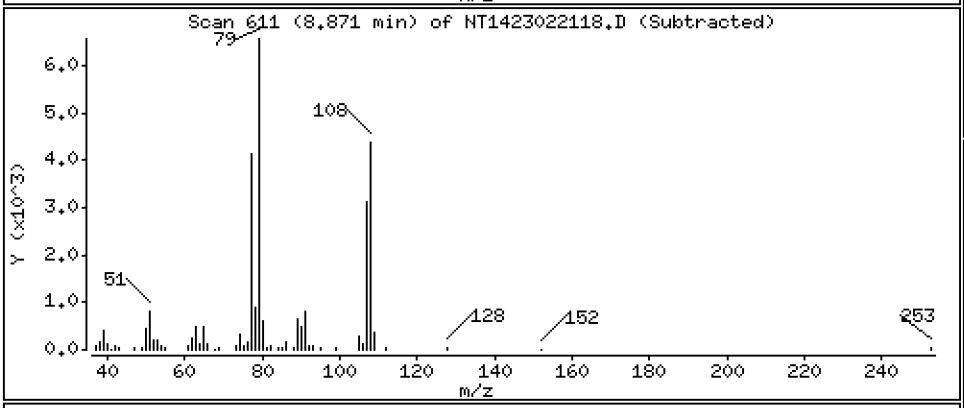
Column phase: ZB-5msi

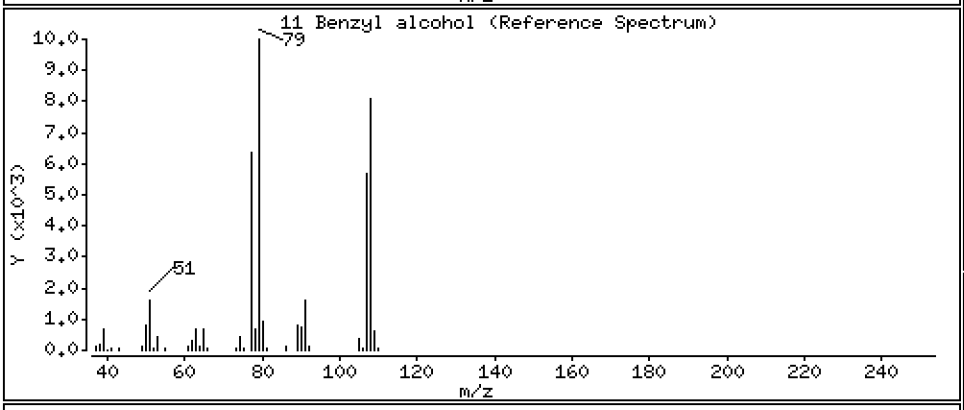
Column diameter: 0.25

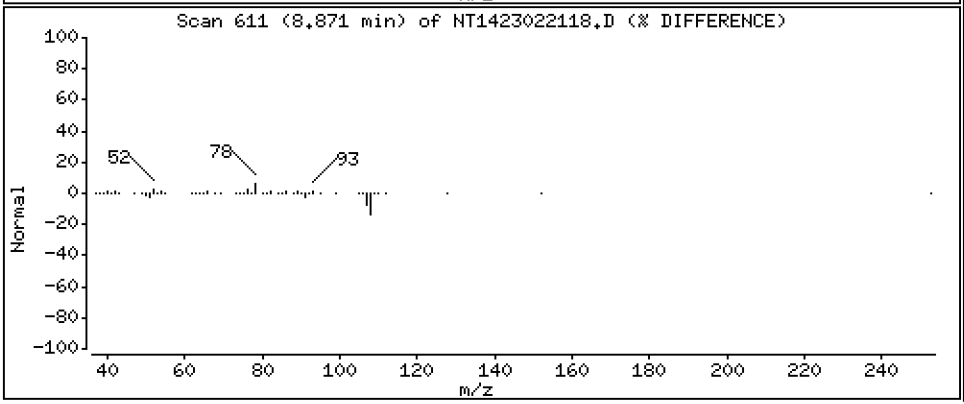
11 Benzyl alcohol

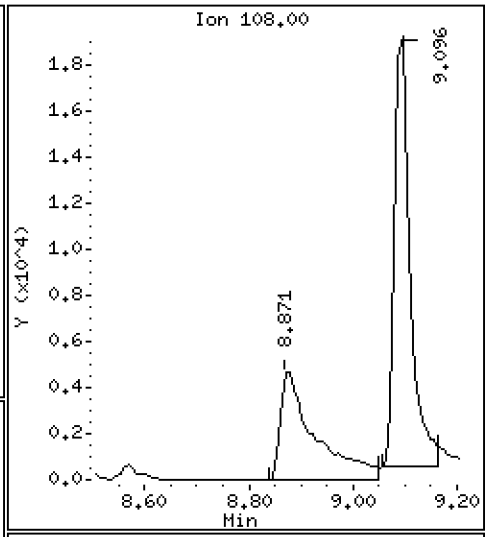
Concentration: 0.3431 ug/mL

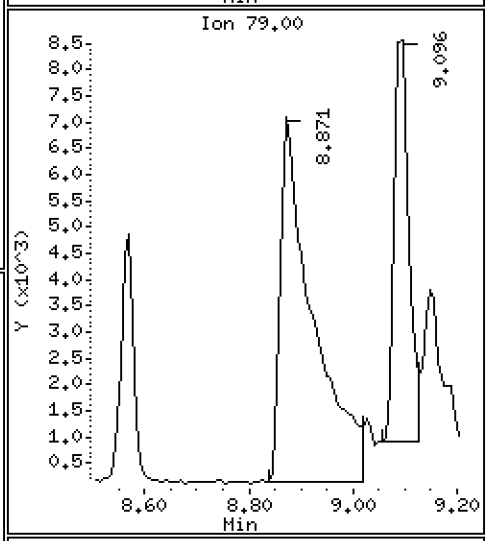


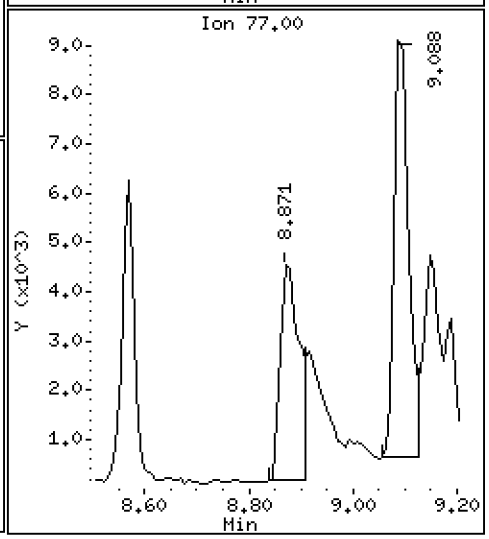












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

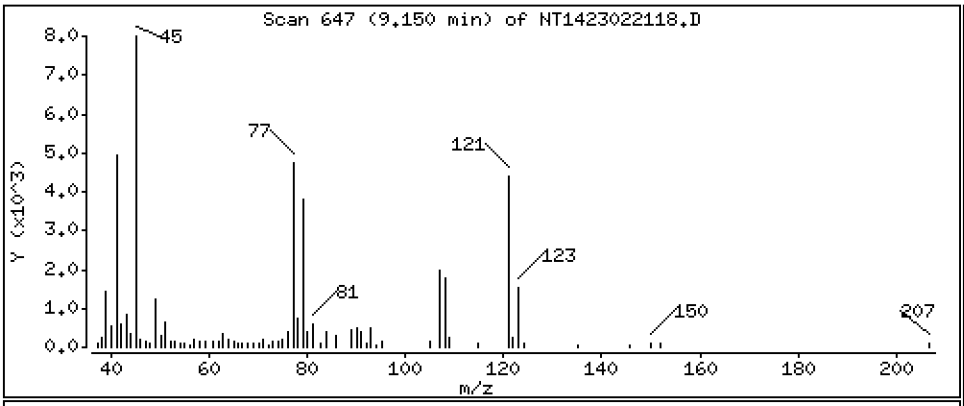
Operator: DSD

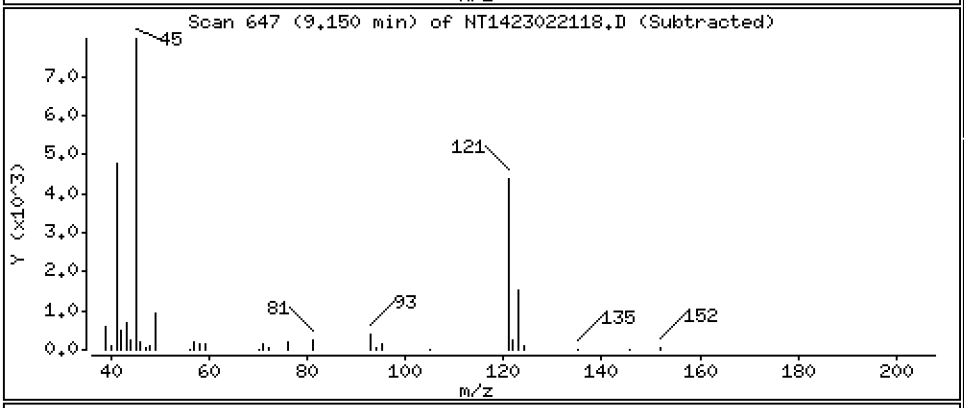
Column phase: ZB-5msi

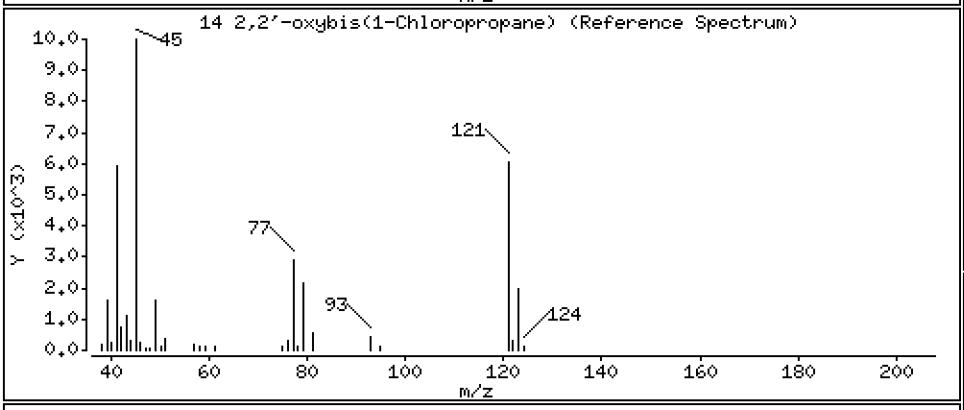
Column diameter: 0.25

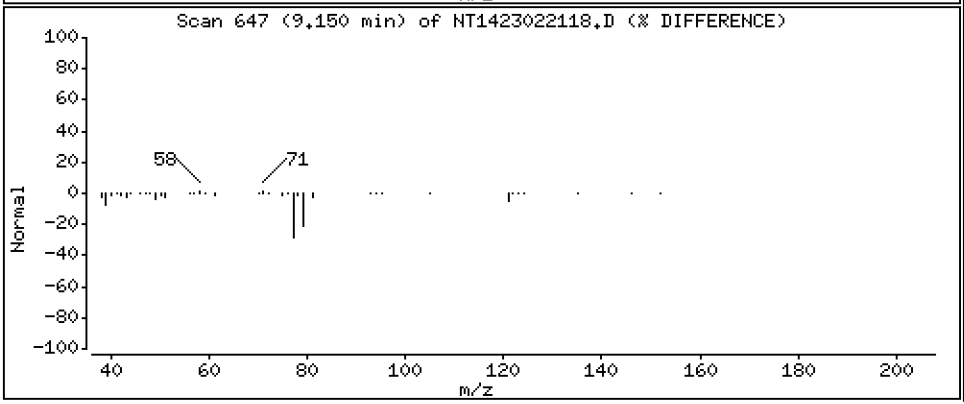
14 2,2'-oxybis(1-Chloropropane)

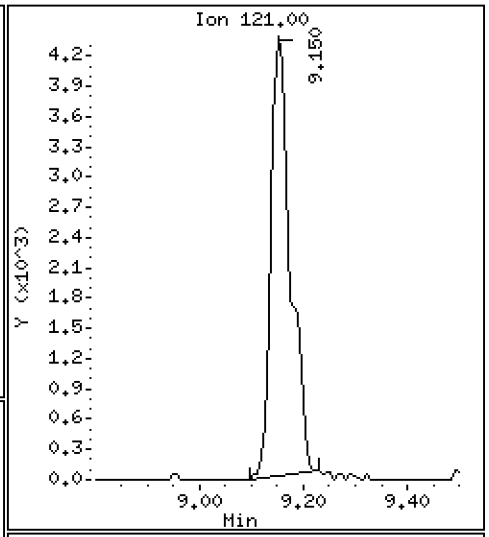
Concentration: 0.4606 ug/mL

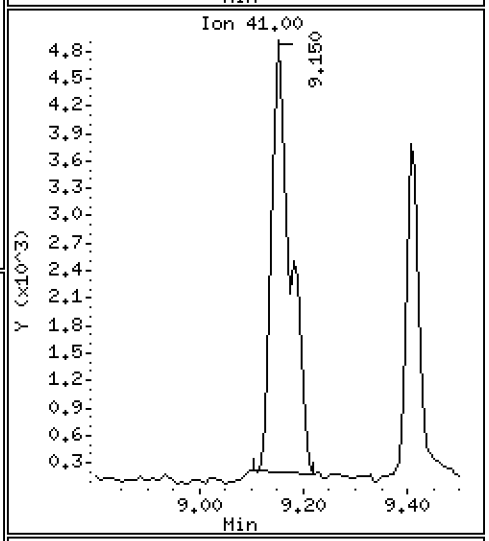


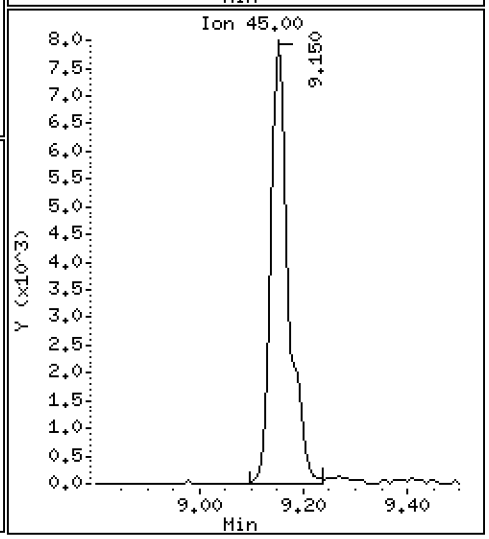












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

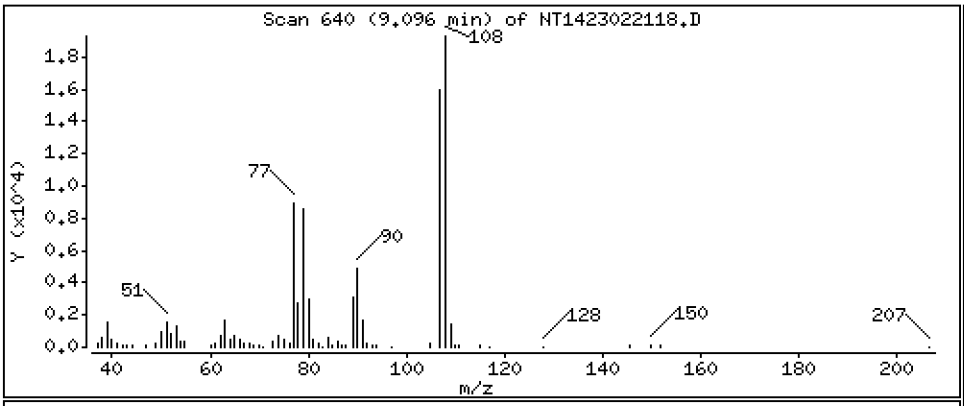
Operator: DSD

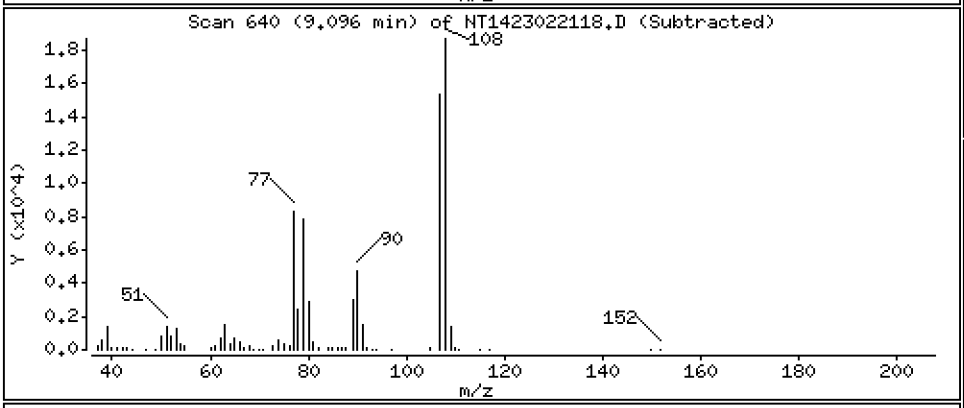
Column phase: ZB-5msi

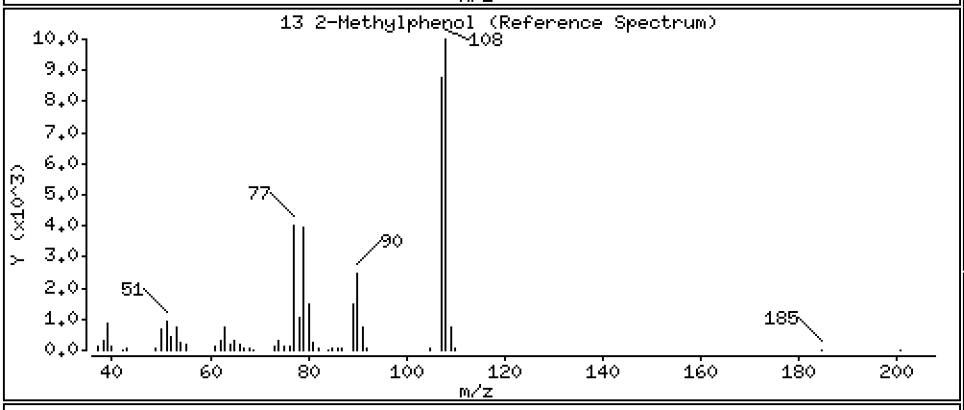
Column diameter: 0.25

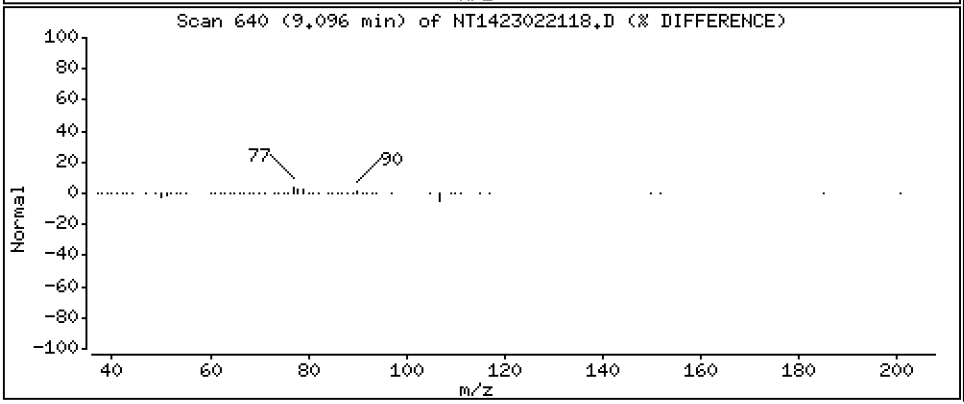
13 2-Methylphenol

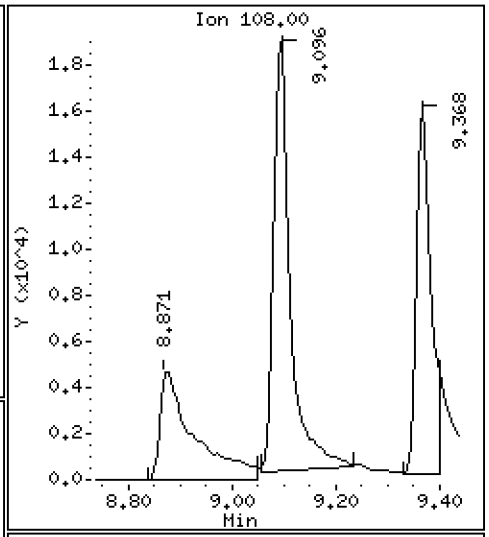
Concentration: 0.5155 ug/mL

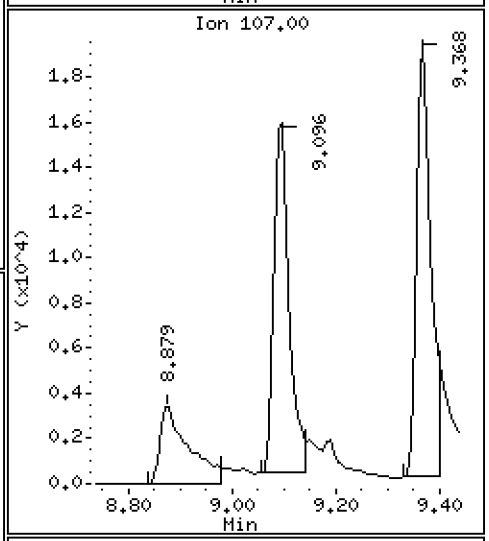


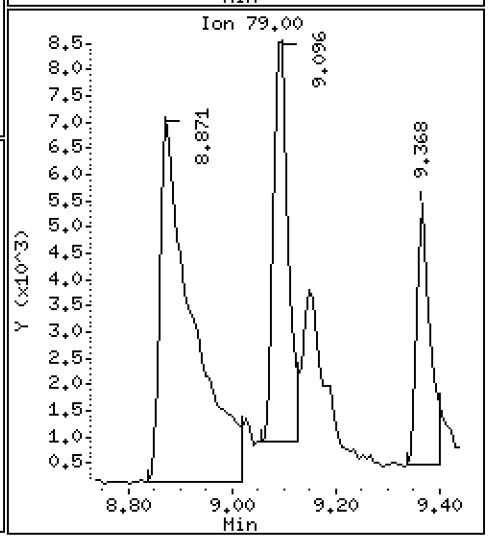












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

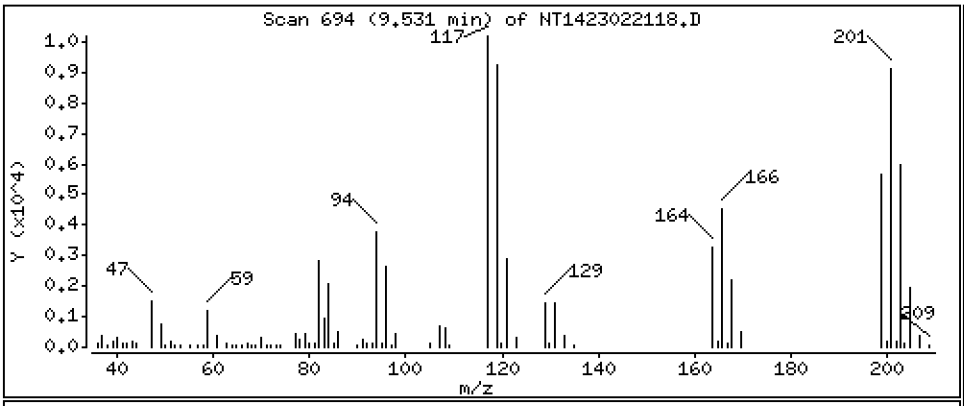
Operator: DSD

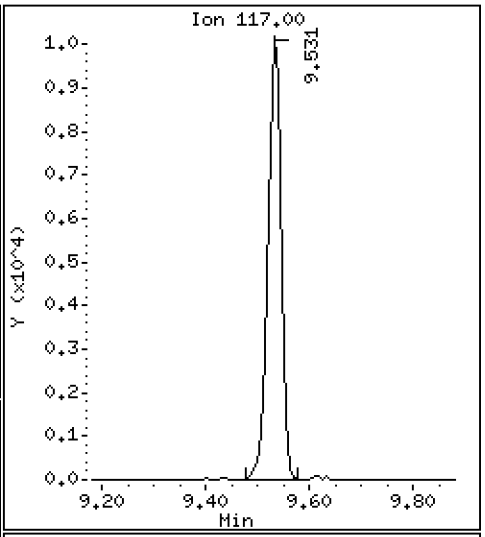
Column phase: ZB-5msi

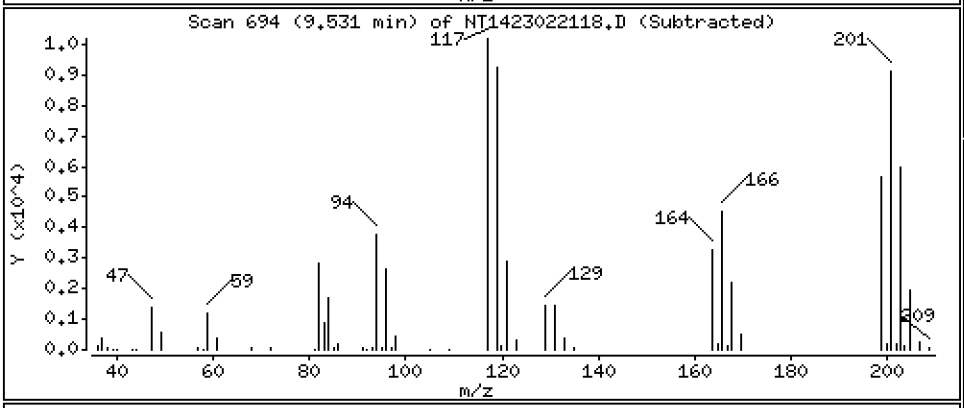
Column diameter: 0.25

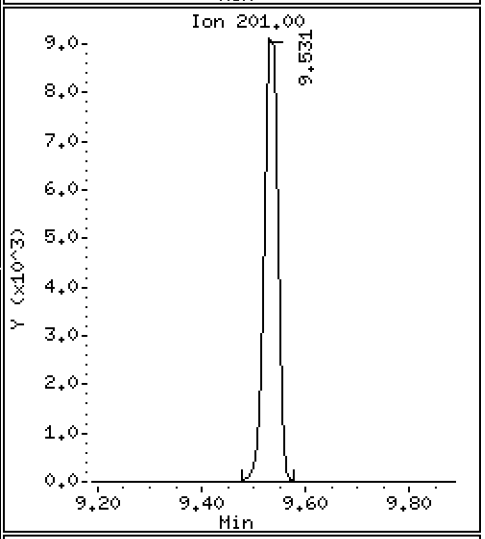
17 Hexachloroethane

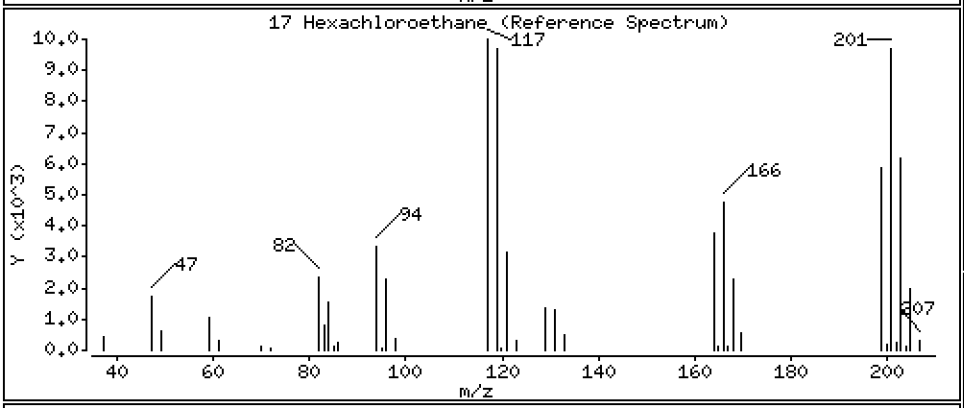
Concentration: 0.4700 ug/mL

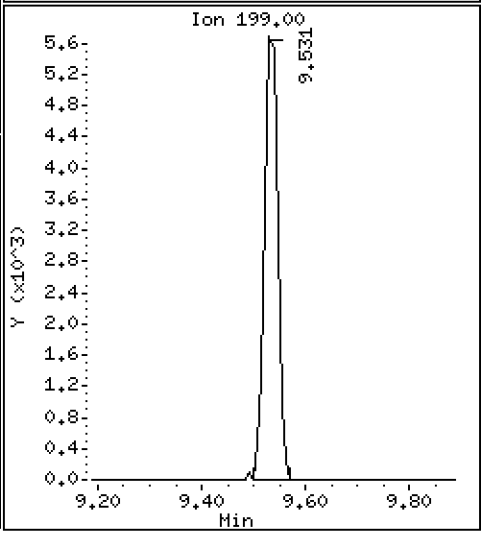


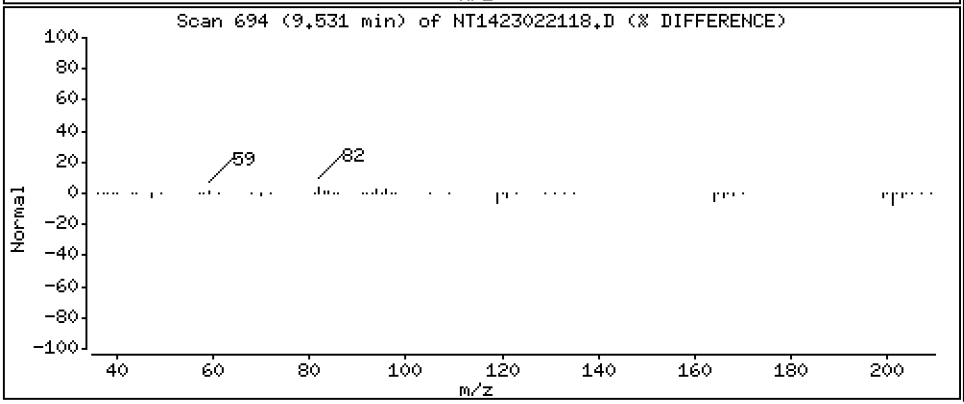












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

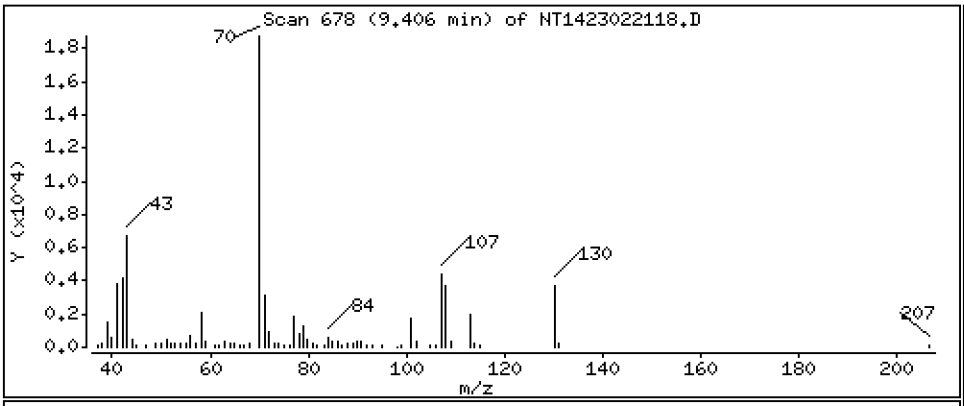
Operator: DSD

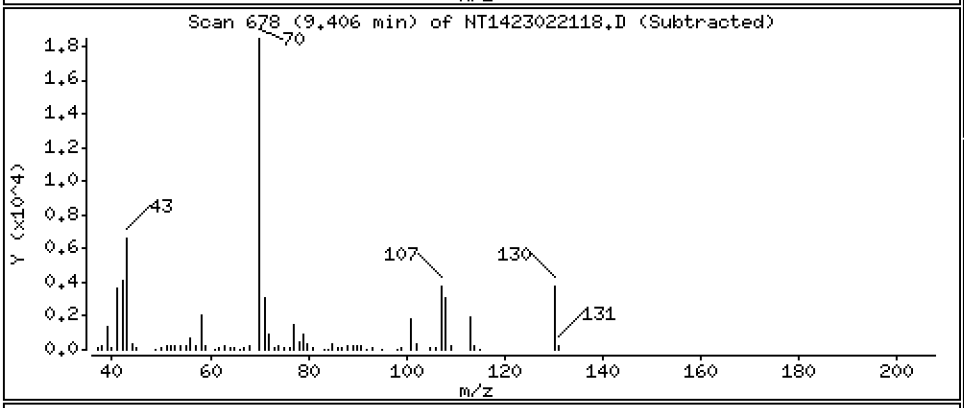
Column phase: ZB-5msi

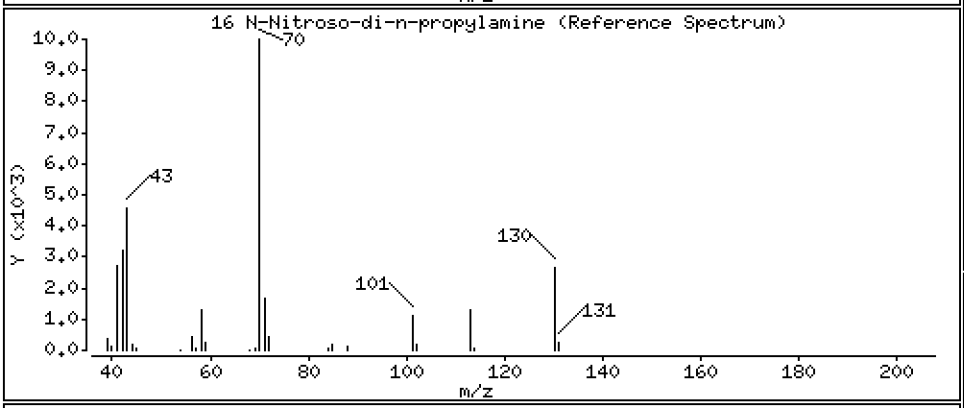
Column diameter: 0.25

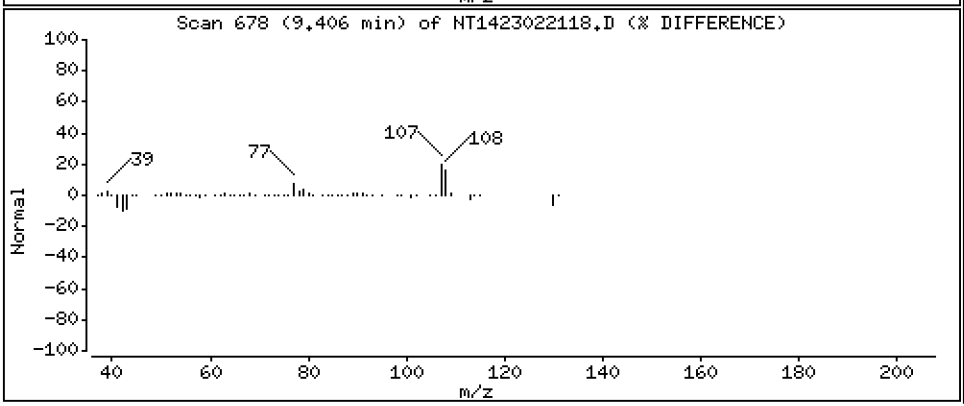
16 N-Nitroso-di-n-propylamine

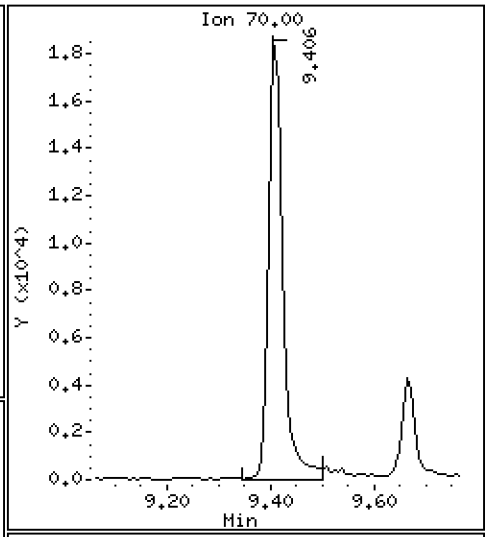
Concentration: 0.4771 ug/mL

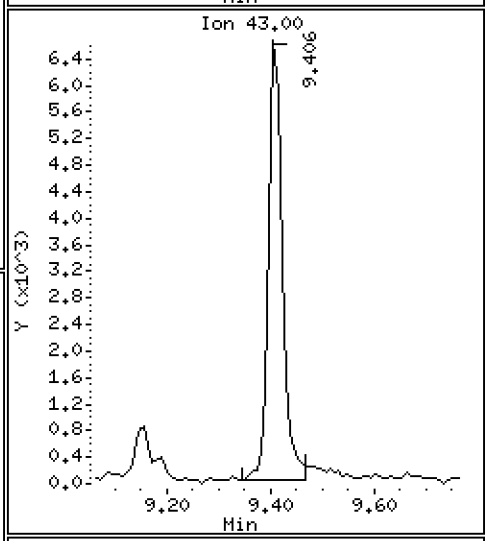


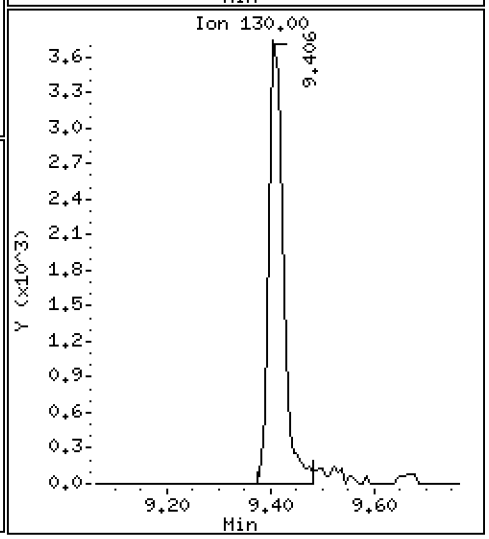












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

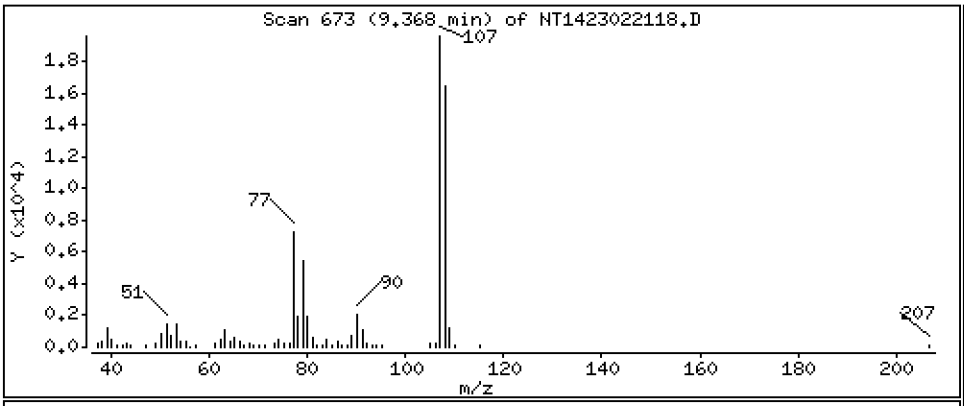
Operator: DSD

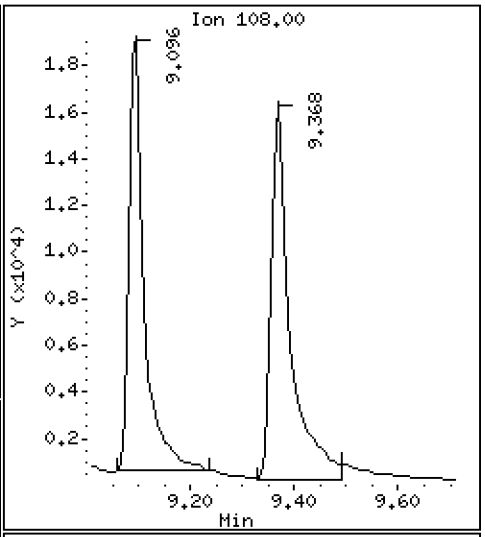
Column phase: ZB-5msi

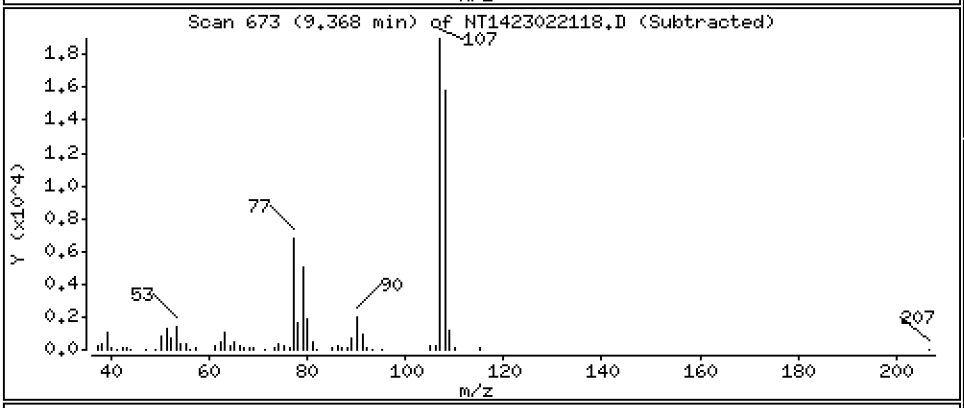
Column diameter: 0.25

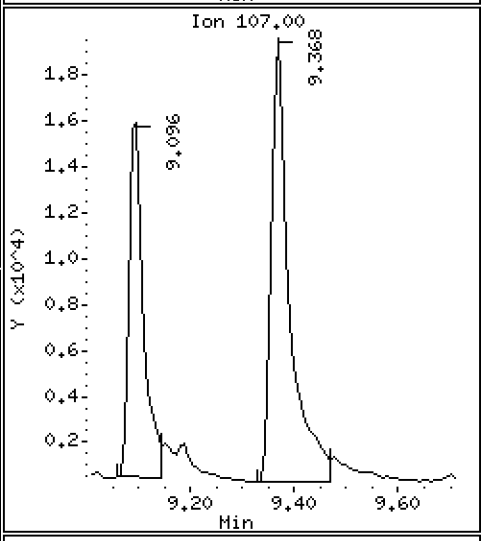
15 4-Methylphenol

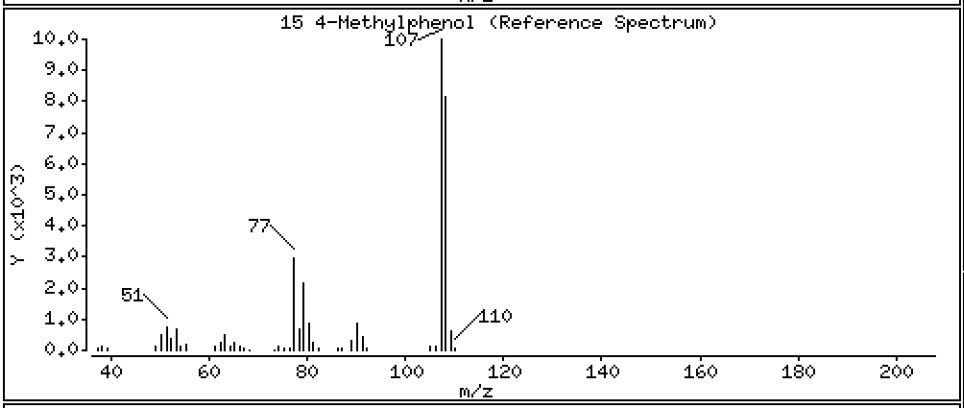
Concentration: 0.4863 ug/mL

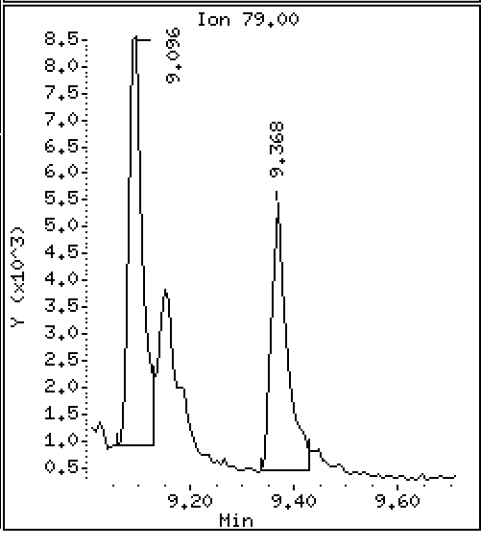


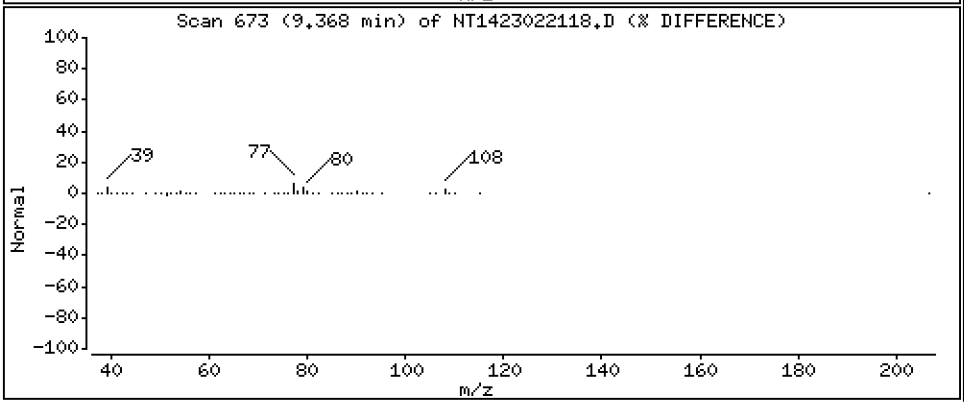












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

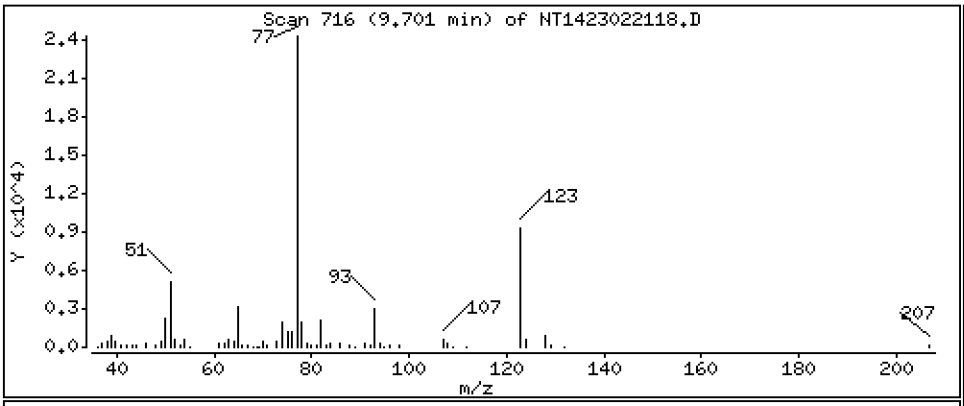
Operator: DSD

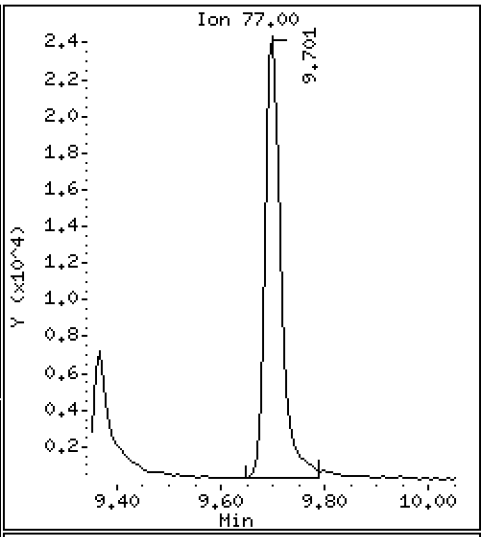
Column phase: ZB-5msi

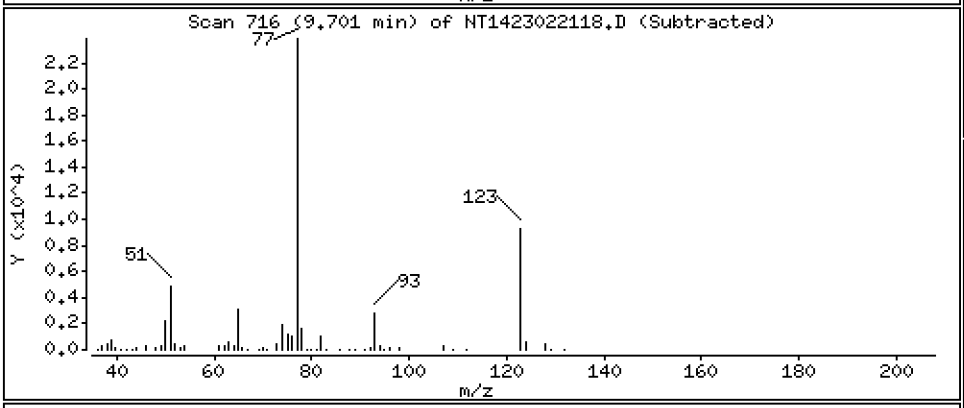
Column diameter: 0.25

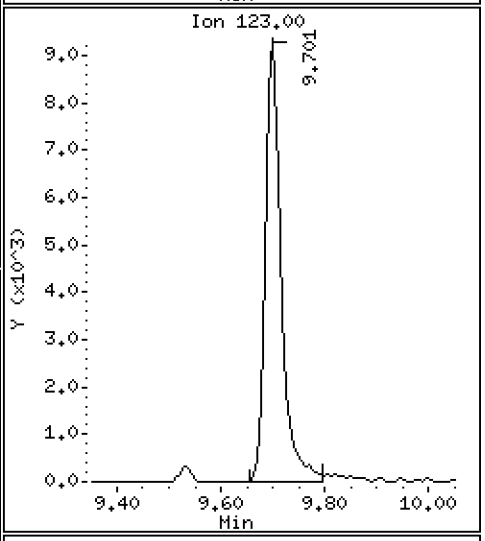
19 Nitrobenzene

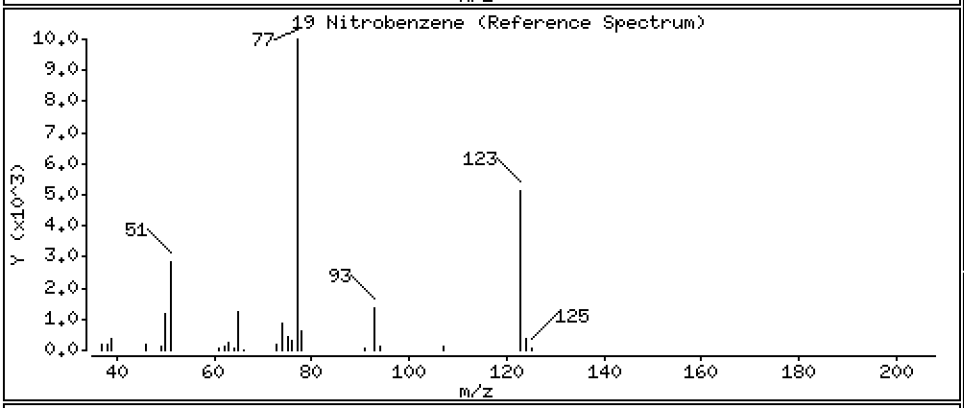
Concentration: 0.5003 ug/mL

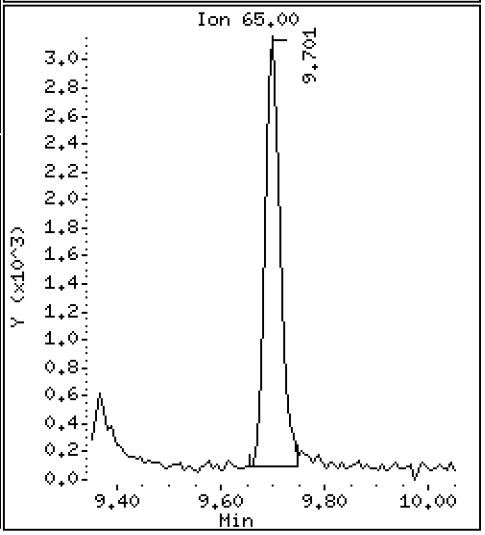


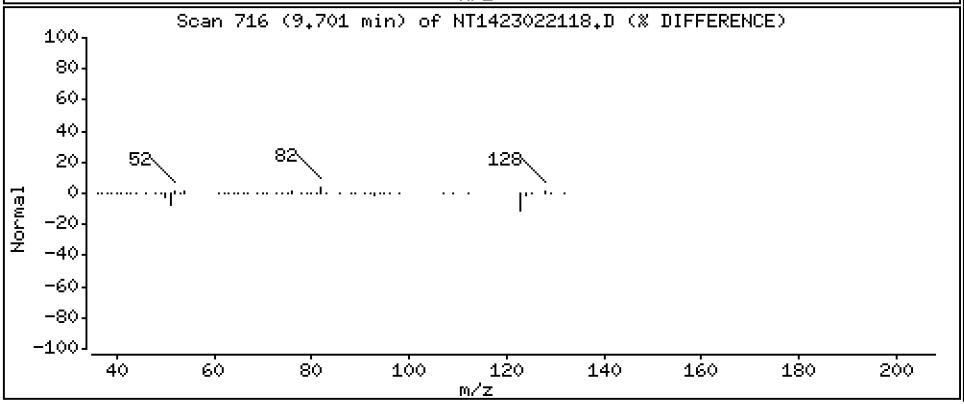












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

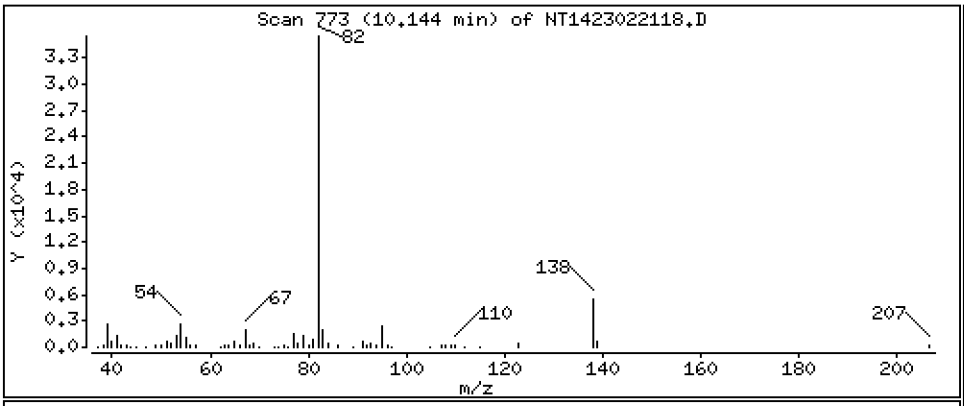
Operator: DSD

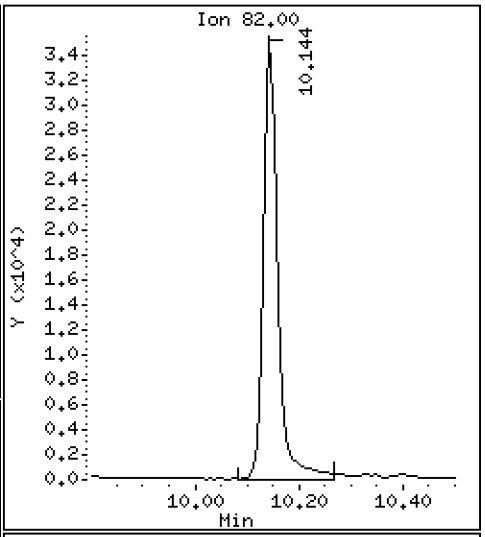
Column phase: ZB-5msi

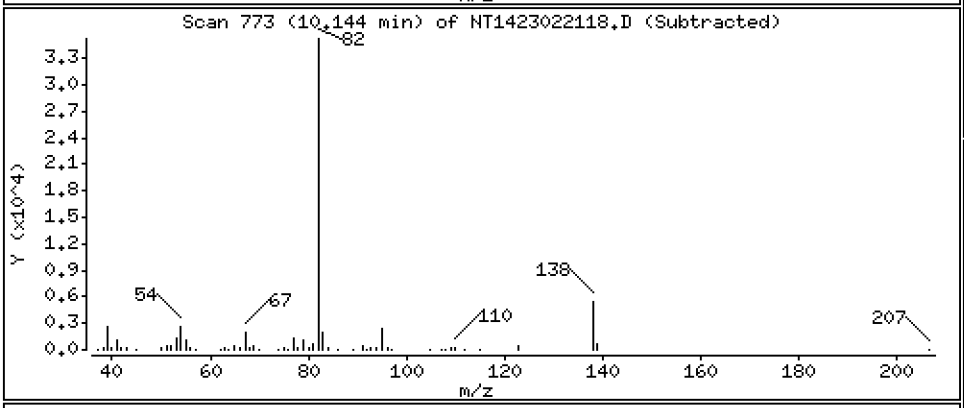
Column diameter: 0.25

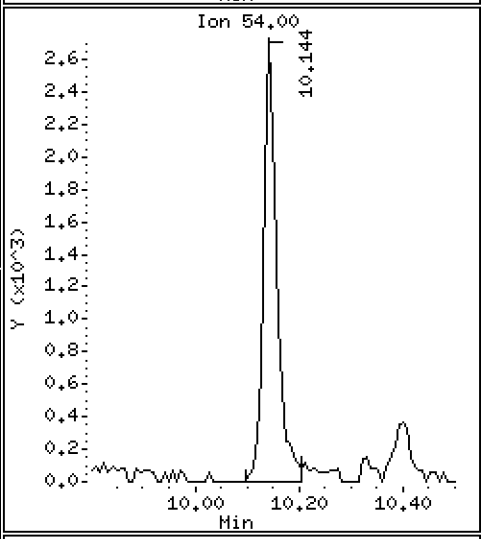
20 Isophorone

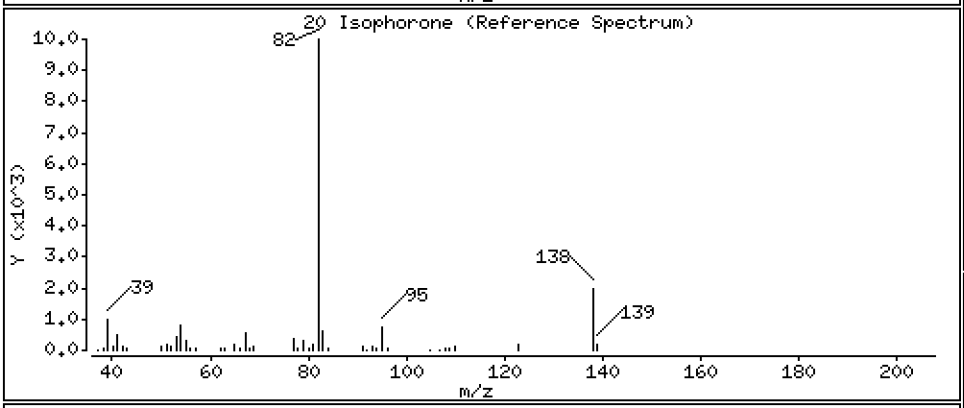
Concentration: 0.5295 ug/mL

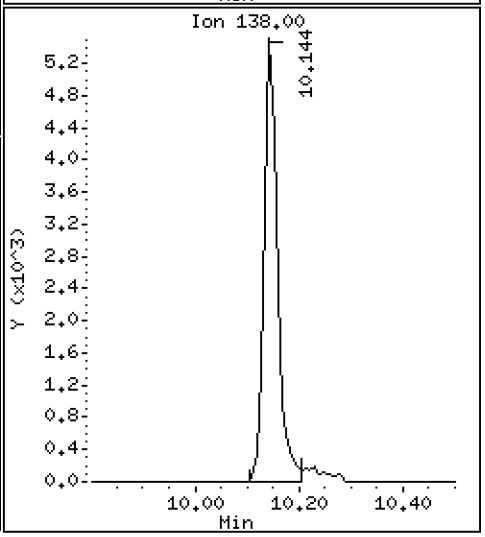


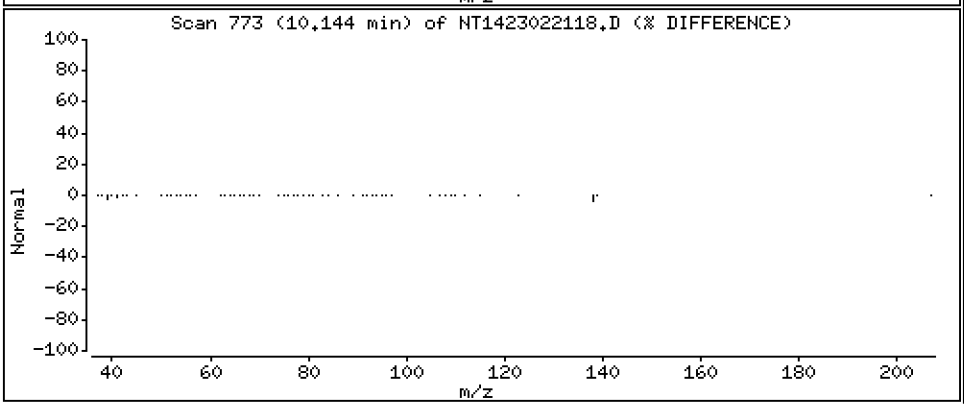












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

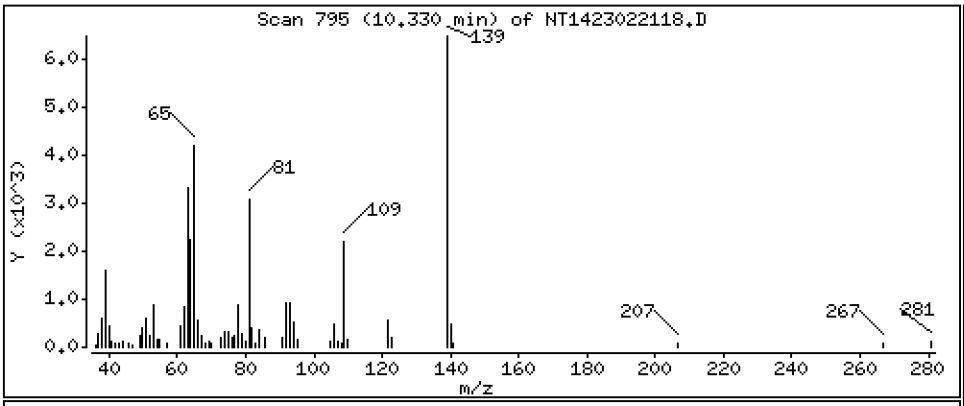
Operator: DSD

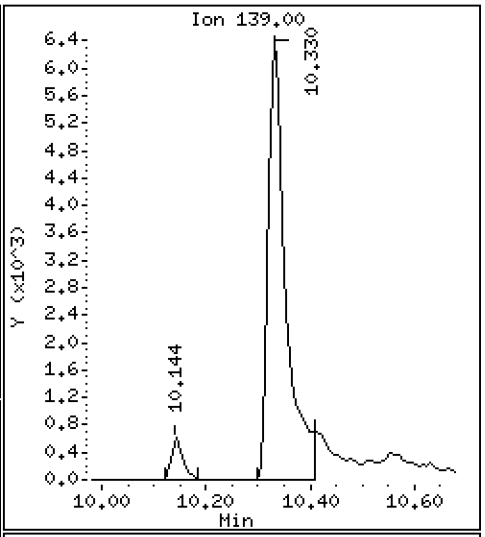
Column phase: ZB-5msi

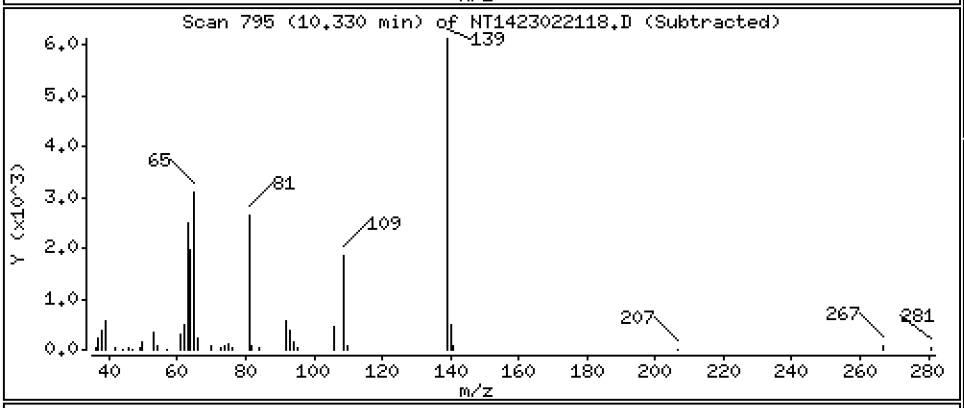
Column diameter: 0.25

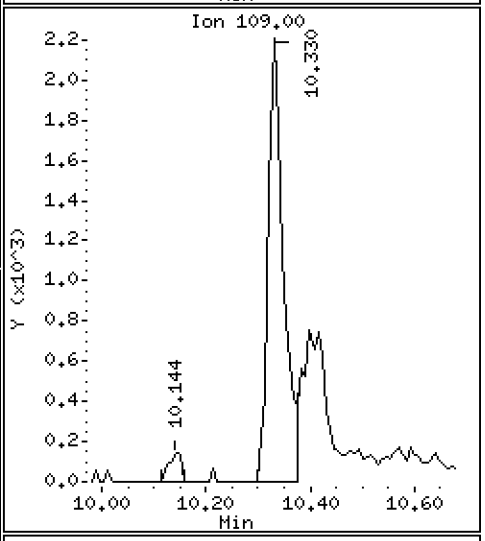
21 2-Nitrophenol

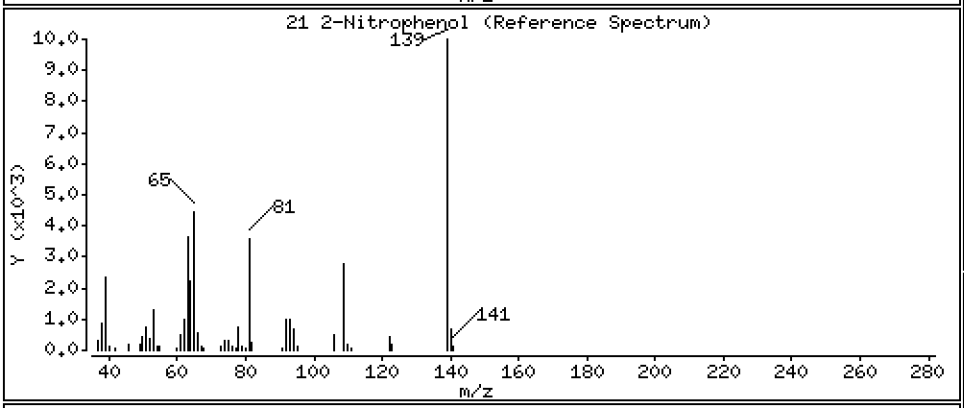
Concentration: 0.3328 ug/mL

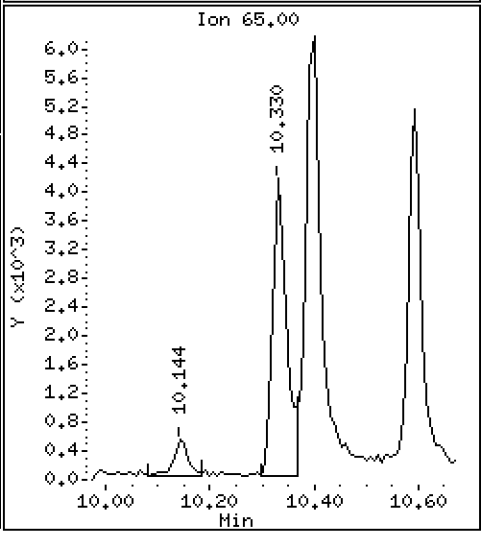


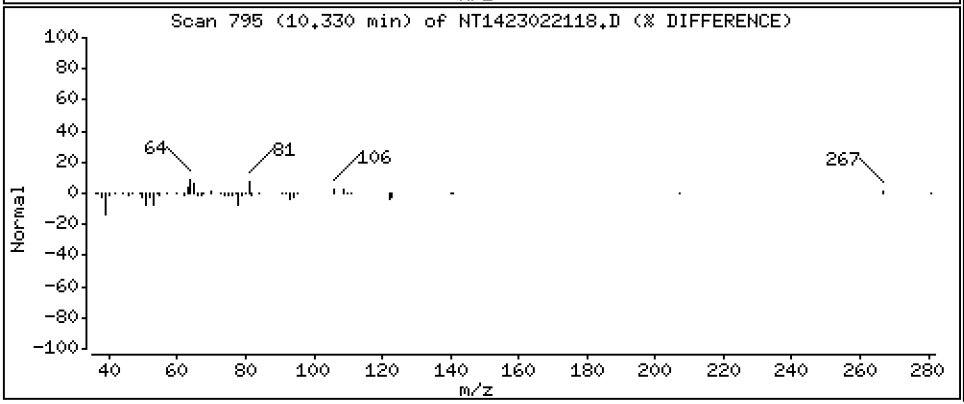












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

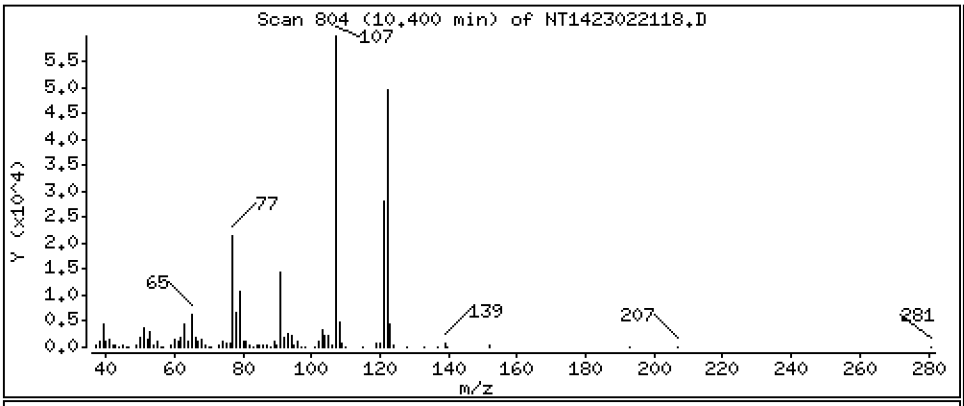
Operator: DSD

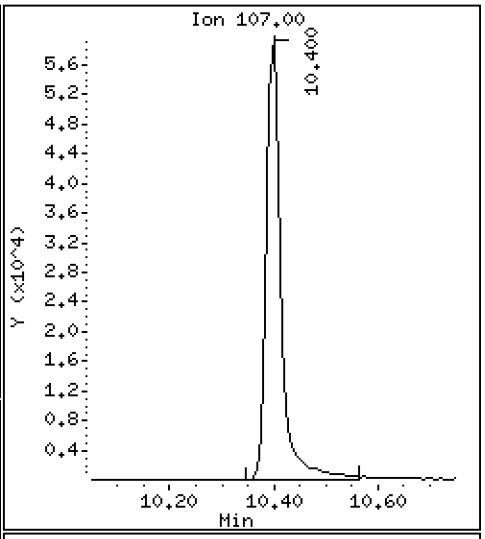
Column phase: ZB-5msi

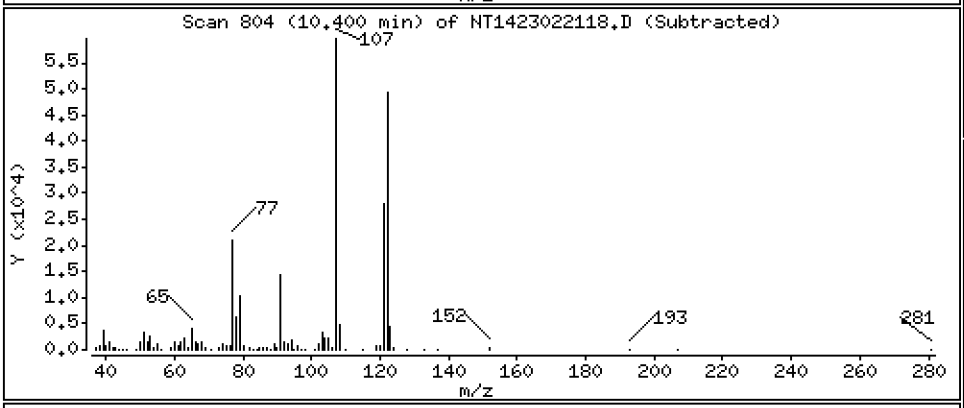
Column diameter: 0.25

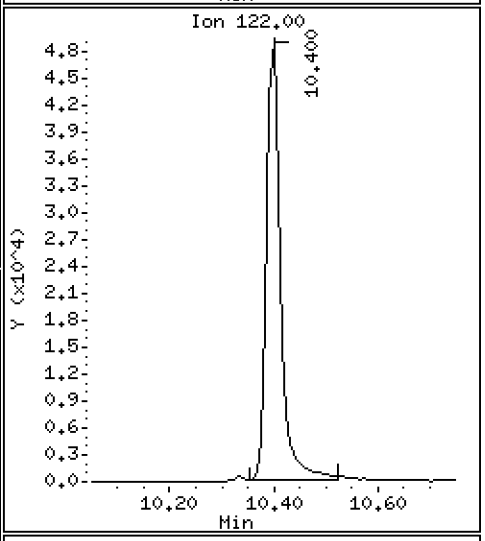
22 2,4-Dimethylphenol

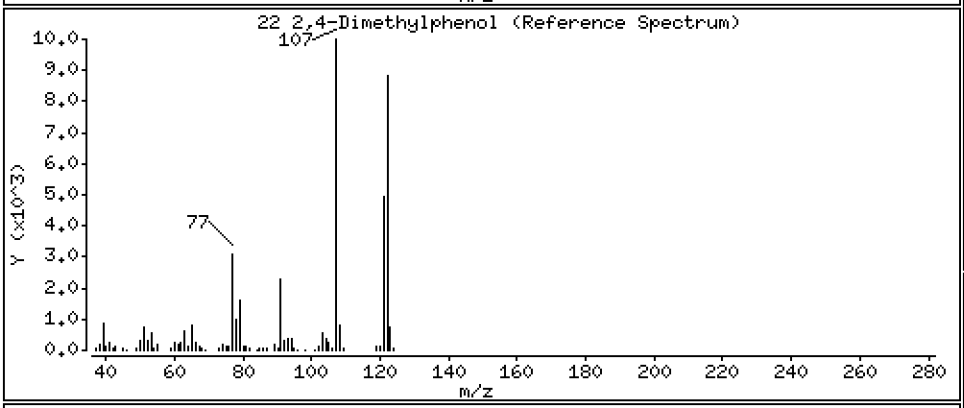
Concentration: 1.489 ug/mL

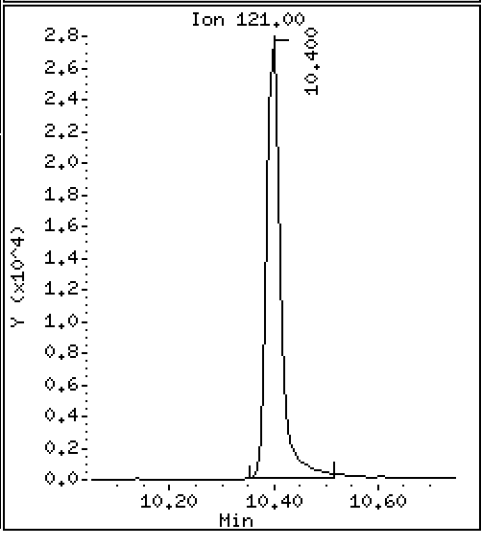


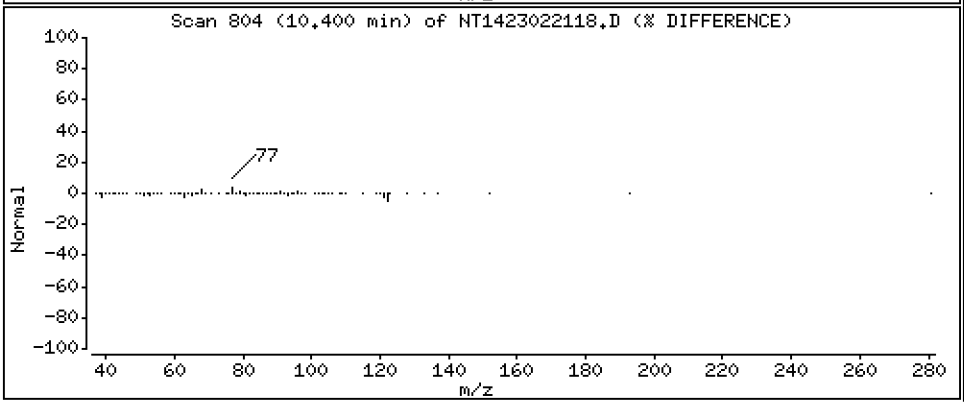












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

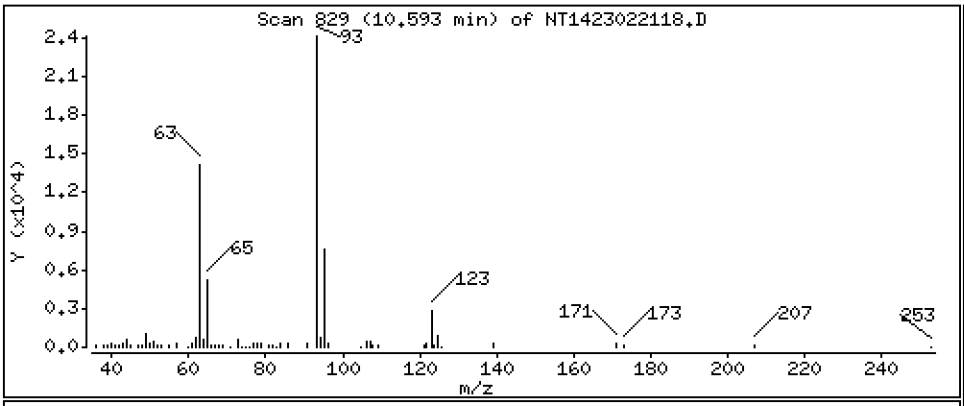
Operator: DSD

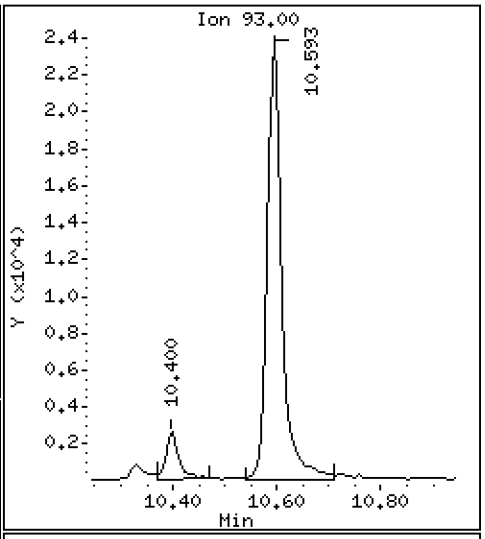
Column phase: ZB-5msi

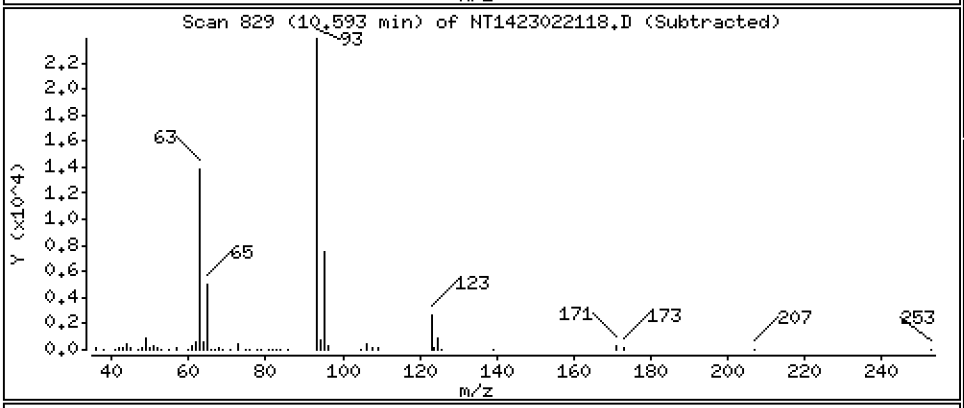
Column diameter: 0.25

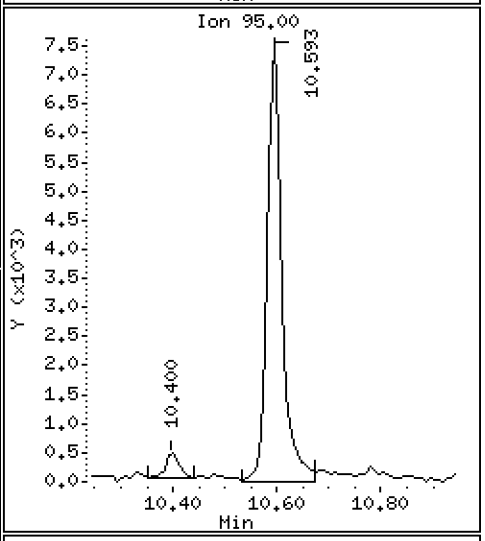
23 Bis(2-Chloroethoxy)methane

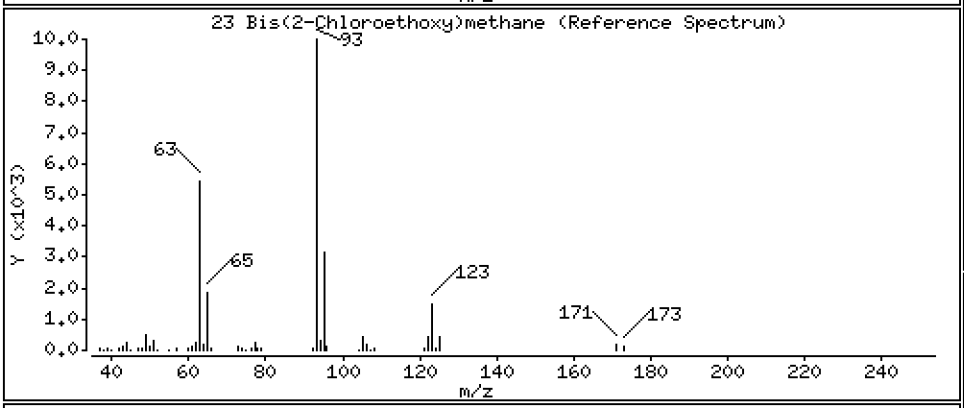
Concentration: 0.5260 ug/mL

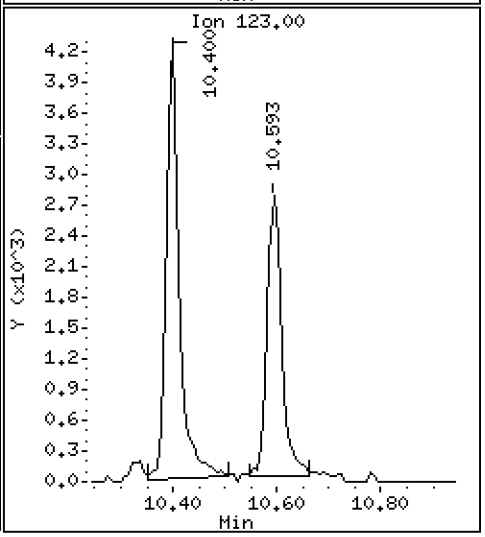


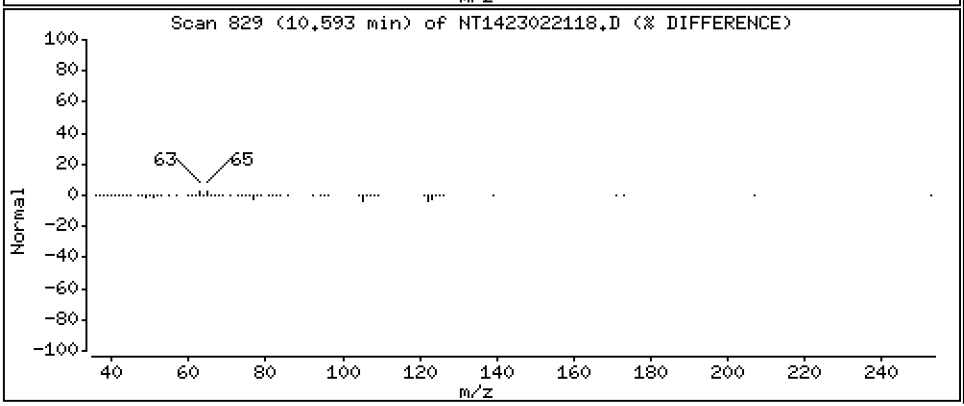












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

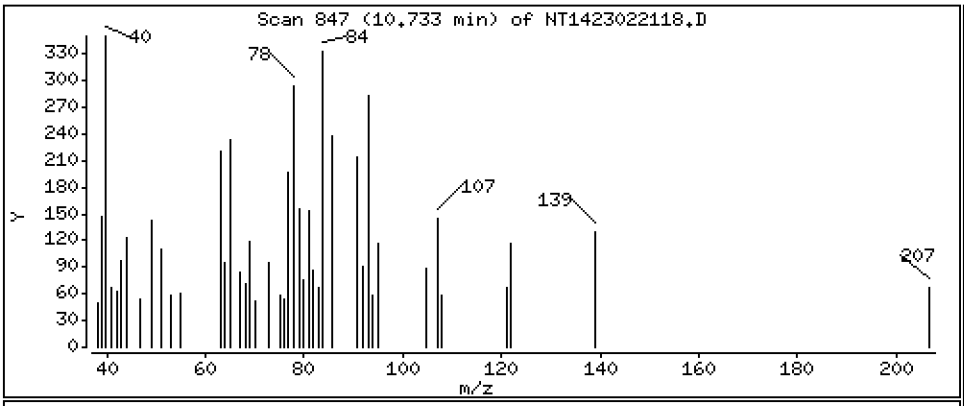
Operator: DSD

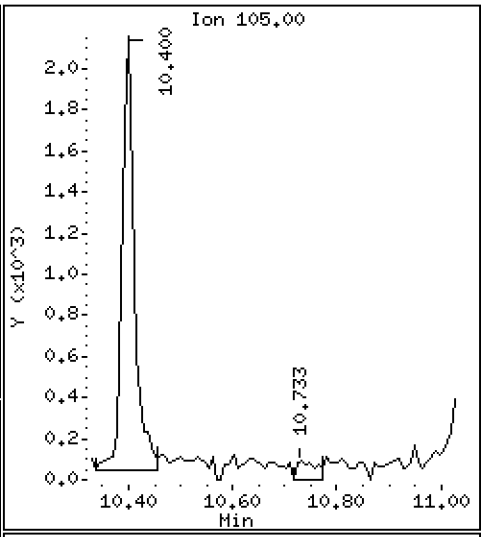
Column phase: ZB-5msi

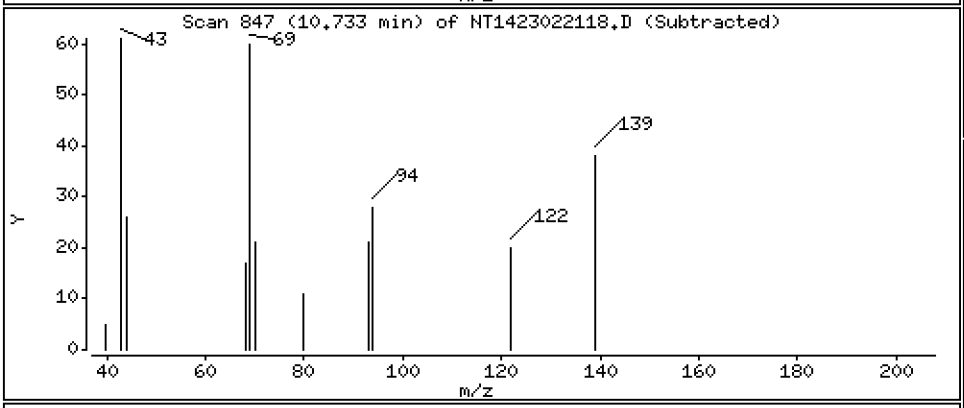
Column diameter: 0.25

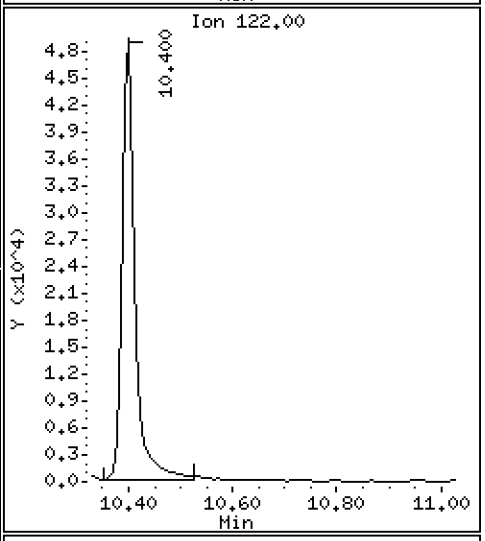
24 Benzoic acid

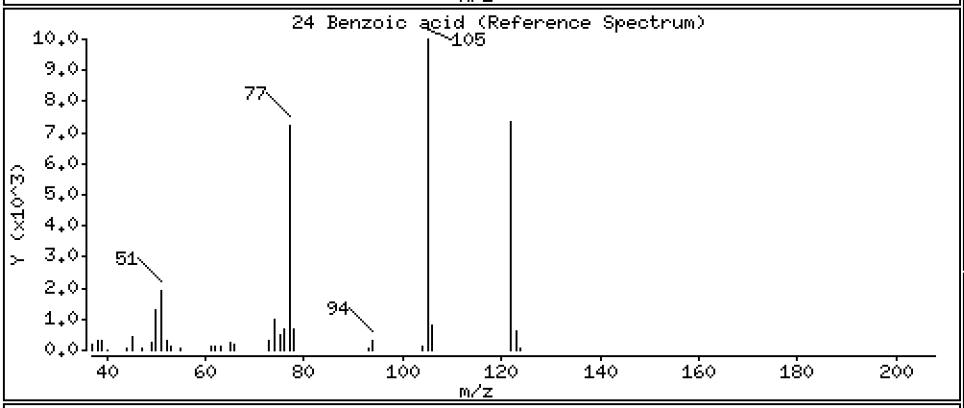
Concentration: 0.005133 ug/mL

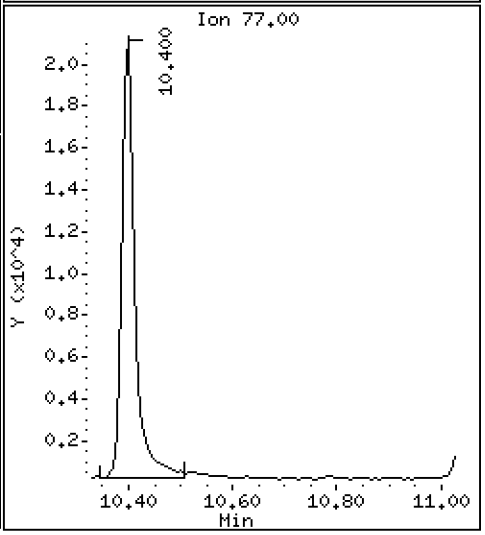


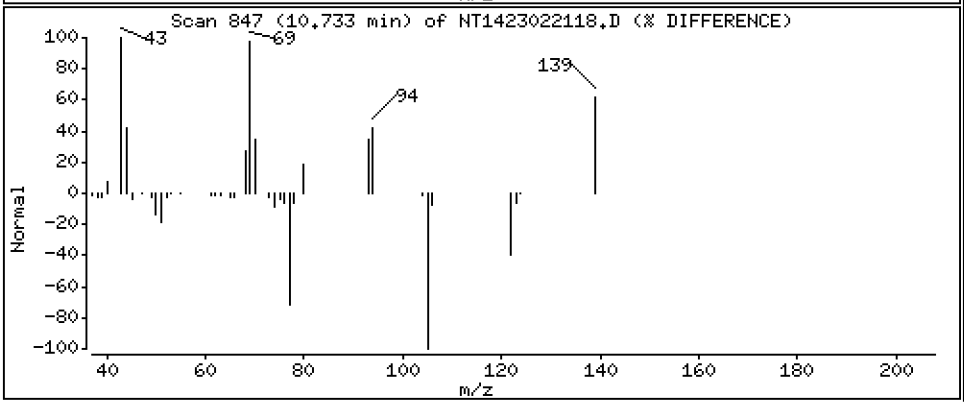












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

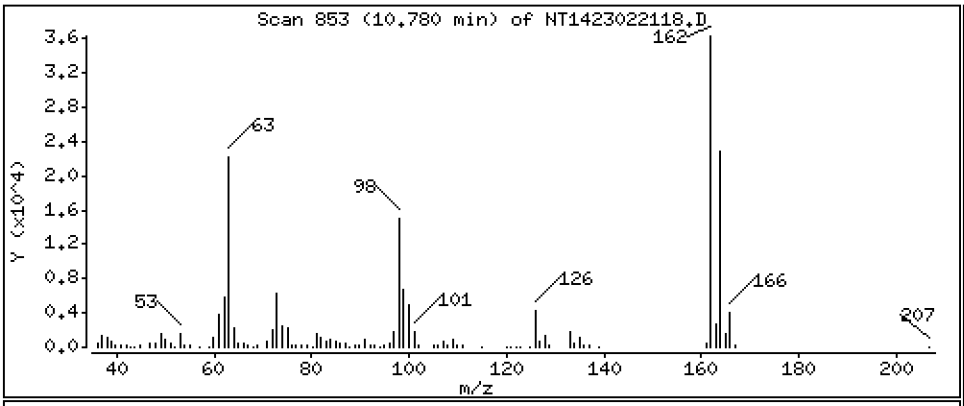
Operator: DSD

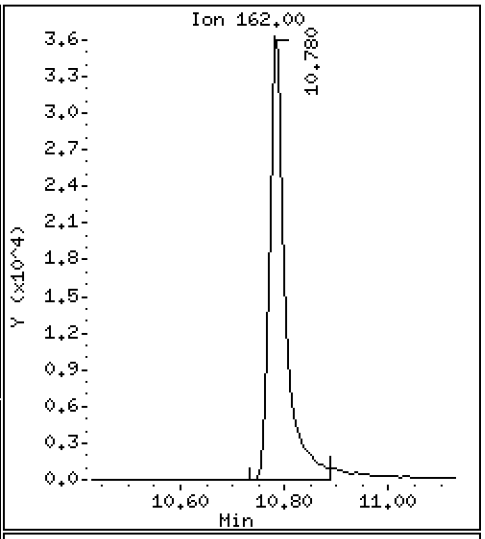
Column phase: ZB-5msi

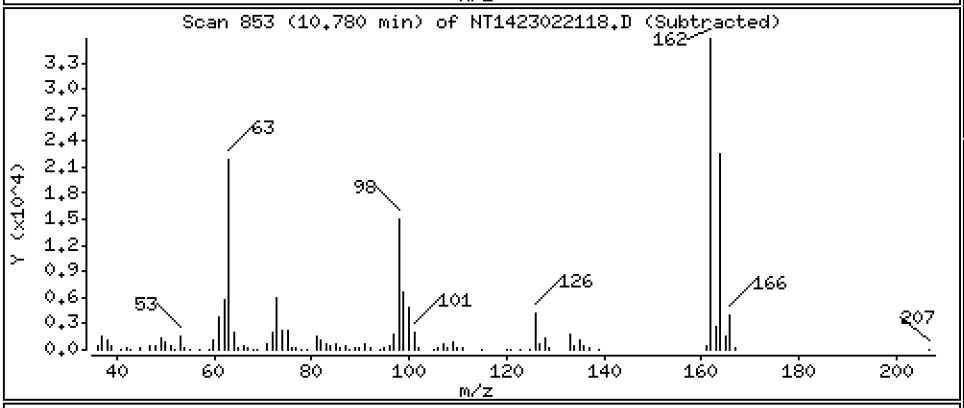
Column diameter: 0.25

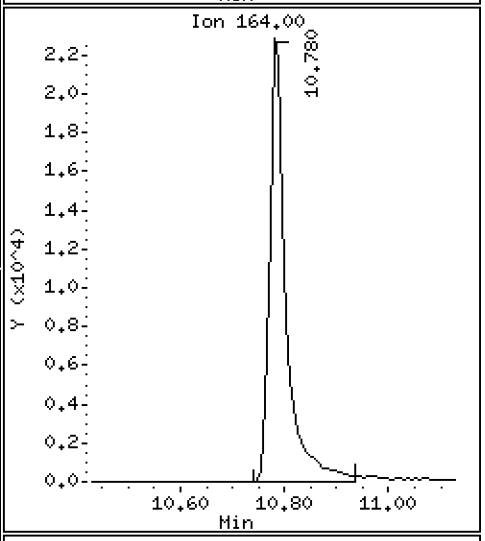
25 2,4-Dichlorophenol

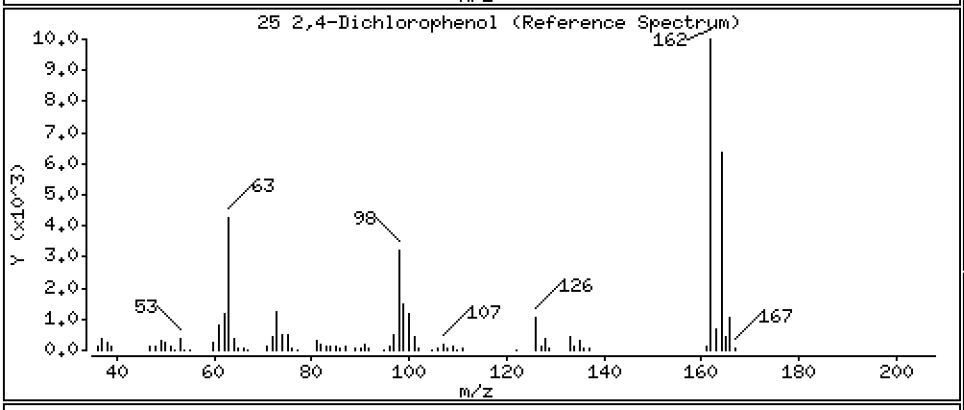
Concentration: 1.203 ug/mL

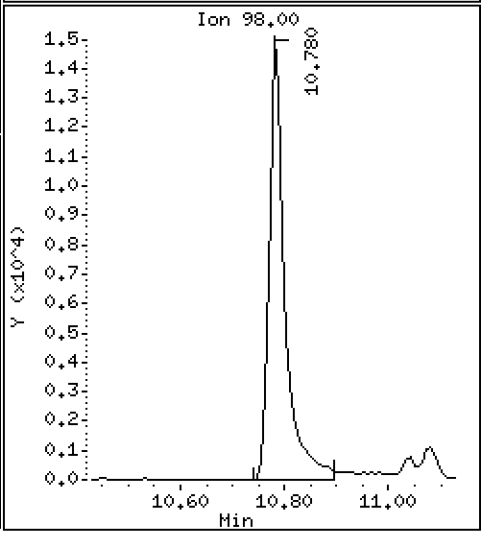


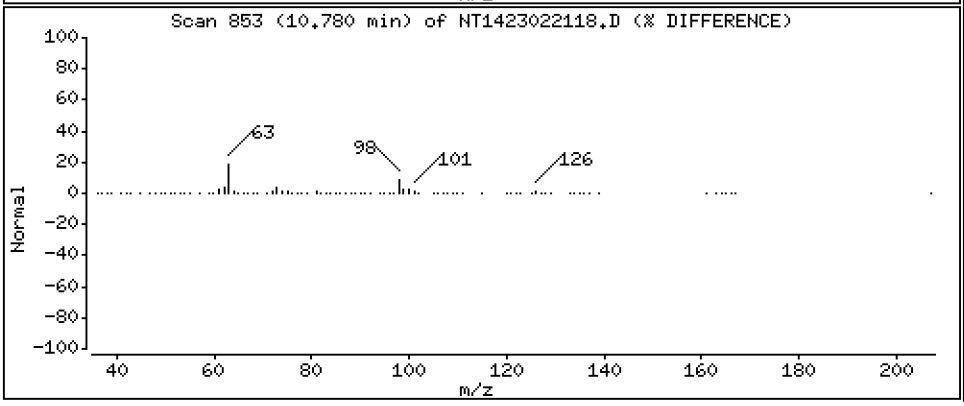












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

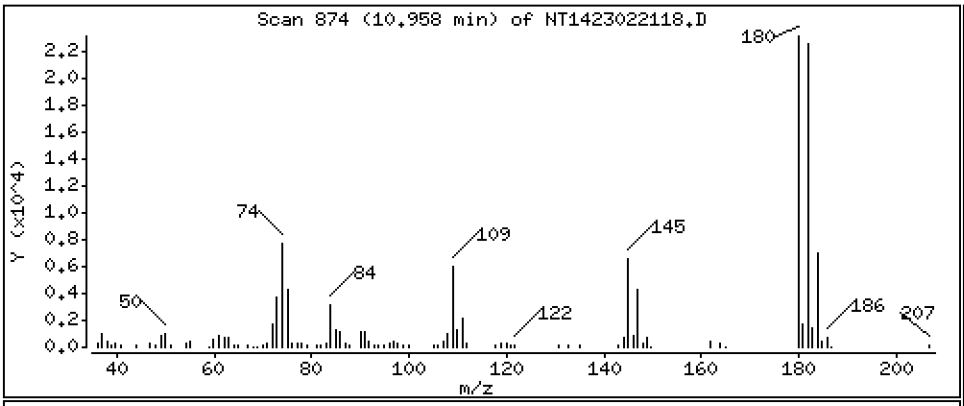
Operator: DSD

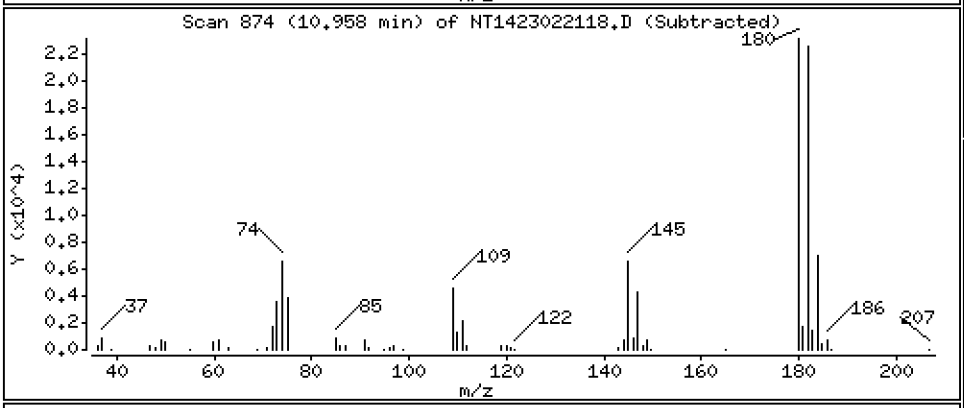
Column phase: ZB-5msi

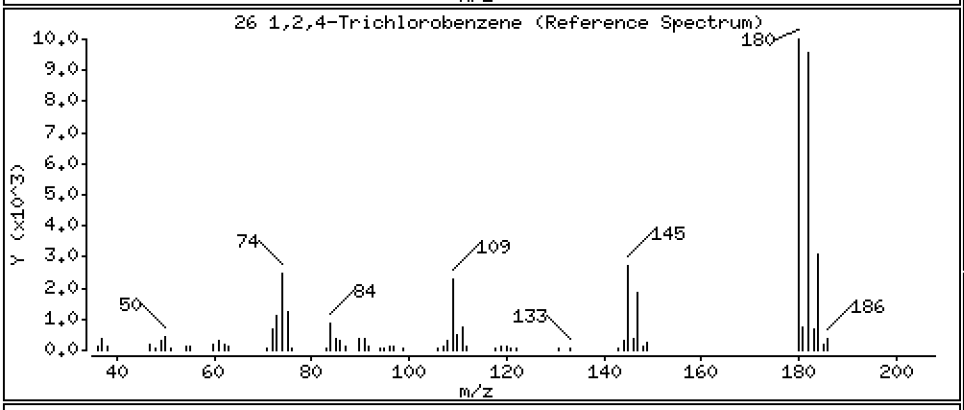
Column diameter: 0.25

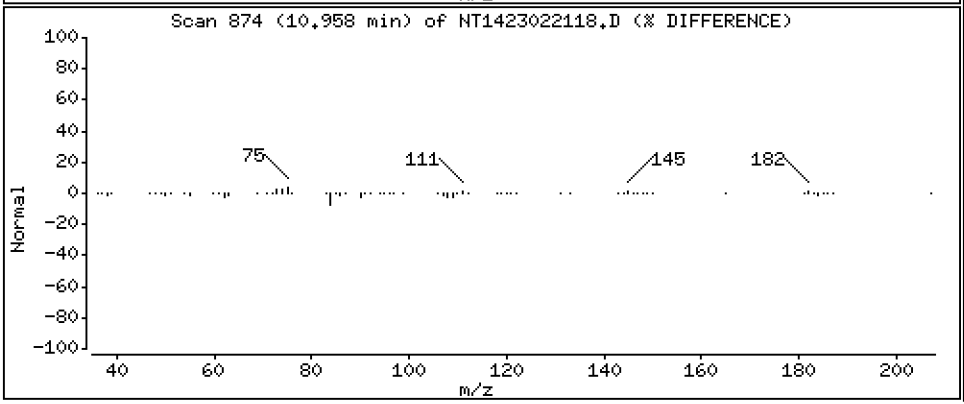
26 1,2,4-Trichlorobenzene

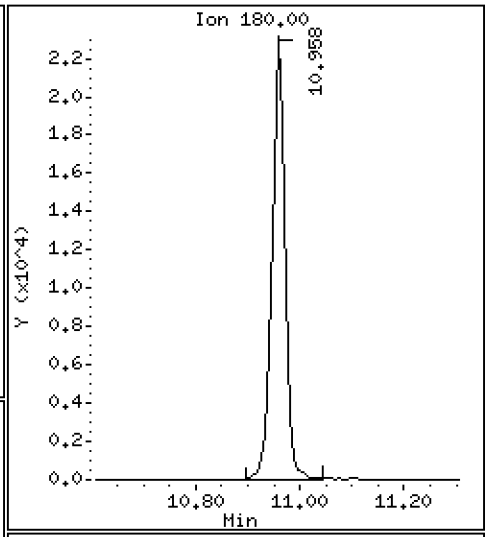
Concentration: 0.5658 ug/mL

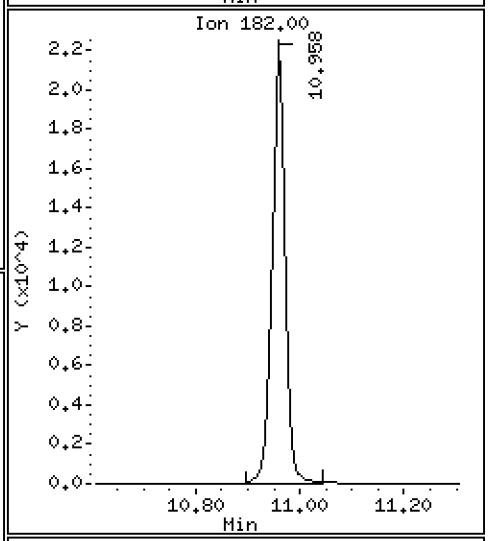


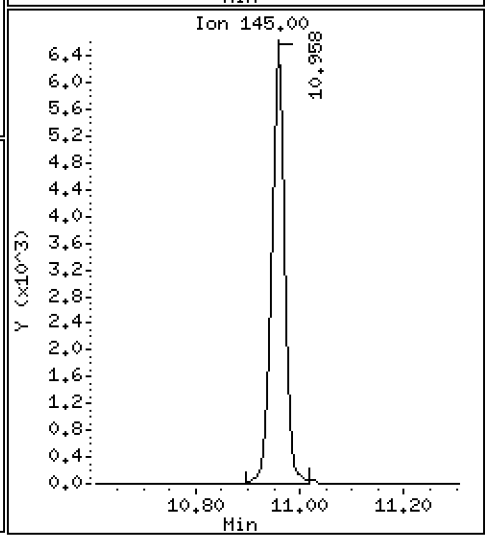












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

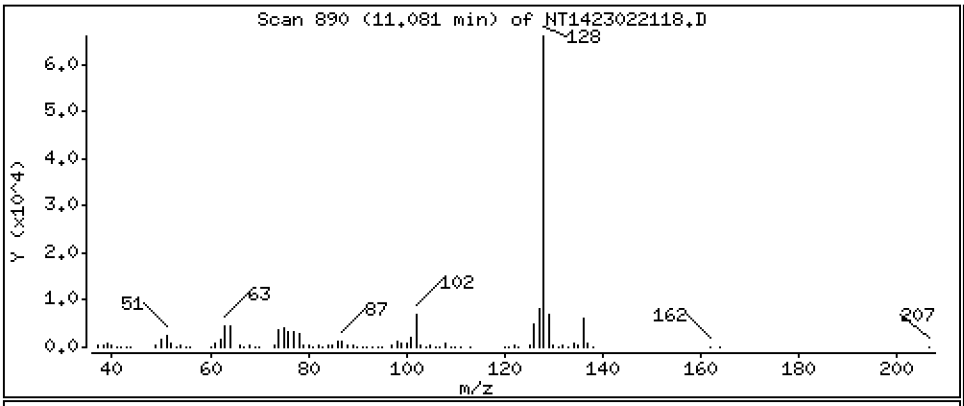
Operator: DSD

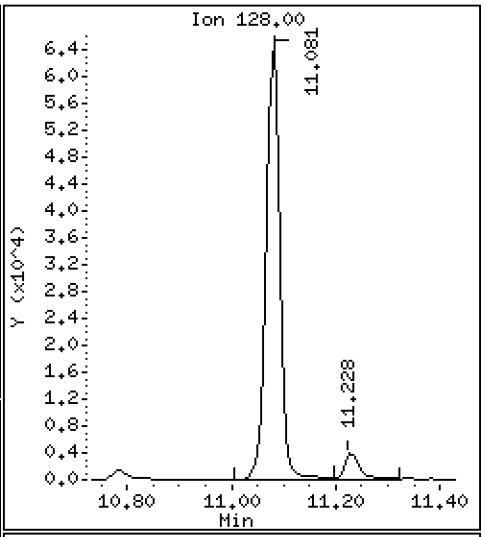
Column phase: ZB-5msi

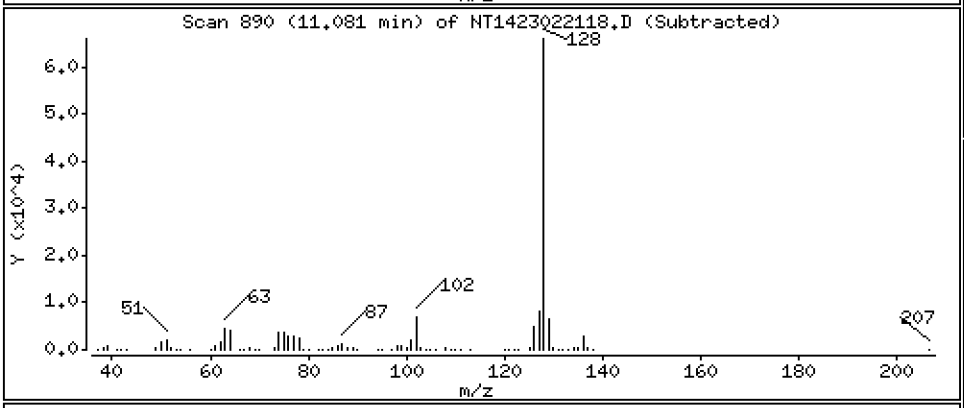
Column diameter: 0.25

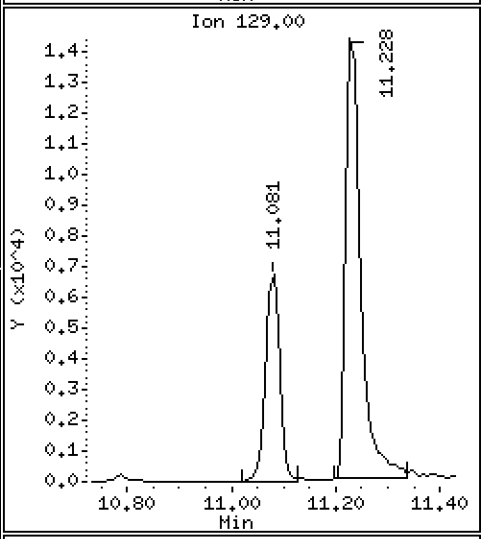
28 Naphthalene

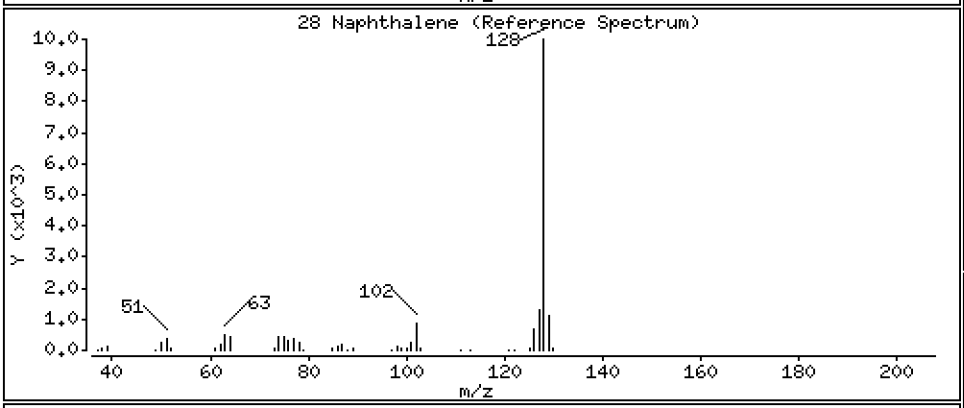
Concentration: 0.5407 ug/mL

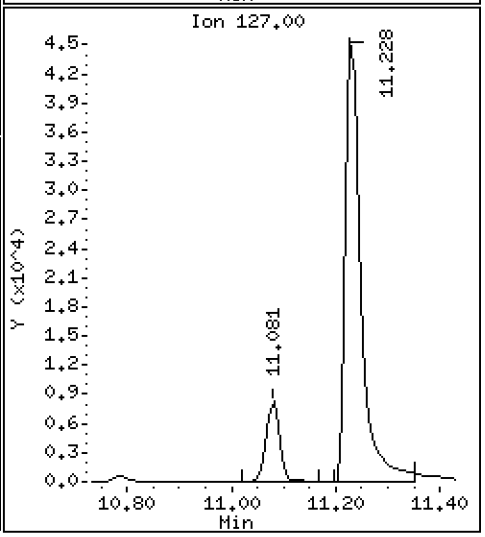


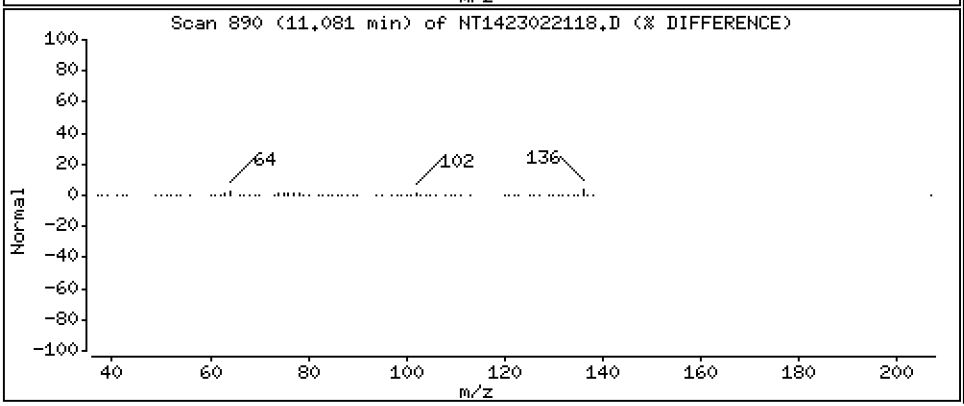












Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022118.D

Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

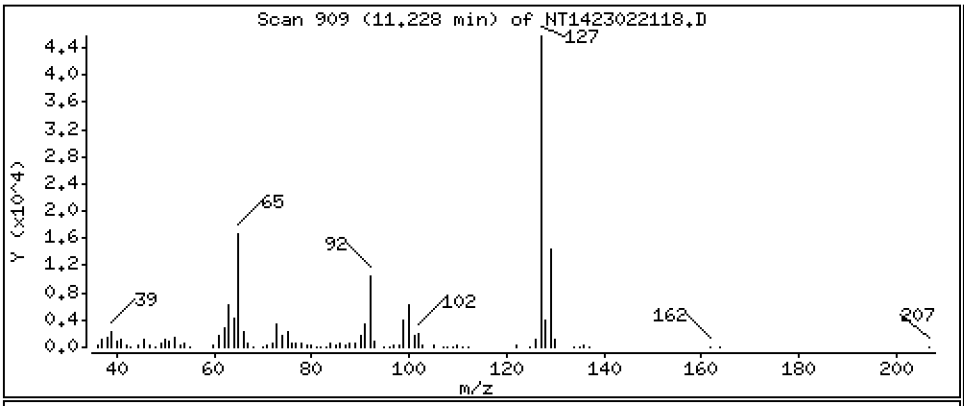
Operator: DSD

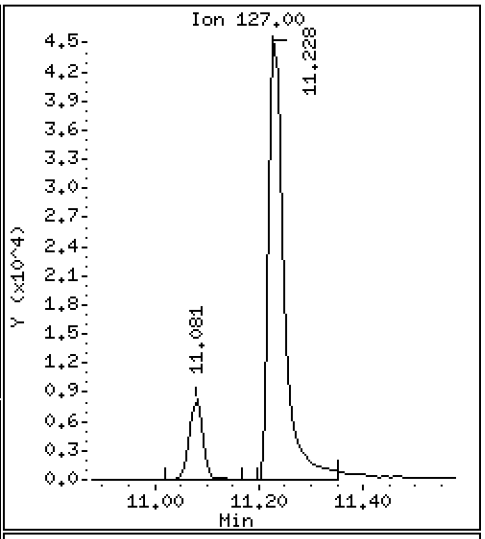
Column phase: ZB-5msi

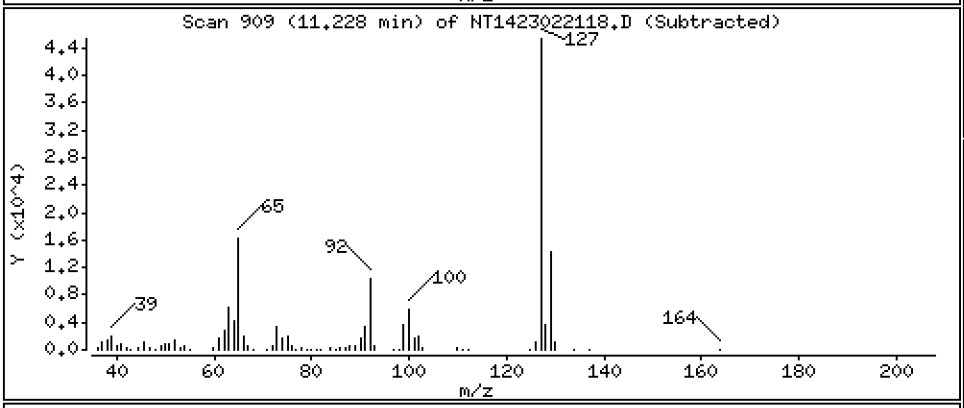
Column diameter: 0.25

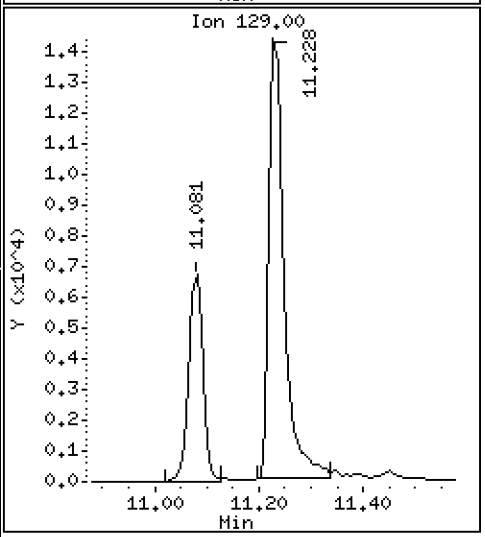
29 4-Chloroaniline

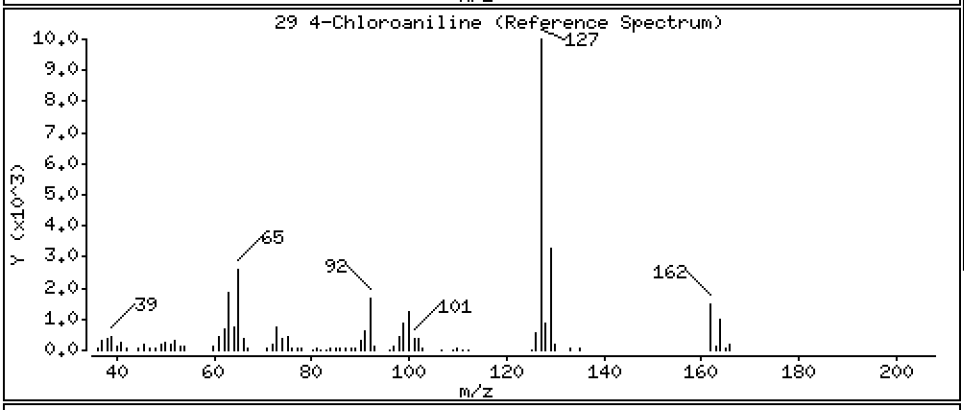
Concentration: 1.013 ug/mL

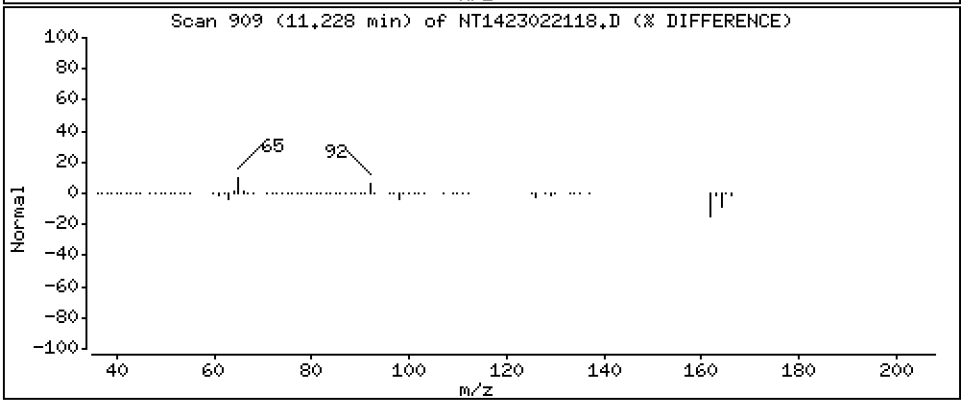












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

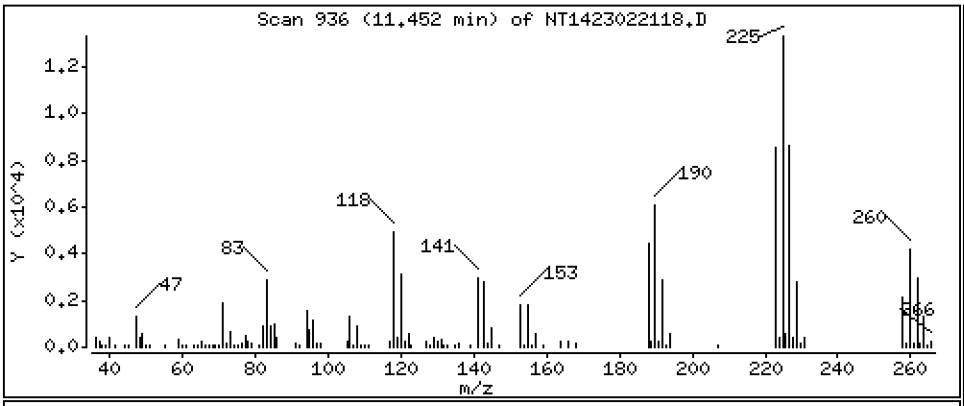
Operator: DSD

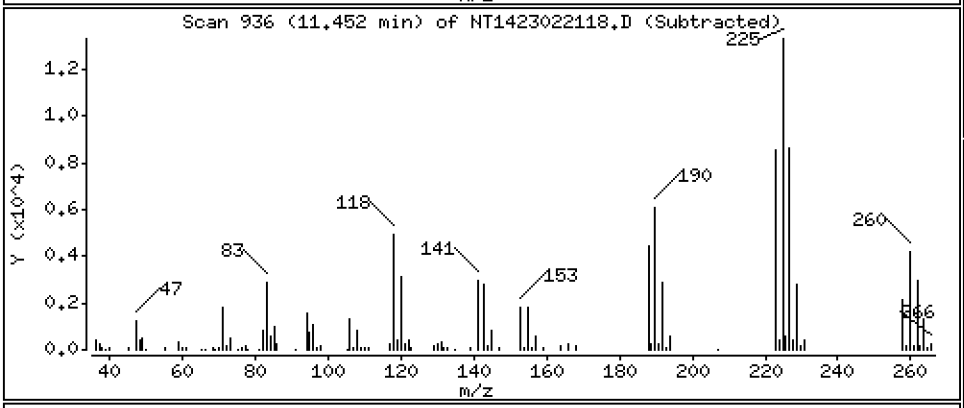
Column phase: ZB-5msi

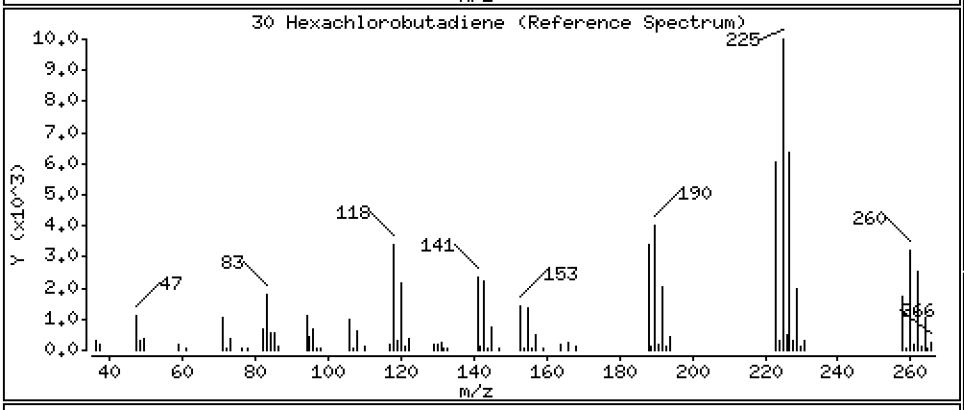
Column diameter: 0.25

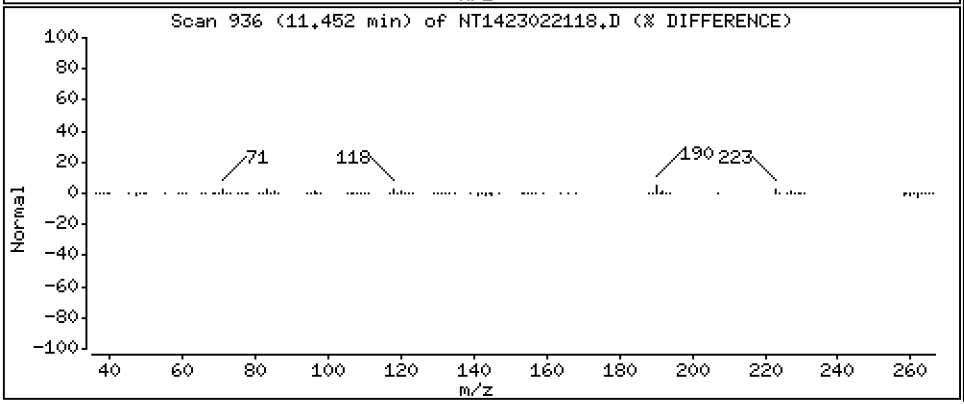
30 Hexachlorobutadiene

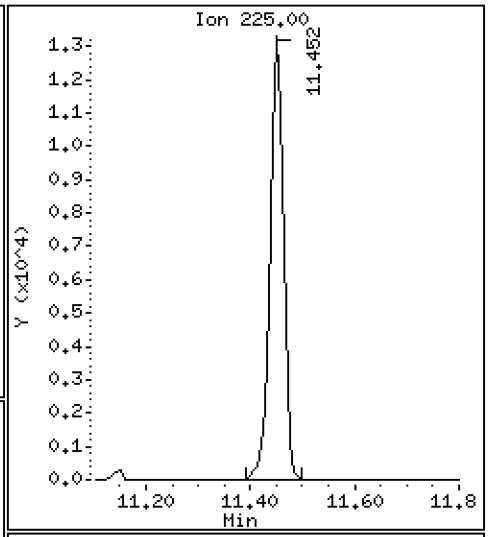
Concentration: 0.5657 ug/mL

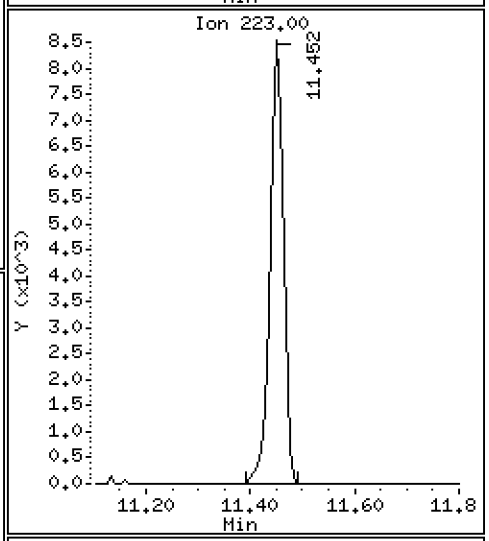


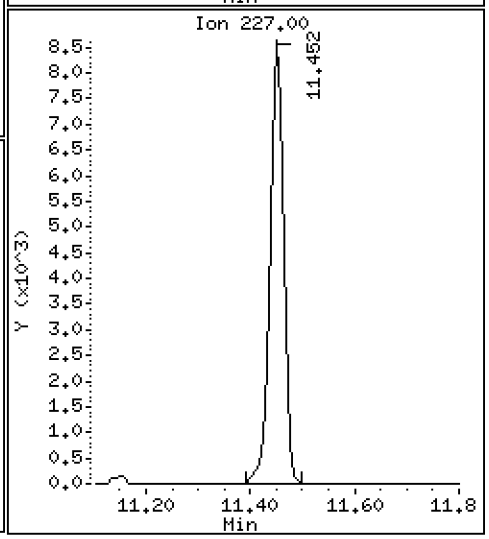












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

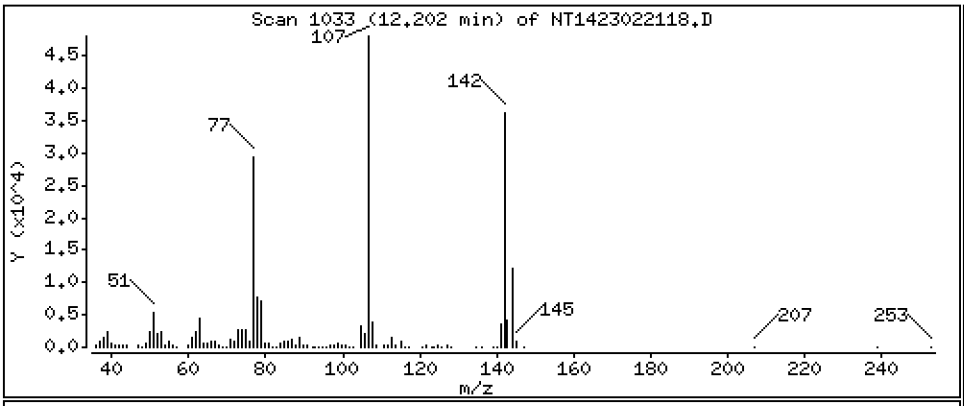
Operator: DSD

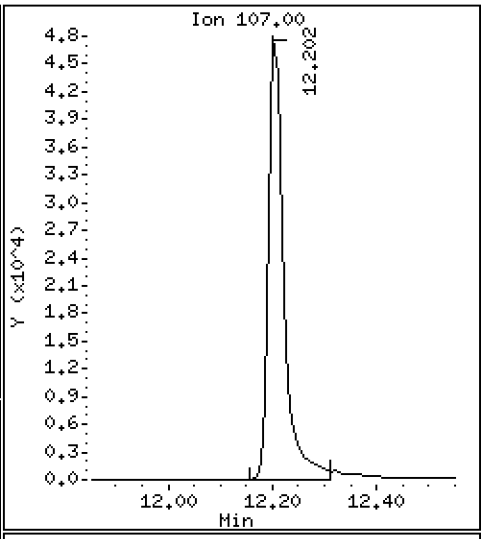
Column phase: ZB-5msi

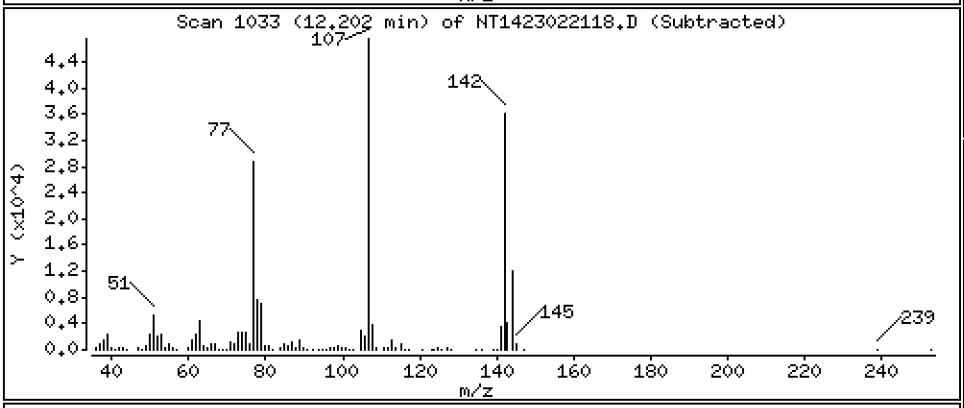
Column diameter: 0.25

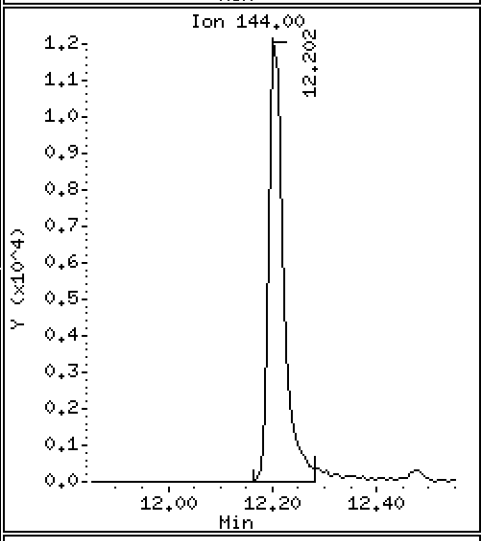
31 4-Chloro-3-methylphenol

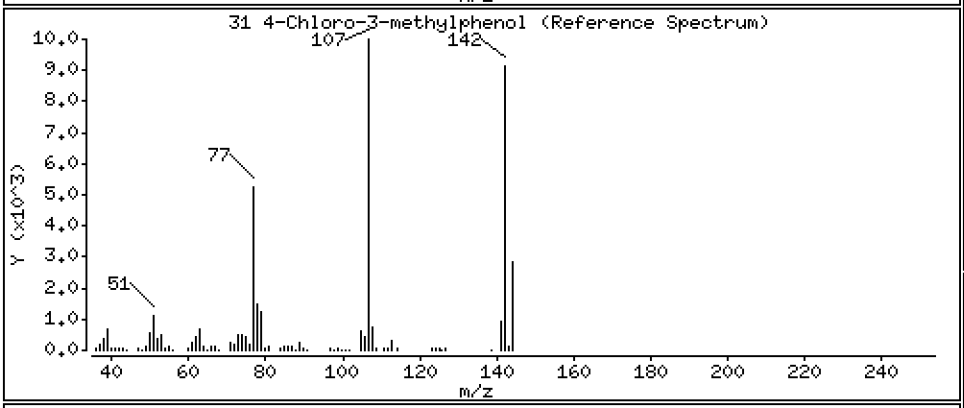
Concentration: 1.357 ug/mL

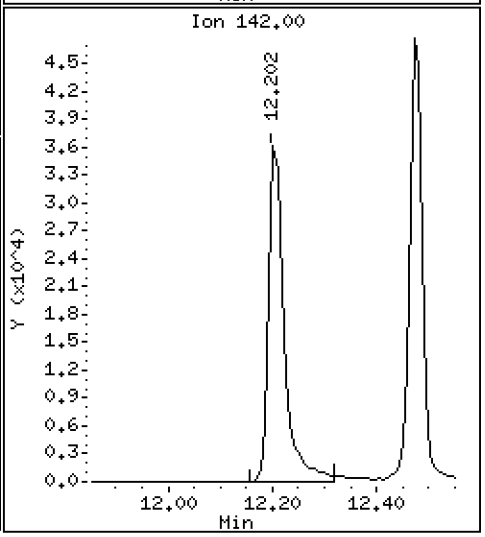


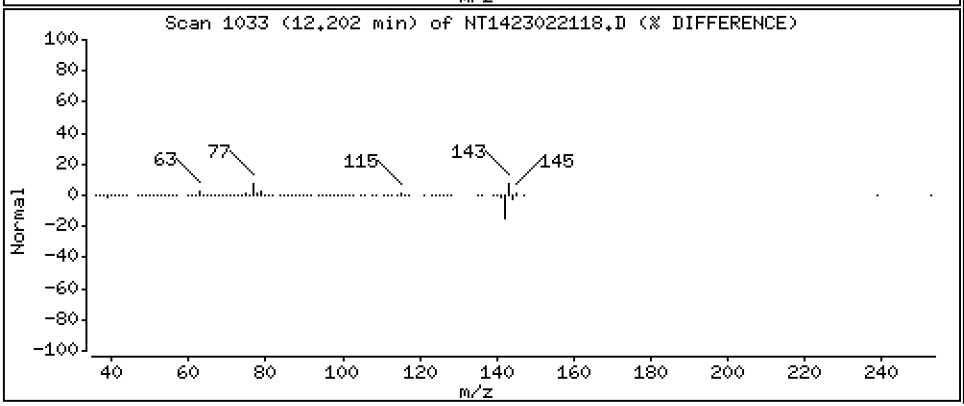












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

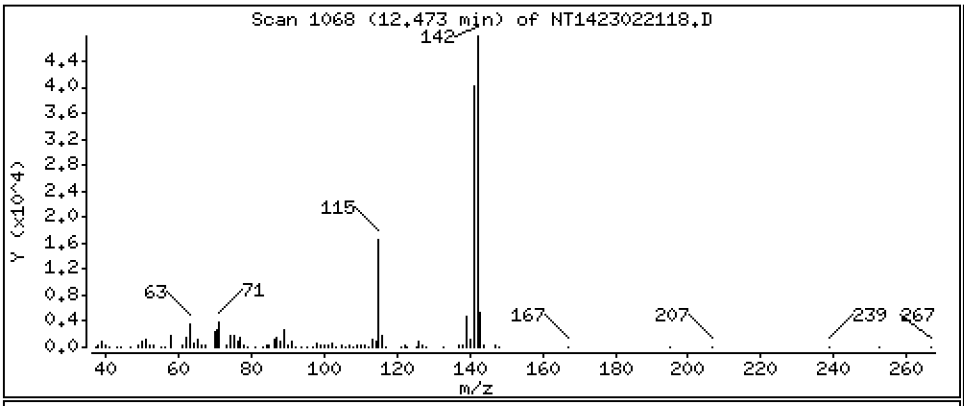
Operator: DSD

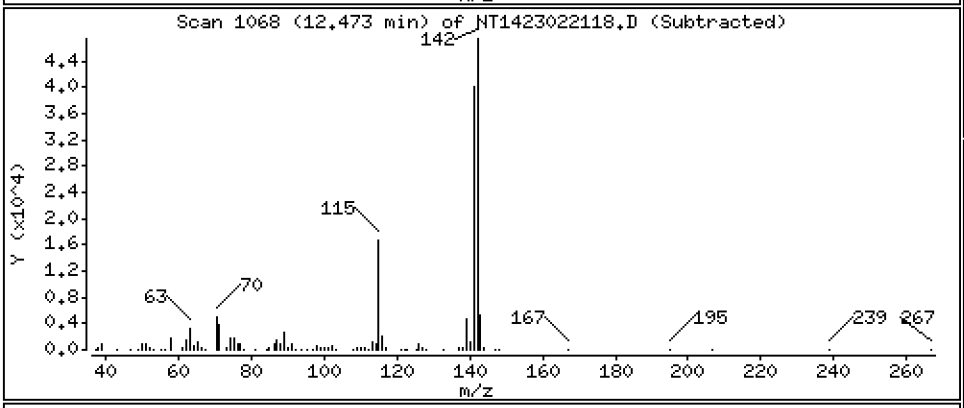
Column phase: ZB-5msi

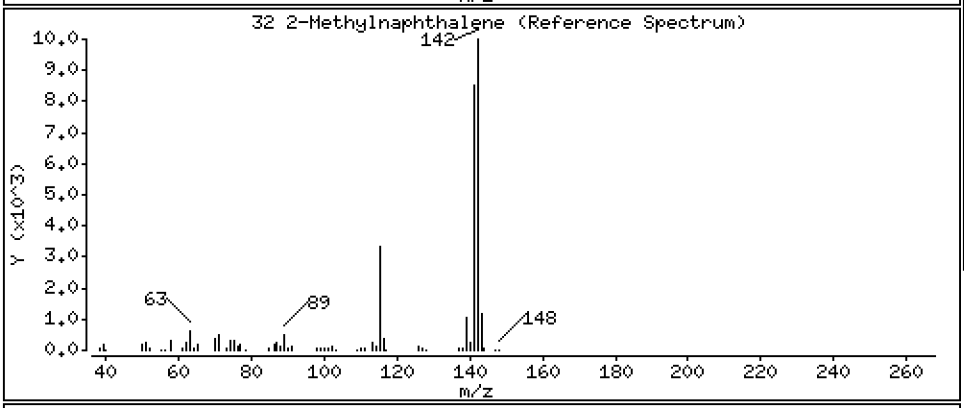
Column diameter: 0.25

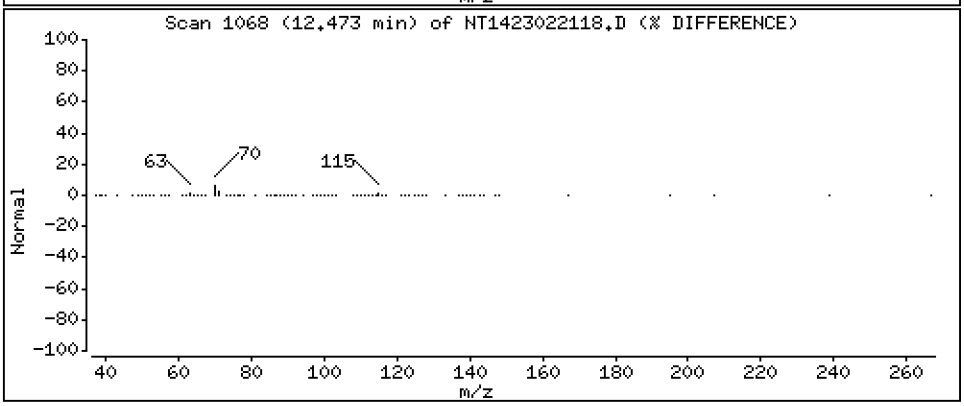
32 2-Methylnaphthalene

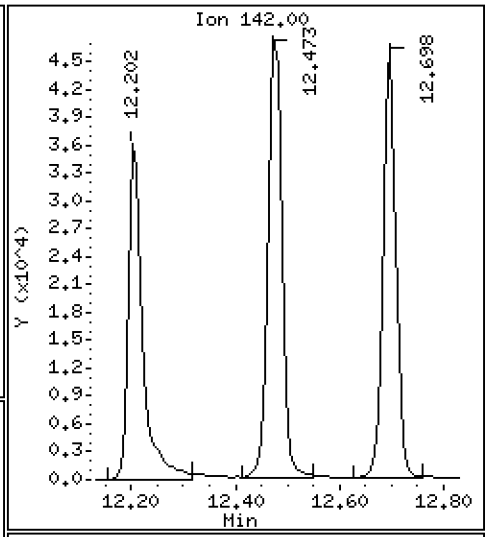
Concentration: 0.5346 ug/mL

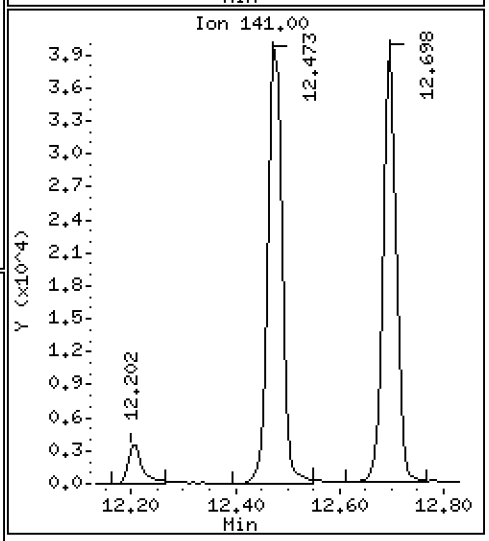












Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022118.D

Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

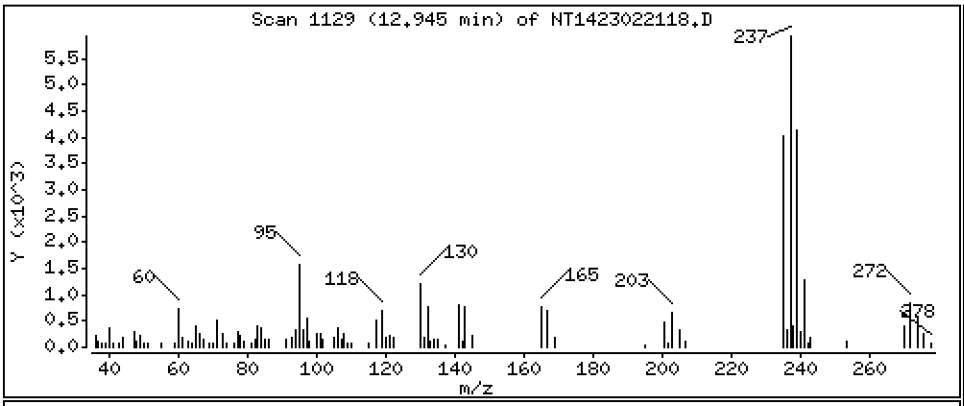
Operator: DSD

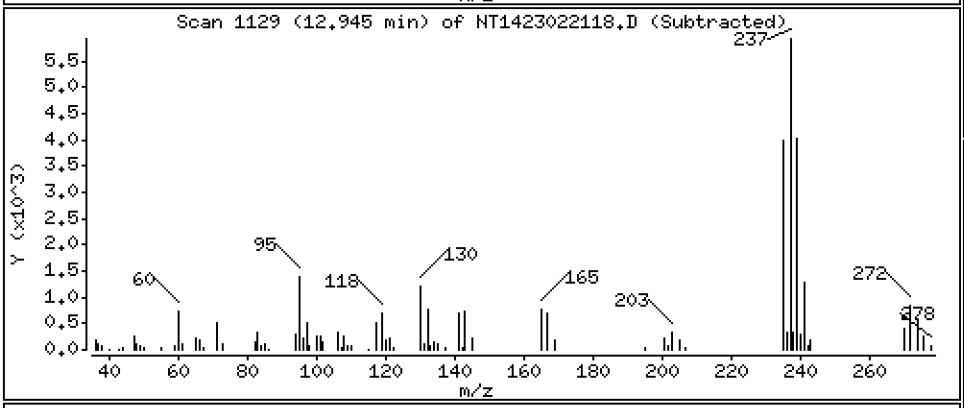
Column phase: ZB-5msi

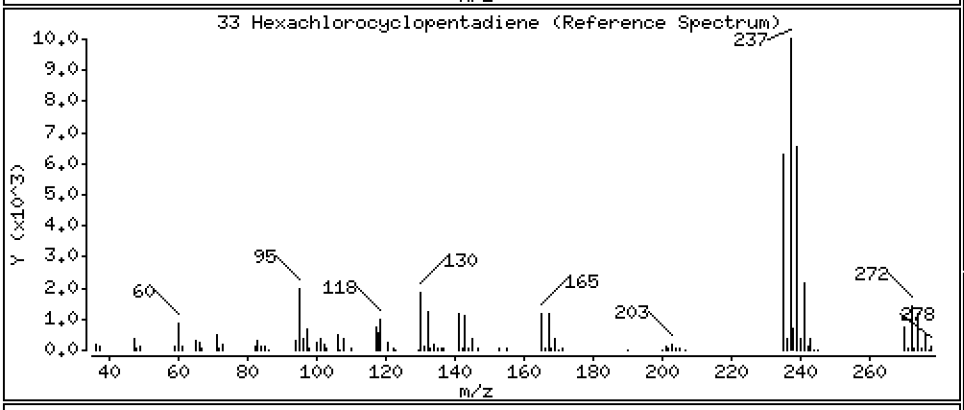
Column diameter: 0.25

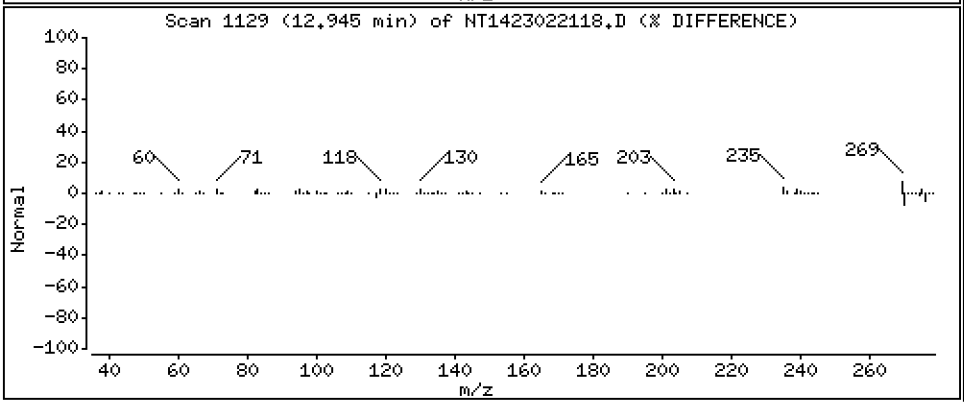
33 Hexachlorocyclopentadiene

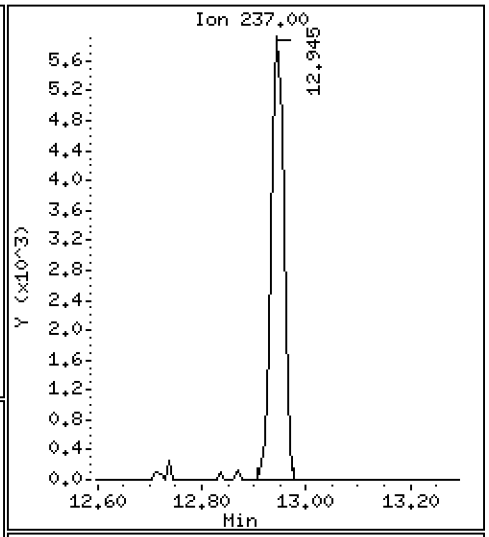
Concentration: 0.1923 ug/mL

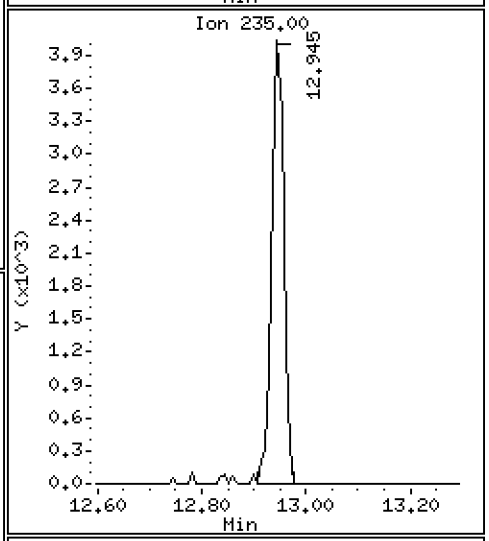


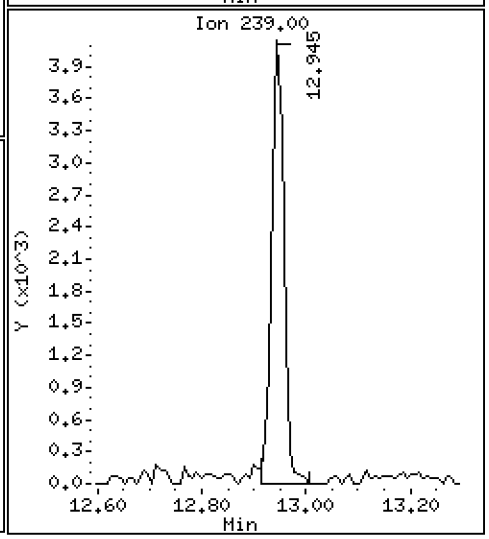












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

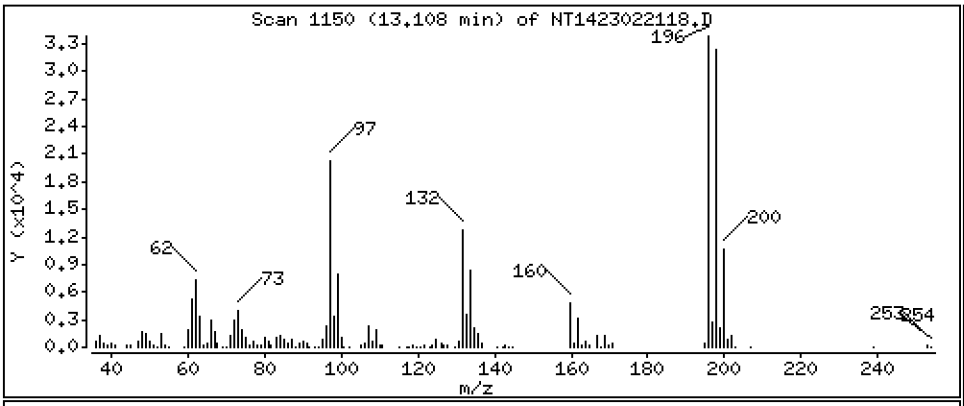
Operator: DSD

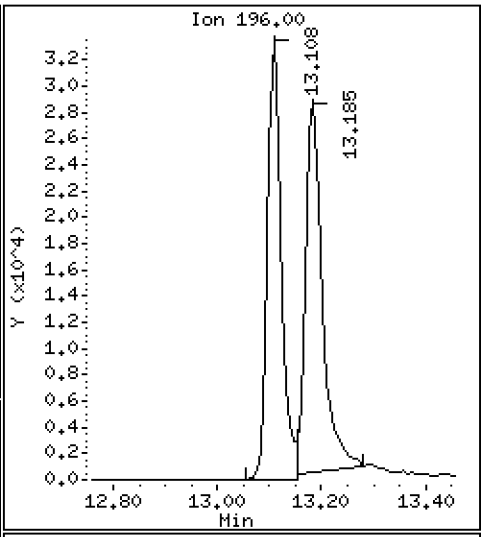
Column phase: ZB-5msi

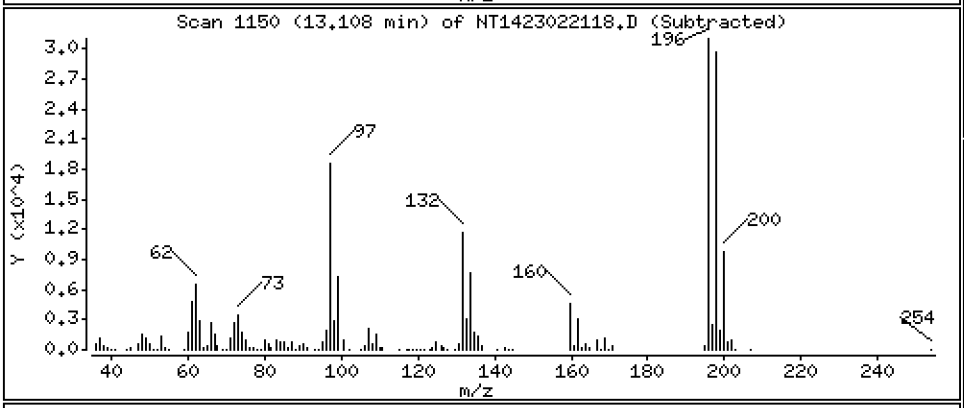
Column diameter: 0.25

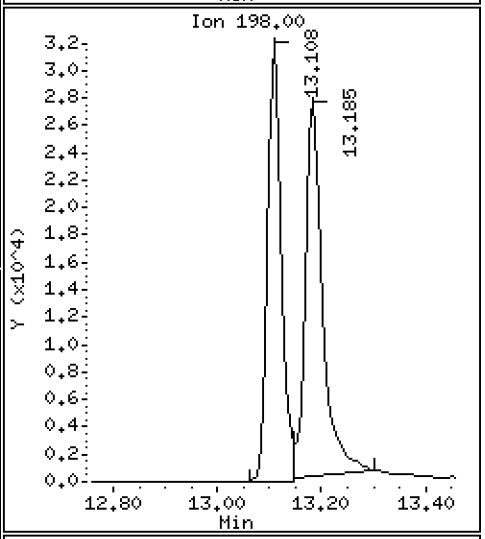
34 2,4,6-Trichlorophenol

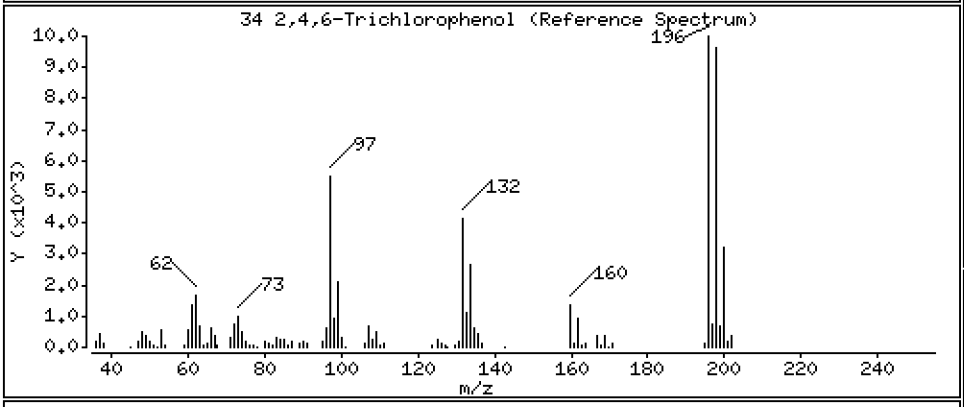
Concentration: 1.198 ug/mL

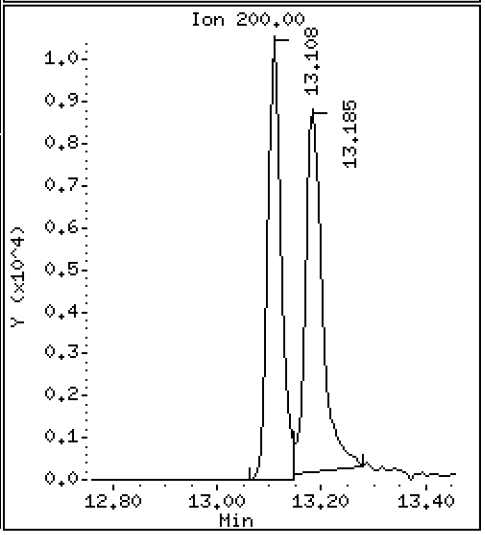


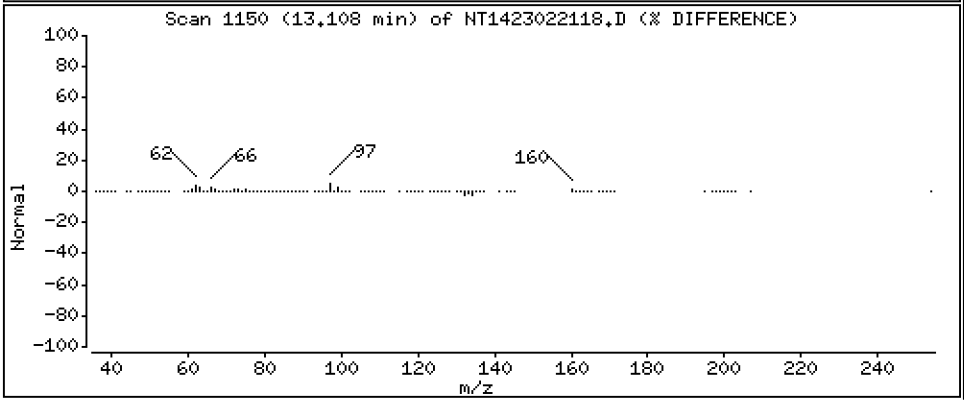












Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022118.D

Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

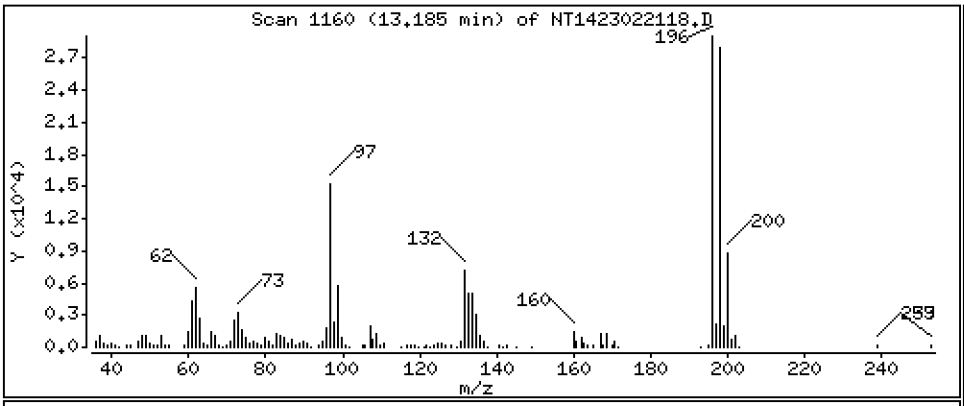
Operator: DSD

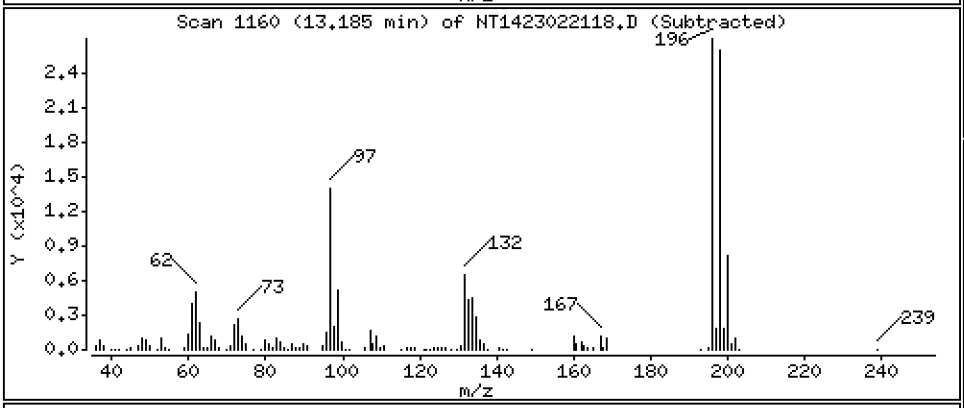
Column phase: ZB-5msi

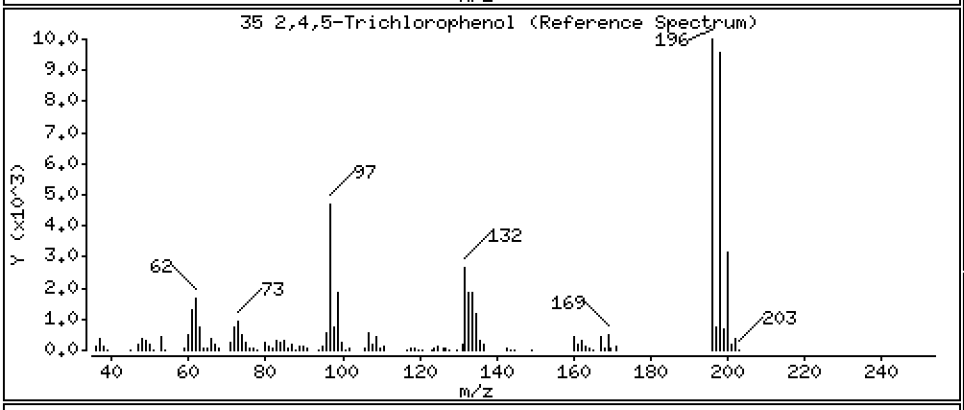
Column diameter: 0.25

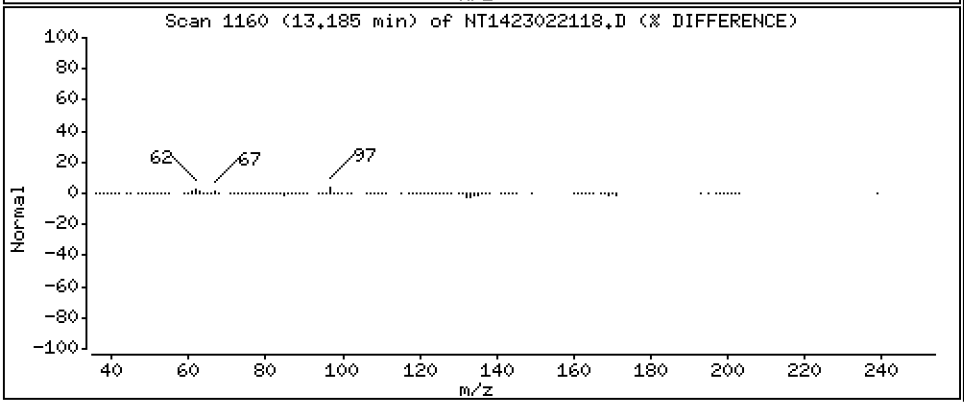
35 2,4,5-Trichlorophenol

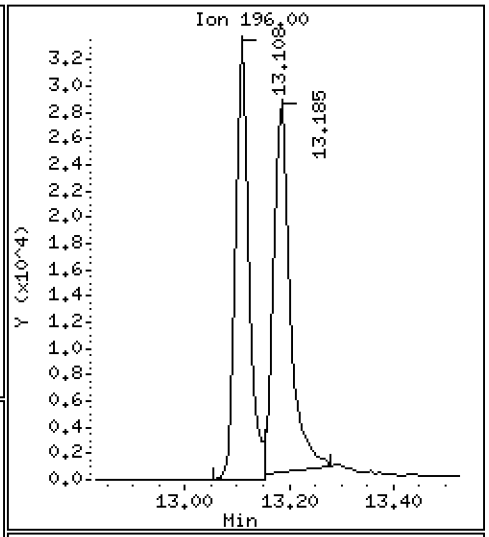
Concentration: 1.128 ug/mL

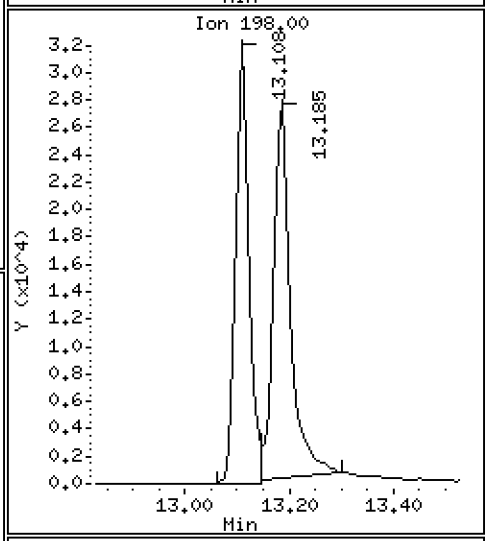


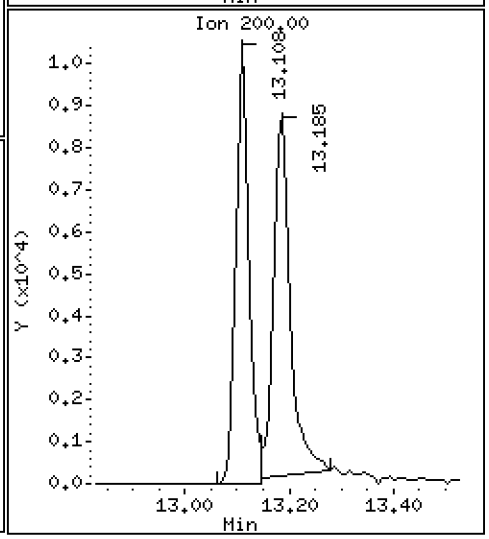












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

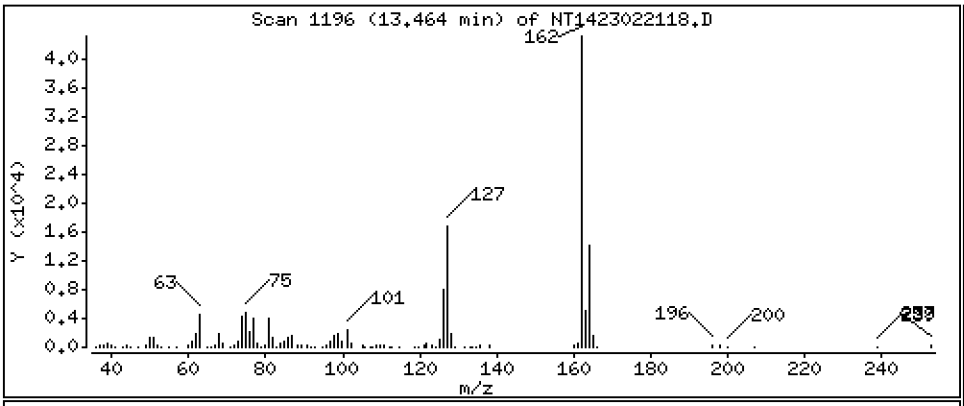
Operator: DSD

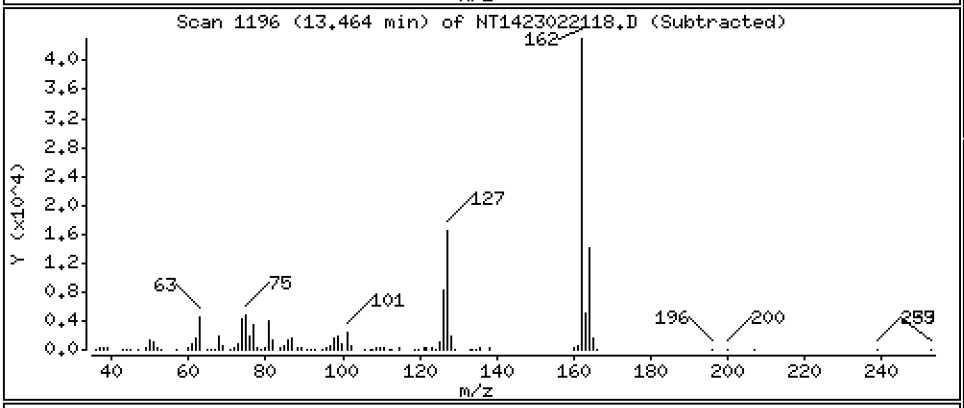
Column phase: ZB-5msi

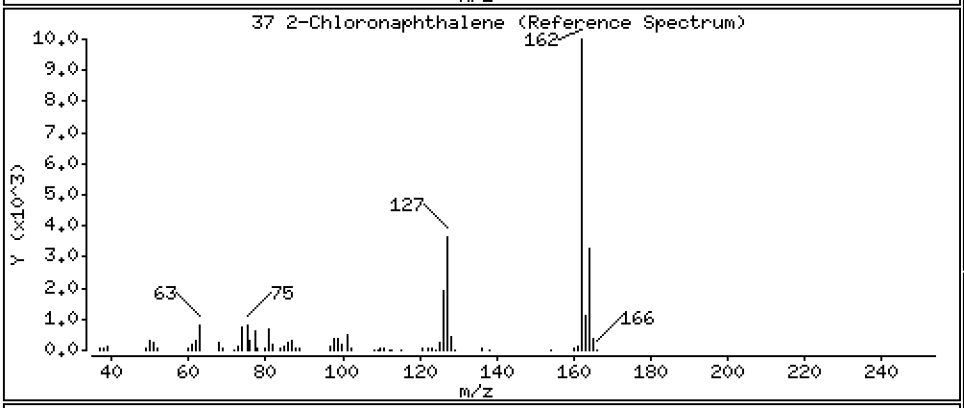
Column diameter: 0.25

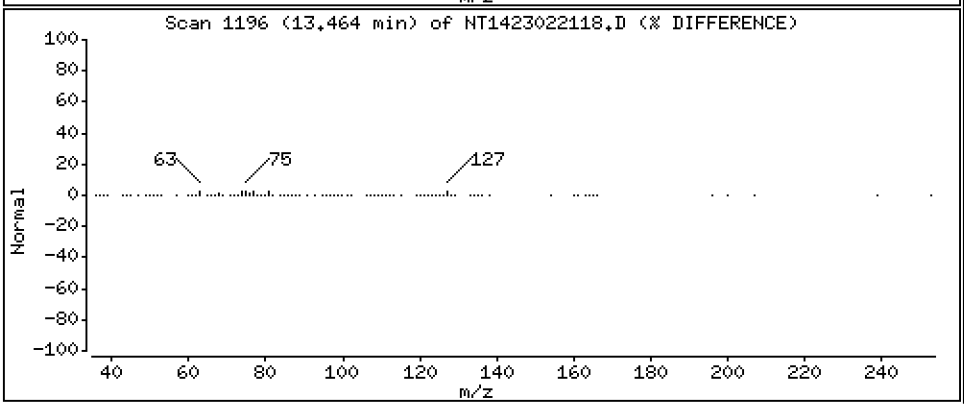
37 2-Chloronaphthalene

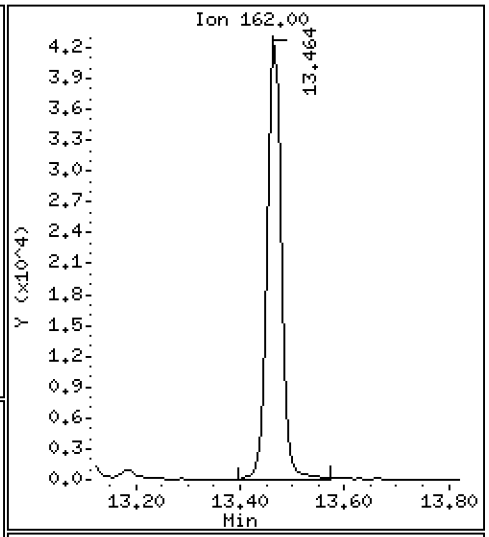
Concentration: 0.5217 ug/mL

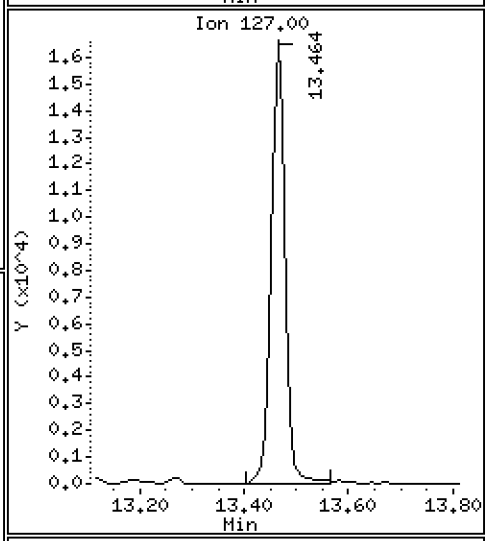


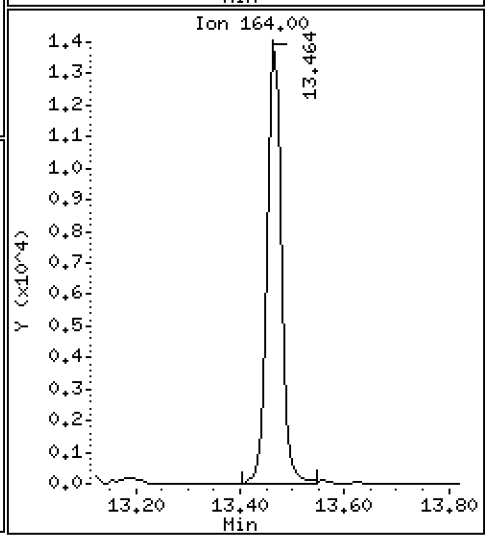












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

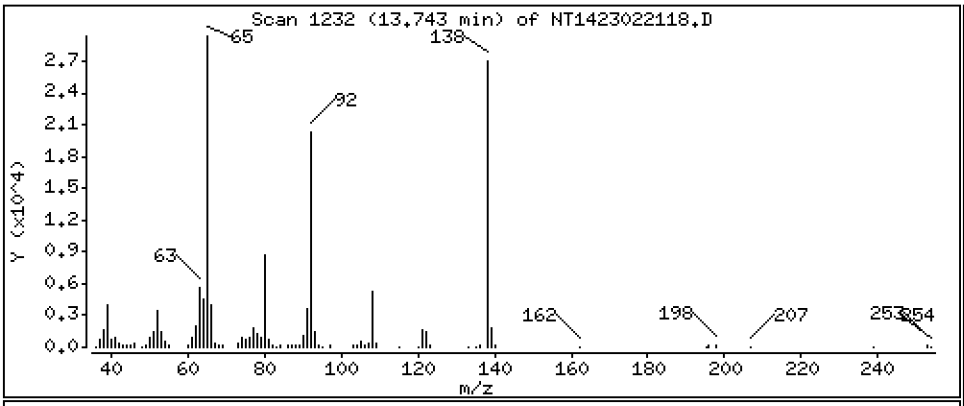
Operator: DSD

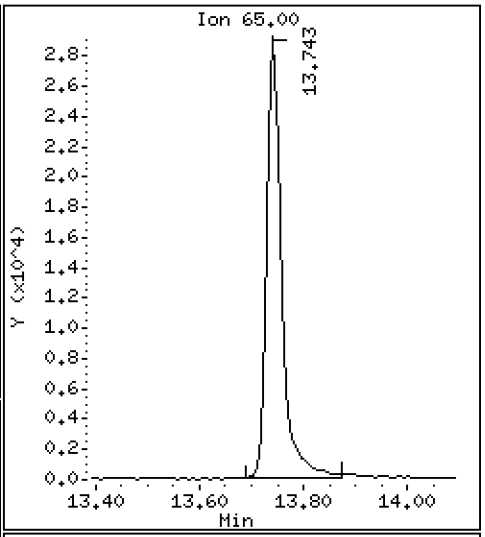
Column phase: ZB-5msi

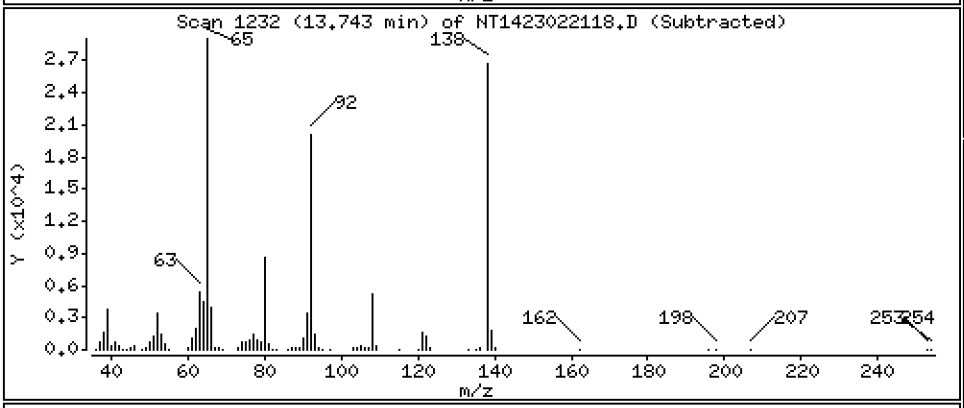
Column diameter: 0.25

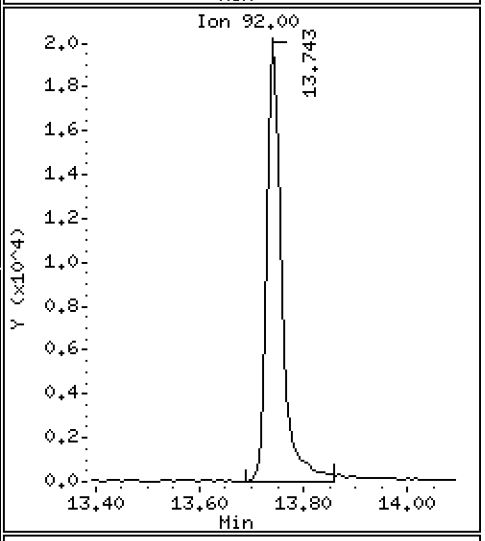
38 2-Nitroaniline

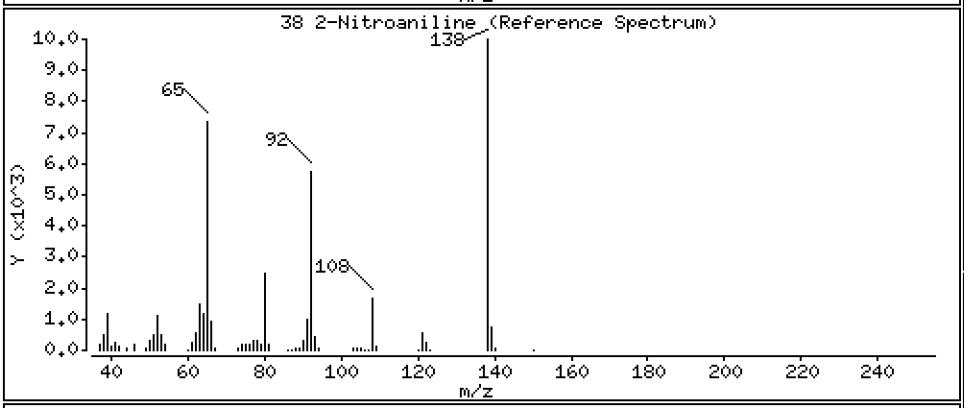
Concentration: 1.161 ug/mL

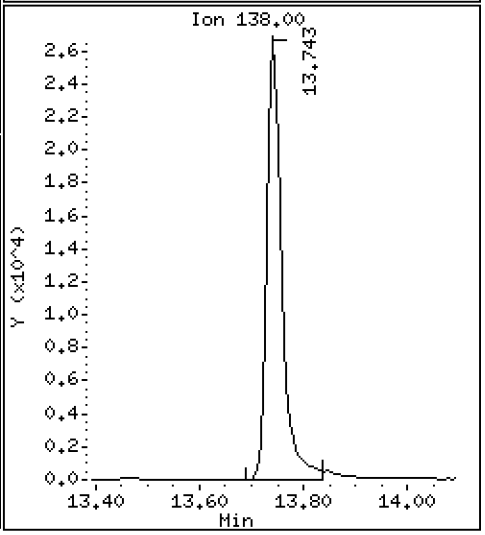


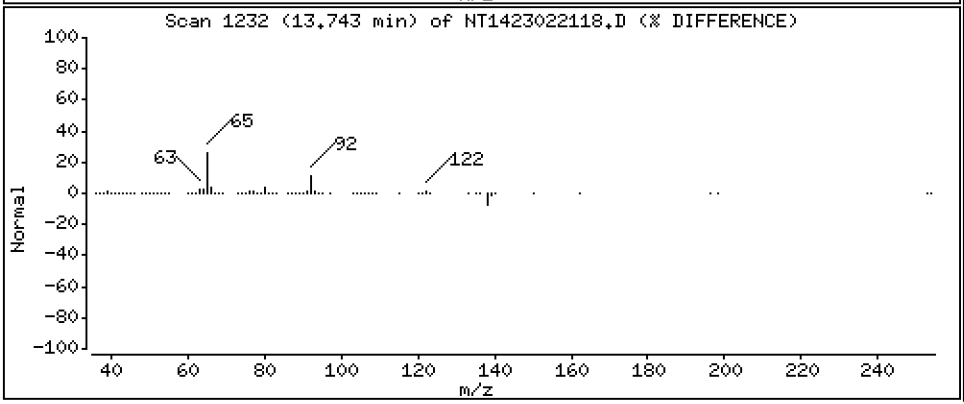












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

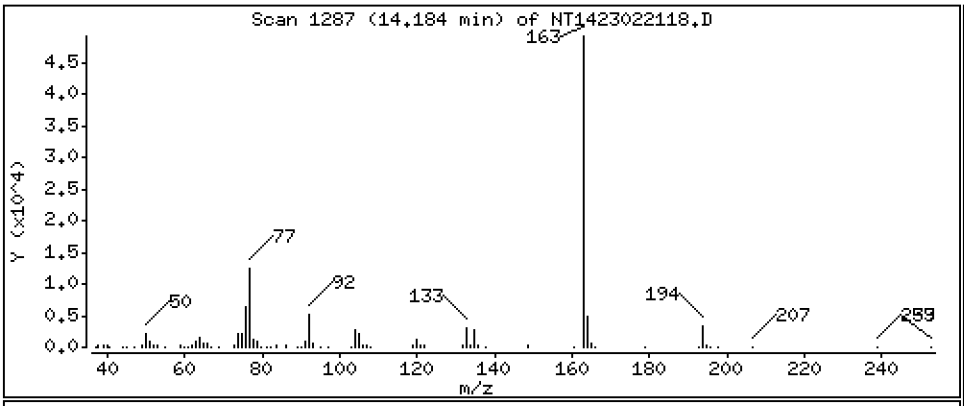
Operator: DSD

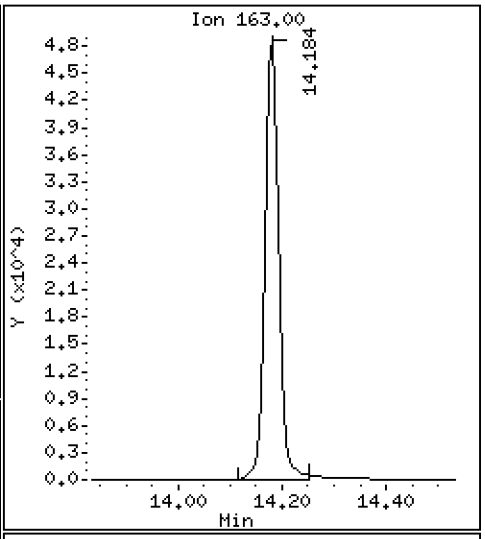
Column phase: ZB-5msi

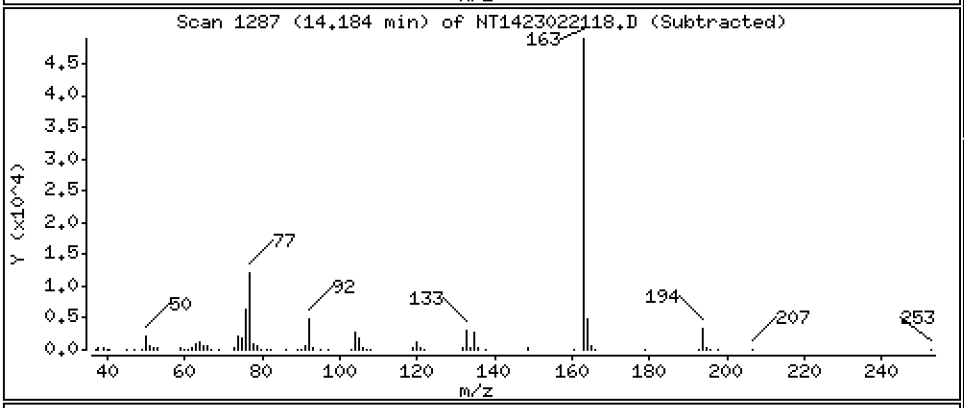
Column diameter: 0.25

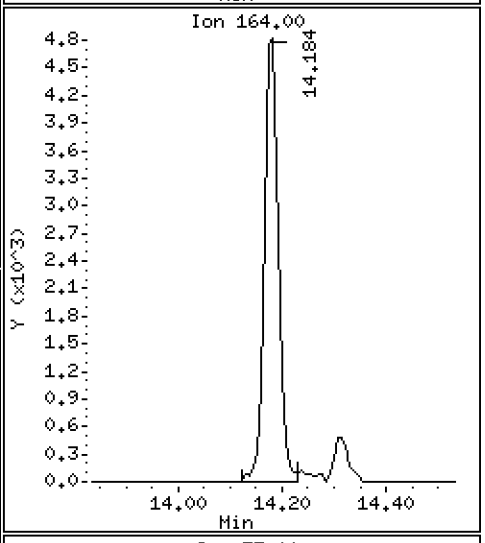
39 Dimethylphthalate

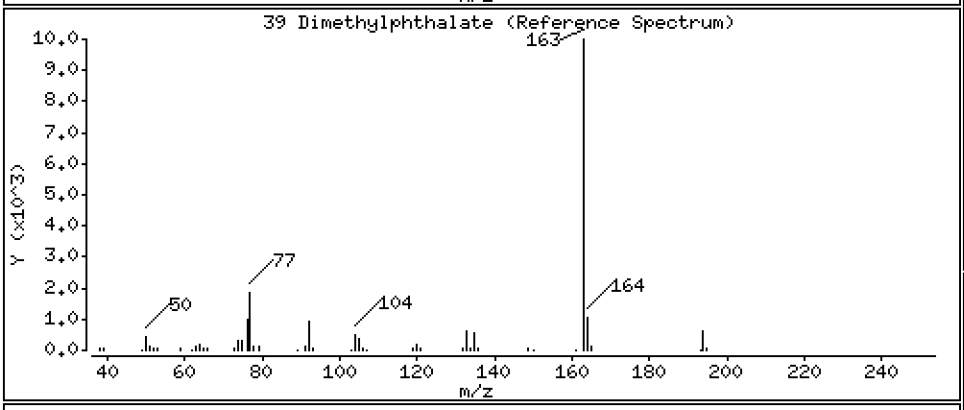
Concentration: 0.5527 ug/mL

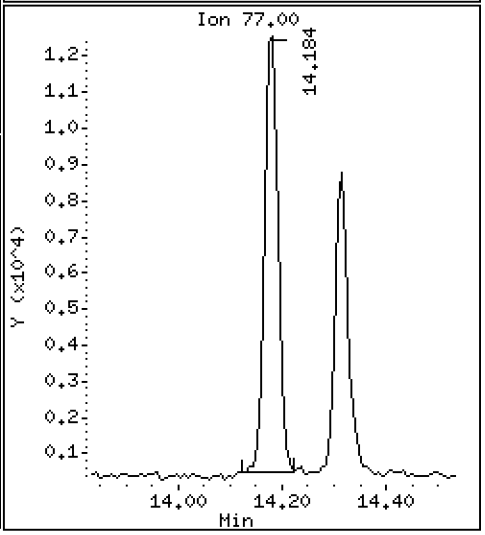


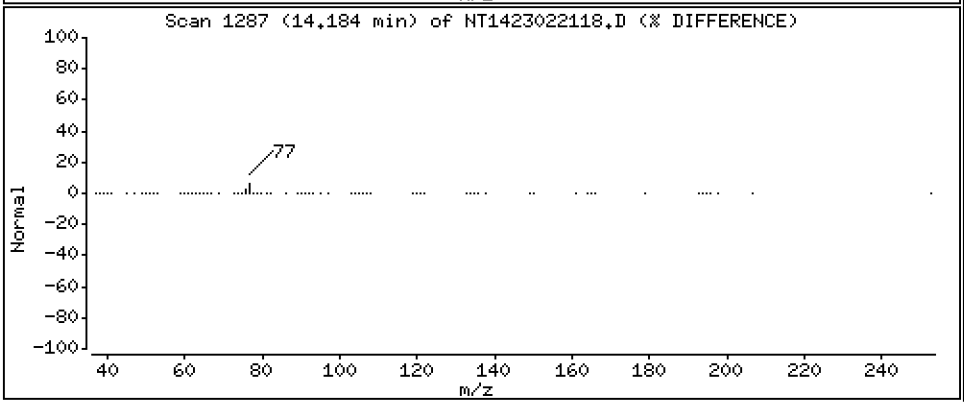












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

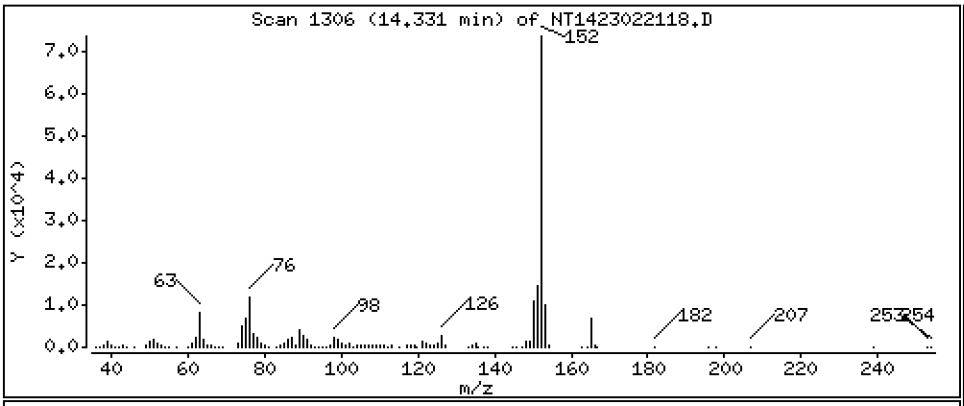
Operator: DSD

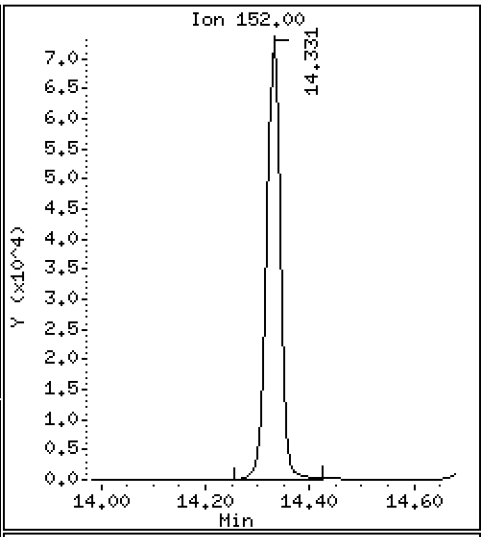
Column phase: ZB-5msi

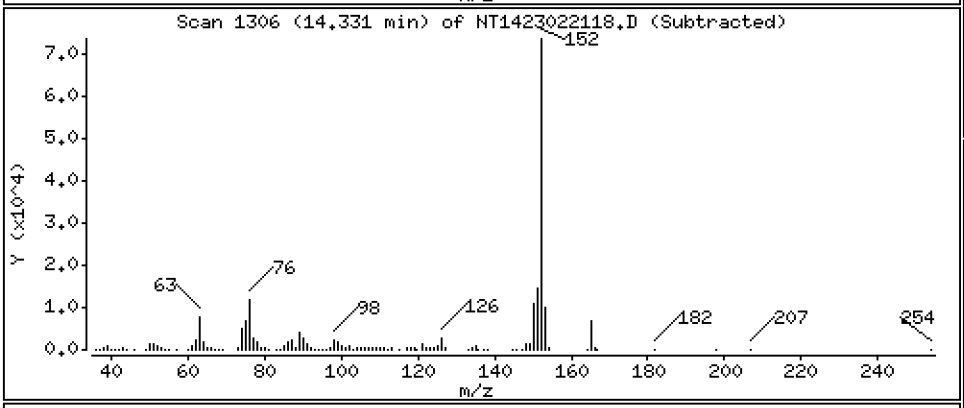
Column diameter: 0.25

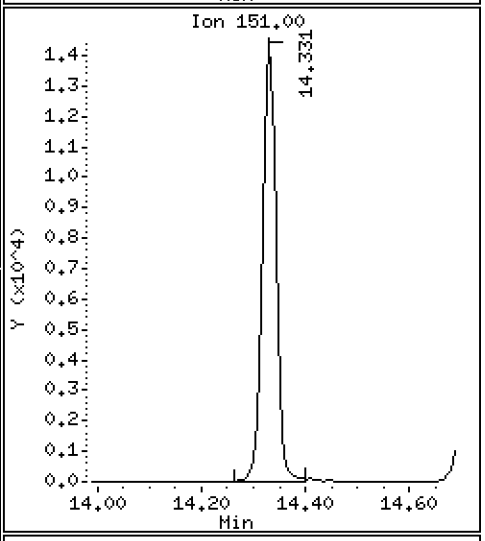
40 Acenaphthylene

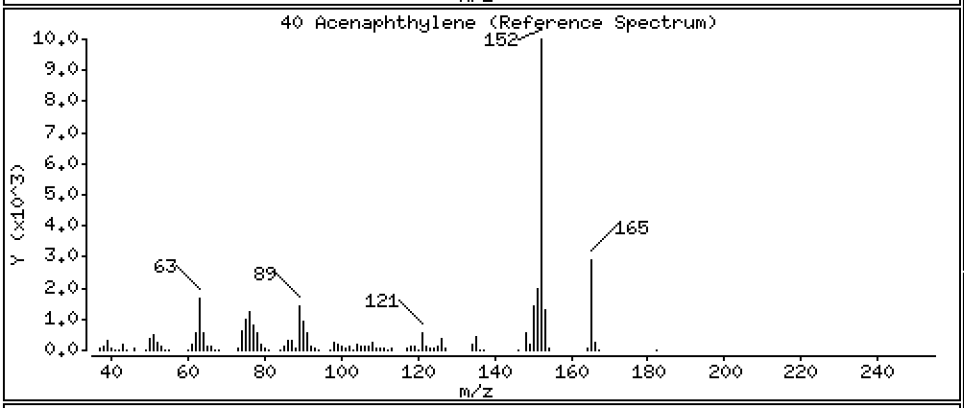
Concentration: 0.5708 ug/mL

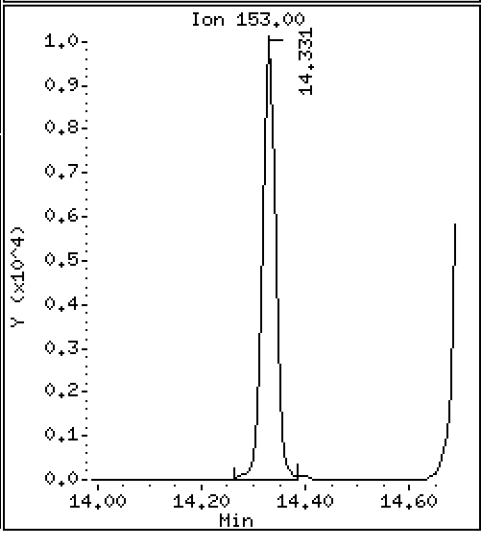


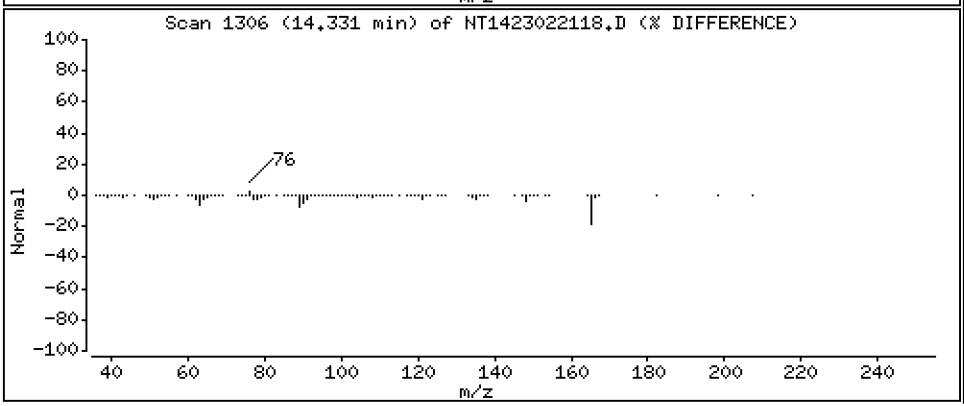












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

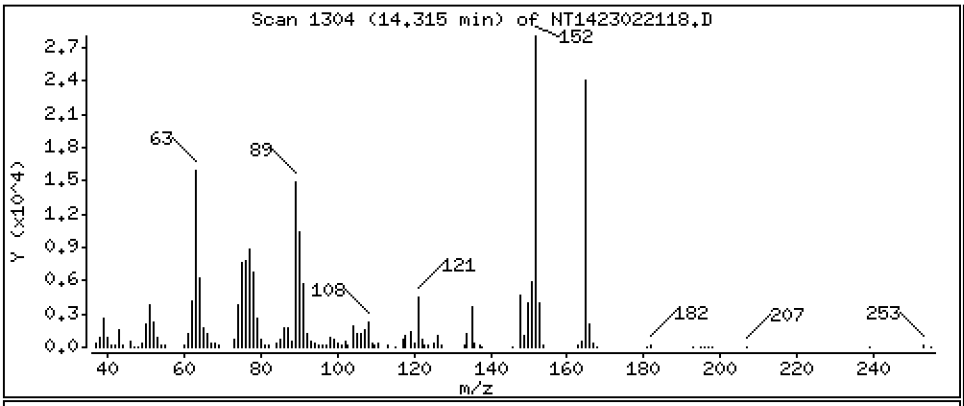
Operator: DSD

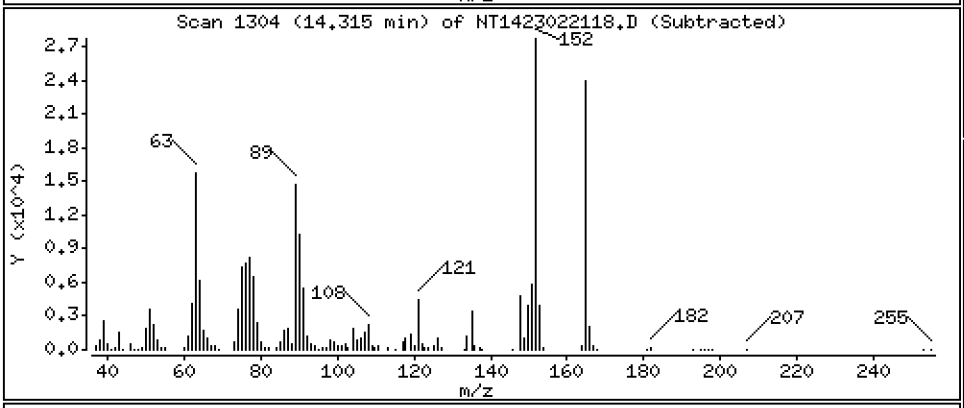
Column phase: ZB-5msi

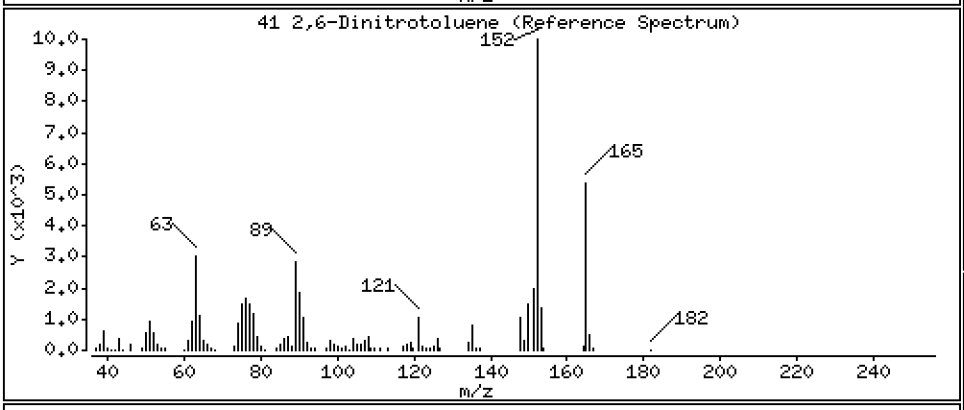
Column diameter: 0.25

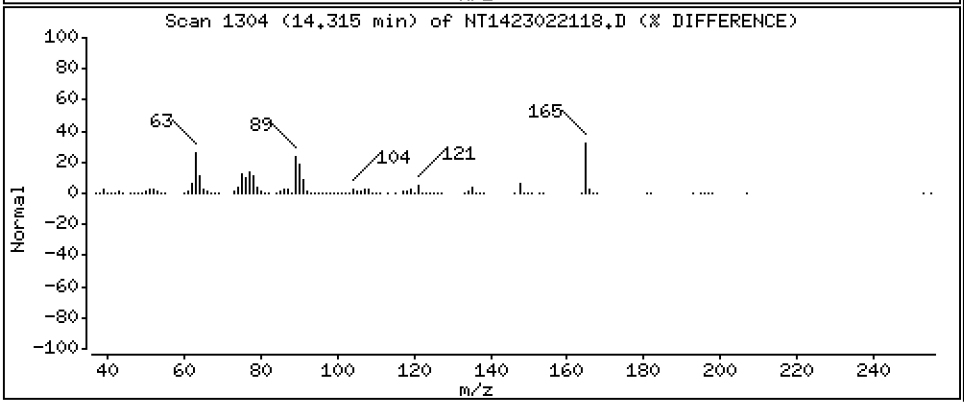
41 2,6-Dinitrotoluene

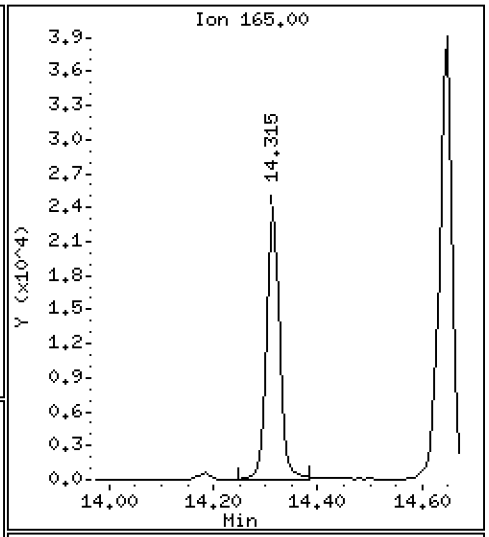
Concentration: 1.084 ug/mL

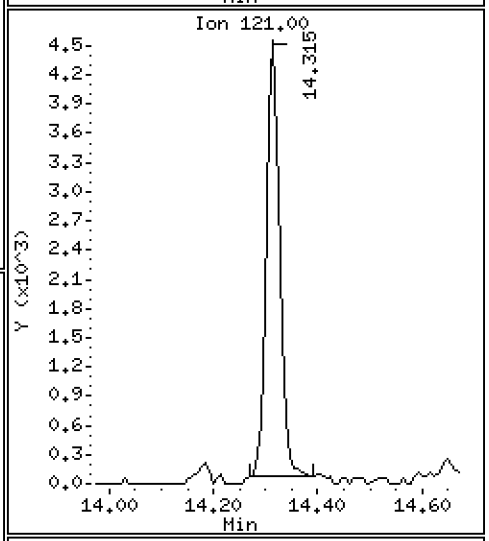


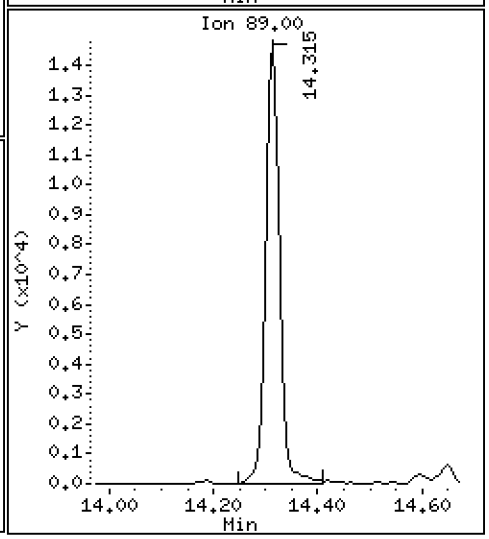












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

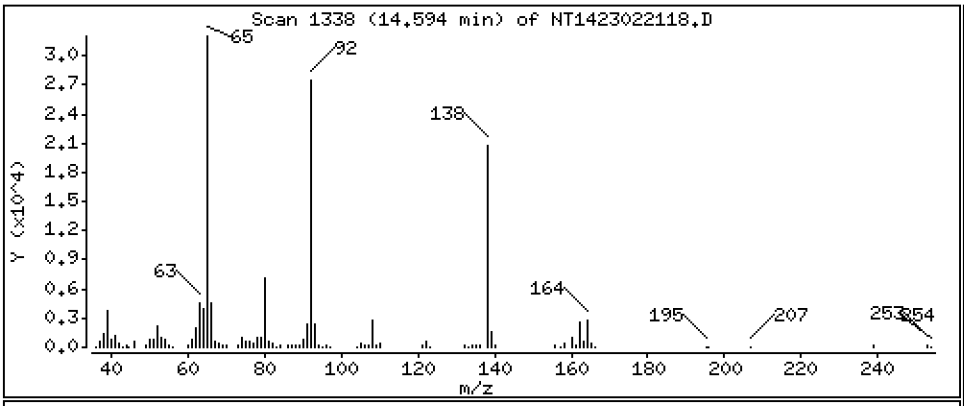
Operator: DSD

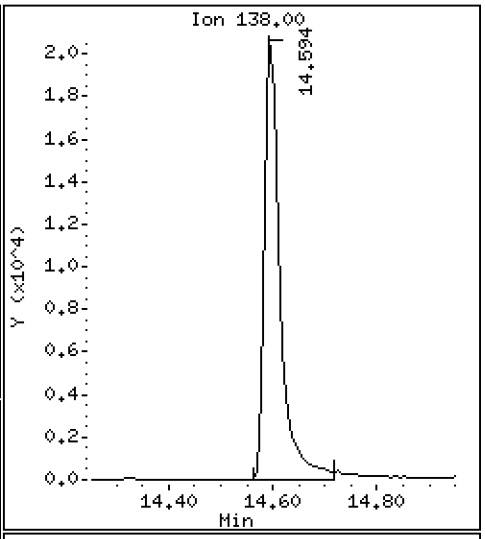
Column phase: ZB-5msi

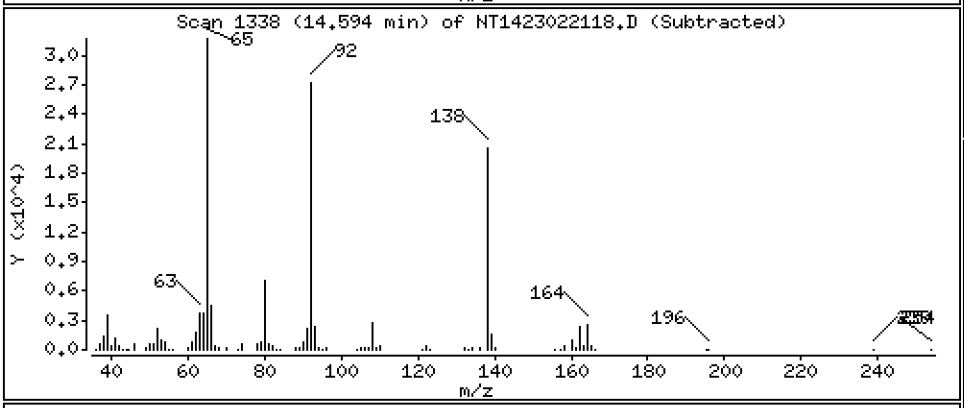
Column diameter: 0.25

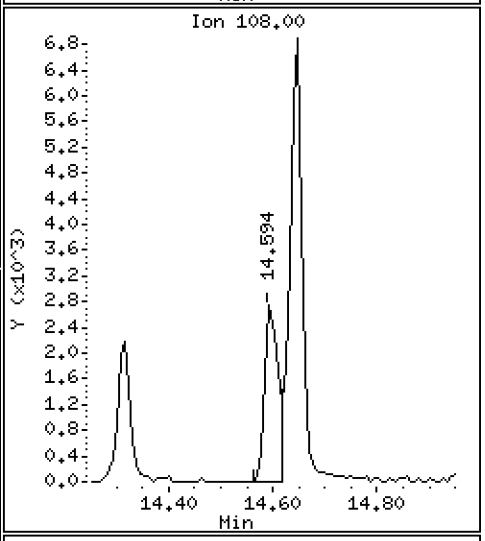
43 3-Nitroaniline

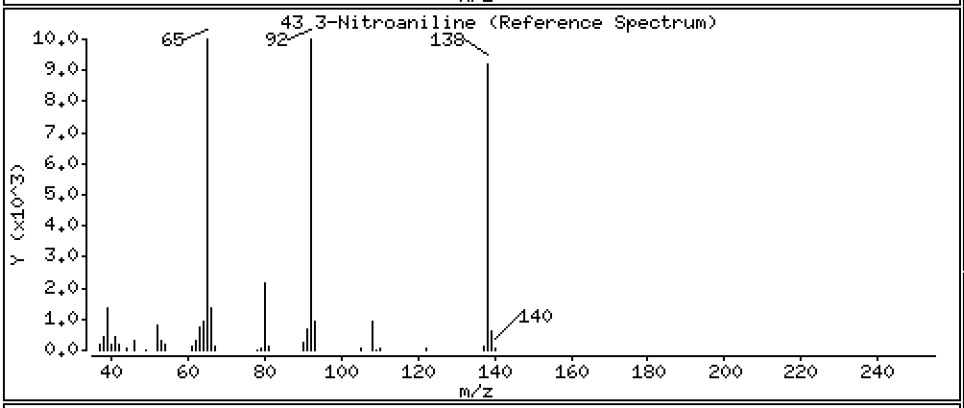
Concentration: 1.074 ug/mL

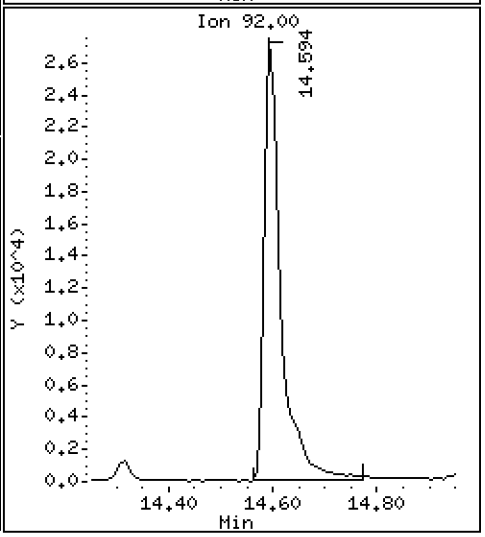


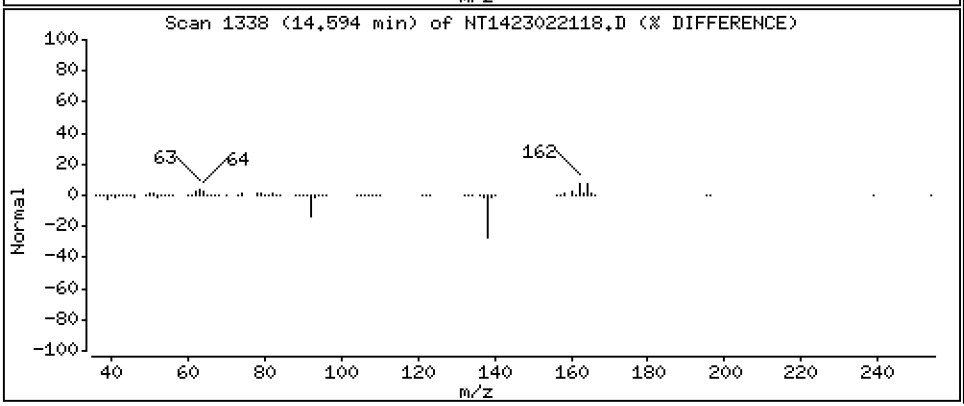












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

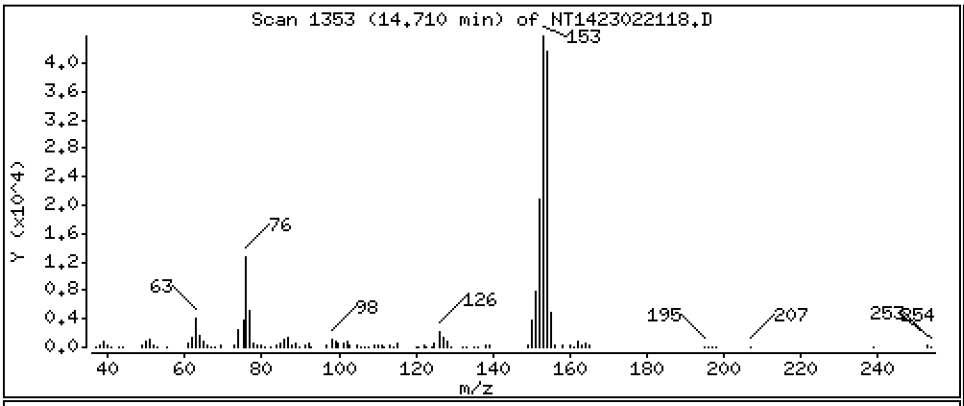
Operator: DSD

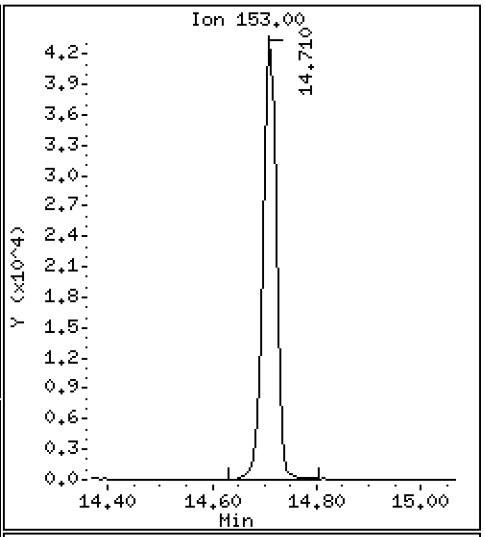
Column phase: ZB-5msi

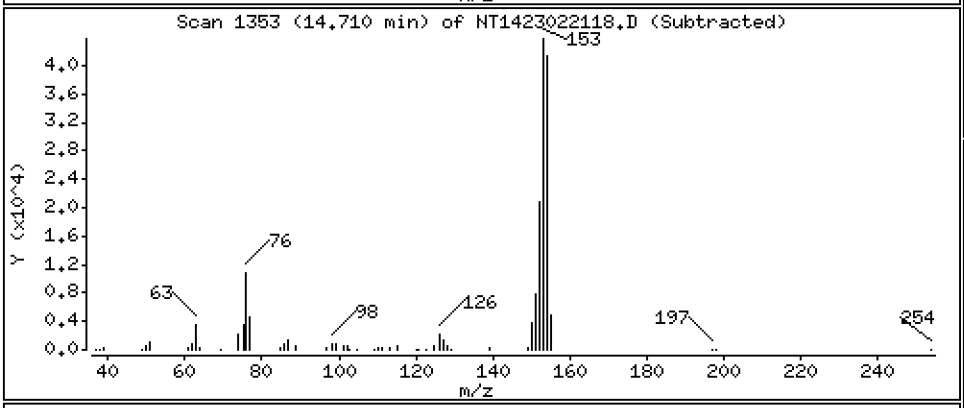
Column diameter: 0.25

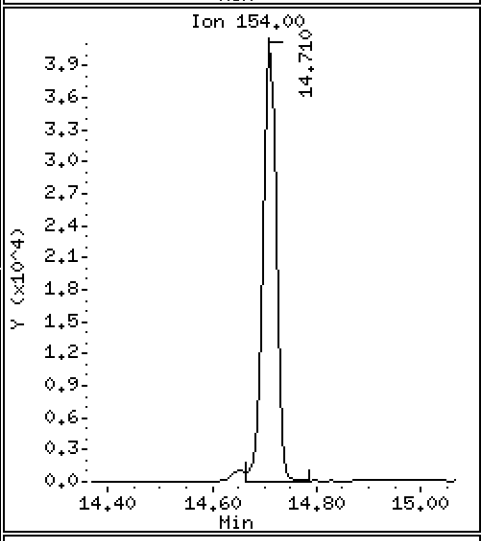
44 Acenaphthene

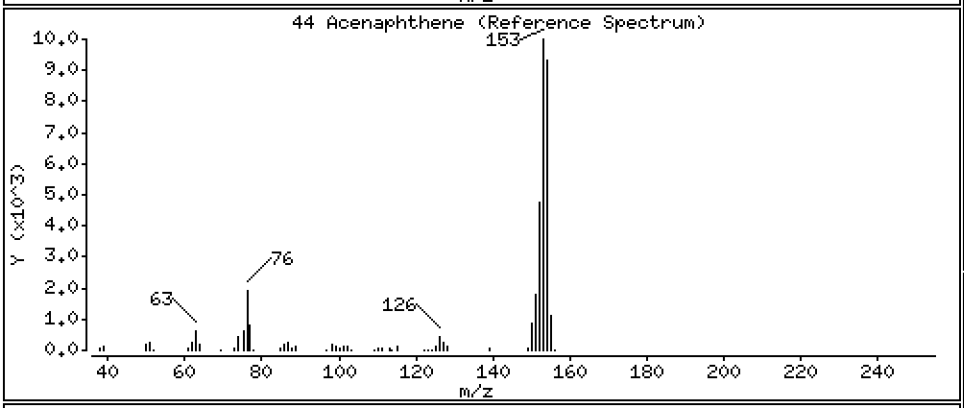
Concentration: 0.5459 ug/mL

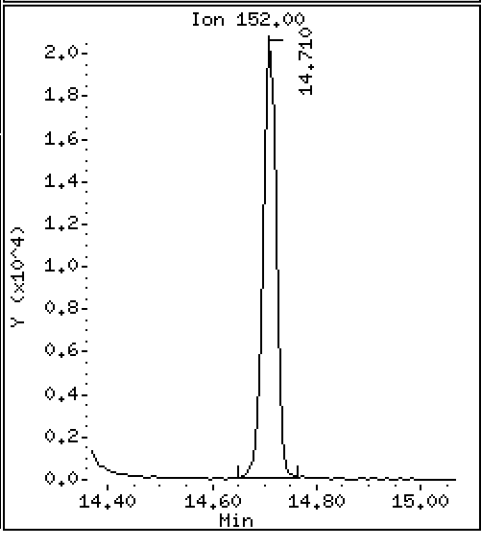


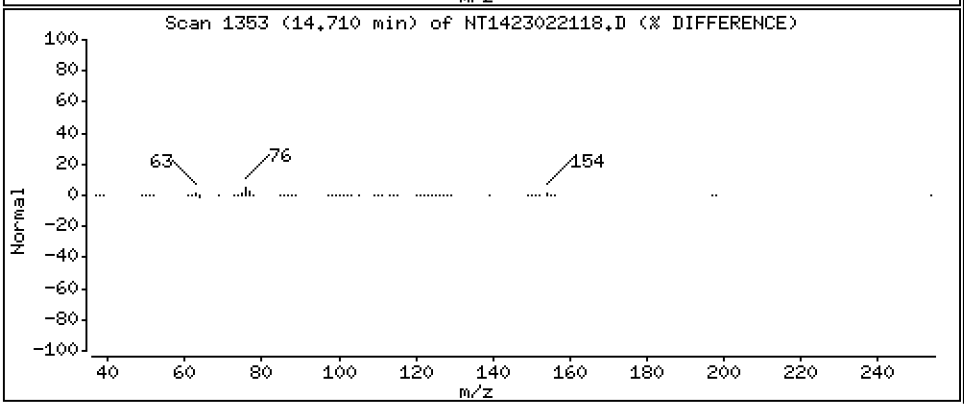












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

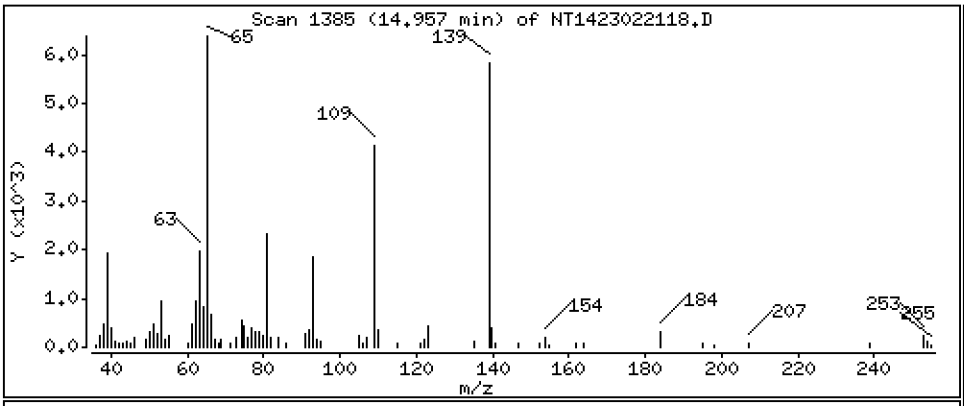
Operator: DSD

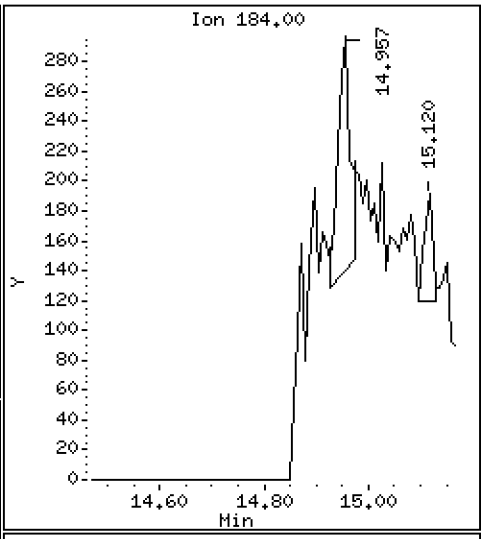
Column phase: ZB-5msi

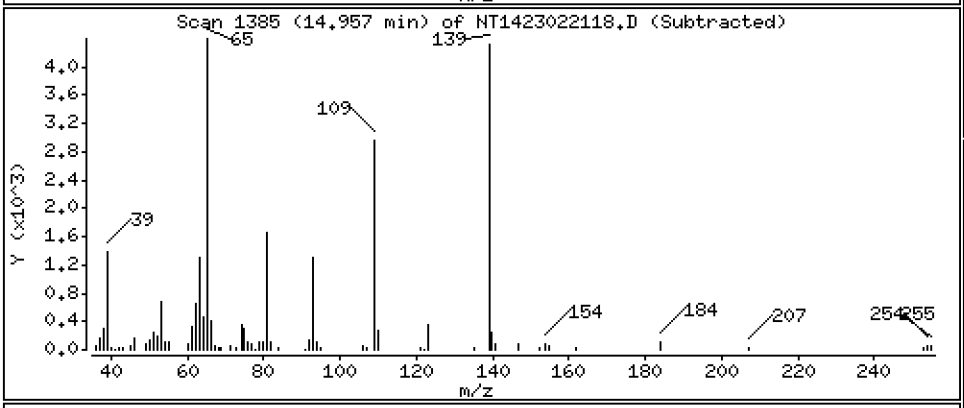
Column diameter: 0.25

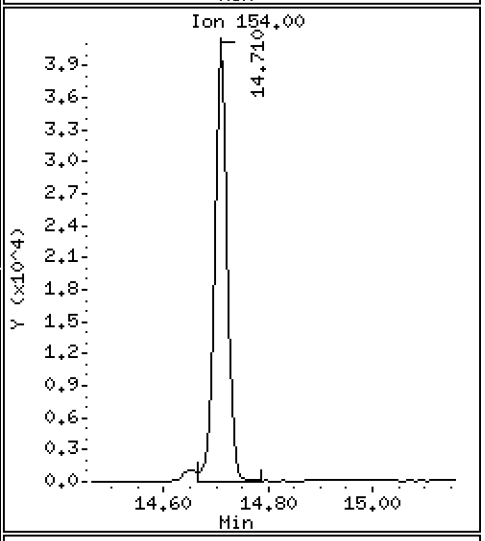
45 2,4-Dinitrophenol

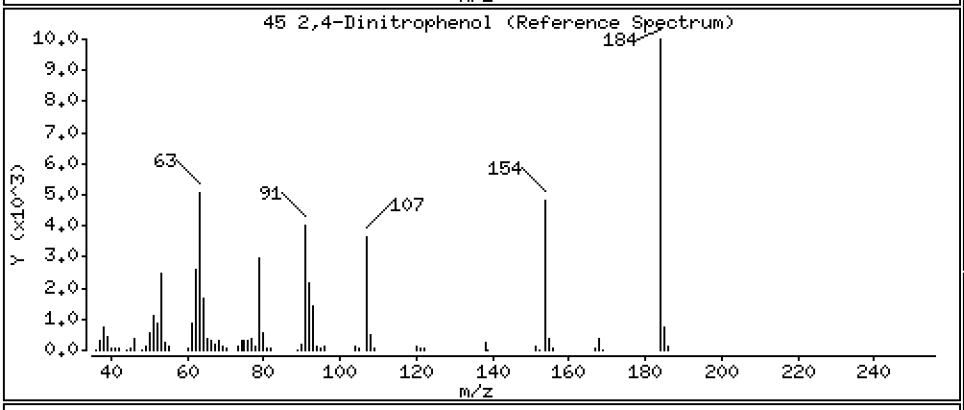
Concentration: 0.01091 ug/mL

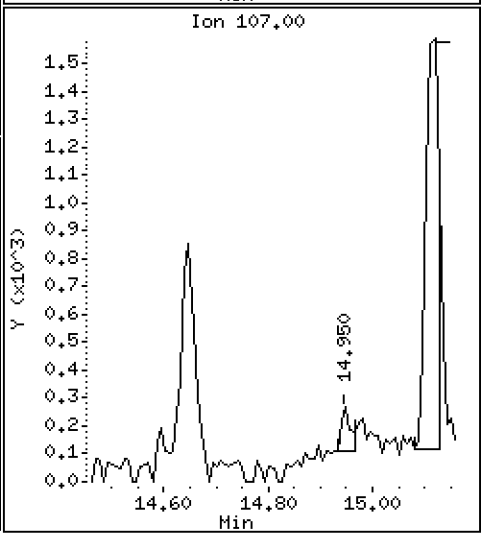


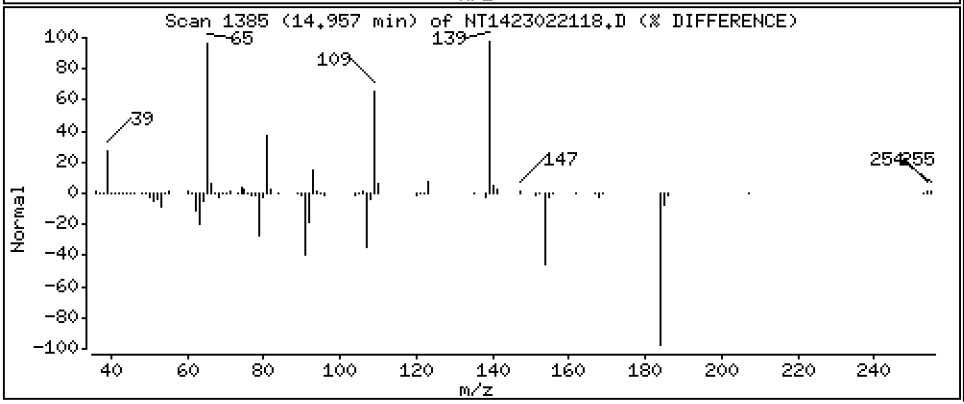












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

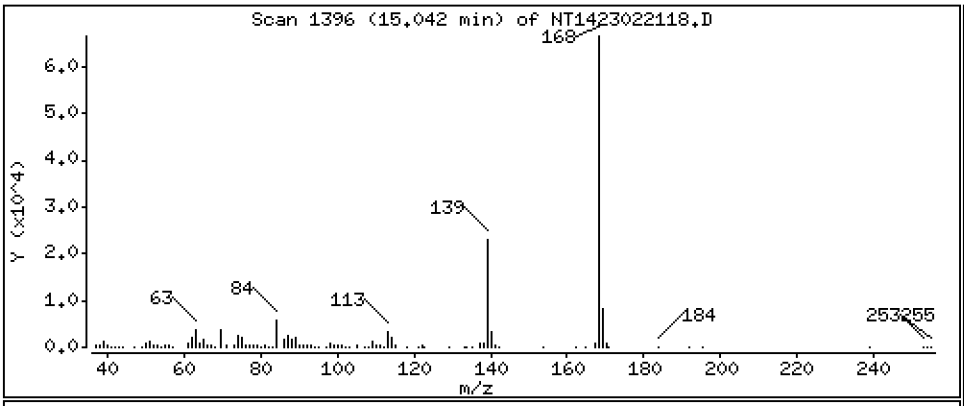
Operator: DSD

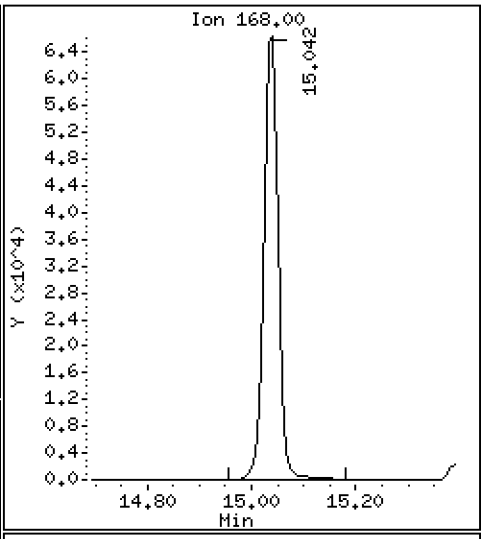
Column phase: ZB-5msi

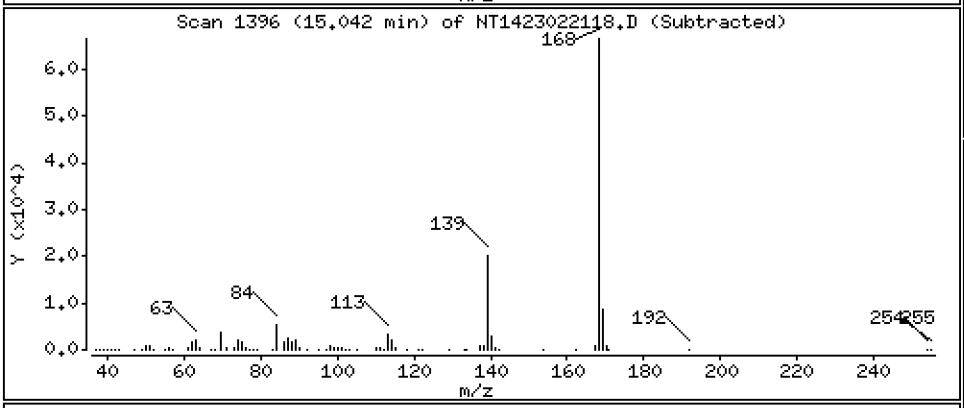
Column diameter: 0.25

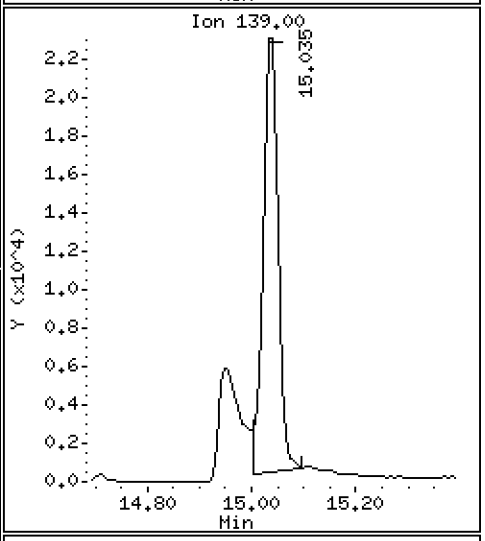
46 Dibenzofuran

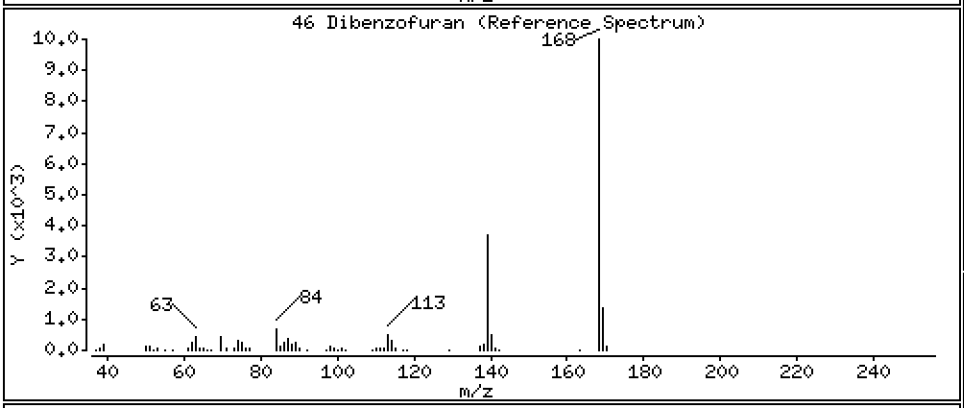
Concentration: 0.5499 ug/mL

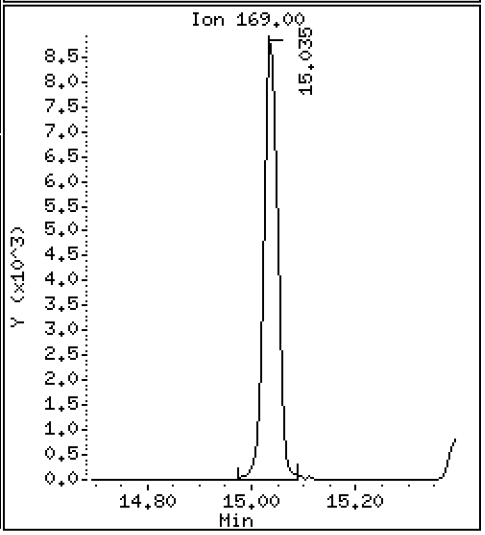


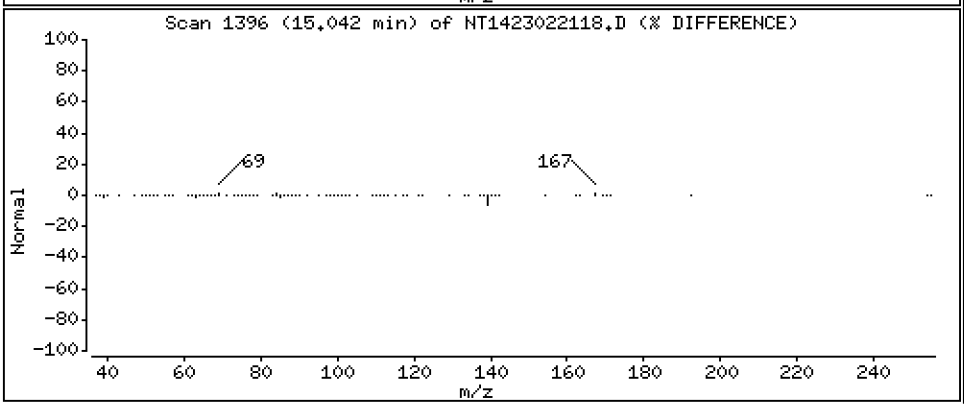












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

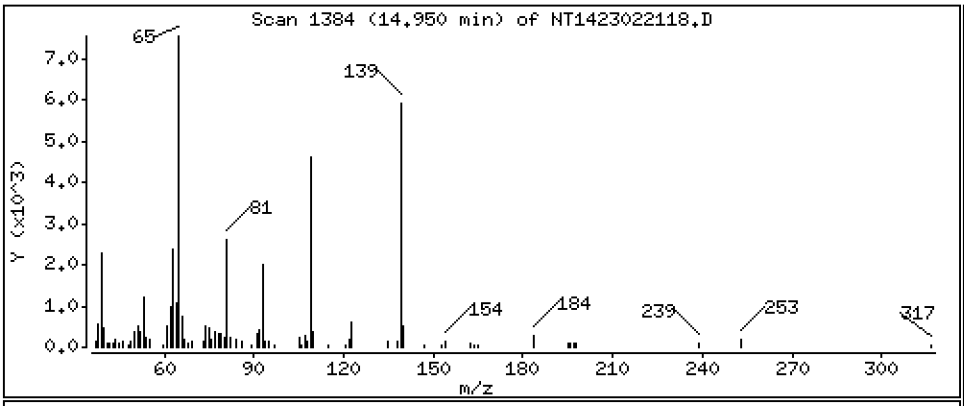
Operator: DSD

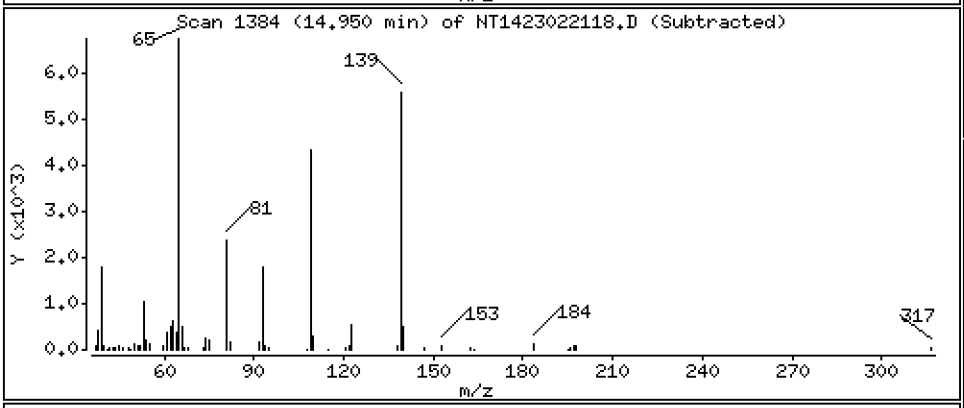
Column phase: ZB-5msi

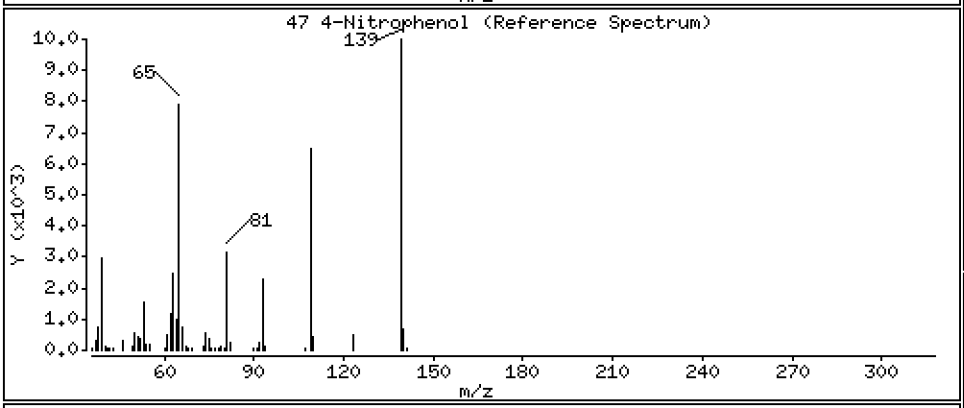
Column diameter: 0.25

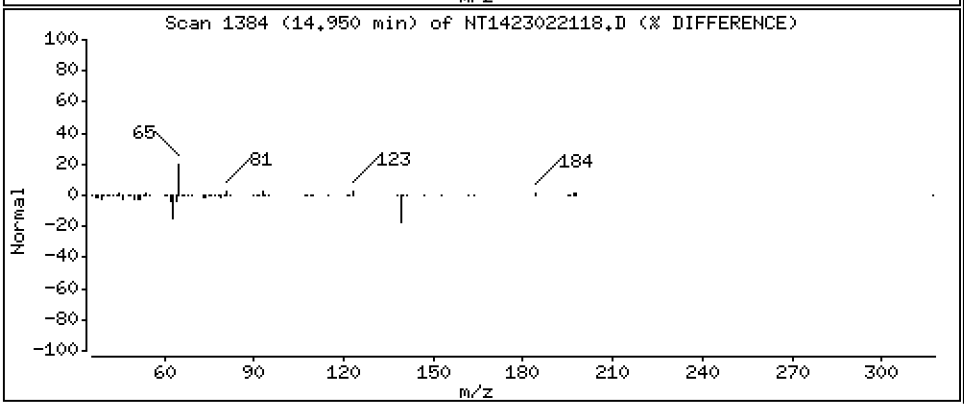
47 4-Nitrophenol

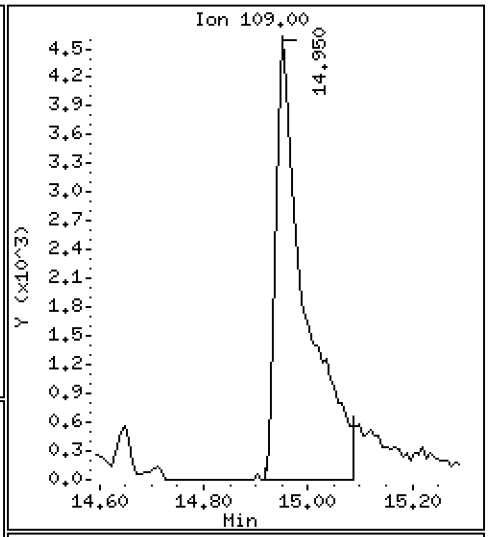
Concentration: 0.7982 ug/mL

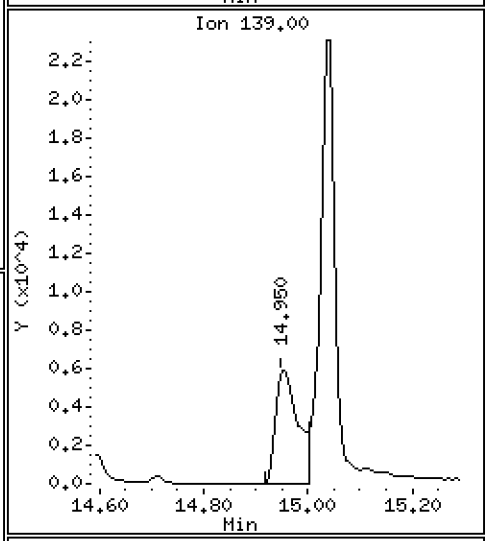


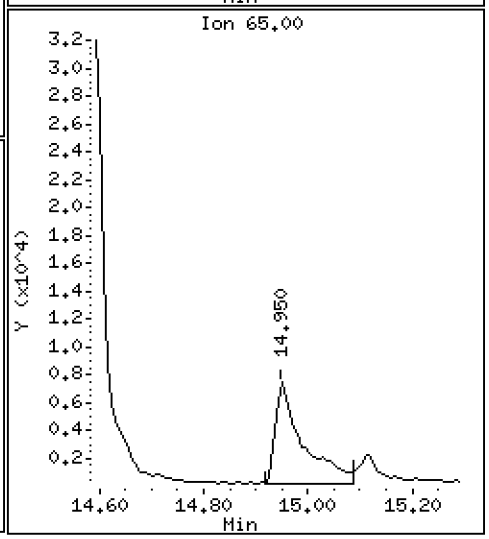












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

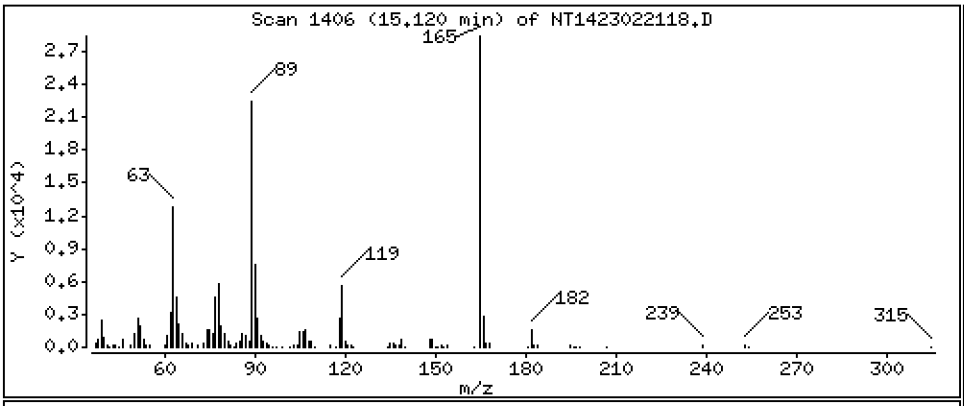
Operator: DSD

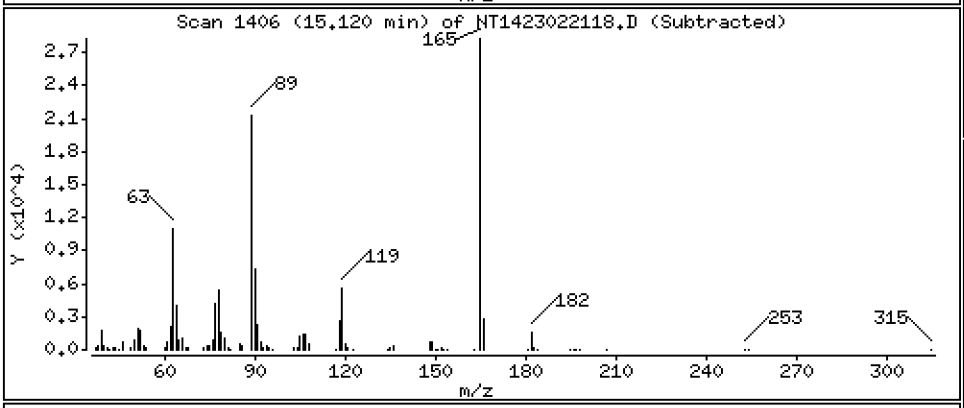
Column phase: ZB-5msi

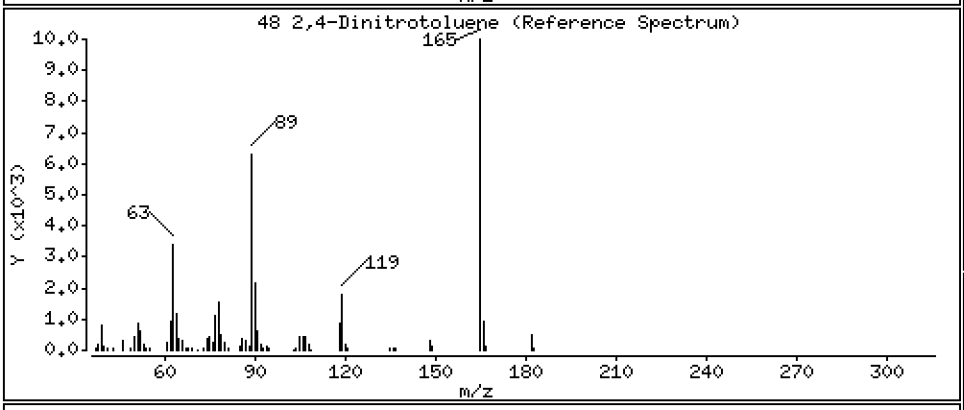
Column diameter: 0.25

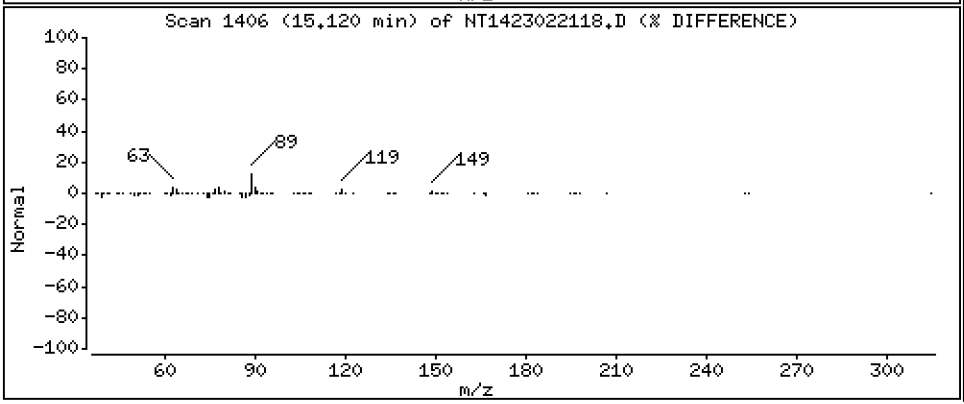
48 2,4-Dinitrotoluene

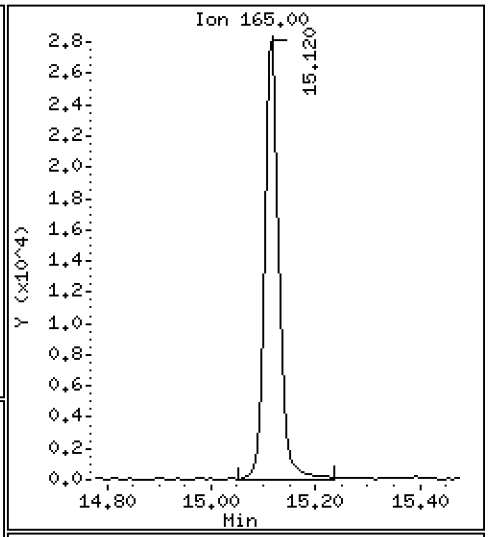
Concentration: 1.029 ug/mL

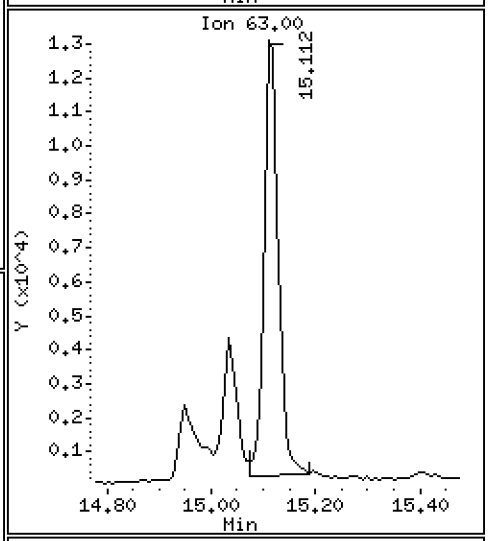


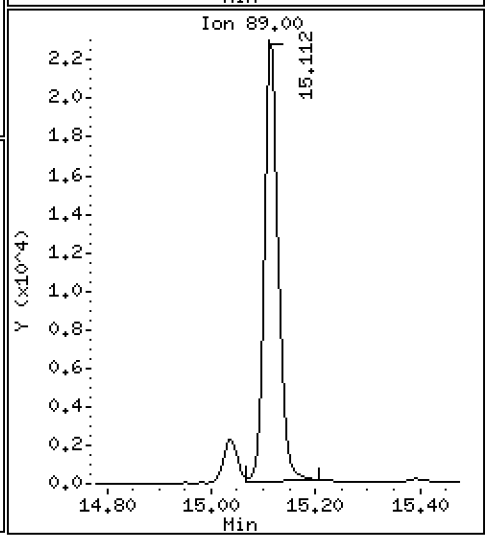












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

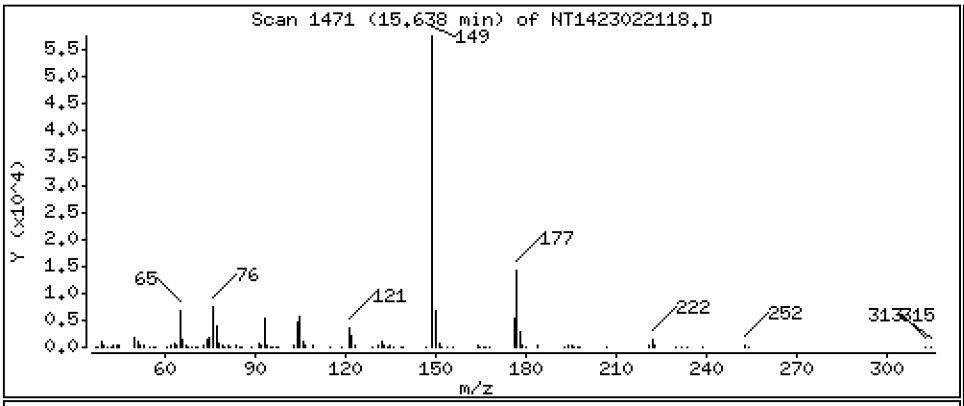
Operator: DSD

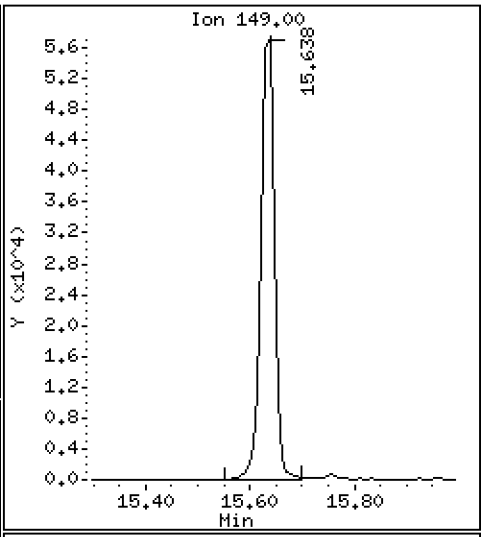
Column phase: ZB-5msi

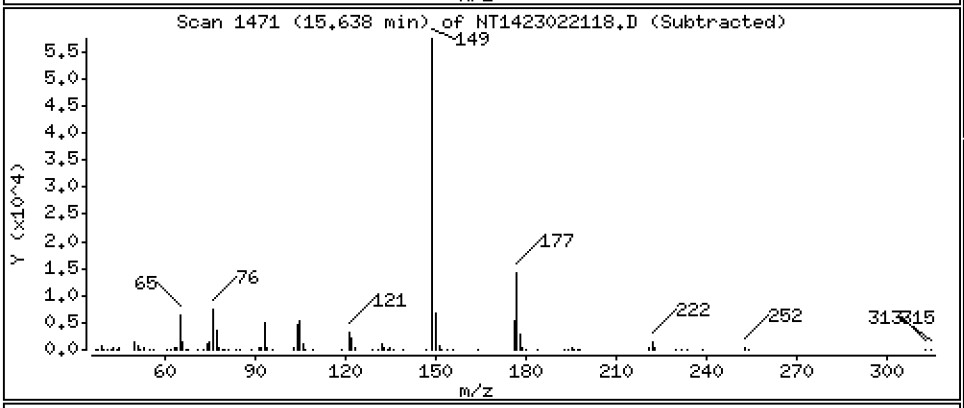
Column diameter: 0.25

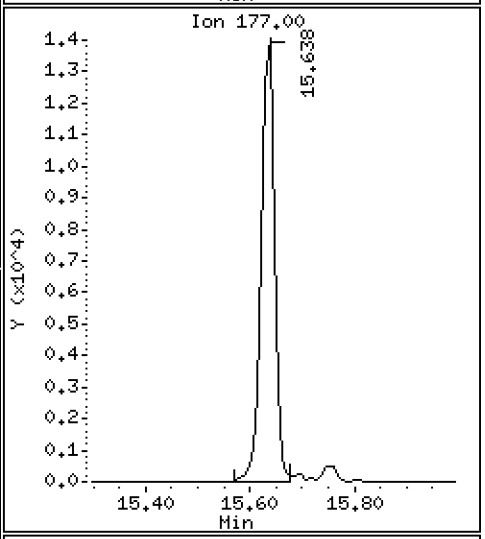
50 Diethylphthalate

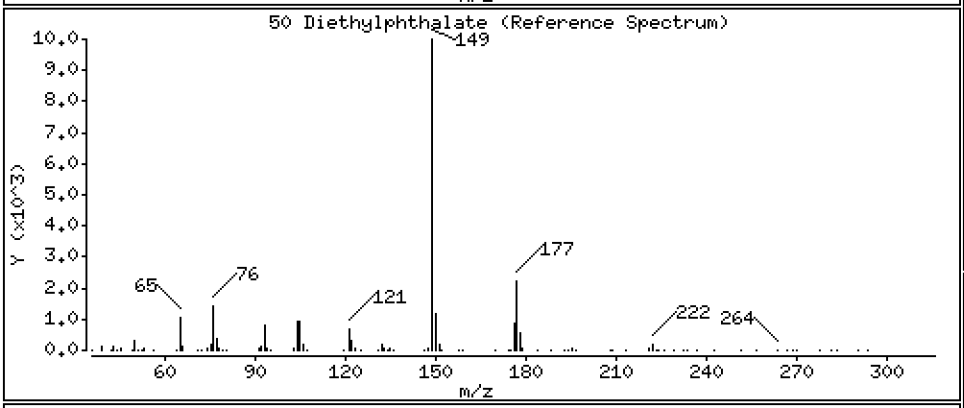
Concentration: 0.5315 ug/mL

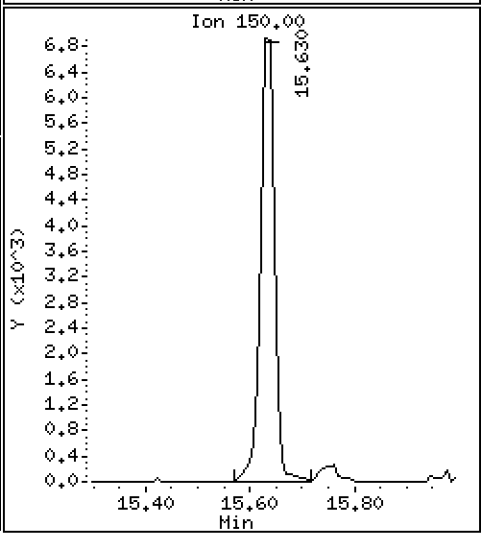


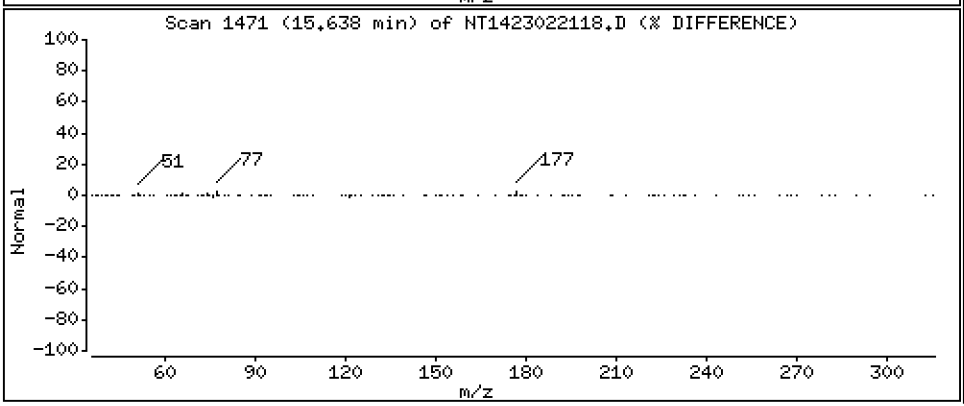












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

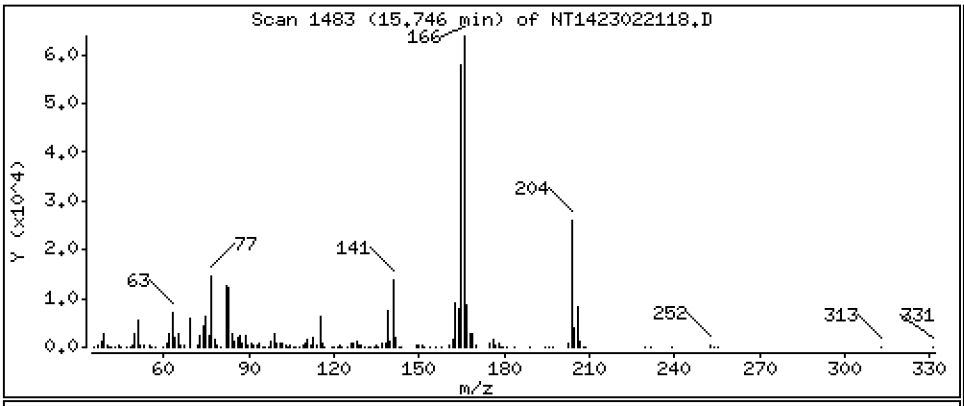
Operator: DSD

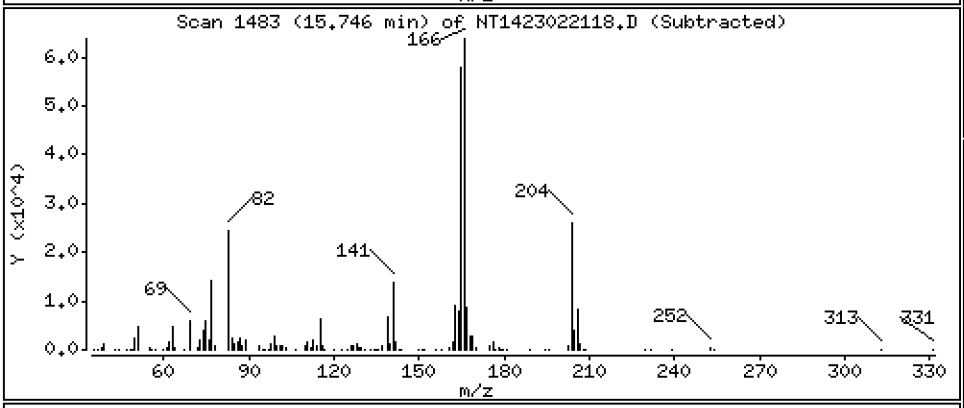
Column phase: ZB-5msi

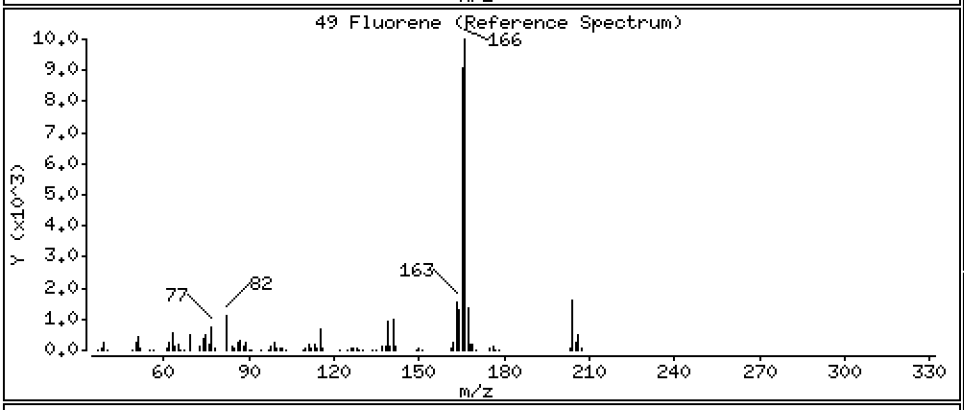
Column diameter: 0.25

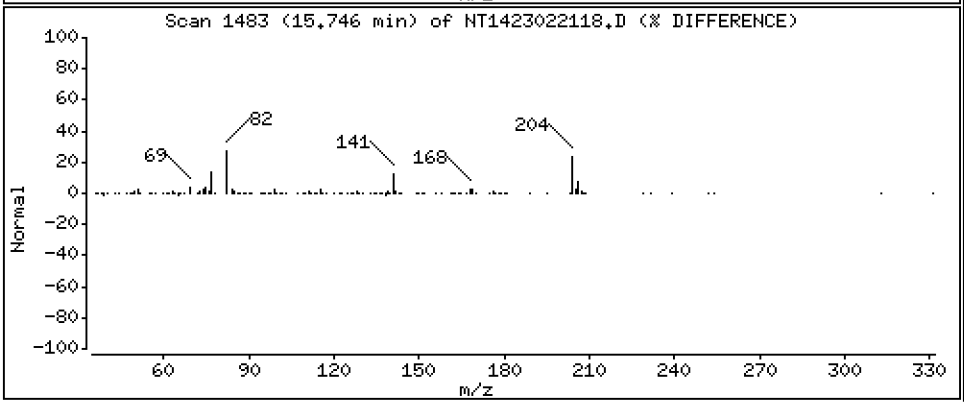
49 Fluorene

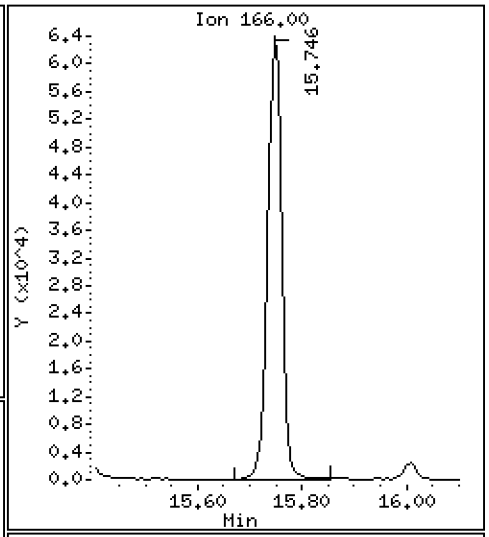
Concentration: 0.5368 ug/mL

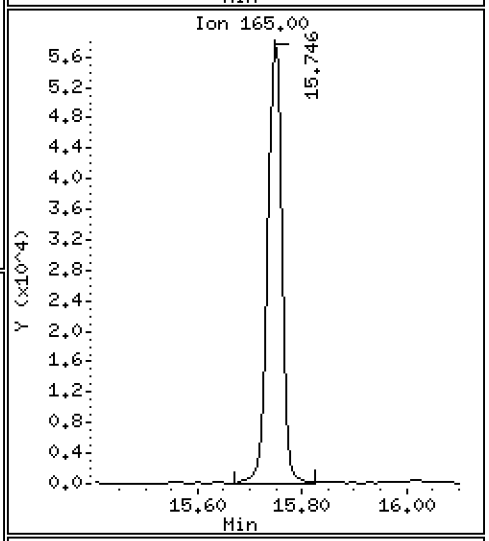


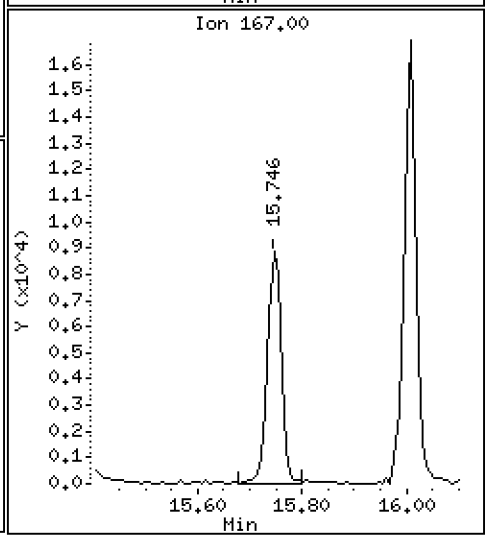












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

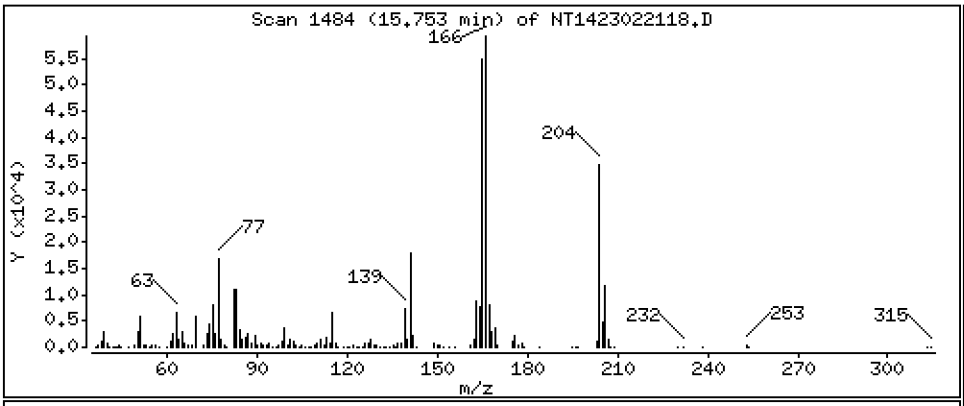
Operator: DSD

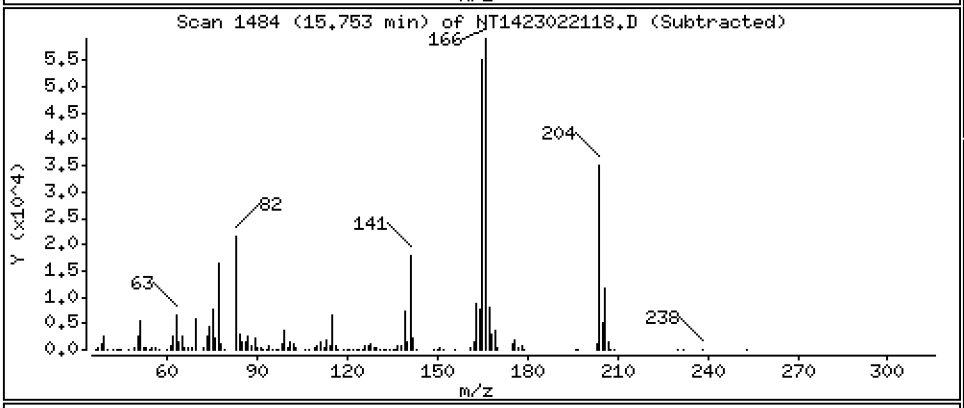
Column phase: ZB-5msi

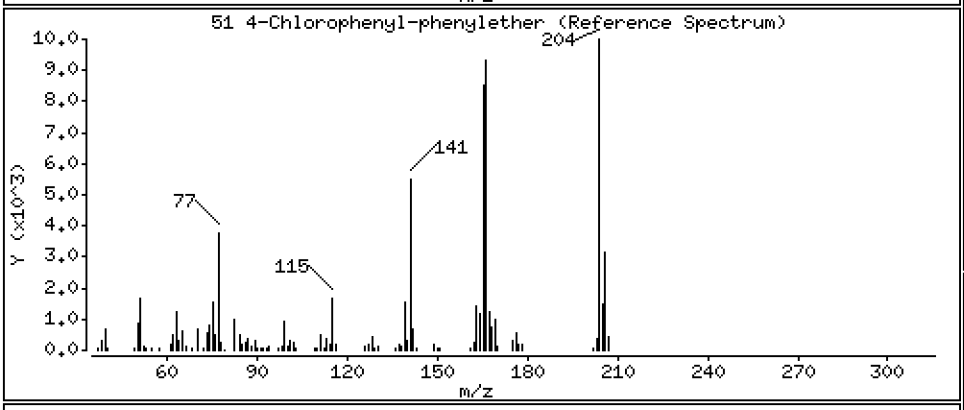
Column diameter: 0.25

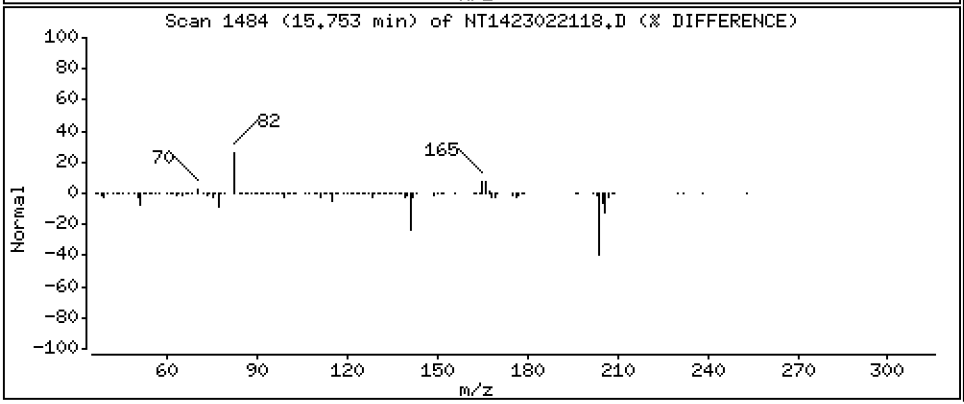
51 4-Chlorophenyl-phenylether

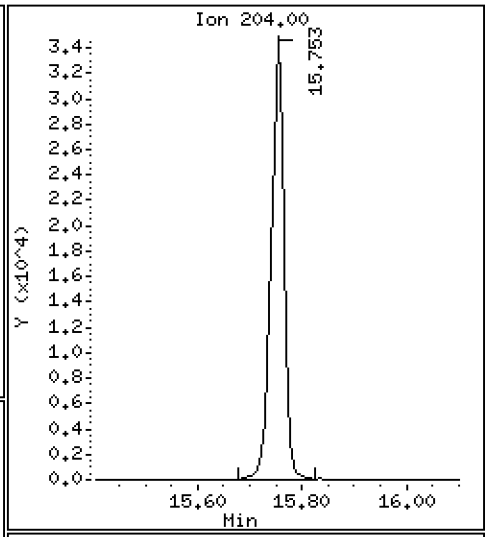
Concentration: 0.5230 ug/mL

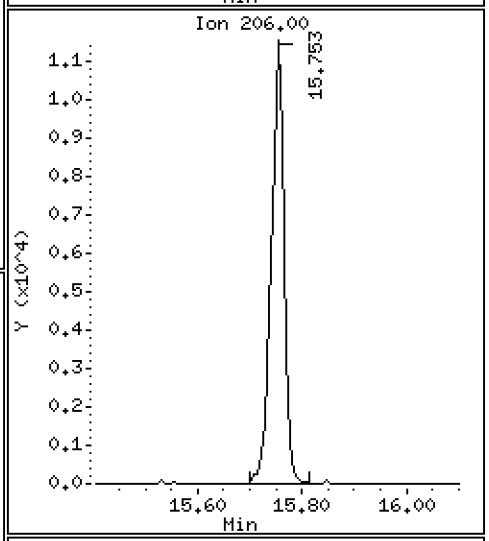


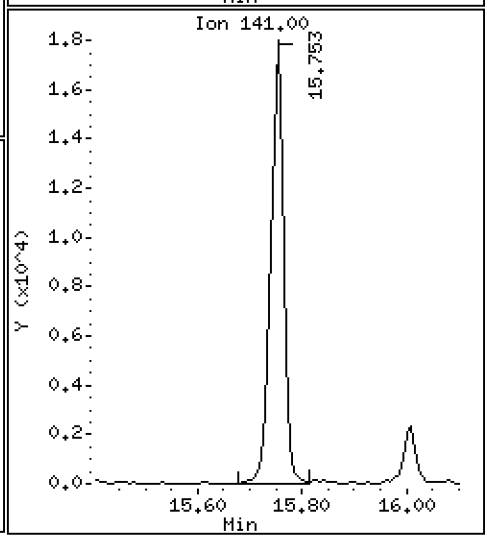












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

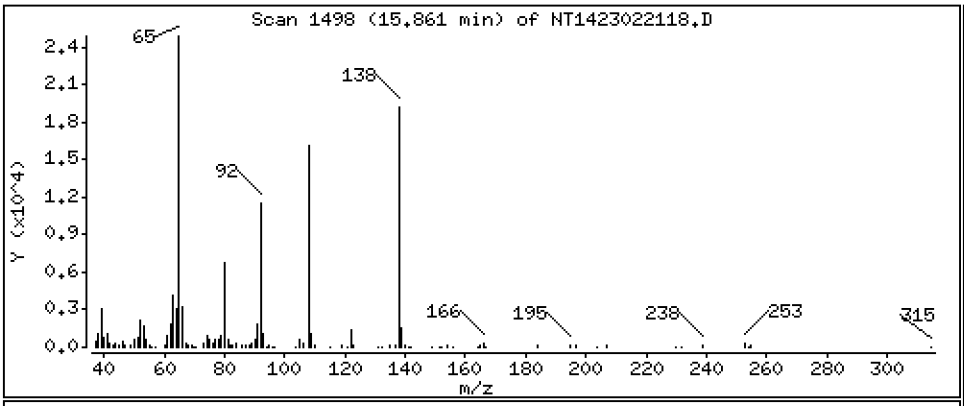
Operator: DSD

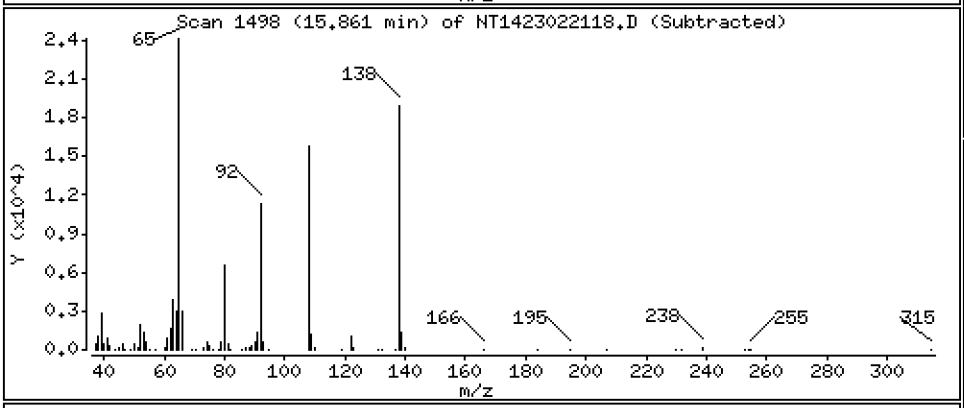
Column phase: ZB-5msi

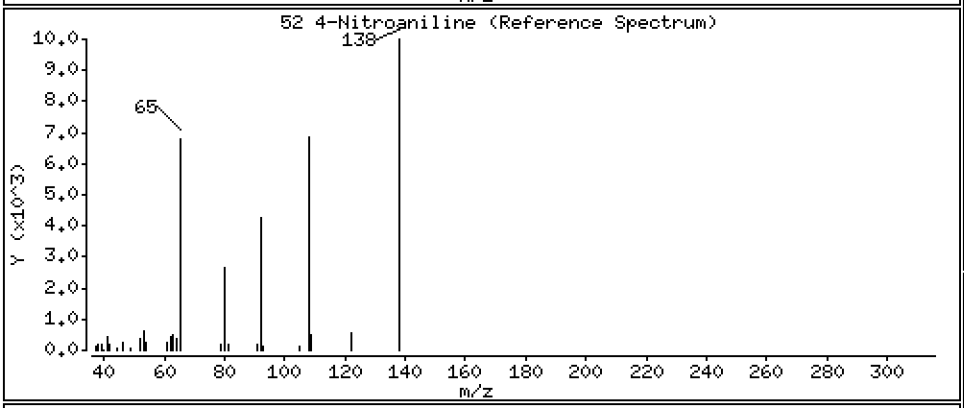
Column diameter: 0.25

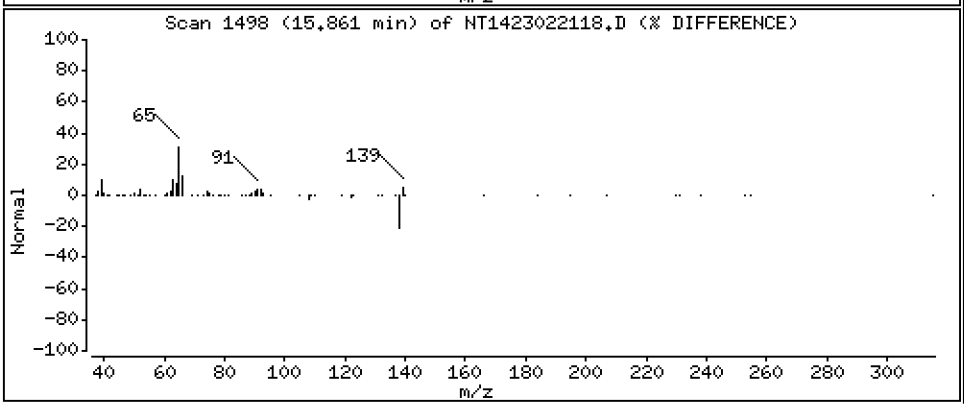
52 4-Nitroaniline

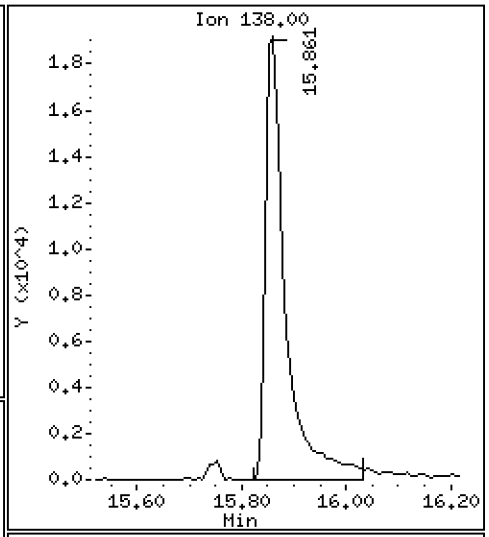
Concentration: 1.129 ug/mL

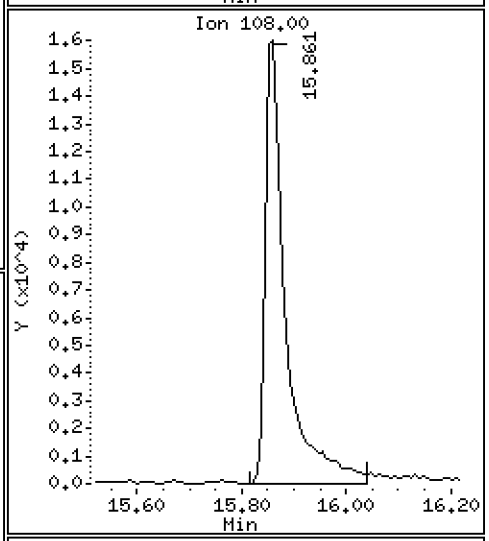


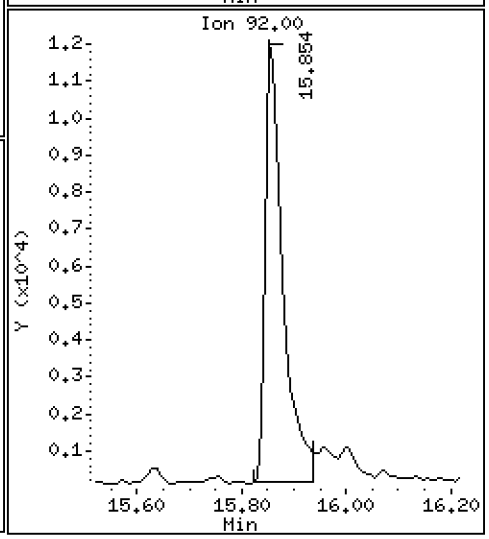












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

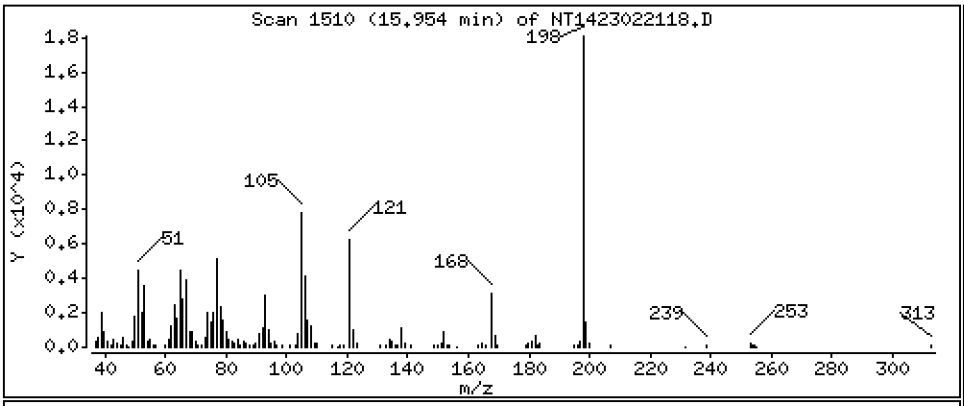
Operator: DSD

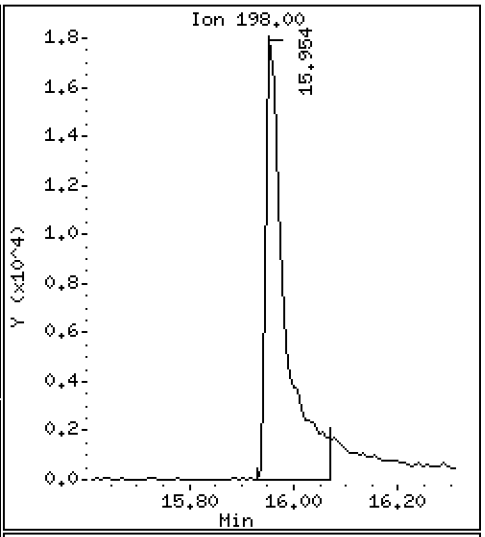
Column phase: ZB-5msi

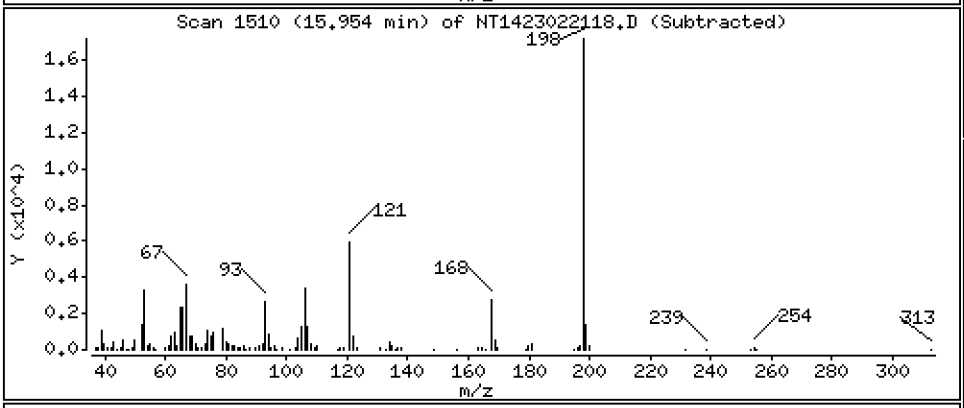
Column diameter: 0.25

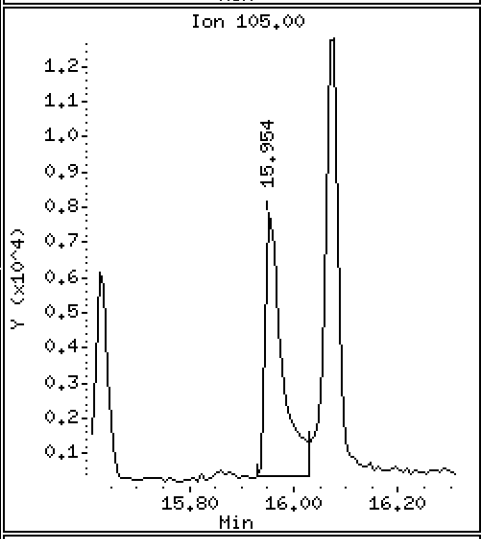
53 4,6-Dinitro-2-methylphenol

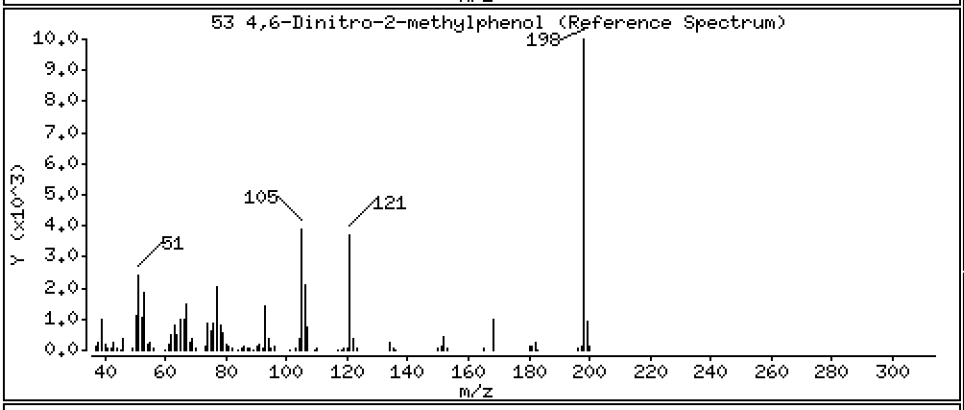
Concentration: 1.193 ug/mL

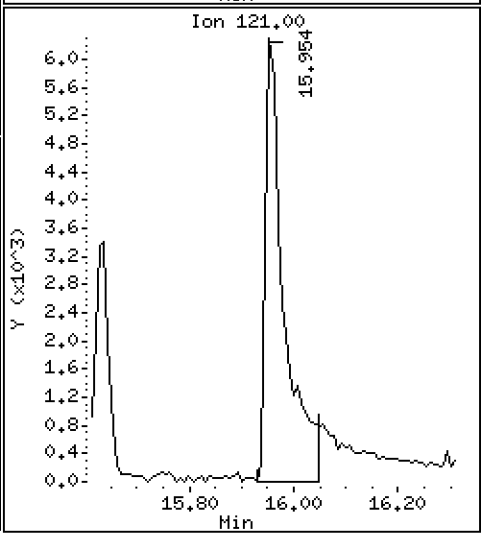


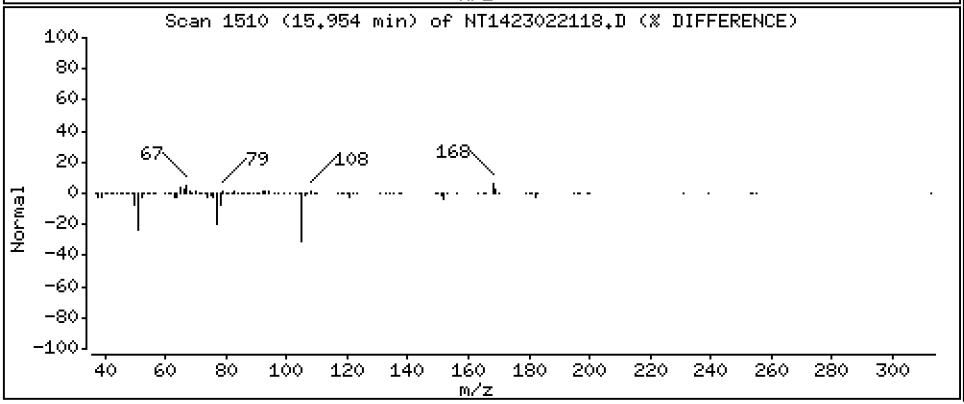












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

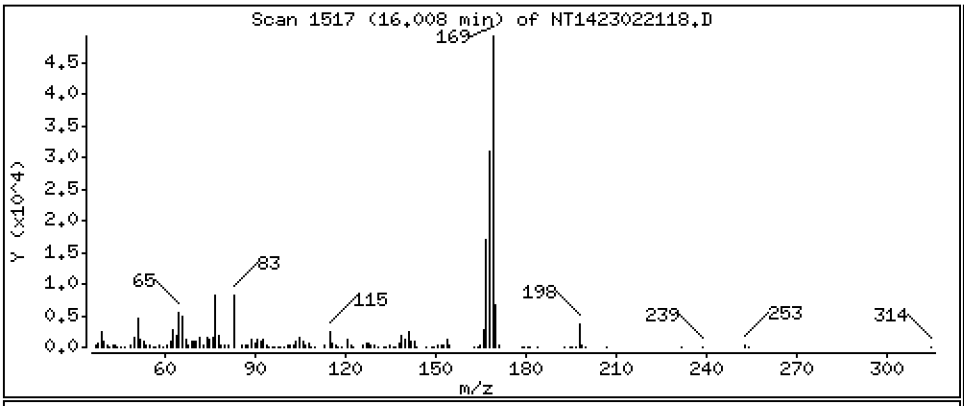
Operator: DSD

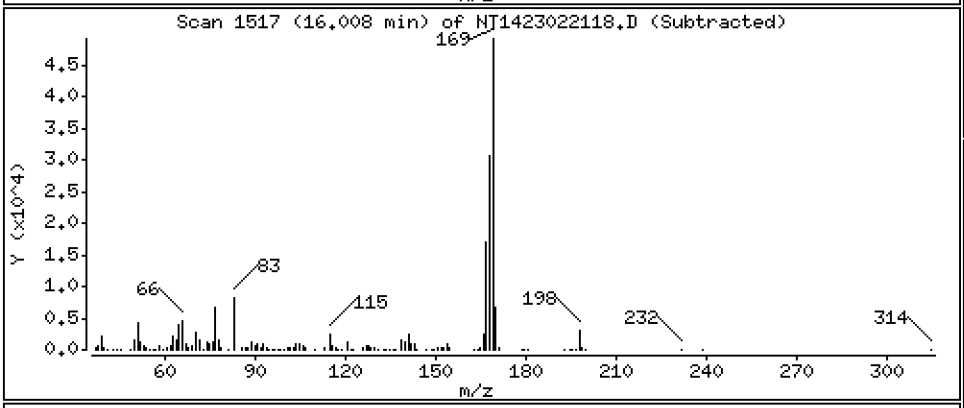
Column phase: ZB-5msi

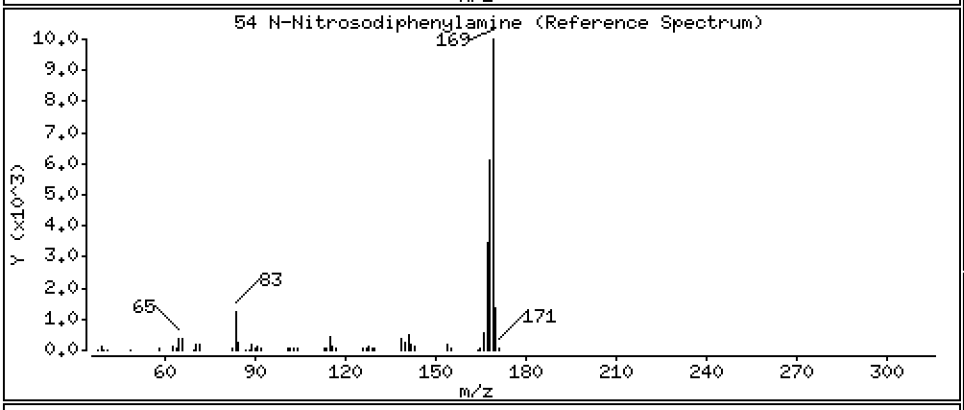
Column diameter: 0.25

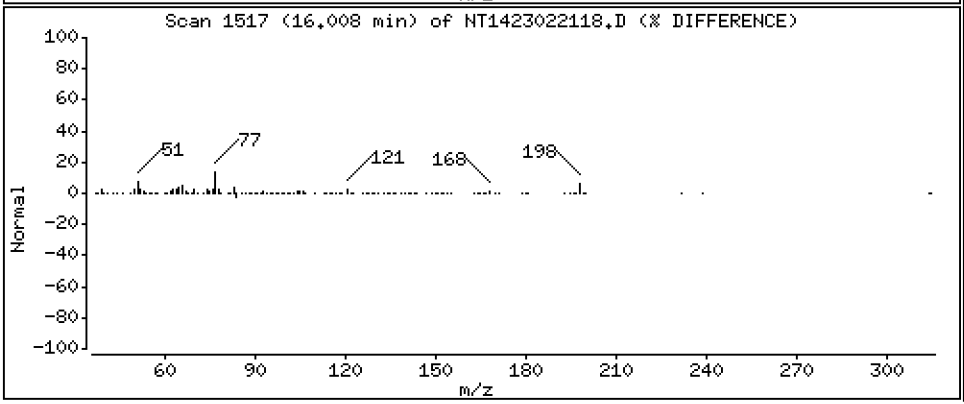
54 N-Nitrosodiphenylamine

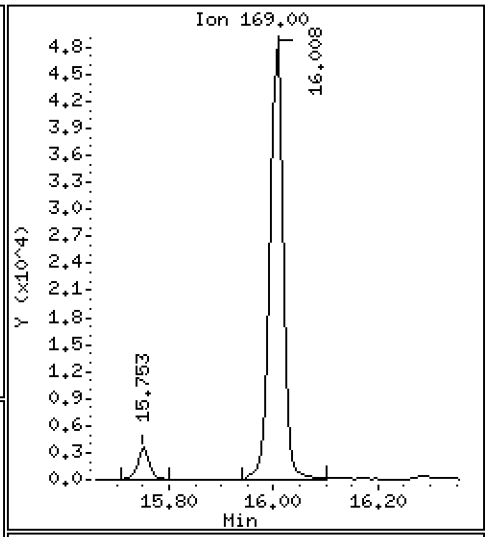
Concentration: 0.5538 ug/mL

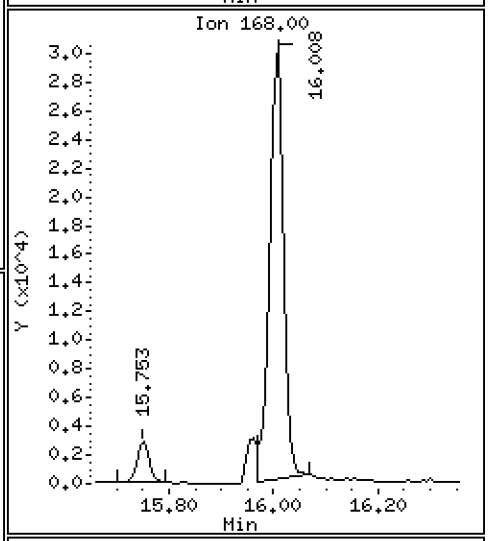


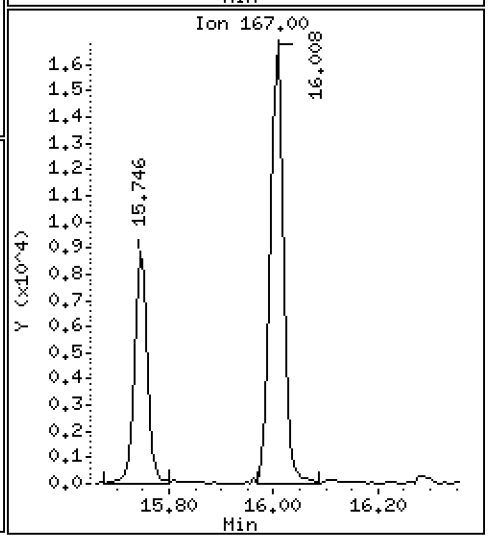












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

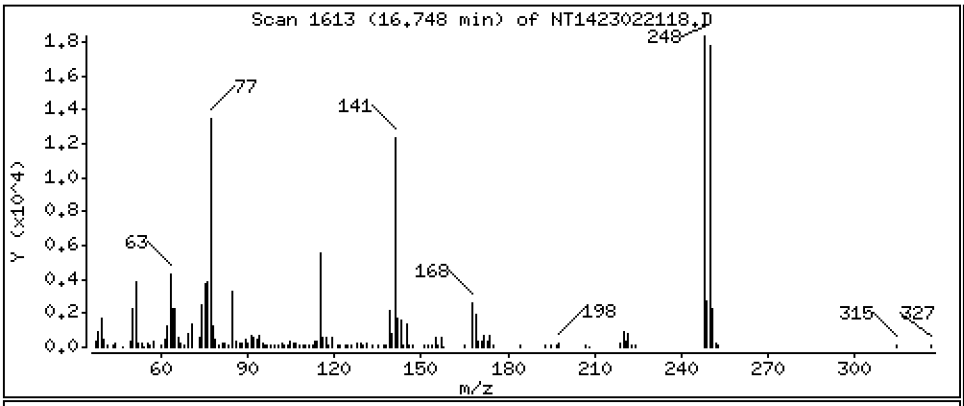
Operator: DSD

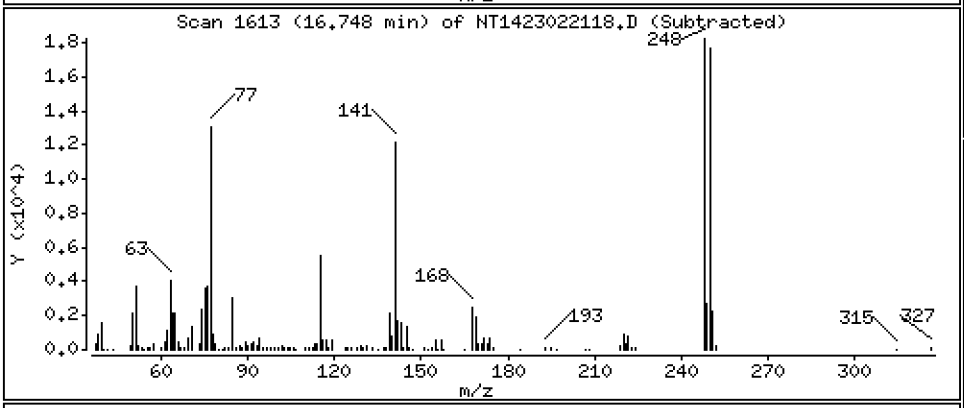
Column phase: ZB-5msi

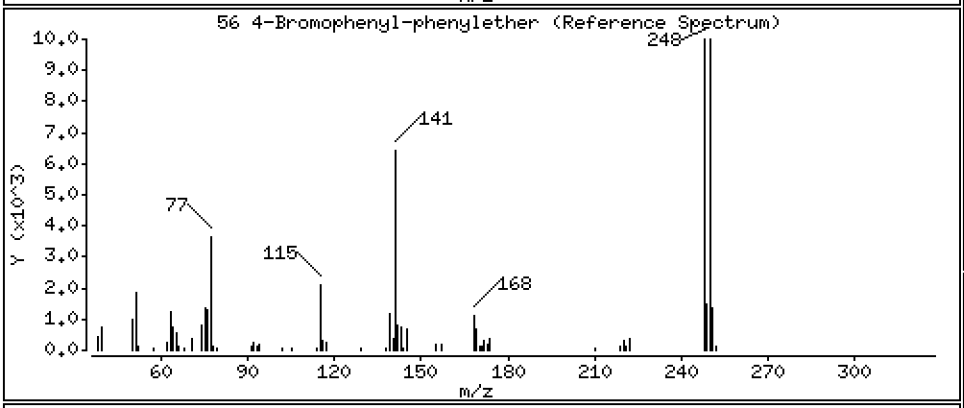
Column diameter: 0.25

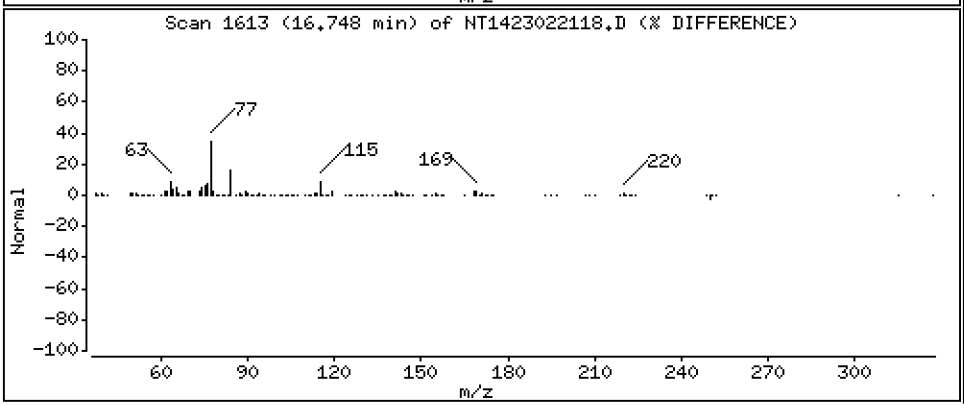
56 4-Bromophenyl-phenylether

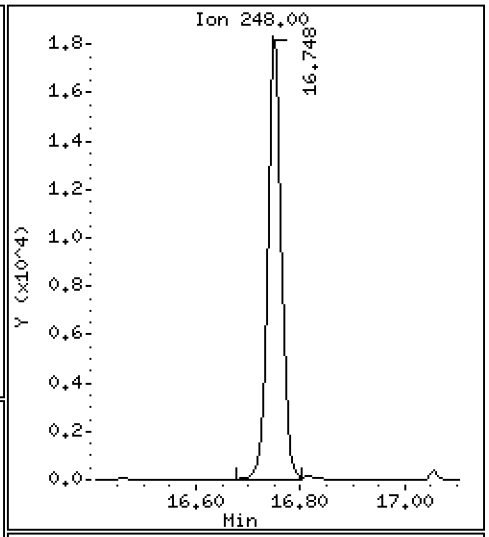
Concentration: 0.5033 ug/mL

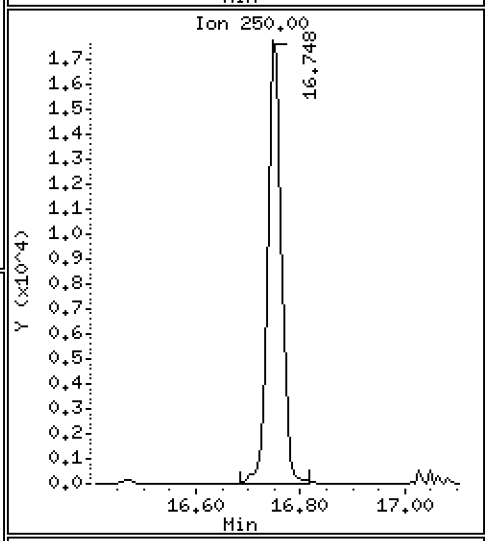


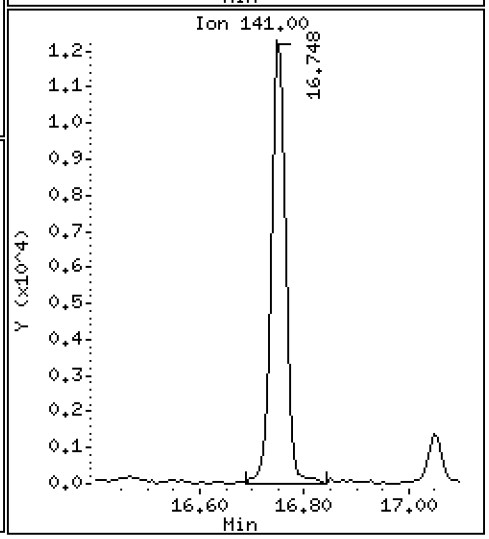












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

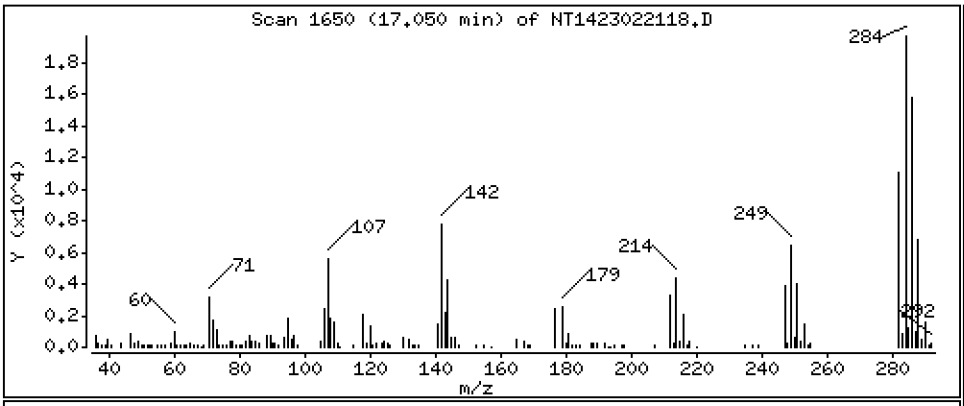
Operator: DSD

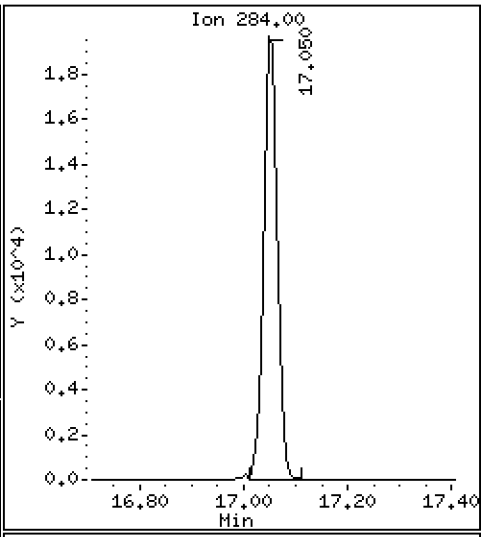
Column phase: ZB-5msi

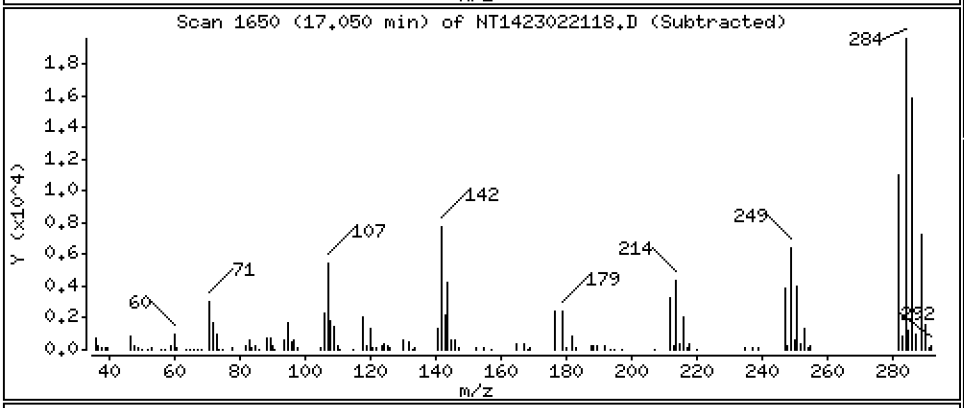
Column diameter: 0.25

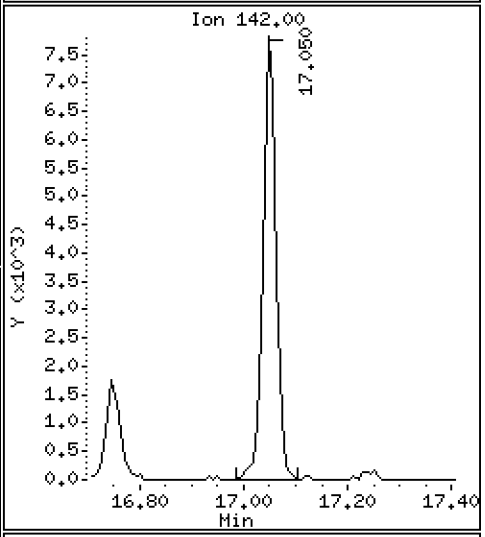
57 Hexachlorobenzene

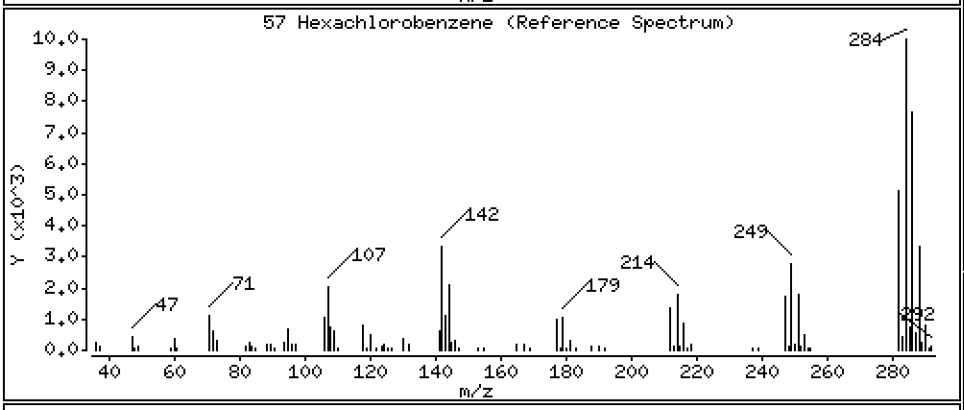
Concentration: 0.5380 ug/mL

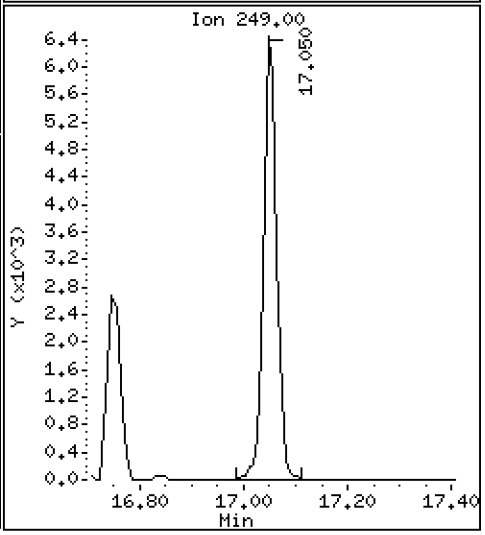


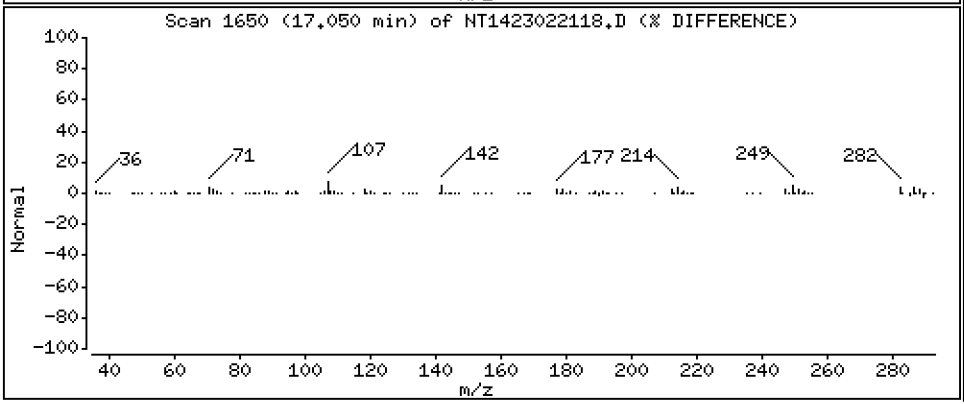












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

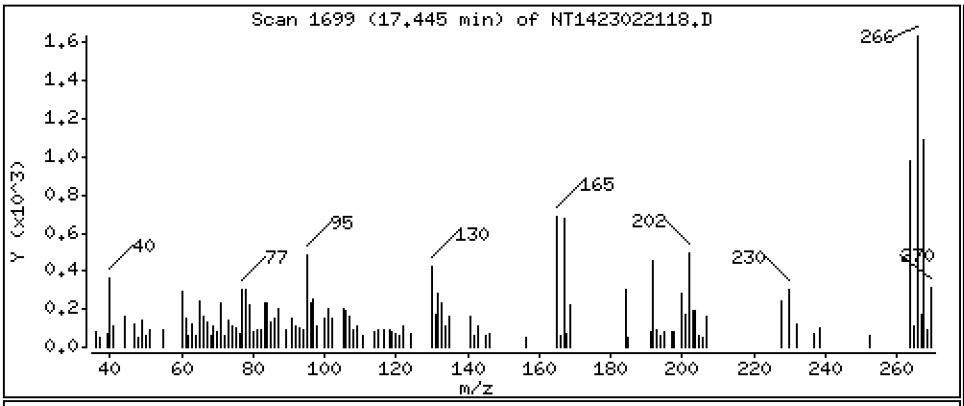
Operator: DSD

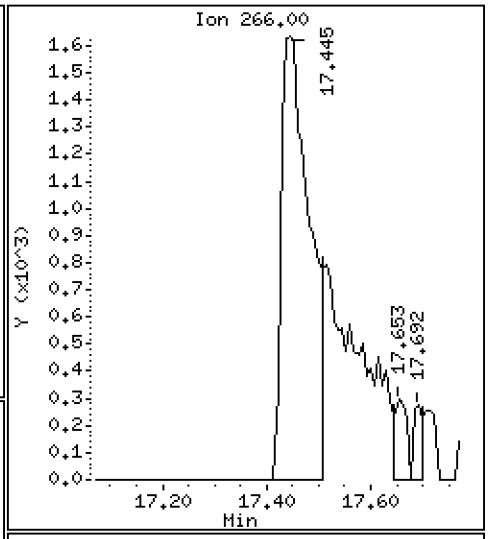
Column phase: ZB-5msi

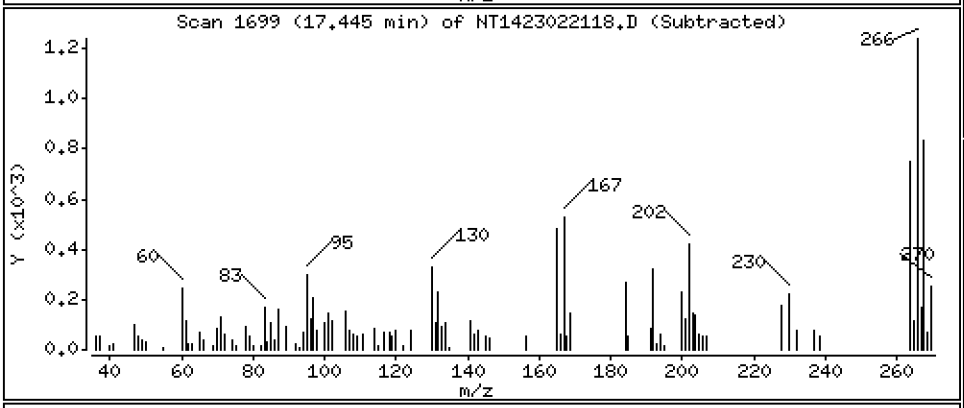
Column diameter: 0.25

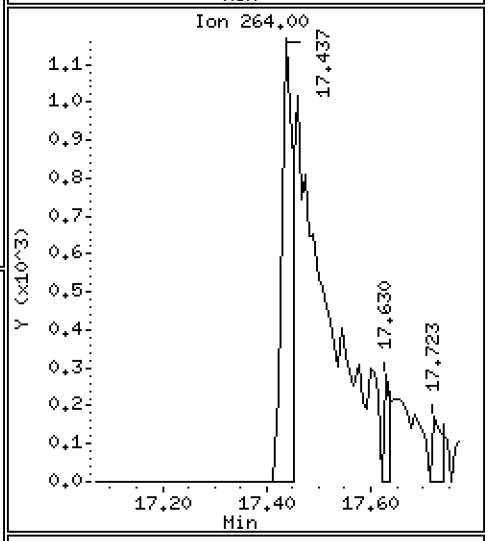
58 Pentachlorophenol

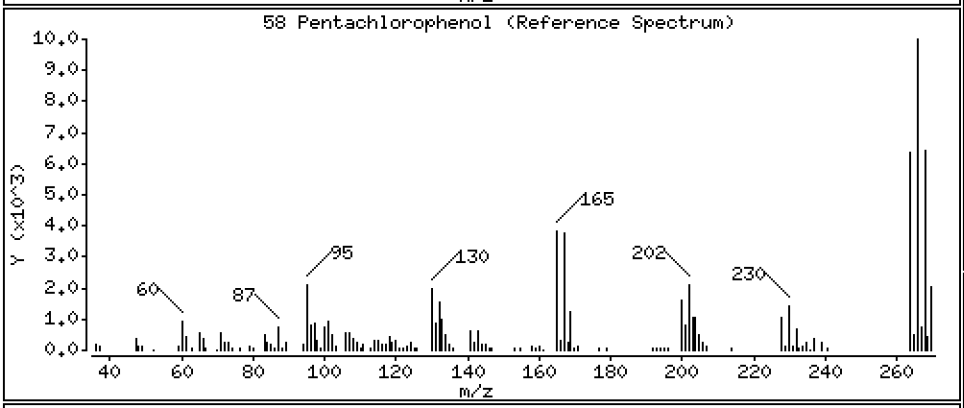
Concentration: 0.1932 ug/mL

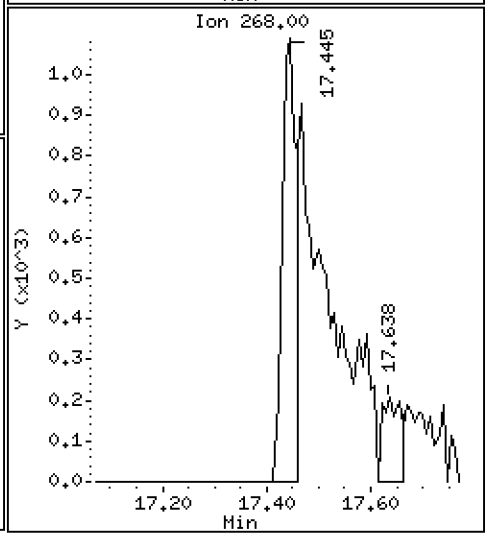


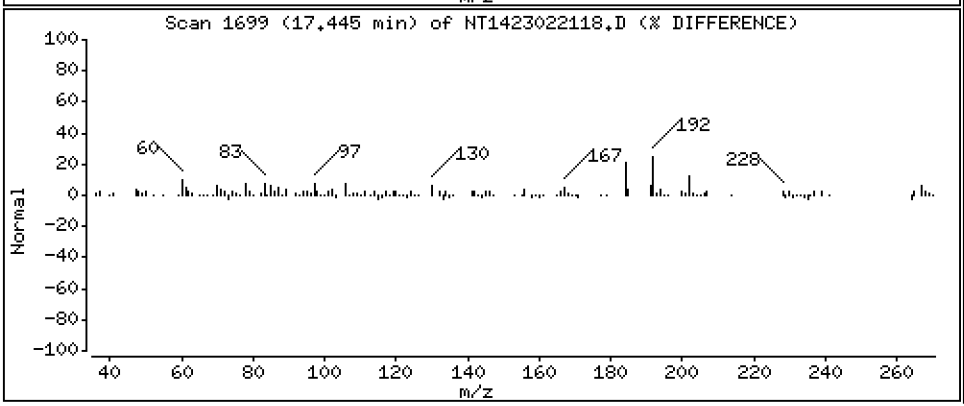












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

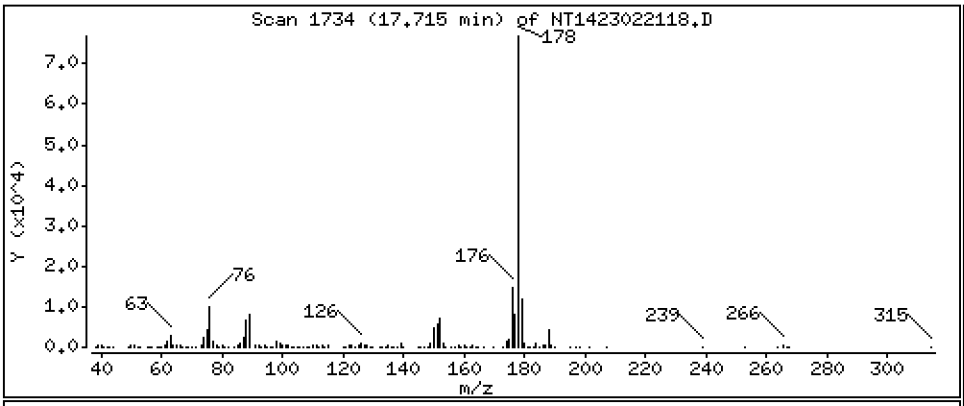
Operator: DSD

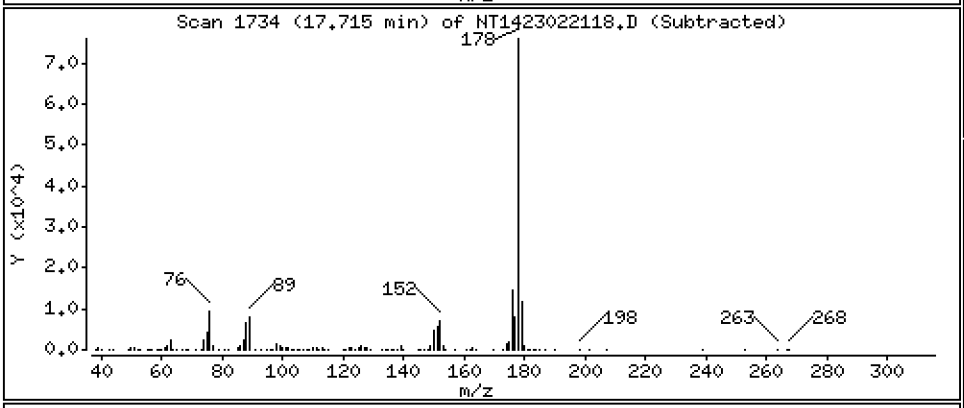
Column phase: ZB-5msi

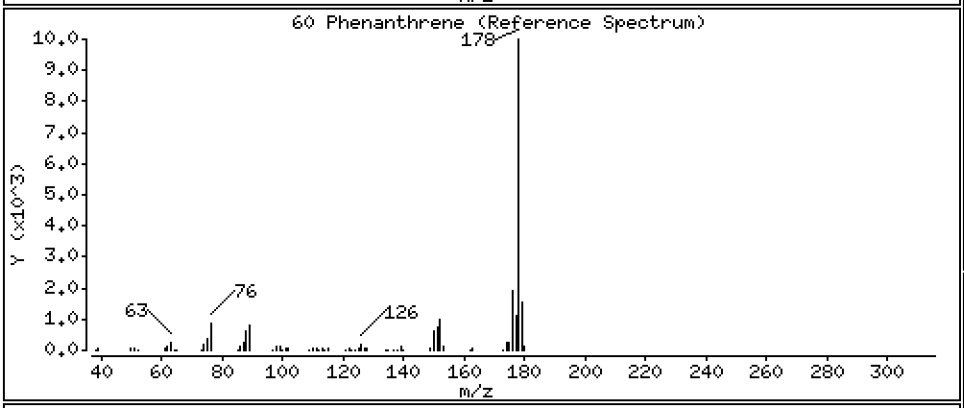
Column diameter: 0.25

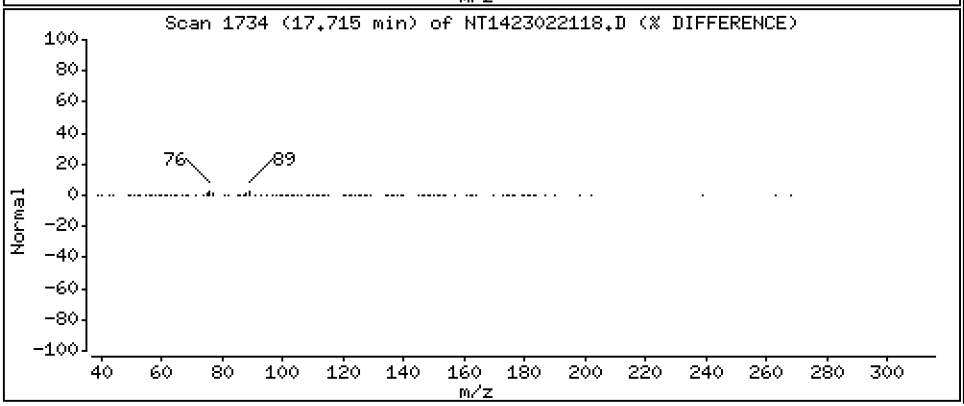
60 Phenanthrene

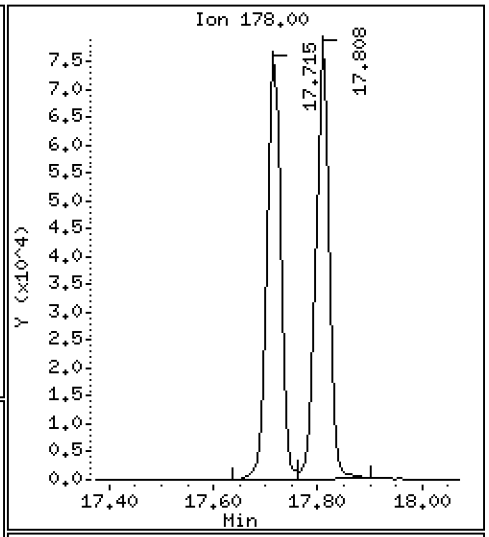
Concentration: 0.5407 ug/mL

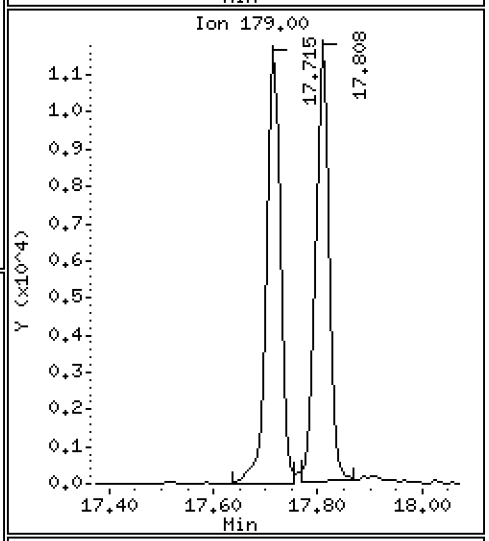


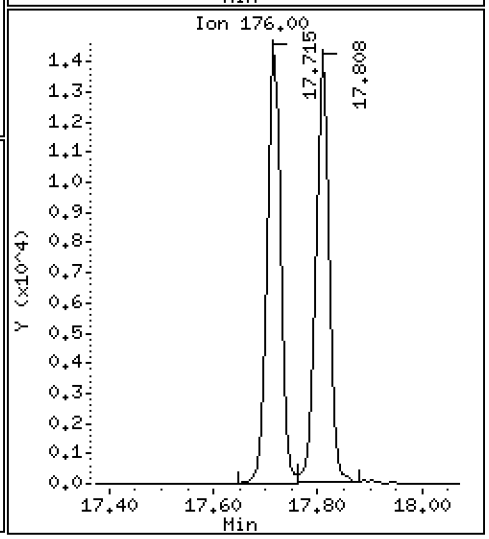












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

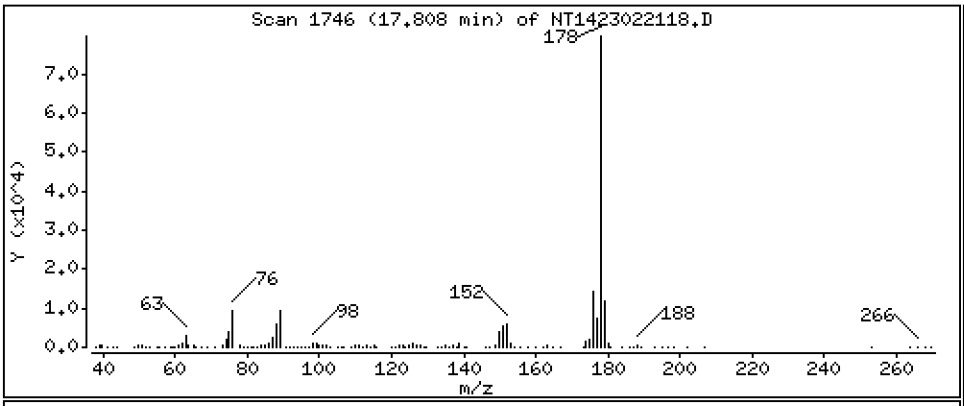
Operator: DSD

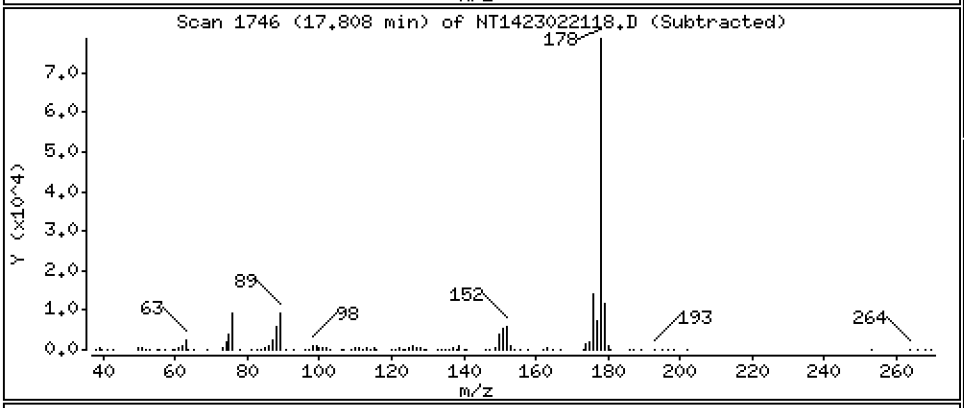
Column phase: ZB-5msi

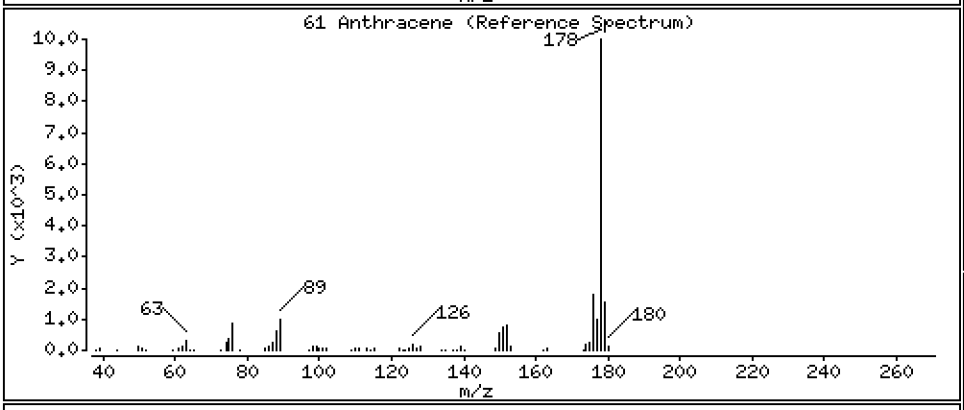
Column diameter: 0.25

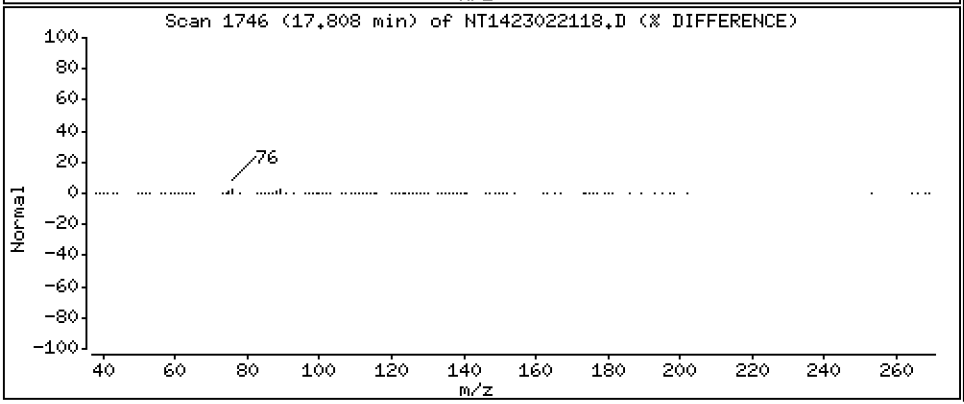
61 Anthracene

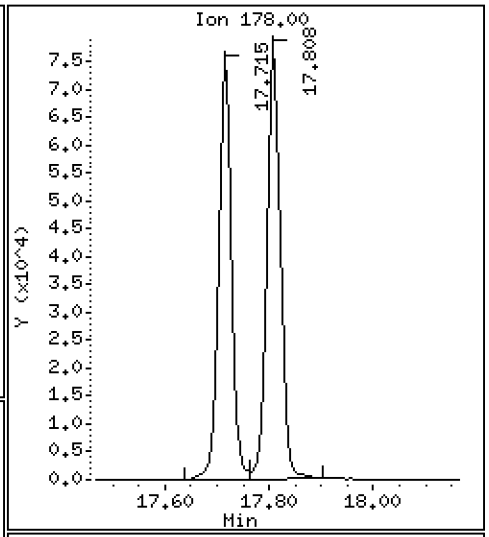
Concentration: 0.5570 ug/mL

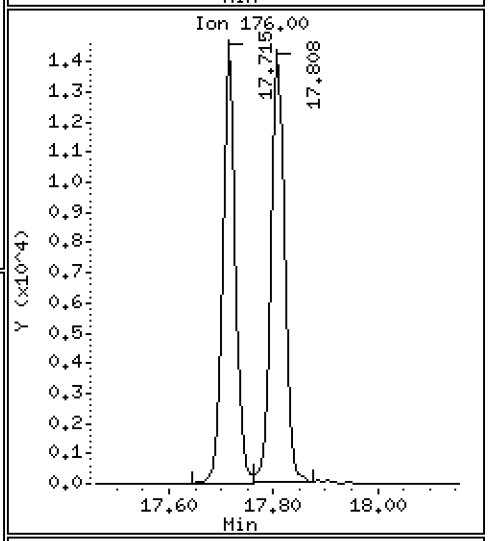


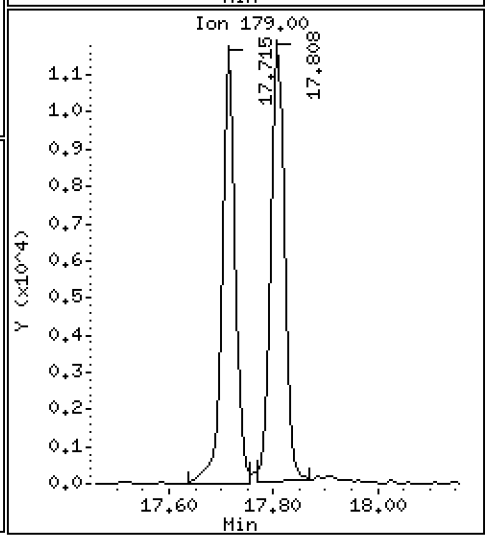












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

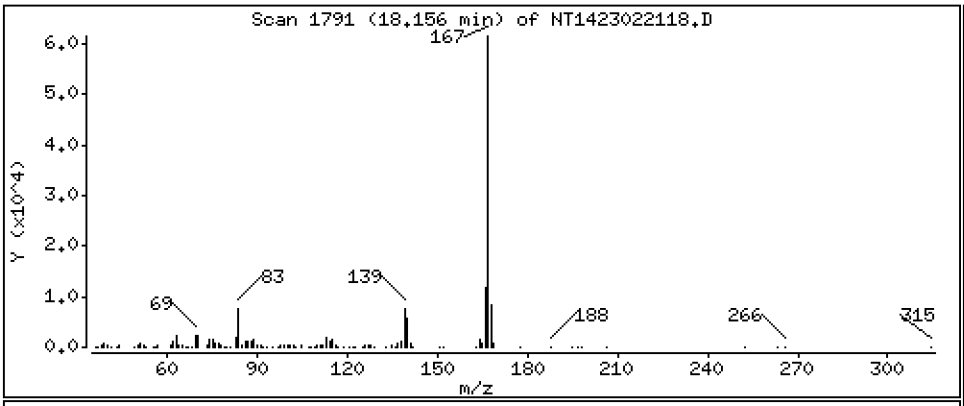
Operator: DSD

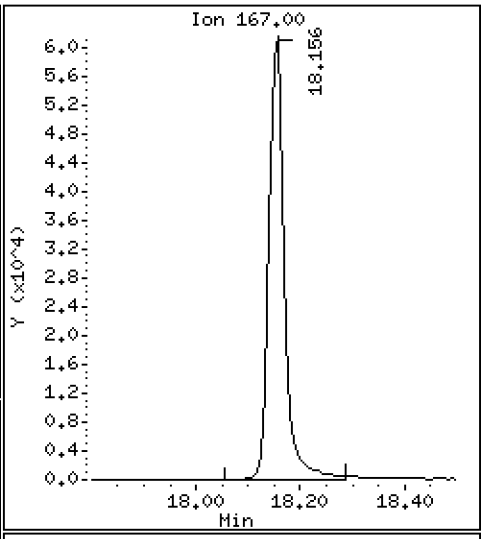
Column phase: ZB-5msi

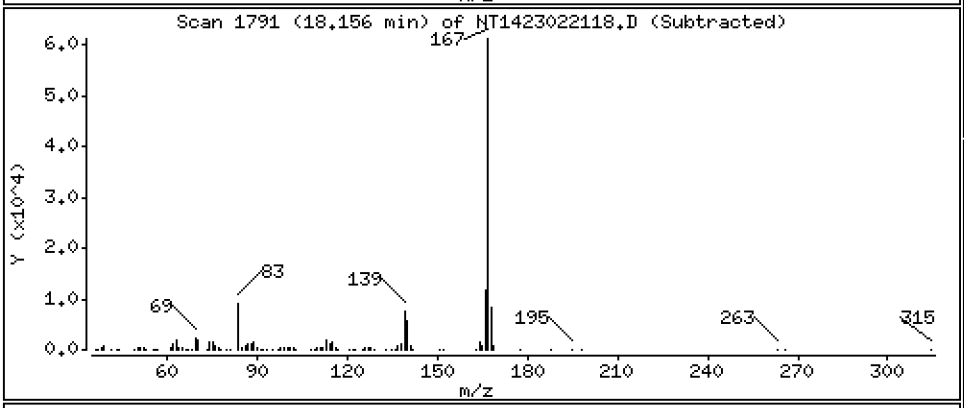
Column diameter: 0.25

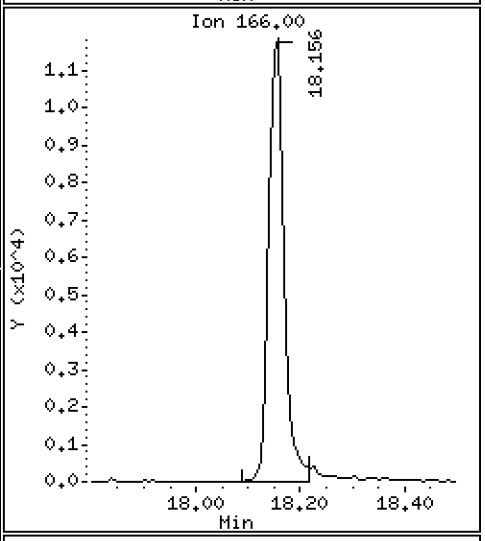
62 Carbazole

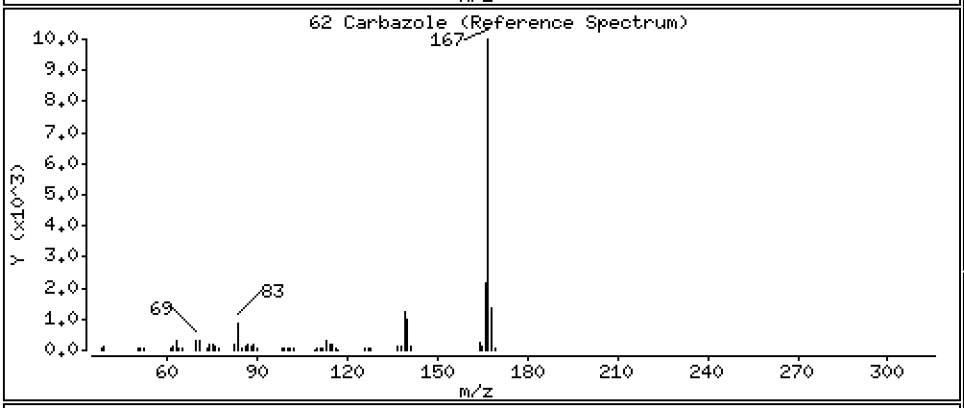
Concentration: 0.5540 ug/mL

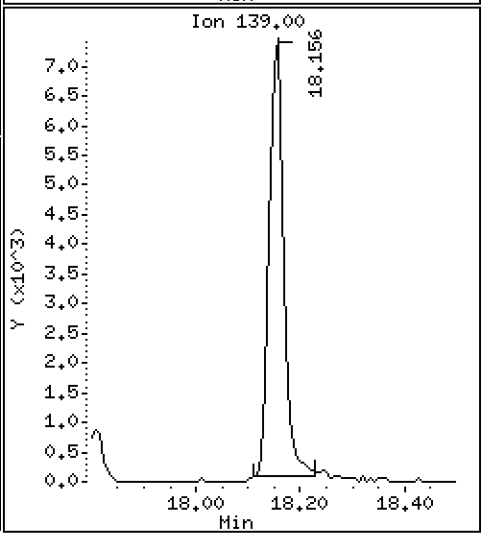


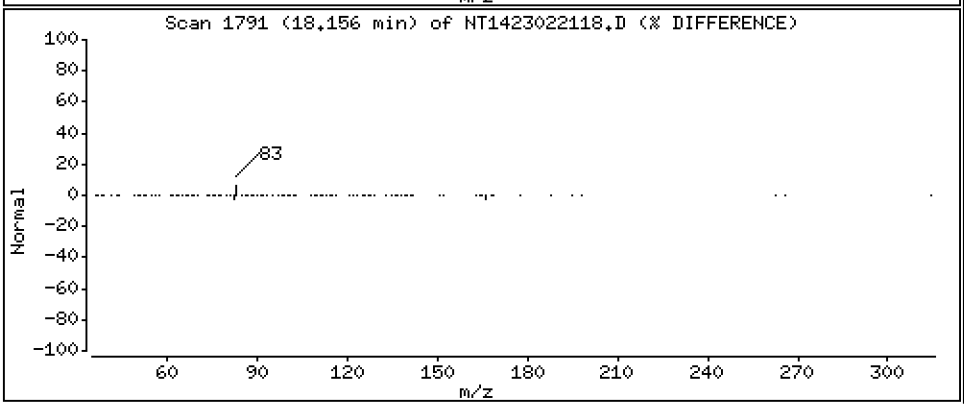












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

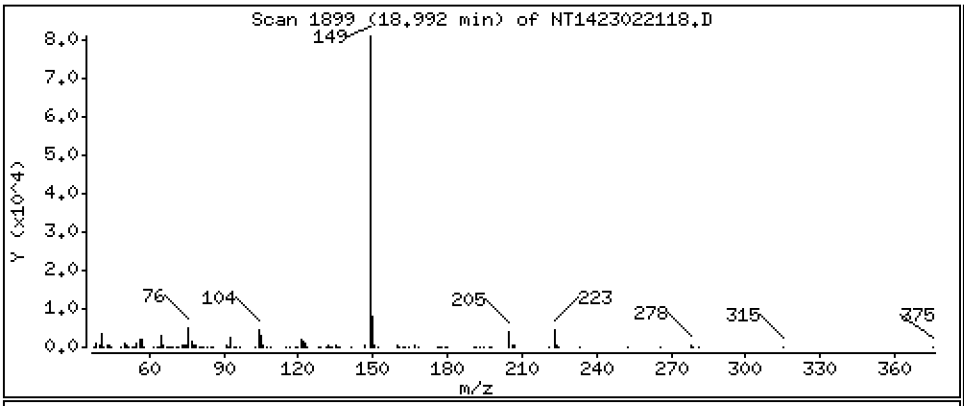
Operator: DSD

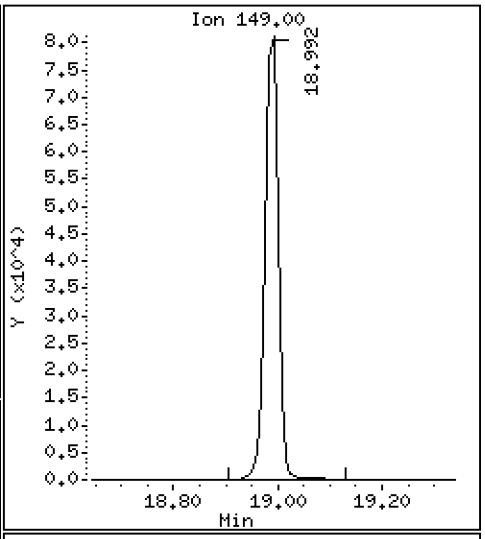
Column phase: ZB-5msi

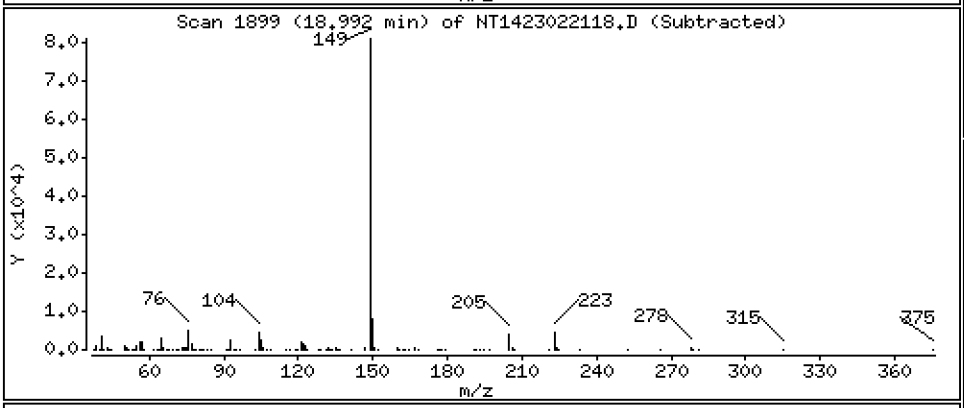
Column diameter: 0.25

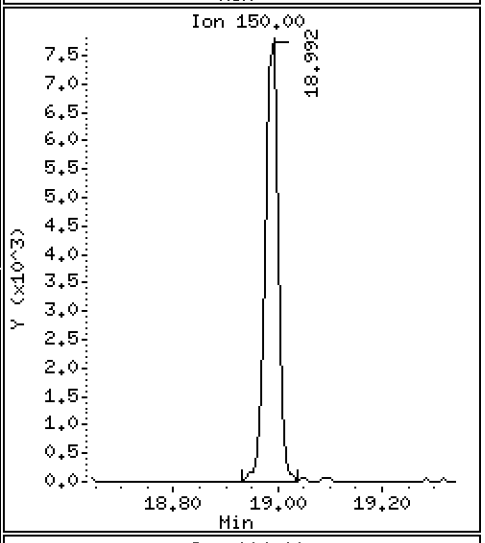
63 Di-n-butylphthalate

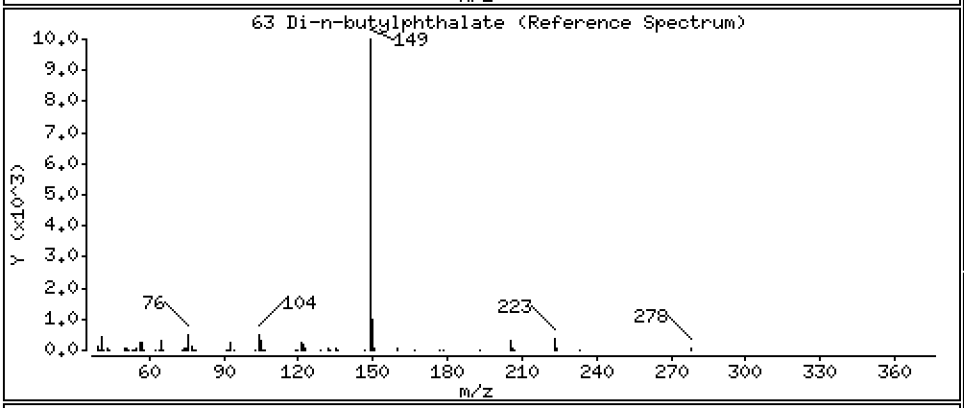
Concentration: 0.5537 ug/mL

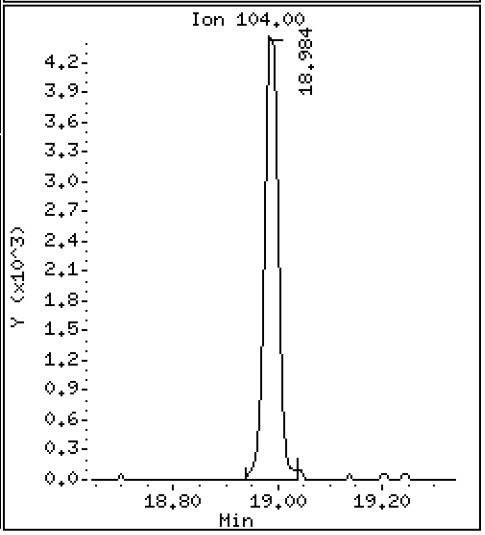


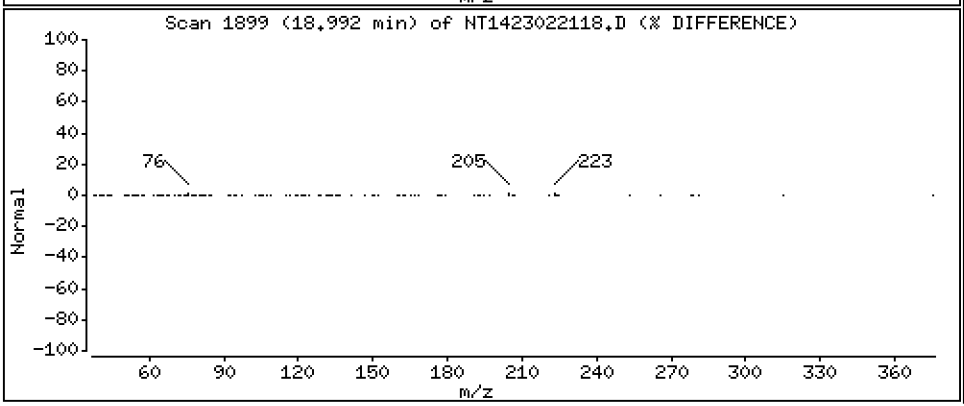












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

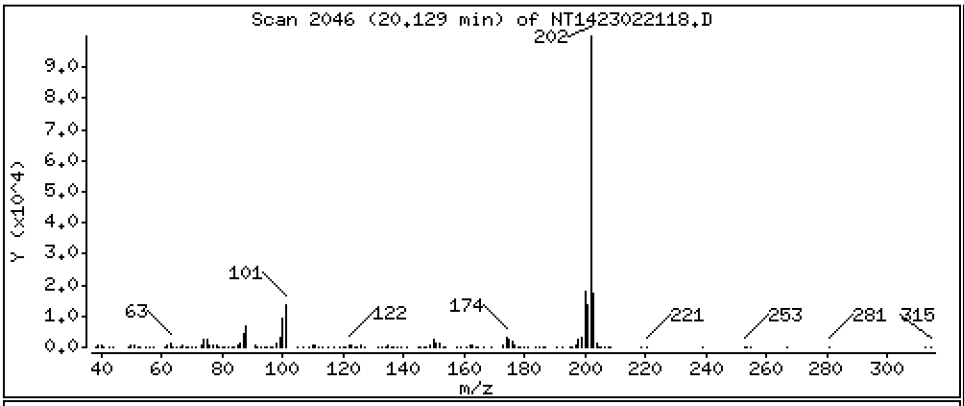
Operator: DSD

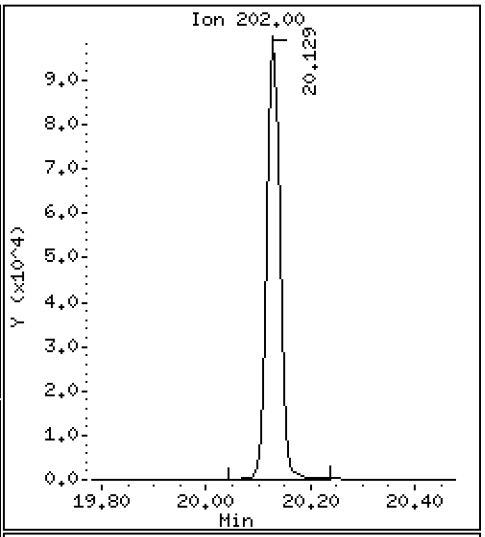
Column phase: ZB-5msi

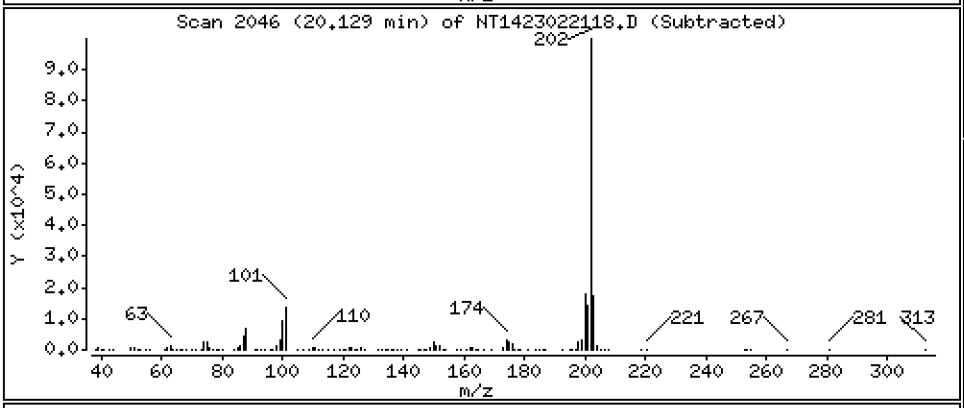
Column diameter: 0.25

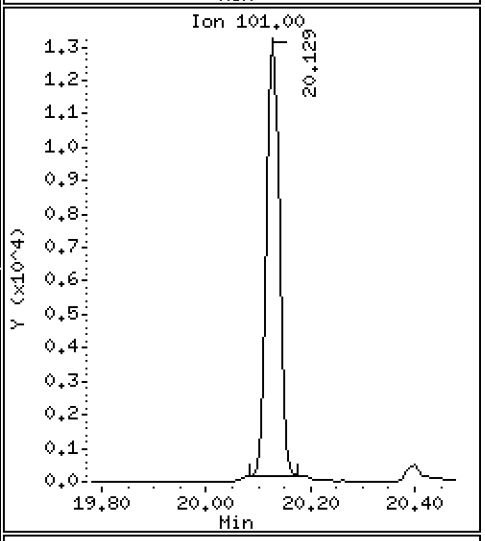
64 Fluoranthene

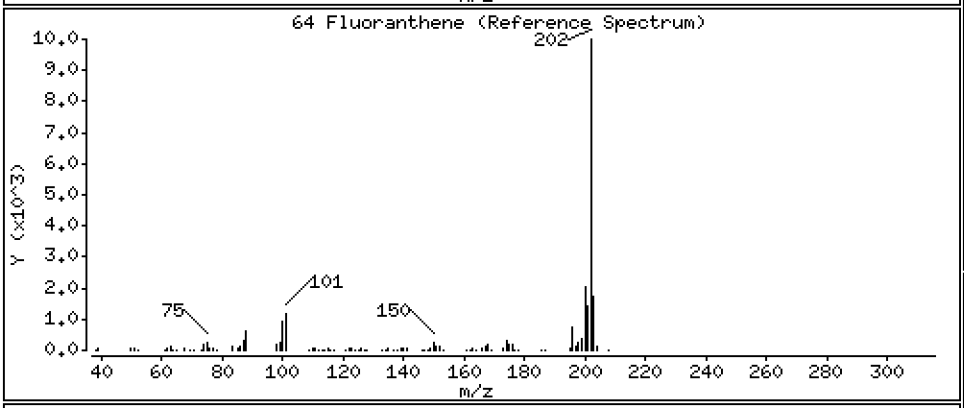
Concentration: 0.4374 ug/mL

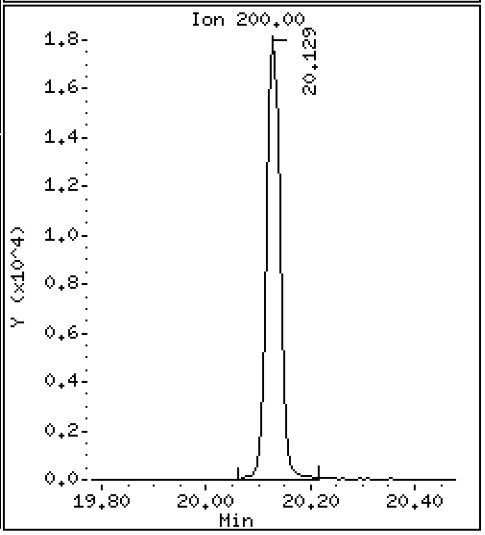


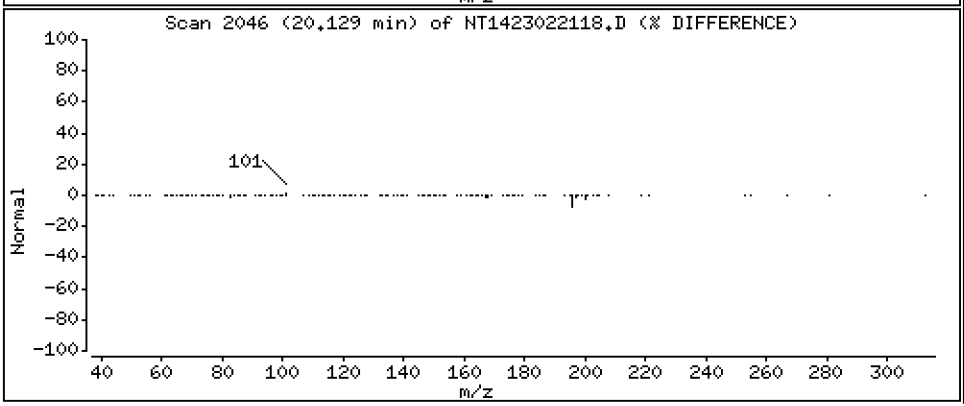












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

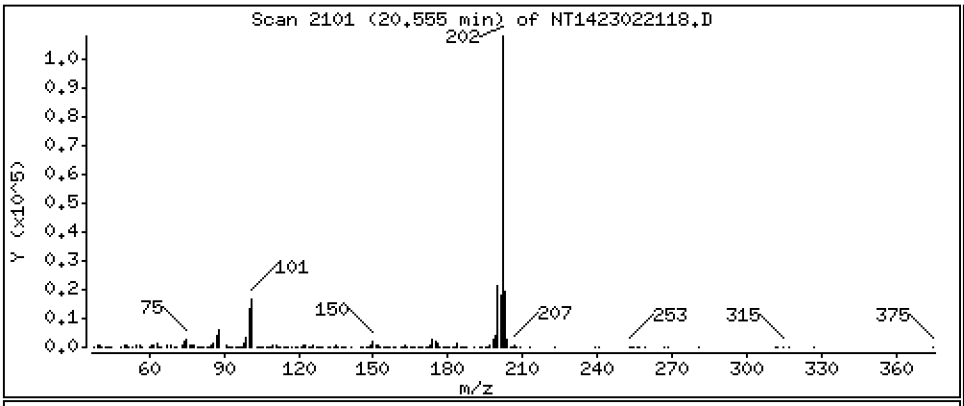
Operator: DSD

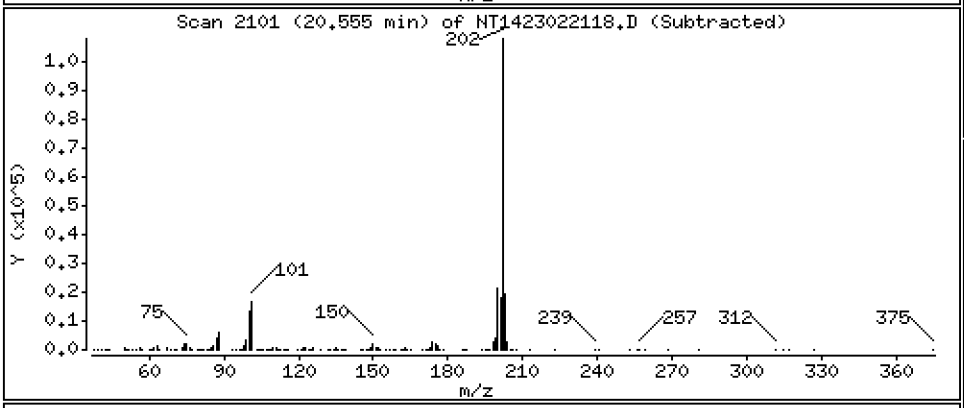
Column phase: ZB-5msi

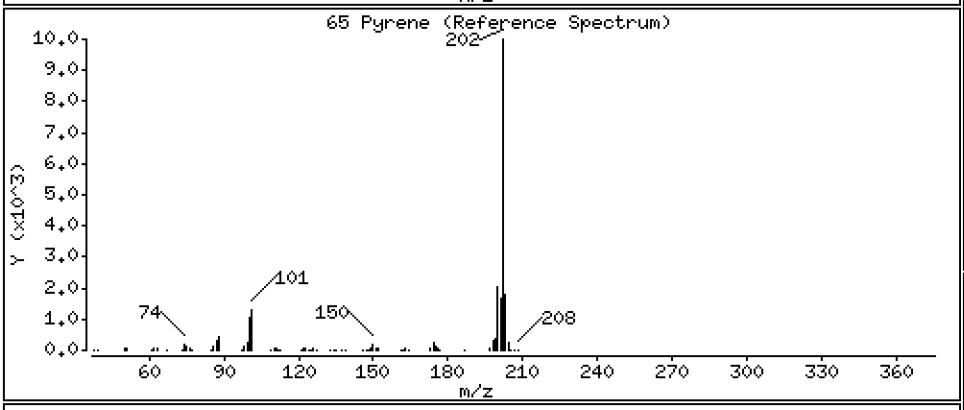
Column diameter: 0.25

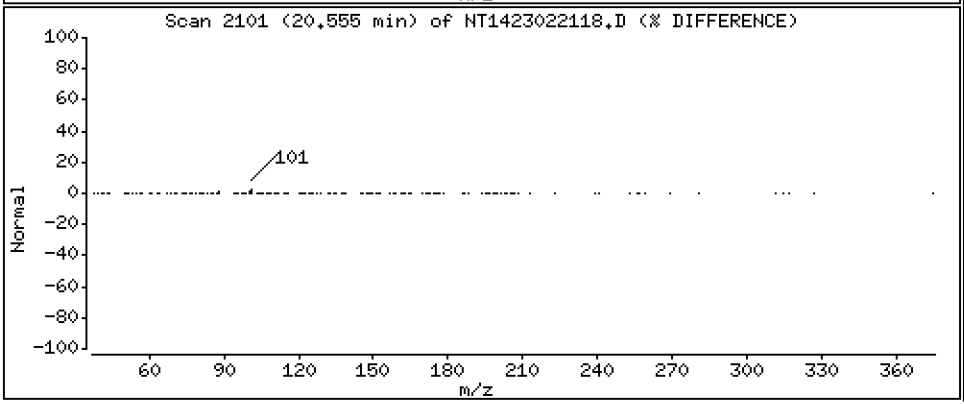
65 Pyrene

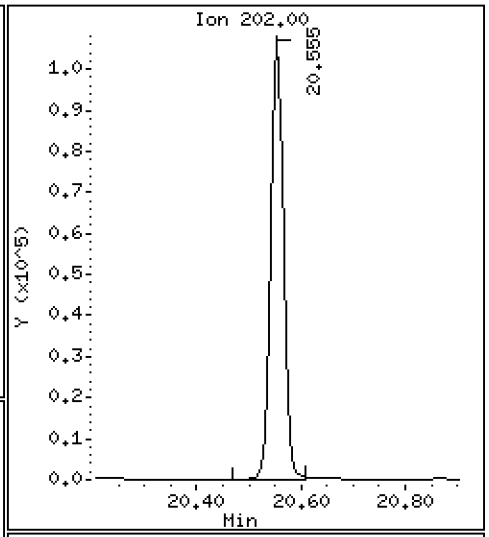
Concentration: 0.4277 ug/mL

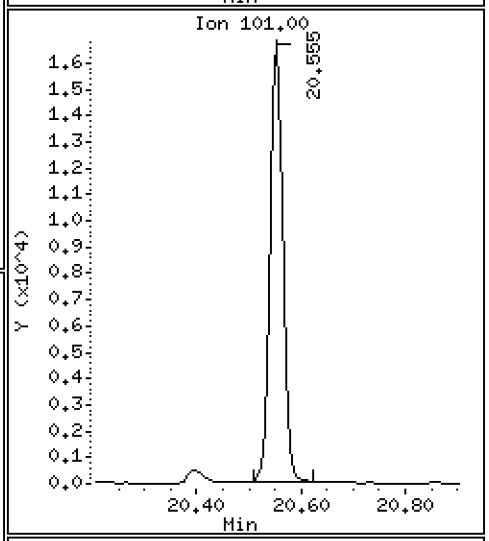


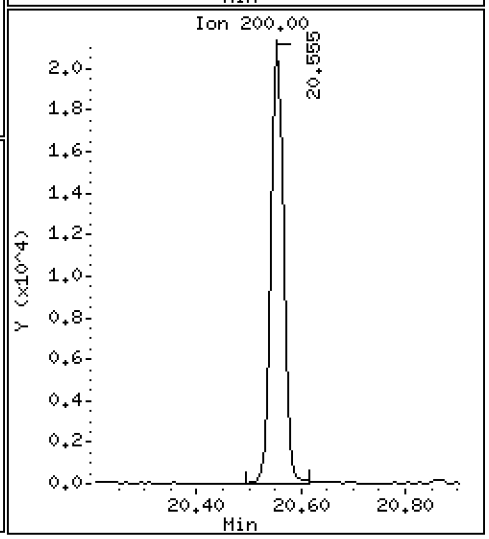












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

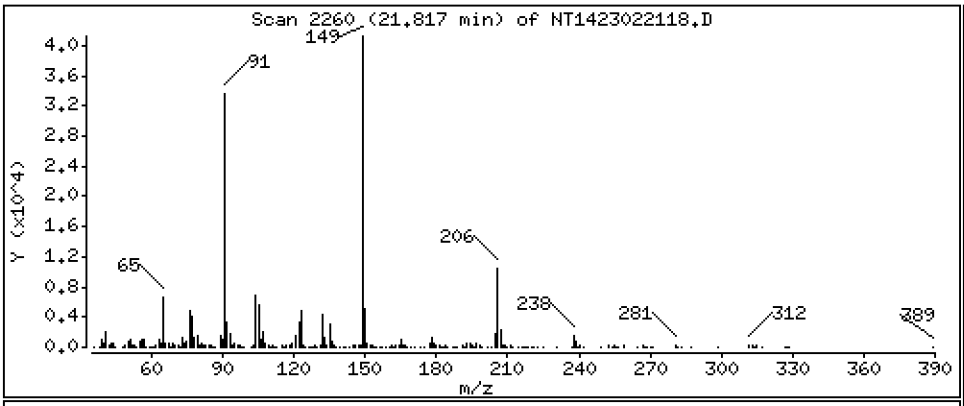
Operator: DSD

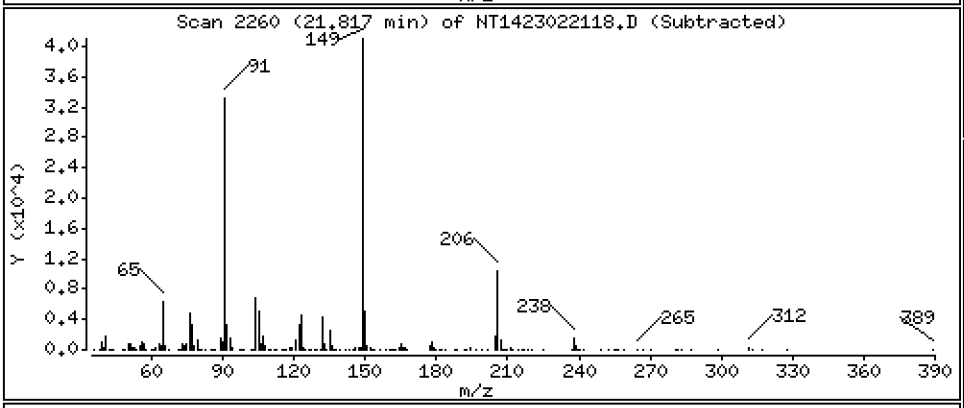
Column phase: ZB-5msi

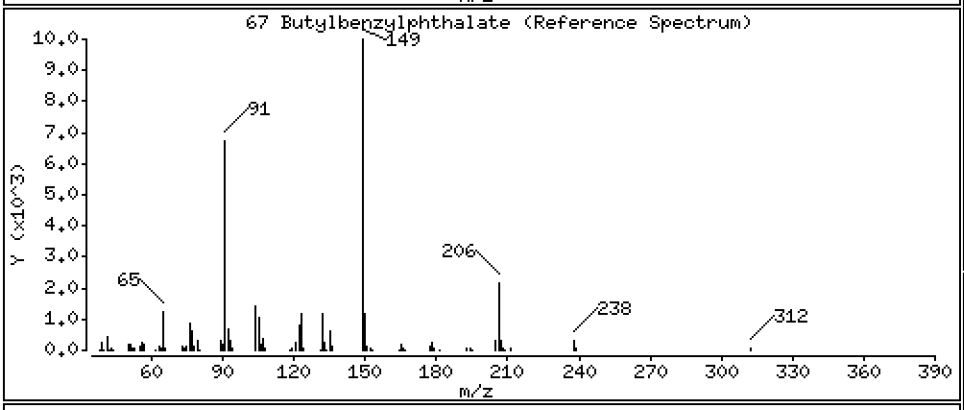
Column diameter: 0.25

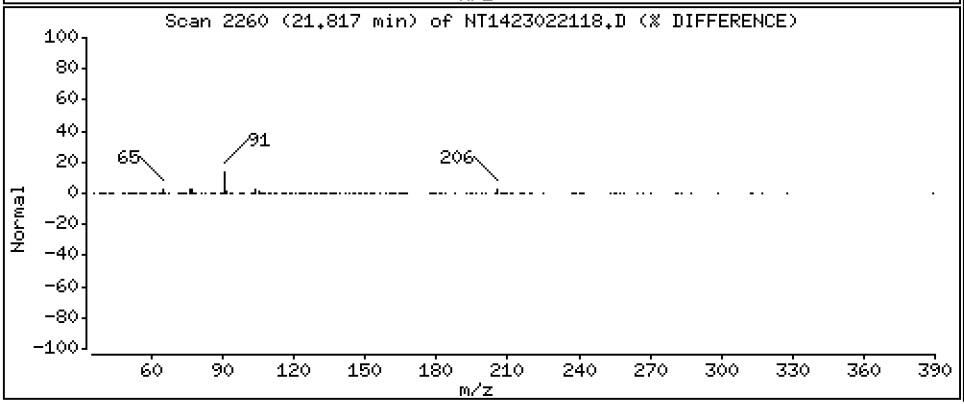
67 Butylbenzylphthalate

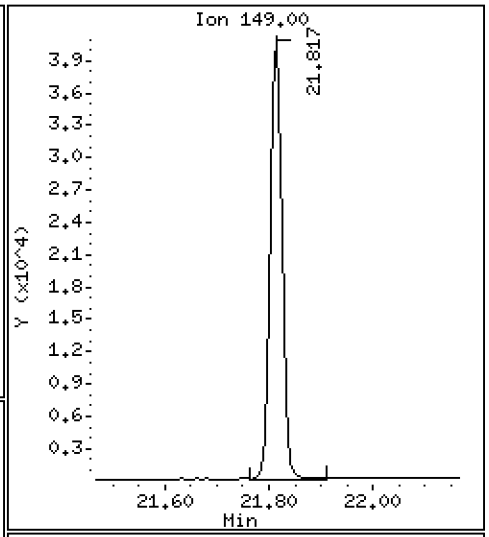
Concentration: 0.4589 ug/mL

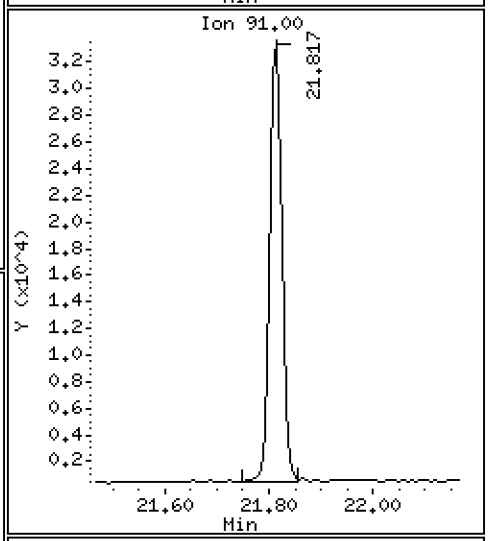


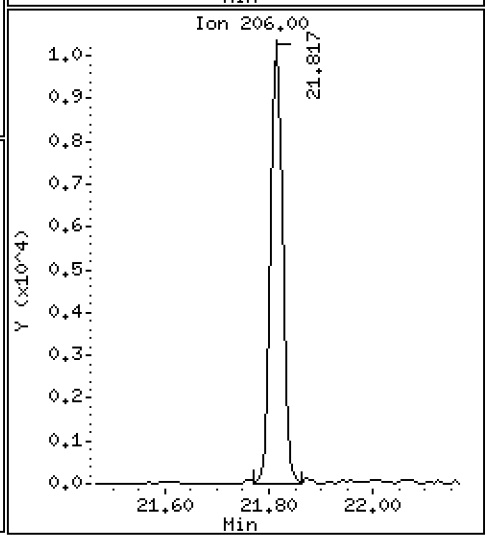












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

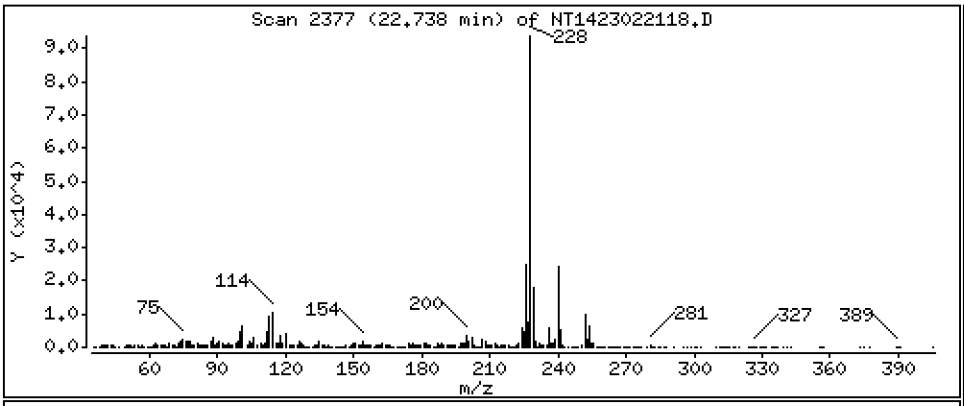
Operator: DSD

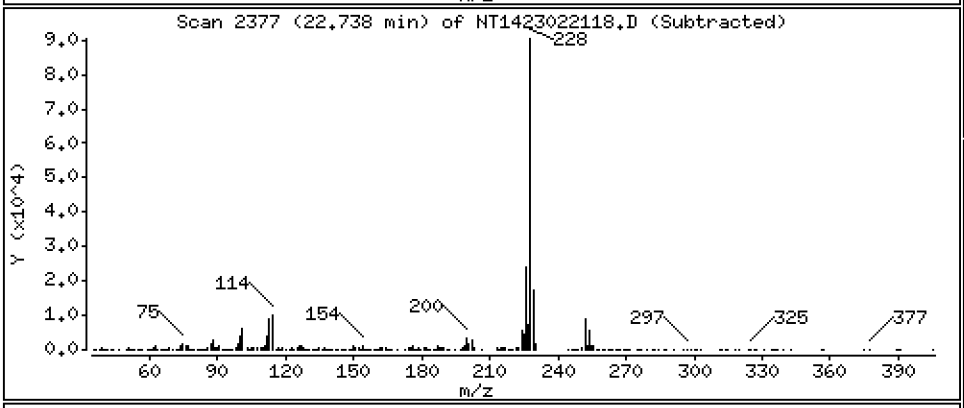
Column phase: ZB-5msi

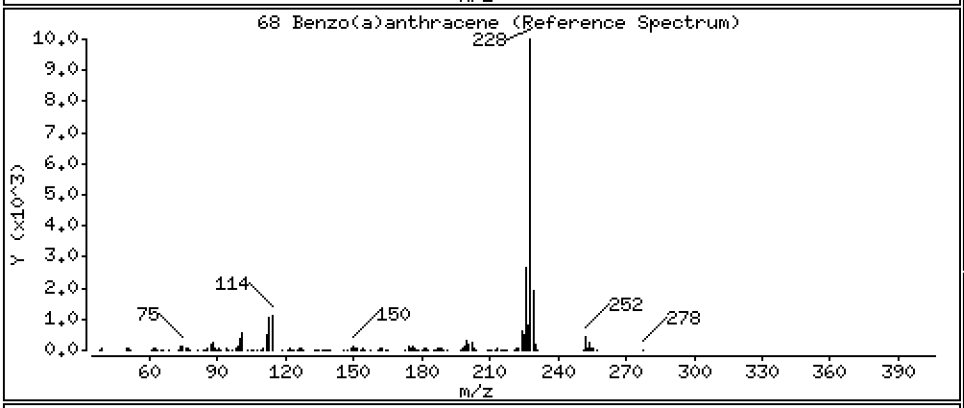
Column diameter: 0.25

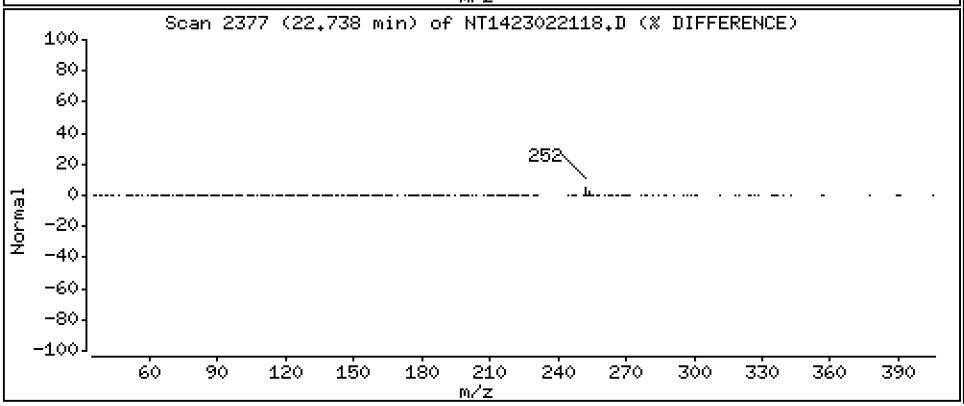
68 Benzo(a)anthracene

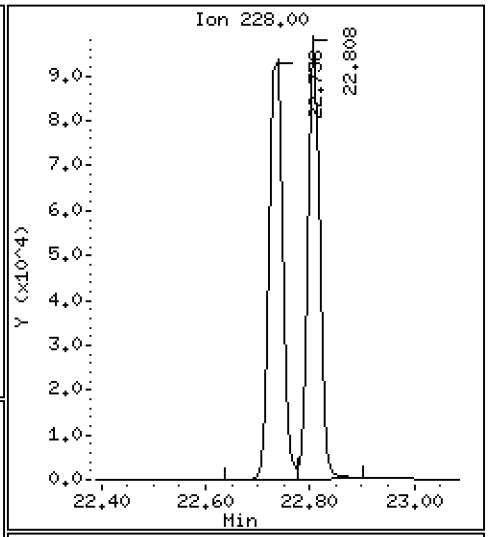
Concentration: 0.5722 ug/mL

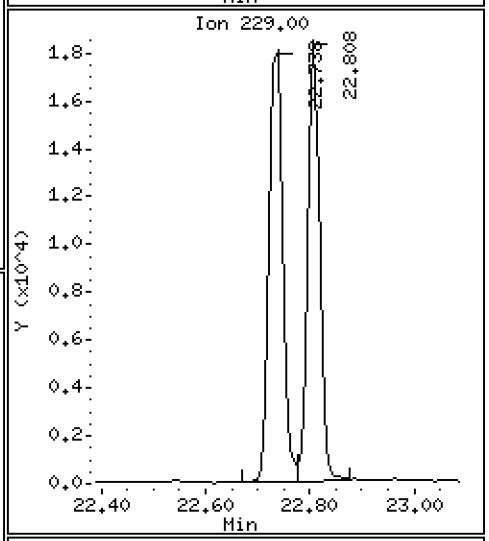


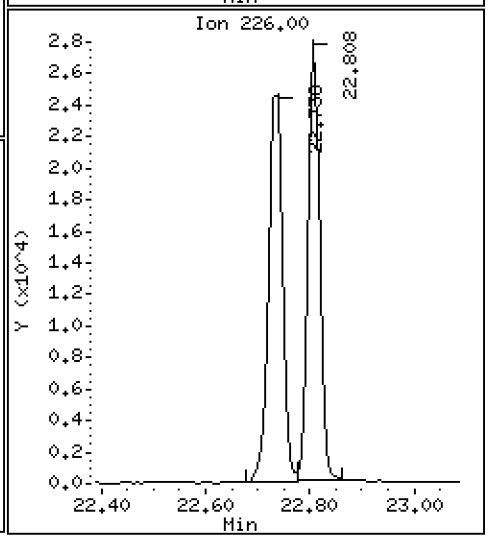












Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022118.D

Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

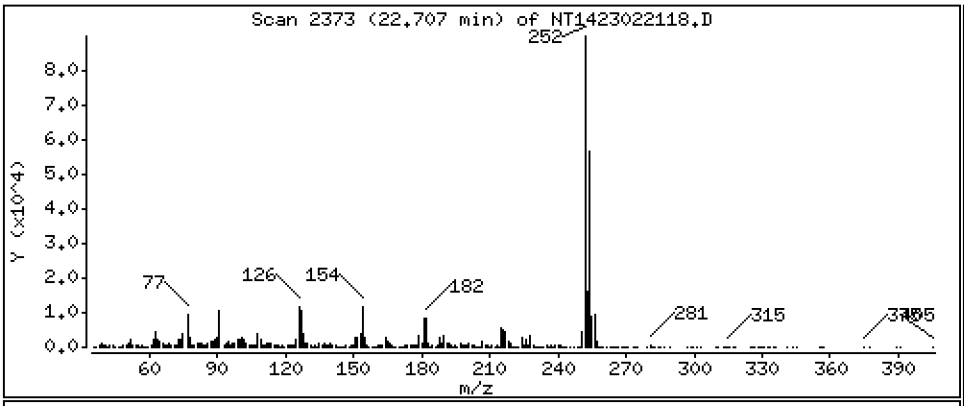
Operator: DSD

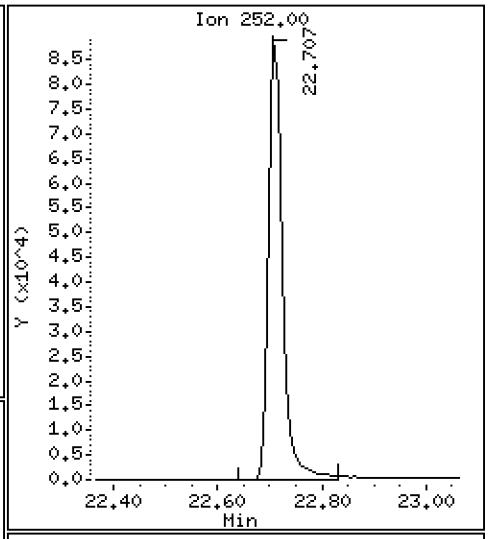
Column phase: ZB-5msi

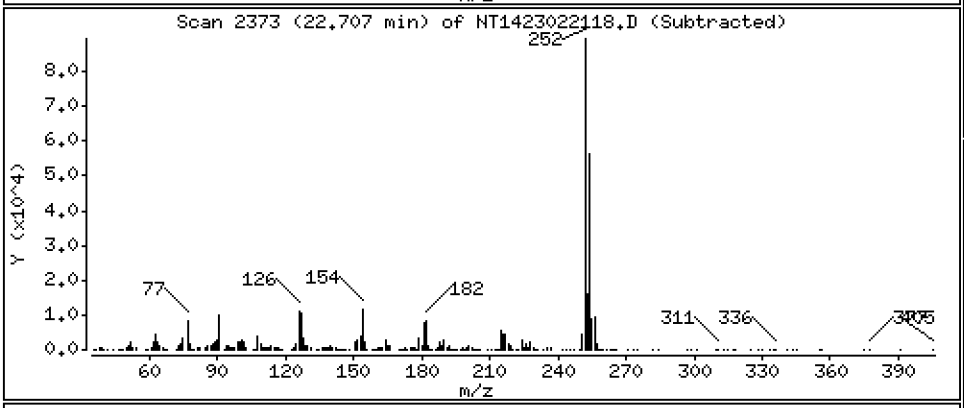
Column diameter: 0.25

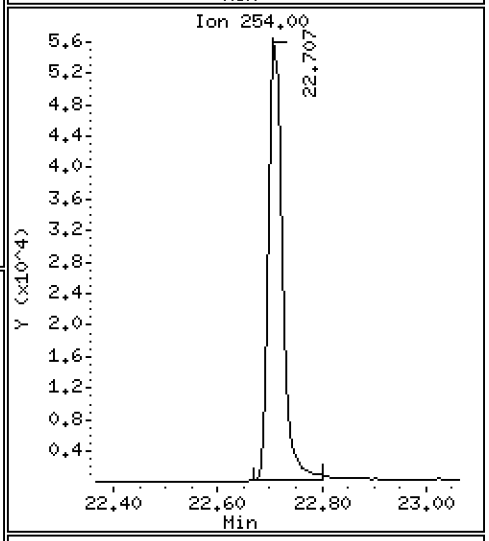
70 3,3'-Dichlorobenzidine

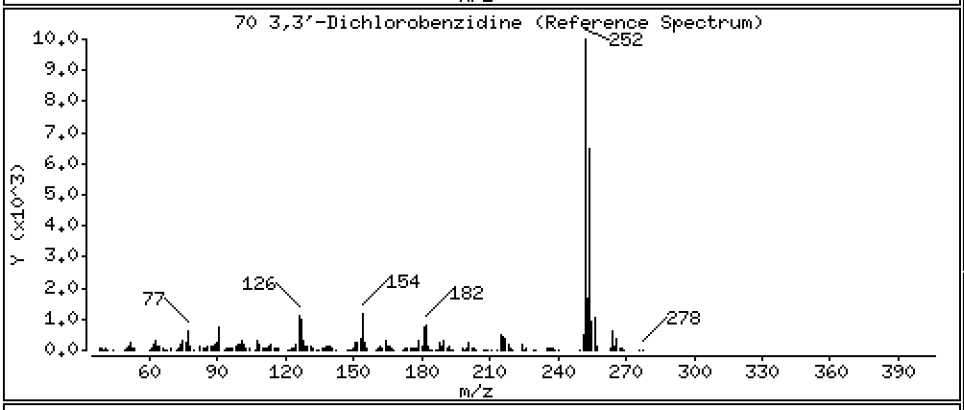
Concentration: 1.828 ug/mL

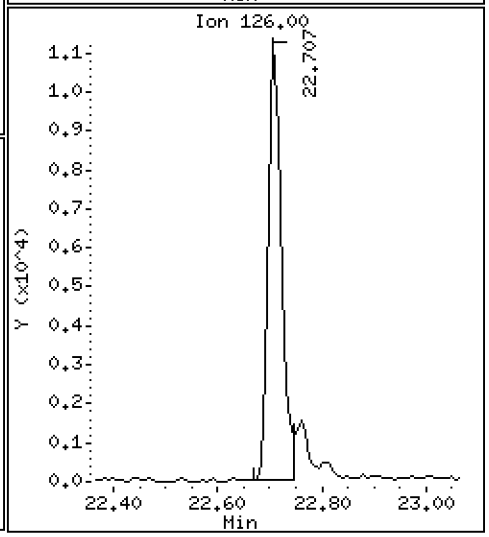


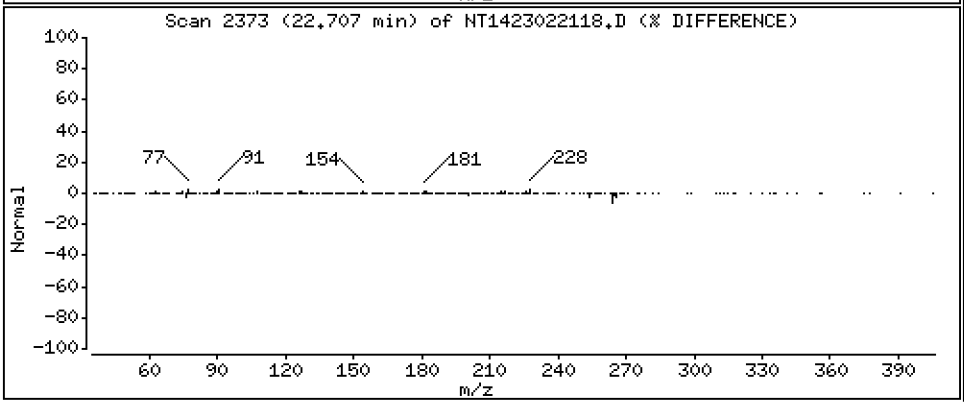












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

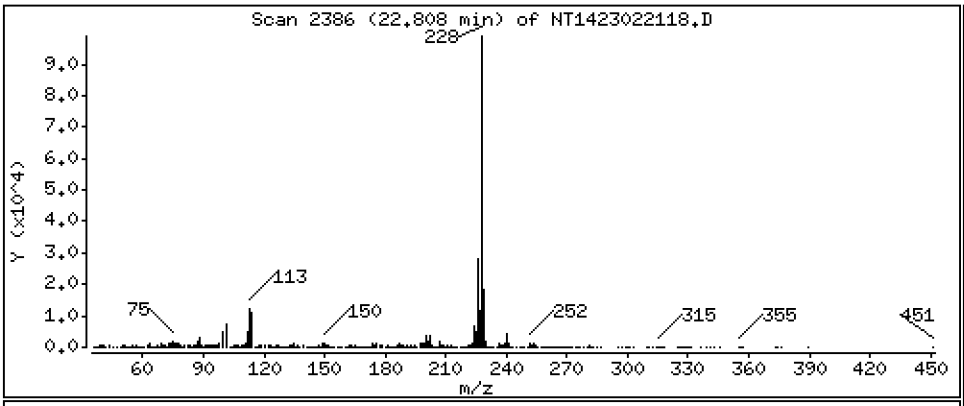
Operator: DSD

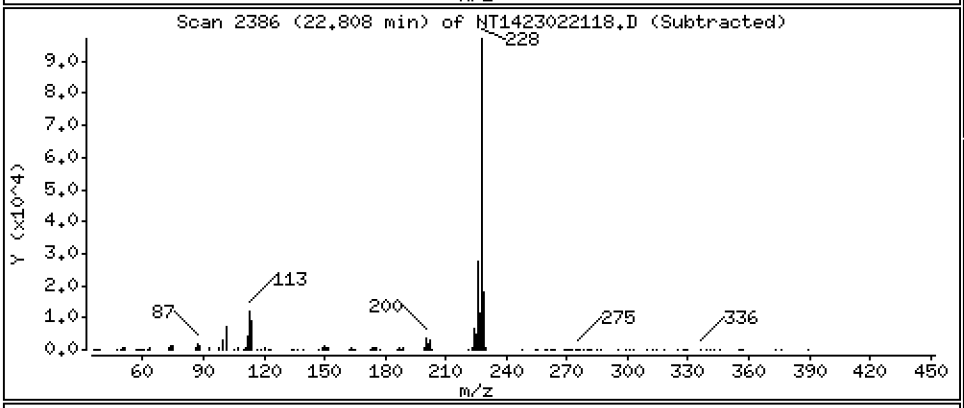
Column phase: ZB-5msi

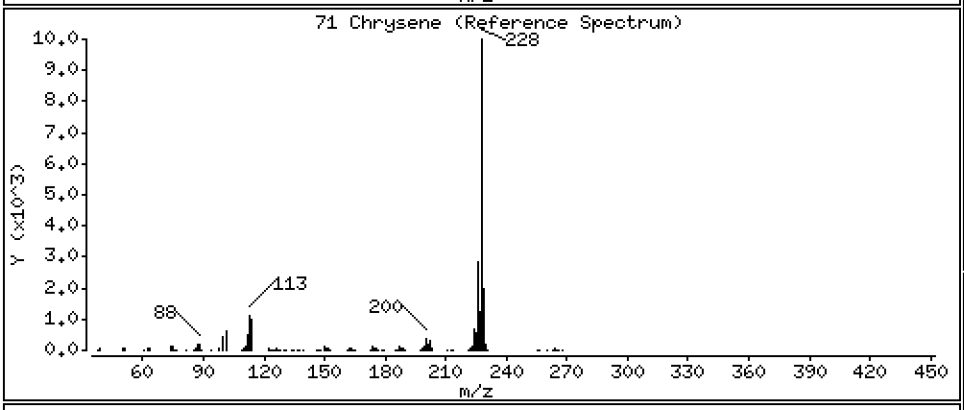
Column diameter: 0.25

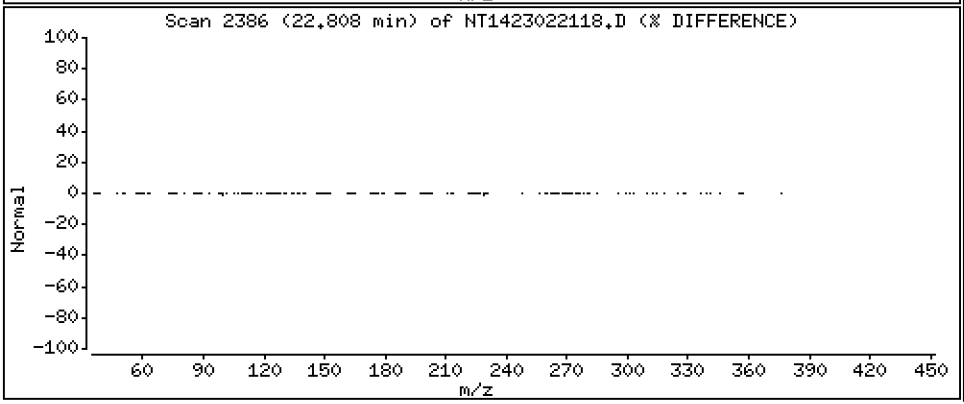
71 Chrysene

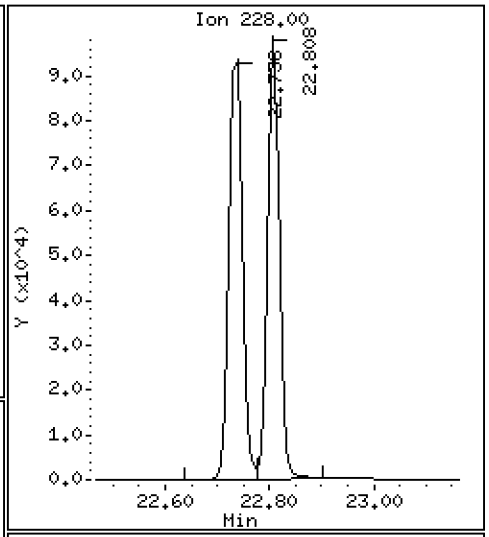
Concentration: 0.5661 ug/mL

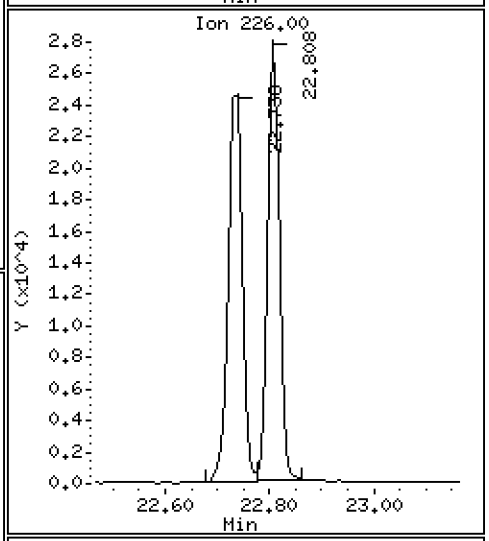


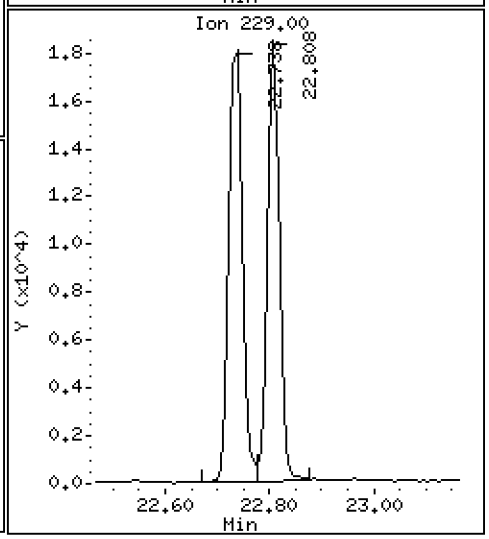












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

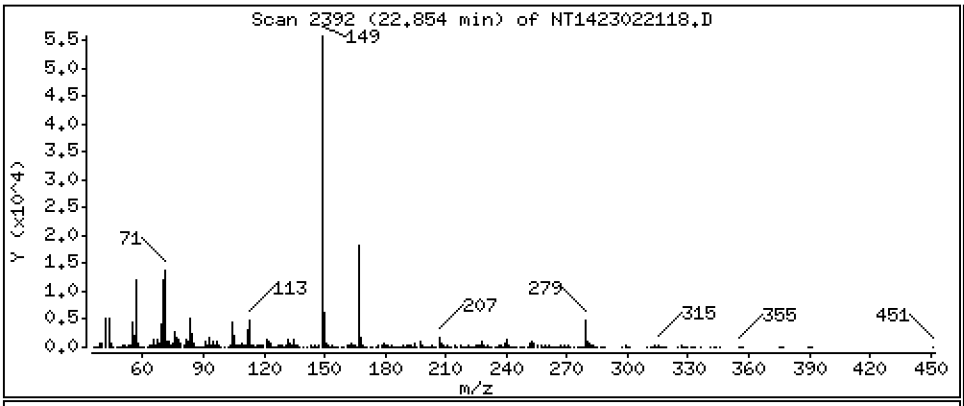
Operator: DSD

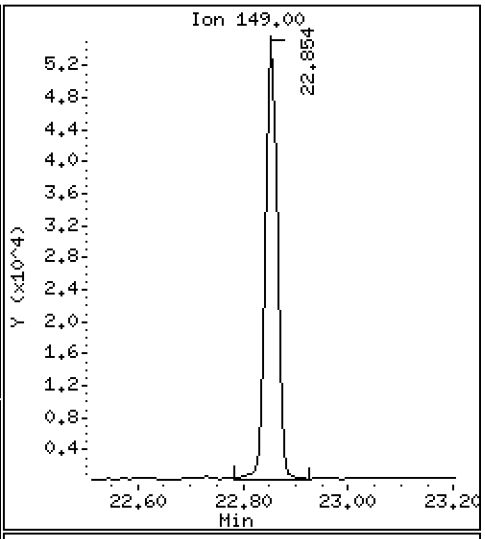
Column phase: ZB-5msi

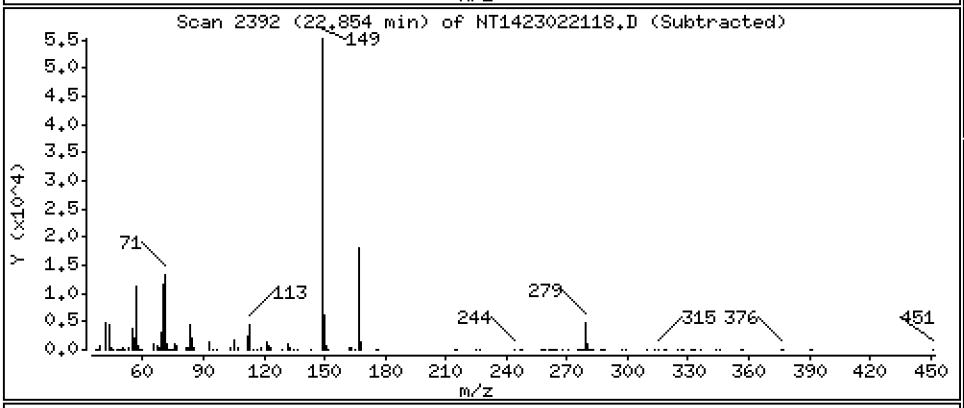
Column diameter: 0.25

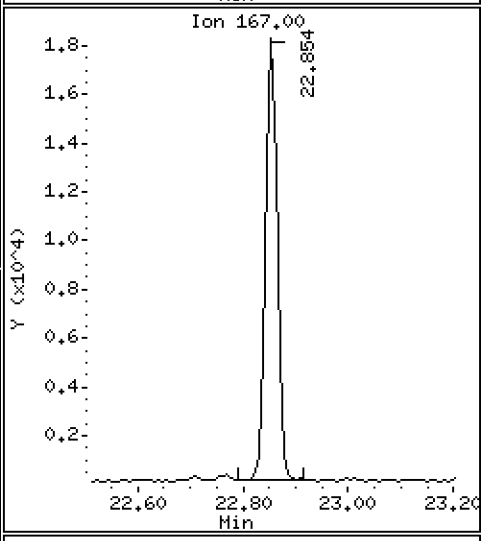
72 bis(2-Ethylhexyl)phthalate

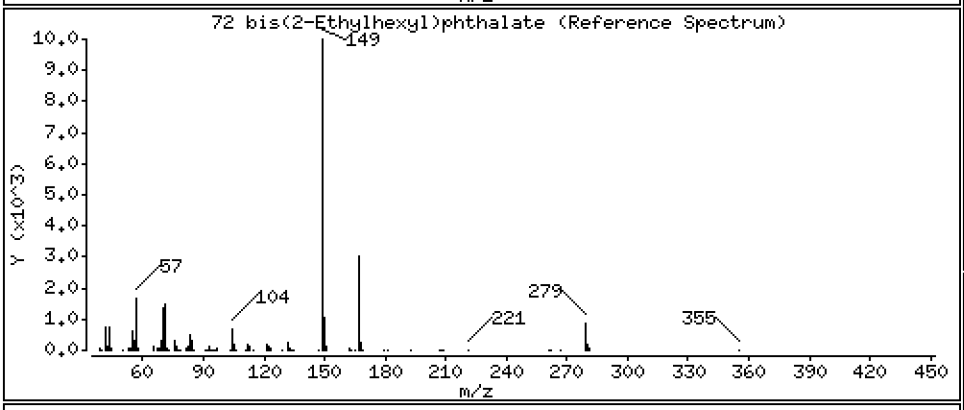
Concentration: 0.3727 ug/mL

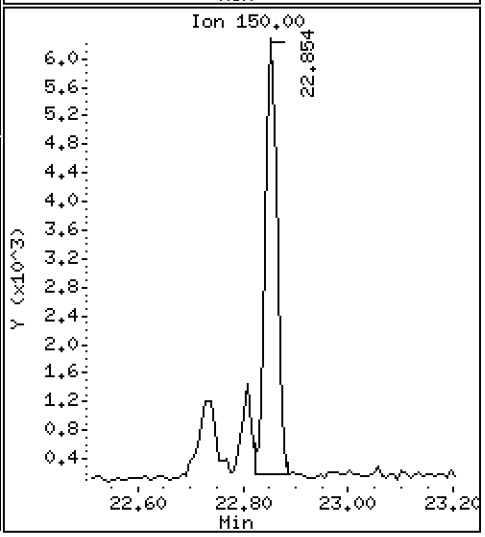


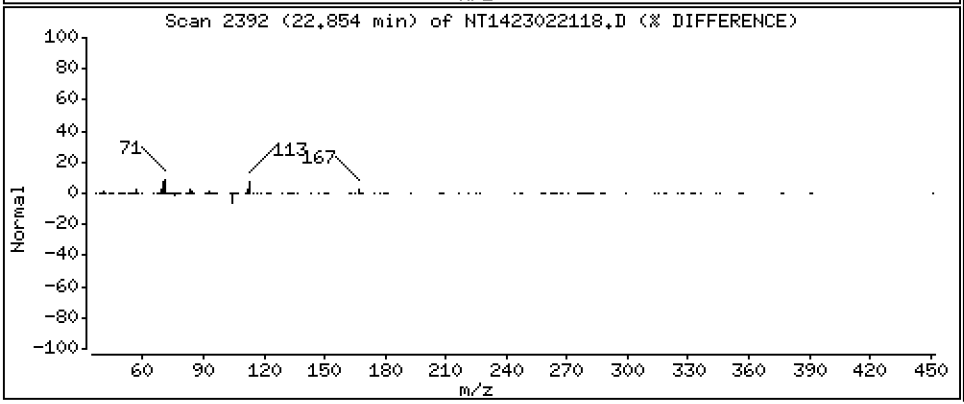












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

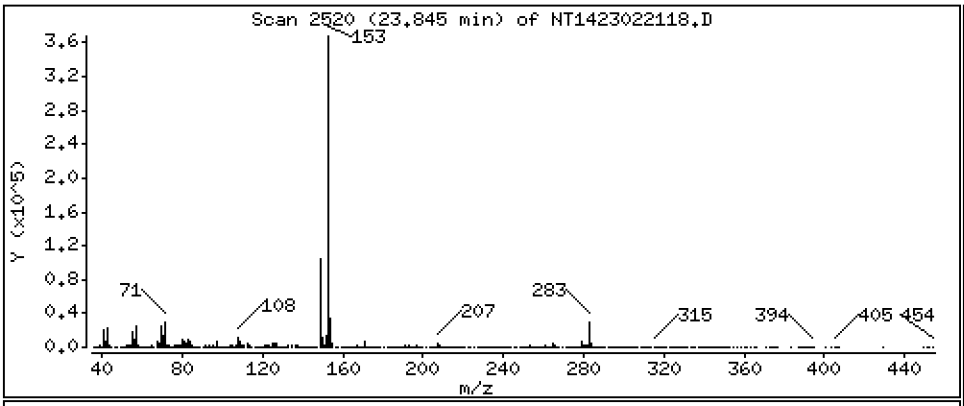
Operator: DSD

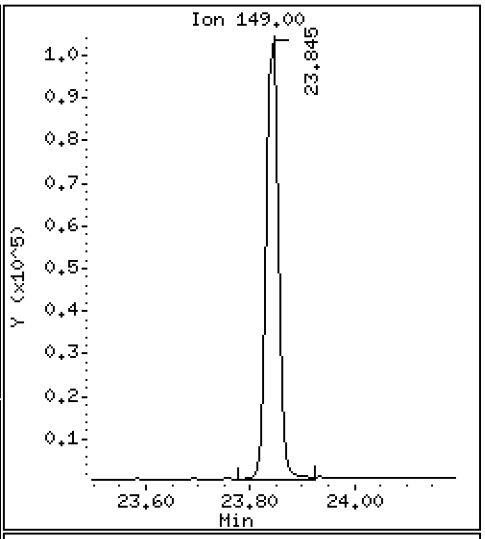
Column phase: ZB-5msi

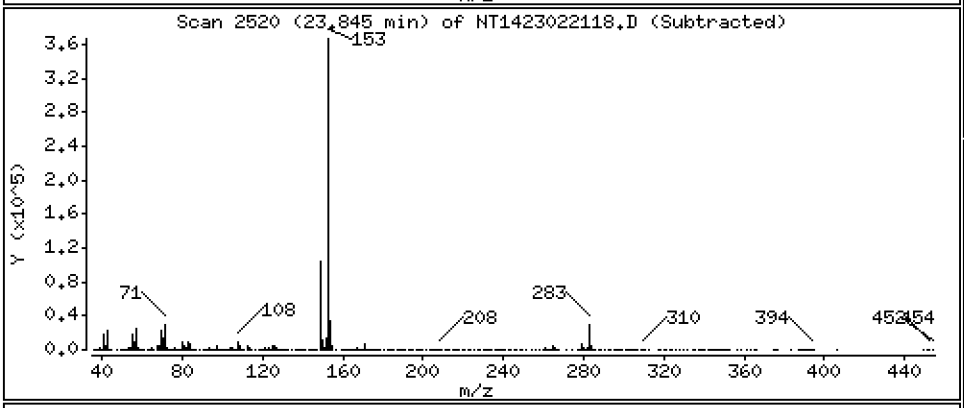
Column diameter: 0.25

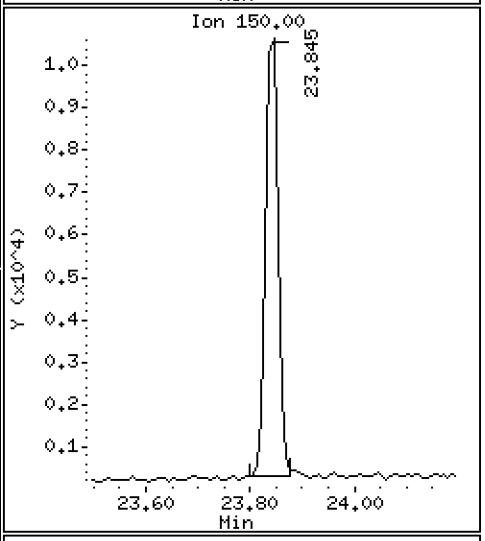
73 Di-n-octylphthalate

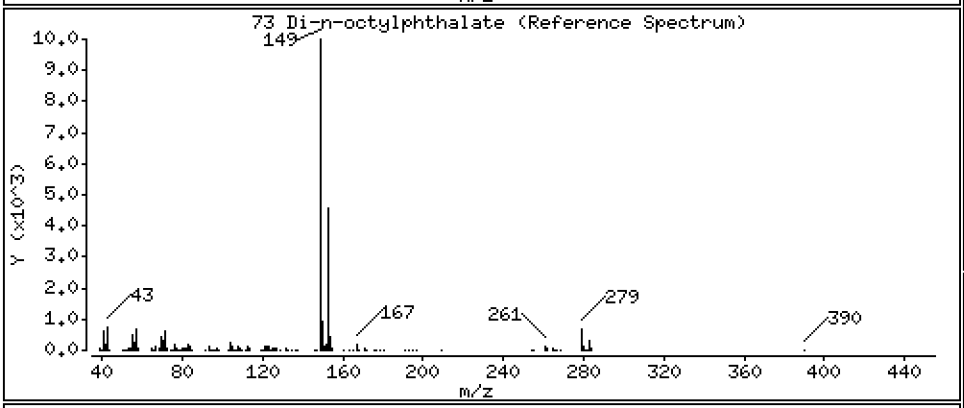
Concentration: 0.5297 ug/mL

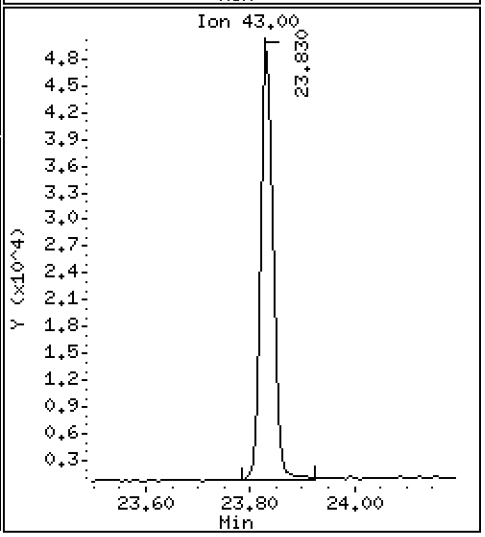


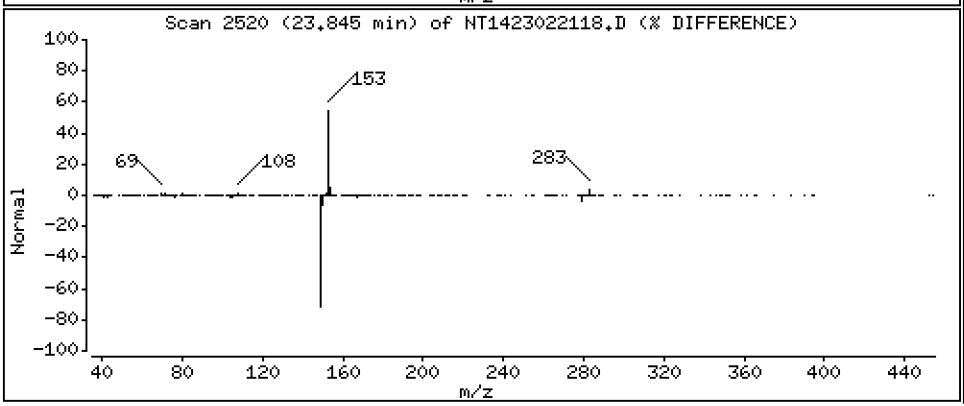












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

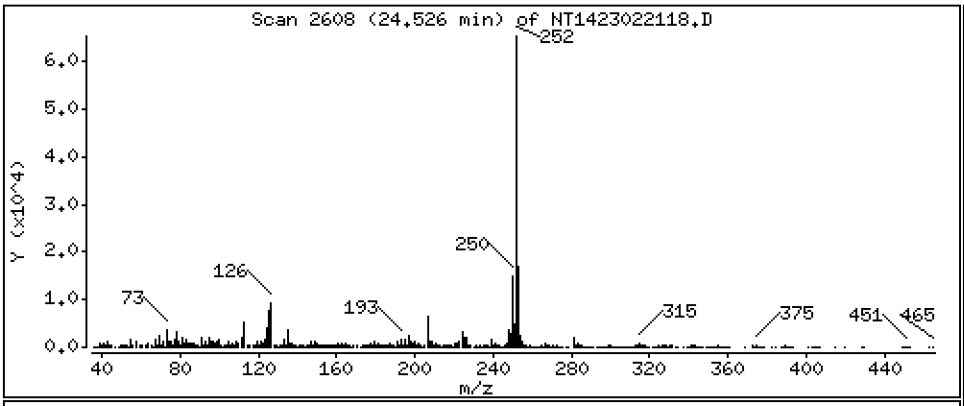
Operator: DSD

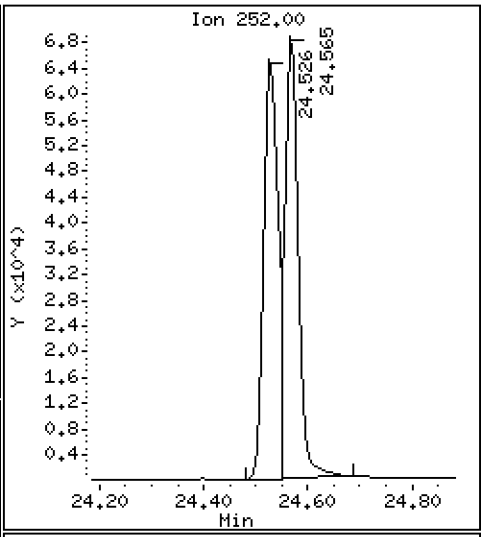
Column phase: ZB-5msi

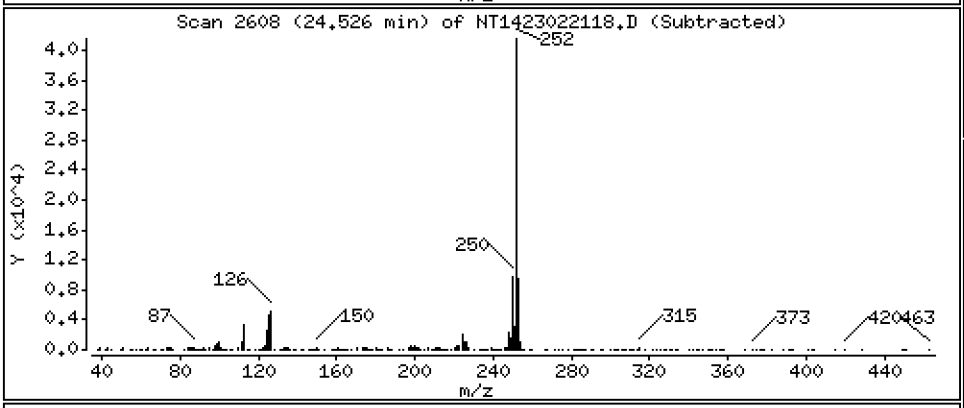
Column diameter: 0.25

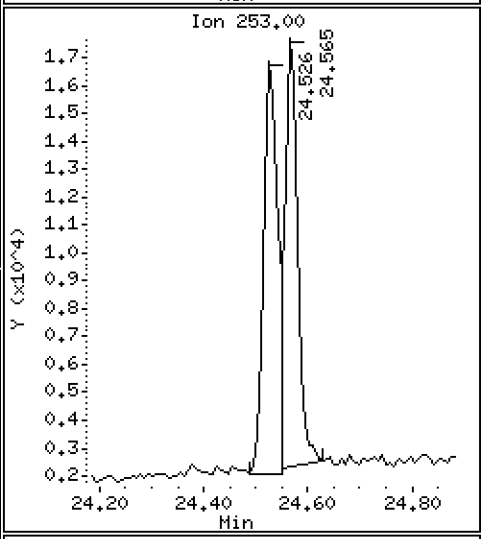
74 Benzo(b)fluoranthene

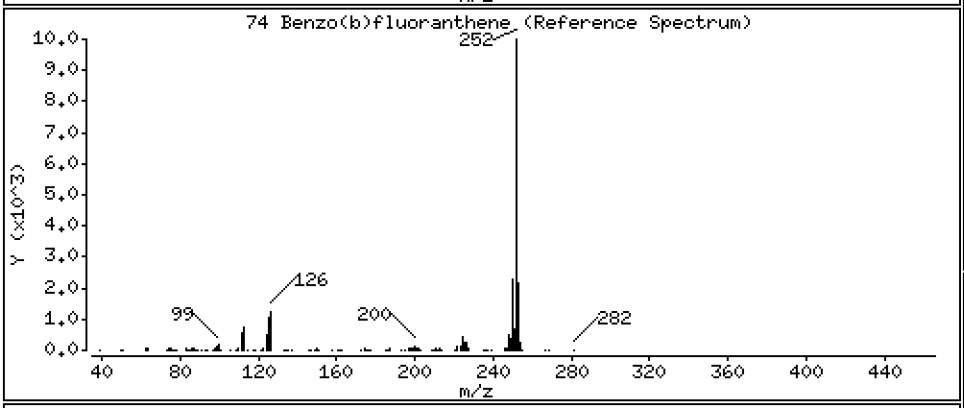
Concentration: 0.5556 ug/mL

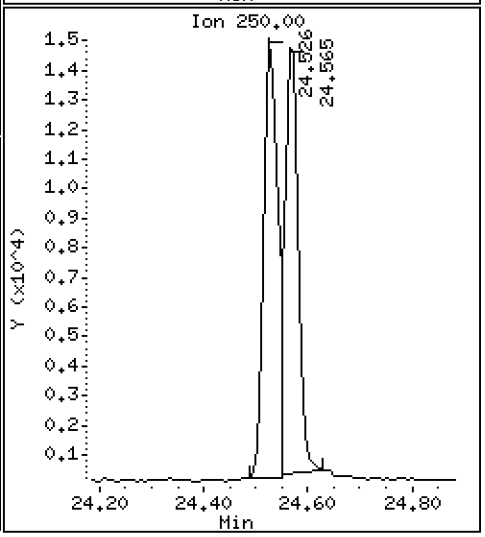


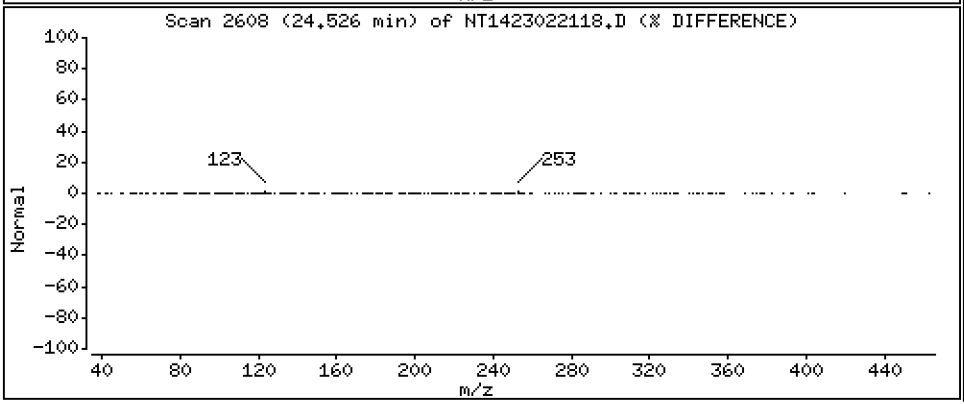












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

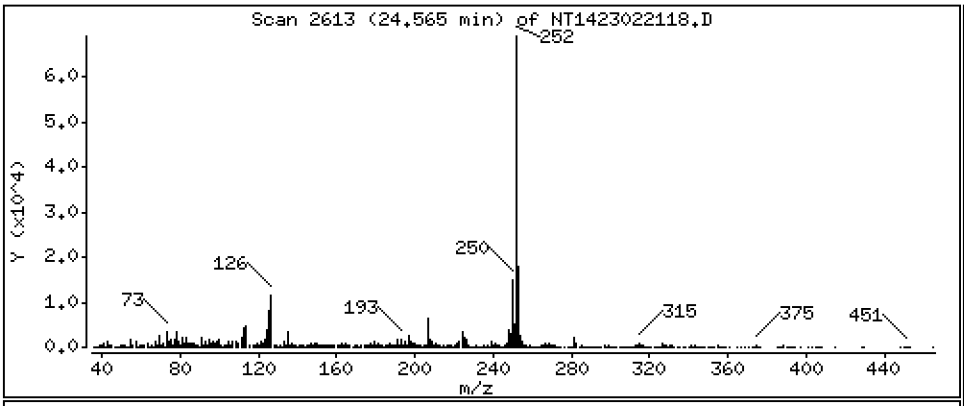
Operator: DSD

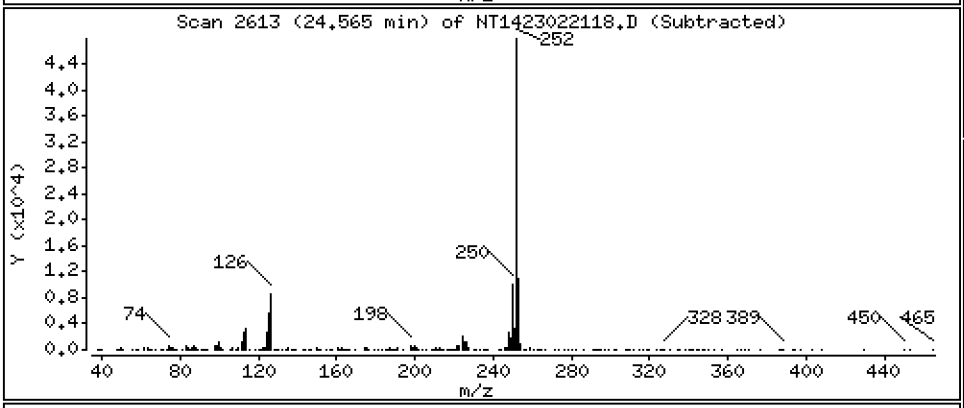
Column phase: ZB-5msi

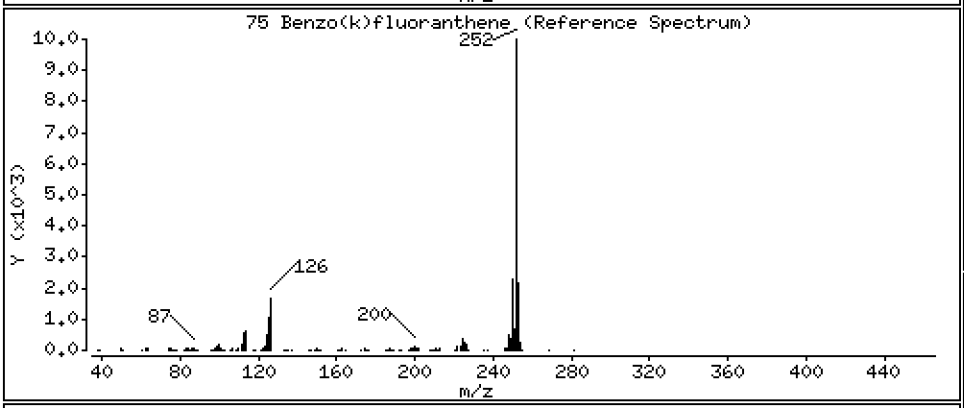
Column diameter: 0.25

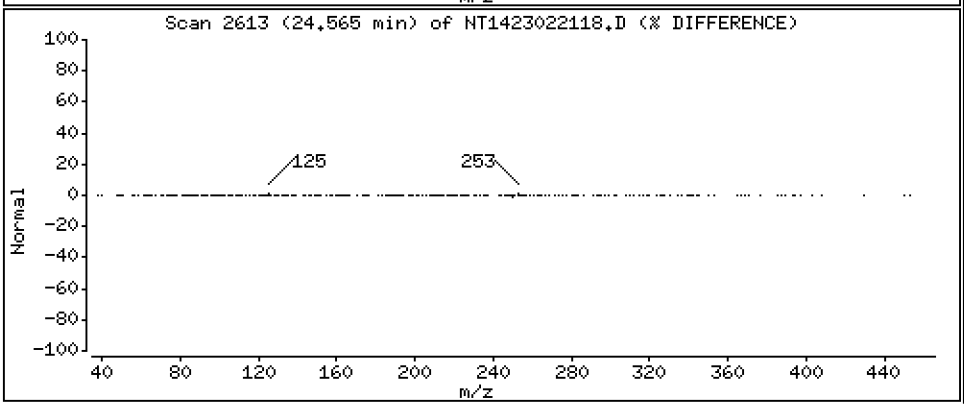
75 Benzo(k)fluoranthene

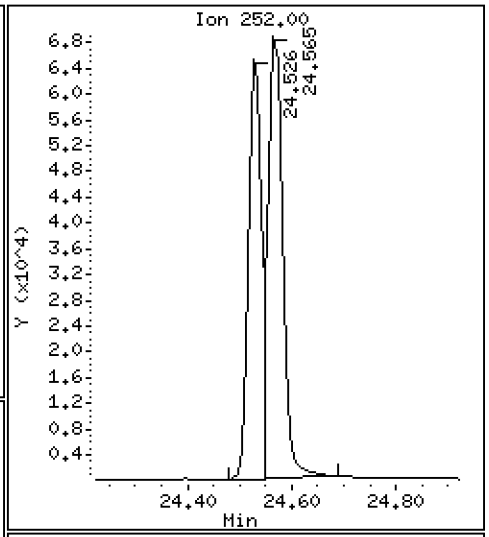
Concentration: 0.5525 ug/mL

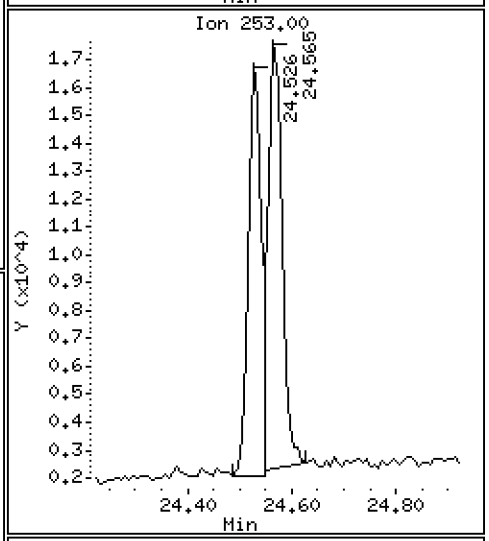


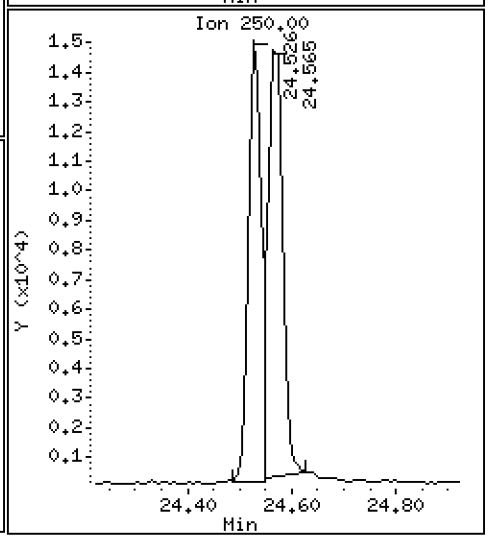












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

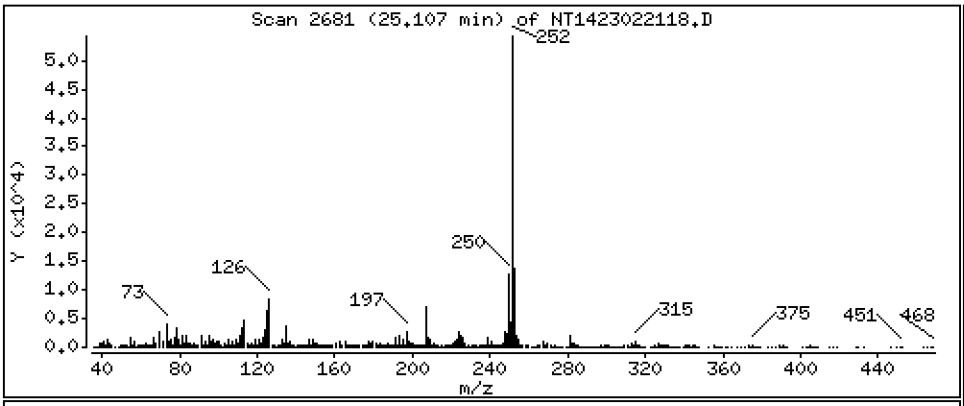
Operator: DSD

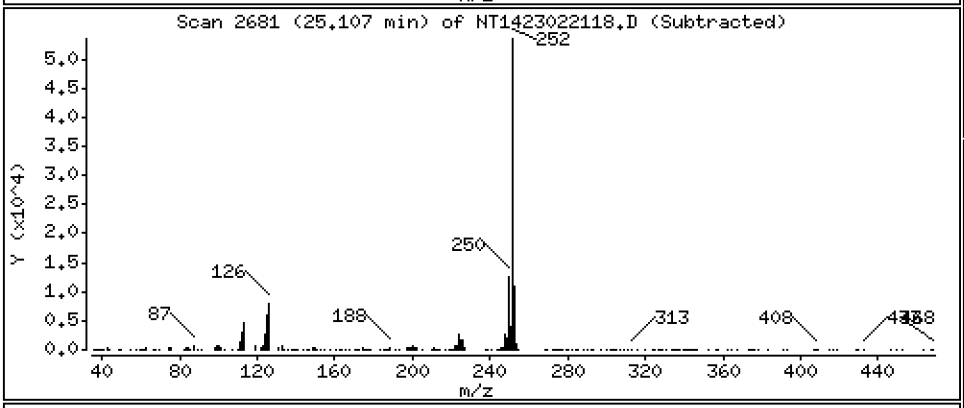
Column phase: ZB-5msi

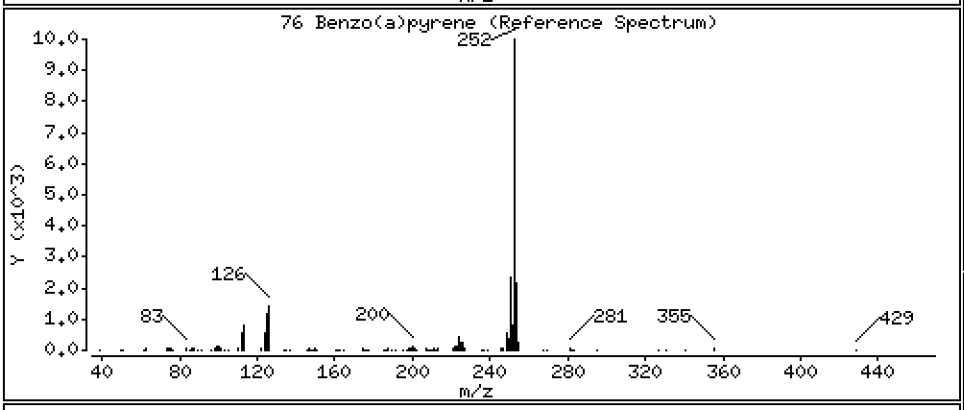
Column diameter: 0.25

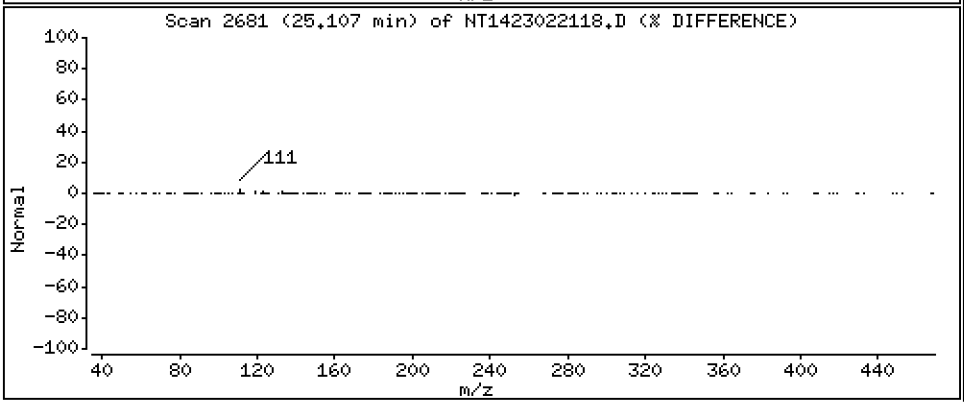
76 Benzo(a)pyrene

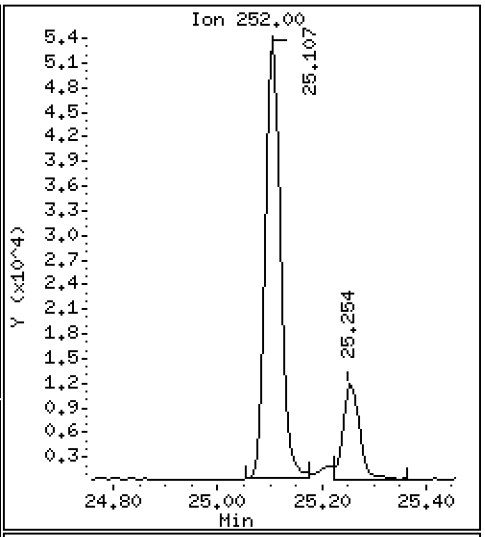
Concentration: 0.4901 ug/mL

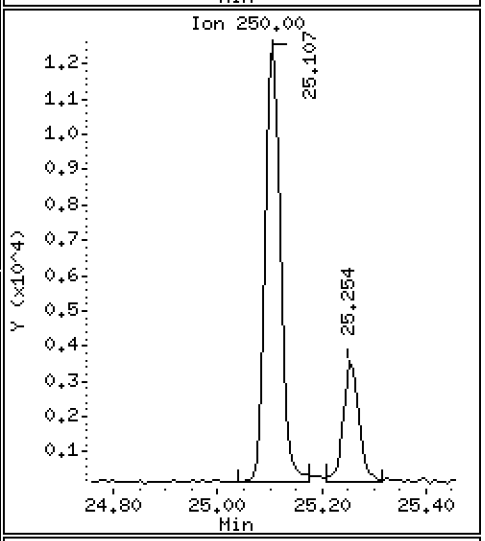


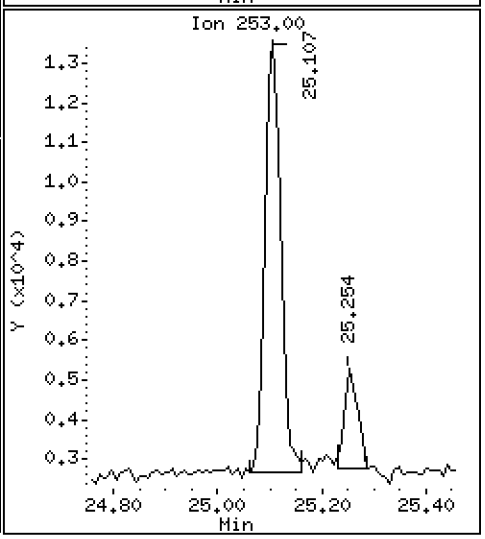












Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022118.D

Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

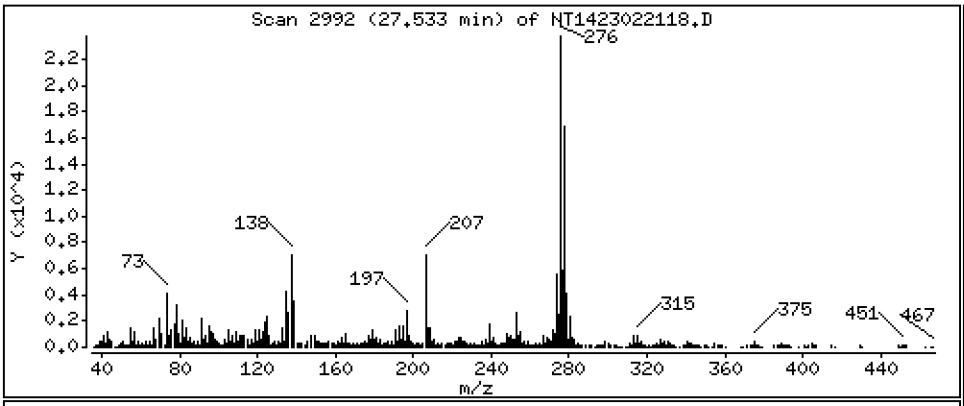
Operator: DSD

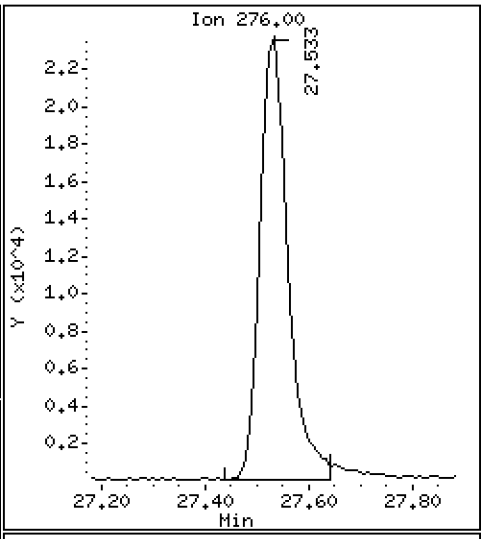
Column phase: ZB-5msi

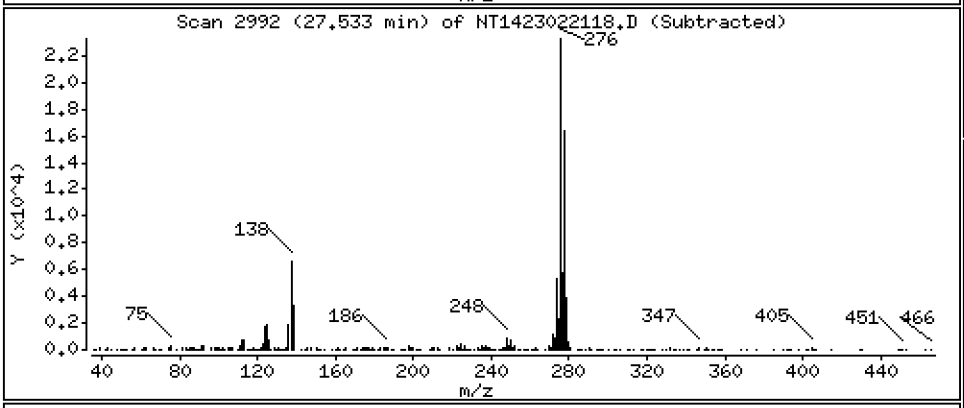
Column diameter: 0.25

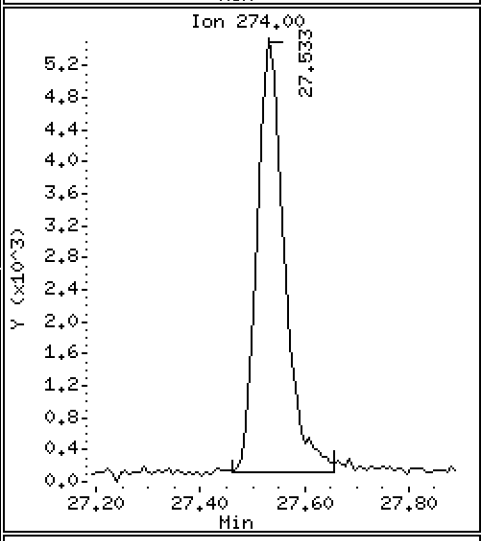
78 Indeno(1,2,3-cd)pyrene

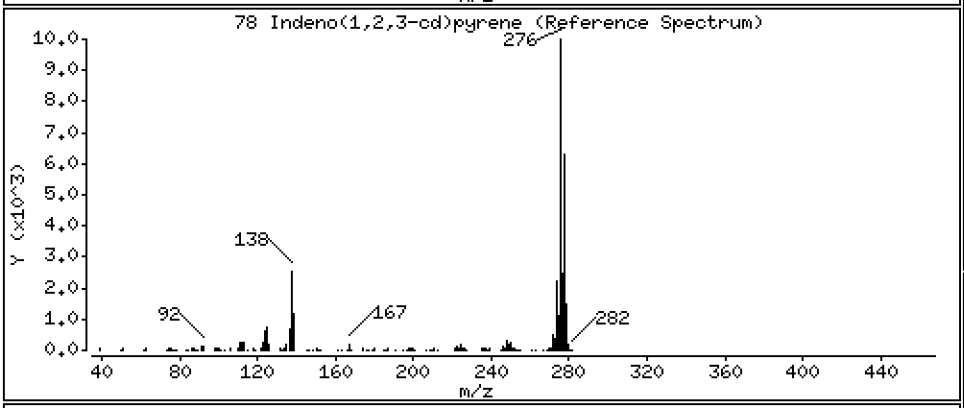
Concentration: 0.5013 ug/mL

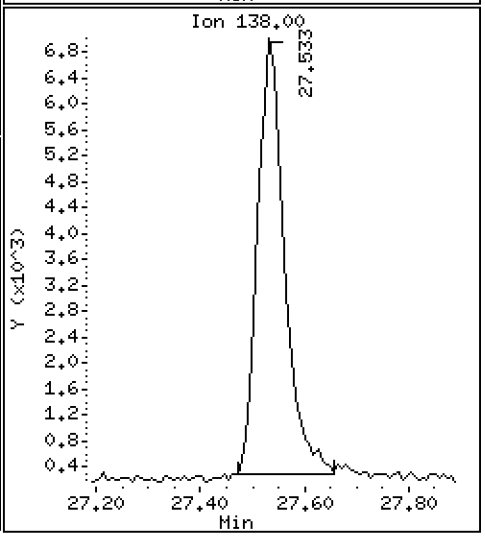


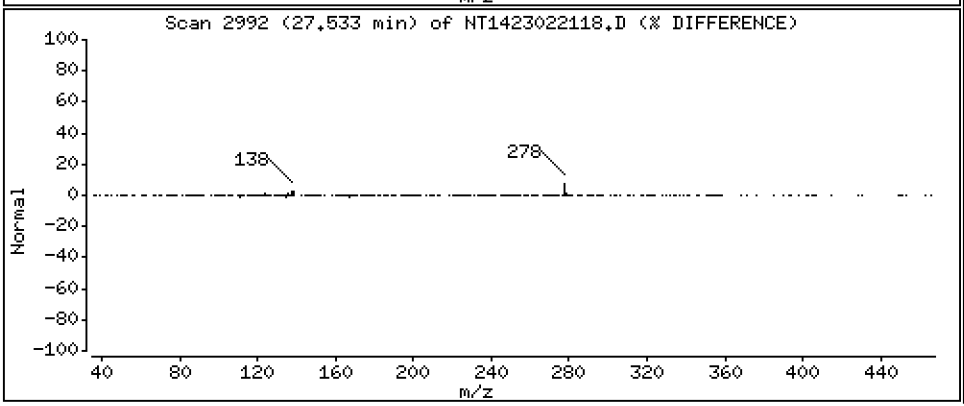












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

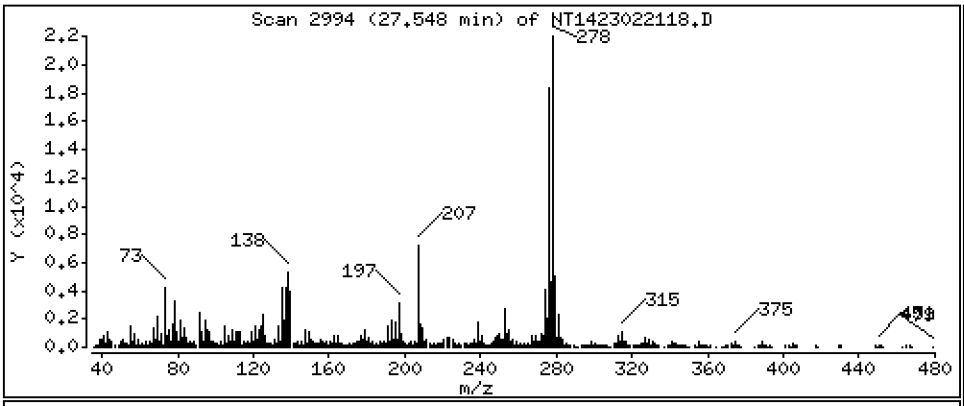
Operator: DSD

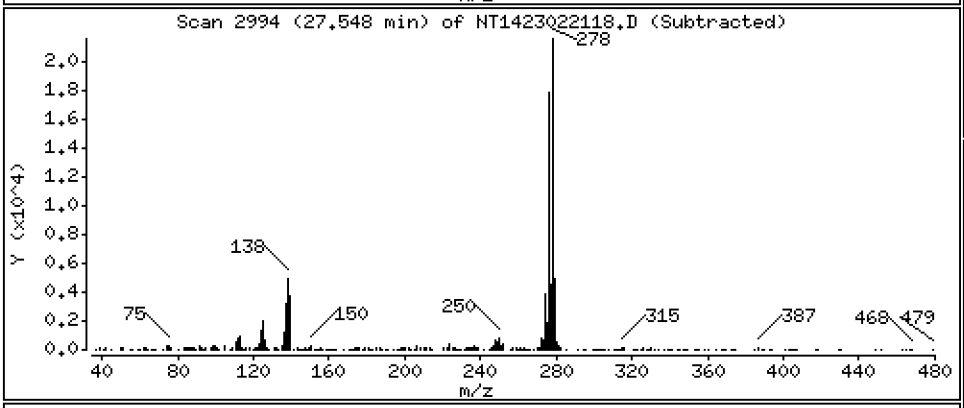
Column phase: ZB-5msi

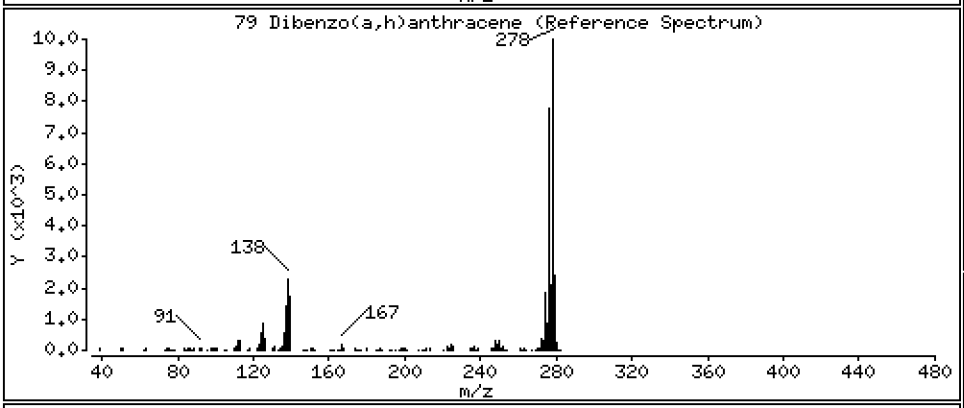
Column diameter: 0.25

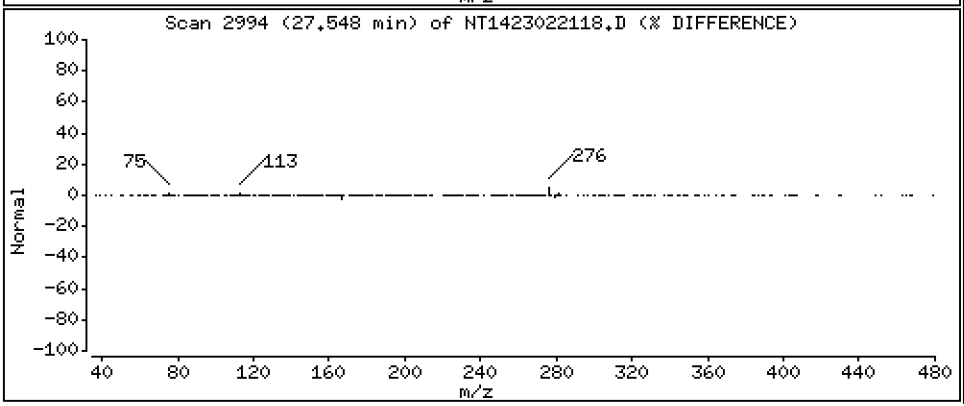
79 Dibenzo(a,h)anthracene

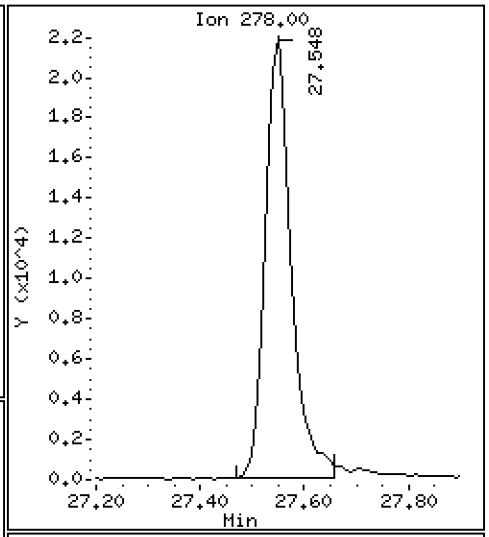
Concentration: 0.5210 ug/mL

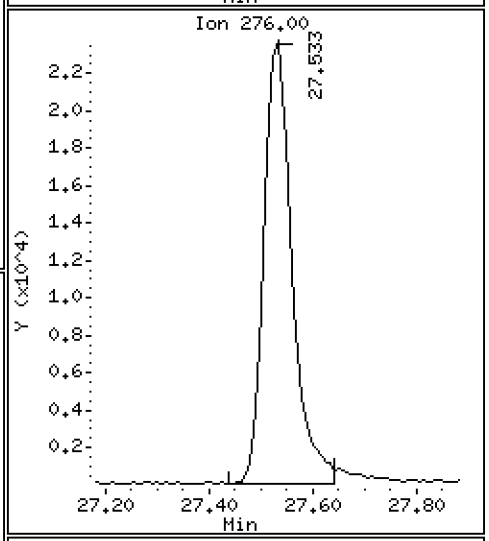


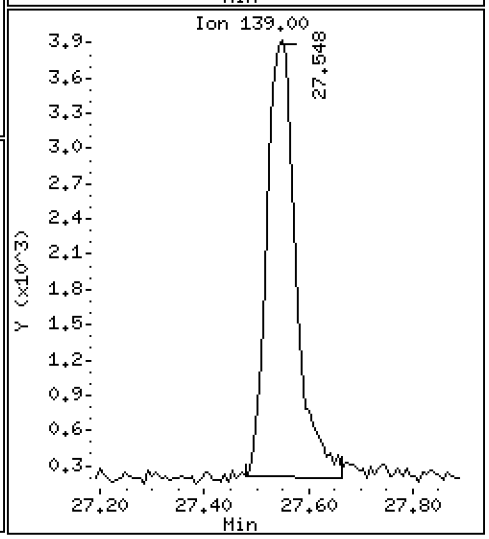












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

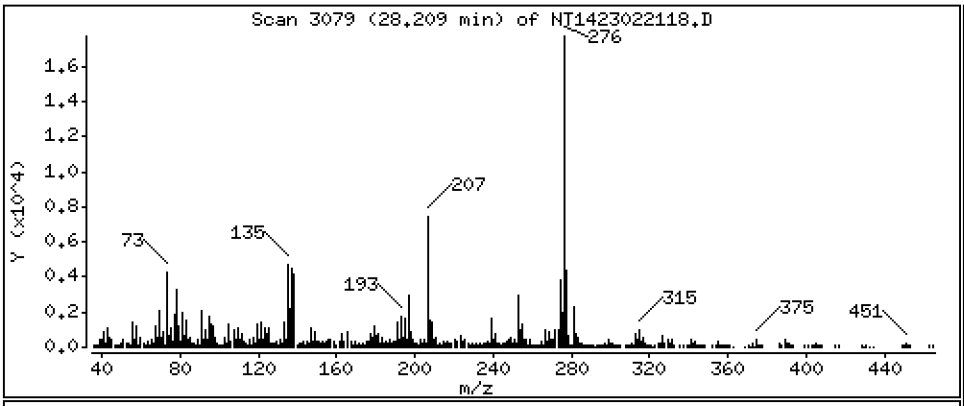
Operator: DSD

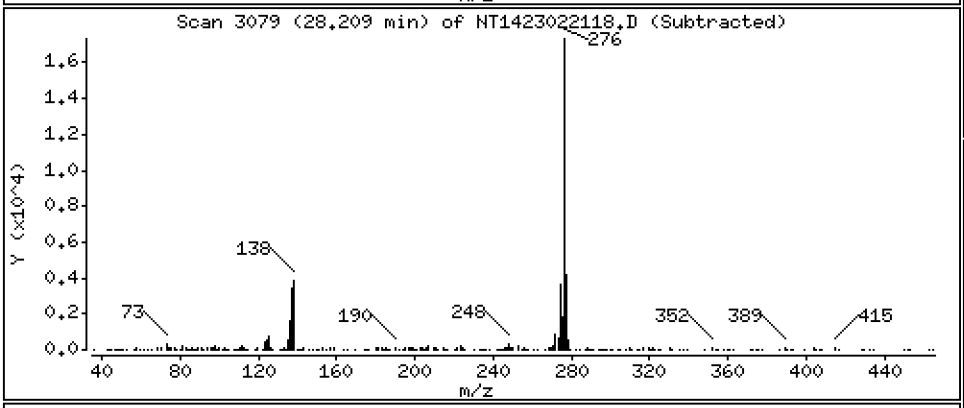
Column phase: ZB-5msi

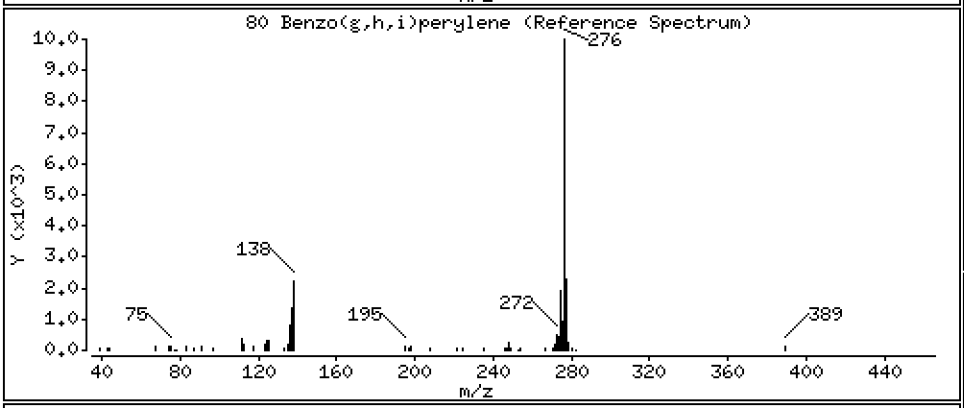
Column diameter: 0.25

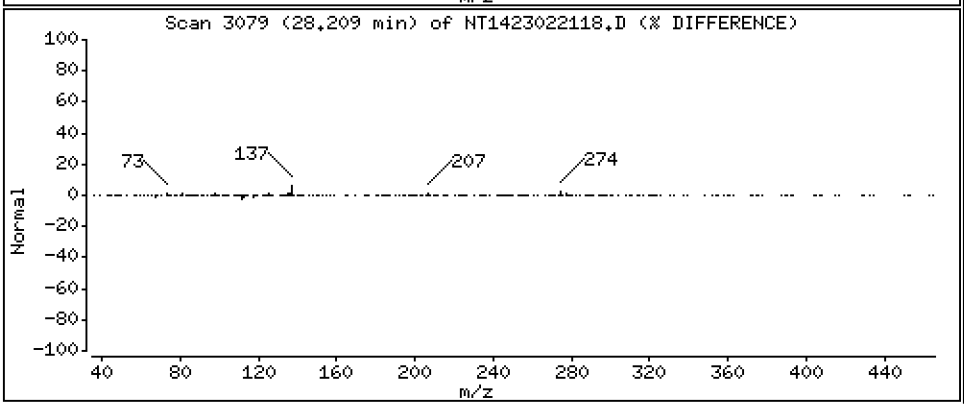
80 Benzo(g,h,i)perylene

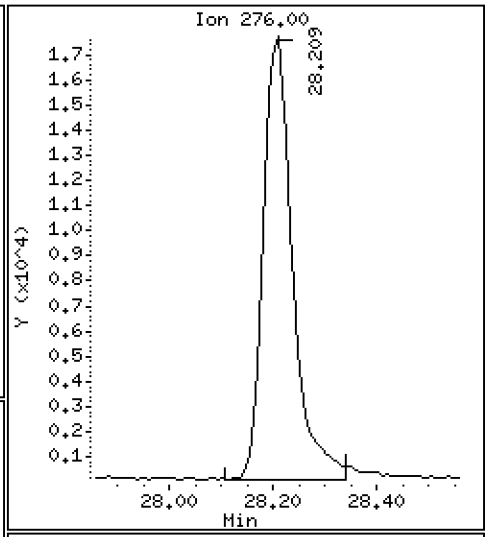
Concentration: 0.4802 ug/mL

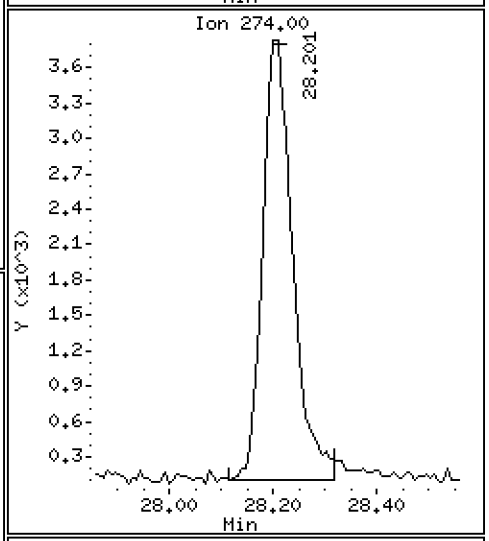


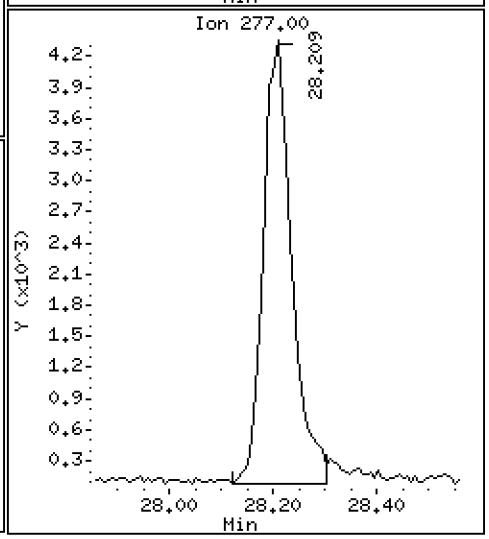












Date : 21-FEB-2023 23:42

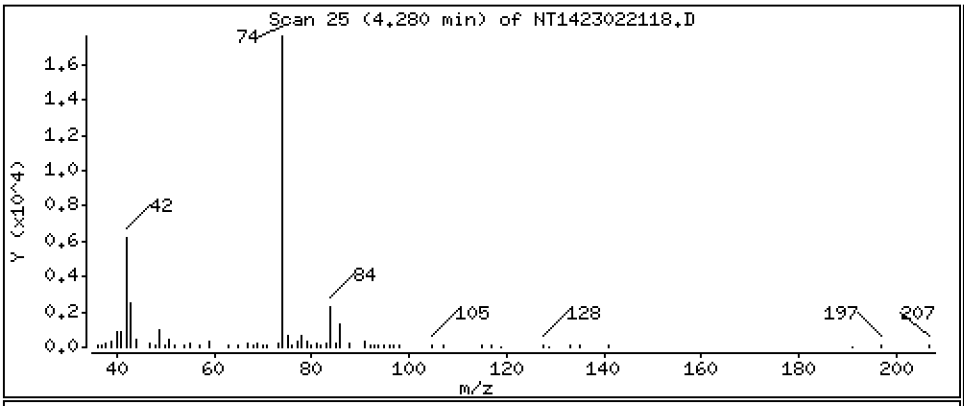
Client ID: Instrument: nt14.i

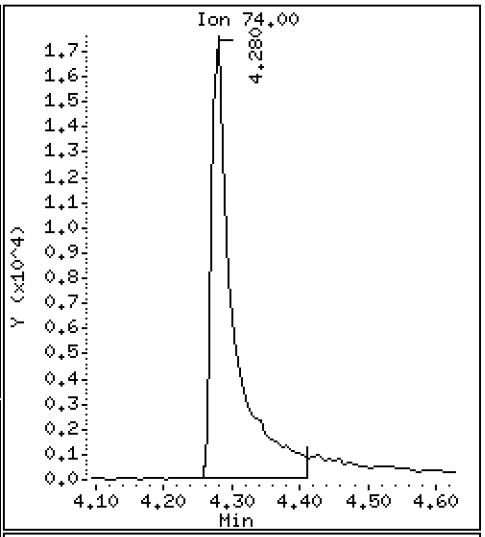
Sample Info: SLB0291-LCV1

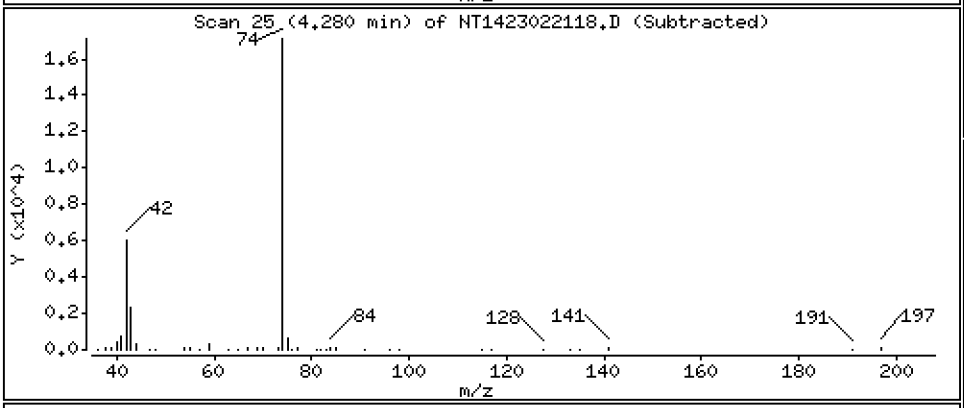
Operator: DSD

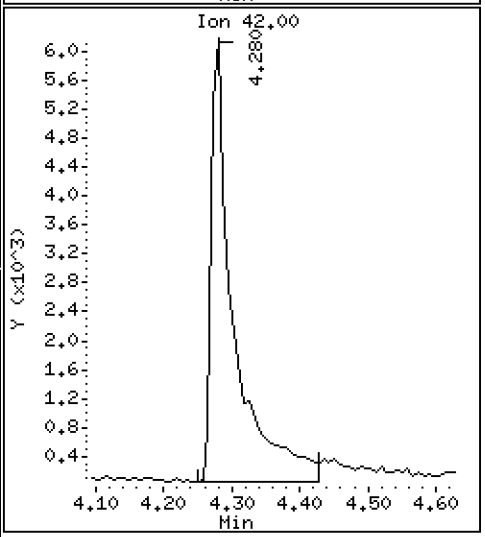
Column phase: ZB-5msi Column diameter: 0.25

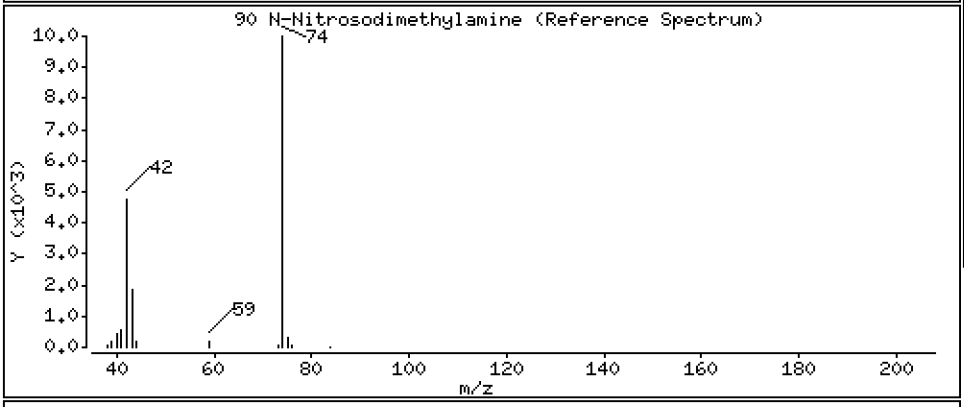
90 N-Nitrosodimethylamine Concentration: 0.7734 ug/mL

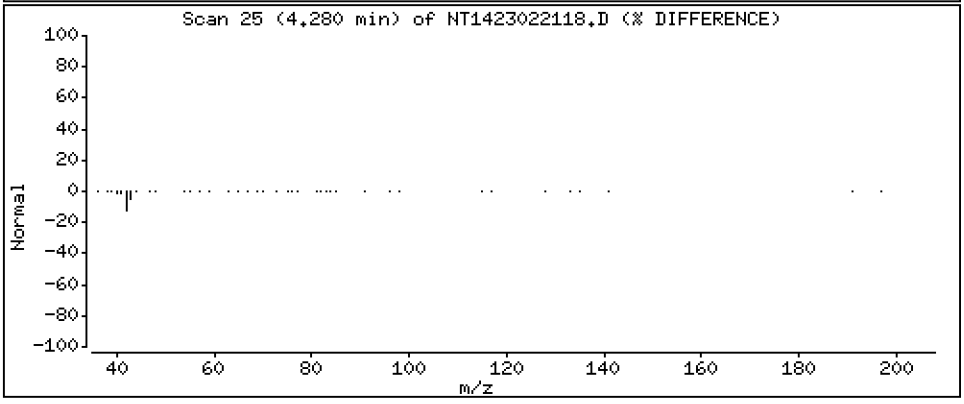












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

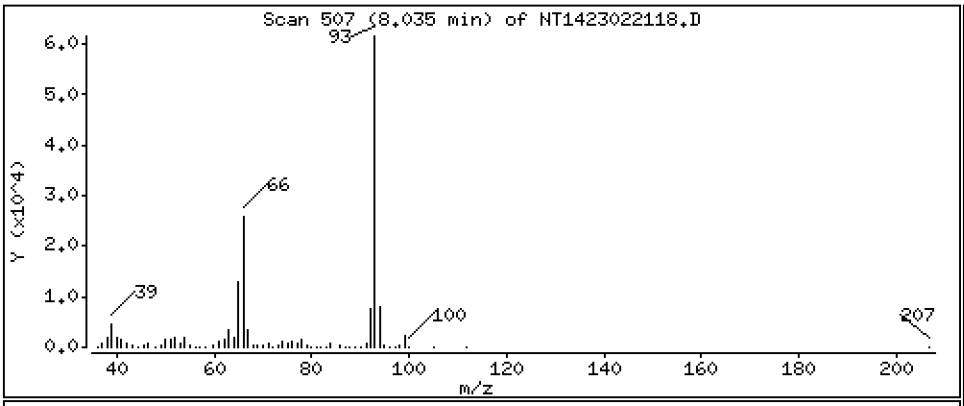
Operator: DSD

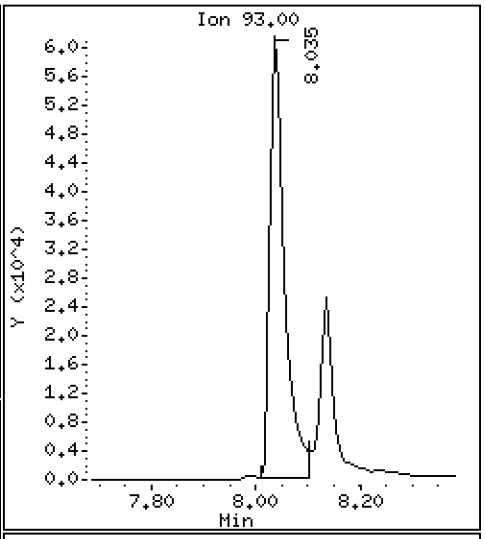
Column phase: ZB-5msi

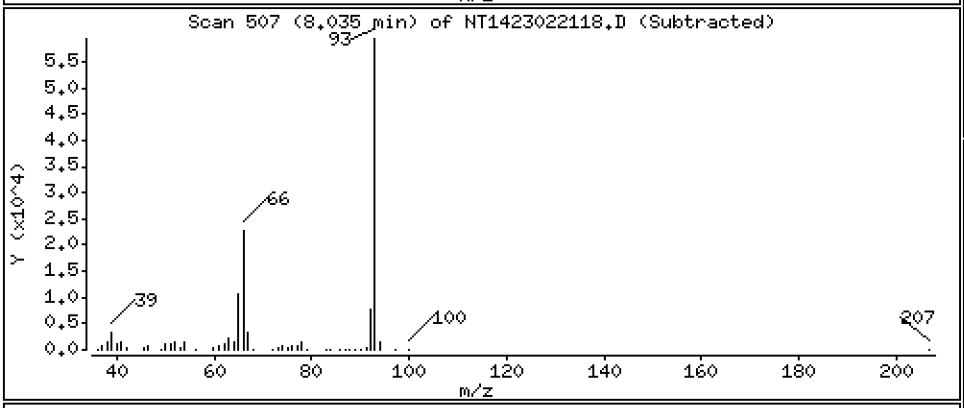
Column diameter: 0.25

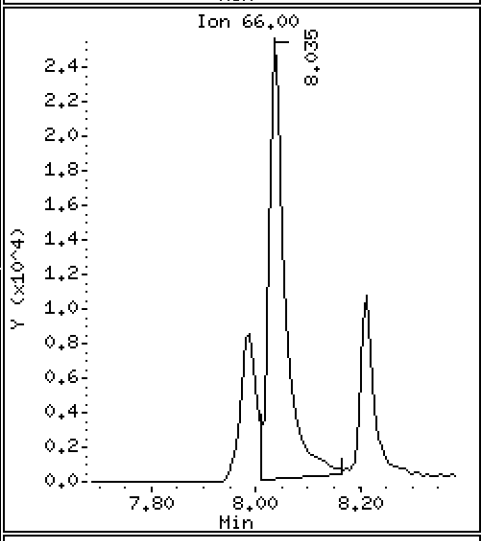
91 Aniline

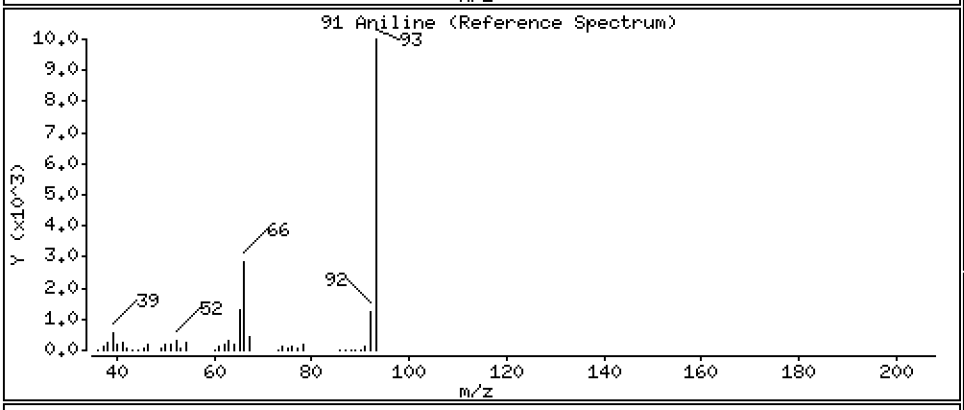
Concentration: 0.9676 ug/mL

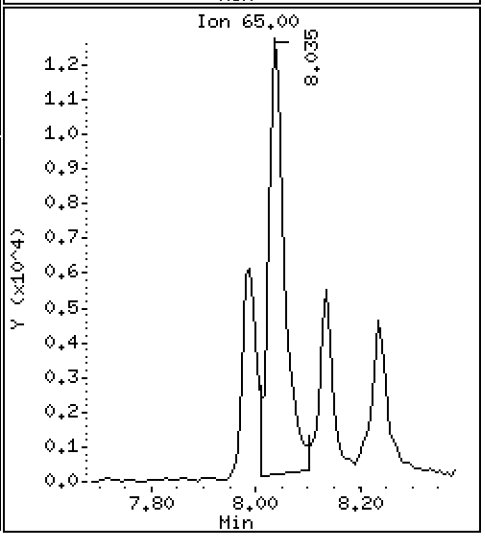


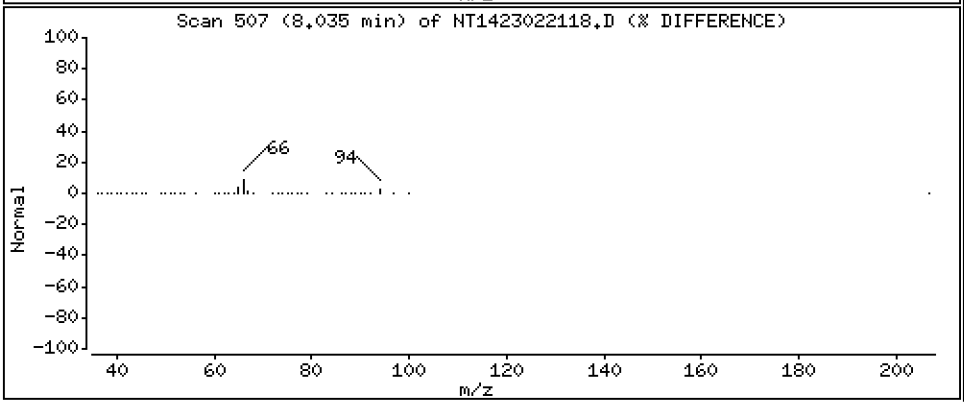












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

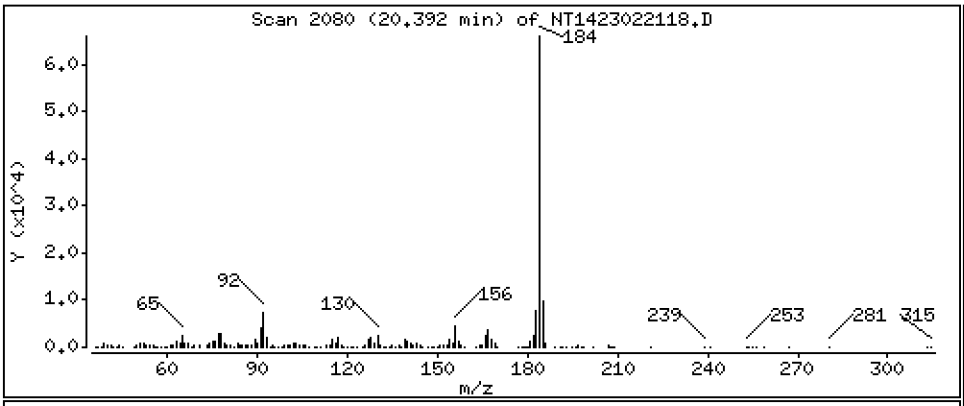
Operator: DSD

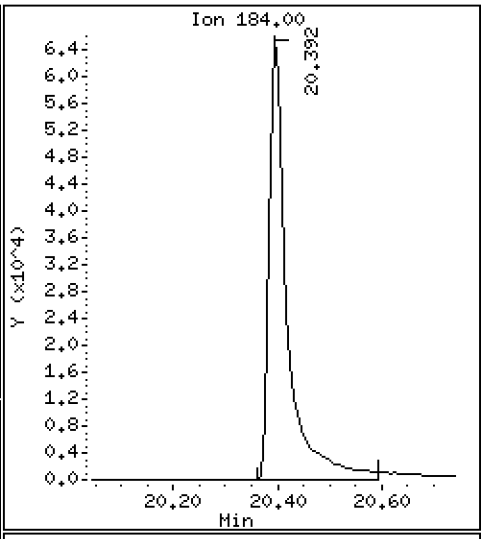
Column phase: ZB-5msi

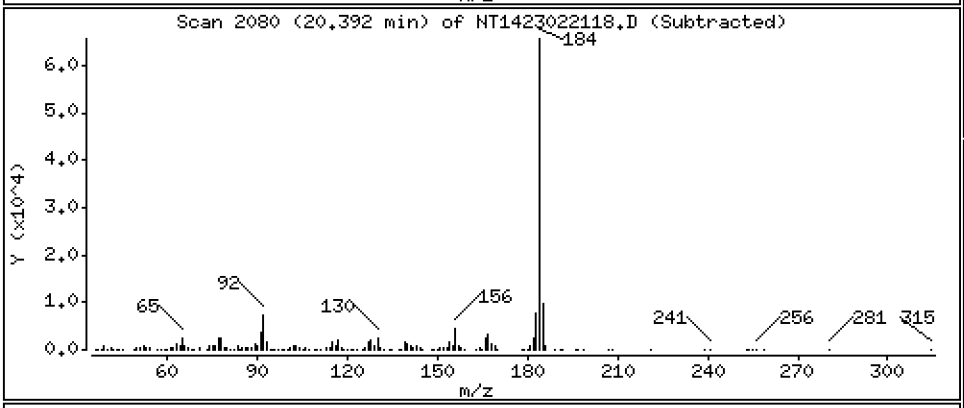
Column diameter: 0.25

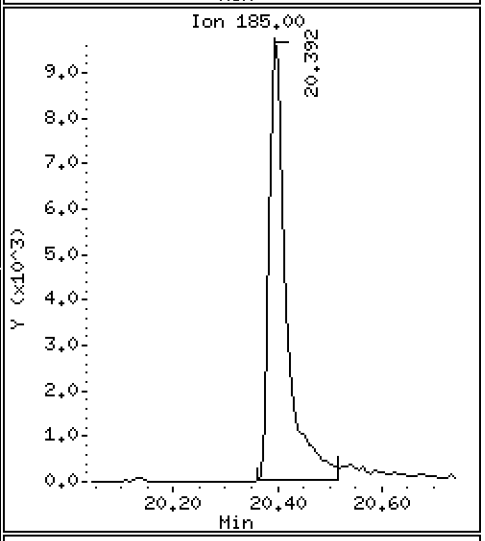
93 Benzidine

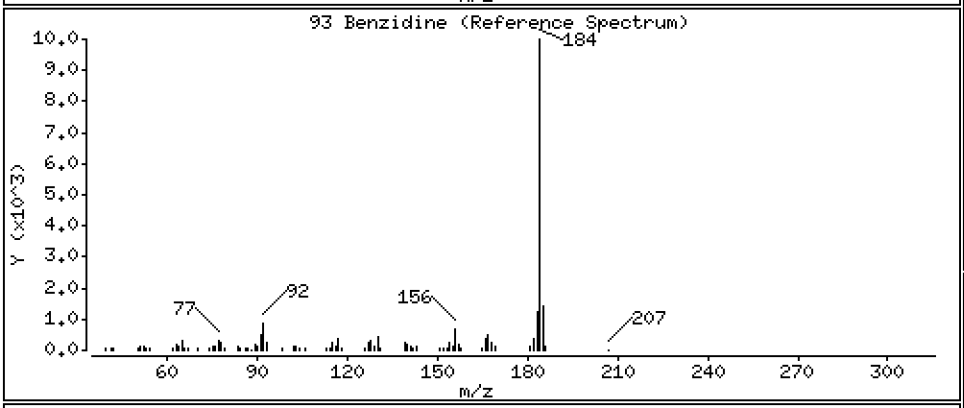
Concentration: 1.539 ug/mL

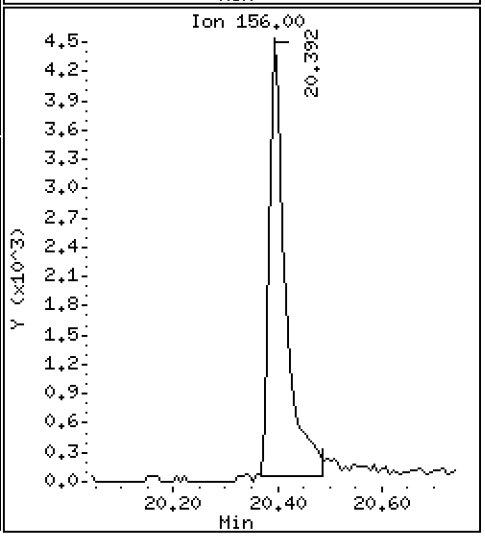


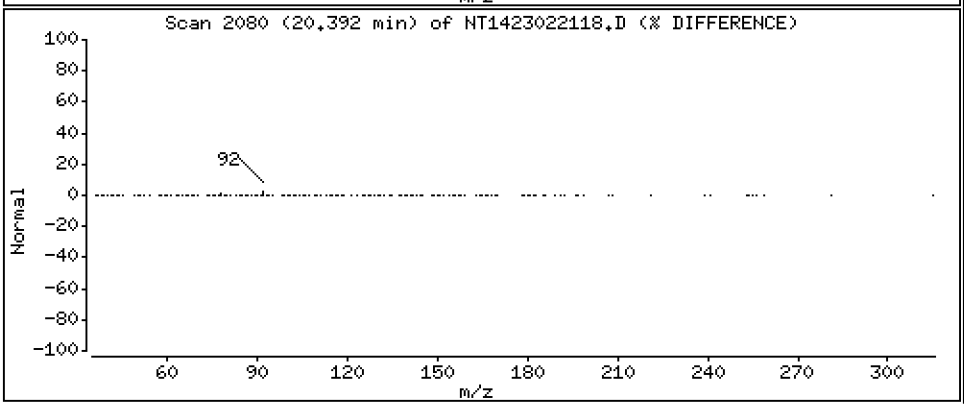












Data File: \\target\share\chem3\nt14.i\20230221A.b\NT1423022118.D

Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

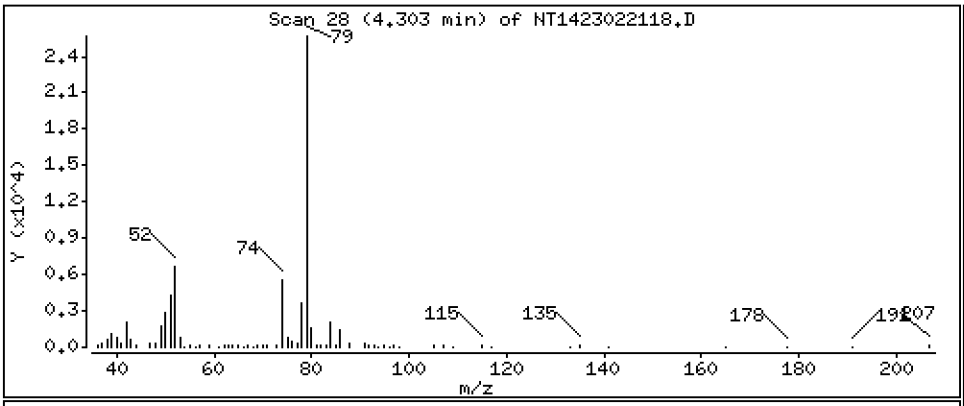
Operator: DSD

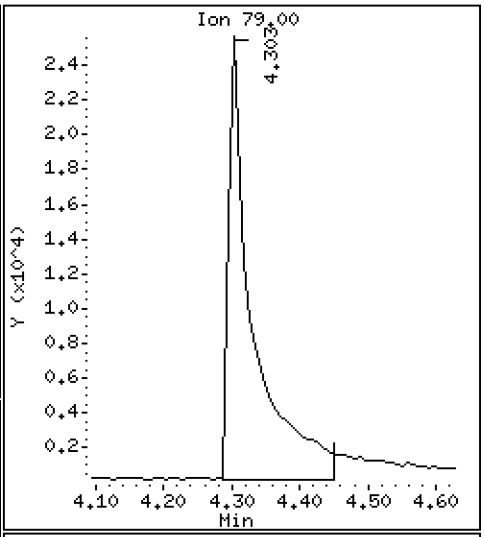
Column phase: ZB-5msi

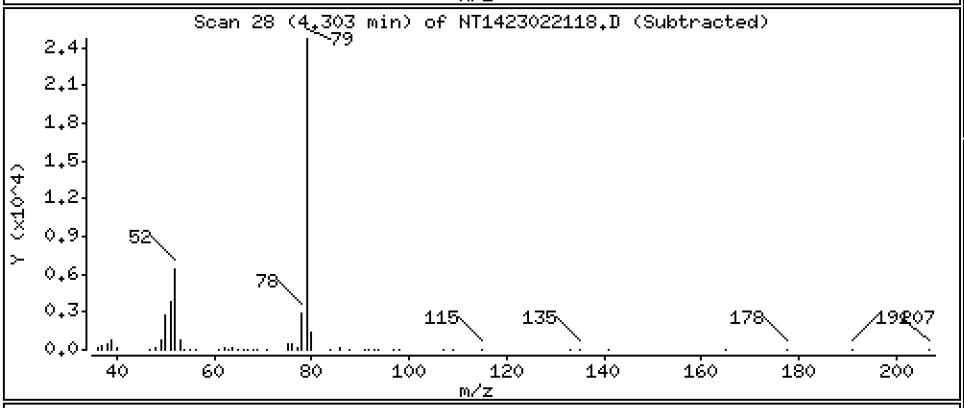
Column diameter: 0.25

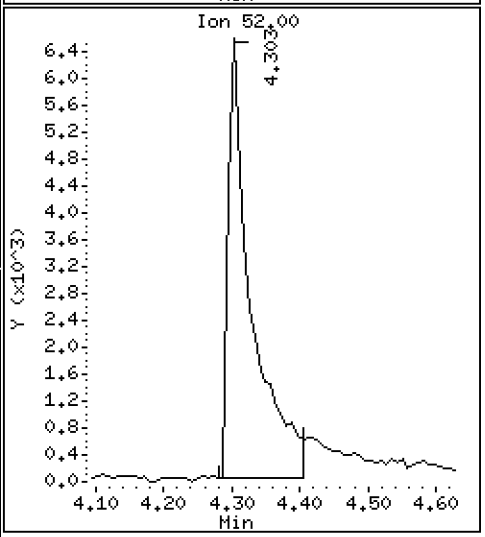
103 Pyridine

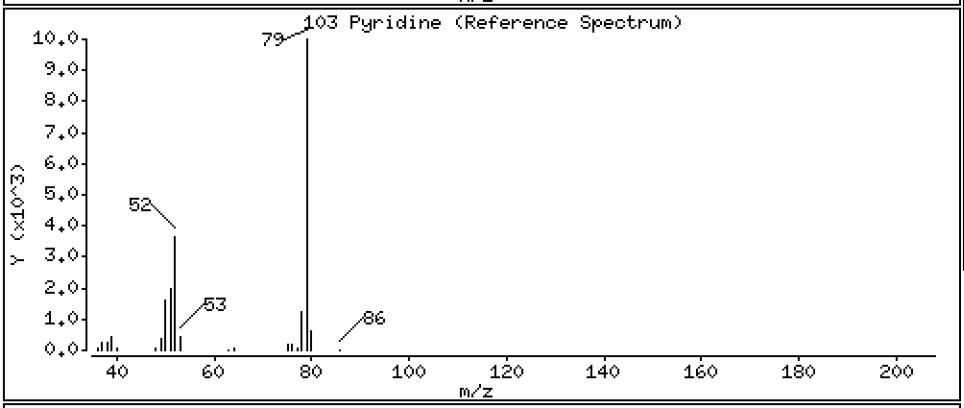
Concentration: 0.7512 ug/mL

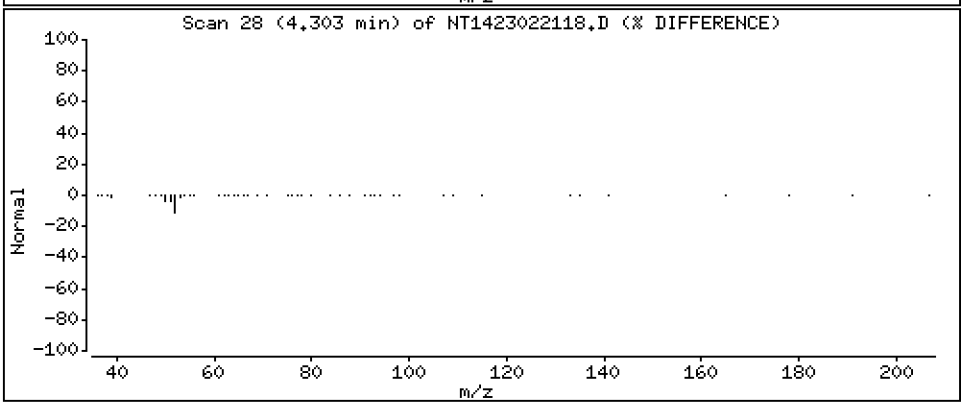












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

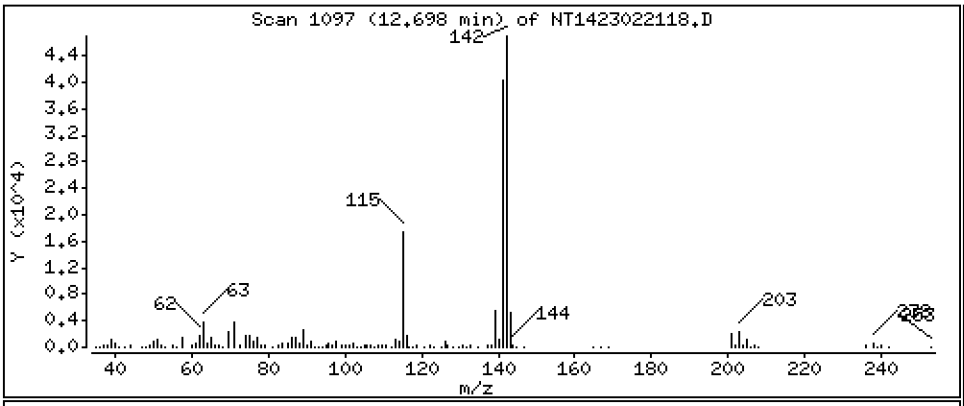
Operator: DSD

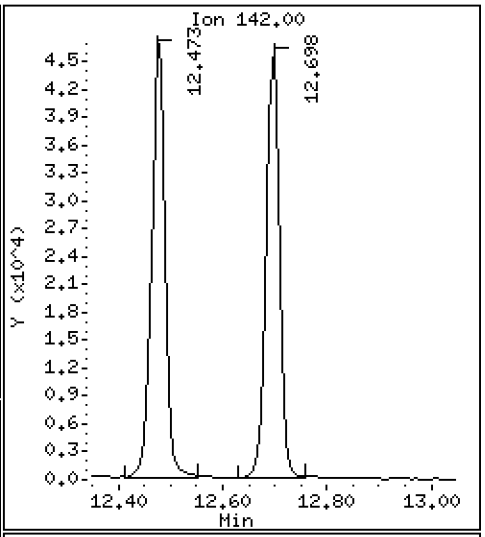
Column phase: ZB-5msi

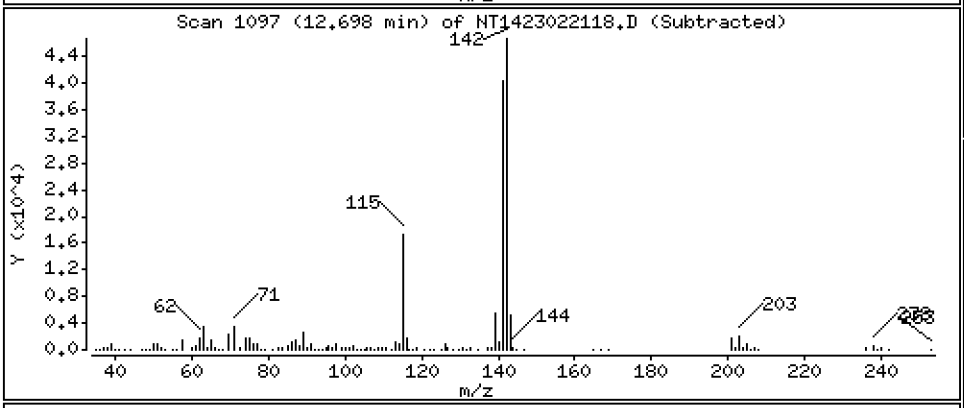
Column diameter: 0.25

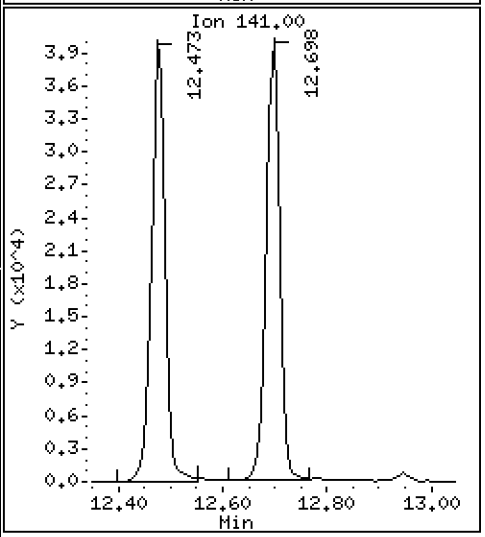
105 1-methylnaphthalene

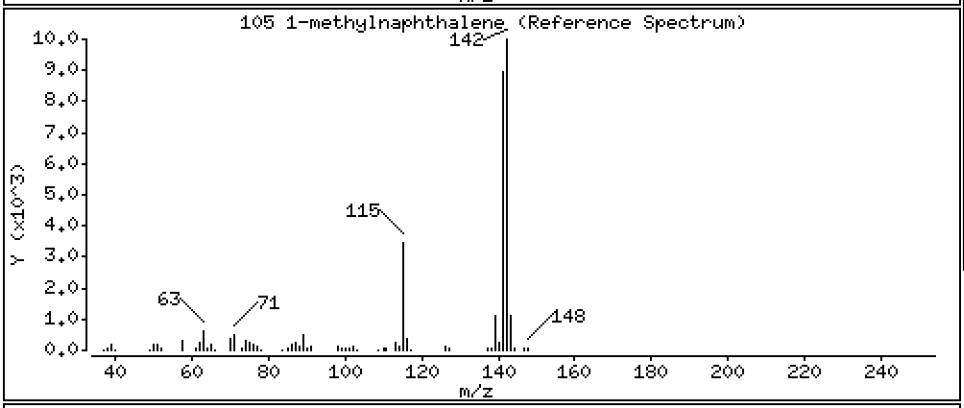
Concentration: 0.5266 ug/mL

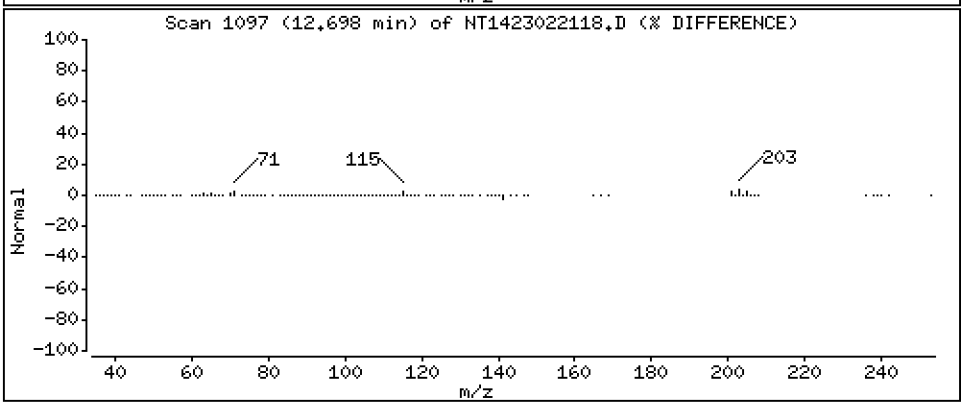












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

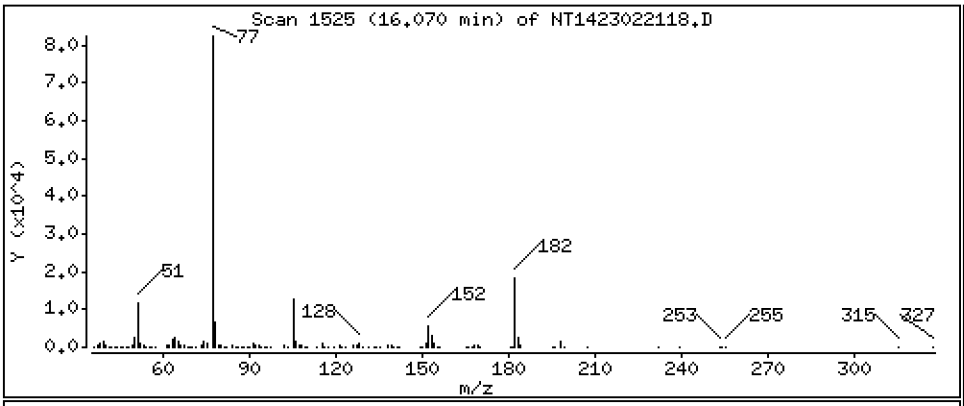
Operator: DSD

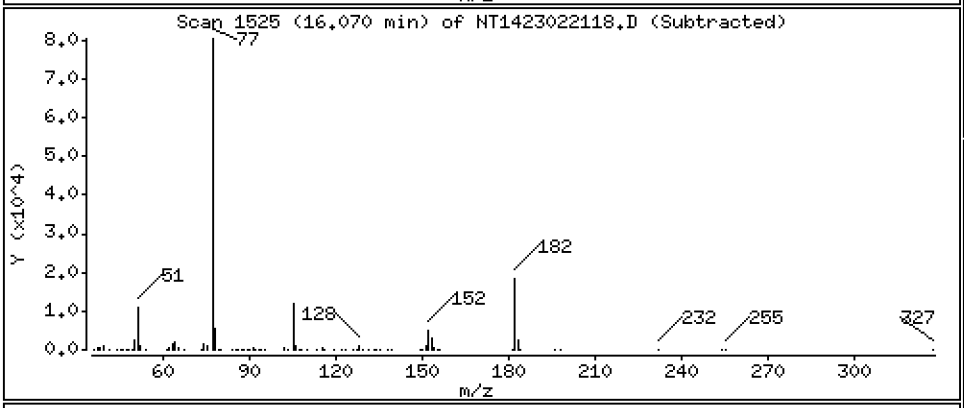
Column phase: ZB-5msi

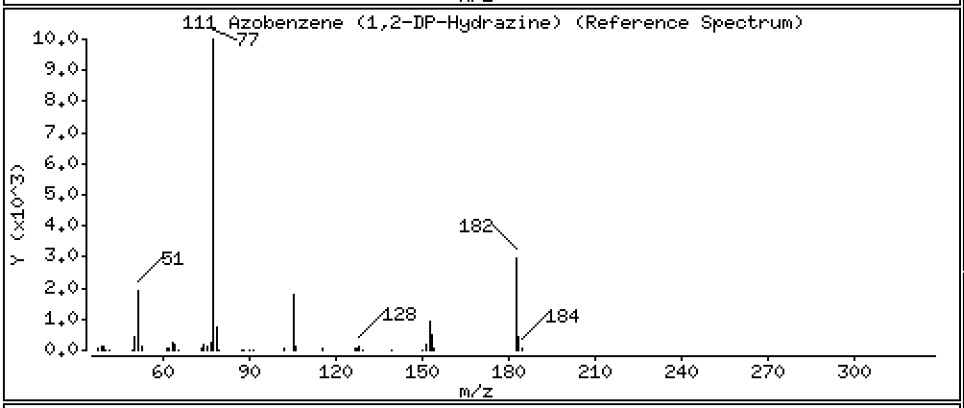
Column diameter: 0.25

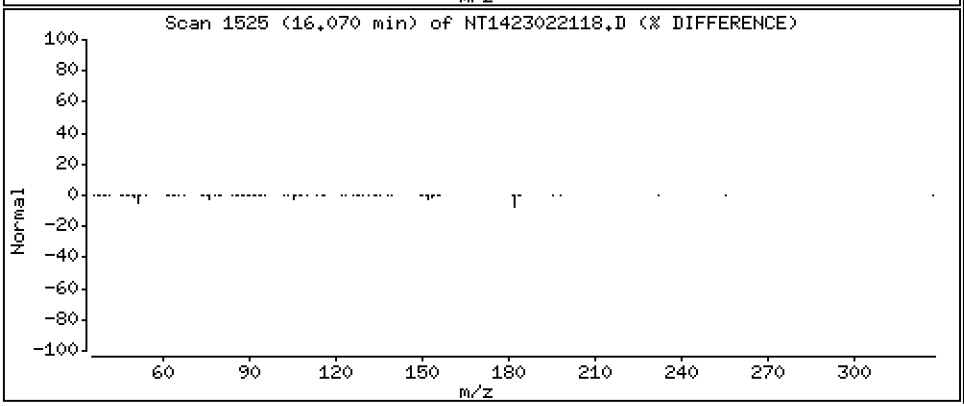
111 Azobenzene (1,2-DP-Hydrazine)

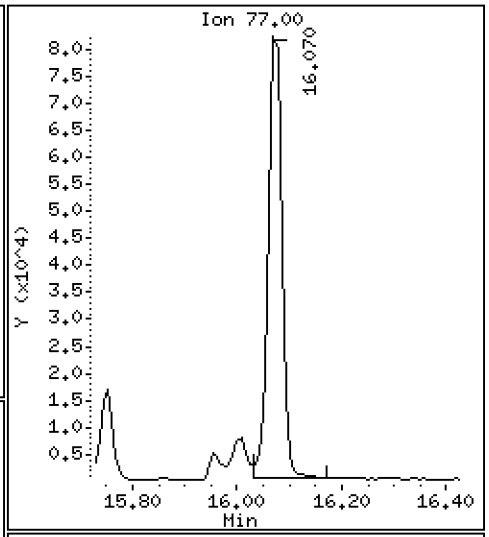
Concentration: 0.5669 ug/mL

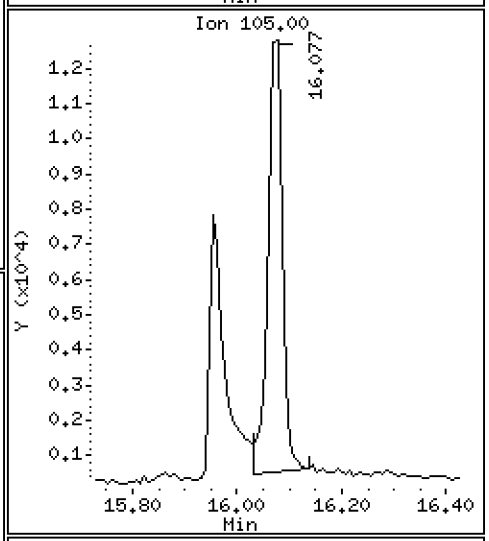


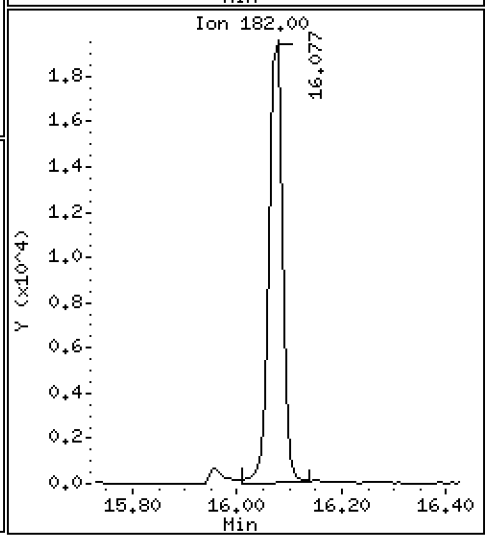












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

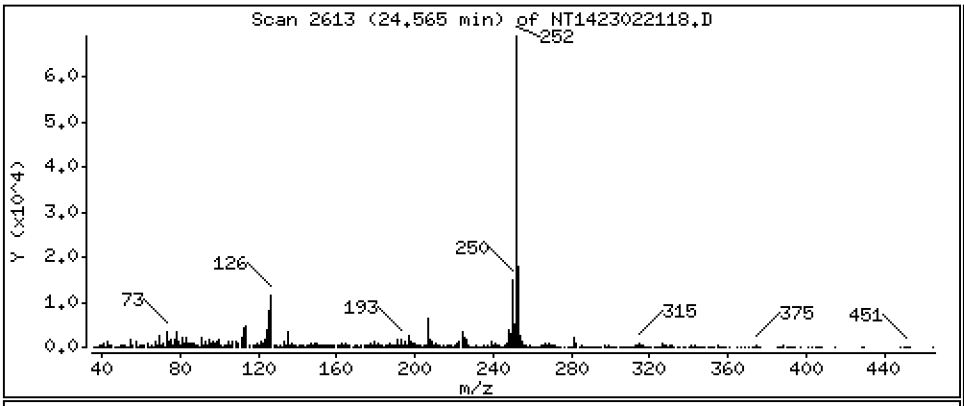
Operator: DSD

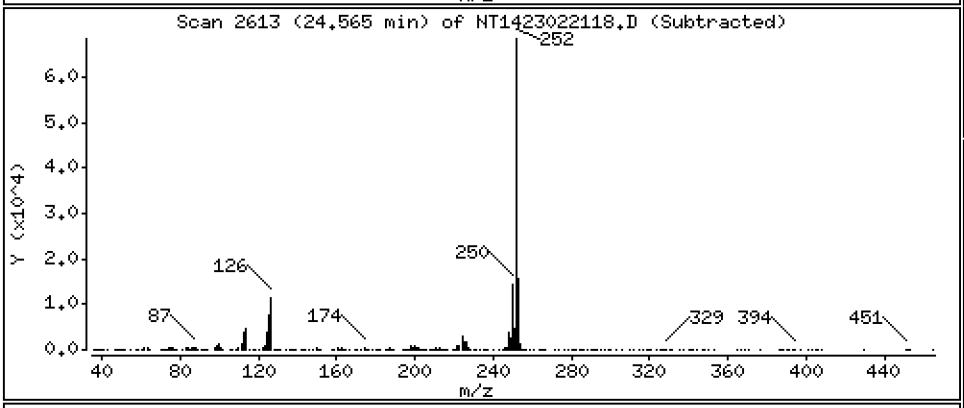
Column phase: ZB-5msi

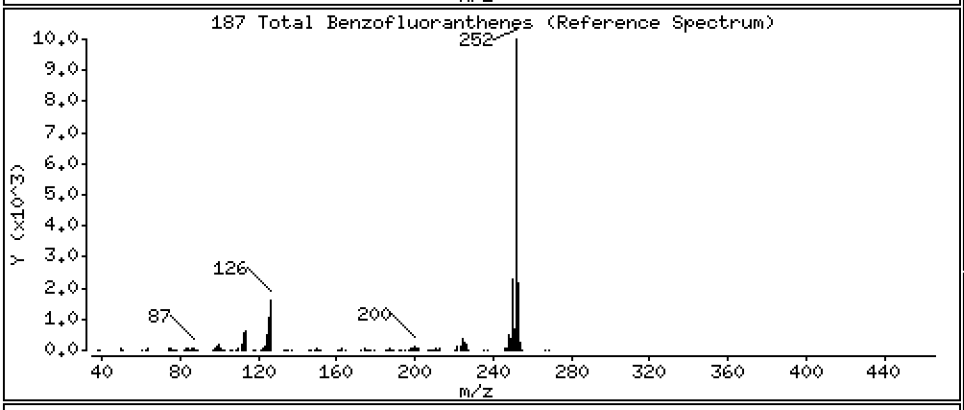
Column diameter: 0.25

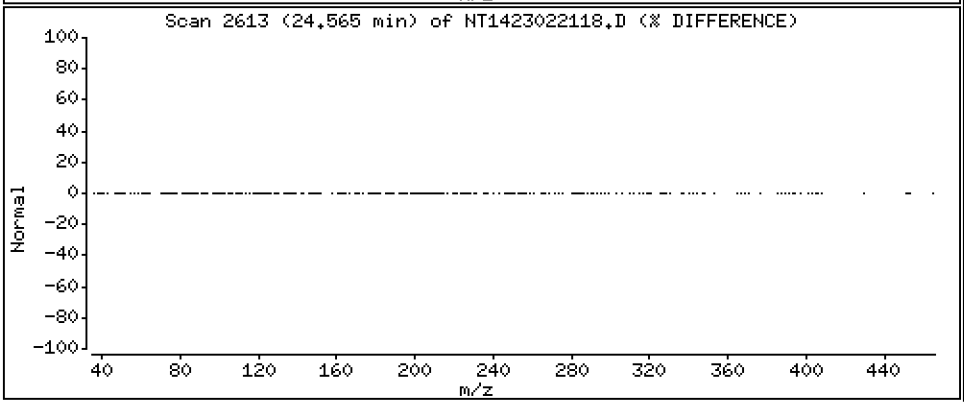
187 Total Benzofluoranthenes

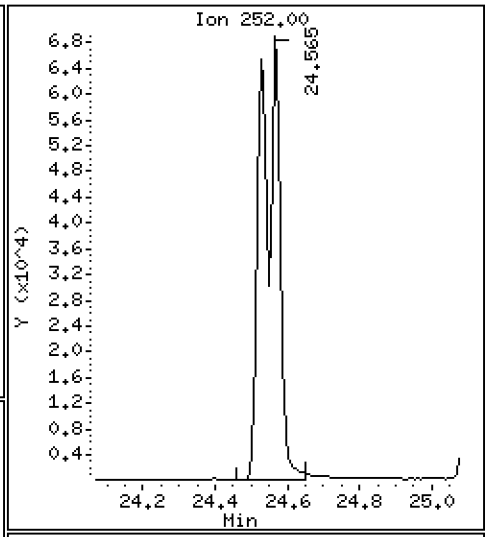
Concentration: 1.116 ug/mL

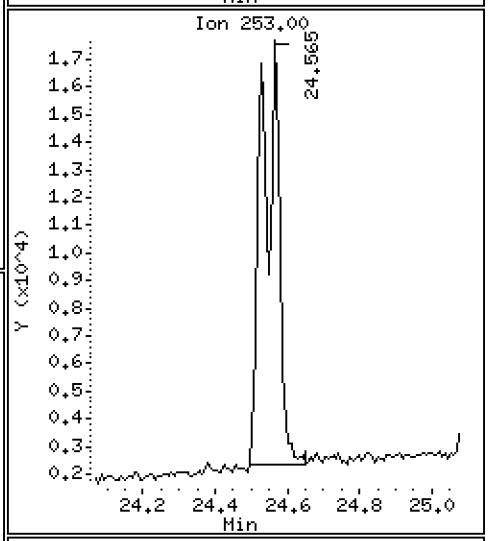


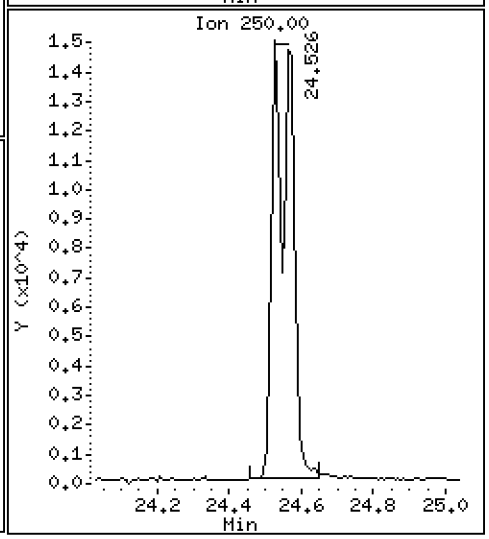












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Date : 21-FEB-2023 23:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0291-LCV1

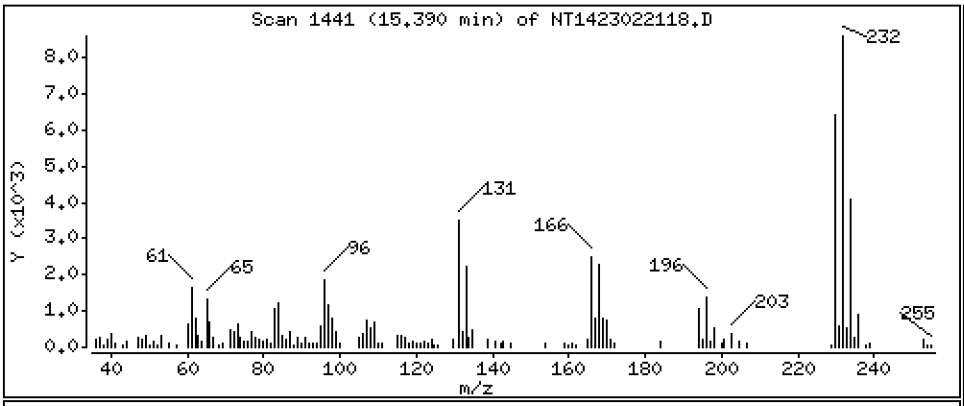
Operator: DSD

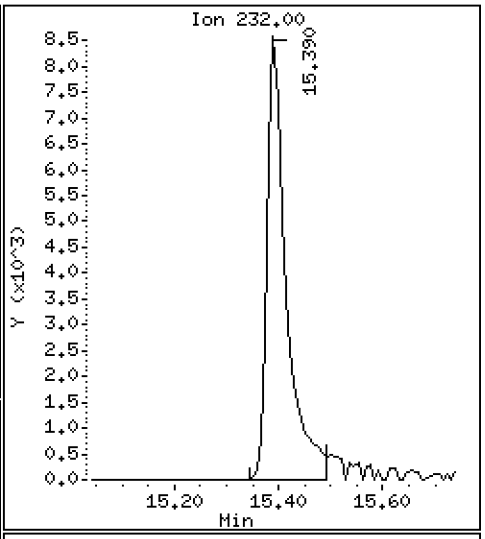
Column phase: ZB-5msi

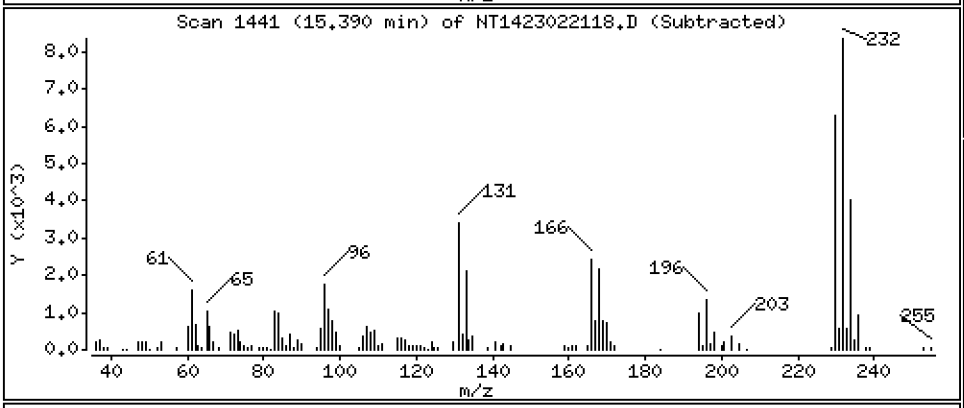
Column diameter: 0.25

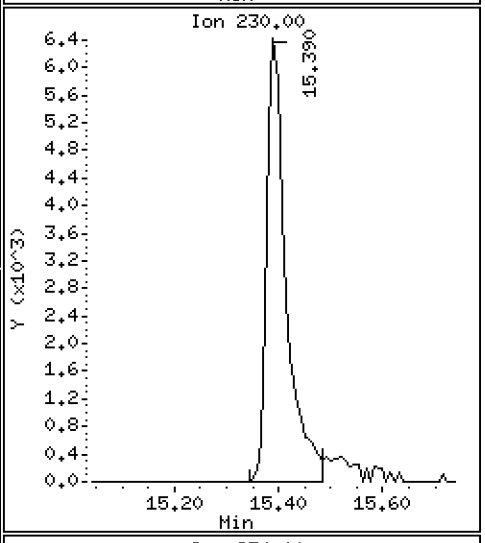
120 2,3,4,6-Tetrachlorophenol

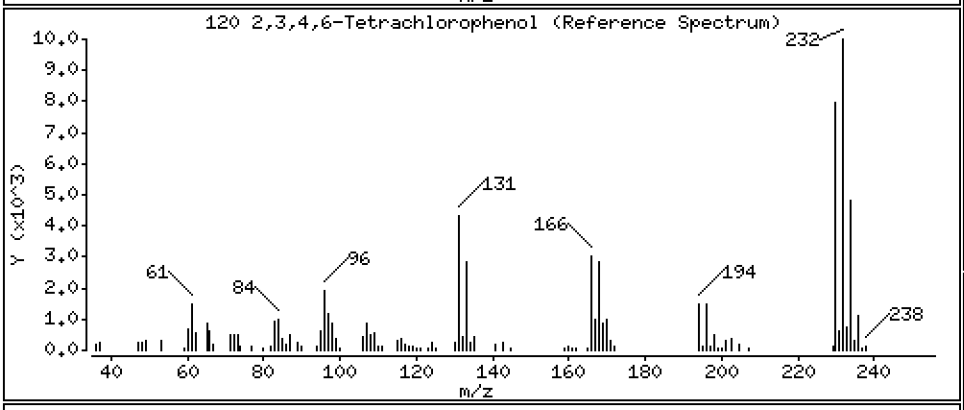
Concentration: 0.3676 ug/mL

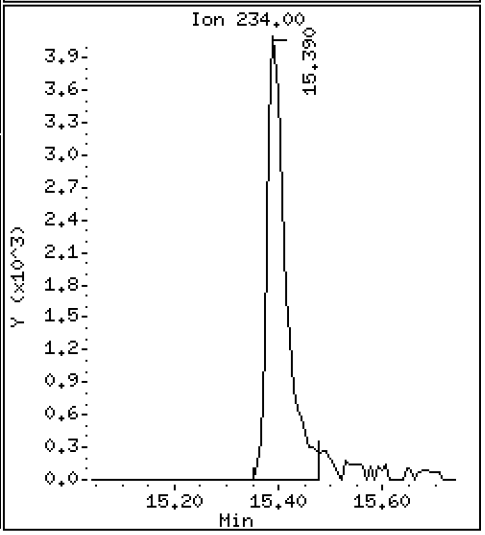


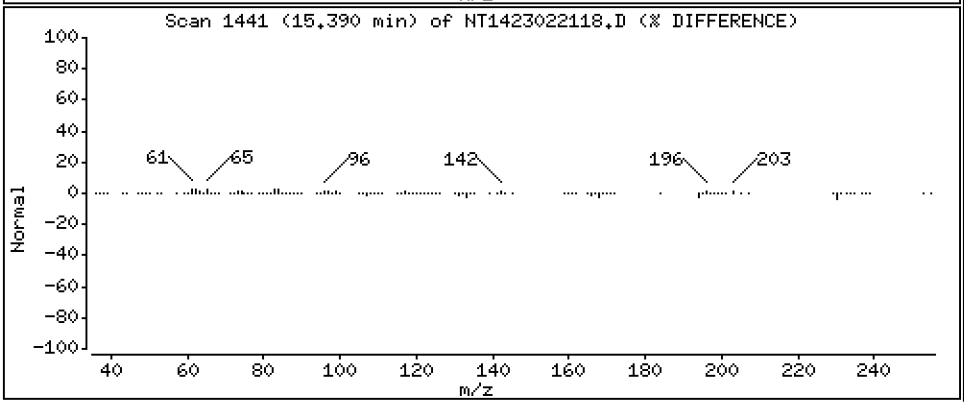












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

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Lab Smp Id: SLB0291-LCV1
Inj Date : 21-FEB-2023 23:42 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0291-LCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20230221A.b\ABN.m
Meth Date : 22-Feb-2023 13:34 deenayd Quant Type: ISTD
Cal Date : 16-FEB-2023 19:30 Cal File: NT1423021610.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: DEENAY-201905

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.380	6.373	(0.745)	42780	0.63978	0.6398
$	2 Phenol-d5	99	7.965	7.965	(0.930)	80116	0.75529	0.7553
	3 Phenol	94	7.988	7.988	(0.932)	45561	0.40574	0.4057
$	5 2-Chlorophenol-d4	132	8.212	8.212	(0.958)	56130	0.74161	0.7416
	4 Bis(2-Chloroethyl)ether	93	8.134	8.135	(0.949)	43913	0.51192	0.5119
	6 2-Chlorophenol	128	8.235	8.235	(0.961)	39607	0.50086	0.5009
	7 1,3-Dichlorobenzene	146	8.506	8.506	(0.993)	43082	0.48938	0.4894
*	8 1,4-Dichlorobenzene-d4	152	8.568	8.568	(1.000)	250126	4.00000	
	9 1,4-Dichlorobenzene	146	8.599	8.599	(1.004)	45333	0.54259	0.5426
$	10 1,2-Dichlorobenzene-d4	152	8.925	8.925	(1.042)	28559	0.50340	0.5034
	12 1,2-Dichlorobenzene	146	8.948	8.948	(1.044)	39934	0.47811	0.4781
	11 Benzyl alcohol	108	8.870	8.855	(1.035)	21641	0.34313	0.3431
	14 2,2'-oxybis(1-Chloropropane)	121	9.150	9.150	(1.068)	11005	0.46057	0.4606(M)
	13 2-Methylphenol	108	9.095	9.088	(1.062)	40423	0.51553	0.5155
	17 Hexachloroethane	117	9.530	9.530	(1.112)	17073	0.47004	0.4700
	16 N-Nitroso-di-n-propylamine	70	9.406	9.414	(1.098)	34054	0.47711	0.4771
	15 4-Methylphenol	108	9.367	9.360	(1.093)	40266	0.48632	0.4863
$	18 Nitrobenzene-d5	82	9.662	9.662	(0.875)	54640	0.55556	0.5556
	19 Nitrobenzene	77	9.701	9.701	(0.879)	49378	0.50030	0.5003
	20 Isophorone	82	10.143	10.151	(0.919)	68952	0.52952	0.5295
	21 2-Nitrophenol	139	10.329	10.329	(0.935)	14696	0.33284	0.3328
	22 2,4-Dimethylphenol	107	10.399	10.399	(0.942)	110959	1.48883	1.489
	23 Bis(2-Chloroethoxy)methane	93	10.593	10.593	(0.959)	44560	0.52605	0.5260
	24 Benzoic acid	105	10.732	10.678	(0.972)	240	0.00513	0.005133
	25 2,4-Dichlorophenol	162	10.779	10.779	(0.976)	76751	1.20328	1.203
	26 1,2,4-Trichlorobenzene	180	10.957	10.957	(0.992)	43721	0.56585	0.5658
*	27 Naphthalene-d8	136	11.042	11.042	(1.000)	851316	4.00000	
	28 Naphthalene	128	11.081	11.081	(1.003)	113501	0.54072	0.5407
	29 4-Chloroaniline	127	11.227	11.227	(1.017)	90813	1.01265	1.013
	30 Hexachlorobutadiene	225	11.451	11.451	(1.037)	26945	0.56570	0.5657
	31 4-Chloro-3-methylphenol	107	12.202	12.202	(1.105)	93665	1.35669	1.357
	32 2-Methylnaphthalene	142	12.473	12.481	(1.130)	84050	0.53464	0.5346
	33 Hexachlorocyclopentadiene	237	12.945	12.945	(0.884)	9452	0.19234	0.1923

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.107	13.108	(0.895)	59859	1.19817	1.198
	35	2,4,5-Trichlorophenol	196	13.185	13.177	(0.900)	61043	1.12824	1.128
$	36	2-Fluorobiphenyl	172	13.270	13.270	(0.906)	104651	0.57665	0.5766
	37	2-Chloronaphthalene	162	13.463	13.471	(0.919)	77275	0.52167	0.5217
	38	2-Nitroaniline	65	13.742	13.742	(0.938)	55925	1.16121	1.161
	39	Dimethylphthalate	163	14.183	14.183	(0.968)	85642	0.55274	0.5527
	40	Acenaphthylene	152	14.330	14.330	(0.978)	128953	0.57076	0.5708
	41	2,6-Dinitrotoluene	165	14.315	14.323	(0.977)	39524	1.08409	1.084
*	42	Acenaphthene-d10	164	14.648	14.648	(1.000)	507249	4.00000	
	43	3-Nitroaniline	138	14.593	14.601	(0.996)	41544	1.07356	1.074
	44	Acenaphthene	153	14.709	14.717	(1.004)	73847	0.54593	0.5459
	45	2,4-Dinitrophenol	184	14.957	14.818	(1.021)	260	0.01091	0.01091
	46	Dibenzofuran	168	15.042	15.042	(1.027)	122118	0.54985	0.5499
	47	4-Nitrophenol	109	14.949	14.941	(1.021)	17896	0.79822	0.7982
	48	2,4-Dinitrotoluene	165	15.119	15.127	(1.032)	53035	1.02885	1.029
	50	Diethylphthalate	149	15.637	15.645	(1.068)	109485	0.53153	0.5315
	49	Fluorene	166	15.745	15.753	(1.075)	124679	0.53683	0.5368
	51	4-Chlorophenyl-phenylether	204	15.753	15.753	(1.075)	64955	0.52304	0.5230
	52	4-Nitroaniline	138	15.861	15.869	(1.083)	50127	1.12904	1.129
	53	4,6-Dinitro-2-methylphenol	198	15.953	15.961	(0.903)	44541	1.19348	1.193
	54	N-Nitrosodiphenylamine	169	16.007	16.008	(0.906)	81992	0.55381	0.5538
$	55	2,4,6-Tribromophenol	330	16.285	16.285	(1.112)	14747	0.50606	0.5061
	56	4-Bromophenyl-phenylether	248	16.748	16.756	(0.948)	33189	0.50331	0.5033
	57	Hexachlorobenzene	284	17.049	17.057	(0.965)	36050	0.53801	0.5380
	58	Pentachlorophenol	266	17.444	17.421	(0.987)	6288	0.19318	0.1932
*	59	Phenanthrene-d10	188	17.668	17.676	(1.000)	1030253	4.00000	
	60	Phenanthrene	178	17.715	17.723	(1.003)	133865	0.54072	0.5407
	61	Anthracene	178	17.808	17.816	(1.008)	136626	0.55704	0.5570
	62	Carbazole	167	18.156	18.148	(1.028)	123313	0.55402	0.5540
	63	Di-n-butylphthalate	149	18.991	18.992	(1.075)	137649	0.55368	0.5537
	64	Fluoranthene	202	20.129	20.129	(0.884)	166353	0.43739	0.4374
	65	Pyrene	202	20.554	20.554	(0.903)	172011	0.42771	0.4277
$	66	Terphenyl-d14	244	20.864	20.864	(0.917)	147356	0.51604	0.5160
	67	Butylbenzylphthalate	149	21.816	21.816	(0.958)	60872	0.45887	0.4589
	68	Benzo(a)anthracene	228	22.738	22.738	(0.999)	161428	0.57222	0.5722
*	69	Chrysene-d12	240	22.761	22.769	(1.000)	881563	4.00000	
	70	3,3'-Dichlorobenzidine	252	22.707	22.715	(0.998)	158018	1.82818	1.828
	71	Chrysene	228	22.807	22.815	(1.002)	143654	0.56613	0.5661
	72	bis(2-Ethylhexyl)phthalate	149	22.854	22.854	(0.959)	81399	0.37265	0.3727
*	134	Di-n-octylphthalate-d4	153	23.829	23.837	(1.000)	1271706	4.00000	
	73	Di-n-octylphthalate	149	23.845	23.845	(1.001)	157515	0.52973	0.5297
	74	Benzo(b)fluoranthene	252	24.526	24.534	(0.973)	124710	0.55563	0.5556
	75	Benzo(k)fluoranthene	252	24.565	24.573	(0.975)	132516	0.55253	0.5525
	76	Benzo(a)pyrene	252	25.107	25.107	(0.996)	104252	0.49008	0.4901
*	77	Perylene-d12	264	25.207	25.215	(1.000)	707350	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	27.532	27.532	(1.092)	87831	0.50127	0.5013
	79	Dibenzo(a,h)anthracene	278	27.548	27.548	(1.093)	75231	0.52100	0.5210
	80	Benzo(g,h,i)perylene	276	28.208	28.208	(1.119)	68241	0.48017	0.4802
	90	N-Nitrosodimethylamine	74	4.280	4.280	(0.500)	40041	0.77343	0.7734
	91	Aniline	93	8.034	8.034	(0.938)	116217	0.96759	0.9676
	93	Benzidine	184	20.392	20.392	(0.896)	154476	1.53851	1.539
	103	Pyridine	79	4.303	4.280	(0.502)	61537	0.75120	0.7512
	105	1-methylnaphthalene	142	12.697	12.697	(1.150)	77726	0.52663	0.5266
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.069	16.077	(1.097)	141924	0.56694	0.5669

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.565	24.573	(0.975)	244633	1.11637	1.116
120 2,3,4,6-Tetrachlorophenol	232	15.390	15.390	(1.051)	21228	0.36760	0.3676

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423022118.D
Lab Smp Id: SLB0291-LCV1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230221A.b\ABN.m
Misc Info:

Calibration Date: 21-FEB-2023
Calibration Time: 23:06
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	247721	123861	495442	250126	0.97
27 Naphthalene-d8	862325	431163	1724650	851316	-1.28
42 Acenaphthene-d10	519526	259763	1039052	507249	-2.36
59 Phenanthrene-d10	1059882	529941	2119764	1030253	-2.80
69 Chrysene-d12	930840	465420	1861680	881563	-5.29
134 Di-n-octylphthala	1343425	671713	2686850	1271706	-5.34
77 Perylene-d12	746835	373418	1493670	707350	-5.29

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.57	8.07	9.07	8.57	-0.00
27 Naphthalene-d8	11.04	10.54	11.54	11.04	-0.00
42 Acenaphthene-d10	14.65	14.15	15.15	14.65	-0.00
59 Phenanthrene-d10	17.68	17.18	18.18	17.67	-0.04
69 Chrysene-d12	22.77	22.27	23.27	22.76	-0.03
134 Di-n-octylphthala	23.84	23.34	24.34	23.83	-0.03
77 Perylene-d12	25.22	24.72	25.72	25.21	-0.03

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

REVIEW SUMMARY FOR FILE - NT1423022118.D

Lab ID: SLB0291-LCV1
nt14.i, ABN.m, 21-FEB-2023 23:42

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.021	1.012	0.0095	2,4-Dinitrophenol

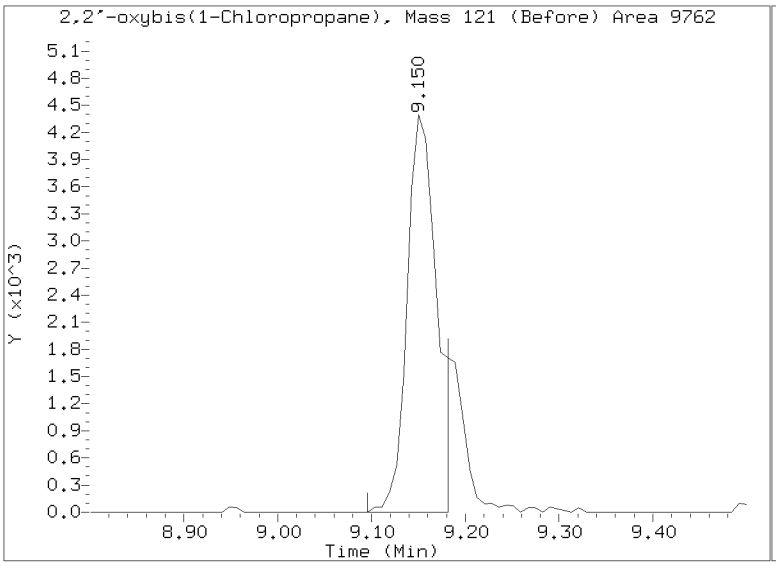
RRT check based on Ccal File: NT1423022117.D

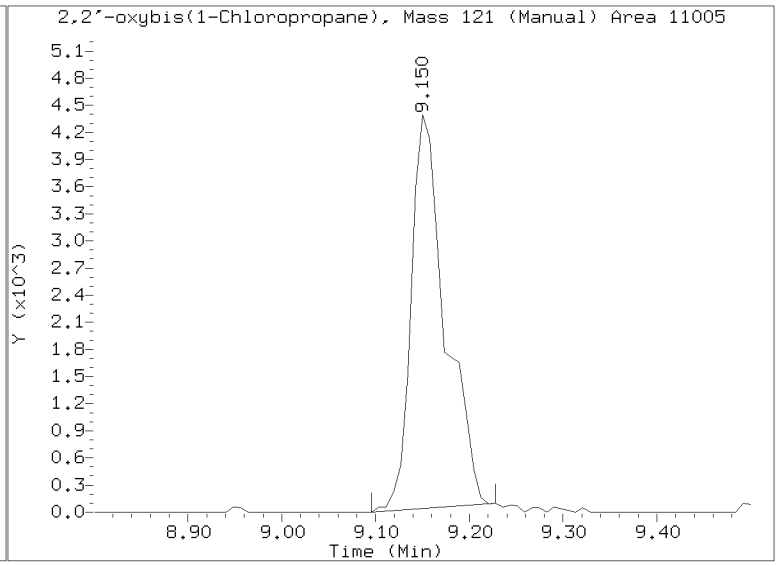
On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230221A.b/NT1423022118.D
Injection Date: 21-FEB-2023 23:42
Lab ID:SLB0291-LCV1 Client ID:
Report Date: 02/23/2023 12:09





APPROVED

By Deenay Dunmore at 12:18 pm, Feb 23, 2023

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0234	Instrument:	NT14
		Calibration:	GB00046

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLB0234-TUN3	NT1423021603.D	NA	02/16/23 14:33
ABN 20	SLB0234-CAL7	NT1423021604.D	NA	02/16/23 15:54
ABN 10	SLB0234-CAL6	NT1423021605.D	NA	02/16/23 16:30
ABN 5	SLB0234-CAL5	NT1423021606.D	NA	02/16/23 17:06
ABN 2.5	SLB0234-CAL4	NT1423021607.D	NA	02/16/23 17:42
ABN 1.0	SLB0234-CAL3	NT1423021608.D	NA	02/16/23 18:18
ABN 0.5	SLB0234-CAL2	NT1423021609.D	NA	02/16/23 18:54
ABN 0.2	SLB0234-CAL1	NT1423021610.D	NA	02/16/23 19:30
SCV 5.0	SLB0234-SCV1	NT1423021613.D	NA	02/16/23 21:18
Initial Cal Blank	SLB0234-ICB1	NT1423021618.D	NA	02/17/23 00:17

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0251	Instrument:	NT14
		Calibration:	GB00046

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLB0251-TUN1	NT1423021701X.D	NA	02/17/23 10:59
Initial Cal Check	SLB0251-ICV1	NT1423021717X.D	NA	02/17/23 20:19
ABN 0.2	SLB0251-LCV1	NT1423021718.D	NA	02/17/23 20:55
Blank	BLA0339-BLK1	NT1423021721.D	Solid	02/17/23 22:43
LCS	BLA0339-BS1	NT1423021722.D	Solid	02/17/23 23:19
LCS Dup	BLA0339-BSD1	NT1423021723.D	Solid	02/17/23 23:55
Reference	BLA0339-SRM1	NT1423021724.D	Solid	02/18/23 00:30
ZZZZZ	23A0100-21	NT1423021725.D	Solid	02/18/23 01:06
ZZZZZ	23A0100-22	NT1423021726.D	Solid	02/18/23 01:42
ZZZZZ	23A0100-23	NT1423021729.D	Solid	02/18/23 03:30
LDW23-SS1254	23A0171-01	NT1423021730.D	Solid	02/18/23 04:06
LDW23-SS1257	23A0171-02	NT1423021731.D	Solid	02/18/23 04:42
LDW23-SS1262	23A0171-03	NT1423021732.D	Solid	02/18/23 05:18
LDW23-SS1245	23A0171-04	NT1423021733.D	Solid	02/18/23 05:54
Calibration Check	SLB0251-CCV1	NT1423021734.D	NA	02/18/23 06:30

Printed: 2/21/2023 12:23:00PM

ANALYSIS SEQUENCE

SLB0251

Instrument ID: NT14
Calibration ID: GB00046
MS EM Level: EV

GCMS Description: Agilent 7890A/5975C XL
GCMS Column ID: ZB-5MS

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLB0251-TUN1	MS Tune	QC		1	K008469		02/17/2023 10:59	NT1423021701.D	DSD	
SLB0251-ICV1	Initial Cal Check	QC		2	K011109	K010831	02/17/2023 20:19	NT1423021717.D	DSD	
SLB0251-LCV1	ABN 0.2	QC		3	K011106	K010831	02/17/2023 20:55	NT1423021718.D	DSD	
BLA0339-BLK1	Blank	QC		4		K010831	02/17/2023 22:43	NT1423021721.D	DSD	
BLA0339-BS1	LCS	QC		5		K010831	02/17/2023 23:19	NT1423021722.D	DSD	
BLA0339-BSD1	LCS Dup	QC		6		K010831	02/17/2023 23:55	NT1423021723.D	DSD	
BLA0339-SRM1	Reference	QC		7		K010831	02/18/2023 00:30	NT1423021724.D	DSD	
BLA0339-MS1	Matrix Spike	QC		8		K010831	02/18/2023 02:18	NT1423021727.D	DSD	
BLA0339-MSD1	Matrix Spike Dup	QC		9		K010831	02/18/2023 02:54	NT1423021728.D	DSD	
23A0100-21	LDW23-SS1154	(20ug/kg solid or 0.2ug/L l	A 04	10		K010831	02/18/2023 01:06	NT1423021725.D	DSD	
23A0100-22	LDW23-SS1149	(20ug/kg solid or 0.2ug/L l	A 04	11		K010831	02/18/2023 01:42	NT1423021726.D	DSD	
23A0100-23	LDW23-SS1130	(20ug/kg solid or 0.2ug/L l	A 04	12		K010831	02/18/2023 03:30	NT1423021729.D	DSD	
23A0171-01	LDW23-SS1254	(20ug/kg solid or 0.2ug/L l	A 03	13		K010831	02/18/2023 04:06	NT1423021730.D	DSD	
23A0171-02	LDW23-SS1257	(20ug/kg solid or 0.2ug/L l	A 03	14		K010831	02/18/2023 04:42	NT1423021731.D	DSD	
23A0171-03	LDW23-SS1262	(20ug/kg solid or 0.2ug/L l	A 03	15		K010831	02/18/2023 05:18	NT1423021732.D	DSD	
23A0171-04	LDW23-SS1245	(20ug/kg solid or 0.2ug/L l	A 03	16		K010831	02/18/2023 05:54	NT1423021733.D	DSD	
SLB0251-CCV1	Calibration Check	QC		17	K011109	K010831	02/18/2023 06:30	NT1423021734.D	DSD	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230217A.b

	Time	Filename	LabID	ClientId	DF																				
1	1059	NT1423021701.D	SLB0251-TUN1		1	|NO ISTDS FOUND||																		
2	2019	NT1423021717.D	SLB0251-ICV1		1	| 8.90	351756	11.40	1299383	15.02	808045	18.06	1607740	23.12	876381	25.69	639717	24.15	1545452 |						
3	2055	NT1423021718.D	SLB0251-LCV1		1	| 8.90	375988	11.39	1381913	15.02	829496	18.05	1629266	23.12	858908	25.69	614473	24.15	1443314 |						
4	2131	NT1423021719.D	SIM-ICV2		1	| 8.90	362755	11.39	1316471	15.02	802319	18.05	1585008	23.12	822943	25.69	575452	24.15	1383344 |						
5	2206	NT1423021720.D	SIM-LCV2		1	| 8.90	308563	11.39	1103780	15.02	639584	18.05	1247809	23.12	625302	25.69	436481	24.15	954292 |						
6	2243	NT1423021721.D	BLA0339-BLK1		1	| 8.90	295499	11.39	1074132	15.02	626355	18.05	1201624	23.12	605674	25.69	412528	24.15	1023141 |						
7	2319	NT1423021722.D	BLA0339-BS1		1	| 8.90	283915	11.39	1030366	15.02	626282	18.05	1212335	23.12	624229	25.69	444728	24.15	1079392 |						
8	2355	NT1423021723.D	BLA0339-BSD1		1	| 8.90	280695	11.39	1026678	15.02	618128	18.05	1197444	23.12	632854	25.69	440715	24.15	1086422 |						
9	0030	NT1423021724.D	BLA0339-SRM1		1	| 8.90	292457	11.39	1035181	15.02	619575	18.05	1225906	23.12	620134	25.69	453579	24.15	1100064 |						
10	0106	NT1423021725.D	23A0100-21		1	| 8.90	293879	11.39	1062249	15.02	611990	18.05	1102399	23.12	507919	25.69	473782	24.15	728176 |						
11	0142	NT1423021726.D	23A0100-22		1	| 8.90	289856	11.39	1046631	15.02	612796	18.05	1188632	23.12	543514	25.69	439605	24.15	952495 |						
12	0218	NT1423021727.D	BLA0339-MS1		1	| 8.90	277312	11.39	1012275	15.02	610192	18.06	1160560	23.12	557705	25.69	445491	24.15	937812 |						
13	0254	NT1423021728.D	BLA0339-MSD1		1	| 8.90	284167	11.40	1029165	15.02	621058	18.06	1175360	23.12	528523	25.69	451015	24.15	862213 |						
14	0330	NT1423021729.D	23A0100-23		1	| 8.90	286423	11.39	1045497	15.02	604106	18.06	1110022	23.13	490011	25.70	454663	24.16	717738 |						
15	0406	NT1423021730.D	23A0171-01		1	| 8.90	289436	11.40	1032547	15.02	597209	18.06	995420	23.13	474035	25.70	432041	24.16	686890 |						
16	0442	NT1423021731.D	23A0171-02		1	| 8.90	283844	11.40	1038171	15.02	612966	18.06	1153670	23.12	488337	25.69	424759	24.15	830512 |						
17	0518	NT1423021732.D	23A0171-03		1	| 8.90	285295	11.40	1036434	15.02	589233	18.06	967672	23.13	455036	25.70	411263	24.16	647250 |						
18	0554	NT1423021733.D	23A0171-04		1	| 8.90	290048	11.40	1050990	15.03	610722	18.06	1063529	23.13	458901	25.70	413471	24.16	668073 |						
19	0630	NT1423021734.D	SLB0251-CCV1		1	| 8.91	350521	11.40	1300165	15.03	788029	18.07	1430128	23.13	624298	25.70	557929	24.16	1083743 |						

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230217A.b

ARI Job No.: SLB0 Method: DFTPP8270E.m Instrument: nt14.i Date: 17-FEB-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1059	NT1423021701.D	SLB0251-TUN1		1	NO MANUAL INTEGRATION
2019	NT1423021717.D	SLB0251-ICV1		1	2,2'-oxybis(1-Chloropropane),
2055	NT1423021718.D	SLB0251-LCV1		1	2,2'-oxybis(1-Chloropropane),
2131	NT1423021719.D	SIM-ICV2		1	NO MANUAL INTEGRATION
2206	NT1423021720.D	SIM-LCV2		1	NO MANUAL INTEGRATION
2243	NT1423021721.D	BLA0339-BLK1		1	1,4-Dichlorobenzene,
2319	NT1423021722.D	BLA0339-BS1		1	NO MANUAL INTEGRATION
2355	NT1423021723.D	BLA0339-BSD1		1	NO MANUAL INTEGRATION
0030	NT1423021724.D	BLA0339-SRM1		1	NO MANUAL INTEGRATION
0106	NT1423021725.D	23A0100-21		1	1,4-Dichlorobenzene, Benzo(k)fluoranthene,
0142	NT1423021726.D	23A0100-22		1	NO MANUAL INTEGRATION
0218	NT1423021727.D	BLA0339-MS1		1	NO MANUAL INTEGRATION
0254	NT1423021728.D	BLA0339-MSD1		1	NO MANUAL INTEGRATION
0330	NT1423021729.D	23A0100-23		1	1,4-Dichlorobenzene, Benzoic acid, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene,
0406	NT1423021730.D	23A0171-01		1	1,4-Dichlorobenzene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene,
0442	NT1423021731.D	23A0171-02		1	Benzo(k)fluoranthene,
0518	NT1423021732.D	23A0171-03		1	1,2-Dichlorobenzene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230217A.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0554	NT1423021733.D	23A0171-04		1	1,4-Dichlorobenzene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene,
0630	NT1423021734.D	SLB0251-CCV1		1	2,2'-oxybis(1-Chloropropane),

Security Status Report

Date: 21-Feb-2023 11:05

NT1423021701.D	Data Locked	deenayd, 21-
NT1423021717.D	Data Locked	deenayd, 21-
NT1423021718.D	Data Locked	deenayd, 21-
NT1423021719.D	Data Locked	deenayd, 21-
NT1423021720.D	Data Locked	deenayd, 21-
NT1423021721.D	Data Locked	deenayd, 21-
NT1423021722.D	Data Locked	deenayd, 21-
NT1423021723.D	Data Locked	deenayd, 21-
NT1423021724.D	Data Locked	deenayd, 21-
NT1423021725.D	Data Locked	deenayd, 21-
NT1423021726.D	Data Locked	deenayd, 21-
NT1423021727.D	Data Locked	deenayd, 21-
NT1423021728.D	Data Locked	deenayd, 21-
NT1423021729.D	Data Locked	deenayd, 21-
NT1423021730.D	Data Locked	deenayd, 21-
NT1423021731.D	Data Locked	deenayd, 21-
NT1423021732.D	Data Locked	deenayd, 21-
NT1423021733.D	Data Locked	deenayd, 21-
NT1423021734.D	Data Locked	deenayd, 21-

Printed: 3/1/2023 3:10:22PM

ANALYSIS SEQUENCE

SLB0251

Instrument ID: NT14
Calibration ID: GB00046
MS EM Level: 1706 EV

GCMS Description: Agilent 7890A/5975C XL
GCMS Column ID: L001045

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLB0251-TUN1	MS Tune	QC		1	K008469		02/17/2023 10:59	NT1423021701X.D	DSD	
SLB0251-ICV1	Initial Cal Check	QC		2	K011109	K010831	02/17/2023 20:19	NT1423021717X.D	DSD	
SLB0251-LCV1	ABN 0.2	QC		3	K011106	K010831	02/17/2023 20:55	NT1423021718.D	DSD	
BLA0339-BLK1	Blank	QC		4		K010831	02/17/2023 22:43	NT1423021721.D	DSD	
BLA0339-BS1	LCS	QC		5		K010831	02/17/2023 23:19	NT1423021722.D	DSD	
BLA0339-BSD1	LCS Dup	QC		6		K010831	02/17/2023 23:55	NT1423021723.D	DSD	
BLA0339-SRM1	Reference	QC		7		K010831	02/18/2023 00:30	NT1423021724.D	DSD	
BLA0339-MS1	Matrix Spike	QC		8		K010831	02/18/2023 02:18	NT1423021727.D	DSD	
BLA0339-MSD1	Matrix Spike Dup	QC		9		K010831	02/18/2023 02:54	NT1423021728.D	DSD	
23A0100-21	LDW23-SS1154	(20ug/kg solid or 0.2ug/L l	A 04	10		K010831	02/18/2023 01:06	NT1423021725.D	DSD	
23A0100-22	LDW23-SS1149	(20ug/kg solid or 0.2ug/L l	A 04	11		K010831	02/18/2023 01:42	NT1423021726.D	DSD	
23A0100-23	LDW23-SS1130	(20ug/kg solid or 0.2ug/L l	A 04	12		K010831	02/18/2023 03:30	NT1423021729.D	DSD	
23A0171-01	LDW23-SS1254	(20ug/kg solid or 0.2ug/L l	A 03	13		K010831	02/18/2023 04:06	NT1423021730.D	DSD	
23A0171-02	LDW23-SS1257	(20ug/kg solid or 0.2ug/L l	A 03	14		K010831	02/18/2023 04:42	NT1423021731.D	DSD	
23A0171-03	LDW23-SS1262	(20ug/kg solid or 0.2ug/L l	A 03	15		K010831	02/18/2023 05:18	NT1423021732.D	DSD	
23A0171-04	LDW23-SS1245	(20ug/kg solid or 0.2ug/L l	A 03	16		K010831	02/18/2023 05:54	NT1423021733.D	DSD	
SLB0251-CCV1	Calibration Check	QC		17	K011109	K010831	02/18/2023 06:30	NT1423021734.D	DSD	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230217A.b

	Time	Filename	LabID	ClientId	DF																				
1	1059	NT1423021701.D	SLB0251-TUN1		1	|NO ISTDS FOUND||																		
2	2019	NT1423021717.D	SLB0251-ICV1		1	| 8.90	351756	||11.40	1299383	||15.02	808045	||18.06	1607740	||23.12	876381	||25.69	639717	||24.15	1545452 |
3	2055	NT1423021718.D	SLB0251-LCV1		1	| 8.90	375988	||11.39	1381913	||15.02	829496	||18.05	1629266	||23.12	858908	||25.69	614473	||24.15	1443314 |
4	2131	NT1423021719.D	SIM-ICV2		1	| 8.90	362755	||11.39	1316471	||15.02	802319	||18.05	1585008	||23.12	822943	||25.69	575452	||24.15	1383344 |
5	2206	NT1423021720.D	SIM-LCV2		1	| 8.90	308563	||11.39	1103780	||15.02	639584	||18.05	1247809	||23.12	625302	||25.69	436481	||24.15	954292 |						
6	2243	NT1423021721.D	BLA0339-BLK1		1	| 8.90	295499	||11.39	1074132	||15.02	626355	||18.05	1201624	||23.12	605674	||25.69	412528	||24.15	1023141 |
7	2319	NT1423021722.D	BLA0339-BS1		1	| 8.90	283915	||11.39	1030366	||15.02	626282	||18.05	1212335	||23.12	624229	||25.69	444728	||24.15	1079392 |						
8	2355	NT1423021723.D	BLA0339-BSD1		1	| 8.90	280695	||11.39	1026678	||15.02	618128	||18.05	1197444	||23.12	632854	||25.69	440715	||24.15	1086422 |
9	0030	NT1423021724.D	BLA0339-SRM1		1	| 8.90	292457	||11.39	1035181	||15.02	619575	||18.05	1225906	||23.12	620134	||25.69	453579	||24.15	1100064 |
10	0106	NT1423021725.D	23A0100-21		1	| 8.90	293879	||11.39	1062249	||15.02	611990	||18.05	1102399	||23.12	507919	||25.69	473782	||24.15	728176 |						
11	0142	NT1423021726.D	23A0100-22		1	| 8.90	289856	||11.39	1046631	||15.02	612796	||18.05	1188632	||23.12	543514	||25.69	439605	||24.15	952495 |						
12	0218	NT1423021727.D	BLA0339-MS1		1	| 8.90	277312	||11.39	1012275	||15.02	610192	||18.06	1160560	||23.12	557705	||25.69	445491	||24.15	937812 |						
13	0254	NT1423021728.D	BLA0339-MSD1		1	| 8.90	284167	||11.40	1029165	||15.02	621058	||18.06	1175360	||23.12	528523	||25.69	451015	||24.15	862213 |
14	0330	NT1423021729.D	23A0100-23		1	| 8.90	286423	||11.39	1045497	||15.02	604106	||18.06	1110022	||23.13	490011	||25.70	454663	||24.16	717738 |						
15	0406	NT1423021730.D	23A0171-01		1	| 8.90	289436	||11.40	1032547	||15.02	597209	||18.06	995420	||23.13	474035	||25.70	432041	||24.16	686890 |						
16	0442	NT1423021731.D	23A0171-02		1	| 8.90	283844	||11.40	1038171	||15.02	612966	||18.06	1153670	||23.12	488337	||25.69	424759	||24.15	830512 |						
17	0518	NT1423021732.D	23A0171-03		1	| 8.90	285295	||11.40	1036434	||15.02	589233	||18.06	967672	||23.13	455036	||25.70	411263	||24.16	647250 |						
18	0554	NT1423021733.D	23A0171-04		1	| 8.90	290048	||11.40	1050990	||15.03	610722	||18.06	1063529	||23.13	458901	||25.70	413471	||24.16	668073 |						
19	0630	NT1423021734.D	SLB0251-CCV1		1	| 8.91	350521	||11.40	1300165	||15.03	788029	||18.07	1430128	||23.13	624298	||25.70	557929	||24.16	1083743 |

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230217A.b

ARI Job No.: SLB0 Method: DFTPP8270E.m Instrument: nt14.i Date: 17-FEB-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1059	NT1423021701.D	SLB0251-TUN1		1	NO MANUAL INTEGRATION
2019	NT1423021717.D	SLB0251-ICV1		1	2,2'-oxybis(1-Chloropropane),
2055	NT1423021718.D	SLB0251-LCV1		1	2,2'-oxybis(1-Chloropropane),
2131	NT1423021719.D	SIM-ICV2		1	NO MANUAL INTEGRATION
2206	NT1423021720.D	SIM-LCV2		1	NO MANUAL INTEGRATION
2243	NT1423021721.D	BLA0339-BLK1		1	1,4-Dichlorobenzene,
2319	NT1423021722.D	BLA0339-BS1		1	NO MANUAL INTEGRATION
2355	NT1423021723.D	BLA0339-BSD1		1	NO MANUAL INTEGRATION
0030	NT1423021724.D	BLA0339-SRM1		1	NO MANUAL INTEGRATION
0106	NT1423021725.D	23A0100-21		1	1,4-Dichlorobenzene, Benzo(k)fluoranthene,
0142	NT1423021726.D	23A0100-22		1	NO MANUAL INTEGRATION
0218	NT1423021727.D	BLA0339-MS1		1	NO MANUAL INTEGRATION
0254	NT1423021728.D	BLA0339-MSD1		1	NO MANUAL INTEGRATION
0330	NT1423021729.D	23A0100-23		1	1,4-Dichlorobenzene, Benzoic acid, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene,
0406	NT1423021730.D	23A0171-01		1	1,4-Dichlorobenzene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene,
0442	NT1423021731.D	23A0171-02		1	Benzo(k)fluoranthene,
0518	NT1423021732.D	23A0171-03		1	1,2-Dichlorobenzene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230217A.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0554	NT1423021733.D	23A0171-04		1	1,4-Dichlorobenzene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene,
0630	NT1423021734.D	SLB0251-CCV1		1	2,2'-oxybis(1-Chloropropane),

Security Status Report

Date: 21-Feb-2023 11:05

NT1423021701.D	Data Locked	deenayd, 21-
NT1423021717.D	Data Locked	deenayd, 21-
NT1423021718.D	Data Locked	deenayd, 21-
NT1423021719.D	Data Locked	deenayd, 21-
NT1423021720.D	Data Locked	deenayd, 21-
NT1423021721.D	Data Locked	deenayd, 21-
NT1423021722.D	Data Locked	deenayd, 21-
NT1423021723.D	Data Locked	deenayd, 21-
NT1423021724.D	Data Locked	deenayd, 21-
NT1423021725.D	Data Locked	deenayd, 21-
NT1423021726.D	Data Locked	deenayd, 21-
NT1423021727.D	Data Locked	deenayd, 21-
NT1423021728.D	Data Locked	deenayd, 21-
NT1423021729.D	Data Locked	deenayd, 21-
NT1423021730.D	Data Locked	deenayd, 21-
NT1423021731.D	Data Locked	deenayd, 21-
NT1423021732.D	Data Locked	deenayd, 21-
NT1423021733.D	Data Locked	deenayd, 21-
NT1423021734.D	Data Locked	deenayd, 21-

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0291	Instrument:	NT14
		Calibration:	GB00046

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLB0291-TUN1	NT1423022101Z.D	NA	02/21/23 13:06
Initial Cal Check	SLB0291-ICV1	NT1423022117Z.D	NA	02/21/23 23:06
ABN 0.2	SLB0291-LCV1	NT1423022118.D	NA	02/21/23 23:42
ZZZZZ	23A0100-21RE1	NT1423022122.D	Solid	02/22/23 02:06
ZZZZZ	23A0100-22RE1	NT1423022123.D	Solid	02/22/23 02:43
ZZZZZ	23A0100-23RE1	NT1423022126.D	Solid	02/22/23 04:31
LDW23-SS1254	23A0171-01RE1	NT1423022127.D	Solid	02/22/23 05:07
LDW23-SS1262	23A0171-03RE1	NT1423022128.D	Solid	02/22/23 05:43
LDW23-SS1245	23A0171-04RE1	NT1423022129.D	Solid	02/22/23 06:19
Calibration Check	SLB0291-CCV1	NT1423022130.D	NA	02/22/23 06:55

ANALYSIS SEQUENCE

SLB0291

Instrument ID: NT14
Calibration ID: GB00046
MS EM Level: 1765 EV

GCMS Description: Agilent 7890A/5975C XL
GCMS Column ID: L001045

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLB0291-TUN1	MS Tune	QC		1	K008469		02/21/2023 13:06	NT1423022101.D	DSD	
SLB0291-ICV1	Initial Cal Check	QC		2	K011109	K010831	02/21/2023 23:06	NT1423022117.D	DSD	
SLB0291-LCV1	ABN 0.2	QC		3	K011106	K010831	02/21/2023 23:42	NT1423022118.D	DSD	
SLB0291-ICB1	Initial Cal Blank	QC		4	K005156	K010831	02/22/2023 01:30	NT1423022121.D	DSD	
23A0100-21RE1	LDW23-SS1154	(20ug/kg solid or 0.2ug/L l	A 04	5		K010831	02/22/2023 02:06	NT1423022122.D	DSD	Added 2/18/2023 by DSD
23A0100-22RE1	LDW23-SS1149	(20ug/kg solid or 0.2ug/L l	A 04	6		K010831	02/22/2023 02:43	NT1423022123.D	DSD	Added 2/22/2023 by DSD
BLA0339-MS2	Matrix Spike	QC		7		K010831	02/22/2023 03:19	NT1423022124.D	DSD	
BLA0339-MSD2	Matrix Spike Dup	QC		8		K010831	02/22/2023 03:55	NT1423022125.D	DSD	
23A0100-23RE1	LDW23-SS1130	(20ug/kg solid or 0.2ug/L l	A 04	9		K010831	02/22/2023 04:31	NT1423022126.D	DSD	Added 2/18/2023 by DSD
23A0171-01RE1	LDW23-SS1254	(20ug/kg solid or 0.2ug/L l	A 03	10		K010831	02/22/2023 05:07	NT1423022127.D	DSD	Added 2/18/2023 by DSD
23A0171-03RE1	LDW23-SS1262	(20ug/kg solid or 0.2ug/L l	A 03	11		K010831	02/22/2023 05:43	NT1423022128.D	DSD	Added 2/18/2023 by DSD
23A0171-04RE1	LDW23-SS1245	(20ug/kg solid or 0.2ug/L l	A 03	12		K010831	02/22/2023 06:19	NT1423022129.D	DSD	Added 2/18/2023 by DSD
SLB0291-CCV1	Calibration Check	QC		13	K011109	K010831	02/22/2023 06:55	NT1423022130.D	DSD	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230221A.b

	Time	Filename	LabID	ClientId	DF																			
1	1306	NT1423022101.D	SLB0291-TUN1		1	|NO ISTDS FOUND||																		
2	2306	NT1423022117.D	SLB0291-ICV1		1	| 8.57	247721	||11.04	862325	||14.65	519526	||17.68	1059882	||22.77	930840	||25.22	746835	||23.84	1343425	|				
3	2342	NT1423022118.D	SLB0291-LCV1		1	| 8.57	250126	||11.04	851316	||14.65	507249	||17.67	1030253	||22.76	881563	||25.21	707350	||23.83	1271706	|				
4	0018	NT1423022119.D	SIM-ICV2		1	| 8.57	255370	||11.04	874350	||14.65	524104	||17.67	1068597	||22.77	919444	||25.21	733608	||23.84	1306124	|				
5	0054	NT1423022120.D	SIM-LCV2		1	| 8.57	240691	||11.04	889413	||14.65	531066	||17.67	1105344	||22.76	925526	||25.21	732675	||23.84	1296604	|				
6	0130	NT1423022121.D	SLB0291-ICB1		1	| 8.57	256724	||11.04	882018	||14.65	521833	||17.67	1063889	||22.76	891123	||25.21	705852	||23.84	1214552	|				
7	0206	NT1423022122.D	23A0100-21RE1		1	| 8.57	309468	||11.03	1136721	||14.65	667429	||17.67	1377941	||22.77	962955	||25.22	729869	||23.84	1365684	|				
8	0243	NT1423022123.D	23A0100-22RE1		1	| 8.57	297953	||11.03	1088400	||14.64	642646	||17.67	1313373	||22.77	1080191	||25.22	802211	||23.84	1662803	|				
9	0319	NT1423022124.D	BLA0339-MS2		1	| 8.57	296929	||11.04	1093654	||14.65	662224	||17.68	1350125	||22.77	1118835	||25.22	822808	||23.84	1692868	|				
10	0355	NT1423022125.D	BLA0339-MSD2		1	| 8.57	297612	||11.04	1097765	||14.65	660901	||17.67	1336360	||22.77	1114435	||25.22	838779	||23.84	1685369	|				
11	0431	NT1423022126.D	23A0100-23RE1		1	| 8.57	305542	||11.04	1118383	||14.65	657376	||17.68	1339025	||22.77	955219	||25.22	701800	||23.84	1403013	|				
12	0507	NT1423022127.D	23A0171-01RE1		1	| 8.57	328442	||11.04	1123613	||14.65	668055	||17.68	1356225	||22.78	892448	||25.23	667405	||23.85	1283143	|				
13	0543	NT1423022128.D	23A0171-03RE1		1	| 8.57	301656	||11.04	1126744	||14.65	665841	||17.68	1357380	||22.78	856411	||25.23	663661	||23.85	1213206	|				
14	0619	NT1423022129.D	23A0171-04RE1		1	| 8.57	307330	||11.04	1136818	||14.65	675404	||17.68	1364570	||22.78	856924	||25.22	660217	||23.84	1287157	|				
15	0655	NT1423022130.D	SLB0291-CCV1		1	| 8.57	235125	||11.04	883104	||14.65	537789	||17.68	1079531	||22.77	826409	||25.22	590325	||23.84	1339562	|				

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230221A.b

ARI Job No.: SLB0 Method: DFTPP8270E.m Instrument: nt14.i Date: 21-FEB-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1306	NT1423022101.D	SLB0291-TUN1		1	NO MANUAL INTEGRATION
2306	NT1423022117.D	SLB0291-ICV1		1	2,2'-oxybis(1-Chloropropane),
2342	NT1423022118.D	SLB0291-LCV1		1	2,2'-oxybis(1-Chloropropane),
0018	NT1423022119.D	SIM-ICV2		1	NO MANUAL INTEGRATION
0054	NT1423022120.D	SIM-LCV2		1	NO MANUAL INTEGRATION
0130	NT1423022121.D	SLB0291-ICB1		1	1,4-Dichlorobenzene,
0206	NT1423022122.D	23A0100-21RE1		1	NO MANUAL INTEGRATION
0243	NT1423022123.D	23A0100-22RE1		1	NO MANUAL INTEGRATION
0319	NT1423022124.D	BLA0339-MS2		1	NO MANUAL INTEGRATION
0355	NT1423022125.D	BLA0339-MSD2		1	NO MANUAL INTEGRATION
0431	NT1423022126.D	23A0100-23RE1		1	NO MANUAL INTEGRATION
0507	NT1423022127.D	23A0171-01RE1		1	1,4-Dichlorobenzene, Acenaphthylene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene,
0543	NT1423022128.D	23A0171-03RE1		1	Benzo(k)fluoranthene, Dibenzo(a,h)anthracene,
0619	NT1423022129.D	23A0171-04RE1		1	Acenaphthylene, Dibenzo(a,h)anthracene,
0655	NT1423022130.D	SLB0291-CCV1		1	2,2'-oxybis(1-Chloropropane),

Security Status Report

Date: 01-Mar-2023 13:12

NT1423022101.D	Data Locked	deenayd, 01-
NT1423022117.D	Data Locked	deenayd, 01-
NT1423022118.D	Data Locked	deenayd, 01-
NT1423022119.D	Data Locked	deenayd, 01-
NT1423022120.D	Data Locked	deenayd, 01-
NT1423022121.D	Data Locked	deenayd, 01-
NT1423022122.D	Data Locked	deenayd, 01-
NT1423022123.D	Data Locked	deenayd, 01-
NT1423022124.D	Data Locked	deenayd, 01-
NT1423022125.D	Data Locked	deenayd, 01-
NT1423022126.D	Data Locked	deenayd, 01-
NT1423022127.D	Data Locked	deenayd, 01-
NT1423022128.D	Data Locked	deenayd, 01-
NT1423022129.D	Data Locked	deenayd, 01-
NT1423022130.D	Data Locked	deenayd, 01-

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLB0234
Instrument: NT14
Calibration: GB00046
Calibration Date: 02/16/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLB0234-SCV1 (Water)			Lab File ID: NT1423021613.D			Analyzed: 02/16/23 21:18		
2-Fluorophenol	7.5000	112	80 - 120	6.674	6.676143	-0.0021	N/A	
Phenol-d5	7.5000	107	80 - 120	8.266	8.270143	-0.0041	N/A	
2-Chlorophenol-d4	7.5000	104	80 - 120	8.536	8.538143	-0.0021	N/A	
1,2-Dichlorobenzene-d4	5.0000	99.7	80 - 120	9.264	9.26	0.0040	N/A	
Nitrobenzene-d5	5.0000	104	80 - 120	10.002	10.00286	-0.0009	N/A	
2-Fluorobiphenyl	5.0000	97.4	80 - 120	13.625	13.62286	0.0021	N/A	
2,4,6-Tribromophenol	7.5000	95.2	80 - 120	16.663	16.66314	-0.0001	N/A	
p-Terphenyl-d14	5.0000	94.6	80 - 120	21.219	21.21986	-0.0009	N/A	
SLB0234-ICB1 (Water)			Lab File ID: NT1423021618.D			Analyzed: 02/17/23 00:17		
2-Fluorophenol	7.5000	117	30 - 160	6.674	6.676143	-0.0021	N/A	
Phenol-d5	7.5000	109	30 - 160	8.266	8.270143	-0.0041	N/A	
2-Chlorophenol-d4	7.5000	111	30 - 160	8.536	8.538143	-0.0021	N/A	
1,2-Dichlorobenzene-d4	5.0000	109	30 - 160	9.257	9.26	-0.0030	N/A	
Nitrobenzene-d5	5.0000	113	30 - 160	10.002	10.00286	-0.0009	N/A	
2-Fluorobiphenyl	5.0000	113	30 - 160	13.617	13.62286	-0.0059	N/A	
2,4,6-Tribromophenol	7.5000	77.2	30 - 160	16.656	16.66314	-0.0071	N/A	
p-Terphenyl-d14	5.0000	118	30 - 160	21.219	21.21986	-0.0009	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0251	Instrument:	NT14
Calibration:	GB00046	Calibration Date:	02/16/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLB0251-ICV1 (Solid)			Lab File ID: NT1423021717X.D			Analyzed: 02/17/23 20:19		
2-Fluorophenol	7.5000	107	80 - 120	6.674	6.676143	-0.0021	N/A	
Phenol-d5	7.5000	100	80 - 120	8.273	8.270143	0.0029	N/A	
2-Chlorophenol-d4	7.5000	101	80 - 120	8.536	8.538143	-0.0021	N/A	
1,2-Dichlorobenzene-d4	5.0000	95.3	80 - 120	9.264	9.26	0.0040	N/A	
Nitrobenzene-d5	5.0000	95.3	80 - 120	10.002	10.00286	-0.0009	N/A	
2-Fluorobiphenyl	5.0000	96.2	80 - 120	13.625	13.62286	0.0021	N/A	
2,4,6-Tribromophenol	7.5000	106	80 - 120	16.663	16.66314	-0.0001	N/A	
p-Terphenyl-d14	5.0000	113	80 - 120	21.218	21.21986	-0.0019	N/A	
SLB0251-LCV1 (Solid)			Lab File ID: NT1423021718.D			Analyzed: 02/17/23 20:55		
2-Fluorophenol	0.75000	92.3	50 - 150	6.681	6.676143	0.0049	N/A	
Phenol-d5	0.75000	92.8	50 - 150	8.266	8.270143	-0.0041	N/A	
2-Chlorophenol-d4	0.75000	100	50 - 150	8.536	8.538143	-0.0021	N/A	
1,2-Dichlorobenzene-d4	0.50000	97.8	50 - 150	9.257	9.26	-0.0030	N/A	
Nitrobenzene-d5	0.50000	95.9	50 - 150	10.002	10.00286	-0.0009	N/A	
2-Fluorobiphenyl	0.50000	101	50 - 150	13.625	13.62286	0.0021	N/A	
2,4,6-Tribromophenol	0.75000	79.2	50 - 150	16.663	16.66314	-0.0001	N/A	
p-Terphenyl-d14	0.50000	125	50 - 150	21.219	21.21986	-0.0009	N/A	
BLA0339-BLK1 (Solid)			Lab File ID: NT1423021721.D			Analyzed: 02/17/23 22:43		
2-Fluorophenol	750.00	52.2	27 - 120	6.682	6.676143	0.0059	N/A	
Phenol-d5	750.00	49.6	29 - 120	8.266	8.270143	-0.0041	N/A	
2-Chlorophenol-d4	750.00	55.9	31 - 120	8.536	8.538143	-0.0021	N/A	
1,2-Dichlorobenzene-d4	500.00	54.3	32 - 120	9.257	9.26	-0.0030	N/A	
Nitrobenzene-d5	500.00	56.7	30 - 120	10.002	10.00286	-0.0009	N/A	
2-Fluorobiphenyl	500.00	59.9	35 - 120	13.618	13.62286	-0.0049	N/A	
2,4,6-Tribromophenol	750.00	38.4	24 - 134	16.663	16.66314	-0.0001	N/A	
p-Terphenyl-d14	500.00	84.2	37 - 120	21.219	21.21986	-0.0009	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0251	Instrument:	NT14
Calibration:	GB00046	Calibration Date:	02/16/2023

Surrogate Compound	Spike Level ug/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
BLA0339-BS1 (Solid)			Lab File ID: NT1423021722.D			Analyzed: 02/17/23 23:19		
2-Fluorophenol	750.00	73.9	27 - 120	6.697	6.676143	0.0209	N/A	
Phenol-d5	750.00	71.6	29 - 120	8.266	8.270143	-0.0041	N/A	
2-Chlorophenol-d4	750.00	71.3	31 - 120	8.536	8.538143	-0.0021	N/A	
1,2-Dichlorobenzene-d4	500.00	64.8	32 - 120	9.257	9.26	-0.0030	N/A	
Nitrobenzene-d5	500.00	69.8	30 - 120	9.994	10.00286	-0.0089	N/A	
2-Fluorobiphenyl	500.00	73.4	35 - 120	13.625	13.62286	0.0021	N/A	
2,4,6-Tribromophenol	750.00	75.0	24 - 134	16.663	16.66314	-0.0001	N/A	
p-Terphenyl-d14	500.00	100	37 - 120	21.219	21.21986	-0.0009	N/A	
BLA0339-BSD1 (Solid)			Lab File ID: NT1423021723.D			Analyzed: 02/17/23 23:55		
2-Fluorophenol	750.00	78.1	27 - 120	6.689	6.676143	0.0129	N/A	
Phenol-d5	750.00	73.5	29 - 120	8.273	8.270143	0.0029	N/A	
2-Chlorophenol-d4	750.00	73.8	31 - 120	8.536	8.538143	-0.0021	N/A	
1,2-Dichlorobenzene-d4	500.00	66.9	32 - 120	9.257	9.26	-0.0030	N/A	
Nitrobenzene-d5	500.00	70.9	30 - 120	10.002	10.00286	-0.0009	N/A	
2-Fluorobiphenyl	500.00	75.5	35 - 120	13.625	13.62286	0.0021	N/A	
2,4,6-Tribromophenol	750.00	81.4	24 - 134	16.663	16.66314	-0.0001	N/A	
p-Terphenyl-d14	500.00	101	37 - 120	21.219	21.21986	-0.0009	N/A	
BLA0339-SRM1 (Solid)			Lab File ID: NT1423021724.D			Analyzed: 02/18/23 00:30		
2-Fluorophenol	7500.0	78.4	27 - 120	6.705	6.676143	0.0289	N/A	
Phenol-d5	7500.0	72.4	29 - 120	8.273	8.270143	0.0029	N/A	
2-Chlorophenol-d4	7500.0	73.8	31 - 120	8.536	8.538143	-0.0021	N/A	
1,2-Dichlorobenzene-d4	5000.0	65.6	32 - 120	9.257	9.26	-0.0030	N/A	
Nitrobenzene-d5	5000.0	70.9	30 - 120	10.002	10.00286	-0.0009	N/A	
2-Fluorobiphenyl	5000.0	76.1	35 - 120	13.625	13.62286	0.0021	N/A	
2,4,6-Tribromophenol	7500.0	81.6	24 - 134	16.663	16.66314	-0.0001	N/A	
p-Terphenyl-d14	5000.0	102	37 - 120	21.219	21.21986	-0.0009	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLB0251
Instrument: NT14
Calibration: GB00046
Calibration Date: 02/16/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0171-01 (Solid)			Lab File ID: NT1423021730.D			Analyzed: 02/18/23 04:06		
2-Fluorophenol	735.76	69.5	27 - 120	6.697	6.676143	0.0209	N/A	
Phenol-d5	735.76	65.2	29 - 120	8.281	8.270143	0.0109	N/A	
2-Chlorophenol-d4	735.76	67.7	31 - 120	8.544	8.538143	0.0059	N/A	
1,2-Dichlorobenzene-d4	490.51	59.0	32 - 120	9.264	9.26	0.0040	N/A	
Nitrobenzene-d5	490.51	65.4	30 - 120	10.002	10.00286	-0.0009	N/A	
2-Fluorobiphenyl	490.51	75.2	35 - 120	13.625	13.62286	0.0021	N/A	
2,4,6-Tribromophenol	735.76	72.3	24 - 134	16.663	16.66314	-0.0001	N/A	
p-Terphenyl-d14	490.51	81.4	37 - 120	21.226	21.21986	0.0061	N/A	
23A0171-02 (Solid)			Lab File ID: NT1423021731.D			Analyzed: 02/18/23 04:42		
2-Fluorophenol	737.67	78.9	27 - 120	6.705	6.676143	0.0289	N/A	
Phenol-d5	737.67	71.0	29 - 120	8.273	8.270143	0.0029	N/A	
2-Chlorophenol-d4	737.67	74.5	31 - 120	8.544	8.538143	0.0059	N/A	
1,2-Dichlorobenzene-d4	491.78	66.7	32 - 120	9.264	9.26	0.0040	N/A	
Nitrobenzene-d5	491.78	71.2	30 - 120	10.002	10.00286	-0.0009	N/A	
2-Fluorobiphenyl	491.78	76.0	35 - 120	13.625	13.62286	0.0021	N/A	
2,4,6-Tribromophenol	737.67	75.9	24 - 134	16.663	16.66314	-0.0001	N/A	
p-Terphenyl-d14	491.78	106	37 - 120	21.219	21.21986	-0.0009	N/A	
23A0171-03 (Solid)			Lab File ID: NT1423021732.D			Analyzed: 02/18/23 05:18		
2-Fluorophenol	740.25	74.0	27 - 120	6.705	6.676143	0.0289	N/A	
Phenol-d5	740.25	67.7	29 - 120	8.281	8.270143	0.0109	N/A	
2-Chlorophenol-d4	740.25	70.3	31 - 120	8.544	8.538143	0.0059	N/A	
1,2-Dichlorobenzene-d4	493.50	60.1	32 - 120	9.265	9.26	0.0050	N/A	
Nitrobenzene-d5	493.50	66.5	30 - 120	10.002	10.00286	-0.0009	N/A	
2-Fluorobiphenyl	493.50	74.6	35 - 120	13.625	13.62286	0.0021	N/A	
2,4,6-Tribromophenol	740.25	70.5	24 - 134	16.663	16.66314	-0.0001	N/A	
p-Terphenyl-d14	493.50	78.4	37 - 120	21.227	21.21986	0.0071	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0251	Instrument:	NT14
Calibration:	GB00046	Calibration Date:	02/16/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0171-04 (Solid)			Lab File ID: NT1423021733.D			Analyzed: 02/18/23 05:54		
2-Fluorophenol	741.17	75.8	27 - 120	6.705	6.676143	0.0289	N/A	
Phenol-d5	741.17	69.2	29 - 120	8.281	8.270143	0.0109	N/A	
2-Chlorophenol-d4	741.17	71.7	31 - 120	8.544	8.538143	0.0059	N/A	
1,2-Dichlorobenzene-d4	494.11	62.7	32 - 120	9.265	9.26	0.0050	N/A	
Nitrobenzene-d5	494.11	68.6	30 - 120	10.002	10.00286	-0.0009	N/A	
2-Fluorobiphenyl	494.11	75.1	35 - 120	13.625	13.62286	0.0021	N/A	
2,4,6-Tribromophenol	741.17	76.6	24 - 134	16.663	16.66314	-0.0001	N/A	
p-Terphenyl-d14	494.11	86.9	37 - 120	21.227	21.21986	0.0071	N/A	
SLB0251-CCV1 (Solid)			Lab File ID: NT1423021734.D			Analyzed: 02/18/23 06:30		
2-Fluorophenol	7.5000	106	50 - 150	6.681	6.676143	0.0049	N/A	
Phenol-d5	7.5000	99.0	50 - 150	8.281	8.270143	0.0109	N/A	
2-Chlorophenol-d4	7.5000	101	50 - 150	8.544	8.538143	0.0059	N/A	
1,2-Dichlorobenzene-d4	5.0000	95.0	50 - 150	9.264	9.26	0.0040	N/A	
Nitrobenzene-d5	5.0000	96.5	50 - 150	10.01	10.00286	0.0071	N/A	
2-Fluorobiphenyl	5.0000	97.9	50 - 150	13.633	13.62286	0.0101	N/A	
2,4,6-Tribromophenol	7.5000	94.9	50 - 150	16.671	16.66314	0.0079	N/A	
p-Terphenyl-d14	5.0000	121	50 - 150	21.226	21.21986	0.0061	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0291	Instrument:	NT14
Calibration:	GB00046	Calibration Date:	02/16/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLB0291-ICV1 (Solid)			Lab File ID: NT1423022117Z.D			Analyzed: 02/21/23 23:06		
2-Fluorophenol	7.5000	103	80 - 120	6.373	6.676143	-0.3031	N/A	
Phenol-d5	7.5000	99.2	80 - 120	7.965	8.270143	-0.3051	N/A	
2-Chlorophenol-d4	7.5000	95.9	80 - 120	8.212	8.538143	-0.3261	N/A	
1,2-Dichlorobenzene-d4	5.0000	90.1	80 - 120	8.925	9.26	-0.3350	N/A	
Nitrobenzene-d5	5.0000	104	80 - 120	9.662	10.00286	-0.3409	N/A	
2-Fluorobiphenyl	5.0000	101	80 - 120	13.27	13.62286	-0.3529	N/A	
2,4,6-Tribromophenol	7.5000	86.4	80 - 120	16.285	16.66314	-0.3781	N/A	
p-Terphenyl-d14	5.0000	83.3	80 - 120	20.864	21.21986	-0.3559	N/A	
SLB0291-LCV1 (Solid)			Lab File ID: NT1423022118.D			Analyzed: 02/21/23 23:42		
2-Fluorophenol	0.75000	85.3	50 - 150	6.38	6.676143	-0.2961	N/A	
Phenol-d5	0.75000	101	50 - 150	7.965	8.270143	-0.3051	N/A	
2-Chlorophenol-d4	0.75000	98.9	50 - 150	8.212	8.538143	-0.3261	N/A	
1,2-Dichlorobenzene-d4	0.50000	101	50 - 150	8.925	9.26	-0.3350	N/A	
Nitrobenzene-d5	0.50000	111	50 - 150	9.662	10.00286	-0.3409	N/A	
2-Fluorobiphenyl	0.50000	115	50 - 150	13.27	13.62286	-0.3529	N/A	
2,4,6-Tribromophenol	0.75000	67.5	50 - 150	16.285	16.66314	-0.3781	N/A	
p-Terphenyl-d14	0.50000	103	50 - 150	20.864	21.21986	-0.3559	N/A	
23A0171-01RE1 (Solid)			Lab File ID: NT1423022127.D			Analyzed: 02/22/23 05:07		
2-Fluorophenol	735.76	66.1	27 - 120	6.396	6.676143	-0.2801	N/A	
Phenol-d5	735.76	62.7	29 - 120	7.972	8.270143	-0.2981	N/A	
2-Chlorophenol-d4	735.76	64.0	31 - 120	8.212	8.538143	-0.3261	N/A	
1,2-Dichlorobenzene-d4	490.51	55.3	32 - 120	8.925	9.26	-0.3350	N/A	
Nitrobenzene-d5	490.51	67.7	30 - 120	9.662	10.00286	-0.3409	N/A	
2-Fluorobiphenyl	490.51	72.2	35 - 120	13.27	13.62286	-0.3529	N/A	
2,4,6-Tribromophenol	735.76	79.4	24 - 134	16.293	16.66314	-0.3701	N/A	
p-Terphenyl-d14	490.51	85.9	37 - 120	20.88	21.21986	-0.3399	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0291	Instrument:	NT14
Calibration:	GB00046	Calibration Date:	02/16/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0171-03RE1 (Solid)			Lab File ID: NT1423022128.D			Analyzed: 02/22/23 05:43		
2-Fluorophenol	740.25	75.6	27 - 120	6.404	6.676143	-0.2721	N/A	
Phenol-d5	740.25	70.0	29 - 120	7.972	8.270143	-0.2981	N/A	
2-Chlorophenol-d4	740.25	76.8	31 - 120	8.212	8.538143	-0.3261	N/A	
1,2-Dichlorobenzene-d4	493.50	60.5	32 - 120	8.925	9.26	-0.3350	N/A	
Nitrobenzene-d5	493.50	68.3	30 - 120	9.662	10.00286	-0.3409	N/A	
2-Fluorobiphenyl	493.50	71.6	35 - 120	13.27	13.62286	-0.3529	N/A	
2,4,6-Tribromophenol	740.25	79.2	24 - 134	16.285	16.66314	-0.3781	N/A	
p-Terphenyl-d14	493.50	85.1	37 - 120	20.879	21.21986	-0.3409	N/A	
23A0171-04RE1 (Solid)			Lab File ID: NT1423022129.D			Analyzed: 02/22/23 06:19		
2-Fluorophenol	741.17	77.0	27 - 120	6.404	6.676143	-0.2721	N/A	
Phenol-d5	741.17	71.3	29 - 120	7.98	8.270143	-0.2901	N/A	
2-Chlorophenol-d4	741.17	72.6	31 - 120	8.219	8.538143	-0.3191	N/A	
1,2-Dichlorobenzene-d4	494.11	62.7	32 - 120	8.925	9.26	-0.3350	N/A	
Nitrobenzene-d5	494.11	71.3	30 - 120	9.662	10.00286	-0.3409	N/A	
2-Fluorobiphenyl	494.11	73.4	35 - 120	13.27	13.62286	-0.3529	N/A	
2,4,6-Tribromophenol	741.17	74.8	24 - 134	16.293	16.66314	-0.3701	N/A	
p-Terphenyl-d14	494.11	87.2	37 - 120	20.879	21.21986	-0.3409	N/A	
SLB0291-CCV1 (Solid)			Lab File ID: NT1423022130.D			Analyzed: 02/22/23 06:55		
2-Fluorophenol	7.5000	110	50 - 150	6.373	6.676143	-0.3031	N/A	
Phenol-d5	7.5000	104	50 - 150	7.965	8.270143	-0.3051	N/A	
2-Chlorophenol-d4	7.5000	103	50 - 150	8.212	8.538143	-0.3261	N/A	
1,2-Dichlorobenzene-d4	5.0000	97.4	50 - 150	8.925	9.26	-0.3350	N/A	
Nitrobenzene-d5	5.0000	103	50 - 150	9.662	10.00286	-0.3409	N/A	
2-Fluorobiphenyl	5.0000	100	50 - 150	13.27	13.62286	-0.3529	N/A	
2,4,6-Tribromophenol	7.5000	98.6	50 - 150	16.293	16.66314	-0.3701	N/A	
p-Terphenyl-d14	5.0000	95.1	50 - 150	20.872	21.21986	-0.3479	N/A	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0234	Instrument:	NT14
		Calibration:	GB00046

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Secondary Cal Check (SLB0234-SCV1)		(Water)		Lab File ID: NT1423021613.D				Analyzed: 02/16/23 21:18	
1,4-Dichlorobenzene-d4	362894	8.9	375798	8.9	97	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1343351	11.397	1378169	11.397	97	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	854455	15.018	847135	15.018	101	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1630237	18.054	1675180	18.054	97	50 - 200	0.000	+/-0.50	
Chrysene-d12	1112056	23.123	1073562	23.123	104	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1298332	24.153	1344129	24.153	97	50 - 200	0.000	+/-0.50	
Perylene-d12	733476	25.686	721978	25.686	102	50 - 200	0.000	+/-0.50	
Initial Cal Blank (SLB0234-ICB1)		(Water)		Lab File ID: NT1423021618.D				Analyzed: 02/17/23 00:17	
1,4-Dichlorobenzene-d4	274788	8.9	375798	8.9	73	50 - 200	0.000	+/-0.50	
Naphthalene-d8	975858	11.389	1378169	11.397	71	50 - 200	-0.008	+/-0.50	
Acenaphthene-d10	576816	15.01	847135	15.018	68	50 - 200	-0.008	+/-0.50	
Phenanthrene-d10	1140272	18.054	1675180	18.054	68	50 - 200	0.000	+/-0.50	
Chrysene-d12	714655	23.116	1073562	23.123	67	50 - 200	-0.007	+/-0.50	
Di-n-Octylphthalate-d4	689415	24.153	1344129	24.153	51	50 - 200	0.000	+/-0.50	
Perylene-d12	466173	25.686	721978	25.686	65	50 - 200	0.000	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0251	Instrument:	NT14
		Calibration:	GB00046

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLB0251-ICV1)		(Solid)	Lab File ID: NT1423021717X.D				Analyzed: 02/17/23 20:19		
1,4-Dichlorobenzene-d4	351756	8.9	351756	8.9	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1299383	11.397	1299383	11.397	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	808045	15.018	808045	15.018	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1607740	18.062	1607740	18.062	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	876381	23.123	876381	23.123	100	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1545452	24.153	1545452	24.153	100	50 - 200	0.000	+/-0.50	
Perylene-d12	639717	25.694	639717	25.694	100	50 - 200	0.000	+/-0.50	
Low Cal Check (SLB0251-LCV1)		(Solid)	Lab File ID: NT1423021718.D				Analyzed: 02/17/23 20:55		
1,4-Dichlorobenzene-d4	375988	8.9	351756	8.9	107	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1381913	11.389	1299383	11.397	106	50 - 200	-0.008	+/-0.50	
Acenaphthene-d10	829496	15.018	808045	15.018	103	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1629266	18.054	1607740	18.062	101	50 - 200	-0.008	+/-0.50	
Chrysene-d12	858908	23.123	876381	23.123	98	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1443314	24.153	1545452	24.153	93	50 - 200	0.000	+/-0.50	
Perylene-d12	614473	25.686	639717	25.694	96	50 - 200	-0.008	+/-0.50	
Blank (BLA0339-BLK1)		(Solid)	Lab File ID: NT1423021721.D				Analyzed: 02/17/23 22:43		
1,4-Dichlorobenzene-d4	295499	8.9	351756	8.9	84	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1074132	11.39	1299383	11.397	83	50 - 200	-0.007	+/-0.50	
Acenaphthene-d10	626355	15.018	808045	15.018	78	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1201624	18.054	1607740	18.062	75	50 - 200	-0.008	+/-0.50	
Chrysene-d12	605674	23.124	876381	23.123	69	50 - 200	0.001	+/-0.50	
Di-n-Octylphthalate-d4	1023141	24.153	1545452	24.153	66	50 - 200	0.000	+/-0.50	
Perylene-d12	412528	25.686	639717	25.694	64	50 - 200	-0.008	+/-0.50	
LCS (BLA0339-BS1)		(Solid)	Lab File ID: NT1423021722.D				Analyzed: 02/17/23 23:19		
1,4-Dichlorobenzene-d4	283915	8.9	351756	8.9	81	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1030366	11.39	1299383	11.397	79	50 - 200	-0.007	+/-0.50	
Acenaphthene-d10	626282	15.018	808045	15.018	78	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1212335	18.054	1607740	18.062	75	50 - 200	-0.008	+/-0.50	
Chrysene-d12	624229	23.124	876381	23.123	71	50 - 200	0.001	+/-0.50	
Di-n-Octylphthalate-d4	1079392	24.153	1545452	24.153	70	50 - 200	0.000	+/-0.50	
Perylene-d12	444728	25.686	639717	25.694	70	50 - 200	-0.008	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0251	Instrument:	NT14
		Calibration:	GB00046

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS Dup (BLA0339-BSD1)		(Solid)	Lab File ID: NT1423021723.D				Analyzed: 02/17/23 23:55		
1,4-Dichlorobenzene-d4	280695	8.9	351756	8.9	80	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1026678	11.389	1299383	11.397	79	50 - 200	-0.008	+/-0.50	
Acenaphthene-d10	618128	15.018	808045	15.018	76	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1197444	18.054	1607740	18.062	74	50 - 200	-0.008	+/-0.50	
Chrysene-d12	632854	23.123	876381	23.123	72	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1086422	24.153	1545452	24.153	70	50 - 200	0.000	+/-0.50	
Perylene-d12	440715	25.694	639717	25.694	69	50 - 200	0.000	+/-0.50	
Reference (BLA0339-SRM1)		(Solid)	Lab File ID: NT1423021724.D				Analyzed: 02/18/23 00:30		
1,4-Dichlorobenzene-d4	292457	8.9	351756	8.9	83	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1035181	11.389	1299383	11.397	80	50 - 200	-0.008	+/-0.50	
Acenaphthene-d10	619575	15.018	808045	15.018	77	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1225906	18.054	1607740	18.062	76	50 - 200	-0.008	+/-0.50	
Chrysene-d12	620134	23.123	876381	23.123	71	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1100064	24.153	1545452	24.153	71	50 - 200	0.000	+/-0.50	
Perylene-d12	453579	25.686	639717	25.694	71	50 - 200	-0.008	+/-0.50	
LDW23-SS1254 (23A0171-01)		(Solid)	Lab File ID: NT1423021730.D				Analyzed: 02/18/23 04:06		
1,4-Dichlorobenzene-d4	289436	8.9	351756	8.9	82	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1032547	11.397	1299383	11.397	79	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	597209	15.018	808045	15.018	74	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	995420	18.062	1607740	18.062	62	50 - 200	0.000	+/-0.50	
Chrysene-d12	474035	23.131	876381	23.123	54	50 - 200	0.008	+/-0.50	
Di-n-Octylphthalate-d4	686890	24.161	1545452	24.153	44	50 - 200	0.008	+/-0.50	*
Perylene-d12	432041	25.701	639717	25.694	68	50 - 200	0.007	+/-0.50	
LDW23-SS1257 (23A0171-02)		(Solid)	Lab File ID: NT1423021731.D				Analyzed: 02/18/23 04:42		
1,4-Dichlorobenzene-d4	283844	8.9	351756	8.9	81	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1038171	11.397	1299383	11.397	80	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	612966	15.018	808045	15.018	76	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1153670	18.062	1607740	18.062	72	50 - 200	0.000	+/-0.50	
Chrysene-d12	488337	23.123	876381	23.123	56	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	830512	24.153	1545452	24.153	54	50 - 200	0.000	+/-0.50	
Perylene-d12	424759	25.694	639717	25.694	66	50 - 200	0.000	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0251	Instrument:	NT14
		Calibration:	GB00046

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SS1262 (23A0171-03)		(Solid)		Lab File ID: NT1423021732.D				Analyzed: 02/18/23 05:18	
1,4-Dichlorobenzene-d4	285295	8.9	351756	8.9	81	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1036434	11.397	1299383	11.397	80	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	589233	15.018	808045	15.018	73	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	967672	18.062	1607740	18.062	60	50 - 200	0.000	+/-0.50	
Chrysene-d12	455036	23.131	876381	23.123	52	50 - 200	0.008	+/-0.50	
Di-n-Octylphthalate-d4	647250	24.161	1545452	24.153	42	50 - 200	0.008	+/-0.50	*
Perylene-d12	411263	25.702	639717	25.694	64	50 - 200	0.008	+/-0.50	
LDW23-SS1245 (23A0171-04)		(Solid)		Lab File ID: NT1423021733.D				Analyzed: 02/18/23 05:54	
1,4-Dichlorobenzene-d4	290048	8.9	351756	8.9	82	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1050990	11.397	1299383	11.397	81	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	610722	15.026	808045	15.018	76	50 - 200	0.008	+/-0.50	
Phenanthrene-d10	1063529	18.062	1607740	18.062	66	50 - 200	0.000	+/-0.50	
Chrysene-d12	458901	23.131	876381	23.123	52	50 - 200	0.008	+/-0.50	
Di-n-Octylphthalate-d4	668073	24.161	1545452	24.153	43	50 - 200	0.008	+/-0.50	*
Perylene-d12	413471	25.702	639717	25.694	65	50 - 200	0.008	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0291	Instrument:	NT14
		Calibration:	GB00046

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLB0291-ICV1)		(Solid)	Lab File ID: NT1423022117Z.D				Analyzed: 02/21/23 23:06		
1,4-Dichlorobenzene-d4	247721	8.568	247721	8.568	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	862325	11.042	862325	11.042	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	519526	14.648	519526	14.648	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1059882	17.676	1059882	17.676	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	930840	22.769	930840	22.769	100	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1343425	23.837	1343425	23.837	100	50 - 200	0.000	+/-0.50	
Perylene-d12	746835	25.215	746835	25.215	100	50 - 200	0.000	+/-0.50	
Low Cal Check (SLB0291-LCV1)		(Solid)	Lab File ID: NT1423022118.D				Analyzed: 02/21/23 23:42		
1,4-Dichlorobenzene-d4	250126	8.568	247721	8.568	101	50 - 200	0.000	+/-0.50	
Naphthalene-d8	851316	11.042	862325	11.042	99	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	507249	14.648	519526	14.648	98	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1030253	17.668	1059882	17.676	97	50 - 200	-0.008	+/-0.50	
Chrysene-d12	881563	22.761	930840	22.769	95	50 - 200	-0.008	+/-0.50	
Di-n-Octylphthalate-d4	1271706	23.829	1343425	23.837	95	50 - 200	-0.008	+/-0.50	
Perylene-d12	707350	25.207	746835	25.215	95	50 - 200	-0.008	+/-0.50	
LDW23-SS1254 (23A0171-01RE1)		(Solid)	Lab File ID: NT1423022127.D				Analyzed: 02/22/23 05:07		
1,4-Dichlorobenzene-d4	328442	8.568	247721	8.568	133	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1123613	11.042	862325	11.042	130	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	668055	14.648	519526	14.648	129	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1356225	17.676	1059882	17.676	128	50 - 200	0.000	+/-0.50	
Chrysene-d12	892448	22.777	930840	22.769	96	50 - 200	0.008	+/-0.50	
Di-n-Octylphthalate-d4	1283143	23.845	1343425	23.837	96	50 - 200	0.008	+/-0.50	
Perylene-d12	667405	25.231	746835	25.215	89	50 - 200	0.016	+/-0.50	
LDW23-SS1262 (23A0171-03RE1)		(Solid)	Lab File ID: NT1423022128.D				Analyzed: 02/22/23 05:43		
1,4-Dichlorobenzene-d4	301656	8.568	247721	8.568	122	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1126744	11.042	862325	11.042	131	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	665841	14.648	519526	14.648	128	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1357380	17.676	1059882	17.676	128	50 - 200	0.000	+/-0.50	
Chrysene-d12	856411	22.776	930840	22.769	92	50 - 200	0.007	+/-0.50	
Di-n-Octylphthalate-d4	1213206	23.845	1343425	23.837	90	50 - 200	0.008	+/-0.50	
Perylene-d12	663661	25.231	746835	25.215	89	50 - 200	0.016	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0291	Instrument:	NT14
		Calibration:	GB00046

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SS1245 (23A0171-04RE1)		(Solid)		Lab File ID: NT1423022129.D				Analyzed: 02/22/23 06:19	
1,4-Dichlorobenzene-d4	307330	8.568	247721	8.568	124	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1136818	11.042	862325	11.042	132	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	675404	14.648	519526	14.648	130	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1364570	17.676	1059882	17.676	129	50 - 200	0.000	+/-0.50	
Chrysene-d12	856924	22.776	930840	22.769	92	50 - 200	0.007	+/-0.50	
Di-n-Octylphthalate-d4	1287157	23.837	1343425	23.837	96	50 - 200	0.000	+/-0.50	
Perylene-d12	660217	25.223	746835	25.215	88	50 - 200	0.008	+/-0.50	

HOLDING TIME SUMMARY

Analysis: EPA 8270E

Laboratory: Analytical Resources, LLC SDG: 23A0171

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

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1254 23A0171-01	12/08/22 08:39	12/08/22 17:18	01/18/23 13:47	41	365	02/18/23 04:06	31	40	
LDW23-SS1254 23A0171-01RE1	12/08/22 08:39	12/08/22 17:18	01/18/23 13:47	41	365	02/22/23 05:07	35	40	
LDW23-SS1257 23A0171-02	12/08/22 09:16	12/08/22 17:18	01/18/23 13:47	41	365	02/18/23 04:42	31	40	
LDW23-SS1262 23A0171-03	12/08/22 10:36	12/08/22 17:18	01/18/23 13:47	41	365	02/18/23 05:18	31	40	
LDW23-SS1262 23A0171-03RE1	12/08/22 10:36	12/08/22 17:18	01/18/23 13:47	41	365	02/22/23 05:43	35	40	
LDW23-SS1245 23A0171-04	12/08/22 11:14	12/08/22 17:18	01/18/23 13:47	41	365	02/18/23 05:54	31	40	
LDW23-SS1245 23A0171-04RE1	12/08/22 11:14	12/08/22 17:18	01/18/23 13:47	41	365	02/22/23 06:19	35	40	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: NT14

Analyte	MDL	RL	Units
Phenol	4.4	20.0	ug/kg
4-Methylphenol	7.4	20.0	ug/kg
Naphthalene	4.2	20.0	ug/kg
2-Methylnaphthalene	4.5	20.0	ug/kg
Acenaphthylene	6.2	20.0	ug/kg
Dimethylphthalate	4.4	20.0	ug/kg
Acenaphthene	5.2	20.0	ug/kg
Dibenzofuran	14.1	20.0	ug/kg
Fluorene	14.6	20.0	ug/kg
Phenanthrene	8.7	20.0	ug/kg
Anthracene	7.2	20.0	ug/kg
Fluoranthene	6.1	20.0	ug/kg
Pyrene	5.7	20.0	ug/kg
Butylbenzylphthalate	9.4	20.0	ug/kg
Benzo(a)anthracene	6.0	20.0	ug/kg
Chrysene	6.1	20.0	ug/kg
bis(2-Ethylhexyl)phthalate	5.5	50.0	ug/kg
Benzofluoranthenes, Total	10.0	40.0	ug/kg
Benzo(a)pyrene	4.2	20.0	ug/kg
Indeno(1,2,3-cd)pyrene	14.7	20.0	ug/kg
Dibenzo(a,h)anthracene	17.2	20.0	ug/kg
Benzo(g,h,i)perylene	13.6	20.0	ug/kg

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: NA

Chemical: Tributyl Phosphate

Manufacturer: Chemservice

Product #: O-916

Lot #: 59-57A

Purity: 99%

Analyst: VB

Element: B000954

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001873

Printed: 9/23/2013 11:47:03AM

Description:	SVOC 4,4 DDT	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	23-Sep-13
Solvent:	N/A	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 11:46 by JZ
Vendor:	Chem Service	Lot #:	198-128A
Vendor Catalog #:			

Comments

Neat, Purity @ 99.2%. (ARI#: 790A)

Analyte	CAS Number	Concentration	Units
4,4'-DDT	50-29-3	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 4,4' DDT

Manufacturer: Chem Service

Product #: _____

Lot #: 198-128A

Purity: 99.2%

Analyst: AB

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001875

Printed: 9/23/2013 12:13:55PM

Description:	SVOC alpha-Terpineol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	N/A	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 12:13 by JZ
Vendor:	ACROS Organics	Lot #:	AD16481201
Vendor Catalog #:			

Comments

Neat, Purity @ 98%. (ARI#: I1582A)

Analyte	CAS Number	Concentration	Units
alpha-Terpineol	98-55-5	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: alpha-Terpineol

Manufacturer: Acros Organics

Product #: _____

Lot #: A0648170 1

Purity: 98%

Analyst: [signature]

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001885

Printed: 9/23/2013 3:45:57PM

Description:	SVOA Dibutyl Phenyl phosphate	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 15:45 by JZ
Vendor:	Monsanto	Lot #:	N/A
Vendor Catalog #:			

Comments

Neat, Purity @ 98.9%.

Analyte	CAS Number	Concentration	Units
Dibutyl Phenyl Phosphate	2528-36-1	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: Dibutyl Phenyl Phosphate

Manufacturer: Monsanto

Product #: N/A

Lot #: N/A

Purity: 98.9%

Analyst: [signature]

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001886

Printed: 9/23/2013 3:59:35PM

Description:	SVOC Triphenyl Phosphate	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 15:59 by JZ
Vendor:	Aldrich	Lot #:	04902CM
Vendor Catalog #:			

Comments

Neat, Purity @ 99%.

Analyte	CAS Number	Concentration	Units
Triphenyl Phosphate	115-86-6	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: Triphenyl Phosphate

Manufacturer: Aldrich

Product #: _____

Lot #: 04907CM

Purity: 99%

Analyst: [signature]

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001887

Printed: 9/23/2013 4:18:55PM

Description:	SVOC Butylated Hydroxytoluene	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 16:18 by JZ
Vendor:	SIGMA	Lot #:	39F-0197
Vendor Catalog #:			

Comments

neat,Purity @ 99.9%.

Analyte	CAS Number	Concentration	Units
Butylated Hydroxytoluene	128-37-0	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Butylated Hydroxytoluene

Manufacturer: Sigma

Product #: _____

Lot #: 39F-0197

Purity: 99.8%

Analyst: AR

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001890

Printed: 9/23/2013 5:02:53PM

Description:	SVOC Butyl Diphenyl Phosphate	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 17:02 by JZ
Vendor:	Monsanto	Lot #:	N/A
Vendor Catalog #:			

Comments

Neat, Purity @ 98%.

Analyte	CAS Number	Concentration	Units
Butyl Diphenyl Phosphate	2752-95-6	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Butyl Diphenyl Phosphate

Manufacturer: Monsanto

Product #: NA

Lot #: NA

Purity: 98%

Analyst: [signature]

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001941

Printed: 9/25/2013 1:45:31PM

Description:	SVOC 2,4-Dinitrophenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 13:45 by JZ
Vendor:	SIGMA	Lot #:	65H5021
Vendor Catalog #:			

Comments

Neat, Purity @ 90-95%. (ARI#: 0466)

Analyte	CAS Number	Concentration	Units
2,4-Dinitrophenol	51-28-5	1000000	ug/mL

B001941
SVOA 2,4-Dinitrophenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: 2,4-Dinitrophenol

Manufacturer: Sigma

Product #: _____

Lot #: bEH 502 I

Purity: 90 ~ 94%

Analyst: _____

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001945

Printed: 9/25/2013 3:23:22PM

Description:	SVOC Benzoic Acid	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:23 by JZ
Vendor:	ACROS Organics	Lot #:	A0224339
Vendor Catalog #:			

Comments

Neat, Purity @ 98%.

Analyte	CAS Number	Concentration	Units
Benzoic acid	65-85-0	1000000	ug/mL

B001945
SVOC Benzoic Acid
Expires 12/31/2029
Prepared By Jianqing Zhou 12/31/2012

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: Benzoic Acid

Manufacturer: Acros Organics

Product #: _____

Lot #: A0214339

Purity: 98%

Analyst: [signature]

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001948

Printed: 9/25/2013 3:37:51PM

Description:	SVOC 4,6-Dinitro-2-Methylphenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:37 by JZ
Vendor:	Chem Service	Lot #:	179-31A
Vendor Catalog #:			

Comments

Neat, Purity @ 99%. (ARI#: 009A)

Analyte	CAS Number	Concentration	Units
4,6-Dinitro-2-methylphenol	534-52-1	1000000	ug/mL

B001948
SVOA 4,6-Dinitro-2-Methylphenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 4,6-Dinitro-2-Methylphenol

Manufacturer: Chem Service

Product #: _____

Lot #: 179-31A

Purity: 99%

Analyst: KB

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B002054

Printed: 10/4/2013 6:32:21PM

Description:	SVOA 1-Methylnaphthalene	Expires:	02-Apr-14
Standard Type:	Analyte Spike	Prepared:	13-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	04-Oct-13 18:32 by JZ
Vendor:	Chem Service	Lot #:	62-5B
Vendor Catalog #:			

Comments

Neat, Purity @ 99%

Analyte	CAS Number	Concentration	Units
1-Methylnaphthalene	90-12-0	1000000	ug/mL

B002054
SVOA 1-Methylnaphthalene
Solvent / Lot: NA
Prep: 12/13/2012 by JZ
Exp: 12/31/2029
Location:

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: 1-Methyl naphthalene

Manufacturer: Chem Service

Product #: 0787

Lot #: 67-53

Purity: 99%

Analyst: AZ

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B002135

Printed: 10/15/2013 12:07:39PM

Description:	SVOA Benzidine	Expires:	31-Dec-29
Standard Type:	Analyte Spike	Prepared:	15-Oct-13
Solvent:	N/A	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	15-Oct-13 12:07 by JZ
Vendor:	SIGMA	Lot #:	18C0024
Vendor Catalog #:			

Comments

Purity @ 95%. ARI#: 0467.

Analyte	CAS Number	Concentration	Units
Benzidine	92-87-5	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: Benzidine

Manufacturer: Sigma

Product #: B-3503

Lot #: 18C0024

Purity: 98%

Analyst: [signature]

Certificate of Analysis

Product Name:	1,2,4,5-Tetrachlorobenzene
Product Description:	98%
Product Brand:	Sigma-Aldrich
Product Number:	131857
Molecular Weight:	215.89
CAS Number:	95-94-3

TEST	SPECIFICATION	LOT 19309JR RESULTS
APPEARANCE	WHITE POWDER, CHIPS OR CRYSTALS	WHITE CHIPS
INFRARED SPECTRUM	CONFORMS TO STRUCTURE.	CONFORMS TO STRUCTURE AND STANDARD AS
** **		ILLUSTRATED ON PAGE 1011C OF EDITION I,
** **		VOLUME 1 OF "THE ALDRICH LIBRARY OF FT-IR
** **		SPECTRA".
GAS LIQUID	97.5% (MINIMUM)	99.9 %
QUALITY CONTROL		JULY 1997

Barbara Rajzer, Supervisor
Quality Control
Milwaukee, Wisconsin USA

F009172
SVOC 1,2,4,5-Tetrachlorobenzene
Expires 12/31/2079
Prepared By Joshua Rains 10/6/2017

H000691

Data File: \\target\share\chem2\fid4a.i\20230317.b\423C1703.D

Page 1

Date : 17-MAR-2023 10:46

Client ID:

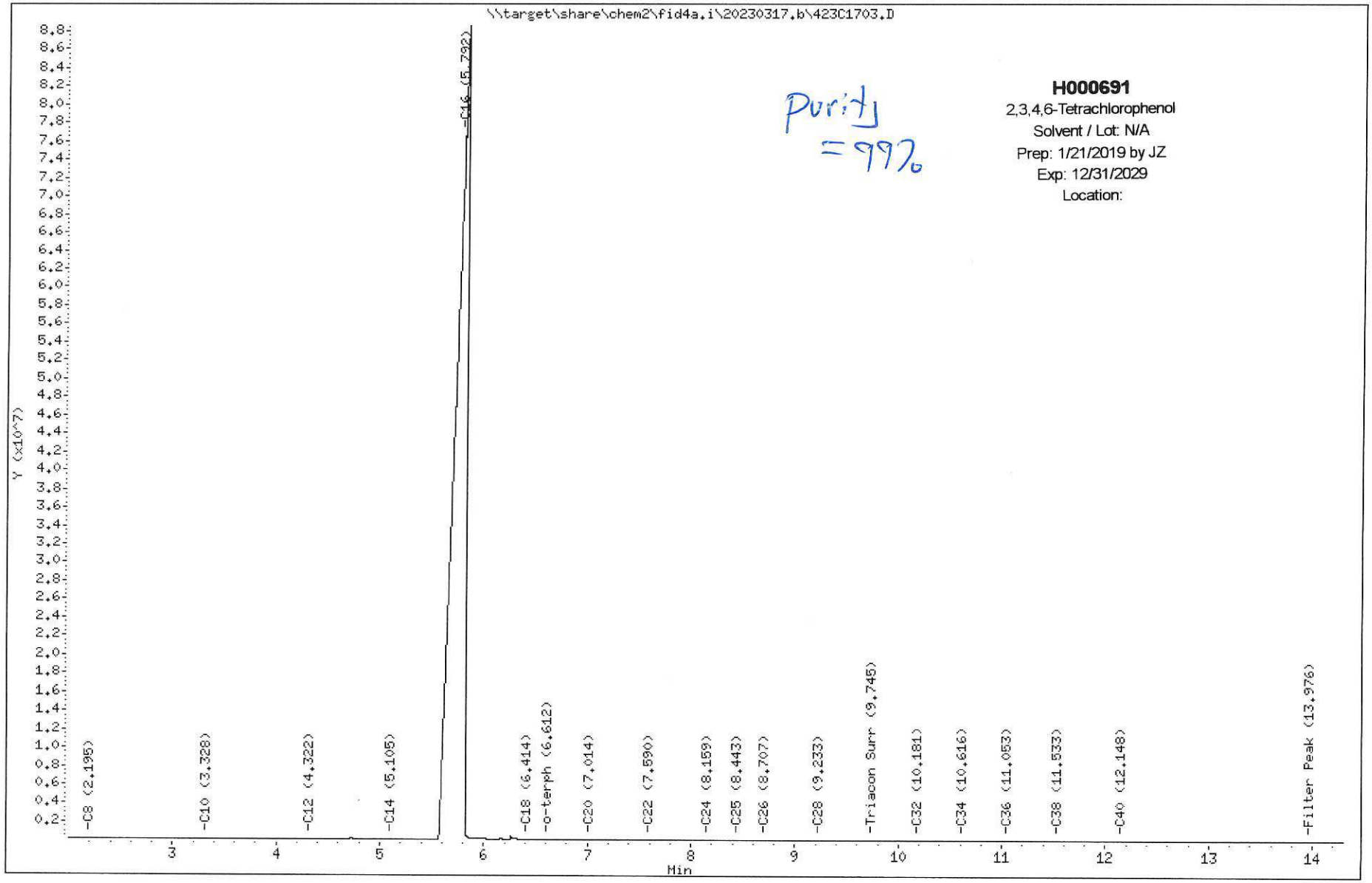
Instrument: fid4a.i

Sample Info: K007226

Operator: AA

Column phase: RTX-1

Column diameter: 0.25



Purity = 99%

H000691
2,3,4,6-Tetrachlorophenol
Solvent / Lot: N/A
Prep: 1/21/2019 by JZ
Exp: 12/31/2029
Location:

ARI Labs, Inc.

Data file : \\target\share\chem2\fid4a.i\20230317.b\423C1703.D
Lab Smp Id: K007226
Inj Date : 17-MAR-2023 10:46
Operator : AA Inst ID: fid4a.i
Smp Info : K007226
Misc Info :
Comment   :
Method   : \\target\share\chem2\fid4a.i\20230317.b\FID4TPH.m
Meth Date : 17-Mar-2023 16:58 alfonso Quant Type: AREA%
Cal Date : 18-AUG-2022 11:51 Cal File: 422H1803.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: tph.sub
Target Version: 4.14
Processing Host: ALFONSO-201901

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.043	81395	55677	0.684	0.012	1 Toluene
2.074	68503	39991	0.584	0.010	
2.104	85451	37158	0.435	0.012	
2.146	59381	25207	0.424	0.008	
2.181	11414	22862	2.003	0.001	
2.195	34939	23199	0.664	0.005	2 C8
2.218	8679	21808	2.513	0.001	
2.224	21070	21832	1.036	0.003	
2.243	45086	20191	0.448	0.006	
2.286	3130	15677	5.009	0.000	
2.291	12615	15880	1.259	0.001	
2.313	20979	15888	0.757	0.003	
2.333	7621	15373	2.017	0.001	
2.348	31874	17112	0.537	0.004	
2.373	4619	13267	2.872	0.000	
2.380	12003	13446	1.120	0.001	
2.393	10327	13347	1.292	0.001	
2.408	9963	12697	1.274	0.001	
2.446	24366	11882	0.488	0.003	
2.498	24898	10214	0.410	0.003	
2.557	1592	6395	4.017	0.000	
2.570	4427	6384	1.442	0.000	
2.583	4275	6215	1.454	0.000	
2.595	1208	6068	5.024	0.000	
2.602	3076	6230	2.025	0.000	
2.607	1560	6270	4.019	0.000	
2.631	17195	8933	0.520	0.002	
2.654	17386	7637	0.439	0.002	
2.703	4531	5468	1.207	0.000	
2.717	9156	5741	0.627	0.001	
2.740	3955	5045	1.275	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.768	1029	4134	4.017	0.000	
2.771	830	4189	5.050	0.000	
2.778	1924	4438	2.307	0.000	
2.784	5498	4564	0.830	0.000	
2.846	25970	8400	0.323	0.003	
2.880	939	3165	3.370	0.000	
2.884	1885	3183	1.688	0.000	
2.901	4805	3504	0.729	0.000	
2.938	581	1990	3.423	0.000	
2.944	1450	2016	1.390	0.000	
2.955	449	1816	4.043	0.000	
2.967	1234	2009	1.629	0.000	
2.982	712	2087	2.931	0.000	
2.988	1000	2338	2.337	0.000	
3.001	3475	3541	1.019	0.000	
3.018	3528	3705	1.050	0.000	
3.033	983	2521	2.564	0.000	
3.038	1297	2686	2.070	0.000	
3.044	2547	2541	0.997	0.000	
3.069	389	1330	3.418	0.000	
3.078	728	1545	2.123	0.000	
3.085	1244	1637	1.316	0.000	
3.098	1115	1624	1.457	0.000	
3.108	926	1475	1.593	0.000	
3.119	239	1202	5.036	0.000	
3.125	540	1251	2.315	0.000	
3.133	409	1219	2.978	0.000	
3.144	2600	1886	0.725	0.000	
3.165	620	1604	2.588	0.000	
3.173	554	1647	2.972	0.000	
3.192	2423	2273	0.938	0.000	
3.197	582	2418	4.158	0.000	
3.204	1161	2723	2.346	0.000	
3.208	825	2777	3.364	0.000	
3.228	4472	3391	0.758	0.000	
3.246	1586	2676	1.688	0.000	
3.279	1194	2070	1.734	0.000	
3.293	854	1951	2.285	0.000	
3.298	595	2029	3.408	0.000	
3.315	2640	2597	0.984	0.000	
3.320	1015	2542	2.504	0.000	
3.328	1549	2593	1.674	0.000	3 C10
3.338	1314	2533	1.928	0.000	
3.350	523	2159	4.130	0.000	
3.358	1776	2105	1.185	0.000	
3.371	356	1797	5.043	0.000	
3.378	914	1880	2.057	0.000	
3.383	380	1927	5.068	0.000	
3.387	595	2023	3.399	0.000	
3.395	1390	2270	1.633	0.000	
3.405	1490	1994	1.338	0.000	
3.423	690	1601	2.321	0.000	
3.435	821	1554	1.894	0.000	
3.441	387	1583	4.087	0.000	
3.444	401	1625	4.051	0.000	
3.448	403	1636	4.060	0.000	
3.455	1216	1700	1.398	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
3.478	235	1185	5.047	0.000	
3.482	412	1229	2.986	0.000	
3.488	695	1177	1.694	0.000	
3.501	239	969	4.063	0.000	
3.509	914	1149	1.258	0.000	
3.520	1078	1069	0.992	0.000	
3.540	301	927	3.079	0.000	
3.556	406	849	2.089	0.000	
3.567	370	873	2.359	0.000	
3.572	178	939	5.270	0.000	
3.578	591	1171	1.981	0.000	
3.591	869	1353	1.556	0.000	
3.596	741	1352	1.826	0.000	
3.606	471	1401	2.976	0.000	
3.613	548	1411	2.577	0.000	
3.618	433	1521	3.511	0.000	
3.625	710	1635	2.303	0.000	
3.630	910	1667	1.832	0.000	
3.652	661	1562	2.362	0.000	
3.670	462	1214	2.627	0.000	
3.686	1036	1453	1.403	0.000	
3.690	829	1374	1.658	0.000	
3.702	531	1191	2.241	0.000	
3.712	452	1355	3.001	0.000	
3.716	820	1423	1.736	0.000	
3.736	2685	2093	0.780	0.000	
3.752	689	2030	2.946	0.000	
3.760	4109	2349	0.572	0.000	
3.805	3183	2036	0.640	0.000	
3.823	496	1686	3.401	0.000	
3.835	1641	2314	1.410	0.000	
3.859	9243	4616	0.499	0.001	
3.897	851	1745	2.051	0.000	
3.904	503	1721	3.419	0.000	
3.927	3866	3293	0.852	0.000	
3.941	5520	3558	0.645	0.000	
3.980	573	1715	2.991	0.000	
3.992	1027	1794	1.748	0.000	
3.995	1494	1860	1.245	0.000	
4.010	887	1639	1.847	0.000	
4.021	663	1724	2.602	0.000	
4.026	1380	1776	1.287	0.000	
4.045	306	1546	5.059	0.000	
4.053	1001	1758	1.757	0.000	
4.061	1137	1804	1.586	0.000	
4.072	779	1773	2.275	0.000	
4.080	989	1896	1.917	0.000	
4.087	561	1905	3.396	0.000	
4.098	1956	2156	1.103	0.000	
4.106	1168	2044	1.750	0.000	
4.127	1049	1627	1.551	0.000	
4.142	587	1545	2.633	0.000	
4.148	1155	1572	1.361	0.000	
4.173	3682	2398	0.651	0.000	
4.189	1023	1738	1.700	0.000	
4.204	549	1627	2.961	0.000	
4.213	628	1658	2.641	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
4.221	1039	1830	1.761	0.000	
4.227	447	1814	4.058	0.000	
4.248	2703	2638	0.976	0.000	
4.256	1387	2945	2.123	0.000	
4.260	743	2988	4.022	0.000	
4.265	912	3081	3.378	0.000	
4.268	779	3140	4.031	0.000	
4.275	1736	3217	1.853	0.000	
4.289	2688	3495	1.300	0.000	
4.295	3466	3448	0.995	0.000	
4.322	1054	2680	2.543	0.000	4 C12
4.330	1686	2627	1.558	0.000	
4.358	1066	1974	1.852	0.000	
4.378	434	1758	4.054	0.000	
4.384	1324	1879	1.419	0.000	
4.403	860	1608	1.869	0.000	
4.414	457	1567	3.431	0.000	
4.421	1117	1675	1.499	0.000	
4.433	910	1538	1.690	0.000	
4.439	865	1534	1.774	0.000	
4.449	764	1302	1.705	0.000	
4.471	433	1123	2.593	0.000	
4.476	734	1135	1.546	0.000	
4.490	385	1005	2.610	0.000	
4.498	555	1186	2.137	0.000	
4.502	695	1166	1.677	0.000	
4.518	587	949	1.618	0.000	
4.526	316	925	2.924	0.000	
4.533	560	989	1.765	0.000	
4.543	469	1001	2.135	0.000	
4.548	222	916	4.130	0.000	
4.553	188	980	5.207	0.000	
4.558	255	1038	4.076	0.000	
4.568	652	1157	1.775	0.000	
4.573	338	1151	3.409	0.000	
4.580	487	1283	2.636	0.000	
4.596	3801	1950	0.513	0.000	
4.631	531	1429	2.692	0.000	
4.663	4548	3737	0.822	0.000	
4.667	2815	3822	1.358	0.000	
4.679	2199	3760	1.710	0.000	
4.688	1068	3585	3.356	0.000	
4.694	2166	3742	1.727	0.000	
4.723	372603	172476	0.463	0.055	
4.894	47034	21828	0.464	0.006	
4.956	80510	28154	0.350	0.011	
4.999	54273	16950	0.312	0.008	
5.068	1137	5713	5.027	0.000	
5.072	8415	5792	0.688	0.001	
5.105	4203	4316	1.027	0.000	5 C14
5.146	660	2685	4.070	0.000	
5.153	2524	2649	1.050	0.000	
5.170	1076	2437	2.265	0.000	
5.174	2371	2438	1.028	0.000	
5.201	1013	2011	1.986	0.000	
5.210	2064	2332	1.130	0.000	
5.224	1083	2304	2.127	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
5.228	2027	2354	1.162	0.000	
5.276	4673	2682	0.574	0.000	
5.322	195	844	4.328	0.000	
5.331	977	1203	1.231	0.000	
5.356	490	993	2.027	0.000	
5.361	814	1044	1.283	0.000	
5.382	115	387	3.351	0.000	
5.399	619	960	1.551	0.000	
5.406	402	1035	2.576	0.000	
5.410	378	1122	2.968	0.000	
5.423	1663	1555	0.935	0.000	
5.452	5951	5020	0.844	0.000	
5.501	290	797	2.753	0.000	
5.523	2317	2472	1.067	0.000	
5.538	5946	6823	1.147	0.000	
5.792	501855376	76456669	0.152	74.449	6 C16
5.807	79757019	82319946	1.032	11.775	
5.823	77929961	88539160	1.136	11.505	
5.962	75333	84828	1.126	0.011	
5.986	474748	124326	0.262	0.070	
6.070	17103	57180	3.343	0.002	
6.074	120761	57565	0.477	0.017	
6.113	90233	47140	0.522	0.013	
6.165	407438	218439	0.536	0.060	
6.263	944101	374166	0.396	0.139	
6.414	114839	39498	0.344	0.016	7 C18
6.464	53190	31177	0.586	0.007	
6.523	31509	25870	0.821	0.004	
6.551	4785	23963	5.008	0.000	
6.559	51194	25409	0.496	0.007	
6.590	21354	21666	1.015	0.003	
6.612	35061	21127	0.603	0.005	$ 8 o-terph
6.638	17712	19934	1.125	0.002	
6.672	22159	19651	0.887	0.003	
6.683	26846	19268	0.718	0.003	
6.708	5413	18142	3.351	0.000	
6.713	24941	18247	0.732	0.003	
6.747	50657	18478	0.365	0.007	
6.795	23973	17444	0.728	0.003	
6.814	28457	17895	0.629	0.004	
6.837	10746	15445	1.437	0.001	
6.871	29974	21406	0.714	0.004	
6.874	4287	21471	5.009	0.000	
6.882	20520	21675	1.056	0.003	
6.944	32864	17445	0.531	0.004	
6.978	9138	15347	1.679	0.001	
7.014	4130	13830	3.348	0.000	9 C20
7.025	12567	14083	1.121	0.001	
7.038	4952	14274	2.882	0.000	
7.044	6508	14578	2.240	0.000	
7.050	25344	14736	0.581	0.003	
7.099	5531	12365	2.236	0.000	
7.108	16440	12371	0.752	0.002	
7.129	9415	11275	1.198	0.001	
7.175	3589	10327	2.878	0.000	
7.182	7285	10474	1.438	0.001	
7.212	11252	10002	0.889	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.227	5193	9506	1.830	0.000	
7.237	5172	9476	1.832	0.000	
7.247	4652	9357	2.011	0.000	
7.254	3258	9369	2.875	0.000	
7.259	7003	9455	1.350	0.001	
7.272	5540	9252	1.670	0.000	
7.283	4511	9087	2.014	0.000	
7.296	5828	9031	1.550	0.000	
7.308	4850	8866	1.828	0.000	
7.318	3111	9014	2.897	0.000	
7.324	3191	9168	2.873	0.000	
7.328	2775	9325	3.360	0.000	
7.339	6190	9713	1.569	0.000	
7.344	2920	9761	3.343	0.000	
7.350	17091	9874	0.578	0.002	
7.379	7217	8616	1.194	0.001	
7.395	5430	8408	1.548	0.000	
7.404	2492	8342	3.348	0.000	
7.409	1666	8354	5.014	0.000	
7.415	2955	8500	2.877	0.000	
7.423	3887	8782	2.259	0.000	
7.465	28160	14253	0.506	0.004	
7.471	6466	14499	2.242	0.000	
7.480	6649	15111	2.273	0.000	
7.484	26595	15197	0.571	0.003	
7.514	13964	13621	0.975	0.002	
7.539	8118	12614	1.554	0.001	
7.553	10540	12495	1.185	0.001	
7.584	2820	11307	4.010	0.000	
7.590	4522	11429	2.527	0.000	10 C22
7.620	16634	10435	0.627	0.002	
7.653	6793	9783	1.440	0.001	
7.663	8606	9666	1.123	0.001	
7.675	2827	9464	3.347	0.000	
7.683	9373	9620	1.026	0.001	
7.699	3657	9205	2.517	0.000	
7.708	5071	9290	1.832	0.000	
7.713	10483	9274	0.885	0.001	
7.735	10686	9257	0.866	0.001	
7.752	4732	8664	1.831	0.000	
7.765	5624	8765	1.558	0.000	
7.773	5614	8686	1.547	0.000	
7.784	3375	8506	2.520	0.000	
7.793	2118	8517	4.021	0.000	
7.799	10086	8544	0.847	0.001	
7.817	7761	8325	1.073	0.001	
7.833	2415	8088	3.350	0.000	
7.838	2838	8160	2.875	0.000	
7.844	3649	8173	2.240	0.000	
7.858	2009	8069	4.017	0.000	
7.864	4482	8197	1.829	0.000	
7.871	3688	8223	2.230	0.000	
7.879	4875	8269	1.696	0.000	
7.889	2009	8061	4.013	0.000	
7.897	4080	8308	2.036	0.000	
7.916	17828	10103	0.567	0.002	
7.935	4052	9086	2.242	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.940	2229	8948	4.015	0.000	
7.945	5765	8973	1.556	0.000	
7.954	6458	8765	1.357	0.000	
7.976	2099	8428	4.016	0.000	
7.984	10213	8807	0.862	0.001	
7.999	4897	8282	1.691	0.000	
8.013	8782	8112	0.924	0.001	
8.028	5860	7858	1.341	0.000	
8.040	3929	7871	2.003	0.000	
8.054	9161	8146	0.889	0.001	
8.067	2701	7766	2.876	0.000	
8.074	3069	7702	2.510	0.000	
8.081	2694	7742	2.874	0.000	
8.088	2705	7793	2.881	0.000	
8.095	5842	7832	1.341	0.000	
8.104	5419	7841	1.447	0.000	
8.119	5740	7735	1.348	0.000	
8.134	4986	7768	1.558	0.000	
8.141	5893	8009	1.359	0.000	
8.159	9098	8027	0.882	0.001	11 C24
8.174	3156	7971	2.526	0.000	
8.185	2376	7967	3.353	0.000	
8.190	4739	7937	1.675	0.000	
8.202	5181	8028	1.549	0.000	
8.212	1994	8027	4.025	0.000	
8.223	6137	8270	1.348	0.000	
8.236	6864	8171	1.190	0.001	
8.248	2383	7986	3.351	0.000	
8.253	2405	8059	3.351	0.000	
8.259	5294	8207	1.550	0.000	
8.268	2866	8235	2.874	0.000	
8.280	6583	8312	1.263	0.000	
8.289	4538	8296	1.828	0.000	
8.295	2060	8300	4.029	0.000	
8.300	2063	8291	4.020	0.000	
8.313	7062	8400	1.189	0.001	
8.318	1667	8375	5.023	0.000	
8.332	11362	9100	0.801	0.001	
8.343	4357	8741	2.006	0.000	
8.358	1267	8458	6.676	0.000	
8.363	2991	8621	2.882	0.000	
8.371	3980	8983	2.257	0.000	
8.379	6330	9083	1.435	0.000	
8.385	3111	8963	2.881	0.000	
8.393	6706	9050	1.349	0.000	
8.404	4903	8943	1.824	0.000	
8.417	8437	8972	1.063	0.001	
8.438	7166	9103	1.270	0.001	
8.443	3211	9227	2.873	0.000	12 C25
8.450	3688	9295	2.521	0.000	
8.455	2313	9276	4.010	0.000	
8.475	30054	13714	0.456	0.004	
8.504	5760	9733	1.690	0.000	
8.519	2799	9376	3.350	0.000	
8.529	4766	9710	2.037	0.000	
8.537	4875	9815	2.013	0.000	
8.543	8411	9973	1.186	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
8.555	2969	9916	3.340	0.000	
8.560	3974	9987	2.513	0.000	
8.568	2483	9997	4.026	0.000	
8.572	5007	10043	2.006	0.000	
8.591	14074	10725	0.762	0.002	
8.602	2648	10665	4.028	0.000	
8.606	2159	10862	5.032	0.000	
8.609	2183	10952	5.017	0.000	
8.633	7361	10561	1.435	0.001	
8.647	6774	10495	1.549	0.001	
8.658	2596	10420	4.014	0.000	
8.663	4723	10573	2.239	0.000	
8.669	3156	10589	3.355	0.000	
8.687	15405	11334	0.736	0.002	
8.699	6103	11158	1.828	0.000	
8.707	2223	11136	5.009	0.000	13 C26
8.730	28697	12536	0.437	0.004	
8.754	8658	11553	1.334	0.001	
8.763	2896	11612	4.010	0.000	
8.780	15029	12352	0.822	0.002	
8.788	1833	12243	6.680	0.000	
8.798	11854	12679	1.070	0.001	
8.806	1873	12509	6.677	0.000	
8.809	3133	12565	4.011	0.000	
8.813	2506	12550	5.008	0.000	
8.819	7588	12757	1.681	0.001	
8.829	4418	12679	2.870	0.000	
8.835	6988	12762	1.826	0.001	
8.848	13711	13258	0.967	0.002	
8.872	26625	13656	0.513	0.003	
8.894	4575	13127	2.869	0.000	
8.898	2631	13188	5.013	0.000	
8.902	5918	13262	2.241	0.000	
8.914	8577	13313	1.552	0.001	
8.922	4011	13433	3.349	0.000	
8.926	4724	13546	2.867	0.000	
8.933	6787	13651	2.011	0.001	
8.946	9614	13923	1.448	0.001	
8.951	6274	14004	2.232	0.000	
8.960	5592	14036	2.510	0.000	
8.966	3513	14090	4.011	0.000	
8.969	2829	14171	5.009	0.000	
8.973	4976	14233	2.860	0.000	
8.980	4289	14365	3.350	0.000	
8.996	27708	16441	0.593	0.004	
9.013	8129	14847	1.827	0.001	
9.025	8129	14840	1.826	0.001	
9.036	7503	15229	2.030	0.001	
9.040	4559	15225	3.340	0.000	
9.057	14920	16251	1.089	0.002	
9.067	9915	16831	1.698	0.001	
9.076	8535	17331	2.031	0.001	
9.081	5250	17596	3.352	0.000	
9.084	10558	17675	1.674	0.001	
9.095	4386	17601	4.013	0.000	
9.111	30564	19262	0.630	0.004	
9.128	8346	18722	2.243	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.139	15095	18986	1.258	0.002	
9.149	6655	19050	2.862	0.000	
9.158	23240	19719	0.848	0.003	
9.171	1903	19042	10.005	0.000	
9.175	4773	19156	4.013	0.000	
9.187	23630	19927	0.843	0.003	
9.199	4925	19763	4.013	0.000	
9.208	14115	20394	1.445	0.002	
9.219	12303	20691	1.682	0.001	
9.226	7266	20831	2.867	0.001	
9.233	15622	21000	1.344	0.002	14 C28
9.247	9280	20714	2.232	0.001	
9.262	45057	27849	0.618	0.006	
9.281	22651	23200	1.024	0.003	
9.304	13489	22820	1.692	0.001	
9.307	18038	22862	1.267	0.002	
9.328	8656	21778	2.516	0.001	
9.334	8635	21650	2.507	0.001	
9.343	16240	21738	1.339	0.002	
9.354	5409	21709	4.013	0.000	
9.367	16481	22234	1.349	0.002	
9.370	6683	22346	3.344	0.000	
9.382	14775	23166	1.568	0.002	
9.390	11679	23531	2.015	0.001	
9.394	12888	23584	1.830	0.001	
9.408	18752	23645	1.261	0.002	
9.416	4675	23396	5.004	0.000	
9.428	25138	24392	0.970	0.003	
9.438	20233	24095	1.191	0.002	
9.468	67429	26696	0.396	0.009	
9.496	8413	24122	2.867	0.001	
9.507	12049	24259	2.013	0.001	
9.527	36362	25771	0.709	0.005	
9.538	12891	25911	2.010	0.001	
9.543	6452	25853	4.007	0.000	
9.551	10420	26202	2.515	0.001	
9.557	29750	26593	0.894	0.004	
9.574	6252	25071	4.010	0.000	
9.593	29143	27655	0.949	0.004	
9.599	40783	27905	0.684	0.006	
9.620	13159	26364	2.004	0.001	
9.632	17259	26799	1.553	0.002	
9.640	13210	26592	2.013	0.001	
9.664	35362	28170	0.797	0.005	
9.672	27890	28134	1.009	0.004	
9.696	26737	28634	1.071	0.003	
9.711	53475	30848	0.577	0.007	
9.745	33266	29504	0.887	0.004	$ 15 Triacon Surr
9.752	7348	29501	4.015	0.001	
9.756	20542	29565	1.439	0.003	
9.768	7255	29059	4.005	0.001	
9.773	7275	29173	4.010	0.001	
9.785	31543	30611	0.970	0.004	
9.803	46804	32832	0.701	0.006	
9.821	10456	30060	2.875	0.001	
9.833	30772	31156	1.012	0.004	
9.860	77784	33514	0.431	0.011	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.881	12779	32069	2.510	0.001	
9.892	14531	32668	2.248	0.002	
9.896	8201	32902	4.012	0.001	
9.908	23357	33882	1.451	0.003	
9.912	27050	34095	1.260	0.003	
9.939	14585	32570	2.233	0.002	
9.951	23032	33095	1.437	0.003	
9.956	11596	33292	2.871	0.001	
9.966	16544	33271	2.011	0.002	
9.971	11660	33391	2.864	0.001	
9.975	10051	33617	3.345	0.001	
9.983	15209	33983	2.234	0.002	
9.988	15177	33830	2.229	0.002	
9.996	10128	33907	3.348	0.001	
10.018	43348	35629	0.822	0.006	
10.021	7133	35693	5.004	0.001	
10.025	8960	35988	4.016	0.001	
10.034	42064	36944	0.878	0.006	
10.063	65447	38699	0.591	0.009	
10.077	7375	36906	5.004	0.001	
10.083	16743	37428	2.235	0.002	
10.095	34467	38665	1.122	0.005	
10.118	90921	40621	0.447	0.013	
10.151	37738	38047	1.008	0.005	
10.158	11383	38037	3.342	0.001	
10.168	36074	38274	1.061	0.005	
10.181	15072	37809	2.509	0.002	16 C32
10.185	5655	37746	6.675	0.000	
10.198	43905	38471	0.876	0.006	
10.208	24771	38177	1.541	0.003	
10.218	19031	38113	2.003	0.002	
10.228	13353	38279	2.867	0.001	
10.237	21225	38826	1.829	0.003	
10.243	30946	38929	1.258	0.004	
10.266	43064	39733	0.923	0.006	
10.275	11912	39784	3.340	0.001	
10.278	19932	39886	2.001	0.002	
10.293	46366	40725	0.878	0.006	
10.318	46465	41024	0.883	0.006	
10.328	24720	41353	1.673	0.003	
10.334	10308	41278	4.005	0.001	
10.343	29100	41866	1.439	0.004	
10.354	22822	41695	1.827	0.003	
10.360	16568	41490	2.504	0.002	
10.376	31388	42321	1.348	0.004	
10.384	36478	43119	1.182	0.005	
10.393	21427	43144	2.014	0.003	
10.416	82339	44731	0.543	0.012	
10.434	23173	42257	1.824	0.003	
10.455	42801	43684	1.021	0.006	
10.459	19648	44004	2.240	0.002	
10.469	19632	43883	2.235	0.002	
10.492	56113	45807	0.816	0.008	
10.497	20626	45915	2.226	0.003	
10.503	27439	45837	1.671	0.004	
10.513	31833	45842	1.440	0.004	
10.523	6773	45190	6.672	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
10.529	22697	45513	2.005	0.003	
10.543	39087	46432	1.188	0.005	
10.552	16284	46719	2.869	0.002	
10.558	18796	47158	2.509	0.002	
10.576	69878	48769	0.698	0.010	
10.586	12085	48384	4.004	0.001	
10.592	21757	48469	2.228	0.003	
10.609	46960	50482	1.075	0.006	
10.616	40486	50812	1.255	0.005	17 C34
10.628	52392	50284	0.960	0.007	
10.665	99744	52644	0.528	0.014	
10.680	20832	52264	2.509	0.003	
10.699	126137	55939	0.443	0.018	
10.723	18258	52316	2.865	0.002	
10.733	65550	52928	0.807	0.009	
10.751	49102	51903	1.057	0.007	
10.765	10288	51490	5.005	0.001	
10.777	73220	52877	0.722	0.010	
10.791	15621	52150	3.338	0.002	
10.799	46819	52190	1.115	0.006	
10.817	52000	52328	1.006	0.007	
10.828	13014	52167	4.008	0.001	
10.833	18275	52280	2.861	0.002	
10.838	67284	52271	0.777	0.009	
10.860	15395	51401	3.339	0.002	
10.867	15366	51252	3.335	0.002	
10.874	25712	51608	2.007	0.003	
10.885	59363	52064	0.877	0.008	
10.901	33199	51247	1.544	0.004	
10.911	35859	51446	1.435	0.005	
10.925	15150	50526	3.335	0.002	
10.936	27761	50508	1.819	0.004	
10.954	40634	51235	1.261	0.005	
10.958	17973	51428	2.861	0.002	
10.982	101216	54997	0.543	0.014	
10.999	80380	54264	0.675	0.011	
11.022	15822	52869	3.342	0.002	
11.029	23878	53171	2.227	0.003	
11.032	23908	53219	2.226	0.003	
11.044	39793	53228	1.338	0.005	
11.053	13218	52959	4.007	0.001	19 C36
11.057	26491	53088	2.004	0.003	
11.069	47933	53454	1.115	0.007	
11.079	78088	52997	0.679	0.011	
11.132	4853	48537	10.002	0.000	
11.138	21933	48845	2.227	0.003	
11.148	46678	49317	1.057	0.006	
11.158	12248	49060	4.006	0.001	
11.164	14711	49102	3.338	0.002	
11.179	64473	49939	0.775	0.009	
11.192	19751	49439	2.503	0.002	
11.197	14848	49541	3.337	0.002	
11.202	17336	49566	2.859	0.002	
11.206	12400	49639	4.003	0.001	
11.212	56808	49881	0.878	0.008	
11.230	26830	48794	1.819	0.003	
11.263	19014	47590	2.503	0.002	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
11.267	11927	47790	4.007	0.001	
11.285	66432	50042	0.753	0.009	
11.308	17214	49235	2.860	0.002	
11.312	19684	49285	2.504	0.002	
11.322	19740	49570	2.511	0.002	
11.331	27467	50208	1.828	0.004	
11.334	12565	50301	4.003	0.001	
11.338	17617	50367	2.859	0.002	
11.356	50450	50688	1.005	0.007	
11.383	31641	48774	1.541	0.004	
11.392	14562	48589	3.337	0.002	
11.398	14566	48593	3.336	0.002	
11.405	21947	48858	2.226	0.003	
11.418	36961	49602	1.342	0.005	
11.428	52174	49838	0.955	0.007	
11.438	46900	49605	1.058	0.006	
11.456	66003	49218	0.746	0.009	
11.481	84312	48818	0.579	0.012	
11.518	39837	46996	1.180	0.005	
11.533	55836	46822	0.839	0.008	20 C38
11.560	30101	46465	1.544	0.004	
11.568	20916	46512	2.224	0.003	
11.573	11637	46596	4.004	0.001	
11.579	23274	46598	2.002	0.003	
11.586	13953	46531	3.335	0.002	
11.591	9318	46631	5.004	0.001	
11.623	97892	48831	0.499	0.014	
11.631	17107	48984	2.863	0.002	
11.638	22090	49260	2.230	0.003	
11.642	32050	49351	1.540	0.004	
11.669	95446	50981	0.534	0.014	
11.685	95822	49865	0.520	0.014	
11.788	8918	44609	5.002	0.001	
11.791	35704	44768	1.254	0.005	
11.804	11082	44350	4.002	0.001	
11.813	22172	44403	2.003	0.003	
11.823	19993	44543	2.228	0.002	
11.829	13395	44754	3.341	0.001	
11.837	20184	44981	2.228	0.002	
11.852	26933	44942	1.669	0.003	
11.866	36041	45224	1.255	0.005	
11.877	15835	45355	2.864	0.002	
11.883	18222	45726	2.509	0.002	
11.889	15985	45741	2.861	0.002	
11.896	20679	46117	2.230	0.003	
11.905	23259	46896	2.016	0.003	
11.929	70146	49826	0.710	0.010	
11.936	52288	50085	0.958	0.007	
11.951	14787	49369	3.339	0.002	
11.957	17313	49595	2.865	0.002	
11.961	32199	49647	1.542	0.004	
11.971	19578	49063	2.506	0.002	
11.980	34244	49065	1.433	0.005	
12.019	96987	51133	0.527	0.014	
12.025	48685	51499	1.058	0.007	
12.053	38386	51386	1.339	0.005	
12.062	38575	51549	1.336	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
12.070	17923	51300	2.862	0.002	
12.078	45780	51141	1.117	0.006	
12.105	31495	48817	1.550	0.004	
12.118	85510	48295	0.565	0.012	
12.148	55474	46657	0.841	0.008	21 C40
12.172	34299	45899	1.338	0.005	
12.181	18286	45754	2.502	0.002	
12.188	20565	45727	2.223	0.003	
12.198	29701	45787	1.542	0.004	
12.212	11377	45530	4.002	0.001	
12.218	29576	45566	1.541	0.004	
12.237	41054	45750	1.114	0.006	
12.243	13695	45701	3.337	0.002	
12.253	27528	46122	1.675	0.004	
12.260	16149	46201	2.861	0.002	
12.272	32473	46571	1.434	0.004	
12.347	231342	54259	0.235	0.034	
12.355	96470	54322	0.563	0.014	
12.383	13155	52687	4.005	0.001	
12.389	52817	52930	1.002	0.007	
12.434	117936	55204	0.468	0.017	
12.440	19323	55283	2.861	0.002	
12.448	22049	55156	2.502	0.003	
12.460	127044	56114	0.442	0.018	
12.500	63536	55700	0.877	0.009	
12.519	44746	56237	1.257	0.006	
12.523	16928	56556	3.341	0.002	
12.528	14154	56666	4.003	0.002	
12.532	14154	56644	4.002	0.002	
12.538	25607	57089	2.229	0.003	
12.543	31284	57010	1.822	0.004	
12.560	76588	57084	0.745	0.011	
12.574	22463	56167	2.500	0.003	
12.583	192414	56305	0.293	0.028	
12.668	201456	54098	0.269	0.029	
12.722	63529	49368	0.777	0.009	
12.744	14574	48683	3.340	0.002	
12.757	68233	49046	0.719	0.010	
12.777	29106	48653	1.672	0.004	
12.802	69072	49884	0.722	0.010	
12.805	19947	49915	2.502	0.002	
12.813	12457	49907	4.006	0.001	
12.826	42860	50672	1.182	0.006	
12.830	15192	50711	3.338	0.002	
12.835	63121	50727	0.804	0.009	
12.856	30109	50299	1.671	0.004	
12.871	12459	49875	4.003	0.001	
12.876	24950	49913	2.001	0.003	
12.883	12458	49860	4.002	0.001	
12.892	24999	50091	2.004	0.003	
12.904	37682	50442	1.339	0.005	
12.918	60965	51059	0.838	0.009	
12.929	15268	50972	3.338	0.002	
12.950	101236	52476	0.518	0.014	
12.991	32619	50285	1.542	0.004	
13.030	23826	47690	2.002	0.003	
13.047	49429	47410	0.959	0.007	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.072	11668	46709	4.003	0.001	
13.077	14056	46964	3.341	0.002	
13.083	21201	47214	2.227	0.003	
13.092	45034	47490	1.055	0.006	
13.103	33139	47401	1.430	0.004	
13.119	58622	47300	0.807	0.008	
13.136	61979	46406	0.749	0.009	
13.163	36232	45399	1.253	0.005	
13.172	13552	45219	3.337	0.002	
13.178	13550	45211	3.337	0.002	
13.183	13581	45318	3.337	0.002	
13.188	15867	45365	2.859	0.002	
13.193	11350	45433	4.003	0.001	
13.206	54879	45909	0.837	0.008	
13.233	74220	46899	0.632	0.010	
13.246	18724	46923	2.506	0.002	
13.250	14089	47028	3.338	0.002	
13.254	9392	46999	5.004	0.001	
13.261	35241	47103	1.337	0.005	
13.270	21093	46884	2.223	0.003	
13.278	16404	46889	2.858	0.002	
13.284	28108	46937	1.670	0.004	
13.309	27777	46575	1.677	0.004	
13.313	11643	46617	4.004	0.001	
13.323	30391	46938	1.544	0.004	
13.337	49696	47554	0.957	0.007	
13.345	11906	47686	4.005	0.001	
13.352	21499	47921	2.229	0.003	
13.358	14416	48133	3.339	0.002	
13.366	24163	48487	2.007	0.003	
13.391	108474	49842	0.459	0.016	
13.411	39818	49922	1.254	0.005	
13.421	140245	49882	0.356	0.020	
13.468	75433	46221	0.613	0.011	
13.519	59701	44435	0.744	0.008	
13.538	26345	44021	1.671	0.003	
13.553	17475	43727	2.502	0.002	
13.559	19699	43828	2.225	0.002	
13.566	15324	43832	2.860	0.002	
13.574	28519	43956	1.541	0.004	
13.585	21950	43943	2.002	0.003	
13.595	26497	44341	1.673	0.003	
13.603	22230	44574	2.005	0.003	
13.608	11135	44585	4.004	0.001	
13.633	100703	46371	0.460	0.014	
13.650	25255	45974	1.820	0.003	
13.663	20511	45675	2.227	0.003	
13.670	15945	45584	2.859	0.002	
13.677	40973	45642	1.114	0.006	
13.688	4544	45448	10.002	0.000	
13.693	29520	45508	1.542	0.004	
13.718	24720	44995	1.820	0.003	
13.727	11216	44890	4.002	0.001	
13.735	29185	45025	1.543	0.004	
13.752	17874	44782	2.505	0.002	
13.767	35874	45020	1.255	0.005	
13.775	36036	45104	1.252	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.785	11226	44939	4.003	0.001	
13.790	47016	44953	0.956	0.006	
13.813	11118	44516	4.004	0.001	
13.818	37641	44507	1.182	0.005	
13.832	15424	44192	2.865	0.002	
13.838	17564	43967	2.503	0.002	
13.844	26339	43892	1.666	0.003	
13.855	30567	43821	1.434	0.004	
13.865	23854	43526	1.825	0.003	
13.882	28266	43639	1.544	0.004	
13.886	30418	43629	1.434	0.004	
13.901	34702	43472	1.253	0.005	
13.920	48162	44005	0.914	0.007	
13.928	17577	43956	2.501	0.002	
13.941	15410	44084	2.861	0.002	
13.946	11045	44251	4.006	0.001	
13.949	24369	44341	1.820	0.003	
13.959	22103	44264	2.003	0.003	
13.967	22088	44195	2.001	0.003	
13.976	33207	44336	1.335	0.004	18 Filter Peak
13.998	24195	44018	1.819	0.003	
14.007	15335	43888	2.862	0.002	
14.014	17519	43863	2.504	0.002	
14.019	54335	43870	0.807	0.008	
14.046	10722	42915	4.003	0.001	
14.052	19305	42955	2.225	0.002	
14.058	8568	42864	5.003	0.001	
14.067	38739	43159	1.114	0.005	
14.077	15012	42931	2.860	0.002	
14.083	25753	42977	1.669	0.003	
14.102	25682	42913	1.671	0.003	
14.108	19267	42865	2.225	0.002	
14.116	12834	42815	3.336	0.001	
14.126	25874	43369	1.676	0.003	
14.133	56339	43595	0.774	0.008	
14.161	32503	43582	1.341	0.004	
14.165	10909	43696	4.006	0.001	
14.170	15313	43822	2.862	0.002	
14.175	10960	43911	4.007	0.001	
14.178	13176	43945	3.335	0.001	
14.183	19785	43976	2.223	0.002	
14.191	8796	44018	5.005	0.001	
14.197	17636	44177	2.505	0.002	
14.208	28815	44459	1.543	0.004	
14.219	8873	44379	5.002	0.001	
14.223	13318	44445	3.337	0.001	
14.229	28860	44456	1.540	0.004	
14.247	15436	44194	2.863	0.002	
14.260	37147	43758	1.178	0.005	
14.274	45685	43705	0.957	0.006	
	677340272	268782821		100.000	

Total unknown % area = 25.478

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Certificate of Composition - Analytical Standard

BASE STOCK

Product no.: 22523051
Lot no.: LRAC9813
Expiry Date: May 2023
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: Dichloromethane
Certificate version: LRAC9813.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

J005199
SVOA-ABN BASE STOCK-200-800ug/ml
Expires 5/31/2023
Prepared By Jianqing Zhou 5/18/2021

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
3,3'-DICHLOROBENZIDINE CAS# 91-94-1	802	µg/mL	99.9	LC27068
2,4-DINITROTOLUENE CAS# 121-14-2	802	µg/mL	97.8	LB46632
2,6-DINITROTOLUENE CAS# 606-20-2	801	µg/mL	99.9	LB79891
HEXACHLOROCYCLOPENTADIENE CAS# 77-47-4	802	µg/mL	96.0	LB95525
N-NITROSODIMETHYLAMINE CAS# 62-75-9	801	µg/mL	95.0	2019-030598 5
PERYLENE CAS# 198-55-0	201	µg/mL	99.6	04101PG
ANILINE CAS# 62-53-3	803	µg/mL	100.0	10126MG
4-CHLOROANILINE CAS# 106-47-8	803	µg/mL	100.0	MKBZ6909V
2-NITROANILINE CAS# 88-74-4	802	µg/mL	99.9	LC05068
3-NITROANILINE CAS# 99-09-2	802	µg/mL	99.9	LC09264
4-NITROANILINE CAS# 100-01-6	802	µg/mL	99.9	LC11400
PYRIDINE (LOW WATER) CAS# 110-86-1	802	µg/mL	100.0	SHBJ9218

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date: 12-May-2021

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9813.01	12-May-2021	Original Release Date

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Certificate of Composition - Analytical Standard

ACID STOC"

Product no.: 22523046
Lot no.: LRAC9812
Expiry Date: May 2023
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: Dichloromethane
Certificate version: LRAC9812.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

J005200
SVOA-ABN ACID STOCK-200-800ug/ml
Solvent / Lot: DCM
Prep: 5/18/2021 by JZ
Exp: 5/31/2023
Location:

JZ 5/18/21

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
2,4-DIMETHYLPHENOL CAS# 105-67-9	802	µg/mL	99.9	LB88935
2,4-DICHLOROPHENOL CAS# 120-83-2	802	µg/mL	100.0	BCBZ6787
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	802	µg/mL	99.9	JS00008
2,4-DINITROPHENOL CAS# 51-28-5	1806	µg/mL	75.9	MKBP5833V
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	803	µg/mL	98.7	LB82983
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	801	µg/mL	99.9	JS00013
4-NITROPHENOL CAS# 100-02-7	801	µg/mL	99.9	LC10889
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	1804	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	803	µg/mL	98.7	MKCK8156
BENZOIC ACID CAS# 65-85-0	1805	µg/mL	99.9	LC16514

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31493 **Lot No.:** A0167617

Description : CLP 04.1 BNA Surrogate Mix

CLP 04.1 BNA Surrogate Mix 1000-1500 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2024 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

J005610
CLP 04.1 BNA SURR MIX
Expires 9/30/2024
Prepared By Jianqing Zhou 5/26/2021

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Fluorophenol **CAS #** 367-12-4 (Lot STBF3761V) **Purity** 99%	1,506.0 µg/mL	+/- 8.9452 µg/mL +/- 43.9882 µg/mL +/- 53.3632 µg/mL	Gravimetric Unstressed Stressed
2	Phenol-d6 **CAS #** 13127-88-3 (Lot PR-31658) **Purity** 99%	1,512.0 µg/mL	+/- 8.9808 µg/mL +/- 44.1635 µg/mL +/- 53.5758 µg/mL	Gravimetric Unstressed Stressed
3	2-Chlorophenol-d4 **CAS #** 93951-73-6 (Lot PR-30568) **Purity** 99%	1,502.0 µg/mL	+/- 8.9214 µg/mL +/- 43.8714 µg/mL +/- 53.2214 µg/mL	Gravimetric Unstressed Stressed
4	1,2-Dichlorobenzene-d4 **CAS #** 2199-69-1 (Lot M-2097) **Purity** 99%	1,006.0 µg/mL	+/- 5.9753 µg/mL +/- 29.3839 µg/mL +/- 35.6463 µg/mL	Gravimetric Unstressed Stressed
5	Nitrobenzene-d5 **CAS #** 4165-60-0 (Lot PR-29940B) **Purity** 99%	1,002.0 µg/mL	+/- 5.9516 µg/mL +/- 29.2671 µg/mL +/- 35.5046 µg/mL	Gravimetric Unstressed Stressed
6	2-Fluorobiphenyl **CAS #** 321-60-8 (Lot 00019169) **Purity** 99%	1,002.0 µg/mL	+/- 5.9516 µg/mL +/- 29.2671 µg/mL +/- 35.5046 µg/mL	Gravimetric Unstressed Stressed
7	2,4,6-Tribromophenol **CAS #** 118-79-6 (Lot S55013V) **Purity** 99%	1,502.0 µg/mL	+/- 8.9214 µg/mL +/- 43.8714 µg/mL +/- 53.2214 µg/mL	Gravimetric Unstressed Stressed

8	p-Terphenyl-d14		1,002.0	µg/mL	+/-	5.9516	µg/mL	Gravimetric
	CAS # 1718-51-0	(Lot PR-30504)			+/-	29.2671	µg/mL	Unstressed
	Purity 99%				+/-	35.5046	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Tech Tips:
Due to the limited solubility of p-terphenyl-d14 in methanol, we do not recommend that this mixture be diluted in methanol.

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

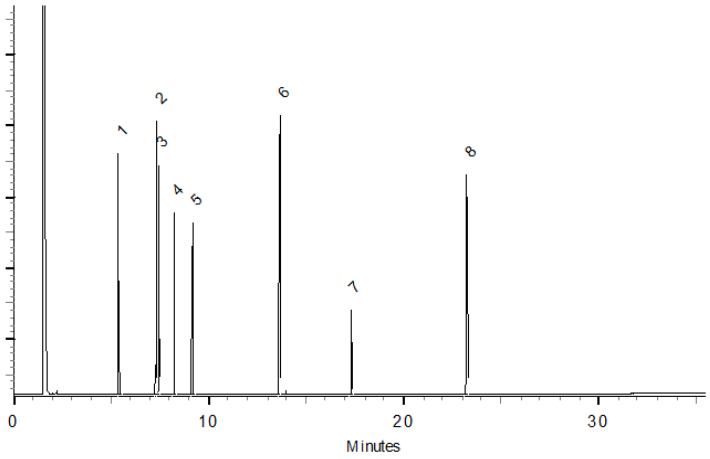
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2020 **Balance:** B345965662

Justine Albertson - Operations Tech-ARM QC

Date Passed: 31-Dec-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Agilent

Certificate of Analysis

J008074

SVOA PAH STD 2000ug/ml
Expires 6/30/2023
Prepared By Joshua Rains 8/5/2021

Product Name: PAH Standard

Product Number: US-106N-1

Lot Number: 0006540449

Lot Issue Date: 11-Jun-2020

Expiration Date: 30-Jun-2023

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
acenaphthene	000083-32-9	RM10879	2008 ± 10 µg/mL
acenaphthylene	000208-96-8	RM10891	2003 ± 10 µg/mL
anthracene	000120-12-7	RM14212	2006 ± 10 µg/mL
benz[a]anthracene	000056-55-3	RM16072	2006 ± 10 µg/mL
benzo[b]fluoranthene	000205-99-2	RM14571	2005 ± 10 µg/mL
benzo[k]fluoranthene	000207-08-9	RM14321	2009 ± 10 µg/mL
benzo[ghi]perylene	000191-24-2	RM15761	2008 ± 10 µg/mL
benzo[a]pyrene	000050-32-8	RM12669	2009 ± 10 µg/mL
chrysene	000218-01-9	RM12260	2009 ± 10 µg/mL
dibenz[a,h]anthracene	000053-70-3	RM06786	2009 ± 10 µg/mL
fluoranthene	000206-44-0	RM12277	2004 ± 10 µg/mL
fluorene	000086-73-7	RM09441	2009 ± 10 µg/mL
indeno[1,2,3-cd]pyrene	000193-39-5	RM14192	2009 ± 10 µg/mL
naphthalene	000091-20-3	NT00970	2008 ± 10 µg/mL
phenanthrene	000085-01-8	RM10495	2009 ± 10 µg/mL
pyrene	000129-00-0	RM03479	2008 ± 10 µg/mL

Matrix: methylene chloride/benzene (1:1)

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

ISO 17025 Cert No. AT-1937

Certificate of Analysis

Product Number: US-106N-1 **Lot Number:** 0006540449

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ISO 17034 Cert No.
AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/

ISO 17025 Cert
No. AT-1937

Certificate of Analysis

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244
Description: Benzidines Standard
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL16062
Certification Date: November 19, 2020
Expiration Date: November 30, 2030

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 2.740%
3,3'-Dichlorobenzidine	91-94-1	2000	± 3.229%

J008310
Benzidines std @2000ug/ml
Expires 11/30/2030
Prepared By Van Spohn 8/12/2021

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
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Certicate No. 2427.03

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

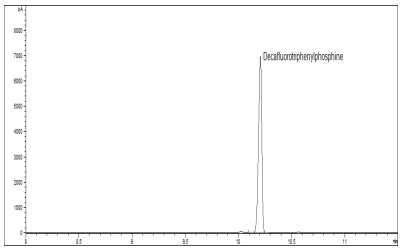
References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis - Certified Reference Material

Decafluorotriphenylphosphine solution

Product no.: 48724-U
Lot no.: LRAD0628
Expiry Date: October 2024
Manufacturing Date: September 2021
Storage: ROOM TEMPERATURE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD0628.01 (*Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

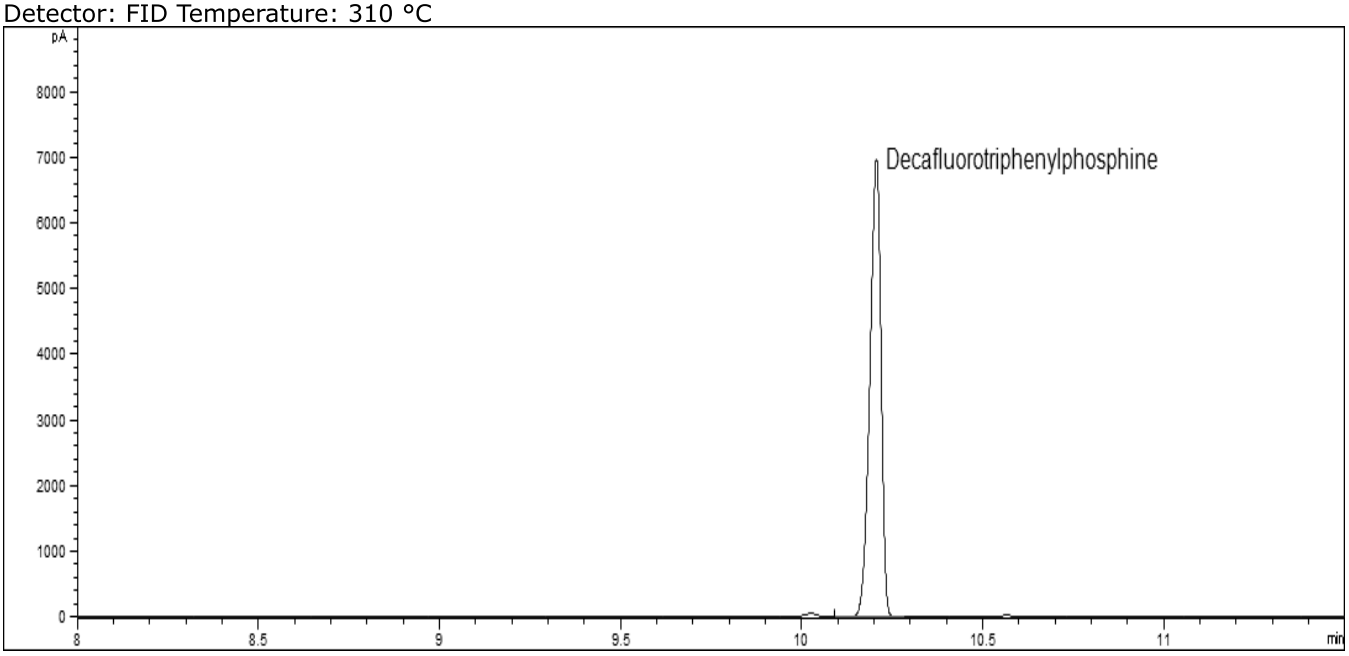


Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
DFTPP CAS# 5074-71-5	25.2 ± 2.6	mg/mL	97.0	10220909

ASSAY Method

METHOD: GC (BELLEFONTE)
Column: SPB-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness
Carrier Gas: H_2 Flow Rate: 4.3 mL/min
Inlet Temperature: 250 °C Injection Volume: 1 µL
Injection Mode: 25:1
Temperature Program: 120 °C (Hold 0 min) @ 12 °C/min to 260 °C (Hold 0 min)
Detector: FID Temperature: 310 °C



Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Elution details:

EO	RT(MIN)	ANALYTE
1	10.206	Decafluorotriphenylphosphine

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Minimum sample size: 1 µL

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 30-Sep-2021

Andy Ommen - QC Manager

Scott Stetler - QA Manager

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom } ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD0628.01	30-Sep-2021	Original Release Date

.

Certificate of Analysis

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101246
Description: Benzoic Acid
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL16693
Certification Date: May 6, 2021
Expiration Date: April 30, 2031

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzoic acid	65-85-0	2000	± 4.383%

K3238

A2LA ACCREDITED
Reference Material Producer
Certicate No. 2427.02

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3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 25 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

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[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101443
Description: Aniline
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL17696
Certification Date: December 14, 2021
Expiration Date: December 31, 2029

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aniline	62-53-3	1000	± 0.760%

K 3239

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

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3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

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[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID CRM143-50G
Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Certified Values

Analyte	*Units*	*Certified Value* [1,4]
1,2,4-Trichlorobenzene	µg/Kg	1477 ± 181
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	1625 ± 292
1-Chloronaphthalene	µg/Kg	2809 ± 84
2,3-Dimethylphenol	µg/Kg	4552 ± 137
2,4,5-Trichlorophenol	µg/Kg	3438 ± 245
2,4,6-Trichlorophenol	µg/Kg	2194 ± 251
2,4-Dichlorophenol	µg/Kg	6991 ± 394
2,4-Dimethylphenol	µg/Kg	6357 ± 879
2,4-Dinitrophenol	µg/Kg	2922 ± 523
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	3318 ± 442
2,6-Dichlorophenol	µg/Kg	4578 ± 874
2,6-Dimethylphenol	µg/Kg	7582 ± 228
2-Chloronaphthalene	µg/Kg	2223 ± 168
2-Chlorophenol	µg/Kg	1678 ± 202
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	5148 ± 685
2-Methylphenol (o-Cresol)	µg/Kg	6004 ± 573
2-Nitrophenol	µg/Kg	6456 ± 383
3,4-Dimethylphenol	µg/Kg	7185 ± 216
3+4-Methylphenol (m+p-Cresol)	µg/Kg	8033 ± 1613
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	7169 ± 310
4-Chloro-3-methylphenol	µg/Kg	2071 ± 110
4-Chlorophenyl phenylether	µg/Kg	2052 ± 113
4-Methylphenol (p-Cresol)	µg/Kg	6617 ± 1371
4-Nitrophenol	µg/Kg	6812 ± 595
Acenaphthene	µg/Kg	5489 ± 380

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Acenaphthylene	µg/Kg	1948 ± 240
Anthracene	µg/Kg	2866 ± 237
Benzo(a)anthracene	µg/Kg	5751 ± 552
Benzo(a)pyrene	µg/Kg	5902 ± 612
Benzo(b)fluoranthene	µg/Kg	3010 ± 409
Benzo(b+k)fluoranthene	µg/Kg	6534 ± 196
Benzo(g,h,i)perylene	µg/Kg	1380 ± 136
Benzo(k)fluoranthene	µg/Kg	2215 ± 237
Butyl benzyl phthalate	µg/Kg	3511 ± 384
Carbazole	µg/Kg	5412 ± 407
Chrysene	µg/Kg	1477 ± 72
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	2905 ± 321
Dibenzo(a,h)anthracene	µg/Kg	3420 ± 302
Dibenzofuran	µg/Kg	6130 ± 253
Dimethyl phthalate	µg/Kg	4537 ± 250
Di-n-butyl phthalate	µg/Kg	1721 ± 154
Di-n-octyl phthalate	µg/Kg	2744 ± 288
Fluoranthene	µg/Kg	2497 ± 222
Fluorene	µg/Kg	3724 ± 222
Hexachlorobutadiene	µg/Kg	1877 ± 245
Indeno(1,2,3-cd) pyrene	µg/Kg	3914 ± 409
Isophorone	µg/Kg	1615 ± 170
Naphthalene	µg/Kg	4458 ± 480
Nitrobenzene	µg/Kg	3539 ± 266
n-Nitrosodimethylamine	µg/Kg	1580 ± 402
n-Nitrosodiphenylamine	µg/Kg	2854 ± 379
Pentachlorophenol	µg/Kg	3411 ± 358
Phenanthrene	µg/Kg	5052 ± 385
Phenol	µg/Kg	2660 ± 184
Pyrene	µg/Kg	2964 ± 256
Pyridine	µg/Kg	1008 ± 30

Informational Values

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID CRM143-50G
Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Analyte	*Units*	*Suggested Acceptance Windows*	*Standard Deviation*
1,2,4-Trichlorobenzene	µg/Kg	148 to 2853	459
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	163 to 3440	605
1-Chloronaphthalene	µg/Kg	1123 to 4494	562
2,3-Dimethylphenol	µg/Kg	1821 to 7284	910
2,4,5-Trichlorophenol	µg/Kg	1003 to 5872	811
2,4,6-Trichlorophenol	µg/Kg	640 to 3748	518
2,4-Dichlorophenol	µg/Kg	2391 to 11591	1533
2,4-Dimethylphenol	µg/Kg	0.00 to 13959	2534
2,4-Dinitrophenol	µg/Kg	1169 to 4675	584
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	1248 to 5388	690
2,6-Dichlorophenol	µg/Kg	1831 to 7324	916
2,6-Dimethylphenol	µg/Kg	3033 to 12132	1516
2-Chloronaphthalene	µg/Kg	748 to 3699	492
2-Chlorophenol	µg/Kg	415 to 2942	421
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	0.00 to 10347	1733
2-Methylphenol (o-Cresol)	µg/Kg	1306 to 10702	1566
2-Nitrophenol	µg/Kg	1534 to 11379	1641
3,4-Dimethylphenol	µg/Kg	2874 to 11495	1437
3+4-Methylphenol (m+p-Cresol)	µg/Kg	4054 to 16218	2027
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	2901 to 11437	1423
4-Chloro-3-methylphenol	µg/Kg	677 to 3464	464
4-Chlorophenyl phenylether	µg/Kg	756 to 3348	432
4-Methylphenol (p-Cresol)	µg/Kg	2647 to 10587	1323
4-Nitrophenol	µg/Kg	681 to 14762	2650
Acenaphthene	µg/Kg	2243 to 8736	1082
Acenaphthylene	µg/Kg	712 to 3183	412
Anthracene	µg/Kg	1218 to 4515	550
Benzo(a)anthracene	µg/Kg	2806 to 8696	982
Benzo(a)pyrene	µg/Kg	2512 to 9292	1130
Benzo(b)fluoranthene	µg/Kg	1197 to 4822	604
Benzo(b+k)fluoranthene	µg/Kg	2614 to 10454	1307

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Benzo(g,h,i)perylene	µg/Kg	489 to 2271	297
Benzo(k)fluoranthene	µg/Kg	892 to 3537	441
Butyl benzyl phthalate	µg/Kg	1255 to 5766	752
Carbazole	µg/Kg	2032 to 8792	1127
Chrysene	µg/Kg	669 to 2284	269
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	765 to 5045	713
Dibenzo(a,h)anthracene	µg/Kg	1257 to 5583	721
Dibenzofuran	µg/Kg	2766 to 9493	1121
Dimethyl phthalate	µg/Kg	1842 to 7231	898
Di-n-butyl phthalate	µg/Kg	495 to 2947	409
Di-n-octyl phthalate	µg/Kg	690 to 4798	685
Fluoranthene	µg/Kg	984 to 4009	504
Fluorene	µg/Kg	1638 to 5810	695
Hexachlorobutadiene	µg/Kg	425 to 3329	484
Indeno(1,2,3-cd) pyrene	µg/Kg	870 to 6957	1015
Isophorone	µg/Kg	437 to 2792	392
Naphthalene	µg/Kg	1131 to 7784	1109
Nitrobenzene	µg/Kg	1024 to 6054	838
n-Nitrosodimethylamine	µg/Kg	632 to 2528	316
n-Nitrosodiphenylamine	µg/Kg	1142 to 4567	571
Pentachlorophenol	µg/Kg	341 to 7037	1209
Phenanthrene	µg/Kg	2307 to 7798	915
Phenol	µg/Kg	681 to 4639	660
Pyrene	µg/Kg	1118 to 4810	615
Pyridine	µg/Kg	403 to 1613	202

Additional Information:

DESCRIPTION

The organic sample is a soil containing extractable BNAs for analysis by 8100, 8270, 8310 or equivalent methods.

This product consist of a 5 vials each containing 10g of soil for analysis of PAHs. Each vial is identical and has been tested how homogeneity. Only one vial is need for test the remaining vials are to be used for multiple methods or routine testing.

The soil has been sterilized to minimize degradation of the sample.

The sample has been sized to 100 mesh.

Required storage condition is 4ºC.

The sample has been intentionally prepared with an apparent headspace.

STORAGE

The sample should be stored at 4ºC. It has been determined to be stable for the duration of the expiration date.

After sub-sampling replace cap securely and store remaining sample at 4ºC.

The shelf life of the product was determined by historic stability of similar CRM's. The expiration date may be extended based on stock and popularity upon successful stability testing by a 17025 accredited laboratory.

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID	CRM143-50G
Lot	**LRAC8918**
Expiration Date	January 2024
Manufacturing Date	January 2021
Storage Conditions	Refrigerate
Solvent/Matrix	SOIL

Stability and shelf life after opening must be determined by the user, taking into account sampling frequency/volume and all local conditions.

SAMPLE PREPARATION

Extract the complete contents of a single vial. Transfer entire contents of one vial to extraction vessel. Rinse vial and cap with extraction solvent.

Assume a 10g sample size for all calculations.

Note: Sample extracts and calibration solutions should be in the same solvent.

Report all results on a wet weight basis, do not correct for moisture.

NOTE: For method 8100 and using a packed column gas chromatographic method or cannot adequately resolve the following may coelute in four pairs of compounds: anthracene and phenanthrene; chrysene and benzo(a)anthracene; benzo(b)fluoranthene and benzo(k)fluoranthene; and dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene.

SCOPE AND APPLICATION

The BNAs in Soil Certified Reference Material (CRM) consists of 5 10mL VOA vials, with a Teflon lined closures containing approximately 10 grams of soil, fortified with BNAs. Being a natural matrix waste sample the analyst is challenged by the same preparation problems, analytical interferences, etc. as is typical for similar matrices received by the laboratory for analysis.

Description

Lot	**LRAC8918**
Expiration Date	January 2024
Manufacturing Date	January 2021
Storage Conditions	Refrigerate
Solvent/Matrix	SOIL

1 **Metrological traceability:** Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.
4 Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. K=2 unless specified. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom } ogeneity}^2 + u_{stability}^2}$$

***k*:** Coverage factor derived from a t-distribution table, based on the degrees of freedom of the data set. Assume 2.0 for a **Confidence interval = 95%**

6 Analytical Value- For QC verification of the certified value only- not to be used in calculations. Represents the analytical data obtained by comparison to a standard as analyzed by the method described in the CoA or another acceptable method. The result may differ from the certified value and UCRM based on method uncertainty as well as the uncertainty associated with the standard used for comparison.

Traceability: The standard was manufactured under an ISO/IEC 17025:2017 certified quality system. The balance used to weigh raw materials is accurate to +/- 0.0001g and calibrated regularly using mass standards traceable to NIST. All dilutions were preformed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Homogeneity: Homogeneity was assessed in accordance with ISO 17034:2016. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared using a one-way analysis of variance approach as described by TNI EL-V3-2009 Appendix A.2. See Instructions for minimum sub-sample size.

Expiration is at end of month given on certificate and label.

MSDS reports for components comprising greater than 1.0% of the solution or 0.1% for components known to be carcinogens are available upon request.

THIS PRODUCT WAS DESIGNED, PRODUCED AND VERIFIED FOR ACCURACY AND STABILITY IN ACCORDANCE WITH **ISO/IEC 17025:2017 (ANAB Cert AT-1467)** and **ISO 17034:2016 (ANAB Cert AR-1470).**

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Certification Date	January 05, 2021
Version	0-152021

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

Agilent

Certificate of Analysis

Product Name: Toxic Substances Standard

Product Number: US-103N-1 **Lot Issue Date:** 25-May-2021

Lot Number: 0006609664 **Expiration Date:** 30-Jun-2024

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
benzoic acid	000065-85-0	RM01884	2005 ± 10 µg/mL
o-cresol	000095-48-7	RM12877	2005 ± 10 µg/mL
p-cresol	000106-44-5	RM01988	2005 ± 10 µg/mL
2,4,5-trichlorophenol	000095-95-4	NT00344	2004 ± 10 µg/mL

Matrix: methylene chloride (dichloromethane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

5/11/22

K004539
toxic sub mix#1
Solvent / Lot: methylene chloride
Prep: 5/11/2022 by JZ
Exp: 6/30/2024
Location:

ANAB ACCREDITED ISO17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert No. AT-1937

ISO 17034

Agilent
Trusted Answers

Reference Material Certificate

Product Name: Phenols Standard
Product Number: US-107N-1
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006648297
Lot Issue Date: 17-Nov-2021
Expiration Date: 31-Dec-2024

Component Name	CERTIFIED VALUES Concentration	Expanded Uncertainty	CAS#	Analyte Lot
4-chloro-3-methylphenol	2006 ±	10 µg/mL	000059-50-7	RM01885
2-chlorophenol	2007 ±	10 µg/mL	000095-57-8	RM01871
2,4-dichlorophenol	2005 ±	10 µg/mL	000120-83-2	RM13878
2,4-dimethylphenol	2006 ±	10 µg/mL	000105-67-9	RM13009
2,4-dinitrophenol	2006 ±	10 µg/mL	000051-28-5	RM02112
2-methyl-4,6-dinitrophenol	2005 ±	10 µg/mL	000534-52-1	RM02292
2-nitrophenol	2007 ±	10 µg/mL	000088-75-5	RM13445
4-nitrophenol	2006 ±	10 µg/mL	000100-02-7	RM03752
pentachlorophenol	2006 ±	10 µg/mL	000087-86-5	RM02474
phenol	2006 ±	10 µg/mL	000108-95-2	RM11471
2,4,6-trichlorophenol	2006 ±	10 µg/mL	000088-06-2	RM18096

Matrix: methylene chloride (dichloromethane)

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

5/11/22

CSD-QA-015.1

K004540
phenols mix
Solvent / Lot: methylene chloride
Prep: 5/11/2022 by JZ
Exp: 12/31/2024
Location:

ISO 17034

Agilent
Trusted Answers

Reference Material Certificate

Product Name: PAH Standard
Product Number: US-106N-1
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006627349
Lot Issue Date: 17-Sep-2021
Expiration Date: 31-Oct-2024

Component Name	CERTIFIED VALUES Concentration	Expanded Uncertainty	CAS#	Analyte Lot
acenaphthene	2007 ±	10 µg/mL	000083-32-9	RM10879
acenaphthylene	2004 ±	10 µg/mL	000208-96-8	RM10891
anthracene	2006 ±	10 µg/mL	000120-12-7	RM14212
benz[a]anthracene	2006 ±	10 µg/mL	000056-55-3	RM16072
benzo[b]fluoranthene	2006 ±	10 µg/mL	000205-99-2	RM14571
benzo[k]fluoranthene	2006 ±	10 µg/mL	000207-08-9	RM18376
benzo[ghi]perylene	2006 ±	10 µg/mL	000191-24-2	RM15761
benzo[a]pyrene	2006 ±	10 µg/mL	000050-32-8	RM17573
chrysene	2007 ±	10 µg/mL	000218-01-9	RM13771
dibenz[a,h]anthracene	2006 ±	10 µg/mL	000053-70-3	RM06786
fluoranthene	2006 ±	10 µg/mL	000206-44-0	RM12277
fluorene	2006 ±	10 µg/mL	000086-73-7	RM09441
indeno[1,2,3-cd]pyrene	2006 ±	10 µg/mL	000193-39-5	RM14192
naphthalene	2007 ±	10 µg/mL	000091-20-3	RM10445
phenanthrene	2005 ±	10 µg/mL	000085-01-8	RM10495
pyrene	2005 ±	10 µg/mL	000129-00-0	RM16126

Matrix: methylene chloride/benzene (1:1)

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

K004541
SVOA PAH STD 2000ug/ml
Solvent / Lot: DCM/BENZENE
Prep: 5/11/2022 by JZ
Exp: 10/31/2024
Location: Fridge 19

CSD-QA-015.1

11/22

Reference Materials Producer
Cert #2495.01

Certificate of Analysis

Chemical Testing
Cert #2495.02

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This **SPEXOrganics**® Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

Certificate of Reference Material

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021 Certifying Officer: Shannon Mora

Report of Certification

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

- ISO 9001:2008: Quality management systems - Requirements - Certified by UL-DQS
- ISO 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories - Accredited by A2LA
- ISO Guide 34:2009: General Requirements for the Competence of Reference Material Producers - Accredited by A2LA
- ISO Guide 31:2000: Reference Materials - Contents of Certificates and Labels
- ISO Guide 35:2006: Reference Materials - General and statistical principals for certification
- Guide to the Expression of Uncertainty in Measurement 1997
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference material producers
- ISO/REMCO N280

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory , please store this product in a refrigerator (2°C to 8°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is unopened and stored under the prescribed conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5 µL with a 25µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i, where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breech of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

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Accredited to 17025 & Guide 34 ISO Certified to 9001

ACCREDITED
Reference Materials Producer
Cert #2495.01

ECS

Certificate of Analysis

ilac-MRA ACCREDITED
Chemical Testing
Cert #2495.02

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This **SPEXOrganics®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

K004542

Certificate of Reference Material

Catalog Number: ECS-A-030

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Lot No. AA210126005

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021

Certifying Officer: Shannon Nave

Report of Certification

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

- ISO 9001:2008: Quality management systems - Requirements - Certified by UL-DQS
- ISO 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories - Accredited by A2LA
- ISO Guide 34:2009: General Requirements for the Competence of Reference Material Producers - Accredited by A2LA
- ISO Guide 31:2000: Reference Materials - Contents of Certificates and Labels
- ISO Guide 35:2006: Reference Materials - General and statistical principals for certification
- Guide to the Expression of Uncertainty in Measurement 1997
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference material producers
- ISO/REMCO N280

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory, please store this product in a refrigerator (2°C to 8°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is unopened and stored under the prescribed conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5µL with a 25µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breech of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

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Accredited to 17025 & Guide 34 ISO Certified to 9001

Agilent

Certificate of Analysis

Product Name: 1-Methylnaphthalene Standard

Product Number: EPA-1225-1 **Lot Issue Date:** 19-Jul-2021

Lot Number: 0006624769 **Expiration Date:** 31-Jul-2023

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1-methylnaphthalene	000090-12-0	RM07712	999.3 ± 5.0 µg/mL

Matrix: methanol (methyl alcohol)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

K004543
1-Methylnaphthalene
Solvent / Lot: MEOH
Prep: 5/11/2022 by JZ
Exp: 7/31/2023
Location:

5/11/22

Sample lot approver:
Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026
Page: 1 of 1
www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert
No. AT-1937

Agilent

Certificate of Analysis

Product Name: Toxic Substances Standard

Product Number: US-104N-1 **Lot Issue Date:** 02-Jul-2021

Lot Number: 0006620643 **Expiration Date:** 31-Jul-2023

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
aniline	000062-53-3	RM12853	2005 ± 10 µg/mL
benzyl alcohol	000100-51-6	RM10547	2004 ± 10 µg/mL
4-chloroaniline	000106-47-8	RM01886	2002 ± 10 µg/mL
dibenzofuran	000132-64-9	RM02077	2002 ± 10 µg/mL
2-methylnaphthalene	000091-57-6	RM01258	2006 ± 10 µg/mL
2-nitroaniline	000088-74-4	RM02402	2003 ± 10 µg/mL
3-nitroaniline	000099-09-2	RM02424	2003 ± 10 µg/mL
4-nitroaniline	000100-01-6	RM02425	2003 ± 10 µg/mL

Matrix: methylene chloride (dichloromethane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

K004544
toxic sub mix#2
Solvent / Lot: methylene chloride
Prep: 5/11/2022 by JZ
Exp: 7/31/2023
Location:

05/11/22

ANAB ACCREDITED ISO17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert No. AT-1937

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31493 **Lot No.:** A0181243

Description : CLP 04.1 BNA Surrogate Mix

CLP 04.1 BNA Surrogate Mix 1000-1500 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2025 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

05/11/22

K004545
CLP 04.1 BNA SURR MIX
Solvent / Lot: AO175316
Prep: 5/11/2022 by JZ
Exp: 10/20/2025
Location:

Elution Order	Compound	Gr (weig					
1	2-Fluorophenol **CAS #** 367-12-4 (Lot STBJ2508) **Purity** 99%	1,50					
				+/-	53.3632	µg/mL	Stressed
2	Phenol-d6 **CAS #** 13127-88-3 (Lot PR-31262) **Purity** 99%	1,506.0	µg/mL	+/-	8.9452	µg/mL	Gravimetric
				+/-	43.9882	µg/mL	Unstressed
				+/-	53.3632	µg/mL	Stressed
3	2-Chlorophenol-d4 **CAS #** 93951-73-6 (Lot PR-30568) **Purity** 99%	1,510.0	µg/mL	+/-	8.9689	µg/mL	Gravimetric
				+/-	44.1050	µg/mL	Unstressed
				+/-	53.5049	µg/mL	Stressed
4	1,2-Dichlorobenzene-d4 **CAS #** 2199-69-1 (Lot PR-32542/022621DB1 **Purity** 99%	1,004.0	µg/mL	+/-	5.9635	µg/mL	Gravimetric
				+/-	29.3255	µg/mL	Unstressed
				+/-	35.5754	µg/mL	Stressed
5	Nitrobenzene-d5 **CAS #** 4165-60-0 (Lot PR-29940A) **Purity** 99%	1,008.0	µg/mL	+/-	5.9872	µg/mL	Gravimetric
				+/-	29.4423	µg/mL	Unstressed
				+/-	35.7172	µg/mL	Stressed
6	2-Fluorobiphenyl **CAS #** 321-60-8 (Lot 19169) **Purity** 99%	1,006.0	µg/mL	+/-	5.9753	µg/mL	Gravimetric
				+/-	29.3839	µg/mL	Unstressed
				+/-	35.6463	µg/mL	Stressed
7	2,4,6-Tribromophenol **CAS #** 118-79-6 (Lot MKCJ7664) **Purity** 99%	1,506.0	µg/mL	+/-	8.9452	µg/mL	Gravimetric
				+/-	43.9882	µg/mL	Unstressed
				+/-	53.3632	µg/mL	Stressed

Certificate of Analysis

phenova Certified Reference Materials | A Phenomenex Company

Produced by Phenova
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Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101246
Description: Benzoic Acid
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL17953
Certification Date: January 31, 2022
Expiration Date: January 31, 2032

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzoic acid	65-85-0	2000	± 2.714%

K004603
Benzoic Acid @2000ug/ml
Solvent / Lot: N/A
Prep: 5/13/2022 by JZ
Exp: 1/31/2032
Location: GC

5/13/22

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

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Chemical Testing Laboratory
Certicate No. 2427.03

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Certificate of Analysis

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244
Description: Benzidines Standard
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL17662
Certification Date: December 2, 2021
Expiration Date: November 30, 2031

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 0.211%
3,3'-Dichlorobenzidine	91-94-1	2000	± 1.305%

K004604
Benzidines std @2000ug/ml
Solvent / Lot: MeCl2
Prep: 5/13/2022 by JZ
Exp: 11/30/2031
Location: GC

5/13/22

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

phenova Certified Reference Materials | A Phenomenex Company

Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

IL64591018_us

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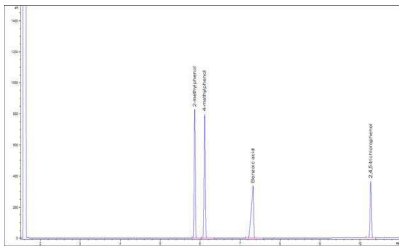
Certificate of Analysis - Certified Reference Material

EPA TCL Hazardous Substances Mix 1

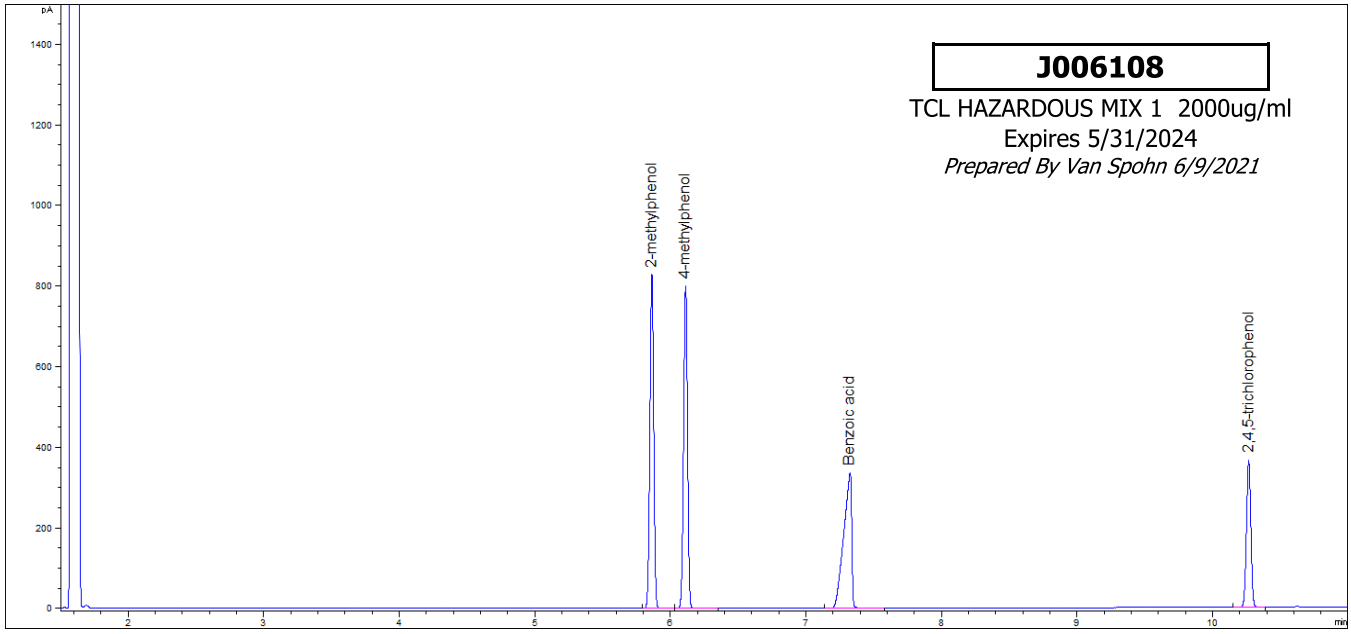
Product no.: 48907
Lot no.: LRAC9610
Expiry Date: May 2024
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAC9610.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*



Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Elution order*	*Raw Material Lot*
2-METHYLPHENOL CAS# 95-48-7	2004 ± 9	µg/mL	99.0	1	G1735A
4-METHYLPHENOL CAS# 106-44-5	2004 ± 13	µg/mL	98.9	2	06921MG
BENZOIC ACID CAS# 65-85-0	2012 ± 6	µg/mL	99.9	3	LC16514
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	2003 ± 6	µg/mL	99.9	4	JS00008

Informational Values:



Additional Information:
Analytical Method Parameters:
Column: Equity-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness (Column #98)
Carrier Gas: H2, Flow: 4.5 mL/min
Inlet Temperature: 170 °C, Injection Volume: 1 µL
Injection Mode: Split, Split Ratio: 20:1

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Temperature Program: 80 °C @ 10 °C/min to 190 °C (Hold 5 min)
Detector: FID
Detector Temperature: 310 °C

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 20-May-2021

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom}\ ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9610.01	20-May-2021	Original Release Date

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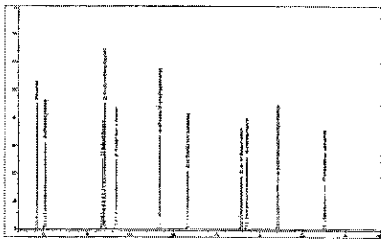
Certificate of Analysis - Certified Reference Material

EPA TCL Phenols Mix

Product no.: 48904
Lot no.: LRAD0139
Expiry Date: July 2024
Manufacturing Date: July 2021
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD0139.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*



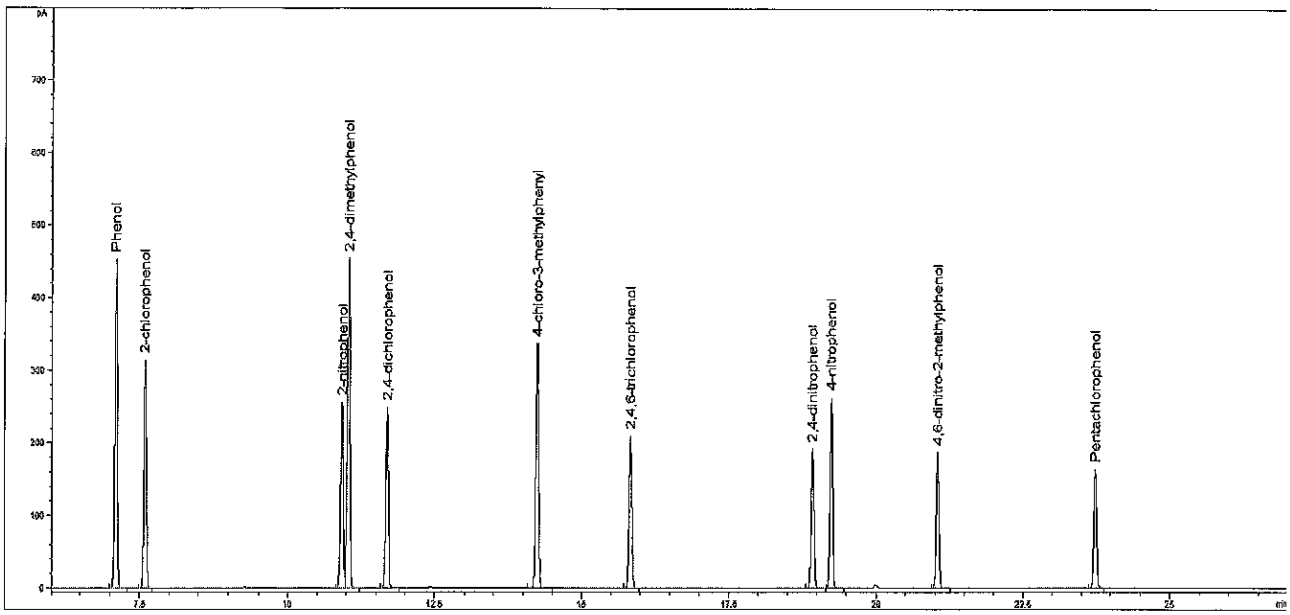
Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
2-CHLOROPHENOL CAS# 95-57-8	2001 ± 25	µg/mL	99.9	STBG3033V
2-NITROPHENOL CAS# 88-75-5	1999 ± 18	µg/mL	99.3	15905BB
2,4-DIMETHYLPHENOL CAS# 105-67-9	2000 ± 14	µg/mL	99.2	05421CO
2,4-DICHLOROPHENOL CAS# 120-83-2	2000 ± 17	µg/mL	99.5	03221TN
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	2000 ± 5	µg/mL	99.9	JS00013
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	2002 ± 5	µg/mL	99.5	04212PS
2,4-DINITROPHENOL CAS# 51-28-5	2000 ± 28	µg/mL	66.9	STBJ5751
4-NITROPHENOL CAS# 100-02-7	2000 ± 33	µg/mL	99.0	04628LT
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	2000 ± 27	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	1999 ± 25	µg/mL	97.9	MKCD2150

ASSAY Method

J013597
TCL Phenols Mix 2000ug/ml
Solvent / Lot: LRAD0139
Prep: 12/30/2021 by VS
Exp: 7/31/2024
Location:

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.



METHOD: GC (Bellefonte Method)

Column: SPB-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness
Carrier Gas: H_2 Flow Rate: 4.5 mL/min
Inlet Temperature: 200 °C Injection Volume: 1.0 µL
Injection Mode: 25:1
Temperature Program: 80 °C (Hold 2 min) @ 6 °C/min to 260 °C (Hold 5 min)
Detector: FID Temperature: 310 °C

Elution details:

EO	RT(MIN)	ANALYTE
1	7.095	Phenol
2	7.585	2-chlorophenol
3	10.925	2-nitrophenol
4	11.037	2,4-dimethylphenol
5	11.696	2,4-dichlorphenol
6	14.242	4-chloro-3-m3thylphenol
7	15.842	2,4,6-trichlorophenol
8	18.93	2,4-dinitrophenol
9	19.25	4-nitrophenol
10	21.05	4,6-dinitro-2-methylphenol
11	23.752	Pentachlorophenol

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 12-Jul-2021

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{hom\ ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD0139.01	12-Jul-2021	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada.

Certificate of Analysis

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Description: 8270 Calibration Standard
Storage: -18 °C
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Lot Number: CL18355
Certification Date: July 25, 2022
Expiration Date: August 31, 2023

K007995
SVOA-8270 LCS MIX 1000ug/ml
Solvent / Lot: N/A
Prep: 8/29/2022 by JZ
Exp: 8/31/2023
Location: FREEZER 44

Aaron Dukes, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Acenaphthene	83-32-9	1000	± 0.300%
Acenaphthylene	208-96-8	1000	± 0.225%
Anthracene	120-12-7	1000	± 6.858%
Azobenzene	103-33-3	1000	± 0.224%
Benzo(a)anthracene	56-55-3	1000	± 0.247%
Benzo(a)pyrene	50-32-8	1000	± 0.270%
Benzo(b)fluoranthene	205-99-2	1000	± 0.635%
Benzo(k)fluoranthene	207-08-9	1000	± 0.682%
Benzo(g,h,i)perylene	191-24-2	1000	± 0.272%
Benzyl alcohol	100-51-6	1000	± 0.231%
Benzyl butyl phthalate	85-68-7	1000	± 0.480%
bis(2-Chloroethoxy)methane	111-91-1	1000	± 0.479%
bis(2-Chloroethyl) ether	111-44-4	1000	± 0.479%
bis(2-Chloroisopropyl) ether	108-60-1	1000	± 0.550%
bis(2-Ethylhexyl) adipate	103-23-1	1000	± 0.479%
bis(2-Ethylhexyl) phthalate	117-81-7	1000	± 0.479%
4-Bromophenyl phenyl ether	101-55-3	1000	± 0.479%
Carbazole	86-74-8	1000	± 0.146%

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
4-Chloroaniline	106-47-8	1000	± 0.300%
4-Chloro-3-methylphenol	59-50-7	1000	± 0.545%
2-Chloronaphthalene	91-58-7	1000	± 0.224%
2-Chlorophenol	95-57-8	1000	± 0.507%
4-Chlorophenyl phenyl ether	7005-72-3	1000	± 0.479%
Chrysene	218-01-9	1000	± 0.145%
Dibenz(a,h)anthracene	53-70-3	1000	± 1.058%
Dibenzofuran	132-64-9	1000	± 0.302%
Di-n-butyl phthalate	84-74-2	1000	± 0.518%
1,2-Dichlorobenzene	95-50-1	1000	± 0.247%
1,3-Dichlorobenzene	541-73-1	1000	± 0.225%
1,4-Dichlorobenzene	106-46-7	1000	± 0.224%
2,4-Dichlorophenol	120-83-2	1000	± 0.545%
Diethyl phthalate	84-66-2	1000	± 0.518%
2,4-Dimethylphenol	105-67-9	1000	± 0.507%
Dimethyl phthalate	131-11-3	1000	± 0.518%
1,2-Dinitrobenzene	528-29-0	1000	± 0.361%
1,3-Dinitrobenzene	99-65-0	1000	± 0.300%
1,4-Dinitrobenzene	100-25-4	1000	± 0.242%
2,4-Dinitrophenol	51-28-5	1000	± 0.545%
2,4-Dinitrotoluene	121-14-2	1000	± 1.128%

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2,6-Dinitrotoluene	606-20-2	1000	± 0.224%
Di-n-octyl phthalate	117-84-0	1000	± 0.486%
Fluoranthene	206-44-0	1000	± 0.224%
Fluorene	86-73-7	1000	± 0.224%
Hexachlorobenzene	118-74-1	1000	± 0.152%
Hexachlorobutadiene	87-68-3	1000	± 0.746%
Hexachlorocyclopentadiene	77-47-4	1000	± 0.153%
Hexachloroethane	67-72-1	1000	± 0.300%
Indeno(1,2,3-cd)pyrene	193-39-5	1000	± 0.883%
Isophorone	78-59-1	1000	± 0.145%
2-Methyl-4,6-dinitrophenol	534-52-1	1000	± 0.508%
1-Methylnaphthalene	90-12-0	1000	± 0.479%
2-Methylnaphthalene	91-57-6	1000	± 0.487%
2-Methylphenol	95-48-7	1000	± 0.545%
3-Methylphenol	108-39-4	500	± 0.279%
4-Methylphenol	106-44-5	500	± 0.399%
Naphthalene	91-20-3	1000	± 0.226%
2-Nitroaniline	88-74-4	1000	± 0.224%
3-Nitroaniline	99-09-2	1000	± 0.235%
4-Nitroaniline	100-01-6	1000	± 0.300%
Nitrobenzene	98-95-3	1000	± 0.300%

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2-Nitrophenol	88-75-5	1000	± 0.514%
4-Nitrophenol	100-02-7	1000	± 0.519%
N-Nitrosodimethylamine	62-75-9	1000	± 0.503%
N-Nitrosodiphenylamine	86-30-6	1000	± 0.476%
N-Nitrosodi-n-propylamine	621-64-7	1000	± 0.461%
Pentachlorophenol	87-86-5	1000	± 0.202%
Phenanthrene	85-01-8	1000	± 0.145%
Phenol	108-95-2	1000	± 0.545%
Pyrene	129-00-0	1000	± 0.147%
Pyridine	110-86-1	1000	± 0.503%
2,3,4,6-Tetrachlorophenol	58-90-2	1000	± 0.247%
2,3,5,6-Tetrachlorophenol	935-95-5	1000	± 0.247%
1,2,4-Trichlorobenzene	120-82-1	1000	± 0.224%
2,4,5-Trichlorophenol	95-95-4	1000	± 0.507%
2,4,6-Trichlorophenol	88-06-2	1000	± 0.509%

Notes: The proper chemical name for Bis(2-Chloroiospropyl) ether is 2,2'-oxybis(1-chloropropane). The analytical uncertainty contribution to the expanded uncertainty for 3 and 4-Methylphenol is measured as the total of the two analytes. N-Nitrosodiphenylamine presents as Diphenylamine at 854 µg/mL.

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Composition - Analytical Standard

BASE STOCK

Product no.: 22523051
Lot no.: LRAD2751
Expiry Date: June 2024
Manufacturing Date: June 2022
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD2751.01 (*Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
3,3'-DICHLOROBENZIDINE, 100MG, NEAT CAS# 91-94-1	799	µg/mL	99.8	LRAD2376
2,4-DINITROTOLUENE CAS# 121-14-2	801	µg/mL	97.8	LB46632
2,6-DINITROTOLUENE CAS# 606-20-2	800	µg/mL	99.2	11231AN
HEXACHLOROCYCLOPENTADIENE CAS# 77-47-4	800	µg/mL	96.0	LB95525
N-NITROSODIMETHYLAMINE CAS# 62-75-9	800	µg/mL	95.0	2019-030598 5
PERYLENE CAS# 198-55-0	200	µg/mL	99.6	04101PG
ANILINE CAS# 62-53-3	800	µg/mL	99.9	LA41596
4-CHLOROANILINE CAS# 106-47-8	800	µg/mL	100.0	MKBZ6909V
2-NITROANILINE CAS# 88-74-4	799	µg/mL	99.9	07411KN
3-NITROANILINE CAS# 99-09-2	800	µg/mL	99.9	LC09264
4-NITROANILINE CAS# 100-01-6	800	µg/mL	99.9	15609AA
PYRIDINE (LOW WATER) CAS# 110-86-1	800	µg/mL	100.0	SHBJ9218

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

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Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date: 03 JUN 2022

Andy Ommen - QC Manager

Scott Stetler - QA Manager

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD2751.01	03 JUN 2022	Original Release Date

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Certificate of Analysis

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Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.:	AL0-101291	**Lot Number:**	CL11000
Description:	GC/MS Tuning Mix	**Certification Date:**	May 9, 2014
Storage:	4 °C	**Expiration Date:**	December 31, 2023
Provided As:	1 mL in 2 mL Ampoule in Methylene chloride	**Revision Date:**	August 5, 2015

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty (%)
Benzidine	92-87-5	1000	± 0.208%
Decafluorotriphenylphosphine (DFTPP)	5074-71-5	1000	± 0.057%
4,4'-DDT	50-29-3	1000	± 0.056%
Pentachlorophenol	87-86-5	1000	± 0.061%

LOO 1648

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Certificate No. 2427.02

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Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

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Chemical Testing Laboratory
Certificate No. 2427.03

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Certificate of Analysis

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Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.: AL0-101291
Description: GC/MS Tuning Mix
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene chloride

Lot Number: CL11000
Certification Date: May 9, 2014
Expiration Date: December 31, 2023
Revision Date: August 5, 2015

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty (%)
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Decafluorotriphenylphosphine (DFTPP)	5074-71-5	1000	± 0.057%
4,4'-DDT	50-29-3	1000	± 0.056%
Pentachlorophenol	87-86-5	1000	± 0.061%

LOO1648

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Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

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Chemical Testing Laboratory
Certificate No. 2427.03

IL11110613_us

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO Guide 34[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in the calibration and calibration verification of chromatographic instrumentation performed in routine laboratory analysis.

4. Instruction: Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all certified analytes in the mixture.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Material Safety Data Sheet (MSDS) is available at www.phenomenex.com/mysupport.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC Guide 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO Guide 34. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC Guide 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC Guide 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO Guide 34.

12. Period of Validity: The Certified Values and their uncertainties are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31:2000(E) – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35:2006(E) – Reference Material – General and Statistical Principles for Certification.
[3] ISO Guide 34:2009(E) – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC Guide 17025:2005(E) – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

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Reference Material Producer
Certificate No. 2427.02

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Certified Reference Materials

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ACCREDITED
Chemical Testing Laboratory
Certificate No. 2427.03

IL111106.13_us

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1254

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-01 A	SDG:	23A0171
Sampled:	12/08/22 08:39	Prepared:	01/18/23 13:47	File ID:	NT1423021730s.D
% Solids:	42.83	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/18/23 04:06
Batch:	BLA0339	Sequence:	SLB0335	Initial/Final:	23.8 g Wet / 1 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	GC00009
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	1.3	J	0.6	4.9
95-50-1	1,2-Dichlorobenzene	1	4.9	U	0.7	4.9
100-51-6	Benzyl Alcohol	1	143		2.4	19.6
65-85-0	Benzoic acid	1	217	J	13.1	392
105-67-9	2,4-Dimethylphenol	1	19.6	U	2.1	19.6
120-82-1	1,2,4-Trichlorobenzene	1	4.9	U	2.6	4.9
86-30-6	N-Nitrosodiphenylamine	1	4.9	U	1.3	4.9
87-86-5	Pentachlorophenol	1	3.3	J	2.1	39.2

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	735.76	471	64.0	27 - 120	
p-Terphenyl-d14	490.51	416	84.9	37 - 120	Q

Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021730s.D

Date : 18-FEB-2023 04:06

Client ID:

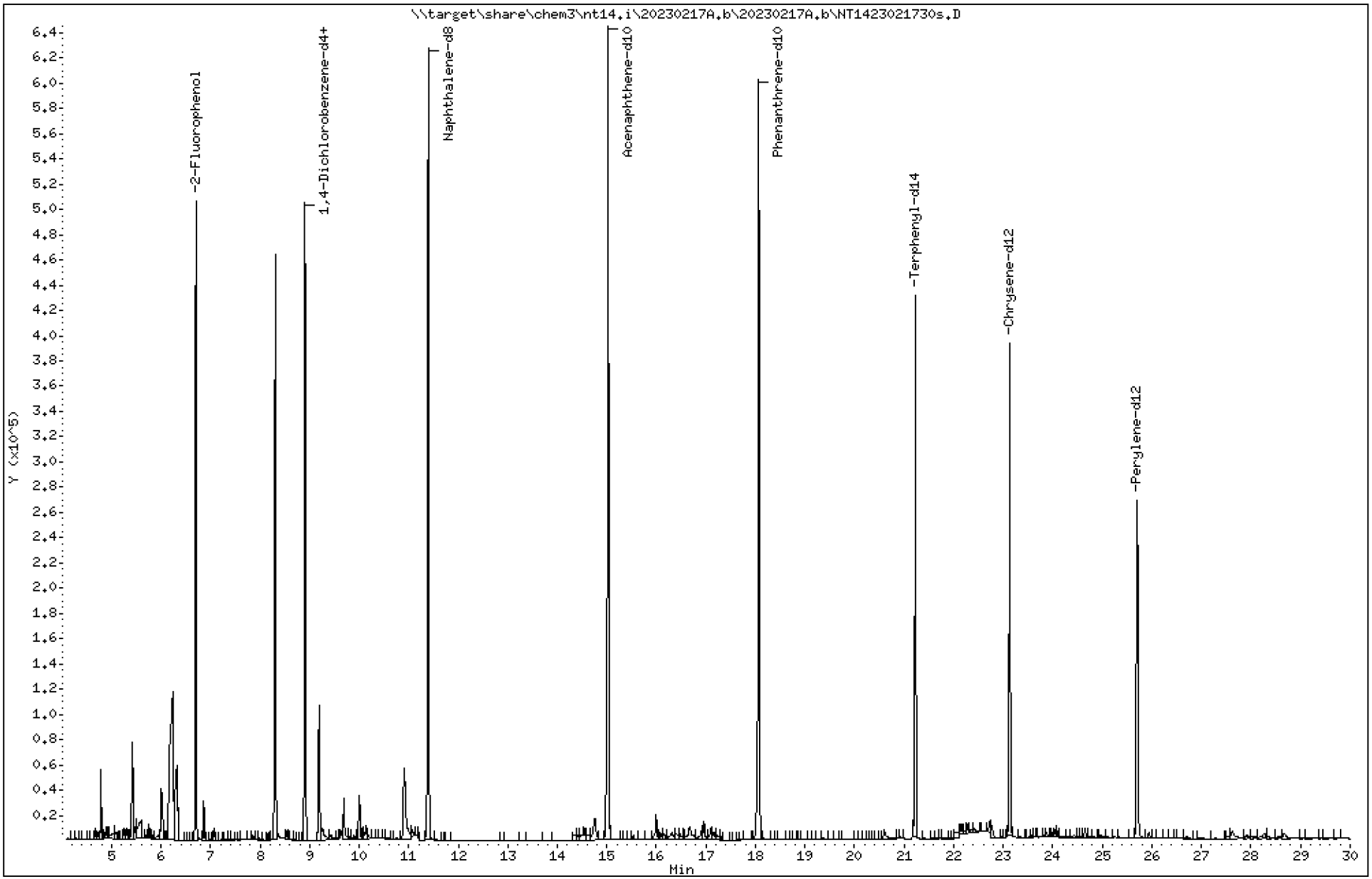
Sample Info: 23A0171-01

Column phase: ZB-5msi

Instrument: nt14.i

Operator: DSD

Column diameter: 0.25



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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

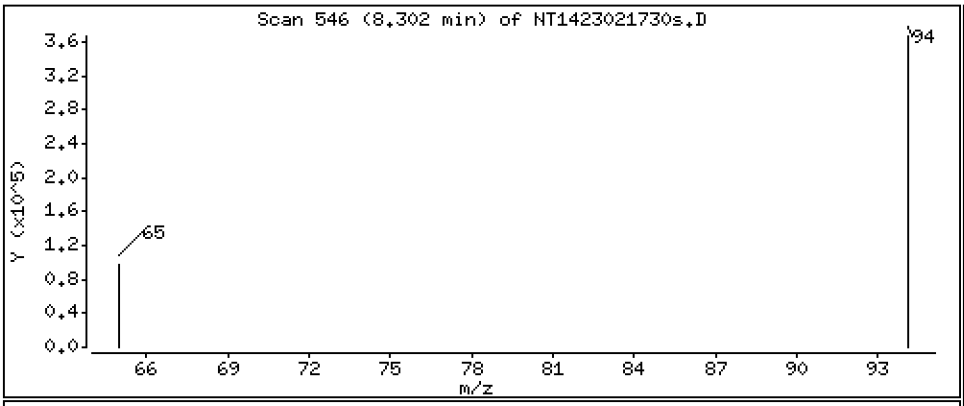
Operator: DSD

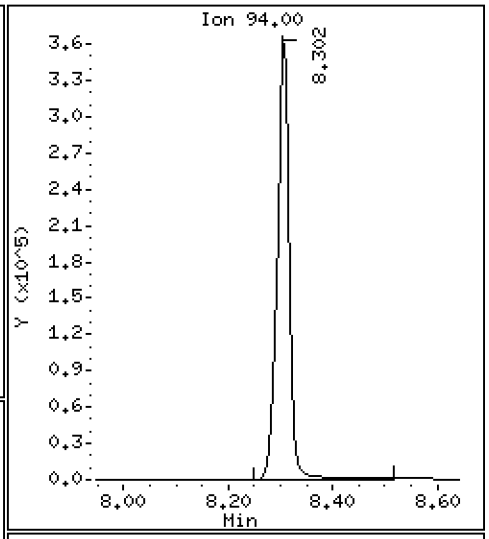
Column phase: ZB-5msi

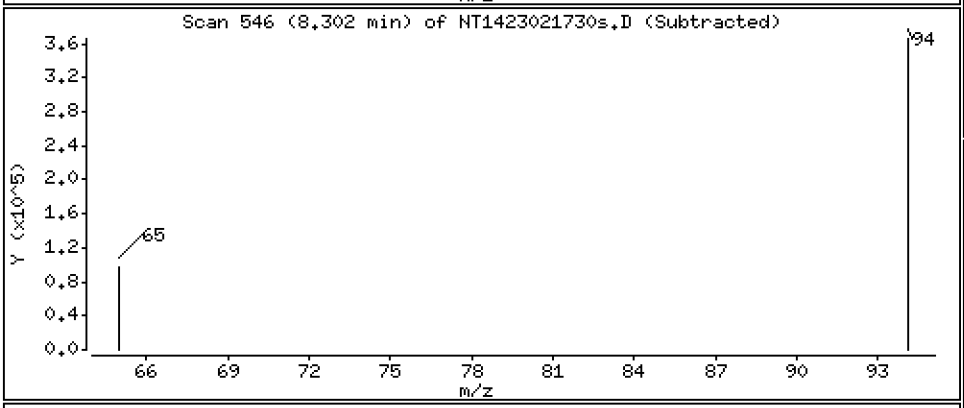
Column diameter: 0.25

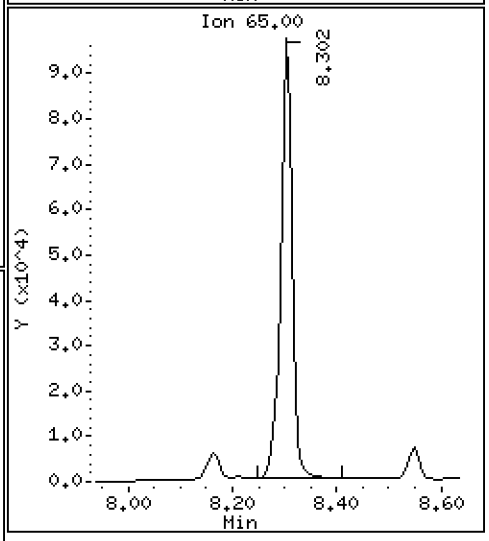
3 Phenol

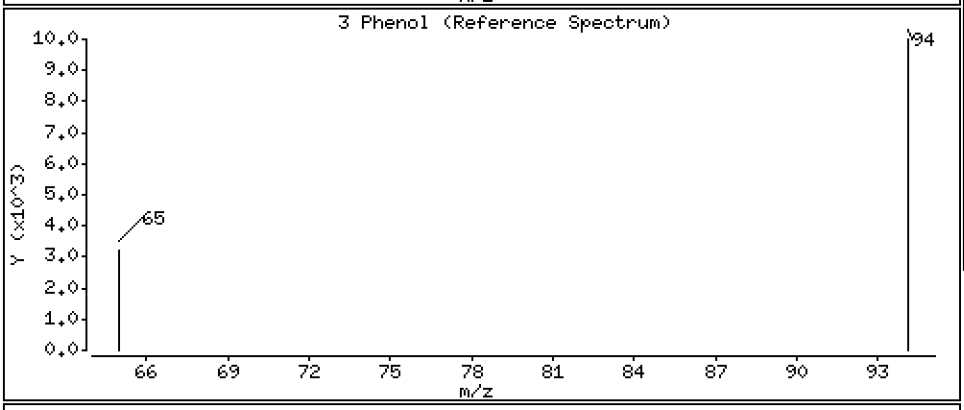
Concentration: 4.358 ug/mL

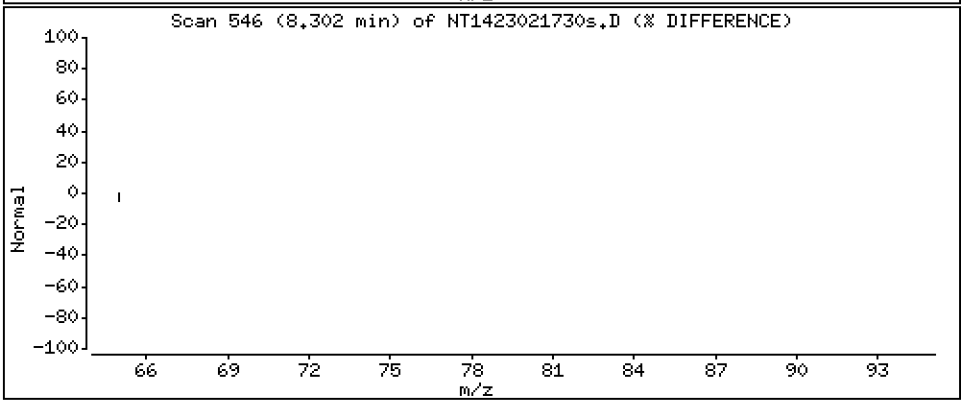












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

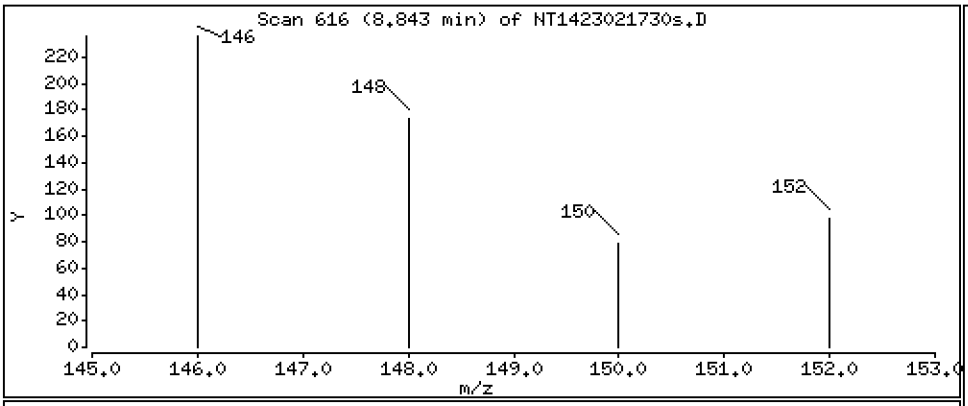
Operator: DSD

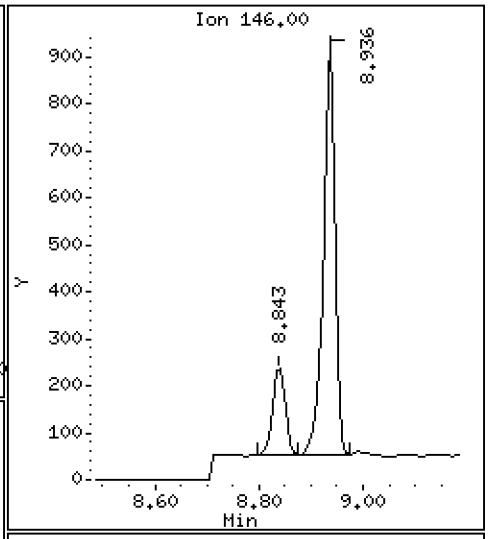
Column phase: ZB-5msi

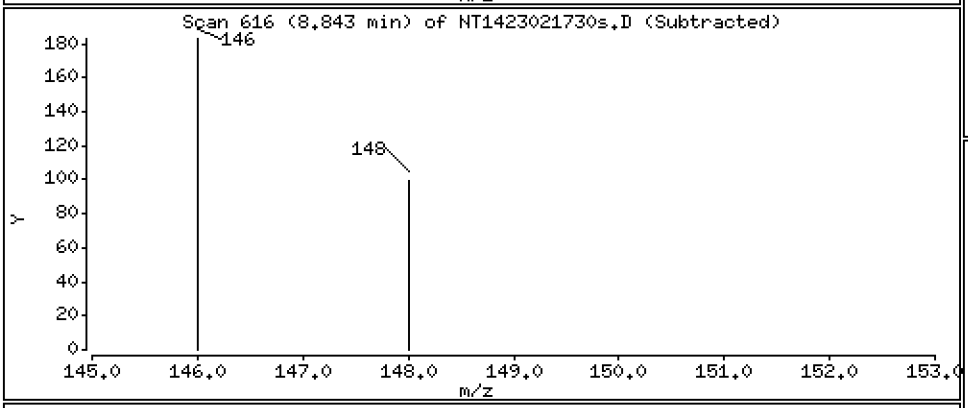
Column diameter: 0.25

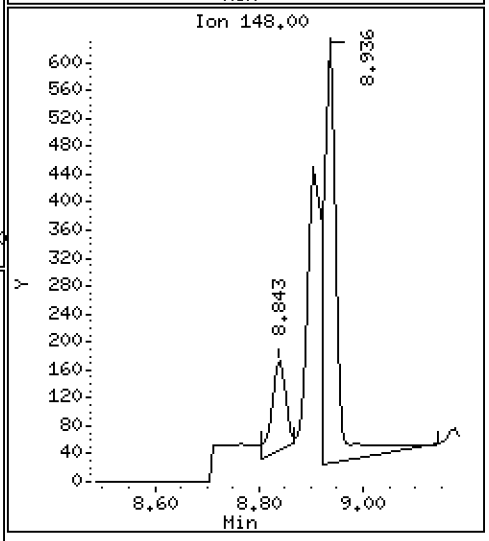
7 1,3-Dichlorobenzene

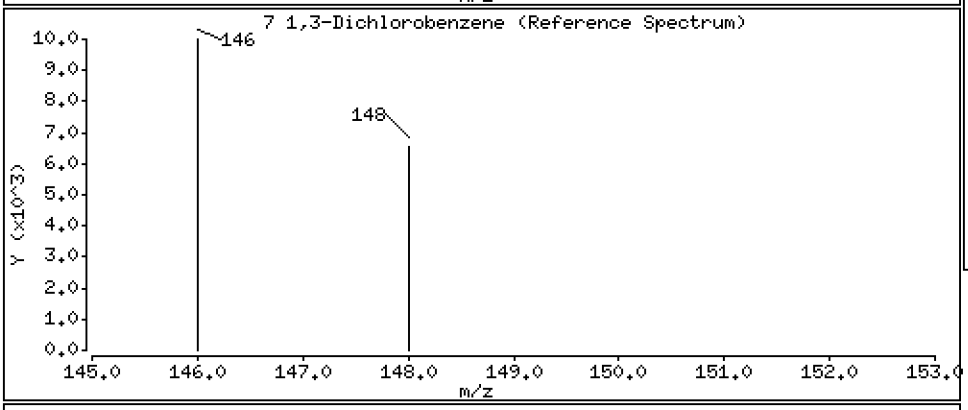
Concentration: 0.002823 ug/mL

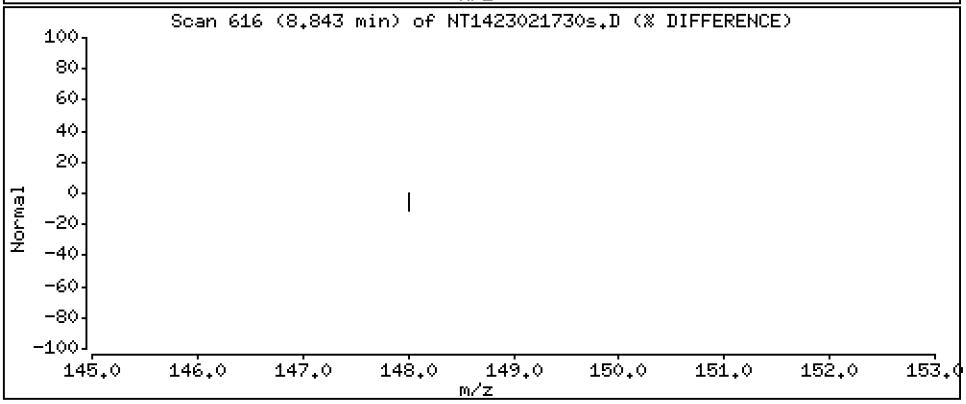












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

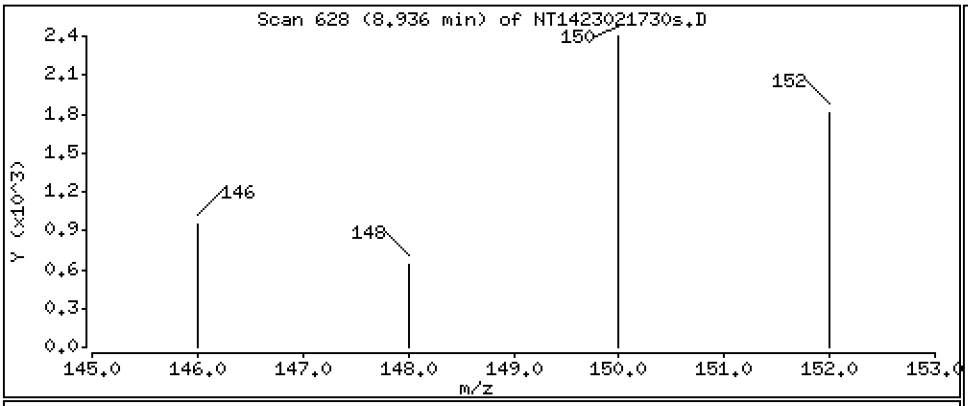
Operator: DSD

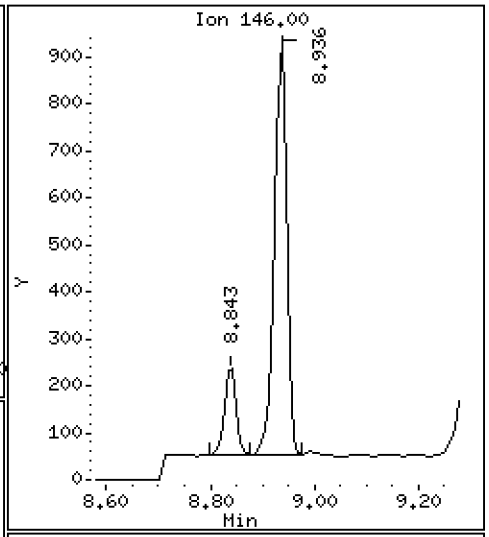
Column phase: ZB-5msi

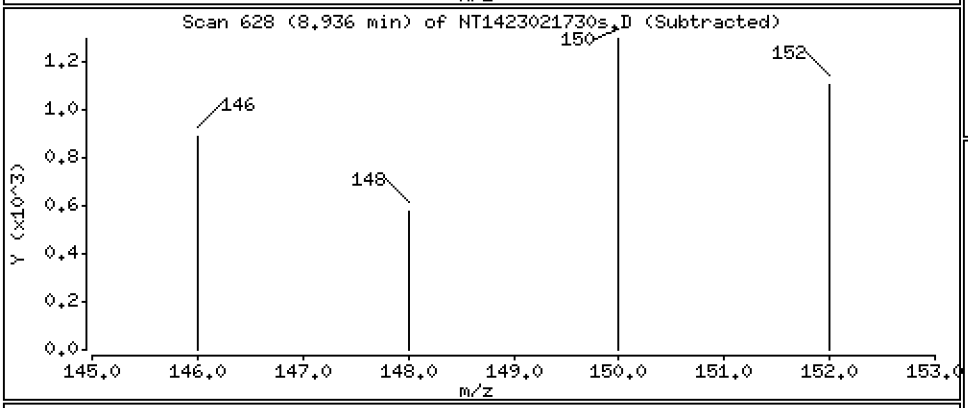
Column diameter: 0.25

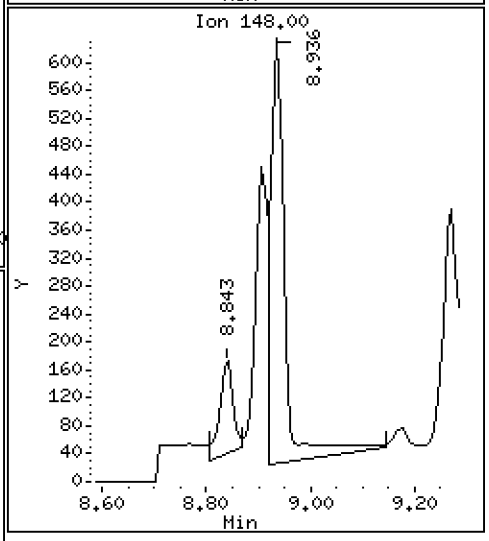
9 1,4-Dichlorobenzene

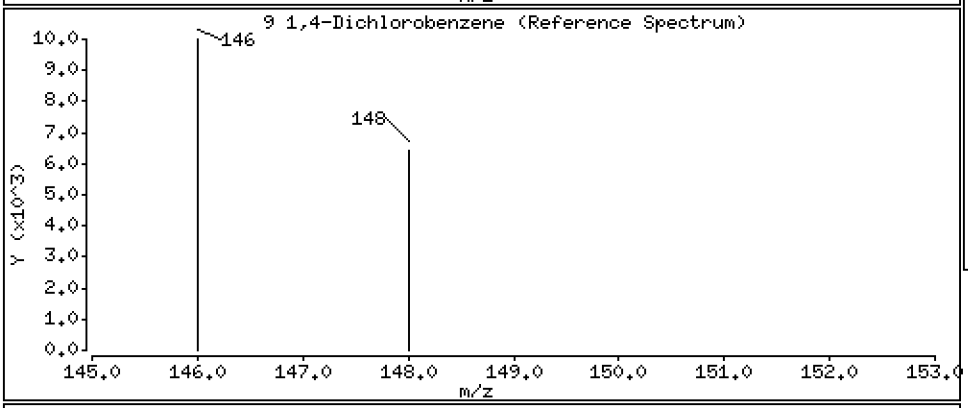
Concentration: 0.01358 ug/mL

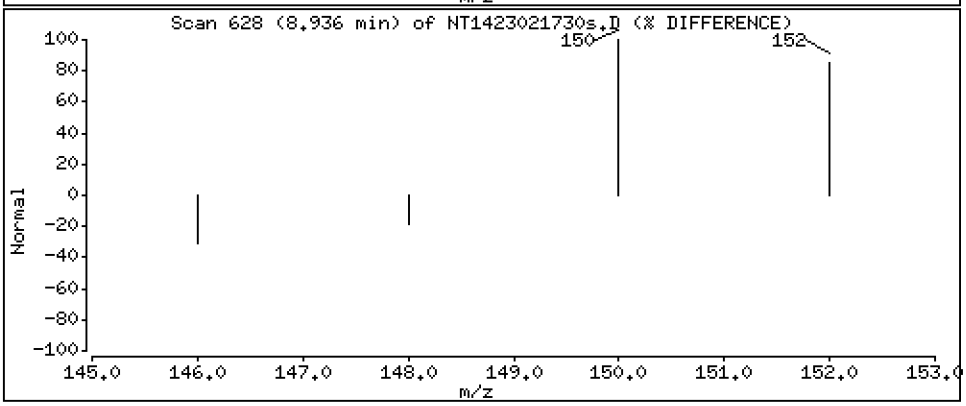












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021730s.D

Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

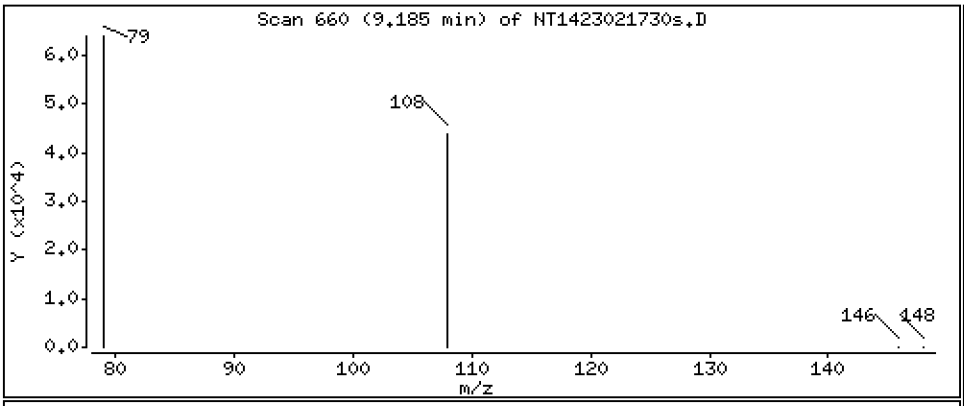
Operator: DSD

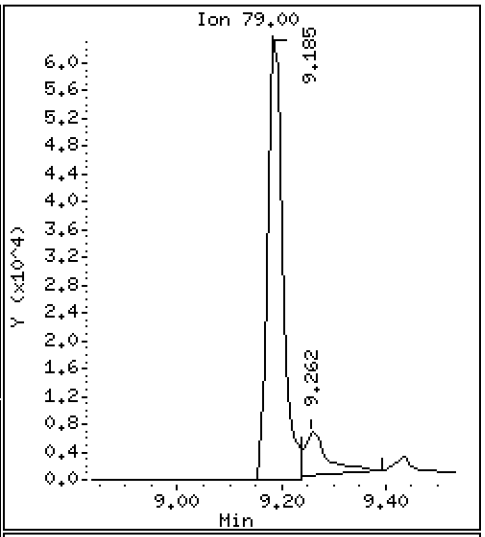
Column phase: ZB-5msi

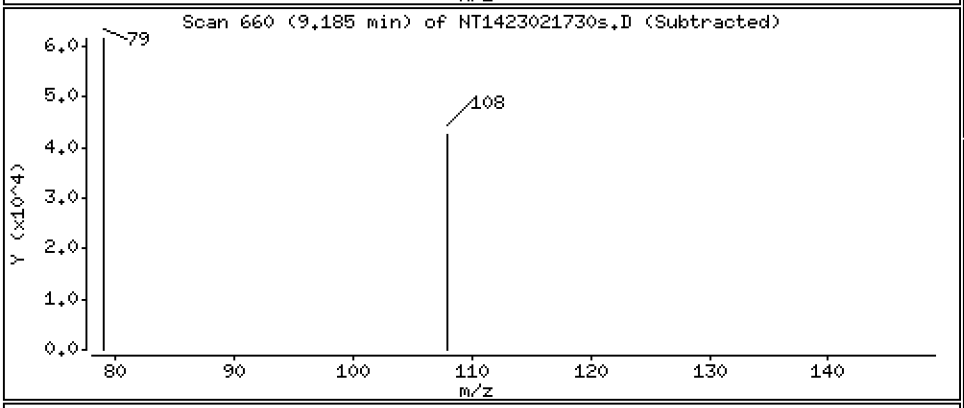
Column diameter: 0.25

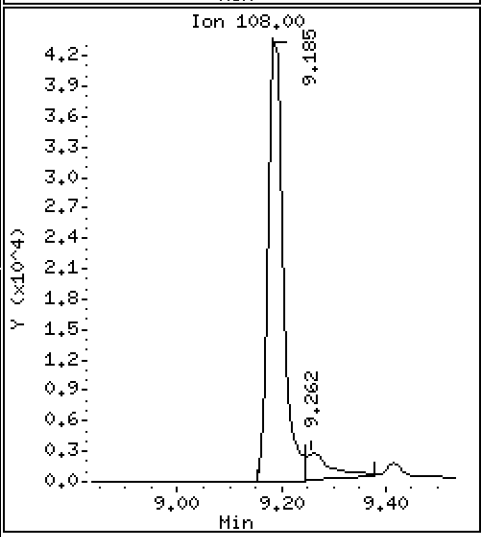
11 Benzyl alcohol

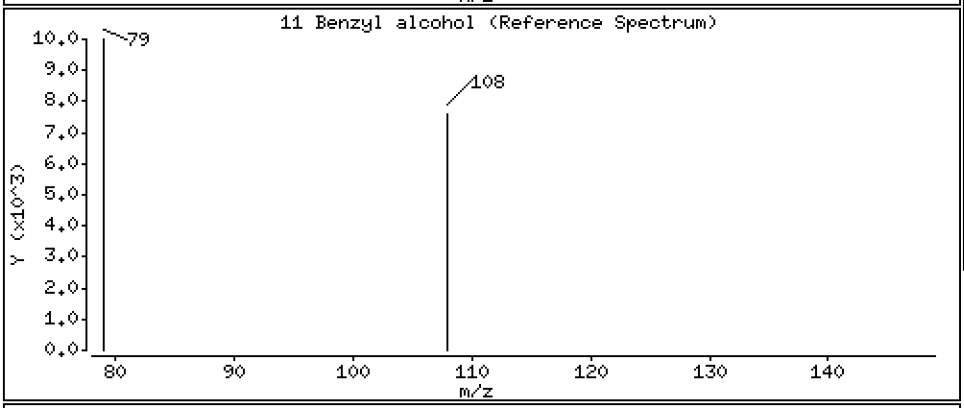
Concentration: 1.453 ug/mL

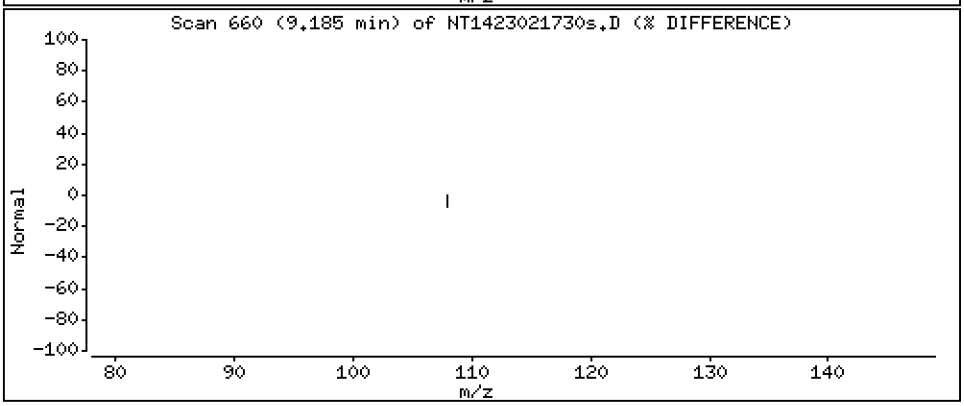












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

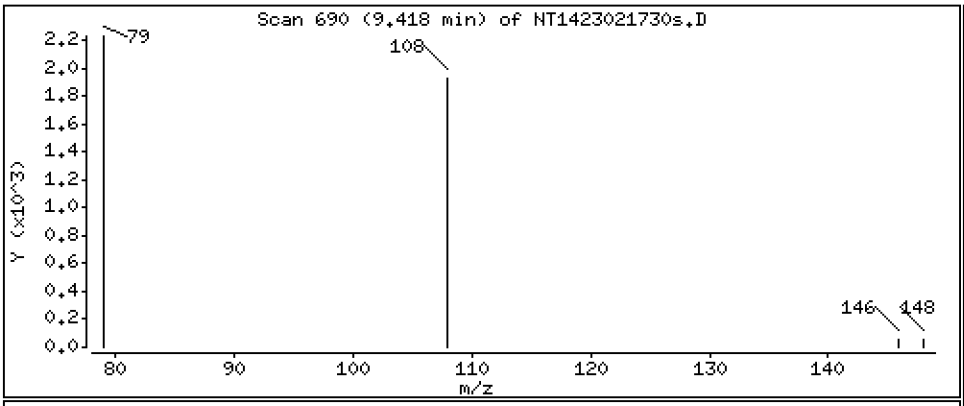
Operator: DSD

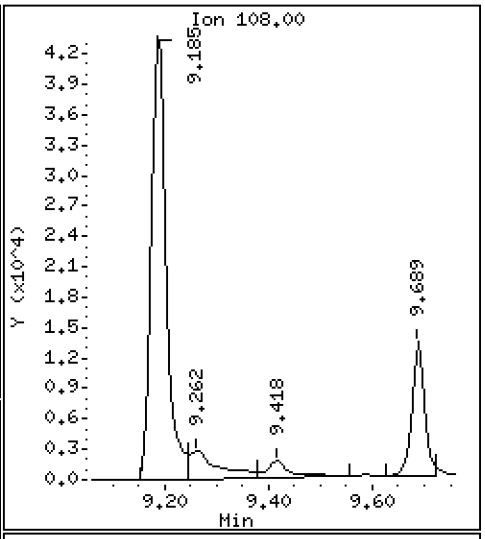
Column phase: ZB-5msi

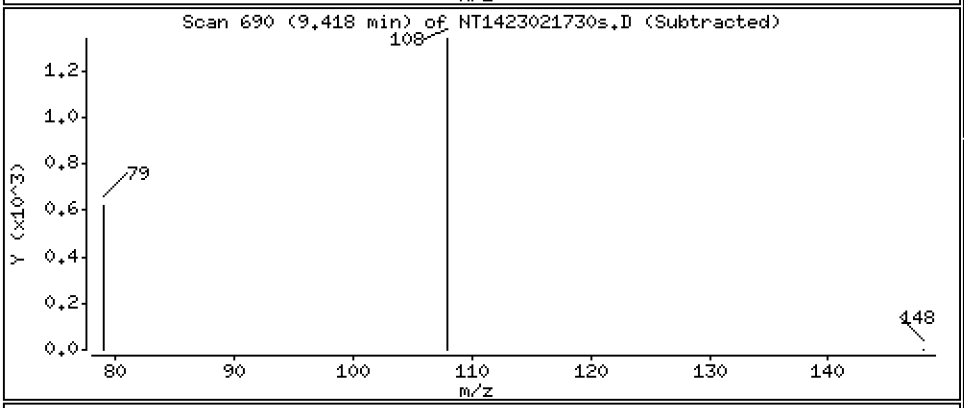
Column diameter: 0.25

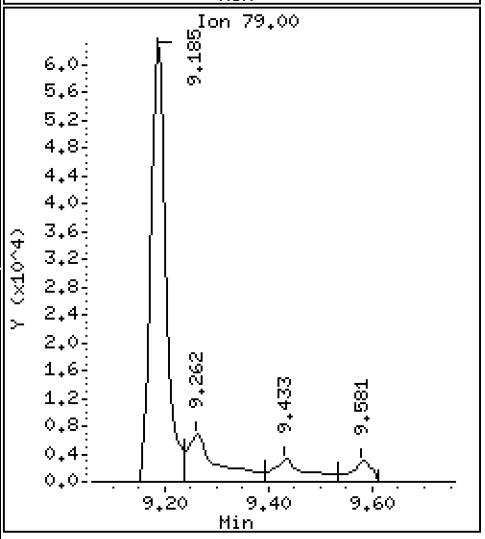
13 2-Methylphenol

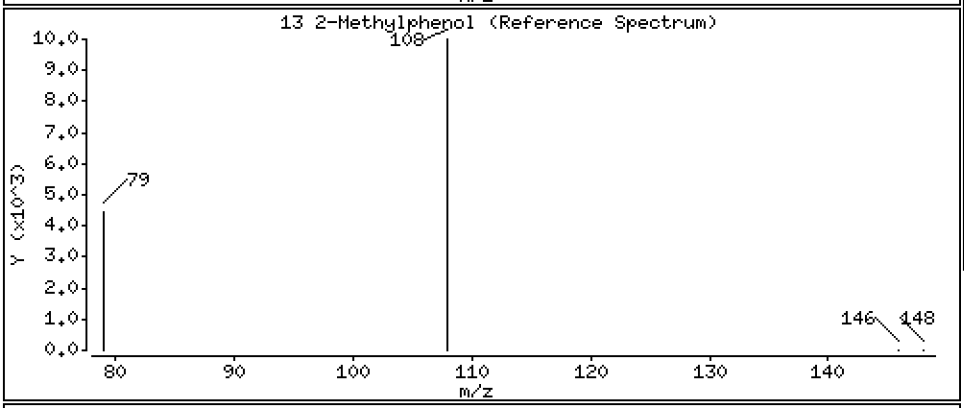
Concentration: 0.05067 ug/mL

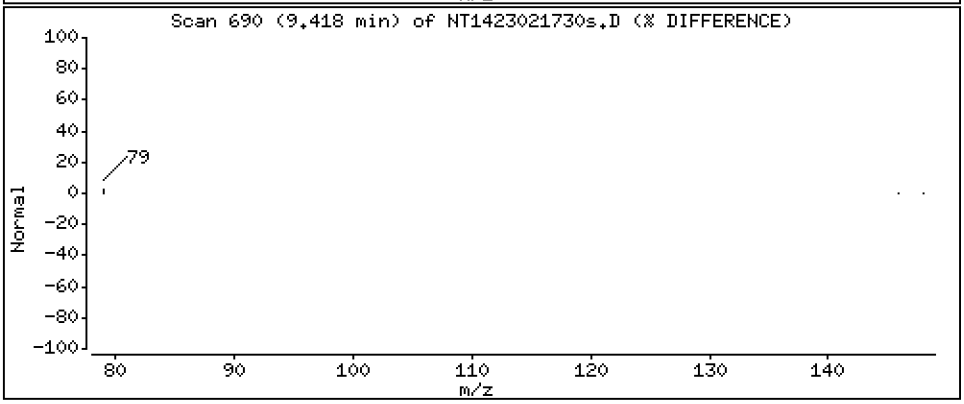












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

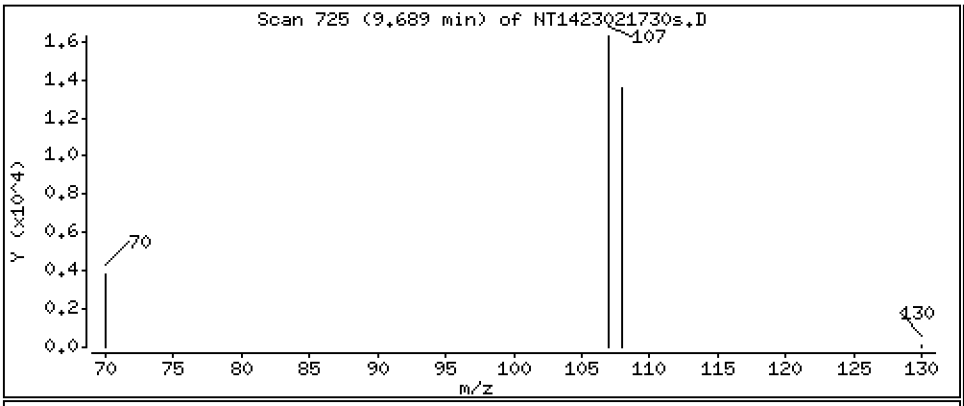
Operator: DSD

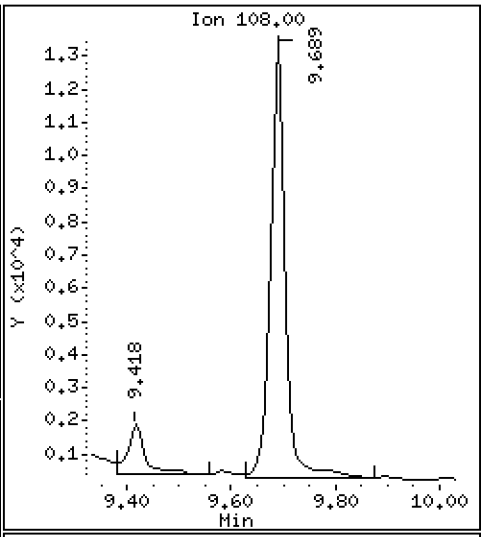
Column phase: ZB-5msi

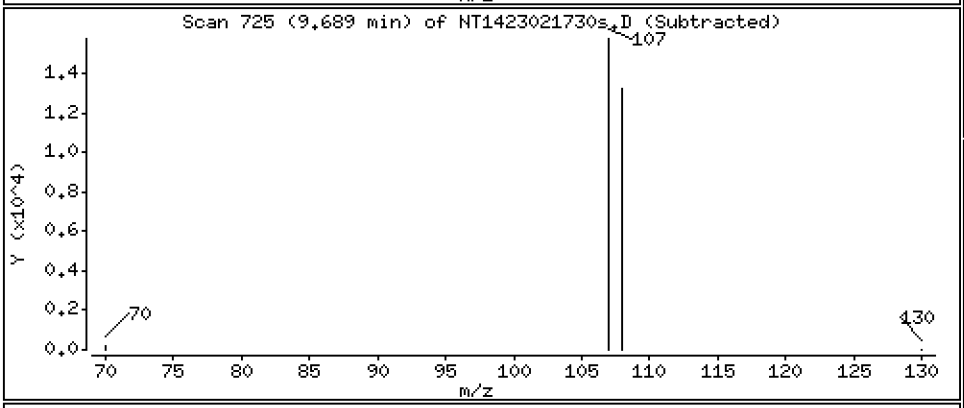
Column diameter: 0.25

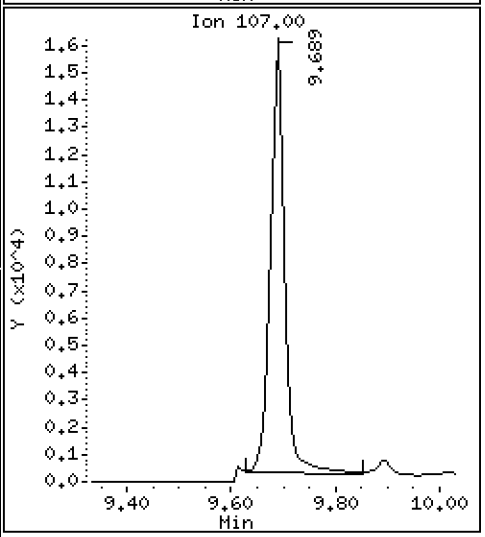
15 4-Methylphenol

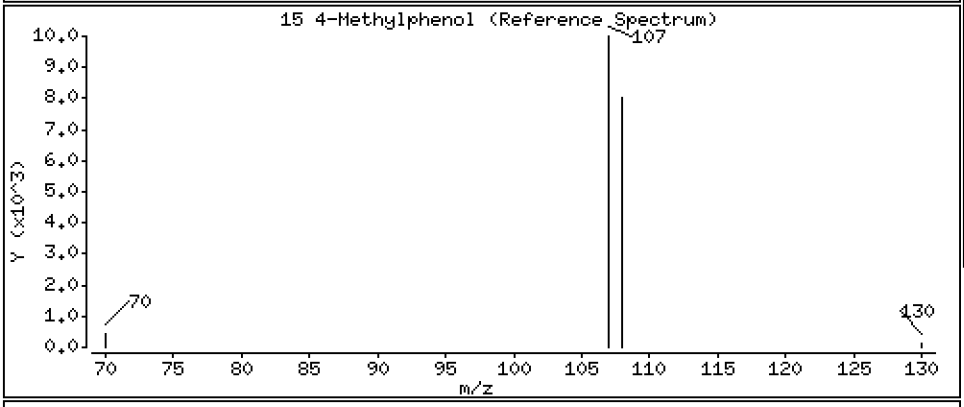
Concentration: 0.2489 ug/mL

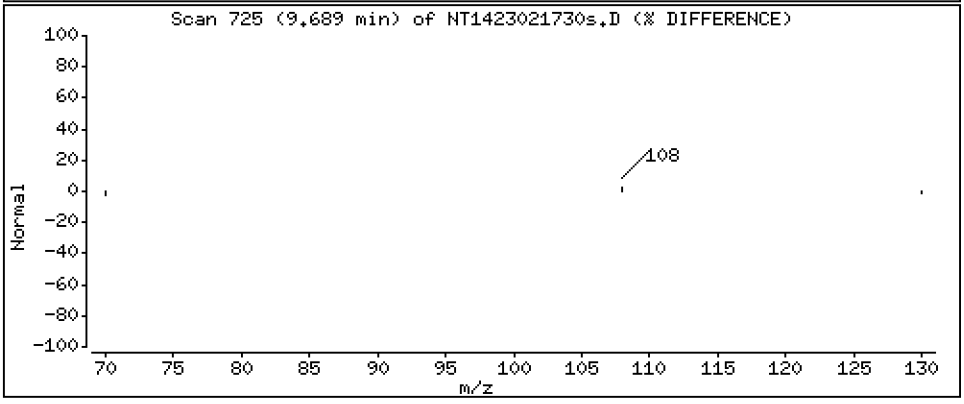












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

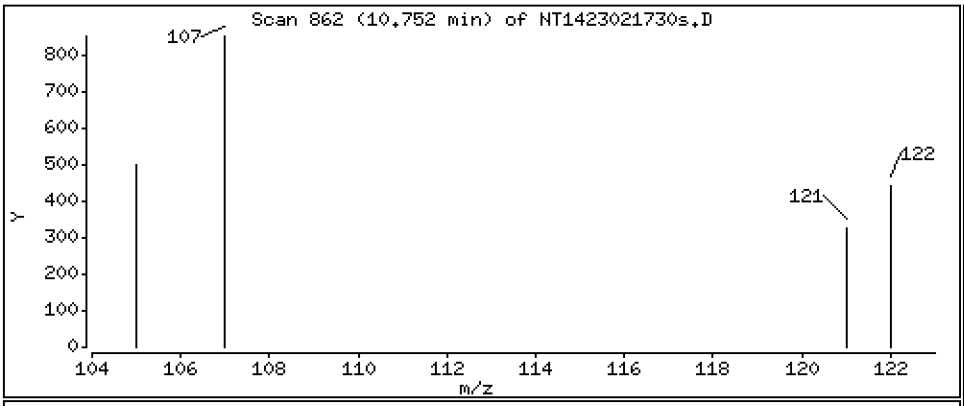
Operator: DSD

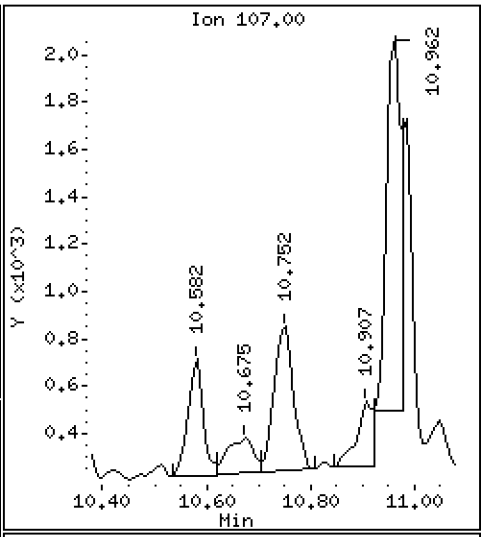
Column phase: ZB-5msi

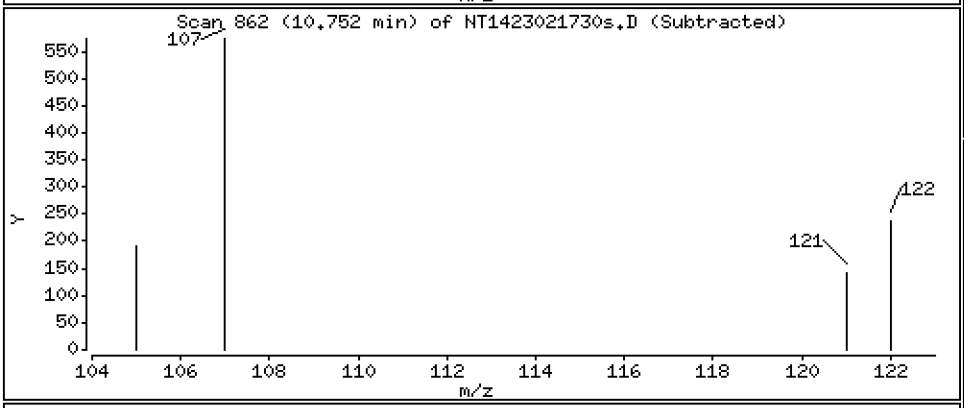
Column diameter: 0.25

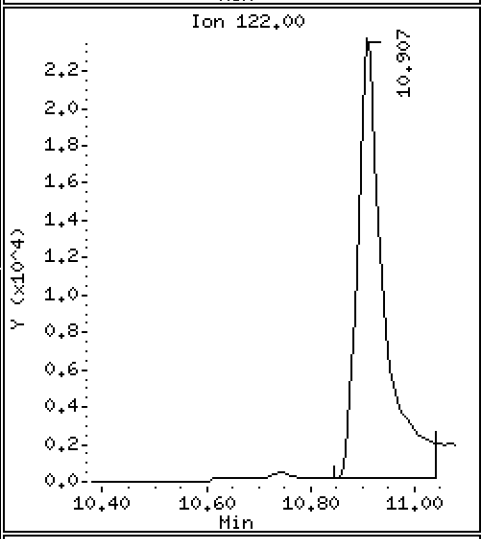
22 2,4-Dimethylphenol

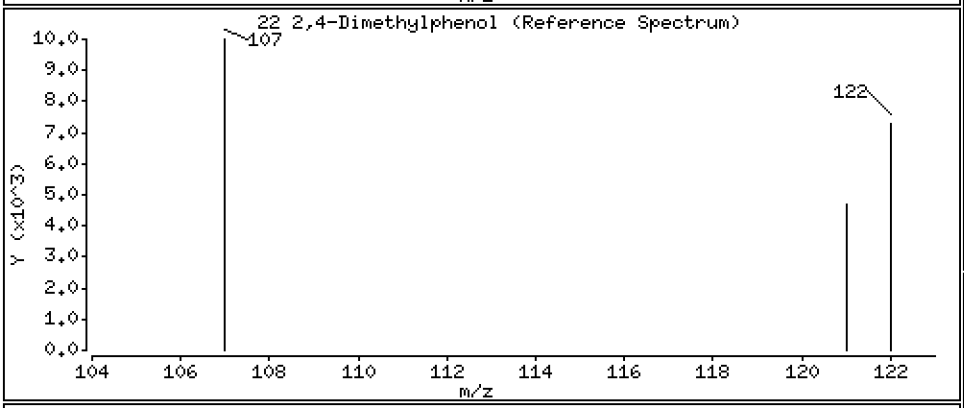
Concentration: 0.01608 ug/mL

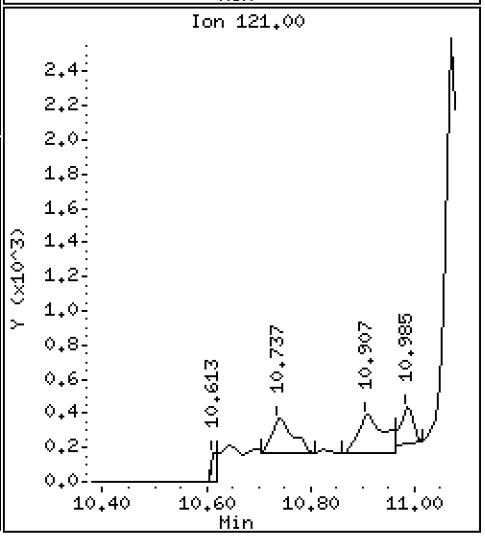


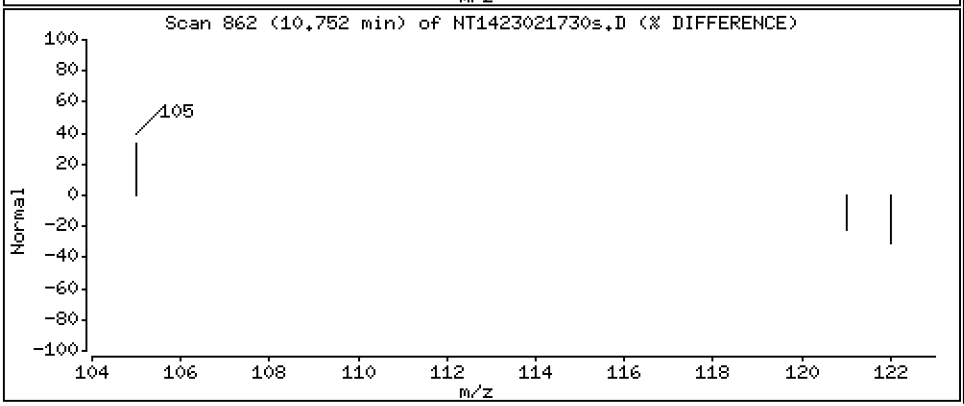












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Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

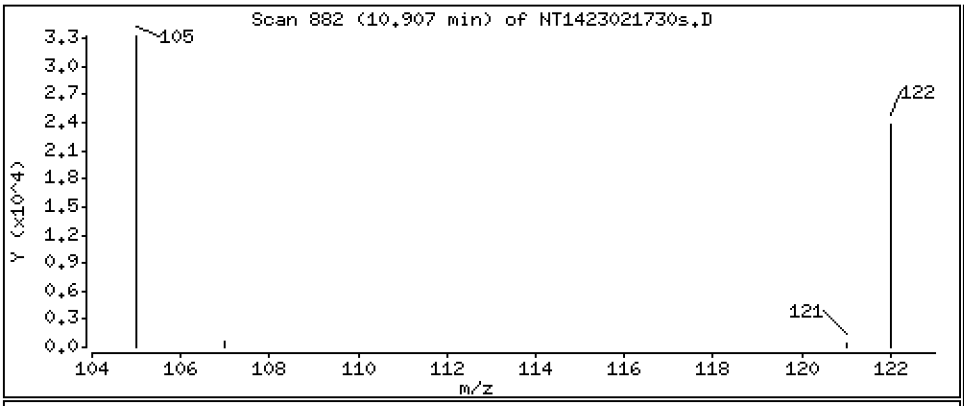
Operator: DSD

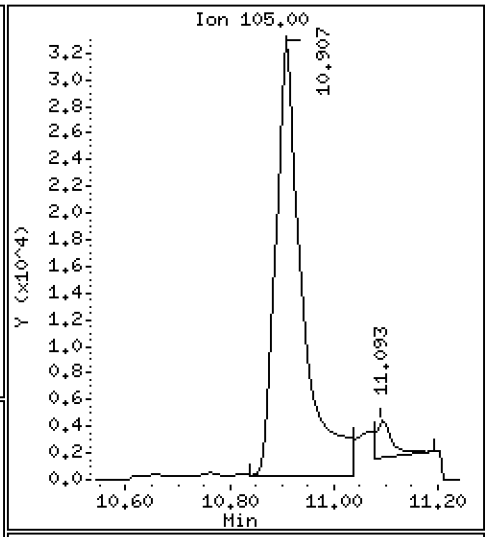
Column phase: ZB-5msi

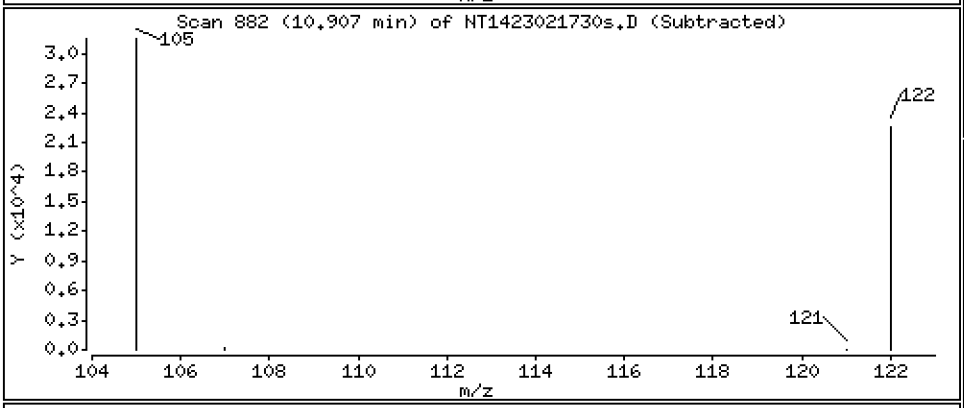
Column diameter: 0.25

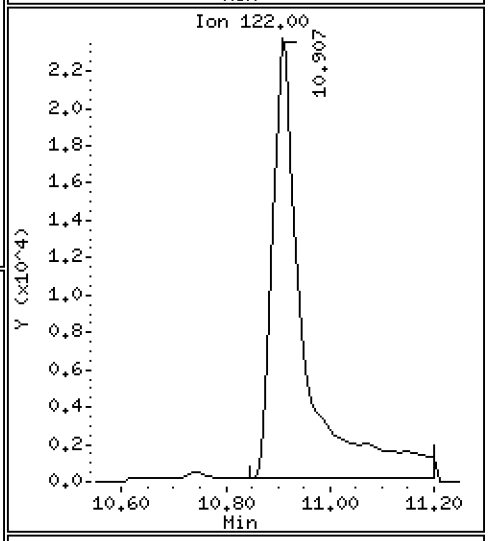
24 Benzoic acid

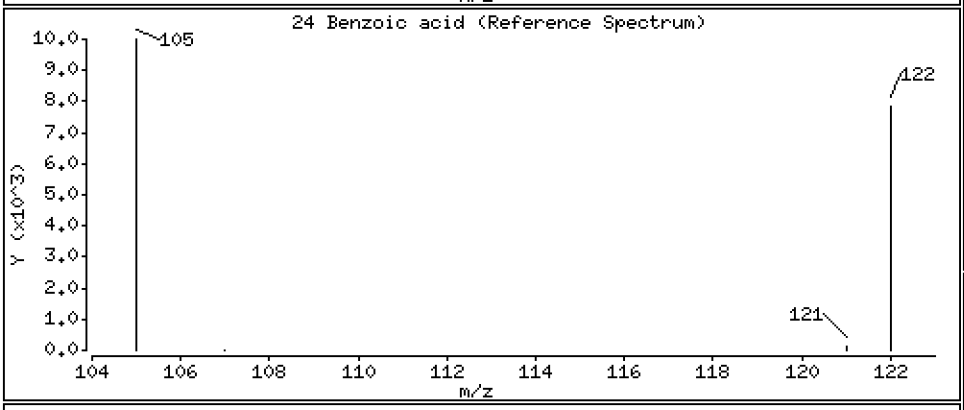
Concentration: 2.209 ug/mL

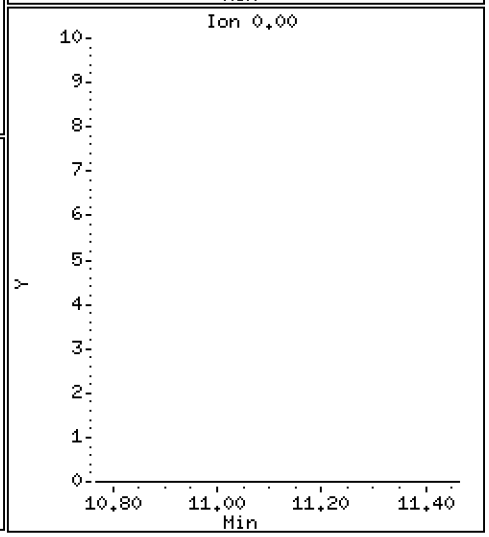


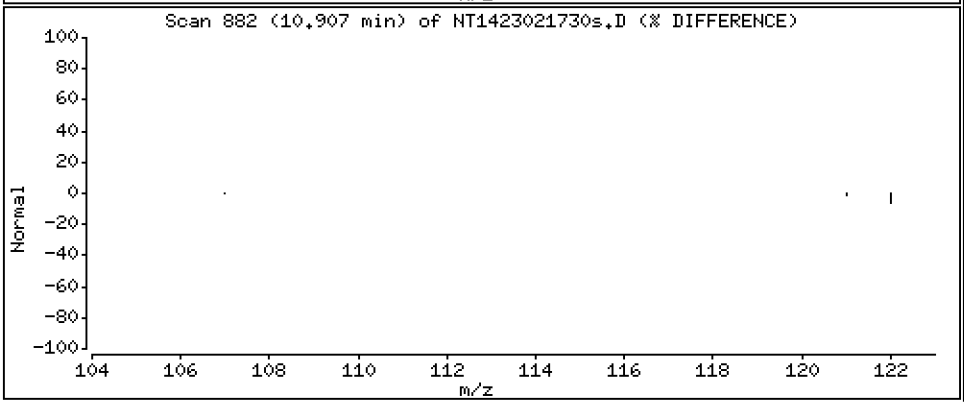












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021730s.D

Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

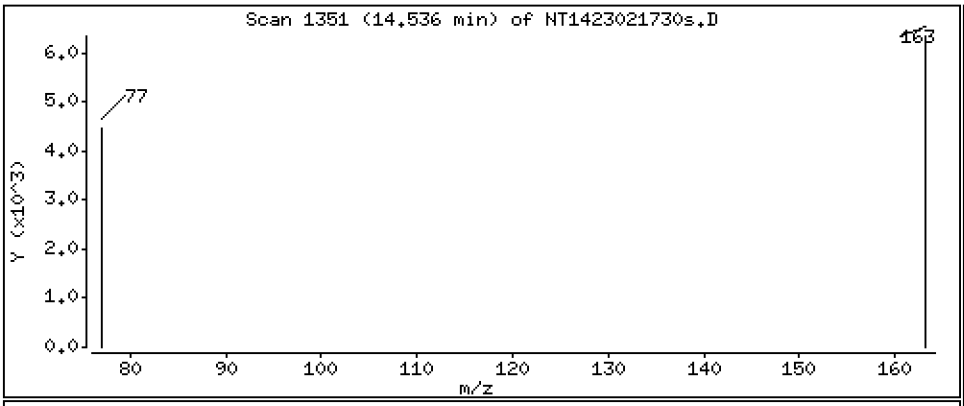
Operator: DSD

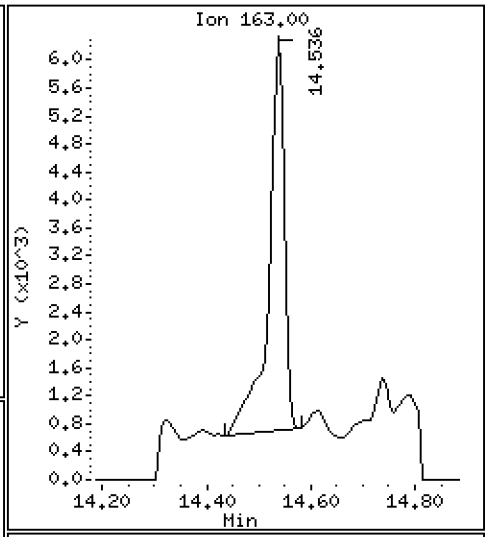
Column phase: ZB-5msi

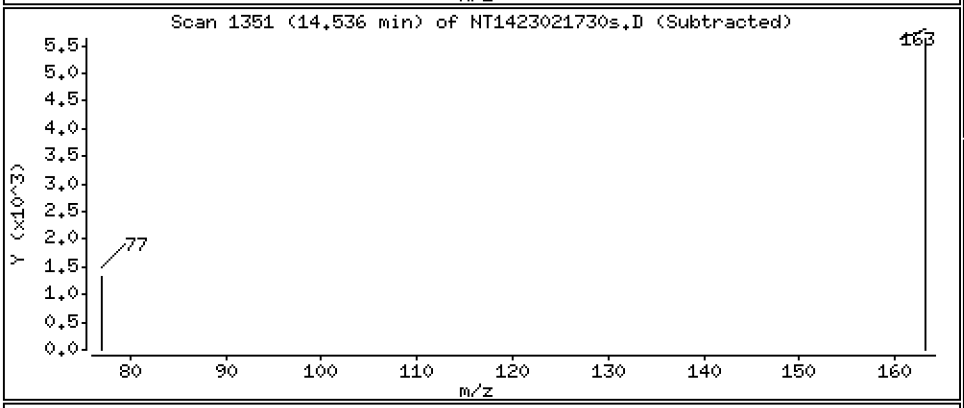
Column diameter: 0.25

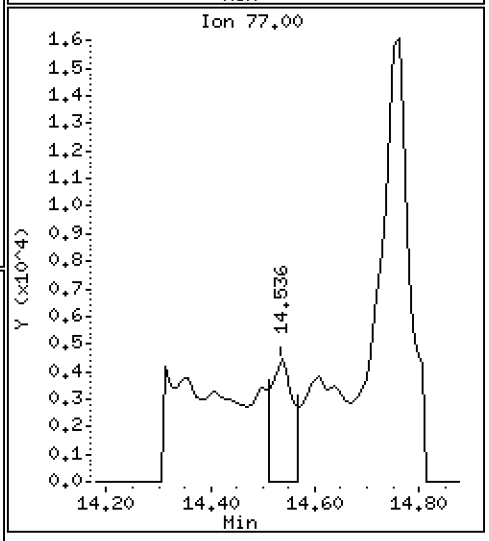
39 Dimethylphthalate

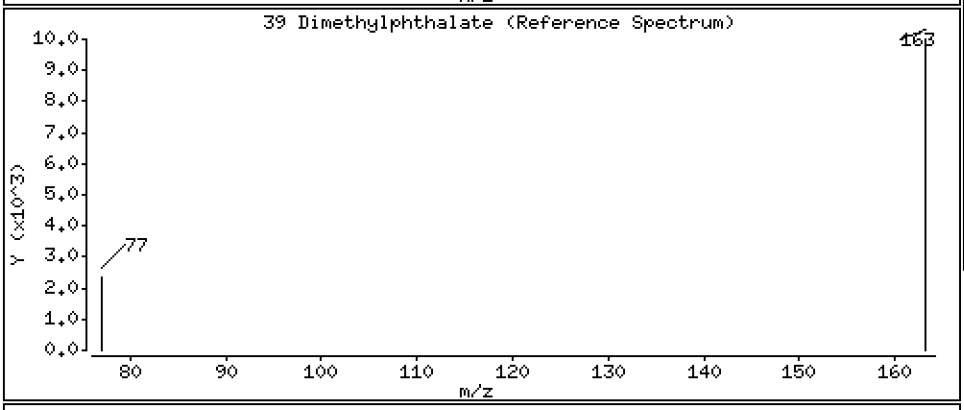
Concentration: 0.06449 ug/mL

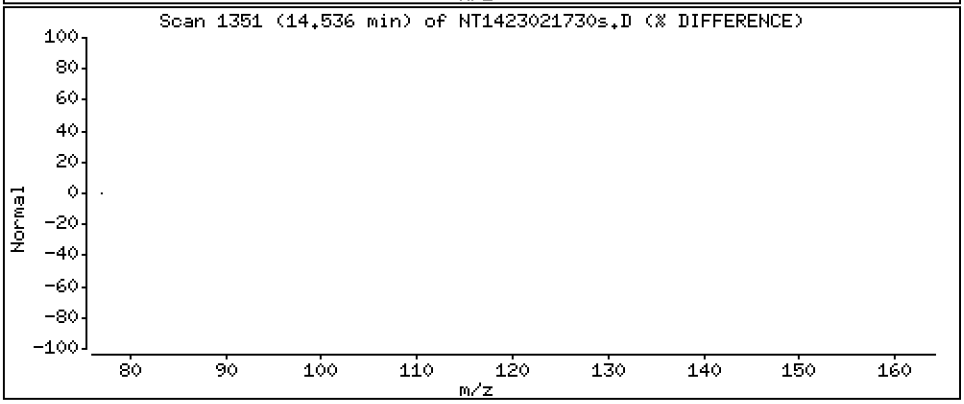












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021730s.D

Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

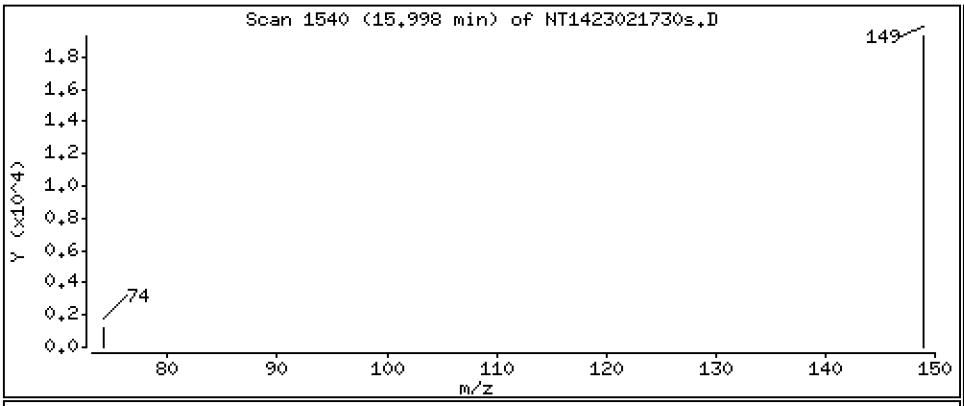
Operator: DSD

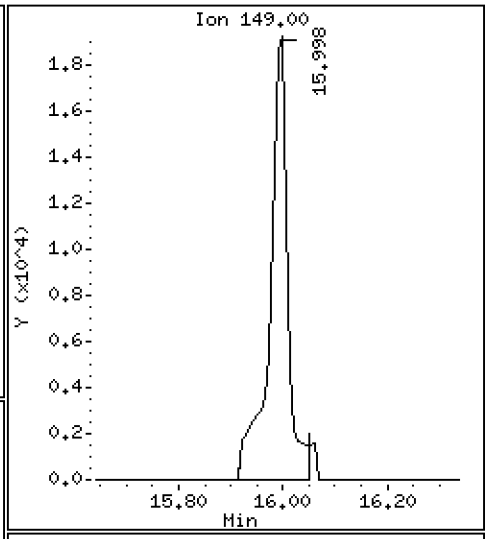
Column phase: ZB-5msi

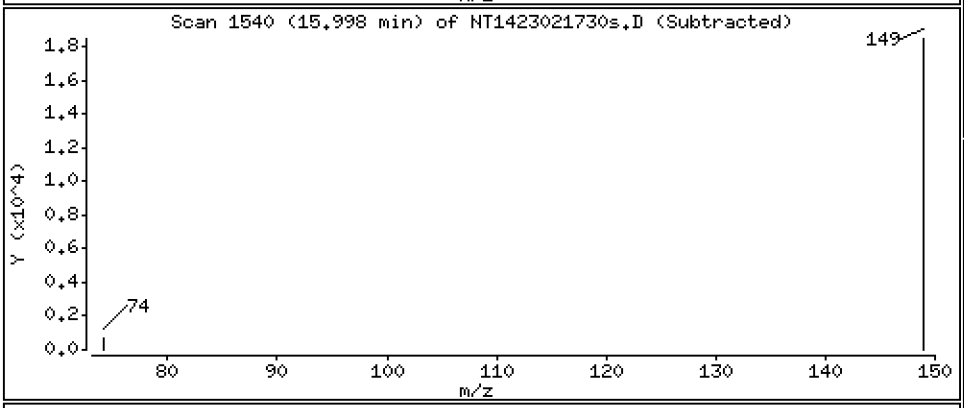
Column diameter: 0.25

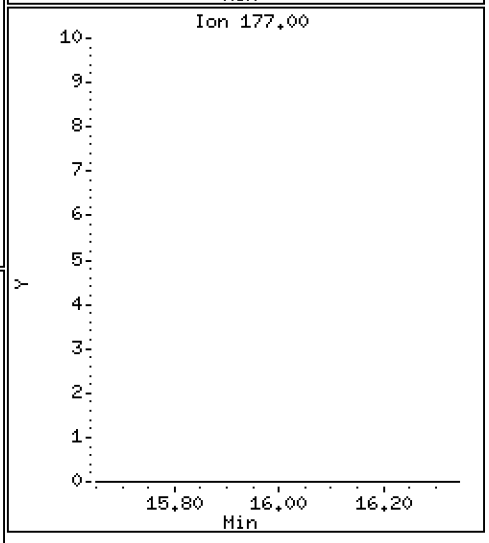
50 Diethylphthalate

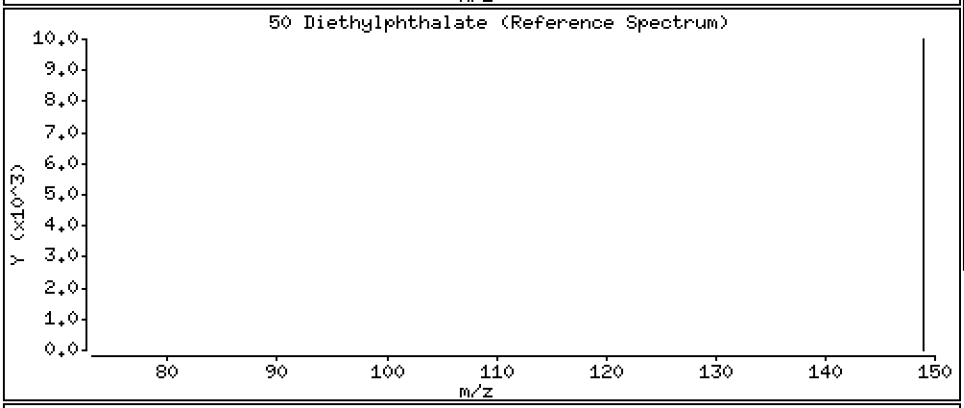
Concentration: 0.2086 ug/mL

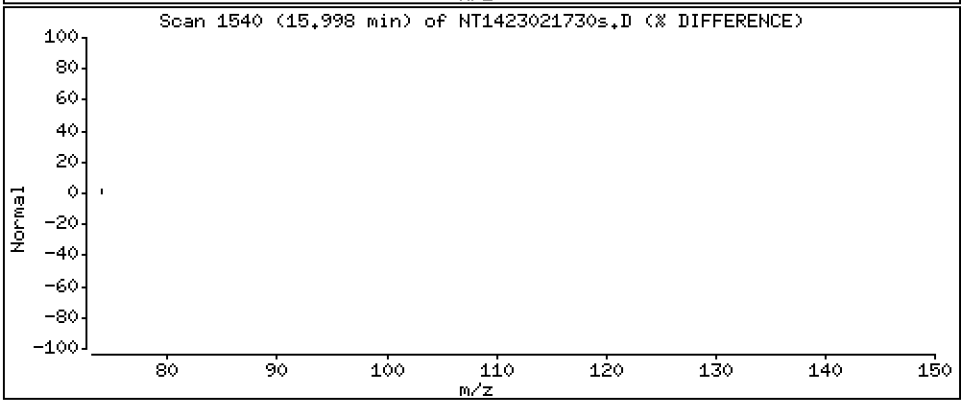












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021730s.D

Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

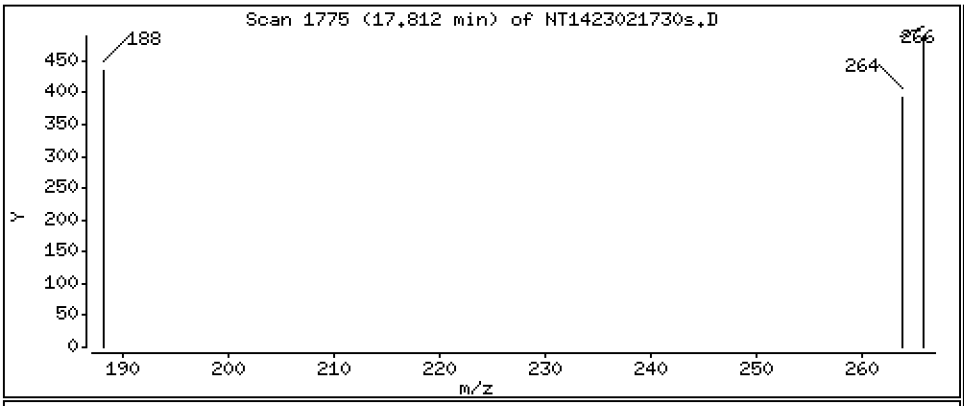
Operator: DSD

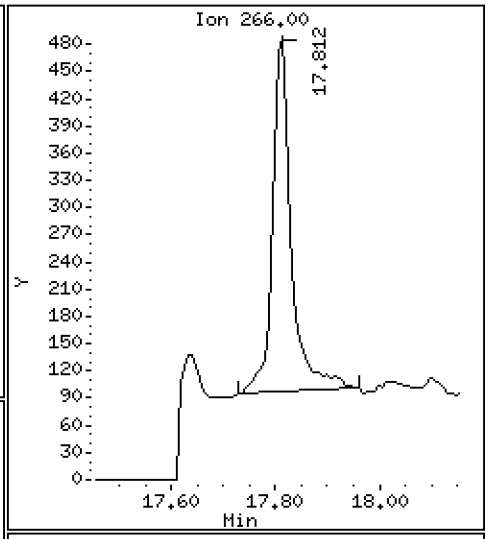
Column phase: ZB-5msi

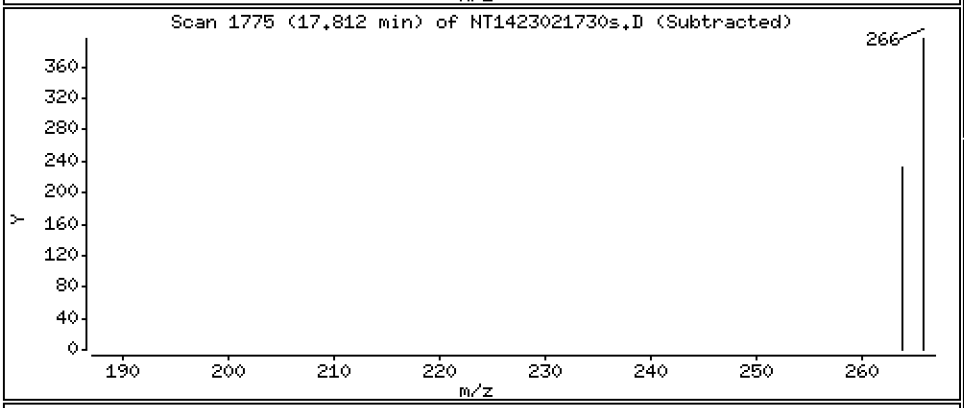
Column diameter: 0.25

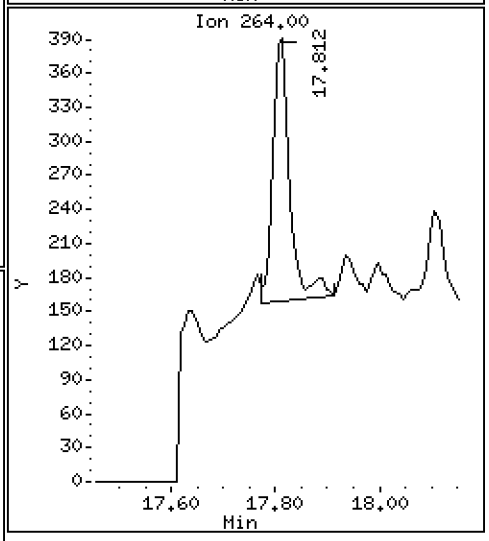
58 Pentachlorophenol

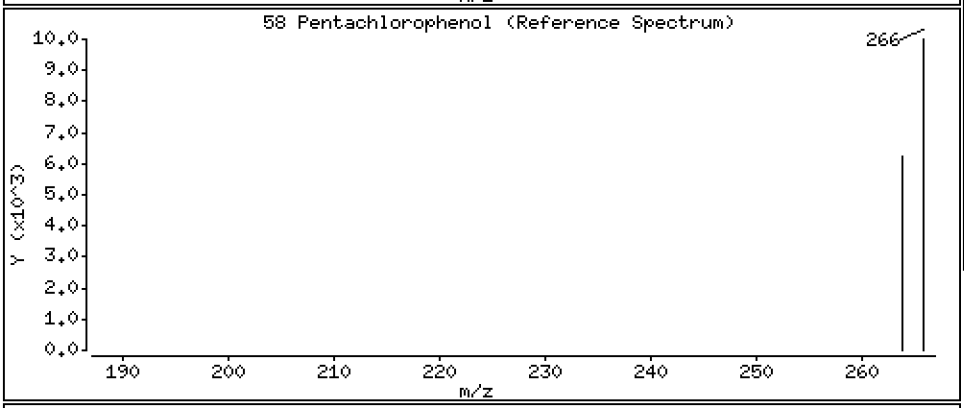
Concentration: 0.03327 ug/mL

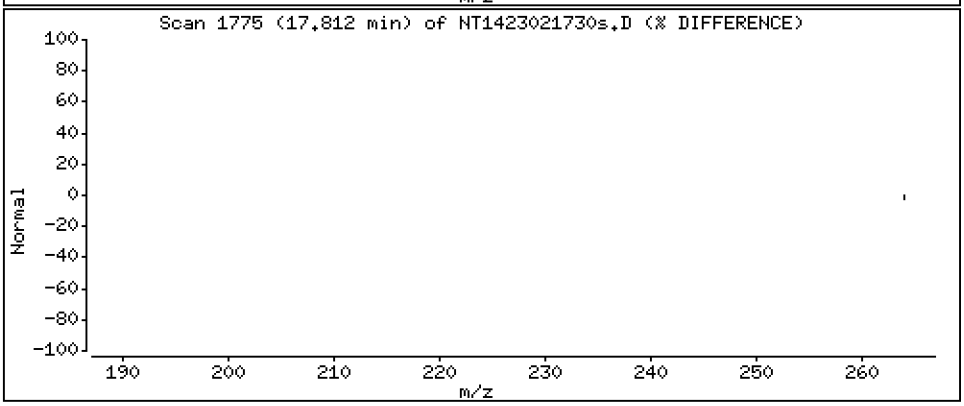












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021730s.D

Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

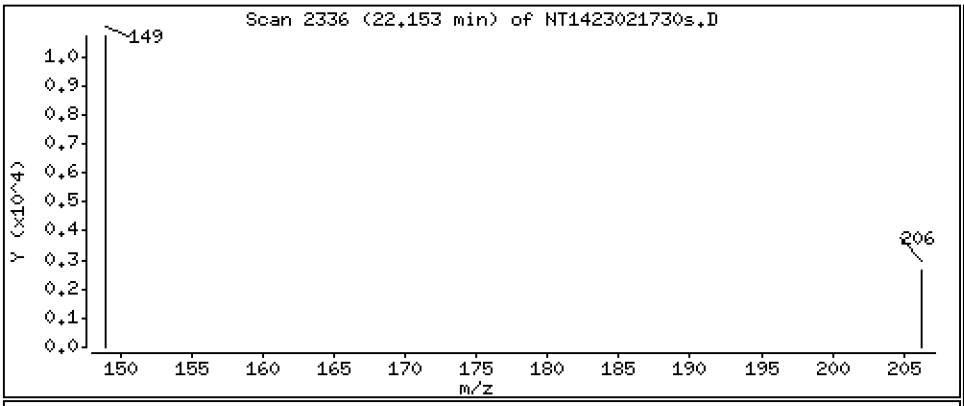
Operator: DSD

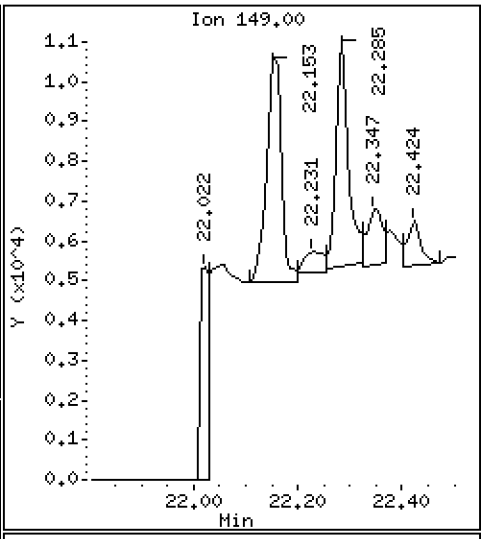
Column phase: ZB-5msi

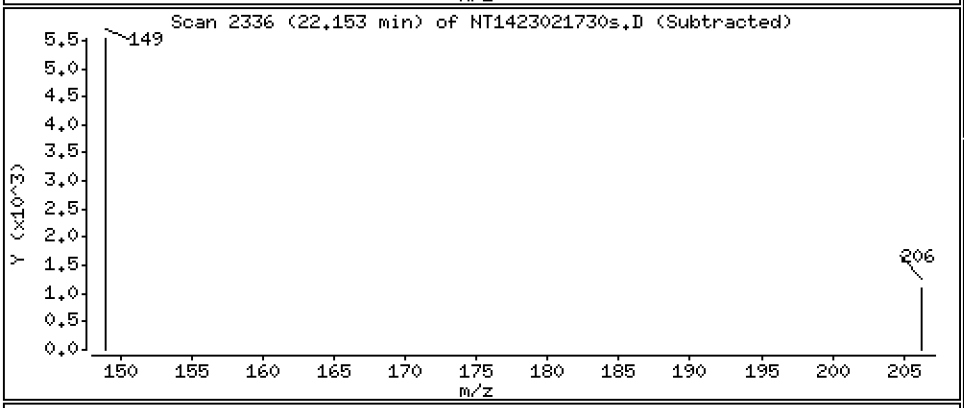
Column diameter: 0.25

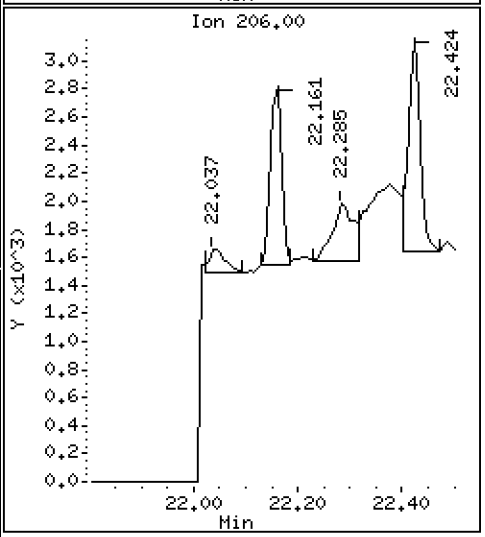
67 Butylbenzylphthalate

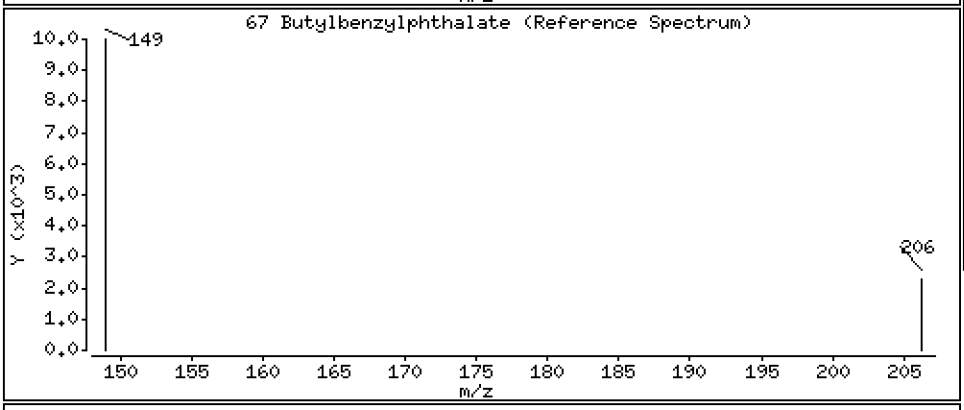
Concentration: 0.1658 ug/mL

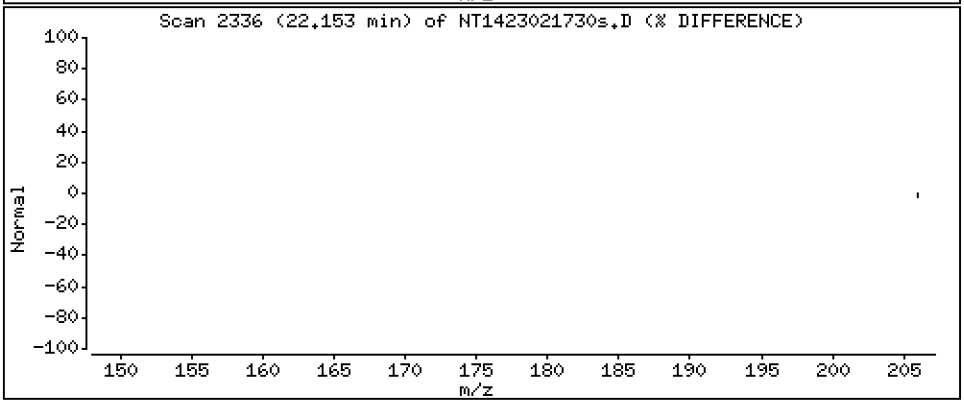












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021730s.D

Date : 18-FEB-2023 04:06

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-01

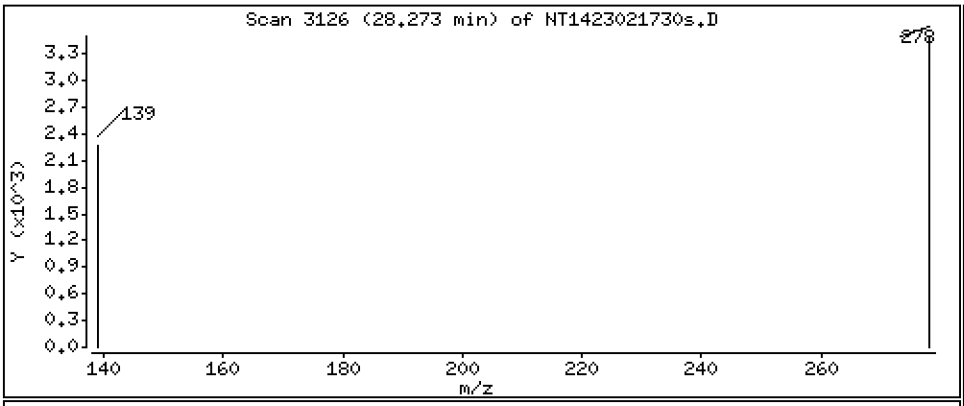
Operator: DSD

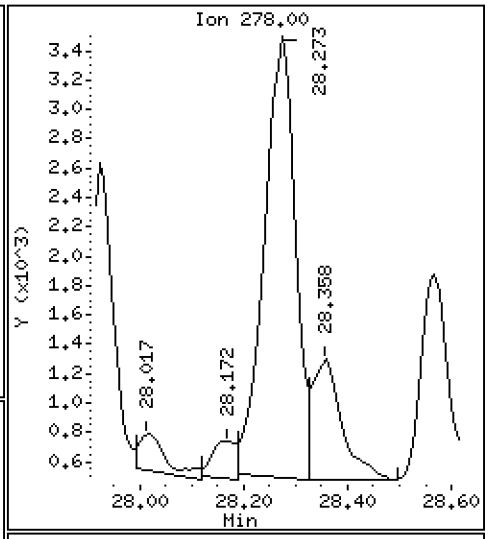
Column phase: ZB-5msi

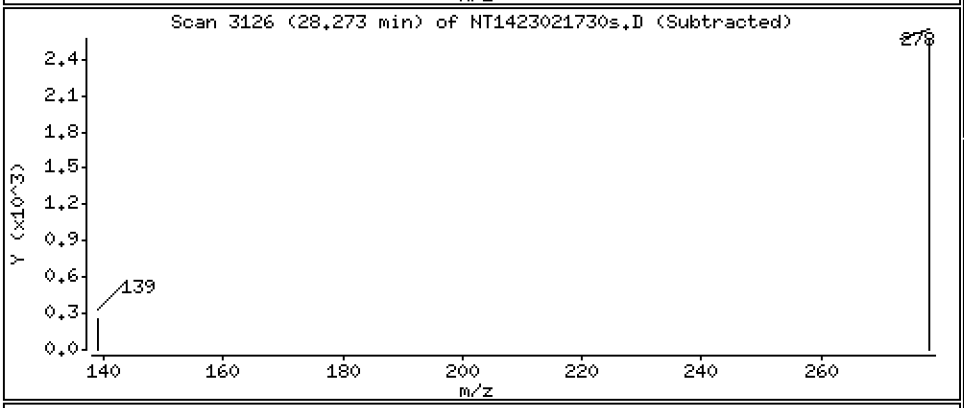
Column diameter: 0.25

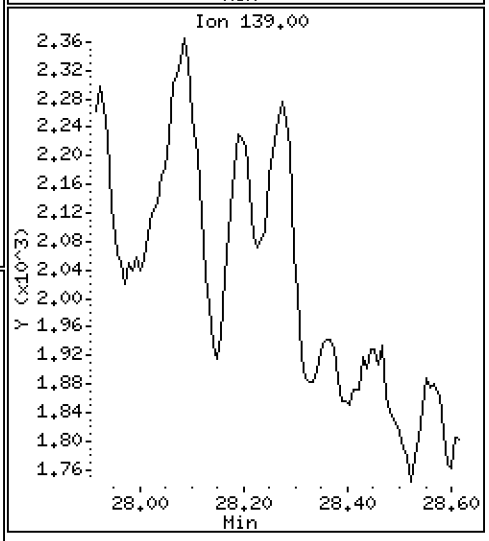
79 Dibenzo(a,h)anthracene

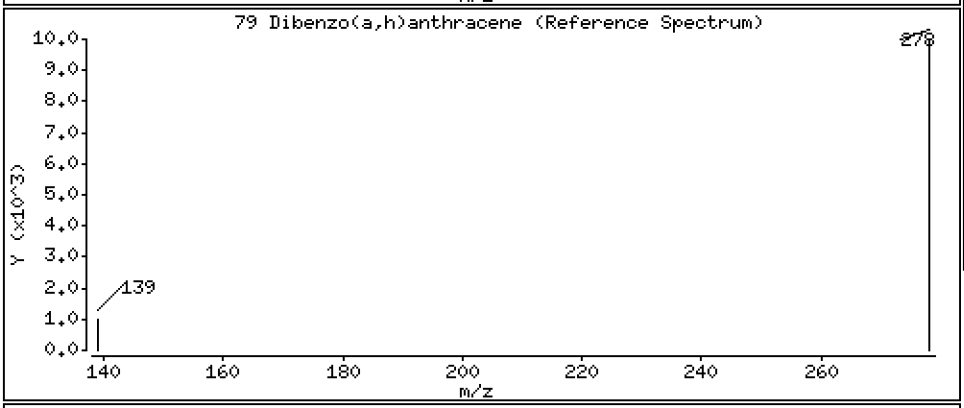
Concentration: 0.1523 ug/mL

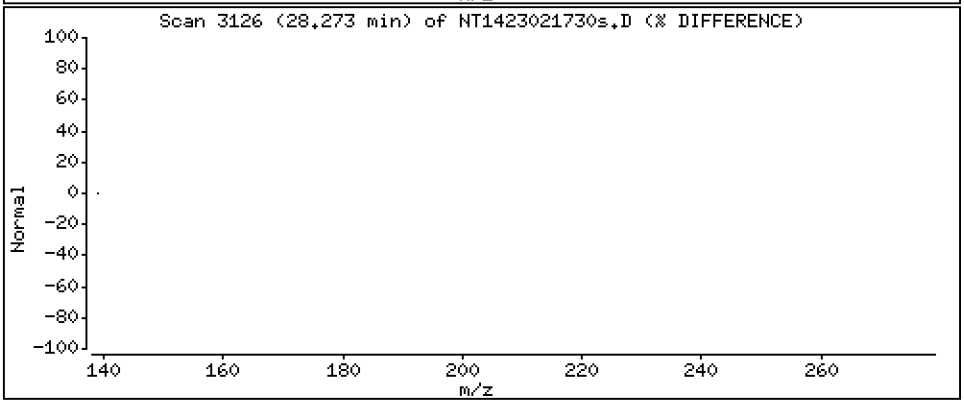












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021730s.D
Lab Smp Id: 23A0171-01
Inj Date : 18-FEB-2023 04:06 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : 23A0171-01
Misc Info :
Comment :
Method : \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\SIMABN2.m
Meth Date : 07-Mar-2023 12:35 van Quant Type: ISTD
Cal Date : 16-FEB-2023 20:42 Cal File: NT1423021612s.D
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1	2-Fluorophenol	112	6.702	6.679	(0.753)	422777	4.79973	4.800(R)
	3	Phenol	94	8.302	8.294	(0.932)	586175	4.35839	4.358
	7	1,3-Dichlorobenzene	146	8.843	8.835	(0.993)	298	0.00282	0.002823
*	8	1,4-Dichlorobenzene-d4	152	8.905	8.905	(1.000)	310259	4.00000	
	9	1,4-Dichlorobenzene	146	8.936	8.928	(1.003)	1368	0.01358	0.01358
	11	Benzyl alcohol	79	9.184	9.184	(1.031)	123454	1.45290	1.453
	12	1,2-Dichlorobenzene	146	Compound Not Detected.					
	13	2-Methylphenol	108	9.417	9.409	(1.058)	4667	0.05067	0.05067
	15	4-Methylphenol	108	9.689	9.681	(1.088)	25118	0.24892	0.2489
	16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22	2,4-Dimethylphenol	107	10.752	10.728	(0.944)	1626	0.01608	0.01608
	24	Benzoic acid	105	10.907	10.891	(0.957)	115237	2.20884	2.209
	26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27	Naphthalene-d8	136	11.394	11.394	(1.000)	1103591	4.00000	
	30	Hexachlorobutadiene	225	Compound Not Detected.					
	39	Dimethylphthalate	163	14.536	14.536	(0.968)	11128	0.06449	0.06449(M)
*	42	Acenaphthene-d10	162	15.023	15.015	(1.000)	565626	4.00000	
	50	Diethylphthalate	149	15.997	15.989	(1.065)	45059	0.20863	0.2086
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	17.812	17.804	(0.986)	953	0.03327	0.03327(M)
*	59	Phenanthrene-d10	188	18.067	18.059	(1.000)	1084412	4.00000	
$	66	Terphenyl-d14	244	21.224	21.216	(0.918)	579017	4.24409	4.244(R)
	67	Butylbenzylphthalate	149	22.153	22.153	(0.958)	10677	0.16582	0.1658
*	69	Chrysene-d12	240	23.128	23.121	(1.000)	512467	4.00000	
*	77	Perylene-d12	264	25.707	25.691	(1.000)	475993	4.00000	
	79	Dibenzo(a,h)anthracene	278	28.272	28.265	(1.100)	12699	0.15234	0.1523
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021730s.D
Lab Smp Id: 23A0171-01
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\SIMABN2.m
Misc Info:

Calibration Date: 17-FEB-2023
Calibration Time: 21:31
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	388684	194342	777368	310259	-20.18
27 Naphthalene-d8	1386667	693334	2773334	1103591	-20.41
42 Acenaphthene-d10	752189	376095	1504378	565626	-24.80
59 Phenanthrene-d10	1701919	850960	3403838	1084412	-36.28
69 Chrysene-d12	887171	443586	1774342	512467	-42.24
77 Perylene-d12	644624	322312	1289248	475993	-26.16

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	0.00
27 Naphthalene-d8	11.39	10.89	11.89	11.39	0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.05
59 Phenanthrene-d10	18.06	17.56	18.56	18.07	0.04
69 Chrysene-d12	23.12	22.62	23.62	23.13	0.03
77 Perylene-d12	25.69	25.19	26.19	25.71	0.06

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

REVIEW SUMMARY FOR FILE - NT1423021730s.D

Lab ID: 23A0171-01
nt14.i, 20230217A.b\20230217A.b\SIMABN2.m,   18-FEB-2023 04:06

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

RRT check based on Ccal File: 20230217A.b/NT1423021719s.D

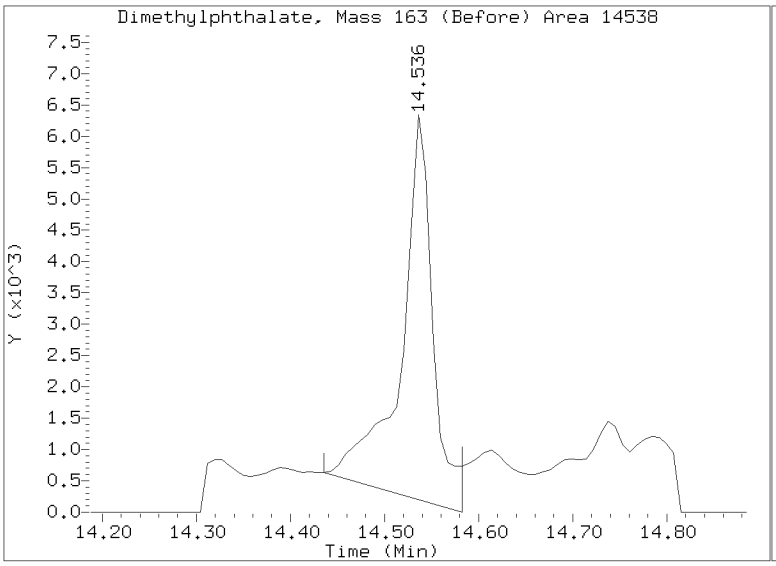
On Column LOD for nt14.i, 20230217A.b\SIMABN2.m, PSDDA.sub = 0.0000

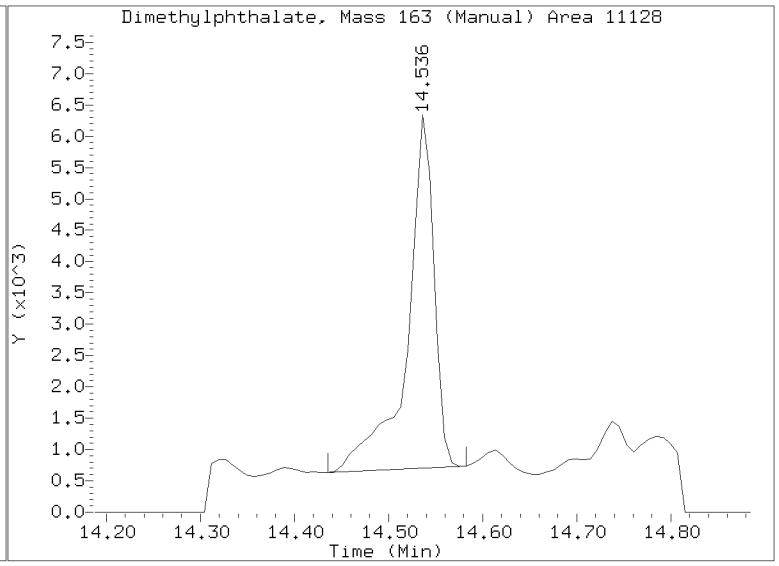
Exception: 1,2,4-Trichlorobenzene 0.0010

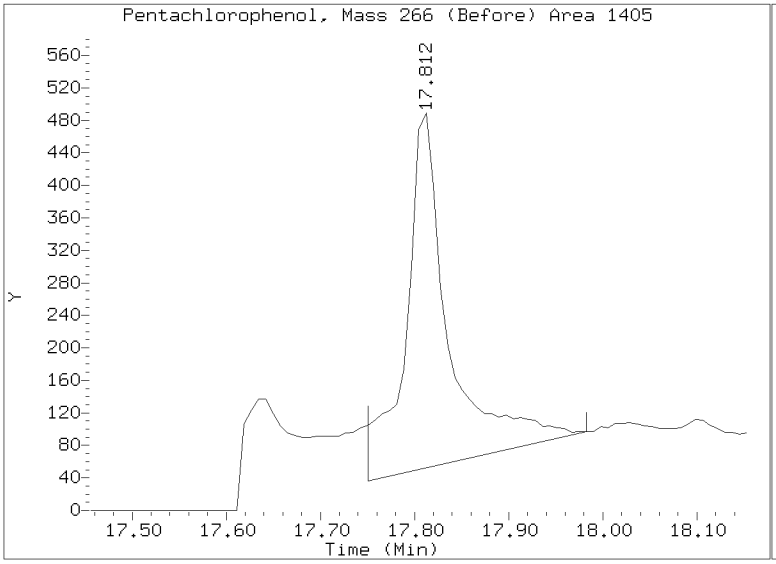
* Only compounds listed in the work order have been verified by the analyst *

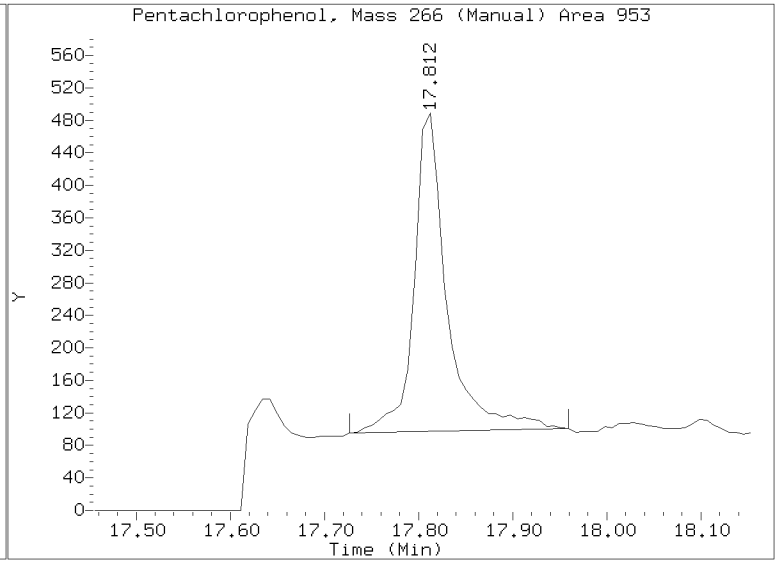
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230217A.b/20230217A.b/NT1423021730s.D
Injection Date: 18-FEB-2023 04:06
Lab ID:23A0171-01 Client ID:
Report Date: 03/07/2023 12:36









Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1257

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-02 A	SDG:	23A0171
Sampled:	12/08/22 09:16	Prepared:	01/18/23 13:47	File ID:	NT1423021731s.D
% Solids:	41.72	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/18/23 04:42
Batch:	BLA0339	Sequence:	SLB0335	Initial/Final:	24.37 g Wet / 1 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	GC00009
Cleanups:	GPC				

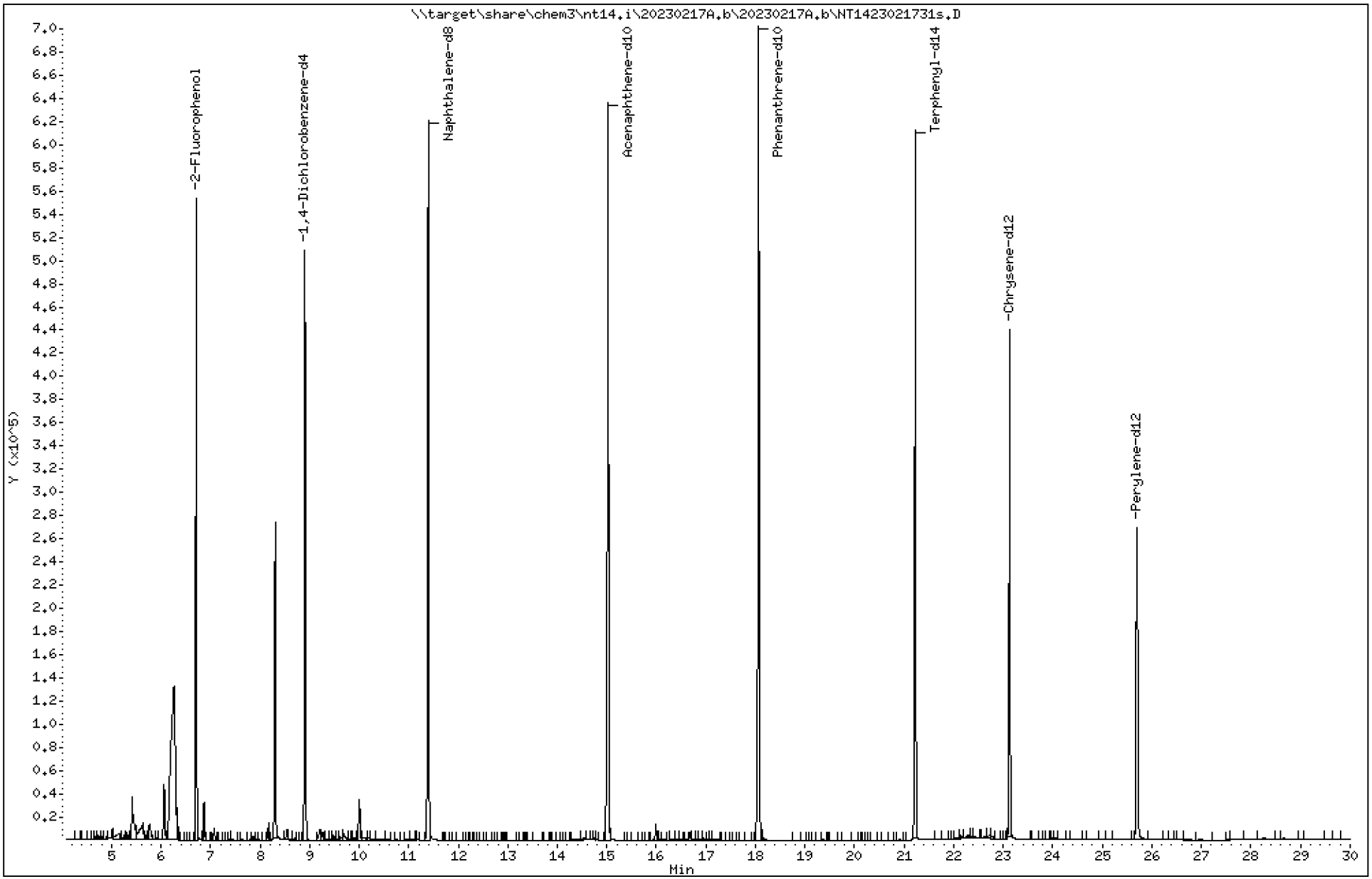
CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	4.9	U	0.6	4.9
95-50-1	1,2-Dichlorobenzene	1	4.9	U	0.7	4.9
100-51-6	Benzyl Alcohol	1	19.7	U	2.4	19.7
65-85-0	Benzoic acid	1	393	U	13.2	393
105-67-9	2,4-Dimethylphenol	1	19.7	U	2.1	19.7
120-82-1	1,2,4-Trichlorobenzene	1	4.9	U	2.6	4.9
86-30-6	N-Nitrosodiphenylamine	1	4.9	U	1.3	4.9
87-86-5	Pentachlorophenol	1	39.3	U	2.1	39.3

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	737.67	526	71.3	27 - 120	
p-Terphenyl-d14	491.78	537	109	37 - 120	Q

Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021731s.D
Date : 18-FEB-2023 04:42
Client ID:
Sample Info: 23A0171-02

Instrument: nt14.i
Operator: DSD
Column diameter: 0.25

Column phase: ZB-5msi



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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

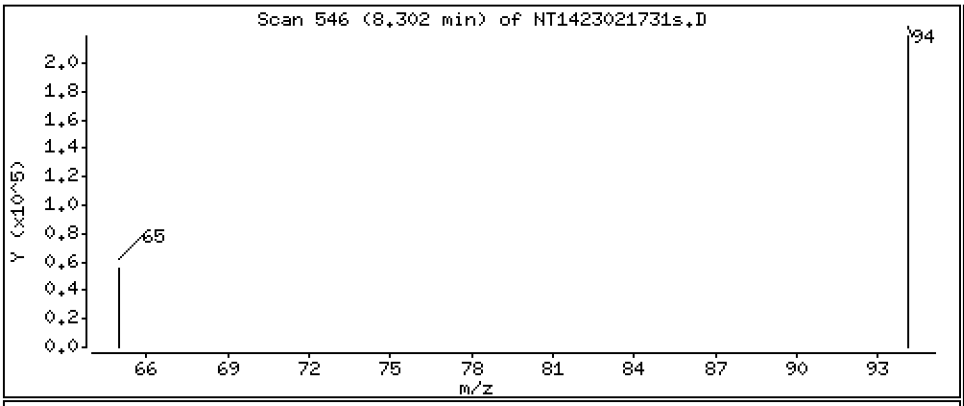
Operator: DSD

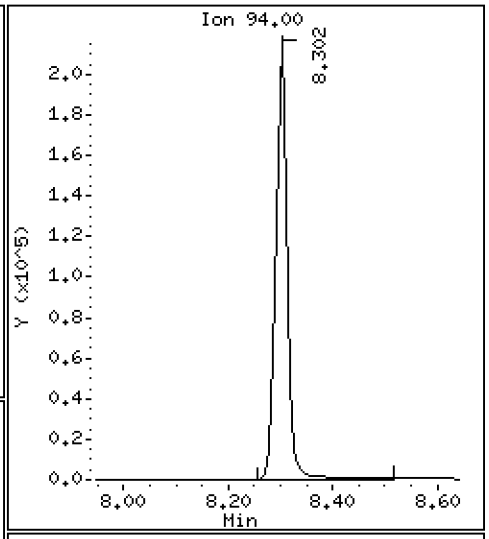
Column phase: ZB-5msi

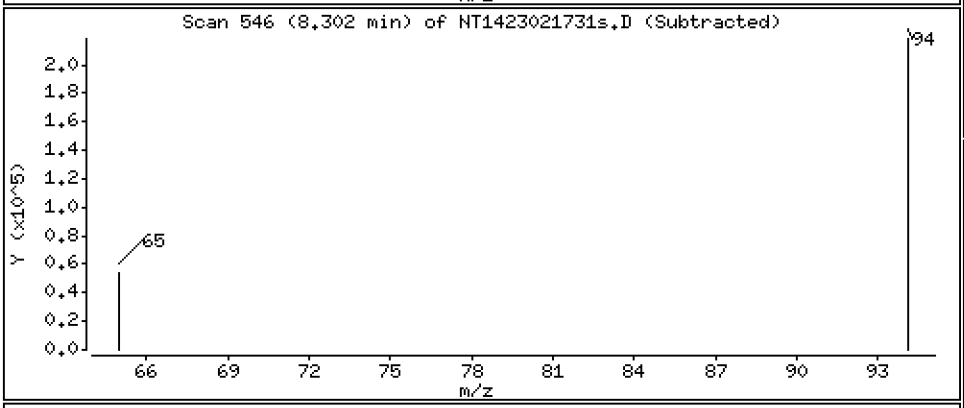
Column diameter: 0.25

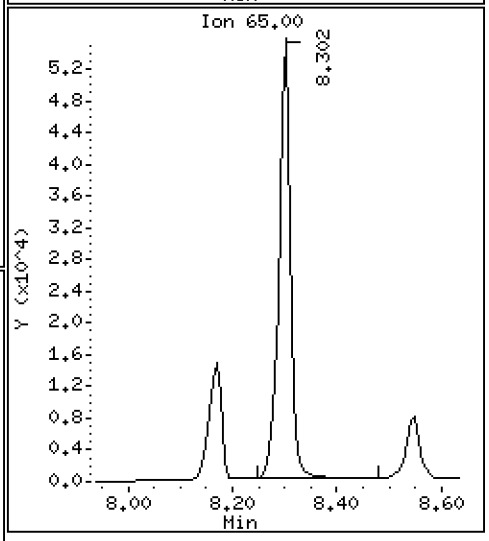
3 Phenol

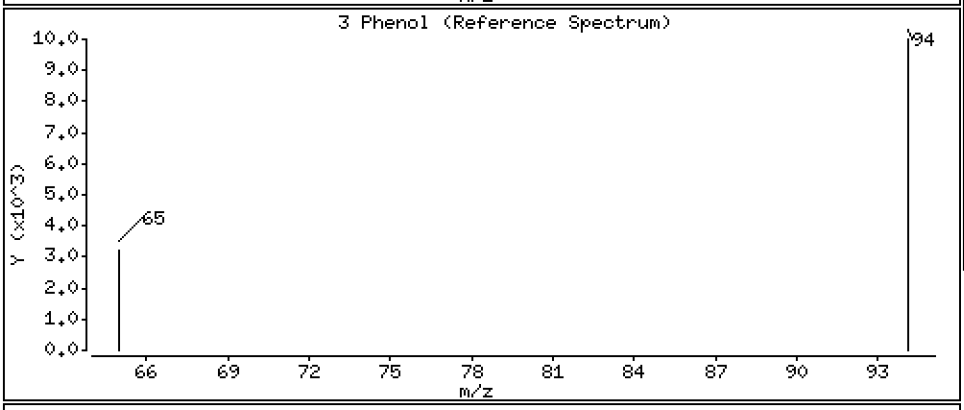
Concentration: 2.426 ug/mL

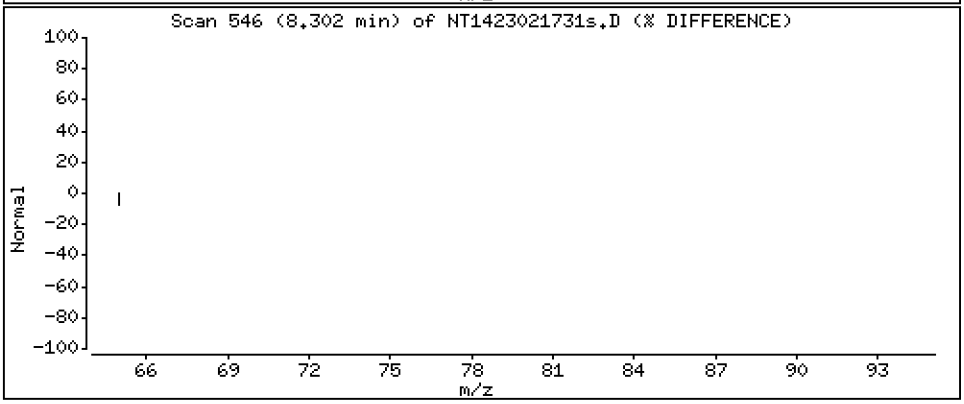












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

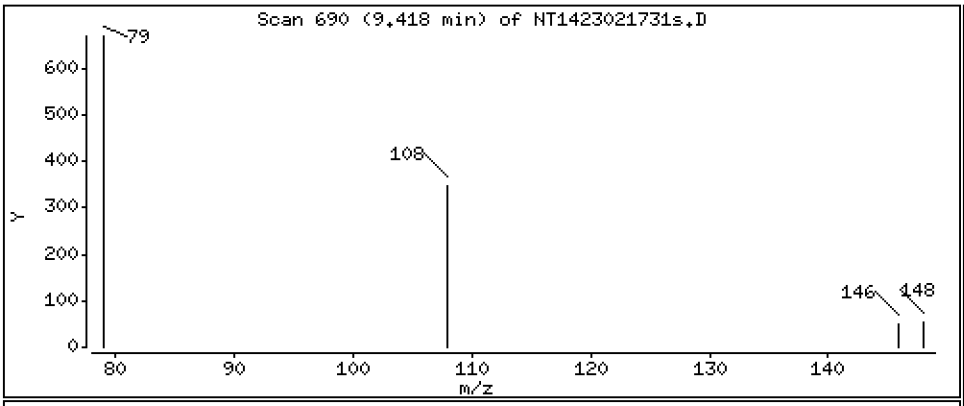
Operator: DSD

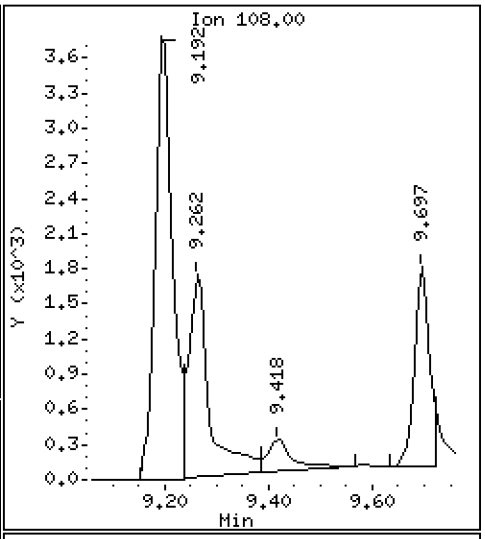
Column phase: ZB-5msi

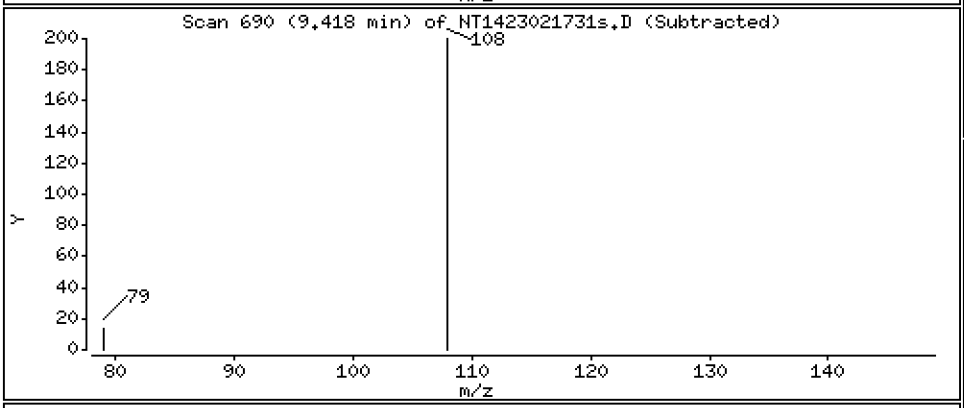
Column diameter: 0.25

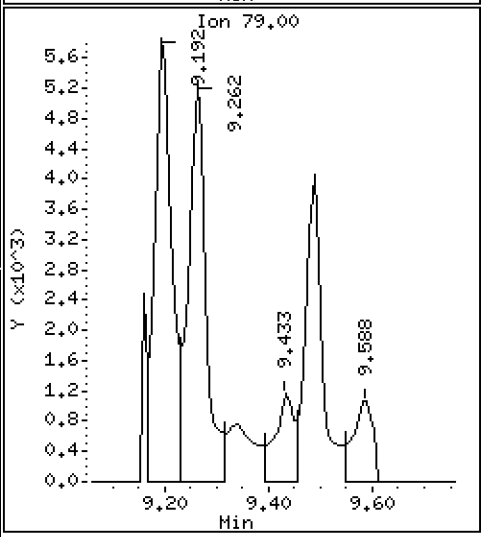
13 2-Methylphenol

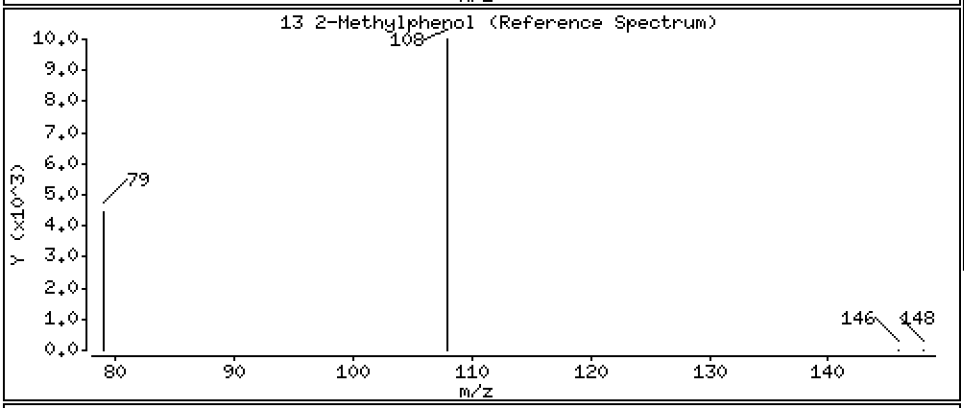
Concentration: 0.01003 ug/mL

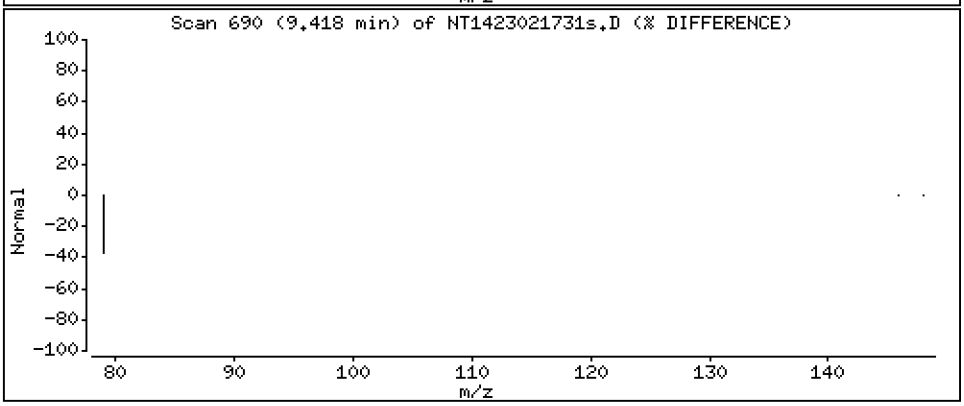












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

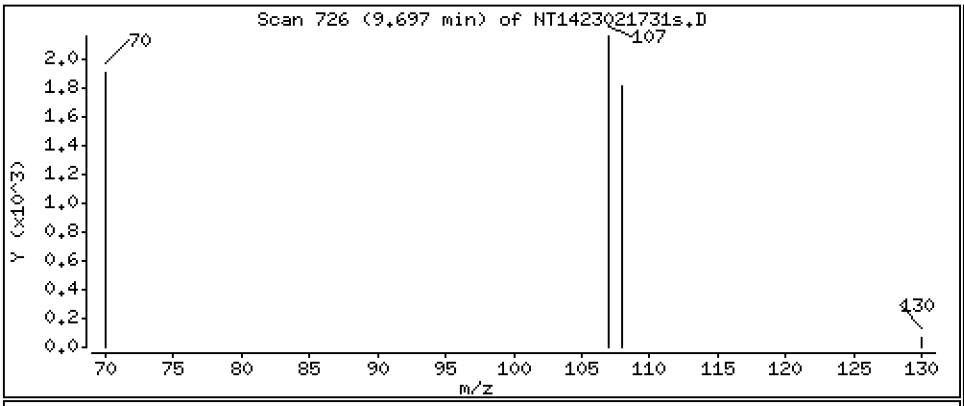
Operator: DSD

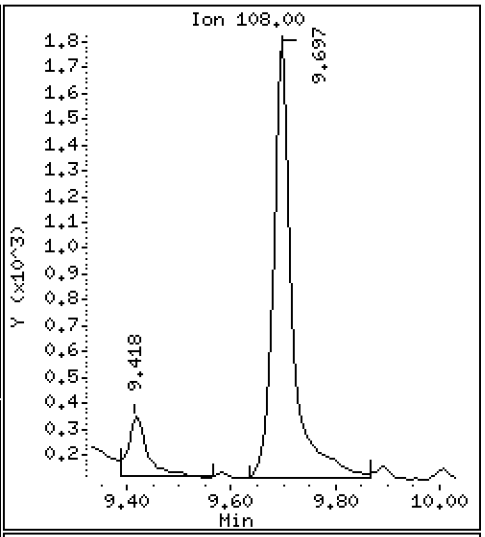
Column phase: ZB-5msi

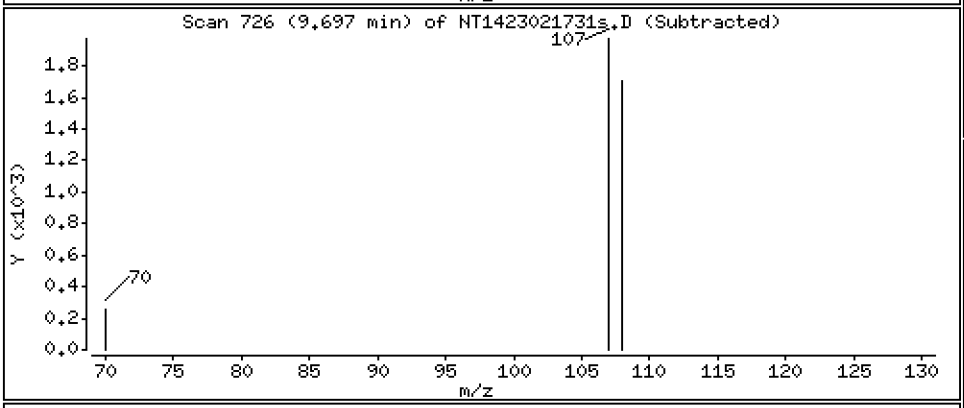
Column diameter: 0.25

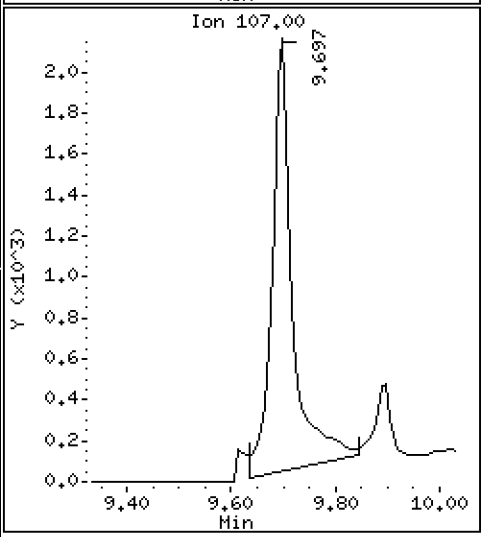
15 4-Methylphenol

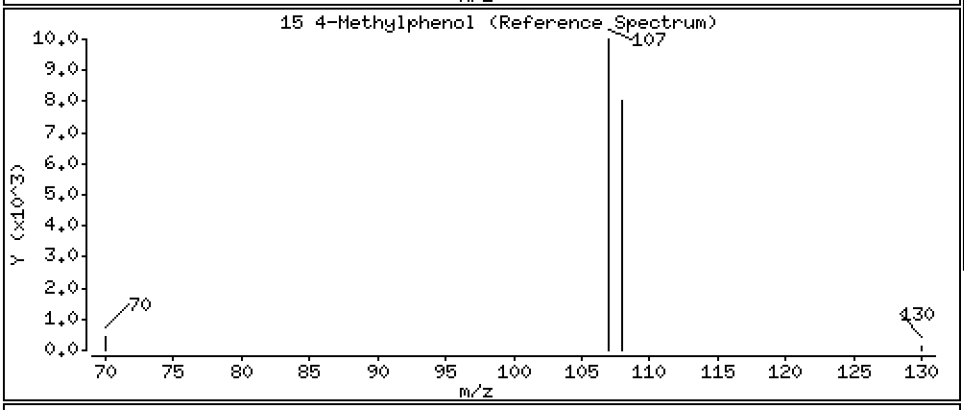
Concentration: 0.04307 ug/mL

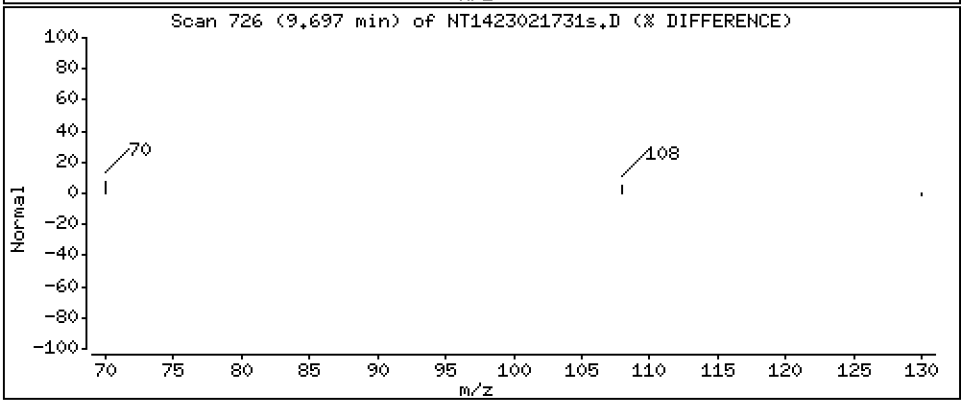












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

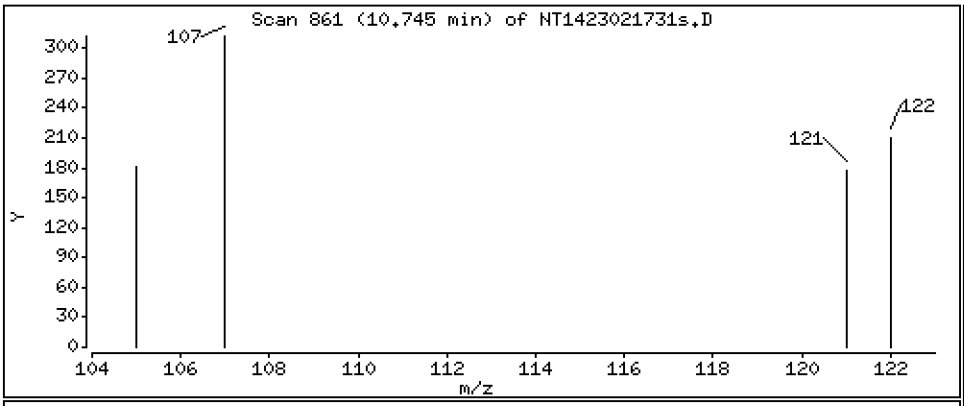
Operator: DSD

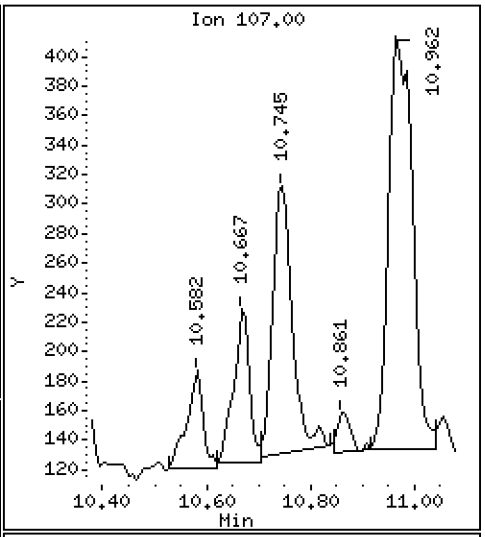
Column phase: ZB-5msi

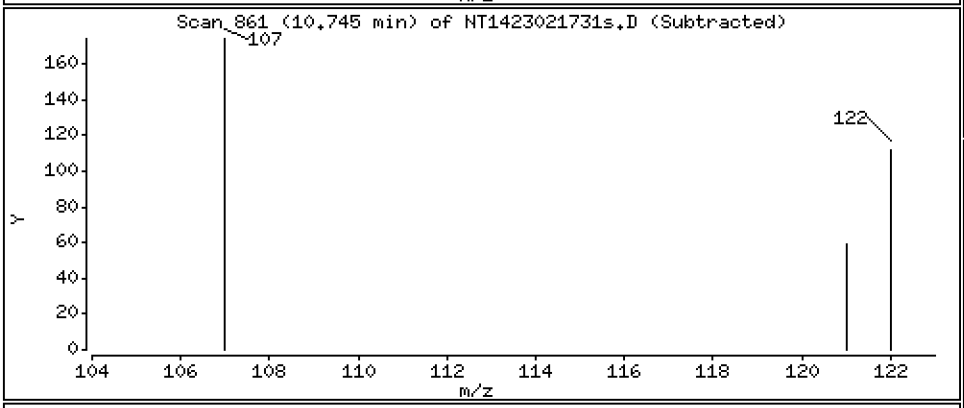
Column diameter: 0.25

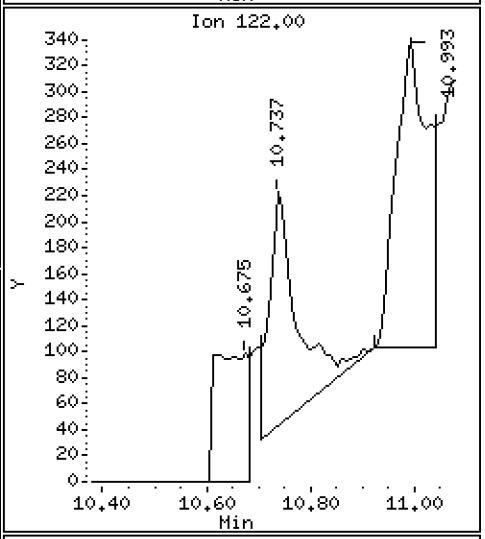
22 2,4-Dimethylphenol

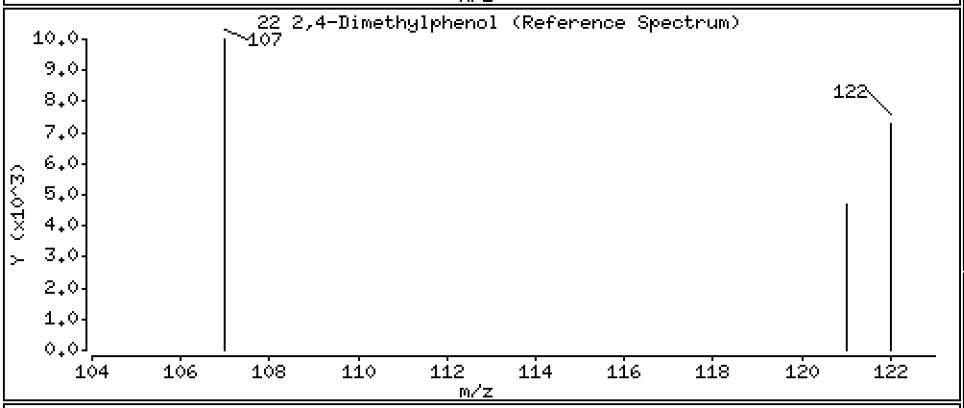
Concentration: 0.004738 ug/mL

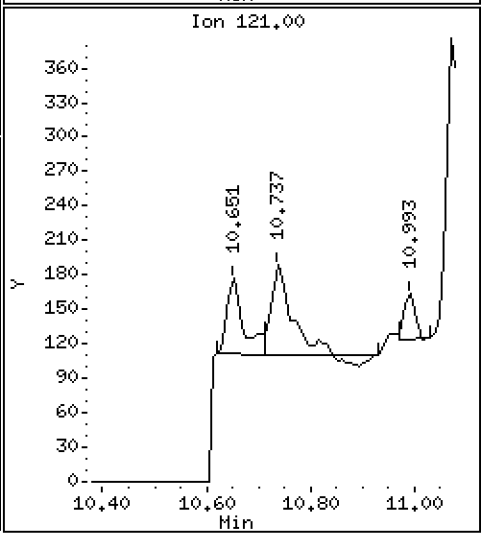


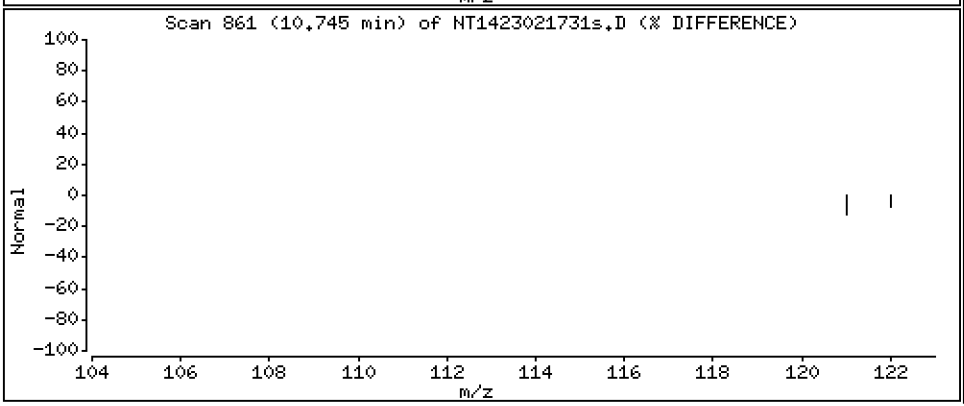












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

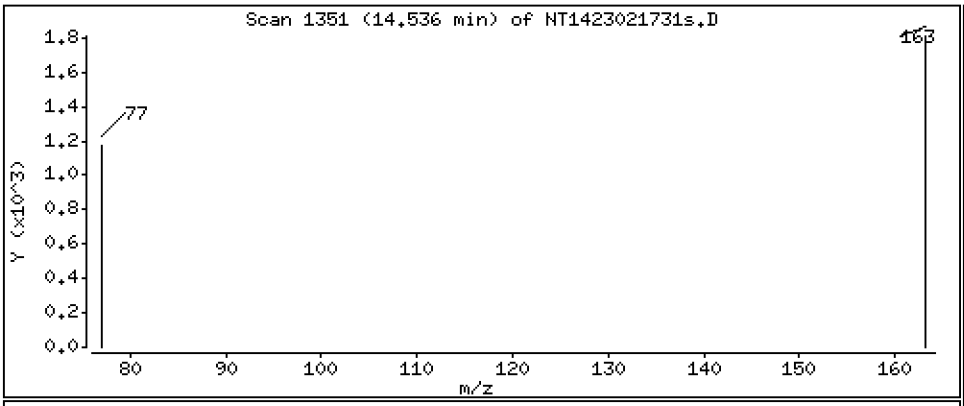
Operator: DSD

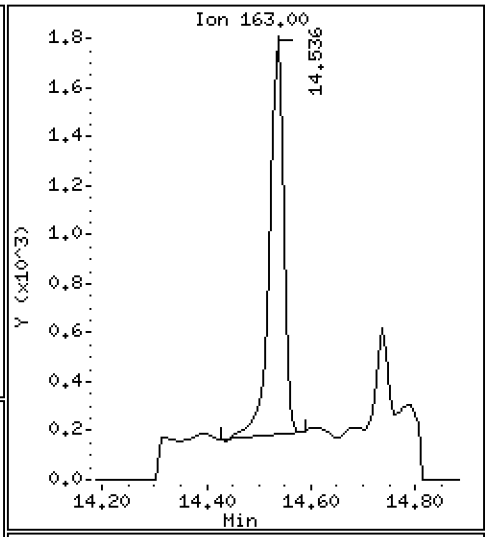
Column phase: ZB-5msi

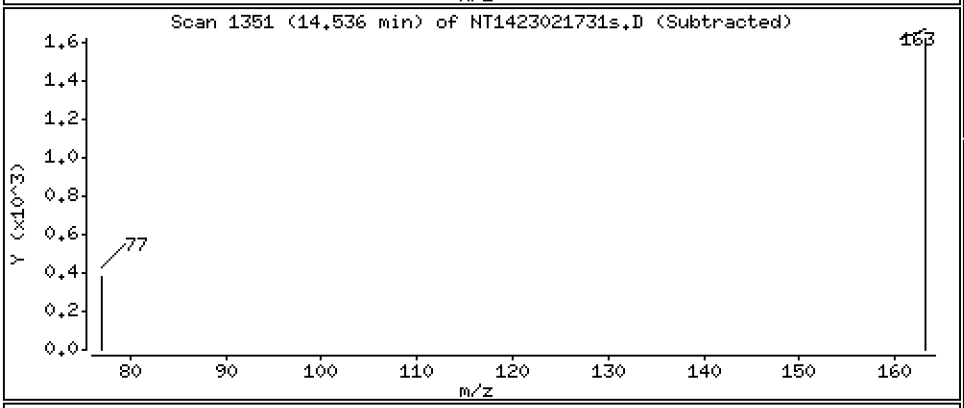
Column diameter: 0.25

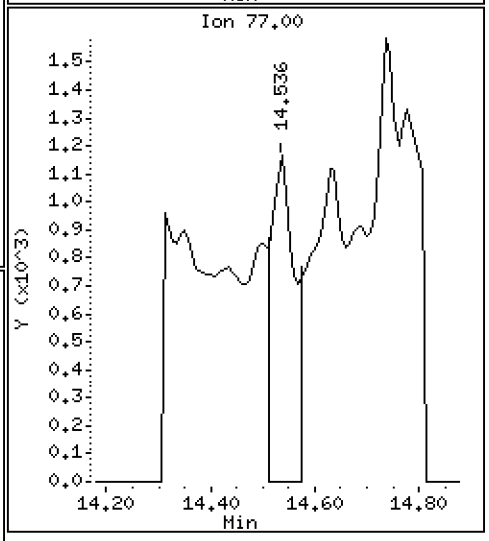
39 Dimethylphthalate

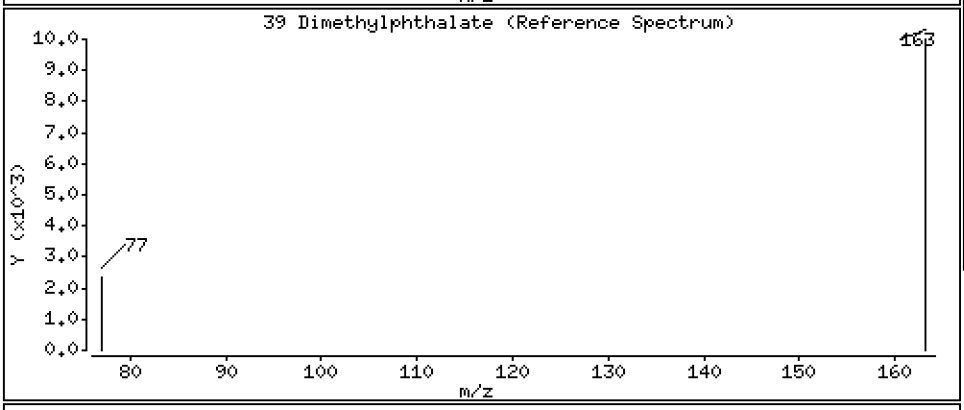
Concentration: 0.01669 ug/mL

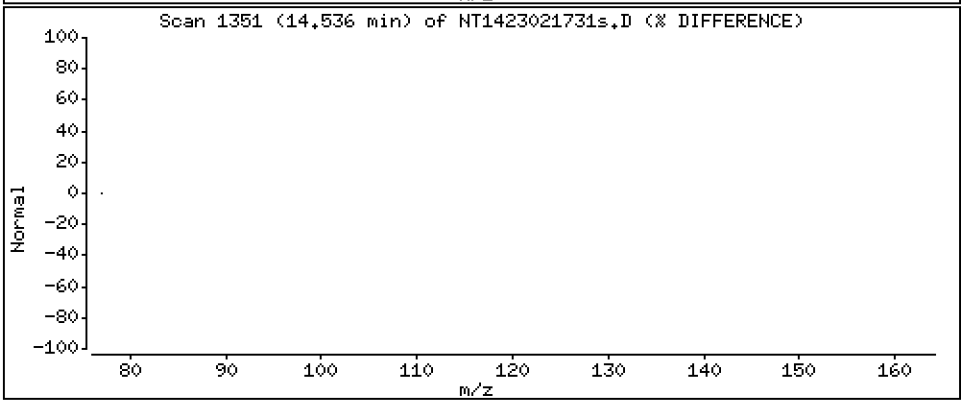












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

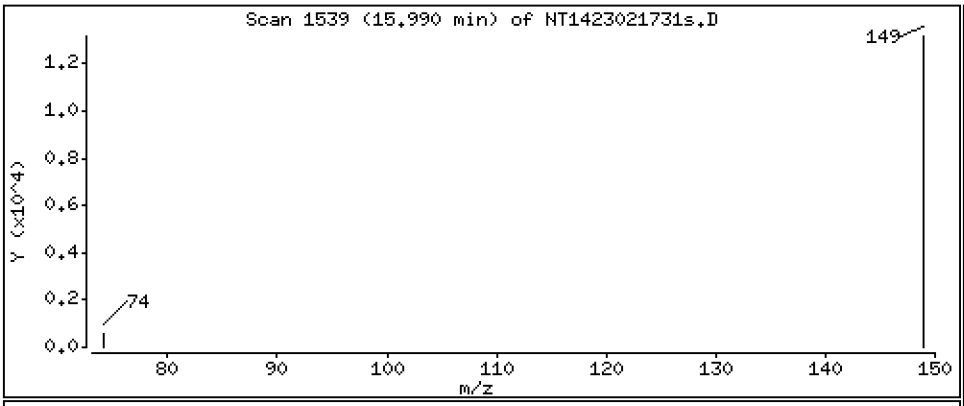
Operator: DSD

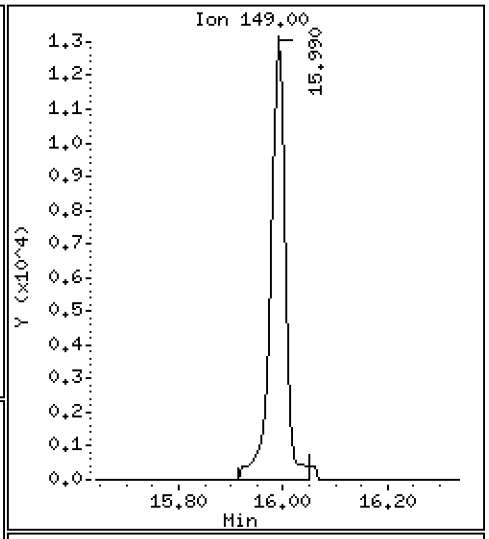
Column phase: ZB-5msi

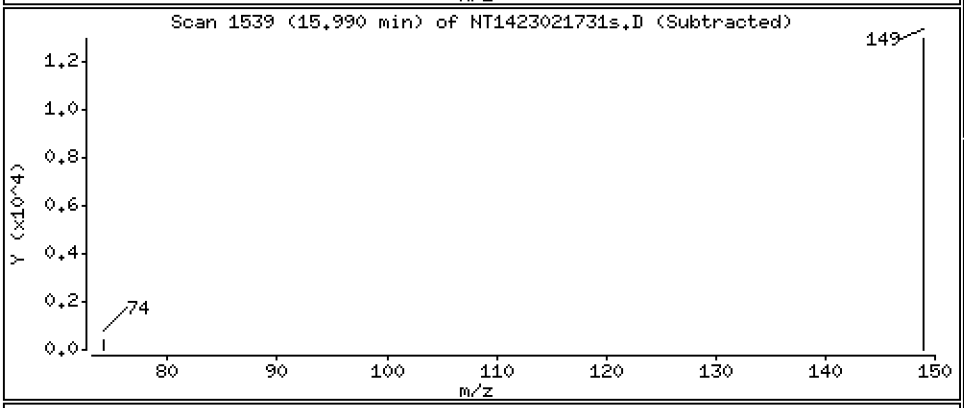
Column diameter: 0.25

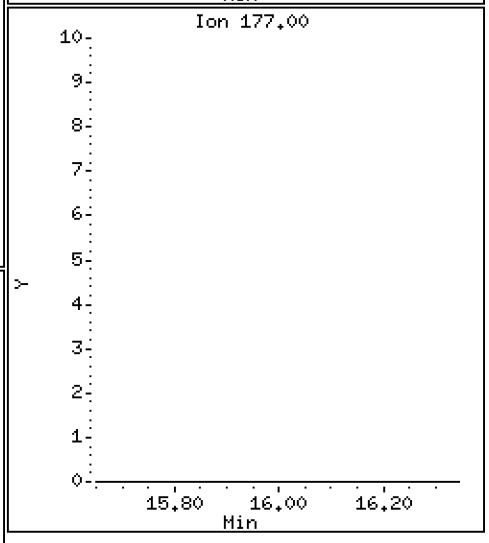
50 Diethylphthalate

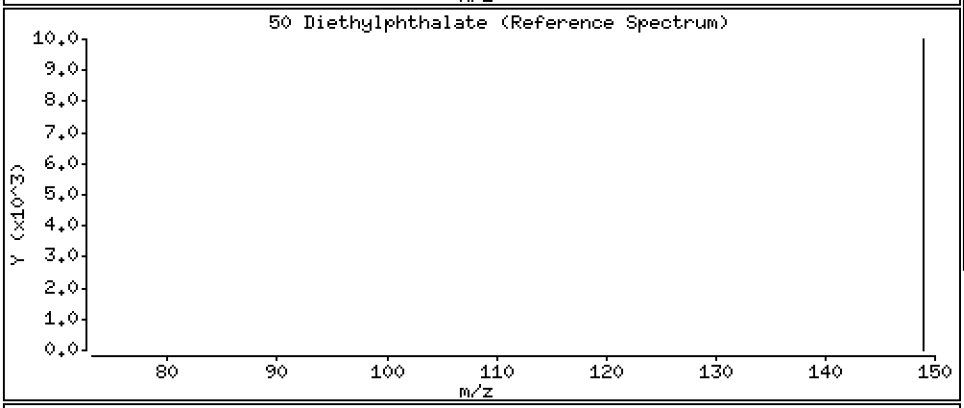
Concentration: 0.1140 ug/mL

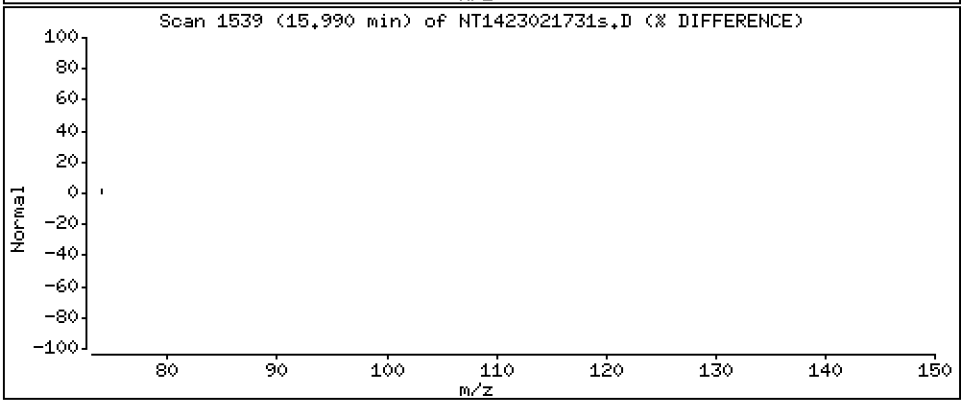












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Date : 18-FEB-2023 04:42

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-02

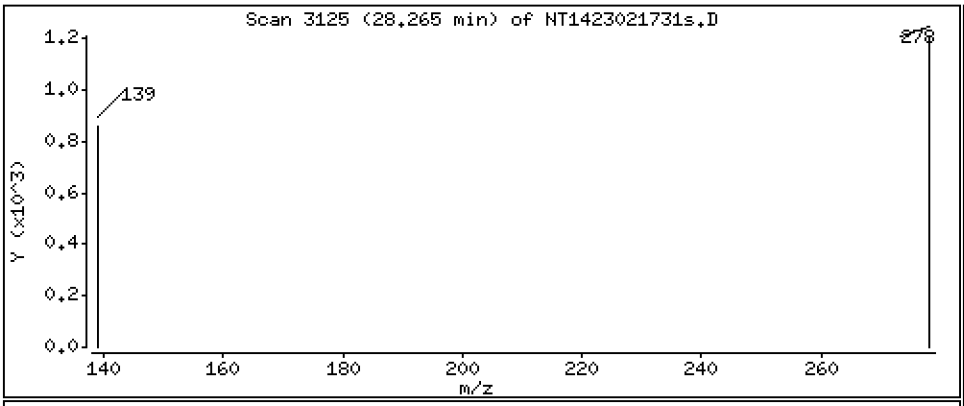
Operator: DSD

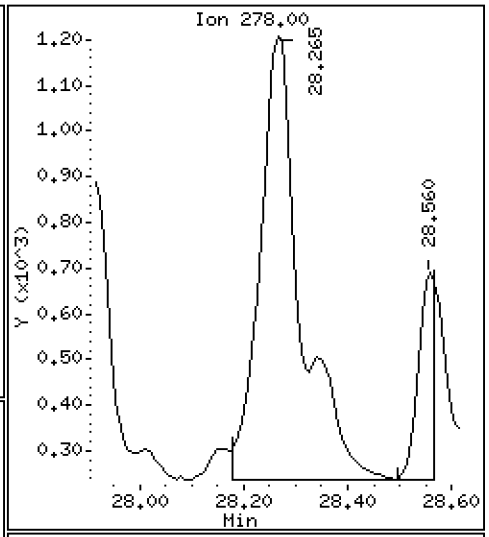
Column phase: ZB-5msi

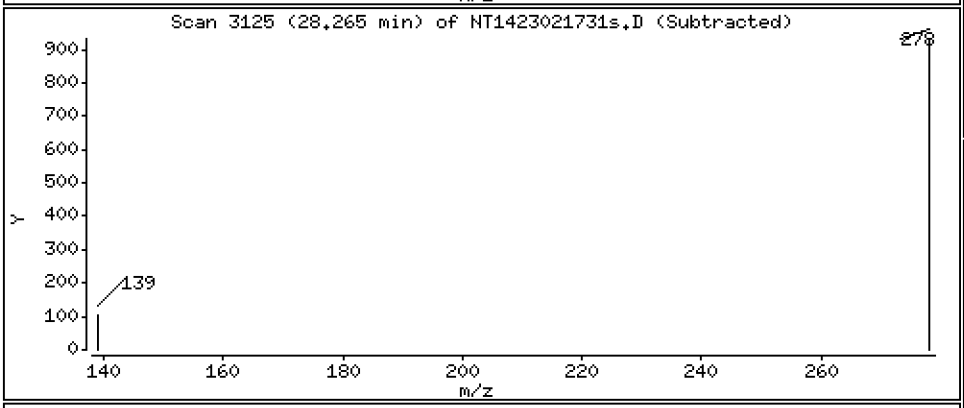
Column diameter: 0.25

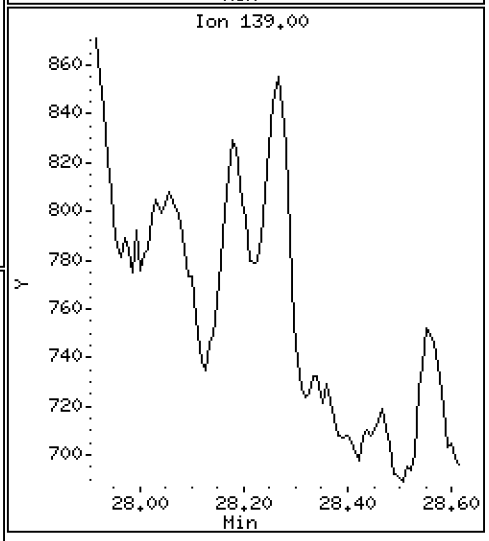
79 Dibenzo(a,h)anthracene

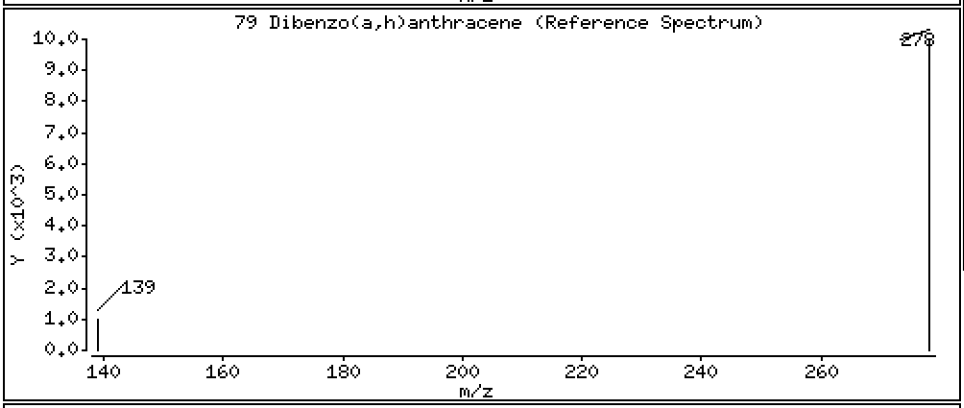
Concentration: 0.06294 ug/mL

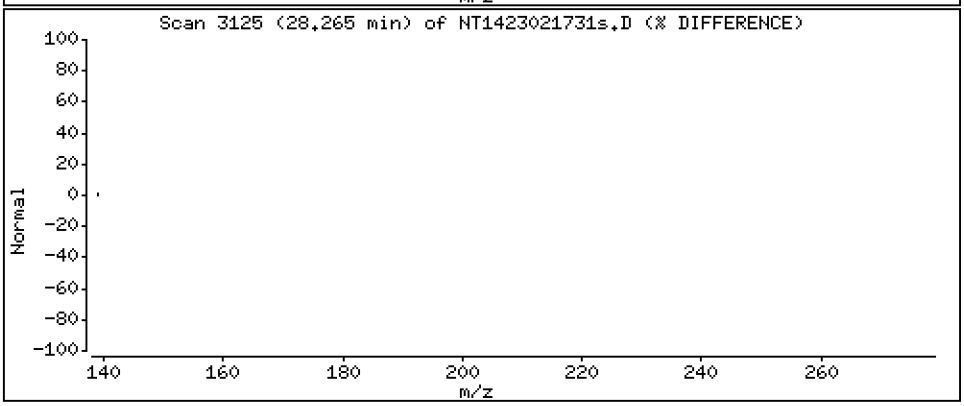












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021731s.D
Lab Smp Id: 23A0171-02
Inj Date : 18-FEB-2023 04:42 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : 23A0171-02
Misc Info :
Comment :
Method : \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\SIMABN2.m
Meth Date : 07-Mar-2023 12:35 van Quant Type: ISTD
Cal Date : 16-FEB-2023 20:42 Cal File: NT1423021612s.D
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.710	6.679	(0.754)	465227	5.34740	5.347(R)
	3 Phenol	94	8.302	8.294	(0.932)	321367	2.42615	2.426
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.905	8.905	(1.000)	307215	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	79	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	13 2-Methylphenol	108	9.417	9.409	(1.058)	915	0.01003	0.01003
	15 4-Methylphenol	108	9.697	9.681	(1.089)	4300	0.04307	0.04307
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	10.744	10.728	(0.943)	479	0.00474	0.004738
	24 Benzoic acid	105	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.394	11.394	(1.000)	1103567	4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	39 Dimethylphthalate	163	14.536	14.536	(0.968)	2896	0.01669	0.01669(M)
*	42 Acenaphthene-d10	162	15.023	15.015	(1.000)	568782	4.00000	
	50 Diethylphthalate	149	15.989	15.989	(1.064)	24760	0.11401	0.1140
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.059	18.059	(1.000)	1245556	4.00000	
$	66 Terphenyl-d14	244	21.224	21.216	(0.918)	772230	5.46274	5.463(R)
	67 Butylbenzylphthalate	149	Compound Not Detected.					
*	69 Chrysene-d12	240	23.128	23.121	(1.000)	531001	4.00000	
*	77 Perylene-d12	264	25.699	25.691	(1.000)	475192	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.265	28.265	(1.100)	5229	0.06294	0.06294
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021731s.D
Lab Smp Id: 23A0171-02
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\SIMABN2.m
Misc Info:

Calibration Date: 17-FEB-2023
Calibration Time: 21:31
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	388684	194342	777368	307215	-20.96
27 Naphthalene-d8	1386667	693334	2773334	1103567	-20.42
42 Acenaphthene-d10	752189	376095	1504378	568782	-24.38
59 Phenanthrene-d10	1701919	850960	3403838	1245556	-26.81
69 Chrysene-d12	887171	443586	1774342	531001	-40.15
77 Perylene-d12	644624	322312	1289248	475192	-26.28

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	0.00
27 Naphthalene-d8	11.39	10.89	11.89	11.39	0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.05
59 Phenanthrene-d10	18.06	17.56	18.56	18.06	0.00
69 Chrysene-d12	23.12	22.62	23.62	23.13	0.03
77 Perylene-d12	25.69	25.19	26.19	25.70	0.03

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

REVIEW SUMMARY FOR FILE - NT1423021731s.D

Lab ID: 23A0171-02
nt14.i, 20230217A.b\20230217A.b\SIMABN2.m,   18-FEB-2023 04:42

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

RRT check based on Ccal File: 20230217A.b/NT1423021719s.D

On Column LOD for nt14.i, 20230217A.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

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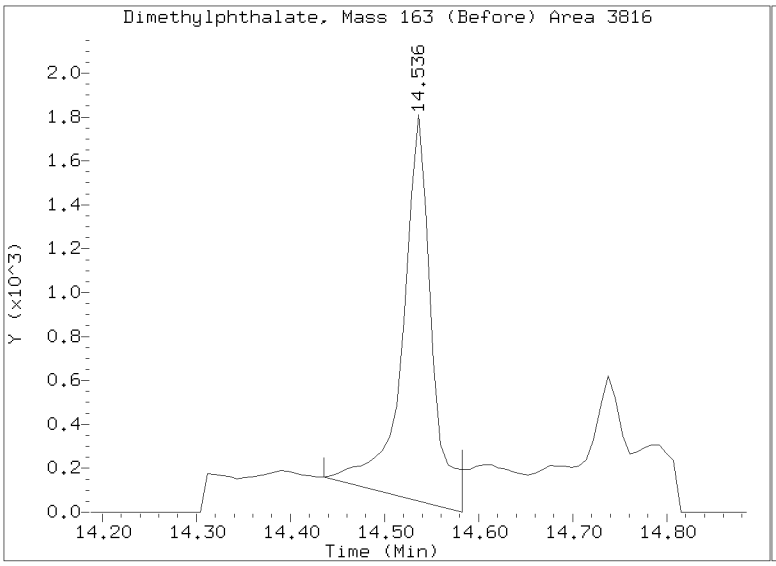
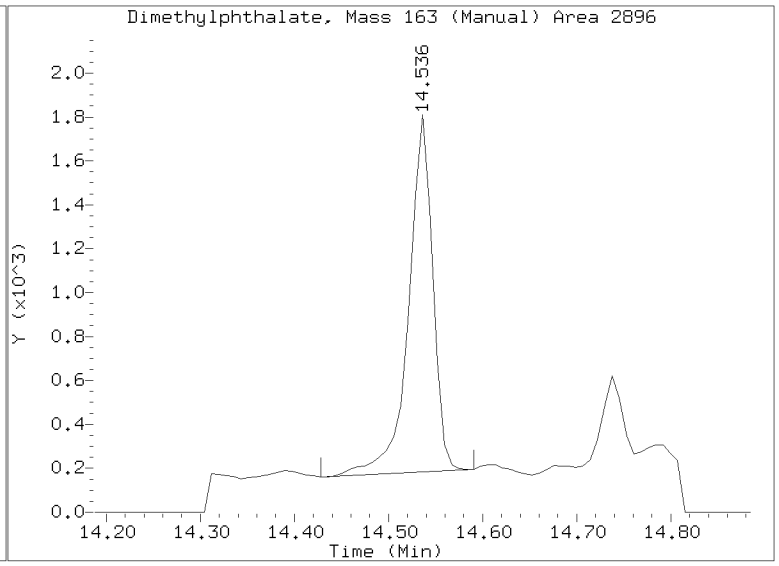
Injection Date: 18-FEB-2023 04:42
Lab ID:23A0171-02 Client ID:
Report Date: 03/07/2023 12:36





Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1262

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-03 A	SDG:	23A0171
Sampled:	12/08/22 10:36	Prepared:	01/18/23 13:47	File ID:	NT1423021732s.D
% Solids:	43.54	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/18/23 05:18
Batch:	BLA0339	Sequence:	SLB0335	Initial/Final:	23.27 g Wet / 1 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	GC00009
Cleanups:	GPC				

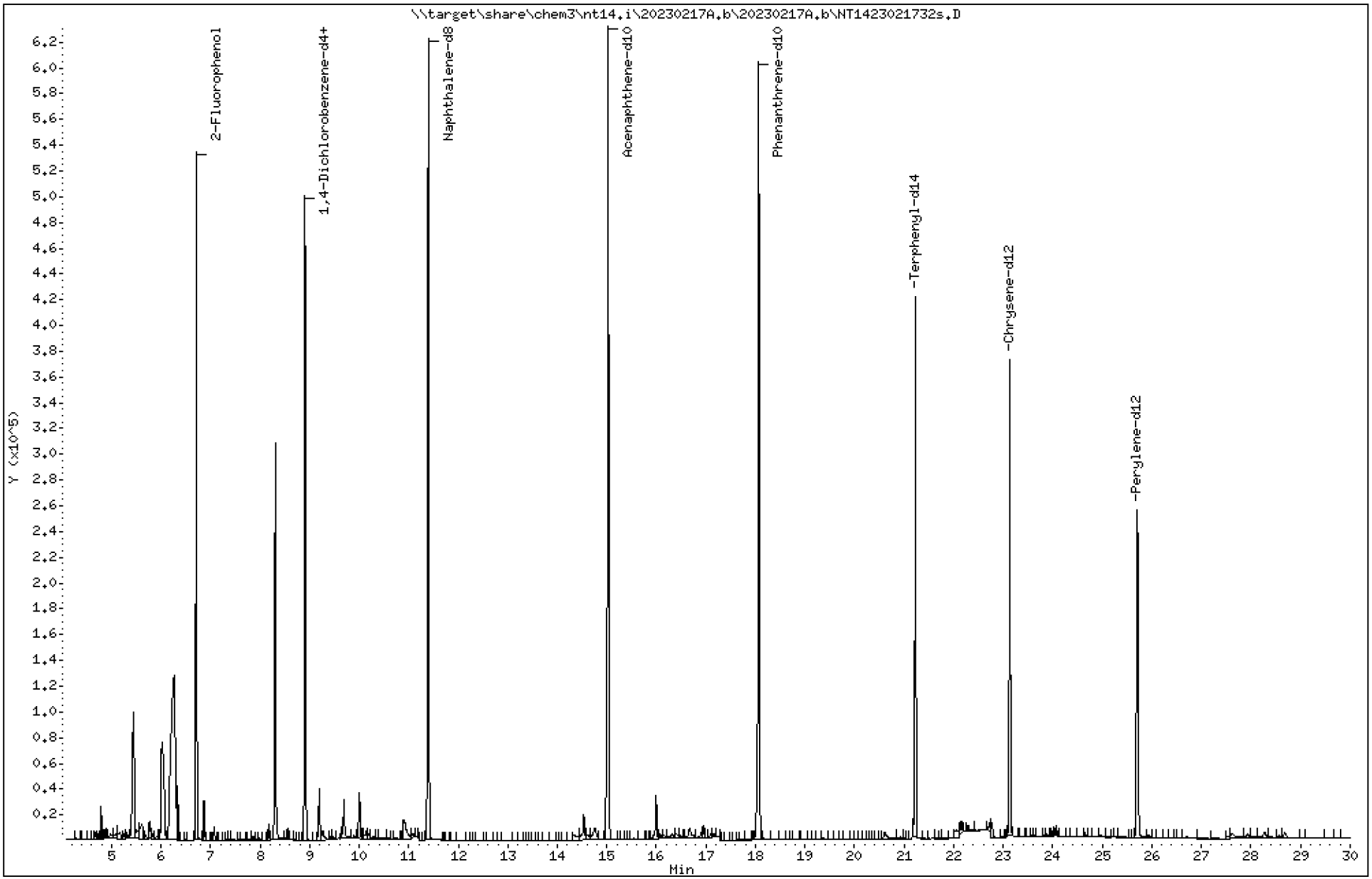
CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	1.2	J	0.6	4.9
95-50-1	1,2-Dichlorobenzene	1	1.5	J	0.7	4.9
100-51-6	Benzyl Alcohol	1	57.8		2.4	19.7
65-85-0	Benzoic acid	1	78.0	J	13.2	395
105-67-9	2,4-Dimethylphenol	1	19.7	U	2.1	19.7
120-82-1	1,2,4-Trichlorobenzene	1	4.9	U	2.6	4.9
86-30-6	N-Nitrosodiphenylamine	1	4.9	U	1.3	4.9
87-86-5	Pentachlorophenol	1	39.5	U	2.1	39.5

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	740.25	505	68.2	27 - 120	
p-Terphenyl-d14	493.50	417	84.5	37 - 120	Q

Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021732s.D
Date : 18-FEB-2023 05:18
Client ID:
Sample Info: 23A0171-03

Instrument: nt14.i
Operator: DSD
Column diameter: 0.25

Column phase: ZB-5msi



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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

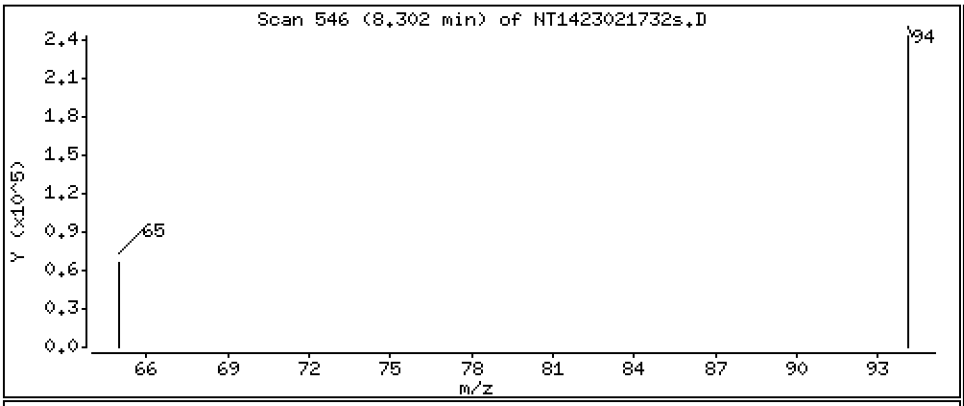
Operator: DSD

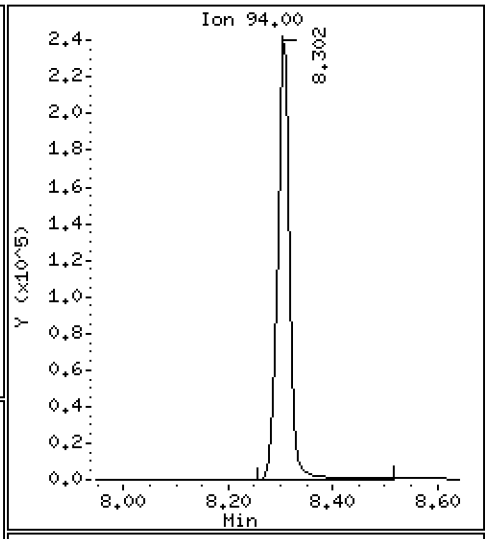
Column phase: ZB-5msi

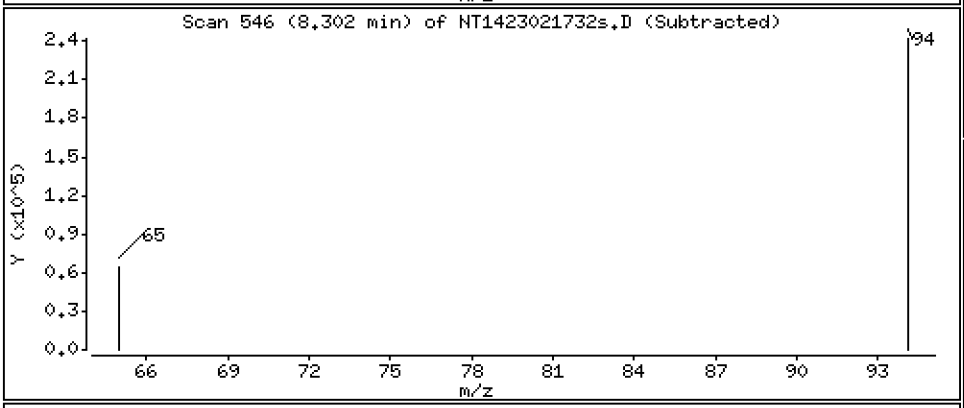
Column diameter: 0.25

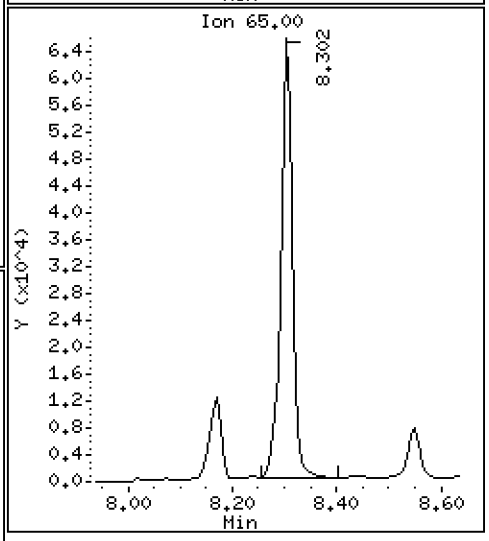
3 Phenol

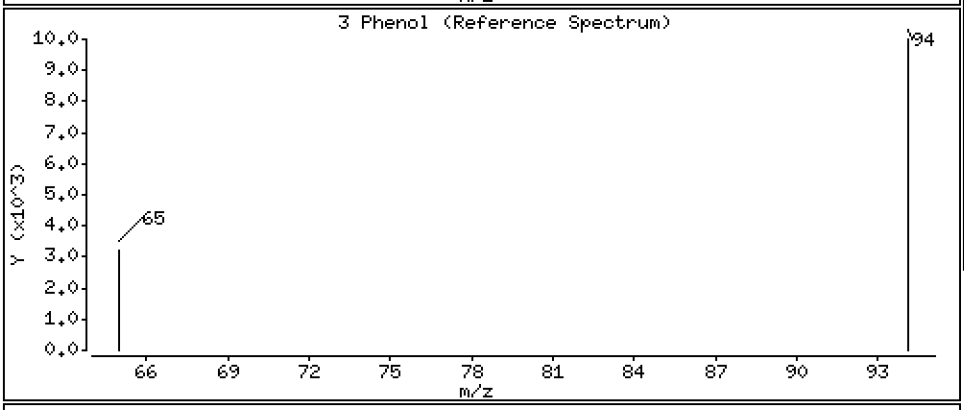
Concentration: 2.923 ug/mL

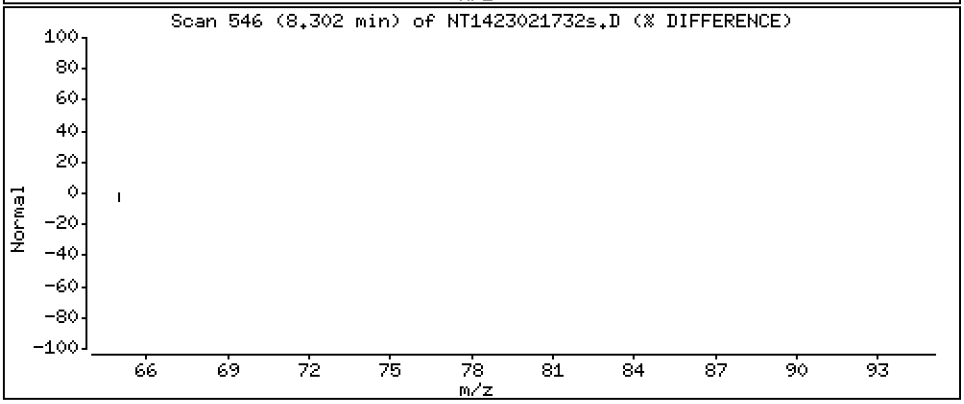












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

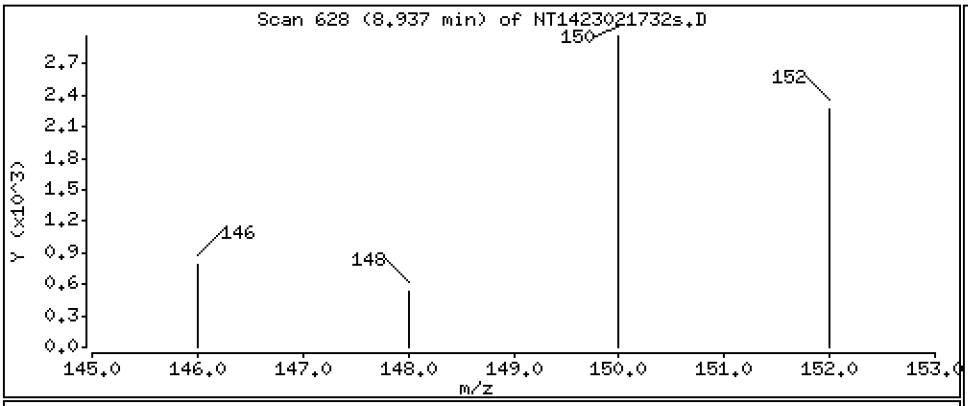
Operator: DSD

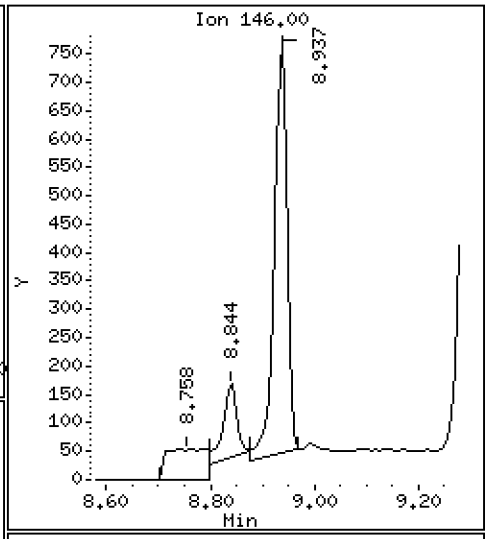
Column phase: ZB-5msi

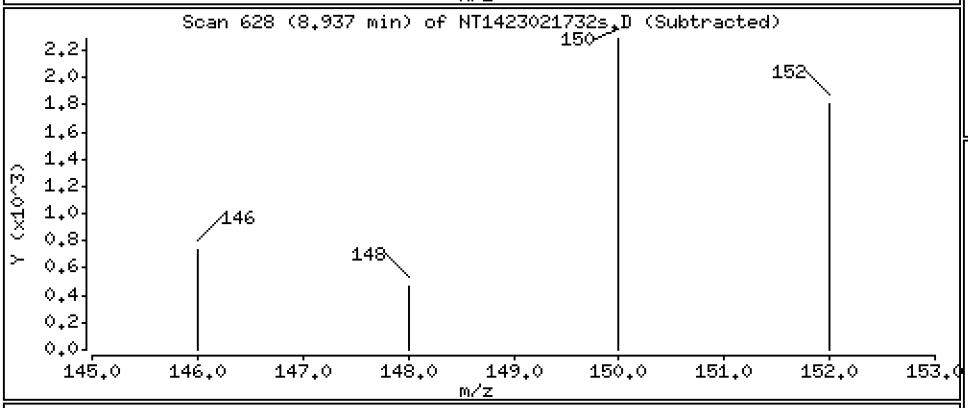
Column diameter: 0.25

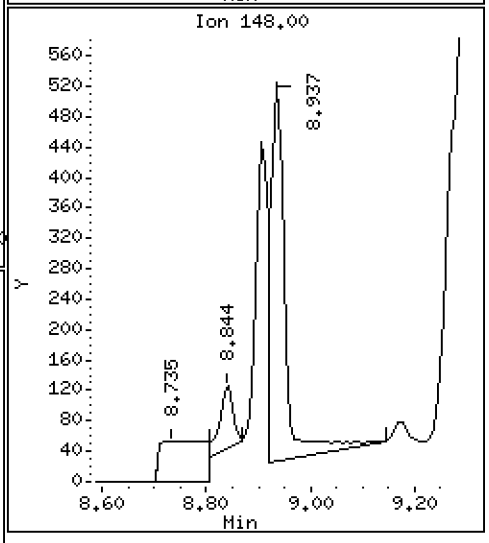
9 1,4-Dichlorobenzene

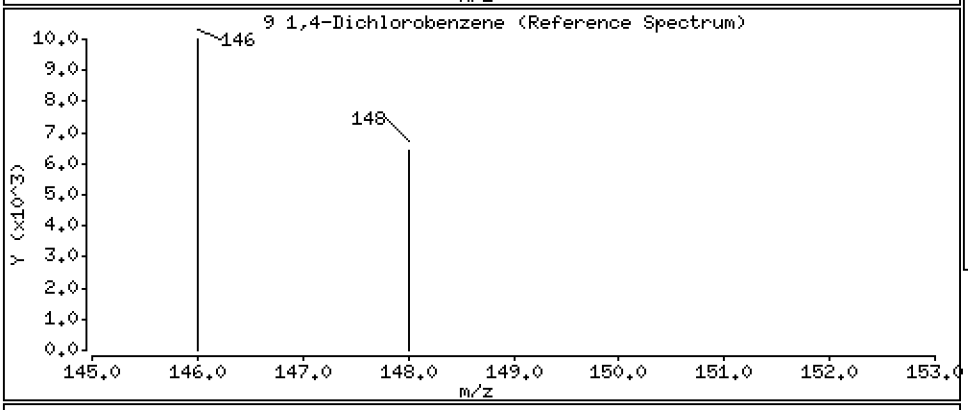
Concentration: 0.01169 ug/mL

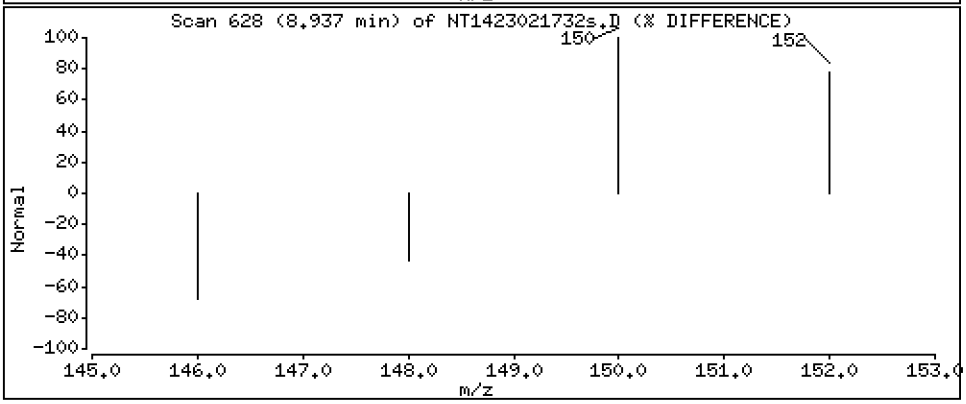












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

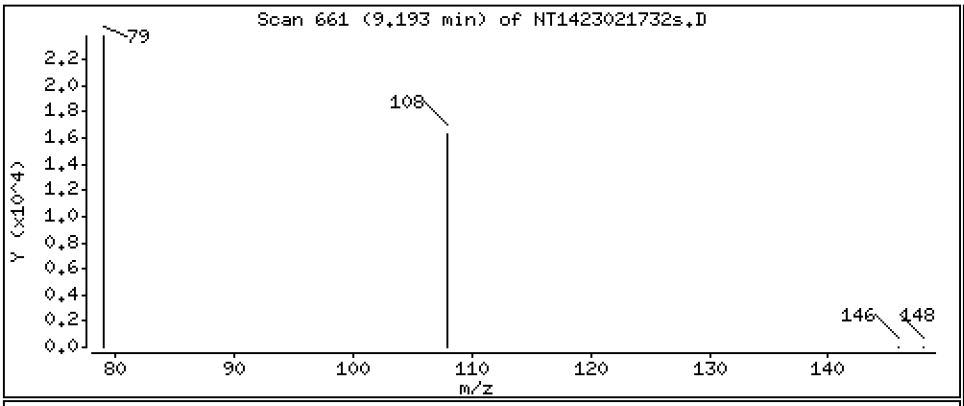
Operator: DSD

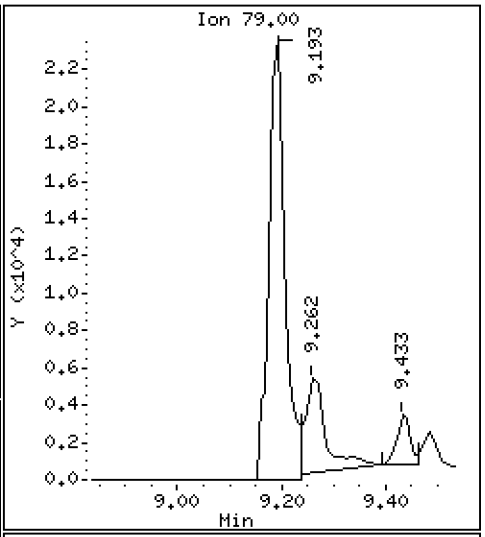
Column phase: ZB-5msi

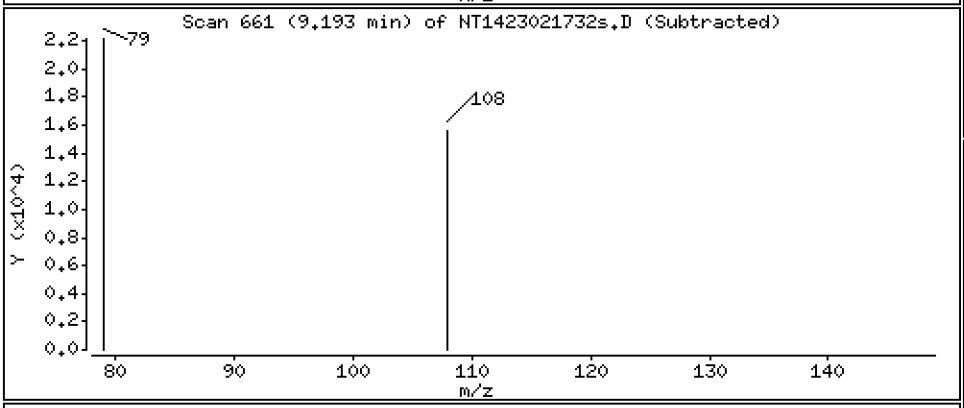
Column diameter: 0.25

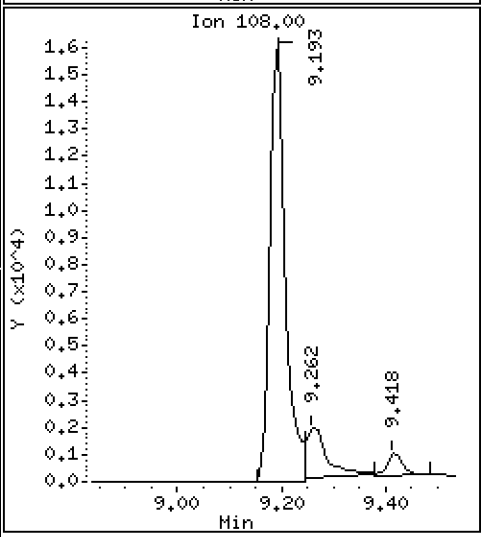
11 Benzyl alcohol

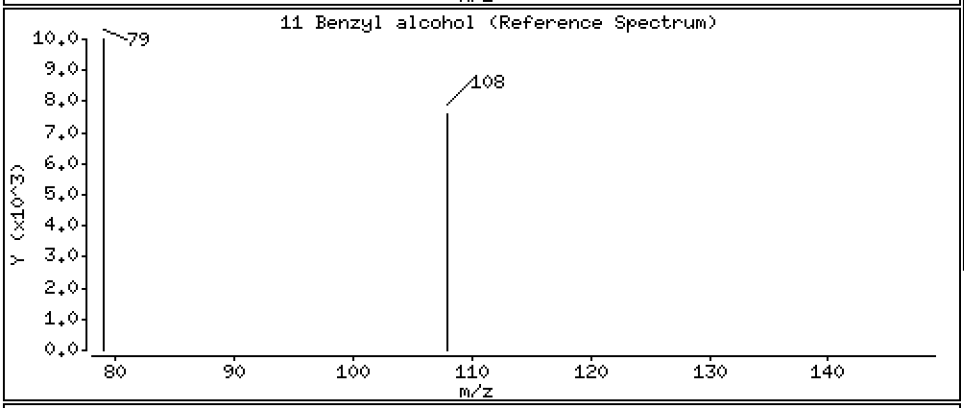
Concentration: 0.5858 ug/mL

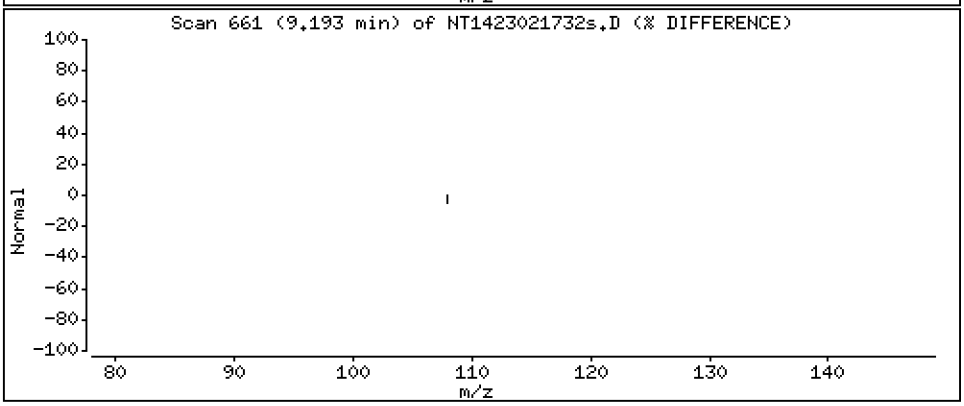












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021732s.D

Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

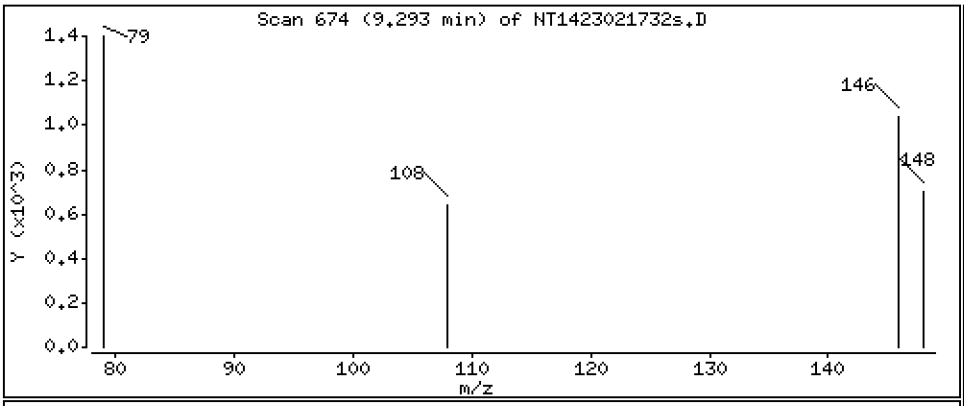
Operator: DSD

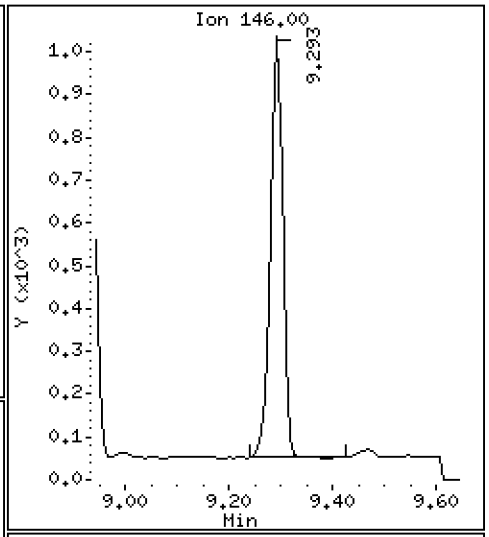
Column phase: ZB-5msi

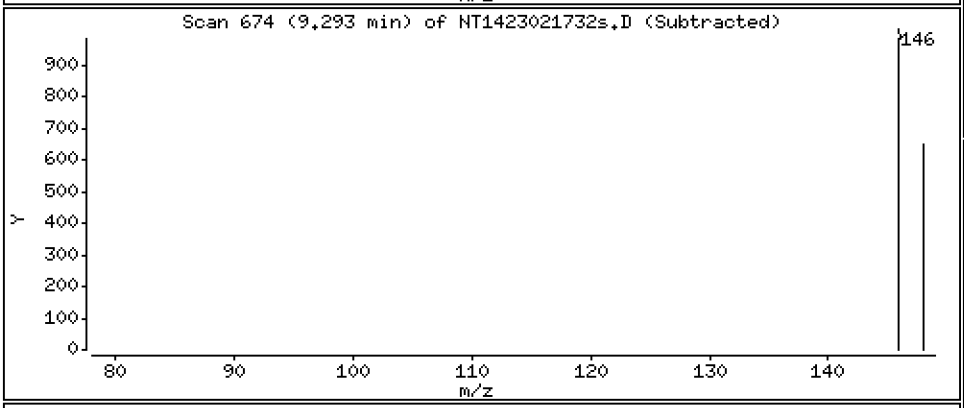
Column diameter: 0.25

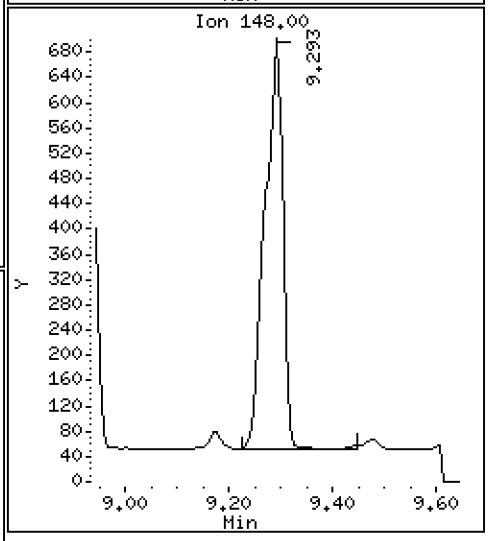
12 1,2-Dichlorobenzene

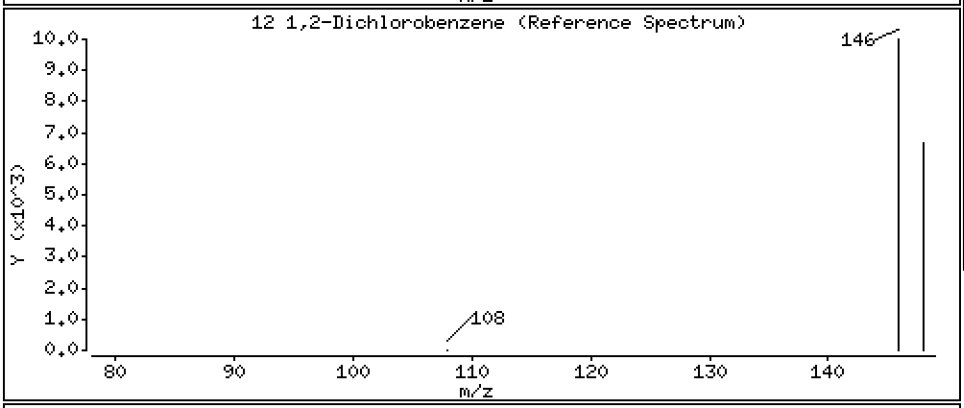
Concentration: 0.01540 ug/mL

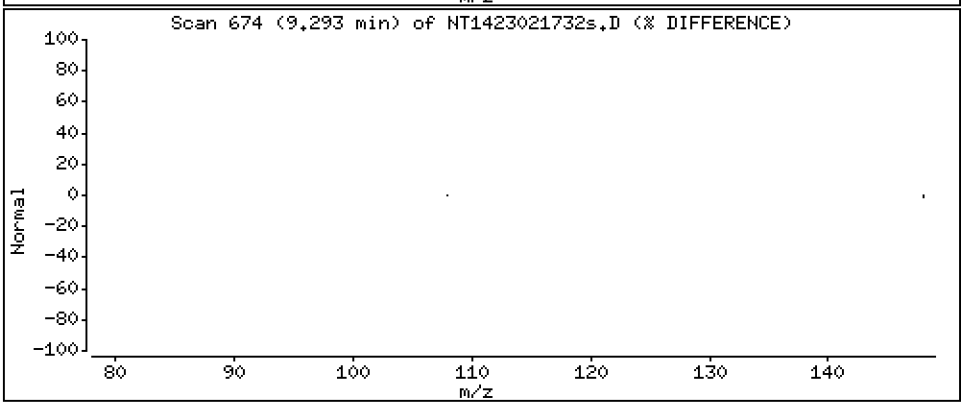












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021732s.D

Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

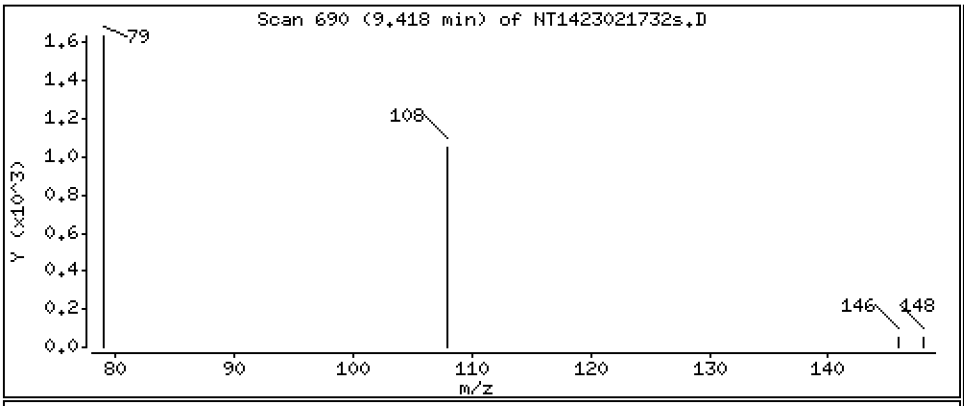
Operator: DSD

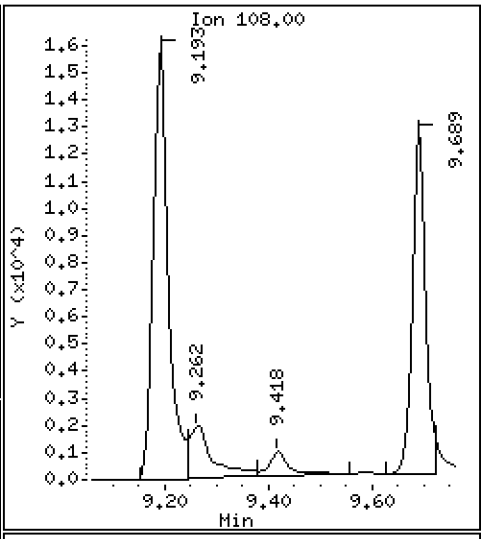
Column phase: ZB-5msi

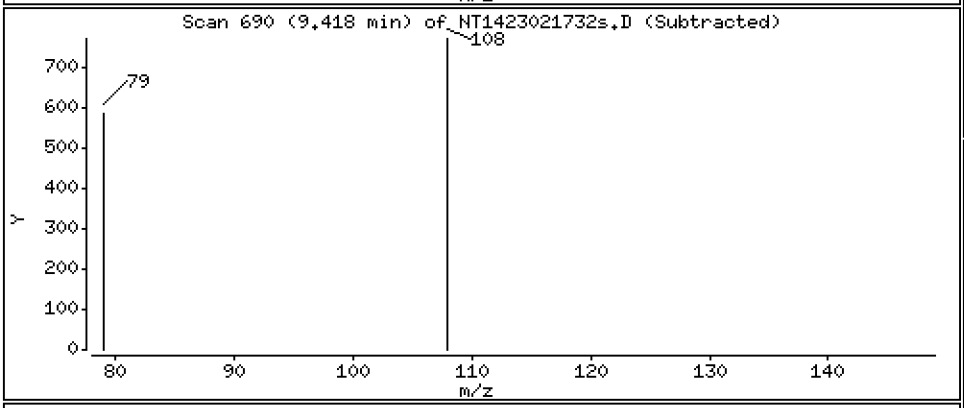
Column diameter: 0.25

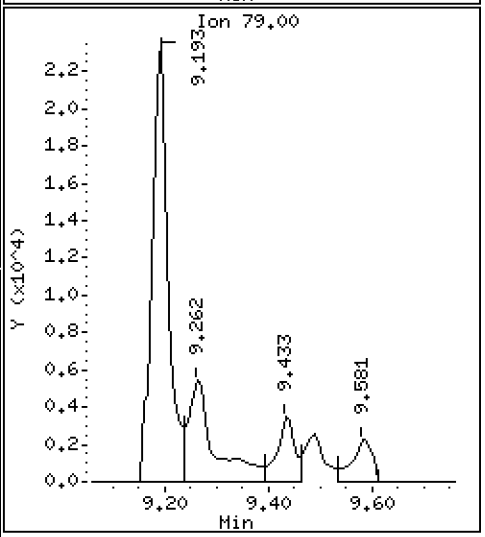
13 2-Methylphenol

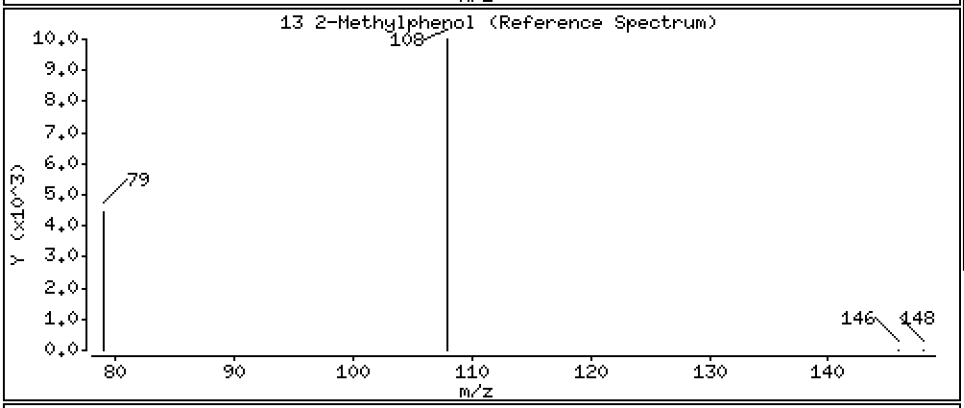
Concentration: 0.02659 ug/mL

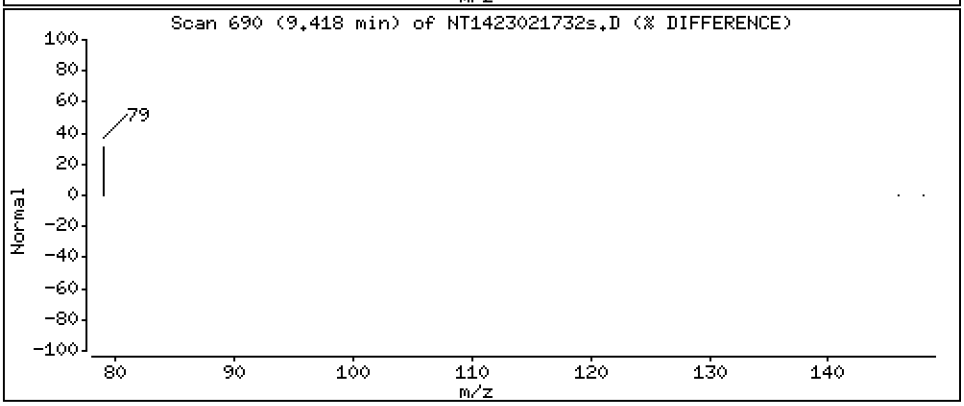












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

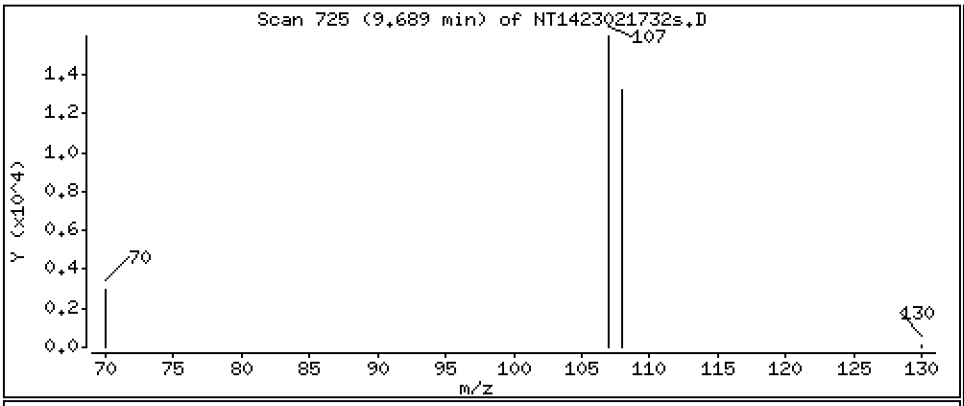
Operator: DSD

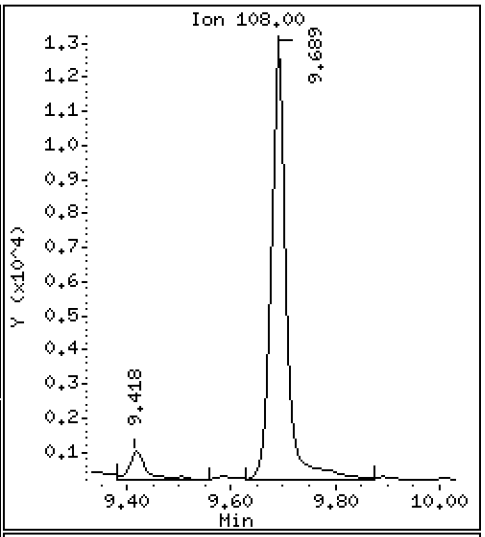
Column phase: ZB-5msi

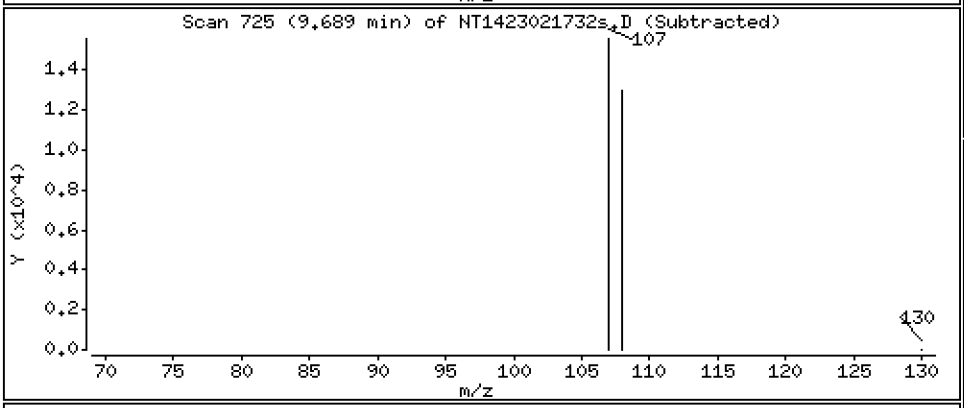
Column diameter: 0.25

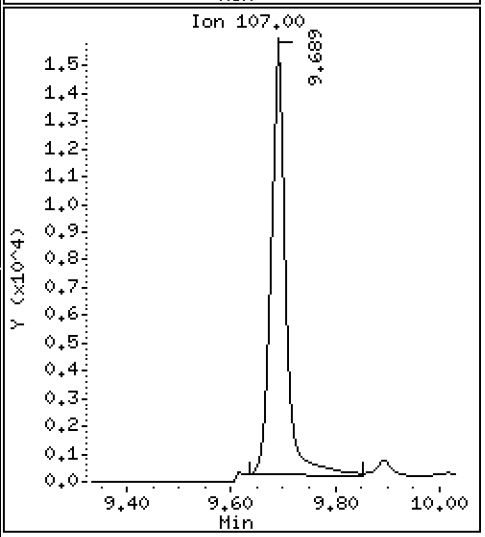
15 4-Methylphenol

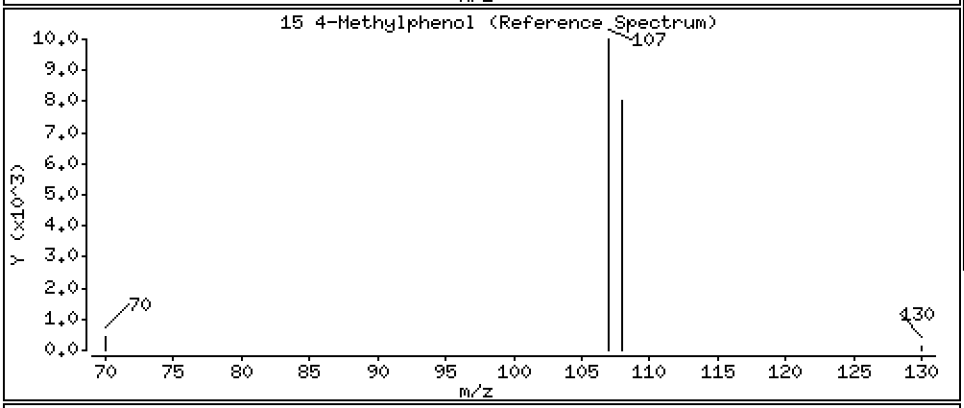
Concentration: 0.2504 ug/mL

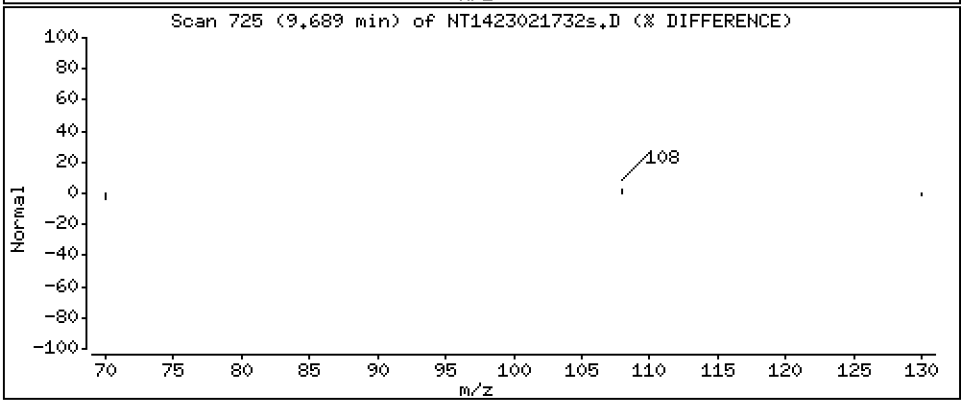












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021732s.D

Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

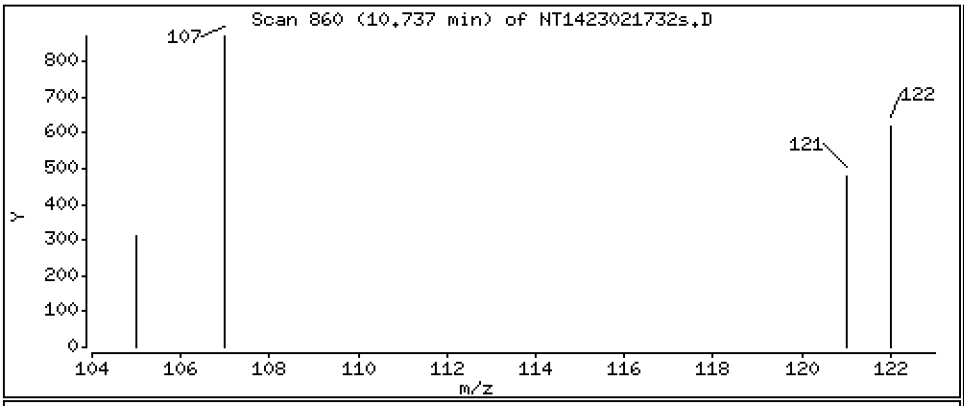
Operator: DSD

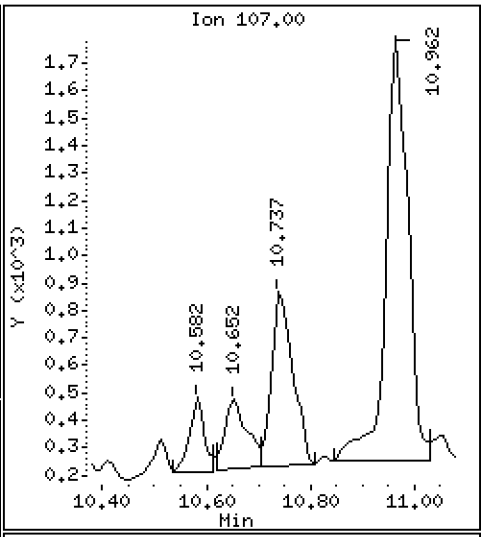
Column phase: ZB-5msi

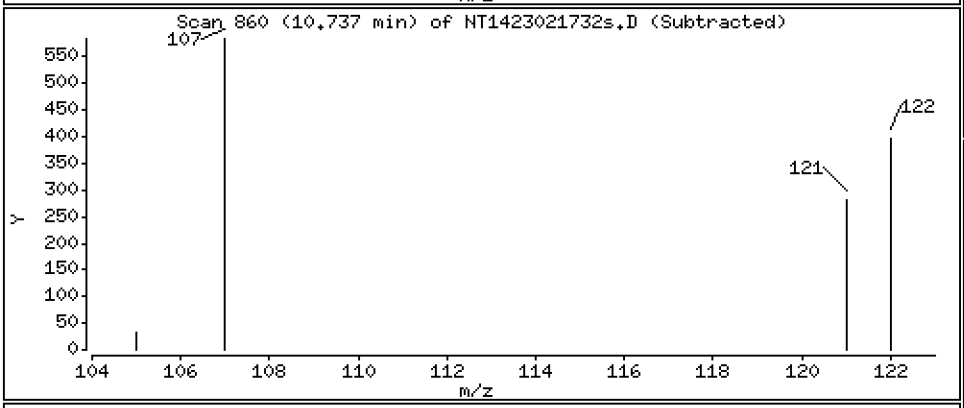
Column diameter: 0.25

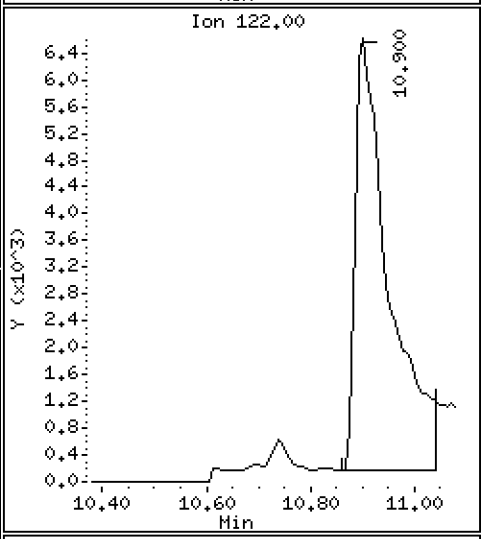
22 2,4-Dimethylphenol

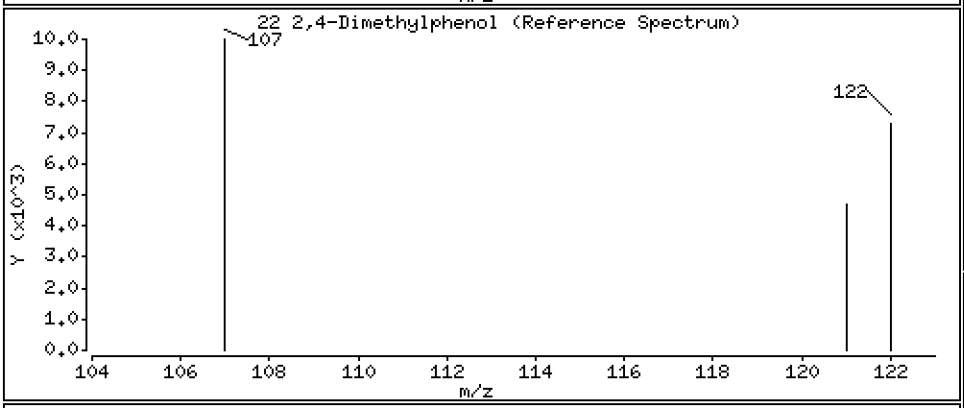
Concentration: 0.01809 ug/mL

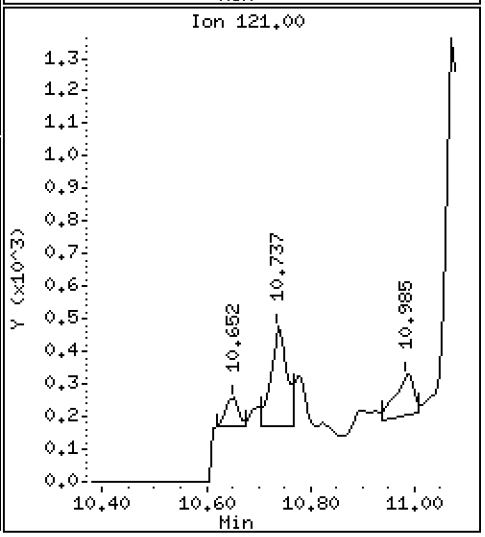


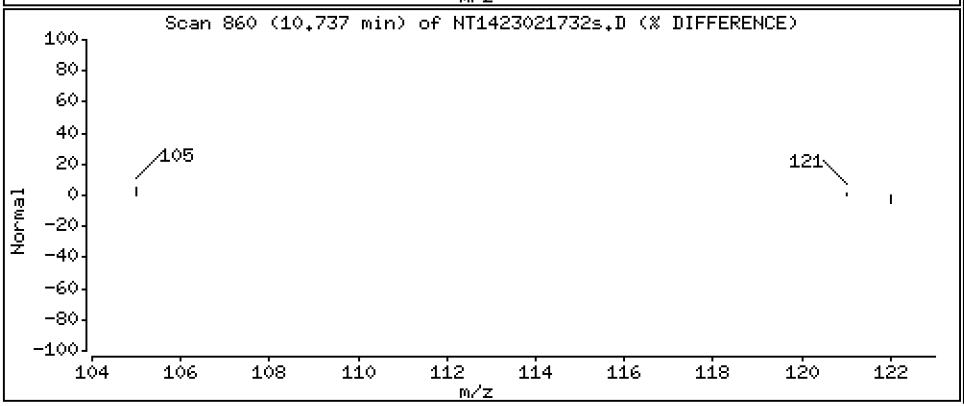












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

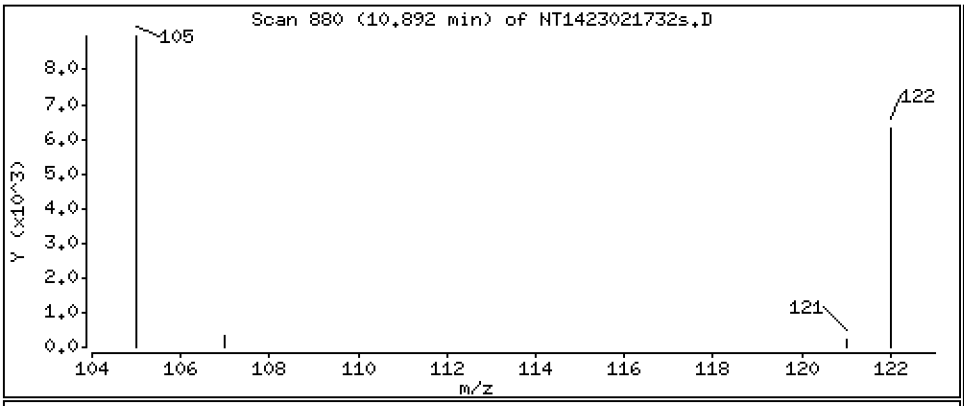
Operator: DSD

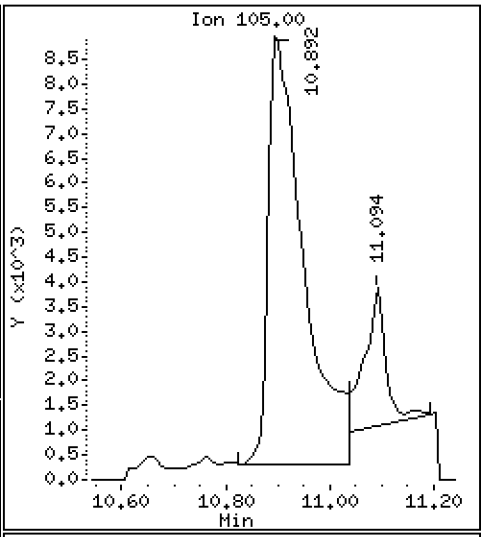
Column phase: ZB-5msi

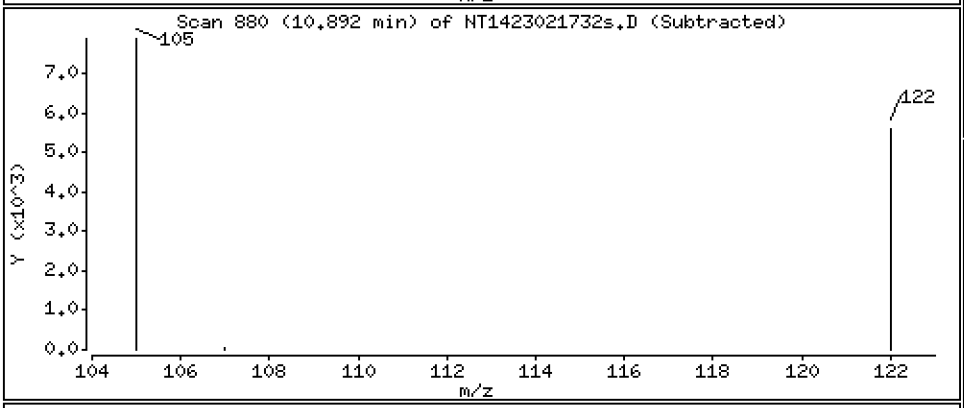
Column diameter: 0.25

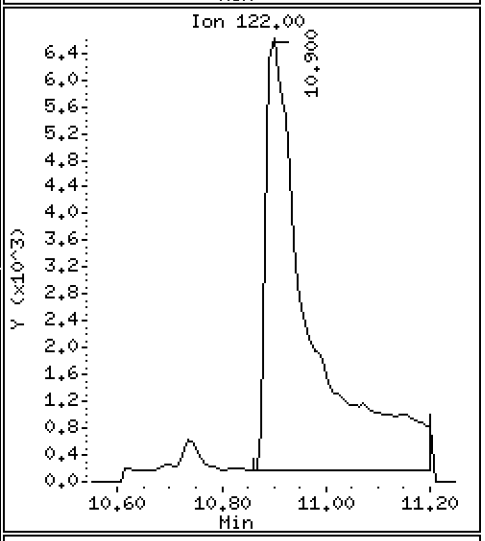
24 Benzoic acid

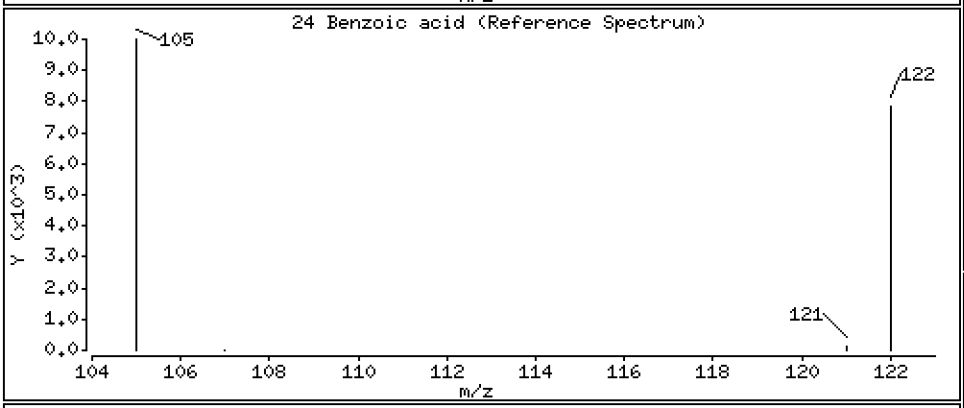
Concentration: 0.7905 ug/mL

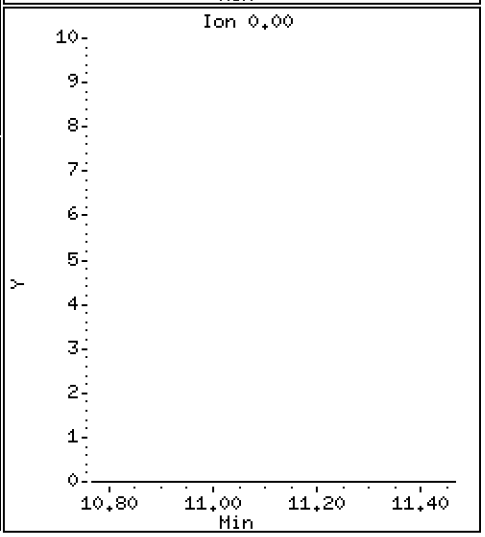


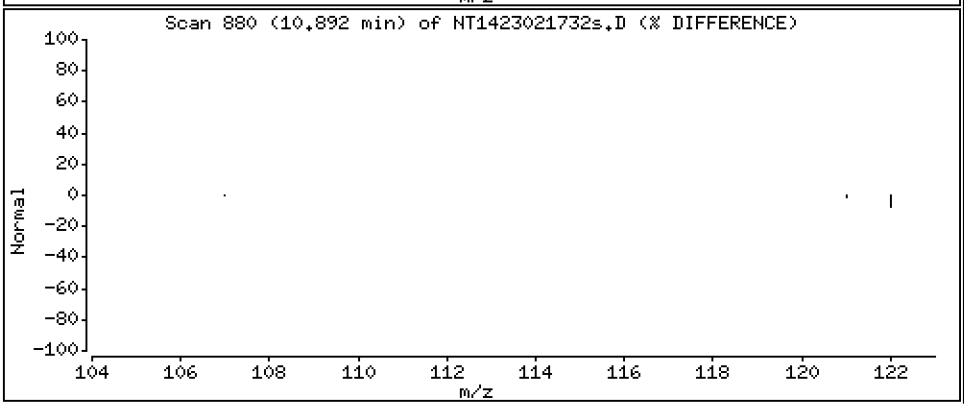












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

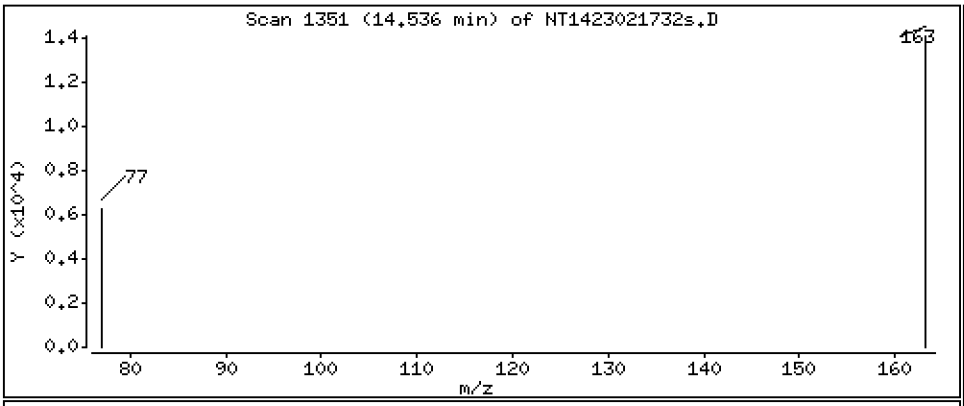
Operator: DSD

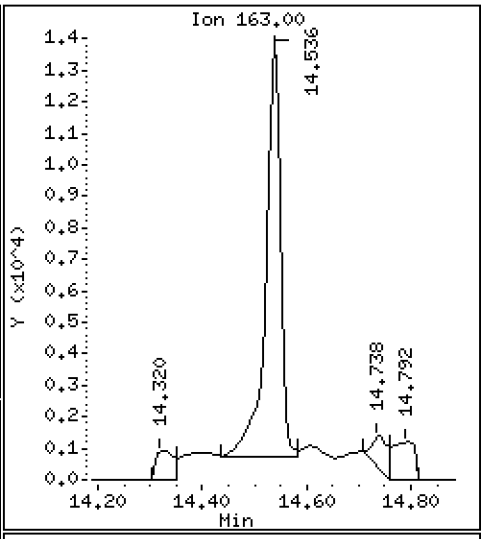
Column phase: ZB-5msi

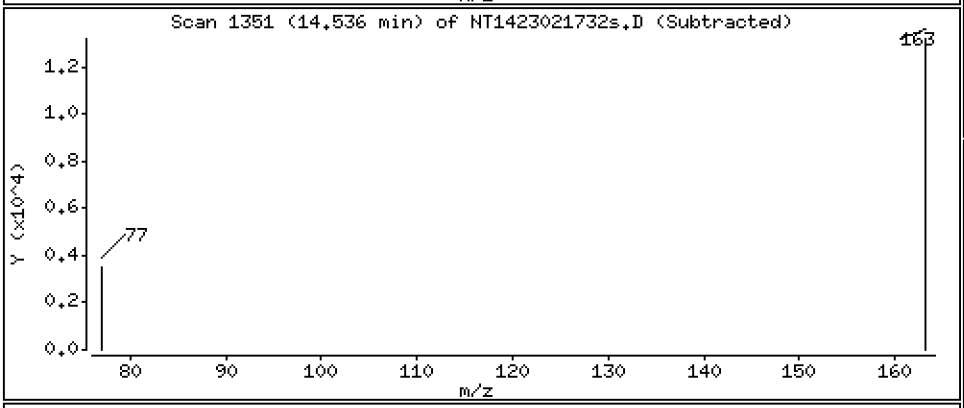
Column diameter: 0.25

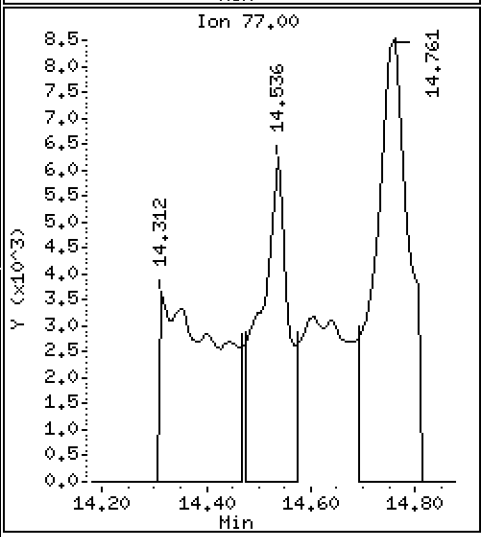
39 Dimethylphthalate

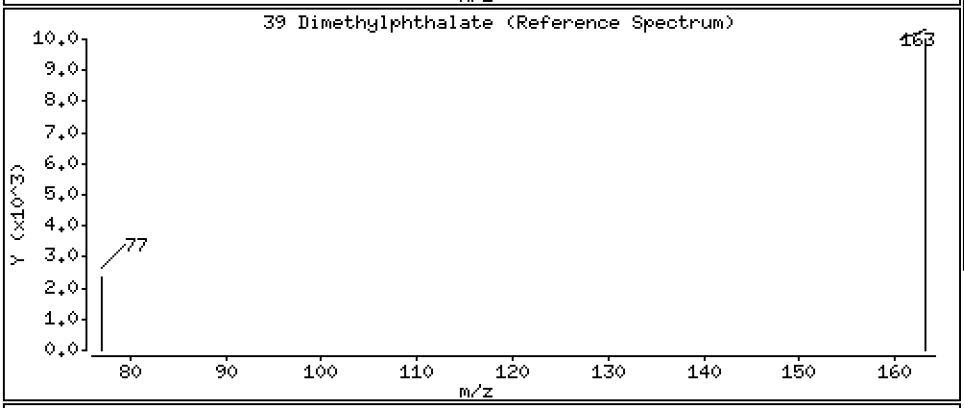
Concentration: 0.1462 ug/mL

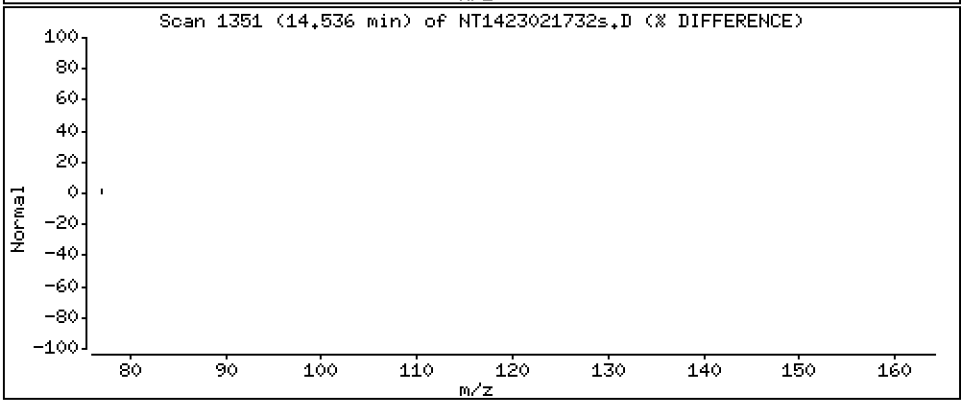












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021732s.D

Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

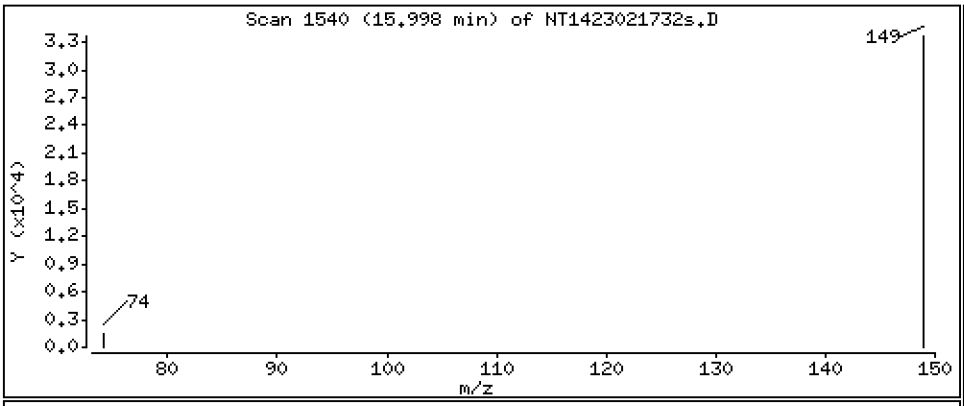
Operator: DSD

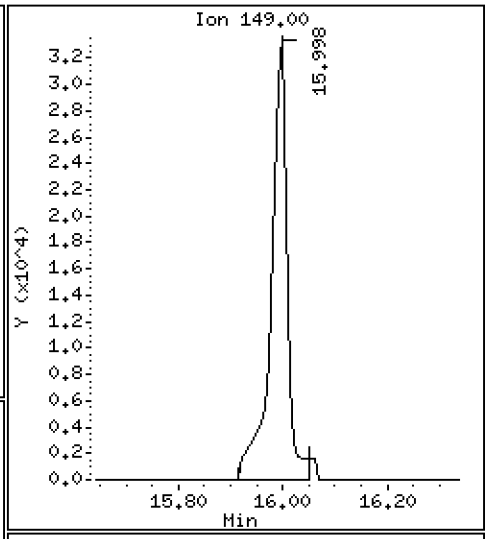
Column phase: ZB-5msi

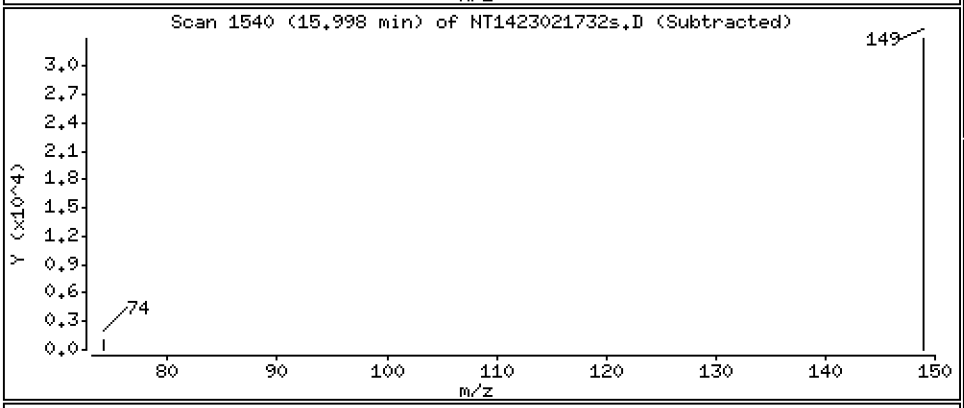
Column diameter: 0.25

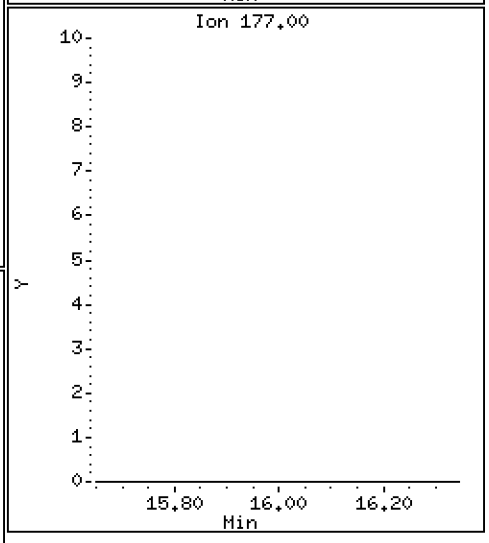
50 Diethylphthalate

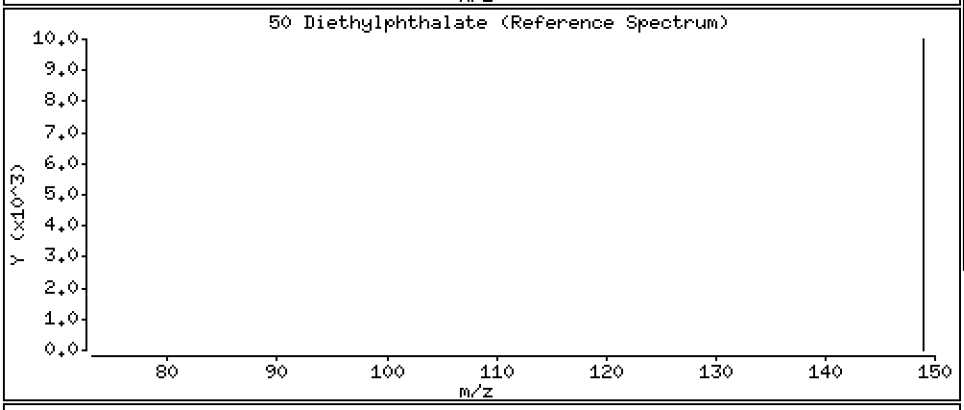
Concentration: 0.3289 ug/mL

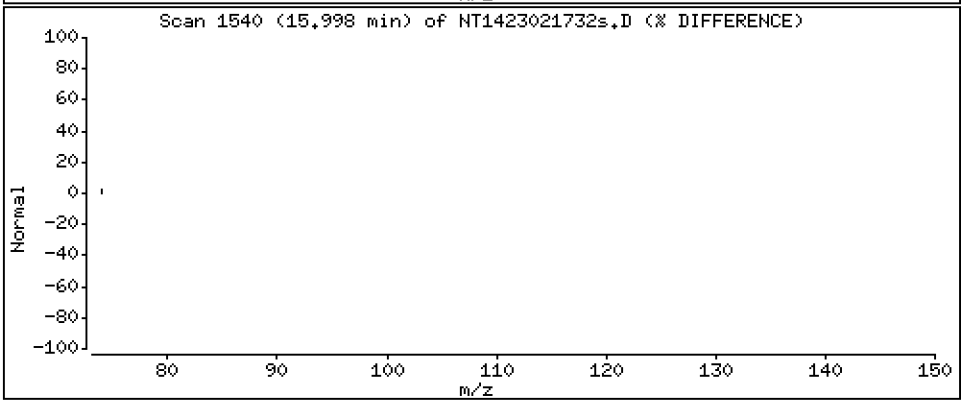












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Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

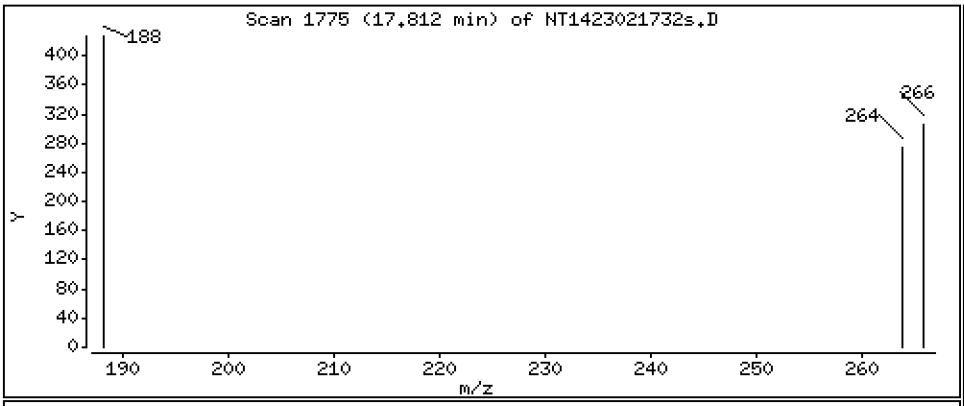
Operator: DSD

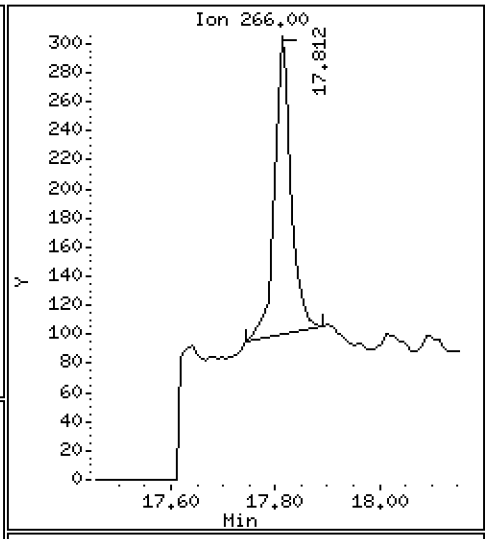
Column phase: ZB-5msi

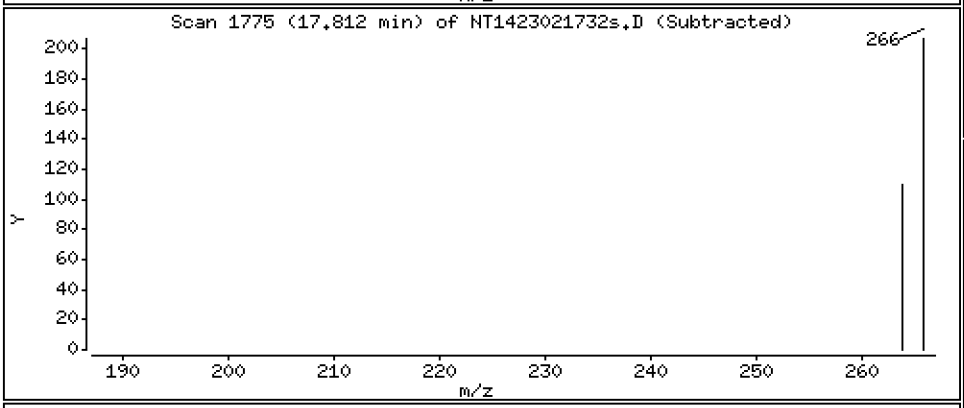
Column diameter: 0.25

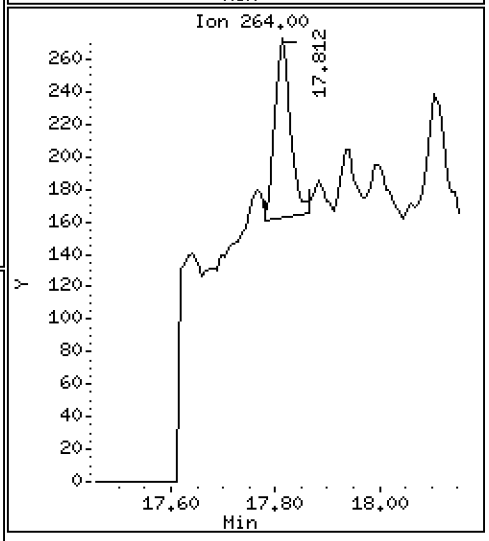
58 Pentachlorophenol

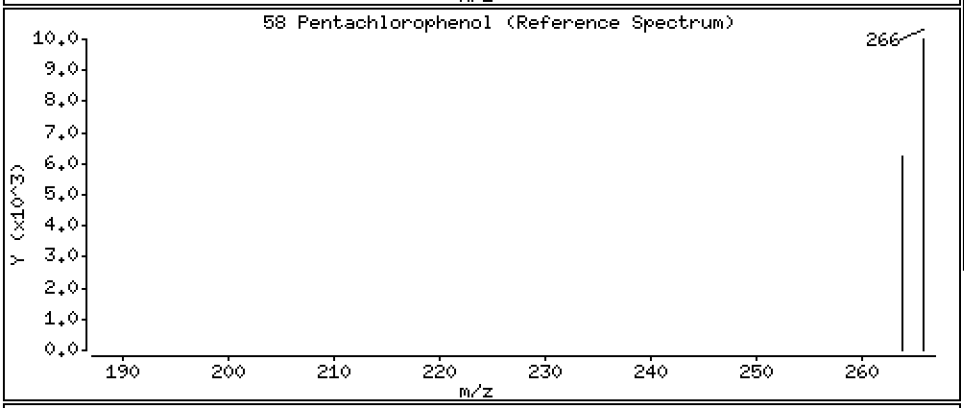
Concentration: 0.01577 ug/mL

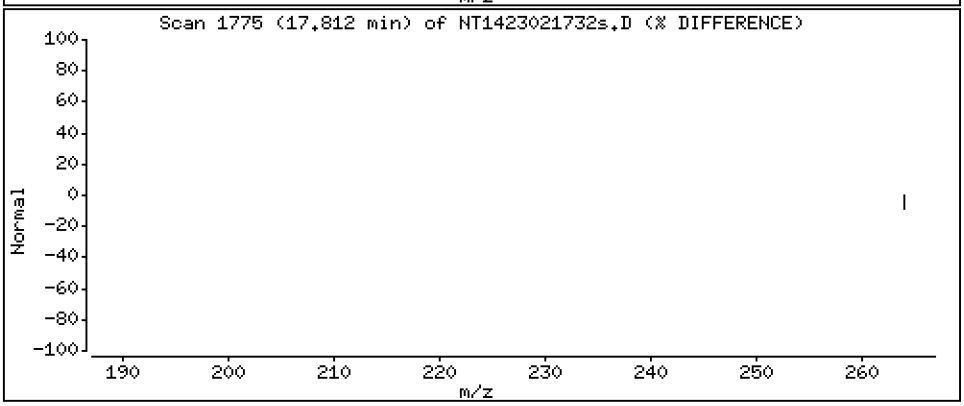












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021732s.D

Date : 18-FEB-2023 05:18

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-03

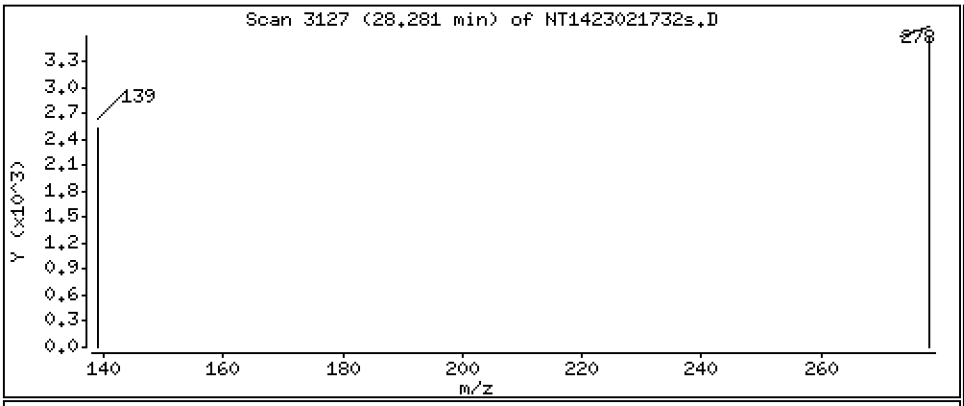
Operator: DSD

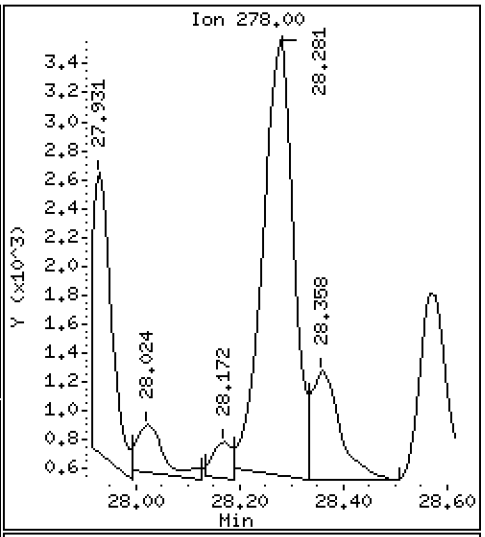
Column phase: ZB-5msi

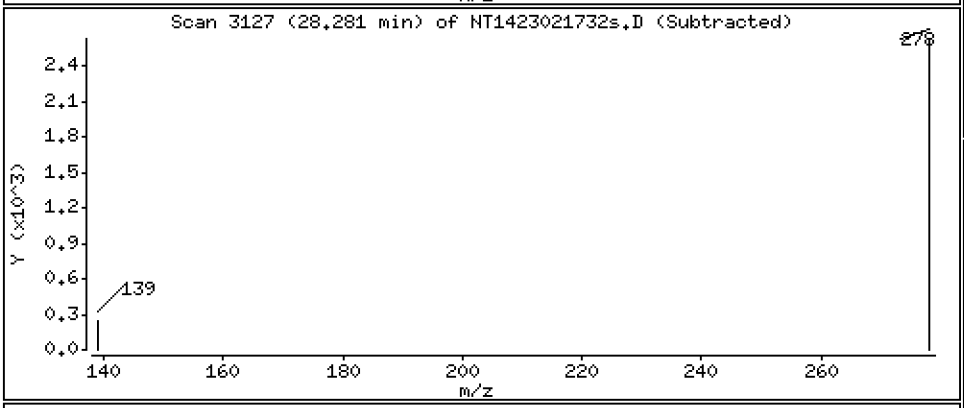
Column diameter: 0.25

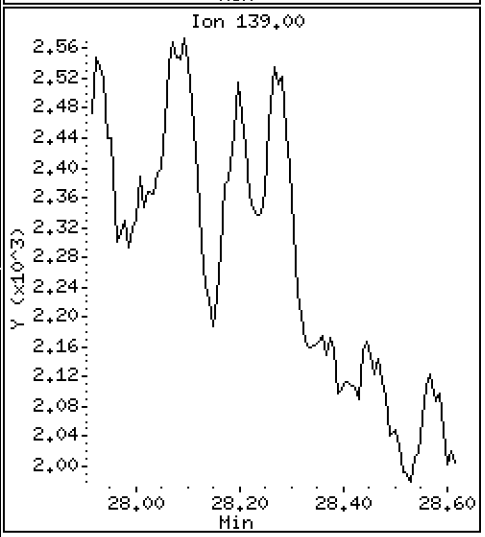
79 Dibenzo(a,h)anthracene

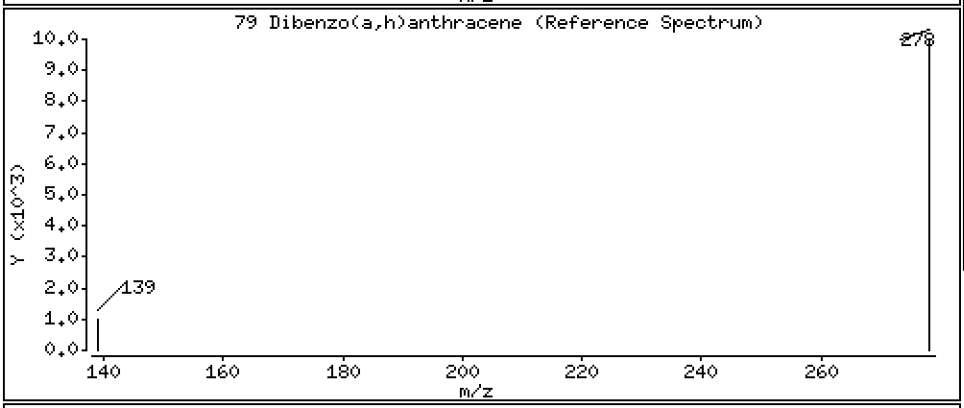
Concentration: 0.1603 ug/mL

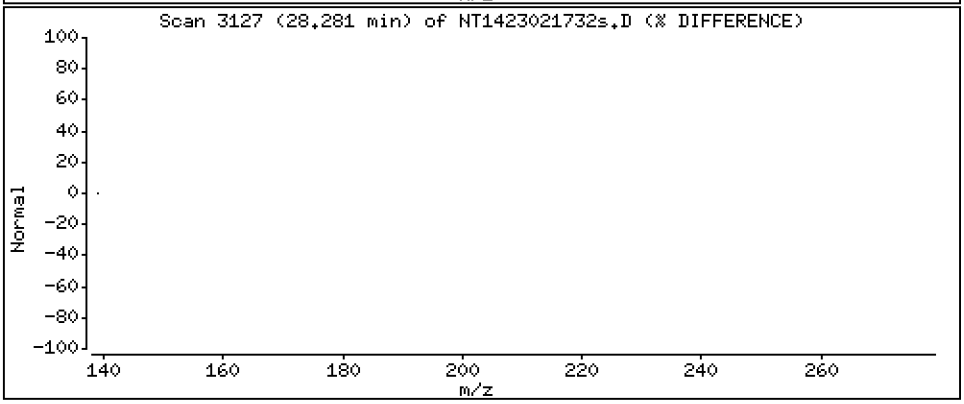












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021732s.D
Lab Smp Id: 23A0171-03
Inj Date : 18-FEB-2023 05:18 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : 23A0171-03
Misc Info :
Comment :
Method : \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\SIMABN2.m
Meth Date : 07-Mar-2023 12:35 van Quant Type: ISTD
Cal Date : 16-FEB-2023 20:42 Cal File: NT1423021612s.D
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1	2-Fluorophenol	112	6.710	6.679	(0.754)	445623	5.11822	5.118(R)
	3	Phenol	94	8.302	8.294	(0.932)	387636	2.92329	2.923
	7	1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8	1,4-Dichlorobenzene-d4	152	8.905	8.905	(1.000)	307124	4.00000	
	9	1,4-Dichlorobenzene	146	8.936	8.928	(1.003)	1165	0.01169	0.01169
	11	Benzyl alcohol	79	9.192	9.184	(1.032)	49272	0.58579	0.5858
	12	1,2-Dichlorobenzene	146	9.293	9.293	(1.044)	1526	0.01540	0.01540
	13	2-Methylphenol	108	9.417	9.409	(1.058)	2424	0.02659	0.02659
	15	4-Methylphenol	108	9.689	9.681	(1.088)	25011	0.25039	0.2504
	16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22	2,4-Dimethylphenol	107	10.736	10.728	(0.942)	1826	0.01809	0.01809
	24	Benzoic acid	105	10.891	10.891	(0.956)	41189	0.79054	0.7905
	26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27	Naphthalene-d8	136	11.395	11.394	(1.000)	1102139	4.00000	
	30	Hexachlorobutadiene	225	Compound Not Detected.					
	39	Dimethylphthalate	163	14.536	14.536	(0.968)	24795	0.14622	0.1462
*	42	Acenaphthene-d10	162	15.023	15.015	(1.000)	555819	4.00000	
	50	Diethylphthalate	149	15.997	15.989	(1.065)	69801	0.32890	0.3289
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	17.812	17.804	(0.986)	438	0.01577	0.01577(M)
*	59	Phenanthrene-d10	188	18.067	18.059	(1.000)	1051765	4.00000	
$	66	Terphenyl-d14	244	21.224	21.216	(0.917)	545601	4.22299	4.223(R)
	67	Butylbenzylphthalate	149	Compound Not Detected.					
*	69	Chrysene-d12	240	23.136	23.121	(1.000)	485304	4.00000	
*	77	Perylene-d12	264	25.707	25.691	(1.000)	447396	4.00000	
	79	Dibenzo(a,h)anthracene	278	28.280	28.265	(1.100)	12561	0.16029	0.1603
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021732s.D
Lab Smp Id: 23A0171-03
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\SIMABN2.m
Misc Info:

Calibration Date: 17-FEB-2023
Calibration Time: 21:31
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	388684	194342	777368	307124	-20.98
27 Naphthalene-d8	1386667	693334	2773334	1102139	-20.52
42 Acenaphthene-d10	752189	376095	1504378	555819	-26.11
59 Phenanthrene-d10	1701919	850960	3403838	1051765	-38.20
69 Chrysene-d12	887171	443586	1774342	485304	-45.30
77 Perylene-d12	644624	322312	1289248	447396	-30.60

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	0.00
27 Naphthalene-d8	11.39	10.89	11.89	11.40	0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.05
59 Phenanthrene-d10	18.06	17.56	18.56	18.07	0.04
69 Chrysene-d12	23.12	22.62	23.62	23.14	0.07
77 Perylene-d12	25.69	25.19	26.19	25.71	0.06

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

REVIEW SUMMARY FOR FILE - NT1423021732s.D

Lab ID: 23A0171-03
nt14.i, 20230217A.b\20230217A.b\SIMABN2.m,   18-FEB-2023 05:18

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

RRT check based on Ccal File: 20230217A.b/NT1423021719s.D

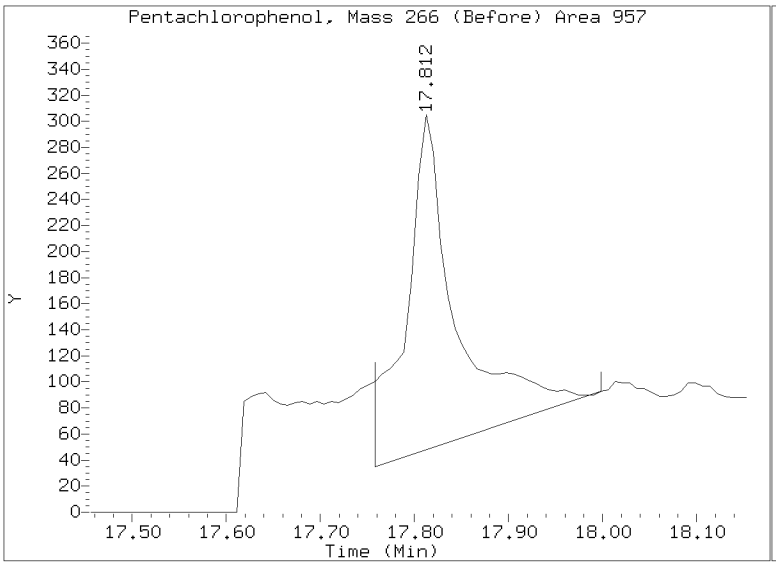
On Column LOD for nt14.i, 20230217A.b\SIMABN2.m, PSDDA.sub = 0.0000

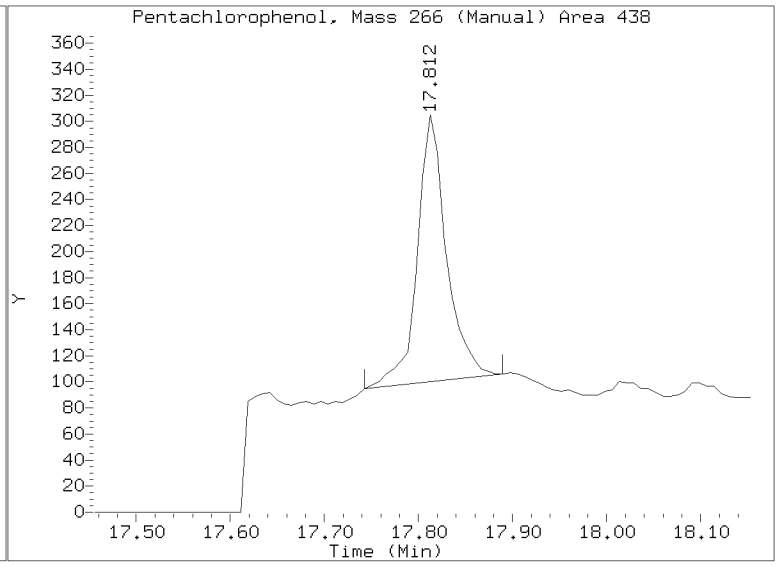
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230217A.b/20230217A.b/NT1423021732s.D
Injection Date: 18-FEB-2023 05:18
Lab ID:23A0171-03 Client ID:
Report Date: 03/07/2023 12:36





Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1245

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-04 A	SDG:	23A0171
Sampled:	12/08/22 11:14	Prepared:	01/18/23 13:47	File ID:	NT1423021733s.D
% Solids:	48.44	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/18/23 05:54
Batch:	BLA0339	Sequence:	SLB0335	Initial/Final:	20.89 g Wet / 1 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	GC00009
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	1.1	J	0.6	4.9
95-50-1	1,2-Dichlorobenzene	1	4.9	U	0.7	4.9
100-51-6	Benzyl Alcohol	1	109		2.5	19.8
65-85-0	Benzoic acid	1	162	J	13.2	395
105-67-9	2,4-Dimethylphenol	1	19.8	U	2.1	19.8
120-82-1	1,2,4-Trichlorobenzene	1	4.9	U	2.6	4.9
86-30-6	N-Nitrosodiphenylamine	1	4.9	U	1.3	4.9
87-86-5	Pentachlorophenol	1	3.7	J	2.1	39.5

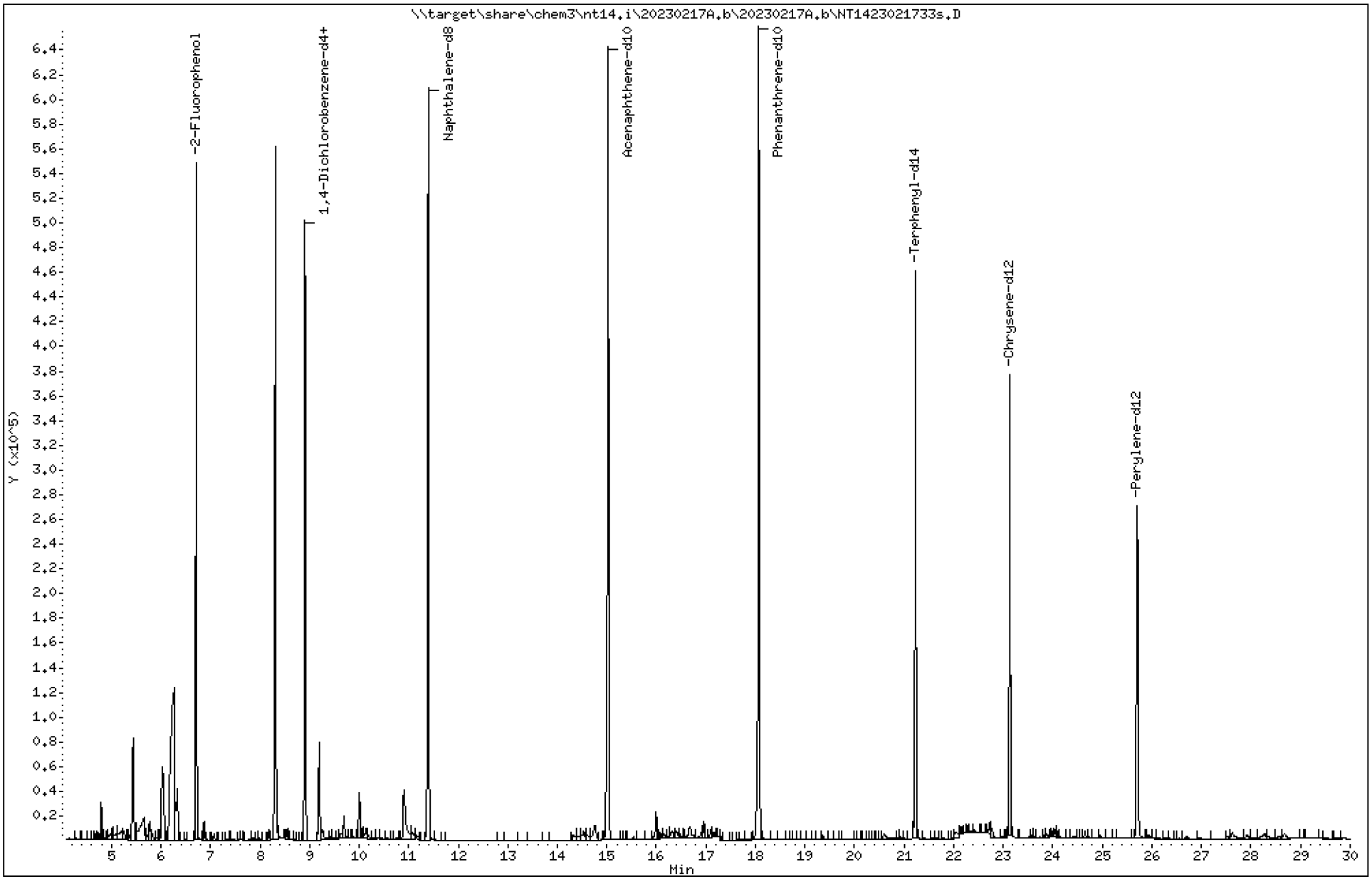
SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	741.17	515	69.5	27 - 120	
p-Terphenyl-d14	494.11	472	95.5	37 - 120	Q

Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021733s.D
Date : 18-FEB-2023 05:54
Client ID:
Sample Info: 23A0171-04

Instrument: nt14.i

Operator: DSD
Column diameter: 0.25

Column phase: ZB-5msi



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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

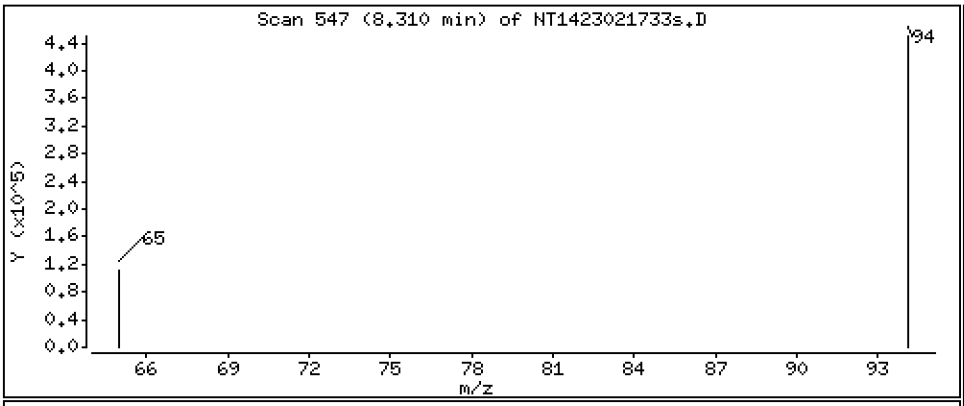
Operator: DSD

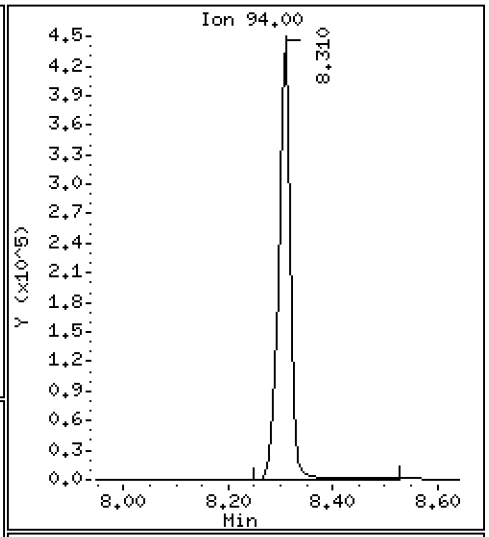
Column phase: ZB-5msi

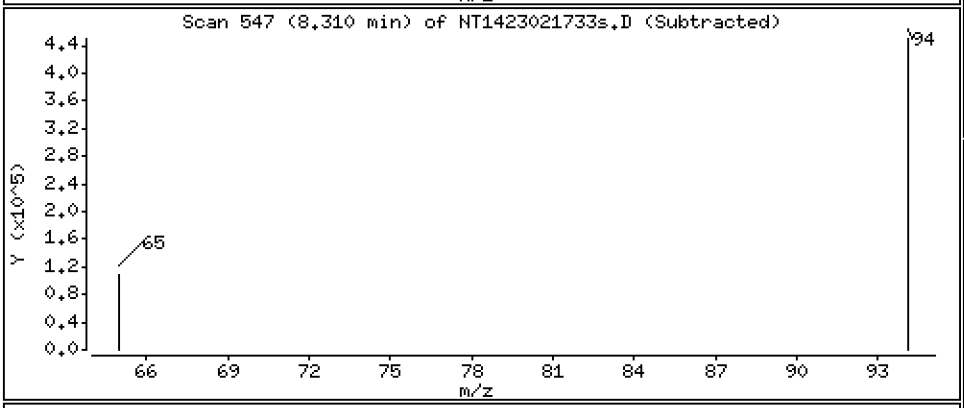
Column diameter: 0.25

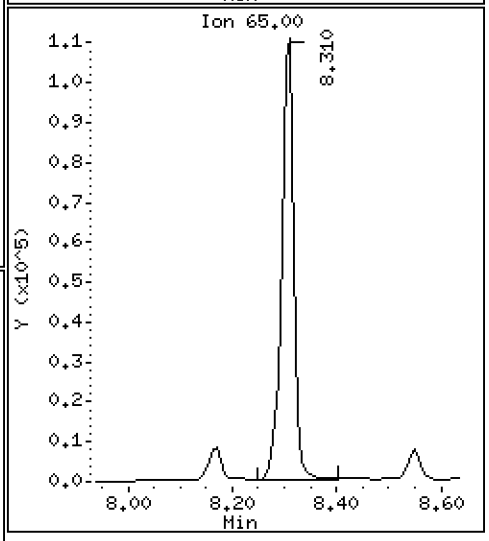
3 Phenol

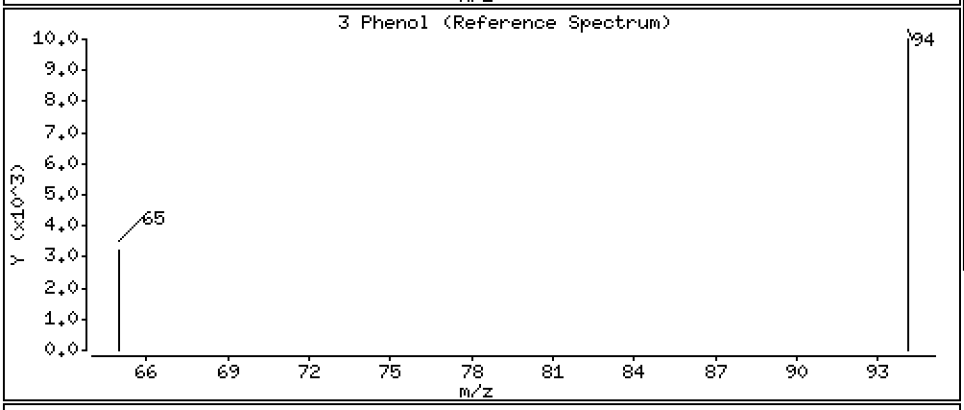
Concentration: 5.241 ug/mL

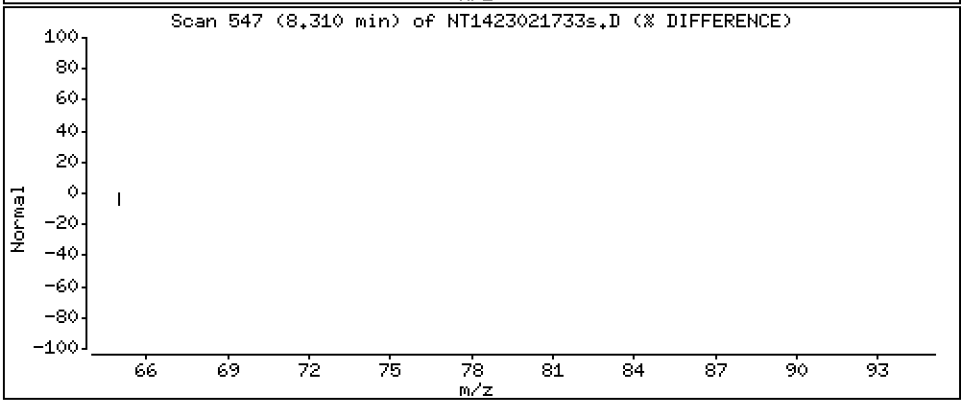












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

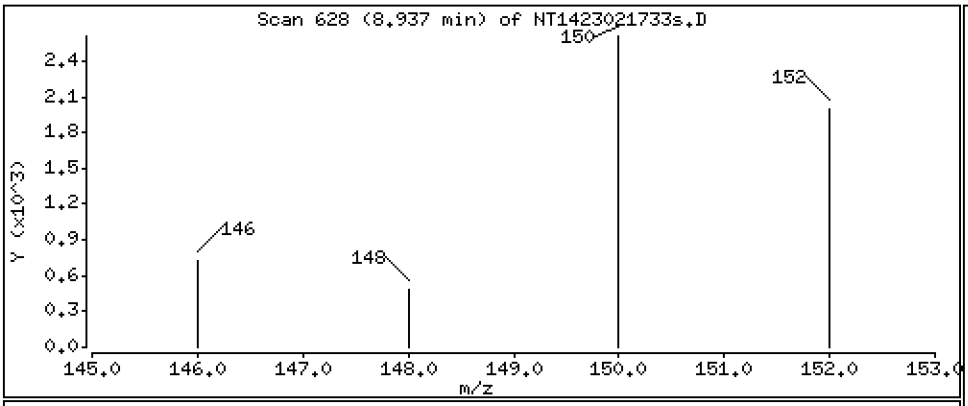
Operator: DSD

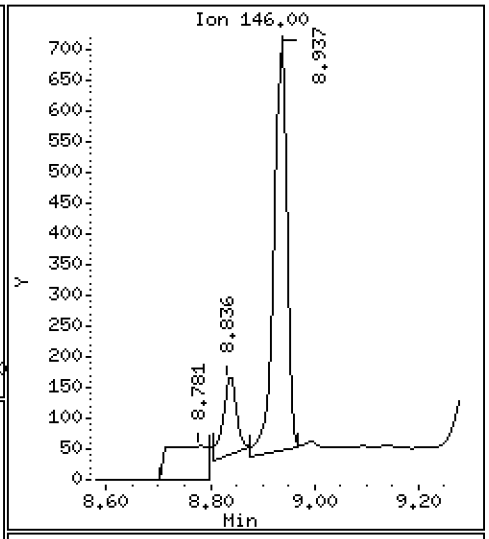
Column phase: ZB-5msi

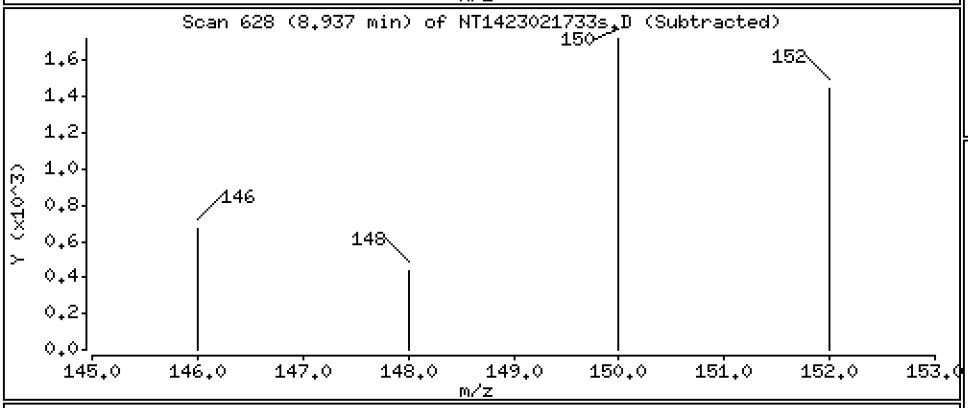
Column diameter: 0.25

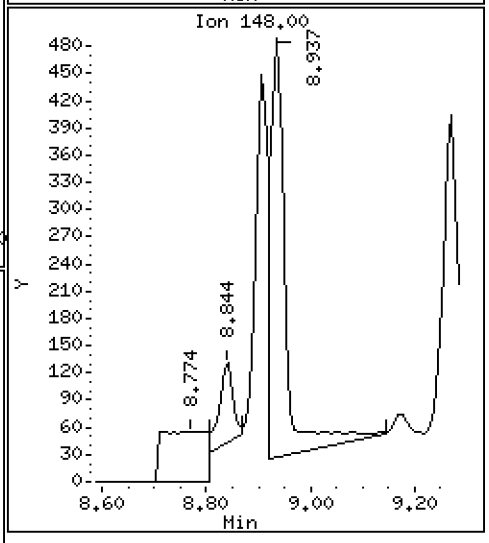
9 1,4-Dichlorobenzene

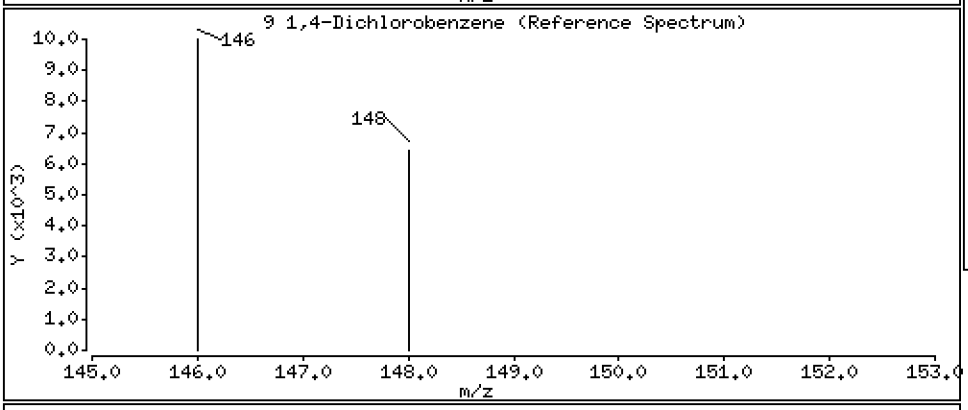
Concentration: 0.01093 ug/mL

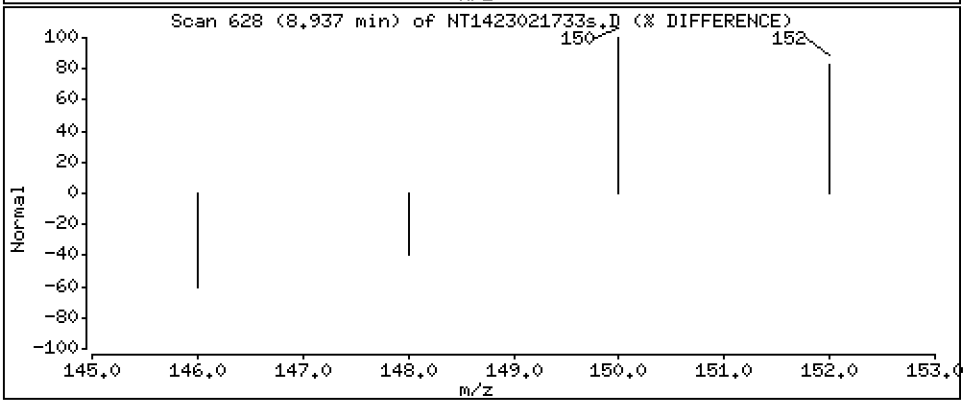












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

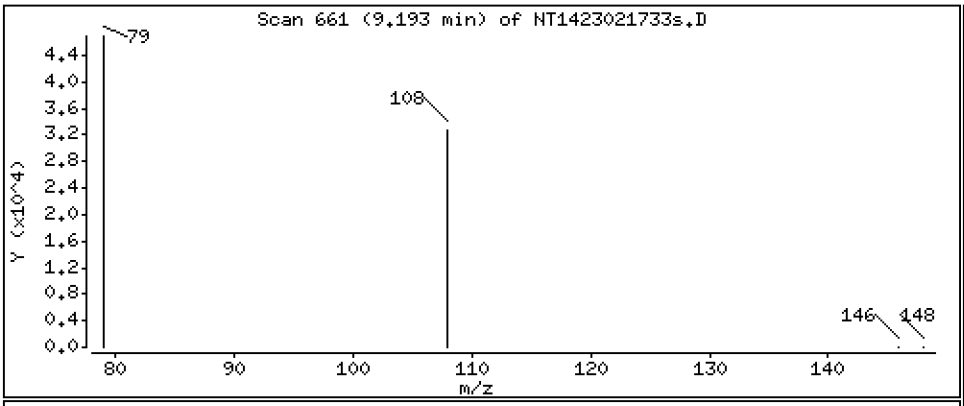
Operator: DSD

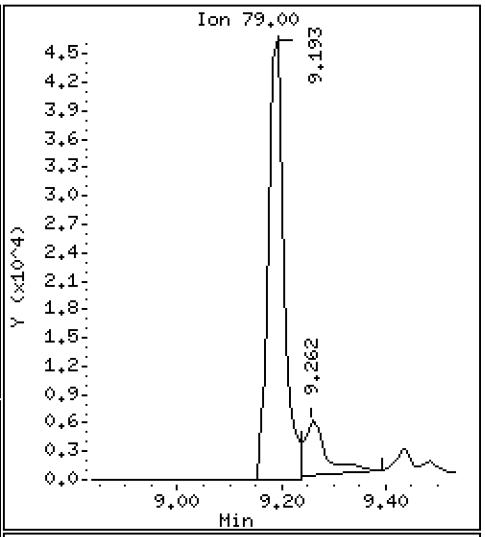
Column phase: ZB-5msi

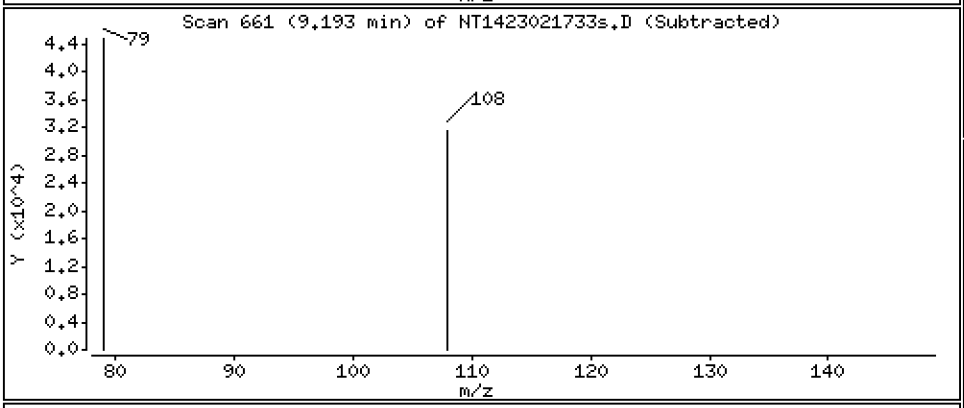
Column diameter: 0.25

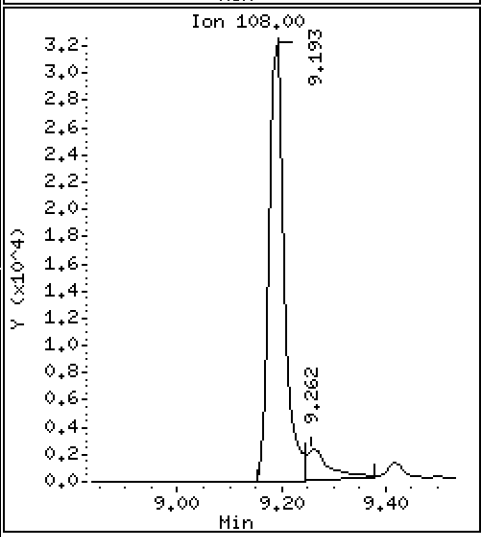
11 Benzyl alcohol

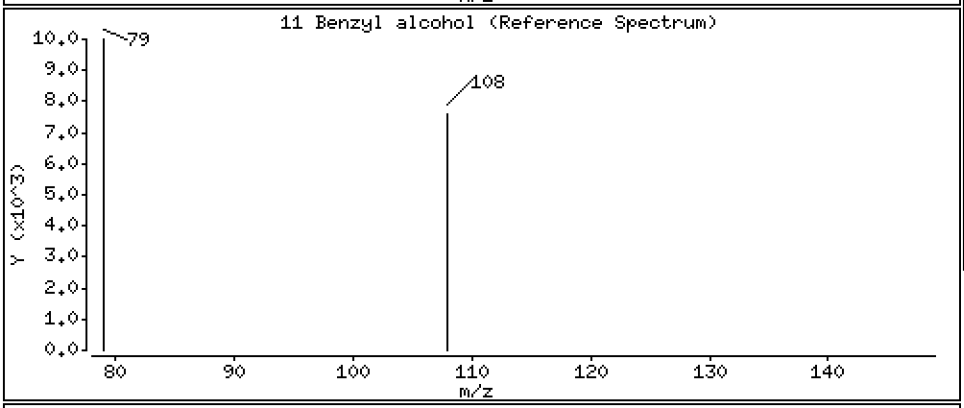
Concentration: 1.104 ug/mL

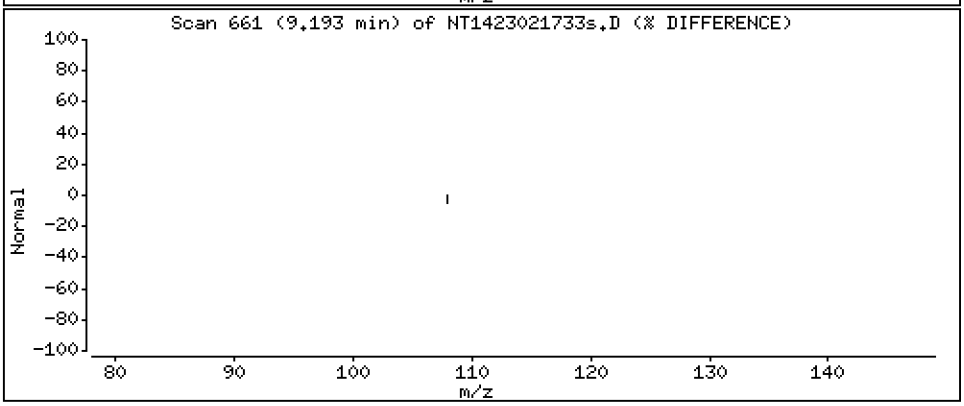












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021733s.D

Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

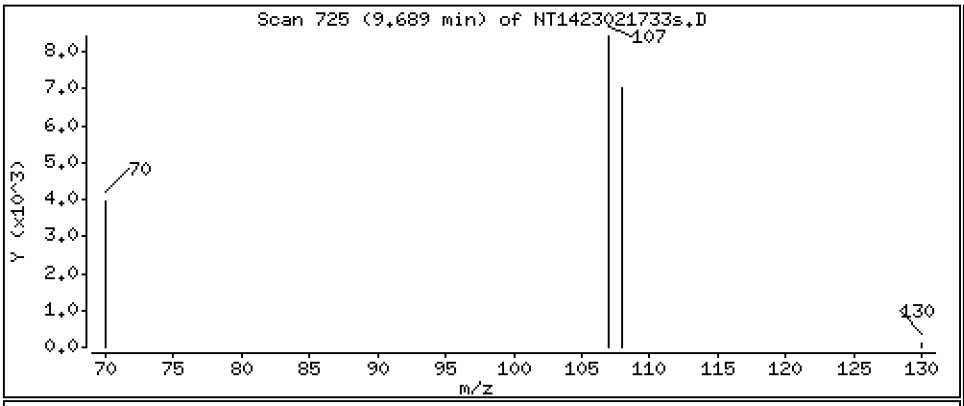
Operator: DSD

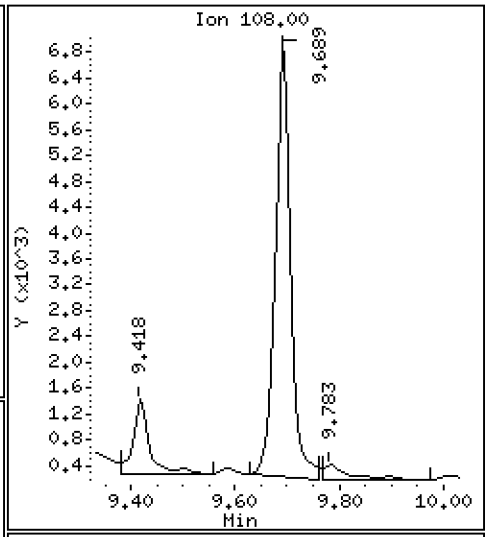
Column phase: ZB-5msi

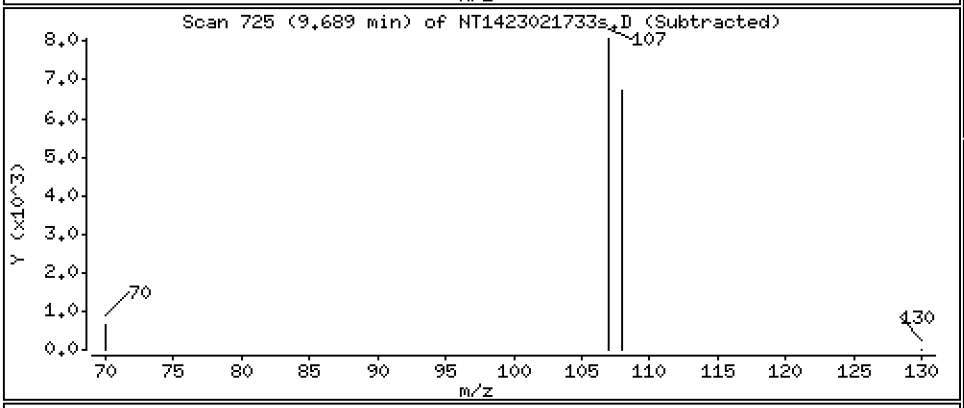
Column diameter: 0.25

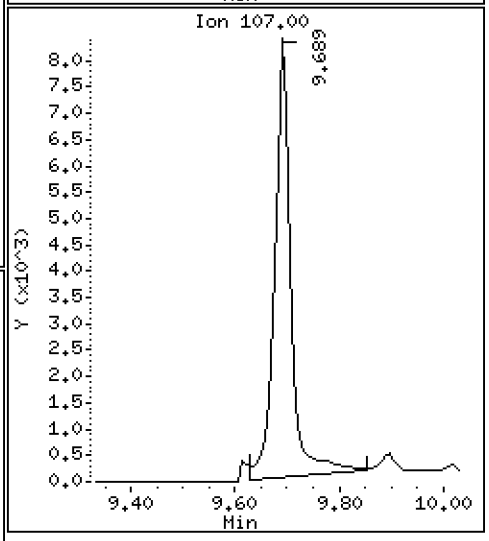
15 4-Methylphenol

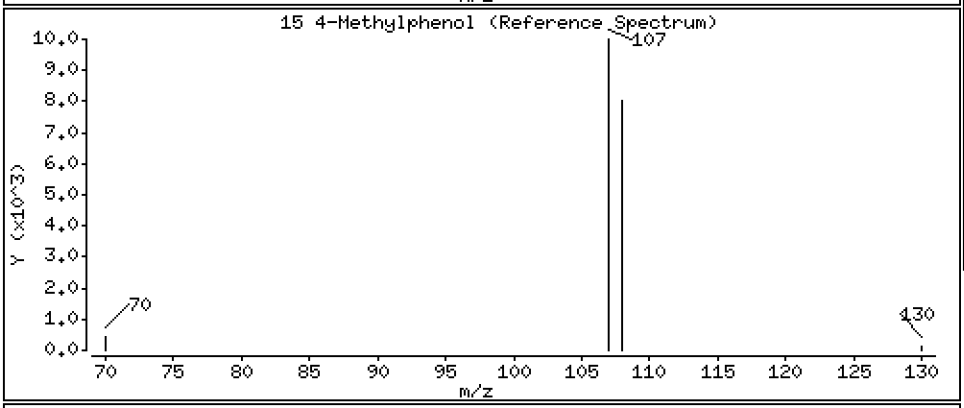
Concentration: 0.1336 ug/mL

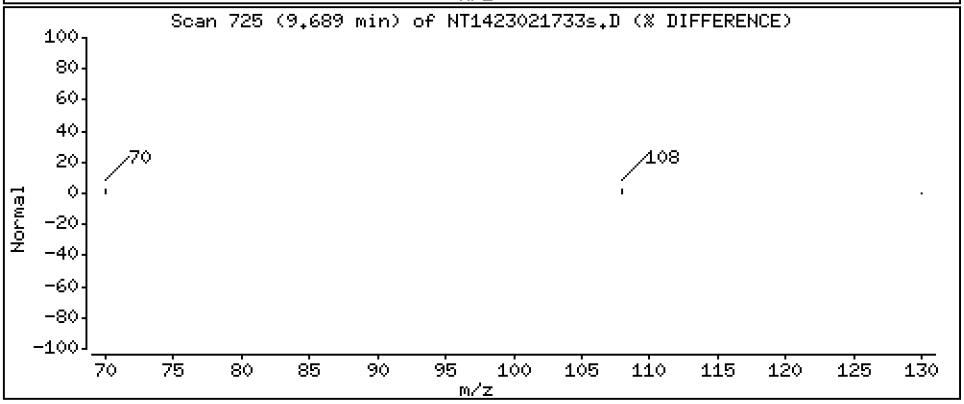












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021733s.D

Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

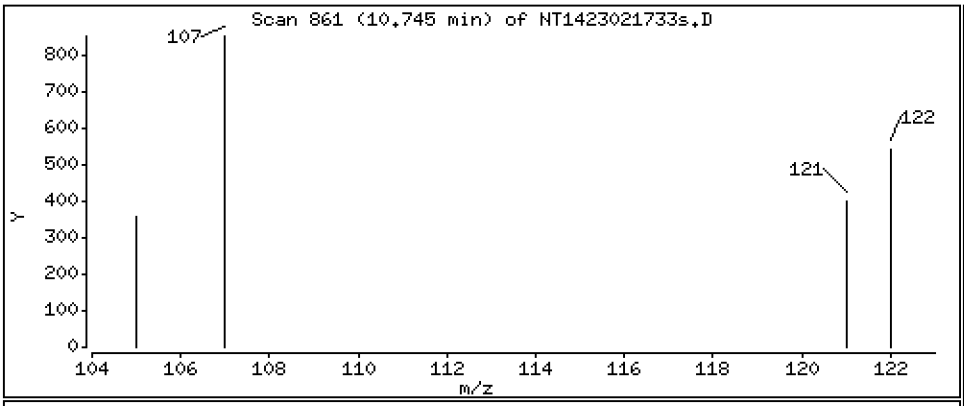
Operator: DSD

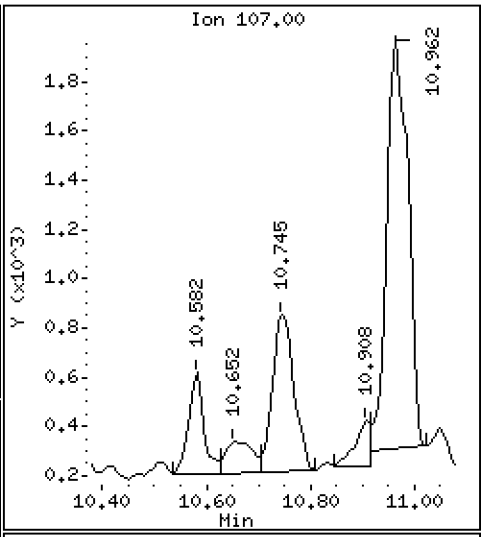
Column phase: ZB-5msi

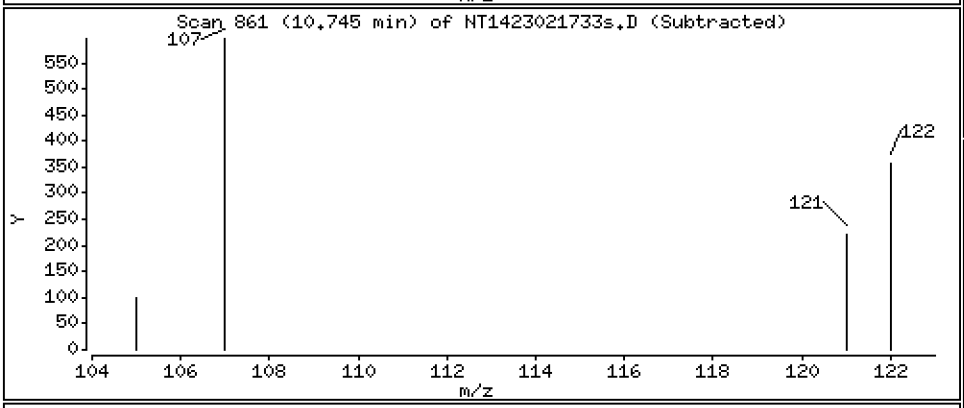
Column diameter: 0.25

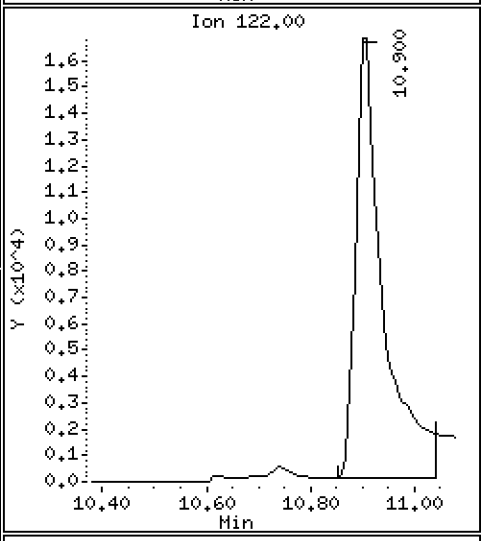
22 2,4-Dimethylphenol

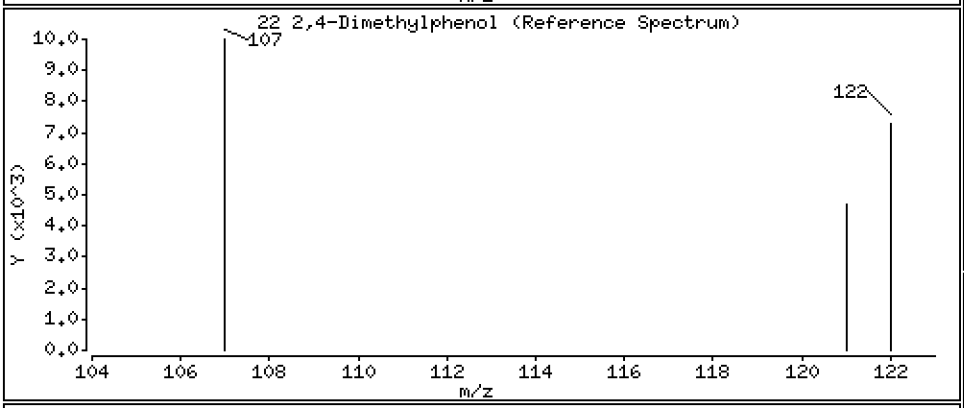
Concentration: 0.01835 ug/mL

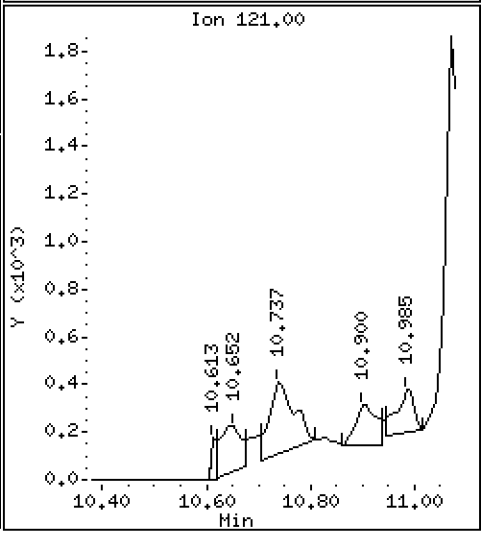


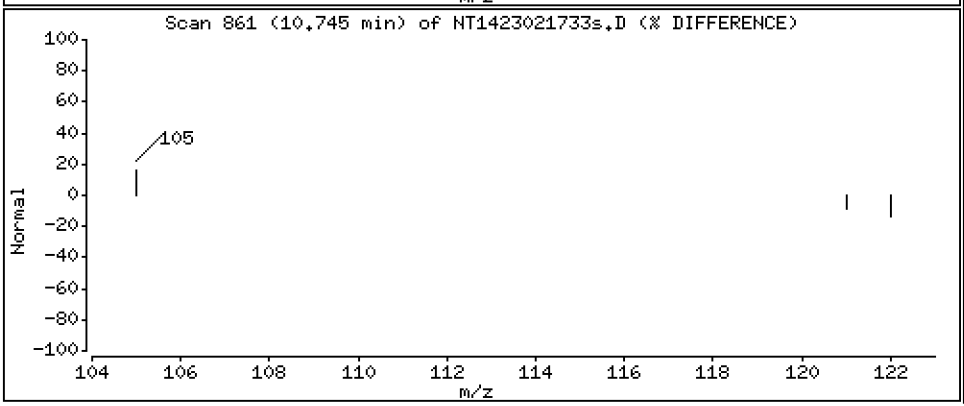












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

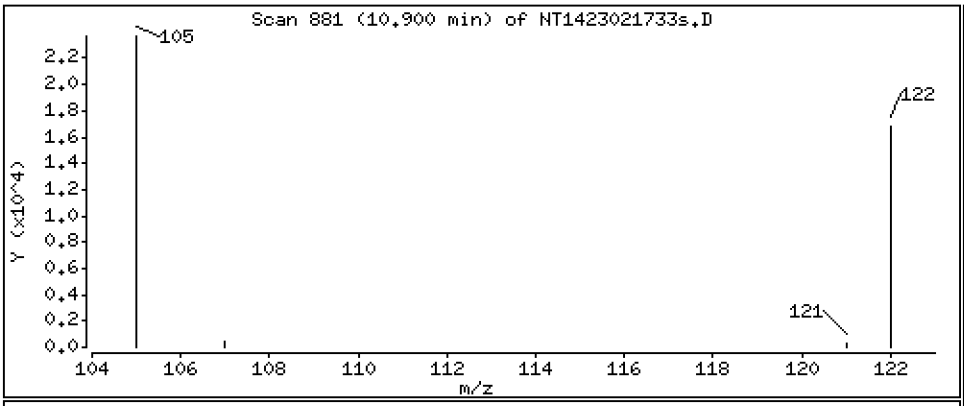
Operator: DSD

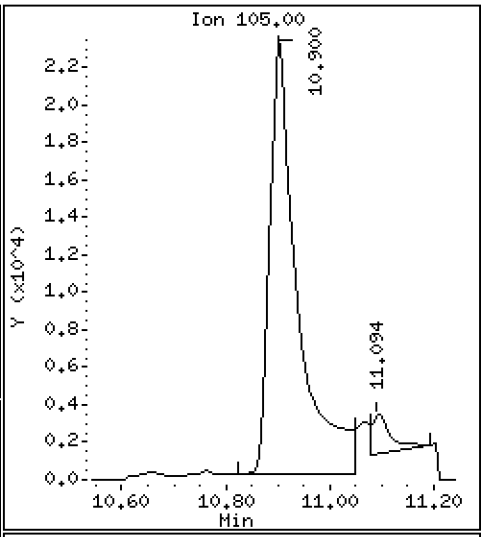
Column phase: ZB-5msi

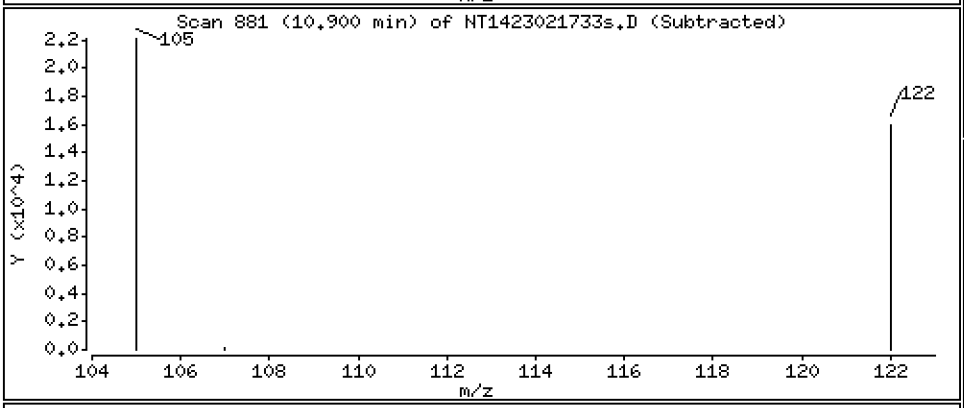
Column diameter: 0.25

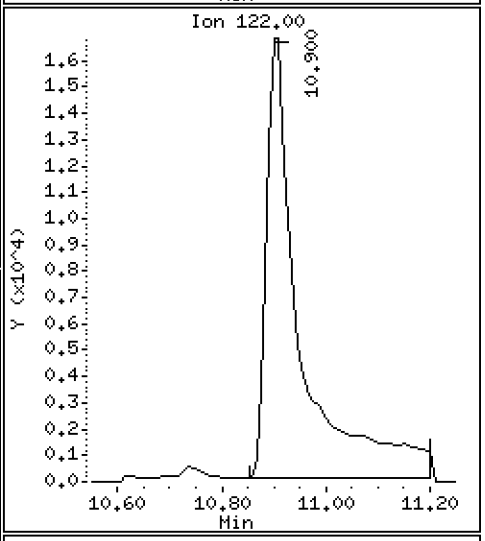
24 Benzoic acid

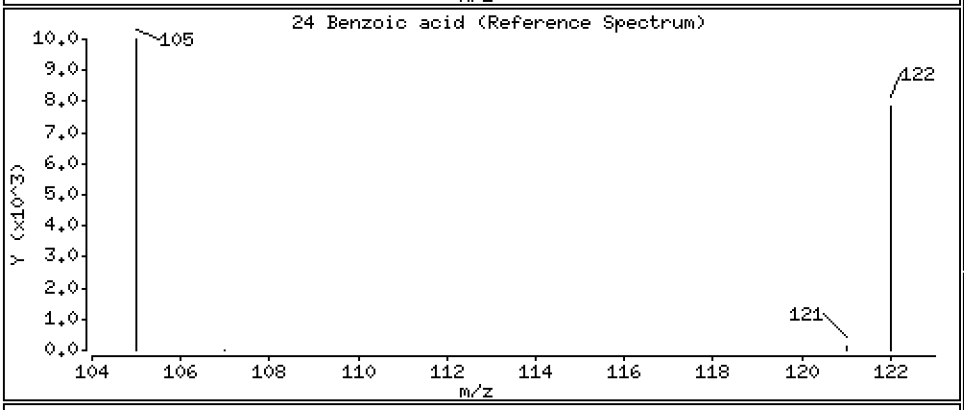
Concentration: 1.638 ug/mL

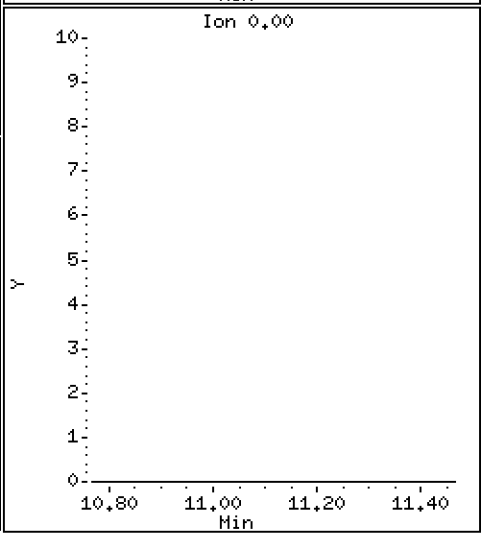


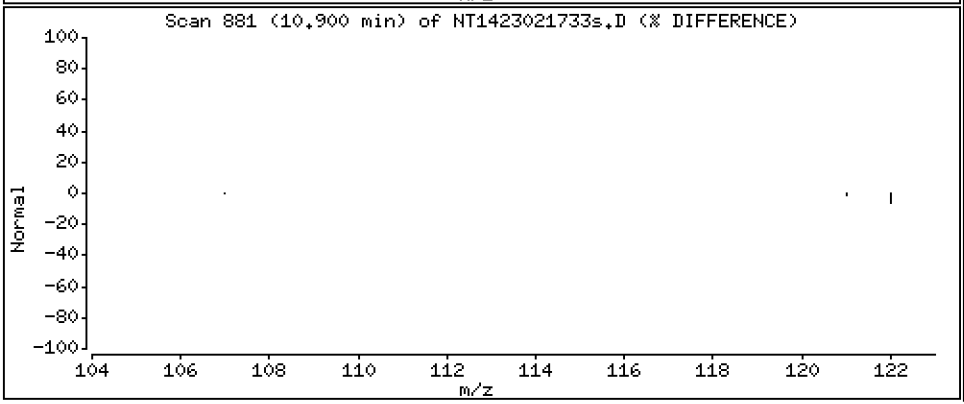












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

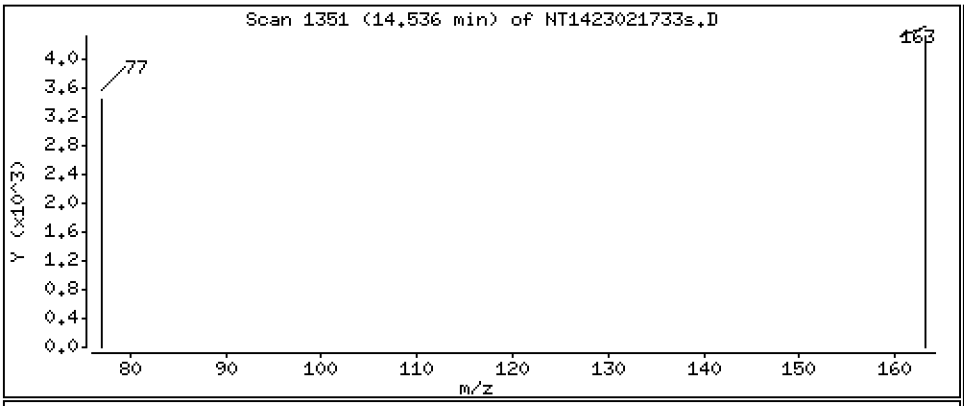
Operator: DSD

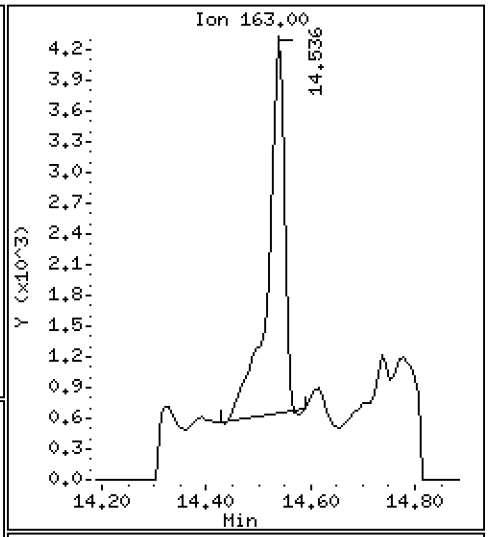
Column phase: ZB-5msi

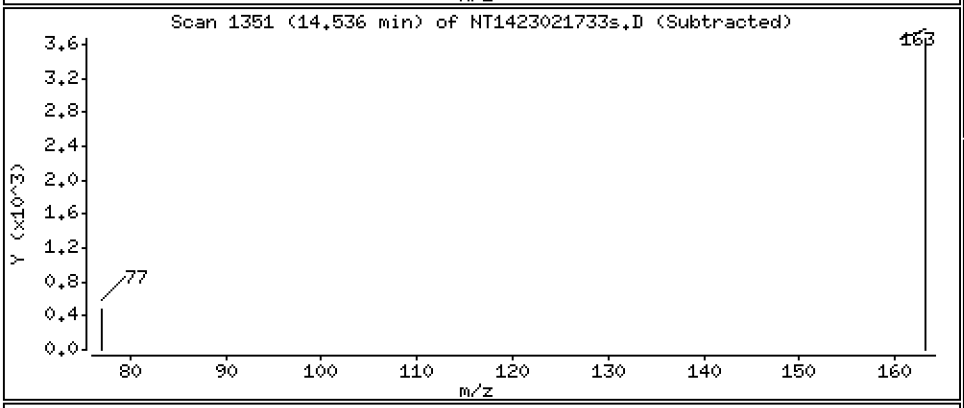
Column diameter: 0.25

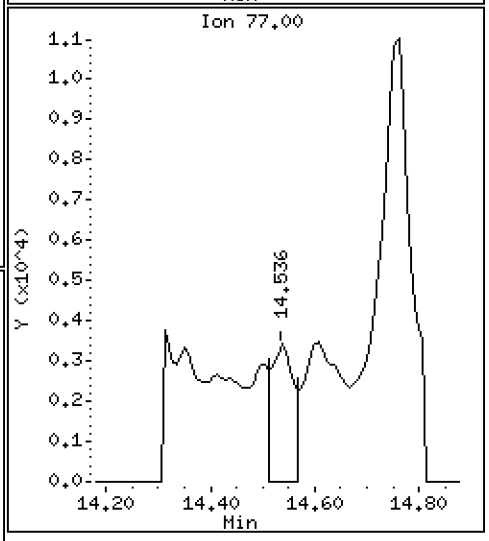
39 Dimethylphthalate

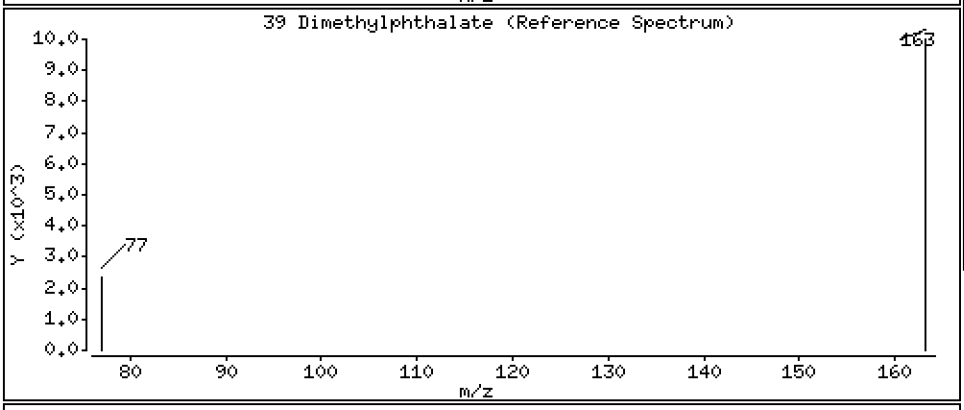
Concentration: 0.04364 ug/mL

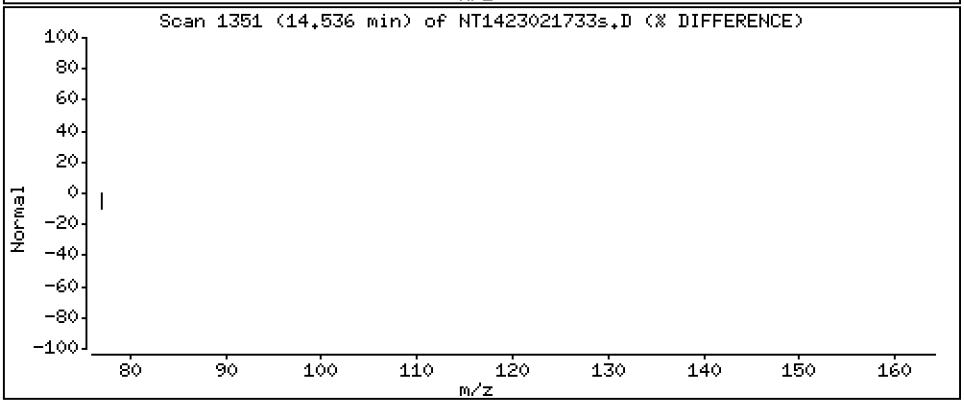












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

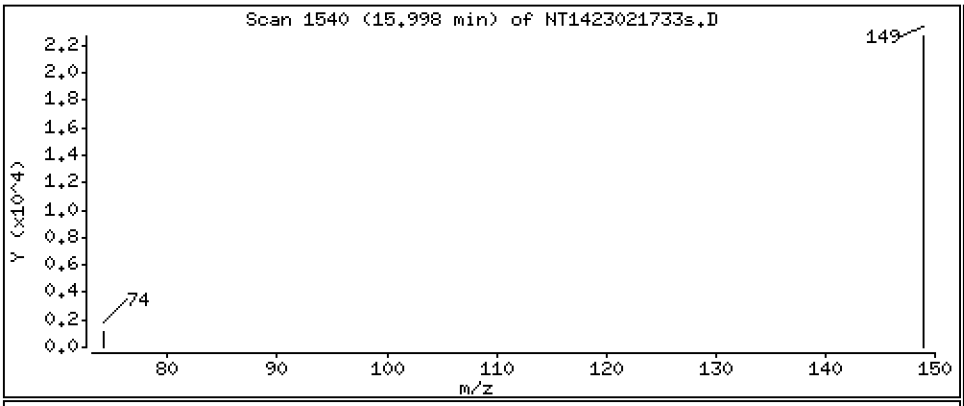
Operator: DSD

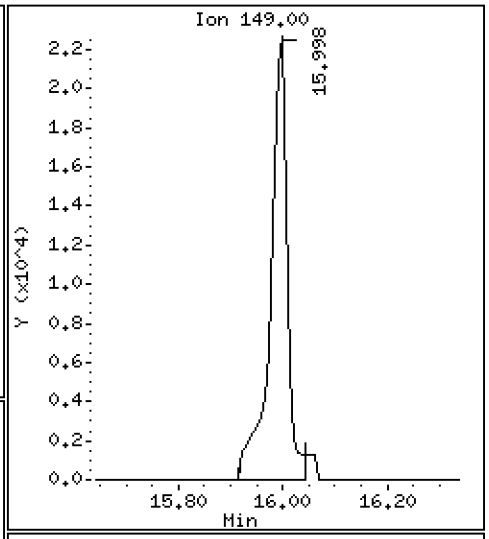
Column phase: ZB-5msi

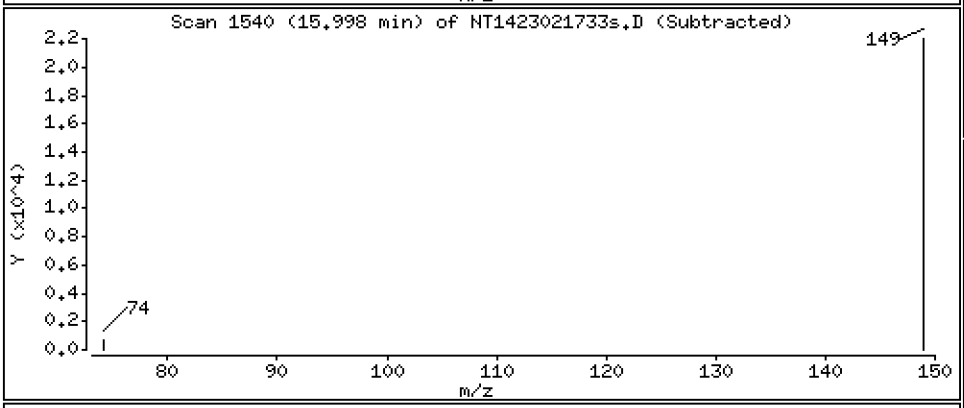
Column diameter: 0.25

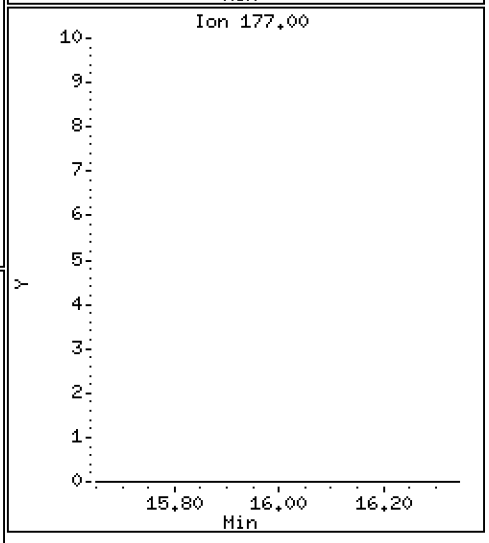
50 Diethylphthalate

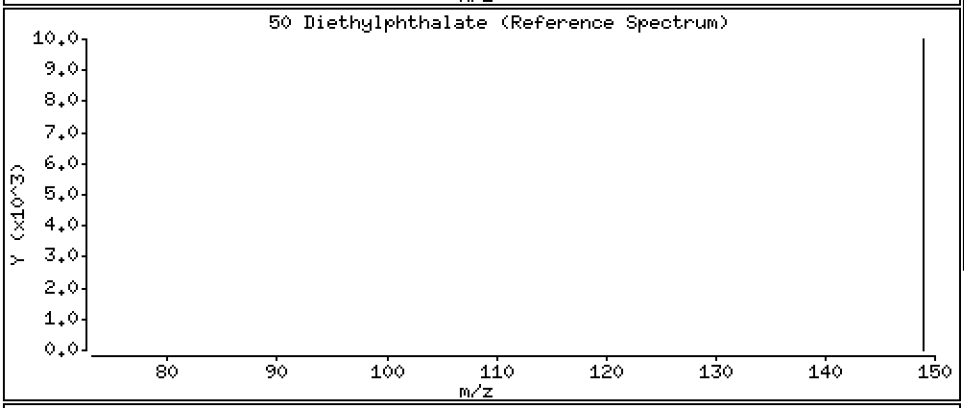
Concentration: 0.2254 ug/mL

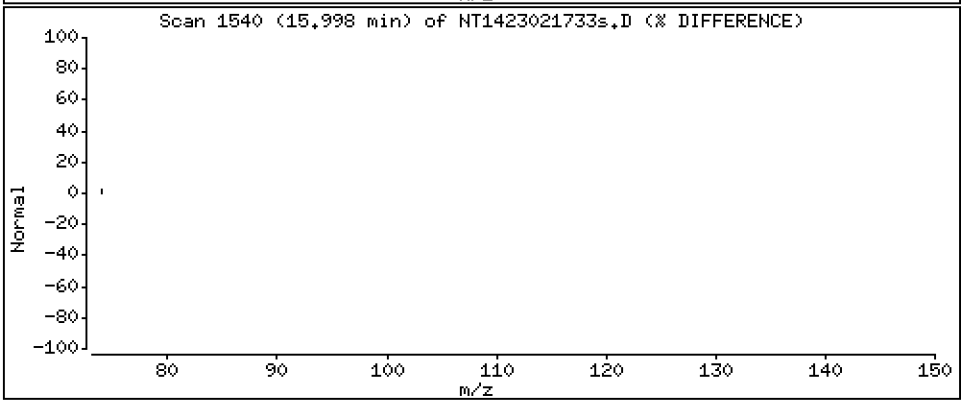












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

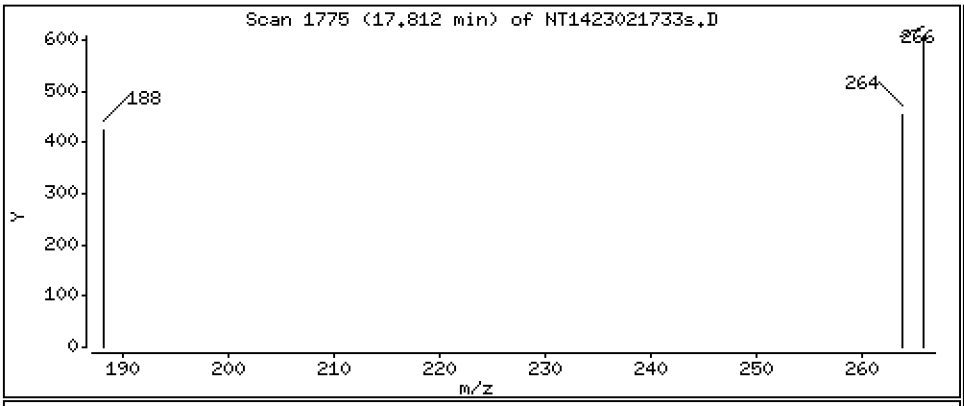
Operator: DSD

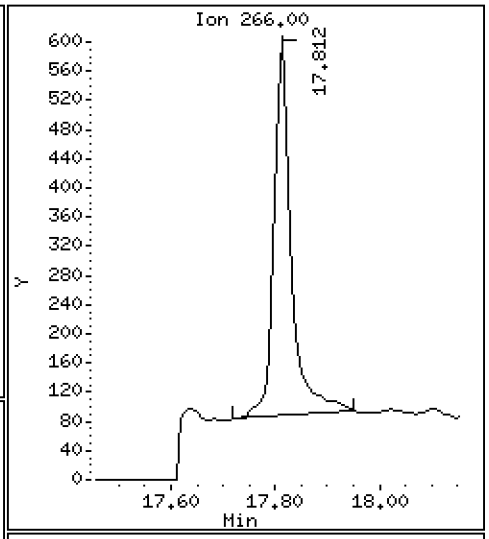
Column phase: ZB-5msi

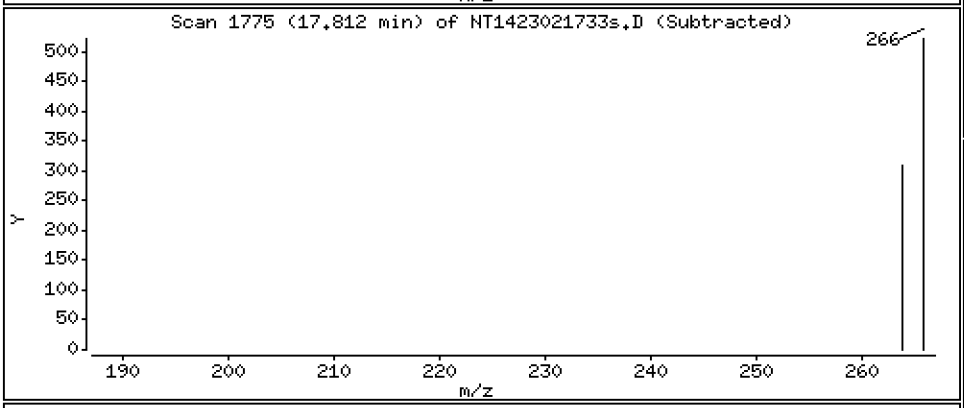
Column diameter: 0.25

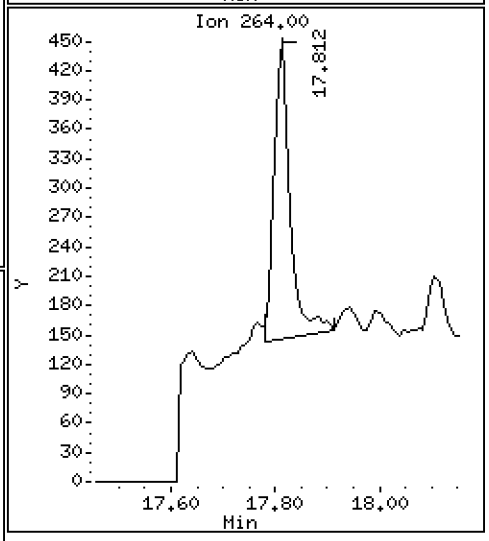
58 Pentachlorophenol

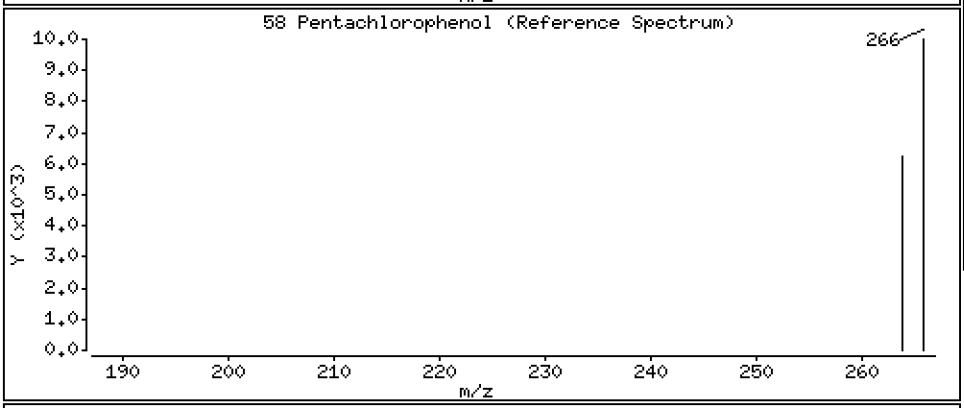
Concentration: 0.03784 ug/mL

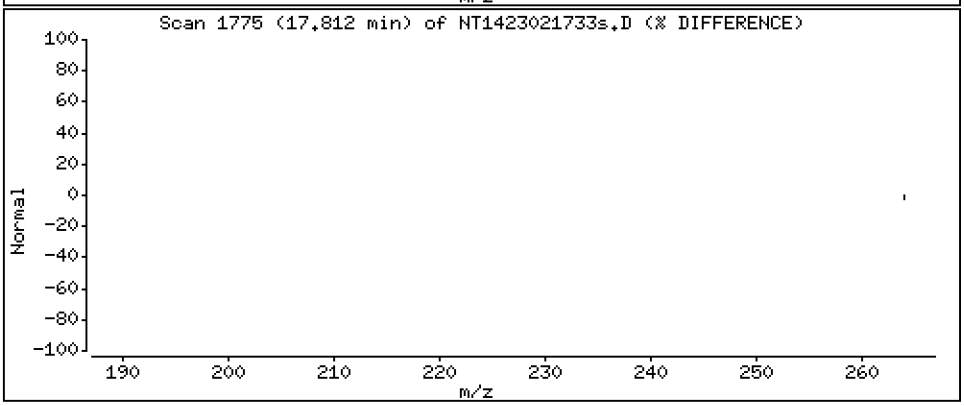












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Date : 18-FEB-2023 05:54

Client ID:

Instrument: nt14.i

Sample Info: 23A0171-04

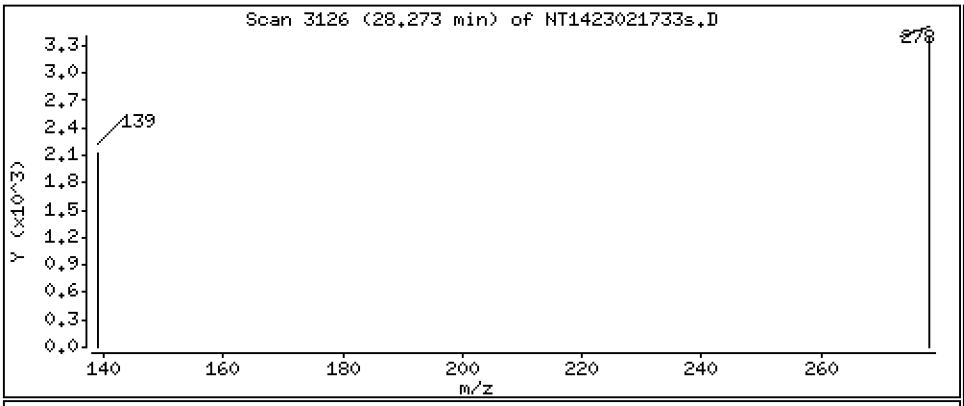
Operator: DSD

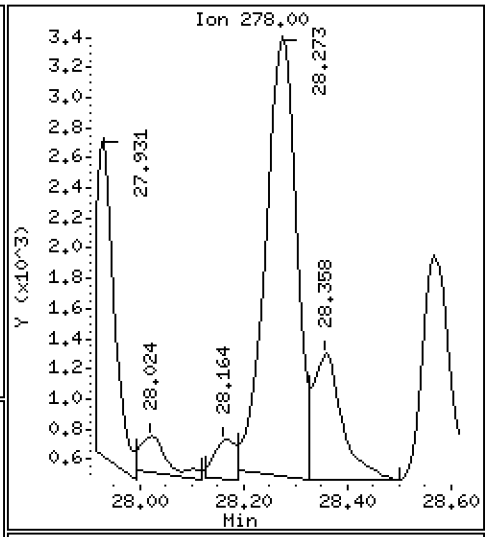
Column phase: ZB-5msi

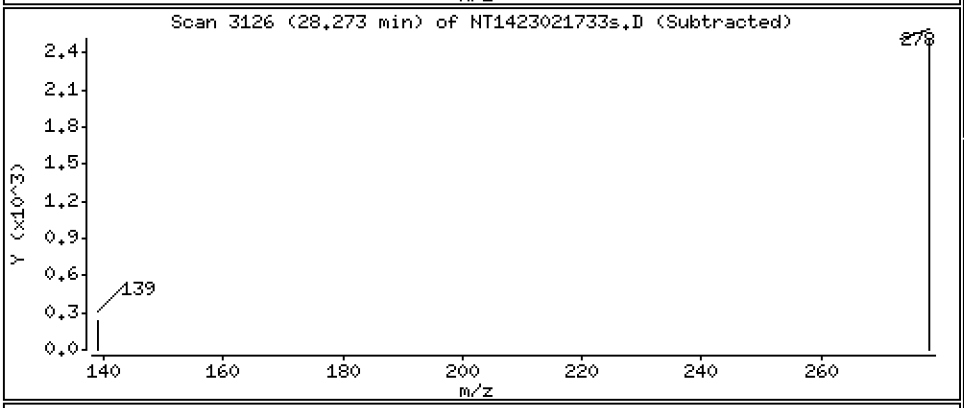
Column diameter: 0.25

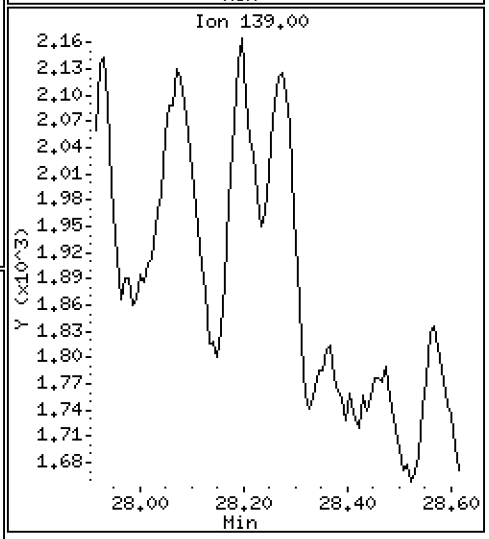
79 Dibenzo(a,h)anthracene

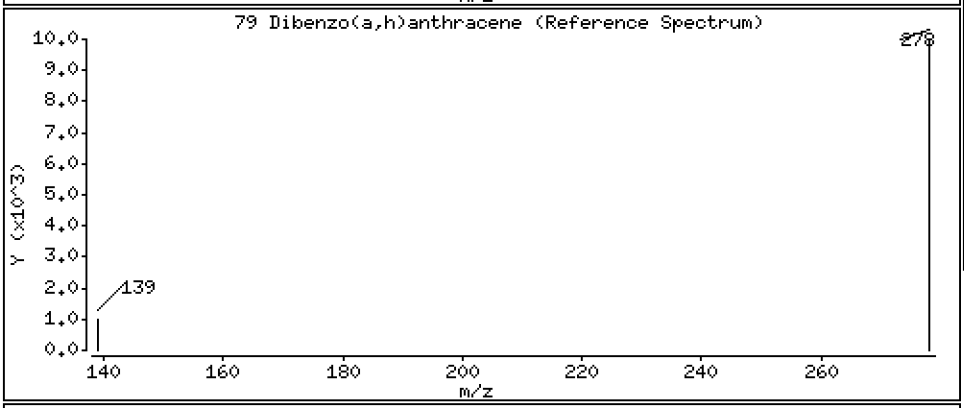
Concentration: 0.1535 ug/mL

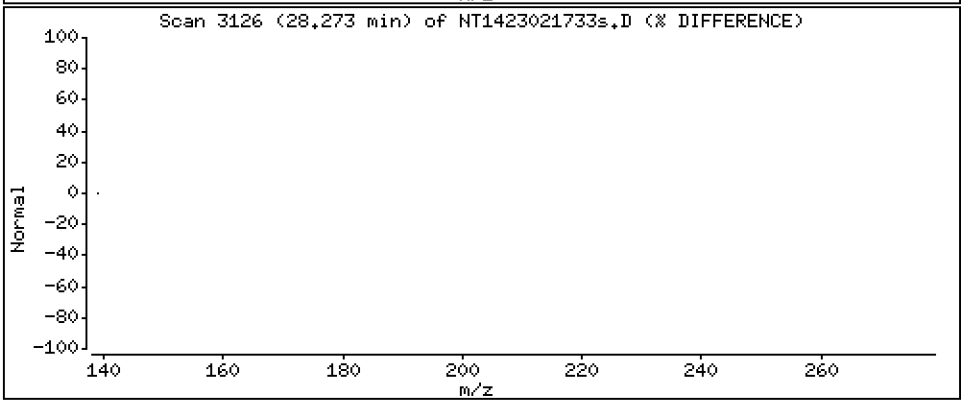












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021733s.D
Lab Smp Id: 23A0171-04
Inj Date : 18-FEB-2023 05:54 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : 23A0171-04
Misc Info :
Comment :
Method : \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\SIMABN2.m
Meth Date : 07-Mar-2023 12:35 van Quant Type: ISTD
Cal Date : 16-FEB-2023 20:42 Cal File: NT1423021612s.D
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.710	6.679	(0.754)	457920	5.21509	5.215(R)
	3 Phenol	94	8.310	8.294	(0.933)	705711	5.24066	5.241
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.905	8.905	(1.000)	309874	4.00000	
	9 1,4-Dichlorobenzene	146	8.936	8.928	(1.003)	1099	0.01093	0.01093
	11 Benzyl alcohol	79	9.192	9.184	(1.032)	93674	1.10379	1.104
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	15 4-Methylphenol	108	9.689	9.681	(1.088)	13460	0.13362	0.1336
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	10.744	10.728	(0.943)	1867	0.01835	0.01835
	24 Benzoic acid	105	10.899	10.891	(0.957)	85994	1.63798	1.638
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.395	11.394	(1.000)	1110553	4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	39 Dimethylphthalate	163	14.536	14.536	(0.968)	7680	0.04364	0.04364(M)
*	42 Acenaphthene-d10	162	15.023	15.015	(1.000)	576909	4.00000	
	50 Diethylphthalate	149	15.997	15.989	(1.065)	49656	0.22542	0.2254
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	17.812	17.804	(0.986)	1171	0.03784	0.03784(M)
*	59 Phenanthrene-d10	188	18.067	18.059	(1.000)	1171208	4.00000	
$	66 Terphenyl-d14	244	21.232	21.216	(0.918)	619998	4.77372	4.774(R)
	67 Butylbenzylphthalate	149	Compound Not Detected.					
*	69 Chrysene-d12	240	23.136	23.121	(1.000)	487857	4.00000	
*	77 Perylene-d12	264	25.707	25.691	(1.000)	455709	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.273	28.265	(1.100)	12252	0.15352	0.1535
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021733s.D
Lab Smp Id: 23A0171-04
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\SIMABN2.m
Misc Info:

Calibration Date: 17-FEB-2023
Calibration Time: 21:31
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	388684	194342	777368	309874	-20.28
27 Naphthalene-d8	1386667	693334	2773334	1110553	-19.91
42 Acenaphthene-d10	752189	376095	1504378	576909	-23.30
59 Phenanthrene-d10	1701919	850960	3403838	1171208	-31.18
69 Chrysene-d12	887171	443586	1774342	487857	-45.01
77 Perylene-d12	644624	322312	1289248	455709	-29.31

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	0.00
27 Naphthalene-d8	11.39	10.89	11.89	11.40	0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.05
59 Phenanthrene-d10	18.06	17.56	18.56	18.07	0.04
69 Chrysene-d12	23.12	22.62	23.62	23.14	0.07
77 Perylene-d12	25.69	25.19	26.19	25.71	0.06

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

REVIEW SUMMARY FOR FILE - NT1423021733s.D

Lab ID: 23A0171-04
nt14.i, 20230217A.b\20230217A.b\SIMABN2.m,   18-FEB-2023 05:54

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

RRT check based on Ccal File: 20230217A.b/NT1423021719s.D

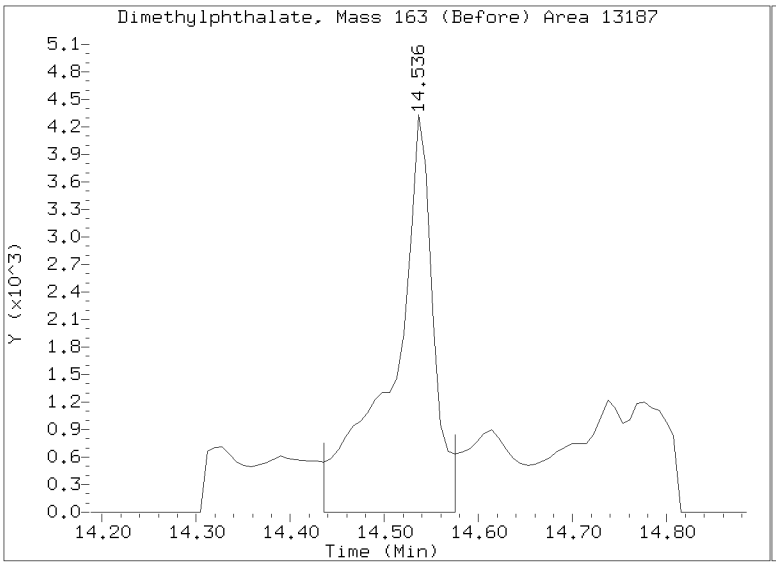
On Column LOD for nt14.i, 20230217A.b\SIMABN2.m, PSDDA.sub = 0.0000

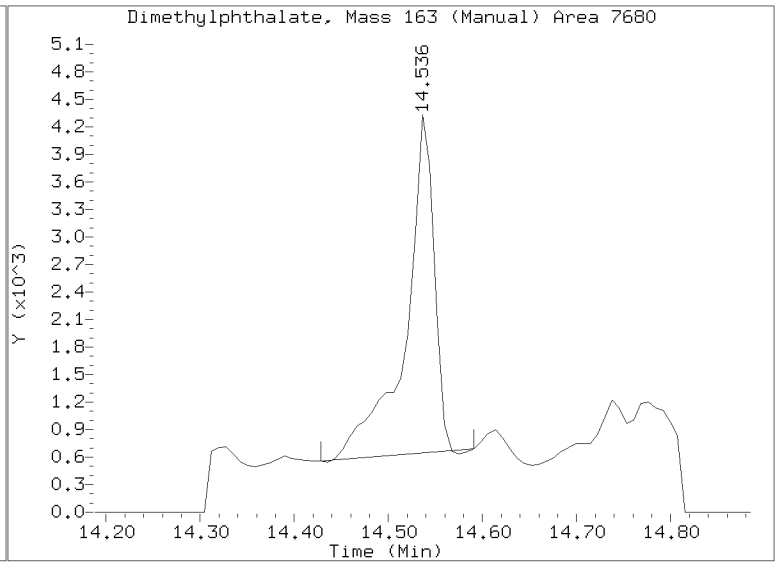
Exception: 1,2,4-Trichlorobenzene 0.0010

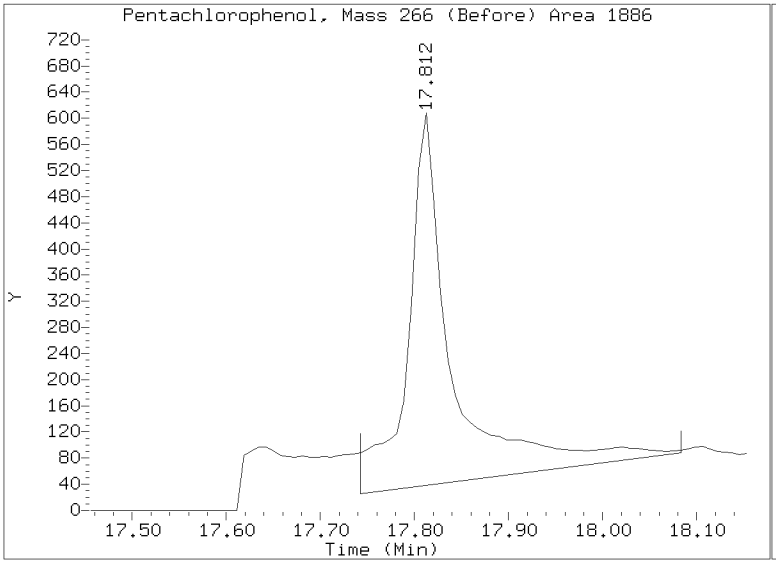
* Only compounds listed in the work order have been verified by the analyst *

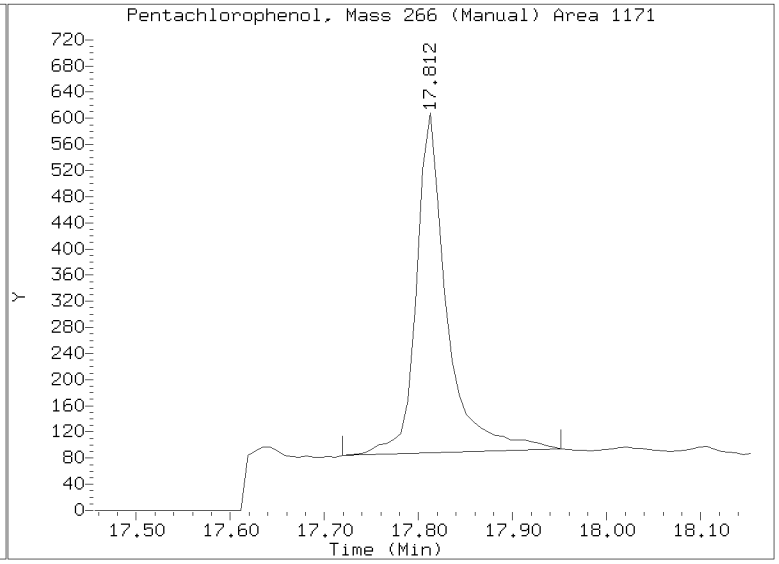
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230217A.b/20230217A.b/NT1423021733s.D
Injection Date: 18-FEB-2023 05:54
Lab ID:23A0171-04 Client ID:
Report Date: 03/07/2023 12:37









PREPARATION BATCH SUMMARY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC SDG: 23A0171

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

Batch: BLA0339 Batch Matrix: Solid Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1254	23A0171-01	NT1423021730s.D	01/18/23 13:47	
LDW23-SS1257	23A0171-02	NT1423021731s.D	01/18/23 13:47	
LDW23-SS1262	23A0171-03	NT1423021732s.D	01/18/23 13:47	
LDW23-SS1245	23A0171-04	NT1423021733s.D	01/18/23 13:47	
Blank	BLA0339-BLK2	NT1423021721s.D	01/18/23 13:47	
LCS	BLA0339-BS2	NT1423021722s.D	01/18/23 13:47	
LCS Dup	BLA0339-BSD2	NT1423021723s.D	01/18/23 13:47	
Reference	BLA0339-SRM2	NT1423021724s.D	01/18/23 13:47	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0339

Prepared using: EPA 3546 (Microwave)

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

Matrix: Solid **Date Prepared:** 01/18/23 (1/12/23) **Balance ID:** B14646264 **Set Up By:** QB 1/13/23

WO Comments

23A0100: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0171: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0175: Please log with project number. DWs need 200.8 and 245.1 and will usually have a supplemental form. <G>double check analyses for preserved for delivery to the labs. Spectra usually provides HCl for Dx and FOG and H2SO4 for Phenolics</G>

The following standards may be missing from this batch!

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

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

Lab Number & Container	% Solids	Initial (g) Target Dry: 10 (Wet) Actual	(REQ) GPC C/U (1:1) 1 (2) 3	Water Wash 1mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
23A0100-21 A	51.8	(19.31) 19.72	(1:1)	1mL	1	0.5	
23A0100-22 A	80.3	(12.45) 12.45	(1:1)	1mL	1	0.5	
23A0100-23 A	53.4	(18.73) 18.95	(1:1)	1mL	1	0.5	
23A0171-01 A	42.8	(23.35) 23.80	(1:1)	1mL	1	0.5	
23A0171-02 A	41.7	(23.97) 24.37	(1:1)	1mL	1	0.5	
23A0171-03 A	43.5	(22.97) 23.27	(1:1)	1mL	1	0.5	
23A0171-04 A	48.4	(20.64) 20.89	(1:1)	1mL	1	0.5	
23A0175-01 A	92.5	(10.81) 11.01	(1:1)	1mL	1	0.5	
23A0175-02 A	89.6	(11.16) 11.68	(1:1)	1mL	1	0.5	
23A0175-03 A	89.5	(11.17) 11.78	(1:1)	1mL	1	0.5	
23A0175-04 A	88.9	(11.25) 11.97	(1:1)	1mL	1	0.5	
23A0175-05 A	90.0	(11.11) 11.64	(1:1)	1mL	1	0.5	

Batch QC

Lab Number	% Solids	Initial (g) Target Dry: 10 (Wet) Actual	(REQ) GPC C/U (1:1) 1 (2) 3	Water Wash 1mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
BLA0339-BLK1	100.0	(10.00) 10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLA0339-BS1	100.0	(10.00) 10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLA0339-BSD1	100.0	(10.00) 10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLA0339-MS1	80.3	(12.45) 12.45	(1:1)	1mL	1	0.5	Use 23A0100-22
BLA0339-MSD1	80.3	(12.45) 12.45	(1:1)	1mL	1	0.5	Use 23A0100-22
BLA0339-SRM1	100.0	~~(10.00)~~ (1.00) 1.00	(1:1)	1mL	1	0.5	Use K003477

+1g DI WATER

Client ID Verified By — 01/18/23 (1/12/23) Date — NKh 1/23/23 Preparation Reviewed By Date — QB 1/18/23 13:47 Extraction Date and Time

Printed: 1/13/2023 1:33:59PM

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0339

Prepared using: EPA 3546 (Microwave)

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

WO Comments

23A0100: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0171: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0175: Please log with project number. DWs need 200.8 and 245.1 and will usually have a supplemental form. <G>double check analyses for preserved for delivery to the labs. Spectra usually provides HCl for Dx and FOG and H2SO4 for Phenolics</G>

Prep Steps	Reagents Used	
Microwave (1) 2 3 CR 1/18 Analyst/Date	**Station/Reagent**	**Standard ID**
	Microwave **Analyst:** CR **Date:** 1/18/23	
	Anhydrous Sodium Sulfate	I000092
	1:1 Methylene Chloride/Acetone	K011507
	Methylene Chloride	K005942
	Pre-Deactivated Glass Wool	K010195
Pre-GPC KD **100°C** **Exchange to Hexane** **(add 10 mL to KD)** (0) 2 4 5 6 NRB 1/18/23 Analyst/Date	**Pre GPC KD** **Analyst:** NRB **Date:** 1/18/23	
	Pre-Deactivated Glass Wool	N/A
	Anhydrous Sodium Sulfate	K011285
TurboVap **Pre GPC** 1 2 3 (4) 5 NRB 1/18/23 Analyst/Date	Methylene Chloride	K005942
	Hexane	K008310
	GPC Filter Prep **Analyst:** TWC **Date:** 1/20/23	
Post GPC KD **80-85°C** (1) 0 (2) 4 5 6 TWC 1/21/23 Analyst/Date	Methylene Chloride	K005942
	GPC **Analyst:** TWC **Date:** 1/20/23	
	Methylene Chloride	K005158
TurboVap 1 2 3 (4) 5 NRB 1/23/23 Analyst/Date	GPC Calibration File	CLA0166 - GPC2
	Post GPC KD **Analyst:** TWC **Date:** 1/21/23	
	Methylene Chloride	K005942
Water Wash NRB 1/23/23 Analyst/Date	**Vialing** **Analyst:** NRB **Date:** 1/23/23	
	Methylene Chloride	K010561

Surrogates & Spike Standards Used

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

MANUALLY ENTER EXPIRATION DATES!

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

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

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0339

Prepared using: EPA 3546 (Microwave)

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

WO Comments

23A0100: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0171: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0175: Please log with project number. DWs need 200.8 and 245.1 and will usually have a supplemental form. <G>double check analyses for preserved for delivery to the labs. Spectra usually provides HCl for Dx and FOG and H2SO4 for Phenolics</G>

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

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: SVOA Extraction Batch: BLA0339

Total Solids Batch: BLA0260 Work Order(s): 23A0100 21-23

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
[X] No Anomalies (standard soil/wet sediment/sand/gravel)= 21-23	CR 1/12/23
[X] Standing Water Decanted (Not shared)= 21-23	CR 1/12/23
[ ] Standing Water Homogenized (Shared samples)=	
[ ] Clay/Clumps (Difficult to homogenize)=	
[ ] Rocks (%+size)?	
[ ] Organics (Leaves/sticks/grass)=	
[ ] Oily, obvious fuel/sulfur odors=	
[ ] Received in 32oz jar(s)=Homogenized in Pyrex dish=	
[X] Previously Frozen = 21-23	CR 1/12/23
[ ] Other (Details)=	
Aqueous:	
[ ] No Anomalies	
[ ] Turbid/Color=	
[ ] Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
[ ] Emulsions (%)=	
[ ] Oily, obvious fuel/sulfur odors=	
[ ] Other (Details)=	
[ ] Received in 1.0L Bottle(s)=No Bottle Rinse=	
[X] Other Notes/Comments= (Note problems, concerns, corrective actions). Breaker was shut off while Blk was being collected - GPC was turned back on, the remainder of the Blk was collected from waste line, re-labeled and put back on GPC2	Thu 1/20123
[X] Share Samples Y / (N)	CR 1/12/23
[X] Multiple Jars Y / (N)	CR 1/12/23
[ ] Sample Pre-Screens indicate analyte activity=	
[ ] Sample weights/volumes reduced based on Pre-Screen=	

3056F

Revision 15
07/01/19

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: SVOA Extraction Batch BLA0379

Total Solids Batch: BLA0262 Work Order(s): 23A0171 01-04

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☐ No Anomalies (standard soil/wet sediment/sand/gravel)=	
☒ Standing Water Decanted (Not shared)= 01-04	CR 1/12/23
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☒ (Oily), obvious fuel/sulfur odors= 01-04	CR 1/12/23
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☒ Previously Frozen = 01-04	CR 1/12/23
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples (Y) / N	CR 1/12/23
☒ Multiple Jars Y / (N)	CR 1/12/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

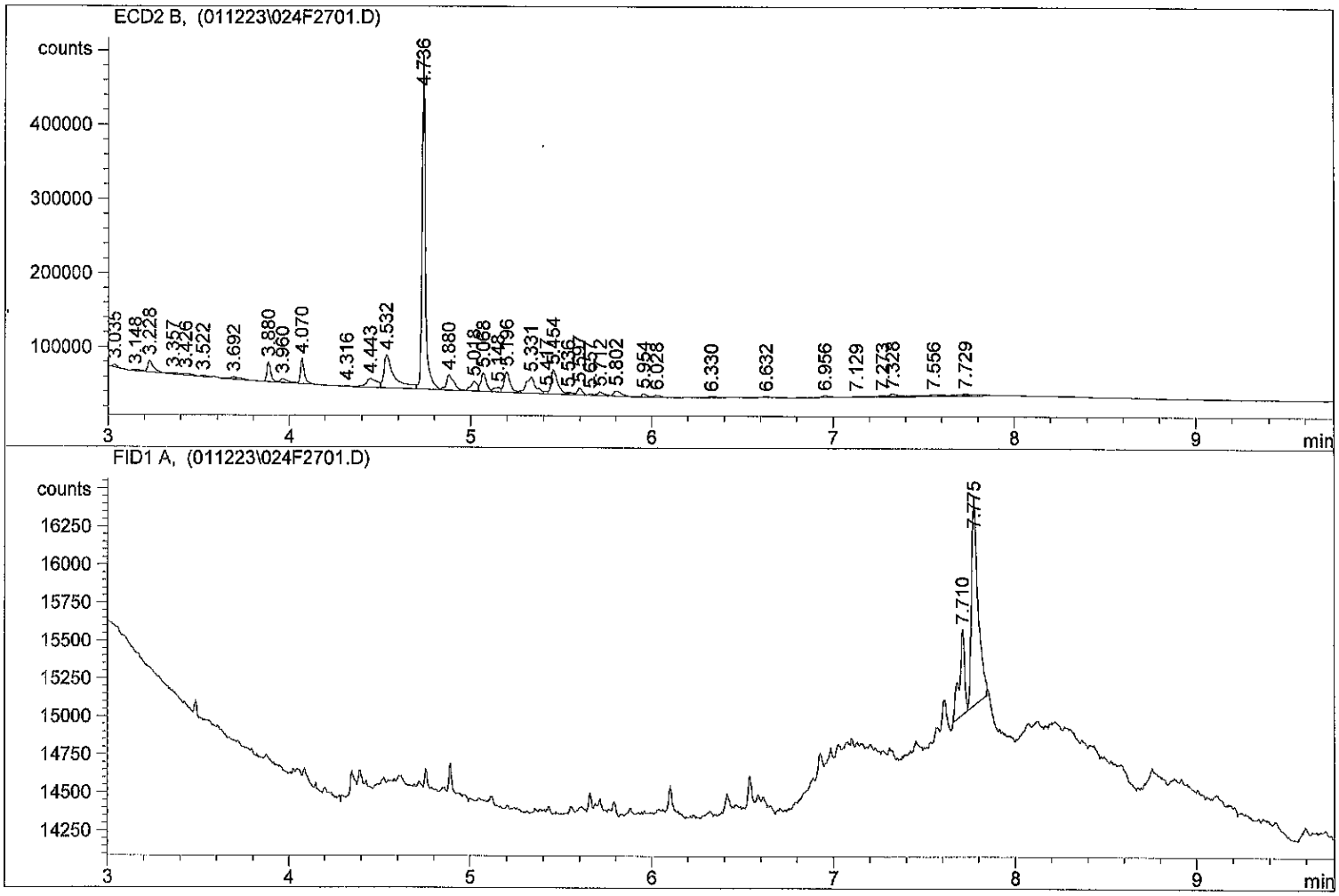
Extraction Parameter: SVOA Extraction Batch BLA0339

Total Solids Batch: BLA0269 Work Order(s): 23A0175 01-05

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= 01-05	CR 1/12/23
☐ Standing Water Decanted (Not shared)=	
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☐ Previously Frozen =	
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples Y / (N)	CR 1/12/23
☒ Multiple Jars Y / (N)	CR 1/12/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

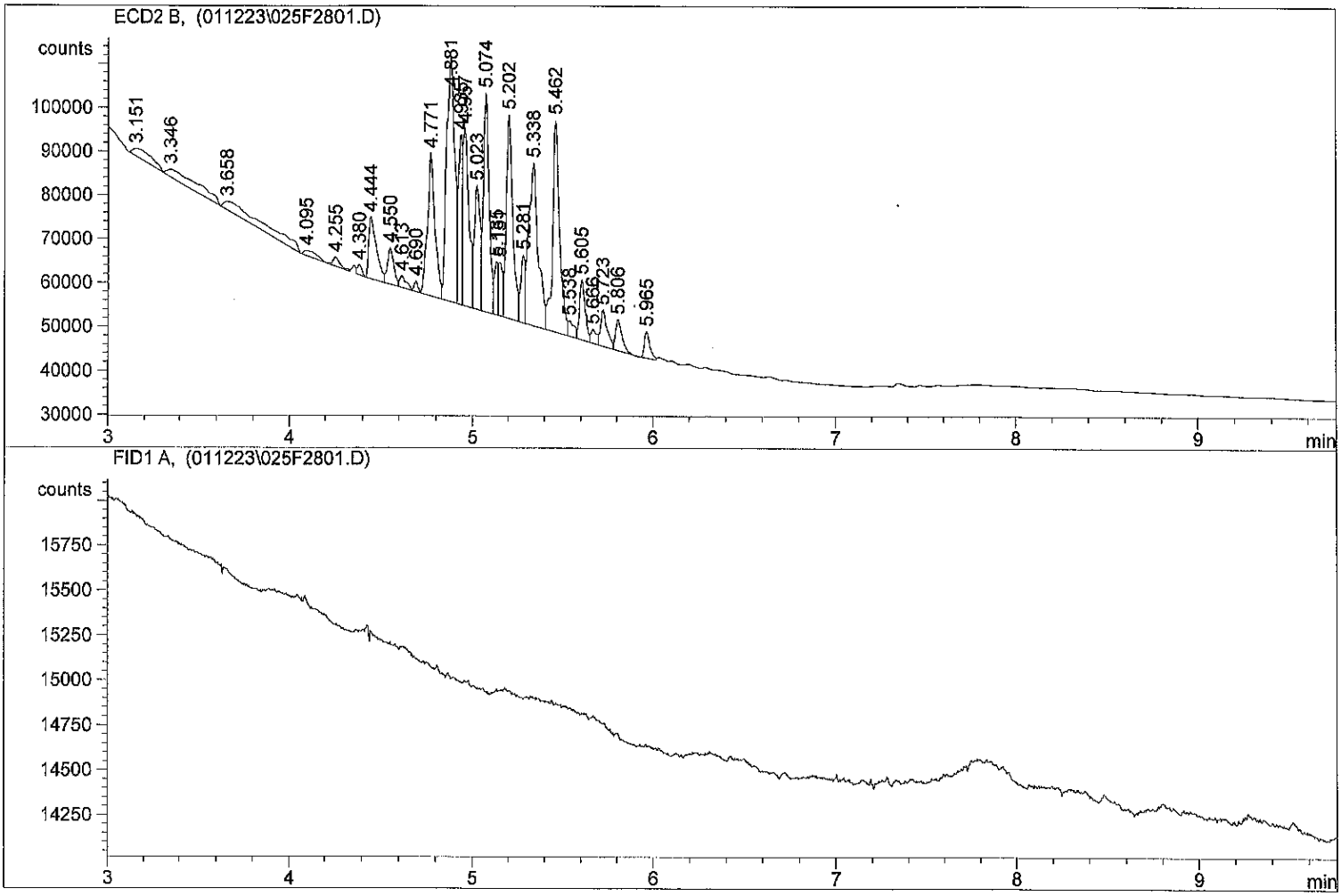
Data File C:\HPCHEM\1\DATA\011223\024F2701.D Sample Name: 23A0100 21

Injection Date	: 1/12/2023 11:08:21 PM	Seq. Line	: 27
Sample Name	: 23A0100 21	Location	: Vial 24
Acq. Operator	: CRR	Inj	: 1
		Inj Volume	: 1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\011223.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		
SCREEN METHOD			



*** End of Report ***

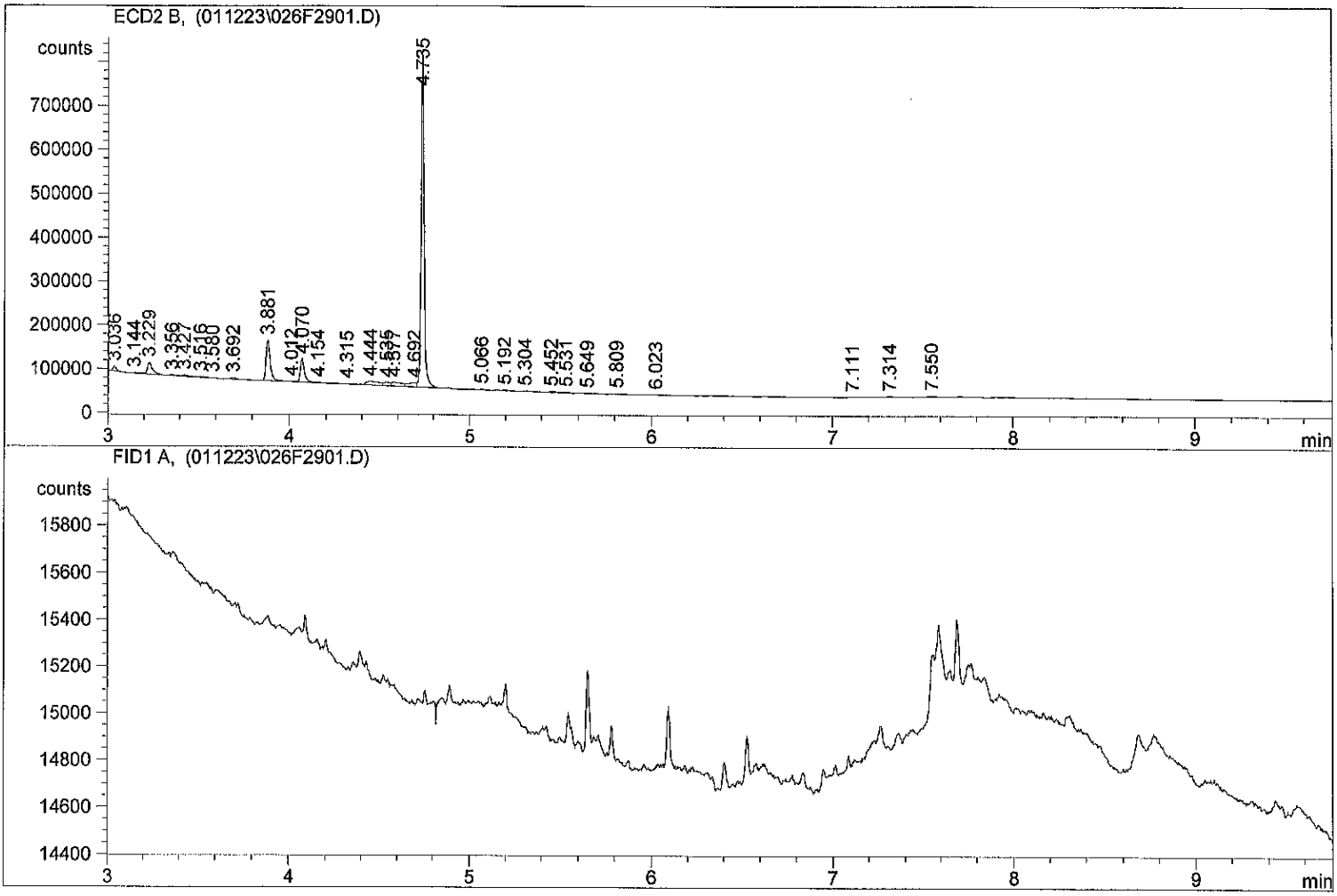
Injection Date	: 1/12/2023 11:22:54 PM	Seq. Line	: 28
Sample Name	: 23A0100 22	Location	: Vial 25
Acq. Operator	: CRR	Inj	: 1
		Inj Volume	: 1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\011223.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		
SCREEN METHOD			



*** End of Report ***

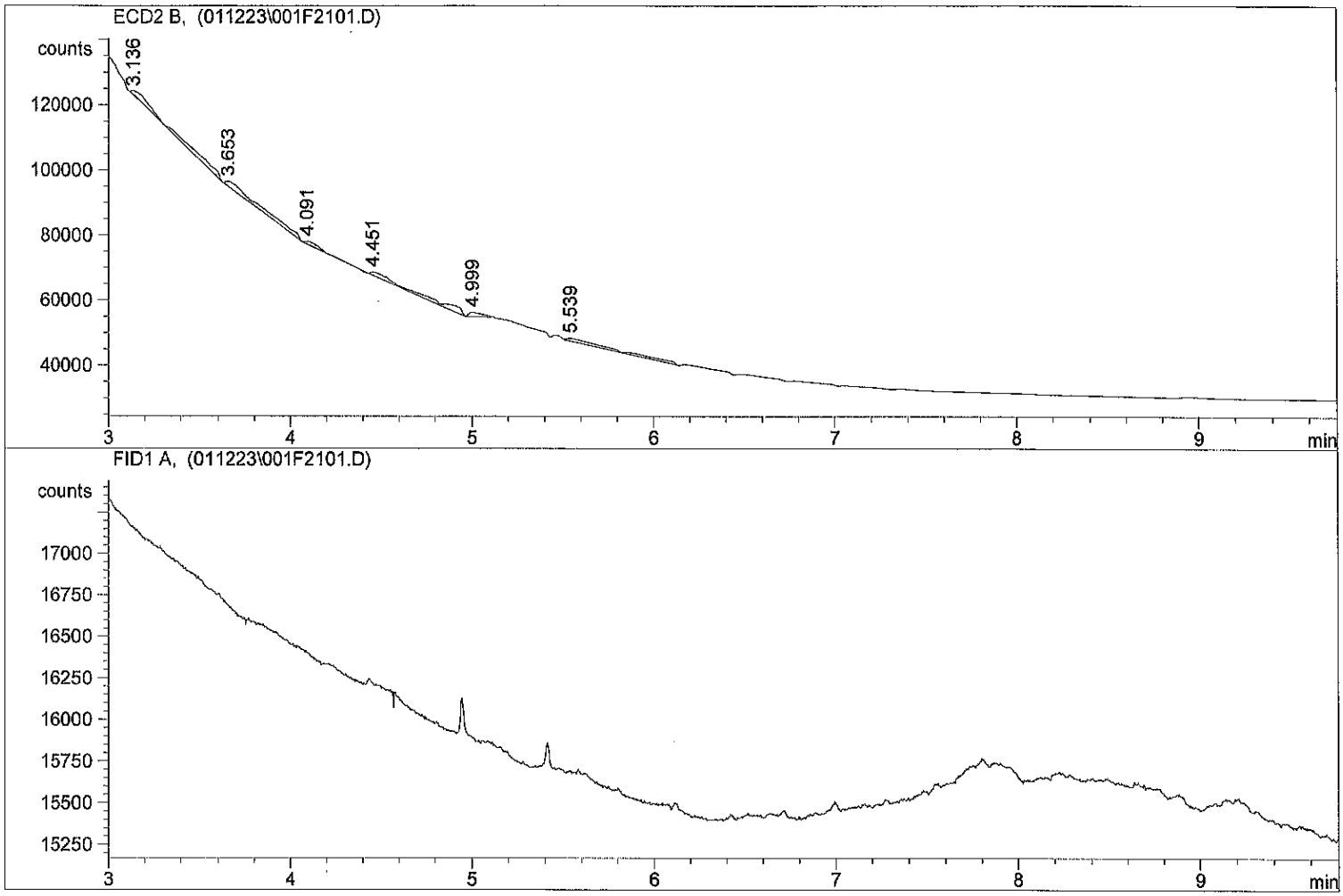
Injection Date : 1/12/2023 11:36:55 PM Seq. Line : 29
Sample Name : 23A0100 23 Location : Vial 26
Acq. Operator : CRR Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\011223.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



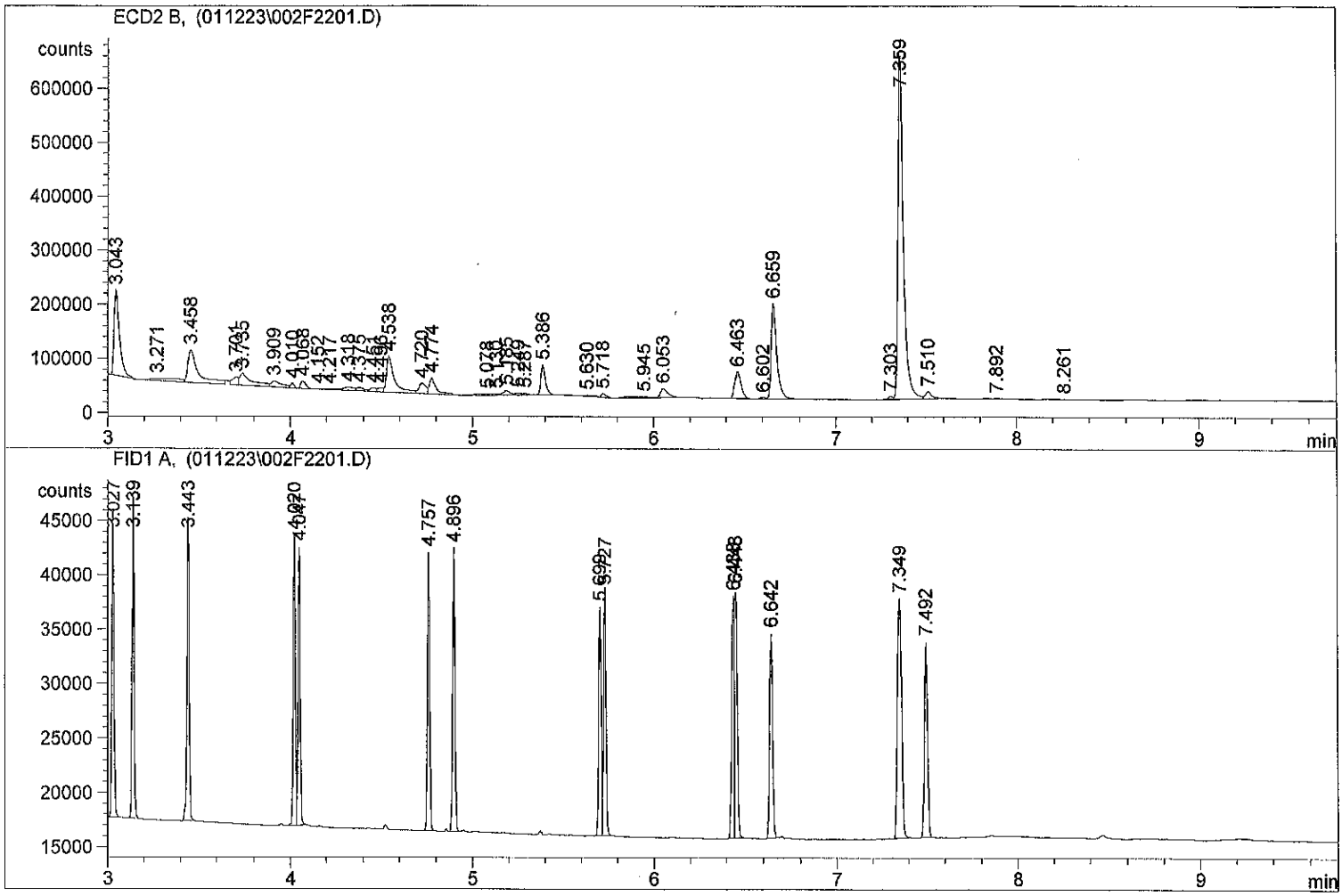
*** End of Report ***

Injection Date	: 1/12/2023 9:42:53 PM	Seq. Line	: 21
Sample Name	: DCM RINSE	Location	: Vial 1
Acq. Operator	: CRR	Inj	: 1
		Inj Volume	: 1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\011223.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		
SCREEN METHOD			



*** End of Report ***

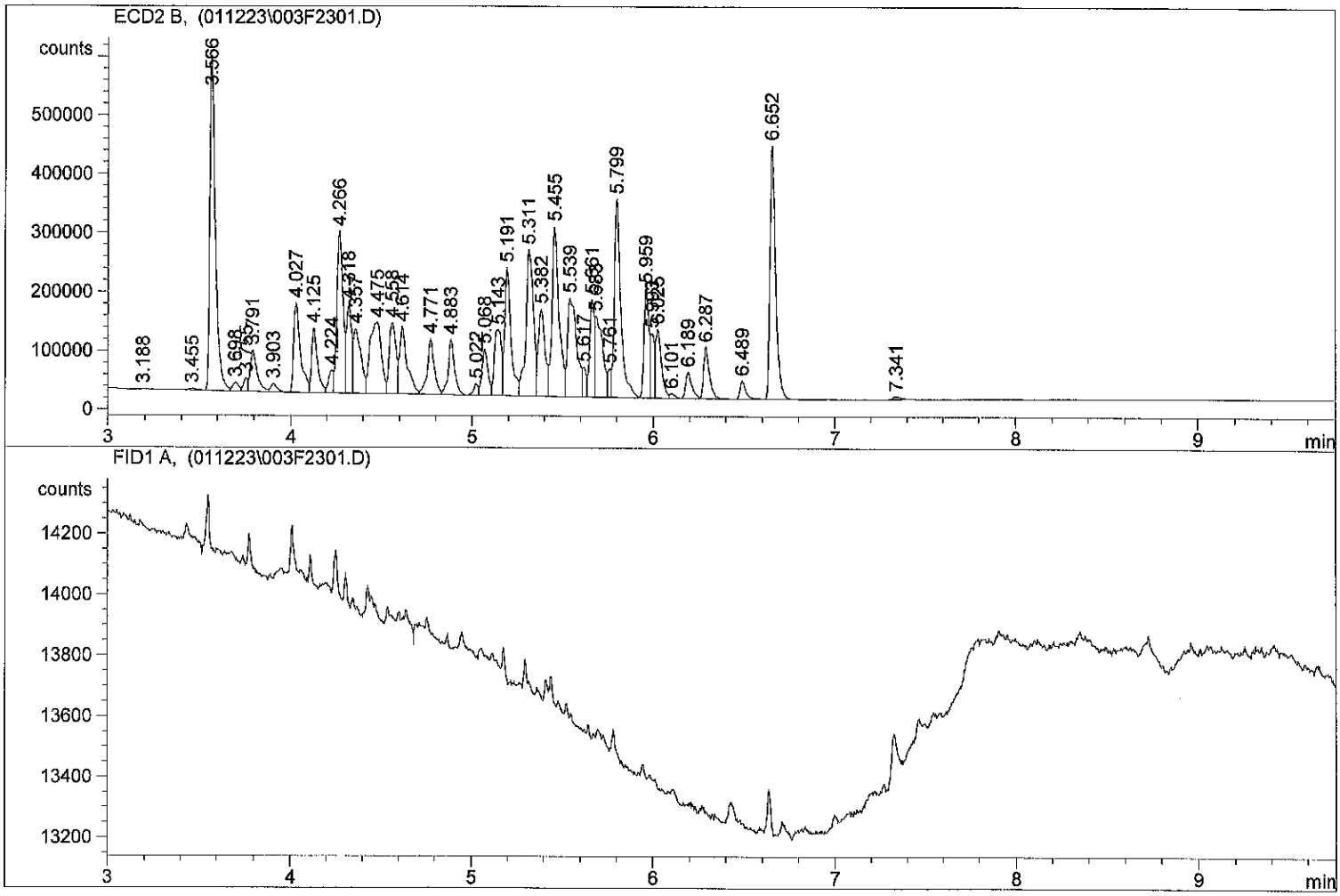
Injection Date	: 1/12/2023 9:57:26 PM	Seq. Line	: 22
Sample Name	: PNA STD 10PPM	Location	: Vial 2
Acq. Operator	: CRR	Inj	: 1
		Inj Volume	: 1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\011223.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		
SCREEN METHOD			



*** End of Report ***

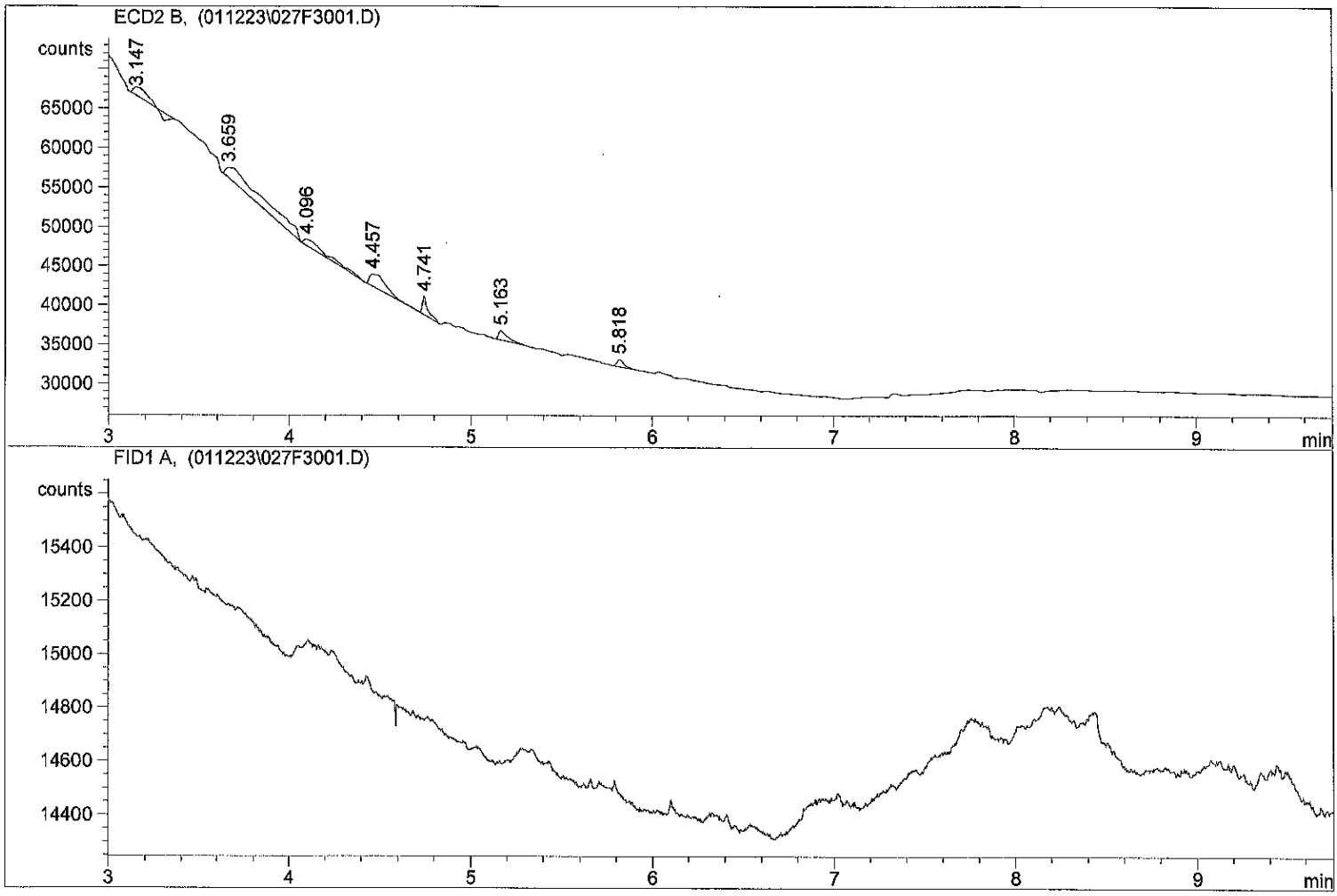
Data File C:\HPCHEM\1\DATA\011223\003F2301.D Sample Name: AR1660 1PPM

Injection Date	: 1/12/2023 10:11:26 PM	Seq. Line :	23
Sample Name	: AR1660 1PPM	Location :	Vial 3
Acq. Operator	: CRR	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\011223.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		
SCREEN METHOD			



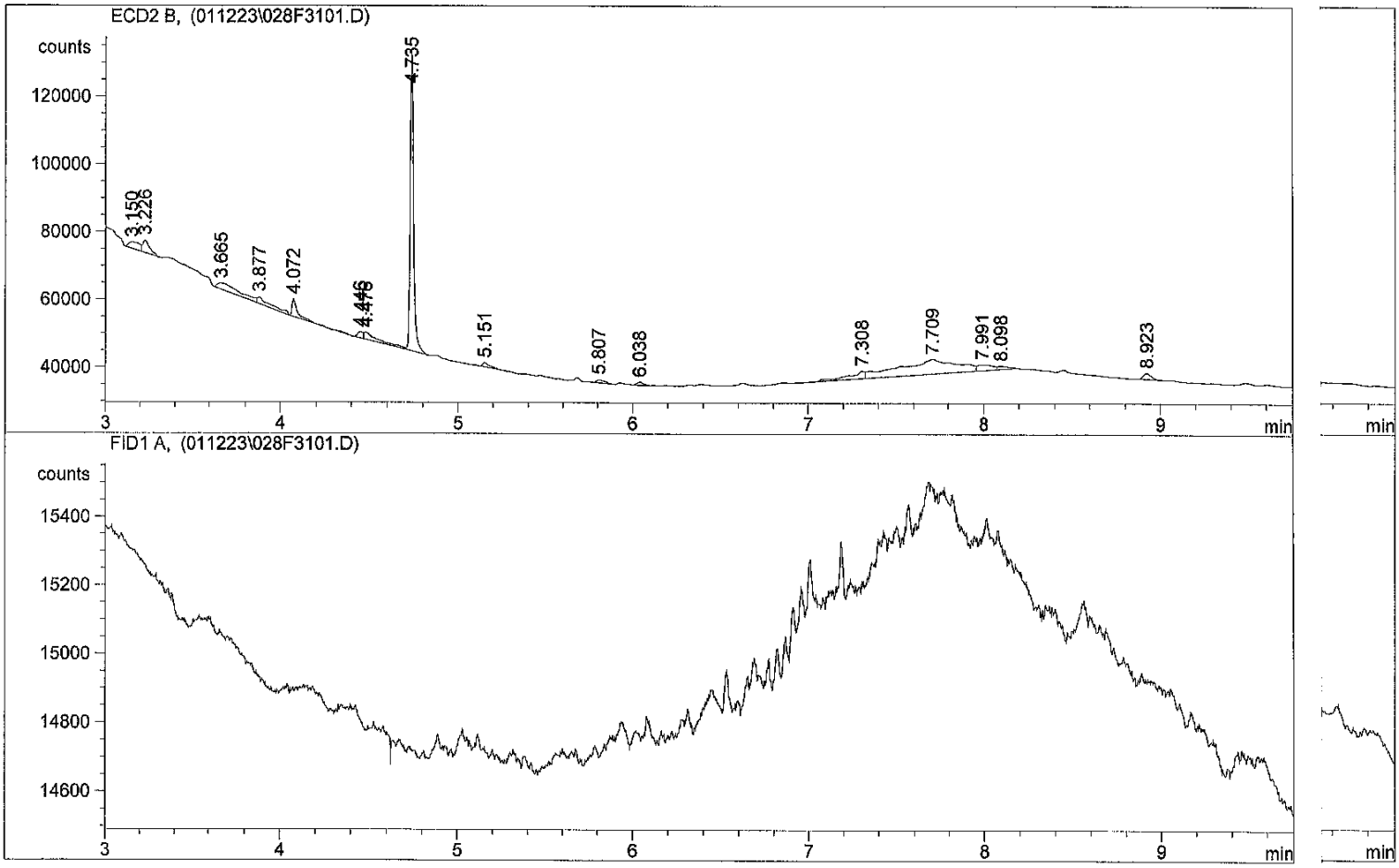
*** End of Report ***

Injection Date	: 1/12/2023 11:51:23 PM	Seq. Line	: 30
Sample Name	: 23A0175 01	Location	: Vial 27
Acq. Operator	: CRR	Inj	: 1
		Inj Volume	: 1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\011223.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		
SCREEN METHOD			



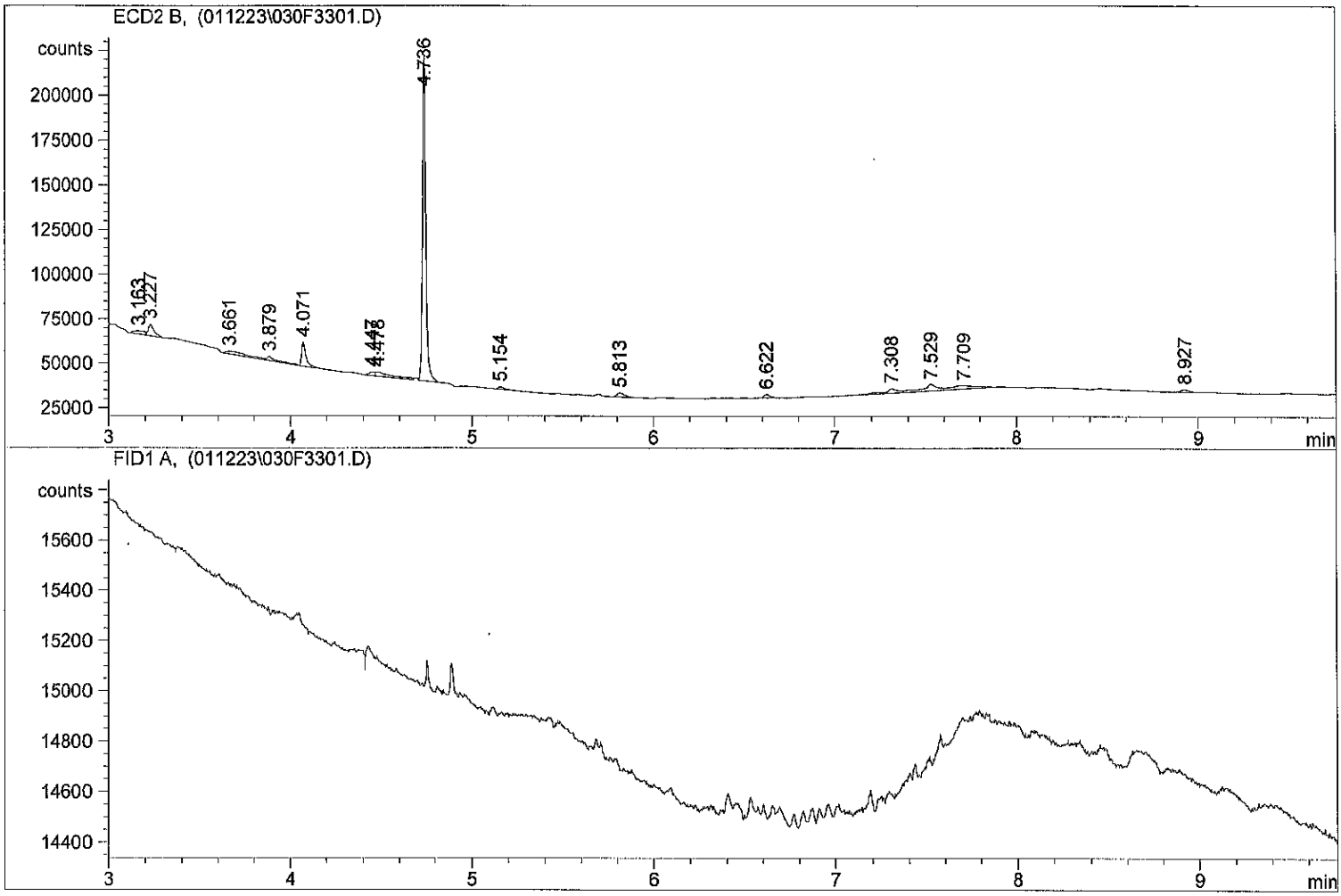
*** End of Report ***

Injection Date	: 1/13/2023 12:05:19 AM	Seq. Line	: 31
Sample Name	: 23A0175 02	Location	: Vial 28
Acq. Operator	: CRR	Inj	: 1
		Inj Volume	: 1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\011223.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		
SCREEN METHOD			



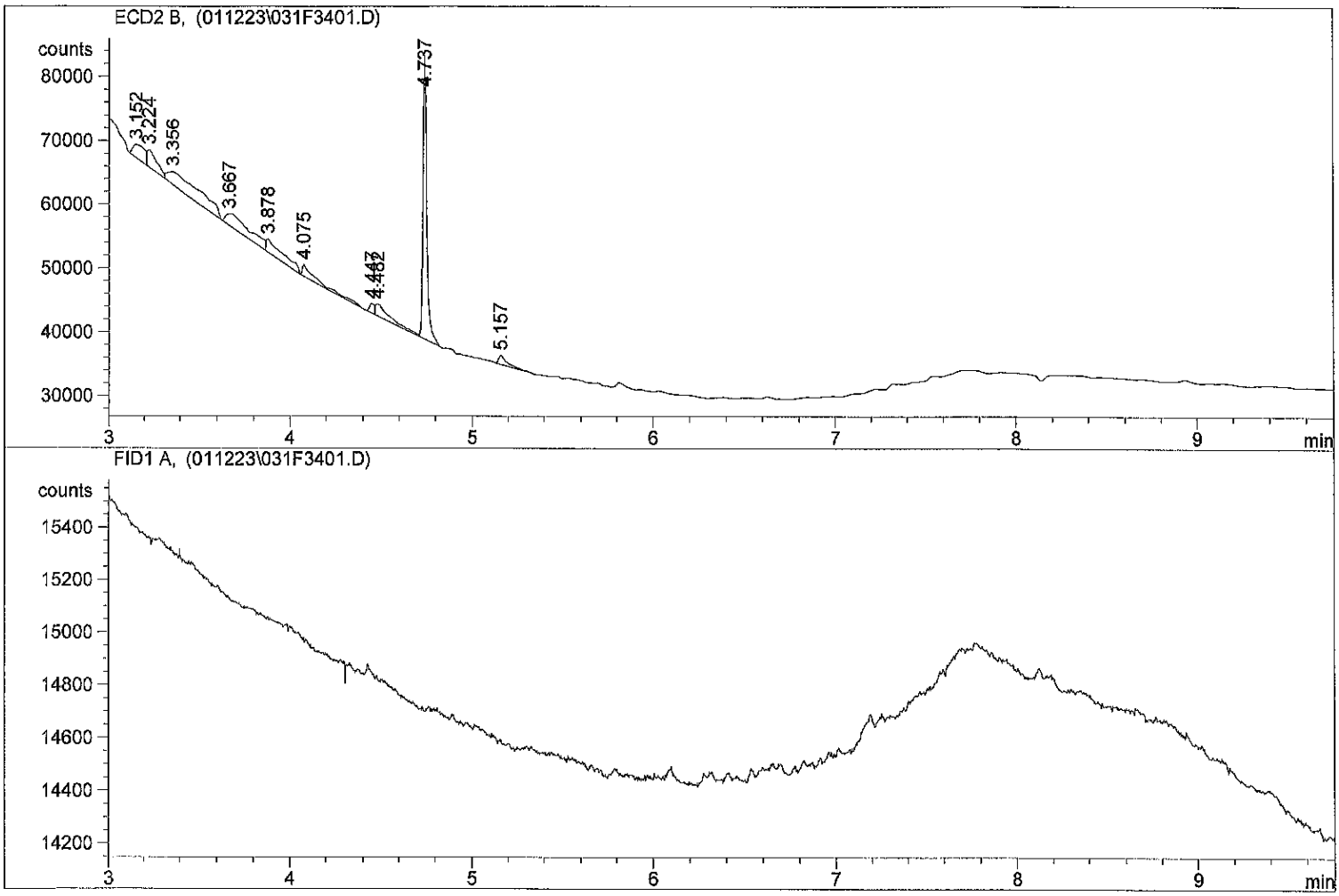
*** End of Report ***

Injection Date	: 1/13/2023 12:33:53 AM	Seq. Line	: 33
Sample Name	: 23A0175 04	Location	: Vial 30
Acq. Operator	: CRR	Inj	: 1
		Inj Volume	: 1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\011223.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		
SCREEN METHOD			



*** End of Report ***

Injection Date	: 1/13/2023 12:48:22 AM	Seq. Line	: 34
Sample Name	: 23A0175 05	Location	: Vial 31
Acq. Operator	: CRR	Inj	: 1
		Inj Volume	: 1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\011223.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		
SCREEN METHOD			

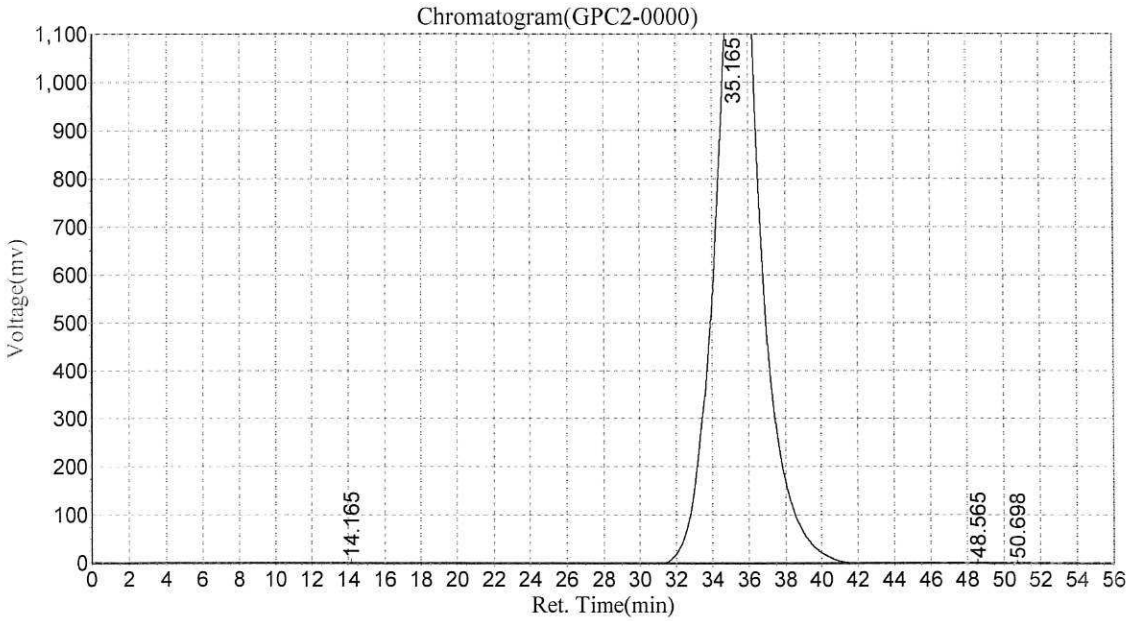


*** End of Report ***

BLA0339 23A0100/171/175 SVOC

Date:2023-01-20,6:25:05 PM
Data File:c:\n2000\data\gpc2\012023C\GPC2-0000
Method File:E:\GPC2_InHouse.mtd

Analyst£ºTWC
Date/Time2023-01-20,6:25:06 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		14.165	2355.821	129866.203	0.0526
2		35.165	1380618.375	246027616.000	99.7265
3		48.565	2928.625	405561.531	0.1644
4		50.698	1912.125	139330.469	0.0565
Total			1387814.946	246702374.203	100.000

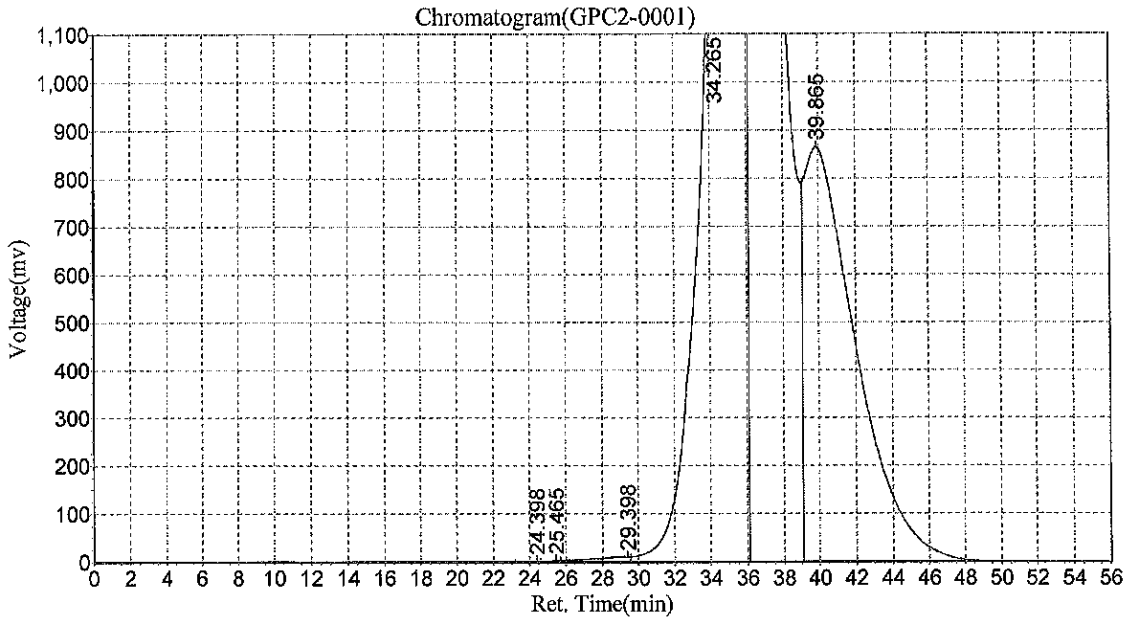
Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

Date:2023-01-20,7:22:50 PM
Data File:c:\n2000\data\gpc2\012023C\GPC2-0001
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-20,7:22:50 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		24.398	3082.843	161776.141	0.0380
2		25.465	4841.332	265272.375	0.0623
3		29.398	12859.758	2165019.250	0.5087
4		34.265	1376746.875	250336096.000	58.8195
5		39.865	867144.938	172672544.000	40.5715
Total			2264675.746	425600707.766	100.000

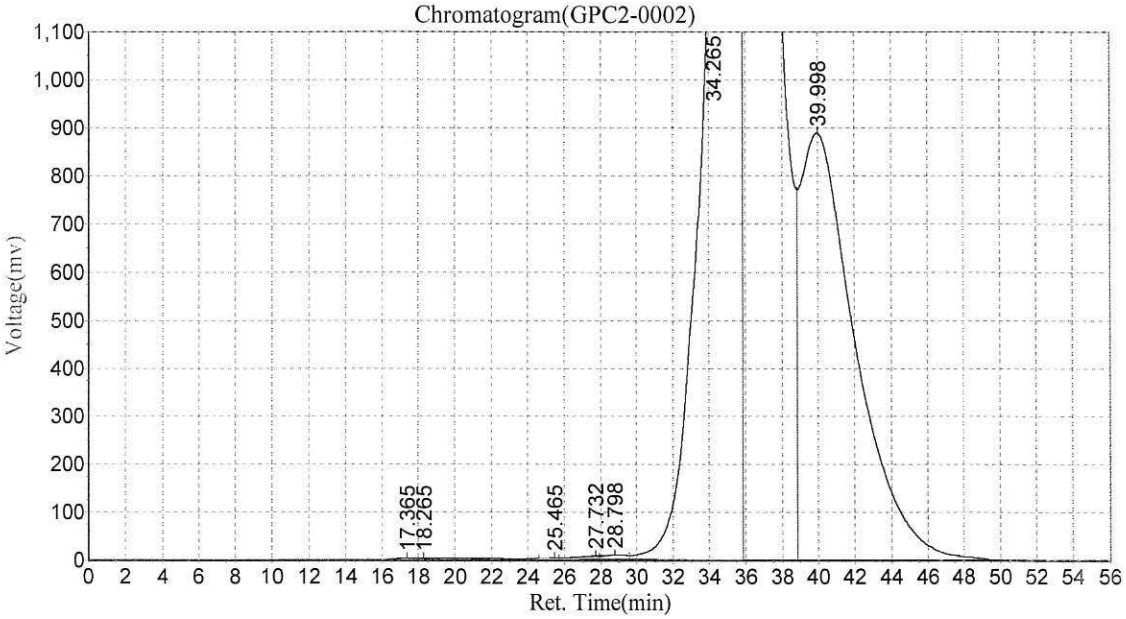
Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

Date:2023-01-20,8:20:31 PM
Data File:c:\n2000\data\gpc2\012023C\GPC2-0002
Method File:E:\GPC2_InHouse.mtd

Analyst£ºTWC
Date/Time2023-01-20,8:20:32 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.365	5878.328	502761.094	0.1214
2		18.265	4504.448	164075.000	0.0396
3		25.465	3353.584	170344.141	0.0411
4		27.732	7886.658	752541.188	0.1817
5		28.798	10172.752	927116.813	0.2238
6		34.265	1374446.125	222966464.000	53.8221
7		39.998	891644.250	188782048.000	45.5703
Total			2297886.145	414265350.234	100.000

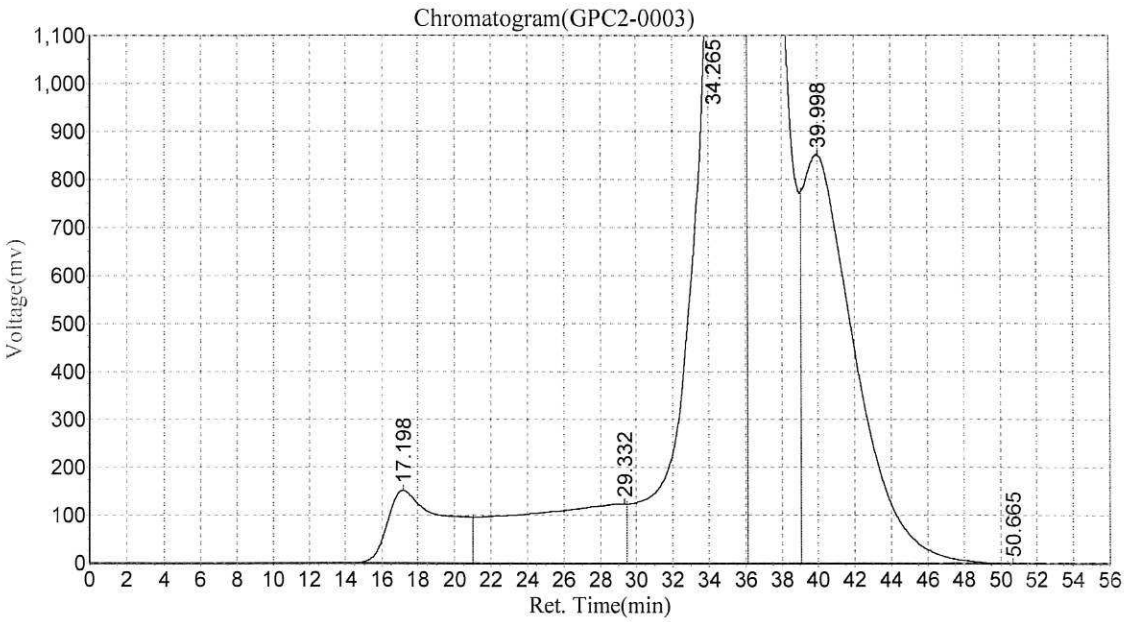
Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

Date:2023-01-20,9:18:15 PM
Data File:c:\n2000\data\gpc2\012023C\GPC2-0003
Method File:E:\GPC2_InHouse.mtd

Analyst£ºTWC
Date/Time2023-01-20,9:18:15 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.198	156825.906	36315072.000	6.6984
2		29.332	129843.258	57815964.000	10.6643
3		34.265	1379522.500	276161824.000	50.9388
4		39.998	856471.125	171607648.000	31.6535
5		50.665	4136.930	243422.797	0.0449
Total			2526799.719	542143930.797	100.000

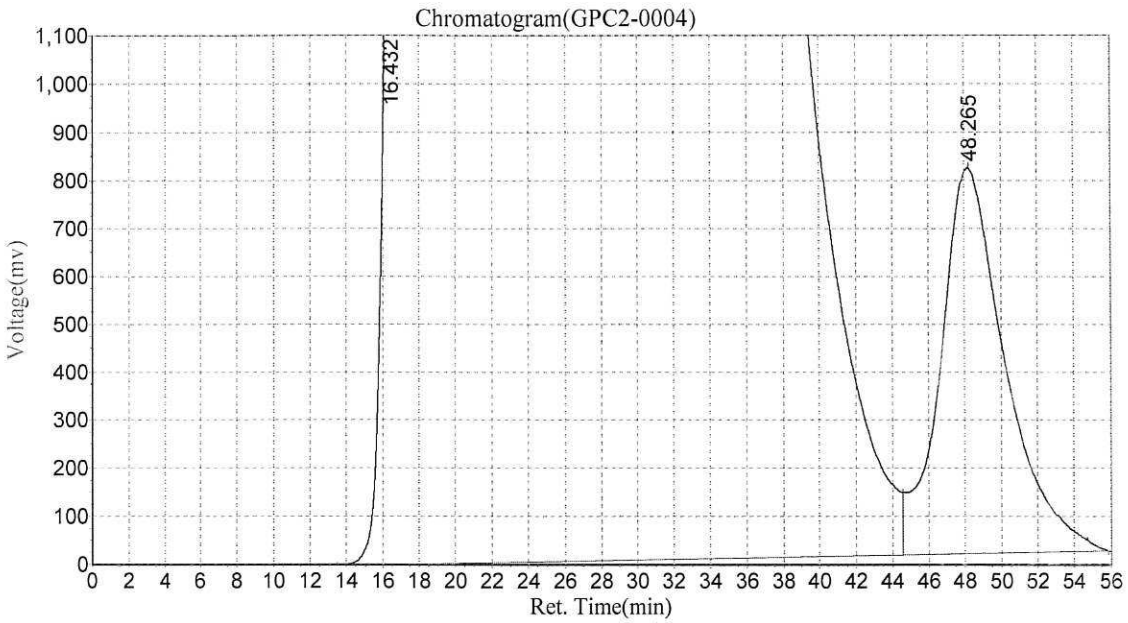
Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

Date:2023-01-20,10:15:56 PM
Data File:c:\n2000\data\gpc2\012023C\GPC2-0004
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-20,10:15:57 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.432	1379648.000	2066226944.000	91.2135
2		48.265	802961.250	199036640.000	8.7865
Total			2182609.250	2265263584.000	100.000

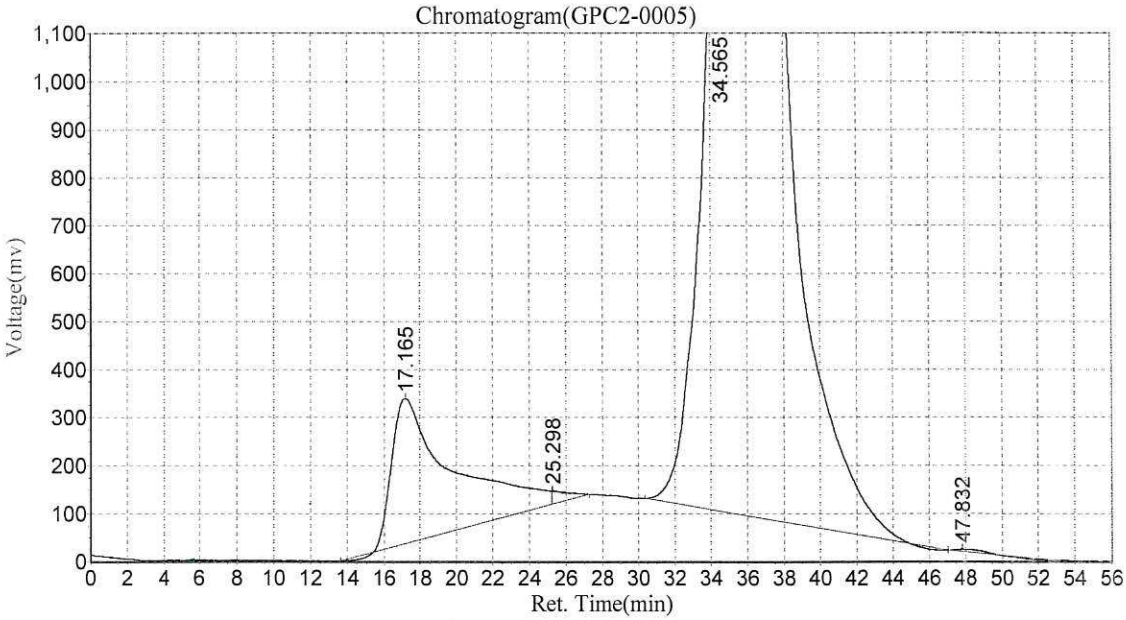
Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

Date:2023-01-20,11:13:40 PM
Data File:c:\n2000\data\gpc2\012023C\GPC2-0005
Method File:E:\GPC2_InHouse.mtd

Analyst£ºTWC
Date/Time2023-01-20,11:13:40 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.165	300971.875	69998656.000	12.9410
2		25.298	27046.807	1662958.375	0.3074
3		34.565	1271107.000	468854592.000	86.6795
4		47.832	4826.182	389502.344	0.0720
Total			1603951.863	540905708.719	100.000

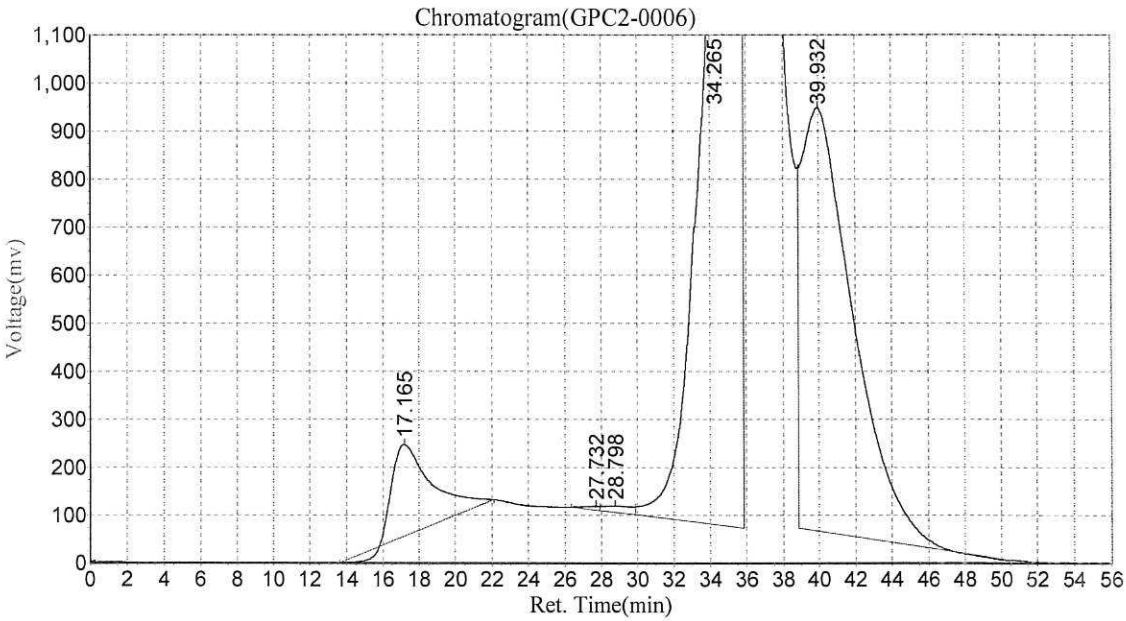
Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

Date:2023-01-21,12:11:21 AM
Data File:c:\n2000\data\gpc2\012023C\GPC2-0006
Method File:E:\GPC2_InHouse.mtd

Analyst£ºTWC
Date/Time2023-01-21,12:11:22 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.165	192509.578	27834004.000	6.5111
2		27.732	10428.657	642641.188	0.1503
3		28.798	16083.603	1793864.875	0.4196
4		34.265	1294846.875	217890784.000	50.9702
5		39.932	894712.750	179325216.000	41.9487
Total			2408581.463	427486510.063	100.000

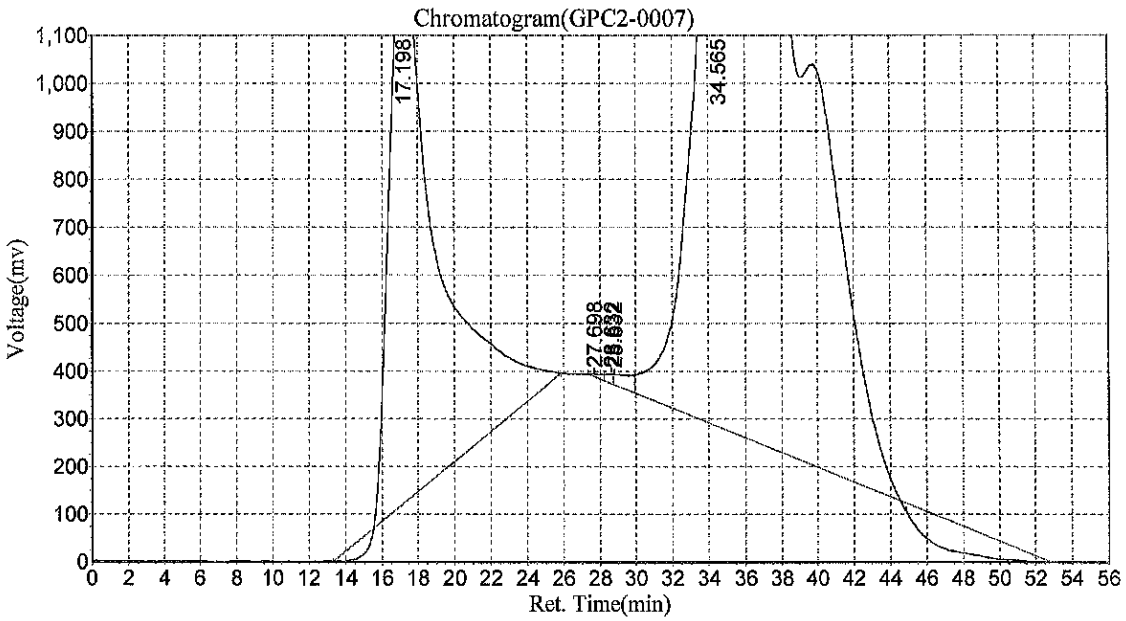
Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

Date:2023-01-21,1:09:09 AM
Data File:c:\n2000\data\gpc2\012023C\GPC2-0007
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-21,1:09:09 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.198	1182877.750	217554256.000	28.8674
2		27.698	5818.384	355312.250	0.0471
3		28.632	19946.258	558526.500	0.0741
4		28.832	22879.088	1985031.250	0.2634
5		34.565	1091588.875	533179840.000	70.7479
Total			2323110.354	753632966.000	100.000

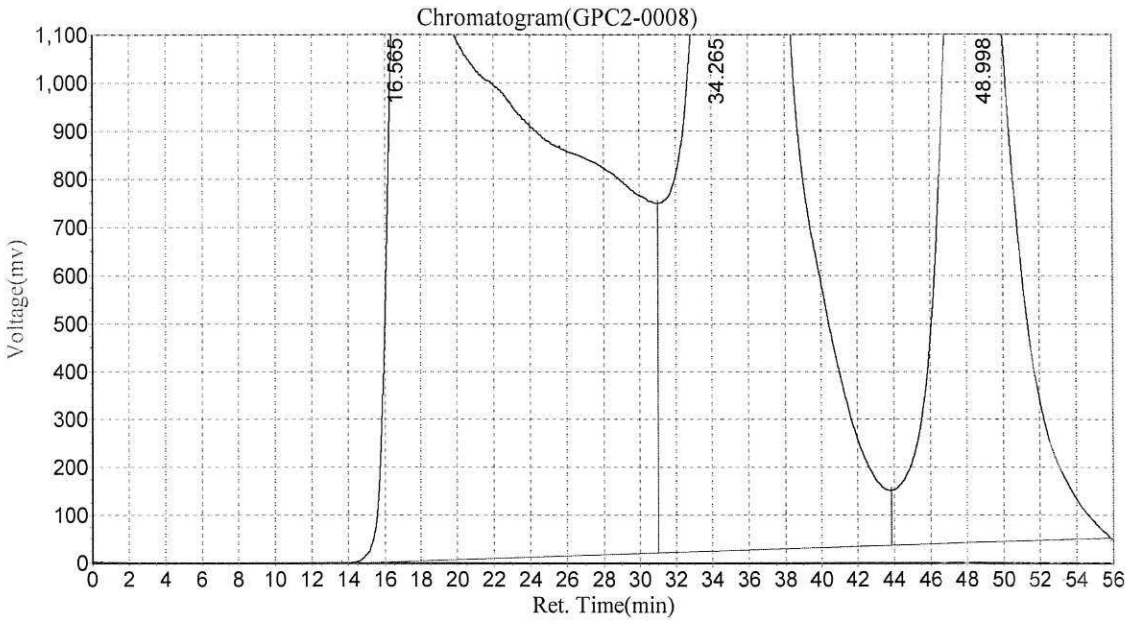
Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

Date:2023-01-21,2:06:50 AM
Data File:c:\n2000\data\gpc2\012023C\GPC2-0008
Method File:E:\GPC2_InHouse.mtd

Analyst£ºTWC
Date/Time2023-01-21,2:06:51 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.565	1377167.375	885329344.000	45.3285
2		34.265	1348821.375	663522432.000	33.9721
3		48.998	1333331.125	404289376.000	20.6994
Total			4059319.875	1953141152.000	100.000

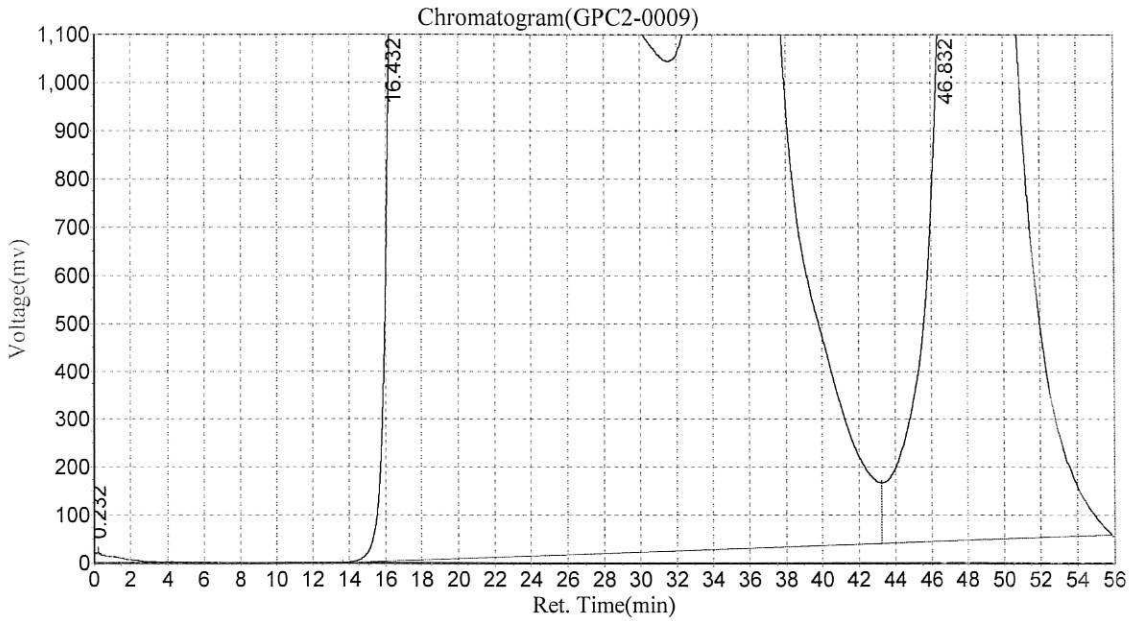
Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

Date:2023-01-21,3:04:38 AM
Data File:c:\n2000\data\gpc2\012023C\GPC2-0009
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-21,3:04:39 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		0.232	4864.000	105691.500	0.0046
2		16.432	1374903.750	1790510080.000	78.3346
3		46.832	1329911.250	495105952.000	21.6608
Total			2709679.000	2285721723.500	100.000

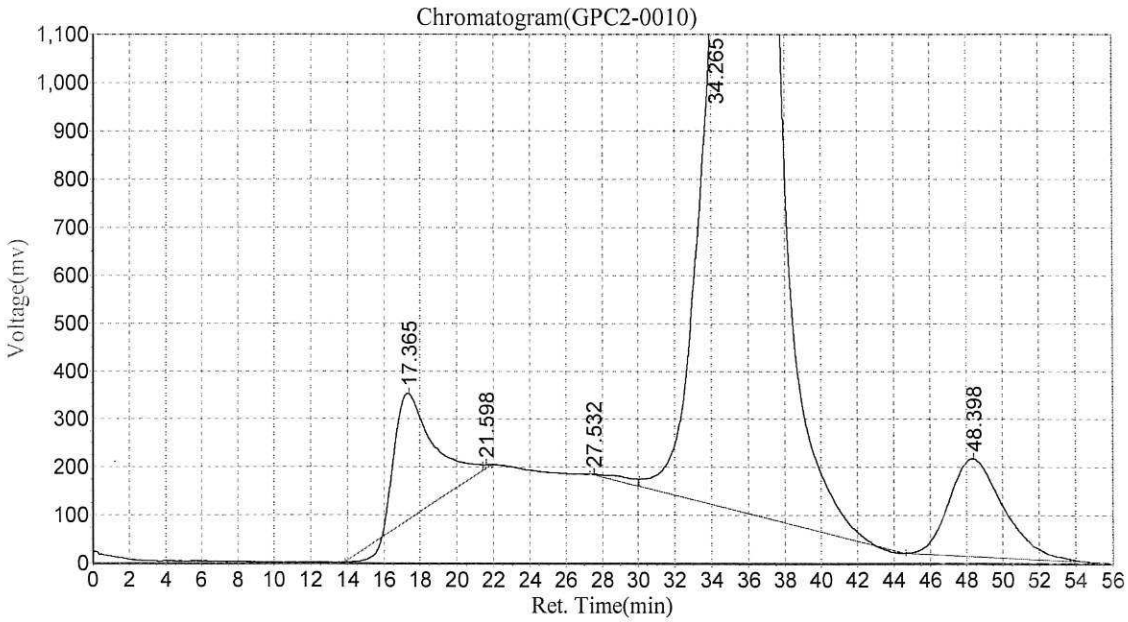
Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

Date:2023-01-21,4:02:20 AM
Data File:c:\n2000\data\gpc2\012023C\GPC2-0010
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-21,4:02:20 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.365	263447.094	37416400.000	7.7267
2		21.598	9207.936	192966.688	0.0398
3		27.532	2137.169	1346051.375	0.2780
4		34.265	1254070.250	402599680.000	83.1386
5		48.398	203122.875	42695984.000	8.8169
Total			1731985.323	484251082.063	100.000

Ingredient Table

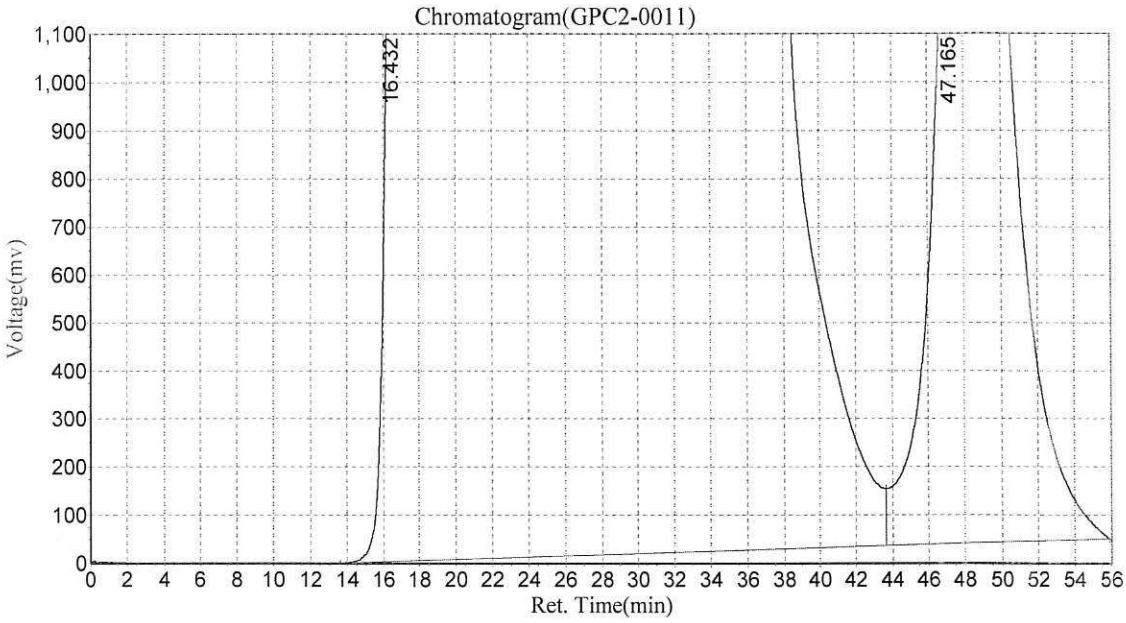
No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

-03

BLA0339 23A0100/171/175 SVOC

Date:2023-01-21,5:00:03 AM
Data File:c:\n2000\data\gpc2\012023C\GPC2-0011
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-21,5:00:03 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.432	1375903.375	1937832576.000	81.0795
2		47.165	1335798.500	452206304.000	18.9205
Total			2711701.875	2390038880.000	100.000

Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

Date:2023-01-21,5:57:44 AM
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Method File:E:\GPC2_InHouse.mtd

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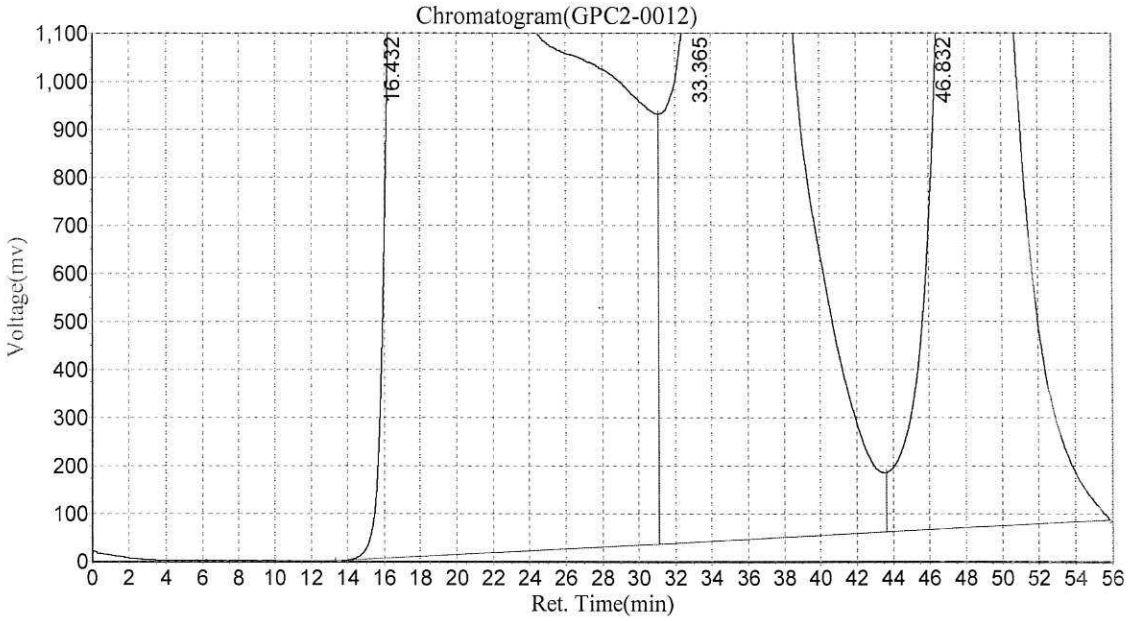

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.432	1371419.000	1041449216.000	47.2922
2		33.365	1331511.750	688033280.000	31.2436
3		46.832	1307420.625	472673760.000	21.4641
Total			4010351.375	2202156256.000	100.000

Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

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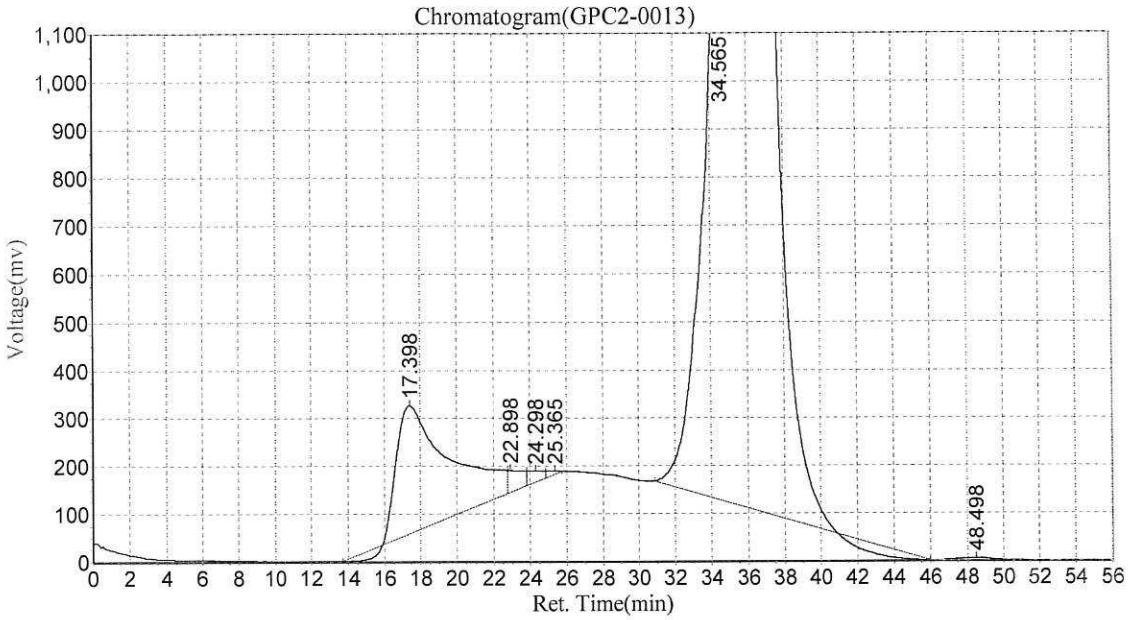

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.398	268616.563	52454260.000	12.6611
2		22.898	46727.918	2535821.750	0.6121
3		24.298	24125.773	1387161.250	0.3348
4		25.365	7505.756	448476.625	0.1083
5		34.565	1246506.250	356417568.000	86.0300
6		48.498	5759.373	1051160.625	0.2537
Total			1599241.633	414294448.250	100.000

Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

Date:2023-01-21,7:53:09 AM
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Method File:E:\GPC2_InHouse.mtd

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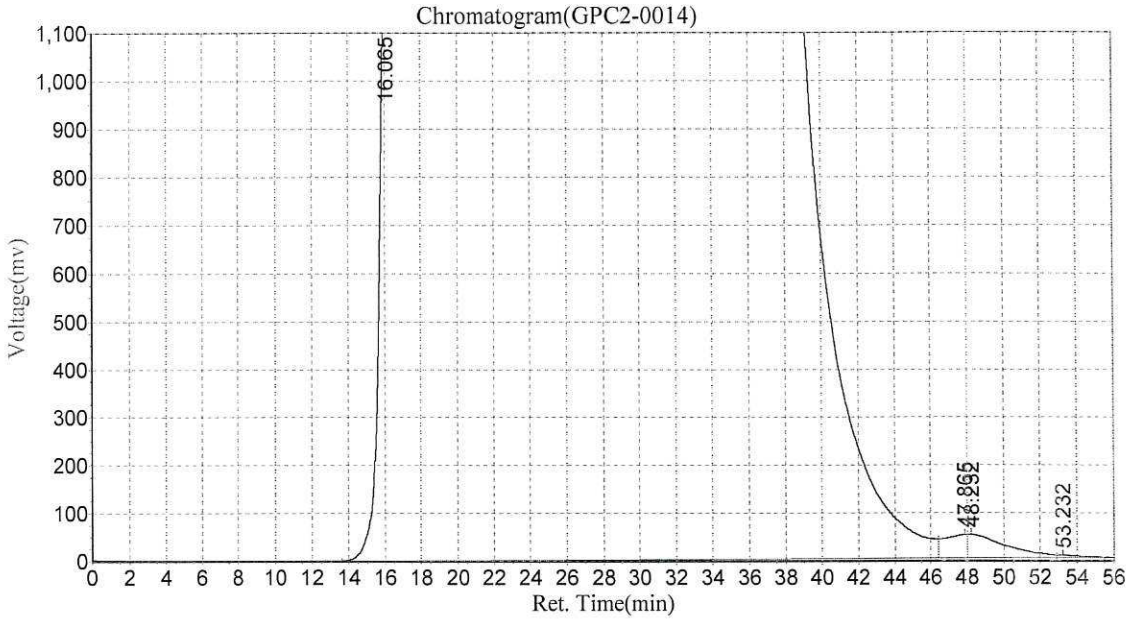

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.065	1379516.250	2050428288.000	99.4301
2		47.865	48926.121	4151270.500	0.2013
3		48.232	49040.906	7214381.500	0.3498
4		53.232	5067.695	387461.938	0.0188
Total			1482550.973	2062181401.938	100.000

Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

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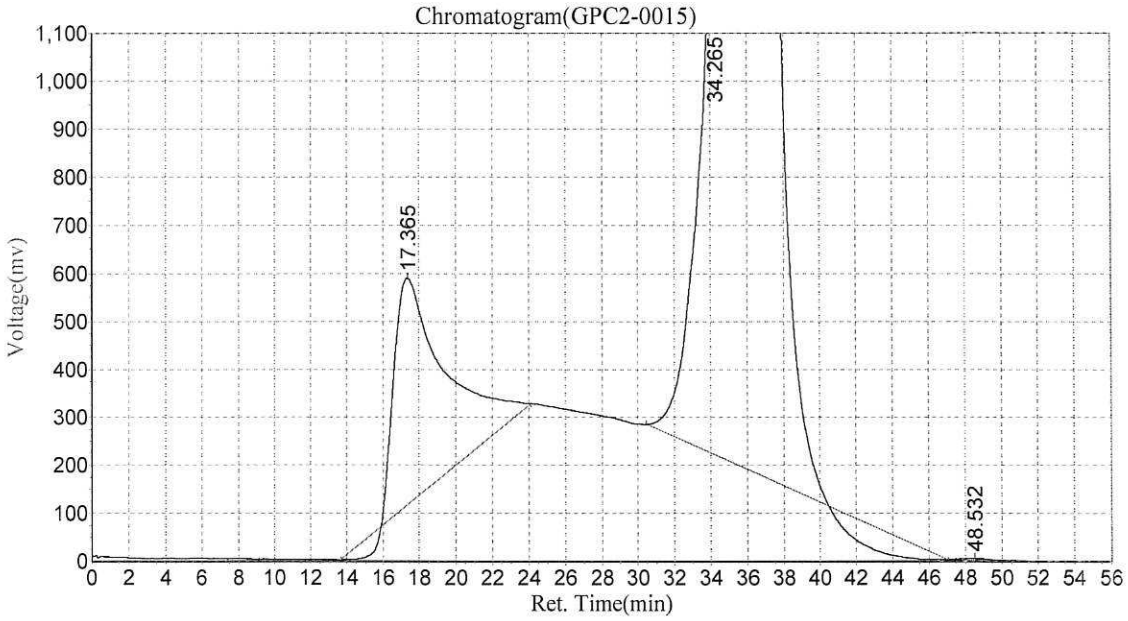

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.365	471208.625	87936352.000	19.8310
2		34.265	1153346.500	354968768.000	80.0509
3		48.532	3364.561	523539.719	0.1181
Total			1627919.686	443428659.719	100.000

Ingredient Table

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

BLA0339 23A0100/171/175 SVOC

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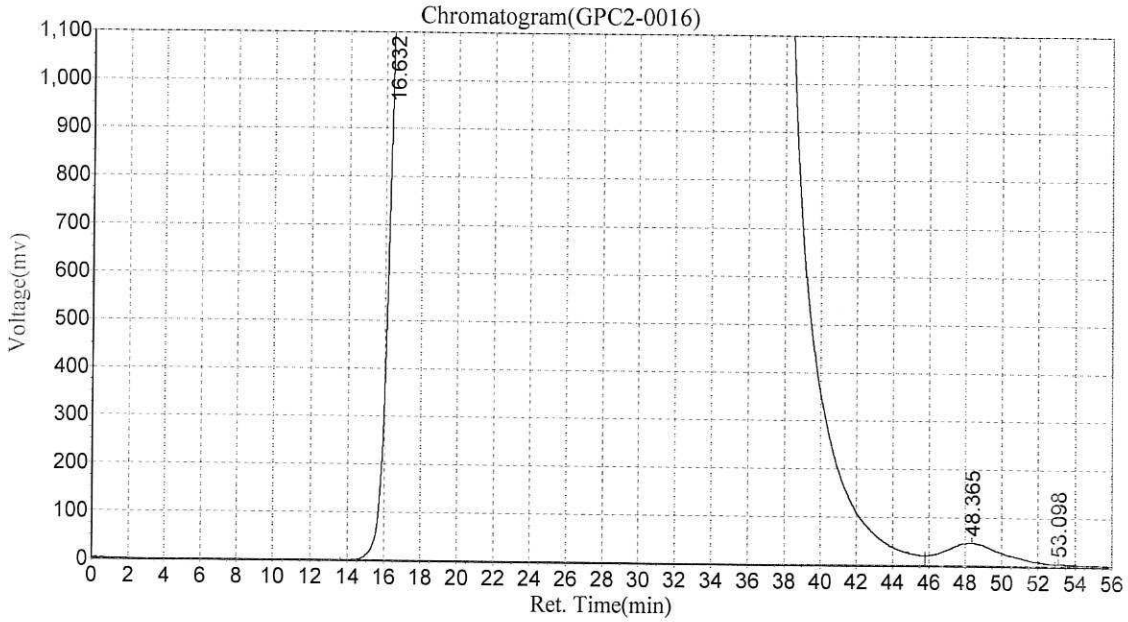

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.632	1379896.000	1918036864.000	99.4152
2		48.365	46587.324	11001886.000	0.5702
3		53.098	4165.492	281130.594	0.0146
Total			1430648.816	1929319880.594	100.000

Ingredient Table

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

2023-01-21

Analytical Resources, Inc.

BLA0339 23A0100/171/175 SVOC

Date:2023-01-21,10:46:17 AM
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Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
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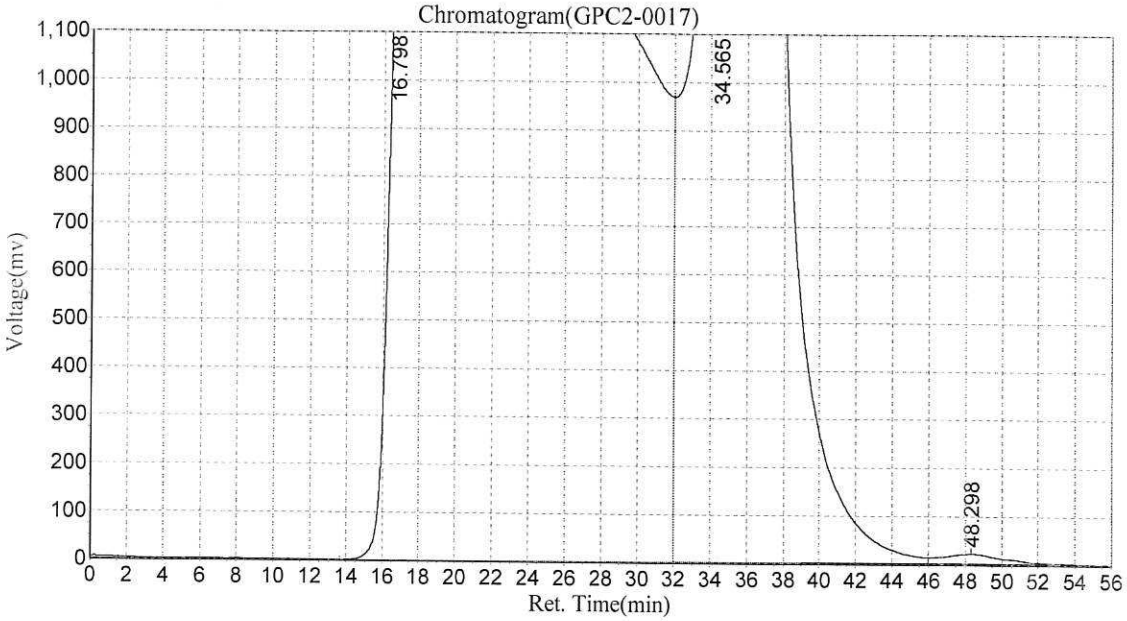


Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.798	1378280.875	1172357504.000	67.3789
2		34.565	1372150.875	563236608.000	32.3709
3		48.298	19545.408	4353855.000	0.2502
Total			2769977.158	1739947967.000	100.000

Ingredient Table

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

2023-01-21

Analytical Resources, Inc.

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLA0198	Cleanup Type:	GPC
Cleanup Method:	EPA 3640A GPC Cleanup 1:1	Analysis:	EPA 8270E-SIM

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Reference	BLA0339-SRM2	NT1423021724s.D	01/23/2023	
LCS Dup	BLA0339-BSD2	NT1423021723s.D	01/23/2023	
LCS	BLA0339-BS2	NT1423021722s.D	01/23/2023	
Blank	BLA0339-BLK2	NT1423021721s.D	01/23/2023	
LDW23-SS1254	23A0171-01	NT1423021730s.D	01/23/2023	
LDW23-SS1245	23A0171-04	NT1423021733s.D	01/23/2023	
LDW23-SS1262	23A0171-03	NT1423021732s.D	01/23/2023	
LDW23-SS1257	23A0171-02	NT1423021731s.D	01/23/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLA0198

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Check Standard: CLA0166-GPC1** **Printed: 1/23/2023 1:41:33PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0100-21	A	LDW23-SS1154	A 04	1	1	8270E-SIM Dual Scan SVOC	1/23/2023	NRB	
23A0100-21	A	LDW23-SS1154	A 01	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/23/2023	NRB	
23A0100-22	A	LDW23-SS1149	A 04	1	1	8270E-SIM Dual Scan SVOC	1/23/2023	NRB	
23A0100-22	A	LDW23-SS1149	A 01	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/23/2023	NRB	
23A0100-23	A	LDW23-SS1130	A 04	1	1	8270E-SIM Dual Scan SVOC	1/23/2023	NRB	
23A0100-23	A	LDW23-SS1130	A 01	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/23/2023	NRB	
23A0171-01	A	LDW23-SS1254	A 03	1	1	8270E-SIM Dual Scan SVOC	1/23/2023	NRB	
23A0171-01	A	LDW23-SS1254	A 01	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/23/2023	NRB	
23A0171-02	A	LDW23-SS1257	A 01	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/23/2023	NRB	
23A0171-02	A	LDW23-SS1257	A 03	1	1	8270E-SIM Dual Scan SVOC	1/23/2023	NRB	
23A0171-03	A	LDW23-SS1262	A 03	1	1	8270E-SIM Dual Scan SVOC	1/23/2023	NRB	
23A0171-03	A	LDW23-SS1262	A 01	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/23/2023	NRB	
23A0171-04	A	LDW23-SS1245	A 03	1	1	8270E-SIM Dual Scan SVOC	1/23/2023	NRB	
23A0171-04	A	LDW23-SS1245	A 01	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/23/2023	NRB	
23A0175-01	A	305233-01	A 01	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/23/2023	NRB	
23A0175-02	A	305233-02	A 01	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/23/2023	NRB	
23A0175-03	A	305233-03	A 01	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/23/2023	NRB	
23A0175-04	A	305233-04	A 01	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/23/2023	NRB	
23A0175-05	A	305233-05	A 01	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/23/2023	NRB	
BLA0339-BLK1	-	Blank	-	1	1	-	1/23/2023	NRB	
BLA0339-BLK2	-	Blank	-	1	1	-	1/23/2023	NRB	
BLA0339-BS1	-	LCS	-	1	1	-	1/23/2023	NRB	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLA0198

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Check Standard: CLA0166-GPC1** **Printed: 1/23/2023 1:41:33PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
BLA0339-BS2	-	LCS	-	1	1	-	1/23/2023	NRB	
BLA0339-BSD1	-	LCS Dup	-	1	1	-	1/23/2023	NRB	
BLA0339-BSD2	-	LCS Dup	-	1	1	-	1/23/2023	NRB	
BLA0339-MS1	-	Matrix Spike	-	1	1	-	1/23/2023	NRB	
BLA0339-MS2	-	Matrix Spike	-	1	1	-	1/23/2023	NRB	
BLA0339-MSD1	-	Matrix Spike Dup	-	1	1	-	1/23/2023	NRB	
BLA0339-MSD2	-	Matrix Spike Dup	-	1	1	-	1/23/2023	NRB	
BLA0339-SRM1	-	Reference	-	1	1	-	1/23/2023	NRB	
BLA0339-SRM2	-	Reference	-	1	1	-	1/23/2023	NRB	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I

METHOD BLANK DATA SHEET

EPA 8270E-SIM

Blank

Laboratory:	Analytical Resources, LLC			SDG:	23A0171
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLA0339-BLK2	File ID:	NT1423021721s.D
Sampled:	N/A	Prepared:	01/18/23 13:47	Analyzed:	02/17/23 22:43
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	10 g / 1 mL
Batch:	BLA0339	Sequence:	SLB0335	Calibration:	GC00009
Instrument:	NT14	Column:	ZB-5MS	Cleanups:	GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	1.2	J	0.6	5.0
95-50-1	1,2-Dichlorobenzene	1	5.0	U	0.7	5.0
100-51-6	Benzyl Alcohol	1	20.0	U	2.5	20.0
65-85-0	Benzoic acid	1	400	U	13.4	400
105-67-9	2,4-Dimethylphenol	1	20.0	U	2.2	20.0
120-82-1	1,2,4-Trichlorobenzene	1	5.0	U	2.7	5.0
86-30-6	N-Nitrosodiphenylamine	1	5.0	U	1.3	5.0
87-86-5	Pentachlorophenol	1	40.0	U	2.1	40.0

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
2-Fluorophenol	750.00	354	47.2	27 - 120	
p-Terphenyl-d14	500.00	416	83.1	37 - 120	Q

Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021721s.D

Date : 17-FEB-2023 22:43

Client ID:

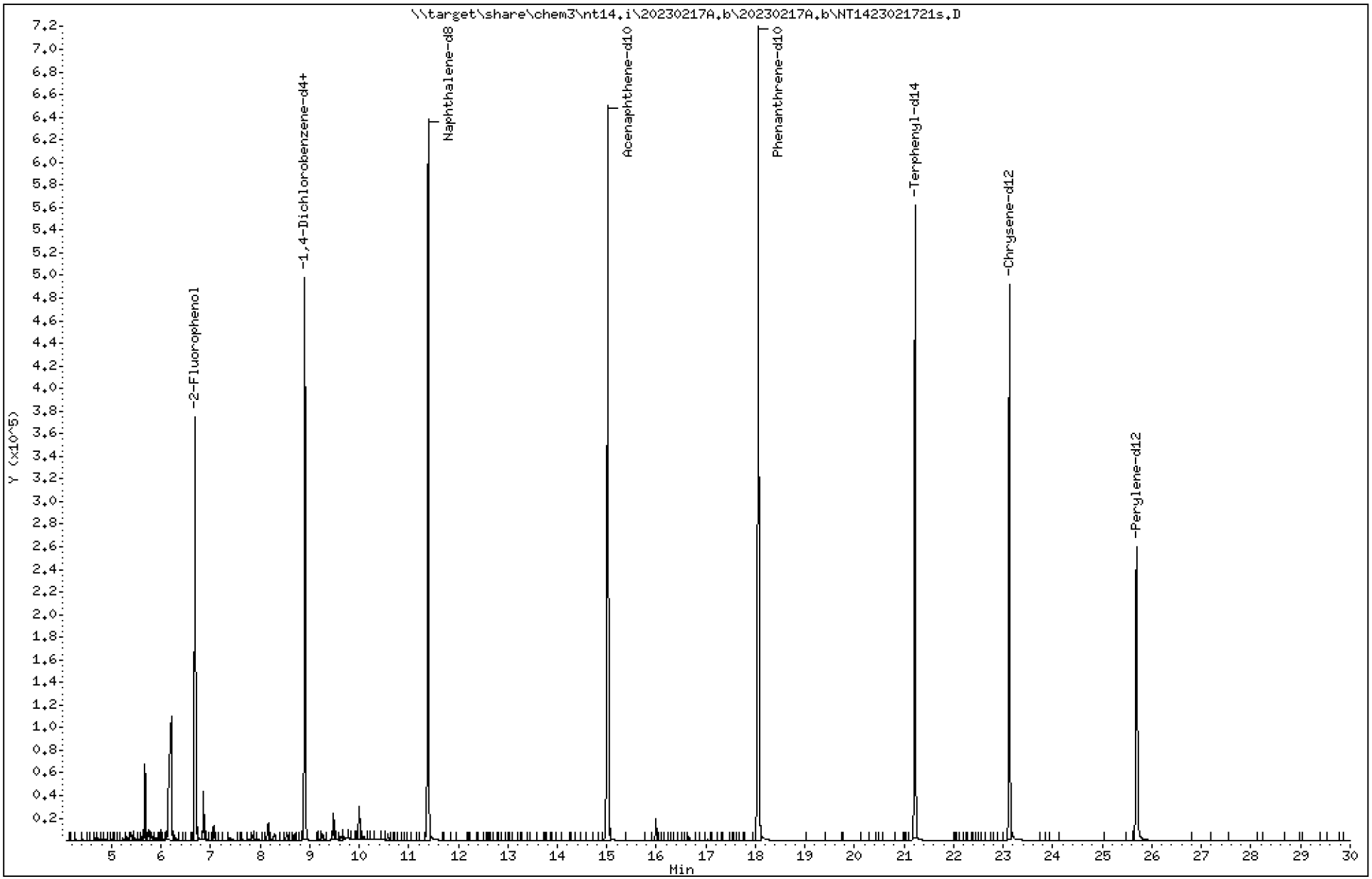
Instrument: nt14.i

Sample Info: BLA0339-BLK2

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 17-FEB-2023 22:43

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BLK2

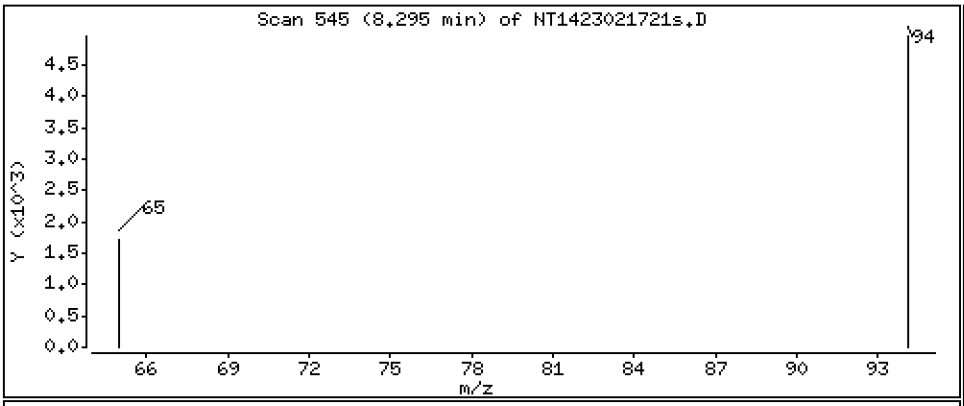
Operator: DSD

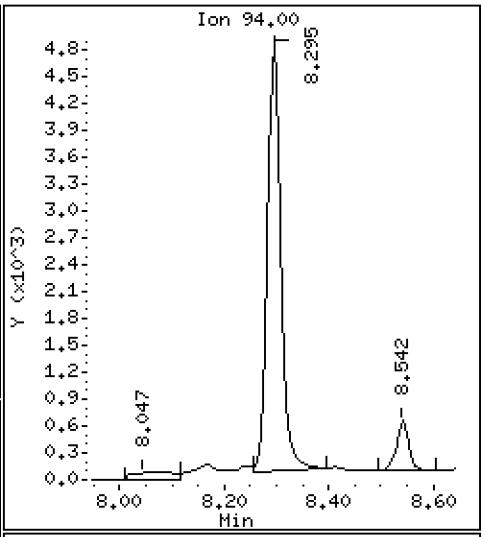
Column phase: ZB-5msi

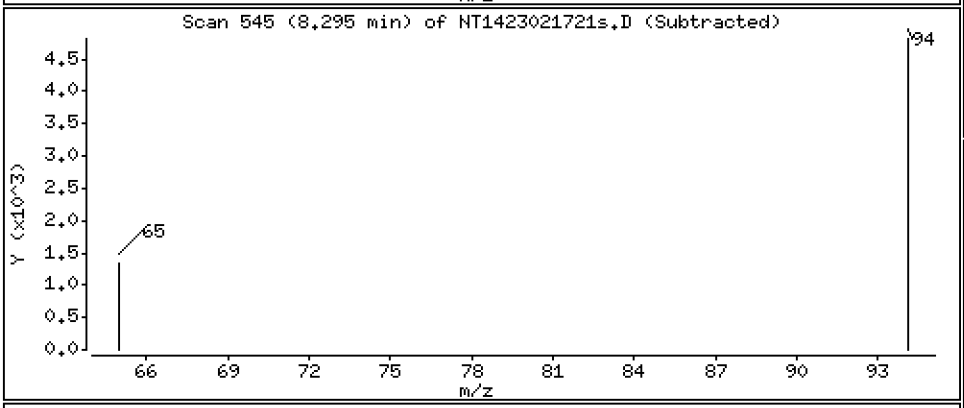
Column diameter: 0.25

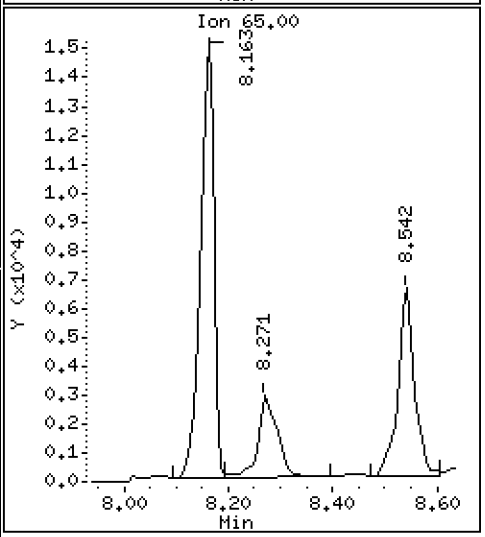
3 Phenol

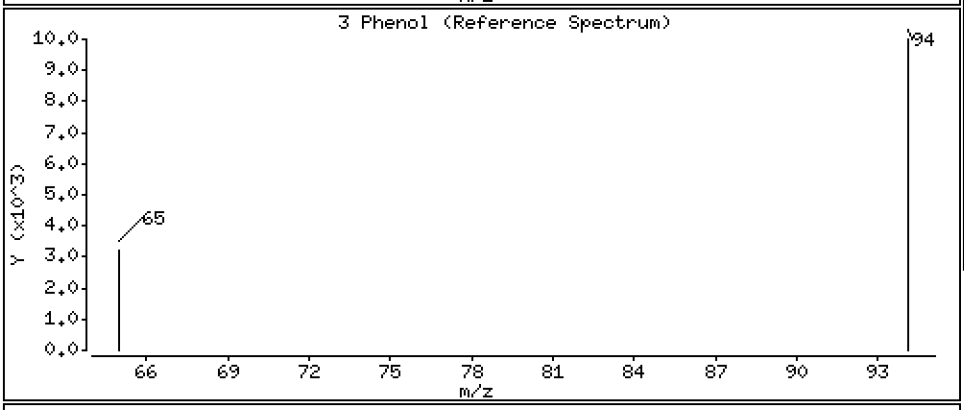
Concentration: 0.05924 ug/mL

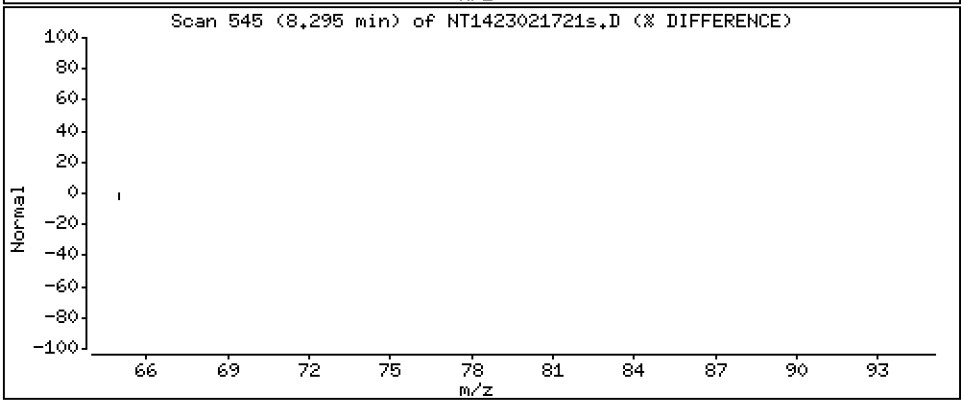












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Date : 17-FEB-2023 22:43

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BLK2

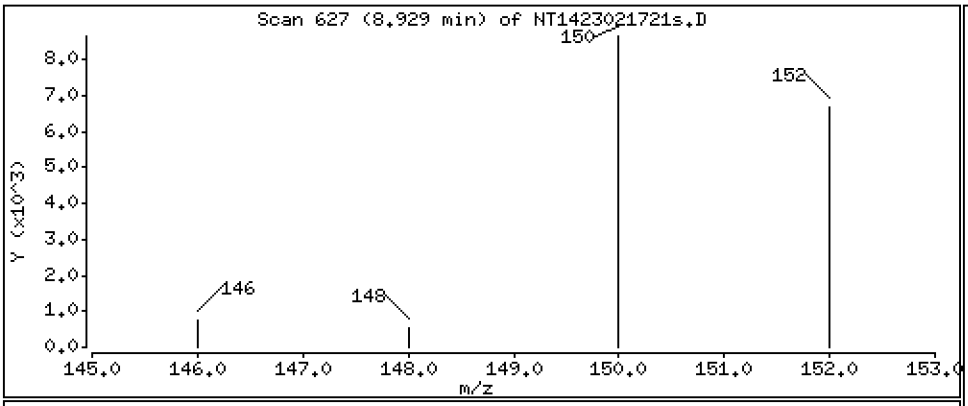
Operator: DSD

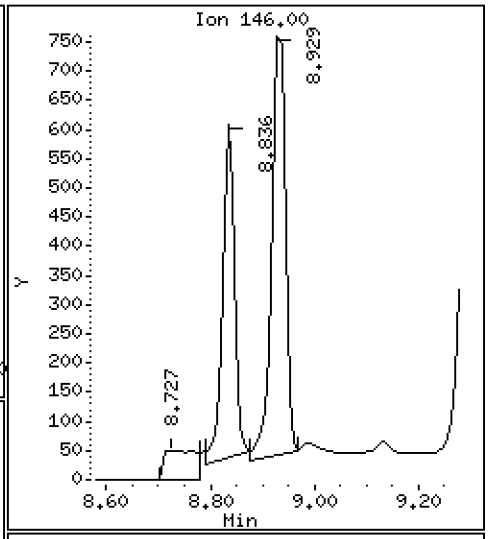
Column phase: ZB-5msi

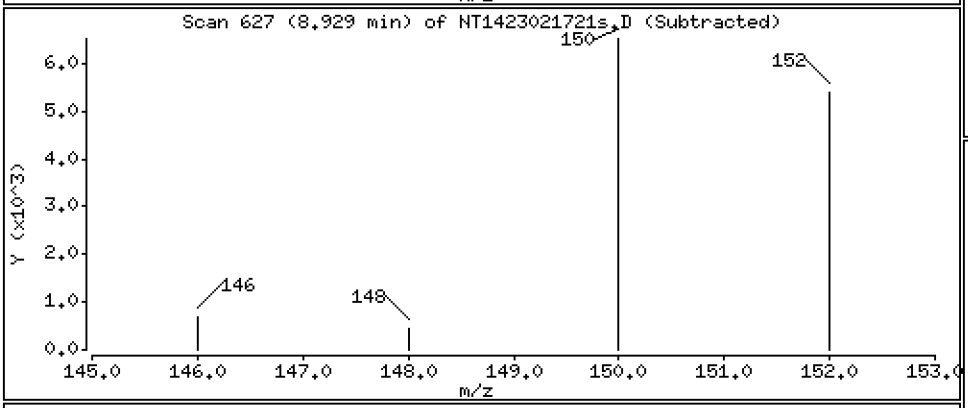
Column diameter: 0.25

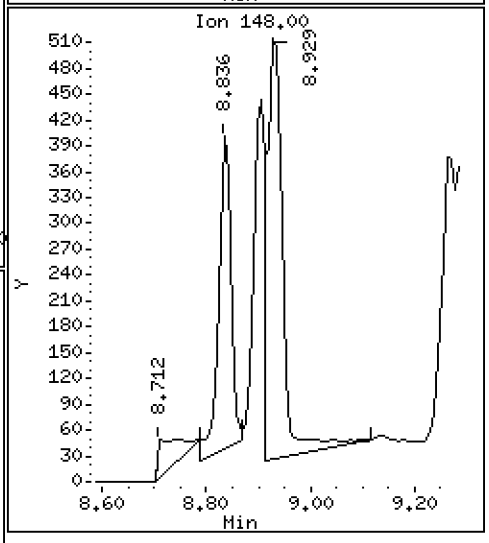
9 1,4-Dichlorobenzene

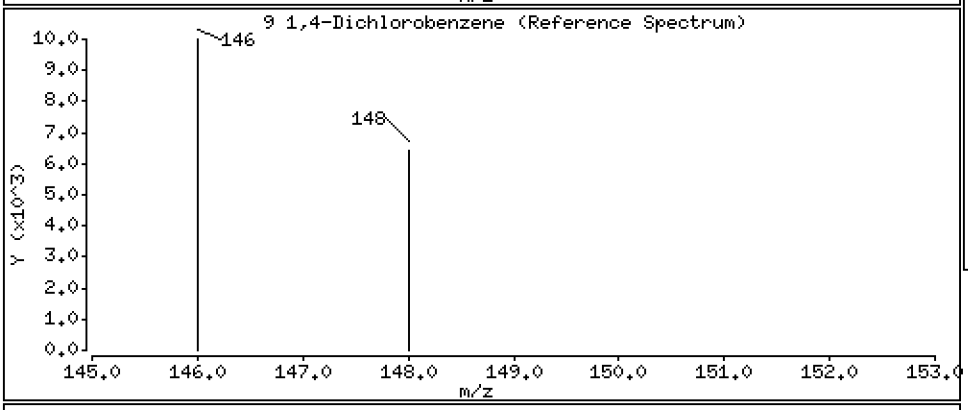
Concentration: 0.01214 ug/mL

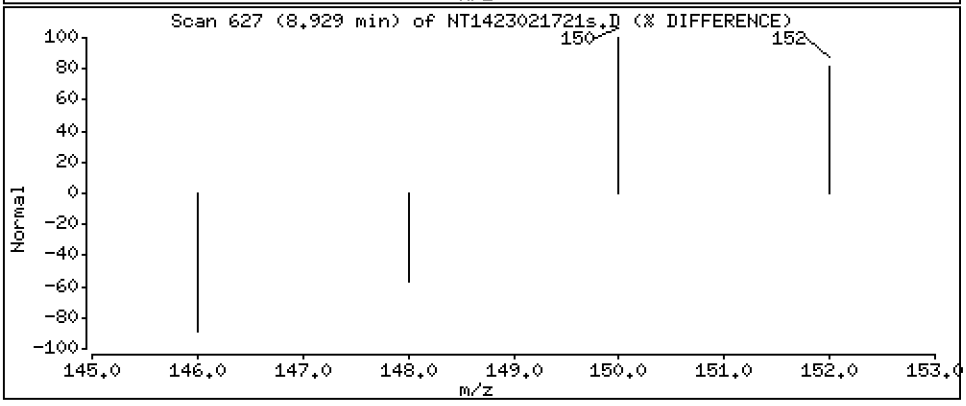












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Date : 17-FEB-2023 22:43

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BLK2

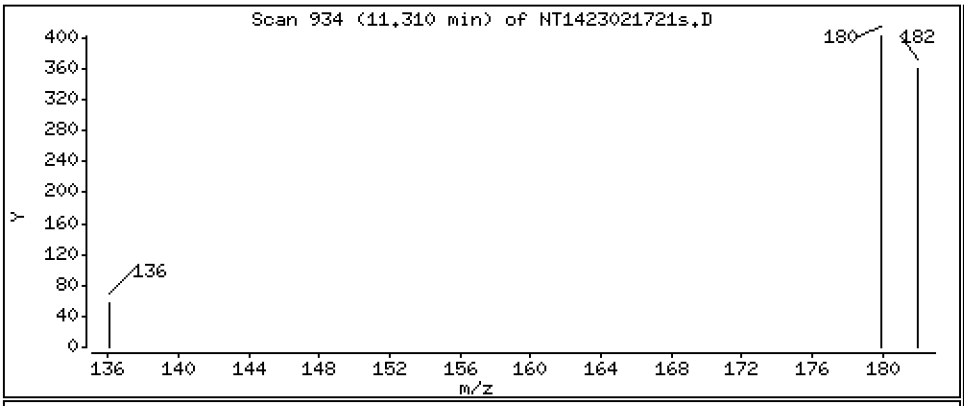
Operator: DSD

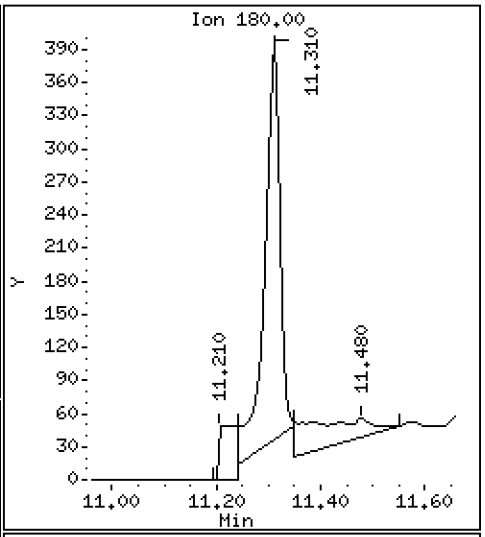
Column phase: ZB-5msi

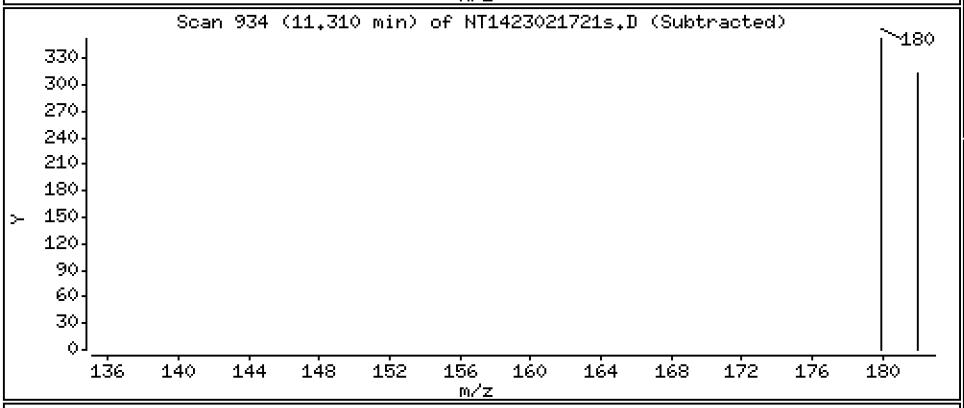
Column diameter: 0.25

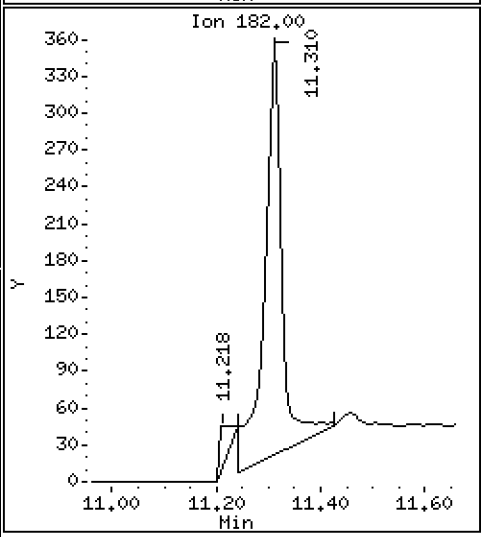
26 1,2,4-Trichlorobenzene

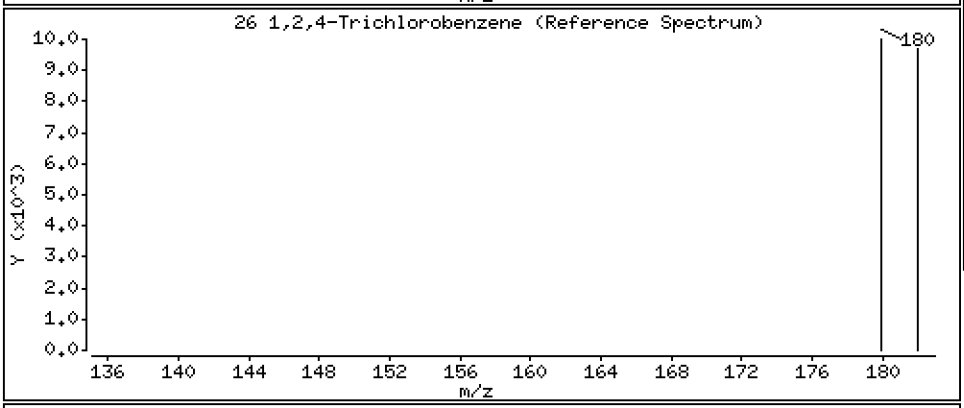
Concentration: 0.006958 ug/mL

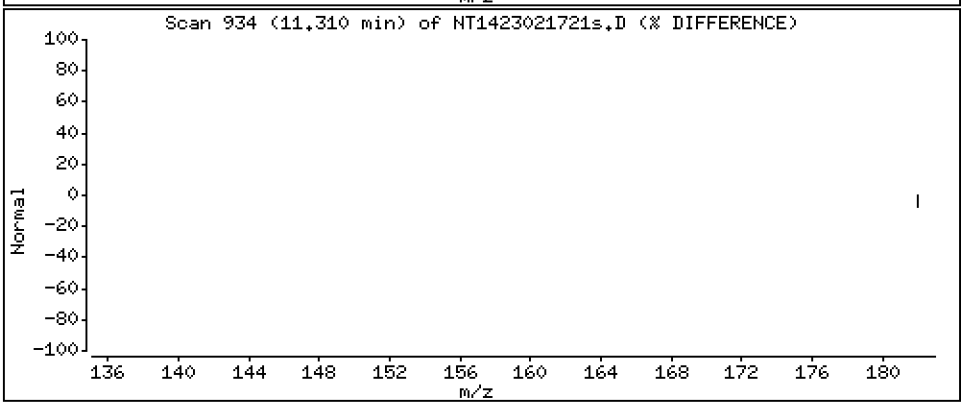












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021721s.D

Date : 17-FEB-2023 22:43

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BLK2

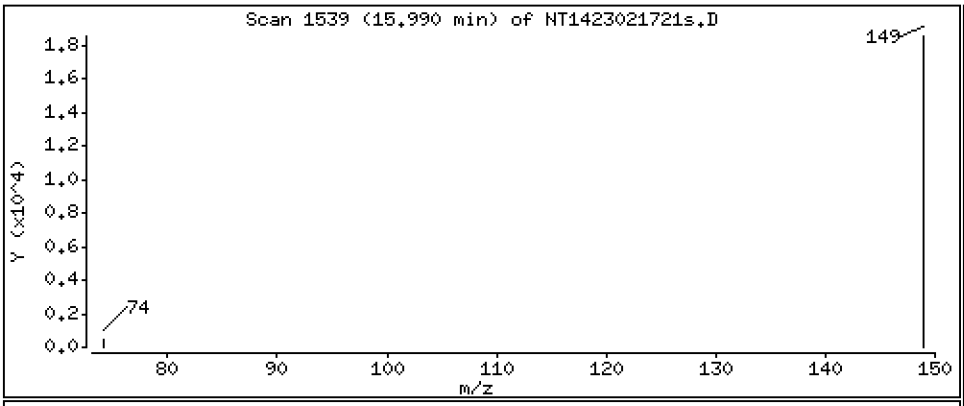
Operator: DSD

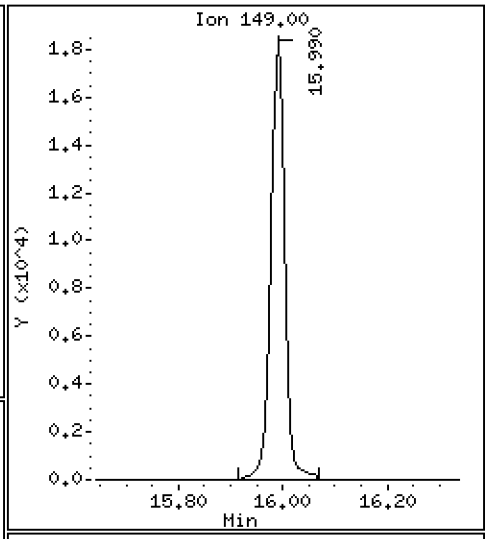
Column phase: ZB-5msi

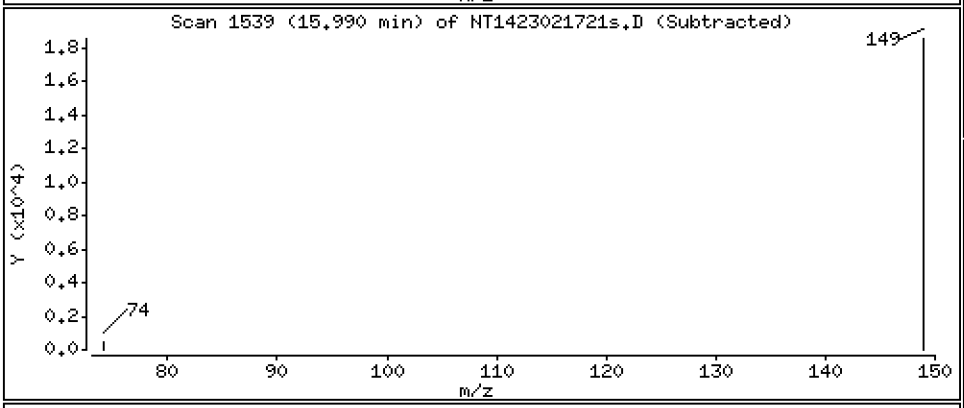
Column diameter: 0.25

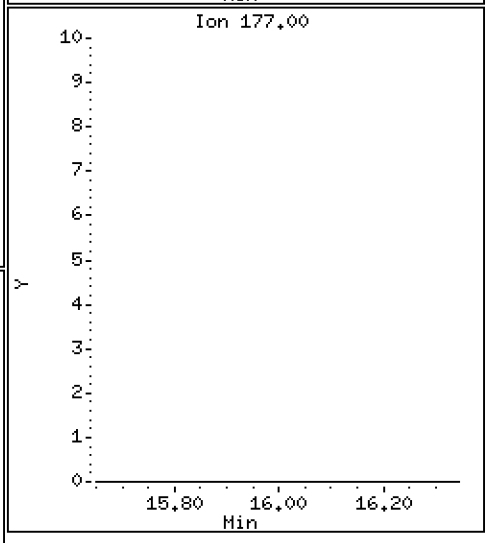
50 Diethylphthalate

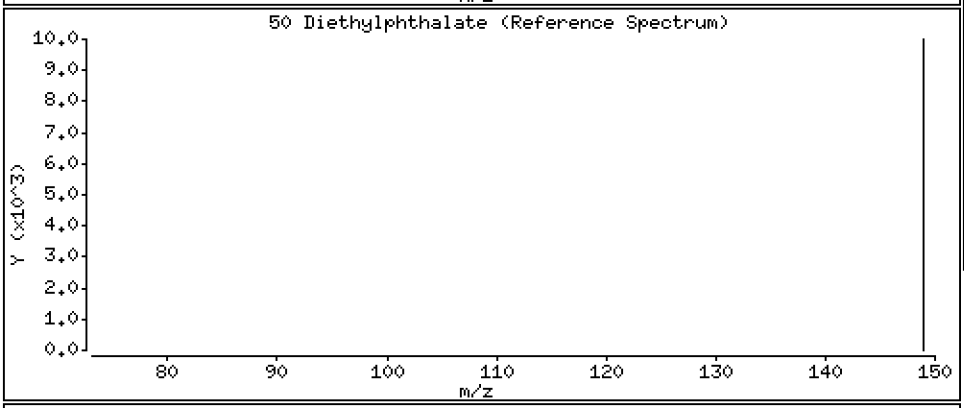
Concentration: 0.1458 ug/mL

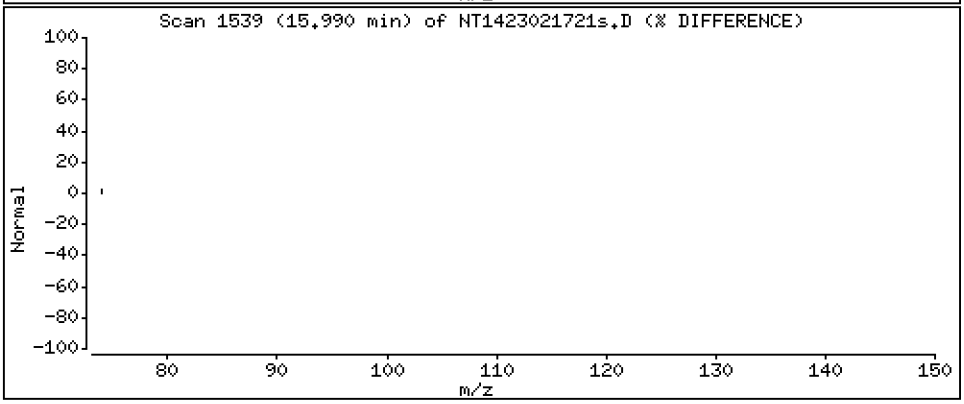












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021721s.D
Lab Smp Id: BLA0339-BLK2
Inj Date : 17-FEB-2023 22:43 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : BLA0339-BLK2
Misc Info :
Comment :
Method : \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\SIMABN2.m
Meth Date : 07-Mar-2023 12:35 van Quant Type: ISTD
Cal Date : 16-FEB-2023 20:42 Cal File: NT1423021612s.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.687	6.679	(0.751)	322803	3.54127	3.541(R)
	3 Phenol	94	8.294	8.294	(0.931)	8101	0.05924	0.05924
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.905	8.905	(1.000)	319207	4.00000	
	9 1,4-Dichlorobenzene	146	8.928	8.928	(1.003)	1258	0.01214	0.01214
	11 Benzyl alcohol	79	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	15 4-Methylphenol	108	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	24 Benzoic acid	105	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	11.310	11.309	(0.993)	728	0.00696	0.006958
*	27 Naphthalene-d8	136	11.395	11.394	(1.000)	1142078	4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	39 Dimethylphthalate	163	Compound Not Detected.					
*	42 Acenaphthene-d10	162	15.016	15.015	(1.000)	583672	4.00000	
	50 Diethylphthalate	149	15.990	15.989	(1.065)	32491	0.14579	0.1458
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.059	18.059	(1.000)	1313880	4.00000	
$	66 Terphenyl-d14	244	21.216	21.216	(0.918)	737898	4.15608	4.156(R)
	67 Butylbenzylphthalate	149	Compound Not Detected.					
*	69 Chrysene-d12	240	23.121	23.121	(1.000)	666917	4.00000	
*	77 Perylene-d12	264	25.691	25.691	(1.000)	467093	4.00000	
	79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021721s.D
Lab Smp Id: BLA0339-BLK2
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\SIMABN2.m
Misc Info:

Calibration Date: 17-FEB-2023
Calibration Time: 21:31
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	388684	194342	777368	319207	-17.87
27 Naphthalene-d8	1386667	693334	2773334	1142078	-17.64
42 Acenaphthene-d10	752189	376095	1504378	583672	-22.40
59 Phenanthrene-d10	1701919	850960	3403838	1313880	-22.80
69 Chrysene-d12	887171	443586	1774342	666917	-24.83
77 Perylene-d12	644624	322312	1289248	467093	-27.54

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	0.00
27 Naphthalene-d8	11.39	10.89	11.89	11.40	0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.00
59 Phenanthrene-d10	18.06	17.56	18.56	18.06	0.00
69 Chrysene-d12	23.12	22.62	23.62	23.12	0.00
77 Perylene-d12	25.69	25.19	26.19	25.69	0.00

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

REVIEW SUMMARY FOR FILE - NT1423021721s.D

Lab ID: BLA0339-BLK2
nt14.i, 20230217A.b\20230217A.b\SIMABN2.m,   17-FEB-2023 22:43

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: 20230217A.b/NT1423021719s.D

On Column LOD for nt14.i, 20230217A.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

LCS / LCS DUPLICATE RECOVERY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	02/17/23 23:19
Batch:	BLA0339	Laboratory ID:	BLA0339-BS2
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS
Initial/Final:	10 g / 1 mL		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
1,4-Dichlorobenzene	500	339		67.9	36 - 120
1,2-Dichlorobenzene	500	341		68.2	36 - 120
Benzyl Alcohol	500	363		72.6	25 - 123
Benzoic acid	2300	2370	Q	103	10 - 160
2,4-Dimethylphenol	1300	292		22.5	10 - 120
1,2,4-Trichlorobenzene	500	338		67.6	35 - 120
N-Nitrosodiphenylamine	500	357		71.5	27 - 120
Pentachlorophenol	1300	1340	Q	103	26 - 120

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene	500	360		72.0	5.90	30	36 - 120
1,2-Dichlorobenzene	500	361		72.1	5.60	30	36 - 120
Benzyl Alcohol	500	388		77.6	6.65	30	25 - 123
Benzoic acid	2300	2410	Q	105	1.54	30	10 - 160
2,4-Dimethylphenol	1300	718	*	55.3	84.3 *	30	10 - 120
1,2,4-Trichlorobenzene	500	358		71.6	5.63	30	35 - 120
N-Nitrosodiphenylamine	500	399		79.8	11.0	30	27 - 120
Pentachlorophenol	1300	1410	Q	108	4.46	30	26 - 120

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021722s.D

Date : 17-FEB-2023 23:19

Client ID:

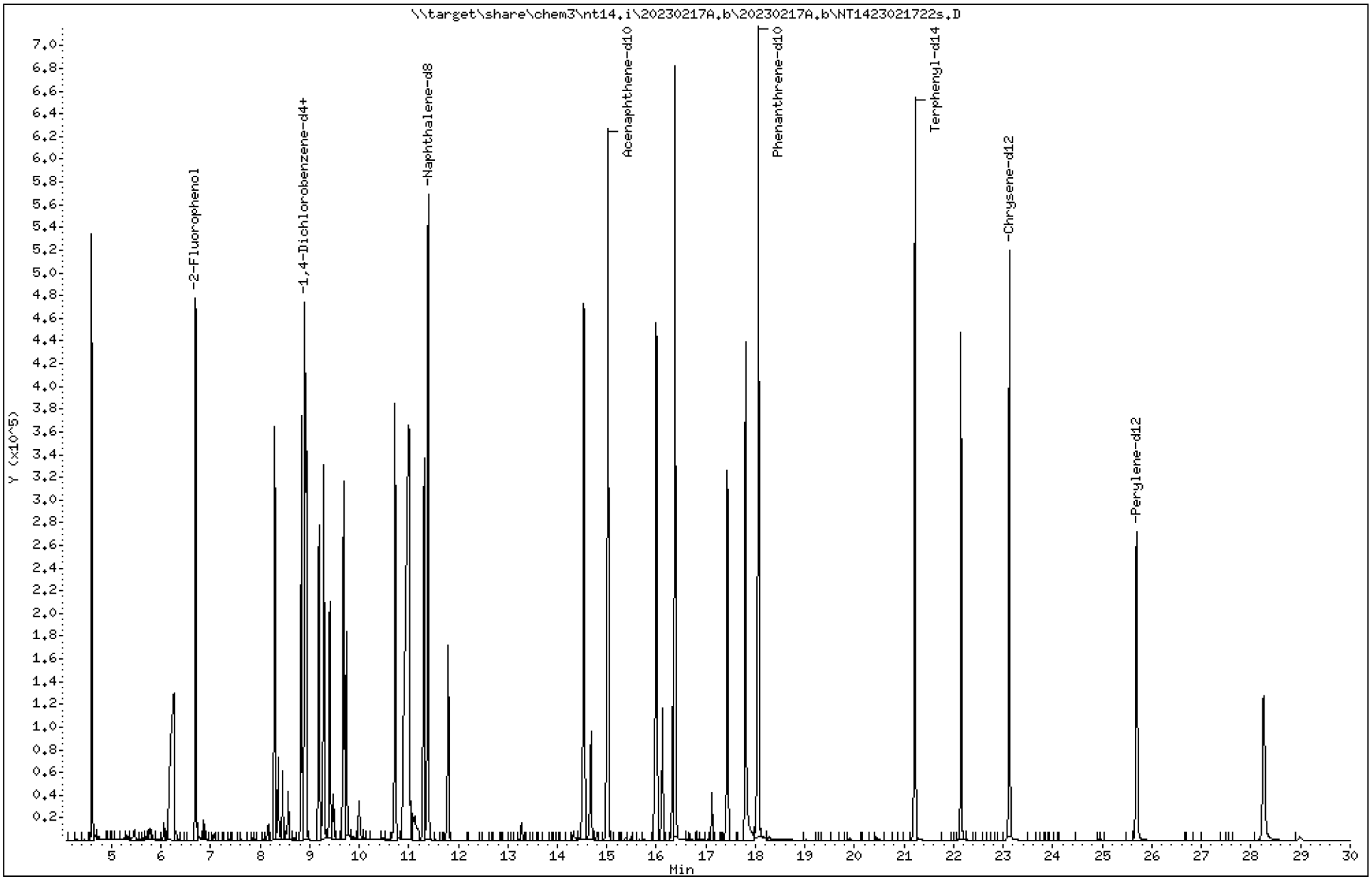
Sample Info: BLA0339-BS2

Instrument: nt14.i

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS2

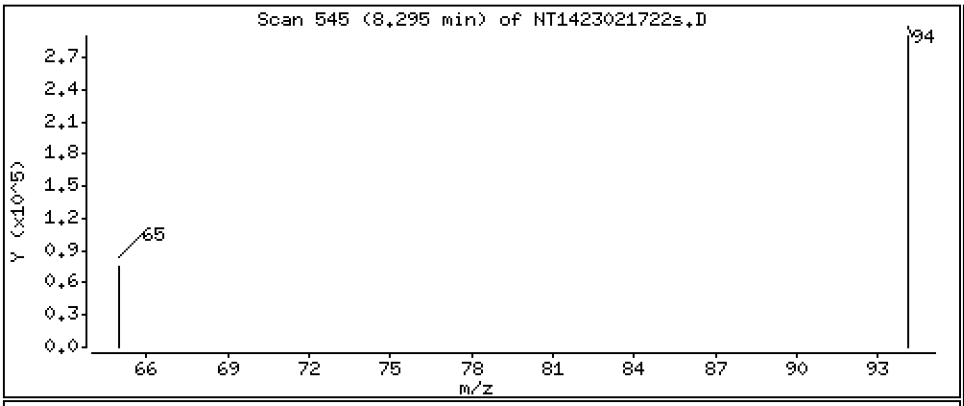
Operator: DSD

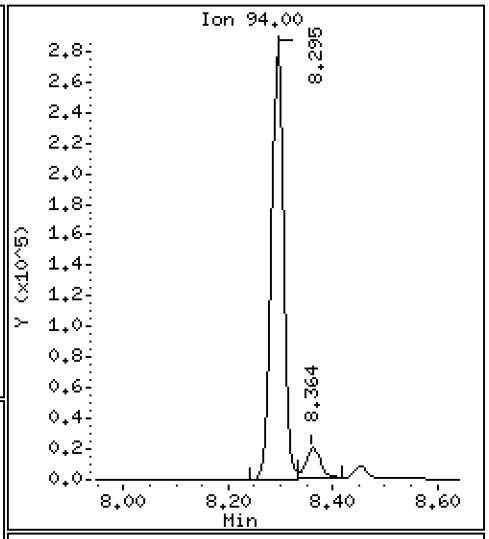
Column phase: ZB-5msi

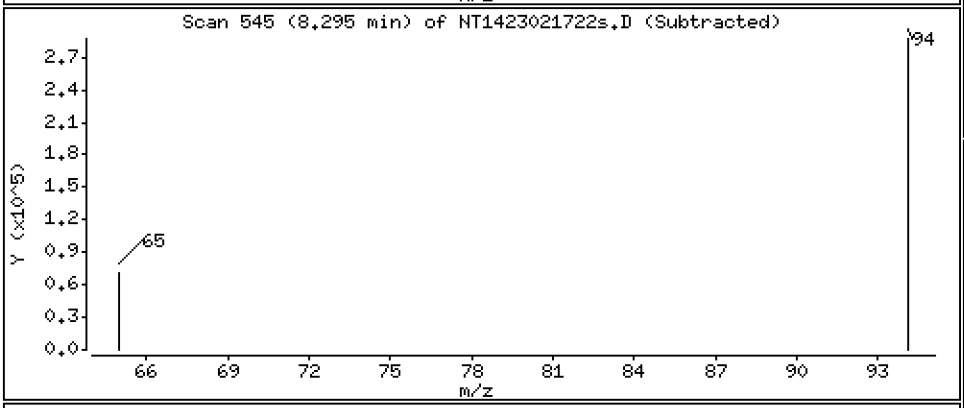
Column diameter: 0.25

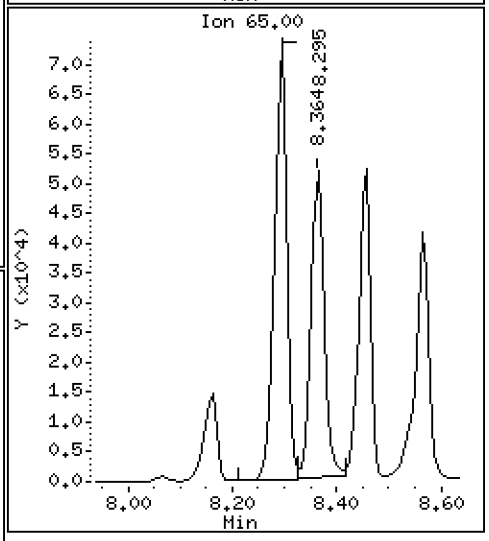
3 Phenol

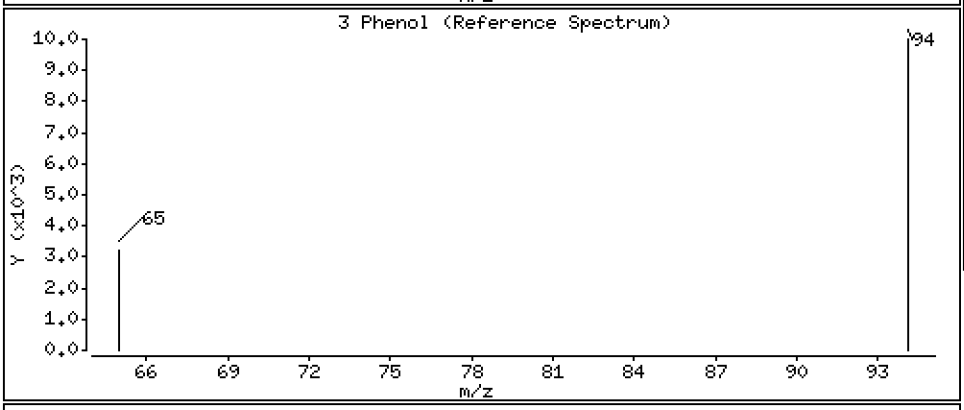
Concentration: 3.308 ug/mL

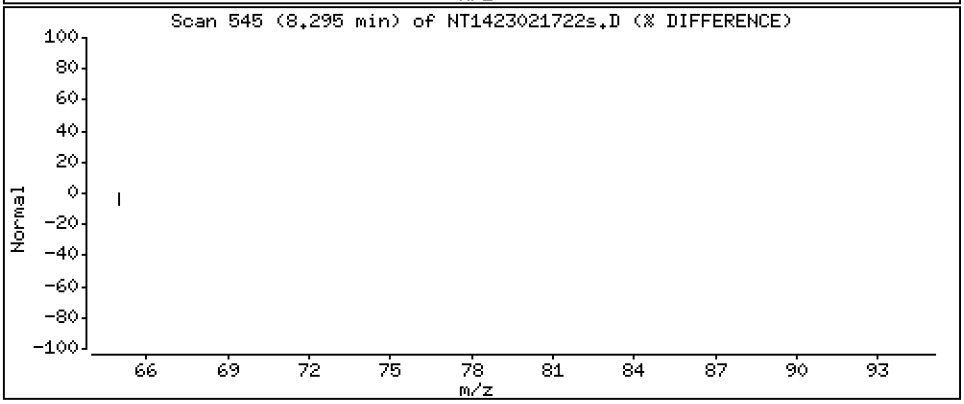












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021722s.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS2

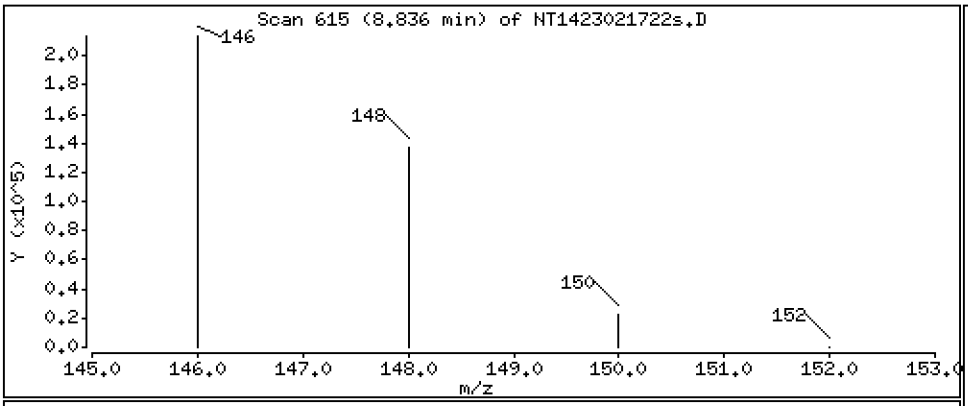
Operator: DSD

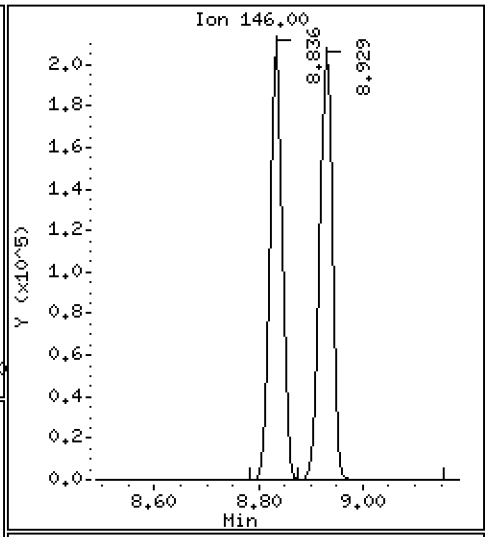
Column phase: ZB-5msi

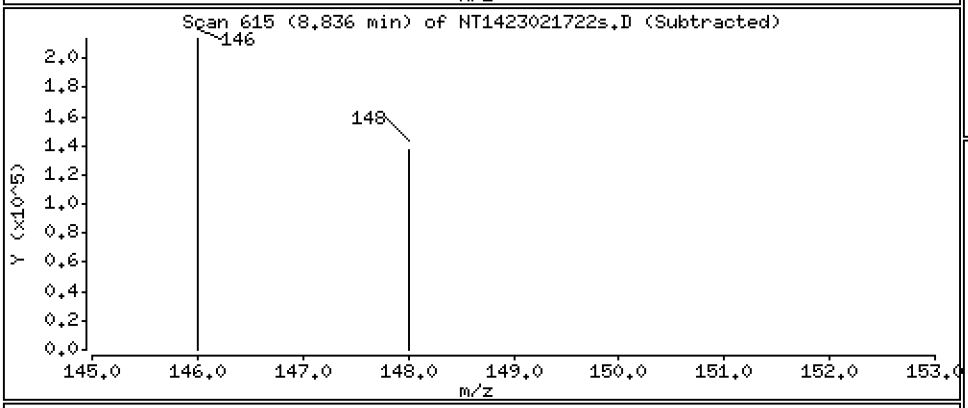
Column diameter: 0.25

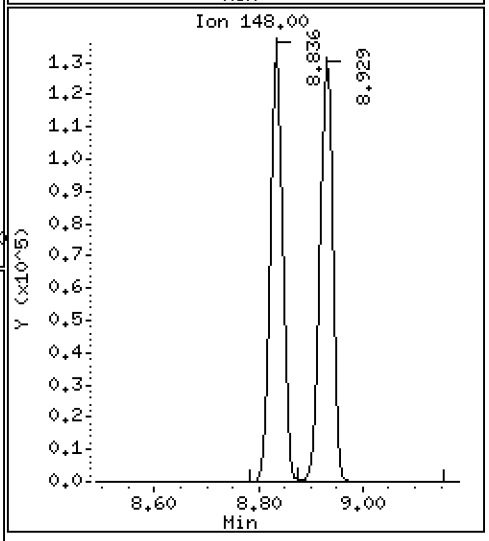
7 1,3-Dichlorobenzene

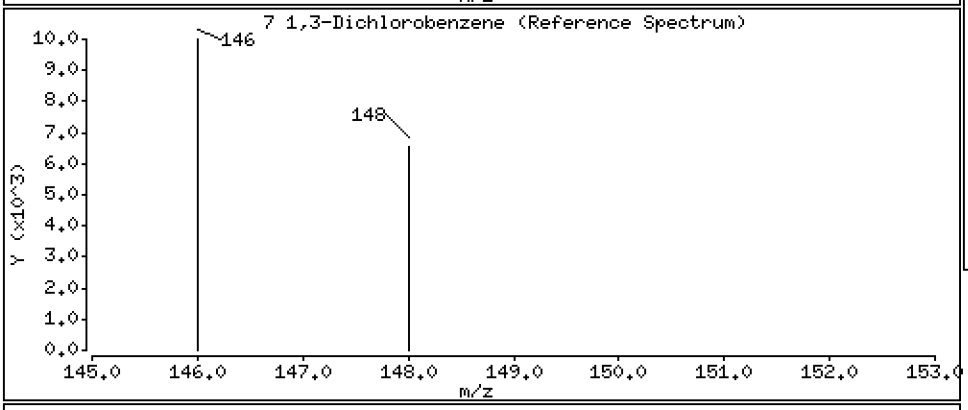
Concentration: 3.301 ug/mL

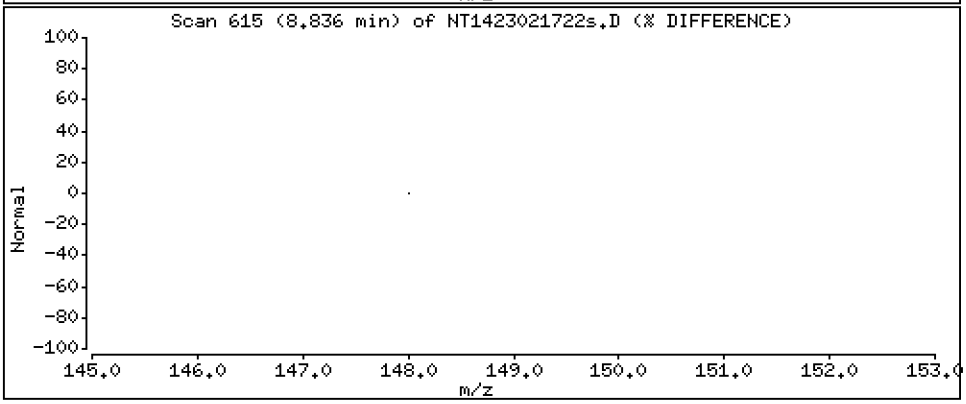












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021722s.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS2

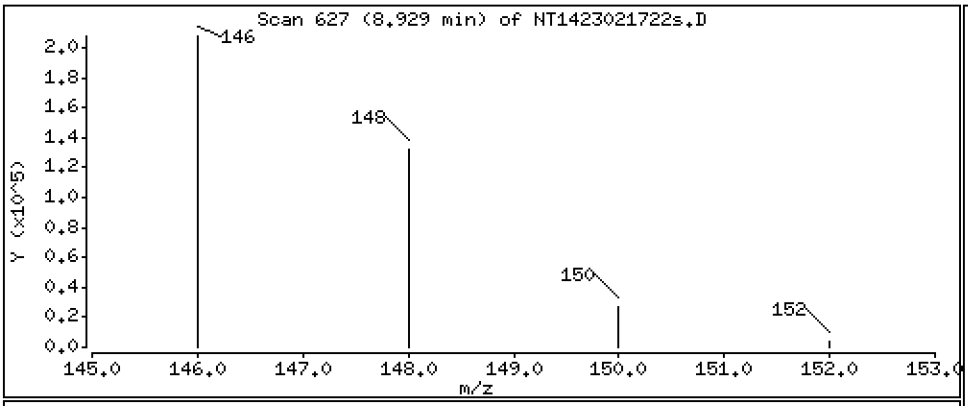
Operator: DSD

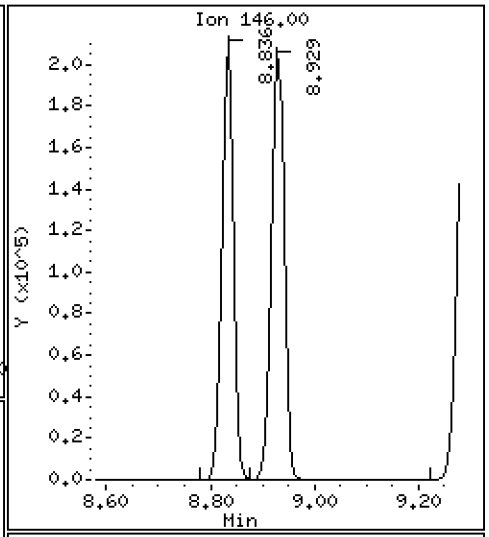
Column phase: ZB-5msi

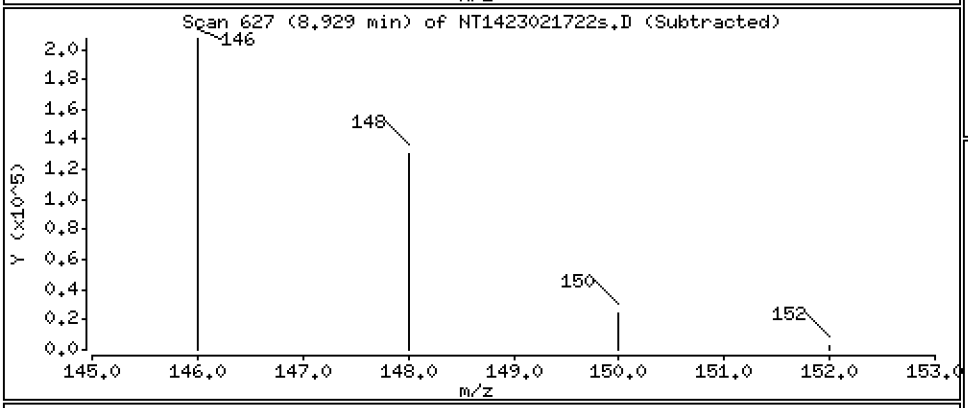
Column diameter: 0.25

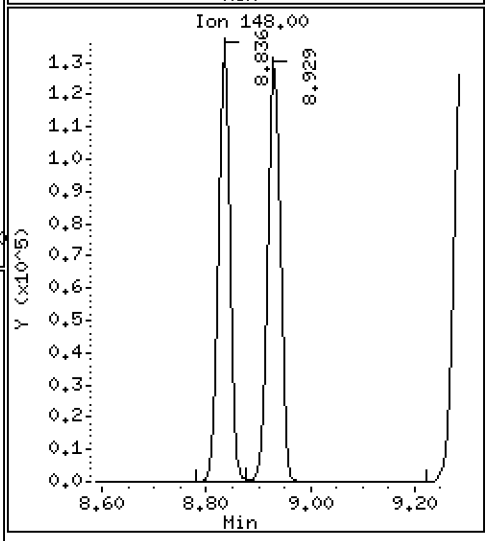
9 1,4-Dichlorobenzene

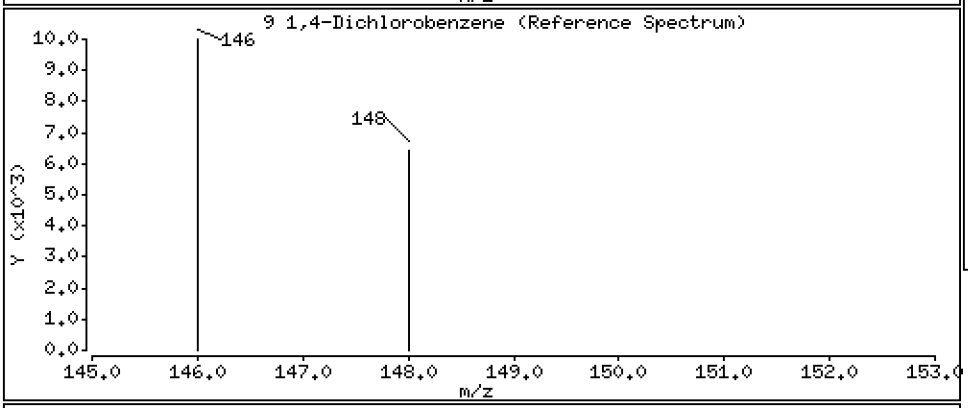
Concentration: 3.394 ug/mL

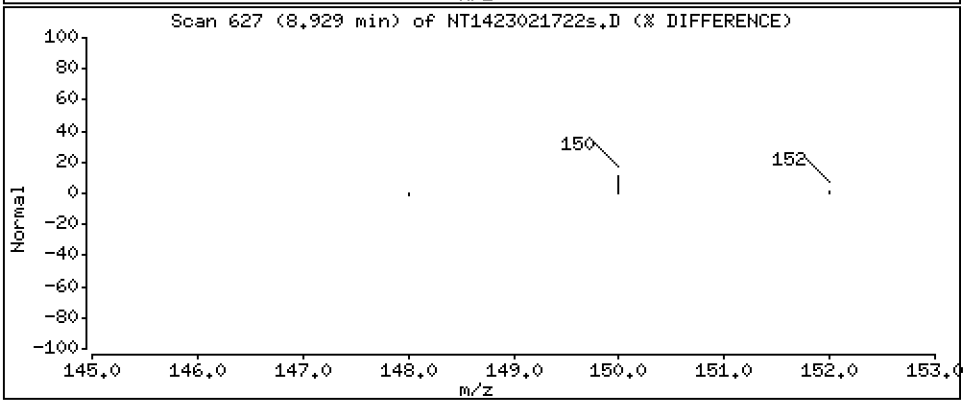












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021722s.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS2

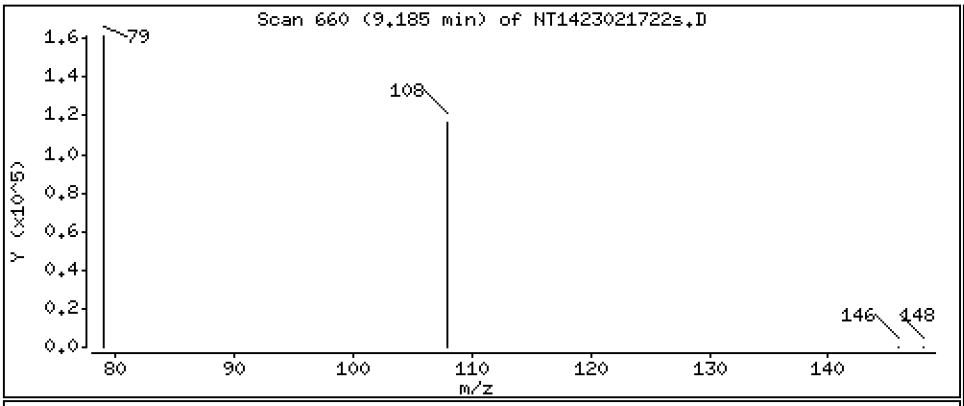
Operator: DSD

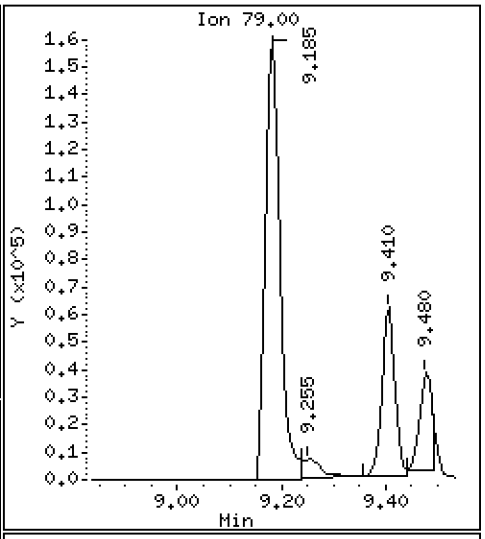
Column phase: ZB-5msi

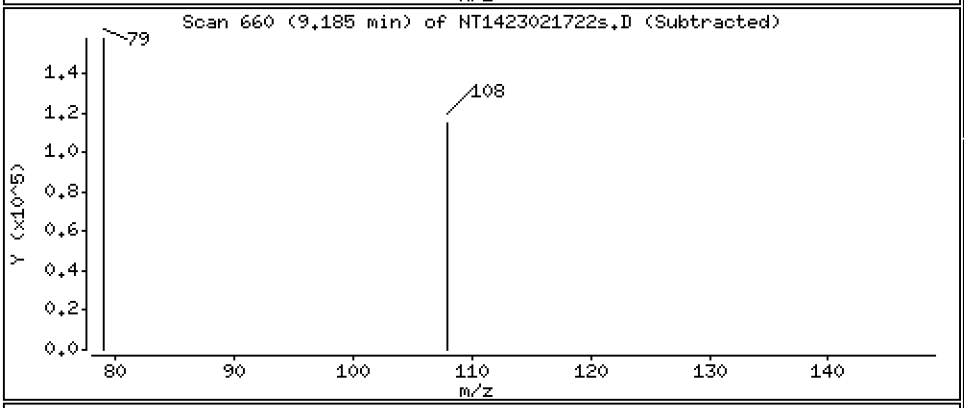
Column diameter: 0.25

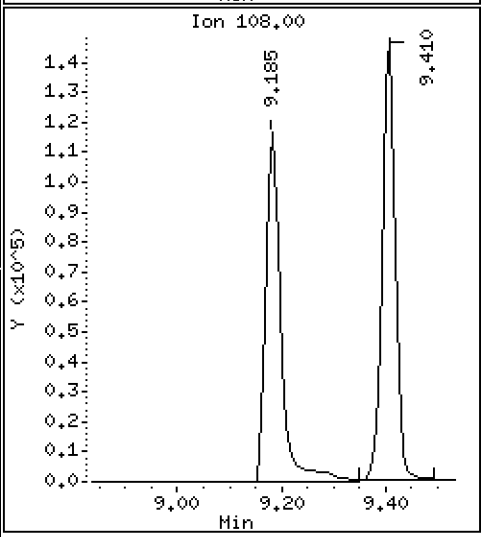
11 Benzyl alcohol

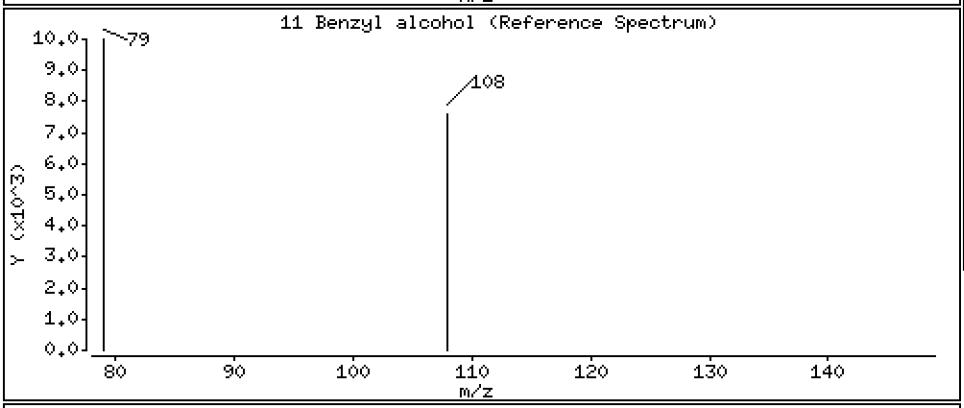
Concentration: 3.632 ug/mL

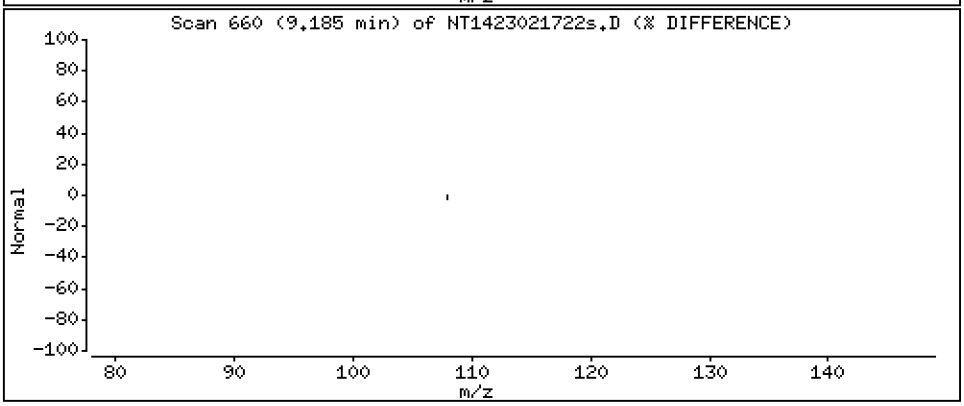












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021722s.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS2

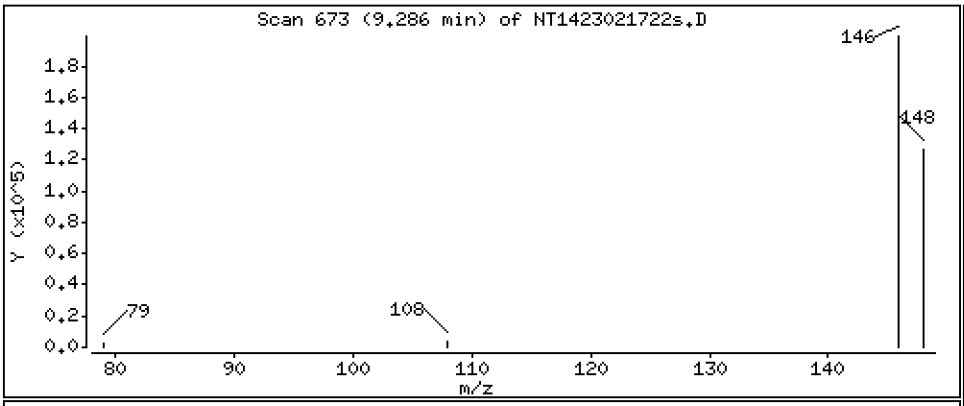
Operator: DSD

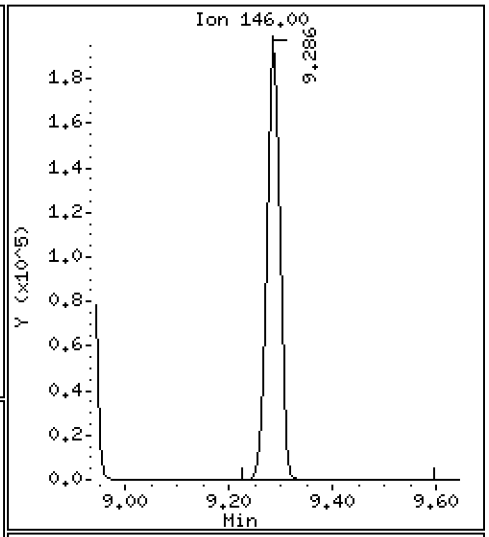
Column phase: ZB-5msi

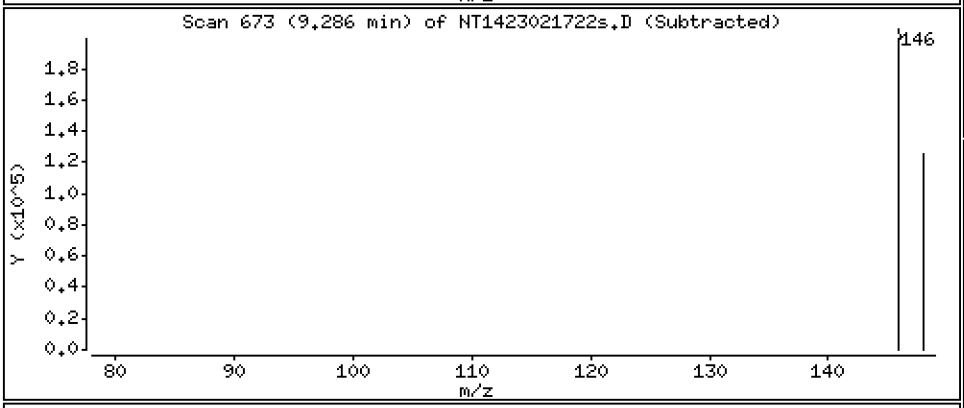
Column diameter: 0.25

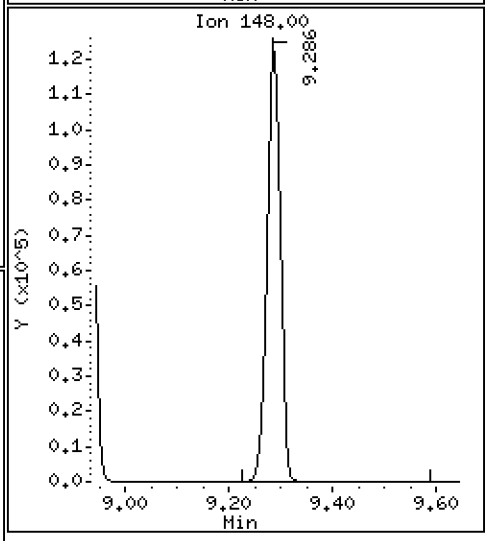
12 1,2-Dichlorobenzene

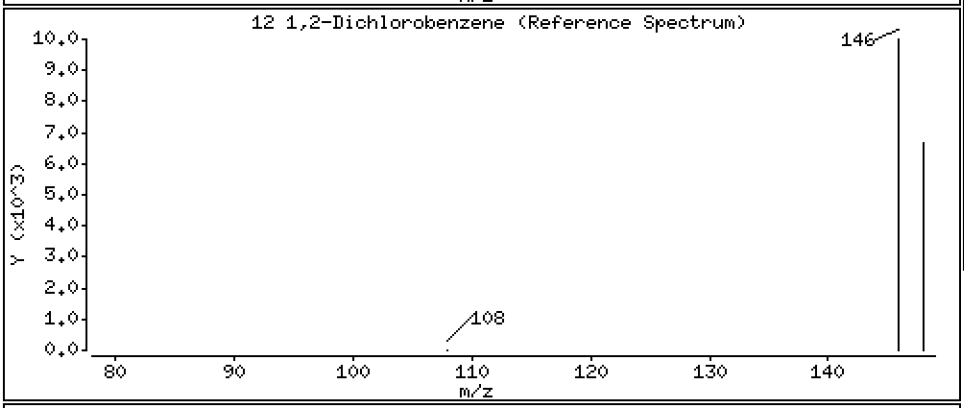
Concentration: 3.409 ug/mL

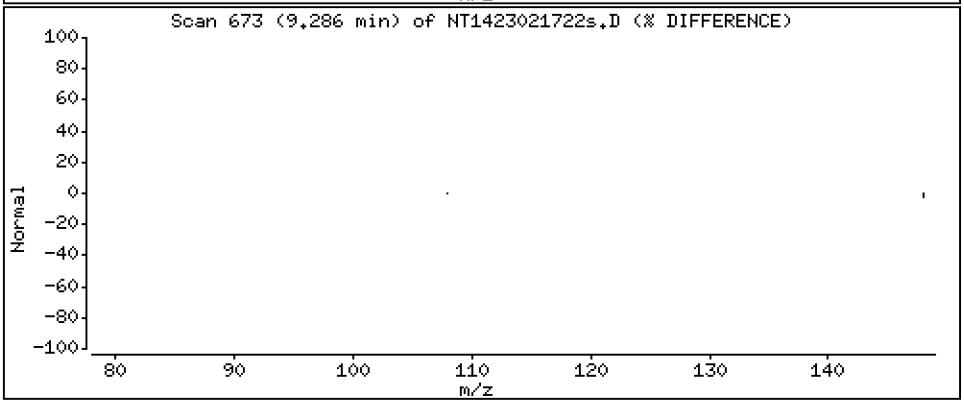












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021722s.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS2

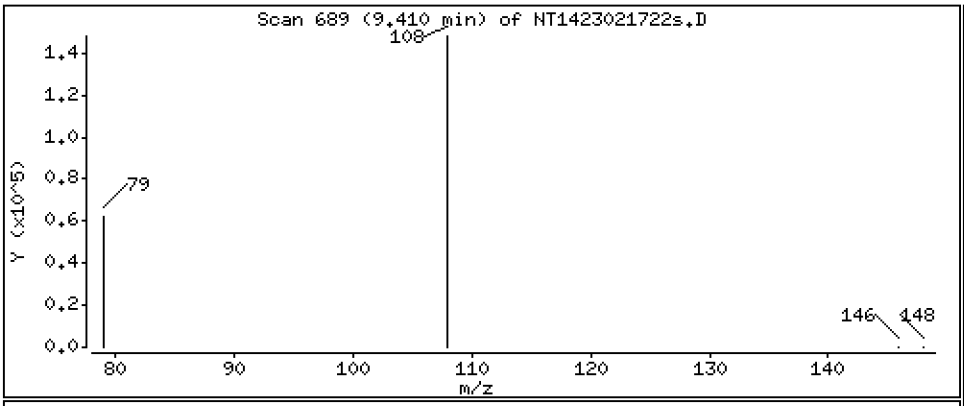
Operator: DSD

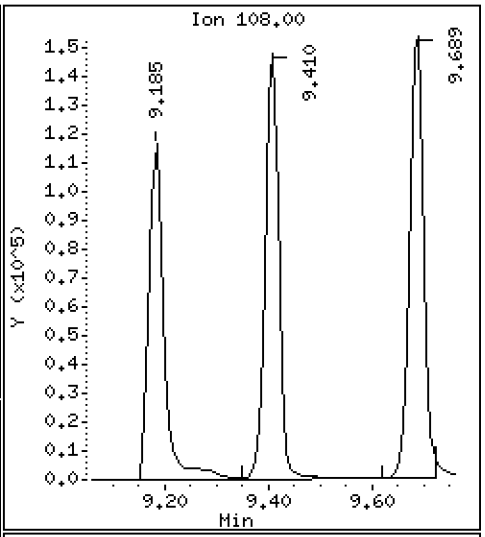
Column phase: ZB-5msi

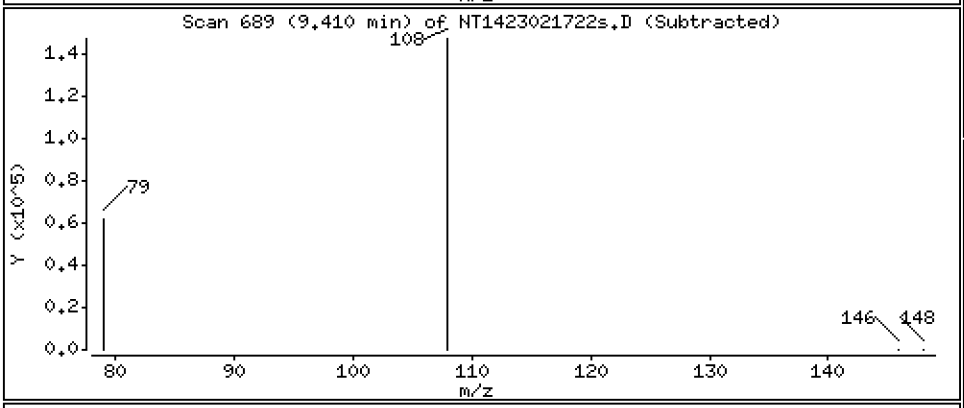
Column diameter: 0.25

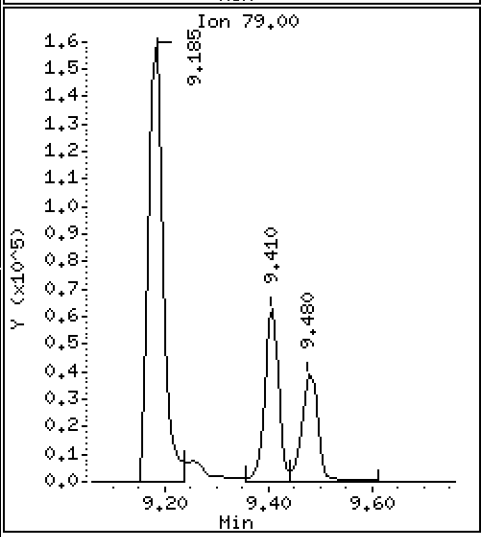
13 2-Methylphenol

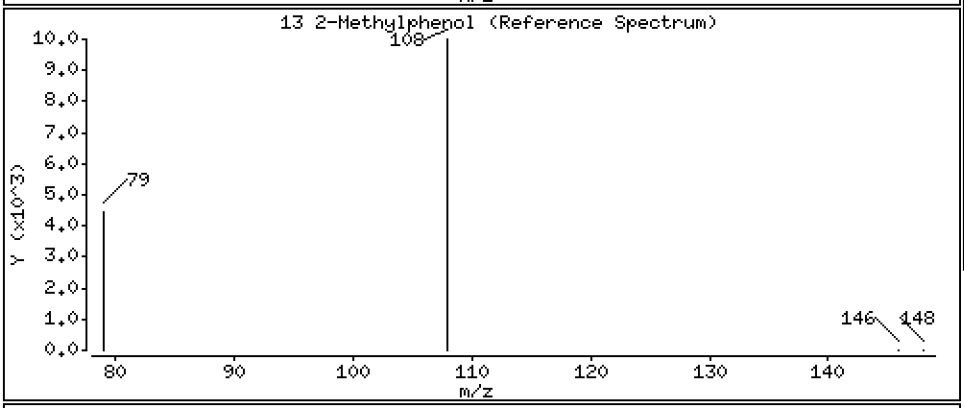
Concentration: 2.869 ug/mL

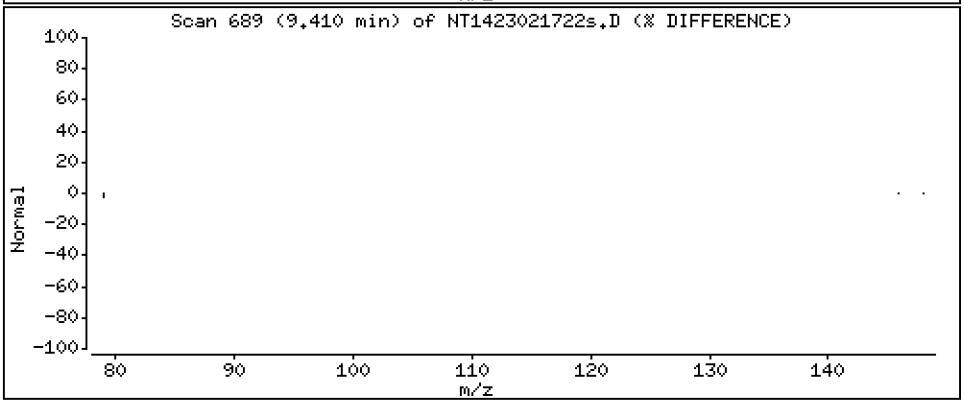












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021722s.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS2

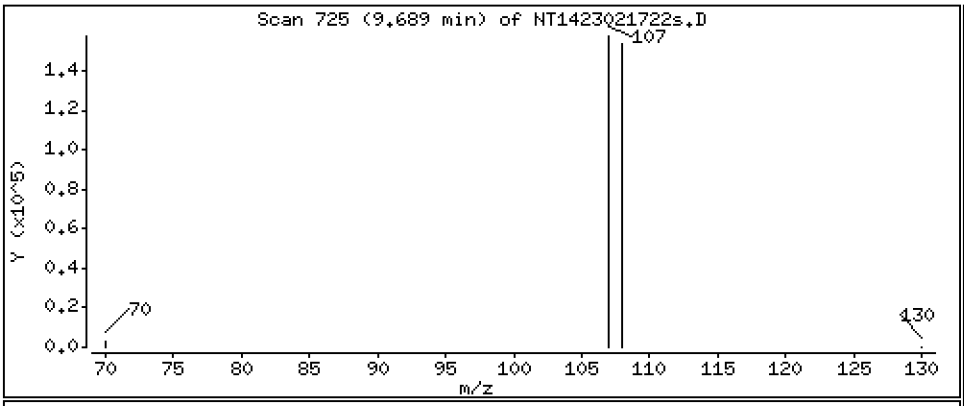
Operator: DSD

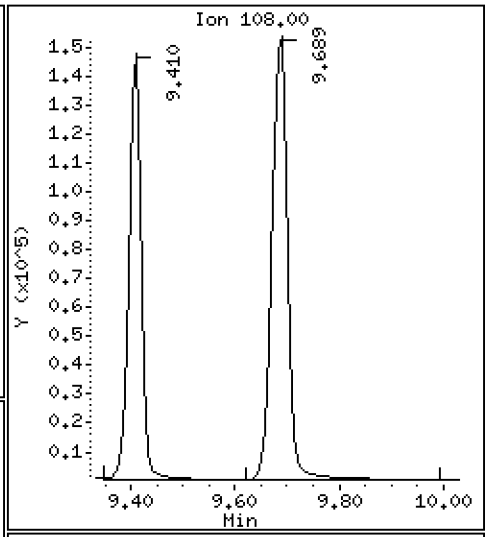
Column phase: ZB-5msi

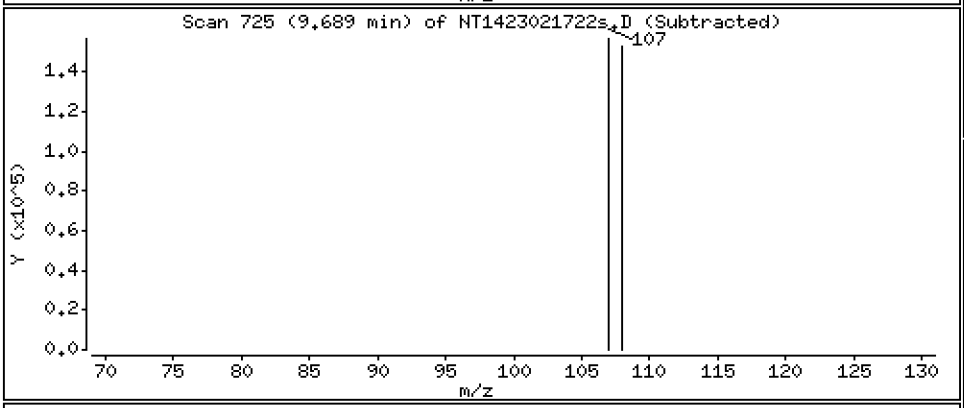
Column diameter: 0.25

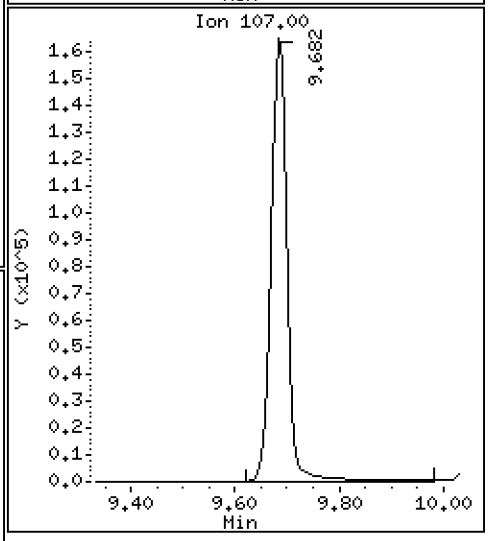
15 4-Methylphenol

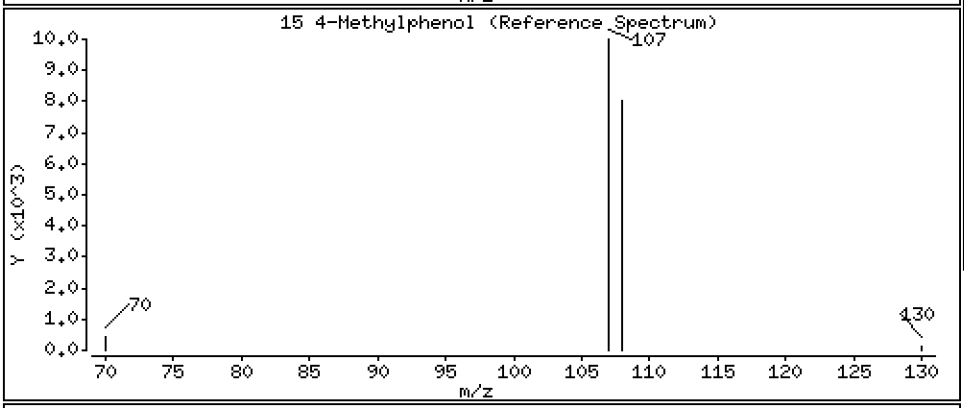
Concentration: 3.129 ug/mL

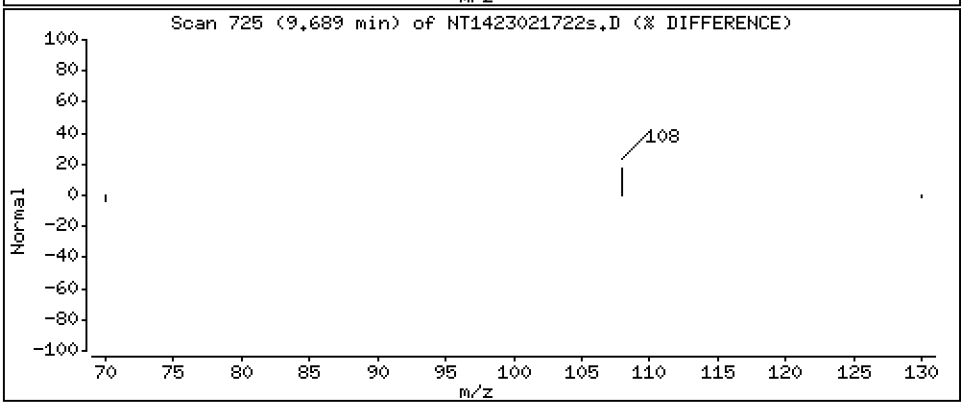












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021722s.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS2

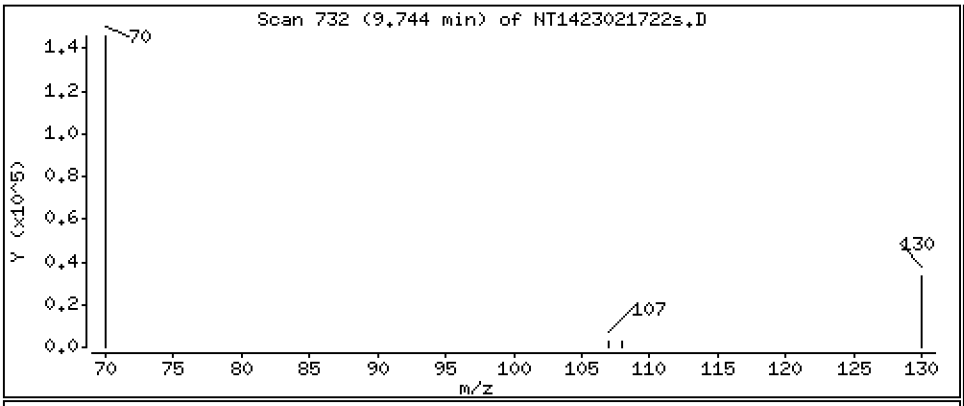
Operator: DSD

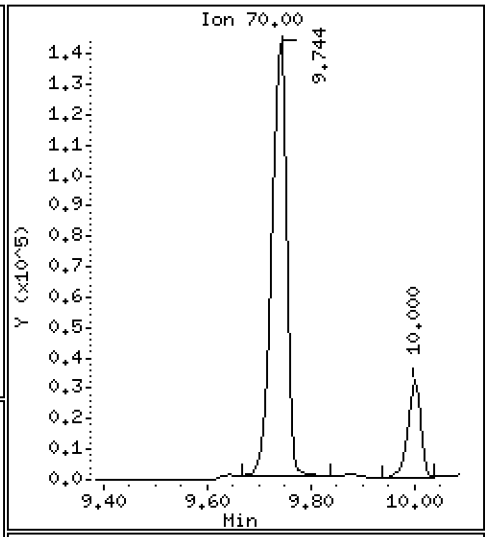
Column phase: ZB-5msi

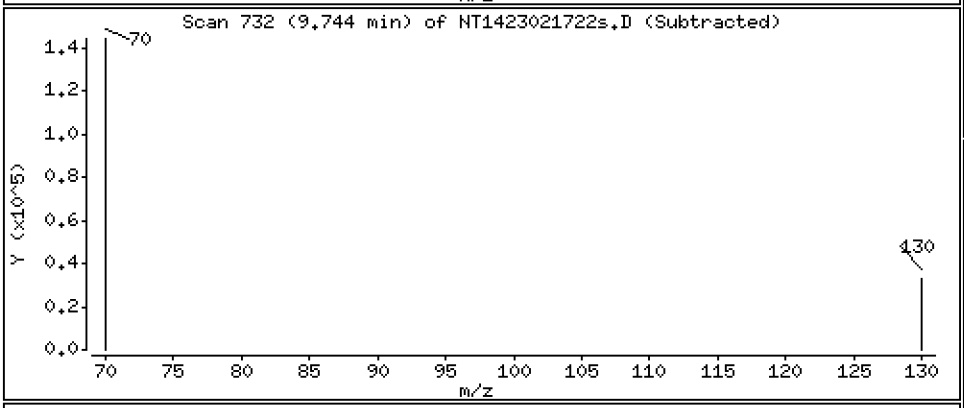
Column diameter: 0.25

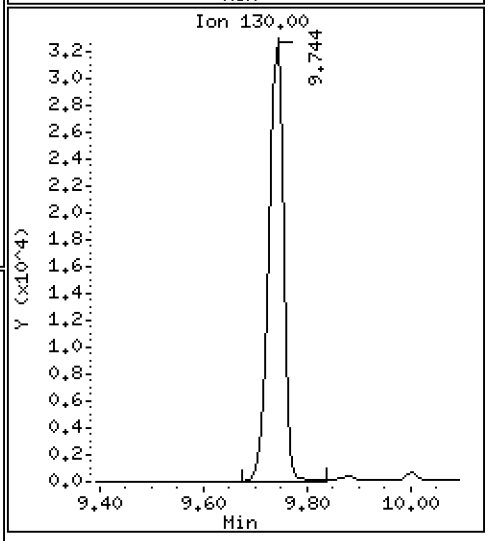
16 N-Nitroso-di-n-propylamine

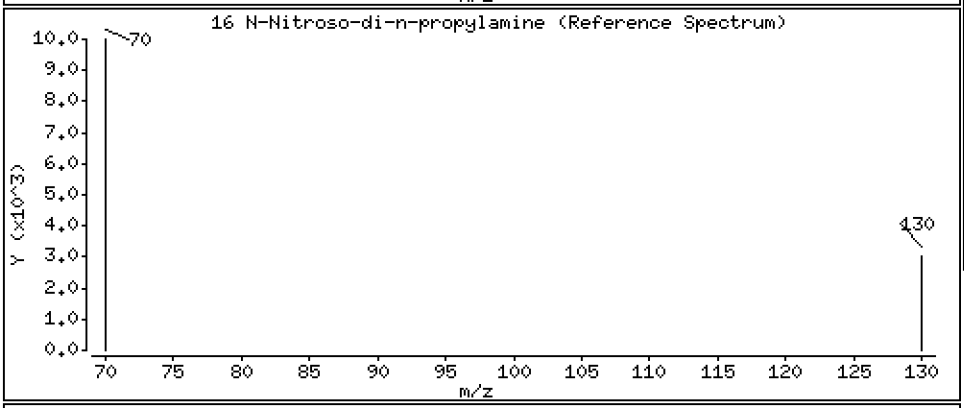
Concentration: 3.555 ug/mL

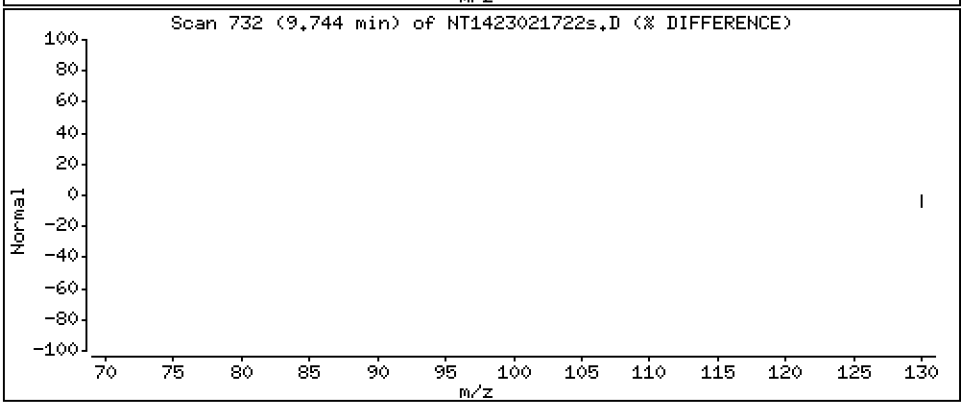












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS2

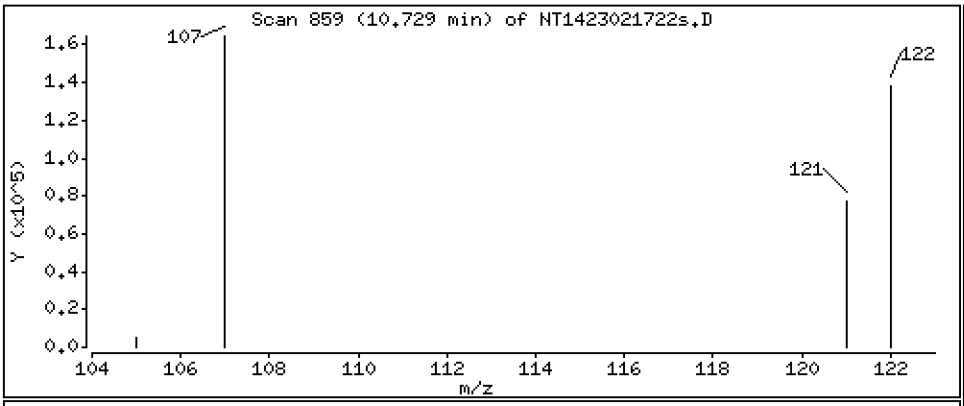
Operator: DSD

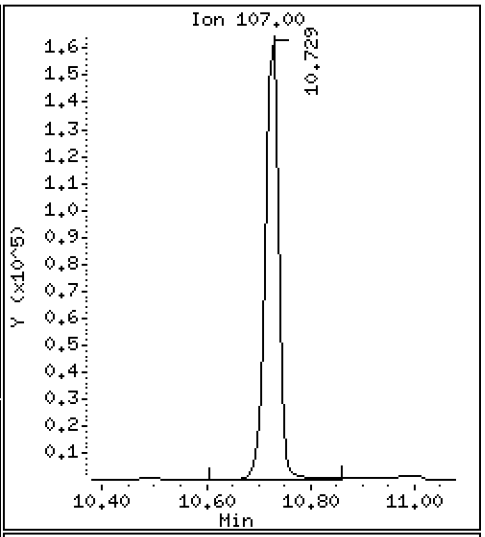
Column phase: ZB-5msi

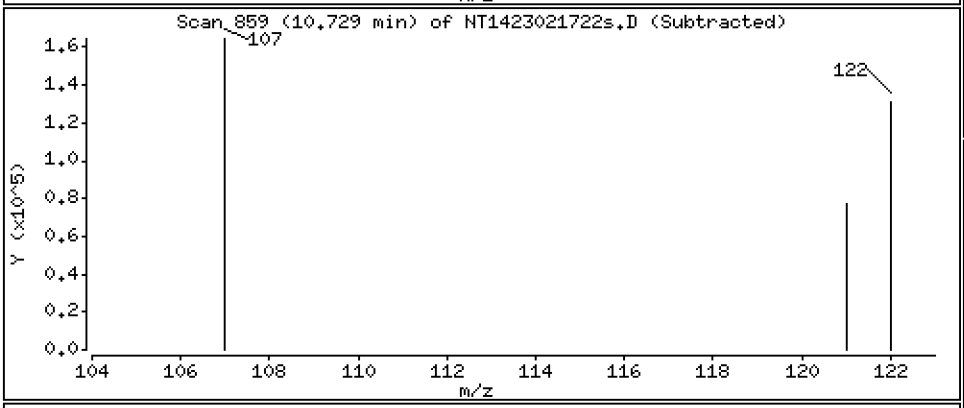
Column diameter: 0.25

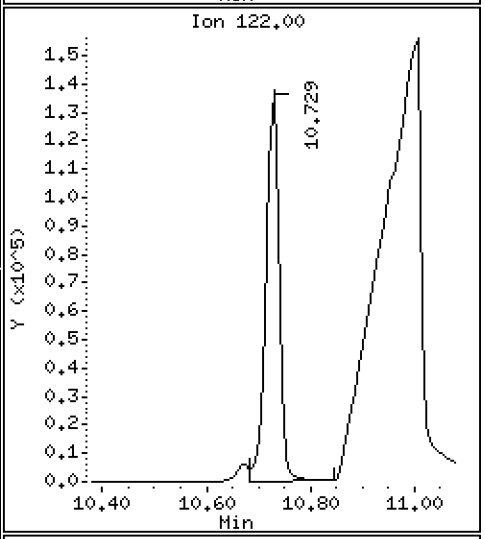
22 2,4-Dimethylphenol

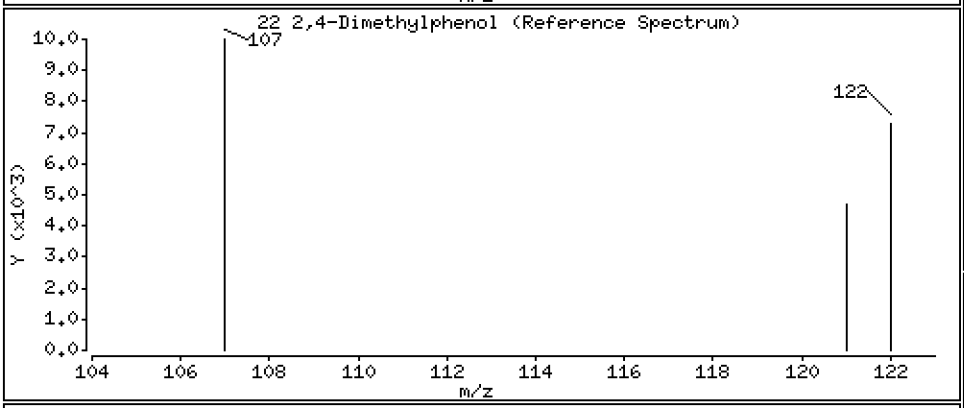
Concentration: 2.923 ug/mL

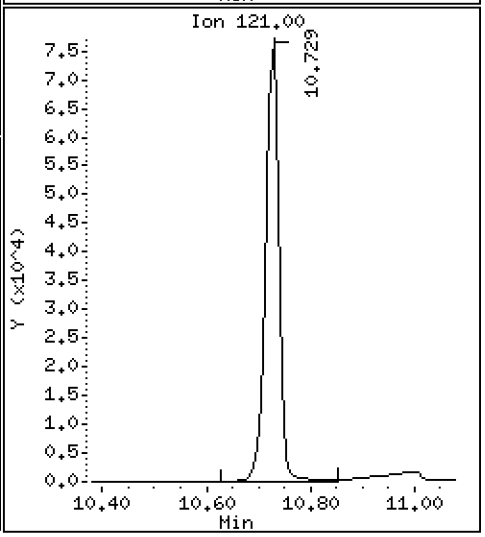


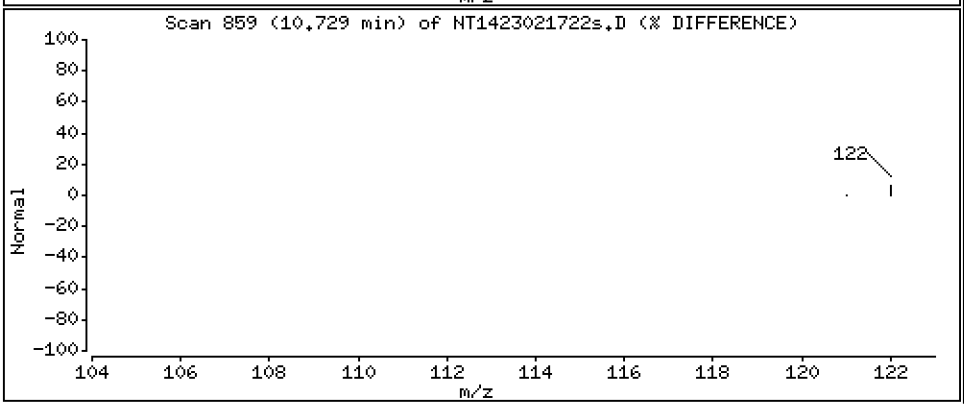












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS2

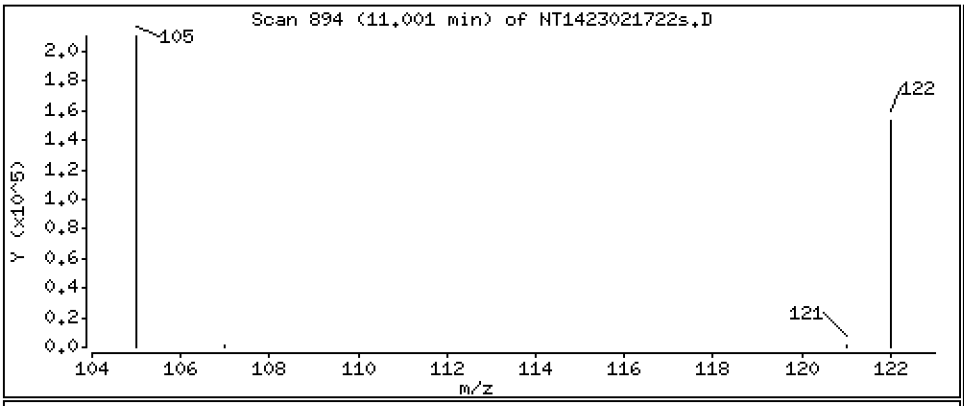
Operator: DSD

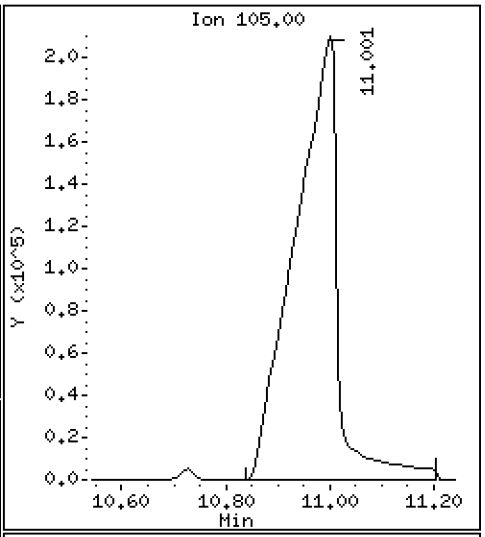
Column phase: ZB-5msi

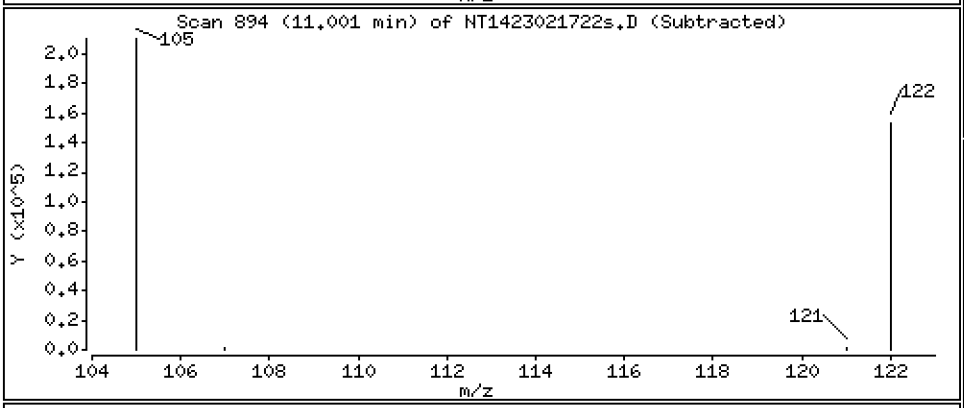
Column diameter: 0.25

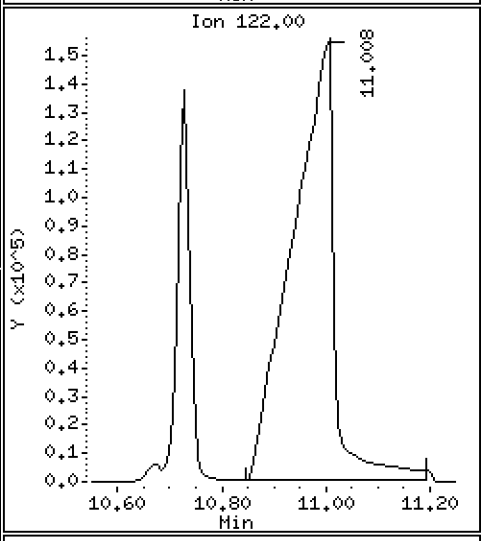
24 Benzoic acid

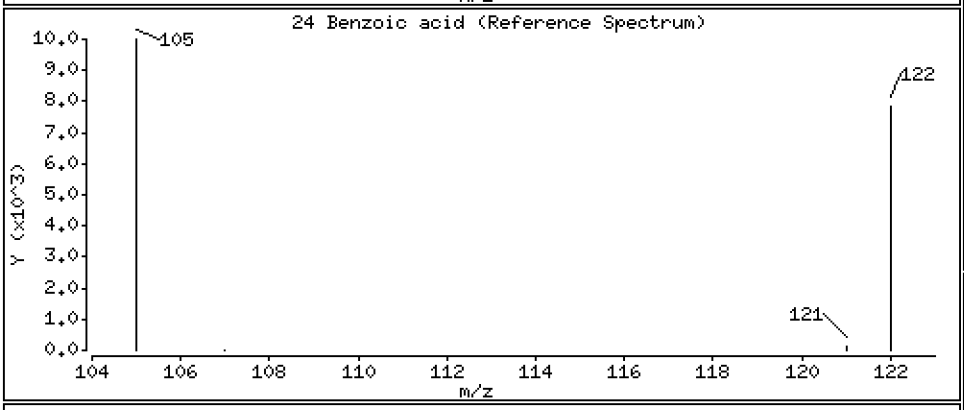
Concentration: 23.70 ug/mL

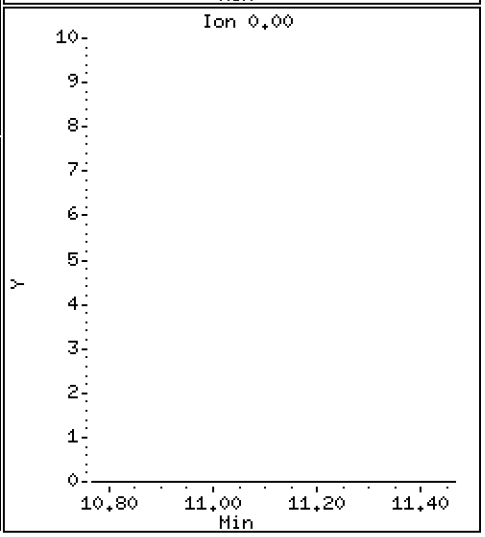


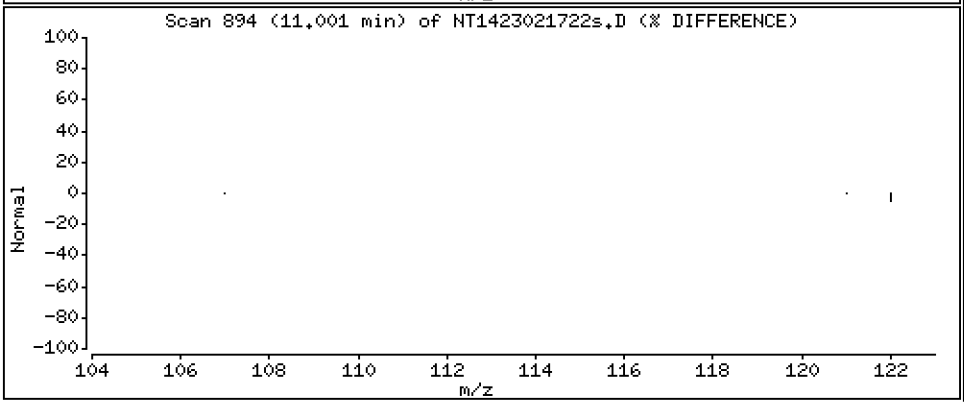












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021722s.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS2

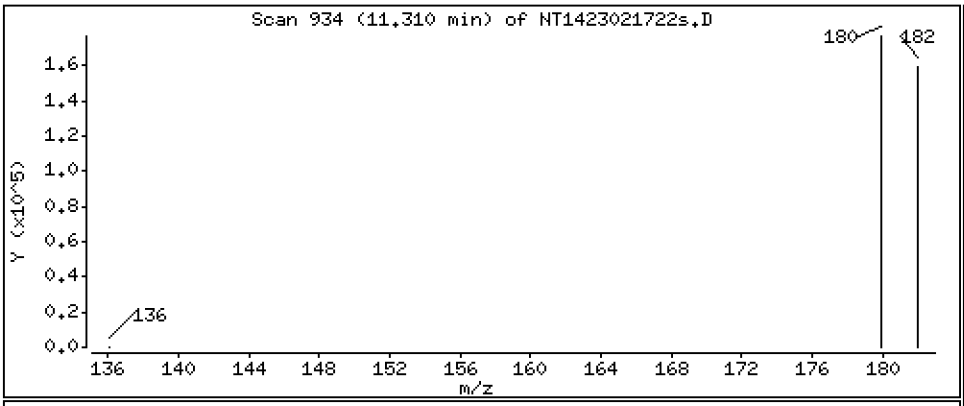
Operator: DSD

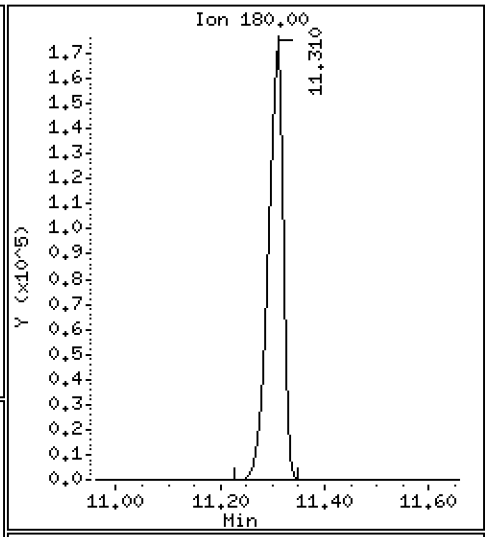
Column phase: ZB-5msi

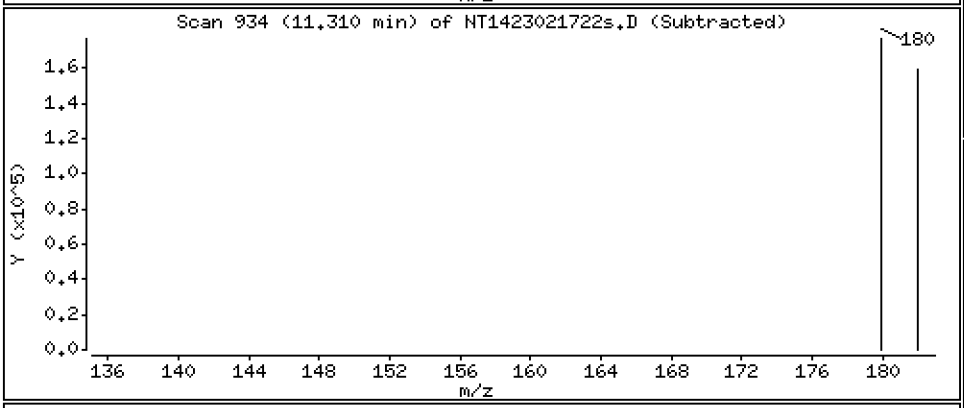
Column diameter: 0.25

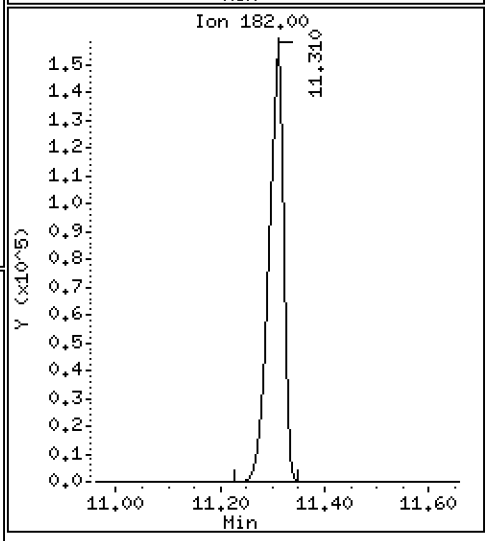
26 1,2,4-Trichlorobenzene

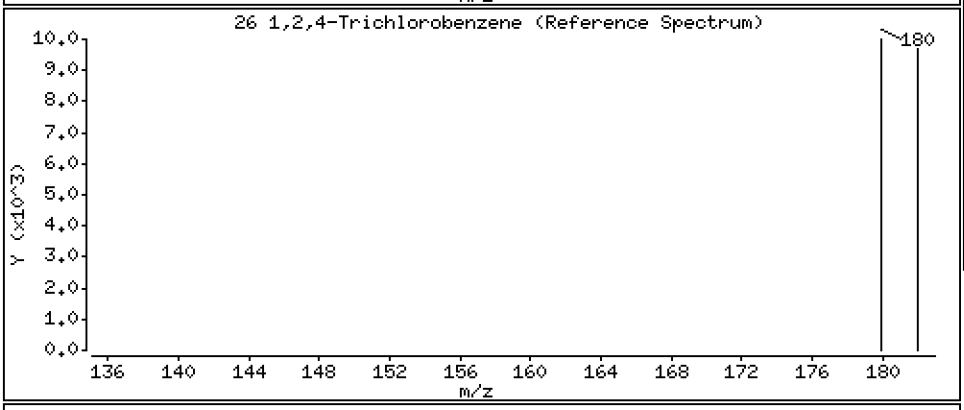
Concentration: 3.382 ug/mL

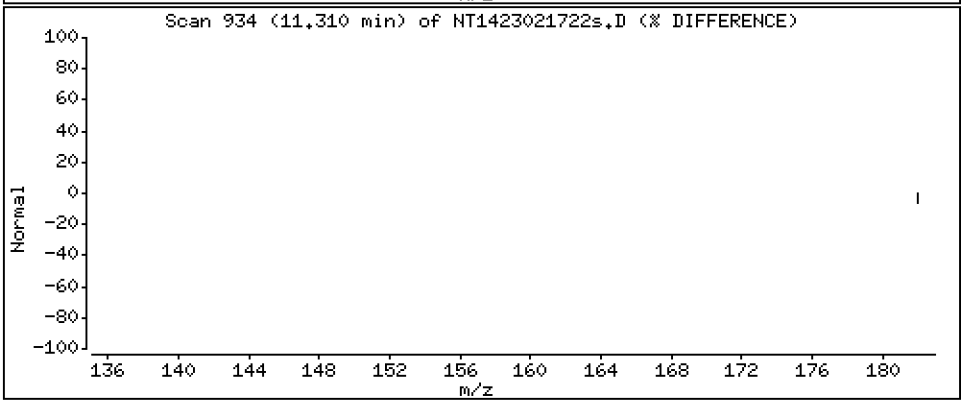












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021722s.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS2

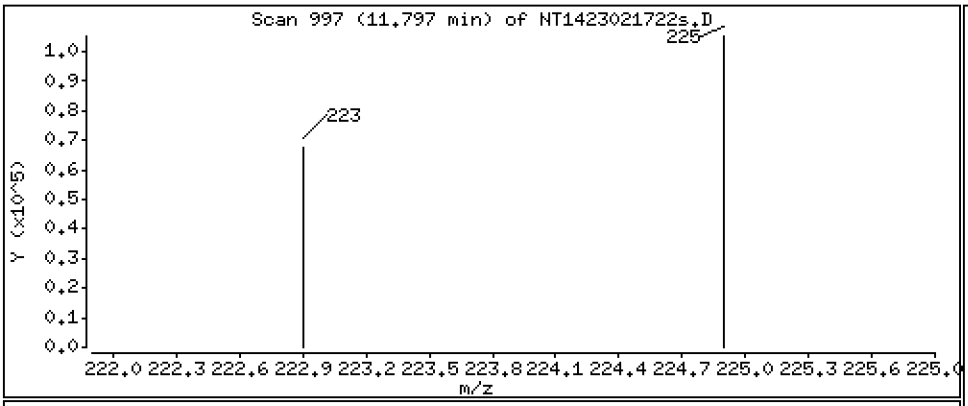
Operator: DSD

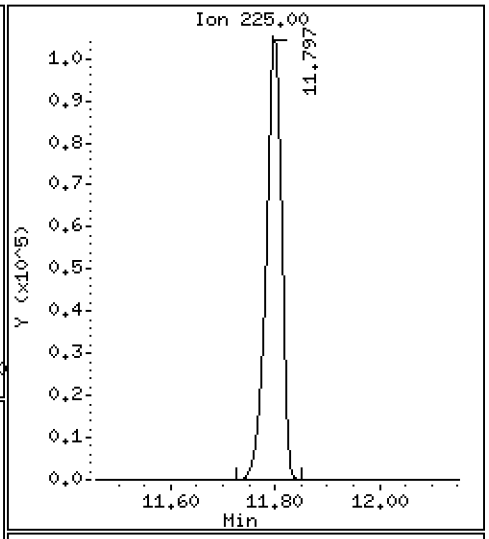
Column phase: ZB-5msi

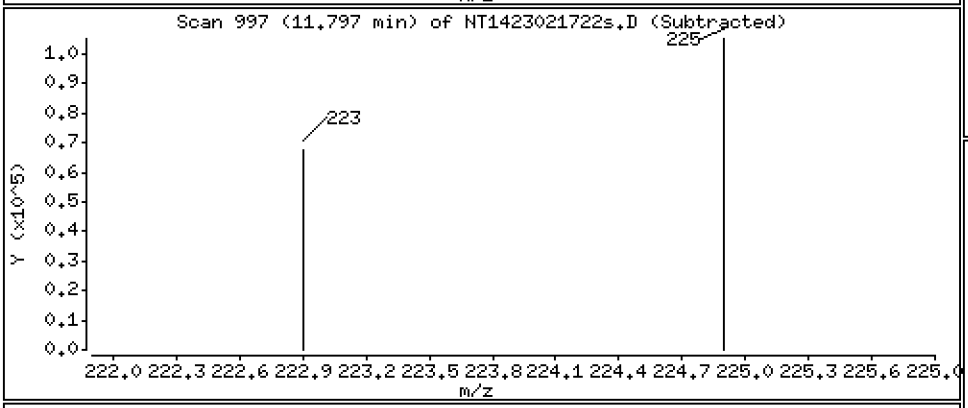
Column diameter: 0.25

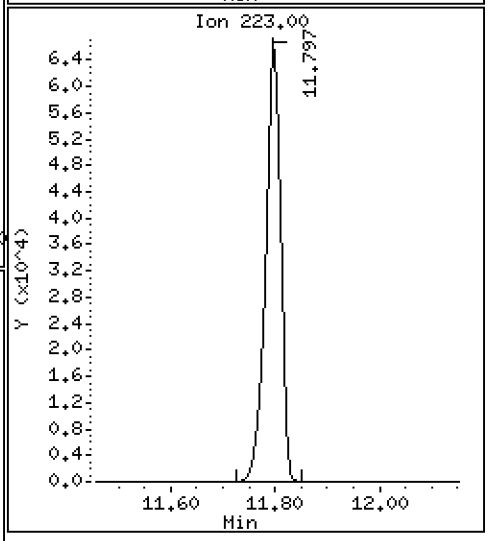
30 Hexachlorobutadiene

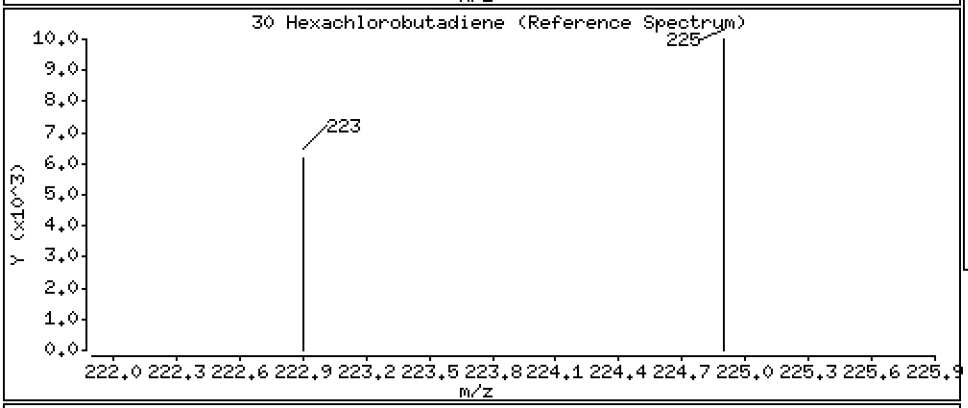
Concentration: 3.465 ug/mL

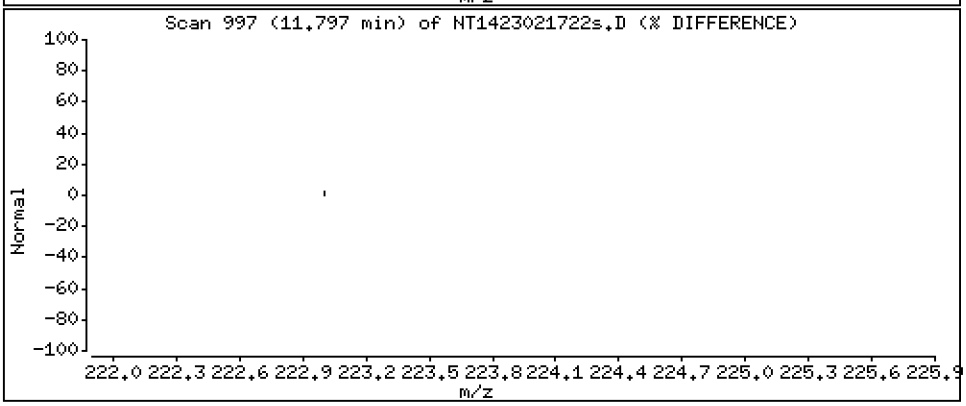












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS2

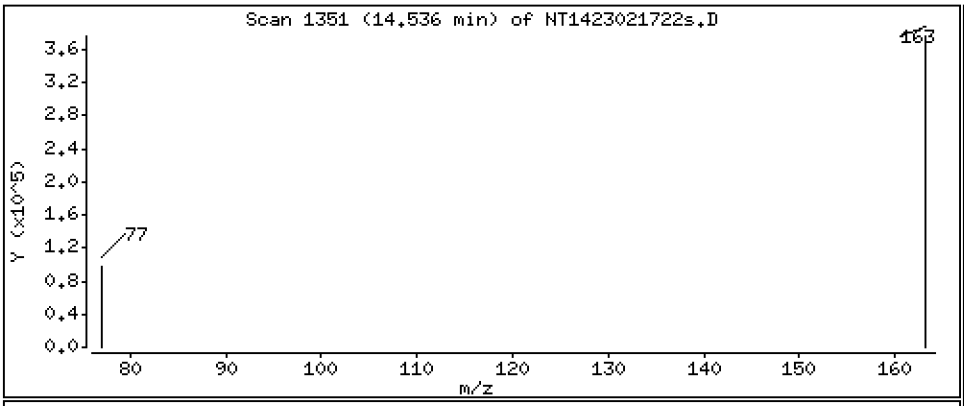
Operator: DSD

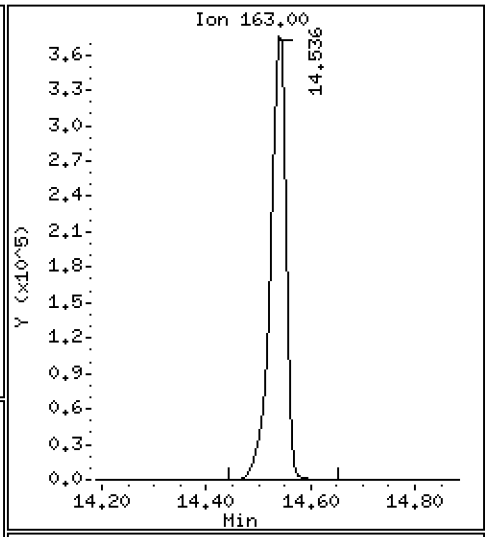
Column phase: ZB-5msi

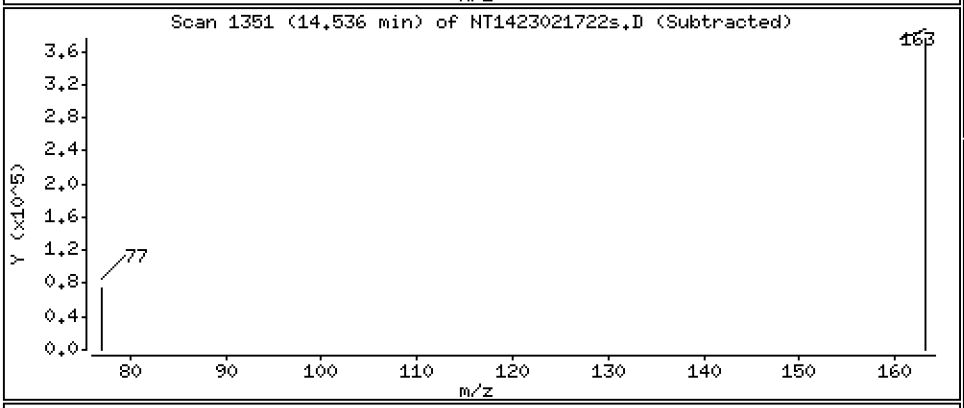
Column diameter: 0.25

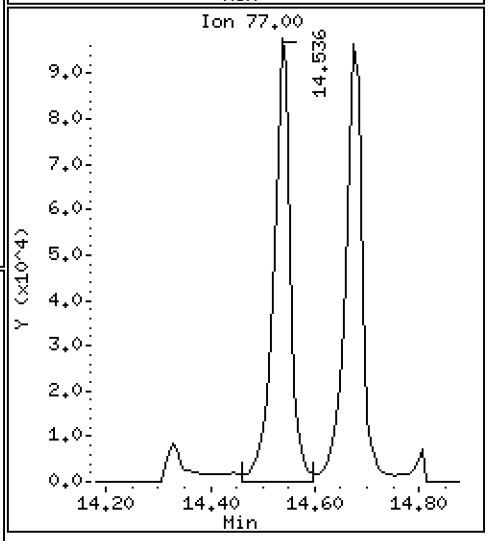
39 Dimethylphthalate

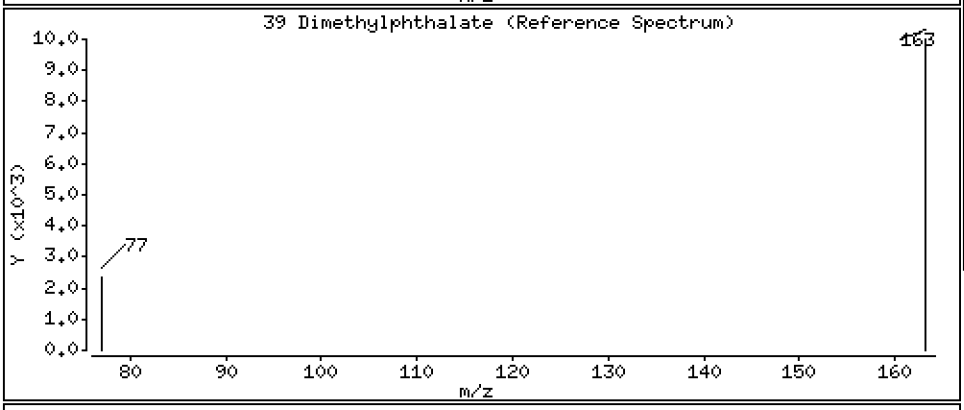
Concentration: 4.272 ug/mL

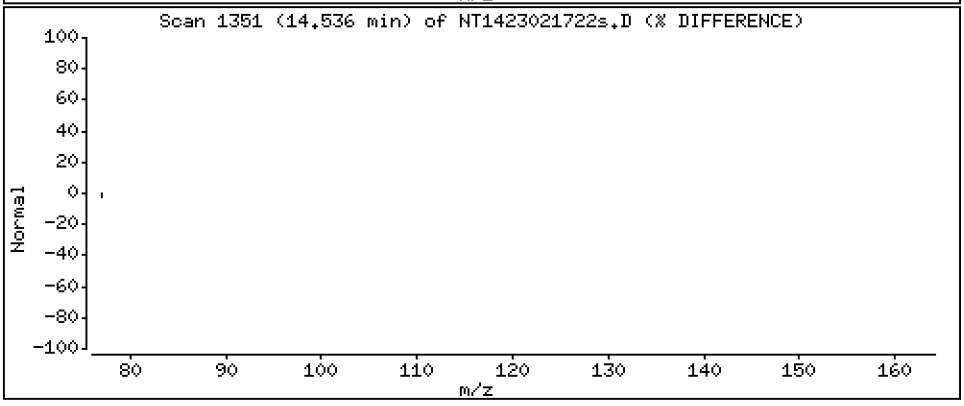












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021722s.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS2

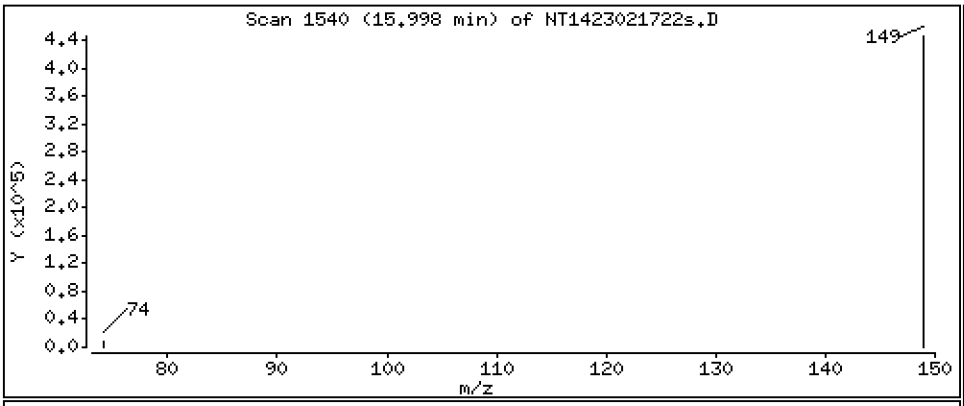
Operator: DSD

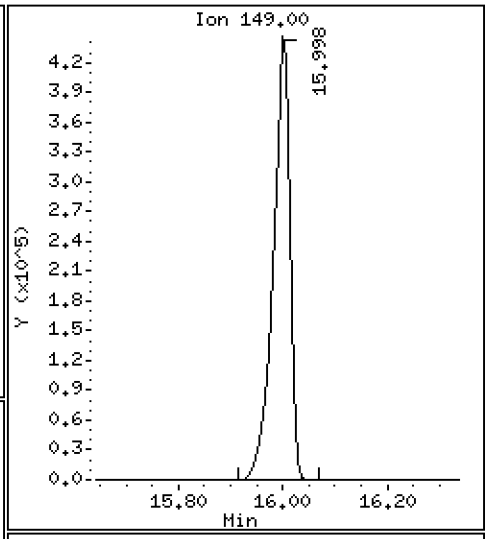
Column phase: ZB-5msi

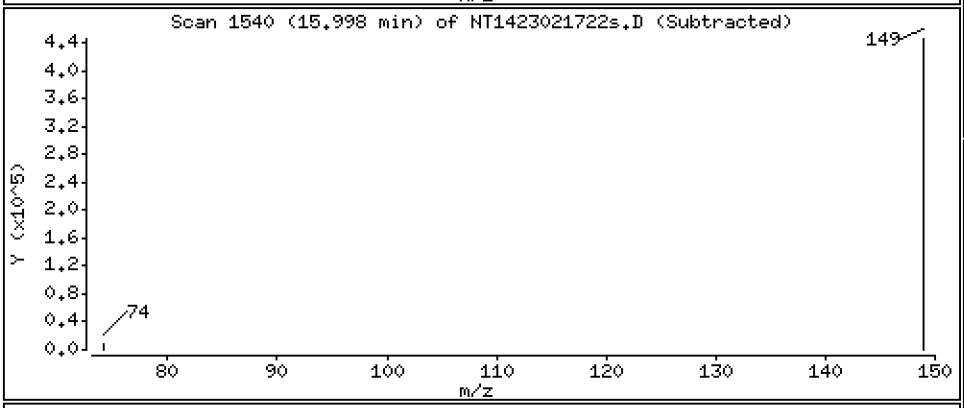
Column diameter: 0.25

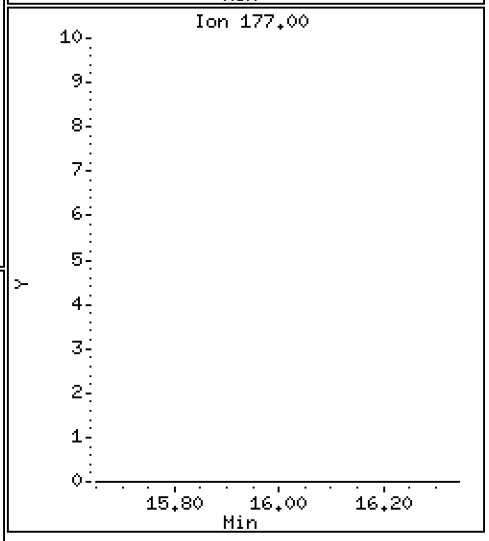
50 Diethylphthalate

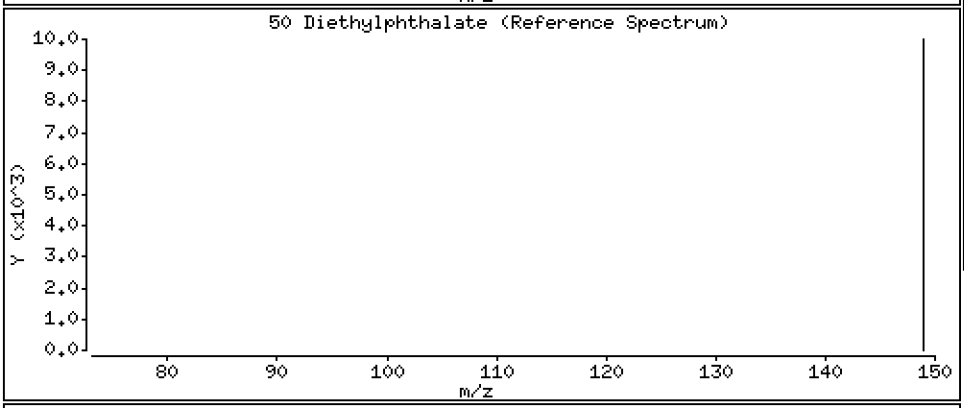
Concentration: 4.425 ug/mL

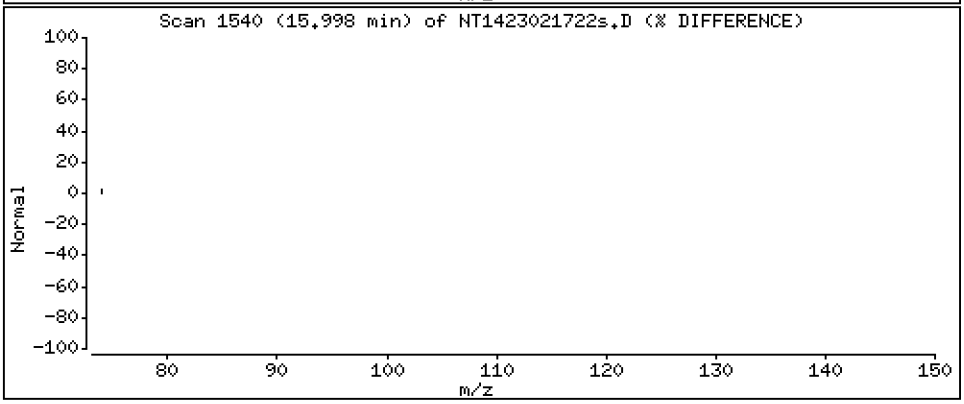












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021722s.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS2

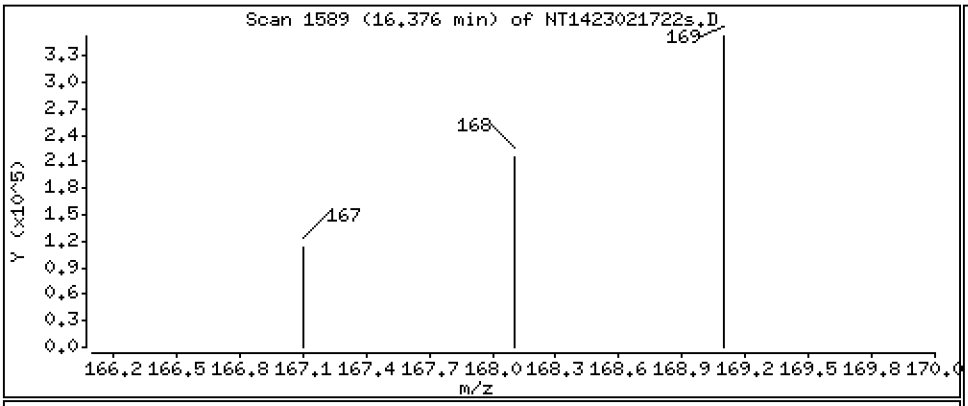
Operator: DSD

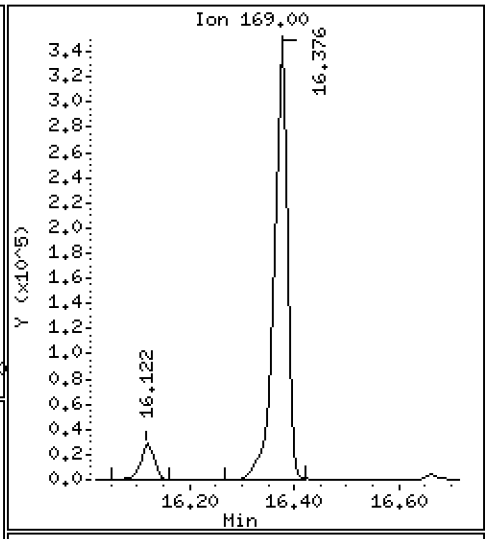
Column phase: ZB-5msi

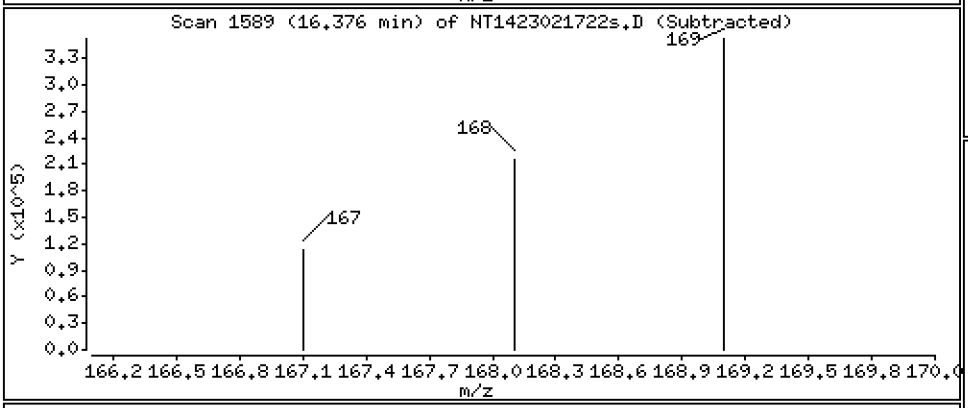
Column diameter: 0.25

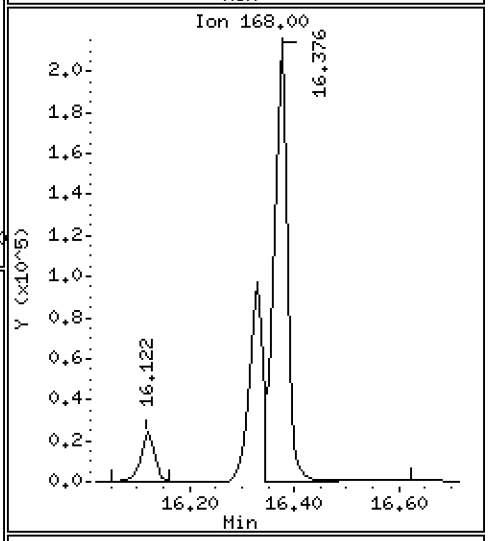
54 N-Nitrosodiphenylamine

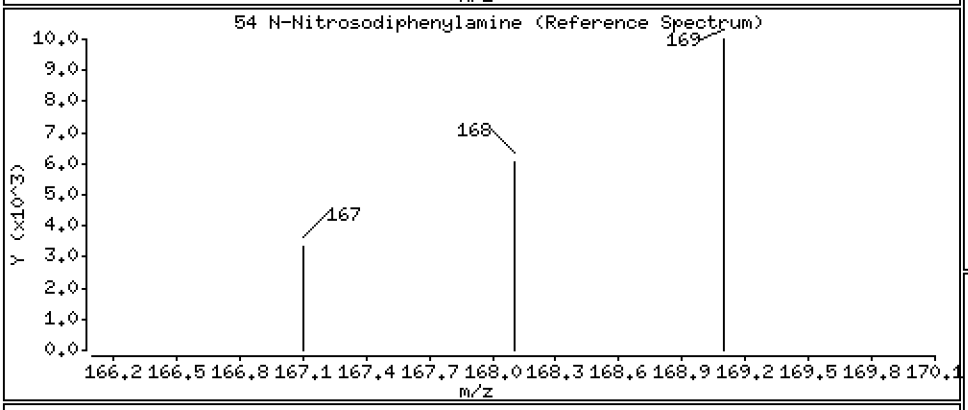
Concentration: 3.575 ug/mL

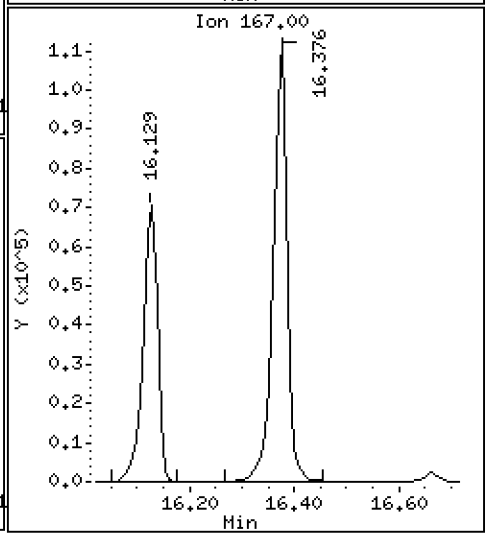


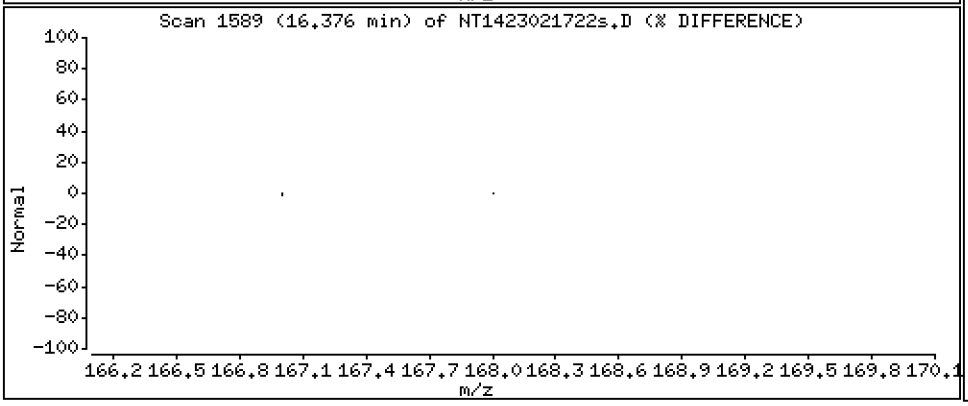












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Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS2

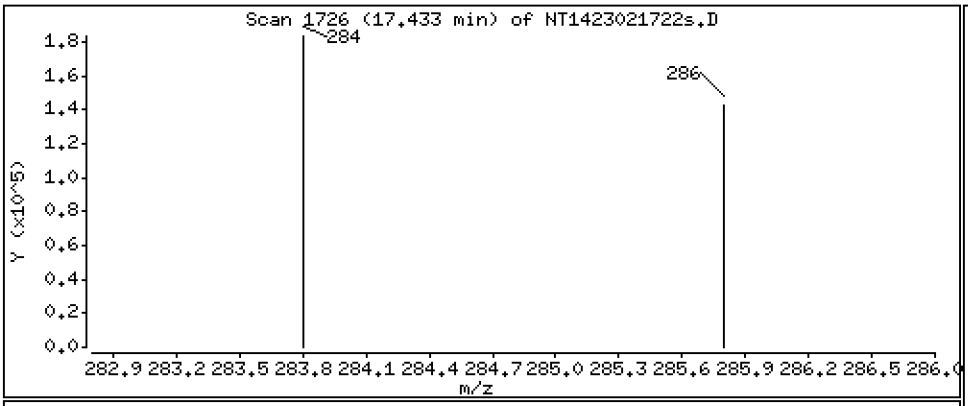
Operator: DSD

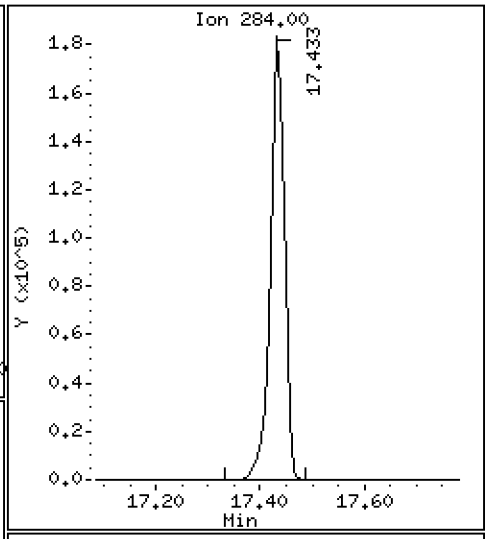
Column phase: ZB-5msi

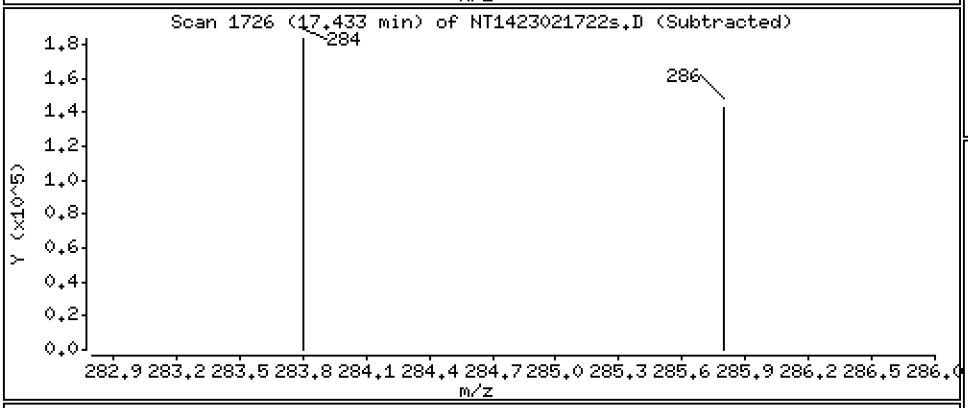
Column diameter: 0.25

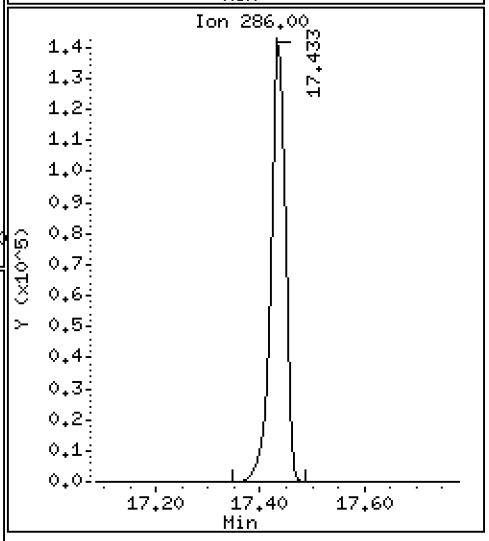
57 Hexachlorobenzene

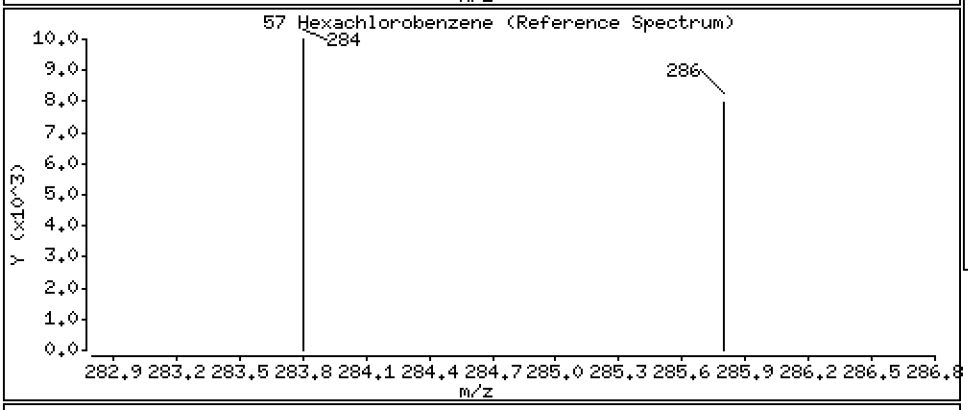
Concentration: 3.942 ug/mL

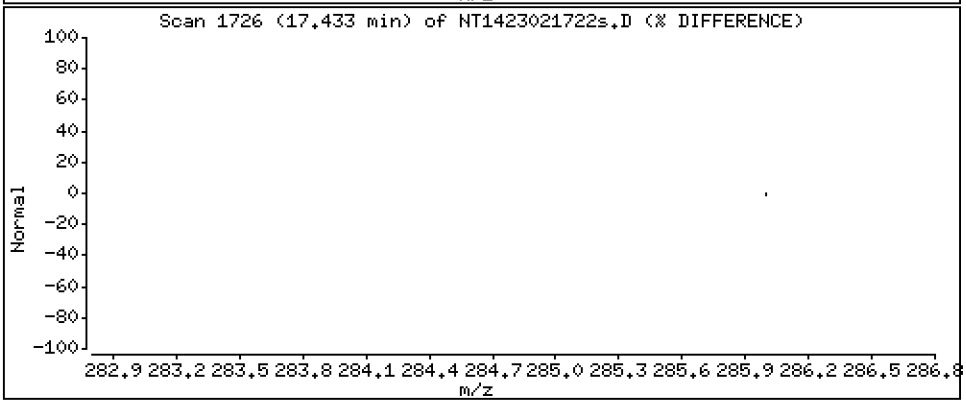












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021722s.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS2

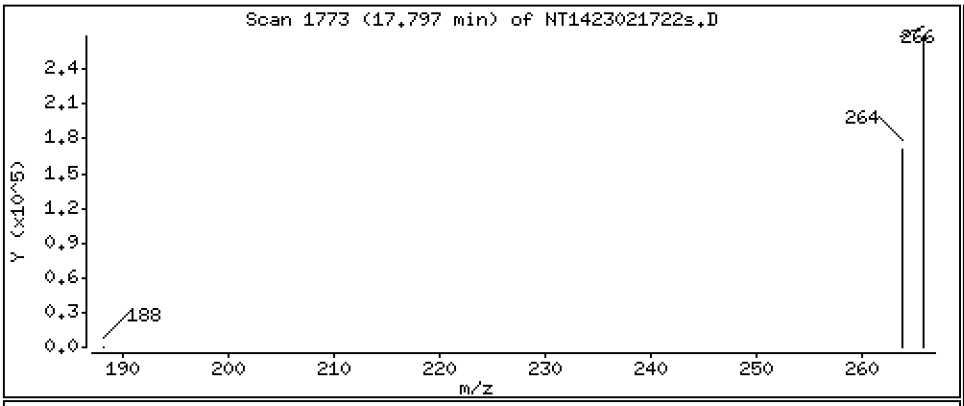
Operator: DSD

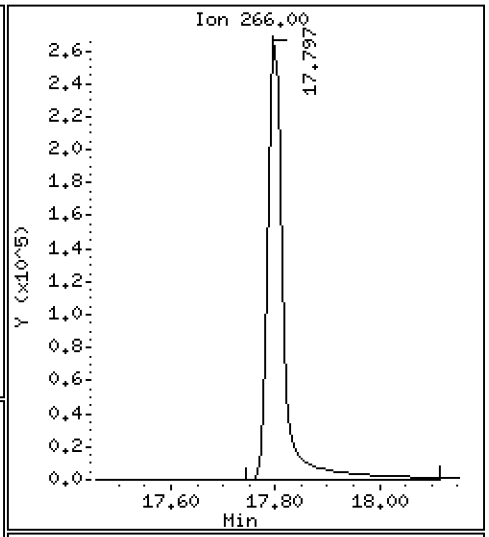
Column phase: ZB-5msi

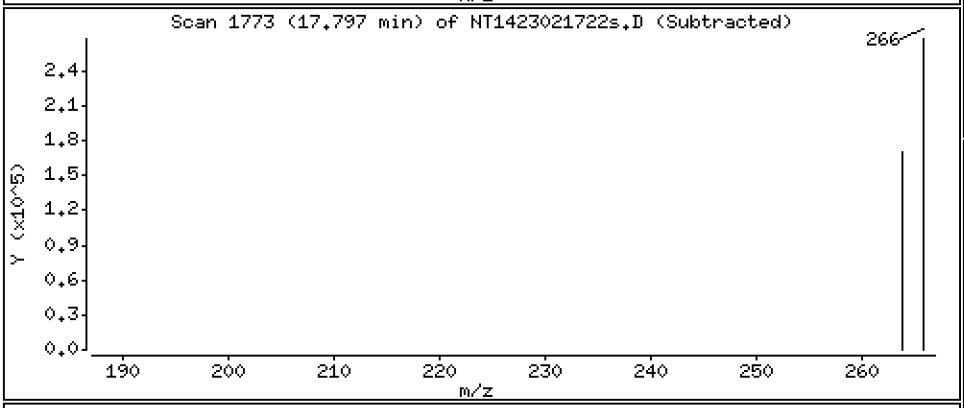
Column diameter: 0.25

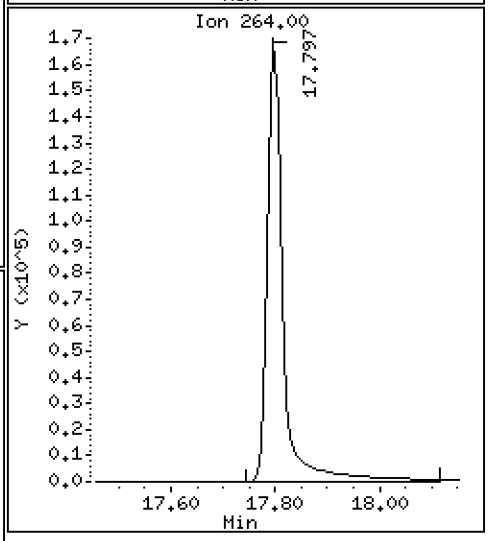
58 Pentachlorophenol

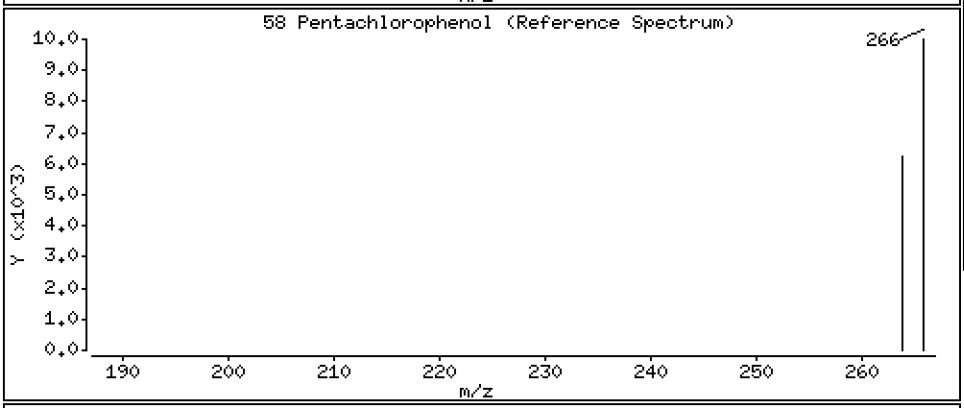
Concentration: 13.44 ug/mL

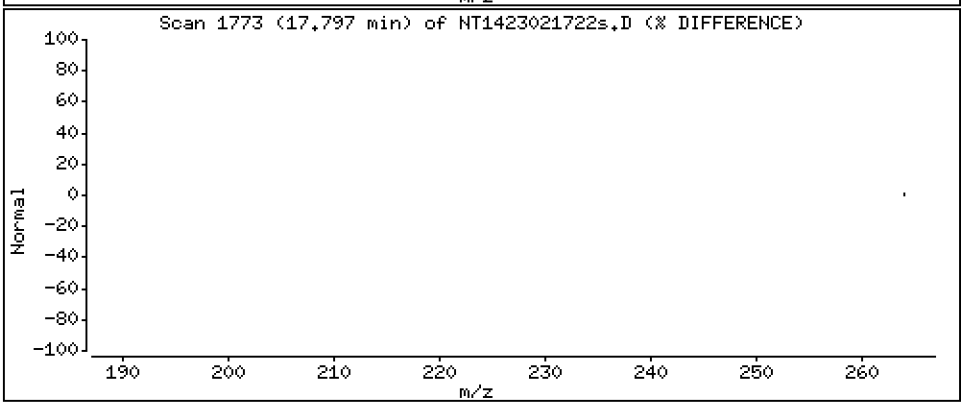












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021722s.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS2

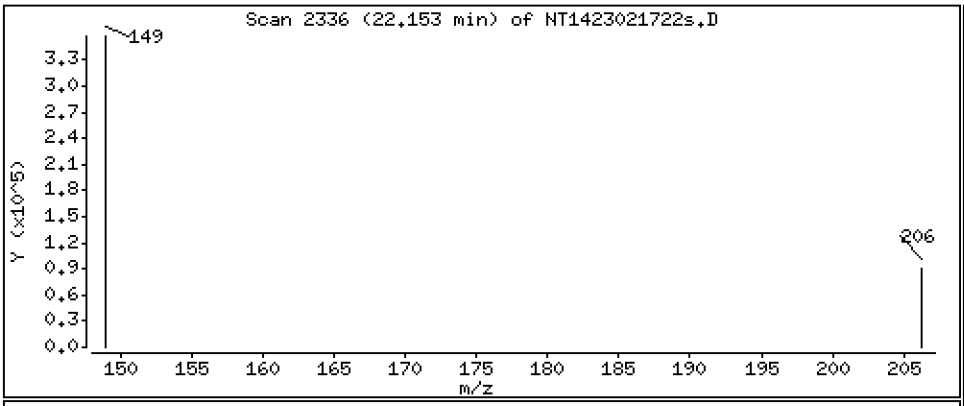
Operator: DSD

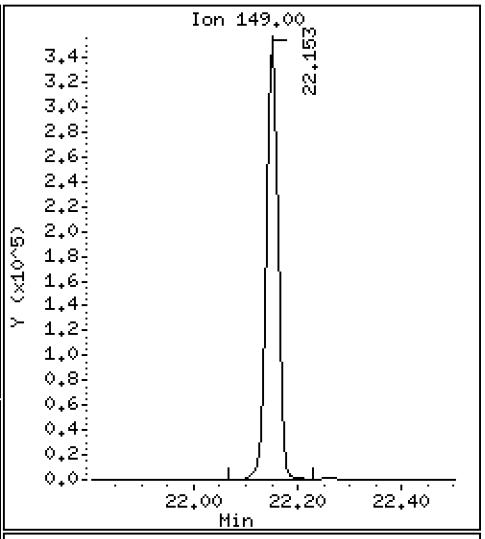
Column phase: ZB-5msi

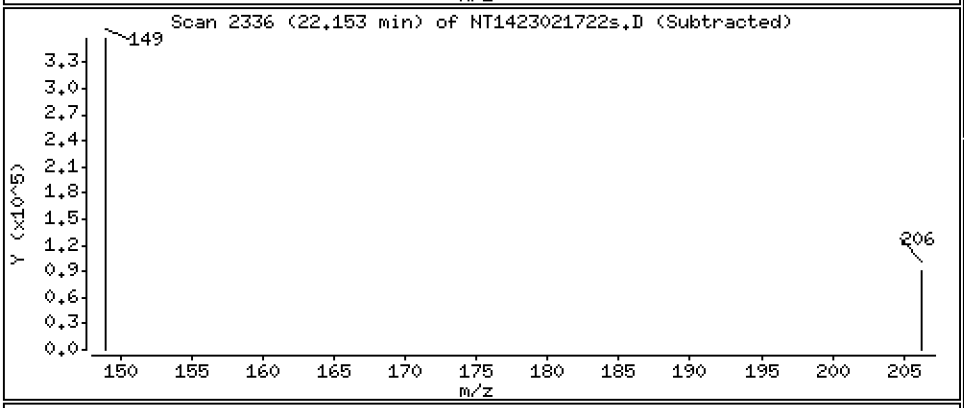
Column diameter: 0.25

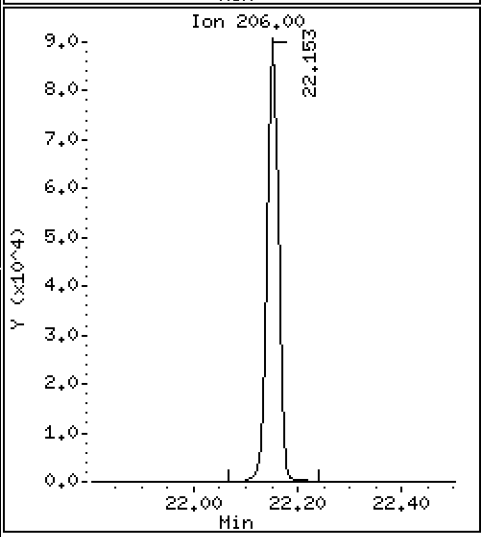
67 Butylbenzylphthalate

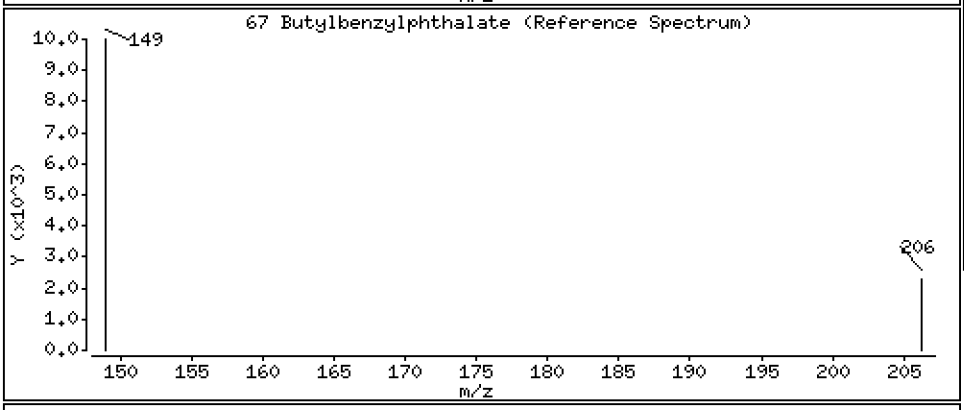
Concentration: 5.482 ug/mL

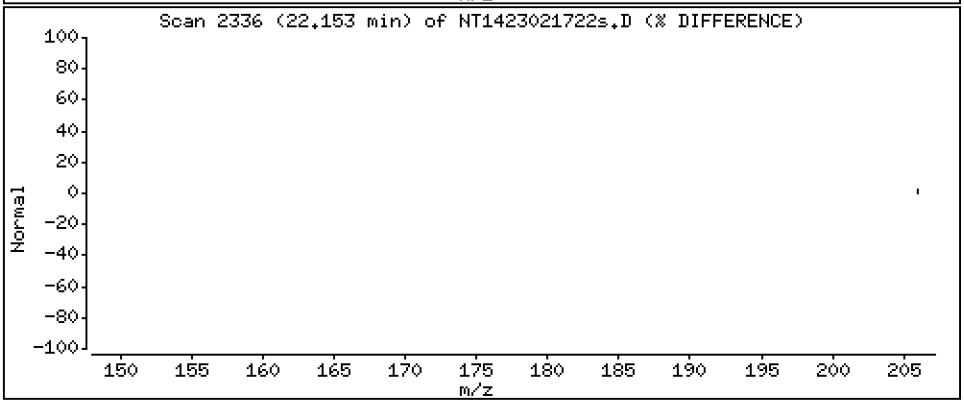












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021722s.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS2

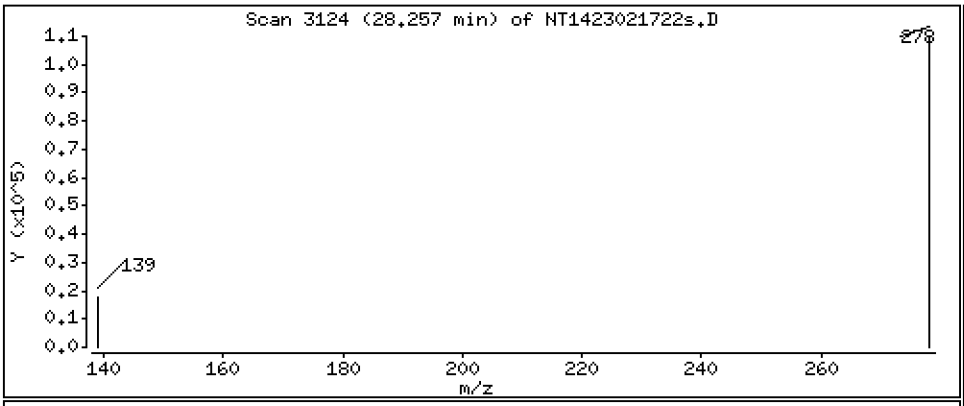
Operator: DSD

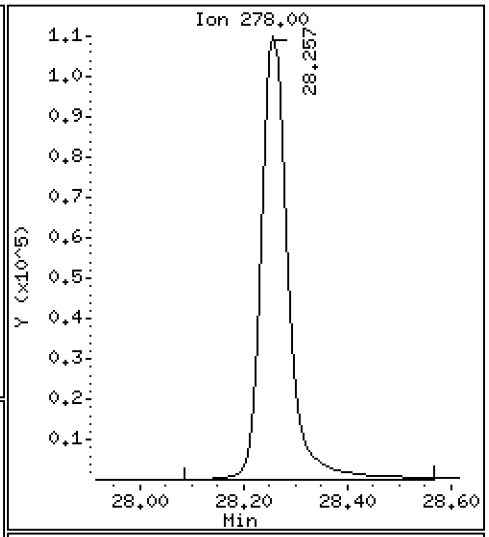
Column phase: ZB-5msi

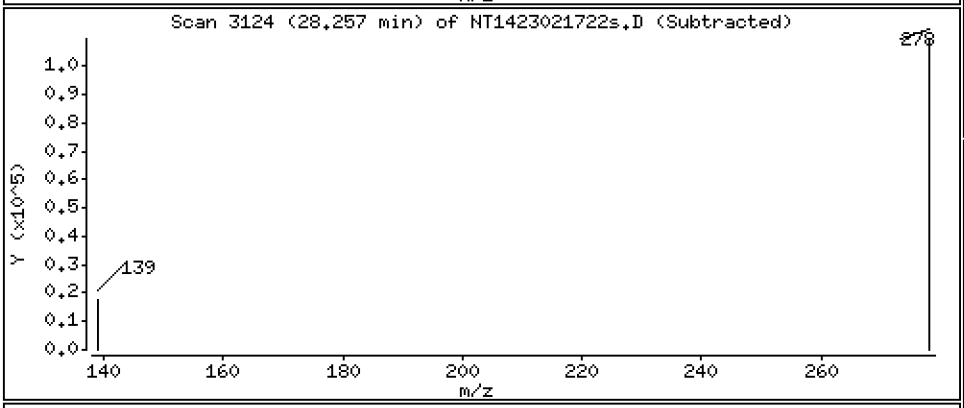
Column diameter: 0.25

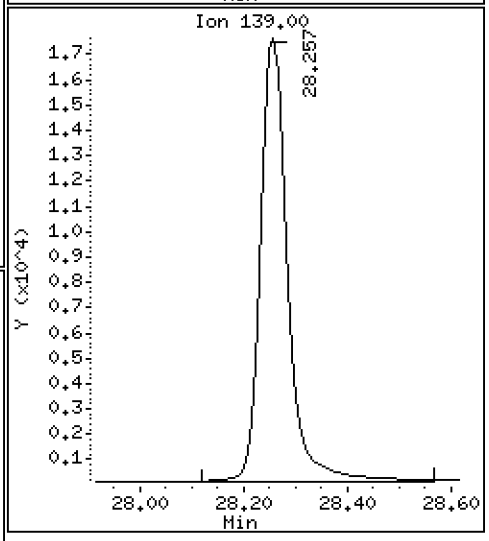
79 Dibenzo(a,h)anthracene

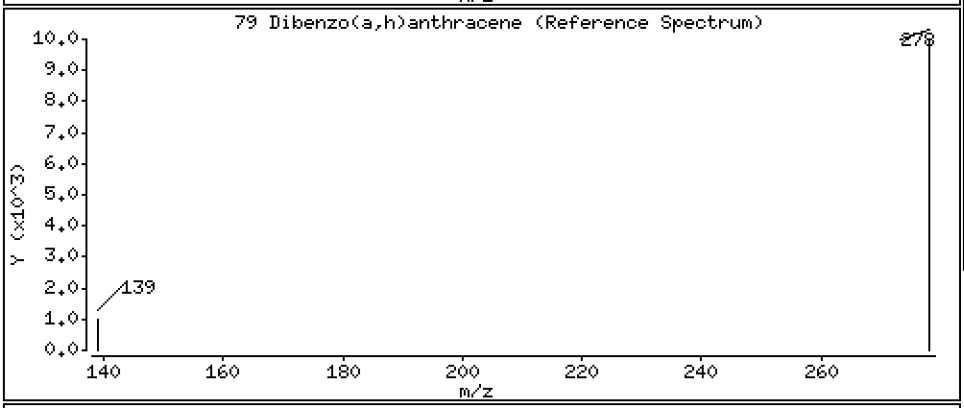
Concentration: 4.172 ug/mL

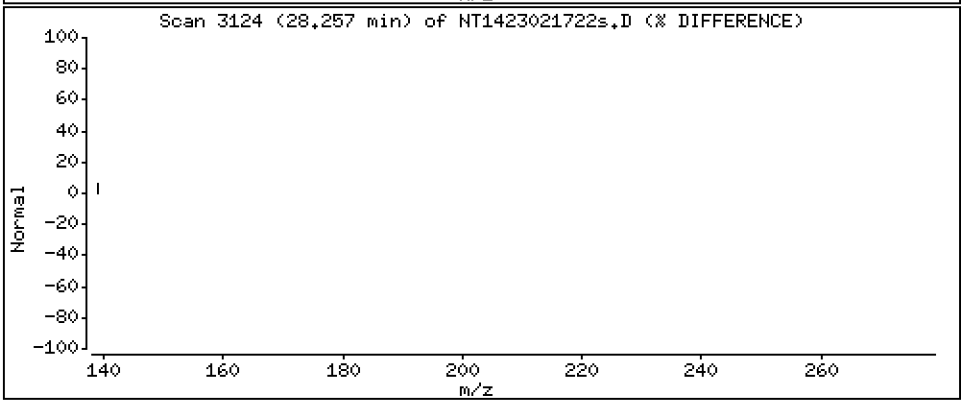












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021722s.D

Date : 17-FEB-2023 23:19

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BS2

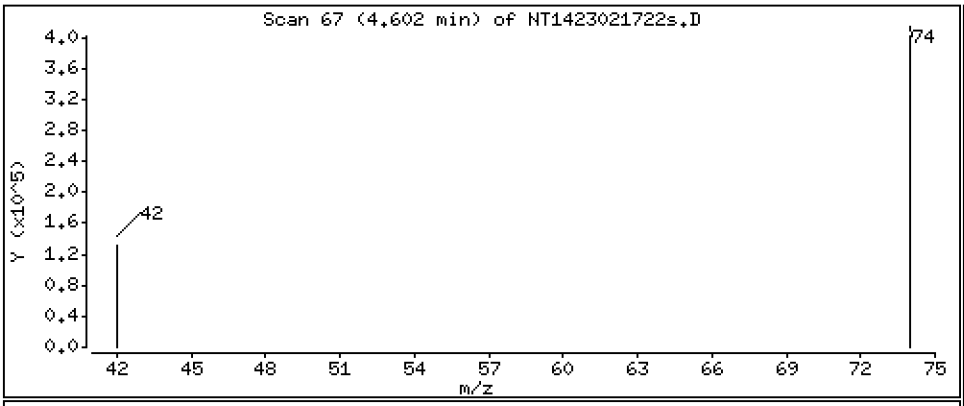
Operator: DSD

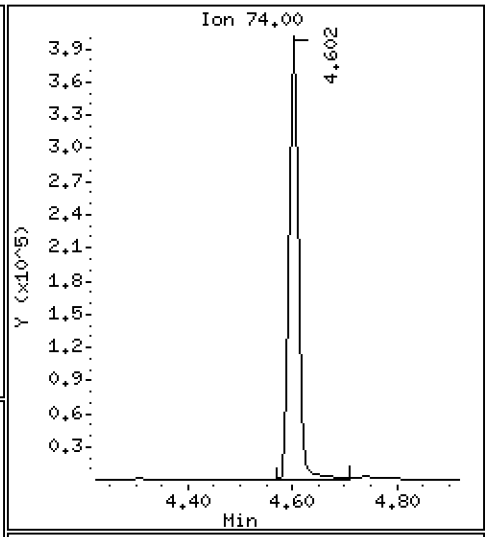
Column phase: ZB-5msi

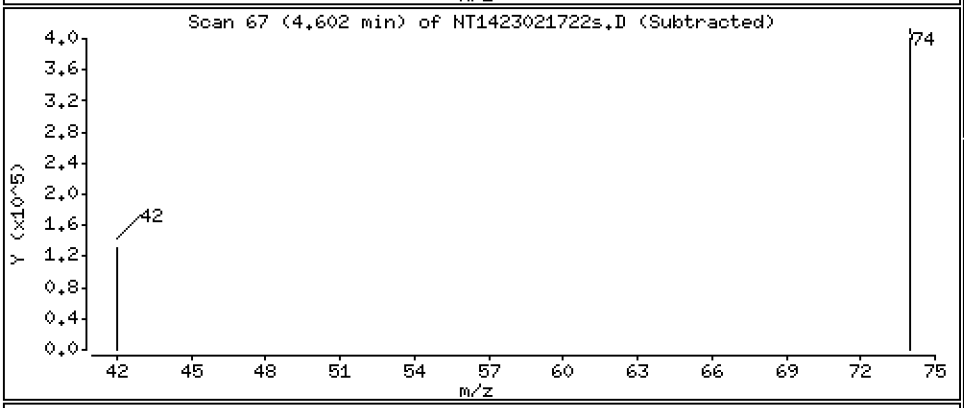
Column diameter: 0.25

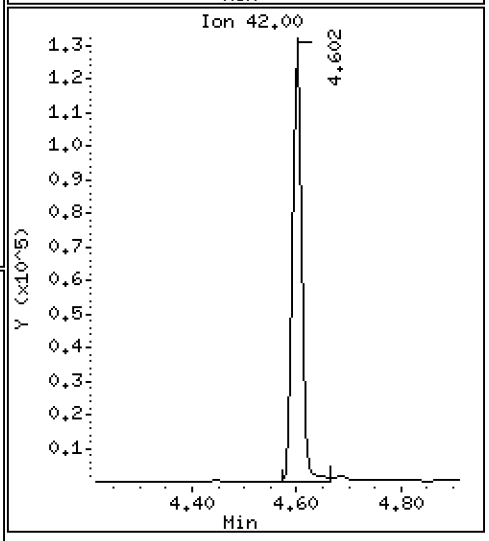
90 N-Nitrosodimethylamine

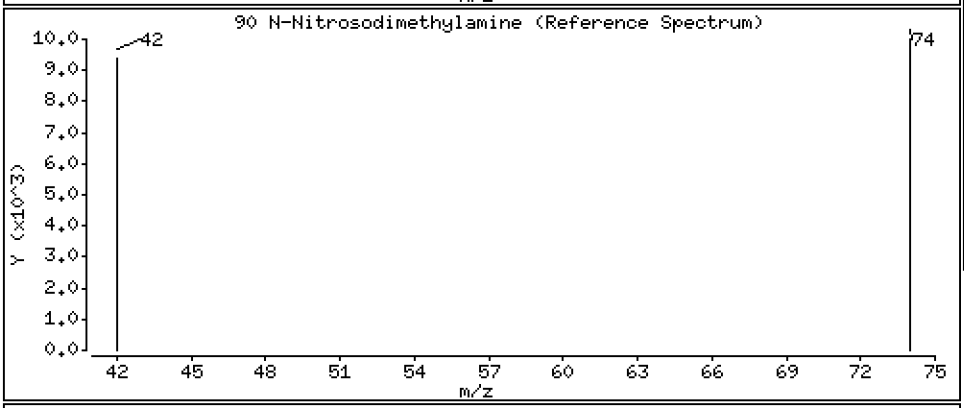
Concentration: 8.409 ug/mL

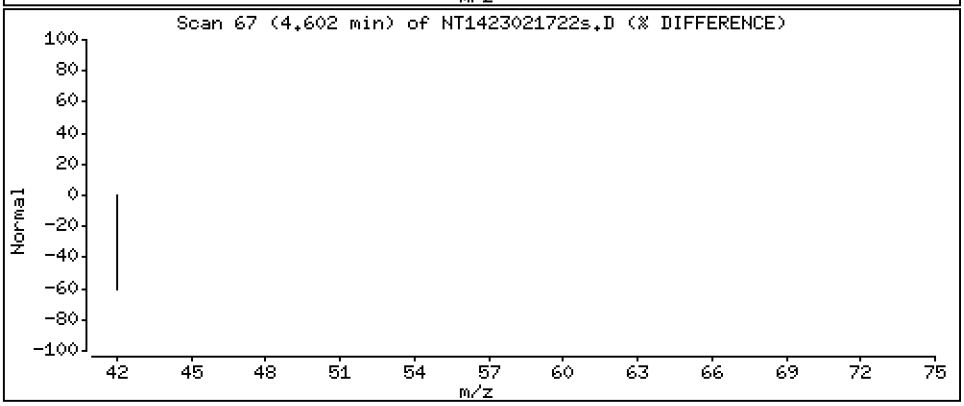












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021722s.D
Lab Smp Id: BLA0339-BS2
Inj Date : 17-FEB-2023 23:19 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : BLA0339-BS2
Misc Info :
Comment :
Method : \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\SIMABN2.m
Meth Date : 07-Mar-2023 12:35 van Quant Type: ISTD
Cal Date : 16-FEB-2023 20:42 Cal File: NT1423021612s.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

			QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1	2-Fluorophenol	112	6.702	6.679	(0.753)	445885	5.19774	5.198(R)
	3	Phenol	94	8.294	8.294	(0.931)	432859	3.30836	3.308
	7	1,3-Dichlorobenzene	146	8.835	8.835	(0.992)	340056	3.30145	3.301
*	8	1,4-Dichlorobenzene-d4	152	8.905	8.905	(1.000)	302713	4.00000	
	9	1,4-Dichlorobenzene	146	8.928	8.928	(1.003)	333503	3.39421	3.394
	11	Benzyl alcohol	79	9.184	9.184	(1.031)	301119	3.63213	3.632
	12	1,2-Dichlorobenzene	146	9.285	9.293	(1.043)	333041	3.40900	3.409
	13	2-Methylphenol	108	9.409	9.409	(1.057)	257777	2.86873	2.869
	15	4-Methylphenol	108	9.689	9.681	(1.088)	312168	3.12894	3.129
	16	N-Nitroso-di-n-propylamine	70	9.743	9.735	(1.094)	277384	3.55549	3.555
	22	2,4-Dimethylphenol	107	10.729	10.728	(0.942)	280090	2.92285	2.923
	24	Benzoic acid	105	11.000	10.891	(0.965)	1212843	23.6968	23.70
	26	1,2,4-Trichlorobenzene	180	11.310	11.309	(0.993)	335471	3.38224	3.382
*	27	Naphthalene-d8	136	11.395	11.394	(1.000)	1082666	4.00000	
	30	Hexachlorobutadiene	225	11.796	11.804	(1.035)	209071	3.46500	3.465
	39	Dimethylphthalate	163	14.536	14.536	(0.968)	755407	4.27171	4.272
*	42	Acenaphthene-d10	162	15.023	15.015	(1.000)	579646	4.00000	
	50	Diethylphthalate	149	15.997	15.989	(1.065)	979309	4.42475	4.425
	54	N-Nitrosodiphenylamine	169	16.376	16.368	(0.907)	600120	3.57472	3.575
	57	Hexachlorobenzene	284	17.432	17.432	(0.965)	332135	3.94161	3.942
	58	Pentachlorophenol	266	17.796	17.804	(0.985)	538904	13.4390	13.44
*	59	Phenanthrene-d10	188	18.059	18.059	(1.000)	1297420	4.00000	
$	66	Terphenyl-d14	244	21.216	21.216	(0.917)	916450	5.02841	5.028(R)
	67	Butylbenzylphthalate	149	22.153	22.153	(0.958)	518197	5.48187	5.482
*	69	Chrysene-d12	240	23.129	23.121	(1.000)	684601	4.00000	
*	77	Perylene-d12	264	25.691	25.691	(1.000)	496930	4.00000	
	79	Dibenzo(a,h)anthracene	278	28.257	28.265	(1.100)	395227	4.17208	4.172
	90	N-Nitrosodimethylamine	74	4.602	4.571	(0.517)	527535	8.40924	8.409

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021722s.D
Lab Smp Id: BLA0339-BS2
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\SIMABN2.m
Misc Info:

Calibration Date: 17-FEB-2023
Calibration Time: 21:31
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	388684	194342	777368	302713	-22.12
27 Naphthalene-d8	1386667	693334	2773334	1082666	-21.92
42 Acenaphthene-d10	752189	376095	1504378	579646	-22.94
59 Phenanthrene-d10	1701919	850960	3403838	1297420	-23.77
69 Chrysene-d12	887171	443586	1774342	684601	-22.83
77 Perylene-d12	644624	322312	1289248	496930	-22.91

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	0.00
27 Naphthalene-d8	11.39	10.89	11.89	11.40	0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.05
59 Phenanthrene-d10	18.06	17.56	18.56	18.06	0.00
69 Chrysene-d12	23.12	22.62	23.62	23.13	0.03
77 Perylene-d12	25.69	25.19	26.19	25.69	0.00

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

REVIEW SUMMARY FOR FILE - NT1423021722s.D

Lab ID: BLA0339-BS2
nt14.i, 20230217A.b\20230217A.b\SIMABN2.m,   17-FEB-2023 23:19

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.965	0.956	0.0095	Benzoic acid

RRT check based on Ccal File: 20230217A.b/NT1423021719s.D

On Column LOD for nt14.i, 20230217A.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021723s.D

Date : 17-FEB-2023 23:55

Client ID:

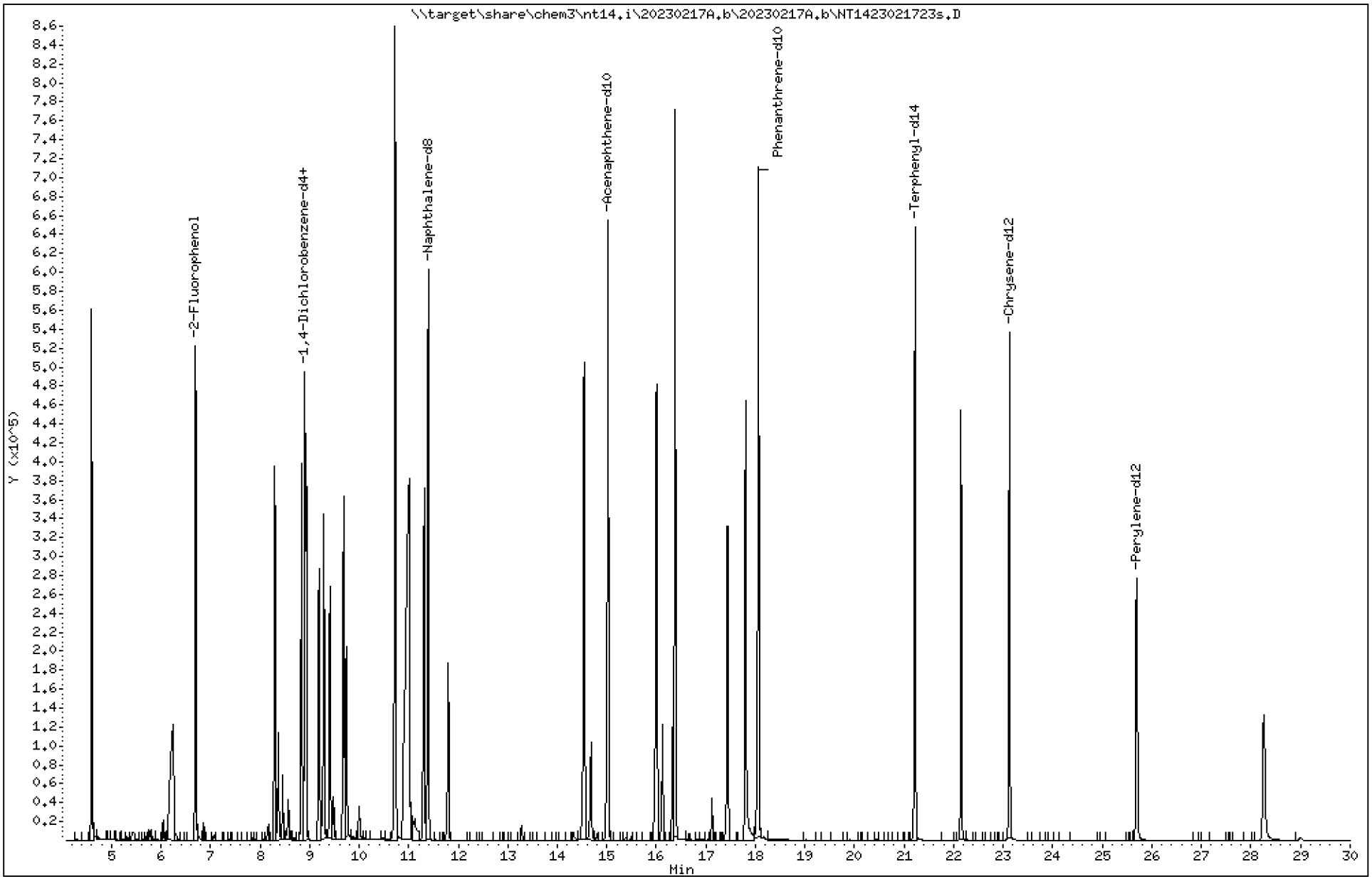
Instrument: nt14.i

Sample Info: BLA0339-BSD2

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD2

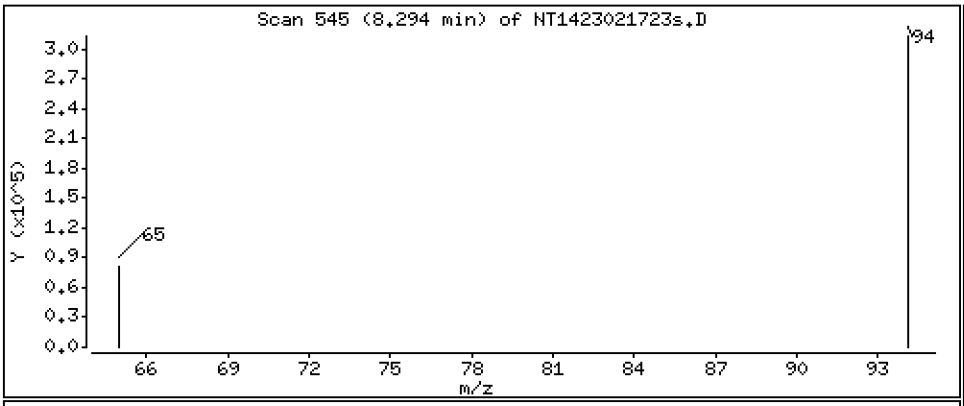
Operator: DSD

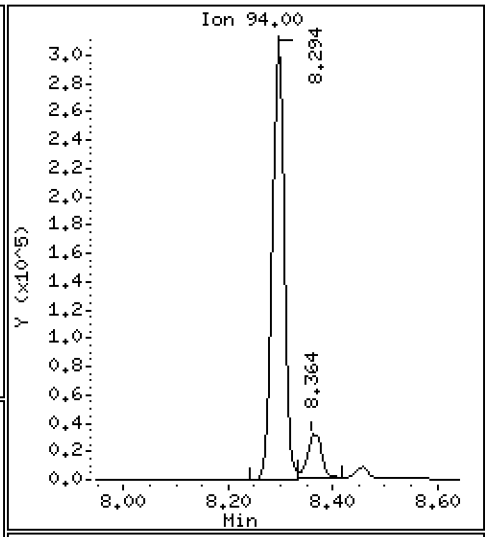
Column phase: ZB-5msi

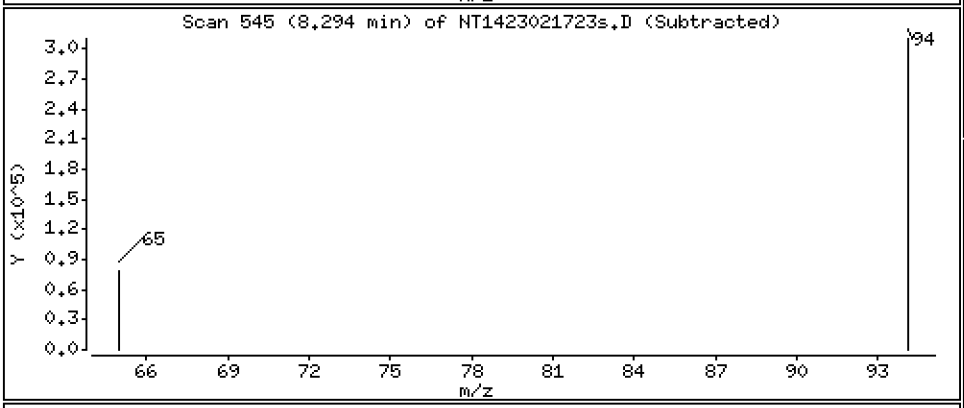
Column diameter: 0.25

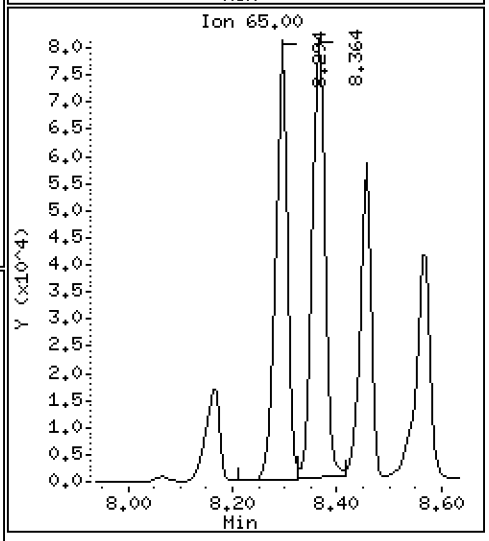
3 Phenol

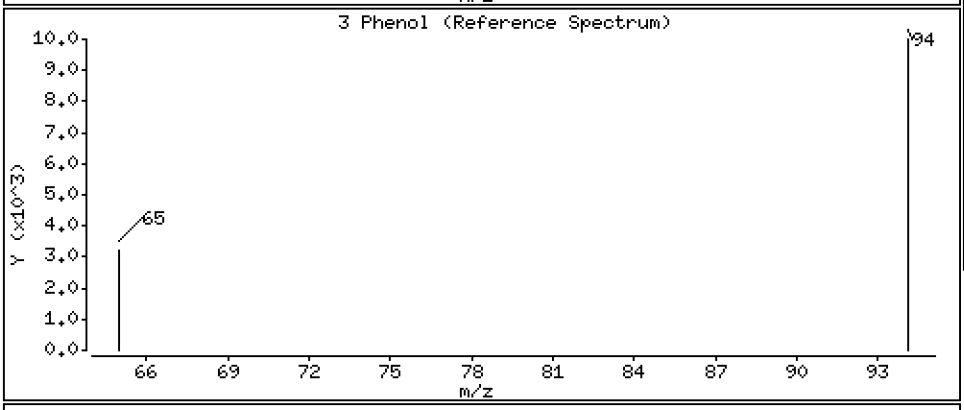
Concentration: 3.523 ug/mL

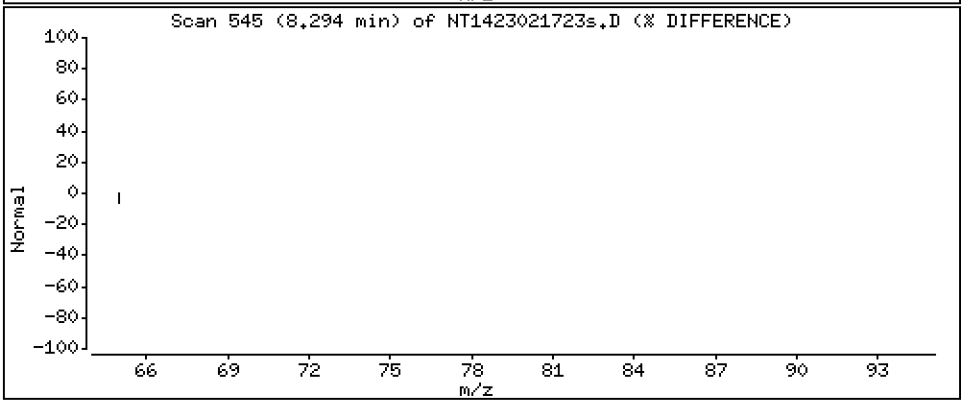












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021723s.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD2

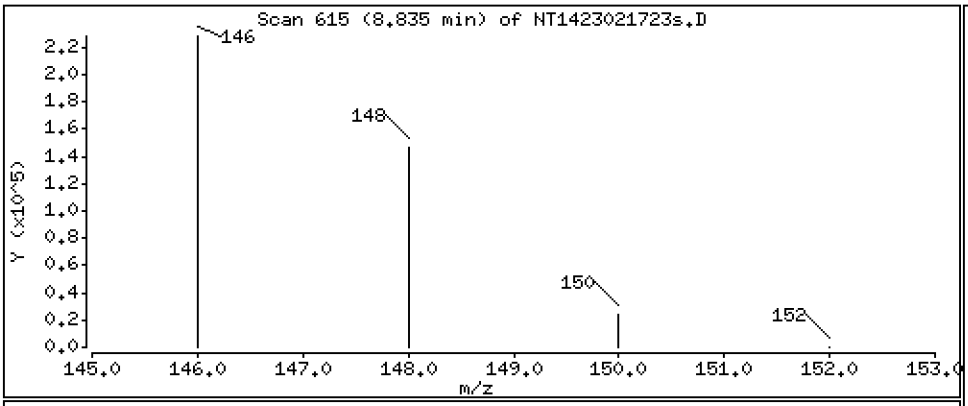
Operator: DSD

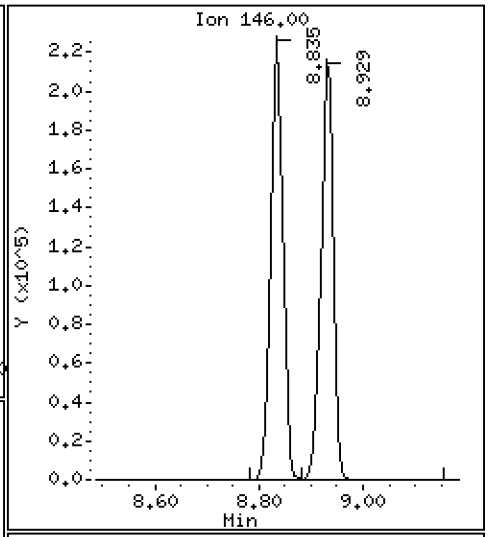
Column phase: ZB-5msi

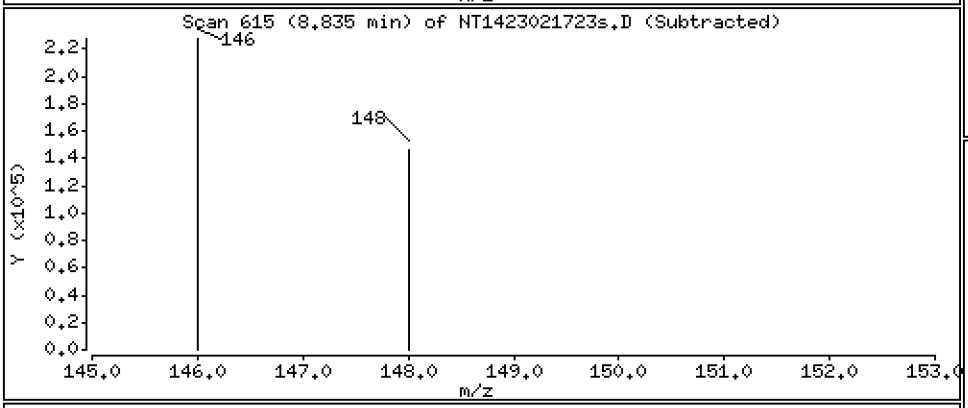
Column diameter: 0.25

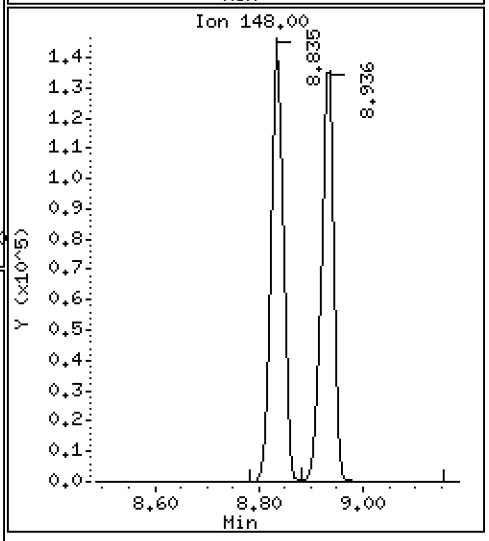
7 1,3-Dichlorobenzene

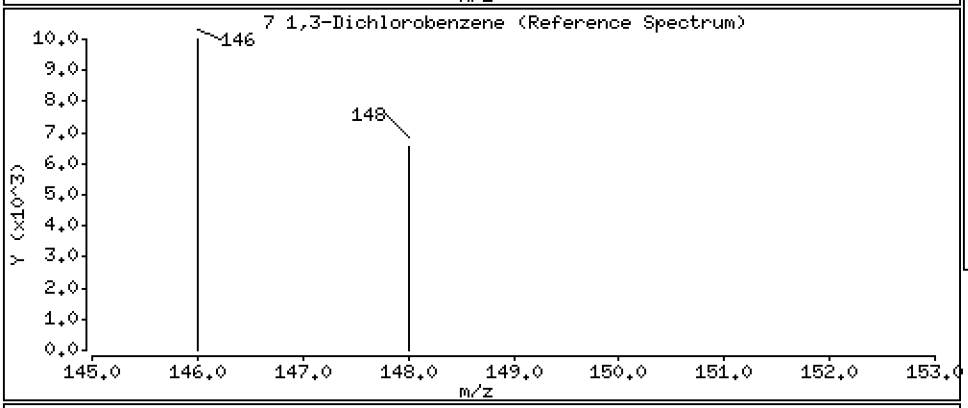
Concentration: 3.505 ug/mL

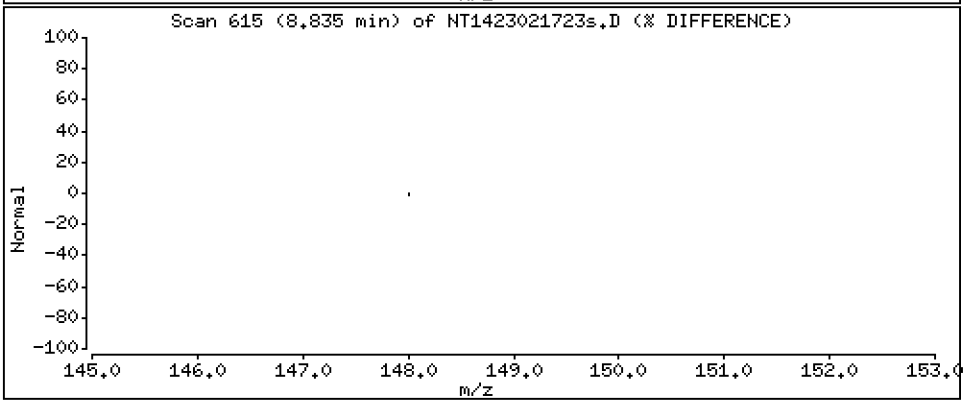












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021723s.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD2

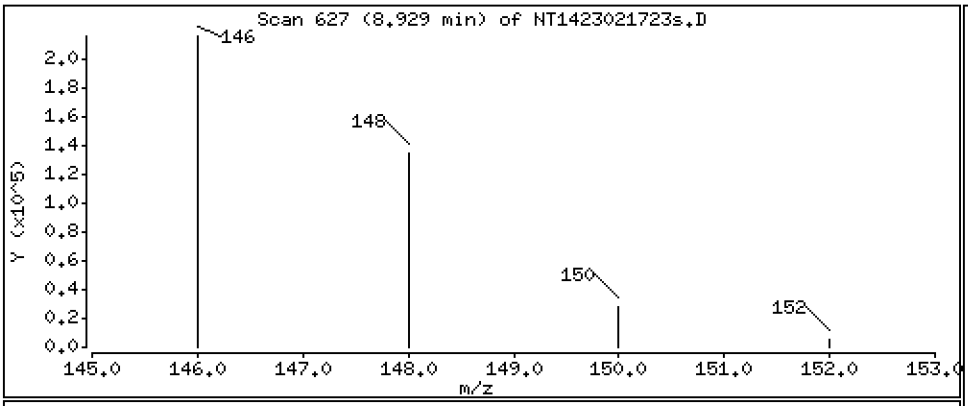
Operator: DSD

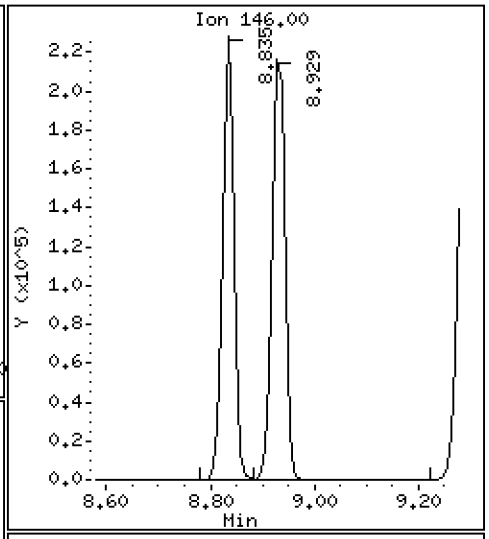
Column phase: ZB-5msi

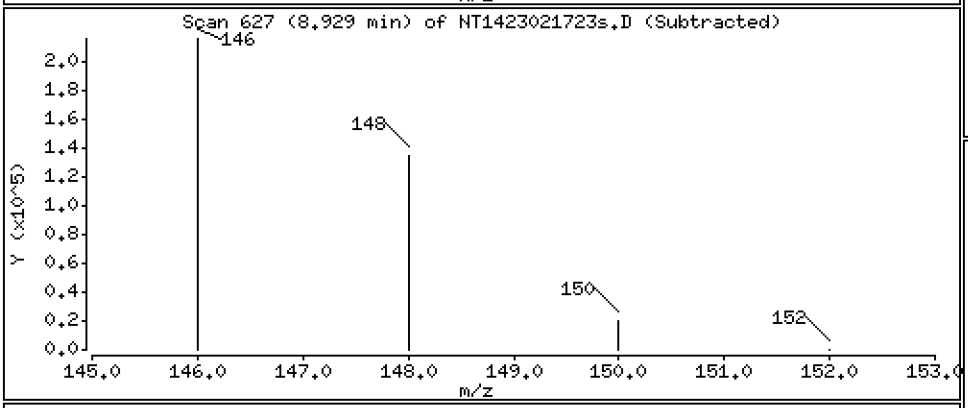
Column diameter: 0.25

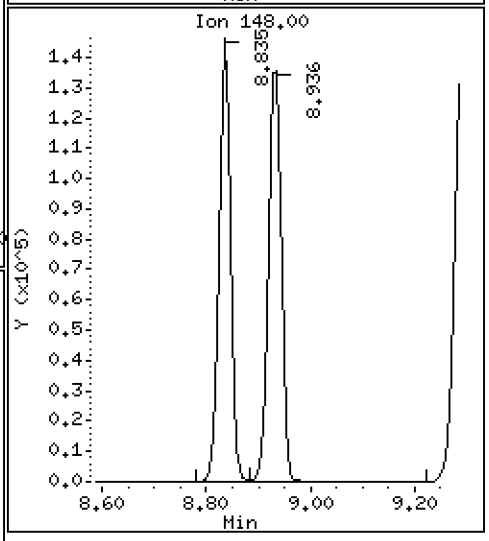
9 1,4-Dichlorobenzene

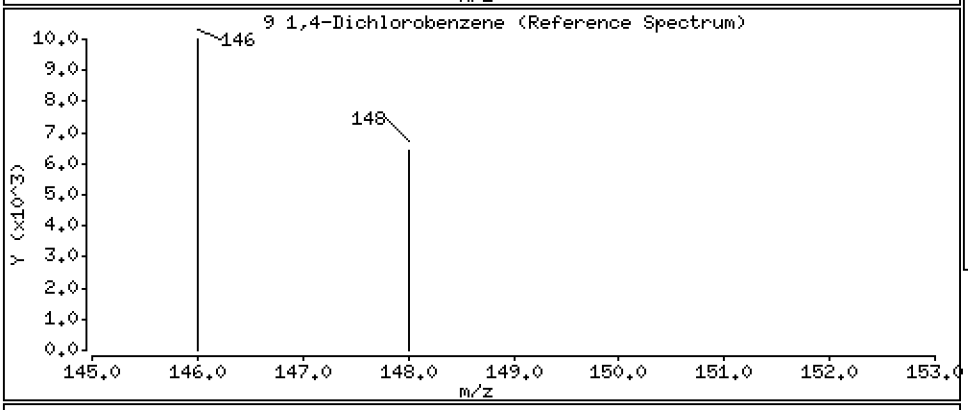
Concentration: 3.600 ug/mL

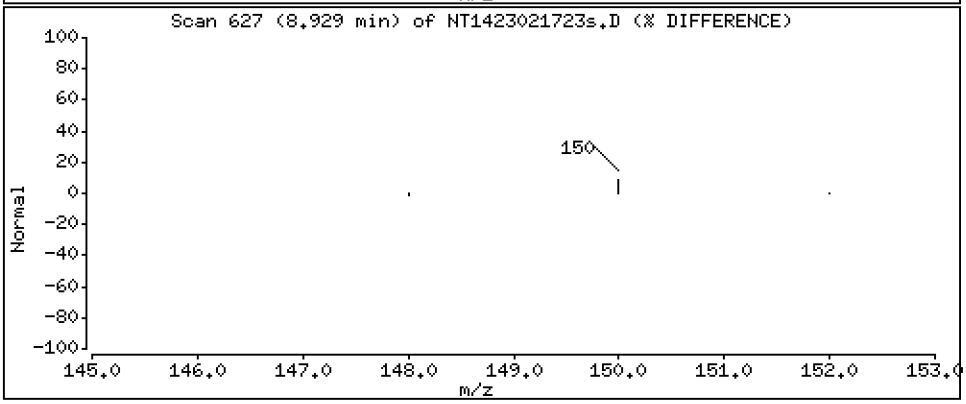












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021723s.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD2

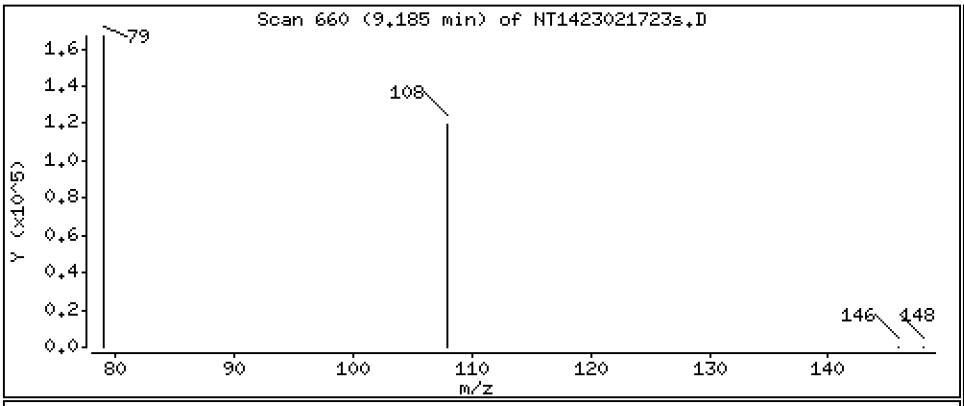
Operator: DSD

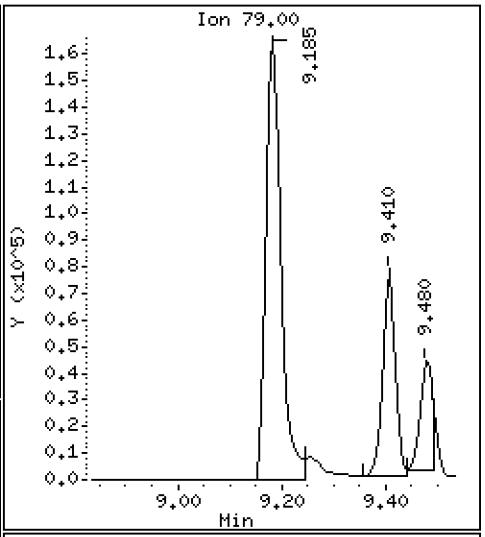
Column phase: ZB-5msi

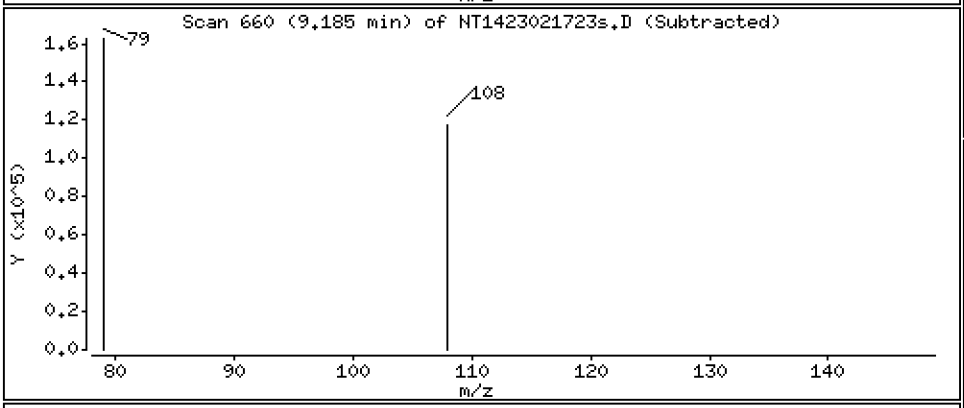
Column diameter: 0.25

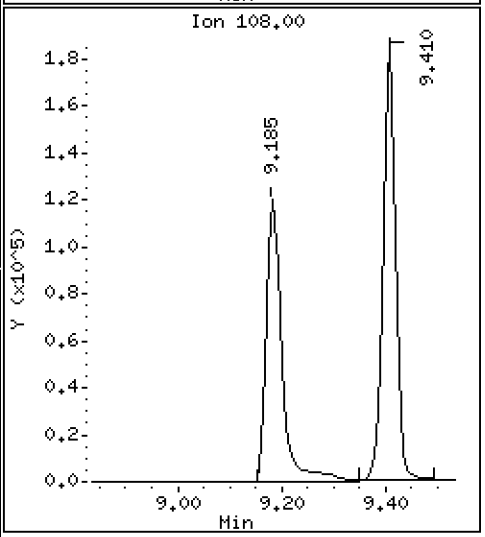
11 Benzyl alcohol

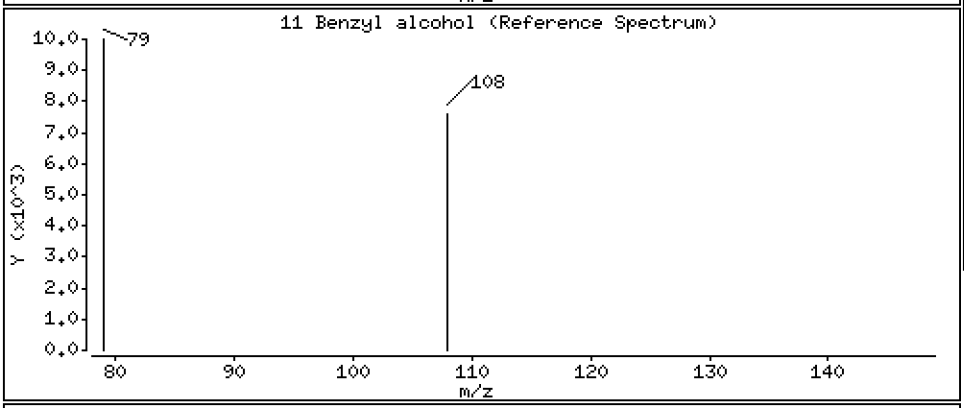
Concentration: 3.882 ug/mL

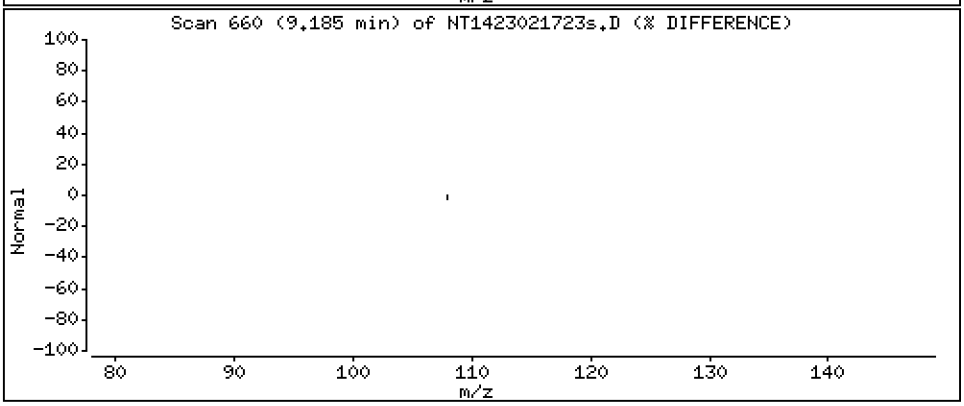












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021723s.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD2

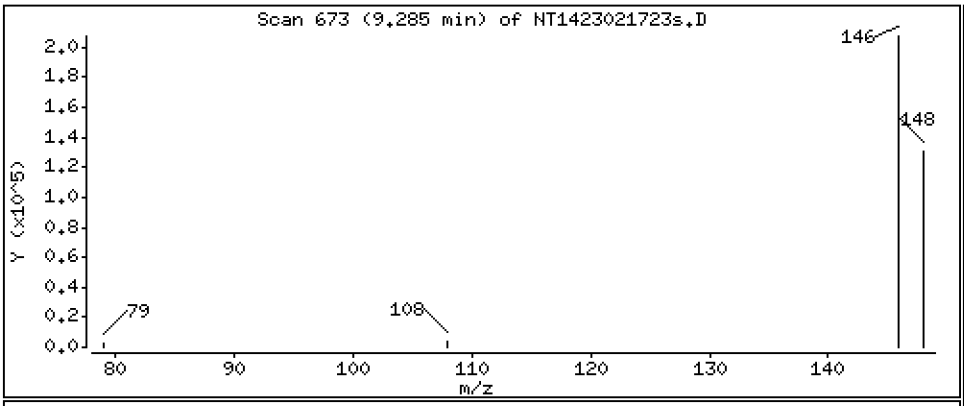
Operator: DSD

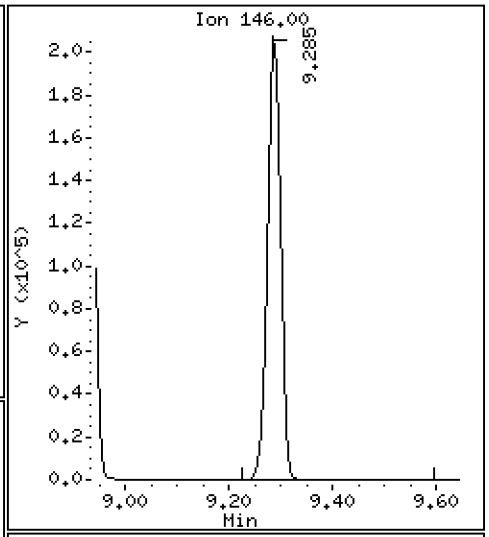
Column phase: ZB-5msi

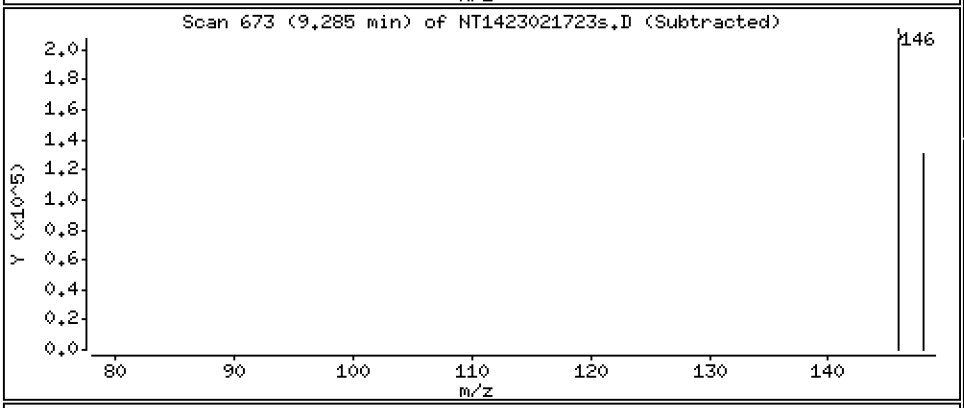
Column diameter: 0.25

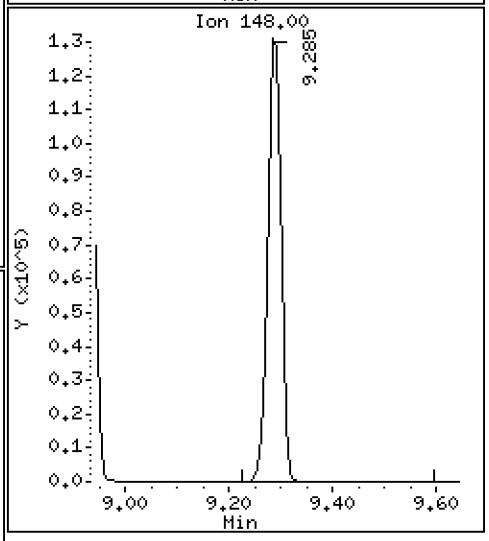
12 1,2-Dichlorobenzene

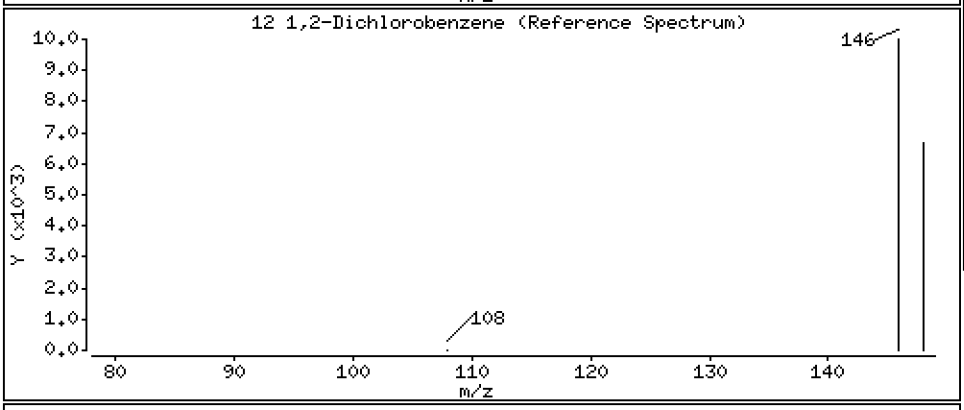
Concentration: 3.605 ug/mL

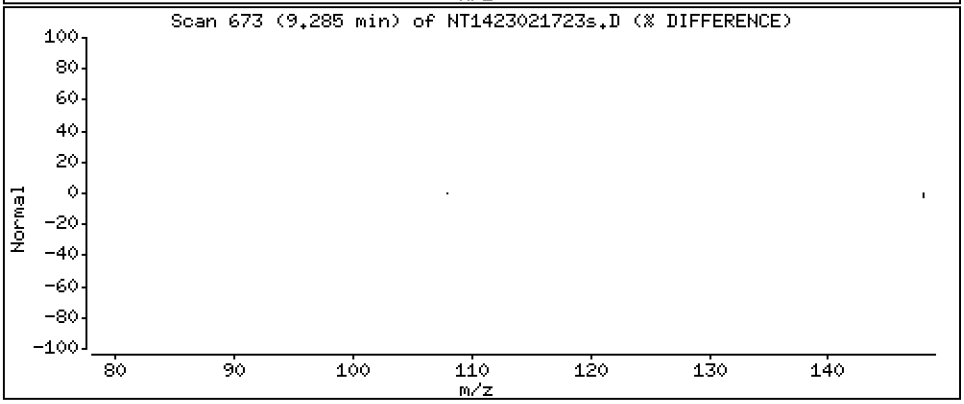












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021723s.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD2

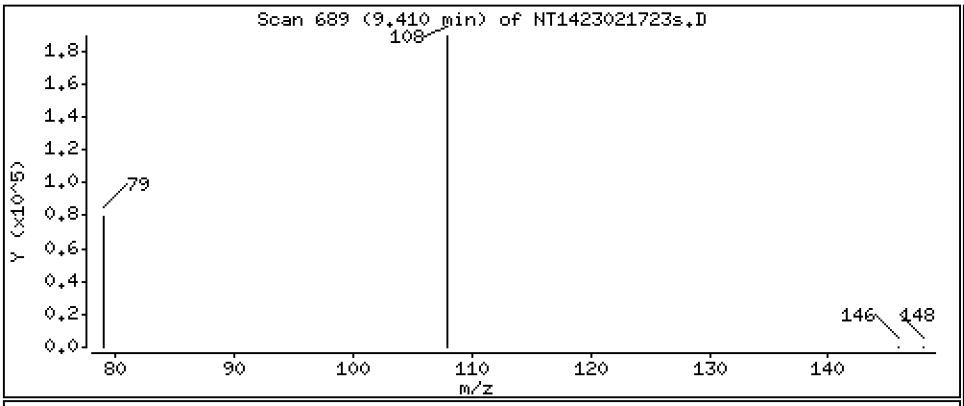
Operator: DSD

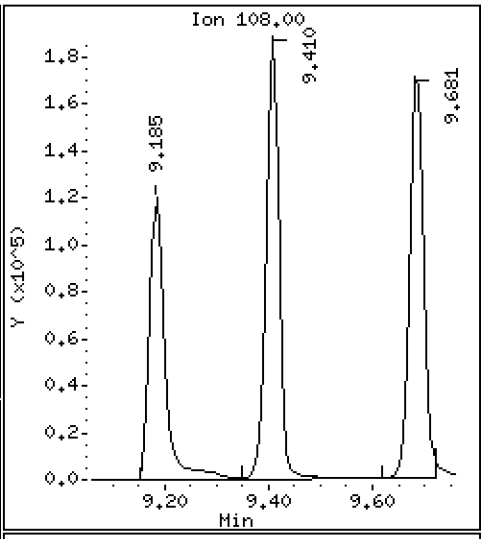
Column phase: ZB-5msi

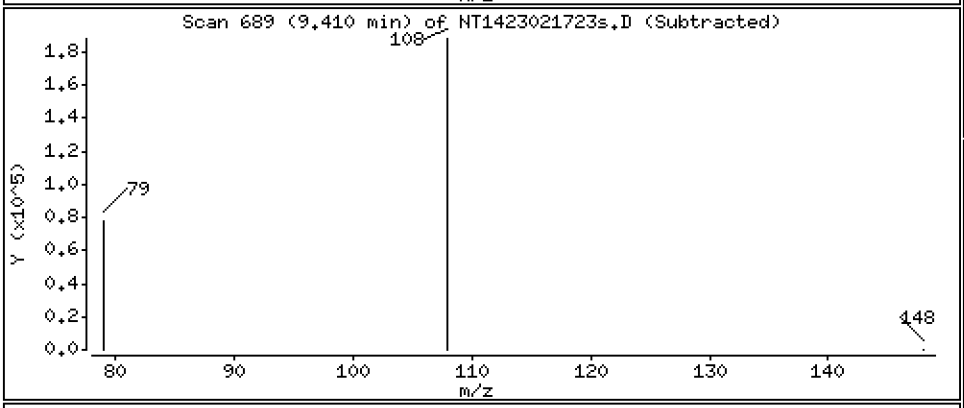
Column diameter: 0.25

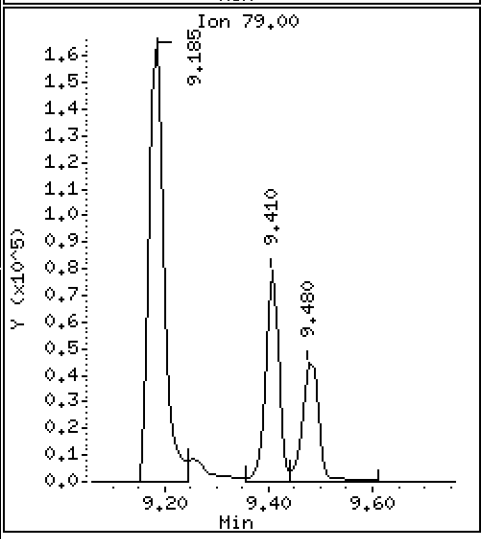
13 2-Methylphenol

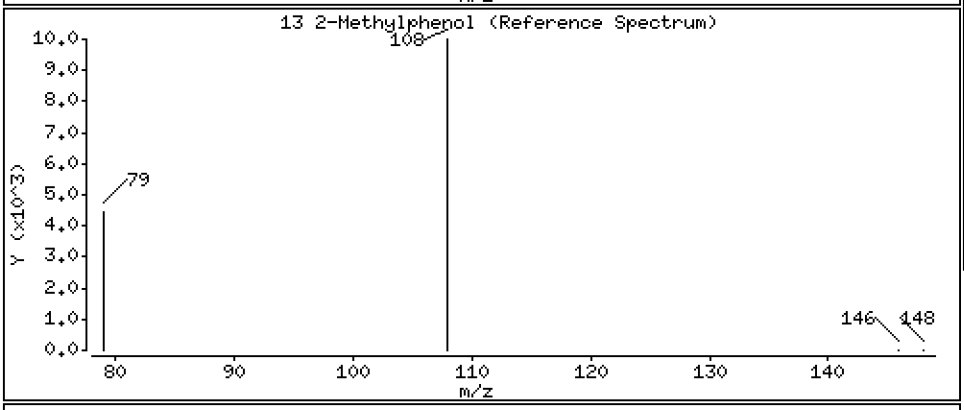
Concentration: 3.455 ug/mL

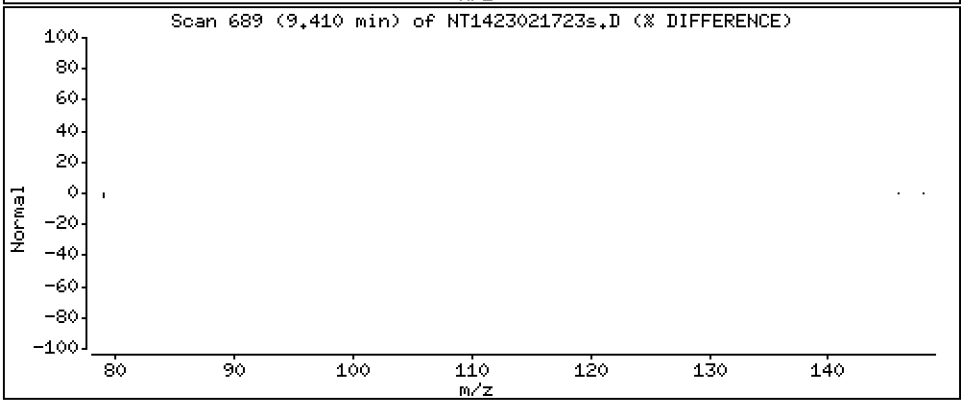












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021723s.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD2

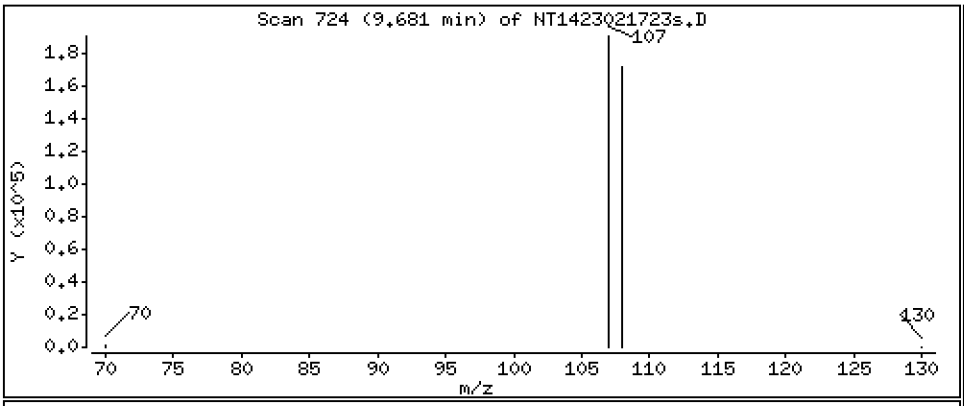
Operator: DSD

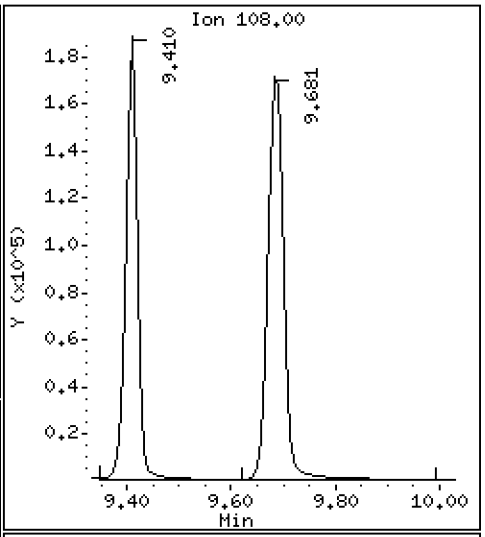
Column phase: ZB-5msi

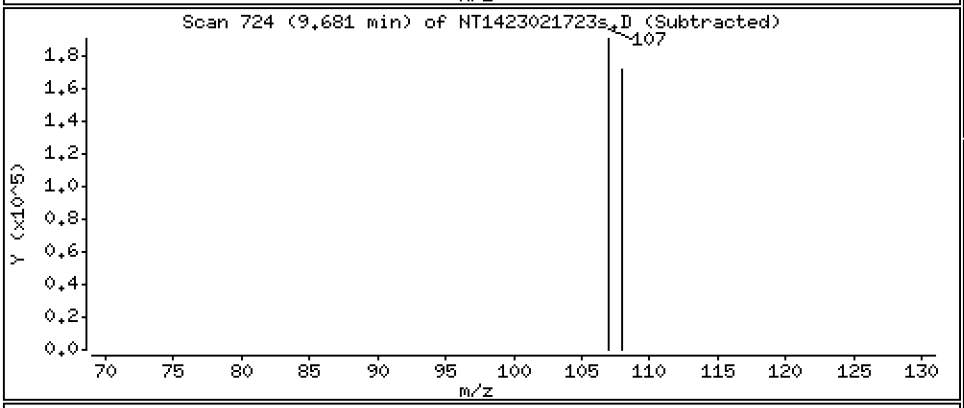
Column diameter: 0.25

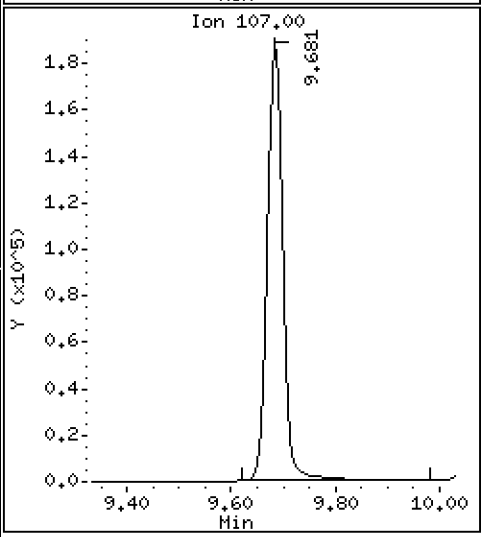
15 4-Methylphenol

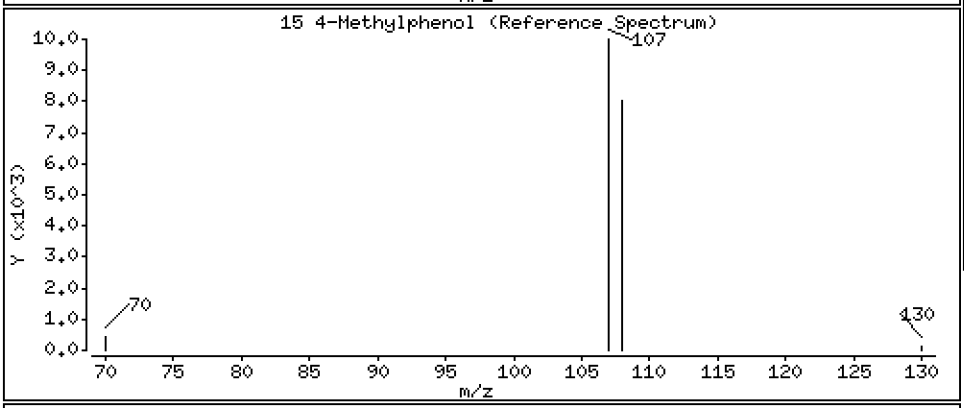
Concentration: 3.524 ug/mL

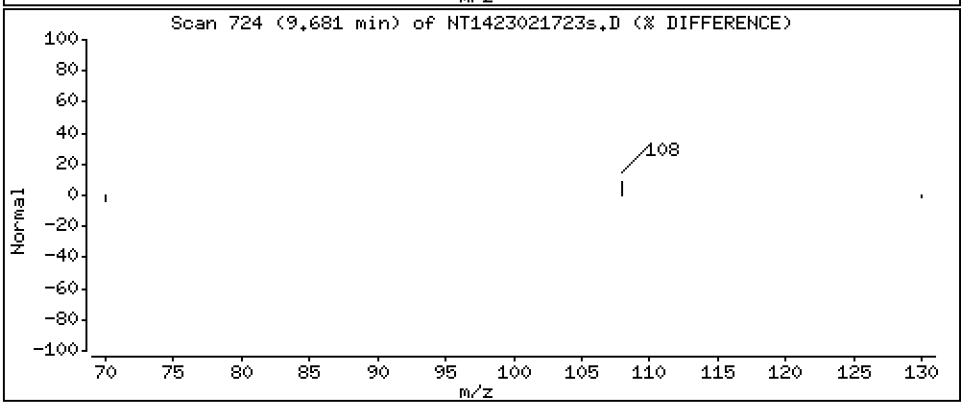












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021723s.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD2

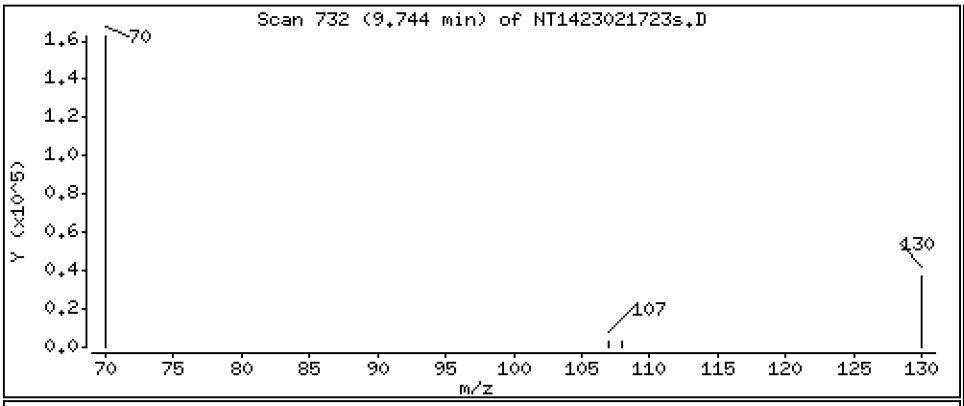
Operator: DSD

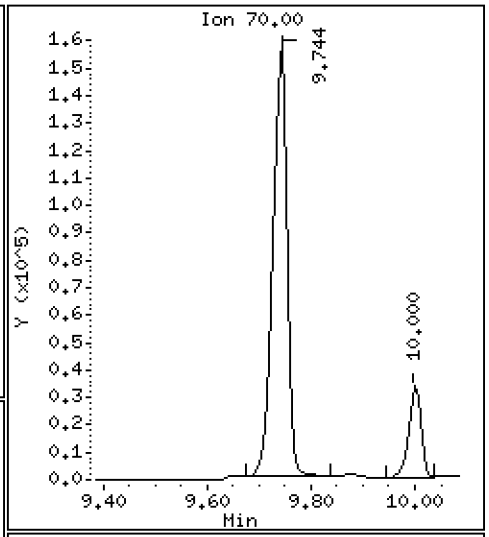
Column phase: ZB-5msi

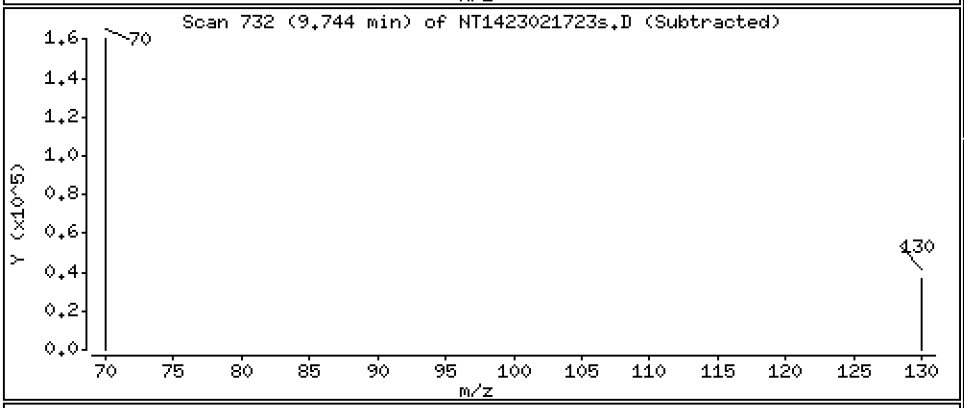
Column diameter: 0.25

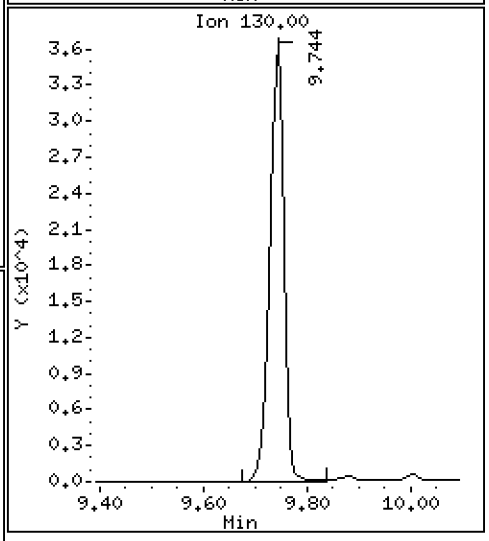
16 N-Nitroso-di-n-propylamine

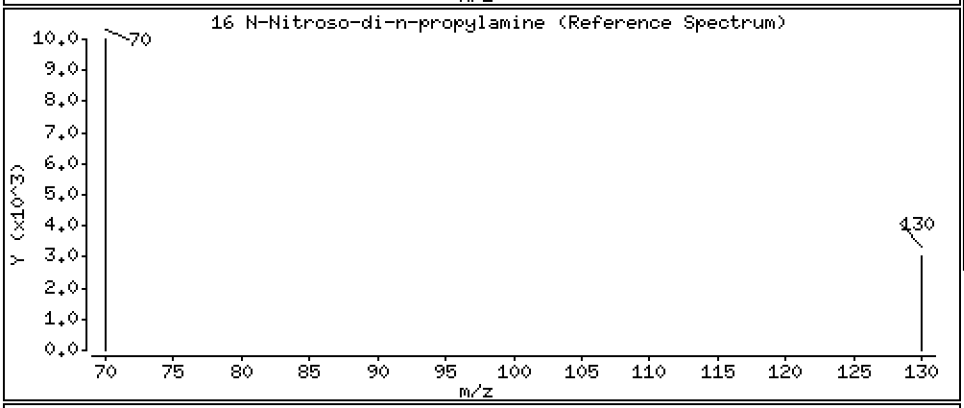
Concentration: 3.710 ug/mL

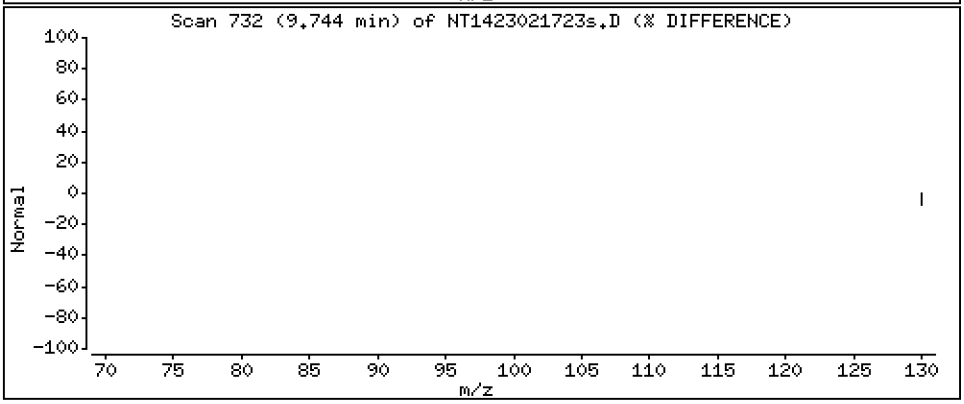












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD2

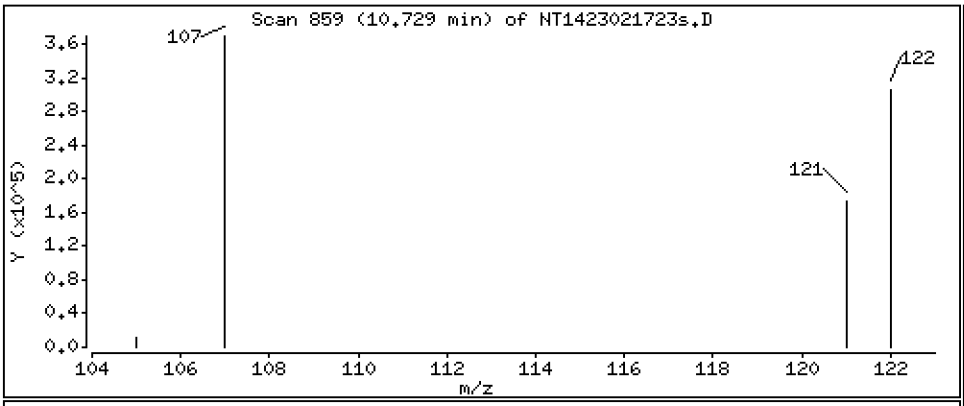
Operator: DSD

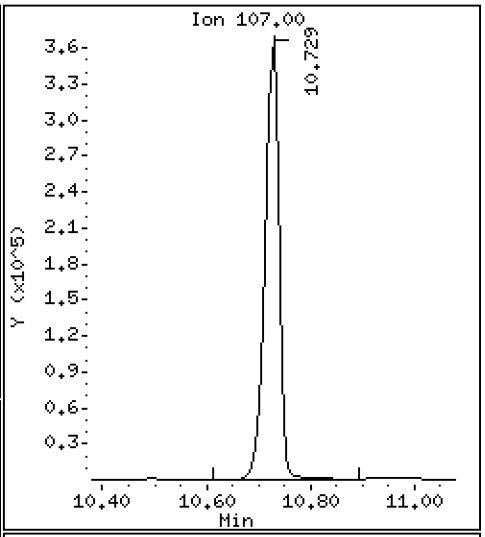
Column phase: ZB-5msi

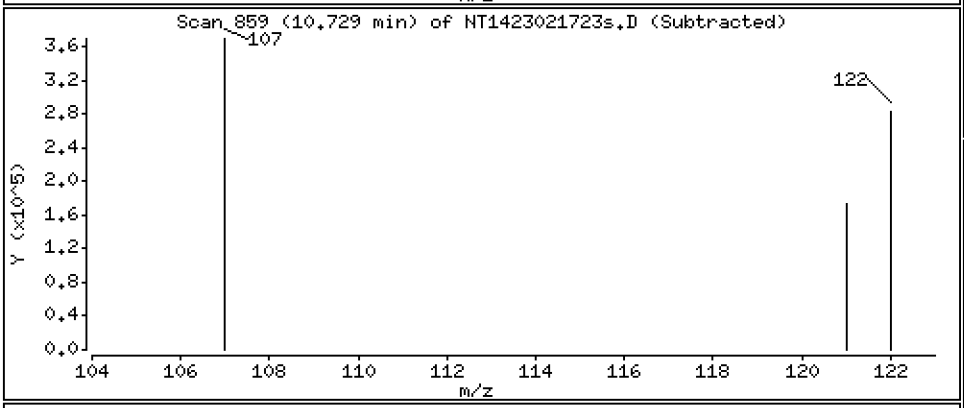
Column diameter: 0.25

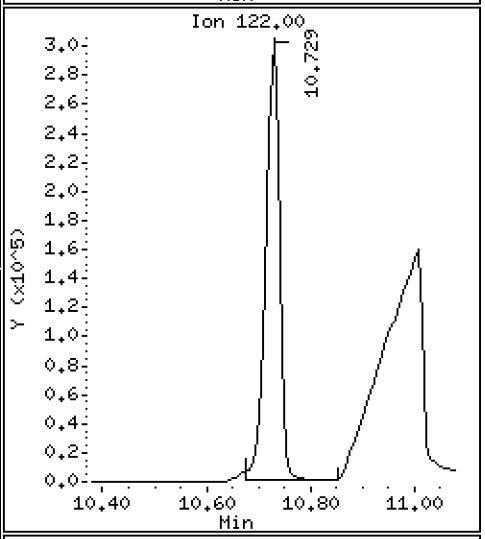
22 2,4-Dimethylphenol

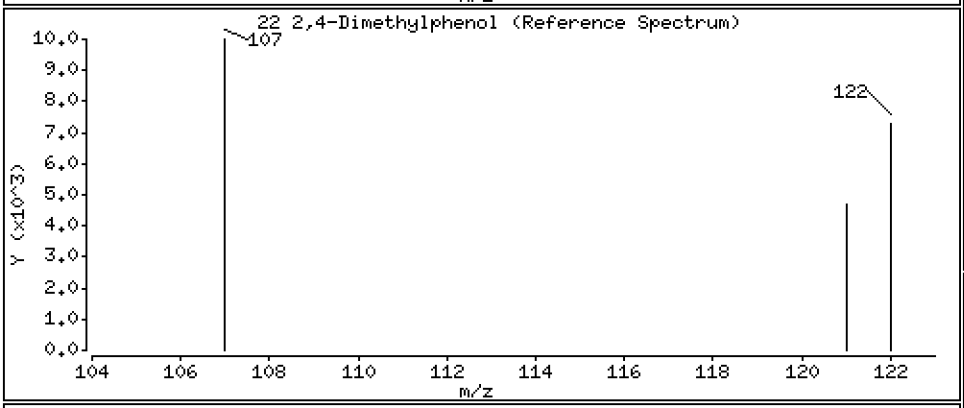
Concentration: 7.184 ug/mL

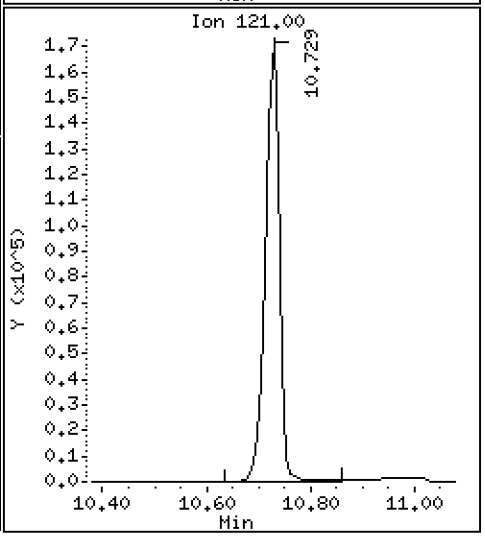


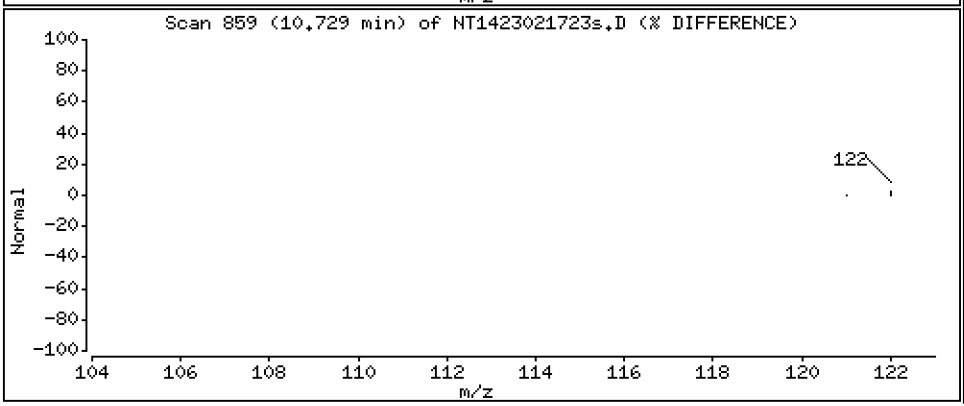












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Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD2

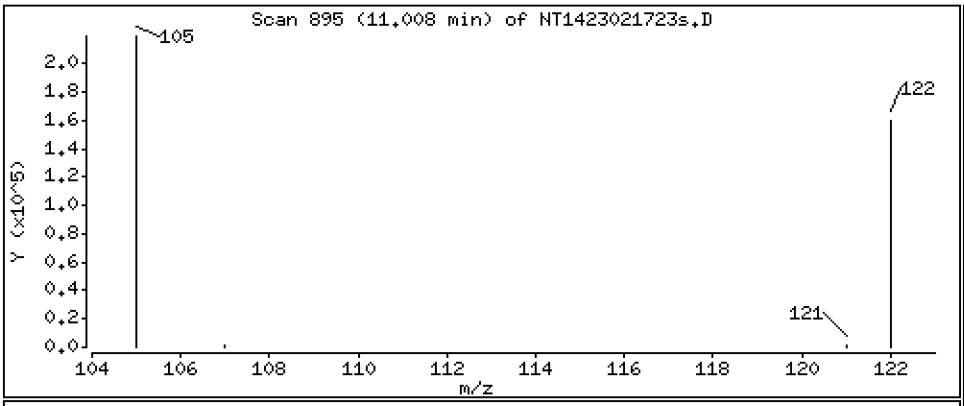
Operator: DSD

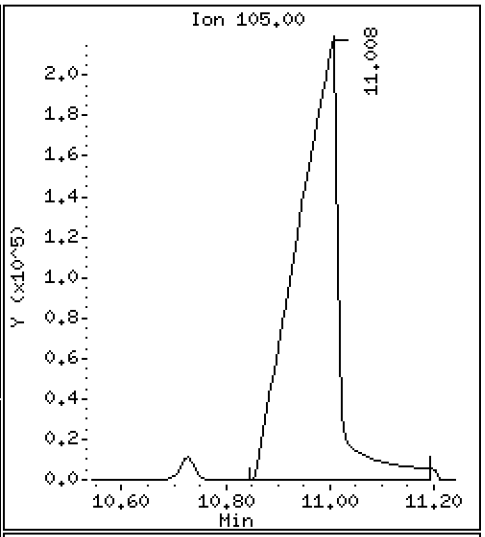
Column phase: ZB-5msi

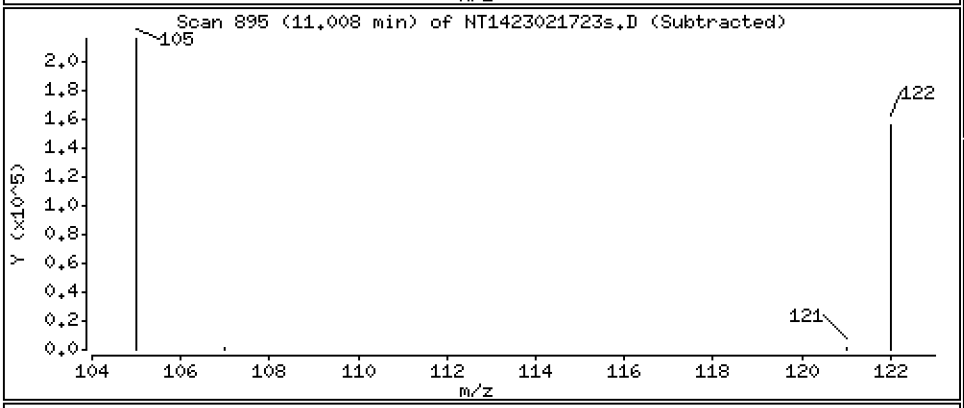
Column diameter: 0.25

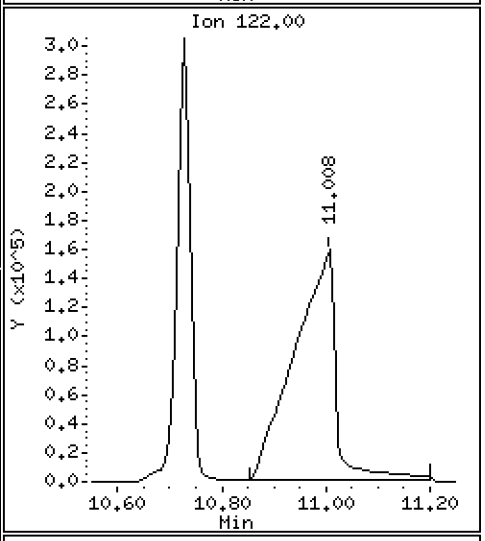
24 Benzoic acid

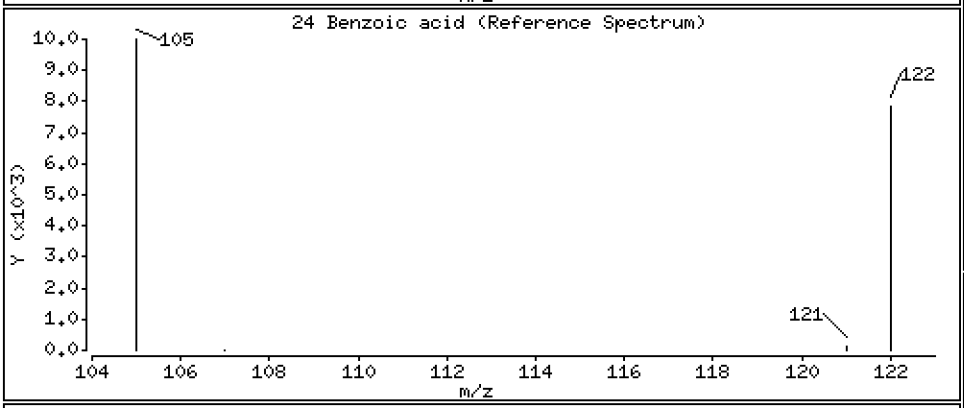
Concentration: 24.06 ug/mL

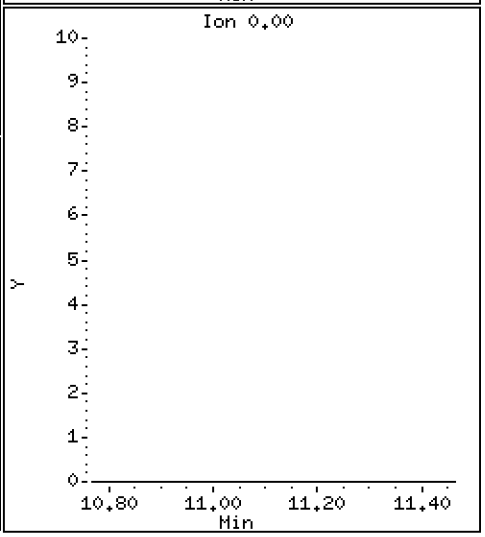


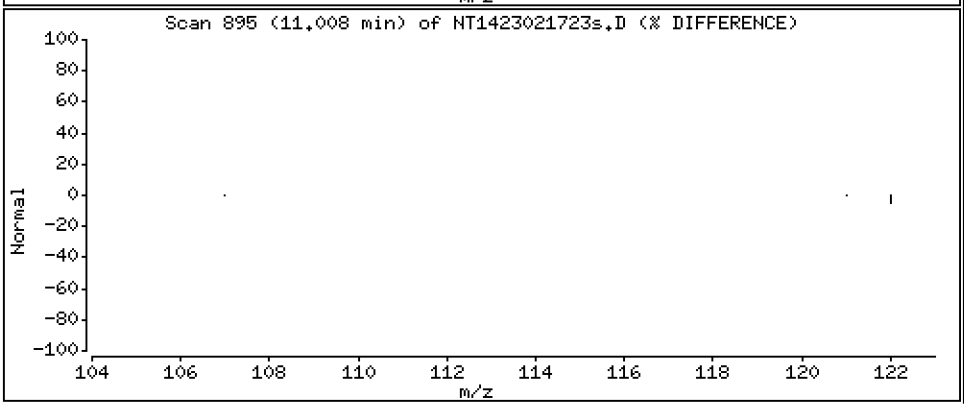












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021723s.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD2

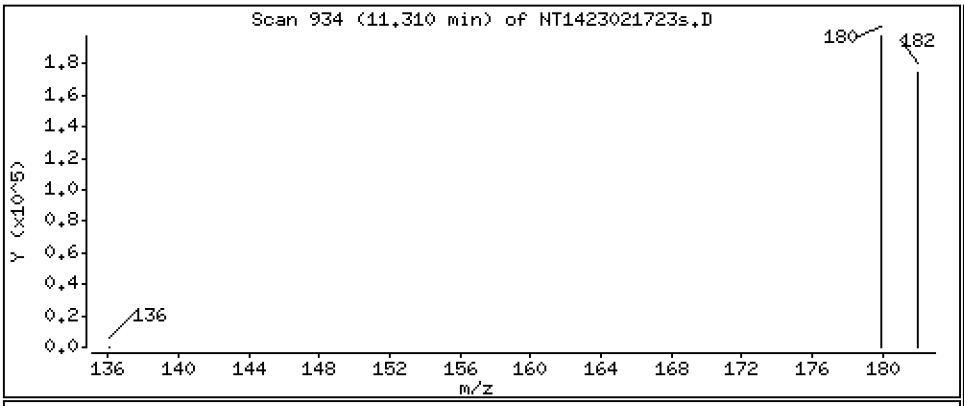
Operator: DSD

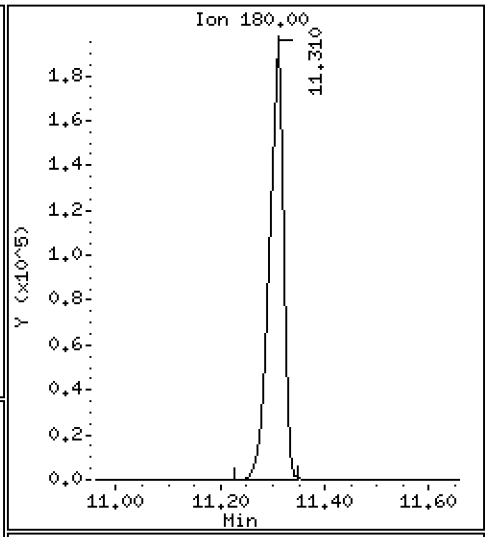
Column phase: ZB-5msi

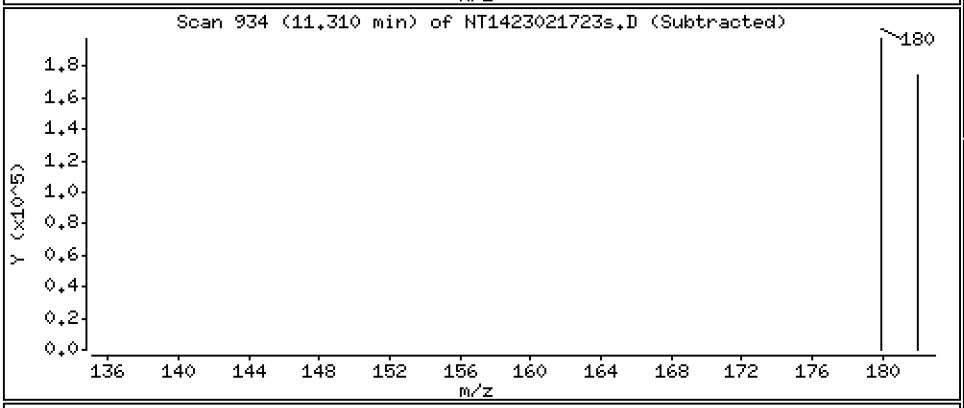
Column diameter: 0.25

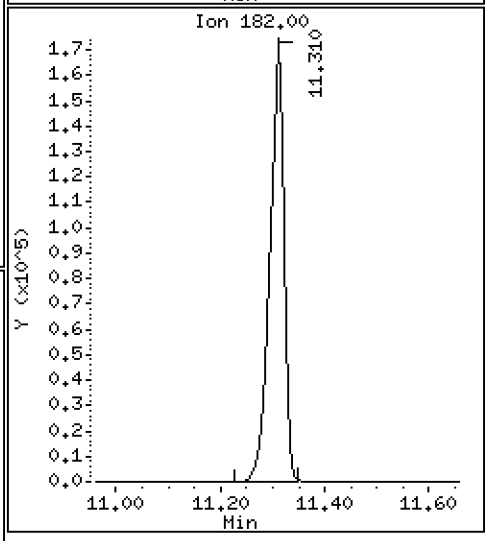
26 1,2,4-Trichlorobenzene

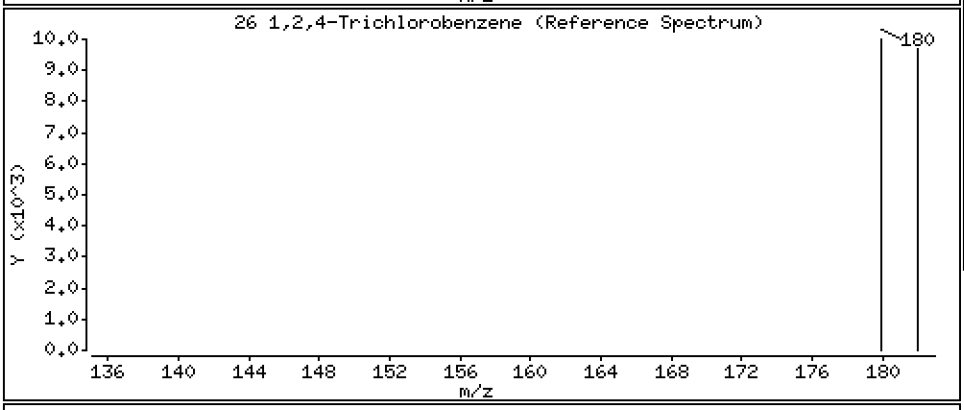
Concentration: 3.578 ug/mL

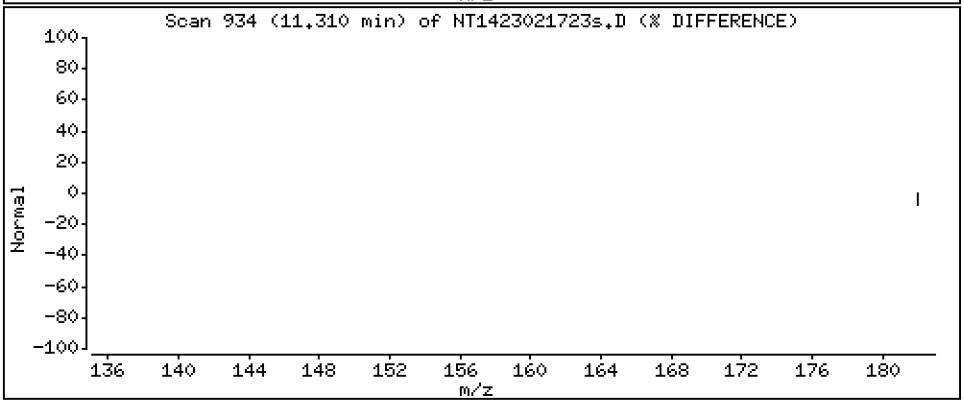












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021723s.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD2

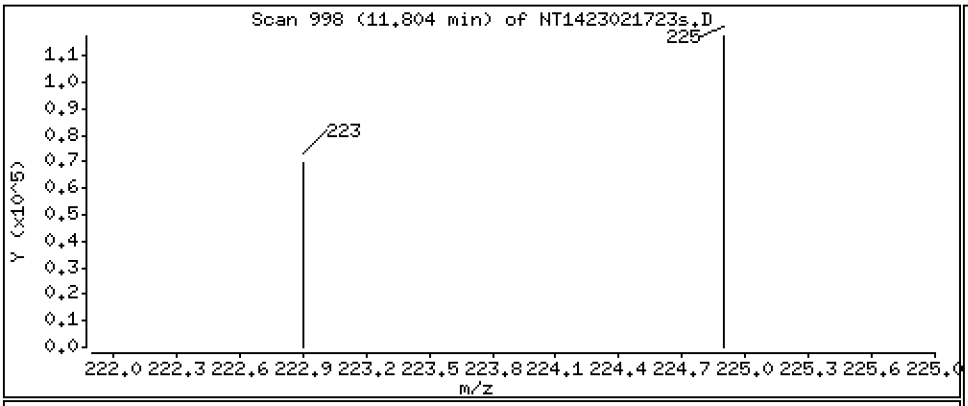
Operator: DSD

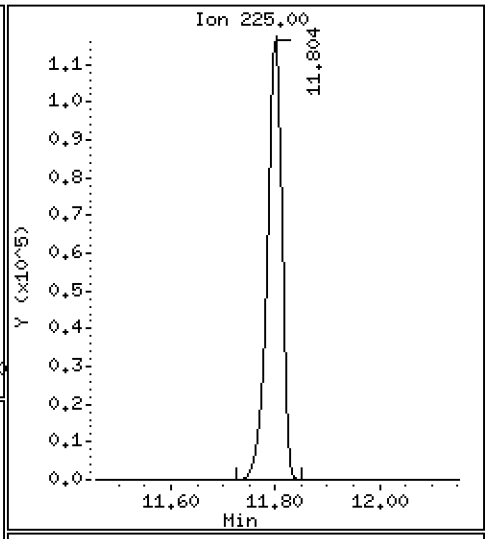
Column phase: ZB-5msi

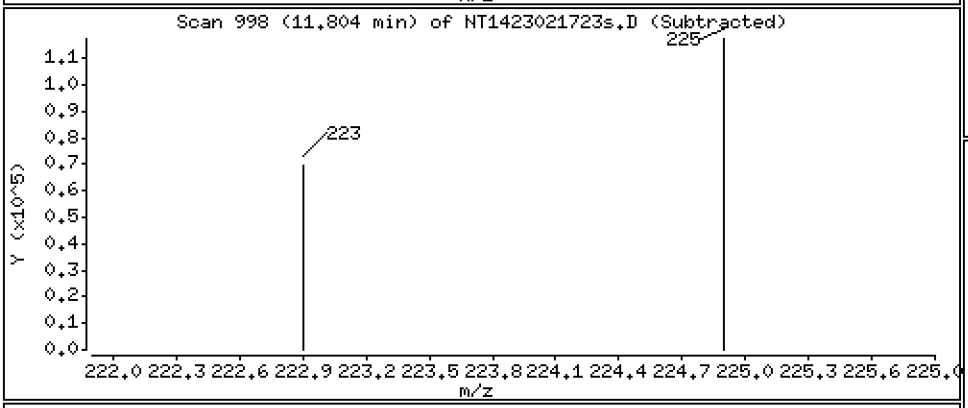
Column diameter: 0.25

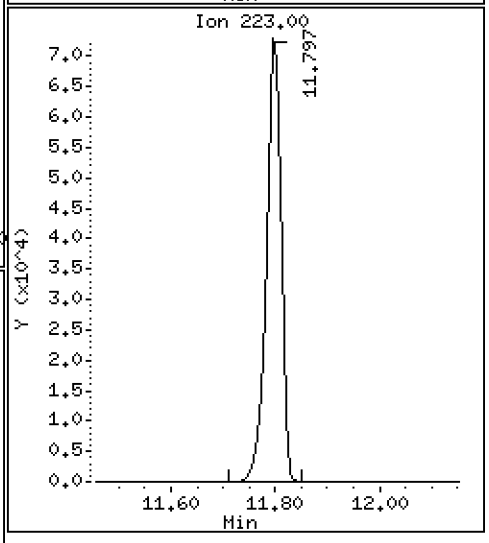
30 Hexachlorobutadiene

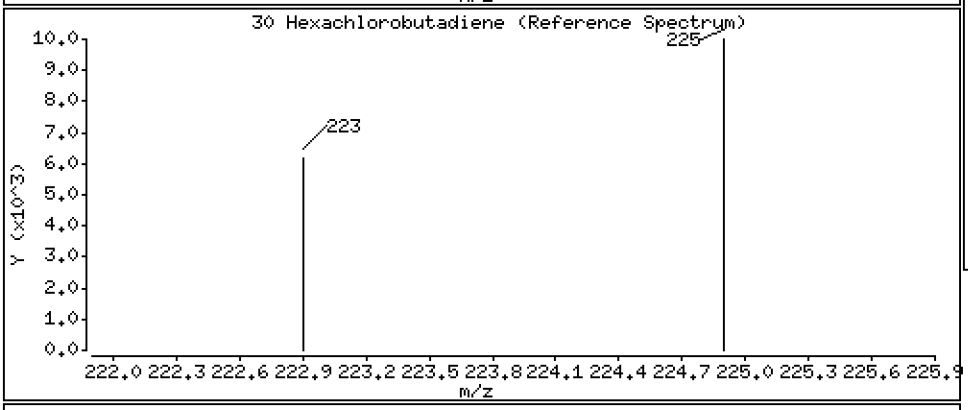
Concentration: 3.658 ug/mL

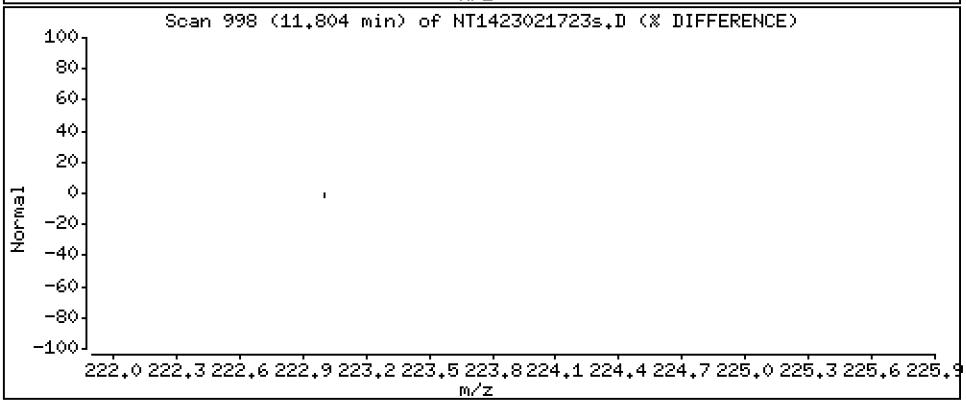












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021723s.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD2

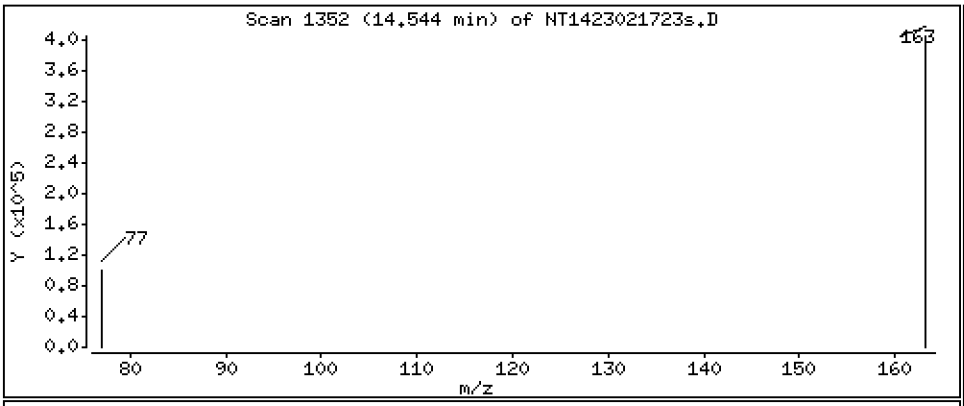
Operator: DSD

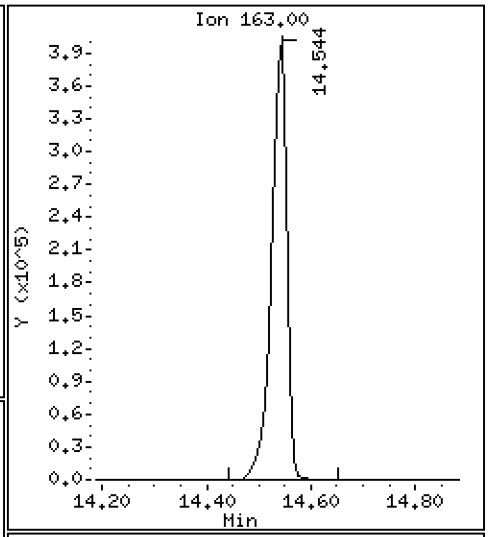
Column phase: ZB-5msi

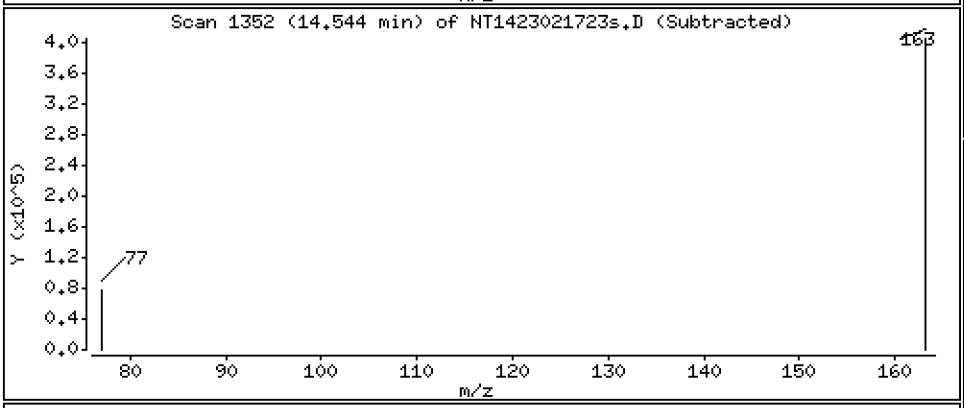
Column diameter: 0.25

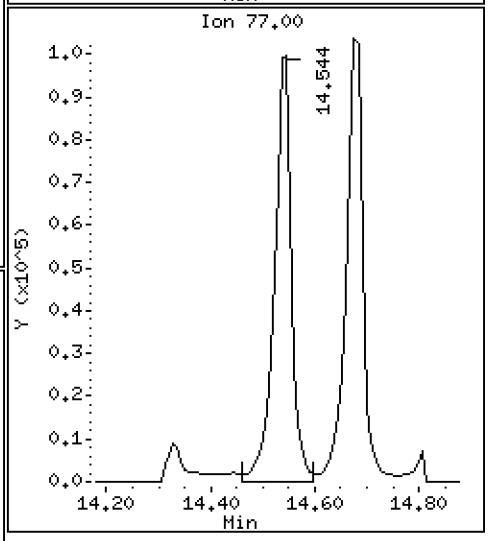
39 Dimethylphthalate

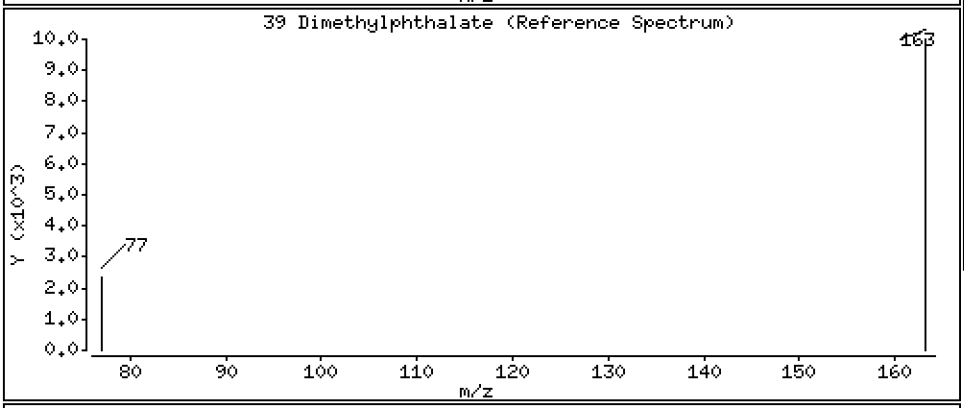
Concentration: 4.512 ug/mL

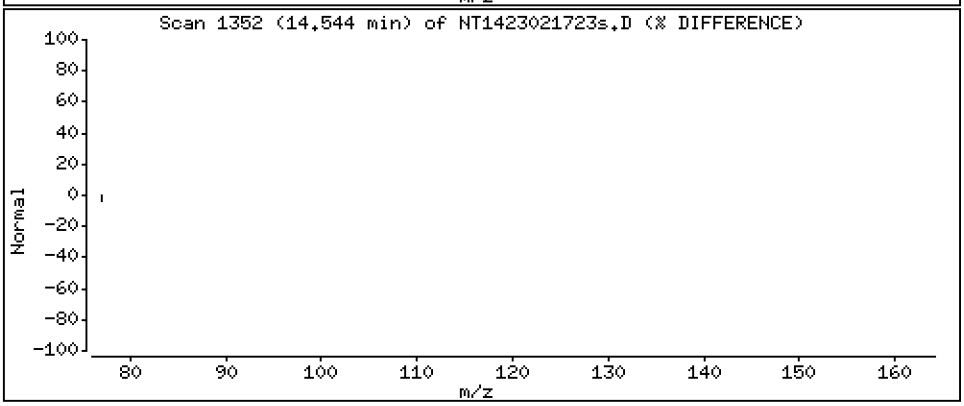












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021723s.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD2

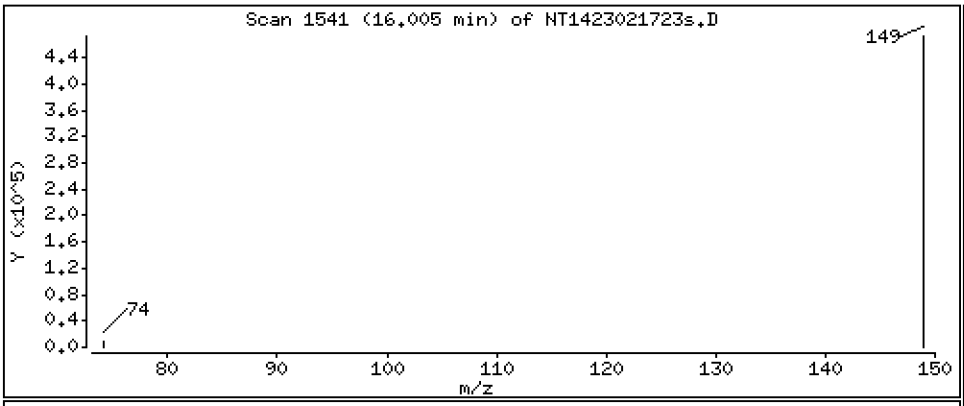
Operator: DSD

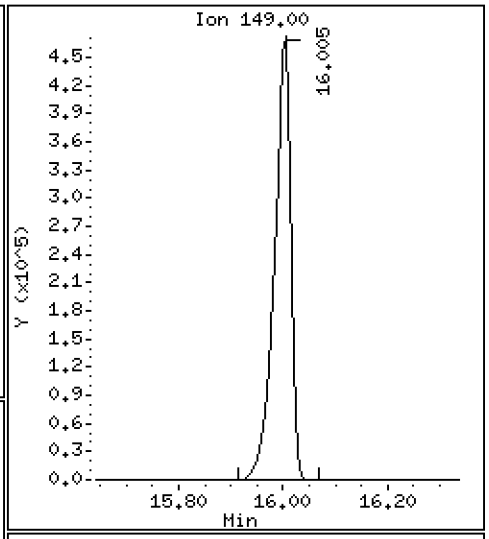
Column phase: ZB-5msi

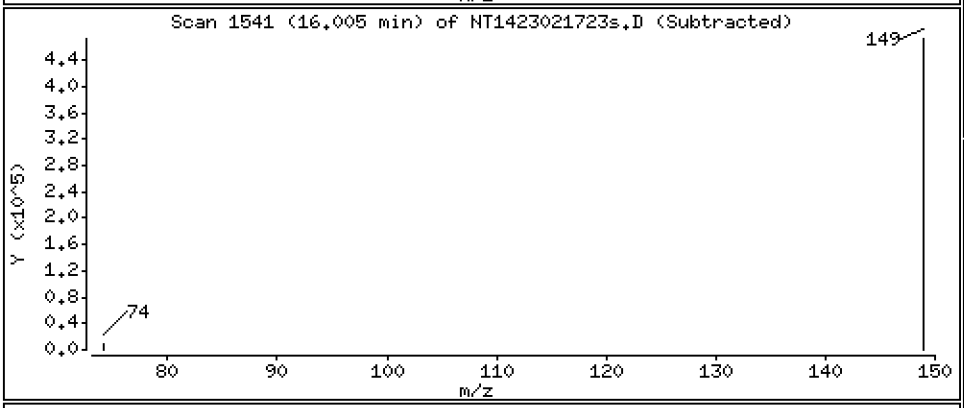
Column diameter: 0.25

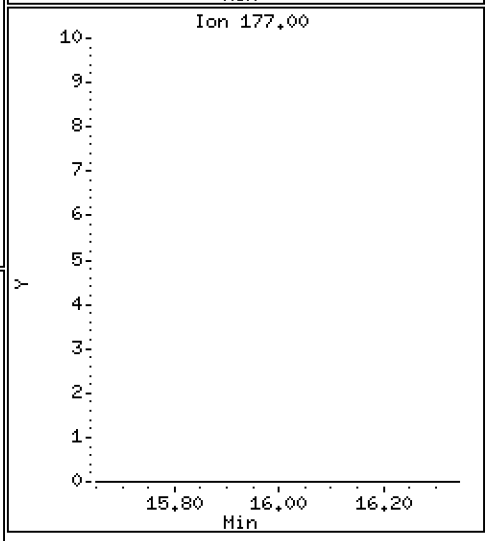
50 Diethylphthalate

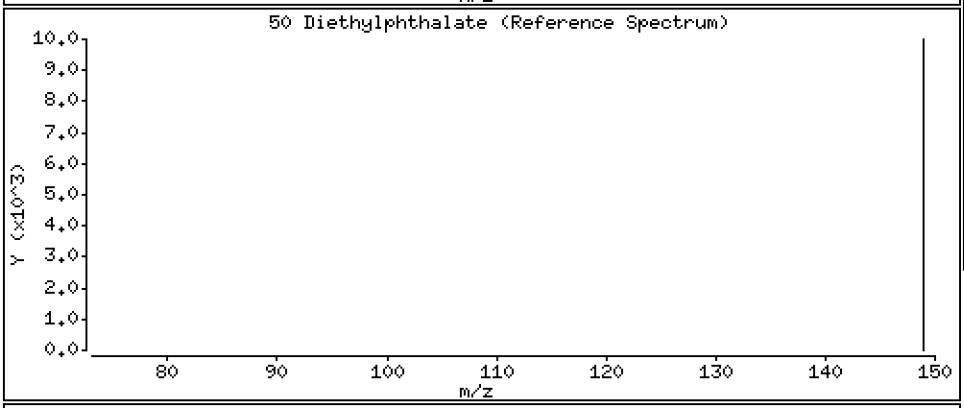
Concentration: 4.633 ug/mL

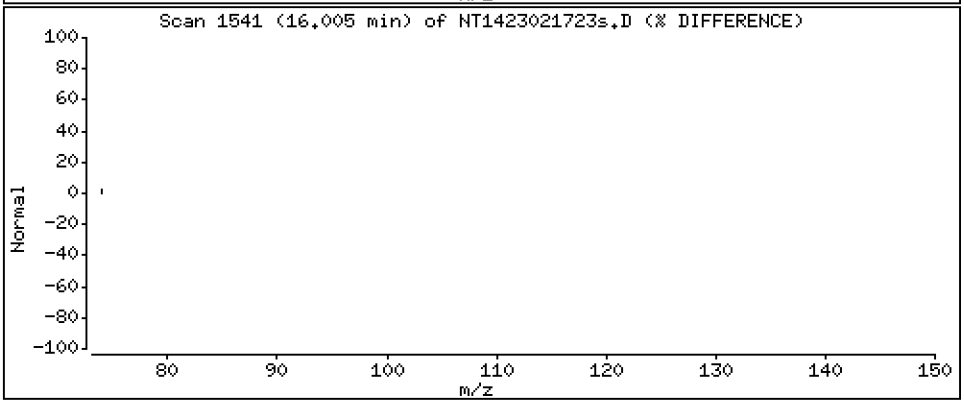












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021723s.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD2

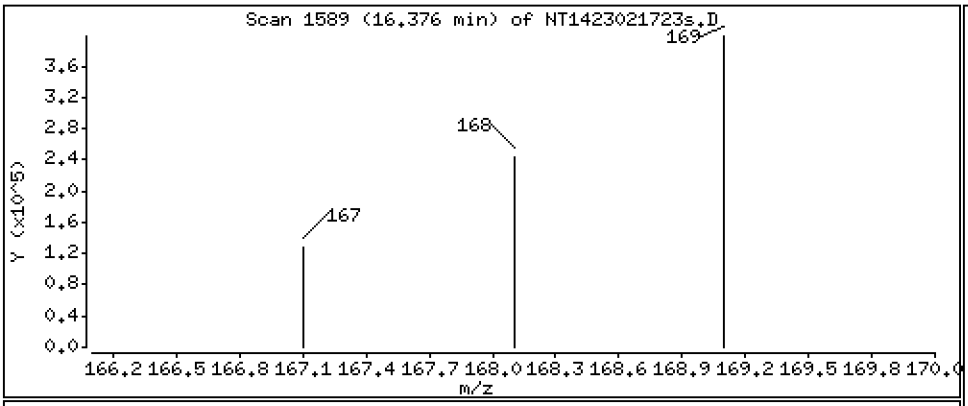
Operator: DSD

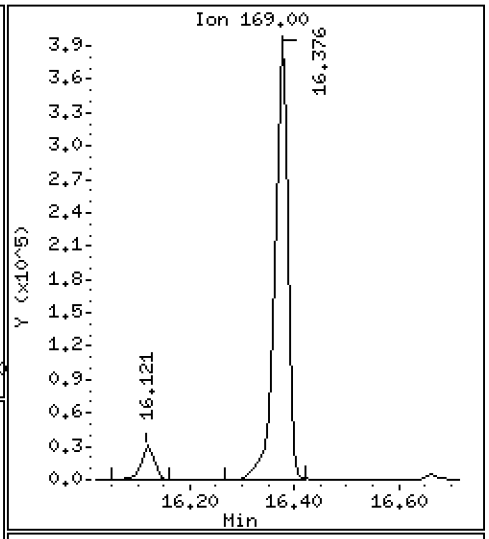
Column phase: ZB-5msi

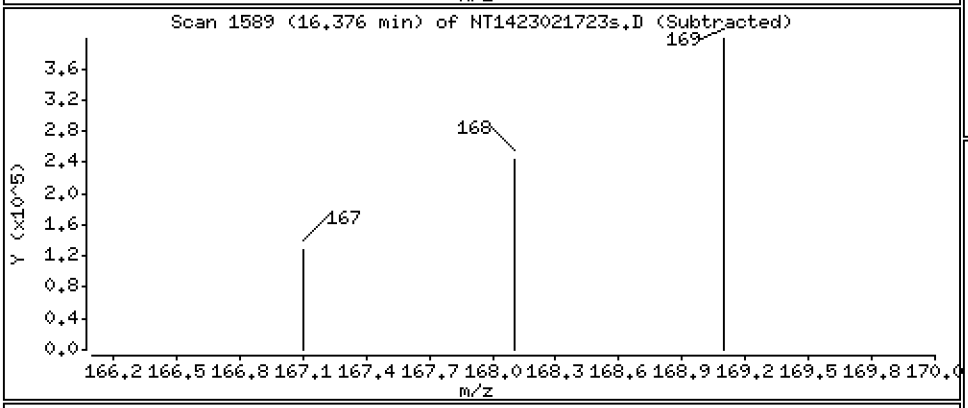
Column diameter: 0.25

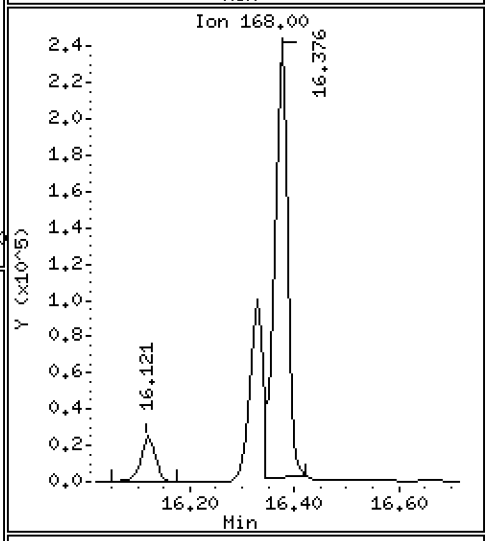
54 N-Nitrosodiphenylamine

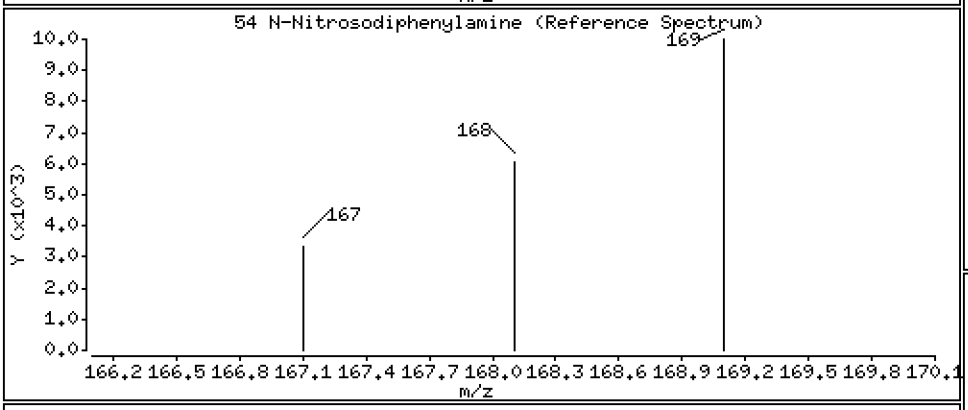
Concentration: 3.989 ug/mL

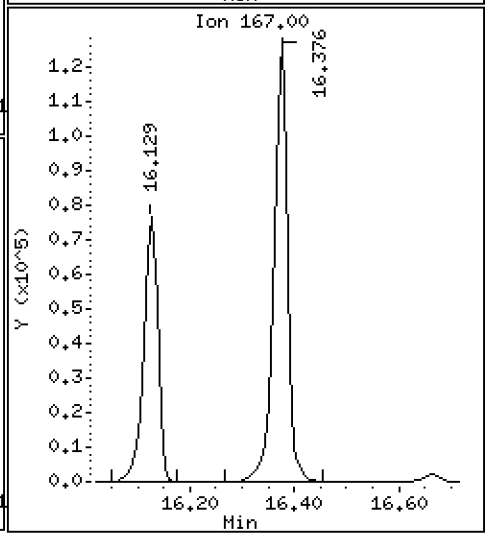


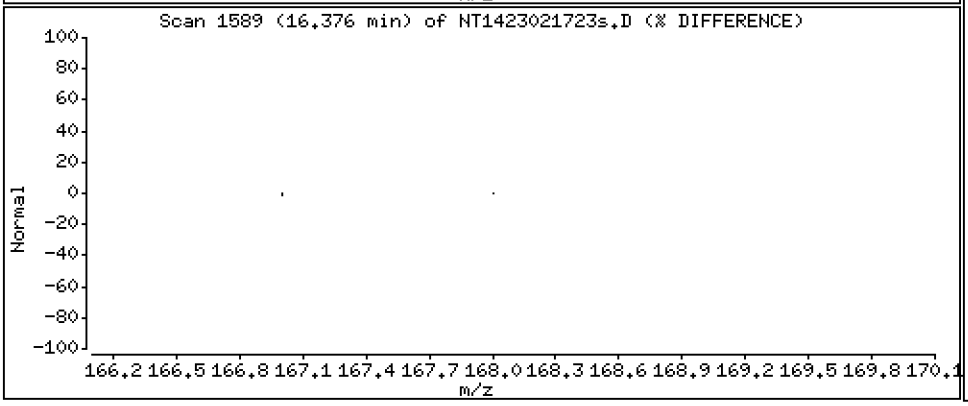












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021723s.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD2

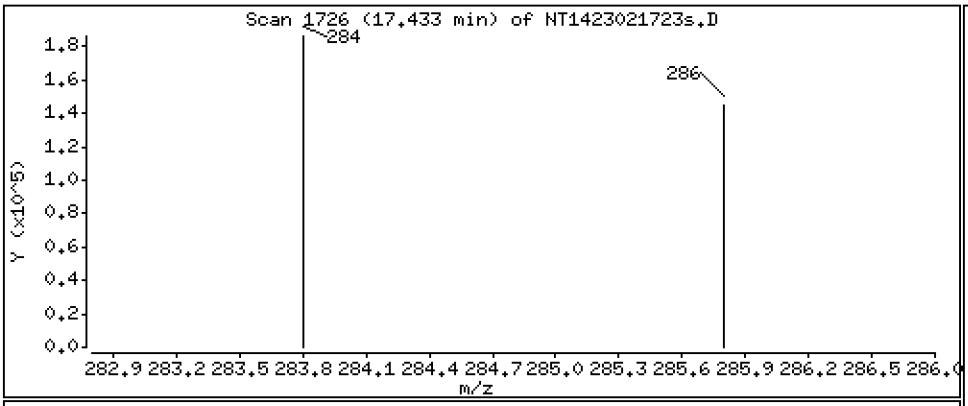
Operator: DSD

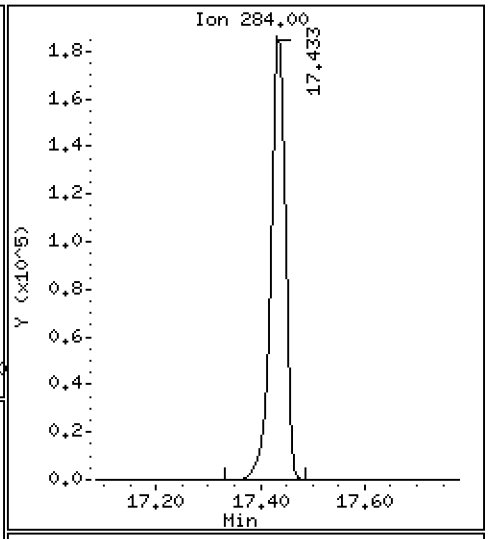
Column phase: ZB-5msi

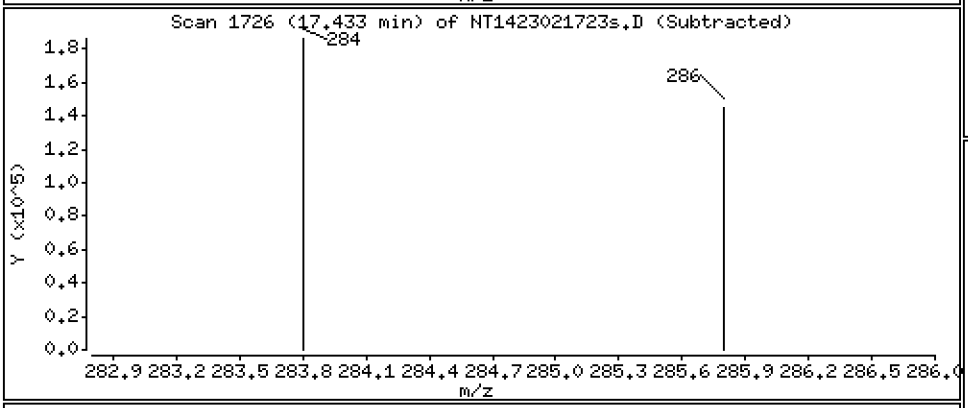
Column diameter: 0.25

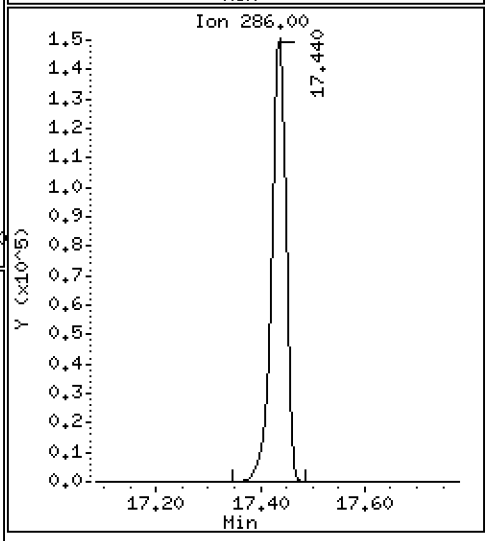
57 Hexachlorobenzene

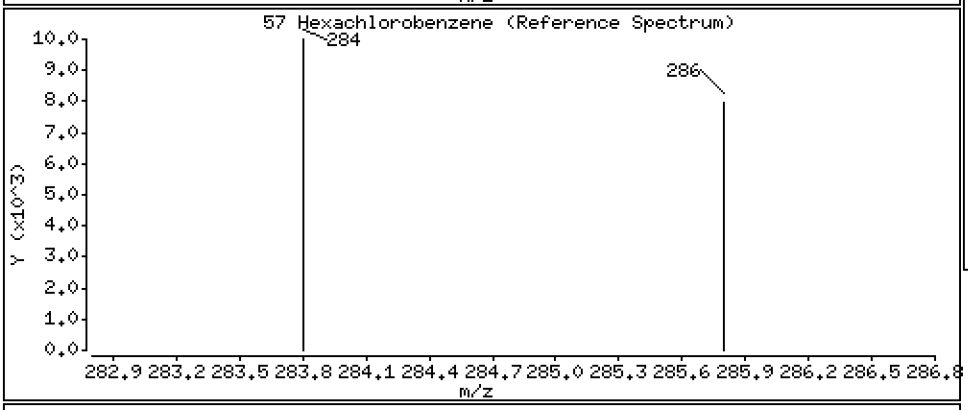
Concentration: 4.137 ug/mL

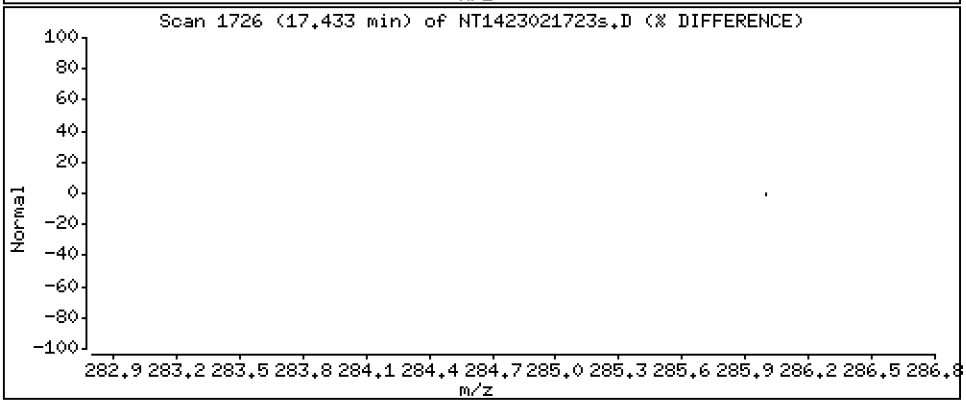












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021723s.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD2

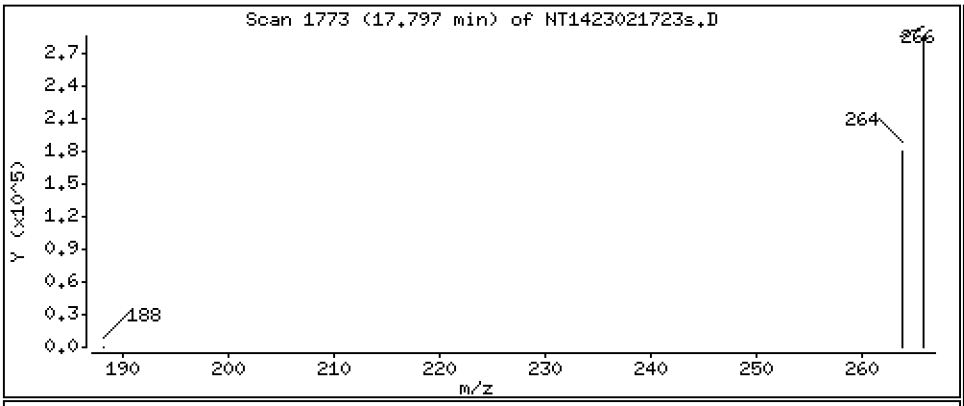
Operator: DSD

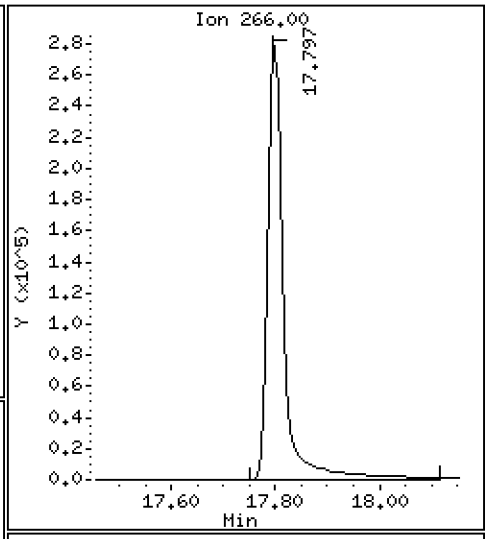
Column phase: ZB-5msi

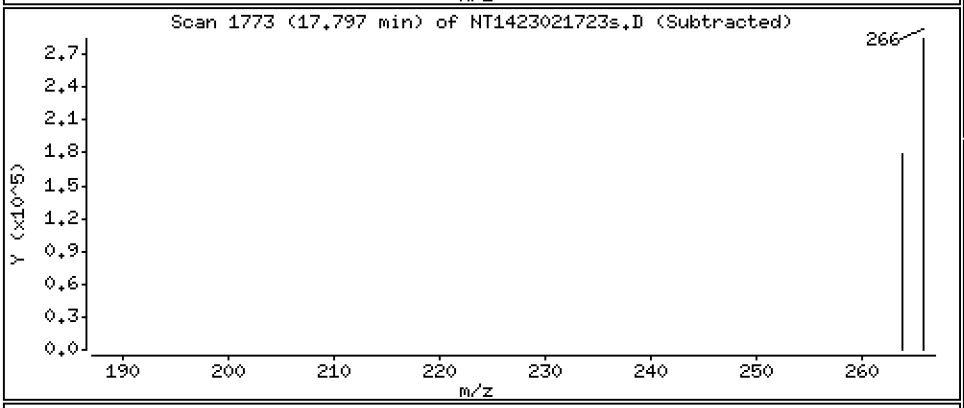
Column diameter: 0.25

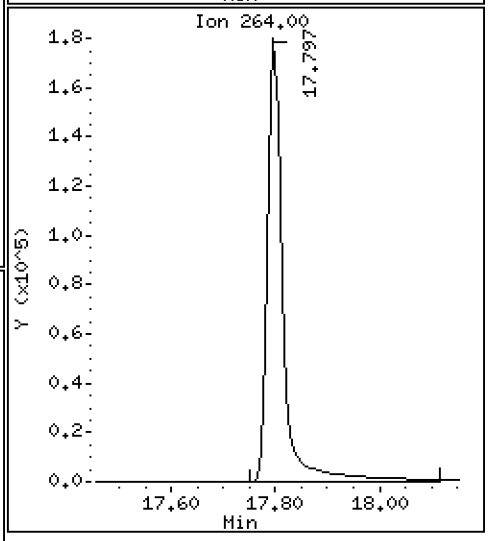
58 Pentachlorophenol

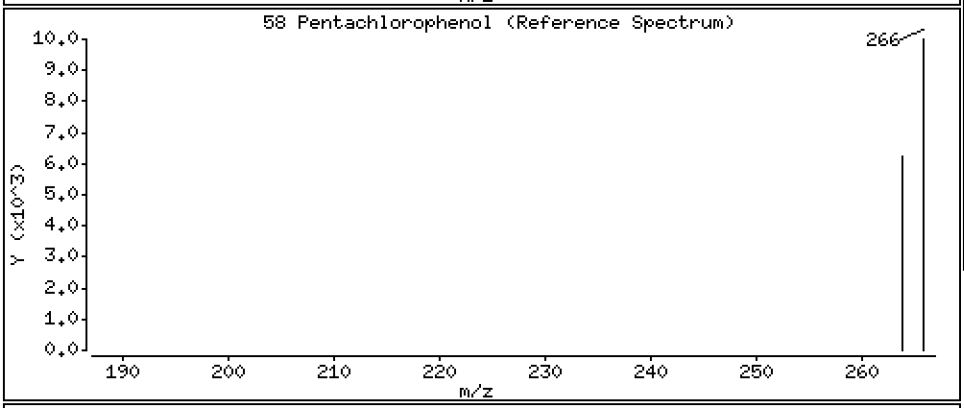
Concentration: 14.05 ug/mL

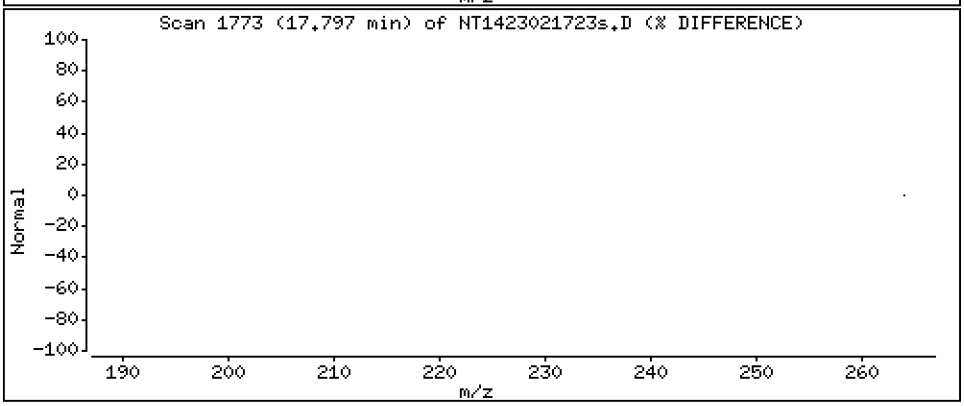












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021723s.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD2

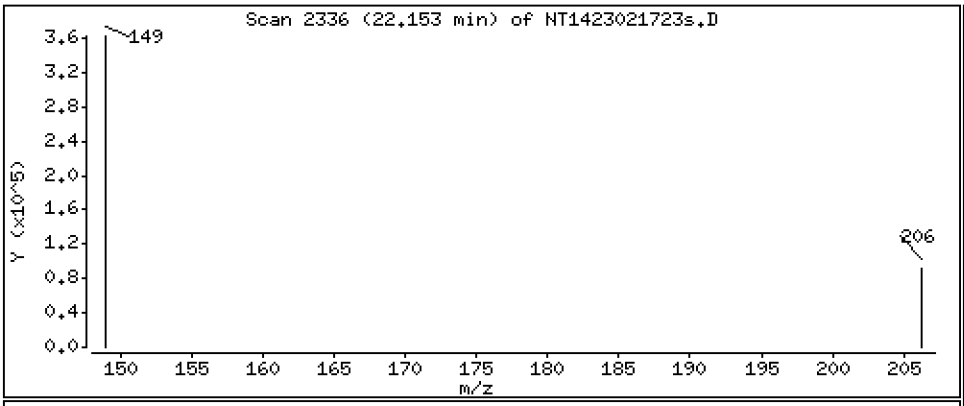
Operator: DSD

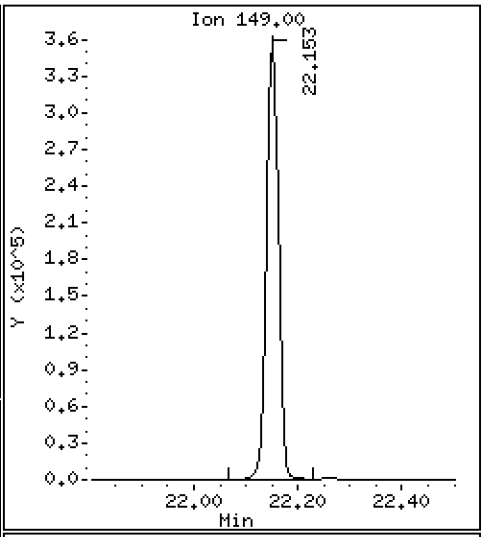
Column phase: ZB-5msi

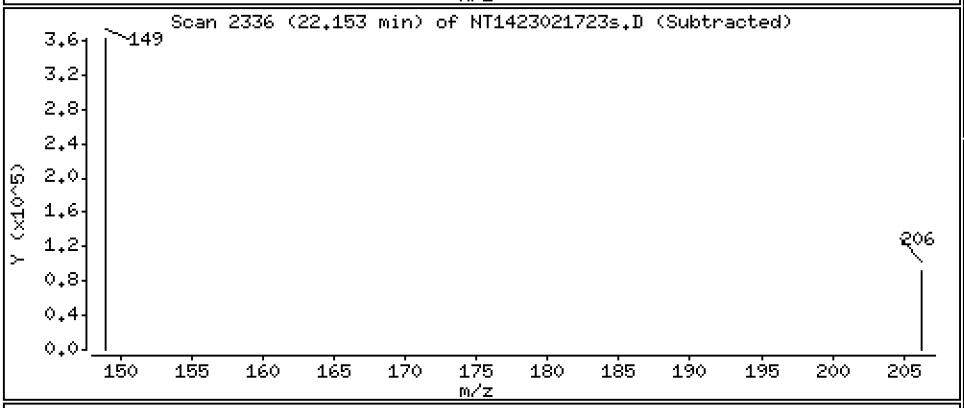
Column diameter: 0.25

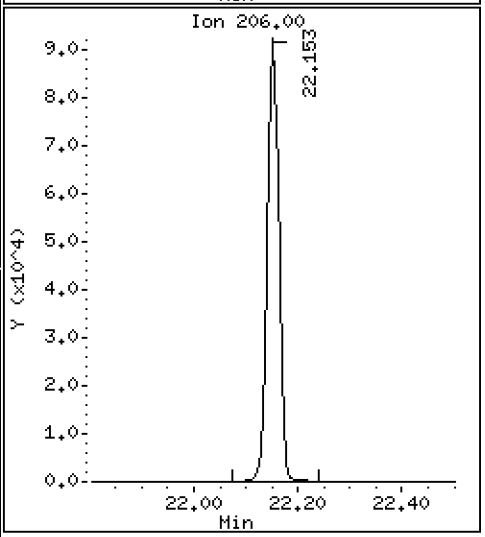
67 Butylbenzylphthalate

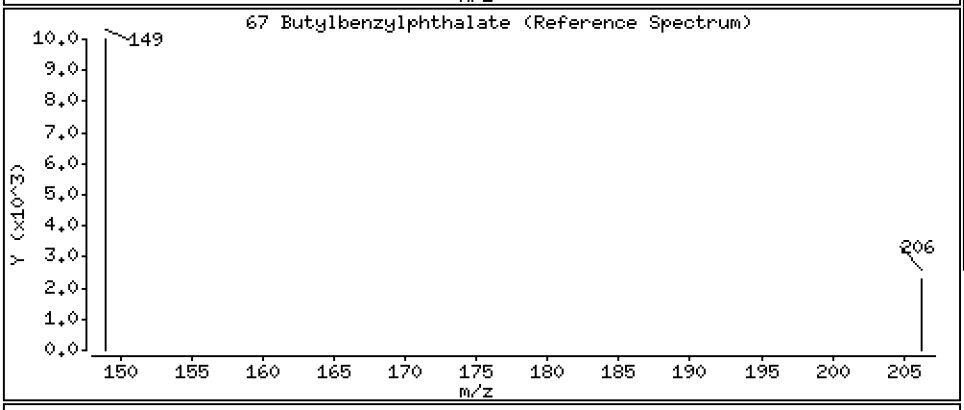
Concentration: 5.654 ug/mL

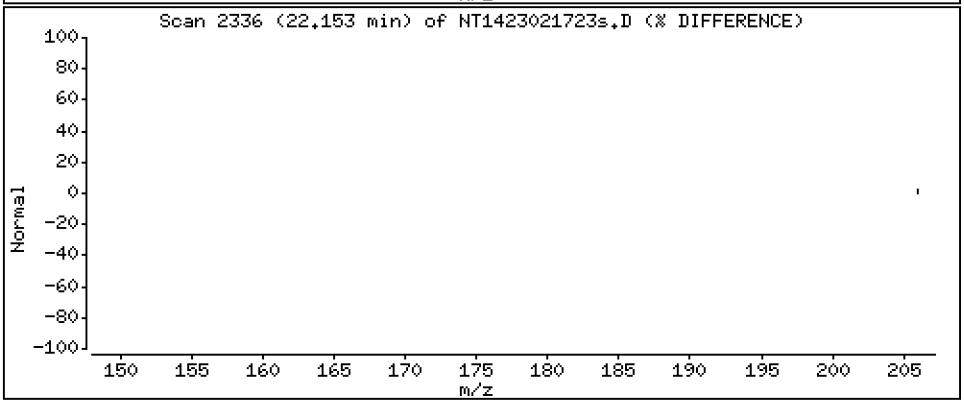












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021723s.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD2

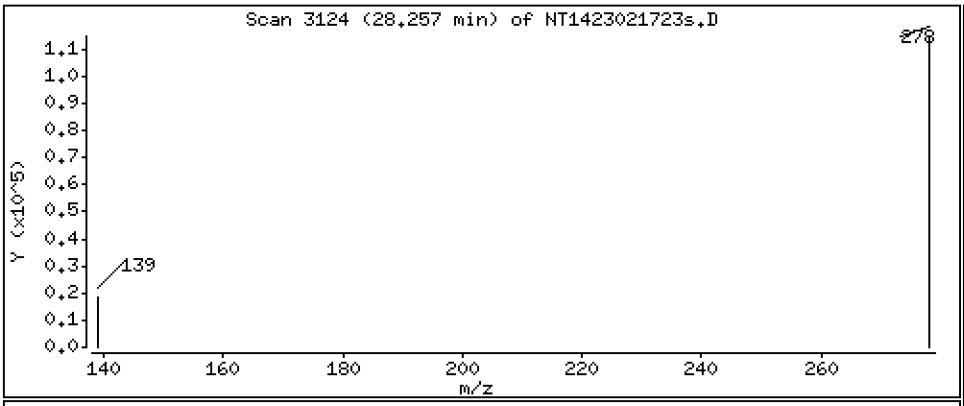
Operator: DSD

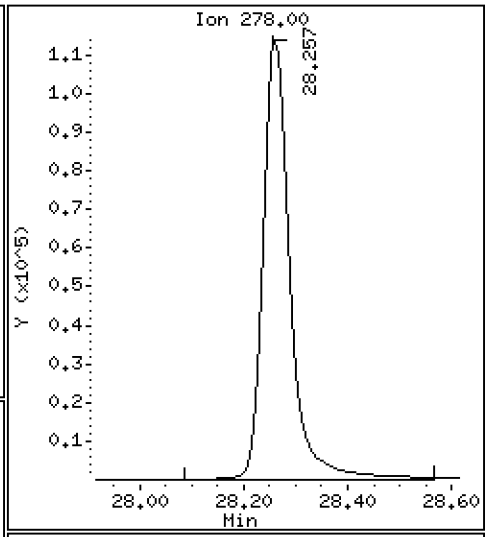
Column phase: ZB-5msi

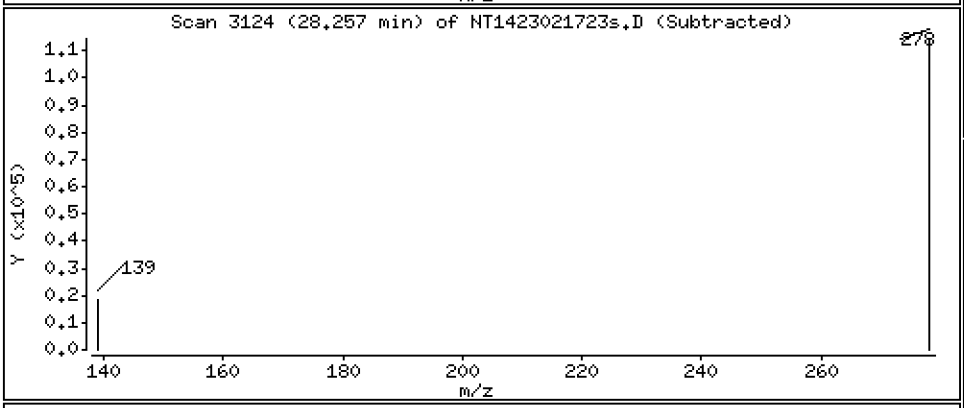
Column diameter: 0.25

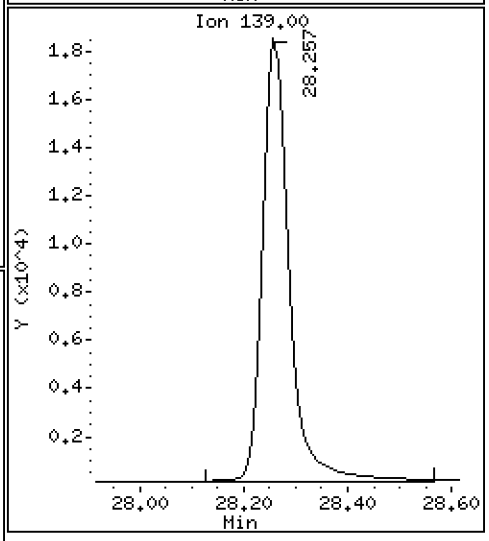
79 Dibenzo(a,h)anthracene

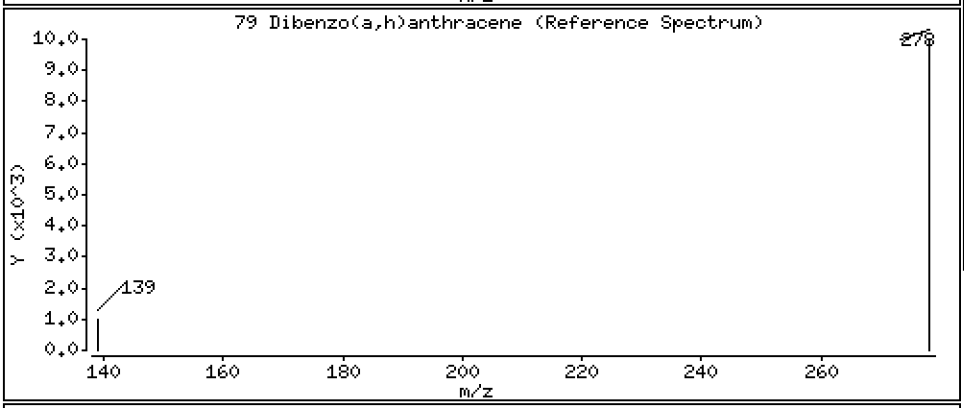
Concentration: 4.333 ug/mL

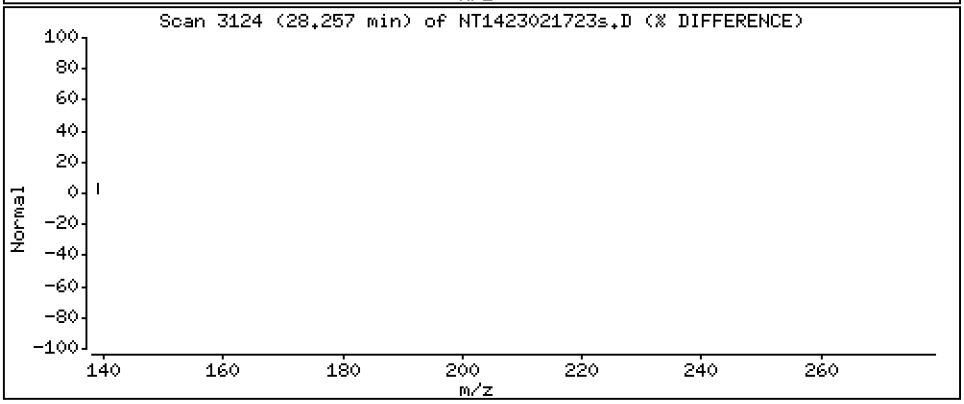












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021723s.D

Date : 17-FEB-2023 23:55

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-BSD2

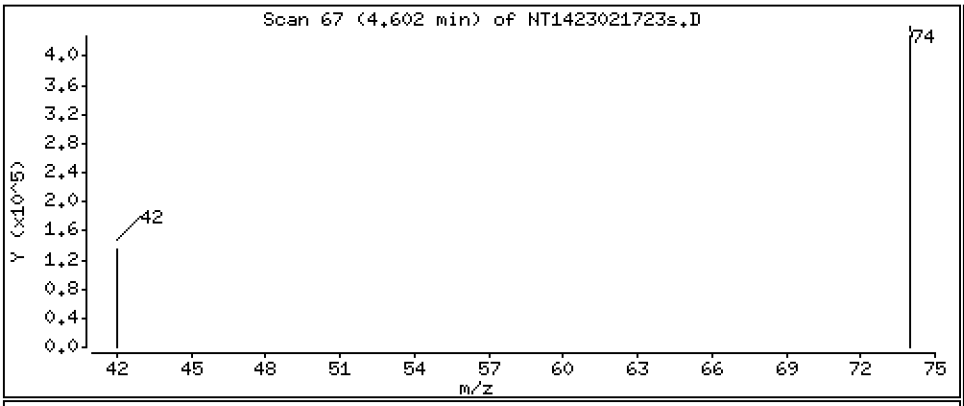
Operator: DSD

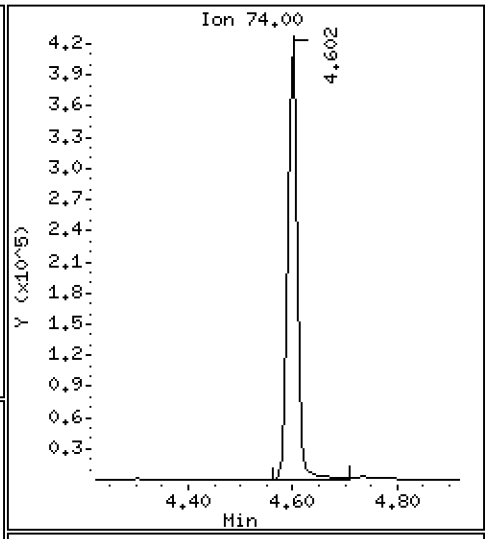
Column phase: ZB-5msi

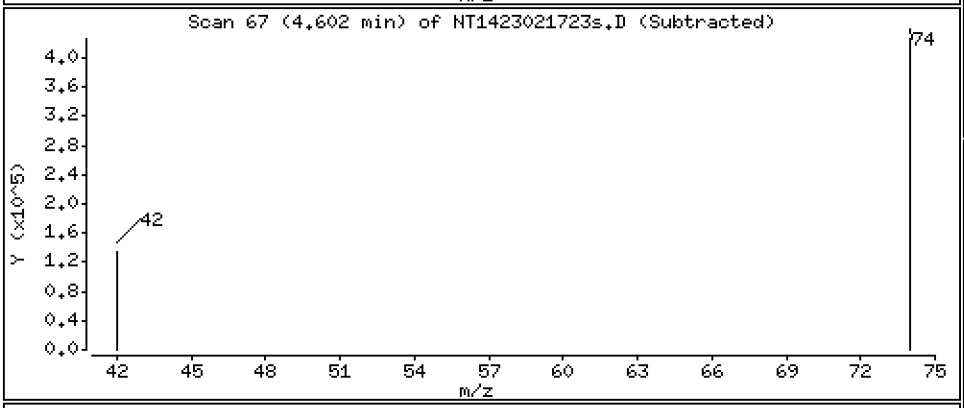
Column diameter: 0.25

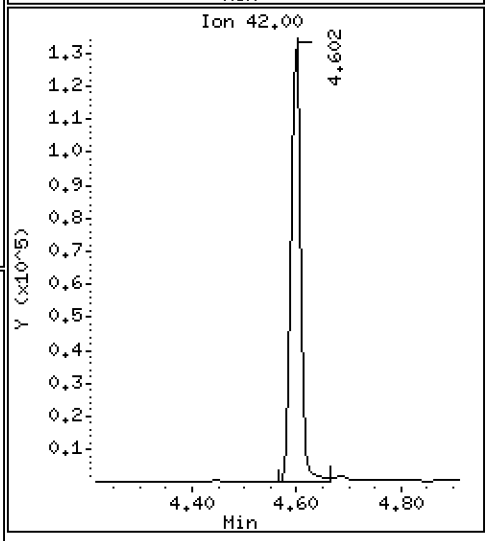
90 N-Nitrosodimethylamine

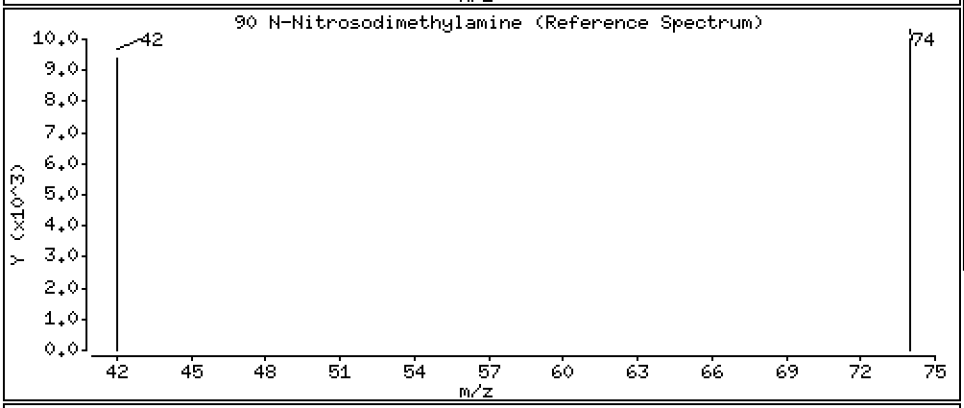
Concentration: 9.069 ug/mL

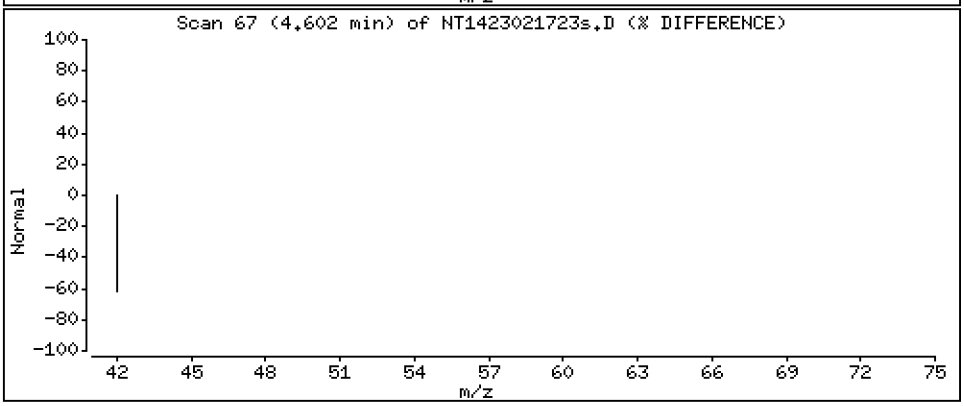












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021723s.D
Lab Smp Id: BLA0339-BSD2
Inj Date : 17-FEB-2023 23:55 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : BLA0339-BSD2
Misc Info :
Comment :
Method : \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\SIMABN2.m
Meth Date : 07-Mar-2023 12:35 van Quant Type: ISTD
Cal Date : 16-FEB-2023 20:42 Cal File: NT1423021612s.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.694	6.679	(0.752)	459175	5.36837	5.368(R)
	3 Phenol	94	8.294	8.294	(0.931)	460169	3.52256	3.523
	7 1,3-Dichlorobenzene	146	8.835	8.835	(0.992)	360290	3.50541	3.505
*	8 1,4-Dichlorobenzene-d4	152	8.905	8.905	(1.000)	302063	4.00000	
	9 1,4-Dichlorobenzene	146	8.928	8.928	(1.003)	353002	3.60039	3.600
	11 Benzyl alcohol	79	9.184	9.184	(1.031)	321128	3.88181	3.882
	12 1,2-Dichlorobenzene	146	9.285	9.293	(1.043)	351471	3.60539	3.605
	13 2-Methylphenol	108	9.409	9.409	(1.057)	309818	3.45530	3.455
	15 4-Methylphenol	108	9.681	9.681	(1.087)	351528	3.52446	3.524
	16 N-Nitroso-di-n-propylamine	70	9.743	9.735	(1.094)	289319	3.71046	3.710
	22 2,4-Dimethylphenol	107	10.728	10.728	(0.942)	659366	7.18391	7.184
	24 Benzoic acid	105	11.008	10.891	(0.966)	1233717	24.0642	24.06
	26 1,2,4-Trichlorobenzene	180	11.309	11.309	(0.993)	355504	3.57819	3.578
*	27 Naphthalene-d8	136	11.394	11.394	(1.000)	1084486	4.00000	
	30 Hexachlorobutadiene	225	11.804	11.804	(1.036)	221095	3.65812	3.658
	39 Dimethylphthalate	163	14.543	14.536	(0.968)	795293	4.51161	4.512
*	42 Acenaphthene-d10	162	15.023	15.015	(1.000)	577802	4.00000	
	50 Diethylphthalate	149	16.005	15.989	(1.065)	1022097	4.63282	4.633
	54 N-Nitrosodiphenylamine	169	16.375	16.368	(0.907)	671703	3.98912	3.989
	57 Hexachlorobenzene	284	17.432	17.432	(0.965)	348158	4.13674	4.137
	58 Pentachlorophenol	266	17.796	17.804	(0.985)	568175	14.0518	14.05
*	59 Phenanthrene-d10	188	18.059	18.059	(1.000)	1295857	4.00000	
$	66 Terphenyl-d14	244	21.216	21.216	(0.917)	919745	5.00282	5.003(R)
	67 Butylbenzylphthalate	149	22.153	22.153	(0.958)	541087	5.65420	5.654
*	69 Chrysene-d12	240	23.128	23.121	(1.000)	690576	4.00000	
*	77 Perylene-d12	264	25.691	25.691	(1.000)	491816	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.257	28.265	(1.100)	407791	4.33253	4.333
	90 N-Nitrosodimethylamine	74	4.601	4.571	(0.517)	564807	9.06906	9.069

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021723s.D
Lab Smp Id: BLA0339-BSD2
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\SIMABN2.m
Misc Info:

Calibration Date: 17-FEB-2023
Calibration Time: 21:31
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	388684	194342	777368	302063	-22.29
27 Naphthalene-d8	1386667	693334	2773334	1084486	-21.79
42 Acenaphthene-d10	752189	376095	1504378	577802	-23.18
59 Phenanthrene-d10	1701919	850960	3403838	1295857	-23.86
69 Chrysene-d12	887171	443586	1774342	690576	-22.16
77 Perylene-d12	644624	322312	1289248	491816	-23.70

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	-0.00
27 Naphthalene-d8	11.39	10.89	11.89	11.39	-0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.05
59 Phenanthrene-d10	18.06	17.56	18.56	18.06	-0.00
69 Chrysene-d12	23.12	22.62	23.62	23.13	0.03
77 Perylene-d12	25.69	25.19	26.19	25.69	-0.00

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

REVIEW SUMMARY FOR FILE - NT1423021723s.D

Lab ID: BLA0339-BSD2
nt14.i, 20230217A.b\20230217A.b\SIMABN2.m,   17-FEB-2023 23:55

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.966	0.956	0.0102	Benzoic acid

RRT check based on Ccal File: 20230217A.b/NT1423021719s.D

On Column LOD for nt14.i, 20230217A.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Analytical Resources, LLC
Analytical Chemists and Consultants

STANDARD REFERENCE MATERIAL RECOVERY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLA0339-SRM2
Batch: BLA0339
Initial/Final: 1 g / 1 mL
Preparation: EPA 3546 (Microwave)
Analyzed: 02/18/2023 0:30
Standard ID: K003477
Expires: 01/31/2024
Standard Lot#: CRM 143 (LRAC8918)
Description: CRM 143 BNAs - Sandy Loam

ANALYTE	TRUE (ug/kg wet)	FOUND (ug/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
2,4-Dimethylphenol	6357.0	5070	21.7	200		79.7	0 - 220
1,2,4-Trichlorobenzene	1477.0	1370	26.8	50.0		92.8	10 - 193
N-Nitrosodiphenylamine	2854.0	4070	13.1	50.0		142	40 - 160
Pentachlorophenol	3411.0	4340	21.3	400	Q	127	10 - 206

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021724s.D

Date : 18-FEB-2023 00:30

Client ID:

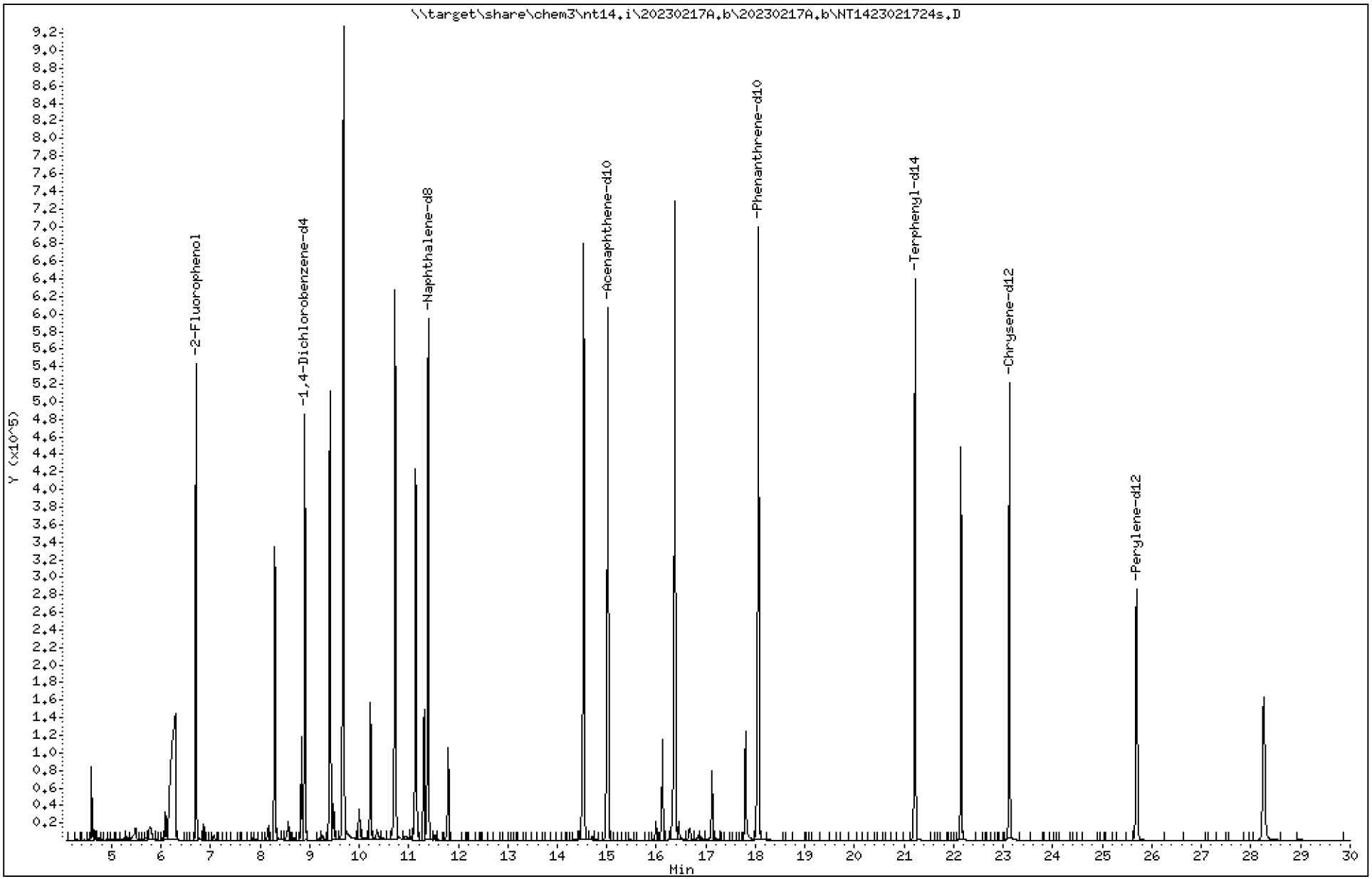
Instrument: nt14.i

Sample Info: BLA0339-SRM2

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM2

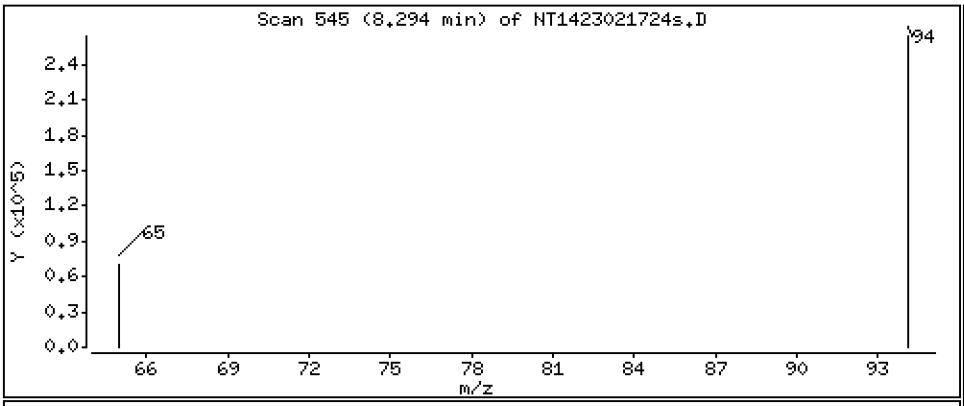
Operator: DSD

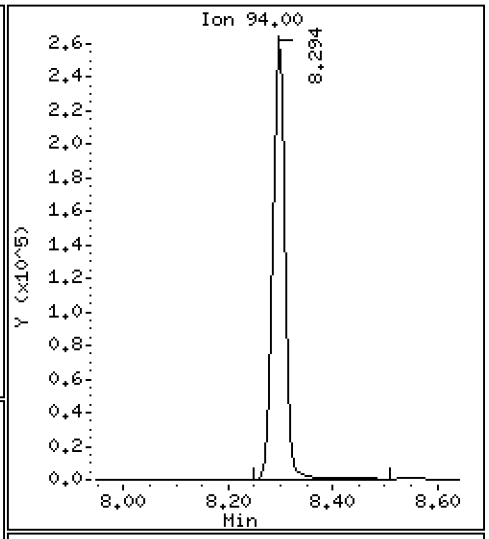
Column phase: ZB-5msi

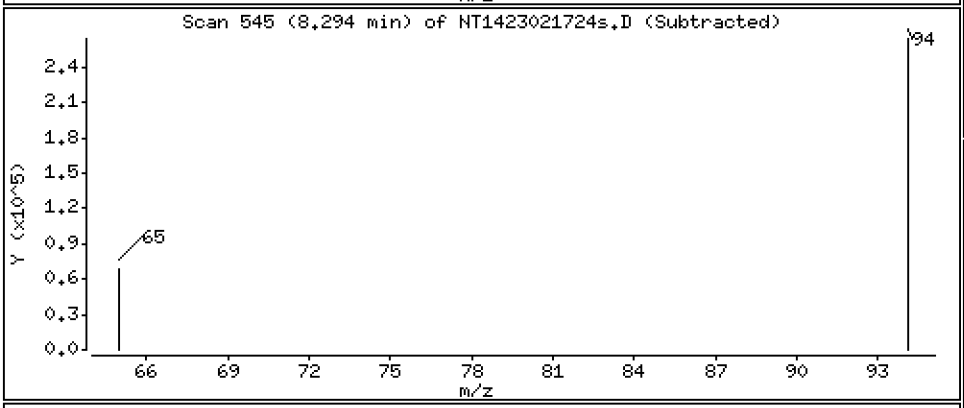
Column diameter: 0.25

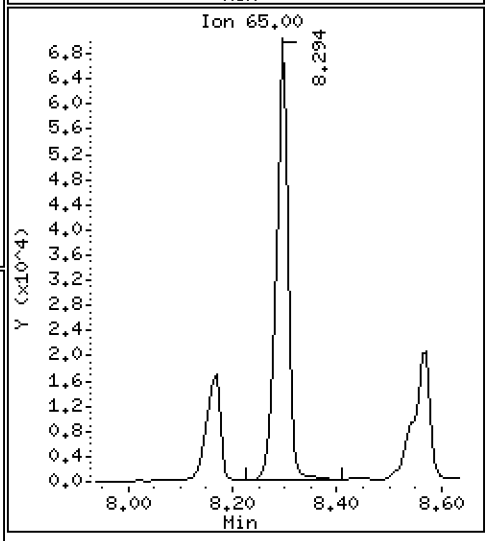
3 Phenol

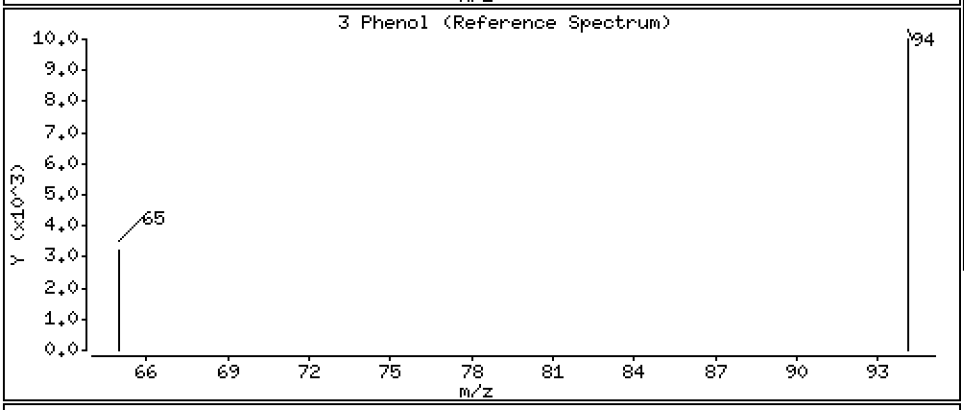
Concentration: 3.003 ug/mL

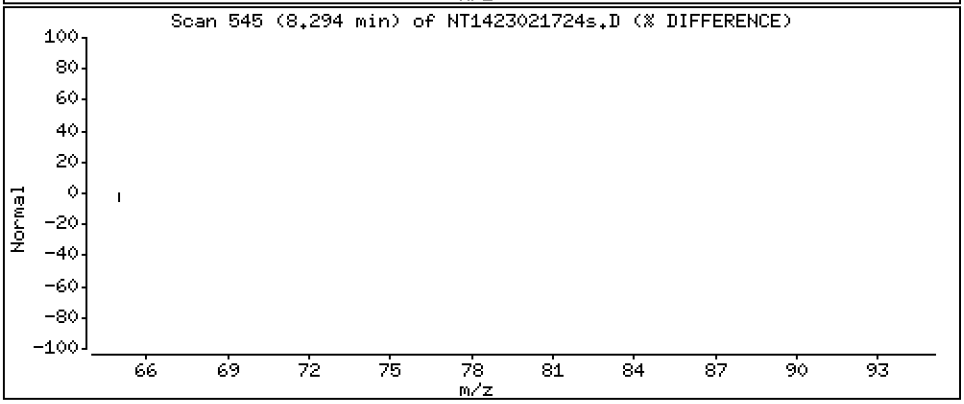












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021724s.D

Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM2

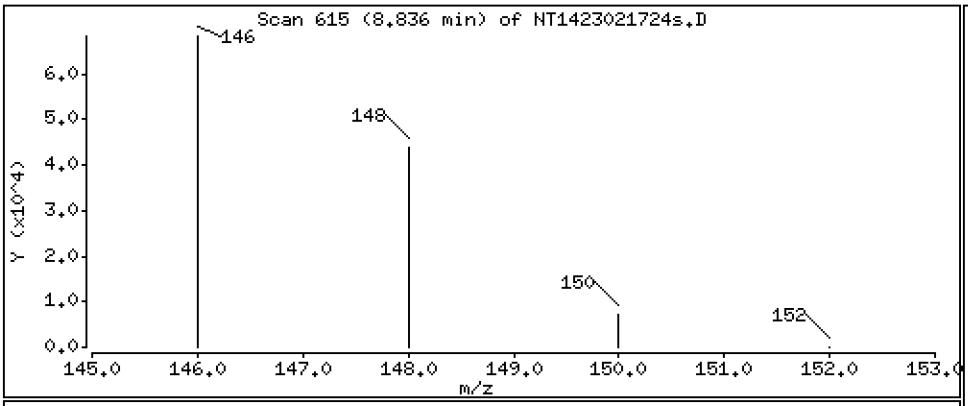
Operator: DSD

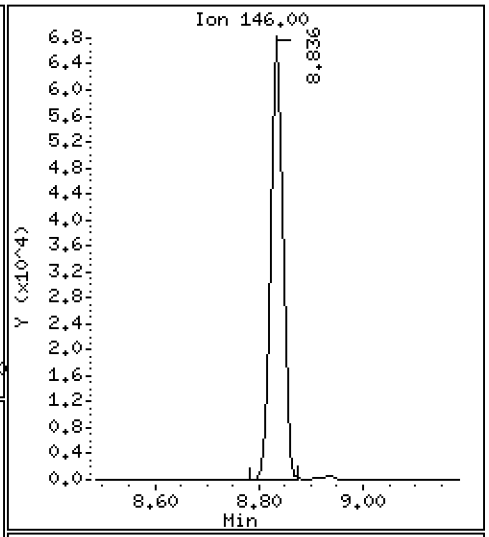
Column phase: ZB-5msi

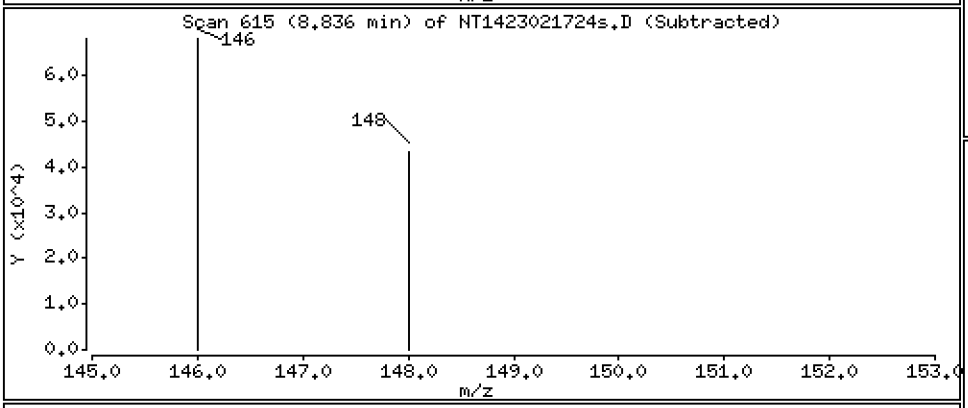
Column diameter: 0.25

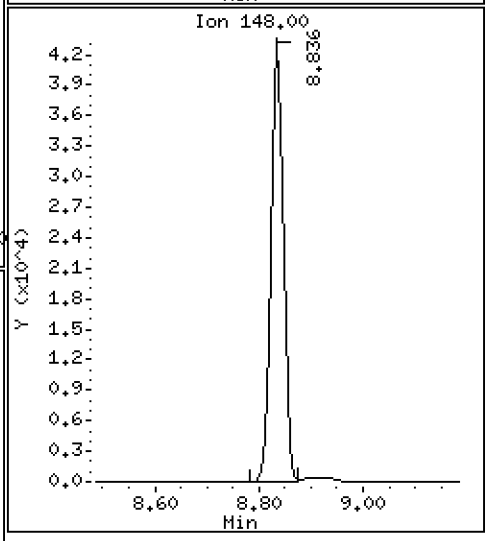
7 1,3-Dichlorobenzene

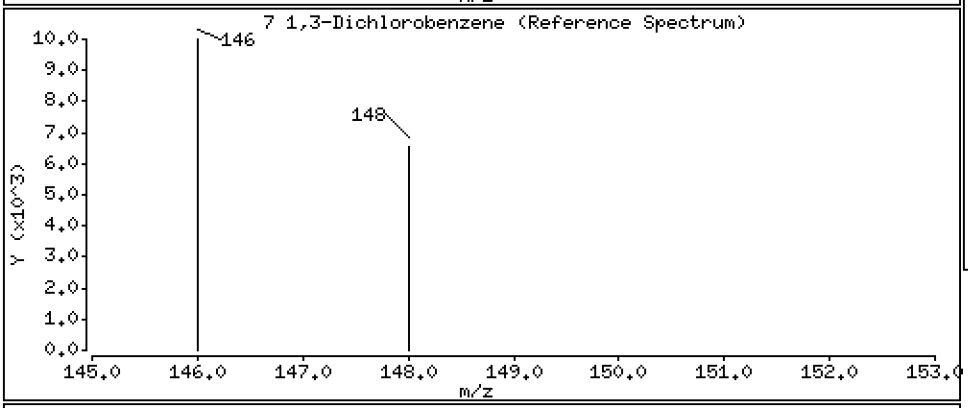
Concentration: 1.020 ug/mL

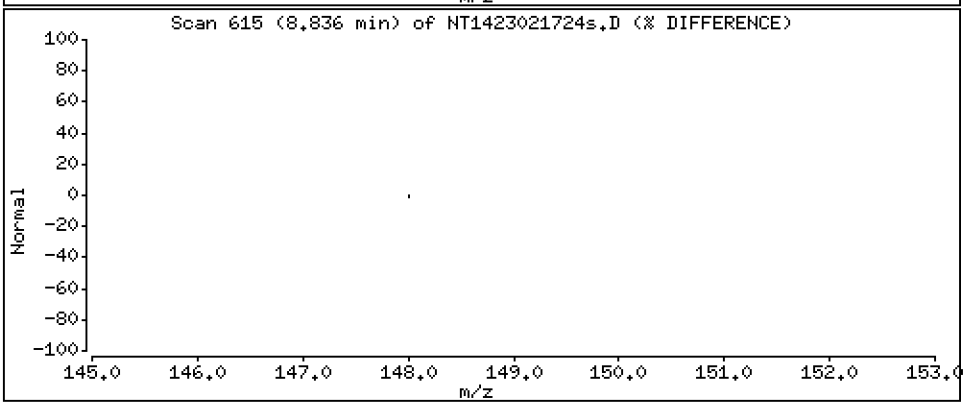












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021724s.D

Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM2

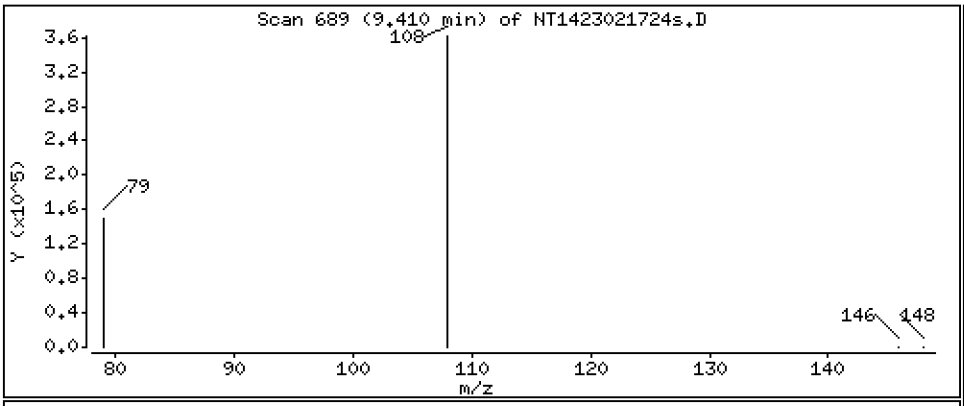
Operator: DSD

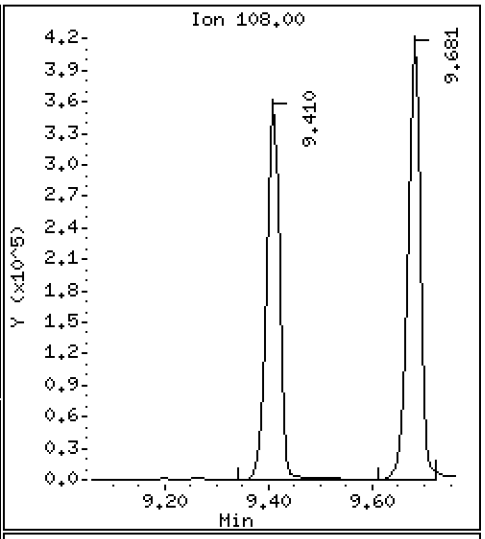
Column phase: ZB-5msi

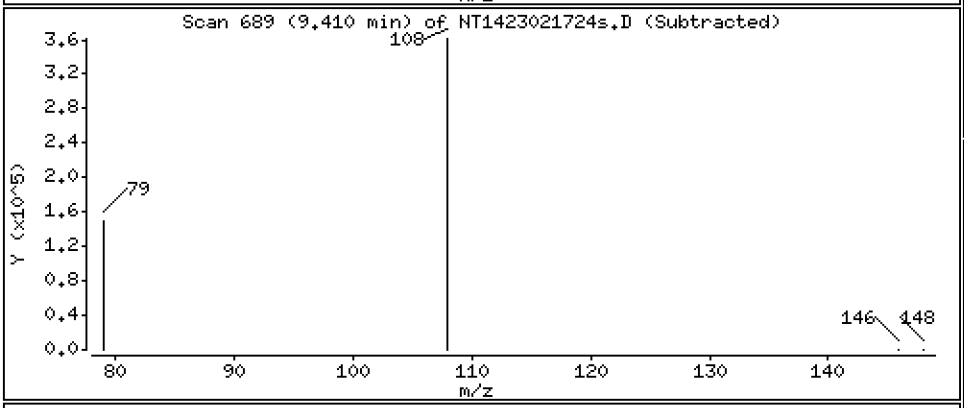
Column diameter: 0.25

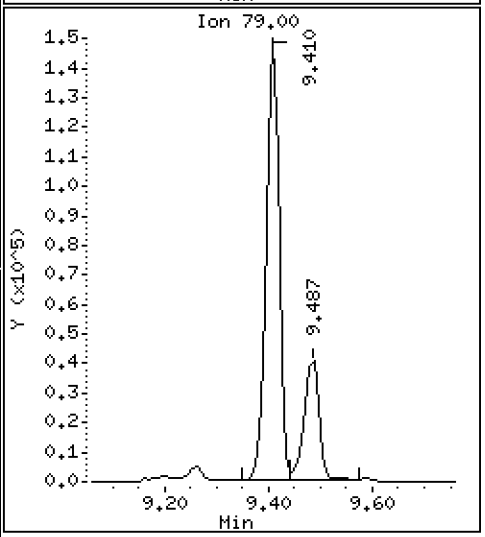
13 2-Methylphenol

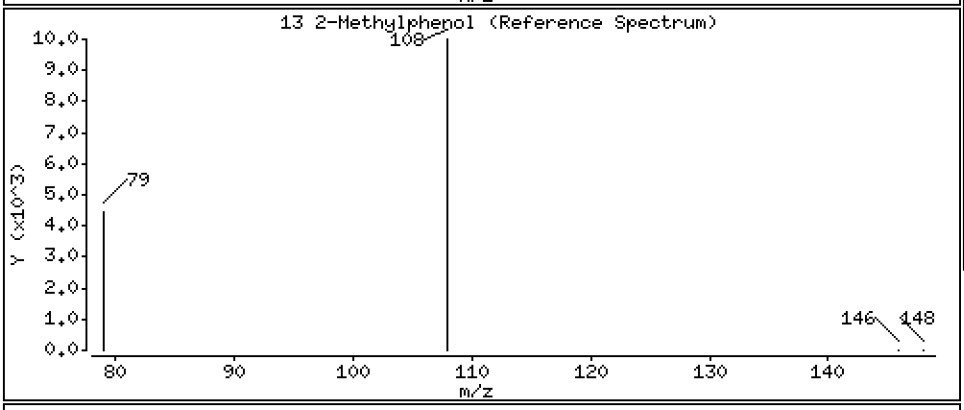
Concentration: 6.417 ug/mL

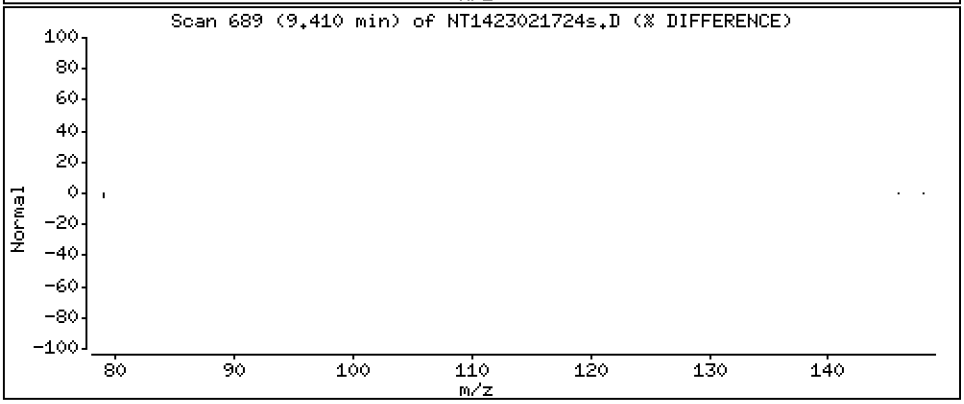












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021724s.D

Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM2

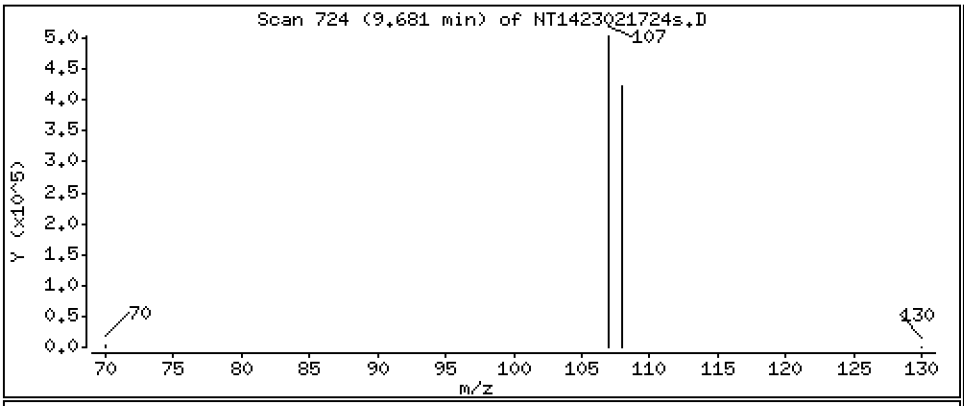
Operator: DSD

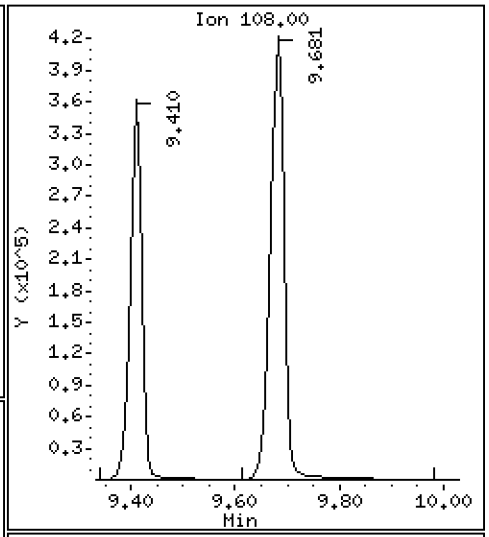
Column phase: ZB-5msi

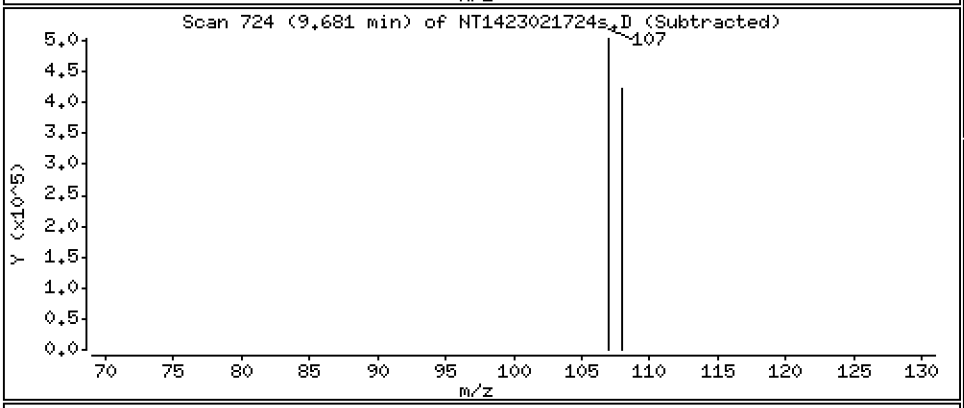
Column diameter: 0.25

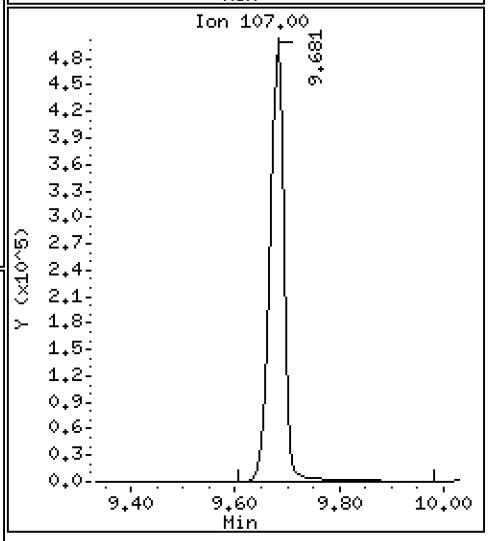
15 4-Methylphenol

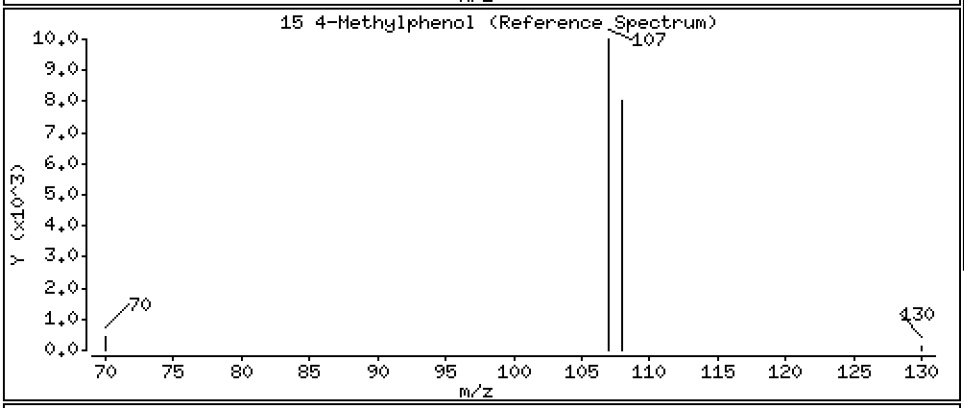
Concentration: 7.193 ug/mL

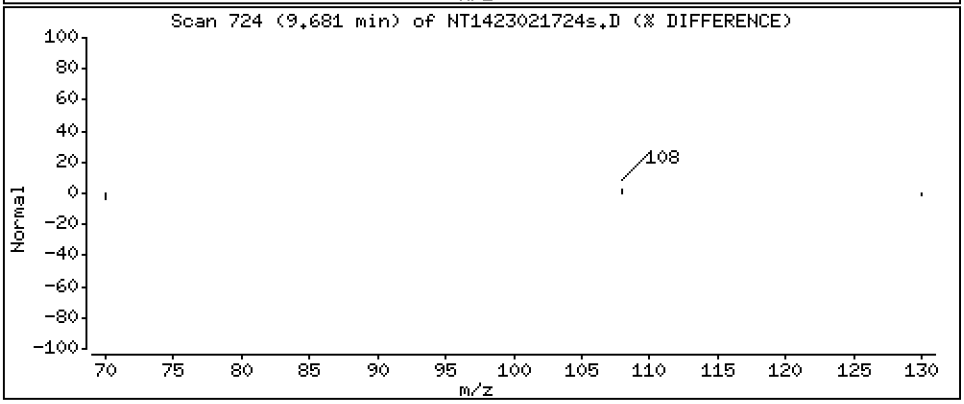












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021724s.D

Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM2

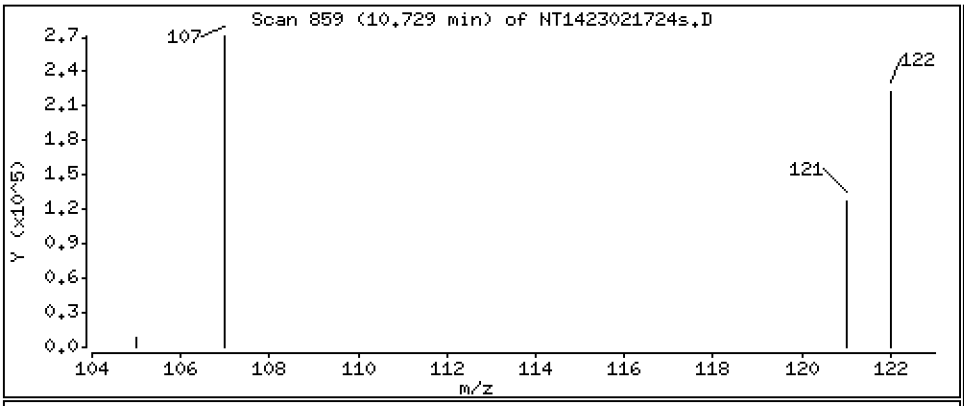
Operator: DSD

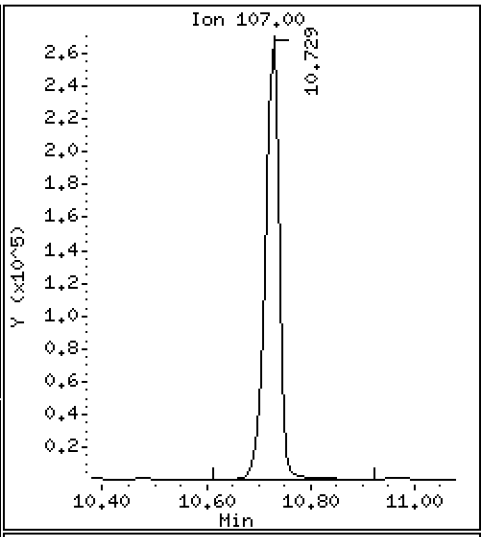
Column phase: ZB-5msi

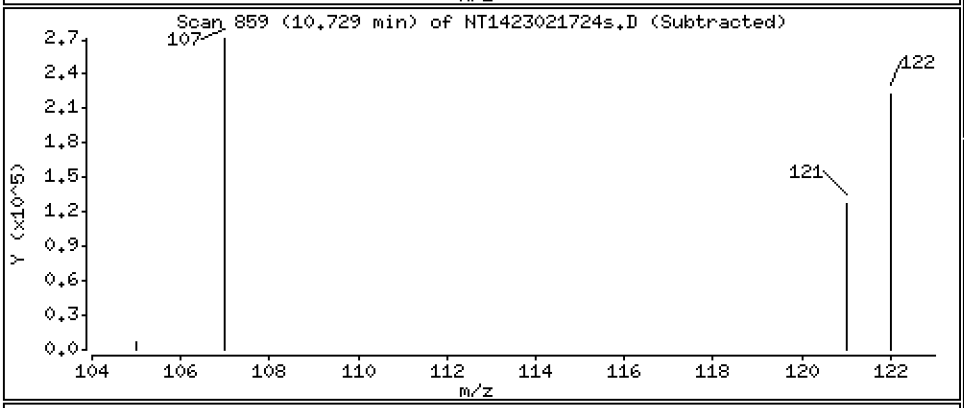
Column diameter: 0.25

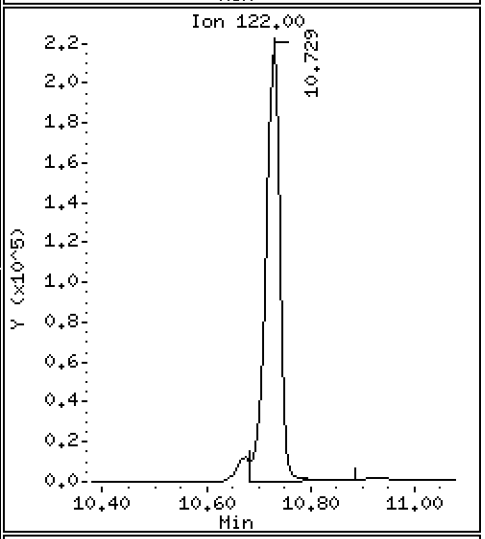
22 2,4-Dimethylphenol

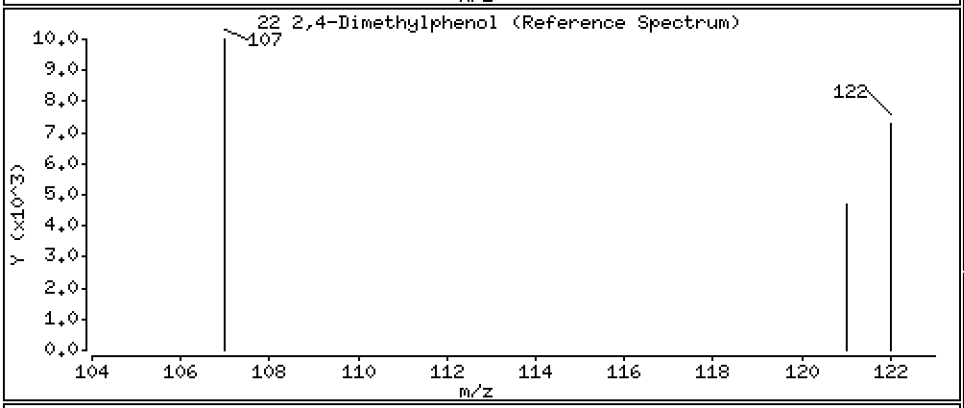
Concentration: 5.066 ug/mL

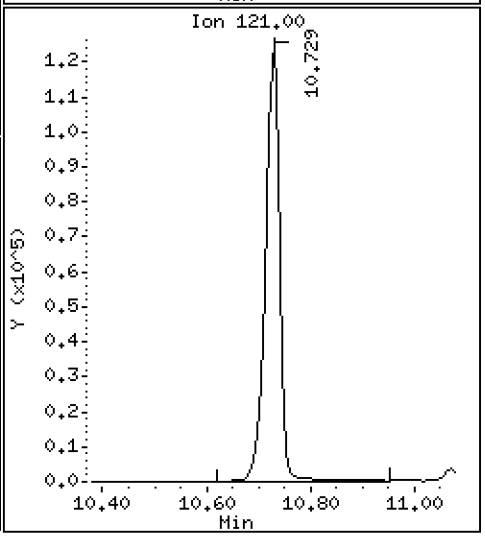


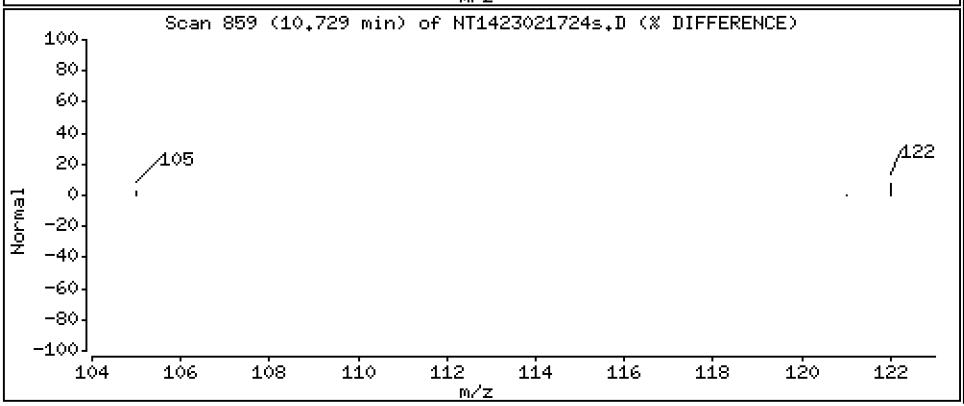












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM2

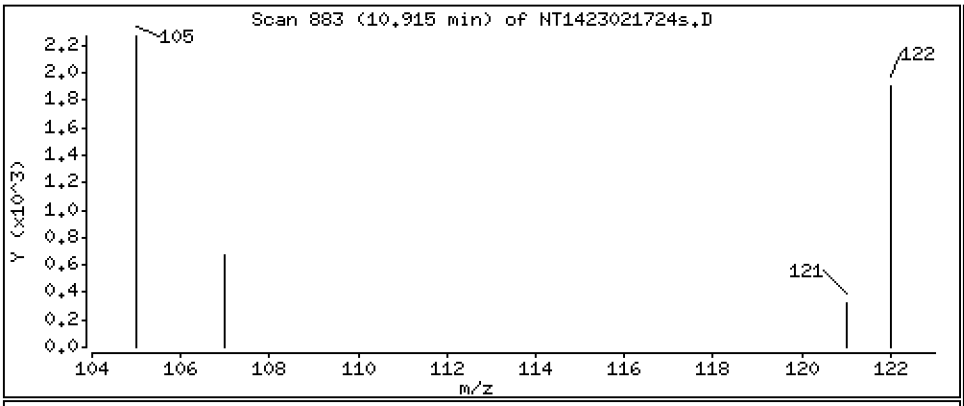
Operator: DSD

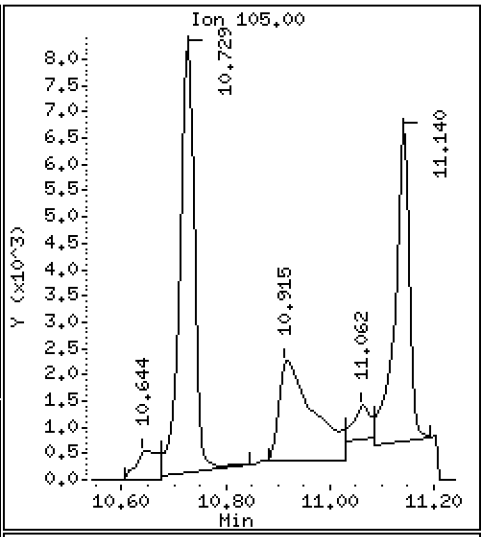
Column phase: ZB-5msi

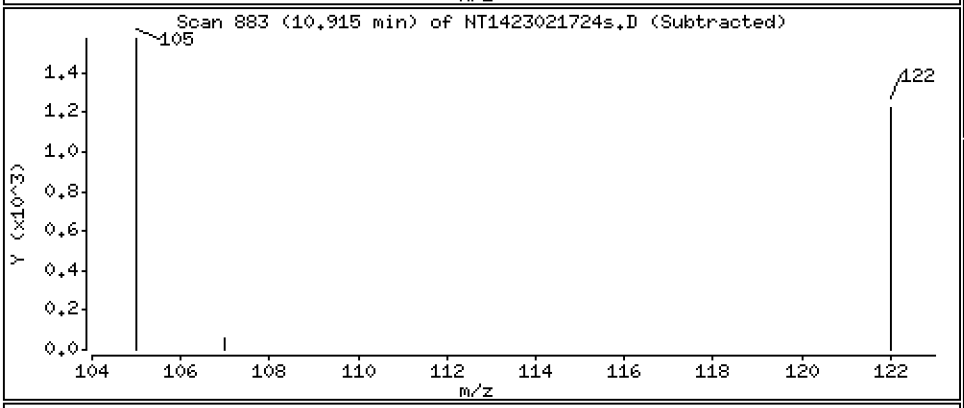
Column diameter: 0.25

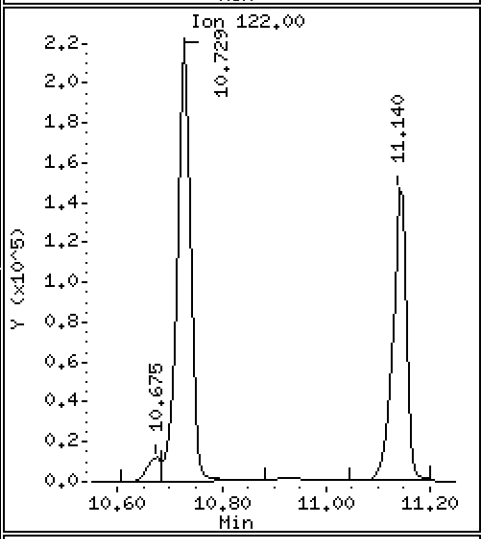
24 Benzoic acid

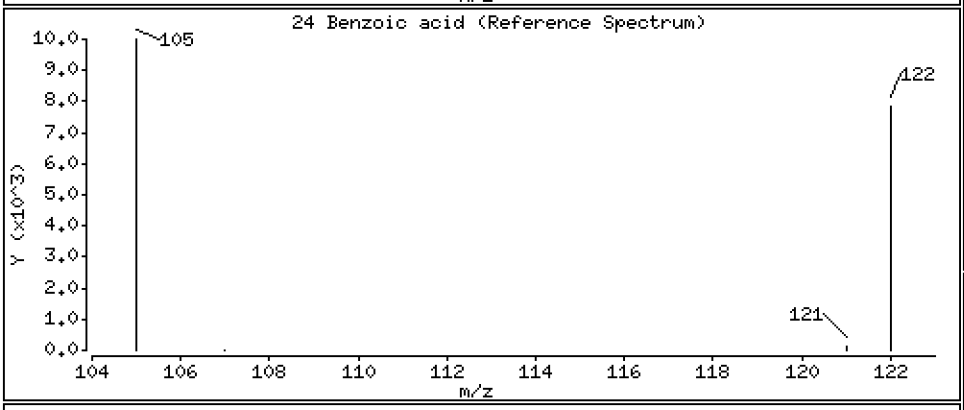
Concentration: 0.1770 ug/mL

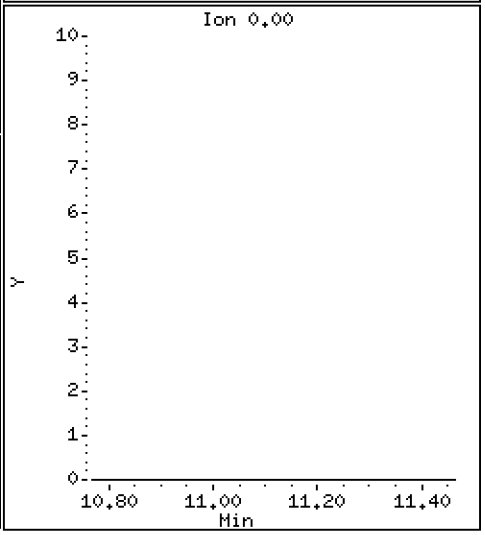


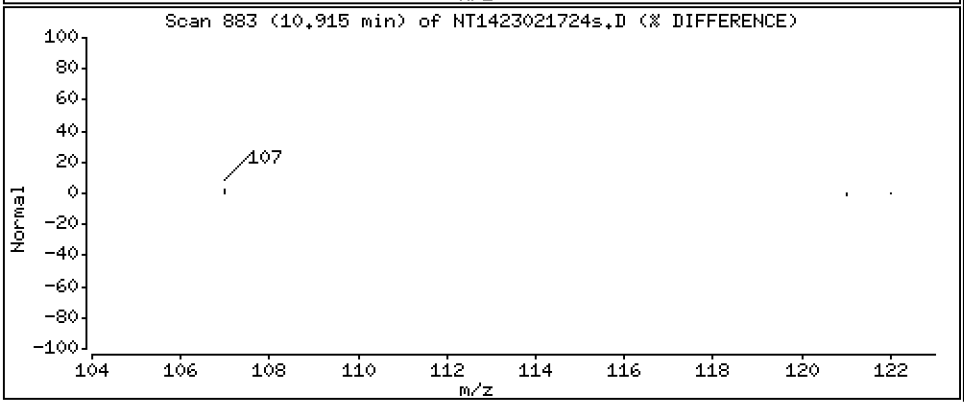












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM2

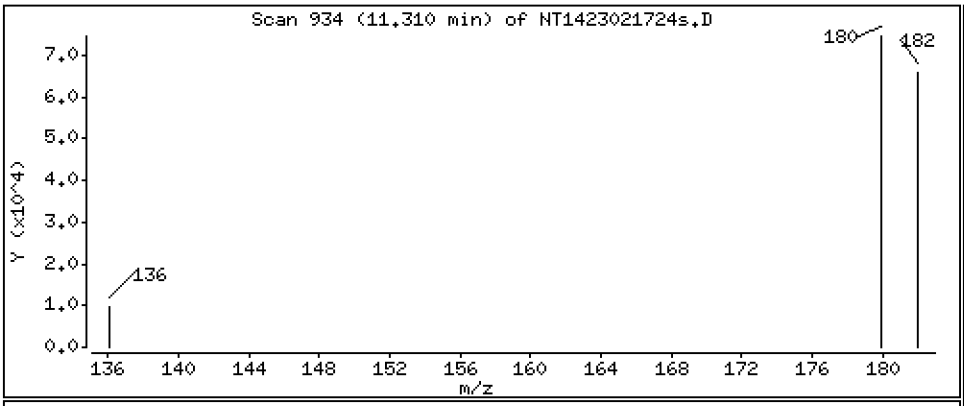
Operator: DSD

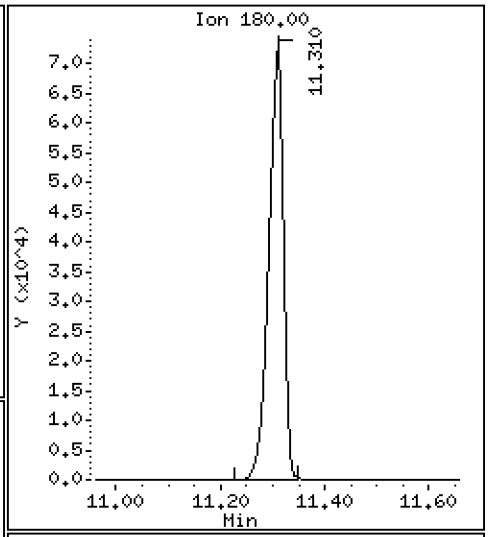
Column phase: ZB-5msi

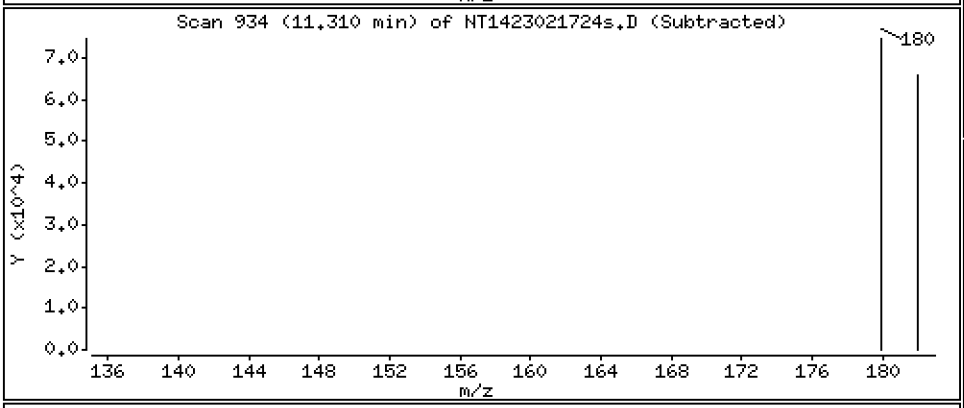
Column diameter: 0.25

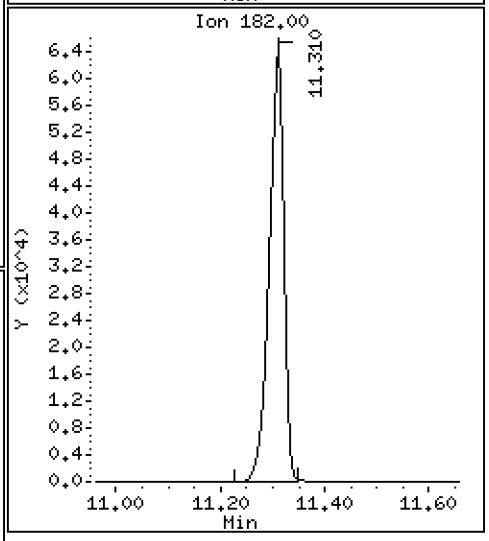
26 1,2,4-Trichlorobenzene

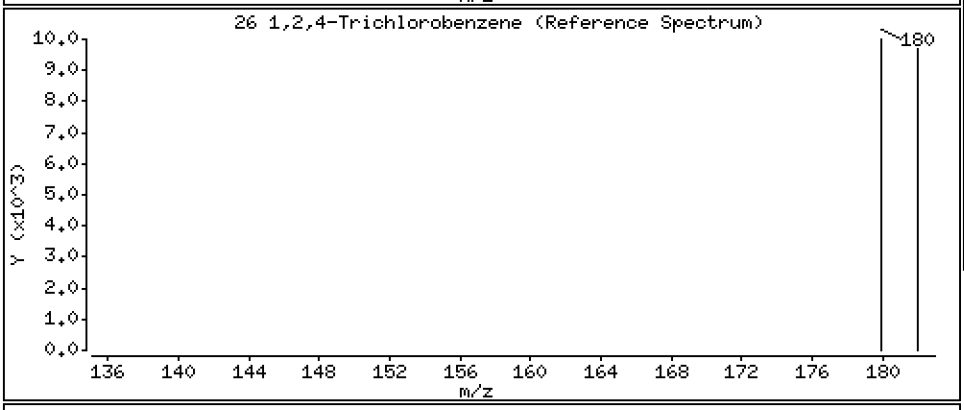
Concentration: 1.371 ug/mL

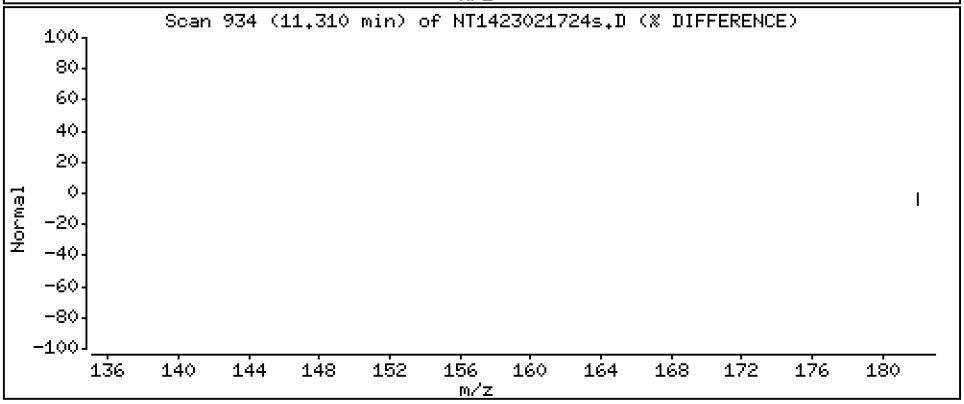












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021724s.D

Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM2

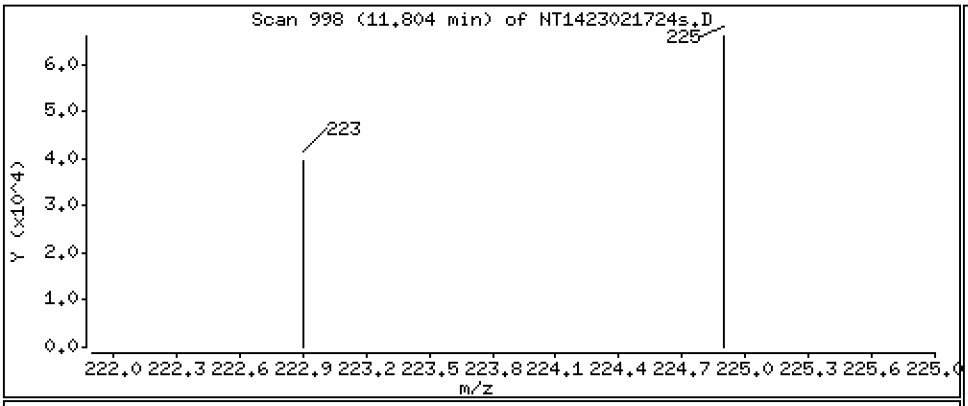
Operator: DSD

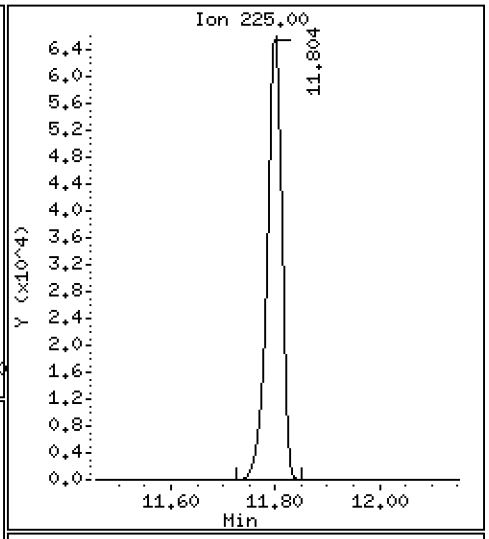
Column phase: ZB-5msi

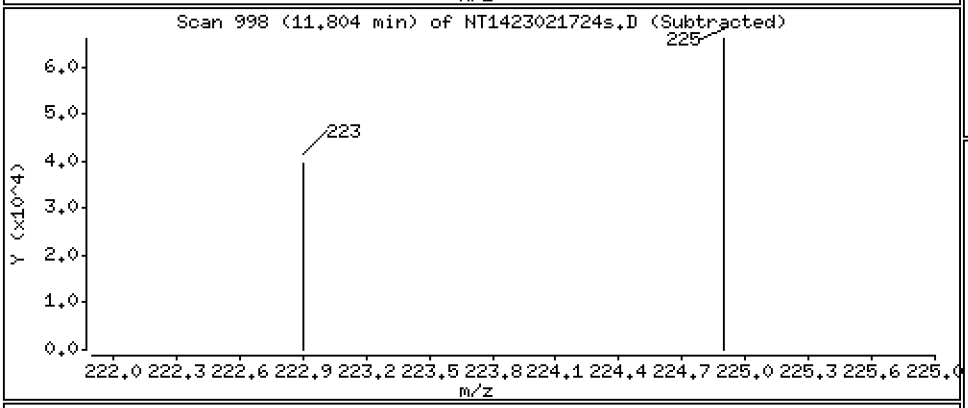
Column diameter: 0.25

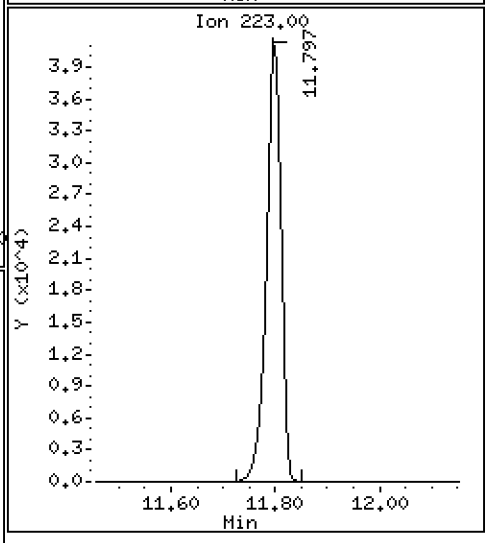
30 Hexachlorobutadiene

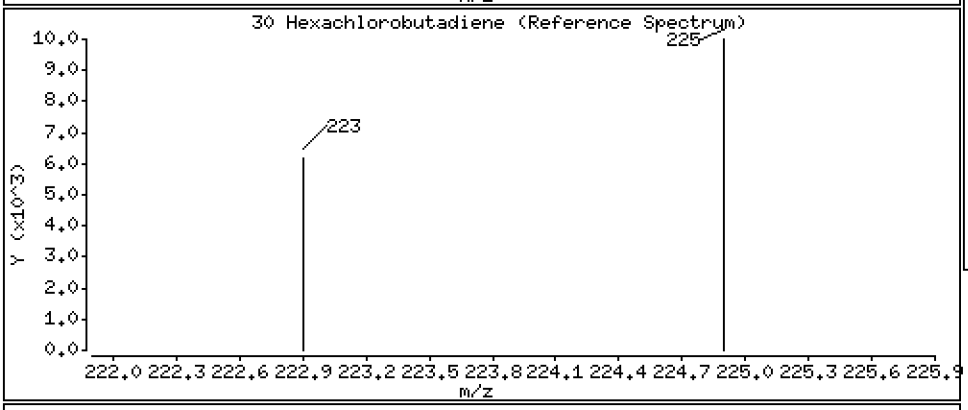
Concentration: 2.050 ug/mL

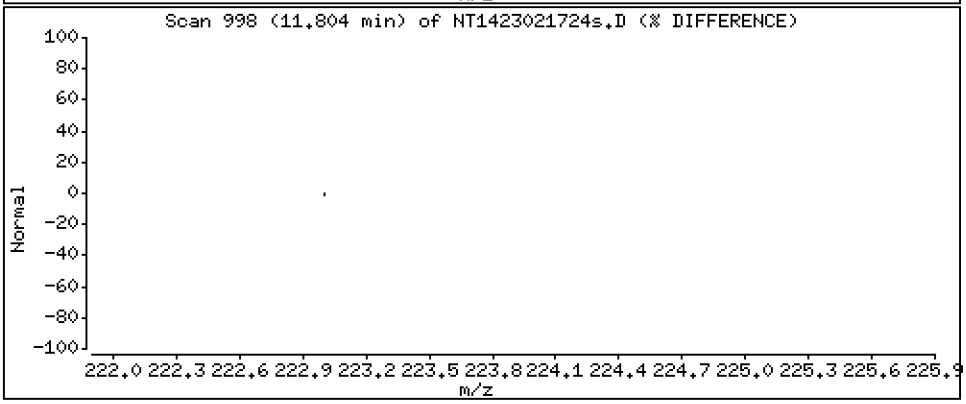












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021724s.D

Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM2

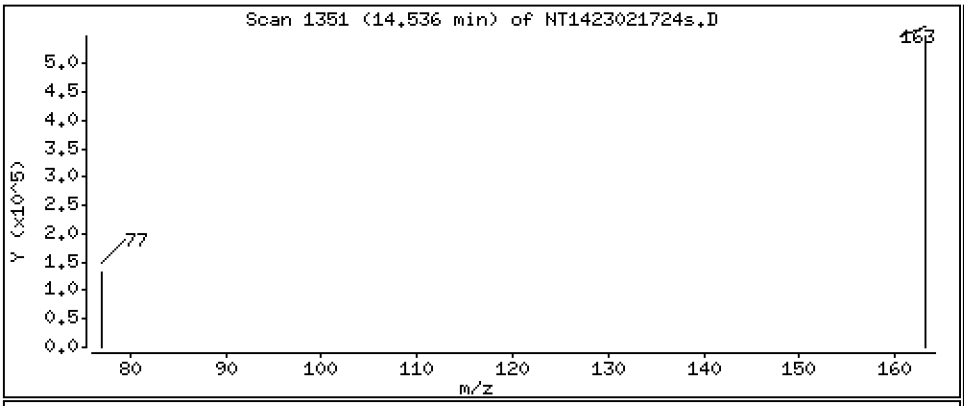
Operator: DSD

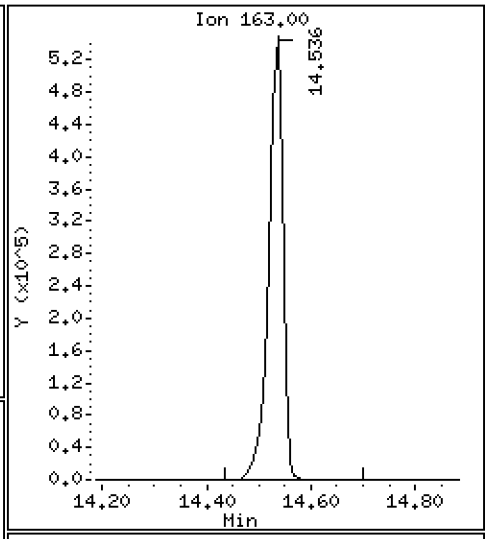
Column phase: ZB-5msi

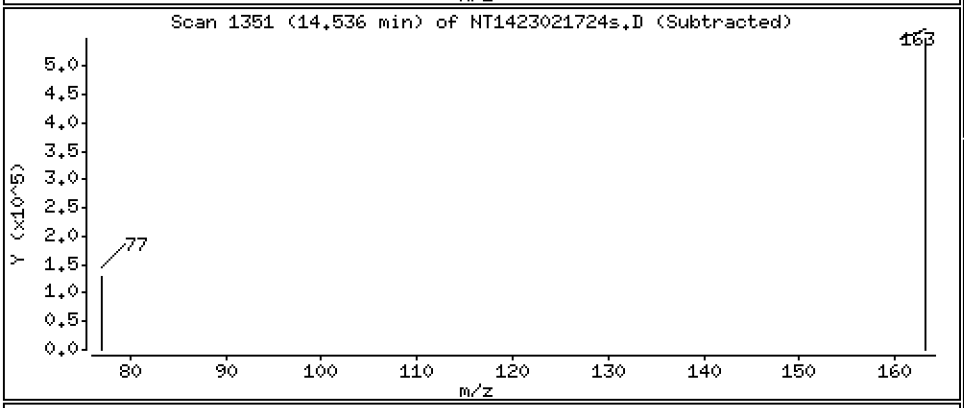
Column diameter: 0.25

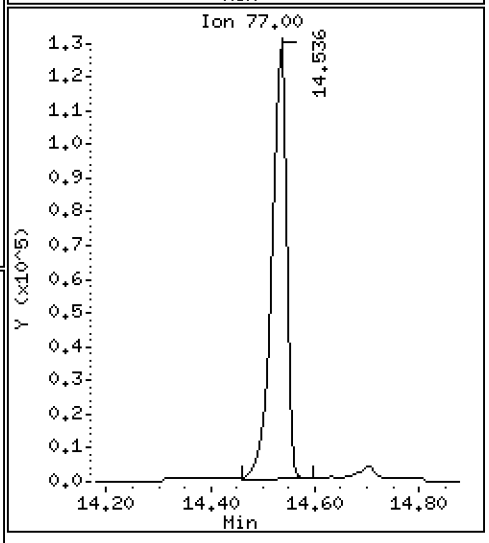
39 Dimethylphthalate

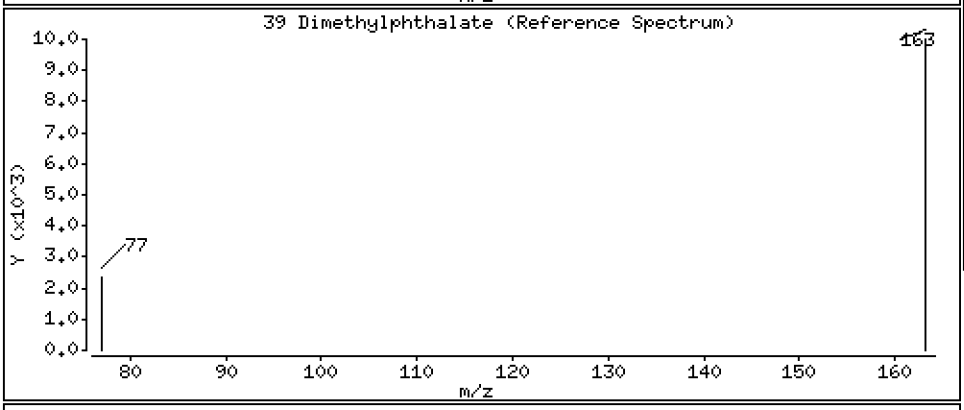
Concentration: 5.618 ug/mL

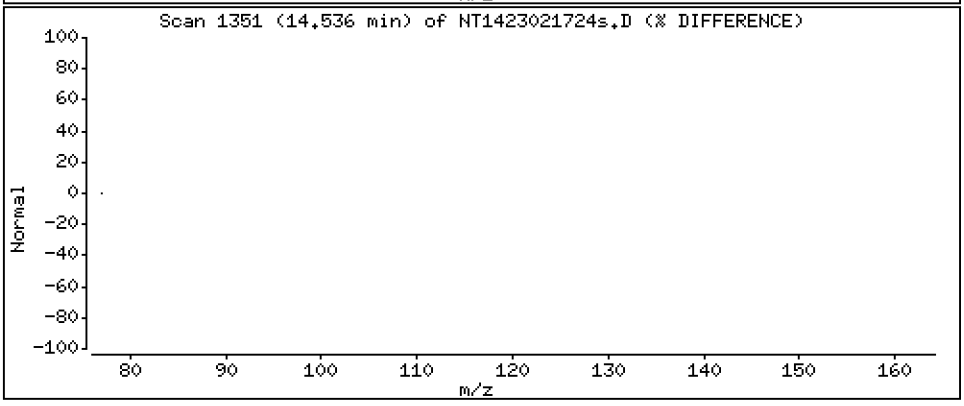












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM2

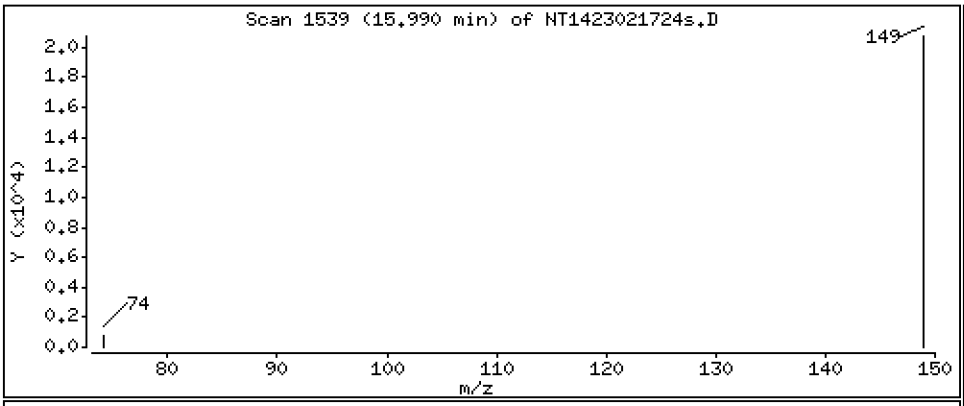
Operator: DSD

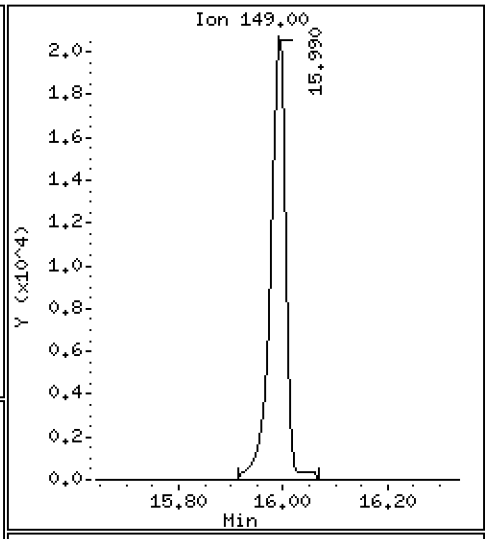
Column phase: ZB-5msi

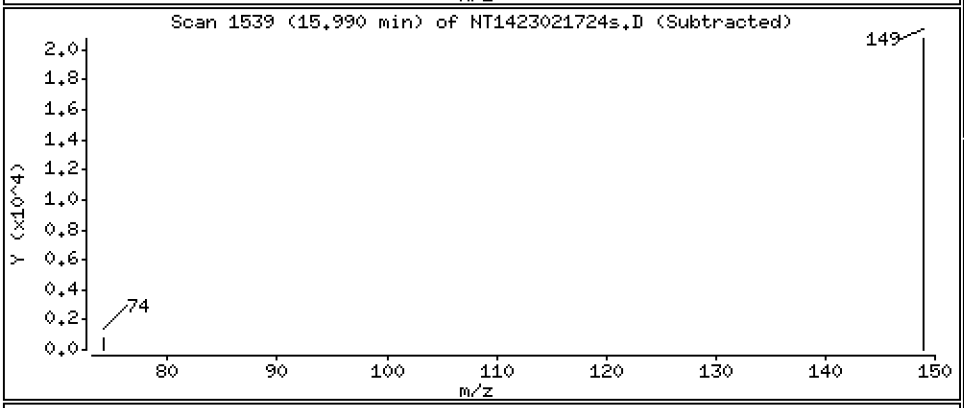
Column diameter: 0.25

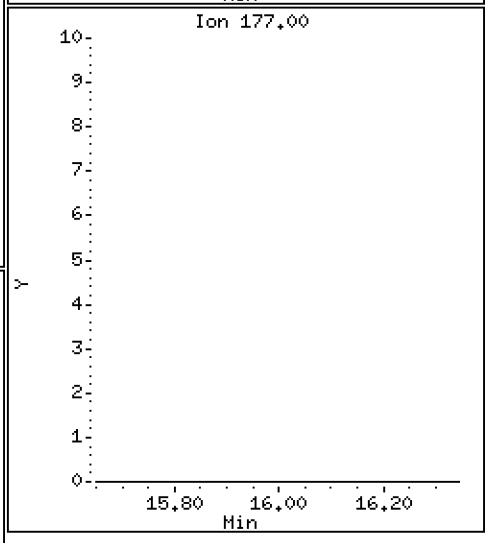
50 Diethylphthalate

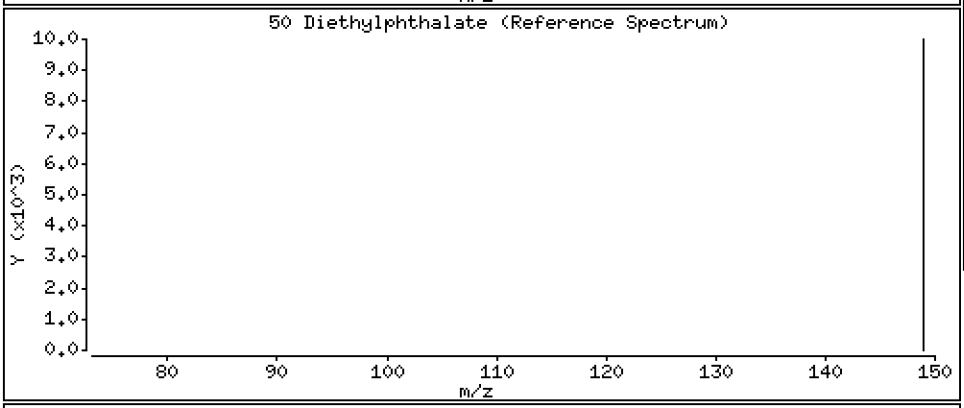
Concentration: 0.1834 ug/mL

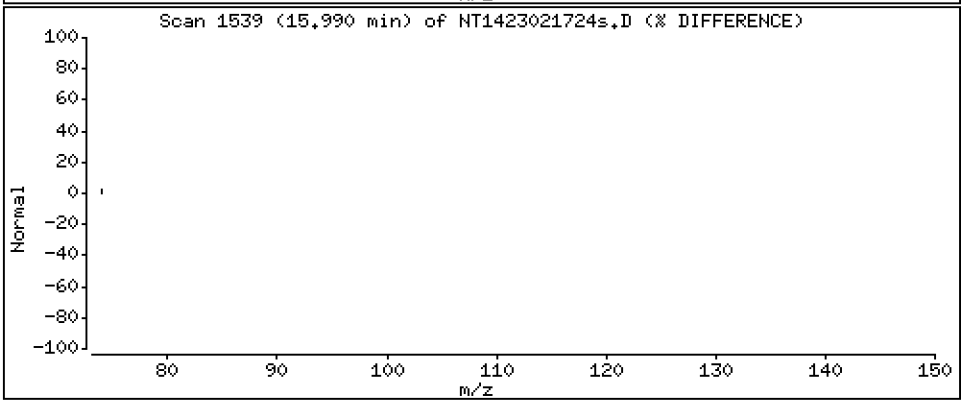












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Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM2

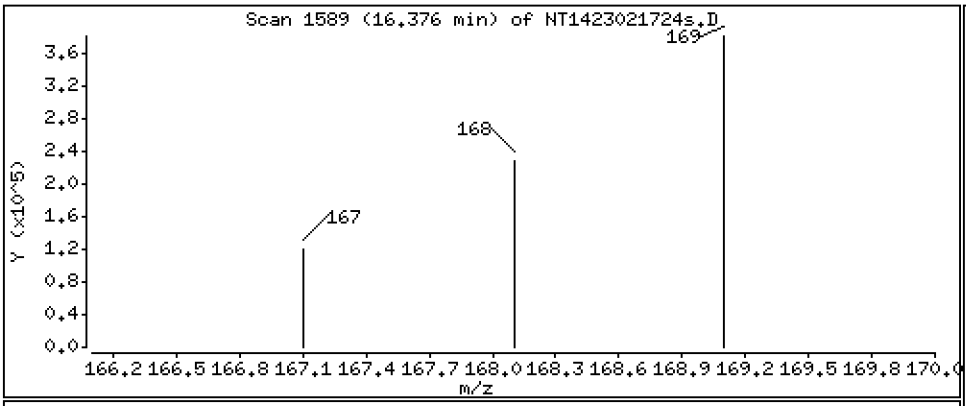
Operator: DSD

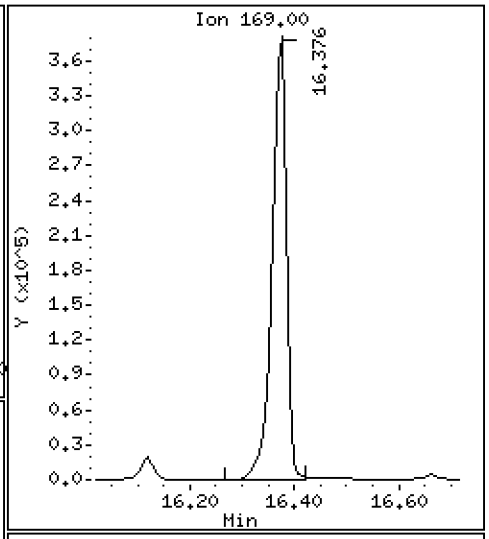
Column phase: ZB-5msi

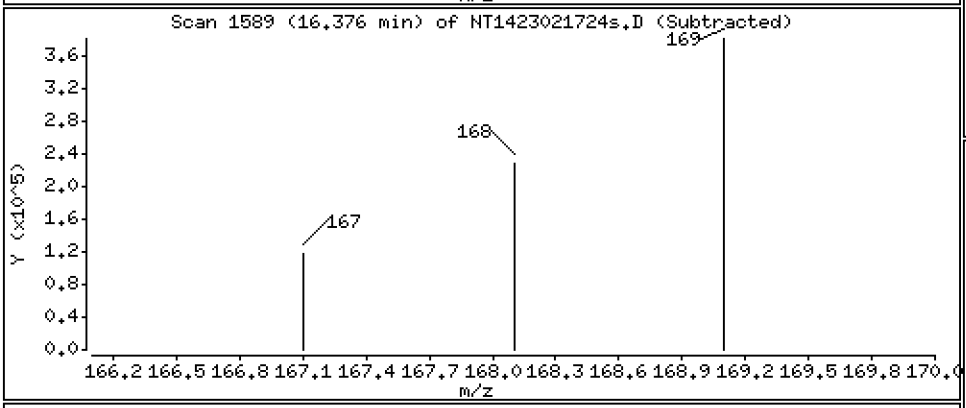
Column diameter: 0.25

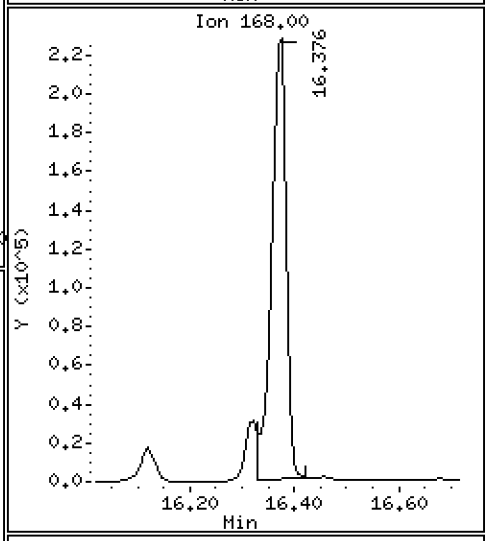
54 N-Nitrosodiphenylamine

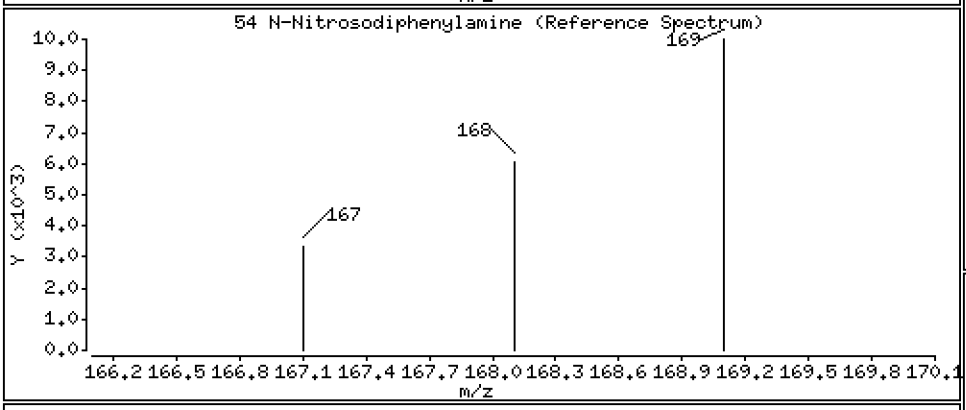
Concentration: 4.066 ug/mL

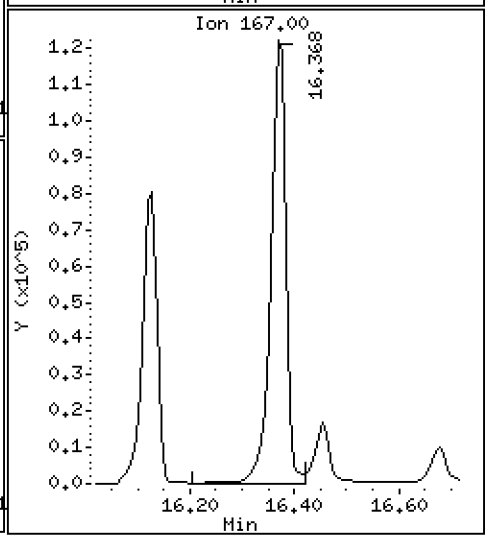


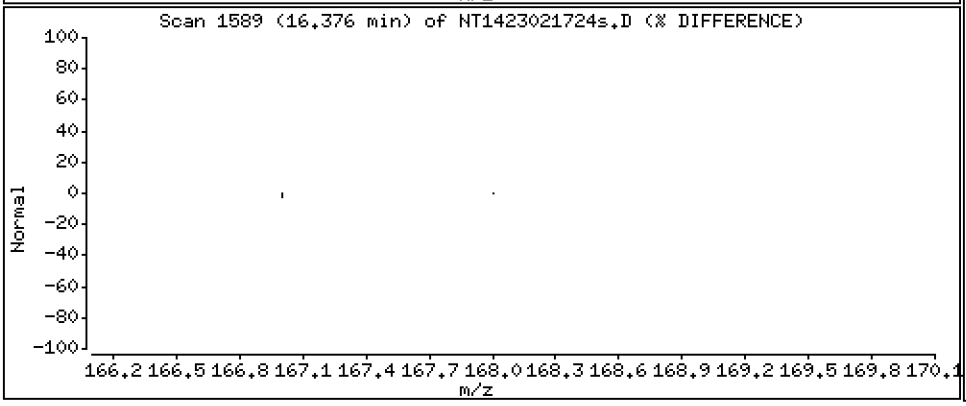












Date : 18-FEB-2023 00:30

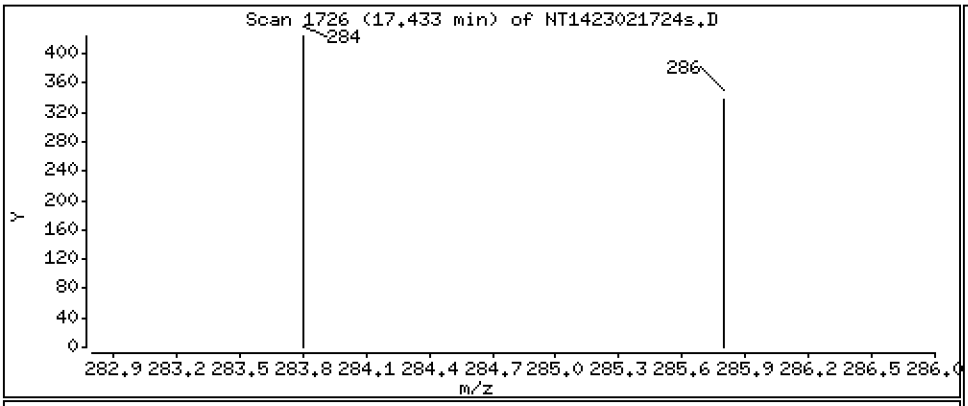
Client ID: Instrument: nt14.i

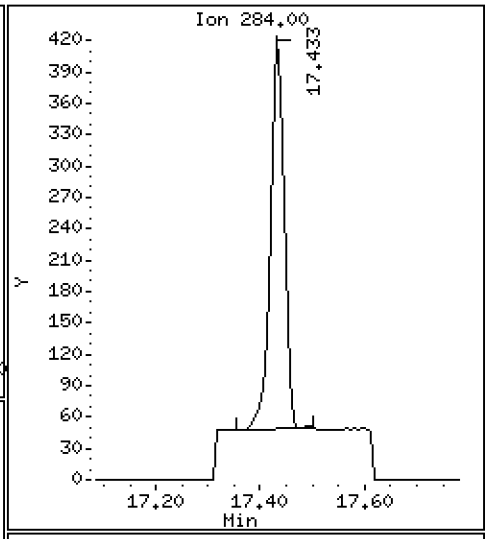
Sample Info: BLA0339-SRM2

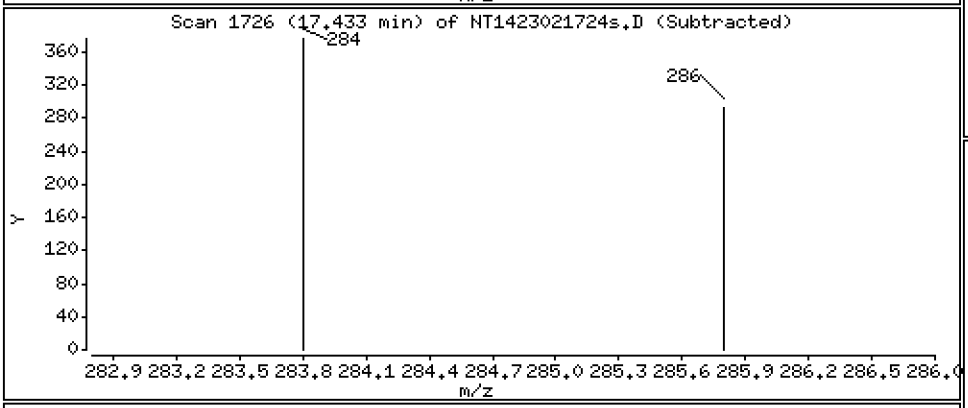
Operator: DSD

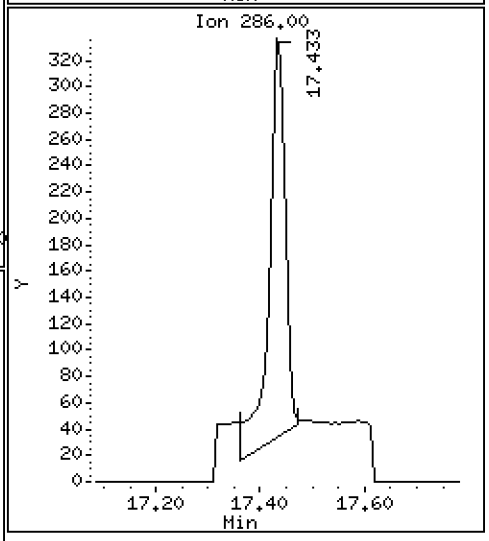
Column phase: ZB-5msi Column diameter: 0.25

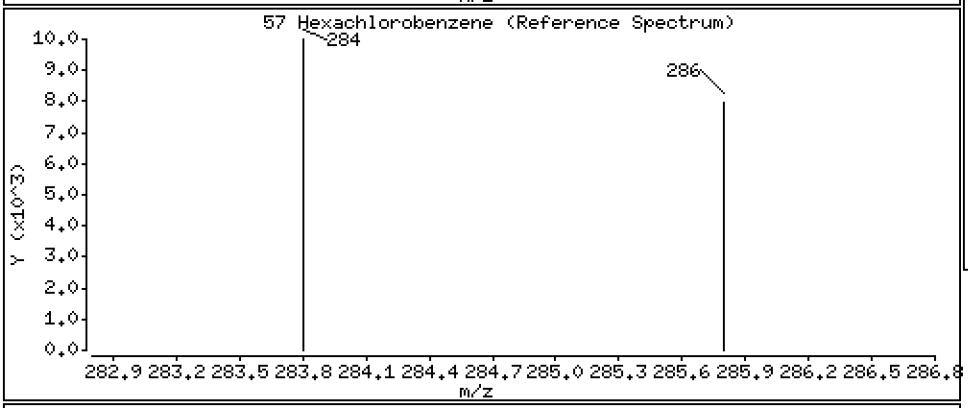
57 Hexachlorobenzene Concentration: 0.007794 ug/mL

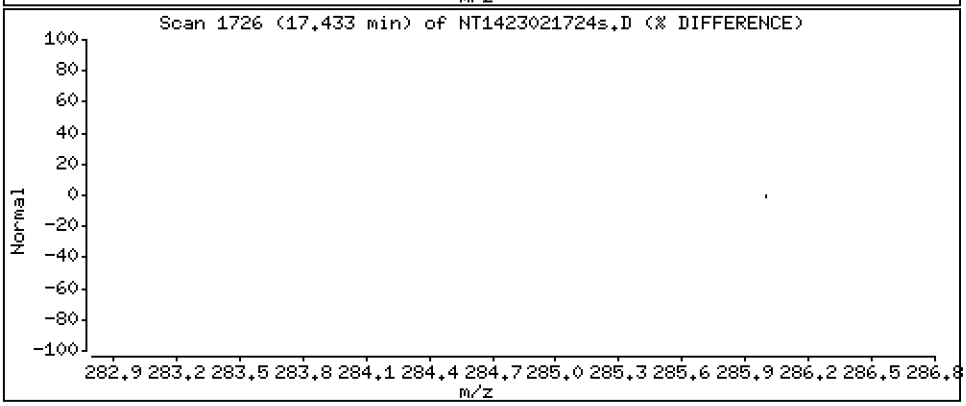












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021724s.D

Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM2

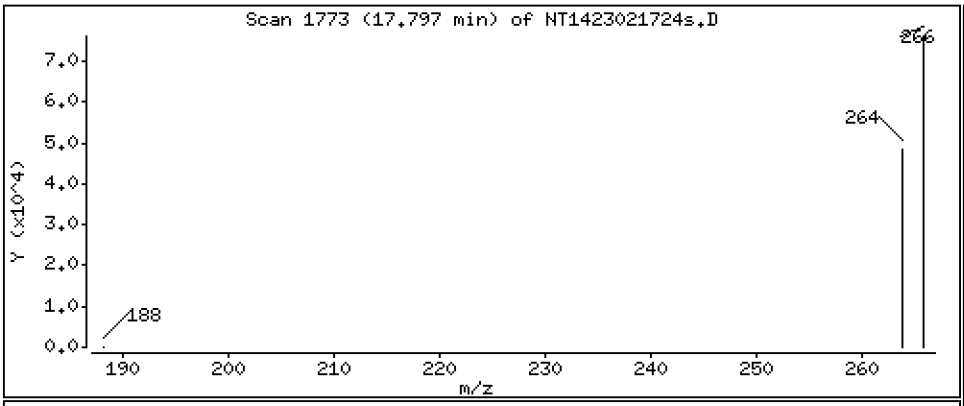
Operator: DSD

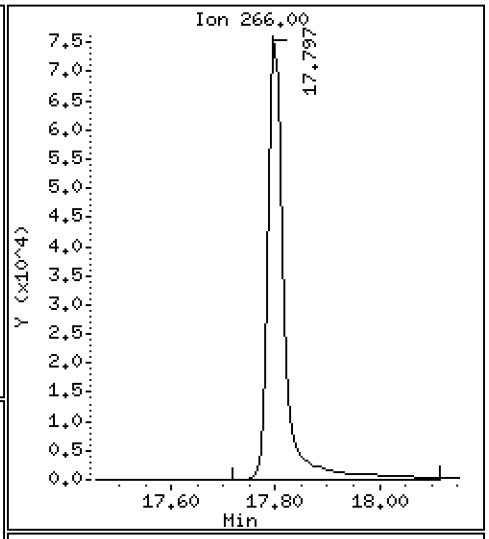
Column phase: ZB-5msi

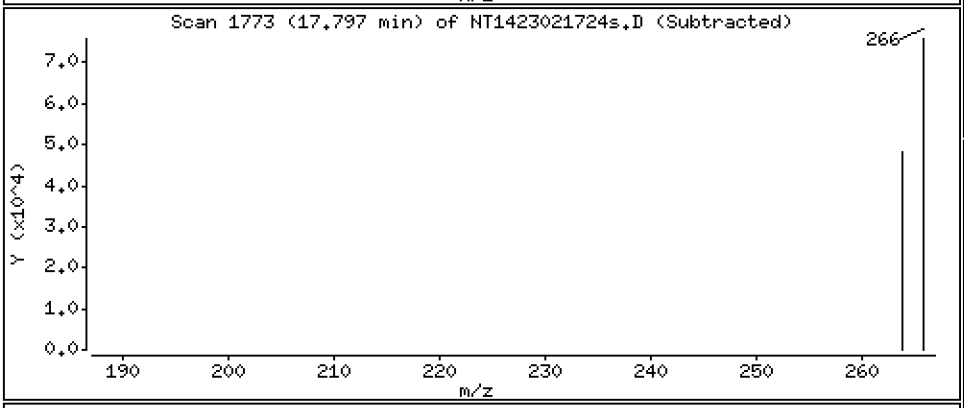
Column diameter: 0.25

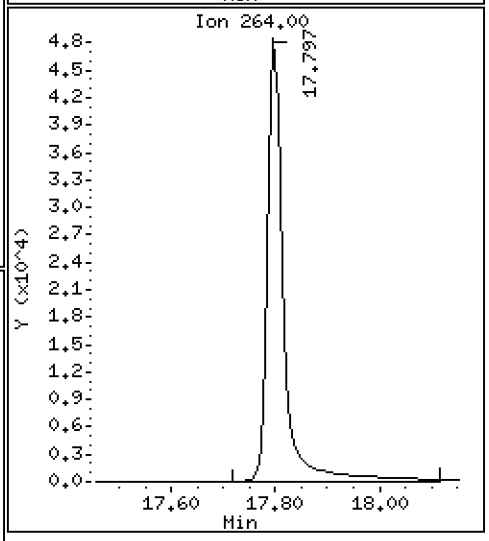
58 Pentachlorophenol

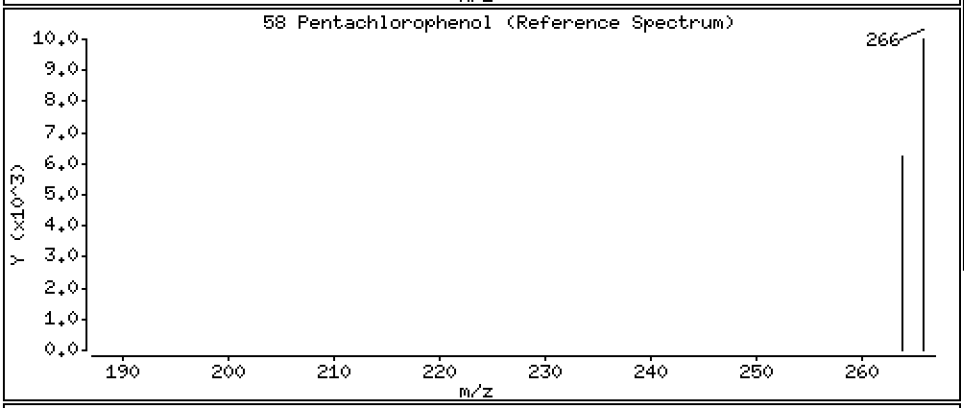
Concentration: 4.340 ug/mL

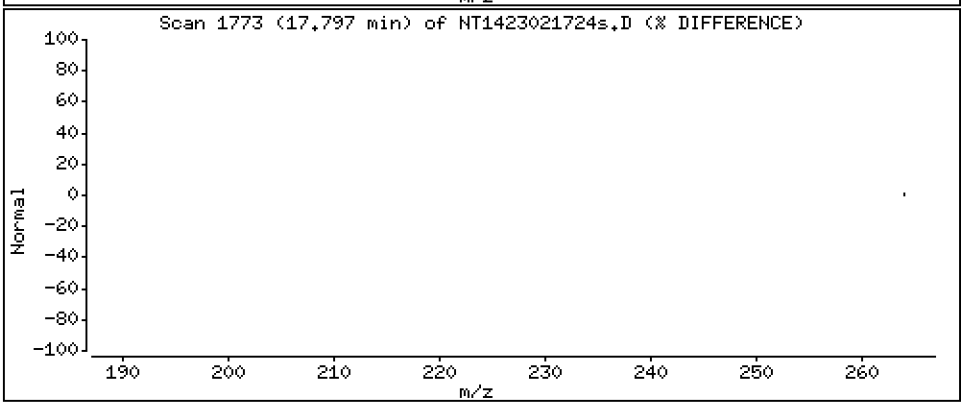












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021724s.D

Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM2

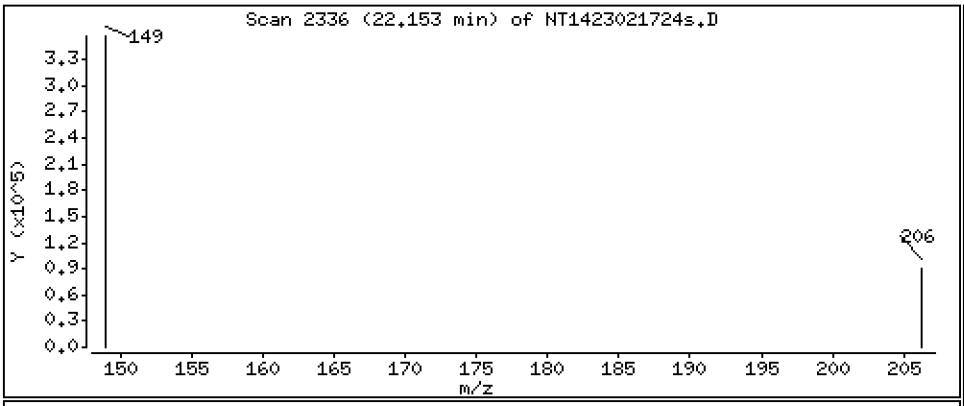
Operator: DSD

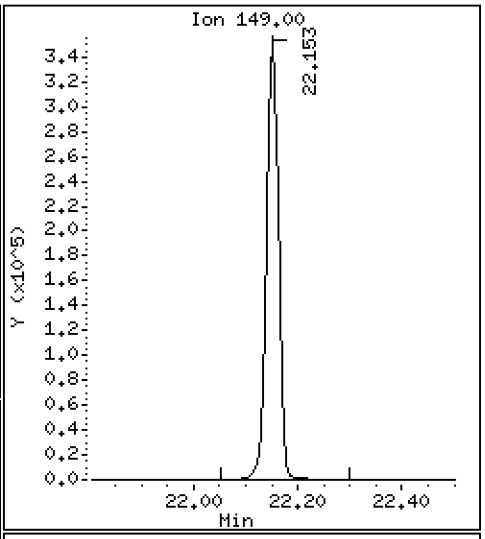
Column phase: ZB-5msi

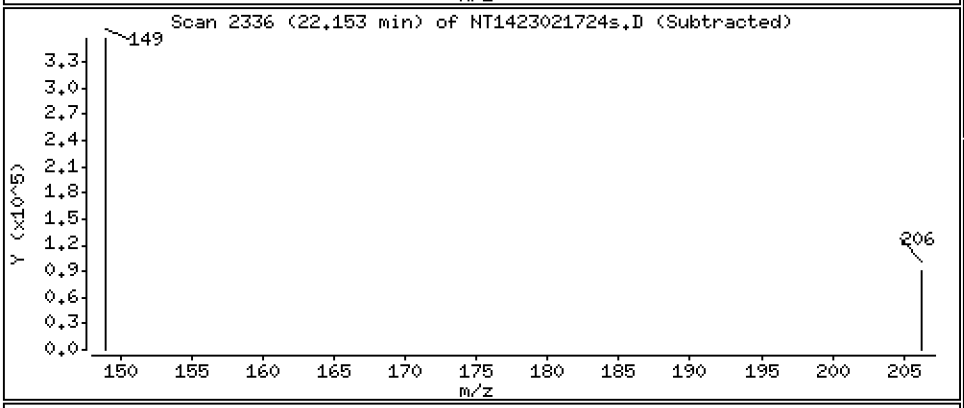
Column diameter: 0.25

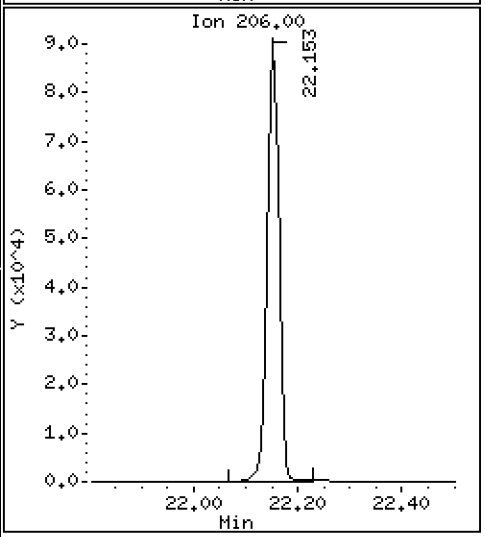
67 Butylbenzylphthalate

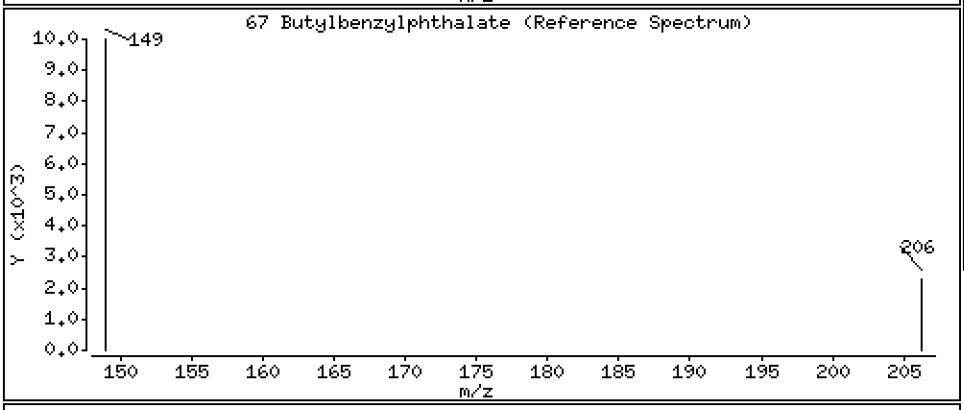
Concentration: 5.680 ug/mL

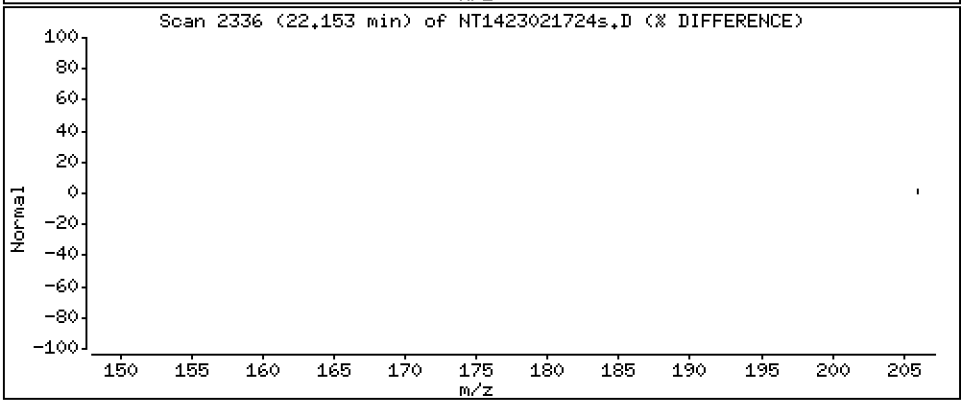












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021724s.D

Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM2

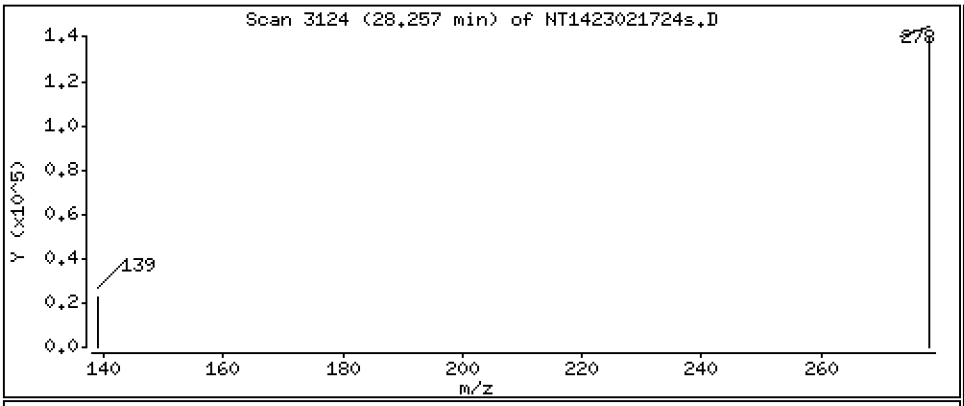
Operator: DSD

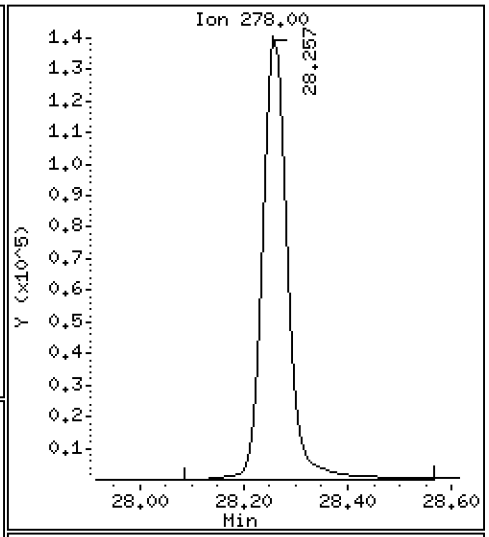
Column phase: ZB-5msi

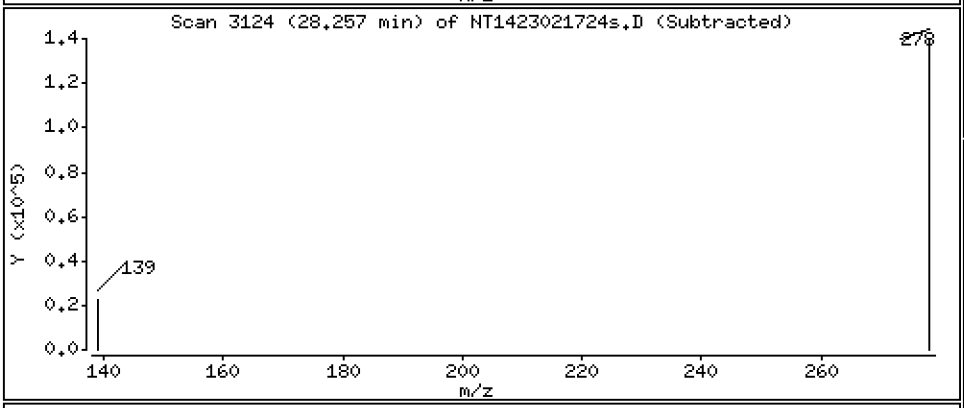
Column diameter: 0.25

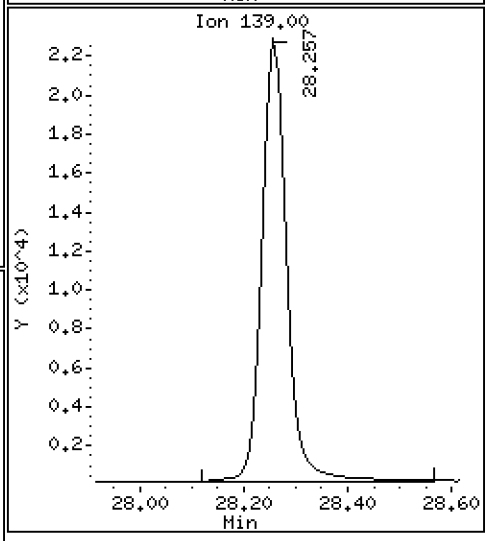
79 Dibenzo(a,h)anthracene

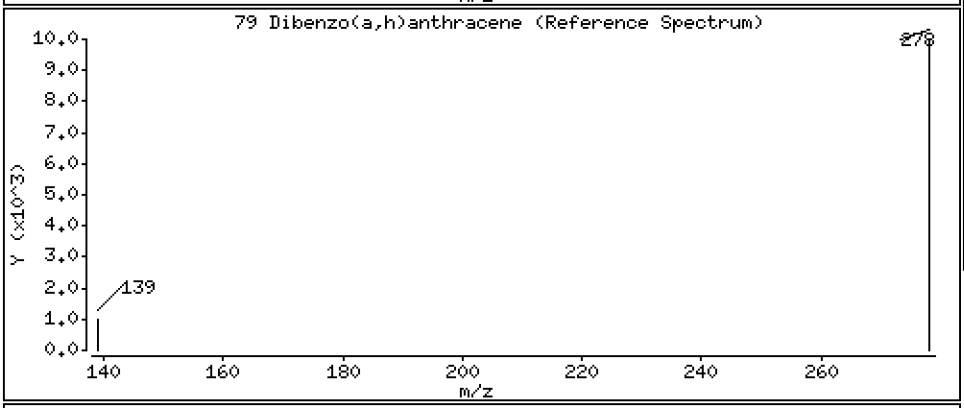
Concentration: 4.756 ug/mL

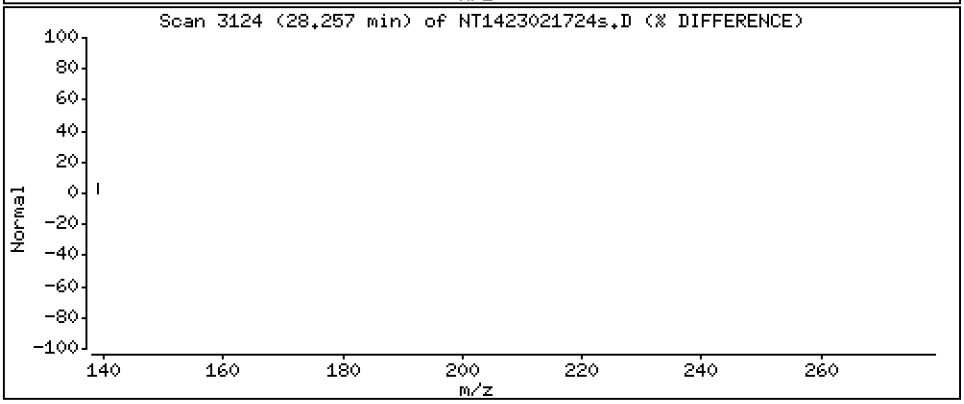












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021724s.D

Date : 18-FEB-2023 00:30

Client ID:

Instrument: nt14.i

Sample Info: BLA0339-SRM2

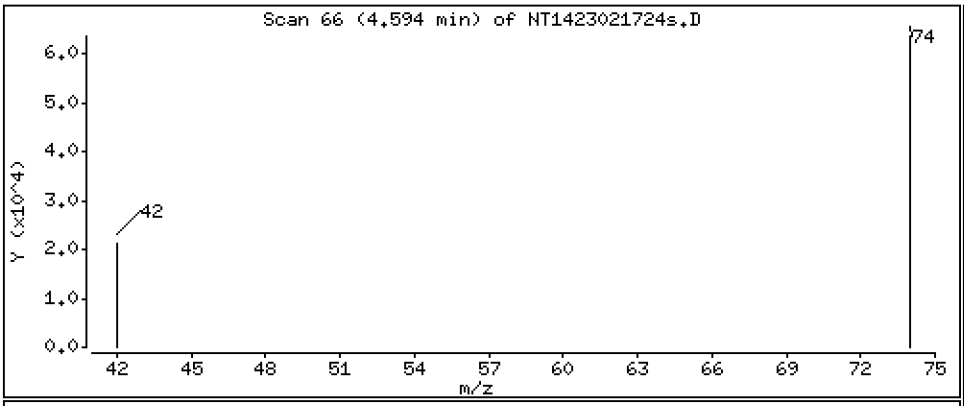
Operator: DSD

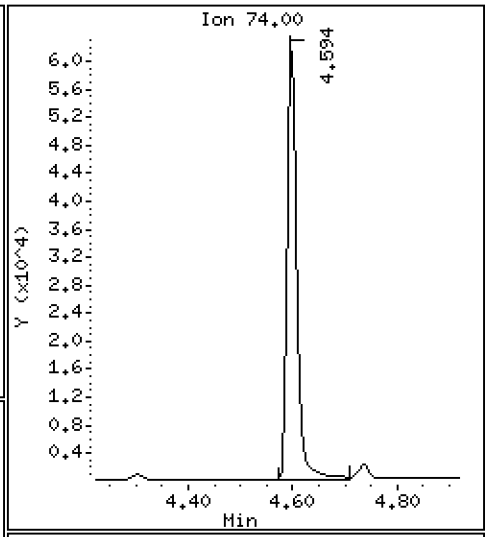
Column phase: ZB-5msi

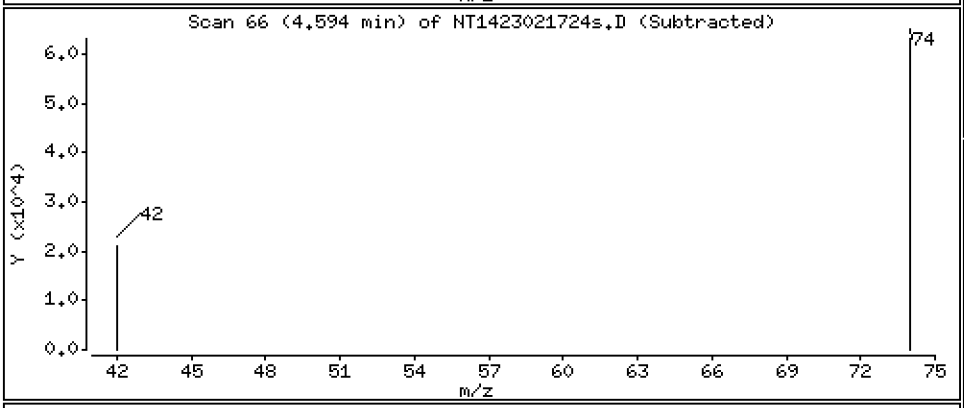
Column diameter: 0.25

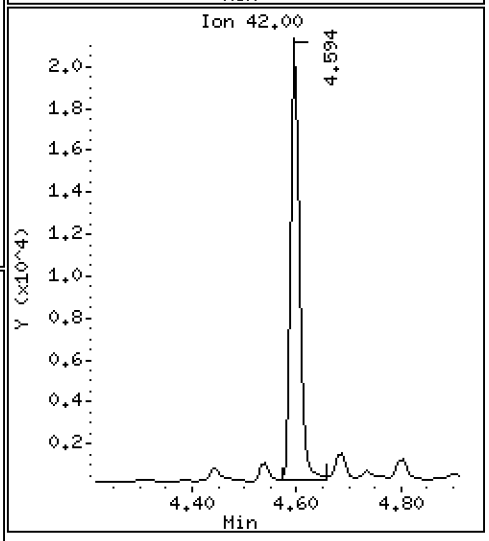
90 N-Nitrosodimethylamine

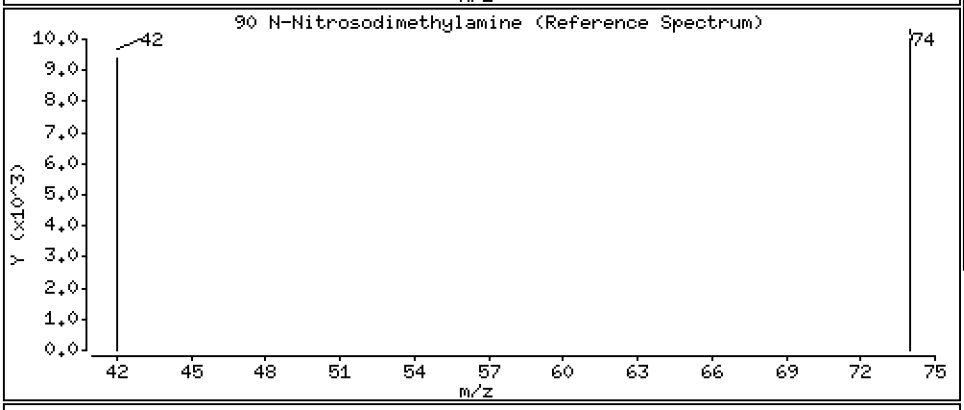
Concentration: 1.237 ug/mL

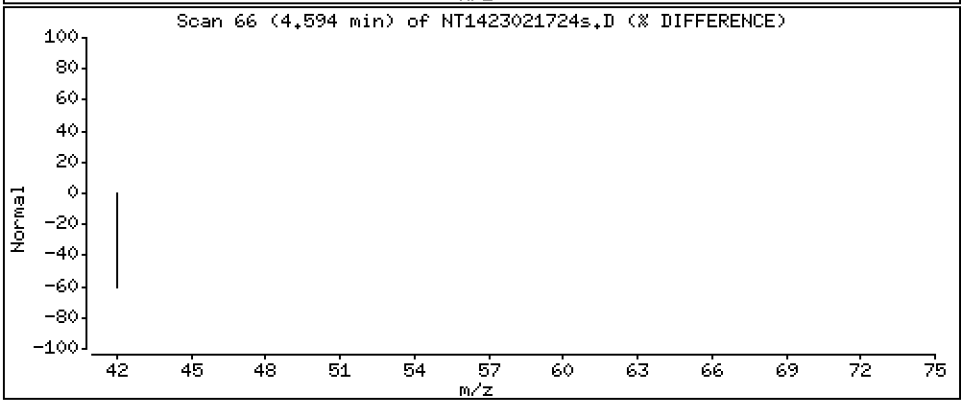












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021724s.D
Lab Smp Id: BLA0339-SRM2
Inj Date : 18-FEB-2023 00:30 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : BLA0339-SRM2
Misc Info :
Comment :
Method : \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\SIMABN2.m
Meth Date : 07-Mar-2023 12:35 van Quant Type: ISTD
Cal Date : 16-FEB-2023 20:42 Cal File: NT1423021612s.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.702	6.679	(0.753)	479155	5.43466	5.435(R)
	3 Phenol	94	8.294	8.294	(0.931)	403975	3.00347	3.003
	7 1,3-Dichlorobenzene	146	8.835	8.835	(0.992)	108122	1.02024	1.020
*	8 1,4-Dichlorobenzene-d4	152	8.905	8.905	(1.000)	311456	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	79	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	13 2-Methylphenol	108	9.409	9.409	(1.057)	593251	6.41679	6.417
	15 4-Methylphenol	108	9.681	9.681	(1.087)	753042	7.19325	7.193
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	10.728	10.728	(0.942)	478577	5.06639	5.066
	24 Benzoic acid	105	10.915	10.891	(0.958)	9138	0.17696	0.1770
	26 1,2,4-Trichlorobenzene	180	11.310	11.309	(0.993)	137154	1.37054	1.371
*	27 Naphthalene-d8	136	11.394	11.394	(1.000)	1092342	4.00000	
	30 Hexachlorobutadiene	225	11.804	11.804	(1.036)	124776	2.04963	2.050
	39 Dimethylphthalate	163	14.536	14.536	(0.968)	993954	5.61781	5.618
*	42 Acenaphthene-d10	162	15.015	15.015	(1.000)	579939	4.00000	
	50 Diethylphthalate	149	15.989	15.989	(1.065)	40609	0.18339	0.1834
	54 N-Nitrosodiphenylamine	169	16.375	16.368	(0.907)	698787	4.06587	4.066
	57 Hexachlorobenzene	284	17.432	17.432	(0.965)	669	0.00779	0.007794(M)
	58 Pentachlorophenol	266	17.796	17.804	(0.985)	158129	4.34049	4.340
*	59 Phenanthrene-d10	188	18.059	18.059	(1.000)	1321621	4.00000	
$	66 Terphenyl-d14	244	21.216	21.216	(0.917)	913780	5.06554	5.066(R)
	67 Butylbenzylphthalate	149	22.153	22.153	(0.958)	533609	5.67977	5.680
*	69 Chrysene-d12	240	23.128	23.121	(1.000)	677603	4.00000	
*	77 Perylene-d12	264	25.691	25.691	(1.000)	506598	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.257	28.265	(1.100)	465937	4.75550	4.756
	90 N-Nitrosodimethylamine	74	4.594	4.571	(0.516)	84909	1.23744	1.237

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021724s.D
Lab Smp Id: BLA0339-SRM2
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\SIMABN2.m
Misc Info:

Calibration Date: 17-FEB-2023
Calibration Time: 21:31
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	388684	194342	777368	311456	-19.87
27 Naphthalene-d8	1386667	693334	2773334	1092342	-21.23
42 Acenaphthene-d10	752189	376095	1504378	579939	-22.90
59 Phenanthrene-d10	1701919	850960	3403838	1321621	-22.35
69 Chrysene-d12	887171	443586	1774342	677603	-23.62
77 Perylene-d12	644624	322312	1289248	506598	-21.41

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	0.00
27 Naphthalene-d8	11.39	10.89	11.89	11.39	0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.00
59 Phenanthrene-d10	18.06	17.56	18.56	18.06	0.00
69 Chrysene-d12	23.12	22.62	23.62	23.13	0.03
77 Perylene-d12	25.69	25.19	26.19	25.69	0.00

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

REVIEW SUMMARY FOR FILE - NT1423021724s.D

Lab ID: BLA0339-SRM2
nt14.i, 20230217A.b\20230217A.b\SIMABN2.m,   18-FEB-2023 00:30

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: 20230217A.b/NT1423021719s.D

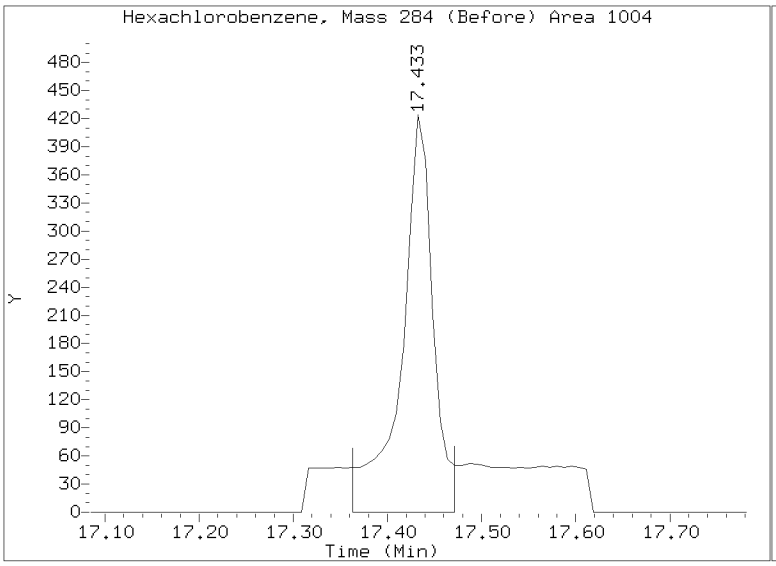
On Column LOD for nt14.i, 20230217A.b\SIMABN2.m, PSDDA.sub = 0.0000

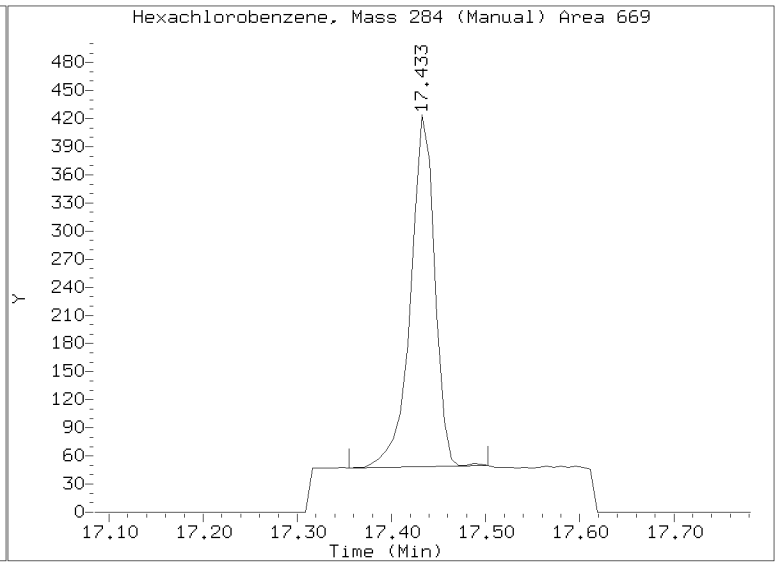
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230217A.b/20230217A.b/NT1423021724s.D
Injection Date: 18-FEB-2023 00:30
Lab ID:BLA0339-SRM2 Client ID:
Report Date: 03/07/2023 12:35





Analytical Resources, LLC
Analytical Chemists and Consultants

MASS SPECTROMETER
INSTRUMENT PERFORMANCE CHECK
EPA 8270E-SIM

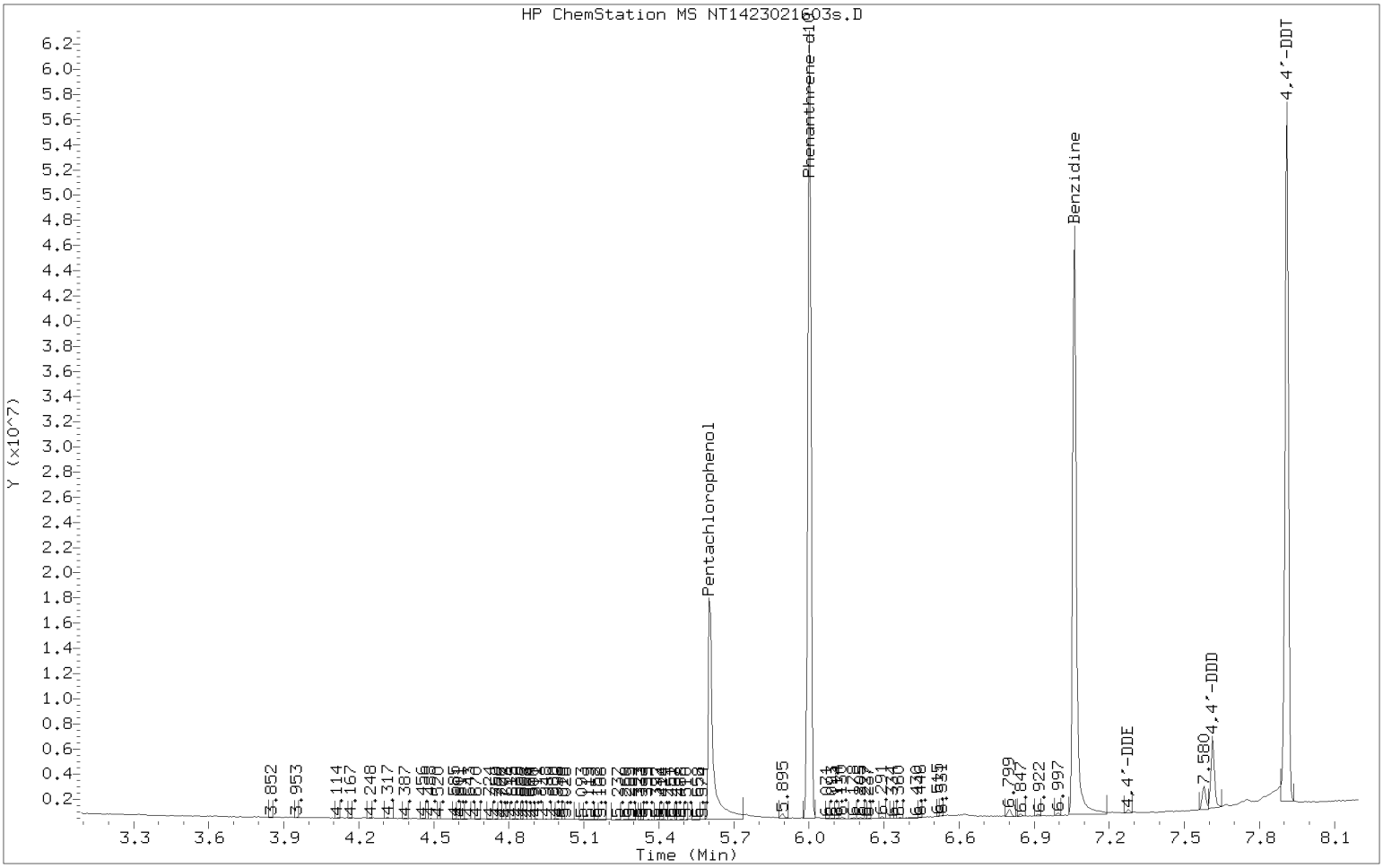
Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Lab File ID:	NT1423021603s.D	Injection Date:	02/16/23
Instrument ID:	NT14	Injection Time:	14:33
Sequence:	SLB0240	Lab Sample ID:	SLB0240-TUN1

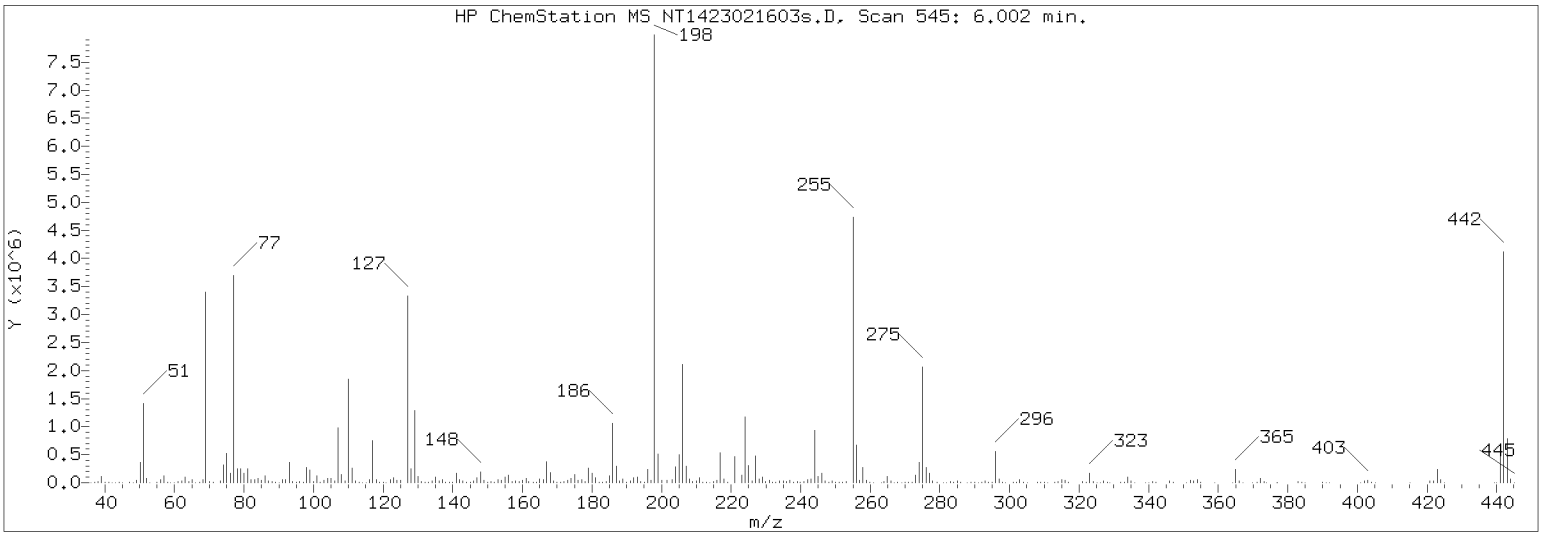
m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
68	Less than 2% of 69	1.69	PASS
69	Less than 100% of 198	43.6	PASS
70	Less than 2% of 69	0.508	PASS
197	Less than 2% of 198	0.611	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.61	PASS
365	1 - 100% of 198	2.96	PASS
441	Less than 150% of 443	74.2	PASS
442	1 - 200% of 198	52	PASS
443	15 - 24% of 442	19	PASS
4,4'-DDD	Less than 20% of 4,4'-DDT		
4,4'-DDE	Less than 20% of 4,4'-DDT		
4,4'-DDT	Base peak, 100% relative abundance		

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
MS Tune	SLB0240-TUN1	NT1423021603s.D	02/16/2023	14:33
Cal Standard	SLB0240-CAL9	NT1423021604s.D	02/16/2023	15:54
Cal Standard	SLB0240-CAL8	NT1423021605s.D	02/16/2023	16:30
Cal Standard	SLB0240-CAL7	NT1423021606s.D	02/16/2023	17:06
Cal Standard	SLB0240-CAL6	NT1423021607s.D	02/16/2023	17:42
Cal Standard	SLB0240-CAL5	NT1423021608s.D	02/16/2023	18:18
Cal Standard	SLB0240-CAL4	NT1423021609s.D	02/16/2023	18:54
Cal Standard	SLB0240-CAL3	NT1423021610s.D	02/16/2023	19:30
Cal Standard	SLB0240-CAL2	NT1423021611s.D	02/16/2023	20:06
Cal Standard	SLB0240-CAL1	NT1423021612s.D	02/16/2023	20:42
Secondary Cal Check	SLB0240-SCV1	NT1423021613s.D	02/16/2023	21:18
Initial Cal Blank	SLB0240-ICB1	NT1423021618s.D	02/17/2023	0:17

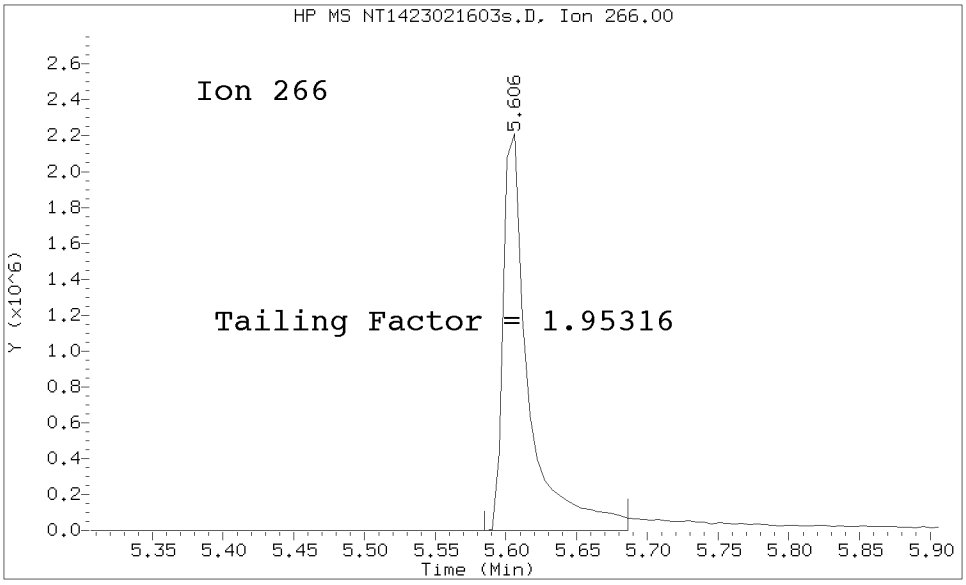
DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230216.b/20230216.b/NT1423021603s.D/NT1423021603s.D
Method Used: \20230216.b\20230216.b\DFTPP8270E.m Inst: nt14
Injection Date: 16-FEB-2023 14:33 Operator: DSD
Sample Info: SLB0240-TUN1 SLB0240-TUN1
Report Date: 03/03/2023 14:18



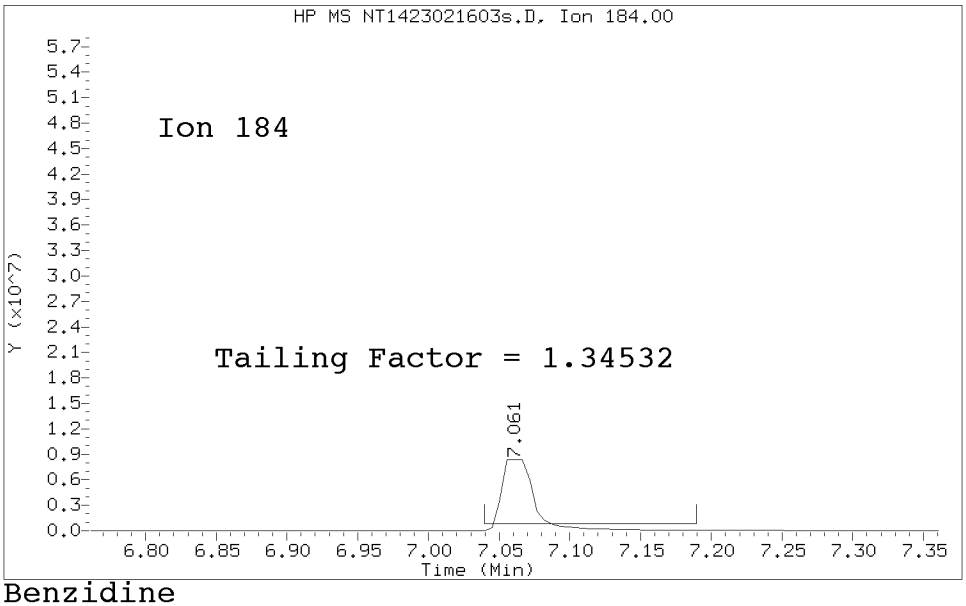


Datafile Analyzed: /20230216.b/20230216.b/NT1423021603s.D/NT1423021603s.D
Method Used: \20230216.b\DFTPP8270E.m\sw846ddt.m Inst: nt14
Injection Date: 16-FEB-2023 14:33 Operator: DSD
Sample Info: SEQ-TUN3
Report Date: 03/03/2023 14:18



Pentachlorophenol
==========
Exp. RT = 5.606
Found RT = 5.606

Tail Factor = 1.953 Maximum Allowed = 2.0



Benzidine
==========
Exp. RT = 7.061
Found RT = 7.061

Tail Factor = 1.345 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.9531646	2.000	PASS
Benzidine	1.3453237	2.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	9391744			N/A
4,4-DDE	31744	0.3	20.0	PASS
4,4-DDD	1131675	10.8	20.0	PASS
4,4-DDD + DDE	1163419	11.0	20.0	PASS

Tuning Sample, nt14.i/20230216.b/20230216.b/NT1423021603s.D, *** PASSED ***

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
68	Less than 2.00% of mass 69	0.74 (1.69)
69	Mass 69 relative abundance	43.59
70	Less than 2.00% of mass 69	0.22 (0.51)
197	Less than 2.00% of mass 198	0.61
199	5.00 - 9.00% of mass 198	6.61
365	1.00 - 100.00% of mass 198	2.96
441	Less than 150.00% of mass 443	7.33 (74.20)
442	Less than 200.00% of mass 198	52.01
443	15.00 - 24.00% of mass 442	9.87 (18.98)

Data File: NT1423021603s.D
Spectrum: Avg. Scans 544-546 (6.00), Background Scan 538
Location of Maximum: 198.00
Number of points: 325

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	234	127.00	2627072	210.00	30808	297.00	57304
37.00	4928	128.00	193536	211.00	66264	298.00	4346
38.00	16100	129.00	1002176	212.00	9012	299.00	778
39.00	86128	130.00	83024	213.00	4418	301.00	6536
40.00	1445	131.00	16110	214.00	2279	302.00	8309
41.00	1468	132.00	6808	215.00	17000	303.00	46096
42.00	911	133.00	2061	216.00	33704	304.00	12268
45.00	3191	134.00	28776	217.00	423104	305.00	985
48.00	1341	135.00	78176	218.00	55256	308.00	6175
49.00	6693	136.00	33232	219.00	5491	309.00	4166
50.00	287040	137.00	42088	221.00	341952	310.00	5991
51.00	1107456	138.00	8363	223.00	98976	311.00	732
52.00	60656	139.00	5700	224.00	901184	313.00	4780
53.00	2876	140.00	12940	225.00	232640	314.00	21184
55.00	10099	141.00	129168	226.00	25264	315.00	48568
56.00	44688	142.00	43080	227.00	360896	316.00	28648
57.00	99760	143.00	28672	228.00	53192	317.00	5757
58.00	6888	144.00	8339	229.00	80040	321.00	13596
59.00	1648	145.00	7386	230.00	9491	322.00	5967
60.00	1219	146.00	24536	231.00	35008	323.00	128608
61.00	23280	147.00	65392	232.00	5357	324.00	21648
62.00	28400	148.00	150720	233.00	6636	325.00	923
63.00	82528	149.00	32664	234.00	23312	326.00	1964
64.00	13066	150.00	10353	235.00	28000	327.00	25704
65.00	44920	151.00	16872	236.00	18056	328.00	12093
66.00	4461	152.00	11153	237.00	35552	329.00	3076
67.00	1649	153.00	42824	238.00	4722	332.00	9967
68.00	45176	154.00	34848	239.00	14633	333.00	12196
69.00	2675712	155.00	74600	240.00	12321	334.00	85224
70.00	13596	156.00	107384	241.00	22320	335.00	22864
73.00	21600	157.00	20016	242.00	47792	336.00	2619
74.00	251584	158.00	24240	243.00	50944	339.00	718
75.00	407680	159.00	22784	244.00	707776	340.00	1309
76.00	140096	160.00	40720	245.00	89264	341.00	14289
77.00	2915840	161.00	62672	246.00	131016	342.00	4394
78.00	200000	162.00	16872	247.00	28936	346.00	28552
79.00	186752	163.00	6683	248.00	6201	347.00	5145
80.00	136704	164.00	8065	249.00	26176	350.00	717
81.00	195200	165.00	49128	250.00	5926	351.00	823
82.00	47032	166.00	40400	251.00	5853	352.00	38056
83.00	45208	167.00	281088	252.00	7432	353.00	26224
85.00	31296	168.00	145536	253.00	15033	354.00	38056
86.00	54160	169.00	23504	254.00	9410	355.00	6985
87.00	26064	170.00	9632	255.00	3554304	359.00	2383
88.00	9527	171.00	12313	256.00	515328	364.00	1635
89.00	7167	172.00	22392	257.00	38256	365.00	181568
90.00	698	173.00	32920	258.00	210304	366.00	24640
91.00	40408	174.00	61832	259.00	31408	367.00	955
92.00	45528	175.00	112128	260.00	6139	370.00	3600

93.00	296960	176.00	31504	261.00	5764	371.00	8738
94.00	22352	177.00	48936	263.00	1078	372.00	60448
95.00	4027	178.00	18064	264.00	5808	373.00	16079
96.00	11069	179.00	205632	265.00	83712	374.00	1592
97.00	3421	180.00	139904	266.00	10984	377.00	1690
98.00	217408	181.00	66784	267.00	858	383.00	15955
99.00	183808	182.00	10904	268.00	681	384.00	4548
100.00	17952	183.00	6693	269.00	1031	385.00	782
101.00	98832	184.00	17728	270.00	3497	390.00	7317
102.00	4121	185.00	100784	271.00	7357	391.00	5379
103.00	32928	186.00	819968	272.00	11090	392.00	3751
104.00	64456	187.00	233216	273.00	102560	401.00	3177
105.00	58656	188.00	25416	274.00	276800	402.00	23400
106.00	20736	189.00	49520	275.00	1550848	403.00	32568
107.00	771648	190.00	8839	276.00	207552	404.00	11566
108.00	119928	191.00	20984	277.00	134784	405.00	2935
109.00	22672	192.00	68752	278.00	23960	415.00	674
110.00	1432064	193.00	74840	279.00	4579	421.00	24160
111.00	204544	194.00	19224	281.00	931	422.00	26616
112.00	24896	195.00	6565	282.00	3437	423.00	186048
113.00	8405	196.00	183680	283.00	14509	424.00	41216
114.00	1701	197.00	37512	284.00	9331	425.00	4321
115.00	1796	198.00	6138368	285.00	23984	438.00	1391
116.00	40928	199.00	405696	286.00	4717	439.00	1400
117.00	604736	200.00	30232	288.00	884	440.00	2550
118.00	44648	201.00	34040	289.00	5002	441.00	449664
119.00	8501	203.00	43656	290.00	4674	442.00	3192320
120.00	8877	204.00	213312	291.00	3293	443.00	606016
121.00	3538	205.00	381120	292.00	6118	444.00	54800
122.00	44736	206.00	1595904	293.00	25544	445.00	2486
123.00	73984	207.00	210944	294.00	6665		
124.00	34728	208.00	47112	295.00	9652		
125.00	32952	209.00	14622	296.00	426176		

INITIAL CALIBRATION DATA

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00009	Instrument:	NT14
Calibration Date:	03/03/2023	Column (1):	ZB-5MS

Calibration Comments: sim svoa ical.
Several low points for Benzoic acid and PCP are not used due to low response.
Benzoic MRL=400
PCP MRL=40

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Phenol	0.05	0.7463768	0.1	0.9682036	0.2	1.664572	0.5	1.57532	1	1.721483	2.5	1.905709
1,3-Dichlorobenzene	0.05	1.260417	0.1	1.319029	0.2	1.613005	0.5	1.303125	1	1.34255	2.5	1.435467
1,4-Dichlorobenzene	0.05	1.225543	0.1	1.267161	0.2	1.530273	0.5	1.232272	1	1.269077	2.5	1.368515
1,2-Dichlorobenzene	0.05	1.198143	0.1	1.258917	0.2	1.522704	0.5	1.233033	1	1.271769	2.5	1.358405
Benzyl Alcohol					0.2	0.921109	0.5	0.9821514	1	1.051412	2.5	1.225375
Benzoic acid									4	3.723011E-02	10	0.156524
2-Methylphenol	0.05	0.8555254	0.1	1.023621	0.2	1.361321	0.5	1.182332	1	1.260291	2.5	1.341282
N-Nitroso-di-n-Propylamine	0.05	0.5835598	0.1	0.7950811	0.2	1.046005	0.5	0.9366186	1	1.016845	2.5	1.127267
4-Methylphenol	0.05	0.5679348	0.1	0.7978291	0.2	1.227731	0.5	1.161078	1	1.293832	2.5	1.420578
2,4-Dimethylphenol	0.1	0.2263032	0.2	0.2896173	0.4	0.3941579	1	0.3491102	2	0.3647015	5	0.3574719
1,2,4-Trichlorobenzene	0.05	0.3377525	0.1	0.3594359	0.2	0.4360415	0.5	0.357755	1	0.3633234	2.5	0.3786406
Hexachlorobutadiene	0.05	0.2241834	0.1	0.2215961	0.2	0.26126	0.5	0.211086	1	0.2158812	2.5	0.2263158
N-Nitrosodimethylamine	0.1	0.2182971	0.2	0.4203259	0.4	0.8164671	1	0.7572316	2	0.8524985	5	0.9395513
Dimethylphthalate	0.05	0.9659875	0.1	1.097785	0.2	1.40389	0.5	1.213347	1	1.266446	2.5	1.337955
Diethyl phthalate					0.2	1.606384	0.5	1.434605	1	1.507876	2.5	1.607258
N-Nitrosodiphenylamine	0.05	0.2973268	0.1	0.4098917	0.2	0.5470832	0.5	0.5062772	1	0.5314858	2.5	0.5878791
Hexachlorobenzene	0.05	0.2405018	0.1	0.2586088	0.2	0.3042554	0.5	0.2472603	1	0.2513695	2.5	0.2770139
Pentachlorophenol	0.1		0.2		0.4	8.429634E-03	1	3.780796E-02	2	6.917267E-02	5	0.1117452
Butylbenzylphthalate	0.05	0.1516566	0.1	0.2055874	0.2	0.350186	0.5	0.4018968	1	0.4859266	2.5	0.5692042
Dibenzo(a,h)anthracene	0.05	0.3299494	0.1	0.387074	0.2	0.5604694	0.5	0.5427045	1	0.6465483	2.5	0.7658298
2-Fluorophenol	0.075	0.1438708	0.15	0.3525043	0.3	0.8413143	0.75	0.9022569	1.5	1.083308	3.75	1.176899
p-Terphenyl-d14	0.05	0.8855079	0.1	1.022307	0.2	1.3089	0.5	1.098397	1	1.133004	2.5	1.061106

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00009	Instrument:	NT14
Calibration Date:	03/03/2023	Column (1):	ZB-5MS

Calibration Comments: sim svoa ical.
Several low points for Benzoic acid and PCP are not used due to low response.
Benzoic MRL=400
PCP MRL=40

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Phenol	5	1.667529	10	1.766873								
1,3-Dichlorobenzene	5	1.254601	10	1.360237								
1,4-Dichlorobenzene	5	1.193735	10	1.30018								
1,2-Dichlorobenzene	5	1.190575	10	1.293835								
Benzyl Alcohol	5	1.14425	10	1.248608								
Benzoic acid	20	0.2122677	40	0.2599972	80	0.2794551						
2-Methylphenol	5	1.198902	10	1.275636								
N-Nitroso-di-n-Propylamine	5	1.004046	10	1.114231								
4-Methylphenol	5	1.291985	10	1.366441								
2,4-Dimethylphenol	10	0.324976	20	0.3041884								
1,2,4-Trichlorobenzene	5	0.334654	10	0.3640097								
Hexachlorobutadiene	5	0.2030934	10	0.2199754								
N-Nitrosodimethylamine	10	0.7882201	20	0.766621								
Dimethylphthalate	5	1.17732	10	1.299899								
Diethyl phthalate	5	1.42713	10	1.58062								
N-Nitrosodiphenylamine	5	0.491873	10	0.5585721								
Hexachlorobenzene	5	0.2349334	10	0.264369								
Pentachlorophenol	10	0.1198322	20	0.1396602								
Butylbenzylphthalate	5	0.5318607	10	0.6186721								
Dibenzo(a,h)anthracene	5	0.7734346	10	0.9237297								
2-Fluorophenol	7.5	1.117705	15	1.086763								
p-Terphenyl-d14	5	1.014268	10	0.9955556								

INITIAL CALIBRATION DATA

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00009	Instrument:	NT14
Calibration Date:	03/03/2023	Column (1):	ZB-5MS

Calibration Comments: sim svoa ical.
Several low points for Benzoic acid and PCP are not used due to low response.
Benzoic MRL=400
PCP MRL=40

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Phenol	1.502008	27.5		0.9987	QCOD (0.99)	
1,3-Dichlorobenzene	1.361054	8.6			RSD (15)	
1,4-Dichlorobenzene	1.298344	8.3			RSD (15)	
1,2-Dichlorobenzene	1.290923	8.4			RSD (15)	
Benzyl Alcohol	1.095484	12.1			RSD (15)	
Benzoic acid	0.1890948	51.4			RSD (15)	*
2-Methylphenol	1.187364	14.4			RSD (15)	
N-Nitroso-di-n-Propylamine	0.9529567	19.2		0.9988	QCOD (0.99)	
4-Methylphenol	1.140926	26.3		0.9992	QCOD (0.99)	
2,4-Dimethylphenol	0.3263158	16.1		0.9998	QCOD (0.99)	
1,2,4-Trichlorobenzene	0.3664516	8.6			RSD (15)	
Hexachlorobutadiene	0.2229239	7.7			RSD (15)	
N-Nitrosodimethylamine	0.6949015	35.2		0.9986	QCOD (0.99)	
Dimethylphthalate	1.220329	11.5			RSD (15)	
Diethyl phthalate	1.527312	5.4			RSD (15)	
N-Nitrosodiphenylamine	0.4912986	19.3		0.9974	QCOD (0.99)	
Hexachlorobenzene	0.259789	8.6			RSD (15)	
Pentachlorophenol	8.110798E-02	63.3		0.9962	QCOD (0.99)	
Butylbenzylphthalate	0.4143738	40.9		0.9990	QCOD (0.99)	
Dibenzo(a,h)anthracene	0.6162175	32.8		0.9996	QCOD (0.99)	
2-Fluorophenol	0.8380777	45.9		0.9996	QCOD (0.99)	
p-Terphenyl-d14	1.064881	11.6			RSD (15)	

Printed: 3/3/2023 2:49:26PM

ANALYSIS SEQUENCE

SLB0240

Instrument ID: NT14
Calibration ID: GC00009
MS EM Level: 1706 EV

GCMS Description: Agilent 7890A/5975C XL
GCMS Column ID: L001045

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLB0240-TUN1	MS Tune	QC		1	K008469		02/16/2023 14:33	NT1423021603S.D	DSD	
SLB0240-CAL9	CAL 20.0	QC		2	K011111	K010831	02/16/2023 15:54	NT1423021604S.D	DSD	
SLB0240-CAL8	CAL 10.0	QC		3	K011110	K010831	02/16/2023 16:30	NT1423021605S.D	DSD	
SLB0240-CAL7	CAL 5.0	QC		4	K011109	K010831	02/16/2023 17:06	NT1423021606S.D	DSD	
SLB0240-CAL6	CAL 2.5	QC		5	K011108	K010831	02/16/2023 17:42	NT1423021607S.D	DSD	
SLB0240-CAL5	CAL 1.0	QC		6	K011107	K010831	02/16/2023 18:18	NT1423021608S.D	DSD	
SLB0240-CAL4	CAL 0.50	QC		7	K011106	K010831	02/16/2023 18:54	NT1423021609S.D	DSD	
SLB0240-CAL3	CAL 0.20	QC		8	K011105	K010831	02/16/2023 19:30	NT1423021610S.D	DSD	
SLB0240-CAL2	CAL 0.10	QC		9	K011452	K010831	02/16/2023 20:06	NT1423021611S.D	DSD	
SLB0240-CAL1	CAL 0.05	QC		10	K011453	K010831	02/16/2023 20:42	NT1423021612S.D	DSD	
SLB0240-SCV1	SCV 5.0	QC		11	K010066	K010831	02/16/2023 21:18	NT1423021613S.D	DSD	
SLB0240-ICB1	Initial Cal Blank	QC		12	K005156	K010831	02/17/2023 00:17	NT1423021618S.D	DSD	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230216.b\20230216.b

	Time	Filename	LabID	ClientId	DF																
1	1433	NT1423021603s.D	SLB0240-TUN1		1	|NO ISTDS FOUND||															
2	1554	NT1423021604s.D	SLB0240-CAL9		1	| 8.91	281412||	11.40	1028262||	15.03	557155||	18.07	1280257||	23.14	778986||	25.69	506790|			
3	1630	NT1423021605s.D	SLB0240-CAL8		1	| 8.91	314437||	11.40	1133072||	15.02	615002||	18.06	1402756||	23.13	858745||	25.69	567246|			
4	1706	NT1423021606s.D	SLB0240-CAL7		1	| 8.91	404552||	11.39	1448768||	15.02	788119||	18.06	1820509||	23.13	1172674||	25.69	801283|			
5	1742	NT1423021607s.D	SLB0240-CAL6		1	| 8.91	355167||	11.39	1288352||	15.02	710230||	18.06	1567702||	23.12	1084006||	25.68	717515|			
6	1818	NT1423021608s.D	SLB0240-CAL5		1	| 8.91	393779||	11.40	1399029||	15.02	759723||	18.06	1756156||	23.12	1174128||	25.68	826011|			
7	1854	NT1423021609s.D	SLB0240-CAL4		1	| 8.91	399360||	11.40	1408942||	15.02	769600||	18.06	1769892||	23.12	1177556||	25.69	823122|			
8	1930	NT1423021610s.D	SLB0240-CAL3		1	| 8.91	338201||	11.39	1194978||	15.02	642586||	18.05	1471001||	23.12	932019||	25.68	646922|			
9	2006	NT1423021611s.D	SLB0240-CAL2		1	| 8.91	349348||	11.39	1224029||	15.02	645081||	18.06	1496005||	23.12	973406||	25.69	661889|			
10	2042	NT1423021612s.D	SLB0240-CAL1		1	| 8.91	353280||	11.39	1245409||	15.02	663197||	18.06	1533128||	23.12	979054||	25.69	656343|			
11	2118	NT1423021613s.D	SLB0240-SCV1		1	| 8.91	391473||	11.39	1430650||	15.02	794620||	18.06	1759092||	23.13	1201603||	25.69	814421|			
12	0017	NT1423021618s.D	SLB0240-ICB1		1	| 8.91	296634||	11.39	1039961||	15.02	537777||	18.05	1239183||	23.12	789133||	25.69	528194|			

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230216.b\20230216.b

Instrument: nt14.i Date: 16-FEB-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
1433	NT1423021603s.D	SLB0240-TUN1	1	NO MANUAL INTEGRATION
1554	NT1423021604s.D	SLB0240-CAL9	1	Benzoic acid,
1630	NT1423021605s.D	SLB0240-CAL8	1	NO MANUAL INTEGRATION
1706	NT1423021606s.D	SLB0240-CAL7	1	NO MANUAL INTEGRATION
1742	NT1423021607s.D	SLB0240-CAL6	1	NO MANUAL INTEGRATION
1818	NT1423021608s.D	SLB0240-CAL5	1	NO MANUAL INTEGRATION
1854	NT1423021609s.D	SLB0240-CAL4	1	Benzoic acid, Pentachlorophenol,
1930	NT1423021610s.D	SLB0240-CAL3	1	NO MANUAL INTEGRATION
2006	NT1423021611s.D	SLB0240-CAL2	1	NO MANUAL INTEGRATION
2042	NT1423021612s.D	SLB0240-CAL1	1	Phenol, N-Nitroso-di-n-propylamine, 1,2,4-Trichlorobenzene, N-Nitrosodimethylamine, N-Nitrosodiphenylamine,
2118	NT1423021613s.D	SLB0240-SCV1	1	NO MANUAL INTEGRATION
0017	NT1423021618s.D	SLB0240-ICB1	1	NO MANUAL INTEGRATION

Security Status Report

Date: 03-Mar-2023 14:50

NT1423021603s.D	Data Locked	van, 03-Mar-2023 14:50
NT1423021604s.D	Data Locked	van, 03-Mar-2023 14:50
NT1423021605s.D	Data Locked	van, 03-Mar-2023 14:50
NT1423021606s.D	Data Locked	van, 03-Mar-2023 14:50
NT1423021607s.D	Data Locked	van, 03-Mar-2023 14:50
NT1423021608s.D	Data Locked	van, 03-Mar-2023 14:50
NT1423021609s.D	Data Locked	van, 03-Mar-2023 14:50
NT1423021610s.D	Data Locked	van, 03-Mar-2023 14:50
NT1423021611s.D	Data Locked	van, 03-Mar-2023 14:50
NT1423021612s.D	Data Locked	van, 03-Mar-2023 14:50
NT1423021613s.D	Data Locked	van, 03-Mar-2023 14:50
NT1423021618s.D	Data Locked	van, 03-Mar-2023 14:50

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INITIAL CALIBRATION DATA

Start Cal Date : 16-FEB-2023 15:54
End Cal Date : 16-FEB-2023 20:42
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Last Edit : 03-Mar-2023 13:16 van

Calibration File Names:
Level 1: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021612s.D
Level 2: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021611s.D
Level 3: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021610s.D
Level 4: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021609s.D
Level 5: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021608s.D
Level 6: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021607s.D
Level 7: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021606s.D
Level 8: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021605s.D
Level 9: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021604s.D

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8	20.0000 Level 9								
138 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
139 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
140 Diallate A	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8	20.0000 Level 9								
141 Diallate B	*****	*****	*****	*****	*****	*****					
	*****	*****	*****				AVRG		0.000e+000		0.000e+000
142 1,2-Dibromo-3-Chloropropane	*****	*****	*****	*****	*****	*****					
	*****	*****	*****				AVRG		0.000e+000		0.000e+000
135 2,3,5,6-Tetrachlorophenol	*****	*****	*****	*****	*****	*****					
	*****	*****	*****				AVRG		0.000e+000		0.000e+000
136 2,3,4,5-tetrachlorophenol	*****	*****	*****	*****	*****	*****					
	*****	*****	*****				AVRG		0.000e+000		0.000e+000
137 NewCpnd_131	*****	*****	*****	*****	*****	*****					
	*****	*****	*****				AVRG		0.000e+000		0.000e+000
133 Butylatedhydroxytoluene	*****	*****	*****	*****	*****	*****					
	*****	*****	*****				AVRG		0.000e+000		0.000e+000
132 3,6-Dimethylphenanthrene	*****	*****	*****	*****	*****	*****					
	*****	*****	*****				AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8	20.0000 Level 9								
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
146 Benzo(j)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8	20.0000 Level 9								
144 alpha-Terpineol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
123 Acetophenone	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
143 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8	20.0000 Level 9								
120 2,3,4,6-Tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
119 7,12-Dimethylbenz(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
118 Triphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
117 Butyl Diphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
116 Dibutyl Phenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
115 Tributyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8	20.0000 Level 9								
113 Diphenyl Oxide	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
112 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
111 Azobenzene (1,2-DP-Hydrazine)	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
110 Tetrachloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
109 3,4,5-Trichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
108 4,5,6-Trichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
107 4,5-Dichloro-2-Methoxyphenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8	20.0000 Level 9								
106 Guaiacol	*****	*****	*****	*****	*****	*****					
	*****	*****	*****				AVRG		0.000e+000		0.000e+000
105 1-methylnaphthalene	*****	*****	*****	*****	*****	*****					
	*****	*****	*****				AVRG		0.000e+000		0.000e+000
3 Phenol	3296	8456	28148	78640	169471	423028					
	843253	1388926	*****				QUAD	0.000e+000	0.58369	-0.00369	0.99870
4 Bis(2-Chloroethyl)ether	*****	*****	*****	*****	*****	*****					
	*****	*****	*****				AVRG		0.000e+000		0.000e+000
6 2-Chlorophenol	*****	*****	*****	*****	*****	*****					
	*****	*****	*****				AVRG		0.000e+000		0.000e+000
7 1,3-Dichlorobenzene	1.26042	1.31903	1.61301	1.30313	1.34255	1.43547					
	1.25460	1.36024	*****				AVRG		1.36105		8.60161
9 1,4-Dichlorobenzene	1.22554	1.26716	1.53027	1.23227	1.26908	1.36851					
	1.19374	1.30018	*****				AVRG		1.29834		8.29318

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8	20.0000 Level 9								
11 Benzyl alcohol	+++++	+++++	0.92111	0.98215	1.05141	1.22538					
	1.14425	1.24861	+++++				AVRG		1.09548		12.10259
12 1,2-Dichlorobenzene	1.19814	1.25892	1.52270	1.23303	1.27177	1.35841					
	1.19058	1.29384	+++++				AVRG		1.29092		8.36903
13 2-Methylphenol	0.85553	1.02362	1.36132	1.18233	1.26029	1.34128					
	1.19890	1.27564	+++++				AVRG		1.18736		14.38272
14 2,2'-oxybis(1-Chloropropane)	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
15 4-Methylphenol	2508	6968	20761	57961	127371	315339					
	653344	1074149	+++++				QUAD	0.000e+000	0.76952	-0.01065	0.99925
16 N-Nitroso-di-n-propylamine	2577	6944	17688	46756	100103	250230					
	507736	875889	+++++				QUAD	0.000e+000	1.00460	-0.03771	0.99877
17 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	5.0000 Level 7	10.0000 Level 8	20.0000 Level 9									
19 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000	
20 Isophorone	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000	
21 2-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000	
22 2,4-Dimethylphenol	7046	17725	47101	122969	255114	575687						
	1177037	1723337	+++++				QUAD	0.000e+000	2.72867	0.37048	0.99982	
23 Bis(2-Chloroethoxy)methane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000	
24 Benzoic acid	+++++	+++++	+++++	+++++	0.03723	0.15652						
	0.21227	0.26000	0.27946				AVRG		0.18909		51.44459	<-
25 2,4-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000	

ARI Labs, Inc.

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Integrator : HP RTE
Method file : \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Last Edit : 03-Mar-2023 13:16 van

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8	20.0000 Level 9								
26 1,2,4-Trichlorobenzene	0.33775	0.35944	0.43604	0.35775	0.36332	0.37864					
	0.33465	0.36401	+++++				AVRG		0.36645		8.60888
28 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
29 4-Chloroaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
30 Hexachlorobutadiene	0.22418	0.22160	0.26126	0.21109	0.21588	0.22632					
	0.20309	0.21998	+++++				AVRG		0.22292		7.72553
31 4-Chloro-3-methylphenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
32 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
33 Hexachlorocyclopentadiene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000

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	5.0000 Level 7	10.0000 Level 8	20.0000 Level 9								
34 2,4,6-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
35 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
37 2-Chloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
38 2-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
39 Dimethylphthalate	0.96599	1.09778	1.40389	1.21335	1.26645	1.33796					
	1.17732	1.29990	+++++				AVRG		1.22033		11.48878
40 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
41 2,6-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000

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	5.0000 Level 7	10.0000 Level 8	20.0000 Level 9								
43 3-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
44 Acenaphthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
45 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
46 Dibenzofuran	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
47 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
48 2,4-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
49 Fluorene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000

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	5.0000 Level 7	10.0000 Level 8	20.0000 Level 9								
50 Diethylphthalate	+++++	+++++	1.60638	1.43460	1.50788	1.60726					
	1.42713	1.58062	+++++				AVRG		1.52731		5.43828
51 4-Chlorophenyl-phenylether	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
52 4-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
53 4,6-Dinitro-2-methylphenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
54 N-Nitrosodiphenylamine	5698	15330	40238	112007	233343	576012					
	1119324	1958851	+++++				QUAD	0.000e+000	1.99936	-0.14546	0.99740
56 4-Bromophenyl-phenylether	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
57 Hexachlorobenzene	0.24050	0.25861	0.30426	0.24726	0.25137	0.27701					
	0.23493	0.26437	+++++				AVRG		0.25979		8.62442

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	5.0000 Level 7	10.0000 Level 8	20.0000 Level 9								
58 Pentachlorophenol	+++++	+++++	1240	16729	60739	218979					
	545389	979546	+++++				QUAD	0.000e+000	9.46608	-3.31617	0.99872
60 Phenanthrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
61 Anthracene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
62 Carbazole	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
63 Di-n-butylphthalate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
64 Fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
65 Pyrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000

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	5.0000 Level 7	10.0000 Level 8	20.0000 Level 9								
67 Butylbenzylphthalate	1856	5003	16319	59157	142635	385638					
	779624	1328204	+++++				QUAD	0.000e+000	1.99478	-0.24339	0.99912
68 Benzo(a)anthracene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
70 3,3'-Dichlorobenzidine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
71 Chrysene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
72 bis(2-Ethylhexyl)phthalate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
73 Di-n-octylphthalate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
74 Benzo(b)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8	20.0000 Level 9								
75 Benzo(k)fluoranthene	*****	*****	*****	*****	*****	*****					
	*****	*****	*****				AVRG		0.000e+000		0.000e+000
76 Benzo(a)pyrene	*****	*****	*****	*****	*****	*****					
	*****	*****	*****				AVRG		0.000e+000		0.000e+000
78 Indeno(1,2,3-cd)pyrene	*****	*****	*****	*****	*****	*****					
	*****	*****	*****				AVRG		0.000e+000		0.000e+000
79 Dibenzo(a,h)anthracene	2707	6405	18129	55839	133514	343434					
	774675	1309955	*****				QUAD	0.000e+000	1.43157	-0.15107	0.99970
80 Benzo(g,h,i)perylene	*****	*****	*****	*****	*****	*****					
	*****	*****	*****				AVRG		0.000e+000		0.000e+000
90 N-Nitrosodimethylamine	1928	7342	27613	75602	167848	417122					
	797190	1205270	*****				QUAD	0.000e+000	1.12149	0.04870	0.99858
91 Aniline	*****	*****	*****	*****	*****	*****					
	*****	*****	*****				AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8	20.0000 Level 9								
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
93 Benzidine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
98 Retene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000

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	5.0000 Level 7	10.0000 Level 8	20.0000 Level 9								
101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
103 Pyridine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
$ 1 2-Fluorophenol	953	4618	21340	67561	159969	391871					
	847818	1281444	+++++				QUAD	0.000e+000	0.86070	0.01459	0.99979
$ 145 d8-1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
$ 2 Phenol-d5	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
$ 5 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000

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	5.0000 Level 7	10.0000 Level 8	20.0000 Level 9								
$ 10 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
$ 18 Nitrobenzene-d5	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
$ 36 2-Fluorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
$ 55 2,4,6-Tribromophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
$ 66 Terphenyl-d14	0.88551	1.02231	1.30890	1.09840	1.13300	1.06111					
	1.01427	0.99556	+++++				AVRG		1.06488		11.59282
$ 85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
$ 86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000

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	5.0000 Level 7	10.0000 Level 8	20.0000 Level 9								
$ 87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
$ 88 Dibenz(a,h)anthracene-d14	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
$ 89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000
$ 95 D10-1-methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+000		0.000e+000

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Batch File: \\target\share\chem3\nt14.i\20230216.b\20230216.b
Inst ID: nt14.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	RT09
FILENAME:	NT1423021604s	NT1423021605s	NT1423021606s	NT1423021607s	NT1423021608s	NT1423021609s	NT1423021610s	NT1423021611s	NT1423021612s
INJ.DATE:	16-FEB-2023	16-FEB-2023	16-FEB-2023	16-FEB-2023	16-FEB-2023	16-FEB-2023	16-FEB-2023	16-FEB-2023	16-FEB-2023
INJ.TIME:	15:54	16:30	17:06	17:42	18:18	18:54	19:30	20:06	20:42

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	RT09	EXPEC RT	RT WINDOW	AVG RT	STD DEV
$ 1 2-Fluorophenol	6.679	6.679	6.679	6.679	6.679	6.679	6.687	6.710	6.764	6.764	6.264-7.264	6.693	0.029
138 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	33.580	33.080-34.080	+++++	+++++
139 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	30.873	30.373-31.373	+++++	+++++
140 Diallate A	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	31.300	30.800-31.800	+++++	+++++
141 Diallate B	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	31.300	30.800-31.800	+++++	+++++
142 1,2-Dibromo-3-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.496	14.996-15.996	+++++	+++++
135 2,3,5,6-Tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.428	19.928-20.928	+++++	+++++
136 2,3,4,5-tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.471	19.971-20.971	+++++	+++++
137 NewCpnd_131	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.828	7.328-8.328	+++++	+++++
* 134 Di-n-octylphthalate-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.768	23.268-24.268	+++++	+++++
133 Butylatedhydroxytoluen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.190	13.690-14.690	+++++	+++++
132 3,6-Dimethylphenanthre	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	31.262	30.762-31.762	+++++	+++++
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	29.954	29.454-30.454	+++++	+++++
146 Benzo(j)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.752	23.252-24.252	+++++	+++++
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.717	27.217-28.217	+++++	+++++
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.566	20.066-21.066	+++++	+++++
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.796	19.296-20.296	+++++	+++++

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

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Method File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Batch File: \\target\share\chem3\nt14.i\20230216.b\20230216.b
Inst ID: nt14.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	RT09	EXPEC RT	RT WINDOW	AVG RT	STD DEV
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.349	22.849-23.849	+++++	+++++
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.474	21.974-22.974	+++++	+++++
144 alpha-Terpineol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.191	10.691-11.691	+++++	+++++
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.779	17.279-18.279	+++++	+++++
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.310	15.810-16.810	+++++	+++++
123 Acetophenone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.707	17.207-18.207	+++++	+++++
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.921	8.421-9.421	+++++	+++++
143 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.736	3.236-4.236	+++++	+++++
$ 145 d8-1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.914	2.414-3.414	+++++	+++++
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.148	19.648-20.648	+++++	+++++
120 2,3,4,6-Tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.588	15.088-16.088	+++++	+++++
119 7,12-Dimethylbenz(a)an	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	38.587	38.087-39.087	+++++	+++++
118 Triphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.382	19.882-20.882	+++++	+++++
117 Butyl Diphenyl Phospha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.734	18.234-19.234	+++++	+++++
116 Dibutyl Phenyl Phospha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.987	16.487-17.487	+++++	+++++
115 Tributyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.204	14.704-15.704	+++++	+++++
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.540	14.040-15.040	+++++	+++++
113 Diphenyl Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.586	21.086-22.086	+++++	+++++
112 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.692	17.192-18.192	+++++	+++++
111 Azobenzene (1,2-DP-Hyd	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.268	15.768-16.768	+++++	+++++
110 Tetrachloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.055	17.555-18.555	+++++	+++++
109 3,4,5-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.228	16.728-17.728	+++++	+++++

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Inst ID: nt14.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	RT09	EXPEC RT	RT WINDOW	AVG RT	STD DEV
108	4,5,6-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.517	16.017-17.017	+++++	+++++
107	4,5-Dichloro-2-Methoxy	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.803	14.303-15.303	+++++	+++++
106	Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.843	11.343-12.343	+++++	+++++
105	1-methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.927	12.427-13.427	+++++	+++++
$ 2	Phenol-d5	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.235	7.735-8.735	+++++	+++++
3	Phenol	8.310	8.302	8.294	8.286	8.287	8.287	8.294	8.302	8.379	8.379	7.879-8.879	8.305	0.029
4	Bis(2-Chloroethyl)ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.397	7.897-8.897	+++++	+++++
$ 5	2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.490	7.990-8.990	+++++	+++++
6	2-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.521	8.021-9.021	+++++	+++++
7	1,3-Dichlorobenzene	8.843	8.843	8.836	8.835	8.836	8.836	8.836	8.836	8.836	8.836	8.336-9.336	8.837	0.003
* 8	1,4-Dichlorobenzene-d4	8.905	8.905	8.905	8.905	8.906	8.905	8.905	8.905	8.905	8.905	8.405-9.405	8.905	0.000
9	1,4-Dichlorobenzene	8.936	8.936	8.936	8.936	8.937	8.929	8.936	8.936	8.936	8.936	8.436-9.436	8.935	0.003
$ 10	1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.960	8.460-9.460	+++++	+++++
11	Benzyl alcohol	9.192	9.184	9.185	9.177	9.185	9.185	9.208	9.262	9.161	9.161	8.661-9.661	9.193	0.029
12	1,2-Dichlorobenzene	9.293	9.293	9.293	9.293	9.286	9.286	9.293	9.293	9.293	9.293	8.793-9.793	9.292	0.003
13	2-Methylphenol	9.417	9.410	9.410	9.410	9.402	9.410	9.410	9.418	9.433	9.433	8.933-9.933	9.413	0.009
14	2,2'-oxybis(1-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.413	8.913-9.913	+++++	+++++
15	4-Methylphenol	9.697	9.689	9.682	9.681	9.674	9.682	9.689	9.705	9.720	9.720	9.220-10.220	9.691	0.014
16	N-Nitroso-di-n-propyla	9.774	9.759	9.744	9.743	9.736	9.744	9.744	9.751	9.767	9.767	9.267-10.267	9.751	0.013
17	Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.809	9.309-10.309	+++++	+++++
$ 18	Nitrobenzene-d5	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.917	9.417-10.417	+++++	+++++
19	Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.948	9.448-10.448	+++++	+++++
20	Isophorone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.399	9.899-10.899	+++++	+++++
21	2-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.575	10.075-11.075	+++++	+++++

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Inst ID: nt14.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	RT09	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	22 2,4-Dimethylphenol	10.744	10.737	10.729	10.729	10.721	10.721	10.729	10.729	10.745	10.745	10.245-11.245	10.732	0.009
	23 Bis(2-Chloroethoxy)met	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.830	10.330-11.330	+++++	+++++
	24 Benzoic acid	11.147	11.062	11.000	10.930	10.884	11.117	+++++	+++++	+++++	11.117	10.617-11.617	11.024	0.104
	25 2,4-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.033	10.533-11.533	+++++	+++++
	26 1,2,4-Trichlorobenzene	11.317	11.318	11.310	11.310	11.310	11.310	11.310	11.310	11.310	11.310	10.810-11.810	11.312	0.003
*	27 Naphthalene-d8	11.402	11.403	11.395	11.395	11.395	11.395	11.395	11.395	11.395	11.395	10.895-11.895	11.397	0.003
	28 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.326	10.826-11.826	+++++	+++++
	29 4-Chloroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.457	10.957-11.957	+++++	+++++
	30 Hexachlorobutadiene	11.804	11.804	11.804	11.804	11.804	11.804	11.804	11.804	11.804	11.804	11.304-12.304	11.804	0.000
	31 4-Chloro-3-methylpheno	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.432	11.932-12.932	+++++	+++++
	32 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.710	12.210-13.210	+++++	+++++
	33 Hexachlorocyclopentadi	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.182	12.682-13.682	+++++	+++++
	34 2,4,6-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.330	12.830-13.830	+++++	+++++
	35 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.415	12.915-13.915	+++++	+++++
$	36 2-Fluorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.484	12.984-13.984	+++++	+++++
	37 2-Chloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.686	13.186-14.186	+++++	+++++
	38 2-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.941	13.441-14.441	+++++	+++++
	39 Dimethylphthalate	14.559	14.552	14.544	14.536	14.529	14.536	14.536	14.544	14.552	14.552	14.052-15.052	14.543	0.010
	40 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.545	14.045-15.045	+++++	+++++
	41 2,6-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.506	14.006-15.006	+++++	+++++
*	42 Acenaphthene-d10	15.031	15.024	15.024	15.023	15.016	15.016	15.016	15.016	15.016	15.016	14.516-15.516	15.020	0.005
	43 3-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.785	14.285-15.285	+++++	+++++
	44 Acenaphthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.924	14.424-15.424	+++++	+++++

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Inst ID: nt14.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	RT09	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	45 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.001	14.501-15.501	+++++	+++++
	46 Dibenzofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.248	14.748-15.748	+++++	+++++
	47 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.171	14.671-15.671	+++++	+++++
	48 2,4-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.302	14.802-15.802	+++++	+++++
	49 Fluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.952	15.452-16.452	+++++	+++++
	50 Diethylphthalate	16.021	16.013	16.005	15.998	15.990	15.990	15.990	15.990	15.998	15.998	15.498-16.498	15.999	0.011
	51 4-Chlorophenyl-phenyle	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.952	15.452-16.452	+++++	+++++
	52 4-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.037	15.537-16.537	+++++	+++++
	53 4,6-Dinitro-2-methylph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.145	15.645-16.645	+++++	+++++
	54 N-Nitrosodiphenylamine	16.399	16.383	16.376	16.376	16.368	16.368	16.376	16.376	16.384	16.384	15.884-16.884	16.378	0.009
$	55 2,4,6-Tribromophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.477	15.977-16.977	+++++	+++++
	56 4-Bromophenyl-phenylet	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.939	16.439-17.439	+++++	+++++
	57 Hexachlorobenzene	17.448	17.440	17.433	17.433	17.433	17.433	17.433	17.433	17.433	17.433	16.933-17.933	17.435	0.005
	58 Pentachlorophenol	17.812	17.797	17.797	17.796	17.805	17.812	17.944	+++++	+++++	17.944	17.444-18.444	17.823	0.054
*	59 Phenanthrene-d10	18.067	18.060	18.060	18.060	18.060	18.060	18.052	18.060	18.060	18.060	17.560-18.560	18.060	0.004
	60 Phenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.899	17.399-18.399	+++++	+++++
	61 Anthracene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.991	17.491-18.491	+++++	+++++
	62 Carbazole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.324	17.824-18.824	+++++	+++++
	63 Di-n-butylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.152	18.652-19.652	+++++	+++++
	64 Fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.289	19.789-20.789	+++++	+++++
	65 Pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.715	20.215-21.215	+++++	+++++
$	66 Terphenyl-d14	21.224	21.224	21.217	21.216	21.217	21.217	21.217	21.224	21.224	21.224	20.724-21.724	21.220	0.004
	67 Butylbenzylphthalate	22.161	22.153	22.153	22.153	22.153	22.153	22.153	22.153	22.153	22.153	21.653-22.653	22.154	0.002
	68 Benzo(a)anthracene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.875	22.375-23.375	+++++	+++++

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	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	RT09	EXPEC RT	RT WINDOW	AVG RT	STD DEV
*	69 Chrysene-d12	23.136	23.129	23.129	23.121	23.121	23.121	23.121	23.121	23.121	23.121	22.621-23.621	23.125	0.006
	70 3,3'-Dichlorobenzidine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.844	22.344-23.344	+++++	+++++
	71 Chrysene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.952	22.452-23.452	+++++	+++++
	72 bis(2-Ethylhexyl)phtha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.007	22.507-23.507	+++++	+++++
	73 Di-n-octylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.990	23.490-24.490	+++++	+++++
	74 Benzo(b)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.687	24.187-25.187	+++++	+++++
	75 Benzo(k)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.725	24.225-25.225	+++++	+++++
	76 Benzo(a)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.283	24.783-25.783	+++++	+++++
*	77 Perylene-d12	25.691	25.691	25.692	25.684	25.684	25.692	25.684	25.691	25.692	25.692	25.192-26.192	25.689	0.004
	78 Indeno(1,2,3-cd)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.794	27.294-28.294	+++++	+++++
	79 Dibenzo(a,h)anthracene	28.273	28.257	28.250	28.249	28.250	28.250	28.265	28.273	28.288	28.288	27.788-28.788	28.262	0.014
	80 Benzo(g,h,i)perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	28.494	27.994-28.994	+++++	+++++
$	85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.238	16.738-17.738	+++++	+++++
$	86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	29.316	28.816-29.816	+++++	+++++
$	87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.007	25.507-26.507	+++++	+++++
$	88 Dibenz(a,h)anthracene-	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	44.609	44.109-45.109	+++++	+++++
$	89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.085	15.585-16.585	+++++	+++++
	90 N-Nitrosodimethylamine	4.602	4.594	4.579	4.571	4.571	4.571	4.571	4.587	4.618	4.618	4.118-5.118	4.585	0.017
	91 Aniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.305	7.805-8.805	+++++	+++++
	92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.615	21.115-22.115	+++++	+++++
	93 Benzidine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.529	20.029-21.029	+++++	+++++
$	95 D10-1-methylnaphthalen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.686	17.186-18.186	+++++	+++++
	96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.540	14.040-15.040	+++++	+++++
	97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.957	26.457-27.457	+++++	+++++

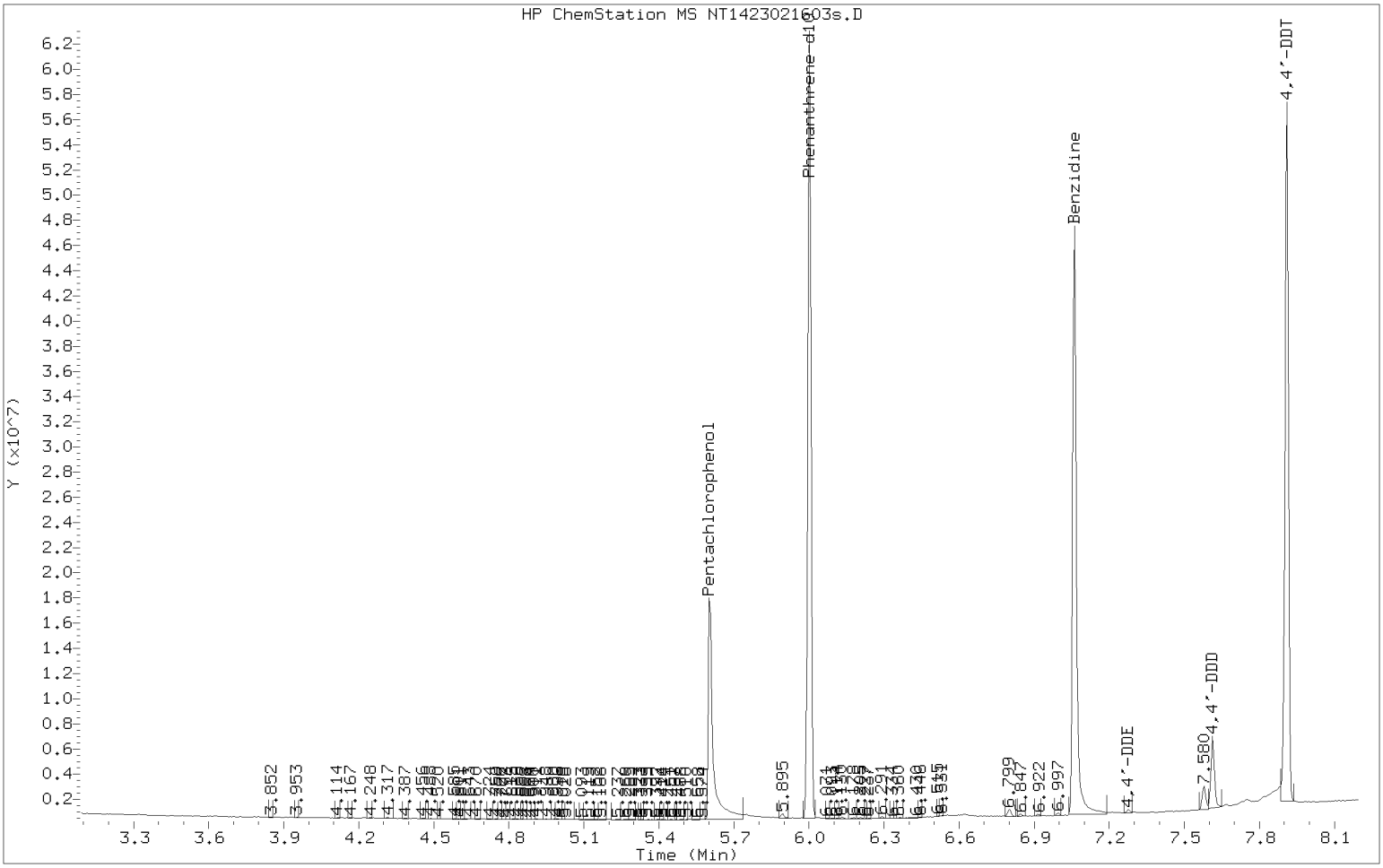
ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

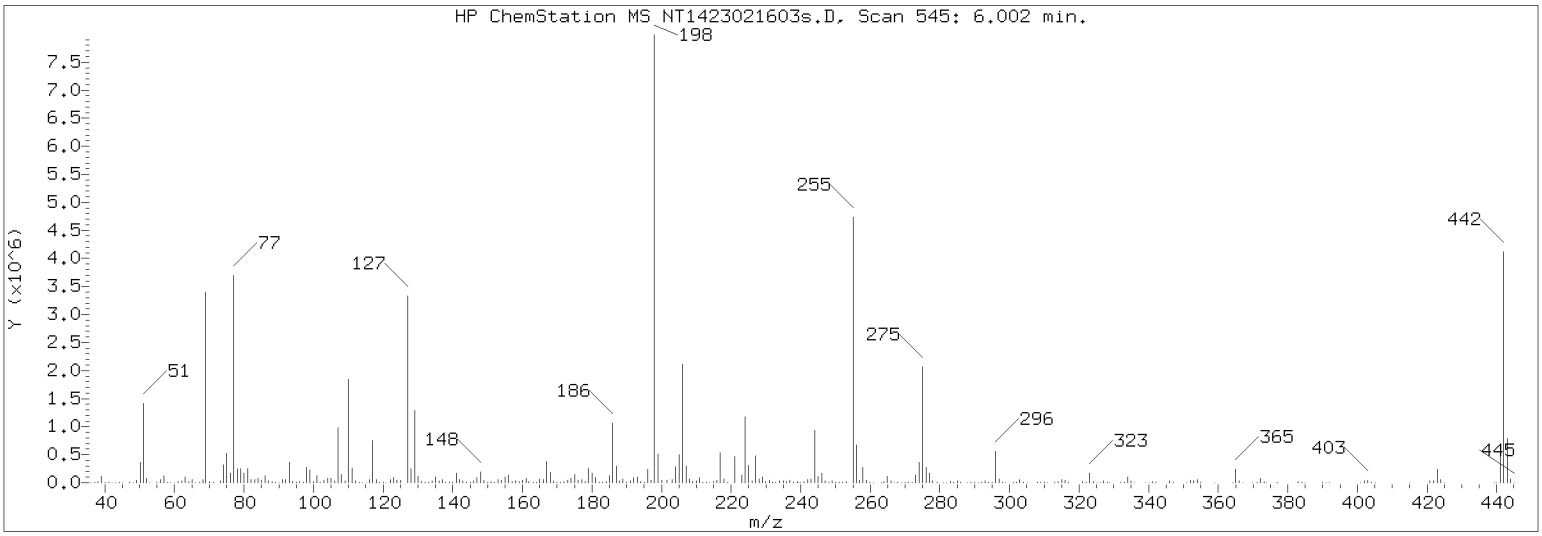
Method File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Batch File: \\target\share\chem3\nt14.i\20230216.b\20230216.b
Inst ID: nt14.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	RT09	EXPEC RT	RT WINDOW	AVG RT	STD DEV
98 Retene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.609	19.109-20.109	+++++	+++++
99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.438	24.938-25.938	+++++	+++++
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.384	25.884-26.884	+++++	+++++
101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.881	43.381-44.381	+++++	+++++
102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	45.573	45.073-46.073	+++++	+++++
103 Pyridine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.535	4.035-5.035	+++++	+++++

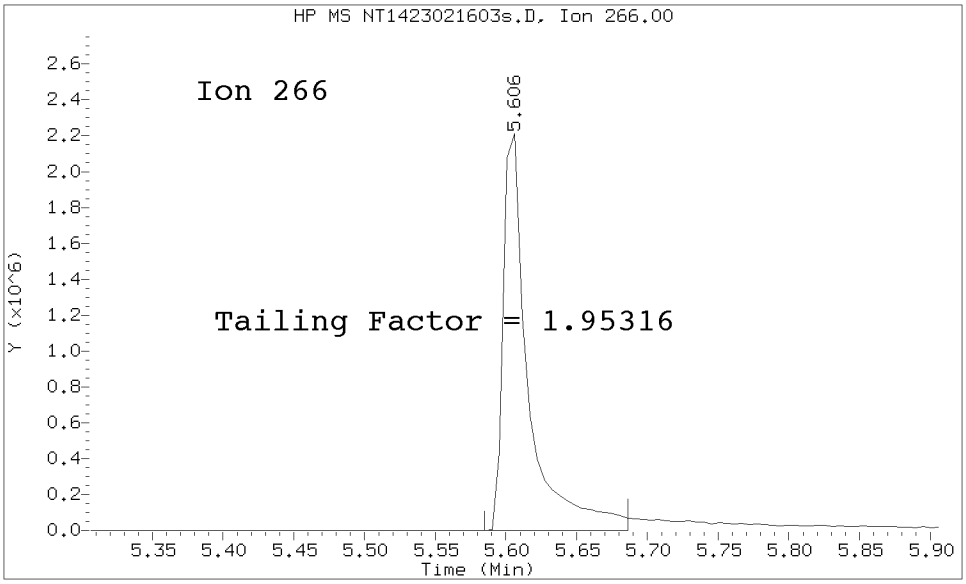
DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230216.b/20230216.b/NT1423021603s.D/NT1423021603s.D
Method Used: \20230216.b\20230216.b\DFTPP8270E.m Inst: nt14
Injection Date: 16-FEB-2023 14:33 Operator: DSD
Sample Info: SLB0240-TUN1 SLB0240-TUN1
Report Date: 03/03/2023 14:18



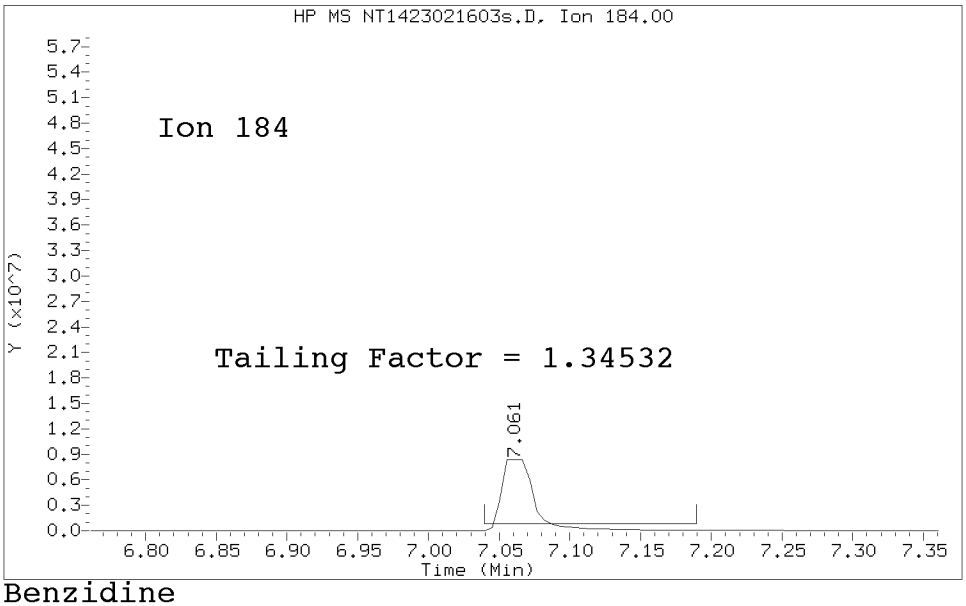


Datafile Analyzed: /20230216.b/20230216.b/NT1423021603s.D/NT1423021603s.D
Method Used: \20230216.b\DFTPP8270E.m\sw846ddt.m Inst: nt14
Injection Date: 16-FEB-2023 14:33 Operator: DSD
Sample Info: SEQ-TUN3
Report Date: 03/03/2023 14:18



Pentachlorophenol
==========
Exp. RT = 5.606
Found RT = 5.606

Tail Factor = 1.953 Maximum Allowed = 2.0



Benzidine
==========
Exp. RT = 7.061
Found RT = 7.061

Tail Factor = 1.345 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.9531646	2.000	PASS
Benzidine	1.3453237	2.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	9391744			N/A
4,4-DDE	31744	0.3	20.0	PASS
4,4-DDD	1131675	10.8	20.0	PASS
4,4-DDD + DDE	1163419	11.0	20.0	PASS

Tuning Sample, nt14.i/20230216.b/20230216.b/NT1423021603s.D, *** PASSED ***

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
68	Less than 2.00% of mass 69	0.74 (1.69)
69	Mass 69 relative abundance	43.59
70	Less than 2.00% of mass 69	0.22 (0.51)
197	Less than 2.00% of mass 198	0.61
199	5.00 - 9.00% of mass 198	6.61
365	1.00 - 100.00% of mass 198	2.96
441	Less than 150.00% of mass 443	7.33 (74.20)
442	Less than 200.00% of mass 198	52.01
443	15.00 - 24.00% of mass 442	9.87 (18.98)

Data File: NT1423021603s.D
Spectrum: Avg. Scans 544-546 (6.00), Background Scan 538
Location of Maximum: 198.00
Number of points: 325

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	234	127.00	2627072	210.00	30808	297.00	57304
37.00	4928	128.00	193536	211.00	66264	298.00	4346
38.00	16100	129.00	1002176	212.00	9012	299.00	778
39.00	86128	130.00	83024	213.00	4418	301.00	6536
40.00	1445	131.00	16110	214.00	2279	302.00	8309
41.00	1468	132.00	6808	215.00	17000	303.00	46096
42.00	911	133.00	2061	216.00	33704	304.00	12268
45.00	3191	134.00	28776	217.00	423104	305.00	985
48.00	1341	135.00	78176	218.00	55256	308.00	6175
49.00	6693	136.00	33232	219.00	5491	309.00	4166
50.00	287040	137.00	42088	221.00	341952	310.00	5991
51.00	1107456	138.00	8363	223.00	98976	311.00	732
52.00	60656	139.00	5700	224.00	901184	313.00	4780
53.00	2876	140.00	12940	225.00	232640	314.00	21184
55.00	10099	141.00	129168	226.00	25264	315.00	48568
56.00	44688	142.00	43080	227.00	360896	316.00	28648
57.00	99760	143.00	28672	228.00	53192	317.00	5757
58.00	6888	144.00	8339	229.00	80040	321.00	13596
59.00	1648	145.00	7386	230.00	9491	322.00	5967
60.00	1219	146.00	24536	231.00	35008	323.00	128608
61.00	23280	147.00	65392	232.00	5357	324.00	21648
62.00	28400	148.00	150720	233.00	6636	325.00	923
63.00	82528	149.00	32664	234.00	23312	326.00	1964
64.00	13066	150.00	10353	235.00	28000	327.00	25704
65.00	44920	151.00	16872	236.00	18056	328.00	12093
66.00	4461	152.00	11153	237.00	35552	329.00	3076
67.00	1649	153.00	42824	238.00	4722	332.00	9967
68.00	45176	154.00	34848	239.00	14633	333.00	12196
69.00	2675712	155.00	74600	240.00	12321	334.00	85224
70.00	13596	156.00	107384	241.00	22320	335.00	22864
73.00	21600	157.00	20016	242.00	47792	336.00	2619
74.00	251584	158.00	24240	243.00	50944	339.00	718
75.00	407680	159.00	22784	244.00	707776	340.00	1309
76.00	140096	160.00	40720	245.00	89264	341.00	14289
77.00	2915840	161.00	62672	246.00	131016	342.00	4394
78.00	200000	162.00	16872	247.00	28936	346.00	28552
79.00	186752	163.00	6683	248.00	6201	347.00	5145
80.00	136704	164.00	8065	249.00	26176	350.00	717
81.00	195200	165.00	49128	250.00	5926	351.00	823
82.00	47032	166.00	40400	251.00	5853	352.00	38056
83.00	45208	167.00	281088	252.00	7432	353.00	26224
85.00	31296	168.00	145536	253.00	15033	354.00	38056
86.00	54160	169.00	23504	254.00	9410	355.00	6985
87.00	26064	170.00	9632	255.00	3554304	359.00	2383
88.00	9527	171.00	12313	256.00	515328	364.00	1635
89.00	7167	172.00	22392	257.00	38256	365.00	181568
90.00	698	173.00	32920	258.00	210304	366.00	24640
91.00	40408	174.00	61832	259.00	31408	367.00	955
92.00	45528	175.00	112128	260.00	6139	370.00	3600

93.00	296960	176.00	31504	261.00	5764	371.00	8738
94.00	22352	177.00	48936	263.00	1078	372.00	60448
95.00	4027	178.00	18064	264.00	5808	373.00	16079
96.00	11069	179.00	205632	265.00	83712	374.00	1592
97.00	3421	180.00	139904	266.00	10984	377.00	1690
98.00	217408	181.00	66784	267.00	858	383.00	15955
99.00	183808	182.00	10904	268.00	681	384.00	4548
100.00	17952	183.00	6693	269.00	1031	385.00	782
101.00	98832	184.00	17728	270.00	3497	390.00	7317
102.00	4121	185.00	100784	271.00	7357	391.00	5379
103.00	32928	186.00	819968	272.00	11090	392.00	3751
104.00	64456	187.00	233216	273.00	102560	401.00	3177
105.00	58656	188.00	25416	274.00	276800	402.00	23400
106.00	20736	189.00	49520	275.00	1550848	403.00	32568
107.00	771648	190.00	8839	276.00	207552	404.00	11566
108.00	119928	191.00	20984	277.00	134784	405.00	2935
109.00	22672	192.00	68752	278.00	23960	415.00	674
110.00	1432064	193.00	74840	279.00	4579	421.00	24160
111.00	204544	194.00	19224	281.00	931	422.00	26616
112.00	24896	195.00	6565	282.00	3437	423.00	186048
113.00	8405	196.00	183680	283.00	14509	424.00	41216
114.00	1701	197.00	37512	284.00	9331	425.00	4321
115.00	1796	198.00	6138368	285.00	23984	438.00	1391
116.00	40928	199.00	405696	286.00	4717	439.00	1400
117.00	604736	200.00	30232	288.00	884	440.00	2550
118.00	44648	201.00	34040	289.00	5002	441.00	449664
119.00	8501	203.00	43656	290.00	4674	442.00	3192320
120.00	8877	204.00	213312	291.00	3293	443.00	606016
121.00	3538	205.00	381120	292.00	6118	444.00	54800
122.00	44736	206.00	1595904	293.00	25544	445.00	2486
123.00	73984	207.00	210944	294.00	6665		
124.00	34728	208.00	47112	295.00	9652		
125.00	32952	209.00	14622	296.00	426176		

Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021604s.D

Date : 16-FEB-2023 15:54

Client ID:

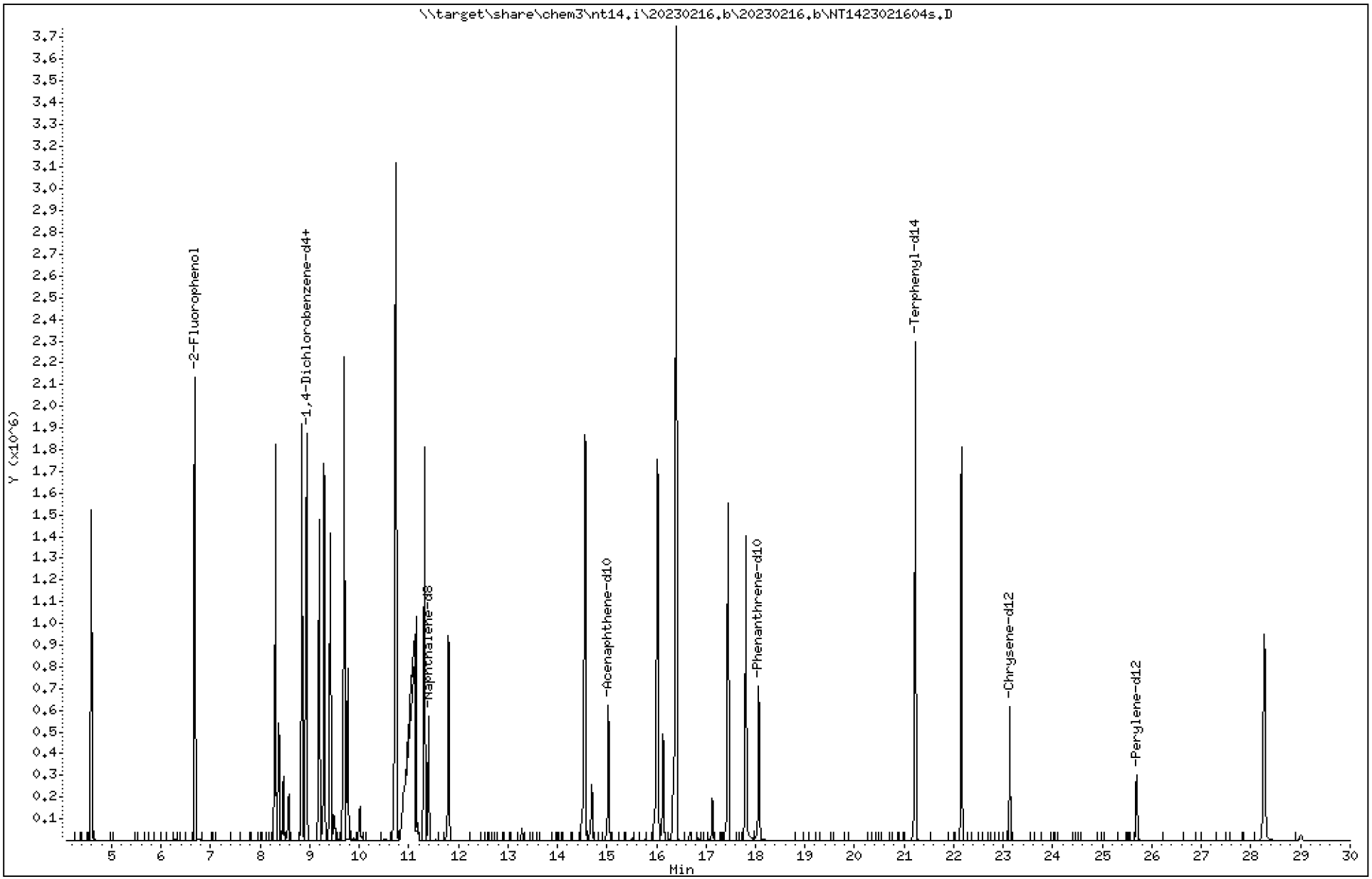
Instrument: nt14.i

Sample Info: SEQ-CAL7

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021604s.D
Lab Smp Id: SLB0240-CAL9
Inj Date : 16-FEB-2023 15:54 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SEQ-CAL7
Misc Info :
Comment :
Method : \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Meth Date : 03-Mar-2023 14:04 van Quant Type: ISTD
Cal Date : 16-FEB-2023 20:42 Cal File: NT1423021612s.D
Als bottle: 2 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.678	6.764	(0.750)	2109056	20.0000	29.08
	3 Phenol	94	8.309	8.379	(0.933)	2303240	20.0000	18.12(H)
	7 1,3-Dichlorobenzene	146	8.842	8.835	(0.993)	1796201	20.0000	18.76
*	8 1,4-Dichlorobenzene-d4	152	8.905	8.905	(1.000)	281412	4.00000	
	9 1,4-Dichlorobenzene	146	8.936	8.936	(1.003)	1742923	20.0000	19.08
	11 Benzyl alcohol	79	9.192	9.161	(1.032)	1718221	20.0000	22.29
	12 1,2-Dichlorobenzene	146	9.292	9.293	(1.044)	1699522	20.0000	18.71
	13 2-Methylphenol	108	9.417	9.433	(1.058)	1712457	20.0000	20.50
	15 4-Methylphenol	108	9.696	9.720	(1.089)	1848380	20.0000	18.38
	16 N-Nitroso-di-n-propylamine	70	9.774	9.767	(1.098)	1538203	20.0000	17.46
	22 2,4-Dimethylphenol	107	10.744	10.745	(0.942)	2837784	20.0000	41.41
	24 Benzoic acid	105	11.147	11.116	(0.978)	5747062	80.0000	118.2(M)
	26 1,2,4-Trichlorobenzene	180	11.317	11.310	(0.993)	1741162	20.0000	18.48
*	27 Naphthalene-d8	136	11.402	11.394	(1.000)	1028262	4.00000	
	30 Hexachlorobutadiene	225	11.804	11.804	(1.035)	1066922	20.0000	18.62
	39 Dimethylphthalate	163	14.559	14.551	(0.969)	3521062	20.0000	20.71
*	42 Acenaphthene-d10	162	15.031	15.016	(1.000)	557155	4.00000	
	50 Diethylphthalate	149	16.020	15.997	(1.066)	4255795	20.0000	20.00
	54 N-Nitrosodiphenylamine	169	16.398	16.384	(0.908)	3381832	20.0000	17.07
	57 Hexachlorobenzene	284	17.447	17.432	(0.966)	1585731	20.0000	19.07
	58 Pentachlorophenol	266	17.811	17.944	(0.986)	1801927	20.0000	27.02
*	59 Phenanthrene-d10	188	18.067	18.059	(1.000)	1280257	4.00000	
$	66 Terphenyl-d14	244	21.223	21.224	(0.917)	3438839	20.0000	16.58
	67 Butylbenzylphthalate	149	22.160	22.153	(0.958)	2268091	20.0000	14.98
*	69 Chrysene-d12	240	23.136	23.121	(1.000)	778986	4.00000	
*	77 Perylene-d12	264	25.691	25.691	(1.000)	506790	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.272	28.288	(1.100)	2342898	20.0000	13.56
	90 N-Nitrosodimethylamine	74	4.601	4.618	(0.517)	1936125	20.0000	40.08

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021604s.D
Lab Smp Id: SLB0240-CAL9
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 18:18
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	393779	196890	787558	281412	-28.54
27 Naphthalene-d8	1399029	699515	2798058	1028262	-26.50
42 Acenaphthene-d10	759723	379862	1519446	557155	-26.66
59 Phenanthrene-d10	1756156	878078	3512312	1280257	-27.10
69 Chrysene-d12	1174128	587064	2348256	778986	-33.65
77 Perylene-d12	826011	413006	1652022	506790	-38.65

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	-0.01
27 Naphthalene-d8	11.40	10.90	11.90	11.40	0.06
42 Acenaphthene-d10	15.02	14.52	15.52	15.03	0.10
59 Phenanthrene-d10	18.06	17.56	18.56	18.07	0.04
69 Chrysene-d12	23.12	22.62	23.62	23.14	0.07
77 Perylene-d12	25.68	25.18	26.18	25.69	0.03

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

REVIEW SUMMARY FOR FILE - NT1423021604s.D

Lab ID: SLB0240-CAL9
nt14.i, 20230216.b\20230216.b\SIMABN2.m,   16-FEB-2023 15:54

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.933	0.941	-0.0078	Phenol
0.978	0.000	0.9776	Benzoic acid
0.986	0.000	0.9859	Pentachlorophenol
0.750	0.760	-0.0095	2-Fluorophenol

RRT check based on Ccal File: 20230216.b/NT1423021612s.D

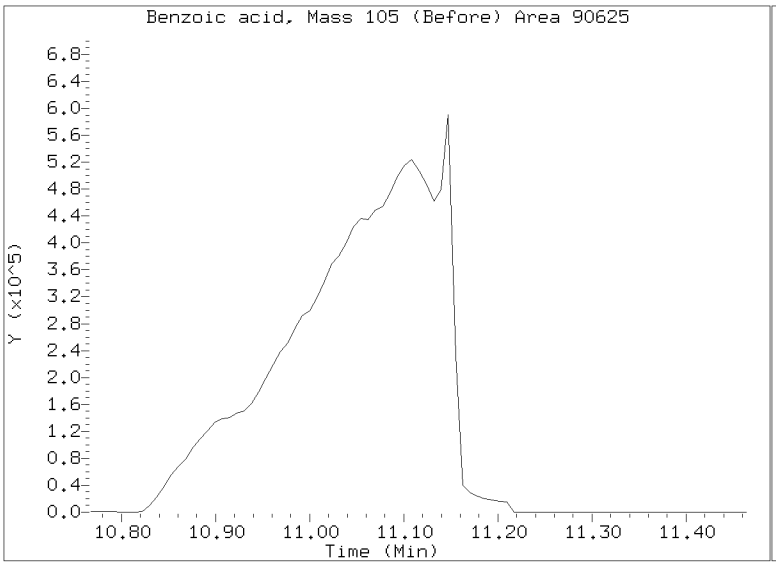
On Column LOD for nt14.i, 20230216.b\SIMABN2.m, PSDDA.sub = 0.0000

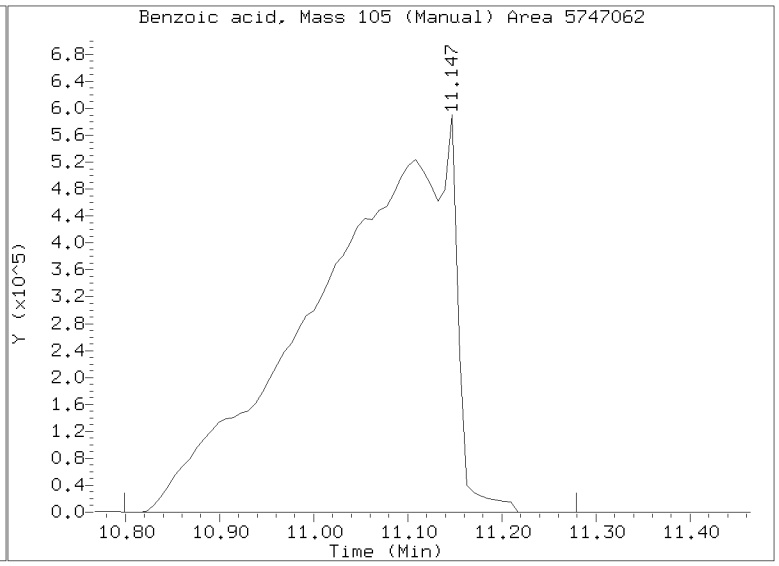
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230216.b/20230216.b/NT1423021604s.D
Injection Date: 16-FEB-2023 15:54
Lab ID:SLB0240-CAL9 Client ID:
Report Date: 03/03/2023 14:07





Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021605s.D

Date : 16-FEB-2023 16:30

Client ID:

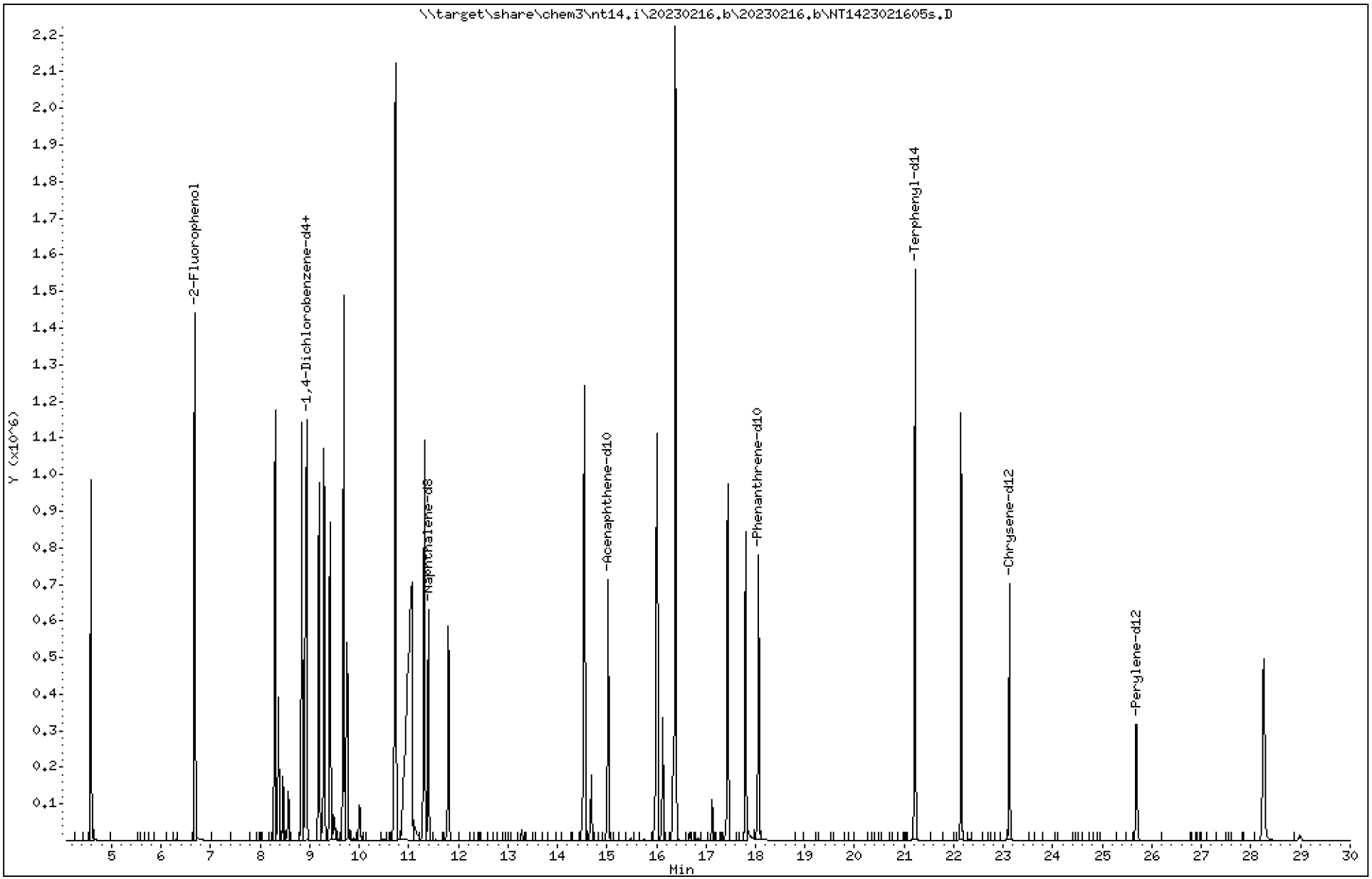
Instrument: nt14.i

Sample Info: SLB0240-CAL8

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021605s.D
Lab Smp Id: SLB0240-CAL8
Inj Date : 16-FEB-2023 16:30 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0240-CAL8
Misc Info :
Comment :
Method : \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Meth Date : 03-Mar-2023 14:04 van Quant Type: ISTD
Cal Date : 16-FEB-2023 20:42 Cal File: NT1423021612s.D
Als bottle: 3 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.679	6.764	(0.750)	1281444	15.0000	15.00
	3 Phenol	94	8.301	8.379	(0.932)	1388926	10.0000	10.03
	7 1,3-Dichlorobenzene	146	8.843	8.835	(0.993)	1069272	10.0000	9.994
*	8 1,4-Dichlorobenzene-d4	152	8.905	8.905	(1.000)	314437	4.00000	
	9 1,4-Dichlorobenzene	146	8.936	8.936	(1.003)	1022062	10.0000	10.01
	11 Benzyl alcohol	79	9.184	9.161	(1.031)	981521	10.0000	11.40
	12 1,2-Dichlorobenzene	146	9.293	9.293	(1.044)	1017074	10.0000	10.02
	13 2-Methylphenol	108	9.409	9.433	(1.057)	1002768	10.0000	10.74
	15 4-Methylphenol	108	9.689	9.720	(1.088)	1074149	10.0000	10.02
	16 N-Nitroso-di-n-propylamine	70	9.758	9.767	(1.096)	875889	10.0000	10.02
	22 2,4-Dimethylphenol	107	10.736	10.745	(0.942)	1723337	20.0000	20.03
	24 Benzoic acid	105	11.062	11.116	(0.970)	2945955	40.0000	55.00
	26 1,2,4-Trichlorobenzene	180	11.317	11.310	(0.993)	1031123	10.0000	9.933
*	27 Naphthalene-d8	136	11.402	11.394	(1.000)	1133072	4.00000	
	30 Hexachlorobutadiene	225	11.804	11.804	(1.035)	623120	10.0000	9.868
	39 Dimethylphthalate	163	14.551	14.551	(0.969)	1998602	10.0000	10.65
*	42 Acenaphthene-d10	162	15.023	15.016	(1.000)	615002	4.00000	
	50 Diethylphthalate	149	16.013	15.997	(1.066)	2430211	10.0000	10.35
	54 N-Nitrosodiphenylamine	169	16.383	16.384	(0.907)	1958851	10.0000	10.03
	57 Hexachlorobenzene	284	17.440	17.432	(0.966)	927113	10.0000	10.18
	58 Pentachlorophenol	266	17.796	17.944	(0.985)	979546	20.0000	19.97
*	59 Phenanthrene-d10	188	18.059	18.059	(1.000)	1402756	4.00000	
$	66 Terphenyl-d14	244	21.224	21.224	(0.918)	2137321	10.0000	9.349
	67 Butylbenzylphthalate	149	22.153	22.153	(0.958)	1328204	10.0000	10.01
*	69 Chrysene-d12	240	23.128	23.121	(1.000)	858745	4.00000	
*	77 Perylene-d12	264	25.691	25.691	(1.000)	567246	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.257	28.288	(1.100)	1309955	10.0000	10.00
	90 N-Nitrosodimethylamine	74	4.594	4.618	(0.516)	1205270	20.0000	20.06

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021605s.D
Lab Smp Id: SLB0240-CAL8
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 18:18
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	393779	196890	787558	314437	-20.15
27 Naphthalene-d8	1399029	699515	2798058	1133072	-19.01
42 Acenaphthene-d10	759723	379862	1519446	615002	-19.05
59 Phenanthrene-d10	1756156	878078	3512312	1402756	-20.12
69 Chrysene-d12	1174128	587064	2348256	858745	-26.86
77 Perylene-d12	826011	413006	1652022	567246	-31.33

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	-0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.40	0.07
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.05
59 Phenanthrene-d10	18.06	17.56	18.56	18.06	-0.00
69 Chrysene-d12	23.12	22.62	23.62	23.13	0.03
77 Perylene-d12	25.68	25.18	26.18	25.69	0.03

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

REVIEW SUMMARY FOR FILE - NT1423021605s.D

Lab ID: SLB0240-CAL8
nt14.i, 20230216.b\20230216.b\SIMABN2.m,   16-FEB-2023 16:30

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.932	0.941	-0.0087	Phenol
0.970	0.000	0.9701	Benzoic acid
0.985	0.000	0.9854	Pentachlorophenol
0.750	0.760	-0.0095	2-Fluorophenol

RRT check based on Ccal File: 20230216.b/NT1423021612s.D

On Column LOD for nt14.i, 20230216.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021606s.D

Date : 16-FEB-2023 17:06

Client ID:

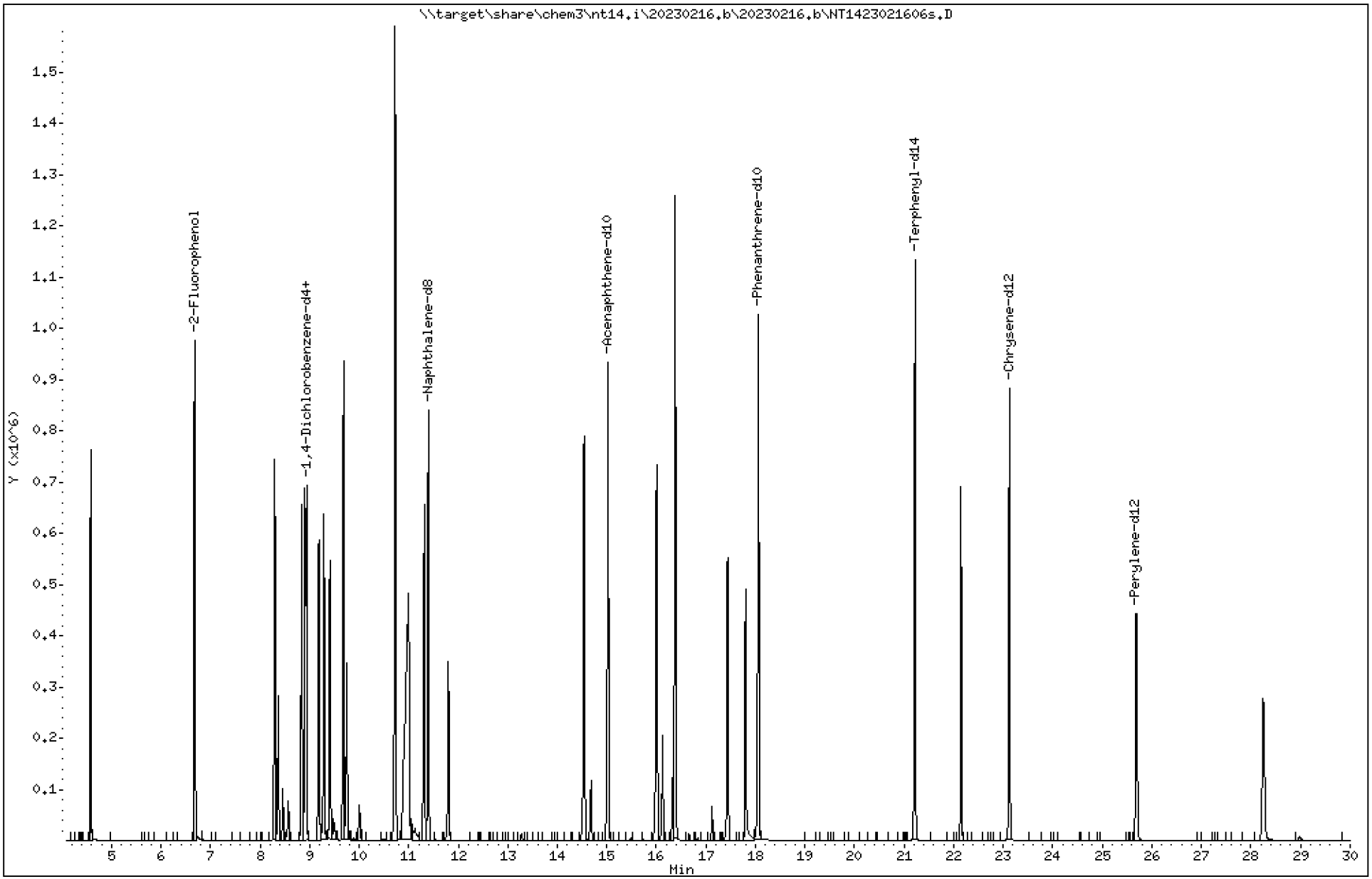
Sample Info: SLB0240-CAL7

Column phase: ZB-5msi

Instrument: nt14.i

Operator: DSD

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021606s.D
Lab Smp Id: SLB0240-CAL7
Inj Date : 16-FEB-2023 17:06 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0240-CAL7
Misc Info :
Comment :
Method : \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Meth Date : 03-Mar-2023 14:04 van Quant Type: ISTD
Cal Date : 16-FEB-2023 20:42 Cal File: NT1423021612s.D
Als bottle: 4 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.679	6.764	(0.750)	847818	7.50000	7.471
	3 Phenol	94	8.294	8.379	(0.931)	843253	5.00000	4.802
	7 1,3-Dichlorobenzene	146	8.835	8.835	(0.992)	634439	5.00000	4.609
*	8 1,4-Dichlorobenzene-d4	152	8.905	8.905	(1.000)	404552	4.00000	
	9 1,4-Dichlorobenzene	146	8.936	8.936	(1.003)	603660	5.00000	4.597
	11 Benzyl alcohol	79	9.184	9.161	(1.031)	578636	5.00000	5.223
	12 1,2-Dichlorobenzene	146	9.293	9.293	(1.044)	602062	5.00000	4.611
	13 2-Methylphenol	108	9.409	9.433	(1.057)	606273	5.00000	5.049
	15 4-Methylphenol	108	9.681	9.720	(1.087)	653344	5.00000	4.860
	16 N-Nitroso-di-n-propylamine	70	9.743	9.767	(1.094)	507736	5.00000	4.806
	22 2,4-Dimethylphenol	107	10.729	10.745	(0.942)	1177037	10.0000	9.846
	24 Benzoic acid	105	11.000	11.116	(0.965)	1537633	20.0000	22.45
	26 1,2,4-Trichlorobenzene	180	11.310	11.310	(0.993)	606045	5.00000	4.566
*	27 Naphthalene-d8	136	11.394	11.394	(1.000)	1448768	4.00000	
	30 Hexachlorobutadiene	225	11.804	11.804	(1.036)	367794	5.00000	4.555
	39 Dimethylphthalate	163	14.544	14.551	(0.968)	1159835	5.00000	4.824
*	42 Acenaphthene-d10	162	15.023	15.016	(1.000)	788119	4.00000	
	50 Diethylphthalate	149	16.005	15.997	(1.065)	1405935	5.00000	4.672
	54 N-Nitrosodiphenylamine	169	16.375	16.384	(0.907)	1119324	5.00000	4.697
	57 Hexachlorobenzene	284	17.432	17.432	(0.965)	534623	5.00000	4.522
	58 Pentachlorophenol	266	17.796	17.944	(0.985)	545389	10.0000	10.15
*	59 Phenanthrene-d10	188	18.059	18.059	(1.000)	1820509	4.00000	
$	66 Terphenyl-d14	244	21.216	21.224	(0.917)	1486757	5.00000	4.762
	67 Butylbenzylphthalate	149	22.153	22.153	(0.958)	779624	5.00000	4.874
*	69 Chrysene-d12	240	23.128	23.121	(1.000)	1172674	4.00000	
*	77 Perylene-d12	264	25.691	25.691	(1.000)	801283	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.249	28.288	(1.100)	774675	5.00000	4.971
	90 N-Nitrosodimethylamine	74	4.578	4.618	(0.514)	797190	10.0000	9.596

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021606s.D
Lab Smp Id: SLB0240-CAL7
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 18:18
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	393779	196890	787558	404552	2.74
27 Naphthalene-d8	1399029	699515	2798058	1448768	3.56
42 Acenaphthene-d10	759723	379862	1519446	788119	3.74
59 Phenanthrene-d10	1756156	878078	3512312	1820509	3.66
69 Chrysene-d12	1174128	587064	2348256	1172674	-0.12
77 Perylene-d12	826011	413006	1652022	801283	-2.99

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	-0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.39	-0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.05
59 Phenanthrene-d10	18.06	17.56	18.56	18.06	-0.00
69 Chrysene-d12	23.12	22.62	23.62	23.13	0.03
77 Perylene-d12	25.68	25.18	26.18	25.69	0.03

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

REVIEW SUMMARY FOR FILE - NT1423021606s.D

Lab ID: SLB0240-CAL7
nt14.i, 20230216.b\20230216.b\SIMABN2.m,   16-FEB-2023 17:06

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.931	0.941	-0.0095	Phenol
0.965	0.000	0.9654	Benzoic acid
0.985	0.000	0.9854	Pentachlorophenol
0.750	0.760	-0.0095	2-Fluorophenol

RRT check based on Ccal File: 20230216.b/NT1423021612s.D

On Column LOD for nt14.i, 20230216.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021607s.D

Date : 16-FEB-2023 17:42

Client ID:

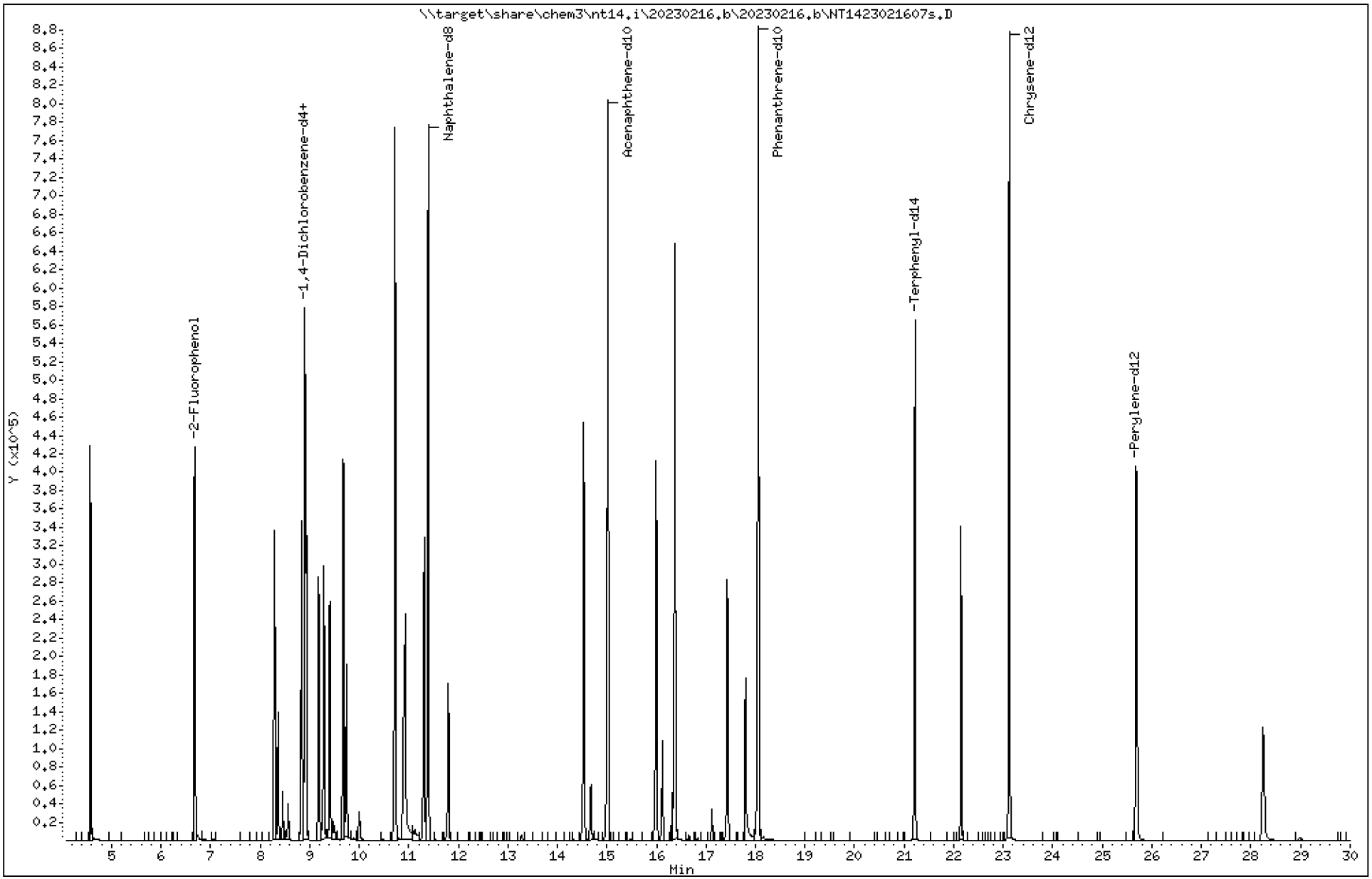
Instrument: nt14.i

Sample Info: SLB0240-CAL6

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021607s.D
Lab Smp Id: SLB0240-CAL6
Inj Date : 16-FEB-2023 17:42 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0240-CAL6
Misc Info :
Comment :
Method : \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Meth Date : 03-Mar-2023 14:04 van Quant Type: ISTD
Cal Date : 16-FEB-2023 20:42 Cal File: NT1423021612s.D
Als bottle: 5 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.679	6.764	(0.750)	391871	3.75000	3.870
	3 Phenol	94	8.286	8.379	(0.931)	423028	2.50000	2.760
	7 1,3-Dichlorobenzene	146	8.835	8.835	(0.992)	318644	2.50000	2.637
*	8 1,4-Dichlorobenzene-d4	152	8.905	8.905	(1.000)	355167	4.00000	
	9 1,4-Dichlorobenzene	146	8.936	8.936	(1.003)	303782	2.50000	2.635
	11 Benzyl alcohol	79	9.176	9.161	(1.030)	272008	2.50000	2.796
	12 1,2-Dichlorobenzene	146	9.293	9.293	(1.044)	301538	2.50000	2.631
	13 2-Methylphenol	108	9.409	9.433	(1.057)	297737	2.50000	2.824
	15 4-Methylphenol	108	9.681	9.720	(1.087)	315339	2.50000	2.699
	16 N-Nitroso-di-n-propylamine	70	9.743	9.767	(1.094)	250230	2.50000	2.756
	22 2,4-Dimethylphenol	107	10.728	10.745	(0.942)	575687	5.00000	5.173
	24 Benzoic acid	105	10.930	11.116	(0.959)	504145	10.0000	8.278
	26 1,2,4-Trichlorobenzene	180	11.309	11.310	(0.993)	304889	2.50000	2.583
*	27 Naphthalene-d8	136	11.394	11.394	(1.000)	1288352	4.00000	
	30 Hexachlorobutadiene	225	11.804	11.804	(1.036)	182234	2.50000	2.538
	39 Dimethylphthalate	163	14.536	14.551	(0.968)	593910	2.50000	2.741
*	42 Acenaphthene-d10	162	15.023	15.016	(1.000)	710230	4.00000	
	50 Diethylphthalate	149	15.997	15.997	(1.065)	713452	2.50000	2.631
	54 N-Nitrosodiphenylamine	169	16.375	16.384	(0.907)	576012	2.50000	2.860
	57 Hexachlorobenzene	284	17.432	17.432	(0.965)	271422	2.50000	2.666
	58 Pentachlorophenol	266	17.796	17.944	(0.985)	218979	5.00000	5.030
*	59 Phenanthrene-d10	188	18.059	18.059	(1.000)	1567702	4.00000	
$	66 Terphenyl-d14	244	21.216	21.224	(0.918)	718903	2.50000	2.491
	67 Butylbenzylphthalate	149	22.153	22.153	(0.958)	385638	2.50000	2.715
*	69 Chrysene-d12	240	23.121	23.121	(1.000)	1084006	4.00000	
*	77 Perylene-d12	264	25.683	25.691	(1.000)	717515	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.249	28.288	(1.100)	343434	2.50000	2.602
	90 N-Nitrosodimethylamine	74	4.570	4.618	(0.513)	417122	5.00000	5.537

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021607s.D
Lab Smp Id: SLB0240-CAL6
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 18:18
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	393779	196890	787558	355167	-9.81
27 Naphthalene-d8	1399029	699515	2798058	1288352	-7.91
42 Acenaphthene-d10	759723	379862	1519446	710230	-6.51
59 Phenanthrene-d10	1756156	878078	3512312	1567702	-10.73
69 Chrysene-d12	1174128	587064	2348256	1084006	-7.68
77 Perylene-d12	826011	413006	1652022	717515	-13.13

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	-0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.39	-0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.05
59 Phenanthrene-d10	18.06	17.56	18.56	18.06	-0.00
69 Chrysene-d12	23.12	22.62	23.62	23.12	-0.00
77 Perylene-d12	25.68	25.18	26.18	25.68	-0.00

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

REVIEW SUMMARY FOR FILE - NT1423021607s.D

Lab ID: SLB0240-CAL6
nt14.i, 20230216.b\20230216.b\SIMABN2.m,   16-FEB-2023 17:42

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.931	0.941	-0.0104	Phenol
0.959	0.000	0.9592	Benzoic acid
0.513	0.518	-0.0052	N-Nitrosodimethylamine
0.985	0.000	0.9854	Pentachlorophenol
0.750	0.760	-0.0095	2-Fluorophenol

RRT check based on Ccal File: 20230216.b/NT1423021612s.D

On Column LOD for nt14.i, 20230216.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021608s.D

Date : 16-FEB-2023 18:18

Client ID:

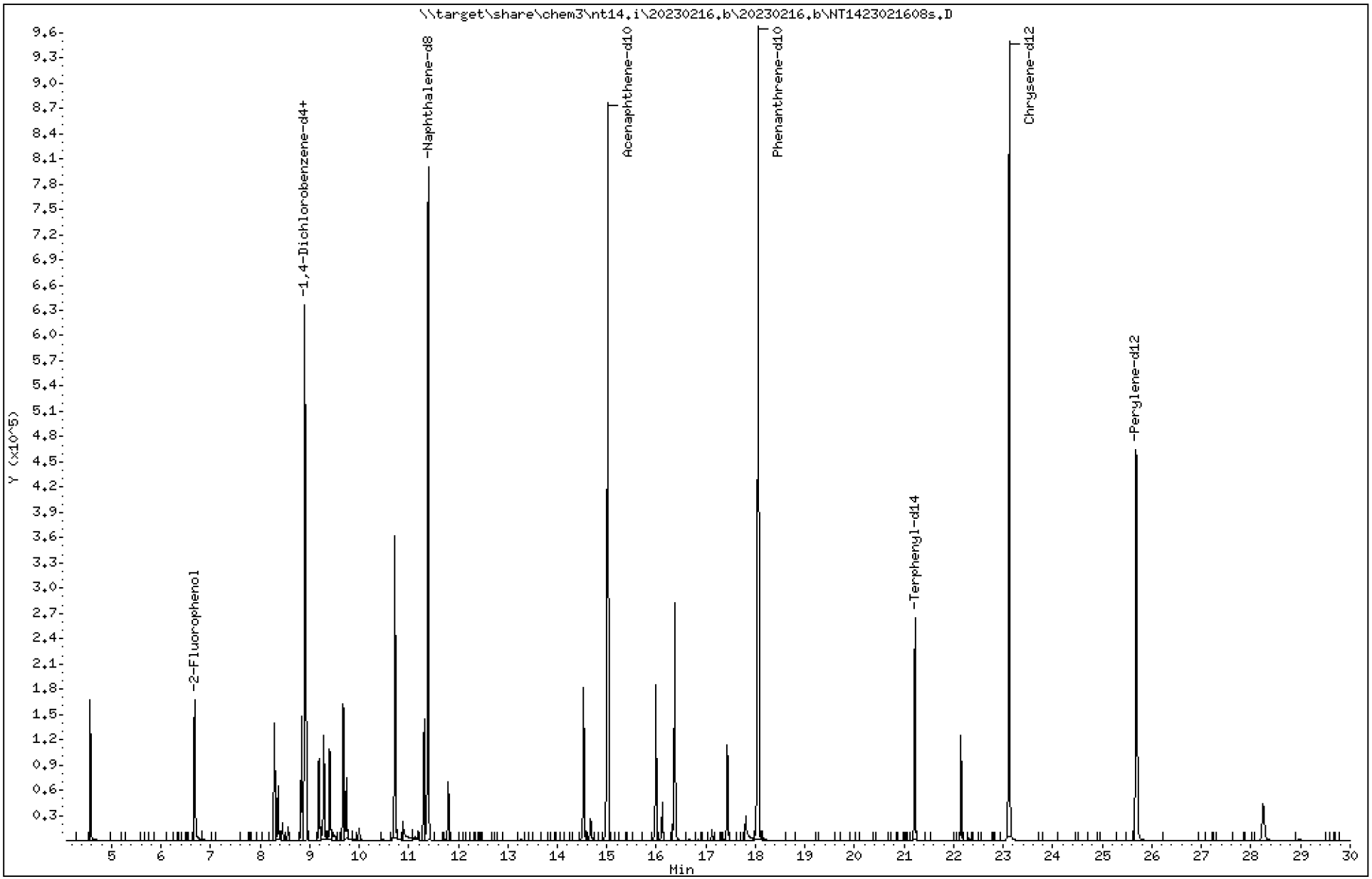
Instrument: nt14.i

Sample Info: SLB0240-CAL5

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021608s.D
Lab Smp Id: SLB0240-CAL5
Inj Date : 16-FEB-2023 18:18 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0240-CAL5
Misc Info :
Comment :
Method : \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Meth Date : 03-Mar-2023 14:04 van Quant Type: ISTD
Cal Date : 16-FEB-2023 20:42 Cal File: NT1423021612s.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.679	6.764	(0.750)	159969	1.50000	1.408
	3 Phenol	94	8.286	8.379	(0.931)	169471	1.00000	1.002
	7 1,3-Dichlorobenzene	146	8.835	8.835	(0.992)	132167	1.00000	0.9864
*	8 1,4-Dichlorobenzene-d4	152	8.905	8.905	(1.000)	393779	4.00000	
	9 1,4-Dichlorobenzene	146	8.936	8.936	(1.003)	124934	1.00000	0.9775
	11 Benzyl alcohol	79	9.184	9.161	(1.031)	103506	1.00000	0.9598
	12 1,2-Dichlorobenzene	146	9.285	9.293	(1.043)	125199	1.00000	0.9852
	13 2-Methylphenol	108	9.402	9.433	(1.056)	124069	1.00000	1.061
	15 4-Methylphenol	108	9.673	9.720	(1.086)	127371	1.00000	0.9912
	16 N-Nitroso-di-n-propylamine	70	9.735	9.767	(1.093)	100103	1.00000	1.012
	22 2,4-Dimethylphenol	107	10.721	10.745	(0.941)	255114	2.00000	2.040
	24 Benzoic acid	105	10.884	11.116	(0.955)	52086	4.00000	0.7875
	26 1,2,4-Trichlorobenzene	180	11.310	11.310	(0.993)	127075	1.00000	0.9915
*	27 Naphthalene-d8	136	11.395	11.394	(1.000)	1399029	4.00000	
	30 Hexachlorobutadiene	225	11.804	11.804	(1.036)	75506	1.00000	0.9684
	39 Dimethylphthalate	163	14.528	14.551	(0.968)	240537	1.00000	1.038
*	42 Acenaphthene-d10	162	15.016	15.016	(1.000)	759723	4.00000	
	50 Diethylphthalate	149	15.990	15.997	(1.065)	286392	1.00000	0.9873
	54 N-Nitrosodiphenylamine	169	16.368	16.384	(0.906)	233343	1.00000	1.052
	57 Hexachlorobenzene	284	17.432	17.432	(0.965)	110361	1.00000	0.9676
	58 Pentachlorophenol	266	17.804	17.944	(0.986)	60739	2.00000	1.294
*	59 Phenanthrene-d10	188	18.059	18.059	(1.000)	1756156	4.00000	
$	66 Terphenyl-d14	244	21.216	21.224	(0.918)	332573	1.00000	1.064
	67 Butylbenzylphthalate	149	22.153	22.153	(0.958)	142635	1.00000	0.9550
*	69 Chrysene-d12	240	23.121	23.121	(1.000)	1174128	4.00000	
*	77 Perylene-d12	264	25.683	25.691	(1.000)	826011	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.249	28.288	(1.100)	133514	1.00000	0.9098
	90 N-Nitrosodimethylamine	74	4.571	4.618	(0.513)	167848	2.00000	1.948

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021608s.D
Lab Smp Id: SLB0240-CAL5
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 18:18
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	393779	196890	787558	393779	0.00
27 Naphthalene-d8	1399029	699515	2798058	1399029	0.00
42 Acenaphthene-d10	759723	379862	1519446	759723	0.00
59 Phenanthrene-d10	1756156	878078	3512312	1756156	0.00
69 Chrysene-d12	1174128	587064	2348256	1174128	0.00
77 Perylene-d12	826011	413006	1652022	826011	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.40	0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.00
59 Phenanthrene-d10	18.06	17.56	18.56	18.06	0.00
69 Chrysene-d12	23.12	22.62	23.62	23.12	0.00
77 Perylene-d12	25.68	25.18	26.18	25.68	0.00

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

REVIEW SUMMARY FOR FILE - NT1423021608s.D

Lab ID: SLB0240-CAL5
nt14.i, 20230216.b\20230216.b\SIMABN2.m,   16-FEB-2023 18:18

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.931	0.941	-0.0104	Phenol
1.086	1.091	-0.0052	4-Methylphenol
0.955	0.000	0.9552	Benzoic acid
0.513	0.518	-0.0052	N-Nitrosodimethylamine
0.986	0.000	0.9859	Pentachlorophenol
0.750	0.760	-0.0095	2-Fluorophenol

RRT check based on Ccal File: 20230216.b/NT1423021612s.D

On Column LOD for nt14.i, 20230216.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021609s.D

Date : 16-FEB-2023 18:54

Client ID:

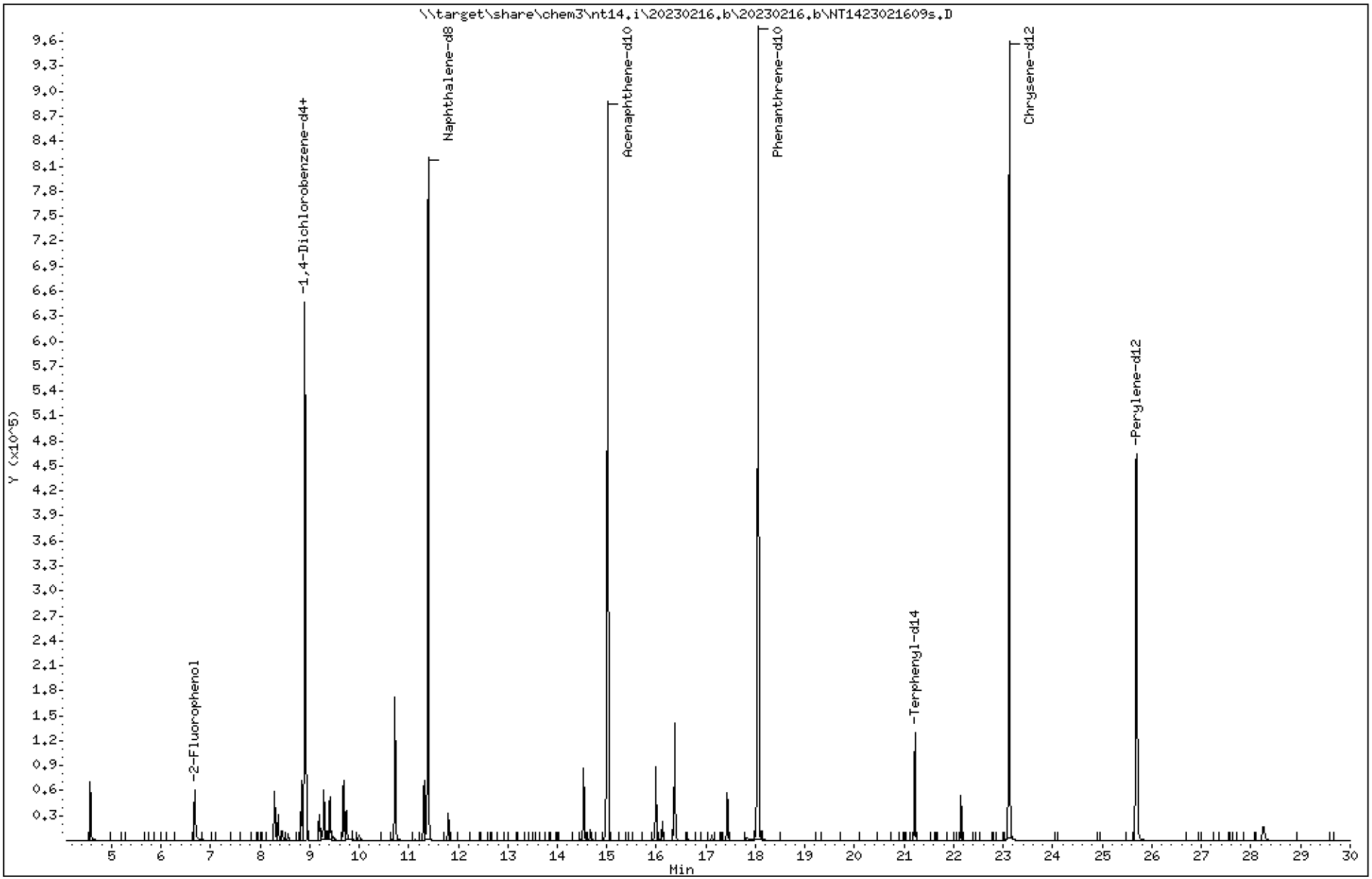
Instrument: nt14.i

Sample Info: SLB0240-CAL4

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021609s.D
Lab Smp Id: SLB0240-CAL4
Inj Date : 16-FEB-2023 18:54 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0240-CAL4
Misc Info :
Comment :
Method : \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Meth Date : 03-Mar-2023 14:04 van Quant Type: ISTD
Cal Date : 16-FEB-2023 20:42 Cal File: NT1423021612s.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1	2-Fluorophenol	112	6.679	6.764	(0.750)	67561	0.75000	0.5841
	3	Phenol	94	8.286	8.379	(0.931)	78640	0.50000	0.4592
	7	1,3-Dichlorobenzene	146	8.835	8.835	(0.992)	65052	0.50000	0.4787
*	8	1,4-Dichlorobenzene-d4	152	8.905	8.905	(1.000)	399360	4.00000	
	9	1,4-Dichlorobenzene	146	8.928	8.936	(1.003)	61515	0.50000	0.4746
	11	Benzyl alcohol	79	9.184	9.161	(1.031)	49029	0.50000	0.4483
	12	1,2-Dichlorobenzene	146	9.285	9.293	(1.043)	61553	0.50000	0.4776
	13	2-Methylphenol	108	9.409	9.433	(1.057)	59022	0.50000	0.4979
	15	4-Methylphenol	108	9.681	9.720	(1.087)	57961	0.50000	0.4458
	16	N-Nitroso-di-n-propylamine	70	9.743	9.767	(1.094)	46756	0.50000	0.4684
	22	2,4-Dimethylphenol	107	10.721	10.745	(0.941)	122969	1.00000	0.9639
	24	Benzoic acid	105	11.116	11.116	(0.976)	61	2.00000	0.0009158(MH)
	26	1,2,4-Trichlorobenzene	180	11.310	11.310	(0.993)	63007	0.50000	0.4881
*	27	Naphthalene-d8	136	11.395	11.394	(1.000)	1408942	4.00000	
	30	Hexachlorobutadiene	225	11.804	11.804	(1.036)	37176	0.50000	0.4734
	39	Dimethylphthalate	163	14.536	14.551	(0.968)	116724	0.50000	0.4971
*	42	Acenaphthene-d10	162	15.016	15.016	(1.000)	769600	4.00000	
	50	Diethylphthalate	149	15.990	15.997	(1.065)	138009	0.50000	0.4697
	54	N-Nitrosodiphenylamine	169	16.368	16.384	(0.906)	112007	0.50000	0.5038
	57	Hexachlorobenzene	284	17.432	17.432	(0.965)	54703	0.50000	0.4759
	58	Pentachlorophenol	266	17.812	17.944	(0.986)	16729	1.00000	0.3567(M)
*	59	Phenanthrene-d10	188	18.059	18.059	(1.000)	1769892	4.00000	
$	66	Terphenyl-d14	244	21.216	21.224	(0.918)	161678	0.50000	0.5157
	67	Butylbenzylphthalate	149	22.153	22.153	(0.958)	59157	0.50000	0.3984
*	69	Chrysene-d12	240	23.121	23.121	(1.000)	1177556	4.00000	
*	77	Perylene-d12	264	25.691	25.691	(1.000)	823122	4.00000	
	79	Dibenzo(a,h)anthracene	278	28.249	28.288	(1.100)	55839	0.50000	0.3857
	90	N-Nitrosodimethylamine	74	4.571	4.618	(0.513)	75602	1.00000	0.8562

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021609s.D
Lab Smp Id: SLB0240-CAL4
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 18:18
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	393779	196890	787558	399360	1.42
27 Naphthalene-d8	1399029	699515	2798058	1408942	0.71
42 Acenaphthene-d10	759723	379862	1519446	769600	1.30
59 Phenanthrene-d10	1756156	878078	3512312	1769892	0.78
69 Chrysene-d12	1174128	587064	2348256	1177556	0.29
77 Perylene-d12	826011	413006	1652022	823122	-0.35

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	-0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.40	-0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	-0.00
59 Phenanthrene-d10	18.06	17.56	18.56	18.06	-0.00
69 Chrysene-d12	23.12	22.62	23.62	23.12	-0.00
77 Perylene-d12	25.68	25.18	26.18	25.69	0.03

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

REVIEW SUMMARY FOR FILE - NT1423021609s.D

Lab ID: SLB0240-CAL4
nt14.i, 20230216.b\20230216.b\SIMABN2.m,   16-FEB-2023 18:54

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.931	0.941	-0.0104	Phenol
0.976	0.000	0.9756	Benzoic acid
0.513	0.518	-0.0052	N-Nitrosodimethylamine
0.986	0.000	0.9863	Pentachlorophenol
0.750	0.760	-0.0095	2-Fluorophenol

RRT check based on Ccal File: 20230216.b/NT1423021612s.D

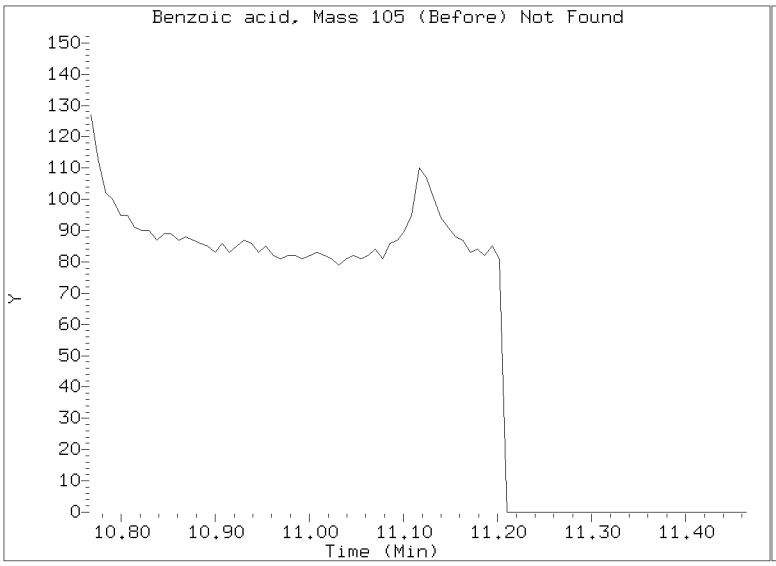
On Column LOD for nt14.i, 20230216.b\SIMABN2.m, PSDDA.sub = 0.0000

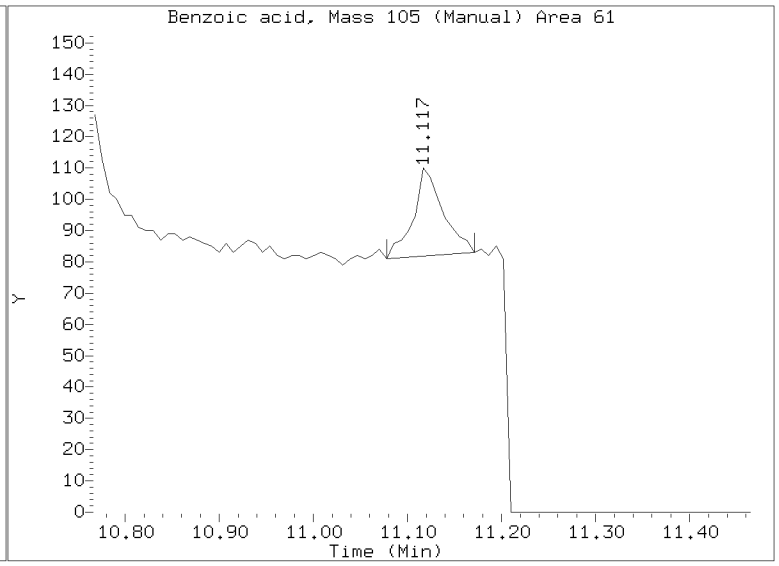
Exception: 1,2,4-Trichlorobenzene 0.0010

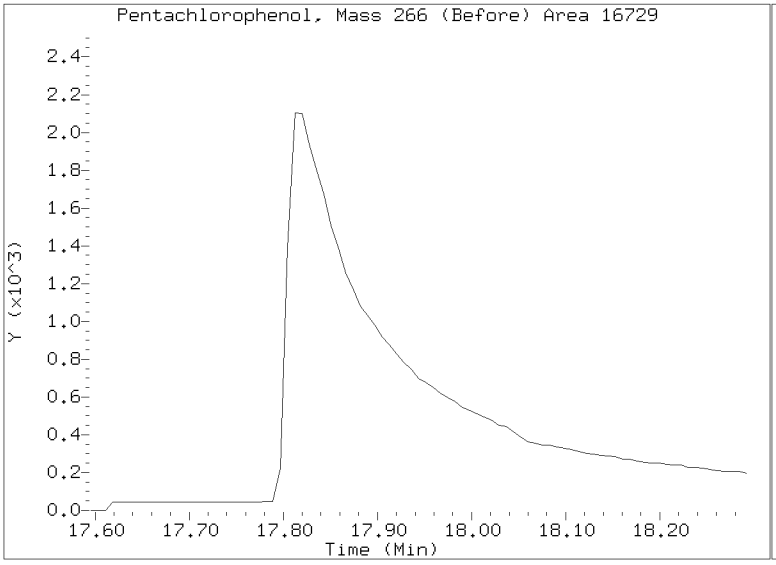
* Only compounds listed in the work order have been verified by the analyst *

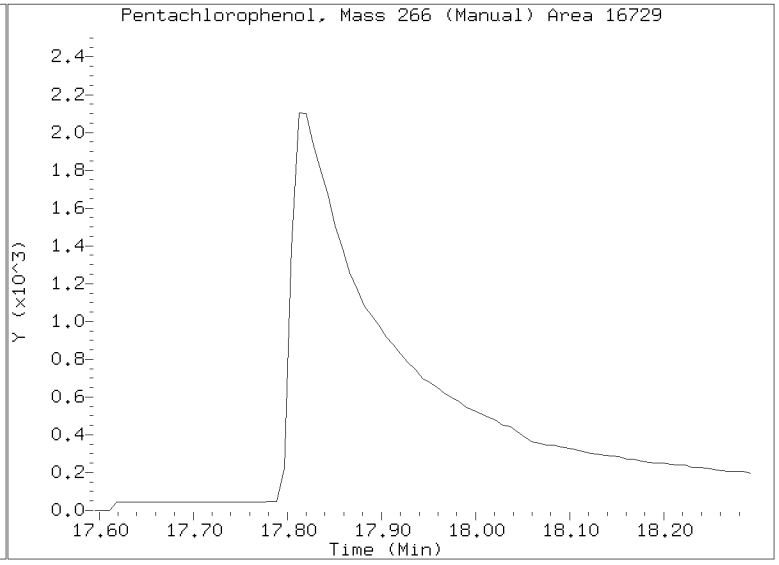
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230216.b/20230216.b/NT1423021609s.D
Injection Date: 16-FEB-2023 18:54
Lab ID:SLB0240-CAL4 Client ID:
Report Date: 03/03/2023 14:07









Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021610s.D

Date : 16-FEB-2023 19:30

Client ID:

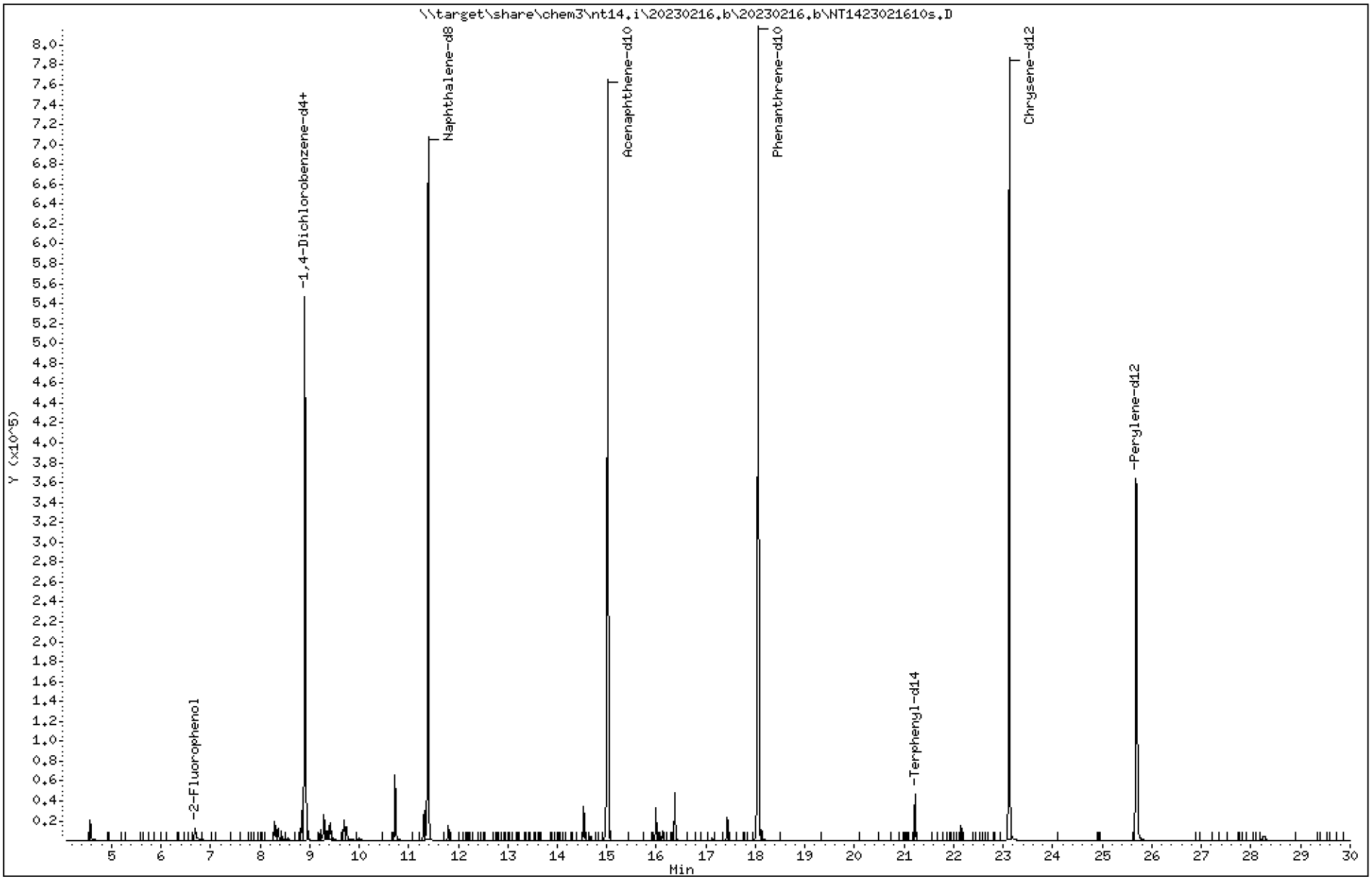
Instrument: nt14.i

Sample Info: SLB0240-CAL3

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021610s.D
Lab Smp Id: SLB0240-CAL3
Inj Date : 16-FEB-2023 19:30 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0240-CAL3
Misc Info :
Comment :
Method : \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Meth Date : 03-Mar-2023 14:04 van Quant Type: ISTD
Cal Date : 16-FEB-2023 20:42 Cal File: NT1423021612s.D
Als bottle: 8 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1	2-Fluorophenol	112	6.687	6.764	(0.751)	21340	0.30000	0.2175
	3	Phenol	94	8.294	8.379	(0.931)	28148	0.20000	0.1942
	7	1,3-Dichlorobenzene	146	8.835	8.835	(0.992)	27276	0.20000	0.2370
*	8	1,4-Dichlorobenzene-d4	152	8.905	8.905	(1.000)	338201	4.00000	
	9	1,4-Dichlorobenzene	146	8.936	8.936	(1.003)	25877	0.20000	0.2357
	11	Benzyl alcohol	79	9.207	9.161	(1.034)	15576	0.20000	0.1682
	12	1,2-Dichlorobenzene	146	9.293	9.293	(1.044)	25749	0.20000	0.2359
	13	2-Methylphenol	108	9.409	9.433	(1.057)	23020	0.20000	0.2293
	15	4-Methylphenol	108	9.689	9.720	(1.088)	20761	0.20000	0.1888
	16	N-Nitroso-di-n-propylamine	70	9.743	9.767	(1.094)	17688	0.20000	0.2097
	22	2,4-Dimethylphenol	107	10.729	10.745	(0.942)	47101	0.40000	0.4325
	24	Benzoic acid	105	Compound Not Detected.					
	26	1,2,4-Trichlorobenzene	180	11.310	11.310	(0.993)	26053	0.20000	0.2380
*	27	Naphthalene-d8	136	11.394	11.394	(1.000)	1194978	4.00000	
	30	Hexachlorobutadiene	225	11.804	11.804	(1.036)	15610	0.20000	0.2344
	39	Dimethylphthalate	163	14.536	14.551	(0.968)	45106	0.20000	0.2301
*	42	Acenaphthene-d10	162	15.015	15.016	(1.000)	642586	4.00000	
	50	Diethylphthalate	149	15.990	15.997	(1.065)	51612	0.20000	0.2104
	54	N-Nitrosodiphenylamine	169	16.375	16.384	(0.907)	40238	0.20000	0.2183
	57	Hexachlorobenzene	284	17.432	17.432	(0.966)	22378	0.20000	0.2342
	58	Pentachlorophenol	266	17.943	17.944	(0.994)	1240	0.40000	0.03191(H)
*	59	Phenanthrene-d10	188	18.052	18.059	(1.000)	1471001	4.00000	
$	66	Terphenyl-d14	244	21.216	21.224	(0.918)	60996	0.20000	0.2458
	67	Butylbenzylphthalate	149	22.153	22.153	(0.958)	16319	0.20000	0.1394
*	69	Chrysene-d12	240	23.121	23.121	(1.000)	932019	4.00000	
*	77	Perylene-d12	264	25.683	25.691	(1.000)	646922	4.00000	
	79	Dibenzo(a,h)anthracene	278	28.265	28.288	(1.101)	18129	0.20000	0.1600
	90	N-Nitrosodimethylamine	74	4.571	4.618	(0.513)	27613	0.40000	0.3676

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021610s.D
Lab Smp Id: SLB0240-CAL3
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 18:18
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	393779	196890	787558	338201	-14.11
27 Naphthalene-d8	1399029	699515	2798058	1194978	-14.59
42 Acenaphthene-d10	759723	379862	1519446	642586	-15.42
59 Phenanthrene-d10	1756156	878078	3512312	1471001	-16.24
69 Chrysene-d12	1174128	587064	2348256	932019	-20.62
77 Perylene-d12	826011	413006	1652022	646922	-21.68

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	-0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.39	-0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	-0.00
59 Phenanthrene-d10	18.06	17.56	18.56	18.05	-0.04
69 Chrysene-d12	23.12	22.62	23.62	23.12	-0.00
77 Perylene-d12	25.68	25.18	26.18	25.68	-0.00

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

REVIEW SUMMARY FOR FILE - NT1423021610s.D

Lab ID: SLB0240-CAL3
nt14.i, 20230216.b\20230216.b\SIMABN2.m,   16-FEB-2023 19:30

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.931	0.941	-0.0095	Phenol
1.034	1.029	0.0052	Benzyl alcohol
0.513	0.518	-0.0052	N-Nitrosodimethylamine
0.994	0.000	0.9940	Pentachlorophenol
0.751	0.760	-0.0087	2-Fluorophenol

RRT check based on Ccal File: 20230216.b/NT1423021612s.D

On Column LOD for nt14.i, 20230216.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021611s.D

Date : 16-FEB-2023 20:06

Client ID:

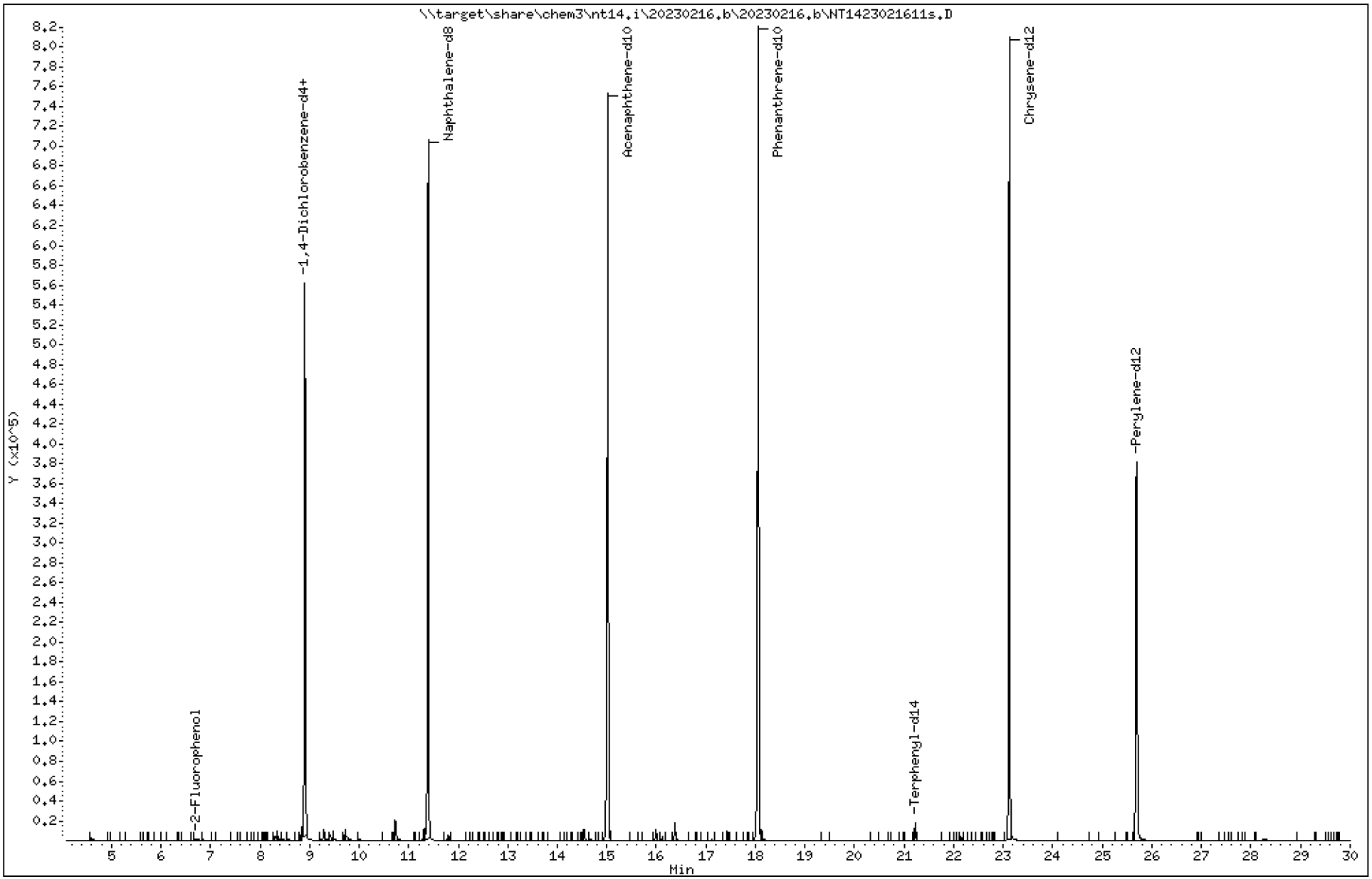
Instrument: nt14.i

Sample Info: SLB0240-CAL2

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021611s.D
Lab Smp Id: SLB0240-CAL2
Inj Date : 16-FEB-2023 20:06 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0240-CAL2
Misc Info :
Comment :
Method : \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Meth Date : 03-Mar-2023 14:04 van Quant Type: ISTD
Cal Date : 16-FEB-2023 20:42 Cal File: NT1423021612s.D
Als bottle: 9 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.710	6.764	(0.753)	4618	0.15000	0.04552
	3 Phenol	94	8.302	8.379	(0.932)	8456	0.10000	0.05650
	7 1,3-Dichlorobenzene	146	8.835	8.835	(0.992)	11520	0.10000	0.09691
*	8 1,4-Dichlorobenzene-d4	152	8.905	8.905	(1.000)	349348	4.00000	
	9 1,4-Dichlorobenzene	146	8.936	8.936	(1.003)	11067	0.10000	0.09760
	11 Benzyl alcohol	79	9.262	9.161	(1.040)	3860	0.10000	0.04034(H)
	12 1,2-Dichlorobenzene	146	9.293	9.293	(1.044)	10995	0.10000	0.09752
	13 2-Methylphenol	108	9.417	9.433	(1.058)	8940	0.10000	0.08621
	15 4-Methylphenol	108	9.704	9.720	(1.090)	6968	0.10000	0.06138
	16 N-Nitroso-di-n-propylamine	70	9.751	9.767	(1.095)	6944	0.10000	0.07981
	22 2,4-Dimethylphenol	107	10.728	10.745	(0.942)	17725	0.20000	0.1584
	24 Benzoic acid	105	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	11.310	11.310	(0.993)	10999	0.10000	0.09809
*	27 Naphthalene-d8	136	11.394	11.394	(1.000)	1224029	4.00000	
	30 Hexachlorobutadiene	225	11.804	11.804	(1.036)	6781	0.10000	0.09940
	39 Dimethylphthalate	163	14.543	14.551	(0.969)	17704	0.10000	0.08996
*	42 Acenaphthene-d10	162	15.015	15.016	(1.000)	645081	4.00000	
	50 Diethylphthalate	149	15.989	15.997	(1.065)	19559	0.10000	0.07941
	54 N-Nitrosodiphenylamine	169	16.375	16.384	(0.907)	15330	0.10000	0.08189
	57 Hexachlorobenzene	284	17.432	17.432	(0.965)	9672	0.10000	0.09955
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.059	18.059	(1.000)	1496005	4.00000	
$	66 Terphenyl-d14	244	21.224	21.224	(0.918)	24878	0.10000	0.09600
	67 Butylbenzylphthalate	149	22.153	22.153	(0.958)	5003	0.10000	0.04098
*	69 Chrysene-d12	240	23.121	23.121	(1.000)	973406	4.00000	
*	77 Perylene-d12	264	25.691	25.691	(1.000)	661889	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.272	28.288	(1.100)	6405	0.10000	0.05536
	90 N-Nitrosodimethylamine	74	4.586	4.618	(0.515)	7342	0.20000	0.09436

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021611s.D
Lab Smp Id: SLB0240-CAL2
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 18:18
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	393779	196890	787558	349348	-11.28
27 Naphthalene-d8	1399029	699515	2798058	1224029	-12.51
42 Acenaphthene-d10	759723	379862	1519446	645081	-15.09
59 Phenanthrene-d10	1756156	878078	3512312	1496005	-14.81
69 Chrysene-d12	1174128	587064	2348256	973406	-17.10
77 Perylene-d12	826011	413006	1652022	661889	-19.87

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	-0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.39	-0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	-0.00
59 Phenanthrene-d10	18.06	17.56	18.56	18.06	-0.00
69 Chrysene-d12	23.12	22.62	23.62	23.12	-0.00
77 Perylene-d12	25.68	25.18	26.18	25.69	0.03

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

REVIEW SUMMARY FOR FILE - NT1423021611s.D

Lab ID: SLB0240-CAL2
nt14.i, 20230216.b\20230216.b\SIMABN2.m,   16-FEB-2023 20:06

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.932	0.941	-0.0087	Phenol
1.040	1.029	0.0113	Benzyl alcohol
0.753	0.760	-0.0061	2-Fluorophenol

RRT check based on Ccal File: 20230216.b/NT1423021612s.D

On Column LOD for nt14.i, 20230216.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021612s.D

Date : 16-FEB-2023 20:42

Client ID:

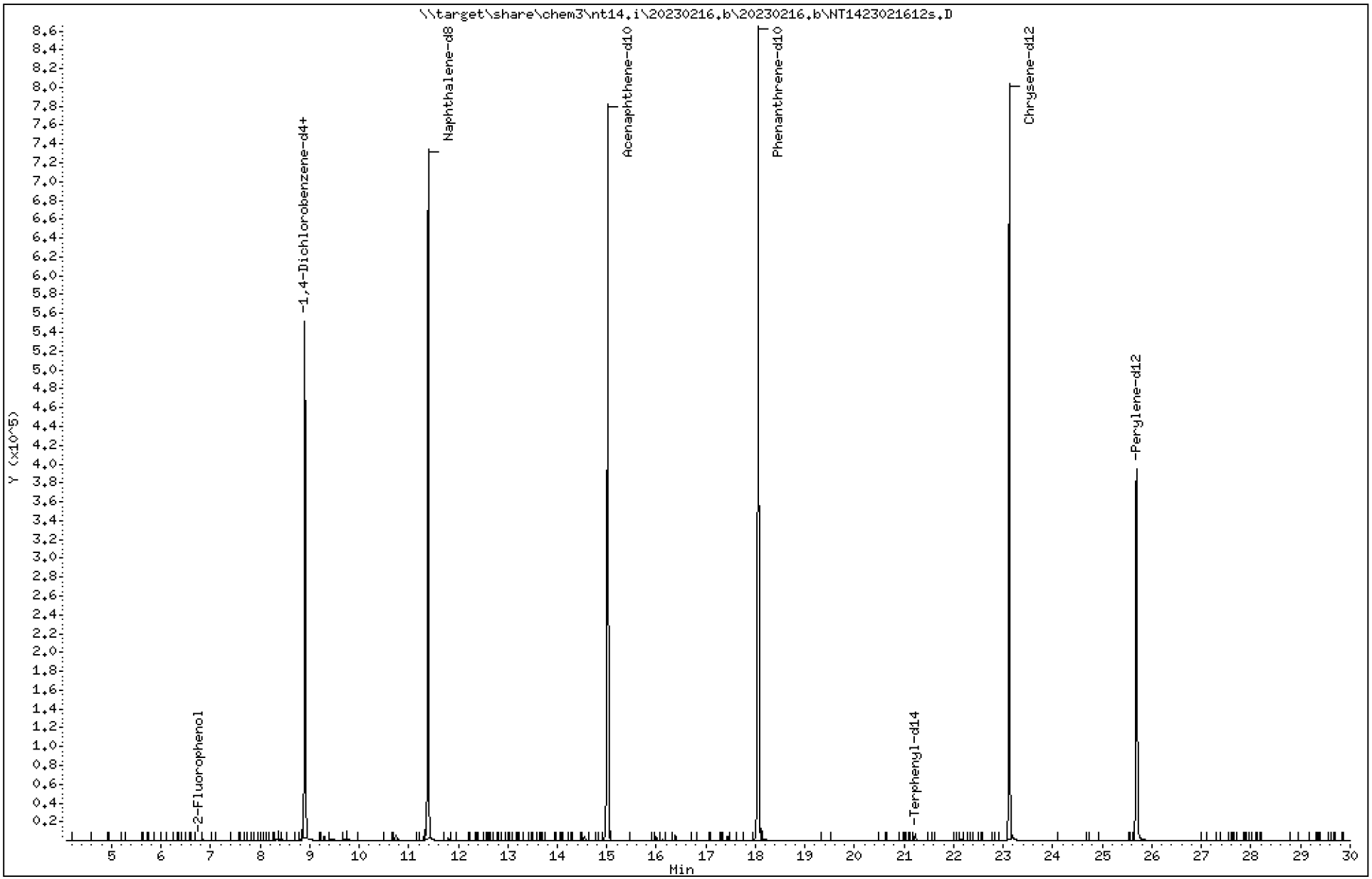
Instrument: nt14.i

Sample Info: SLB0240-CAL1

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021612s.D
Lab Smp Id: SLB0240-CAL1
Inj Date : 16-FEB-2023 20:42 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0240-CAL1
Misc Info :
Comment :
Method : \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Meth Date : 03-Mar-2023 14:04 van Quant Type: ISTD
Cal Date : 16-FEB-2023 20:42 Cal File: NT1423021612s.D
Als bottle: 10 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.764	6.764	(0.760)	953	0.07500	0.009288(H)
	3 Phenol	94	8.379	8.379	(0.941)	3296	0.05000	0.02178(M)
	7 1,3-Dichlorobenzene	146	8.835	8.835	(0.992)	5566	0.05000	0.04630
*	8 1,4-Dichlorobenzene-d4	152	8.905	8.905	(1.000)	353280	4.00000	
	9 1,4-Dichlorobenzene	146	8.936	8.936	(1.003)	5412	0.05000	0.04720
	11 Benzyl alcohol	79	9.161	9.161	(1.029)	444	0.05000	0.004589
	12 1,2-Dichlorobenzene	146	9.293	9.293	(1.044)	5291	0.05000	0.04641
	13 2-Methylphenol	108	9.433	9.433	(1.059)	3778	0.05000	0.03603
	15 4-Methylphenol	108	9.720	9.720	(1.092)	2508	0.05000	0.02185
	16 N-Nitroso-di-n-propylamine	70	9.766	9.767	(1.097)	2577	0.05000	0.02930(M)
	22 2,4-Dimethylphenol	107	10.744	10.745	(0.943)	7046	0.10000	0.06180
	24 Benzoic acid	105	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	11.310	11.310	(0.993)	5258	0.05000	0.04608(M)
*	27 Naphthalene-d8	136	11.394	11.394	(1.000)	1245409	4.00000	
	30 Hexachlorobutadiene	225	11.804	11.804	(1.036)	3490	0.05000	0.05028
	39 Dimethylphthalate	163	14.551	14.551	(0.969)	8008	0.05000	0.03958
*	42 Acenaphthene-d10	162	15.016	15.016	(1.000)	663197	4.00000	
	50 Diethylphthalate	149	15.997	15.997	(1.065)	8335	0.05000	0.03292
	54 N-Nitrosodiphenylamine	169	16.383	16.384	(0.907)	5698	0.05000	0.02972(M)
	57 Hexachlorobenzene	284	17.432	17.432	(0.965)	4609	0.05000	0.04629
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.059	18.059	(1.000)	1533128	4.00000	
$	66 Terphenyl-d14	244	21.224	21.224	(0.918)	10837	0.05000	0.04158
	67 Butylbenzylphthalate	149	22.153	22.153	(0.958)	1856	0.05000	0.01512
*	69 Chrysene-d12	240	23.121	23.121	(1.000)	979054	4.00000	
*	77 Perylene-d12	264	25.691	25.691	(1.000)	656343	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.288	28.288	(1.101)	2707	0.05000	0.02361
	90 N-Nitrosodimethylamine	74	4.617	4.618	(0.519)	1928	0.10000	0.02449(M)

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021612s.D
Lab Smp Id: SLB0240-CAL1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 18:18
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	393779	196890	787558	353280	-10.28
27 Naphthalene-d8	1399029	699515	2798058	1245409	-10.98
42 Acenaphthene-d10	759723	379862	1519446	663197	-12.71
59 Phenanthrene-d10	1756156	878078	3512312	1533128	-12.70
69 Chrysene-d12	1174128	587064	2348256	979054	-16.61
77 Perylene-d12	826011	413006	1652022	656343	-20.54

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	-0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.39	-0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	-0.00
59 Phenanthrene-d10	18.06	17.56	18.56	18.06	-0.00
69 Chrysene-d12	23.12	22.62	23.62	23.12	-0.00
77 Perylene-d12	25.68	25.18	26.18	25.69	0.03

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

REVIEW SUMMARY FOR FILE - NT1423021612s.D

Lab ID: SLB0240-CAL1
nt14.i, 20230216.b\20230216.b\SIMABN2.m,   16-FEB-2023 20:42

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: 20230216.b/NT1423021612s.D

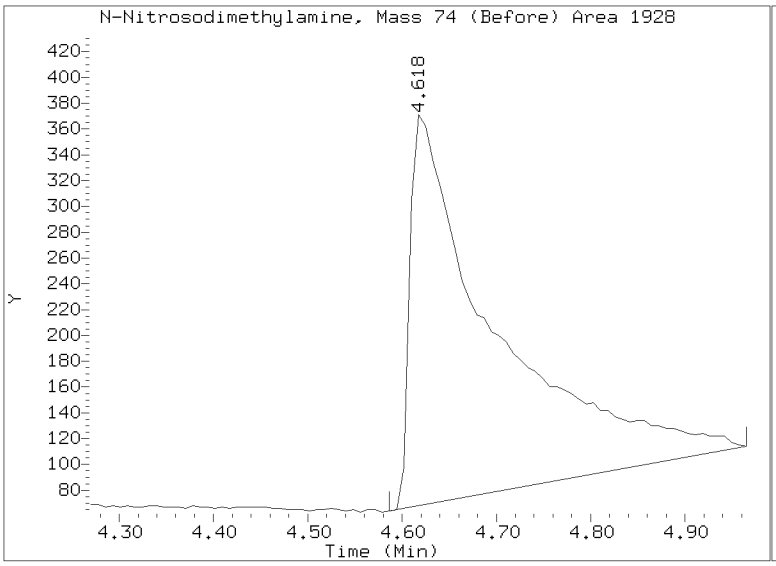
On Column LOD for nt14.i, 20230216.b\SIMABN2.m, PSDDA.sub = 0.0000

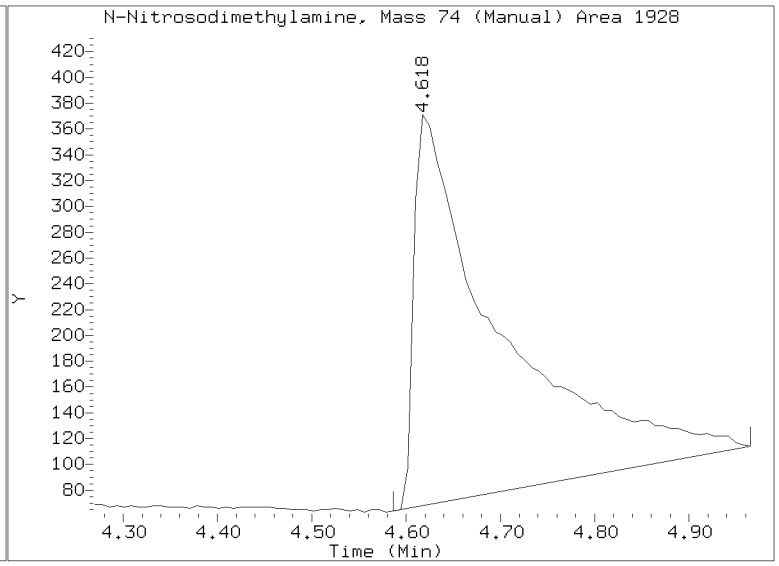
Exception: 1,2,4-Trichlorobenzene 0.0010

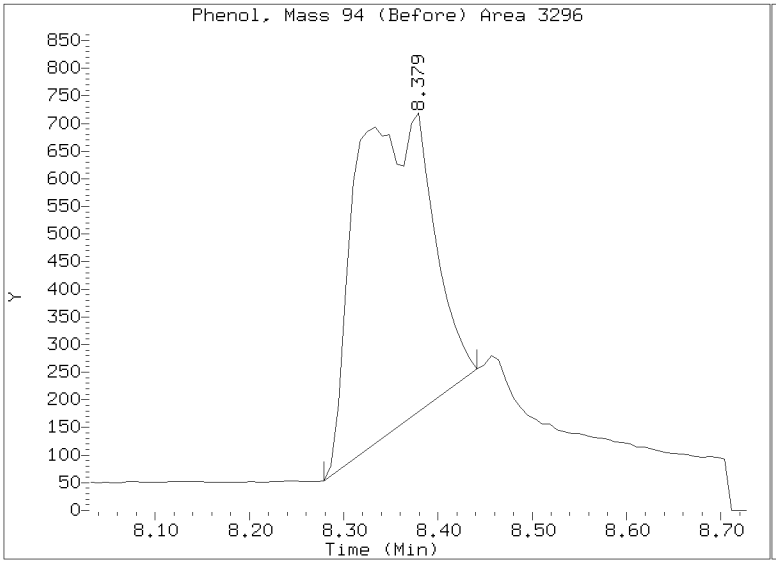
* Only compounds listed in the work order have been verified by the analyst *

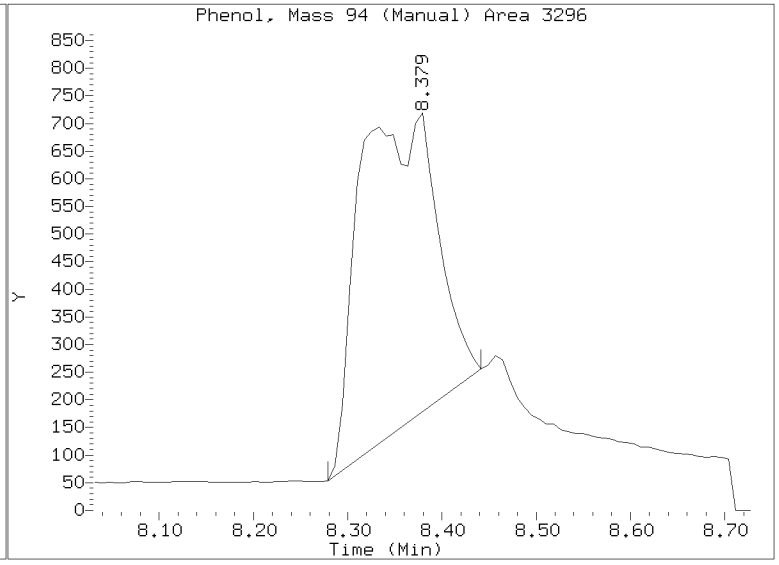
Quant Ion Manual Peak Adjustment Report

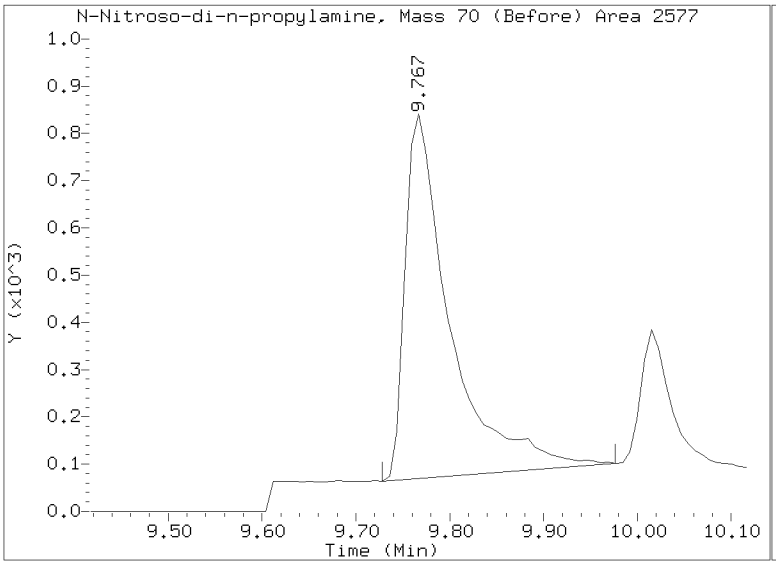
Datafile: //target/share/chem3/nt14.i/20230216.b/20230216.b/NT1423021612s.D
Injection Date: 16-FEB-2023 20:42
Lab ID:SLB0240-CAL1 Client ID:
Report Date: 03/03/2023 14:07

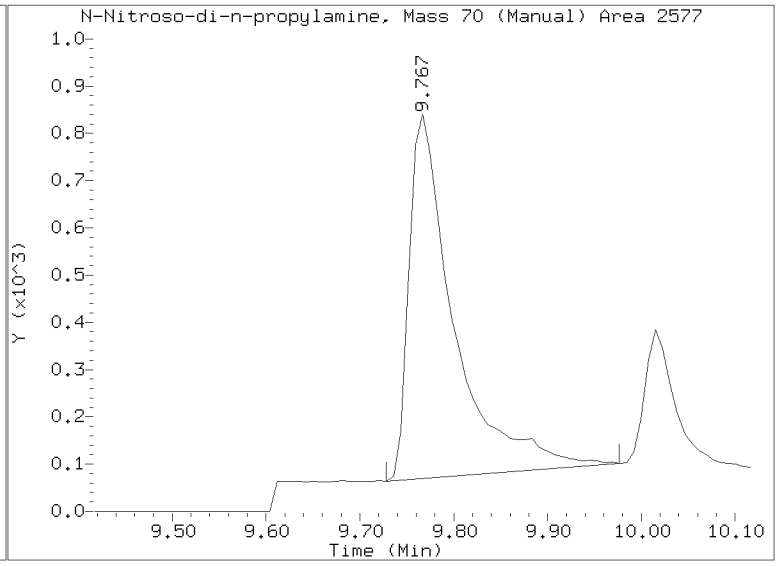






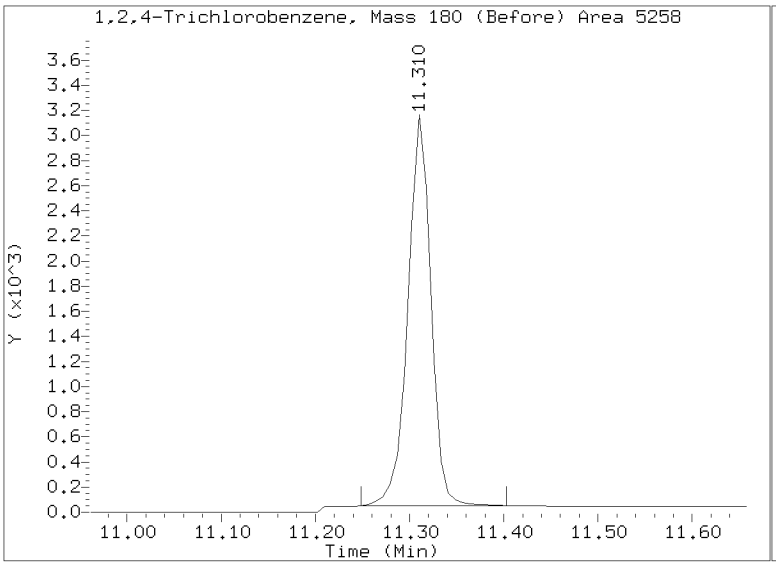


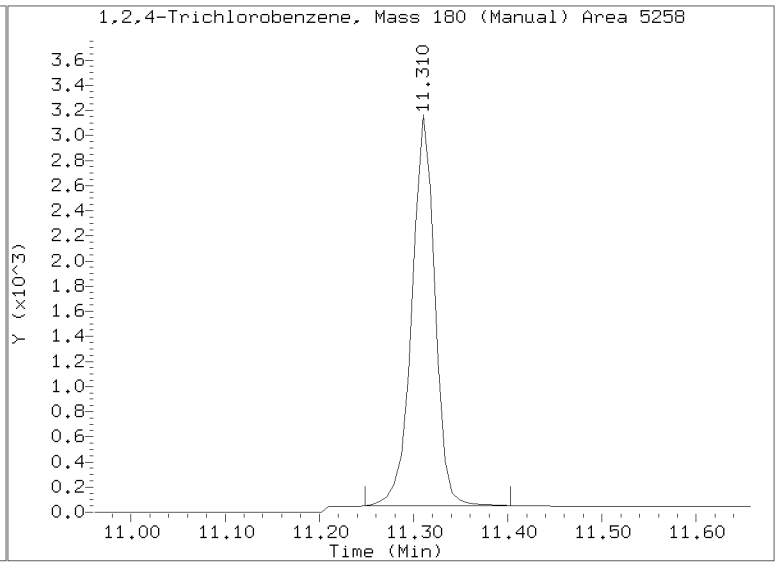


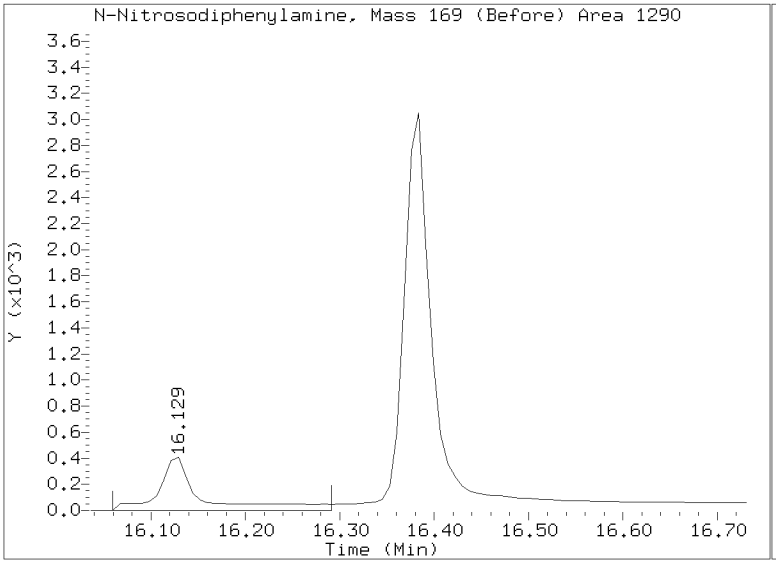


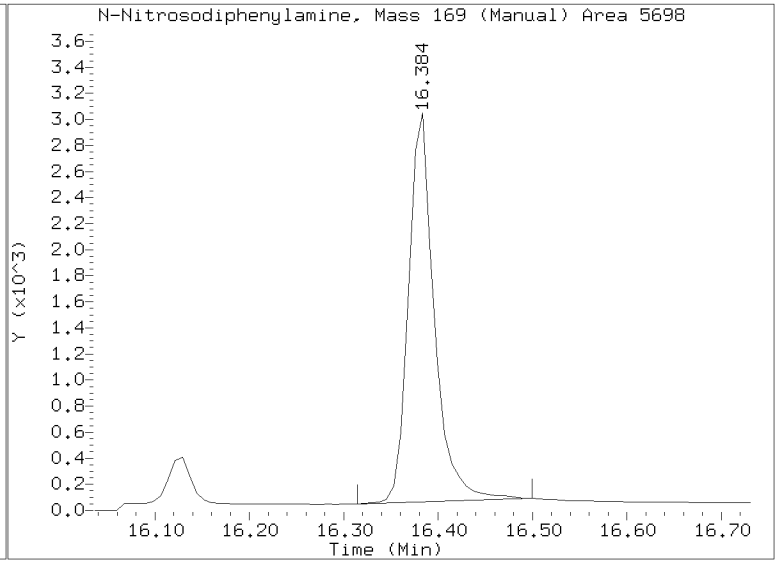
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230216.b/20230216.b/NT1423021612s.D
Injection Date: 16-FEB-2023 20:42
Lab ID:SLB0240-CAL1 Client ID:
Report Date: 03/03/2023 14:07









Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

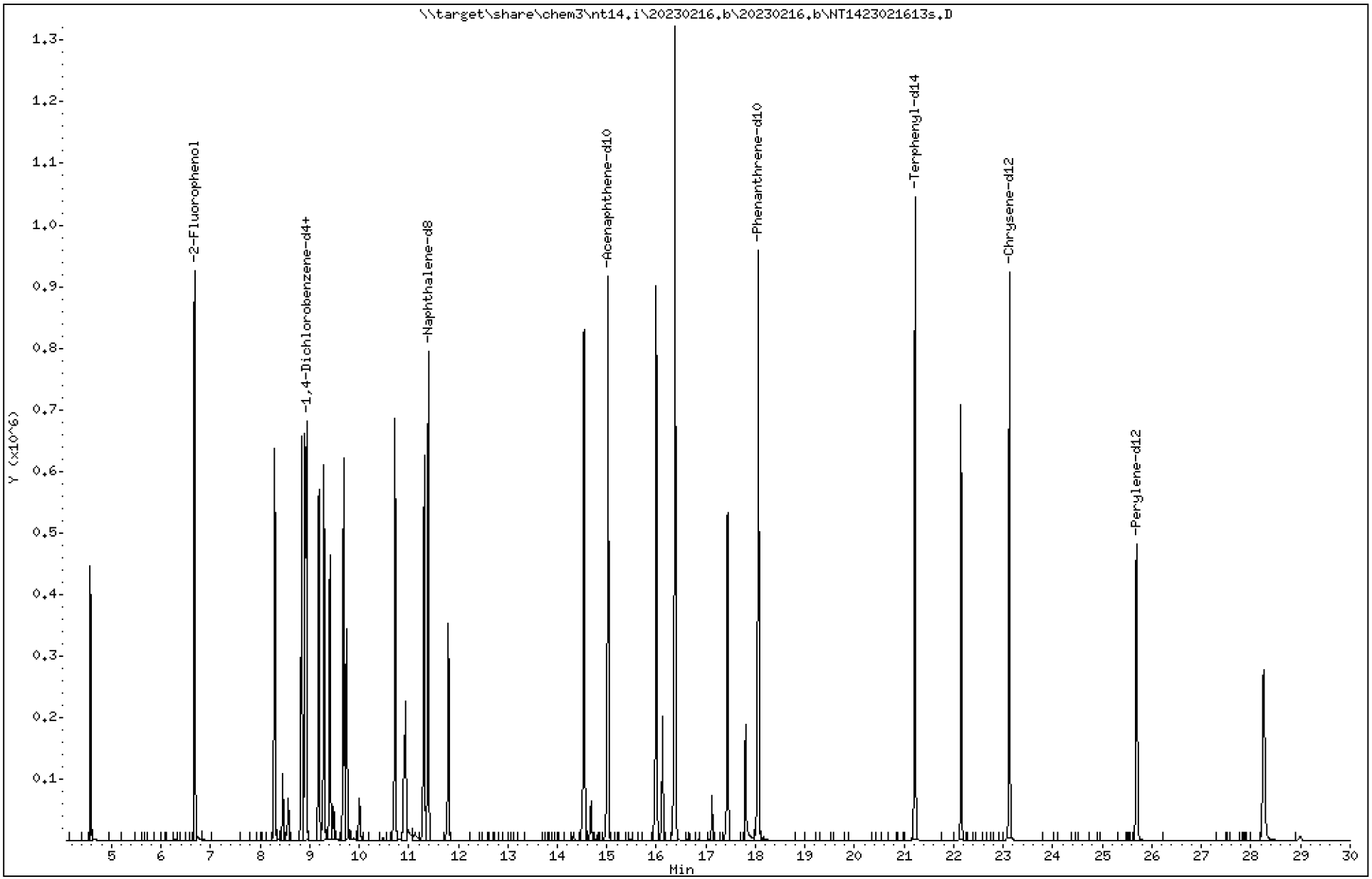
Instrument: nt14.i

Sample Info: SLB0240-SCV1

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

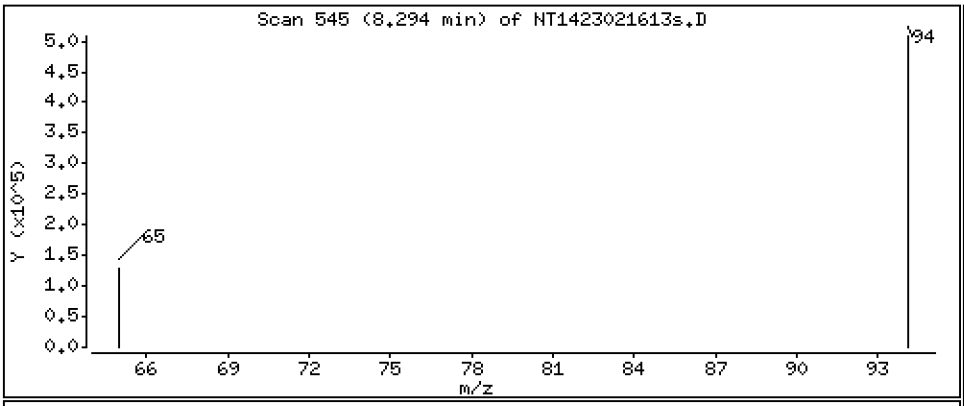
Operator: DSD

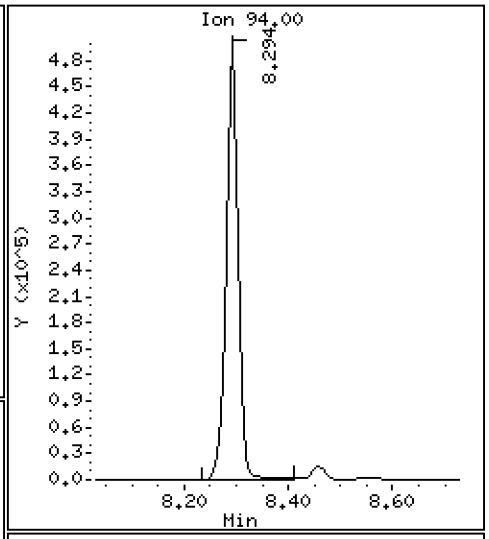
Column phase: ZB-5msi

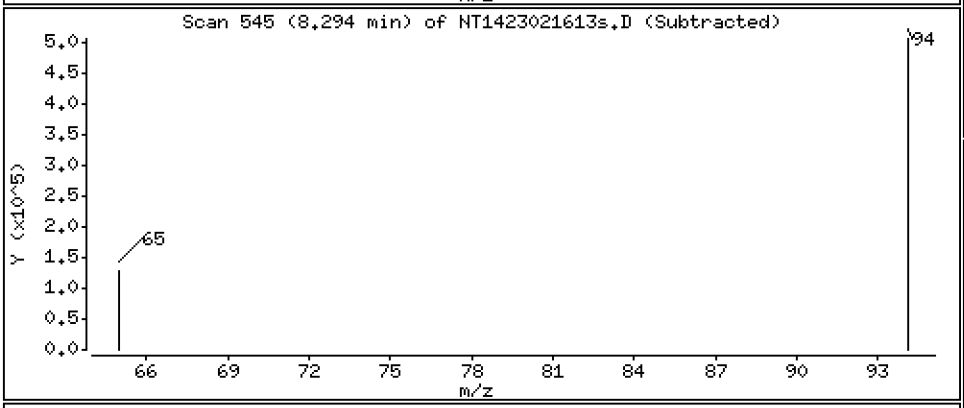
Column diameter: 0.25

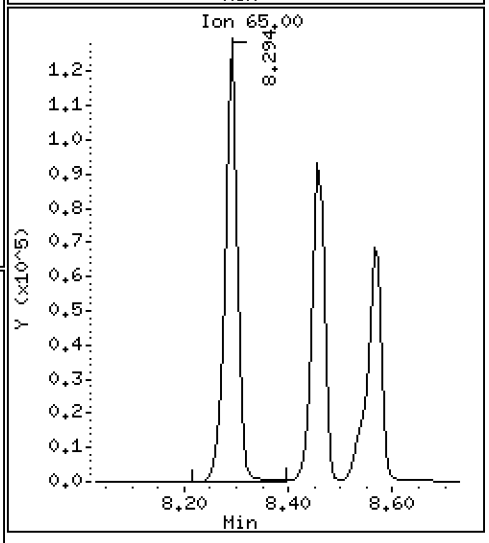
3 Phenol

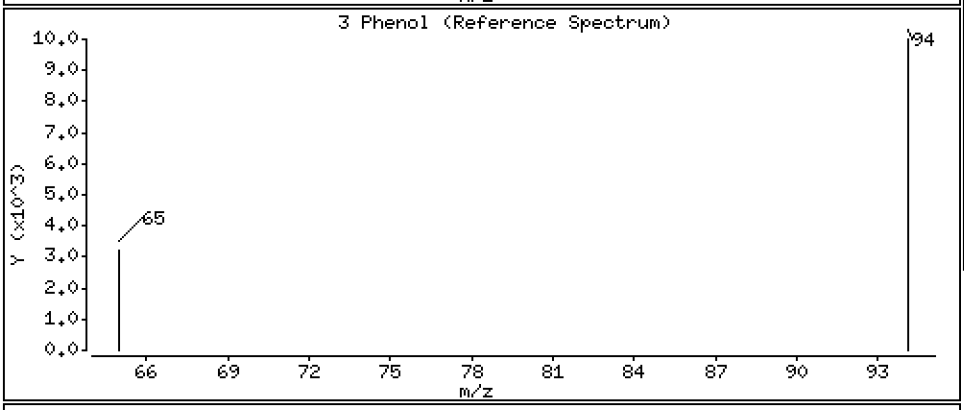
Concentration: 4.556 ug/mL

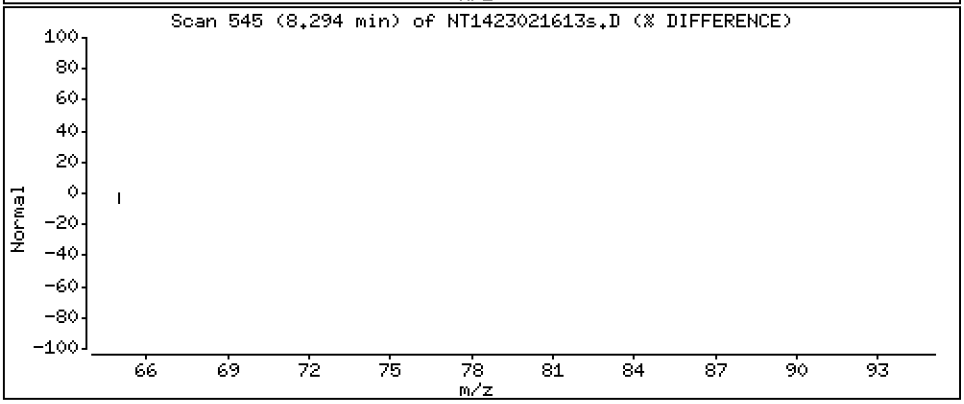












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

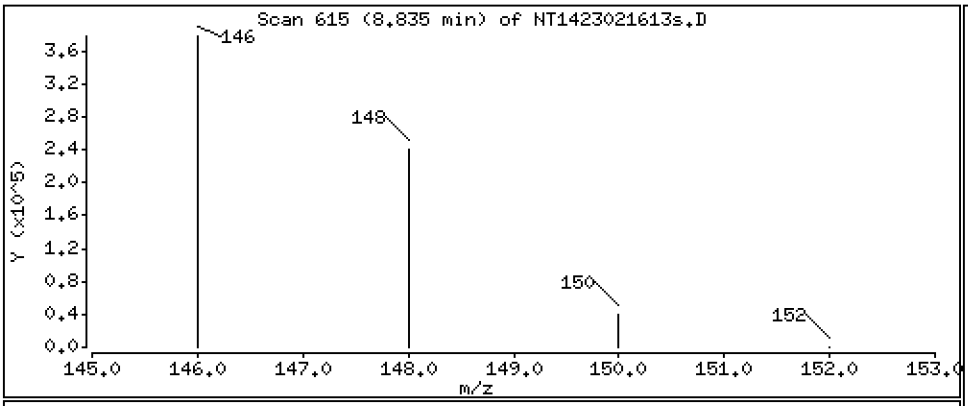
Operator: DSD

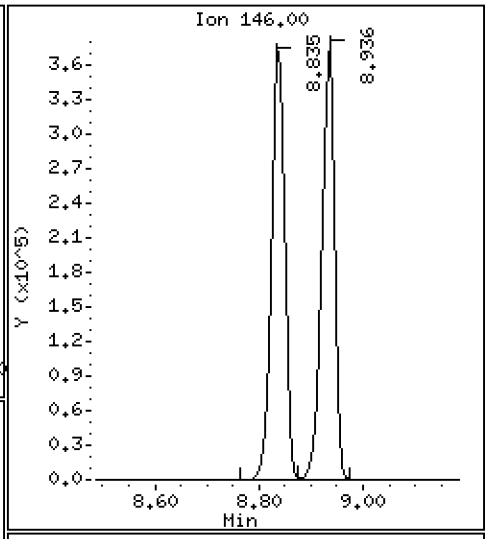
Column phase: ZB-5msi

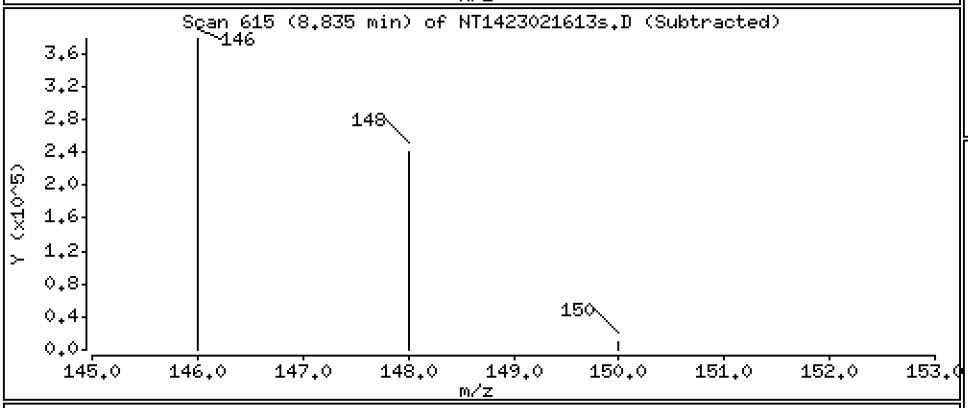
Column diameter: 0.25

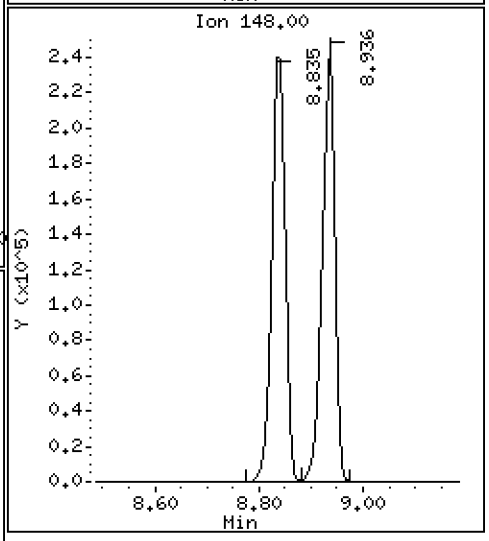
7 1,3-Dichlorobenzene

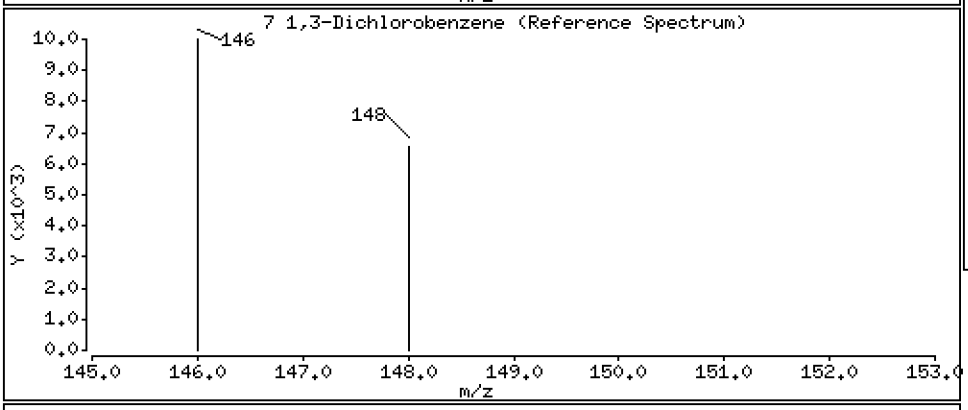
Concentration: 4.809 ug/mL

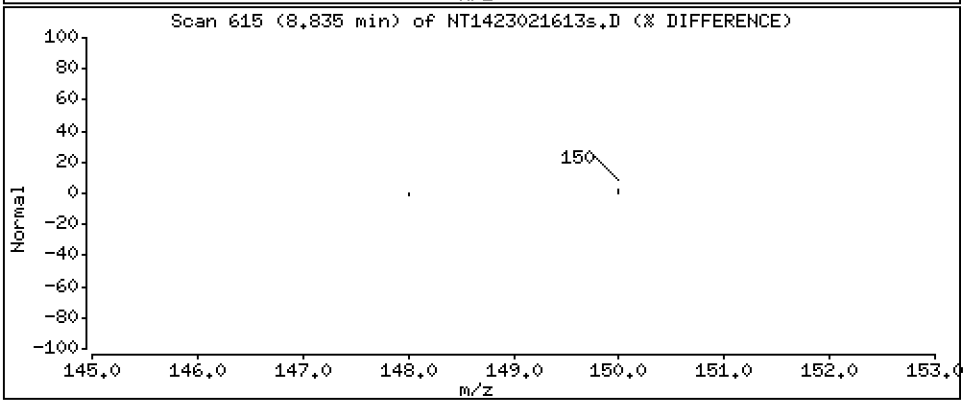












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

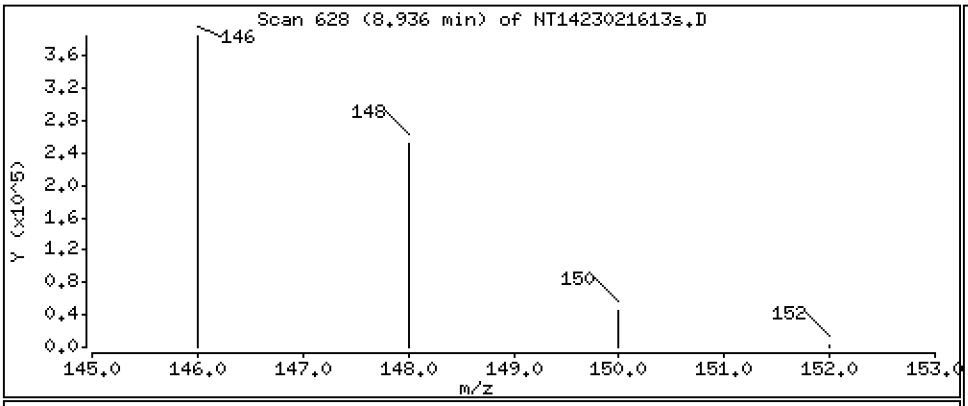
Operator: DSD

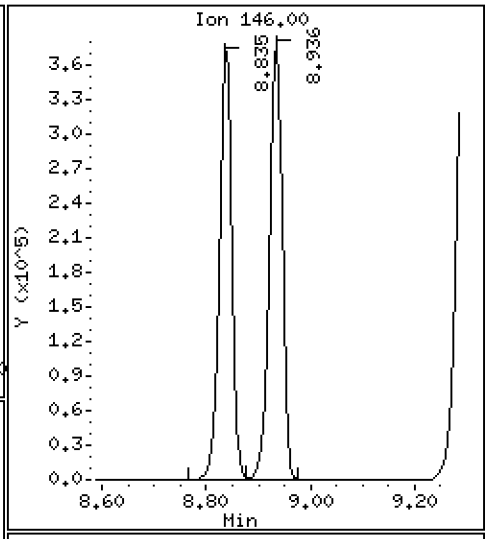
Column phase: ZB-5msi

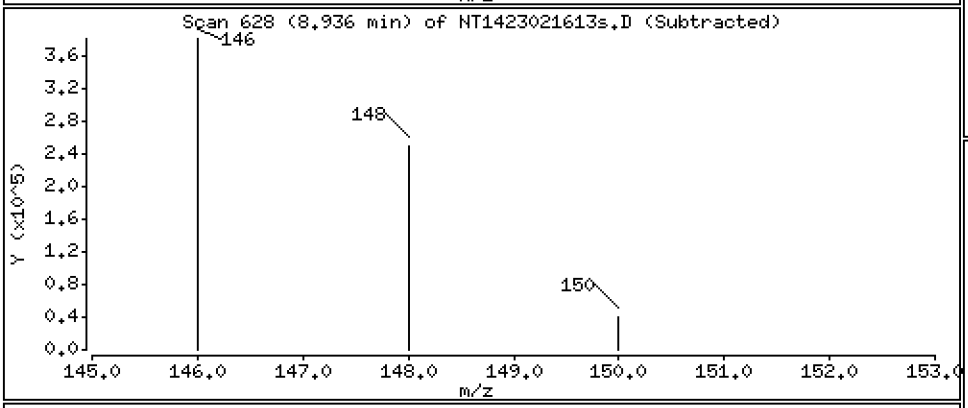
Column diameter: 0.25

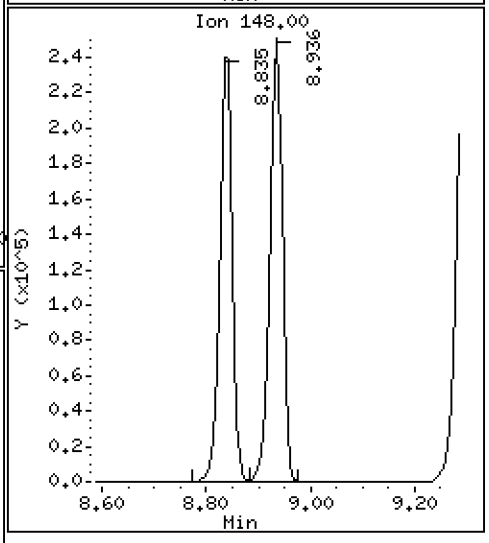
9 1,4-Dichlorobenzene

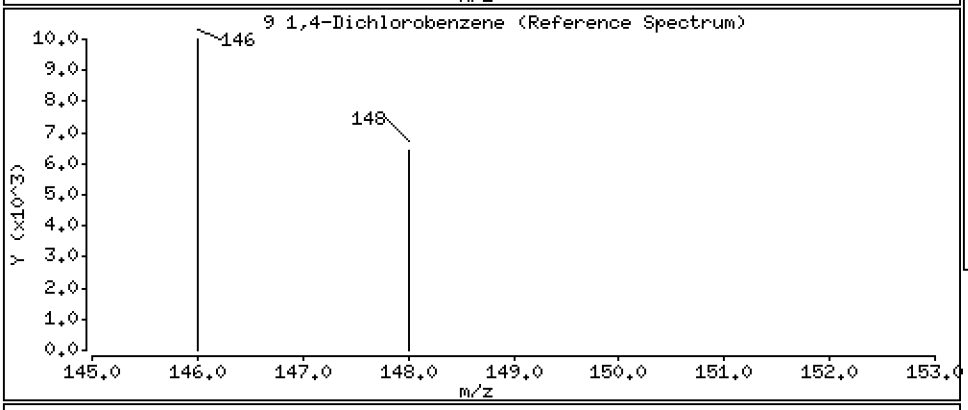
Concentration: 4.850 ug/mL

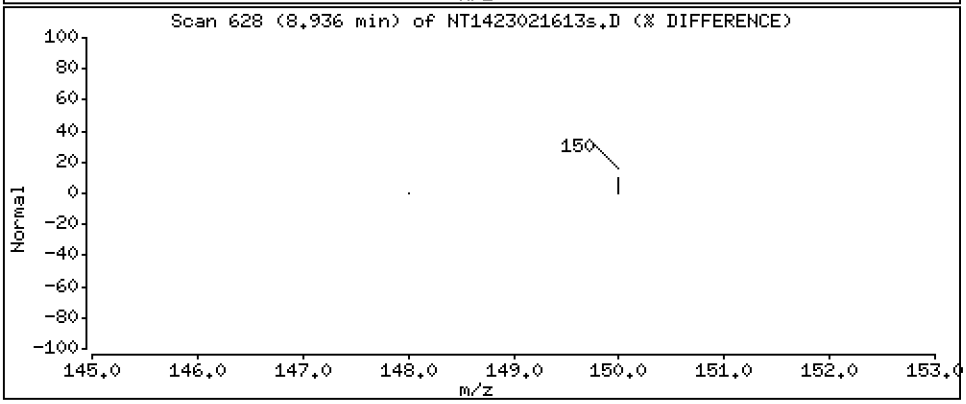












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

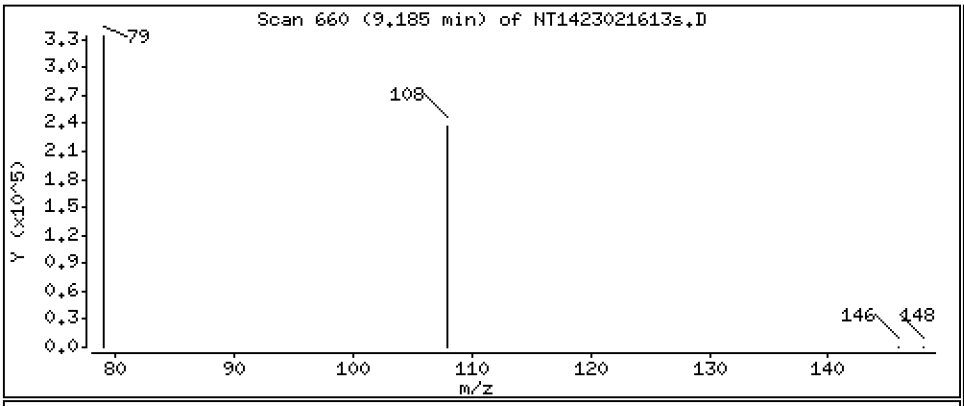
Operator: DSD

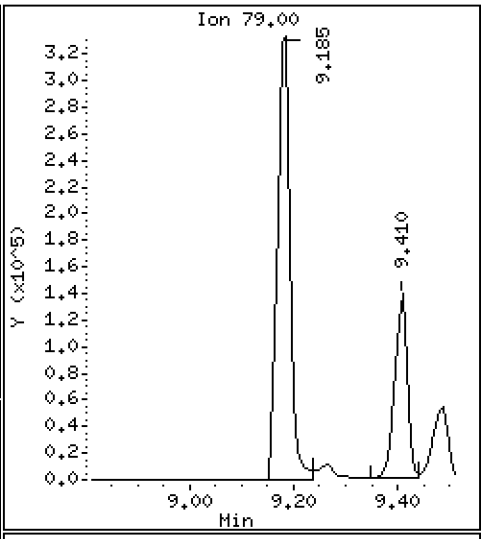
Column phase: ZB-5msi

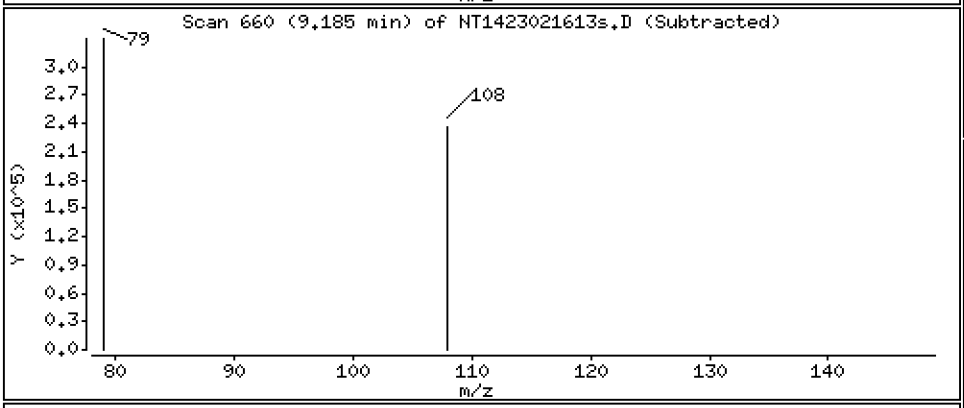
Column diameter: 0.25

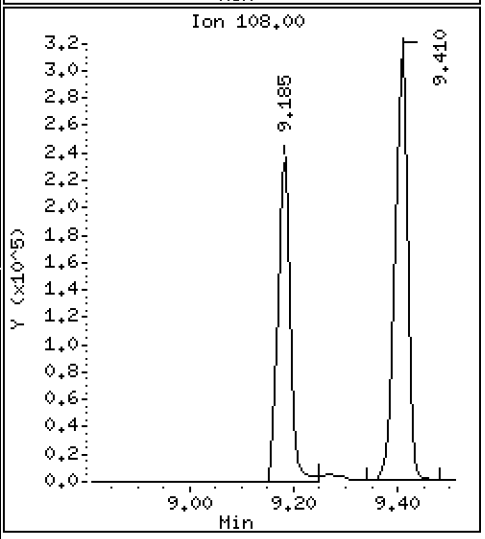
11 Benzyl alcohol

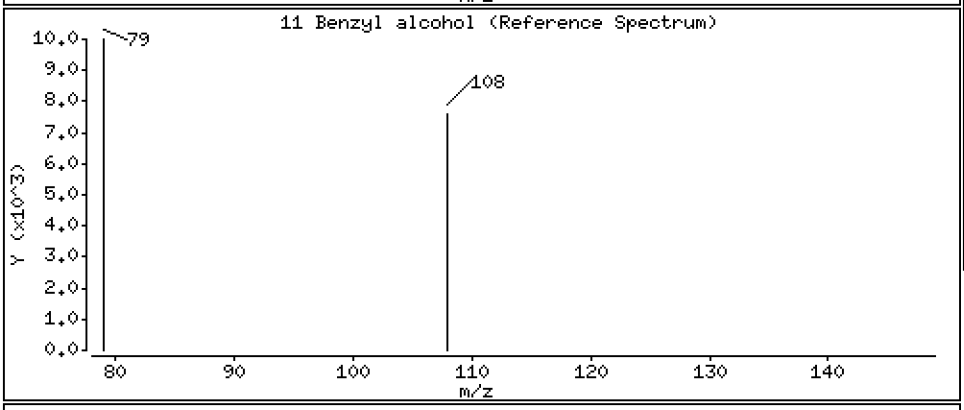
Concentration: 5.300 ug/mL

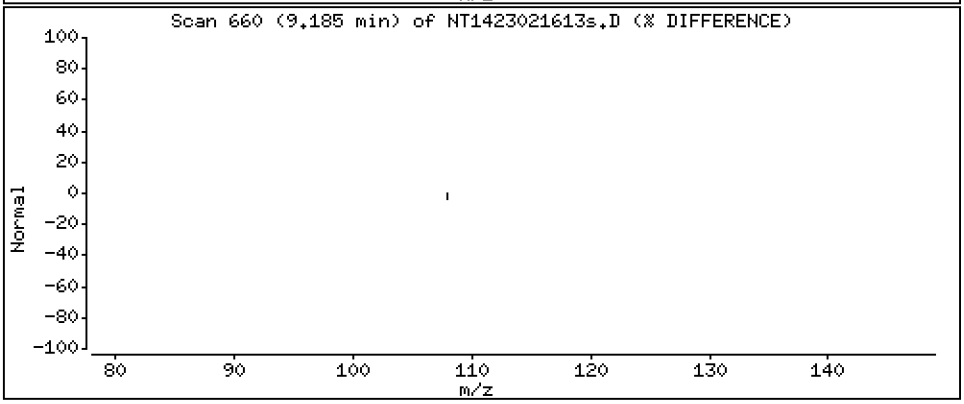












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

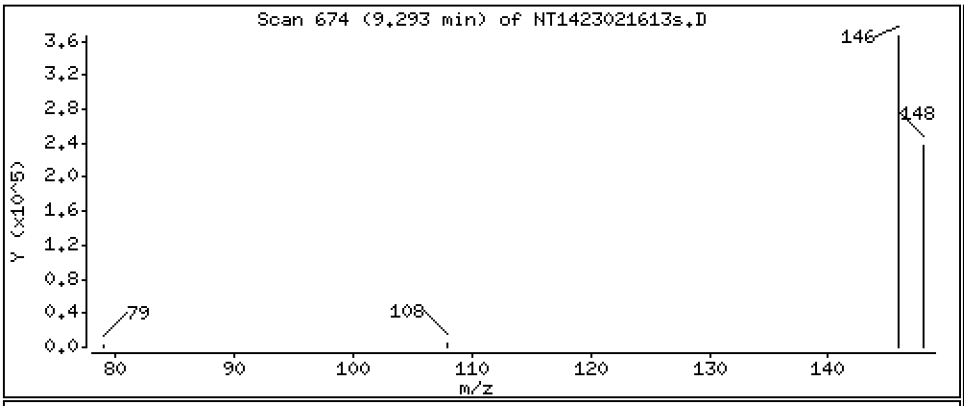
Operator: DSD

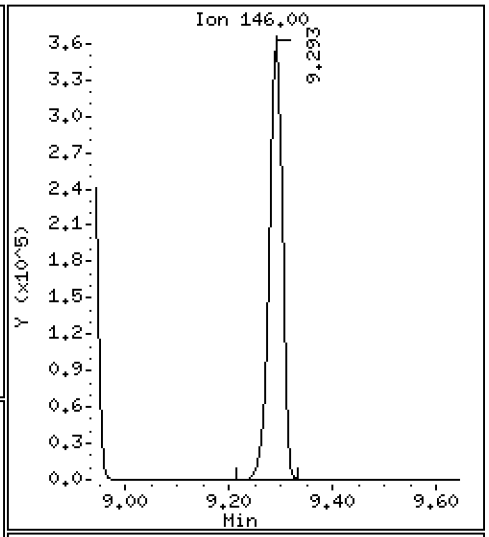
Column phase: ZB-5msi

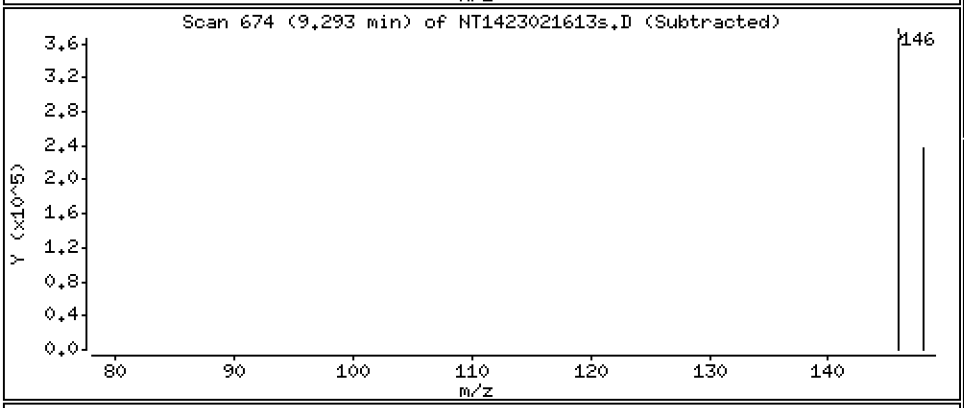
Column diameter: 0.25

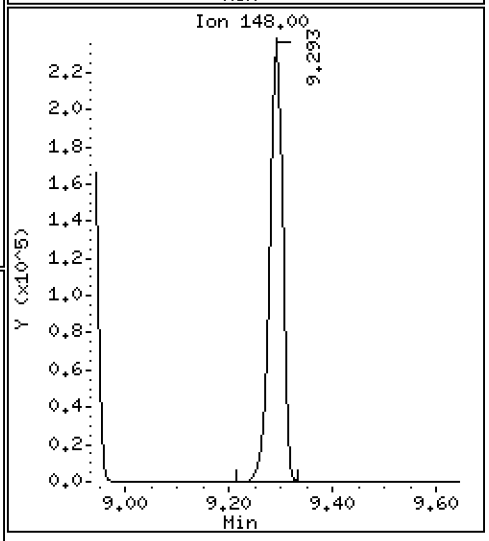
12 1,2-Dichlorobenzene

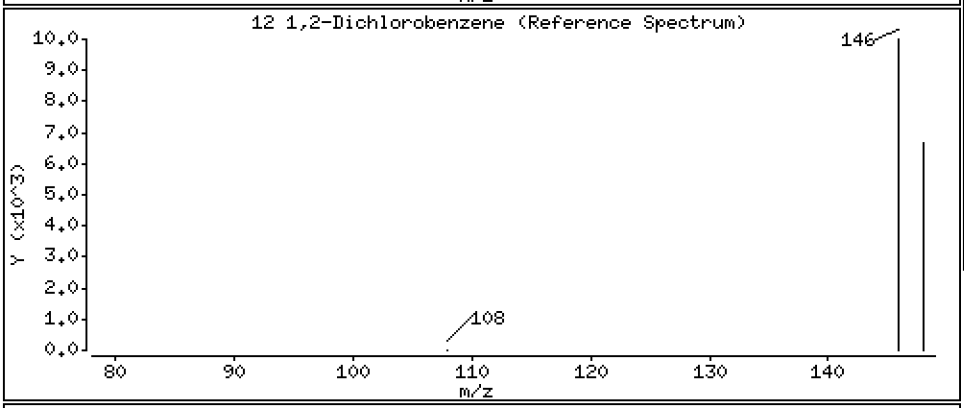
Concentration: 4.795 ug/mL

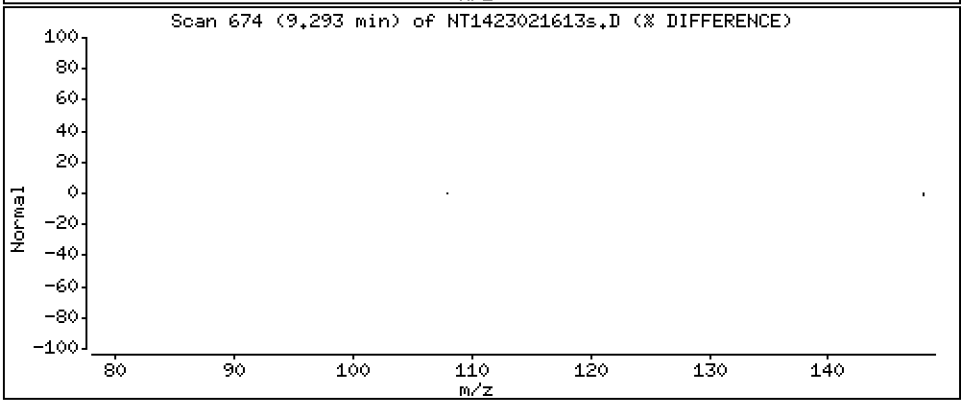












Date : 16-FEB-2023 21:18

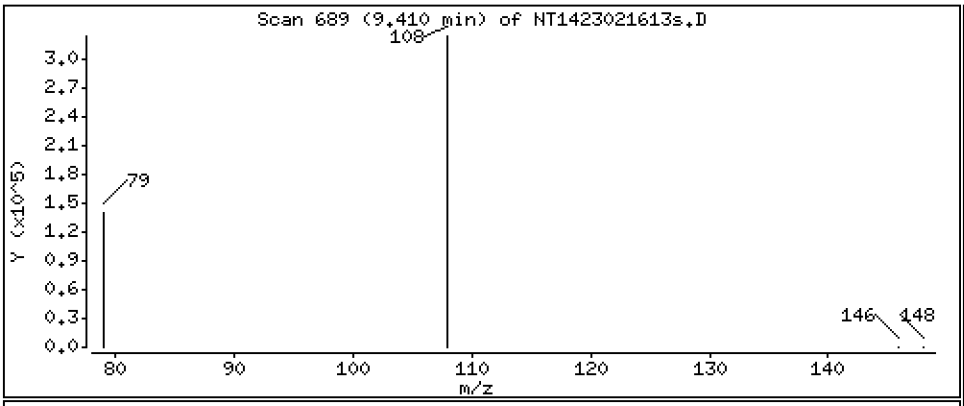
Client ID: Instrument: nt14.i

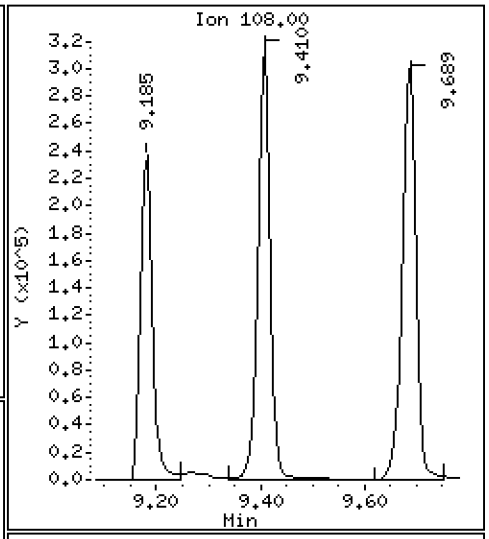
Sample Info: SLB0240-SCV1

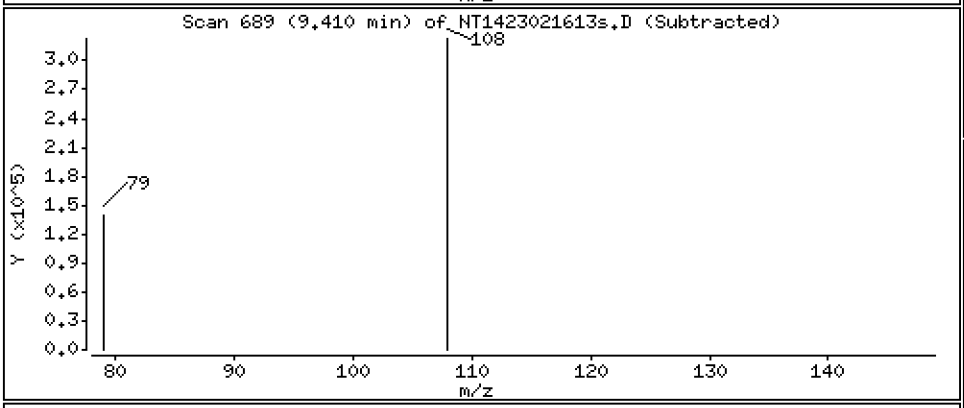
Operator: DSD

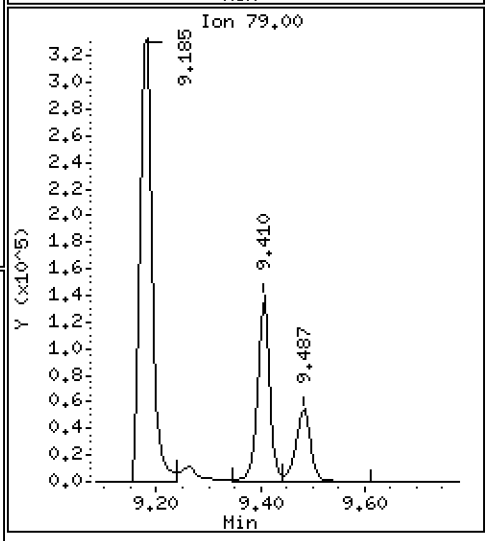
Column phase: ZB-5msi Column diameter: 0.25

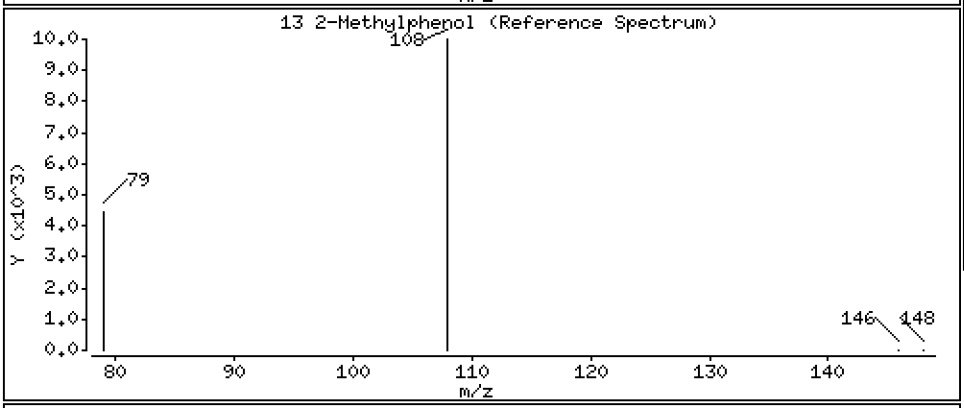
13 2-Methylphenol Concentration: 4.507 ug/mL

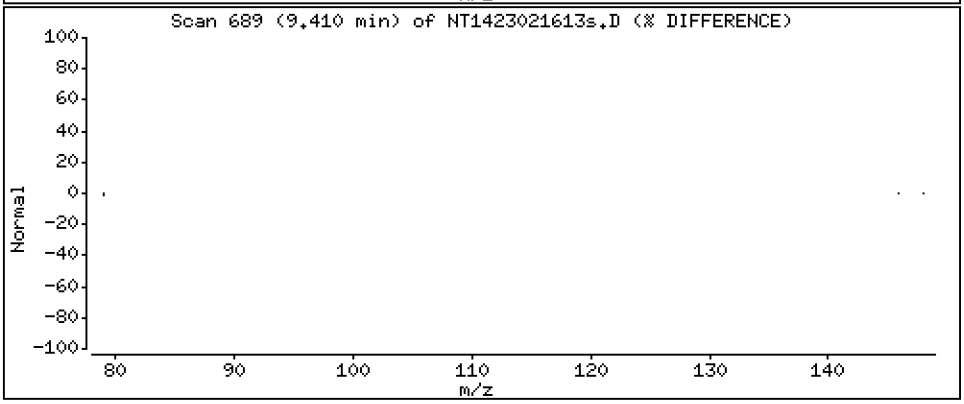












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

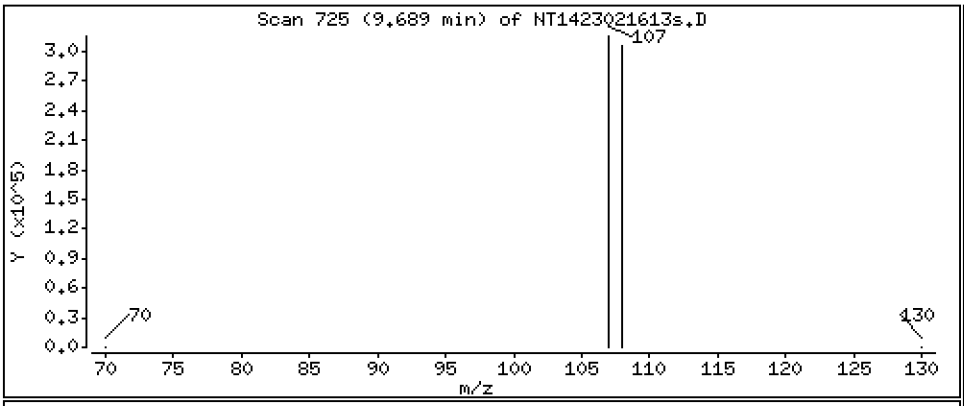
Operator: DSD

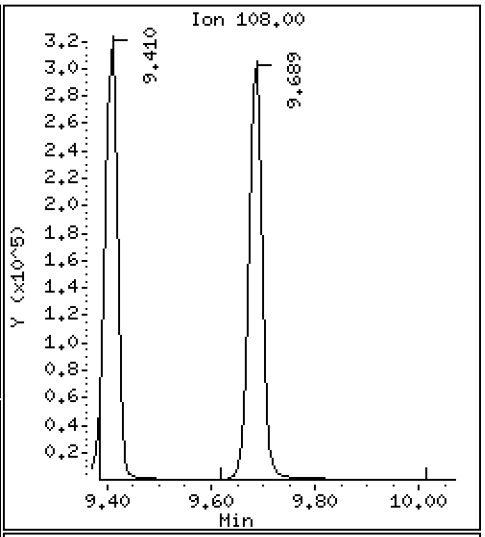
Column phase: ZB-5msi

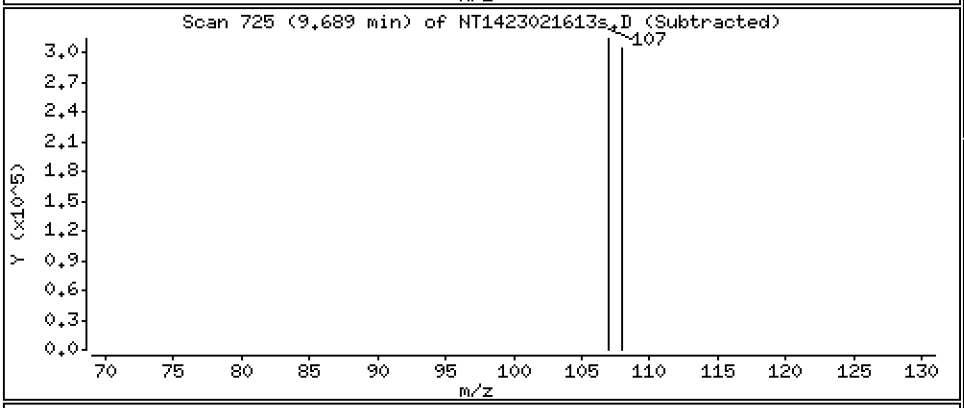
Column diameter: 0.25

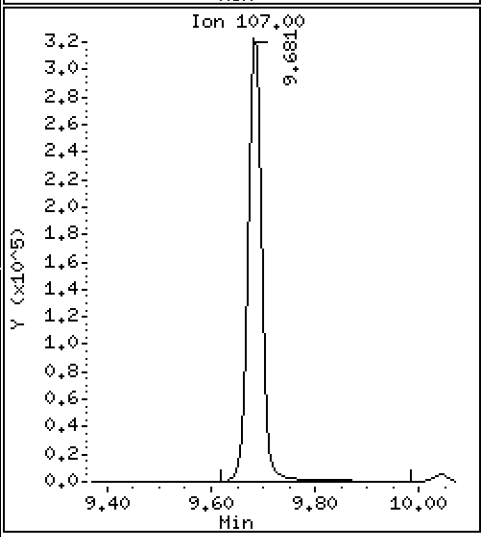
15 4-Methylphenol

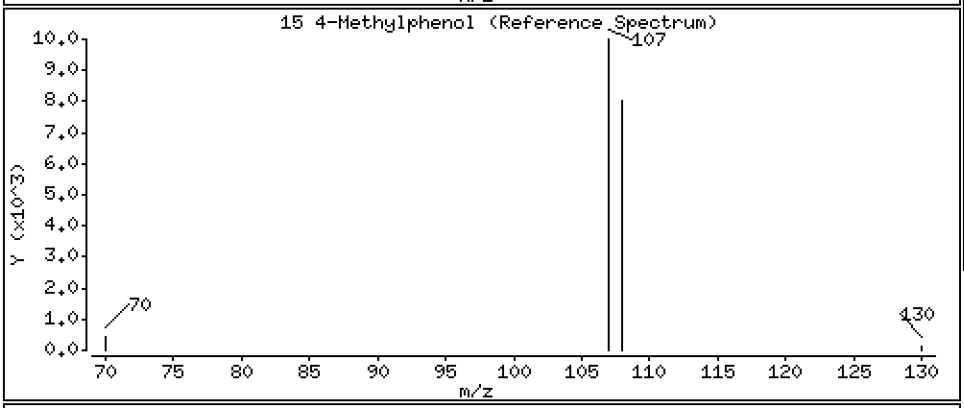
Concentration: 4.460 ug/mL

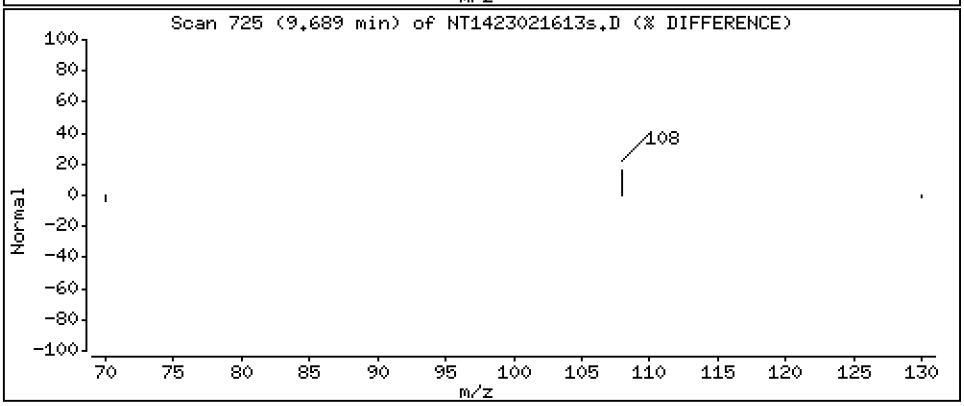












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

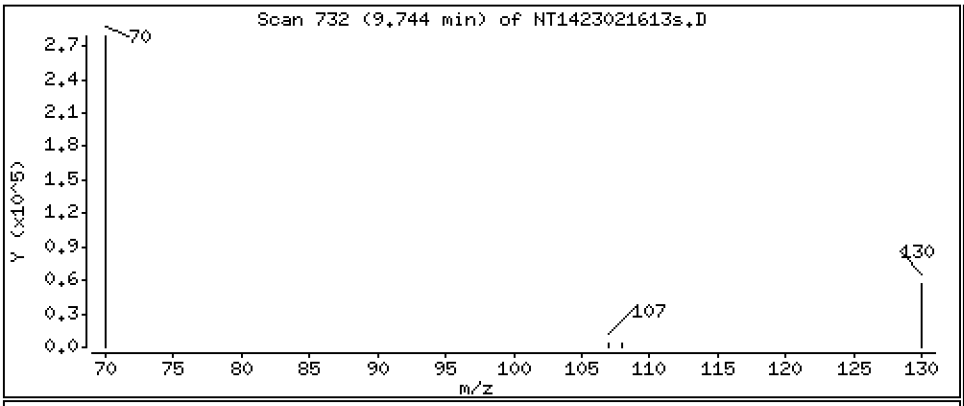
Operator: DSD

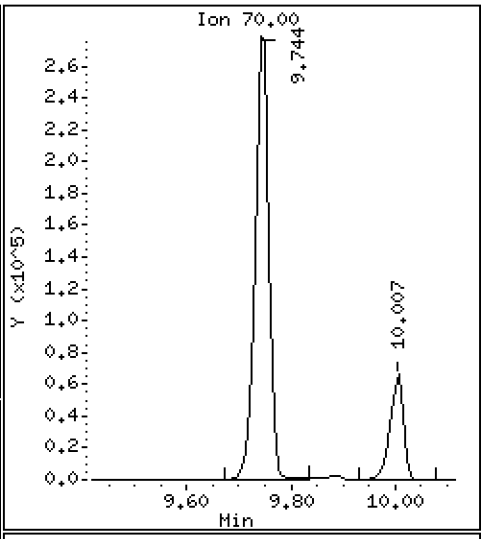
Column phase: ZB-5msi

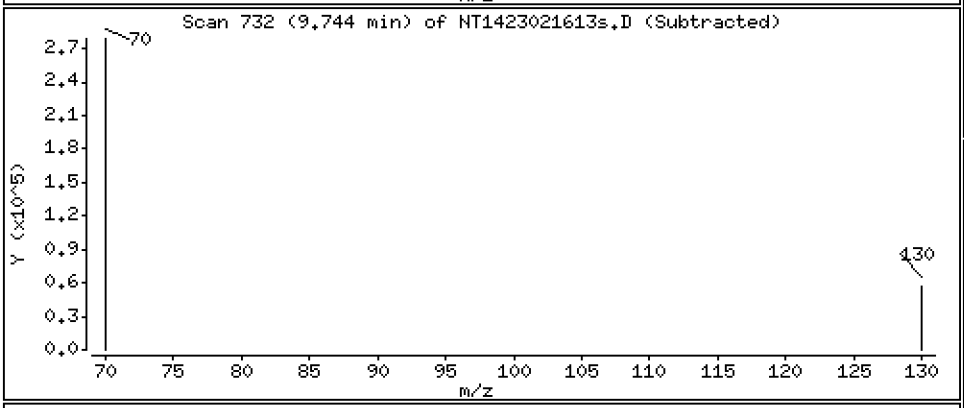
Column diameter: 0.25

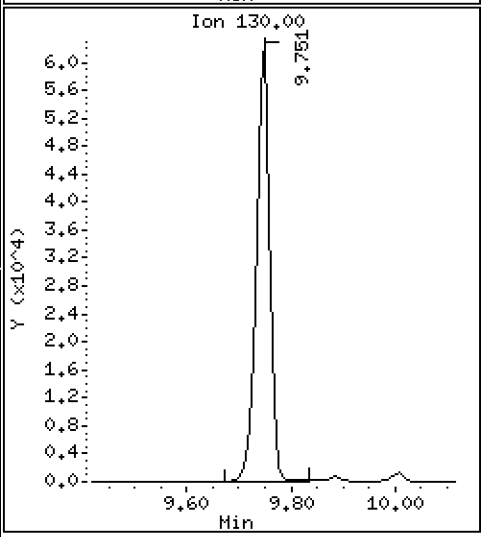
16 N-Nitroso-di-n-propylamine

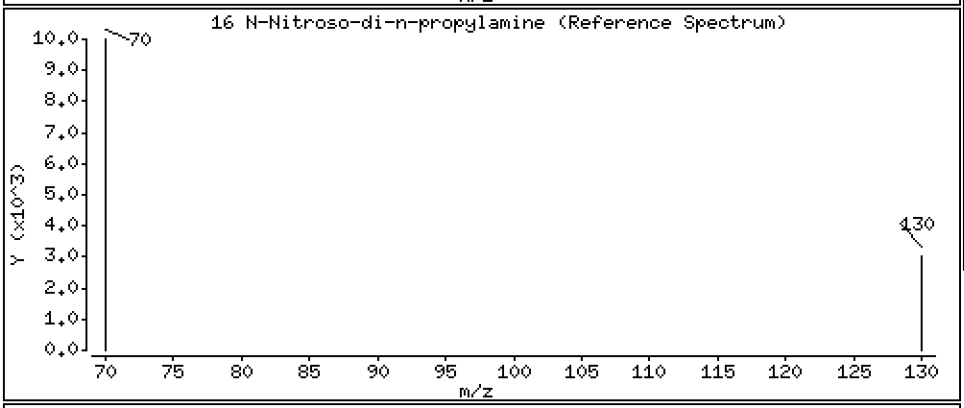
Concentration: 5.047 ug/mL

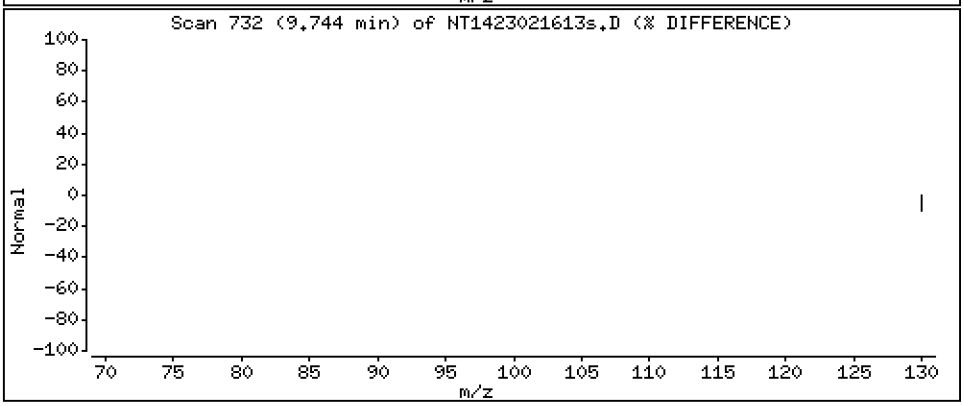












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

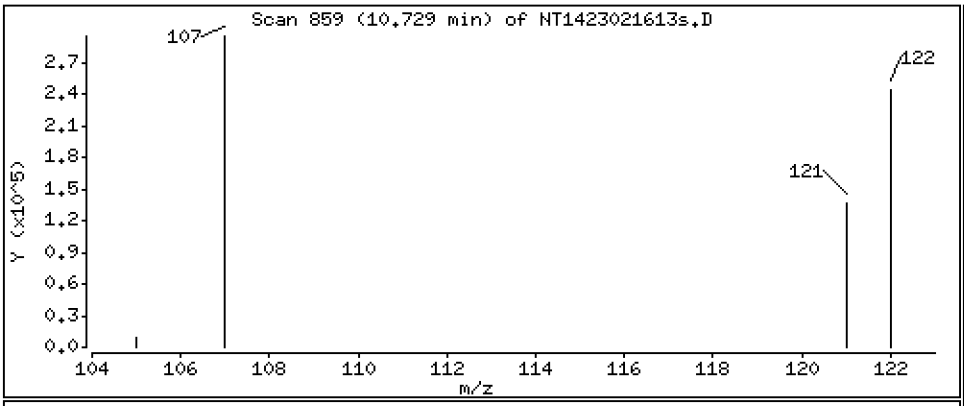
Operator: DSD

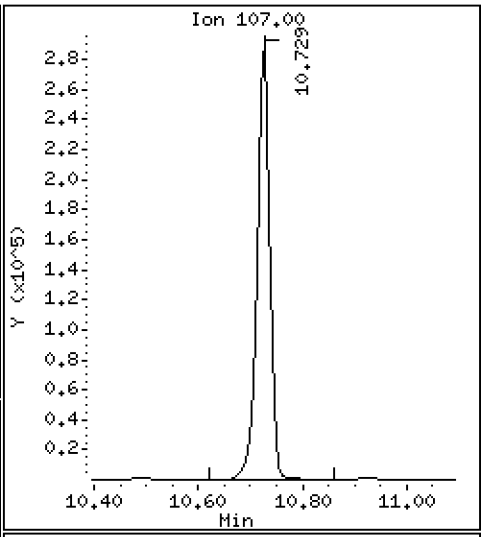
Column phase: ZB-5msi

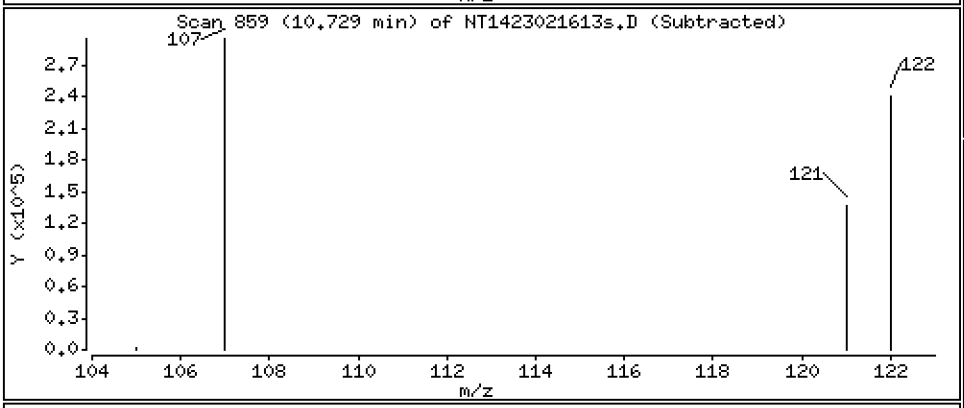
Column diameter: 0.25

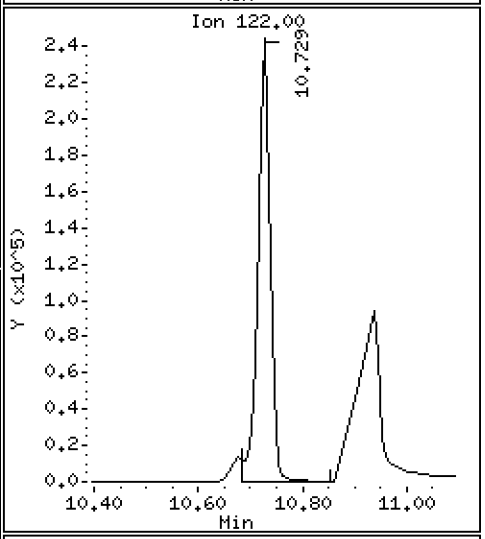
22 2,4-Dimethylphenol

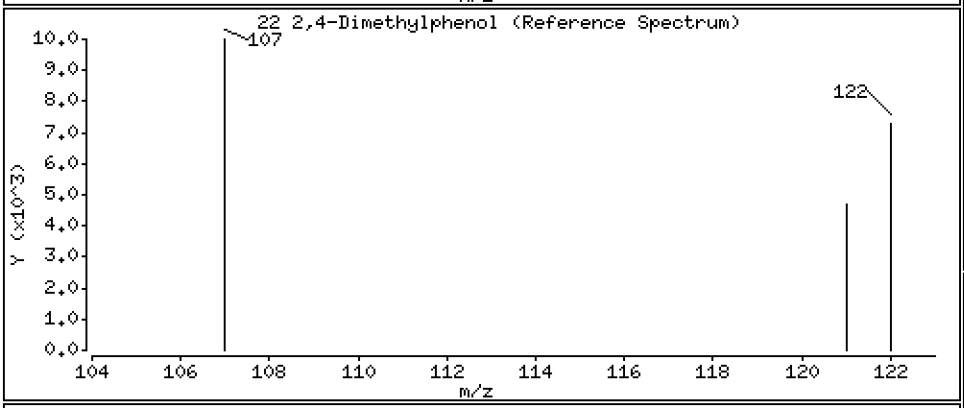
Concentration: 3.903 ug/mL

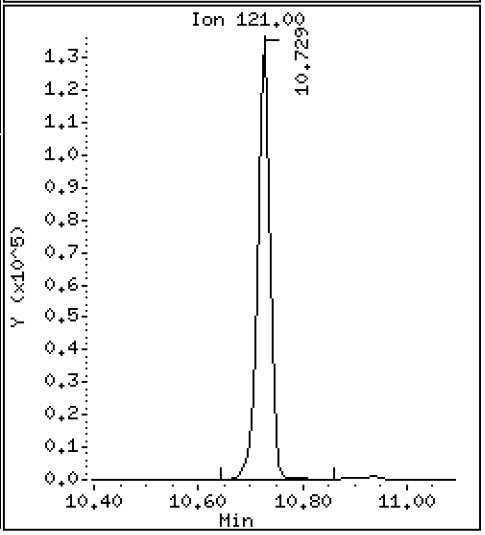


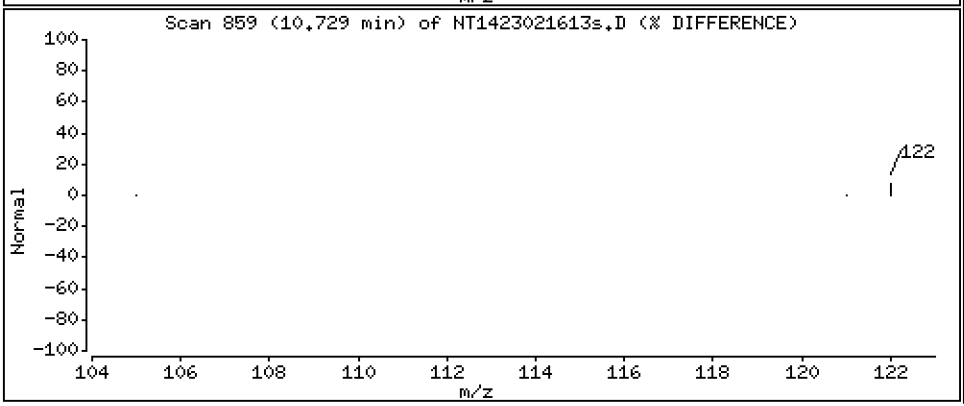












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

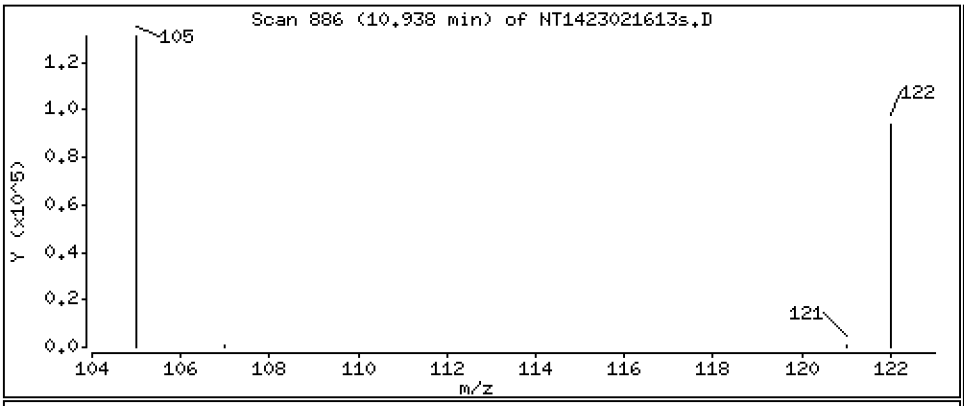
Operator: DSD

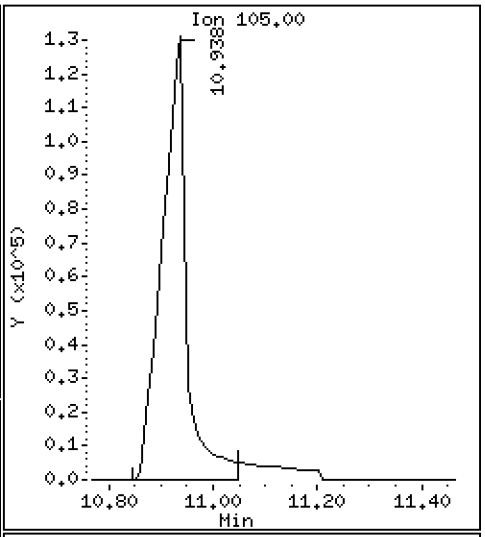
Column phase: ZB-5msi

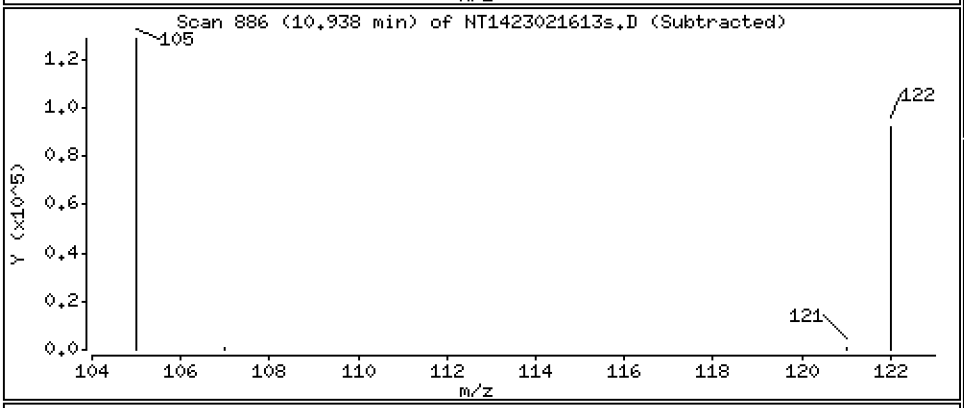
Column diameter: 0.25

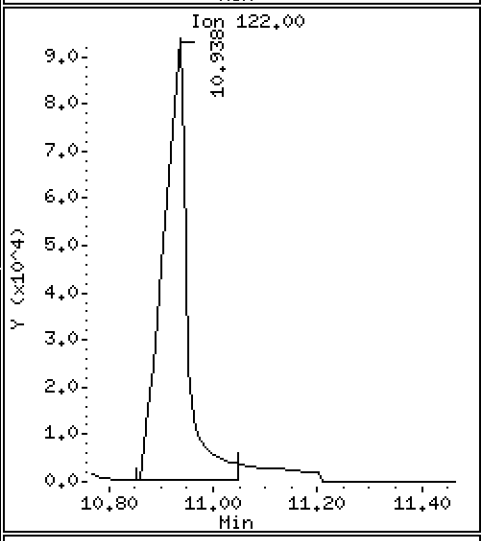
24 Benzoic acid

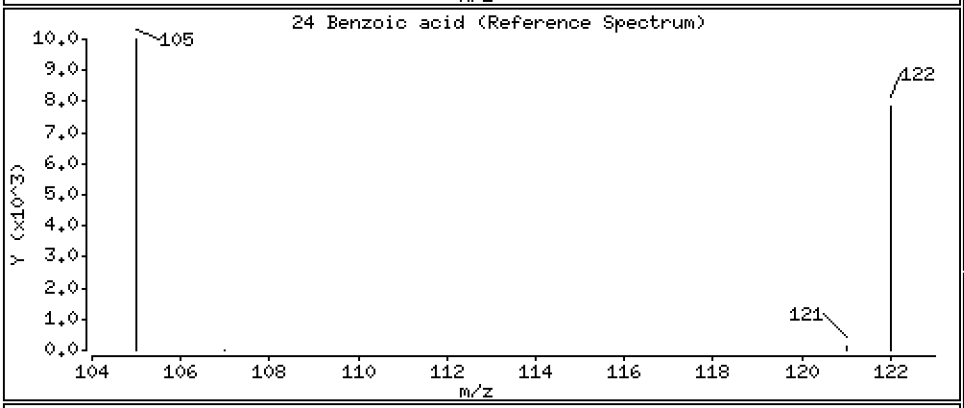
Concentration: 6.447 ug/mL

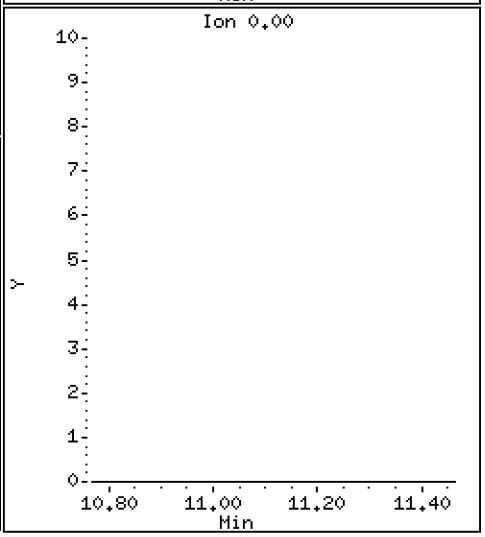


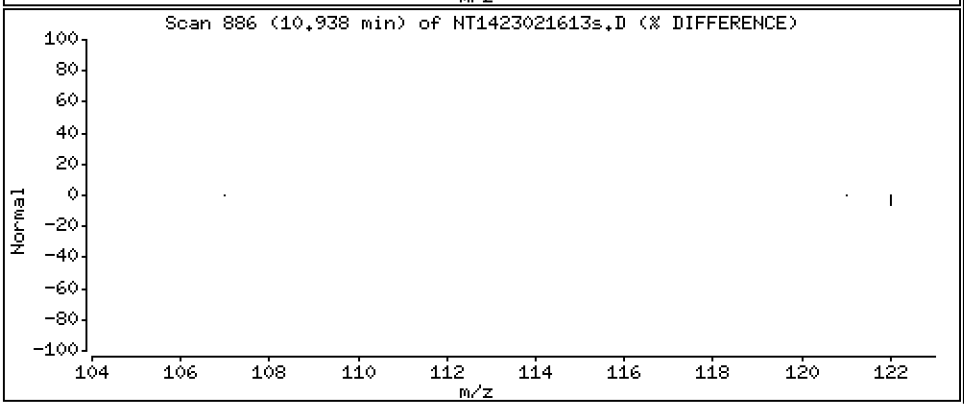












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

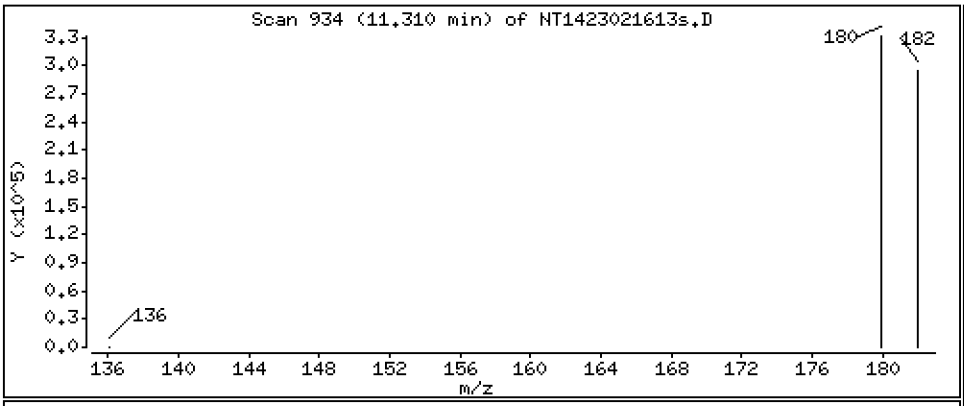
Operator: DSD

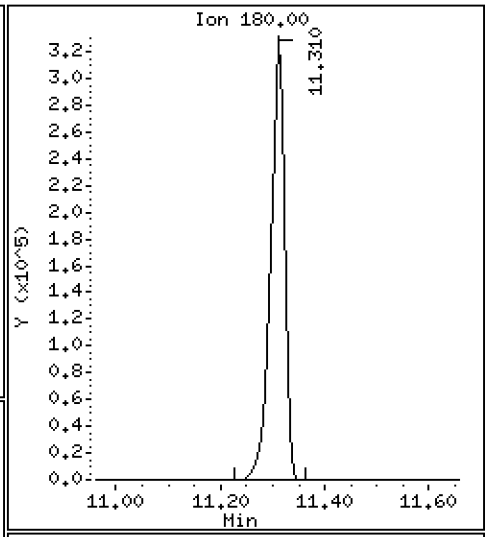
Column phase: ZB-5msi

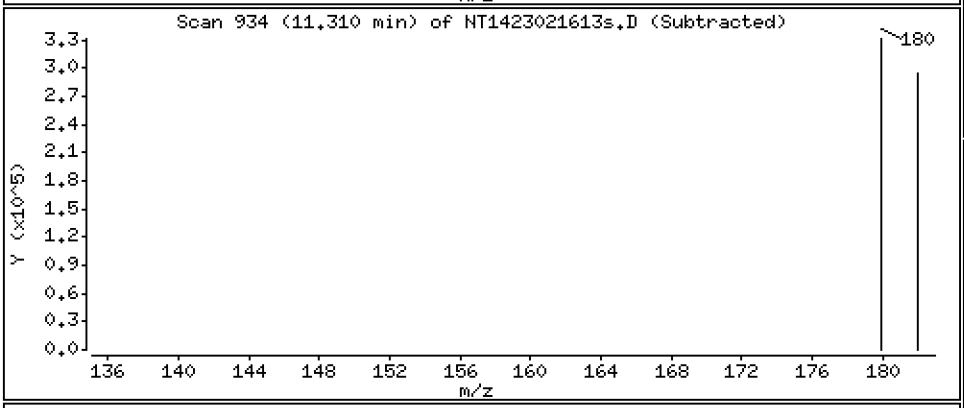
Column diameter: 0.25

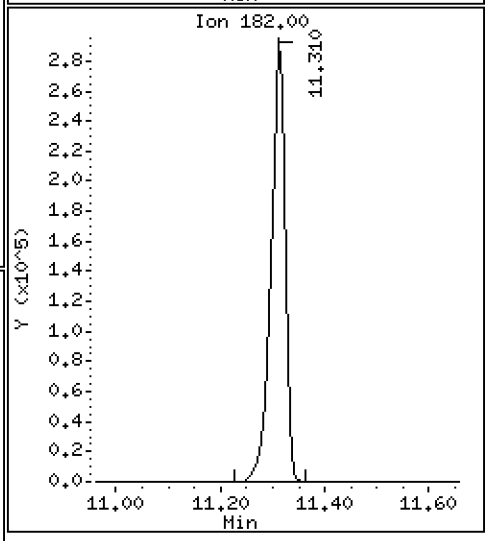
26 1,2,4-Trichlorobenzene

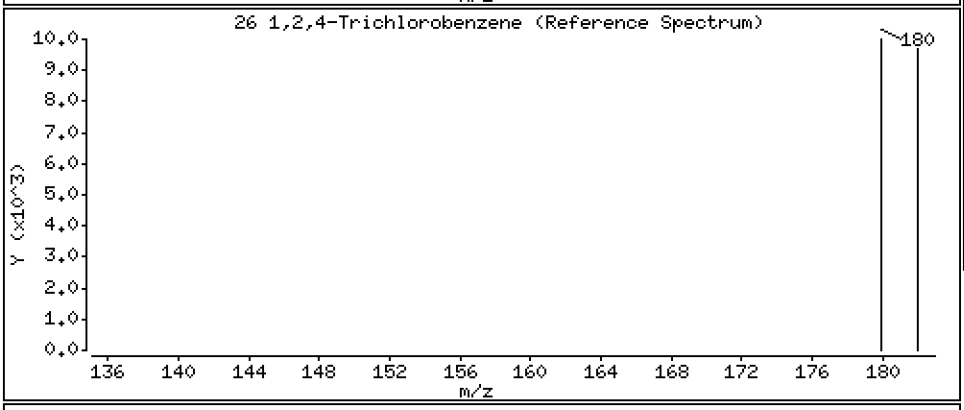
Concentration: 4.595 ug/mL

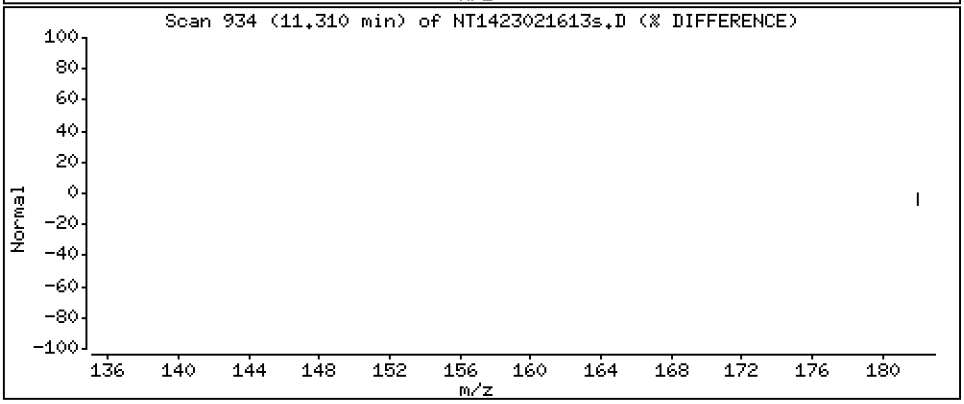












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

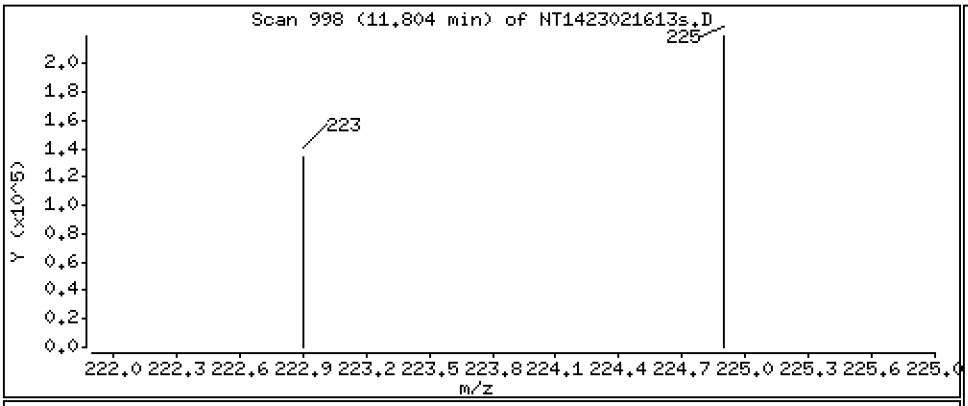
Operator: DSD

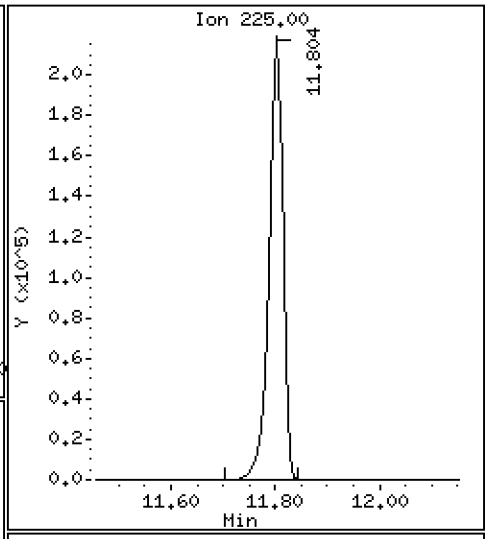
Column phase: ZB-5msi

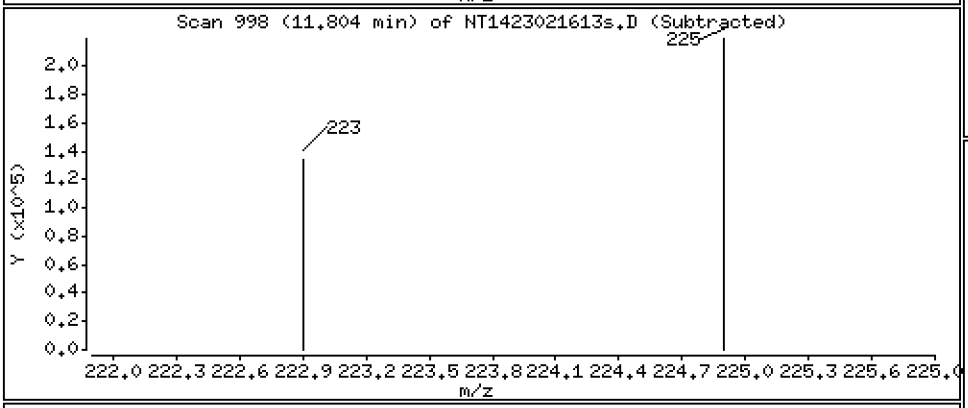
Column diameter: 0.25

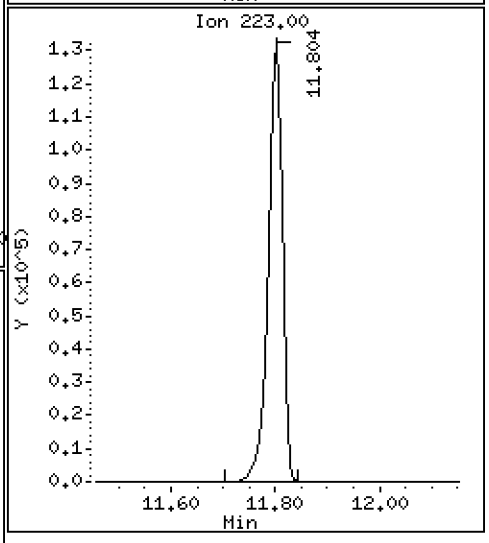
30 Hexachlorobutadiene

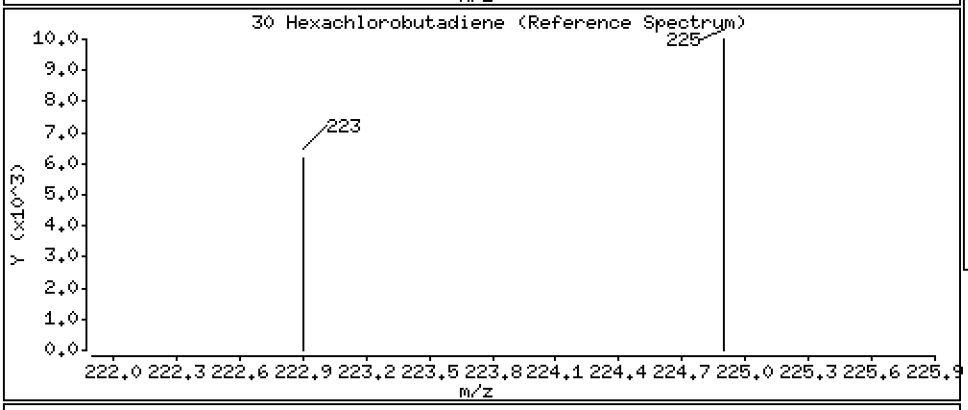
Concentration: 4.815 ug/mL

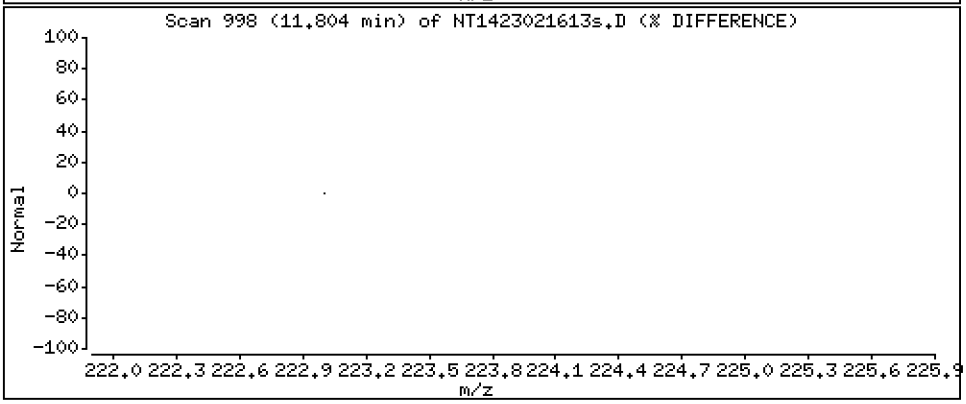












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

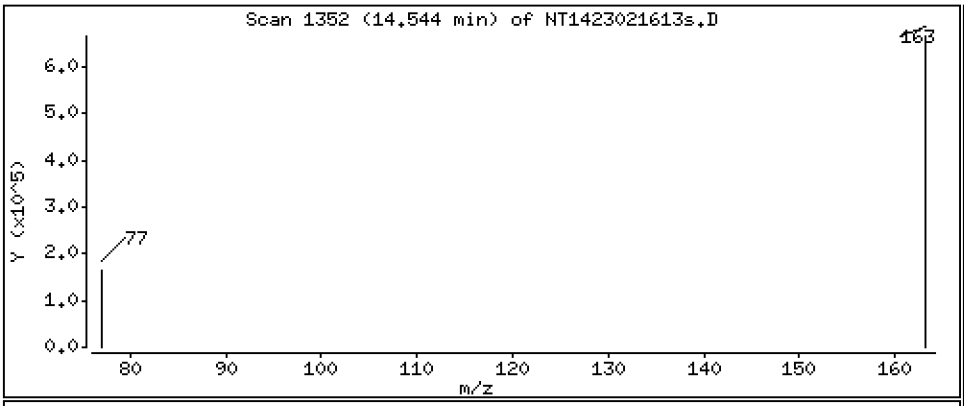
Operator: DSD

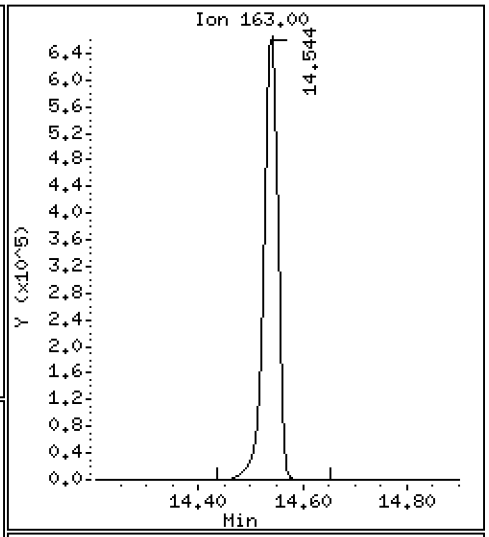
Column phase: ZB-5msi

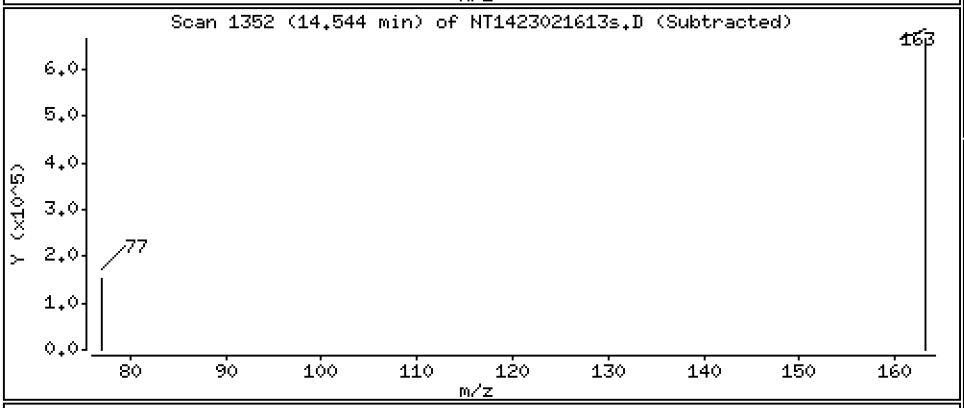
Column diameter: 0.25

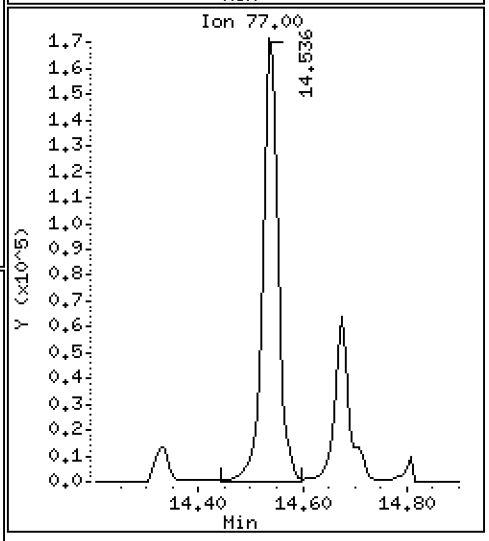
39 Dimethylphthalate

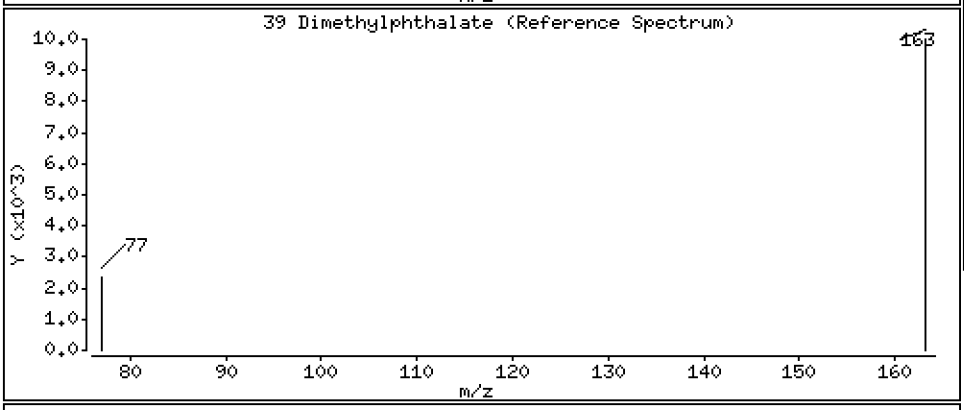
Concentration: 5.002 ug/mL

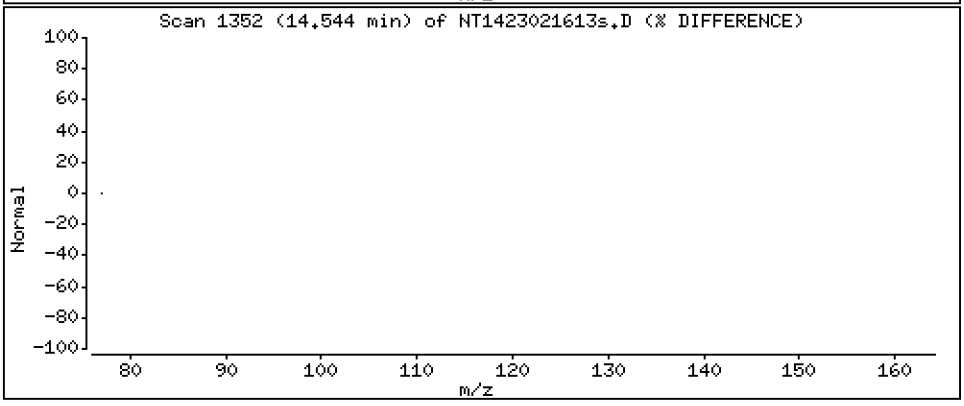












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

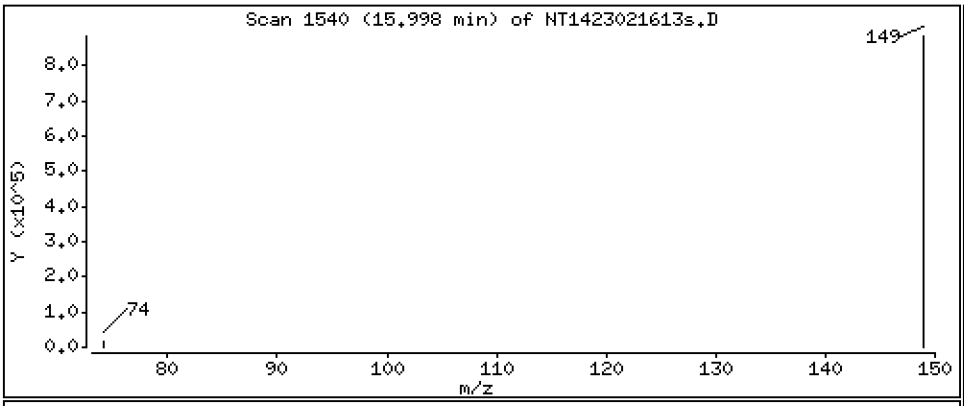
Operator: DSD

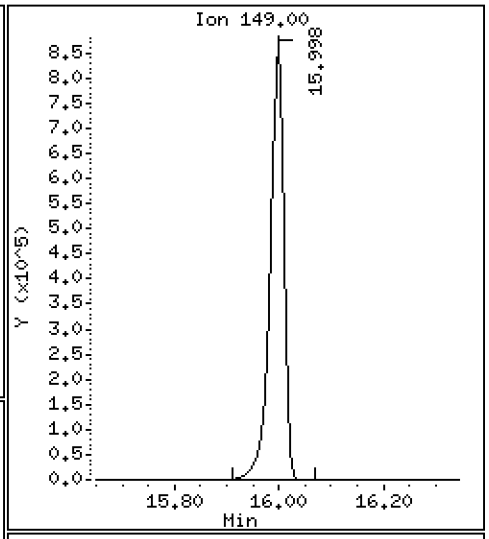
Column phase: ZB-5msi

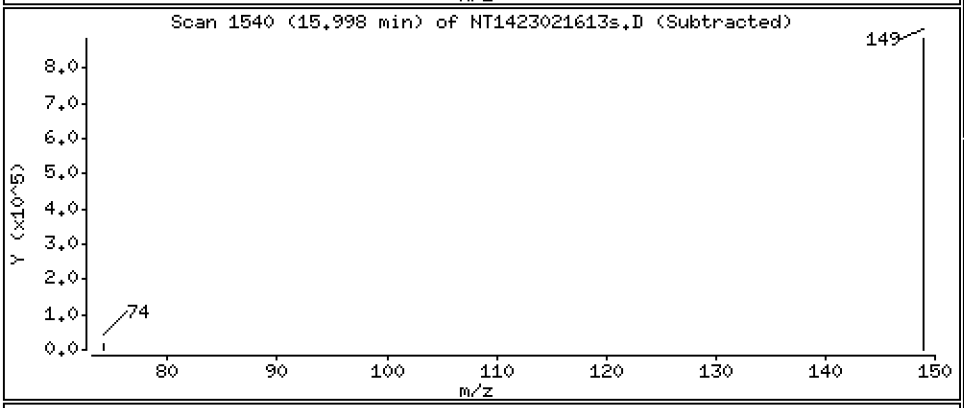
Column diameter: 0.25

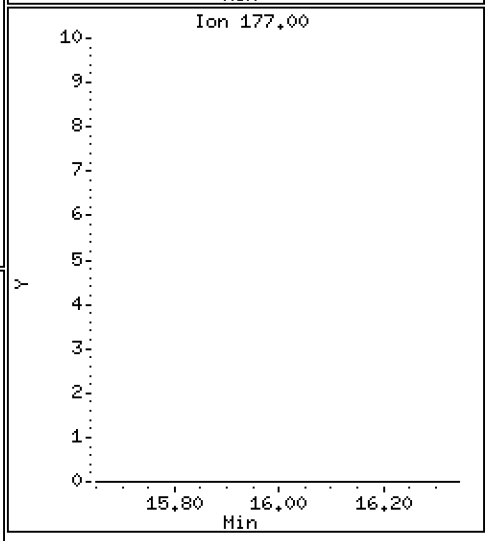
50 Diethylphthalate

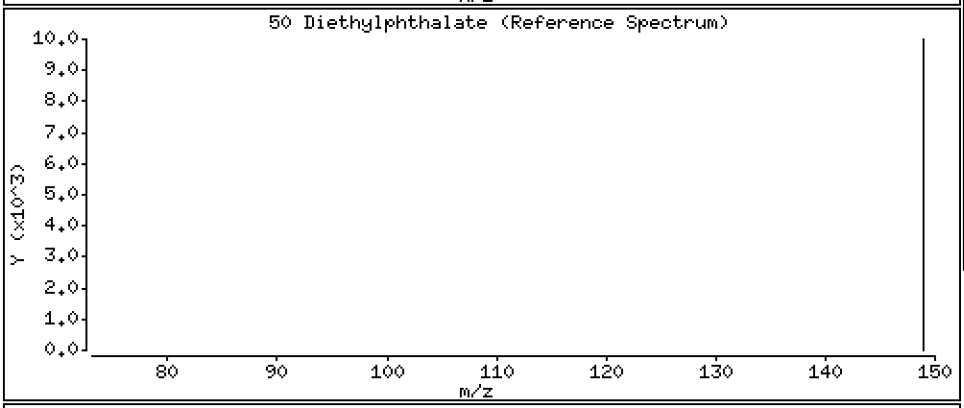
Concentration: 4.969 ug/mL

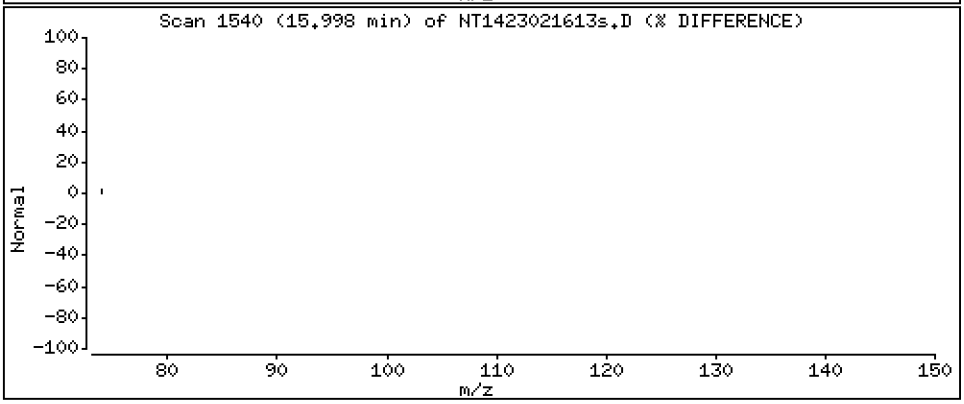












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

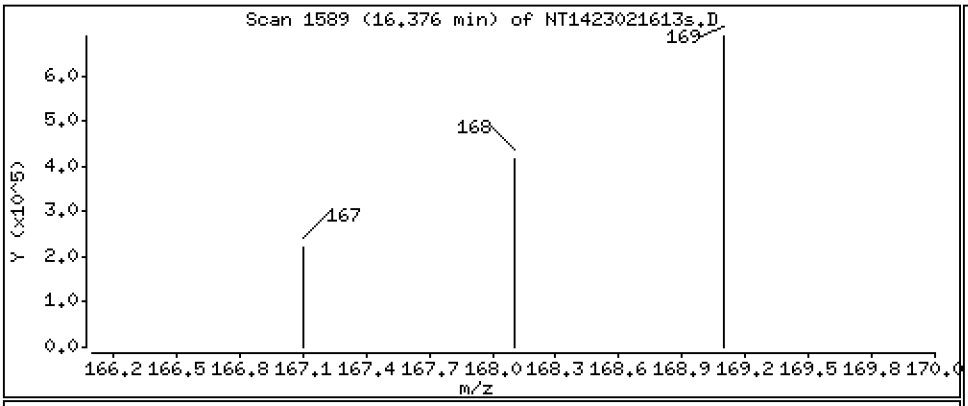
Operator: DSD

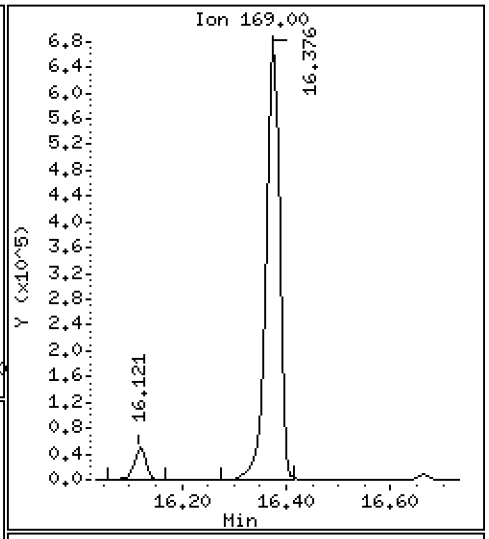
Column phase: ZB-5msi

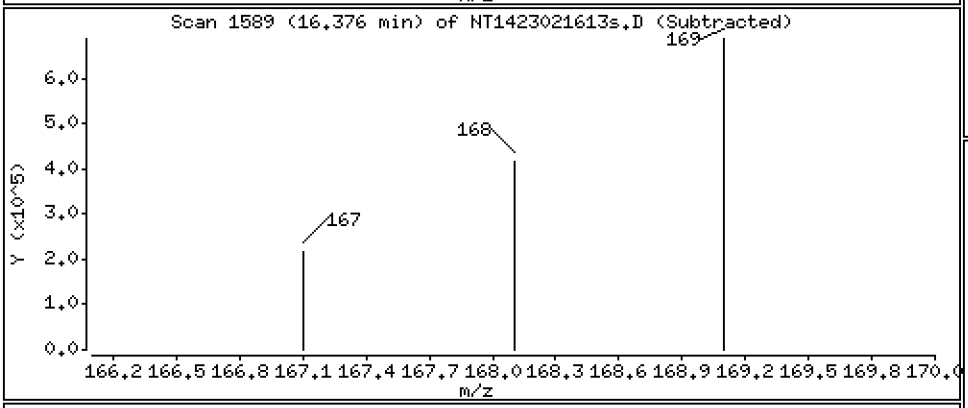
Column diameter: 0.25

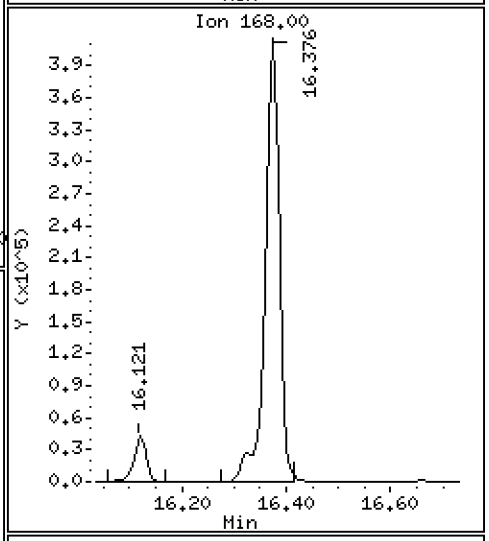
54 N-Nitrosodiphenylamine

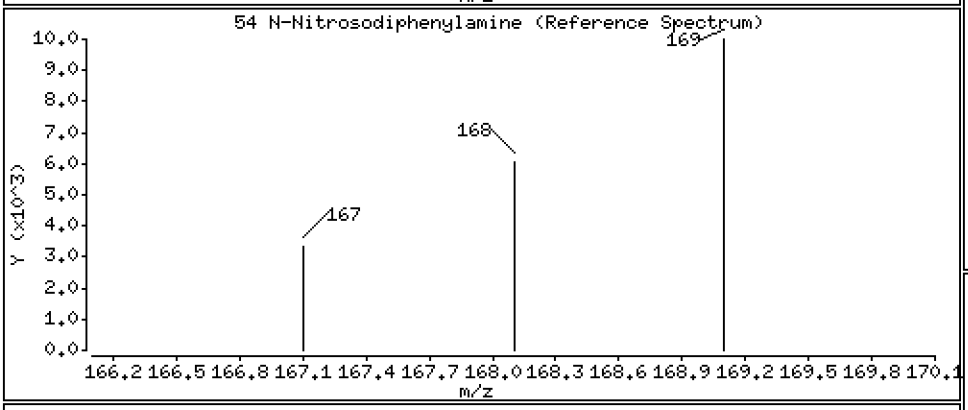
Concentration: 5.009 ug/mL

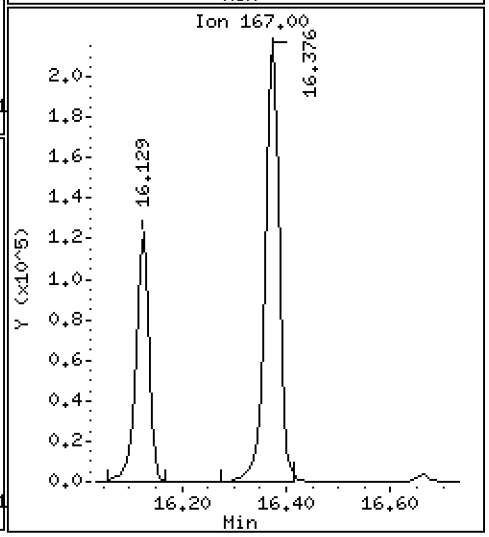


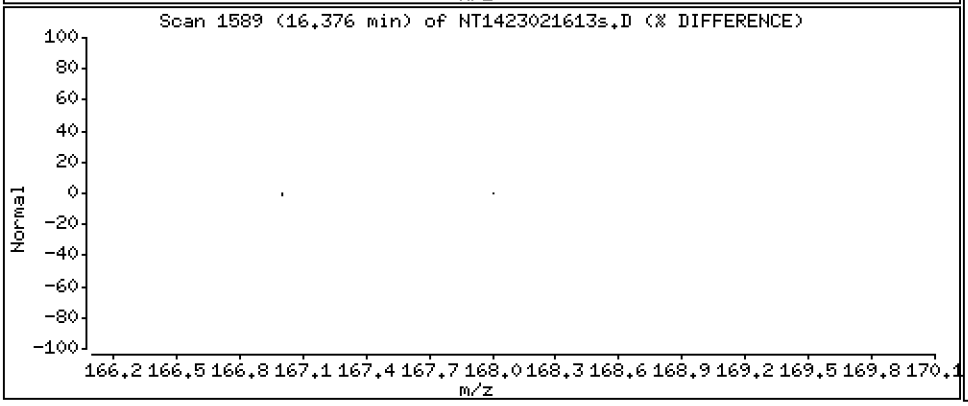












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

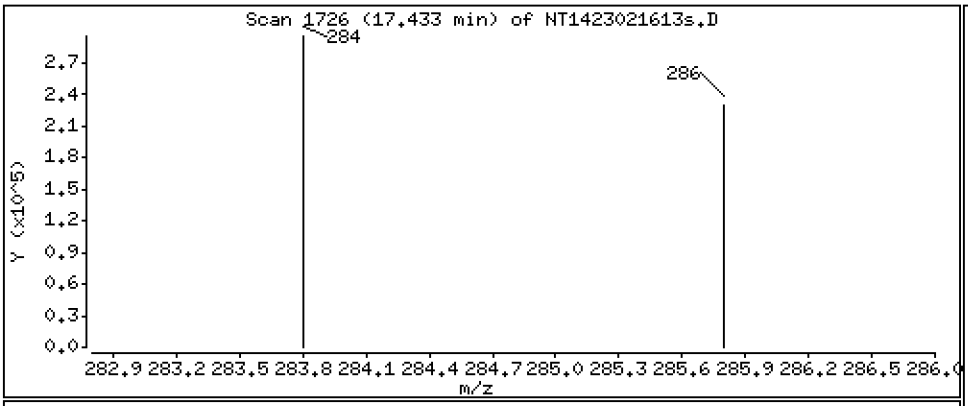
Operator: DSD

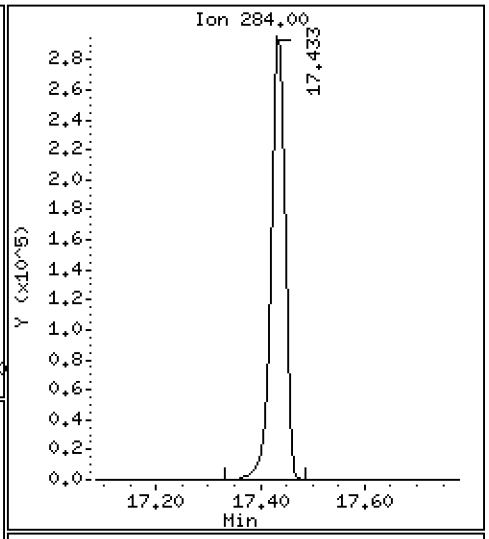
Column phase: ZB-5msi

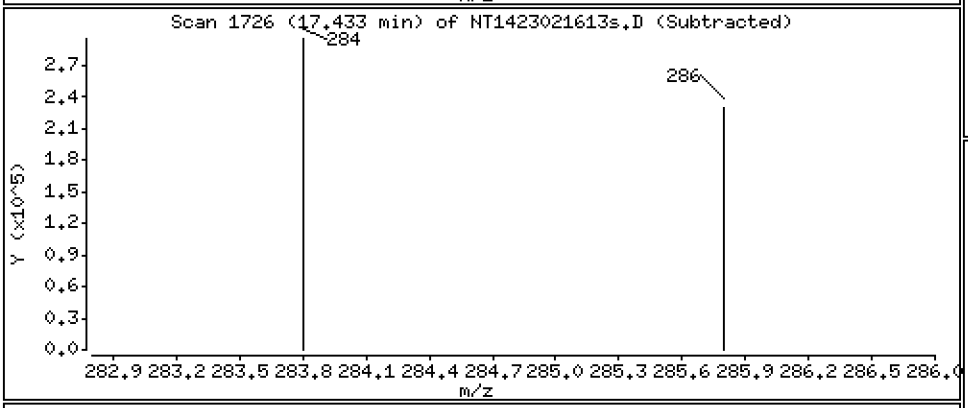
Column diameter: 0.25

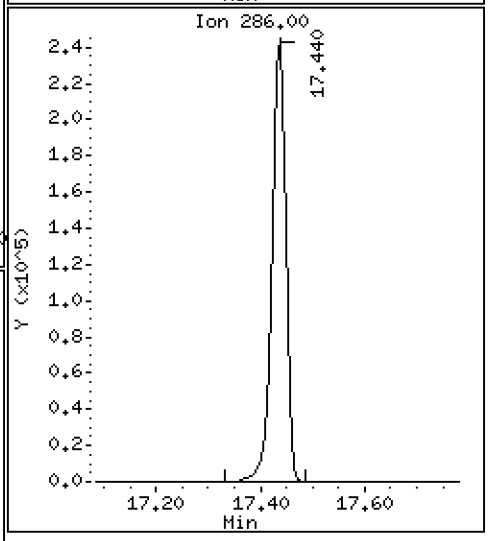
57 Hexachlorobenzene

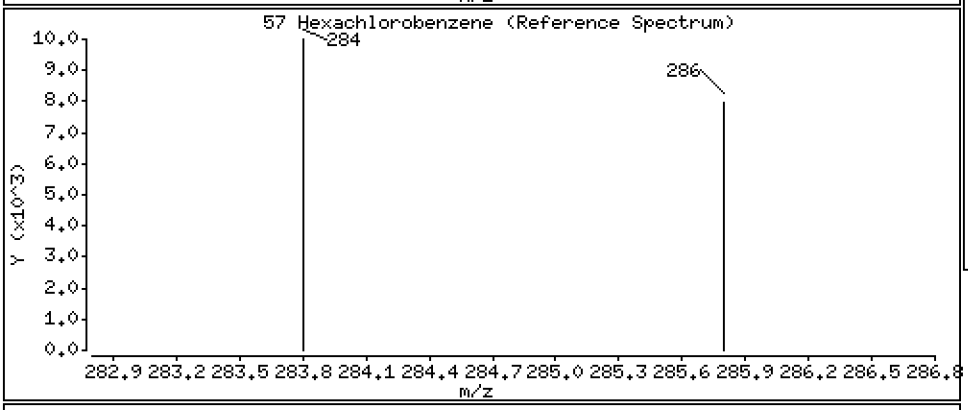
Concentration: 4.700 ug/mL

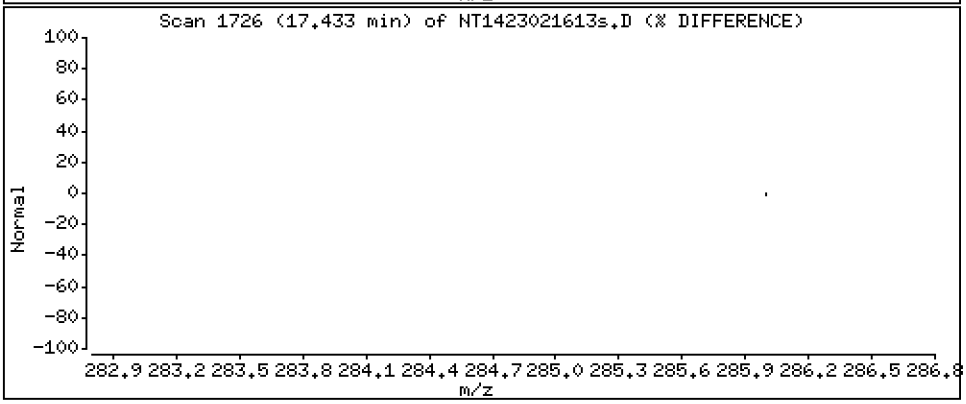












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

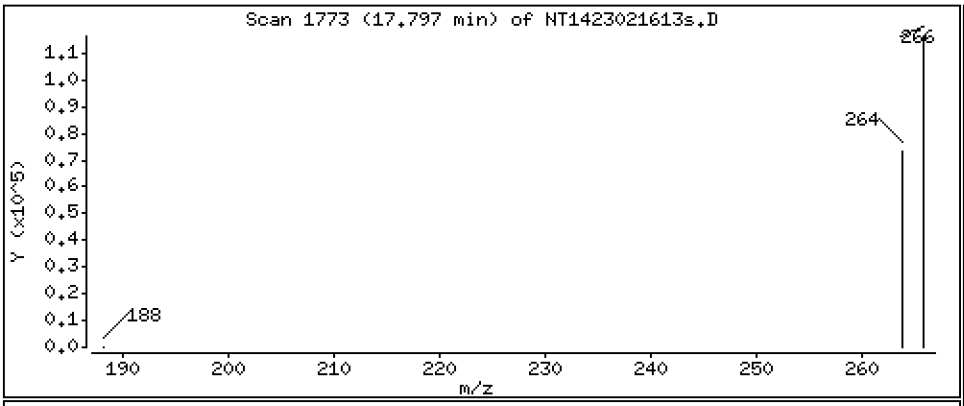
Operator: DSD

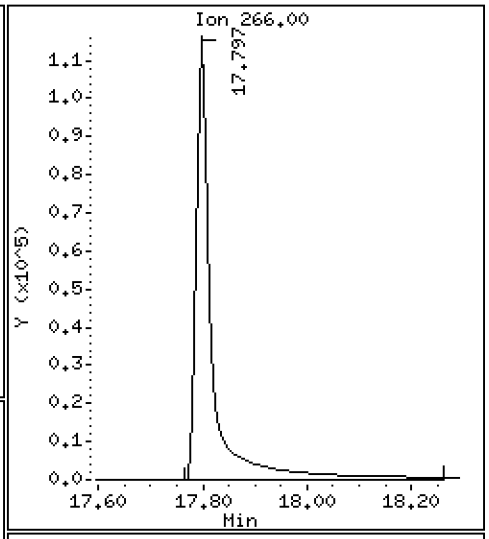
Column phase: ZB-5msi

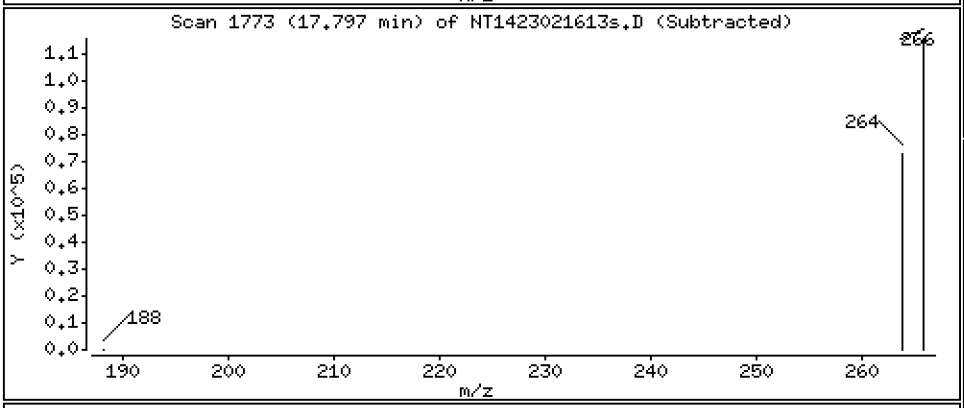
Column diameter: 0.25

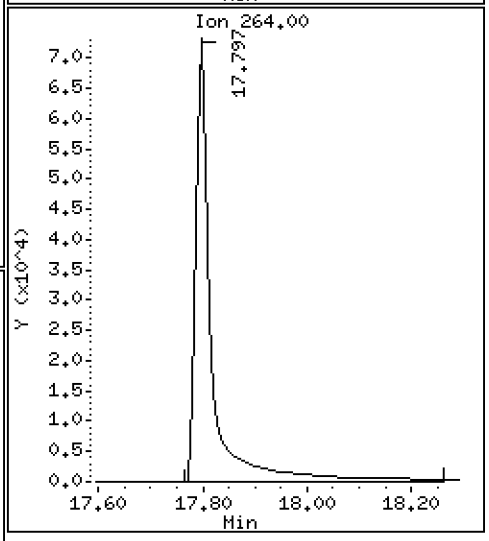
58 Pentachlorophenol

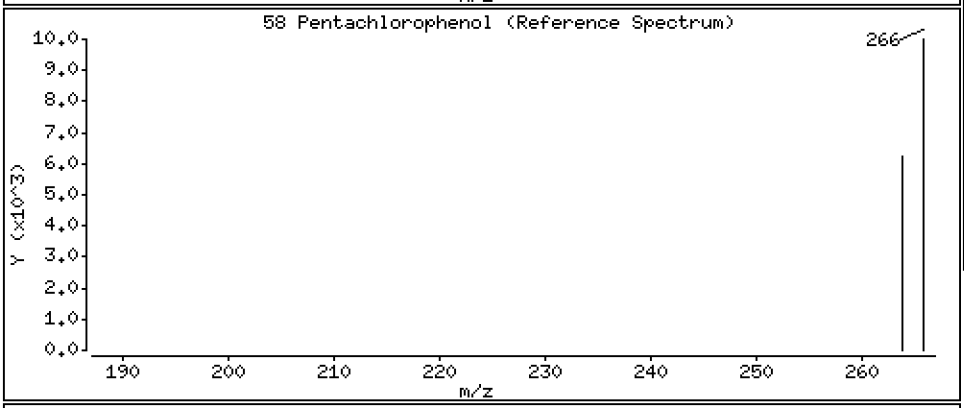
Concentration: 4.935 ug/mL

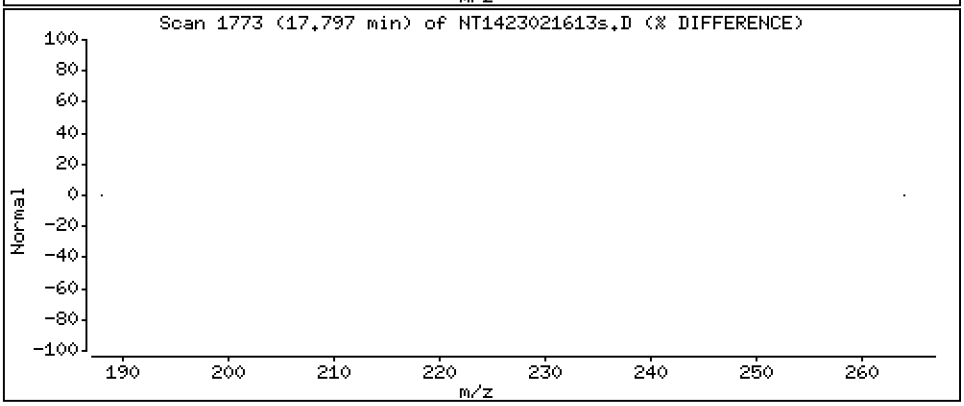












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

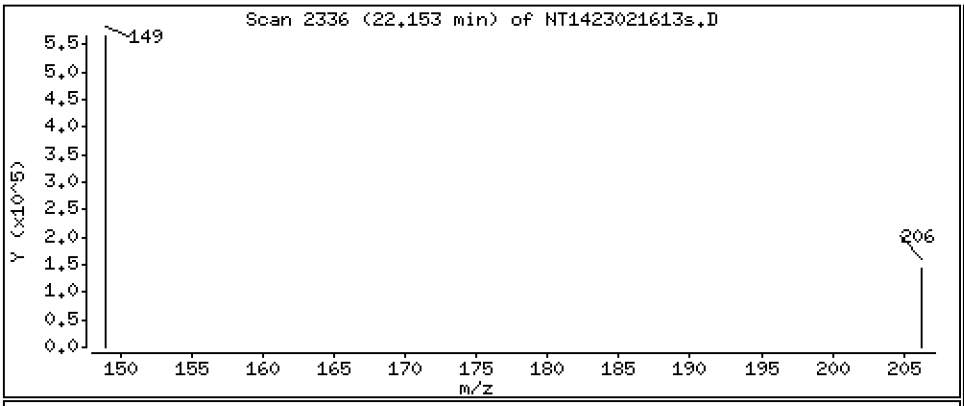
Operator: DSD

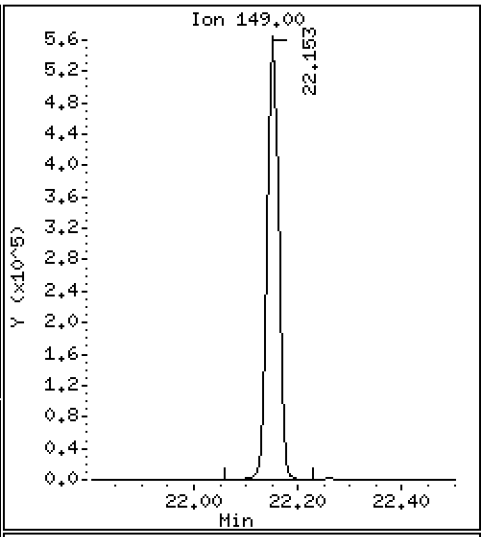
Column phase: ZB-5msi

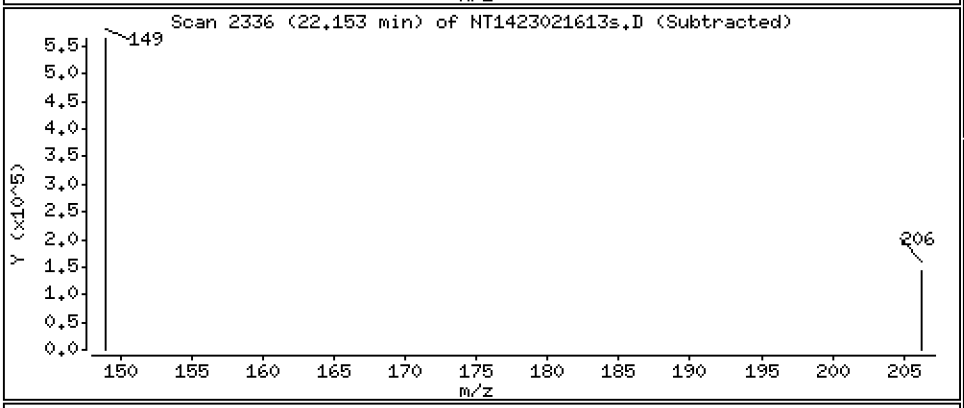
Column diameter: 0.25

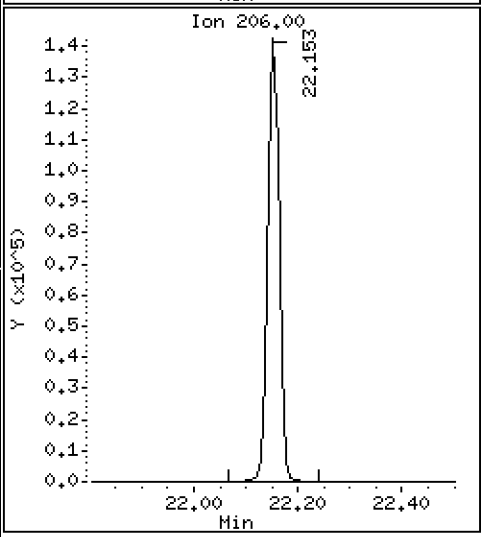
67 Butylbenzylphthalate

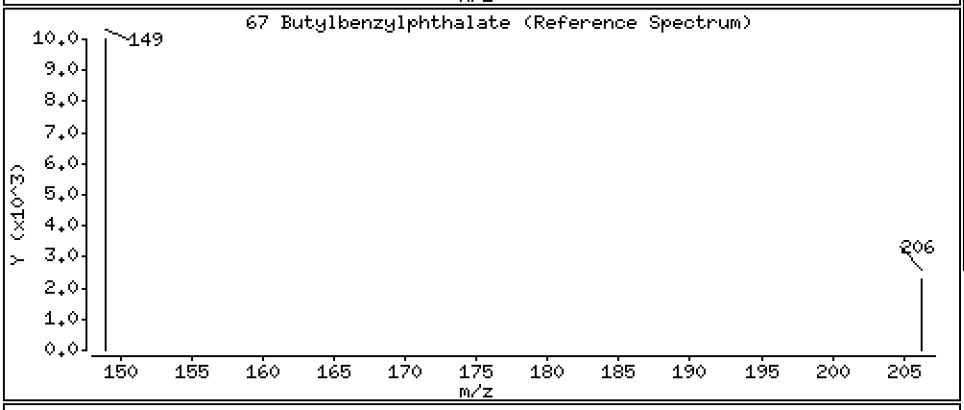
Concentration: 4.964 ug/mL

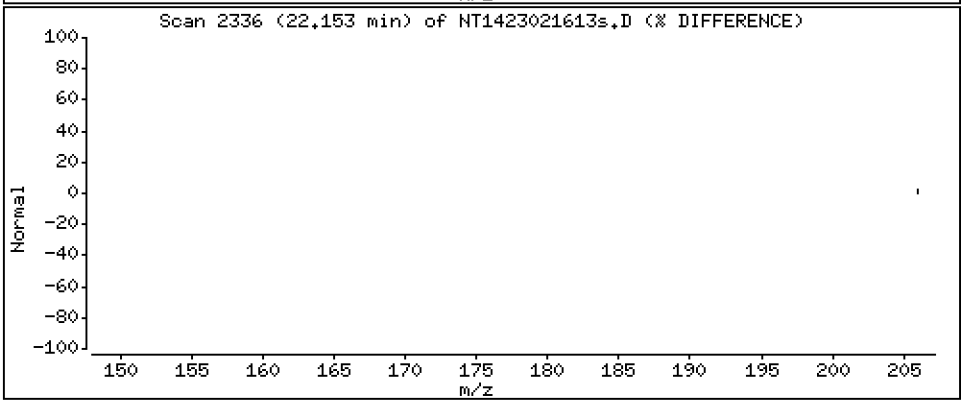












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

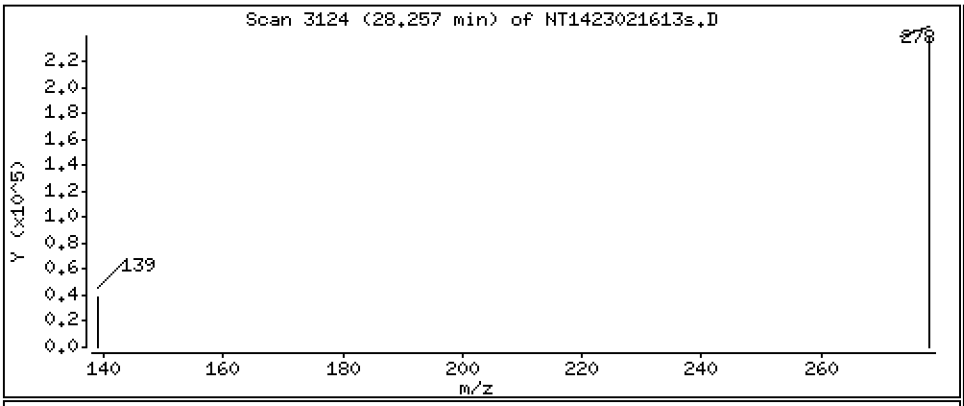
Operator: DSD

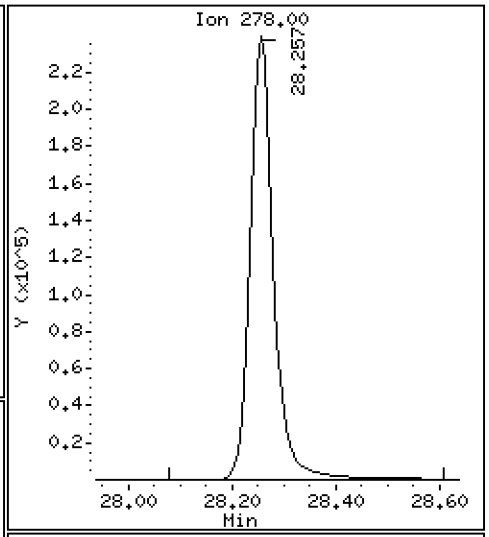
Column phase: ZB-5msi

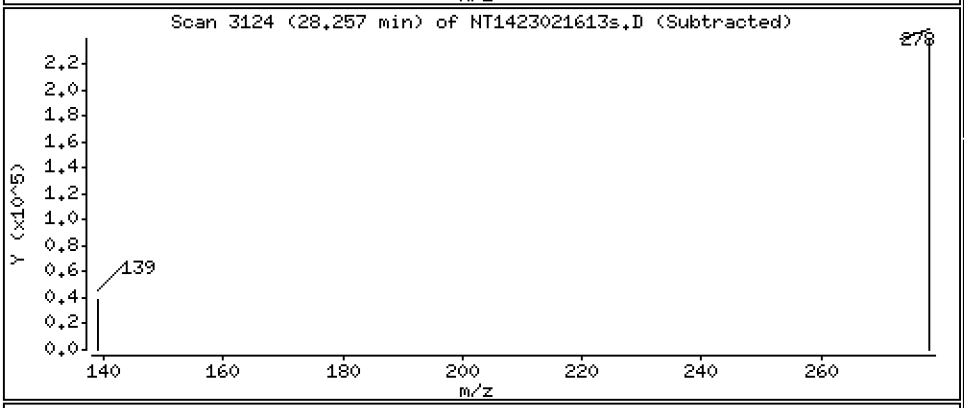
Column diameter: 0.25

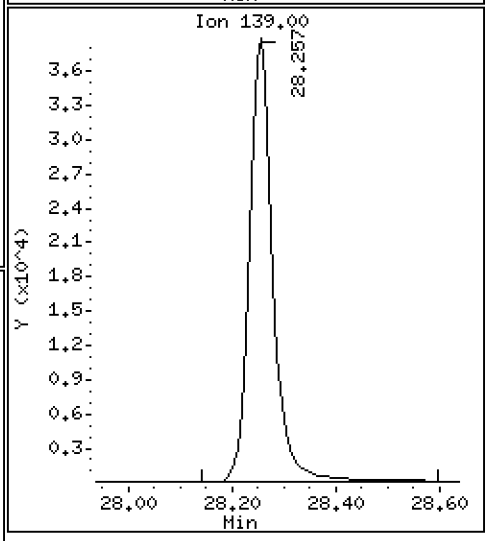
79 Dibenzo(a,h)anthracene

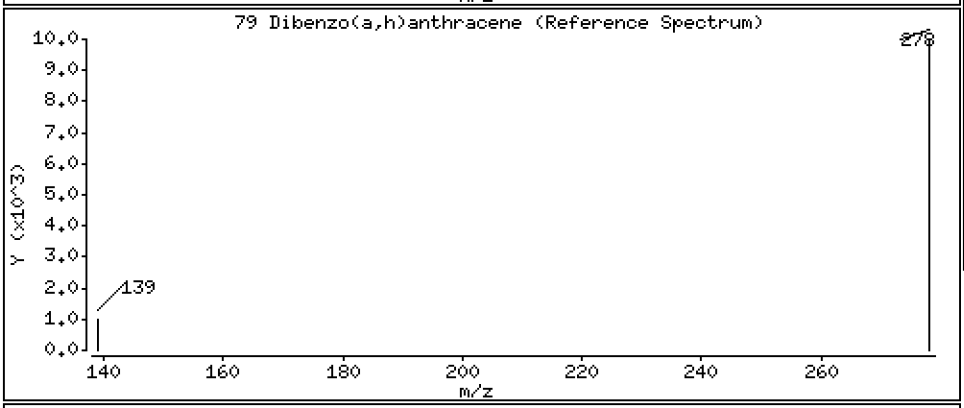
Concentration: 4.888 ug/mL

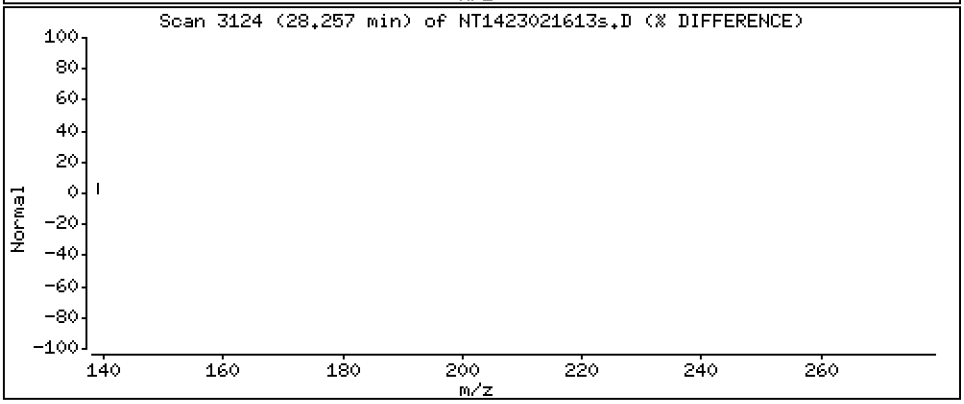












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

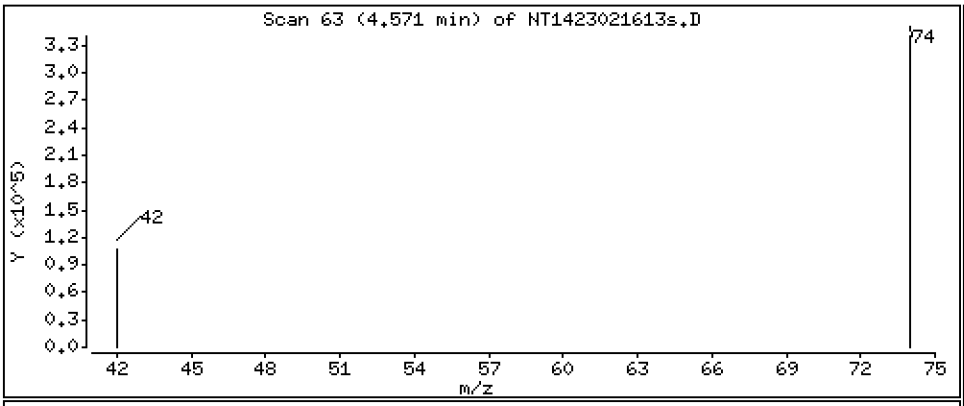
Operator: DSD

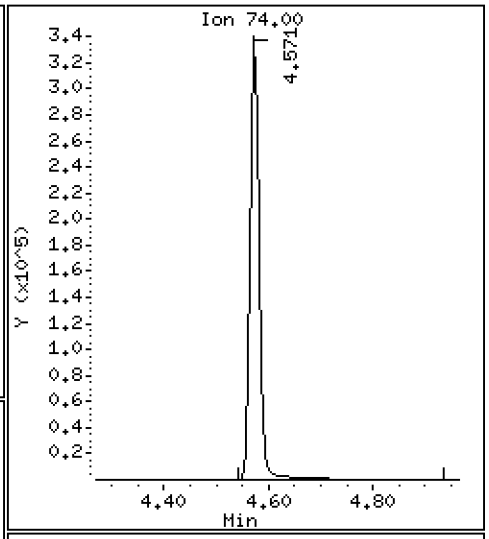
Column phase: ZB-5msi

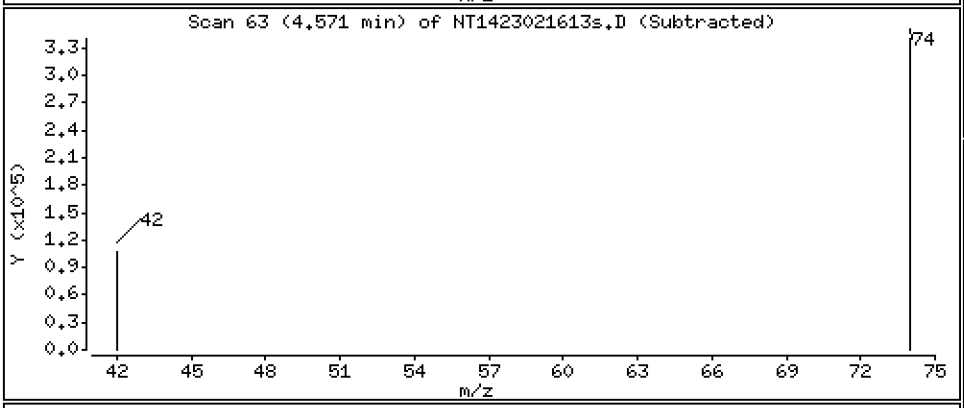
Column diameter: 0.25

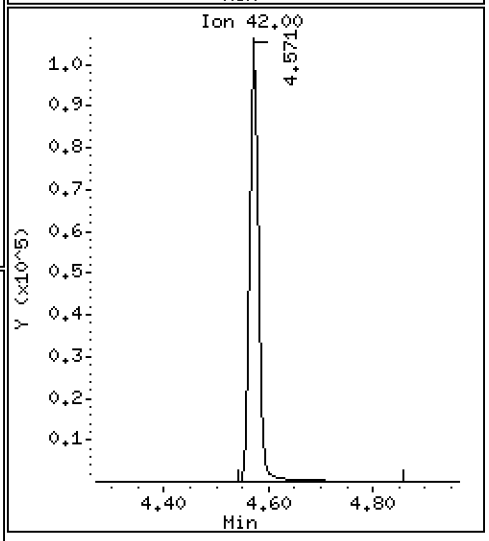
90 N-Nitrosodimethylamine

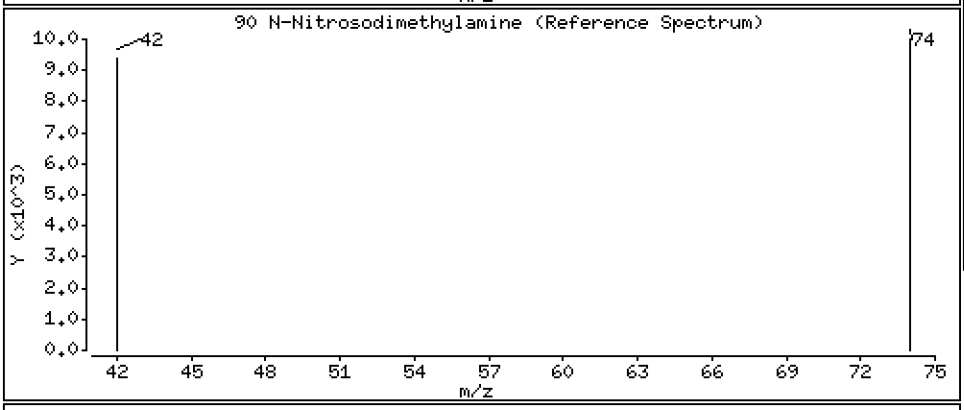
Concentration: 5.293 ug/mL

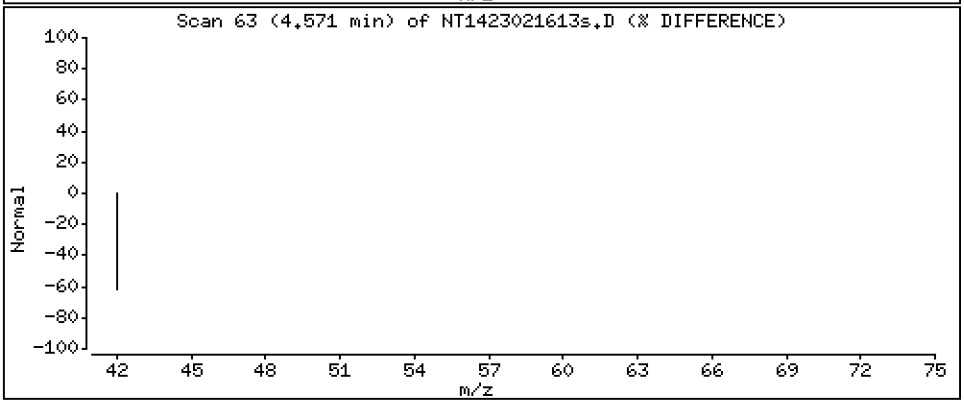












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D
Lab Smp Id: SLB0240-SCV1
Inj Date : 16-FEB-2023 21:18 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0240-SCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Meth Date : 03-Mar-2023 14:04 van Quant Type: ISTD
Cal Date : 16-FEB-2023 20:42 Cal File: NT1423021612s.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.679	6.764	(0.750)	843875	7.69265	7.693(R)
	3 Phenol	94	8.294	8.379	(0.931)	773600	4.55614	4.556
	7 1,3-Dichlorobenzene	146	8.835	8.835	(0.992)	640622	4.80933	4.809
*	8 1,4-Dichlorobenzene-d4	152	8.905	8.905	(1.000)	391473	4.00000	
	9 1,4-Dichlorobenzene	146	8.936	8.936	(1.003)	616286	4.85010	4.850
	11 Benzyl alcohol	79	9.184	9.161	(1.031)	568264	5.30032	5.300
	12 1,2-Dichlorobenzene	146	9.293	9.293	(1.044)	605835	4.79526	4.795
	13 2-Methylphenol	108	9.409	9.433	(1.057)	523707	4.50674	4.507
	15 4-Methylphenol	108	9.689	9.720	(1.088)	579099	4.46016	4.460
	16 N-Nitroso-di-n-propylamine	70	9.743	9.767	(1.094)	517307	5.04663	5.047
	22 2,4-Dimethylphenol	107	10.728	10.745	(0.942)	488898	3.90295	3.903
	24 Benzoic acid	105	10.938	11.116	(0.960)	436009	6.44677	6.447
	26 1,2,4-Trichlorobenzene	180	11.309	11.310	(0.993)	602290	4.59532	4.595
*	27 Naphthalene-d8	136	11.394	11.394	(1.000)	1430650	4.00000	
	30 Hexachlorobutadiene	225	11.804	11.804	(1.036)	383880	4.81466	4.815
	39 Dimethylphthalate	163	14.543	14.551	(0.968)	1212628	5.00209	5.002
*	42 Acenaphthene-d10	162	15.023	15.016	(1.000)	794620	4.00000	
	50 Diethylphthalate	149	15.997	15.997	(1.065)	1507744	4.96936	4.969
	54 N-Nitrosodiphenylamine	169	16.375	16.384	(0.907)	1157201	5.00925	5.009(H)
	57 Hexachlorobenzene	284	17.432	17.432	(0.965)	537021	4.70048	4.700
	58 Pentachlorophenol	266	17.796	17.944	(0.985)	240806	4.93475	4.935
*	59 Phenanthrene-d10	188	18.059	18.059	(1.000)	1759092	4.00000	
$	66 Terphenyl-d14	244	21.224	21.224	(0.918)	1463833	4.57604	4.576(R)
	67 Butylbenzylphthalate	149	22.153	22.153	(0.958)	814994	4.96402	4.964
*	69 Chrysene-d12	240	23.128	23.121	(1.000)	1201603	4.00000	
*	77 Perylene-d12	264	25.691	25.691	(1.000)	814421	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.257	28.288	(1.100)	772593	4.88838	4.888
	90 N-Nitrosodimethylamine	74	4.571	4.618	(0.513)	440424	5.29346	5.293

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021613s.D
Lab Smp Id: SLB0240-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 18:18
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	393779	196890	787558	391473	-0.59
27 Naphthalene-d8	1399029	699515	2798058	1430650	2.26
42 Acenaphthene-d10	759723	379862	1519446	794620	4.59
59 Phenanthrene-d10	1756156	878078	3512312	1759092	0.17
69 Chrysene-d12	1174128	587064	2348256	1201603	2.34
77 Perylene-d12	826011	413006	1652022	814421	-1.40

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	-0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.39	-0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.05
59 Phenanthrene-d10	18.06	17.56	18.56	18.06	-0.00
69 Chrysene-d12	23.12	22.62	23.62	23.13	0.03
77 Perylene-d12	25.68	25.18	26.18	25.69	0.03

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

REVIEW SUMMARY FOR FILE - NT1423021613s.D

Lab ID: SLB0240-SCV1
nt14.i, 20230216.b\20230216.b\SIMABN2.m,   16-FEB-2023 21:18

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.931	0.941	-0.0095	Phenol
0.960	0.000	0.9599	Benzoic acid
0.513	0.518	-0.0052	N-Nitrosodimethylamine
0.985	0.000	0.9854	Pentachlorophenol
0.750	0.760	-0.0095	2-Fluorophenol

RRT check based on Ccal File: 20230216.b/NT1423021612s.D

On Column LOD for nt14.i, 20230216.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021618s.D

Date : 17-FEB-2023 00:17

Client ID:

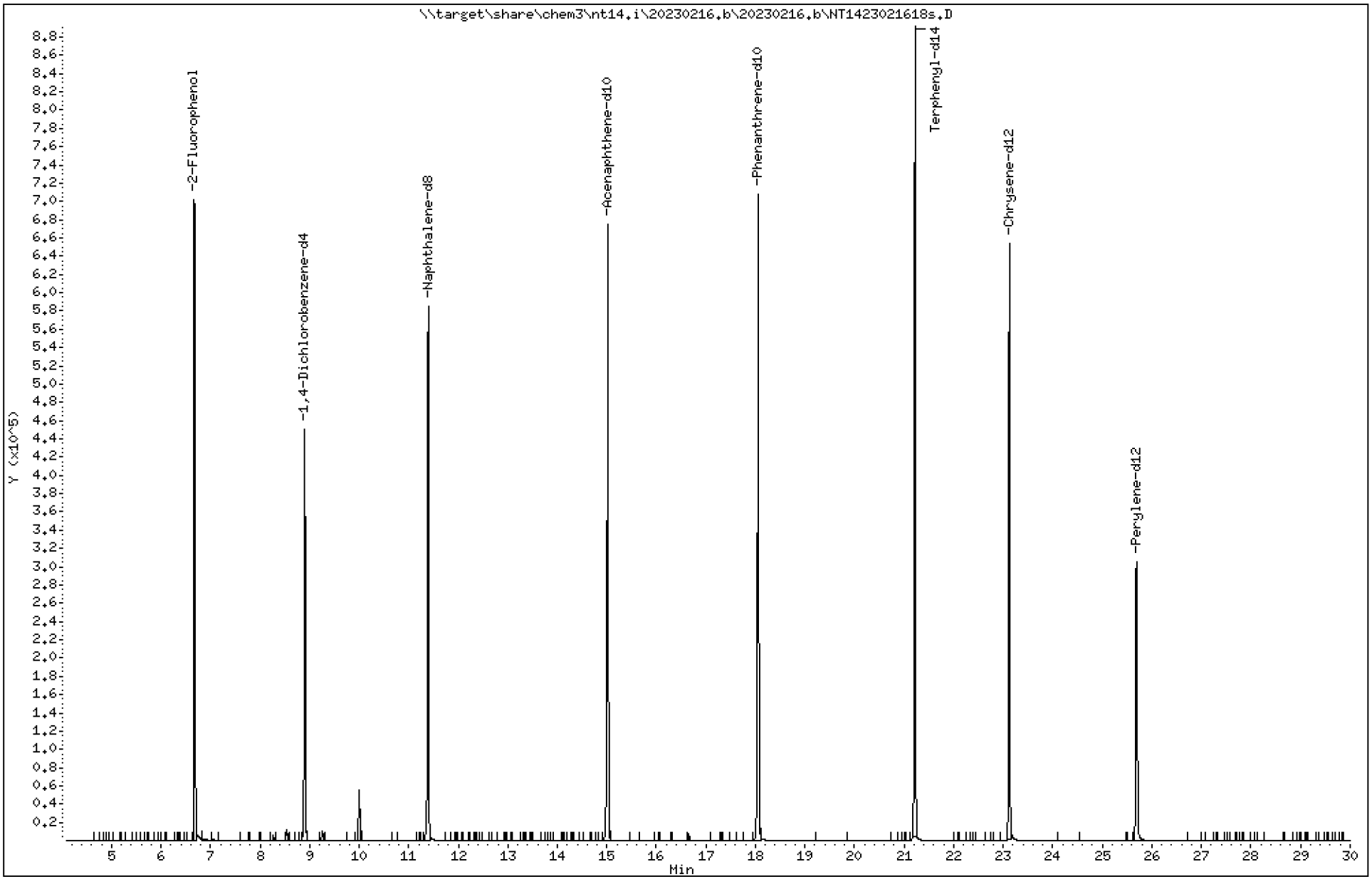
Instrument: nt14.i

Sample Info: SLB0240-ICB1

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021618s.D
Lab Smp Id: SLB0240-ICB1
Inj Date : 17-FEB-2023 00:17 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0240-ICB1
Misc Info :
Comment :
Method : \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Meth Date : 03-Mar-2023 14:04 van Quant Type: ISTD
Cal Date : 16-FEB-2023 20:42 Cal File: NT1423021612s.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1	2-Fluorophenol	112	6.679	6.764	(0.750)	672461	8.10468	8.105(R)
	3	Phenol	94	Compound Not Detected.					
	7	1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8	1,4-Dichlorobenzene-d4	152	8.905	8.905	(1.000)	296634	4.00000	
	9	1,4-Dichlorobenzene	146	Compound Not Detected.					
	11	Benzyl alcohol	79	Compound Not Detected.					
	12	1,2-Dichlorobenzene	146	Compound Not Detected.					
	13	2-Methylphenol	108	Compound Not Detected.					
	15	4-Methylphenol	108	Compound Not Detected.					
	16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22	2,4-Dimethylphenol	107	Compound Not Detected.					
	24	Benzoic acid	105	Compound Not Detected.					
	26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27	Naphthalene-d8	136	11.394	11.394	(1.000)	1039961	4.00000	
	30	Hexachlorobutadiene	225	Compound Not Detected.					
	39	Dimethylphthalate	163	Compound Not Detected.					
*	42	Acenaphthene-d10	162	15.015	15.016	(1.000)	537777	4.00000	
	50	Diethylphthalate	149	Compound Not Detected.					
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	Compound Not Detected.					
*	59	Phenanthrene-d10	188	18.051	18.059	(1.000)	1239183	4.00000	
$	66	Terphenyl-d14	244	21.216	21.224	(0.918)	1175849	5.59707	5.597(R)
	67	Butylbenzylphthalate	149	Compound Not Detected.					
*	69	Chrysene-d12	240	23.121	23.121	(1.000)	789133	4.00000	
*	77	Perylene-d12	264	25.691	25.691	(1.000)	528194	4.00000	
	79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021618s.D
Lab Smp Id: SLB0240-ICB1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 18:18
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	393779	196890	787558	296634	-24.67
27 Naphthalene-d8	1399029	699515	2798058	1039961	-25.67
42 Acenaphthene-d10	759723	379862	1519446	537777	-29.21
59 Phenanthrene-d10	1756156	878078	3512312	1239183	-29.44
69 Chrysene-d12	1174128	587064	2348256	789133	-32.79
77 Perylene-d12	826011	413006	1652022	528194	-36.05

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	-0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.39	-0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	-0.00
59 Phenanthrene-d10	18.06	17.56	18.56	18.05	-0.04
69 Chrysene-d12	23.12	22.62	23.62	23.12	-0.00
77 Perylene-d12	25.68	25.18	26.18	25.69	0.03

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

REVIEW SUMMARY FOR FILE - NT1423021618s.D

Lab ID: SLB0240-ICB1
nt14.i, 20230216.b\20230216.b\SIMABN2.m,   17-FEB-2023 00:17

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.750	0.760	-0.0095	2-Fluorophenol

RRT check based on Ccal File: 20230216.b/NT1423021612s.D

On Column LOD for nt14.i, 20230216.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00009
Laboratory ID: SLB0240-SCV1
Sequence: SLB0240
Sequence Name: SCV 5.0
Standard ID: K010066

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	5.0000	4.56	-8.9	20.00
1,3-Dichlorobenzene	5.0000	4.81	-3.8	20.00
1,4-Dichlorobenzene	5.0000	4.85	-3.0	20.00
1,2-Dichlorobenzene	5.0000	4.80	-4.1	20.00
Benzyl Alcohol	5.0000	5.30	6.0	20.00
Benzoic acid	10.000	6.45	-35.5 *	20.00
2-Methylphenol	5.0000	4.51	-9.9	20.00
N-Nitroso-di-n-Propylamine	5.0000	5.05	0.9	20.00
4-Methylphenol	5.0000	4.46	-10.8	20.00
2,4-Dimethylphenol	5.0000	3.90	-21.9 *	20.00
1,2,4-Trichlorobenzene	5.0000	4.60	-8.1	20.00
Hexachlorobutadiene	5.0000	4.81	-3.7	20.00
N-Nitrosodimethylamine	5.0000	5.29	5.9	20.00
Dimethylphthalate	5.0000	5.00	0.04	20.00
Diethyl phthalate	5.0000	4.97	-0.6	20.00
N-Nitrosodiphenylamine	5.0000	5.01	0.2	20.00
Hexachlorobenzene	5.0000	4.70	-6.0	20.00
Pentachlorophenol	5.0000	4.93	-1.3	20.00
Butylbenzylphthalate	5.0000	4.96	-0.7	20.00
Dibenzo(a,h)anthracene	5.0000	4.89	-2.2	20.00
2-Fluorophenol	7.5000	7.69	2.6	
p-Terphenyl-d14	5.0000	4.58	-8.5	

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

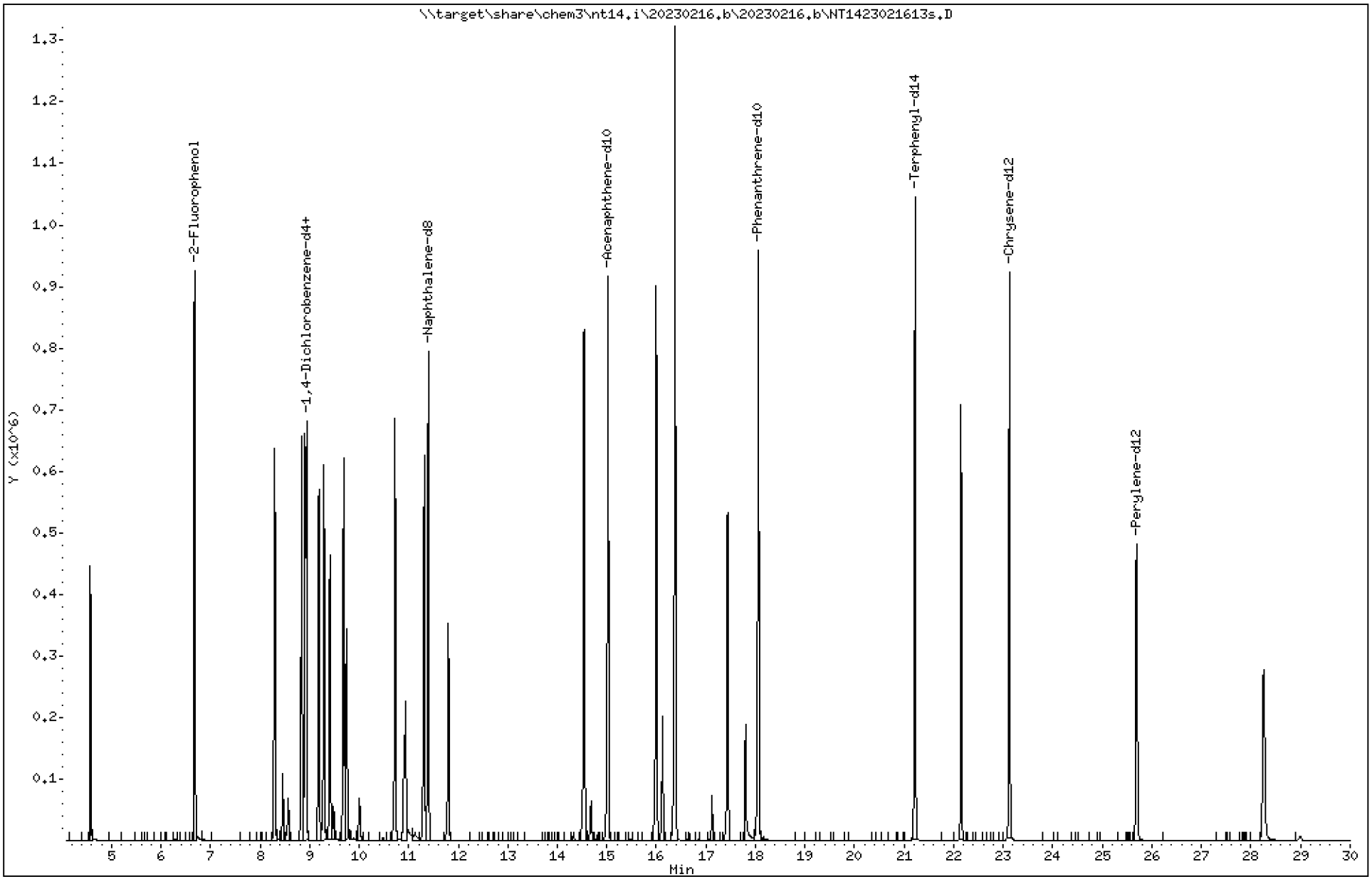
Sample Info: SLB0240-SCV1

Column phase: ZB-5msi

Instrument: nt14.i

Operator: DSD

Column diameter: 0.25



Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

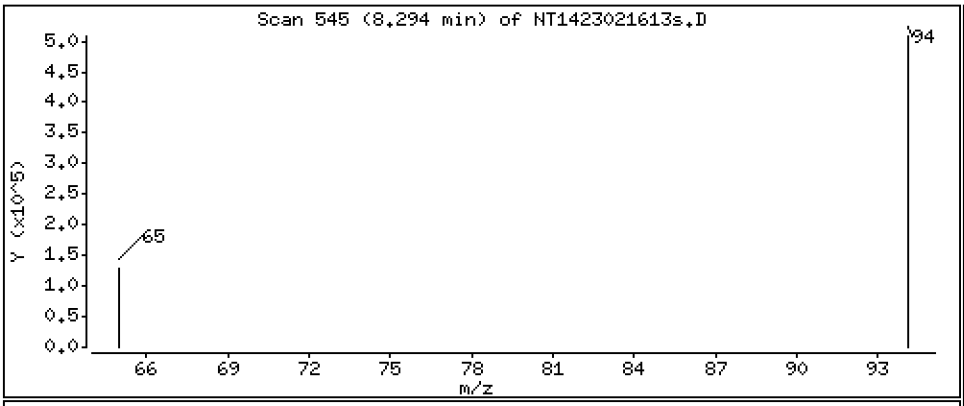
Operator: DSD

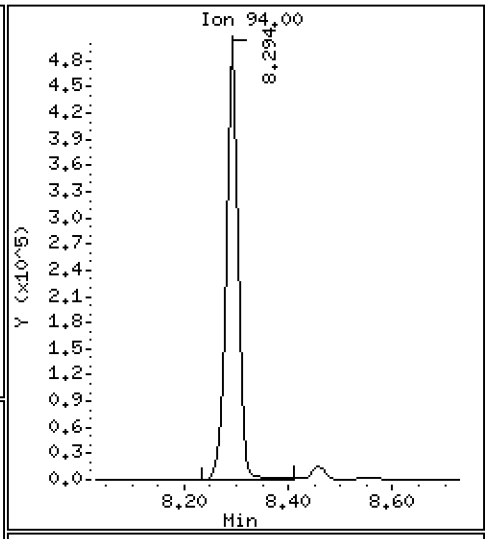
Column phase: ZB-5msi

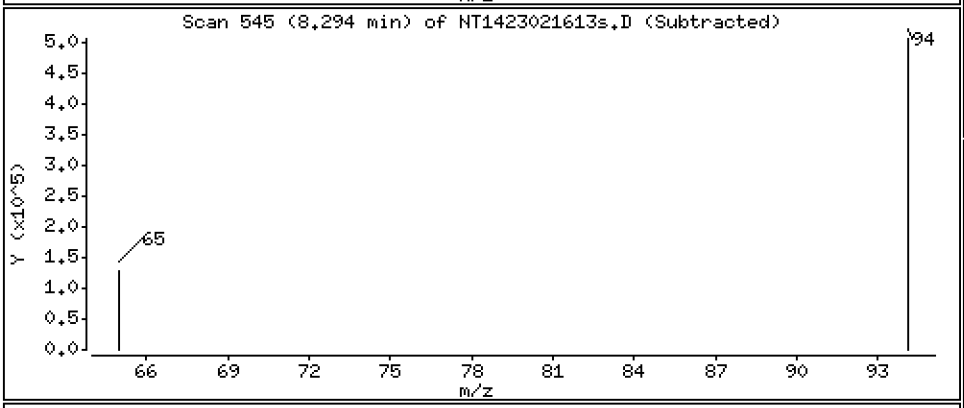
Column diameter: 0.25

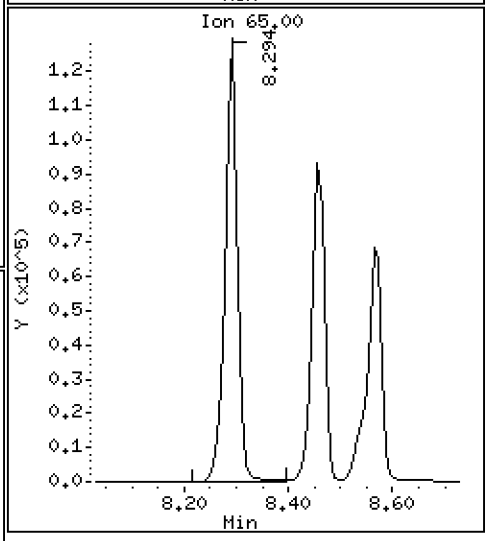
3 Phenol

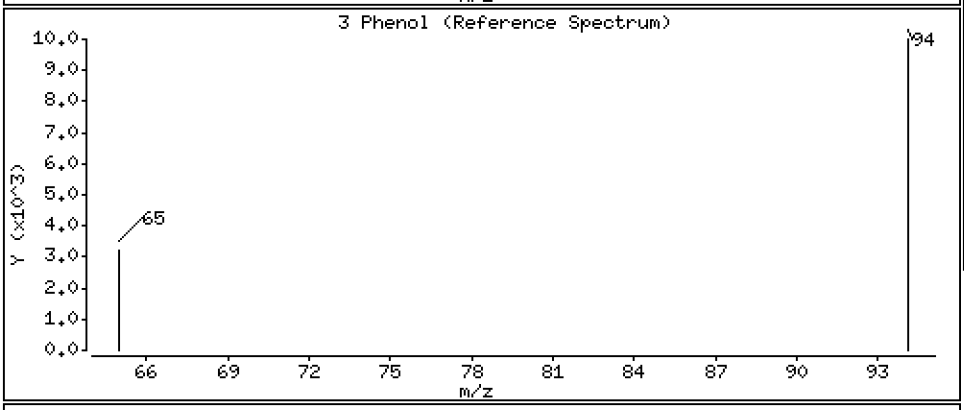
Concentration: 4.556 ug/mL

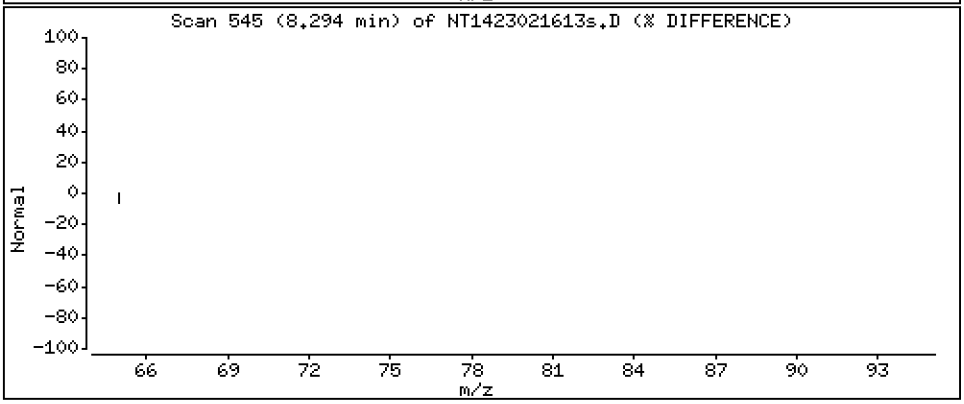












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

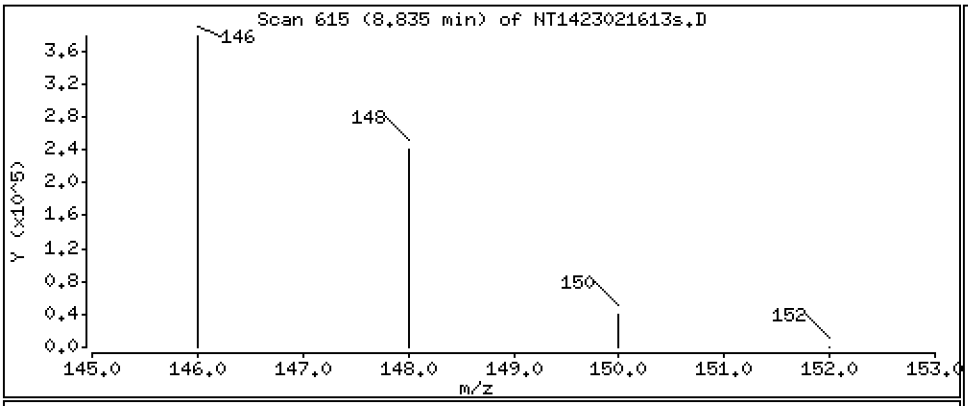
Operator: DSD

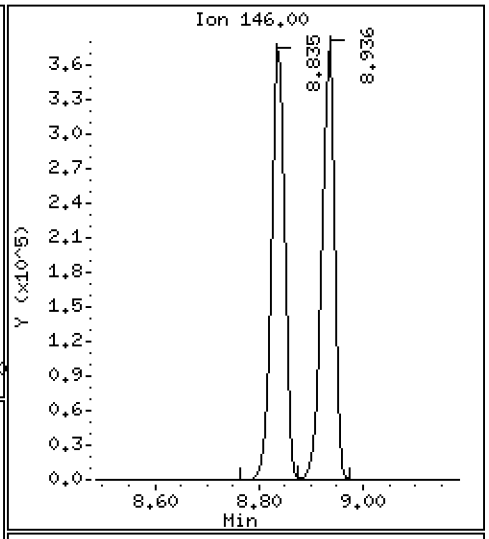
Column phase: ZB-5msi

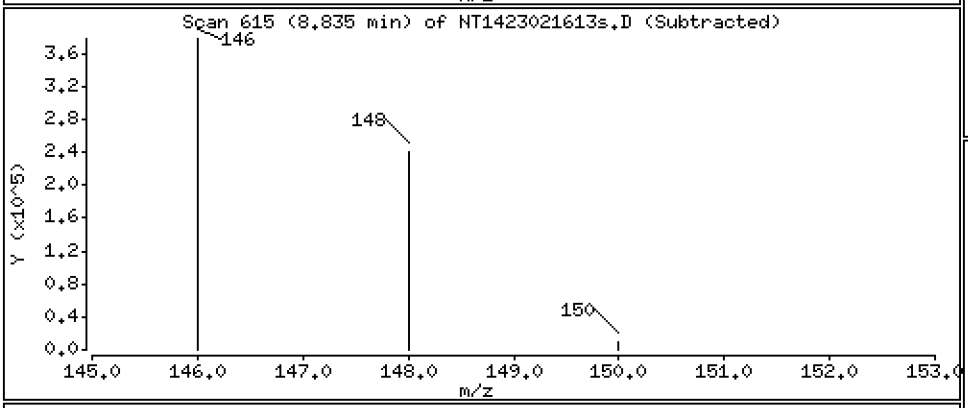
Column diameter: 0.25

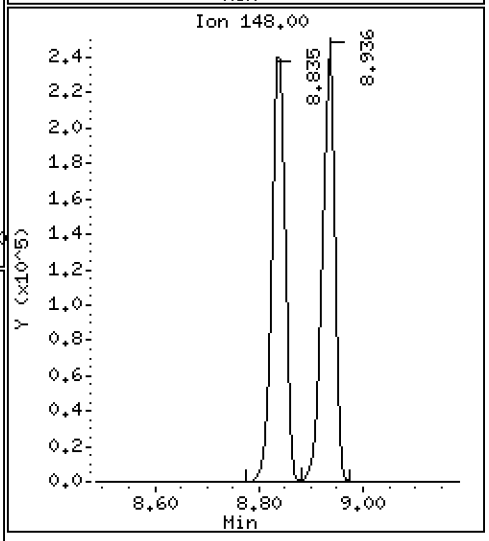
7 1,3-Dichlorobenzene

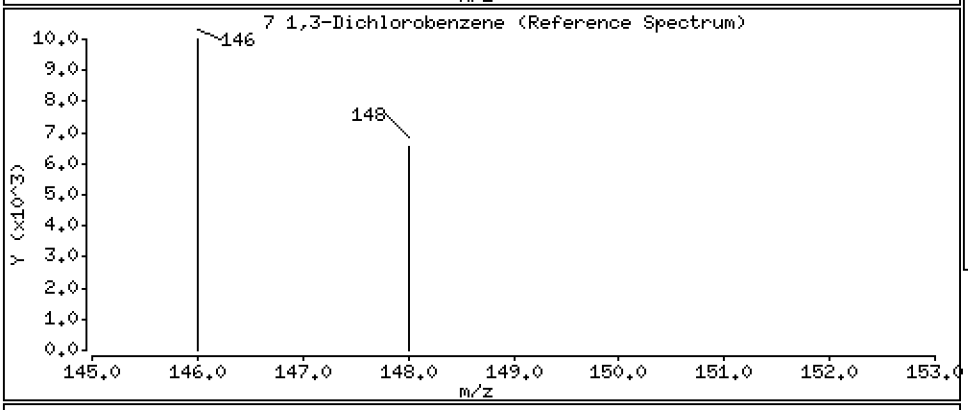
Concentration: 4.809 ug/mL

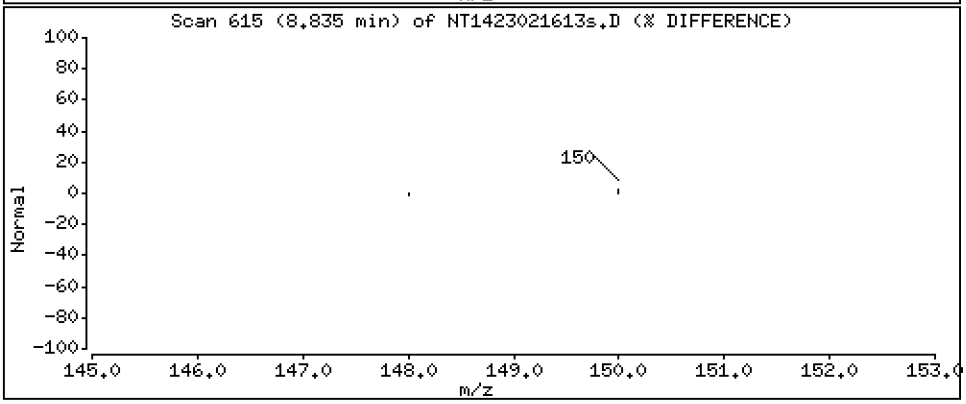












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

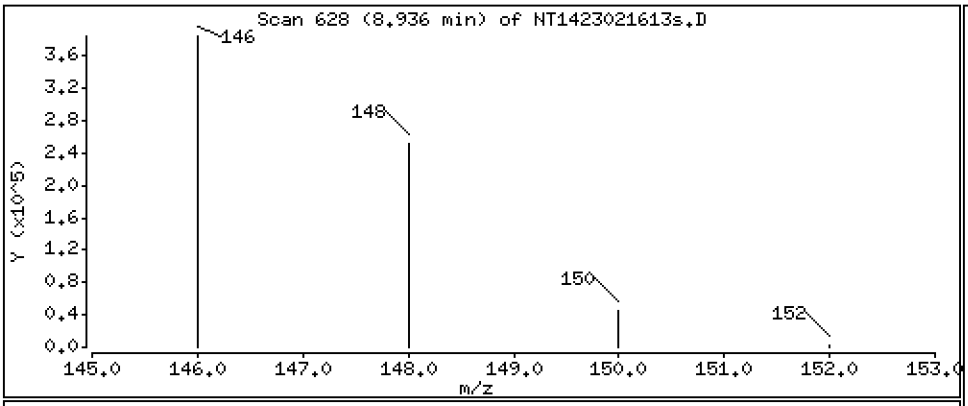
Operator: DSD

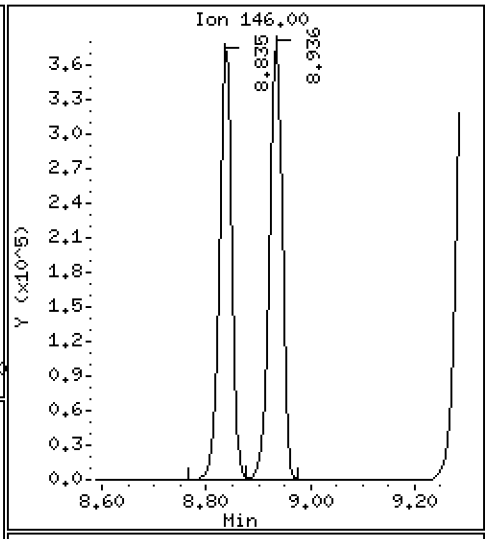
Column phase: ZB-5msi

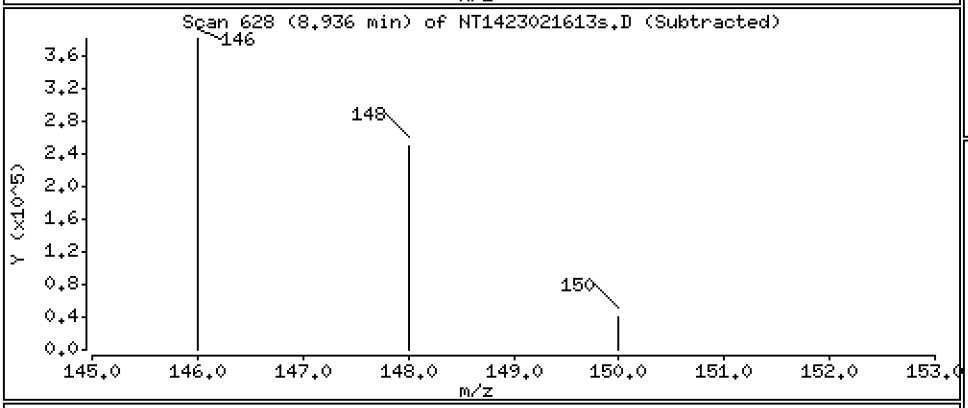
Column diameter: 0.25

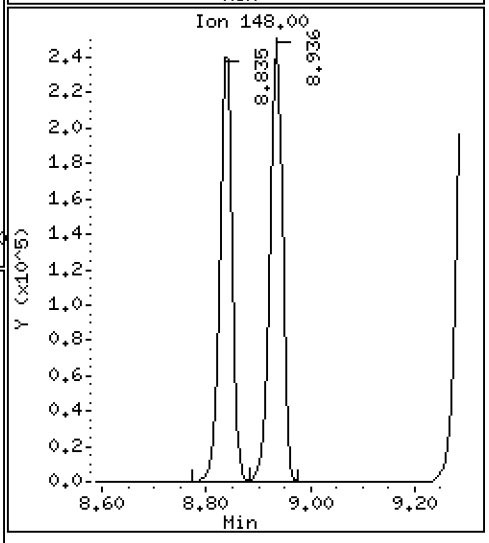
9 1,4-Dichlorobenzene

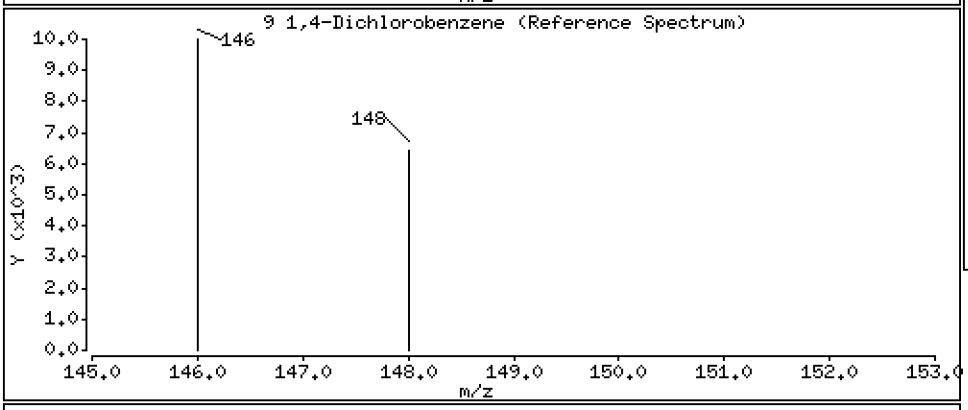
Concentration: 4.850 ug/mL

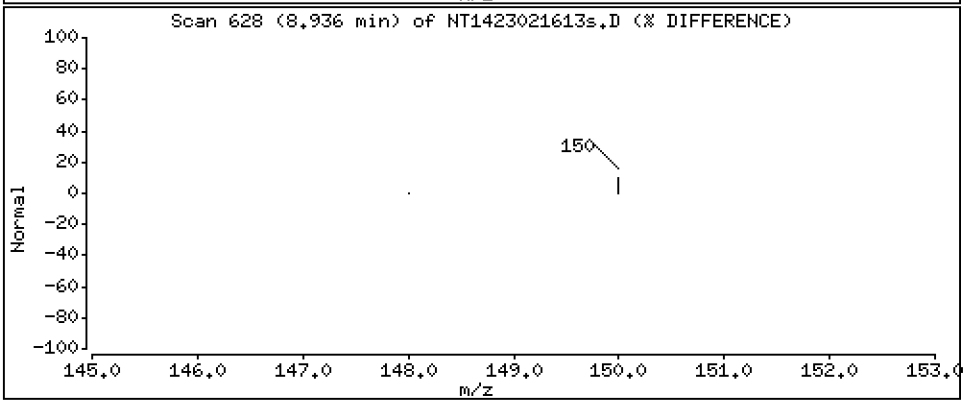












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

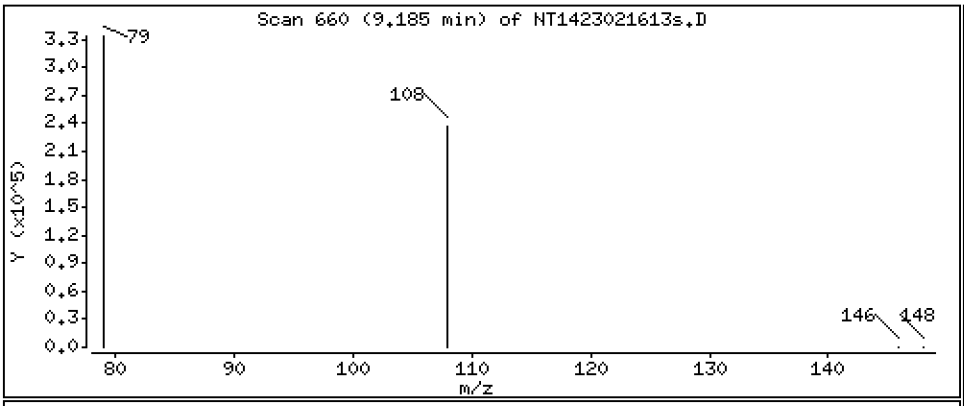
Operator: DSD

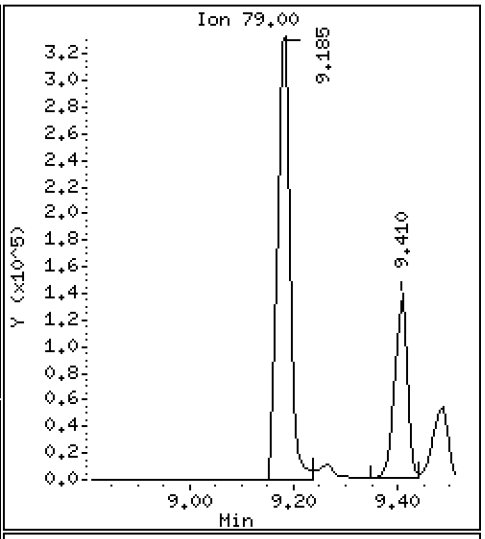
Column phase: ZB-5msi

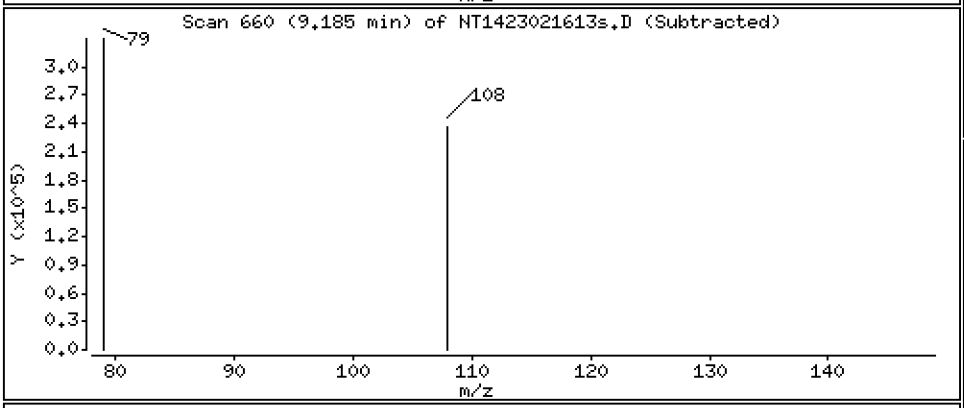
Column diameter: 0.25

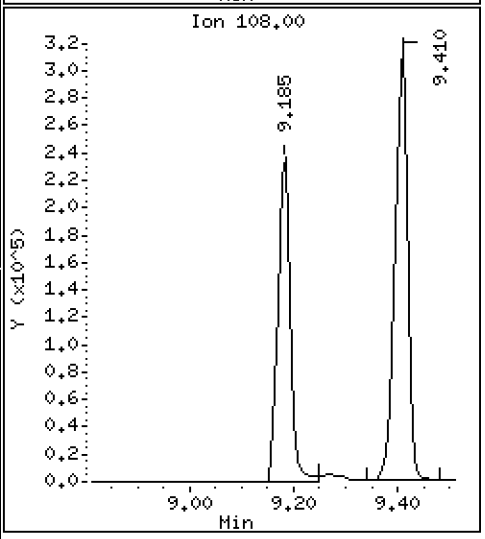
11 Benzyl alcohol

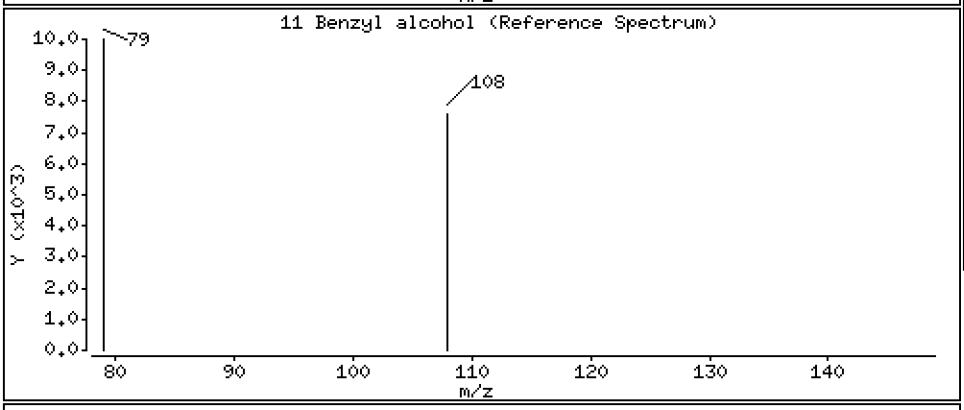
Concentration: 5.300 ug/mL

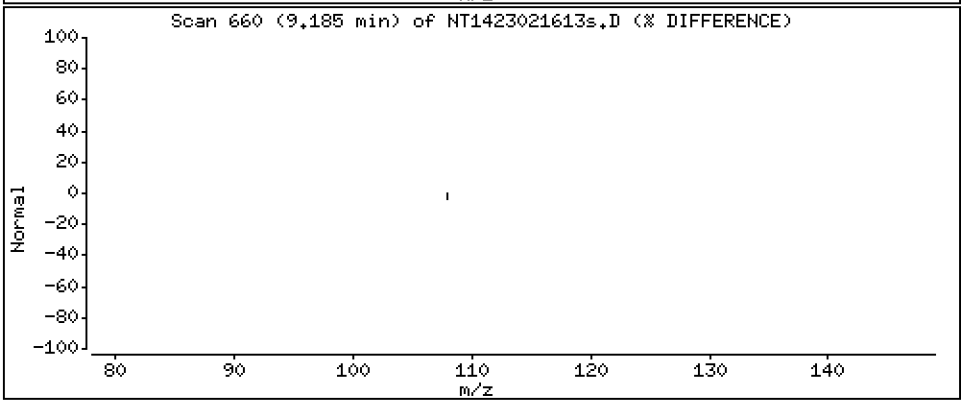












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

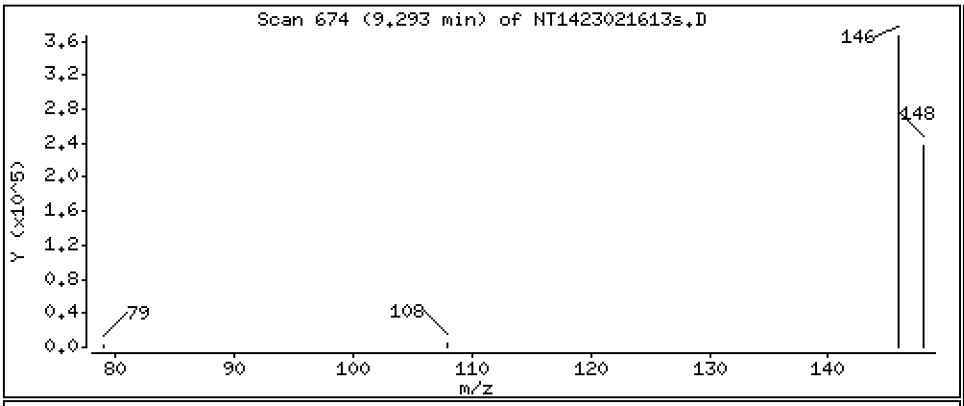
Operator: DSD

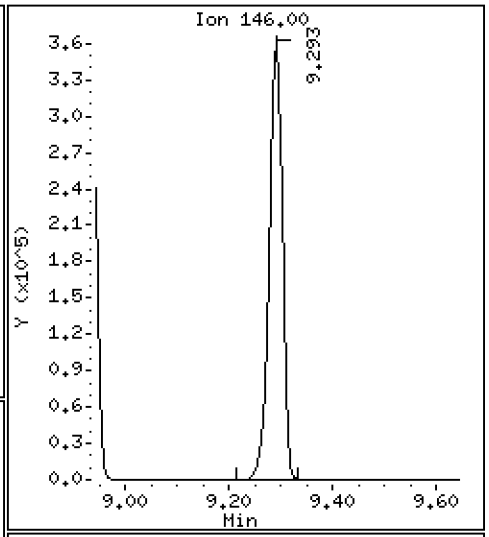
Column phase: ZB-5msi

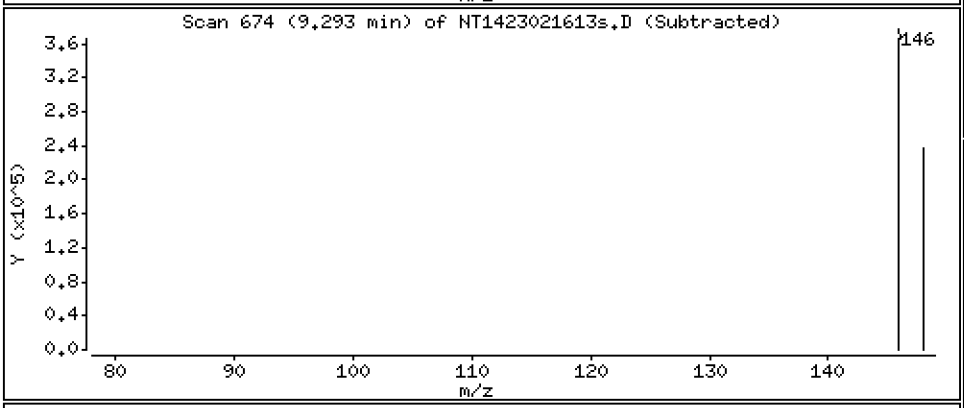
Column diameter: 0.25

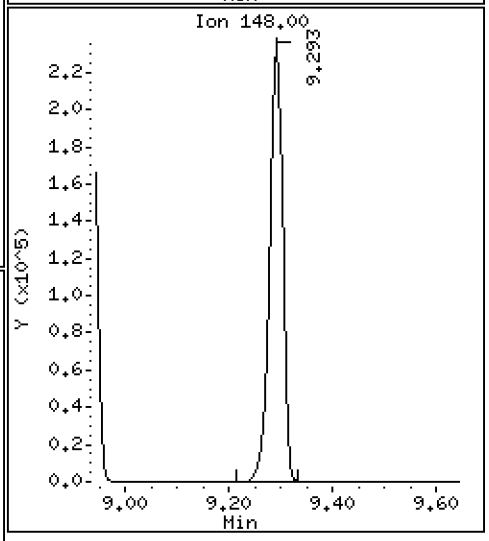
12 1,2-Dichlorobenzene

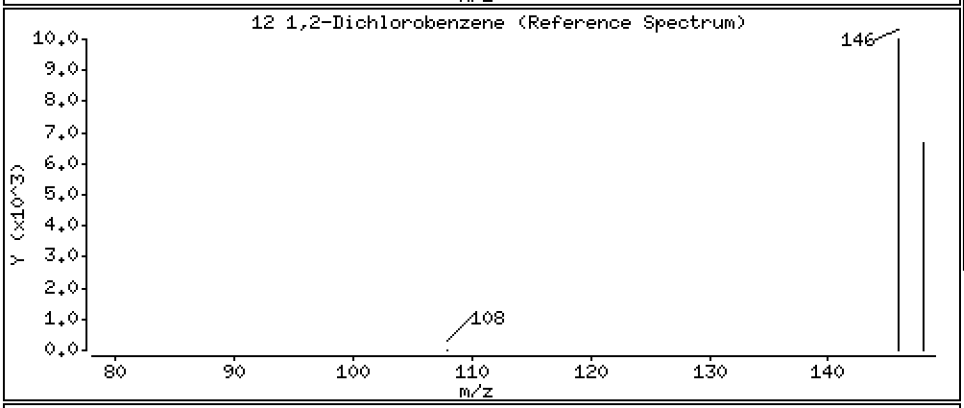
Concentration: 4.795 ug/mL

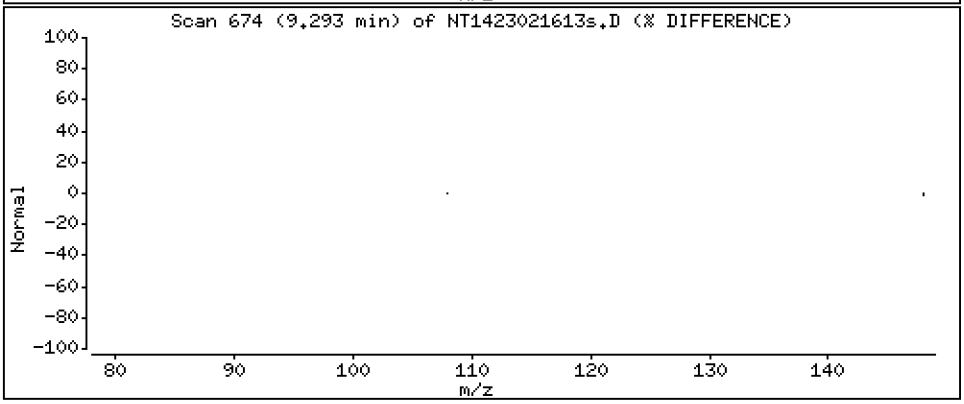












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

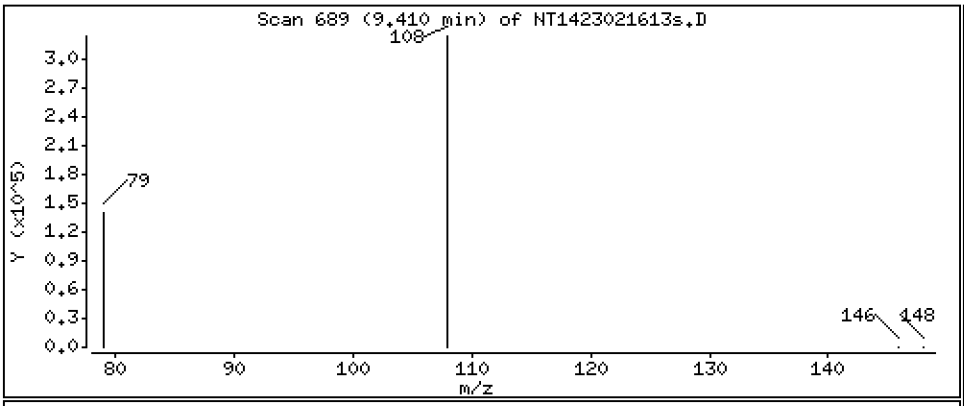
Operator: DSD

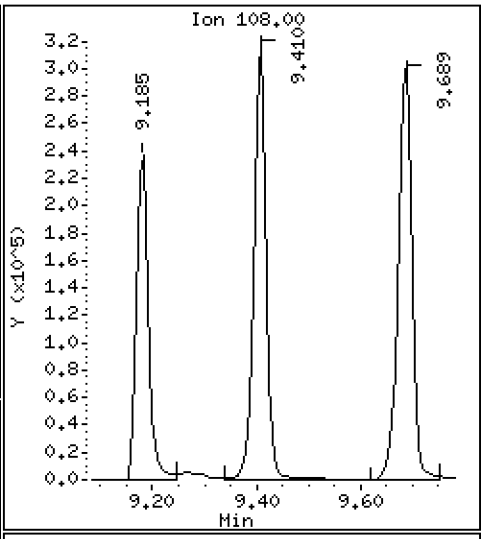
Column phase: ZB-5msi

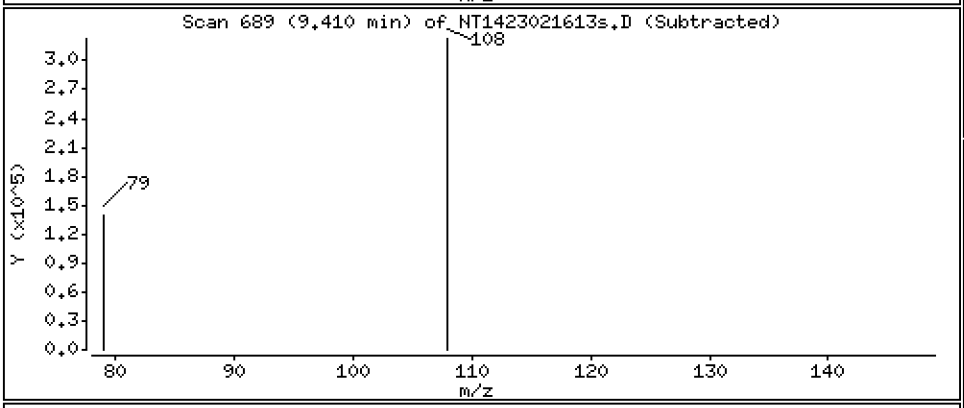
Column diameter: 0.25

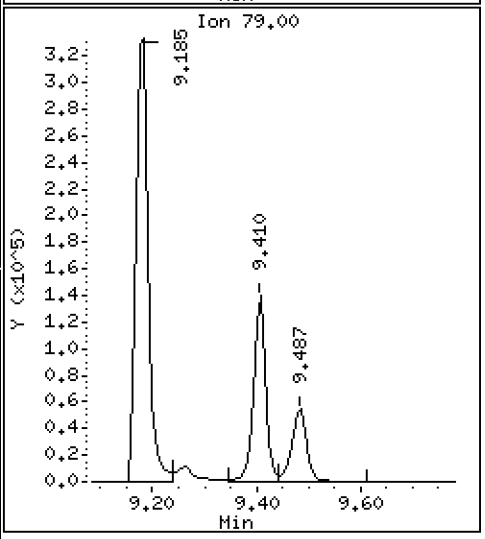
13 2-Methylphenol

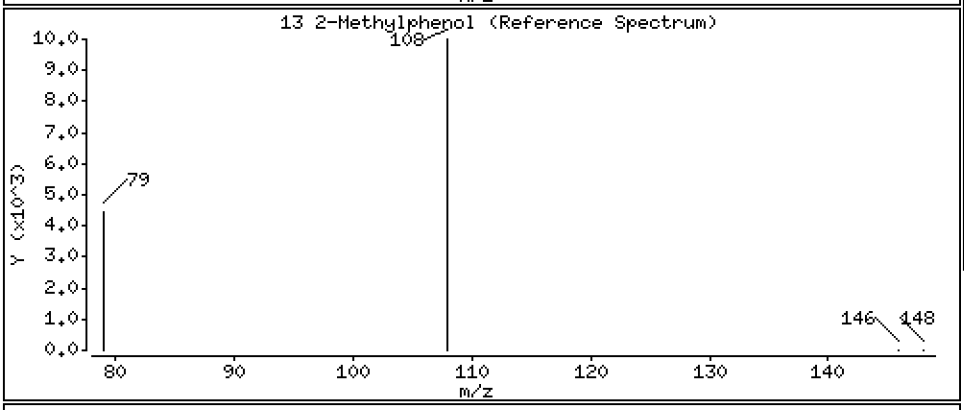
Concentration: 4.507 ug/mL

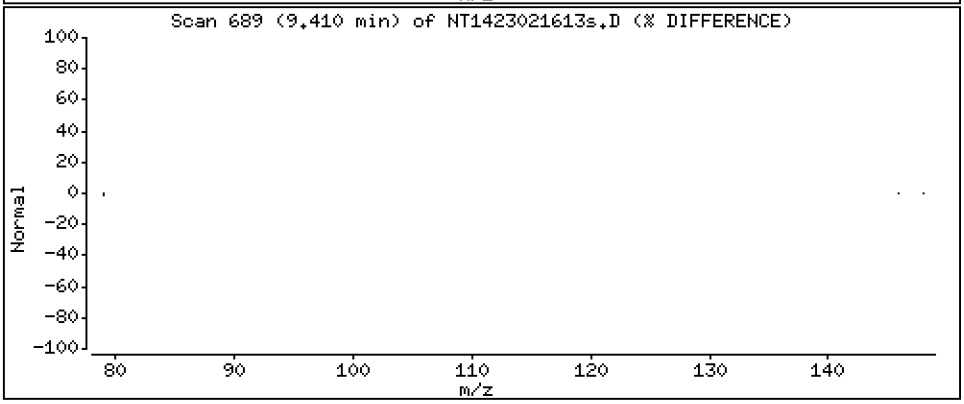












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

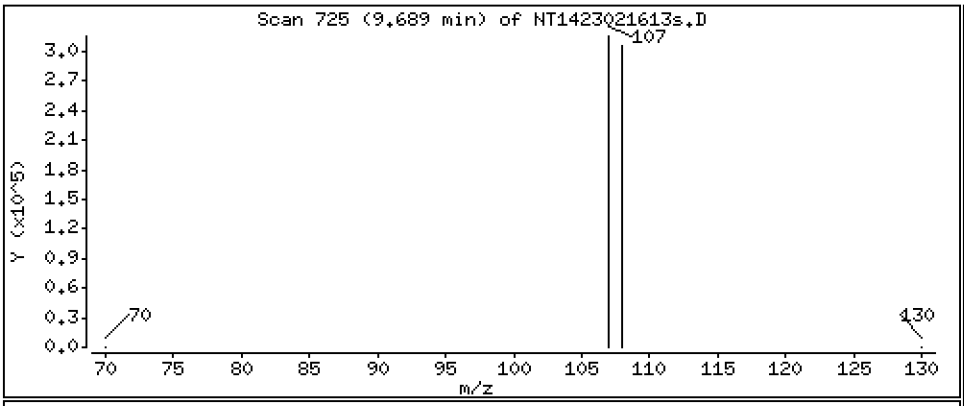
Operator: DSD

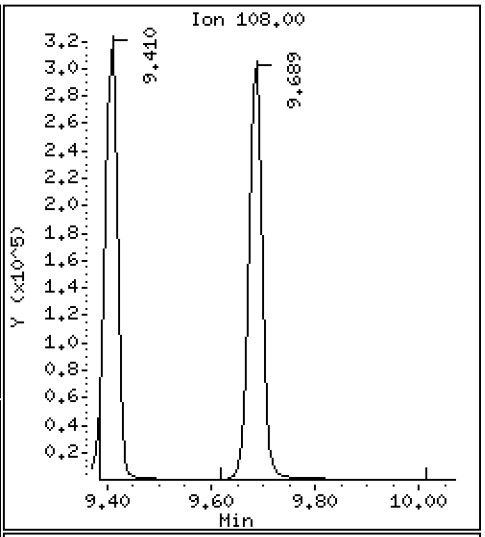
Column phase: ZB-5msi

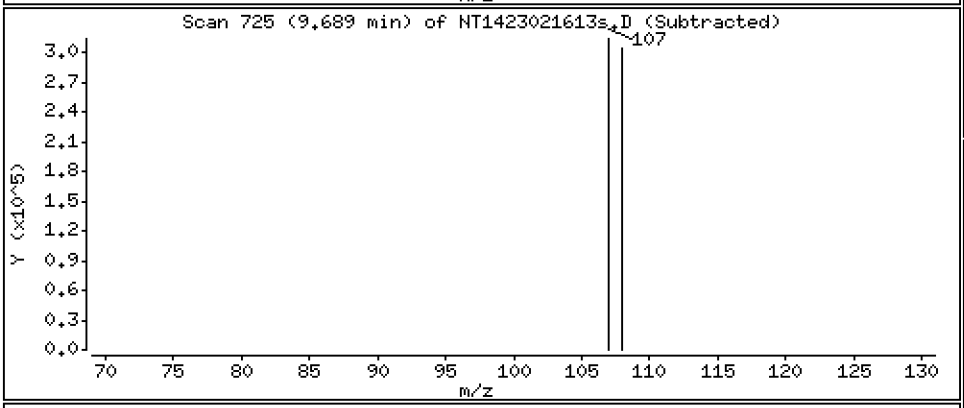
Column diameter: 0.25

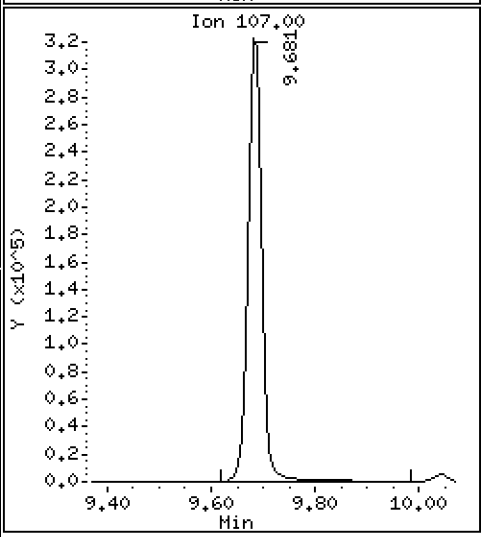
15 4-Methylphenol

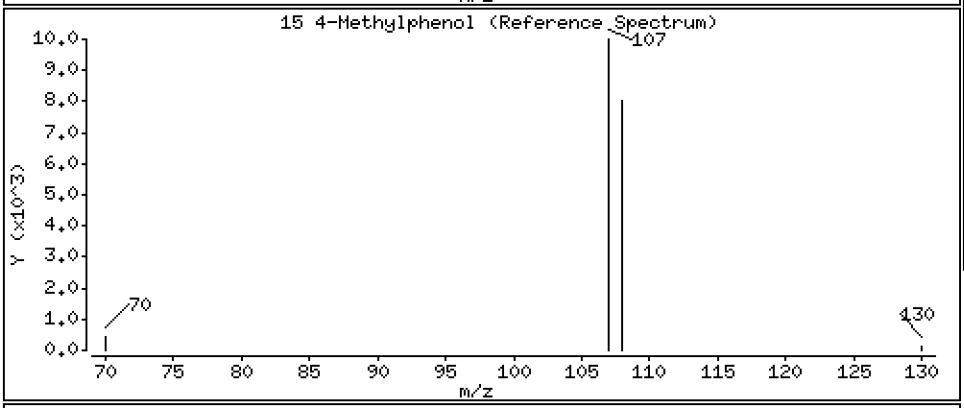
Concentration: 4.460 ug/mL

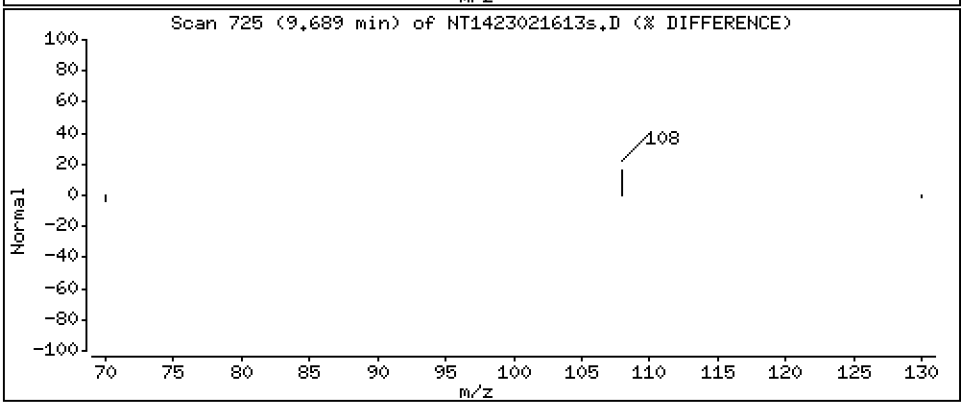












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

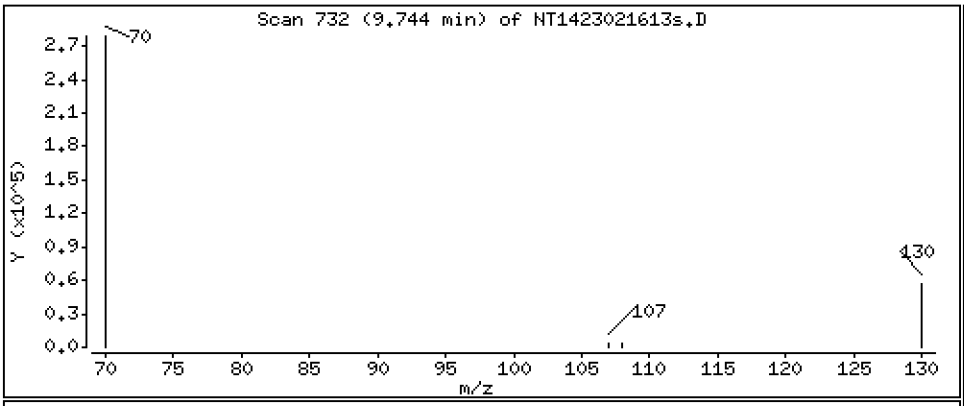
Operator: DSD

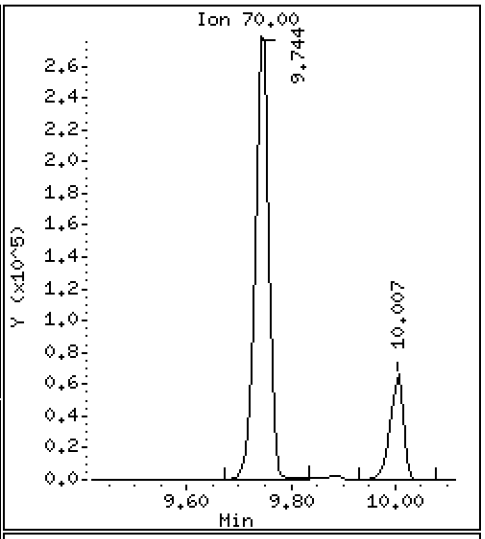
Column phase: ZB-5msi

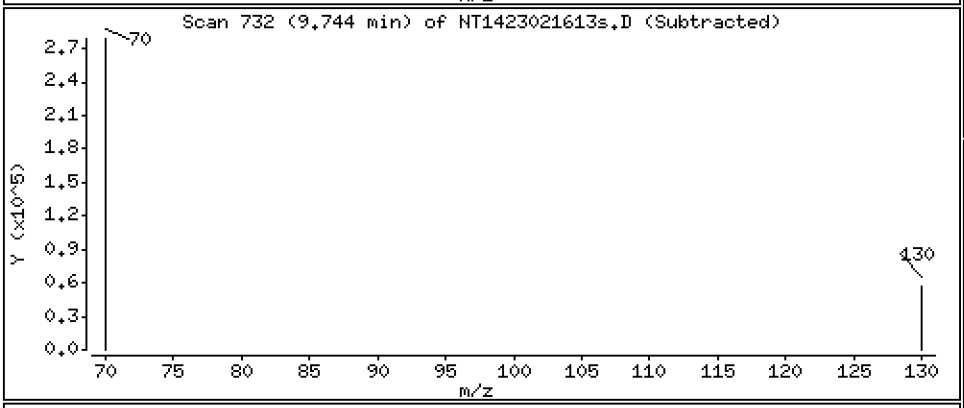
Column diameter: 0.25

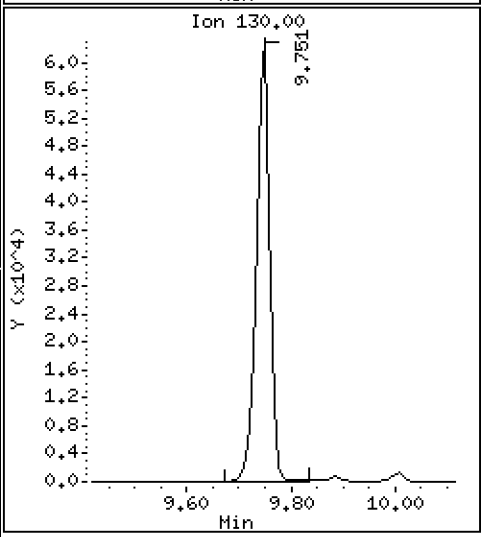
16 N-Nitroso-di-n-propylamine

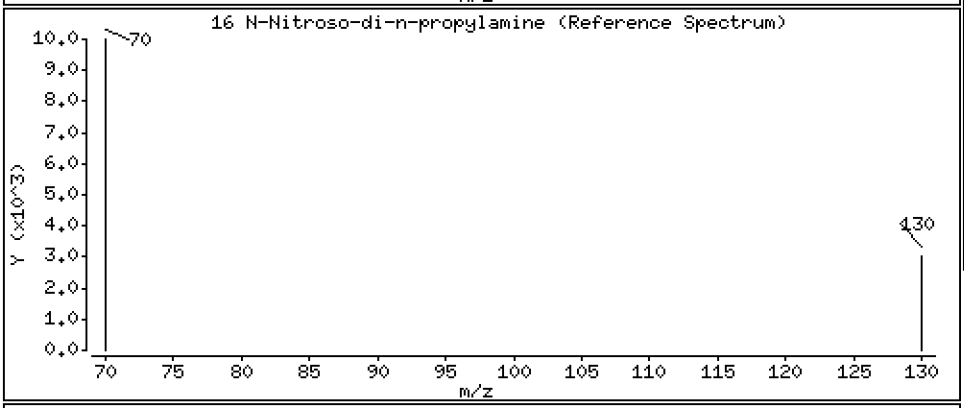
Concentration: 5.047 ug/mL

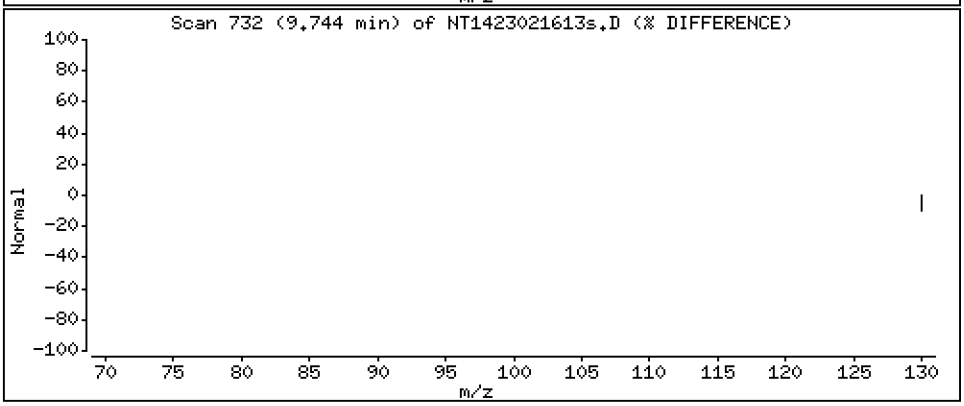












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

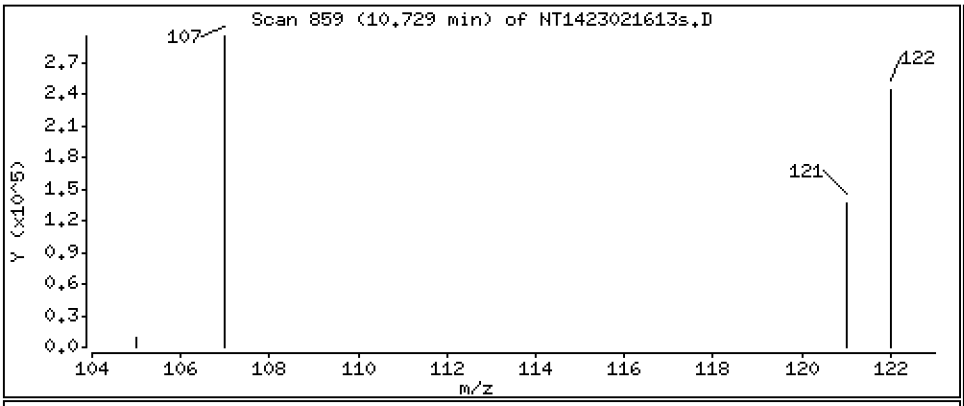
Operator: DSD

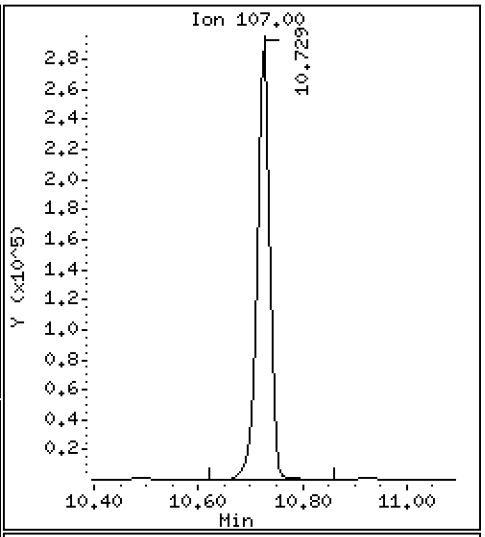
Column phase: ZB-5msi

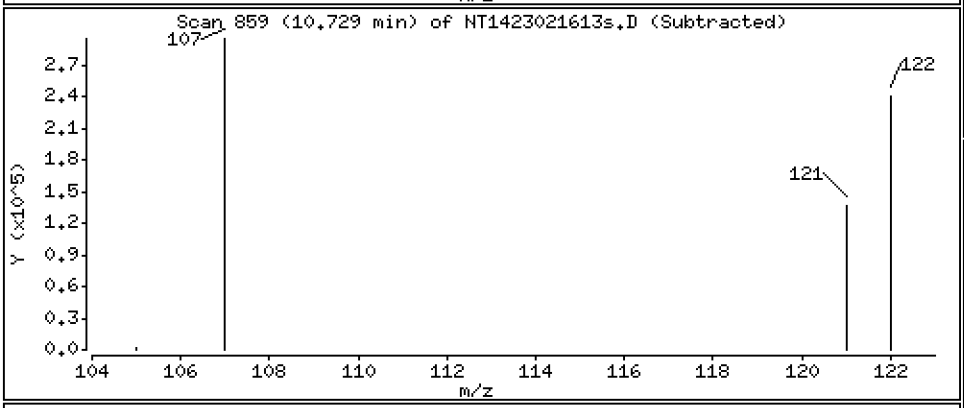
Column diameter: 0.25

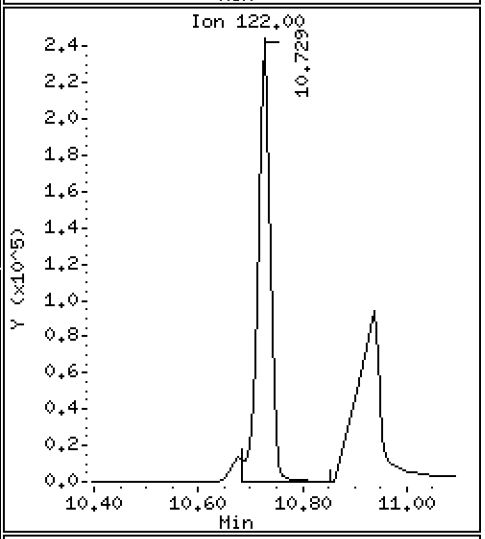
22 2,4-Dimethylphenol

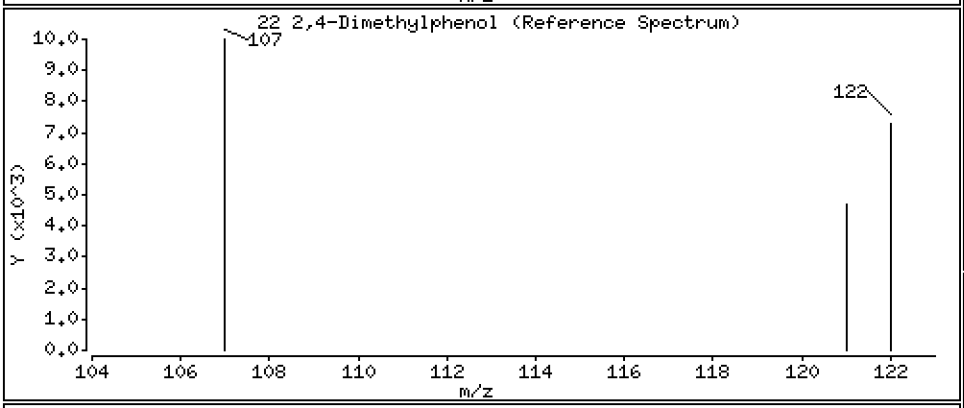
Concentration: 3.903 ug/mL

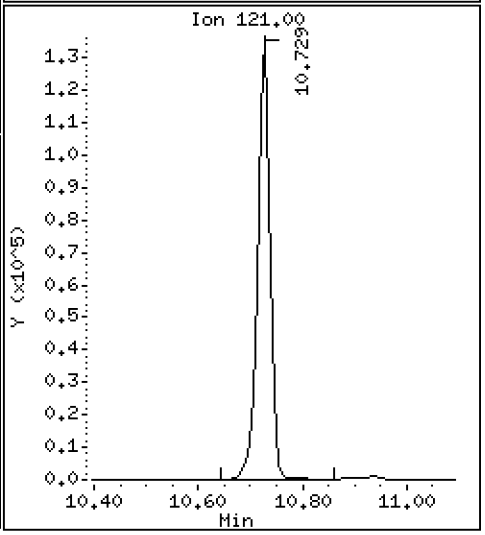


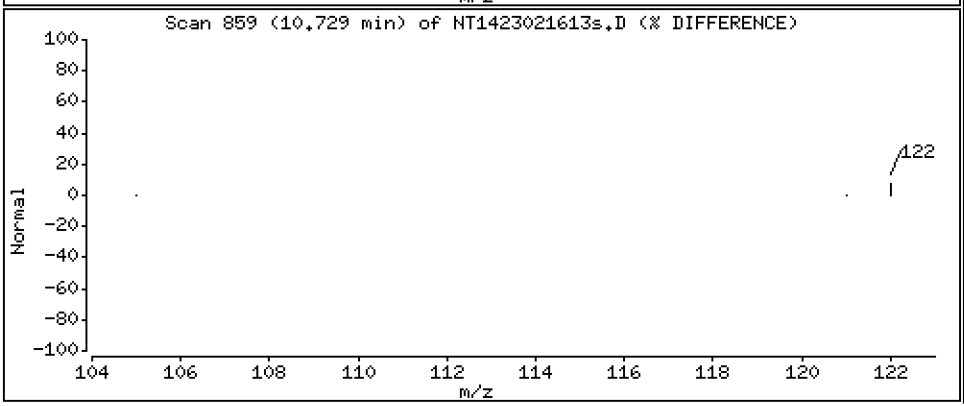












Date : 16-FEB-2023 21:18

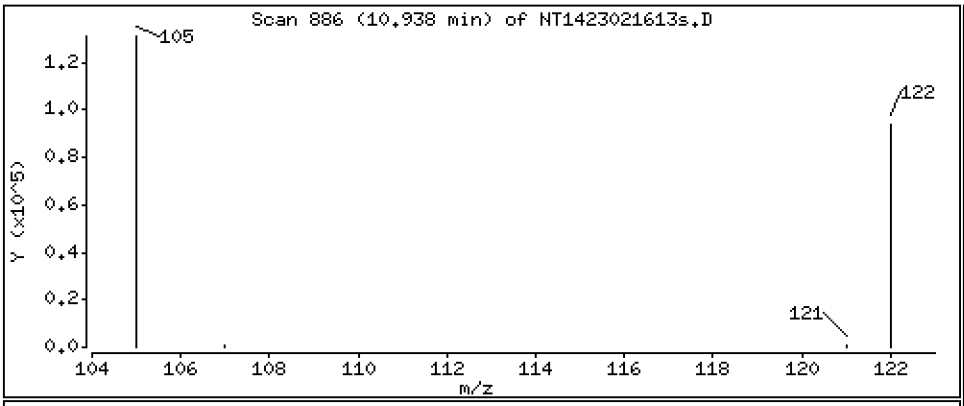
Client ID: Instrument: nt14.i

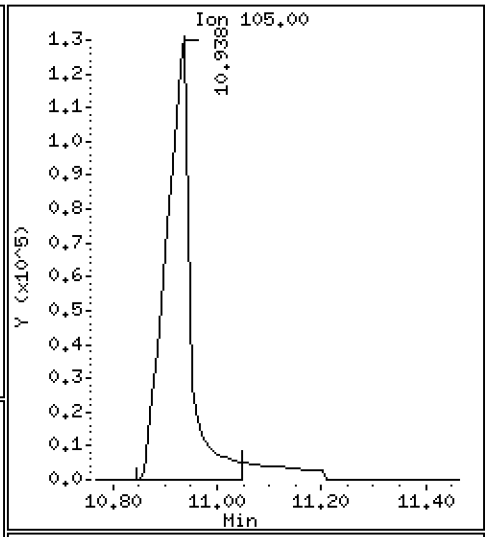
Sample Info: SLB0240-SCV1

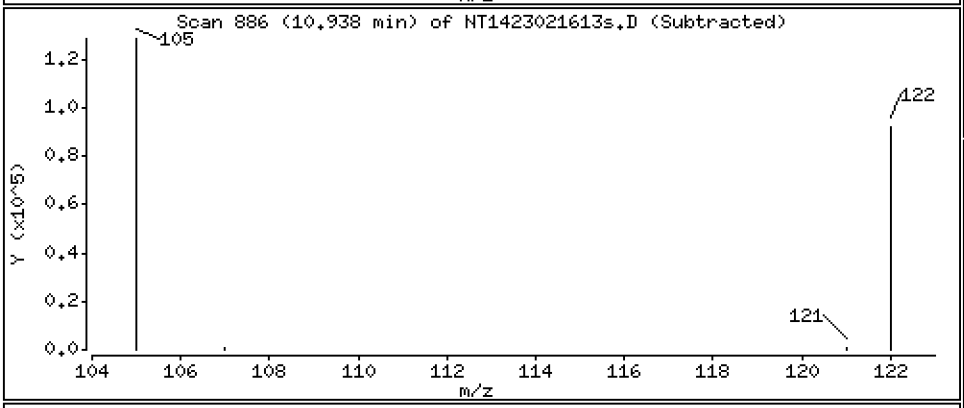
Operator: DSD

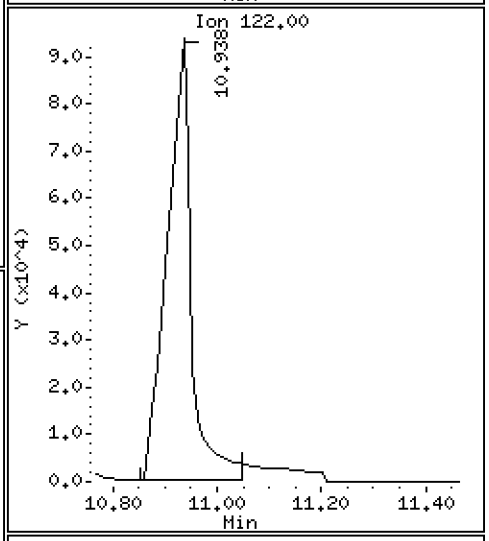
Column phase: ZB-5msi Column diameter: 0.25

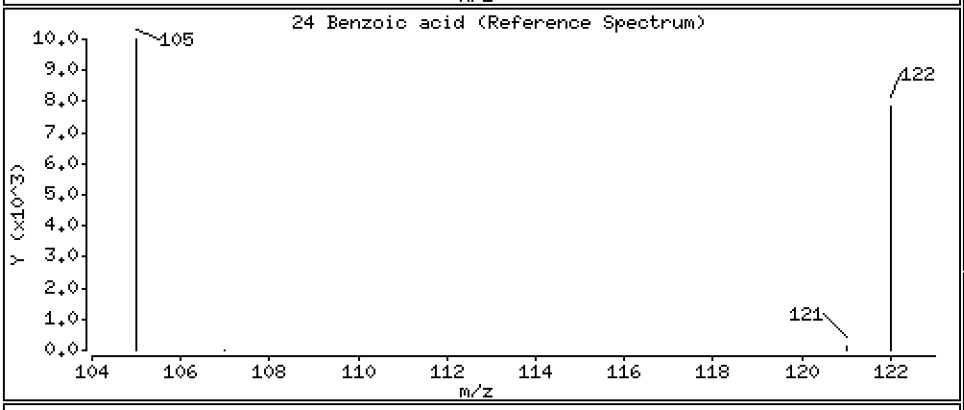
24 Benzoic acid Concentration: 6.447 ug/mL

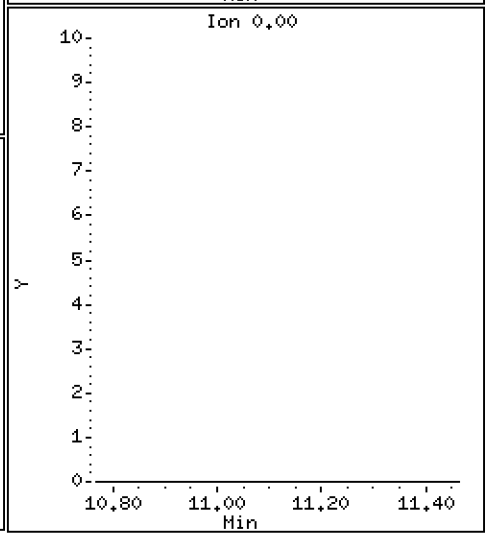


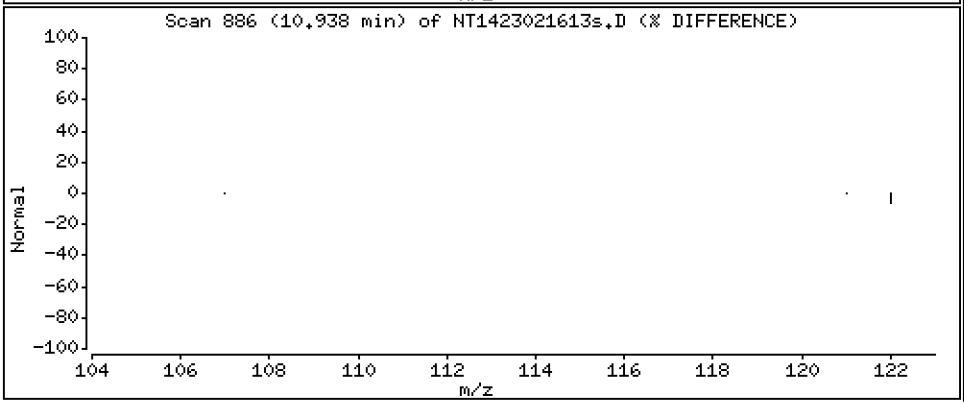












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

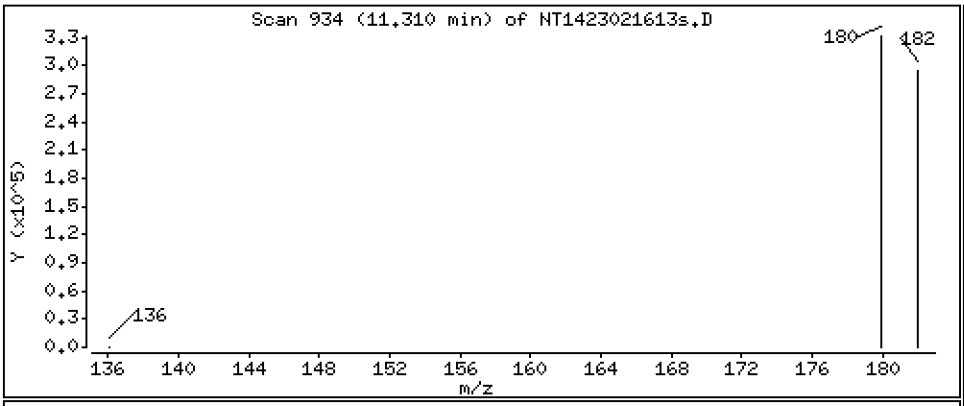
Operator: DSD

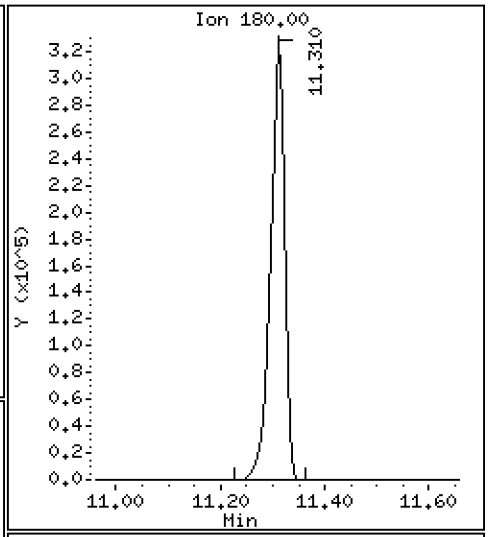
Column phase: ZB-5msi

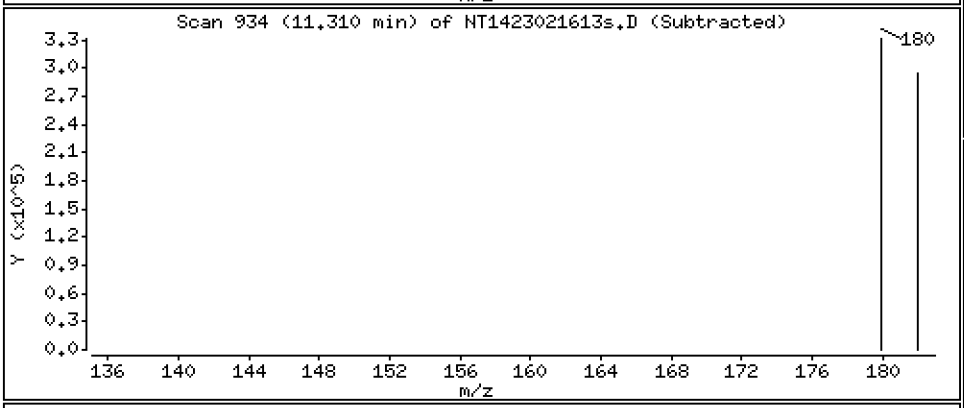
Column diameter: 0.25

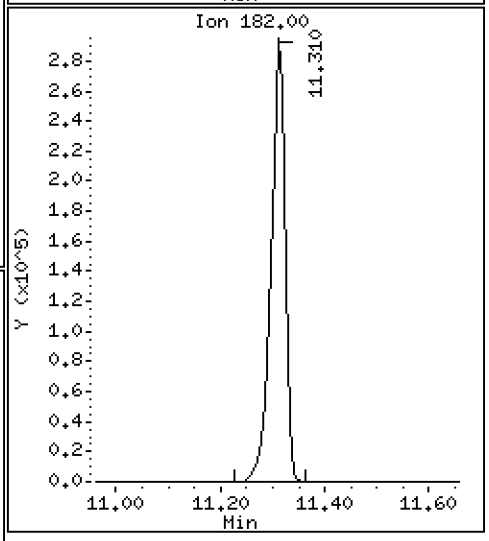
26 1,2,4-Trichlorobenzene

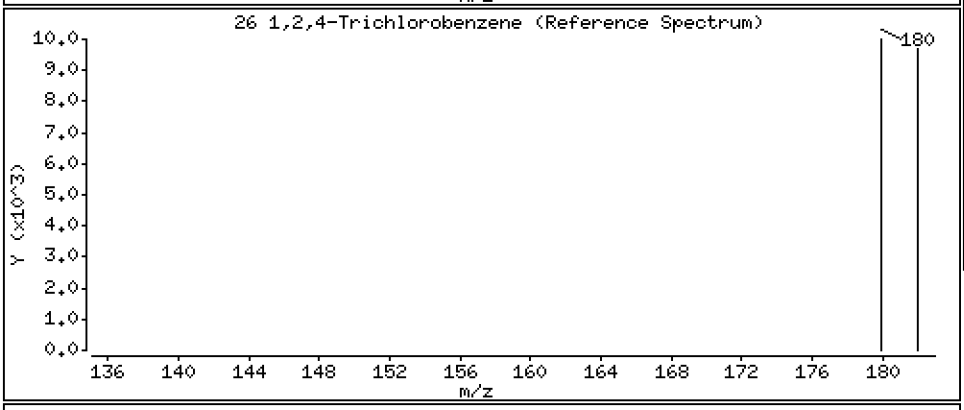
Concentration: 4.595 ug/mL

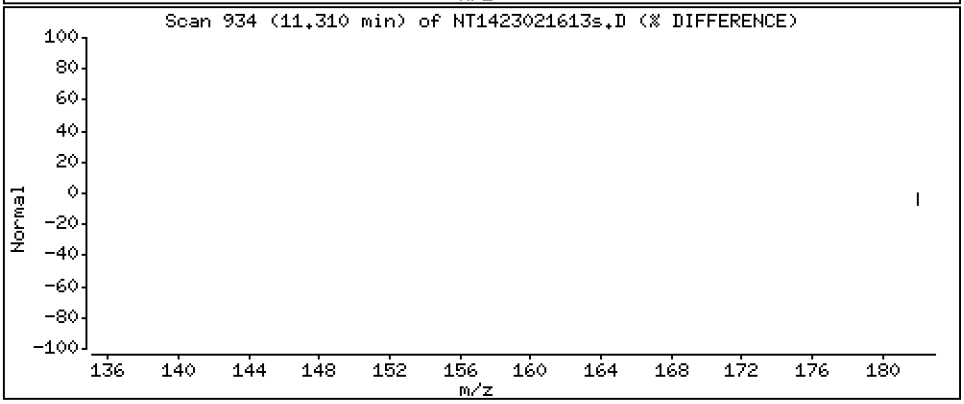












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

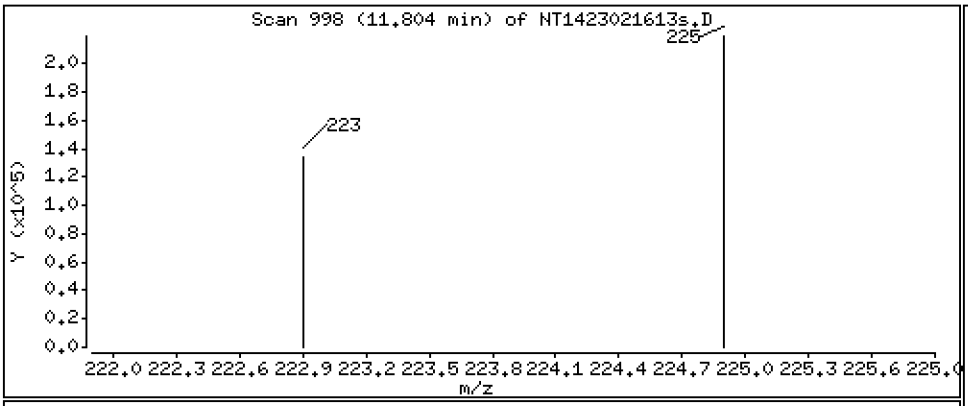
Operator: DSD

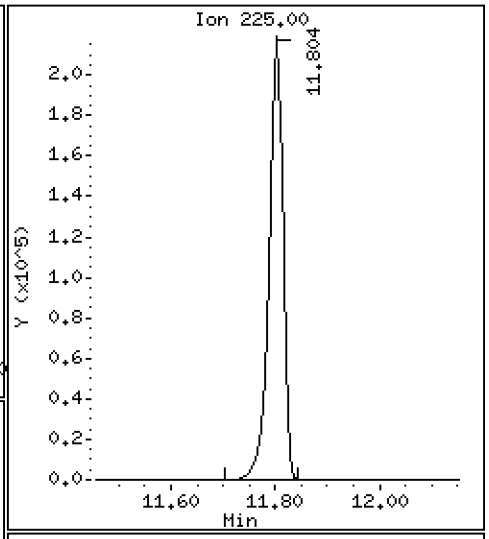
Column phase: ZB-5msi

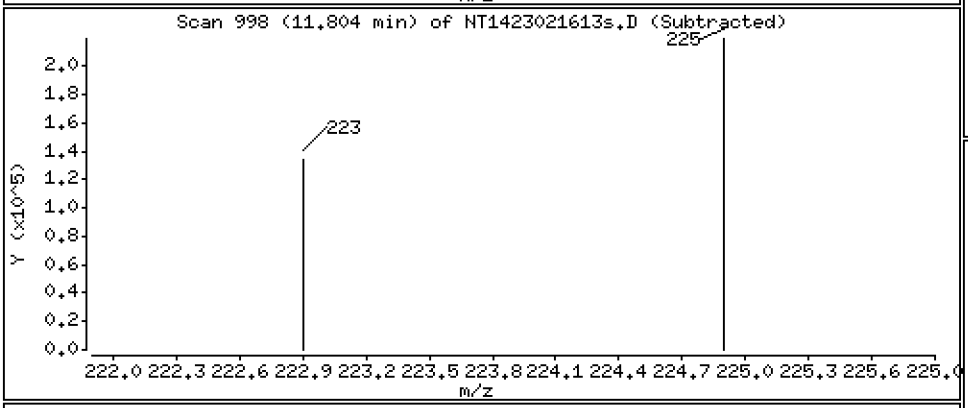
Column diameter: 0.25

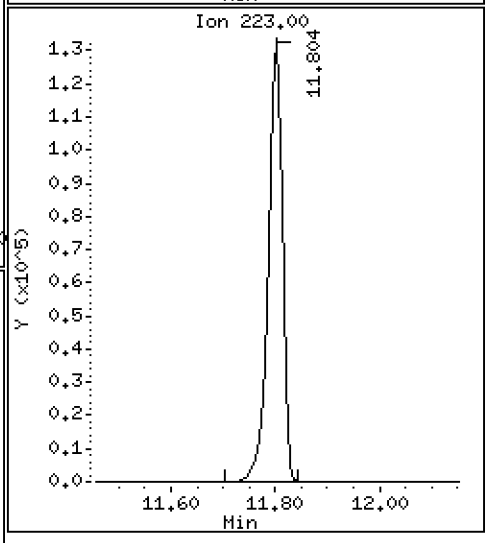
30 Hexachlorobutadiene

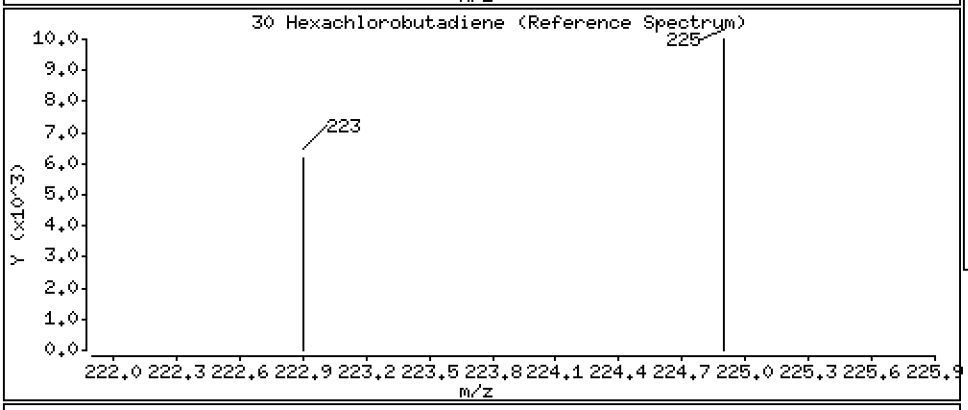
Concentration: 4.815 ug/mL

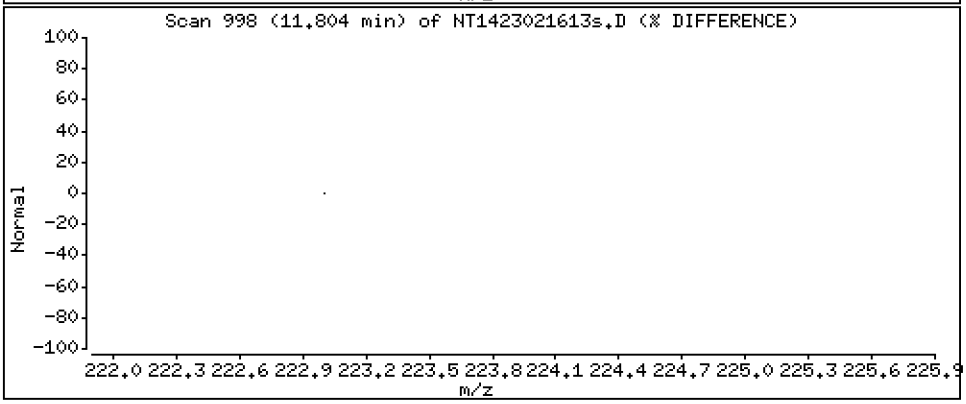












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

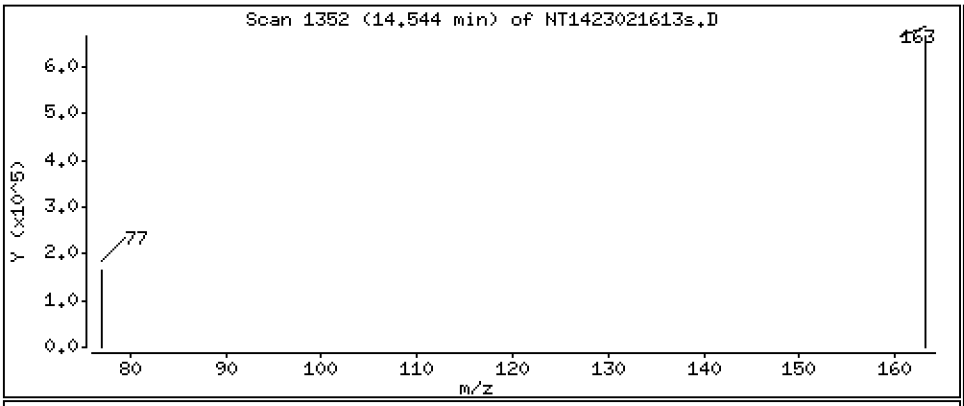
Operator: DSD

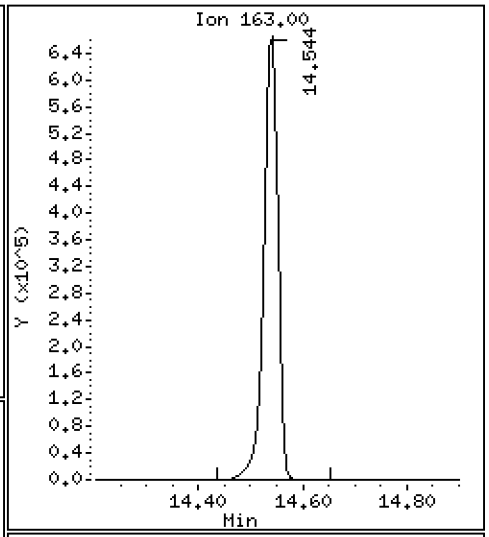
Column phase: ZB-5msi

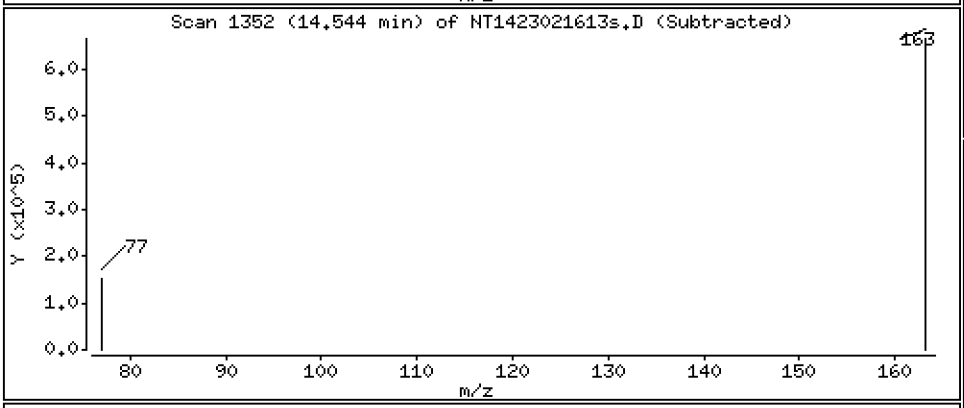
Column diameter: 0.25

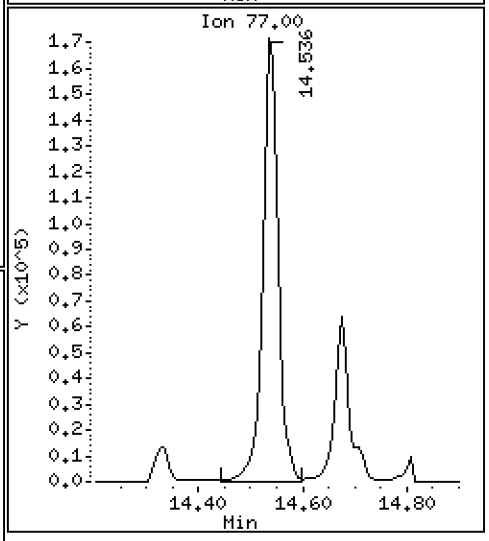
39 Dimethylphthalate

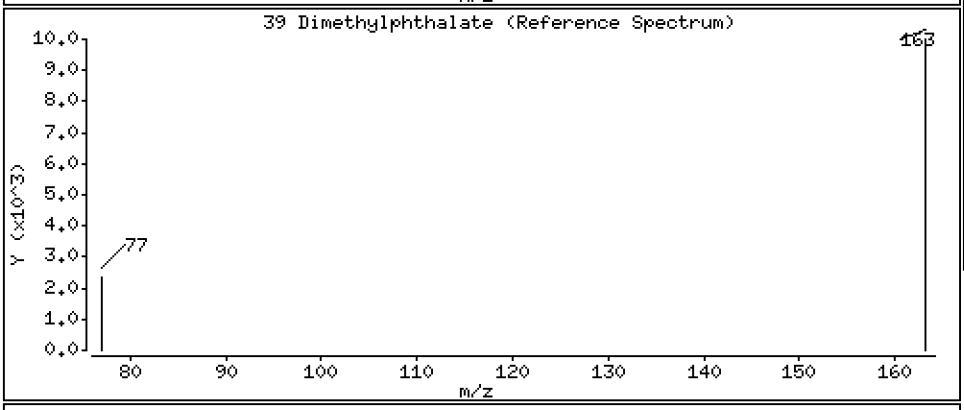
Concentration: 5.002 ug/mL

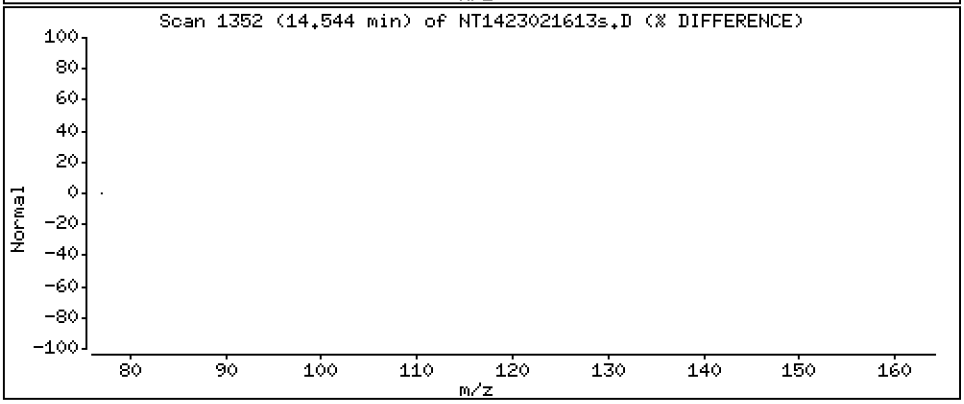












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

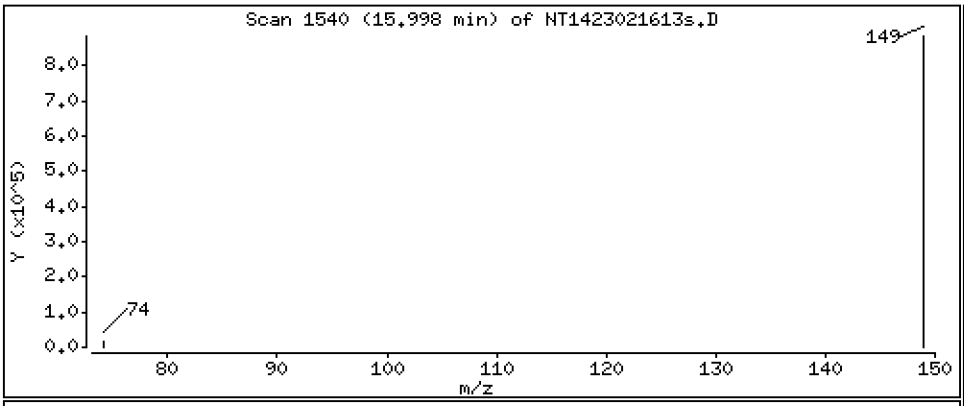
Operator: DSD

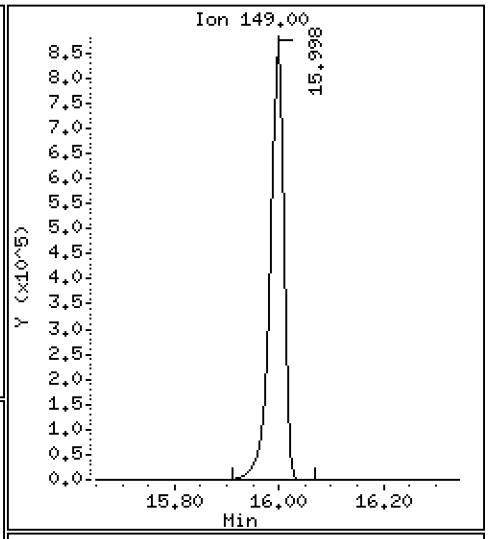
Column phase: ZB-5msi

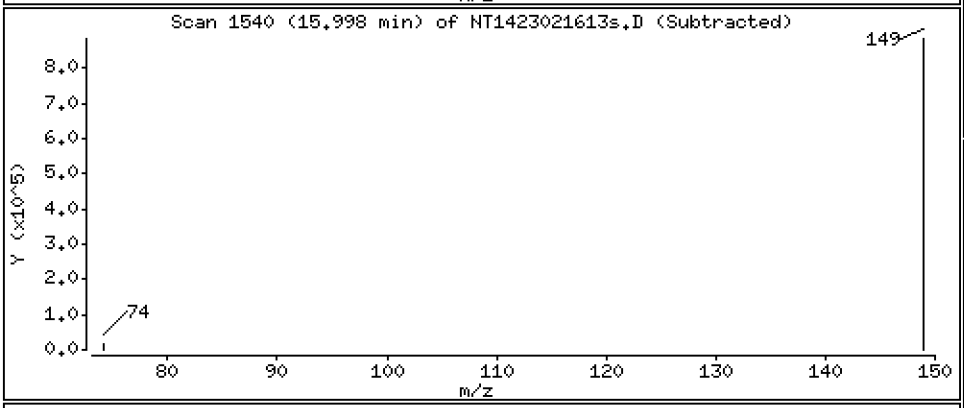
Column diameter: 0.25

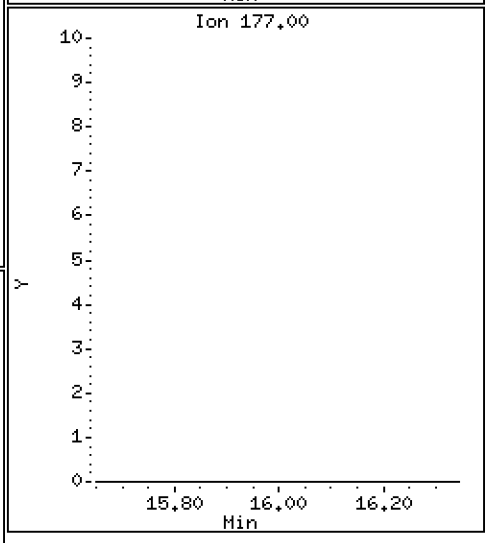
50 Diethylphthalate

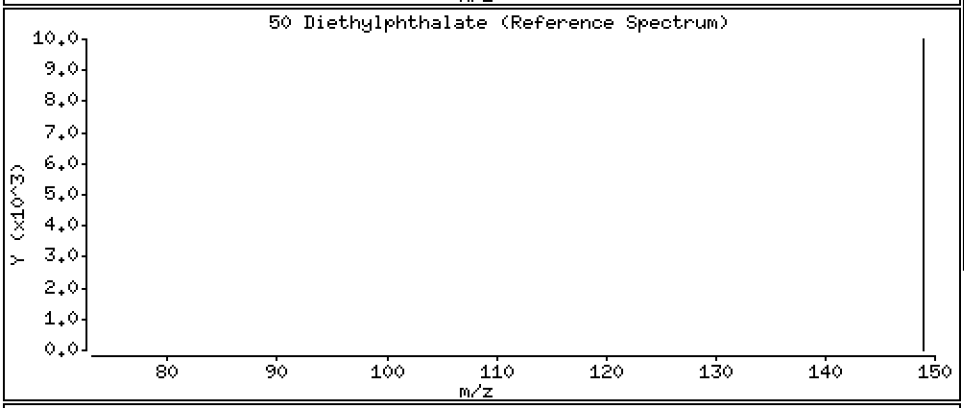
Concentration: 4.969 ug/mL

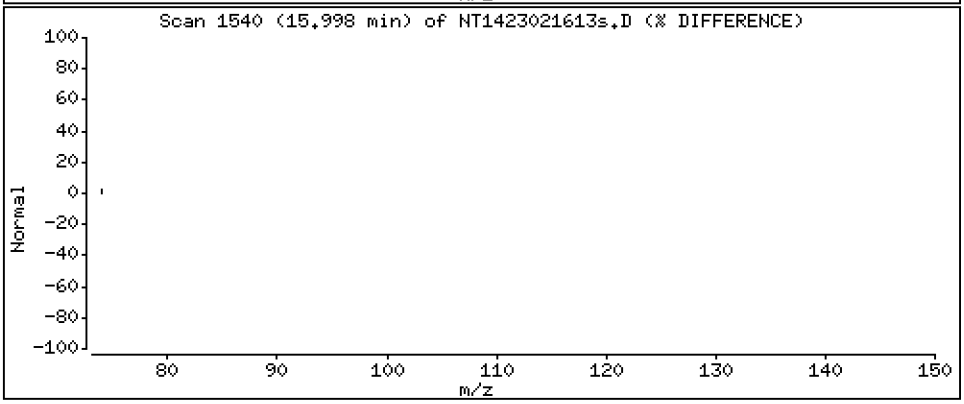












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

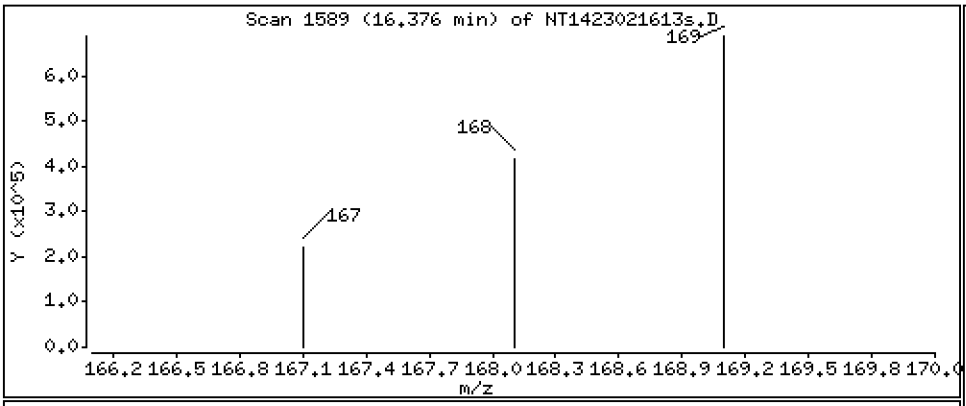
Operator: DSD

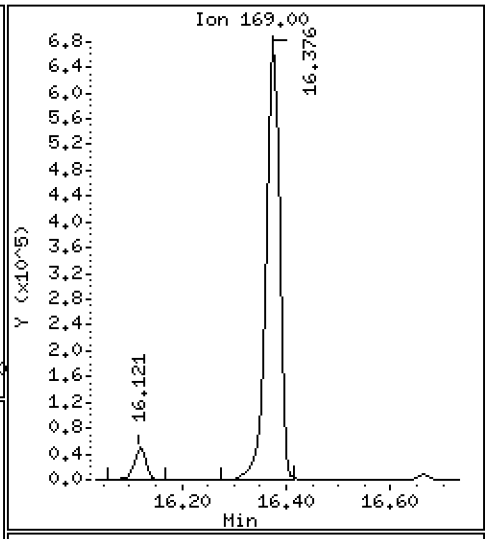
Column phase: ZB-5msi

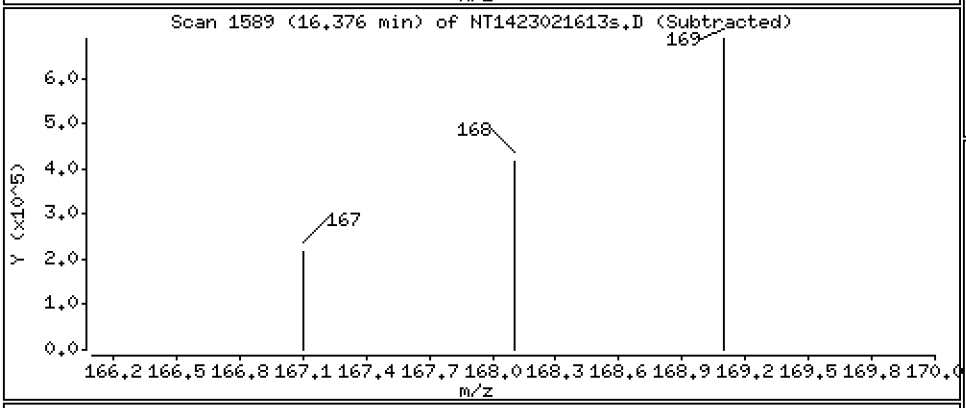
Column diameter: 0.25

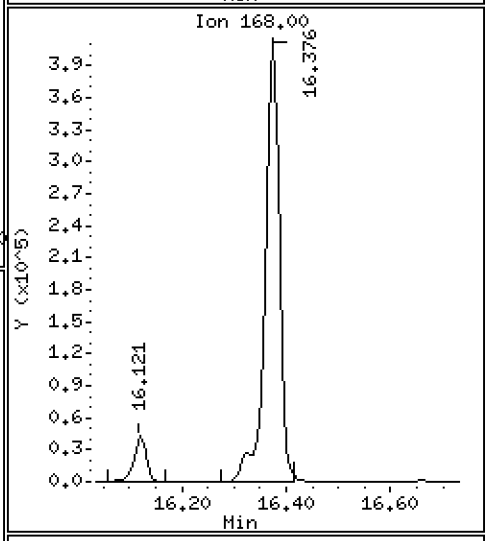
54 N-Nitrosodiphenylamine

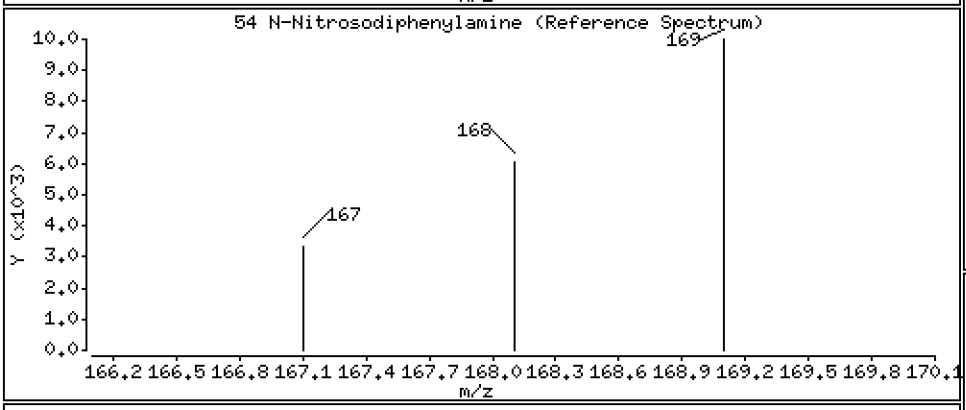
Concentration: 5.009 ug/mL

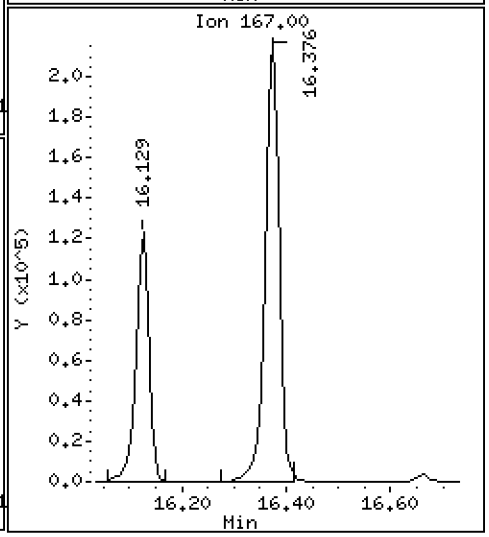


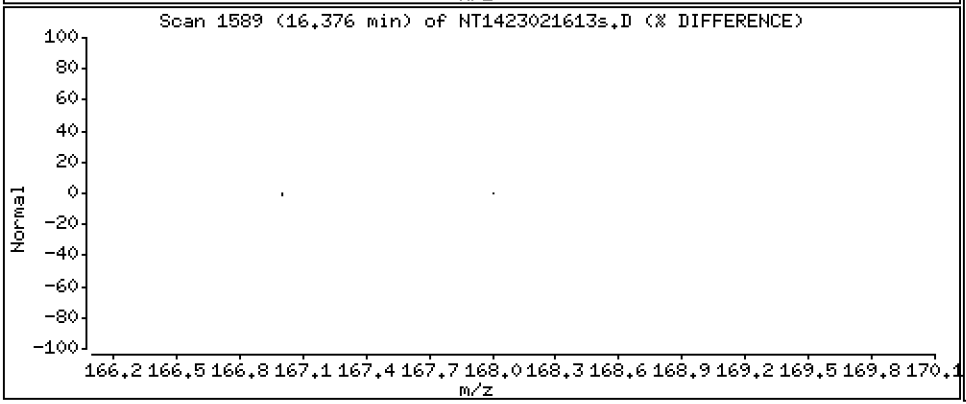












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

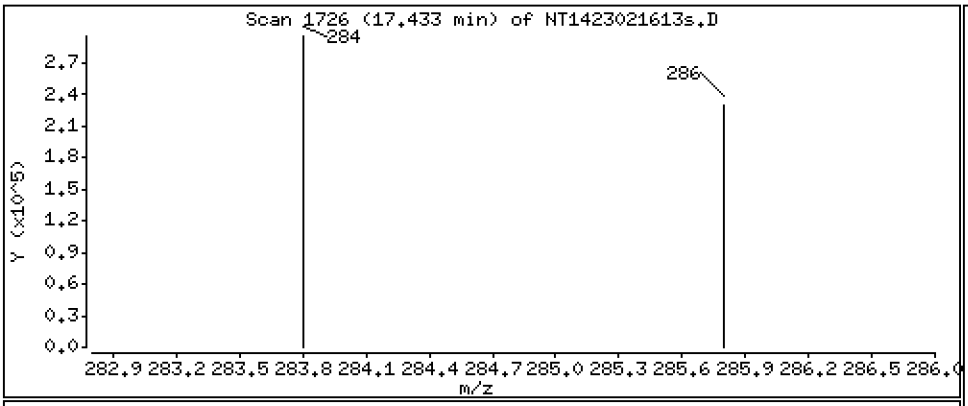
Operator: DSD

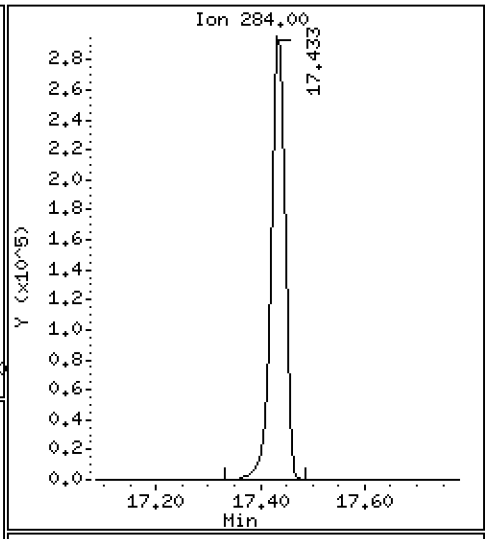
Column phase: ZB-5msi

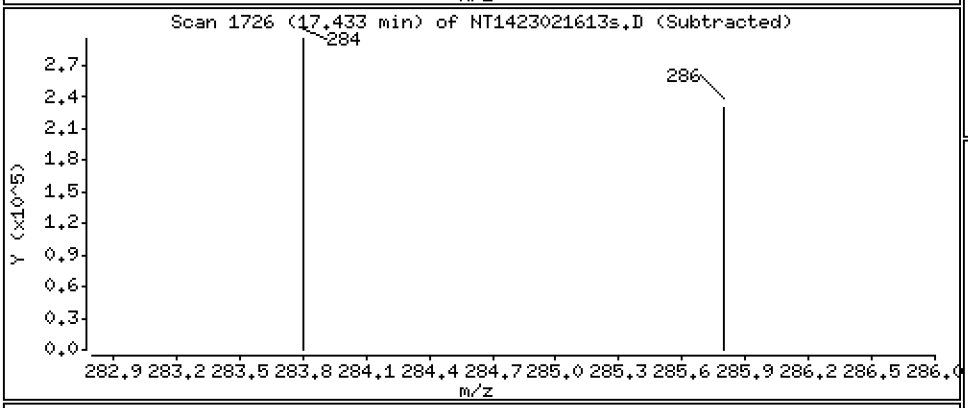
Column diameter: 0.25

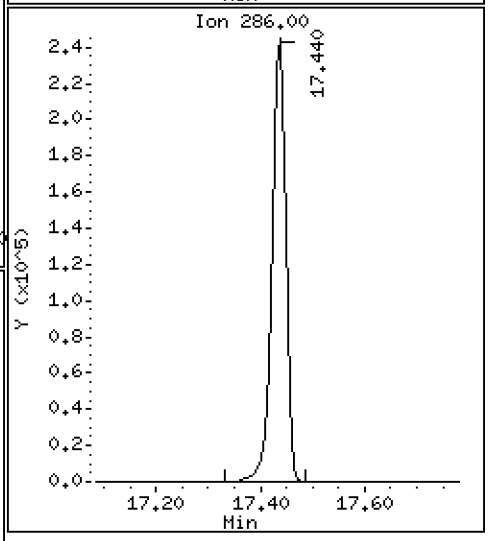
57 Hexachlorobenzene

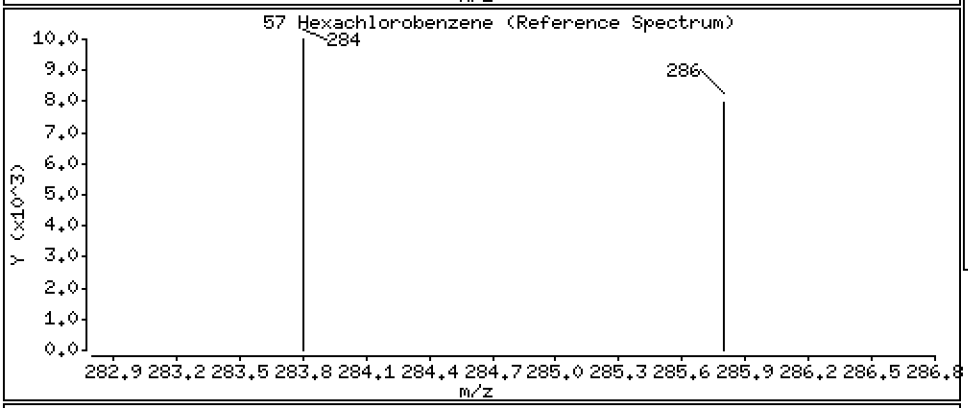
Concentration: 4.700 ug/mL

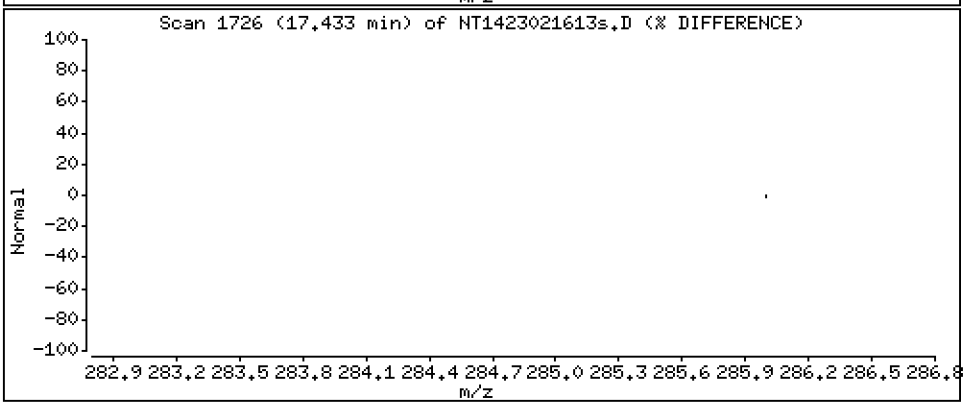












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

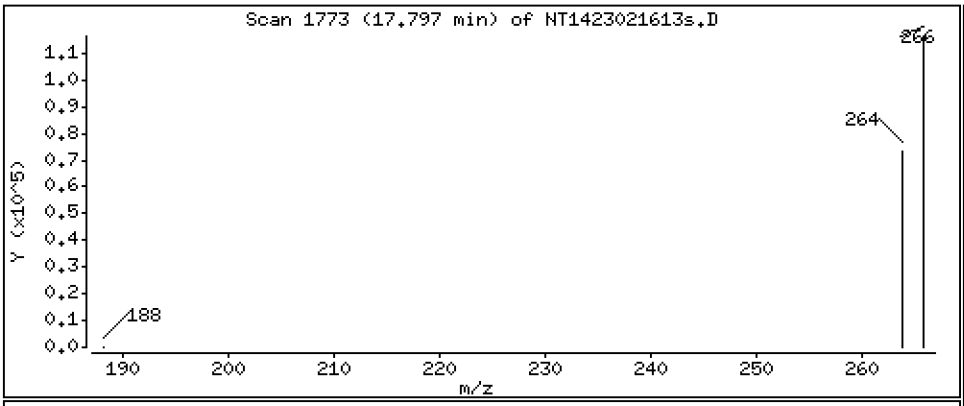
Operator: DSD

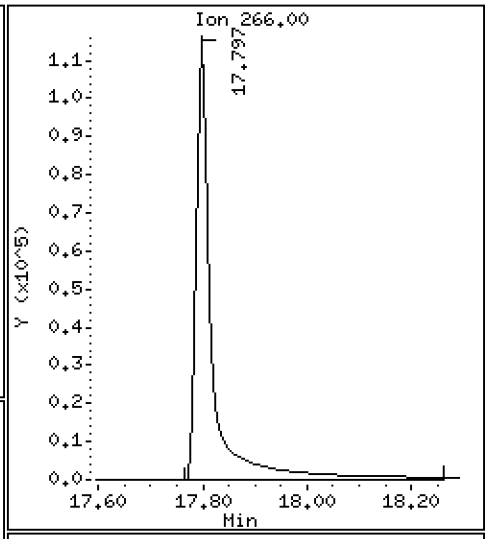
Column phase: ZB-5msi

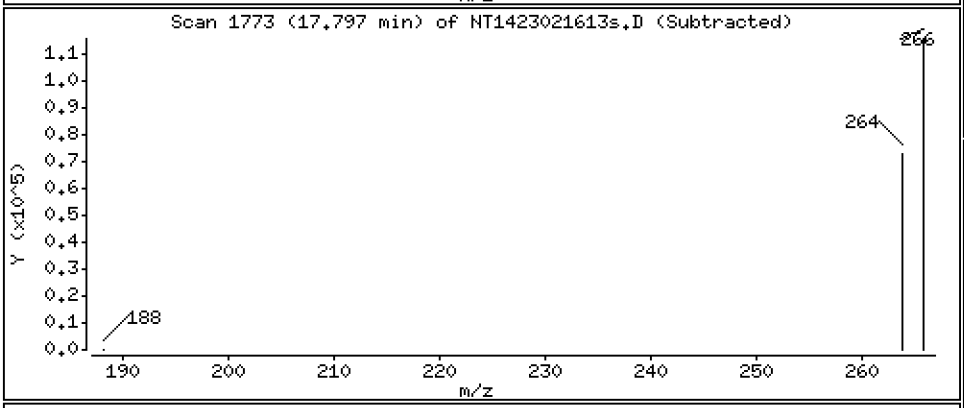
Column diameter: 0.25

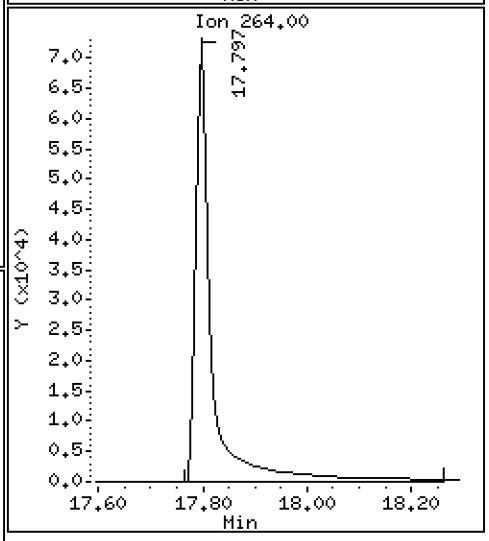
58 Pentachlorophenol

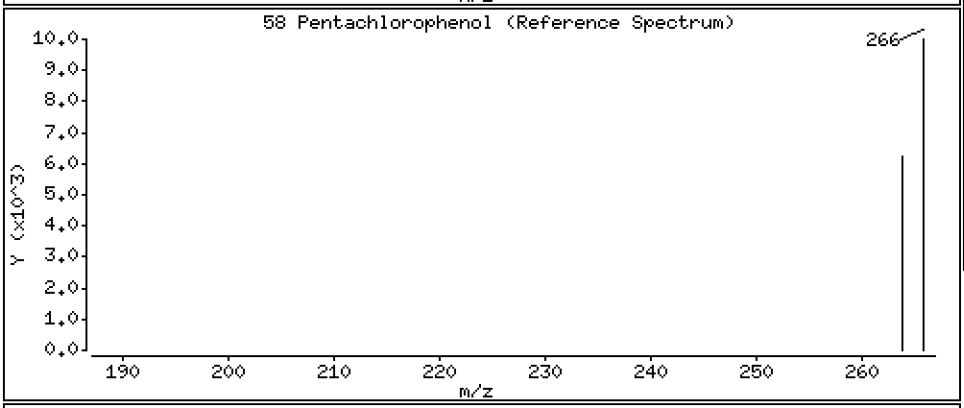
Concentration: 4.935 ug/mL

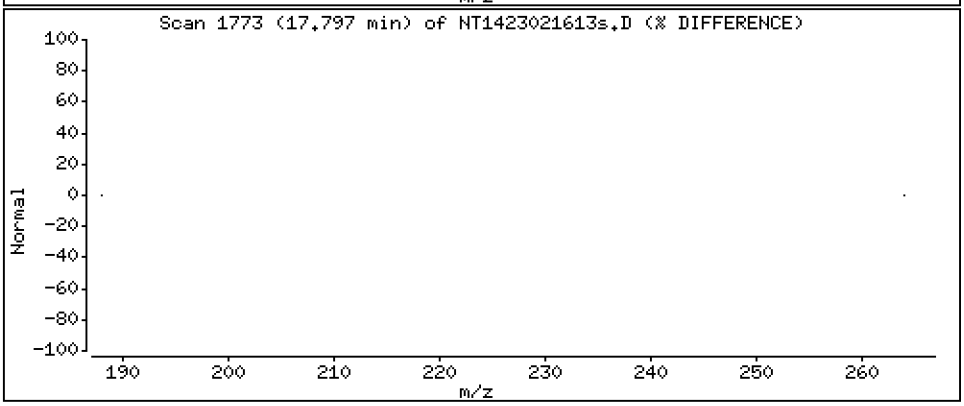












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

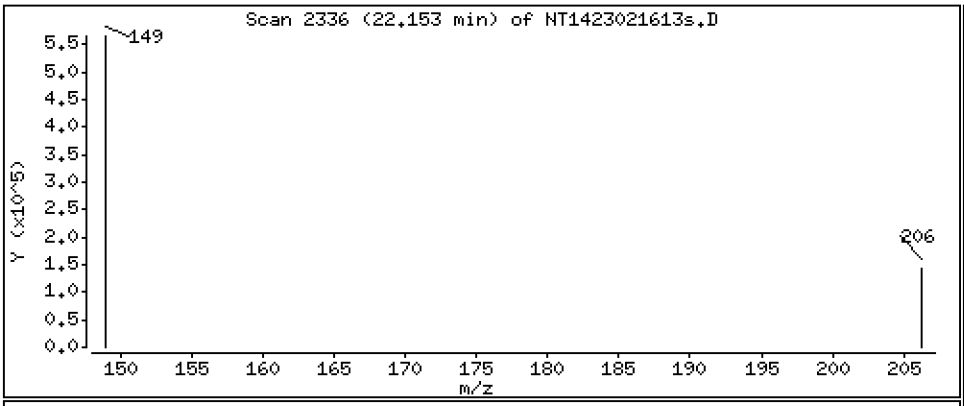
Operator: DSD

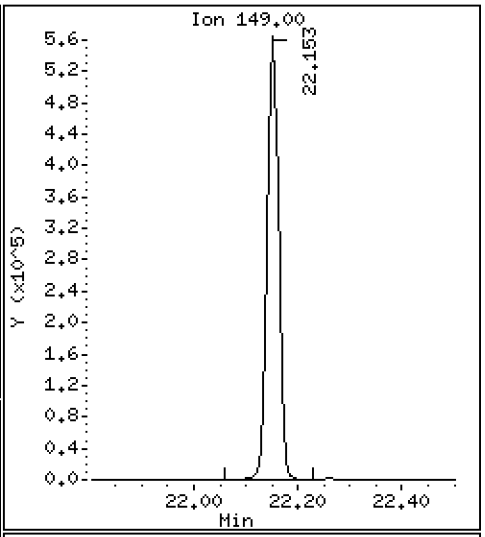
Column phase: ZB-5msi

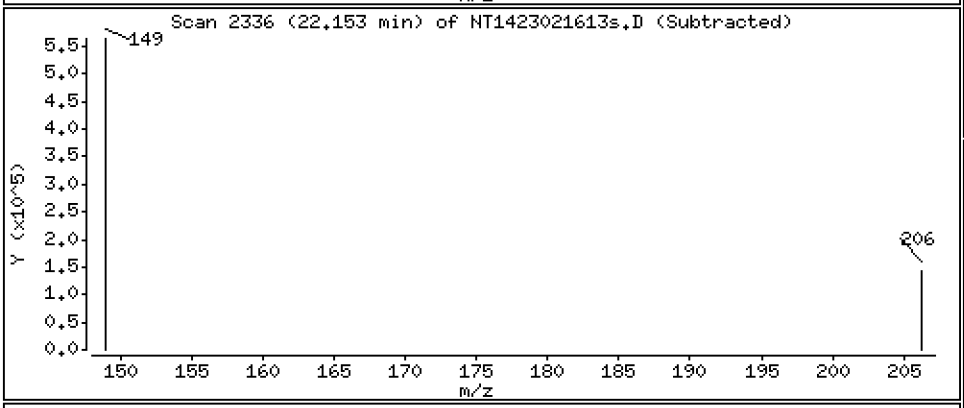
Column diameter: 0.25

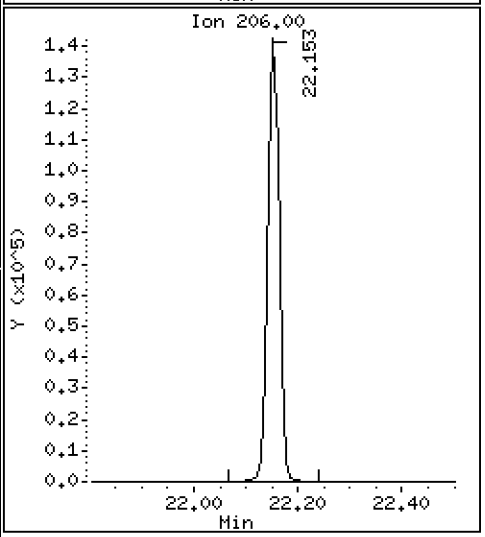
67 Butylbenzylphthalate

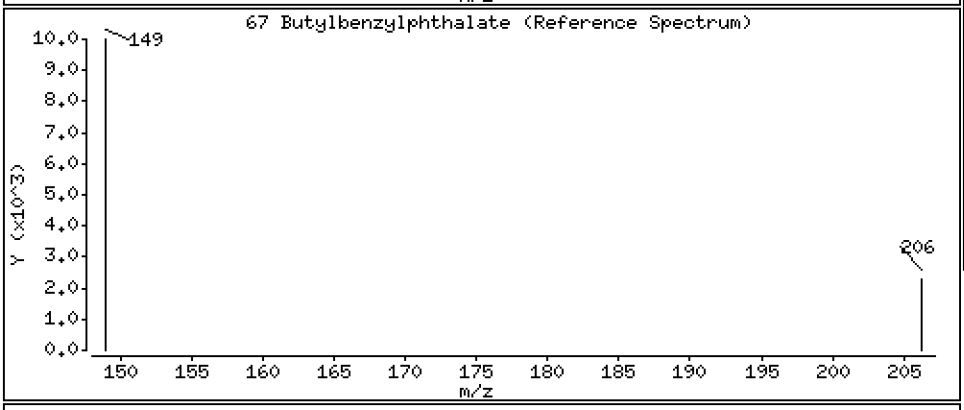
Concentration: 4.964 ug/mL

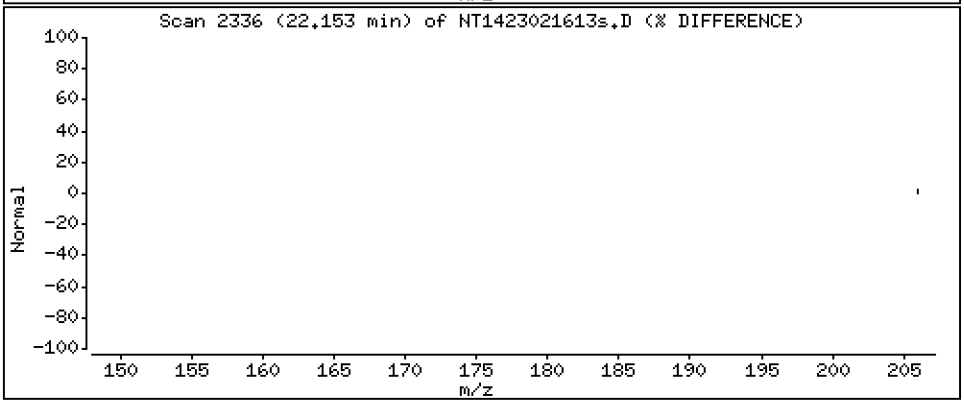












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

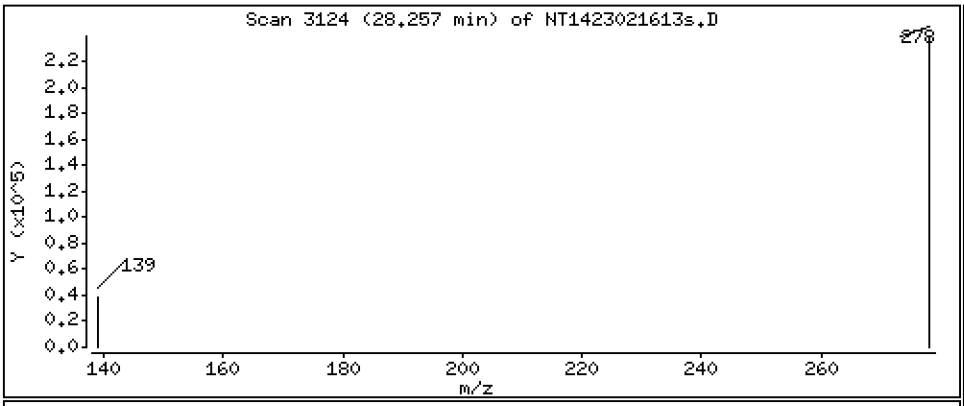
Operator: DSD

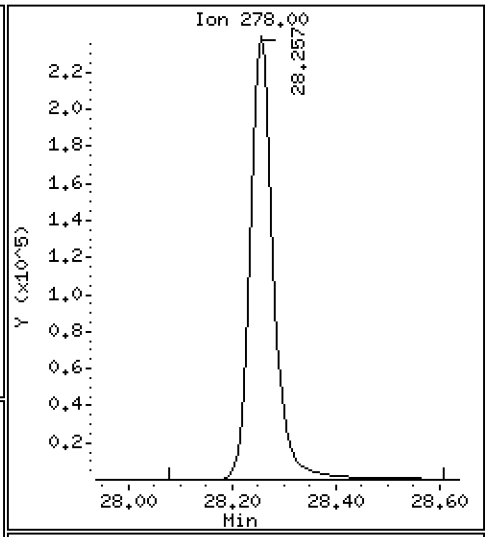
Column phase: ZB-5msi

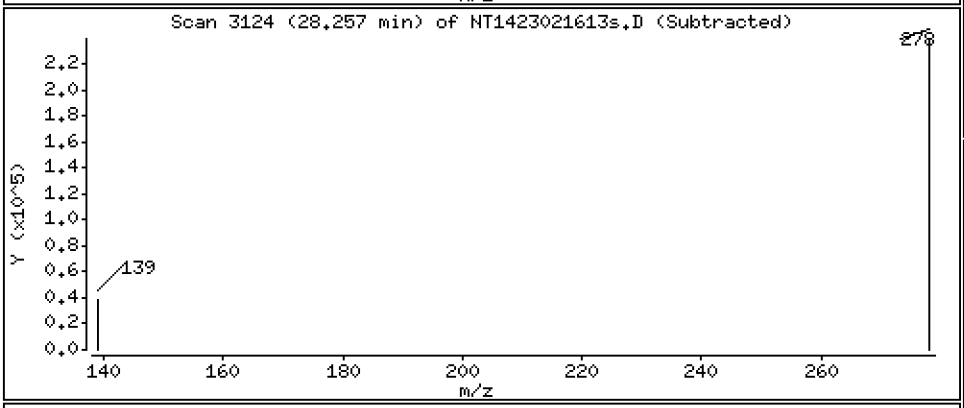
Column diameter: 0.25

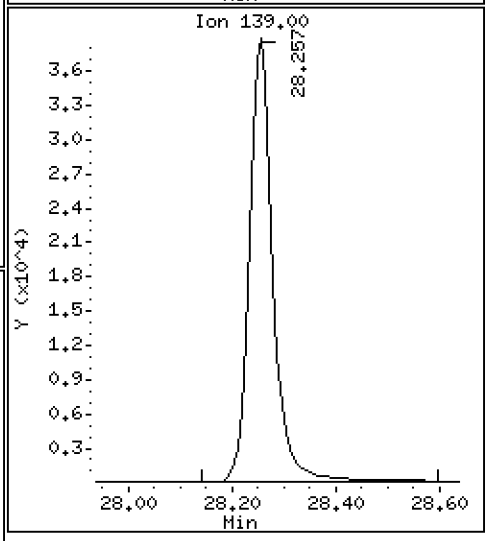
79 Dibenzo(a,h)anthracene

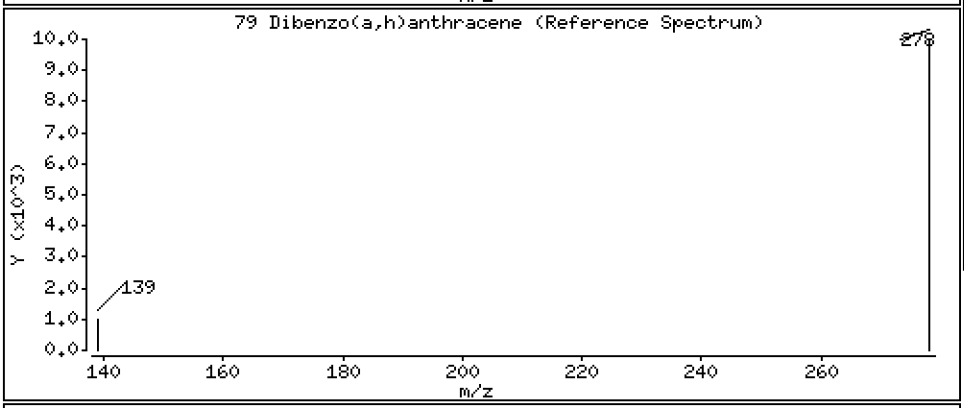
Concentration: 4.888 ug/mL

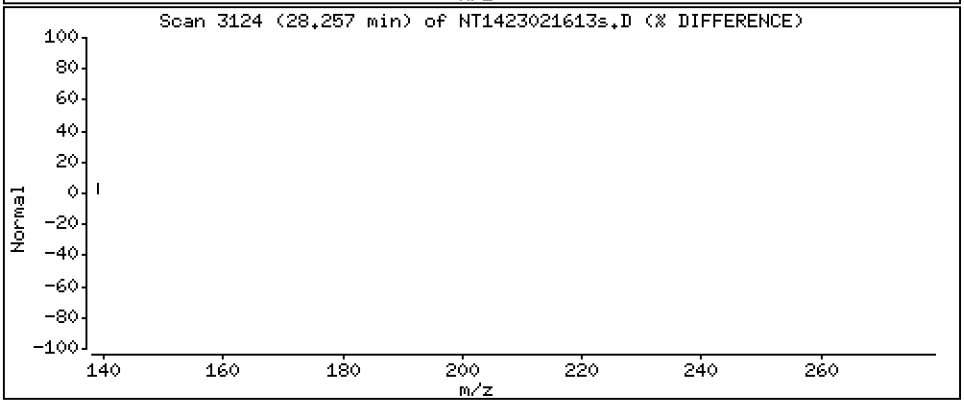












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

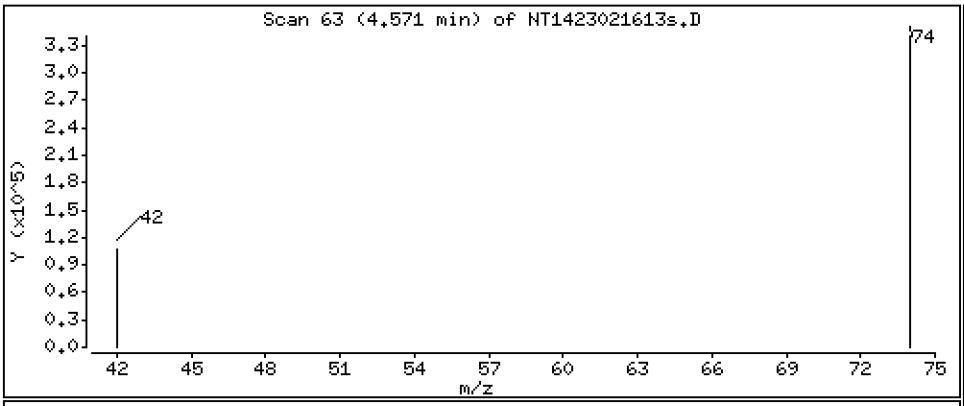
Operator: DSD

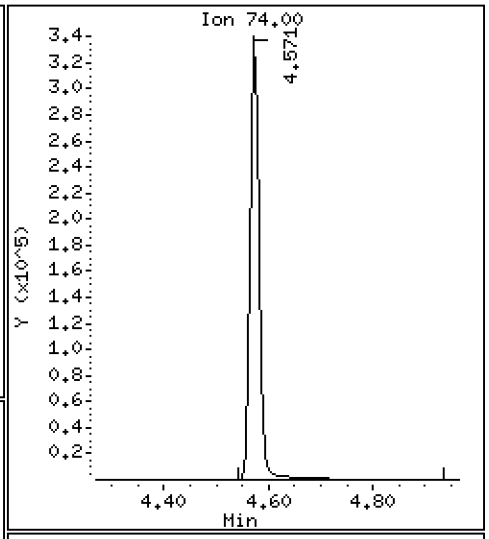
Column phase: ZB-5msi

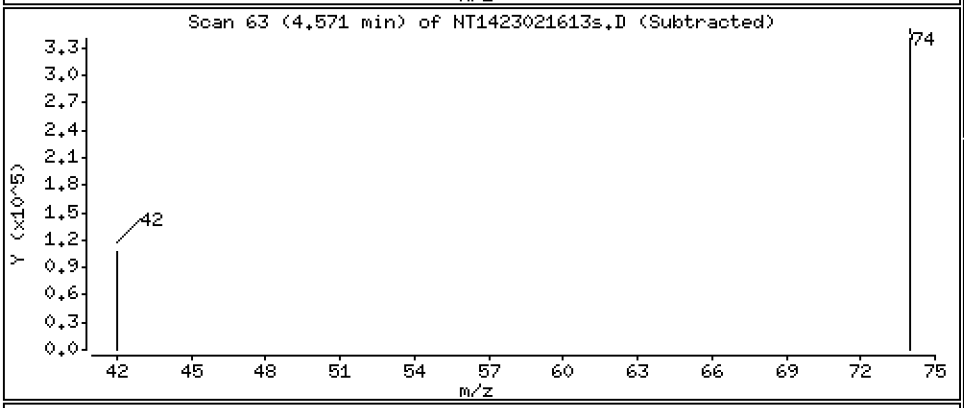
Column diameter: 0.25

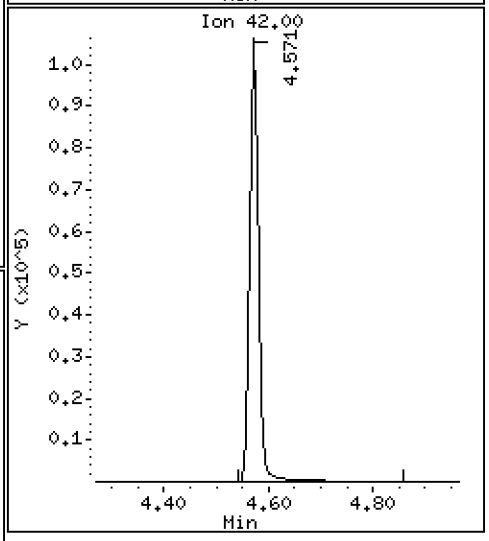
90 N-Nitrosodimethylamine

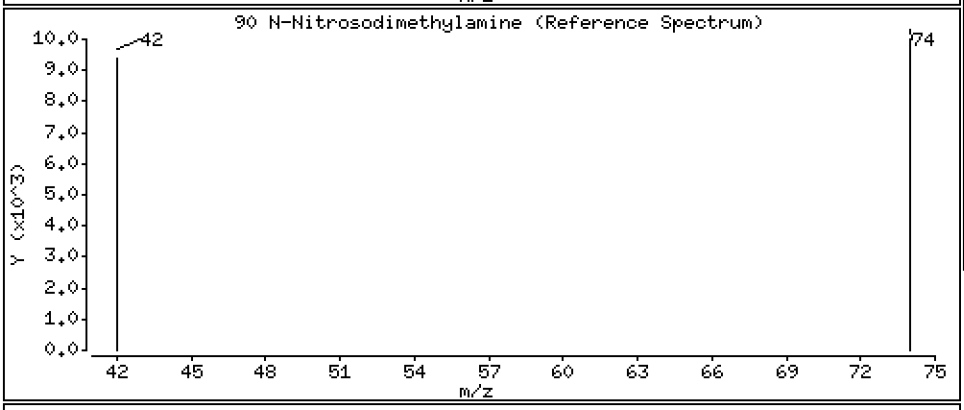
Concentration: 5.293 ug/mL

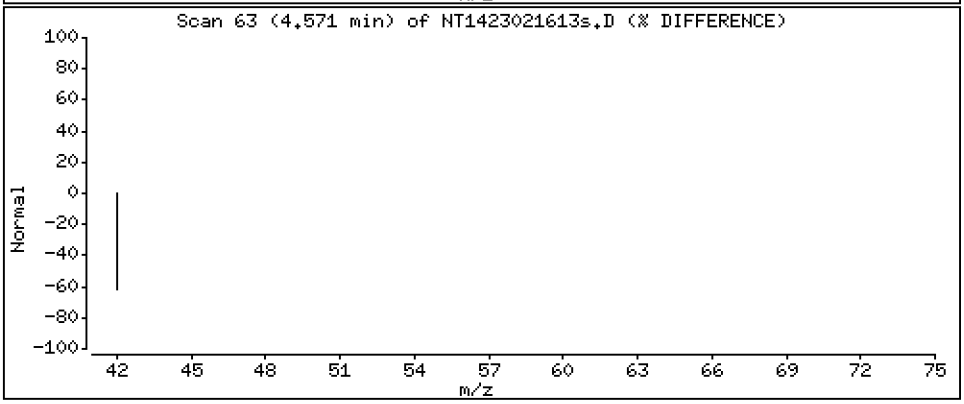












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D
Lab Smp Id: SLB0240-SCV1
Inj Date : 16-FEB-2023 21:18 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0240-SCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Meth Date : 03-Mar-2023 14:04 van Quant Type: ISTD
Cal Date : 16-FEB-2023 20:42 Cal File: NT1423021612s.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.679	6.764	(0.750)	843875	7.69265	7.693(R)
	3 Phenol	94	8.294	8.379	(0.931)	773600	4.55614	4.556
	7 1,3-Dichlorobenzene	146	8.835	8.835	(0.992)	640622	4.80933	4.809
*	8 1,4-Dichlorobenzene-d4	152	8.905	8.905	(1.000)	391473	4.00000	
	9 1,4-Dichlorobenzene	146	8.936	8.936	(1.003)	616286	4.85010	4.850
	11 Benzyl alcohol	79	9.184	9.161	(1.031)	568264	5.30032	5.300
	12 1,2-Dichlorobenzene	146	9.293	9.293	(1.044)	605835	4.79526	4.795
	13 2-Methylphenol	108	9.409	9.433	(1.057)	523707	4.50674	4.507
	15 4-Methylphenol	108	9.689	9.720	(1.088)	579099	4.46016	4.460
	16 N-Nitroso-di-n-propylamine	70	9.743	9.767	(1.094)	517307	5.04663	5.047
	22 2,4-Dimethylphenol	107	10.728	10.745	(0.942)	488898	3.90295	3.903
	24 Benzoic acid	105	10.938	11.116	(0.960)	436009	6.44677	6.447
	26 1,2,4-Trichlorobenzene	180	11.309	11.310	(0.993)	602290	4.59532	4.595
*	27 Naphthalene-d8	136	11.394	11.394	(1.000)	1430650	4.00000	
	30 Hexachlorobutadiene	225	11.804	11.804	(1.036)	383880	4.81466	4.815
	39 Dimethylphthalate	163	14.543	14.551	(0.968)	1212628	5.00209	5.002
*	42 Acenaphthene-d10	162	15.023	15.016	(1.000)	794620	4.00000	
	50 Diethylphthalate	149	15.997	15.997	(1.065)	1507744	4.96936	4.969
	54 N-Nitrosodiphenylamine	169	16.375	16.384	(0.907)	1157201	5.00925	5.009(H)
	57 Hexachlorobenzene	284	17.432	17.432	(0.965)	537021	4.70048	4.700
	58 Pentachlorophenol	266	17.796	17.944	(0.985)	240806	4.93475	4.935
*	59 Phenanthrene-d10	188	18.059	18.059	(1.000)	1759092	4.00000	
$	66 Terphenyl-d14	244	21.224	21.224	(0.918)	1463833	4.57604	4.576(R)
	67 Butylbenzylphthalate	149	22.153	22.153	(0.958)	814994	4.96402	4.964
*	69 Chrysene-d12	240	23.128	23.121	(1.000)	1201603	4.00000	
*	77 Perylene-d12	264	25.691	25.691	(1.000)	814421	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.257	28.288	(1.100)	772593	4.88838	4.888
	90 N-Nitrosodimethylamine	74	4.571	4.618	(0.513)	440424	5.29346	5.293

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021613s.D
Lab Smp Id: SLB0240-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 18:18
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	393779	196890	787558	391473	-0.59
27 Naphthalene-d8	1399029	699515	2798058	1430650	2.26
42 Acenaphthene-d10	759723	379862	1519446	794620	4.59
59 Phenanthrene-d10	1756156	878078	3512312	1759092	0.17
69 Chrysene-d12	1174128	587064	2348256	1201603	2.34
77 Perylene-d12	826011	413006	1652022	814421	-1.40

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	-0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.39	-0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.05
59 Phenanthrene-d10	18.06	17.56	18.56	18.06	-0.00
69 Chrysene-d12	23.12	22.62	23.62	23.13	0.03
77 Perylene-d12	25.68	25.18	26.18	25.69	0.03

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

REVIEW SUMMARY FOR FILE - NT1423021613s.D

Lab ID: SLB0240-SCV1
nt14.i, 20230216.b\20230216.b\SIMABN2.m,   16-FEB-2023 21:18

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.931	0.941	-0.0095	Phenol
0.960	0.000	0.9599	Benzoic acid
0.513	0.518	-0.0052	N-Nitrosodimethylamine
0.985	0.000	0.9854	Pentachlorophenol
0.750	0.760	-0.0095	2-Fluorophenol

RRT check based on Ccal File: 20230216.b/NT1423021612s.D

On Column LOD for nt14.i, 20230216.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00009
Laboratory ID: SLB0240-SCV1
Sequence: SLB0240
Standard ID: K010066

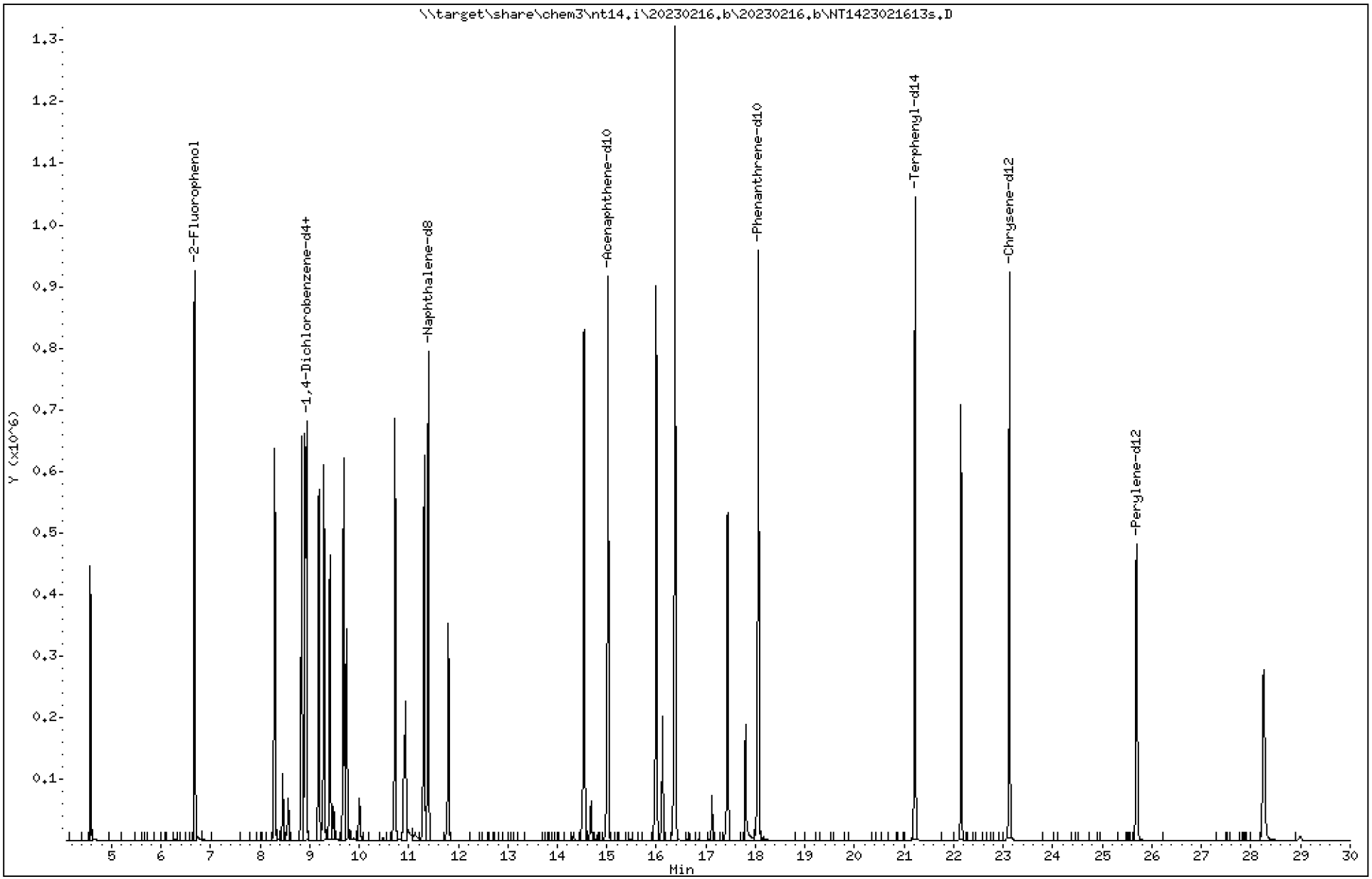
ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	5.0000	4.56	-8.9	20.00
1,3-Dichlorobenzene	5.0000	4.81	-3.8	20.00
1,4-Dichlorobenzene	5.0000	4.85	-3.0	20.00
1,2-Dichlorobenzene	5.0000	4.80	-4.1	20.00
Benzyl Alcohol	5.0000	5.30	6.0	20.00
Benzoic acid	10.000	6.45	-35.5 *	20.00
2-Methylphenol	5.0000	4.51	-9.9	20.00
N-Nitroso-di-n-Propylamine	5.0000	5.05	0.9	20.00
4-Methylphenol	5.0000	4.46	-10.8	20.00
2,4-Dimethylphenol	5.0000	3.90	-21.9 *	20.00
1,2,4-Trichlorobenzene	5.0000	4.60	-8.1	20.00
Hexachlorobutadiene	5.0000	4.81	-3.7	20.00
N-Nitrosodimethylamine	5.0000	5.29	5.9	20.00
Dimethylphthalate	5.0000	5.00	0.04	20.00
Diethyl phthalate	5.0000	4.97	-0.6	20.00
N-Nitrosodiphenylamine	5.0000	5.01	0.2	20.00
Hexachlorobenzene	5.0000	4.70	-6.0	20.00
Pentachlorophenol	5.0000	4.93	-1.3	20.00
Butylbenzylphthalate	5.0000	4.96	-0.7	20.00
Dibenzo(a,h)anthracene	5.0000	4.89	-2.2	20.00
2-Fluorophenol	7.5000	7.69	2.6	
p-Terphenyl-d14	5.0000	4.58	-8.5	

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D
Date : 16-FEB-2023 21:18
Client ID:
Sample Info: SLB0240-SCV1

Instrument: nt14.i
Operator: DSD
Column diameter: 0.25

Column phase: ZB-5msi



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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

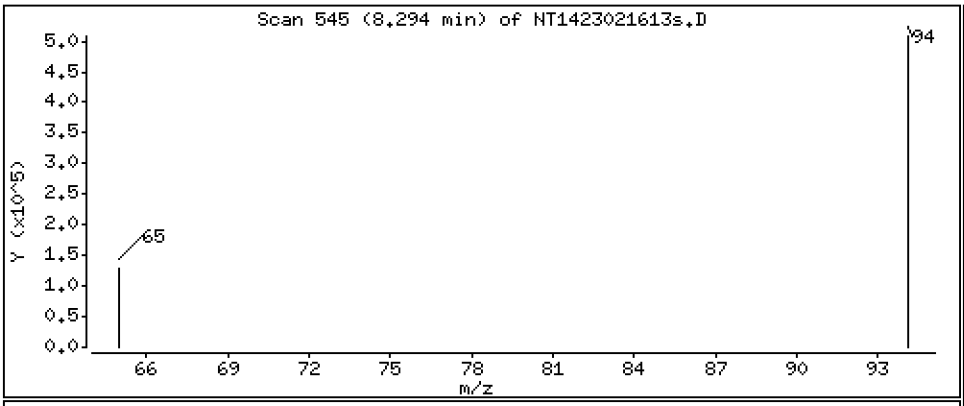
Operator: DSD

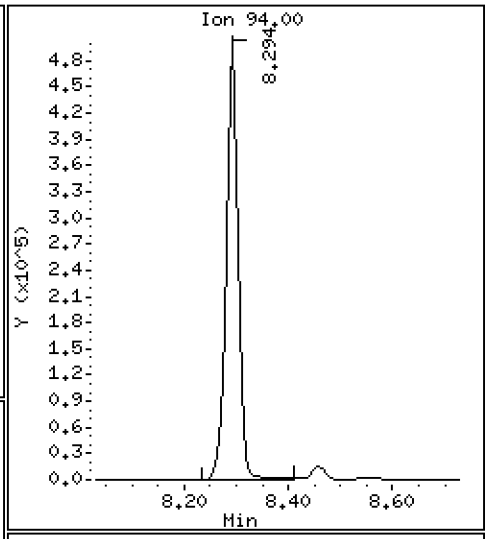
Column phase: ZB-5msi

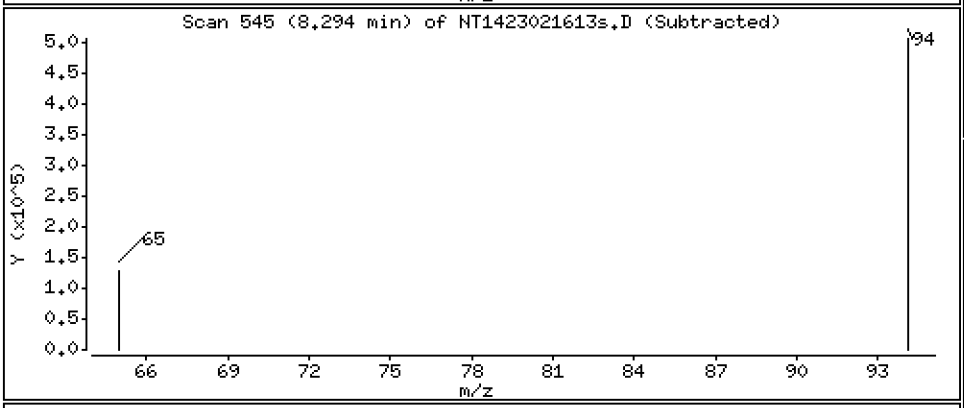
Column diameter: 0.25

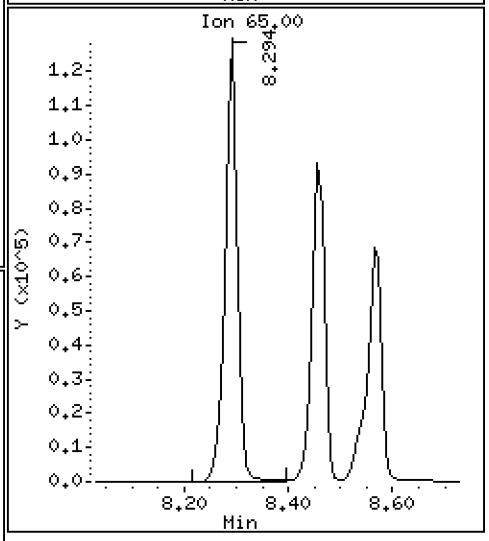
3 Phenol

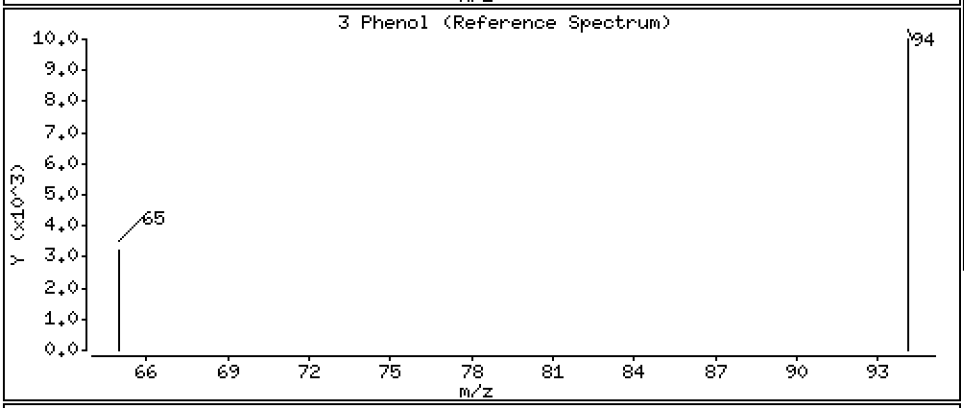
Concentration: 4.556 ug/mL

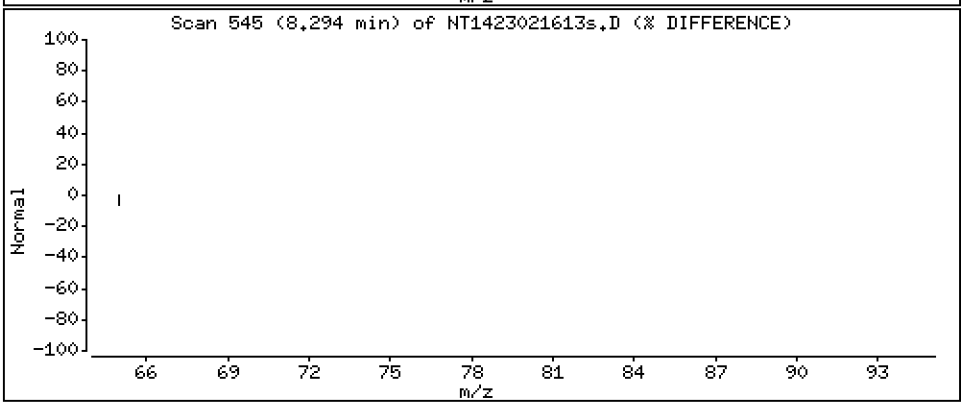












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

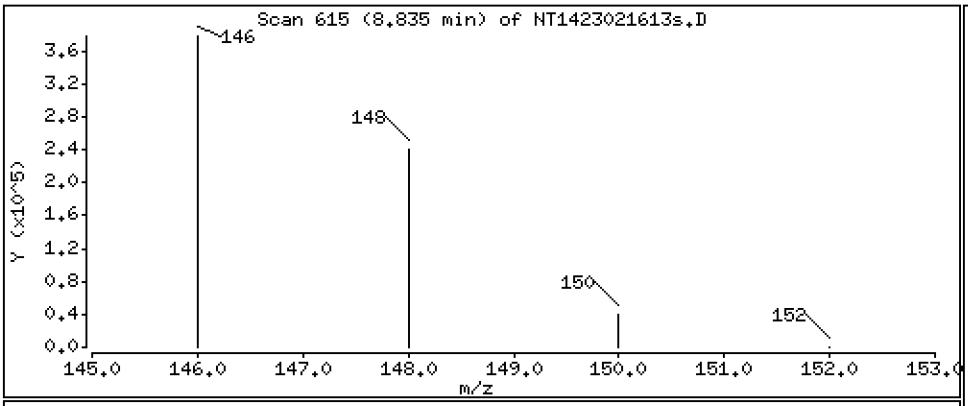
Operator: DSD

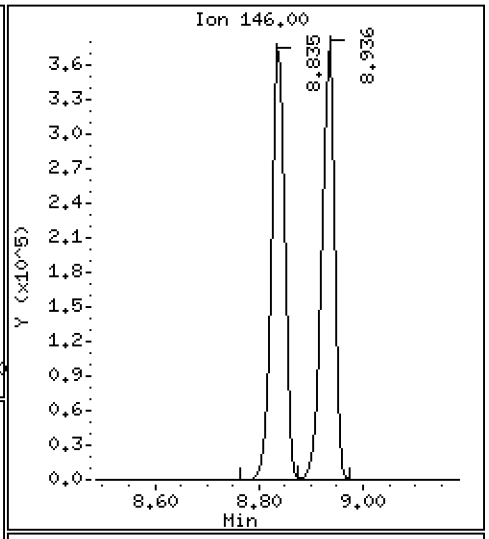
Column phase: ZB-5msi

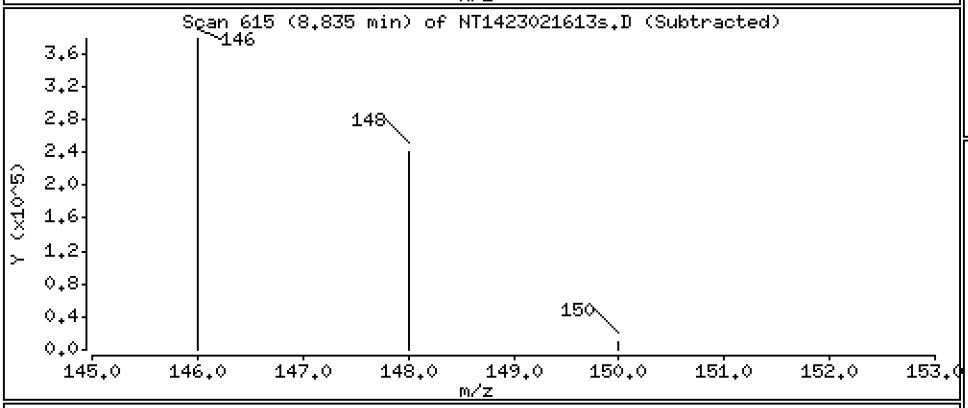
Column diameter: 0.25

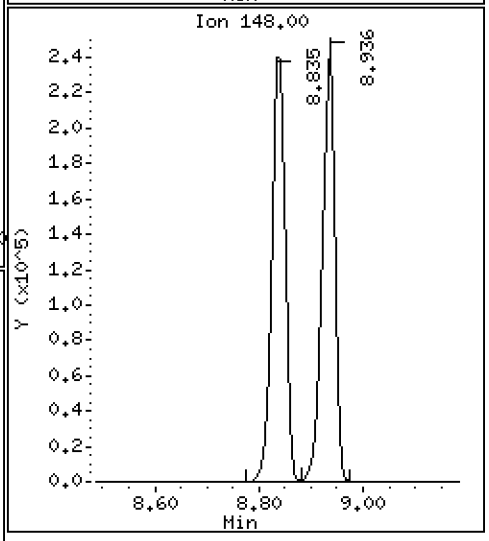
7 1,3-Dichlorobenzene

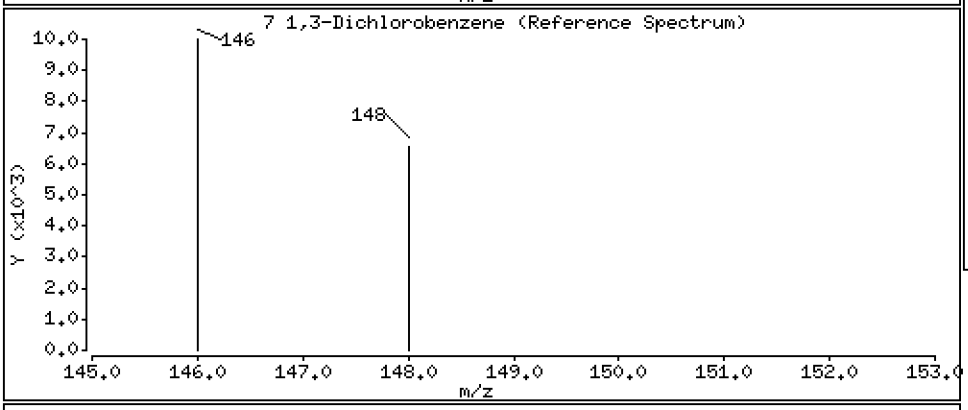
Concentration: 4.809 ug/mL

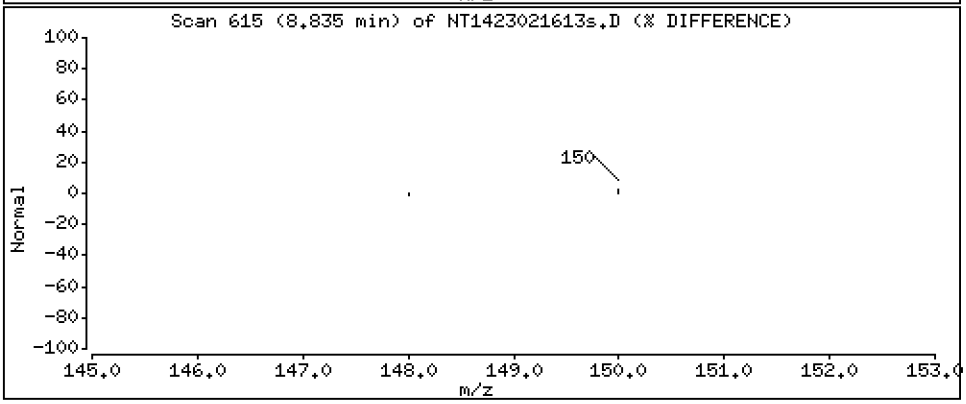












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

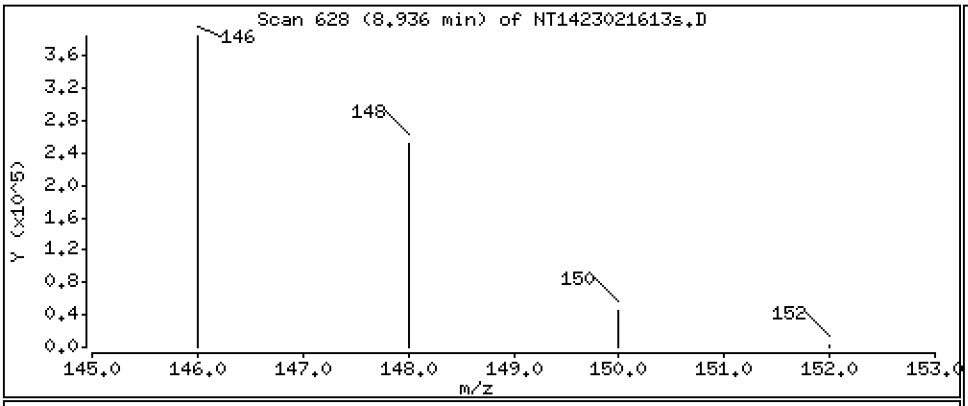
Operator: DSD

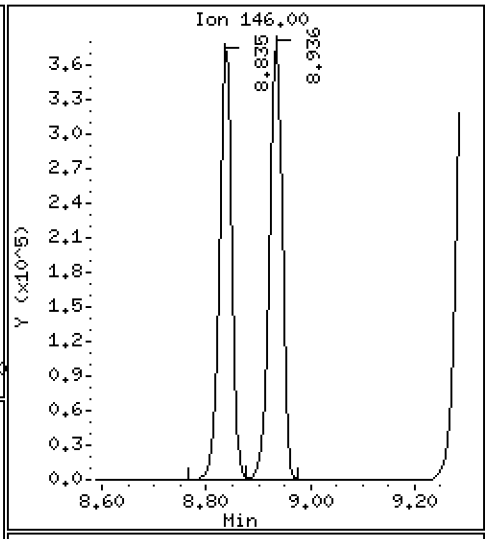
Column phase: ZB-5msi

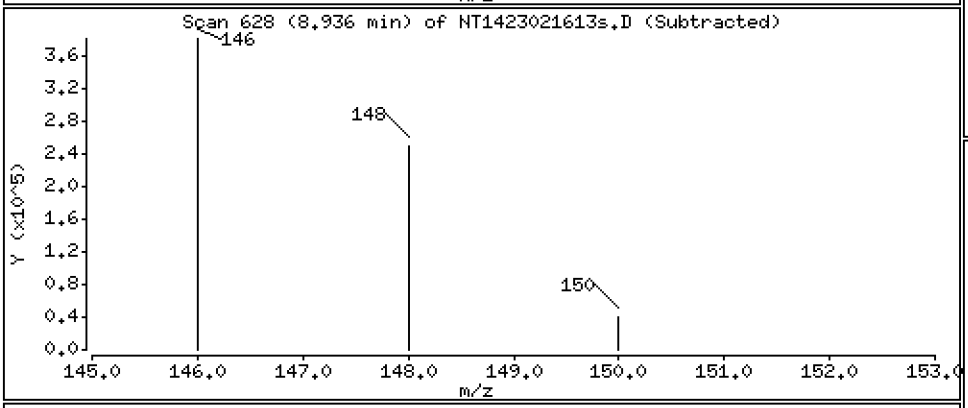
Column diameter: 0.25

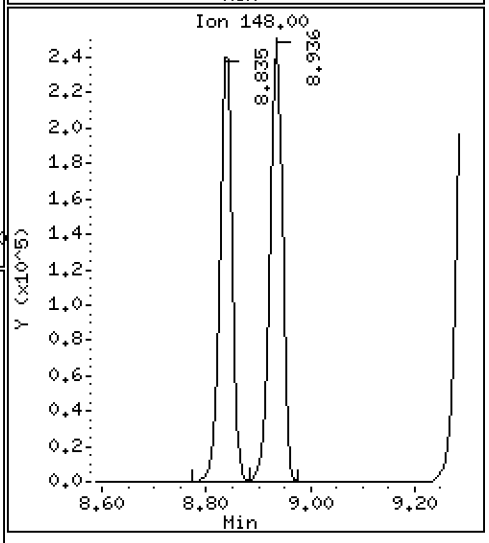
9 1,4-Dichlorobenzene

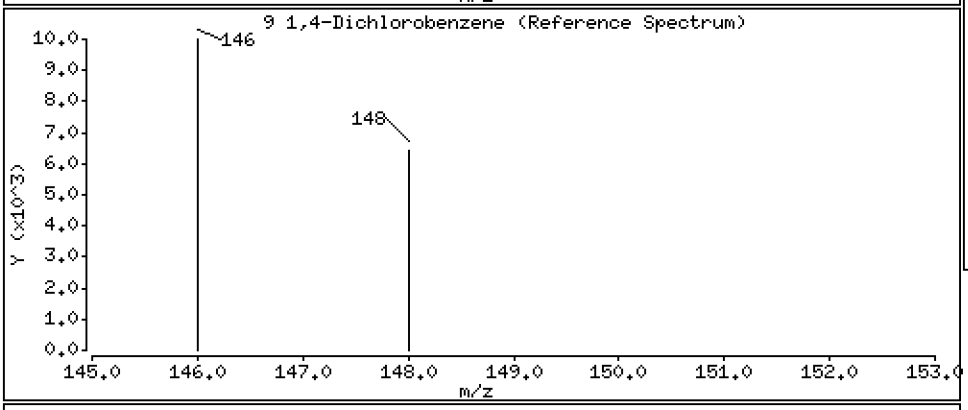
Concentration: 4.850 ug/mL

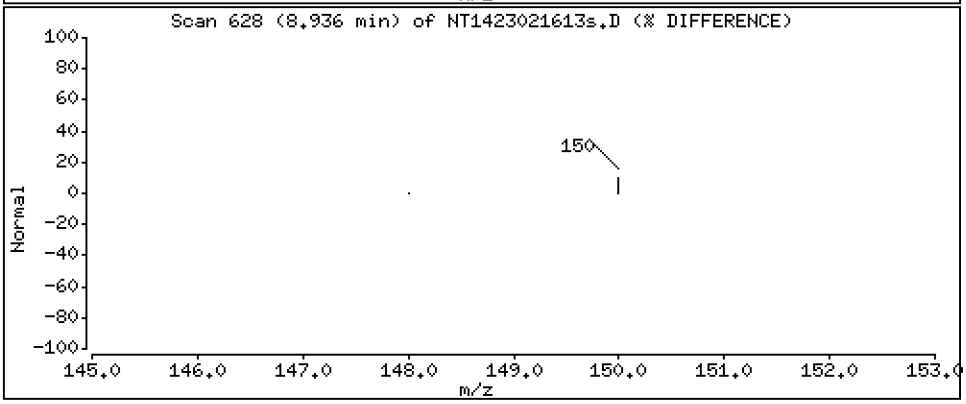












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

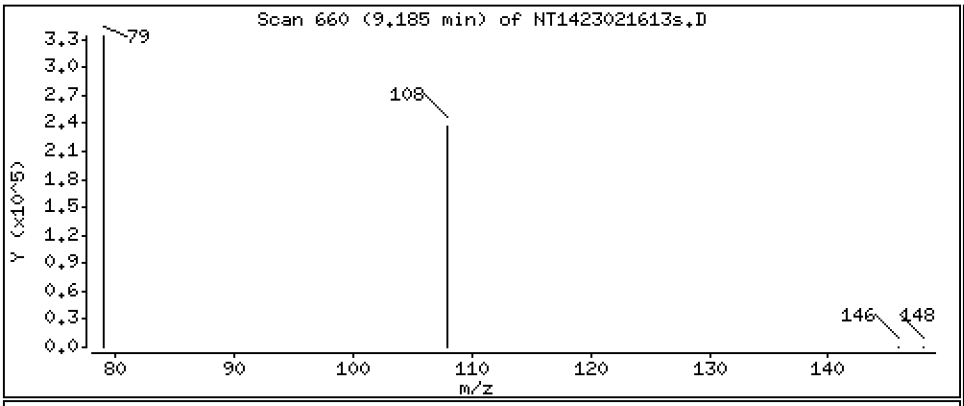
Operator: DSD

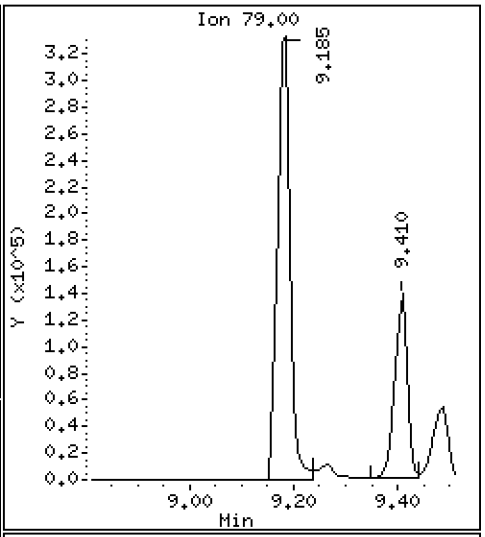
Column phase: ZB-5msi

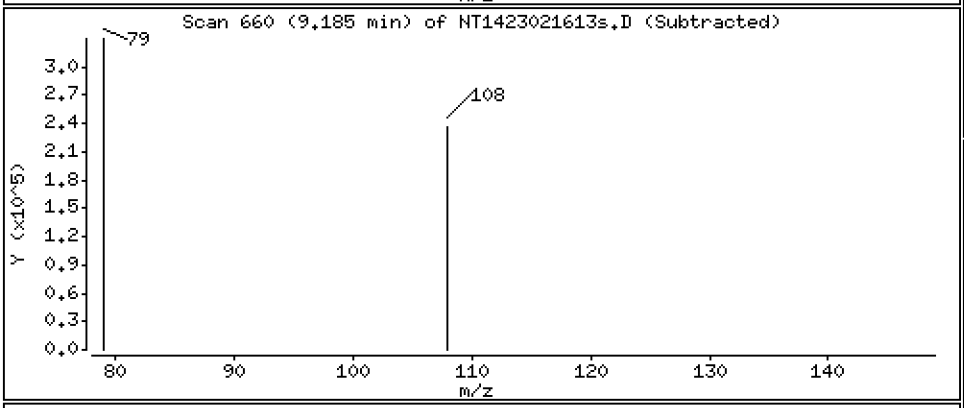
Column diameter: 0.25

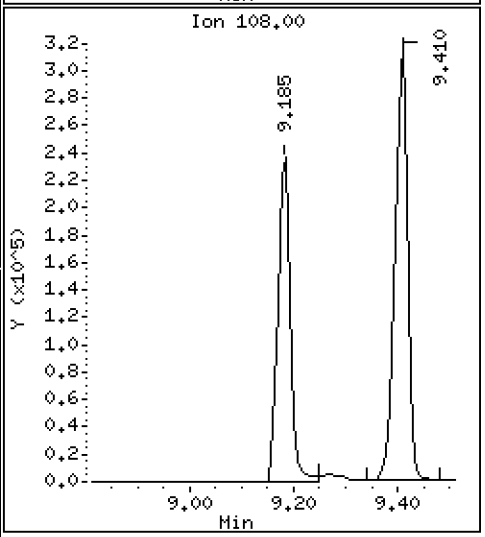
11 Benzyl alcohol

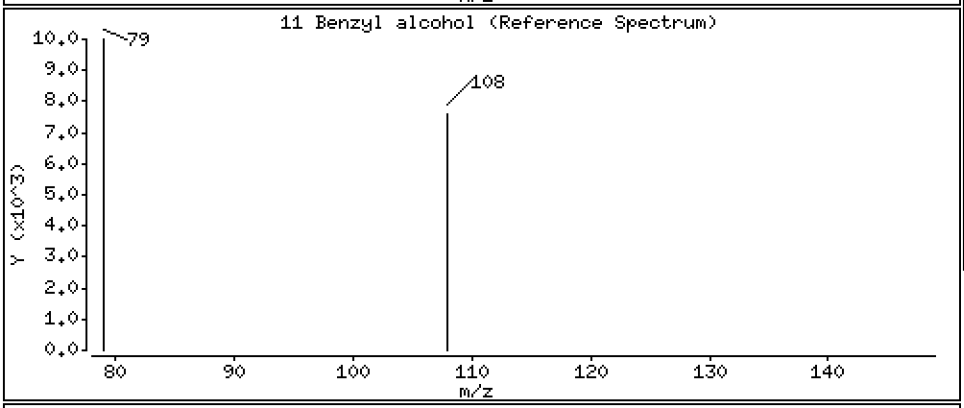
Concentration: 5.300 ug/mL

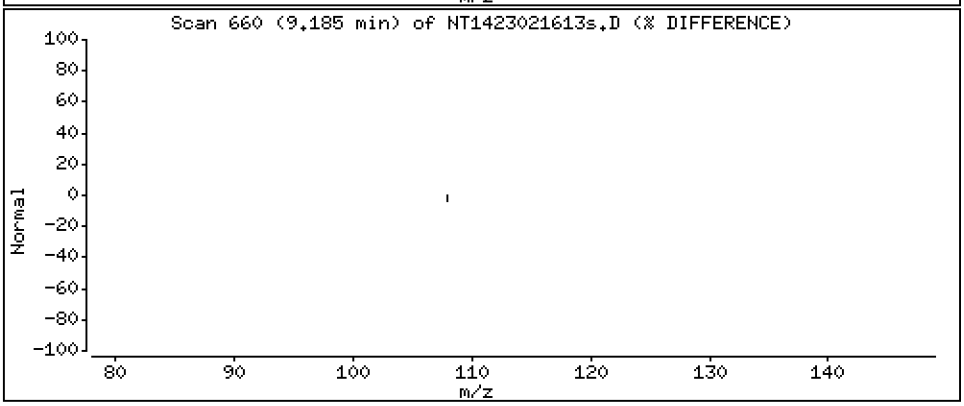












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

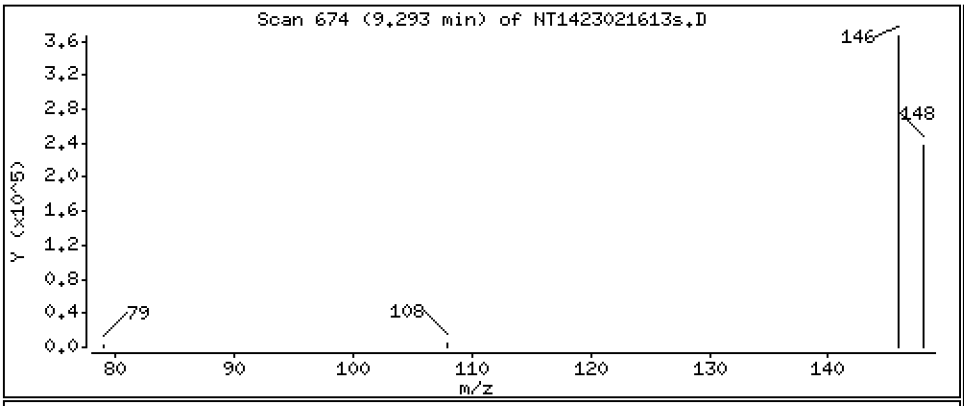
Operator: DSD

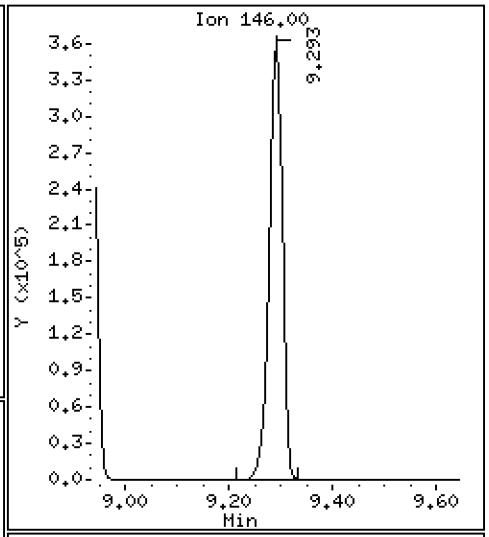
Column phase: ZB-5msi

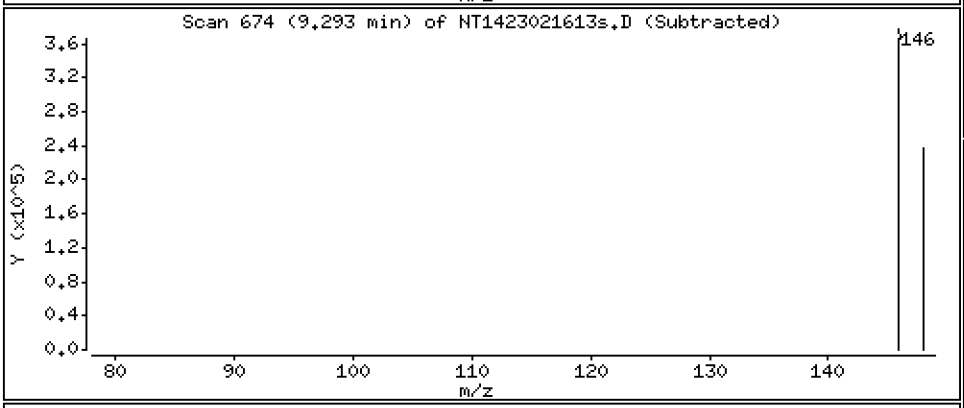
Column diameter: 0.25

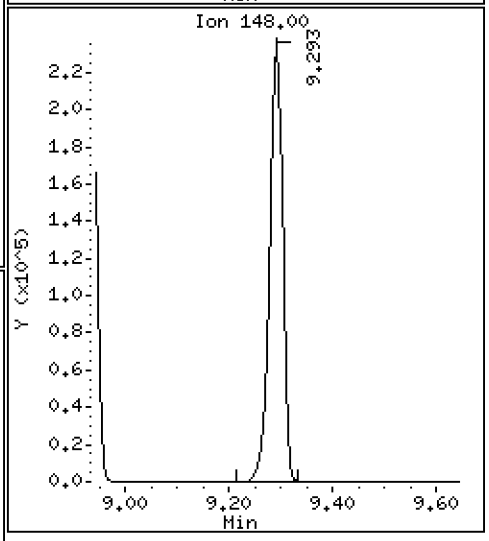
12 1,2-Dichlorobenzene

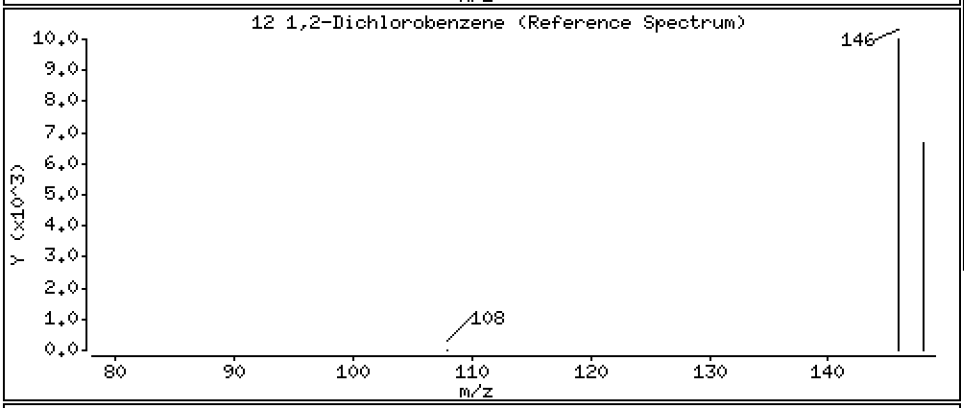
Concentration: 4.795 ug/mL

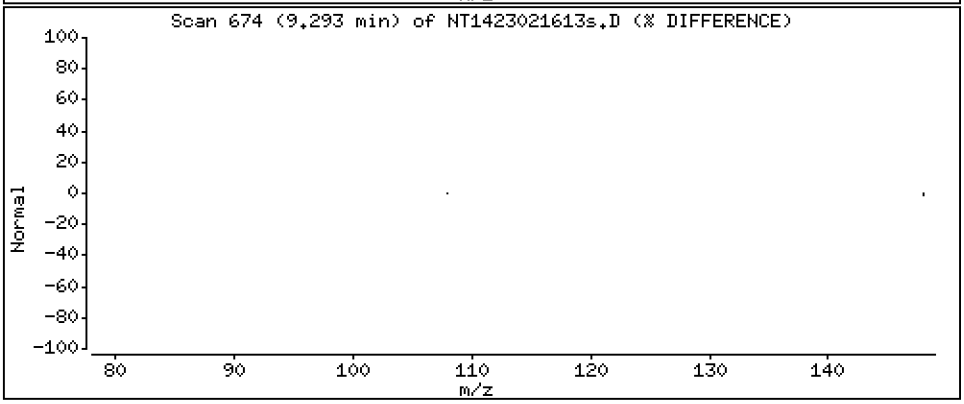












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

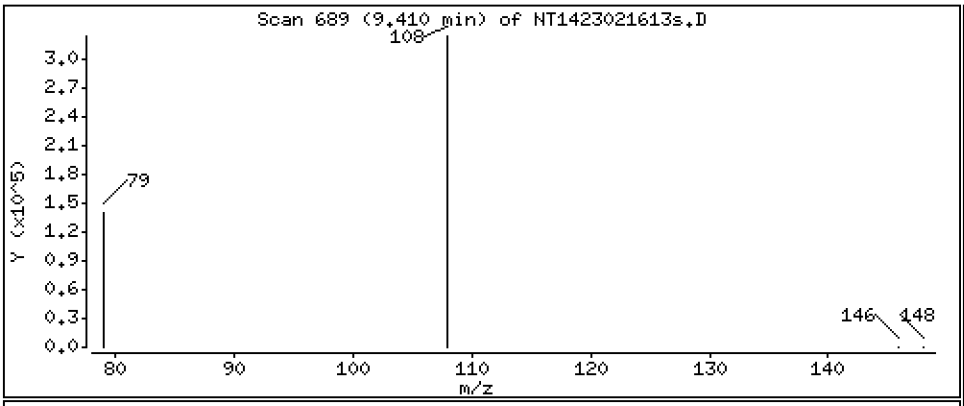
Operator: DSD

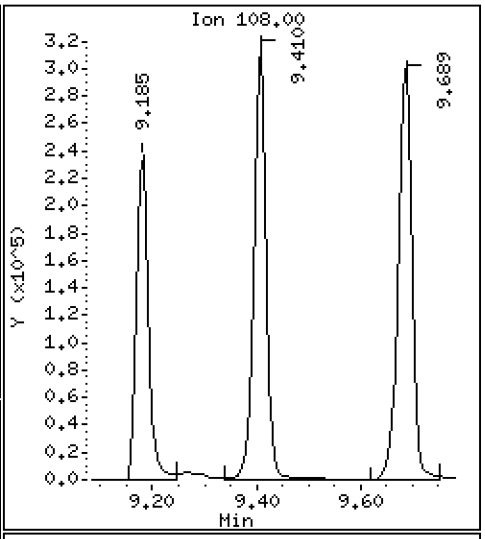
Column phase: ZB-5msi

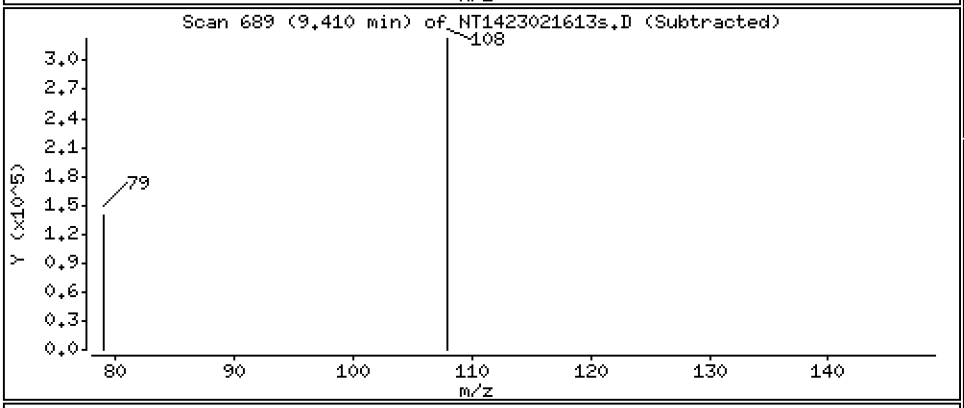
Column diameter: 0.25

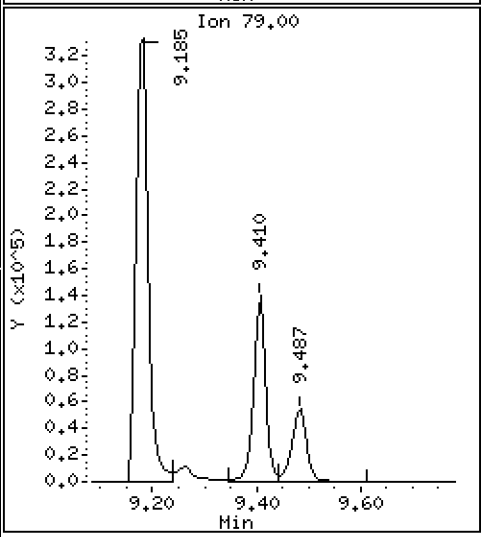
13 2-Methylphenol

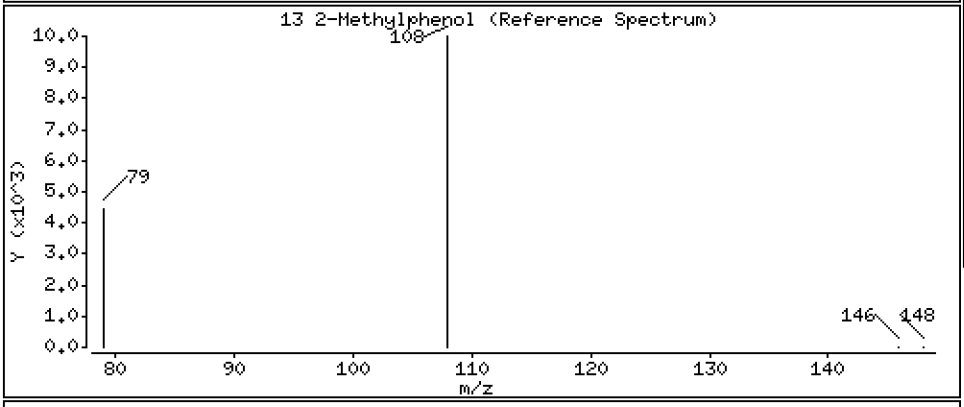
Concentration: 4.507 ug/mL

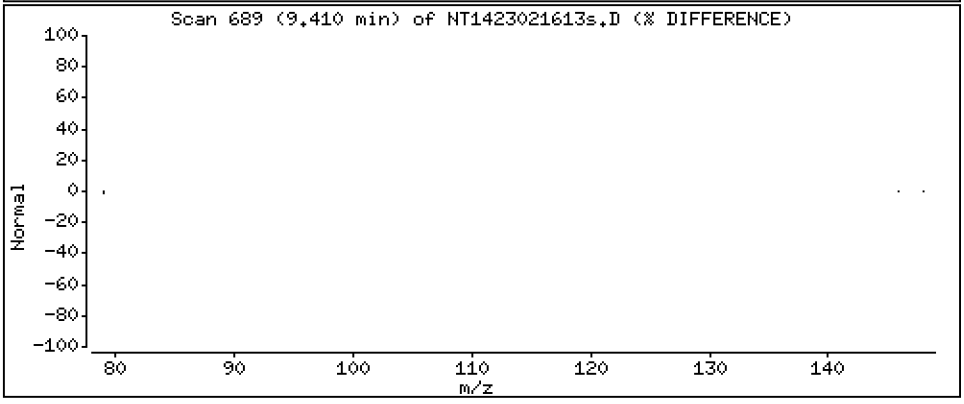












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

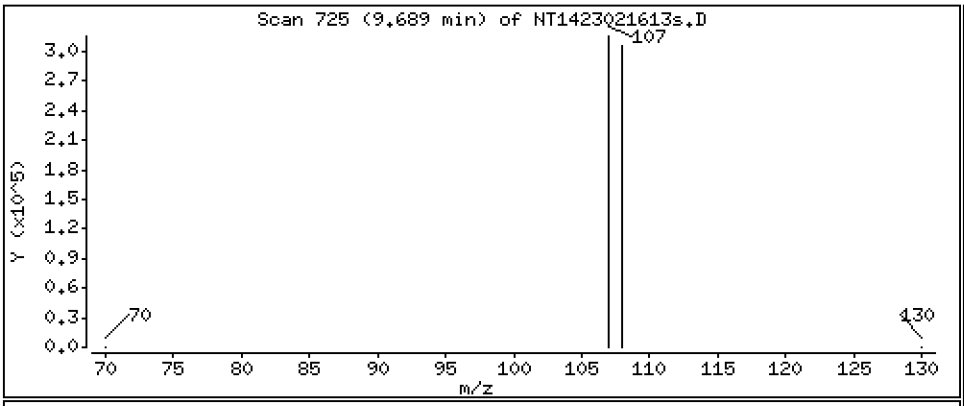
Operator: DSD

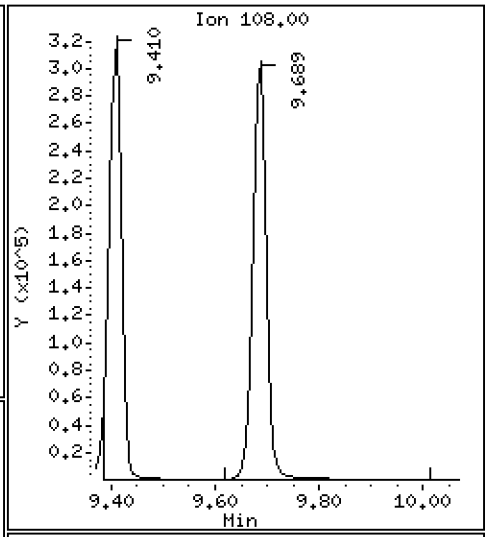
Column phase: ZB-5msi

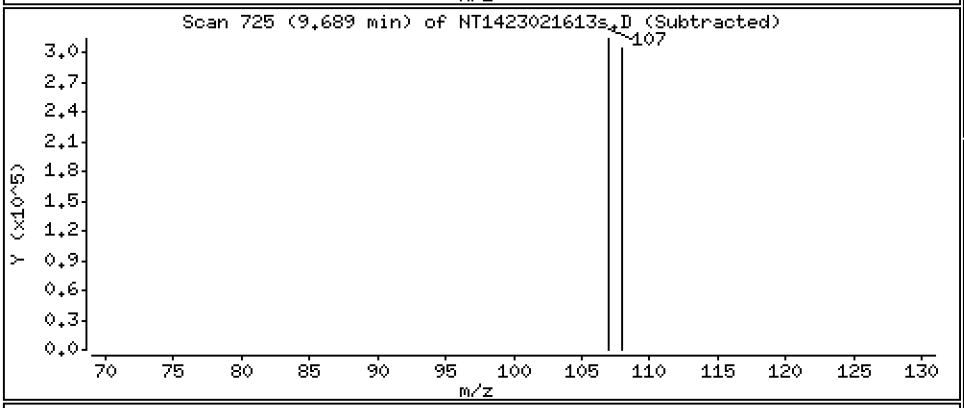
Column diameter: 0.25

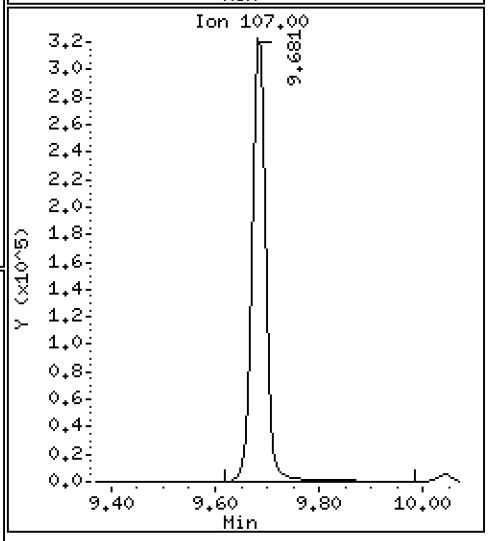
15 4-Methylphenol

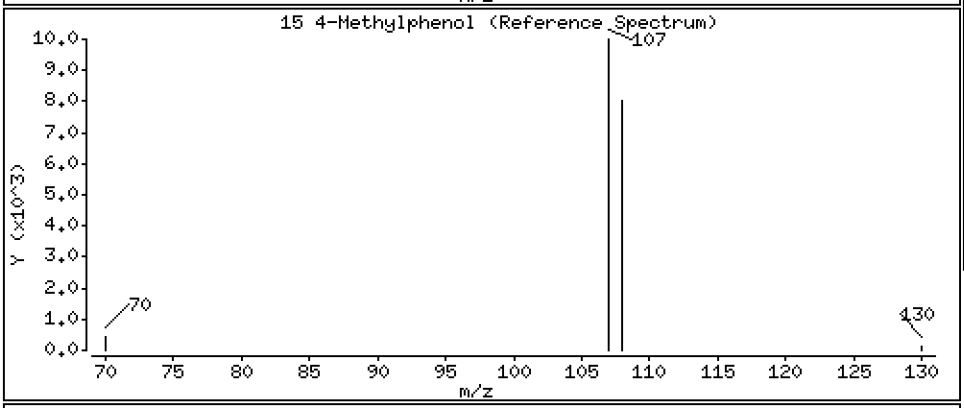
Concentration: 4.460 ug/mL

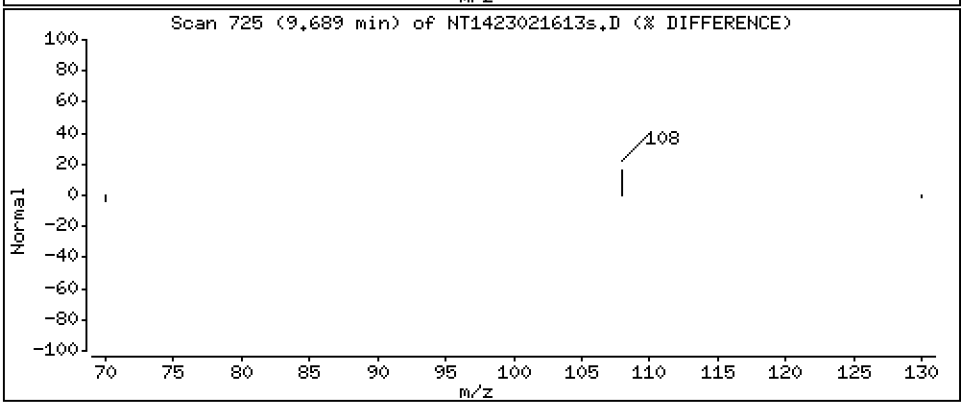












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

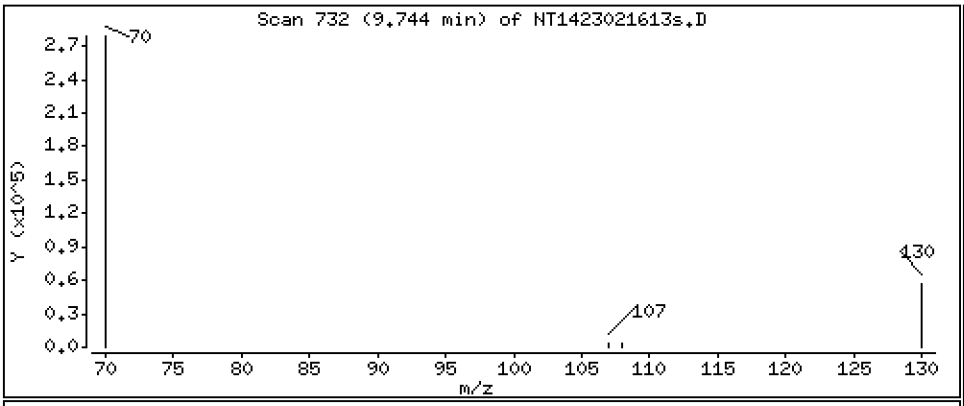
Operator: DSD

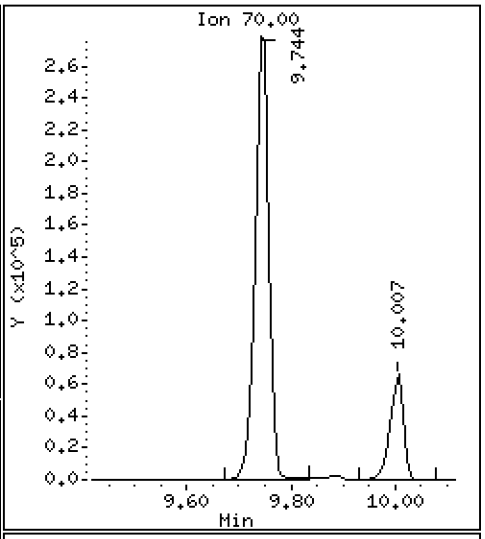
Column phase: ZB-5msi

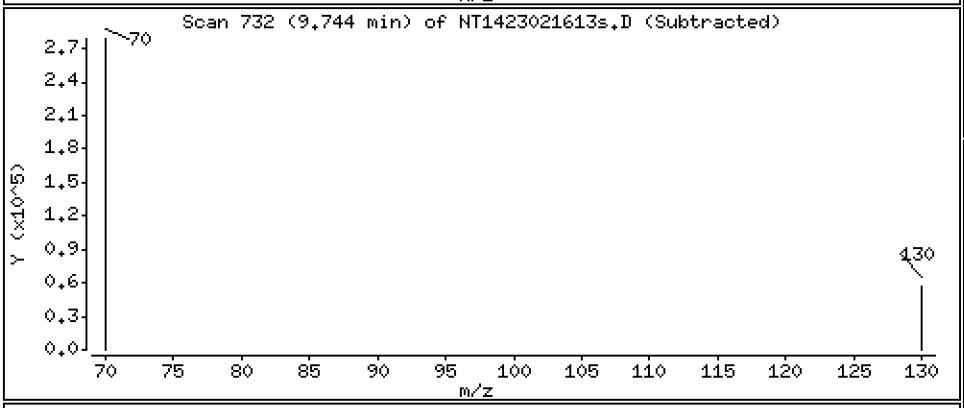
Column diameter: 0.25

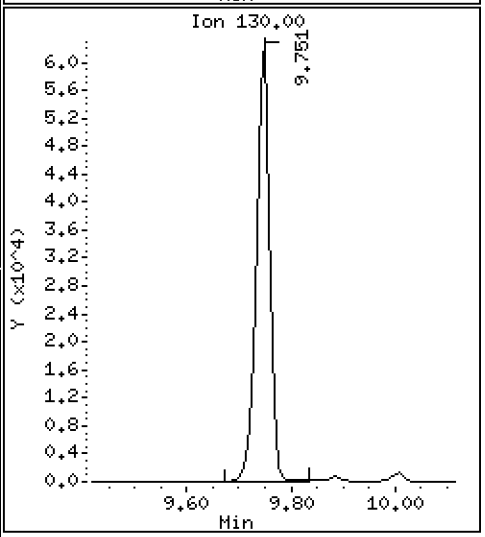
16 N-Nitroso-di-n-propylamine

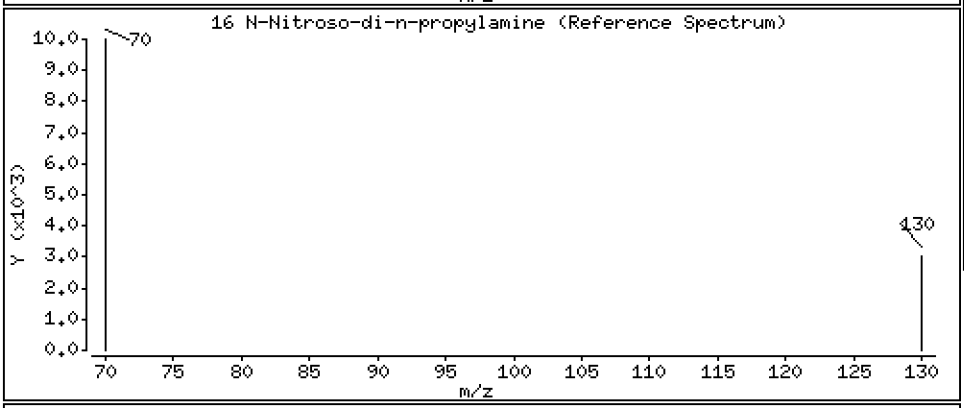
Concentration: 5.047 ug/mL

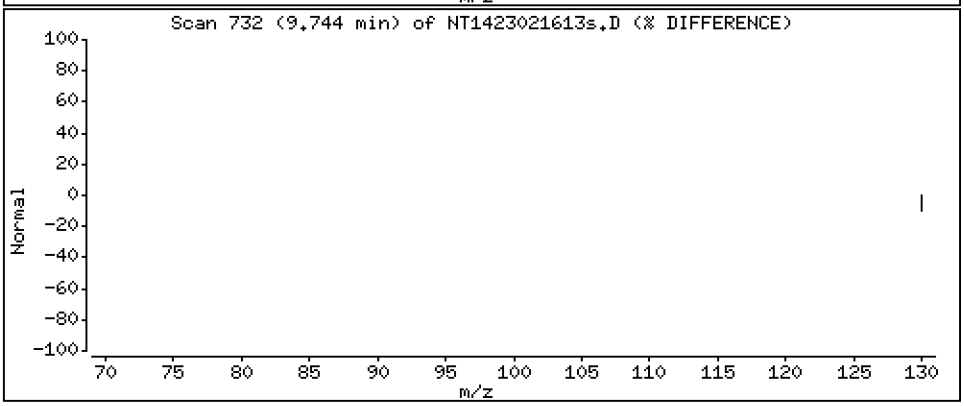












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

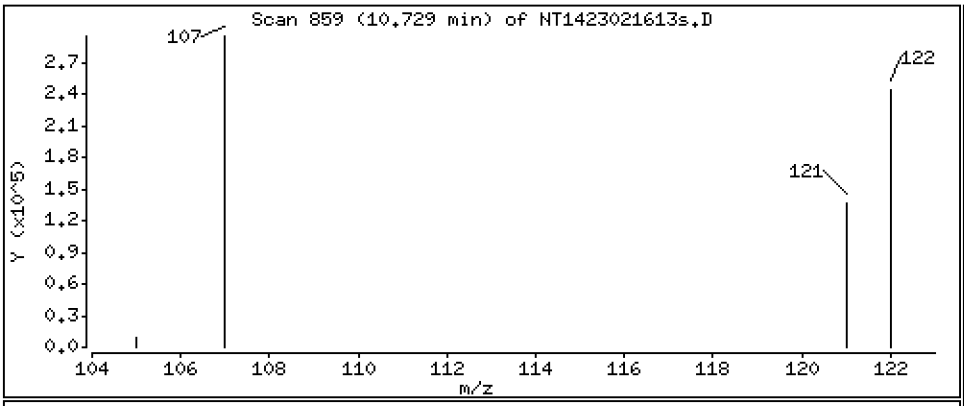
Operator: DSD

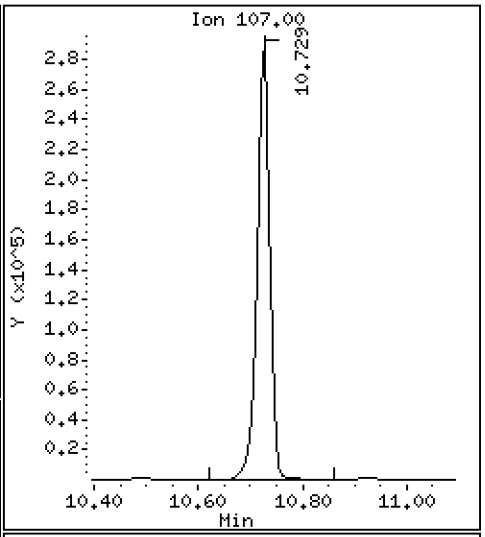
Column phase: ZB-5msi

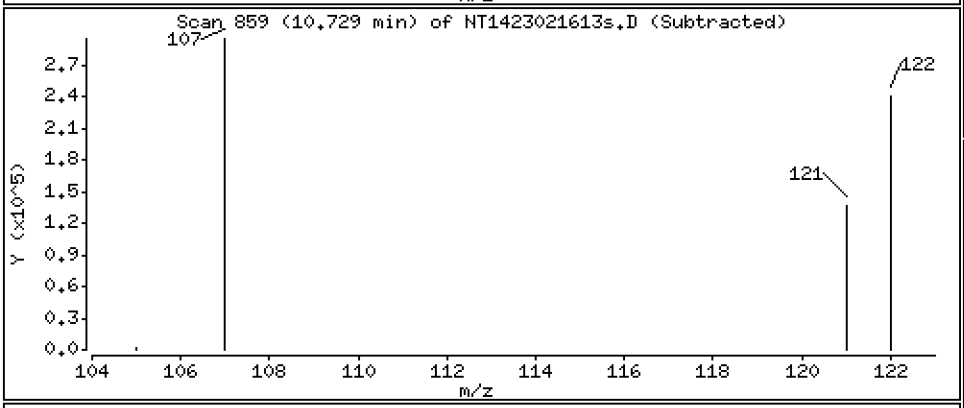
Column diameter: 0.25

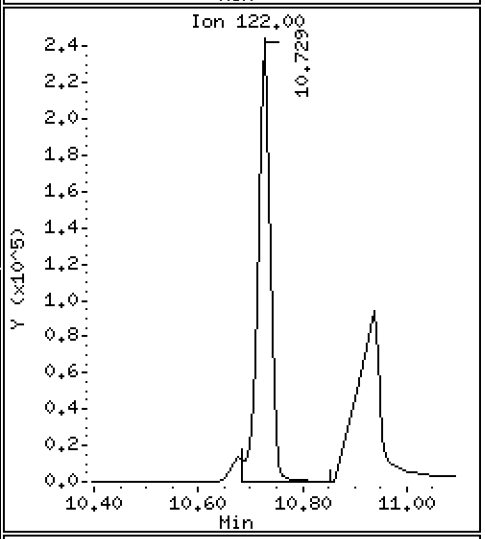
22 2,4-Dimethylphenol

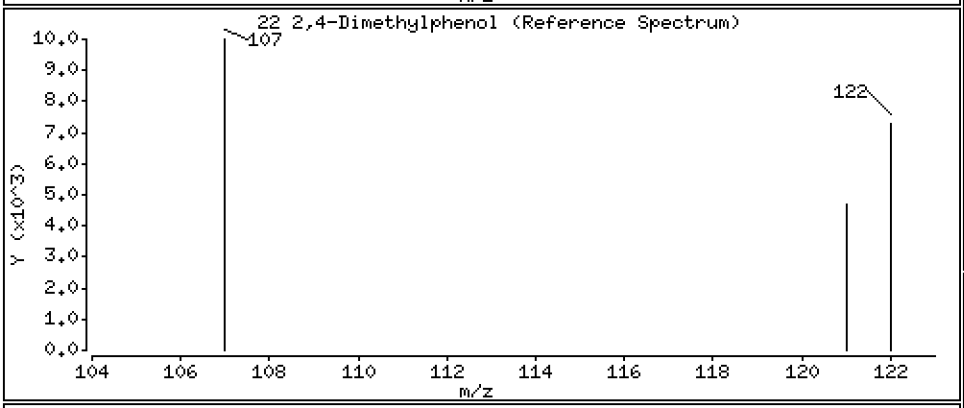
Concentration: 3.903 ug/mL

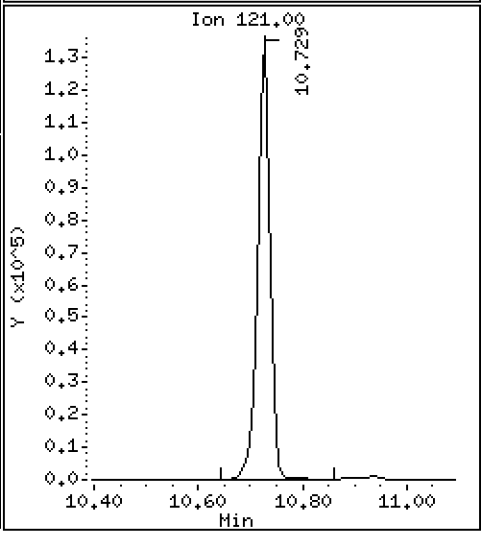


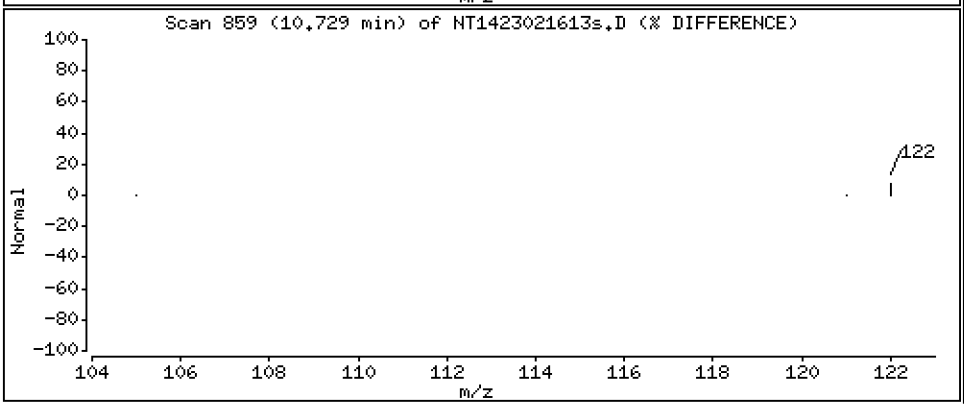












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

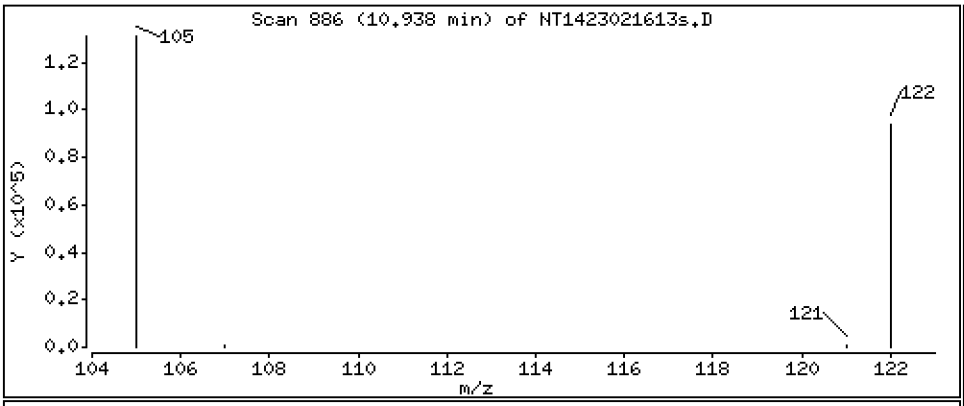
Operator: DSD

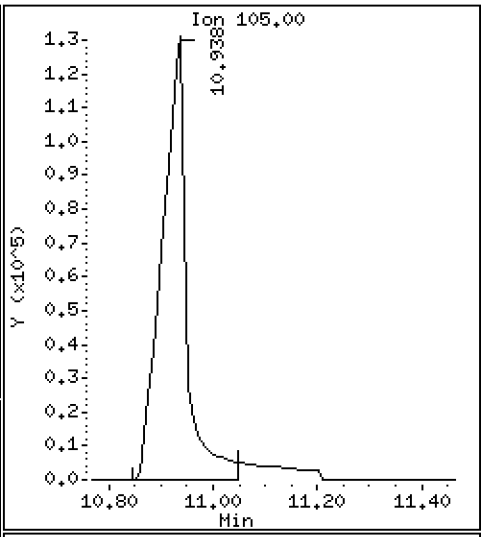
Column phase: ZB-5msi

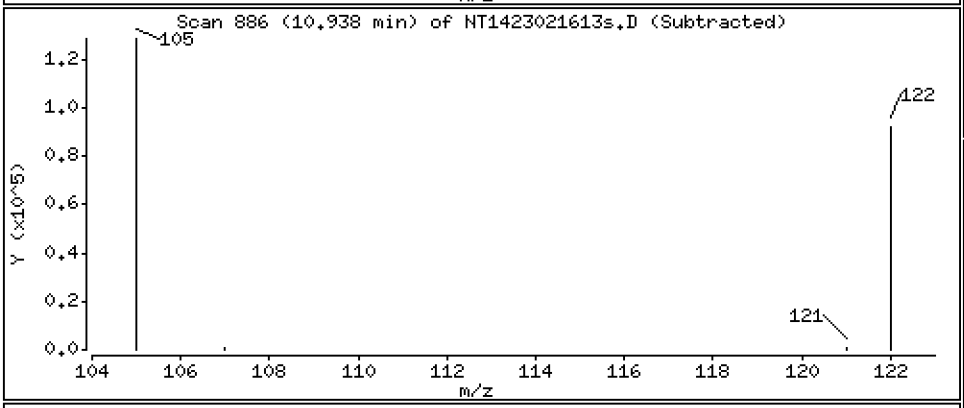
Column diameter: 0.25

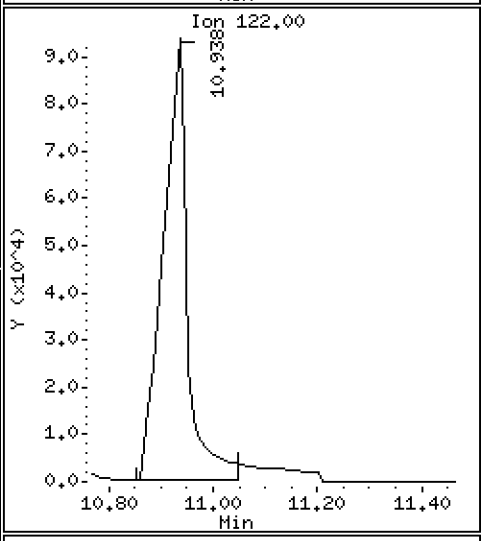
24 Benzoic acid

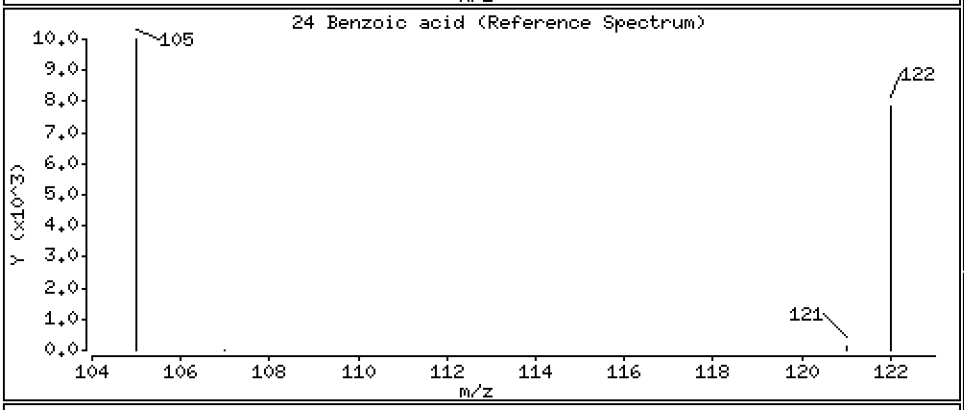
Concentration: 6.447 ug/mL

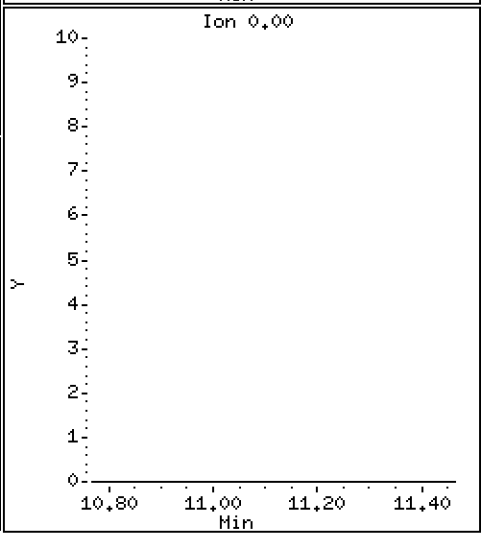


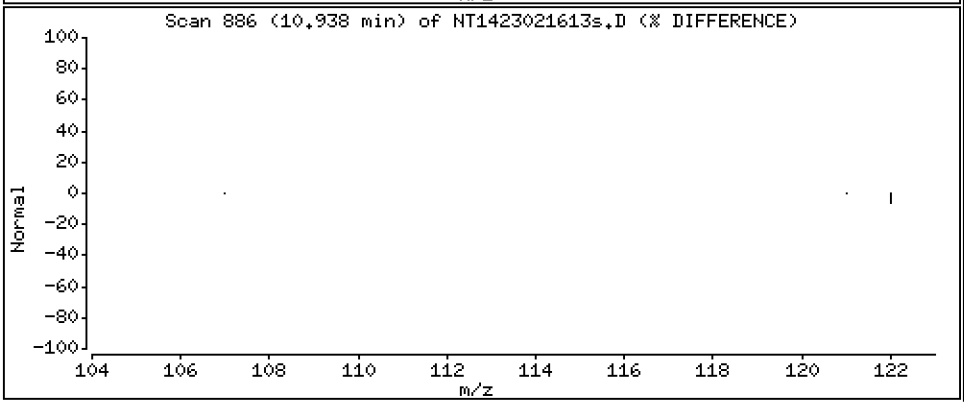












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

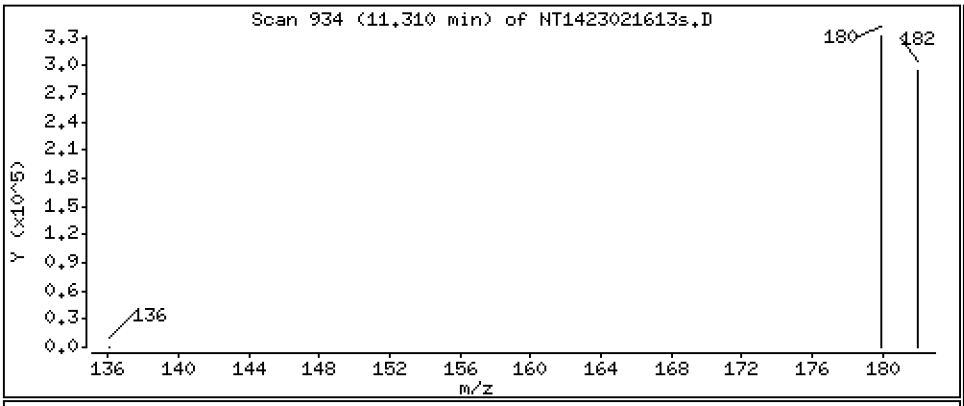
Operator: DSD

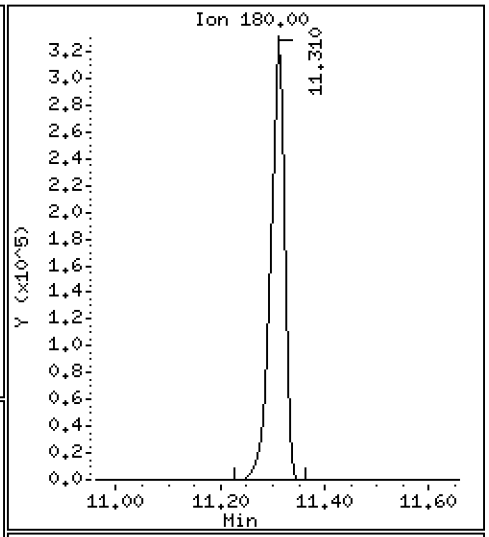
Column phase: ZB-5msi

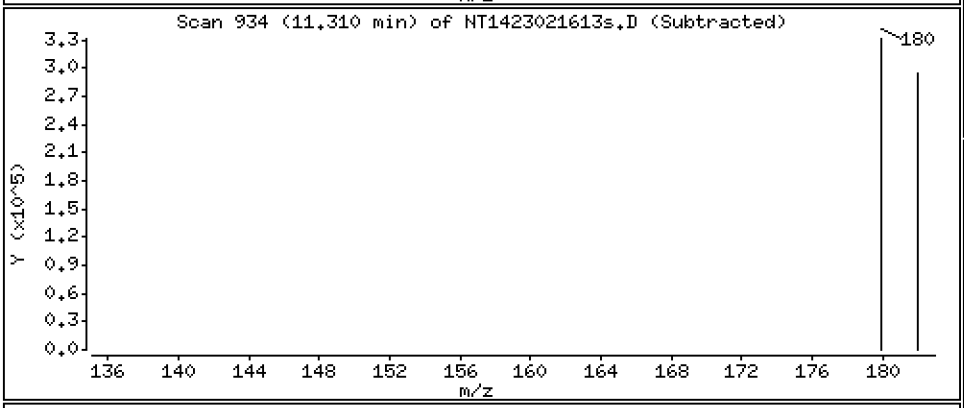
Column diameter: 0.25

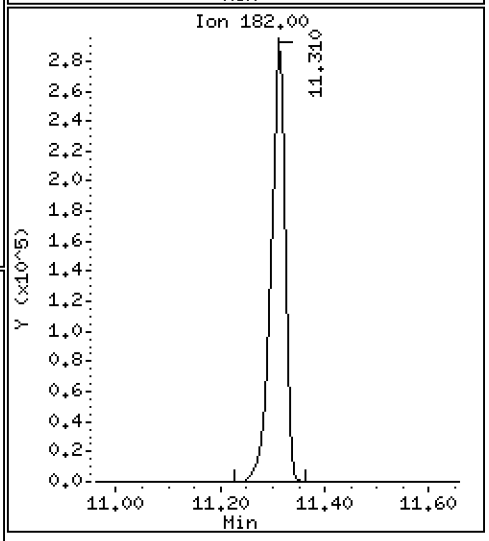
26 1,2,4-Trichlorobenzene

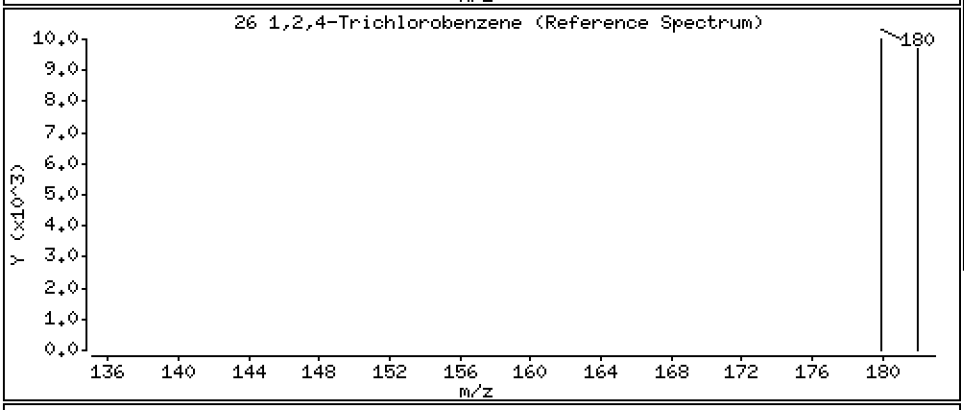
Concentration: 4.595 ug/mL

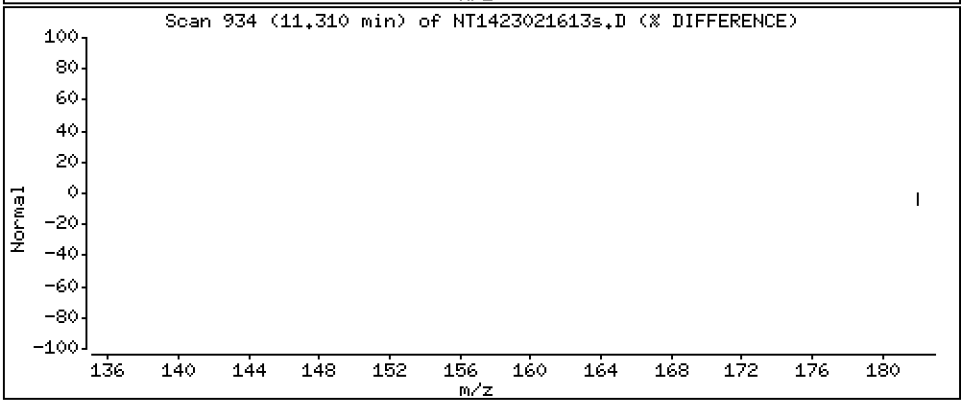












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

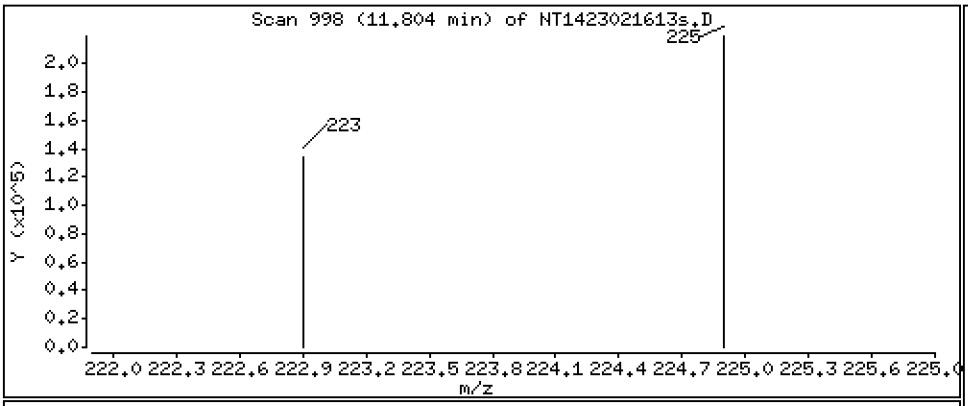
Operator: DSD

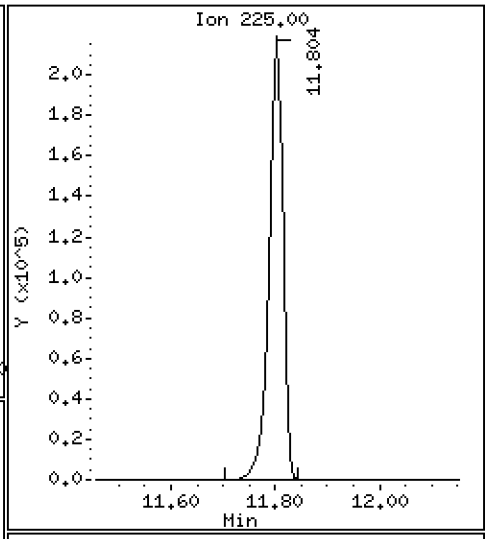
Column phase: ZB-5msi

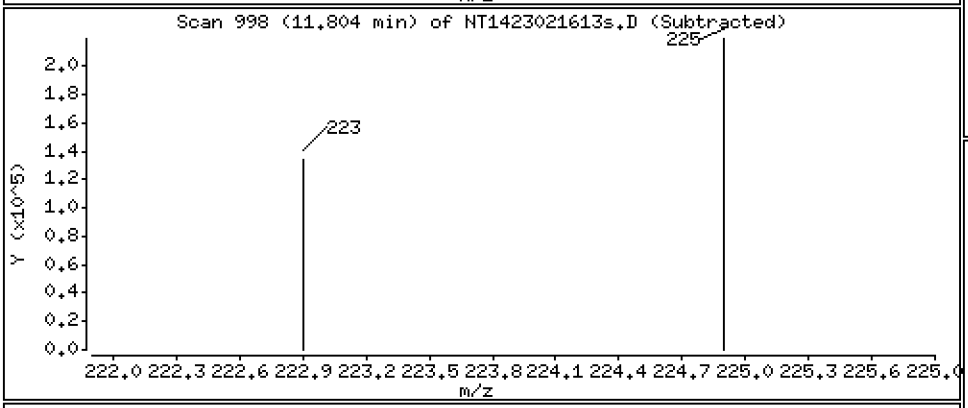
Column diameter: 0.25

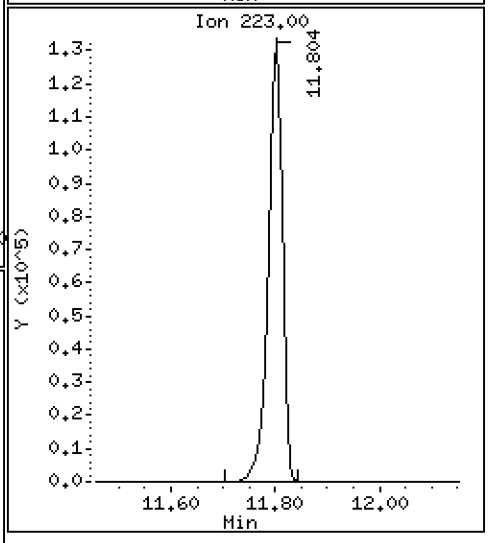
30 Hexachlorobutadiene

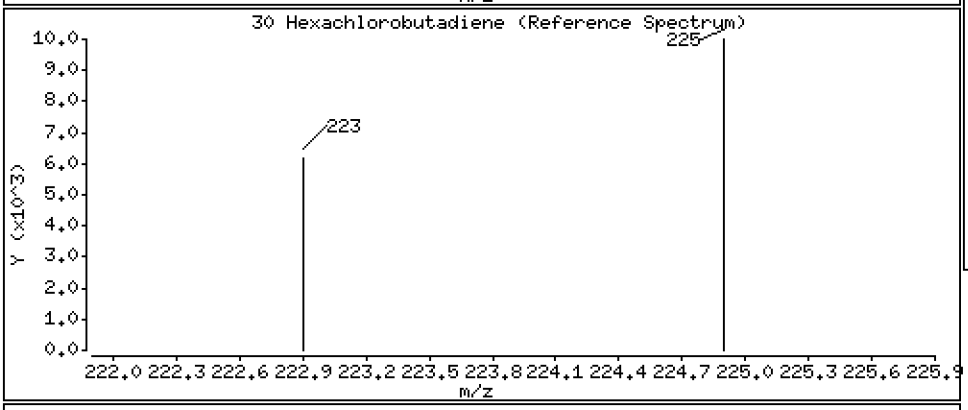
Concentration: 4.815 ug/mL

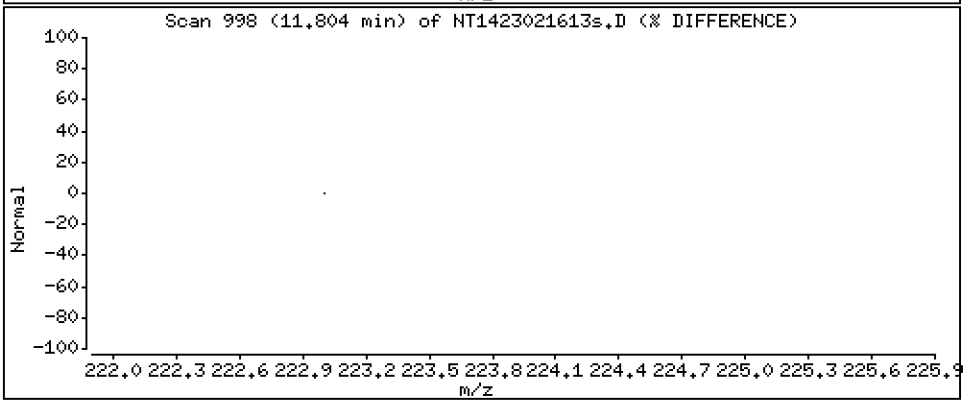












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

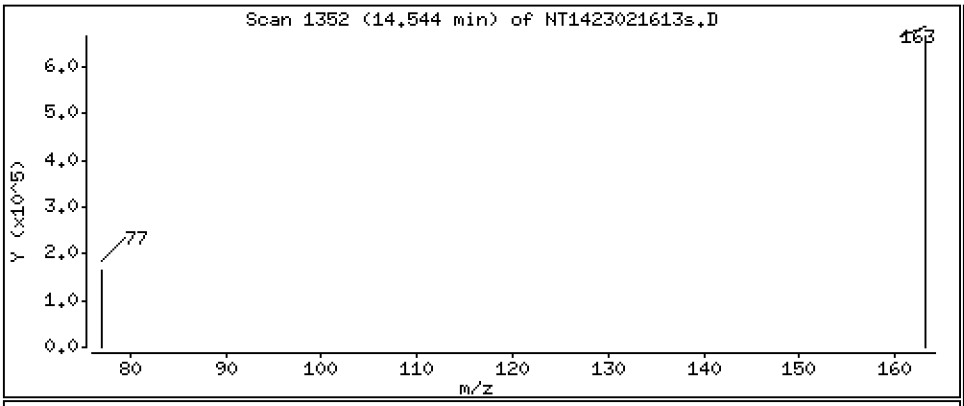
Operator: DSD

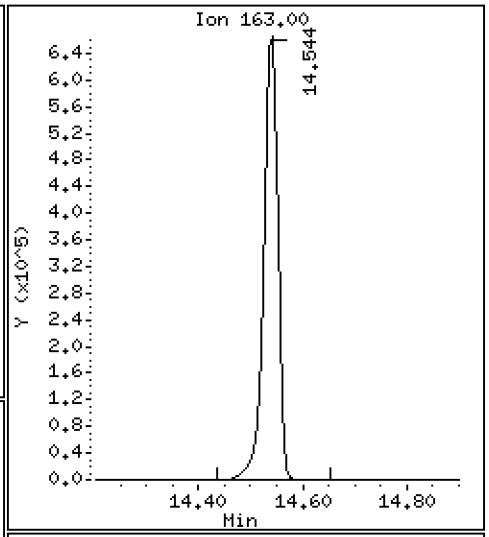
Column phase: ZB-5msi

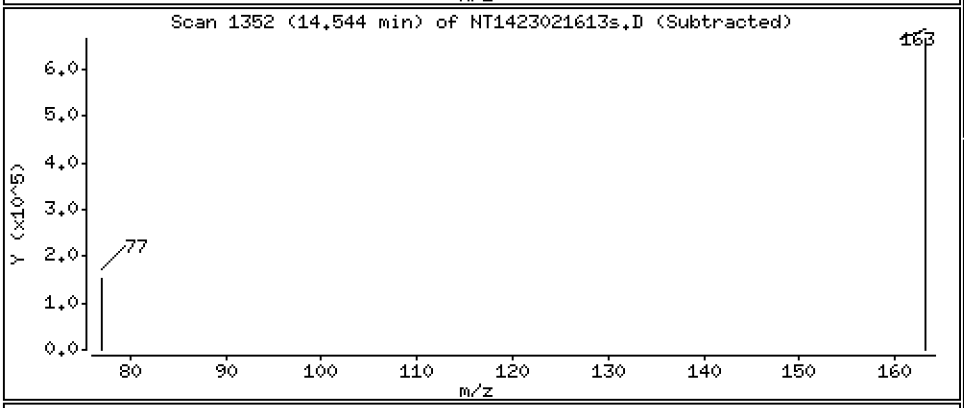
Column diameter: 0.25

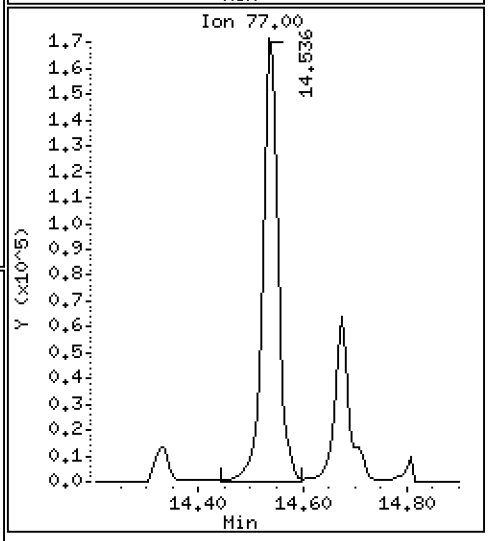
39 Dimethylphthalate

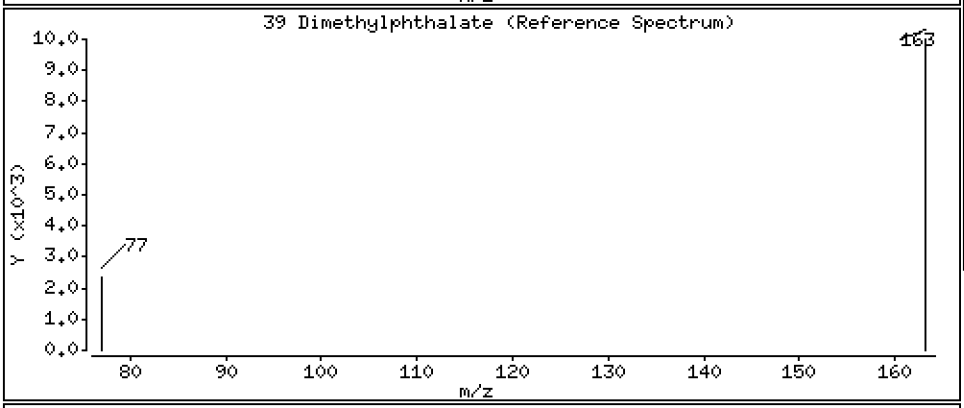
Concentration: 5.002 ug/mL

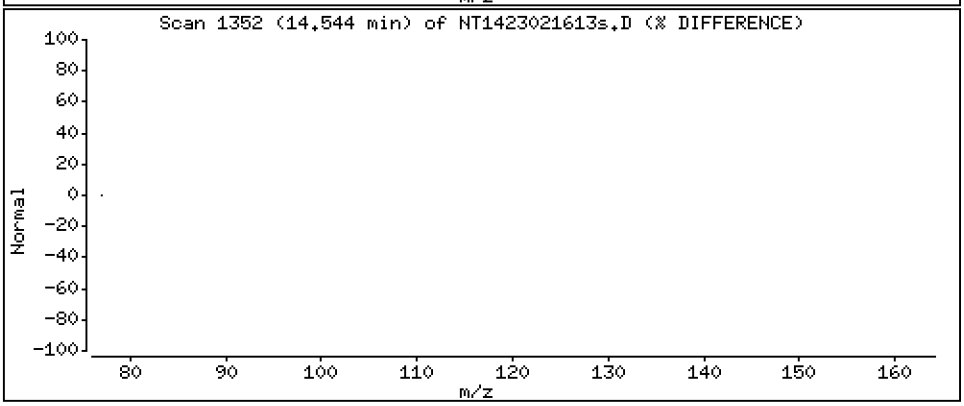












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

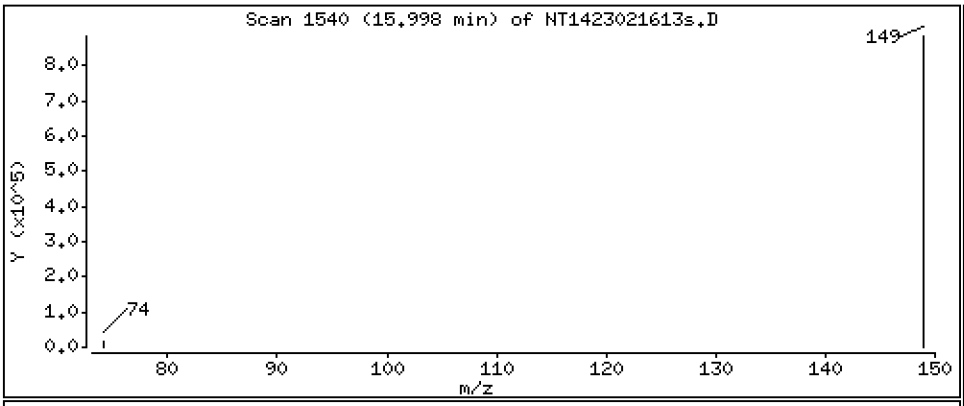
Operator: DSD

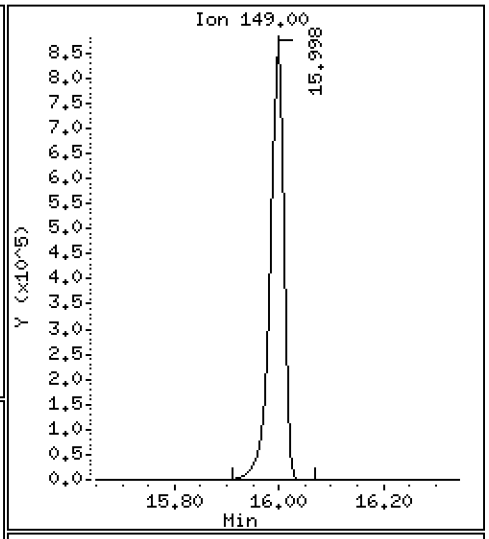
Column phase: ZB-5msi

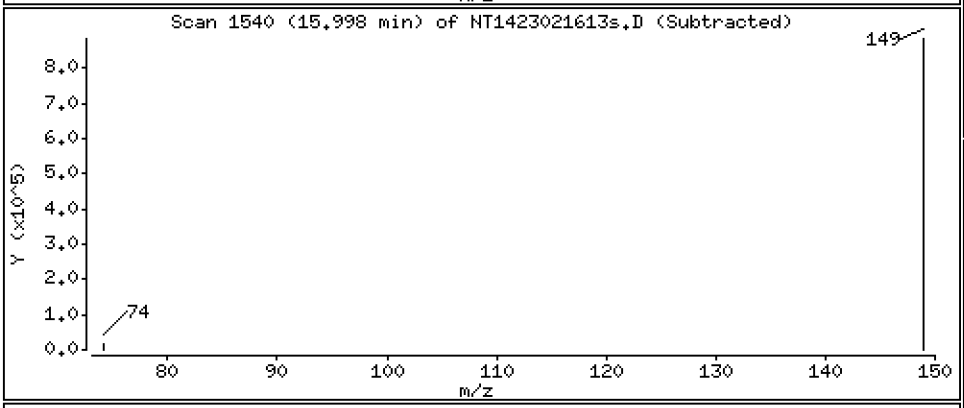
Column diameter: 0.25

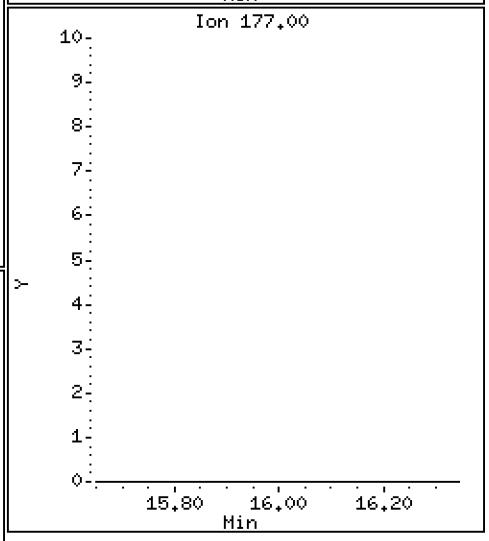
50 Diethylphthalate

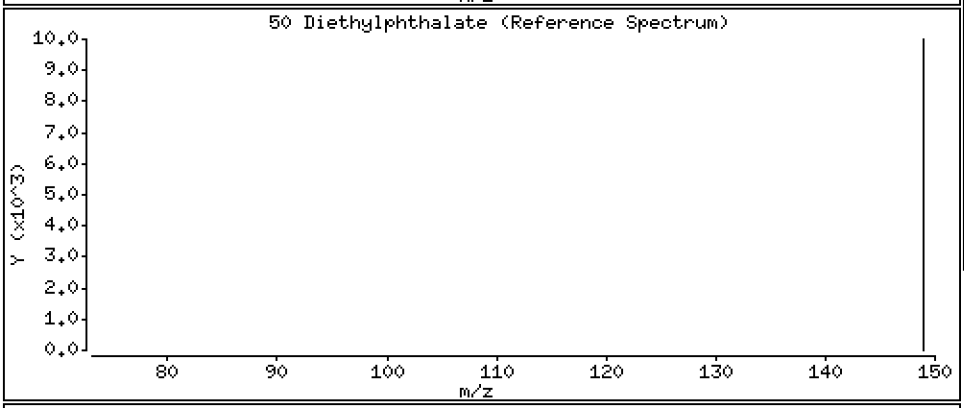
Concentration: 4.969 ug/mL

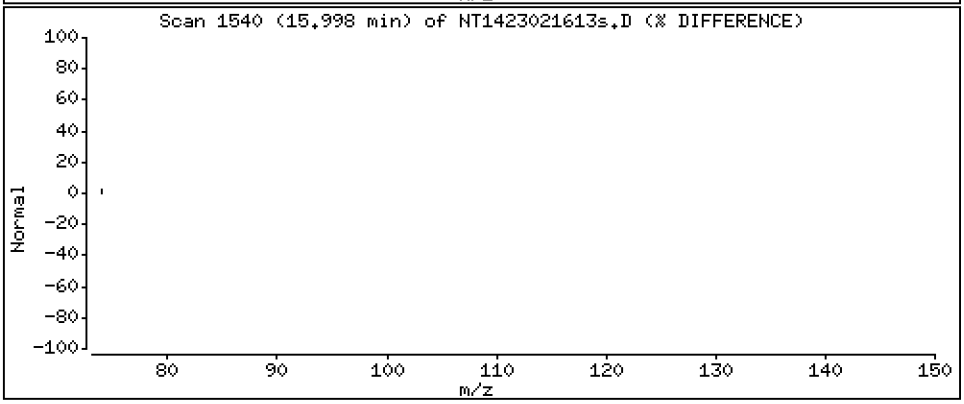












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

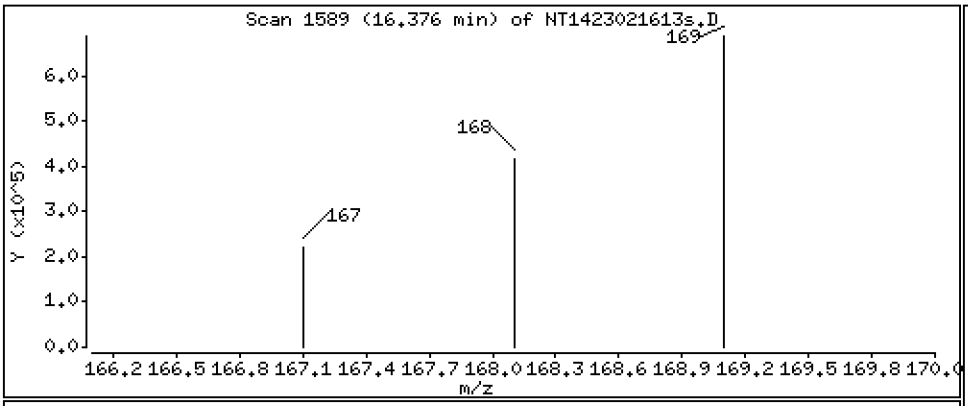
Operator: DSD

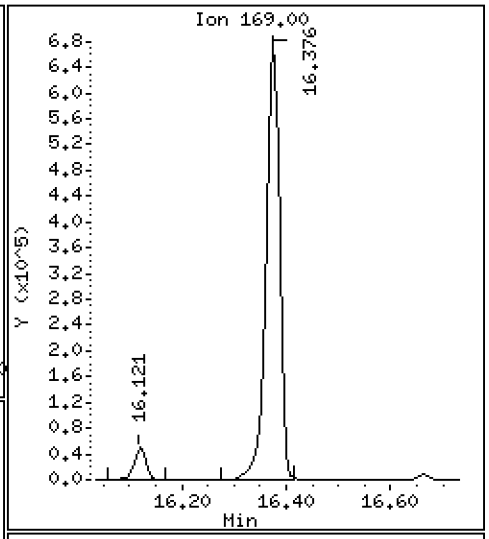
Column phase: ZB-5msi

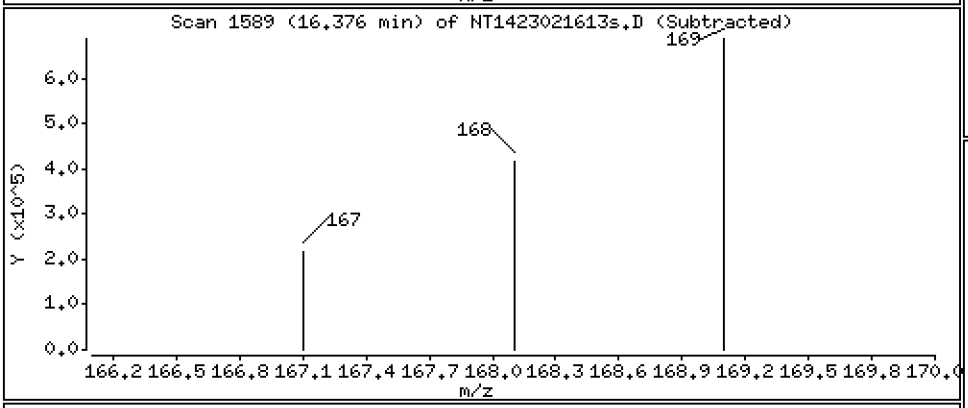
Column diameter: 0.25

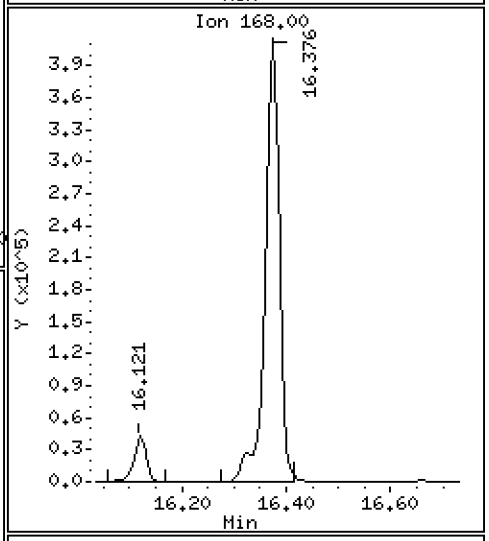
54 N-Nitrosodiphenylamine

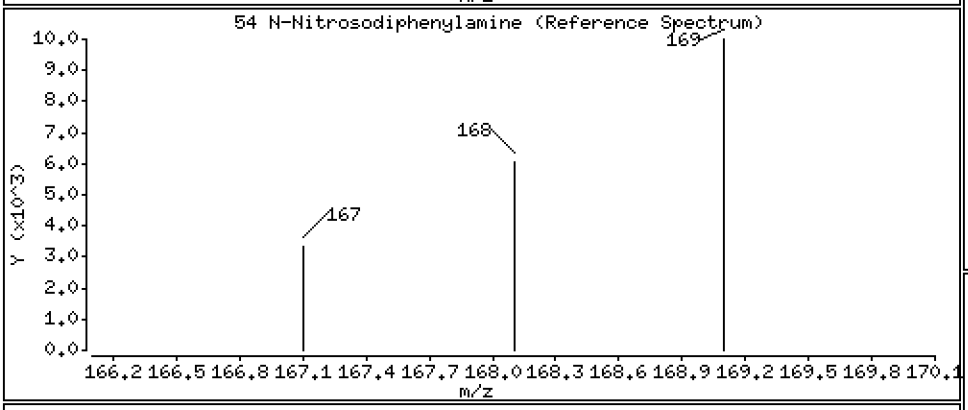
Concentration: 5.009 ug/mL

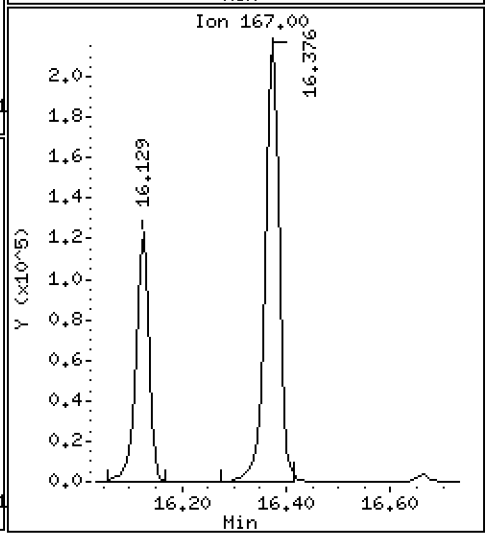


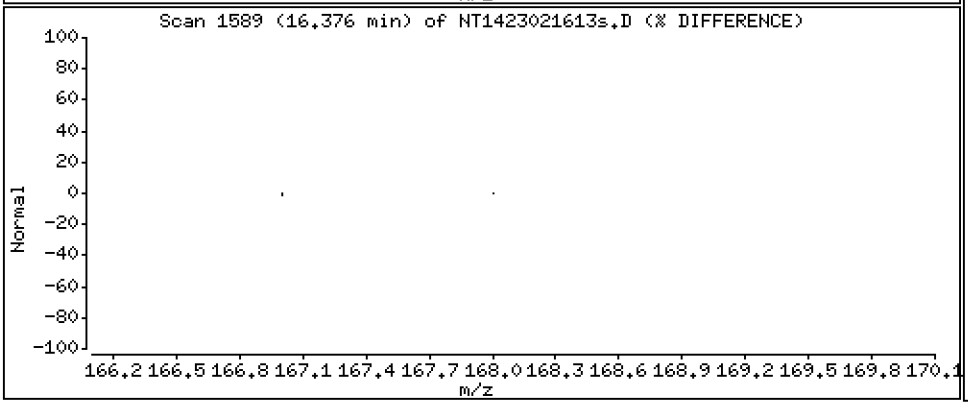












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

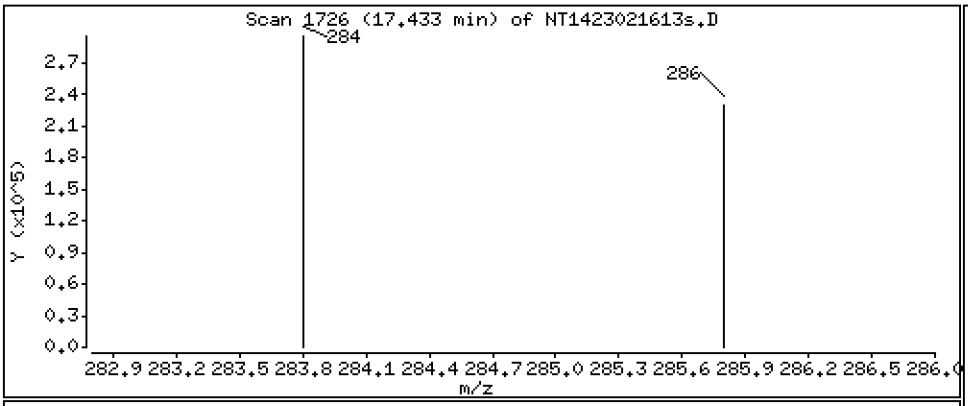
Operator: DSD

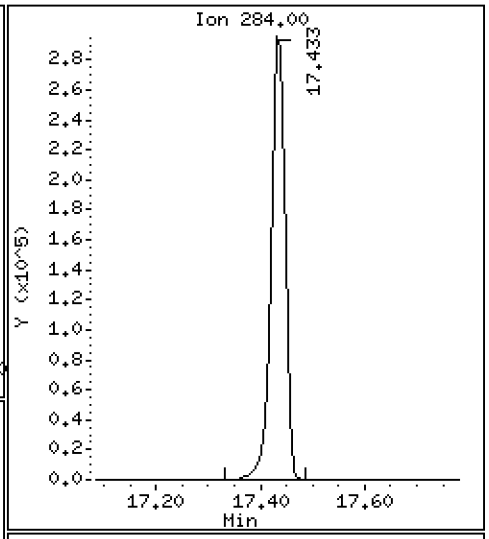
Column phase: ZB-5msi

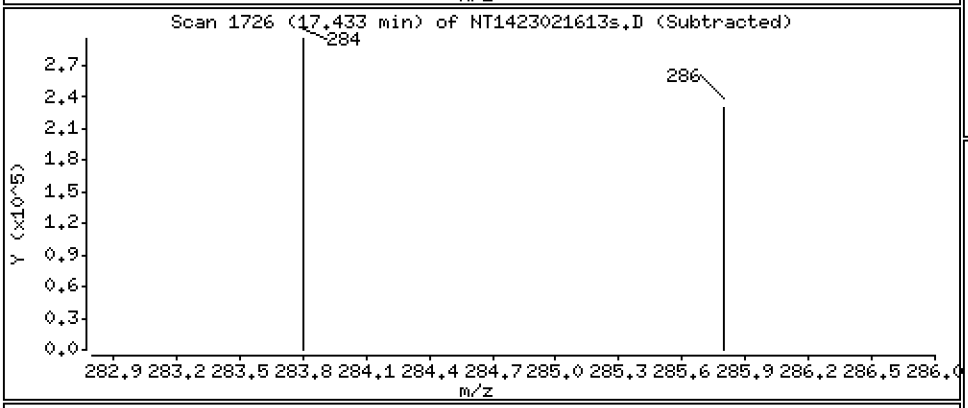
Column diameter: 0.25

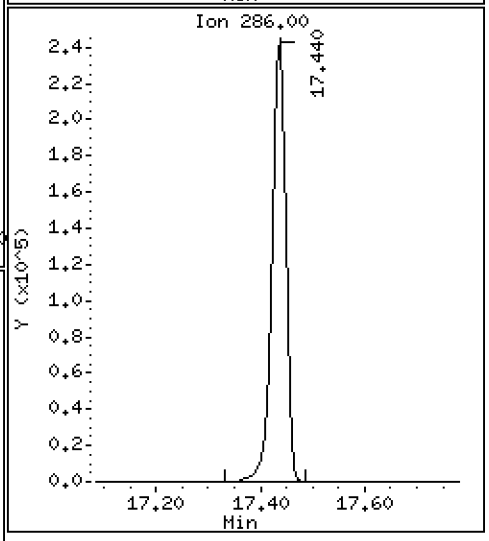
57 Hexachlorobenzene

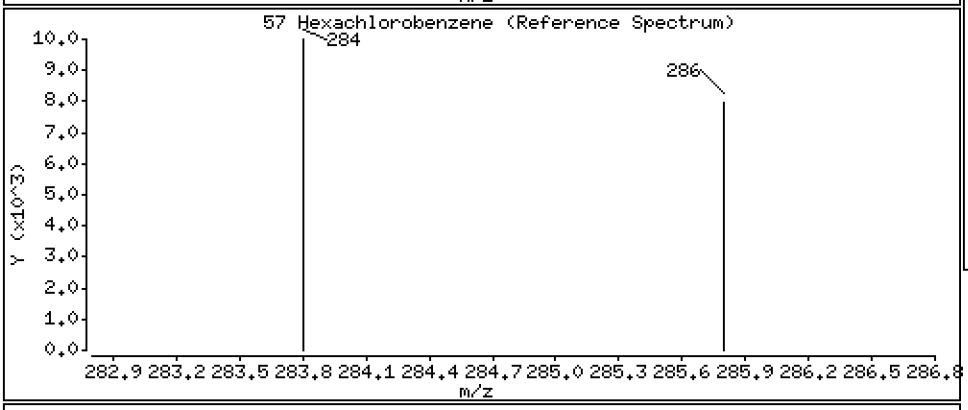
Concentration: 4.700 ug/mL

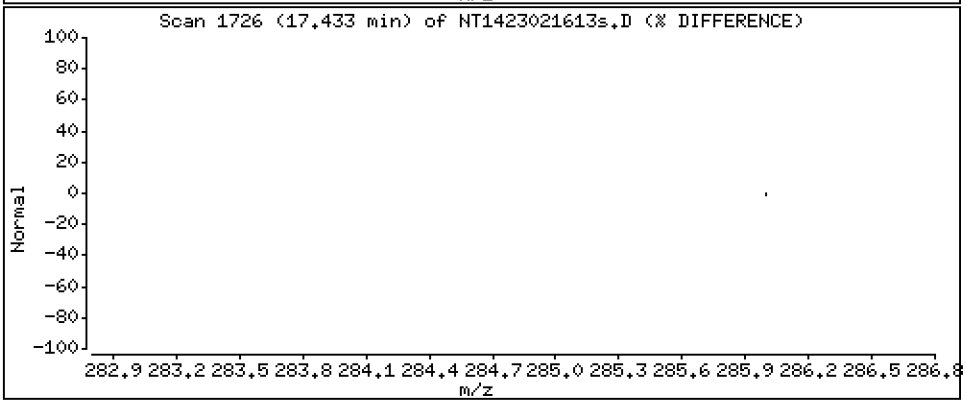












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

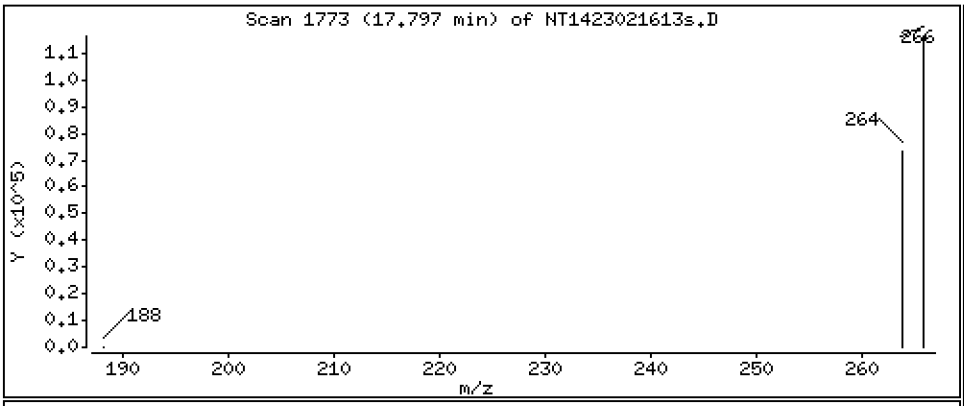
Operator: DSD

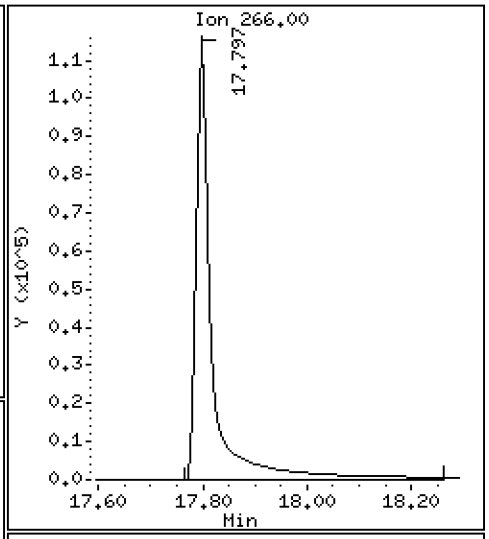
Column phase: ZB-5msi

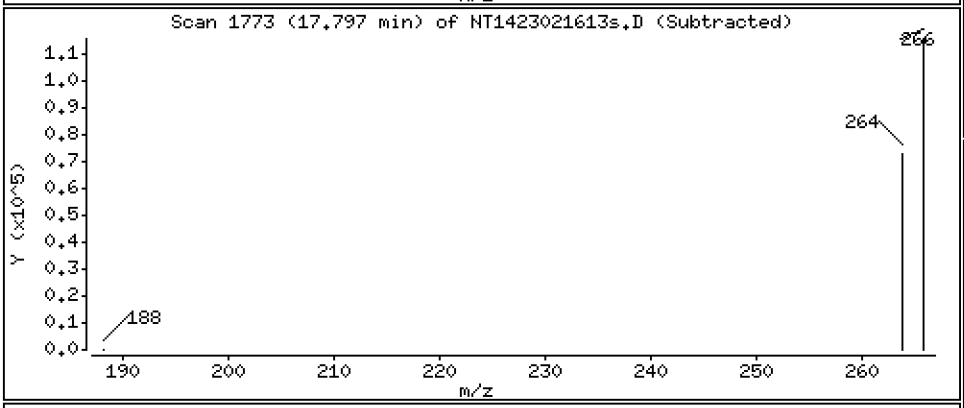
Column diameter: 0.25

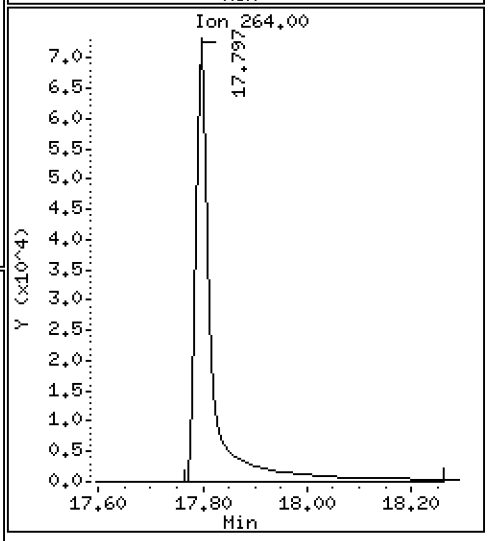
58 Pentachlorophenol

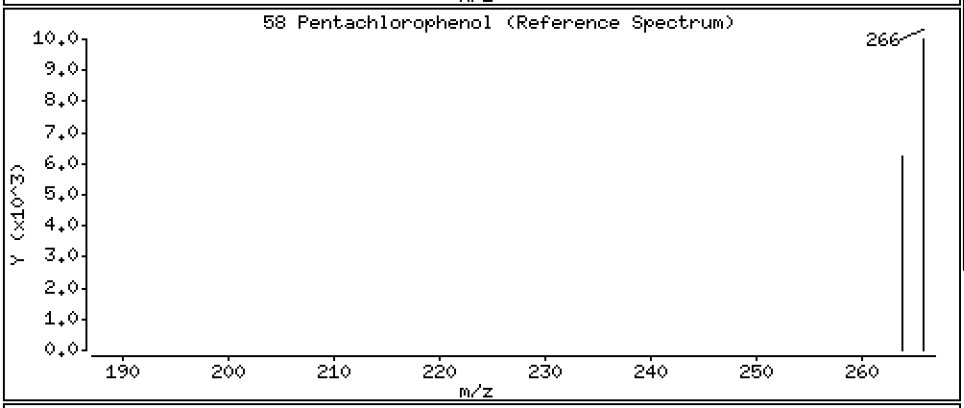
Concentration: 4.935 ug/mL

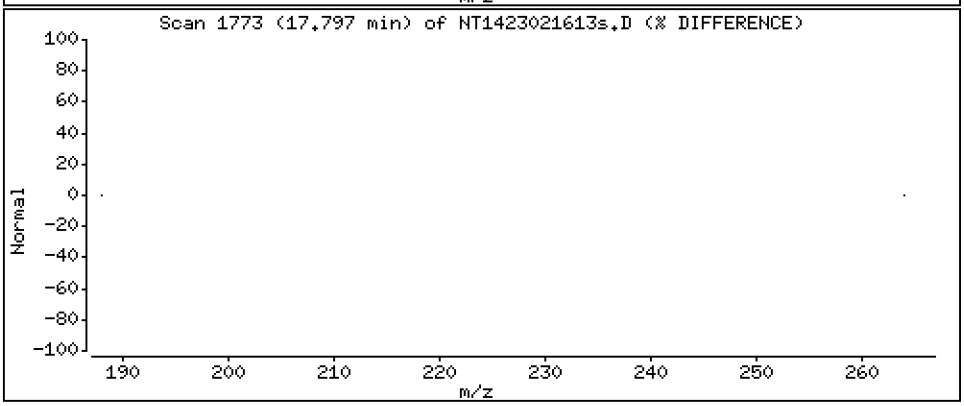












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

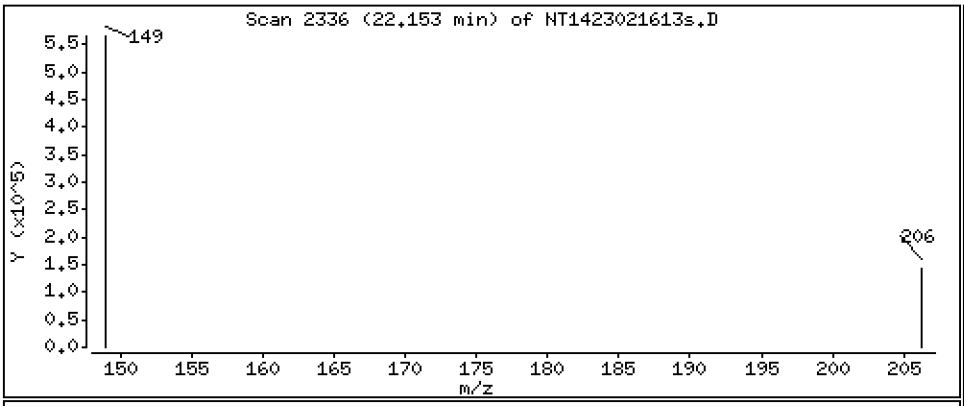
Operator: DSD

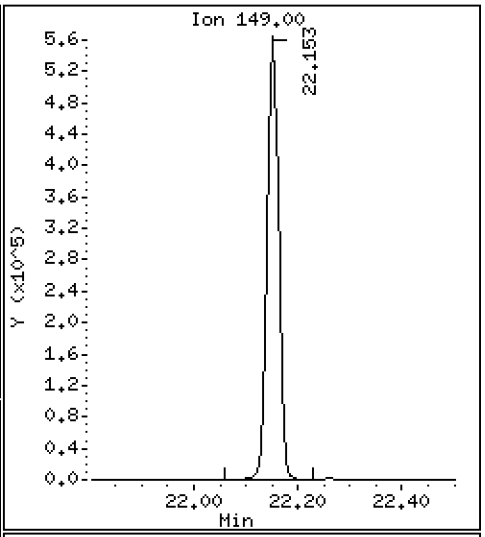
Column phase: ZB-5msi

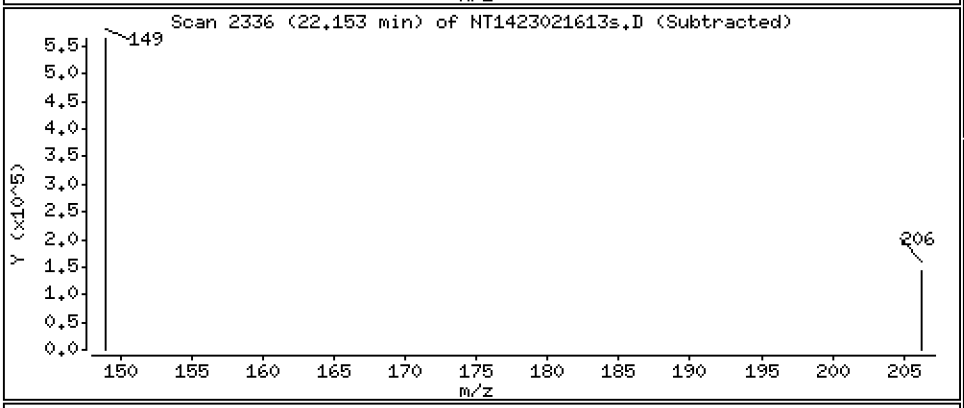
Column diameter: 0.25

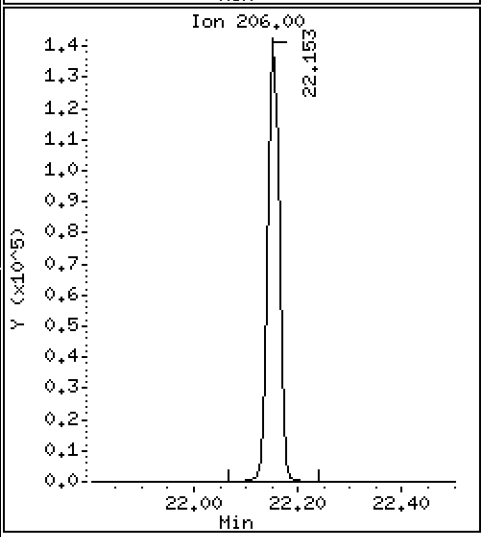
67 Butylbenzylphthalate

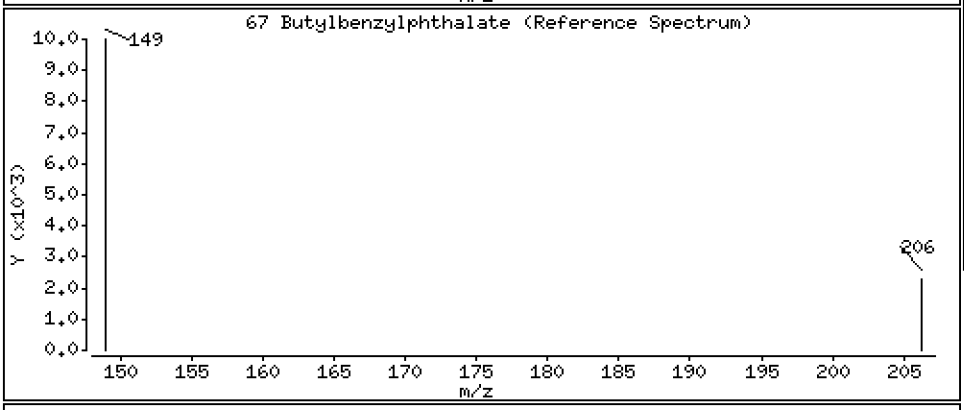
Concentration: 4.964 ug/mL

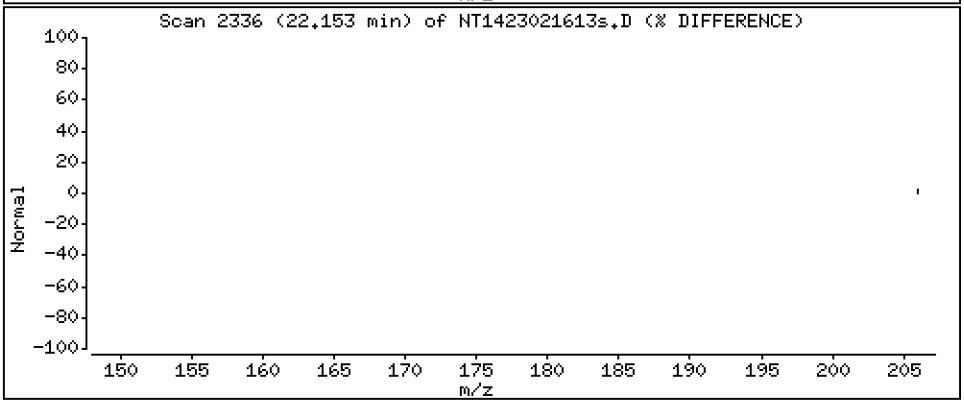












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

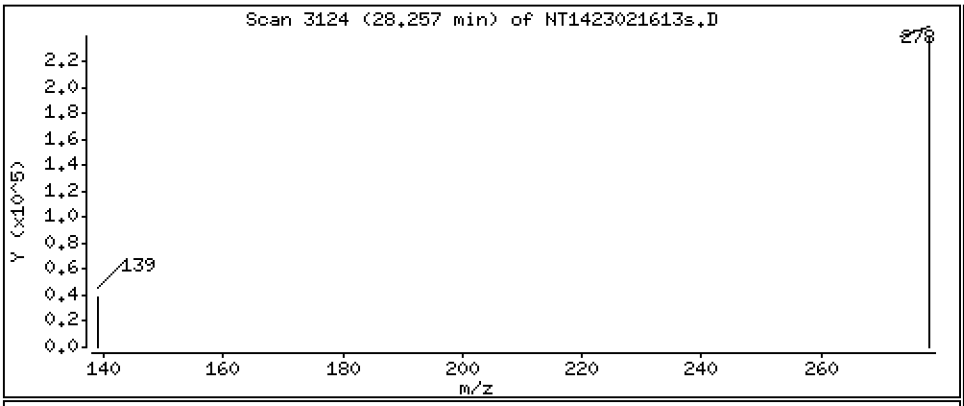
Operator: DSD

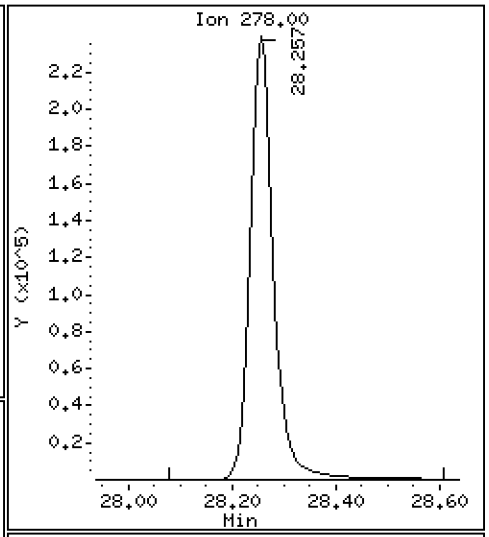
Column phase: ZB-5msi

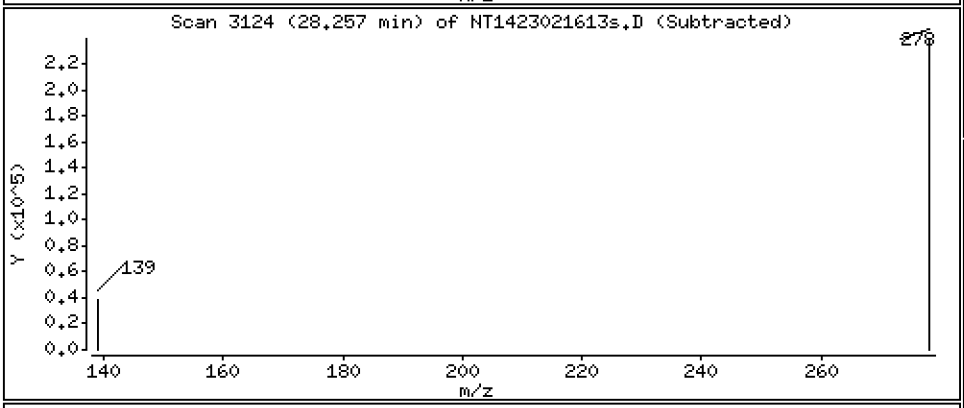
Column diameter: 0.25

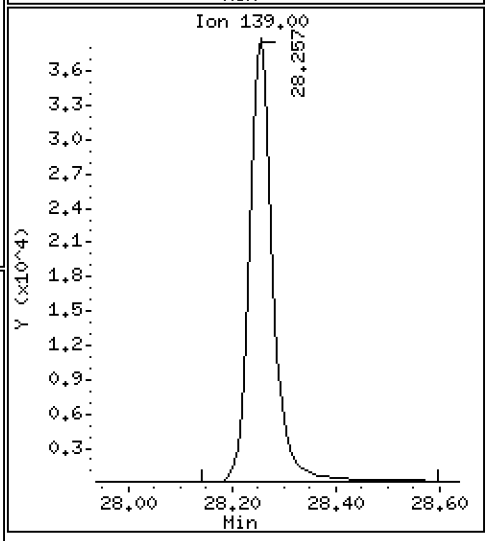
79 Dibenzo(a,h)anthracene

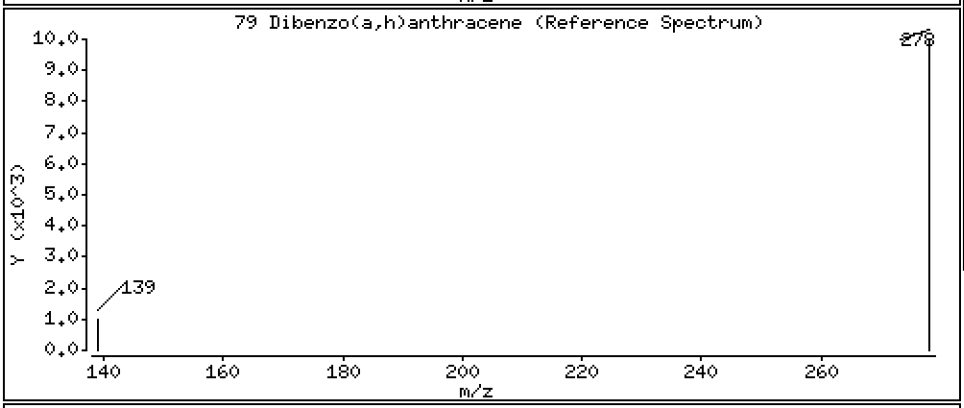
Concentration: 4.888 ug/mL

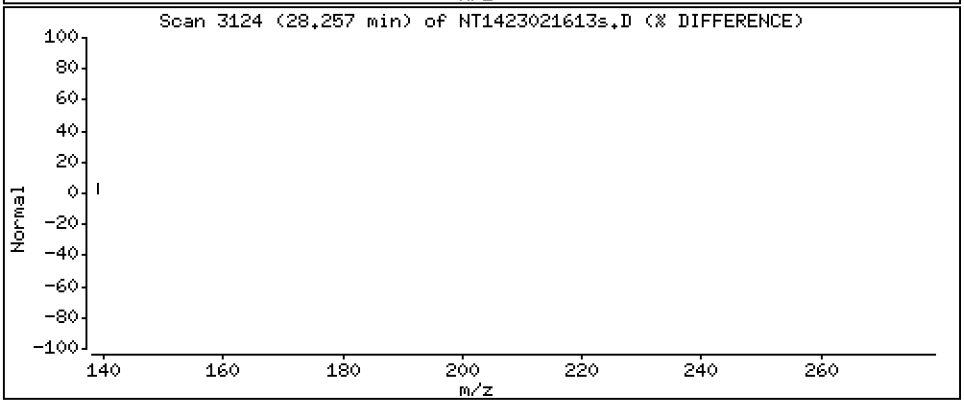












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

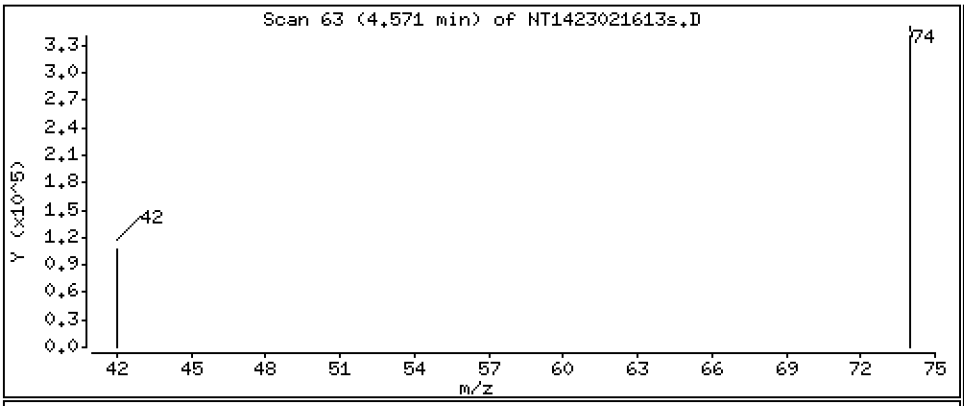
Operator: DSD

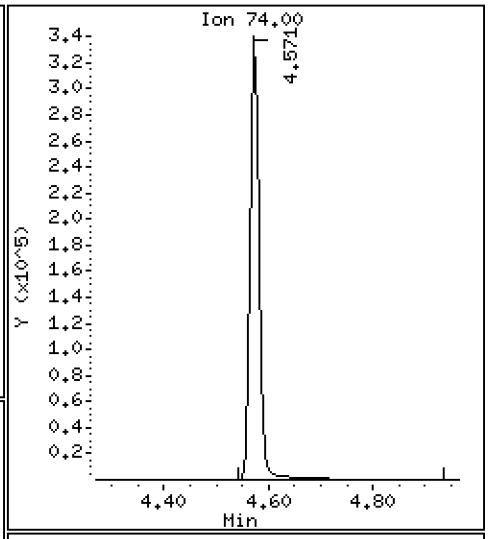
Column phase: ZB-5msi

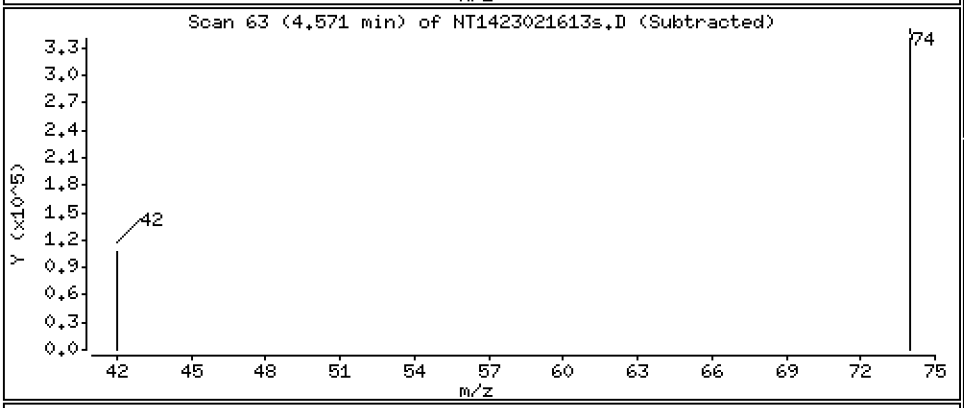
Column diameter: 0.25

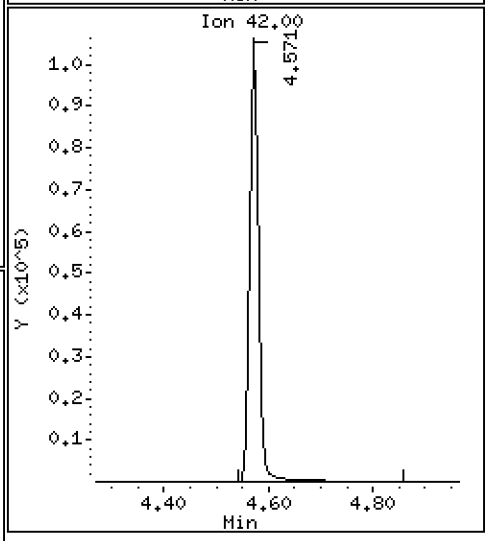
90 N-Nitrosodimethylamine

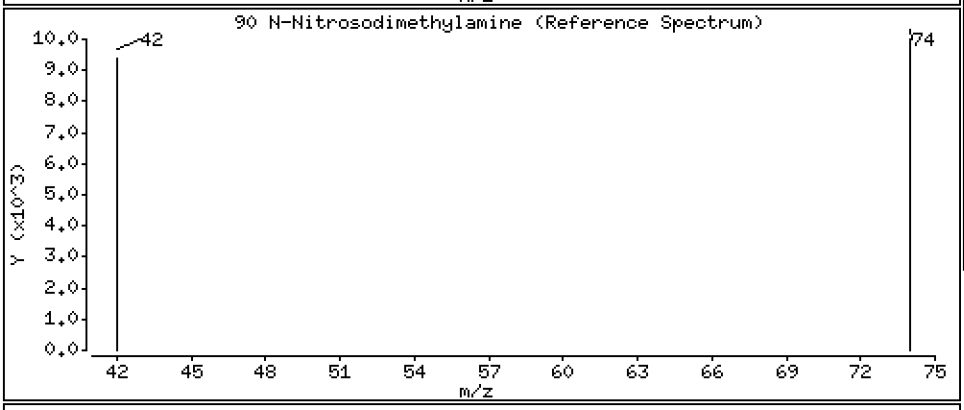
Concentration: 5.293 ug/mL

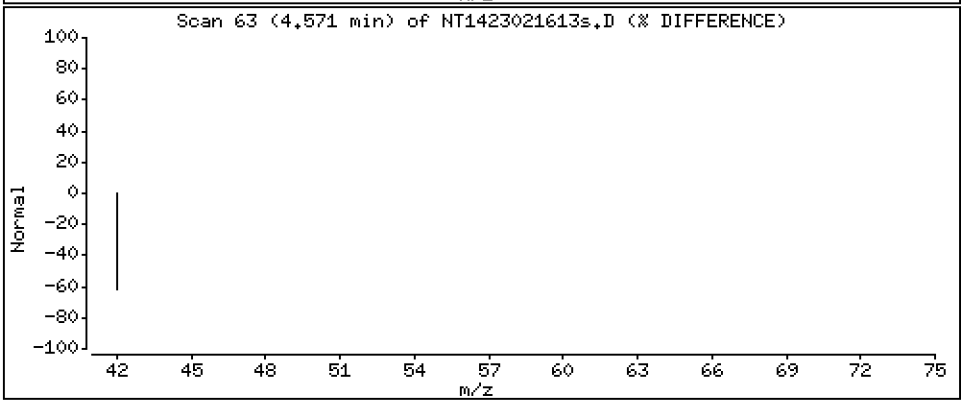












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D
Lab Smp Id: SLB0240-SCV1
Inj Date : 16-FEB-2023 21:18 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0240-SCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Meth Date : 03-Mar-2023 14:04 van Quant Type: ISTD
Cal Date : 16-FEB-2023 20:42 Cal File: NT1423021612s.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.679	6.764	(0.750)	843875	7.69265	7.693(R)
	3 Phenol	94	8.294	8.379	(0.931)	773600	4.55614	4.556
	7 1,3-Dichlorobenzene	146	8.835	8.835	(0.992)	640622	4.80933	4.809
*	8 1,4-Dichlorobenzene-d4	152	8.905	8.905	(1.000)	391473	4.00000	
	9 1,4-Dichlorobenzene	146	8.936	8.936	(1.003)	616286	4.85010	4.850
	11 Benzyl alcohol	79	9.184	9.161	(1.031)	568264	5.30032	5.300
	12 1,2-Dichlorobenzene	146	9.293	9.293	(1.044)	605835	4.79526	4.795
	13 2-Methylphenol	108	9.409	9.433	(1.057)	523707	4.50674	4.507
	15 4-Methylphenol	108	9.689	9.720	(1.088)	579099	4.46016	4.460
	16 N-Nitroso-di-n-propylamine	70	9.743	9.767	(1.094)	517307	5.04663	5.047
	22 2,4-Dimethylphenol	107	10.728	10.745	(0.942)	488898	3.90295	3.903
	24 Benzoic acid	105	10.938	11.116	(0.960)	436009	6.44677	6.447
	26 1,2,4-Trichlorobenzene	180	11.309	11.310	(0.993)	602290	4.59532	4.595
*	27 Naphthalene-d8	136	11.394	11.394	(1.000)	1430650	4.00000	
	30 Hexachlorobutadiene	225	11.804	11.804	(1.036)	383880	4.81466	4.815
	39 Dimethylphthalate	163	14.543	14.551	(0.968)	1212628	5.00209	5.002
*	42 Acenaphthene-d10	162	15.023	15.016	(1.000)	794620	4.00000	
	50 Diethylphthalate	149	15.997	15.997	(1.065)	1507744	4.96936	4.969
	54 N-Nitrosodiphenylamine	169	16.375	16.384	(0.907)	1157201	5.00925	5.009(H)
	57 Hexachlorobenzene	284	17.432	17.432	(0.965)	537021	4.70048	4.700
	58 Pentachlorophenol	266	17.796	17.944	(0.985)	240806	4.93475	4.935
*	59 Phenanthrene-d10	188	18.059	18.059	(1.000)	1759092	4.00000	
$	66 Terphenyl-d14	244	21.224	21.224	(0.918)	1463833	4.57604	4.576(R)
	67 Butylbenzylphthalate	149	22.153	22.153	(0.958)	814994	4.96402	4.964
*	69 Chrysene-d12	240	23.128	23.121	(1.000)	1201603	4.00000	
*	77 Perylene-d12	264	25.691	25.691	(1.000)	814421	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.257	28.288	(1.100)	772593	4.88838	4.888
	90 N-Nitrosodimethylamine	74	4.571	4.618	(0.513)	440424	5.29346	5.293

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021613s.D
Lab Smp Id: SLB0240-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 18:18
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	393779	196890	787558	391473	-0.59
27 Naphthalene-d8	1399029	699515	2798058	1430650	2.26
42 Acenaphthene-d10	759723	379862	1519446	794620	4.59
59 Phenanthrene-d10	1756156	878078	3512312	1759092	0.17
69 Chrysene-d12	1174128	587064	2348256	1201603	2.34
77 Perylene-d12	826011	413006	1652022	814421	-1.40

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	-0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.39	-0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.05
59 Phenanthrene-d10	18.06	17.56	18.56	18.06	-0.00
69 Chrysene-d12	23.12	22.62	23.62	23.13	0.03
77 Perylene-d12	25.68	25.18	26.18	25.69	0.03

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

REVIEW SUMMARY FOR FILE - NT1423021613s.D

Lab ID: SLB0240-SCV1
nt14.i, 20230216.b\20230216.b\SIMABN2.m,   16-FEB-2023 21:18

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.931	0.941	-0.0095	Phenol
0.960	0.000	0.9599	Benzoic acid
0.513	0.518	-0.0052	N-Nitrosodimethylamine
0.985	0.000	0.9854	Pentachlorophenol
0.750	0.760	-0.0095	2-Fluorophenol

RRT check based on Ccal File: 20230216.b/NT1423021612s.D

On Column LOD for nt14.i, 20230216.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT14	Calibration:	GC00009
Lab File ID:	NT1423021719s1.D	Calibration Date:	03/03/2023
Sequence:	SLB0335	Injection Date:	02/17/23
Lab Sample ID:	SLB0335-ICV1	Injection Time:	21:31
Sequence Name:	Initial Cal Check		

		CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF		
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT	
1,4-Dichlorobenzene	A	1.0000	1.0	1.2983440	1.2787350		-1.5	+/-20	
1,2-Dichlorobenzene	A	1.0000	1.0	1.2909230	1.2953660		0.3	+/-20	
Benzyl Alcohol	A	1.0000	0.9	1.0954840	0.9845015		-10.1	+/-20	
Benzoic acid	A	4.0000	0.8	0.1890948	0.0399317		-78.9	+/-20	*
2,4-Dimethylphenol	A	2.0000	2.0	0.3263158	0.3660230		2.4	+/-20	
1,2,4-Trichlorobenzene	A	1.0000	1.0	0.3664516	0.3644711		-0.5	+/-20	
N-Nitrosodiphenylamine	A	1.0000	1.1	0.4912986	0.5466183		8.2	+/-20	
Pentachlorophenol	A	2.0000	1.1	0.0811080	0.0609771		-42.9	+/-20	*
2-Fluorophenol	A	1.5000	1.40	0.8380777	1.0798420		-6.4	+/-20	
p-Terphenyl-d14	A	1.0000	1.37	1.0648810	1.4573560		36.9	+/-20	*

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021719s.D

Date : 17-FEB-2023 21:31

Client ID:

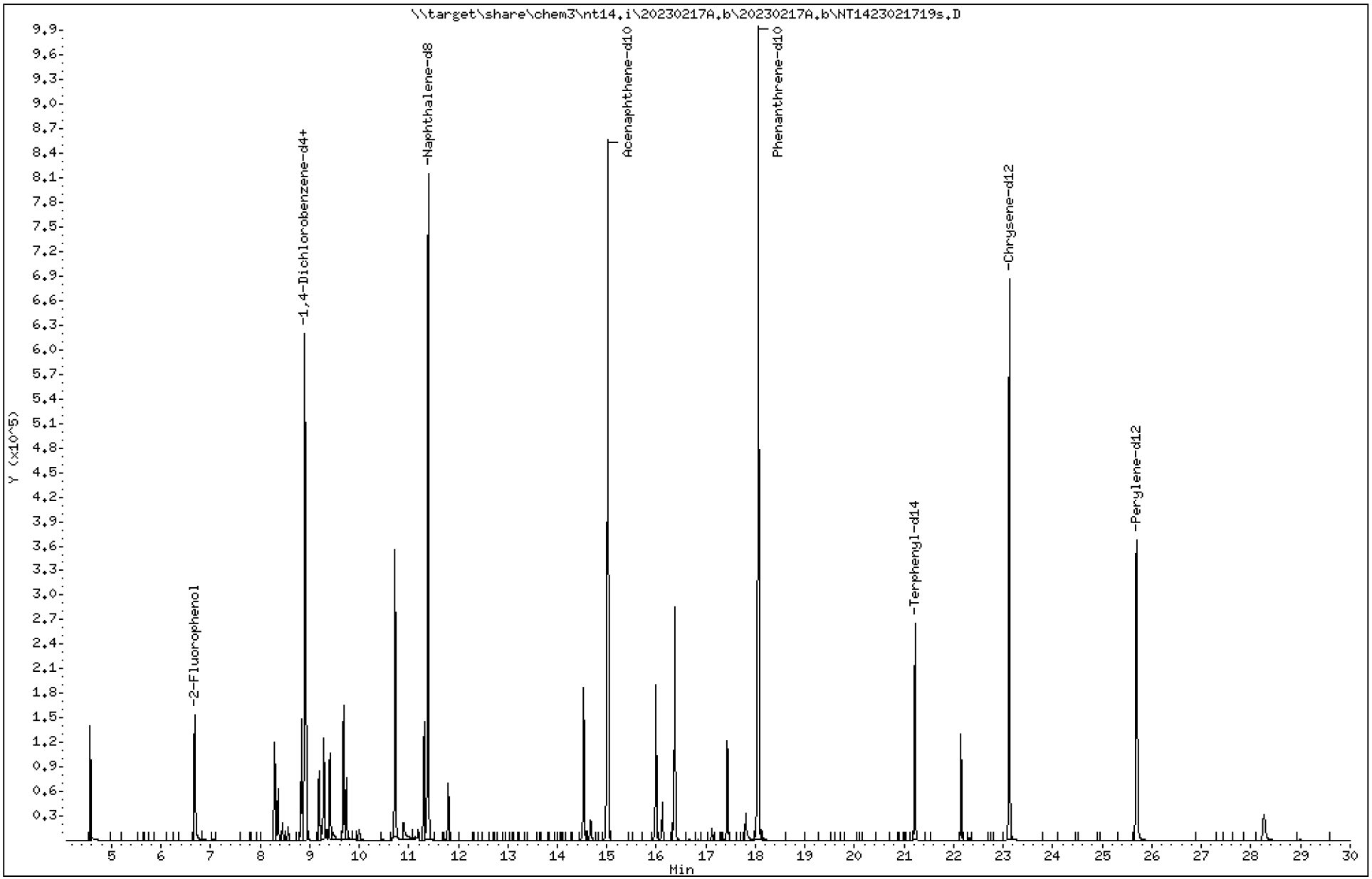
Sample Info: SLB0335-ICV1

Instrument: nt14.i

Operator: DSD

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021719s.D
Lab Smp Id: SLB0335-ICV1
Inj Date : 17-FEB-2023 21:31 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0335-ICV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\SIMABN2.m
Meth Date : 07-Mar-2023 12:35 van Quant Type: ISTD
Cal Date : 16-FEB-2023 20:42 Cal File: NT1423021612s.D
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1	2-Fluorophenol	112	6.679	6.679	(0.750)	157394	1.50000	1.404
	3	Phenol	94	8.294	8.294	(0.931)	160600	1.00000	0.9622
	7	1,3-Dichlorobenzene	146	8.835	8.835	(0.992)	133719	1.00000	1.011
*	8	1,4-Dichlorobenzene-d4	152	8.905	8.905	(1.000)	388684	4.00000	
	9	1,4-Dichlorobenzene	146	8.928	8.928	(1.003)	124256	1.00000	0.9849
	11	Benzyl alcohol	79	9.184	9.184	(1.031)	95665	1.00000	0.8987
	12	1,2-Dichlorobenzene	146	9.293	9.293	(1.044)	125872	1.00000	1.003
	13	2-Methylphenol	108	9.409	9.409	(1.057)	125394	1.00000	1.087
	15	4-Methylphenol	108	9.681	9.681	(1.087)	128181	1.00000	1.010
	16	N-Nitroso-di-n-propylamine	70	9.735	9.735	(1.093)	100824	1.00000	1.032
	22	2,4-Dimethylphenol	107	10.728	10.728	(0.942)	253776	2.00000	2.047
	24	Benzoic acid	105	10.891	10.891	(0.956)	55372	4.00000	0.8447
	26	1,2,4-Trichlorobenzene	180	11.309	11.309	(0.993)	126350	1.00000	0.9946
*	27	Naphthalene-d8	136	11.394	11.394	(1.000)	1386667	4.00000	
	30	Hexachlorobutadiene	225	11.804	11.804	(1.036)	75086	1.00000	0.9716
	39	Dimethylphthalate	163	14.536	14.536	(0.968)	244766	1.00000	1.067
*	42	Acenaphthene-d10	162	15.015	15.015	(1.000)	752189	4.00000	
	50	Diethylphthalate	149	15.989	15.989	(1.065)	294661	1.00000	1.026
	54	N-Nitrosodiphenylamine	169	16.368	16.368	(0.906)	232575	1.00000	1.082
	57	Hexachlorobenzene	284	17.432	17.432	(0.965)	113211	1.00000	1.024
	58	Pentachlorophenol	266	17.804	17.804	(0.986)	51889	2.00000	1.142
*	59	Phenanthrene-d10	188	18.059	18.059	(1.000)	1701919	4.00000	
$	66	Terphenyl-d14	244	21.216	21.216	(0.918)	323231	1.00000	1.369
	67	Butylbenzylphthalate	149	22.153	22.153	(0.958)	146831	1.00000	1.294
*	69	Chrysene-d12	240	23.121	23.121	(1.000)	887171	4.00000	
*	77	Perylene-d12	264	25.691	25.691	(1.000)	644624	4.00000	
	79	Dibenzo(a,h)anthracene	278	28.265	28.265	(1.100)	113438	1.00000	0.9890
	90	N-Nitrosodimethylamine	74	4.571	4.571	(0.513)	156525	2.00000	1.838

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021719s.D
Lab Smp Id: SLB0335-ICV1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\SIMABN2.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 18:18
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	393779	196890	787558	388684	-1.29
27 Naphthalene-d8	1399029	699515	2798058	1386667	-0.88
42 Acenaphthene-d10	759723	379862	1519446	752189	-0.99
59 Phenanthrene-d10	1756156	878078	3512312	1701919	-3.09
69 Chrysene-d12	1174128	587064	2348256	887171	-24.44
77 Perylene-d12	826011	413006	1652022	644624	-21.96

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	-0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.39	-0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	-0.00
59 Phenanthrene-d10	18.06	17.56	18.56	18.06	-0.00
69 Chrysene-d12	23.12	22.62	23.62	23.12	-0.00
77 Perylene-d12	25.68	25.18	26.18	25.69	0.03

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

REVIEW SUMMARY FOR FILE - NT1423021719s.D

Lab ID: SLB0335-ICV1
nt14.i, 20230217A.b\20230217A.b\SIMABN2.m,   17-FEB-2023 21:31

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check. Ccal file.

On Column LOD for nt14.i, 20230217A.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230217A.b\20230217A

Instrument: nt14.i Date: 17-FEB-2023 Method: 20230217A.b\SIMABN2.m

INITIAL CAL: 16-FEB-2023

Compound	%RSD or R^2
Benzoic acid	51.4

ICV CAL: NT1423021719s.D 17-FEB-2023 21:31

Compound	%D
Benzoic acid	-78.9
Pentachlorophenol	-42.9
Butylbenzylphthalate	29.4
Terphenyl-d14	36.9

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

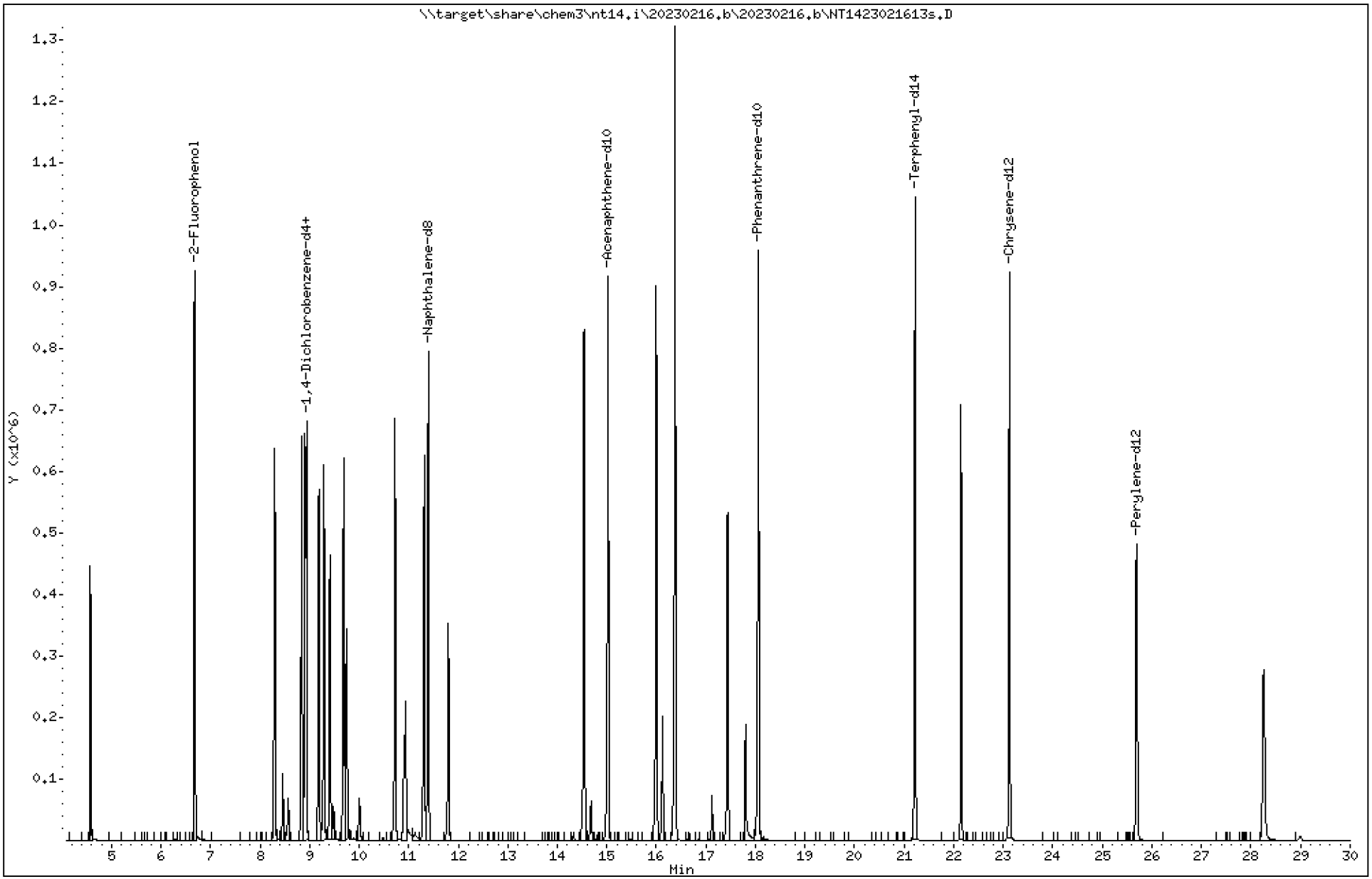
Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT14	Calibration:	GC00009
Lab File ID:	NT1423021613s.D	Calibration Date:	03/03/2023
Sequence:	SLB0240	Injection Date:	02/16/23
Lab Sample ID:	SLB0240-SCV1	Injection Time:	21:18
Sequence Name:	SCV 5.0		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
Phenol	A	5.0000	4.56	1.5020080	1.5809010		-8.9	+/-20	
1,3-Dichlorobenzene	A	5.0000	4.81	1.3610540	1.3091520		-3.8	+/-20	
1,4-Dichlorobenzene	A	5.0000	4.85	1.2983440	1.2594200		-3.0	+/-20	
1,2-Dichlorobenzene	A	5.0000	4.80	1.2909230	1.2380620		-4.1	+/-20	
Benzyl Alcohol	A	5.0000	5.30	1.0954840	1.1612840		6.0	+/-20	
Benzoic acid	A	10.000	6.45	0.1890948	0.1219051		-35.5	+/-20	*
2-Methylphenol	A	5.0000	4.51	1.1873640	1.0702290		-9.9	+/-20	
N-Nitroso-di-n-Propylamine	A	5.0000	5.05	0.9529567	1.0571500		0.9	+/-20	
4-Methylphenol	A	5.0000	4.46	1.1409260	1.1834260		-10.8	+/-20	
2,4-Dimethylphenol	A	5.0000	3.90	0.3263158	0.2733851		-21.9	+/-20	*
1,2,4-Trichlorobenzene	A	5.0000	4.60	0.3664516	0.3367924		-8.1	+/-20	
Hexachlorobutadiene	A	5.0000	4.81	0.2229239	0.2146605		-3.7	+/-20	
N-Nitrosodimethylamine	A	5.0000	5.29	0.6949015	0.9000345		5.9	+/-20	
Dimethylphthalate	A	5.0000	5.00	1.2203290	1.2208380		0.04	+/-20	
Diethyl phthalate	A	5.0000	4.97	1.5273120	1.5179520		-0.6	+/-20	
N-Nitrosodiphenylamine	A	5.0000	5.01	0.4912986	0.5262720		0.2	+/-20	
Hexachlorobenzene	A	5.0000	4.70	0.2597890	0.2442265		-6.0	+/-20	
Pentachlorophenol	A	5.0000	4.93	0.0811080	0.1095138		-1.3	+/-20	
Butylbenzylphthalate	A	5.0000	4.96	0.4143738	0.5426045		-0.7	+/-20	
Dibenzo(a,h)anthracene	A	5.0000	4.89	0.6162175	0.7589127		-2.2	+/-20	
2-Fluorophenol	A	7.5000	7.69	0.8380777	1.1496750		2.6		
p-Terphenyl-d14	A	5.0000	4.58	1.0648810	0.9745868		-8.5		

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D
Date : 16-FEB-2023 21:18
Client ID:
Sample Info: SLB0240-SCV1

Instrument: nt14.i
Operator: DSD
Column phase: ZB-5msi
Column diameter: 0.25



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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

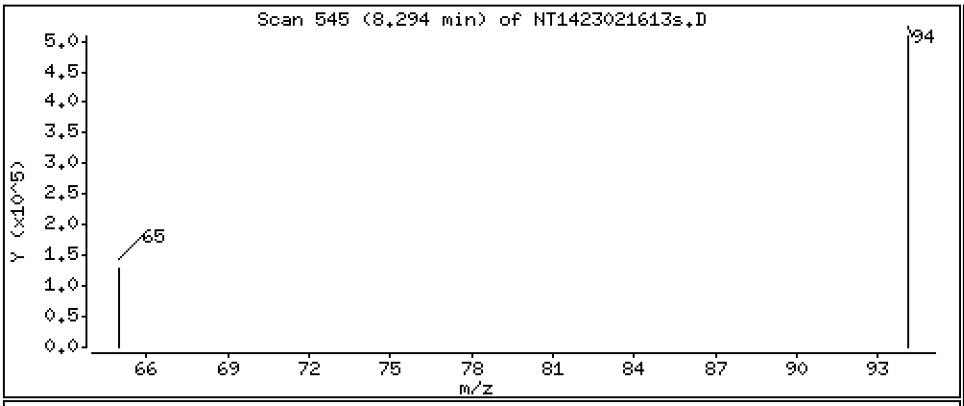
Operator: DSD

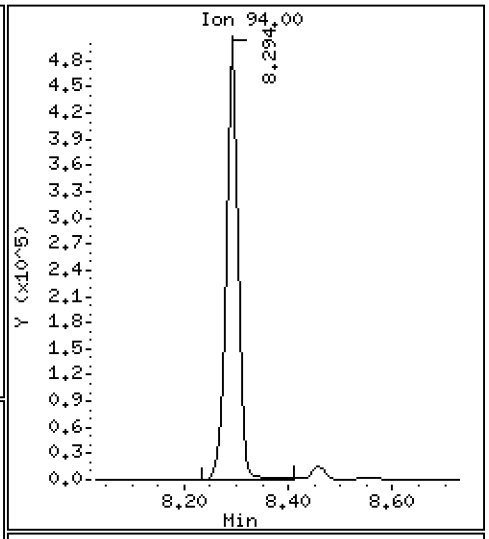
Column phase: ZB-5msi

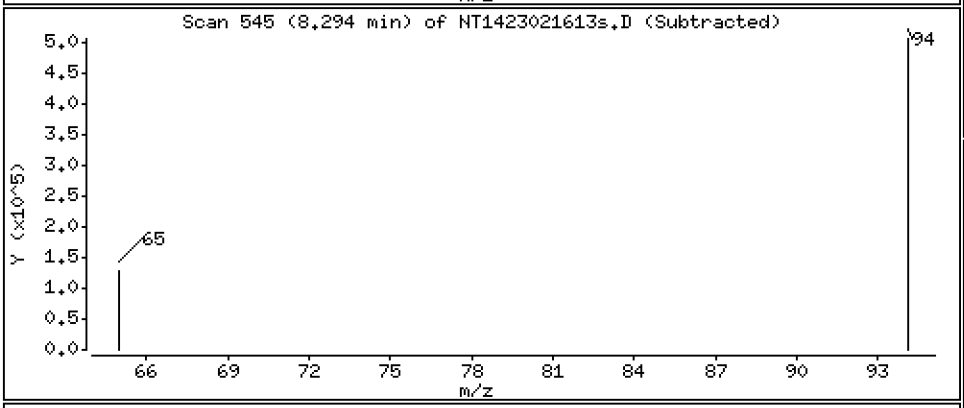
Column diameter: 0.25

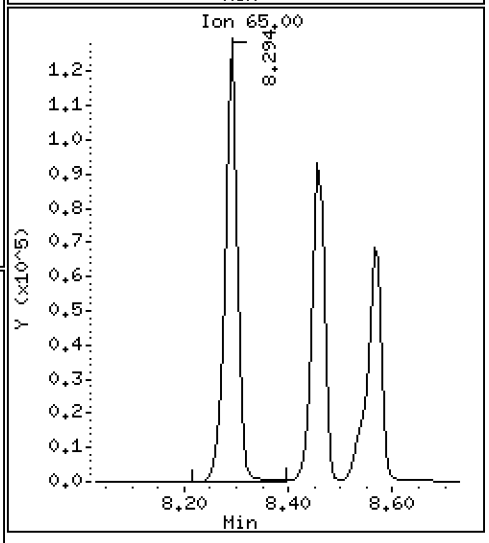
3 Phenol

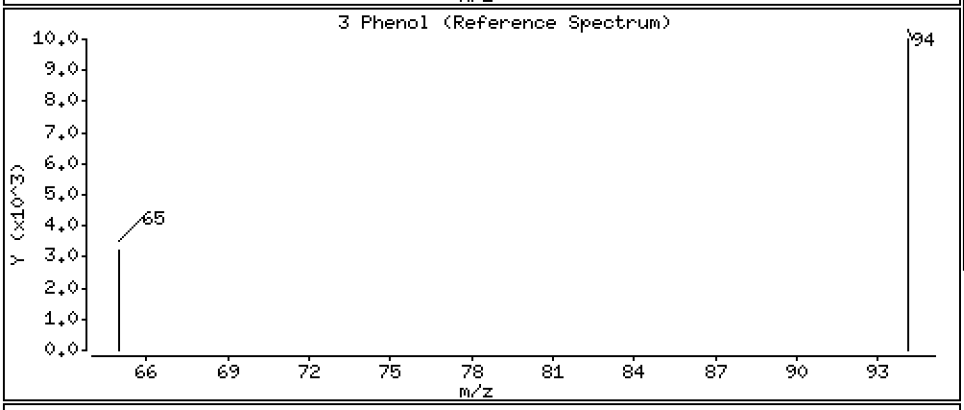
Concentration: 4.556 ug/mL

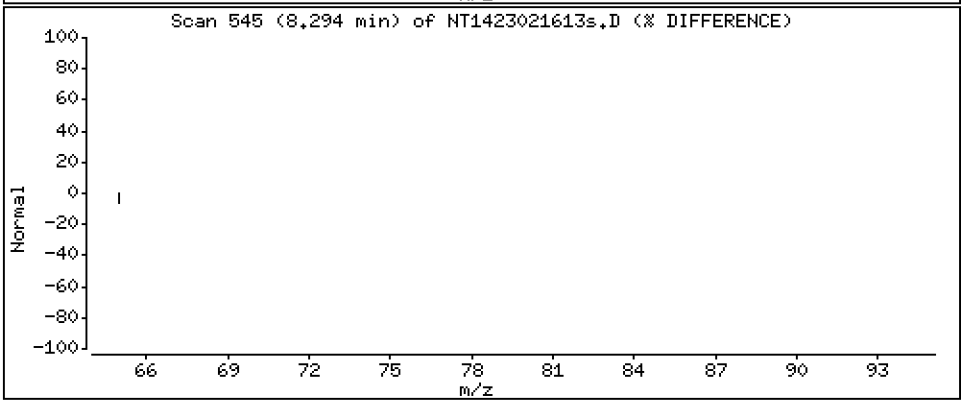












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

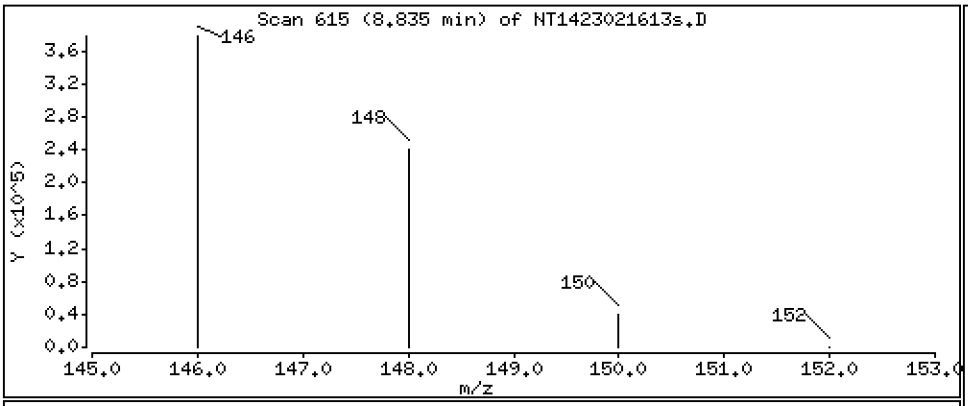
Operator: DSD

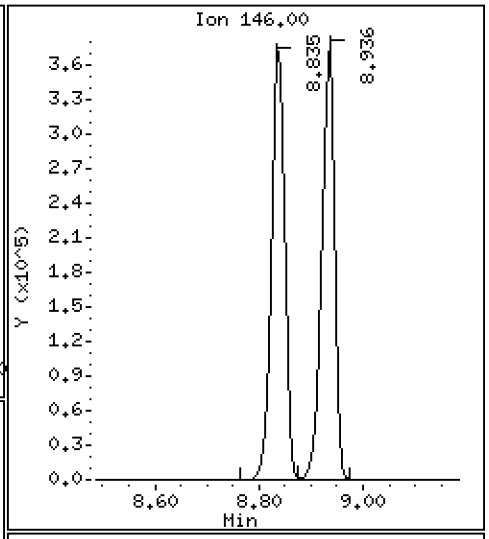
Column phase: ZB-5msi

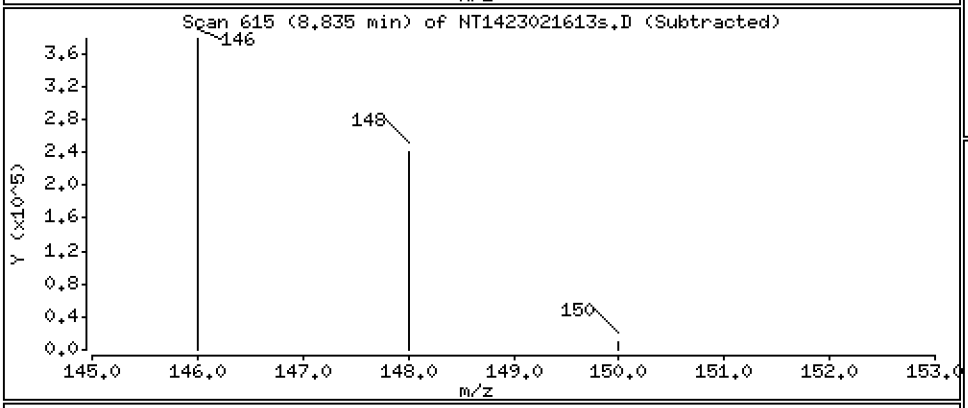
Column diameter: 0.25

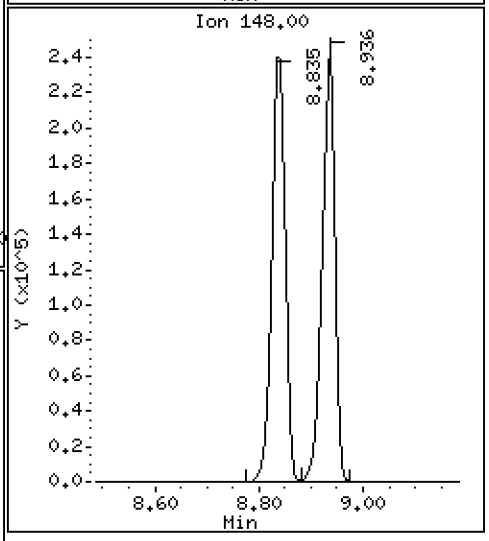
7 1,3-Dichlorobenzene

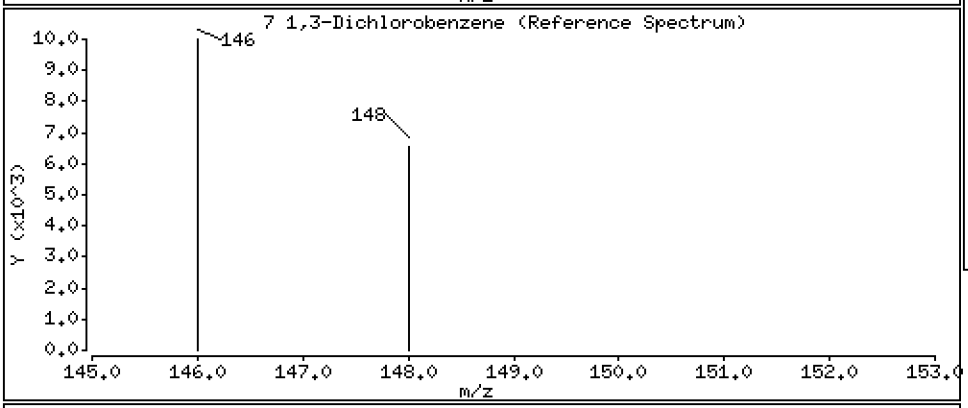
Concentration: 4.809 ug/mL

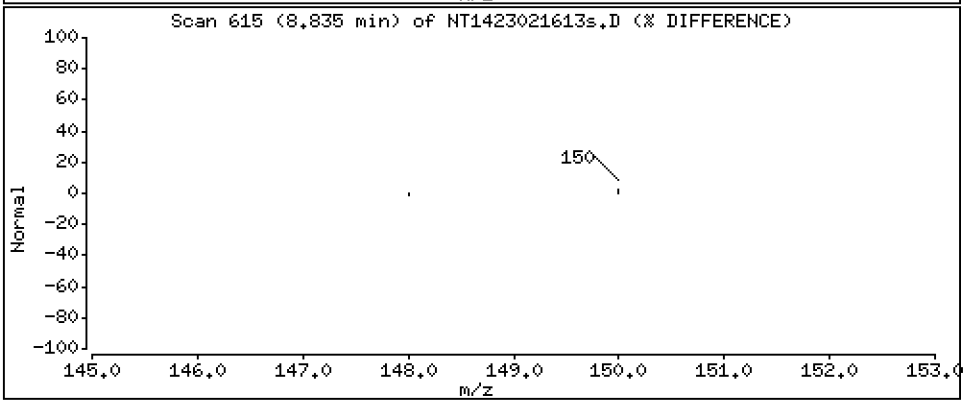












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

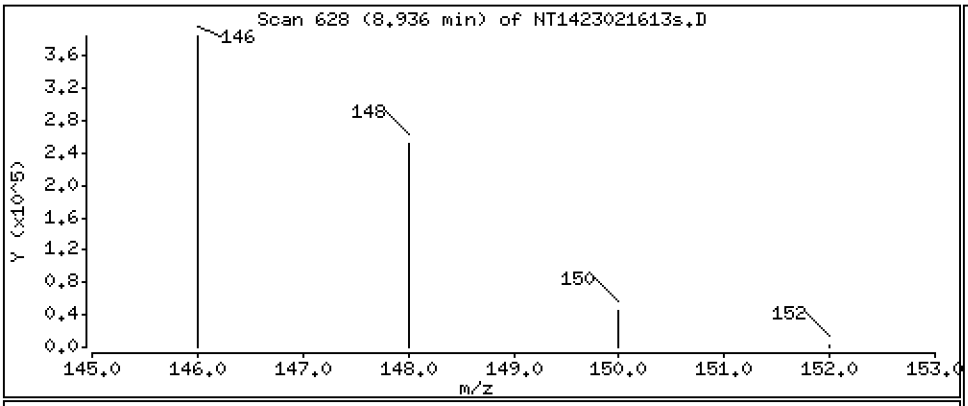
Operator: DSD

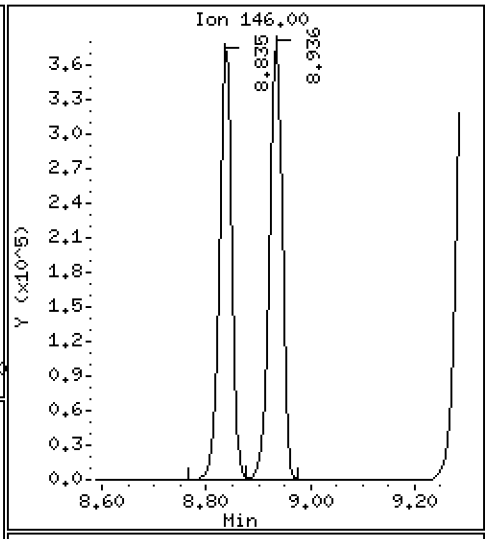
Column phase: ZB-5msi

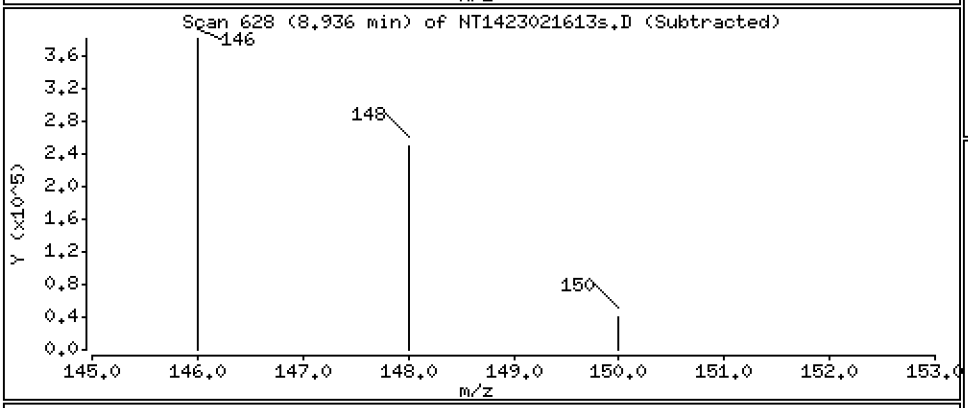
Column diameter: 0.25

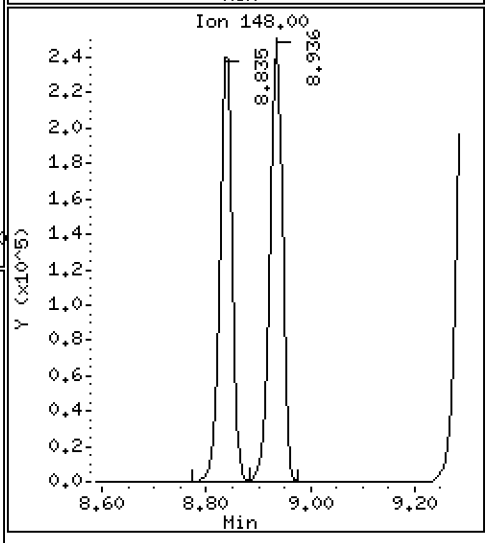
9 1,4-Dichlorobenzene

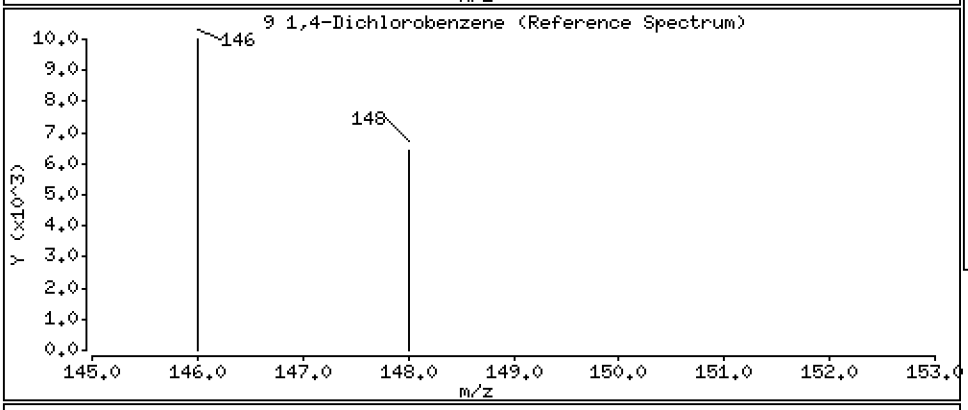
Concentration: 4.850 ug/mL

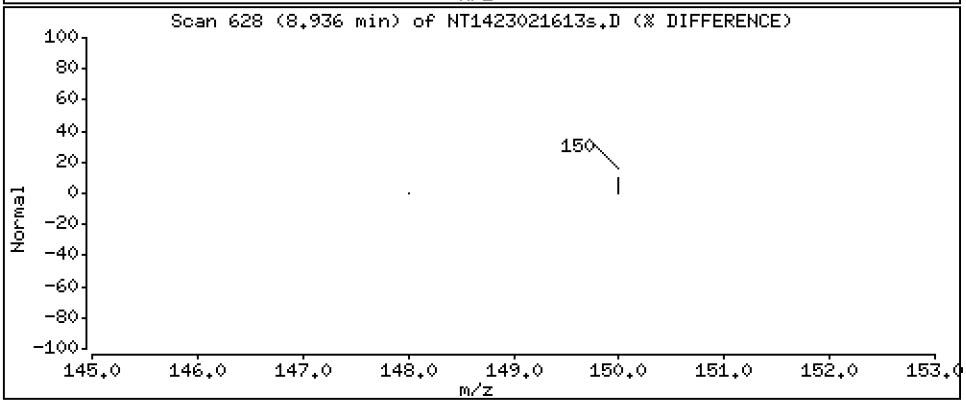












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

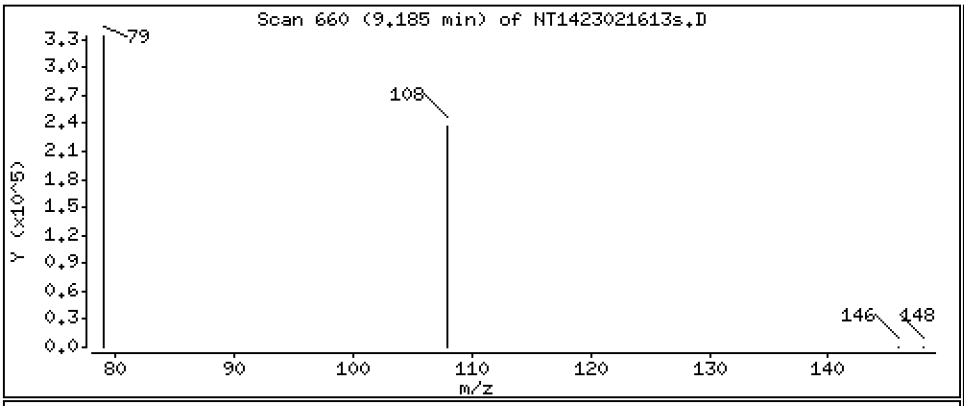
Operator: DSD

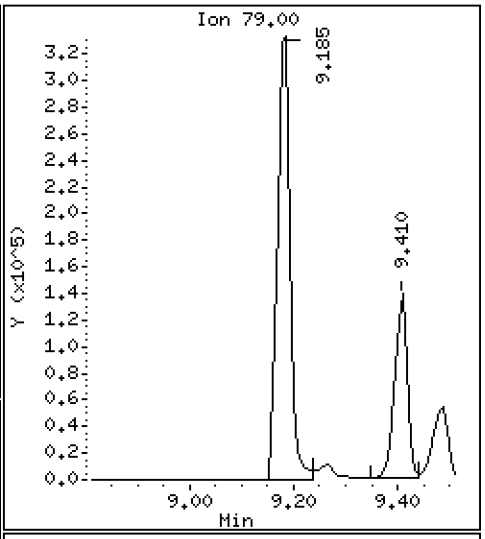
Column phase: ZB-5msi

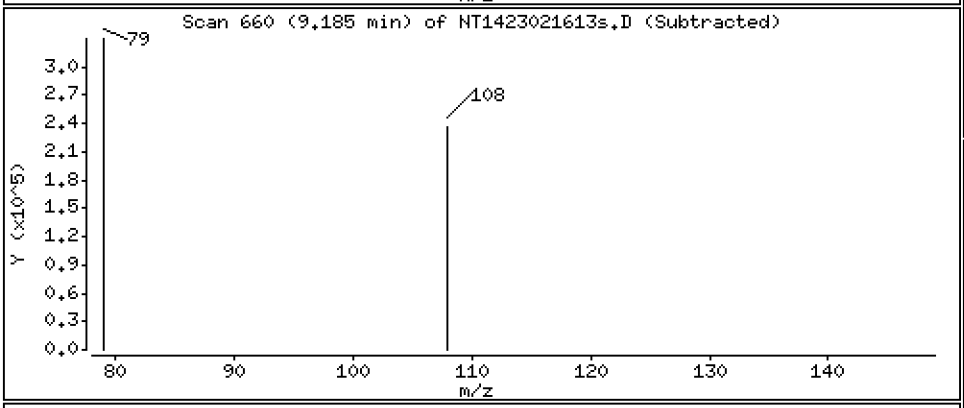
Column diameter: 0.25

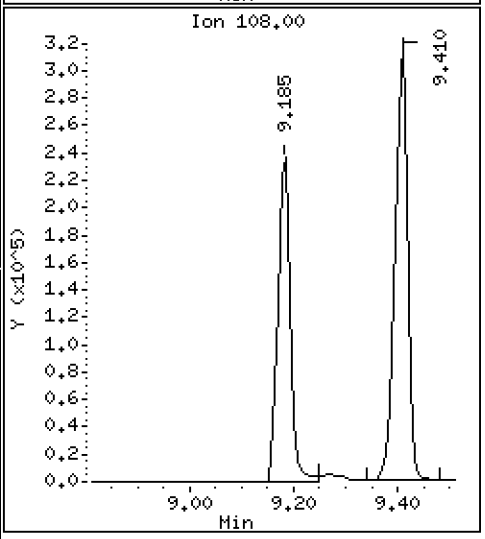
11 Benzyl alcohol

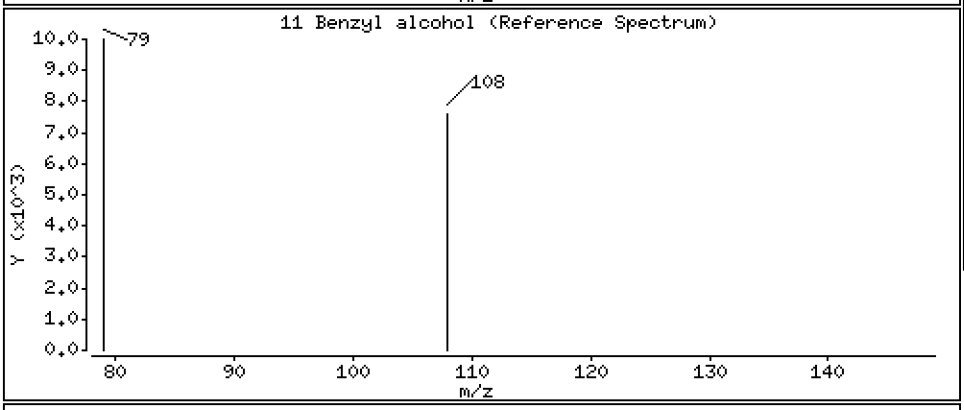
Concentration: 5.300 ug/mL

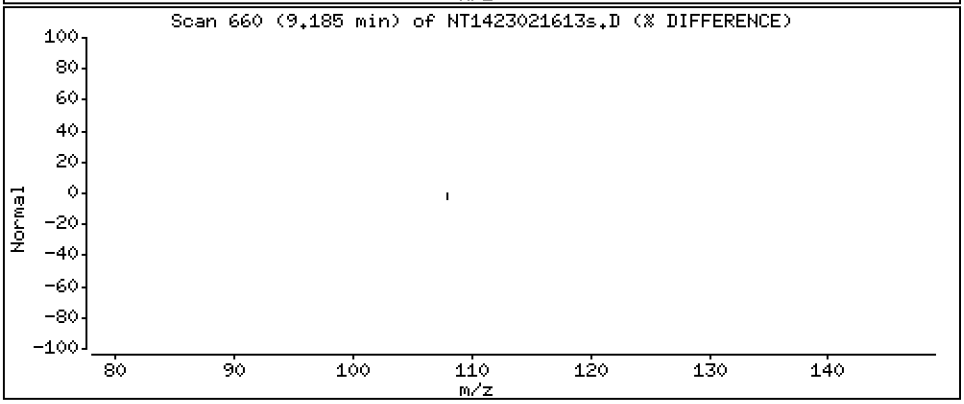












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

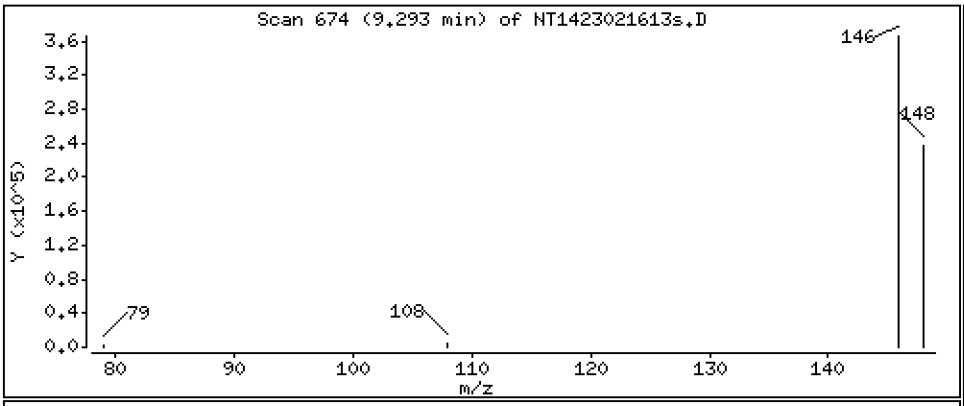
Operator: DSD

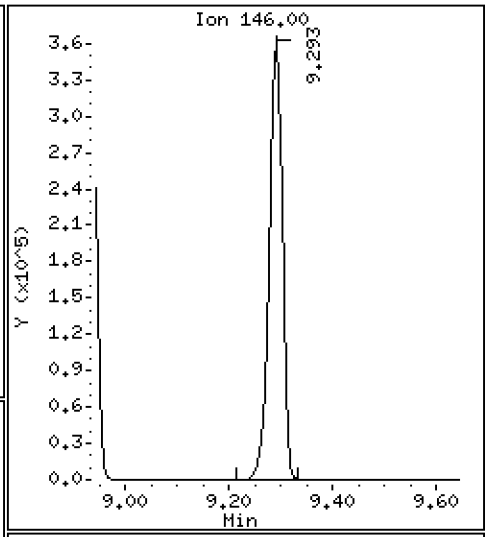
Column phase: ZB-5msi

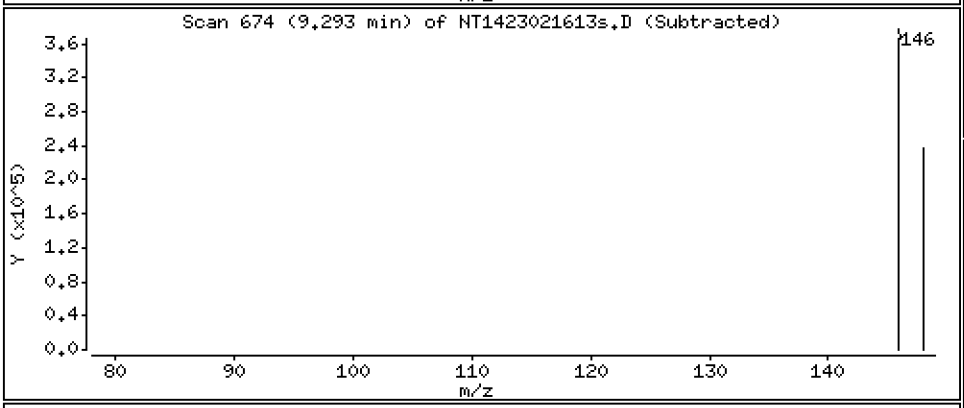
Column diameter: 0.25

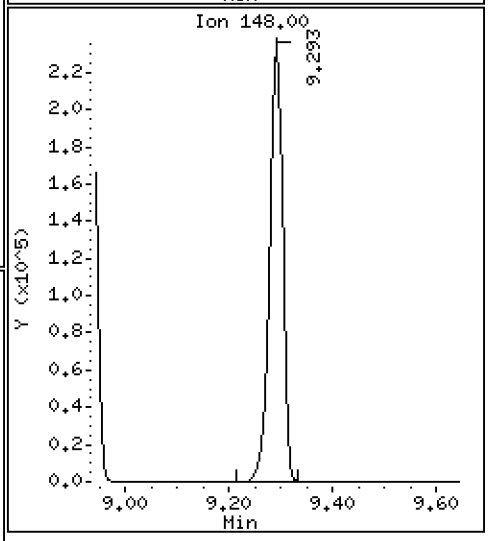
12 1,2-Dichlorobenzene

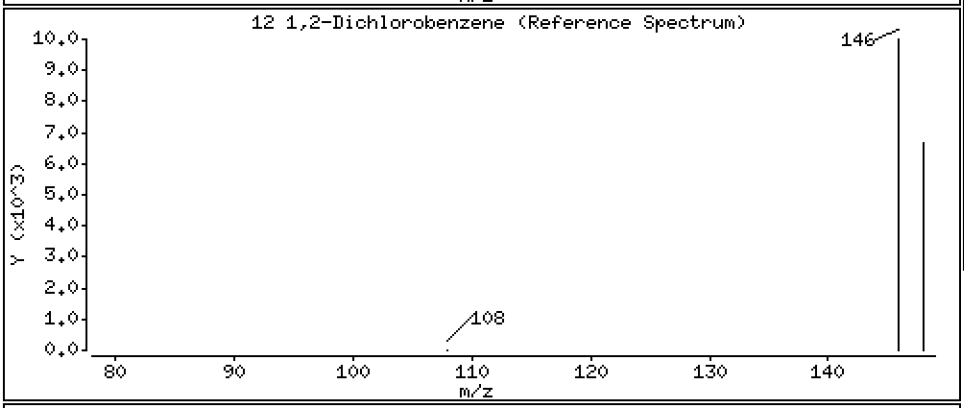
Concentration: 4.795 ug/mL

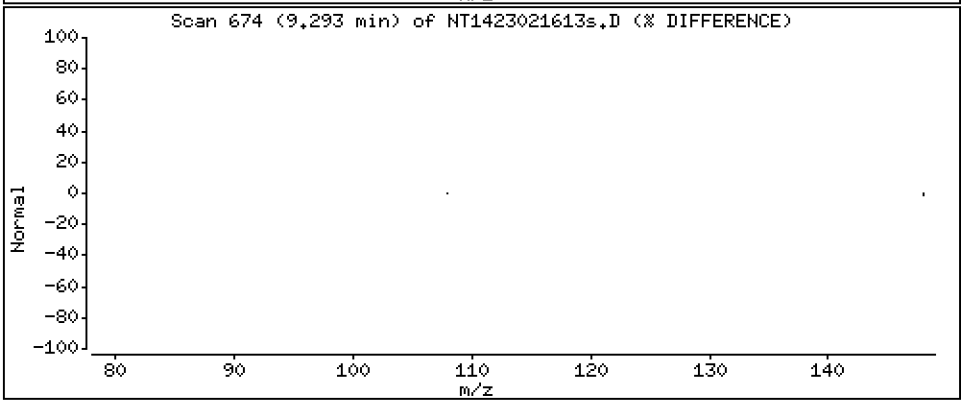












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

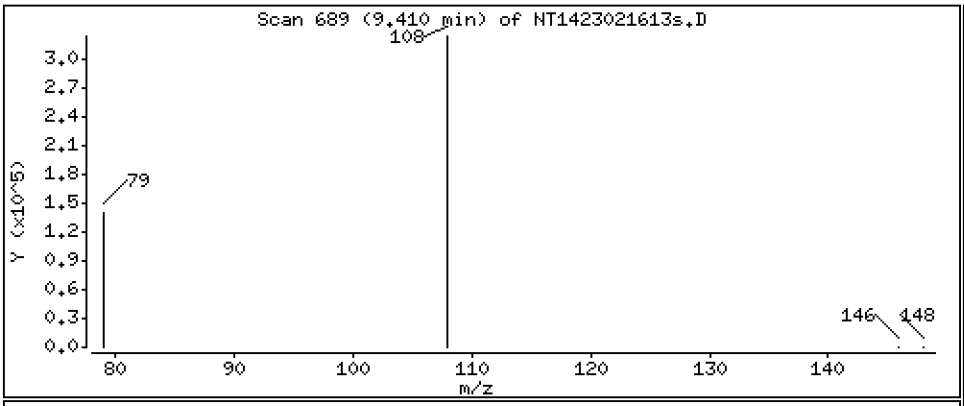
Operator: DSD

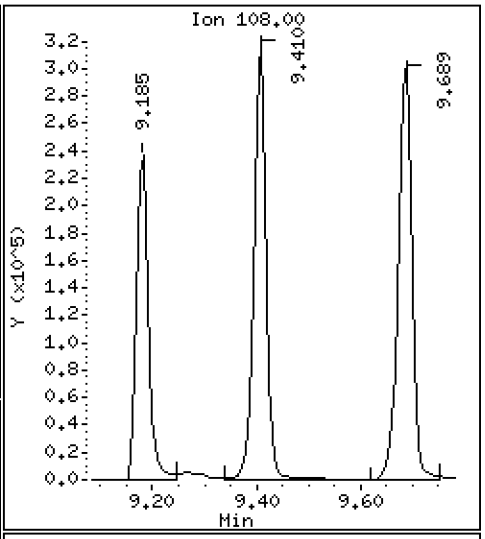
Column phase: ZB-5msi

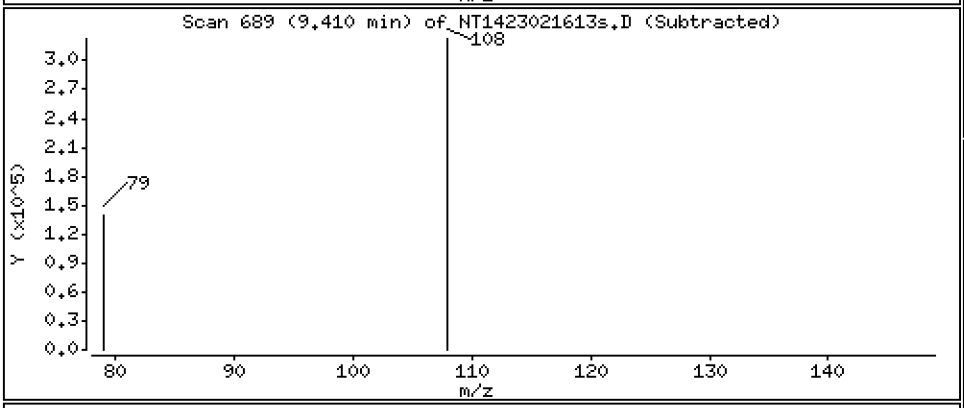
Column diameter: 0.25

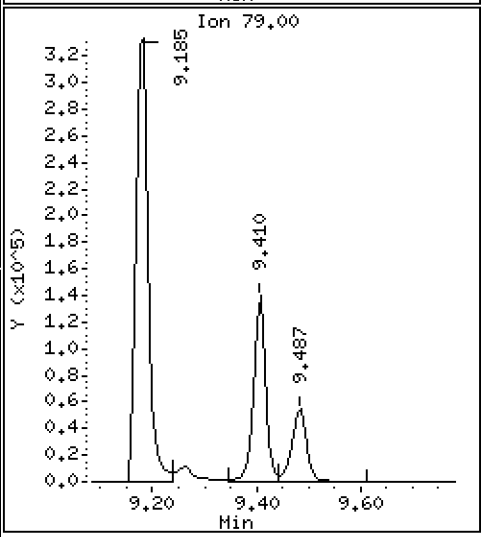
13 2-Methylphenol

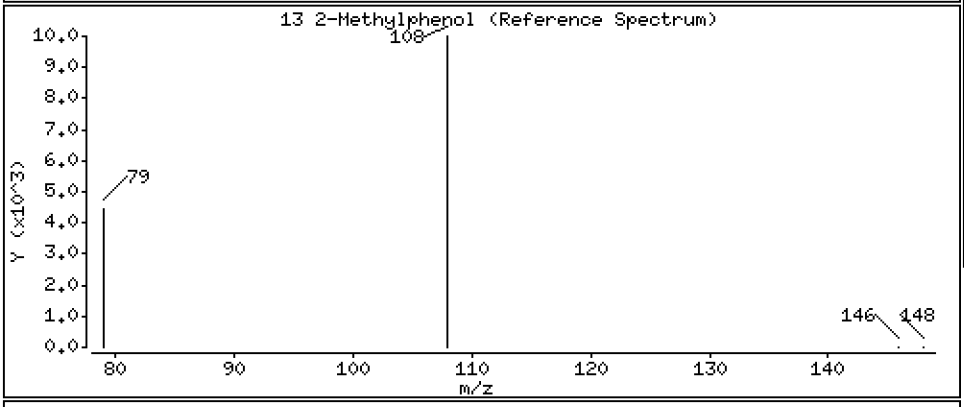
Concentration: 4.507 ug/mL

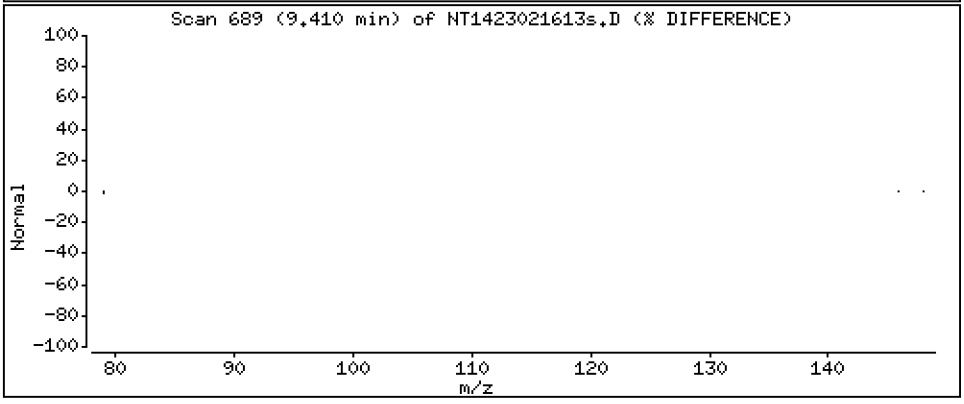












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

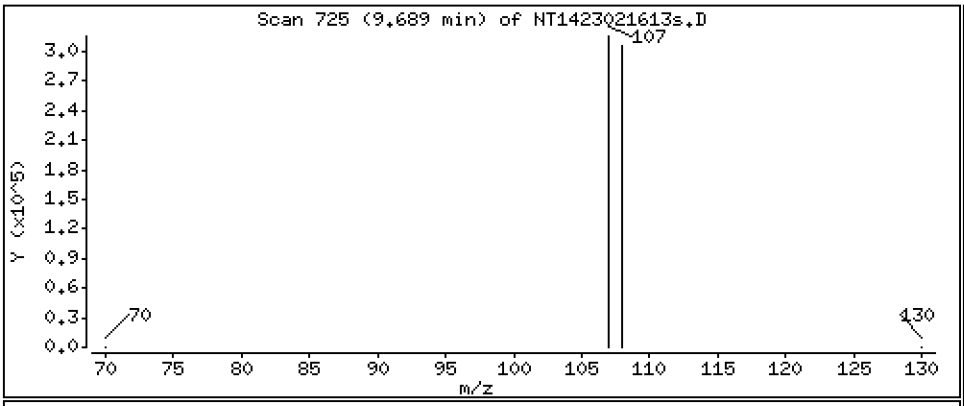
Operator: DSD

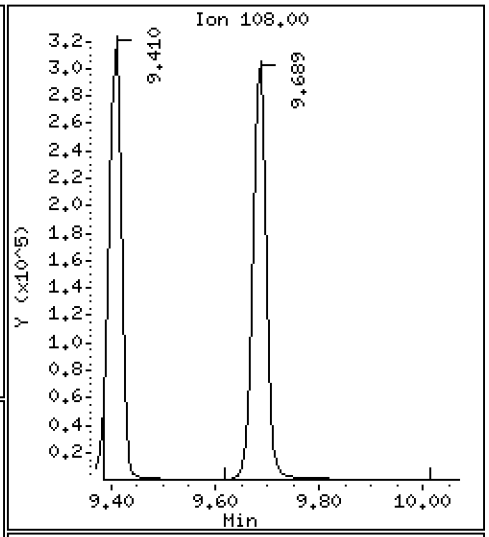
Column phase: ZB-5msi

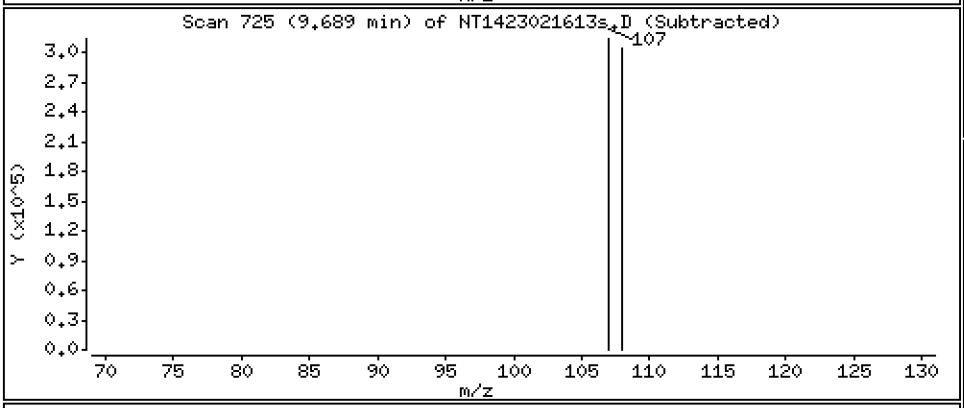
Column diameter: 0.25

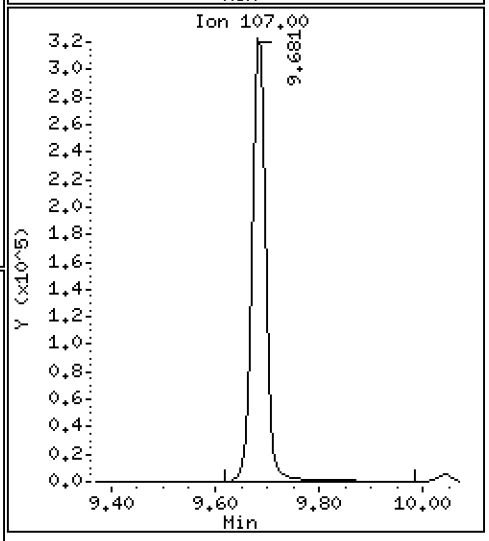
15 4-Methylphenol

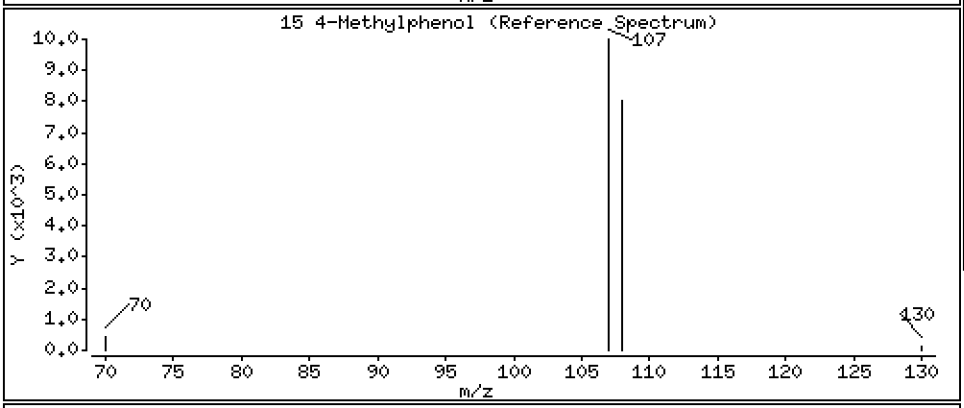
Concentration: 4.460 ug/mL

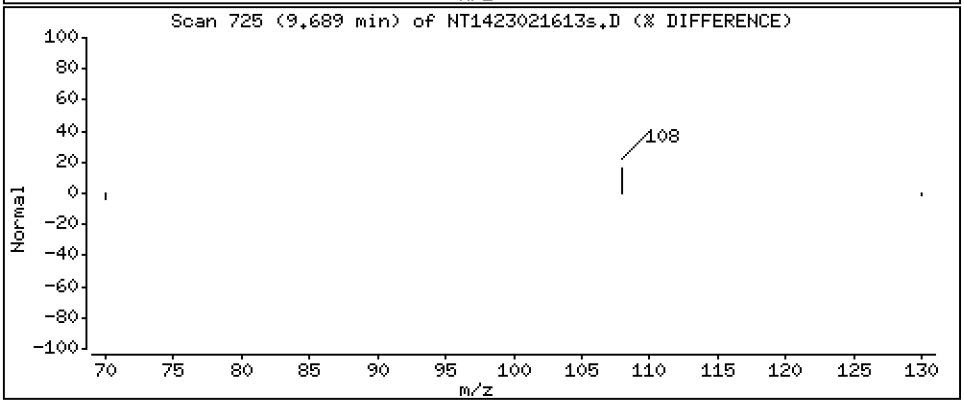












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

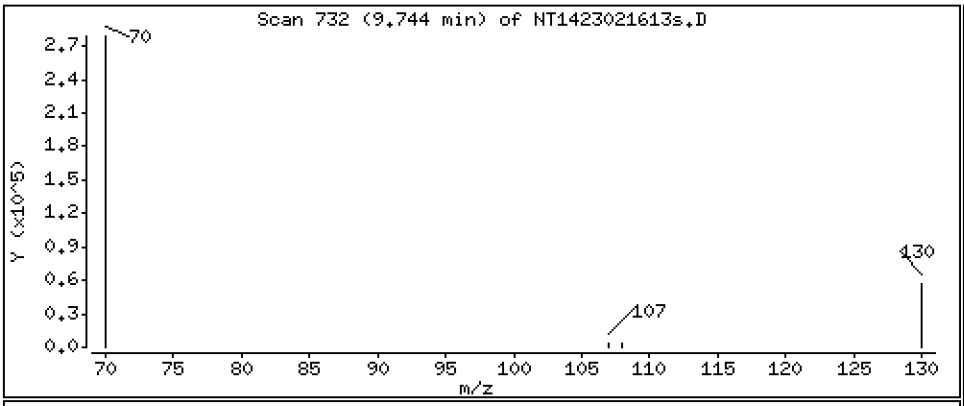
Operator: DSD

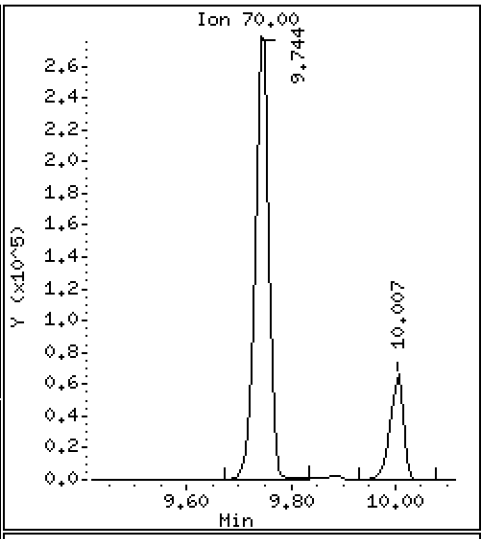
Column phase: ZB-5msi

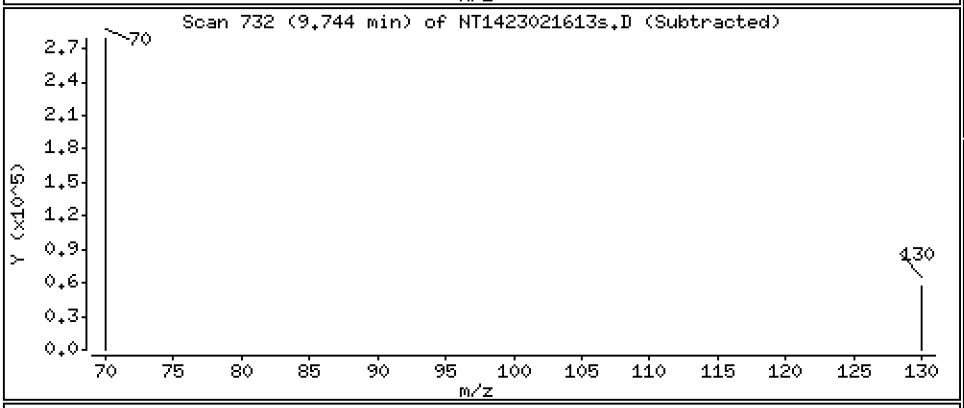
Column diameter: 0.25

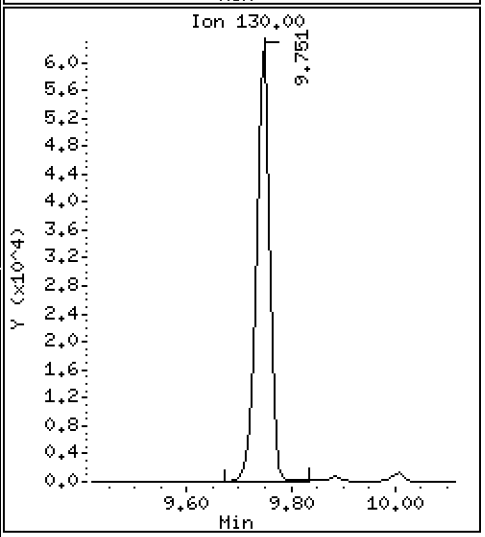
16 N-Nitroso-di-n-propylamine

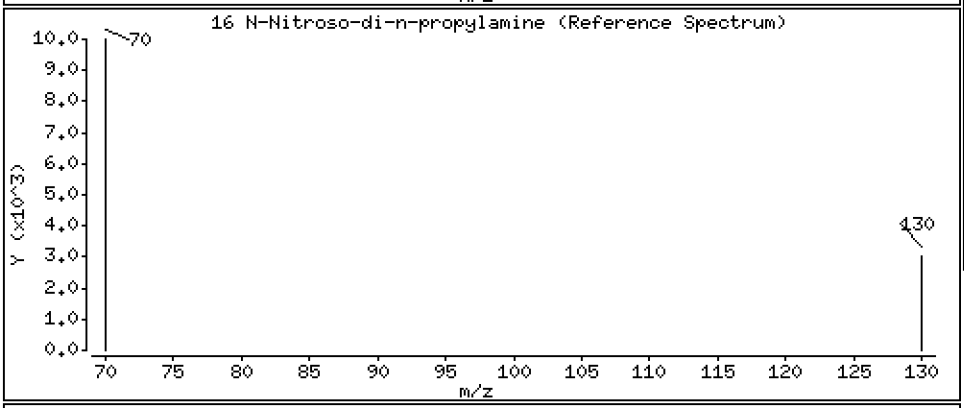
Concentration: 5.047 ug/mL

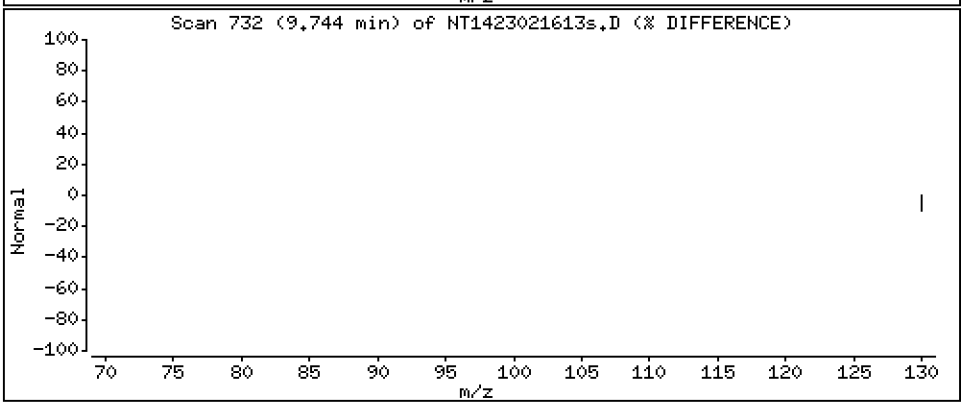












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

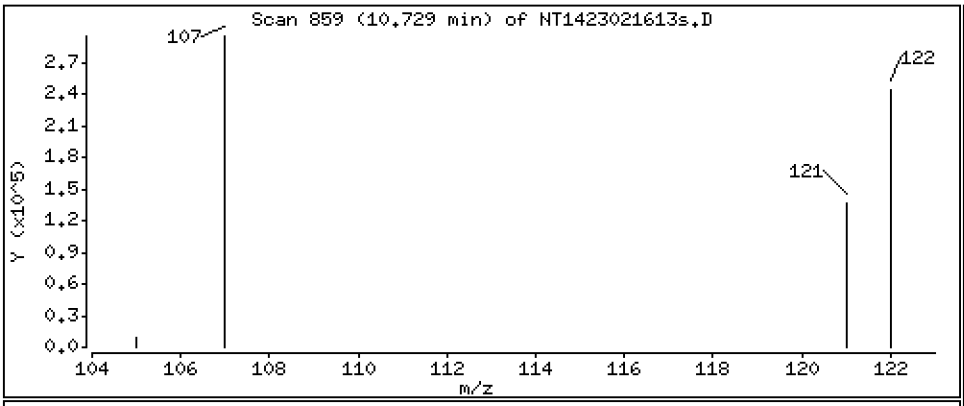
Operator: DSD

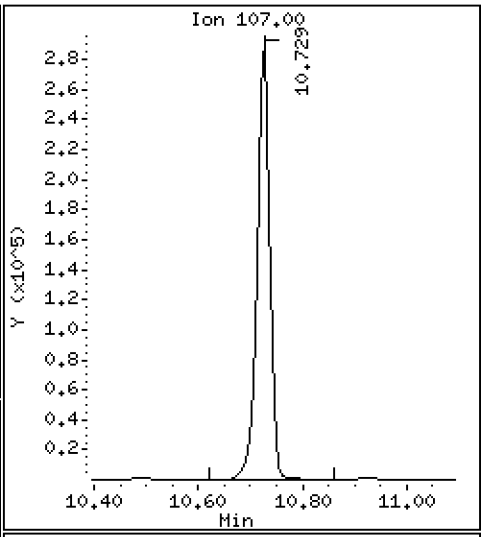
Column phase: ZB-5msi

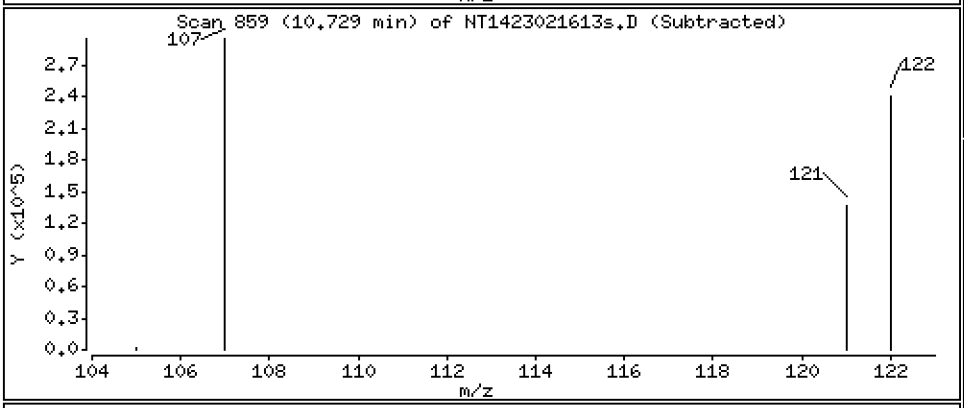
Column diameter: 0.25

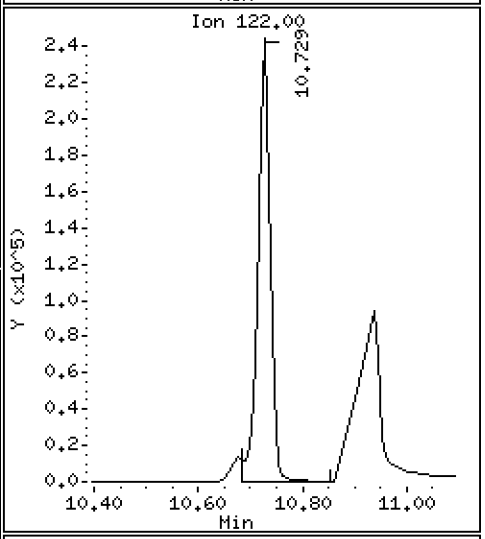
22 2,4-Dimethylphenol

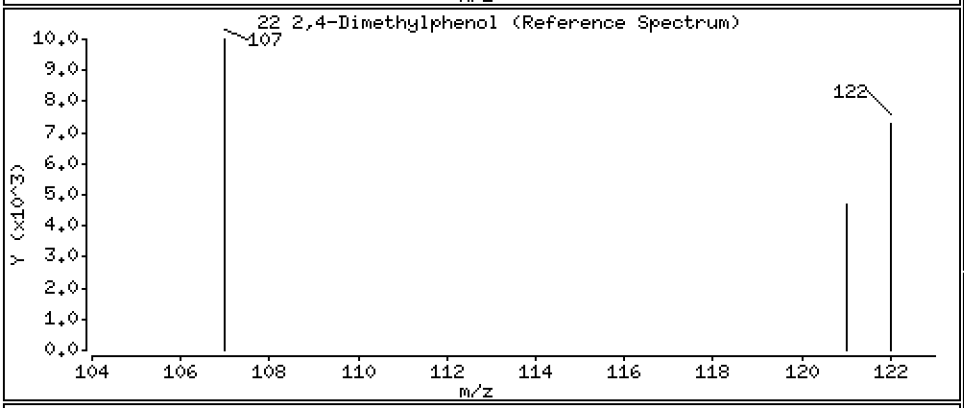
Concentration: 3.903 ug/mL

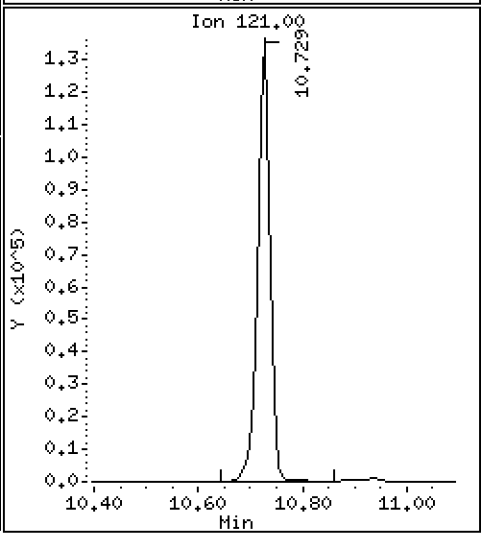


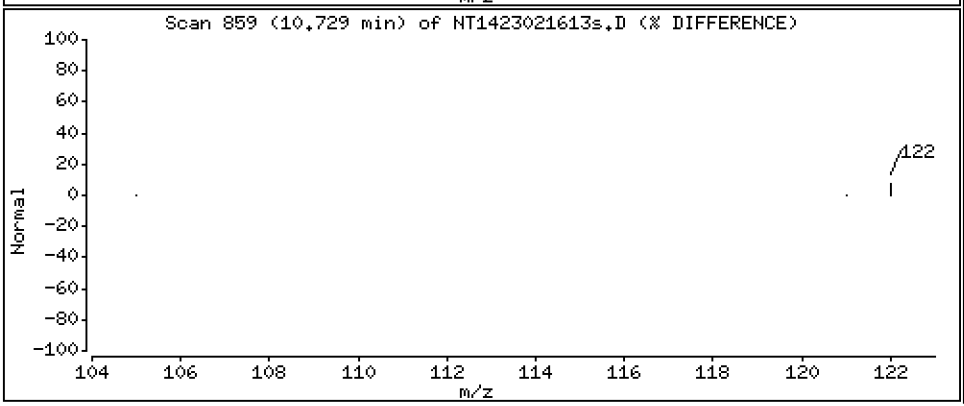












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

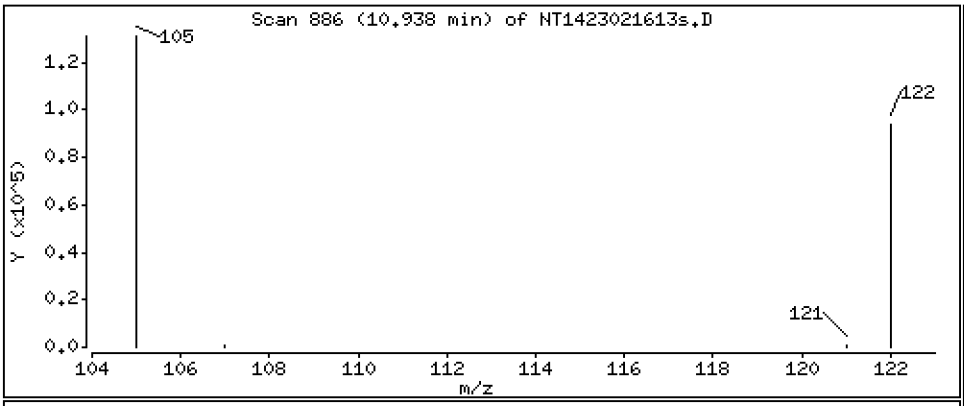
Operator: DSD

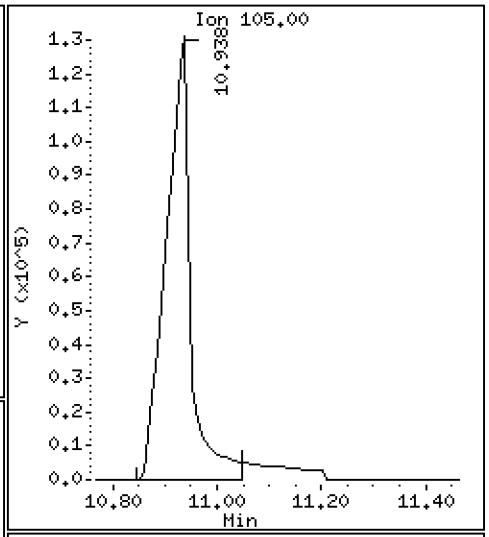
Column phase: ZB-5msi

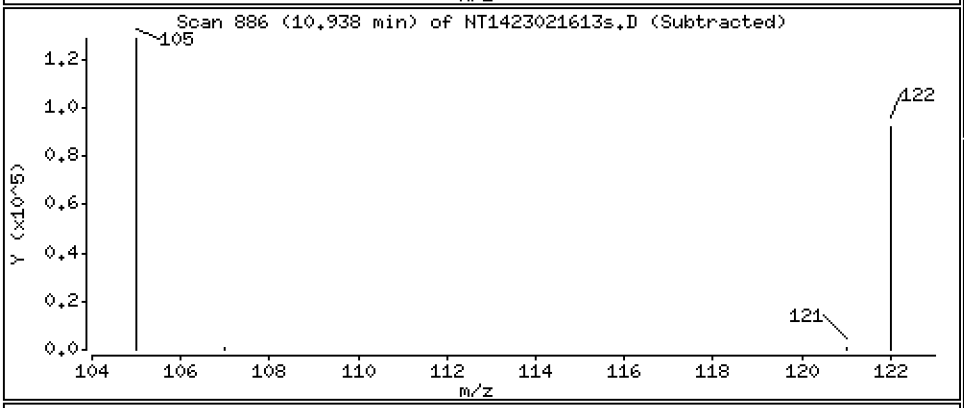
Column diameter: 0.25

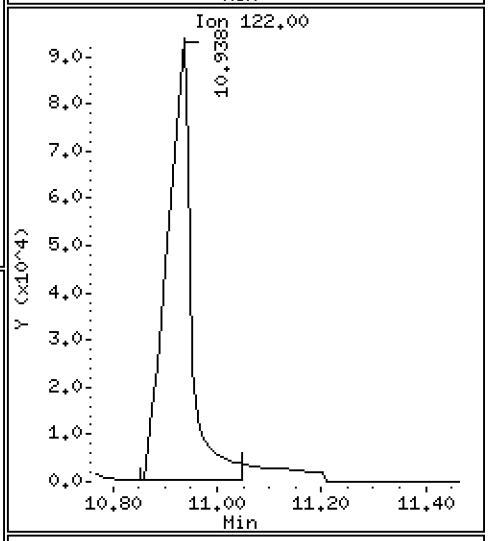
24 Benzoic acid

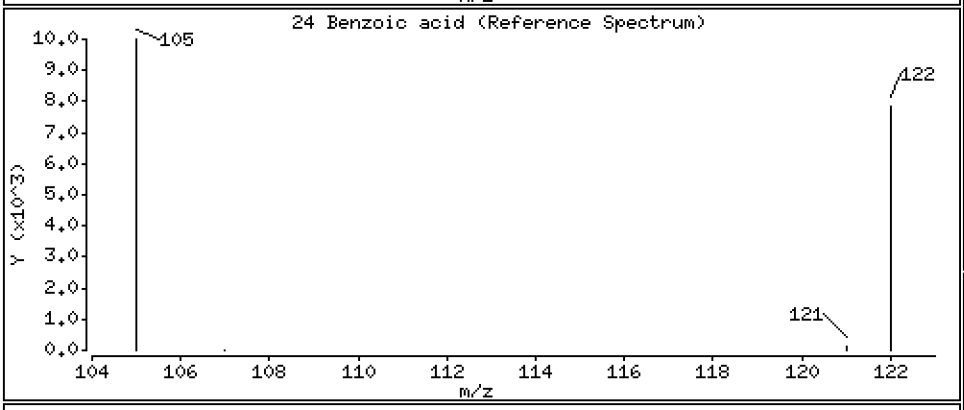
Concentration: 6.447 ug/mL

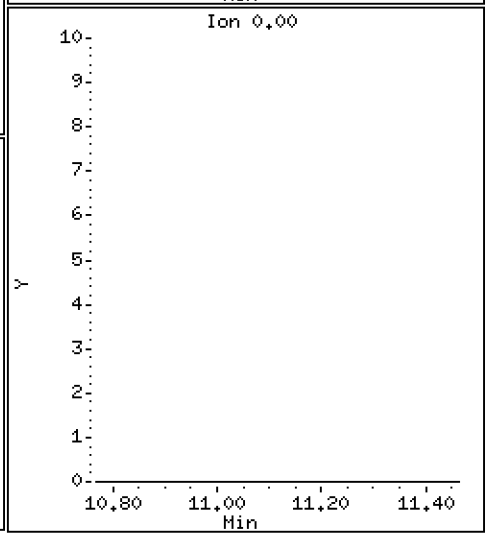


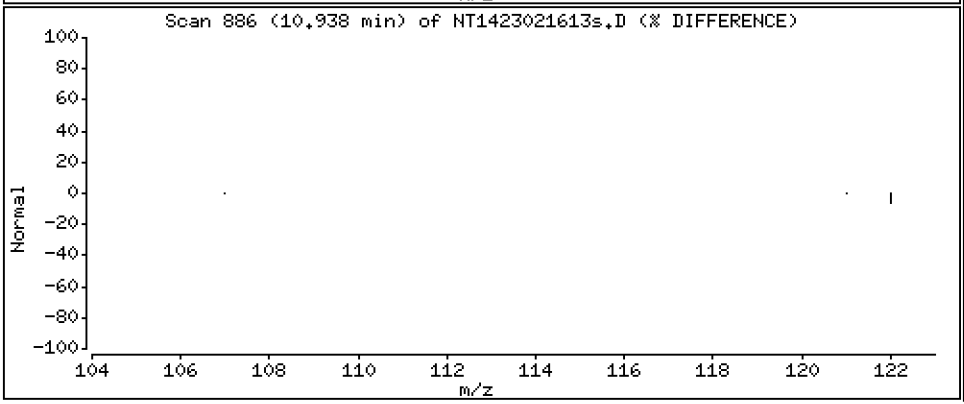












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

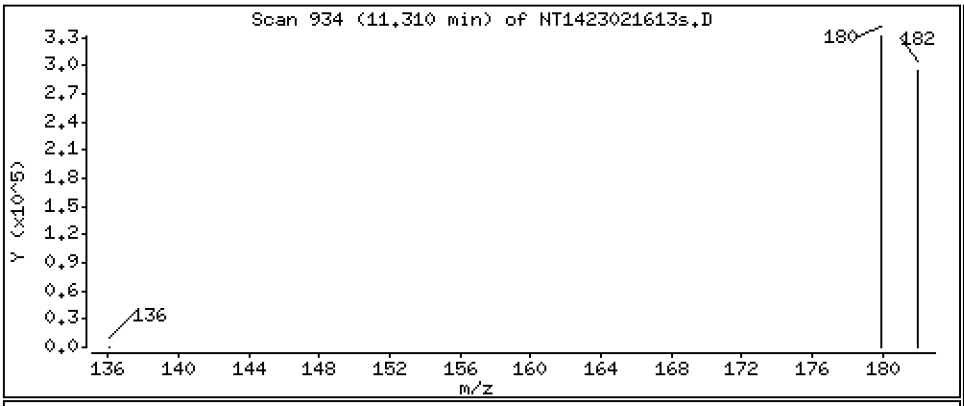
Operator: DSD

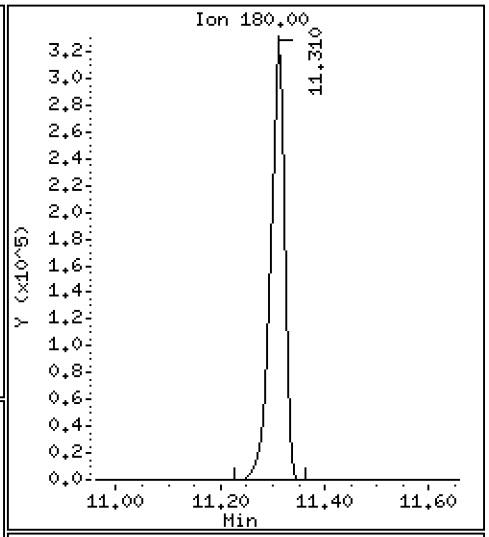
Column phase: ZB-5msi

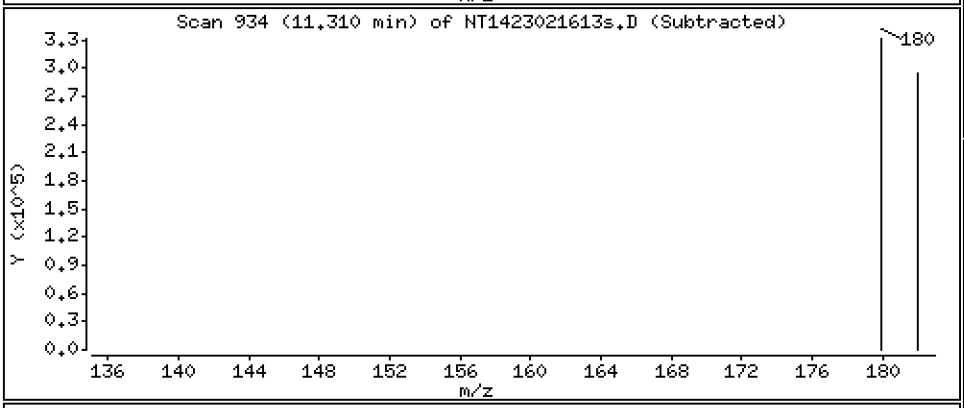
Column diameter: 0.25

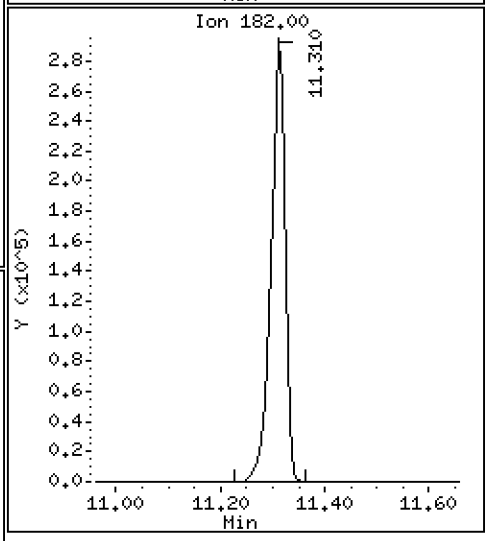
26 1,2,4-Trichlorobenzene

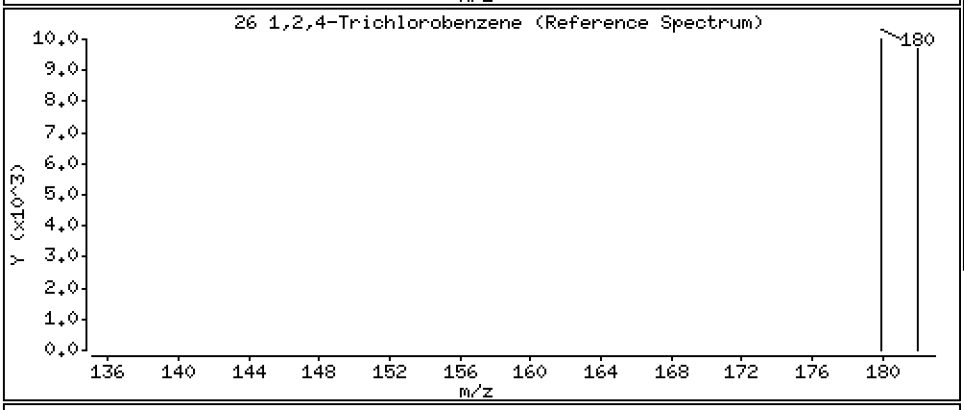
Concentration: 4.595 ug/mL

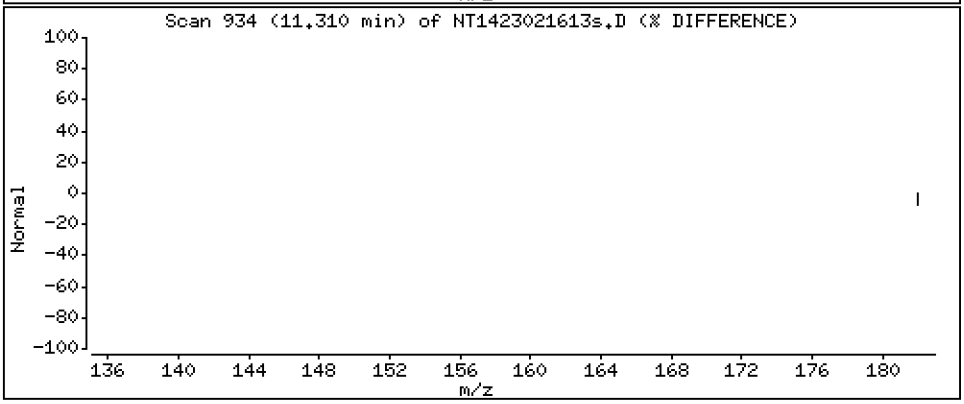












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

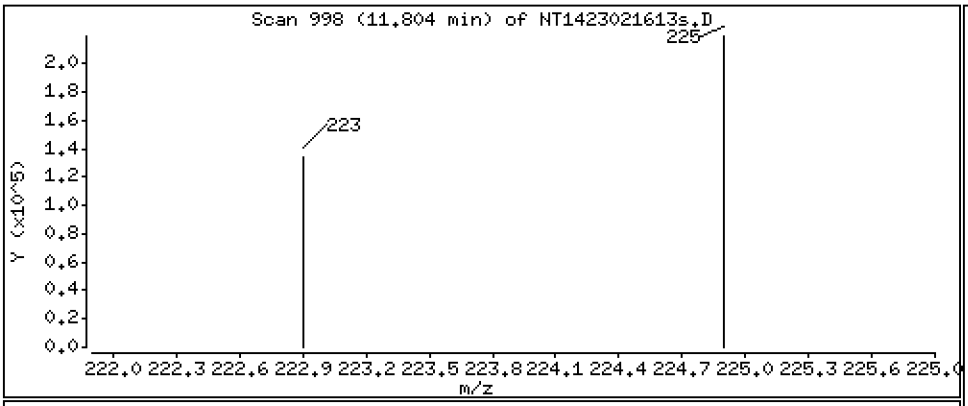
Operator: DSD

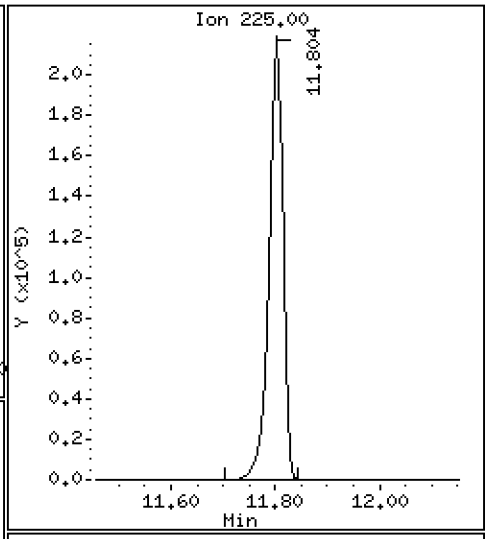
Column phase: ZB-5msi

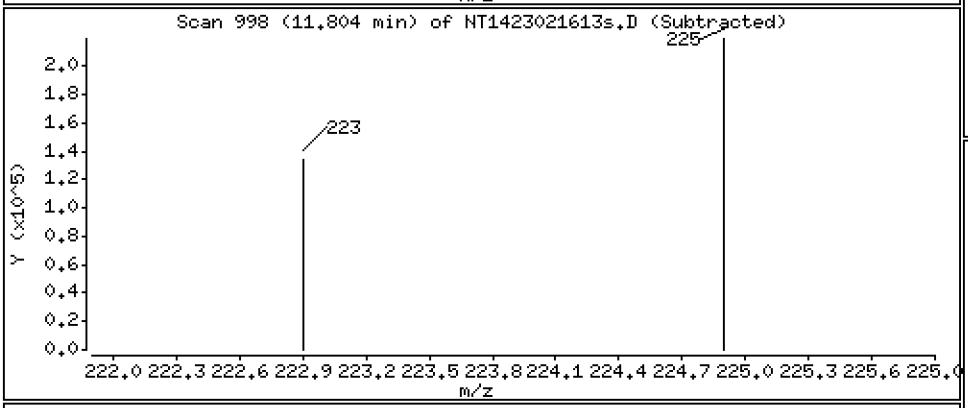
Column diameter: 0.25

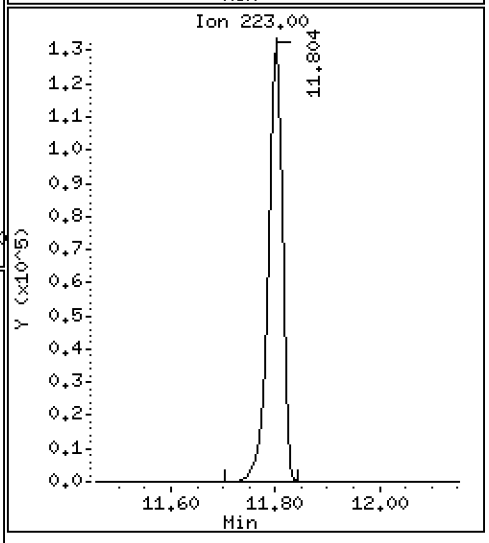
30 Hexachlorobutadiene

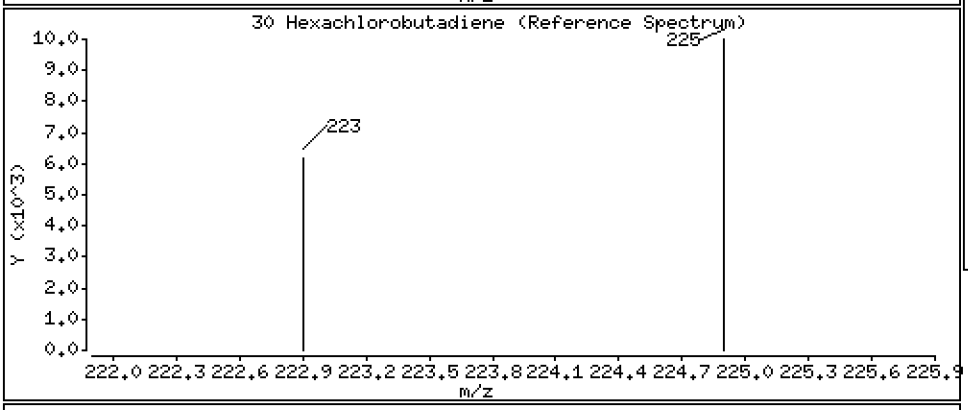
Concentration: 4.815 ug/mL

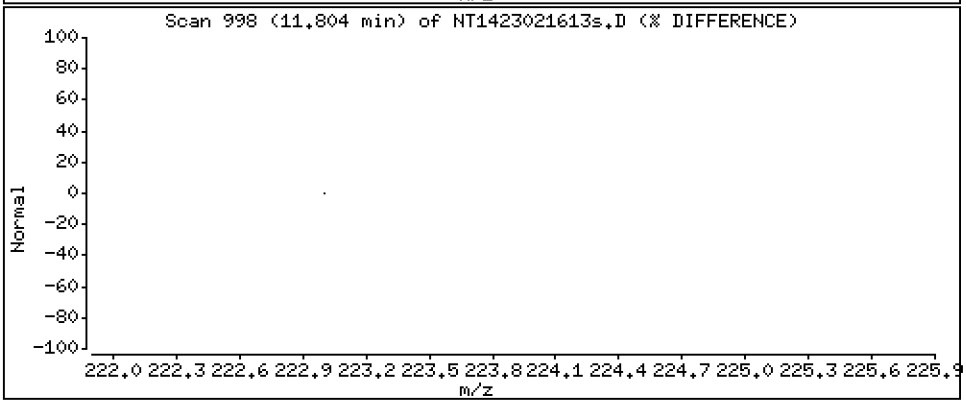












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

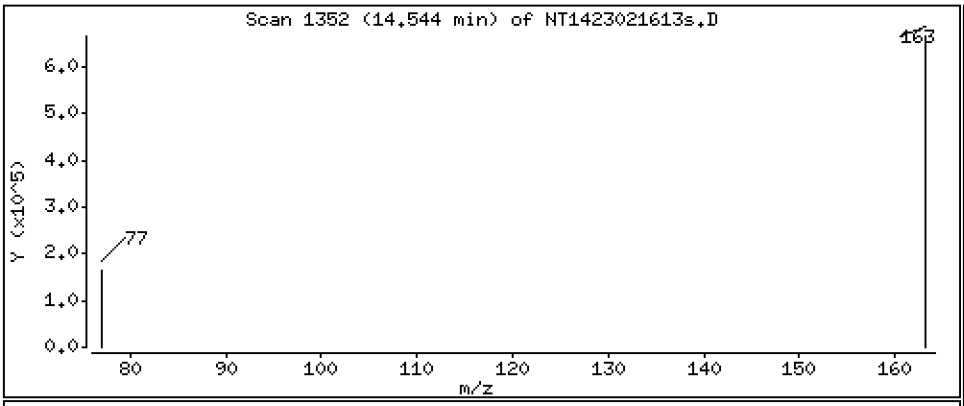
Operator: DSD

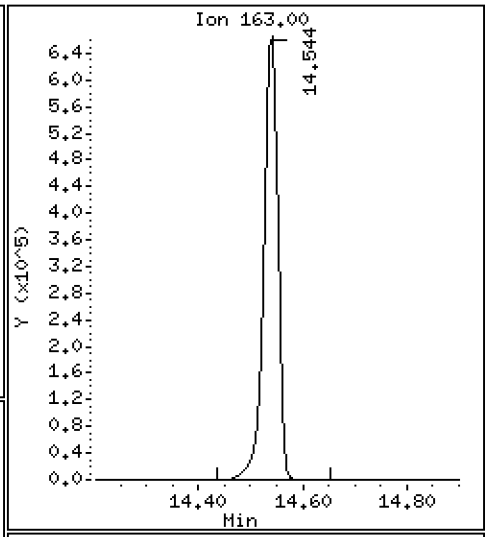
Column phase: ZB-5msi

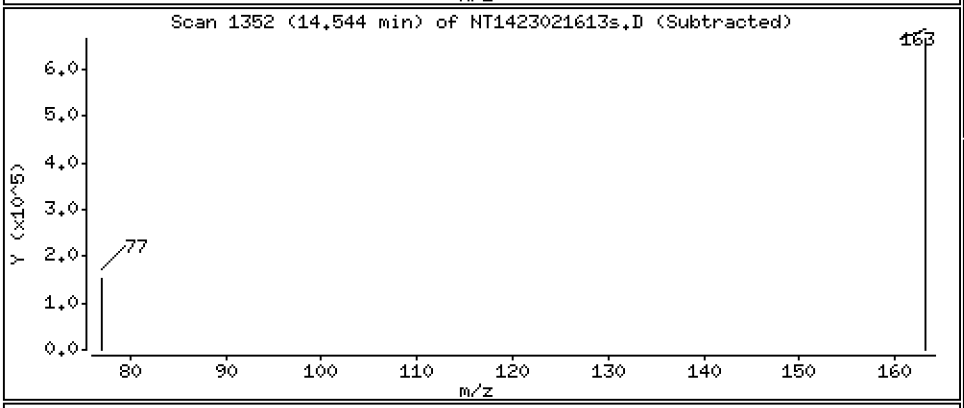
Column diameter: 0.25

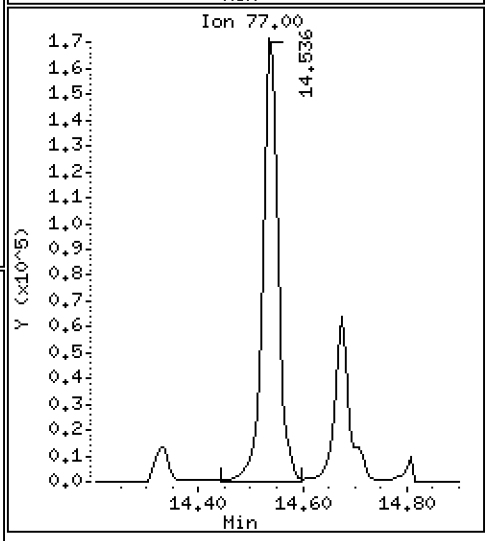
39 Dimethylphthalate

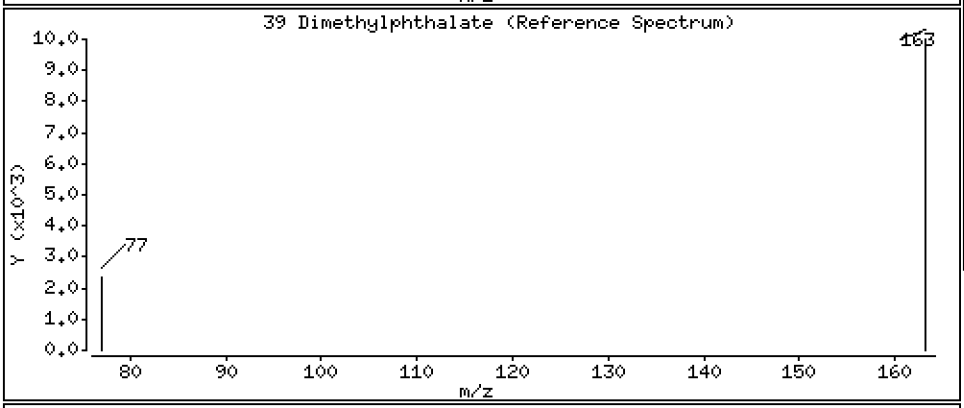
Concentration: 5.002 ug/mL

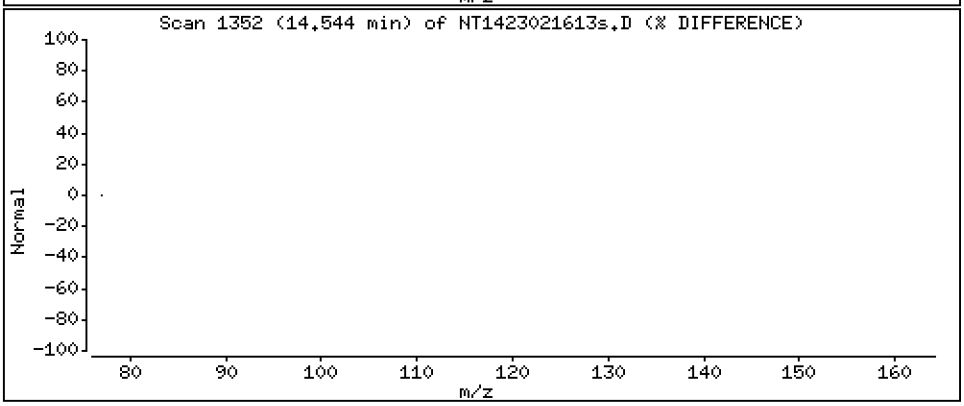












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

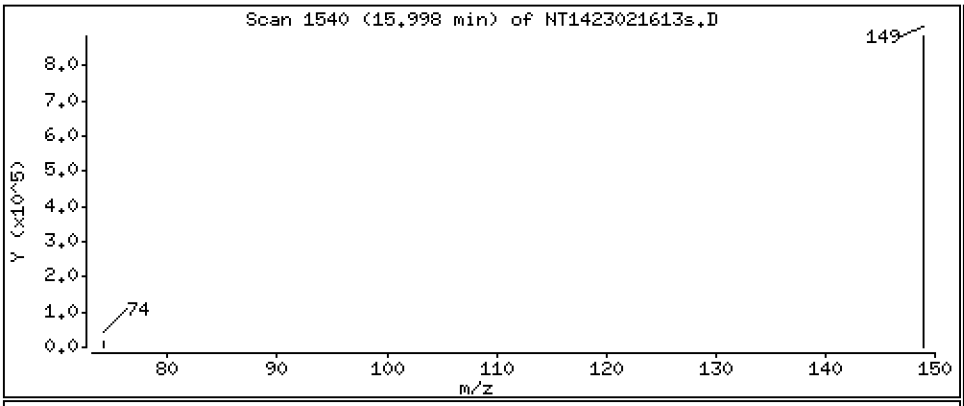
Operator: DSD

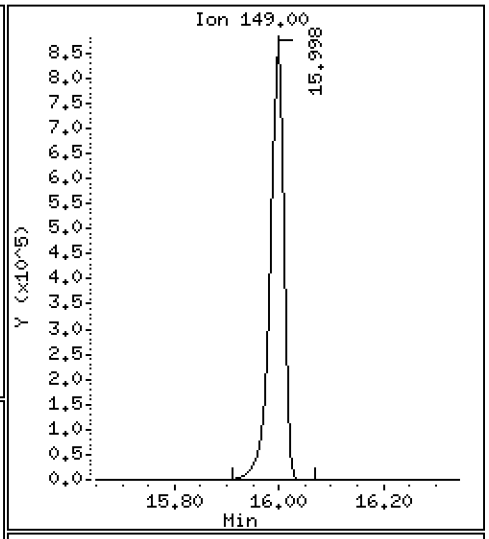
Column phase: ZB-5msi

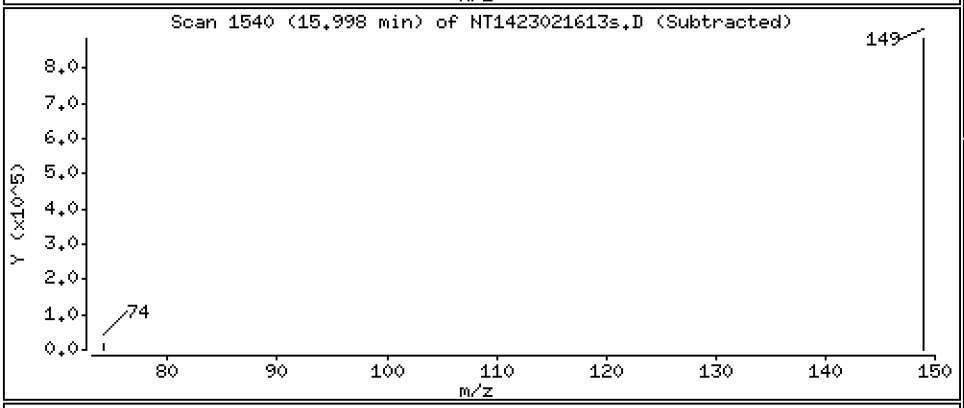
Column diameter: 0.25

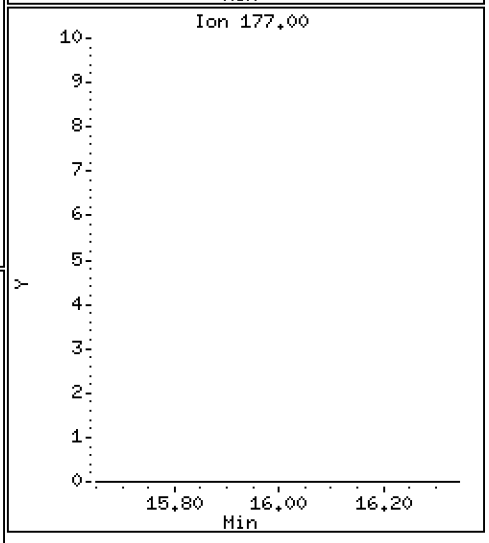
50 Diethylphthalate

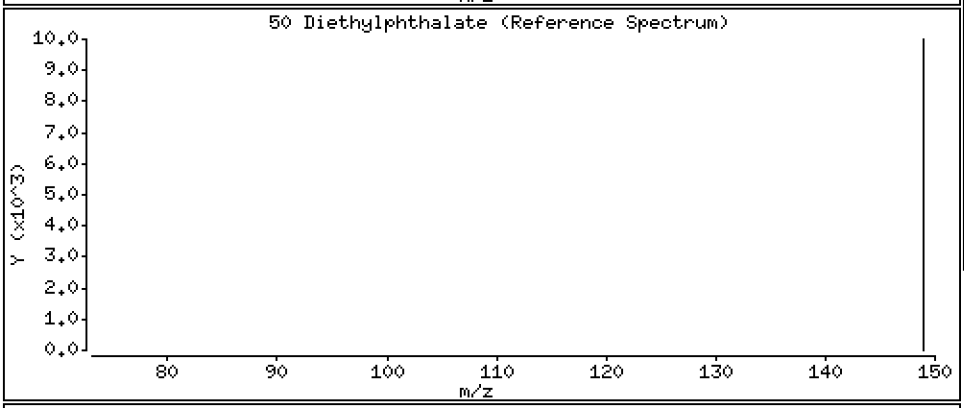
Concentration: 4.969 ug/mL

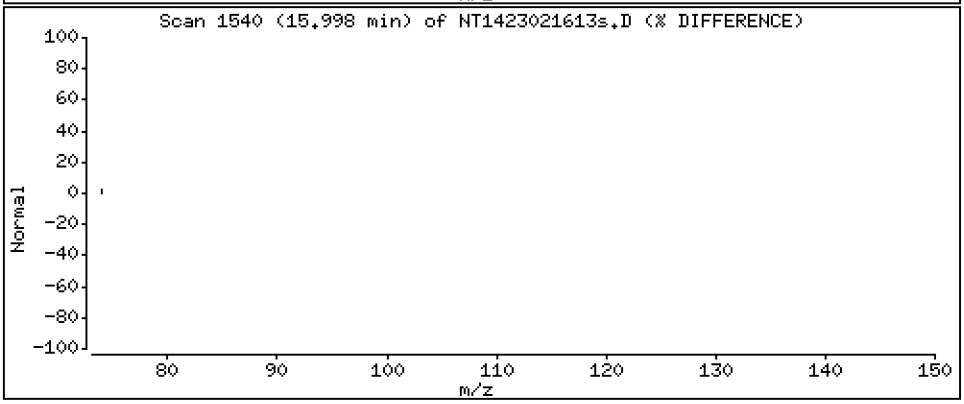












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

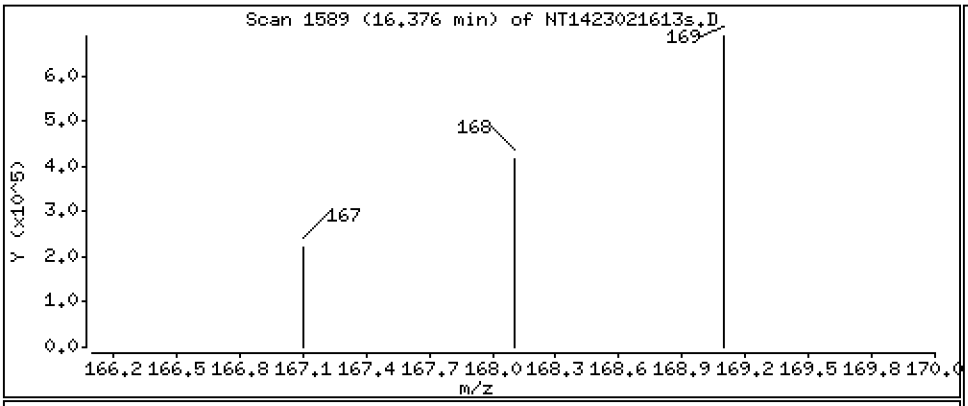
Operator: DSD

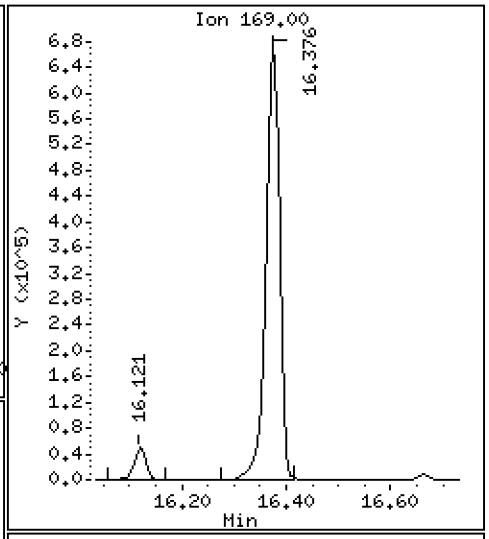
Column phase: ZB-5msi

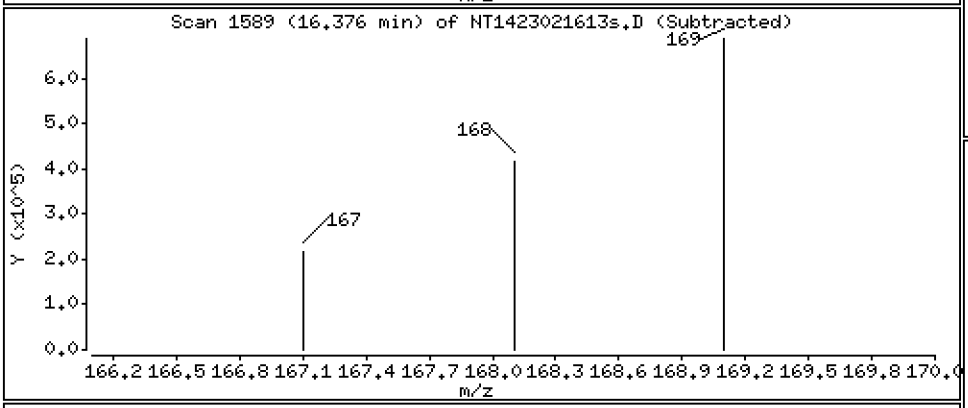
Column diameter: 0.25

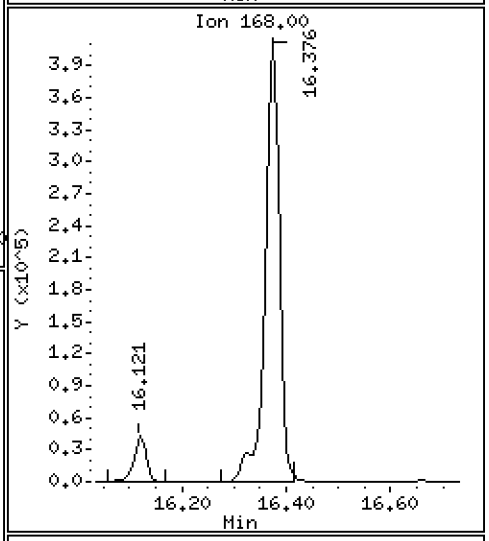
54 N-Nitrosodiphenylamine

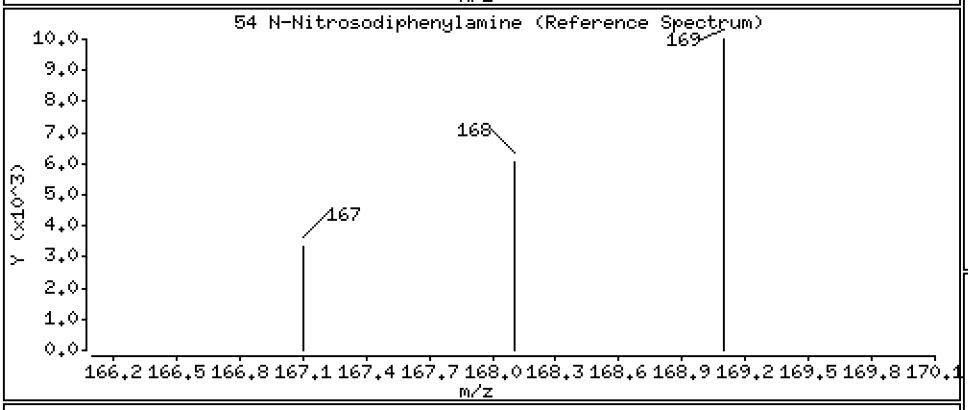
Concentration: 5.009 ug/mL

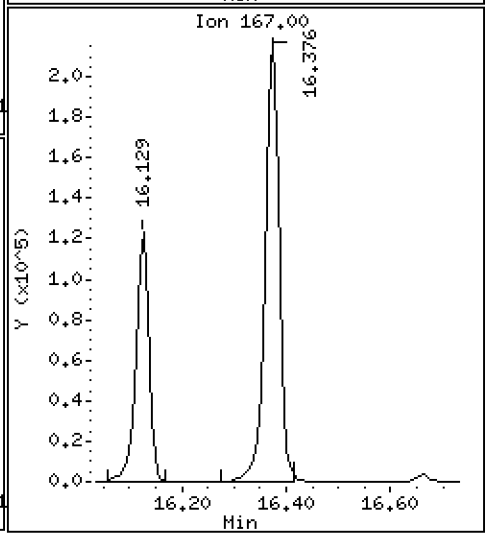


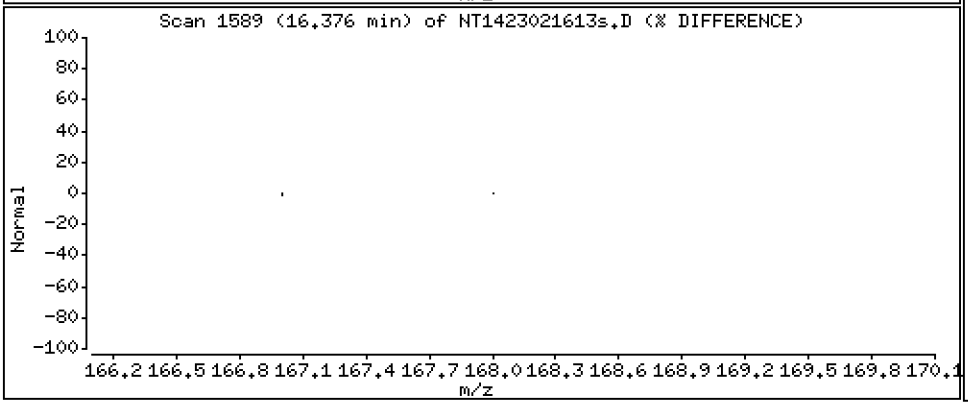












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

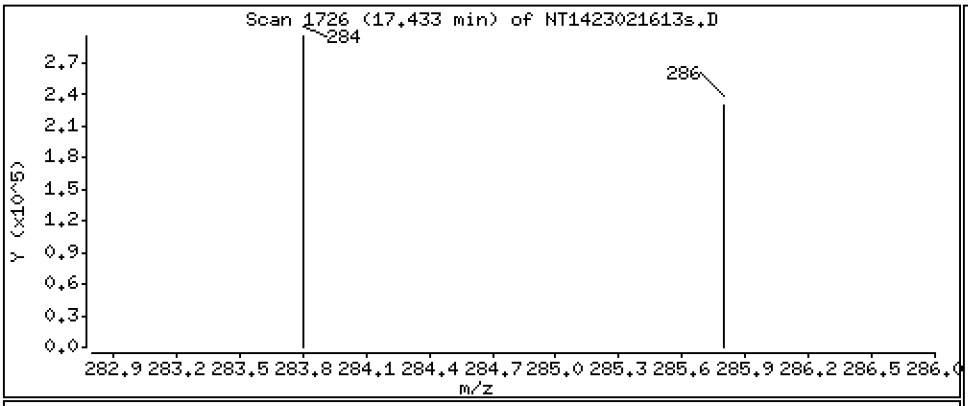
Operator: DSD

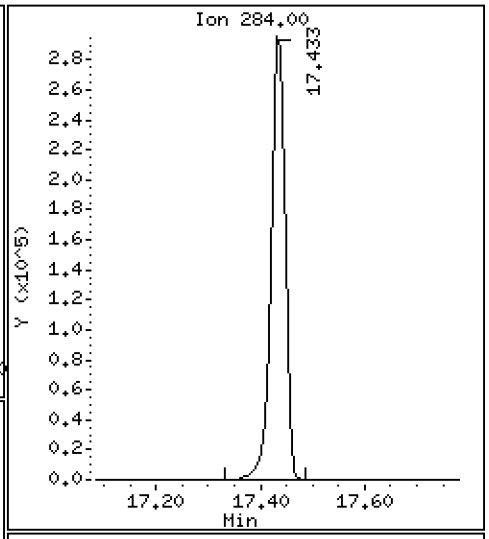
Column phase: ZB-5msi

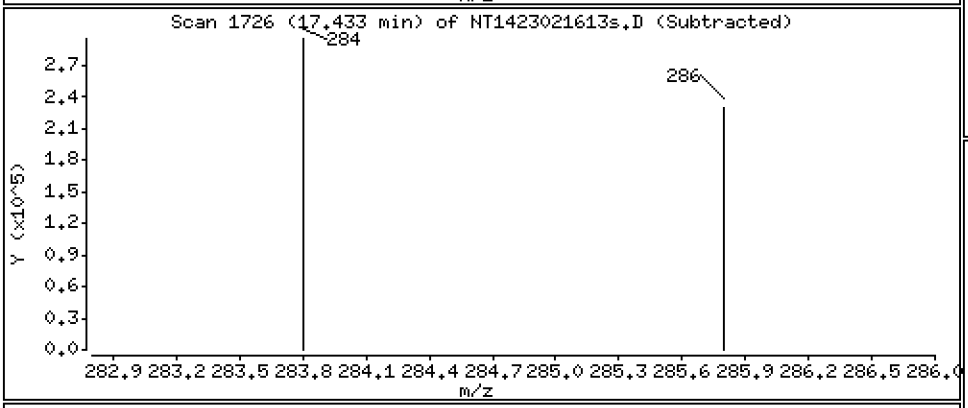
Column diameter: 0.25

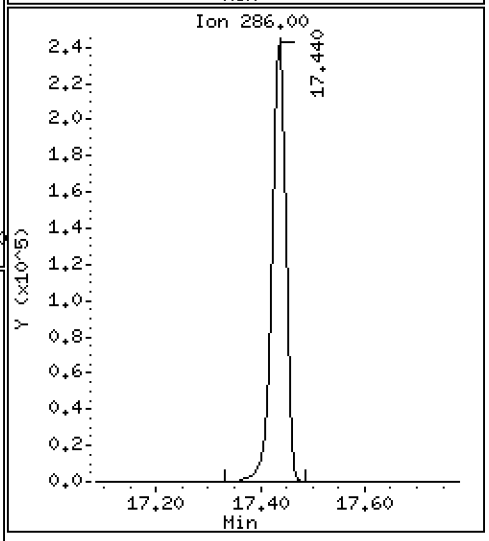
57 Hexachlorobenzene

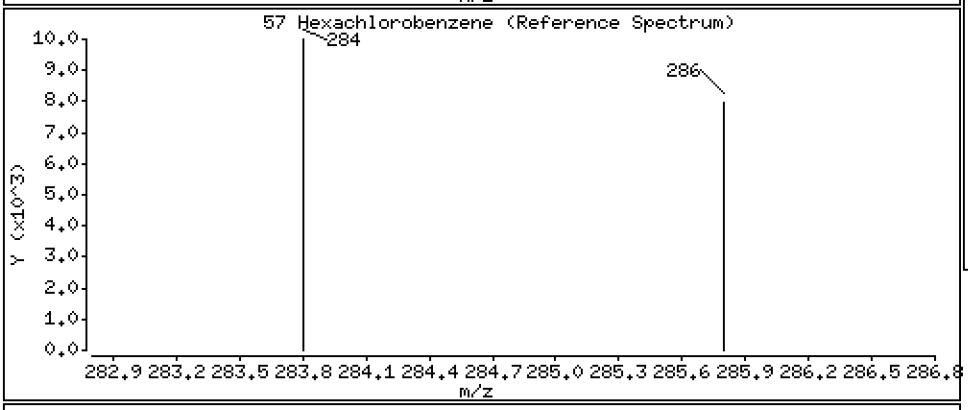
Concentration: 4.700 ug/mL

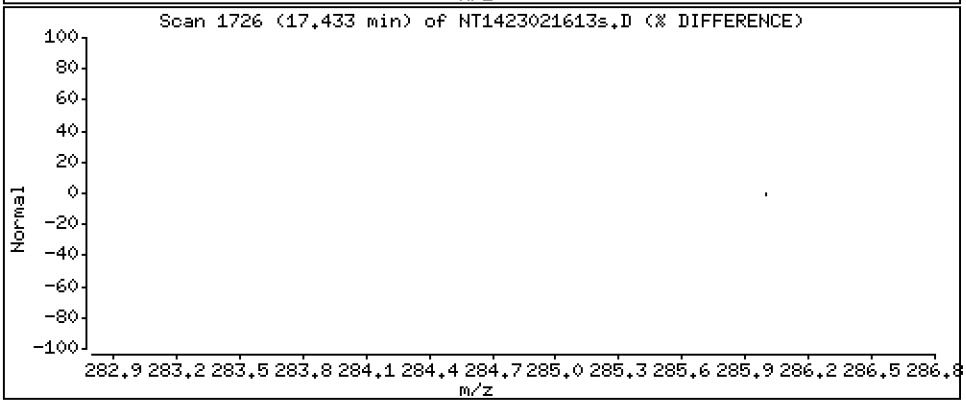












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

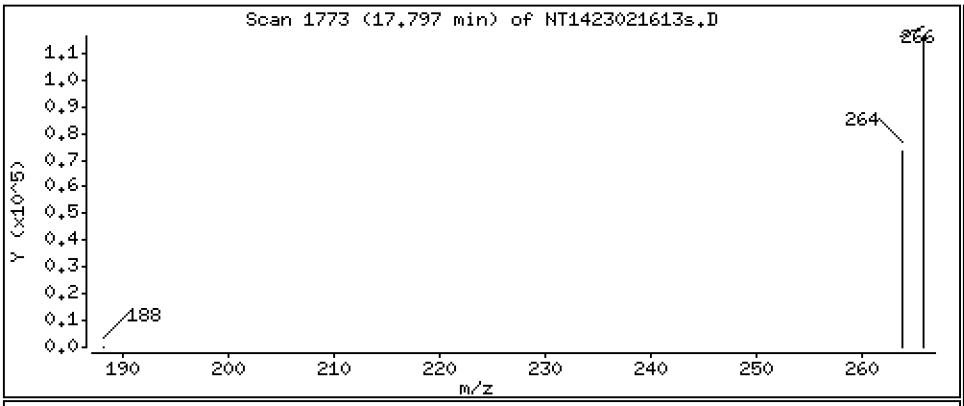
Operator: DSD

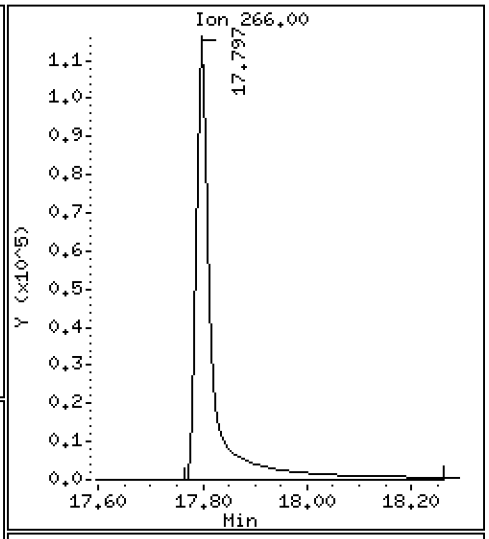
Column phase: ZB-5msi

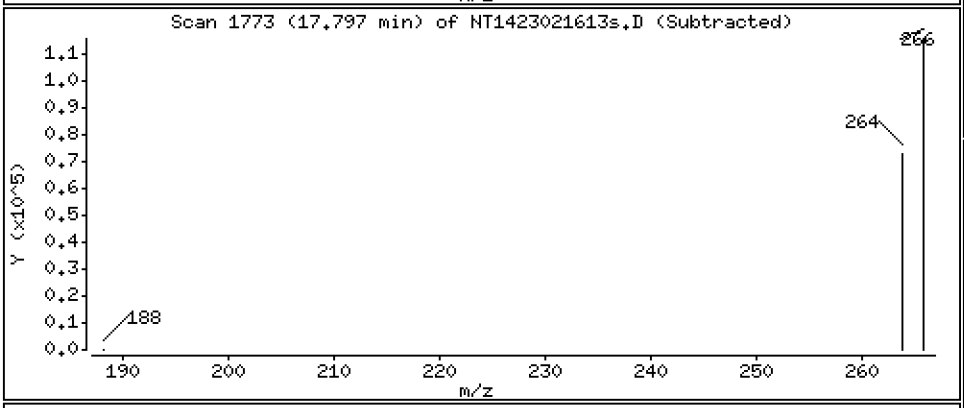
Column diameter: 0.25

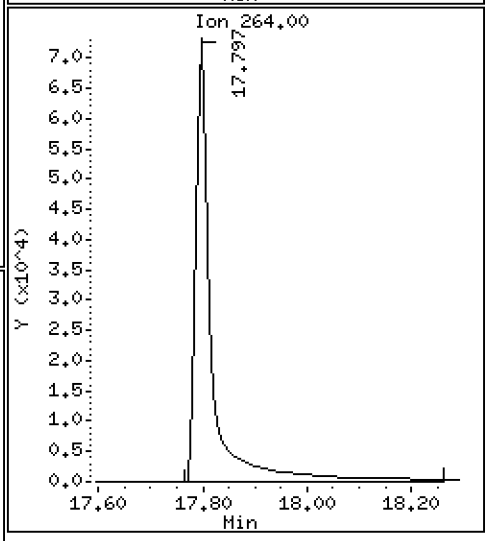
58 Pentachlorophenol

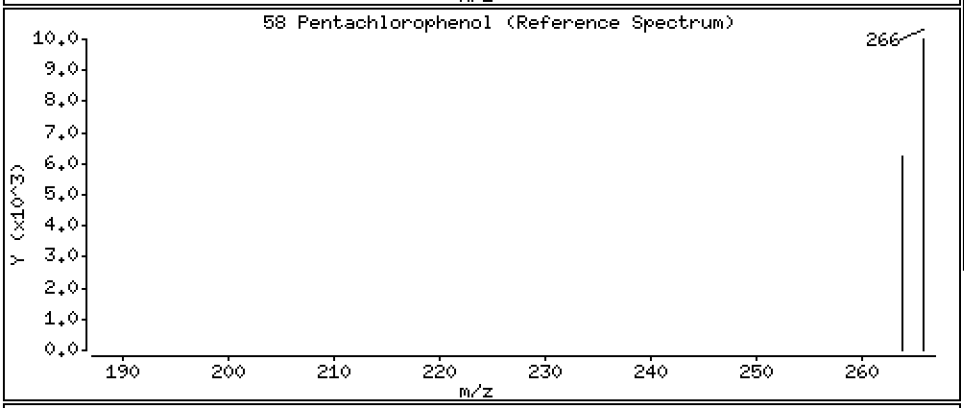
Concentration: 4.935 ug/mL

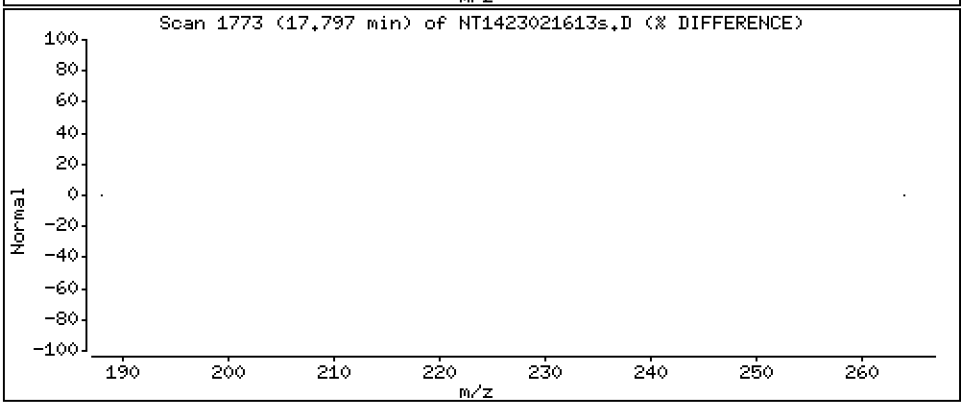












Data File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D

Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

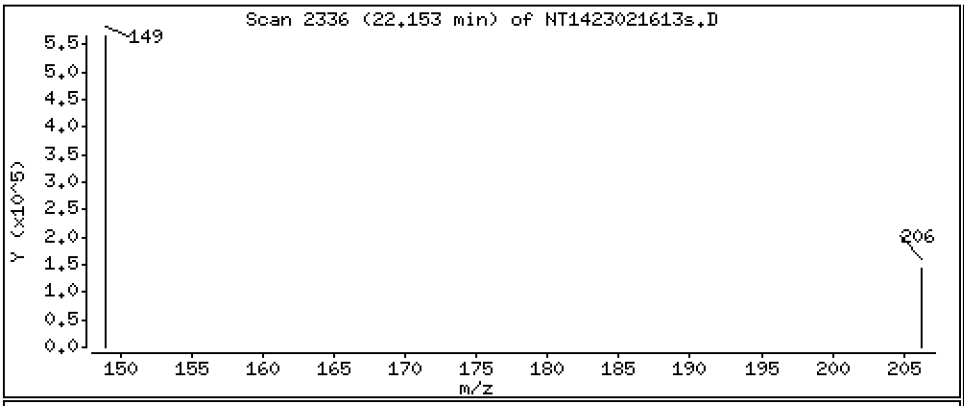
Operator: DSD

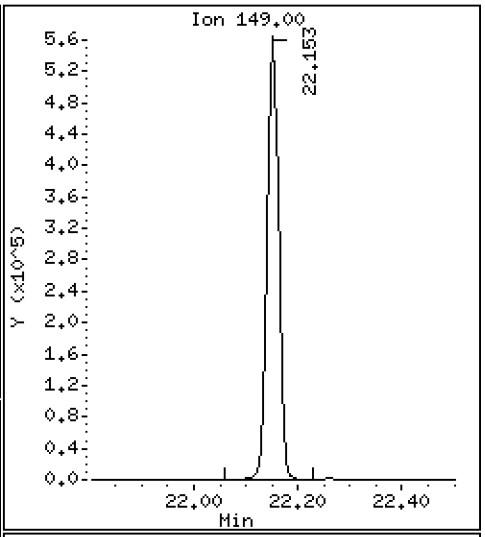
Column phase: ZB-5msi

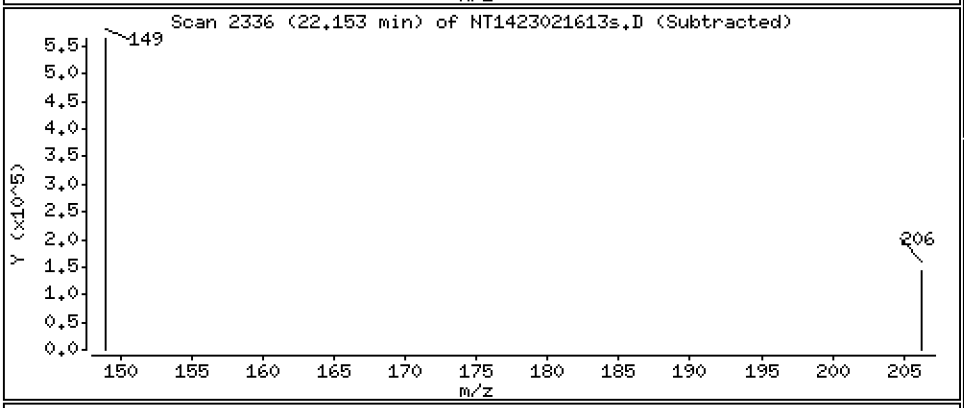
Column diameter: 0.25

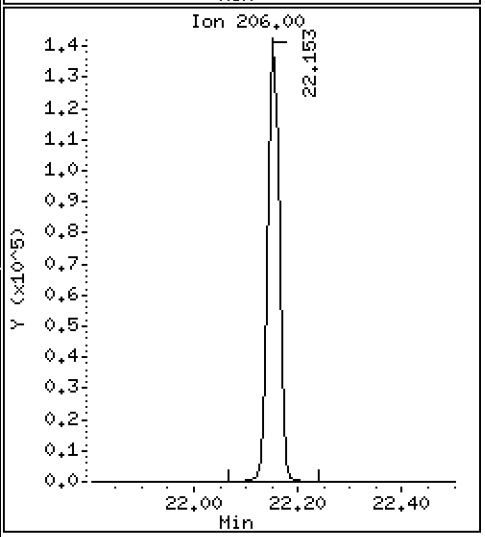
67 Butylbenzylphthalate

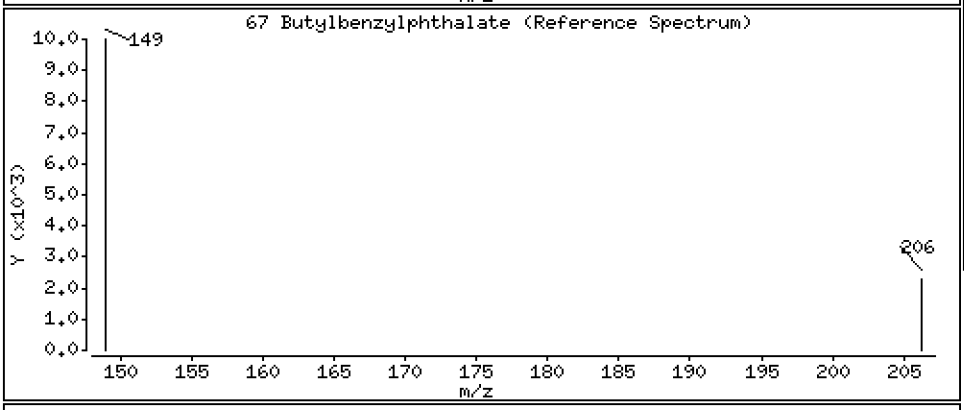
Concentration: 4.964 ug/mL

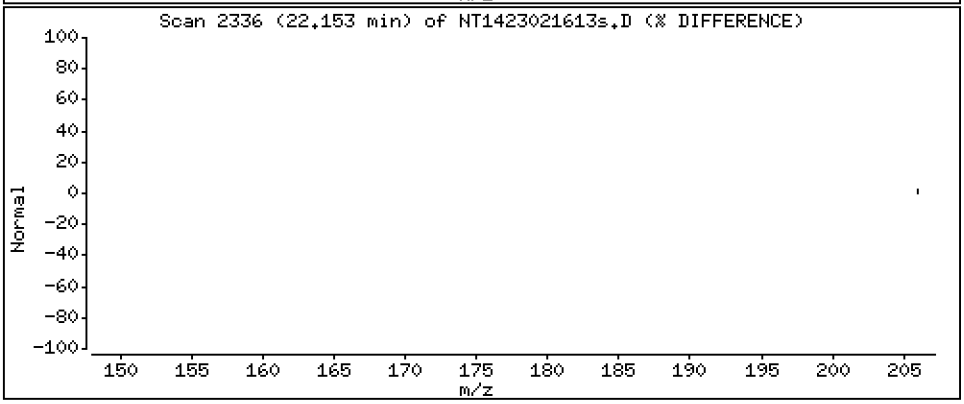












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

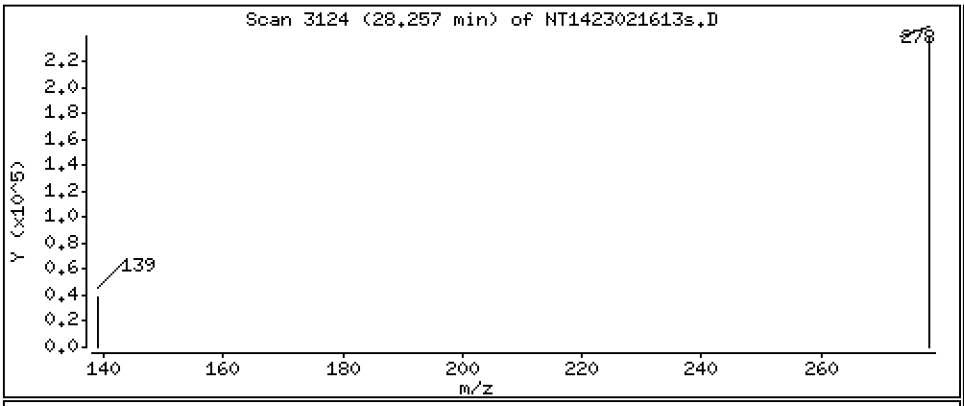
Operator: DSD

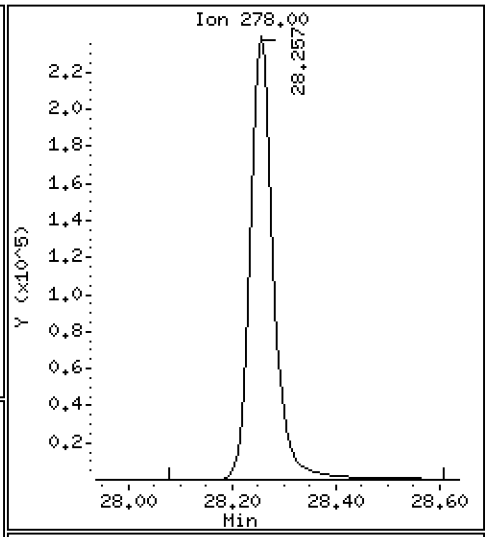
Column phase: ZB-5msi

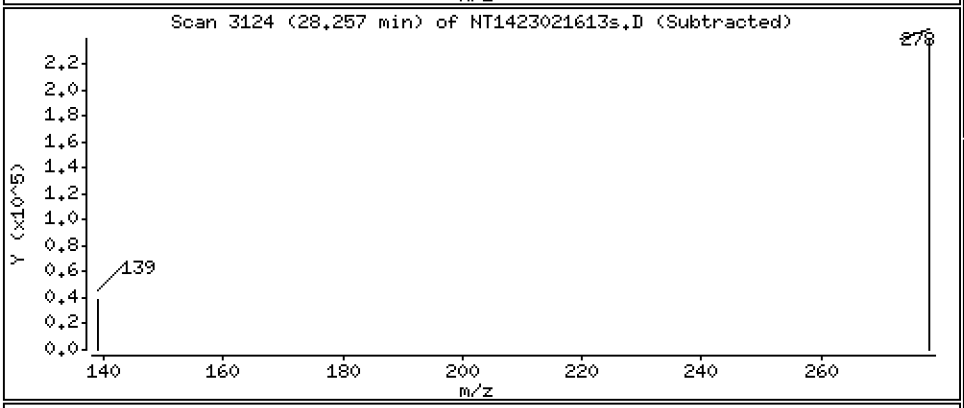
Column diameter: 0.25

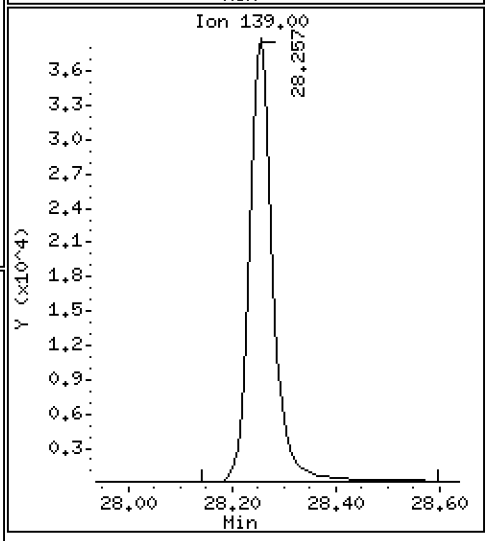
79 Dibenzo(a,h)anthracene

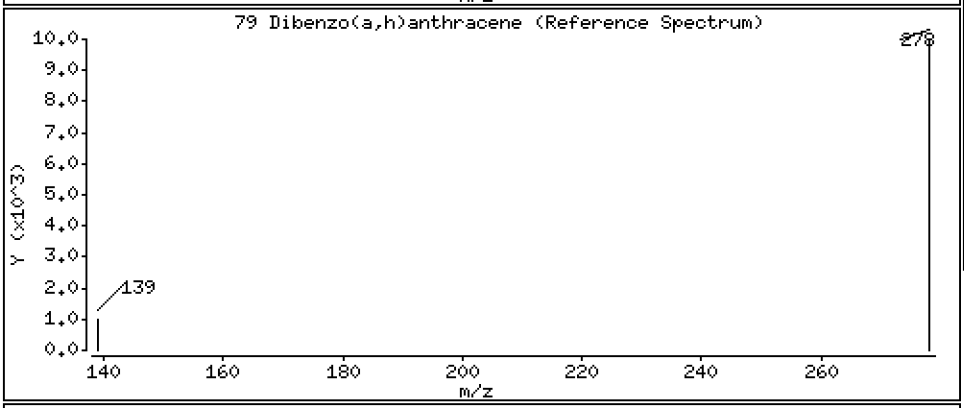
Concentration: 4.888 ug/mL

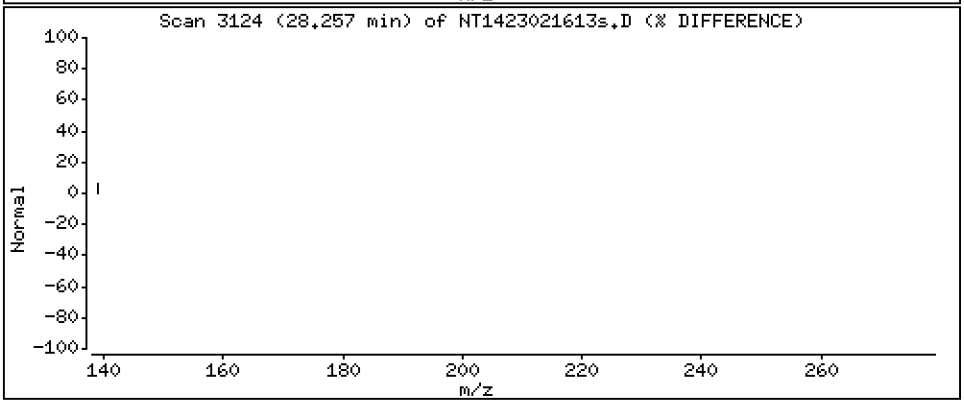












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Date : 16-FEB-2023 21:18

Client ID:

Instrument: nt14.i

Sample Info: SLB0240-SCV1

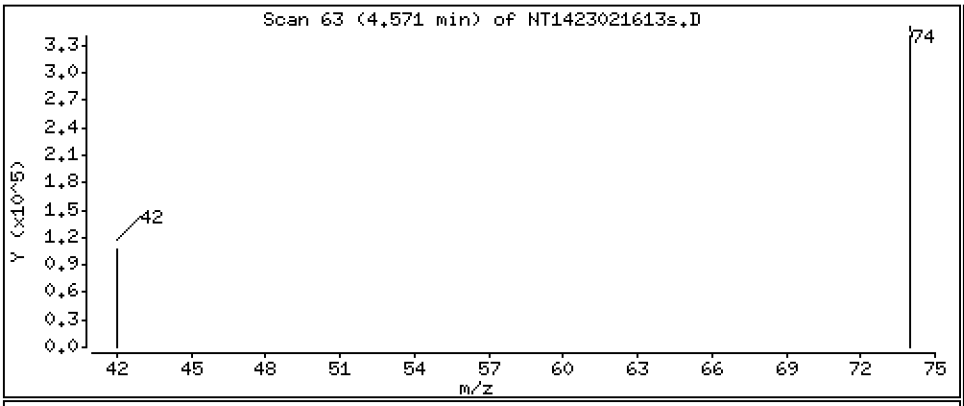
Operator: DSD

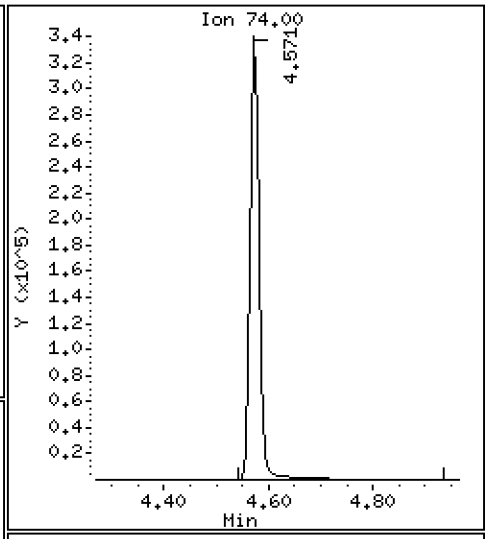
Column phase: ZB-5msi

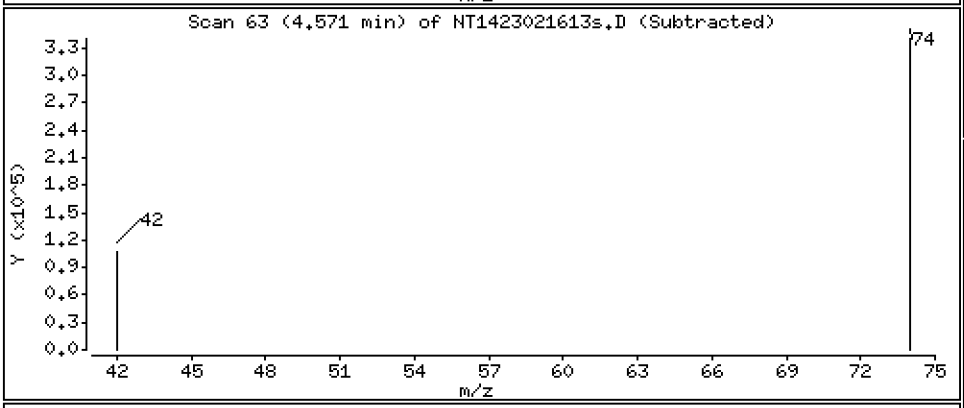
Column diameter: 0.25

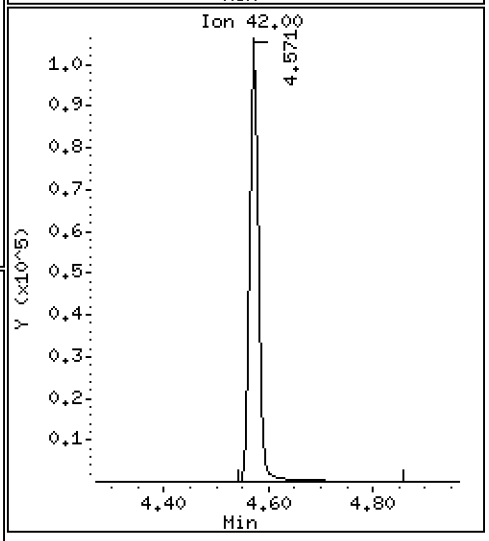
90 N-Nitrosodimethylamine

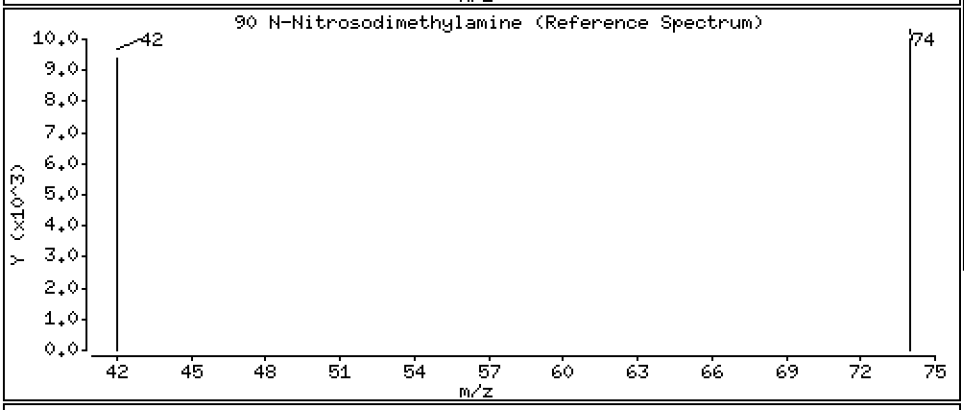
Concentration: 5.293 ug/mL

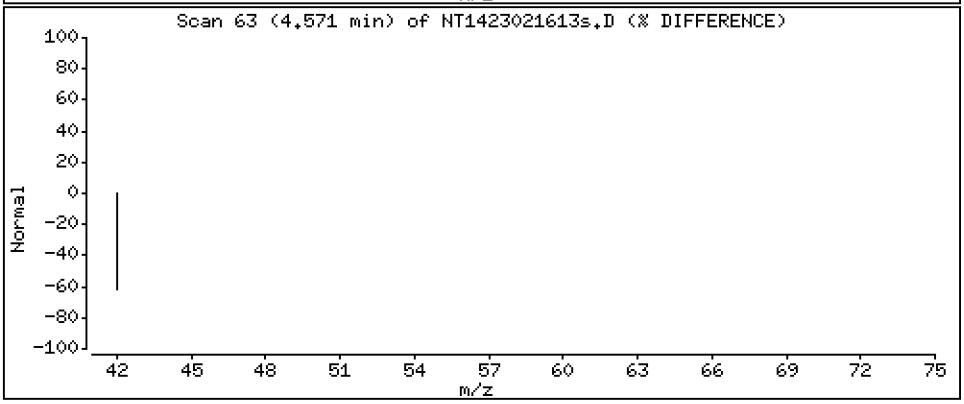












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230216.b\20230216.b\NT1423021613s.D
Lab Smp Id: SLB0240-SCV1
Inj Date : 16-FEB-2023 21:18 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0240-SCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Meth Date : 03-Mar-2023 14:04 van Quant Type: ISTD
Cal Date : 16-FEB-2023 20:42 Cal File: NT1423021612s.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.679	6.764	(0.750)	843875	7.69265	7.693(R)
	3 Phenol	94	8.294	8.379	(0.931)	773600	4.55614	4.556
	7 1,3-Dichlorobenzene	146	8.835	8.835	(0.992)	640622	4.80933	4.809
*	8 1,4-Dichlorobenzene-d4	152	8.905	8.905	(1.000)	391473	4.00000	
	9 1,4-Dichlorobenzene	146	8.936	8.936	(1.003)	616286	4.85010	4.850
	11 Benzyl alcohol	79	9.184	9.161	(1.031)	568264	5.30032	5.300
	12 1,2-Dichlorobenzene	146	9.293	9.293	(1.044)	605835	4.79526	4.795
	13 2-Methylphenol	108	9.409	9.433	(1.057)	523707	4.50674	4.507
	15 4-Methylphenol	108	9.689	9.720	(1.088)	579099	4.46016	4.460
	16 N-Nitroso-di-n-propylamine	70	9.743	9.767	(1.094)	517307	5.04663	5.047
	22 2,4-Dimethylphenol	107	10.728	10.745	(0.942)	488898	3.90295	3.903
	24 Benzoic acid	105	10.938	11.116	(0.960)	436009	6.44677	6.447
	26 1,2,4-Trichlorobenzene	180	11.309	11.310	(0.993)	602290	4.59532	4.595
*	27 Naphthalene-d8	136	11.394	11.394	(1.000)	1430650	4.00000	
	30 Hexachlorobutadiene	225	11.804	11.804	(1.036)	383880	4.81466	4.815
	39 Dimethylphthalate	163	14.543	14.551	(0.968)	1212628	5.00209	5.002
*	42 Acenaphthene-d10	162	15.023	15.016	(1.000)	794620	4.00000	
	50 Diethylphthalate	149	15.997	15.997	(1.065)	1507744	4.96936	4.969
	54 N-Nitrosodiphenylamine	169	16.375	16.384	(0.907)	1157201	5.00925	5.009(H)
	57 Hexachlorobenzene	284	17.432	17.432	(0.965)	537021	4.70048	4.700
	58 Pentachlorophenol	266	17.796	17.944	(0.985)	240806	4.93475	4.935
*	59 Phenanthrene-d10	188	18.059	18.059	(1.000)	1759092	4.00000	
$	66 Terphenyl-d14	244	21.224	21.224	(0.918)	1463833	4.57604	4.576(R)
	67 Butylbenzylphthalate	149	22.153	22.153	(0.958)	814994	4.96402	4.964
*	69 Chrysene-d12	240	23.128	23.121	(1.000)	1201603	4.00000	
*	77 Perylene-d12	264	25.691	25.691	(1.000)	814421	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.257	28.288	(1.100)	772593	4.88838	4.888
	90 N-Nitrosodimethylamine	74	4.571	4.618	(0.513)	440424	5.29346	5.293

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021613s.D
Lab Smp Id: SLB0240-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230216.b\20230216.b\SIMABN2.m
Misc Info:

Calibration Date: 16-FEB-2023
Calibration Time: 18:18
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	393779	196890	787558	391473	-0.59
27 Naphthalene-d8	1399029	699515	2798058	1430650	2.26
42 Acenaphthene-d10	759723	379862	1519446	794620	4.59
59 Phenanthrene-d10	1756156	878078	3512312	1759092	0.17
69 Chrysene-d12	1174128	587064	2348256	1201603	2.34
77 Perylene-d12	826011	413006	1652022	814421	-1.40

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	-0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.39	-0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.05
59 Phenanthrene-d10	18.06	17.56	18.56	18.06	-0.00
69 Chrysene-d12	23.12	22.62	23.62	23.13	0.03
77 Perylene-d12	25.68	25.18	26.18	25.69	0.03

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

REVIEW SUMMARY FOR FILE - NT1423021613s.D

Lab ID: SLB0240-SCV1
nt14.i, 20230216.b\20230216.b\SIMABN2.m,   16-FEB-2023 21:18

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.931	0.941	-0.0095	Phenol
0.960	0.000	0.9599	Benzoic acid
0.513	0.518	-0.0052	N-Nitrosodimethylamine
0.985	0.000	0.9854	Pentachlorophenol
0.750	0.760	-0.0095	2-Fluorophenol

RRT check based on Ccal File: 20230216.b/NT1423021612s.D

On Column LOD for nt14.i, 20230216.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT14	Calibration:	GC00009
Lab File ID:	NT1423021736s.D	Calibration Date:	03/03/2023
Sequence:	SLB0335	Injection Date:	02/18/23
Lab Sample ID:	SLB0335-CCV1	Injection Time:	07:42
Sequence Name:	Calibration Check		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
1,4-Dichlorobenzene	A	1.0000	1.0	1.2983440	1.2927680		-0.4	+/-50	
1,2-Dichlorobenzene	A	1.0000	1.0	1.2909230	1.3039280		1.0	+/-50	
Benzyl Alcohol	A	1.0000	1.0	1.0954840	1.0896710		-0.5	+/-50	
Benzoic acid	A	4.0000	0.7	0.1890948	0.0296598		-83.1	+/-50	*
2,4-Dimethylphenol	A	2.0000	2.0	0.3263158	0.3648763		2.0	+/-50	
1,2,4-Trichlorobenzene	A	1.0000	1.0	0.3664516	0.3649560		-0.4	+/-50	
N-Nitrosodiphenylamine	A	1.0000	1.1	0.4912986	0.5809229		14.9	+/-50	
Pentachlorophenol	A	2.0000	0.8	0.0811080	0.0436119		-59.0	+/-50	*
2-Fluorophenol	A	1.5000	1.39	0.8380777	1.0722750		-7.1	+/-50	
p-Terphenyl-d14	A	1.0000	1.36	1.0648810	1.4488490		36.1	+/-50	

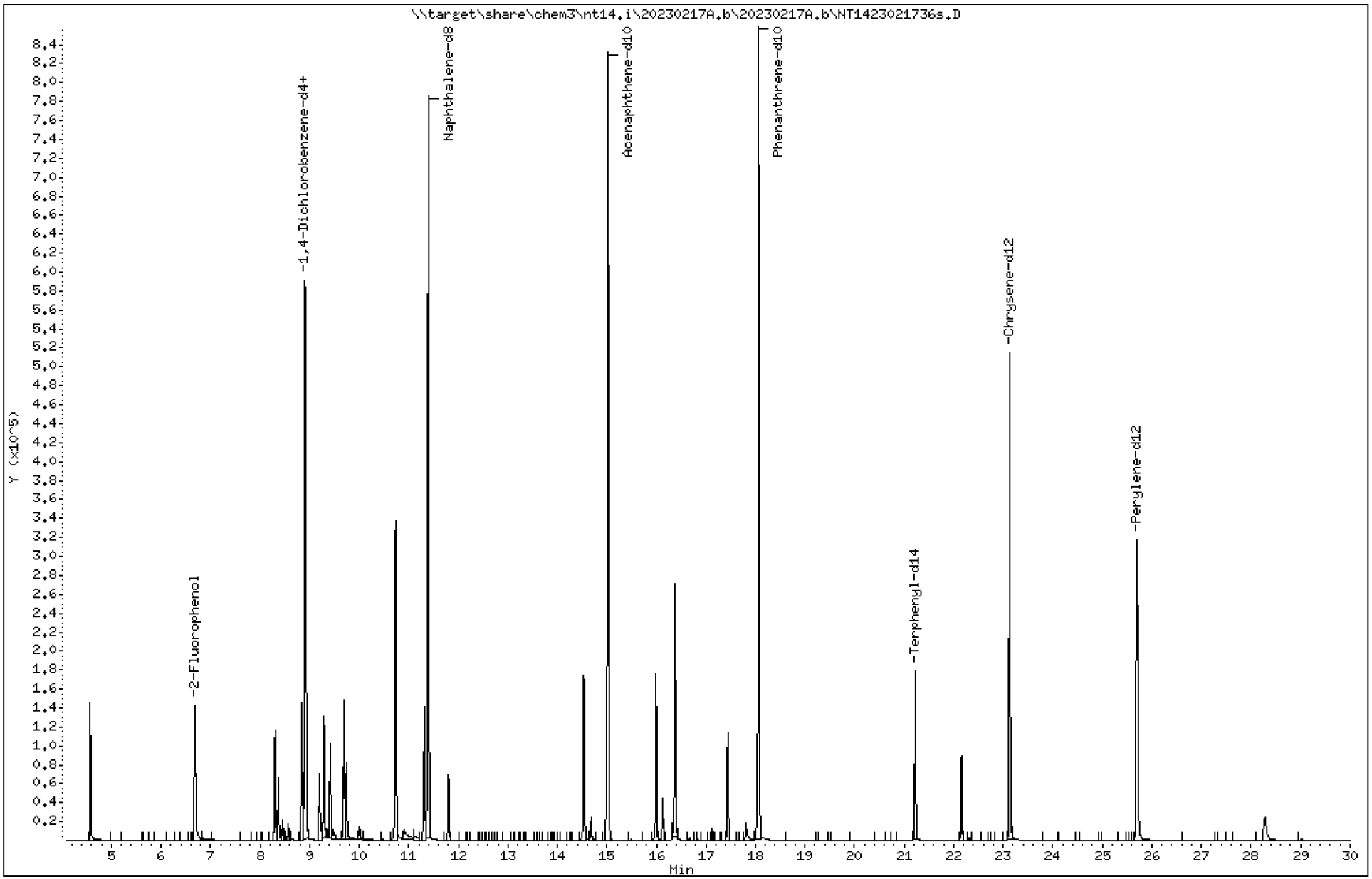
* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021736s.D
Date : 18-FEB-2023 07:42
Client ID:
Sample Info: SLB0335-CCV1

Instrument: nt14.i
Operator: DSD
Column diameter: 0.25

Column phase: ZB-5msi



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Date : 18-FEB-2023 07:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-CCV1

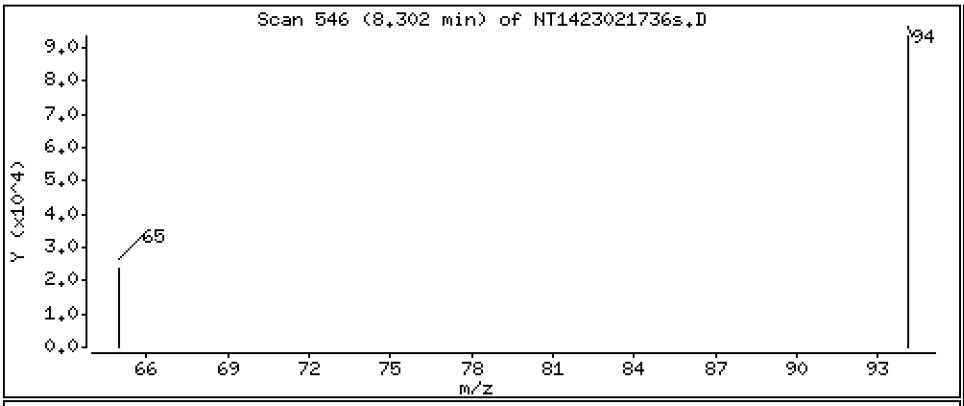
Operator: DSD

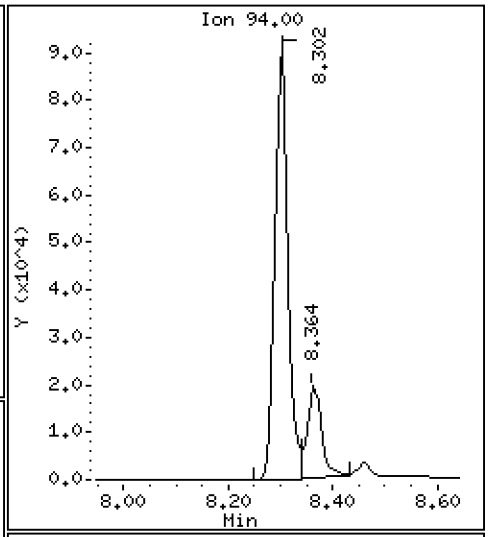
Column phase: ZB-5msi

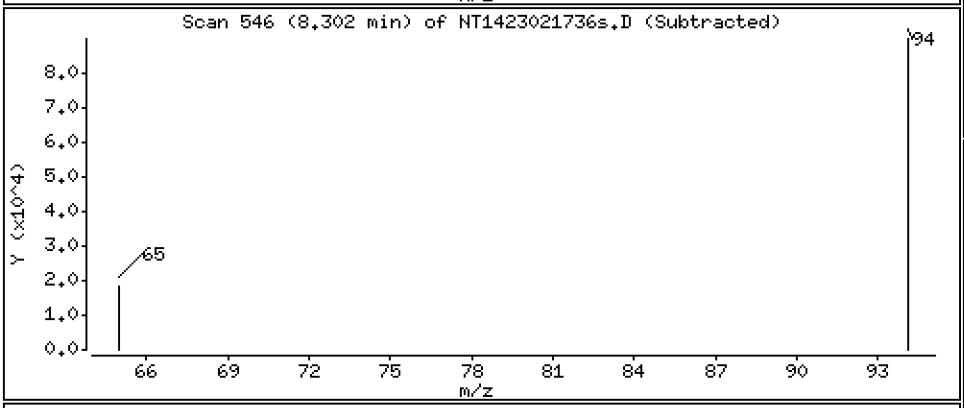
Column diameter: 0.25

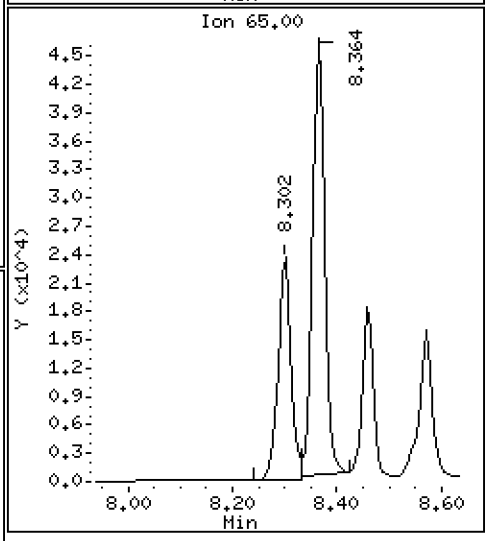
3 Phenol

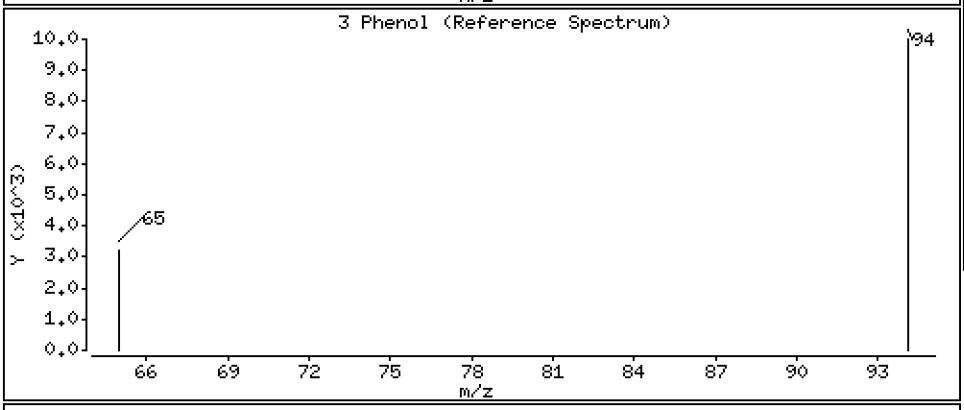
Concentration: 0.9271 ug/mL

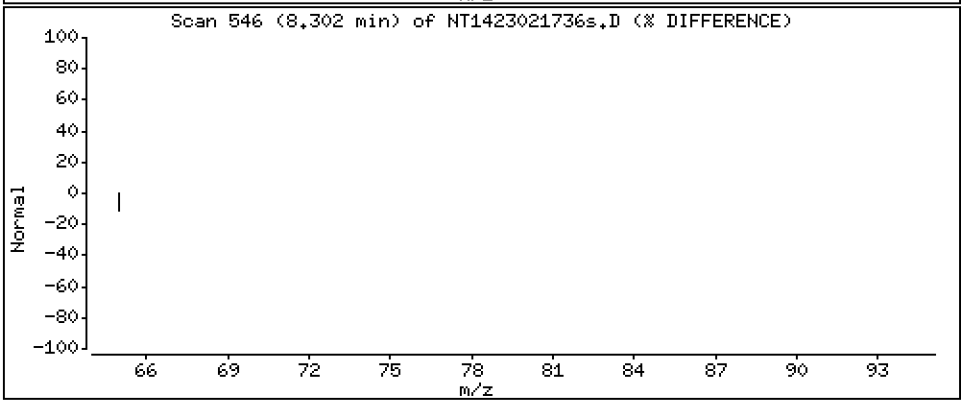












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Date : 18-FEB-2023 07:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-CCV1

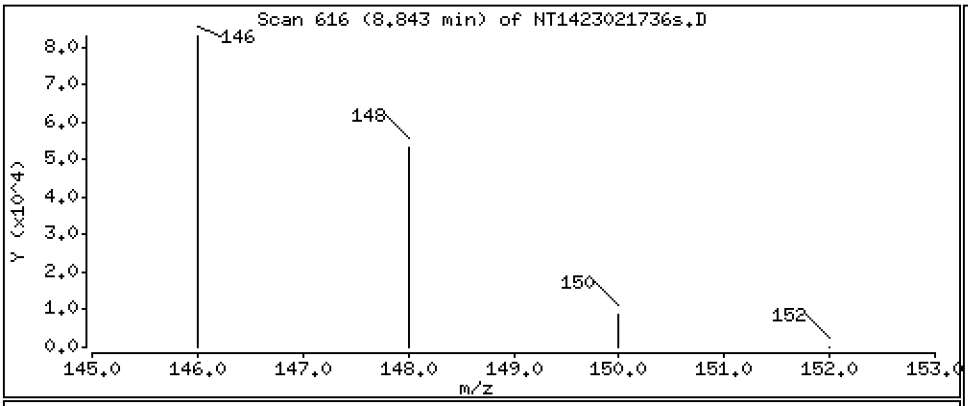
Operator: DSD

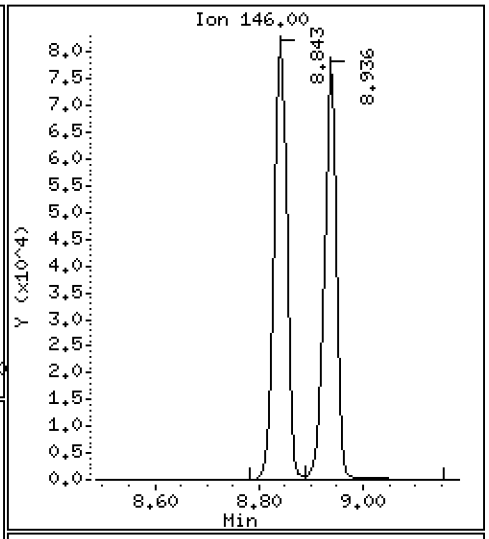
Column phase: ZB-5msi

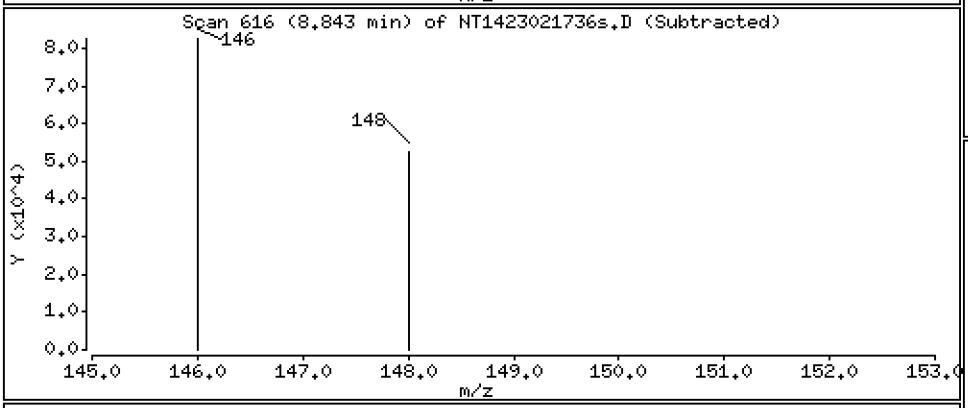
Column diameter: 0.25

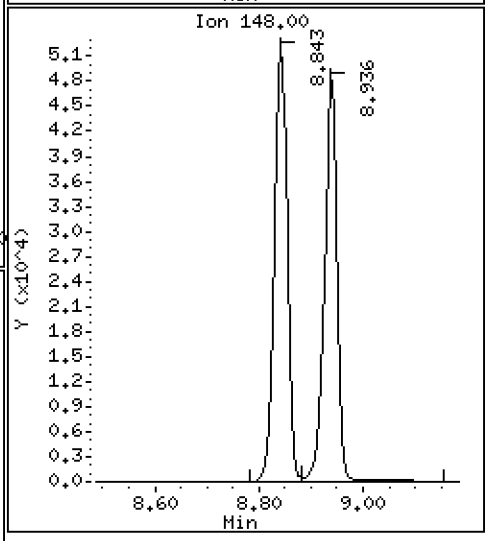
7 1,3-Dichlorobenzene

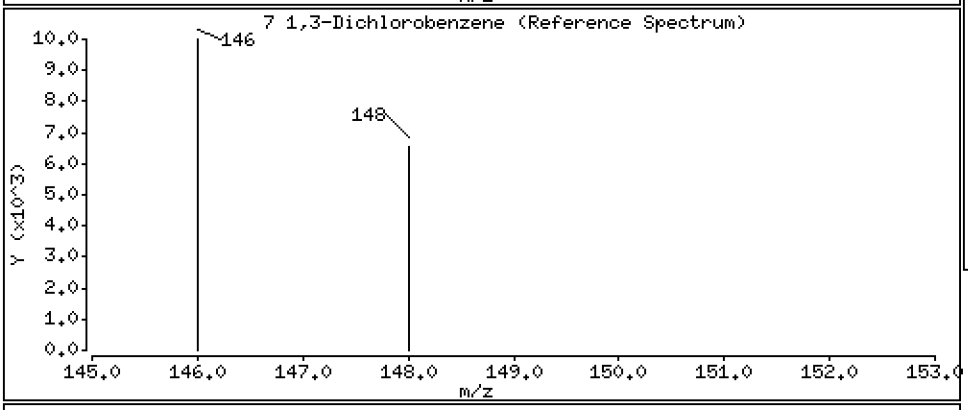
Concentration: 1.012 ug/mL

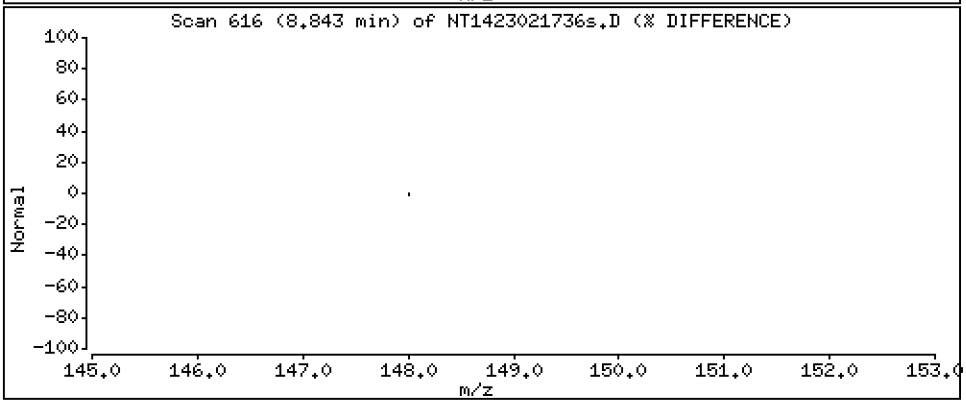












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Date : 18-FEB-2023 07:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-CCV1

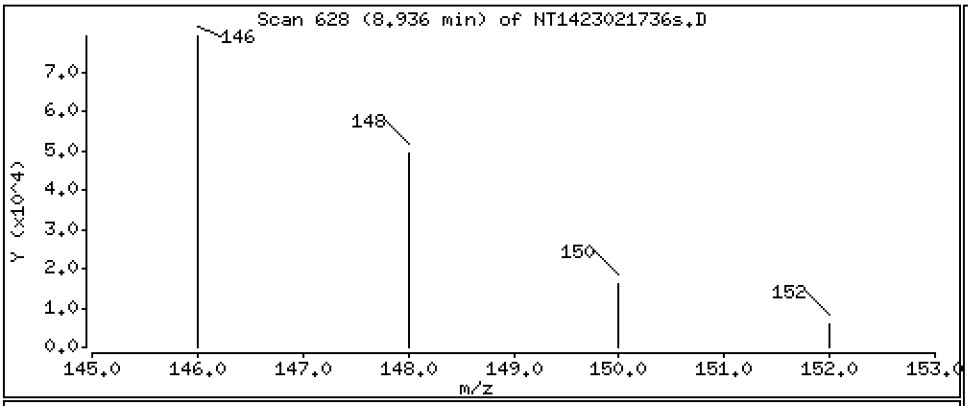
Operator: DSD

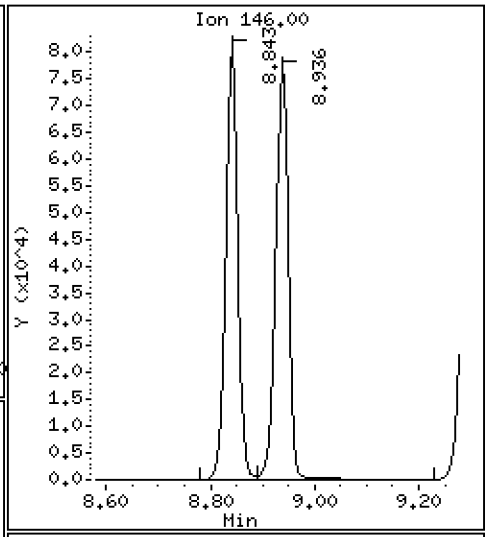
Column phase: ZB-5msi

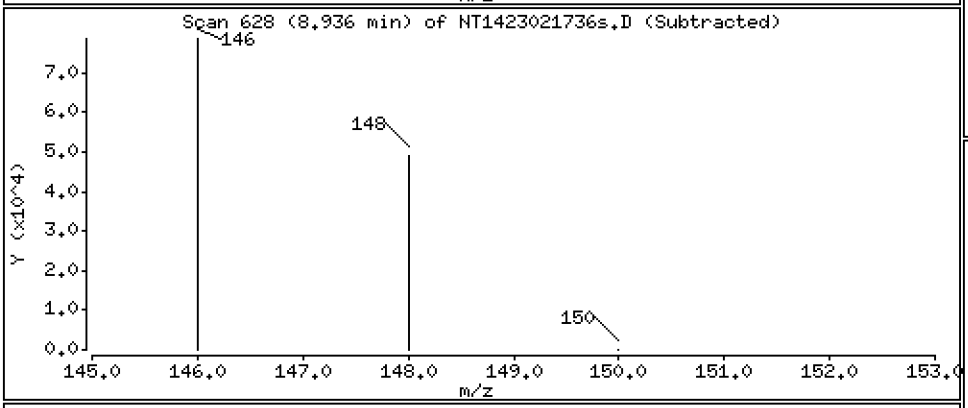
Column diameter: 0.25

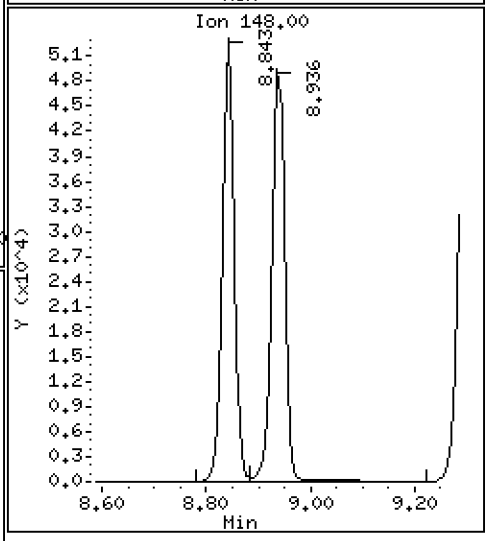
9 1,4-Dichlorobenzene

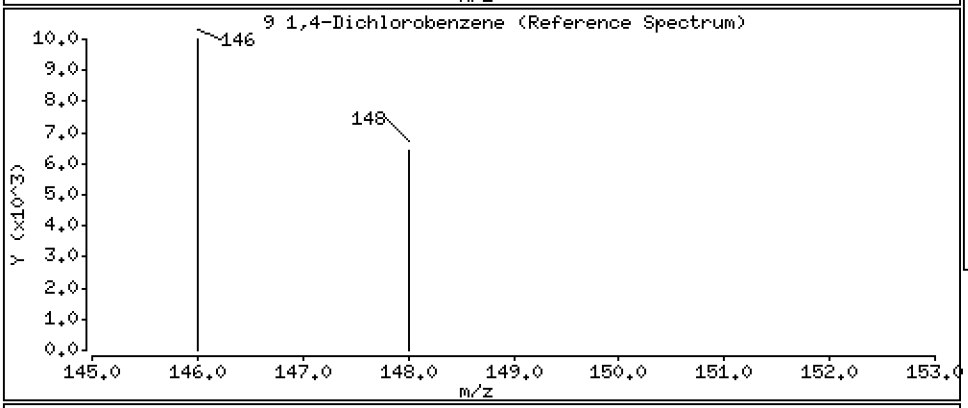
Concentration: 0.9957 ug/mL

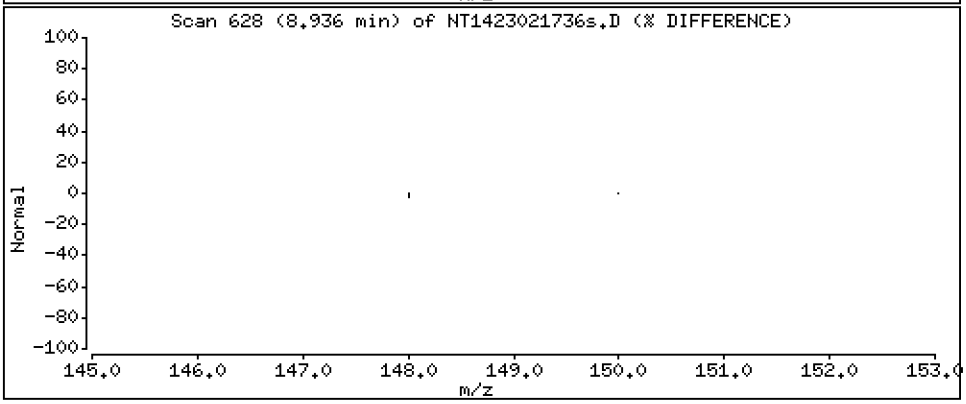












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021736s.D

Date : 18-FEB-2023 07:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-CCV1

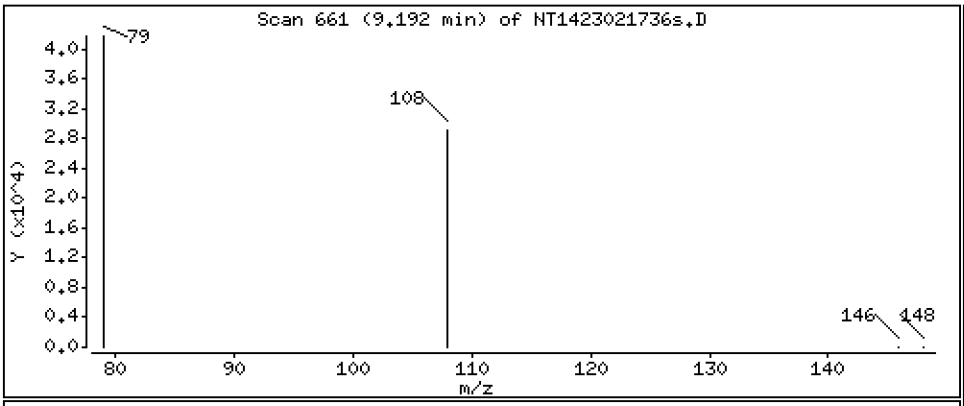
Operator: DSD

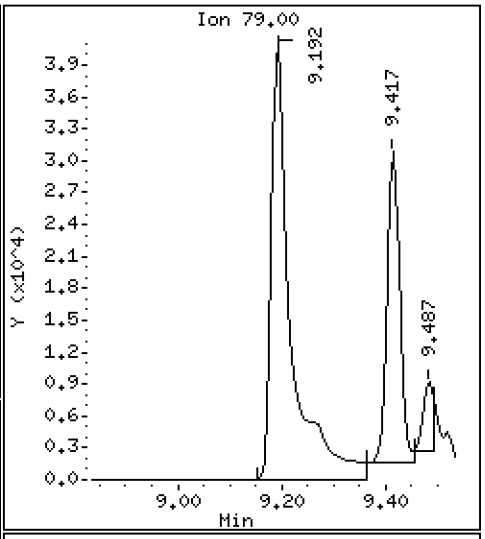
Column phase: ZB-5msi

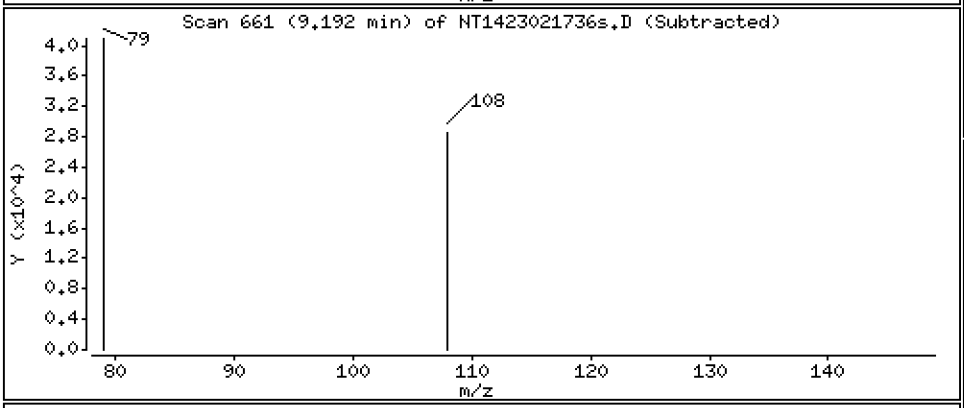
Column diameter: 0.25

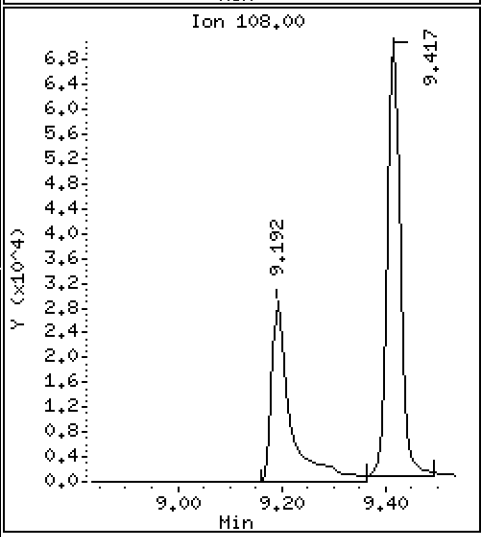
11 Benzyl alcohol

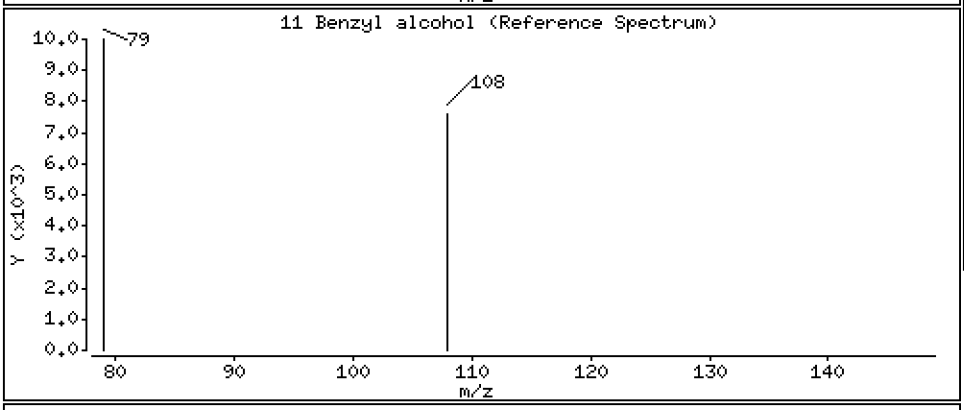
Concentration: 0.9947 ug/mL

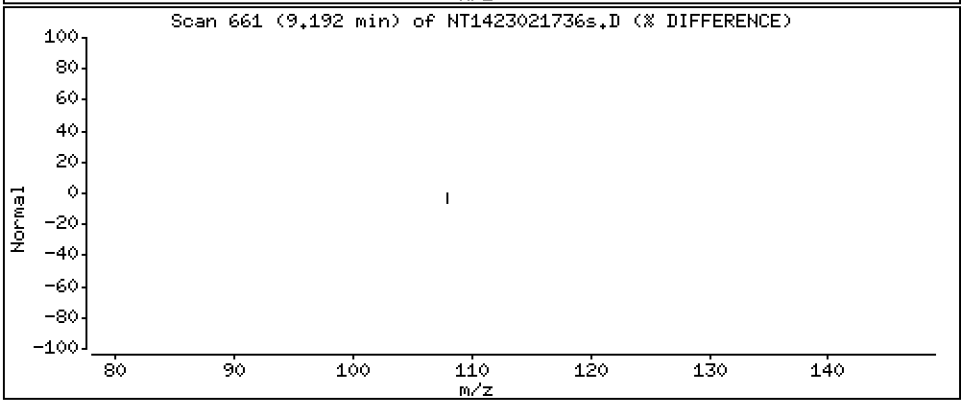












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Date : 18-FEB-2023 07:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-CCV1

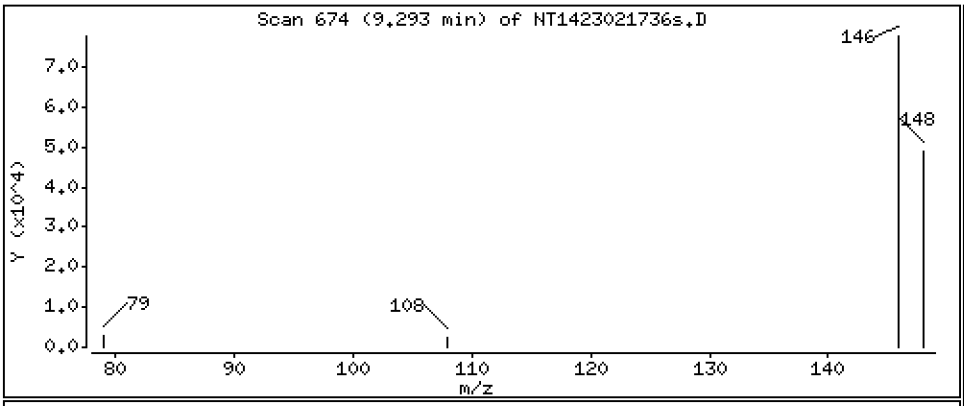
Operator: DSD

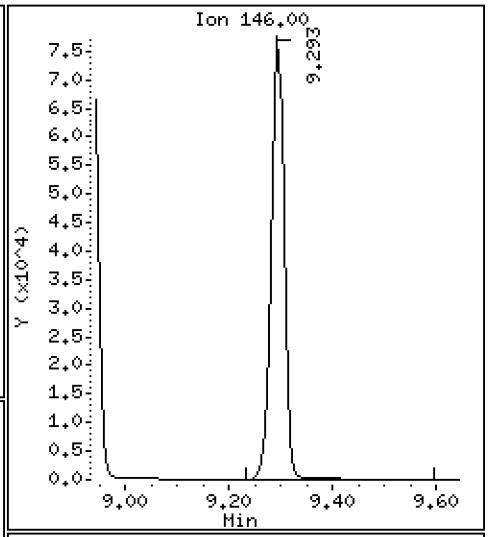
Column phase: ZB-5msi

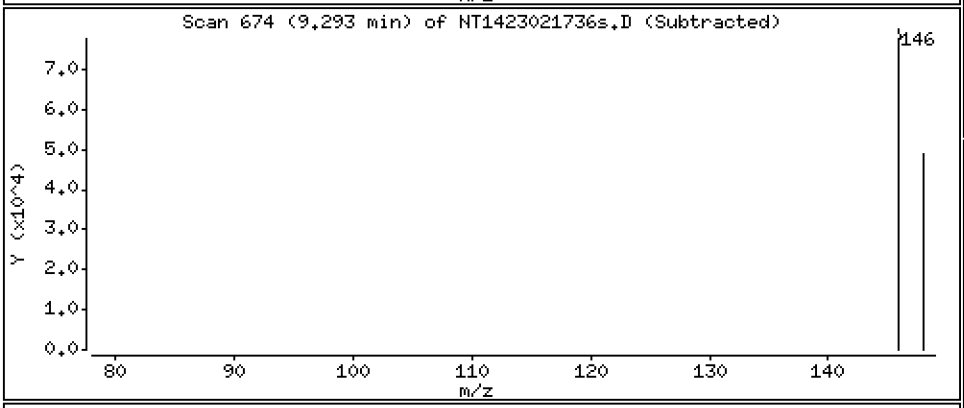
Column diameter: 0.25

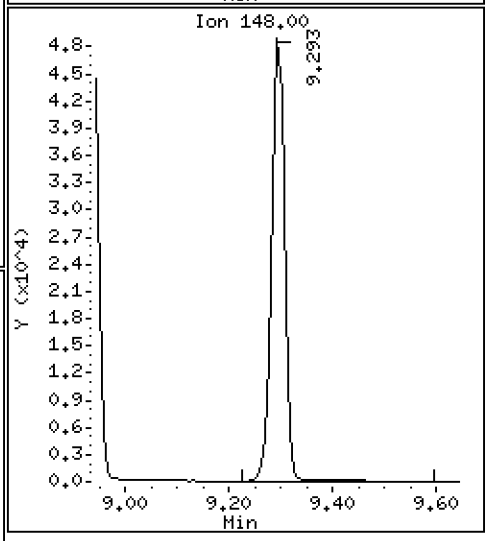
12 1,2-Dichlorobenzene

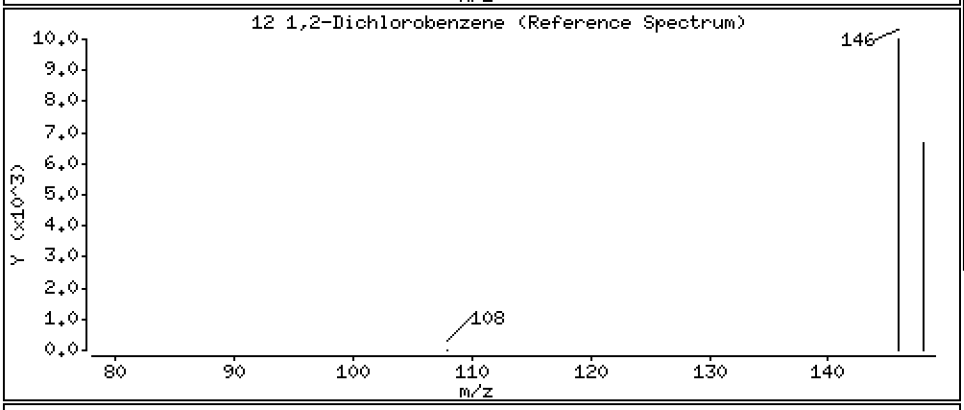
Concentration: 1.010 ug/mL

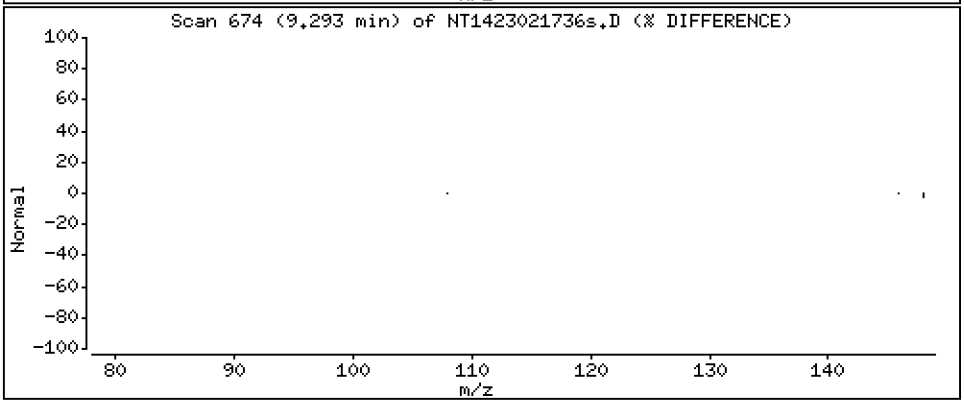












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Date : 18-FEB-2023 07:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-CCV1

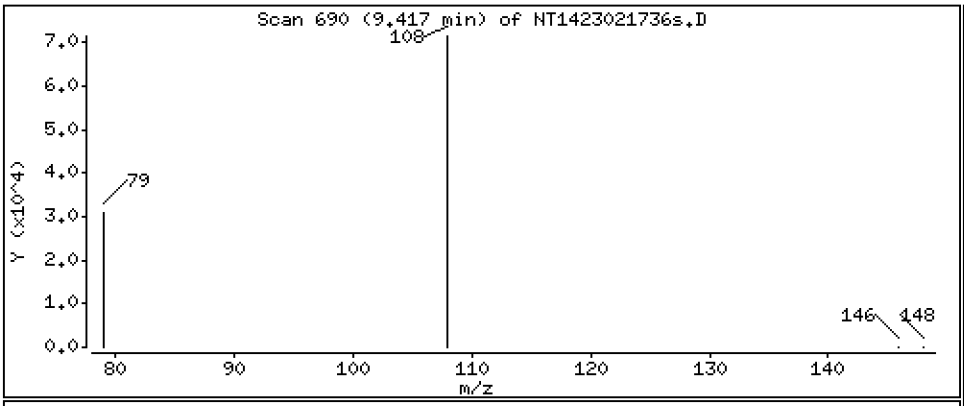
Operator: DSD

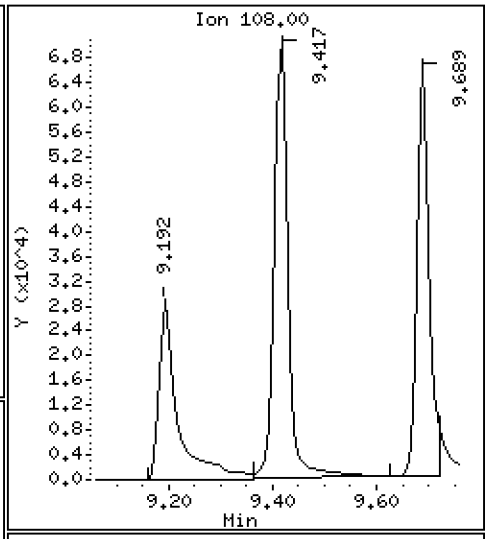
Column phase: ZB-5msi

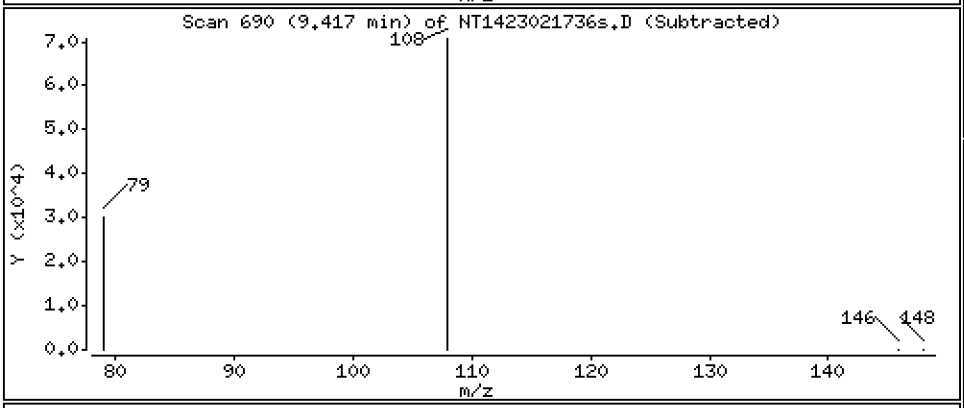
Column diameter: 0.25

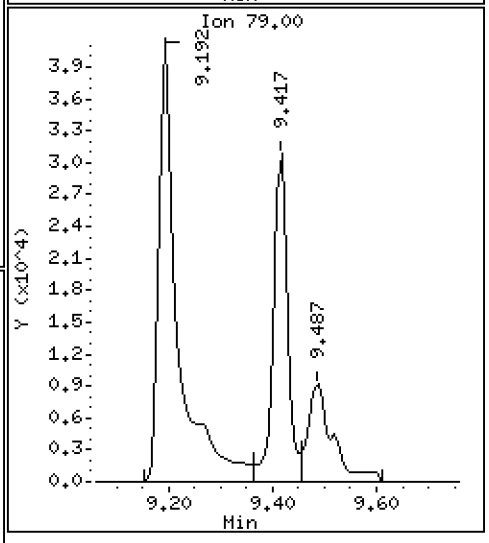
13 2-Methylphenol

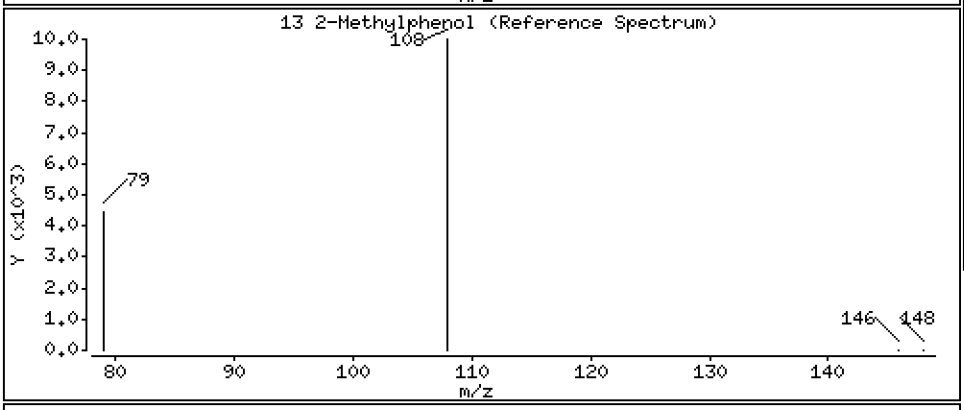
Concentration: 1.081 ug/mL

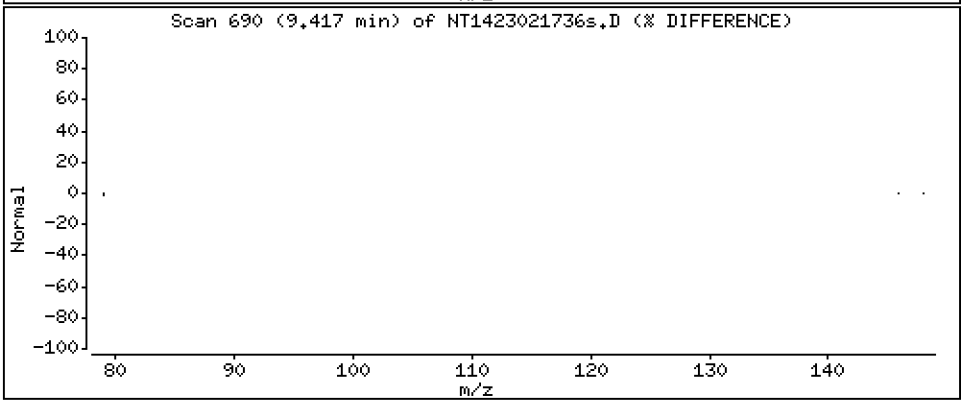












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Date : 18-FEB-2023 07:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-CCV1

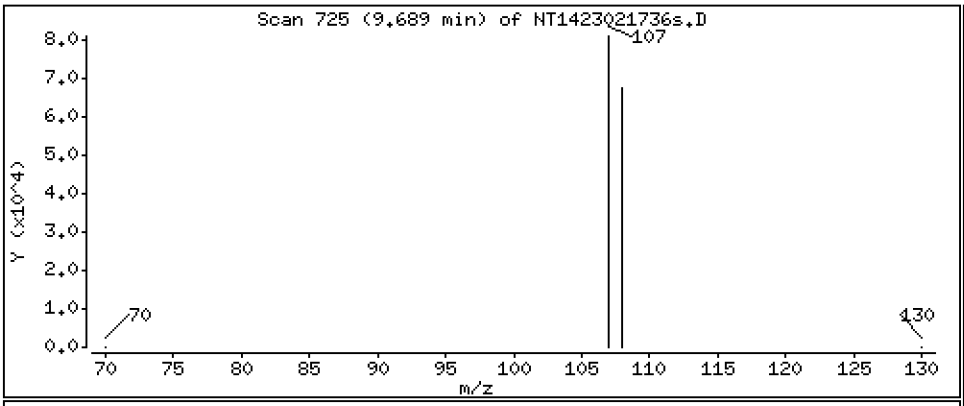
Operator: DSD

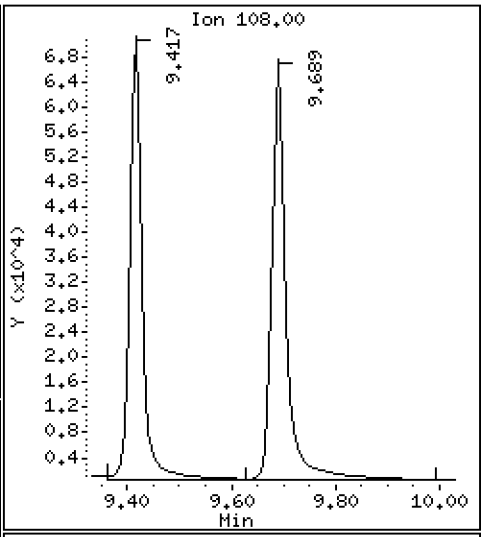
Column phase: ZB-5msi

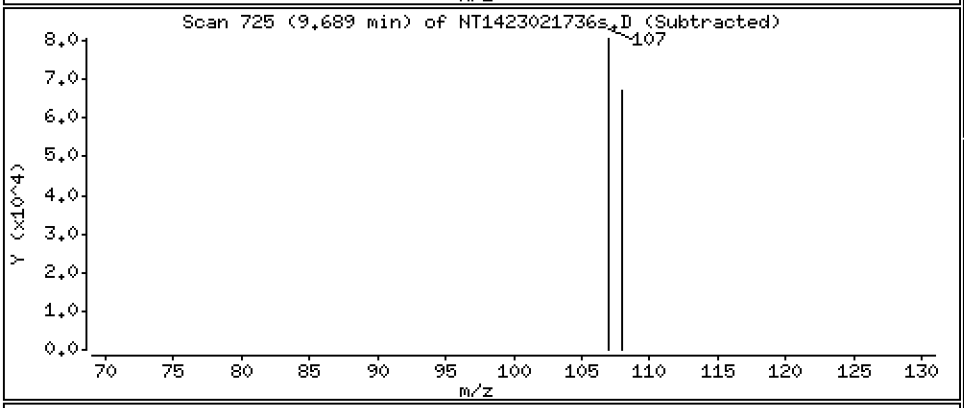
Column diameter: 0.25

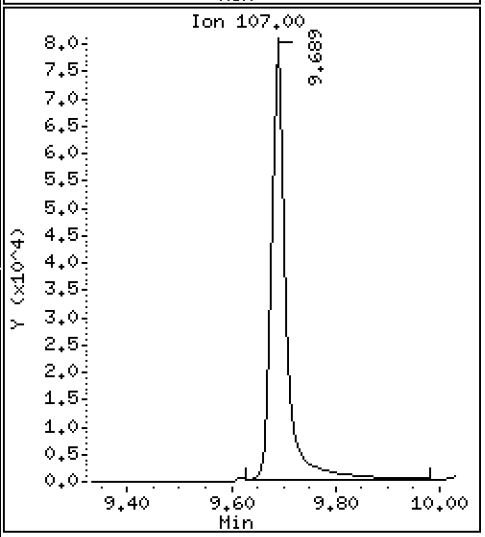
15 4-Methylphenol

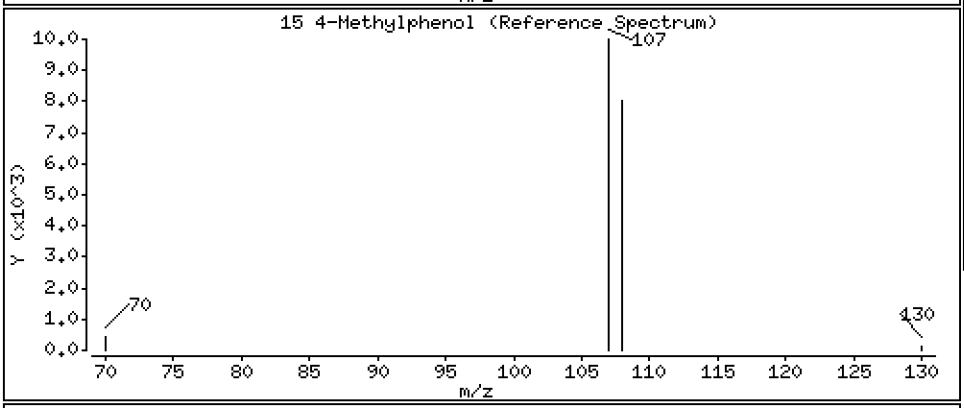
Concentration: 0.9959 ug/mL

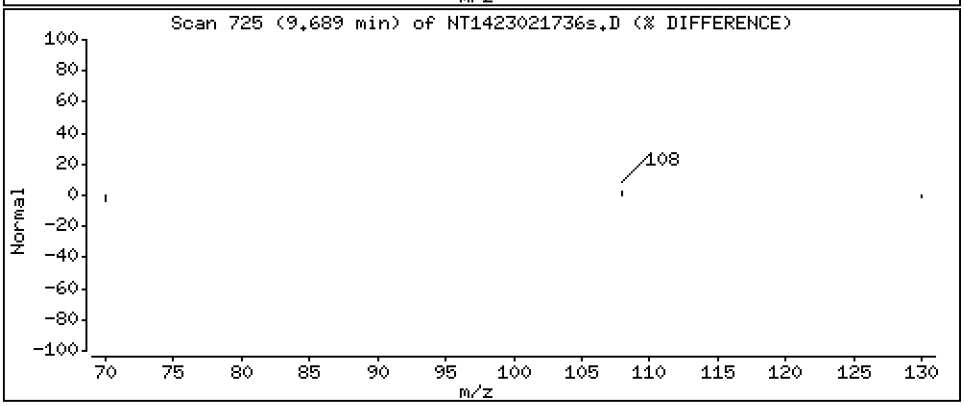












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Date : 18-FEB-2023 07:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-CCV1

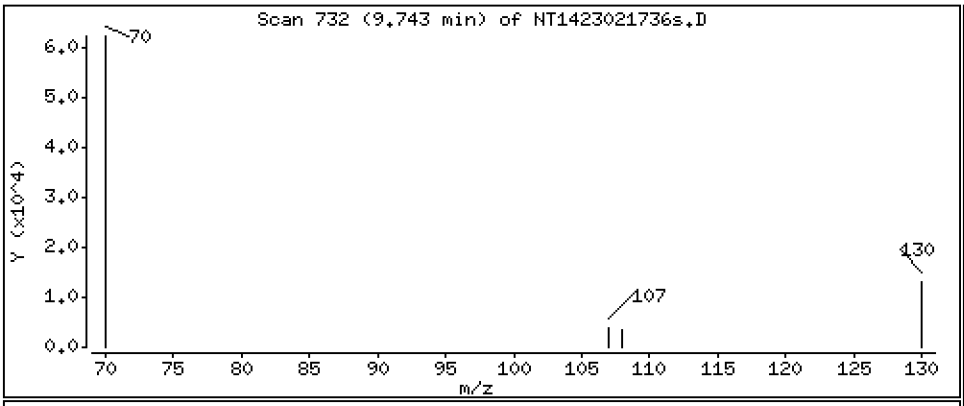
Operator: DSD

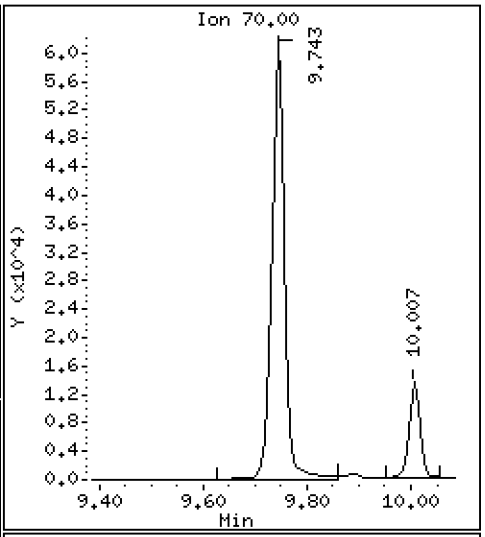
Column phase: ZB-5msi

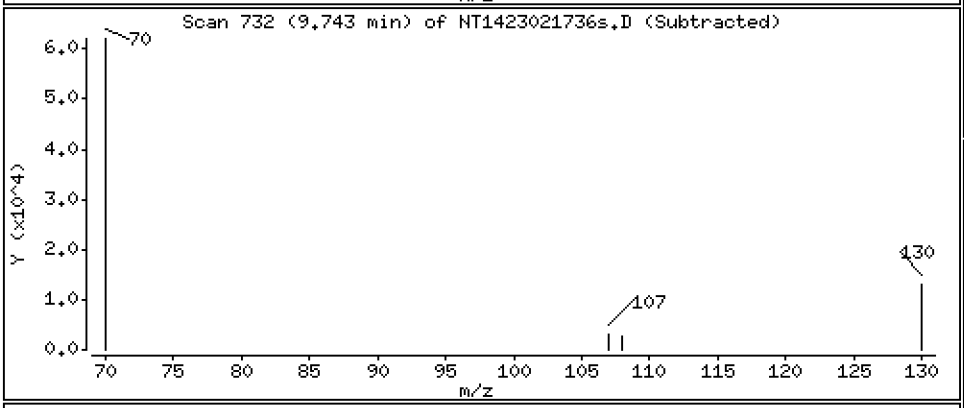
Column diameter: 0.25

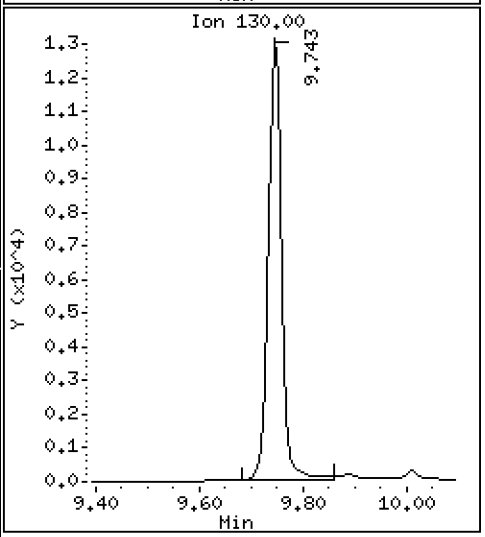
16 N-Nitroso-di-n-propylamine

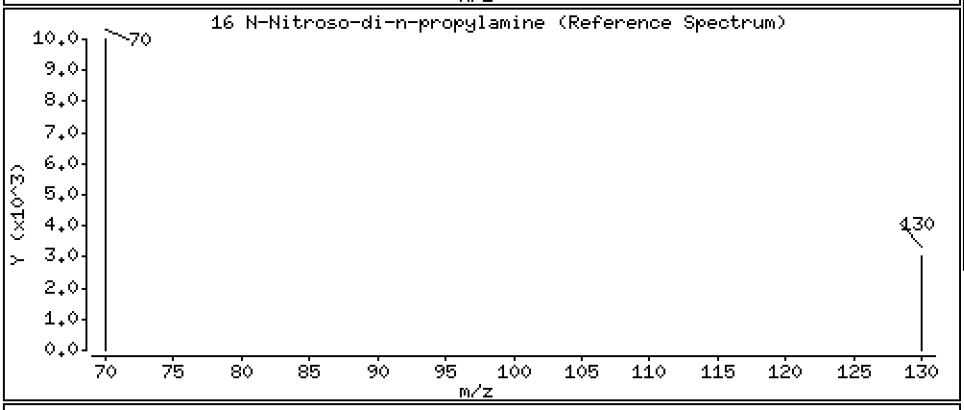
Concentration: 1.044 ug/mL

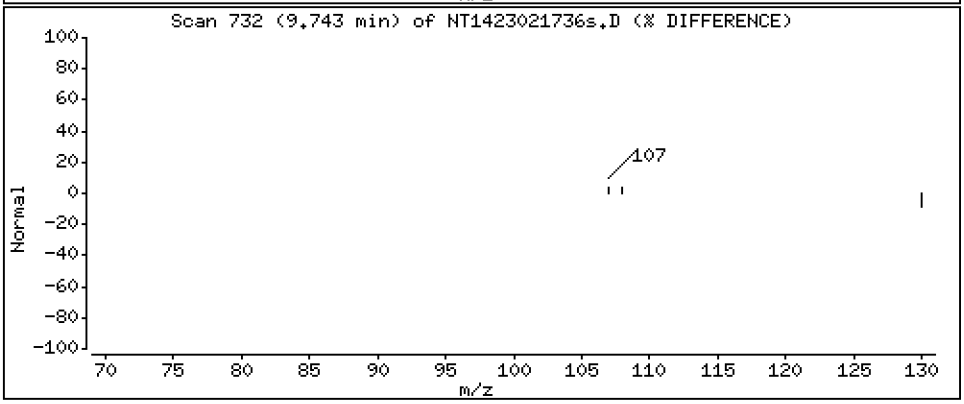












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Date : 18-FEB-2023 07:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-CCV1

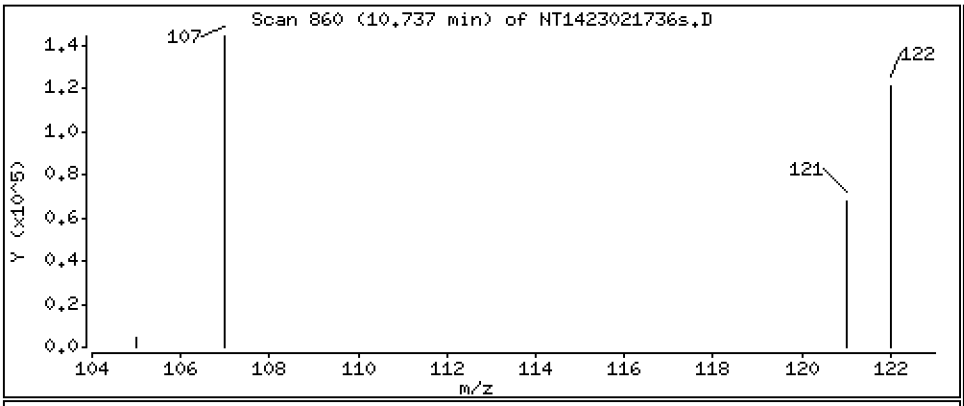
Operator: DSD

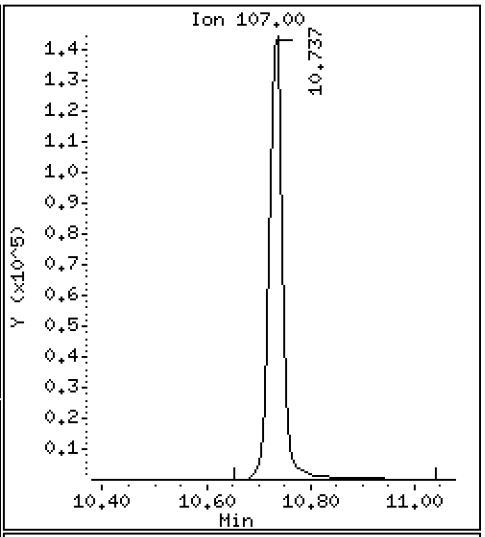
Column phase: ZB-5msi

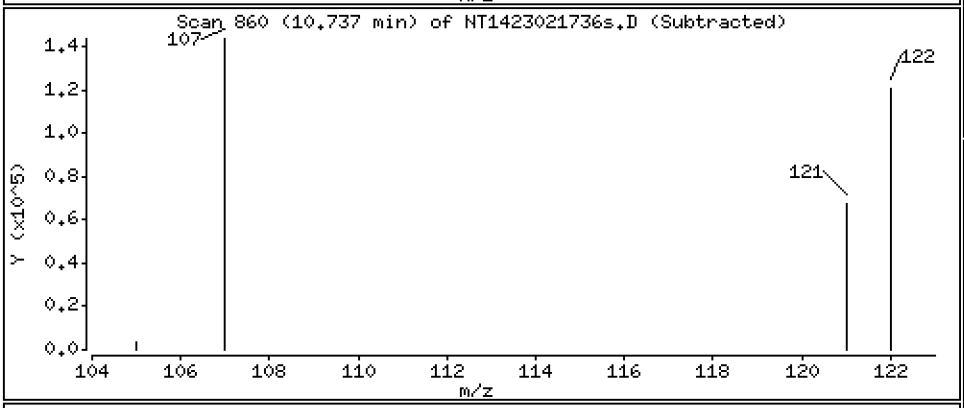
Column diameter: 0.25

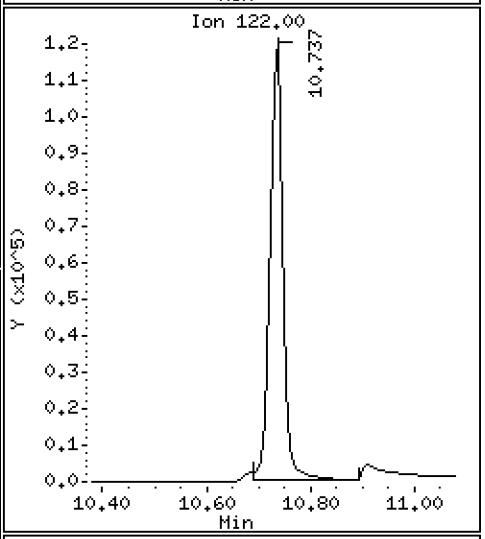
22 2,4-Dimethylphenol

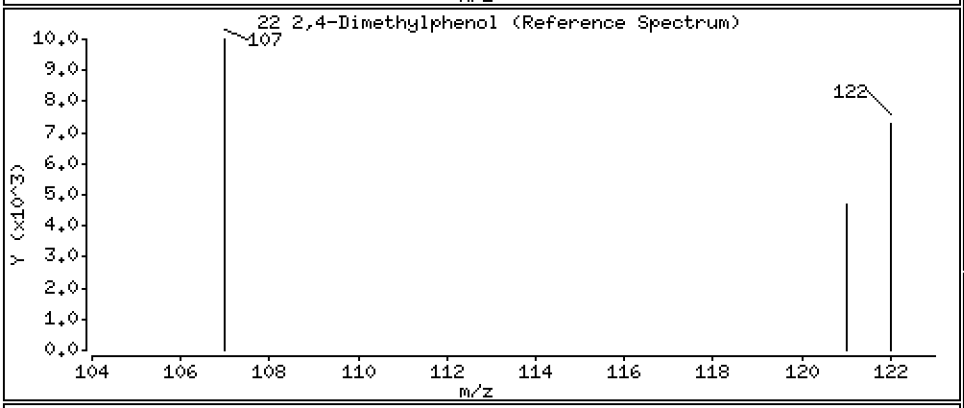
Concentration: 2.041 ug/mL

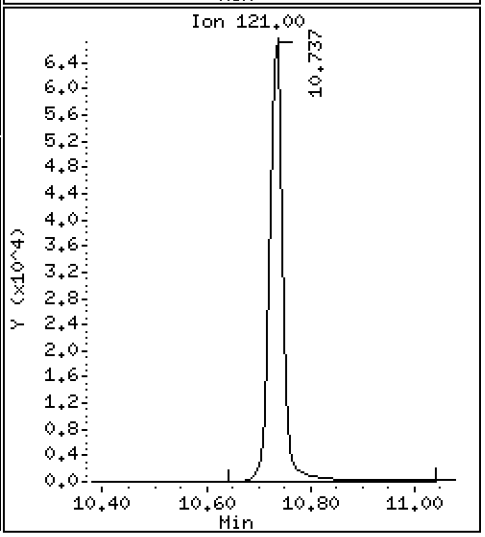


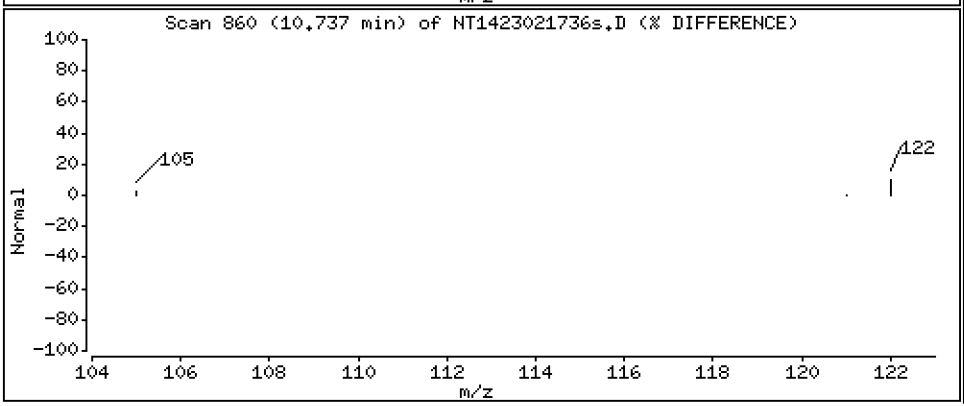












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Date : 18-FEB-2023 07:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-CCV1

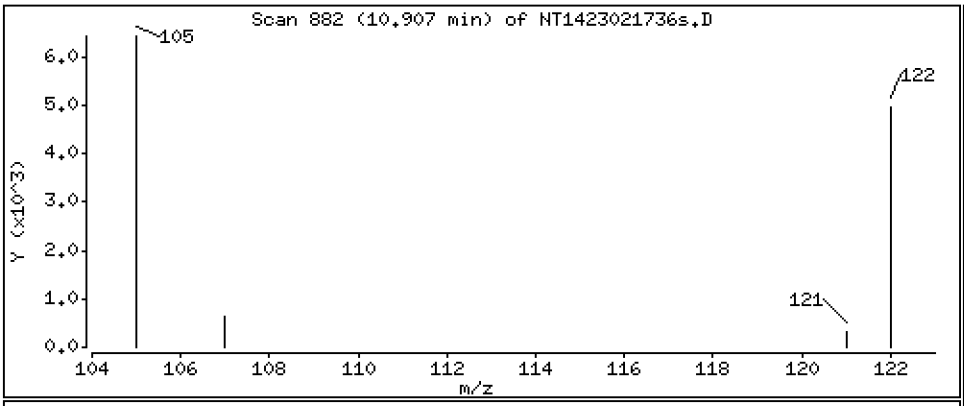
Operator: DSD

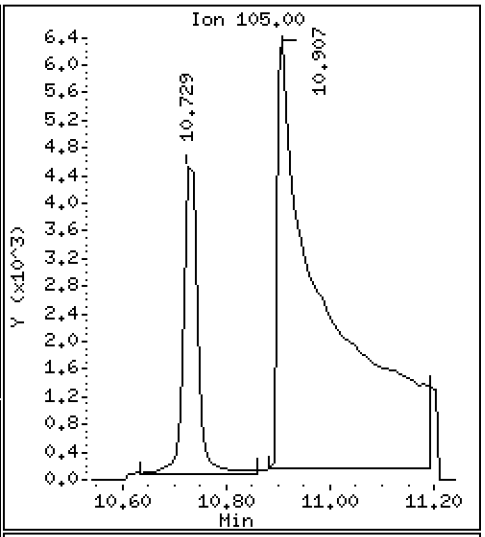
Column phase: ZB-5msi

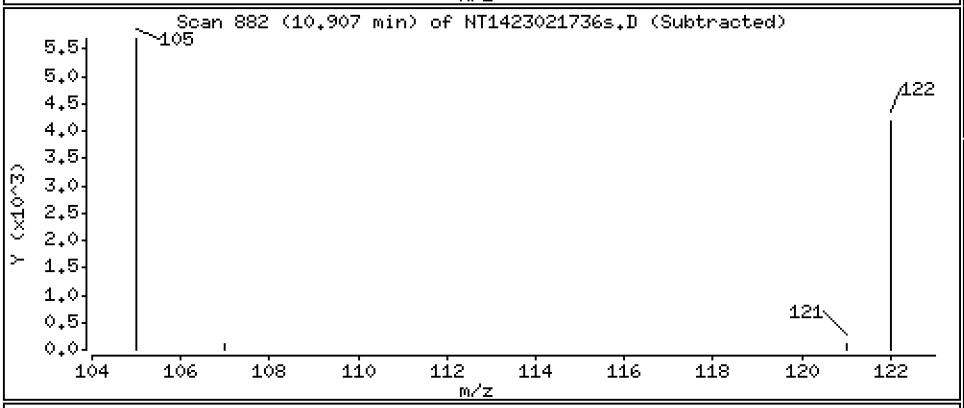
Column diameter: 0.25

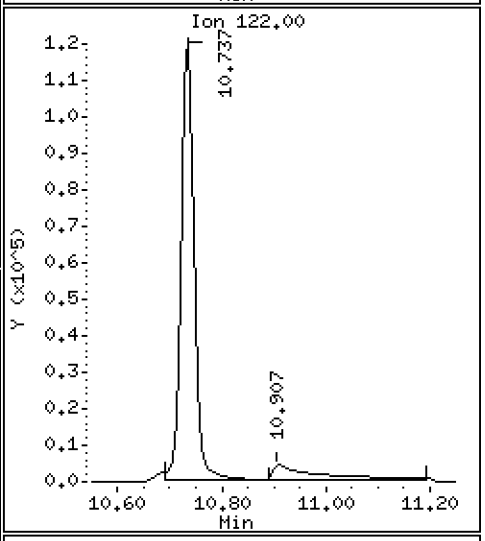
24 Benzoic acid

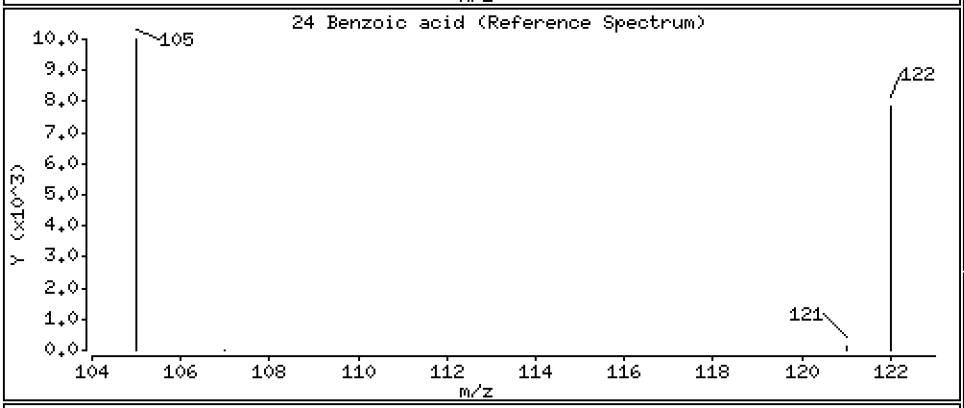
Concentration: 0.6274 ug/mL

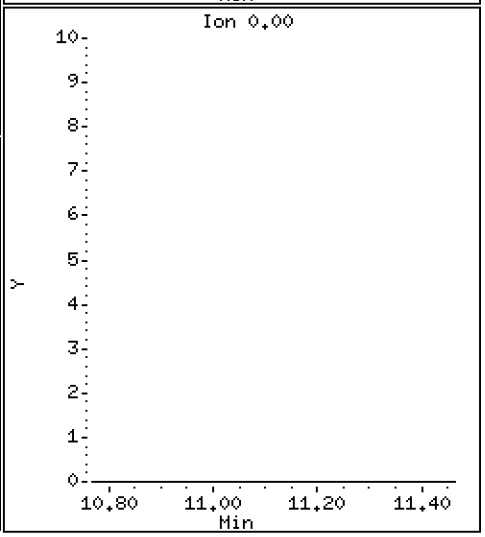


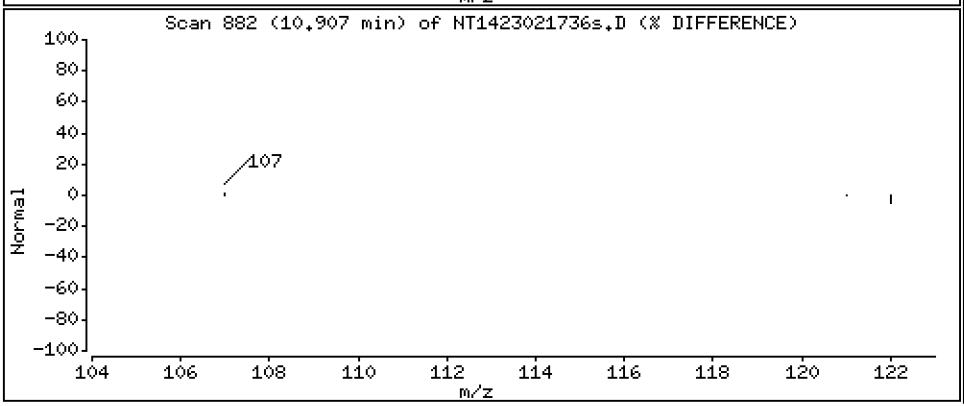












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Date : 18-FEB-2023 07:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-CCV1

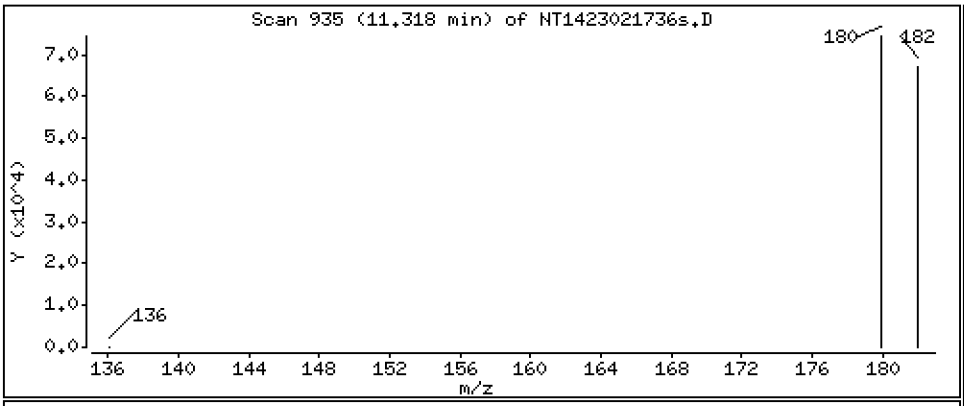
Operator: DSD

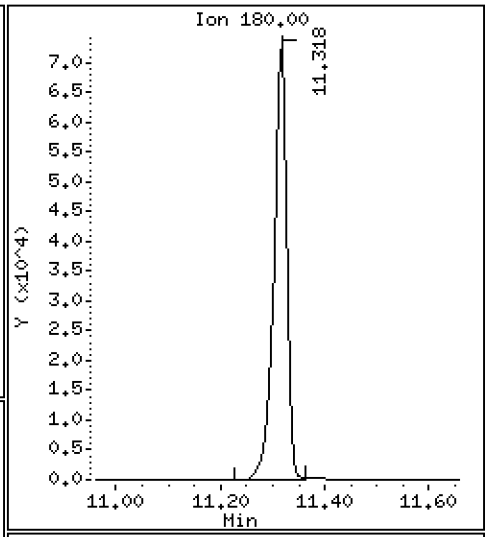
Column phase: ZB-5msi

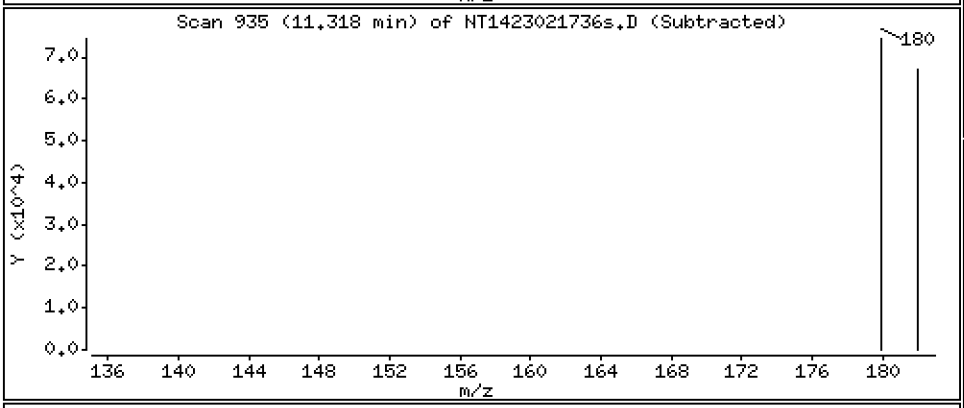
Column diameter: 0.25

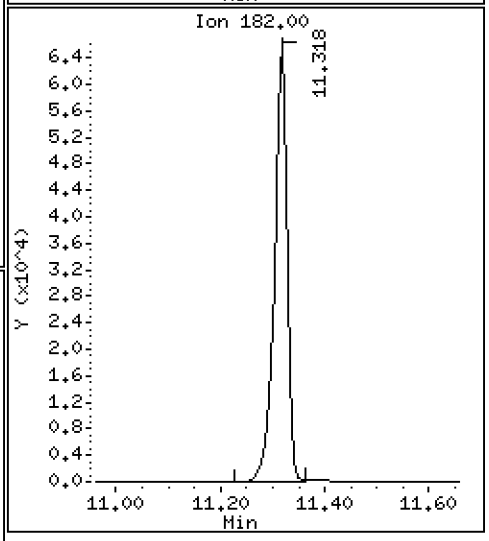
26 1,2,4-Trichlorobenzene

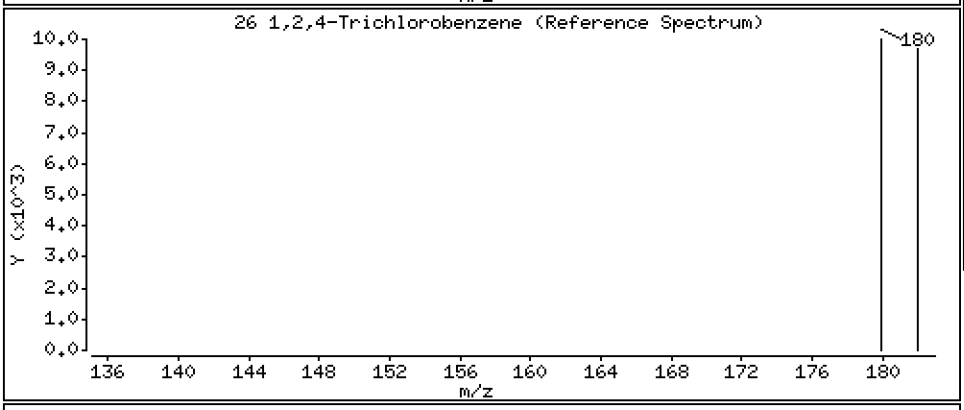
Concentration: 0.9959 ug/mL

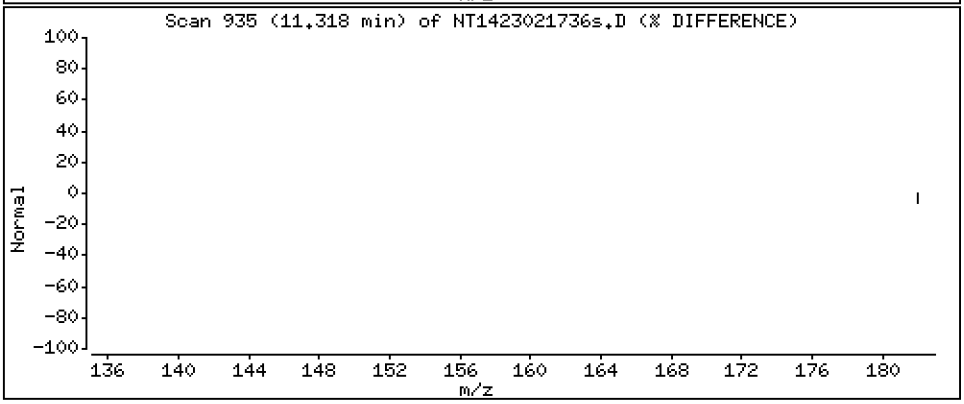












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Date : 18-FEB-2023 07:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-CCV1

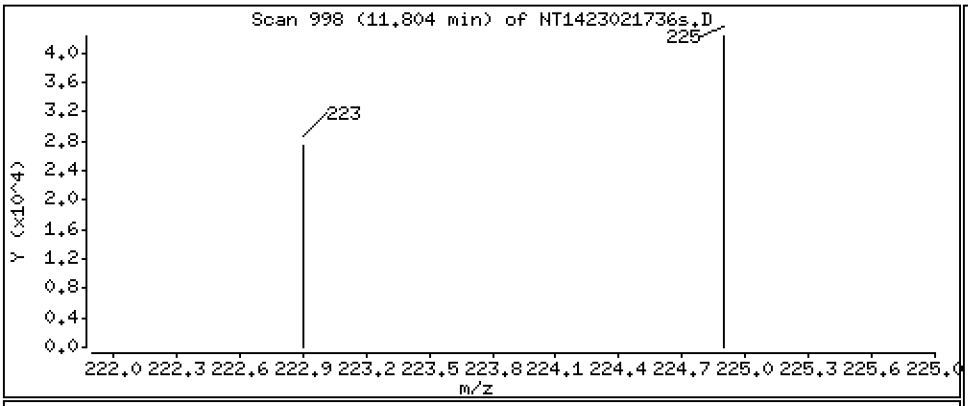
Operator: DSD

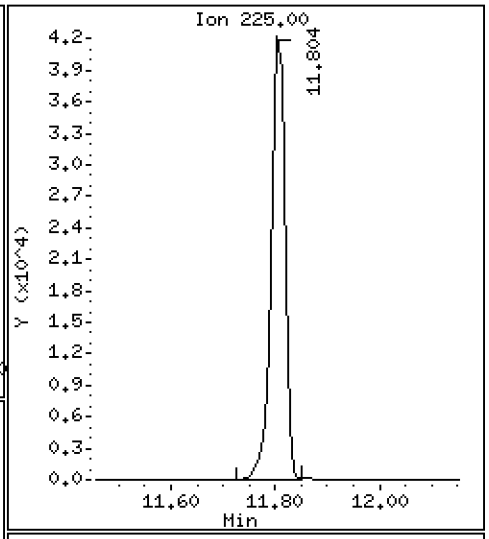
Column phase: ZB-5msi

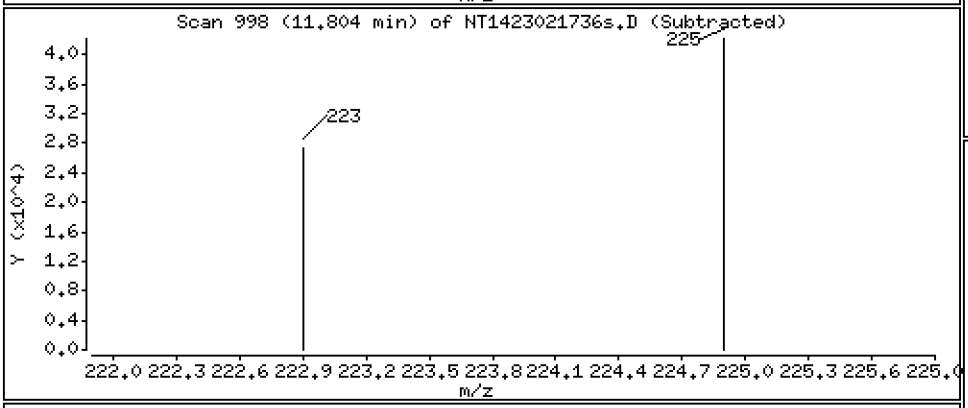
Column diameter: 0.25

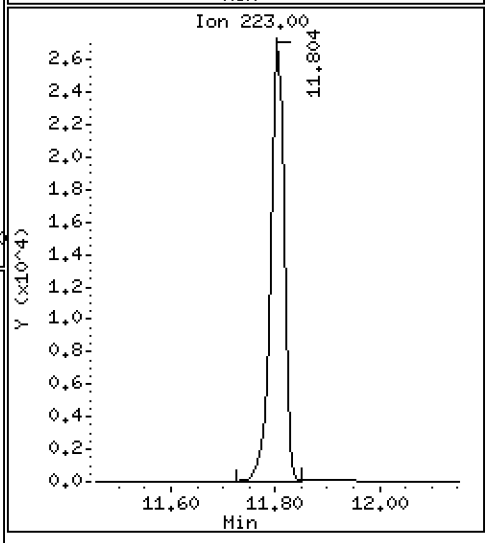
30 Hexachlorobutadiene

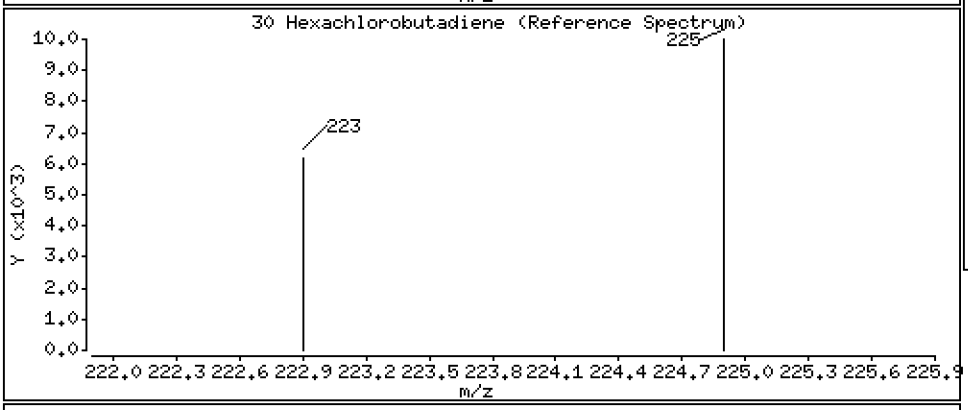
Concentration: 0.9517 ug/mL

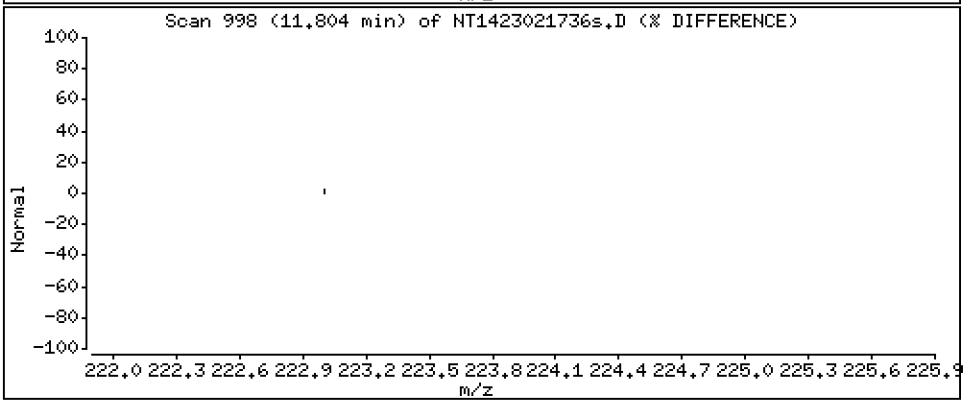












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021736s.D

Date : 18-FEB-2023 07:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-CCV1

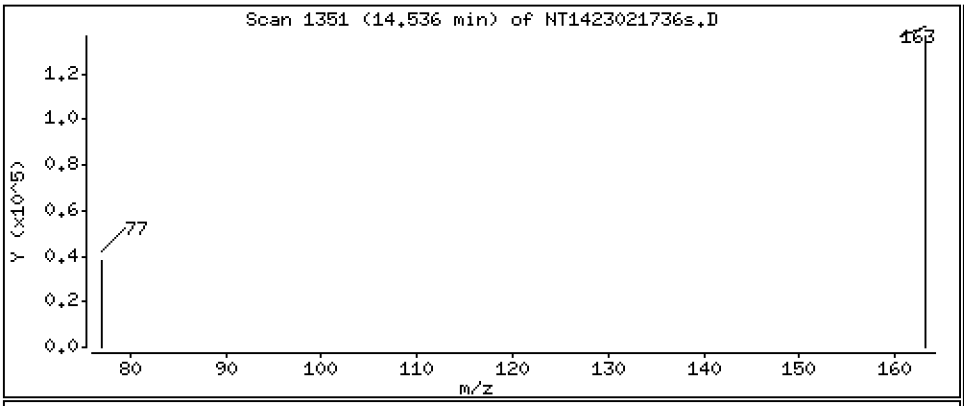
Operator: DSD

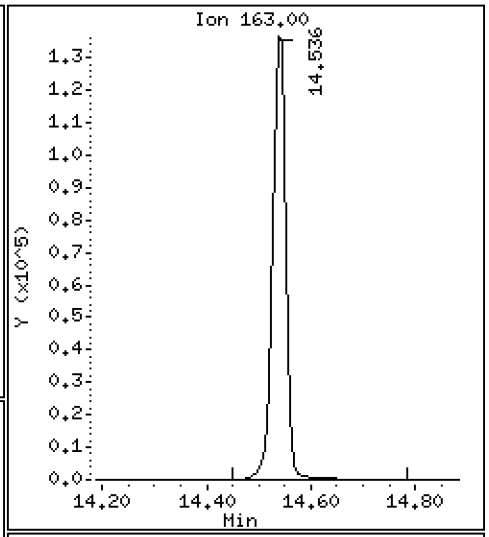
Column phase: ZB-5msi

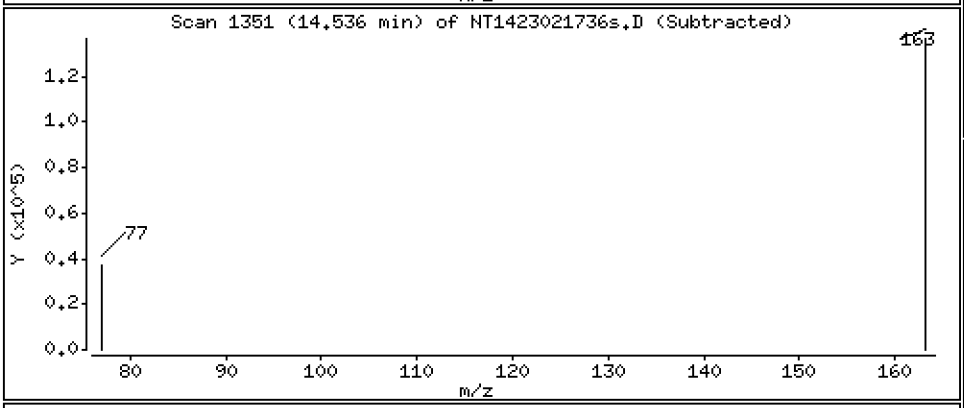
Column diameter: 0.25

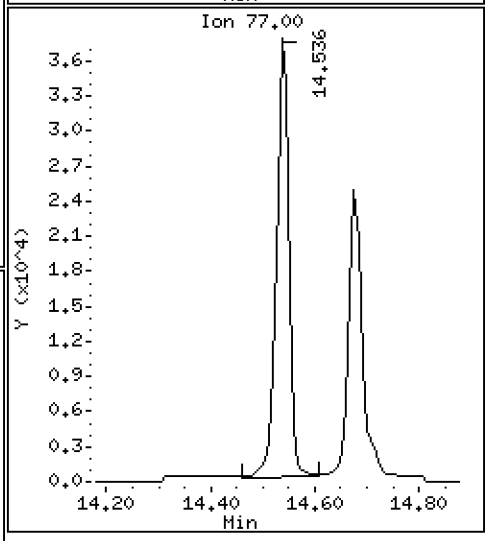
39 Dimethylphthalate

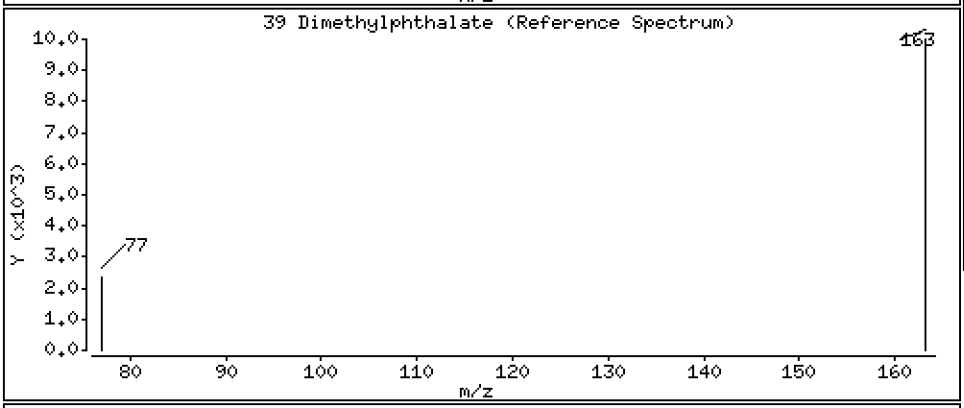
Concentration: 1.066 ug/mL

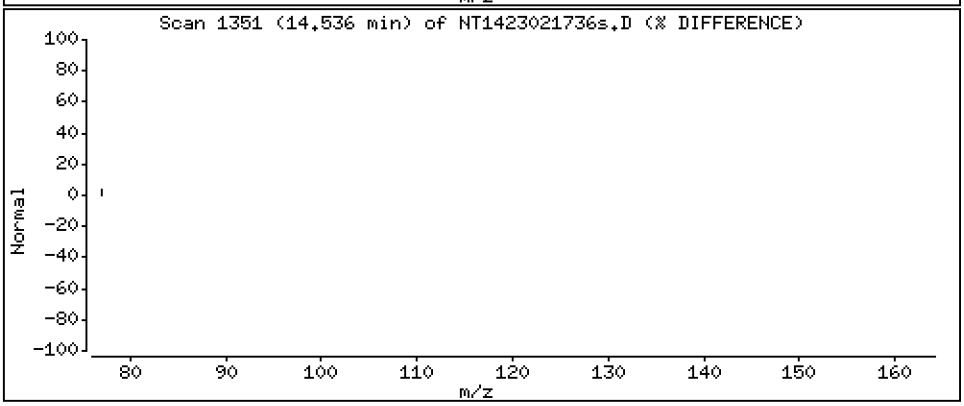












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021736s.D

Date : 18-FEB-2023 07:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-CCV1

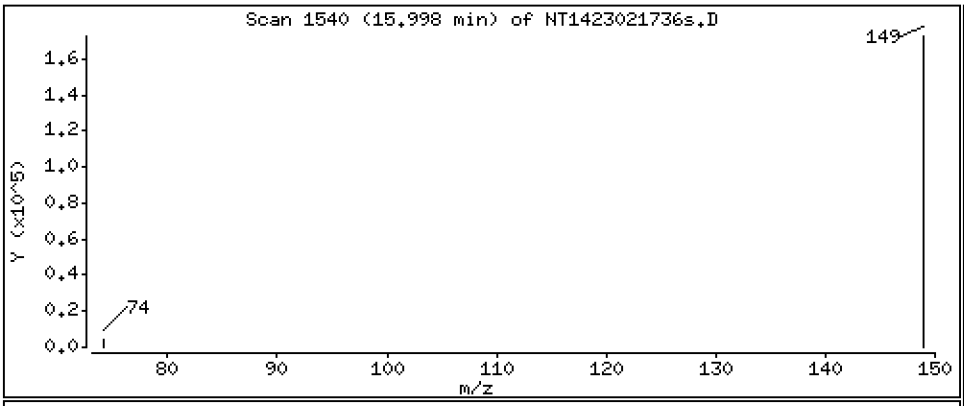
Operator: DSD

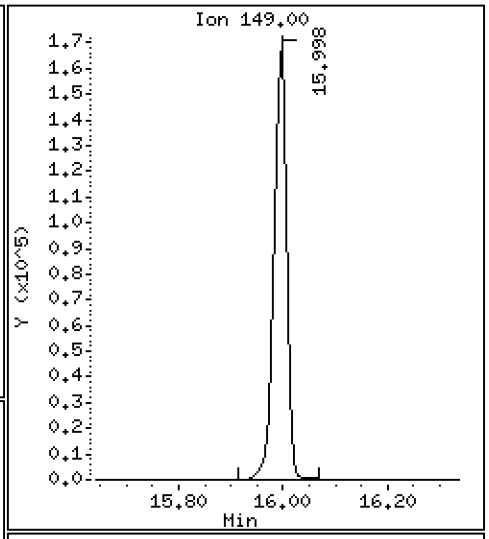
Column phase: ZB-5msi

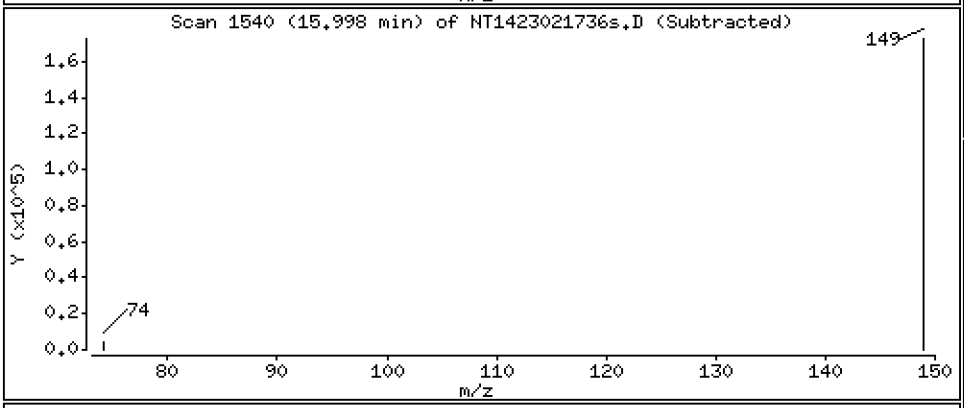
Column diameter: 0.25

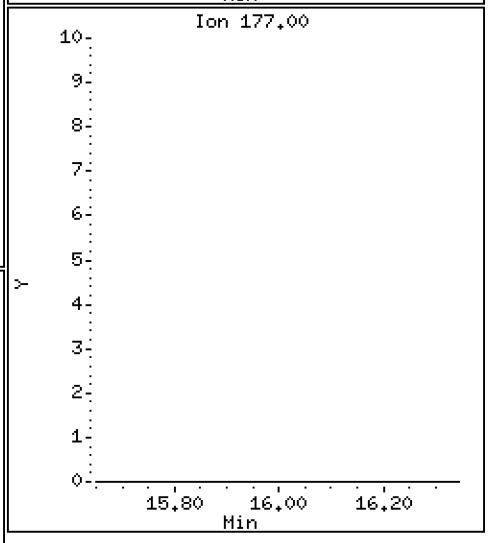
50 Diethylphthalate

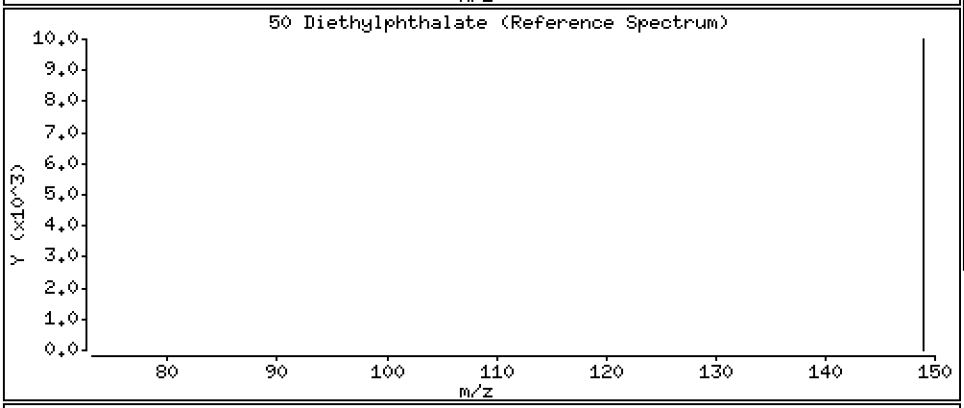
Concentration: 1.013 ug/mL

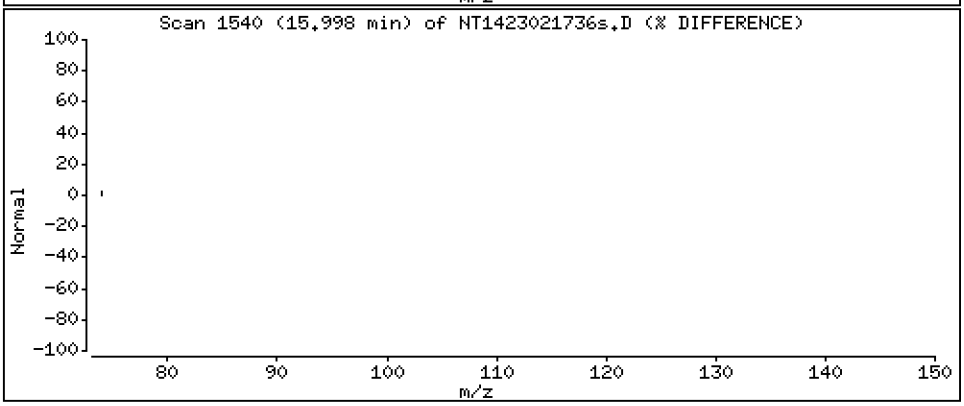












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Date : 18-FEB-2023 07:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-CCV1

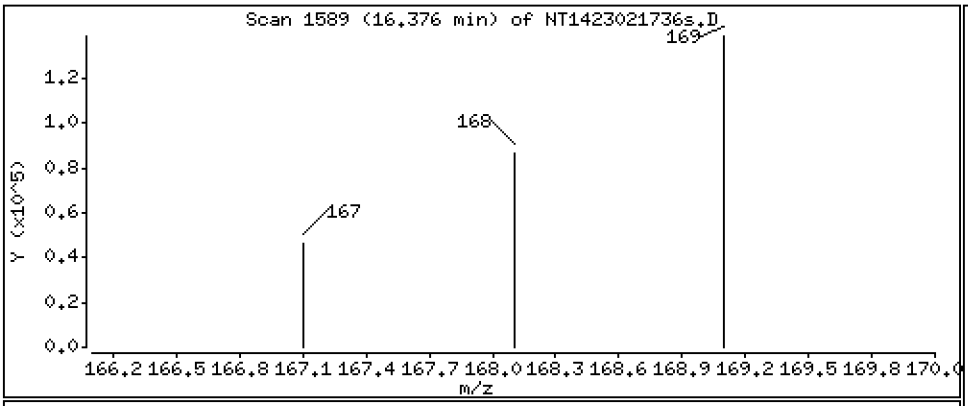
Operator: DSD

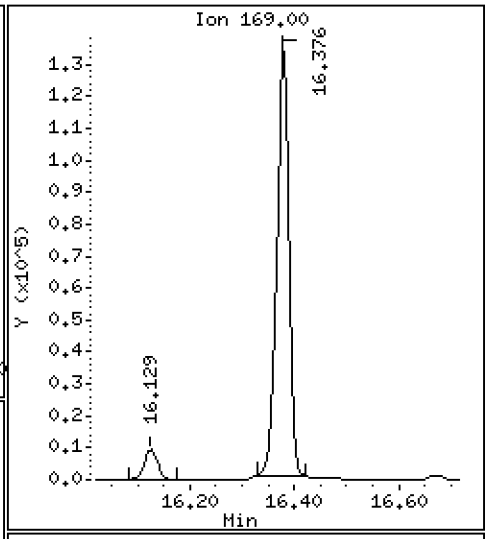
Column phase: ZB-5msi

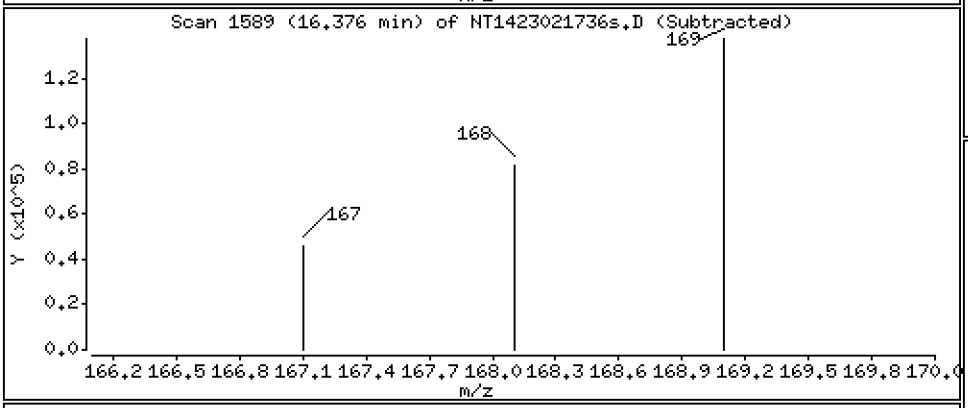
Column diameter: 0.25

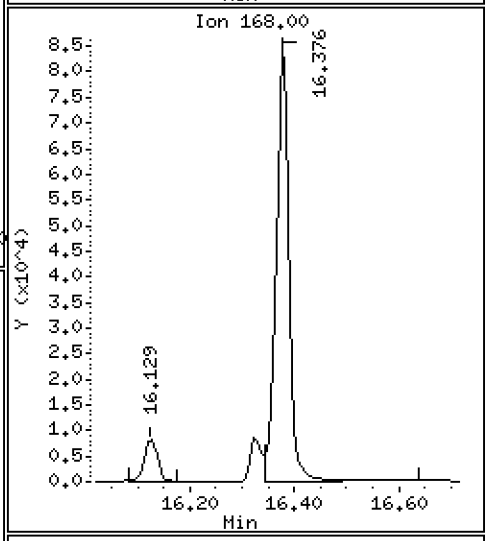
54 N-Nitrosodiphenylamine

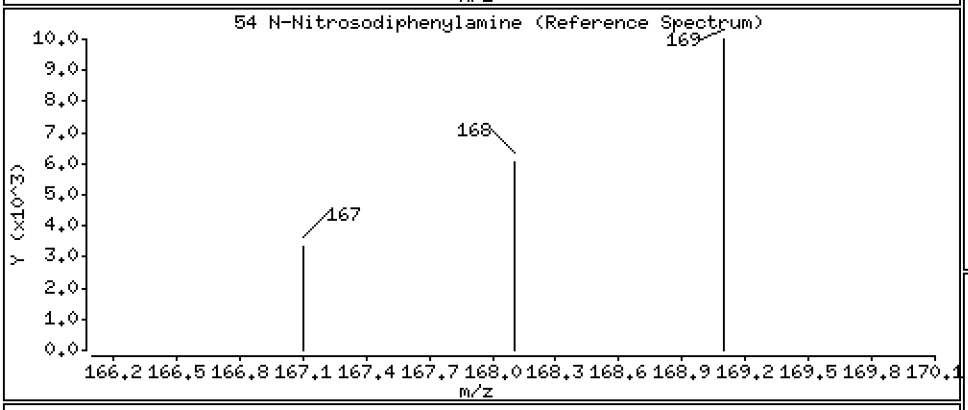
Concentration: 1.149 ug/mL

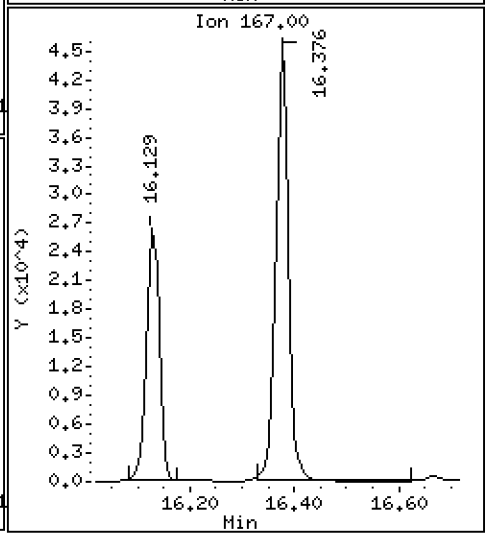


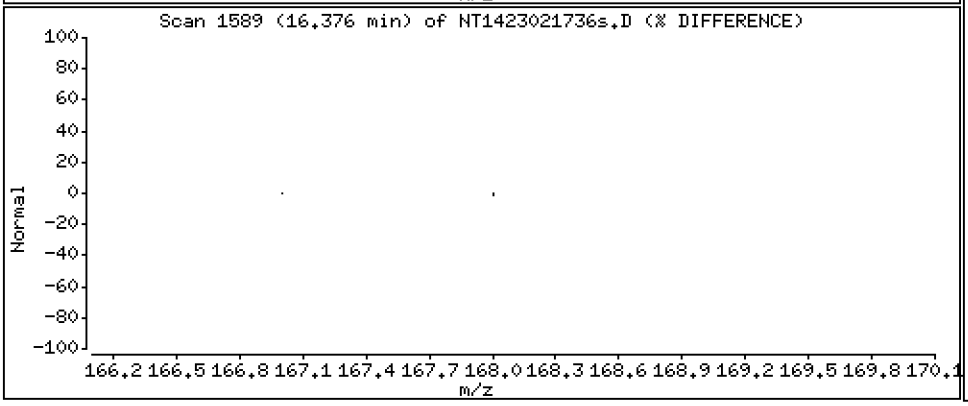












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Date : 18-FEB-2023 07:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-CCV1

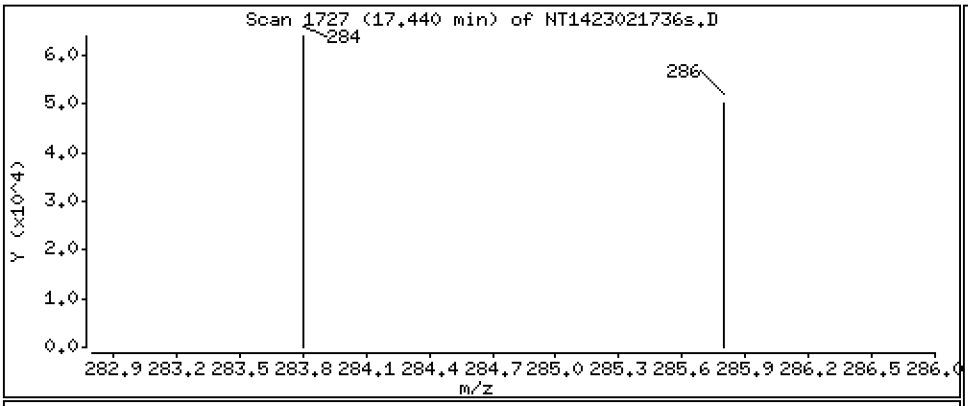
Operator: DSD

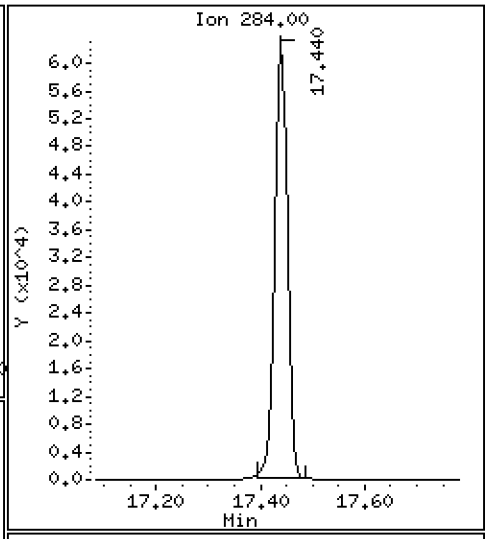
Column phase: ZB-5msi

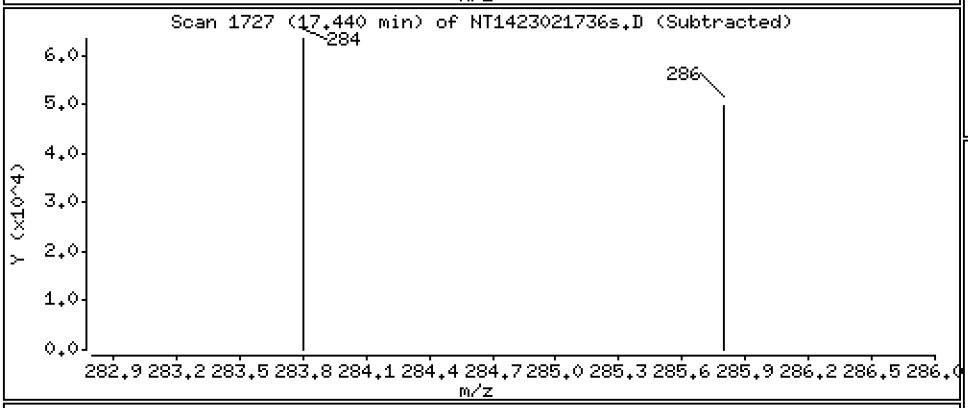
Column diameter: 0.25

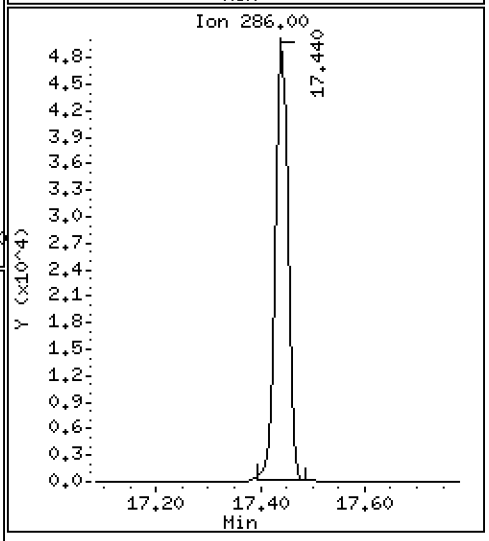
57 Hexachlorobenzene

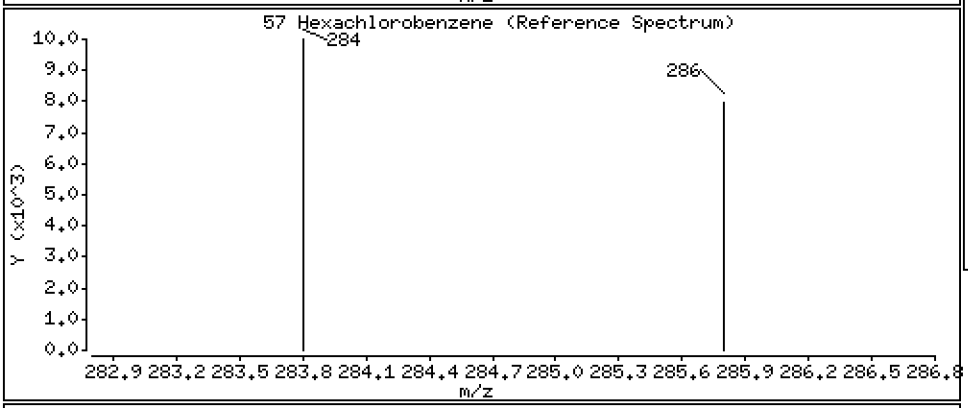
Concentration: 1.045 ug/mL

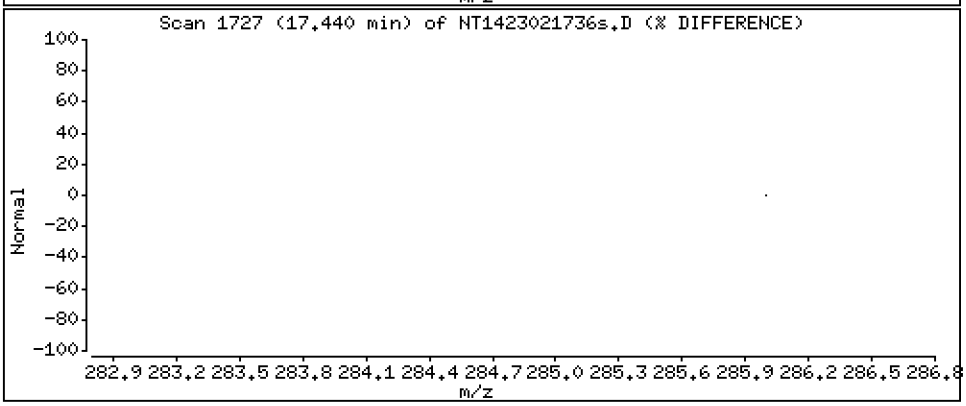












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021736s.D

Date : 18-FEB-2023 07:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-CCV1

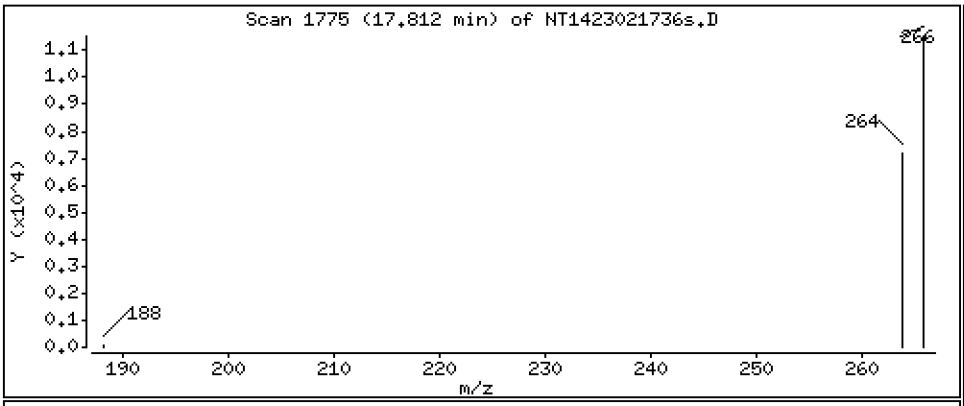
Operator: DSD

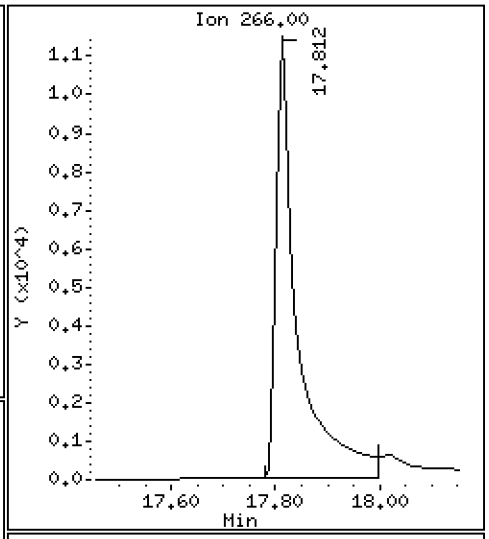
Column phase: ZB-5msi

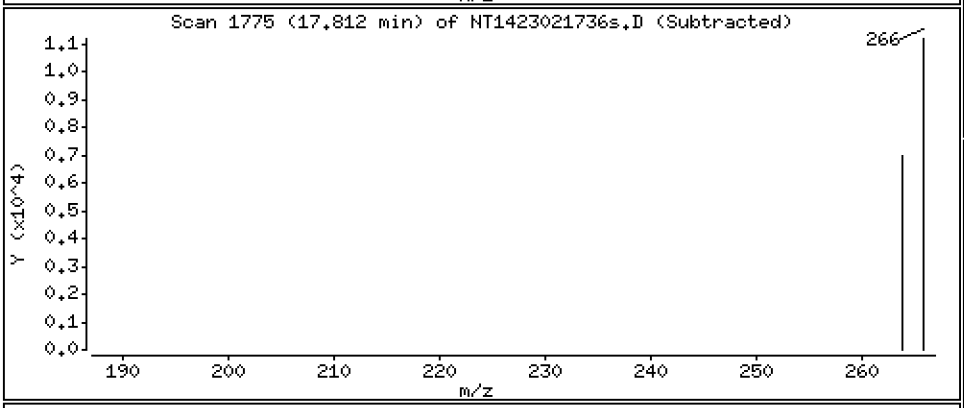
Column diameter: 0.25

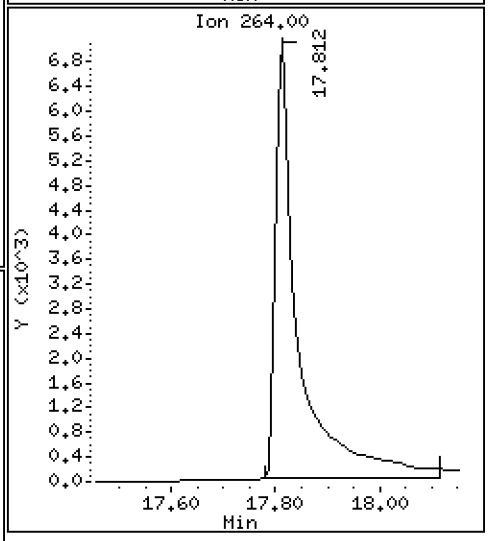
58 Pentachlorophenol

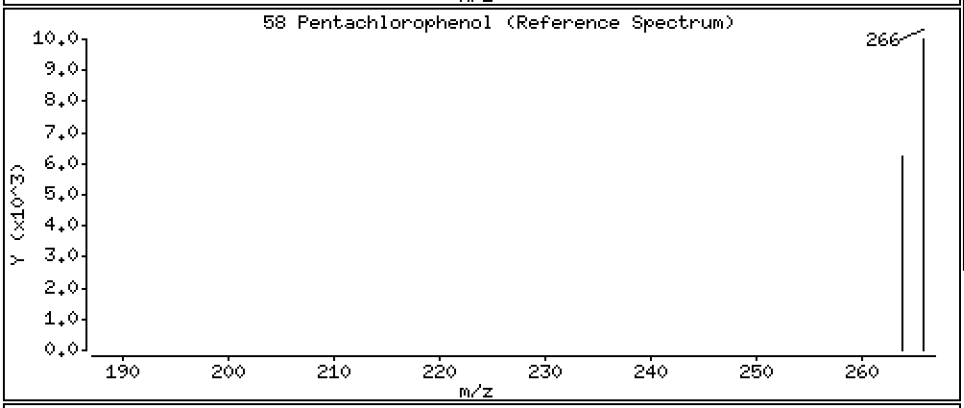
Concentration: 0.8194 ug/mL

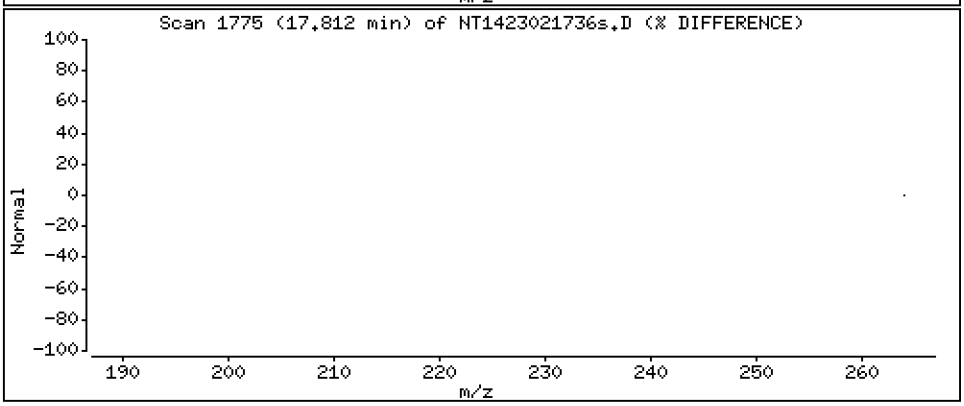












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Date : 18-FEB-2023 07:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-CCV1

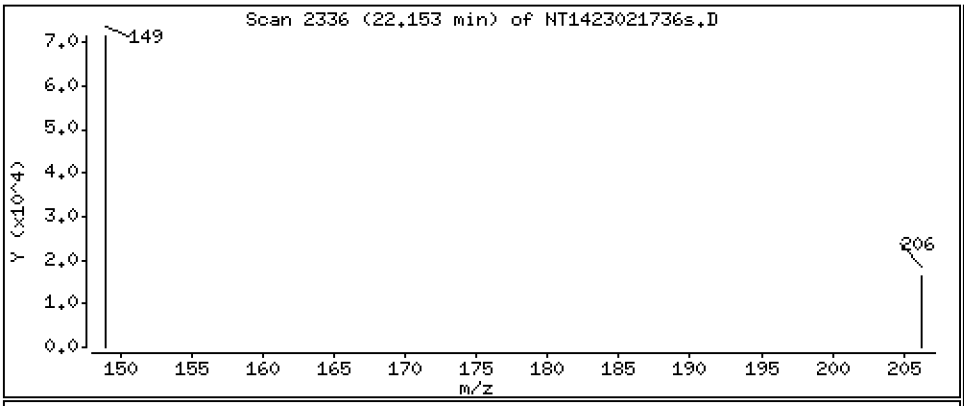
Operator: DSD

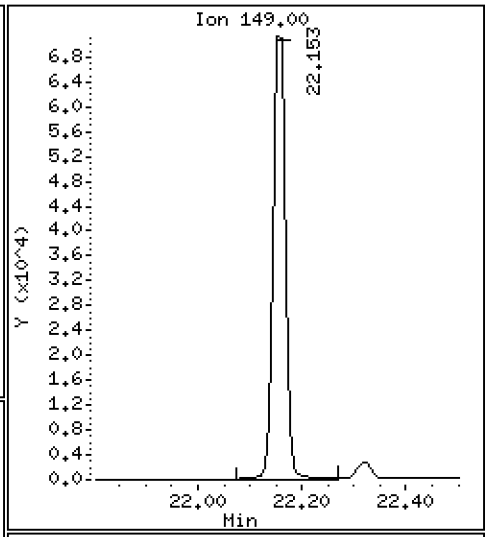
Column phase: ZB-5msi

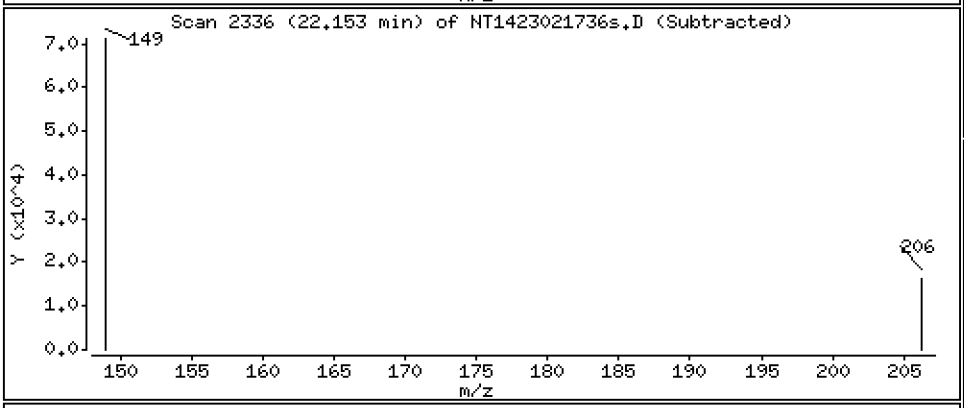
Column diameter: 0.25

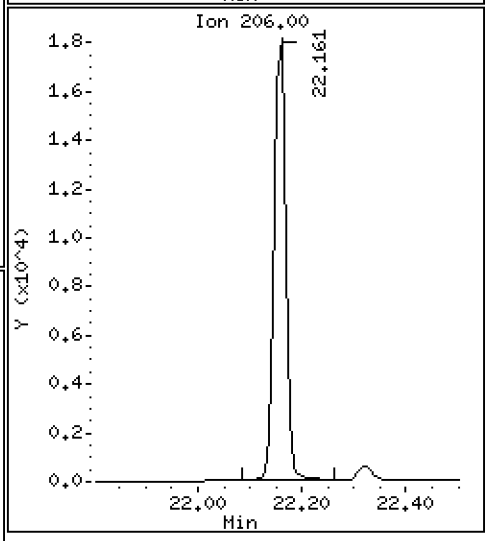
67 Butylbenzylphthalate

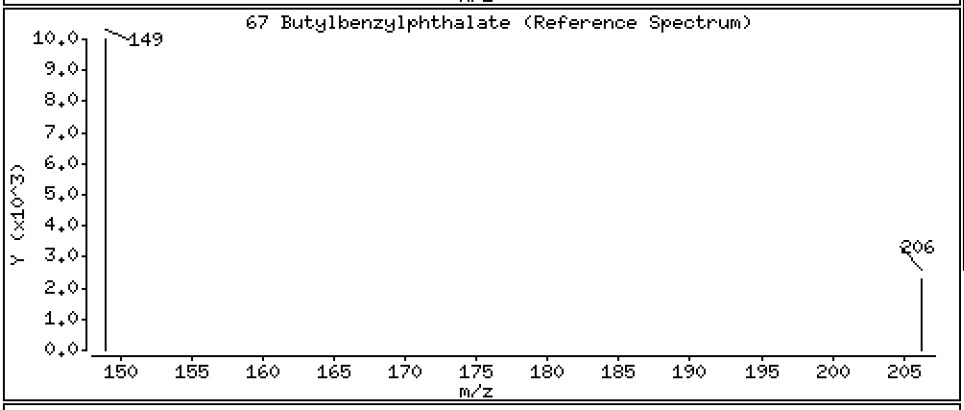
Concentration: 1.318 ug/mL

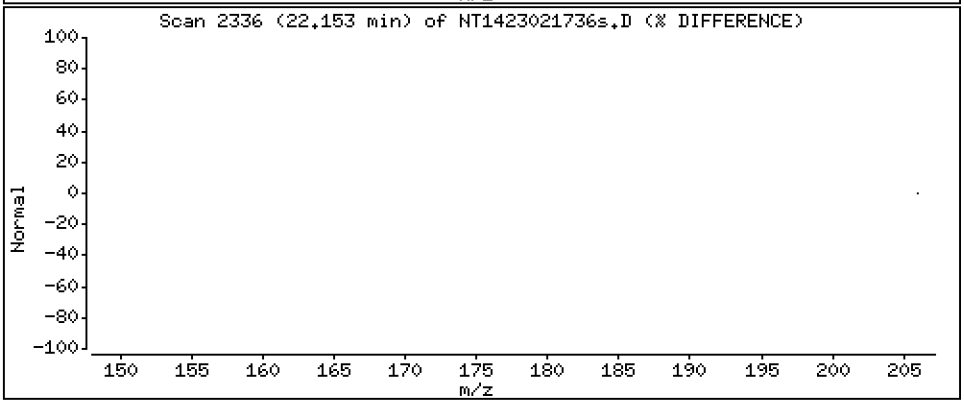












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Date : 18-FEB-2023 07:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-CCV1

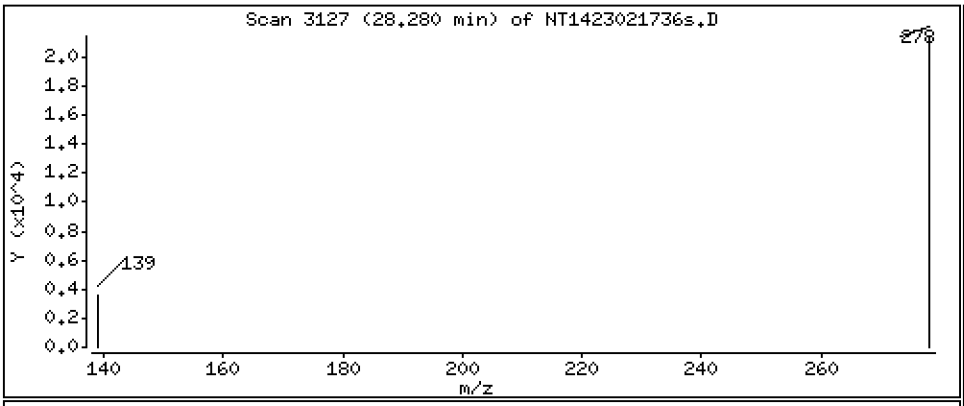
Operator: DSD

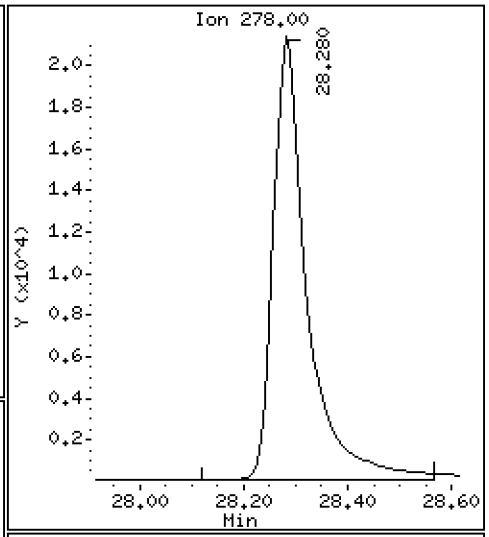
Column phase: ZB-5msi

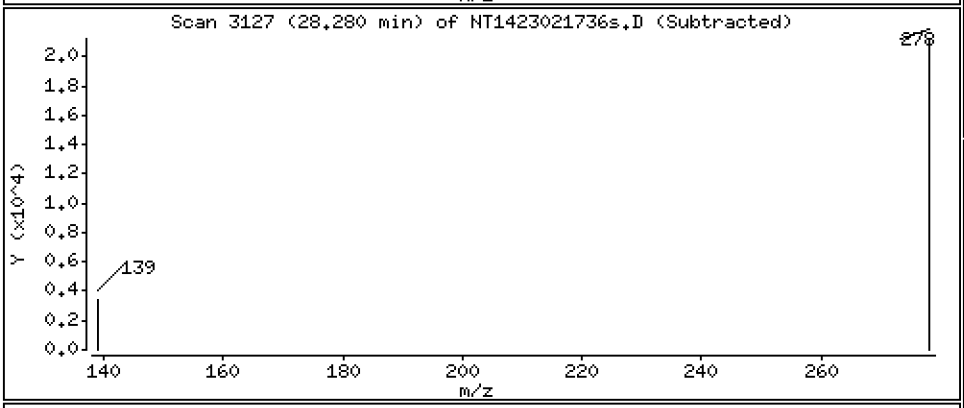
Column diameter: 0.25

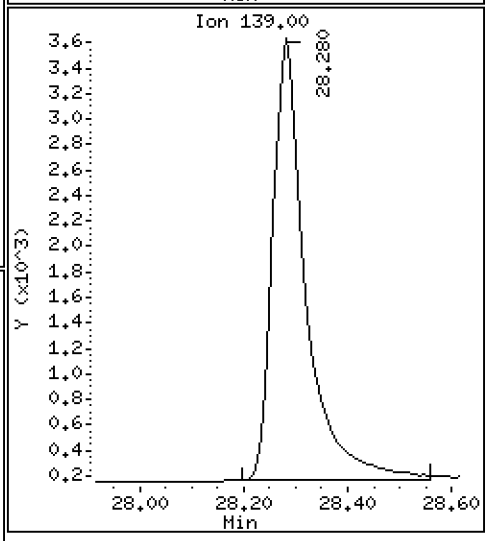
79 Dibenzo(a,h)anthracene

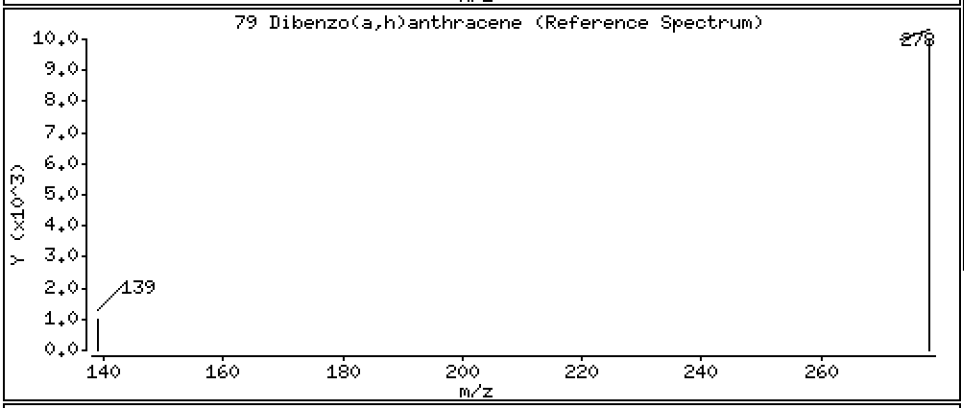
Concentration: 0.9404 ug/mL

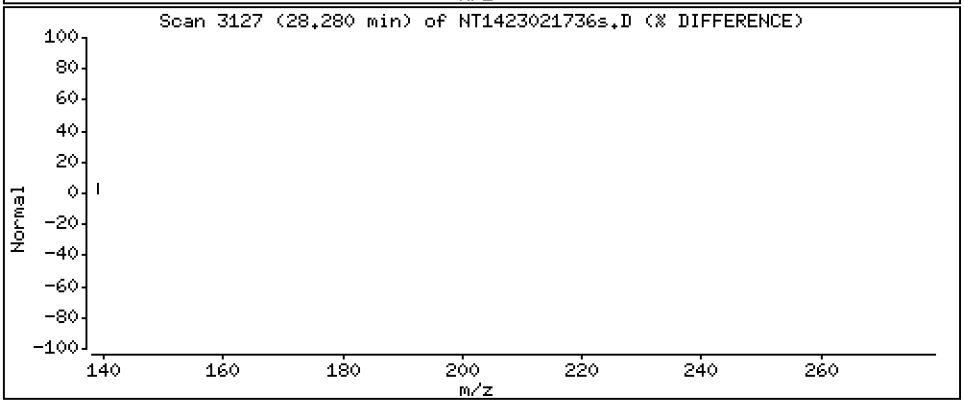












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Date : 18-FEB-2023 07:42

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-CCV1

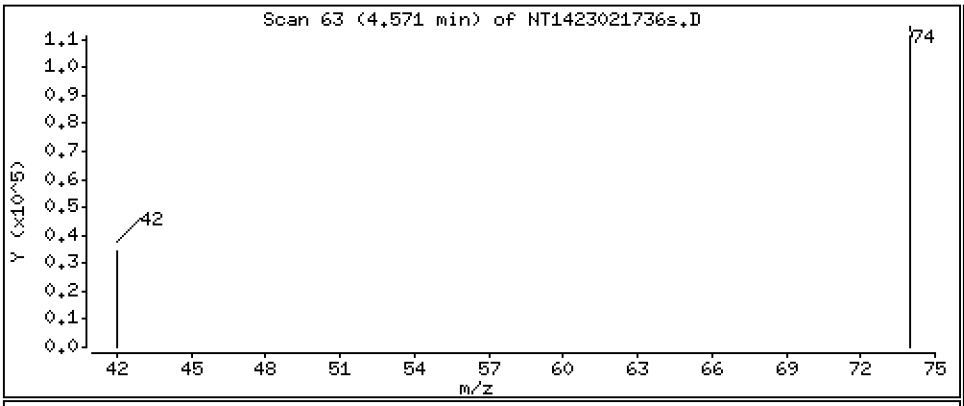
Operator: DSD

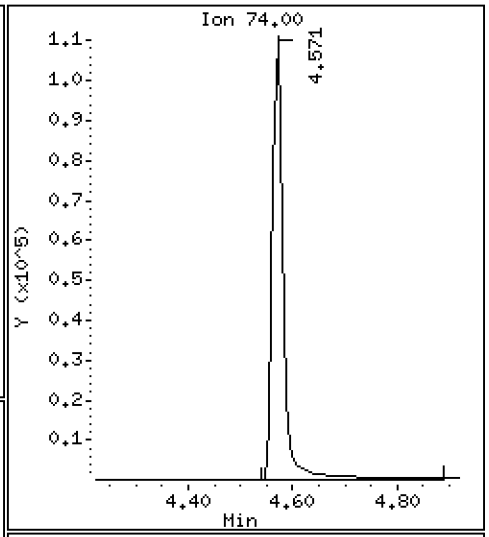
Column phase: ZB-5msi

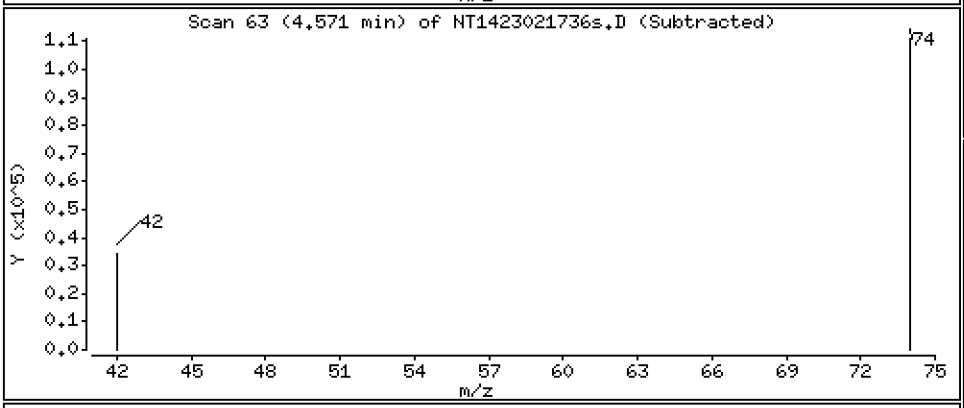
Column diameter: 0.25

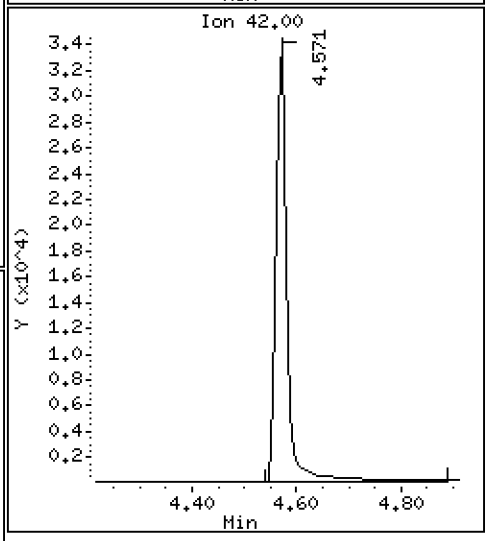
90 N-Nitrosodimethylamine

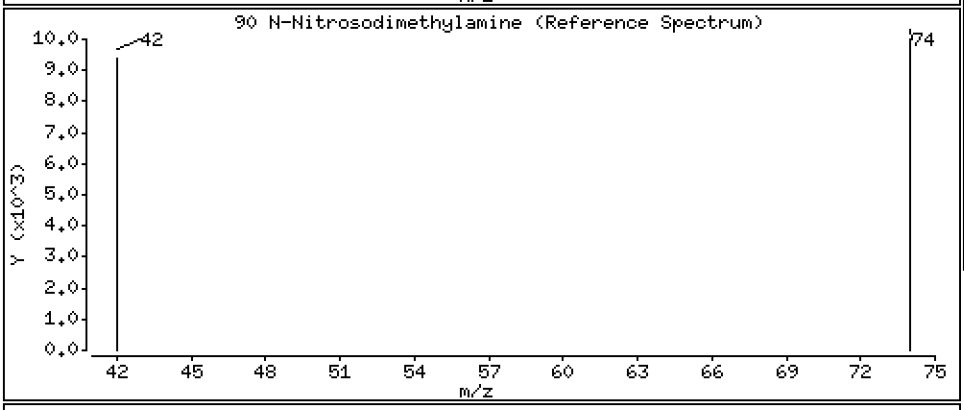
Concentration: 1.808 ug/mL

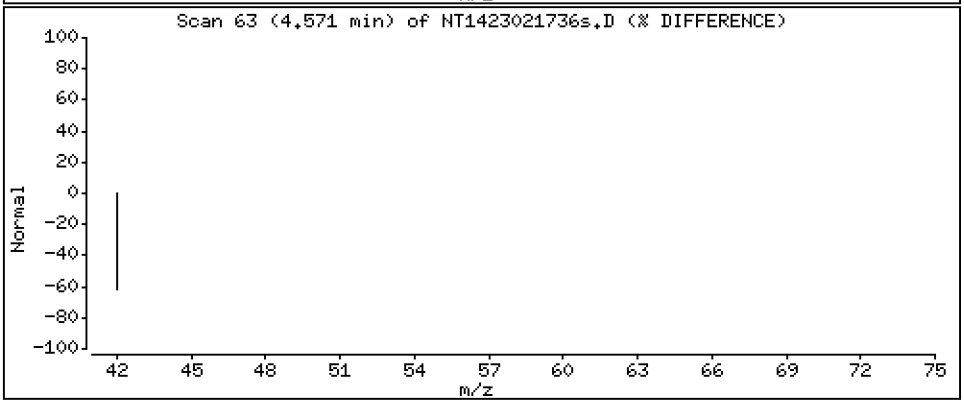












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021736s.D
Lab Smp Id: SLB0335-CCV1
Inj Date : 18-FEB-2023 07:42 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0335-CCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\SIMABN2.m
Meth Date : 07-Mar-2023 12:35 van Quant Type: ISTD
Cal Date : 16-FEB-2023 20:42 Cal File: NT1423021612s.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1	2-Fluorophenol	112	6.686	6.679	(0.750)	155086	1.39380	1.394(R)
	3	Phenol	94	8.302	8.294	(0.931)	153544	0.92714	0.9271
	7	1,3-Dichlorobenzene	146	8.843	8.835	(0.992)	132800	1.01192	1.012
*	8	1,4-Dichlorobenzene-d4	152	8.913	8.905	(1.000)	385687	4.00000	
	9	1,4-Dichlorobenzene	146	8.936	8.928	(1.003)	124651	0.99571	0.9957
	11	Benzyl alcohol	79	9.192	9.184	(1.031)	105068	0.99469	0.9947
	12	1,2-Dichlorobenzene	146	9.293	9.293	(1.043)	125727	1.01007	1.010
	13	2-Methylphenol	108	9.417	9.409	(1.057)	123806	1.08139	1.081
	15	4-Methylphenol	108	9.689	9.681	(1.087)	125356	0.99594	0.9959
	16	N-Nitroso-di-n-propylamine	70	9.743	9.735	(1.093)	101183	1.04382	1.044
	22	2,4-Dimethylphenol	107	10.736	10.728	(0.942)	251663	2.04058	2.041
	24	Benzoic acid	105	10.907	10.891	(0.957)	40914	0.62741	0.6274
	26	1,2,4-Trichlorobenzene	180	11.317	11.309	(0.993)	125859	0.99592	0.9959
*	27	Naphthalene-d8	136	11.402	11.394	(1.000)	1379443	4.00000	
	30	Hexachlorobutadiene	225	11.804	11.804	(1.035)	73161	0.95165	0.9517
	39	Dimethylphthalate	163	14.536	14.536	(0.968)	232870	1.06607	1.066
*	42	Acenaphthene-d10	162	15.023	15.015	(1.000)	715998	4.00000	
	50	Diethylphthalate	149	15.997	15.989	(1.065)	276997	1.01320	1.013
	54	N-Nitrosodiphenylamine	169	16.375	16.368	(0.906)	214257	1.14920	1.149
	57	Hexachlorobenzene	284	17.440	17.432	(0.965)	100085	1.04456	1.045
	58	Pentachlorophenol	266	17.812	17.804	(0.986)	32170	0.81936	0.8194
*	59	Phenanthrene-d10	188	18.067	18.059	(1.000)	1475287	4.00000	
$	66	Terphenyl-d14	244	21.224	21.216	(0.918)	233754	1.36057	1.361(R)
	67	Butylbenzylphthalate	149	22.153	22.153	(0.958)	108800	1.31753	1.318
*	69	Chrysene-d12	240	23.128	23.121	(1.000)	645351	4.00000	
*	77	Perylene-d12	264	25.699	25.691	(1.000)	579672	4.00000	
	79	Dibenzo(a,h)anthracene	278	28.280	28.265	(1.100)	96905	0.94039	0.9404
	90	N-Nitrosodimethylamine	74	4.571	4.571	(0.513)	152849	1.80839	1.808

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1423021736s.D
Lab Smp Id: SLB0335-CCV1
Analysis Type: SV
Quant Type: ISTD
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\SIMABN2.m
Misc Info:

Calibration Date: 17-FEB-2023
Calibration Time: 21:31
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	388684	194342	777368	385687	-0.77
27 Naphthalene-d8	1386667	693334	2773334	1379443	-0.52
42 Acenaphthene-d10	752189	376095	1504378	715998	-4.81
59 Phenanthrene-d10	1701919	850960	3403838	1475287	-13.32
69 Chrysene-d12	887171	443586	1774342	645351	-27.26
77 Perylene-d12	644624	322312	1289248	579672	-10.08

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	0.09
27 Naphthalene-d8	11.39	10.89	11.89	11.40	0.07
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.05
59 Phenanthrene-d10	18.06	17.56	18.56	18.07	0.04
69 Chrysene-d12	23.12	22.62	23.62	23.13	0.03
77 Perylene-d12	25.69	25.19	26.19	25.70	0.03

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

REVIEW SUMMARY FOR FILE - NT1423021736s.D

Lab ID: SLB0335-CCV1
nt14.i, 20230217A.b\20230217A.b\SIMABN2.m,   18-FEB-2023 07:42

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: 20230217A.b/NT1423021719s.D

On Column LOD for nt14.i, 20230217A.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Analytical Resources, LLC
Analytical Chemists and Consultants

LOW-CONCENTRATION CONTINUING CALIBRATION CHECK

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT14	Calibration:	GC00009
Lab File ID:	NT1423021720s.D	Calibration Date:	03/03/2023
Sequence:	SLB0335	Injection Date:	02/17/23
Lab Sample ID:	SLB0335-LCV1	Injection Time:	22:06
Sequence Name:	Low Cal Check		

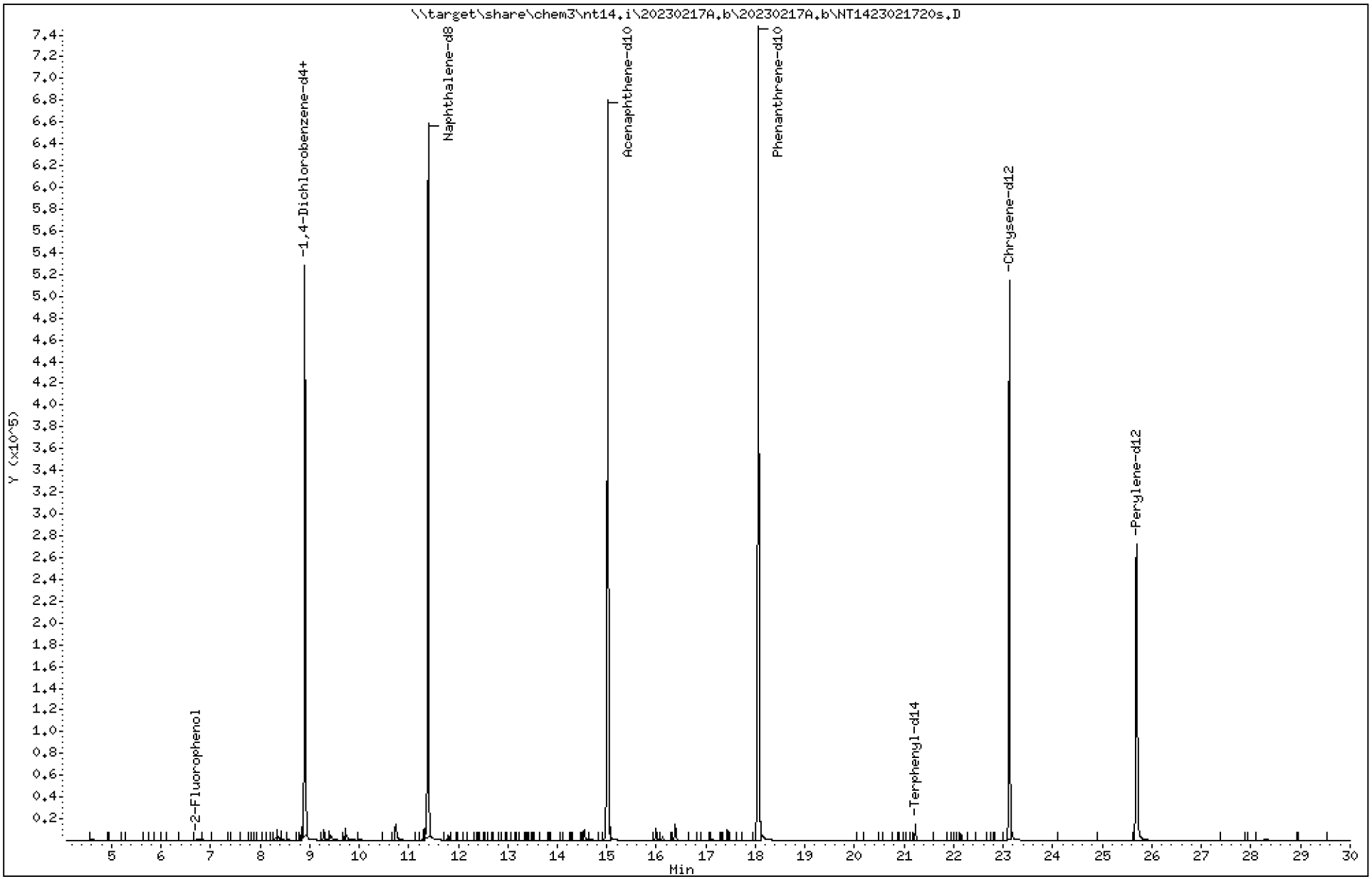
		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
1,4-Dichlorobenzene	A	0.10000	0.1	1.2983440	1.2914190		-0.5	
1,2-Dichlorobenzene	A	0.10000	0.1	1.2909230	1.2812140		-0.8	
Benzyl Alcohol	A	0.10000	0.0	1.0954840				
Benzoic acid	A	0.40000	0.0	0.1890948				
2,4-Dimethylphenol	A	0.20000	0.2	0.3263158	0.3145917		-14.0	
1,2,4-Trichlorobenzene	A	0.10000	0.1	0.3664516	0.3579415		-2.3	
N-Nitrosodiphenylamine	A	0.10000	0.09	0.4912986	0.4668586		-6.7	
Pentachlorophenol	A	0.20000	0.0	0.0811080				
2-Fluorophenol	A	0.15000	0.00915	0.8380777	0.0708317		-93.9	
p-Terphenyl-d14	A	0.10000	0.126	1.0648810	1.3442920		26.2	

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021720s.D
Date : 17-FEB-2023 22:06
Client ID:
Sample Info: SLB0335-LCV1

Instrument: nt14.i
Operator: DSD
Column diameter: 0.25

Column phase: ZB-5msi



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Date : 17-FEB-2023 22:06

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-LCV1

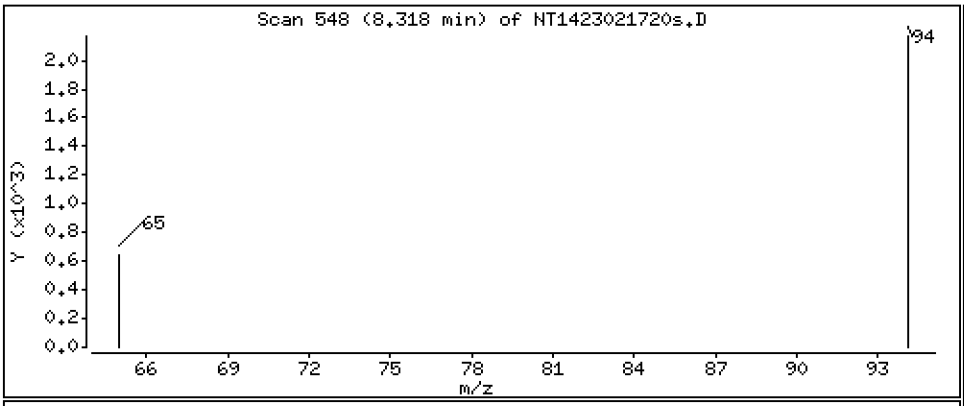
Operator: DSD

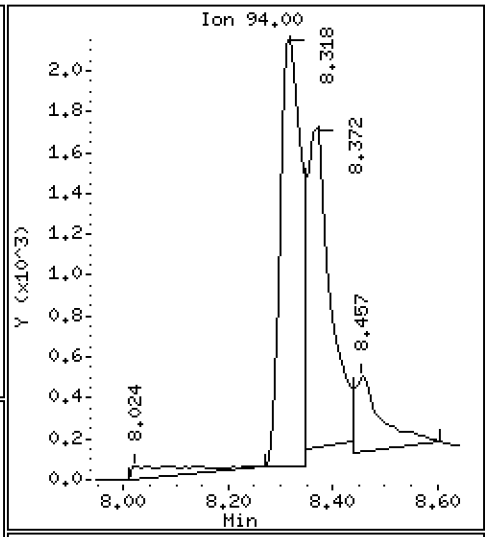
Column phase: ZB-5msi

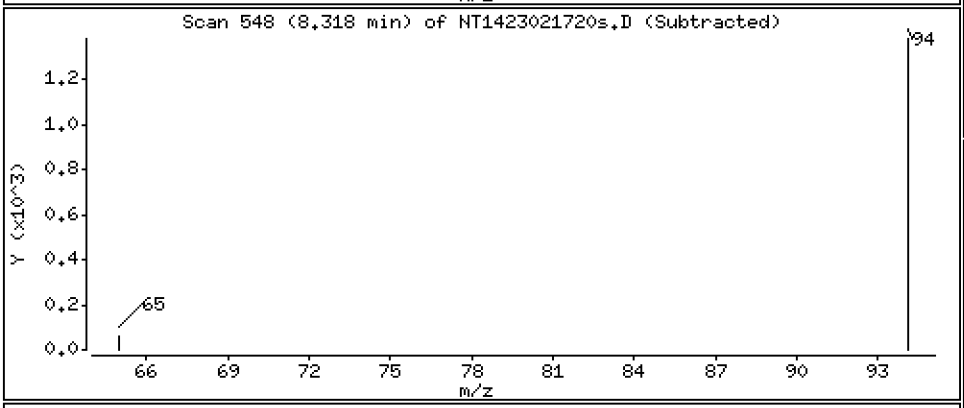
Column diameter: 0.25

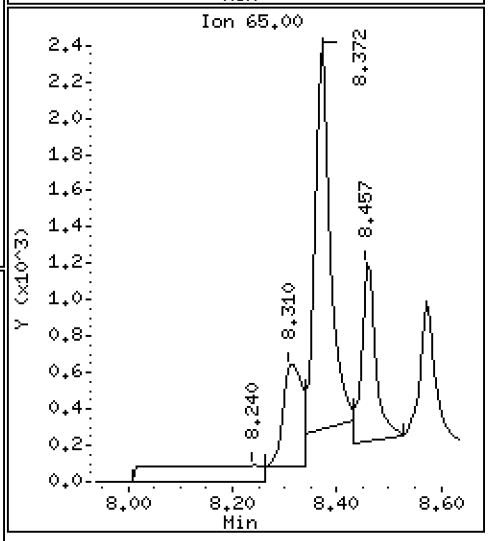
3 Phenol

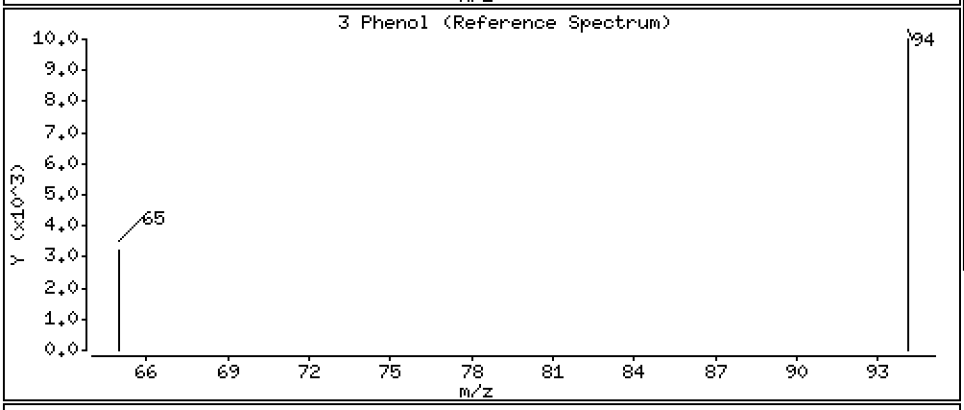
Concentration: 0.04366 ug/mL

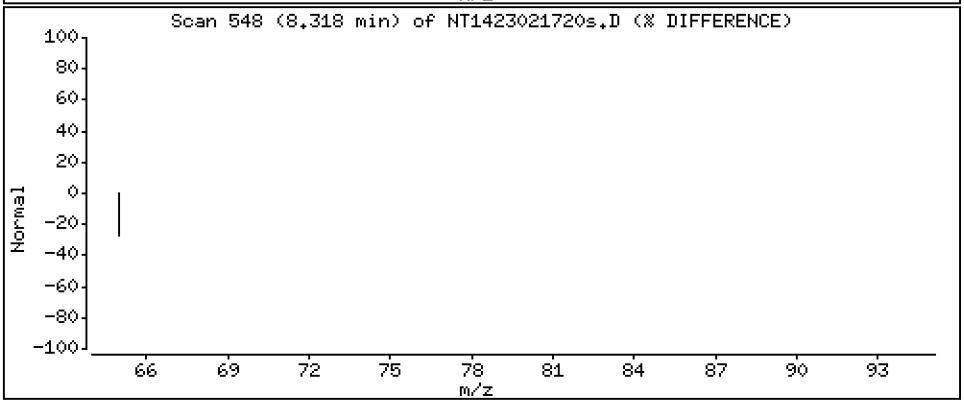












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Date : 17-FEB-2023 22:06

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-LCV1

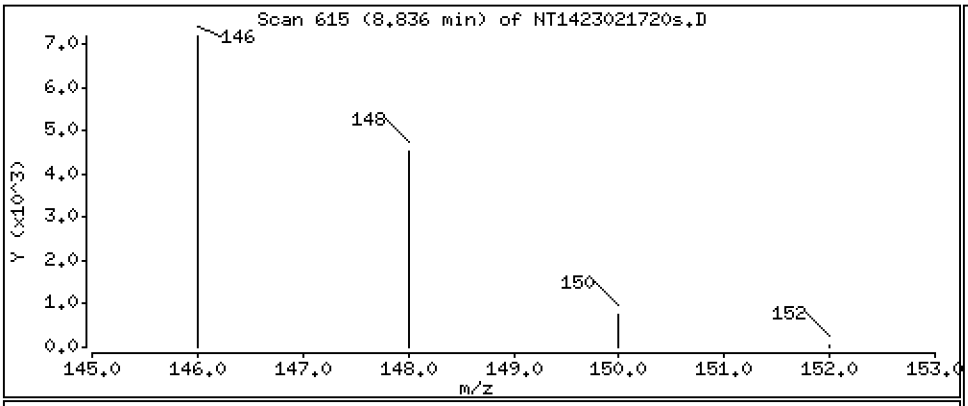
Operator: DSD

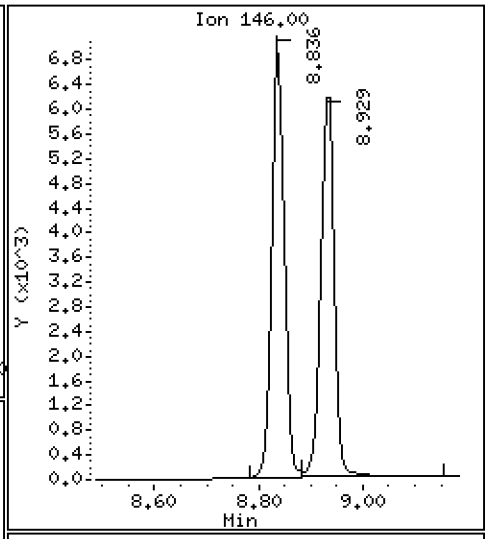
Column phase: ZB-5msi

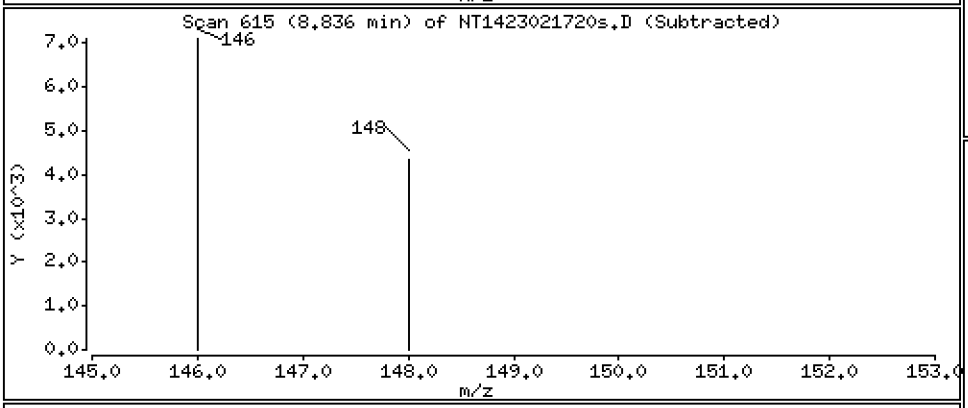
Column diameter: 0.25

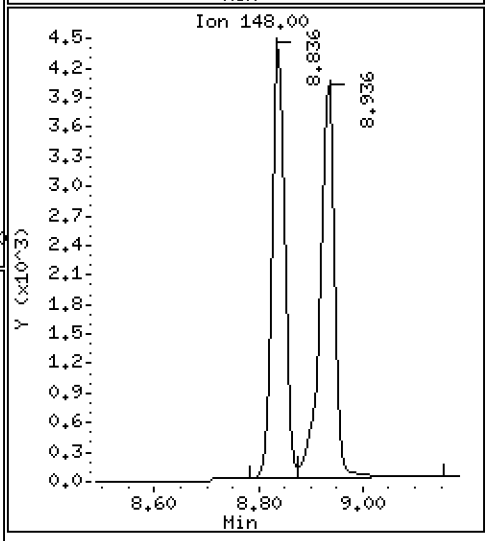
7 1,3-Dichlorobenzene

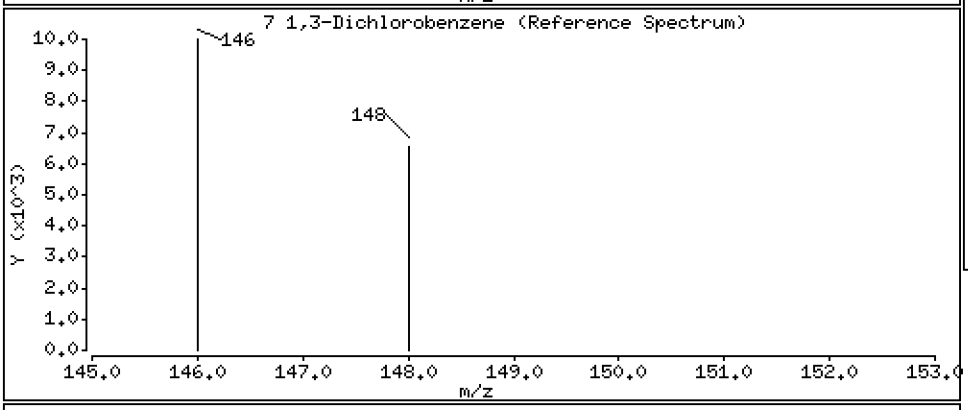
Concentration: 0.09913 ug/mL

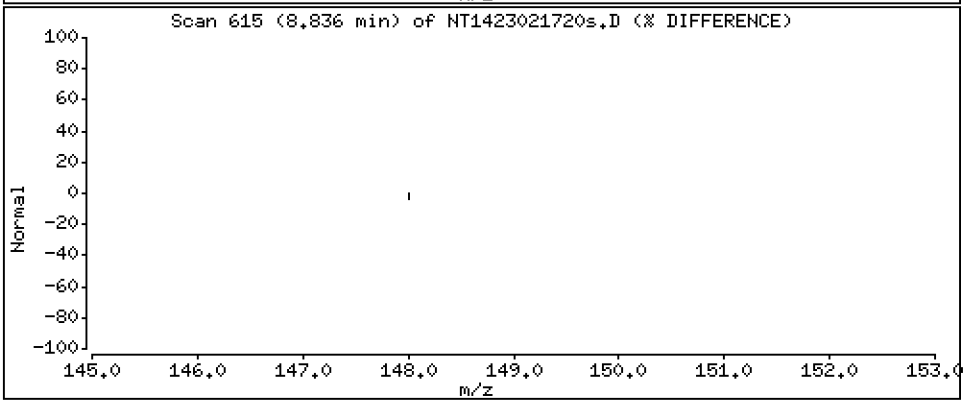












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Date : 17-FEB-2023 22:06

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-LCV1

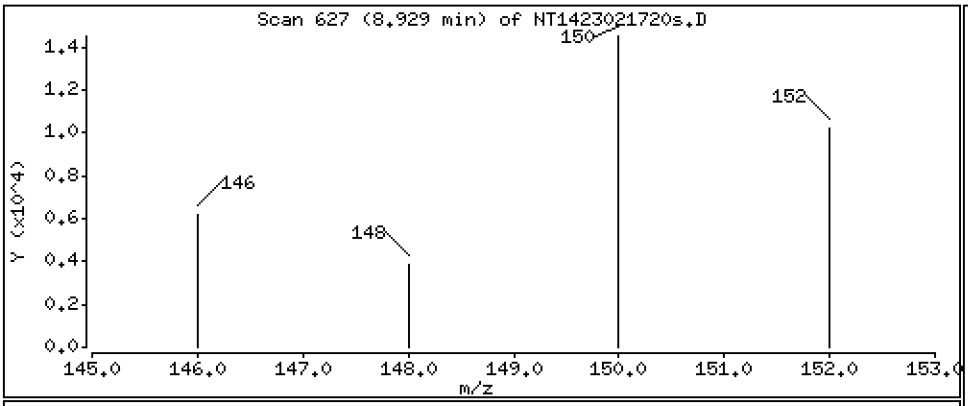
Operator: DSD

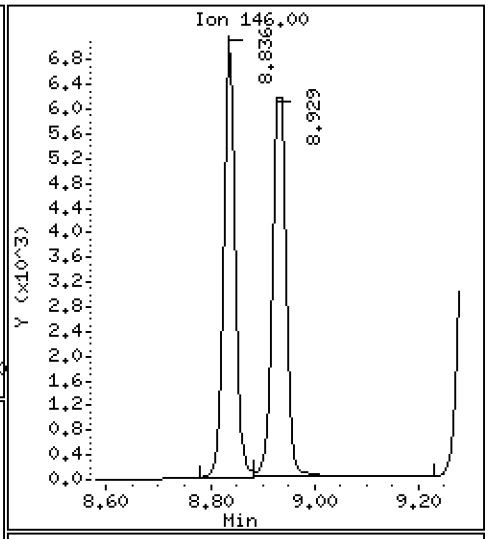
Column phase: ZB-5msi

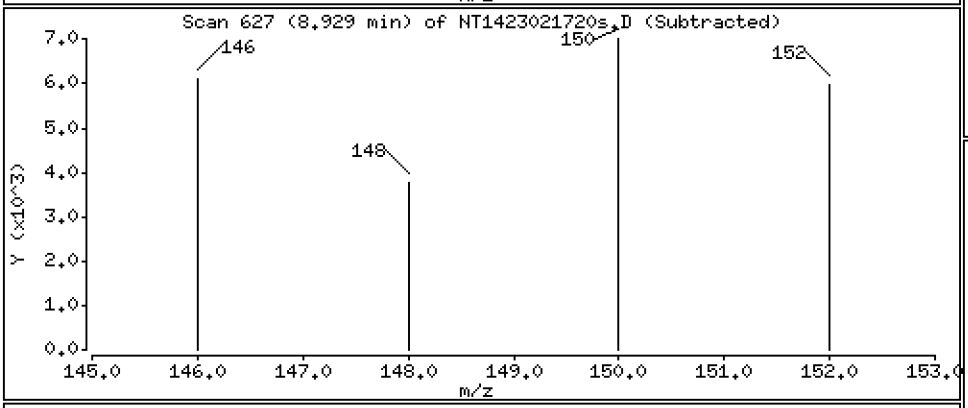
Column diameter: 0.25

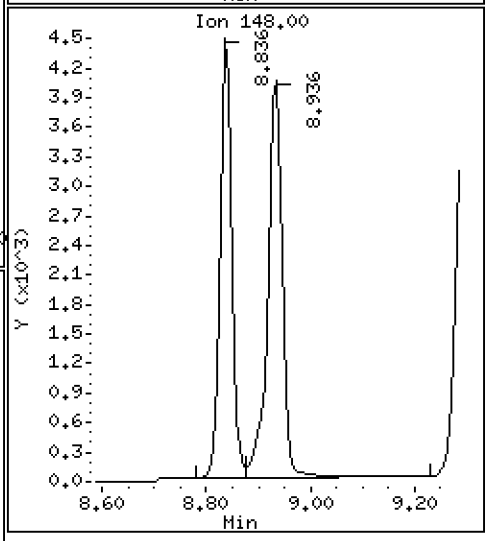
9 1,4-Dichlorobenzene

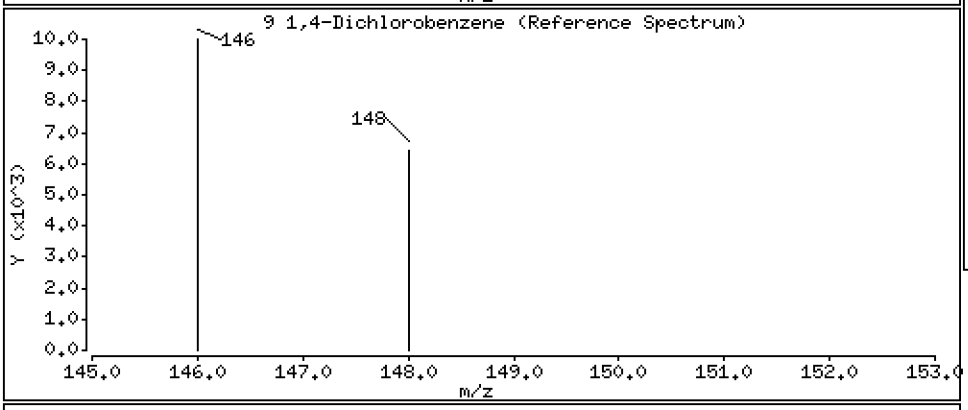
Concentration: 0.09947 ug/mL

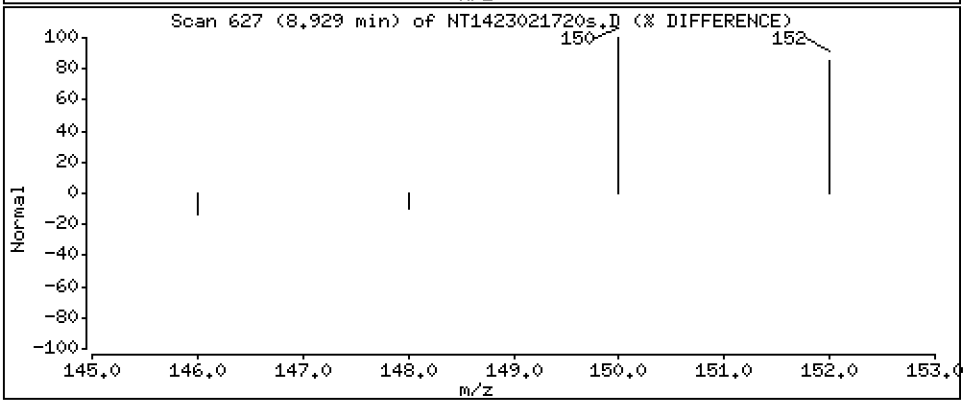












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021720s.D

Date : 17-FEB-2023 22:06

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-LCV1

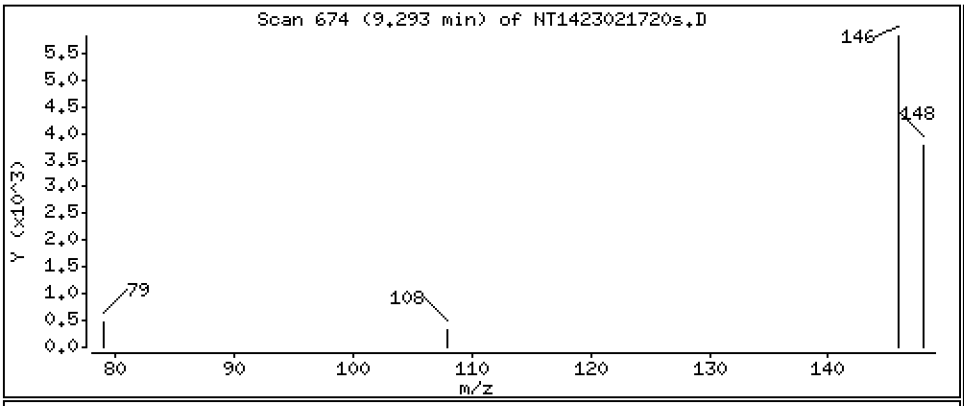
Operator: DSD

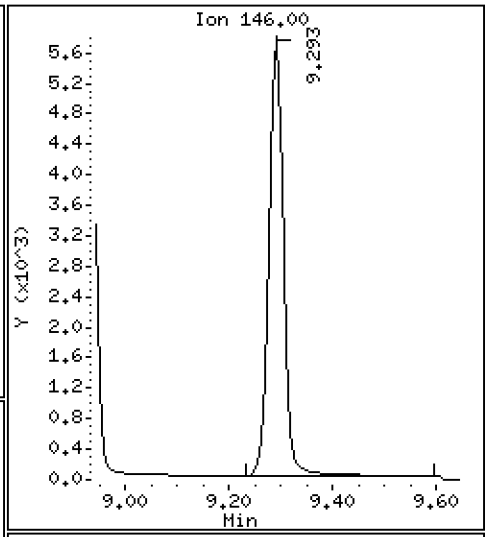
Column phase: ZB-5msi

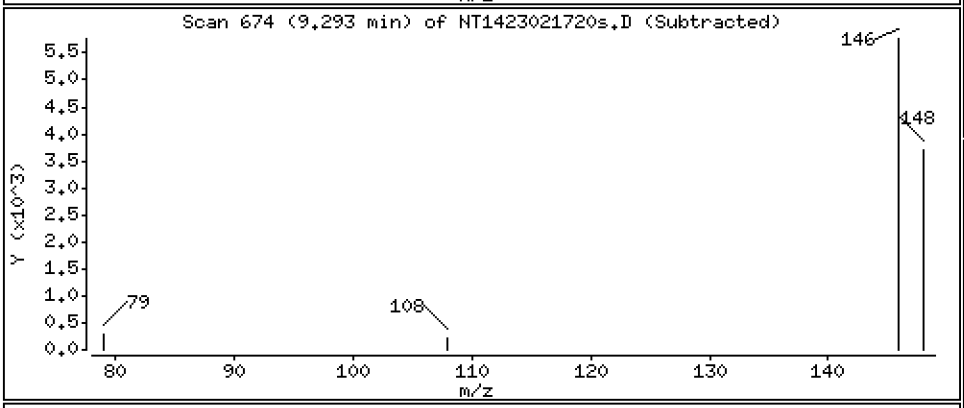
Column diameter: 0.25

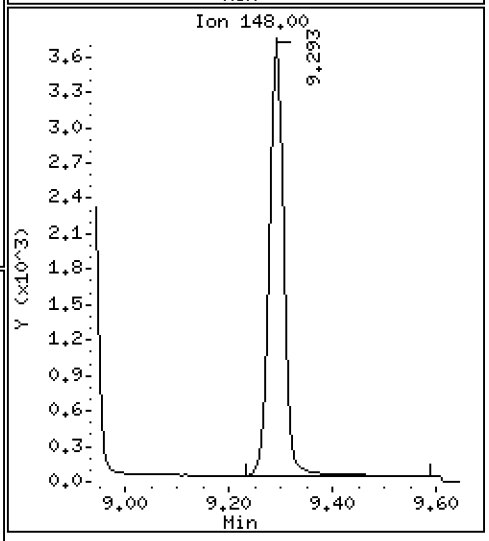
12 1,2-Dichlorobenzene

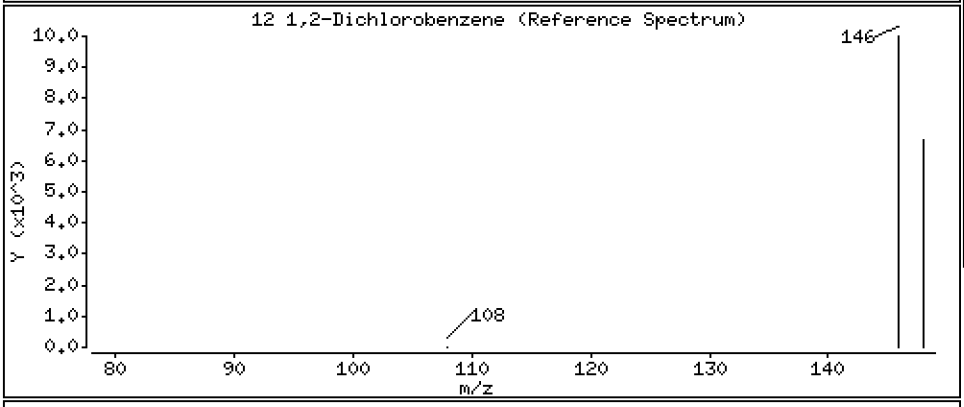
Concentration: 0.09925 ug/mL

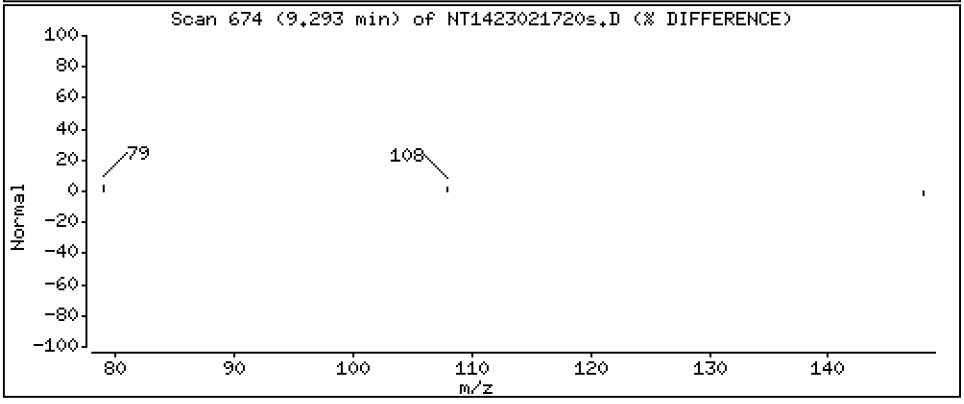












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021720s.D

Date : 17-FEB-2023 22:06

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-LCV1

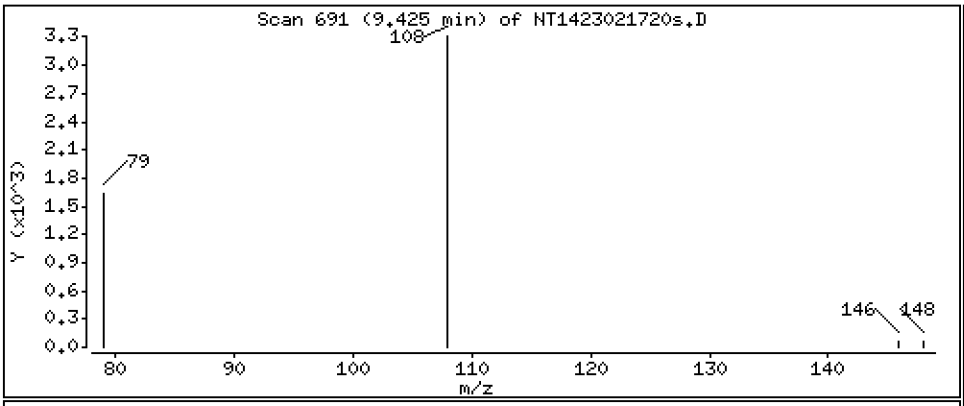
Operator: DSD

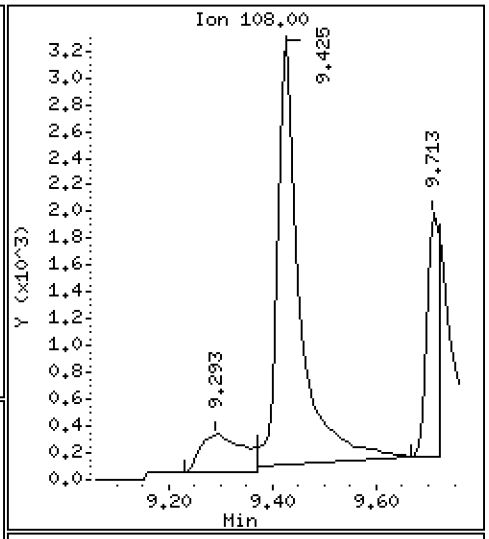
Column phase: ZB-5msi

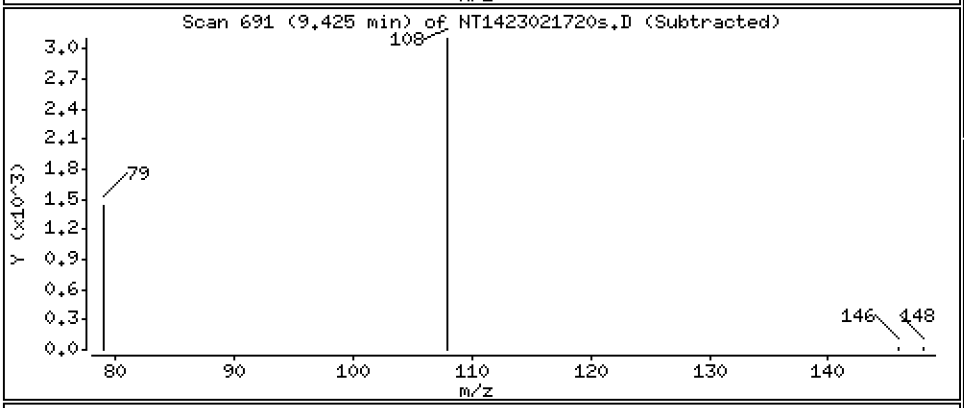
Column diameter: 0.25

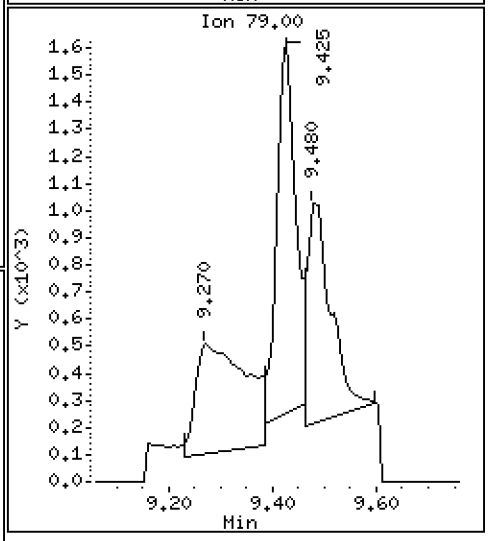
13 2-Methylphenol

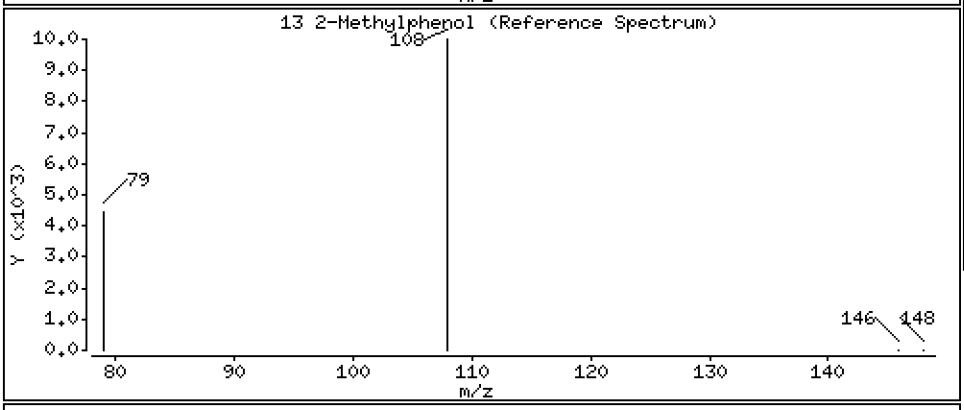
Concentration: 0.09437 ug/mL

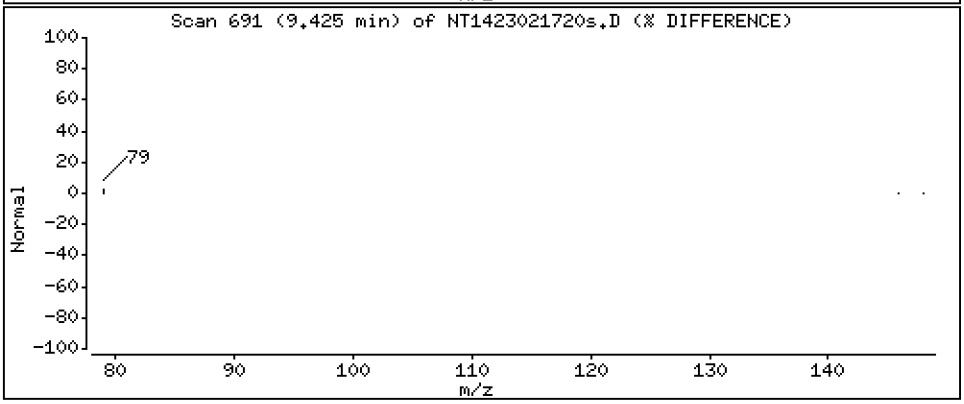












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Date : 17-FEB-2023 22:06

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-LCV1

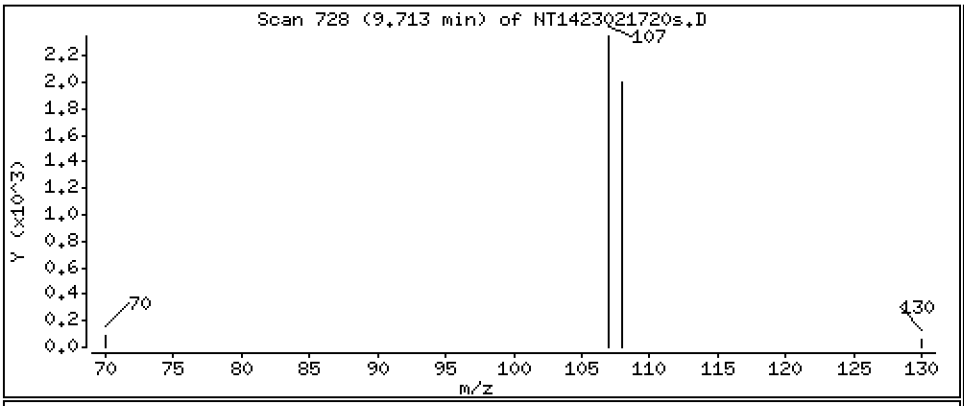
Operator: DSD

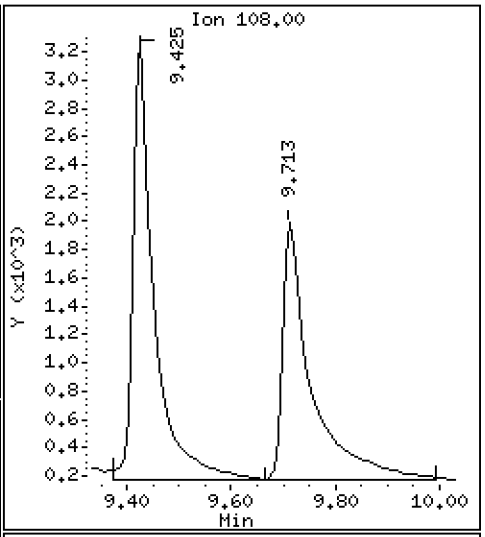
Column phase: ZB-5msi

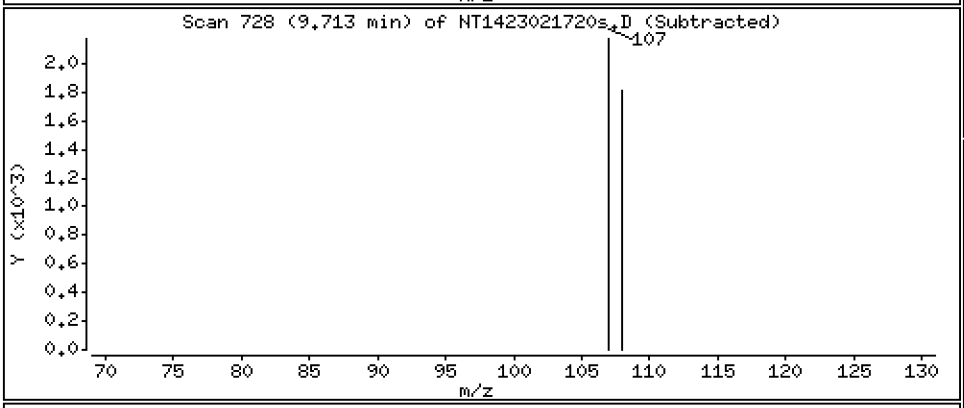
Column diameter: 0.25

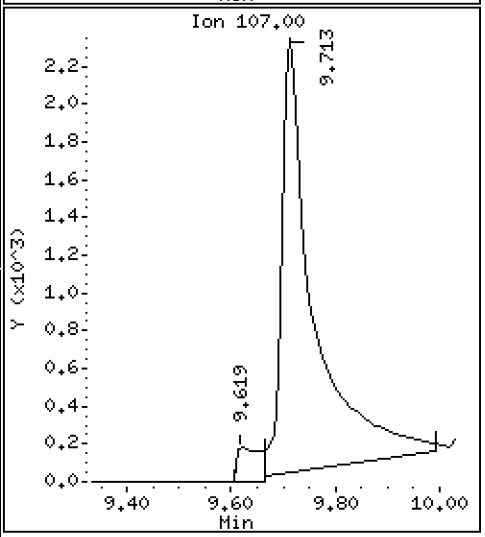
15 4-Methylphenol

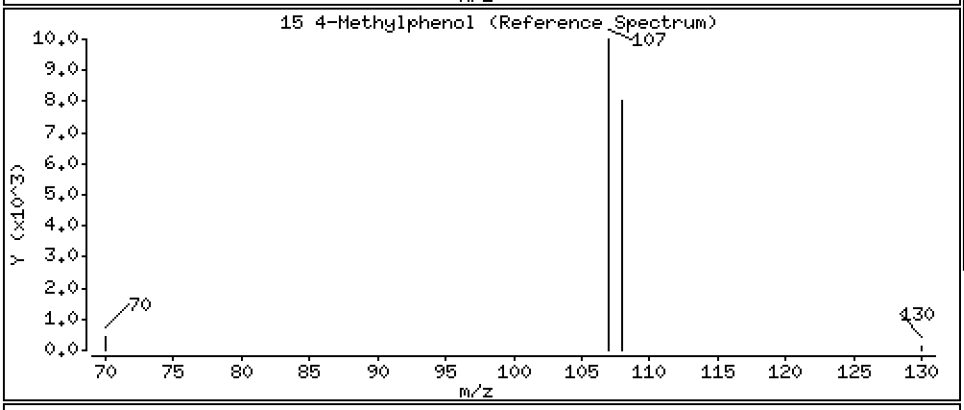
Concentration: 0.06407 ug/mL

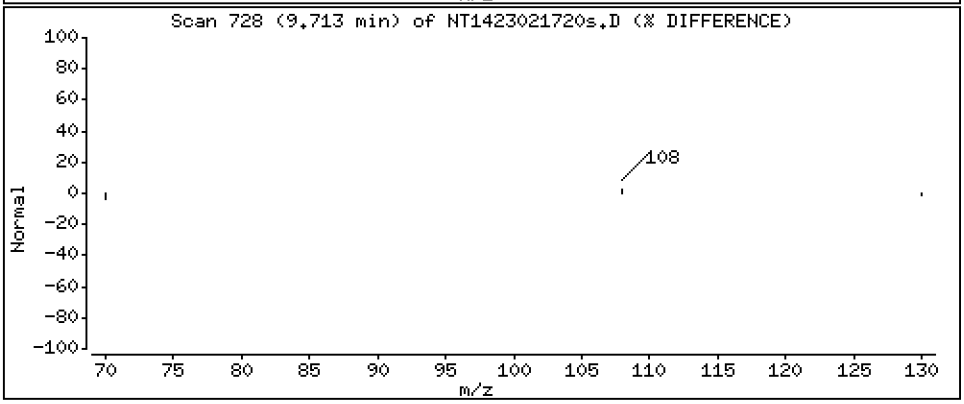












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Date : 17-FEB-2023 22:06

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-LCV1

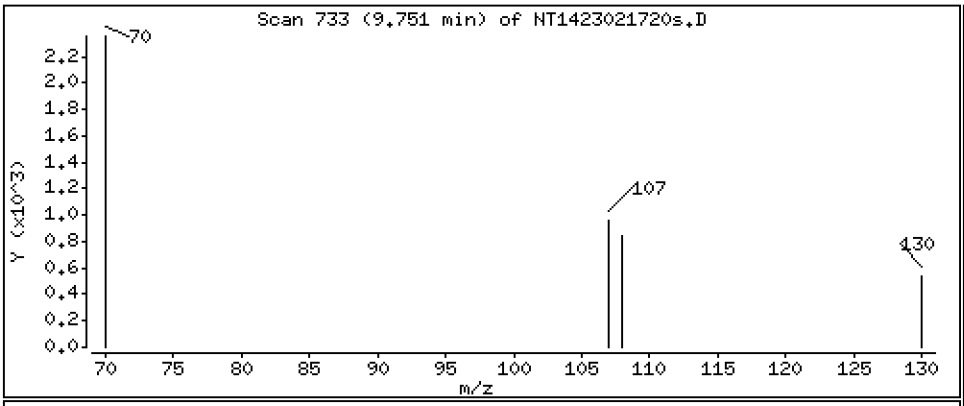
Operator: DSD

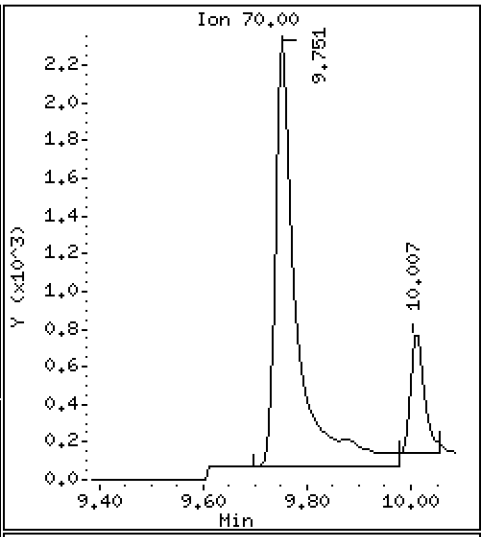
Column phase: ZB-5msi

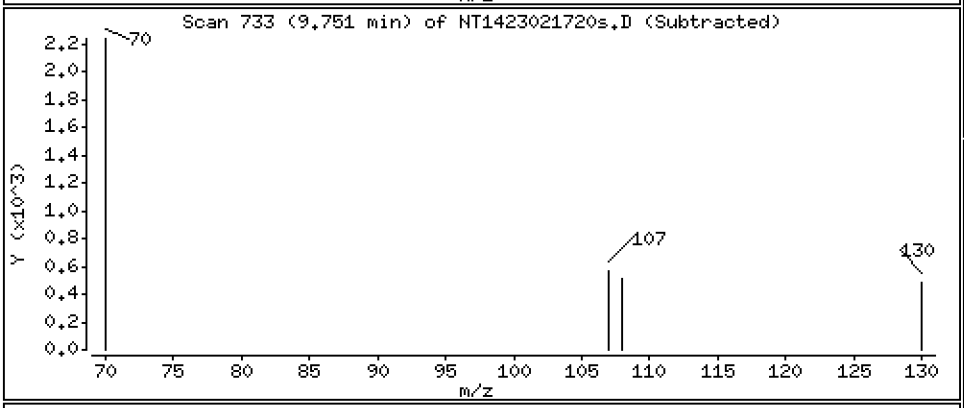
Column diameter: 0.25

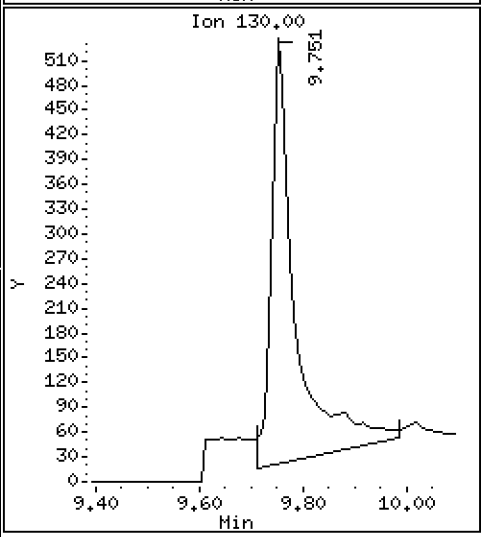
16 N-Nitroso-di-n-propylamine

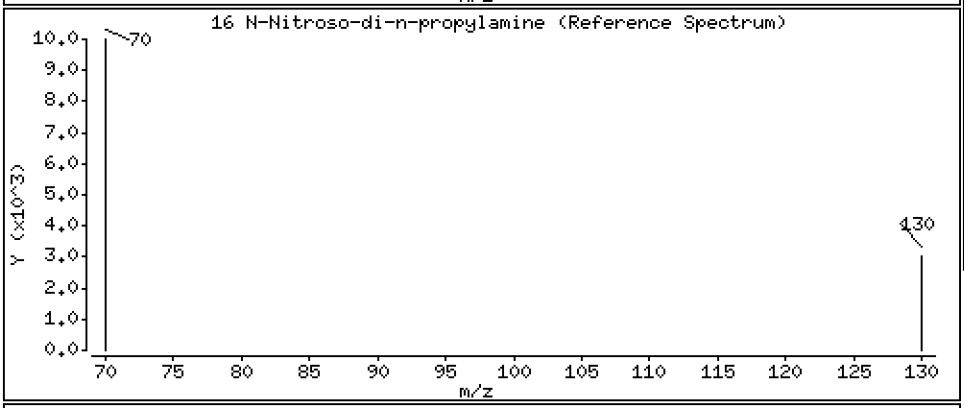
Concentration: 0.07885 ug/mL

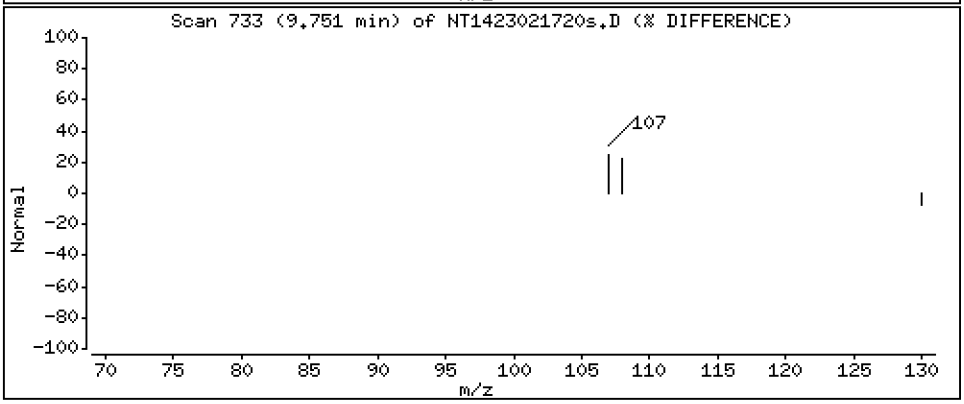












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Date : 17-FEB-2023 22:06

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-LCV1

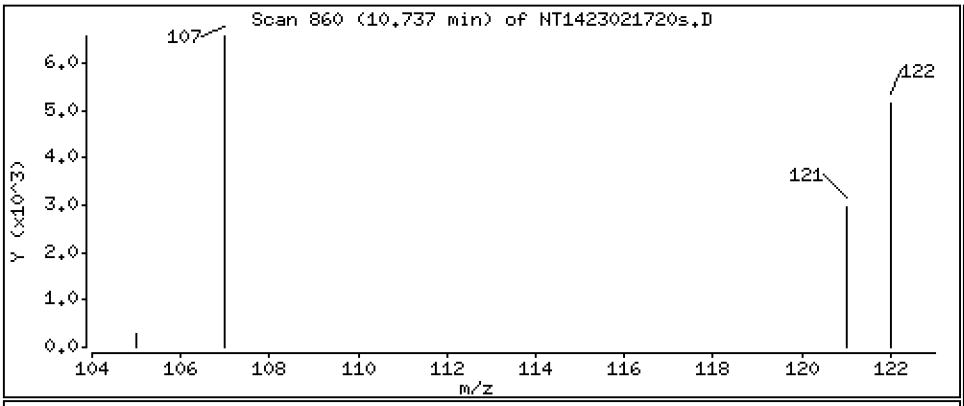
Operator: DSD

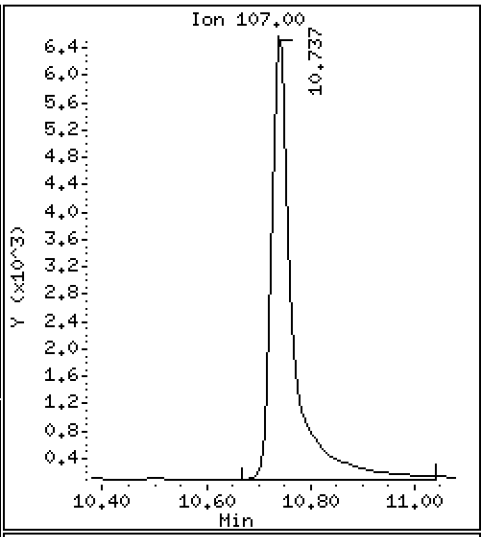
Column phase: ZB-5msi

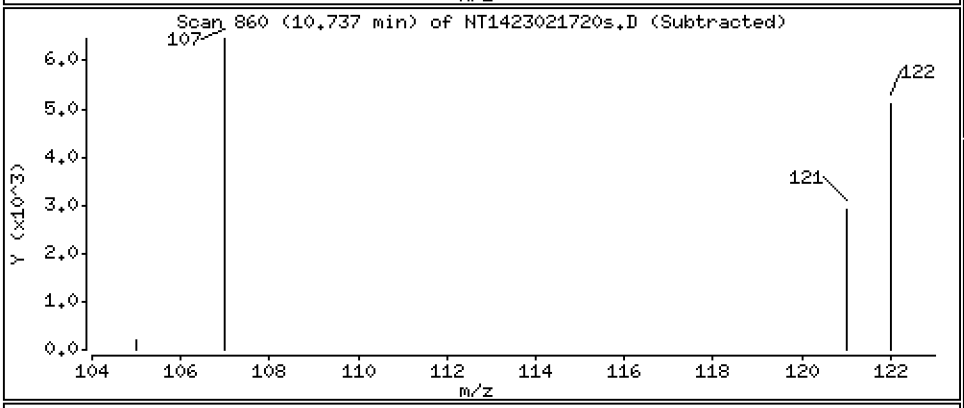
Column diameter: 0.25

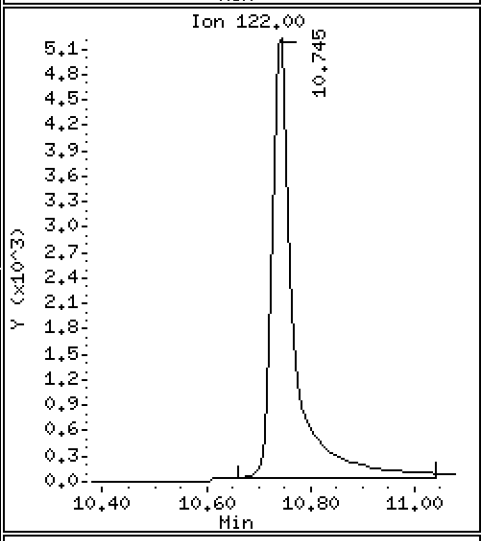
22 2,4-Dimethylphenol

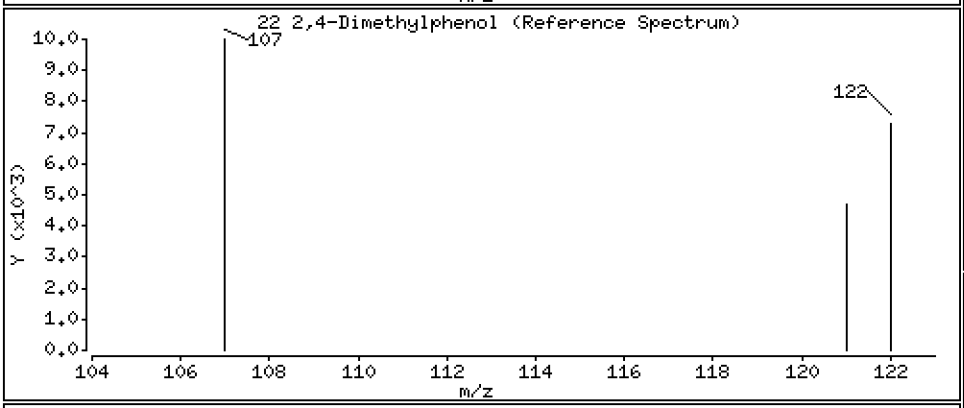
Concentration: 0.1721 ug/mL

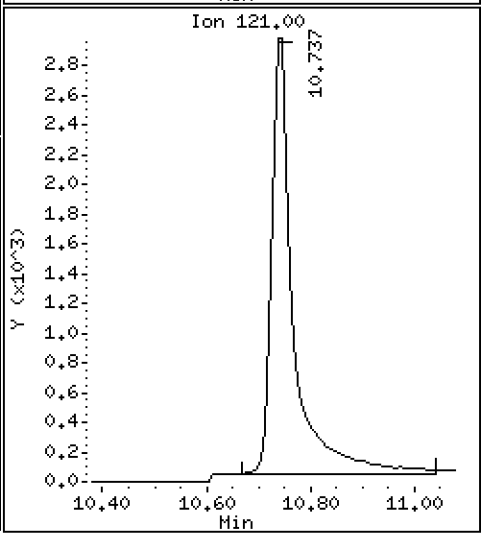


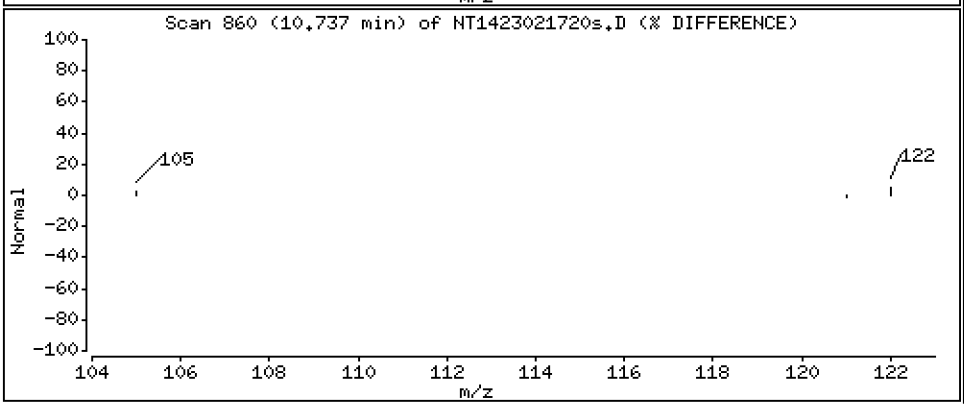












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Date : 17-FEB-2023 22:06

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-LCV1

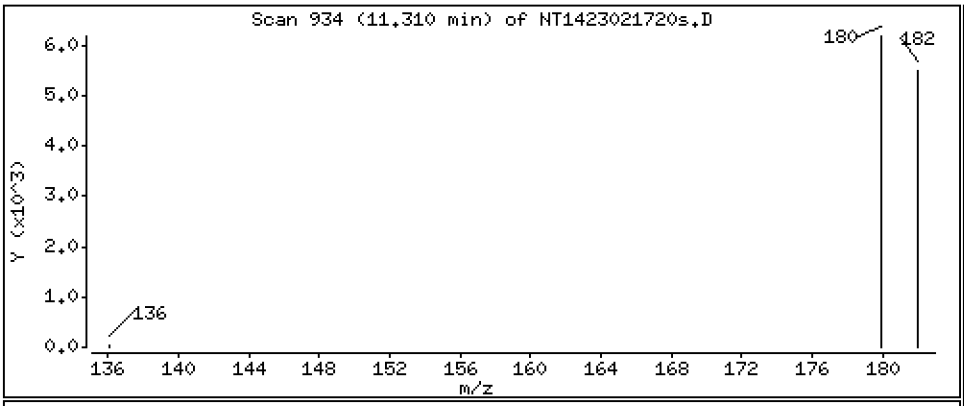
Operator: DSD

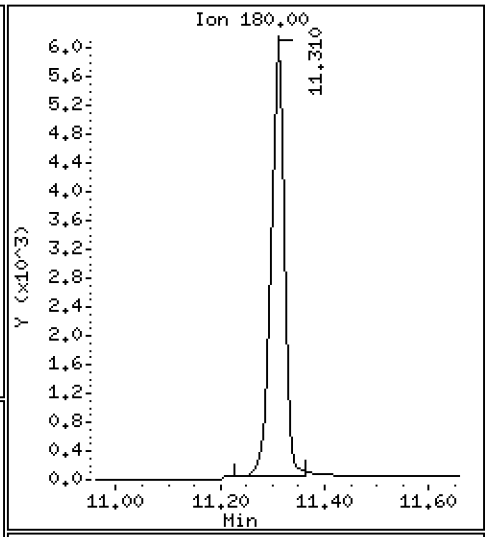
Column phase: ZB-5msi

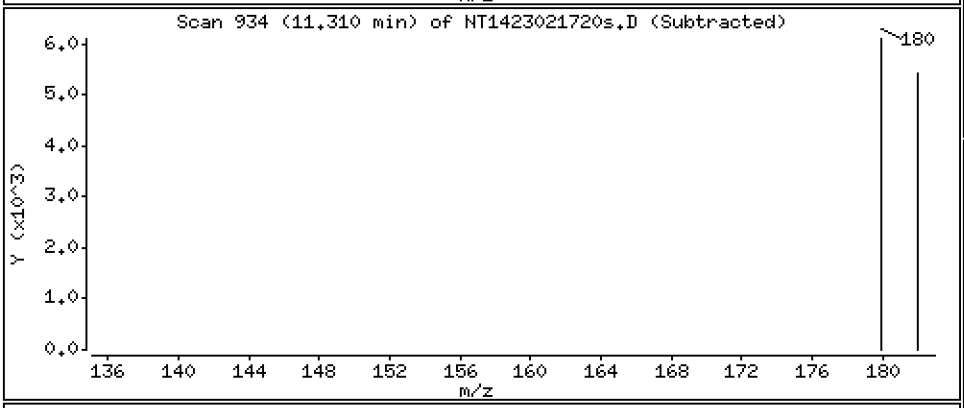
Column diameter: 0.25

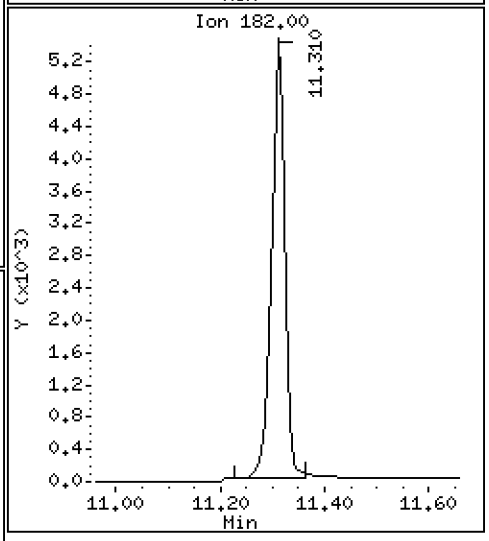
26 1,2,4-Trichlorobenzene

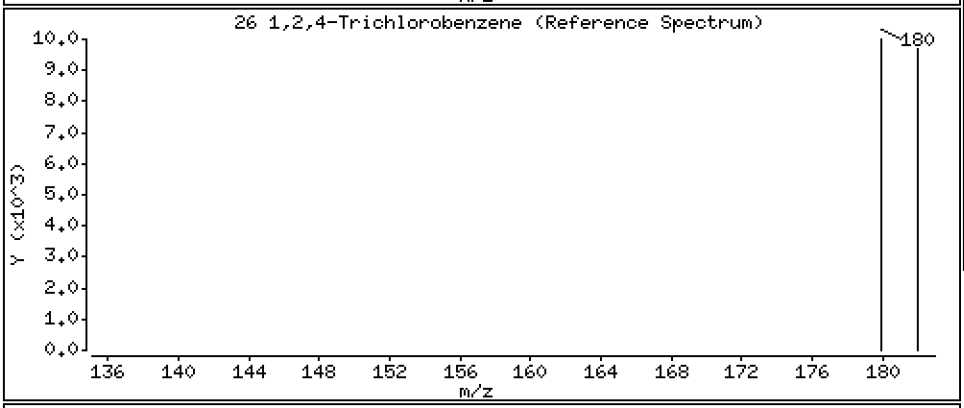
Concentration: 0.09768 ug/mL

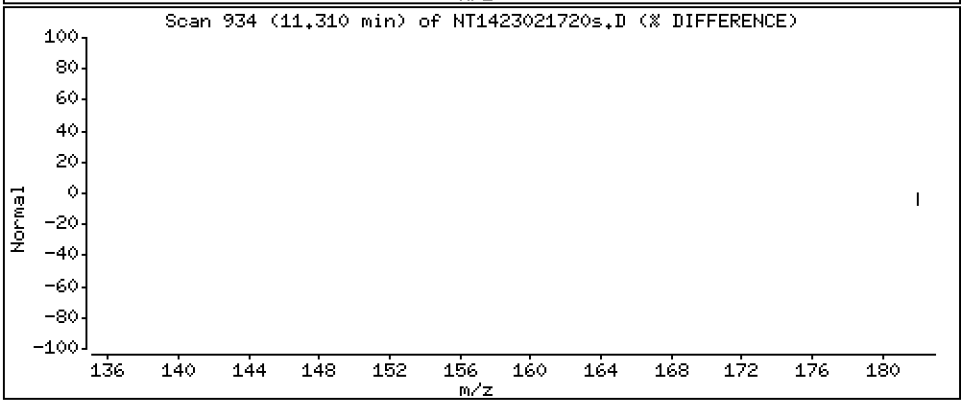












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021720s.D

Date : 17-FEB-2023 22:06

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-LCV1

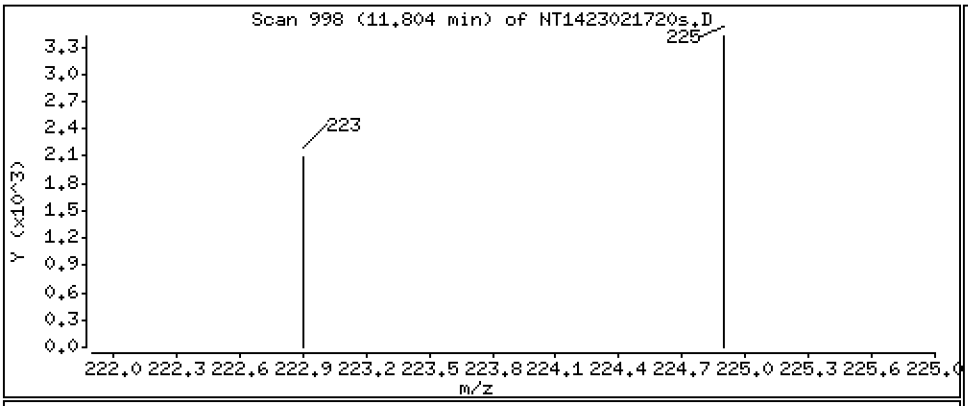
Operator: DSD

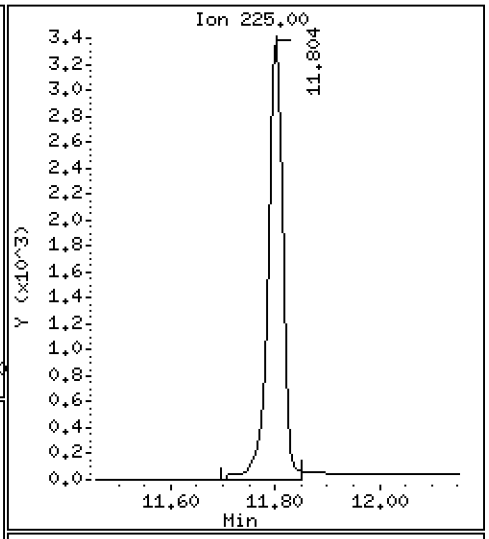
Column phase: ZB-5msi

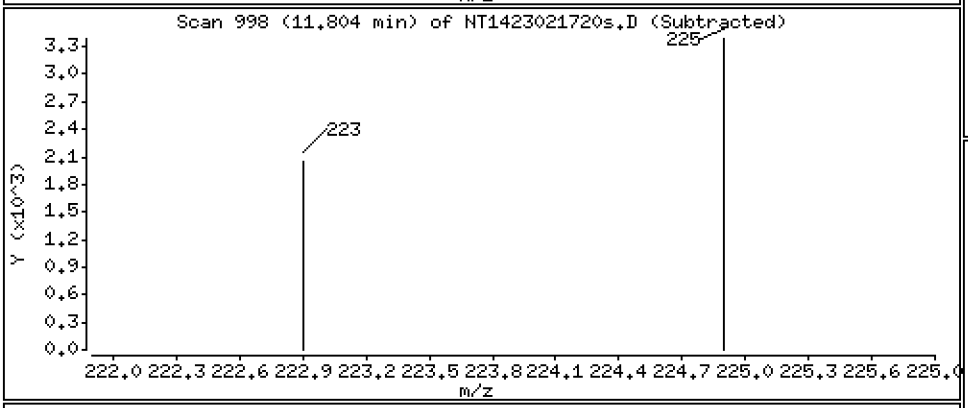
Column diameter: 0.25

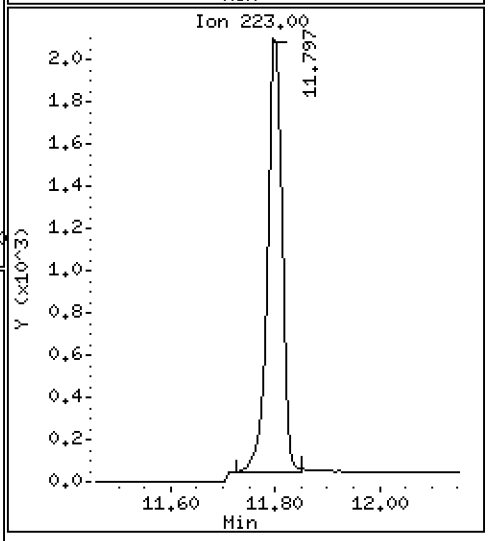
30 Hexachlorobutadiene

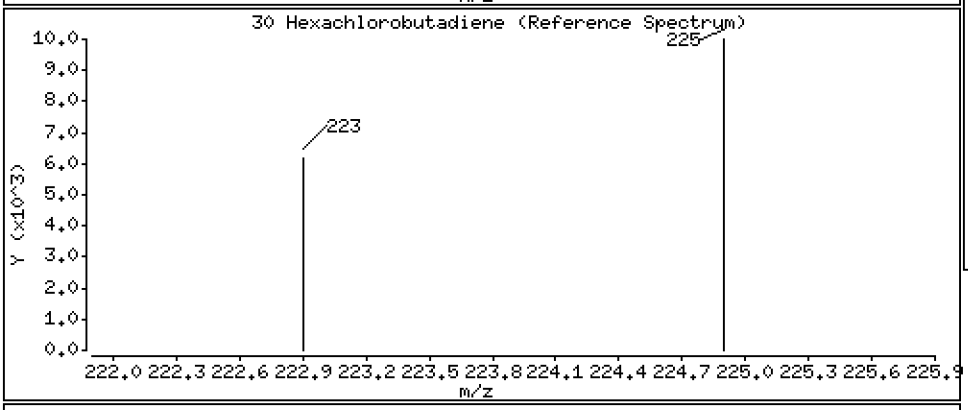
Concentration: 0.09862 ug/mL

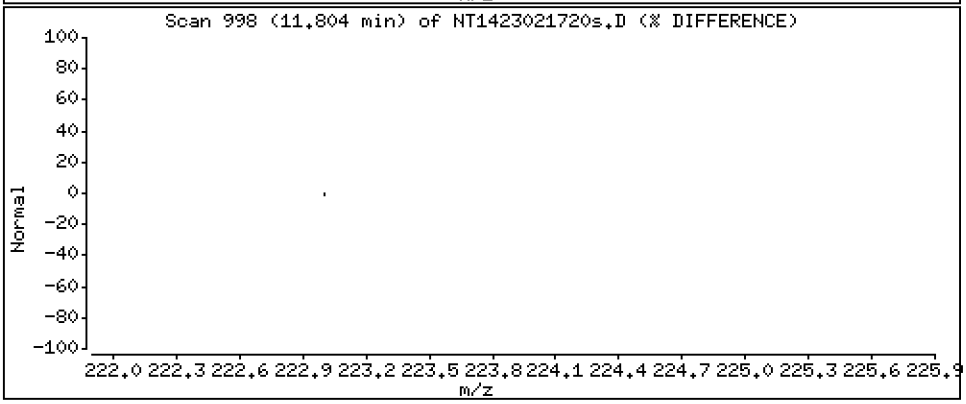












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Date : 17-FEB-2023 22:06

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-LCV1

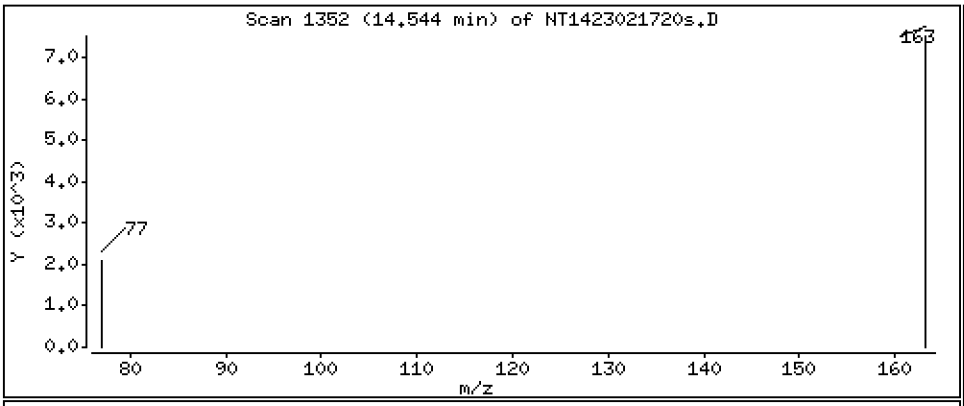
Operator: DSD

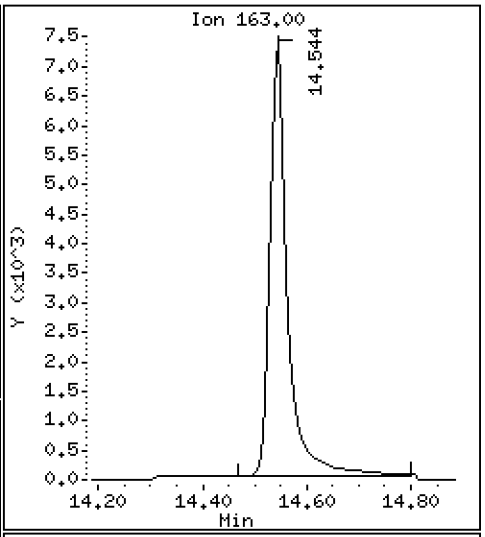
Column phase: ZB-5msi

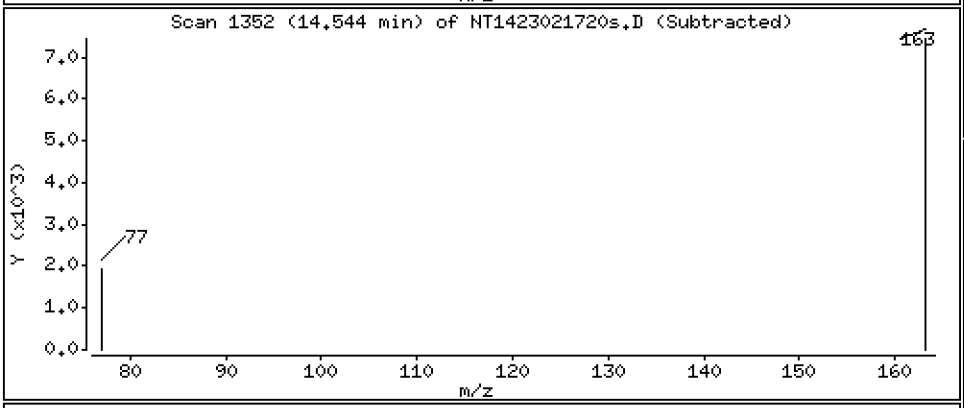
Column diameter: 0.25

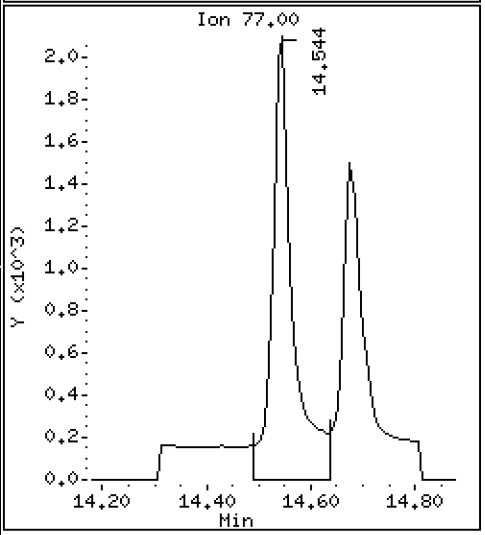
39 Dimethylphthalate

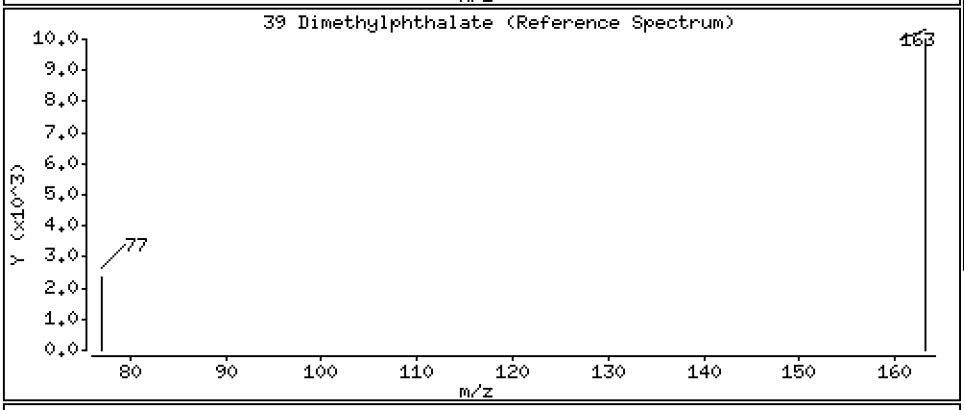
Concentration: 0.09370 ug/mL

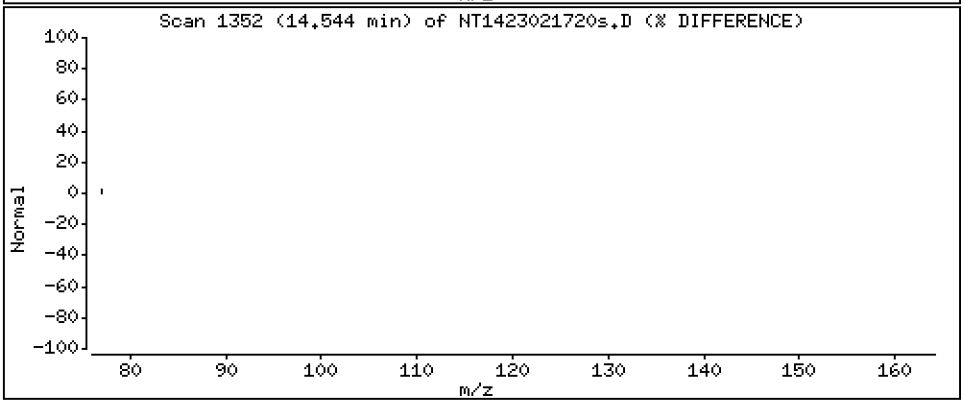












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Date : 17-FEB-2023 22:06

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-LCV1

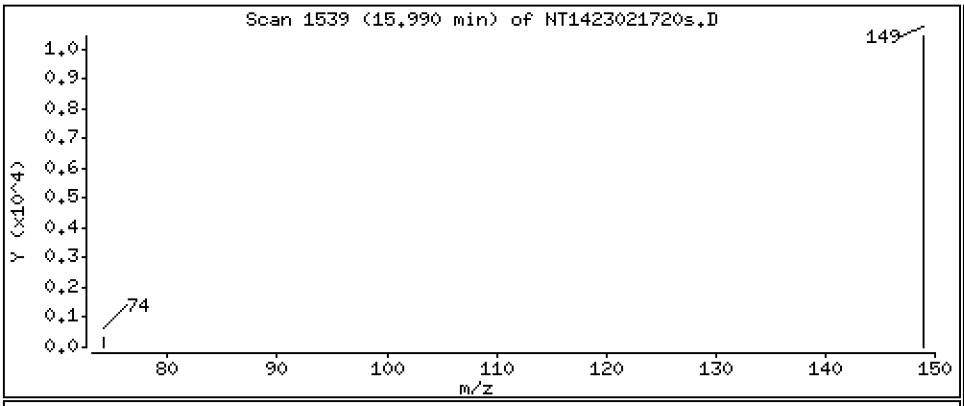
Operator: DSD

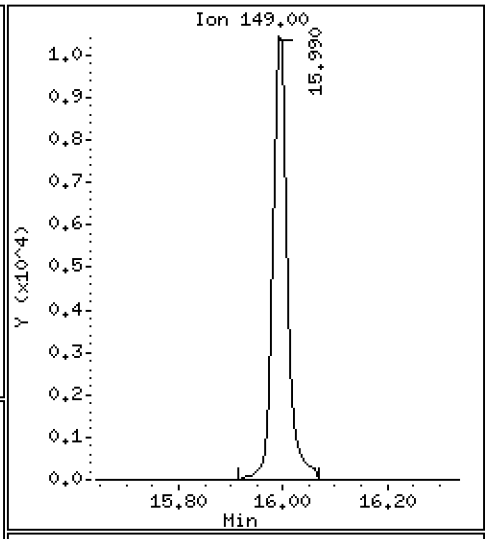
Column phase: ZB-5msi

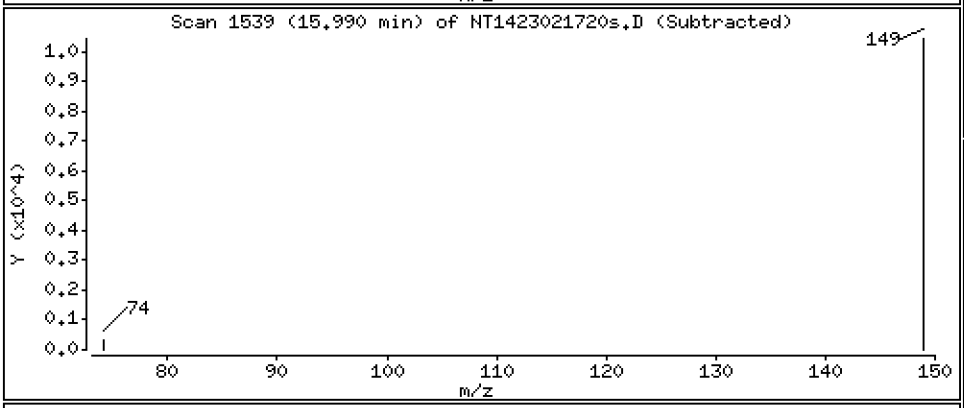
Column diameter: 0.25

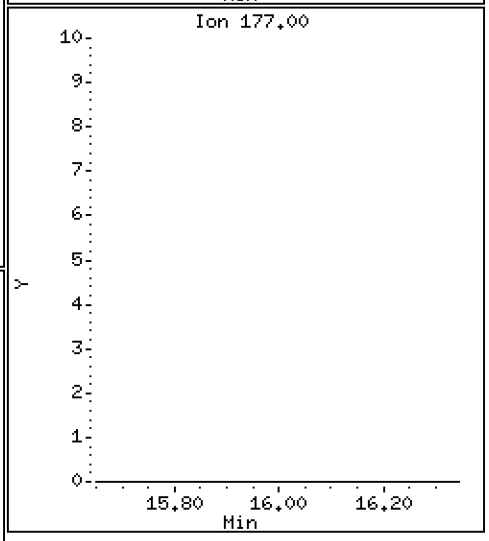
50 Diethylphthalate

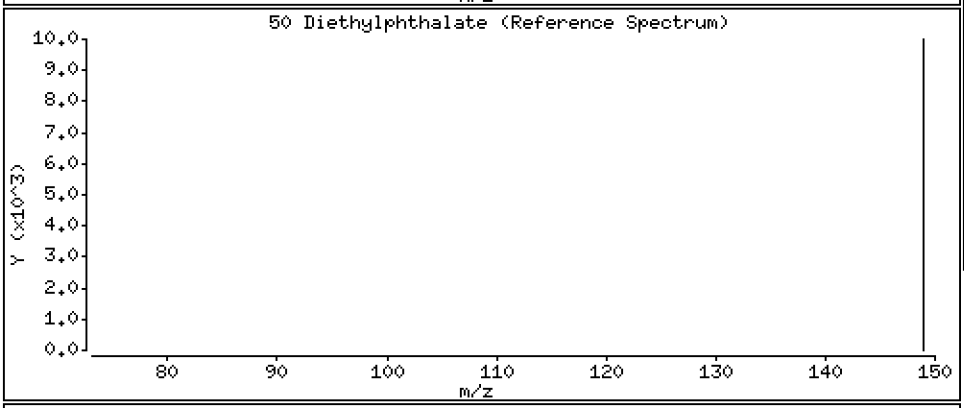
Concentration: 0.08569 ug/mL

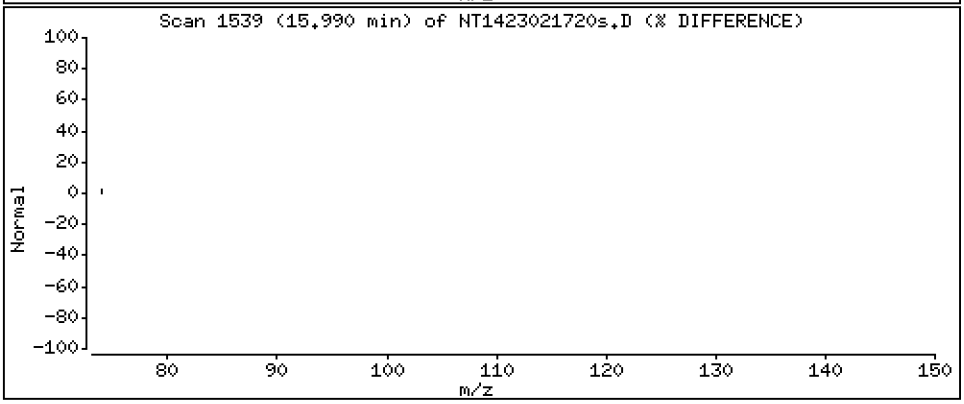












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Date : 17-FEB-2023 22:06

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-LCV1

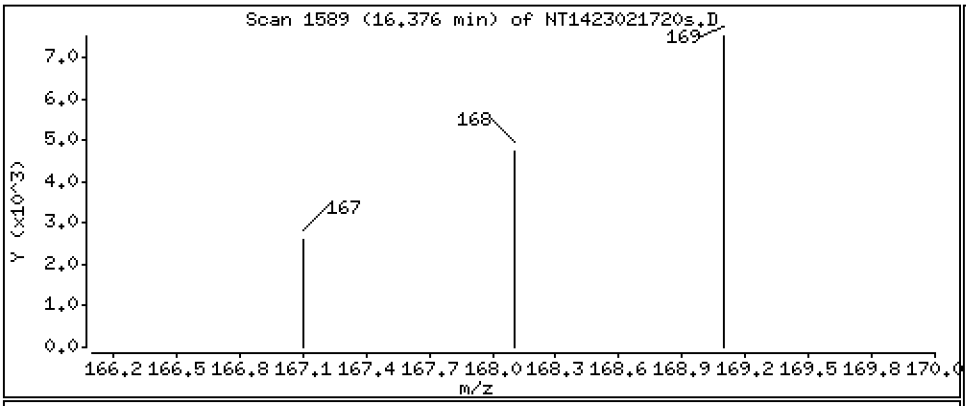
Operator: DSD

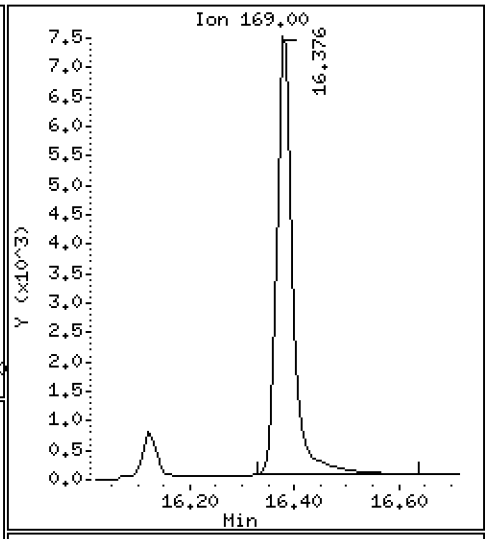
Column phase: ZB-5msi

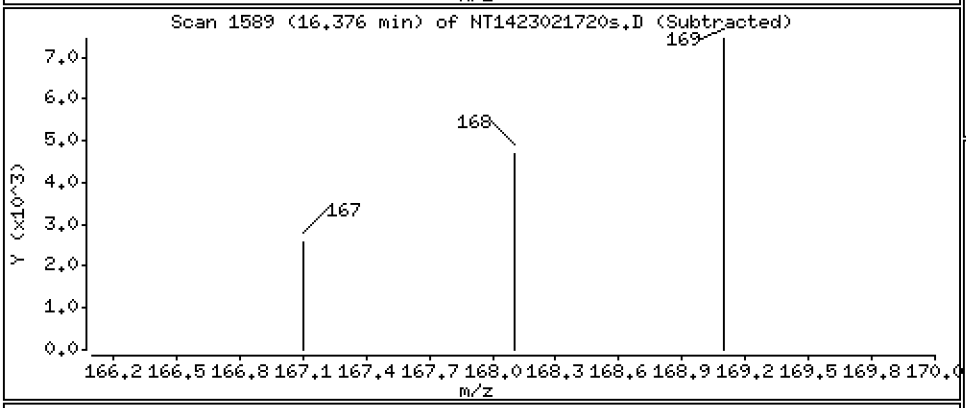
Column diameter: 0.25

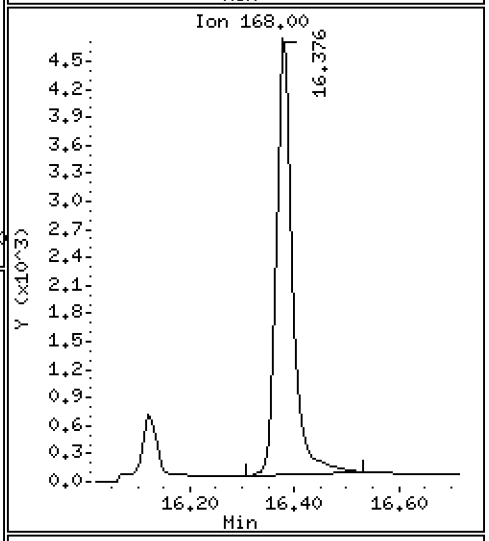
54 N-Nitrosodiphenylamine

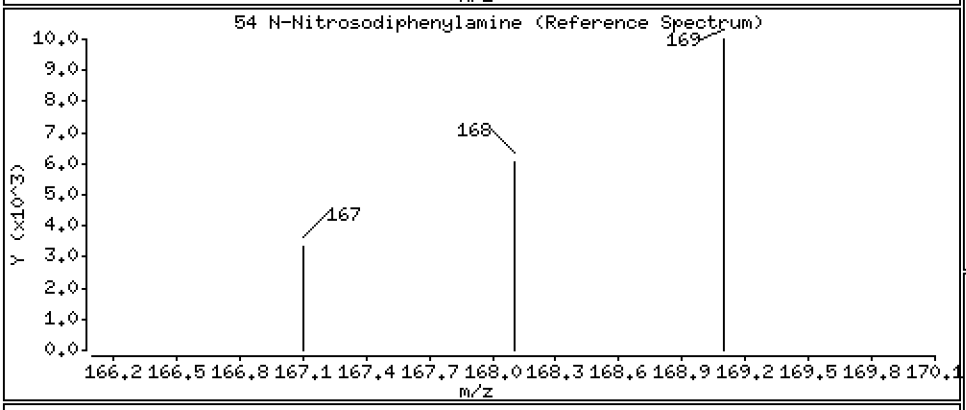
Concentration: 0.09326 ug/mL

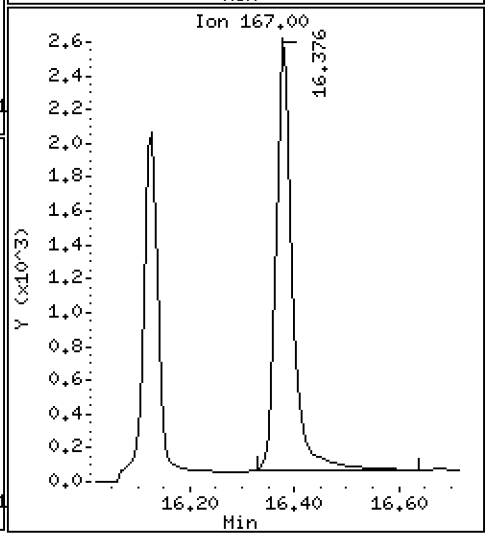


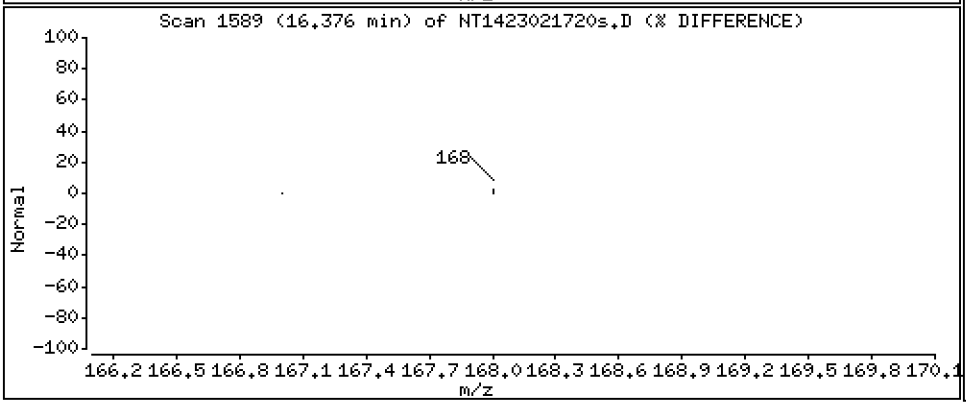












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021720s.D

Date : 17-FEB-2023 22:06

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-LCV1

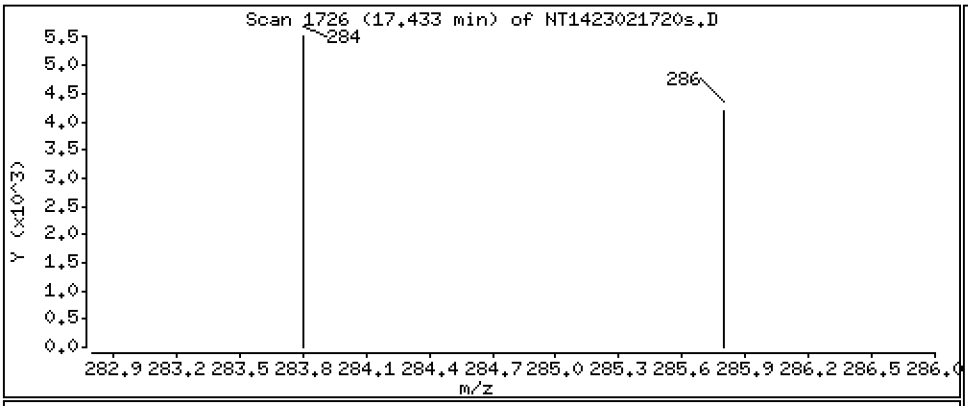
Operator: DSD

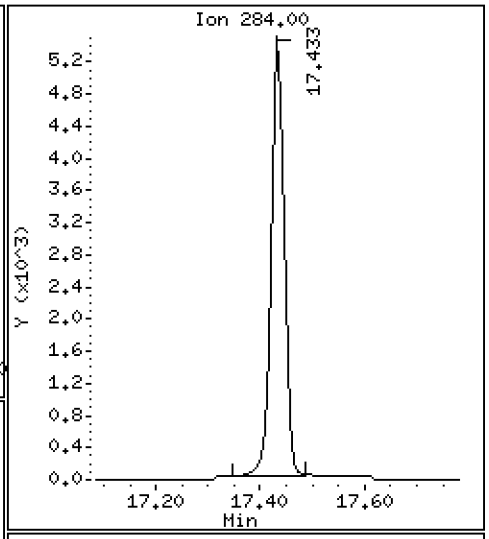
Column phase: ZB-5msi

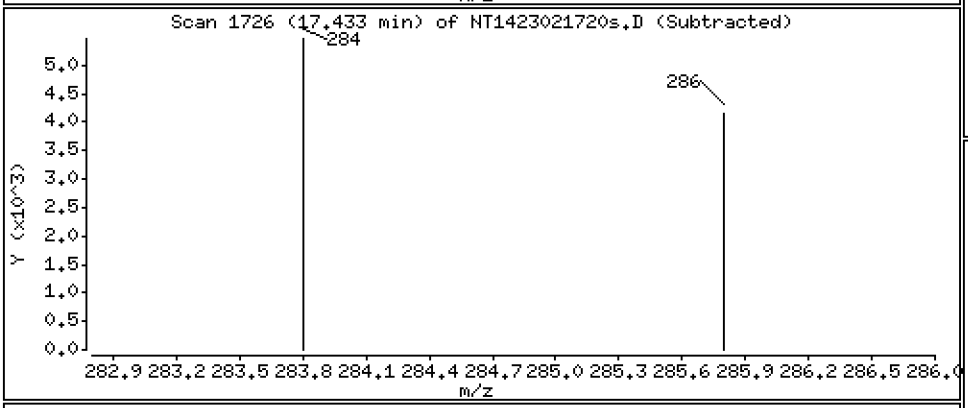
Column diameter: 0.25

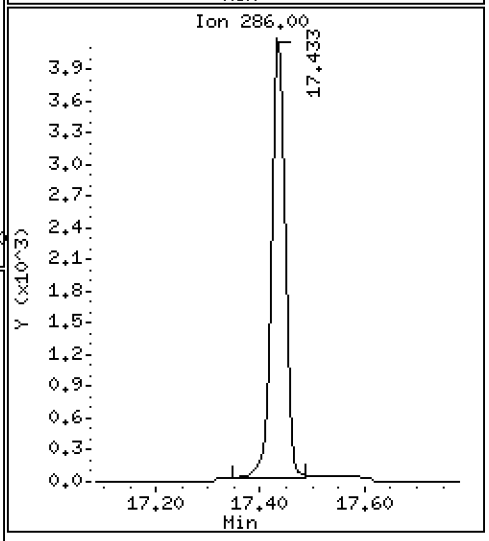
57 Hexachlorobenzene

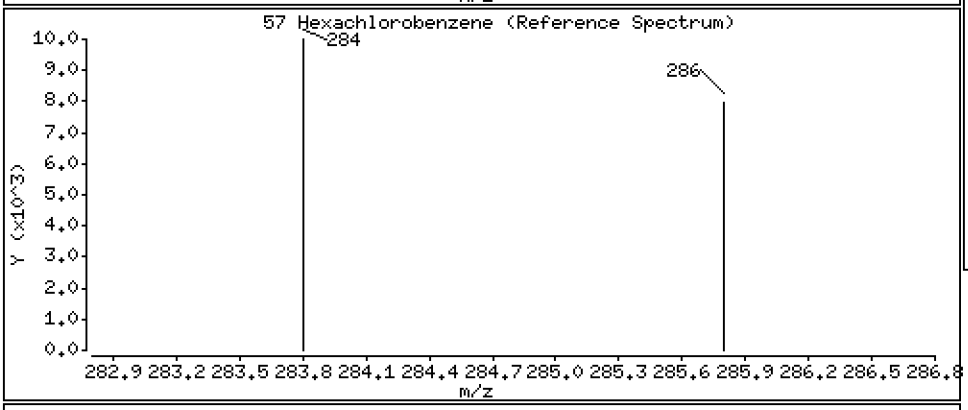
Concentration: 0.1036 ug/mL

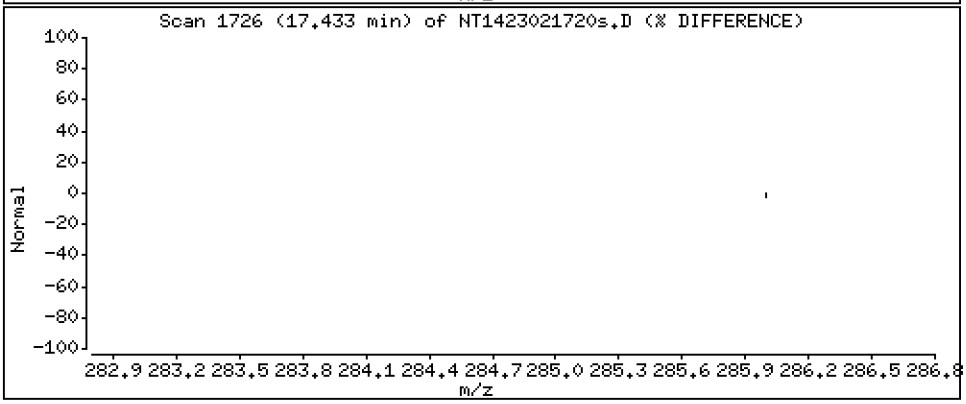












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021720s.D

Date : 17-FEB-2023 22:06

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-LCV1

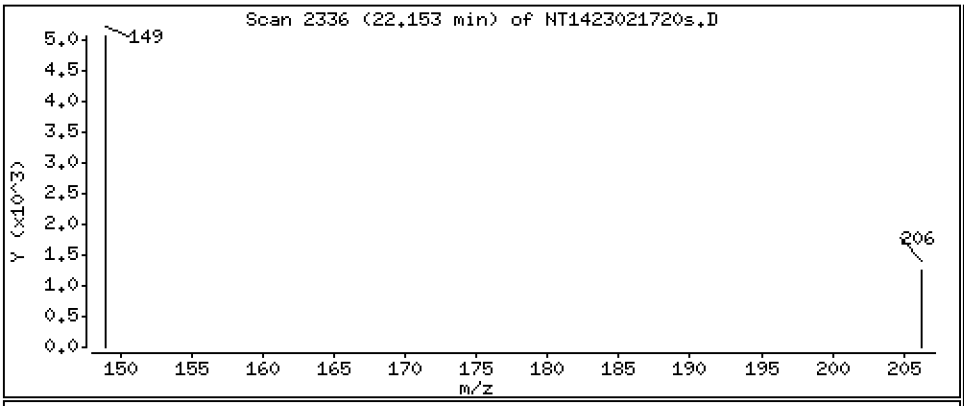
Operator: DSD

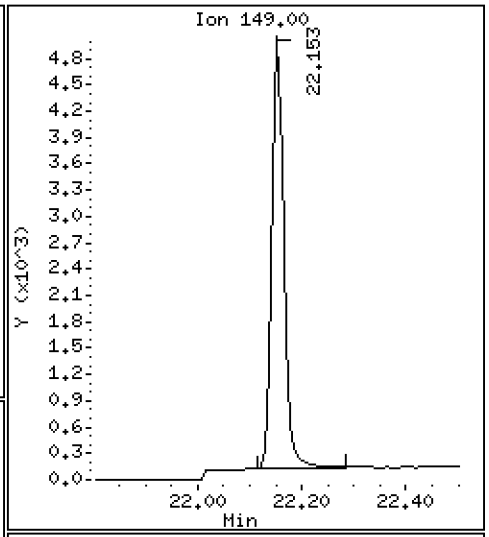
Column phase: ZB-5msi

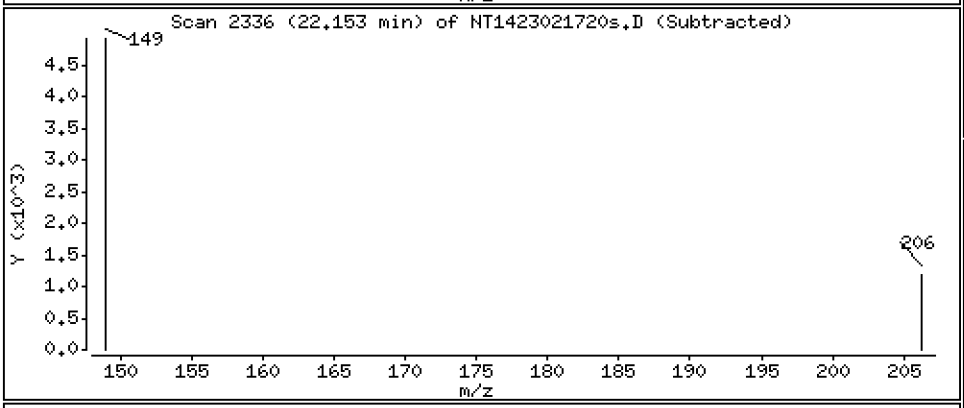
Column diameter: 0.25

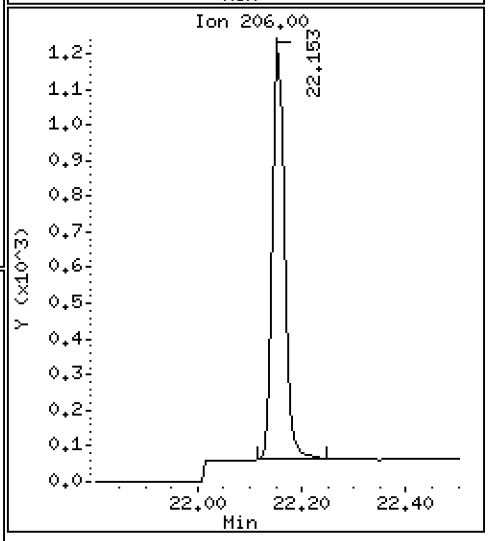
67 Butylbenzylphthalate

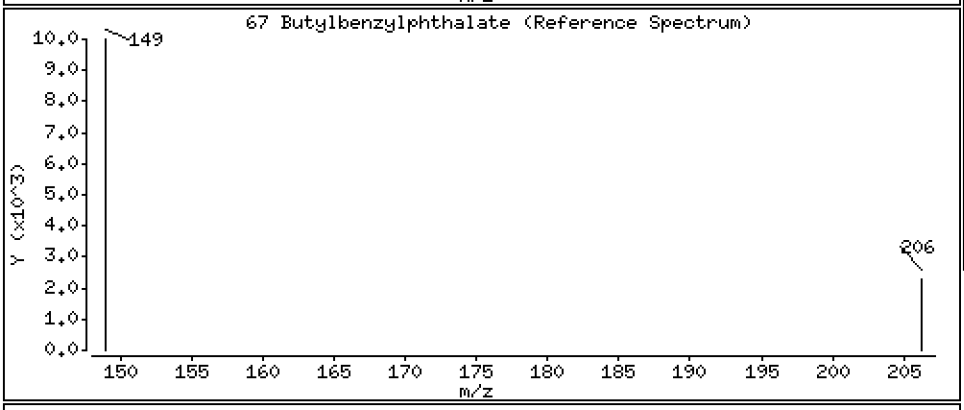
Concentration: 0.08599 ug/mL

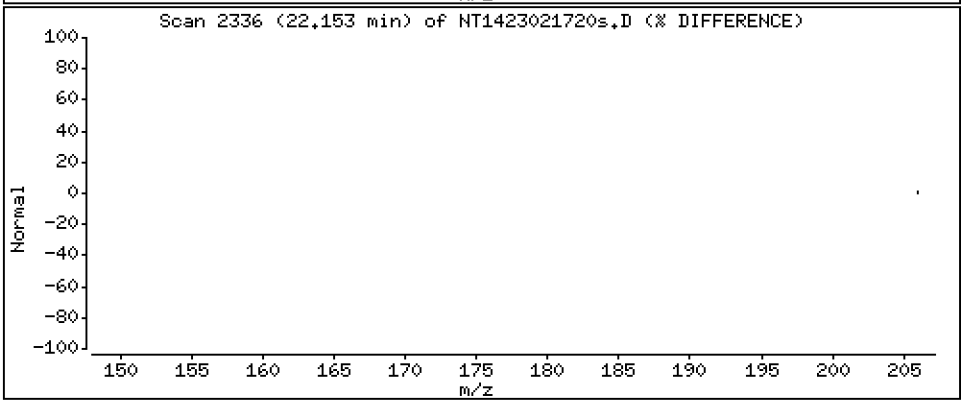












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Date : 17-FEB-2023 22:06

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-LCV1

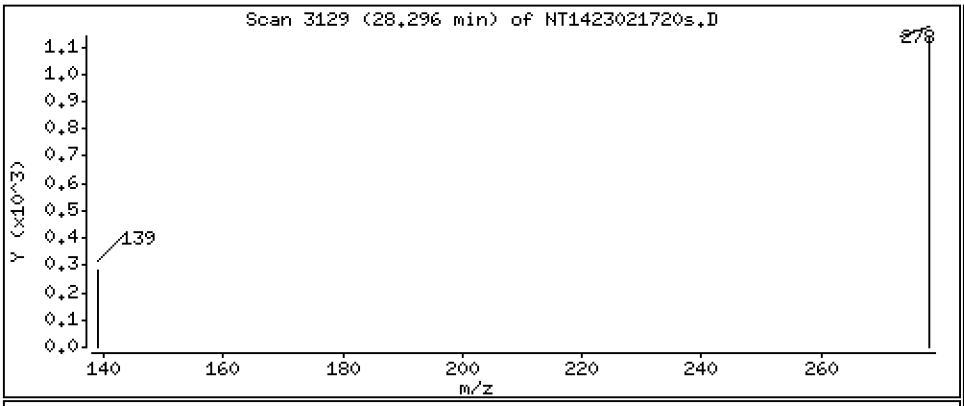
Operator: DSD

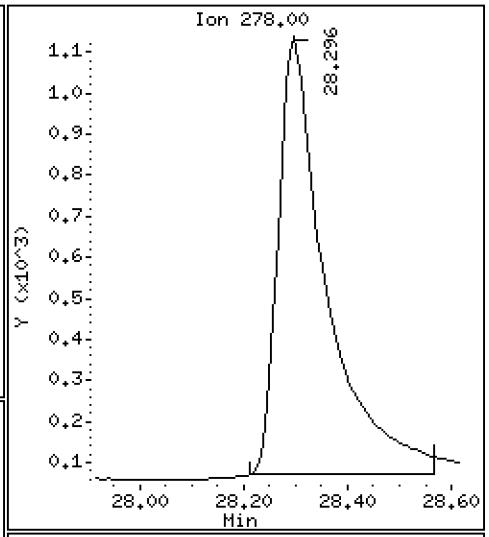
Column phase: ZB-5msi

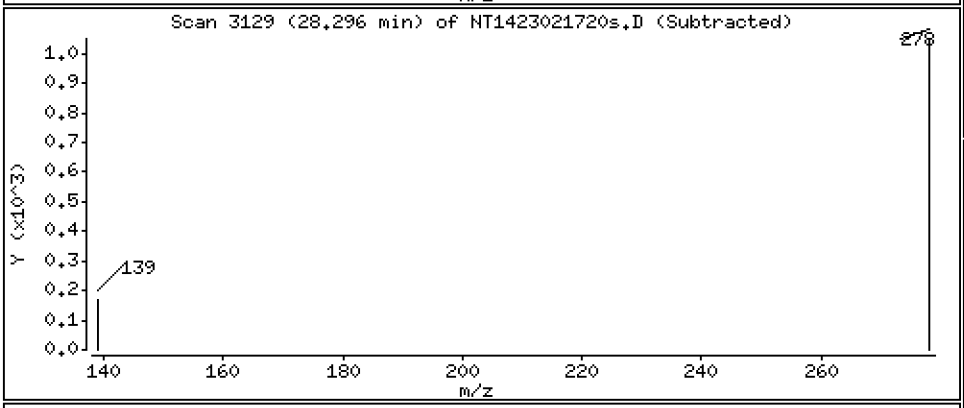
Column diameter: 0.25

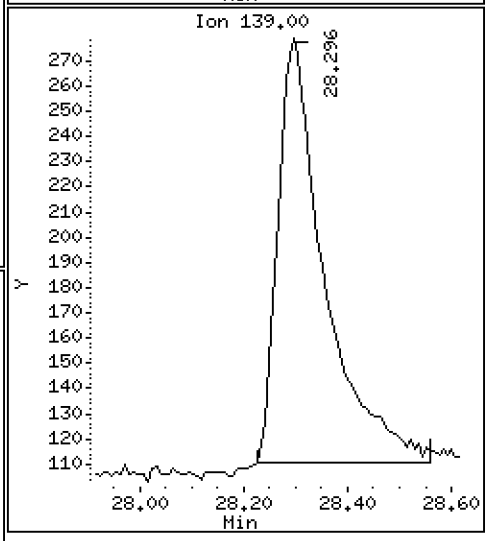
79 Dibenzo(a,h)anthracene

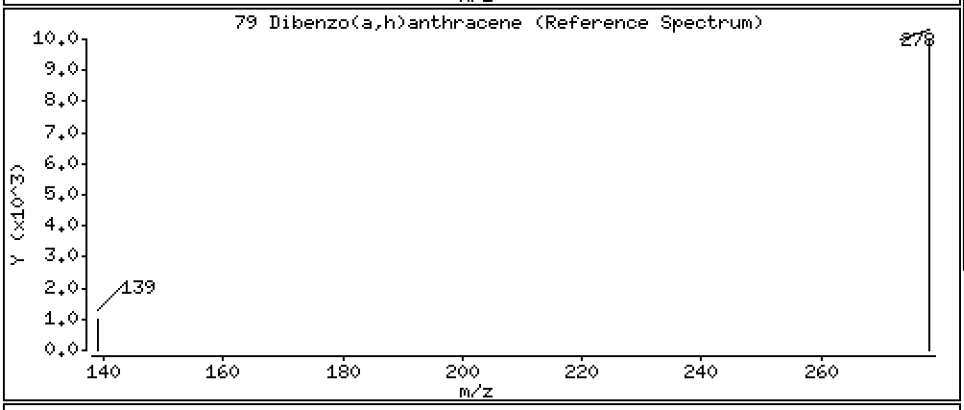
Concentration: 0.08041 ug/mL

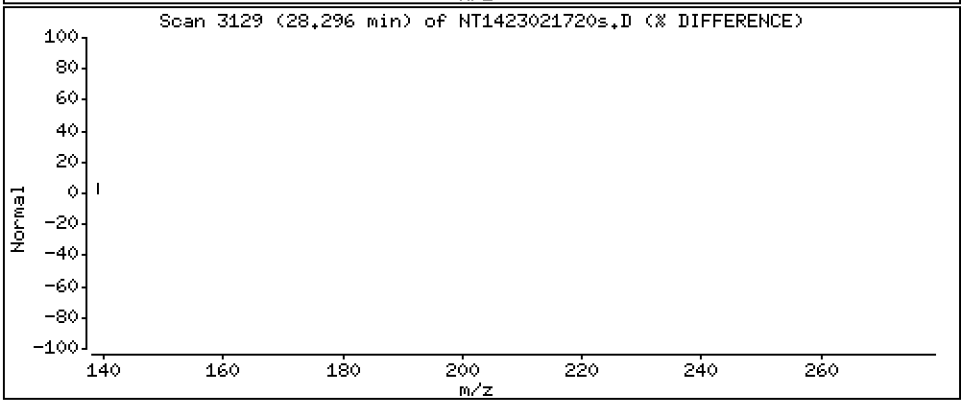












Data File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021720s.D

Date : 17-FEB-2023 22:06

Client ID:

Instrument: nt14.i

Sample Info: SLB0335-LCV1

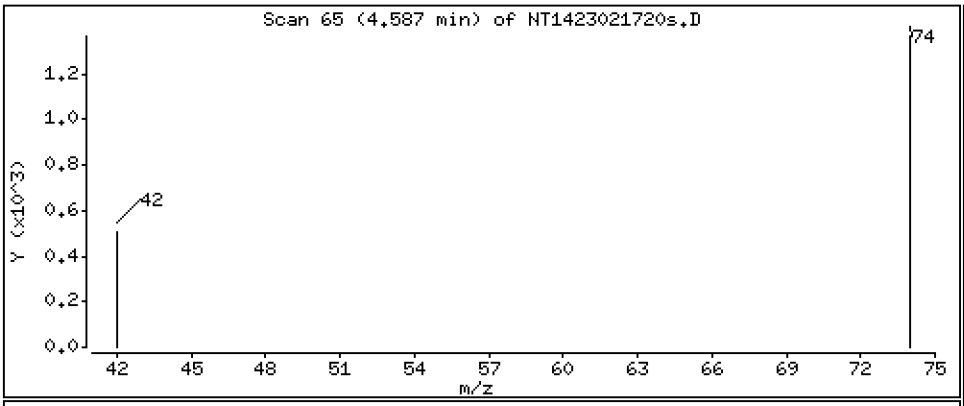
Operator: DSD

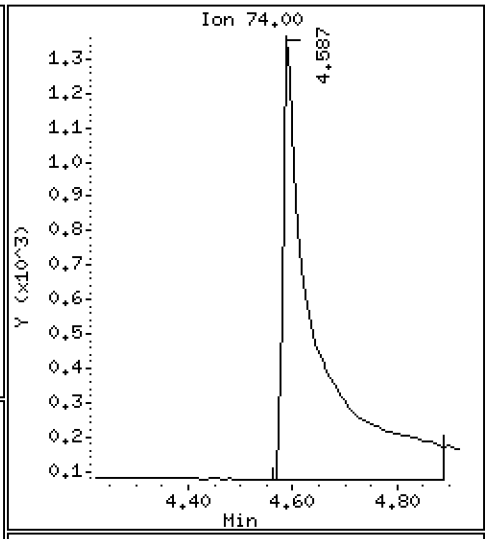
Column phase: ZB-5msi

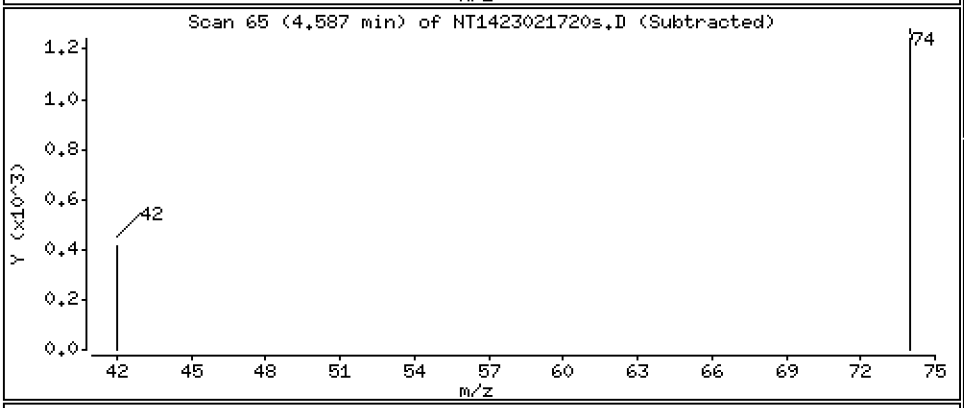
Column diameter: 0.25

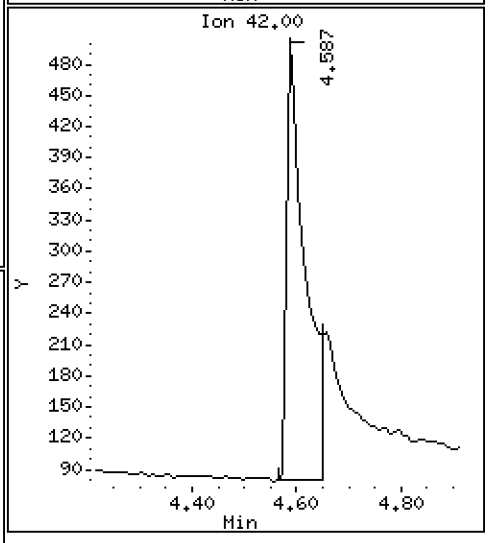
90 N-Nitrosodimethylamine

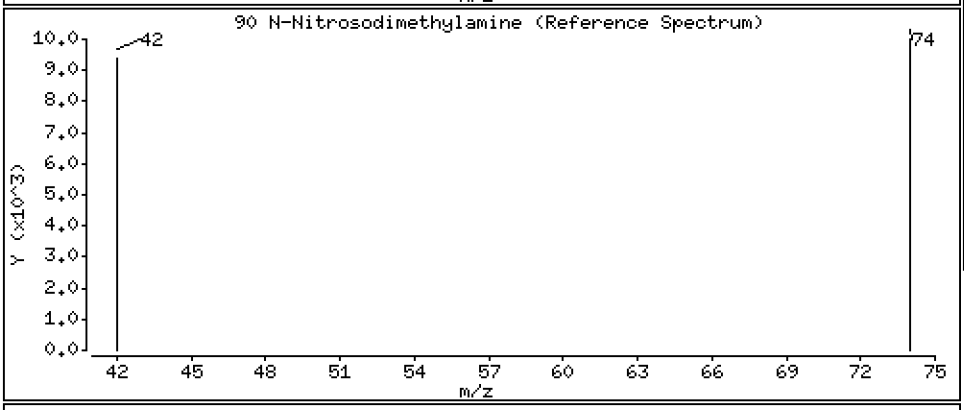
Concentration: 0.07715 ug/mL

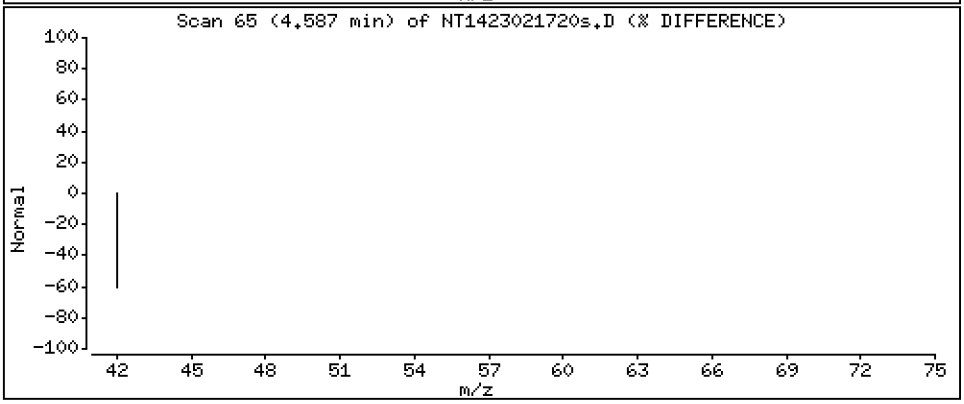












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\NT1423021720s.D
Lab Smp Id: SLB0335-LCV1
Inj Date : 17-FEB-2023 22:06 MS Autotune Date: 17-MAY-2011 01:22
Operator : DSD Inst ID: nt14.i
Smp Info : SLB0335-LCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\SIMABN2.m
Meth Date : 07-Mar-2023 12:35 van Quant Type: ISTD
Cal Date : 16-FEB-2023 20:42 Cal File: NT1423021612s.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.640	6.679	(0.746)	885	0.00915	0.009145(R)
	3 Phenol	94	8.317	8.294	(0.934)	6232	0.04366	0.04366
	7 1,3-Dichlorobenzene	146	8.835	8.835	(0.992)	11238	0.09913	0.09913
*	8 1,4-Dichlorobenzene-d4	152	8.905	8.905	(1.000)	333184	4.00000	
	9 1,4-Dichlorobenzene	146	8.928	8.928	(1.003)	10757	0.09947	0.09947
	11 Benzyl alcohol	79	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	9.293	9.293	(1.044)	10672	0.09925	0.09925
	13 2-Methylphenol	108	9.425	9.409	(1.058)	9333	0.09437	0.09437
	15 4-Methylphenol	108	9.712	9.681	(1.091)	6937	0.06407	0.06407
	16 N-Nitroso-di-n-propylamine	70	9.751	9.735	(1.095)	6543	0.07885	0.07885
	22 2,4-Dimethylphenol	107	10.736	10.728	(0.942)	18520	0.17205	0.1721
	24 Benzoic acid	105	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	11.310	11.309	(0.993)	10536	0.09768	0.09768
*	27 Naphthalene-d8	136	11.394	11.394	(1.000)	1177399	4.00000	
	30 Hexachlorobutadiene	225	11.804	11.804	(1.036)	6471	0.09862	0.09862
	39 Dimethylphthalate	163	14.544	14.536	(0.969)	17215	0.09370	0.09370
*	42 Acenaphthene-d10	162	15.015	15.015	(1.000)	602233	4.00000	
	50 Diethylphthalate	149	15.990	15.989	(1.065)	19705	0.08569	0.08569
	54 N-Nitrosodiphenylamine	169	16.375	16.368	(0.907)	15903	0.09326	0.09326(M)
	57 Hexachlorobenzene	284	17.432	17.432	(0.965)	9170	0.10362	0.1036
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.059	18.059	(1.000)	1362554	4.00000	
$	66 Terphenyl-d14	244	21.224	21.216	(0.918)	22919	0.12624	0.1262(R)
	67 Butylbenzylphthalate	149	22.153	22.153	(0.958)	7359	0.08599	0.08599
*	69 Chrysene-d12	240	23.121	23.121	(1.000)	681965	4.00000	
*	77 Perylene-d12	264	25.691	25.691	(1.000)	492763	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.296	28.265	(1.101)	6930	0.08041	0.08041
	90 N-Nitrosodimethylamine	74	4.586	4.571	(0.515)	5726	0.07715	0.07715

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 17-FEB-2023
Lab File ID: NT1423021720s.D Calibration Time: 21:31
Lab Smp Id: SLB0335-LCV1
Analysis Type: SV Level:
Quant Type: ISTD Sample Type:
Operator: DSD
Method File: \\target\share\chem3\nt14.i\20230217A.b\20230217A.b\SIMABN2.m
Misc Info:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	388684	194342	777368	333184	-14.28
27 Naphthalene-d8	1386667	693334	2773334	1177399	-15.09
42 Acenaphthene-d10	752189	376095	1504378	602233	-19.94
59 Phenanthrene-d10	1701919	850960	3403838	1362554	-19.94
69 Chrysene-d12	887171	443586	1774342	681965	-23.13
77 Perylene-d12	644624	322312	1289248	492763	-23.56

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	0.00
27 Naphthalene-d8	11.39	10.89	11.89	11.39	0.00
42 Acenaphthene-d10	15.02	14.52	15.52	15.02	0.00
59 Phenanthrene-d10	18.06	17.56	18.56	18.06	0.00
69 Chrysene-d12	23.12	22.62	23.62	23.12	0.00
77 Perylene-d12	25.69	25.19	26.19	25.69	0.00

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

REVIEW SUMMARY FOR FILE - NT1423021720s.D

Lab ID: SLB0335-LCV1
nt14.i, 20230217A.b\20230217A.b\SIMABN2.m,   17-FEB-2023 22:06

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: 20230217A.b/NT1423021719s.D

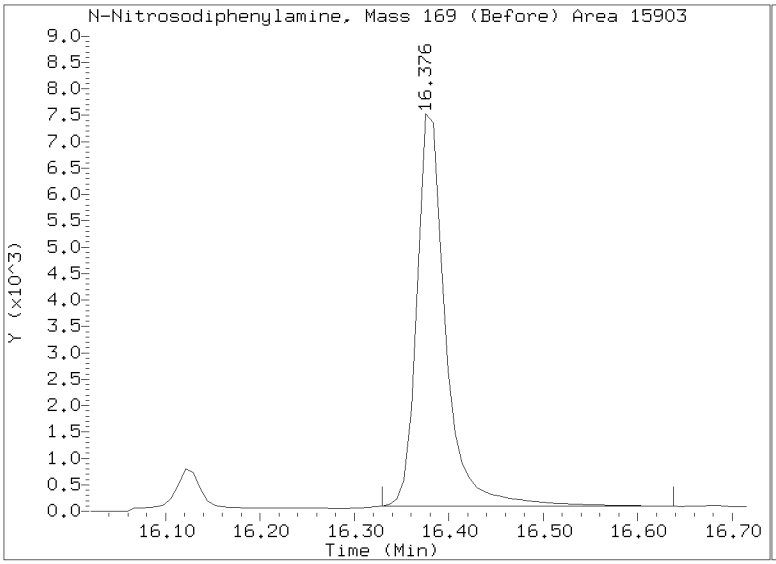
On Column LOD for nt14.i, 20230217A.b\SIMABN2.m, PSDDA.sub = 0.0000

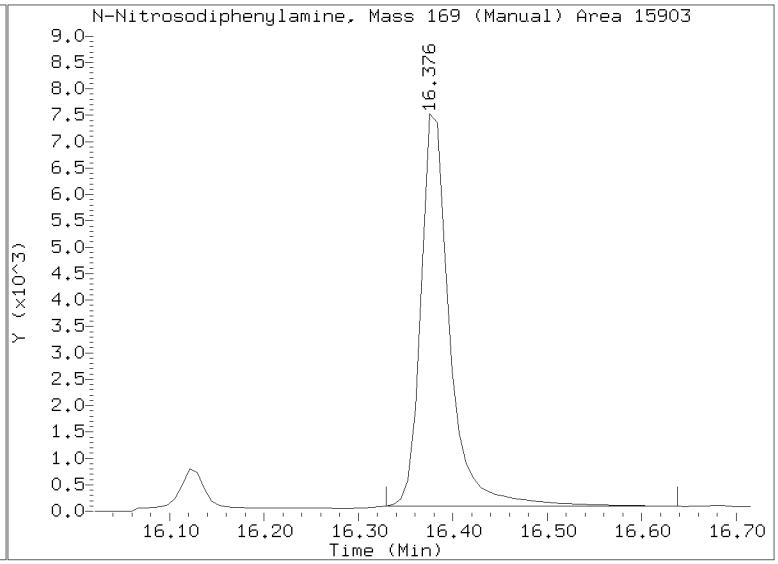
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230217A.b/20230217A.b/NT1423021720s.D
Injection Date: 17-FEB-2023 22:06
Lab ID:SLB0335-LCV1 Client ID:
Report Date: 03/07/2023 12:35





Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0240	Instrument:	NT14
		Calibration:	GC00009

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLB0240-TUN1	NT1423021603s.D	NA	02/16/23 14:33
CAL 20.0	SLB0240-CAL9	NT1423021604s.D	NA	02/16/23 15:54
CAL 10.0	SLB0240-CAL8	NT1423021605s.D	NA	02/16/23 16:30
CAL 5.0	SLB0240-CAL7	NT1423021606s.D	NA	02/16/23 17:06
CAL 2.5	SLB0240-CAL6	NT1423021607s.D	NA	02/16/23 17:42
CAL 1.0	SLB0240-CAL5	NT1423021608s.D	NA	02/16/23 18:18
CAL 0.50	SLB0240-CAL4	NT1423021609s.D	NA	02/16/23 18:54
CAL 0.20	SLB0240-CAL3	NT1423021610s.D	NA	02/16/23 19:30
CAL 0.10	SLB0240-CAL2	NT1423021611s.D	NA	02/16/23 20:06
CAL 0.05	SLB0240-CAL1	NT1423021612s.D	NA	02/16/23 20:42
SCV 5.0	SLB0240-SCV1	NT1423021613s.D	NA	02/16/23 21:18
Initial Cal Blank	SLB0240-ICB1	NT1423021618s.D	NA	02/17/23 00:17

ANALYSIS SEQUENCE

SLB0240

Instrument ID: NT14
Calibration ID: GC00009
MS EM Level: 1706 EV

GCMS Description: Agilent 7890A/5975C XL
GCMS Column ID: L001045

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLB0240-TUN1	MS Tune	QC		1	K008469		02/16/2023 14:33	NT1423021603S.D	DSD	
SLB0240-CAL9	CAL 20.0	QC		2	K011111	K010831	02/16/2023 15:54	NT1423021604S.D	DSD	
SLB0240-CAL8	CAL 10.0	QC		3	K011110	K010831	02/16/2023 16:30	NT1423021605S.D	DSD	
SLB0240-CAL7	CAL 5.0	QC		4	K011109	K010831	02/16/2023 17:06	NT1423021606S.D	DSD	
SLB0240-CAL6	CAL 2.5	QC		5	K011108	K010831	02/16/2023 17:42	NT1423021607S.D	DSD	
SLB0240-CAL5	CAL 1.0	QC		6	K011107	K010831	02/16/2023 18:18	NT1423021608S.D	DSD	
SLB0240-CAL4	CAL 0.50	QC		7	K011106	K010831	02/16/2023 18:54	NT1423021609S.D	DSD	
SLB0240-CAL3	CAL 0.20	QC		8	K011105	K010831	02/16/2023 19:30	NT1423021610S.D	DSD	
SLB0240-CAL2	CAL 0.10	QC		9	K011452	K010831	02/16/2023 20:06	NT1423021611S.D	DSD	
SLB0240-CAL1	CAL 0.05	QC		10	K011453	K010831	02/16/2023 20:42	NT1423021612S.D	DSD	
SLB0240-SCV1	SCV 5.0	QC		11	K010066	K010831	02/16/2023 21:18	NT1423021613S.D	DSD	
SLB0240-ICB1	Initial Cal Blank	QC		12	K005156	K010831	02/17/2023 00:17	NT1423021618S.D	DSD	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230216.b\20230216.b

	Time	Filename	LabID	ClientId	DF																
1	1433	NT1423021603s.D	SLB0240-TUN1		1	|NO ISTDS FOUND||															
2	1554	NT1423021604s.D	SLB0240-CAL9		1	| 8.91	281412||	11.40	1028262||	15.03	557155||	18.07	1280257||	23.14	778986||	25.69	506790|			
3	1630	NT1423021605s.D	SLB0240-CAL8		1	| 8.91	314437||	11.40	1133072||	15.02	615002||	18.06	1402756||	23.13	858745||	25.69	567246|			
4	1706	NT1423021606s.D	SLB0240-CAL7		1	| 8.91	404552||	11.39	1448768||	15.02	788119||	18.06	1820509||	23.13	1172674||	25.69	801283|			
5	1742	NT1423021607s.D	SLB0240-CAL6		1	| 8.91	355167||	11.39	1288352||	15.02	710230||	18.06	1567702||	23.12	1084006||	25.68	717515|			
6	1818	NT1423021608s.D	SLB0240-CAL5		1	| 8.91	393779||	11.40	1399029||	15.02	759723||	18.06	1756156||	23.12	1174128||	25.68	826011|			
7	1854	NT1423021609s.D	SLB0240-CAL4		1	| 8.91	399360||	11.40	1408942||	15.02	769600||	18.06	1769892||	23.12	1177556||	25.69	823122|			
8	1930	NT1423021610s.D	SLB0240-CAL3		1	| 8.91	338201||	11.39	1194978||	15.02	642586||	18.05	1471001||	23.12	932019||	25.68	646922|			
9	2006	NT1423021611s.D	SLB0240-CAL2		1	| 8.91	349348||	11.39	1224029||	15.02	645081||	18.06	1496005||	23.12	973406||	25.69	661889|			
10	2042	NT1423021612s.D	SLB0240-CAL1		1	| 8.91	353280||	11.39	1245409||	15.02	663197||	18.06	1533128||	23.12	979054||	25.69	656343|			
11	2118	NT1423021613s.D	SLB0240-SCV1		1	| 8.91	391473||	11.39	1430650||	15.02	794620||	18.06	1759092||	23.13	1201603||	25.69	814421|			
12	0017	NT1423021618s.D	SLB0240-ICB1		1	| 8.91	296634||	11.39	1039961||	15.02	537777||	18.05	1239183||	23.12	789133||	25.69	528194|			

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230216.b\20230216.b

Instrument: nt14.i Date: 16-FEB-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
1433	NT1423021603s.D	SLB0240-TUN1	1	NO MANUAL INTEGRATION
1554	NT1423021604s.D	SLB0240-CAL9	1	Benzoic acid,
1630	NT1423021605s.D	SLB0240-CAL8	1	NO MANUAL INTEGRATION
1706	NT1423021606s.D	SLB0240-CAL7	1	NO MANUAL INTEGRATION
1742	NT1423021607s.D	SLB0240-CAL6	1	NO MANUAL INTEGRATION
1818	NT1423021608s.D	SLB0240-CAL5	1	NO MANUAL INTEGRATION
1854	NT1423021609s.D	SLB0240-CAL4	1	Benzoic acid, Pentachlorophenol,
1930	NT1423021610s.D	SLB0240-CAL3	1	NO MANUAL INTEGRATION
2006	NT1423021611s.D	SLB0240-CAL2	1	NO MANUAL INTEGRATION
2042	NT1423021612s.D	SLB0240-CAL1	1	Phenol, N-Nitroso-di-n-propylamine, 1,2,4-Trichlorobenzene, N-Nitrosodimethylamine, N-Nitrosodiphenylamine,
2118	NT1423021613s.D	SLB0240-SCV1	1	NO MANUAL INTEGRATION
0017	NT1423021618s.D	SLB0240-ICB1	1	NO MANUAL INTEGRATION

Security Status Report

Date: 03-Mar-2023 14:50

NT1423021603s.D	Data Locked	van, 03-Mar-2023 14:50
NT1423021604s.D	Data Locked	van, 03-Mar-2023 14:50
NT1423021605s.D	Data Locked	van, 03-Mar-2023 14:50
NT1423021606s.D	Data Locked	van, 03-Mar-2023 14:50
NT1423021607s.D	Data Locked	van, 03-Mar-2023 14:50
NT1423021608s.D	Data Locked	van, 03-Mar-2023 14:50
NT1423021609s.D	Data Locked	van, 03-Mar-2023 14:50
NT1423021610s.D	Data Locked	van, 03-Mar-2023 14:50
NT1423021611s.D	Data Locked	van, 03-Mar-2023 14:50
NT1423021612s.D	Data Locked	van, 03-Mar-2023 14:50
NT1423021613s.D	Data Locked	van, 03-Mar-2023 14:50
NT1423021618s.D	Data Locked	van, 03-Mar-2023 14:50

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0335	Instrument:	NT14
		Calibration:	GC00009

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Initial Cal Check	SLB0335-ICV1	NT1423021719s1.D	NA	02/17/23 21:31
Low Cal Check	SLB0335-LCV1	NT1423021720s.D	NA	02/17/23 22:06
Blank	BLA0339-BLK2	NT1423021721s.D	Solid	02/17/23 22:43
LCS	BLA0339-BS2	NT1423021722s.D	Solid	02/17/23 23:19
LCS Dup	BLA0339-BSD2	NT1423021723s.D	Solid	02/17/23 23:55
Reference	BLA0339-SRM2	NT1423021724s.D	Solid	02/18/23 00:30
ZZZZZ	23A0100-21	NT1423021725s.D	Solid	02/18/23 01:06
ZZZZZ	23A0100-22	NT1423021726s.D	Solid	02/18/23 01:42
ZZZZZ	23A0100-23	NT1423021729s.D	Solid	02/18/23 03:30
LDW23-SS1254	23A0171-01	NT1423021730s.D	Solid	02/18/23 04:06
LDW23-SS1257	23A0171-02	NT1423021731s.D	Solid	02/18/23 04:42
LDW23-SS1262	23A0171-03	NT1423021732s.D	Solid	02/18/23 05:18
LDW23-SS1245	23A0171-04	NT1423021733s.D	Solid	02/18/23 05:54
Calibration Check	SLB0335-CCV1	NT1423021736s.D	NA	02/18/23 07:42

ANALYSIS SEQUENCE

SLB0335

Instrument ID: NT14
Calibration ID: GB00047
MS EM Level: EV

GCMS Description: Agilent 7890A/5975C XL
GCMS Column ID: ZB-5MS

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLB0335-TUN1	MS Tune	QC		1	K008469		02/17/2023 10:59	NT1423021701S.D	DSD	
SLB0335-ICV1	Initial Cal Check	QC		2	K011107	K010831	02/17/2023 21:31	NT1423021719S.D	DSD	
SLB0335-LCV1	Low Cal Check	QC		3	K011452	K010831	02/17/2023 22:06	NT1423021720S.D	DSD	
BLA0339-BLK2	Blank	QC		4		K010831	02/17/2023 22:43	NT1423021721S.D	DSD	
BLA0339-BS2	LCS	QC		5		K010831	02/17/2023 23:19	NT1423021722S.D	DSD	
BLA0339-BSD2	LCS Dup	QC		6		K010831	02/17/2023 23:55	NT1423021723S.D	DSD	
BLA0339-SRM2	Reference	QC		7		K010831	02/18/2023 00:30	NT1423021724S.D	DSD	
23A0100-21	LDW23-SS1154	270E-SIM Dual Scan SVO	A 04	8		K010831	02/18/2023 01:06	NT1423021725S.D	DSD	
23A0100-22	LDW23-SS1149	270E-SIM Dual Scan SVO	A 04	9		K010831	02/18/2023 01:42	NT1423021726S.D	DSD	
BLA0339-MS3	Matrix Spike	QC		10		K010831	02/18/2023 02:18	NT1423021727S.D	DSD	
BLA0339-MSD3	Matrix Spike Dup	QC		11		K010831	02/18/2023 02:54	NT1423021728S.D	DSD	
23A0100-23	LDW23-SS1130	270E-SIM Dual Scan SVO	A 04	12		K010831	02/18/2023 03:30	NT1423021729S.D	DSD	
23A0171-01	LDW23-SS1254	270E-SIM Dual Scan SVO	A 03	13		K010831	02/18/2023 04:06	NT1423021730S.D	DSD	
23A0171-02	LDW23-SS1257	270E-SIM Dual Scan SVO	A 03	14		K010831	02/18/2023 04:42	NT1423021731S.D	DSD	
23A0171-03	LDW23-SS1262	270E-SIM Dual Scan SVO	A 03	15		K010831	02/18/2023 05:18	NT1423021732S.D	DSD	
23A0171-04	LDW23-SS1245	270E-SIM Dual Scan SVO	A 03	16		K010831	02/18/2023 05:54	NT1423021733S.D	DSD	
SLB0335-CCV1	Calibration Check	QC		17	K011107	K010831	02/18/2023 07:42	NT1423021736S.D	DSD	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230217A.b\20230217A.b

	Time	Filename	LabID	ClientId	DF																
1	1059	NT1423021701s.D	SLB0335-TUN1		1	|NO ISTDS FOUND||															
2	2131	NT1423021719s.D	SLB0335-ICV1		1	| 8.91	388684	|11.39	1386667	|15.02	752189	|18.06	1701919	|23.12	887171	|25.69	644624|			
3	2206	NT1423021720s.D	SLB0335-LCV1		1	| 8.91	333184	|11.39	1177399	|15.02	602233	|18.06	1362554	|23.12	681965	|25.69	492763|			
4	2243	NT1423021721s.D	BLA0339-BLK1		1	| 8.91	319207	|11.40	1142078	|15.02	583672	|18.06	1313880	|23.12	666917	|25.69	467093|			
5	2319	NT1423021722s.D	BLA0339-BS1		1	| 8.91	302713	|11.40	1082666	|15.02	579646	|18.06	1297420	|23.13	684601	|25.69	496930|			
6	2355	NT1423021723s.D	BLA0339-BSD1		1	| 8.91	302063	|11.39	1084486	|15.02	577802	|18.06	1295857	|23.13	690576	|25.69	491816|			
7	0030	NT1423021724s.D	BLA0339-SRM1		1	| 8.91	311456	|11.39	1092342	|15.02	579939	|18.06	1321621	|23.13	677603	|25.69	506598|			
8	0106	NT1423021725s.D	23A0100-21		1	| 8.91	313801	|11.40	1123747	|15.02	574588	|18.06	1201264	|23.13	548557	|25.70	518052|			
9	0142	NT1423021726s.D	23A0100-22		1	| 8.91	313797	|11.39	1115573	|15.02	574424	|18.06	1277943	|23.13	596487	|25.69	492641|			
10	0218	NT1423021727s.D	BLA0339-MS1		1	| 8.91	299659	|11.39	1069727	|15.02	571114	|18.06	1258973	|23.13	596412	|25.69	497140|			
11	0254	NT1423021728s.D	BLA0339-MSD1		1	| 8.91	303890	|11.40	1091673	|15.02	581587	|18.06	1277548	|23.13	572070	|25.70	498855|			
12	0330	NT1423021729s.D	23A0100-23		1	| 8.91	307720	|11.40	1102547	|15.02	563579	|18.06	1195165	|23.13	530092	|25.70	500067|			
13	0406	NT1423021730s.D	23A0171-01		1	| 8.91	310259	|11.39	1103591	|15.02	565626	|18.07	1084412	|23.13	512467	|25.71	475993|			
14	0442	NT1423021731s.D	23A0171-02		1	| 8.91	307215	|11.39	1103567	|15.02	568782	|18.06	1245556	|23.13	531001	|25.70	475192|			
15	0518	NT1423021732s.D	23A0171-03		1	| 8.91	307124	|11.40	1102139	|15.02	555819	|18.07	1051765	|23.14	485304	|25.71	447396|			
16	0554	NT1423021733s.D	23A0171-04		1	| 8.91	309874	|11.40	1110553	|15.02	576909	|18.07	1171208	|23.14	487857	|25.71	455709|			
17	0630	NT1423021734s.D	SEQ-ICV3		1	| 8.91	375417	|11.40	1372358	|15.03	724305	|18.07	1545226	|23.13	674632	|25.70	622827|			
18	0706	NT1423021735s.D	SEQ-LCV3		1	| 8.91	406343	|11.40	1445228	|15.02	743810	|18.07	1563925	|23.13	691741	|25.70	616295|			
19	0742	NT1423021736s.D	SLB0335-CCV1		1	| 8.91	385687	|11.40	1379443	|15.02	715998	|18.07	1475287	|23.13	645351	|25.70	579672|			
20	0818	NT1423021737s.D	SIM-LCV3		1	| 8.91	335563	|11.40	1181476	|15.02	597563	|18.07	1268431	|23.13	539211	|25.70	462157|			

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230217A.b\20230217A.b

ARI Job No.: SLB0 Method: DFTPP8270E.m Instrument: nt14.i Date: 17-FEB-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1059	NT1423021701s.D	SLB0335-TUN1		1	NO MANUAL INTEGRATION
2131	NT1423021719s.D	SLB0335-ICV1		1	NO MANUAL INTEGRATION
2206	NT1423021720s.D	SLB0335-LCV1		1	N-Nitrosodiphenylamine,
2243	NT1423021721s.D	BLA0339-BLK2		1	NO MANUAL INTEGRATION
2319	NT1423021722s.D	BLA0339-BS2		1	NO MANUAL INTEGRATION
2355	NT1423021723s.D	BLA0339-BSD2		1	NO MANUAL INTEGRATION
0030	NT1423021724s.D	BLA0339-SRM2		1	Hexachlorobenzene,
0106	NT1423021725s.D	23A0100-21		1	1,4-Dichlorobenzene, Dimethylphthalate,
0142	NT1423021726s.D	23A0100-22		1	NO MANUAL INTEGRATION
0218	NT1423021727s.D	BLA0339-MS3		1	NO MANUAL INTEGRATION
0254	NT1423021728s.D	BLA0339-MSD3		1	NO MANUAL INTEGRATION
0330	NT1423021729s.D	23A0100-23		1	Dimethylphthalate, Pentachlorophenol,
0406	NT1423021730s.D	23A0171-01		1	Dimethylphthalate, Pentachlorophenol,
0442	NT1423021731s.D	23A0171-02		1	Dimethylphthalate,
0518	NT1423021732s.D	23A0171-03		1	Pentachlorophenol,
0554	NT1423021733s.D	23A0171-04		1	Dimethylphthalate, Pentachlorophenol,
0630	NT1423021734s.D	SEQ-ICV3		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230217A.b\20230217A.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0706	NT1423021735s.D	SEQ-LCV3		1	NO MANUAL INTEGRATION
0742	NT1423021736s.D	SLB0335-CCV1		1	NO MANUAL INTEGRATION
0818	NT1423021737s.D	SIM-LCV3		1	NO MANUAL INTEGRATION

Security Status Report

Date: 02-Mar-2023 11:31

NT1423021701s.D	Data Locked	deenayd, 02-
NT1423021719s.D	Data Locked	deenayd, 02-
NT1423021720s.D	Data Locked	deenayd, 02-
NT1423021721s.D	Data Locked	deenayd, 02-
NT1423021722s.D	Data Locked	deenayd, 02-
NT1423021723s.D	Data Locked	deenayd, 02-
NT1423021724s.D	Data Locked	deenayd, 02-
NT1423021725s.D	Data Locked	deenayd, 02-
NT1423021726s.D	Data Locked	deenayd, 02-
NT1423021727s.D	Data Locked	deenayd, 02-
NT1423021728s.D	Data Locked	deenayd, 02-
NT1423021729s.D	Data Locked	deenayd, 02-
NT1423021730s.D	Data Locked	deenayd, 02-
NT1423021731s.D	Data Locked	deenayd, 02-
NT1423021732s.D	Data Locked	deenayd, 02-
NT1423021733s.D	Data Locked	deenayd, 02-
NT1423021734s.D	Data Locked	deenayd, 02-
NT1423021735s.D	Data Locked	deenayd, 02-
NT1423021736s.D	Data Locked	deenayd, 02-
NT1423021737s.D	Data Locked	deenayd, 02-

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0240	Instrument:	NT14
Calibration:	GC00009	Calibration Date:	02/16/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLB0240-SCV1 (Water)			Lab File ID: NT1423021613s.D				Analyzed: 02/16/23 21:18	
2-Fluorophenol	7.5000	103	0 - 200	6.679	6.6945	-0.0155	N/A	
p-Terphenyl-d14	5.0000	91.5	0 - 200	21.224	21.219	0.0050	N/A	
SLB0240-ICB1 (Water)			Lab File ID: NT1423021618s.D				Analyzed: 02/17/23 00:17	
2-Fluorophenol	7.5000	108	30 - 160	6.679	6.6945	-0.0155	N/A	
p-Terphenyl-d14	5.0000	112	30 - 160	21.216	21.219	-0.0030	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLB0335
Instrument: NT14
Calibration: GC00009
Calibration Date: 02/16/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLB0335-ICV1 (Solid)			Lab File ID: NT1423021719s1.D			Analyzed: 02/17/23 21:31		
2-Fluorophenol	1.5000	93.6	80 - 120	6.679	6.6945	-0.0155	N/A	
p-Terphenyl-d14	1.0000	137	80 - 120	21.216	21.219	-0.0030	N/A	*
SLB0335-LCV1 (Solid)			Lab File ID: NT1423021720s.D			Analyzed: 02/17/23 22:06		
2-Fluorophenol	0.15000	6.10	0 - 200	6.64	6.6945	-0.0545	N/A	
p-Terphenyl-d14	0.10000	126	0 - 200	21.224	21.219	0.0050	N/A	
BLA0339-BLK2 (Solid)			Lab File ID: NT1423021721s.D			Analyzed: 02/17/23 22:43		
2-Fluorophenol	750.00	47.2	27 - 120	6.687	6.6945	-0.0075	N/A	
p-Terphenyl-d14	500.00	83.1	37 - 120	21.216	21.219	-0.0030	N/A	
BLA0339-BS2 (Solid)			Lab File ID: NT1423021722s.D			Analyzed: 02/17/23 23:19		
2-Fluorophenol	750.00	69.3	27 - 120	6.702	6.6945	0.0075	N/A	
p-Terphenyl-d14	500.00	101	37 - 120	21.216	21.219	-0.0030	N/A	
BLA0339-BSD2 (Solid)			Lab File ID: NT1423021723s.D			Analyzed: 02/17/23 23:55		
2-Fluorophenol	750.00	71.6	27 - 120	6.694	6.6945	-0.0005	N/A	
p-Terphenyl-d14	500.00	100	37 - 120	21.216	21.219	-0.0030	N/A	
BLA0339-SRM2 (Solid)			Lab File ID: NT1423021724s.D			Analyzed: 02/18/23 00:30		
2-Fluorophenol	7500.0	72.5	27 - 120	6.702	6.6945	0.0075	N/A	
p-Terphenyl-d14	5000.0	101	37 - 120	21.216	21.219	-0.0030	N/A	
23A0171-01 (Solid)			Lab File ID: NT1423021730s.D			Analyzed: 02/18/23 04:06		
2-Fluorophenol	735.76	64.0	27 - 120	6.702	6.6945	0.0075	N/A	
p-Terphenyl-d14	490.51	84.9	37 - 120	21.224	21.219	0.0050	N/A	
23A0171-02 (Solid)			Lab File ID: NT1423021731s.D			Analyzed: 02/18/23 04:42		
2-Fluorophenol	737.67	71.3	27 - 120	6.71	6.6945	0.0155	N/A	
p-Terphenyl-d14	491.78	109	37 - 120	21.224	21.219	0.0050	N/A	
23A0171-03 (Solid)			Lab File ID: NT1423021732s.D			Analyzed: 02/18/23 05:18		
2-Fluorophenol	740.25	68.2	27 - 120	6.71	6.6945	0.0155	N/A	
p-Terphenyl-d14	493.50	84.5	37 - 120	21.224	21.219	0.0050	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0335	Instrument:	NT14
Calibration:	GC00009	Calibration Date:	02/16/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0171-04 (Solid)			Lab File ID: NT1423021733s.D				Analyzed: 02/18/23 05:54	
2-Fluorophenol	741.17	69.5	27 - 120	6.71	6.6945	0.0155	N/A	
p-Terphenyl-d14	494.11	95.5	37 - 120	21.232	21.219	0.0130	N/A	
SLB0335-CCV1 (Solid)			Lab File ID: NT1423021736s.D				Analyzed: 02/18/23 07:42	
2-Fluorophenol	1.5000	92.9	50 - 150	6.686	6.6945	-0.0085	N/A	
p-Terphenyl-d14	1.0000	136	50 - 150	21.224	21.219	0.0050	N/A	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0240	Instrument:	NT14
		Calibration:	GC00009

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Secondary Cal Check (SLB0240-SCV1)		(Water)	Lab File ID: NT1423021613s.D					Analyzed: 02/16/23 21:18	
1,4-Dichlorobenzene-d4	391473	8.905	393779	8.905	99	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1430650	11.394	1399029	11.395	102	50 - 200	-0.001	+/-0.50	
Acenaphthene-d10	794620	15.023	759723	15.016	105	50 - 200	0.007	+/-0.50	
Phenanthrene-d10	1759092	18.059	1756156	18.059	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	1201603	23.128	1174128	23.121	102	50 - 200	0.007	+/-0.50	
Perylene-d12	814421	25.691	826011	25.683	99	50 - 200	0.008	+/-0.50	
Initial Cal Blank (SLB0240-ICB1)		(Water)	Lab File ID: NT1423021618s.D					Analyzed: 02/17/23 00:17	
1,4-Dichlorobenzene-d4	296634	8.905	393779	8.905	75	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1039961	11.394	1399029	11.395	74	50 - 200	-0.001	+/-0.50	
Acenaphthene-d10	537777	15.015	759723	15.016	71	50 - 200	-0.001	+/-0.50	
Phenanthrene-d10	1239183	18.051	1756156	18.059	71	50 - 200	-0.008	+/-0.50	
Chrysene-d12	789133	23.121	1174128	23.121	67	50 - 200	0.000	+/-0.50	
Perylene-d12	528194	25.691	826011	25.683	64	50 - 200	0.008	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0335	Instrument:	NT14
		Calibration:	GC00009

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLB0335-ICV1)		(Solid)	Lab File ID: NT1423021719s1.D				Analyzed: 02/17/23 21:31		
1,4-Dichlorobenzene-d4	388684	8.905	388684	8.905	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1386667	11.394	1386667	11.394	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	752189	15.015	752189	15.015	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1701919	18.059	1701919	18.059	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	887171	23.121	887171	23.121	100	50 - 200	0.000	+/-0.50	
Perylene-d12	644624	25.691	644624	25.691	100	50 - 200	0.000	+/-0.50	
Low Cal Check (SLB0335-LCV1)		(Solid)	Lab File ID: NT1423021720s.D				Analyzed: 02/17/23 22:06		
1,4-Dichlorobenzene-d4	333184	8.905	388684	8.905	86	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1177399	11.394	1386667	11.394	85	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	602233	15.015	752189	15.015	80	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1362554	18.059	1701919	18.059	80	50 - 200	0.000	+/-0.50	
Chrysene-d12	681965	23.121	887171	23.121	77	50 - 200	0.000	+/-0.50	
Perylene-d12	492763	25.691	644624	25.691	76	50 - 200	0.000	+/-0.50	
Blank (BLA0339-BLK2)		(Solid)	Lab File ID: NT1423021721s.D				Analyzed: 02/17/23 22:43		
1,4-Dichlorobenzene-d4	319207	8.905	388684	8.905	82	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1142078	11.395	1386667	11.394	82	50 - 200	0.001	+/-0.50	
Acenaphthene-d10	583672	15.016	752189	15.015	78	50 - 200	0.001	+/-0.50	
Phenanthrene-d10	1313880	18.059	1701919	18.059	77	50 - 200	0.000	+/-0.50	
Chrysene-d12	666917	23.121	887171	23.121	75	50 - 200	0.000	+/-0.50	
Perylene-d12	467093	25.691	644624	25.691	72	50 - 200	0.000	+/-0.50	
LCS (BLA0339-BS2)		(Solid)	Lab File ID: NT1423021722s.D				Analyzed: 02/17/23 23:19		
1,4-Dichlorobenzene-d4	302713	8.905	388684	8.905	78	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1082666	11.395	1386667	11.394	78	50 - 200	0.001	+/-0.50	
Acenaphthene-d10	579646	15.023	752189	15.015	77	50 - 200	0.008	+/-0.50	
Phenanthrene-d10	1297420	18.059	1701919	18.059	76	50 - 200	0.000	+/-0.50	
Chrysene-d12	684601	23.129	887171	23.121	77	50 - 200	0.008	+/-0.50	
Perylene-d12	496930	25.691	644624	25.691	77	50 - 200	0.000	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0335	Instrument:	NT14
		Calibration:	GC00009

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS Dup (BLA0339-BSD2)		(Solid)	Lab File ID: NT1423021723s.D				Analyzed: 02/17/23 23:55		
1,4-Dichlorobenzene-d4	302063	8.905	388684	8.905	78	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1084486	11.394	1386667	11.394	78	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	577802	15.023	752189	15.015	77	50 - 200	0.008	+/-0.50	
Phenanthrene-d10	1295857	18.059	1701919	18.059	76	50 - 200	0.000	+/-0.50	
Chrysene-d12	690576	23.128	887171	23.121	78	50 - 200	0.007	+/-0.50	
Perylene-d12	491816	25.691	644624	25.691	76	50 - 200	0.000	+/-0.50	
Reference (BLA0339-SRM2)		(Solid)	Lab File ID: NT1423021724s.D				Analyzed: 02/18/23 00:30		
1,4-Dichlorobenzene-d4	311456	8.905	388684	8.905	80	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1092342	11.394	1386667	11.394	79	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	579939	15.015	752189	15.015	77	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1321621	18.059	1701919	18.059	78	50 - 200	0.000	+/-0.50	
Chrysene-d12	677603	23.128	887171	23.121	76	50 - 200	0.007	+/-0.50	
Perylene-d12	506598	25.691	644624	25.691	79	50 - 200	0.000	+/-0.50	
LDW23-SS1254 (23A0171-01)		(Solid)	Lab File ID: NT1423021730s.D				Analyzed: 02/18/23 04:06		
1,4-Dichlorobenzene-d4	310259	8.905	388684	8.905	80	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1103591	11.394	1386667	11.394	80	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	565626	15.023	752189	15.015	75	50 - 200	0.008	+/-0.50	
Phenanthrene-d10	1084412	18.067	1701919	18.059	64	50 - 200	0.008	+/-0.50	
Chrysene-d12	512467	23.128	887171	23.121	58	50 - 200	0.007	+/-0.50	
Perylene-d12	475993	25.707	644624	25.691	74	50 - 200	0.016	+/-0.50	
LDW23-SS1257 (23A0171-02)		(Solid)	Lab File ID: NT1423021731s.D				Analyzed: 02/18/23 04:42		
1,4-Dichlorobenzene-d4	307215	8.905	388684	8.905	79	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1103567	11.394	1386667	11.394	80	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	568782	15.023	752189	15.015	76	50 - 200	0.008	+/-0.50	
Phenanthrene-d10	1245556	18.059	1701919	18.059	73	50 - 200	0.000	+/-0.50	
Chrysene-d12	531001	23.128	887171	23.121	60	50 - 200	0.007	+/-0.50	
Perylene-d12	475192	25.699	644624	25.691	74	50 - 200	0.008	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0335	Instrument:	NT14
		Calibration:	GC00009

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SS1262 (23A0171-03)		(Solid)		Lab File ID: NT1423021732s.D				Analyzed: 02/18/23 05:18	
1,4-Dichlorobenzene-d4	307124	8.905	388684	8.905	79	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1102139	11.395	1386667	11.394	79	50 - 200	0.001	+/-0.50	
Acenaphthene-d10	555819	15.023	752189	15.015	74	50 - 200	0.008	+/-0.50	
Phenanthrene-d10	1051765	18.067	1701919	18.059	62	50 - 200	0.008	+/-0.50	
Chrysene-d12	485304	23.136	887171	23.121	55	50 - 200	0.015	+/-0.50	
Perylene-d12	447396	25.707	644624	25.691	69	50 - 200	0.016	+/-0.50	
LDW23-SS1245 (23A0171-04)		(Solid)		Lab File ID: NT1423021733s.D				Analyzed: 02/18/23 05:54	
1,4-Dichlorobenzene-d4	309874	8.905	388684	8.905	80	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1110553	11.395	1386667	11.394	80	50 - 200	0.001	+/-0.50	
Acenaphthene-d10	576909	15.023	752189	15.015	77	50 - 200	0.008	+/-0.50	
Phenanthrene-d10	1171208	18.067	1701919	18.059	69	50 - 200	0.008	+/-0.50	
Chrysene-d12	487857	23.136	887171	23.121	55	50 - 200	0.015	+/-0.50	
Perylene-d12	455709	25.707	644624	25.691	71	50 - 200	0.016	+/-0.50	

HOLDING TIME SUMMARY

Analysis: EPA 8270E-SIM

Laboratory: Analytical Resources, LLC SDG: 23A0171

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

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1254 23A0171-01	12/08/22 08:39	12/08/22 17:18	01/18/23 13:47	41	365	02/18/23 04:06	31	40	
LDW23-SS1257 23A0171-02	12/08/22 09:16	12/08/22 17:18	01/18/23 13:47	41	365	02/18/23 04:42	31	40	
LDW23-SS1262 23A0171-03	12/08/22 10:36	12/08/22 17:18	01/18/23 13:47	41	365	02/18/23 05:18	31	40	
LDW23-SS1245 23A0171-04	12/08/22 11:14	12/08/22 17:18	01/18/23 13:47	41	365	02/18/23 05:54	31	40	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: NT14

Analyte	MDL	RL	Units
1,4-Dichlorobenzene	0.6	5.0	ug/kg
1,2-Dichlorobenzene	0.7	5.0	ug/kg
Benzyl Alcohol	2.5	20.0	ug/kg
Benzoic acid	13.4	100	ug/kg
2,4-Dimethylphenol	2.2	20.0	ug/kg
1,2,4-Trichlorobenzene	2.7	5.0	ug/kg
N-Nitrosodiphenylamine	1.3	5.0	ug/kg
Pentachlorophenol	2.1	20.0	ug/kg

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: NA

Chemical: Tributyl Phosphate

Manufacturer: Chemservice

Product #: O-916

Lot #: 59-57A

Purity: 99%

Analyst: VB

Element: B000954

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001873

Printed: 9/23/2013 11:47:03AM

Description:	SVOC 4,4 DDT	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	23-Sep-13
Solvent:	N/A	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 11:46 by JZ
Vendor:	Chem Service	Lot #:	198-128A
Vendor Catalog #:			

Comments

Neat, Purity @ 99.2%. (ARI#: 790A)

Analyte	CAS Number	Concentration	Units
4,4'-DDT	50-29-3	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: 4,4' DDT

Manufacturer: Chem Service

Product #: _____

Lot #: 198-128A

Purity: 99.2%

Analyst: AB

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001875

Printed: 9/23/2013 12:13:55PM

Description:	SVOC alpha-Terpineol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	N/A	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 12:13 by JZ
Vendor:	ACROS Organics	Lot #:	AD16481201
Vendor Catalog #:			

Comments

Neat, Purity @ 98%. (ARI#: I1582A)

Analyte	CAS Number	Concentration	Units
alpha-Terpineol	98-55-5	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: alpha-Terpineol

Manufacturer: Acros Organics

Product #: _____

Lot #: A0648170 1

Purity: 98%

Analyst: [signature]

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001885

Printed: 9/23/2013 3:45:57PM

Description:	SVOA Dibutyl Phenyl phosphate	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 15:45 by JZ
Vendor:	Monsanto	Lot #:	N/A
Vendor Catalog #:			

Comments

Neat, Purity @ 98.9%.

Analyte	CAS Number	Concentration	Units
Dibutyl Phenyl Phosphate	2528-36-1	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: Dibutyl Phenyl Phosphate

Manufacturer: Monsanto

Product #: N/A

Lot #: N/A

Purity: 98.9%

Analyst: [signature]

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001886

Printed: 9/23/2013 3:59:35PM

Description:	SVOC Triphenyl Phosphate	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 15:59 by JZ
Vendor:	Aldrich	Lot #:	04902CM
Vendor Catalog #:			

Comments

Neat, Purity @ 99%.

Analyte	CAS Number	Concentration	Units
Triphenyl Phosphate	115-86-6	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: Triphenyl Phosphate

Manufacturer: Aldrich

Product #: _____

Lot #: 04907CM

Purity: 99%

Analyst: _____

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001887

Printed: 9/23/2013 4:18:55PM

Description:	SVOC Butylated Hydroxytoluene	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 16:18 by JZ
Vendor:	SIGMA	Lot #:	39F-0197
Vendor Catalog #:			

Comments

neat,Purity @ 99.9%.

Analyte	CAS Number	Concentration	Units
Butylated Hydroxytoluene	128-37-0	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Butylated Hydroxytoluene

Manufacturer: Sigma

Product #: _____

Lot #: 39F-0197

Purity: 99.8%

Analyst: _____

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001890

Printed: 9/23/2013 5:02:53PM

Description:	SVOC Butyl Diphenyl Phosphate	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 17:02 by JZ
Vendor:	Monsanto	Lot #:	N/A
Vendor Catalog #:			

Comments

Neat, Purity @ 98%.

Analyte	CAS Number	Concentration	Units
Butyl Diphenyl Phosphate	2752-95-6	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Butyl Diphenyl Phosphate

Manufacturer: Monsanto

Product #: NA

Lot #: NA

Purity: 98%

Analyst: [signature]

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001941

Printed: 9/25/2013 1:45:31PM

Description:	SVOC 2,4-Dinitrophenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 13:45 by JZ
Vendor:	SIGMA	Lot #:	65H5021
Vendor Catalog #:			

Comments

Neat, Purity @ 90-95%. (ARI#: 0466)

Analyte	CAS Number	Concentration	Units
2,4-Dinitrophenol	51-28-5	1000000	ug/mL

B001941
SVOA 2,4-Dinitrophenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: 2,4-Dinitrophenol

Manufacturer: Sigma

Product #: _____

Lot #: bEH 502 1

Purity: 90 ~ 94%

Analyst: _____

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001945

Printed: 9/25/2013 3:23:22PM

Description:	SVOC Benzoic Acid	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:23 by JZ
Vendor:	ACROS Organics	Lot #:	A0224339
Vendor Catalog #:			

Comments

Neat, Purity @ 98%.

Analyte	CAS Number	Concentration	Units
Benzoic acid	65-85-0	1000000	ug/mL

B001945
SVOC Benzoic Acid
Expires 12/31/2029
Prepared By Jianqing Zhou 12/31/2012

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: Benzoic Acid

Manufacturer: Acros Organics

Product #: _____

Lot #: A0214339

Purity: 98%

Analyst: _____

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001948

Printed: 9/25/2013 3:37:51PM

Description:	SVOC 4,6-Dinitro-2-Methylphenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:37 by JZ
Vendor:	Chem Service	Lot #:	179-31A
Vendor Catalog #:			

Comments

Neat, Purity @ 99%. (ARI#: 009A)

Analyte	CAS Number	Concentration	Units
4,6-Dinitro-2-methylphenol	534-52-1	1000000	ug/mL

B001948
SVOA 4,6-Dinitro-2-Methylphenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 4,6-Dinitro-2-Methylphenol

Manufacturer: Chem Service

Product #: _____

Lot #: 179-31A

Purity: 99%

Analyst: KB

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B002054

Printed: 10/4/2013 6:32:21PM

Description:	SVOA 1-Methylnaphthalene	Expires:	02-Apr-14
Standard Type:	Analyte Spike	Prepared:	13-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	04-Oct-13 18:32 by JZ
Vendor:	Chem Service	Lot #:	62-5B
Vendor Catalog #:			

Comments

Neat, Purity @ 99%

Analyte	CAS Number	Concentration	Units
1-Methylnaphthalene	90-12-0	1000000	ug/mL

B002054
SVOA 1-Methylnaphthalene
Solvent / Lot: NA
Prep: 12/13/2012 by JZ
Exp: 12/31/2029
Location:

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: 1-Methyl naphthalene

Manufacturer: Chem Service

Product #: 0787

Lot #: 67-53

Purity: 99%

Analyst: AZ

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B002135

Printed: 10/15/2013 12:07:39PM

Description:	SVOA Benzidine	Expires:	31-Dec-29
Standard Type:	Analyte Spike	Prepared:	15-Oct-13
Solvent:	N/A	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	15-Oct-13 12:07 by JZ
Vendor:	SIGMA	Lot #:	18C0024
Vendor Catalog #:			

Comments

Purity @ 95%. ARI#: 0467.

Analyte	CAS Number	Concentration	Units
Benzidine	92-87-5	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: Benzidine

Manufacturer: Sigma

Product #: B-3503

Lot #: 18C0024

Purity: 98%

Analyst: [signature]

Certificate of Analysis

Product Name:	1,2,4,5-Tetrachlorobenzene
Product Description:	98%
Product Brand:	Sigma-Aldrich
Product Number:	131857
Molecular Weight:	215.89
CAS Number:	95-94-3

TEST	SPECIFICATION	LOT 19309JR RESULTS
APPEARANCE	WHITE POWDER, CHIPS OR CRYSTALS	WHITE CHIPS
INFRARED SPECTRUM	CONFORMS TO STRUCTURE.	CONFORMS TO STRUCTURE AND STANDARD AS
** **		ILLUSTRATED ON PAGE 1011C OF EDITION I,
** **		VOLUME 1 OF "THE ALDRICH LIBRARY OF FT-IR
** **		SPECTRA".
GAS LIQUID	97.5% (MINIMUM)	99.9 %
QUALITY CONTROL		JULY 1997

Barbara Rajzer, Supervisor
Quality Control
Milwaukee, Wisconsin USA

F009172

SVOC 1,2,4,5-Tetrachlorobenzene
Expires 12/31/2079
Prepared By Joshua Rains 10/6/2017

H000691

Data File: \\target\share\chem2\fid4a.i\20230317.b\423C1703.D

Page 1

Date : 17-MAR-2023 10:46

Client ID:

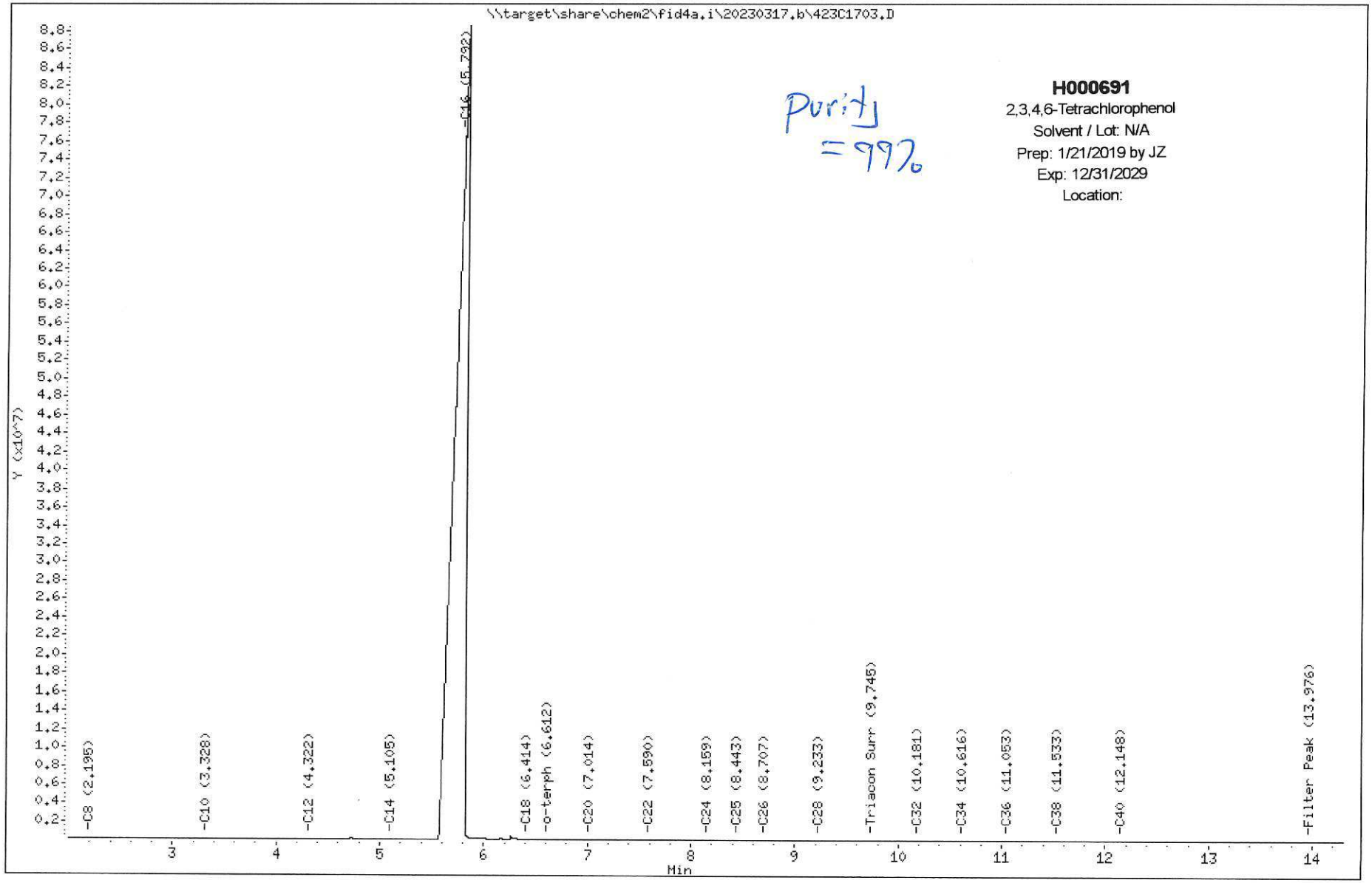
Instrument: fid4a.i

Sample Info: K007226

Operator: AA

Column phase: RTX-1

Column diameter: 0.25



Purity = 99%

H000691
2,3,4,6-Tetrachlorophenol
Solvent / Lot: N/A
Prep: 1/21/2019 by JZ
Exp: 12/31/2029
Location:

ARI Labs, Inc.

Data file : \\target\share\chem2\fid4a.i\20230317.b\423C1703.D
Lab Smp Id: K007226
Inj Date : 17-MAR-2023 10:46
Operator : AA   Inst ID: fid4a.i
Smp Info : K007226
Misc Info :
Comment   :
Method   : \\target\share\chem2\fid4a.i\20230317.b\FID4TPH.m
Meth Date : 17-Mar-2023 16:58 alfonso   Quant Type: AREA%
Cal Date : 18-AUG-2022 11:51   Cal File: 422H1803.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon+   Compound Sublist: tph.sub
Target Version: 4.14
Processing Host: ALFONSO-201901

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable   Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.043	81395	55677	0.684	0.012	1 Toluene
2.074	68503	39991	0.584	0.010	
2.104	85451	37158	0.435	0.012	
2.146	59381	25207	0.424	0.008	
2.181	11414	22862	2.003	0.001	
2.195	34939	23199	0.664	0.005	2 C8
2.218	8679	21808	2.513	0.001	
2.224	21070	21832	1.036	0.003	
2.243	45086	20191	0.448	0.006	
2.286	3130	15677	5.009	0.000	
2.291	12615	15880	1.259	0.001	
2.313	20979	15888	0.757	0.003	
2.333	7621	15373	2.017	0.001	
2.348	31874	17112	0.537	0.004	
2.373	4619	13267	2.872	0.000	
2.380	12003	13446	1.120	0.001	
2.393	10327	13347	1.292	0.001	
2.408	9963	12697	1.274	0.001	
2.446	24366	11882	0.488	0.003	
2.498	24898	10214	0.410	0.003	
2.557	1592	6395	4.017	0.000	
2.570	4427	6384	1.442	0.000	
2.583	4275	6215	1.454	0.000	
2.595	1208	6068	5.024	0.000	
2.602	3076	6230	2.025	0.000	
2.607	1560	6270	4.019	0.000	
2.631	17195	8933	0.520	0.002	
2.654	17386	7637	0.439	0.002	
2.703	4531	5468	1.207	0.000	
2.717	9156	5741	0.627	0.001	
2.740	3955	5045	1.275	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.768	1029	4134	4.017	0.000	
2.771	830	4189	5.050	0.000	
2.778	1924	4438	2.307	0.000	
2.784	5498	4564	0.830	0.000	
2.846	25970	8400	0.323	0.003	
2.880	939	3165	3.370	0.000	
2.884	1885	3183	1.688	0.000	
2.901	4805	3504	0.729	0.000	
2.938	581	1990	3.423	0.000	
2.944	1450	2016	1.390	0.000	
2.955	449	1816	4.043	0.000	
2.967	1234	2009	1.629	0.000	
2.982	712	2087	2.931	0.000	
2.988	1000	2338	2.337	0.000	
3.001	3475	3541	1.019	0.000	
3.018	3528	3705	1.050	0.000	
3.033	983	2521	2.564	0.000	
3.038	1297	2686	2.070	0.000	
3.044	2547	2541	0.997	0.000	
3.069	389	1330	3.418	0.000	
3.078	728	1545	2.123	0.000	
3.085	1244	1637	1.316	0.000	
3.098	1115	1624	1.457	0.000	
3.108	926	1475	1.593	0.000	
3.119	239	1202	5.036	0.000	
3.125	540	1251	2.315	0.000	
3.133	409	1219	2.978	0.000	
3.144	2600	1886	0.725	0.000	
3.165	620	1604	2.588	0.000	
3.173	554	1647	2.972	0.000	
3.192	2423	2273	0.938	0.000	
3.197	582	2418	4.158	0.000	
3.204	1161	2723	2.346	0.000	
3.208	825	2777	3.364	0.000	
3.228	4472	3391	0.758	0.000	
3.246	1586	2676	1.688	0.000	
3.279	1194	2070	1.734	0.000	
3.293	854	1951	2.285	0.000	
3.298	595	2029	3.408	0.000	
3.315	2640	2597	0.984	0.000	
3.320	1015	2542	2.504	0.000	
3.328	1549	2593	1.674	0.000	3 C10
3.338	1314	2533	1.928	0.000	
3.350	523	2159	4.130	0.000	
3.358	1776	2105	1.185	0.000	
3.371	356	1797	5.043	0.000	
3.378	914	1880	2.057	0.000	
3.383	380	1927	5.068	0.000	
3.387	595	2023	3.399	0.000	
3.395	1390	2270	1.633	0.000	
3.405	1490	1994	1.338	0.000	
3.423	690	1601	2.321	0.000	
3.435	821	1554	1.894	0.000	
3.441	387	1583	4.087	0.000	
3.444	401	1625	4.051	0.000	
3.448	403	1636	4.060	0.000	
3.455	1216	1700	1.398	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
3.478	235	1185	5.047	0.000	
3.482	412	1229	2.986	0.000	
3.488	695	1177	1.694	0.000	
3.501	239	969	4.063	0.000	
3.509	914	1149	1.258	0.000	
3.520	1078	1069	0.992	0.000	
3.540	301	927	3.079	0.000	
3.556	406	849	2.089	0.000	
3.567	370	873	2.359	0.000	
3.572	178	939	5.270	0.000	
3.578	591	1171	1.981	0.000	
3.591	869	1353	1.556	0.000	
3.596	741	1352	1.826	0.000	
3.606	471	1401	2.976	0.000	
3.613	548	1411	2.577	0.000	
3.618	433	1521	3.511	0.000	
3.625	710	1635	2.303	0.000	
3.630	910	1667	1.832	0.000	
3.652	661	1562	2.362	0.000	
3.670	462	1214	2.627	0.000	
3.686	1036	1453	1.403	0.000	
3.690	829	1374	1.658	0.000	
3.702	531	1191	2.241	0.000	
3.712	452	1355	3.001	0.000	
3.716	820	1423	1.736	0.000	
3.736	2685	2093	0.780	0.000	
3.752	689	2030	2.946	0.000	
3.760	4109	2349	0.572	0.000	
3.805	3183	2036	0.640	0.000	
3.823	496	1686	3.401	0.000	
3.835	1641	2314	1.410	0.000	
3.859	9243	4616	0.499	0.001	
3.897	851	1745	2.051	0.000	
3.904	503	1721	3.419	0.000	
3.927	3866	3293	0.852	0.000	
3.941	5520	3558	0.645	0.000	
3.980	573	1715	2.991	0.000	
3.992	1027	1794	1.748	0.000	
3.995	1494	1860	1.245	0.000	
4.010	887	1639	1.847	0.000	
4.021	663	1724	2.602	0.000	
4.026	1380	1776	1.287	0.000	
4.045	306	1546	5.059	0.000	
4.053	1001	1758	1.757	0.000	
4.061	1137	1804	1.586	0.000	
4.072	779	1773	2.275	0.000	
4.080	989	1896	1.917	0.000	
4.087	561	1905	3.396	0.000	
4.098	1956	2156	1.103	0.000	
4.106	1168	2044	1.750	0.000	
4.127	1049	1627	1.551	0.000	
4.142	587	1545	2.633	0.000	
4.148	1155	1572	1.361	0.000	
4.173	3682	2398	0.651	0.000	
4.189	1023	1738	1.700	0.000	
4.204	549	1627	2.961	0.000	
4.213	628	1658	2.641	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
4.221	1039	1830	1.761	0.000	
4.227	447	1814	4.058	0.000	
4.248	2703	2638	0.976	0.000	
4.256	1387	2945	2.123	0.000	
4.260	743	2988	4.022	0.000	
4.265	912	3081	3.378	0.000	
4.268	779	3140	4.031	0.000	
4.275	1736	3217	1.853	0.000	
4.289	2688	3495	1.300	0.000	
4.295	3466	3448	0.995	0.000	
4.322	1054	2680	2.543	0.000	4 C12
4.330	1686	2627	1.558	0.000	
4.358	1066	1974	1.852	0.000	
4.378	434	1758	4.054	0.000	
4.384	1324	1879	1.419	0.000	
4.403	860	1608	1.869	0.000	
4.414	457	1567	3.431	0.000	
4.421	1117	1675	1.499	0.000	
4.433	910	1538	1.690	0.000	
4.439	865	1534	1.774	0.000	
4.449	764	1302	1.705	0.000	
4.471	433	1123	2.593	0.000	
4.476	734	1135	1.546	0.000	
4.490	385	1005	2.610	0.000	
4.498	555	1186	2.137	0.000	
4.502	695	1166	1.677	0.000	
4.518	587	949	1.618	0.000	
4.526	316	925	2.924	0.000	
4.533	560	989	1.765	0.000	
4.543	469	1001	2.135	0.000	
4.548	222	916	4.130	0.000	
4.553	188	980	5.207	0.000	
4.558	255	1038	4.076	0.000	
4.568	652	1157	1.775	0.000	
4.573	338	1151	3.409	0.000	
4.580	487	1283	2.636	0.000	
4.596	3801	1950	0.513	0.000	
4.631	531	1429	2.692	0.000	
4.663	4548	3737	0.822	0.000	
4.667	2815	3822	1.358	0.000	
4.679	2199	3760	1.710	0.000	
4.688	1068	3585	3.356	0.000	
4.694	2166	3742	1.727	0.000	
4.723	372603	172476	0.463	0.055	
4.894	47034	21828	0.464	0.006	
4.956	80510	28154	0.350	0.011	
4.999	54273	16950	0.312	0.008	
5.068	1137	5713	5.027	0.000	
5.072	8415	5792	0.688	0.001	
5.105	4203	4316	1.027	0.000	5 C14
5.146	660	2685	4.070	0.000	
5.153	2524	2649	1.050	0.000	
5.170	1076	2437	2.265	0.000	
5.174	2371	2438	1.028	0.000	
5.201	1013	2011	1.986	0.000	
5.210	2064	2332	1.130	0.000	
5.224	1083	2304	2.127	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA		COMPOUNDS
5.228	2027	2354	1.162	0.000		
5.276	4673	2682	0.574	0.000		
5.322	195	844	4.328	0.000		
5.331	977	1203	1.231	0.000		
5.356	490	993	2.027	0.000		
5.361	814	1044	1.283	0.000		
5.382	115	387	3.351	0.000		
5.399	619	960	1.551	0.000		
5.406	402	1035	2.576	0.000		
5.410	378	1122	2.968	0.000		
5.423	1663	1555	0.935	0.000		
5.452	5951	5020	0.844	0.000		
5.501	290	797	2.753	0.000		
5.523	2317	2472	1.067	0.000		
5.538	5946	6823	1.147	0.000		
5.792	501855376	76456669	0.152	74.449		6 C16
5.807	79757019	82319946	1.032	11.775		
5.823	77929961	88539160	1.136	11.505		
5.962	75333	84828	1.126	0.011		
5.986	474748	124326	0.262	0.070		
6.070	17103	57180	3.343	0.002		
6.074	120761	57565	0.477	0.017		
6.113	90233	47140	0.522	0.013		
6.165	407438	218439	0.536	0.060		
6.263	944101	374166	0.396	0.139		
6.414	114839	39498	0.344	0.016		7 C18
6.464	53190	31177	0.586	0.007		
6.523	31509	25870	0.821	0.004		
6.551	4785	23963	5.008	0.000		
6.559	51194	25409	0.496	0.007		
6.590	21354	21666	1.015	0.003		
6.612	35061	21127	0.603	0.005	$	8 o-terph
6.638	17712	19934	1.125	0.002		
6.672	22159	19651	0.887	0.003		
6.683	26846	19268	0.718	0.003		
6.708	5413	18142	3.351	0.000		
6.713	24941	18247	0.732	0.003		
6.747	50657	18478	0.365	0.007		
6.795	23973	17444	0.728	0.003		
6.814	28457	17895	0.629	0.004		
6.837	10746	15445	1.437	0.001		
6.871	29974	21406	0.714	0.004		
6.874	4287	21471	5.009	0.000		
6.882	20520	21675	1.056	0.003		
6.944	32864	17445	0.531	0.004		
6.978	9138	15347	1.679	0.001		
7.014	4130	13830	3.348	0.000		9 C20
7.025	12567	14083	1.121	0.001		
7.038	4952	14274	2.882	0.000		
7.044	6508	14578	2.240	0.000		
7.050	25344	14736	0.581	0.003		
7.099	5531	12365	2.236	0.000		
7.108	16440	12371	0.752	0.002		
7.129	9415	11275	1.198	0.001		
7.175	3589	10327	2.878	0.000		
7.182	7285	10474	1.438	0.001		
7.212	11252	10002	0.889	0.001		

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.227	5193	9506	1.830	0.000	
7.237	5172	9476	1.832	0.000	
7.247	4652	9357	2.011	0.000	
7.254	3258	9369	2.875	0.000	
7.259	7003	9455	1.350	0.001	
7.272	5540	9252	1.670	0.000	
7.283	4511	9087	2.014	0.000	
7.296	5828	9031	1.550	0.000	
7.308	4850	8866	1.828	0.000	
7.318	3111	9014	2.897	0.000	
7.324	3191	9168	2.873	0.000	
7.328	2775	9325	3.360	0.000	
7.339	6190	9713	1.569	0.000	
7.344	2920	9761	3.343	0.000	
7.350	17091	9874	0.578	0.002	
7.379	7217	8616	1.194	0.001	
7.395	5430	8408	1.548	0.000	
7.404	2492	8342	3.348	0.000	
7.409	1666	8354	5.014	0.000	
7.415	2955	8500	2.877	0.000	
7.423	3887	8782	2.259	0.000	
7.465	28160	14253	0.506	0.004	
7.471	6466	14499	2.242	0.000	
7.480	6649	15111	2.273	0.000	
7.484	26595	15197	0.571	0.003	
7.514	13964	13621	0.975	0.002	
7.539	8118	12614	1.554	0.001	
7.553	10540	12495	1.185	0.001	
7.584	2820	11307	4.010	0.000	
7.590	4522	11429	2.527	0.000	10 C22
7.620	16634	10435	0.627	0.002	
7.653	6793	9783	1.440	0.001	
7.663	8606	9666	1.123	0.001	
7.675	2827	9464	3.347	0.000	
7.683	9373	9620	1.026	0.001	
7.699	3657	9205	2.517	0.000	
7.708	5071	9290	1.832	0.000	
7.713	10483	9274	0.885	0.001	
7.735	10686	9257	0.866	0.001	
7.752	4732	8664	1.831	0.000	
7.765	5624	8765	1.558	0.000	
7.773	5614	8686	1.547	0.000	
7.784	3375	8506	2.520	0.000	
7.793	2118	8517	4.021	0.000	
7.799	10086	8544	0.847	0.001	
7.817	7761	8325	1.073	0.001	
7.833	2415	8088	3.350	0.000	
7.838	2838	8160	2.875	0.000	
7.844	3649	8173	2.240	0.000	
7.858	2009	8069	4.017	0.000	
7.864	4482	8197	1.829	0.000	
7.871	3688	8223	2.230	0.000	
7.879	4875	8269	1.696	0.000	
7.889	2009	8061	4.013	0.000	
7.897	4080	8308	2.036	0.000	
7.916	17828	10103	0.567	0.002	
7.935	4052	9086	2.242	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.940	2229	8948	4.015	0.000	
7.945	5765	8973	1.556	0.000	
7.954	6458	8765	1.357	0.000	
7.976	2099	8428	4.016	0.000	
7.984	10213	8807	0.862	0.001	
7.999	4897	8282	1.691	0.000	
8.013	8782	8112	0.924	0.001	
8.028	5860	7858	1.341	0.000	
8.040	3929	7871	2.003	0.000	
8.054	9161	8146	0.889	0.001	
8.067	2701	7766	2.876	0.000	
8.074	3069	7702	2.510	0.000	
8.081	2694	7742	2.874	0.000	
8.088	2705	7793	2.881	0.000	
8.095	5842	7832	1.341	0.000	
8.104	5419	7841	1.447	0.000	
8.119	5740	7735	1.348	0.000	
8.134	4986	7768	1.558	0.000	
8.141	5893	8009	1.359	0.000	
8.159	9098	8027	0.882	0.001	11 C24
8.174	3156	7971	2.526	0.000	
8.185	2376	7967	3.353	0.000	
8.190	4739	7937	1.675	0.000	
8.202	5181	8028	1.549	0.000	
8.212	1994	8027	4.025	0.000	
8.223	6137	8270	1.348	0.000	
8.236	6864	8171	1.190	0.001	
8.248	2383	7986	3.351	0.000	
8.253	2405	8059	3.351	0.000	
8.259	5294	8207	1.550	0.000	
8.268	2866	8235	2.874	0.000	
8.280	6583	8312	1.263	0.000	
8.289	4538	8296	1.828	0.000	
8.295	2060	8300	4.029	0.000	
8.300	2063	8291	4.020	0.000	
8.313	7062	8400	1.189	0.001	
8.318	1667	8375	5.023	0.000	
8.332	11362	9100	0.801	0.001	
8.343	4357	8741	2.006	0.000	
8.358	1267	8458	6.676	0.000	
8.363	2991	8621	2.882	0.000	
8.371	3980	8983	2.257	0.000	
8.379	6330	9083	1.435	0.000	
8.385	3111	8963	2.881	0.000	
8.393	6706	9050	1.349	0.000	
8.404	4903	8943	1.824	0.000	
8.417	8437	8972	1.063	0.001	
8.438	7166	9103	1.270	0.001	
8.443	3211	9227	2.873	0.000	12 C25
8.450	3688	9295	2.521	0.000	
8.455	2313	9276	4.010	0.000	
8.475	30054	13714	0.456	0.004	
8.504	5760	9733	1.690	0.000	
8.519	2799	9376	3.350	0.000	
8.529	4766	9710	2.037	0.000	
8.537	4875	9815	2.013	0.000	
8.543	8411	9973	1.186	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
8.555	2969	9916	3.340	0.000	
8.560	3974	9987	2.513	0.000	
8.568	2483	9997	4.026	0.000	
8.572	5007	10043	2.006	0.000	
8.591	14074	10725	0.762	0.002	
8.602	2648	10665	4.028	0.000	
8.606	2159	10862	5.032	0.000	
8.609	2183	10952	5.017	0.000	
8.633	7361	10561	1.435	0.001	
8.647	6774	10495	1.549	0.001	
8.658	2596	10420	4.014	0.000	
8.663	4723	10573	2.239	0.000	
8.669	3156	10589	3.355	0.000	
8.687	15405	11334	0.736	0.002	
8.699	6103	11158	1.828	0.000	
8.707	2223	11136	5.009	0.000	13 C26
8.730	28697	12536	0.437	0.004	
8.754	8658	11553	1.334	0.001	
8.763	2896	11612	4.010	0.000	
8.780	15029	12352	0.822	0.002	
8.788	1833	12243	6.680	0.000	
8.798	11854	12679	1.070	0.001	
8.806	1873	12509	6.677	0.000	
8.809	3133	12565	4.011	0.000	
8.813	2506	12550	5.008	0.000	
8.819	7588	12757	1.681	0.001	
8.829	4418	12679	2.870	0.000	
8.835	6988	12762	1.826	0.001	
8.848	13711	13258	0.967	0.002	
8.872	26625	13656	0.513	0.003	
8.894	4575	13127	2.869	0.000	
8.898	2631	13188	5.013	0.000	
8.902	5918	13262	2.241	0.000	
8.914	8577	13313	1.552	0.001	
8.922	4011	13433	3.349	0.000	
8.926	4724	13546	2.867	0.000	
8.933	6787	13651	2.011	0.001	
8.946	9614	13923	1.448	0.001	
8.951	6274	14004	2.232	0.000	
8.960	5592	14036	2.510	0.000	
8.966	3513	14090	4.011	0.000	
8.969	2829	14171	5.009	0.000	
8.973	4976	14233	2.860	0.000	
8.980	4289	14365	3.350	0.000	
8.996	27708	16441	0.593	0.004	
9.013	8129	14847	1.827	0.001	
9.025	8129	14840	1.826	0.001	
9.036	7503	15229	2.030	0.001	
9.040	4559	15225	3.340	0.000	
9.057	14920	16251	1.089	0.002	
9.067	9915	16831	1.698	0.001	
9.076	8535	17331	2.031	0.001	
9.081	5250	17596	3.352	0.000	
9.084	10558	17675	1.674	0.001	
9.095	4386	17601	4.013	0.000	
9.111	30564	19262	0.630	0.004	
9.128	8346	18722	2.243	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.139	15095	18986	1.258	0.002	
9.149	6655	19050	2.862	0.000	
9.158	23240	19719	0.848	0.003	
9.171	1903	19042	10.005	0.000	
9.175	4773	19156	4.013	0.000	
9.187	23630	19927	0.843	0.003	
9.199	4925	19763	4.013	0.000	
9.208	14115	20394	1.445	0.002	
9.219	12303	20691	1.682	0.001	
9.226	7266	20831	2.867	0.001	
9.233	15622	21000	1.344	0.002	14 C28
9.247	9280	20714	2.232	0.001	
9.262	45057	27849	0.618	0.006	
9.281	22651	23200	1.024	0.003	
9.304	13489	22820	1.692	0.001	
9.307	18038	22862	1.267	0.002	
9.328	8656	21778	2.516	0.001	
9.334	8635	21650	2.507	0.001	
9.343	16240	21738	1.339	0.002	
9.354	5409	21709	4.013	0.000	
9.367	16481	22234	1.349	0.002	
9.370	6683	22346	3.344	0.000	
9.382	14775	23166	1.568	0.002	
9.390	11679	23531	2.015	0.001	
9.394	12888	23584	1.830	0.001	
9.408	18752	23645	1.261	0.002	
9.416	4675	23396	5.004	0.000	
9.428	25138	24392	0.970	0.003	
9.438	20233	24095	1.191	0.002	
9.468	67429	26696	0.396	0.009	
9.496	8413	24122	2.867	0.001	
9.507	12049	24259	2.013	0.001	
9.527	36362	25771	0.709	0.005	
9.538	12891	25911	2.010	0.001	
9.543	6452	25853	4.007	0.000	
9.551	10420	26202	2.515	0.001	
9.557	29750	26593	0.894	0.004	
9.574	6252	25071	4.010	0.000	
9.593	29143	27655	0.949	0.004	
9.599	40783	27905	0.684	0.006	
9.620	13159	26364	2.004	0.001	
9.632	17259	26799	1.553	0.002	
9.640	13210	26592	2.013	0.001	
9.664	35362	28170	0.797	0.005	
9.672	27890	28134	1.009	0.004	
9.696	26737	28634	1.071	0.003	
9.711	53475	30848	0.577	0.007	
9.745	33266	29504	0.887	0.004	$ 15 Triacon Surr
9.752	7348	29501	4.015	0.001	
9.756	20542	29565	1.439	0.003	
9.768	7255	29059	4.005	0.001	
9.773	7275	29173	4.010	0.001	
9.785	31543	30611	0.970	0.004	
9.803	46804	32832	0.701	0.006	
9.821	10456	30060	2.875	0.001	
9.833	30772	31156	1.012	0.004	
9.860	77784	33514	0.431	0.011	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.881	12779	32069	2.510	0.001	
9.892	14531	32668	2.248	0.002	
9.896	8201	32902	4.012	0.001	
9.908	23357	33882	1.451	0.003	
9.912	27050	34095	1.260	0.003	
9.939	14585	32570	2.233	0.002	
9.951	23032	33095	1.437	0.003	
9.956	11596	33292	2.871	0.001	
9.966	16544	33271	2.011	0.002	
9.971	11660	33391	2.864	0.001	
9.975	10051	33617	3.345	0.001	
9.983	15209	33983	2.234	0.002	
9.988	15177	33830	2.229	0.002	
9.996	10128	33907	3.348	0.001	
10.018	43348	35629	0.822	0.006	
10.021	7133	35693	5.004	0.001	
10.025	8960	35988	4.016	0.001	
10.034	42064	36944	0.878	0.006	
10.063	65447	38699	0.591	0.009	
10.077	7375	36906	5.004	0.001	
10.083	16743	37428	2.235	0.002	
10.095	34467	38665	1.122	0.005	
10.118	90921	40621	0.447	0.013	
10.151	37738	38047	1.008	0.005	
10.158	11383	38037	3.342	0.001	
10.168	36074	38274	1.061	0.005	
10.181	15072	37809	2.509	0.002	16 C32
10.185	5655	37746	6.675	0.000	
10.198	43905	38471	0.876	0.006	
10.208	24771	38177	1.541	0.003	
10.218	19031	38113	2.003	0.002	
10.228	13353	38279	2.867	0.001	
10.237	21225	38826	1.829	0.003	
10.243	30946	38929	1.258	0.004	
10.266	43064	39733	0.923	0.006	
10.275	11912	39784	3.340	0.001	
10.278	19932	39886	2.001	0.002	
10.293	46366	40725	0.878	0.006	
10.318	46465	41024	0.883	0.006	
10.328	24720	41353	1.673	0.003	
10.334	10308	41278	4.005	0.001	
10.343	29100	41866	1.439	0.004	
10.354	22822	41695	1.827	0.003	
10.360	16568	41490	2.504	0.002	
10.376	31388	42321	1.348	0.004	
10.384	36478	43119	1.182	0.005	
10.393	21427	43144	2.014	0.003	
10.416	82339	44731	0.543	0.012	
10.434	23173	42257	1.824	0.003	
10.455	42801	43684	1.021	0.006	
10.459	19648	44004	2.240	0.002	
10.469	19632	43883	2.235	0.002	
10.492	56113	45807	0.816	0.008	
10.497	20626	45915	2.226	0.003	
10.503	27439	45837	1.671	0.004	
10.513	31833	45842	1.440	0.004	
10.523	6773	45190	6.672	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
10.529	22697	45513	2.005	0.003	
10.543	39087	46432	1.188	0.005	
10.552	16284	46719	2.869	0.002	
10.558	18796	47158	2.509	0.002	
10.576	69878	48769	0.698	0.010	
10.586	12085	48384	4.004	0.001	
10.592	21757	48469	2.228	0.003	
10.609	46960	50482	1.075	0.006	
10.616	40486	50812	1.255	0.005	17 C34
10.628	52392	50284	0.960	0.007	
10.665	99744	52644	0.528	0.014	
10.680	20832	52264	2.509	0.003	
10.699	126137	55939	0.443	0.018	
10.723	18258	52316	2.865	0.002	
10.733	65550	52928	0.807	0.009	
10.751	49102	51903	1.057	0.007	
10.765	10288	51490	5.005	0.001	
10.777	73220	52877	0.722	0.010	
10.791	15621	52150	3.338	0.002	
10.799	46819	52190	1.115	0.006	
10.817	52000	52328	1.006	0.007	
10.828	13014	52167	4.008	0.001	
10.833	18275	52280	2.861	0.002	
10.838	67284	52271	0.777	0.009	
10.860	15395	51401	3.339	0.002	
10.867	15366	51252	3.335	0.002	
10.874	25712	51608	2.007	0.003	
10.885	59363	52064	0.877	0.008	
10.901	33199	51247	1.544	0.004	
10.911	35859	51446	1.435	0.005	
10.925	15150	50526	3.335	0.002	
10.936	27761	50508	1.819	0.004	
10.954	40634	51235	1.261	0.005	
10.958	17973	51428	2.861	0.002	
10.982	101216	54997	0.543	0.014	
10.999	80380	54264	0.675	0.011	
11.022	15822	52869	3.342	0.002	
11.029	23878	53171	2.227	0.003	
11.032	23908	53219	2.226	0.003	
11.044	39793	53228	1.338	0.005	
11.053	13218	52959	4.007	0.001	19 C36
11.057	26491	53088	2.004	0.003	
11.069	47933	53454	1.115	0.007	
11.079	78088	52997	0.679	0.011	
11.132	4853	48537	10.002	0.000	
11.138	21933	48845	2.227	0.003	
11.148	46678	49317	1.057	0.006	
11.158	12248	49060	4.006	0.001	
11.164	14711	49102	3.338	0.002	
11.179	64473	49939	0.775	0.009	
11.192	19751	49439	2.503	0.002	
11.197	14848	49541	3.337	0.002	
11.202	17336	49566	2.859	0.002	
11.206	12400	49639	4.003	0.001	
11.212	56808	49881	0.878	0.008	
11.230	26830	48794	1.819	0.003	
11.263	19014	47590	2.503	0.002	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
11.267	11927	47790	4.007	0.001	
11.285	66432	50042	0.753	0.009	
11.308	17214	49235	2.860	0.002	
11.312	19684	49285	2.504	0.002	
11.322	19740	49570	2.511	0.002	
11.331	27467	50208	1.828	0.004	
11.334	12565	50301	4.003	0.001	
11.338	17617	50367	2.859	0.002	
11.356	50450	50688	1.005	0.007	
11.383	31641	48774	1.541	0.004	
11.392	14562	48589	3.337	0.002	
11.398	14566	48593	3.336	0.002	
11.405	21947	48858	2.226	0.003	
11.418	36961	49602	1.342	0.005	
11.428	52174	49838	0.955	0.007	
11.438	46900	49605	1.058	0.006	
11.456	66003	49218	0.746	0.009	
11.481	84312	48818	0.579	0.012	
11.518	39837	46996	1.180	0.005	
11.533	55836	46822	0.839	0.008	20 C38
11.560	30101	46465	1.544	0.004	
11.568	20916	46512	2.224	0.003	
11.573	11637	46596	4.004	0.001	
11.579	23274	46598	2.002	0.003	
11.586	13953	46531	3.335	0.002	
11.591	9318	46631	5.004	0.001	
11.623	97892	48831	0.499	0.014	
11.631	17107	48984	2.863	0.002	
11.638	22090	49260	2.230	0.003	
11.642	32050	49351	1.540	0.004	
11.669	95446	50981	0.534	0.014	
11.685	95822	49865	0.520	0.014	
11.788	8918	44609	5.002	0.001	
11.791	35704	44768	1.254	0.005	
11.804	11082	44350	4.002	0.001	
11.813	22172	44403	2.003	0.003	
11.823	19993	44543	2.228	0.002	
11.829	13395	44754	3.341	0.001	
11.837	20184	44981	2.228	0.002	
11.852	26933	44942	1.669	0.003	
11.866	36041	45224	1.255	0.005	
11.877	15835	45355	2.864	0.002	
11.883	18222	45726	2.509	0.002	
11.889	15985	45741	2.861	0.002	
11.896	20679	46117	2.230	0.003	
11.905	23259	46896	2.016	0.003	
11.929	70146	49826	0.710	0.010	
11.936	52288	50085	0.958	0.007	
11.951	14787	49369	3.339	0.002	
11.957	17313	49595	2.865	0.002	
11.961	32199	49647	1.542	0.004	
11.971	19578	49063	2.506	0.002	
11.980	34244	49065	1.433	0.005	
12.019	96987	51133	0.527	0.014	
12.025	48685	51499	1.058	0.007	
12.053	38386	51386	1.339	0.005	
12.062	38575	51549	1.336	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
12.070	17923	51300	2.862	0.002	
12.078	45780	51141	1.117	0.006	
12.105	31495	48817	1.550	0.004	
12.118	85510	48295	0.565	0.012	
12.148	55474	46657	0.841	0.008	21 C40
12.172	34299	45899	1.338	0.005	
12.181	18286	45754	2.502	0.002	
12.188	20565	45727	2.223	0.003	
12.198	29701	45787	1.542	0.004	
12.212	11377	45530	4.002	0.001	
12.218	29576	45566	1.541	0.004	
12.237	41054	45750	1.114	0.006	
12.243	13695	45701	3.337	0.002	
12.253	27528	46122	1.675	0.004	
12.260	16149	46201	2.861	0.002	
12.272	32473	46571	1.434	0.004	
12.347	231342	54259	0.235	0.034	
12.355	96470	54322	0.563	0.014	
12.383	13155	52687	4.005	0.001	
12.389	52817	52930	1.002	0.007	
12.434	117936	55204	0.468	0.017	
12.440	19323	55283	2.861	0.002	
12.448	22049	55156	2.502	0.003	
12.460	127044	56114	0.442	0.018	
12.500	63536	55700	0.877	0.009	
12.519	44746	56237	1.257	0.006	
12.523	16928	56556	3.341	0.002	
12.528	14154	56666	4.003	0.002	
12.532	14154	56644	4.002	0.002	
12.538	25607	57089	2.229	0.003	
12.543	31284	57010	1.822	0.004	
12.560	76588	57084	0.745	0.011	
12.574	22463	56167	2.500	0.003	
12.583	192414	56305	0.293	0.028	
12.668	201456	54098	0.269	0.029	
12.722	63529	49368	0.777	0.009	
12.744	14574	48683	3.340	0.002	
12.757	68233	49046	0.719	0.010	
12.777	29106	48653	1.672	0.004	
12.802	69072	49884	0.722	0.010	
12.805	19947	49915	2.502	0.002	
12.813	12457	49907	4.006	0.001	
12.826	42860	50672	1.182	0.006	
12.830	15192	50711	3.338	0.002	
12.835	63121	50727	0.804	0.009	
12.856	30109	50299	1.671	0.004	
12.871	12459	49875	4.003	0.001	
12.876	24950	49913	2.001	0.003	
12.883	12458	49860	4.002	0.001	
12.892	24999	50091	2.004	0.003	
12.904	37682	50442	1.339	0.005	
12.918	60965	51059	0.838	0.009	
12.929	15268	50972	3.338	0.002	
12.950	101236	52476	0.518	0.014	
12.991	32619	50285	1.542	0.004	
13.030	23826	47690	2.002	0.003	
13.047	49429	47410	0.959	0.007	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.072	11668	46709	4.003	0.001	
13.077	14056	46964	3.341	0.002	
13.083	21201	47214	2.227	0.003	
13.092	45034	47490	1.055	0.006	
13.103	33139	47401	1.430	0.004	
13.119	58622	47300	0.807	0.008	
13.136	61979	46406	0.749	0.009	
13.163	36232	45399	1.253	0.005	
13.172	13552	45219	3.337	0.002	
13.178	13550	45211	3.337	0.002	
13.183	13581	45318	3.337	0.002	
13.188	15867	45365	2.859	0.002	
13.193	11350	45433	4.003	0.001	
13.206	54879	45909	0.837	0.008	
13.233	74220	46899	0.632	0.010	
13.246	18724	46923	2.506	0.002	
13.250	14089	47028	3.338	0.002	
13.254	9392	46999	5.004	0.001	
13.261	35241	47103	1.337	0.005	
13.270	21093	46884	2.223	0.003	
13.278	16404	46889	2.858	0.002	
13.284	28108	46937	1.670	0.004	
13.309	27777	46575	1.677	0.004	
13.313	11643	46617	4.004	0.001	
13.323	30391	46938	1.544	0.004	
13.337	49696	47554	0.957	0.007	
13.345	11906	47686	4.005	0.001	
13.352	21499	47921	2.229	0.003	
13.358	14416	48133	3.339	0.002	
13.366	24163	48487	2.007	0.003	
13.391	108474	49842	0.459	0.016	
13.411	39818	49922	1.254	0.005	
13.421	140245	49882	0.356	0.020	
13.468	75433	46221	0.613	0.011	
13.519	59701	44435	0.744	0.008	
13.538	26345	44021	1.671	0.003	
13.553	17475	43727	2.502	0.002	
13.559	19699	43828	2.225	0.002	
13.566	15324	43832	2.860	0.002	
13.574	28519	43956	1.541	0.004	
13.585	21950	43943	2.002	0.003	
13.595	26497	44341	1.673	0.003	
13.603	22230	44574	2.005	0.003	
13.608	11135	44585	4.004	0.001	
13.633	100703	46371	0.460	0.014	
13.650	25255	45974	1.820	0.003	
13.663	20511	45675	2.227	0.003	
13.670	15945	45584	2.859	0.002	
13.677	40973	45642	1.114	0.006	
13.688	4544	45448	10.002	0.000	
13.693	29520	45508	1.542	0.004	
13.718	24720	44995	1.820	0.003	
13.727	11216	44890	4.002	0.001	
13.735	29185	45025	1.543	0.004	
13.752	17874	44782	2.505	0.002	
13.767	35874	45020	1.255	0.005	
13.775	36036	45104	1.252	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.785	11226	44939	4.003	0.001	
13.790	47016	44953	0.956	0.006	
13.813	11118	44516	4.004	0.001	
13.818	37641	44507	1.182	0.005	
13.832	15424	44192	2.865	0.002	
13.838	17564	43967	2.503	0.002	
13.844	26339	43892	1.666	0.003	
13.855	30567	43821	1.434	0.004	
13.865	23854	43526	1.825	0.003	
13.882	28266	43639	1.544	0.004	
13.886	30418	43629	1.434	0.004	
13.901	34702	43472	1.253	0.005	
13.920	48162	44005	0.914	0.007	
13.928	17577	43956	2.501	0.002	
13.941	15410	44084	2.861	0.002	
13.946	11045	44251	4.006	0.001	
13.949	24369	44341	1.820	0.003	
13.959	22103	44264	2.003	0.003	
13.967	22088	44195	2.001	0.003	
13.976	33207	44336	1.335	0.004	18 Filter Peak
13.998	24195	44018	1.819	0.003	
14.007	15335	43888	2.862	0.002	
14.014	17519	43863	2.504	0.002	
14.019	54335	43870	0.807	0.008	
14.046	10722	42915	4.003	0.001	
14.052	19305	42955	2.225	0.002	
14.058	8568	42864	5.003	0.001	
14.067	38739	43159	1.114	0.005	
14.077	15012	42931	2.860	0.002	
14.083	25753	42977	1.669	0.003	
14.102	25682	42913	1.671	0.003	
14.108	19267	42865	2.225	0.002	
14.116	12834	42815	3.336	0.001	
14.126	25874	43369	1.676	0.003	
14.133	56339	43595	0.774	0.008	
14.161	32503	43582	1.341	0.004	
14.165	10909	43696	4.006	0.001	
14.170	15313	43822	2.862	0.002	
14.175	10960	43911	4.007	0.001	
14.178	13176	43945	3.335	0.001	
14.183	19785	43976	2.223	0.002	
14.191	8796	44018	5.005	0.001	
14.197	17636	44177	2.505	0.002	
14.208	28815	44459	1.543	0.004	
14.219	8873	44379	5.002	0.001	
14.223	13318	44445	3.337	0.001	
14.229	28860	44456	1.540	0.004	
14.247	15436	44194	2.863	0.002	
14.260	37147	43758	1.178	0.005	
14.274	45685	43705	0.957	0.006	
	677340272	268782821		100.000	

Total unknown % area = 25.478

Supelco®

www.sigmaaldrich.com

Certificate of Composition - Analytical Standard

BASE STOCK

Product no.: 22523051
Lot no.: LRAC9813
Expiry Date: May 2023
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: Dichloromethane
Certificate version: LRAC9813.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

J005199
SVOA-ABN BASE STOCK-200-800ug/ml
Expires 5/31/2023
Prepared By Jianqing Zhou 5/18/2021

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
3,3'-DICHLOROBENZIDINE CAS# 91-94-1	802	µg/mL	99.9	LC27068
2,4-DINITROTOLUENE CAS# 121-14-2	802	µg/mL	97.8	LB46632
2,6-DINITROTOLUENE CAS# 606-20-2	801	µg/mL	99.9	LB79891
HEXACHLOROCYCLOPENTADIENE CAS# 77-47-4	802	µg/mL	96.0	LB95525
N-NITROSODIMETHYLAMINE CAS# 62-75-9	801	µg/mL	95.0	2019-030598 5
PERYLENE CAS# 198-55-0	201	µg/mL	99.6	04101PG
ANILINE CAS# 62-53-3	803	µg/mL	100.0	10126MG
4-CHLOROANILINE CAS# 106-47-8	803	µg/mL	100.0	MKBZ6909V
2-NITROANILINE CAS# 88-74-4	802	µg/mL	99.9	LC05068
3-NITROANILINE CAS# 99-09-2	802	µg/mL	99.9	LC09264
4-NITROANILINE CAS# 100-01-6	802	µg/mL	99.9	LC11400
PYRIDINE (LOW WATER) CAS# 110-86-1	802	µg/mL	100.0	SHBJ9218

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date: 12-May-2021

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9813.01	12-May-2021	Original Release Date

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Certificate of Composition - Analytical Standard

ACID STOC"

Product no.: 22523046
Lot no.: LRAC9812
Expiry Date: May 2023
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: Dichloromethane
Certificate version: LRAC9812.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

J005200
SVOA-ABN ACID STOCK-200-800ug/ml
Solvent / Lot: DCM
Prep: 5/18/2021 by JZ
Exp: 5/31/2023
Location:

JZ 5/18/21

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
2,4-DIMETHYLPHENOL CAS# 105-67-9	802	µg/mL	99.9	LB88935
2,4-DICHLOROPHENOL CAS# 120-83-2	802	µg/mL	100.0	BCBZ6787
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	802	µg/mL	99.9	JS00008
2,4-DINITROPHENOL CAS# 51-28-5	1806	µg/mL	75.9	MKBP5833V
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	803	µg/mL	98.7	LB82983
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	801	µg/mL	99.9	JS00013
4-NITROPHENOL CAS# 100-02-7	801	µg/mL	99.9	LC10889
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	1804	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	803	µg/mL	98.7	MKCK8156
BENZOIC ACID CAS# 65-85-0	1805	µg/mL	99.9	LC16514

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

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RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31493 **Lot No.:** A0167617

Description : CLP 04.1 BNA Surrogate Mix

CLP 04.1 BNA Surrogate Mix 1000-1500 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2024 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

J005610
CLP 04.1 BNA SURR MIX
Expires 9/30/2024
Prepared By Jianqing Zhou 5/26/2021

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Fluorophenol **CAS #** 367-12-4 (Lot STBF3761V) **Purity** 99%	1,506.0 µg/mL	+/- 8.9452 µg/mL +/- 43.9882 µg/mL +/- 53.3632 µg/mL	Gravimetric Unstressed Stressed
2	Phenol-d6 **CAS #** 13127-88-3 (Lot PR-31658) **Purity** 99%	1,512.0 µg/mL	+/- 8.9808 µg/mL +/- 44.1635 µg/mL +/- 53.5758 µg/mL	Gravimetric Unstressed Stressed
3	2-Chlorophenol-d4 **CAS #** 93951-73-6 (Lot PR-30568) **Purity** 99%	1,502.0 µg/mL	+/- 8.9214 µg/mL +/- 43.8714 µg/mL +/- 53.2214 µg/mL	Gravimetric Unstressed Stressed
4	1,2-Dichlorobenzene-d4 **CAS #** 2199-69-1 (Lot M-2097) **Purity** 99%	1,006.0 µg/mL	+/- 5.9753 µg/mL +/- 29.3839 µg/mL +/- 35.6463 µg/mL	Gravimetric Unstressed Stressed
5	Nitrobenzene-d5 **CAS #** 4165-60-0 (Lot PR-29940B) **Purity** 99%	1,002.0 µg/mL	+/- 5.9516 µg/mL +/- 29.2671 µg/mL +/- 35.5046 µg/mL	Gravimetric Unstressed Stressed
6	2-Fluorobiphenyl **CAS #** 321-60-8 (Lot 00019169) **Purity** 99%	1,002.0 µg/mL	+/- 5.9516 µg/mL +/- 29.2671 µg/mL +/- 35.5046 µg/mL	Gravimetric Unstressed Stressed
7	2,4,6-Tribromophenol **CAS #** 118-79-6 (Lot S55013V) **Purity** 99%	1,502.0 µg/mL	+/- 8.9214 µg/mL +/- 43.8714 µg/mL +/- 53.2214 µg/mL	Gravimetric Unstressed Stressed

8	p-Terphenyl-d14		1,002.0	µg/mL	+/-	5.9516	µg/mL	Gravimetric
	CAS # 1718-51-0	(Lot PR-30504)			+/-	29.2671	µg/mL	Unstressed
	Purity 99%				+/-	35.5046	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Tech Tips:
Due to the limited solubility of p-terphenyl-d14 in methanol, we do not recommend that this mixture be diluted in methanol.

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

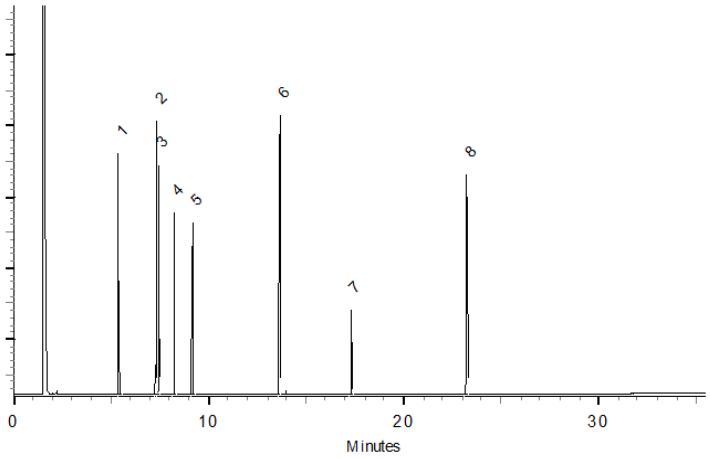
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2020 **Balance:** B345965662

Justine Albertson - Operations Tech-ARM QC

Date Passed: 31-Dec-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Agilent

Certificate of Analysis

J008074

SVOA PAH STD 2000ug/ml
Expires 6/30/2023
Prepared By Joshua Rains 8/5/2021

Product Name: PAH Standard

Product Number: US-106N-1

Lot Number: 0006540449

Lot Issue Date: 11-Jun-2020

Expiration Date: 30-Jun-2023

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
acenaphthene	000083-32-9	RM10879	2008 ± 10 µg/mL
acenaphthylene	000208-96-8	RM10891	2003 ± 10 µg/mL
anthracene	000120-12-7	RM14212	2006 ± 10 µg/mL
benz[a]anthracene	000056-55-3	RM16072	2006 ± 10 µg/mL
benzo[b]fluoranthene	000205-99-2	RM14571	2005 ± 10 µg/mL
benzo[k]fluoranthene	000207-08-9	RM14321	2009 ± 10 µg/mL
benzo[ghi]perylene	000191-24-2	RM15761	2008 ± 10 µg/mL
benzo[a]pyrene	000050-32-8	RM12669	2009 ± 10 µg/mL
chrysene	000218-01-9	RM12260	2009 ± 10 µg/mL
dibenz[a,h]anthracene	000053-70-3	RM06786	2009 ± 10 µg/mL
fluoranthene	000206-44-0	RM12277	2004 ± 10 µg/mL
fluorene	000086-73-7	RM09441	2009 ± 10 µg/mL
indeno[1,2,3-cd]pyrene	000193-39-5	RM14192	2009 ± 10 µg/mL
naphthalene	000091-20-3	NT00970	2008 ± 10 µg/mL
phenanthrene	000085-01-8	RM10495	2009 ± 10 µg/mL
pyrene	000129-00-0	RM03479	2008 ± 10 µg/mL

Matrix: methylene chloride/benzene (1:1)

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

ISO 17034 Cert No.
AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

ISO 17025 Cert
No. AT-1937

Certificate of Analysis

Product Number: US-106N-1 **Lot Number:** 0006540449

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ISO 17034 Cert No.
AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/

ISO 17025 Cert
No. AT-1937

Certificate of Analysis

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244
Description: Benzidines Standard
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL16062
Certification Date: November 19, 2020
Expiration Date: November 30, 2030

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 2.740%
3,3'-Dichlorobenzidine	91-94-1	2000	± 3.229%

J008310
Benzidines std @2000ug/ml
Expires 11/30/2030
Prepared By Van Spohn 8/12/2021

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

IL64691018_us

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

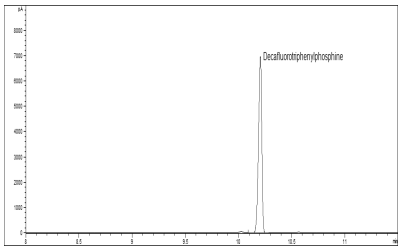
References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis - Certified Reference Material

Decafluorotriphenylphosphine solution

Product no.: 48724-U
Lot no.: LRAD0628
Expiry Date: October 2024
Manufacturing Date: September 2021
Storage: ROOM TEMPERATURE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD0628.01 (*Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

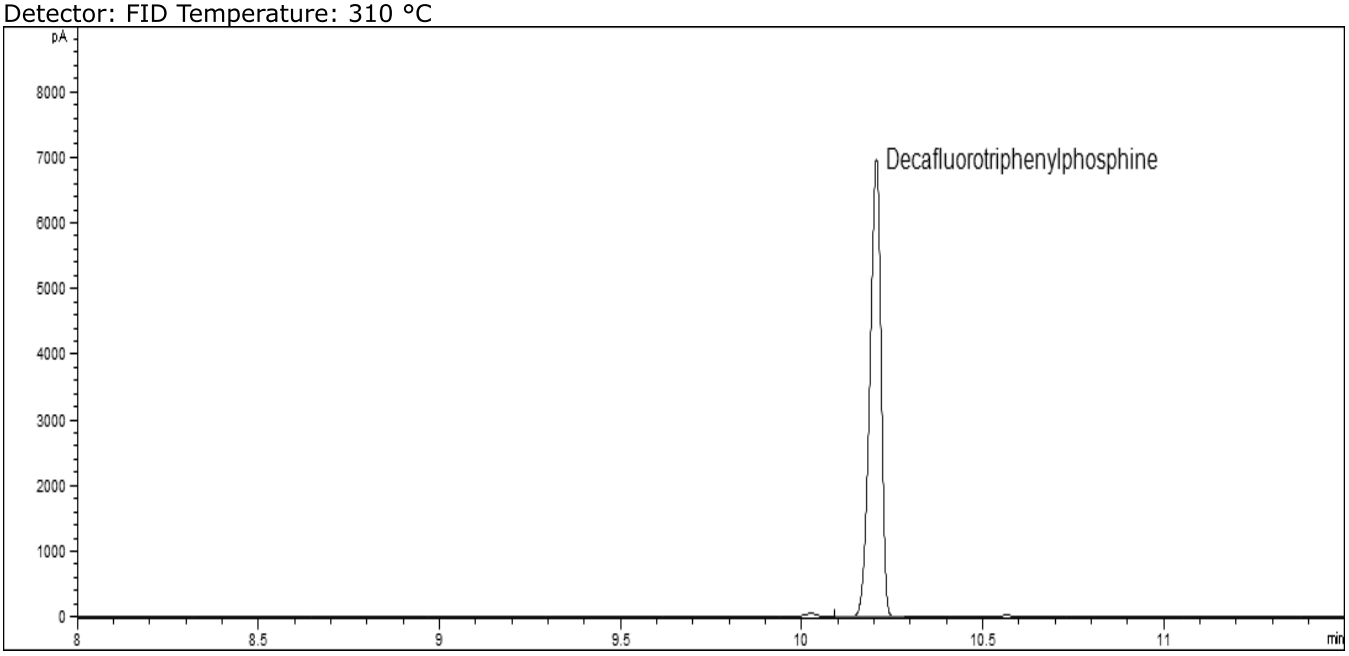


Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
DFTPP CAS# 5074-71-5	25.2 ± 2.6	mg/mL	97.0	10220909

ASSAY Method

METHOD: GC (BELLEFONTE)
Column: SPB-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness
Carrier Gas: H_2 Flow Rate: 4.3 mL/min
Inlet Temperature: 250 °C Injection Volume: 1 µL
Injection Mode: 25:1
Temperature Program: 120 °C (Hold 0 min) @ 12 °C/min to 260 °C (Hold 0 min)
Detector: FID Temperature: 310 °C



Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Elution details:

EO	RT(MIN)	ANALYTE
1	10.206	Decafluorotriphenylphosphine

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Minimum sample size: 1 µL

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 30-Sep-2021

Andy Ommen - QC Manager

Scott Stetler - QA Manager

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom } ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD0628.01	30-Sep-2021	Original Release Date

.

Certificate of Analysis

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101246
Description: Benzoic Acid
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL16693
Certification Date: May 6, 2021
Expiration Date: April 30, 2031

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzoic acid	65-85-0	2000	± 4.383%

K3238

A2LA ACCREDITED
Reference Material Producer
Certicate No. 2427.02

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3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 25 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

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Certificate of Analysis

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Certified Reference Material

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Catalog No.:	AL0-101443	**Lot Number:**	CL17696
Description:	Aniline	**Certification Date:**	December 14, 2021
Storage:	4 °C	**Expiration Date:**	December 31, 2029
Provided As:	1 mL in 2 mL Ampoule in Methylene Chloride		

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aniline	62-53-3	1000	± 0.760%

K 3239

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

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Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

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Chemical Testing Laboratory
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5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

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[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID CRM143-50G
Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Certified Values

Analyte	*Units*	*Certified Value* [1,4]
1,2,4-Trichlorobenzene	µg/Kg	1477 ± 181
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	1625 ± 292
1-Chloronaphthalene	µg/Kg	2809 ± 84
2,3-Dimethylphenol	µg/Kg	4552 ± 137
2,4,5-Trichlorophenol	µg/Kg	3438 ± 245
2,4,6-Trichlorophenol	µg/Kg	2194 ± 251
2,4-Dichlorophenol	µg/Kg	6991 ± 394
2,4-Dimethylphenol	µg/Kg	6357 ± 879
2,4-Dinitrophenol	µg/Kg	2922 ± 523
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	3318 ± 442
2,6-Dichlorophenol	µg/Kg	4578 ± 874
2,6-Dimethylphenol	µg/Kg	7582 ± 228
2-Chloronaphthalene	µg/Kg	2223 ± 168
2-Chlorophenol	µg/Kg	1678 ± 202
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	5148 ± 685
2-Methylphenol (o-Cresol)	µg/Kg	6004 ± 573
2-Nitrophenol	µg/Kg	6456 ± 383
3,4-Dimethylphenol	µg/Kg	7185 ± 216
3+4-Methylphenol (m+p-Cresol)	µg/Kg	8033 ± 1613
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	7169 ± 310
4-Chloro-3-methylphenol	µg/Kg	2071 ± 110
4-Chlorophenyl phenylether	µg/Kg	2052 ± 113
4-Methylphenol (p-Cresol)	µg/Kg	6617 ± 1371
4-Nitrophenol	µg/Kg	6812 ± 595
Acenaphthene	µg/Kg	5489 ± 380

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Acenaphthylene	µg/Kg	1948 ± 240
Anthracene	µg/Kg	2866 ± 237
Benzo(a)anthracene	µg/Kg	5751 ± 552
Benzo(a)pyrene	µg/Kg	5902 ± 612
Benzo(b)fluoranthene	µg/Kg	3010 ± 409
Benzo(b+k)fluoranthene	µg/Kg	6534 ± 196
Benzo(g,h,i)perylene	µg/Kg	1380 ± 136
Benzo(k)fluoranthene	µg/Kg	2215 ± 237
Butyl benzyl phthalate	µg/Kg	3511 ± 384
Carbazole	µg/Kg	5412 ± 407
Chrysene	µg/Kg	1477 ± 72
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	2905 ± 321
Dibenzo(a,h)anthracene	µg/Kg	3420 ± 302
Dibenzofuran	µg/Kg	6130 ± 253
Dimethyl phthalate	µg/Kg	4537 ± 250
Di-n-butyl phthalate	µg/Kg	1721 ± 154
Di-n-octyl phthalate	µg/Kg	2744 ± 288
Fluoranthene	µg/Kg	2497 ± 222
Fluorene	µg/Kg	3724 ± 222
Hexachlorobutadiene	µg/Kg	1877 ± 245
Indeno(1,2,3-cd) pyrene	µg/Kg	3914 ± 409
Isophorone	µg/Kg	1615 ± 170
Naphthalene	µg/Kg	4458 ± 480
Nitrobenzene	µg/Kg	3539 ± 266
n-Nitrosodimethylamine	µg/Kg	1580 ± 402
n-Nitrosodiphenylamine	µg/Kg	2854 ± 379
Pentachlorophenol	µg/Kg	3411 ± 358
Phenanthrene	µg/Kg	5052 ± 385
Phenol	µg/Kg	2660 ± 184
Pyrene	µg/Kg	2964 ± 256
Pyridine	µg/Kg	1008 ± 30

Informational Values

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID CRM143-50G
Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Analyte	*Units*	*Suggested Acceptance Windows*	*Standard Deviation*
1,2,4-Trichlorobenzene	µg/Kg	148 to 2853	459
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	163 to 3440	605
1-Chloronaphthalene	µg/Kg	1123 to 4494	562
2,3-Dimethylphenol	µg/Kg	1821 to 7284	910
2,4,5-Trichlorophenol	µg/Kg	1003 to 5872	811
2,4,6-Trichlorophenol	µg/Kg	640 to 3748	518
2,4-Dichlorophenol	µg/Kg	2391 to 11591	1533
2,4-Dimethylphenol	µg/Kg	0.00 to 13959	2534
2,4-Dinitrophenol	µg/Kg	1169 to 4675	584
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	1248 to 5388	690
2,6-Dichlorophenol	µg/Kg	1831 to 7324	916
2,6-Dimethylphenol	µg/Kg	3033 to 12132	1516
2-Chloronaphthalene	µg/Kg	748 to 3699	492
2-Chlorophenol	µg/Kg	415 to 2942	421
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	0.00 to 10347	1733
2-Methylphenol (o-Cresol)	µg/Kg	1306 to 10702	1566
2-Nitrophenol	µg/Kg	1534 to 11379	1641
3,4-Dimethylphenol	µg/Kg	2874 to 11495	1437
3+4-Methylphenol (m+p-Cresol)	µg/Kg	4054 to 16218	2027
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	2901 to 11437	1423
4-Chloro-3-methylphenol	µg/Kg	677 to 3464	464
4-Chlorophenyl phenylether	µg/Kg	756 to 3348	432
4-Methylphenol (p-Cresol)	µg/Kg	2647 to 10587	1323
4-Nitrophenol	µg/Kg	681 to 14762	2650
Acenaphthene	µg/Kg	2243 to 8736	1082
Acenaphthylene	µg/Kg	712 to 3183	412
Anthracene	µg/Kg	1218 to 4515	550
Benzo(a)anthracene	µg/Kg	2806 to 8696	982
Benzo(a)pyrene	µg/Kg	2512 to 9292	1130
Benzo(b)fluoranthene	µg/Kg	1197 to 4822	604
Benzo(b+k)fluoranthene	µg/Kg	2614 to 10454	1307

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Benzo(g,h,i)perylene	µg/Kg	489 to 2271	297
Benzo(k)fluoranthene	µg/Kg	892 to 3537	441
Butyl benzyl phthalate	µg/Kg	1255 to 5766	752
Carbazole	µg/Kg	2032 to 8792	1127
Chrysene	µg/Kg	669 to 2284	269
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	765 to 5045	713
Dibenzo(a,h)anthracene	µg/Kg	1257 to 5583	721
Dibenzofuran	µg/Kg	2766 to 9493	1121
Dimethyl phthalate	µg/Kg	1842 to 7231	898
Di-n-butyl phthalate	µg/Kg	495 to 2947	409
Di-n-octyl phthalate	µg/Kg	690 to 4798	685
Fluoranthene	µg/Kg	984 to 4009	504
Fluorene	µg/Kg	1638 to 5810	695
Hexachlorobutadiene	µg/Kg	425 to 3329	484
Indeno(1,2,3-cd) pyrene	µg/Kg	870 to 6957	1015
Isophorone	µg/Kg	437 to 2792	392
Naphthalene	µg/Kg	1131 to 7784	1109
Nitrobenzene	µg/Kg	1024 to 6054	838
n-Nitrosodimethylamine	µg/Kg	632 to 2528	316
n-Nitrosodiphenylamine	µg/Kg	1142 to 4567	571
Pentachlorophenol	µg/Kg	341 to 7037	1209
Phenanthrene	µg/Kg	2307 to 7798	915
Phenol	µg/Kg	681 to 4639	660
Pyrene	µg/Kg	1118 to 4810	615
Pyridine	µg/Kg	403 to 1613	202

Additional Information:

DESCRIPTION

The organic sample is a soil containing extractable BNAs for analysis by 8100, 8270, 8310 or equivalent methods.

This product consist of a 5 vials each containing 10g of soil for analysis of PAHs. Each vial is identical and has been tested how homogeneity. Only one vial is need for test the remaining vials are to be used for multiple methods or routine testing.

The soil has been sterilized to minimize degradation of the sample.

The sample has been sized to 100 mesh.

Required storage condition is 4ºC.

The sample has been intentionally prepared with an apparent headspace.

STORAGE

The sample should be stored at 4ºC. It has been determined to be stable for the duration of the expiration date.

After sub-sampling replace cap securely and store remaining sample at 4ºC.

The shelf life of the product was determined by historic stability of similar CRM's. The expiration date may be extended based on stock and popularity upon successful stability testing by a 17025 accredited laboratory.

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID	CRM143-50G
Lot	**LRAC8918**
Expiration Date	January 2024
Manufacturing Date	January 2021
Storage Conditions	Refrigerate
Solvent/Matrix	SOIL

Stability and shelf life after opening must be determined by the user, taking into account sampling frequency/volume and all local conditions.

SAMPLE PREPARATION

Extract the complete contents of a single vial. Transfer entire contents of one vial to extraction vessel. Rinse vial and cap with extraction solvent.

Assume a 10g sample size for all calculations.

Note: Sample extracts and calibration solutions should be in the same solvent.

Report all results on a wet weight basis, do not correct for moisture.

NOTE: For method 8100 and using a packed column gas chromatographic method or cannot adequately resolve the following may coelute in four pairs of compounds: anthracene and phenanthrene; chrysene and benzo(a)anthracene; benzo(b)fluoranthene and benzo(k)fluoranthene; and dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene.

SCOPE AND APPLICATION

The BNAs in Soil Certified Reference Material (CRM) consists of 5 10mL VOA vials, with a Teflon lined closures containing approximately 10 grams of soil, fortified with BNAs. Being a natural matrix waste sample the analyst is challenged by the same preparation problems, analytical interferences, etc. as is typical for similar matrices received by the laboratory for analysis.

Description

Lot	**LRAC8918**
Expiration Date	January 2024
Manufacturing Date	January 2021
Storage Conditions	Refrigerate
Solvent/Matrix	SOIL

1 **Metrological traceability:** Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.
4 Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. K=2 unless specified. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom } ogeneity}^2 + u_{stability}^2}$$

***k*:** Coverage factor derived from a t-distribution table, based on the degrees of freedom of the data set. Assume 2.0 for a **Confidence interval = 95%**

6 Analytical Value- For QC verification of the certified value only- not to be used in calculations. Represents the analytical data obtained by comparison to a standard as analyzed by the method described in the CoA or another acceptable method. The result may differ from the certified value and UCRM based on method uncertainty as well as the uncertainty associated with the standard used for comparison.

Traceability: The standard was manufactured under an ISO/IEC 17025:2017 certified quality system. The balance used to weigh raw materials is accurate to +/- 0.0001g and calibrated regularly using mass standards traceable to NIST. All dilutions were preformed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Homogeneity: Homogeneity was assessed in accordance with ISO 17034:2016. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared using a one-way analysis of variance approach as described by TNI EL-V3-2009 Appendix A.2. See Instructions for minimum sub-sample size.

Expiration is at end of month given on certificate and label.

MSDS reports for components comprising greater than 1.0% of the solution or 0.1% for components known to be carcinogens are available upon request.

THIS PRODUCT WAS DESIGNED, PRODUCED AND VERIFIED FOR ACCURACY AND STABILITY IN ACCORDANCE WITH **ISO/IEC 17025:2017 (ANAB Cert AT-1467)** and **ISO 17034:2016 (ANAB Cert AR-1470).**

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Certification Date	January 05, 2021
Version	0-152021

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

Agilent

Certificate of Analysis

Product Name: Toxic Substances Standard

Product Number: US-103N-1 **Lot Issue Date:** 25-May-2021

Lot Number: 0006609664 **Expiration Date:** 30-Jun-2024

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
benzoic acid	000065-85-0	RM01884	2005 ± 10 µg/mL
o-cresol	000095-48-7	RM12877	2005 ± 10 µg/mL
p-cresol	000106-44-5	RM01988	2005 ± 10 µg/mL
2,4,5-trichlorophenol	000095-95-4	NT00344	2004 ± 10 µg/mL

Matrix: methylene chloride (dichloromethane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

5/11/22

K004539
toxic sub mix#1
Solvent / Lot: methylene chloride
Prep: 5/11/2022 by JZ
Exp: 6/30/2024
Location:

ANAB ACCREDITED ISO17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert No. AT-1937

ISO 17034

Agilent
Trusted Answers

Reference Material Certificate

Product Name: Phenols Standard
Product Number: US-107N-1
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006648297
Lot Issue Date: 17-Nov-2021
Expiration Date: 31-Dec-2024

Component Name	CERTIFIED VALUES Concentration	Expanded Uncertainty	CAS#	Analyte Lot
4-chloro-3-methylphenol	2006 ±	10 µg/mL	000059-50-7	RM01885
2-chlorophenol	2007 ±	10 µg/mL	000095-57-8	RM01871
2,4-dichlorophenol	2005 ±	10 µg/mL	000120-83-2	RM13878
2,4-dimethylphenol	2006 ±	10 µg/mL	000105-67-9	RM13009
2,4-dinitrophenol	2006 ±	10 µg/mL	000051-28-5	RM02112
2-methyl-4,6-dinitrophenol	2005 ±	10 µg/mL	000534-52-1	RM02292
2-nitrophenol	2007 ±	10 µg/mL	000088-75-5	RM13445
4-nitrophenol	2006 ±	10 µg/mL	000100-02-7	RM03752
pentachlorophenol	2006 ±	10 µg/mL	000087-86-5	RM02474
phenol	2006 ±	10 µg/mL	000108-95-2	RM11471
2,4,6-trichlorophenol	2006 ±	10 µg/mL	000088-06-2	RM18096

Matrix: methylene chloride (dichloromethane)

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

5/11/22

CSD-QA-015.1

K004540
phenols mix
Solvent / Lot: methylene chloride
Prep: 5/11/2022 by JZ
Exp: 12/31/2024
Location:

ISO 17034

Agilent
Trusted Answers

Reference Material Certificate

Product Name: PAH Standard
Product Number: US-106N-1
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006627349
Lot Issue Date: 17-Sep-2021
Expiration Date: 31-Oct-2024

Component Name	CERTIFIED VALUES Concentration	Expanded Uncertainty	CAS#	Analyte Lot
acenaphthene	2007 ±	10 µg/mL	000083-32-9	RM10879
acenaphthylene	2004 ±	10 µg/mL	000208-96-8	RM10891
anthracene	2006 ±	10 µg/mL	000120-12-7	RM14212
benz[a]anthracene	2006 ±	10 µg/mL	000056-55-3	RM16072
benzo[b]fluoranthene	2006 ±	10 µg/mL	000205-99-2	RM14571
benzo[k]fluoranthene	2006 ±	10 µg/mL	000207-08-9	RM18376
benzo[ghi]perylene	2006 ±	10 µg/mL	000191-24-2	RM15761
benzo[a]pyrene	2006 ±	10 µg/mL	000050-32-8	RM17573
chrysene	2007 ±	10 µg/mL	000218-01-9	RM13771
dibenz[a,h]anthracene	2006 ±	10 µg/mL	000053-70-3	RM06786
fluoranthene	2006 ±	10 µg/mL	000206-44-0	RM12277
fluorene	2006 ±	10 µg/mL	000086-73-7	RM09441
indeno[1,2,3-cd]pyrene	2006 ±	10 µg/mL	000193-39-5	RM14192
naphthalene	2007 ±	10 µg/mL	000091-20-3	RM10445
phenanthrene	2005 ±	10 µg/mL	000085-01-8	RM10495
pyrene	2005 ±	10 µg/mL	000129-00-0	RM16126

Matrix: methylene chloride/benzene (1:1)

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

K004541
SVOA PAH STD 2000ug/ml
Solvent / Lot: DCM/BENZENE
Prep: 5/11/2022 by JZ
Exp: 10/31/2024
Location: Fridge 19

CSD-QA-015.1

11/22

Reference Materials Producer
Cert #2495.01

Certificate of Analysis

Chemical Testing
Cert #2495.02

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This **SPEXOrganics**® Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

Certificate of Reference Material

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021 Certifying Officer: Shannon Mora

Report of Certification

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

- ISO 9001:2008: Quality management systems - Requirements - Certified by UL-DQS
- ISO 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories - Accredited by A2LA
- ISO Guide 34:2009: General Requirements for the Competence of Reference Material Producers - Accredited by A2LA
- ISO Guide 31:2000: Reference Materials - Contents of Certificates and Labels
- ISO Guide 35:2006: Reference Materials - General and statistical principals for certification
- Guide to the Expression of Uncertainty in Measurement 1997
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference material producers
- ISO/REMCO N280

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory , please store this product in a refrigerator (2°C to 8°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is unopened and stored under the prescribed conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5 µL with a 25µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i, where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breech of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

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Accredited to 17025 & Guide 34 ISO Certified to 9001

ACCREDITED
Reference Materials Producer
Cert #2495.01

ECS

Certificate of Analysis

ilac-MRA ACCREDITED
Chemical Testing
Cert #2495.02

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This **SPEXOrganics®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

K004542

Certificate of Reference Material

Catalog Number: ECS-A-030

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Lot No. AA210126005

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021

Certifying Officer: Shannon Nave

Report of Certification

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

- ISO 9001:2008: Quality management systems - Requirements - Certified by UL-DQS
- ISO 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories - Accredited by A2LA
- ISO Guide 34:2009: General Requirements for the Competence of Reference Material Producers - Accredited by A2LA
- ISO Guide 31:2000: Reference Materials - Contents of Certificates and Labels
- ISO Guide 35:2006: Reference Materials - General and statistical principals for certification
- Guide to the Expression of Uncertainty in Measurement 1997
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference material producers
- ISO/REMCO N280

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory, please store this product in a refrigerator (2°C to 8°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is unopened and stored under the prescribed conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5µL with a 25µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breech of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

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Phone: 1-732-549-7144 • Fax 1-732-603-9647

Accredited to 17025 & Guide 34 ISO Certified to 9001

Agilent

Certificate of Analysis

Product Name: 1-Methylnaphthalene Standard

Product Number: EPA-1225-1 **Lot Issue Date:** 19-Jul-2021

Lot Number: 0006624769 **Expiration Date:** 31-Jul-2023

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1-methylnaphthalene	000090-12-0	RM07712	999.3 ± 5.0 µg/mL

Matrix: methanol (methyl alcohol)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

K004543
1-Methylnaphthalene
Solvent / Lot: MEOH
Prep: 5/11/2022 by JZ
Exp: 7/31/2023
Location:

5/11/22

Sample lot approver:
Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026
Page: 1 of 1
www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert
No. AT-1937

Agilent

Certificate of Analysis

Product Name: Toxic Substances Standard

Product Number: US-104N-1 **Lot Issue Date:** 02-Jul-2021

Lot Number: 0006620643 **Expiration Date:** 31-Jul-2023

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
aniline	000062-53-3	RM12853	2005 ± 10 µg/mL
benzyl alcohol	000100-51-6	RM10547	2004 ± 10 µg/mL
4-chloroaniline	000106-47-8	RM01886	2002 ± 10 µg/mL
dibenzofuran	000132-64-9	RM02077	2002 ± 10 µg/mL
2-methylnaphthalene	000091-57-6	RM01258	2006 ± 10 µg/mL
2-nitroaniline	000088-74-4	RM02402	2003 ± 10 µg/mL
3-nitroaniline	000099-09-2	RM02424	2003 ± 10 µg/mL
4-nitroaniline	000100-01-6	RM02425	2003 ± 10 µg/mL

Matrix: methylene chloride (dichloromethane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

K004544
toxic sub mix#2
Solvent / Lot: methylene chloride
Prep: 5/11/2022 by JZ
Exp: 7/31/2023
Location:

05/11/22

ANAB ACCREDITED ISO17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert No. AT-1937

RESTEK®
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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31493 **Lot No.:** A0181243

Description : CLP 04.1 BNA Surrogate Mix

CLP 04.1 BNA Surrogate Mix 1000-1500 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2025 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

05/11/22

K004545
CLP 04.1 BNA SURR MIX
Solvent / Lot: AO175316
Prep: 5/11/2022 by JZ
Exp: 10/20/2025
Location:

Elution Order	Compound	Gr (weig					
1	2-Fluorophenol **CAS #** 367-12-4 (Lot STBJ2508) **Purity** 99%	1,50					
				+/-	53.3632	µg/mL	Stressed
2	Phenol-d6 **CAS #** 13127-88-3 (Lot PR-31262) **Purity** 99%	1,506.0	µg/mL	+/-	8.9452	µg/mL	Gravimetric
				+/-	43.9882	µg/mL	Unstressed
				+/-	53.3632	µg/mL	Stressed
3	2-Chlorophenol-d4 **CAS #** 93951-73-6 (Lot PR-30568) **Purity** 99%	1,510.0	µg/mL	+/-	8.9689	µg/mL	Gravimetric
				+/-	44.1050	µg/mL	Unstressed
				+/-	53.5049	µg/mL	Stressed
4	1,2-Dichlorobenzene-d4 **CAS #** 2199-69-1 (Lot PR-32542/022621DB1 **Purity** 99%	1,004.0	µg/mL	+/-	5.9635	µg/mL	Gravimetric
				+/-	29.3255	µg/mL	Unstressed
				+/-	35.5754	µg/mL	Stressed
5	Nitrobenzene-d5 **CAS #** 4165-60-0 (Lot PR-29940A) **Purity** 99%	1,008.0	µg/mL	+/-	5.9872	µg/mL	Gravimetric
				+/-	29.4423	µg/mL	Unstressed
				+/-	35.7172	µg/mL	Stressed
6	2-Fluorobiphenyl **CAS #** 321-60-8 (Lot 19169) **Purity** 99%	1,006.0	µg/mL	+/-	5.9753	µg/mL	Gravimetric
				+/-	29.3839	µg/mL	Unstressed
				+/-	35.6463	µg/mL	Stressed
7	2,4,6-Tribromophenol **CAS #** 118-79-6 (Lot MKCJ7664) **Purity** 99%	1,506.0	µg/mL	+/-	8.9452	µg/mL	Gravimetric
				+/-	43.9882	µg/mL	Unstressed
				+/-	53.3632	µg/mL	Stressed

Certificate of Analysis

phenova Certified Reference Materials | A Phenomenex Company

Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ▪ Tel: 303-940-0033 ▪ Fax: 303-940-0043 ▪ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.:	AL0-101246	**Lot Number:**	CL17953
Description:	Benzoic Acid	**Certification Date:**	January 31, 2022
Storage:	4 °C	**Expiration Date:**	January 31, 2032
Provided As:	1 mL in 2 mL Ampoule in Methylene Chloride		

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzoic acid	65-85-0	2000	± 2.714%

K004603
Benzoic Acid @2000ug/ml
Solvent / Lot: N/A
Prep: 5/13/2022 by JZ
Exp: 1/31/2032
Location: GC

5/13/22

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

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Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

IL64691018 us

Certificate of Analysis

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6390 Joyce Drive STE 100, Golden, CO 80403 USA ▪ Tel: 303-940-0033 ▪ Fax: 303-940-0043 ▪ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244
Description: Benzidines Standard
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL17662
Certification Date: December 2, 2021
Expiration Date: November 30, 2031

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 0.211%
3,3'-Dichlorobenzidine	91-94-1	2000	± 1.305%

K004604
Benzidines std @2000ug/ml
Solvent / Lot: MeCl2
Prep: 5/13/2022 by JZ
Exp: 11/30/2031
Location: GC

5/13/22

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

phenova Certified Reference Materials | A Phenomenex Company

Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

IL64591018_us

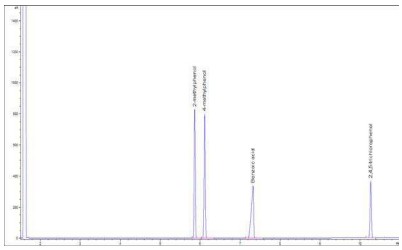
Supelco®

www.sigmaaldrich.com

Certificate of Analysis - Certified Reference Material

EPA TCL Hazardous Substances Mix 1

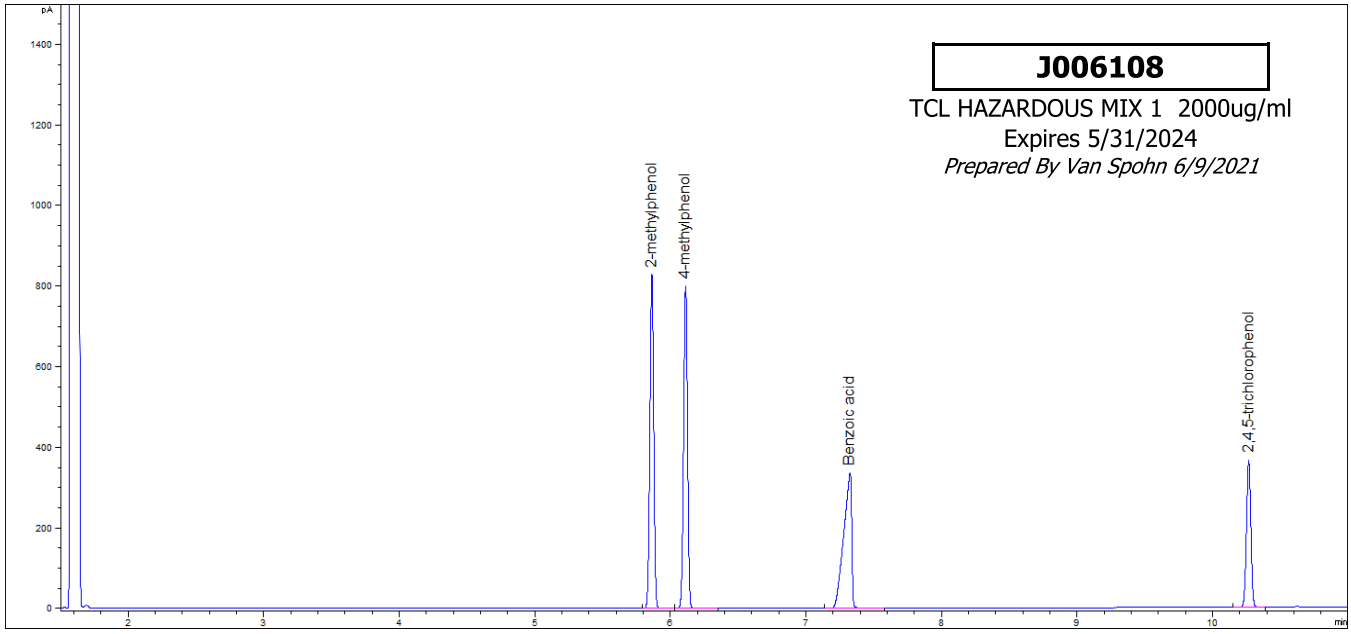
Product no.: 48907
Lot no.: LRAC9610
Expiry Date: May 2024
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAC9610.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*



Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Elution order*	*Raw Material Lot*
2-METHYLPHENOL CAS# 95-48-7	2004 ± 9	µg/mL	99.0	1	G1735A
4-METHYLPHENOL CAS# 106-44-5	2004 ± 13	µg/mL	98.9	2	06921MG
BENZOIC ACID CAS# 65-85-0	2012 ± 6	µg/mL	99.9	3	LC16514
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	2003 ± 6	µg/mL	99.9	4	JS00008

Informational Values:



Additional Information:
Analytical Method Parameters:
Column: Equity-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness (Column #98)
Carrier Gas: H2, Flow: 4.5 mL/min
Inlet Temperature: 170 °C, Injection Volume: 1 µL
Injection Mode: Split, Split Ratio: 20:1

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Temperature Program: 80 °C @ 10 °C/min to 190 °C (Hold 5 min)
Detector: FID
Detector Temperature: 310 °C

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 20-May-2021

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom}\ ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9610.01	20-May-2021	Original Release Date

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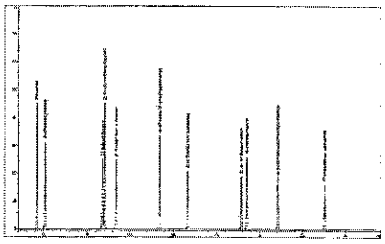
Certificate of Analysis - Certified Reference Material

EPA TCL Phenols Mix

Product no.: 48904
Lot no.: LRAD0139
Expiry Date: July 2024
Manufacturing Date: July 2021
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD0139.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*



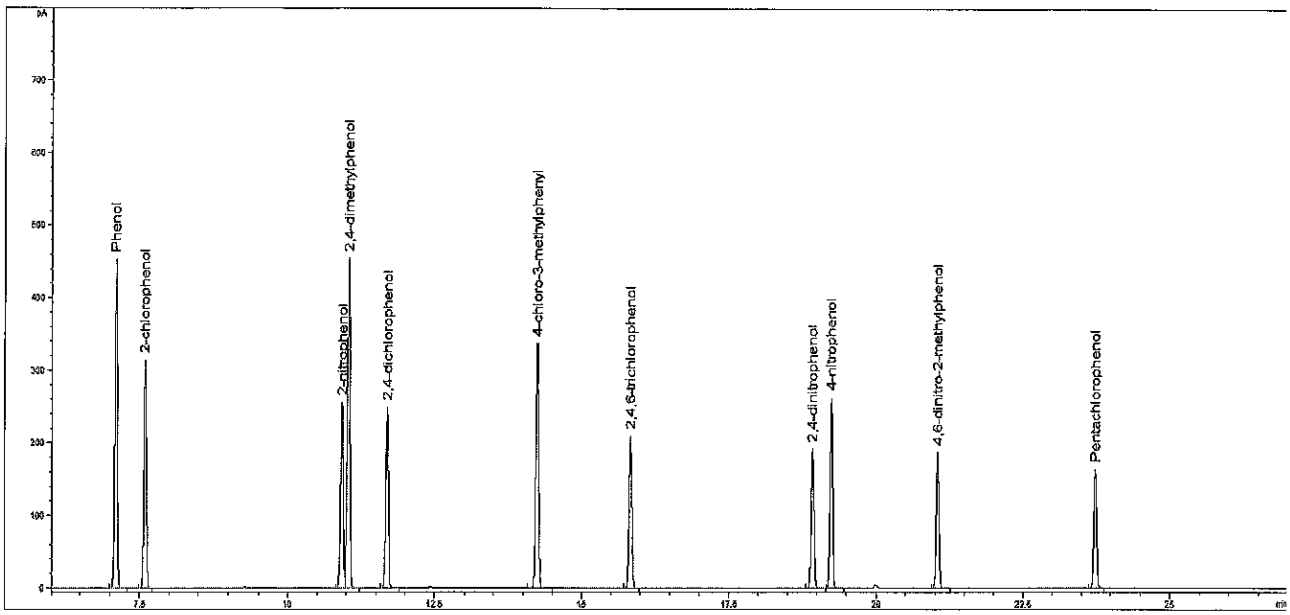
Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
2-CHLOROPHENOL CAS# 95-57-8	2001 ± 25	µg/mL	99.9	STBG3033V
2-NITROPHENOL CAS# 88-75-5	1999 ± 18	µg/mL	99.3	15905BB
2,4-DIMETHYLPHENOL CAS# 105-67-9	2000 ± 14	µg/mL	99.2	05421CO
2,4-DICHLOROPHENOL CAS# 120-83-2	2000 ± 17	µg/mL	99.5	03221TN
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	2000 ± 5	µg/mL	99.9	JS00013
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	2002 ± 5	µg/mL	99.5	04212PS
2,4-DINITROPHENOL CAS# 51-28-5	2000 ± 28	µg/mL	66.9	STBJ5751
4-NITROPHENOL CAS# 100-02-7	2000 ± 33	µg/mL	99.0	04628LT
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	2000 ± 27	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	1999 ± 25	µg/mL	97.9	MKCD2150

ASSAY Method

J013597
TCL Phenols Mix 2000ug/ml
Solvent / Lot: LRAD0139
Prep: 12/30/2021 by VS
Exp: 7/31/2024
Location:

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.



METHOD: GC (Bellefonte Method)

Column: SPB-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness
Carrier Gas: H_2 Flow Rate: 4.5 mL/min
Inlet Temperature: 200 °C Injection Volume: 1.0 µL
Injection Mode: 25:1
Temperature Program: 80 °C (Hold 2 min) @ 6 °C/min to 260 °C (Hold 5 min)
Detector: FID Temperature: 310 °C

Elution details:

EO	RT(MIN)	ANALYTE
1	7.095	Phenol
2	7.585	2-chlorophenol
3	10.925	2-nitrophenol
4	11.037	2,4-dimethylphenol
5	11.696	2,4-dichlorphenol
6	14.242	4-chloro-3-m3thylphenol
7	15.842	2,4,6-trichlorophenol
8	18.93	2,4-dinitrophenol
9	19.25	4-nitrophenol
10	21.05	4,6-dinitro-2-methylphenol
11	23.752	Pentachlorophenol

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 12-Jul-2021

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{hom\ ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD0139.01	12-Jul-2021	Original Release Date

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Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada.

Certificate of Analysis

Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Description: 8270 Calibration Standard
Storage: -18 °C
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Lot Number: CL18355
Certification Date: July 25, 2022
Expiration Date: August 31, 2023

K007995
SVOA-8270 LCS MIX 1000ug/ml
Solvent / Lot: N/A
Prep: 8/29/2022 by JZ
Exp: 8/31/2023
Location: FREEZER 44

Aaron Dukes, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Acenaphthene	83-32-9	1000	± 0.300%
Acenaphthylene	208-96-8	1000	± 0.225%
Anthracene	120-12-7	1000	± 6.858%
Azobenzene	103-33-3	1000	± 0.224%
Benzo(a)anthracene	56-55-3	1000	± 0.247%
Benzo(a)pyrene	50-32-8	1000	± 0.270%
Benzo(b)fluoranthene	205-99-2	1000	± 0.635%
Benzo(k)fluoranthene	207-08-9	1000	± 0.682%
Benzo(g,h,i)perylene	191-24-2	1000	± 0.272%
Benzyl alcohol	100-51-6	1000	± 0.231%
Benzyl butyl phthalate	85-68-7	1000	± 0.480%
bis(2-Chloroethoxy)methane	111-91-1	1000	± 0.479%
bis(2-Chloroethyl) ether	111-44-4	1000	± 0.479%
bis(2-Chloroisopropyl) ether	108-60-1	1000	± 0.550%
bis(2-Ethylhexyl) adipate	103-23-1	1000	± 0.479%
bis(2-Ethylhexyl) phthalate	117-81-7	1000	± 0.479%
4-Bromophenyl phenyl ether	101-55-3	1000	± 0.479%
Carbazole	86-74-8	1000	± 0.146%

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Catalog No.: AL0-101444
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Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
4-Chloroaniline	106-47-8	1000	± 0.300%
4-Chloro-3-methylphenol	59-50-7	1000	± 0.545%
2-Chloronaphthalene	91-58-7	1000	± 0.224%
2-Chlorophenol	95-57-8	1000	± 0.507%
4-Chlorophenyl phenyl ether	7005-72-3	1000	± 0.479%
Chrysene	218-01-9	1000	± 0.145%
Dibenz(a,h)anthracene	53-70-3	1000	± 1.058%
Dibenzofuran	132-64-9	1000	± 0.302%
Di-n-butyl phthalate	84-74-2	1000	± 0.518%
1,2-Dichlorobenzene	95-50-1	1000	± 0.247%
1,3-Dichlorobenzene	541-73-1	1000	± 0.225%
1,4-Dichlorobenzene	106-46-7	1000	± 0.224%
2,4-Dichlorophenol	120-83-2	1000	± 0.545%
Diethyl phthalate	84-66-2	1000	± 0.518%
2,4-Dimethylphenol	105-67-9	1000	± 0.507%
Dimethyl phthalate	131-11-3	1000	± 0.518%
1,2-Dinitrobenzene	528-29-0	1000	± 0.361%
1,3-Dinitrobenzene	99-65-0	1000	± 0.300%
1,4-Dinitrobenzene	100-25-4	1000	± 0.242%
2,4-Dinitrophenol	51-28-5	1000	± 0.545%
2,4-Dinitrotoluene	121-14-2	1000	± 1.128%

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Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2,6-Dinitrotoluene	606-20-2	1000	± 0.224%
Di-n-octyl phthalate	117-84-0	1000	± 0.486%
Fluoranthene	206-44-0	1000	± 0.224%
Fluorene	86-73-7	1000	± 0.224%
Hexachlorobenzene	118-74-1	1000	± 0.152%
Hexachlorobutadiene	87-68-3	1000	± 0.746%
Hexachlorocyclopentadiene	77-47-4	1000	± 0.153%
Hexachloroethane	67-72-1	1000	± 0.300%
Indeno(1,2,3-cd)pyrene	193-39-5	1000	± 0.883%
Isophorone	78-59-1	1000	± 0.145%
2-Methyl-4,6-dinitrophenol	534-52-1	1000	± 0.508%
1-Methylnaphthalene	90-12-0	1000	± 0.479%
2-Methylnaphthalene	91-57-6	1000	± 0.487%
2-Methylphenol	95-48-7	1000	± 0.545%
3-Methylphenol	108-39-4	500	± 0.279%
4-Methylphenol	106-44-5	500	± 0.399%
Naphthalene	91-20-3	1000	± 0.226%
2-Nitroaniline	88-74-4	1000	± 0.224%
3-Nitroaniline	99-09-2	1000	± 0.235%
4-Nitroaniline	100-01-6	1000	± 0.300%
Nitrobenzene	98-95-3	1000	± 0.300%

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Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2-Nitrophenol	88-75-5	1000	± 0.514%
4-Nitrophenol	100-02-7	1000	± 0.519%
N-Nitrosodimethylamine	62-75-9	1000	± 0.503%
N-Nitrosodiphenylamine	86-30-6	1000	± 0.476%
N-Nitrosodi-n-propylamine	621-64-7	1000	± 0.461%
Pentachlorophenol	87-86-5	1000	± 0.202%
Phenanthrene	85-01-8	1000	± 0.145%
Phenol	108-95-2	1000	± 0.545%
Pyrene	129-00-0	1000	± 0.147%
Pyridine	110-86-1	1000	± 0.503%
2,3,4,6-Tetrachlorophenol	58-90-2	1000	± 0.247%
2,3,5,6-Tetrachlorophenol	935-95-5	1000	± 0.247%
1,2,4-Trichlorobenzene	120-82-1	1000	± 0.224%
2,4,5-Trichlorophenol	95-95-4	1000	± 0.507%
2,4,6-Trichlorophenol	88-06-2	1000	± 0.509%

Notes: The proper chemical name for Bis(2-Chloroiospropyl) ether is 2,2'-oxybis(1-chloropropane). The analytical uncertainty contribution to the expanded uncertainty for 3 and 4-Methylphenol is measured as the total of the two analytes. N-Nitrosodiphenylamine presents as Diphenylamine at 854 µg/mL.

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Supelco®

www.sigmaaldrich.com

Certificate of Composition - Analytical Standard

BASE STOCK

Product no.: 22523051
Lot no.: LRAD2751
Expiry Date: June 2024
Manufacturing Date: June 2022
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD2751.01 (*Note: Certificates may be updated due to the availability of new data. Check our website at:* www.sigma-aldrich.com *for the most current version.)*

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
3,3'-DICHLOROBENZIDINE, 100MG, NEAT CAS# 91-94-1	799	µg/mL	99.8	LRAD2376
2,4-DINITROTOLUENE CAS# 121-14-2	801	µg/mL	97.8	LB46632
2,6-DINITROTOLUENE CAS# 606-20-2	800	µg/mL	99.2	11231AN
HEXACHLOROCYCLOPENTADIENE CAS# 77-47-4	800	µg/mL	96.0	LB95525
N-NITROSODIMETHYLAMINE CAS# 62-75-9	800	µg/mL	95.0	2019-030598 5
PERYLENE CAS# 198-55-0	200	µg/mL	99.6	04101PG
ANILINE CAS# 62-53-3	800	µg/mL	99.9	LA41596
4-CHLOROANILINE CAS# 106-47-8	800	µg/mL	100.0	MKBZ6909V
2-NITROANILINE CAS# 88-74-4	799	µg/mL	99.9	07411KN
3-NITROANILINE CAS# 99-09-2	800	µg/mL	99.9	LC09264
4-NITROANILINE CAS# 100-01-6	800	µg/mL	99.9	15609AA
PYRIDINE (LOW WATER) CAS# 110-86-1	800	µg/mL	100.0	SHBJ9218

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

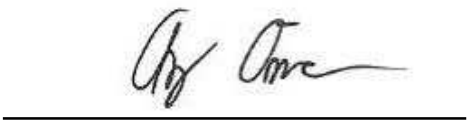
Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date: 03 JUN 2022



Andy Ommen - QC Manager

Scott Stetler - QA Manager

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD2751.01	03 JUN 2022	Original Release Date

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Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1254

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0171
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0171-01 A	File ID:	23012431.D
Sampled:	12/08/22 08:39	Prepared:	01/17/23 13:07	Analyzed:	01/25/23 01:11
% Solids:	42.83	Preparation:	EPA 3546 (Microwave)	Initial/Final:	29.85 g Wet / 2.5 mL
Batch:	BLA0340	Sequence:	SLA0299	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	2	1	0.26	0.14	0.49	J

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.8218*	*8.99*	*115*	*30 - 160*	
Decachlorobiphenyl	*2*	*7.8218*	*9.27*	*119*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.8218*	*6.38*	*81.6*	*30 - 160*	
Tetrachlorometaxylene	*2*	*7.8218*	*6.30*	*80.6*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230124.b/23012431.D
Data file 2: /20230124.b/B20230124.b/23012431.D
Method: \20230124.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: 23A0171-01
Client ID:
Injection Date: 25-JAN-2023 01:11
Report Date: 01/27/2023 13:34
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.304	-0.007	59492	4.830	-0.003	24678	3.79	1.05	113.3*	alpha-BHC N
----			5.335	0.026	20130	0.00	2.25	---	beta-BHC
4.883	0.007	109328	----			8.51	0.00	---	delta-BHC
4.615	0.003	66779	5.234	0.005	19349	4.90	0.97	134.0*	gamma-BHC (Lindane) N
5.080	-0.013	25123	5.767	0.013	43944	2.07	2.43	15.8	Heptachlor N
5.433	0.019	78579	6.163	0.005	36356	5.78	1.76	106.7*	Aldrin
6.076	-0.013	32538	6.794	-0.020	226018	2.76	13.22	130.9*	Heptachlor epoxide b N
----			7.246	-0.012	17460	0.00	1.16	---	Endosulfan I
6.773	-0.018	125921	7.535	-0.017	75812	10.84	4.56	81.7*	Dieldrin N
6.446	-0.005	156456	7.341	-0.001	83402	14.51	5.46	90.6*	4,4'-DDE N
7.067	0.026	320332	----			38.04	0.00	---	Endrin
7.306	0.028	21974	8.097	0.010	119195	2.90	11.06	116.9*	Endosulfan II N
----			7.947	-0.001	84918	0.00	8.30	---	4,4'-DDD
8.128	-0.012	9156	----			1.27	0.00	---	Endosulfan sulfate
7.363	-0.028	314551	8.275	0.008	432060	41.03	43.77	6.5	4,4'-DDT N
----			----			0.00	0.00	---	Methoxychlor
----			9.229	0.019	175911	0.00	17.21	---	Endrin ketone
7.731	0.025	68911	8.413	-0.005	67938	11.40	8.94	24.2	Endrin aldehyde N
6.229	-0.001	34246	----			2.86	0.00	---	trans-Chlordane
6.396	0.020	100945	7.184	-0.001	27449	8.41	1.65	134.5*	cis-Chlordane N
2.286	-0.017	16624	2.454	-0.028	125427	1.01	5.61	139.0*	Hexachlorobutadiene
4.152	-0.001	12461	4.690	-0.003	28696	0.85	1.34	44.2*	Hexachlorobenzene MN
3.800	-0.001	362421	4.196	-0.001	533159	32.65	32.24	1.3	Tetrachloro-m-xylene MN
9.321	0.002	299204	10.429	-0.000	387429	45.97	47.40	3.1	Decachlorobiphenyl N

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

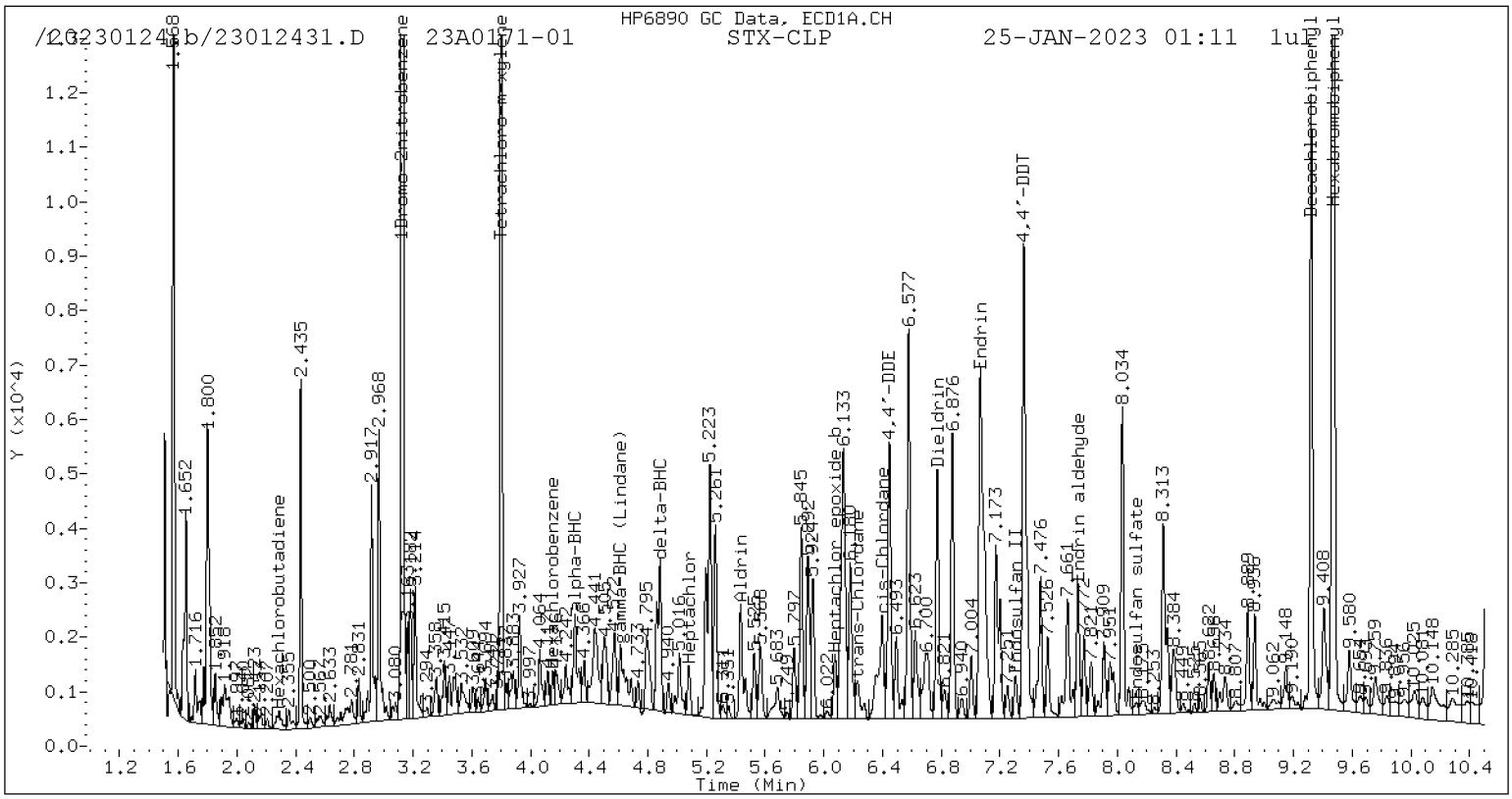
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	816226	21.4
Hexabromobiphenyl	609723	642341	5.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1174983	16.7
Hexabromobiphenyl	769764	739499	-3.9

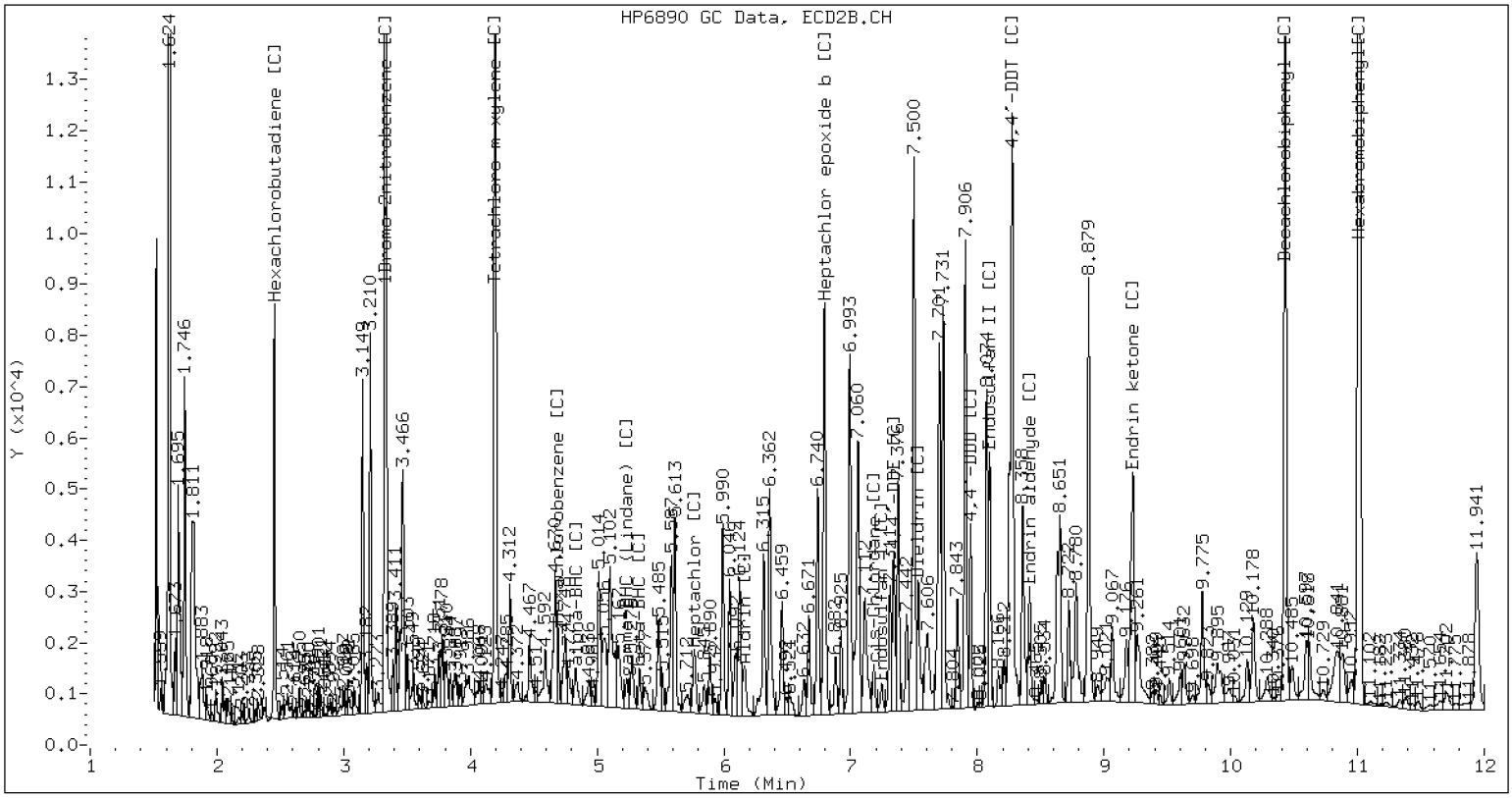
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

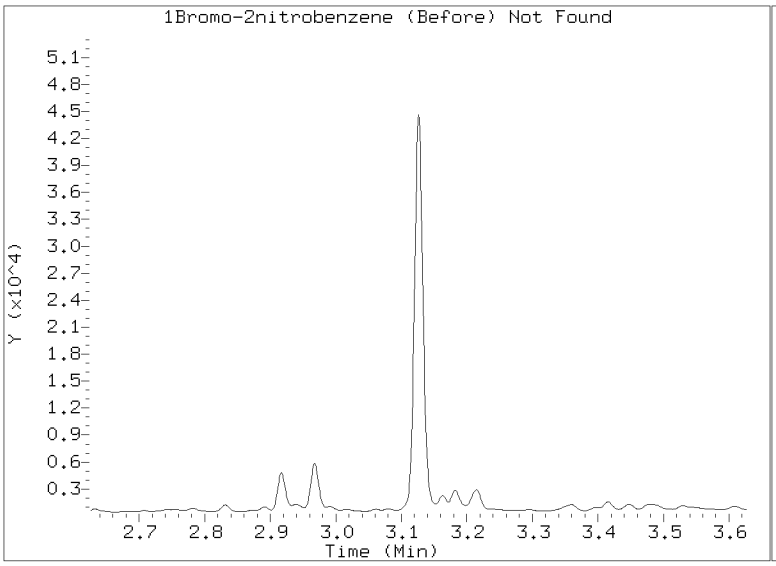
/20230124.b/B20230124.b/23012431.D 23A0171-01 CLP2

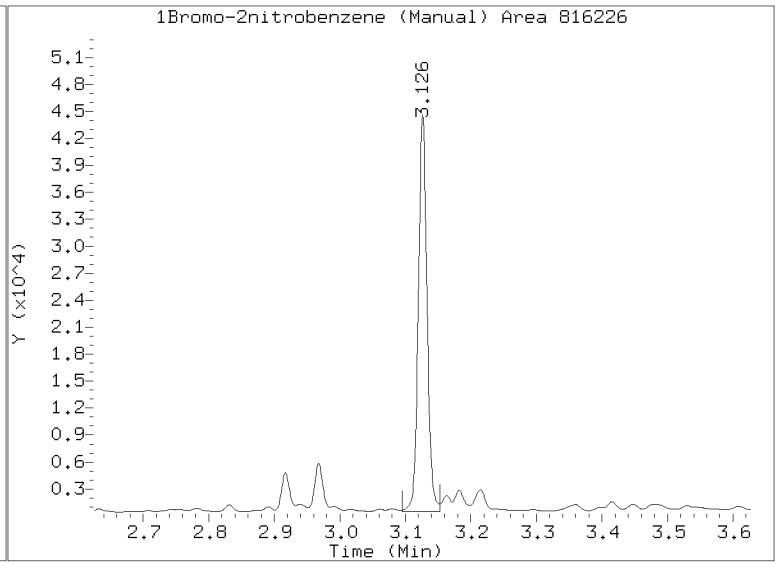


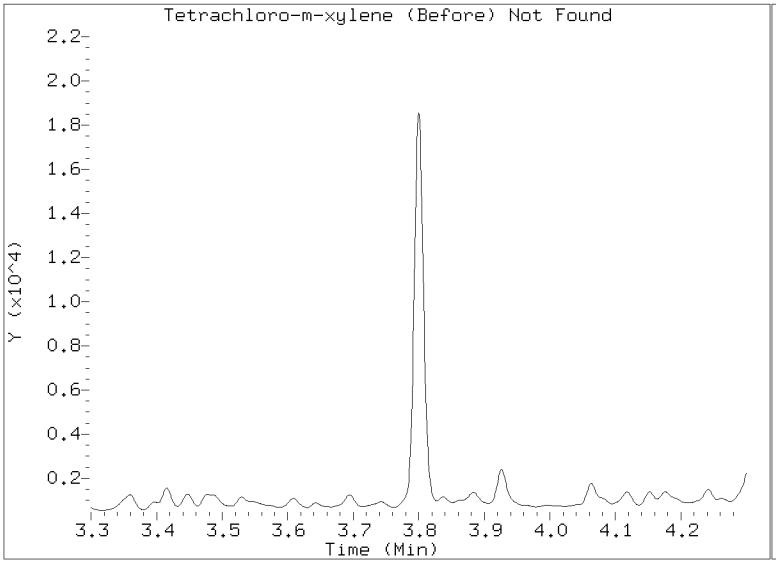
CLP-2 Manual Integration: YES

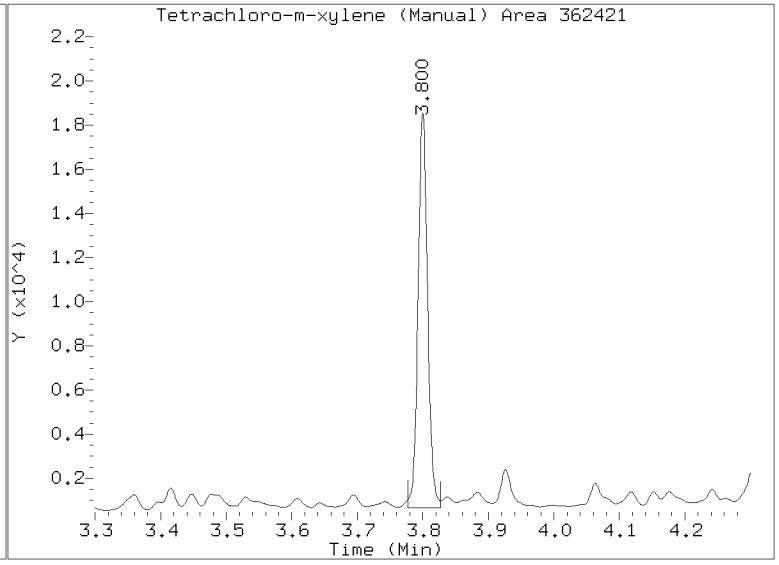
Manual Peak Adjustment Report, STX-CLP

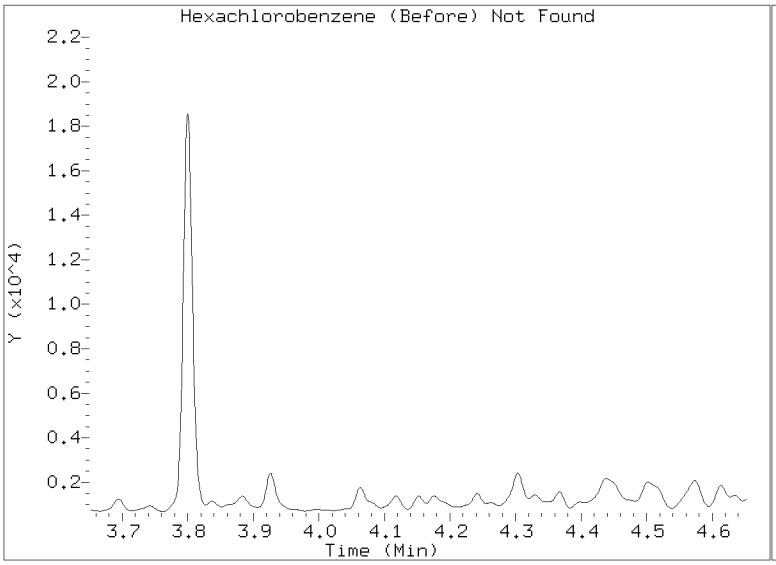
Datafile: /20230124.b/23012431.D
Injection Date: 25-JAN-2023 01:11
Lab ID:23A0171-01 Client ID:
Report Date: 01/27/2023 13:34

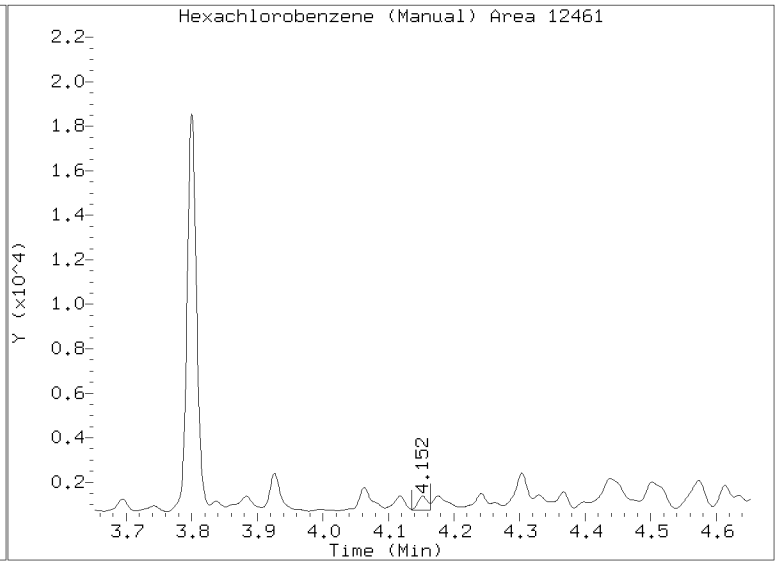






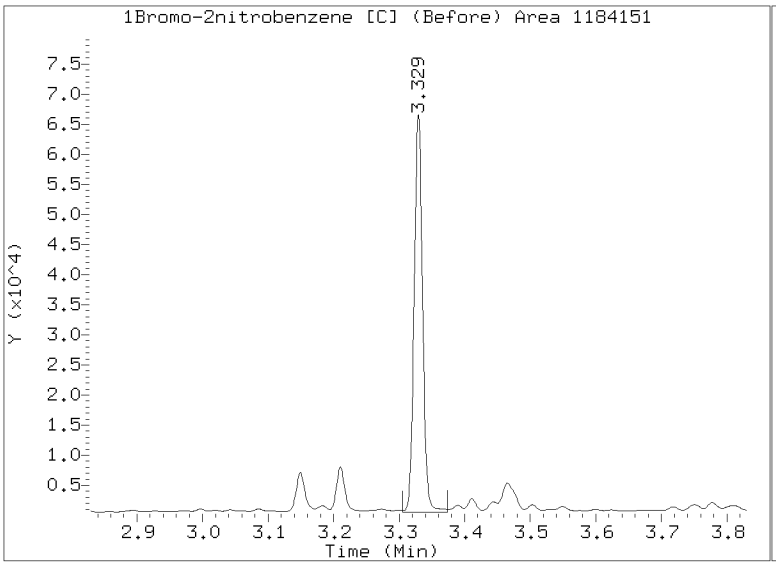


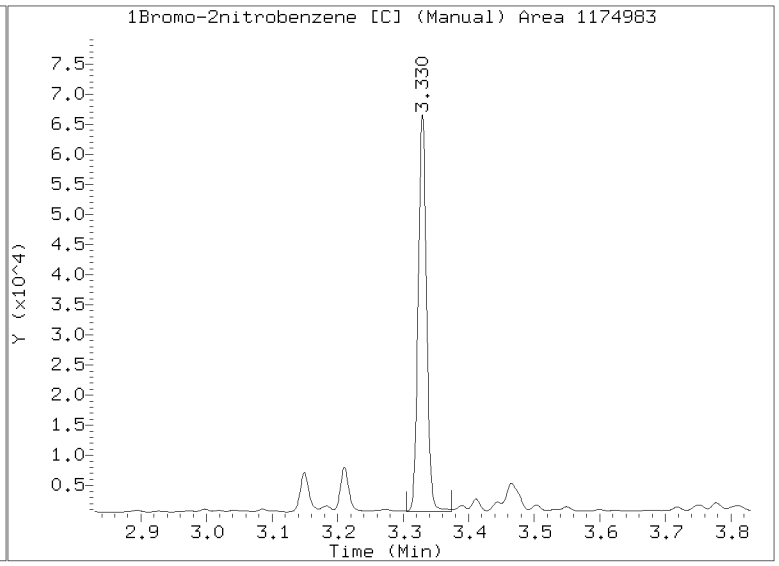


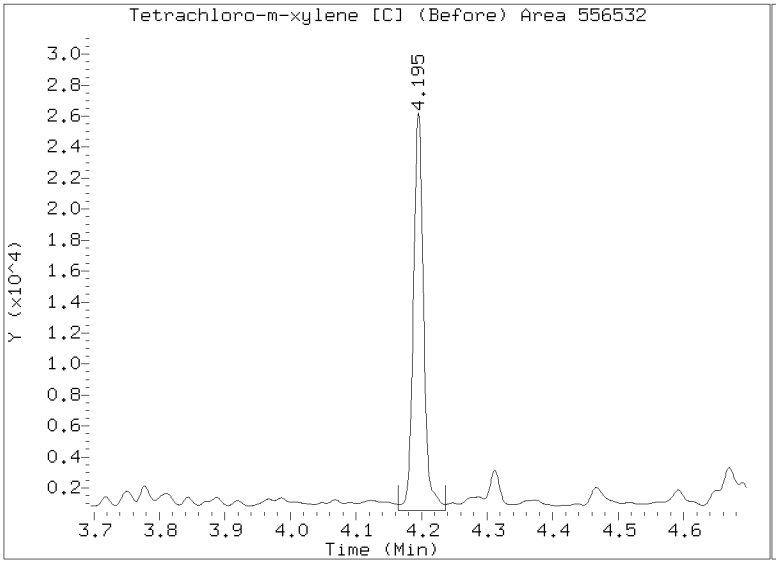


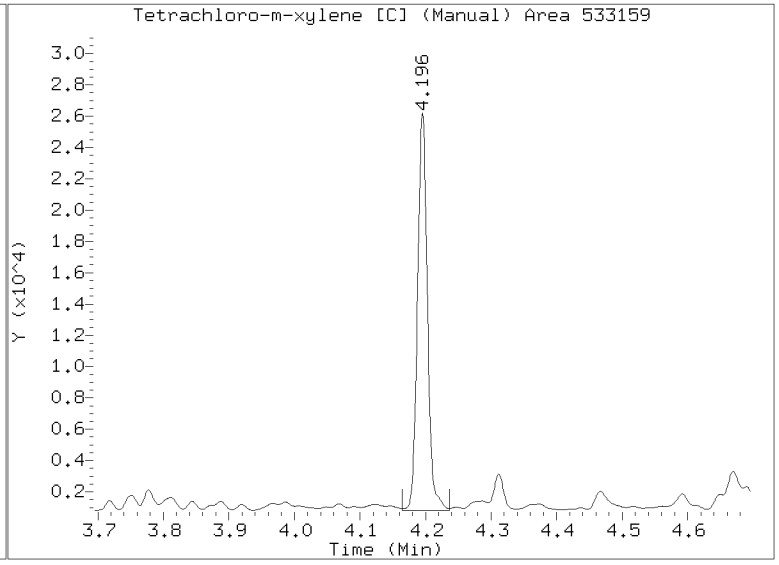
Manual Peak Adjustment Report, CLP-2

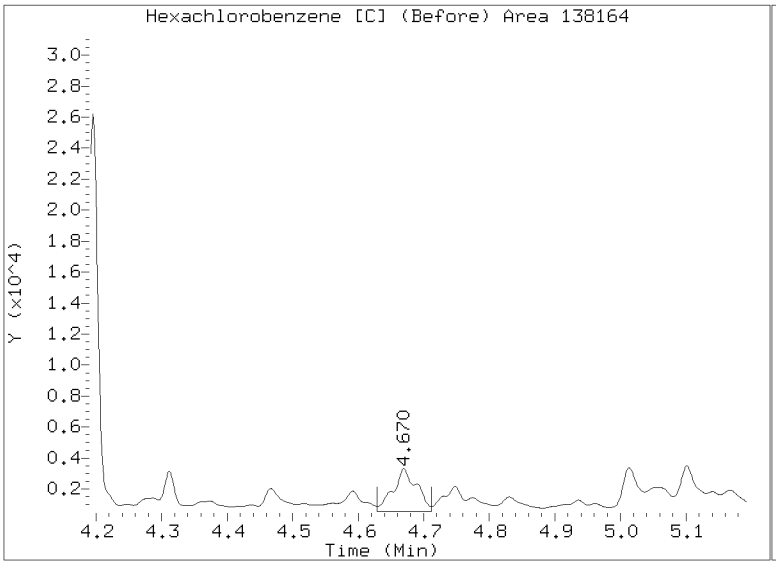
Datafile: /20230124.b/B20230124.b/23012431.D
Injection Date: 25-JAN-2023 01:11
Lab ID:23A0171-01 Client ID:

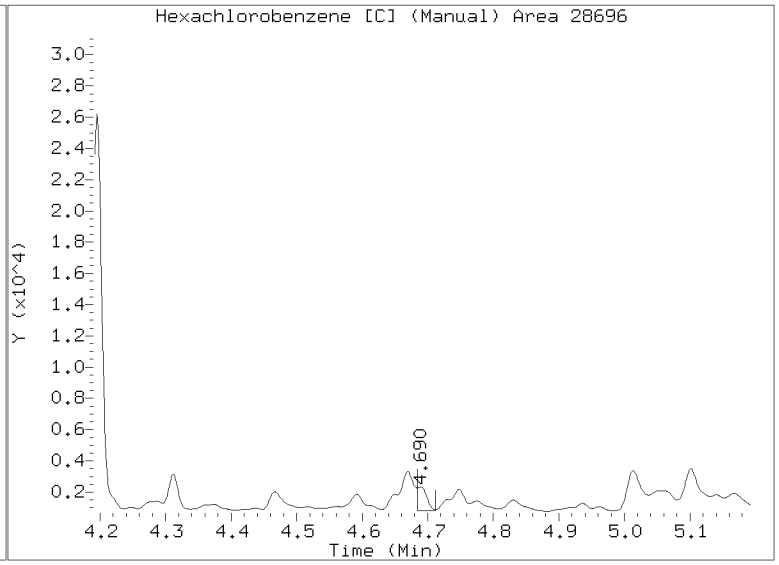












Manual Peak Adjustment Report, CLP-2

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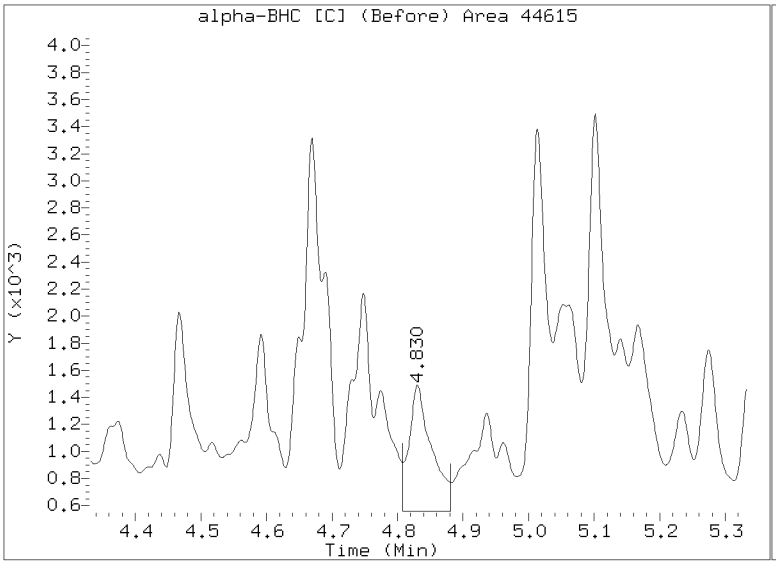
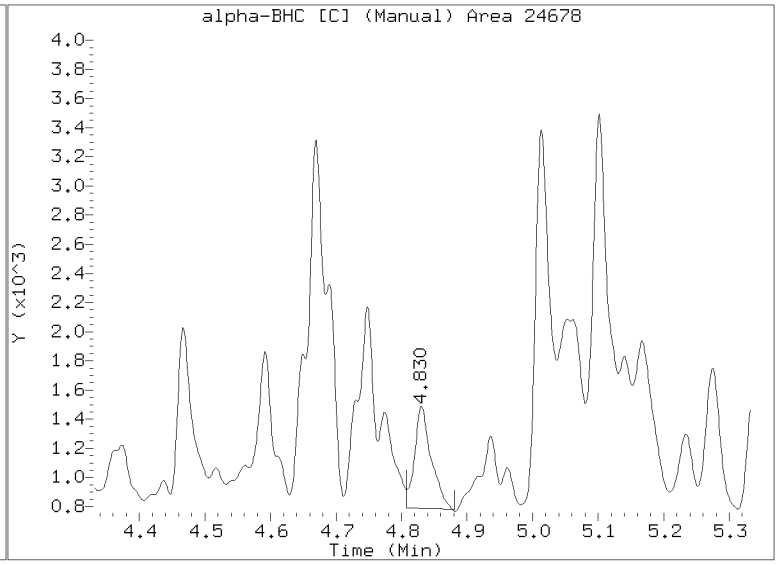
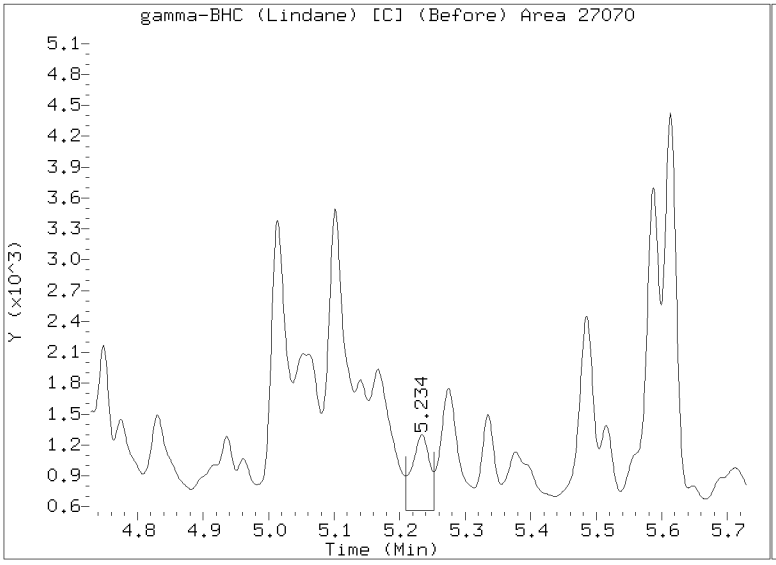
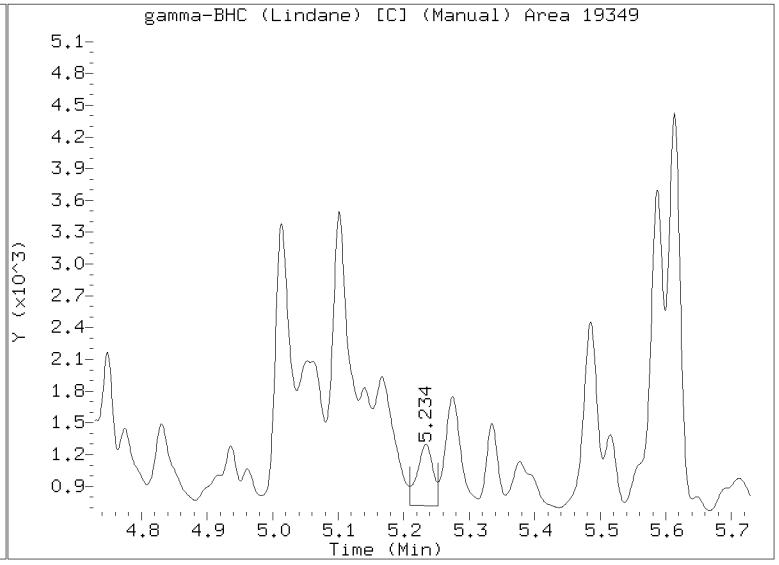
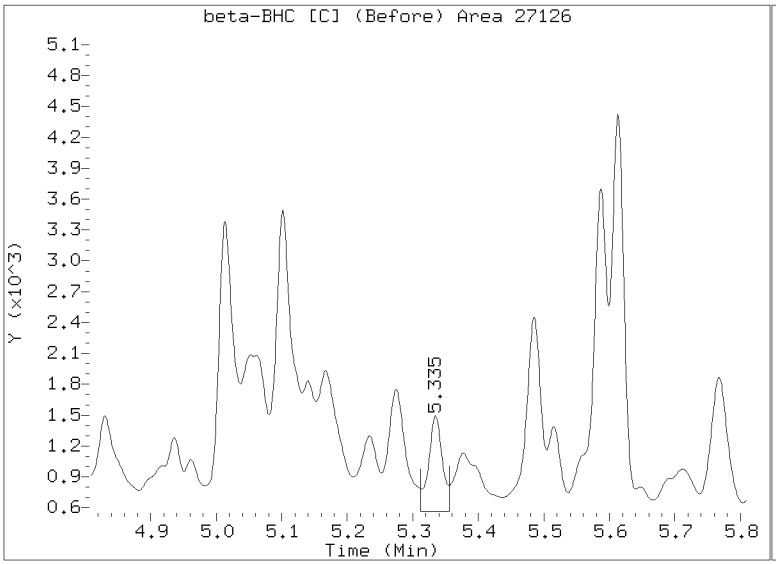
Lab ID:23A0171-01 Client ID:

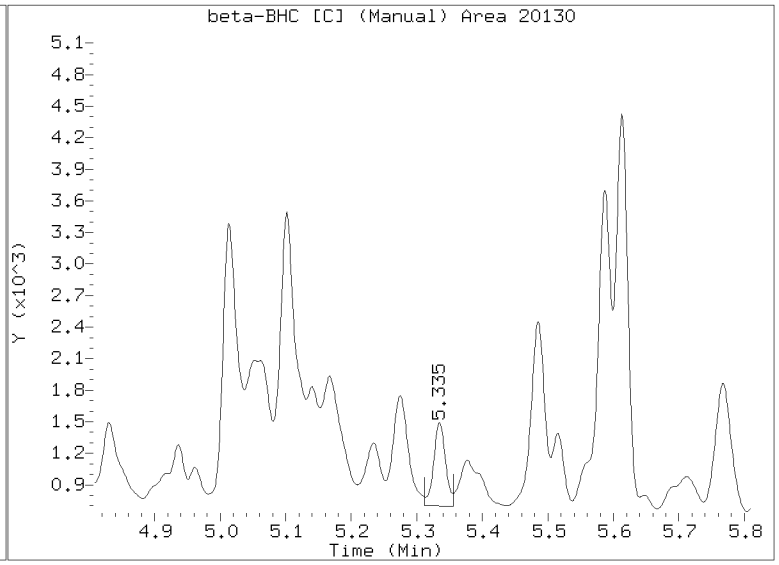












Manual Peak Adjustment Report, CLP-2

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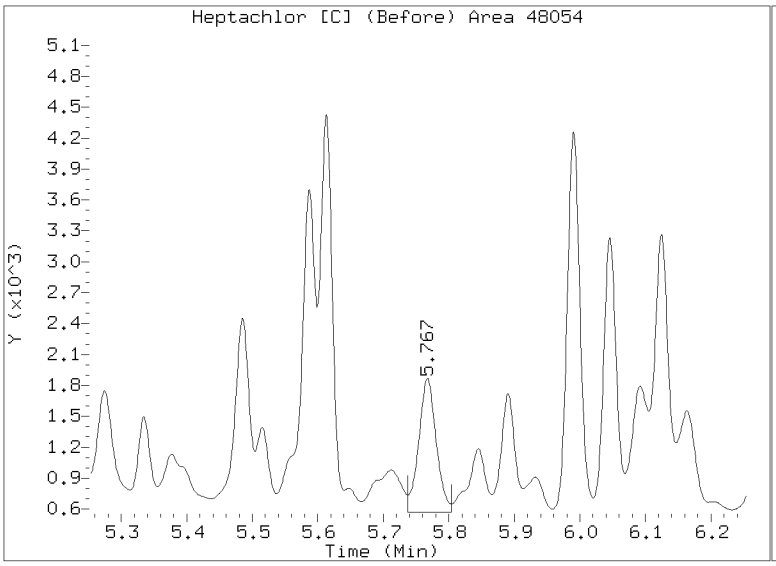

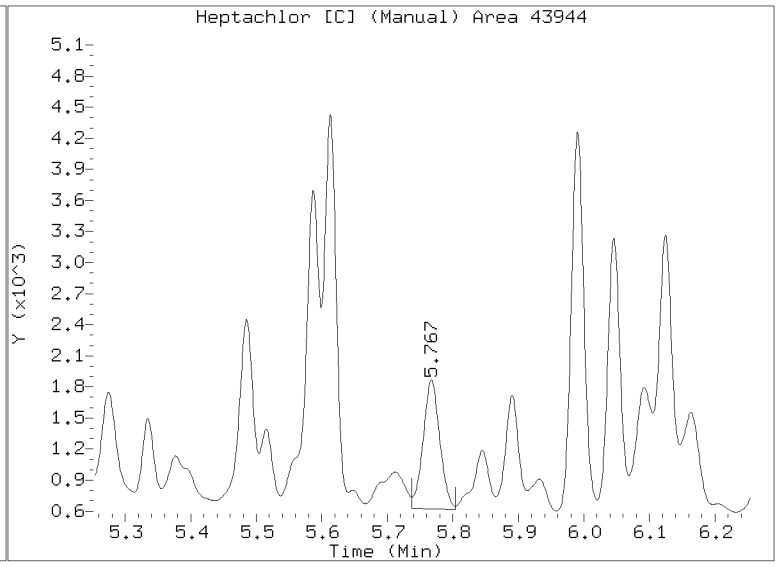

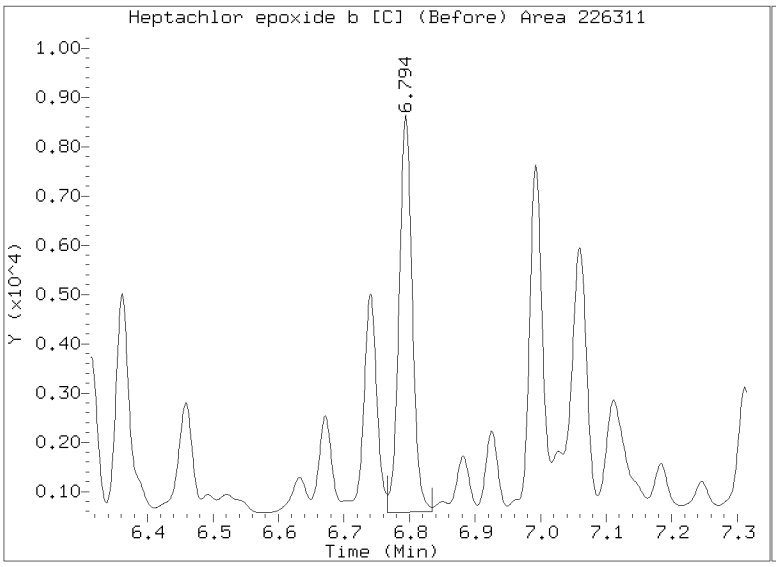

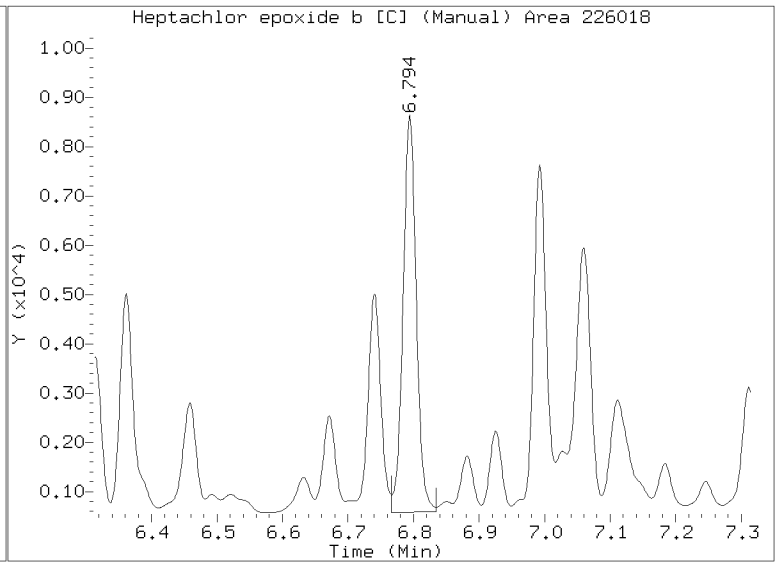

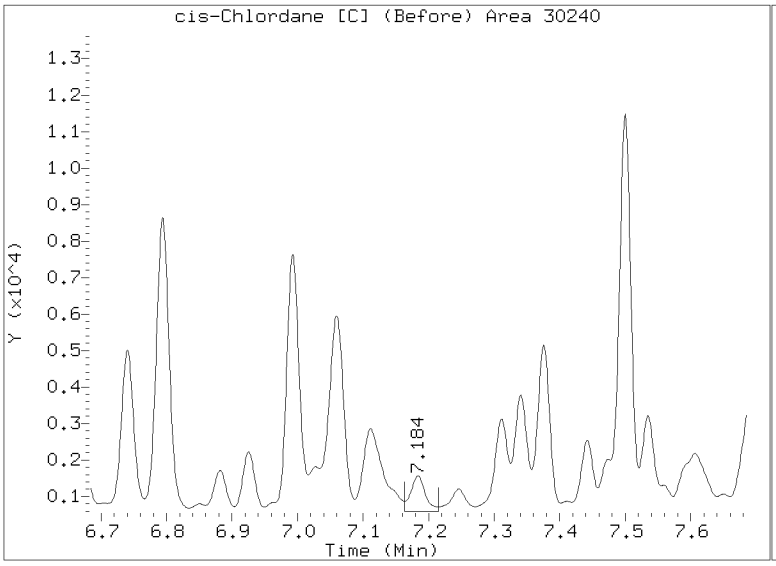

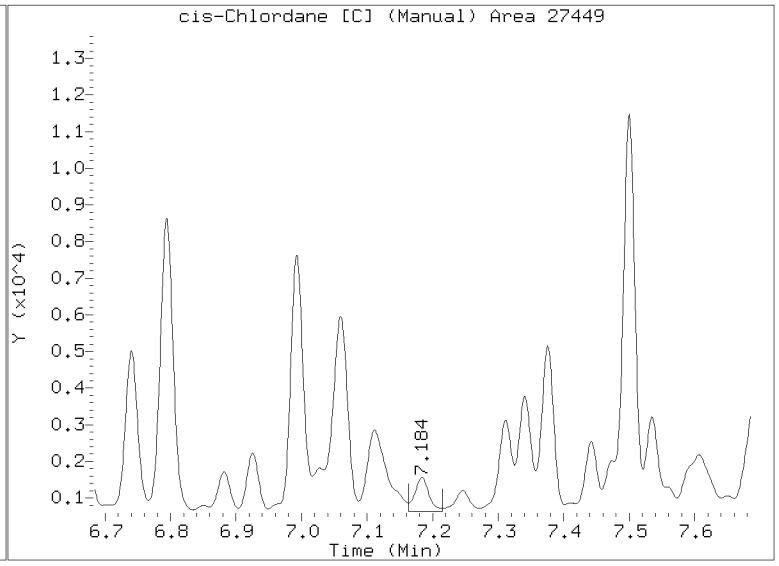

Manual Peak Adjustment Report, CLP-2

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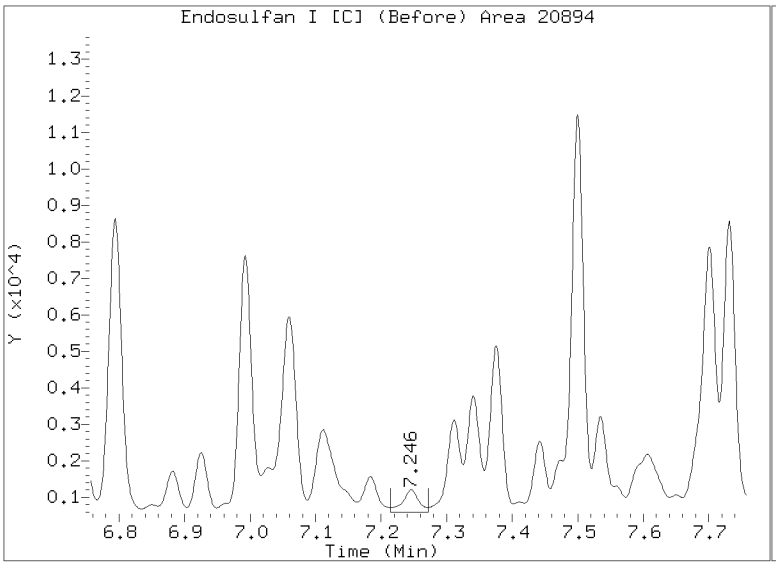

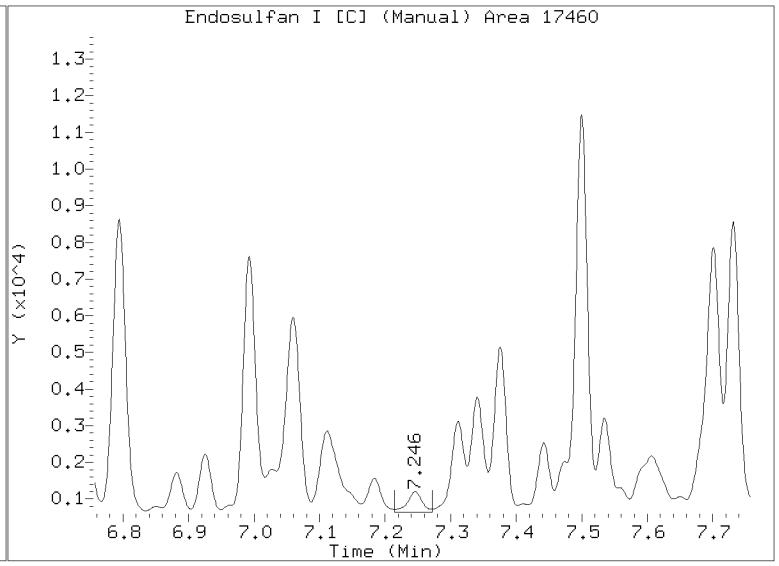

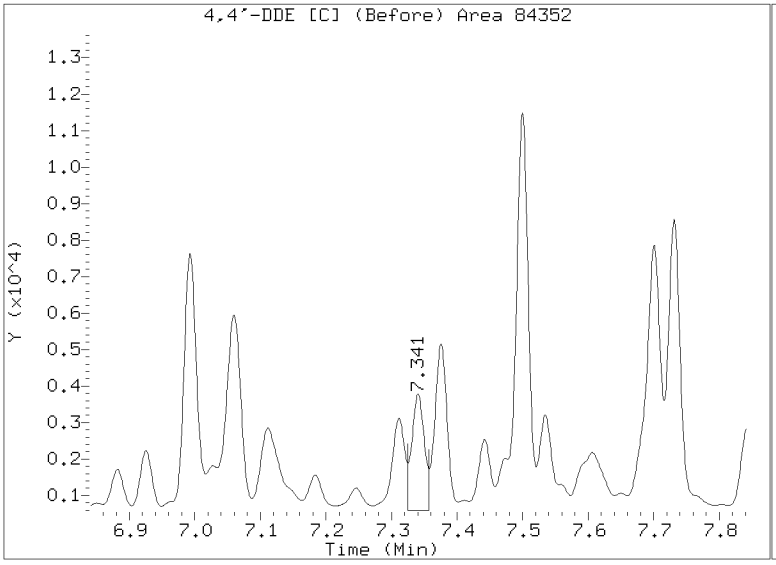

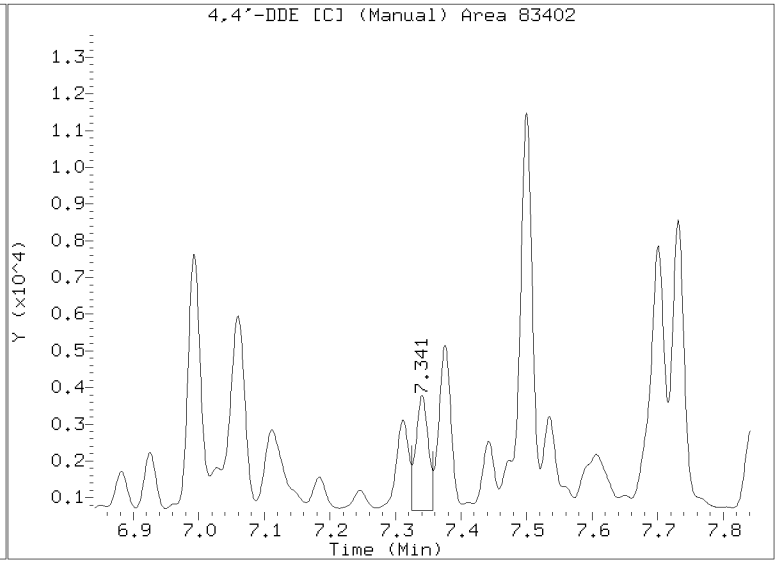

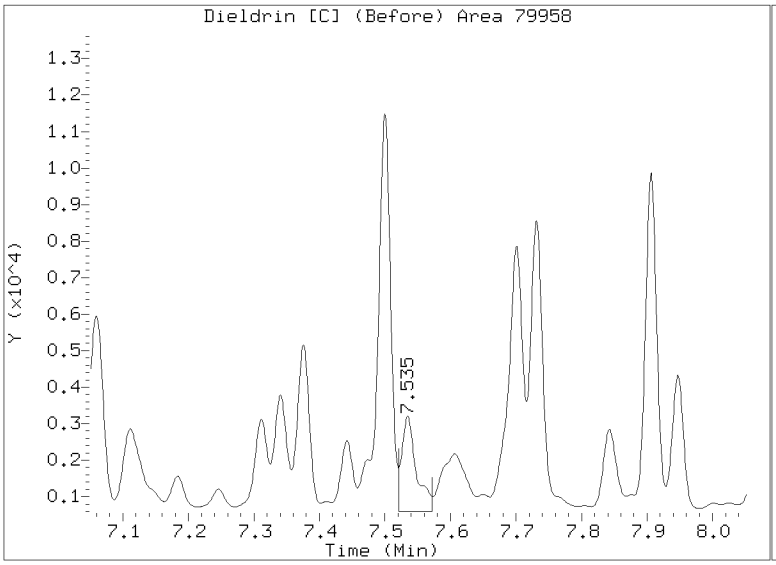

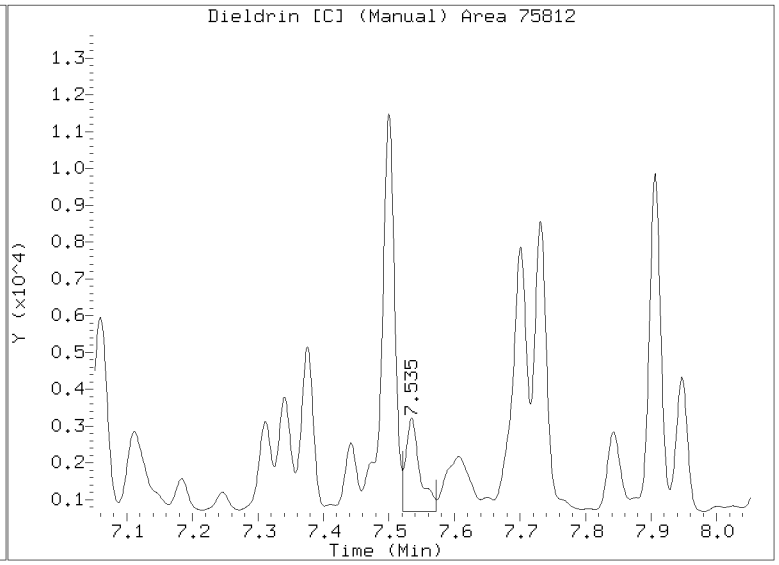

Manual Peak Adjustment Report, CLP-2

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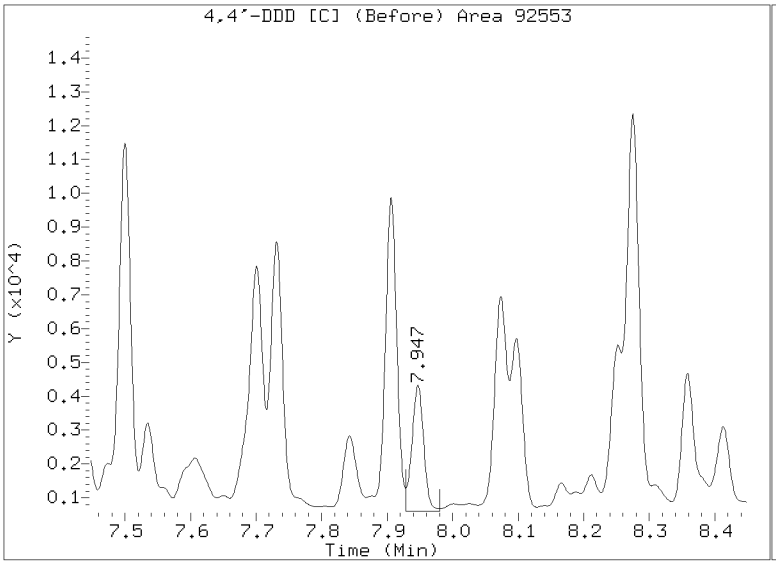
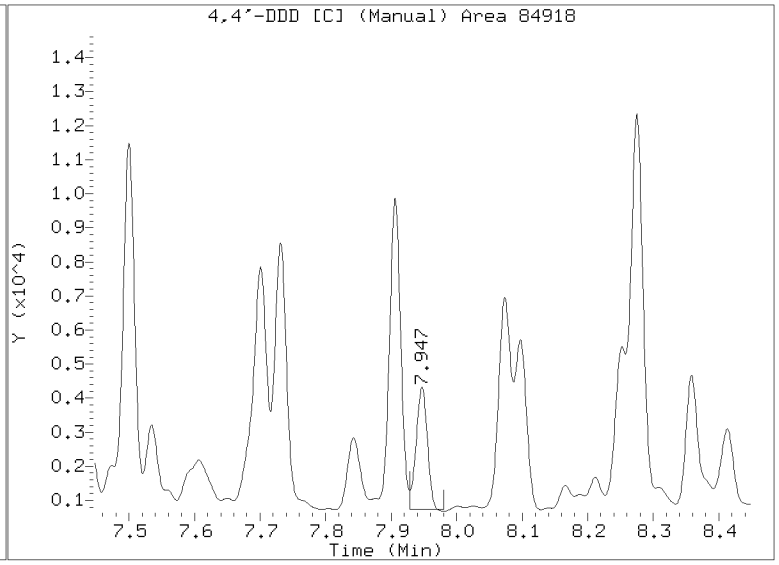
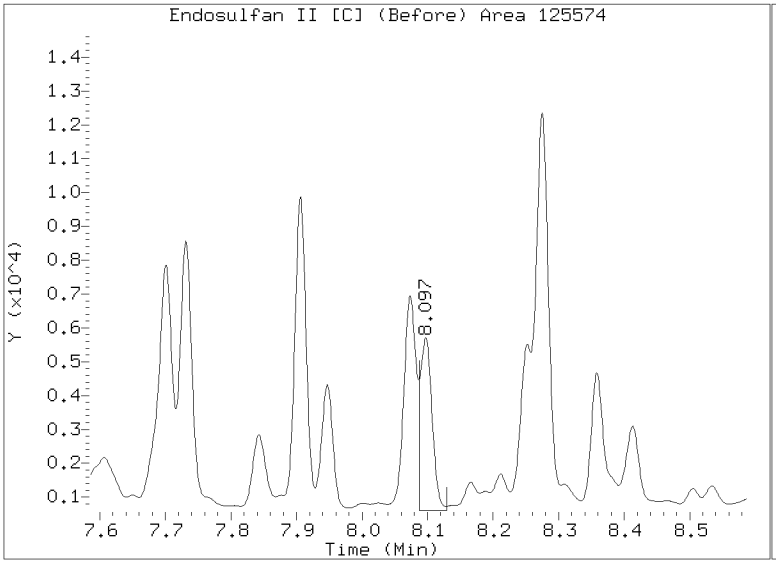
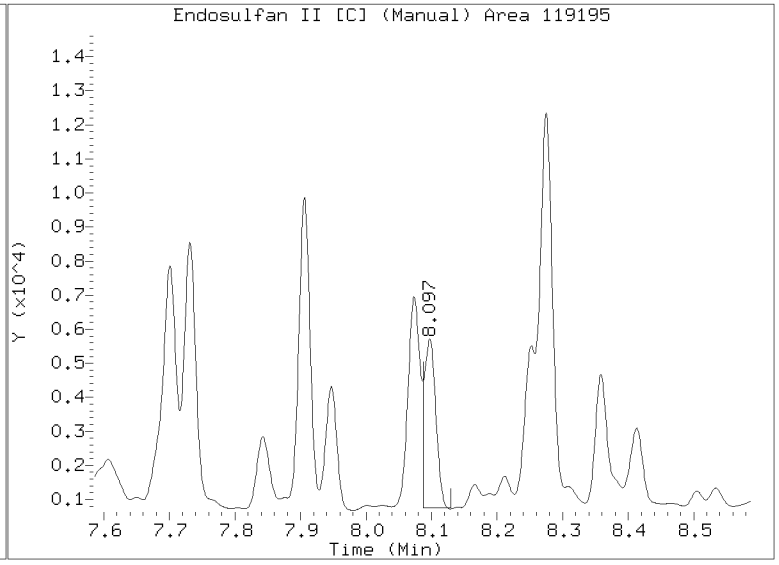
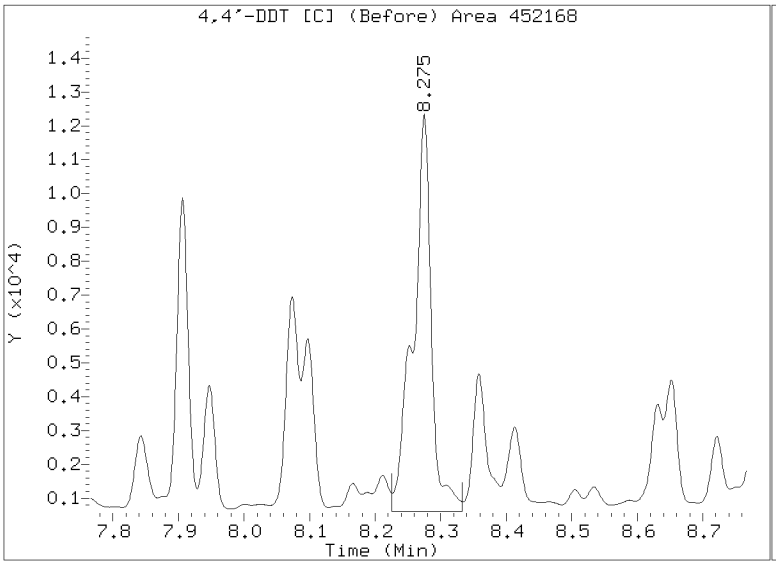
Lab ID:23A0171-01 Client ID:

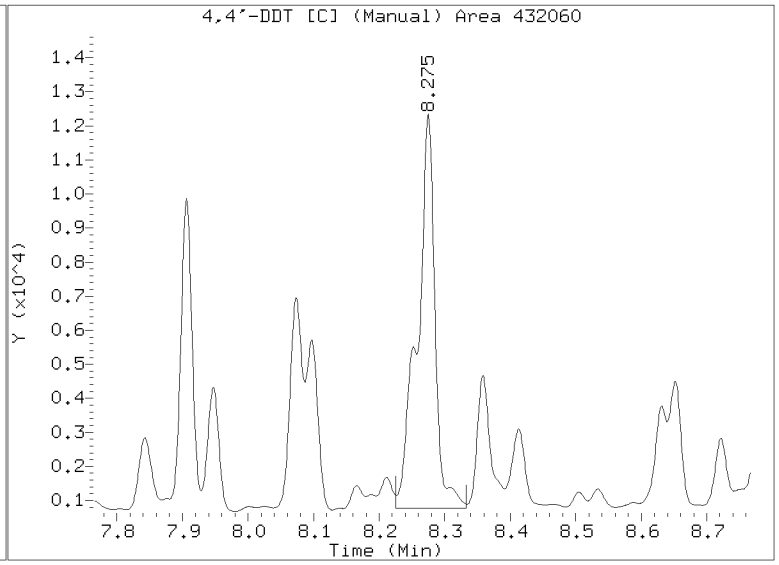












Manual Peak Adjustment Report, CLP-2

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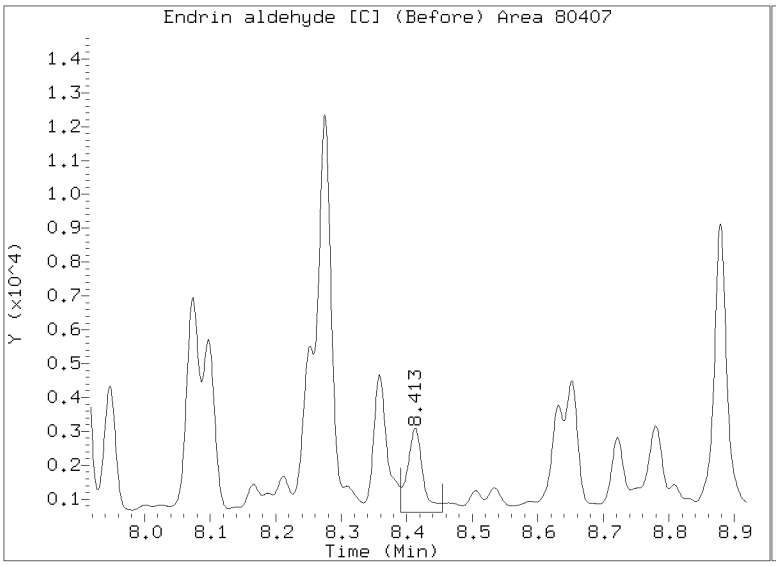

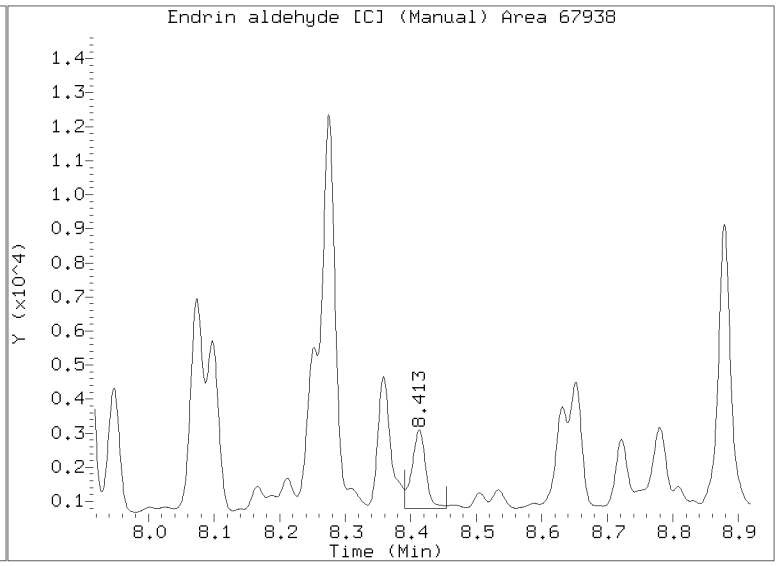

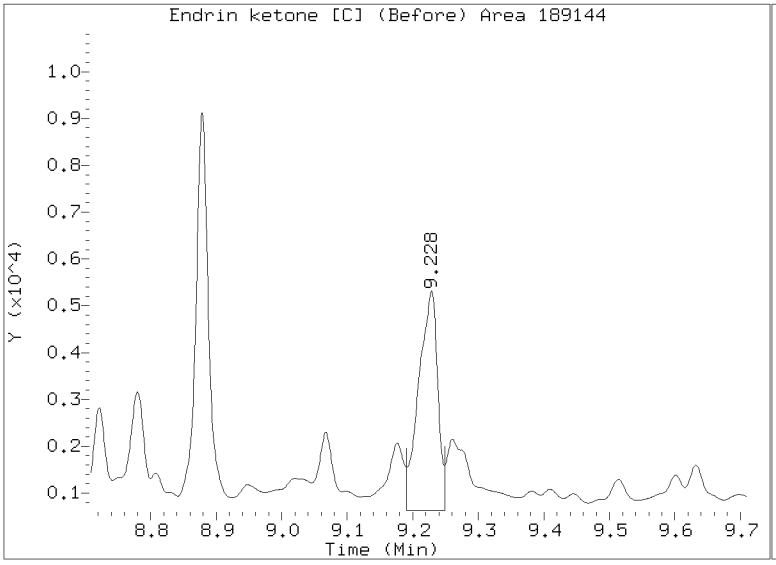

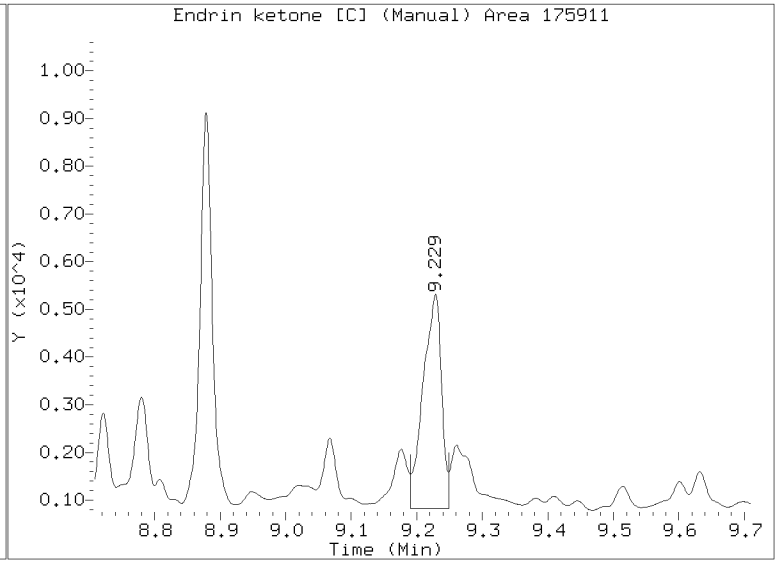

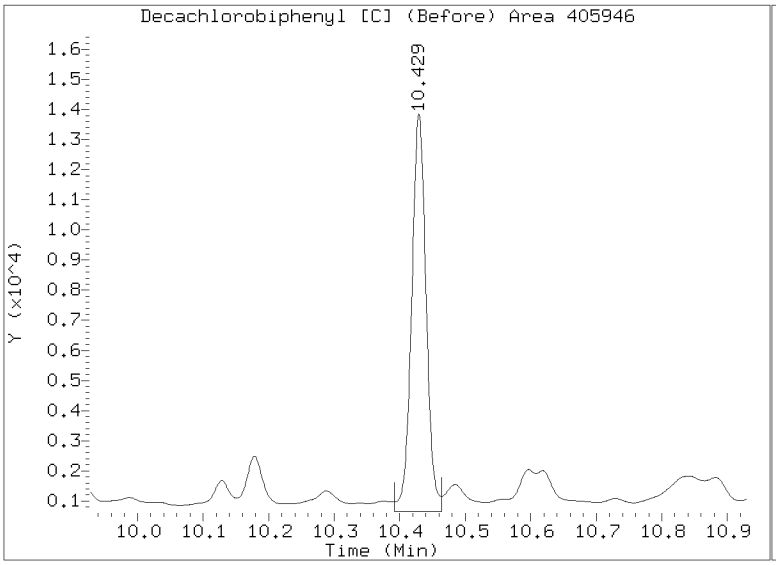

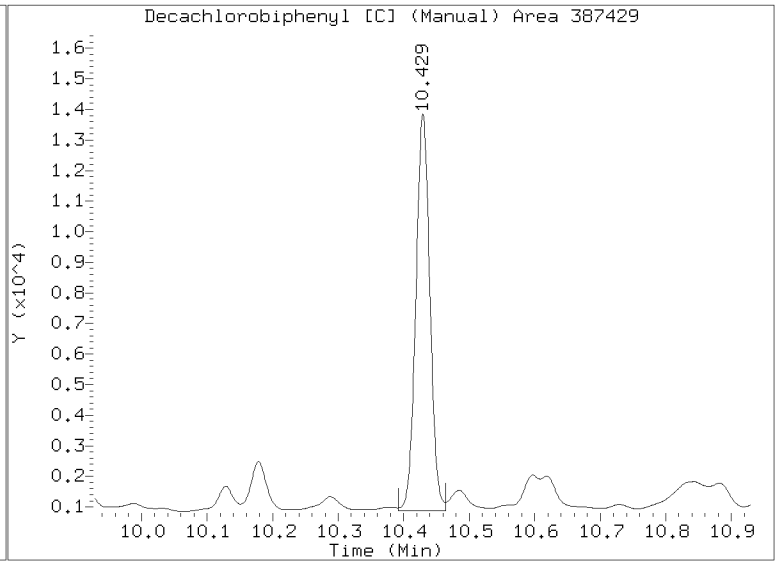

Manual Peak Adjustment Report, CLP-2

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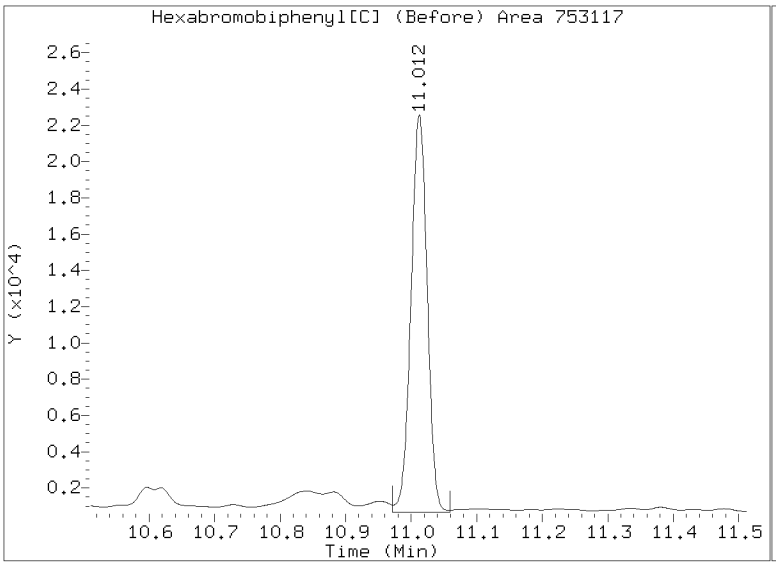
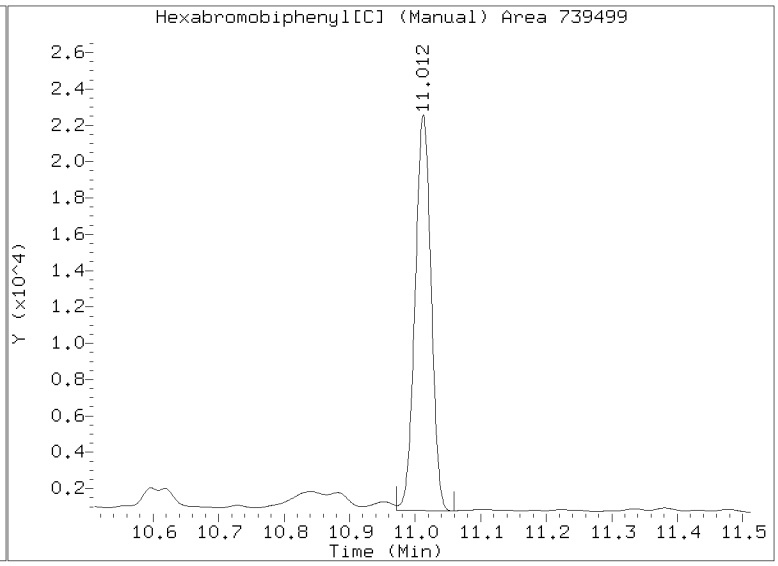




Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1257

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0171
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0171-02 A	File ID:	23012432.D
Sampled:	12/08/22 09:16	Prepared:	01/17/23 13:07	Analyzed:	01/25/23 01:29
% Solids:	41.72	Preparation:	EPA 3546 (Microwave)	Initial/Final:	29.96 g Wet / 2.5 mL
Batch:	BLA0340	Sequence:	SLA0299	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.27	0.15	0.50	J

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*8.0004*	*9.29*	*116*	*30 - 160*	
Tetrachlorometaxylene	*1*	*8.0004*	*6.07*	*75.9*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230124.b/23012432.D
Data file 2: /20230124.b/B20230124.b/23012432.D
Method: \20230124.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: 23A0171-02
Client ID:
Injection Date: 25-JAN-2023 01:29
Report Date: 01/27/2023 13:34
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.304	-0.007	75845	4.829	-0.003	17023	4.25	0.70	143.1*	alpha-BHC N
----			5.334	0.025	16359	0.00	1.78	---	beta-BHC
4.884	0.008	122541	----			8.39	0.00	---	delta-BHC
4.615	0.003	73822	5.233	0.004	10340	4.77	0.50	161.8*	gamma-BHC (Lindane) N
5.080	-0.013	30066	5.768	0.013	48589	2.18	2.61	18.0	Heptachlor N
5.433	0.019	81293	6.161	0.003	37500	5.26	1.77	99.5*	Aldrin
6.076	-0.013	37510	6.794	-0.020	225524	2.80	12.85	128.4*	Heptachlor epoxide b N
----			7.245	-0.012	10182	0.00	0.66	---	Endosulfan I
6.773	-0.018	126409	7.534	-0.017	68644	9.57	4.02	81.8*	Dieldrin N
6.447	-0.005	154263	7.340	-0.002	76986	12.58	4.91	87.7*	4,4'-DDE N
7.066	0.025	317515	----			36.89	0.00	---	Endrin
7.306	0.028	22754	8.097	0.010	129587	2.94	11.90	120.8*	Endosulfan II N
----			7.947	-0.002	88817	0.00	8.59	---	4,4'-DDD
8.125	-0.016	15258	----			2.07	0.00	---	Endosulfan sulfate
7.362	-0.029	344879	8.274	0.008	484708	44.02	48.59	9.9	4,4'-DDT N
----			----			0.00	0.00	---	Methoxychlor
8.444	0.030	9086	9.228	0.019	177857	1.08	17.22	176.4*	Endrin ketone N
7.730	0.023	72835	8.412	-0.006	88165	11.79	11.48	2.7	Endrin aldehyde N
----			----			0.00	0.00	---	trans-Chlordane
6.397	0.021	97275	7.183	-0.002	19447	7.13	1.14	145.0*	cis-Chlordane N
2.299	-0.004	20545	2.453	-0.029	114684	1.10	4.99	127.9*	Hexachlorobutadiene
4.153	-0.000	22741	4.691	-0.001	65500	1.37	2.98	73.8*	Hexachlorobenzene MN
3.800	0.000	383160	4.195	-0.001	530701	30.36	31.24	2.9	Tetrachloro-m-xylene N
9.320	0.002	308864	10.429	0.000	388173	46.43	47.00	1.2	Decachlorobiphenyl N

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

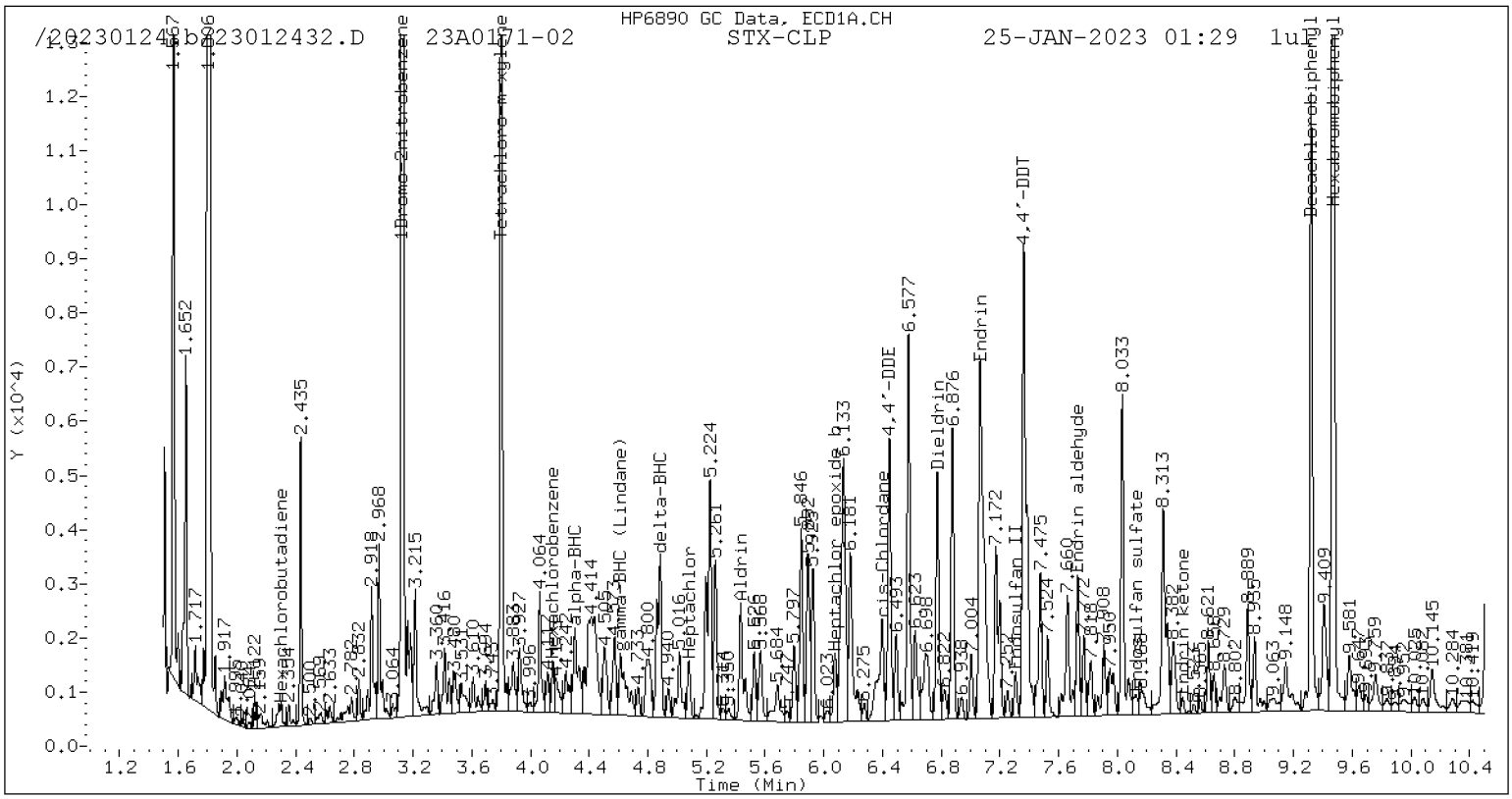
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	927930	38.0
Hexabromobiphenyl	609723	656497	7.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1206668	19.9
Hexabromobiphenyl	769764	747250	-2.9

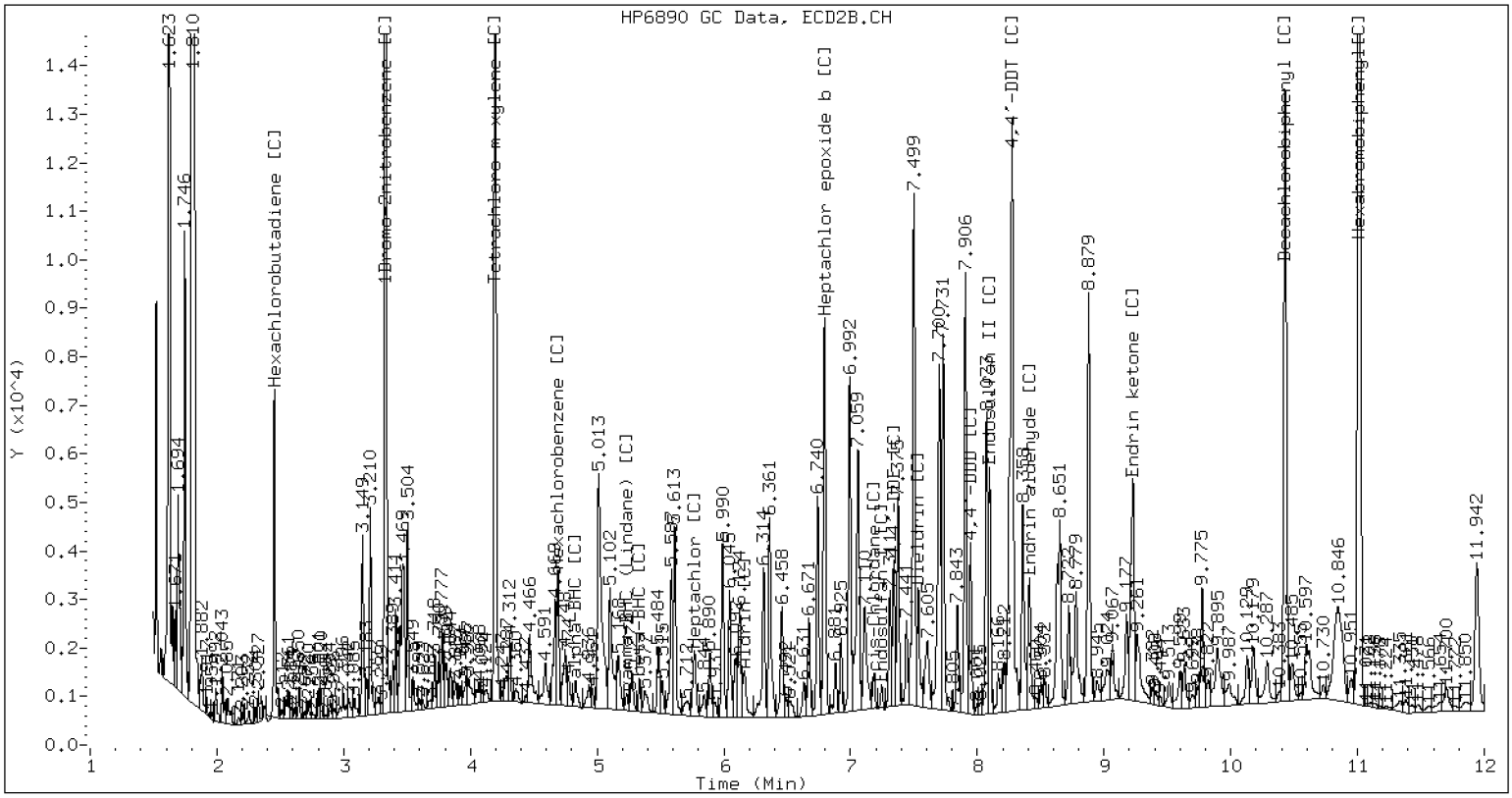
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

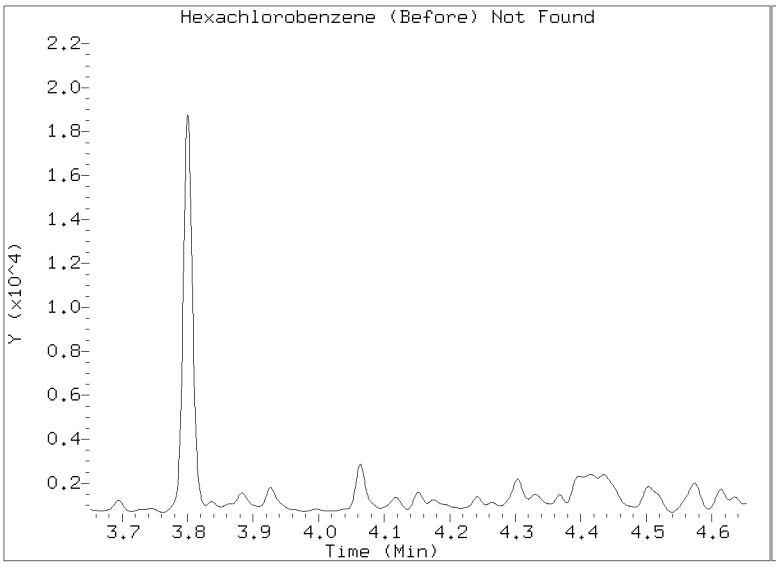
/20230124.b/B20230124.b/23012432.D 23A0171-02 CLP2

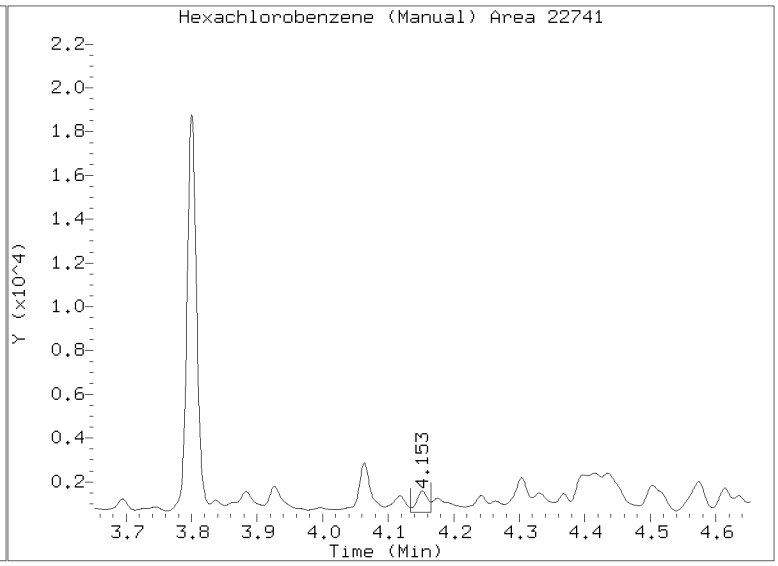


CLP-2 Manual Integration: YES

Manual Peak Adjustment Report, STX-CLP

Datafile: /20230124.b/23012432.D
Injection Date: 25-JAN-2023 01:29
Lab ID:23A0171-02 Client ID:
Report Date: 01/27/2023 13:34





Manual Peak Adjustment Report, CLP-2

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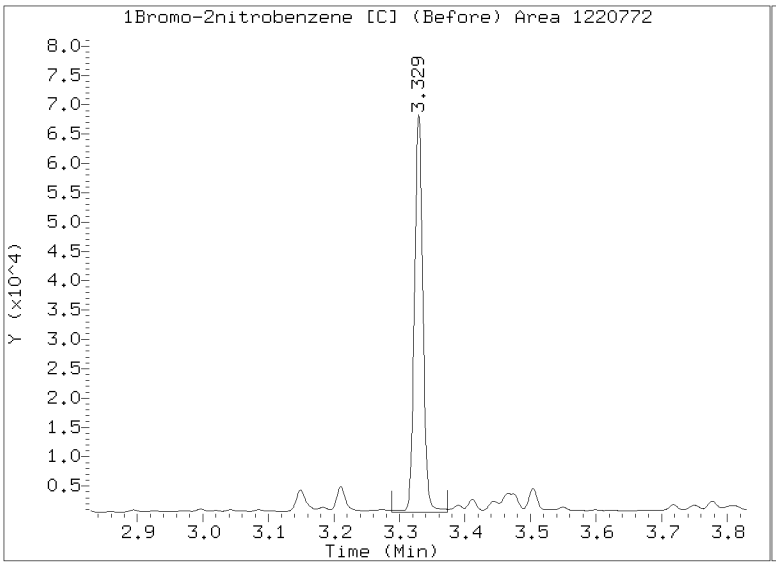

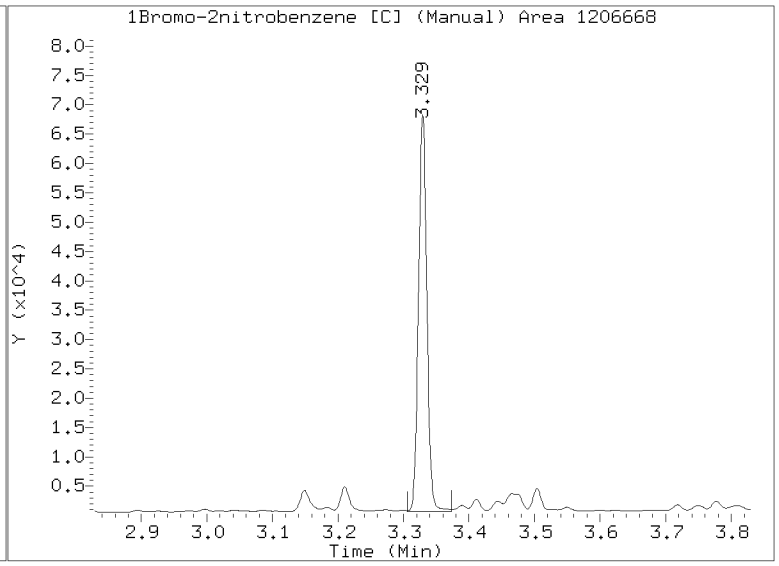

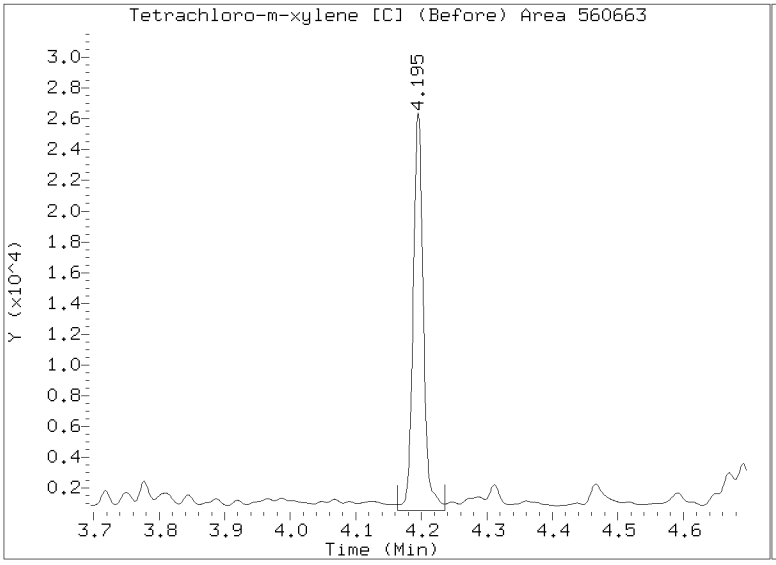

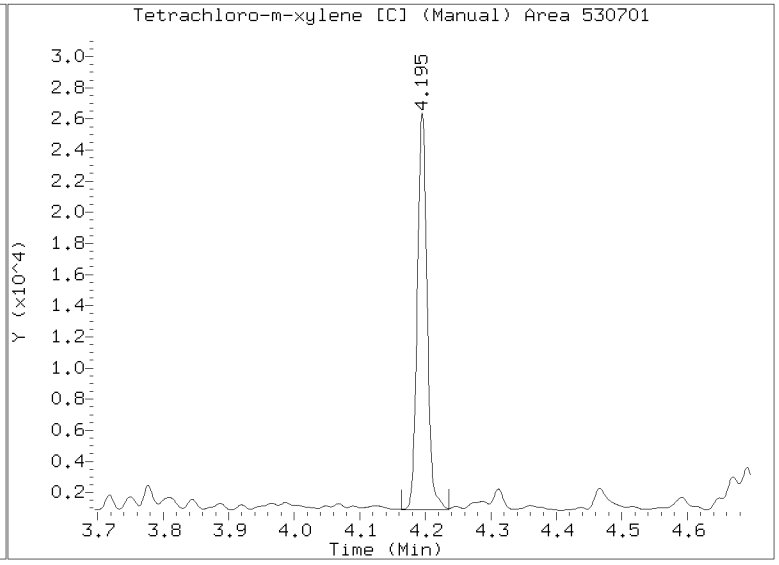

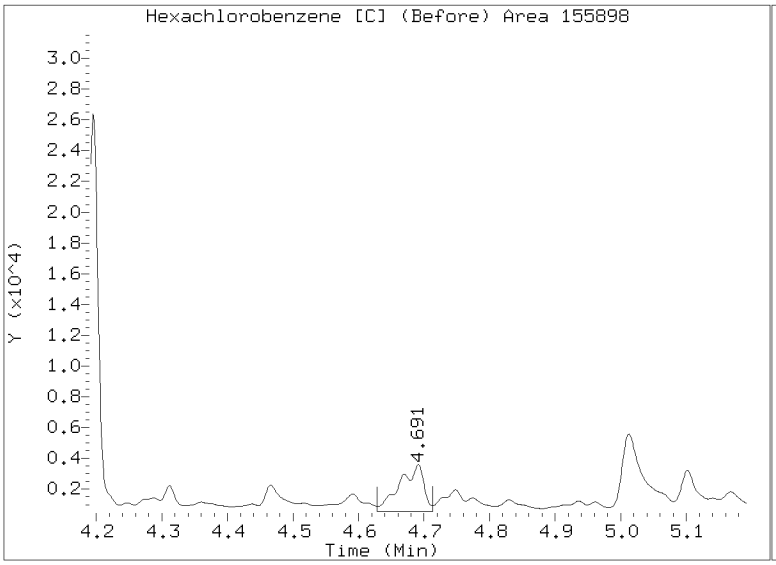

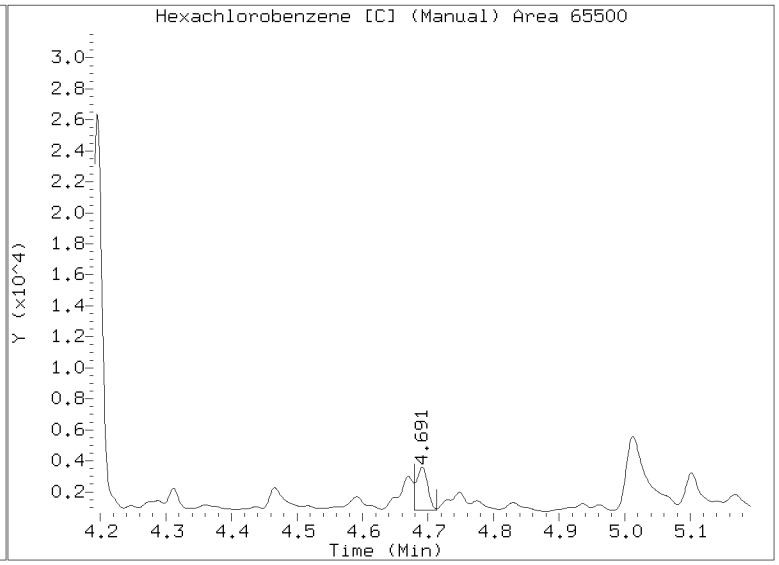

Manual Peak Adjustment Report, CLP-2

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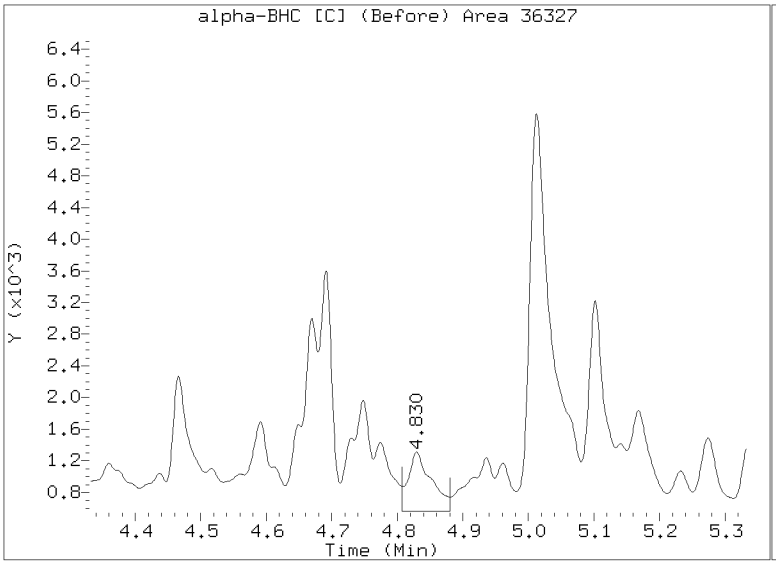

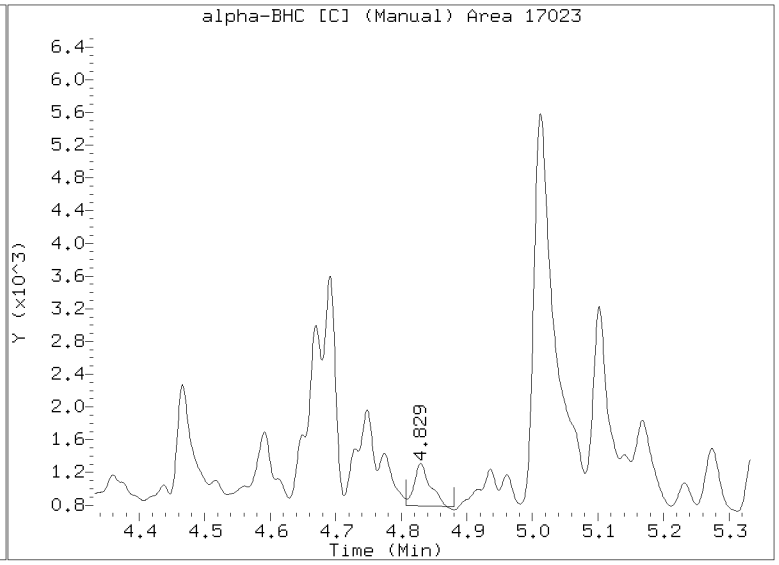

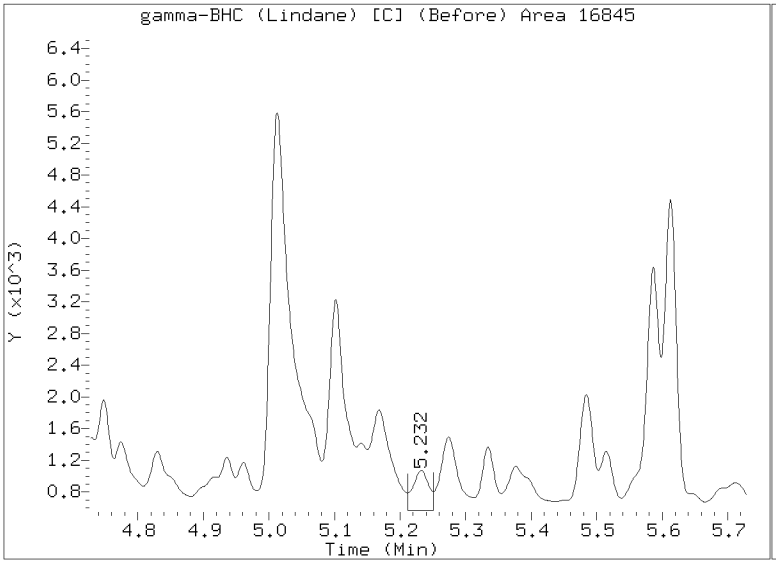

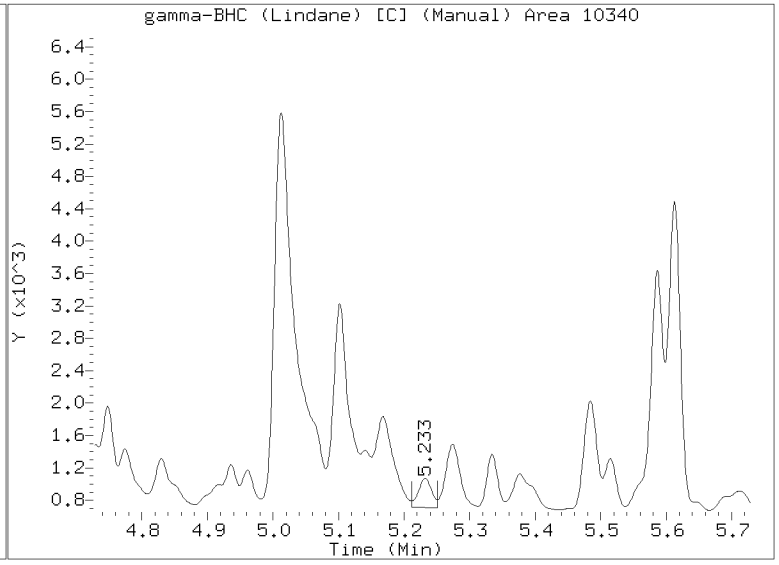

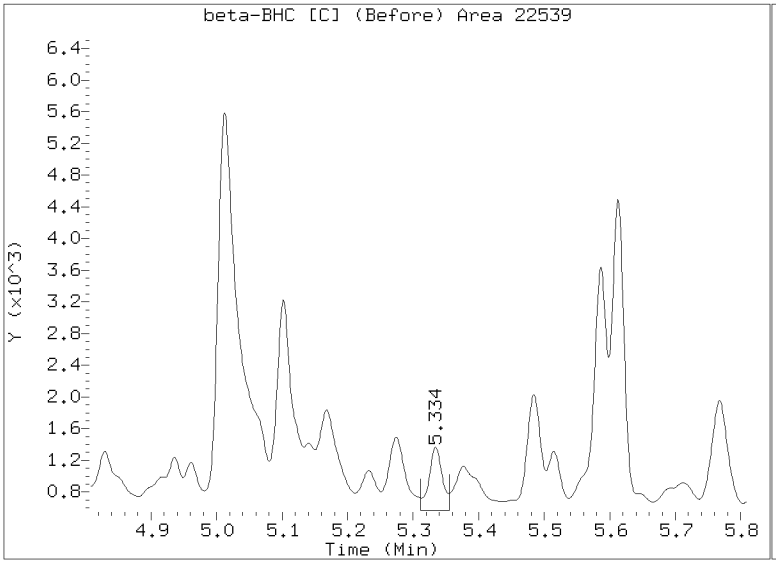

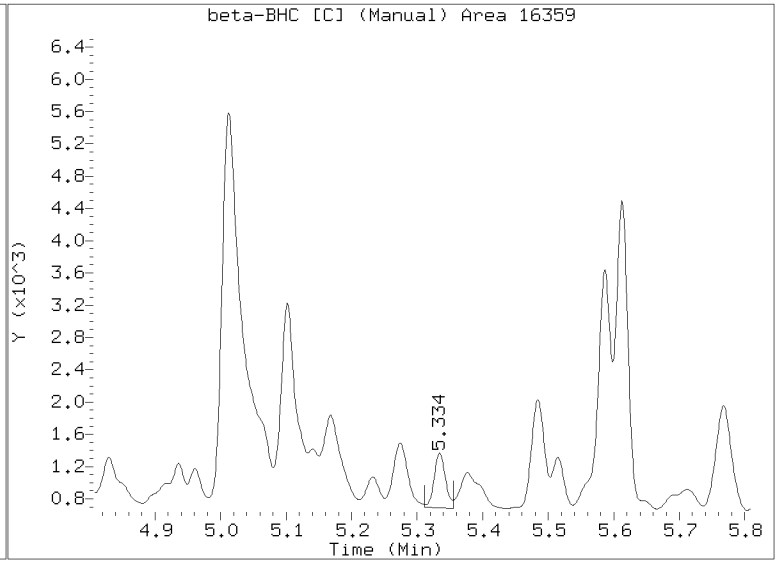

Manual Peak Adjustment Report, CLP-2

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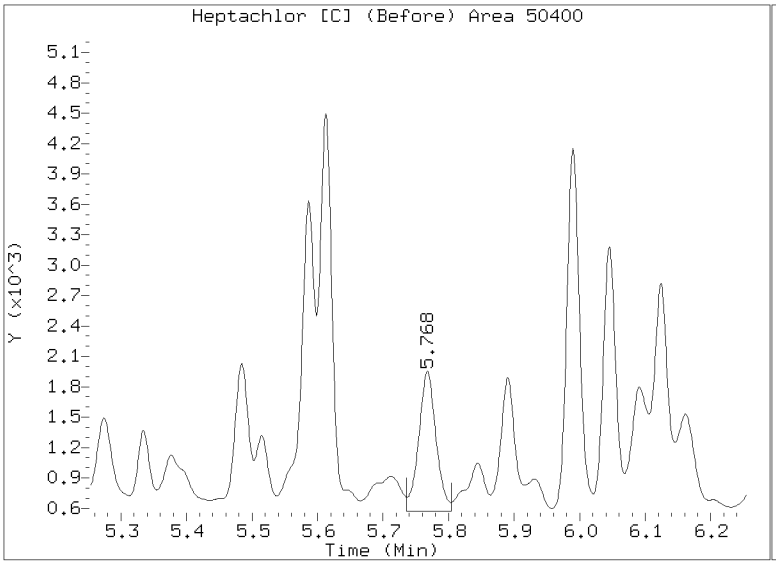

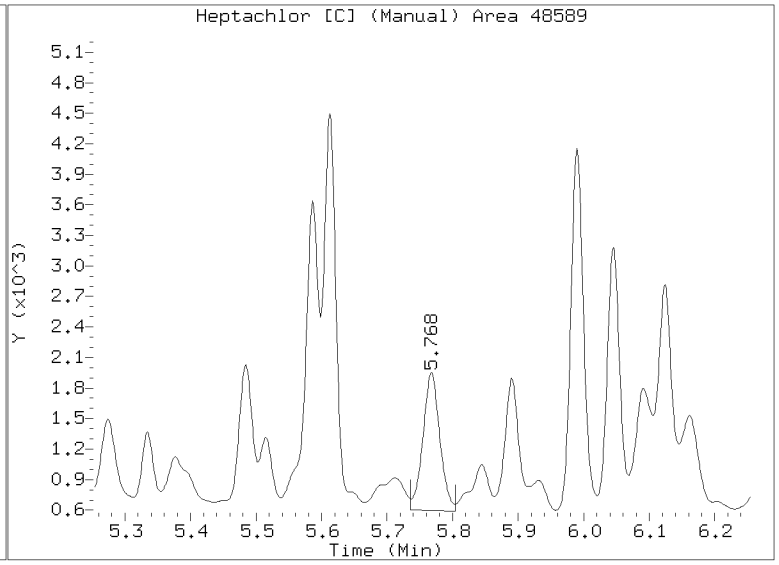

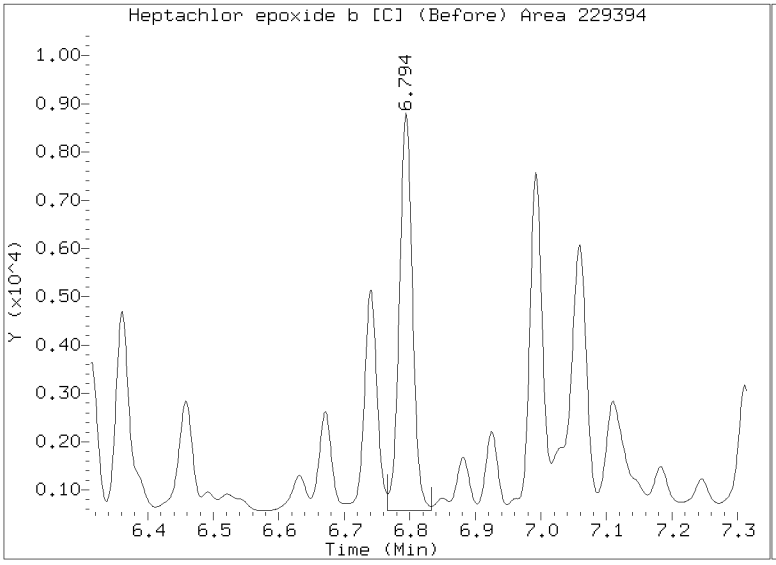

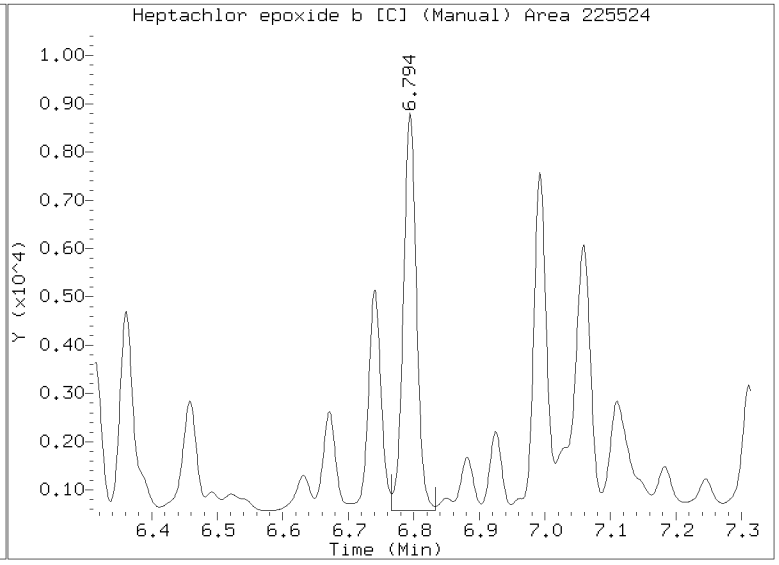

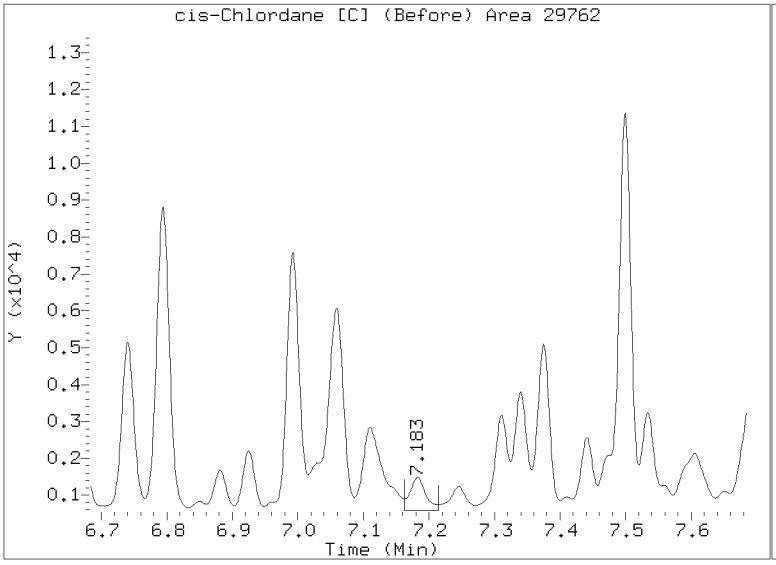

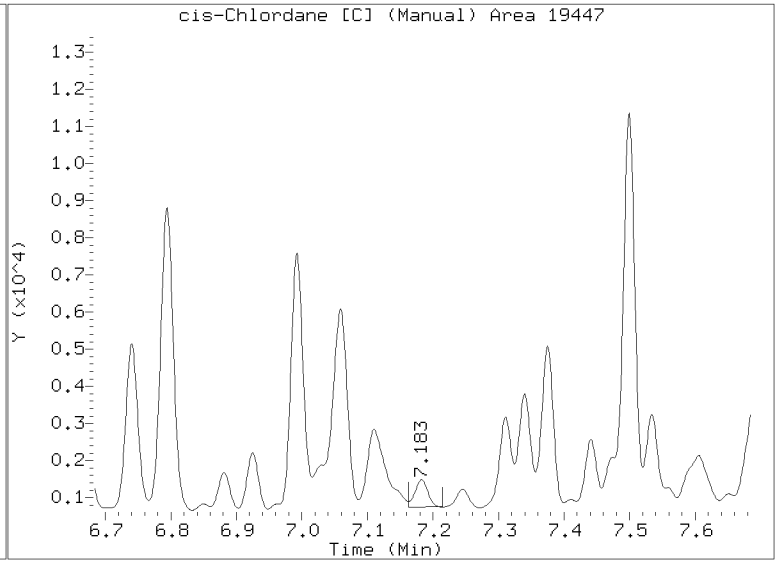

Manual Peak Adjustment Report, CLP-2

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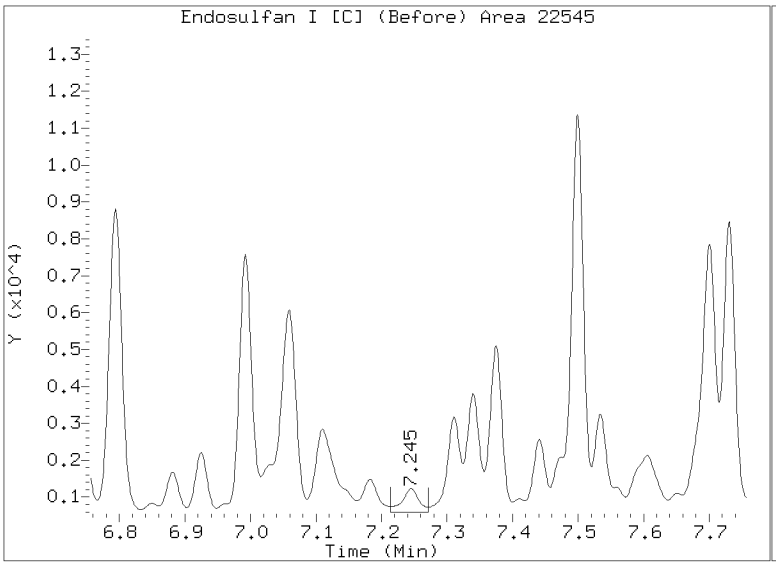

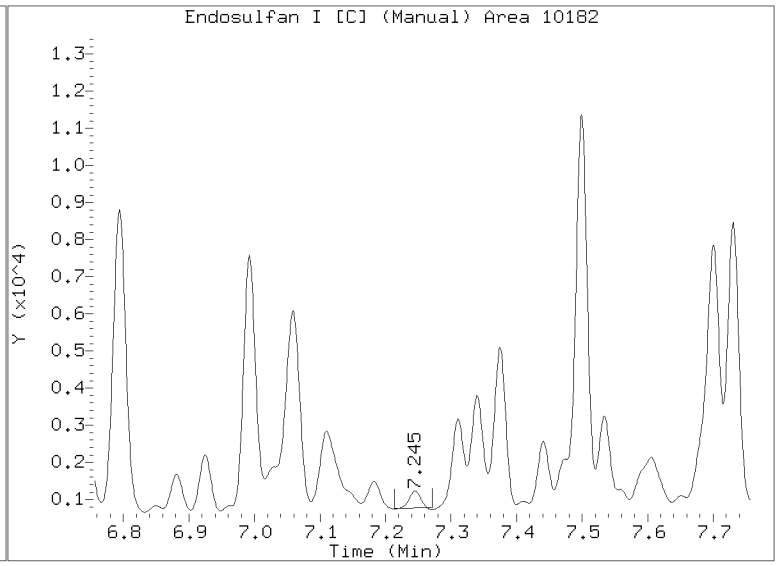

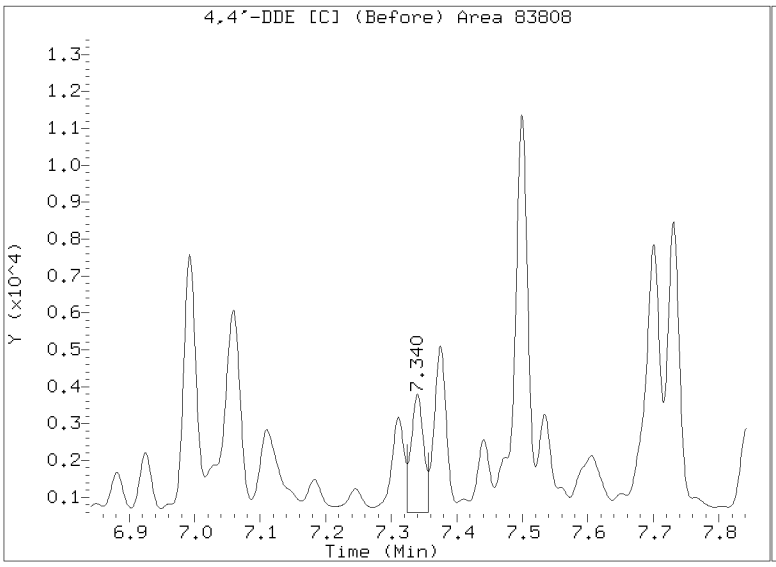

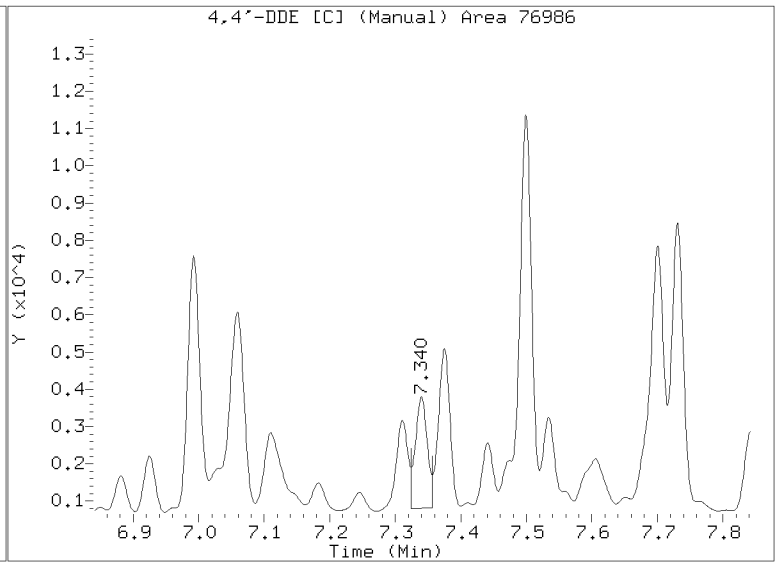

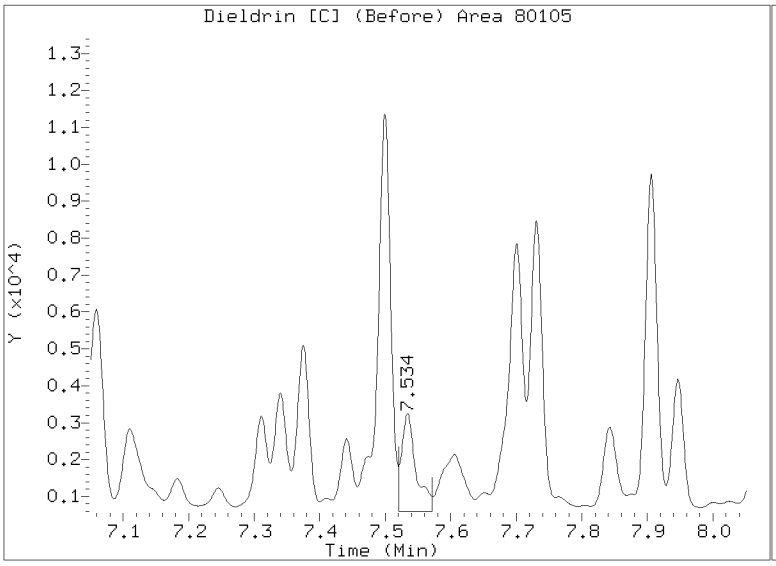

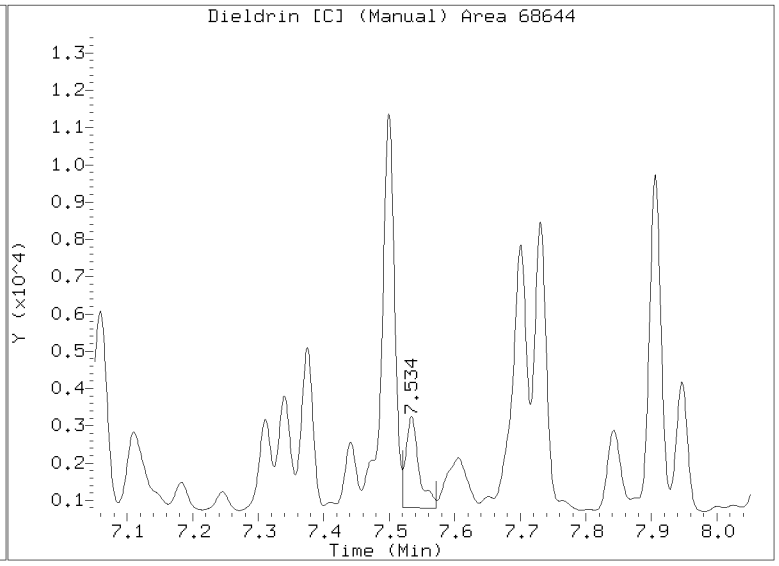

Manual Peak Adjustment Report, CLP-2

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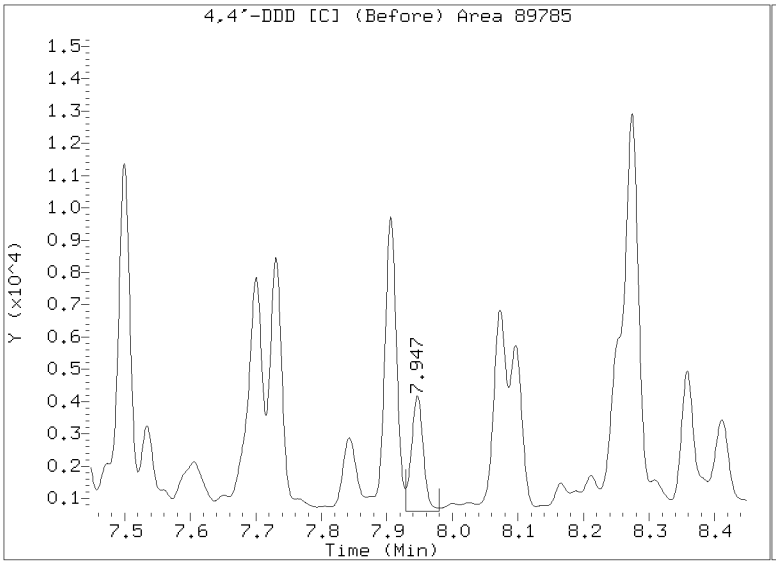
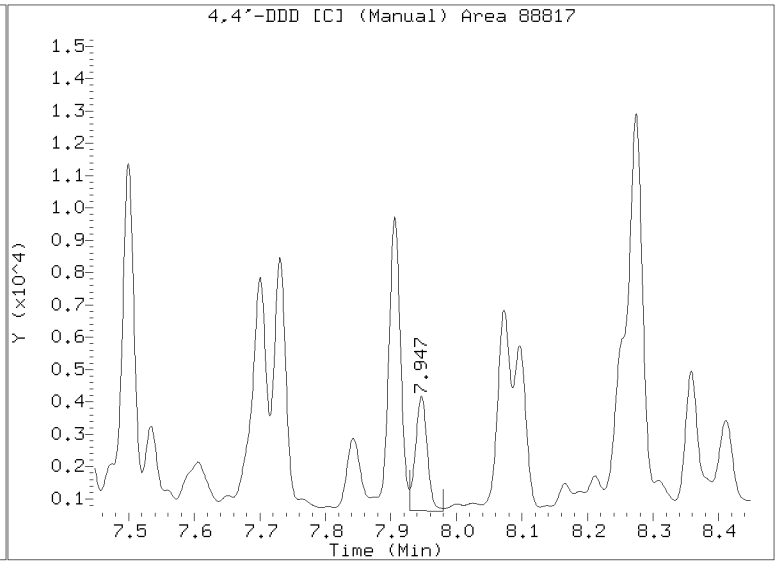
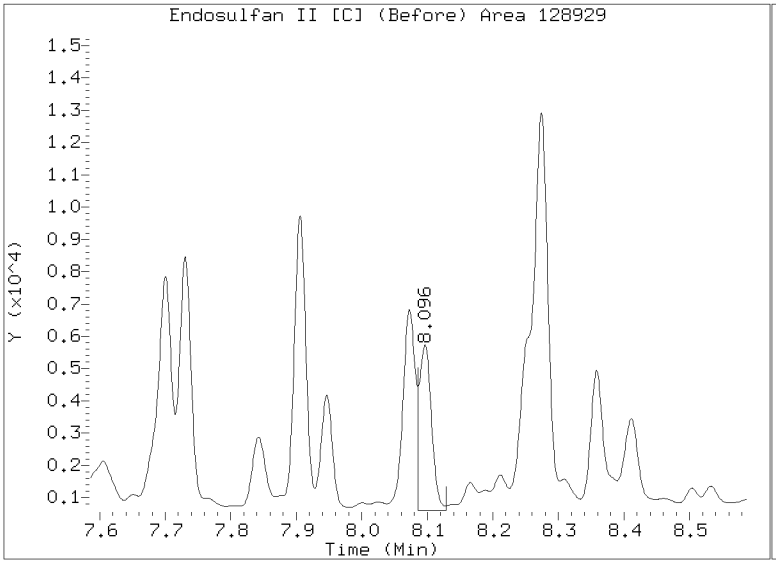
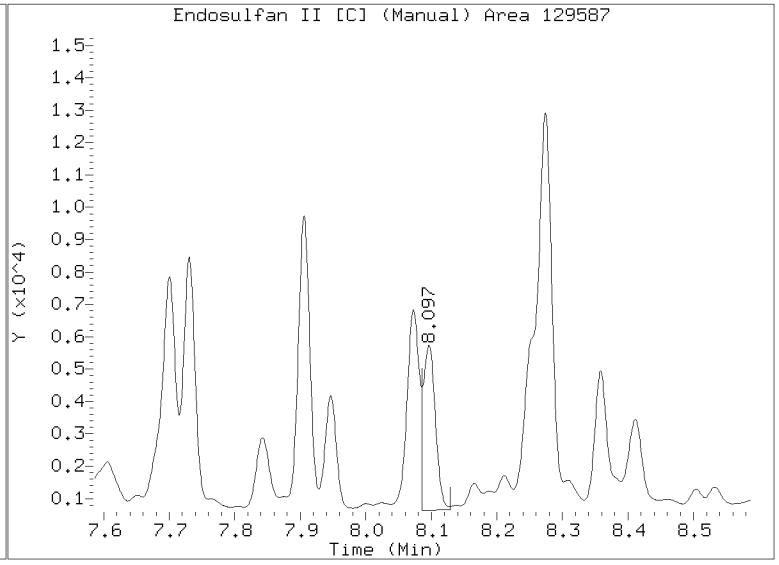
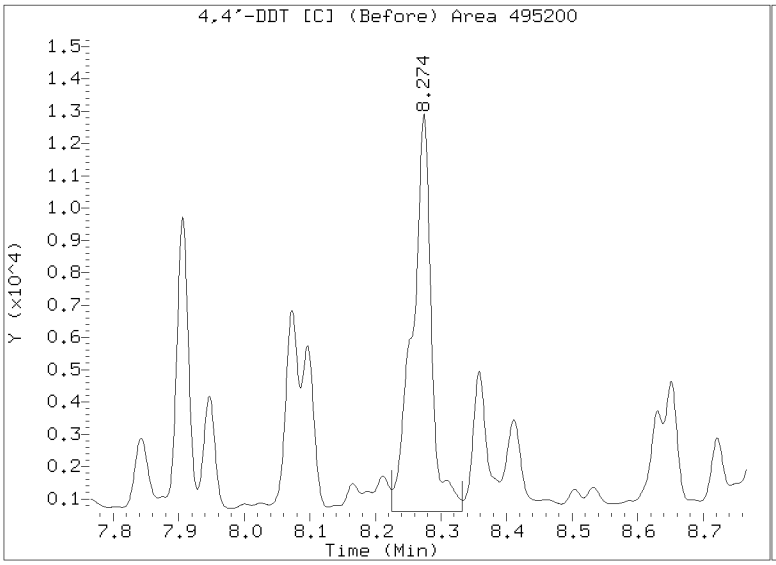
Lab ID:23A0171-02 Client ID:

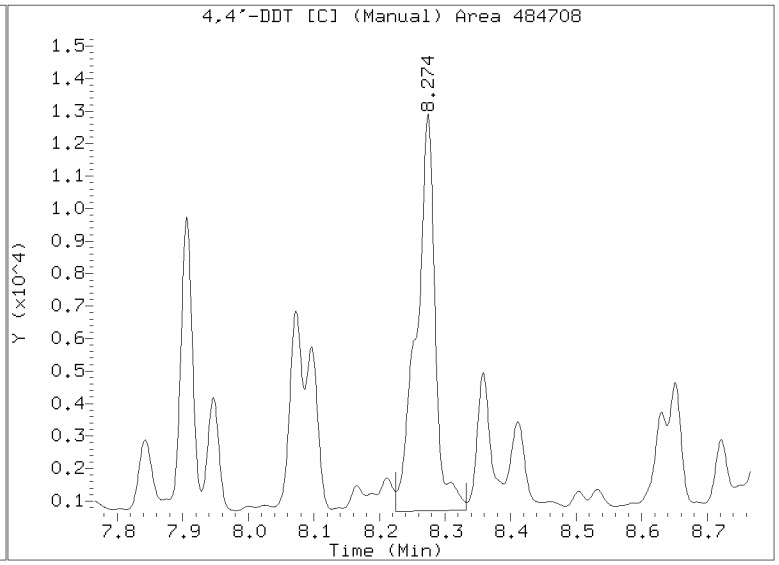












Manual Peak Adjustment Report, CLP-2

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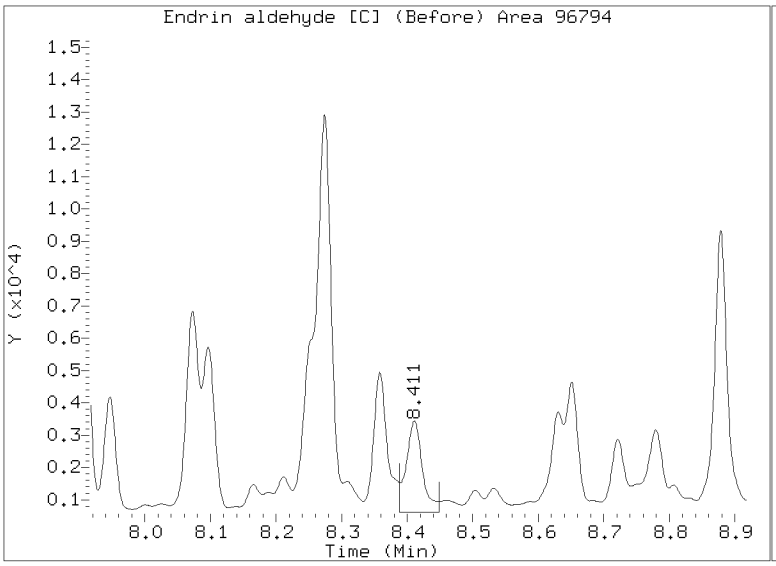
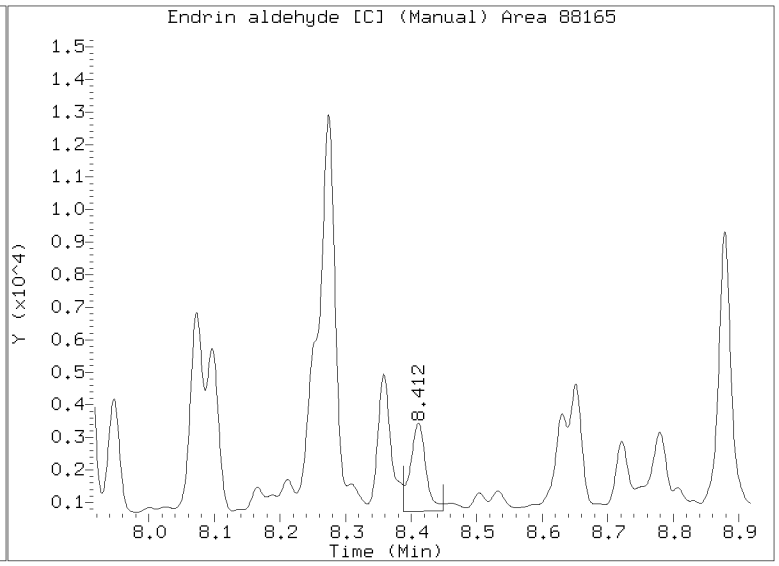
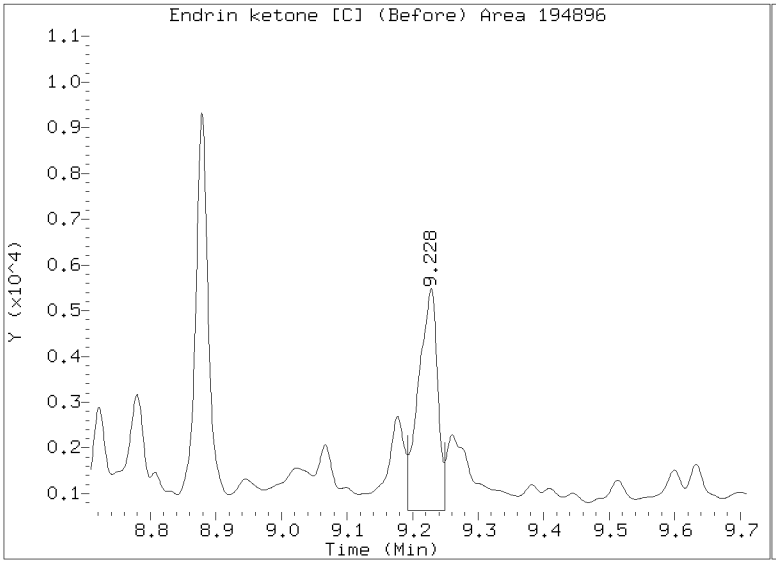
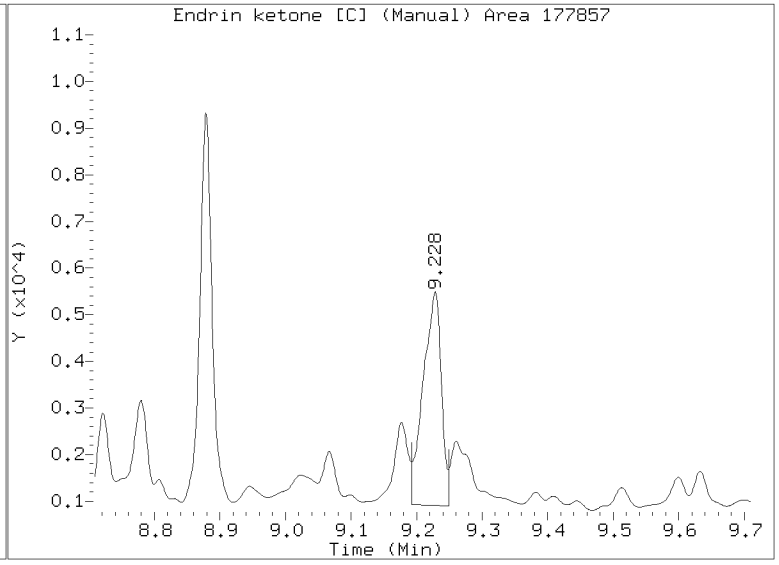
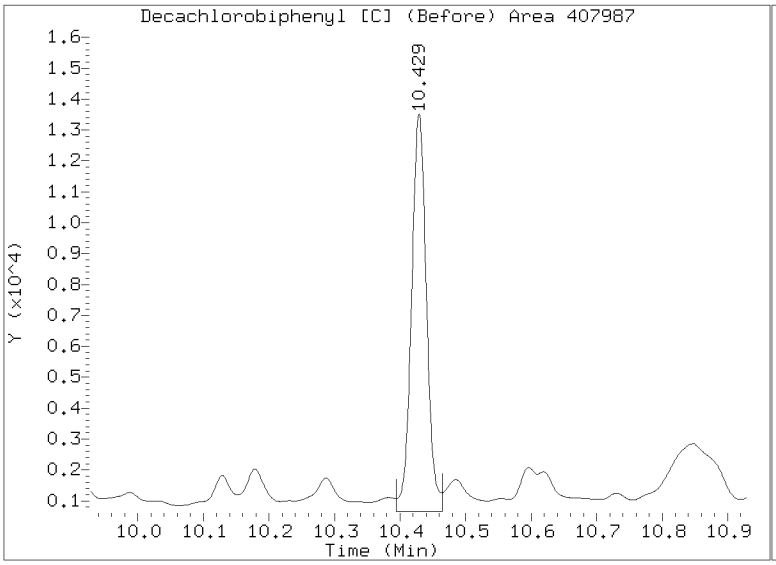
Injection Date: 25-JAN-2023 01:29
Lab ID:23A0171-02 Client ID:

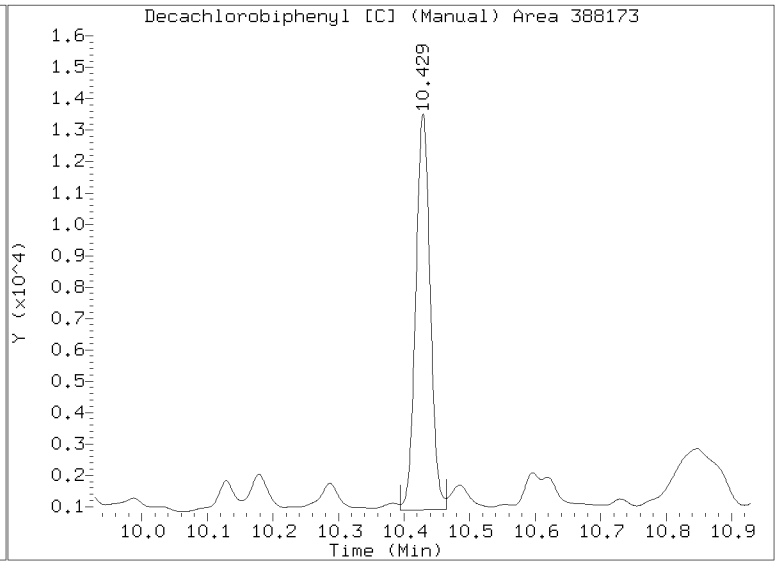












Manual Peak Adjustment Report, CLP-2

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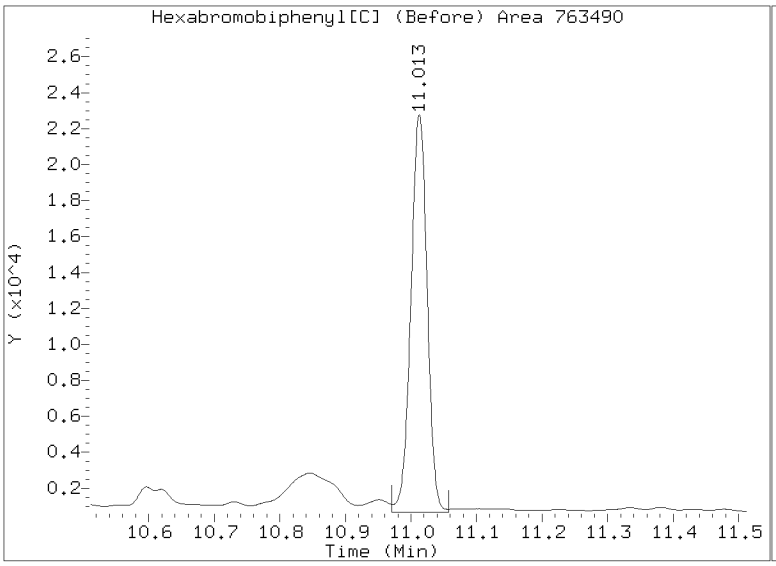
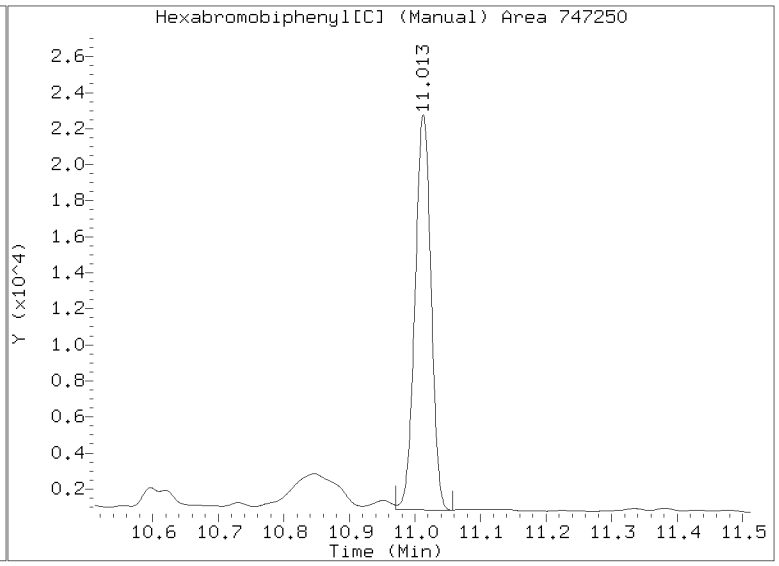
Injection Date: 25-JAN-2023 01:29
Lab ID:23A0171-02 Client ID:





Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1262

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0171
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0171-03 A	File ID:	23012433.D
Sampled:	12/08/22 10:36	Prepared:	01/17/23 13:07	Analyzed:	01/25/23 01:47
% Solids:	43.54	Preparation:	EPA 3546 (Microwave)	Initial/Final:	28.97 g Wet / 2.5 mL
Batch:	BLA0340	Sequence:	SLA0299	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.18	0.14	0.50	J

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9280*	*9.12*	*115*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.9280*	*6.79*	*85.6*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230124.b/23012433.D
Data file 2: /20230124.b/B20230124.b/23012433.D
Method: \20230124.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: 23A0171-03
Client ID:
Injection Date: 25-JAN-2023 01:47
Report Date: 01/27/2023 13:34
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.303	-0.007	56345	4.829	-0.003	18325	3.61	0.78	129.2*	alpha-BHC N
----			5.334	0.025	14201	0.00	1.58	---	beta-BHC
4.883	0.008	100191	----			7.85	0.00	---	delta-BHC
4.614	0.003	54897	5.230	0.001	11091	4.06	0.55	151.9*	gamma-BHC (Lindane) N
5.080	-0.013	23330	5.766	0.011	42104	1.94	2.32	18.0	Heptachlor N
5.433	0.019	72929	6.162	0.004	32049	5.40	1.55	110.9*	Aldrin N
----			6.794	-0.020	193456	0.00	11.30	---	Heptachlor epoxide b
----			7.245	-0.012	11946	0.00	0.79	---	Endosulfan I
6.773	-0.018	107456	7.534	-0.017	61531	9.31	3.69	86.5*	Dieldrin N
6.446	-0.005	134429	7.340	-0.002	67833	12.55	4.44	95.5*	4,4'-DDE N
7.067	0.026	276080	----			32.47	0.00	---	Endrin
7.306	0.028	20028	8.073	-0.014	240966	2.62	22.06	157.6*	Endosulfan II N
----			7.947	-0.002	77581	0.00	7.48	---	4,4'-DDD
8.127	-0.013	18216	----			2.51	0.00	---	Endosulfan sulfate
7.363	-0.028	291973	8.274	0.008	384300	37.72	38.40	1.8	4,4'-DDT N
----			8.879	-0.030	187226	0.00	42.28	---	Methoxychlor
----			9.228	0.019	143838	0.00	13.88	---	Endrin ketone
7.732	0.025	63020	8.412	-0.007	65064	10.32	8.44	20.0	Endrin aldehyde N
----			----			0.00	0.00	---	trans-Chlordane
6.396	0.020	89643	7.183	-0.002	21692	7.52	1.30	141.1*	cis-Chlordane N
2.288	-0.016	15024	2.454	-0.028	105013	0.92	4.69	134.5*	Hexachlorobutadiene
4.152	-0.001	13391	4.684	-0.008	17577	0.92	0.82	12.1	Hexachlorobenzene MN
3.800	0.000	377531	4.195	-0.001	535612	34.24	32.32	5.7	Tetrachloro-m-xylene N
9.322	0.003	302450	10.429	0.000	393036	46.02	47.44	3.0	Decachlorobiphenyl N

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

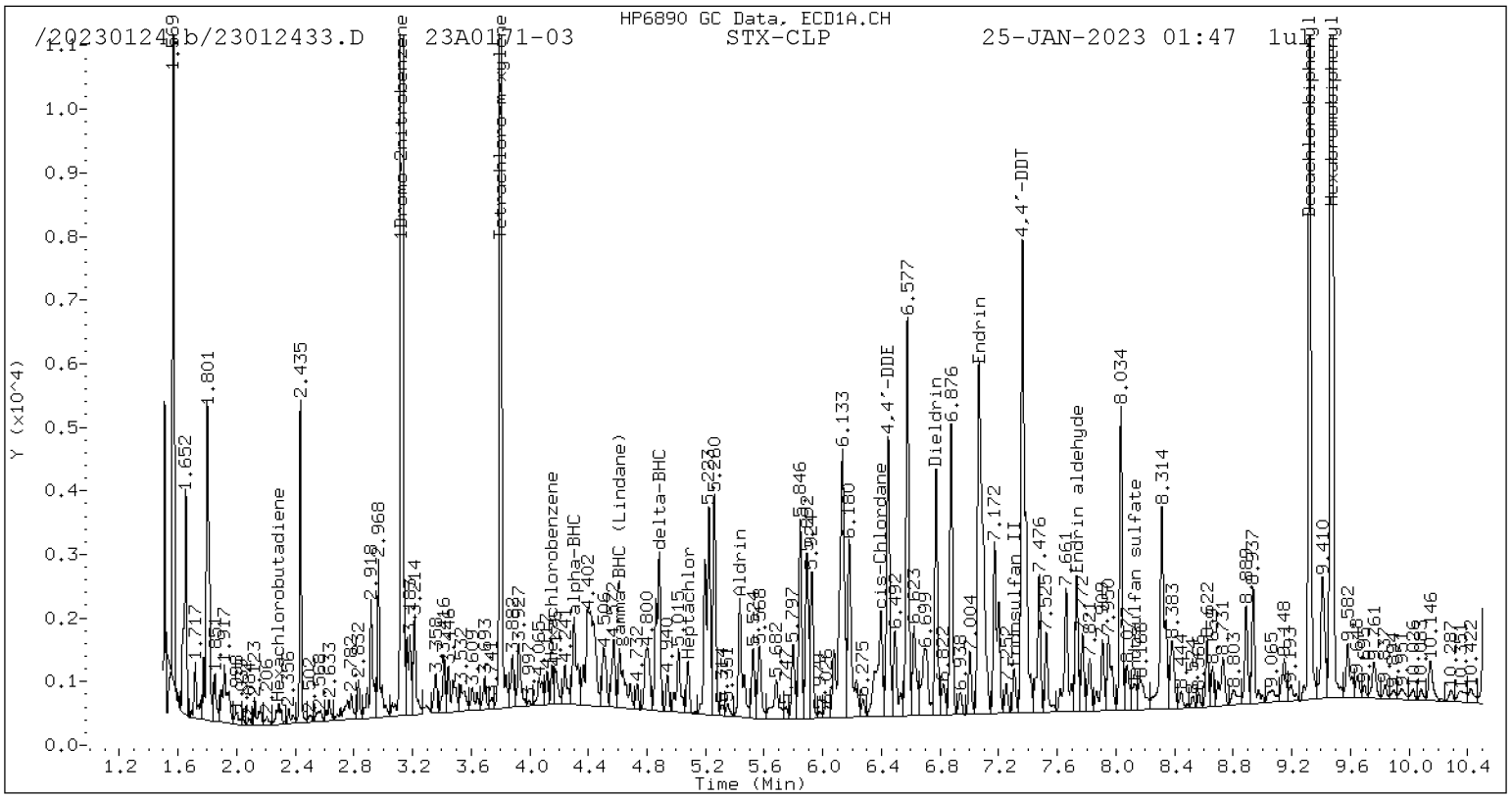
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	810829	20.6
Hexabromobiphenyl	609723	648583	6.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1177138	17.0
Hexabromobiphenyl	769764	749650	-2.6

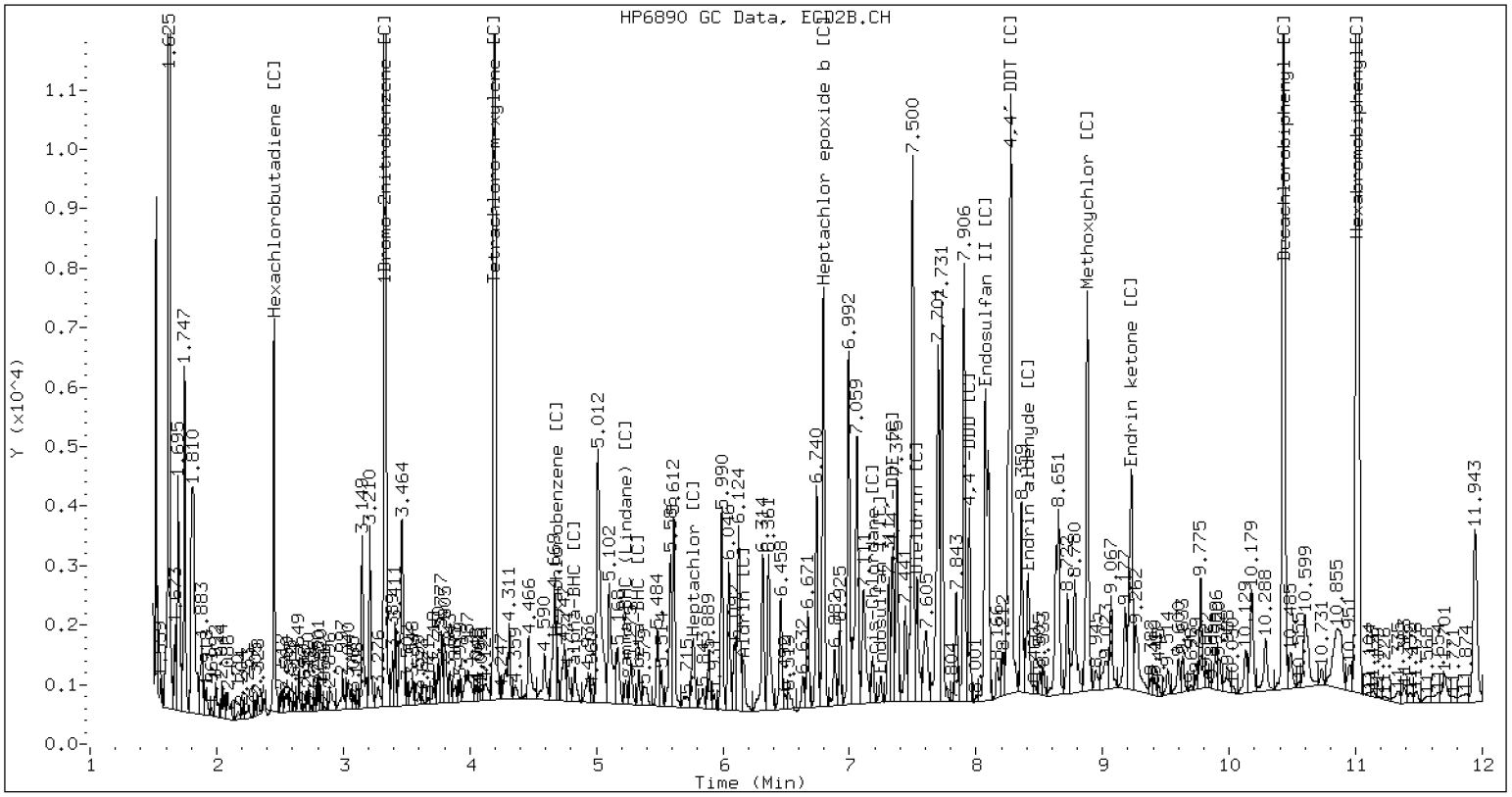
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

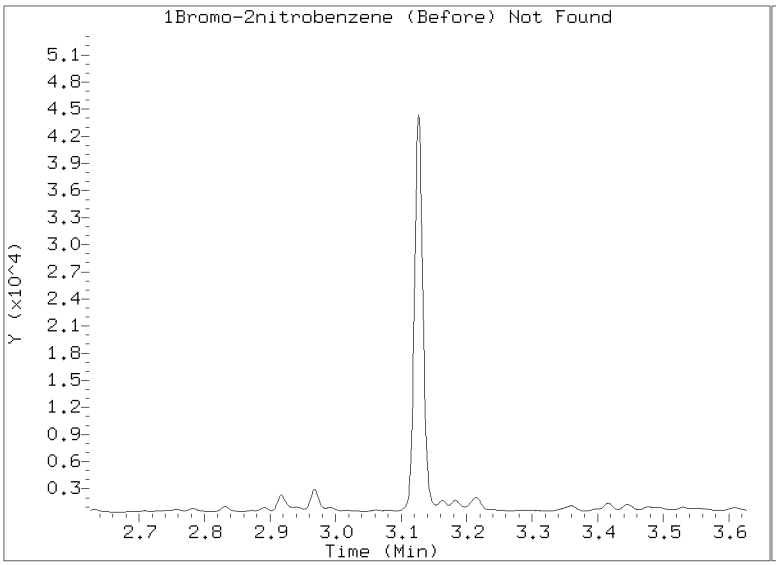
/20230124.b/B20230124.b/23012433.D 23A0171-03 CLP2

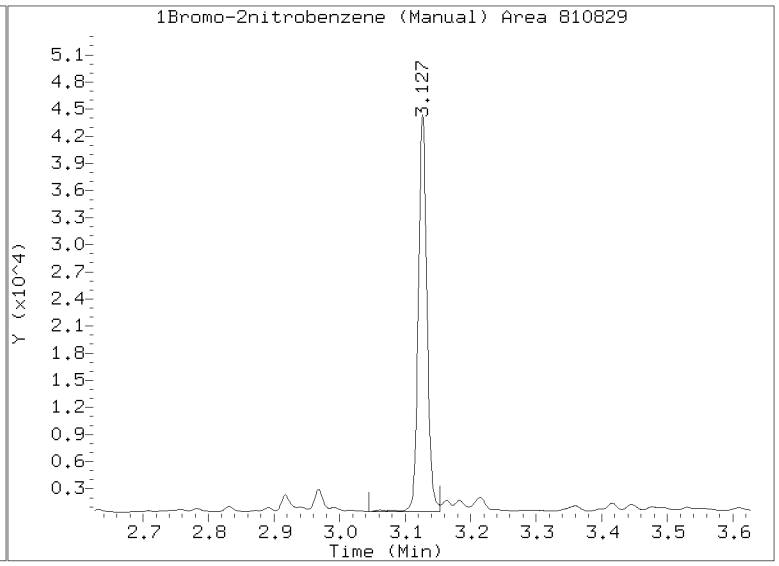


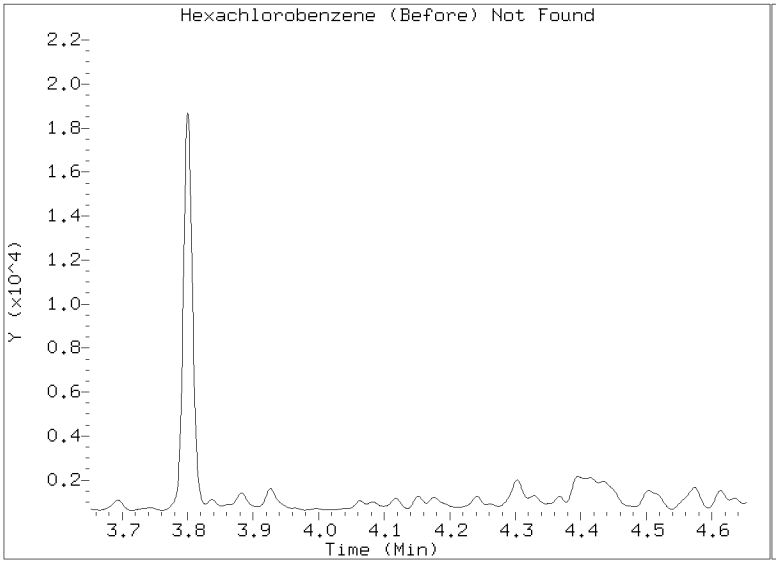
CLP-2 Manual Integration: YES

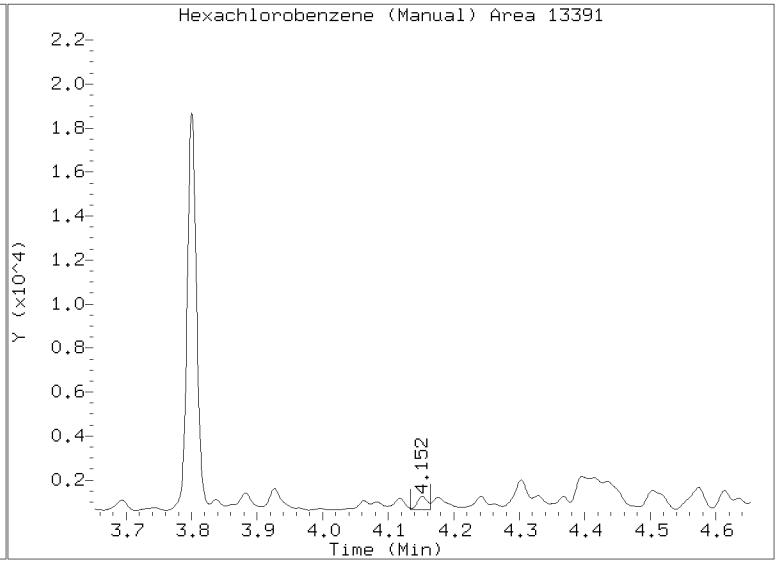
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230124.b/23012433.D
Injection Date: 25-JAN-2023 01:47
Lab ID:23A0171-03 Client ID:
Report Date: 01/27/2023 13:34









Manual Peak Adjustment Report, CLP-2

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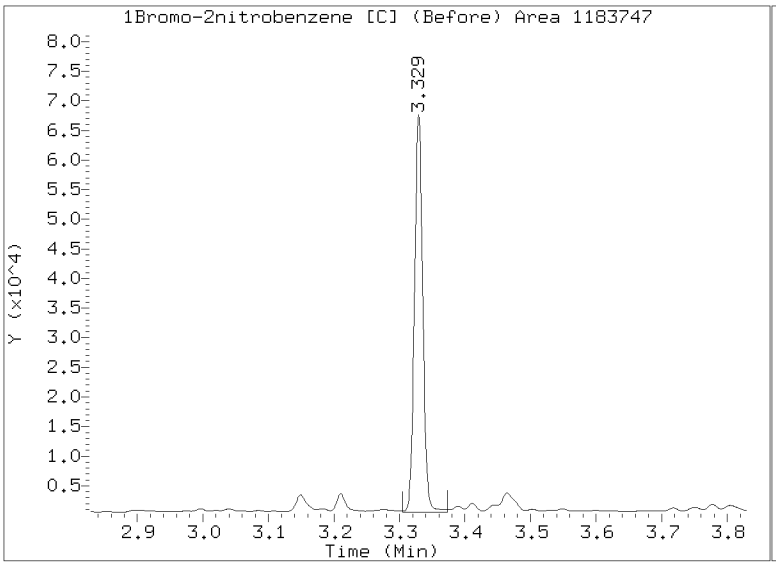

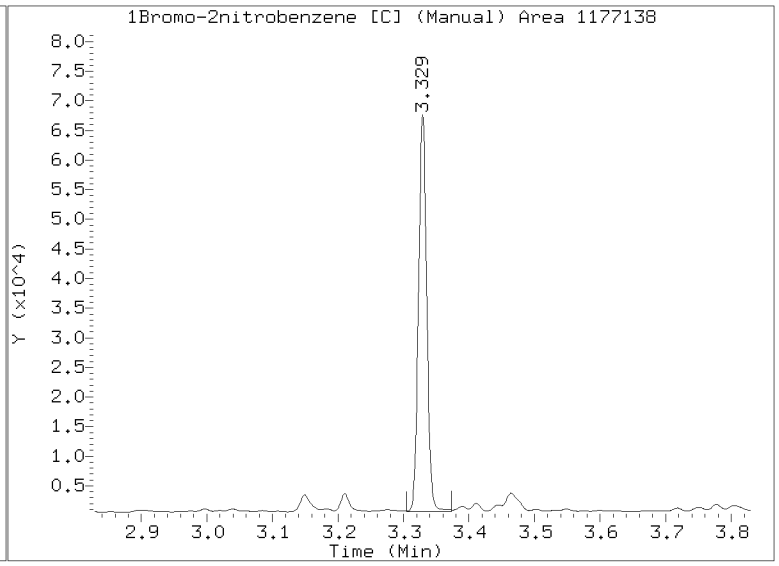

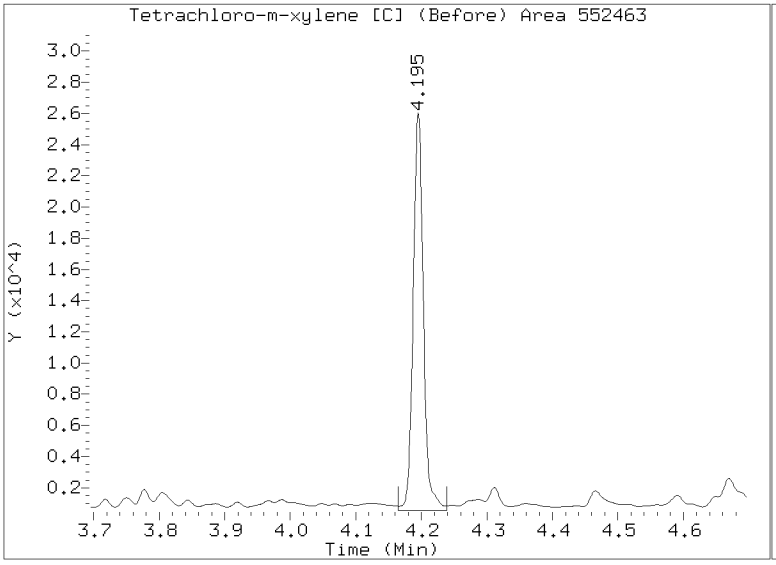

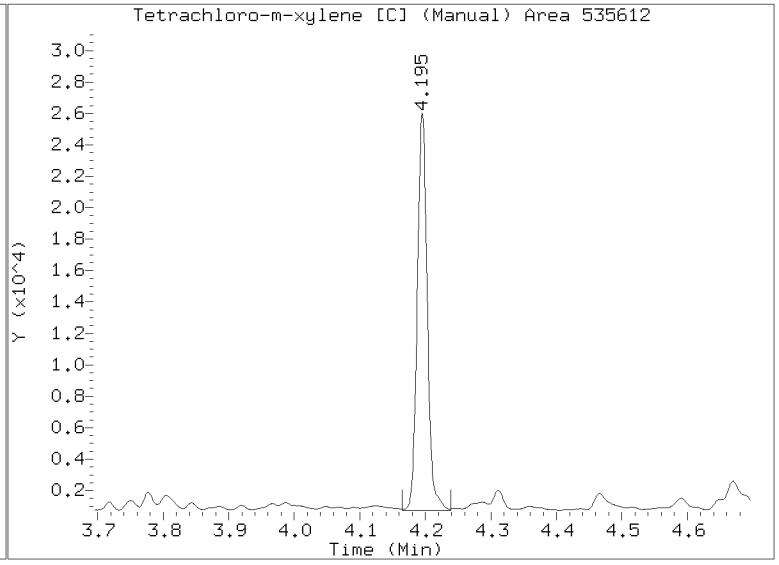

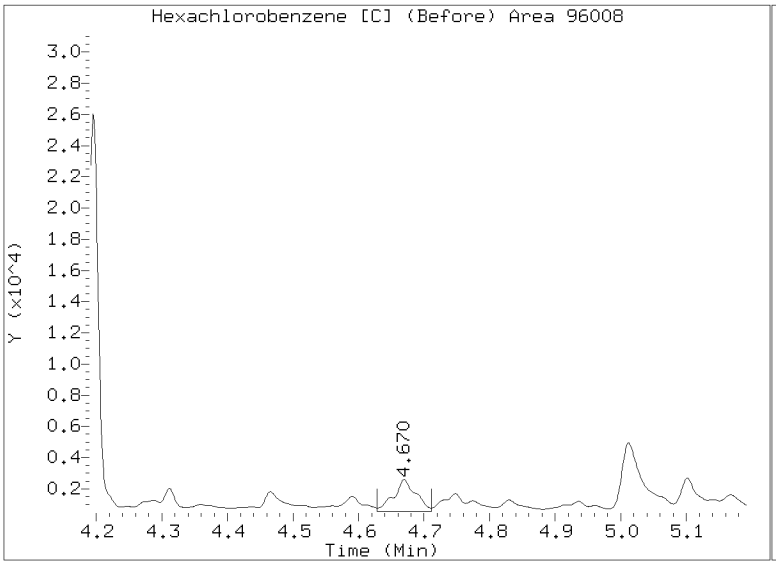

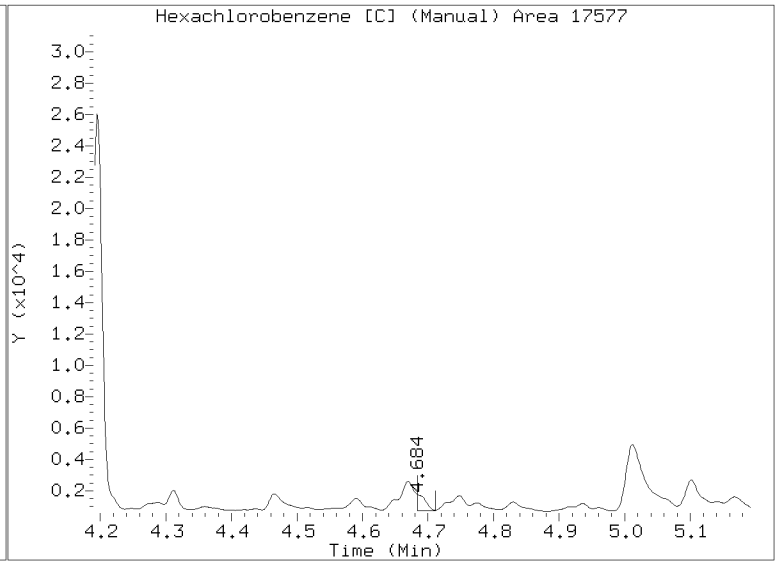

Manual Peak Adjustment Report, CLP-2

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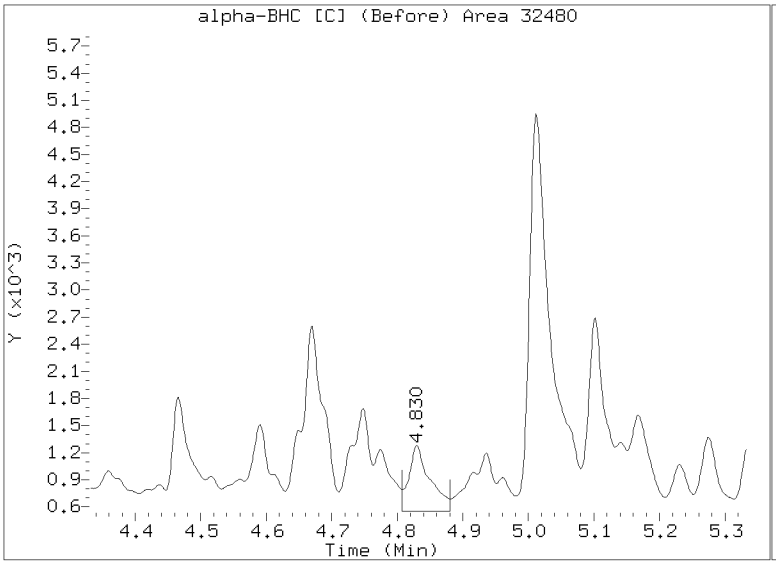

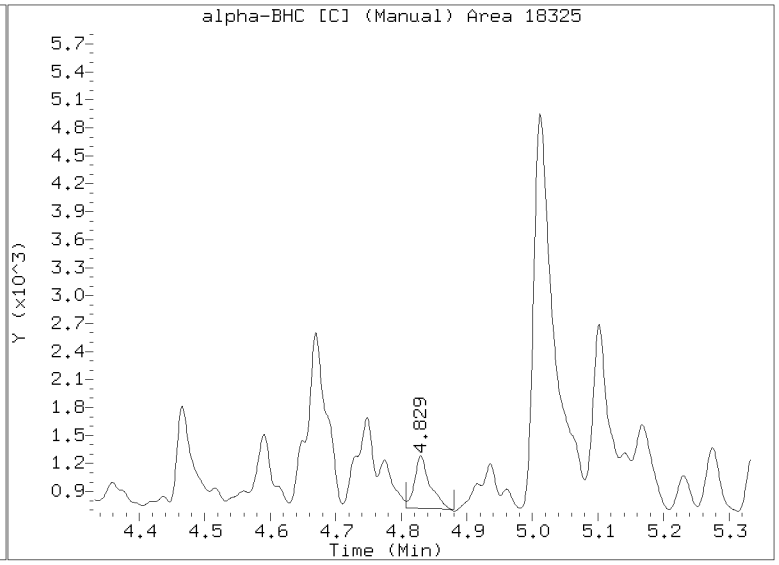

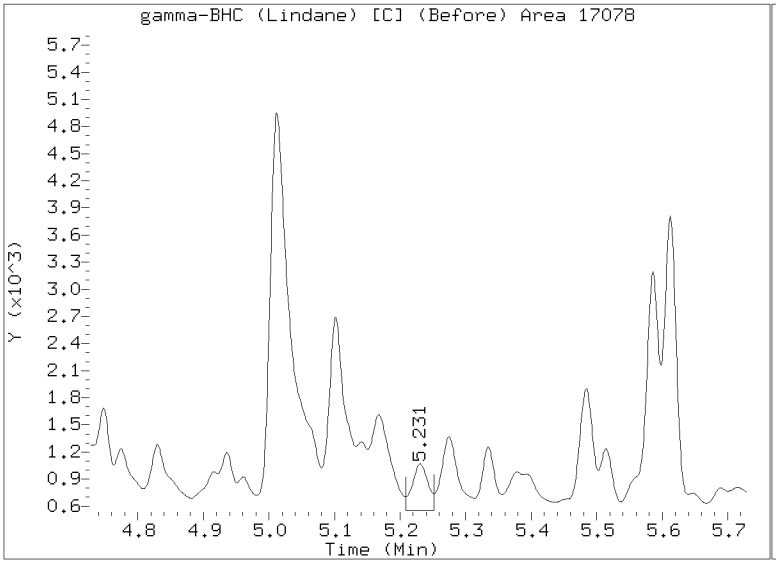

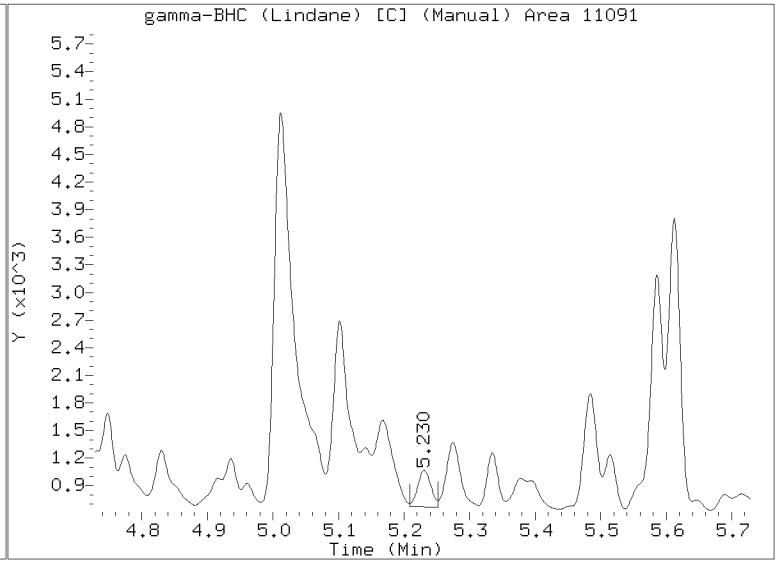

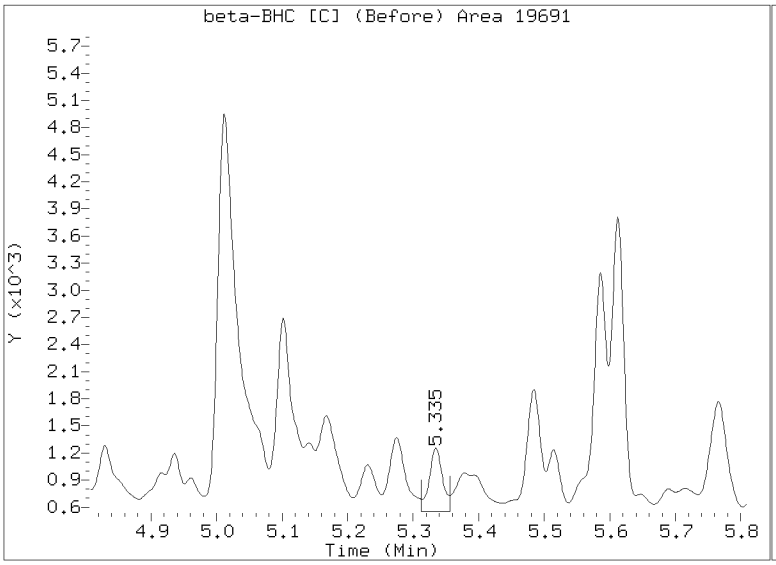

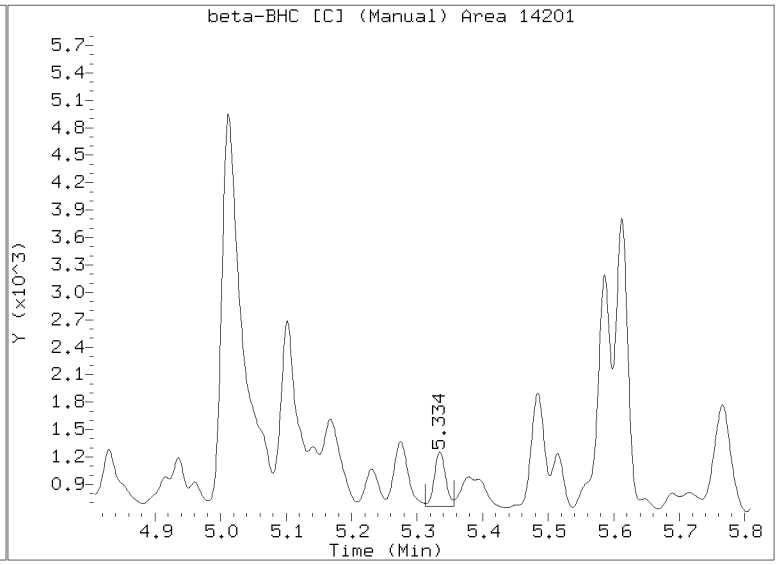

Manual Peak Adjustment Report, CLP-2

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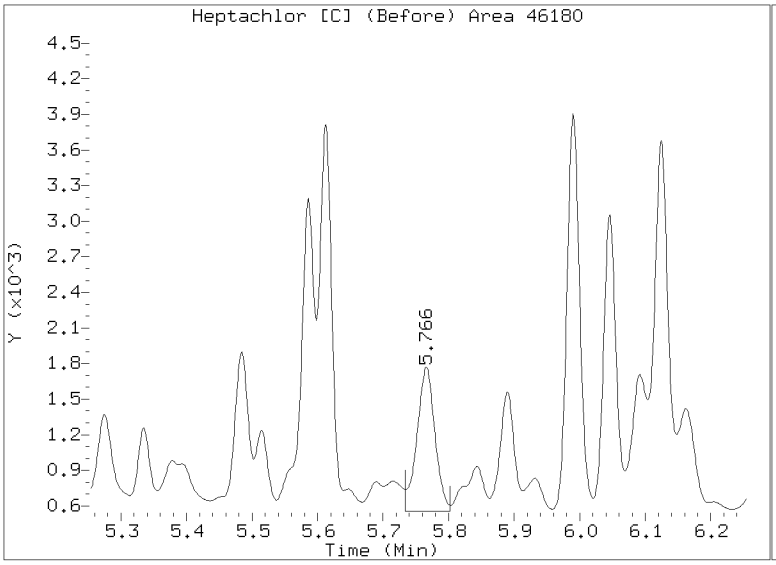

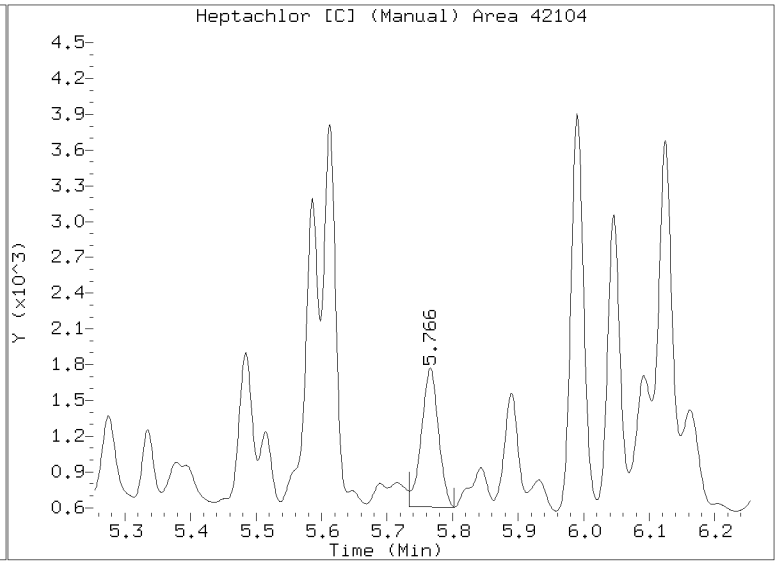

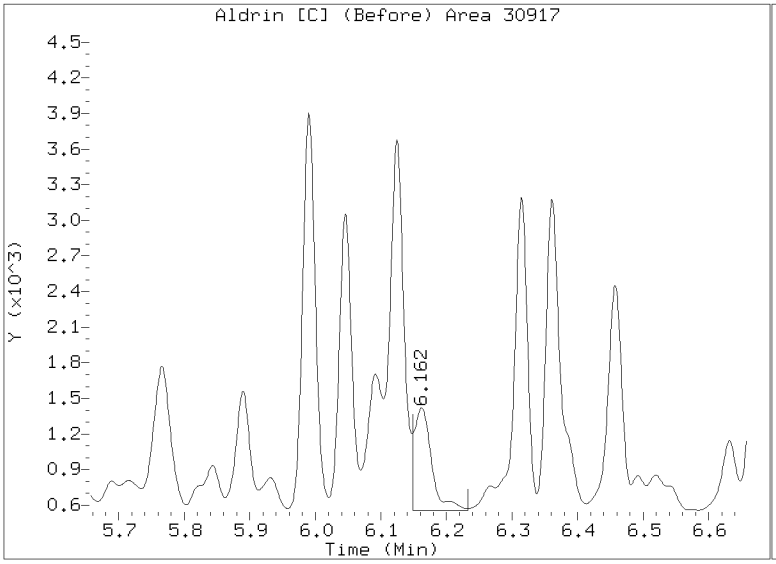

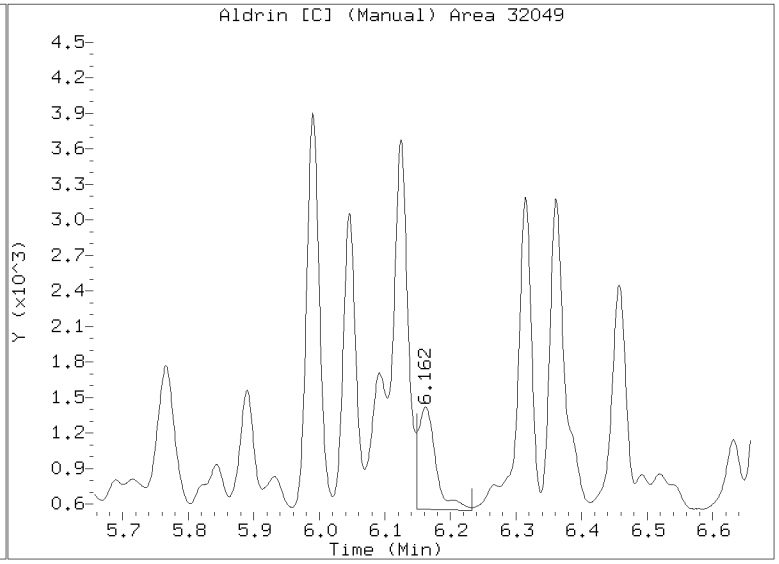

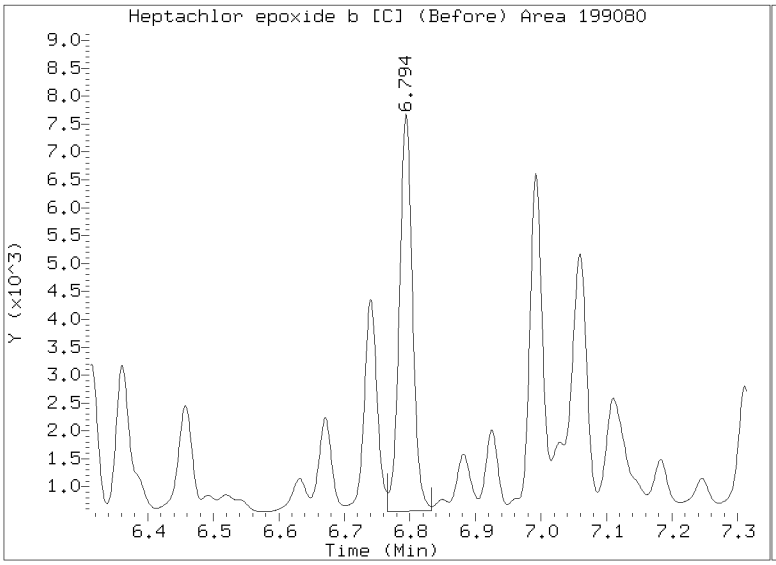

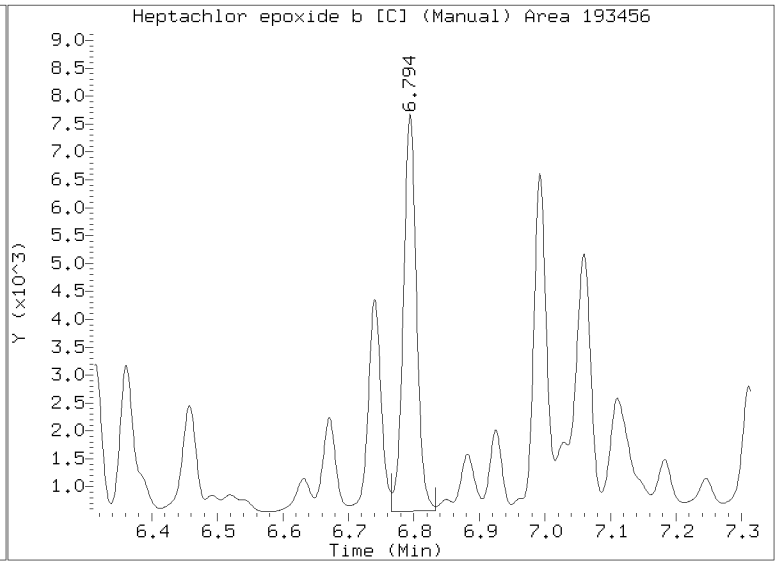

Manual Peak Adjustment Report, CLP-2

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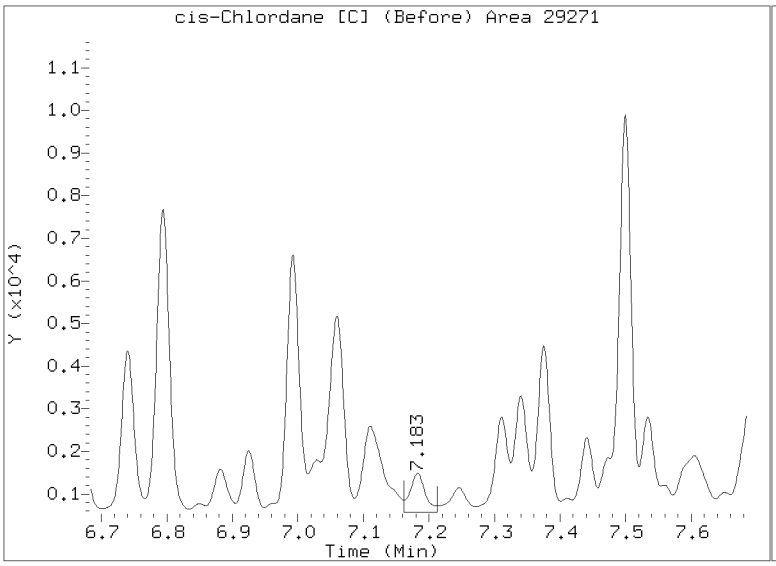

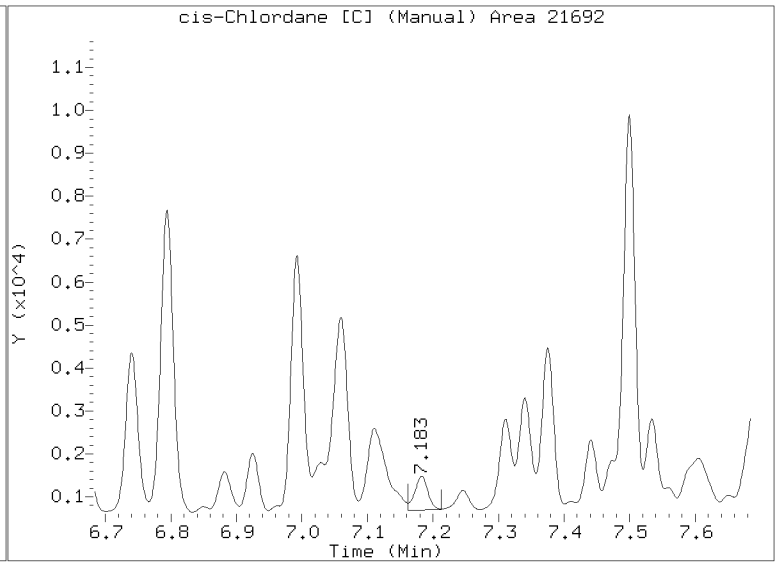

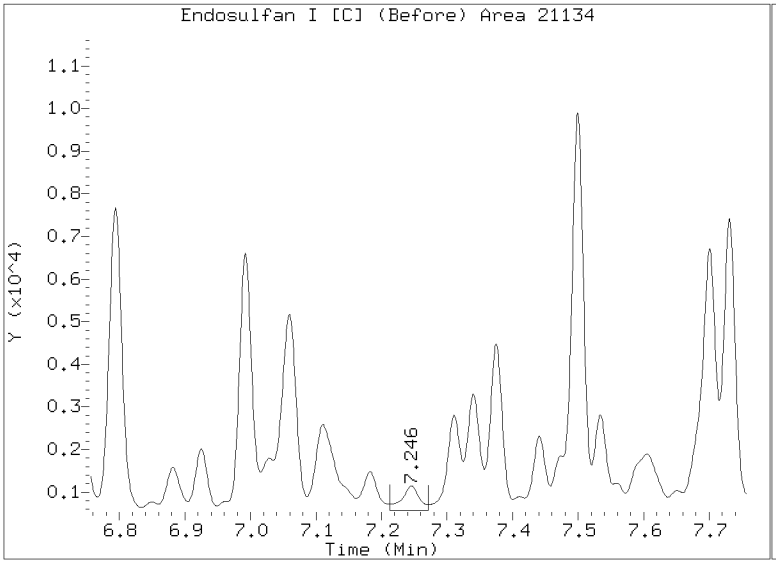

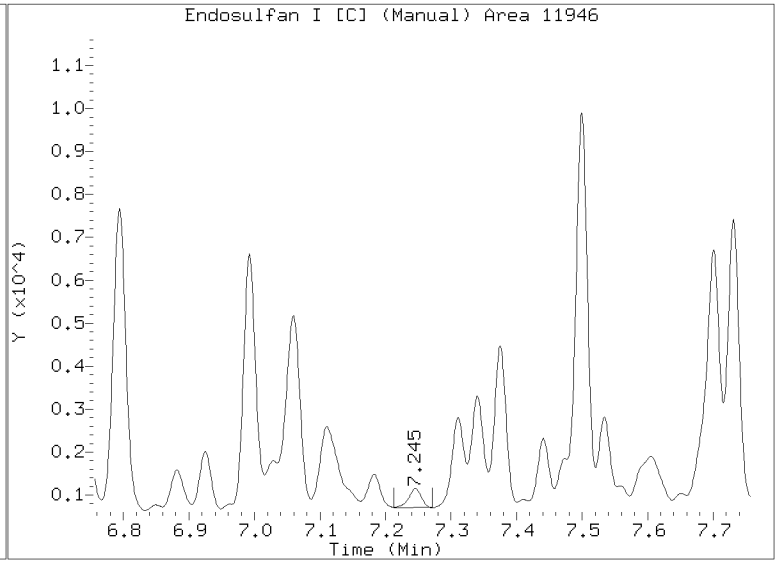

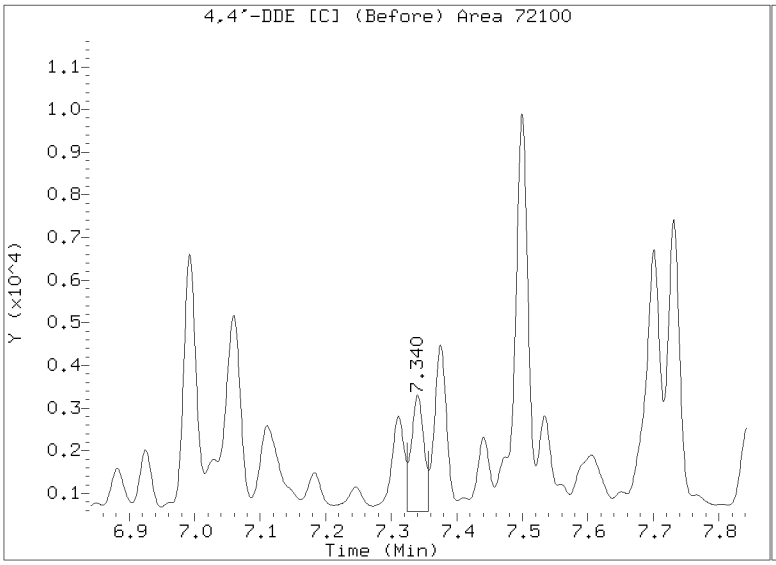

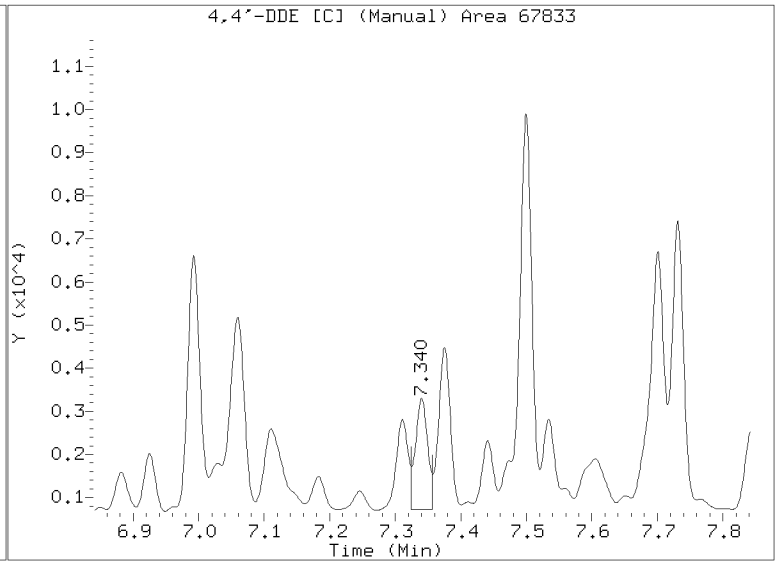

Manual Peak Adjustment Report, CLP-2

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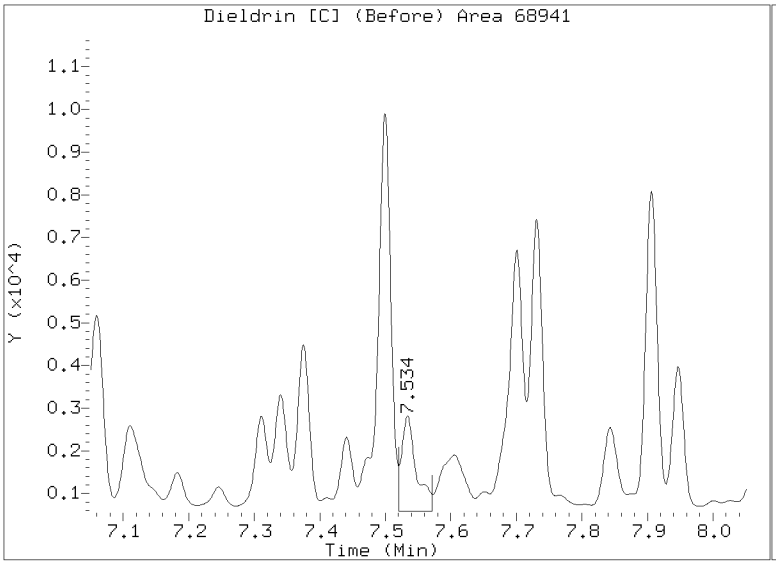
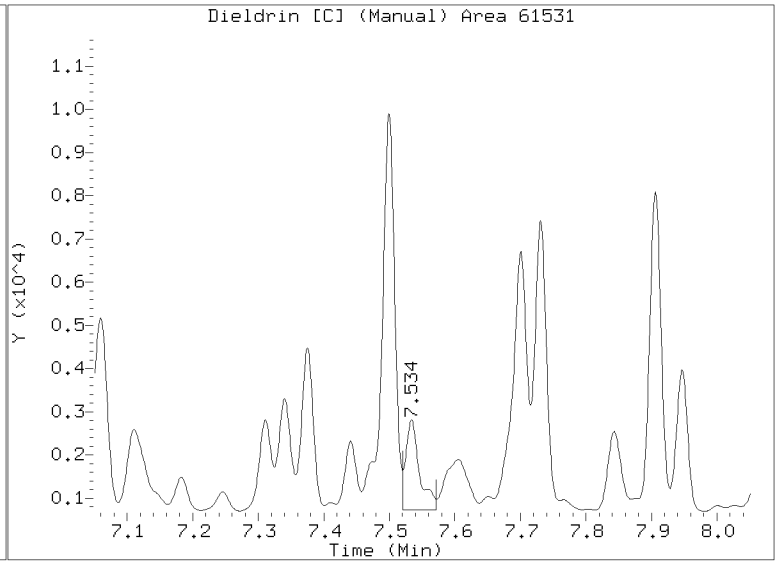
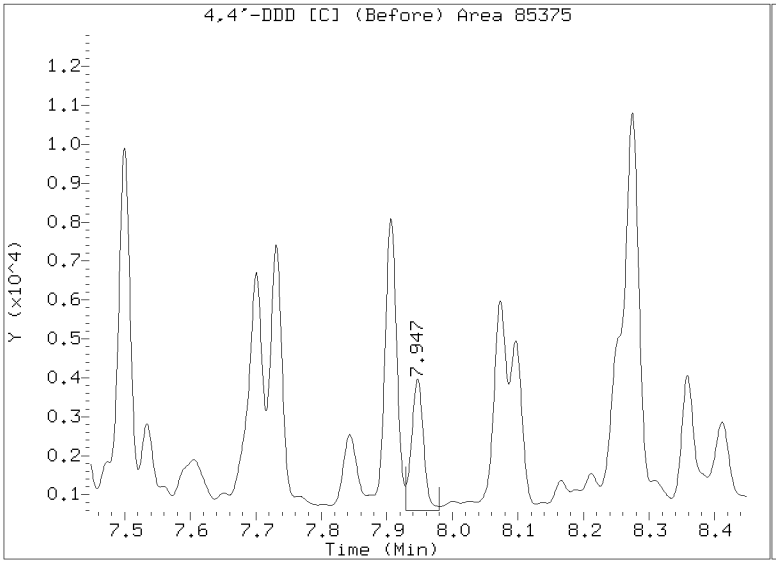
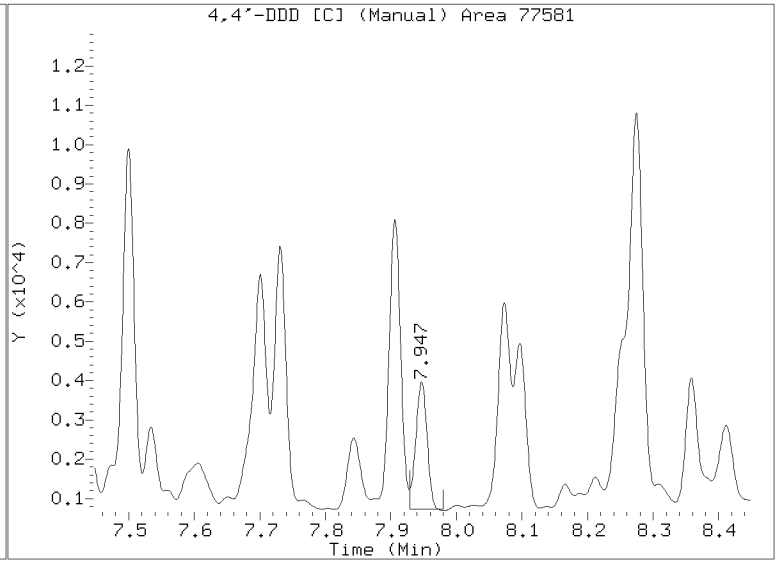
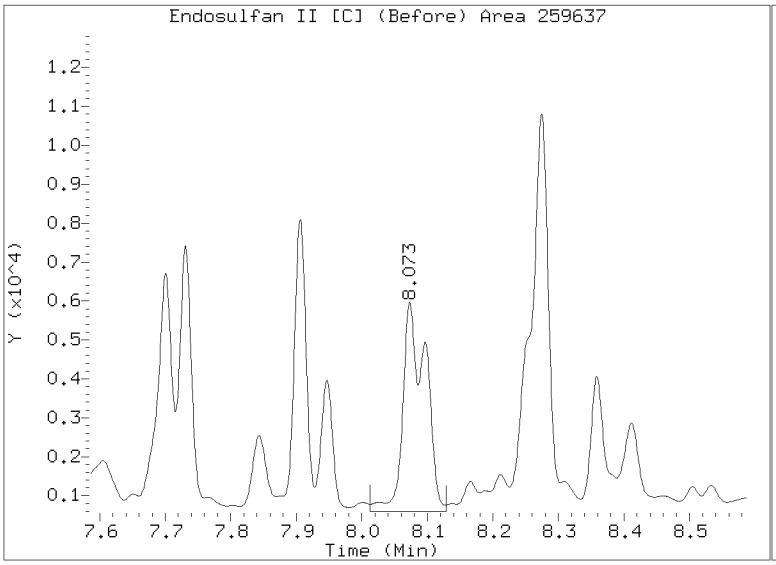
Injection Date: 25-JAN-2023 01:47
Lab ID:23A0171-03 Client ID:

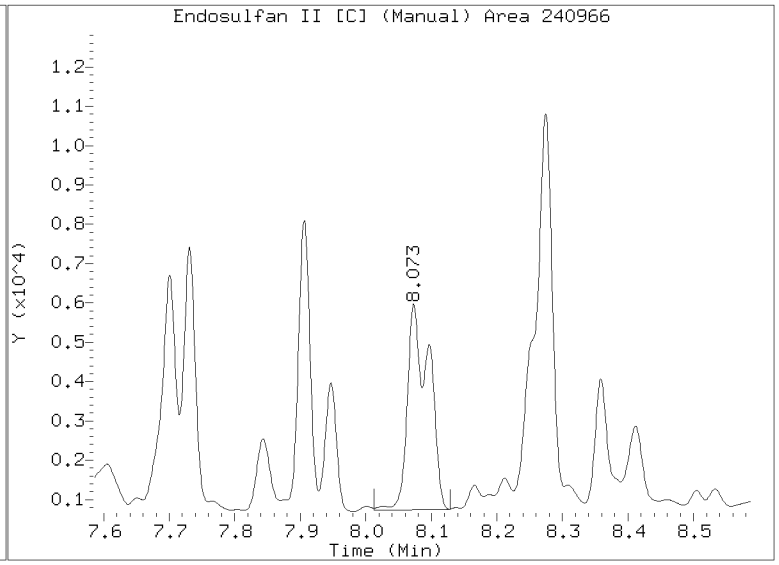












Manual Peak Adjustment Report, CLP-2

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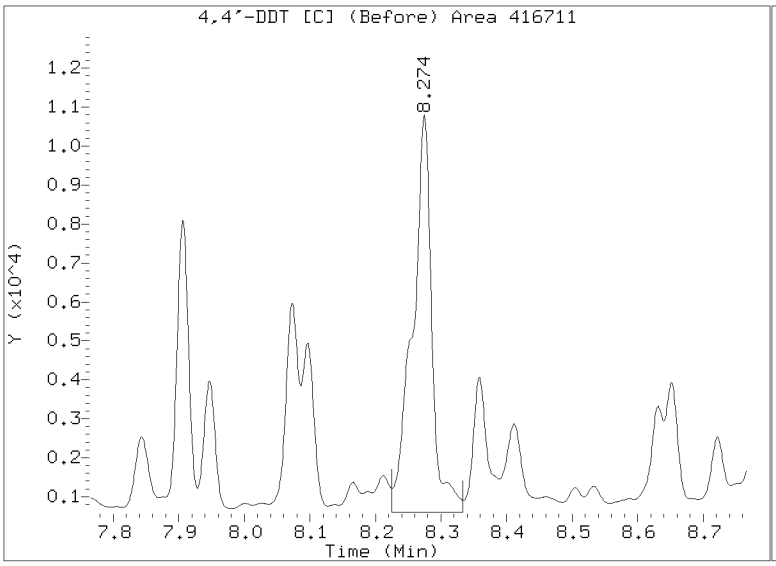

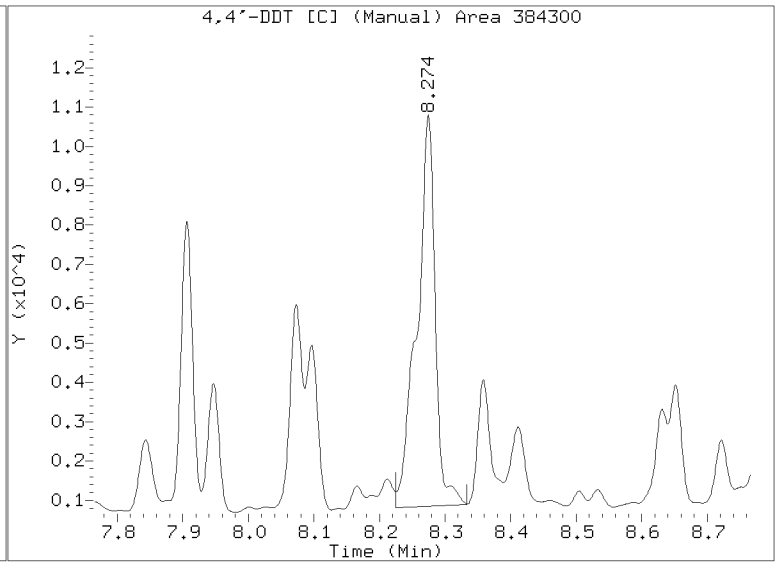

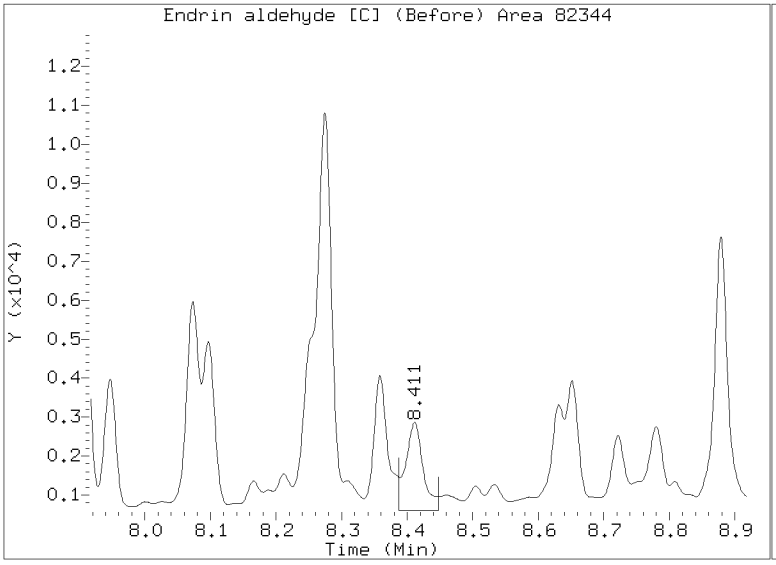

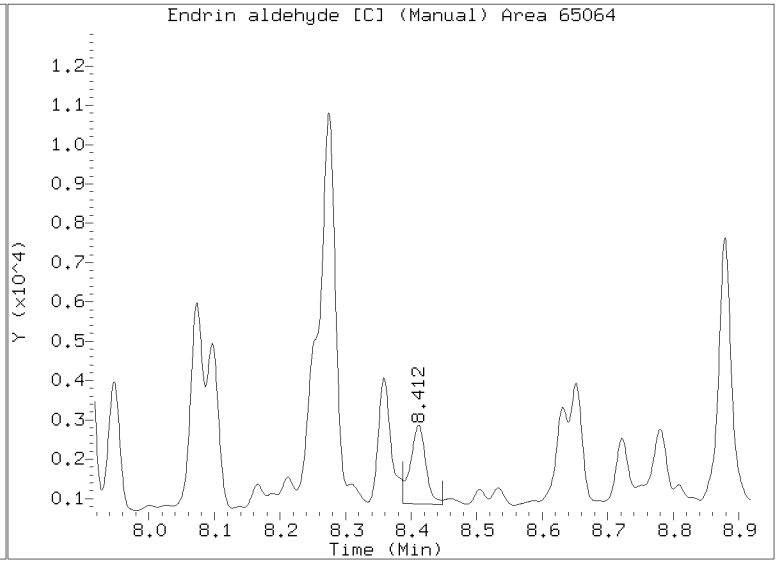

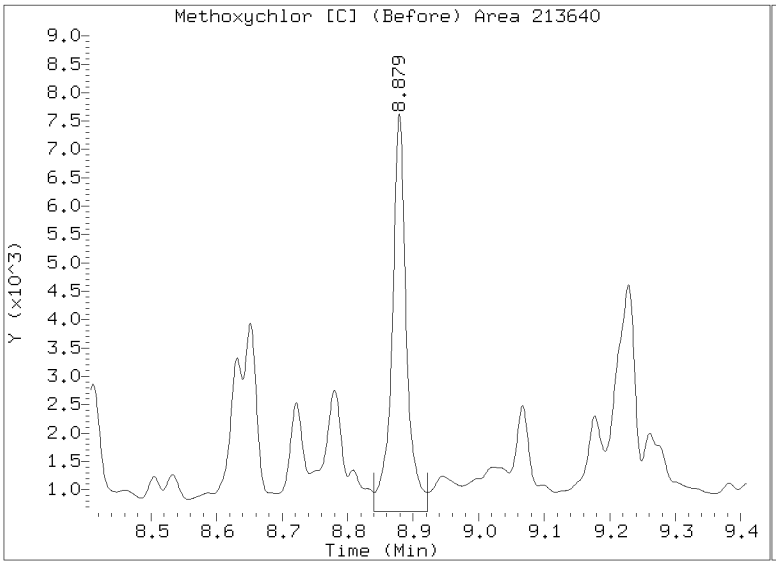

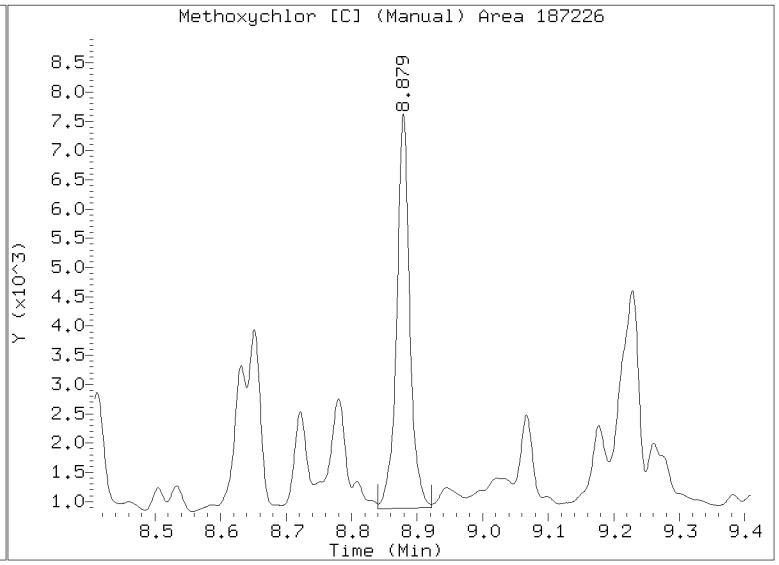

Manual Peak Adjustment Report, CLP-2

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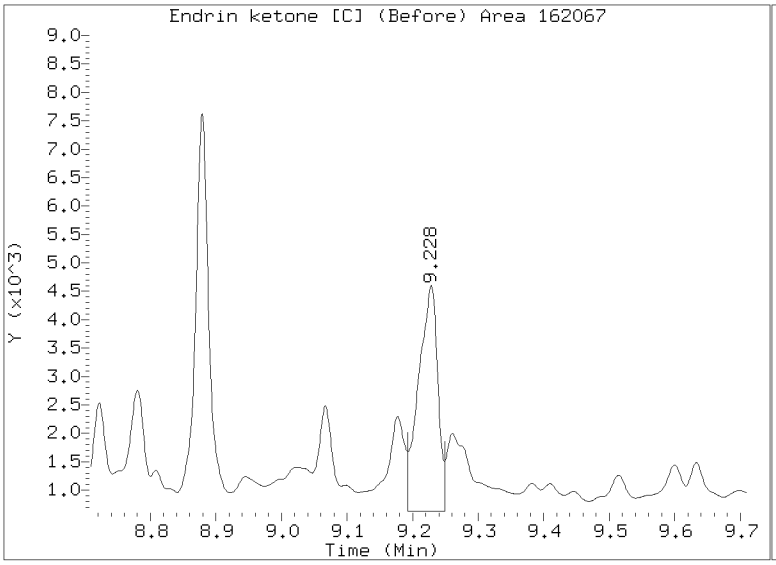
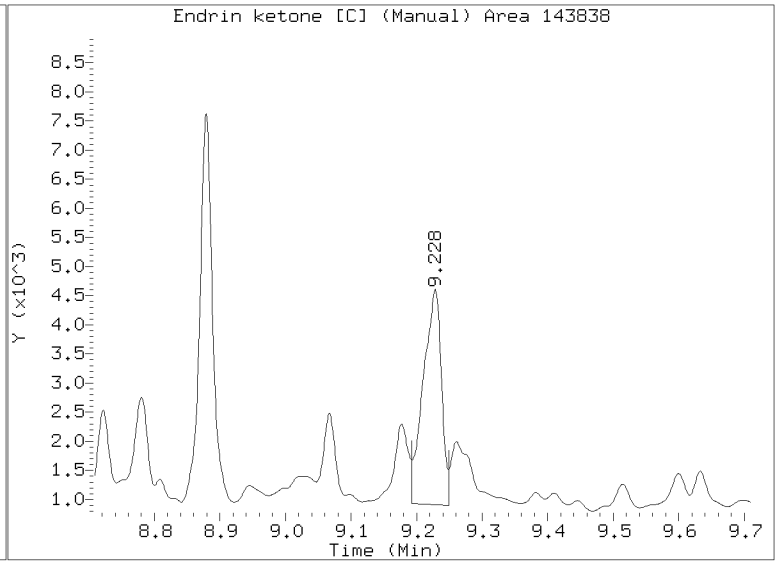
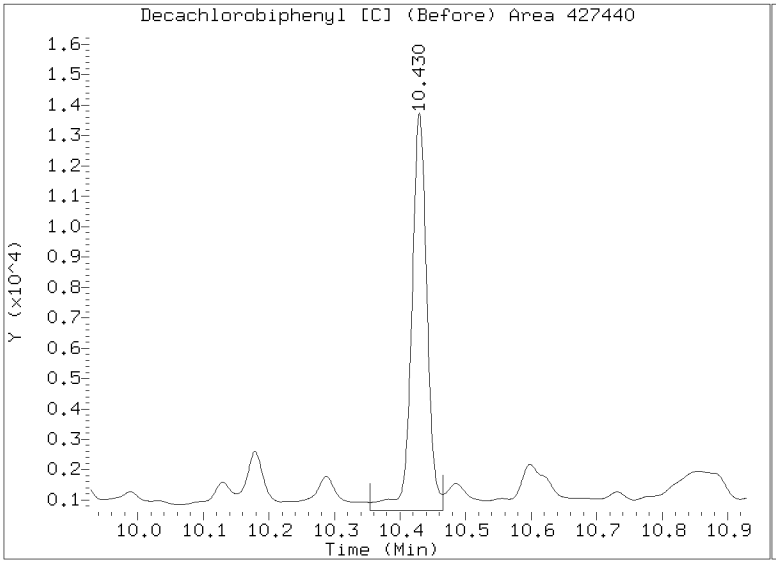
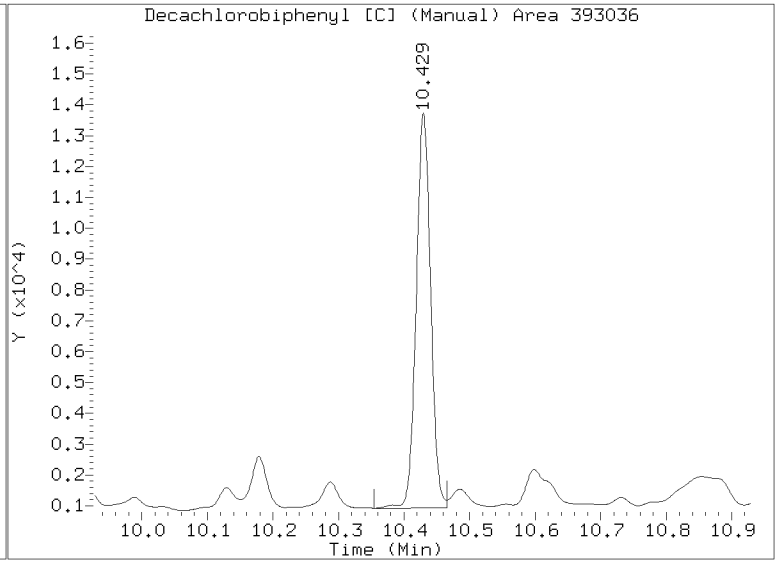
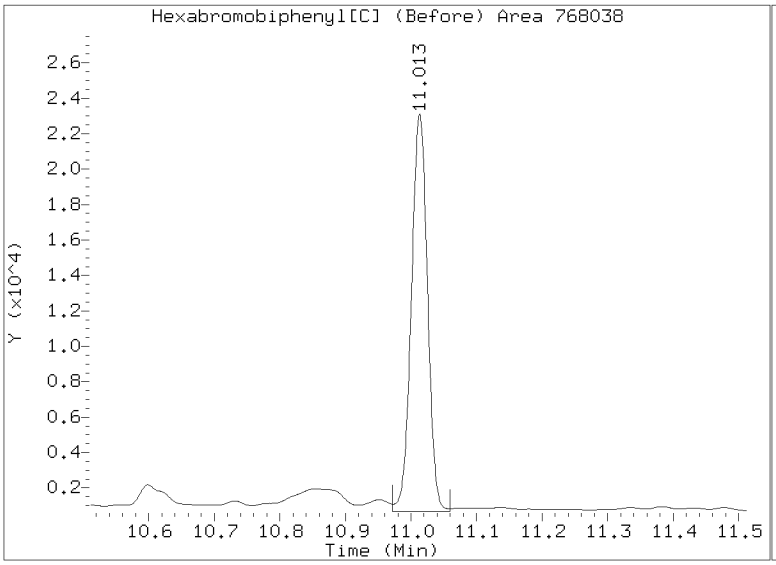
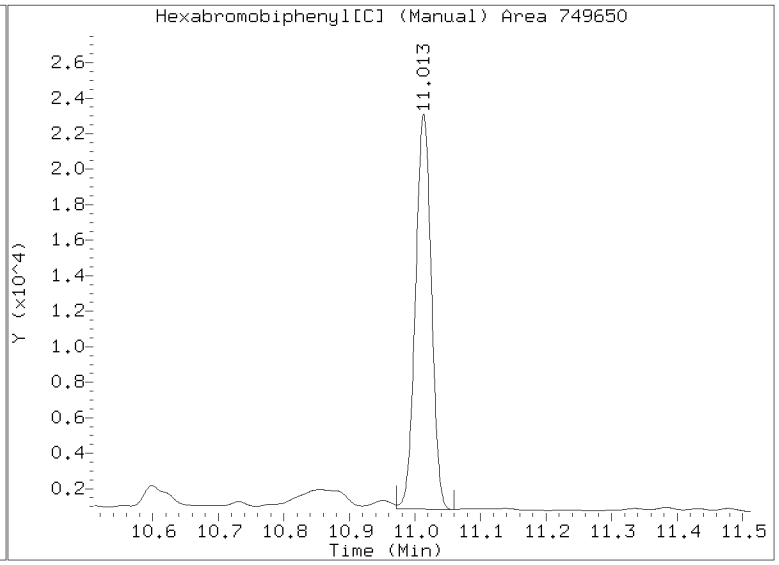












Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1245

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0171
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0171-04 A	File ID:	23012434.D
Sampled:	12/08/22 11:14	Prepared:	01/17/23 13:07	Analyzed:	01/25/23 02:05
% Solids:	48.44	Preparation:	EPA 3546 (Microwave)	Initial/Final:	26.02 g Wet / 2.5 mL
Batch:	BLA0340	Sequence:	SLA0299	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.20	0.14	0.50	J

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9339*	*8.86*	*112*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.9339*	*6.49*	*81.8*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230124.b/23012434.D
Data file 2: /20230124.b/B20230124.b/23012434.D
Method: \20230124.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: 23A0171-04
Client ID:
Injection Date: 25-JAN-2023 02:05
Report Date: 01/27/2023 13:35
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.303	-0.008	78650	4.830	-0.003	16189	4.80	0.67	150.8*	alpha-BHC N
----			5.334	0.025	14728	0.00	1.61	---	beta-BHC
4.883	0.008	90402	5.646	-0.015	3458	6.75	0.17	189.9*	delta-BHC N
4.616	0.004	72550	5.234	0.005	14613	5.11	0.72	150.8*	gamma-BHC (Lindane) N
5.080	-0.013	21843	5.767	0.012	33585	1.73	1.82	5.0	Heptachlor N
5.433	0.019	68476	6.163	0.005	34877	4.83	1.65	98.1*	Aldrin
----			6.794	-0.020	180446	0.00	10.33	---	Heptachlor epoxide b
----			7.245	-0.012	12236	0.00	0.80	---	Endosulfan I
6.772	-0.019	101628	7.533	-0.018	60648	8.39	3.57	80.7*	Dieldrin N
6.446	-0.005	128090	7.340	-0.002	67157	11.39	4.31	90.3*	4,4'-DDE N
7.066	0.025	266686	----			31.31	0.00	---	Endrin
7.306	0.028	18737	8.097	0.010	96451	2.44	8.80	113.1*	Endosulfan II N
----			7.947	-0.002	75181	0.00	7.23	---	4,4'-DDD
8.124	-0.016	16430	----			2.26	0.00	---	Endosulfan sulfate
7.363	-0.028	259986	8.275	0.008	352337	33.53	35.09	4.6	4,4'-DDT N
7.866	-0.011	15595	----			4.54	0.00	---	Methoxychlor
----			9.228	0.019	139256	0.00	13.39	---	Endrin ketone
7.731	0.024	55720	8.413	-0.006	52955	9.11	6.85	28.3	Endrin aldehyde N
----			----			0.00	0.00	---	trans-Chlordane
6.396	0.020	91720	7.183	-0.001	21894	7.33	1.29	140.3*	cis-Chlordane N
2.286	-0.018	16941	2.453	-0.029	96415	0.99	4.22	124.2*	Hexachlorobutadiene
4.152	-0.001	15123	4.685	-0.007	10941	0.99	0.50	66.2*	Hexachlorobenzene MN
3.800	0.000	378903	4.195	-0.001	518655	32.74	30.69	6.4	Tetrachloro-m-xylene N
9.321	0.002	293903	10.429	0.000	375584	44.65	45.18	1.2	Decachlorobiphenyl N

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

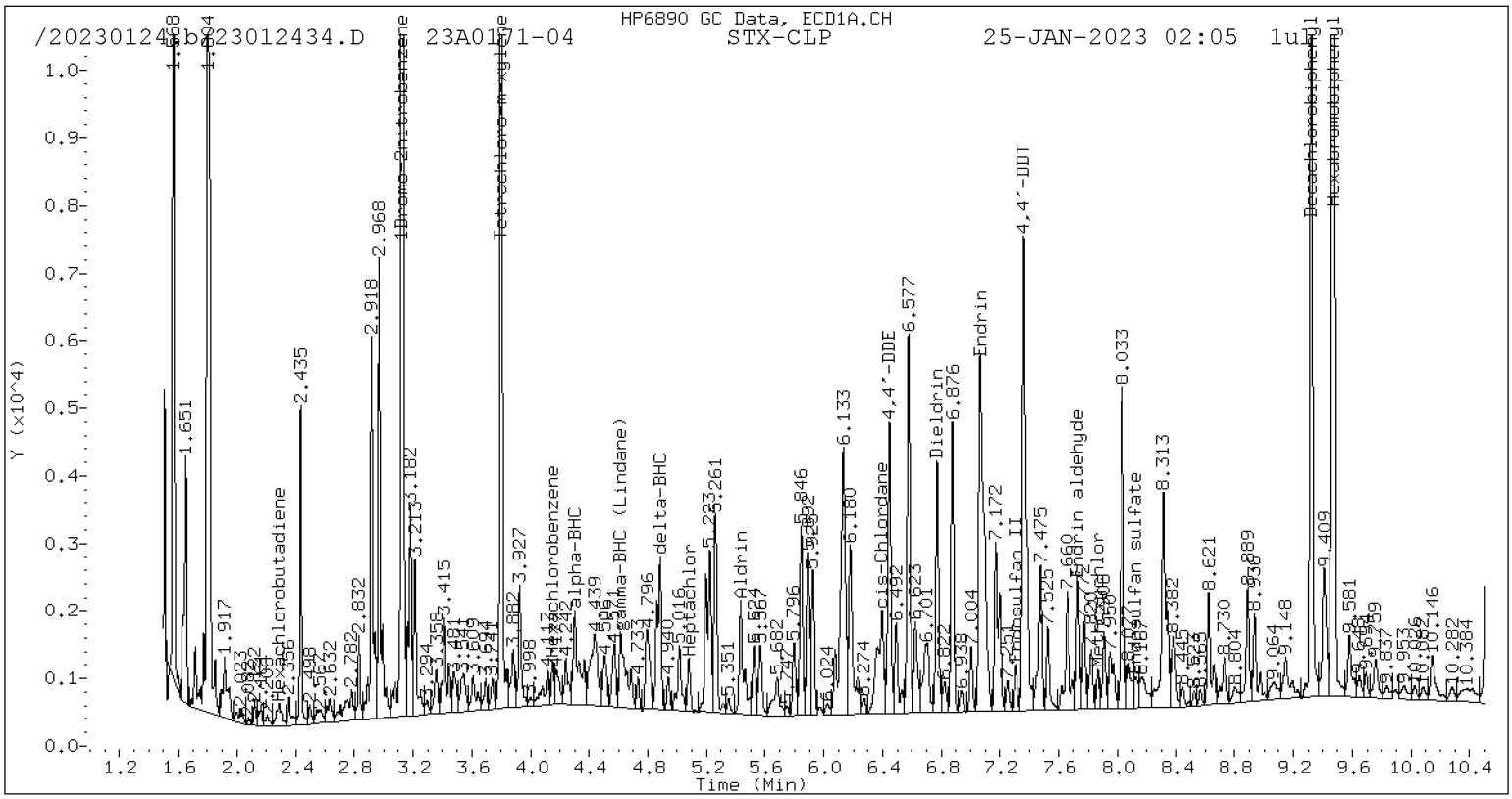
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	851130	26.6
Hexabromobiphenyl	609723	649686	6.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1200510	19.3
Hexabromobiphenyl	769764	752099	-2.3

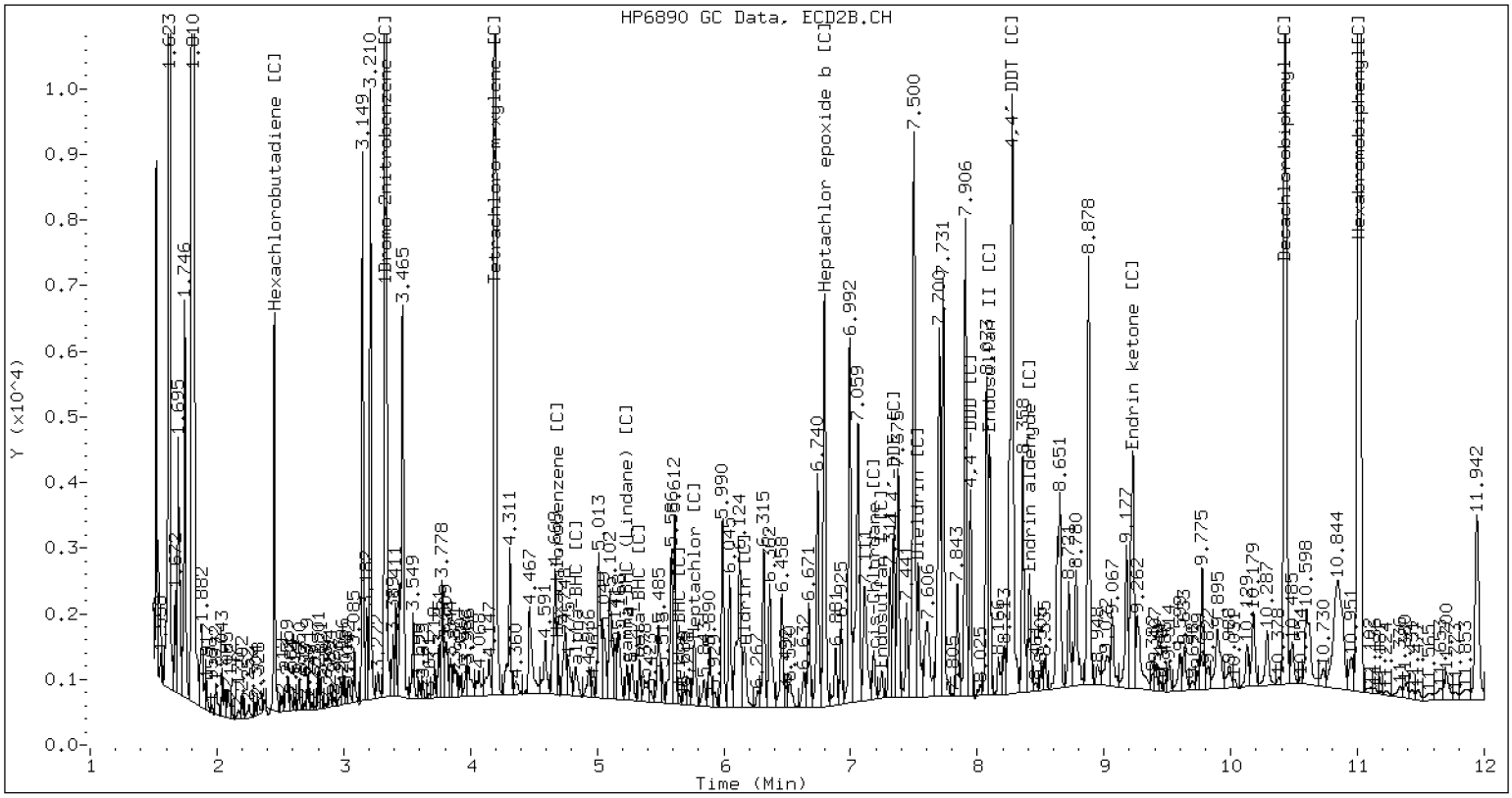
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

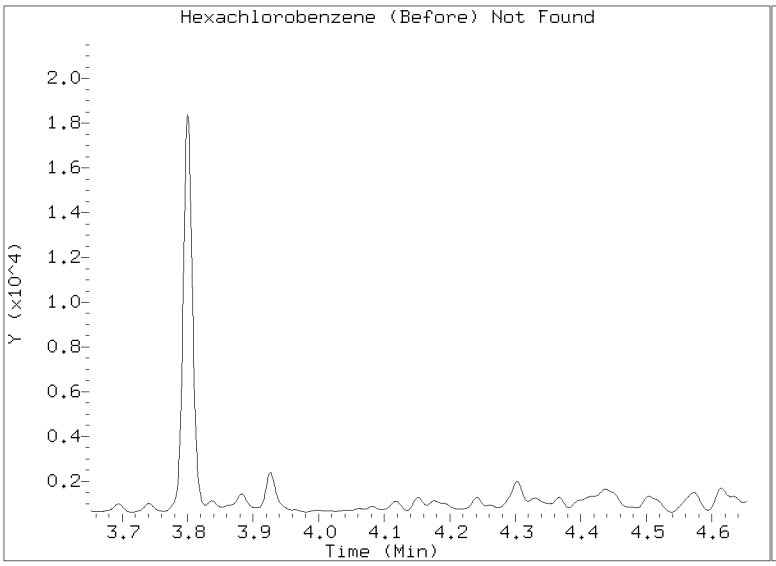
/20230124.b/B20230124.b/23012434.D 23A0171-04 CLP2

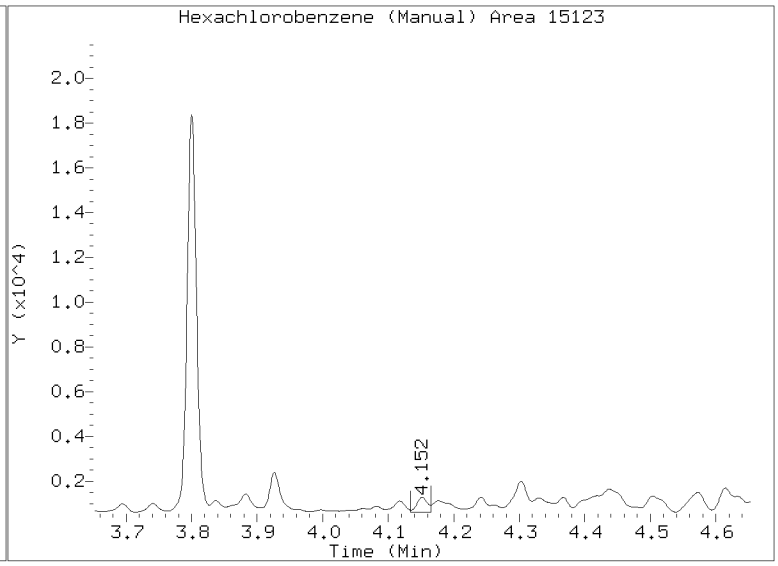


CLP-2 Manual Integration: YES

Manual Peak Adjustment Report, STX-CLP

Datafile: /20230124.b/23012434.D
Injection Date: 25-JAN-2023 02:05
Lab ID:23A0171-04 Client ID:
Report Date: 01/27/2023 13:35





Manual Peak Adjustment Report, CLP-2

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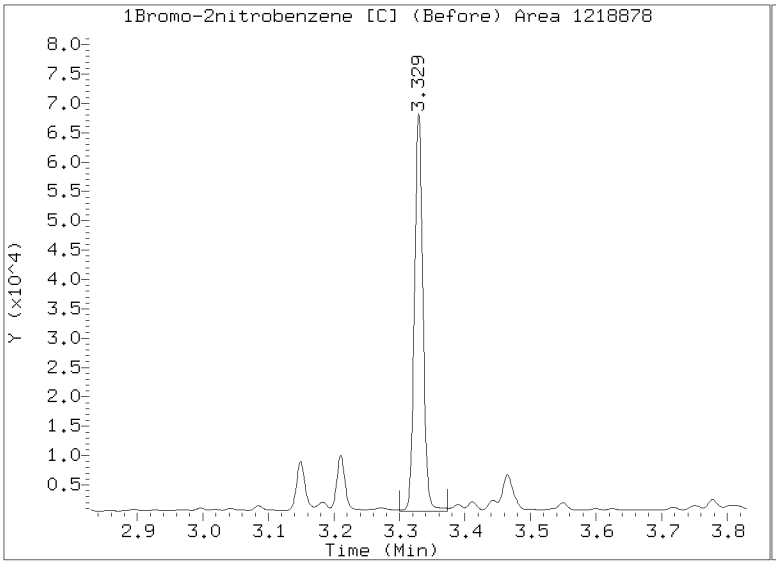
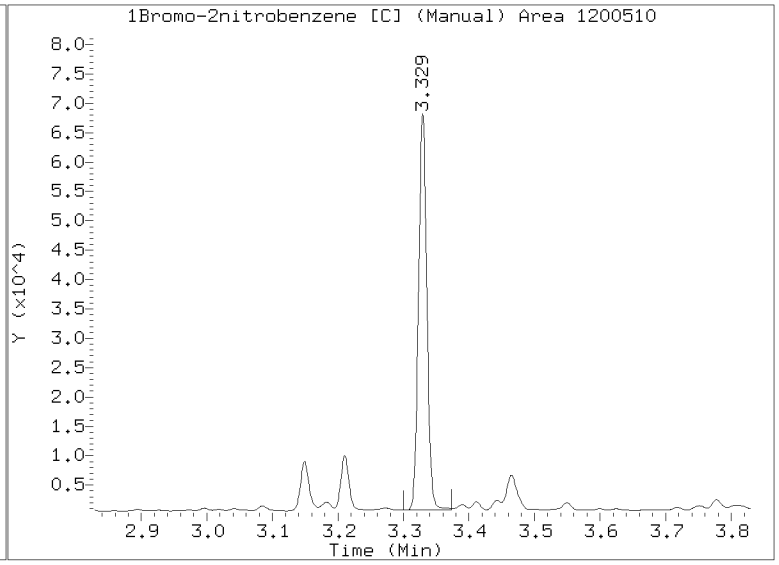
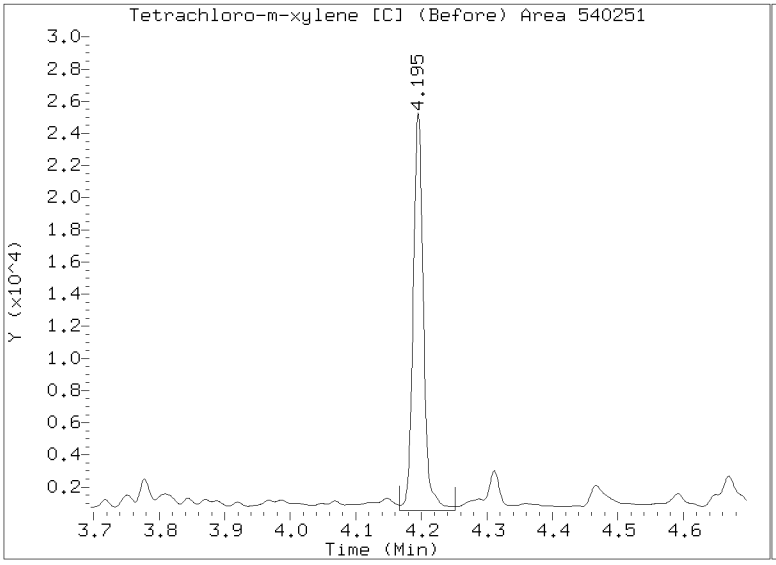
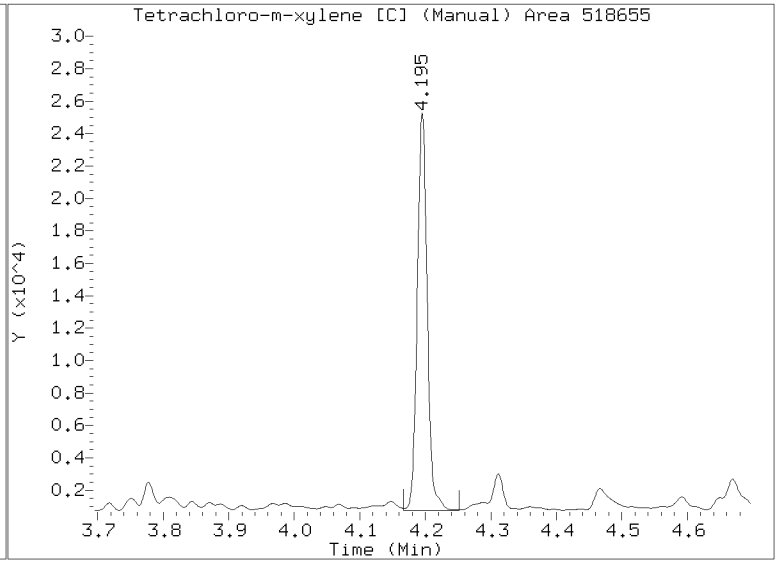
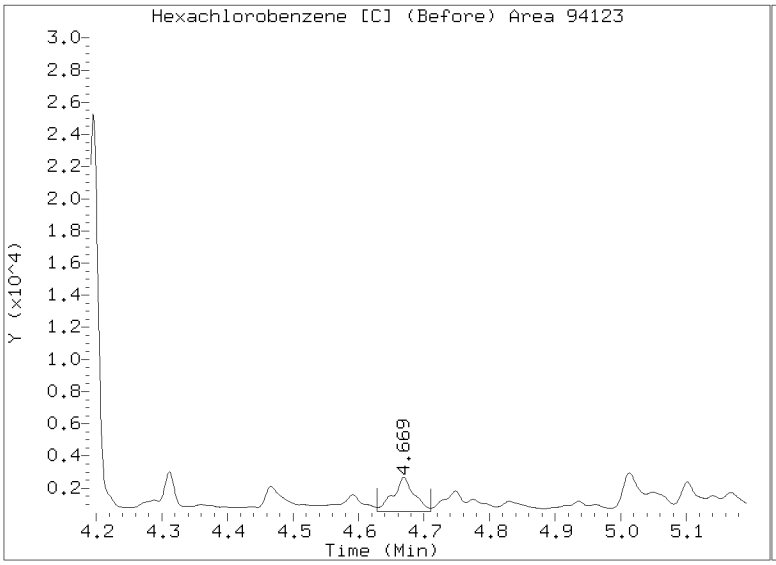
Lab ID:23A0171-04 Client ID:

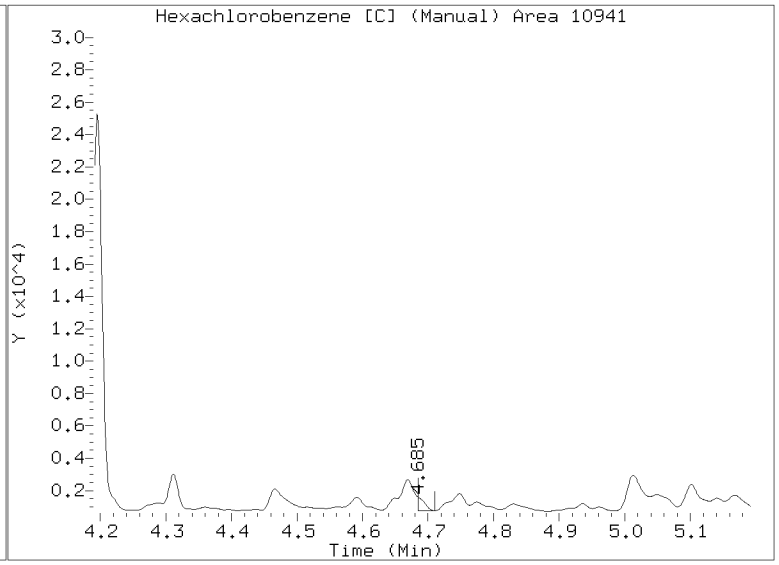












Manual Peak Adjustment Report, CLP-2

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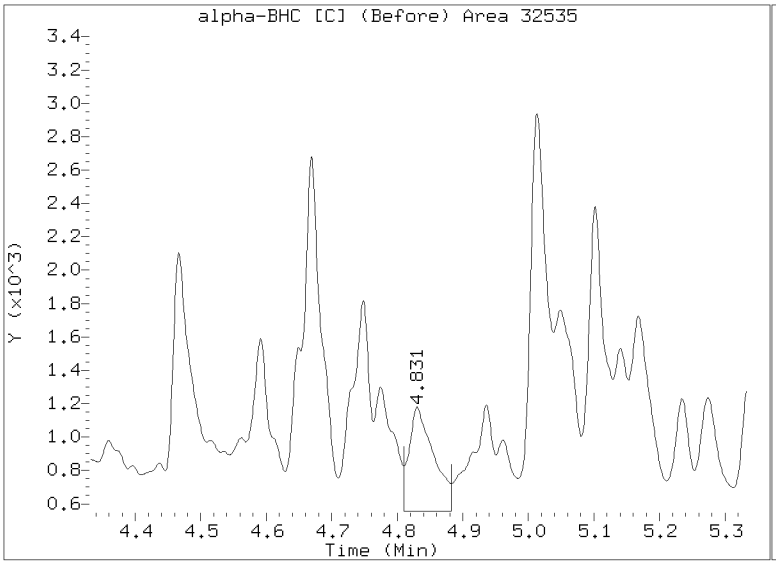
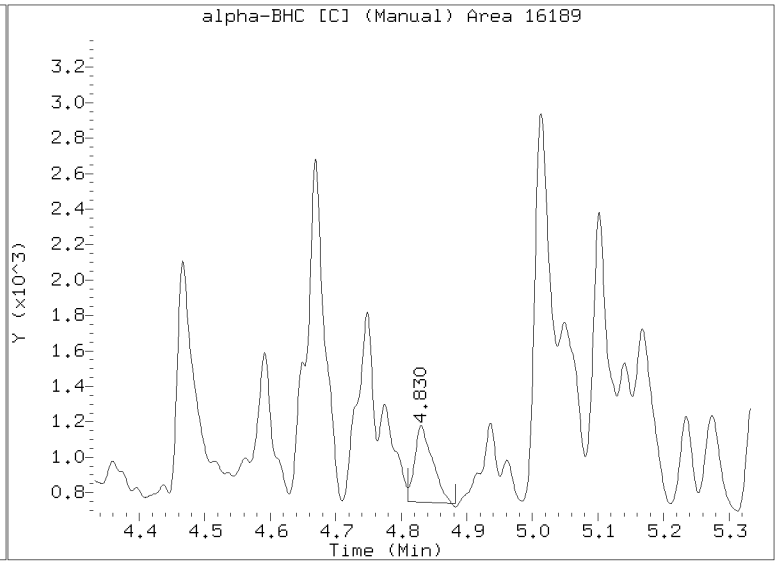
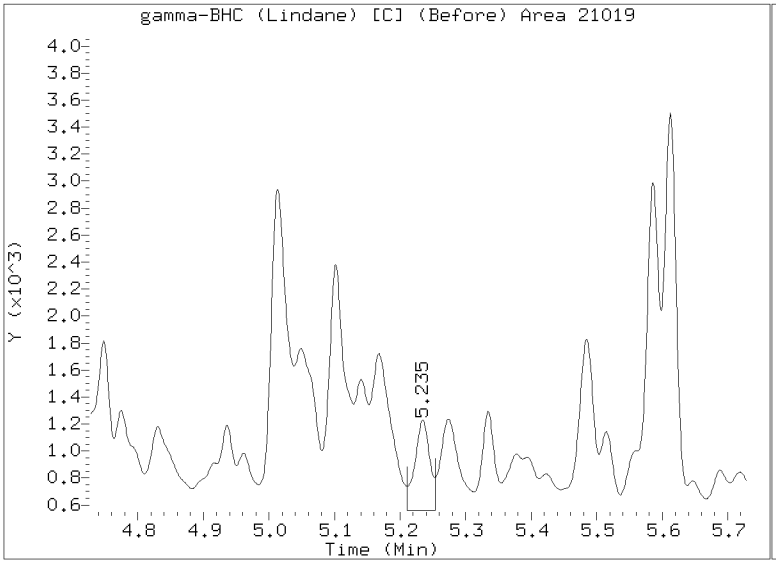
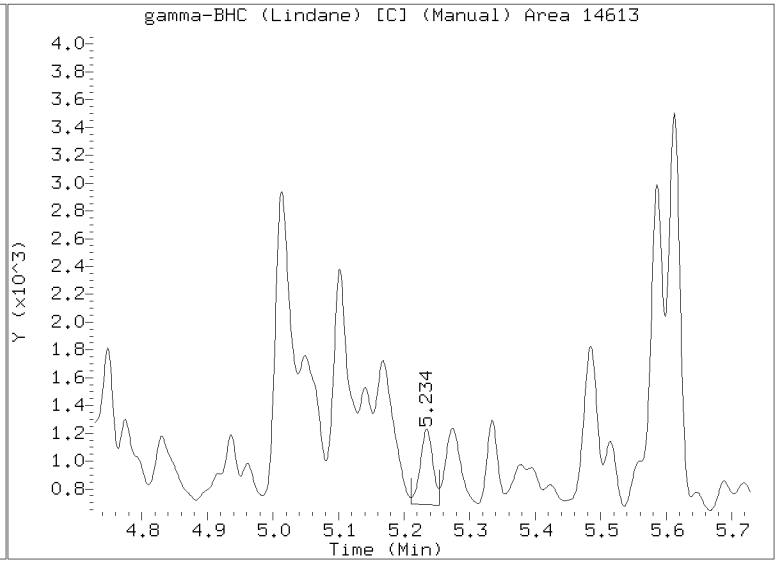
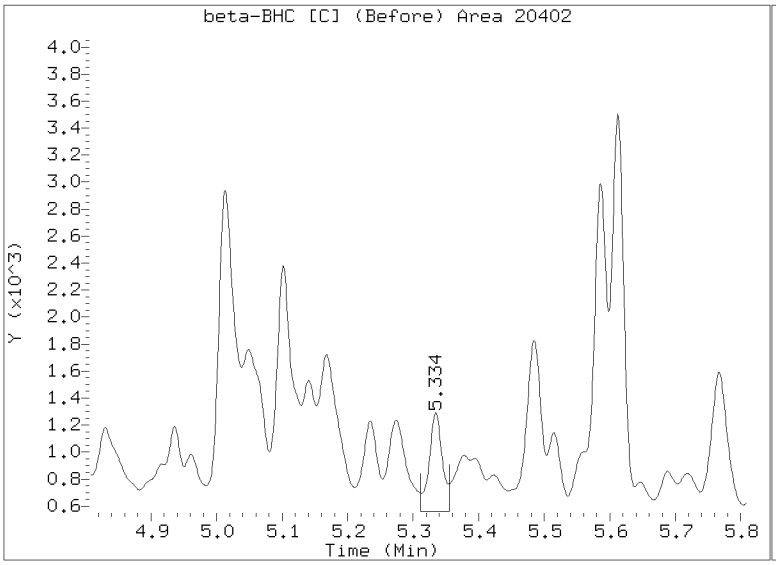
Lab ID:23A0171-04 Client ID:

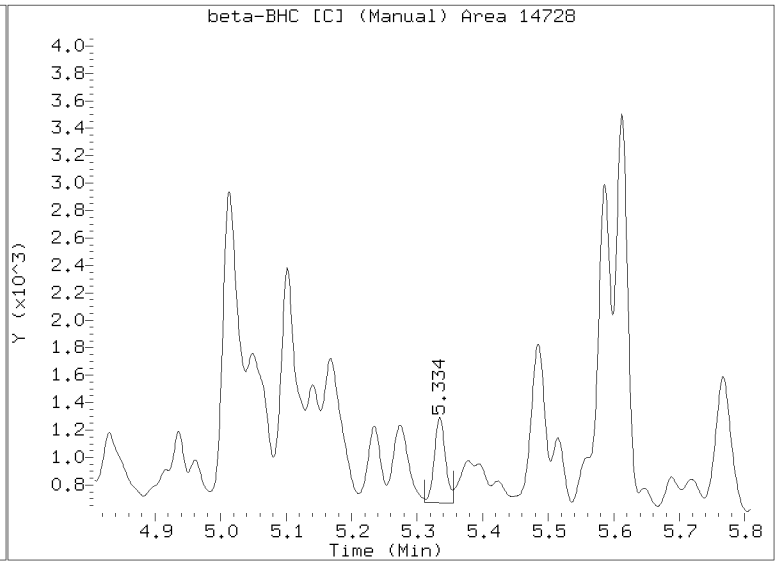












Manual Peak Adjustment Report, CLP-2

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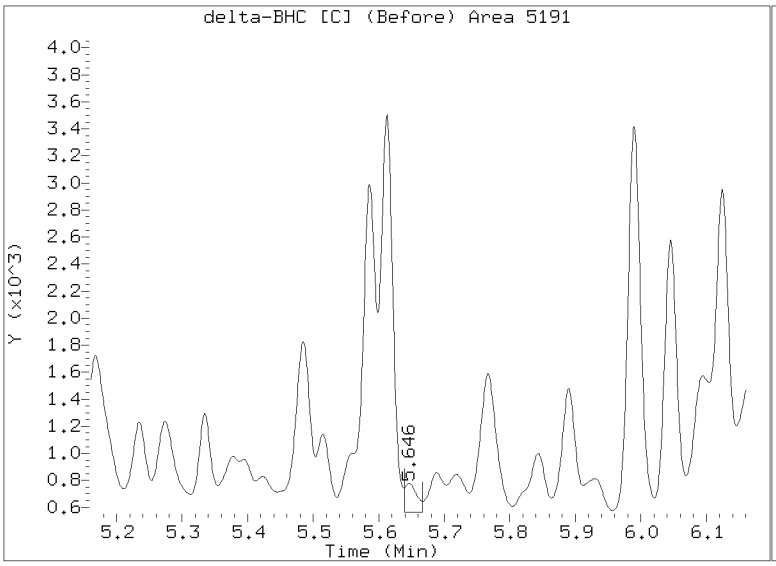
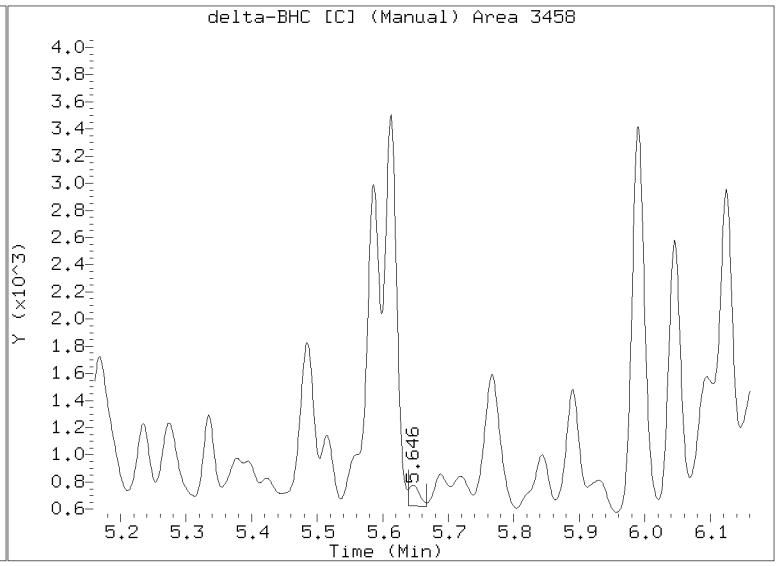
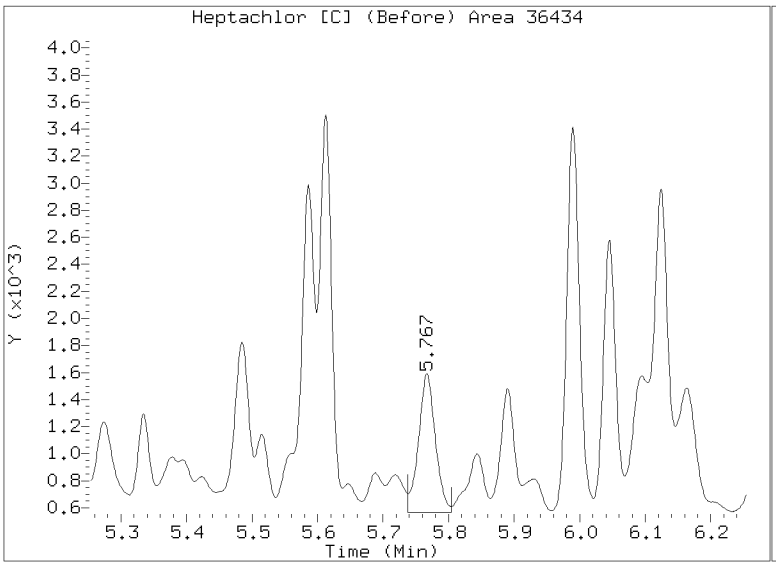
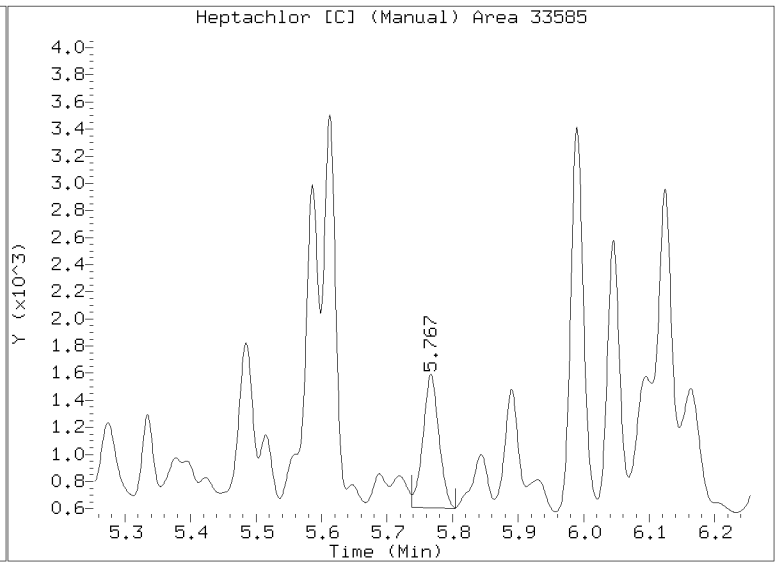
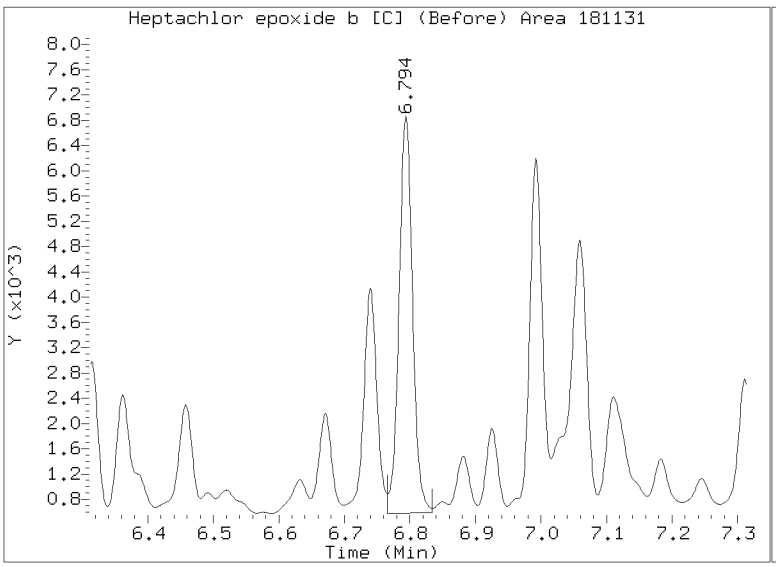
Lab ID:23A0171-04 Client ID:

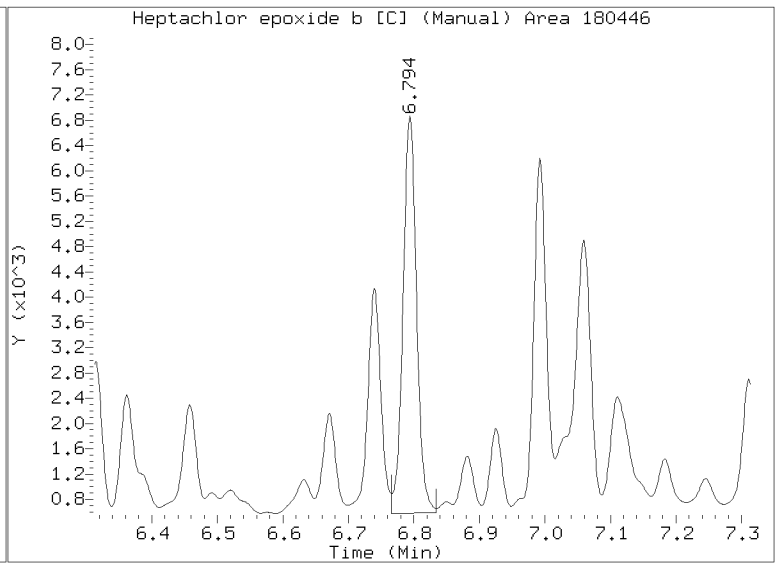






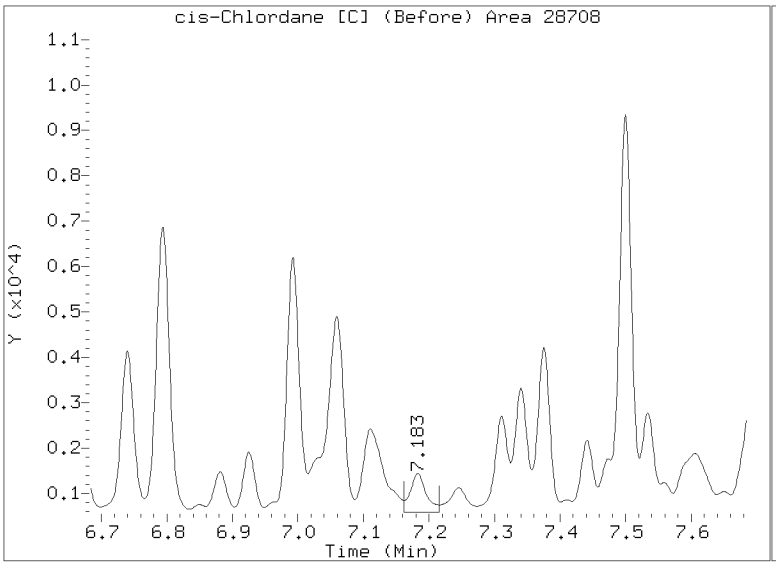


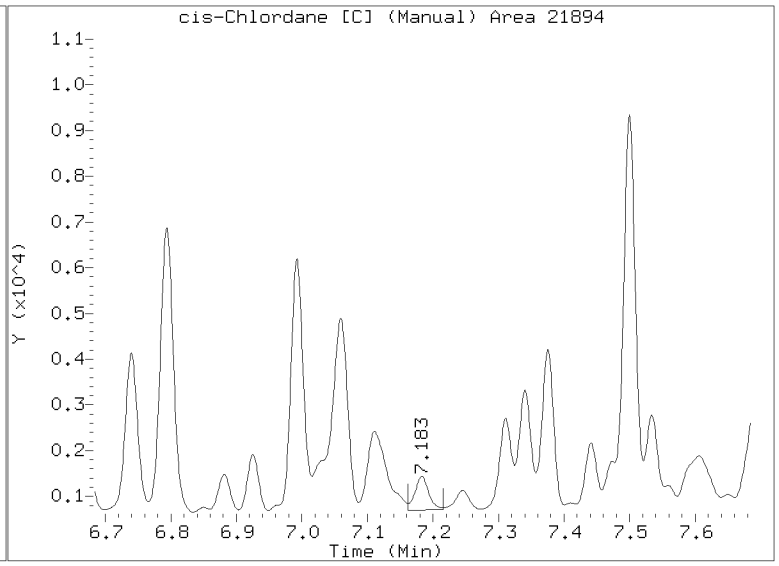


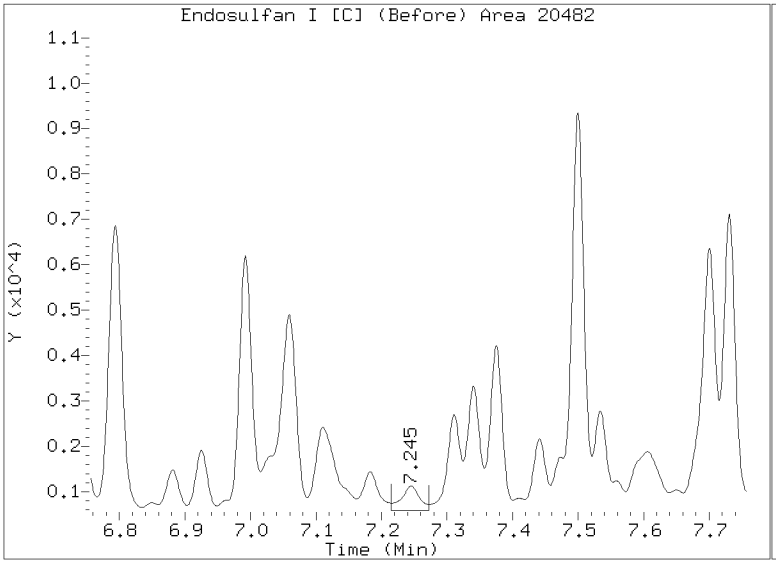


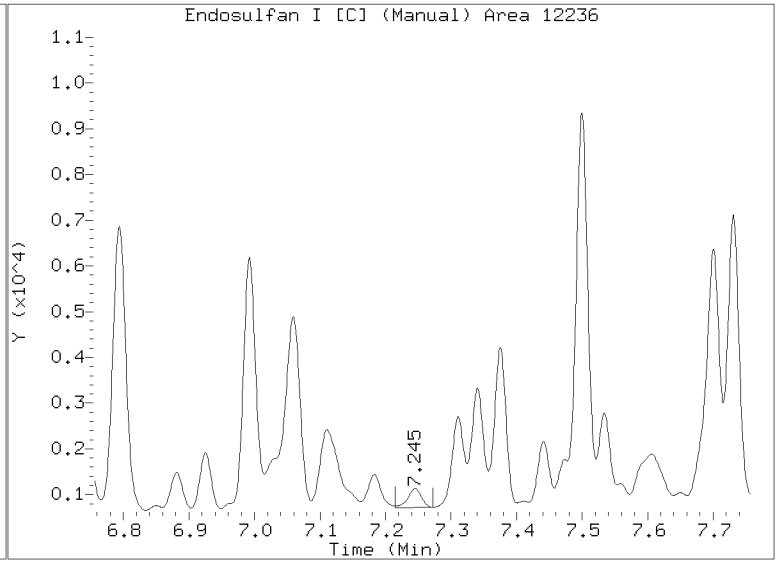
Manual Peak Adjustment Report, CLP-2

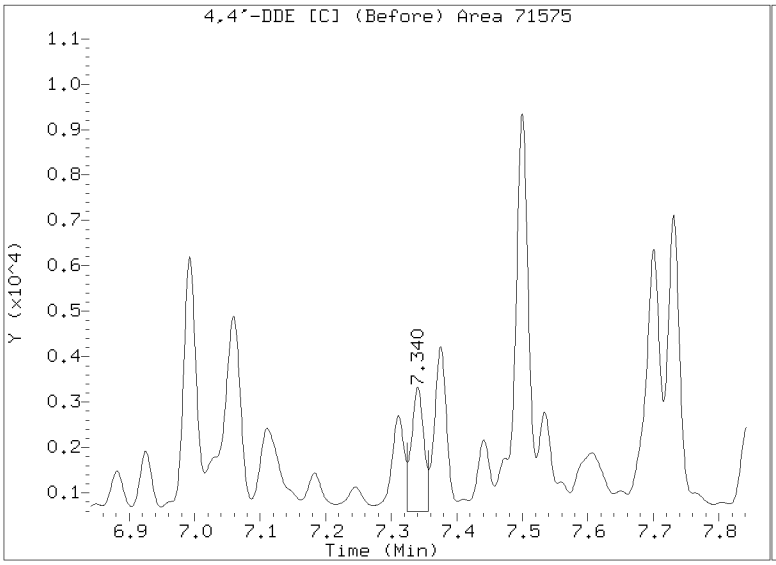
Datafile: /20230124.b/B20230124.b/23012434.D
Injection Date: 25-JAN-2023 02:05
Lab ID:23A0171-04 Client ID:

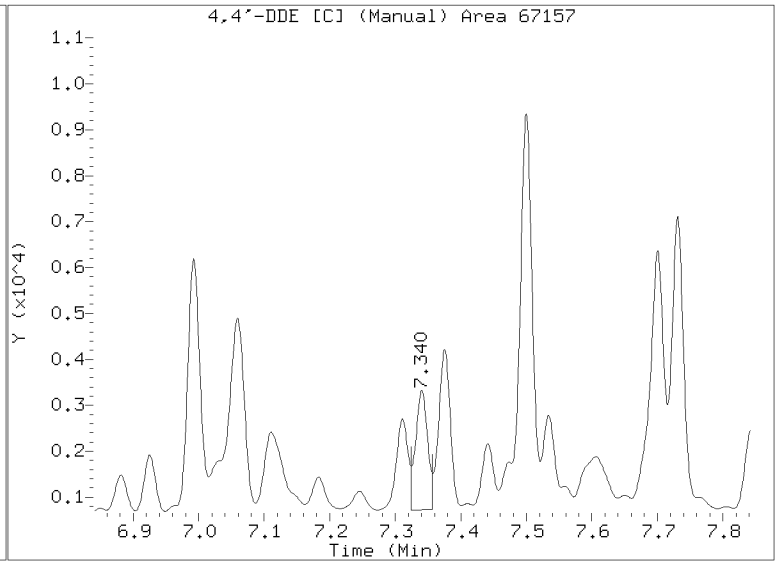












Manual Peak Adjustment Report, CLP-2

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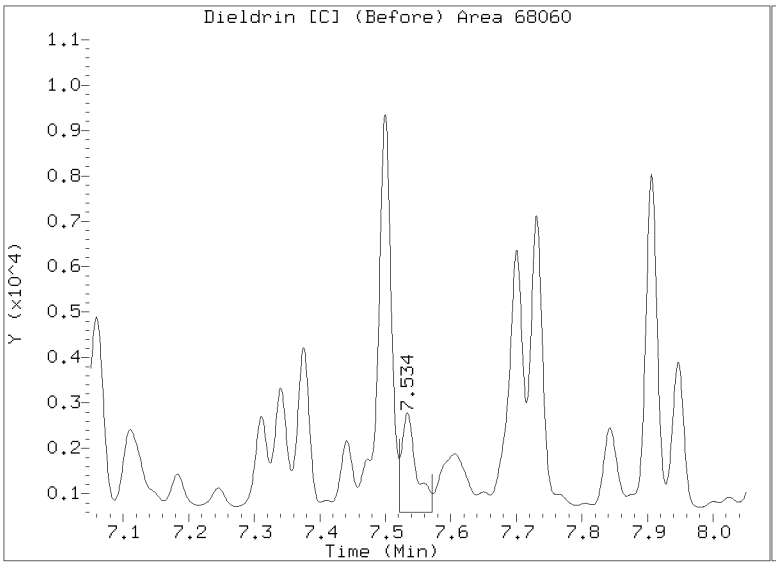
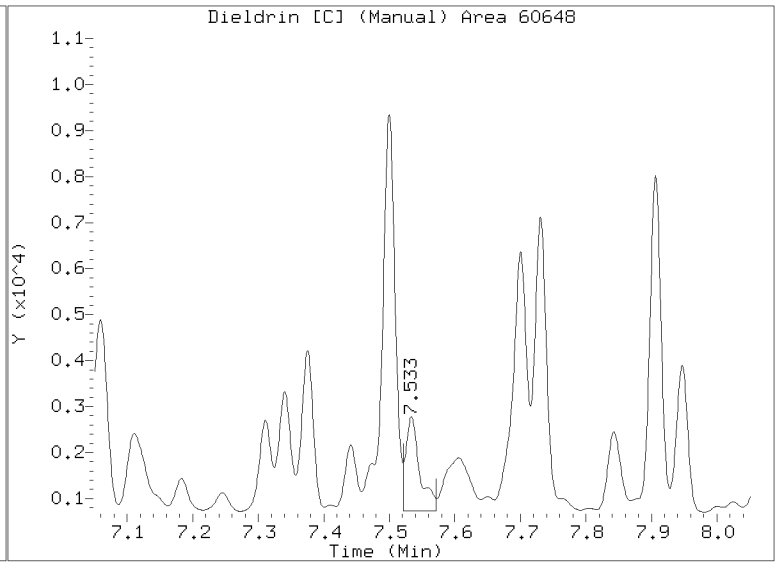
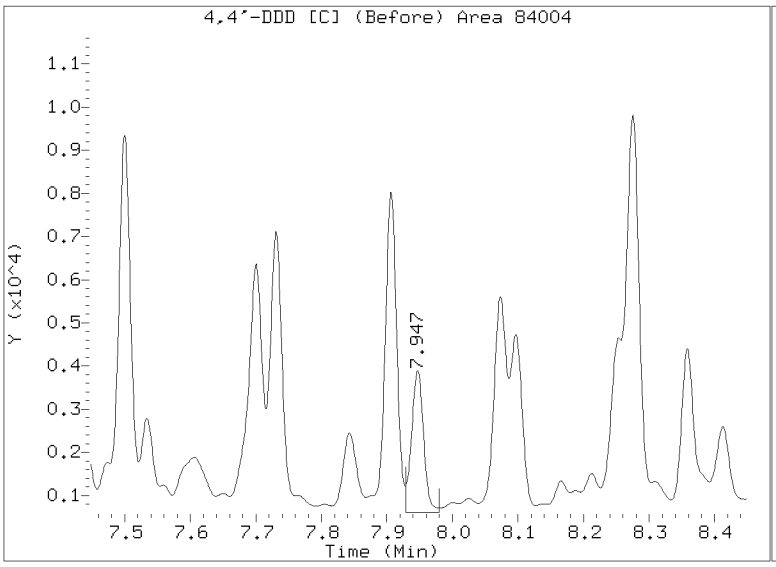
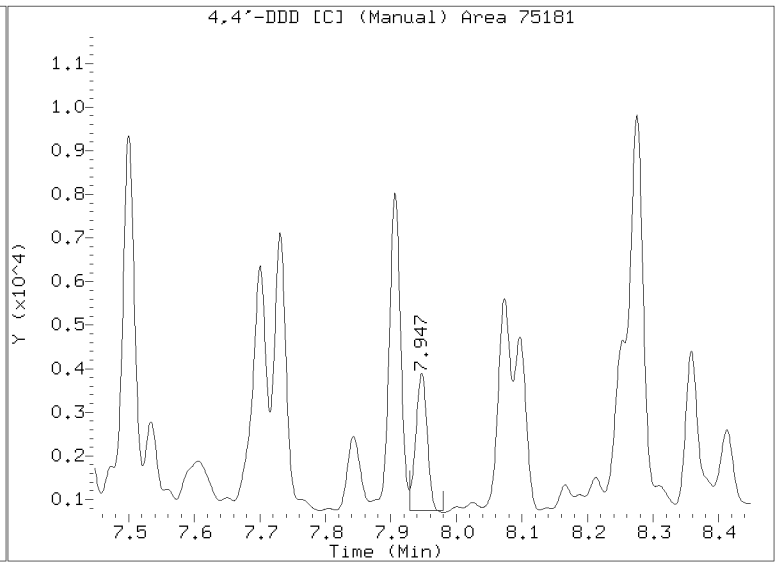
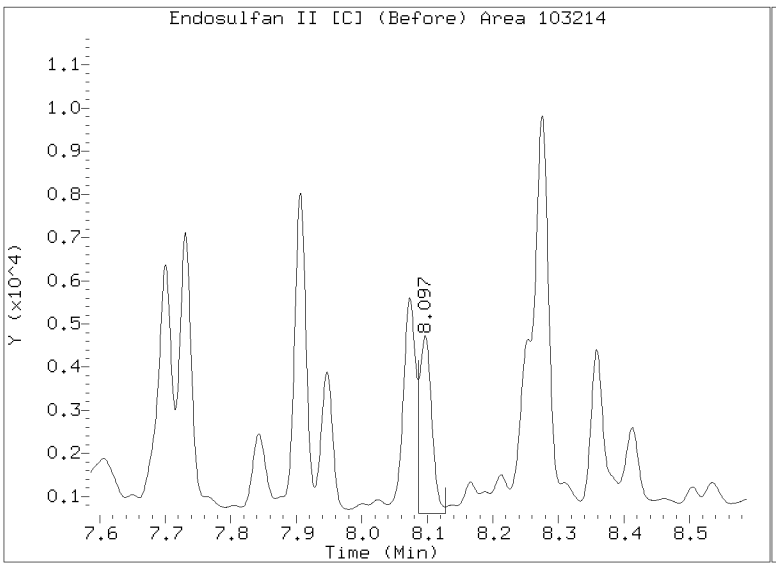
Injection Date: 25-JAN-2023 02:05
Lab ID:23A0171-04 Client ID:

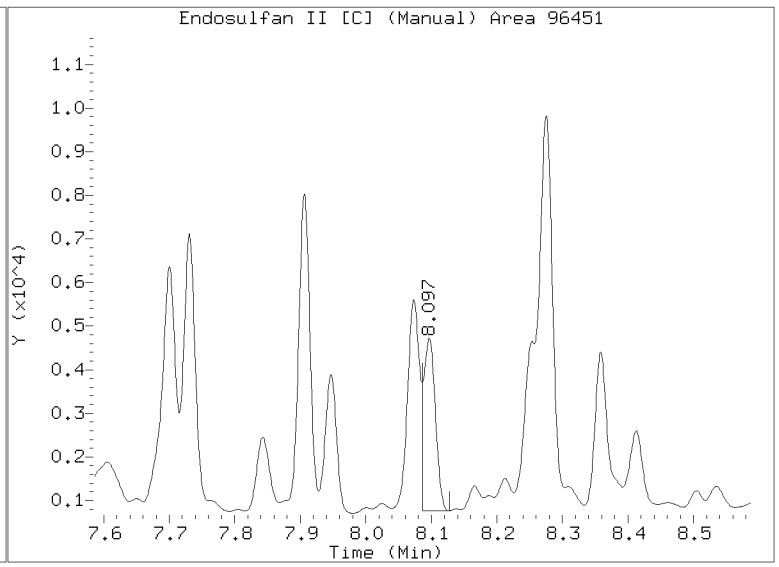






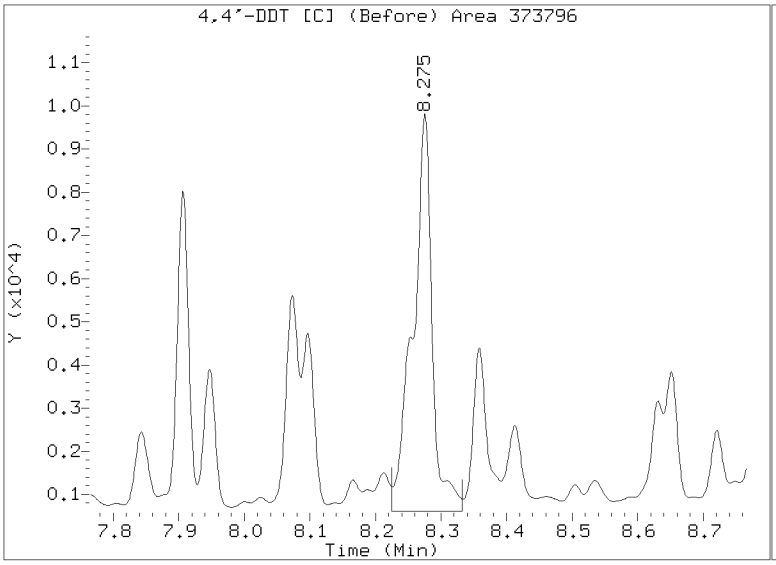


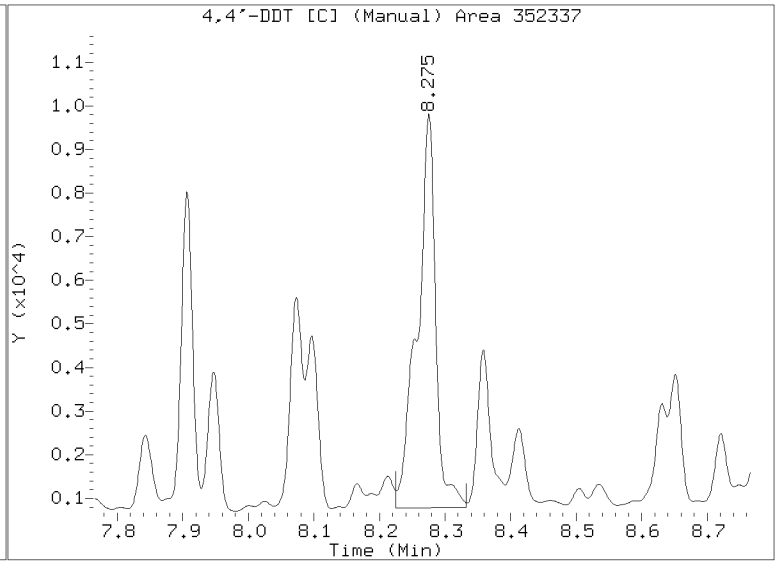


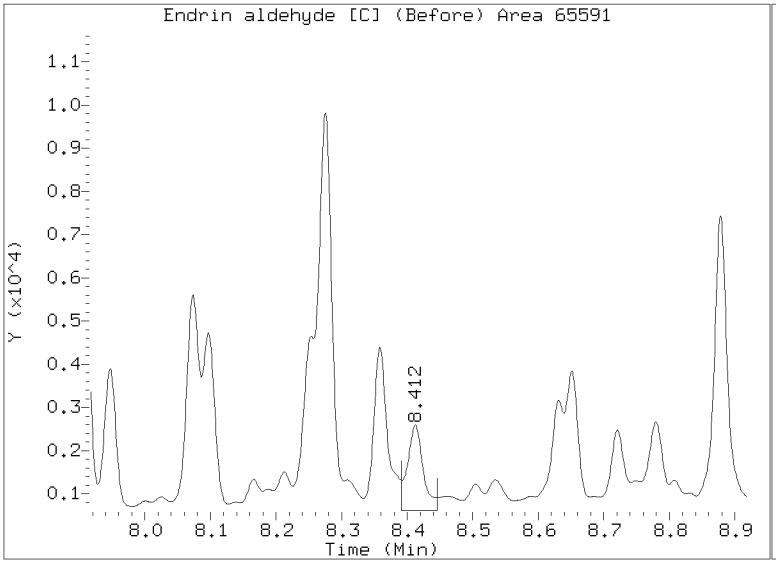


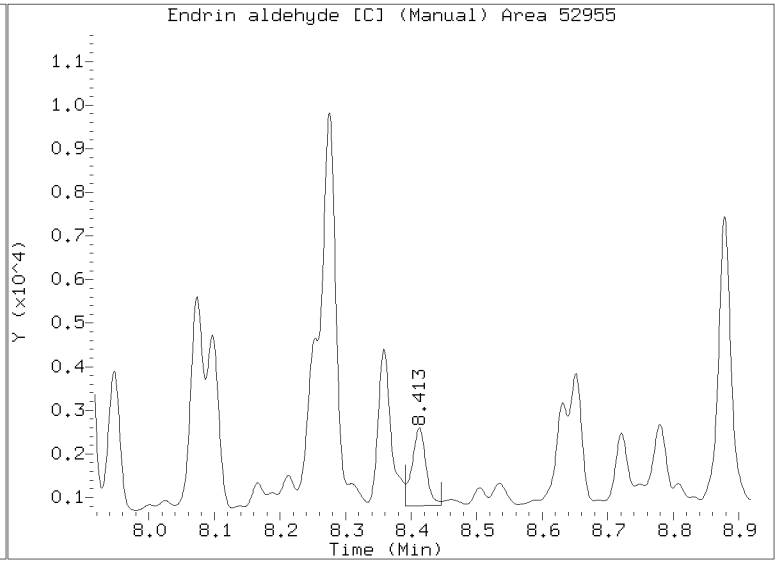
Manual Peak Adjustment Report, CLP-2

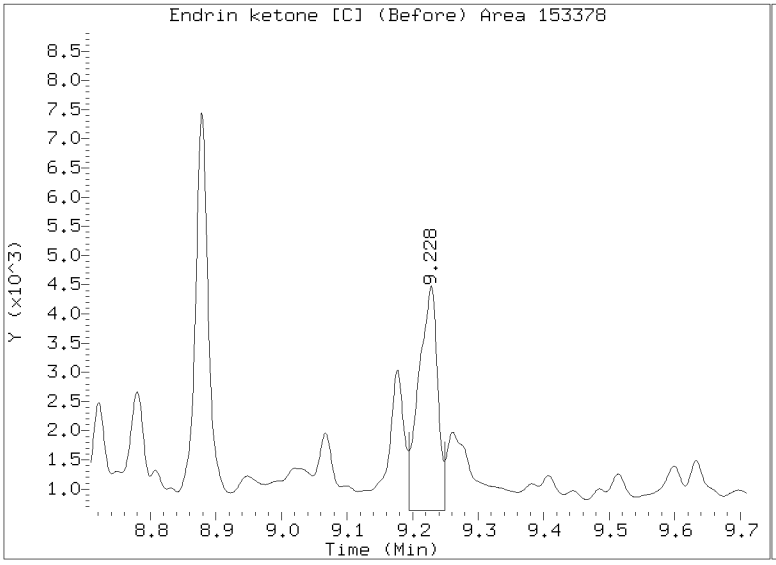
Datafile: /20230124.b/B20230124.b/23012434.D
Injection Date: 25-JAN-2023 02:05
Lab ID:23A0171-04 Client ID:

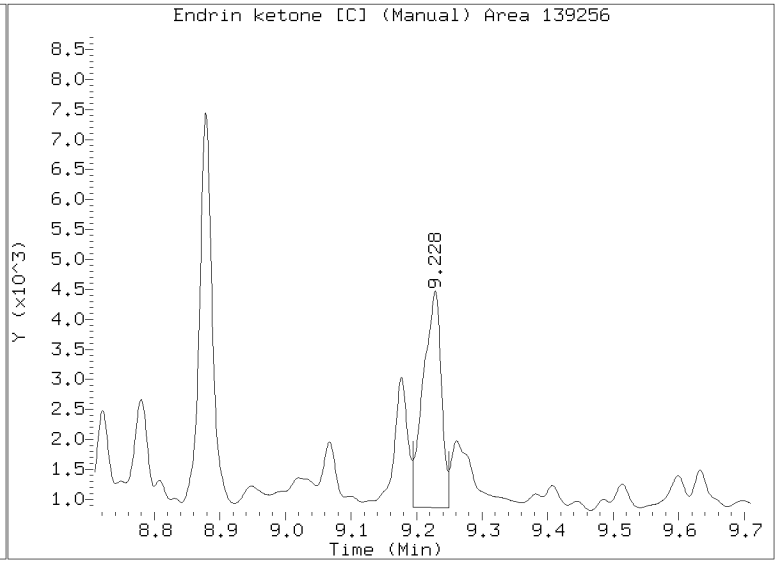






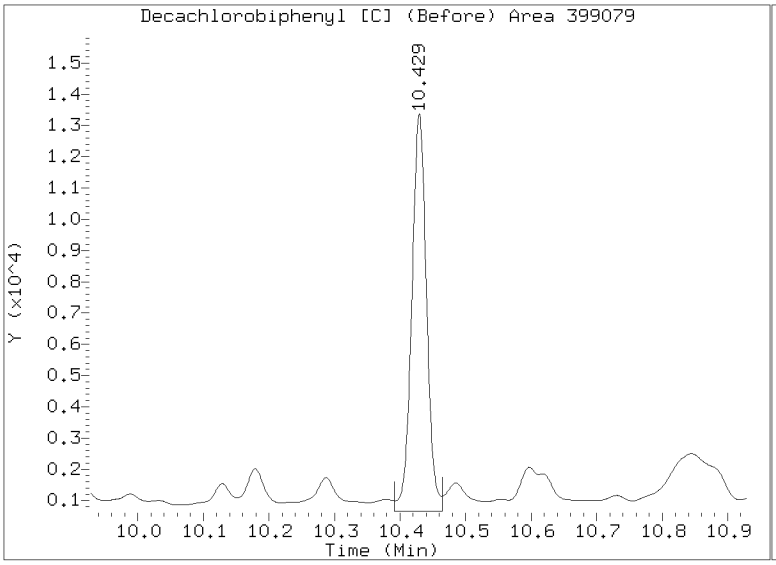


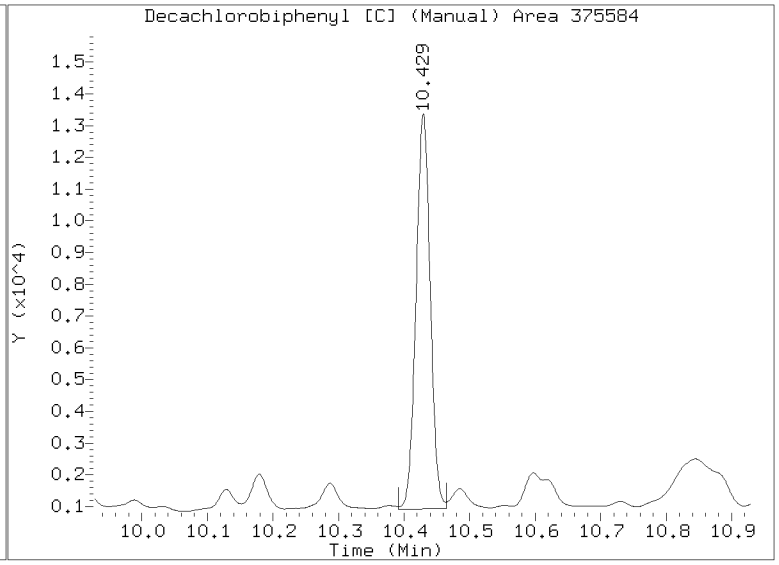


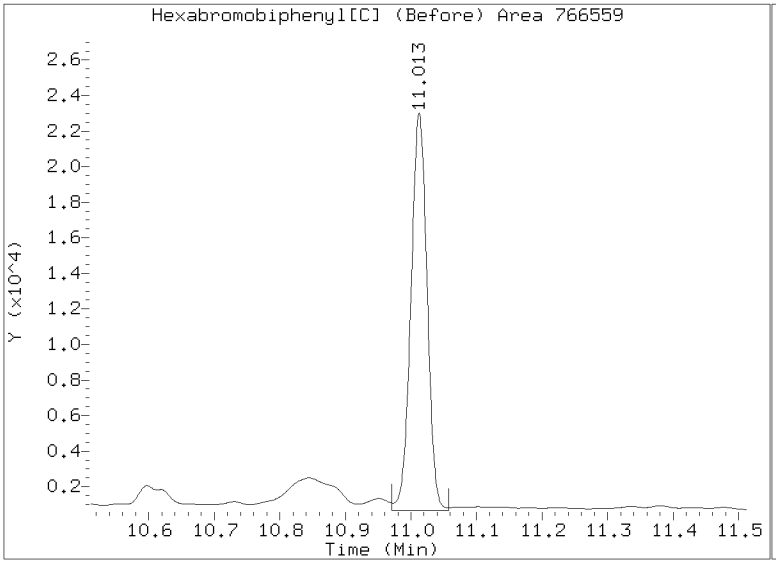


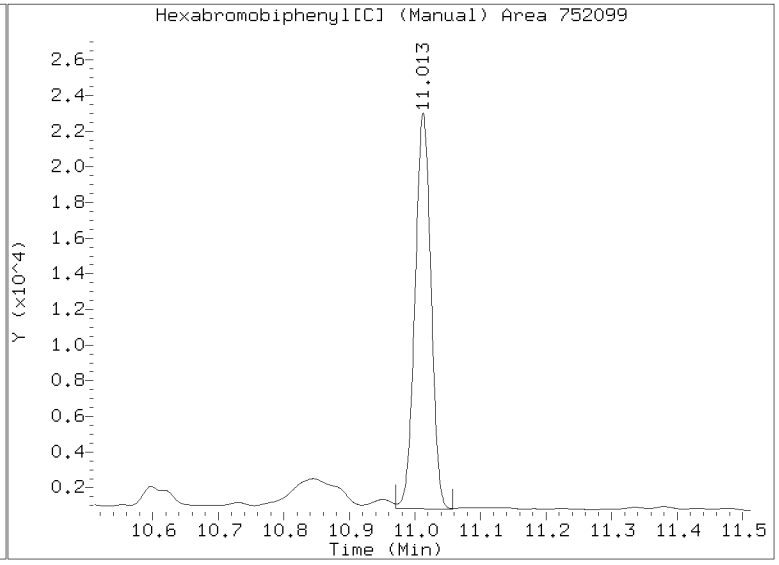
Manual Peak Adjustment Report, CLP-2

Datafile: /20230124.b/B20230124.b/23012434.D
Injection Date: 25-JAN-2023 02:05
Lab ID:23A0171-04 Client ID:









PREPARATION BATCH SUMMARY

EPA 8081B

Laboratory: Analytical Resources, LLC SDG: 23A0171

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

Batch: BLA0340 Batch Matrix: Solid Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1254	23A0171-01	23012431.D	01/17/23 13:07	
LDW23-SS1257	23A0171-02	23012432.D	01/17/23 13:07	
LDW23-SS1262	23A0171-03	23012433.D	01/17/23 13:07	
LDW23-SS1245	23A0171-04	23012434.D	01/17/23 13:07	
Blank	BLA0340-BLK1	23012423.D	01/17/23 13:07	
LCS	BLA0340-BS1	23012424.D	01/17/23 13:07	
LCS Dup	BLA0340-BSD1	23012425.D	01/17/23 13:07	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0340

Prepared using: EPA 3546 (Microwave)

8081B Pest (PSDDA) in Solid (Version:HCB Only)

Matrix: Solid **Date Prepared:** 1/17/23 **Balance ID:** B139298002 **Set Up By:** CRD 1/13/23

WO Comments

23A0100: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0171: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

The following standards may be missing from this batch!

Designator	Description
62	Toxaphene
44	WND
QLS 10	QLS Spike

Analysis: 8081B Pest (PSDDA)

Lab Number & Container	% Solids	Initial (g) Target Dry: 12.5 (Wet)	Actual	(REQ) GPC (1:1) 1 (2) 3	(Yes / No) Acid Clean 5mL	(REQ) Sulfur C/U 4.5mL+0.5 mL Ethyl Acetate	(REQ) Silica Gel C/U (2:5)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
23A0100-21 A	51.8	(24.14)	24.58	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0100-22 A	80.3	(15.56)	15.56	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0100-23 A	53.4	(23.41)	23.73	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0171-01 A	42.8	(29.19)	29.85	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0171-02 A	41.7	(29.96)	29.96	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0171-03 A	43.5	(28.71)	28.97	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0171-04 A	48.4	(25.81)	26.02	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	

Batch QC

Lab Number	% Solids	Initial (g) Target Dry: 12.5 (Wet)	Actual	(REQ) GPC (1:1) 1 (2) 3	(Yes / No) Acid Clean 5mL	(REQ) Sulfur C/U 4.5mL+0.5 mL Ethyl Acetate	(REQ) Silica Gel C/U (2:5)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
BLA0340-BLK1	100.0	(12.50)	12.50	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
BLA0340-BS1	100.0	(12.50)	12.50	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
BLA0340-BSD1	100.0	(12.50)	12.50	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
BLA0340-MS1	80.3	(15.56)	15.56	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	Use 23A0100-22
BLA0340-MSD1	80.3	(15.56)	15.56	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	Use 23A0100-22

CR 1/17/23 — Client ID verified By / Date

LJ 1/23/23 — Preparation Reviewed By / Date

01/17/23 13:47 — Extraction Date and Time

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0340

Prepared using: EPA 3546 (Microwave)

8081B Pest (PSDDA) in Solid (Version:HCB Only)

WO Comments

23A0100: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0171: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Steps	Reagents Used	
Microwave 1 (2) 3 CR 1/17/23 Analyst/Date	**Station/Reagent**	**Standard ID**
	Microwave **Analyst:** CR **Date:** 1/17/23	
	Hexane	K008316
	80:20 Hexane/Acetone	K010953
	1:1 Hexane/Acetone	L000044
	Neutral Glass Wool	K010562
	Anhydrous Sodium Sulfate	L000092
Pre GPC KD 100°C (No Exchange) (1) 3 (4) 5 6 TWC 1/18/23 Analyst/Date	**Pre GPC KD** **Analyst:** TWC **Date:** 1/18/23	
	Hexane	K008316
	Anhydrous Sodium Sulfate	N/A
	Neutral Glass Wool	N/A
TurboVap **Pre GPC** 0 1 2 3 (4) 5 LJ 1/18/23 Analyst/Date	**GPC Filter Prep** **Analyst:** LJ **Date:** 1/18/23	
	Methylene Chloride	K005942
Post GPC KD 80 - 85°C Hexane Exchange (2 X 20 mL) 100°C 0 1 (2) 3 (4) 5 6 LJ 1/19/23 Analyst/Date	**GPC** **Analyst:** TWC **Date:** 1/18/23	
	Methylene Chloride	K005942
	GPC Calibration File	CLK0135-GPC2
	Post GPC KD **Analyst:** LJ **Date:** 1/19/23	
TurboVap **Pre-Cleanups** 1 (2) 3 4 5 LJ 1/23/23 Analyst/Date	Methylene Chloride	K005942
	Hexane	K003310
	Vialing **Analyst:** LJ **Date:** 1/23/23	
TurboVap **Post-Cleanups** 1 2 (3) 4 5 LJ 1/23/23 Analyst/Date	Hexane	K003310
	Sulfuric Acid	K010364
	Ethyl Acetate	
	Tetrabutylammonium hydrogensulfate (TBAS)	K011865
Vialing	Sodium Sulfite	K010563
	Silica Gel (SPE) Darts	K~~[illegible]~~15773 LJ 1/23/23

Surrogates & Spike Standards Used

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surrogate 2µg/mL	N K011752 Exp Date: 1/23/23	50µL	CR	CT
Spike (Freezer) 0.5/1/5µg/mL	3 K011471 Exp Date: 6/10/23	100µL	CR	CT

MANUALLY ENTER EXPIRATION DATES!

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

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

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0340

Prepared using: EPA 3546 (Microwave)

8081B Pest (PSDDA) in Solid (Version:HCB Only)

WO Comments

23A0100: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

23A0171: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

LJ 1/23/23
Analyst/Date

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0340

Prepared using: EPA 3546 (Microwave)

8081B Pest (PSDDA) in Solid (Version:HCB Only)

WO Comments

23A0100: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0171: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Instructions	
SPECIAL INSTRUCTIONS: 1. Weigh into beakers-lightly dry with Sodium Sulfate. 2. Transfer to microwave vessels. 3. Add 1:1 Hex/ACE to the vessels (until solvent is 3" above soil layer after homogenization). 4. Add surr/spike. 5. Microwave on appropriate power setting determined by # of samples. 6. After microwave-re-homogenize while hot then let cool 15 min in cold water. Re-homogenize while cool. 7. Decant 1:1 Hex/ACE into Erlenmeyer flask using a funnel containing neutral glasswool. 8. Rinse with Hexane. 9. Microwave a 2nd time using 8:2 Hex/Ace (until solvent is 3" above soil layer after homogenization). 10. Let cool and decant the solvent then empty the soil into the funnel and rinse with Hexane. 11. KD to 5mL at 100°C. (NO HEXANE EXCHANGE). 12. TurboVap 13. GPC 14. After GPC: KD at 80 - 85°C 15. Exchange to Hexane at 100°C 2 x 20 mL). 16. TurboVap. 17. Cleanups, If Acid cleaning do not add Ethyl Acetate for Sulfur Clean. Do Not Acid Clean if Acid liable compounds are requested. 18. Vial in Hexane. A. Need Total Solids Y (N) B. Archive/Freeze (Y) N	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: PEST Extraction Batch: OLA0340

Total Solids Batch: BLA0260 Work Order(s): 23A0100 21-23

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
[X] No Anomalies (standard soil/wet sediment/sand/gravel)= 21-23	CR 1/12/23
[X] Standing Water Decanted (Not shared)= 21-23	CR 1/12/23
[ ] Standing Water Homogenized (Shared samples)=	
[ ] Clay/Clumps (Difficult to homogenize)=	
[ ] Rocks (%+size)?	
[ ] Organics (Leaves/sticks/grass)=	
[ ] Oily, obvious fuel/sulfur odors=	
[ ] Received in 32oz jar(s)=Homogenized in Pyrex dish=	
[X] Previously Frozen = 21-23	CR 1/12/23
[ ] Other (Details)=	
Aqueous:	
[ ] No Anomalies	
[ ] Turbid/Color=	
[ ] Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
[ ] Emulsions (%)=	
[ ] Oily, obvious fuel/sulfur odors=	
[ ] Other (Details)=	
[ ] Received in 1.0L Bottle(s)=No Bottle Rinse=	
[ ] Other Notes/Comments= (Note problems, concerns, corrective actions).	
[X] Share Samples Y / (N)	CR 1/12/23
[X] Multiple Jars Y / (N)	CR 1/12/23
[ ] Sample Pre-Screens indicate analyte activity=	
[ ] Sample weights/volumes reduced based on Pre-Screen=	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: PEST Extraction Batch BLA0340

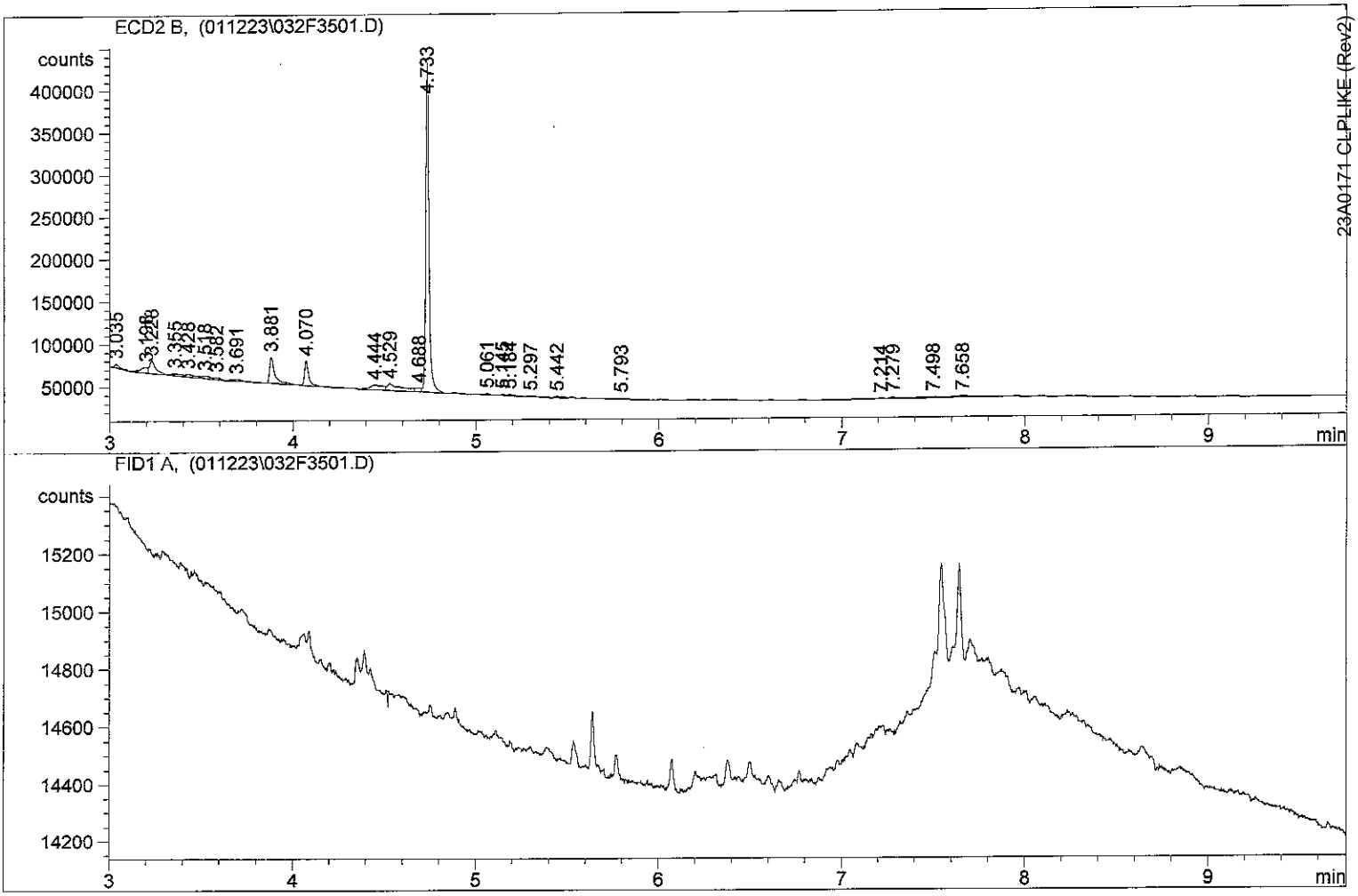
Total Solids Batch: BLA0262 Work Order(s): 23A0171 01-04

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☐ No Anomalies (standard soil/wet sediment/sand/gravel)=	
☒ Standing Water Decanted (Not shared)= 01-04	CR 1/12/23
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☒ (Oily), obvious fuel/sulfur odors= 01-04	CR 1/12/23
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☒ Previously Frozen = 01-04	CR 1/12/23
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples (Y) / N	CR 1/12/23
☒ Multiple Jars Y / (N)	CR 1/12/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

Injection Date : 1/13/2023 1:02:21 AM
Sample Name : 23A0171 01
Acq. Operator : CRR

Seq. Line : 35
Location : Vial 32
Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\011223.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



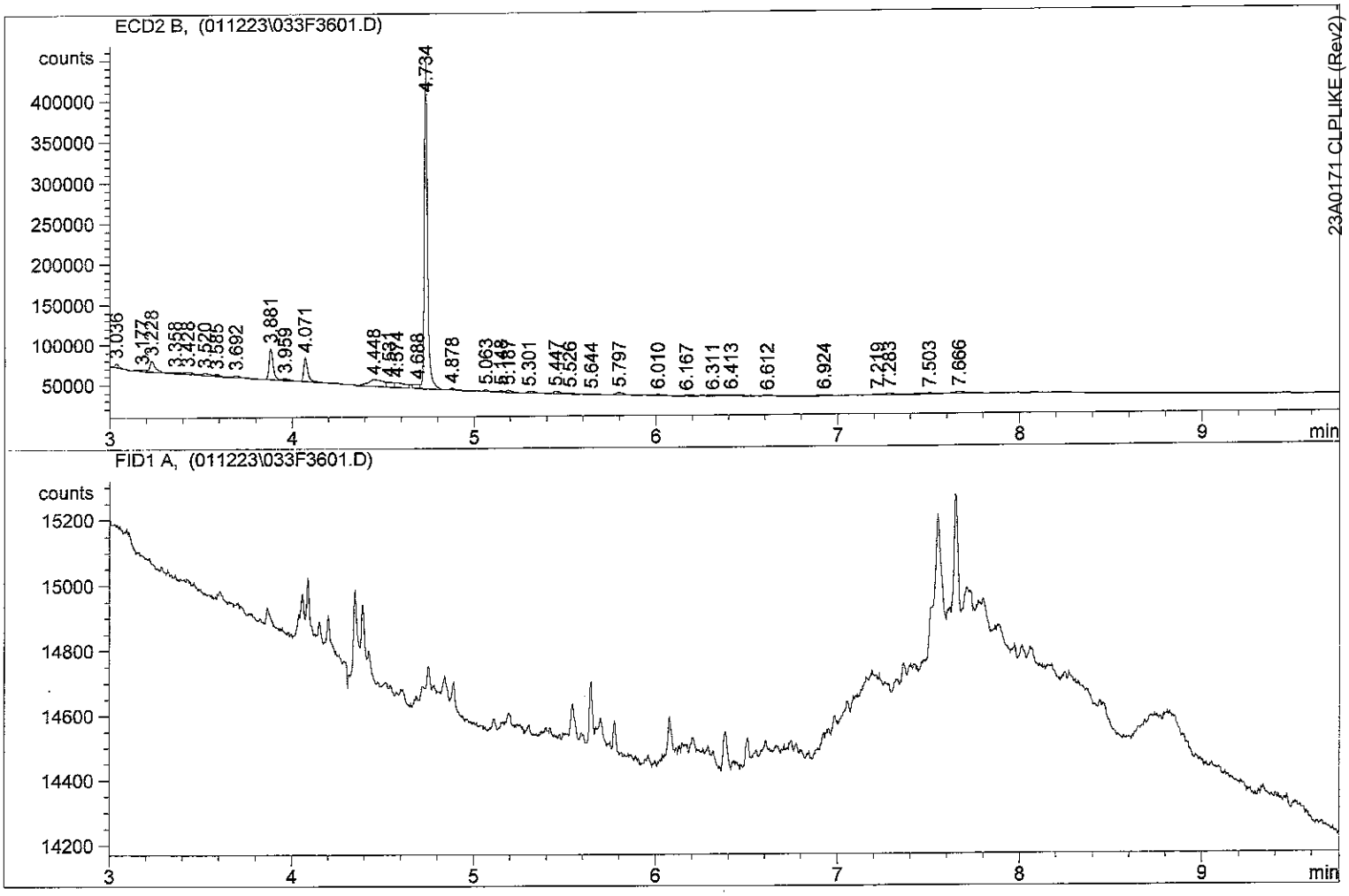
*** End of Report ***

Data File C:\HPCHEM\1\DATA\011223\033F3601.D

Sample Name: 23A0171 02

Injection Date	: 1/13/2023 1:16:51 AM	Seq. Line	: 36
Sample Name	: 23A0171 02	Location	: Vial 33
Acq. Operator	: CRR	Inj	: 1
		Inj Volume	: 1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\011223.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		

SCREEN METHOD

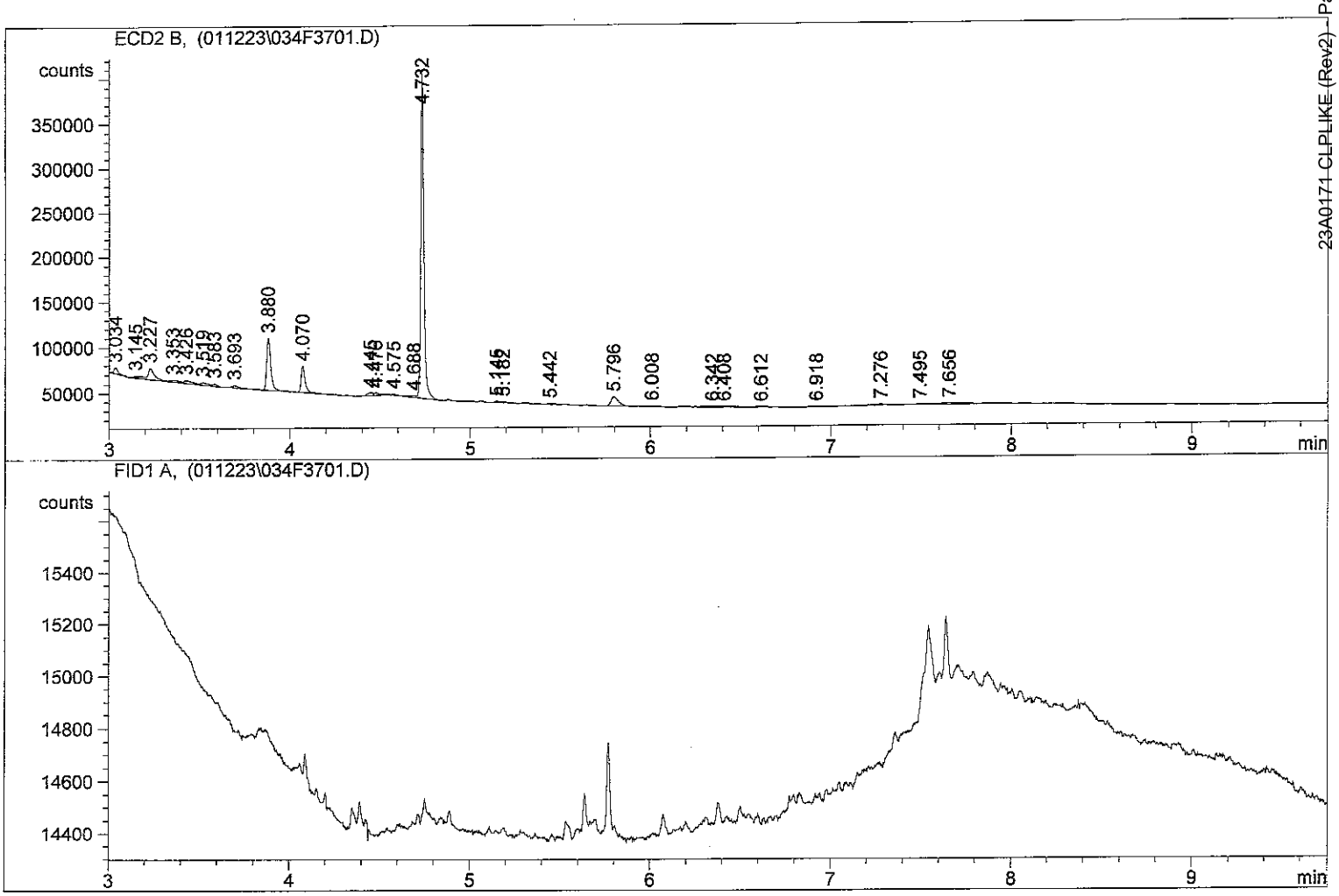


*** End of Report ***

Injection Date : 1/13/2023 1:30:45 AM
Sample Name : 23A0171 03
Acq. Operator : CRR

Seq. Line : 37
Location : Vial 34
Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\011223.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD

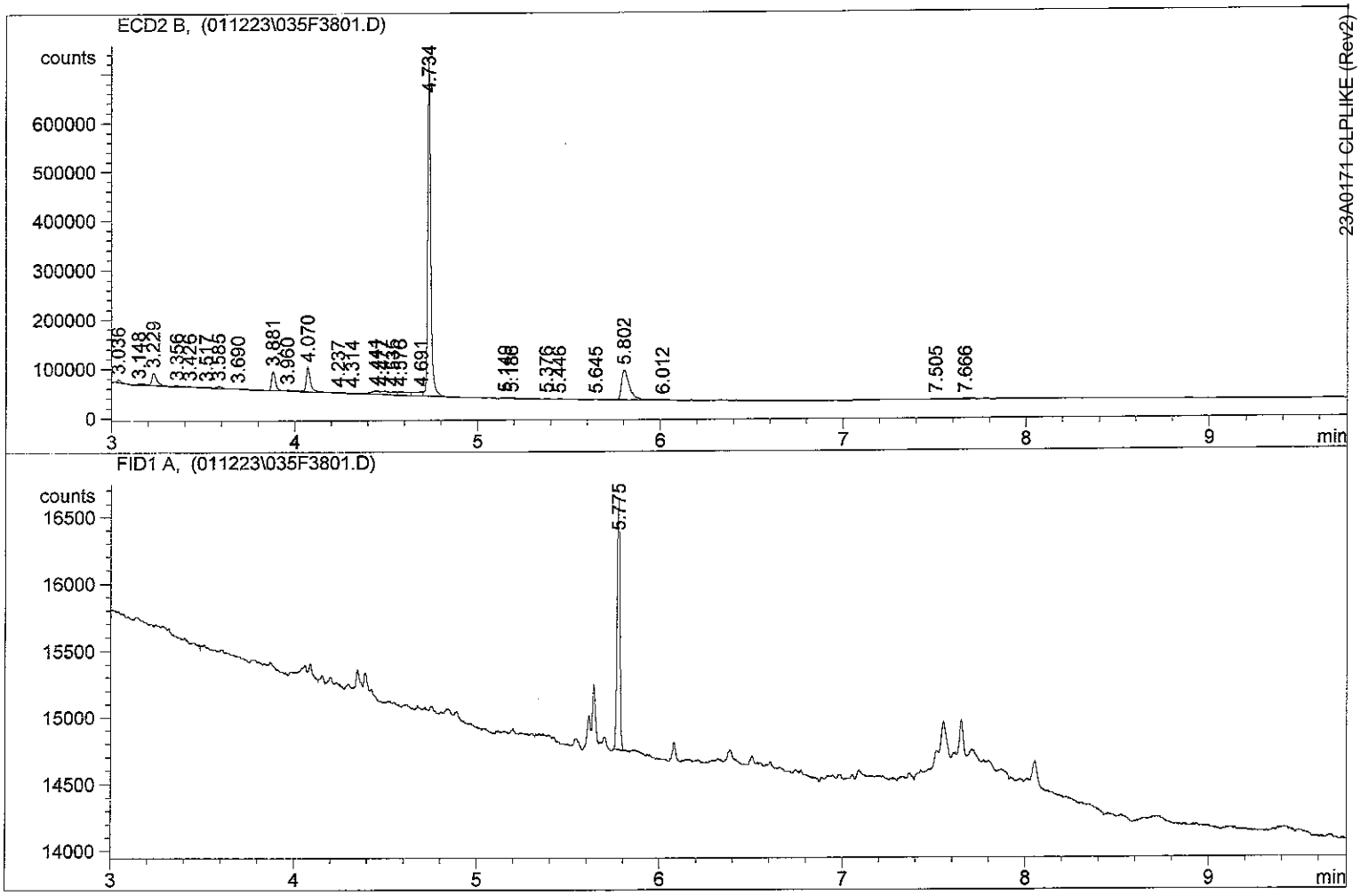


*** End of Report ***

Injection Date : 1/13/2023 1:45:17 AM
Sample Name : 23A0171 04
Acq. Operator : CRR

Seq. Line : 38
Location : Vial 35
Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\011223.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD

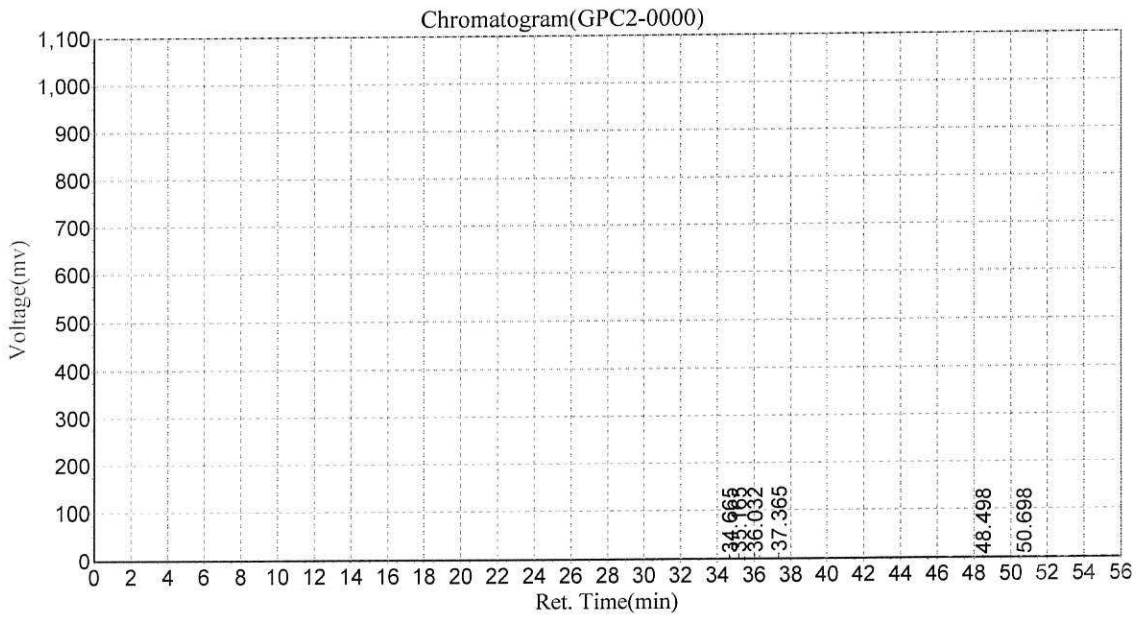


*** End of Report ***

BLA0340 23A0100/171 PEST

Date:2023-01-18,8:43:03 PM
Data File:c:\n2000\data\gpc2\011823\GPC2-0000
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-18,8:43:03 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		34.665	5419.322	237882.328	13.7900
2		35.165	6294.648	274578.625	15.9173
3		36.032	6219.548	292385.406	16.9496
4		37.365	6929.085	665541.500	38.5814
5		48.498	1593.000	113200.047	6.5622
6		50.698	1821.000	141442.156	8.1994
Total			28276.604	1725030.063	100.000

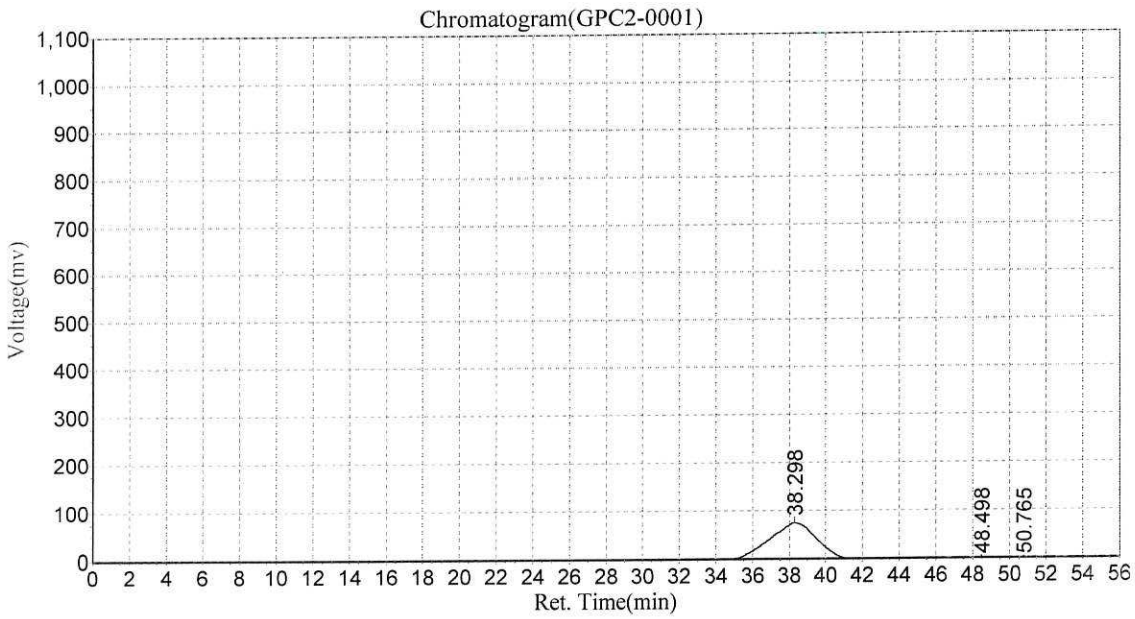
Ingredient Table

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

BLA0340 23A0100/171 PEST

Date:2023-01-18,9:40:48 PM
Data File:c:\n2000\data\gpc2\011823\GPC2-0001
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-18,9:40:48 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		38.298	83985.047	16870856.000	97.8571
2		48.498	2076.769	216494.906	1.2557
3		50.765	1852.500	152943.859	0.8871
Total			87914.316	17240294.766	100.000

Ingredient Table

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

BLA0340 23A0100/171 PEST

Date:2023-01-18,10:38:30 PM
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Method File:E:\GPC2_InHouse.mtd

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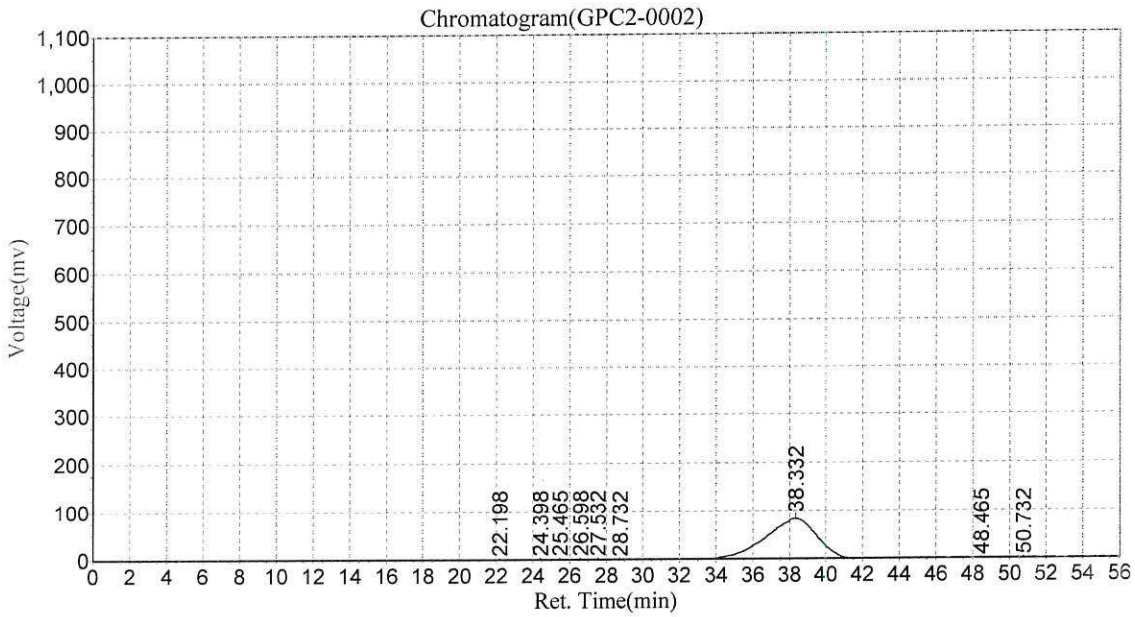

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		22.198	2226.152	123140.313	0.5519
2		24.398	2361.445	101978.242	0.4571
3		25.465	3292.769	179839.797	0.8060
4		26.598	3231.738	169442.688	0.7594
5		27.532	2818.771	143039.516	0.6411
6		28.732	2877.386	146929.406	0.6585
7		38.332	92378.242	21101942.000	94.5765
8		48.465	1730.500	202926.906	0.9095
9		50.732	1780.000	142790.297	0.6400
Total			112697.002	22312029.164	100.000

Ingredient Table

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

-21

BLA0340 23A0100/171 PEST

Date:2023-01-18,11:36:13 PM
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Method File:E:\GPC2_InHouse.mtd

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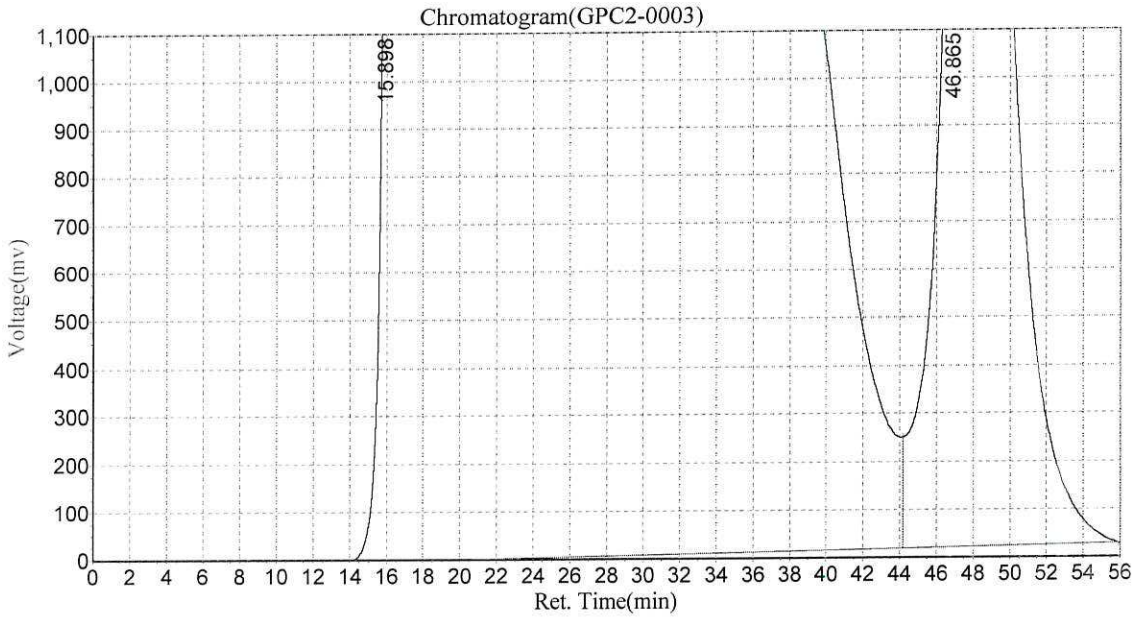
Date/Time2023-01-18,11:36:13 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		15.898	1383565.125	2124448896.000	82.4906
2		46.865	1356074.500	450934848.000	17.5094
Total			2739639.625	2575383744.000	100.000

Ingredient Table

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

BLA0340 23A0100/171 PEST

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Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
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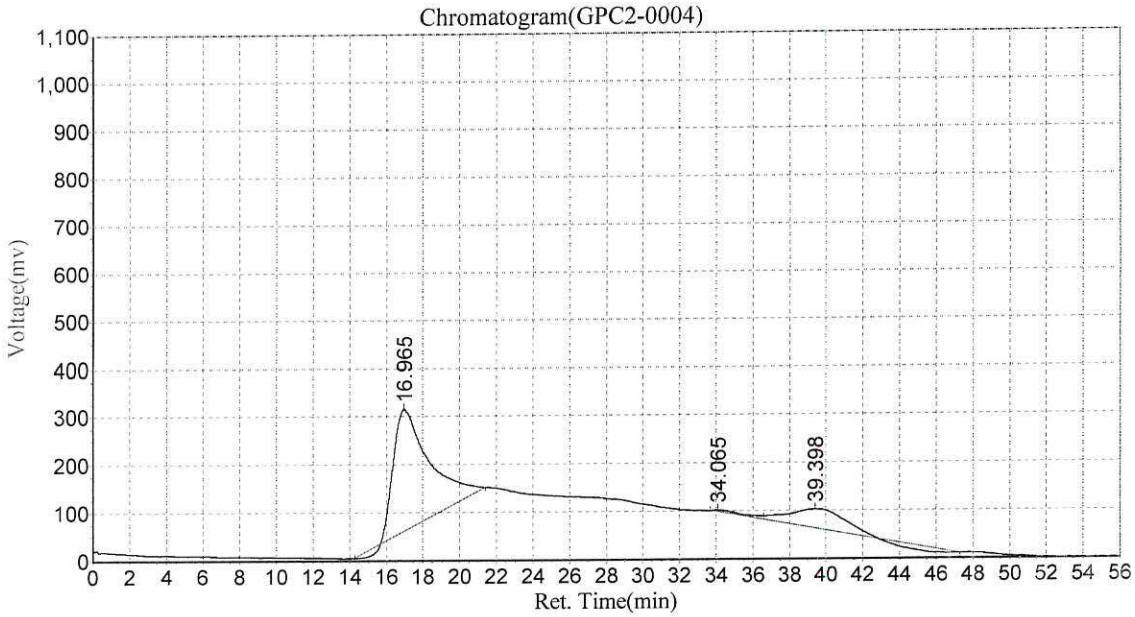


Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.965	254685.016	34162124.000	80.6935
2		34.065	4063.059	798320.250	1.8857
3		39.398	40750.508	7375206.500	17.4208
Total			299498.582	42335650.750	100.000

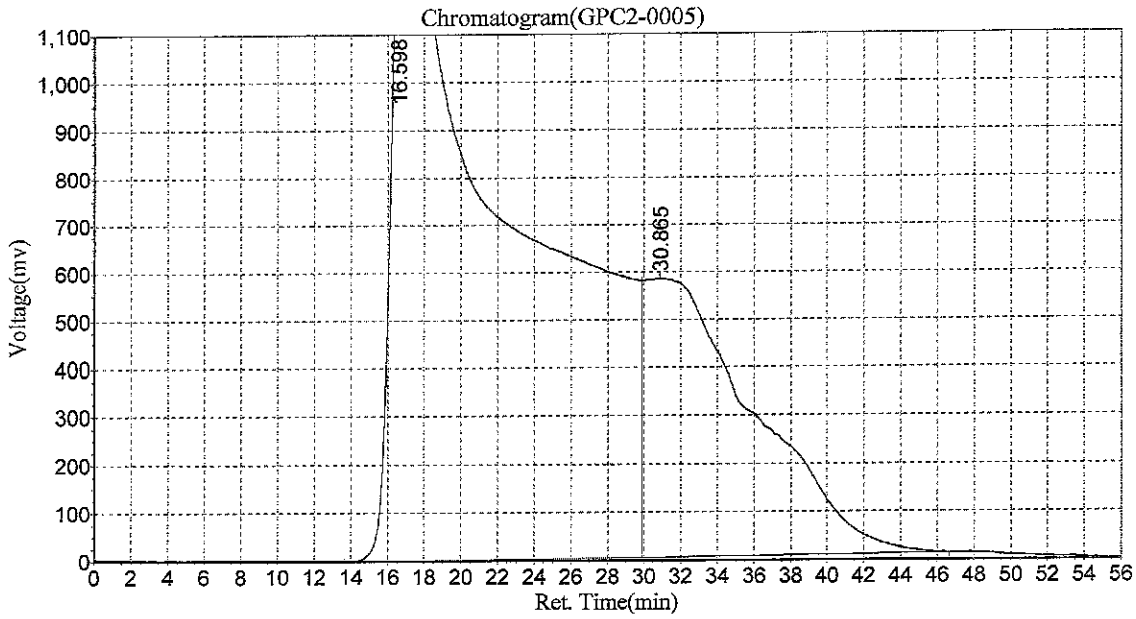
Ingredient Table

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

BLA0340 23A0100/171 PEST

Date:2023-01-19,1:31:38 AM
Data File:c:\n2000\data\gpc2\011823\GPC2-0005
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-19,1:31:39 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.598	1379429.250	674875008.000	73.8121
2		30.865	579212.750	239440336.000	26.1879
Total			1958642.000	914315344.000	100.000

Ingredient Table

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

BLA0340 23A0100/171 PEST

Date:2023-01-19,2:29:25 AM
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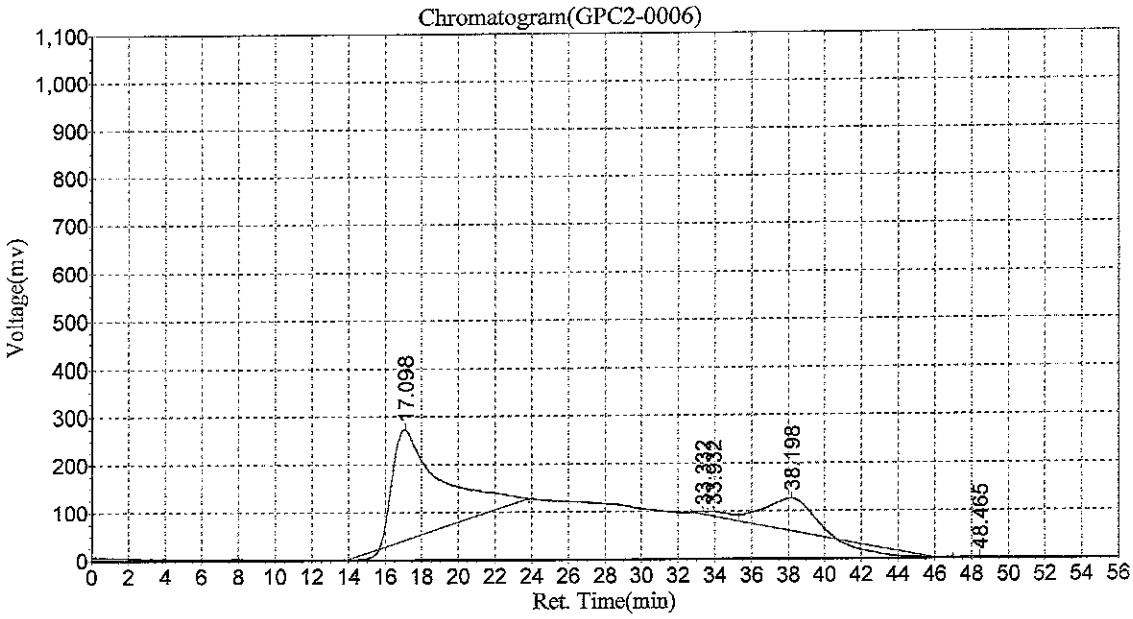
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-19,2:29:25 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.098	232819.313	42261636.000	76.3967
2		33.332	8893.393	373768.250	0.6757
3		33.932	13419.113	1444624.125	2.6115
4		38.198	71409.680	10823009.000	19.5648
5		48.465	3364.267	415662.219	0.7514
Total			329905.765	55318699.594	100.000

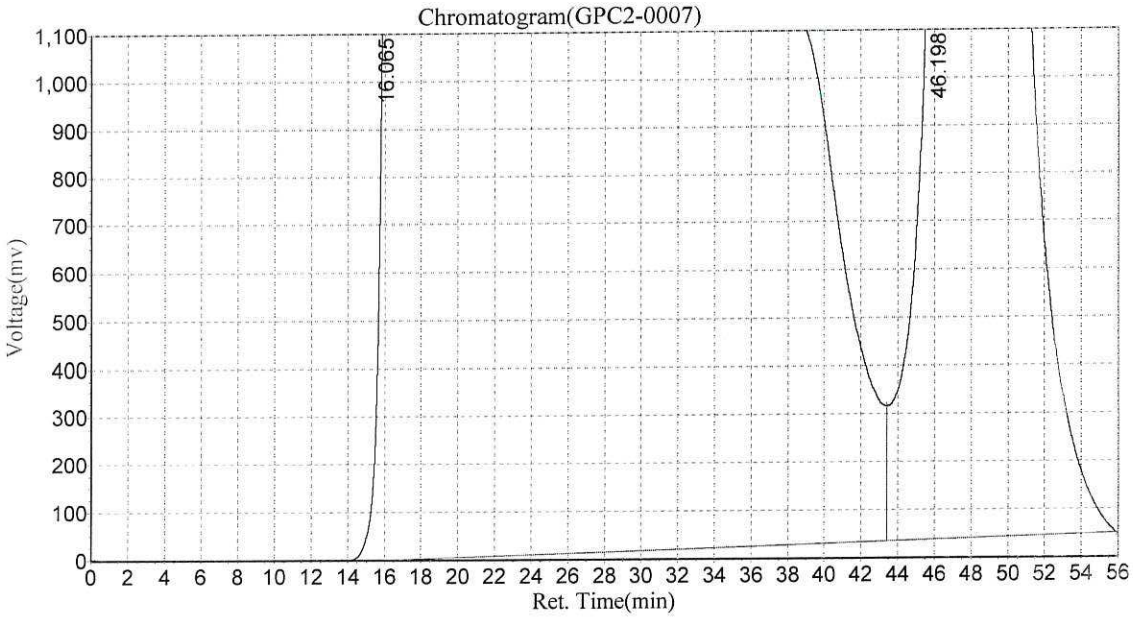
Ingredient Table

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

BLA0340 23A0100/171 PEST

Date:2023-01-19,3:27:08 AM
Data File:c:\n2000\data\gpc2\011823\GPC2-0007
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-19,3:27:08 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.065	1379180.500	2053024640.000	77.4061
2		46.198	1339357.375	599252800.000	22.5939
Total			2718537.875	2652277440.000	100.000

Ingredient Table

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

-01

BLA0340 23A0100/171 PEST

Date:2023-01-19,4:24:49 AM
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Method File:E:\GPC2_InHouse.mtd

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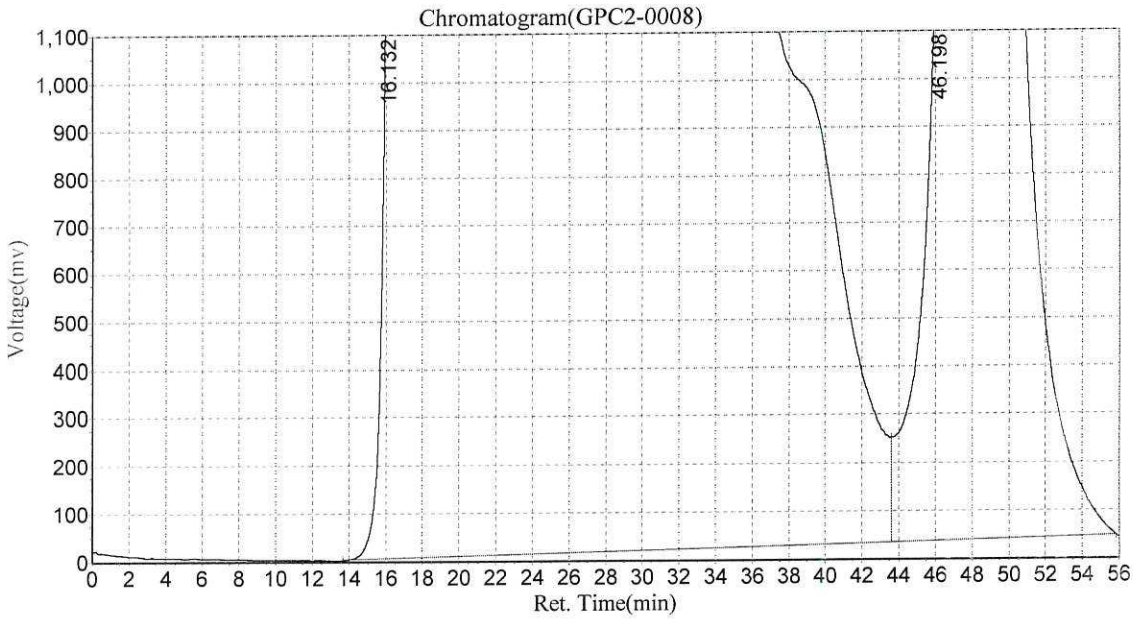

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.132	1373170.250	1994817664.000	78.8687
2		46.198	1338970.375	534473248.000	21.1313
Total			2712140.625	2529290912.000	100.000

Ingredient Table

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

BLA0340 23A0100/171 PEST

Date:2023-01-19,5:22:32 AM
Data File:c:\n2000\data\gpc2\011823\GPC2-0009
Method File:E:\GPC2_InHouse.mtd

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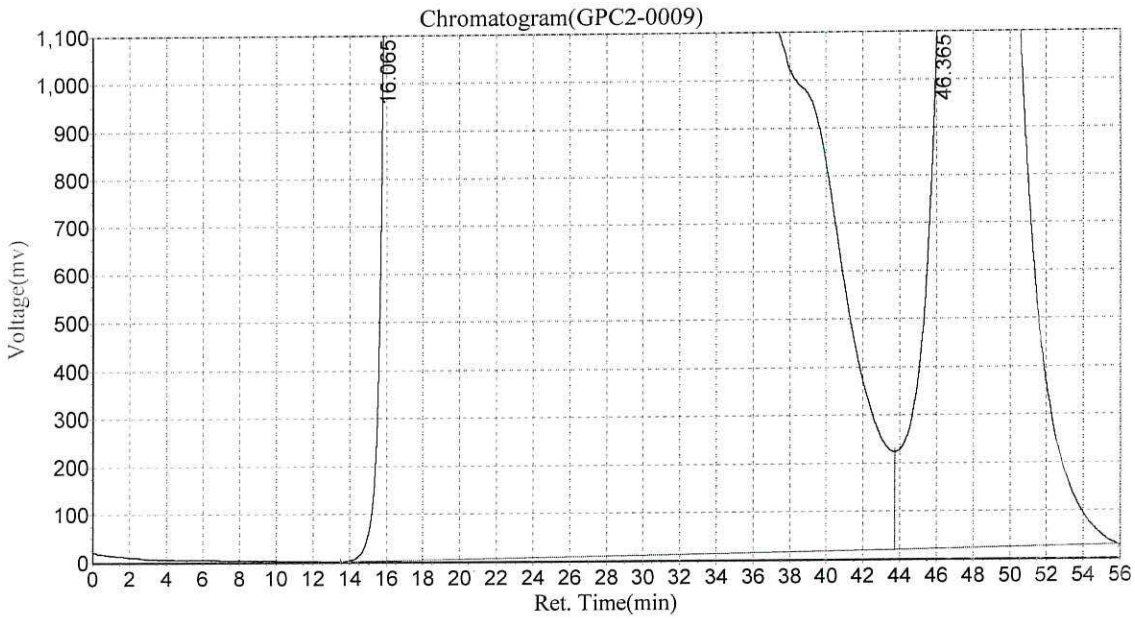
Date/Time2023-01-19,5:22:33 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.065	1376382.000	2015999488.000	80.0729
2		46.365	1355013.625	501704544.000	19.9271
Total			2731395.625	2517704032.000	100.000

Ingredient Table

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

BLA0340 23A0100/171 PEST

Date:2023-01-19,6:20:14 AM
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Method File:E:\GPC2_InHouse.mtd

Analyst£ºTWC
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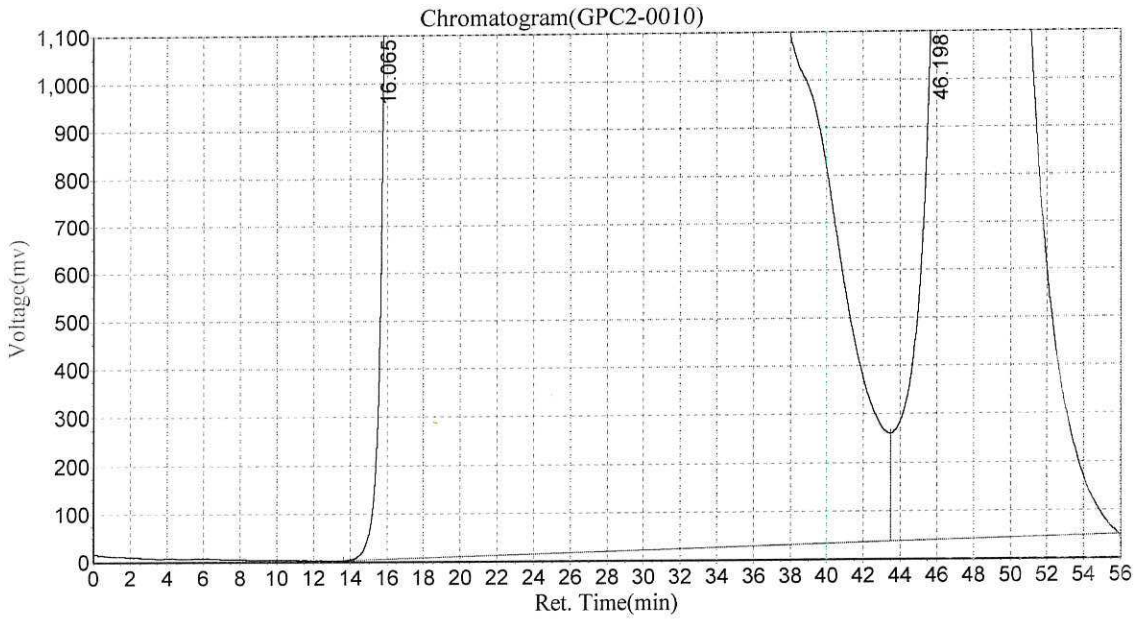

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.065	1373919.750	2012270208.000	77.8865
2		46.198	1337444.875	571324608.000	22.1136
Total			2711364.625	2583594816.000	100.000

Ingredient Table

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

BLA0340 23A0100/171 PEST

Date:2023-01-19,7:17:58 AM
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Analyst£°TWC
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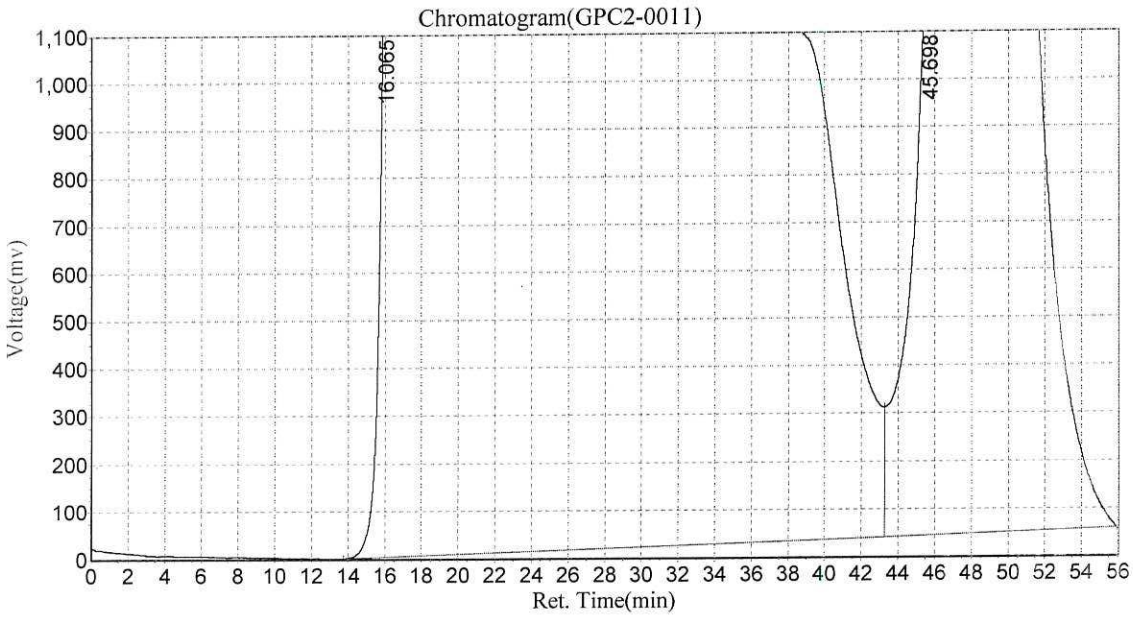


Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.065	1374583.000	2028750464.000	76.1898
2		45.698	1331276.125	634007040.000	23.8102
Total			2705859.125	2662757504.000	100.000

Ingredient Table

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

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLA0199	Cleanup Type:	Sulfur
Cleanup Method:	EPA 3660B Sulfur Cleanup - uL	Analysis:	EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1254	23A0171-01	23012431.D	01/23/2023	
LDW23-SS1245	23A0171-04	23012434.D	01/23/2023	
LDW23-SS1262	23A0171-03	23012433.D	01/23/2023	
LDW23-SS1257	23A0171-02	23012432.D	01/23/2023	
LCS Dup	BLA0340-BSD1	23012425.D	01/23/2023	
LCS	BLA0340-BS1	23012424.D	01/23/2023	
Blank	BLA0340-BLK1	23012423.D	01/23/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLA0199

Matrix: Solid **Cleanup using: Organics - EPA 3660B Sulfur Cleanup - uL** **Printed: 1/23/2023 3:10:47PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0100-21	A	LDW23-SS1154	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
23A0100-22	A	LDW23-SS1149	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
23A0100-23	A	LDW23-SS1130	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
23A0171-01	A	LDW23-SS1254	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
23A0171-02	A	LDW23-SS1257	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
23A0171-03	A	LDW23-SS1262	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
23A0171-04	A	LDW23-SS1245	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
BLA0340-BLK1	-	Blank	-	2.5	2.5	-	1/23/2023	LMJ	
BLA0340-BS1	-	LCS	-	2.5	2.5	-	1/23/2023	LMJ	
BLA0340-BSD1	-	LCS Dup	-	2.5	2.5	-	1/23/2023	LMJ	
BLA0340-MS1	-	Matrix Spike	-	2.5	2.5	-	1/23/2023	LMJ	
BLA0340-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	1/23/2023	LMJ	

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLA0200	Cleanup Type:	Silica Gel
Cleanup Method:	EPA 3630C Silica Gel Cleanup - uL	Analysis:	EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LCS Dup	BLA0340-BSD1	23012425.D	01/23/2023	
Blank	BLA0340-BLK1	23012423.D	01/23/2023	
LCS	BLA0340-BS1	23012424.D	01/23/2023	
LDW23-SS1254	23A0171-01	23012431.D	01/23/2023	
LDW23-SS1257	23A0171-02	23012432.D	01/23/2023	
LDW23-SS1262	23A0171-03	23012433.D	01/23/2023	
LDW23-SS1245	23A0171-04	23012434.D	01/23/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLA0200

Matrix: Solid **Cleanup using: Organics - EPA 3660C Silica Gel Cleanup - uL** **Printed: 1/23/2023 3:11:17PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0100-21	A	LDW23-SS1154	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
23A0100-22	A	LDW23-SS1149	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
23A0100-23	A	LDW23-SS1130	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
23A0171-01	A	LDW23-SS1254	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
23A0171-02	A	LDW23-SS1257	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
23A0171-03	A	LDW23-SS1262	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
23A0171-04	A	LDW23-SS1245	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
BLA0340-BLK1	-	Blank	-	2.5	2.5	-	1/23/2023	LMJ	
BLA0340-BS1	-	LCS	-	2.5	2.5	-	1/23/2023	LMJ	
BLA0340-BSD1	-	LCS Dup	-	2.5	2.5	-	1/23/2023	LMJ	
BLA0340-MS1	-	Matrix Spike	-	2.5	2.5	-	1/23/2023	LMJ	
BLA0340-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	1/23/2023	LMJ	

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLA0201	Cleanup Type:	Sulfuric Acid
Cleanup Method:	EPA 3665 Sulfuric Acid Cleanup - uL	Analysis:	EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LCS Dup	BLA0340-BSD1	23012425.D	01/23/2023	
LCS	BLA0340-BS1	23012424.D	01/23/2023	
Blank	BLA0340-BLK1	23012423.D	01/23/2023	
LDW23-SS1262	23A0171-03	23012433.D	01/23/2023	
LDW23-SS1254	23A0171-01	23012431.D	01/23/2023	
LDW23-SS1245	23A0171-04	23012434.D	01/23/2023	
LDW23-SS1257	23A0171-02	23012432.D	01/23/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLA0201

Matrix: Solid **Cleanup using: Organics - EPA 3665 Sulfuric Acid Cleanup - uL** **Printed: 1/23/2023 3:11:50PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0100-21	A	LDW23-SS1154	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
23A0100-22	A	LDW23-SS1149	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
23A0100-23	A	LDW23-SS1130	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
23A0171-01	A	LDW23-SS1254	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
23A0171-02	A	LDW23-SS1257	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
23A0171-03	A	LDW23-SS1262	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
23A0171-04	A	LDW23-SS1245	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
BLA0340-BLK1	-	Blank	-	2.5	2.5	-	1/23/2023	LMJ	
BLA0340-BS1	-	LCS	-	2.5	2.5	-	1/23/2023	LMJ	
BLA0340-BSD1	-	LCS Dup	-	2.5	2.5	-	1/23/2023	LMJ	
BLA0340-MS1	-	Matrix Spike	-	2.5	2.5	-	1/23/2023	LMJ	
BLA0340-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	1/23/2023	LMJ	

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLA0202	Cleanup Type:	GPC
Cleanup Method:	EPA 3640A GPC Cleanup 1:1	Analysis:	EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1257	23A0171-02	23012432.D	01/23/2023	
Blank	BLA0340-BLK1	23012423.D	01/23/2023	
LCS	BLA0340-BS1	23012424.D	01/23/2023	
LDW23-SS1262	23A0171-03	23012433.D	01/23/2023	
LCS Dup	BLA0340-BSD1	23012425.D	01/23/2023	
LDW23-SS1254	23A0171-01	23012431.D	01/23/2023	
LDW23-SS1245	23A0171-04	23012434.D	01/23/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLA0202

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Check Standard: CKK0135-GPC2** **Printed: 1/23/2023 3:13:10PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0100-21	A	LDW23-SS1154	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
23A0100-22	A	LDW23-SS1149	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
23A0100-23	A	LDW23-SS1130	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
23A0171-01	A	LDW23-SS1254	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
23A0171-02	A	LDW23-SS1257	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
23A0171-03	A	LDW23-SS1262	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
23A0171-04	A	LDW23-SS1245	A 02	2.5	2.5	8081B Pest (PSDDA)	1/23/2023	LMJ	
BLA0340-BLK1	-	Blank	-	2.5	2.5	-	1/23/2023	LMJ	
BLA0340-BS1	-	LCS	-	2.5	2.5	-	1/23/2023	LMJ	
BLA0340-BSD1	-	LCS Dup	-	2.5	2.5	-	1/23/2023	LMJ	
BLA0340-MS1	-	Matrix Spike	-	2.5	2.5	-	1/23/2023	LMJ	
BLA0340-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	1/23/2023	LMJ	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I

METHOD BLANK DATA SHEET

EPA 8081B

Blank

Laboratory:	Analytical Resources, LLC			SDG:	23A0171
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLA0340-BLK1	File ID:	23012423.D
Sampled:	N/A	Prepared:	01/17/23 13:07	Analyzed:	01/24/23 22:48
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	12.5 g / 2.5 mL
Batch:	BLA0340	Sequence:	SLA0299	Calibration:	FL00041
Instrument:	ECD6	Column:	STX-CLP	Cleanups:	GPC, Silica Gel, Sulfur, Sulfuric Acid

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
118-74-1	Hexachlorobenzene	1	0.50	U	0.15	0.50

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
Decachlorobiphenyl	8.0000	9.56	120	30 - 160	
Decachlorobiphenyl [2C]	8.0000	10.2	127	30 - 160	
Tetrachlorometaxylene	8.0000	7.30	91.2	30 - 160	
Tetrachlorometaxylene [2C]	8.0000	7.10	88.8	30 - 160	

[2C] indicates second-column analyte, present if quantification on any batch samples used second column data.

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230124.b/23012423.D
Data file 2: /20230124.b/B20230124.b/23012423.D
Method: \20230124.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: BLA0340-BLK1
Client ID:
Injection Date: 24-JAN-2023 22:48
Report Date: 01/27/2023 08:03
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	alpha-BHC
----			----			0.00	0.00	---	beta-BHC
----			----			0.00	0.00	---	delta-BHC
----			----			0.00	0.00	---	gamma-BHC (Lindane)
----			----			0.00	0.00	---	Heptachlor
----			----			0.00	0.00	---	Aldrin
----			----			0.00	0.00	---	Heptachlor epoxide b
----			----			0.00	0.00	---	Endosulfan I
----			----			0.00	0.00	---	Dieldrin
----			----			0.00	0.00	---	4,4'-DDE
----			----			0.00	0.00	---	Endrin
----			----			0.00	0.00	---	Endosulfan II
----			----			0.00	0.00	---	4,4'-DDD
----			----			0.00	0.00	---	Endosulfan sulfate
----			----			0.00	0.00	---	4,4'-DDT
----			----			0.00	0.00	---	Methoxychlor
----			----			0.00	0.00	---	Endrin ketone
----			----			0.00	0.00	---	Endrin aldehyde
----			----			0.00	0.00	---	trans-Chlordane
----			----			0.00	0.00	---	cis-Chlordane
----			----			0.00	0.00	---	Hexachlorobutadiene
----			----			0.00	0.00	---	Hexachlorobenzene
3.800	0.000	353550	4.196	-0.001	551992	36.48	35.51	2.7	Tetrachloro-m-xylene
9.318	-0.001	307948	10.428	-0.001	393225	47.80	50.80	6.1	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

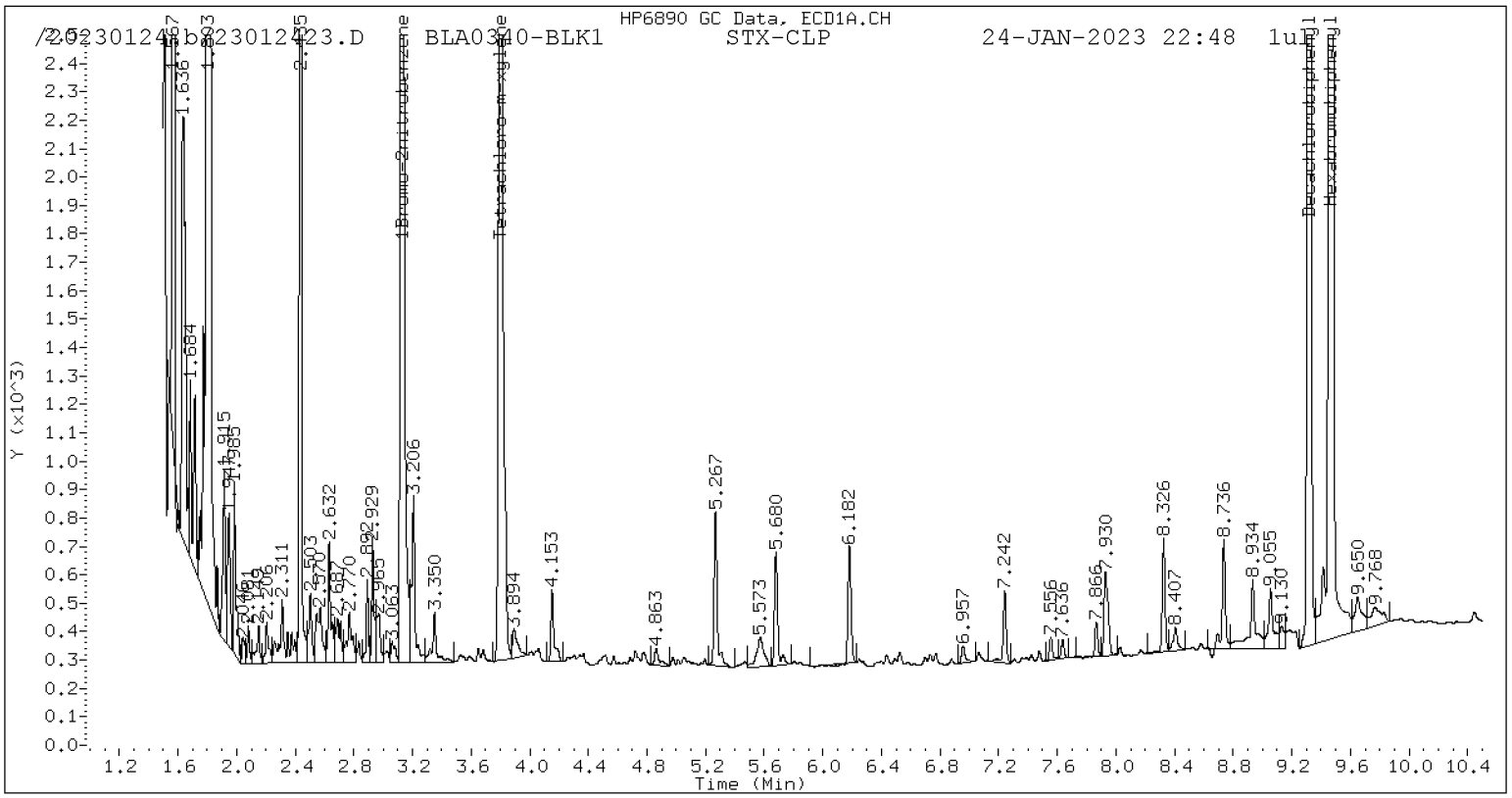
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	712572	6.0
Hexabromobiphenyl	609723	635766	4.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1104256	9.7
Hexabromobiphenyl	769764	700304	-9.0

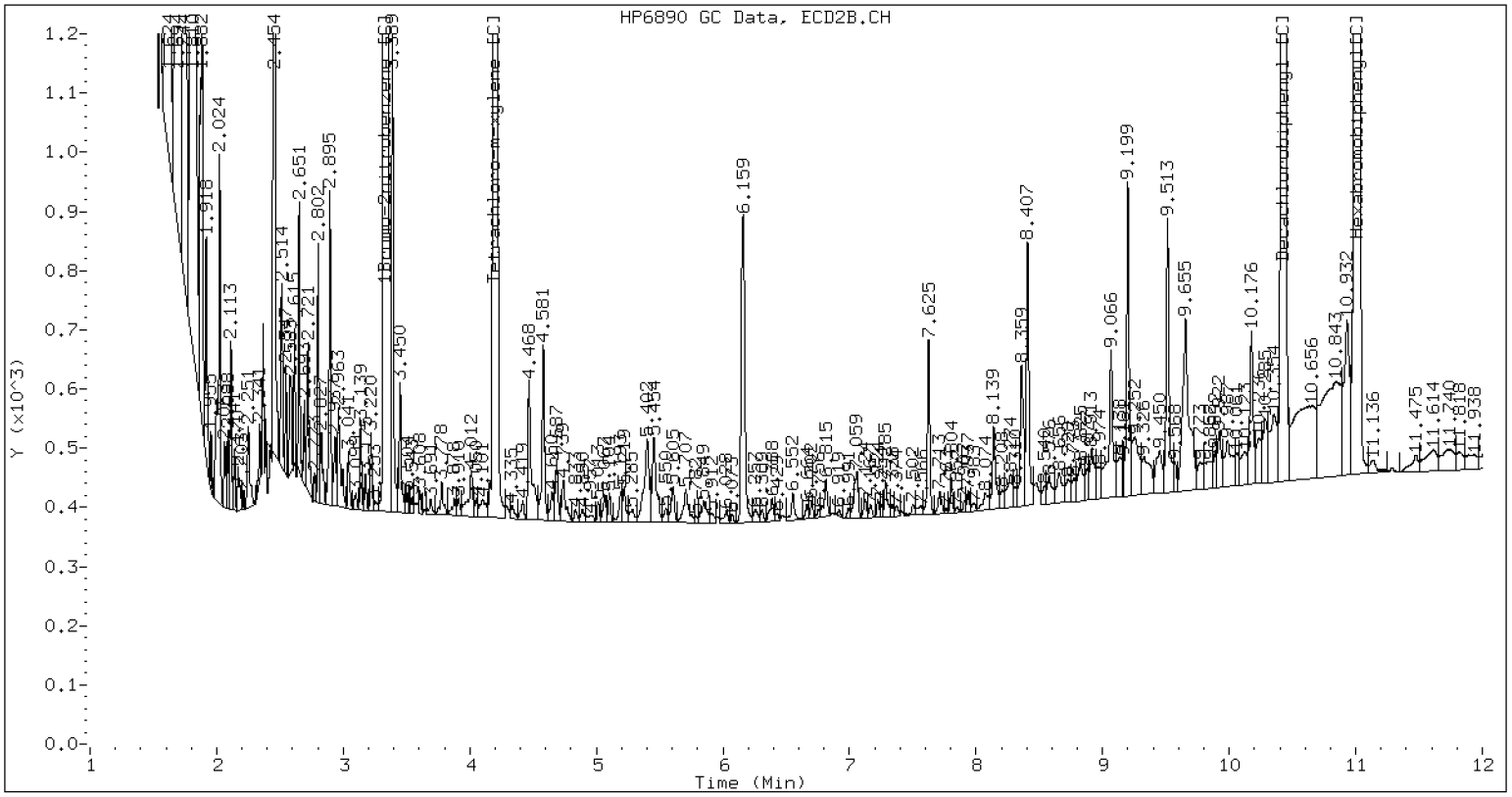
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230124.b/B20230124.b/23012423.D BLA0340-BLK1 CLP2



CLP-2 Manual Integration: NO

LCS / LCS DUPLICATE RECOVERY

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	01/24/23 23:06
Batch:	BLA0340	Laboratory ID:	BLA0340-BS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS
Initial/Final:	12.5 g / 2.5 mL		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Hexachlorobenzene	4.00	3.00		74.9	26 - 128

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Hexachlorobenzene	4.00	3.24		81.0	7.79	30	26 - 128

* Indicates values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230124.b/23012424.D
Data file 2: /20230124.b/B20230124.b/23012424.D
Method: \20230124.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: BLA0340-BS1
Client ID:
Injection Date: 24-JAN-2023 23:06
Report Date: 01/27/2023 13:34
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.310	-0.000	251556	4.831	-0.001	365372	16.22	15.00	7.8	alpha-BHC
4.693	0.000	98884	5.308	-0.001	143150	16.57	15.46	6.9	beta-BHC
4.875	-0.001	226594	5.660	-0.001	333801	17.88	16.64	7.2	delta-BHC
4.611	-0.000	227484	5.228	-0.001	334164	16.92	16.17	4.6	gamma-BHC (Lindane)
5.092	-0.000	208251	5.754	-0.001	303162	17.41	16.19	7.3	Heptachlor
5.414	0.000	207973	6.156	-0.002	273843	15.51	12.81	19.1	Aldrin
6.087	-0.001	186175	6.813	-0.002	263239	16.02	14.89	7.3	Heptachlor epoxide b
6.530	-0.001	256869	7.256	-0.001	345863	24.08	22.20	8.2	Endosulfan I
----			7.559	0.008	709	0.00	0.04	---	Dieldrin
6.450	-0.002	373923	7.340	-0.002	506407	35.15	32.08	9.1	4,4'-DDE
----			7.882	0.007	2365	0.00	0.21	---	Endrin
7.277	-0.001	58889	8.086	-0.002	71565	7.19	6.21	14.6	Endosulfan II
7.098	-0.001	318380	7.947	-0.002	425213	38.86	38.89	0.1	4,4'-DDD
8.140	-0.001	200368	8.684	-0.002	253780	25.77	25.08	2.7	Endosulfan sulfate
7.390	-0.001	327101	8.265	-0.002	418591	39.51	39.67	0.4	4,4'-DDT
7.873	-0.004	15293	8.907	-0.002	18837	4.17	4.03	3.3	Methoxychlor
8.413	-0.001	168925	9.207	-0.002	207160	18.97	18.96	0.1	Endrin ketone
7.706	-0.001	25930	8.416	-0.003	39021	3.97	4.80	18.9	Endrin aldehyde
6.229	-0.000	195456	7.024	-0.002	274423	16.56	15.57	6.2	trans-Chlordane
6.376	0.000	195482	7.183	-0.002	260381	16.51	15.10	9.0	cis-Chlordane
2.304	0.000	213706	2.482	-0.001	290391	13.16	12.55	4.7	Hexachlorobutadiene
4.152	-0.001	215639	4.691	-0.001	318419	14.98	14.36	4.2	Hexachlorobenzene
3.801	0.000	364845	4.195	-0.001	560083	33.31	32.74	1.7	Tetrachloro-m-xylene
9.318	-0.001	311671	10.427	-0.002	403431	44.34	46.18	4.1	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

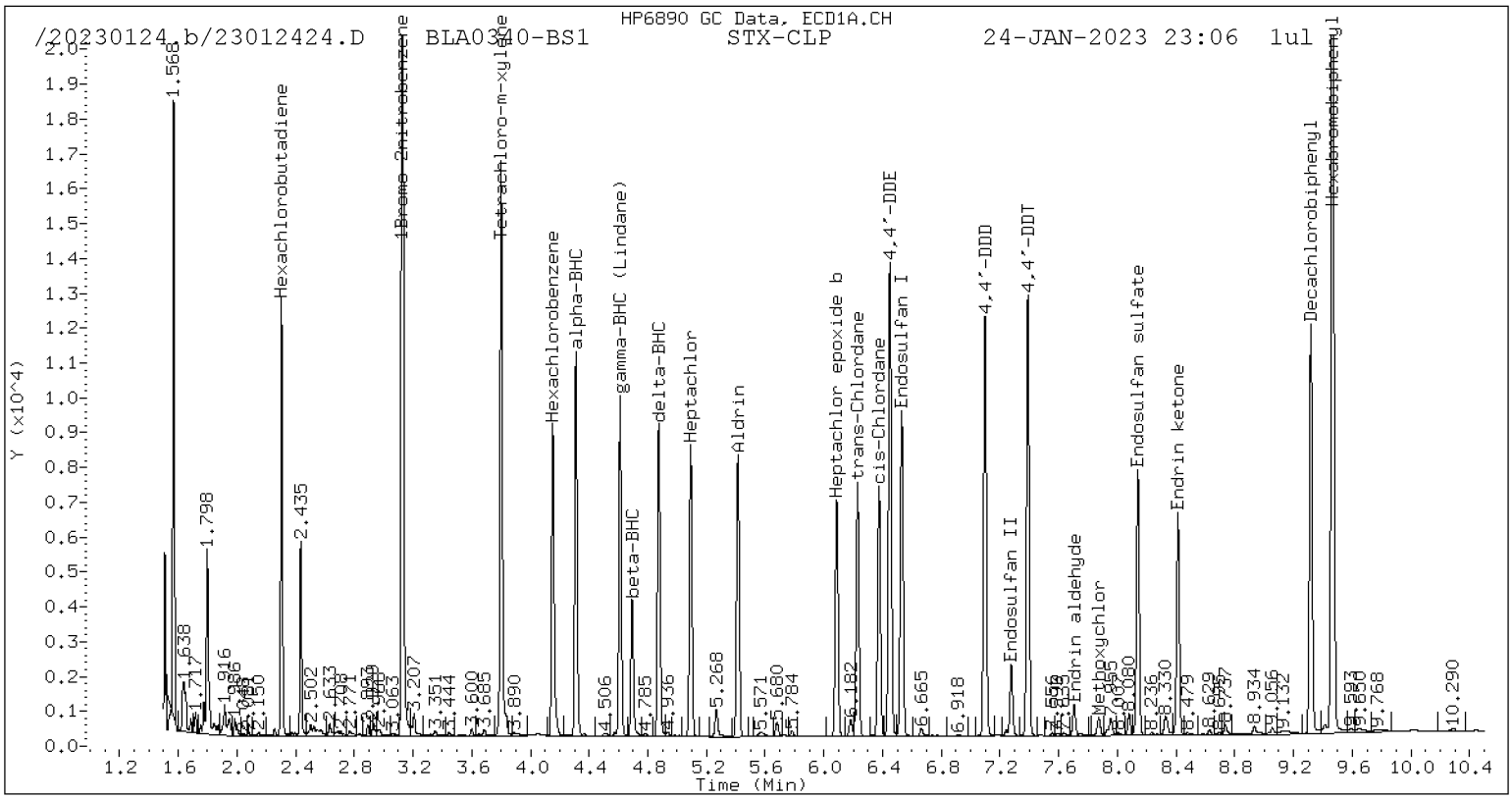
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	805373	19.8
Hexabromobiphenyl	609723	693688	13.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1215444	20.8
Hexabromobiphenyl	769764	790491	2.7

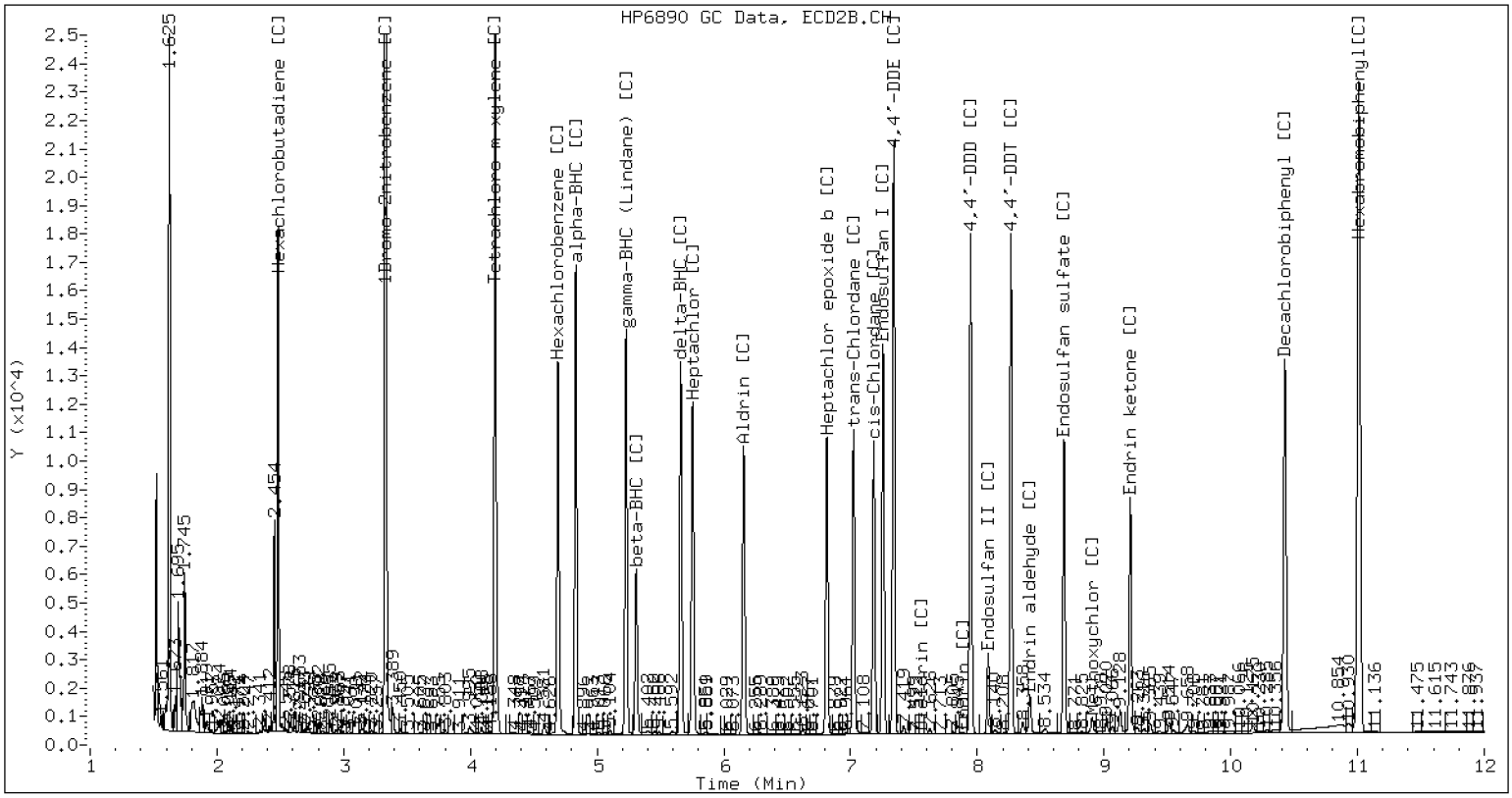
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230124.b/B20230124.b/23012424.D BLA0340-BS1 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230124.b/23012425.D
Data file 2: /20230124.b/B20230124.b/23012425.D
Method: \20230124.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: BLA0340-BSD1
Client ID:
Injection Date: 24-JAN-2023 23:24
Report Date: 01/27/2023 13:34
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.310	-0.001	275931	4.832	-0.001	401263	17.77	16.24	9.0	alpha-BHC
4.692	-0.001	111010	5.308	-0.001	155800	18.57	16.58	11.3	beta-BHC
4.874	-0.002	239903	5.660	-0.001	356487	18.90	17.51	7.6	delta-BHC
4.611	-0.001	254508	5.227	-0.002	355918	18.90	16.97	10.8	gamma-BHC (Lindane)
5.092	-0.001	226080	5.754	-0.001	327830	18.87	17.25	8.9	Heptachlor
5.413	-0.001	220403	6.156	-0.002	292608	16.42	13.49	19.6	Aldrin
6.087	-0.001	194657	6.812	-0.002	275981	16.72	15.39	8.3	Heptachlor epoxide b
6.530	-0.001	255743	7.256	-0.001	345290	23.94	21.84	9.2	Endosulfan I
----			7.558	0.007	1407	0.00	0.08	---	Dieldrin
6.450	-0.002	395117	7.340	-0.002	540370	37.08	33.73	9.4	4,4'-DDE
----			7.883	0.007	2681	0.00	0.24	---	Endrin
7.276	-0.002	49615	8.085	-0.002	59387	5.98	5.11	15.8	Endosulfan II
7.097	-0.002	333503	7.947	-0.002	454109	40.19	41.14	2.3	4,4'-DDD
8.140	-0.001	200441	8.684	-0.002	261627	25.46	25.61	0.6	Endosulfan sulfate
7.390	-0.001	344793	8.265	-0.002	447843	41.12	42.04	2.2	4,4'-DDT
7.868	-0.009	28436	8.907	-0.002	19615	7.65	4.16	59.1*	Methoxychlor
8.413	-0.001	171329	9.208	-0.002	214126	19.00	19.41	2.2	Endrin ketone
7.705	-0.001	20232	8.413	-0.005	45627	3.06	5.56	58.0*	Endrin aldehyde
6.229	-0.001	219560	7.023	-0.002	298752	18.57	16.70	10.6	trans-Chlordane
6.375	-0.000	203567	7.183	-0.002	276686	17.17	15.81	8.2	cis-Chlordane
2.304	-0.000	224381	2.482	-0.001	321299	13.79	13.69	0.7	Hexachlorobutadiene
4.152	-0.000	233496	4.691	-0.001	359834	16.19	16.00	1.2	Hexachlorobenzene
3.801	0.000	393524	4.195	-0.001	605445	35.87	34.88	2.8	Tetrachloro-m-xylene
9.317	-0.001	308754	10.428	-0.001	418180	43.37	47.41	8.9	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

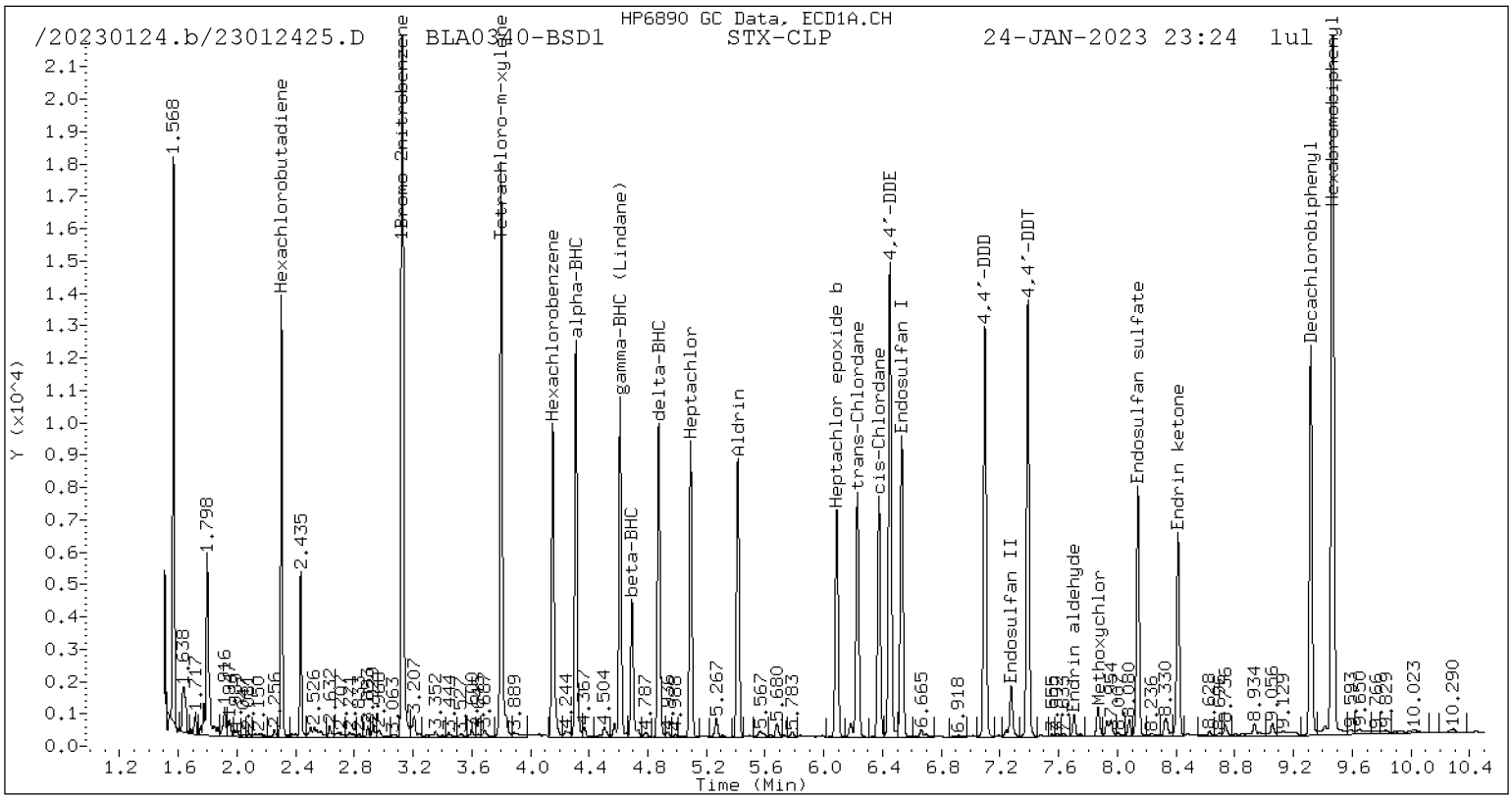
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	806665	20.0
Hexabromobiphenyl	609723	702591	15.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1233222	22.5
Hexabromobiphenyl	769764	798068	3.7

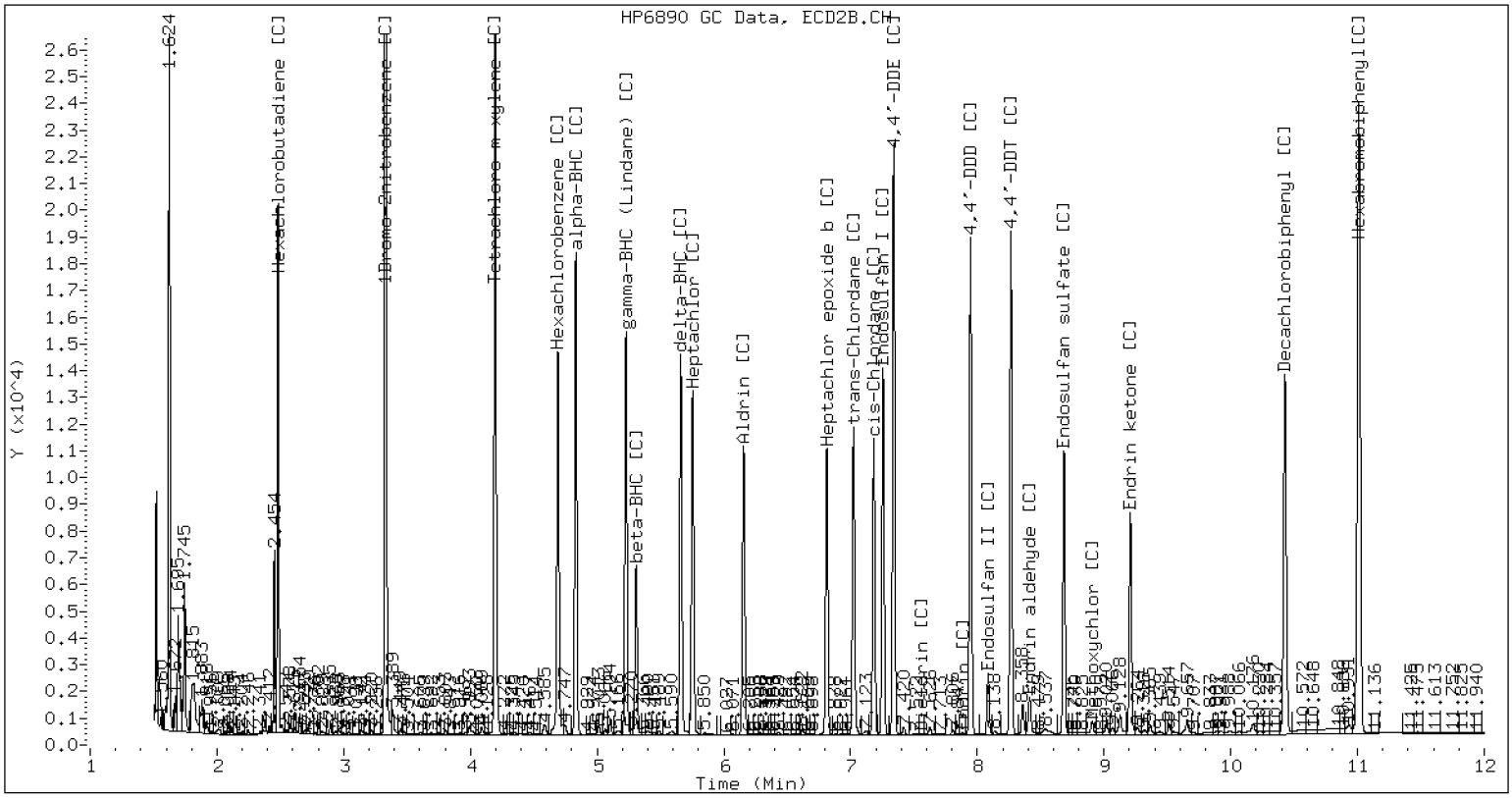
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230124.b/B20230124.b/23012425.D BLA0340-BSD1 CLP2



CLP-2 Manual Integration: NO

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	**RRF**	Conc	RRF	Conc	RRF	Conc	**RRF**	Conc	**RRF**
alpha-BHC			2.5	1.564682	5	1.558115	10	1.57359	20	1.566596	40	1.528219
beta-BHC			2.5	0.6501672	5	0.6116678	10	0.6049898	20	0.5910241	40	0.567415
gamma-BHC (Lindane)			2.5	1.364013	5	1.359107	10	1.367627	20	1.357913	40	1.317203
delta-BHC			2.5	1.267737	5	1.264366	10	1.278672	20	1.286232	40	1.255792
Heptachlor			2.5	1.26903	5	1.222902	10	1.218715	20	1.207966	40	1.145438
Aldrin			2.5	1.349967	5	1.349283	10	1.40535	20	1.372547	40	1.307197
Heptachlor Epoxide			2.5	1.231126	5	1.189593	10	1.20792	20	1.178021	40	1.104377
trans-Chlordane (beta-Chlordane)			2.5	1.262297	5	1.202181	10	1.202336	20	1.19062	40	1.128117
cis-Chlordane (alpha-chlordane)			2.5	1.308183	5	1.222582	10	1.200602	20	1.177182	40	1.111332
Endosulfan I			2.5	1.143813	5	1.097776	10	1.093658	20	1.076133	40	1.011287
4,4'-DDE			5	1.141182	10	1.108491	20	1.098369	40	1.077225	80	0.9961189
Dieldrin			5	1.225418	10	1.190449	20	1.185191	40	1.155764	80	1.077517
Endrin			5	1.158191	10	1.117563	20	1.079508	40	1.061387	80	0.9725989
Endosulfan II			5	0.9400399	10	0.9913797	20	1.005265	40	0.925043	80	0.9337917
4,4'-DDD			5	1.004568	10	0.9927897	20	0.9803235	40	0.9586353	80	0.8937077
Endrin Aldehyde			5	0.8167784	10	0.7834798	20	0.7706241	40	0.7573308	80	0.7147756
4,4'-DDT			5	1.007054	10	0.9936998	20	0.9768522	40	0.9722874	80	0.9123228
Endosulfan Sulfate			5	0.9534179	10	0.9413755	20	0.9158457	40	0.9056998	80	0.8542021
Endrin Ketone			5	1.134866	10	1.083274	20	1.043162	40	1.021136	80	0.9645492
Methoxychlor			25	0.4887243	50	0.4567517	100	0.4291758	200	0.4123964	400	0.380531
Hexachlorobutadiene			2.5	1.967135	5	1.727858	10	1.608612	20	1.550898	40	1.457962
Hexachlorobenzene			2.5	1.583946	5	1.509865	10	1.463674	20	1.414258	40	1.348389
Decachlorobiphenyl			5	0.9567749	10	0.8690419	20	0.8114883	40	0.7853665	80	0.7399881
Tetrachlorometaxylene			5	1.223478	10	1.154628	20	1.122612	40	1.064313	80	1.018952

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
alpha-BHC	80	1.449687										
beta-BHC	80	0.5324503										
gamma-BHC (Lindane)	80	1.246178										
delta-BHC	80	1.199667										
Heptachlor	80	1.064858										
Aldrin	80	1.204866										
Heptachlor Epoxide	80	1.016142										
trans-Chlordane (beta-Chlordane)	80	1.050129										
cis-Chlordane (alpha-chlordane)	80	1.036345										
Endosulfan I	80	0.9344351										
4,4'-DDE	160	0.9196699										
Dieldrin	160	0.9953457										
Endrin	160	0.903669										
Endosulfan II	160	0.8694106										
4,4'-DDD	160	0.8394108										
Endrin Aldehyde	160	0.6754471										
4,4'-DDT	160	0.8666848										
Endosulfan Sulfate	160	0.808554										
Endrin Ketone	160	0.9150773										
Methoxychlor	800	0.3710888										
Hexachlorobutadiene	80	1.368623										
Hexachlorobenzene	80	1.259233										
2,4'-DDE					5	0.8703192	10	0.8471901	20	0.8231684	40	0.7887622
2,4'-DDD					5	0.761682	10	0.7418629	20	0.7301989	40	0.7053717
2,4'-DDT					5	0.8194572	10	0.8004965	20	0.7842725	40	0.7616258
Oxychlordane					5	1.016746	10	1.011016	20	0.9890796	40	0.9530961
cis-Nonachlor					5	1.323191	10	1.277938	20	1.243982	40	1.217703

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
trans-Nonachlor					5	1.347777	10	1.328677	20	1.28535	40	1.249062
Mirex					5	0.8317764	10	0.8043457	20	0.7641487	40	0.7481553
Decachlorobiphenyl	160	0.7008722										
Tetrachlorometaxylene	160	0.9437243										

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
2,4'-DDE	80	0.7262802	160	0.6559468								
2,4'-DDD	80	0.6522807	160	0.6001736								
2,4'-DDT	80	0.7135595	160	0.6495601								
Oxychlordane	80	0.9018234	160	0.8351028								
cis-Nonachlor	80	1.140435	160	1.065099								
trans-Nonachlor	80	1.167639	160	1.085646								
Mirex	80	0.706171	160	0.6667706								

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

Compound	Level 19		Level 20		Level 21		Level 22		Level 23		Level 24	
	Conc		Conc		Conc		Conc		Conc		Conc	

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

Compound	Level 25		Level 26		Level 27		Level 28		Level 29		Level 30	
	Conc		Conc		Conc		Conc		Conc		Conc	

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
alpha-BHC	1.540148	3.1			RSD (20)	
beta-BHC	0.5929524	6.8			RSD (20)	
gamma-BHC (Lindane)	1.33534	3.5			RSD (20)	
delta-BHC	1.258744	2.5			RSD (20)	
Heptachlor	1.188151	6.1			RSD (20)	
Aldrin	1.331535	5.2			RSD (20)	
Heptachlor Epoxide	1.15453	6.9			RSD (20)	
trans-Chlordane (beta-Chlordane)	1.172613	6.3			RSD (20)	
cis-Chlordane (alpha-chlordane)	1.176038	8.0			RSD (20)	
Endosulfan I	1.059517	7.1			RSD (20)	
4,4'-DDE	1.056843	7.9			RSD (20)	
Dieldrin	1.138281	7.6			RSD (20)	
Endrin	1.048819	9.0			RSD (20)	
Endosulfan II	0.944155	5.2			RSD (20)	
4,4'-DDD	0.9449058	6.9			RSD (20)	
Endrin Aldehyde	0.7530726	6.7			RSD (20)	
4,4'-DDT	0.9548168	5.7			RSD (20)	
Endosulfan Sulfate	0.8965158	6.2			RSD (20)	
Endrin Ketone	1.027011	7.7			RSD (20)	
Methoxychlor	0.4231113	10.6			RSD (20)	
Hexachlorobutadiene	1.613515	13.2			RSD (20)	
Hexachlorobenzene	1.429894	8.1			RSD (20)	
2,4'-DDE	0.7852778	10.3			RSD (20)	
2,4'-DDD	0.698595	8.8			RSD (20)	
2,4'-DDT	0.7548286	8.4			RSD (20)	
Oxychlordane	0.951144	7.5			RSD (20)	
cis-Nonachlor	1.211391	7.8			RSD (20)	
trans-Nonachlor	1.244025	8.1			RSD (20)	
Mirex	0.7535613	8.1			RSD (20)	
Decachlorobiphenyl	0.8105886	11.4			RSD (20)	
Tetrachlorometaxylene	1.087951	9.2			RSD (20)	

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	**RRF**	Conc	RRF	Conc	RRF	Conc	**RRF**	Conc	**RRF**
alpha-BHC [2C]			2.5	1.582358	5	1.586238	10	1.633164	20	1.640486	40	1.615441
beta-BHC [2C]			2.5	0.652782	5	0.6172948	10	0.6184608	20	0.6125812	40	0.5918008
gamma-BHC (Lindane) [2C]			2.5	1.355071	5	1.348783	10	1.381456	20	1.392772	40	1.366606
delta-BHC [2C]			2.5	1.323764	5	1.307234	10	1.339425	20	1.328433	40	1.331977
Heptachlor [2C]			2.5	1.270249	5	1.234236	10	1.258409	20	1.272245	40	1.215755
Aldrin [2C]			2.5	1.511397	5	1.416724	10	1.432636	20	1.430376	40	1.370917
Heptachlor Epoxide [2C]			2.5	1.2977	5	1.174596	10	1.174288	20	1.174706	40	1.114434
trans-Chlordane (beta-Chlordane) [2C]			2.5	1.25449	5	1.176102	10	1.164843	20	1.168848	40	1.125534
cis-Chlordane (alpha-chlordane) [2C]			2.5	1.258498	5	1.153199	10	1.135052	20	1.136251	40	1.089792
Endosulfan I [2C]			2.5	1.118263	5	1.044155	10	1.035412	20	1.034697	40	0.9885012
4,4'-DDE [2C]			5	1.120237	10	1.069625	20	1.064387	40	1.055415	80	0.9897135
Dieldrin [2C]			5	1.270008	10	1.162844	20	1.139359	40	1.136098	80	1.071389
Endrin [2C]			5	1.256912	10	1.17909	20	1.159477	40	1.149599	80	1.066056
Endosulfan II [2C]			5	1.296819	10	1.202961	20	1.188491	40	1.160501	80	1.099056
4,4'-DDD [2C]			5	1.234482	10	1.121556	20	1.117792	40	1.112003	80	1.04628
Endrin Aldehyde [2C]			5	0.9430111	10	0.8430348	20	0.8249196	40	0.8129946	80	0.7727701
4,4'-DDT [2C]			5	1.175911	10	1.077825	20	1.067612	40	1.073272	80	1.019364
Endosulfan Sulfate [2C]			5	1.137768	10	1.042553	20	1.030373	40	1.023023	80	0.9721732
Endrin Ketone [2C]			5	1.235631	10	1.119988	20	1.114405	40	1.100852	80	1.047659
Methoxychlor [2C]			25	0.5184064	50	0.4866753	100	0.4751666	200	0.4681736	400	0.4433957
Hexachlorobutadiene [2C]			2.5	1.975612	5	1.648845	10	1.492482	20	1.376096	40	1.341211
Hexachlorobenzene [2C]			2.5	1.602215	5	1.520618	10	1.491402	20	1.450251	40	1.385947
Decachlorobiphenyl [2C]			5	1.087142	10	0.9391597	20	0.8562421	40	0.8499592	80	0.8013928
Tetrachlorometaxylene [2C]			5	1.220863	10	1.179368	20	1.164832	40	1.127982	80	1.06878

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
alpha-BHC [2C]	80	1.561903										
beta-BHC [2C]	80	0.5642956										
gamma-BHC (Lindane) [2C]	80	1.31891										
delta-BHC [2C]	80	1.29291										
Heptachlor [2C]	80	1.144118										
Aldrin [2C]	80	1.281263										
Heptachlor Epoxide [2C]	80	1.046144										
trans-Chlordane (beta-Chlordane) [2C]	80	1.072685										
cis-Chlordane (alpha-chlordane) [2C]	80	1.03859										
Endosulfan I [2C]	80	0.9325836										
4,4'-DDE [2C]	160	0.9356313										
Dieldrin [2C]	160	1.019365										
Endrin [2C]	160	1.013782										
Endosulfan II [2C]	160	1.047801										
4,4'-DDD [2C]	160	1.006382										
Endrin Aldehyde [2C]	160	0.7380269										
4,4'-DDT [2C]	160	0.9933936										
Endosulfan Sulfate [2C]	160	0.9372514										
Endrin Ketone [2C]	160	1.016567										
Methoxychlor [2C]	800	0.4436418										
Hexachlorobutadiene [2C]	80	1.300813										
Hexachlorobenzene [2C]	80	1.304223										
2,4'-DDE [2C]					5	0.8343307	10	0.8052418	20	0.7431295	40	0.7258871
2,4'-DDD [2C]					5	0.9097548	10	0.8797099	20	0.8273813	40	0.8164191
2,4'-DDT [2C]					5	0.9400077	10	0.8804604	20	0.8502582	40	0.8485216
Oxychlordane [2C]					5	0.9644685	10	0.9467754	20	0.9033255	40	0.8966281
cis-Nonachlor [2C]					5	1.449238	10	1.407074	20	1.376474	40	1.372123

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
trans-Nonachlor [2C]					5	1.488853	10	1.51762	20	1.451789	40	1.447663
Mirex [2C]					5	0.9331395	10	0.8115521	20	0.7946205	40	0.762682
Decachlorobiphenyl [2C]	160	0.7711875										
Tetrachlorometaxylene [2C]	160	0.9948184										

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
2,4'-DDE [2C]	80	0.6667087	160	0.6020159								
2,4'-DDD [2C]	80	0.76623	160	0.7136982								
2,4'-DDT [2C]	80	0.7977257	160	0.7424898								
Oxychlordane [2C]	80	0.8433342	160	0.7909247								
cis-Nonachlor [2C]	80	1.313286	160	1.248174								
trans-Nonachlor [2C]	80	1.376815	160	1.306683								
Mirex [2C]	80	0.7399752	160	0.7075065								

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

Compound	Level 19		Level 20		Level 21		Level 22		Level 23		Level 24	
	Conc		Conc		Conc		Conc		Conc		Conc	

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

Compound	Level 25		Level 26		Level 27		Level 28		Level 29		Level 30	
	Conc		Conc		Conc		Conc		Conc		Conc	

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
alpha-BHC [2C]	1.603265	1.9			RSD (20)	
beta-BHC [2C]	0.6095359	4.9			RSD (20)	
gamma-BHC (Lindane) [2C]	1.3606	1.9			RSD (20)	
delta-BHC [2C]	1.320624	1.3			RSD (20)	
Heptachlor [2C]	1.232502	3.9			RSD (20)	
Aldrin [2C]	1.407219	5.4			RSD (20)	
Heptachlor Epoxide [2C]	1.163645	7.1			RSD (20)	
trans-Chlordane (beta-Chlordane) [2C]	1.160417	5.2			RSD (20)	
cis-Chlordane (alpha-chlordane) [2C]	1.13523	6.5			RSD (20)	
Endosulfan I [2C]	1.025602	6.0			RSD (20)	
4,4'-DDE [2C]	1.039168	6.3			RSD (20)	
Dieldrin [2C]	1.133177	7.5			RSD (20)	
Endrin [2C]	1.137486	7.6			RSD (20)	
Endosulfan II [2C]	1.165938	7.4			RSD (20)	
4,4'-DDD [2C]	1.106416	7.0			RSD (20)	
Endrin Aldehyde [2C]	0.8224595	8.5			RSD (20)	
4,4'-DDT [2C]	1.067896	5.9			RSD (20)	
Endosulfan Sulfate [2C]	1.023857	6.7			RSD (20)	
Endrin Ketone [2C]	1.10585	6.8			RSD (20)	
Methoxychlor [2C]	0.4725766	6.0			RSD (20)	
Hexachlorobutadiene [2C]	1.52251	16.8			RSD (20)	
Hexachlorobenzene [2C]	1.459109	7.2			RSD (20)	
2,4'-DDE [2C]	0.7295523	11.8			RSD (20)	
2,4'-DDD [2C]	0.8188656	8.8			RSD (20)	
2,4'-DDT [2C]	0.8432439	8.1			RSD (20)	
Oxychlordane [2C]	0.8909094	7.3			RSD (20)	
cis-Nonachlor [2C]	1.361061	5.2			RSD (20)	
trans-Nonachlor [2C]	1.43157	5.4			RSD (20)	
Mirex [2C]	0.7915793	9.9			RSD (20)	
Decachlorobiphenyl [2C]	0.8841805	13.0			RSD (20)	
Tetrachlorometaxylene [2C]	1.126107	7.3			RSD (20)	

Printed: 12/17/2022 10:57:45AM

ANALYSIS SEQUENCE

SKL0233

Instrument: ECD6 Element Column ID:
Calibration ID: FL00041

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SKL0233-PEM1	DS1	QC		1	K007286	K006953		
SKL0233-CAL1	INDAA	QC		2	K011594	K006953		
SKL0233-CAL2	INDAB	QC		3	K011593	K006953		
SKL0233-CAL3	INDAC	QC		4	K011592	K006953		
SKL0233-CAL4	INDAD	QC		5	K011591	K006953		
SKL0233-CAL5	INDAE	QC		6	K011590	K006953		
SKL0233-CAL6	INDAF	QC		7	K011589	K006953		
SKL0233-CAL7	INDAG	QC		8	K011463	K006953		
SKL0233-CAL8	WNDA	QC		9	K011595	K006953		
SKL0233-CAL9	WNDB	QC		10	K007148	K006953		
SKL0233-CALA	WNDC	QC		11	K007147	K006953		
SKL0233-CALB	WNDD	QC		12	K007146	K006953		
SKL0233-CALC	WNDE	QC		13	K007145	K006953		
SKL0233-CALD	WNDF	QC		14	K007144	K006953		
SKL0233-CALE	WNDG	QC		15	K007093	K006953		
SKL0233-CALM	NOS1	QC		16	K007375	K006953		
SKL0233-CALN	NOS2	QC		17	K007374	K006953		
SKL0233-CALO	NOS3	QC		18	K007373	K006953		
SKL0233-CALP	NOS4	QC		19	K007372	K006953		
SKL0233-CALQ	NOS5	QC		20	K007371	K006953		
SKL0233-CALR	NOS6	QC		21	K007370	K006953		
SKL0233-CALS	NOS7	QC		22	K007287	K006953		

Printed: 12/17/2022 10:57:45AM

ANALYSIS SEQUENCE

SKL0233

Instrument: ECD6 Element Column ID:
Calibration ID: FL00041

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SKL0233-CALF	TOXAPH1	QC		23	K011601	K006953		
SKL0233-CALG	TOXAPH2	QC		24	K011600	K006953		
SKL0233-CALH	TOXAPH3	QC		25	K011599	K006953		
SKL0233-CALI	TOXAPH4	QC		26	K011598	K006953		
SKL0233-CALJ	TOXAPH5	QC		27	K011597	K006953		
SKL0233-CALK	TOXAPH6	QC		28	K011596	K006953		
SKL0233-CALL	TOXAPH7	QC		29	K008546	K006953		

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	14-DEC-2022 19:27	22121401.D	1	RINSE	
2	14-DEC-2022 19:44	22121402.D	1	RINSE	
3	14-DEC-2022 20:02	22121403.D	1	SEQ-IBL1	
4	14-DEC-2022 20:20	22121404.D	1	SEQ-PEM1	
5	14-DEC-2022 20:38	22121405.D	1	SEQ-CAL1	
6	14-DEC-2022 20:56	22121406.D	1	SEQ-CAL2	
7	14-DEC-2022 21:14	22121407.D	1	SEQ-CAL3	
8	14-DEC-2022 21:31	22121408.D	1	SEQ-CAL4	
9	14-DEC-2022 21:49	22121409.D	1	SEQ-CAL5	
10	14-DEC-2022 22:07	22121410.D	1	SEQ-CAL6	
11	14-DEC-2022 22:25	22121411.D	1	SEQ-CAL7	
12	14-DEC-2022 22:43	22121412.D	1	SEQ-CAL8	
13	14-DEC-2022 23:01	22121413.D	1	SEQ-CAL9	
14	14-DEC-2022 23:19	22121414.D	1	SEQ-CALA	
15	14-DEC-2022 23:36	22121415.D	1	SEQ-CALB	
16	14-DEC-2022 23:54	22121416.D	1	SEQ-CALC	
17	15-DEC-2022 00:12	22121417.D	1	SEQ-CALD	
18	15-DEC-2022 00:30	22121418.D	1	SEQ-CALE	
19	15-DEC-2022 00:48	22121419.D	1	SEQ-SCV1	
20	15-DEC-2022 01:06	22121420.D	1	SEQ-SCV2	
21	15-DEC-2022 01:24	22121421.D	1	SEQ-CAL1A	
22	15-DEC-2022 01:42	22121422.D	1	SEQ-CAL2A	
23	15-DEC-2022 01:59	22121423.D	1	SEQ-CAL3A	
24	15-DEC-2022 02:17	22121424.D	1	SEQ-CAL4A	
25	15-DEC-2022 02:35	22121425.D	1	SEQ-CAL5A	
26	15-DEC-2022 02:53	22121426.D	1	SEQ-CAL6A	
27	15-DEC-2022 03:11	22121427.D	1	SEQ-CAL7A	
28	15-DEC-2022 03:29	22121428.D	1	SEQ-CAL8A	
29	15-DEC-2022 03:46	22121429.D	1	SEQ-CAL9A	
30	15-DEC-2022 04:04	22121430.D	1	SEQ-CALAA	
31	15-DEC-2022 04:22	22121431.D	1	SEQ-CALAB	
32	15-DEC-2022 04:40	22121432.D	1	SEQ-CALAC	
33	15-DEC-2022 04:58	22121433.D	1	SEQ-CALAD	
34	15-DEC-2022 05:16	22121434.D	1	SEQ-CALAE	
35	15-DEC-2022 05:33	22121435.D	1	SEQ-PEM2	
36	15-DEC-2022 05:51	22121436.D	1	SEQ-ICV1	
37	15-DEC-2022 06:09	22121437.D	1	SEQ-ICV2	
38	15-DEC-2022 06:27	22121438.D	1	SEQ-ICV3	
39	15-DEC-2022 06:45	22121439.D	1	SEQ-ICV4	
40	15-DEC-2022 07:03	22121440.D	1	BKK0688-BLK1	
41	15-DEC-2022 07:21	22121441.D	1	BKK0688-BS1	
42	15-DEC-2022 07:39	22121442.D	1	BKK0688-BS2	
43	15-DEC-2022 07:57	22121443.D	1	BKK0688-BS3	
44	15-DEC-2022 08:15	22121444.D	1	BKK0688-BSD1	
45	15-DEC-2022 08:32	22121445.D	1	BKK0142-BLK1	
46	15-DEC-2022 08:50	22121446.D	1	BKK0142-BS1	
47	15-DEC-2022 09:08	22121447.D	1	BKK0142-BS2	
48	15-DEC-2022 09:26	22121448.D	1	BKK0142-BSD1	
49	15-DEC-2022 09:44	22121449.D	1	BKK0142-MS1	
50	15-DEC-2022 10:02	22121450.D	1	BKK0142-MSD1	

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b p

	Inject Date/Time	Filename	DF	LabID	ClientID
51	15-DEC-2022 10:20	22121451.D	1	22J0513-01	
52	15-DEC-2022 10:38	22121452.D	1	22J0513-04	
53	15-DEC-2022 10:55	22121453.D	1	22J0535-01	
54	15-DEC-2022 11:13	22121454.D	1	22K0429-01	
55	15-DEC-2022 11:31	22121455.D	1	22K0429-02	
56	15-DEC-2022 11:49	22121456.D	1	22K0429-03	
57	15-DEC-2022 12:07	22121457.D	1	SEQ-PEM3	
58	15-DEC-2022 12:25	22121458.D	1	SEQ-CCV1	
59	15-DEC-2022 12:43	22121459.D	1	SEQ-CCV2	
60	15-DEC-2022 13:01	22121460.D	1	SEQ-CCV3	
61	15-DEC-2022 13:19	22121461.D	1	SEQ-CCV4	
62	15-DEC-2022 13:36	22121462.D	1	BKK0380-BLK1	
63	15-DEC-2022 13:54	22121463.D	1	BKK0380-BS1	
64	15-DEC-2022 14:12	22121464.D	1	BKK0380-BSD1	
65	15-DEC-2022 14:30	22121465.D	1	22K0157-01	
66	15-DEC-2022 14:48	22121466.D	1	22K0230-01	
67	15-DEC-2022 15:06	22121467.D	1	22K0231-01	
68	15-DEC-2022 15:24	22121468.D	1	BKK0382-BLK1	
69	15-DEC-2022 15:42	22121469.D	1	BKK0382-BS1	
70	15-DEC-2022 16:00	22121470.D	1	BKK0382-BS2	
71	15-DEC-2022 16:18	22121471.D	1	BKK0382-BSD1	
72	15-DEC-2022 16:35	22121472.D	1	22K0075-01	
73	15-DEC-2022 16:53	22121473.D	1	SEQ-PEM4	
74	15-DEC-2022 17:11	22121474.D	1	SEQ-CCV5	
75	15-DEC-2022 17:29	22121475.D	1	SEQ-CCV6	
76	15-DEC-2022 17:47	22121476.D	1	SEQ-CCV7	
77	15-DEC-2022 18:05	22121477.D	1	SEQ-CCV8	
78	15-DEC-2022 18:23	22121478.D	1	BKK0537-BLK1	
79	15-DEC-2022 18:40	22121479.D	1	BKK0537-BS1	
80	15-DEC-2022 18:58	22121480.D	1	BKK0537-BS2	
81	15-DEC-2022 19:16	22121481.D	1	22K0194-01	
82	15-DEC-2022 19:34	22121482.D	1	22K0194-01RE1	10
83	15-DEC-2022 19:52	22121483.D	1	SEQ-PEM5	
84	15-DEC-2022 20:09	22121484.D	1	SEQ-CCV9	
85	15-DEC-2022 20:27	22121485.D	1	SEQ-CCVA	
86	15-DEC-2022 20:45	22121486.D	1	SEQ-CCVB	
87	15-DEC-2022 21:03	22121487.D	1	SEQ-CCVC	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

ARI Job No.: RINS Method: PEST.m Instrument: ecd6.i Date: 14-DEC-2022

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1927	22121401.D	RINSE		1	NO MANUAL INTEGRATION
1944	22121402.D	RINSE		1	NO MANUAL INTEGRATION
2002	22121403.D	SEQ-IBL1		1	NO MANUAL INTEGRATION
2020	22121404.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
2038	22121405.D	SEQ-CAL1		1	NO MANUAL INTEGRATION
2056	22121406.D	SEQ-CAL2		1	NO MANUAL INTEGRATION
2114	22121407.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
2131	22121408.D	SEQ-CAL4		1	NO MANUAL INTEGRATION
2149	22121409.D	SEQ-CAL5		1	NO MANUAL INTEGRATION
2207	22121410.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
2225	22121411.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
2243	22121412.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
2301	22121413.D	SEQ-CAL9		1	NO MANUAL INTEGRATION
2319	22121414.D	SEQ-CALA		1	NO MANUAL INTEGRATION
2336	22121415.D	SEQ-CALB		1	NO MANUAL INTEGRATION
2354	22121416.D	SEQ-CALC		1	NO MANUAL INTEGRATION
0012	22121417.D	SEQ-CALD		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0030	22121418.D	SEQ-CALE		1	NO MANUAL INTEGRATION
0048	22121419.D	SEQ-SCV1		1	NO MANUAL INTEGRATION
0106	22121420.D	SEQ-SCV2		1	NO MANUAL INTEGRATION
0124	22121421.D	SEQ-CAL1A		1	NO MANUAL INTEGRATION
0142	22121422.D	SEQ-CAL2A		1	NO MANUAL INTEGRATION
0159	22121423.D	SEQ-CAL3A		1	NO MANUAL INTEGRATION
0217	22121424.D	SEQ-CAL4A		1	NO MANUAL INTEGRATION
0235	22121425.D	SEQ-CAL5A		1	NO MANUAL INTEGRATION
0253	22121426.D	SEQ-CAL6A		1	NO MANUAL INTEGRATION
0311	22121427.D	SEQ-CAL7A		1	NO MANUAL INTEGRATION
0329	22121428.D	SEQ-CAL8A		1	NO MANUAL INTEGRATION
0346	22121429.D	SEQ-CAL9A		1	NO MANUAL INTEGRATION
0404	22121430.D	SEQ-CALAA		1	NO MANUAL INTEGRATION
0422	22121431.D	SEQ-CALAB		1	NO MANUAL INTEGRATION
0440	22121432.D	SEQ-CALAC		1	NO MANUAL INTEGRATION
0458	22121433.D	SEQ-CALAD		1	NO MANUAL INTEGRATION
0516	22121434.D	SEQ-CALAE		1	NO MANUAL INTEGRATION
0533	22121435.D	SEQ-PEM2		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0551	22121436.D	SEQ-ICV1		1	NO MANUAL INTEGRATION
0609	22121437.D	SEQ-ICV2		1	NO MANUAL INTEGRATION
0627	22121438.D	SEQ-ICV3		1	NO MANUAL INTEGRATION
0645	22121439.D	SEQ-ICV4		1	NO MANUAL INTEGRATION
0703	22121440.D	BKK0688-BLK1		1	NO MANUAL INTEGRATION
0721	22121441.D	BKK0688-BS1		1	NO MANUAL INTEGRATION
0739	22121442.D	BKK0688-BS2		1	NO MANUAL INTEGRATION
0757	22121443.D	BKK0688-BS3		1	NO MANUAL INTEGRATION
0815	22121444.D	BKK0688-BSD1		1	NO MANUAL INTEGRATION
0832	22121445.D	BKK0142-BLK1		1	NO MANUAL INTEGRATION
0850	22121446.D	BKK0142-BS1		1	NO MANUAL INTEGRATION
0908	22121447.D	BKK0142-BS2		1	NO MANUAL INTEGRATION
0926	22121448.D	BKK0142-BSD1		1	NO MANUAL INTEGRATION
0944	22121449.D	BKK0142-MS1		1	NO MANUAL INTEGRATION
1002	22121450.D	BKK0142-MSD1		1	NO MANUAL INTEGRATION
1020	22121451.D	22J0513-01		1	NO MANUAL INTEGRATION
1038	22121452.D	22J0513-04		1	NO MANUAL INTEGRATION
1055	22121453.D	22J0535-01		1	trans-Chlordane,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1113	22121454.D	22K0429-01		1	Heptachlor epoxide b,
1131	22121455.D	22K0429-02		1	Heptachlor epoxide b,
1149	22121456.D	22K0429-03		1	Hexachlorobenzene,
1207	22121457.D	SEQ-PEM3		1	NO MANUAL INTEGRATION
1225	22121458.D	SEQ-CCV1		1	NO MANUAL INTEGRATION
1243	22121459.D	SEQ-CCV2		1	NO MANUAL INTEGRATION
1301	22121460.D	SEQ-CCV3		1	NO MANUAL INTEGRATION
1319	22121461.D	SEQ-CCV4		1	NO MANUAL INTEGRATION
1336	22121462.D	BKK0380-BLK1		1	NO MANUAL INTEGRATION
1354	22121463.D	BKK0380-BS1		1	NO MANUAL INTEGRATION
1412	22121464.D	BKK0380-BSD1		1	NO MANUAL INTEGRATION
1430	22121465.D	22K0157-01		1	NO MANUAL INTEGRATION
1448	22121466.D	22K0230-01		1	NO MANUAL INTEGRATION
1506	22121467.D	22K0231-01		1	NO MANUAL INTEGRATION
1524	22121468.D	BKK0382-BLK1		1	NO MANUAL INTEGRATION
1542	22121469.D	BKK0382-BS1		1	NO MANUAL INTEGRATION
1600	22121470.D	BKK0382-BS2		1	NO MANUAL INTEGRATION
1618	22121471.D	BKK0382-BSD1		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1635	22121472.D	22K0075-01		1	NO MANUAL INTEGRATION
1653	22121473.D	SEQ-PEM4		1	NO MANUAL INTEGRATION
1711	22121474.D	SEQ-CCV5		1	NO MANUAL INTEGRATION
1729	22121475.D	SEQ-CCV6		1	NO MANUAL INTEGRATION
1747	22121476.D	SEQ-CCV7		1	NO MANUAL INTEGRATION
1805	22121477.D	SEQ-CCV8		1	NO MANUAL INTEGRATION
1823	22121478.D	BKK0537-BLK1		1	NO MANUAL INTEGRATION
1840	22121479.D	BKK0537-BS1		1	NO MANUAL INTEGRATION
1858	22121480.D	BKK0537-BS2		1	NO MANUAL INTEGRATION
1916	22121481.D	22K0194-01		1	NO MANUAL INTEGRATION
1934	22121482.D	22K0194-01RE1	10	1	NO MANUAL INTEGRATION
1952	22121483.D	SEQ-PEM5		1	NO MANUAL INTEGRATION
2009	22121484.D	SEQ-CCV9		1	NO MANUAL INTEGRATION
2027	22121485.D	SEQ-CCVA		1	NO MANUAL INTEGRATION
2045	22121486.D	SEQ-CCVB		1	NO MANUAL INTEGRATION
2103	22121487.D	SEQ-CCVC		1	NO MANUAL INTEGRATION
1927	22121401.D	RINSE		1	NO MANUAL INTEGRATION
1944	22121402.D	RINSE		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2002	22121403.D	SEQ-IBL1		1	NO MANUAL INTEGRATION
2020	22121404.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
2038	22121405.D	SEQ-CAL1		1	NO MANUAL INTEGRATION
2056	22121406.D	SEQ-CAL2		1	NO MANUAL INTEGRATION
2114	22121407.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
2131	22121408.D	SEQ-CAL4		1	NO MANUAL INTEGRATION
2149	22121409.D	SEQ-CAL5		1	NO MANUAL INTEGRATION
2207	22121410.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
2225	22121411.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
2243	22121412.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
2301	22121413.D	SEQ-CAL9		1	NO MANUAL INTEGRATION
2319	22121414.D	SEQ-CALA		1	NO MANUAL INTEGRATION
2336	22121415.D	SEQ-CALB		1	NO MANUAL INTEGRATION
2354	22121416.D	SEQ-CALC		1	NO MANUAL INTEGRATION
0012	22121417.D	SEQ-CALD		1	NO MANUAL INTEGRATION
0030	22121418.D	SEQ-CALE		1	NO MANUAL INTEGRATION
0048	22121419.D	SEQ-SCV1		1	NO MANUAL INTEGRATION
0106	22121420.D	SEQ-SCV2		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0124	22121421.D	SEQ-CAL1A		1	NO MANUAL INTEGRATION
0142	22121422.D	SEQ-CAL2A		1	NO MANUAL INTEGRATION
0159	22121423.D	SEQ-CAL3A		1	NO MANUAL INTEGRATION
0217	22121424.D	SEQ-CAL4A		1	NO MANUAL INTEGRATION
0235	22121425.D	SEQ-CAL5A		1	NO MANUAL INTEGRATION
0253	22121426.D	SEQ-CAL6A		1	NO MANUAL INTEGRATION
0311	22121427.D	SEQ-CAL7A		1	NO MANUAL INTEGRATION
0329	22121428.D	SEQ-CAL8A		1	NO MANUAL INTEGRATION
0346	22121429.D	SEQ-CAL9A		1	NO MANUAL INTEGRATION
0404	22121430.D	SEQ-CALAA		1	NO MANUAL INTEGRATION
0422	22121431.D	SEQ-CALAB		1	NO MANUAL INTEGRATION
0440	22121432.D	SEQ-CALAC		1	NO MANUAL INTEGRATION
0458	22121433.D	SEQ-CALAD		1	NO MANUAL INTEGRATION
0516	22121434.D	SEQ-CALAE		1	NO MANUAL INTEGRATION
0533	22121435.D	SEQ-PEM2		1	NO MANUAL INTEGRATION
0551	22121436.D	SEQ-ICV1		1	NO MANUAL INTEGRATION
0609	22121437.D	SEQ-ICV2		1	NO MANUAL INTEGRATION
0627	22121438.D	SEQ-ICV3		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0645	22121439.D	SEQ-ICV4		1	NO MANUAL INTEGRATION
0703	22121440.D	BKK0688-BLK1		1	NO MANUAL INTEGRATION
0721	22121441.D	BKK0688-BS1		1	NO MANUAL INTEGRATION
0739	22121442.D	BKK0688-BS2		1	NO MANUAL INTEGRATION
0757	22121443.D	BKK0688-BS3		1	NO MANUAL INTEGRATION
0815	22121444.D	BKK0688-BSD1		1	NO MANUAL INTEGRATION
0832	22121445.D	BKK0142-BLK1		1	NO MANUAL INTEGRATION
0850	22121446.D	BKK0142-BS1		1	NO MANUAL INTEGRATION
0908	22121447.D	BKK0142-BS2		1	NO MANUAL INTEGRATION
0926	22121448.D	BKK0142-BSD1		1	NO MANUAL INTEGRATION
0944	22121449.D	BKK0142-MS1		1	NO MANUAL INTEGRATION
1002	22121450.D	BKK0142-MSD1		1	NO MANUAL INTEGRATION
1020	22121451.D	22J0513-01		1	NO MANUAL INTEGRATION
1038	22121452.D	22J0513-04		1	NO MANUAL INTEGRATION
1055	22121453.D	22J0535-01		1	trans-Chlordane [C],
1113	22121454.D	22K0429-01		1	NO MANUAL INTEGRATION
1131	22121455.D	22K0429-02		1	Aldrin [C], Heptachlor epoxide b [C], trans-Chlordane [C],
1149	22121456.D	22K0429-03		1	Aldrin [C],

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1207	22121457.D	SEQ-PEM3		1	NO MANUAL INTEGRATION
1225	22121458.D	SEQ-CCV1		1	NO MANUAL INTEGRATION
1243	22121459.D	SEQ-CCV2		1	NO MANUAL INTEGRATION
1301	22121460.D	SEQ-CCV3		1	NO MANUAL INTEGRATION
1319	22121461.D	SEQ-CCV4		1	NO MANUAL INTEGRATION
1336	22121462.D	BKK0380-BLK1		1	NO MANUAL INTEGRATION
1354	22121463.D	BKK0380-BS1		1	NO MANUAL INTEGRATION
1412	22121464.D	BKK0380-BSD1		1	NO MANUAL INTEGRATION
1430	22121465.D	22K0157-01		1	NO MANUAL INTEGRATION
1448	22121466.D	22K0230-01		1	NO MANUAL INTEGRATION
1506	22121467.D	22K0231-01		1	NO MANUAL INTEGRATION
1524	22121468.D	BKK0382-BLK1		1	NO MANUAL INTEGRATION
1542	22121469.D	BKK0382-BS1		1	NO MANUAL INTEGRATION
1600	22121470.D	BKK0382-BS2		1	NO MANUAL INTEGRATION
1618	22121471.D	BKK0382-BSD1		1	NO MANUAL INTEGRATION
1635	22121472.D	22K0075-01		1	NO MANUAL INTEGRATION
1653	22121473.D	SEQ-PEM4		1	NO MANUAL INTEGRATION
1711	22121474.D	SEQ-CCV5		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1729	22121475.D	SEQ-CCV6		1	NO MANUAL INTEGRATION
1747	22121476.D	SEQ-CCV7		1	NO MANUAL INTEGRATION
1805	22121477.D	SEQ-CCV8		1	NO MANUAL INTEGRATION
1823	22121478.D	BKK0537-BLK1		1	NO MANUAL INTEGRATION
1840	22121479.D	BKK0537-BS1		1	NO MANUAL INTEGRATION
1858	22121480.D	BKK0537-BS2		1	NO MANUAL INTEGRATION
1916	22121481.D	22K0194-01		1	NO MANUAL INTEGRATION
1934	22121482.D	22K0194-01RE1	10	1	NO MANUAL INTEGRATION
1952	22121483.D	SEQ-PEM5		1	NO MANUAL INTEGRATION
2010	22121484.D	SEQ-CCV9		1	NO MANUAL INTEGRATION
2027	22121485.D	SEQ-CCVA		1	NO MANUAL INTEGRATION
2045	22121486.D	SEQ-CCVB		1	NO MANUAL INTEGRATION
2103	22121487.D	SEQ-CCVC		1	NO MANUAL INTEGRATION

Security Status Report

Date: 17-Dec-2022 10:57

22121401.D	Data Locked	jrains, 17-Dec-2022 10:57
22121402.D	Data Locked	jrains, 17-Dec-2022 10:57
22121403.D	Data Locked	jrains, 17-Dec-2022 10:57
22121404.D	Data Locked	jrains, 17-Dec-2022 10:57
22121405.D	Data Locked	jrains, 17-Dec-2022 10:57
22121406.D	Data Locked	jrains, 17-Dec-2022 10:57
22121407.D	Data Locked	jrains, 17-Dec-2022 10:57
22121408.D	Data Locked	jrains, 17-Dec-2022 10:57
22121409.D	Data Locked	jrains, 17-Dec-2022 10:57
22121410.D	Data Locked	jrains, 17-Dec-2022 10:57
22121411.D	Data Locked	jrains, 17-Dec-2022 10:57
22121412.D	Data Locked	jrains, 17-Dec-2022 10:57
22121413.D	Data Locked	jrains, 17-Dec-2022 10:57
22121414.D	Data Locked	jrains, 17-Dec-2022 10:57
22121415.D	Data Locked	jrains, 17-Dec-2022 10:57
22121416.D	Data Locked	jrains, 17-Dec-2022 10:57
22121417.D	Data Locked	jrains, 17-Dec-2022 10:57
22121418.D	Data Locked	jrains, 17-Dec-2022 10:57
22121419.D	Data Locked	jrains, 17-Dec-2022 10:57
22121420.D	Data Locked	jrains, 17-Dec-2022 10:57
22121421.D	Data Locked	jrains, 17-Dec-2022 10:57
22121422.D	Data Locked	jrains, 17-Dec-2022 10:57
22121423.D	Data Locked	jrains, 17-Dec-2022 10:57
22121424.D	Data Locked	jrains, 17-Dec-2022 10:57
22121425.D	Data Locked	jrains, 17-Dec-2022 10:57
22121426.D	Data Locked	jrains, 17-Dec-2022 10:57
22121427.D	Data Locked	jrains, 17-Dec-2022 10:57
22121428.D	Data Locked	jrains, 17-Dec-2022 10:57
22121429.D	Data Locked	jrains, 17-Dec-2022 10:57
22121430.D	Data Locked	jrains, 17-Dec-2022 10:57
22121431.D	Data Locked	jrains, 17-Dec-2022 10:57
22121432.D	Data Locked	jrains, 17-Dec-2022 10:57
22121433.D	Data Locked	jrains, 17-Dec-2022 10:57
22121434.D	Data Locked	jrains, 17-Dec-2022 10:57

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
End Cal Date : 15-DEC-2022 05:16
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121428.D
Level 2: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121429.D
Level 3: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121430.D
Level 4: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121431.D
Level 5: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121432.D
Level 6: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121433.D
Level 7: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121434.D

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
1 Hexachlorobutadiene [C]	+++++	1.97561	1.64885	1.49248	1.37610	1.34121	1.30081	1.52251	16.761
5 Hexachlorobenzene [C]	+++++	1.60221	1.52062	1.49140	1.45025	1.38595	1.30422	1.45911	7.170
6 alpha-BHC [C]	+++++	1.58236	1.58624	1.63316	1.64049	1.61544	1.56190	1.60327	1.946
7 gamma-BHC (Lindane) [C]	+++++	1.35507	1.34878	1.38146	1.39277	1.36661	1.31891	1.36060	1.921
8 beta-BHC [C]	+++++	0.65278	0.61729	0.61846	0.61258	0.59180	0.56430	0.60954	4.856
9 delta-BHC [C]	+++++	1.32376	1.30723	1.33943	1.32843	1.33198	1.29291	1.32062	1.312
10 Heptachlor [C]	+++++	1.27025	1.23424	1.25841	1.27225	1.21576	1.14412	1.23250	3.937
11 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
12 Aldrin [C]	+++++	1.51140	1.41672	1.43264	1.43038	1.37092	1.28126	1.40722	5.441
13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Heptachlor epoxide b [C]	+++++	1.29770	1.17460	1.17429	1.17471	1.11443	1.04614	1.16364	7.144
15 cis-Chlordane [C]	+++++	1.25850	1.15320	1.13505	1.13625	1.08979	1.03859	1.13523	6.464
16 trans-Chlordane [C]	+++++	1.25449	1.17610	1.16484	1.16885	1.12553	1.07269	1.16042	5.185
17 Endosulfan I [C]	+++++	1.11826	1.04415	1.03541	1.03470	0.98850	0.93258	1.02560	6.032
18 4,4'-DDE [C]	+++++	1.12024	1.06963	1.06439	1.05541	0.98971	0.93563	1.03917	6.320
19 Dieldrin [C]	+++++	1.27001	1.16284	1.13936	1.13610	1.07139	1.01937	1.13318	7.532
20 Endrin [C]	+++++	1.25691	1.17909	1.15948	1.14960	1.06606	1.01378	1.13749	7.566
21 4,4'-DDD [C]	+++++	1.23448	1.12156	1.11779	1.11200	1.04628	1.00638	1.10642	7.049
22 Endosulfan II [C]	+++++	1.29682	1.20296	1.18849	1.16050	1.09906	1.04780	1.16594	7.425

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
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Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
23 4,4'-DDT [C]	+++++	1.17591	1.07782	1.06761	1.07327	1.01936	0.99339	1.06790	5.878
24 Endrin aldehyde [C]	+++++	0.94301	0.84303	0.82492	0.81299	0.77277	0.73803	0.82246	8.537
25 Endosulfan sulfate [C]	+++++	1.13777	1.04255	1.03037	1.02302	0.97217	0.93725	1.02386	6.702
26 Methoxychlor [C]	+++++	0.51841	0.48668	0.47517	0.46817	0.44340	0.44364	0.47258	5.996
27 Endrin ketone [C]	+++++	1.23563	1.11999	1.11440	1.10085	1.04766	1.01657	1.10585	6.827
29 Aroclor-1016(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
30 Aroclor-1221(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
End Cal Date : 15-DEC-2022 05:16
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
31 Aroclor-1232(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
32 Aroclor-1242(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
End Cal Date : 15-DEC-2022 05:16
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####
33 Aroclor-1248(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####
34 Aroclor-1254(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
End Cal Date : 15-DEC-2022 05:16
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####
35 Aroclor-1260(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####
36 Aroclor-1262(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
End Cal Date : 15-DEC-2022 05:16
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
37 Aroclor-1268(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
38 Toxaphene [C](1)	0.01492	0.01529	0.01573	0.01558	0.01527	0.01455	0.01387	0.01503	4.285
(2)	0.03524	0.03538	0.03581	0.03480	0.03351	0.03170	0.03010	0.03379	6.368
(3)	0.02615	0.02659	0.02671	0.02640	0.02571	0.02464	0.02387	0.02572	4.197
(4)	0.08868	0.08690	0.08740	0.08502	0.08225	0.07926	0.07782	0.08390	5.022
(5)	0.04138	0.04124	0.04193	0.04145	0.04102	0.04046	0.04062	0.04116	1.227
39 2,4-DDE [C]	+++++	0.83433	0.80524	0.74313	0.72589	0.66671	0.60202	0.72955	11.810

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
End Cal Date : 15-DEC-2022 05:16
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
40 2,4-DDD [C]	+++++	0.90975	0.87971	0.82738	0.81642	0.76623	0.71370	0.81887	8.785
41 2,4-DDT [C]	+++++	0.94001	0.88046	0.85026	0.84852	0.79773	0.74249	0.84324	8.052
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
43 Oxychlordane [C]	+++++	0.96447	0.94678	0.90333	0.89663	0.84333	0.79092	0.89091	7.271
44 trans-Nonachlor [C]	+++++	1.48885	1.51762	1.45179	1.44766	1.37681	1.30668	1.43157	5.406
45 cis-Nonachlor [C]	+++++	1.44924	1.40707	1.37647	1.37212	1.31329	1.24817	1.36106	5.224
46 Mirex [C]	+++++	0.93314	0.81155	0.79462	0.76268	0.73998	0.70751	0.79158	9.949
47 bis-(2-ethylhexyl) Phthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
48 Chlordane (NOS) [C](1)	0.03877	0.03690	0.03764	0.03840	0.03761	0.03805	0.03764	0.03786	1.615
(2)	0.04647	0.04439	0.04416	0.04357	0.04103	0.03978	0.03825	0.04252	6.844
(3)	0.14135	0.14252	0.14927	0.15059	0.14418	0.14081	0.13812	0.14383	3.173

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
End Cal Date : 15-DEC-2022 05:16
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 4 Tetrachloro-m-xylene [C]	+++++	1.22086	1.17937	1.16483	1.12798	1.06878	0.99482	1.12611	7.306
$ 28 Decachlorobiphenyl [C]	+++++	1.08714	0.93916	0.85624	0.84996	0.80139	0.77119	0.88418	12.973

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem4\ecd6.i\20220809.b\22080909.D
Level 2: \\target\share\chem4\ecd6.i\20220809.b\22080910.D
Level 3: \\target\share\chem4\ecd6.i\20220809.b\22080911.D
Level 4: \\target\share\chem4\ecd6.i\20220809.b\22080912.D
Level 5: \\target\share\chem4\ecd6.i\20220809.b\22080913.D
Level 6: \\target\share\chem4\ecd6.i\20220809.b\22080914.D
Level 7: \\target\share\chem4\ecd6.i\20220809.b\22080915.D

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
						80.000 Level 7		
1 Hexachlorobutadiene	+++++	1.64215	1.55667	1.51049	1.47308	1.40536		
	1.30292						1.48178	7.988
5 Hexachlorobenzene	+++++	1.48647	1.40778	1.36481	1.31957	1.25458		
	1.15582						1.33150	8.750
6 alpha-BHC	+++++	1.41183	1.40802	1.42270	1.42790	1.37811		
	1.29587						1.39074	3.567
7 gamma-BHC (Lindane)	+++++	1.20108	1.18733	1.20704	1.21598	1.18532		
	1.11861						1.18589	2.948
8 beta-BHC	+++++	0.65244	0.60612	0.58927	0.57533	0.54649		
	0.50588						0.57925	8.684
9 delta-BHC	+++++	1.15252	1.13315	1.18185	1.21952	1.21492		
	1.16159						1.17726	2.950
10 Heptachlor	+++++	1.18674	1.12881	1.11527	1.09009	1.03076		
	0.94214						1.08230	7.897
11 Aldrin	+++++	1.14505	1.10493	1.10576	1.09698	1.04621		
	0.96536						1.07738	5.877

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
12 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Heptachlor epoxide b	+++++	1.05278	0.99602	0.98316	0.95413	0.89408	0.81733	0.94959	8.751
15 cis-Chlordane	+++++	1.00217	0.95563	0.94931	0.93343	0.89233	0.82943	0.92705	6.424
16 trans-Chlordane	+++++	1.02223	0.96054	0.95840	0.94631	0.90606	0.84267	0.93937	6.420
17 Endosulfan I	+++++	1.10444	1.01004	0.97510	0.92642	0.86761	0.77363	0.94287	12.207
18 4,4'-DDE	+++++	0.85783	0.84618	0.86175	0.85068	0.80349	0.73346	0.82557	6.027
19 Dieldrin	+++++	1.02112	0.97469	0.96064	0.93395	0.87876	0.79720	0.92773	8.553
20 Endrin	+++++	1.03359	0.99258	1.01493	1.03951	0.95184	0.92125	0.99228	4.755
21 4,4'-DDD	+++++	1.26749	1.21690	1.21140	1.19455	1.09258	1.02286	1.16763	7.815
22 Endosulfan II	+++++	1.32213	1.30831	1.28817	1.25191	1.14300	1.05695	1.22841	8.614

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
23 4,4'-DDT	+++++	1.20278	1.19912	1.21231	1.21971	1.13284	1.06544	1.17203	5.186
24 Endrin aldehyde	+++++	1.05042	1.01673	1.00197	0.99460	0.91340	0.84575	0.97048	7.836
25 Methoxychlor	+++++	0.56408	0.54010	0.51985	0.50693	0.45626	0.43428	0.50358	9.854
26 Endosulfan sulfate	+++++	1.14290	1.11216	1.09802	1.09968	1.00734	0.94888	1.06816	6.922
27 Endrin ketone	+++++	1.47959	1.40243	1.34455	1.31335	1.19489	1.12695	1.31029	9.966
29 Aroclor-1016(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
30 Aroclor-1221(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
31 Aroclor-1232(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
32 Aroclor-1242(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(6)	*****	*****	*****	*****	*****	*****	*****	*****	*****
33 Aroclor-1248(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
34 Aroclor-1254(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
35 Aroclor-1260(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
36 Aroclor-1262(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
37 Aroclor-1268(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
38 Toxaphene(1)	0.02824	0.03896	0.03693	0.03480	0.03418	0.02891	0.02792	0.03285	13.645
(2)	0.08343	0.10636	0.10204	0.09499	0.09608	0.08394	0.08263	0.09278	10.362
(3)	0.04776	0.06283	0.06069	0.06020	0.06090	0.05141	0.05119	0.05643	10.755
(4)	0.05098	0.07225	0.07089	0.06844	0.06847	0.06296	0.06388	0.06541	11.021
(5)	0.04955	0.06896	0.06748	0.06372	0.06603	0.05846	0.05934	0.06194	10.880

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
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Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
39 2,4-DDE	+++++	1.14103	1.08072	1.09005	1.06169	0.88466	0.89319	1.02522	10.614
40 2,4-DDD	+++++	1.08881	1.01841	0.99599	0.98400	0.85150	0.85318	0.96531	9.816
41 2,4-DDT	+++++	0.97799	0.97179	0.97332	0.98841	0.88743	0.88215	0.94685	5.117
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
43 Oxychlordane	+++++	1.32927	1.24890	1.22496	1.20236	1.04785	1.05015	1.18392	9.540
44 trans-Nonachlor	+++++	1.68629	1.57989	1.58456	1.55669	1.34437	1.36253	1.51906	8.949
45 cis-Nonachlor	+++++	1.62941	1.55213	1.53413	1.52347	1.34758	1.35527	1.49033	7.639
46 Mirex	+++++	1.20478	1.11168	1.05006	1.00932	0.85381	0.85786	1.01459	13.749
47 bis-(2-ethylhexyl) Phthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
48 Chlordane (NOS)(1)	0.06029	0.05735	0.05369	0.05005	0.04581	0.04808	0.04531	0.05151	11.230
(2)	0.15038	0.14213	0.13501	0.13074	0.12020	0.12674	0.12030	0.13221	8.482

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(3)	0.17221	0.15459	0.13623	0.13893	0.12753	0.13518	0.13160	0.14232	11.024
49 Trifluralin	*****	*****	*****	*****	*****	*****	*****	*****	*****
50 Dacthal	*****	*****	*****	*****	*****	*****	*****	*****	*****
51 Oxadiazon	*****	*****	*****	*****	*****	*****	*****	*****	*****
52 Kelthane	*****	*****	*****	*****	*****	*****	*****	*****	*****
53 Chlorpyrifos	*****	*****	*****	*****	*****	*****	*****	*****	*****
54 Methyl Parathion	*****	*****	*****	*****	*****	*****	*****	*****	*****
55 Ethyl Parathion	*****	*****	*****	*****	*****	*****	*****	*****	*****
56 Kepone	*****	*****	*****	*****	*****	*****	*****	*****	*****
57 1-Chloropyrene	*****	*****	*****	*****	*****	*****	*****	*****	*****
$ 4 Tetrachloro-m-xylene	*****	1.10401	1.05839	1.02629	0.99588	0.93352	0.85040	0.99475	9.166

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
$ 28 Decachlorobiphenyl	+++++	0.99444	0.96249	0.90111	0.87014	0.79161	0.75653	0.87939	10.607

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121405	22121406	22121407	22121408	22121409	22121410	22121411
INJ.DATE:	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022
INJ.TIME:	20:38	20:56	21:14	21:31	21:49	22:07	22:25

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Hexachlorobutadiene	2.323	2.323	2.324	2.323	2.324	2.324	2.324	2.324	2.294-2.354	2.323	0.000
* 2 1Bromo-2nitrobenzene	3.151	3.151	3.152	3.151	3.151	3.151	3.151	3.151	3.121-3.181	3.151	0.000
* 3 Hexabromobiphenyl	9.504	9.503	9.504	9.505	9.505	9.504	9.504	9.505	9.475-9.535	9.504	0.001
$ 4 Tetrachloro-m-xylene	3.828	3.828	3.828	3.828	3.828	3.828	3.828	3.828	3.798-3.858	3.828	0.000
5 Hexachlorobenzene	4.182	4.182	4.183	4.183	4.182	4.183	4.182	4.182	4.152-4.212	4.183	0.000
6 alpha-BHC	4.342	4.342	4.343	4.343	4.342	4.342	4.342	4.342	4.312-4.372	4.342	0.000
7 gamma-BHC (Lindane)	4.645	4.645	4.646	4.646	4.645	4.646	4.645	4.645	4.615-4.675	4.645	0.000
8 beta-BHC	4.726	4.726	4.727	4.726	4.726	4.726	4.726	4.726	4.696-4.756	4.726	0.000
9 delta-BHC	4.909	4.909	4.910	4.910	4.909	4.910	4.910	4.909	4.879-4.939	4.910	0.000
10 Heptachlor	5.130	5.129	5.130	5.130	5.130	5.130	5.130	5.130	5.100-5.160	5.130	0.000
11 Aldrin	5.453	5.453	5.455	5.454	5.454	5.454	5.454	5.454	5.424-5.484	5.454	0.000
12 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.627	13.597-13.657	+++++	+++++
13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.869	10.839-10.899	+++++	+++++
14 Heptachlor epoxide b	6.130	6.130	6.132	6.131	6.130	6.130	6.130	6.130	6.100-6.160	6.131	0.001
15 cis-Chlordane	6.417	6.417	6.417	6.418	6.417	6.417	6.417	6.417	6.387-6.447	6.417	0.000
16 trans-Chlordane	6.270	6.271	6.271	6.271	6.271	6.271	6.271	6.271	6.241-6.301	6.271	0.000
17 Endosulfan I	6.572	6.572	6.573	6.573	6.572	6.572	6.573	6.572	6.542-6.602	6.573	0.000

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE	6.489	6.489	6.490	6.490	6.489	6.489	6.490	6.489	6.459-6.519	6.489	0.000
	19 Dieldrin	6.831	6.832	6.832	6.832	6.831	6.832	6.832	6.831	6.801-6.861	6.832	0.000
	20 Endrin	7.081	7.081	7.082	7.082	7.081	7.082	7.082	7.081	7.051-7.111	7.082	0.000
	21 4,4'-DDD	7.135	7.136	7.136	7.136	7.135	7.136	7.135	7.135	7.105-7.165	7.136	0.000
	22 Endosulfan II	7.318	7.317	7.318	7.318	7.317	7.317	7.317	7.317	7.287-7.347	7.317	0.000
	23 4,4'-DDT	7.427	7.427	7.428	7.428	7.427	7.427	7.428	7.427	7.397-7.457	7.428	0.000
	24 Endrin aldehyde	7.746	7.746	7.746	7.746	7.746	7.746	7.746	7.746	7.716-7.776	7.746	0.000
	25 Methoxychlor	7.912	7.912	7.913	7.912	7.912	7.912	7.912	7.912	7.882-7.942	7.912	0.000
	26 Endosulfan sulfate	8.180	8.179	8.180	8.180	8.180	8.179	8.180	8.180	8.150-8.210	8.180	0.000
	27 Endrin ketone	8.453	8.452	8.454	8.453	8.453	8.453	8.454	8.453	8.423-8.483	8.453	0.001
$	28 Decachlorobiphenyl	9.355	9.354	9.355	9.355	9.355	9.355	9.356	9.355	9.325-9.385	9.355	0.000
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.851-4.911	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.329-5.389	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.388-4.448	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.227-5.287	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	6.015-6.075	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.271-8.331	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.229-11.289	+++++	+++++
	38 Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.931	6.901-6.961	+++++	+++++
	39 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.106	6.076-6.136	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.681	6.651-6.711	+++++	+++++
41 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.957	6.927-6.987	+++++	+++++
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.774	1.744-1.804	+++++	+++++
43 Oxychlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.014	5.984-6.044	+++++	+++++
44 trans-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.397	6.367-6.427	+++++	+++++
45 cis-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.112	7.082-7.142	+++++	+++++
46 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.082	8.052-8.112	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.126-20.186	+++++	+++++
48 Chlordane (NOS)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.593	5.563-5.623	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.289-6.349	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.906-9.966	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.861-11.921	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.797-14.857	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.720-9.780	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.077-9.137	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.221-10.281	+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.588	6.558-6.618	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.953	6.923-6.983	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121405	22121406	22121407	22121408	22121409	22121410	22121411
INJ.DATE:	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022
INJ.TIME:	20:38	20:56	21:14	21:31	21:49	22:07	22:25

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Hexachlorobutadiene [C	2.500	2.500	2.500	2.500	2.500	2.500	2.501	2.501	2.471-2.531	2.500	0.000
* 2 1Bromo-2nitrobenzene [	3.350	3.350	3.351	3.351	3.350	3.351	3.351	3.351	3.321-3.381	3.351	0.000
* 3 Hexabromobiphenyl[C]	11.054	11.053	11.054	11.054	11.053	11.053	11.054	11.054	11.024-11.084	11.054	0.000
$ 4 Tetrachloro-m-xylene [	4.220	4.220	4.220	4.220	4.220	4.221	4.220	4.220	4.190-4.250	4.220	0.000
5 Hexachlorobenzene [C]	4.718	4.718	4.718	4.718	4.718	4.718	4.718	4.718	4.688-4.748	4.718	0.000
6 alpha-BHC [C]	4.860	4.859	4.860	4.860	4.860	4.860	4.861	4.861	4.831-4.891	4.860	0.000
7 gamma-BHC (Lindane) [C	5.257	5.257	5.258	5.258	5.258	5.258	5.258	5.258	5.228-5.288	5.258	0.000
8 beta-BHC [C]	5.337	5.337	5.338	5.337	5.337	5.337	5.337	5.337	5.307-5.367	5.337	0.000
9 delta-BHC [C]	5.690	5.691	5.691	5.691	5.690	5.691	5.691	5.691	5.661-5.721	5.691	0.000
10 Heptachlor [C]	5.786	5.787	5.787	5.787	5.787	5.787	5.787	5.787	5.757-5.817	5.787	0.000
11 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.588	14.558-14.618	+++++	+++++
12 Aldrin [C]	6.190	6.190	6.191	6.191	6.191	6.190	6.191	6.191	6.161-6.221	6.191	0.000
13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.680	12.650-12.710	+++++	+++++
14 Heptachlor epoxide b [	6.845	6.845	6.845	6.846	6.845	6.846	6.845	6.845	6.815-6.875	6.845	0.000
15 cis-Chlordane [C]	7.215	7.215	7.216	7.216	7.216	7.215	7.216	7.216	7.186-7.246	7.215	0.000
16 trans-Chlordane [C]	7.056	7.055	7.056	7.056	7.056	7.056	7.056	7.056	7.026-7.086	7.056	0.000
17 Endosulfan I [C]	7.288	7.288	7.289	7.289	7.289	7.288	7.289	7.289	7.259-7.319	7.288	0.000

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE [C]	7.370	7.370	7.371	7.371	7.370	7.371	7.371	7.371	7.341-7.401	7.371	0.000
	19 Dieldrin [C]	7.582	7.582	7.583	7.583	7.582	7.582	7.583	7.583	7.553-7.613	7.582	0.000
	20 Endrin [C]	7.906	7.906	7.906	7.907	7.907	7.907	7.907	7.907	7.877-7.937	7.907	0.000
	21 4,4'-DDD [C]	7.976	7.976	7.976	7.977	7.976	7.976	7.976	7.976	7.946-8.006	7.976	0.000
	22 Endosulfan II [C]	8.117	8.116	8.117	8.117	8.117	8.117	8.117	8.117	8.087-8.147	8.117	0.000
	23 4,4'-DDT [C]	8.294	8.294	8.294	8.295	8.295	8.295	8.295	8.295	8.265-8.325	8.295	0.000
	24 Endrin aldehyde [C]	8.448	8.447	8.448	8.448	8.448	8.448	8.448	8.448	8.418-8.478	8.448	0.000
	25 Endosulfan sulfate [C]	8.715	8.714	8.715	8.715	8.715	8.715	8.715	8.715	8.685-8.745	8.715	0.000
	26 Methoxychlor [C]	8.935	8.934	8.935	8.936	8.935	8.935	8.936	8.936	8.906-8.966	8.935	0.001
	27 Endrin ketone [C]	9.239	9.239	9.239	9.240	9.239	9.239	9.240	9.240	9.210-9.270	9.239	0.000
$	28 Decachlorobiphenyl [C]	10.466	10.465	10.466	10.466	10.466	10.466	10.467	10.467	10.437-10.497	10.466	0.001
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.150-4.210	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.021-5.081	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.141-5.201	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.940-5.000	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.255-5.315	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.938-5.998	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.737-6.797	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.684-9.744	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.761-11.821	+++++	+++++
	38 Toxaphene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.126	7.096-7.156	+++++	+++++
	39 2,4-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.036	7.006-7.066	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.591	7.561-7.621	+++++	+++++
41 2,4-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.913	7.883-7.943	+++++	+++++
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.676	1.646-1.706	+++++	+++++
43 Oxychlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.741	6.711-6.771	+++++	+++++
44 trans-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.155	7.125-7.185	+++++	+++++
45 cis-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.975	7.945-8.005	+++++	+++++
46 Mirex [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.223	9.193-9.253	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.469-21.529	+++++	+++++
48 Chlordane (NOS) [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.612	5.582-5.642	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.841-4.901	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.610-6.670	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.085-8.145	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.256-11.316	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.497-6.557	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.312-6.372	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.811-6.871	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.336	7.306-7.366	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.745	7.715-7.775	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121412	22121413	22121414	22121415	22121416	22121417	22121418
INJ.DATE:	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	15-DEC-2022	15-DEC-2022
INJ.TIME:	22:43	23:01	23:19	23:36	23:54	00:12	00:30

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.324	2.294-2.354	+++++	+++++
*	2 1Bromo-2nitrobenzene	3.151	3.151	3.151	3.151	3.151	3.151	3.151	3.151	3.121-3.181	3.151	0.000
*	3 Hexabromobiphenyl	9.504	9.504	9.504	9.504	9.504	9.504	9.504	9.505	9.475-9.535	9.504	0.000
$	4 Tetrachloro-m-xylene	+++++	+++++	+++++	+++++	3.800	3.800	3.800	3.828	3.798-3.858	3.800	0.000
	5 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.182	4.152-4.212	+++++	+++++
	6 alpha-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.342	4.312-4.372	+++++	+++++
	7 gamma-BHC (Lindane)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.645	4.615-4.675	+++++	+++++
	8 beta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.726	4.696-4.756	+++++	+++++
	9 delta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.909	4.879-4.939	+++++	+++++
	10 Heptachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.130	5.100-5.160	+++++	+++++
	11 Aldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.454	5.424-5.484	+++++	+++++
	12 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.627	13.597-13.657	+++++	+++++
	13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.869	10.839-10.899	+++++	+++++
	14 Heptachlor epoxide b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.130	6.100-6.160	+++++	+++++
	15 cis-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.417	6.387-6.447	+++++	+++++
	16 trans-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.271	6.241-6.301	+++++	+++++
	17 Endosulfan I	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.572	6.542-6.602	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.489	6.459-6.519	+++++	+++++
	19 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.831	6.801-6.861	+++++	+++++
	20 Endrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.081	7.051-7.111	+++++	+++++
	21 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.135	7.105-7.165	+++++	+++++
	22 Endosulfan II	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.317	7.287-7.347	+++++	+++++
	23 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.427	7.397-7.457	+++++	+++++
	24 Endrin aldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.746	7.716-7.776	+++++	+++++
	25 Methoxychlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.912	7.882-7.942	+++++	+++++
	26 Endosulfan sulfate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.180	8.150-8.210	+++++	+++++
	27 Endrin ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.453	8.423-8.483	+++++	+++++
$	28 Decachlorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.355	9.325-9.385	+++++	+++++
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.851-4.911	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.329-5.389	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.388-4.448	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.227-5.287	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	6.015-6.075	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.271-8.331	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.229-11.289	+++++	+++++
	38 Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.931	6.901-6.961	+++++	+++++
	39 2,4-DDE	6.106	6.106	6.106	6.106	6.106	6.106	6.106	6.106	6.076-6.136	6.106	0.000

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	6.681	6.681	6.681	6.681	6.681	6.681	6.680	6.681	6.651-6.711	6.681	0.000
41 2,4-DDT	6.956	6.957	6.956	6.956	6.957	6.956	6.956	6.957	6.927-6.987	6.956	0.000
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.774	1.744-1.804	+++++	+++++
43 Oxychlordane	6.014	6.015	6.014	6.015	6.014	6.014	6.014	6.014	5.984-6.044	6.015	0.000
44 trans-Nonachlor	6.397	6.398	6.398	6.398	6.397	6.397	6.397	6.397	6.367-6.427	6.398	0.000
45 cis-Nonachlor	7.112	7.112	7.111	7.112	7.112	7.112	7.112	7.112	7.082-7.142	7.112	0.000
46 Mirex	8.082	8.082	8.082	8.082	8.082	8.082	8.082	8.082	8.052-8.112	8.082	0.000
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.126-20.186	+++++	+++++
48 Chlordane (NOS)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.593	5.563-5.623	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.289-6.349	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.906-9.966	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.861-11.921	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.797-14.857	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.720-9.780	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.077-9.137	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.221-10.281	+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.588	6.558-6.618	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.953	6.923-6.983	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121412	22121413	22121414	22121415	22121416	22121417	22121418
INJ.DATE:	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	15-DEC-2022	15-DEC-2022
INJ.TIME:	22:43	23:01	23:19	23:36	23:54	00:12	00:30

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Hexachlorobutadiene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.501	2.471-2.531	+++++	+++++
*	2 1Bromo-2nitrobenzene [	3.351	3.351	3.351	3.351	3.351	3.351	3.351	3.351	3.321-3.381	3.351	0.000
*	3 Hexabromobiphenyl[C]	11.054	11.054	11.054	11.054	11.054	11.054	11.054	11.054	11.024-11.084	11.054	0.000
$	4 Tetrachloro-m-xylene [	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.220	4.190-4.250	+++++	+++++
	5 Hexachlorobenzene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.718	4.688-4.748	+++++	+++++
	6 alpha-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.861	4.831-4.891	+++++	+++++
	7 gamma-BHC (Lindane) [C	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.258	5.228-5.288	+++++	+++++
	8 beta-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.337	5.307-5.367	+++++	+++++
	9 delta-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.691	5.661-5.721	+++++	+++++
	10 Heptachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.787	5.757-5.817	+++++	+++++
	11 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.588	14.558-14.618	+++++	+++++
	12 Aldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.191	6.161-6.221	+++++	+++++
	13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.680	12.650-12.710	+++++	+++++
	14 Heptachlor epoxide b [	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.845	6.815-6.875	+++++	+++++
	15 cis-Chlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.216	7.186-7.246	+++++	+++++
	16 trans-Chlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.056	7.026-7.086	+++++	+++++
	17 Endosulfan I [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.289	7.259-7.319	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.371	7.341-7.401	+++++	+++++
	19 Dieldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.583	7.553-7.613	+++++	+++++
	20 Endrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.907	7.877-7.937	+++++	+++++
	21 4,4'-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.976	7.946-8.006	+++++	+++++
	22 Endosulfan II [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.117	8.087-8.147	+++++	+++++
	23 4,4'-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.295	8.265-8.325	+++++	+++++
	24 Endrin aldehyde [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.448	8.418-8.478	+++++	+++++
	25 Endosulfan sulfate [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.715	8.685-8.745	+++++	+++++
	26 Methoxychlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.936	8.906-8.966	+++++	+++++
	27 Endrin ketone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.240	9.210-9.270	+++++	+++++
$	28 Decachlorobiphenyl [C]	+++++	+++++	+++++	+++++	+++++	+++++	10.471	10.467	10.437-10.497	10.471	0.000
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.150-4.210	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.021-5.081	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.141-5.201	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.940-5.000	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.255-5.315	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.938-5.998	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.737-6.797	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.684-9.744	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.761-11.821	+++++	+++++
	38 Toxaphene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.126	7.096-7.156	+++++	+++++
	39 2,4-DDE [C]	7.036	7.036	7.035	7.036	7.036	7.036	7.036	7.036	7.006-7.066	7.036	0.000

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD [C]	7.591	7.590	7.590	7.591	7.590	7.591	7.591	7.591	7.561-7.621	7.591	0.000
41 2,4-DDT [C]	7.913	7.914	7.913	7.913	7.913	7.914	7.913	7.913	7.883-7.943	7.913	0.000
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.676	1.646-1.706	+++++	+++++
43 Oxychlordane [C]	6.741	6.741	6.741	6.741	6.741	6.741	6.741	6.741	6.711-6.771	6.741	0.000
44 trans-Nonachlor [C]	7.154	7.154	7.154	7.155	7.154	7.155	7.155	7.155	7.125-7.185	7.154	0.000
45 cis-Nonachlor [C]	7.975	7.975	7.975	7.975	7.975	7.975	7.975	7.975	7.945-8.005	7.975	0.000
46 Mirex [C]	9.223	9.223	9.222	9.223	9.222	9.223	9.223	9.223	9.193-9.253	9.223	0.000
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.469-21.529	+++++	+++++
48 Chlordane (NOS) [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.612	5.582-5.642	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.841-4.901	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.610-6.670	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.085-8.145	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.256-11.316	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.497-6.557	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.312-6.372	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.811-6.871	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.336	7.306-7.366	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.745	7.715-7.775	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121421	22121422	22121423	22121424	22121425	22121426	22121427
INJ.DATE:	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022
INJ.TIME:	01:24	01:42	01:59	02:17	02:35	02:53	03:11

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.324	2.294-2.354	+++++	+++++
*	2 1Bromo-2nitrobenzene	3.151	3.151	3.151	3.151	3.151	3.151	3.151	3.151	3.121-3.181	3.151	0.000
*	3 Hexabromobiphenyl	9.504	9.504	9.505	9.504	9.504	9.504	9.505	9.505	9.475-9.535	9.504	0.000
$	4 Tetrachloro-m-xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.828	3.798-3.858	+++++	+++++
	5 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.182	4.152-4.212	+++++	+++++
	6 alpha-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.342	4.312-4.372	+++++	+++++
	7 gamma-BHC (Lindane)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.645	4.615-4.675	+++++	+++++
	8 beta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.726	4.696-4.756	+++++	+++++
	9 delta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.909	4.879-4.939	+++++	+++++
	10 Heptachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.130	5.100-5.160	+++++	+++++
	11 Aldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.454	5.424-5.484	+++++	+++++
	12 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.627	13.597-13.657	+++++	+++++
	13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.869	10.839-10.899	+++++	+++++
	14 Heptachlor epoxide b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.130	6.100-6.160	+++++	+++++
	15 cis-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.417	6.387-6.447	+++++	+++++
	16 trans-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.271	6.241-6.301	+++++	+++++
	17 Endosulfan I	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.572	6.542-6.602	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.489	6.459-6.519	+++++	+++++
	19 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.831	6.801-6.861	+++++	+++++
	20 Endrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.081	7.051-7.111	+++++	+++++
	21 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.135	7.105-7.165	+++++	+++++
	22 Endosulfan II	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.317	7.287-7.347	+++++	+++++
	23 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.427	7.397-7.457	+++++	+++++
	24 Endrin aldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.746	7.716-7.776	+++++	+++++
	25 Methoxychlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.912	7.882-7.942	+++++	+++++
	26 Endosulfan sulfate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.180	8.150-8.210	+++++	+++++
	27 Endrin ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.453	8.423-8.483	+++++	+++++
$	28 Decachlorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++	9.380	9.355	9.325-9.385	9.380	0.000
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.851-4.911	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.329-5.389	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.388-4.448	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.227-5.287	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	6.015-6.075	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.271-8.331	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.229-11.289	+++++	+++++
	38 Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.931	6.901-6.961	+++++	+++++
	39 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.106	6.076-6.136	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.681	6.651-6.711	+++++	+++++
41 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.957	6.927-6.987	+++++	+++++
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.774	1.744-1.804	+++++	+++++
43 Oxychlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.014	5.984-6.044	+++++	+++++
44 trans-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.397	6.367-6.427	+++++	+++++
45 cis-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.112	7.082-7.142	+++++	+++++
46 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.082	8.052-8.112	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.126-20.186	+++++	+++++
48 Chlordane (NOS)	5.593	5.593	5.593	5.593	5.593	5.592	5.593	5.593	5.563-5.623	5.593	0.000
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.289-6.349	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.906-9.966	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.861-11.921	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.797-14.857	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.720-9.780	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.077-9.137	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.221-10.281	+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.588	6.558-6.618	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.953	6.923-6.983	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121421	22121422	22121423	22121424	22121425	22121426	22121427
INJ.DATE:	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022
INJ.TIME:	01:24	01:42	01:59	02:17	02:35	02:53	03:11

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Hexachlorobutadiene [C	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.501	2.471-2.531	+++++	+++++
* 2 1Bromo-2nitrobenzene [	3.351	3.351	3.351	3.351	3.351	3.351	3.351	3.351	3.321-3.381	3.351	0.000
* 3 Hexabromobiphenyl[C]	11.054	11.055	11.054	11.054	11.054	11.054	11.054	11.054	11.024-11.084	11.054	0.000
$ 4 Tetrachloro-m-xylene [	4.215	+++++	+++++	+++++	+++++	+++++	+++++	4.220	4.190-4.250	4.215	0.000
5 Hexachlorobenzene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.718	4.688-4.748	+++++	+++++
6 alpha-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.861	4.831-4.891	+++++	+++++
7 gamma-BHC (Lindane) [C	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.258	5.228-5.288	+++++	+++++
8 beta-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.337	5.307-5.367	+++++	+++++
9 delta-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.691	5.661-5.721	+++++	+++++
10 Heptachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.787	5.757-5.817	+++++	+++++
11 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.588	14.558-14.618	+++++	+++++
12 Aldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.191	6.161-6.221	+++++	+++++
13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.680	12.650-12.710	+++++	+++++
14 Heptachlor epoxide b [	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.845	6.815-6.875	+++++	+++++
15 cis-Chlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.216	7.186-7.246	+++++	+++++
16 trans-Chlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.056	7.026-7.086	+++++	+++++
17 Endosulfan I [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.289	7.259-7.319	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.371	7.341-7.401	+++++	+++++
	19 Dieldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.583	7.553-7.613	+++++	+++++
	20 Endrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.907	7.877-7.937	+++++	+++++
	21 4,4'-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.976	7.946-8.006	+++++	+++++
	22 Endosulfan II [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.117	8.087-8.147	+++++	+++++
	23 4,4'-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.295	8.265-8.325	+++++	+++++
	24 Endrin aldehyde [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.448	8.418-8.478	+++++	+++++
	25 Endosulfan sulfate [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.715	8.685-8.745	+++++	+++++
	26 Methoxychlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.936	8.906-8.966	+++++	+++++
	27 Endrin ketone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.240	9.210-9.270	+++++	+++++
$	28 Decachlorobiphenyl [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.467	10.437-10.497	+++++	+++++
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.150-4.210	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.021-5.081	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.141-5.201	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.940-5.000	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.255-5.315	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.938-5.998	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.737-6.797	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.684-9.744	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.761-11.821	+++++	+++++
	38 Toxaphene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.126	7.096-7.156	+++++	+++++
	39 2,4-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.036	7.006-7.066	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.591	7.561-7.621	+++++	+++++
41 2,4-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.913	7.883-7.943	+++++	+++++
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.676	1.646-1.706	+++++	+++++
43 Oxychlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.741	6.711-6.771	+++++	+++++
44 trans-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.155	7.125-7.185	+++++	+++++
45 cis-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.975	7.945-8.005	+++++	+++++
46 Mirex [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.223	9.193-9.253	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.469-21.529	+++++	+++++
48 Chlordane (NOS) [C]	5.612	5.612	5.612	5.611	5.612	5.612	5.612	5.612	5.582-5.642	5.612	0.000
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.841-4.901	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.610-6.670	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.085-8.145	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.256-11.316	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.497-6.557	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.312-6.372	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.811-6.871	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.336	7.306-7.366	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.745	7.715-7.775	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121428	22121429	22121430	22121431	22121432	22121433	22121434
INJ.DATE:	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022
INJ.TIME:	03:29	03:46	04:04	04:22	04:40	04:58	05:16

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.324	2.294-2.354	+++++	+++++
*	2 1Bromo-2nitrobenzene	3.151	3.151	3.151	3.151	3.151	3.151	3.151	3.151	3.121-3.181	3.151	0.000
*	3 Hexabromobiphenyl	9.505	9.504	9.504	9.504	9.505	9.504	9.504	9.505	9.475-9.535	9.504	0.000
$	4 Tetrachloro-m-xylene	3.828	3.828	3.828	3.828	3.828	3.828	3.828	3.828	3.798-3.858	3.828	0.000
	5 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.182	4.152-4.212	+++++	+++++
	6 alpha-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.342	4.312-4.372	+++++	+++++
	7 gamma-BHC (Lindane)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.645	4.615-4.675	+++++	+++++
	8 beta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.726	4.696-4.756	+++++	+++++
	9 delta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.909	4.879-4.939	+++++	+++++
	10 Heptachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.130	5.100-5.160	+++++	+++++
	11 Aldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.454	5.424-5.484	+++++	+++++
	12 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.627	13.597-13.657	+++++	+++++
	13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.869	10.839-10.899	+++++	+++++
	14 Heptachlor epoxide b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.130	6.100-6.160	+++++	+++++
	15 cis-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.417	6.387-6.447	+++++	+++++
	16 trans-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.271	6.241-6.301	+++++	+++++
	17 Endosulfan I	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.572	6.542-6.602	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.489	6.459-6.519	+++++	+++++
	19 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.831	6.801-6.861	+++++	+++++
	20 Endrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.081	7.051-7.111	+++++	+++++
	21 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.135	7.105-7.165	+++++	+++++
	22 Endosulfan II	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.317	7.287-7.347	+++++	+++++
	23 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.427	7.397-7.457	+++++	+++++
	24 Endrin aldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.746	7.716-7.776	+++++	+++++
	25 Methoxychlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.912	7.882-7.942	+++++	+++++
	26 Endosulfan sulfate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.180	8.150-8.210	+++++	+++++
	27 Endrin ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.453	8.423-8.483	+++++	+++++
$	28 Decachlorobiphenyl	9.355	9.355	9.355	9.355	9.356	9.356	9.355	9.355	9.325-9.385	9.356	0.000
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.851-4.911	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.329-5.389	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.388-4.448	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.227-5.287	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	6.015-6.075	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.271-8.331	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.229-11.289	+++++	+++++
	38 Toxaphene	6.931	6.931	6.931	6.931	6.931	6.931	6.931	6.931	6.901-6.961	6.931	0.000
	39 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.106	6.076-6.136	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.681	6.651-6.711	+++++	+++++
41 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.957	6.927-6.987	+++++	+++++
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.774	1.744-1.804	+++++	+++++
43 Oxychlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.014	5.984-6.044	+++++	+++++
44 trans-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.397	6.367-6.427	+++++	+++++
45 cis-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.112	7.082-7.142	+++++	+++++
46 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.082	8.052-8.112	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.126-20.186	+++++	+++++
48 Chlordane (NOS)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.593	5.563-5.623	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.289-6.349	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.906-9.966	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.861-11.921	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.797-14.857	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.720-9.780	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.077-9.137	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.221-10.281	+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.588	6.558-6.618	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.953	6.923-6.983	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121428	22121429	22121430	22121431	22121432	22121433	22121434
INJ.DATE:	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022
INJ.TIME:	03:29	03:46	04:04	04:22	04:40	04:58	05:16

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Hexachlorobutadiene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.501	2.471-2.531	+++++	+++++
*	2 1Bromo-2nitrobenzene [	3.351	3.351	3.351	3.351	3.351	3.351	3.351	3.351	3.321-3.381	3.351	0.000
*	3 Hexabromobiphenyl[C]	11.055	11.054	11.054	11.055	11.054	11.054	11.054	11.054	11.024-11.084	11.054	0.000
$	4 Tetrachloro-m-xylene [	4.221	4.220	4.220	4.221	4.221	4.221	4.221	4.220	4.190-4.250	4.221	0.000
	5 Hexachlorobenzene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.718	4.688-4.748	+++++	+++++
	6 alpha-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.861	4.831-4.891	+++++	+++++
	7 gamma-BHC (Lindane) [C	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.258	5.228-5.288	+++++	+++++
	8 beta-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.337	5.307-5.367	+++++	+++++
	9 delta-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.691	5.661-5.721	+++++	+++++
	10 Heptachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.787	5.757-5.817	+++++	+++++
	11 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.588	14.558-14.618	+++++	+++++
	12 Aldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.191	6.161-6.221	+++++	+++++
	13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.680	12.650-12.710	+++++	+++++
	14 Heptachlor epoxide b [	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.845	6.815-6.875	+++++	+++++
	15 cis-Chlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.216	7.186-7.246	+++++	+++++
	16 trans-Chlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.056	7.026-7.086	+++++	+++++
	17 Endosulfan I [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.289	7.259-7.319	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.371	7.341-7.401	+++++	+++++
	19 Dieldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.583	7.553-7.613	+++++	+++++
	20 Endrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.907	7.877-7.937	+++++	+++++
	21 4,4'-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.976	7.946-8.006	+++++	+++++
	22 Endosulfan II [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.117	8.087-8.147	+++++	+++++
	23 4,4'-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.295	8.265-8.325	+++++	+++++
	24 Endrin aldehyde [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.448	8.418-8.478	+++++	+++++
	25 Endosulfan sulfate [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.715	8.685-8.745	+++++	+++++
	26 Methoxychlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.936	8.906-8.966	+++++	+++++
	27 Endrin ketone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.240	9.210-9.270	+++++	+++++
$	28 Decachlorobiphenyl [C]	10.467	10.467	10.467	10.466	10.466	10.466	10.467	10.467	10.437-10.497	10.466	0.000
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.150-4.210	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.021-5.081	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.141-5.201	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.940-5.000	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.255-5.315	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.938-5.998	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.737-6.797	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.684-9.744	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.761-11.821	+++++	+++++
	38 Toxaphene [C]	7.125	7.125	7.125	7.125	7.126	7.126	7.126	7.126	7.096-7.156	7.125	0.000
	39 2,4-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.036	7.006-7.066	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.591	7.561-7.621	+++++	+++++
41 2,4-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.913	7.883-7.943	+++++	+++++
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.676	1.646-1.706	+++++	+++++
43 Oxychlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.741	6.711-6.771	+++++	+++++
44 trans-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.155	7.125-7.185	+++++	+++++
45 cis-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.975	7.945-8.005	+++++	+++++
46 Mirex [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.223	9.193-9.253	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.469-21.529	+++++	+++++
48 Chlordane (NOS) [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.612	5.582-5.642	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.841-4.901	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.610-6.670	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.085-8.145	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.256-11.316	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.497-6.557	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.312-6.372	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.811-6.871	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.336	7.306-7.366	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.745	7.715-7.775	+++++	+++++

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121403.D
Data file 2: /20221214.b/B20221214.b/22121403.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-IBL1
Client ID:
Injection Date: 14-DEC-2022 20:02
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	alpha-BHC
----			----			0.00	0.00	---	beta-BHC
----			----			0.00	0.00	---	delta-BHC
----			----			0.00	0.00	---	gamma-BHC (Lindane)
----			----			0.00	0.00	---	Heptachlor
----			----			0.00	0.00	---	Aldrin
----			6.824	-0.021	2291	0.00	0.14	---	Heptachlor epoxide b
----			----			0.00	0.00	---	Endosulfan I
----			7.597	0.015	1696	0.00	0.11	---	Dieldrin
----			----			0.00	0.00	---	4,4'-DDE
----			----			0.00	0.00	---	Endrin
----			8.135	0.018	285	0.00	0.02	---	Endosulfan II
----			7.975	-0.002	1369	0.00	0.12	---	4,4'-DDD
----			8.720	0.005	243	0.00	0.02	---	Endosulfan sulfate
----			----			0.00	0.00	---	4,4'-DDT
----			8.924	-0.013	546	0.00	0.11	---	Methoxychlor
8.444	-0.009	1962	9.226	-0.013	2888	0.23	0.25	10.1	Endrin ketone
----			----			0.00	0.00	---	Endrin aldehyde
----			7.070	0.014	4708	0.00	0.30	---	trans-Chlordane
----			7.219	0.003	810	0.00	0.05	---	cis-Chlordane
2.351	0.028	6378	2.512	0.012	33421	0.42	1.60	116.6*	Hexachlorobutadiene
4.183	0.001	4869	4.721	0.003	421	0.36	0.02	178.1*	Hexachlorobenzene
3.828	0.000	375293	4.220	-0.000	579767	36.70	37.46	2.1	Tetrachloro-m-xylene
9.356	0.001	243291	10.467	0.000	323668	35.86	35.40	1.3	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

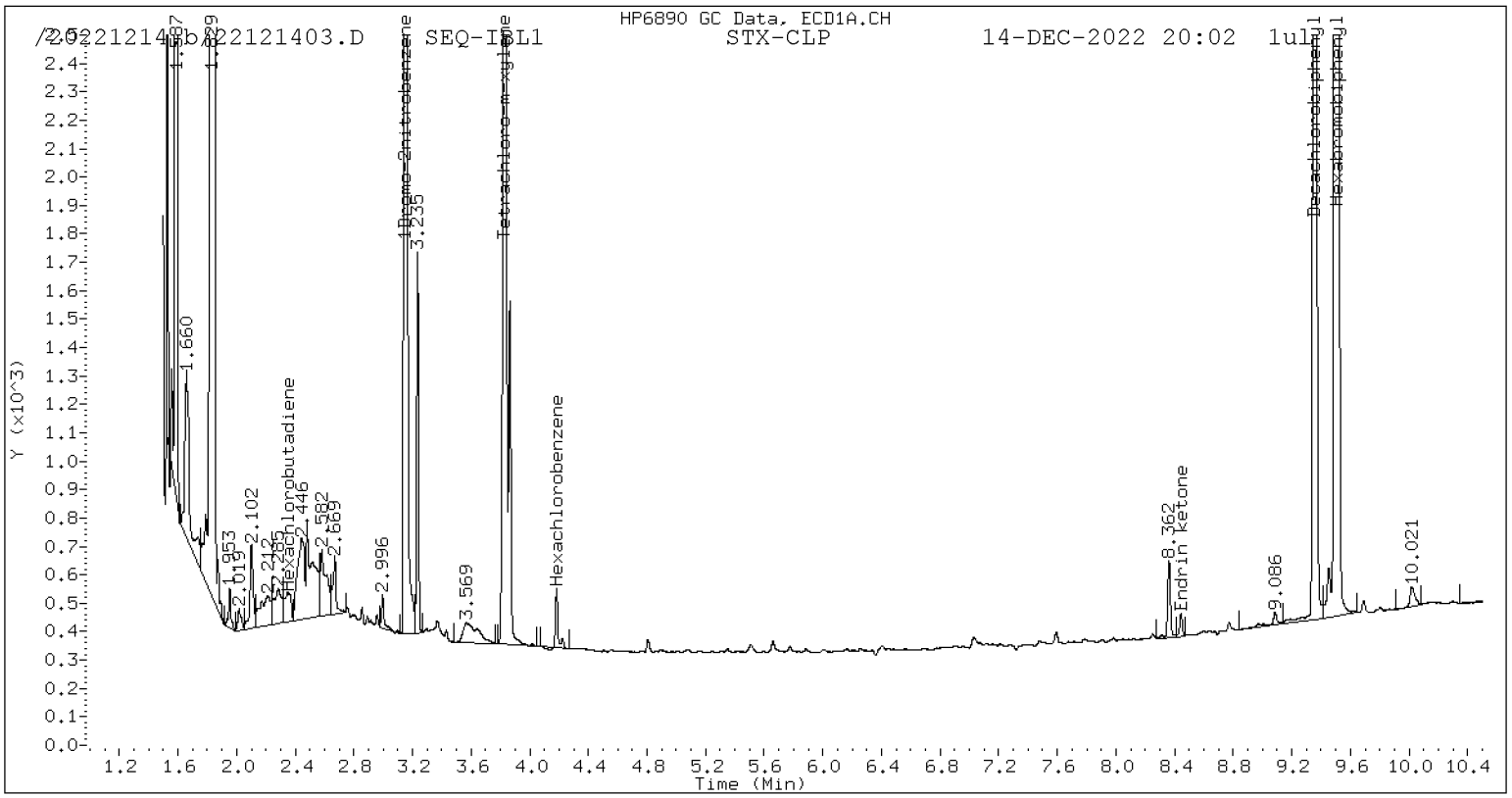
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	751998	5.8
Hexabromobiphenyl	641833	669495	4.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1099555	3.8
Hexabromobiphenyl	797125	827325	3.8

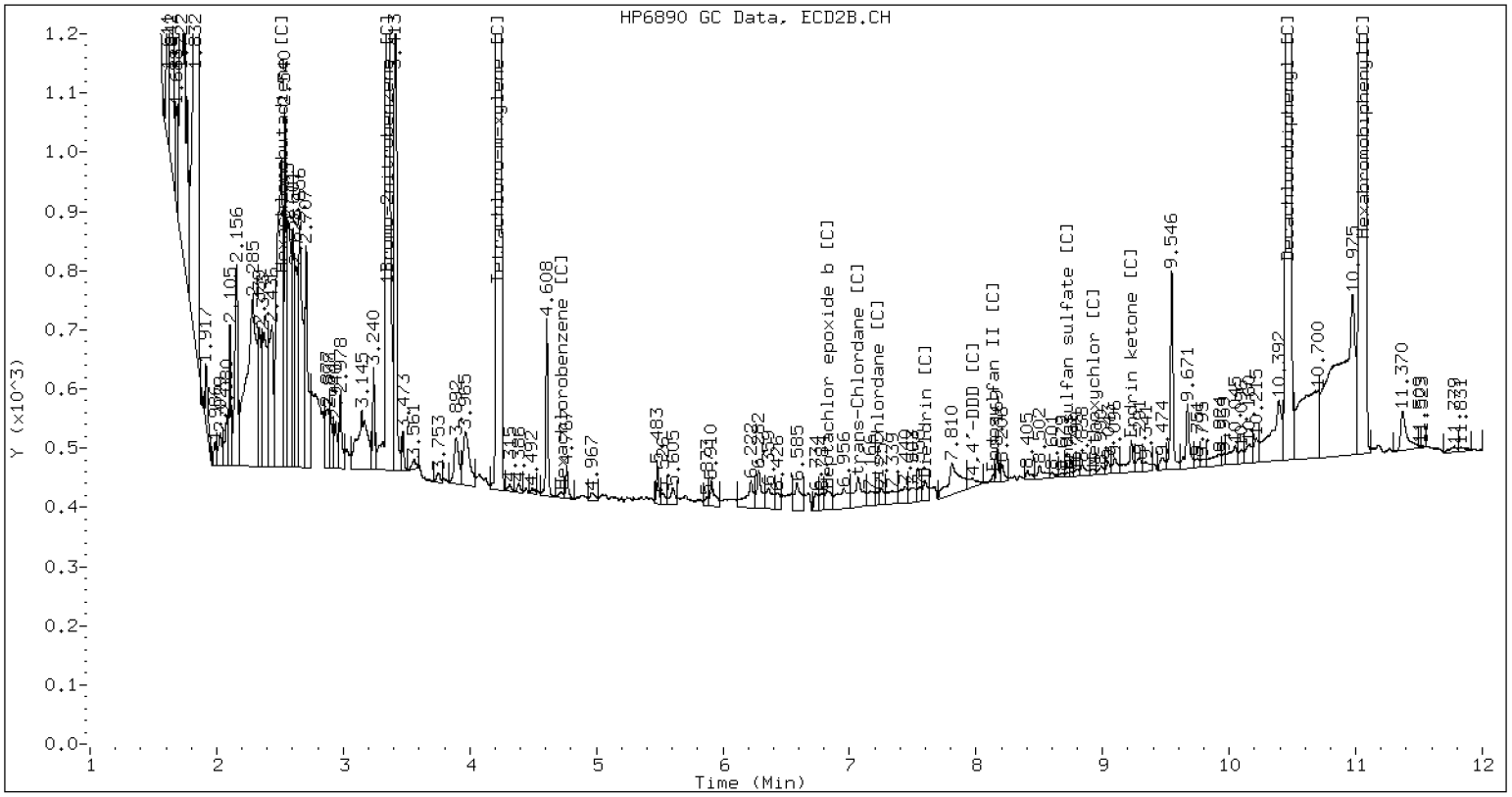
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121403.D SEQ-IBL1 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121403.D
Data file 2: /20221214.b/B20221214.b/22121403.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-IBL1
Client ID:
Injection Date: 14-DEC-2022 20:02
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

7E

8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: SEQ-PEM1 InstID,Data File: ecd6.i, 22121404.D

Analysis Date: 14-DEC-2022 20:20 Init. Calib. Date: 14-DEC-2022

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene	3.151	683485
4,4'-DDE	6.490	6258
Endrin	7.082	745471
4,4'-DDD	7.136	15566
4,4'-DDT	7.428	629664
Endrin ketone	8.453	19276
Endrin aldehyde	7.747	21328
Hexabromobiphenyl	9.504	619012
Tetrachloro-m-xylene	3.828	1161664
Decachlorobiphenyl	9.355	833312

DDT Percent Breakdown = 3.3 %
((6258+15566) * 100)/(6258+15566+629664)

Endrin Percent Breakdown = 5.2 %
((21328+19276) * 100)/(21328+19276+745471)

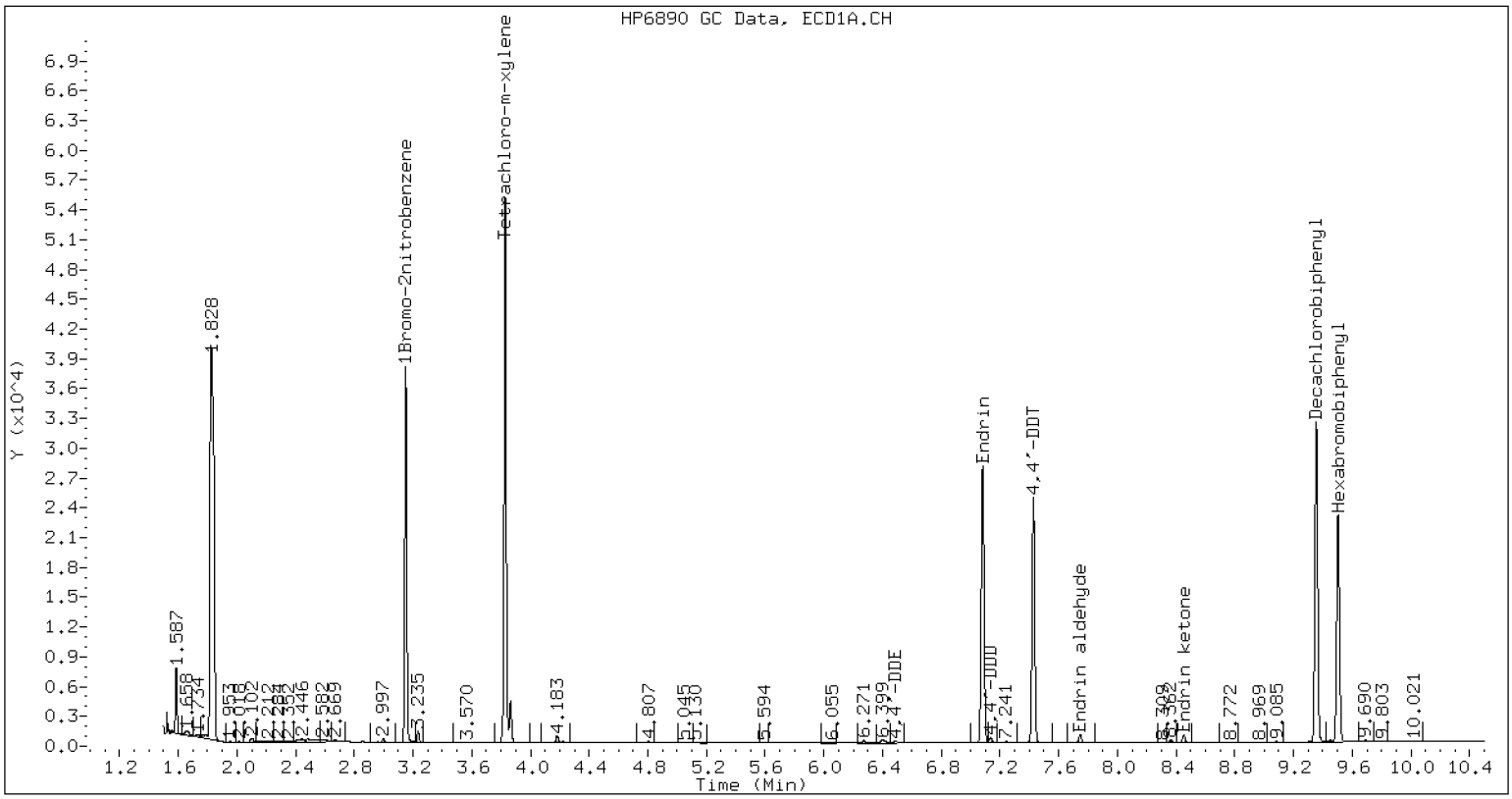
GC Column: STX-CLP2 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene [C]	3.350	1005375
4,4'-DDE [C]	7.370	11906
Endrin [C]	7.907	1029194
4,4'-DDD [C]	7.977	32697
4,4'-DDT [C]	8.295	890195
Endrin ketone [C]	9.239	28268
Endrin aldehyde [C]	8.448	31426
Hexabromobiphenyl[C]	11.054	772586
Tetrachloro-m-xylene [C]	4.220	1890294
Decachlorobiphenyl [C]	10.467	1140978

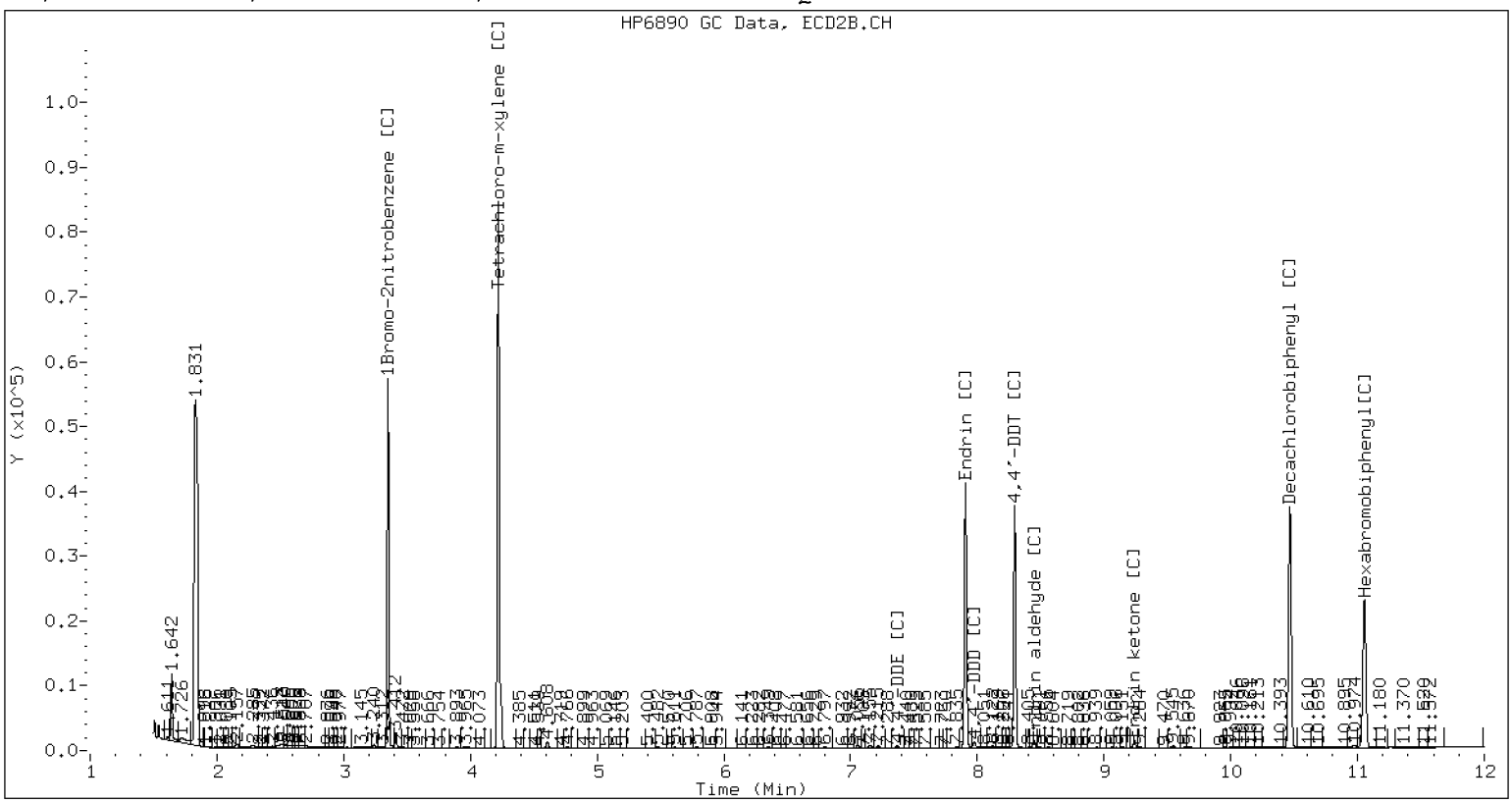
DDT Percent Breakdown = 4.8 %
((11906+32697) * 100)/(11906+32697+890195)

Endrin Percent Breakdown = 5.5 %
((31426+28268) * 100)/(31426+28268+1029194)

/20221214.b/22121404.D SEQ-PEM1 STX-CLP 14-DEC-2022 20:20 1ul



/20221214.b/B20221214.b/22121404.D SEQ-PEM1 CLP2 14-DEC-2022



7E

8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: SEQ-PEM1 InstID,Data File: ecd6.i, 22121404.D

Analysis Date: 14-DEC-2022 20:20 Init. Calib. Date: 14-DEC-2022

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene	3.151	683485
4,4'-DDE	6.490	6258
Endrin	7.082	745471
4,4'-DDD	7.136	15566
4,4'-DDT	7.428	629664
Endrin ketone	8.453	19276
Endrin aldehyde	7.747	21328
Hexabromobiphenyl	9.504	619012
Tetrachloro-m-xylene	3.828	1161664
Decachlorobiphenyl	9.355	833312

DDT Percent Breakdown = 3.3 %
((6258+15566) * 100)/(6258+15566+629664)

Endrin Percent Breakdown = 5.2 %
((21328+19276) * 100)/(21328+19276+745471)

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312

Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121405.D
Data file 2: /20221214.b/B20221214.b/22121405.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL1
Client ID:
Injection Date: 14-DEC-2022 20:38
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.342	-0.000	17720	4.860	-0.001	25579	1.30	1.22	6.4	alpha-BHC
4.726	-0.000	7513	5.337	-0.000	10927	1.43	1.37	4.4	beta-BHC
4.909	-0.000	14050	5.690	-0.000	21188	1.26	1.23	2.8	delta-BHC
4.645	-0.000	15329	5.257	-0.001	21981	1.30	1.24	4.9	gamma-BHC (Lindane)
5.130	-0.000	14540	5.786	-0.000	20395	1.38	1.27	8.9	Heptachlor
5.453	-0.001	15026	6.190	-0.001	24413	1.28	1.33	3.9	Aldrin
6.130	0.000	13937	6.845	-0.000	21959	1.37	1.44	5.6	Heptachlor epoxide b
6.572	-0.000	13220	7.288	-0.000	19257	1.41	1.44	1.8	Endosulfan I
6.831	0.000	27285	7.582	-0.001	43580	2.71	2.94	8.2	Dieldrin
6.489	0.000	25951	7.370	-0.001	37722	2.78	2.78	0.0	4,4'-DDE
7.081	0.000	24429	7.906	-0.001	31381	2.94	2.78	5.3	Endrin
7.318	0.001	19827	8.117	-0.000	30675	2.65	2.66	0.3	Endosulfan II
7.135	0.000	20434	7.976	-0.000	28995	2.73	2.65	3.0	4,4'-DDD
8.180	-0.000	19661	8.715	-0.000	26689	2.76	2.63	4.9	Endosulfan sulfate
7.427	0.000	20071	8.294	-0.001	26950	2.65	2.55	3.9	4,4'-DDT
7.912	-0.000	52385	8.935	-0.001	65896	15.60	14.07	10.3	Methoxychlor
8.453	-0.001	24276	9.239	-0.000	30129	2.98	2.75	8.0	Endrin ketone
7.746	-0.000	17209	8.448	-0.000	21218	2.88	2.60	10.1	Endrin aldehyde
6.270	-0.001	14829	7.056	-0.000	22517	1.43	1.48	3.7	trans-Chlordane
6.417	0.000	15767	7.215	-0.000	22150	1.52	1.49	1.6	cis-Chlordane
2.323	-0.001	27320	2.500	-0.001	42655	1.92	2.14	11.3	Hexachlorobutadiene
4.182	0.000	18555	4.718	-0.000	27377	1.47	1.44	2.2	Hexachlorobenzene
3.828	-0.000	28792	4.220	-0.001	41270	2.99	2.80	6.5	Tetrachloro-m-xylene
9.355	-0.000	21954	10.466	-0.000	30646	3.41	3.50	2.5	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

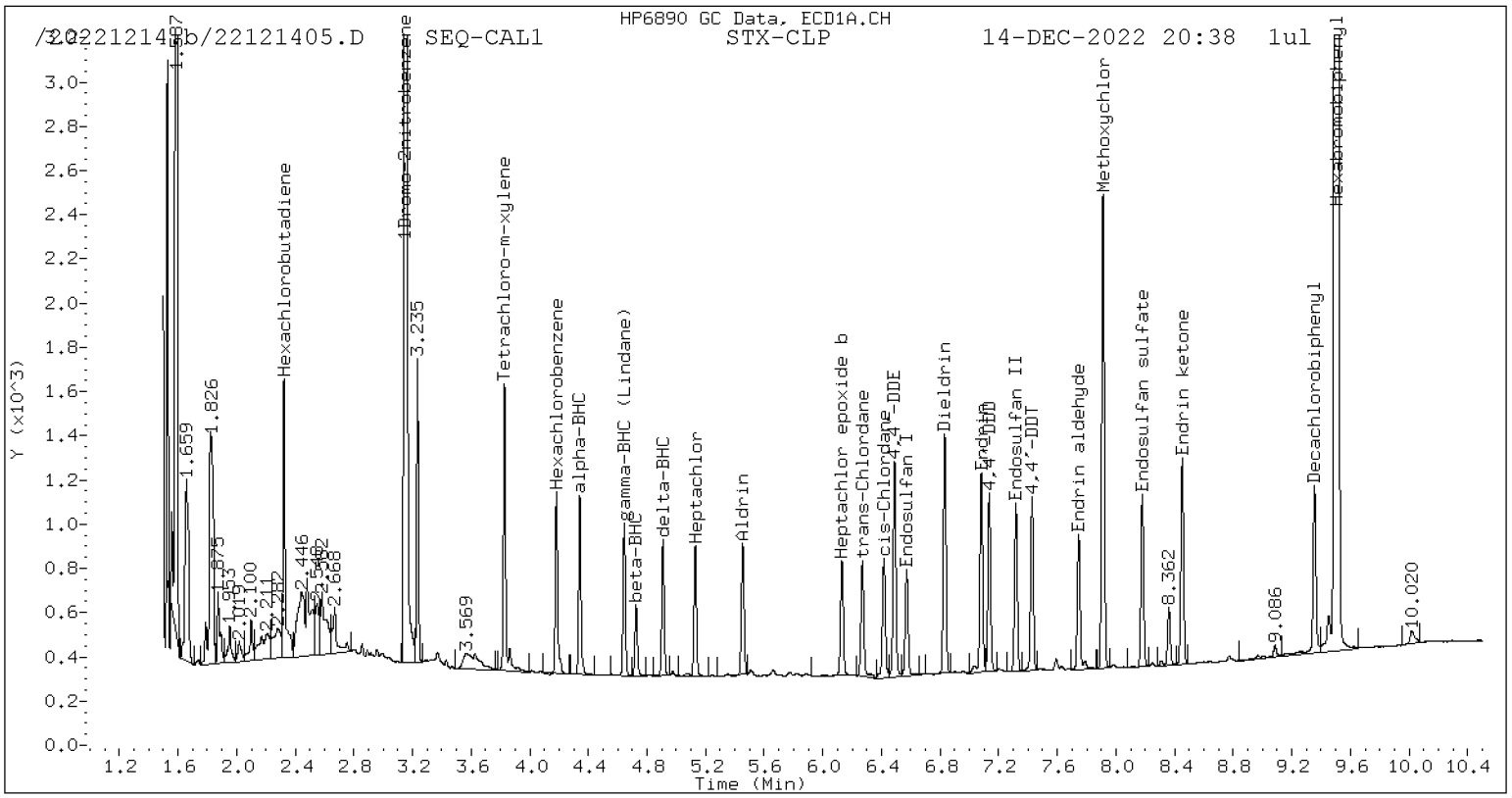
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	707324	-0.5
Hexabromobiphenyl	641833	634819	-1.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1045524	-1.3
Hexabromobiphenyl	797125	792558	-0.6

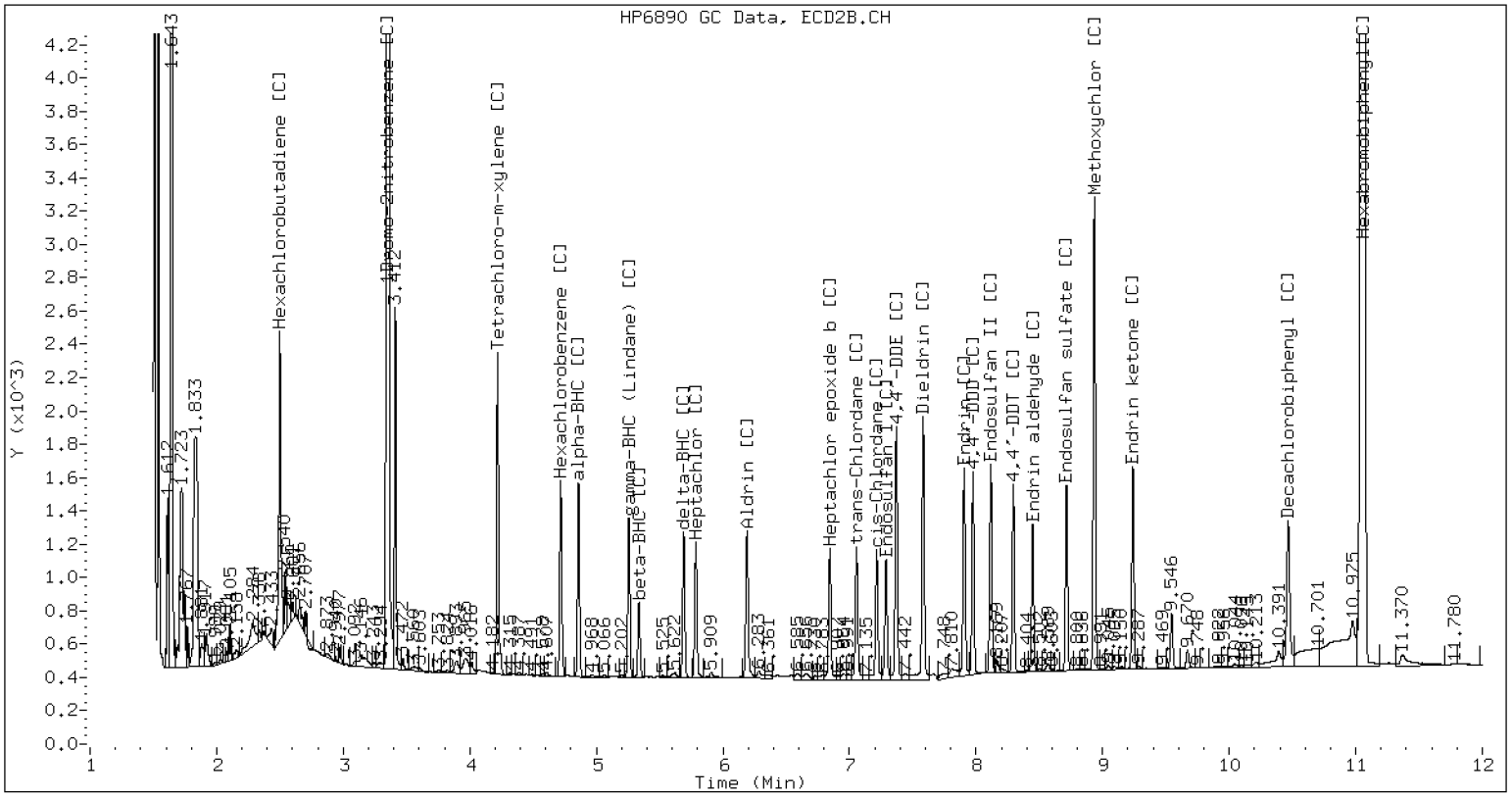
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121405.D SEQ-CAL1 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121405.D
Data file 2: /20221214.b/B20221214.b/22121405.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL1
Client ID:
Injection Date: 14-DEC-2022 20:38
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121406.D
Data file 2: /20221214.b/B20221214.b/22121406.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL2
Client ID:
Injection Date: 14-DEC-2022 20:56
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.342	-0.000	35088	4.859	-0.001	52514	2.54	2.47	2.9	alpha-BHC
4.726	-0.000	14580	5.337	-0.000	21664	2.74	2.68	2.4	beta-BHC
4.909	-0.000	28429	5.691	-0.000	43932	2.52	2.51	0.5	delta-BHC
4.645	0.000	30588	5.257	-0.001	44971	2.55	2.49	2.5	gamma-BHC (Lindane)
5.129	-0.001	28458	5.787	-0.000	42156	2.67	2.58	3.6	Heptachlor
5.453	-0.001	30273	6.190	-0.001	50159	2.53	2.69	5.8	Aldrin
6.130	-0.001	27608	6.845	-0.001	43067	2.67	2.79	4.5	Heptachlor epoxide b
6.572	-0.000	25650	7.288	-0.001	37112	2.70	2.73	1.0	Endosulfan I
6.832	0.000	54960	7.582	-0.001	84296	5.38	5.60	4.0	Dieldrin
6.489	-0.000	51182	7.370	-0.001	74355	5.40	5.39	0.2	4,4'-DDE
7.081	0.000	46577	7.906	-0.001	63434	5.52	5.52	0.1	Endrin
7.317	0.001	37804	8.116	-0.001	65448	4.98	5.56	11.1	Endosulfan II
7.136	0.001	40399	7.976	-0.001	62302	5.32	5.58	4.8	4,4'-DDD
8.179	-0.001	38342	8.714	-0.001	57421	5.32	5.56	4.4	Endosulfan sulfate
7.427	-0.000	40499	8.294	-0.001	59346	5.27	5.51	4.3	4,4'-DDT
7.912	-0.000	98271	8.934	-0.002	130815	28.88	27.42	5.2	Methoxychlor
8.452	-0.001	45639	9.239	-0.001	62360	5.53	5.59	1.1	Endrin ketone
7.746	0.000	32847	8.447	-0.001	47592	5.42	5.73	5.6	Endrin aldehyde
6.271	0.000	28307	7.055	-0.001	41633	2.69	2.70	0.4	trans-Chlordane
6.417	0.000	29336	7.215	-0.000	41766	2.78	2.77	0.3	cis-Chlordane
2.323	-0.001	44113	2.500	-0.001	65565	3.05	3.24	6.2	Hexachlorobutadiene
4.182	-0.000	35520	4.718	-0.000	53173	2.77	2.75	0.9	Hexachlorobenzene
3.828	-0.000	54873	4.220	-0.001	81034	5.62	5.42	3.7	Tetrachloro-m-xylene
9.354	-0.001	38477	10.465	-0.001	54866	5.90	6.15	4.1	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

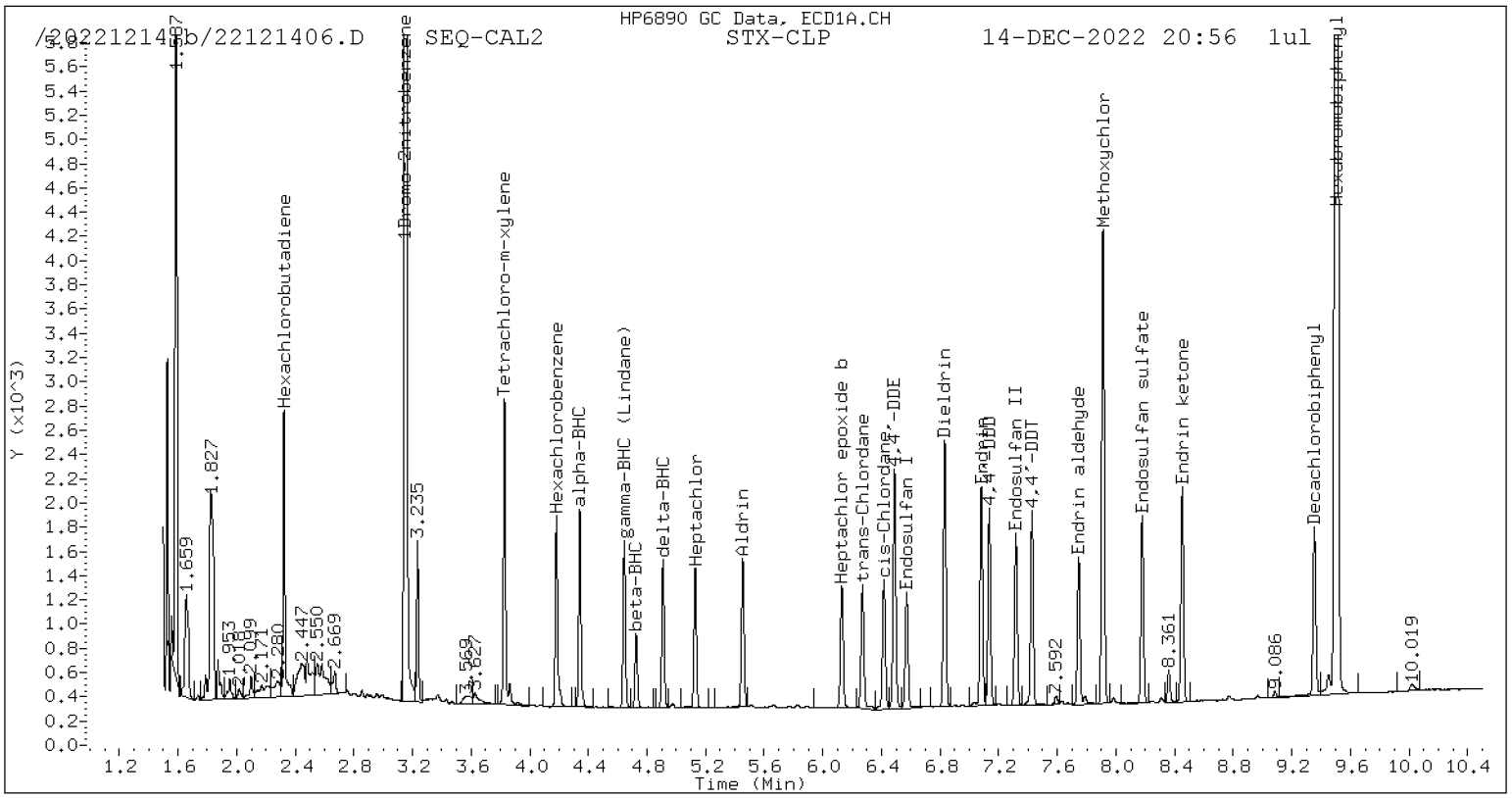
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	717600	1.0
Hexabromobiphenyl	641833	643445	0.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1061990	0.3
Hexabromobiphenyl	797125	807490	1.3

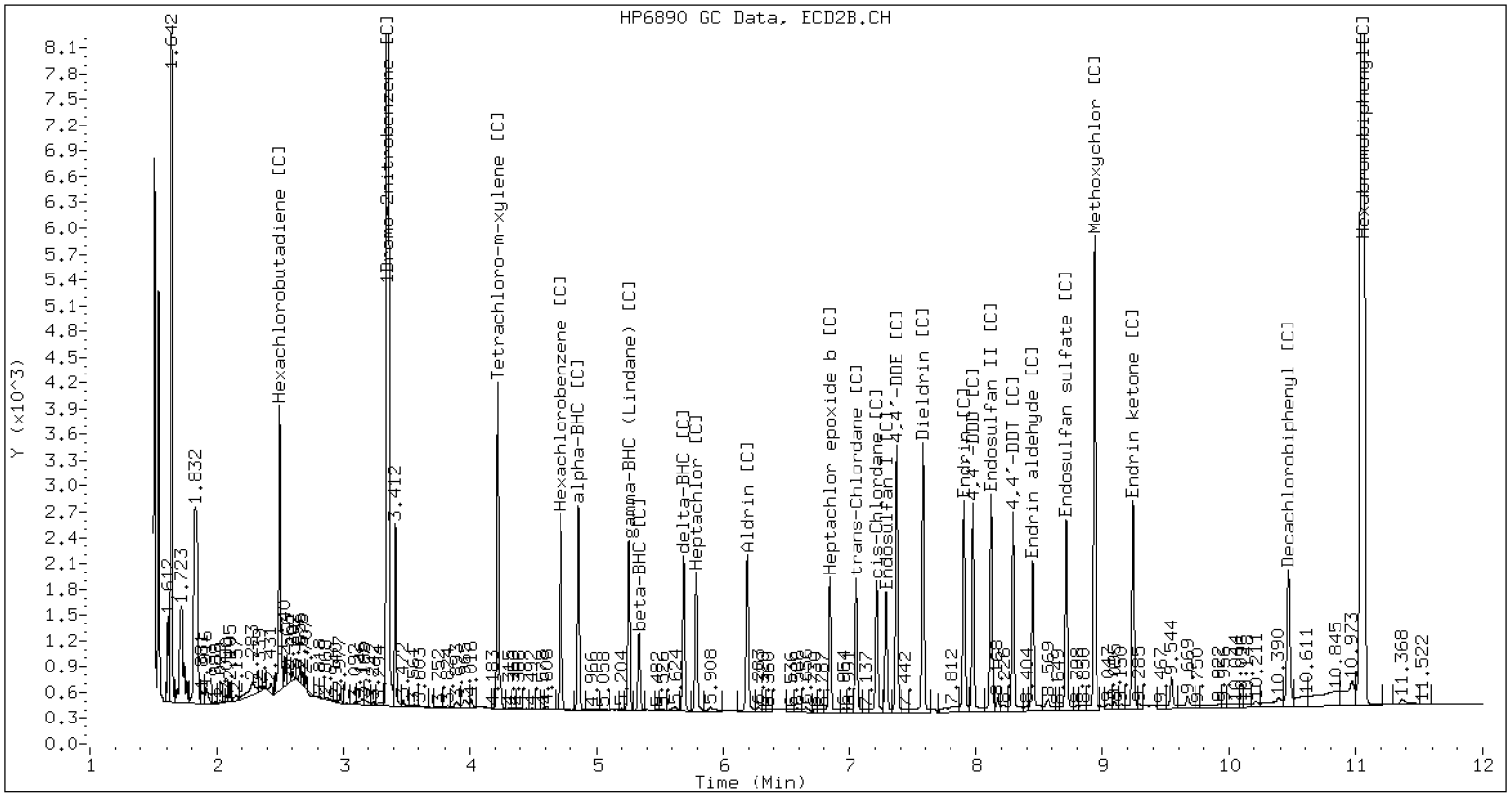
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121406.D SEQ-CAL2 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121406.D
Data file 2: /20221214.b/B20221214.b/22121406.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL2
Client ID:
Injection Date: 14-DEC-2022 20:56
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121407.D
Data file 2: /20221214.b/B20221214.b/22121407.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL3
Client ID:
Injection Date: 14-DEC-2022 21:14
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.343	0.001	68202	4.860	-0.000	103195	5.06	4.95	2.2	alpha-BHC
4.727	0.000	26774	5.338	0.000	40159	5.16	5.06	1.8	beta-BHC
4.910	0.001	55344	5.691	0.000	85044	5.02	4.95	1.5	delta-BHC
4.646	0.001	59491	5.258	0.000	87747	5.09	4.96	2.6	gamma-BHC (Lindane)
5.130	0.000	53529	5.787	0.000	80295	5.15	5.01	2.7	Heptachlor
5.455	0.001	59061	6.191	0.000	92167	5.07	5.03	0.7	Aldrin
6.132	0.001	52071	6.845	-0.000	76415	5.15	5.05	2.1	Heptachlor epoxide b
6.573	0.001	48052	7.289	-0.000	67929	5.18	5.09	1.8	Endosulfan I
6.832	0.001	104217	7.583	-0.000	151301	10.46	10.26	1.9	Dieldrin
6.490	0.001	97042	7.371	0.000	139172	10.49	10.29	1.9	4,4'-DDE
7.082	0.001	87185	7.906	-0.001	115830	10.66	10.37	2.8	Endrin
7.318	0.001	77341	8.117	0.000	118175	10.50	10.32	1.8	Endosulfan II
7.136	0.001	77451	7.976	0.000	110178	10.51	10.14	3.6	4,4'-DDD
8.180	0.001	73440	8.715	0.000	102417	10.50	10.18	3.1	Endosulfan sulfate
7.428	0.001	77522	8.294	-0.001	105882	10.41	10.09	3.1	4,4'-DDT
7.913	0.001	178164	8.935	-0.001	239047	53.98	51.49	4.7	Methoxychlor
8.454	0.000	84510	9.239	-0.000	110024	10.55	10.13	4.1	Endrin ketone
7.746	0.001	61122	8.448	-0.000	82817	10.40	10.25	1.5	Endrin aldehyde
6.271	0.001	52622	7.056	-0.000	76513	5.13	5.07	1.1	trans-Chlordane
6.417	0.001	53515	7.216	0.000	75023	5.20	5.08	2.3	cis-Chlordane
2.324	-0.000	75632	2.500	-0.000	107268	5.35	5.41	1.1	Hexachlorobutadiene
4.183	0.001	66090	4.718	-0.000	98926	5.28	5.21	1.3	Hexachlorobenzene
3.828	0.000	101081	4.220	-0.000	153451	10.61	10.47	1.3	Tetrachloro-m-xylene
9.355	-0.000	67797	10.466	-0.000	92260	10.72	10.62	0.9	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

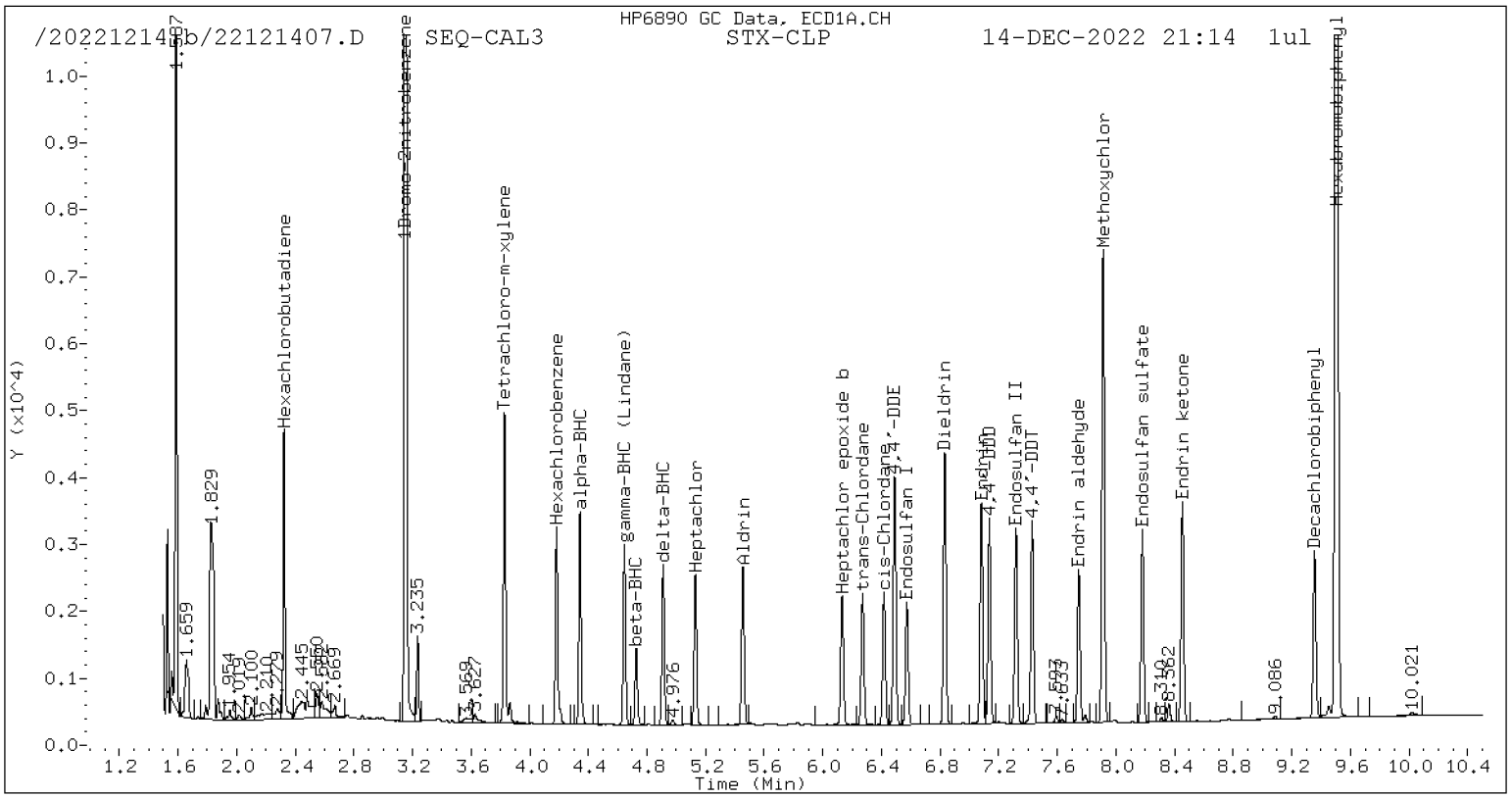
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	700354	-1.4
Hexabromobiphenyl	641833	624108	-2.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1040903	-1.7
Hexabromobiphenyl	797125	785894	-1.4

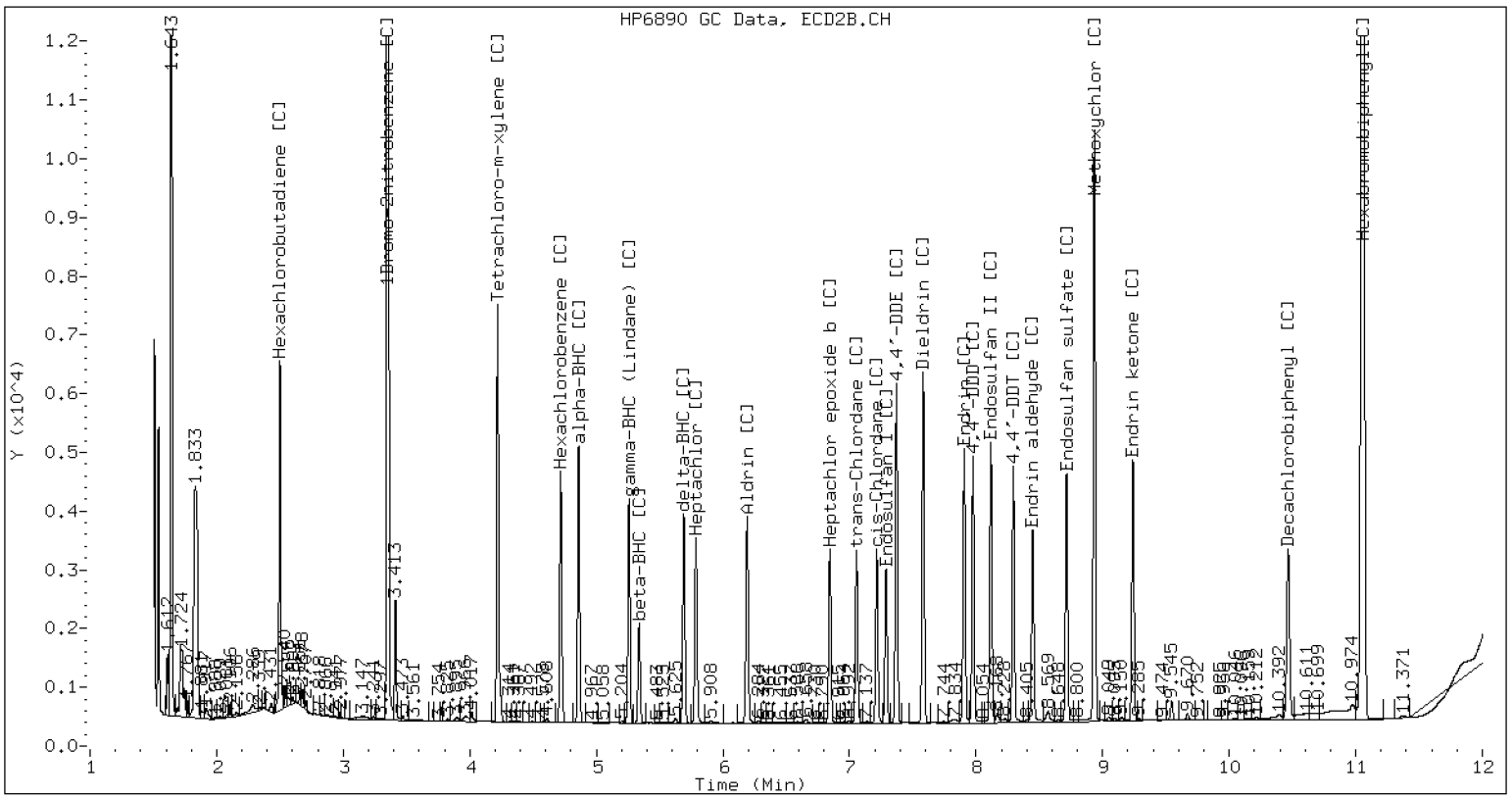
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121407.D SEQ-CAL3 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121407.D
Data file 2: /20221214.b/B20221214.b/22121407.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL3
Client ID:
Injection Date: 14-DEC-2022 21:14
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121408.D
Data file 2: /20221214.b/B20221214.b/22121408.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL4
Client ID:
Injection Date: 14-DEC-2022 21:31
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.343	0.000	139784	4.860	-0.000	216159	10.22	10.19	0.3	alpha-BHC
4.726	0.000	53742	5.337	0.000	81857	10.20	10.15	0.6	beta-BHC
4.910	0.001	113586	5.691	0.000	177281	10.16	10.14	0.2	delta-BHC
4.646	0.000	121488	5.258	0.000	182844	10.24	10.15	0.9	gamma-BHC (Lindane)
5.130	0.000	108260	5.787	-0.000	166558	10.26	10.21	0.5	Heptachlor
5.454	0.000	124839	6.191	0.000	189618	10.55	10.18	3.6	Aldrin
6.131	0.001	107301	6.846	0.001	155424	10.46	10.09	3.6	Heptachlor epoxide b
6.573	0.000	97151	7.289	0.000	137043	10.32	10.10	2.2	Endosulfan I
6.832	0.001	210564	7.583	0.000	301602	20.82	20.11	3.5	Dieldrin
6.490	0.001	195139	7.371	0.000	281756	20.79	20.49	1.5	4,4'-DDE
7.082	0.001	173216	7.907	-0.000	231062	20.59	20.39	1.0	Endrin
7.318	0.001	161303	8.117	0.001	236844	21.29	20.39	4.4	Endosulfan II
7.136	0.001	157301	7.977	0.001	222755	20.75	20.21	2.7	4,4'-DDD
8.180	0.000	146955	8.715	0.000	205334	20.43	20.13	1.5	Endosulfan sulfate
7.428	0.001	156744	8.295	-0.000	212755	20.46	19.99	2.3	4,4'-DDT
7.912	0.001	344324	8.936	-0.001	473459	101.43	100.55	0.9	Methoxychlor
8.453	-0.000	167384	9.240	0.000	222080	20.31	20.15	0.8	Endrin ketone
7.746	0.000	123653	8.448	0.000	164391	20.47	20.06	2.0	Endrin aldehyde
6.271	0.001	106805	7.056	0.000	154174	10.25	10.04	2.1	trans-Chlordane
6.418	0.001	106651	7.216	0.001	150231	10.21	10.00	2.1	cis-Chlordane
2.323	-0.000	142895	2.500	-0.001	197539	9.97	9.80	1.7	Hexachlorobutadiene
4.183	0.000	130020	4.718	0.000	197396	10.24	10.22	0.1	Hexachlorobenzene
3.828	0.000	199446	4.220	-0.000	308345	20.64	20.69	0.2	Tetrachloro-m-xylene
9.355	0.000	130210	10.466	-0.000	170633	20.02	19.37	3.3	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

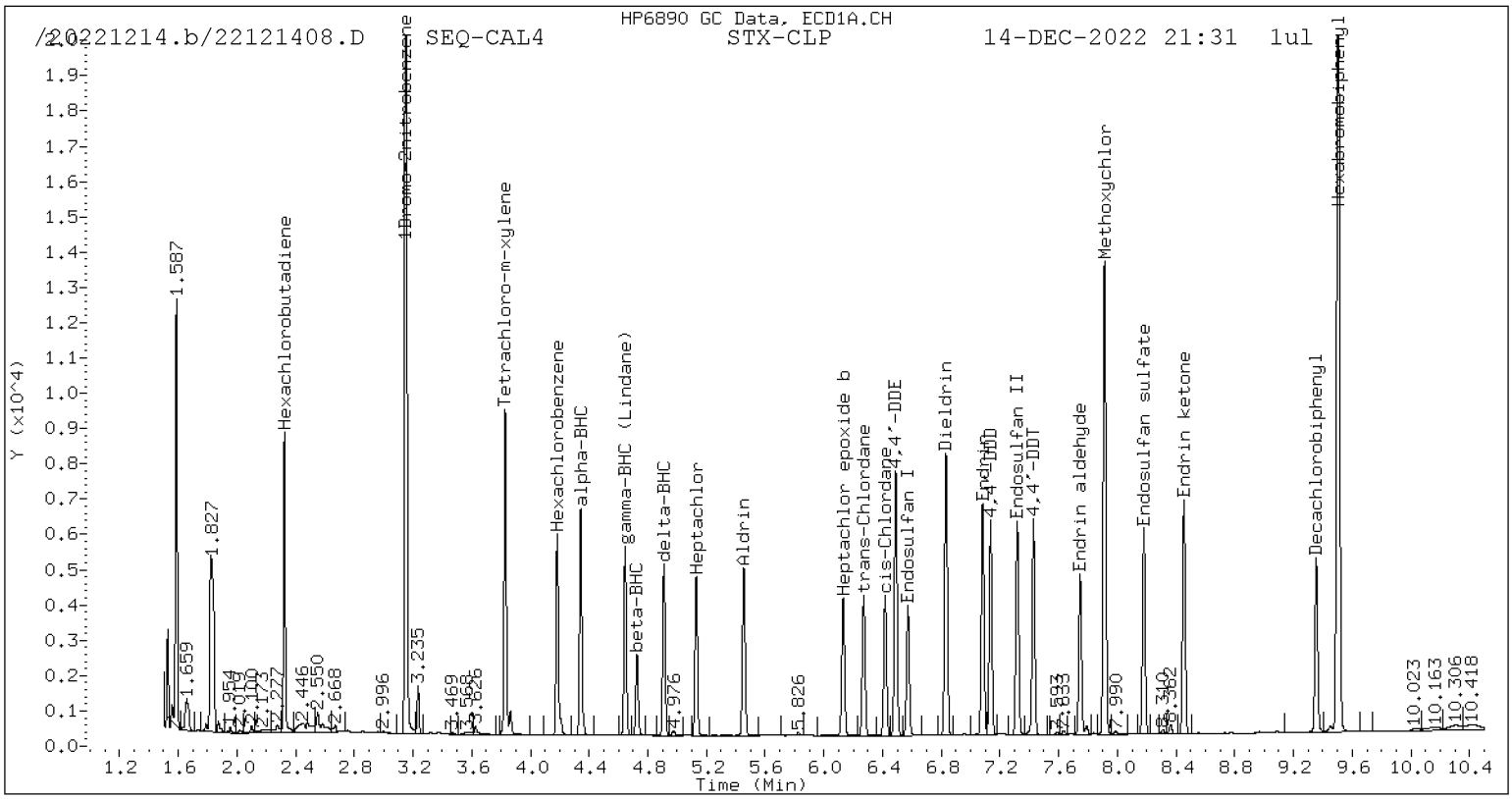
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	710650	0.0
Hexabromobiphenyl	641833	641833	0.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1058848	0.0
Hexabromobiphenyl	797125	797125	0.0

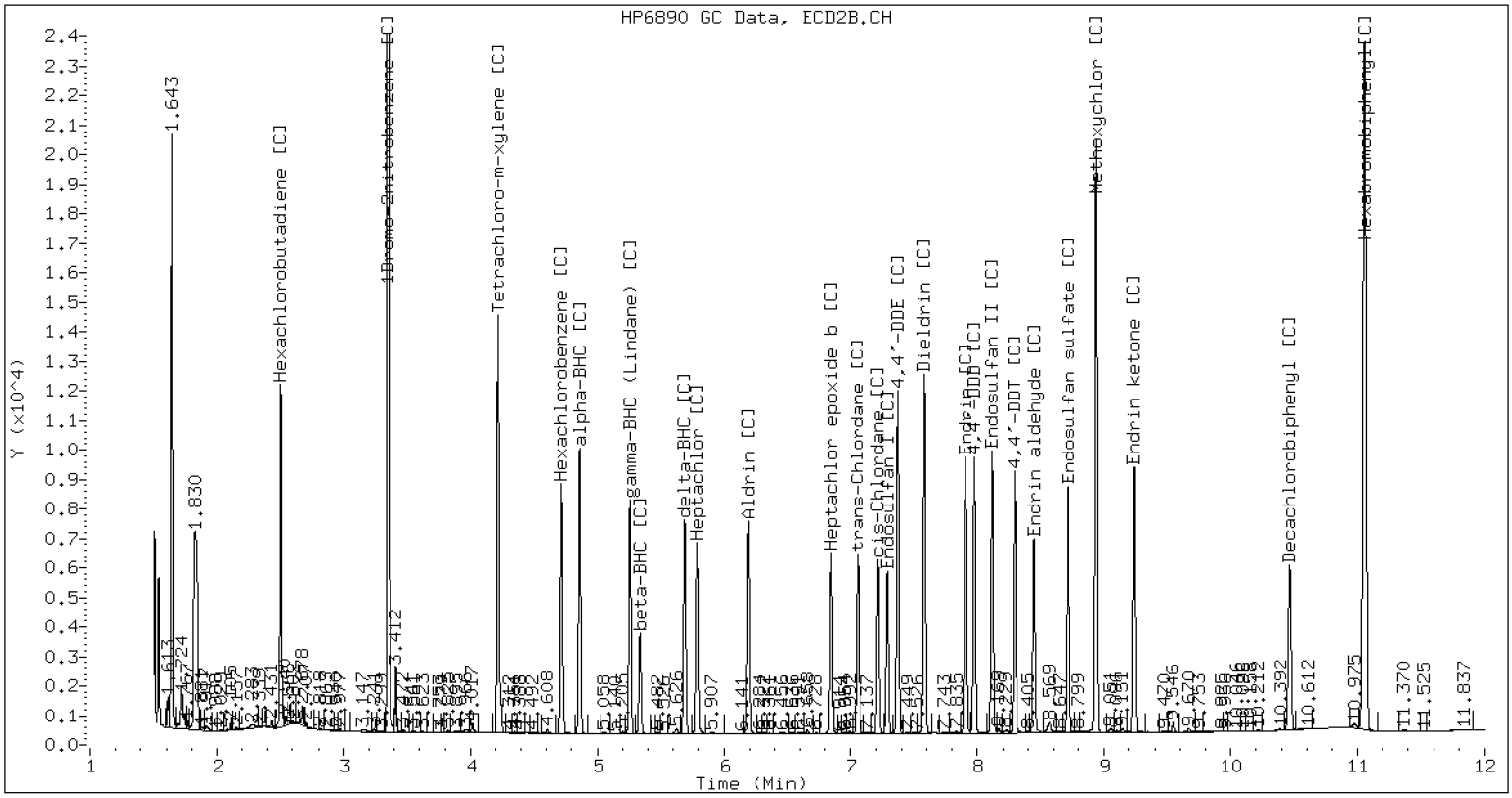
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121408.D SEQ-CAL4 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121408.D
Data file 2: /20221214.b/B20221214.b/22121408.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL4
Client ID:
Injection Date: 14-DEC-2022 21:31
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121409.D
Data file 2: /20221214.b/B20221214.b/22121409.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL5
Client ID:
Injection Date: 14-DEC-2022 21:49
Report Date: 12/16/2022 15:30
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.342	0.000	263355	4.860	-0.001	412780	20.34	20.46	0.6	alpha-BHC
4.726	0.000	99355	5.337	-0.000	154138	19.93	20.10	0.8	beta-BHC
4.909	0.000	216224	5.690	-0.000	334261	20.44	20.12	1.6	delta-BHC
4.645	0.000	228274	5.258	-0.000	350450	20.34	20.47	0.7	gamma-BHC (Lindane)
5.130	0.000	203067	5.787	-0.000	320123	20.33	20.64	1.5	Heptachlor
5.454	0.000	230734	6.191	-0.000	359912	20.62	20.33	1.4	Aldrin
6.130	0.000	198033	6.845	-0.000	295580	20.41	20.19	1.1	Heptachlor epoxide b
6.572	0.000	180905	7.289	-0.000	260351	20.31	20.18	0.7	Endosulfan I
6.831	0.000	388583	7.582	-0.000	571731	40.61	40.10	1.3	Dieldrin
6.489	0.000	362177	7.370	-0.000	531128	40.77	40.63	0.4	4,4'-DDE
7.081	0.000	323576	7.907	-0.000	442460	40.48	40.43	0.1	Endrin
7.317	0.000	282010	8.117	-0.000	446656	39.19	39.81	1.6	Endosulfan II
7.135	0.000	292251	7.976	-0.000	427990	40.58	40.20	0.9	4,4'-DDD
8.180	0.000	276113	8.715	0.000	393743	40.41	39.97	1.1	Endosulfan sulfate
7.427	0.000	296413	8.295	-0.000	413083	40.73	40.20	1.3	4,4'-DDT
7.912	0.000	628619	8.935	-0.001	900958	194.94	198.14	1.6	Methoxychlor
8.453	0.000	311305	9.239	-0.000	423698	39.77	39.82	0.1	Endrin ketone
7.746	0.000	230881	8.448	0.000	312907	40.23	39.54	1.7	Endrin aldehyde
6.271	0.000	200151	7.056	-0.000	294106	20.31	20.15	0.8	trans-Chlordane
6.417	0.000	197892	7.216	-0.000	285904	20.02	20.02	0.0	cis-Chlordane
2.324	0.000	260716	2.500	-0.000	346254	19.22	18.08	6.2	Hexachlorobutadiene
4.182	0.000	237746	4.718	-0.000	364913	19.78	19.88	0.5	Hexachlorobenzene
3.828	0.000	357836	4.220	-0.000	567647	39.13	40.07	2.4	Tetrachloro-m-xylene
9.355	0.000	239428	10.466	-0.001	327134	38.76	38.45	0.8	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

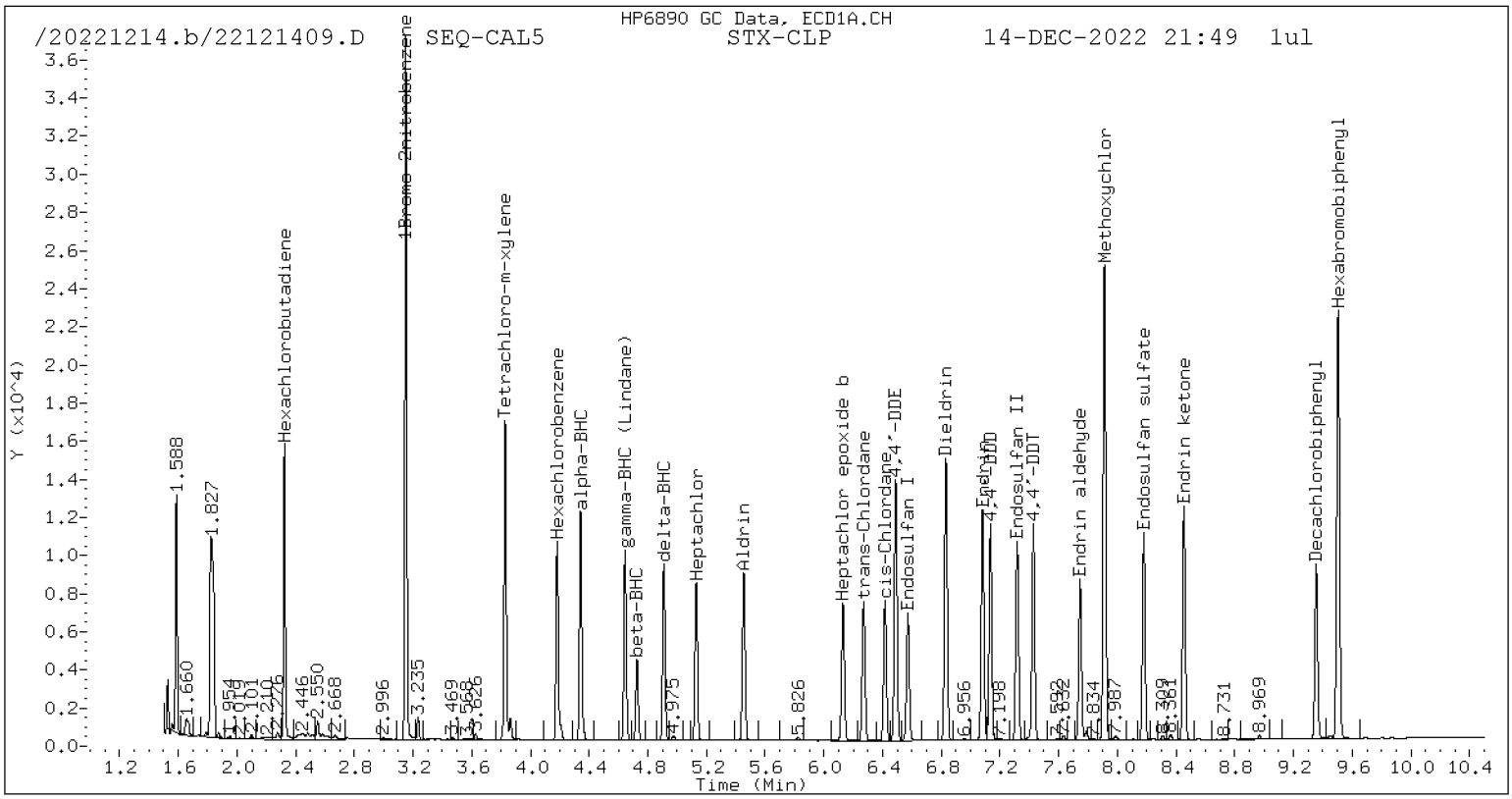
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	672426	0.0
Hexabromobiphenyl	609723	609723	0.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1006482	0.0
Hexabromobiphenyl	769764	769764	0.0

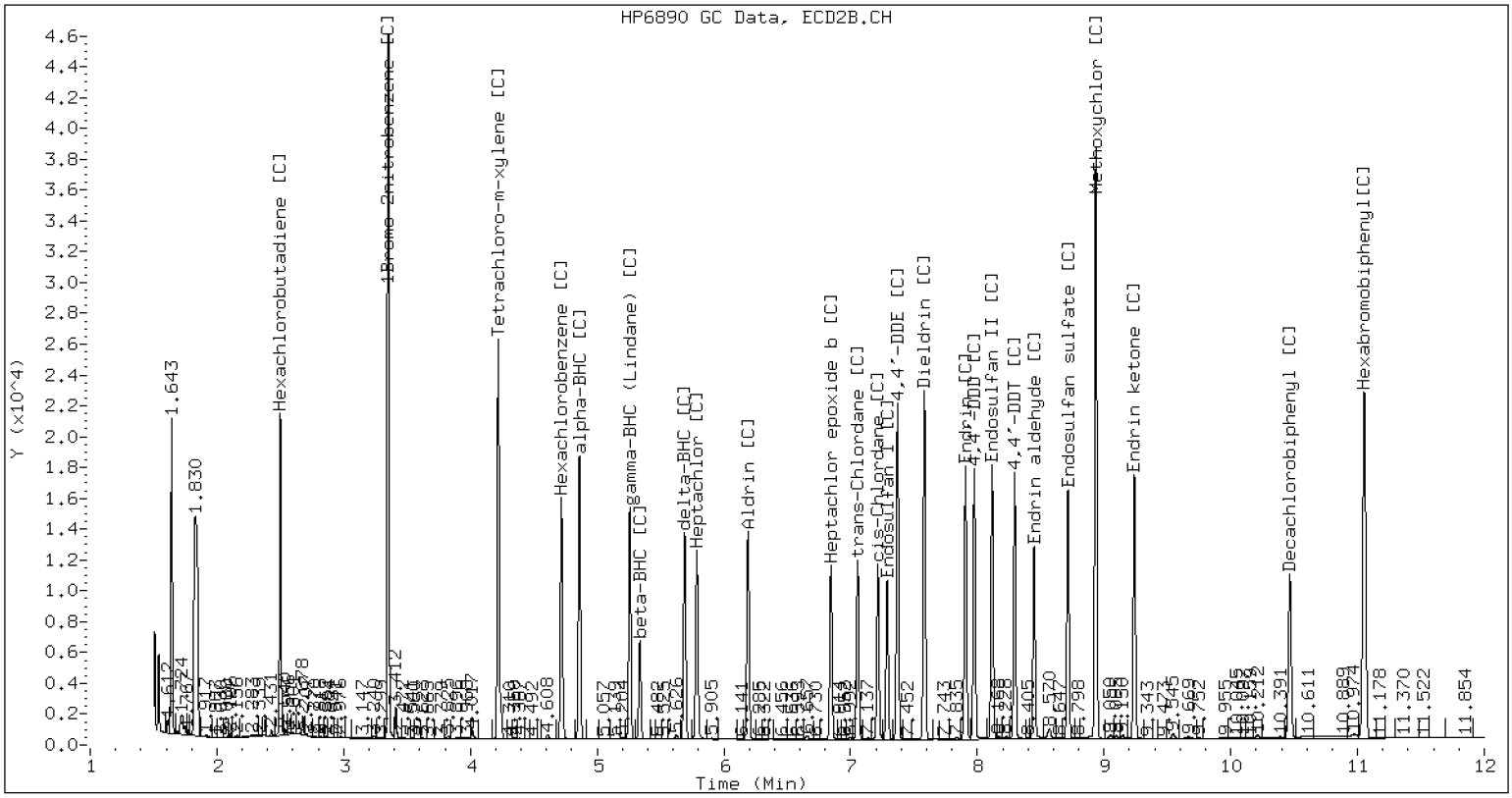
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121409.D SEQ-CAL5 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121409.D
Data file 2: /20221214.b/B20221214.b/22121409.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL5
Client ID:
Injection Date: 14-DEC-2022 21:49
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121410.D
Data file 2: /20221214.b/B20221214.b/22121410.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL6
Client ID:
Injection Date: 14-DEC-2022 22:07
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.342	0.000	535902	4.860	-0.000	849533	39.69	40.30	1.5	alpha-BHC
4.726	0.000	198976	5.337	-0.000	311218	38.28	38.84	1.4	beta-BHC
4.910	0.000	440370	5.691	0.000	700464	39.91	40.34	1.1	delta-BHC
4.646	0.000	461905	5.258	0.000	718675	39.46	40.18	1.8	gamma-BHC (Lindane)
5.130	0.000	401672	5.787	0.000	639345	38.56	39.46	2.3	Heptachlor
5.454	0.000	458396	6.190	-0.000	720942	39.27	38.97	0.8	Aldrin
6.130	0.000	387273	6.846	0.000	586062	38.26	38.31	0.1	Heptachlor epoxide b
6.572	-0.000	354629	7.288	-0.001	519836	38.18	38.55	1.0	Endosulfan I
6.832	0.000	755708	7.582	-0.000	1126850	75.73	75.64	0.1	Dieldrin
6.489	0.000	698620	7.371	-0.000	1040947	75.40	76.19	1.0	4,4'-DDE
7.082	0.000	615481	7.907	-0.000	858461	74.19	74.98	1.1	Endrin
7.317	0.000	590923	8.117	-0.000	885035	79.12	75.41	4.8	Endosulfan II
7.136	0.000	565557	7.976	-0.000	842536	75.67	75.65	0.0	4,4'-DDD
8.179	-0.001	540557	8.715	0.000	782860	76.22	75.96	0.3	Endosulfan sulfate
7.427	0.000	577337	8.295	-0.000	820861	76.44	76.36	0.1	4,4'-DDT
7.912	-0.000	1204040	8.935	-0.001	1785262	359.75	375.30	4.2	Methoxychlor
8.453	-0.001	610387	9.239	-0.000	843646	75.13	75.79	0.9	Endrin ketone
7.746	-0.000	452325	8.448	0.000	622287	75.93	75.17	1.0	Endrin aldehyde
6.271	0.000	395598	7.056	-0.000	591899	38.48	38.80	0.8	trans-Chlordane
6.417	0.001	389712	7.215	-0.000	573103	37.80	38.40	1.6	cis-Chlordane
2.324	0.000	511265	2.500	-0.000	705320	36.14	35.24	2.5	Hexachlorobutadiene
4.183	0.001	472841	4.718	0.000	728846	37.72	37.99	0.7	Hexachlorobenzene
3.828	-0.000	714634	4.221	0.000	1124106	74.93	75.93	1.3	Tetrachloro-m-xylene
9.355	-0.000	468280	10.466	-0.001	645336	73.03	72.51	0.7	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

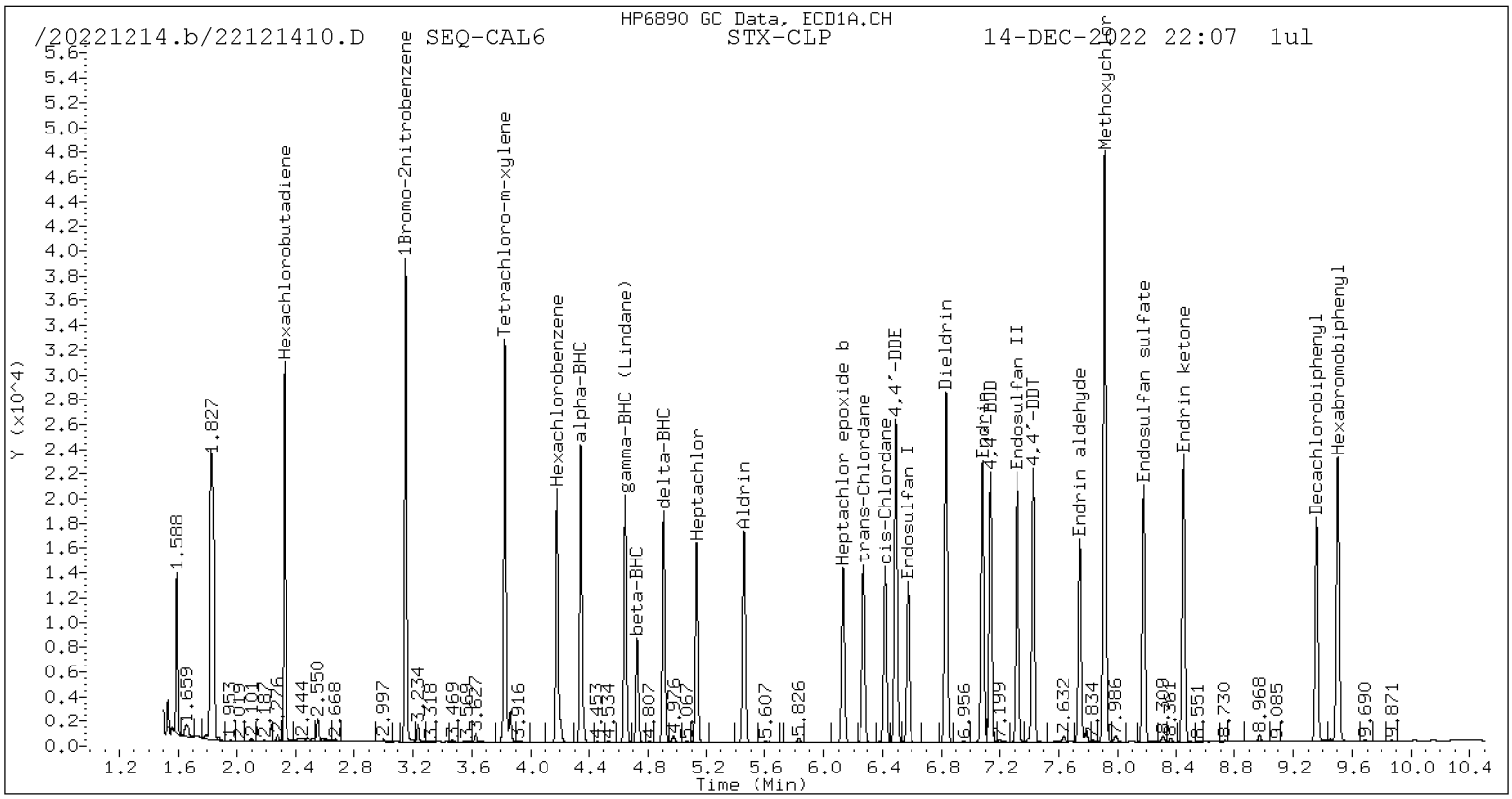
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	701342	-1.3
Hexabromobiphenyl	641833	632821	-1.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1051766	-0.7
Hexabromobiphenyl	797125	805268	1.0

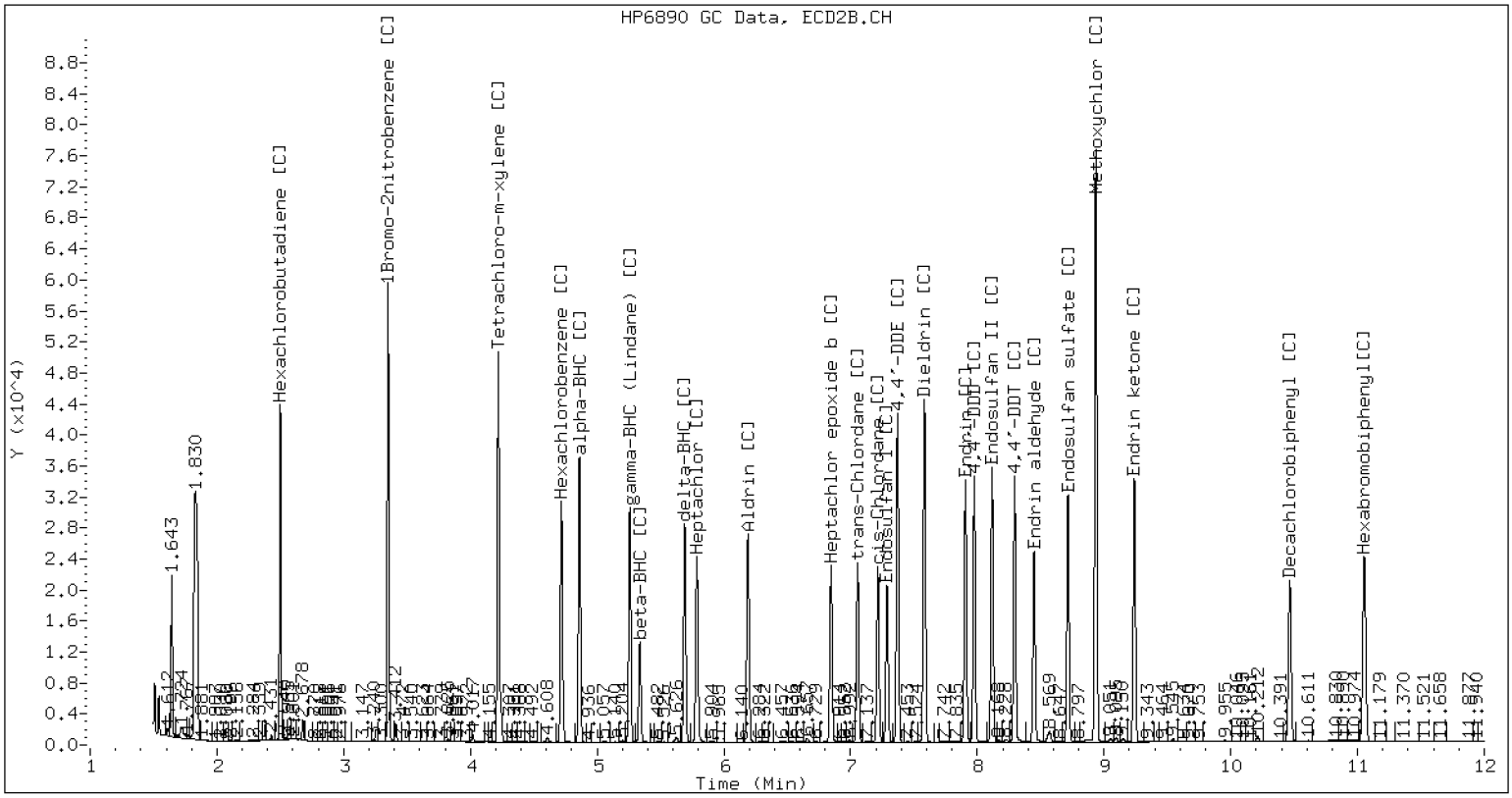
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121410.D SEQ-CAL6 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121410.D
Data file 2: /20221214.b/B20221214.b/22121410.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL6
Client ID:
Injection Date: 14-DEC-2022 22:07
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121411.D
Data file 2: /20221214.b/B20221214.b/22121411.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL7
Client ID:
Injection Date: 14-DEC-2022 22:25
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.342	0.000	1012605	4.861	0.000	1623058	75.30	77.94	3.4	alpha-BHC
4.726	0.000	371916	5.337	0.000	586390	71.84	74.06	3.1	beta-BHC
4.910	0.000	837966	5.691	0.000	1343533	76.25	78.32	2.7	delta-BHC
4.645	-0.000	870454	5.258	0.000	1370551	74.66	77.55	3.8	gamma-BHC (Lindane)
5.130	0.000	743802	5.787	0.000	1188915	71.70	74.26	3.5	Heptachlor
5.454	0.000	841598	6.191	0.000	1331430	72.39	72.84	0.6	Aldrin
6.130	-0.000	709774	6.845	0.000	1087105	70.41	71.92	2.1	Heptachlor epoxide b
6.573	0.000	652702	7.289	0.000	969098	70.56	72.74	3.1	Endosulfan I
6.832	0.000	1390496	7.583	0.000	2118555	139.91	143.93	2.8	Dieldrin
6.490	0.001	1284777	7.371	0.000	1944530	139.23	144.06	3.4	4,4'-DDE
7.082	0.001	1132487	7.907	0.000	1618631	137.86	142.60	3.4	Endrin
7.317	0.000	1089554	8.117	0.000	1672946	147.33	143.79	2.4	Endosulfan II
7.135	0.000	1051958	7.976	0.000	1606815	142.14	145.53	2.4	4,4'-DDD
8.180	0.000	1013288	8.715	0.000	1496440	144.30	146.47	1.5	Endosulfan sulfate
7.428	0.001	1086138	8.295	0.000	1586078	145.23	148.84	2.5	4,4'-DDT
7.912	0.001	2325261	8.936	0.000	3541650	701.64	751.02	6.8	Methoxychlor
8.454	0.000	1146784	9.240	0.000	1623077	142.56	147.08	3.1	Endrin ketone
7.746	-0.000	846477	8.448	0.000	1178353	143.51	143.57	0.0	Endrin aldehyde
6.271	0.000	733514	7.056	0.000	1114685	71.64	73.95	3.2	trans-Chlordane
6.417	0.001	723886	7.216	0.000	1079255	70.50	73.19	3.7	cis-Chlordane
2.324	0.000	955982	2.501	0.000	1351745	67.86	68.35	0.7	Hexachlorobutadiene
4.182	0.000	879573	4.718	0.000	1355289	70.45	71.51	1.5	Hexachlorobenzene
3.828	0.000	1318381	4.220	0.000	2067539	138.79	141.35	1.8	Tetrachloro-m-xylene
9.356	0.000	878340	10.467	0.000	1231298	138.34	139.55	0.9	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

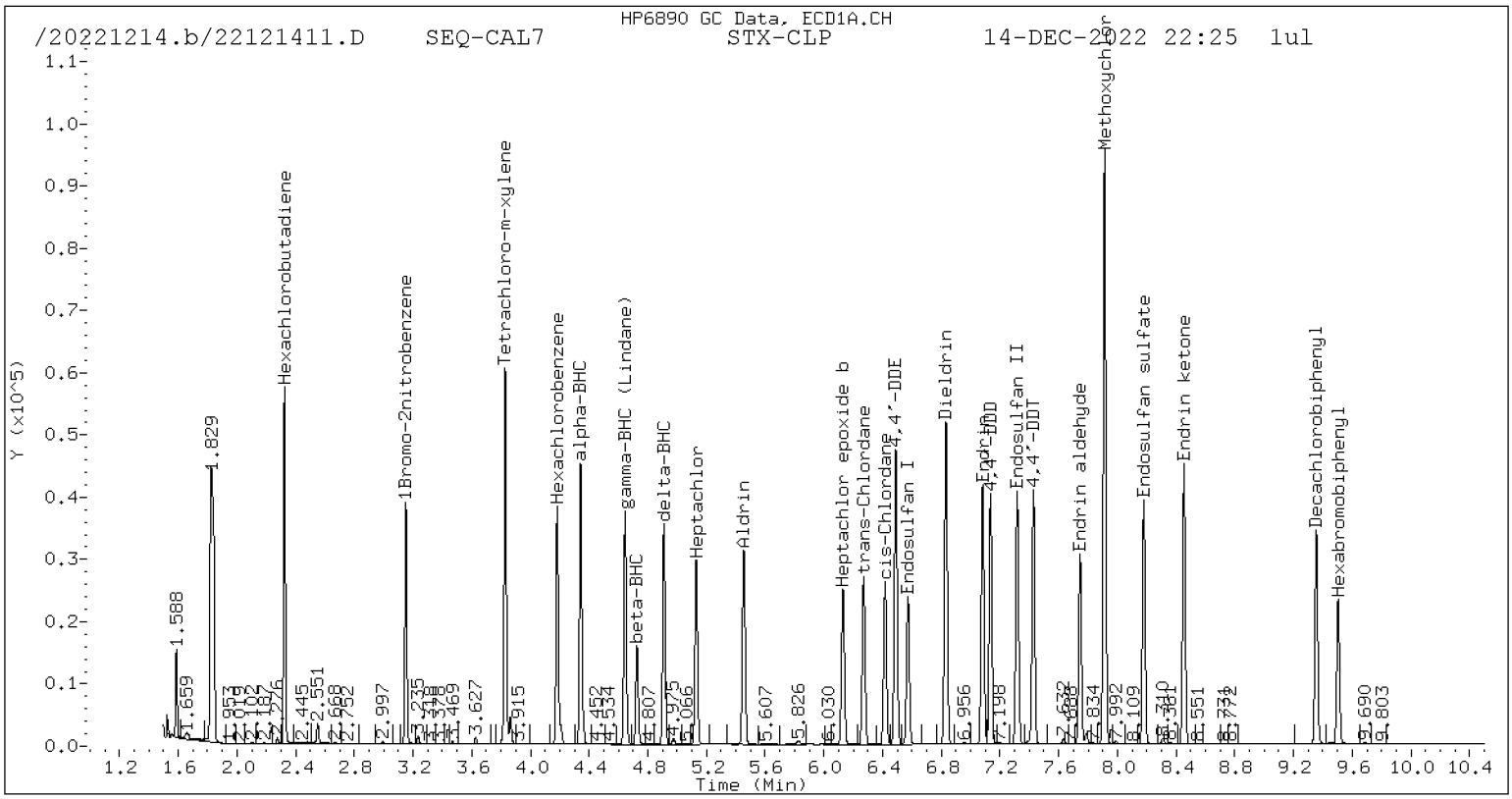
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	698499	-1.7
Hexabromobiphenyl	641833	626605	-2.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1039154	-1.9
Hexabromobiphenyl	797125	798313	0.1

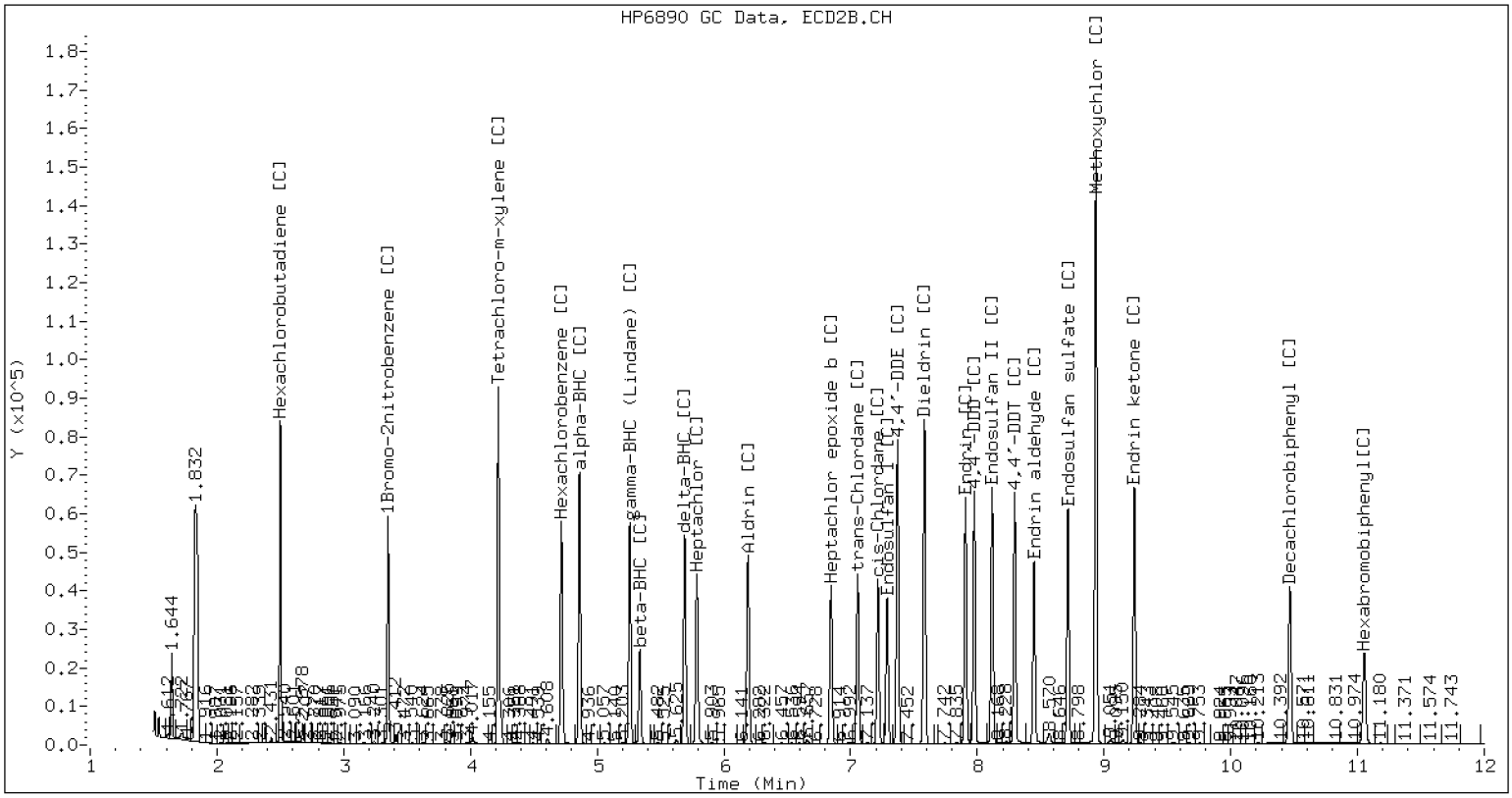
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121411.D SEQ-CAL7 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121411.D
Data file 2: /20221214.b/B20221214.b/22121411.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL7
Client ID:
Injection Date: 14-DEC-2022 22:25
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121412.D
Data file 2: /20221214.b/B20221214.b/22121412.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL8
Client ID:
Injection Date: 14-DEC-2022 22:43
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.014	-0.000	22184	6.741	-0.000	34211	2.89	2.85	1.2	Oxychlordane
6.106	-0.000	18661	7.036	-0.000	30817	2.94	3.14	6.5	2,4-DDE
6.397	-0.000	30616	7.154	-0.001	41466	3.05	2.82	7.5	trans-Nonachlor
6.681	0.000	16263	7.591	0.000	26177	2.88	3.12	7.9	2,4-DDD
6.956	-0.001	17569	7.913	-0.000	24398	2.88	2.82	2.1	2,4-DDT
7.112	-0.000	29417	7.975	-0.000	37972	3.01	2.72	9.9	cis-Nonachlor
8.082	-0.000	18819	9.223	-0.000	24312	3.09	3.00	3.1	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

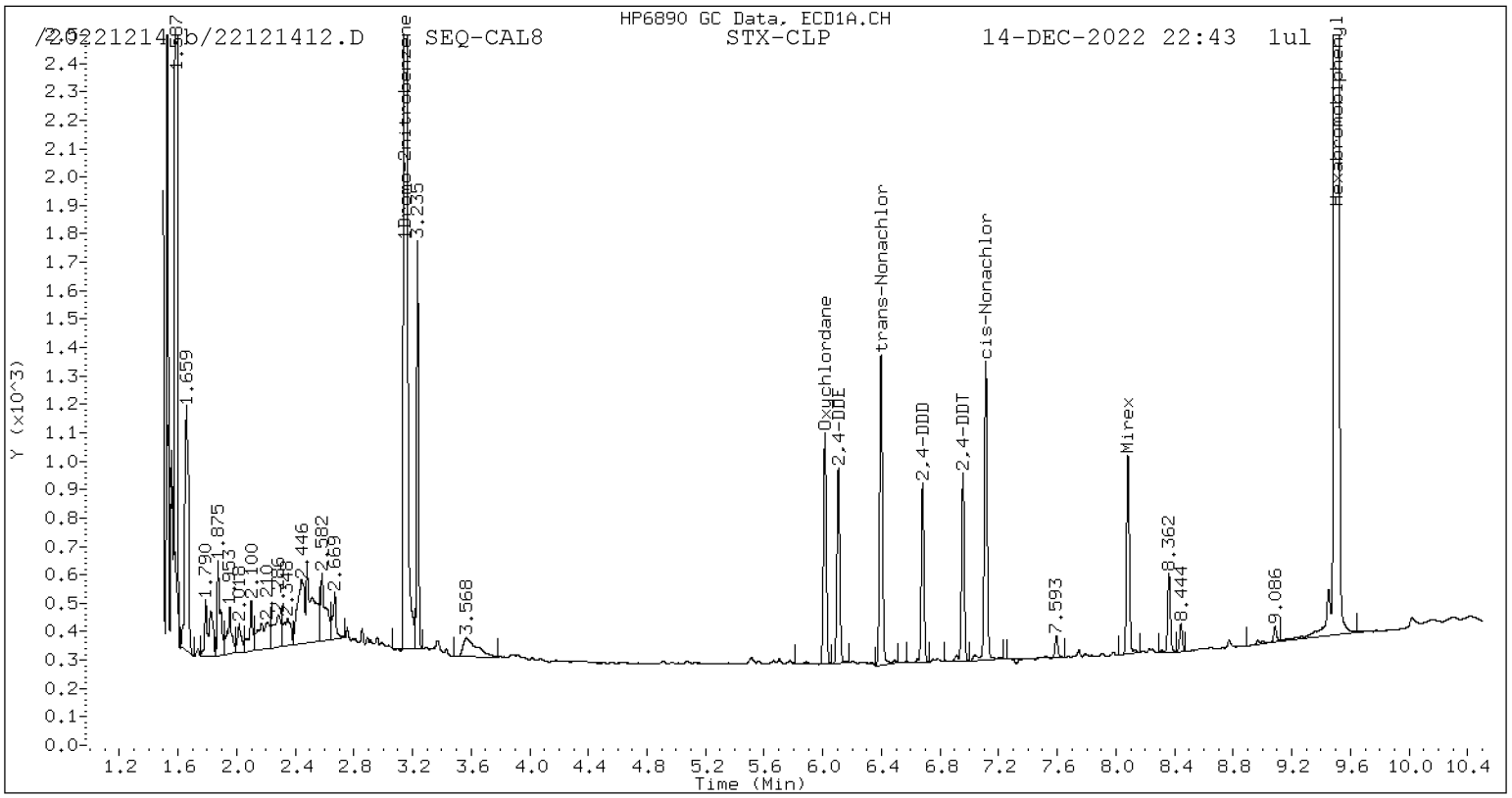
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	713898	0.5
Hexabromobiphenyl	641833	646441	0.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1076864	1.7
Hexabromobiphenyl	797125	820275	2.9

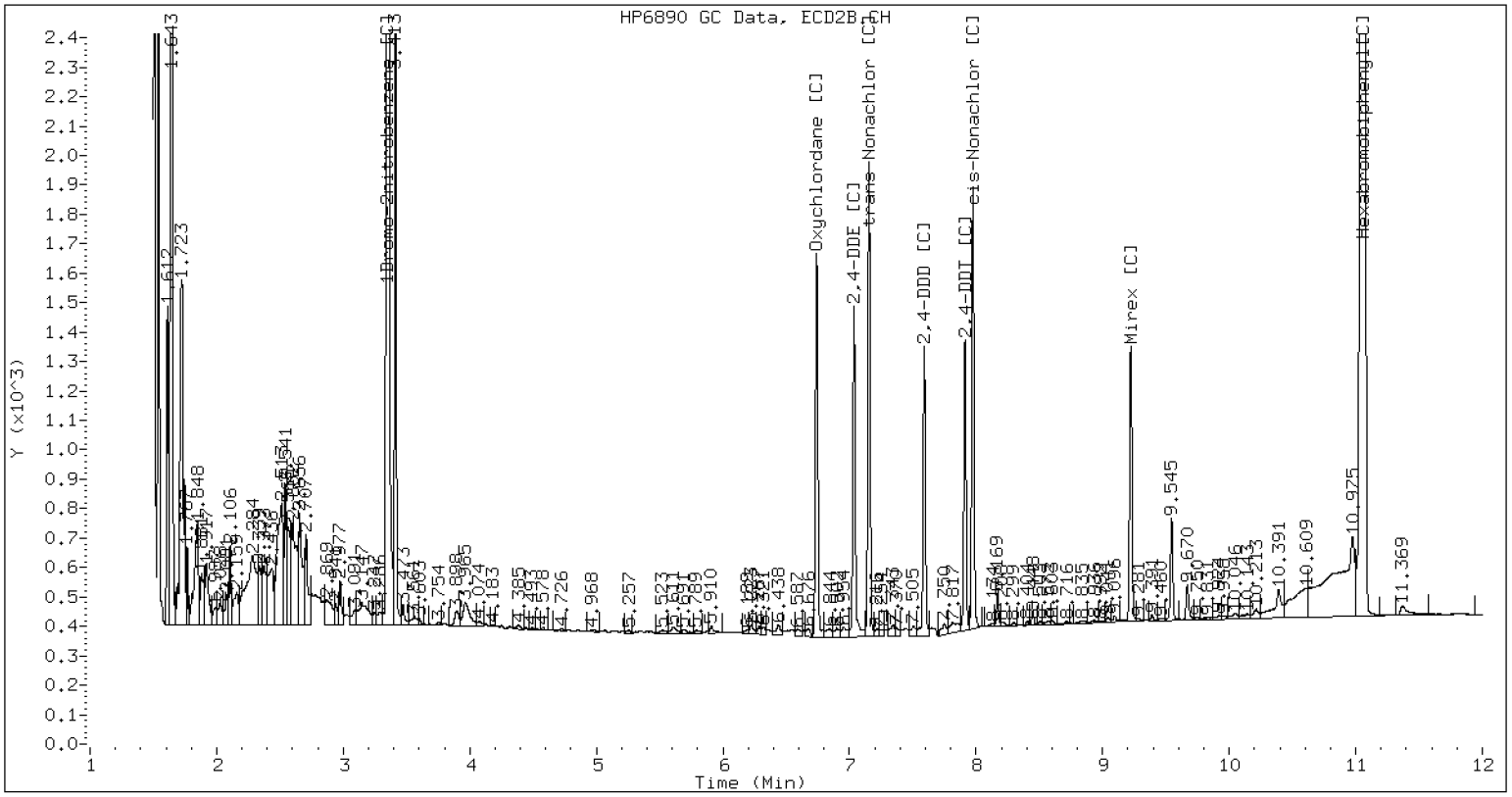
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121412.D SEQ-CAL8 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121412.D
Data file 2: /20221214.b/B20221214.b/22121412.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL8
Client ID:
Injection Date: 14-DEC-2022 22:43
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121413.D
Data file 2: /20221214.b/B20221214.b/22121413.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL9
Client ID:
Injection Date: 14-DEC-2022 23:01
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.015	0.000	39121	6.741	-0.000	61505	5.34	5.41	1.3	Oxychlordane
6.106	0.000	33487	7.036	-0.000	53206	5.54	5.72	3.1	2,4-DDE
6.398	0.000	51858	7.154	-0.001	72836	5.42	5.20	4.1	trans-Nonachlor
6.681	0.000	29307	7.590	-0.000	44506	5.45	5.55	1.9	2,4-DDD
6.957	-0.000	31530	7.914	0.000	45986	5.43	5.57	2.6	2,4-DDT
7.112	-0.000	50912	7.975	0.000	70898	5.46	5.32	2.6	cis-Nonachlor
8.082	-0.000	32004	9.223	-0.000	45650	5.52	5.89	6.6	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

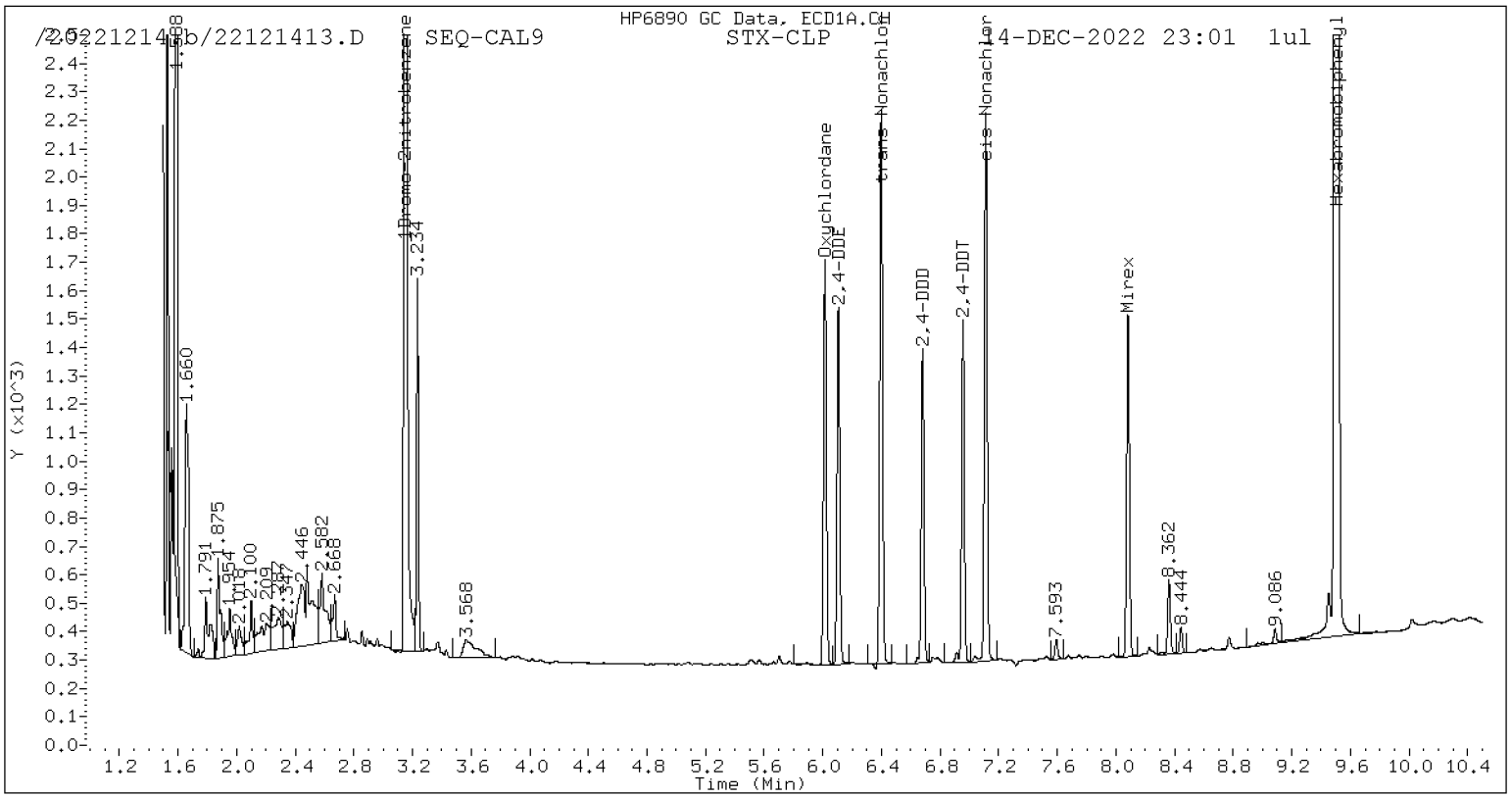
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	672507	-5.4
Hexabromobiphenyl	641833	615627	-4.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1020334	-3.6
Hexabromobiphenyl	797125	782734	-1.8

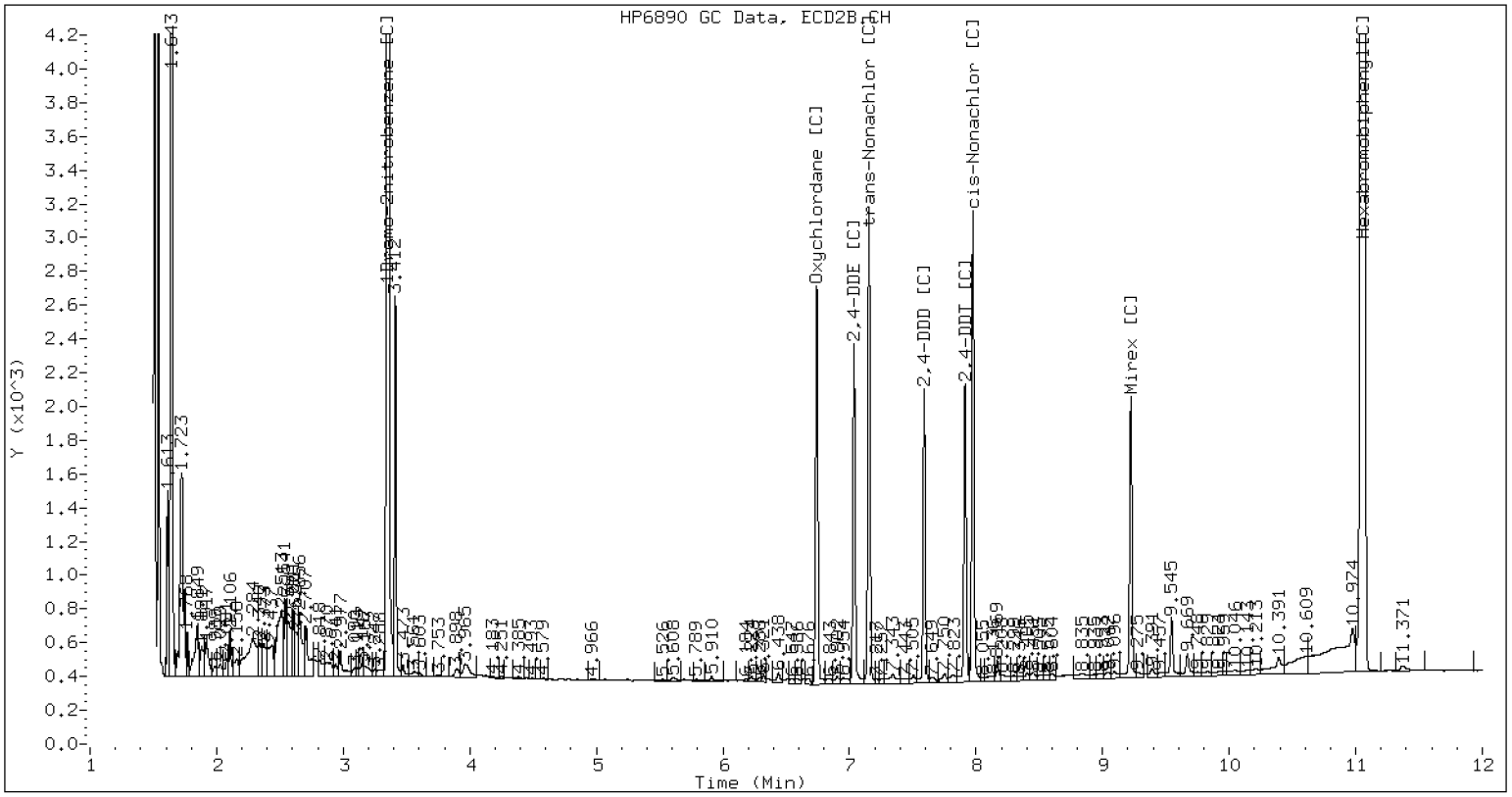
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121413.D SEQ-CAL9 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121413.D
Data file 2: /20221214.b/B20221214.b/22121413.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL9
Client ID:
Injection Date: 14-DEC-2022 23:01
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121414.D
Data file 2: /20221214.b/B20221214.b/22121414.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALA
Client ID:
Injection Date: 14-DEC-2022 23:19
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.014	-0.000	82473	6.741	-0.001	127500	10.63	10.63	0.0	Oxychlordane
6.106	-0.000	69109	7.035	-0.001	108440	10.79	11.04	2.3	2,4-DDE
6.398	0.000	108386	7.154	-0.001	157712	10.68	10.60	0.7	trans-Nonachlor
6.681	0.000	60517	7.590	-0.000	91420	10.62	10.74	1.2	2,4-DDD
6.956	-0.001	65300	7.913	0.000	91498	10.61	10.44	1.6	2,4-DDT
7.111	-0.001	104247	7.975	-0.000	146224	10.55	10.34	2.0	cis-Nonachlor
8.082	-0.000	65614	9.222	-0.000	84337	10.67	10.25	4.0	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

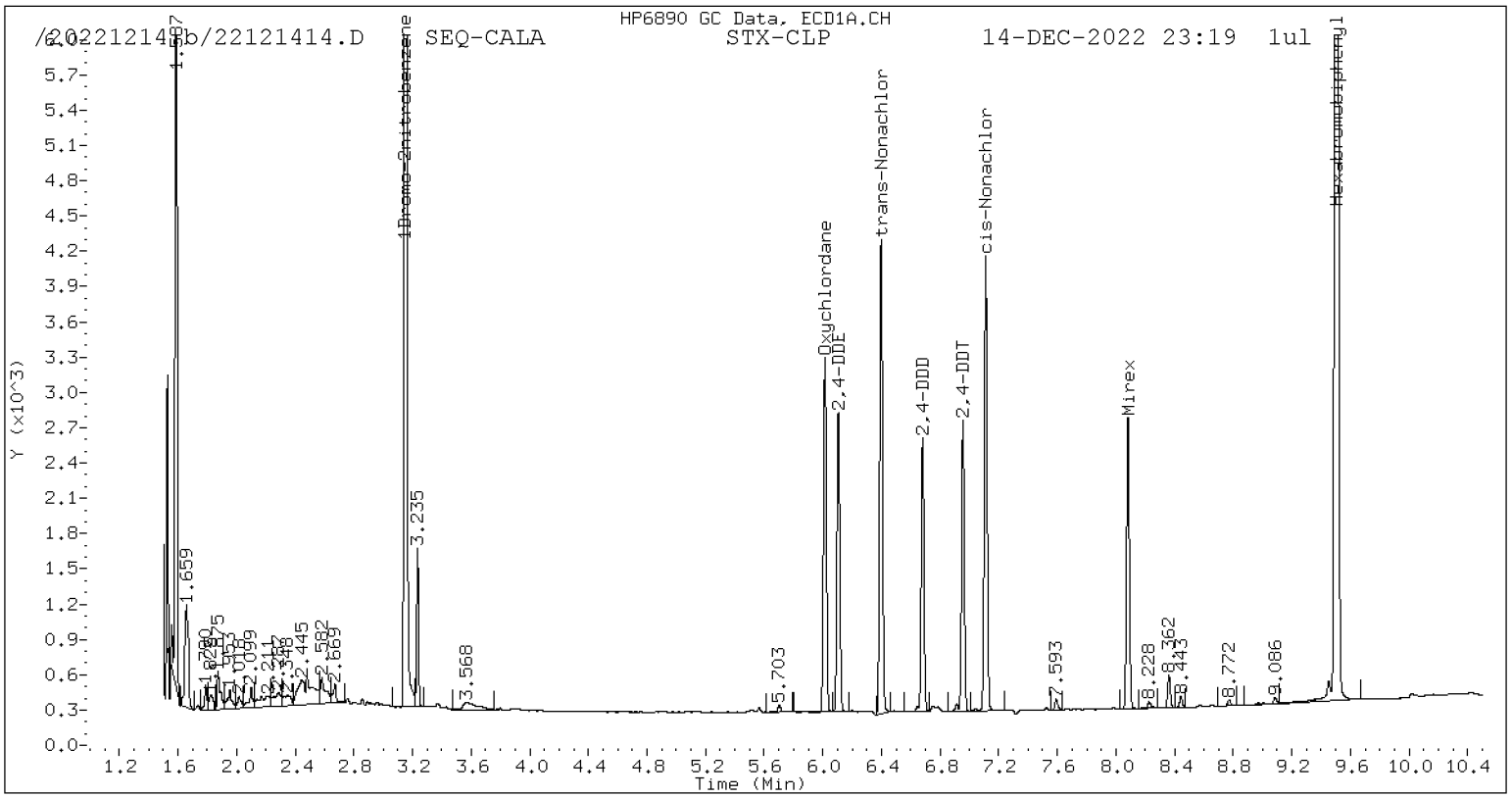
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	712122	0.2
Hexabromobiphenyl	641833	652595	1.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1077341	1.7
Hexabromobiphenyl	797125	831365	4.3

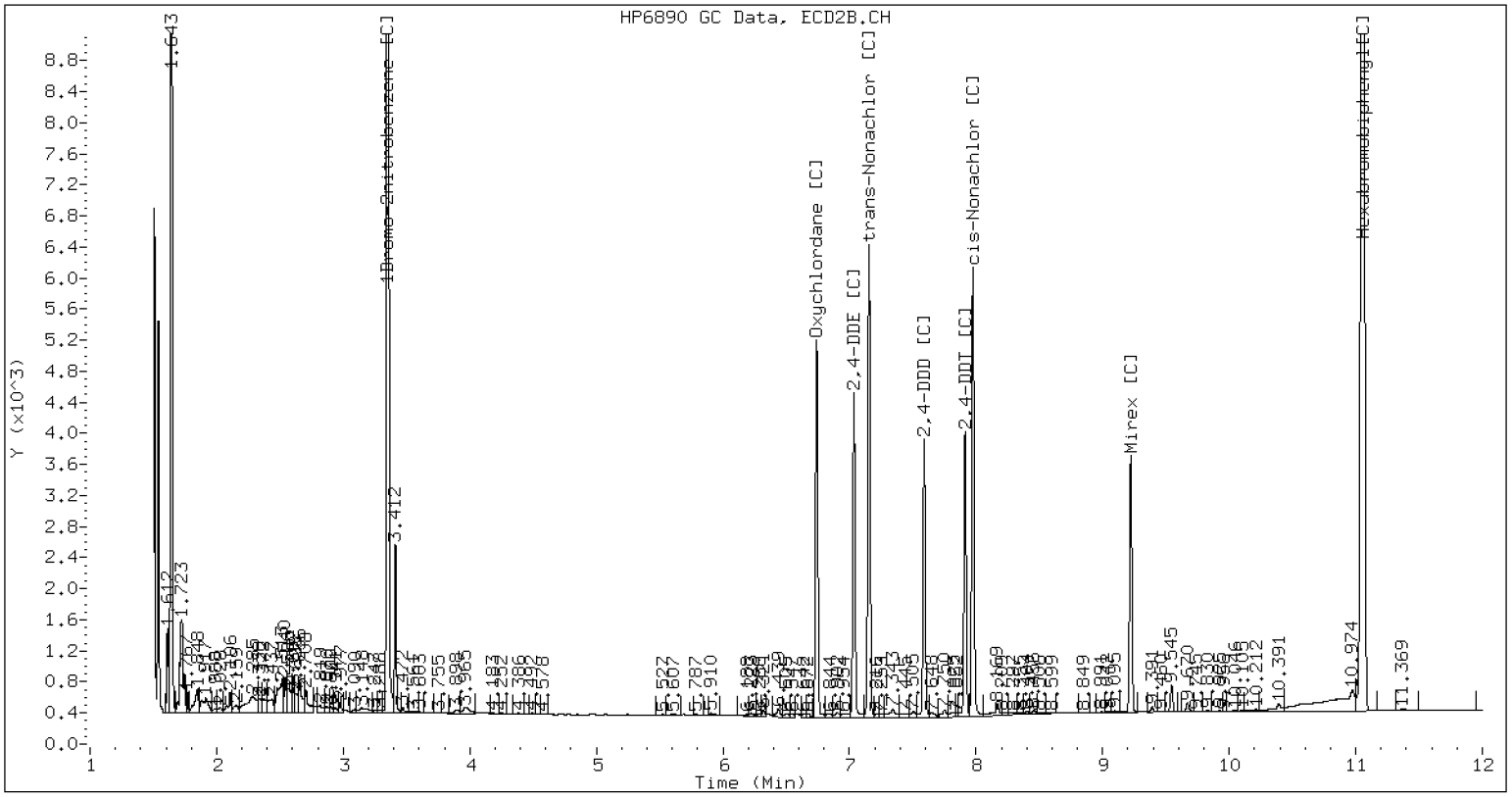
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121414.D SEQ-CALA CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121414.D
Data file 2: /20221214.b/B20221214.b/22121414.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALA
Client ID:
Injection Date: 14-DEC-2022 23:19
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121415.D
Data file 2: /20221214.b/B20221214.b/22121415.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALB
Client ID:
Injection Date: 14-DEC-2022 23:36
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.015	0.001	154379	6.741	-0.000	238017	20.80	20.28	2.5	Oxychlordane
6.106	-0.000	128483	7.036	-0.000	195807	20.97	20.37	2.9	2,4-DDE
6.398	0.000	200622	7.155	-0.000	289952	20.66	20.28	1.9	trans-Nonachlor
6.681	0.000	113972	7.591	0.000	165245	20.90	20.21	3.4	2,4-DDD
6.956	-0.001	122412	7.913	0.000	169814	20.78	20.17	3.0	2,4-DDT
7.112	-0.000	194165	7.975	-0.000	274910	20.54	20.23	1.5	cis-Nonachlor
8.082	-0.000	119271	9.223	0.000	158702	20.28	20.08	1.0	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

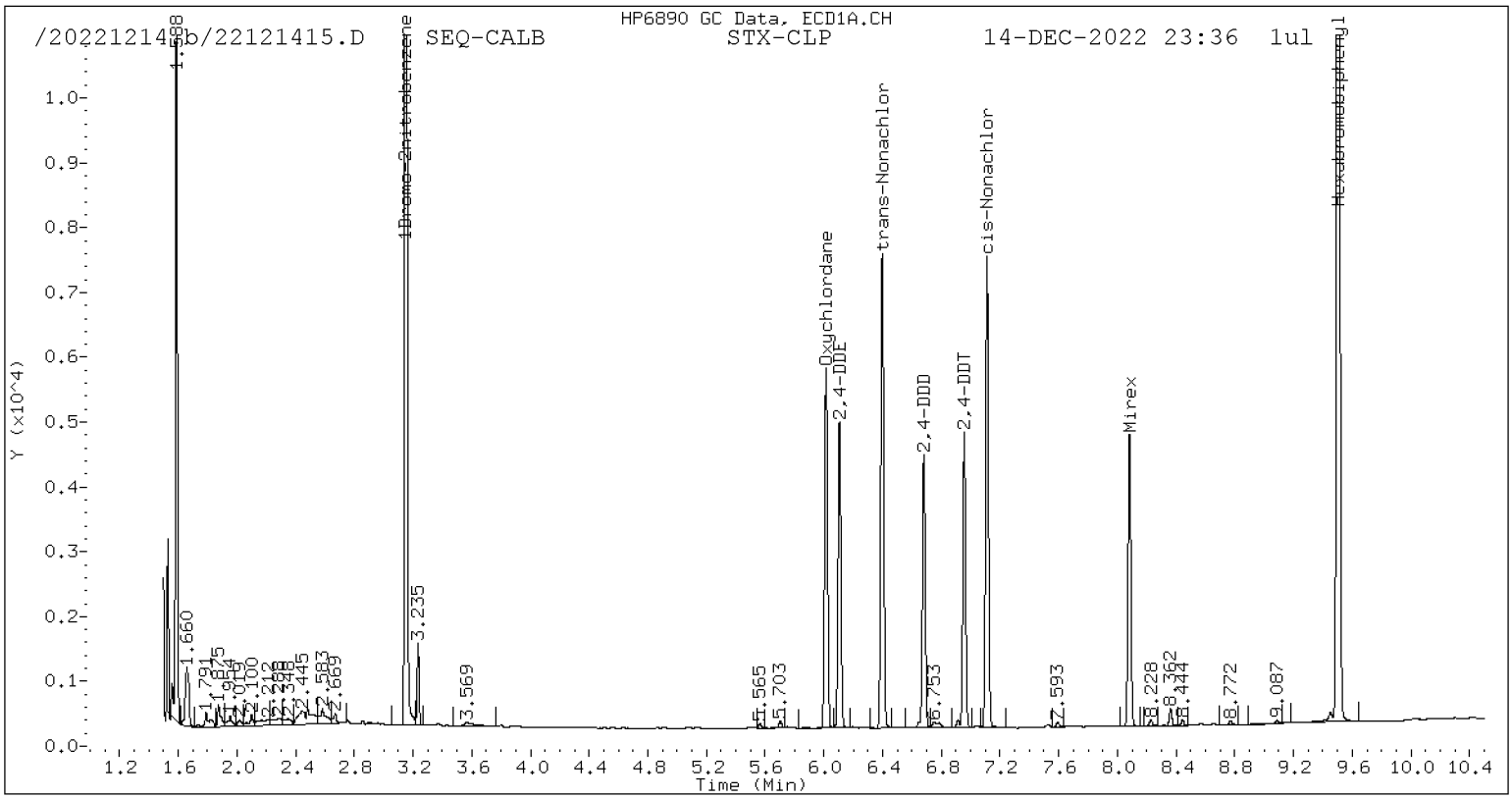
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	693450	-2.4
Hexabromobiphenyl	641833	624334	-2.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1053959	-0.5
Hexabromobiphenyl	797125	798882	0.2

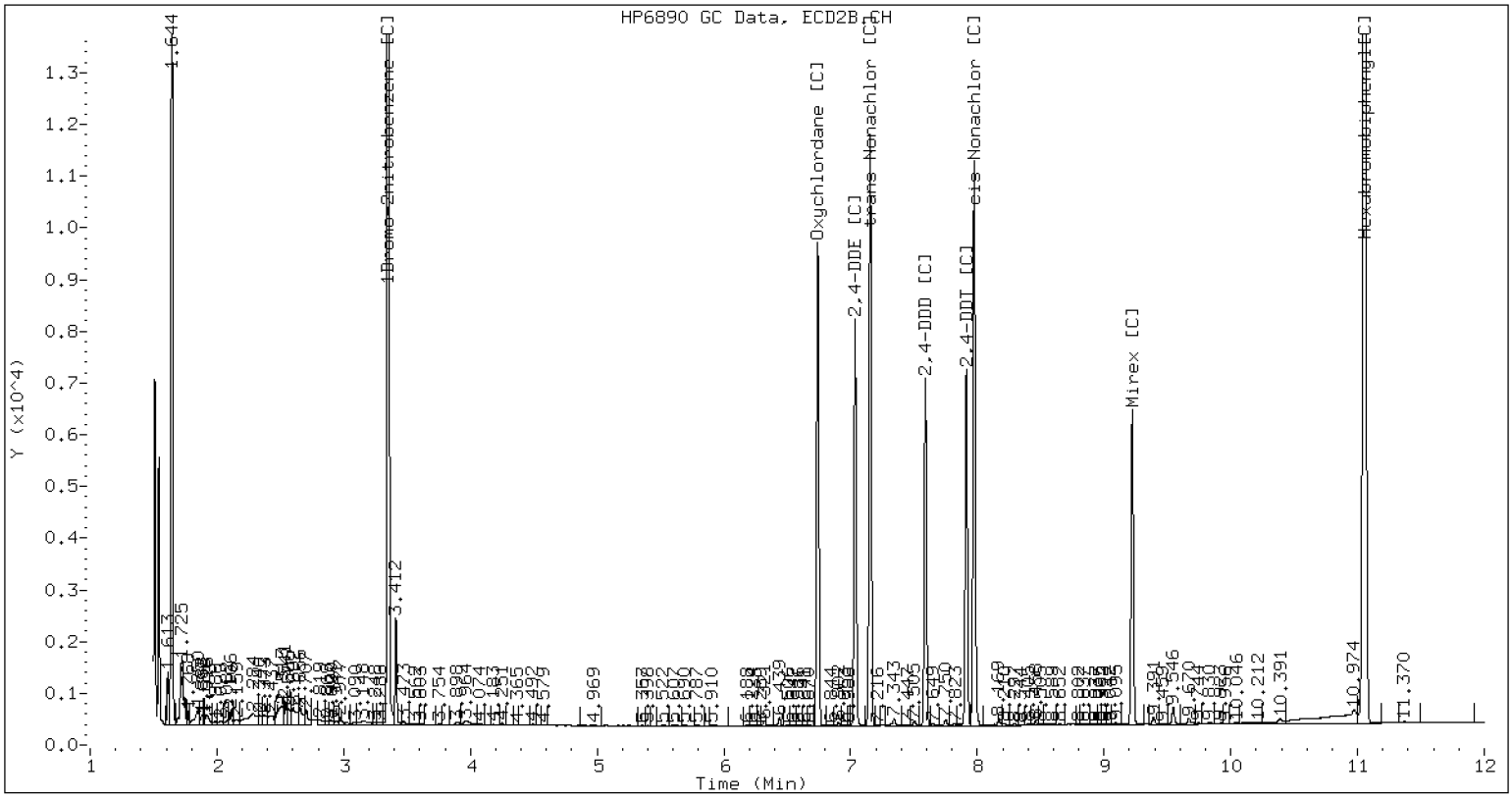
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121415.D SEQ-CALB CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121415.D
Data file 2: /20221214.b/B20221214.b/22121415.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALB
Client ID:
Injection Date: 14-DEC-2022 23:36
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121416.D
Data file 2: /20221214.b/B20221214.b/22121416.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALC
Client ID:
Injection Date: 14-DEC-2022 23:54
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.014	0.000	292499	6.741	-0.000	460731	40.08	40.26	0.4	Oxychlordane
6.106	0.000	242066	7.036	-0.000	372996	40.18	39.80	0.9	2,4-DDE
6.397	0.000	383329	7.154	-0.001	567971	40.16	40.45	0.7	trans-Nonachlor
6.681	0.000	216474	7.590	-0.000	320311	40.39	39.88	1.3	2,4-DDD
6.957	0.000	233738	7.913	-0.000	332906	40.36	40.25	0.3	2,4-DDT
7.112	0.000	373705	7.975	-0.000	538334	40.21	40.33	0.3	cis-Nonachlor
8.082	0.000	229604	9.222	-0.000	299228	39.71	38.54	3.0	Mirex
3.800	-0.028	1151	----			0.13	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

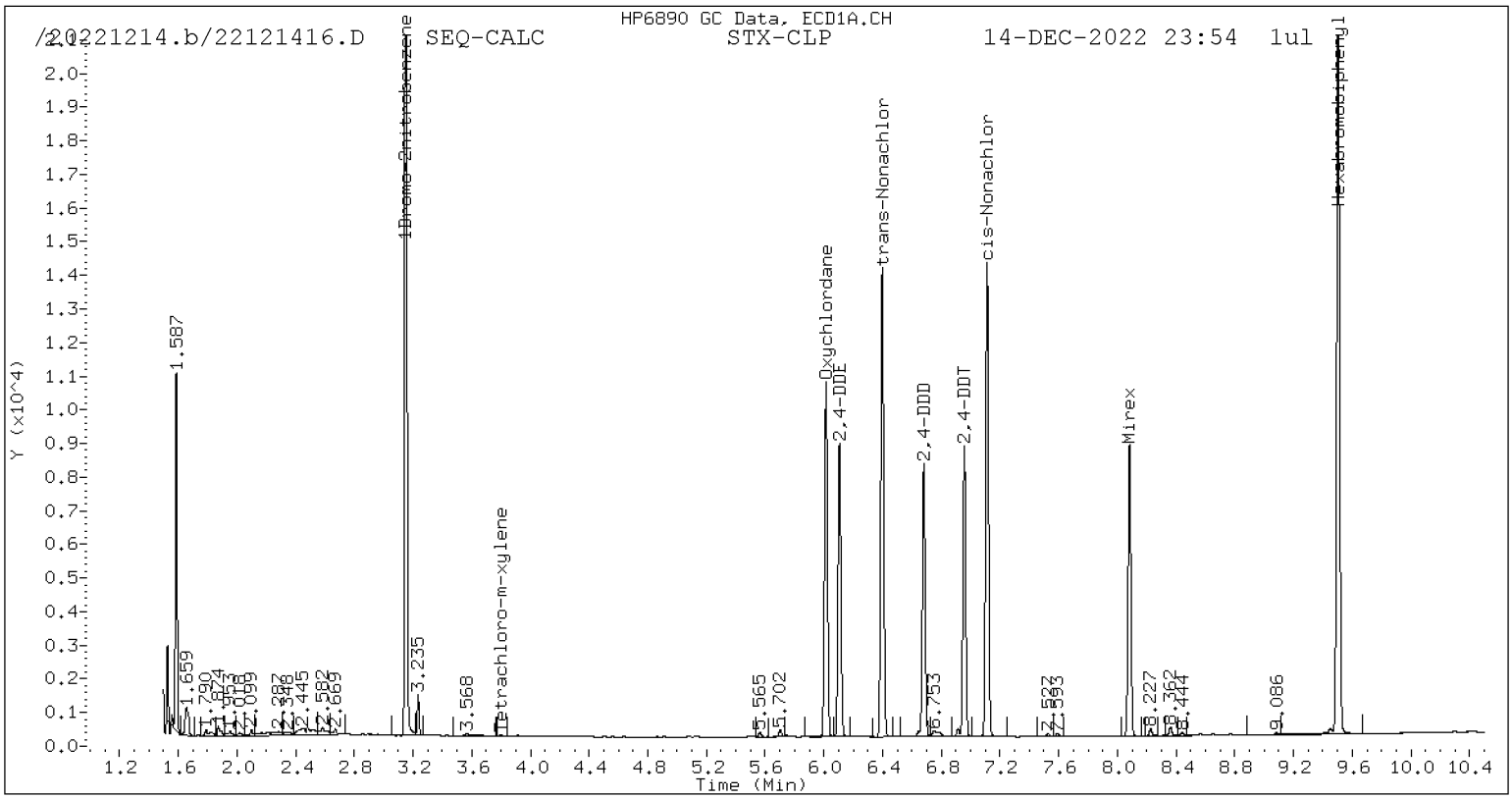
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	674573	-5.1
Hexabromobiphenyl	641833	613787	-4.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1027697	-2.9
Hexabromobiphenyl	797125	784673	-1.6

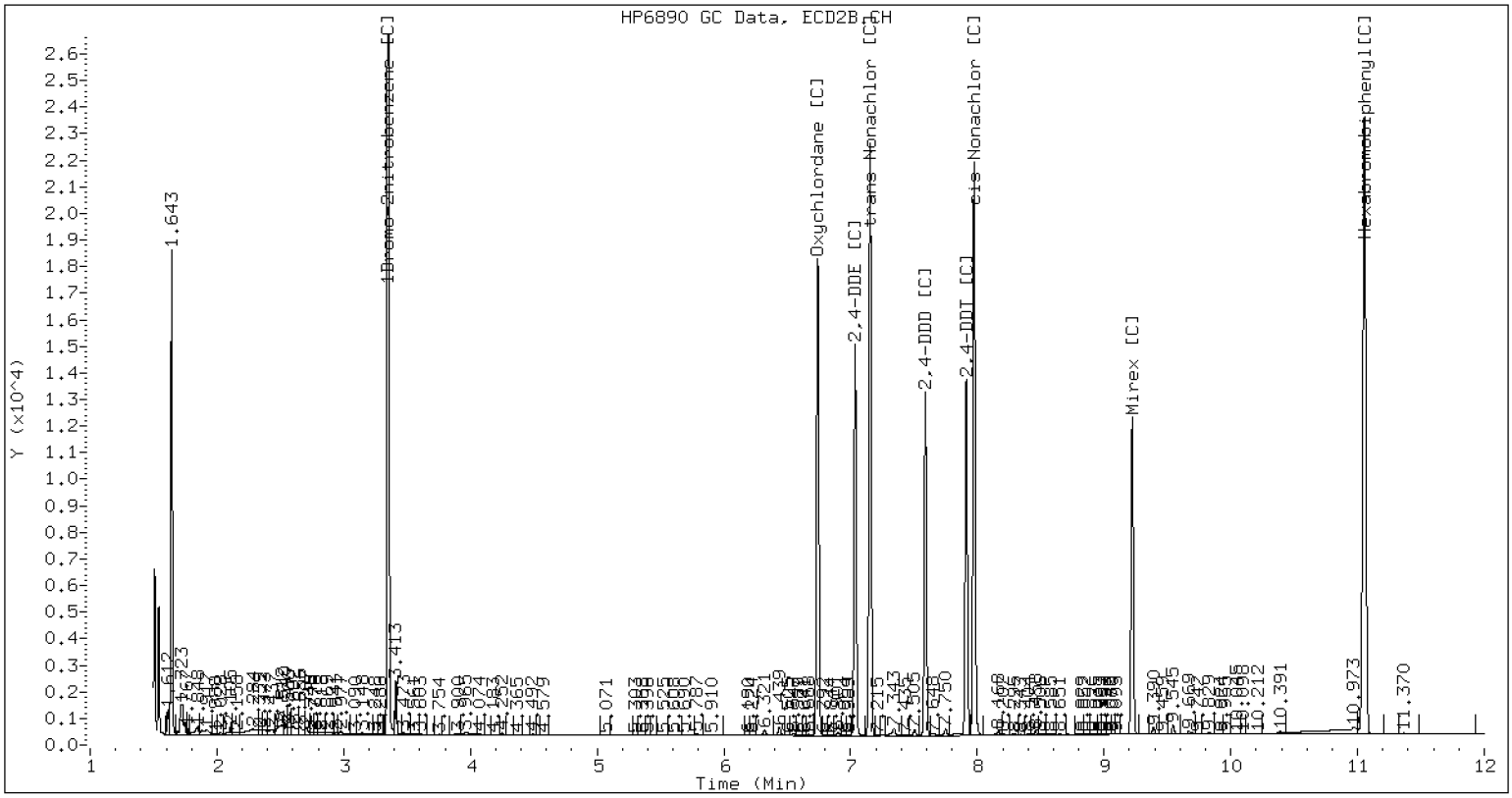
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121416.D SEQ-CALC CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121416.D
Data file 2: /20221214.b/B20221214.b/22121416.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALC
Client ID:
Injection Date: 14-DEC-2022 23:54
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121417.D
Data file 2: /20221214.b/B20221214.b/22121417.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALD
Client ID:
Injection Date: 15-DEC-2022 00:12
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.014	-0.000	544254	6.741	-0.000	856443	75.85	75.73	0.2	Oxychlordane
6.106	-0.000	438313	7.036	-0.000	677072	73.99	73.11	1.2	2,4-DDE
6.397	-0.000	704675	7.155	0.000	1067899	75.09	76.94	2.4	trans-Nonachlor
6.681	0.000	393654	7.591	0.000	594311	74.70	74.86	0.2	2,4-DDD
6.956	-0.001	430636	7.914	0.000	618740	75.63	75.68	0.1	2,4-DDT
7.112	-0.000	688257	7.975	0.000	1018624	75.31	77.19	2.5	cis-Nonachlor
8.082	-0.001	426177	9.223	0.000	573947	74.97	74.78	0.2	Mirex
3.800	-0.028	2109	----			0.23	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

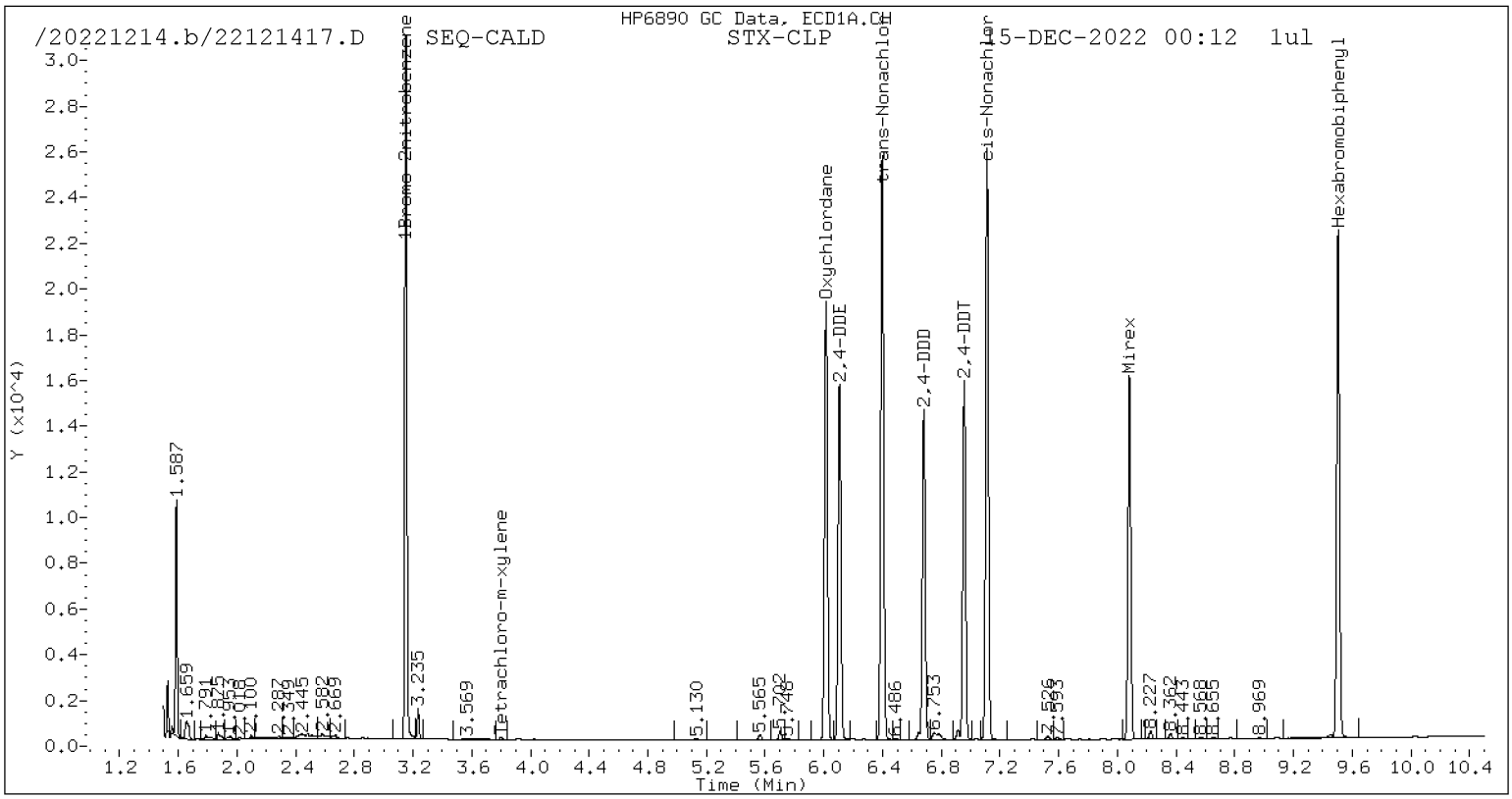
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	664375	-6.5
Hexabromobiphenyl	641833	603504	-6.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1015544	-4.1
Hexabromobiphenyl	797125	775630	-2.7

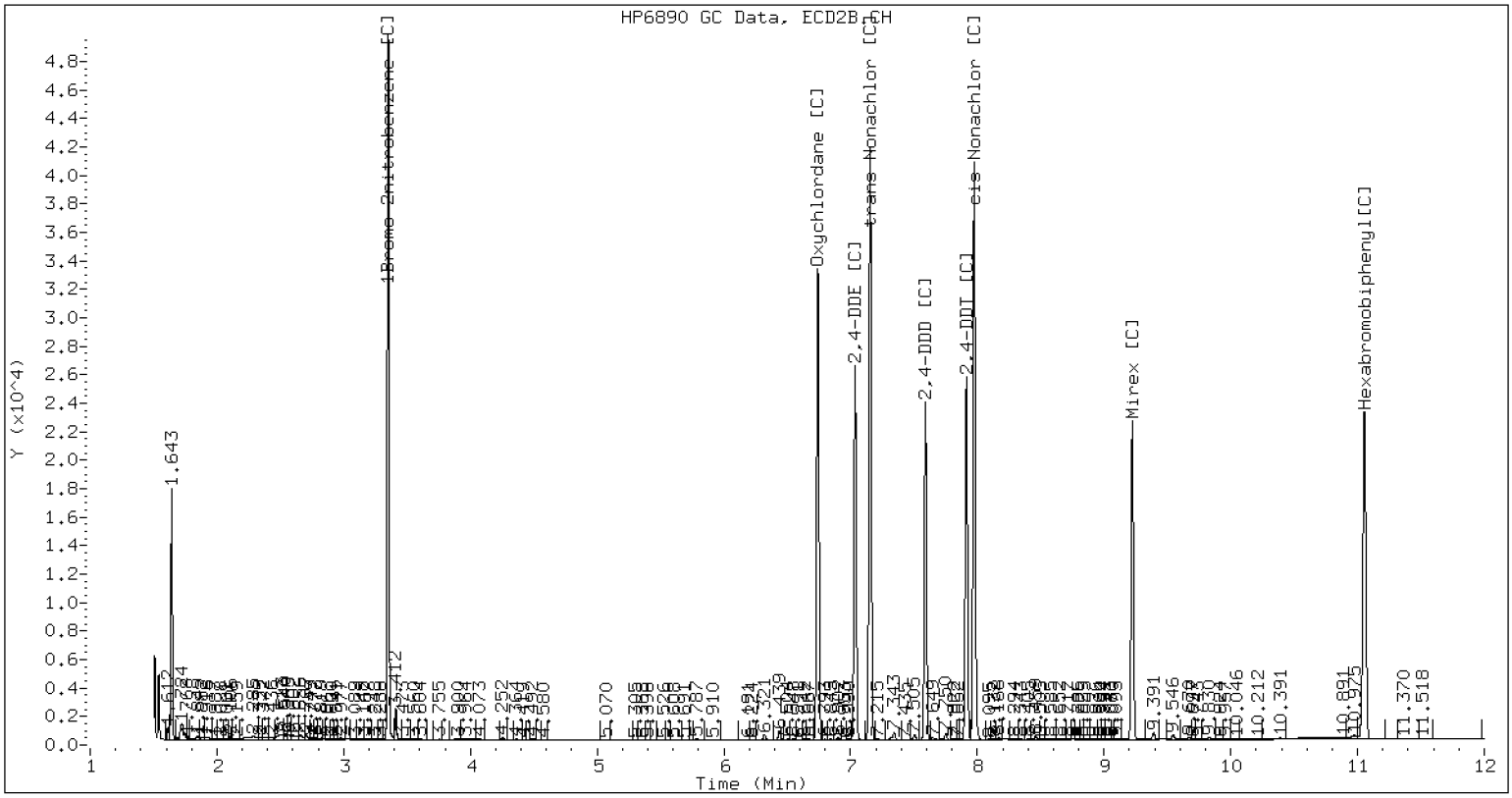
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121417.D SEQ-CALD CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121417.D
Data file 2: /20221214.b/B20221214.b/22121417.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALD
Client ID:
Injection Date: 15-DEC-2022 00:12
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121418.D
Data file 2: /20221214.b/B20221214.b/22121418.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALE
Client ID:
Injection Date: 15-DEC-2022 00:30
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.014	0.000	1020828	6.741	0.000	1630330	140.48	142.04	1.1	Oxychlordane
6.106	-0.000	801828	7.036	0.000	1240933	133.65	132.03	1.2	2,4-DDE
6.397	0.000	1327091	7.155	0.000	2047915	139.63	146.04	4.5	trans-Nonachlor
6.680	-0.000	733651	7.591	0.000	1118552	137.46	139.45	1.4	2,4-DDD
6.956	-0.001	794021	7.913	0.000	1163676	137.69	140.88	2.3	2,4-DDT
7.112	-0.000	1301975	7.975	0.000	1956215	140.68	146.73	4.2	cis-Nonachlor
8.082	-0.001	815059	9.223	0.000	1108848	141.57	143.01	1.0	Mirex
3.800	-0.028	3997	----			0.43	0.00	---	Tetrachloro-m-xylene
----			10.471	0.004	3393	0.00	0.39	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

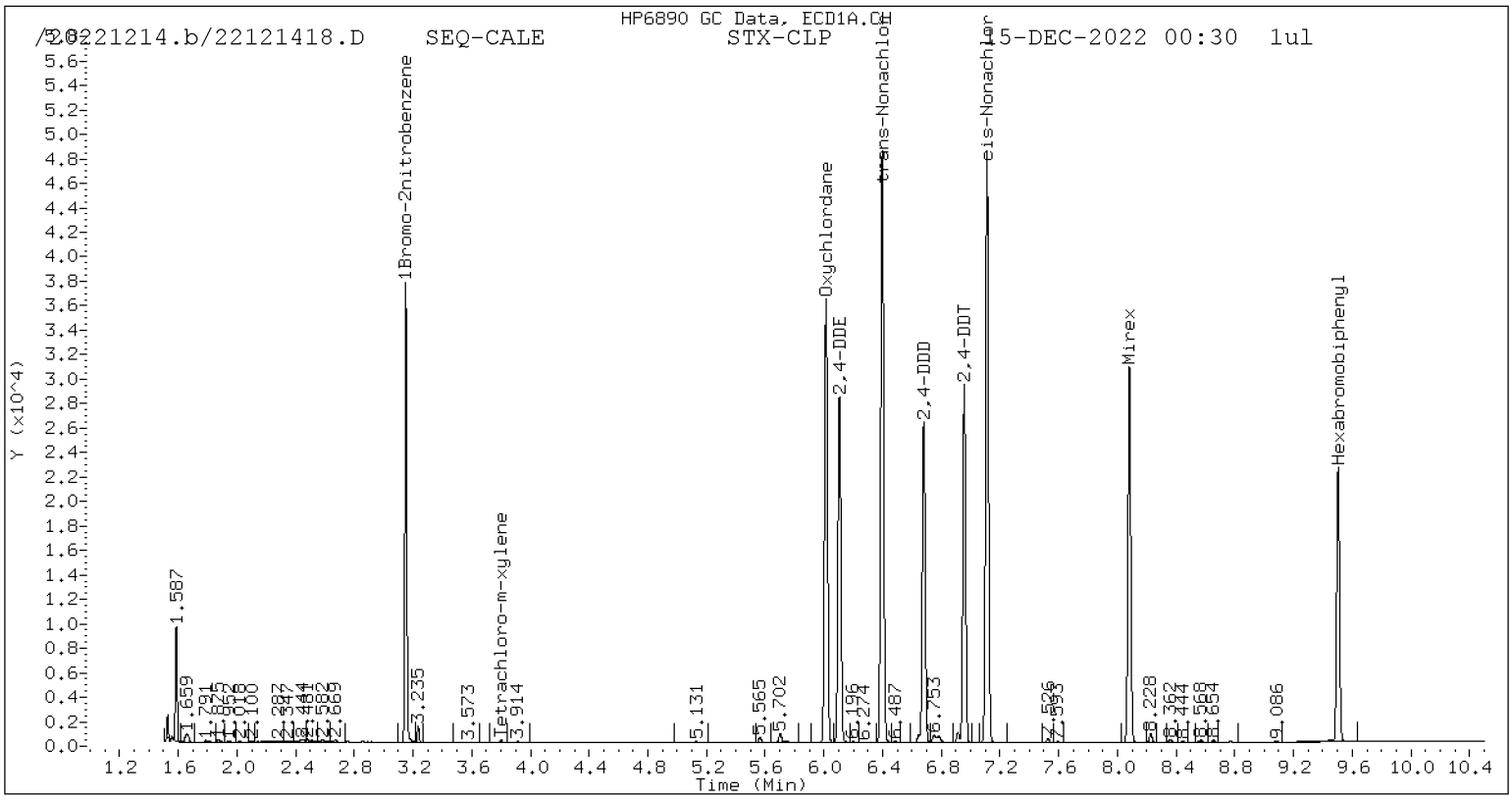
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	675789	-4.9
Hexabromobiphenyl	641833	611199	-4.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1030648	-2.7
Hexabromobiphenyl	797125	783631	-1.7

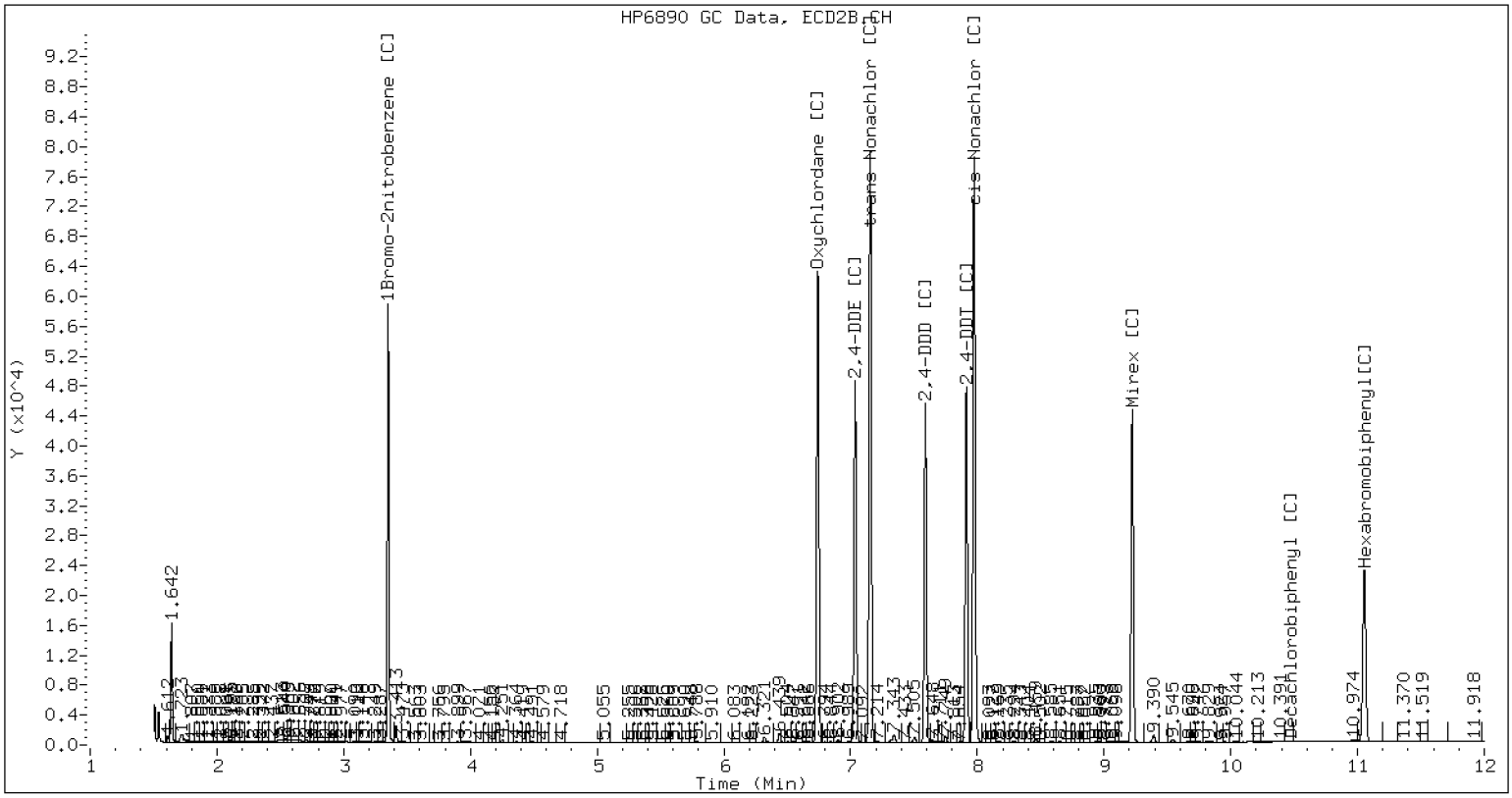
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121418.D SEQ-CALE CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121418.D
Data file 2: /20221214.b/B20221214.b/22121418.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALE
Client ID:
Injection Date: 15-DEC-2022 00:30
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121419.D
Data file 2: /20221214.b/B20221214.b/22121419.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-SCV1
Client ID:
Injection Date: 15-DEC-2022 00:48
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.342	0.000	643235	4.860	-0.000	1047709	49.66	51.22	3.1	alpha-BHC
4.726	-0.000	242617	5.337	0.000	386388	48.66	49.69	2.1	beta-BHC
4.909	0.000	554797	5.692	0.001	897343	52.41	53.26	1.6	delta-BHC
4.646	0.001	573983	5.258	0.000	915596	51.11	52.75	3.1	gamma-BHC (Lindane)
5.130	0.000	495138	5.788	0.001	804002	49.55	51.13	3.1	Heptachlor
5.454	0.000	526615	6.191	0.000	842909	47.03	46.95	0.2	Aldrin
6.130	0.000	469481	6.846	0.000	724932	48.36	48.83	1.0	Heptachlor epoxide b
6.573	0.000	423102	7.289	-0.000	632890	47.49	48.37	1.8	Endosulfan I
6.832	0.000	478299	7.583	0.000	724854	49.97	50.14	0.3	Dieldrin
6.489	0.000	448741	7.371	0.000	670346	50.49	50.56	0.1	4,4'-DDE
7.082	0.001	396143	7.907	0.000	551004	50.36	50.73	0.7	Endrin
7.318	0.001	350431	8.118	0.001	537104	49.49	48.24	2.6	Endosulfan II
7.136	0.001	355688	7.977	0.001	525927	50.19	49.78	0.8	4,4'-DDD
8.180	0.000	347949	8.716	0.001	502438	51.75	51.39	0.7	Endosulfan sulfate
7.428	0.001	368644	8.295	-0.000	524685	51.48	51.45	0.1	4,4'-DDT
7.913	0.001	174306	8.935	-0.001	238791	54.93	52.91	3.7	Methoxychlor
8.454	0.000	394474	9.240	-0.000	540431	51.21	51.18	0.1	Endrin ketone
7.746	0.001	316262	8.448	0.000	449269	56.00	57.20	2.1	Endrin aldehyde
6.271	0.000	490842	7.056	0.000	748350	49.78	50.55	1.5	trans-Chlordane
6.417	0.001	469513	7.216	0.000	700871	47.47	48.39	1.9	cis-Chlordane
----			2.512	0.011	11364	0.00	0.59	---	Hexachlorobutadiene
----			4.719	0.001	634	0.00	0.03	---	Hexachlorobenzene
----			4.220	-0.000	1724	0.00	0.12	---	Tetrachloro-m-xylene
----			10.468	0.001	643	0.00	0.08	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

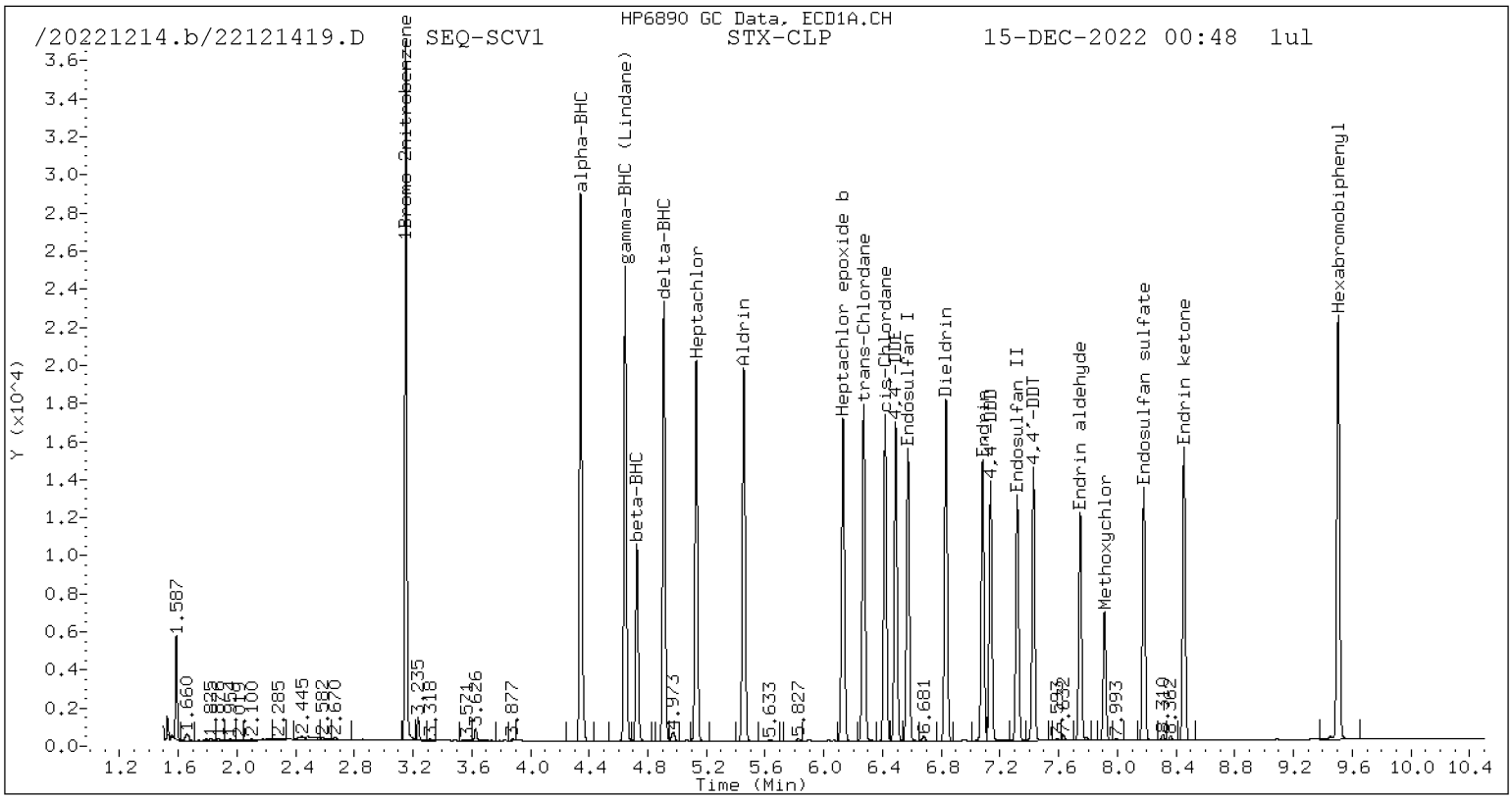
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	672755	-5.3
Hexabromobiphenyl	641833	599983	-6.5

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1020655	-3.6
Hexabromobiphenyl	797125	763949	-4.2

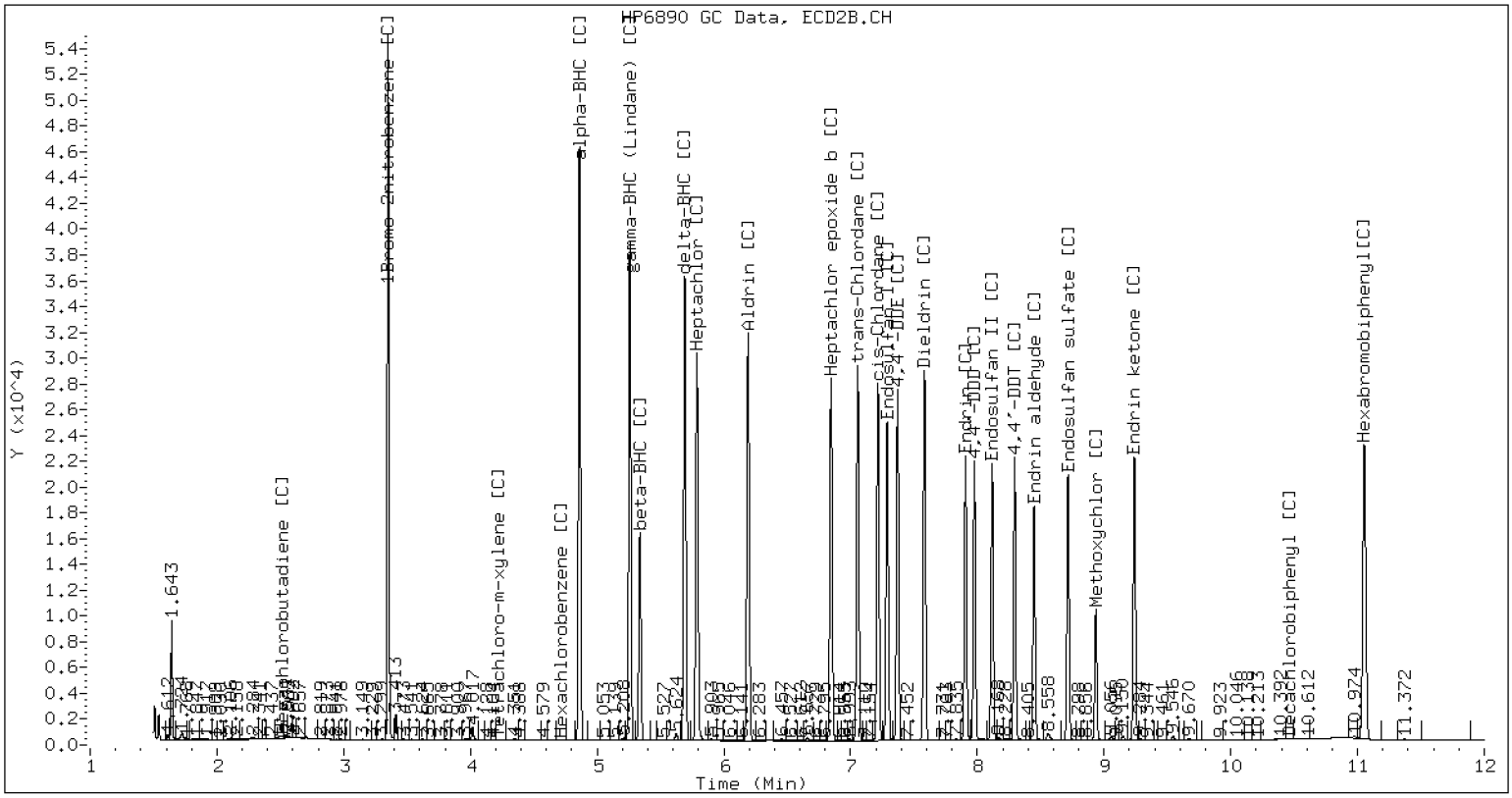
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121419.D SEQ-SCV1 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121419.D
Data file 2: /20221214.b/B20221214.b/22121419.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-SCV1
Client ID:
Injection Date: 15-DEC-2022 00:48
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121420.D
Data file 2: /20221214.b/B20221214.b/22121420.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-SCV2
Client ID:
Injection Date: 15-DEC-2022 01:06
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.014	-0.000	374516	6.741	0.000	591348	51.08	50.07	2.0	Oxychlordane
6.106	-0.000	261097	7.036	-0.000	403824	43.13	41.76	3.2	2,4-DDE
6.397	-0.000	444133	7.155	-0.000	657777	46.31	45.91	0.9	trans-Nonachlor
6.681	0.000	222534	7.591	0.000	334706	41.32	40.84	1.2	2,4-DDD
6.956	-0.001	262722	7.914	0.000	382016	45.15	45.26	0.2	2,4-DDT
7.111	-0.001	455894	7.975	0.000	655718	48.82	48.13	1.4	cis-Nonachlor
8.081	-0.001	256593	9.223	0.000	343173	44.17	43.31	2.0	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

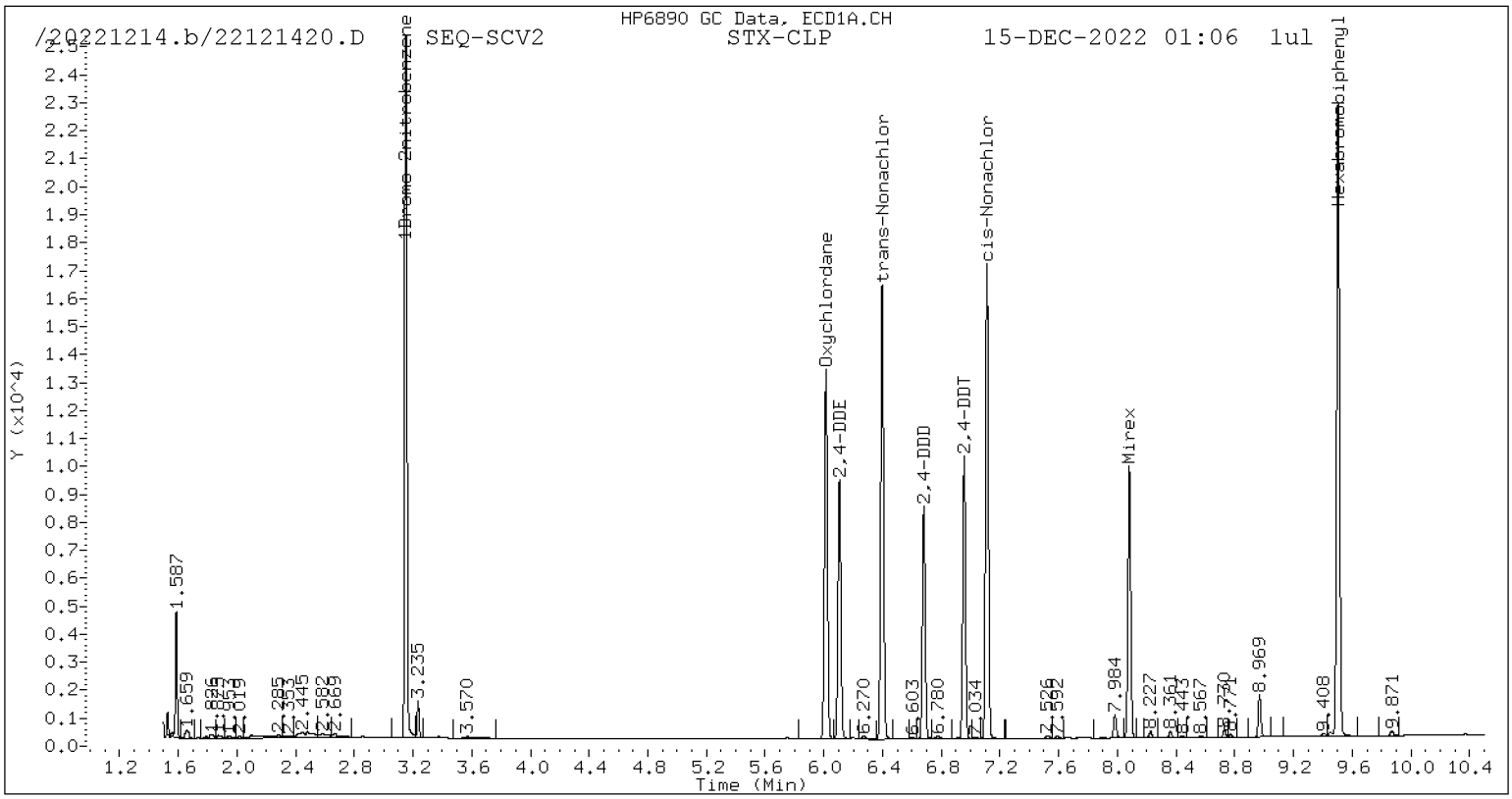
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	687052	-3.3
Hexabromobiphenyl	641833	616730	-3.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1060438	0.2
Hexabromobiphenyl	797125	800740	0.5

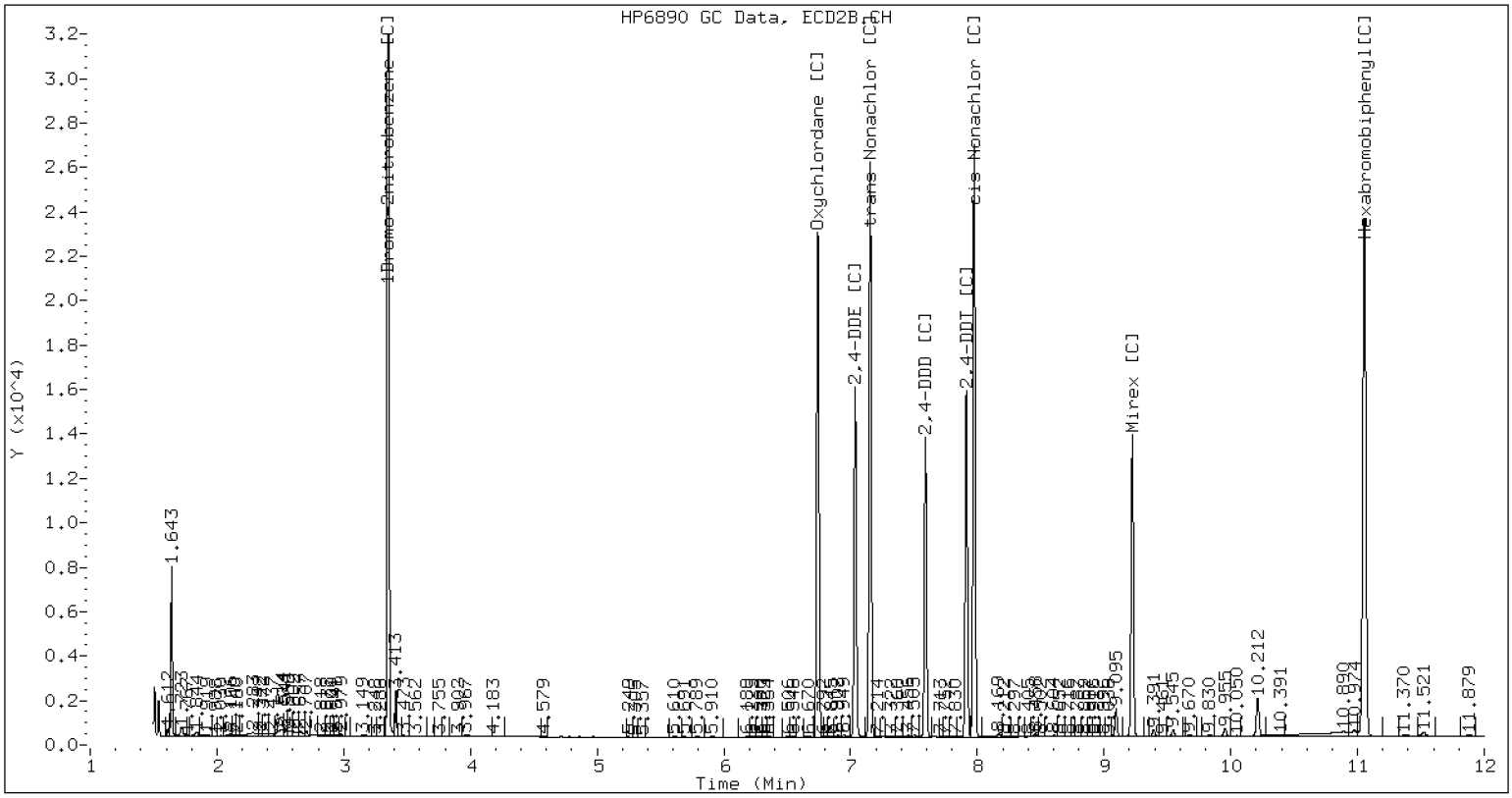
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121420.D SEQ-SCV2 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121420.D
Data file 2: /20221214.b/B20221214.b/22121420.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-SCV2
Client ID:
Injection Date: 15-DEC-2022 01:06
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121421.D
Data file 2: /20221214.b/B20221214.b/22121421.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL1A
Client ID:
Injection Date: 15-DEC-2022 01:24
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			4.215	-0.006	361	0.00	0.02	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	601512	-15.4
Hexabromobiphenyl	641833	690103	7.5

Column 2

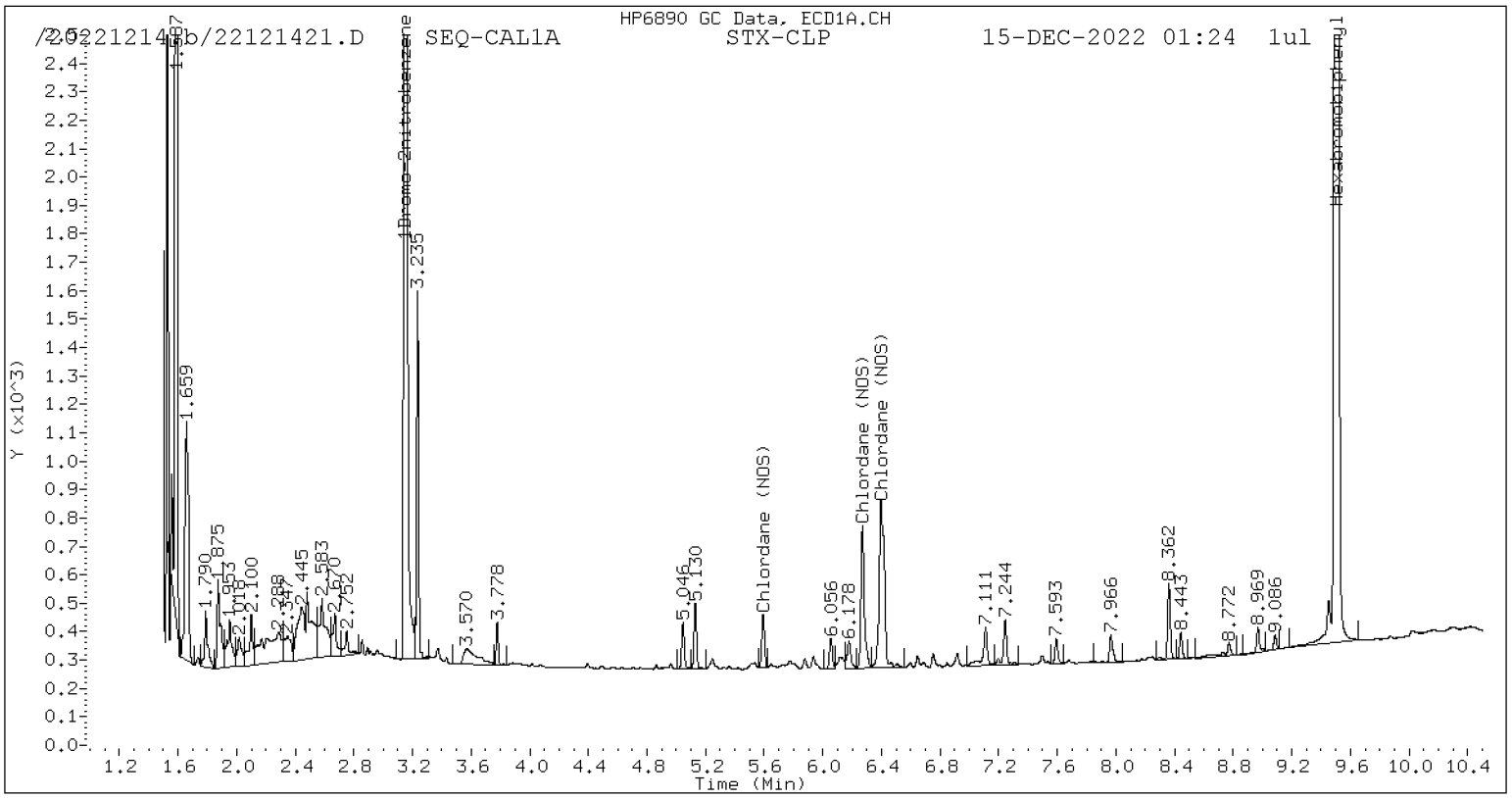
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	776759	-26.6
Hexabromobiphenyl	797125	1058847	32.8

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Chlordane (NOS)	1	5.593	0.000	5054	13.1	1	5.612	-0.000	6415	12.8
Chlordane (NOS)	2	6.271	-0.000	15913	12.4	2	6.349	-0.000	7689	13.7
Chlordane (NOS)	3	6.399	0.000	29332	13.1	3	7.155	-0.001	23386	12.3

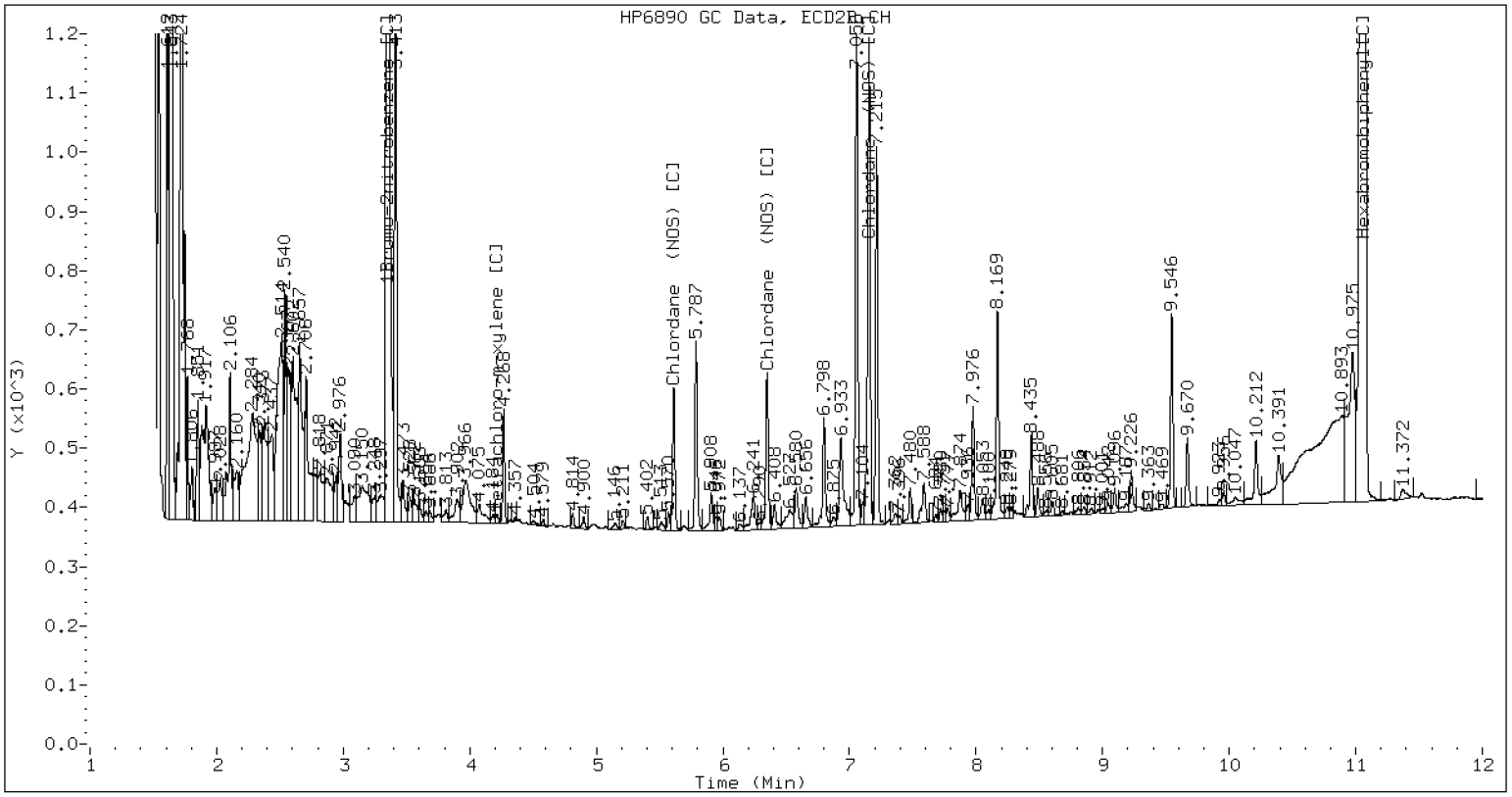
Total STX-CLPAve (3 peaks): 12.882 Total CLP2Ave (3 peaks): 12.916 RPD = 0
Corrected Ave (3 peaks): 12.882 Corrected Ave (3 peaks): 12.916 RPD = 0

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121421.D SEQ-CAL1A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121421.D
Data file 2: /20221214.b/B20221214.b/22121421.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL1A
Client ID:
Injection Date: 15-DEC-2022 01:24
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121422.D
Data file 2: /20221214.b/B20221214.b/22121422.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL2A
Client ID:
Injection Date: 15-DEC-2022 01:42
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	611280	-14.0
Hexabromobiphenyl	641833	704720	9.8

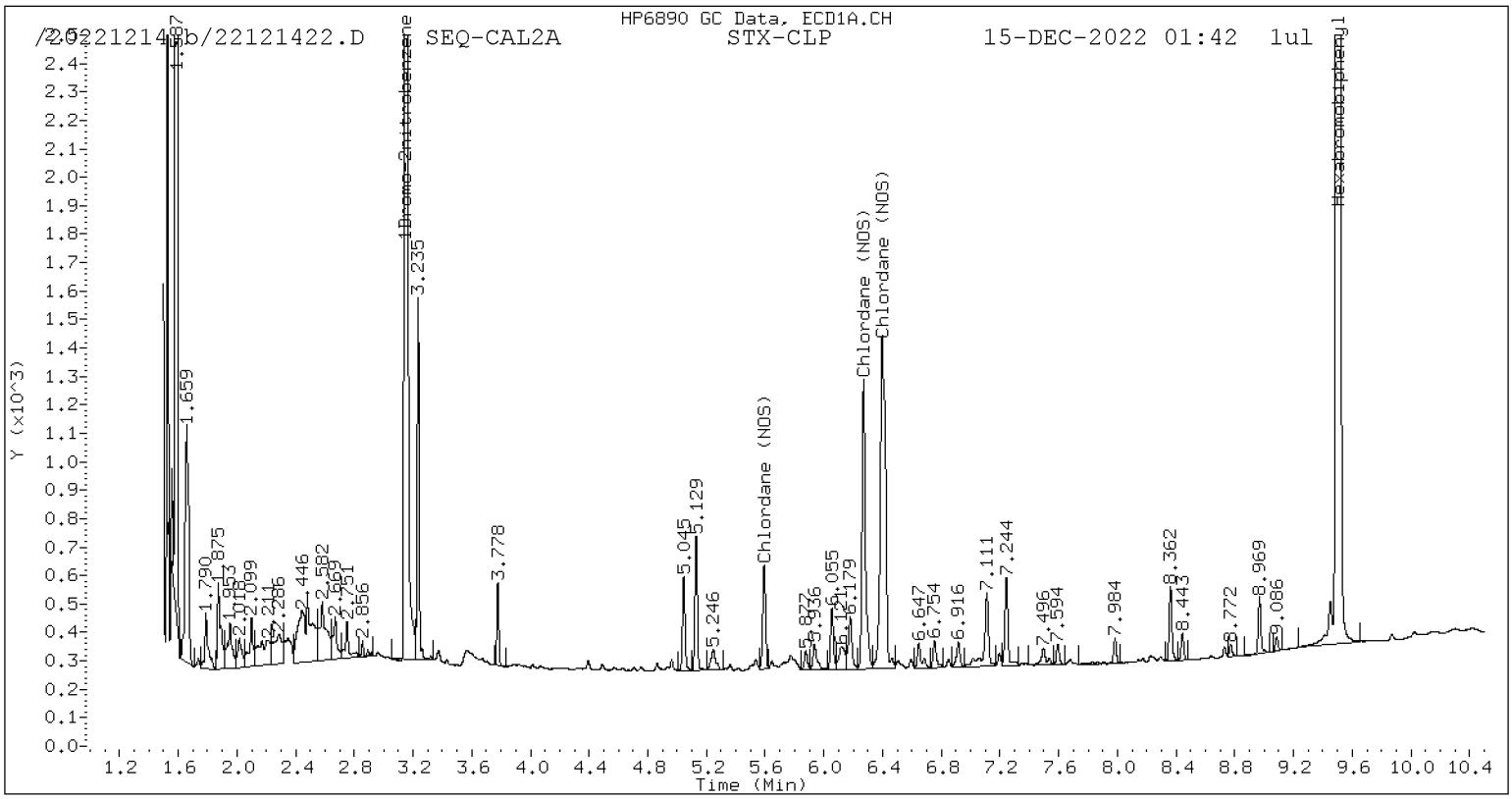
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	793365	-25.1
Hexabromobiphenyl	797125	1083049	35.9

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

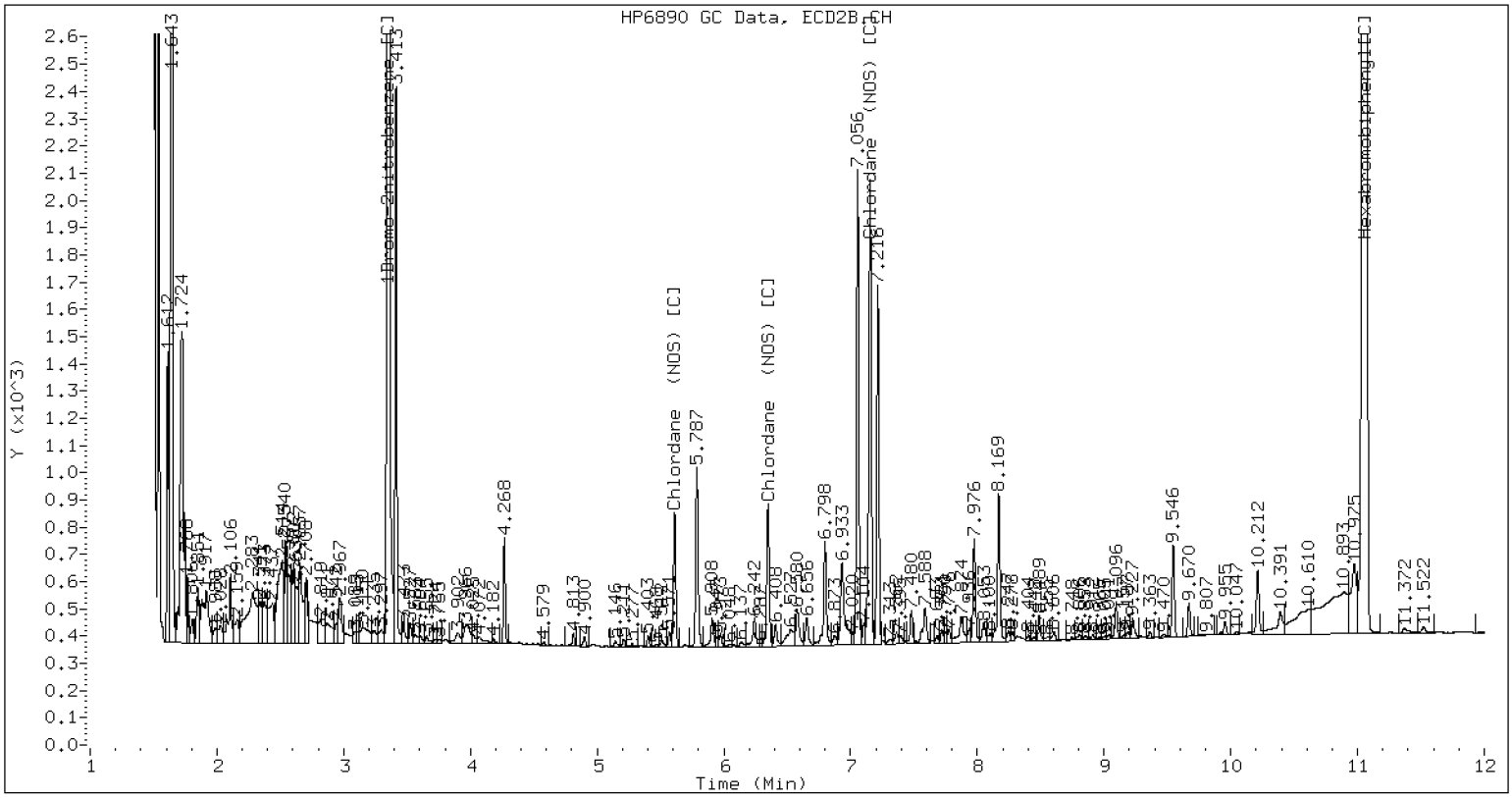
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Chlordane (NOS)	1	5.593	0.000	10046	25.5	1	5.612	-0.000	12488	24.4	
Chlordane (NOS)	2	6.271	-0.000	32715	25.0	2	6.348	-0.001	15023	26.1	
Chlordane (NOS)	3	6.399	0.000	58016	25.4	3	7.155	-0.000	48236	24.8	
Total STX-CLPAve (3 peaks): 25.309						Total CLP2Ave (3 peaks): 25.077				RPD = 1	
Corrected Ave (3 peaks): 25.309						Corrected Ave (3 peaks): 25.077				RPD = 1	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121422.D SEQ-CAL2A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121422.D
Data file 2: /20221214.b/B20221214.b/22121422.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL2A
Client ID:
Injection Date: 15-DEC-2022 01:42
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121423.D
Data file 2: /20221214.b/B20221214.b/22121423.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL3A
Client ID:
Injection Date: 15-DEC-2022 01:59
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	592438	-16.6
Hexabromobiphenyl	641833	685225	6.8

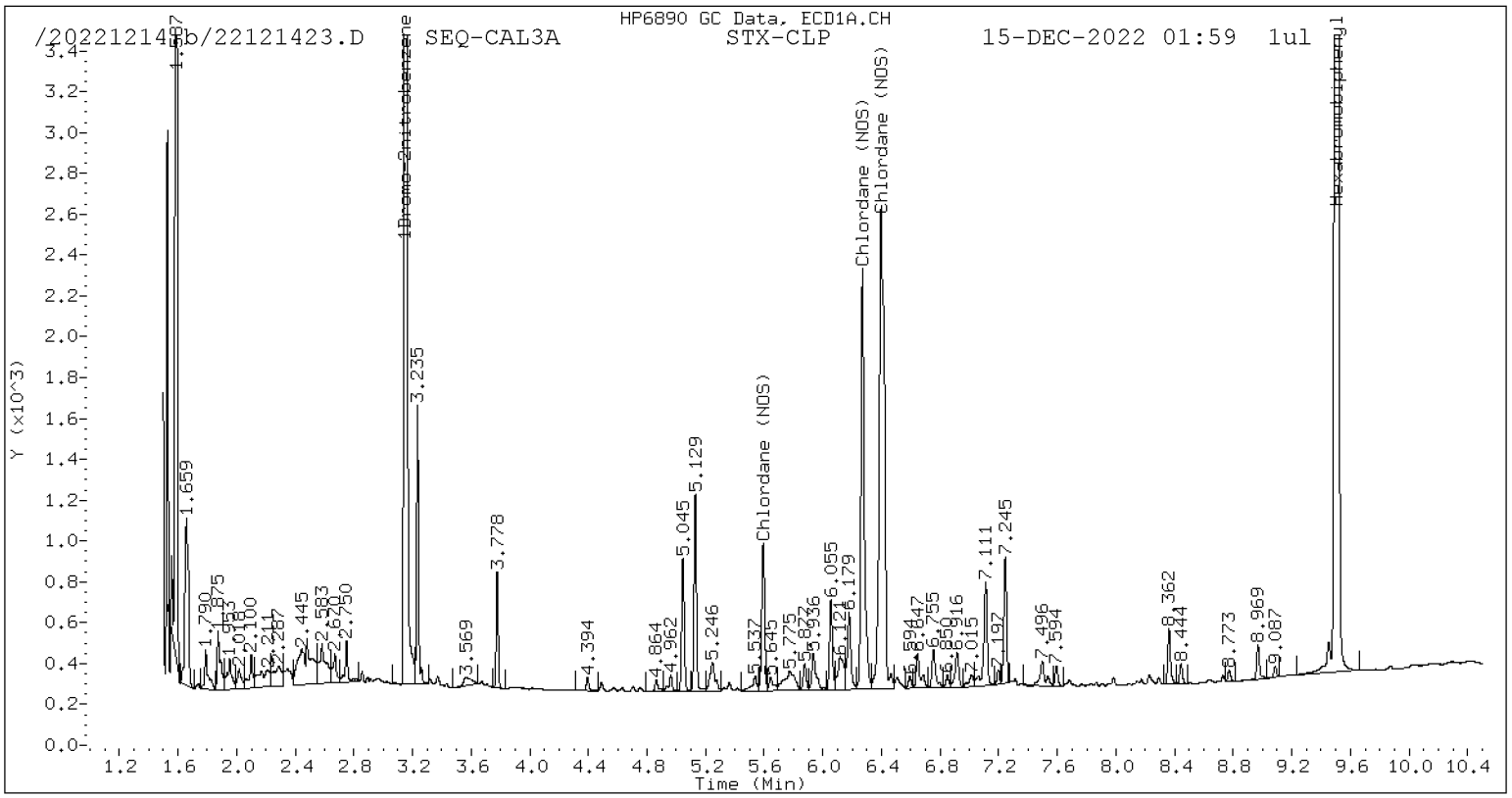
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	769029	-27.4
Hexabromobiphenyl	797125	1054742	32.3

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

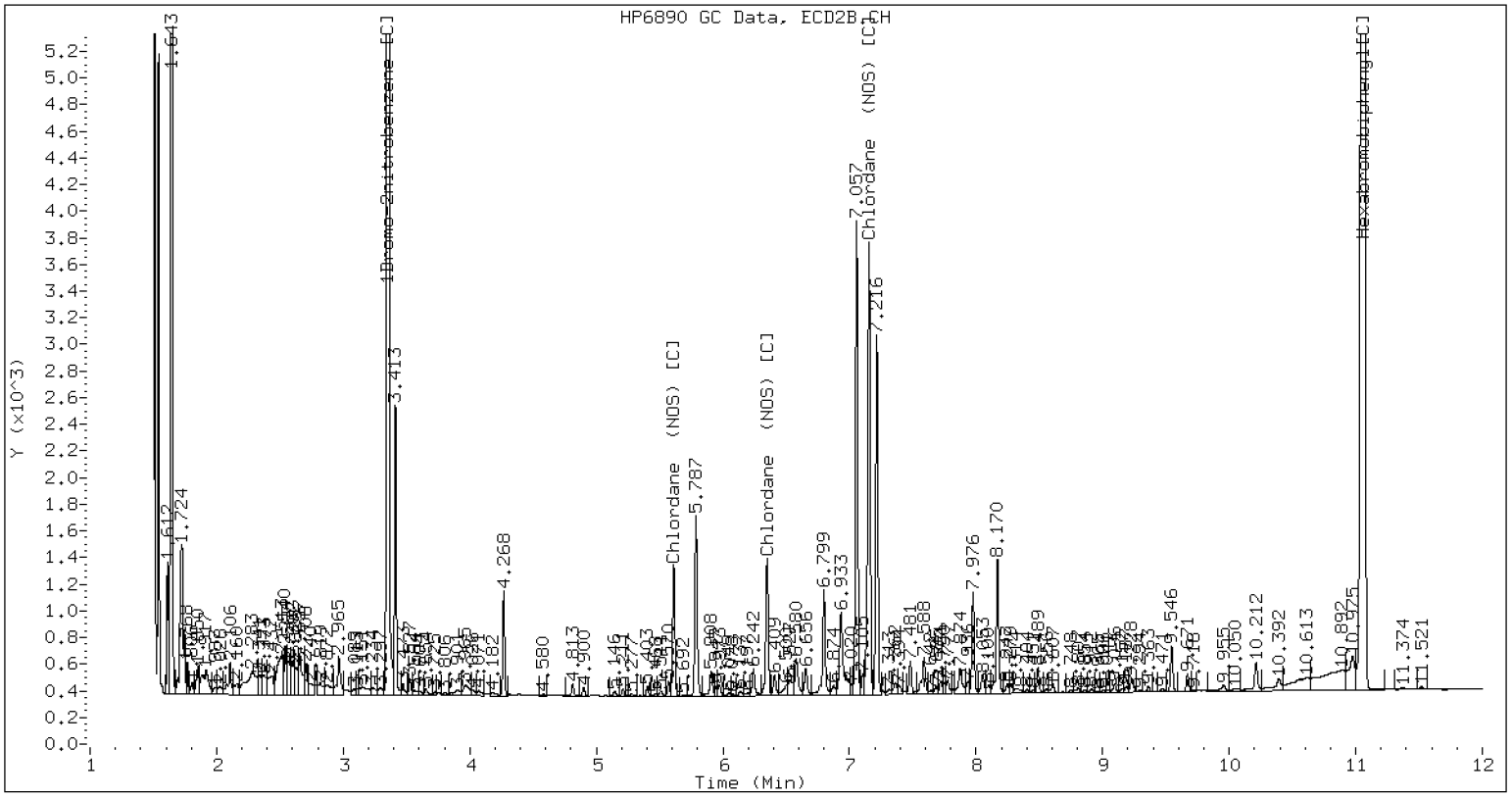
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Chlordane (NOS)	1	5.593	0.001	20502	53.5	1	5.612	-0.000	24816	49.7	
Chlordane (NOS)	2	6.271	-0.000	66320	52.2	2	6.349	0.000	29114	51.9	
Chlordane (NOS)	3	6.399	0.000	116820	52.6	3	7.155	-0.000	98401	51.9	
Total STX-CLPAve (3 peaks): 52.767						Total CLP2Ave (3 peaks): 51.179				RPD = 3	
Corrected Ave (3 peaks): 52.767						Corrected Ave (3 peaks): 51.179				RPD = 3	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121423.D SEQ-CAL3A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121423.D
Data file 2: /20221214.b/B20221214.b/22121423.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL3A
Client ID:
Injection Date: 15-DEC-2022 01:59
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121424.D
Data file 2: /20221214.b/B20221214.b/22121424.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL4A
Client ID:
Injection Date: 15-DEC-2022 02:17
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	584808	-17.7
Hexabromobiphenyl	641833	675665	5.3

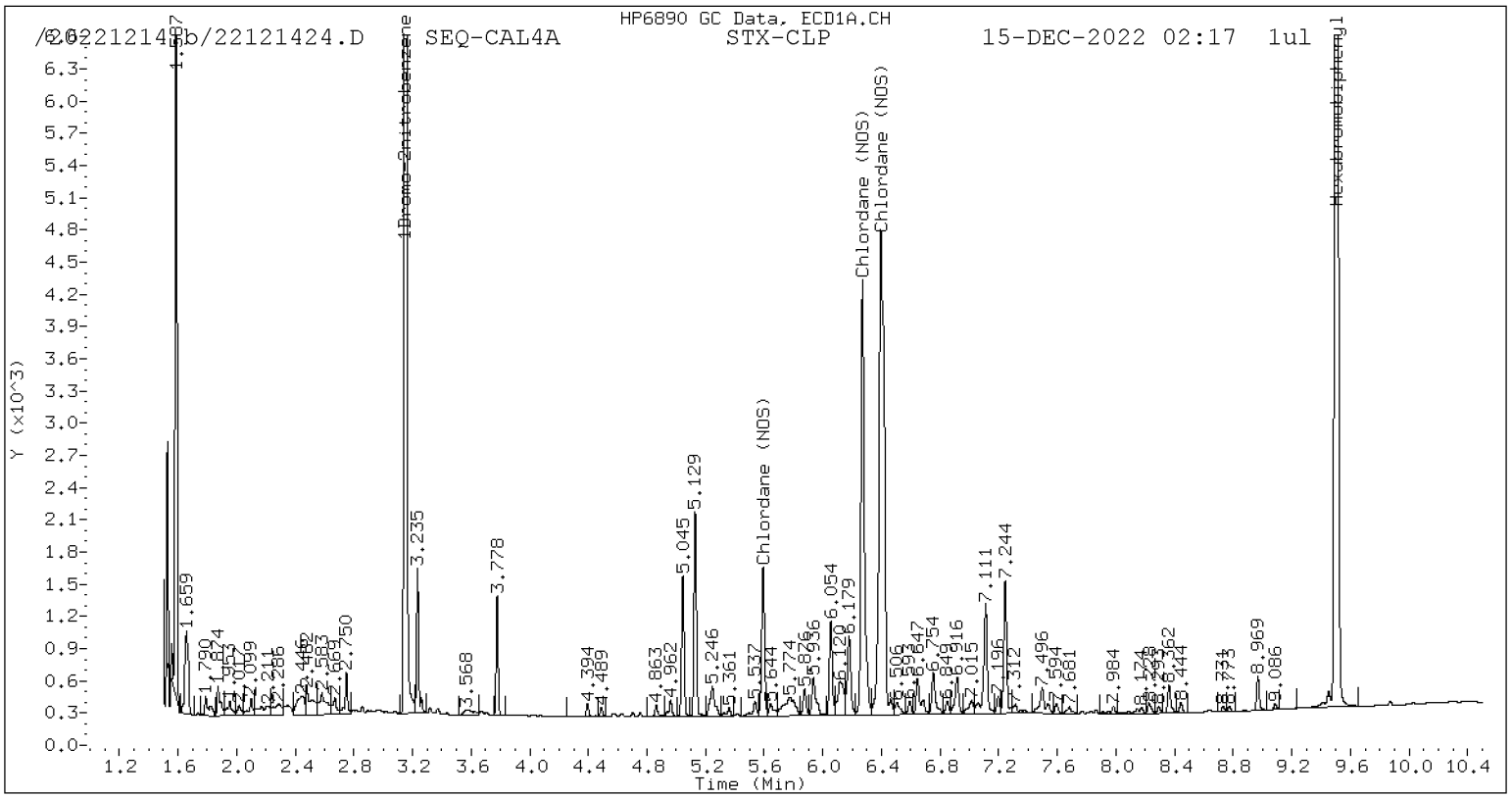
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	758204	-28.4
Hexabromobiphenyl	797125	1039488	30.4

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

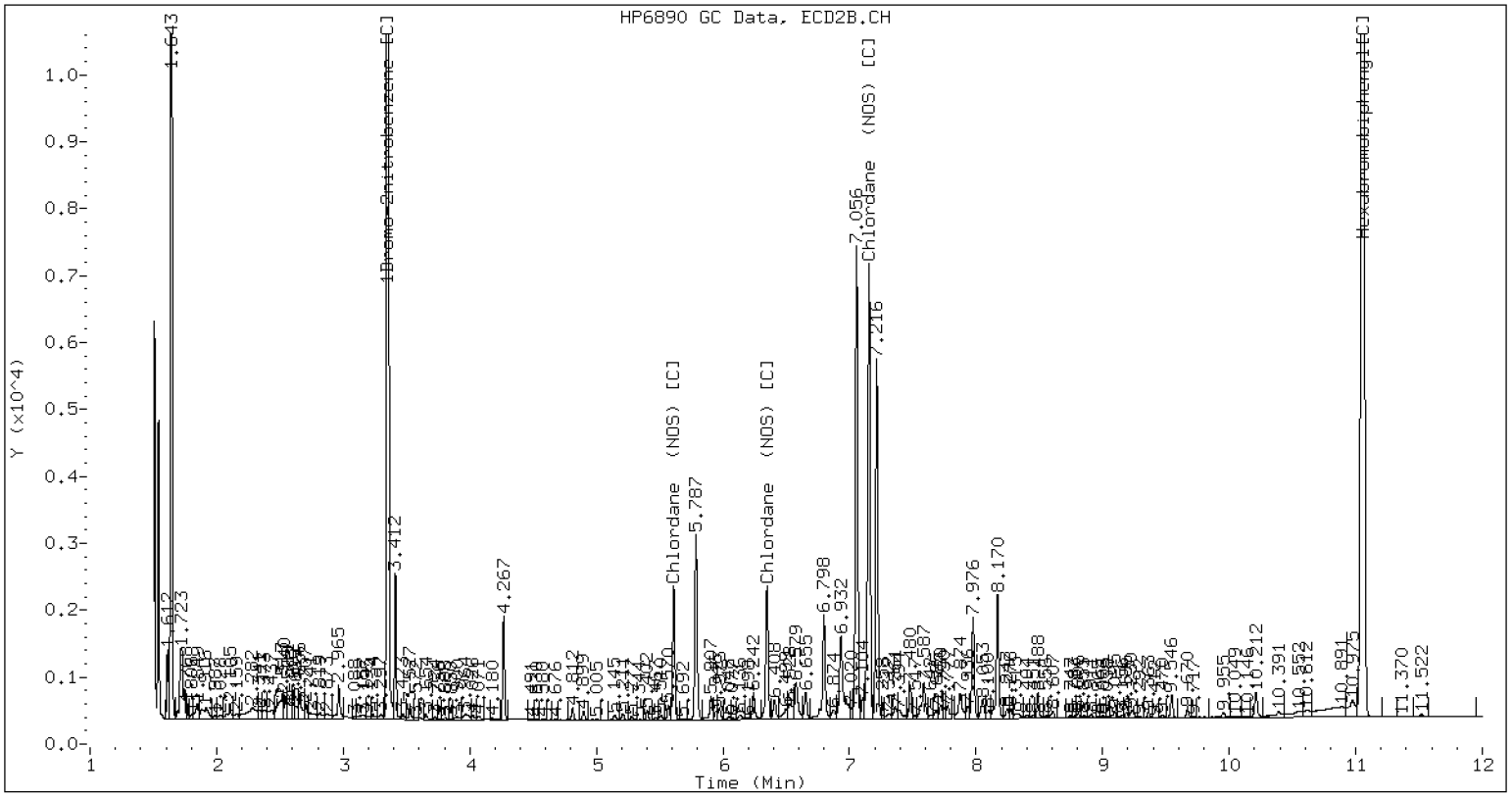
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Chlordane (NOS)	1	5.593	-0.000	39696	105.0	1	5.611	-0.001	49889	101.4	
Chlordane (NOS)	2	6.271	-0.000	131726	105.2	2	6.348	-0.001	56608	102.5	
Chlordane (NOS)	3	6.398	-0.001	229050	104.6	3	7.155	-0.000	195665	104.7	
Total STX-CLPAve (3 peaks): 104.931						Total CLP2Ave (3 peaks): 102.854				RPD = 2	
Corrected Ave (3 peaks): 104.931						Corrected Ave (3 peaks): 102.854				RPD = 2	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121424.D SEQ-CAL4A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121424.D
Data file 2: /20221214.b/B20221214.b/22121424.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL4A
Client ID:
Injection Date: 15-DEC-2022 02:17
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121425.D
Data file 2: /20221214.b/B20221214.b/22121425.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL5A
Client ID:
Injection Date: 15-DEC-2022 02:35
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	612592	-13.8
Hexabromobiphenyl	641833	705251	9.9

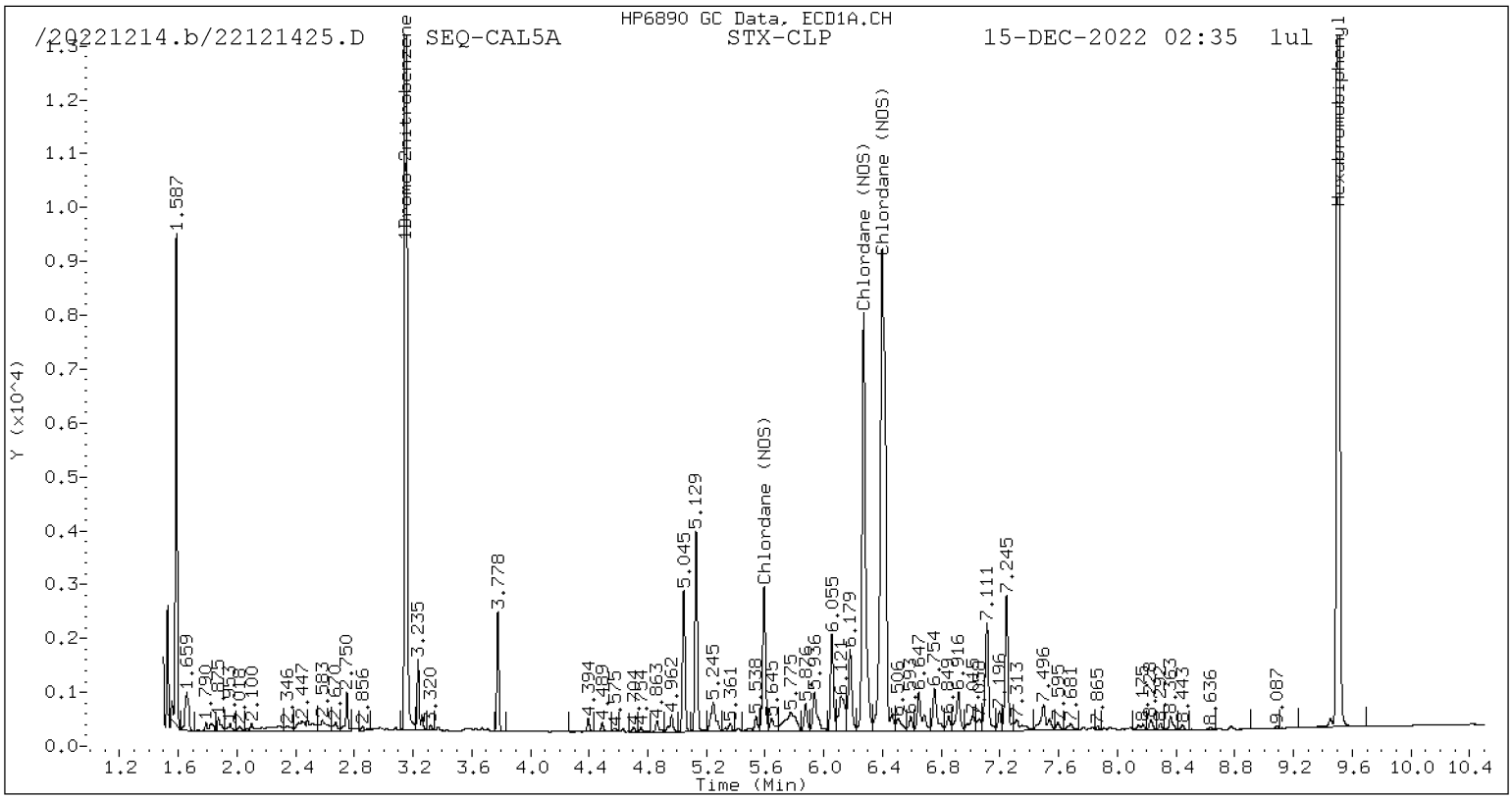
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	792856	-25.1
Hexabromobiphenyl	797125	1079718	35.5

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

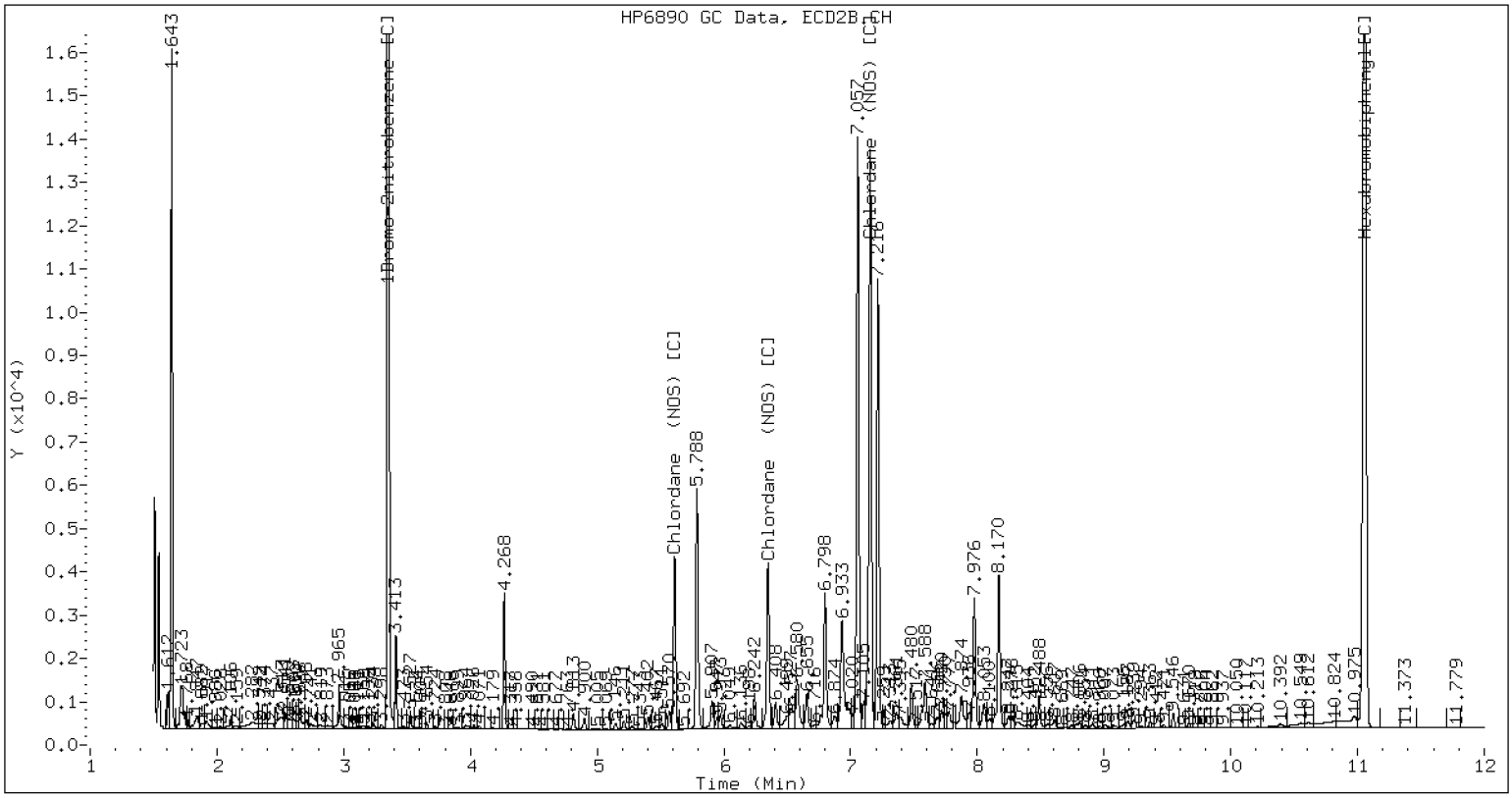
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Chlordane (NOS)	1	5.593	0.000	77307	196.0	1	5.612	-0.000	101527	198.7	
Chlordane (NOS)	2	6.271	0.000	261078	199.7	2	6.349	-0.001	110757	193.0	
Chlordane (NOS)	3	6.399	0.000	449301	196.5	3	7.155	-0.000	389197	200.5	
Total STX-CLPAve (3 peaks): 197.408						Total CLP2Ave (3 peaks): 197.390				RPD = 0	
Corrected Ave (3 peaks): 197.408						Corrected Ave (3 peaks): 197.390				RPD = 0	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121425.D SEQ-CAL5A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121425.D
Data file 2: /20221214.b/B20221214.b/22121425.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL5A
Client ID:
Injection Date: 15-DEC-2022 02:35
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121426.D
Data file 2: /20221214.b/B20221214.b/22121426.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL6A
Client ID:
Injection Date: 15-DEC-2022 02:53
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	603526	-15.1
Hexabromobiphenyl	641833	699031	8.9

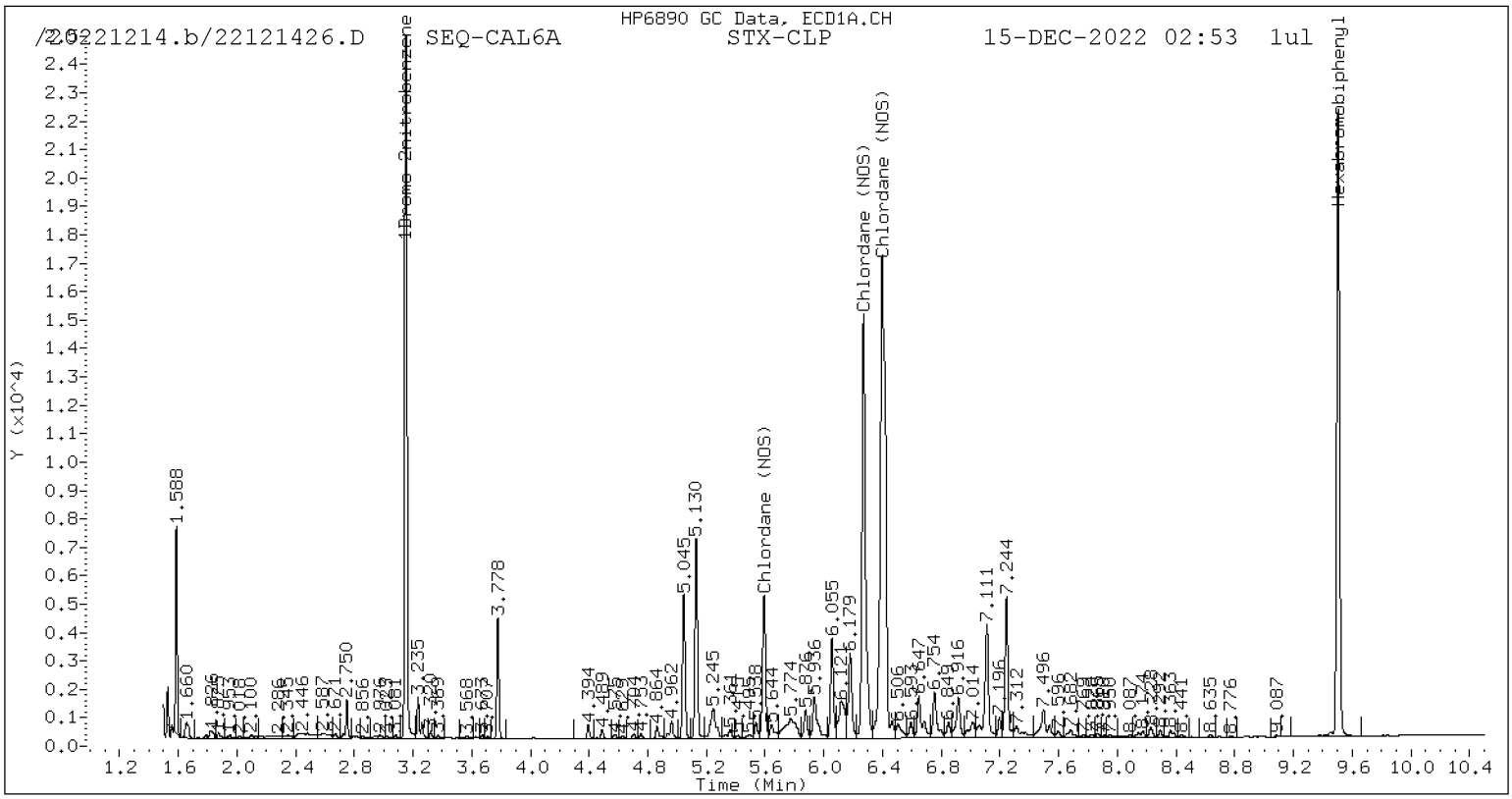
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	779405	-26.4
Hexabromobiphenyl	797125	1068976	34.1

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

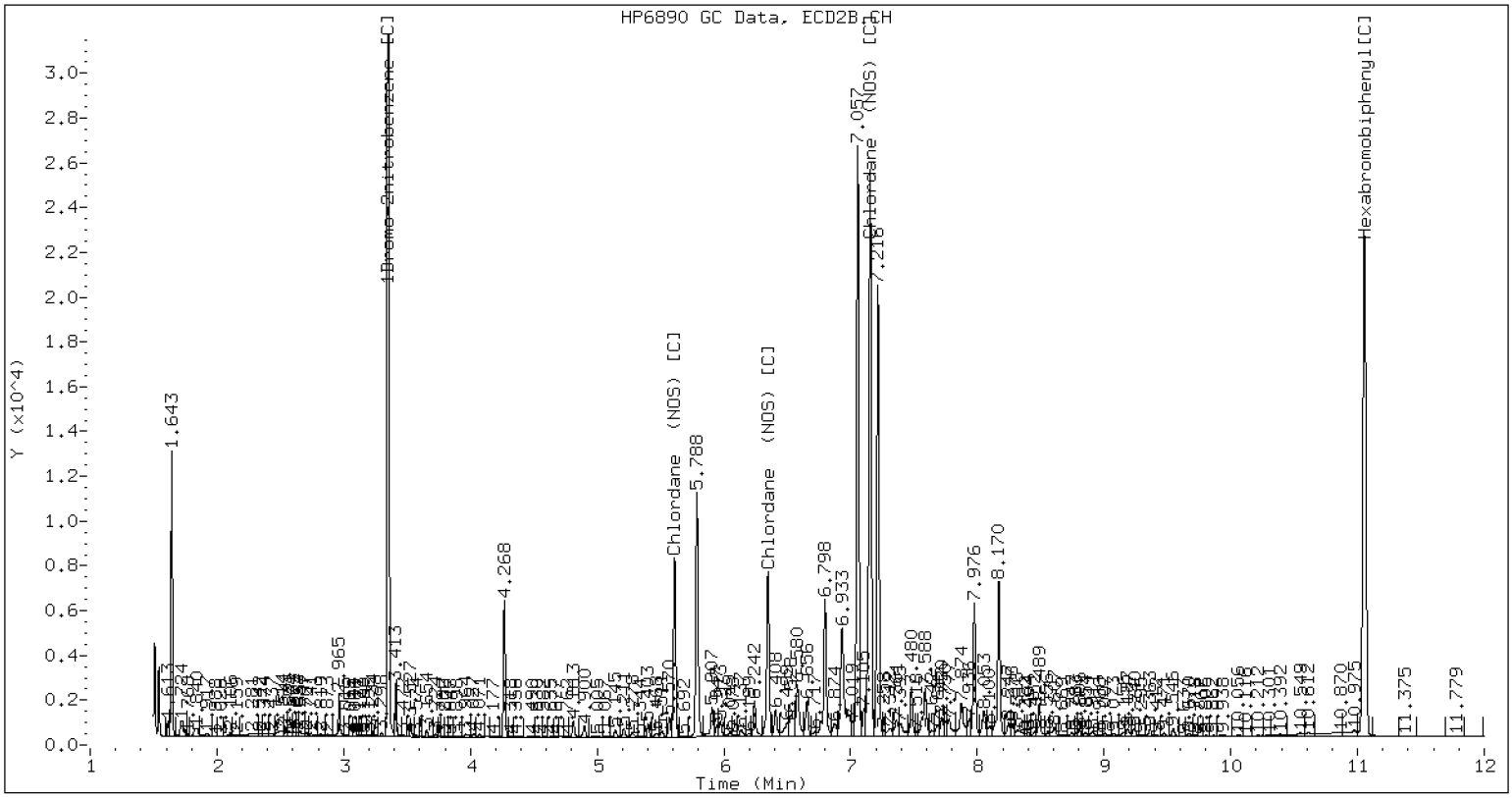
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Chlordane (NOS)	1	5.592	-0.000	146950	375.8	1	5.612	-0.000	203386	402.0	
Chlordane (NOS)	2	6.271	-0.000	503310	388.5	2	6.349	-0.000	212637	374.2	
Chlordane (NOS)	3	6.399	0.000	857451	378.4	3	7.155	-0.000	752631	391.6	
Total STX-CLPAve (3 peaks): 380.894						Total CLP2Ave (3 peaks): 389.290				RPD = 2	
Corrected Ave (3 peaks): 380.894						Corrected Ave (3 peaks): 389.290				RPD = 2	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121426.D SEQ-CAL6A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121426.D
Data file 2: /20221214.b/B20221214.b/22121426.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL6A
Client ID:
Injection Date: 15-DEC-2022 02:53
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121427.D
Data file 2: /20221214.b/B20221214.b/22121427.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL7A
Client ID:
Injection Date: 15-DEC-2022 03:11
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	Tetrachloro-m-xylene
9.380	0.025	1930	----			0.31	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	610159	-14.1
Hexabromobiphenyl	641833	692215	7.8

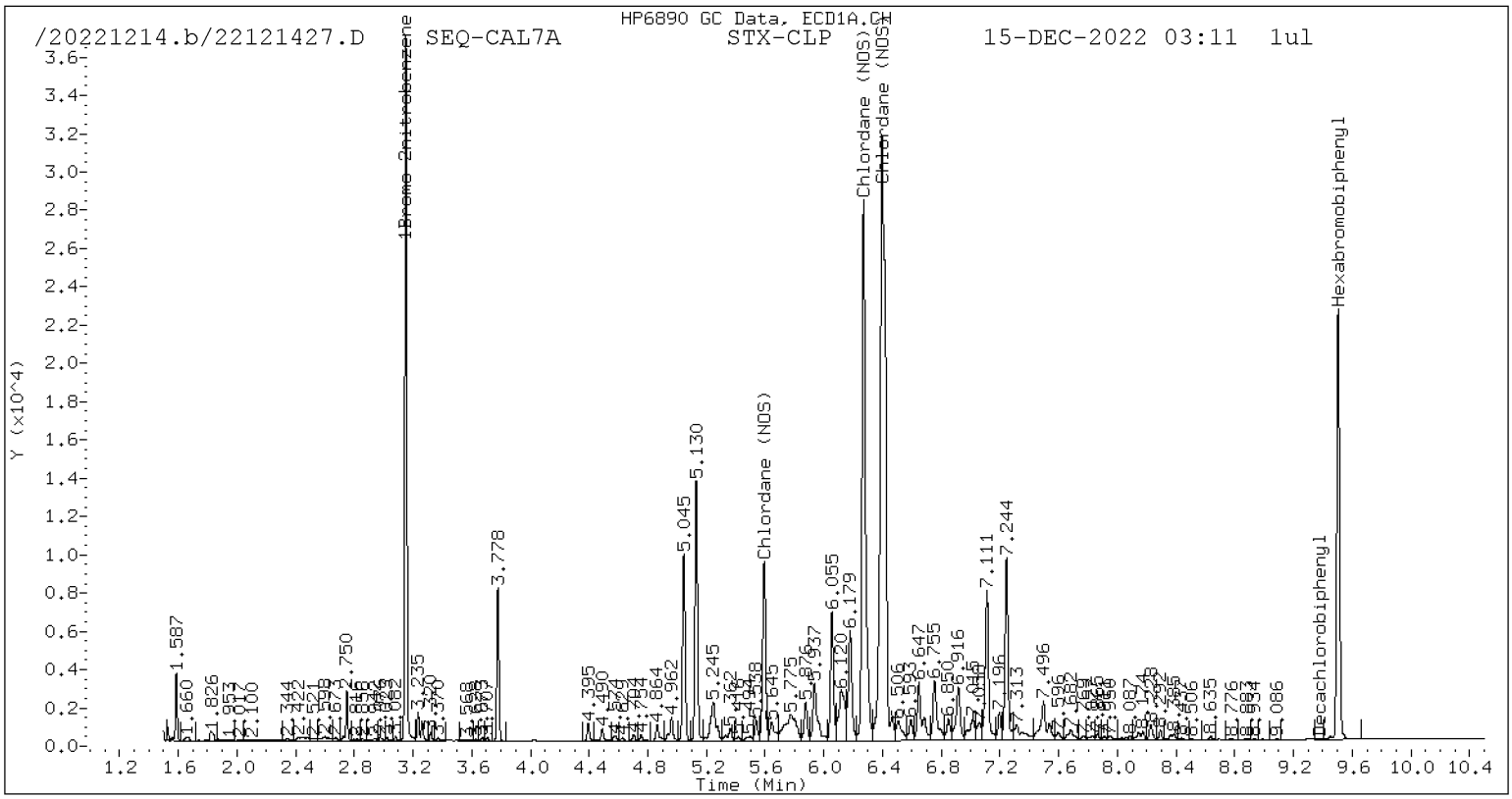
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	790388	-25.4
Hexabromobiphenyl	797125	1059143	32.9

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

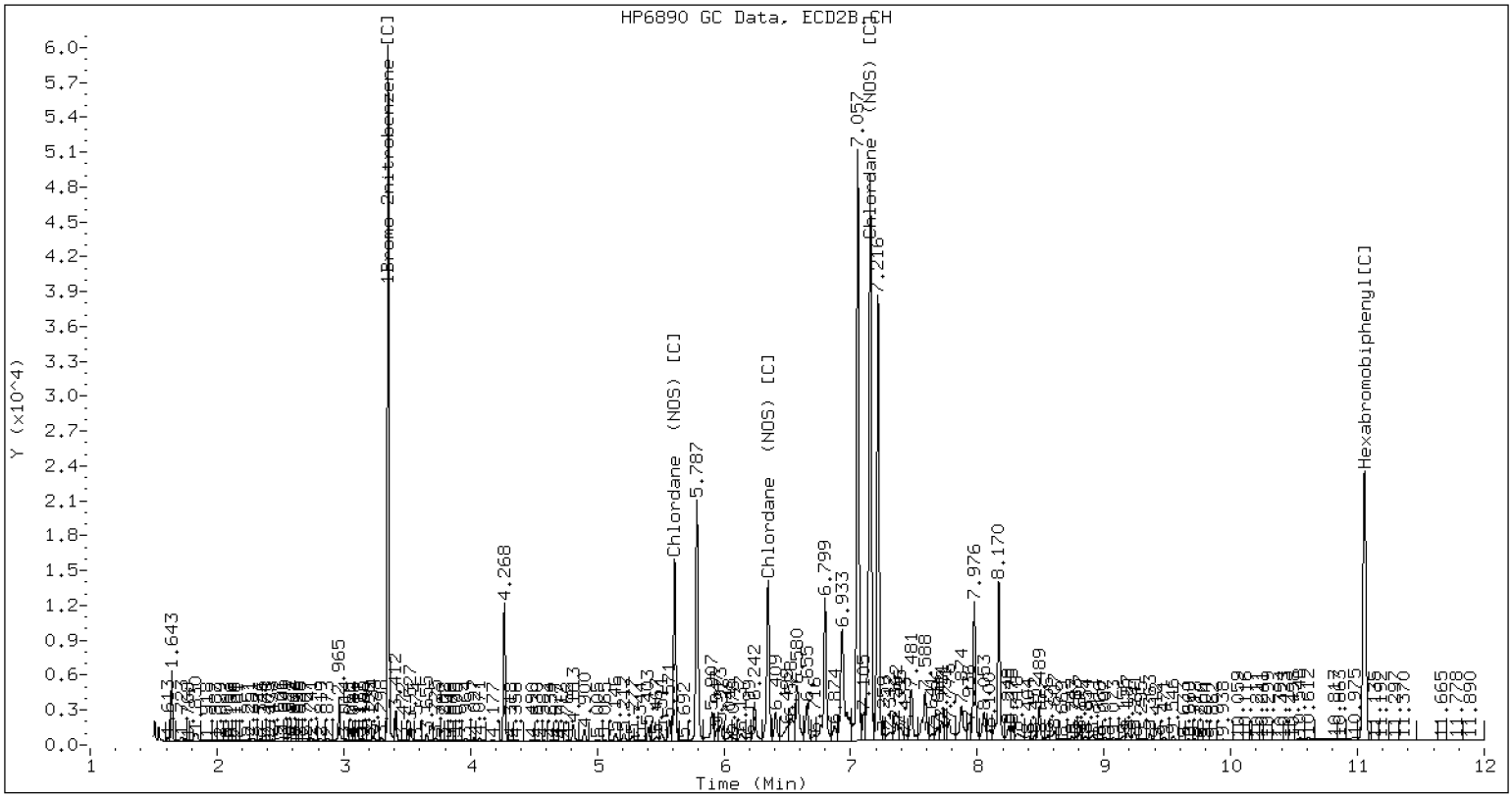
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Chlordane (NOS)	1	5.593	0.001	276980	715.3	1	5.612	0.000	398620	795.3	
Chlordane (NOS)	2	6.271	-0.000	961368	749.3	2	6.349	0.000	405170	719.7	
Chlordane (NOS)	3	6.399	-0.000	1631241	727.0	3	7.155	0.000	1462876	768.2	
Total STX-CLPAve (3 peaks): 730.539						Total CLP2Ave (3 peaks): 761.064				RPD = 4	
Corrected Ave (3 peaks): 730.539						Corrected Ave (3 peaks): 761.064				RPD = 4	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121427.D SEQ-CAL7A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121427.D
Data file 2: /20221214.b/B20221214.b/22121427.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL7A
Client ID:
Injection Date: 15-DEC-2022 03:11
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121428.D
Data file 2: /20221214.b/B20221214.b/22121428.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL8A
Client ID:
Injection Date: 15-DEC-2022 03:29
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	0.000	8893	4.221	0.000	14795	0.95	0.98	4.0	Tetrachloro-m-xylene
9.355	0.000	15511	10.467	0.000	24896	2.54	2.86	11.7	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	691781	-2.7
Hexabromobiphenyl	641833	602865	-6.1

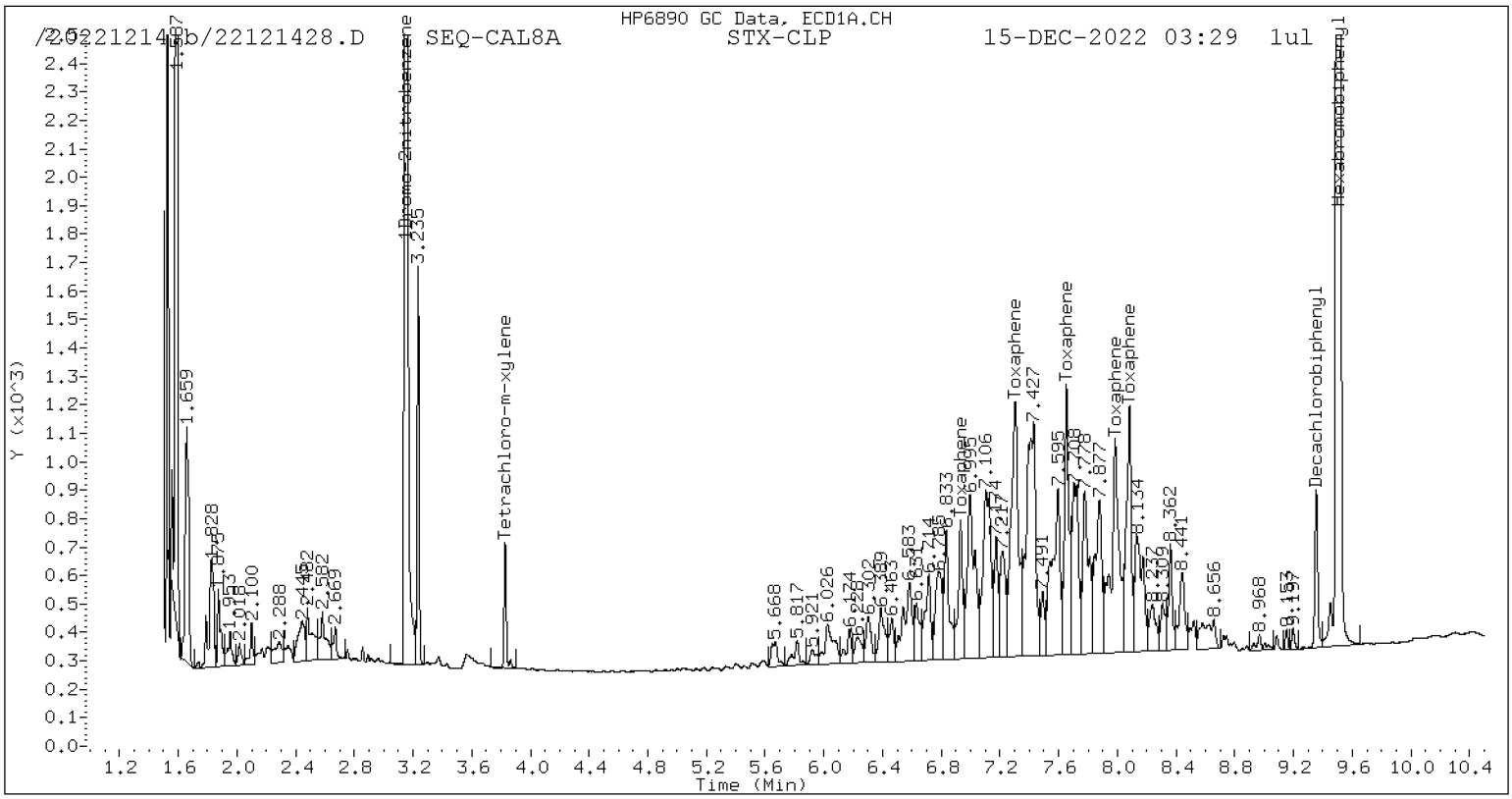
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1068328	0.9
Hexabromobiphenyl	797125	788806	-1.0

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

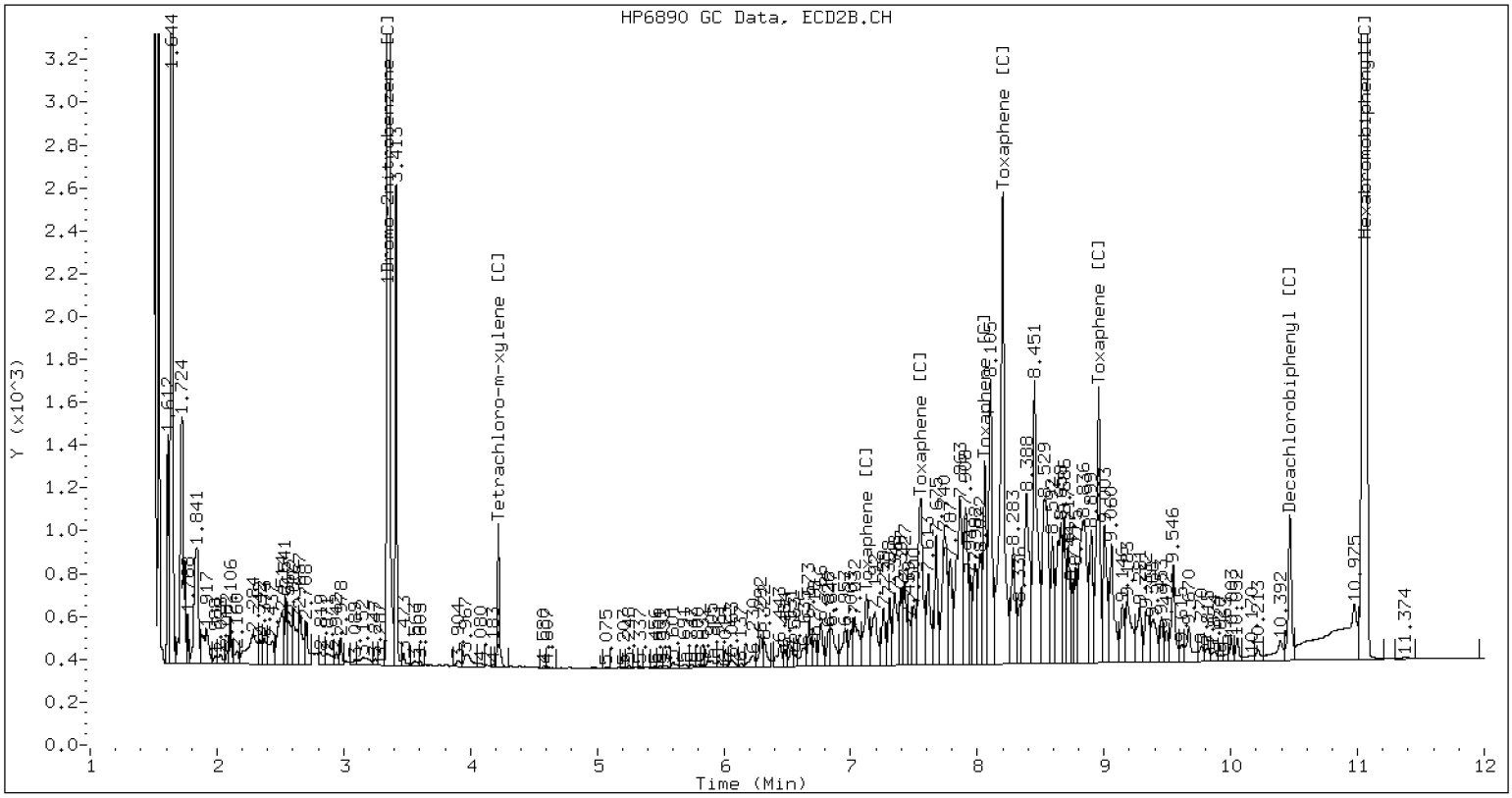
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Toxaphene	1	6.931	0.000	20939	118.9	1	7.125	-0.000	18390	124.1	
Toxaphene	2	7.304	0.000	62921	127.5	2	7.553	-0.000	43437	130.4	
Toxaphene	3	7.653	-0.000	40147	126.2	3	8.059	-0.001	32235	127.1	
Toxaphene	4	7.985	-0.001	56816	133.6	4	8.201	-0.001	109296	132.1	
Toxaphene	5	8.082	-0.000	39643	123.4	5	8.958	-0.001	50997	125.7	
Total STX-CLPAve (5 peaks): 125.907						Total CLP2Ave (5 peaks): 127.865					RPD = 2
Corrected Ave (5 peaks): 125.907						Corrected Ave (5 peaks): 127.865					RPD = 2

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121428.D SEQ-CAL8A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121428.D
Data file 2: /20221214.b/B20221214.b/22121428.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL8A
Client ID:
Injection Date: 15-DEC-2022 03:29
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121429.D
Data file 2: /20221214.b/B20221214.b/22121429.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL9A
Client ID:
Injection Date: 15-DEC-2022 03:46
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	-0.000	18632	4.220	-0.000	29829	1.92	1.92	0.1	Tetrachloro-m-xylene
9.355	0.000	29179	10.467	0.000	44716	4.64	4.98	7.1	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	713620	0.4
Hexabromobiphenyl	641833	620026	-3.4

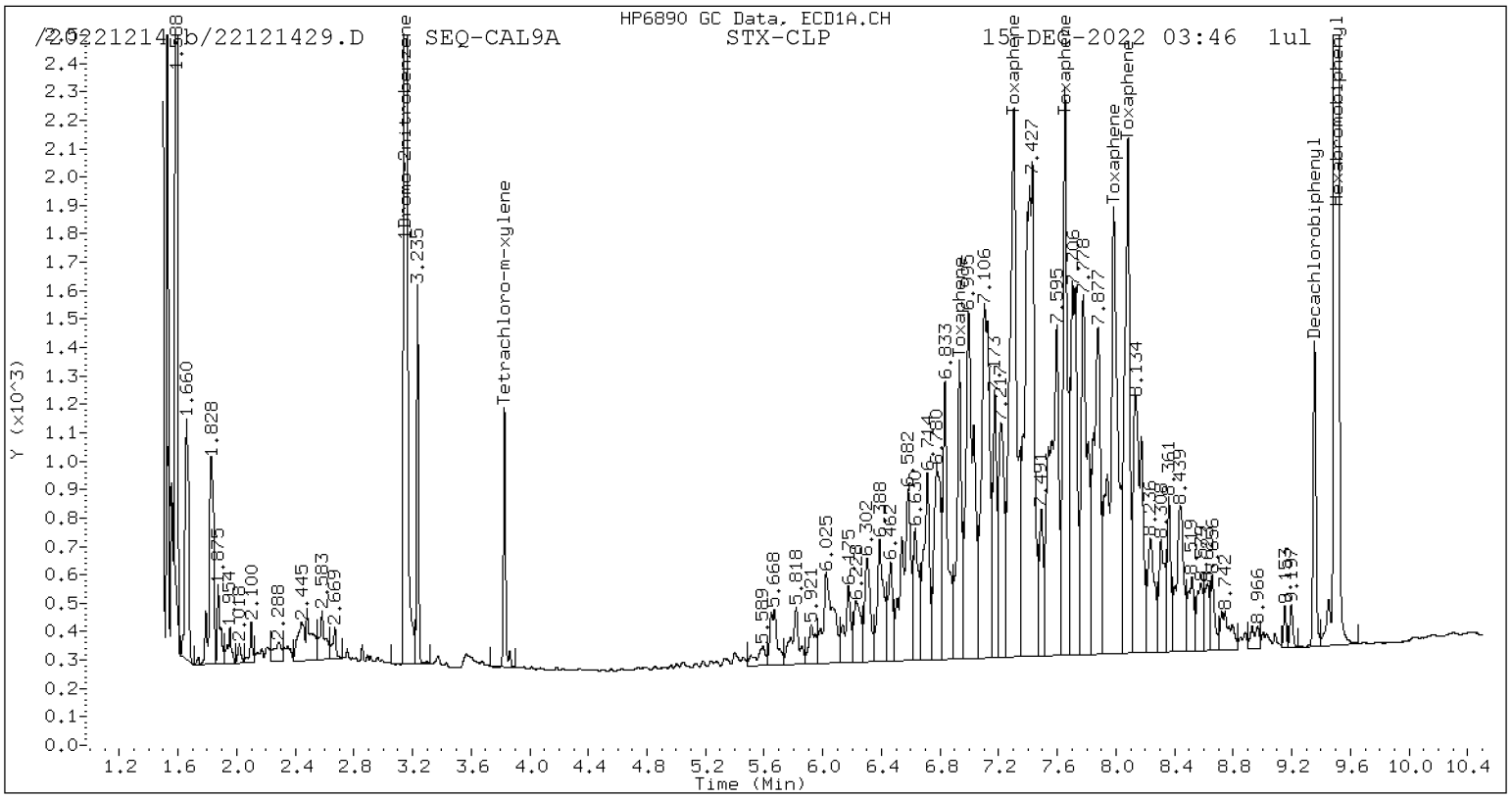
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1104488	4.3
Hexabromobiphenyl	797125	811719	1.8

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

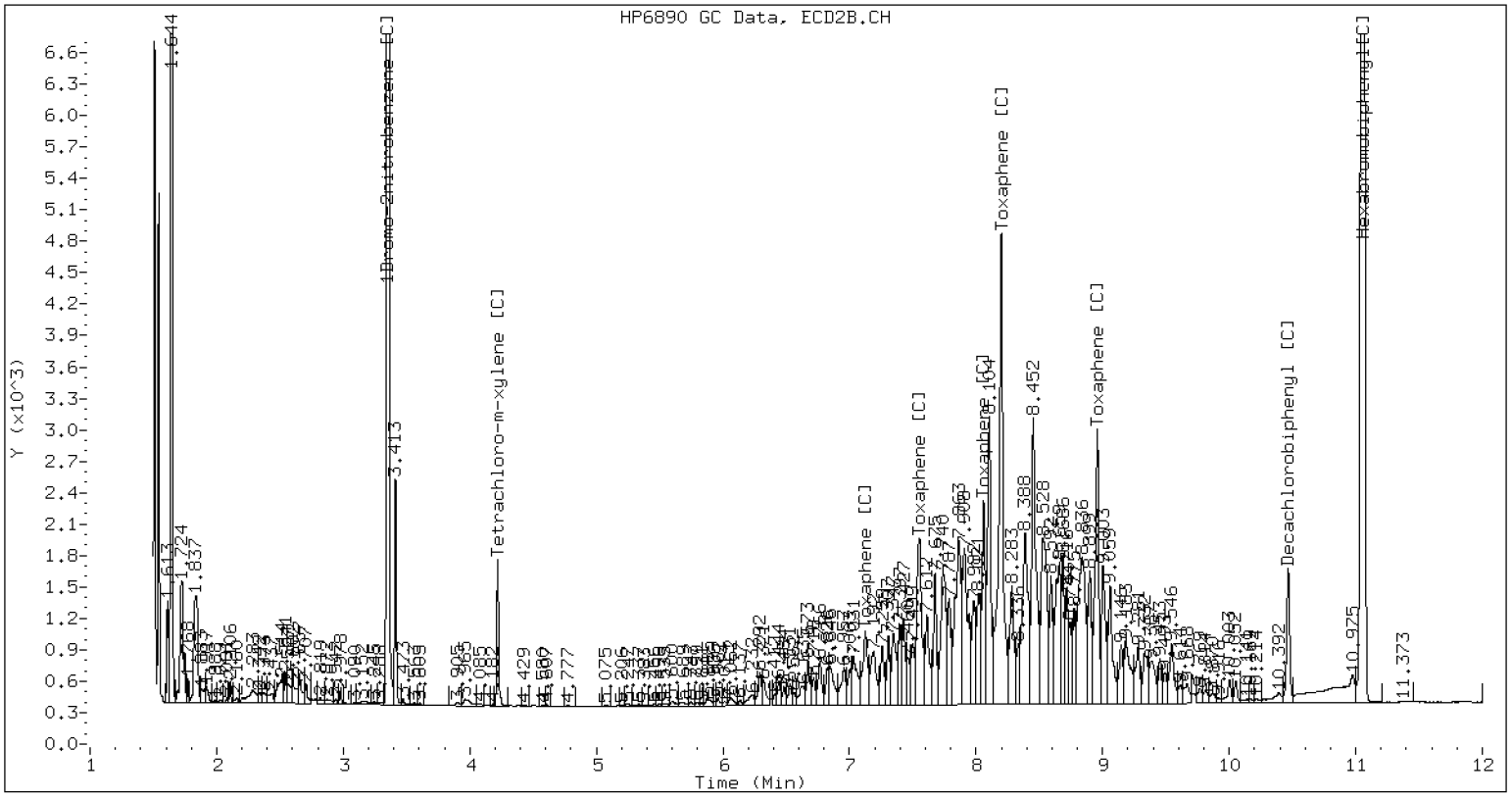
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Toxaphene	1	6.931	0.000	47415	261.8	1	7.125	-0.001	38790	254.4	
Toxaphene	2	7.302	-0.001	134642	265.2	2	7.552	-0.001	89754	261.8	
Toxaphene	3	7.652	-0.001	86679	264.9	3	8.059	-0.001	67442	258.4	
Toxaphene	4	7.985	-0.001	125891	287.7	4	8.200	-0.001	220426	258.9	
Toxaphene	5	8.081	-0.000	85903	260.0	5	8.958	-0.001	104601	250.5	
Total STX-CLPAve (5 peaks): 267.939						Total CLP2Ave (5 peaks): 256.784				RPD = 4	
Corrected Ave (5 peaks): 267.939						Corrected Ave (5 peaks): 256.784				RPD = 4	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121429.D SEQ-CAL9A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121429.D
Data file 2: /20221214.b/B20221214.b/22121429.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL9A
Client ID:
Injection Date: 15-DEC-2022 03:46
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121430.D
Data file 2: /20221214.b/B20221214.b/22121430.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAA
Client ID:
Injection Date: 15-DEC-2022 04:04
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	-0.000	37717	4.220	0.000	60469	3.98	3.98	0.0	Tetrachloro-m-xylene
9.355	0.000	57106	10.467	0.000	82418	9.20	9.32	1.3	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	696179	-2.0
Hexabromobiphenyl	641833	612804	-4.5

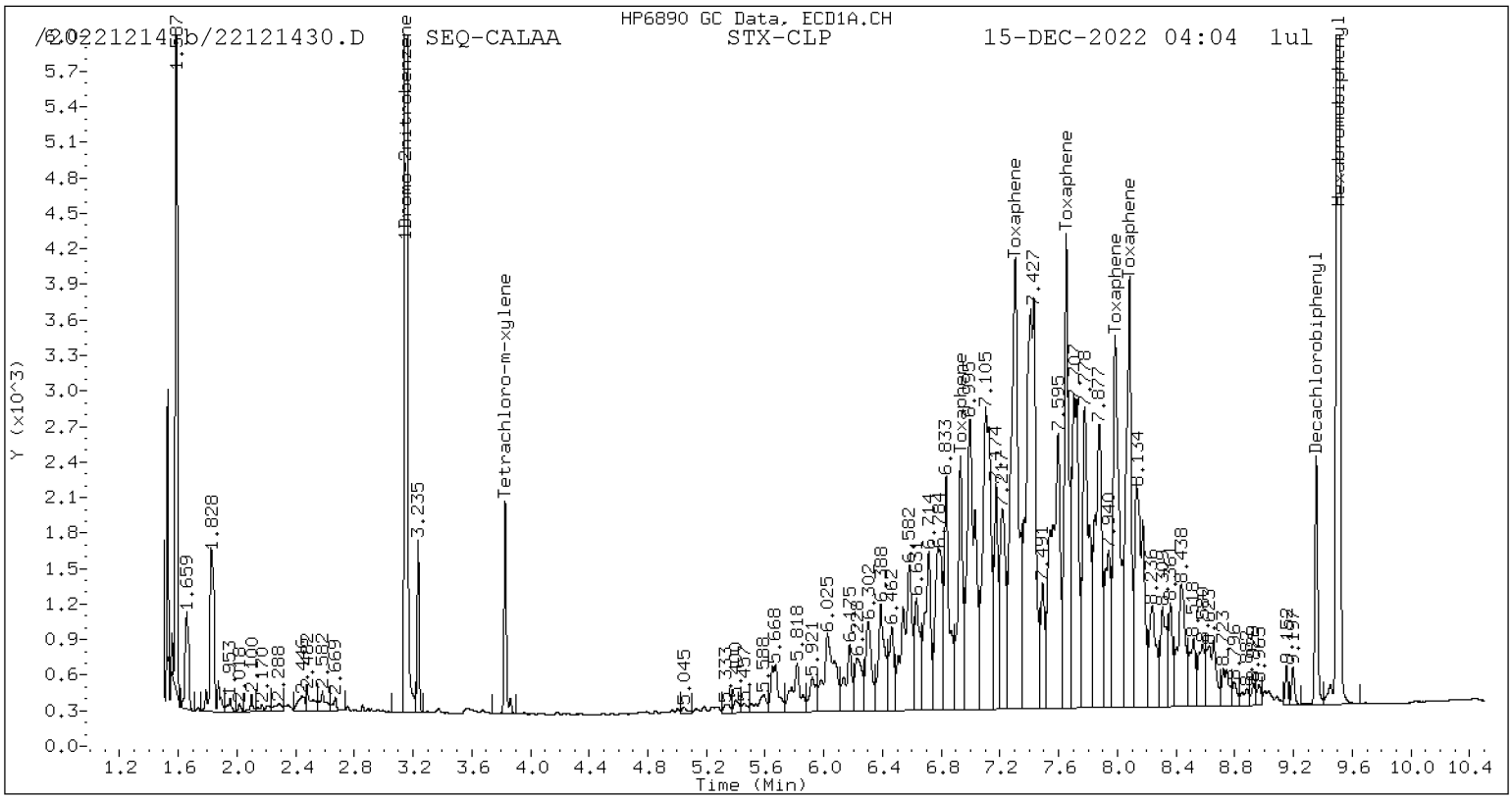
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1078803	1.9
Hexabromobiphenyl	797125	800071	0.4

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

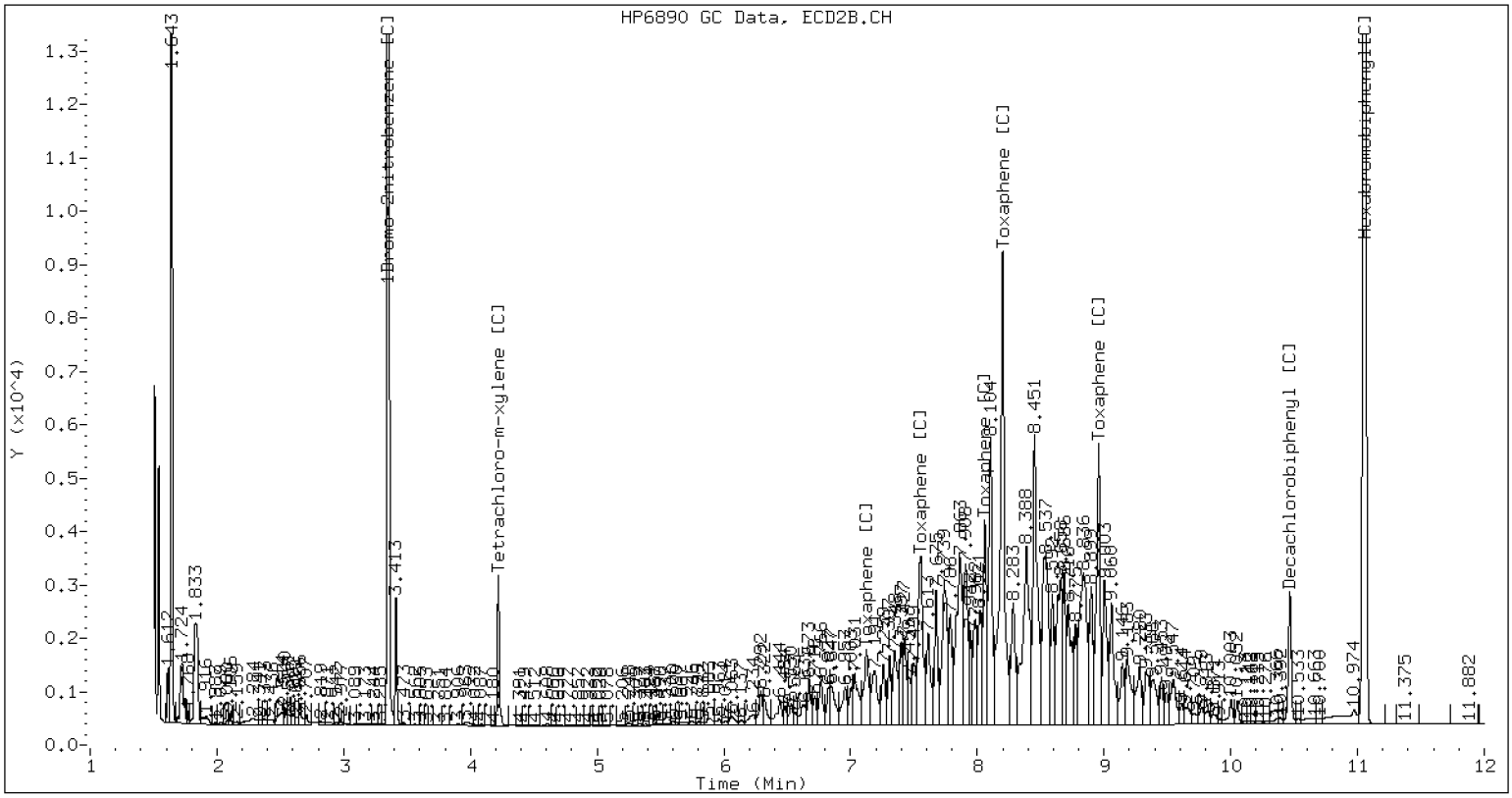
	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.931	-0.000	96535	539.4	1	7.125	-0.001	78635	523.1
Toxaphene	2	7.304	0.000	273576	545.2	2	7.553	-0.001	179081	529.9
Toxaphene	3	7.652	-0.001	177095	547.7	3	8.059	-0.001	133547	519.1
Toxaphene	4	7.985	-0.001	190443	440.4	4	8.200	-0.001	437035	520.8
Toxaphene	5	8.082	-0.000	175009	535.8	5	8.958	-0.001	209659	509.4
Total STX-CLPAve (5 peaks): 521.711						Total CLP2Ave (5 peaks): 520.468				RPD = 0
Corrected Ave (5 peaks): 521.711						Corrected Ave (5 peaks): 520.468				RPD = 0

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121430.D SEQ-CALAA CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121430.D
Data file 2: /20221214.b/B20221214.b/22121430.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAA
Client ID:
Injection Date: 15-DEC-2022 04:04
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121431.D
Data file 2: /20221214.b/B20221214.b/22121431.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAB
Client ID:
Injection Date: 15-DEC-2022 04:22
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	0.000	74347	4.221	0.000	119694	7.73	7.77	0.5	Tetrachloro-m-xylene
9.355	-0.000	107024	10.466	-0.000	151970	17.00	17.11	0.7	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	706924	-0.5
Hexabromobiphenyl	641833	621486	-3.2

Column 2

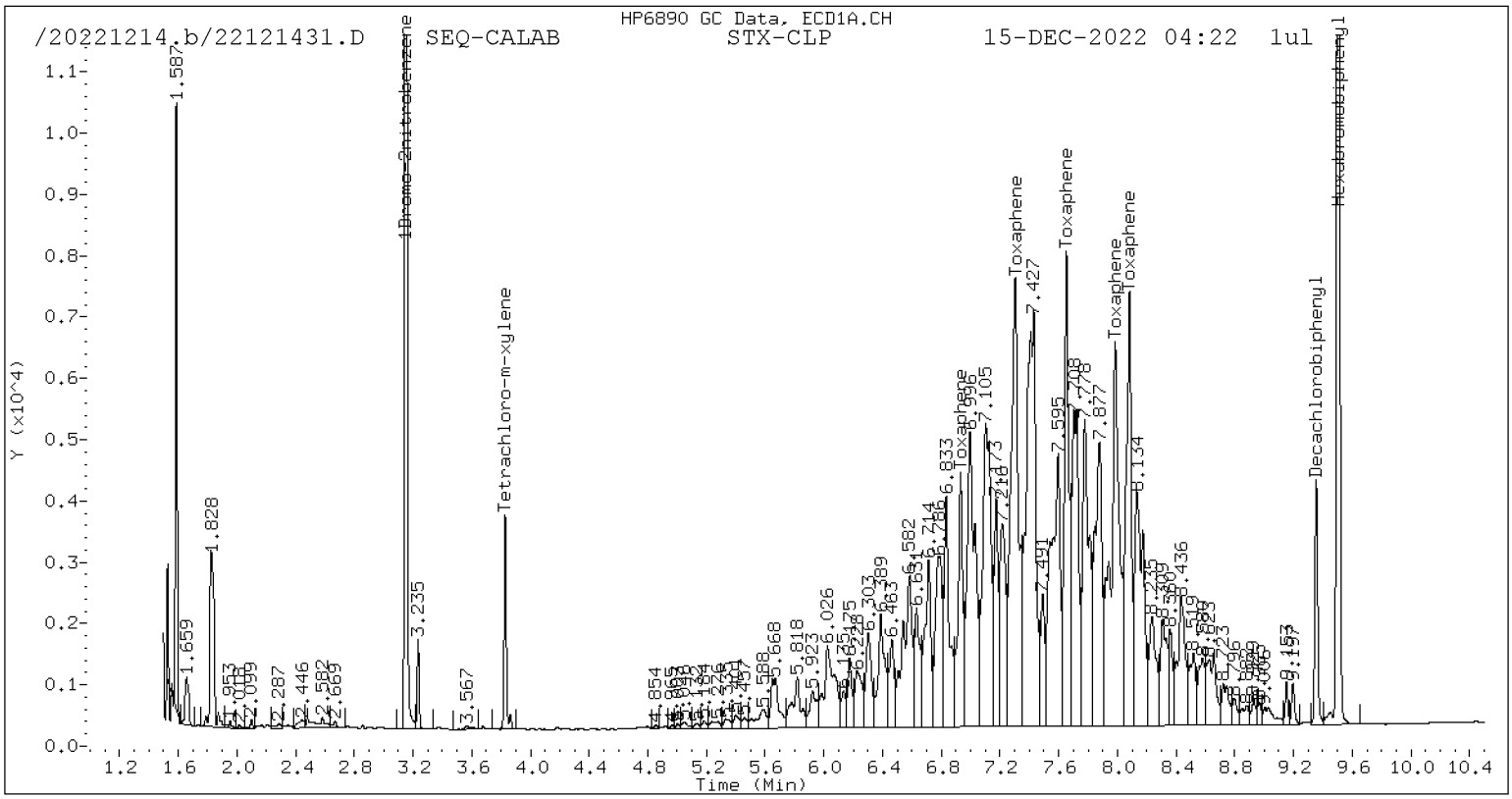
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1093936	3.3
Hexabromobiphenyl	797125	803782	0.8

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.931	0.000	192757	1062.0	1	7.125	-0.000	156515	1036.5
Toxaphene	2	7.303	-0.000	530863	1043.2	2	7.553	-0.001	349637	1029.8
Toxaphene	3	7.653	-0.000	344194	1049.6	3	8.059	-0.000	265296	1026.5
Toxaphene	4	7.986	-0.000	522105	1190.6	4	8.201	-0.001	854255	1013.3
Toxaphene	5	8.082	-0.000	345477	1043.0	5	8.958	-0.001	416452	1007.1

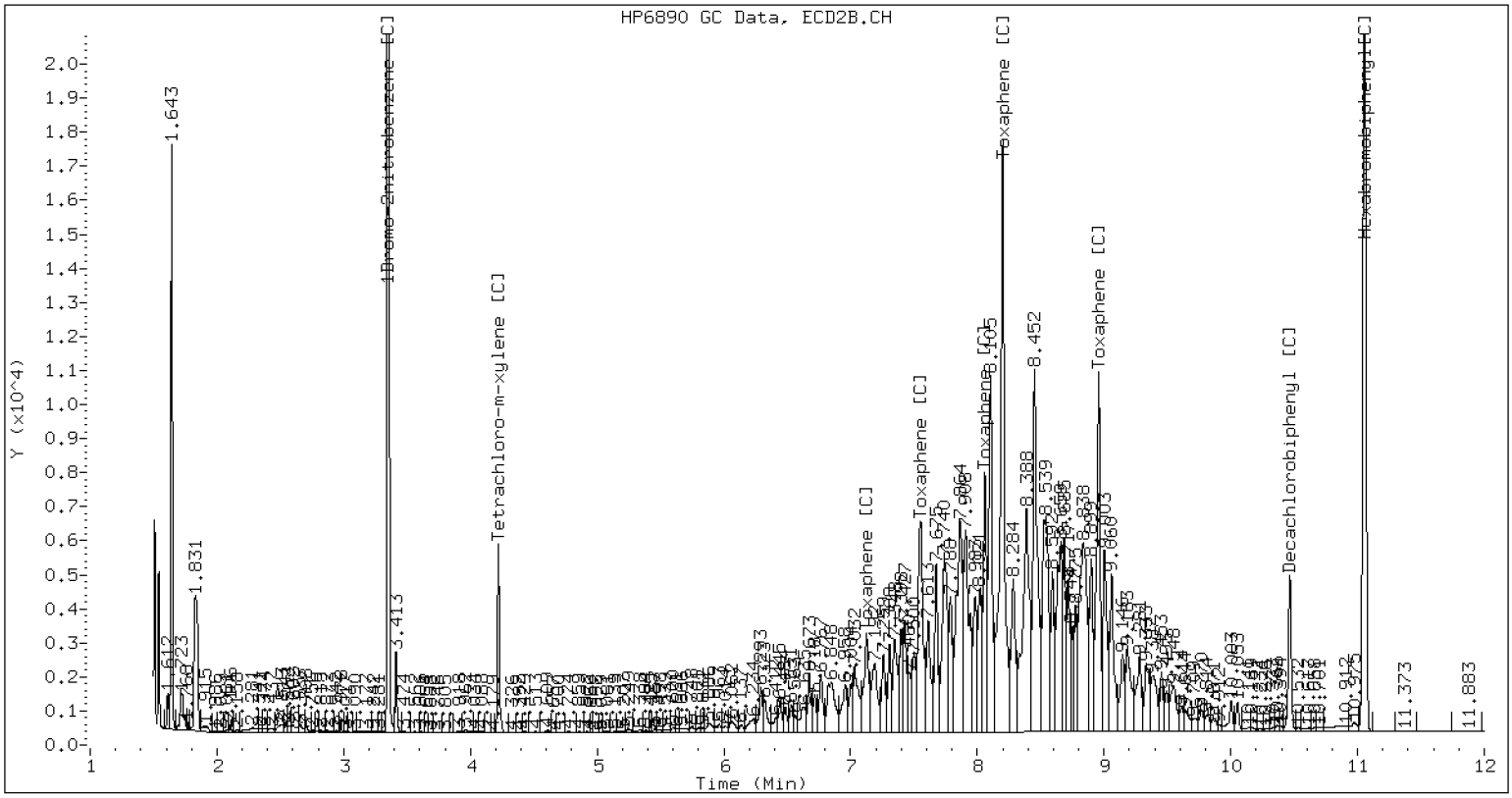
Total STX-CLPAve (5 peaks): 1077.665 Total CLP2Ave (5 peaks): 1022.630 RPD = 5
Corrected Ave (5 peaks): 1077.665 Corrected Ave (5 peaks): 1022.630 RPD = 5

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121431.D SEQ-CALAB CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121431.D
Data file 2: /20221214.b/B20221214.b/22121431.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAB
Client ID:
Injection Date: 15-DEC-2022 04:22
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121432.D
Data file 2: /20221214.b/B20221214.b/22121432.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAC
Client ID:
Injection Date: 15-DEC-2022 04:40
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	0.000	169388	4.221	0.000	273030	18.51	18.69	1.0	Tetrachloro-m-xylene
9.356	0.001	234532	10.466	-0.000	332716	40.53	40.11	1.0	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	672958	-5.3
Hexabromobiphenyl	641833	571112	-11.0

Column 2

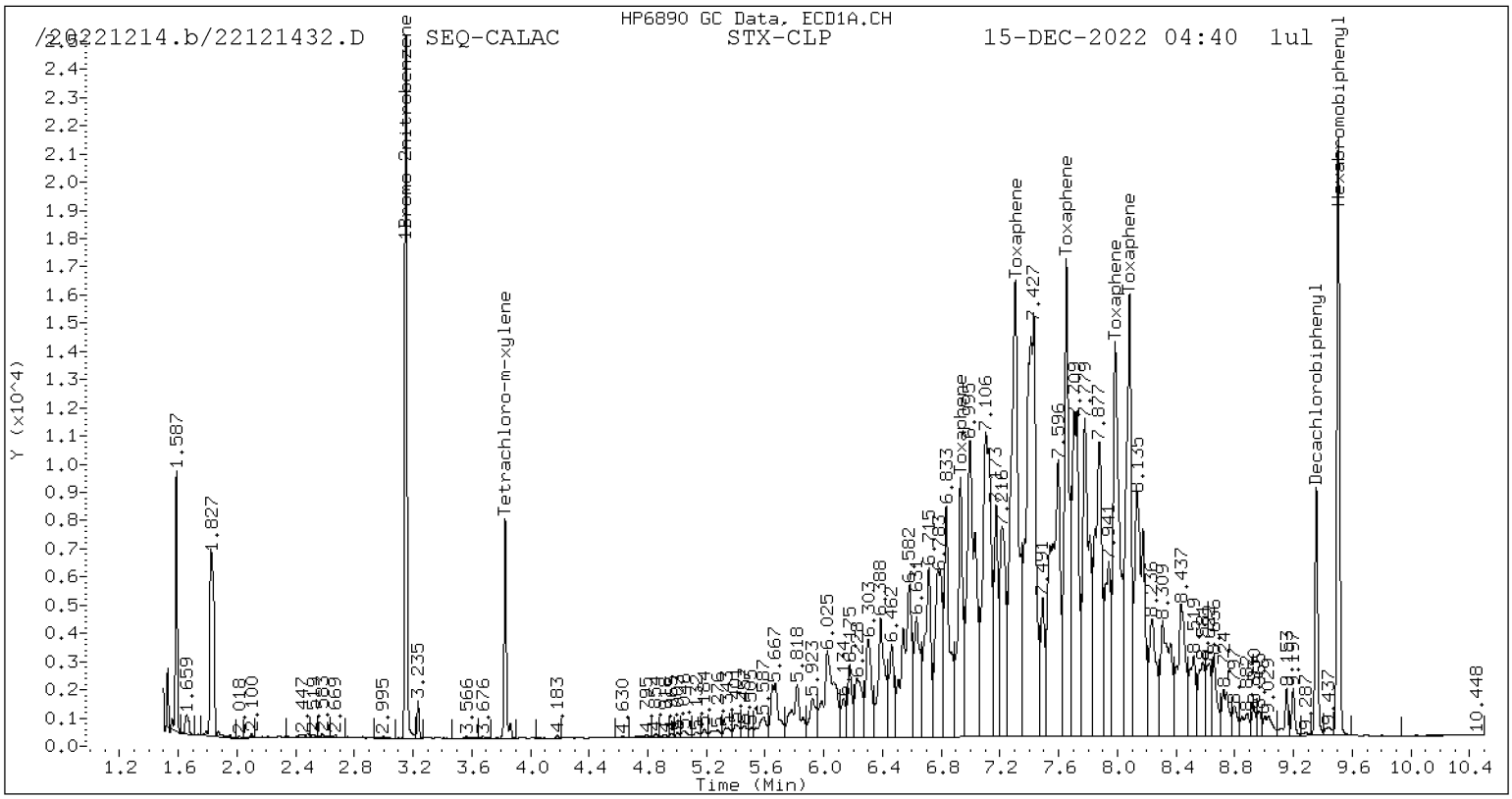
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1037593	-2.0
Hexabromobiphenyl	797125	750492	-5.9

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.931	0.000	432250	2591.5	1	7.126	-0.000	358061	2539.5
Toxaphene	2	7.303	0.000	1180375	2524.1	2	7.553	0.000	785942	2479.1
Toxaphene	3	7.653	0.000	762221	2529.4	3	8.059	-0.000	602985	2498.7
Toxaphene	4	7.986	0.000	863552	2142.9	4	8.201	-0.001	1929083	2450.8
Toxaphene	5	8.082	0.000	777497	2554.3	5	8.958	-0.001	962132	2492.0

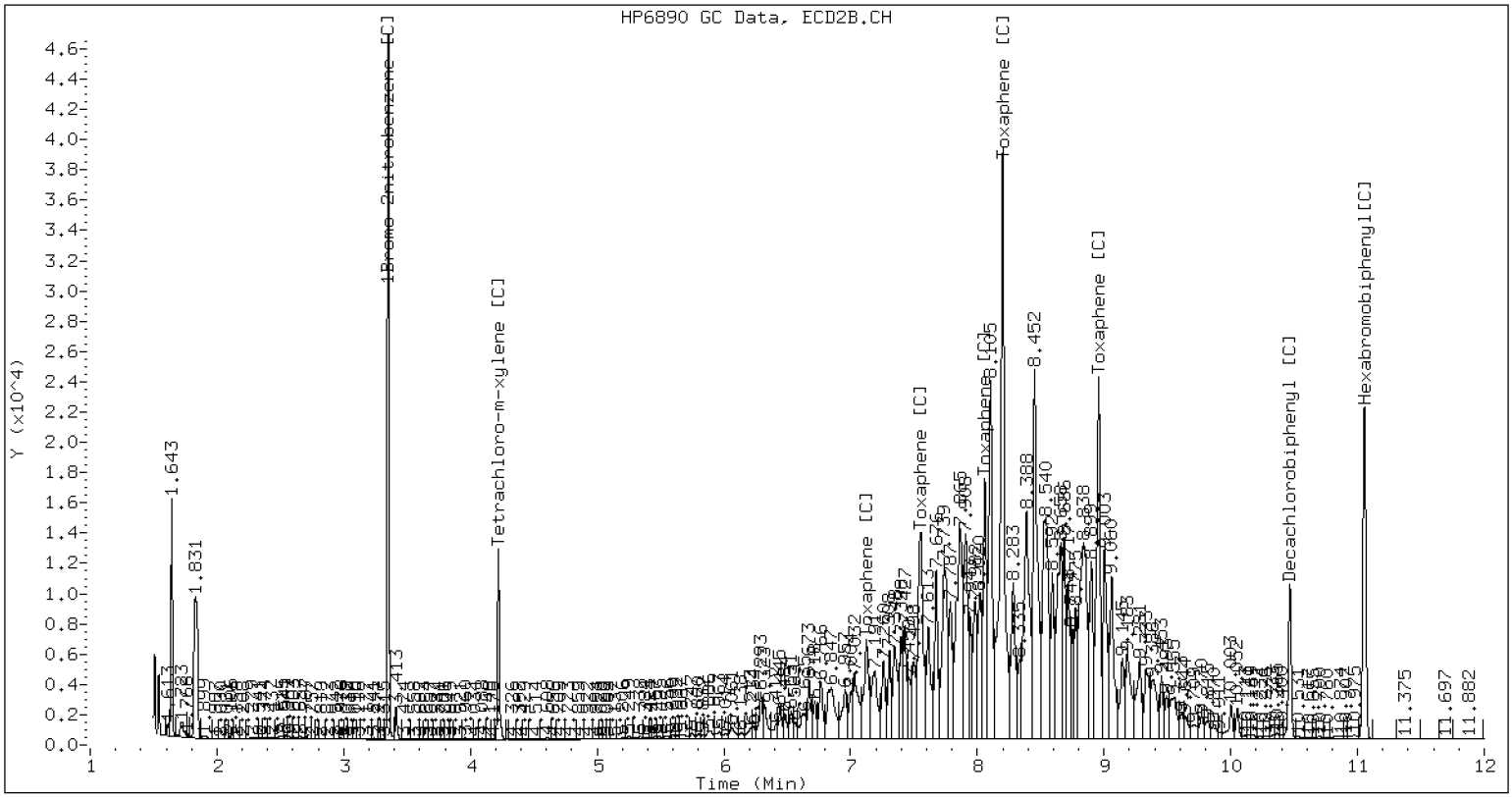
Total STX-CLPAve (5 peaks): 2468.427 Total CLP2Ave (5 peaks): 2492.024 RPD = 1
Corrected Ave (5 peaks): 2468.427 Corrected Ave (5 peaks): 2492.024 RPD = 1

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121432.D SEQ-CALAC CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121432.D
Data file 2: /20221214.b/B20221214.b/22121432.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAC
Client ID:
Injection Date: 15-DEC-2022 04:40
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121433.D
Data file 2: /20221214.b/B20221214.b/22121433.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAD
Client ID:
Injection Date: 15-DEC-2022 04:58
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	-0.000	329284	4.221	0.000	536251	34.78	35.63	2.4	Tetrachloro-m-xylene
9.356	0.000	464116	10.466	-0.000	660536	76.95	77.19	0.3	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	696178	-2.0
Hexabromobiphenyl	641833	595287	-7.3

Column 2

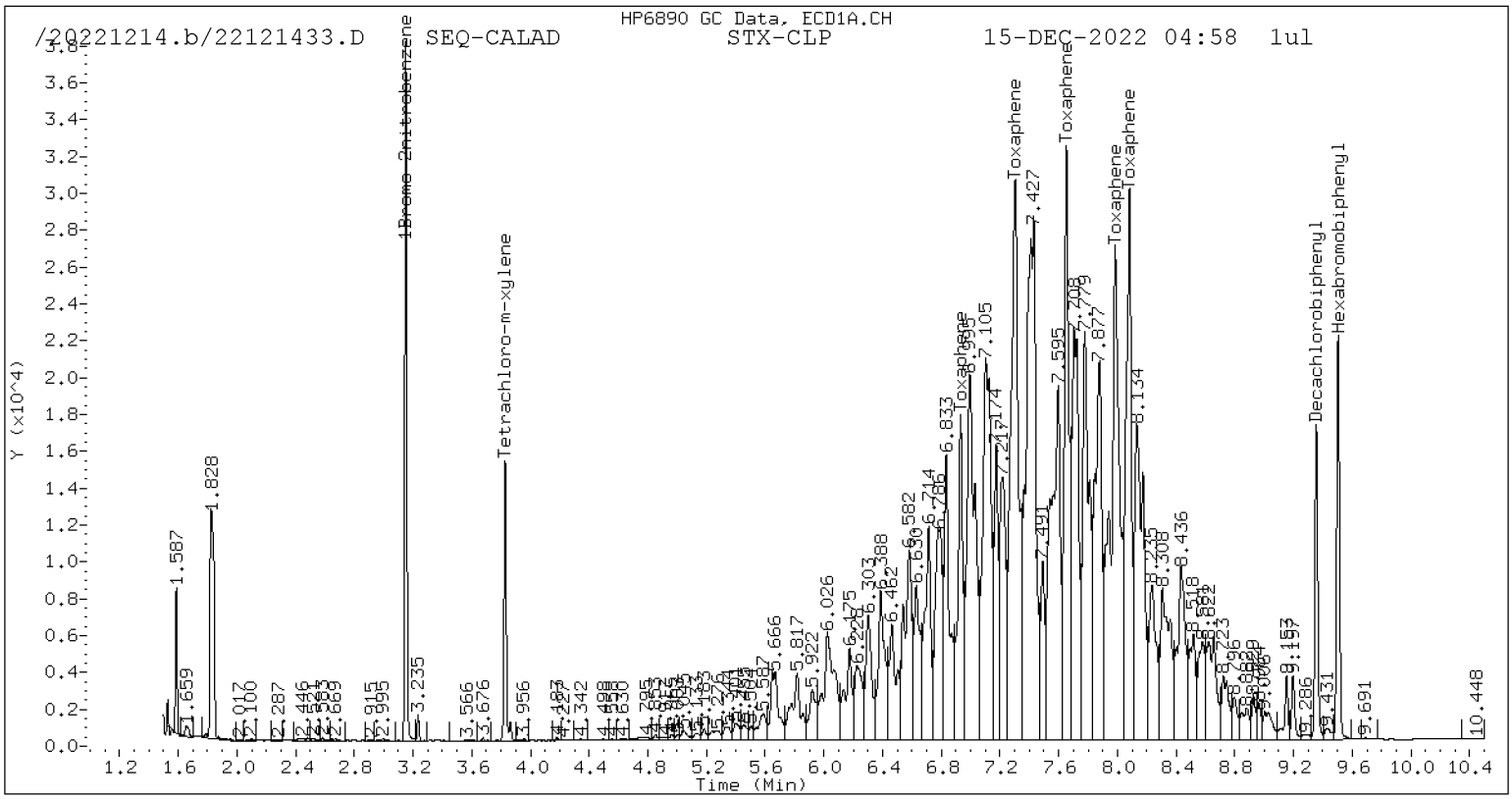
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1069205	1.0
Hexabromobiphenyl	797125	774218	-2.9

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.931	0.000	828531	4765.6	1	7.126	-0.000	704213	4841.5
Toxaphene	2	7.303	-0.000	2275106	4667.4	2	7.554	0.000	1533921	4690.3
Toxaphene	3	7.653	-0.000	1493693	4755.4	3	8.059	-0.001	1192086	4788.5
Toxaphene	4	7.986	0.000	2318449	5519.5	4	8.201	-0.001	3835448	4723.4
Toxaphene	5	8.081	-0.000	1509568	4758.0	5	8.958	-0.000	1957568	4914.8

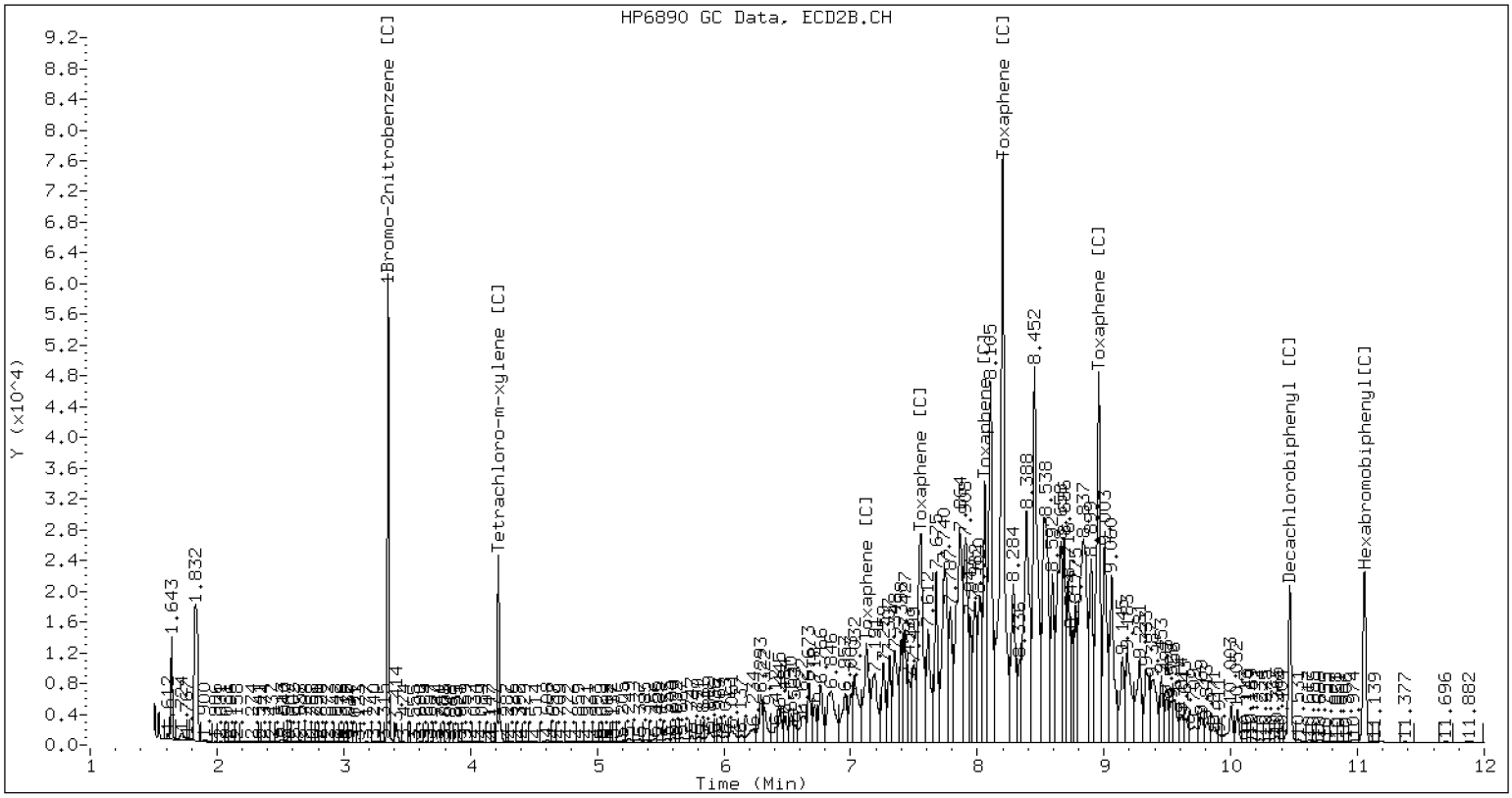
Total STX-CLPAve (5 peaks): 4893.192 Total CLP2Ave (5 peaks): 4791.694 RPD = 2
Corrected Ave (5 peaks): 4893.192 Corrected Ave (5 peaks): 4791.694 RPD = 2

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121433.D SEQ-CALAD CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121433.D
Data file 2: /20221214.b/B20221214.b/22121433.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAD
Client ID:
Injection Date: 15-DEC-2022 04:58
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121434.D
Data file 2: /20221214.b/B20221214.b/22121434.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAE
Client ID:
Injection Date: 15-DEC-2022 05:16
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	-0.000	626937	4.221	0.000	1016753	65.66	67.54	2.8	Tetrachloro-m-xylene
9.355	0.000	899917	10.467	0.000	1293767	145.37	151.89	4.4	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	702143	-1.2
Hexabromobiphenyl	641833	610983	-4.8

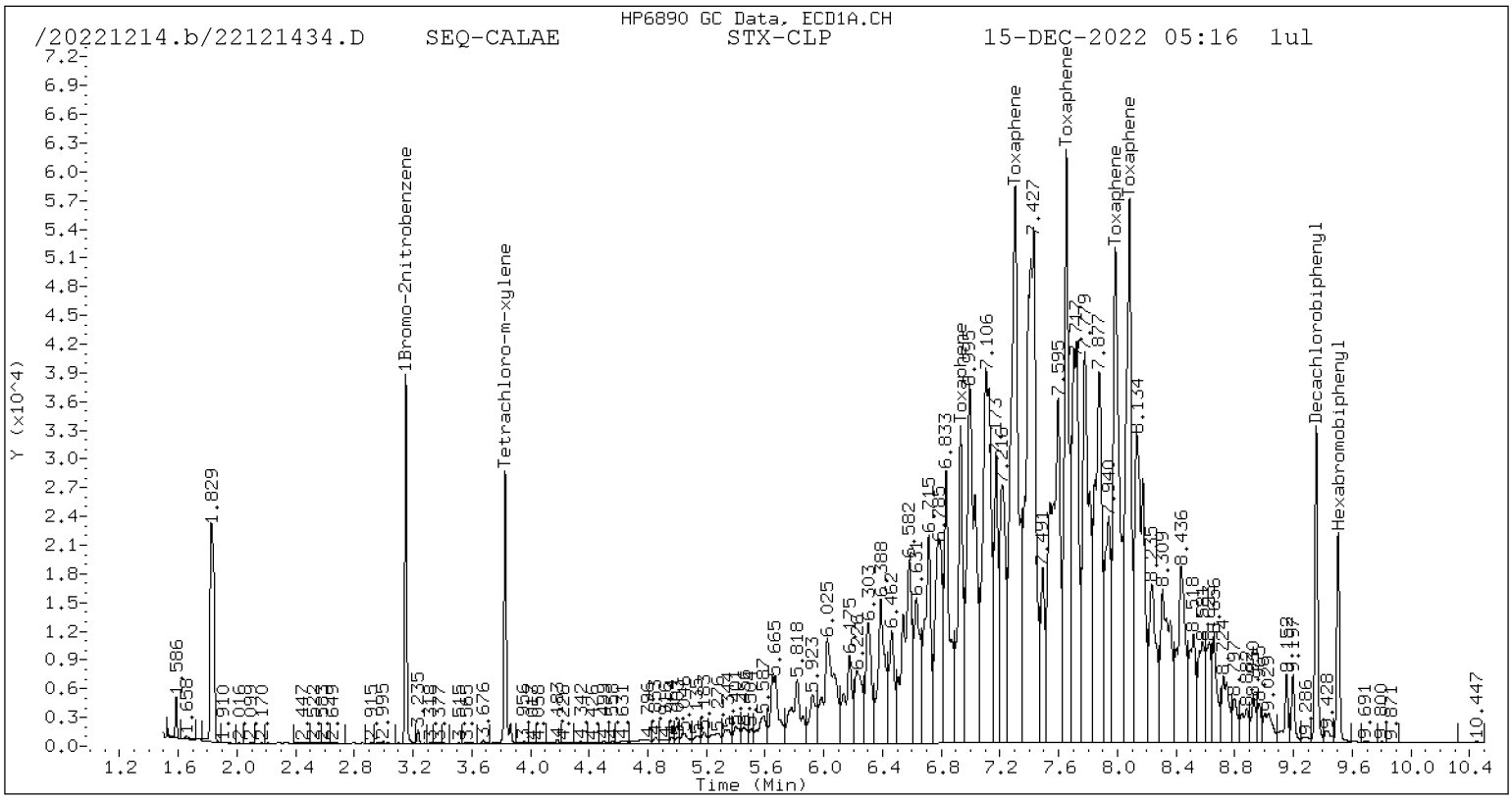
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1069521	1.0
Hexabromobiphenyl	797125	770702	-3.3

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

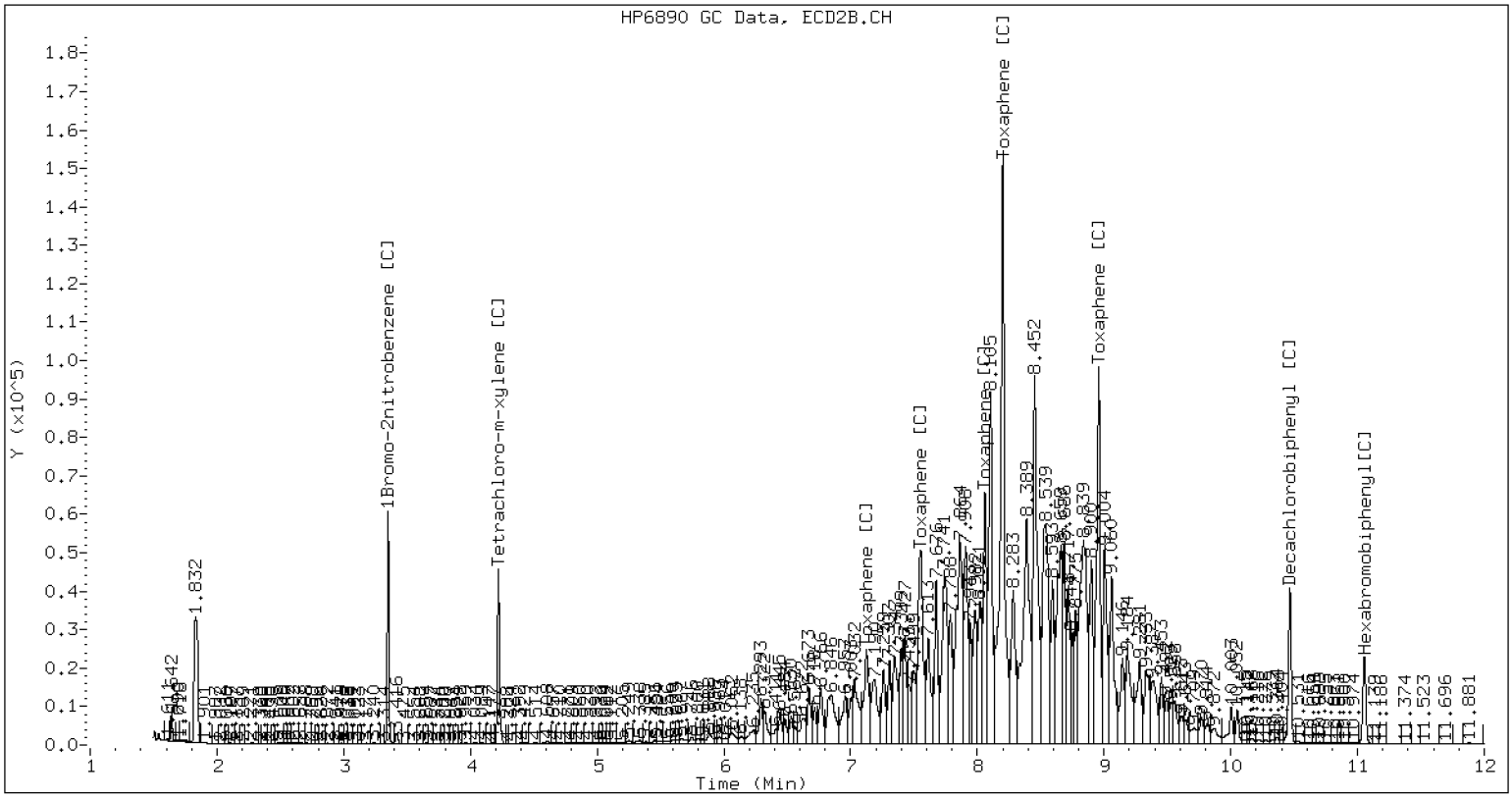
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Toxaphene	1	6.931	0.000	1553785	8707.6	1	7.126	0.000	1336419	9229.8	
Toxaphene	2	7.303	-0.000	4216546	8428.1	2	7.553	0.000	2900195	8908.4	
Toxaphene	3	7.653	-0.000	2652265	8227.0	3	8.060	0.000	2299294	9278.2	
Toxaphene	4	7.987	0.001	3225164	7480.8	4	8.201	0.000	7496819	9274.6	
Toxaphene	5	8.082	-0.000	2882252	8851.2	5	8.959	0.000	3913616	9870.7	
Total STX-CLPAve (5 peaks): 8338.950						Total CLP2Ave (5 peaks): 9312.318					RPD = 11
Corrected Ave (5 peaks): 8338.950						Corrected Ave (5 peaks): 9312.318					RPD = 11

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121434.D SEQ-CALAE CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121434.D
Data file 2: /20221214.b/B20221214.b/22121434.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAE
Client ID:
Injection Date: 15-DEC-2022 05:16
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	23012405.D	Calibration Date:	12/14/2022
Sequence:	SLA0299	Injection Date:	01/24/23
Lab Sample ID:	SLA0299-ICV1	Injection Time:	17:25
Sequence Name:	INDAE		

		CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Hexachlorobenzene	A	20.000	20.8	1.4298940	1.4878070		4.1	+/-20
Hexachlorobenzene [2C]	A	20.000	20.5	1.4591090	1.4972730		2.6	+/-20
Decachlorobiphenyl	A	40.000	39.4	0.8105886	0.7988944		-1.4	+/-20
Decachlorobiphenyl [2C]	A	40.000	39.3	0.8841805	0.8685045		-1.8	+/-20
Tetrachlorometaxylene	A	40.000	39.8	1.0879510	1.0831120		-0.4	+/-20
Tetrachlorometaxylene [2C]	A	40.000	40.4	1.1261070	1.1361470		0.9	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230124.b/23012405.D
Data file 2: /20230124.b/B20230124.b/23012405.D
Method: \20230124.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: SEQ-INDAICV1
Client ID:
Injection Date: 24-JAN-2023 17:25
Report Date: 01/27/2023 08:03
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.311	0.000	336908	4.833	0.000	503592	22.77	22.43	1.5	alpha-BHC
4.693	0.001	130538	5.309	0.000	188009	22.91	22.02	4.0	beta-BHC
4.876	0.000	293267	5.661	-0.000	350697	24.25	18.96	24.5	delta-BHC
4.612	0.000	288254	5.229	-0.000	431999	22.47	22.67	0.9	gamma-BHC (Lindane)
5.093	0.000	270336	5.755	0.000	387552	23.68	22.45	5.3	Heptachlor
5.414	0.000	287981	6.157	-0.000	418466	22.51	21.23	5.8	Aldrin
6.088	-0.000	243845	6.814	-0.001	339997	21.98	20.86	5.2	Heptachlor epoxide b
6.531	0.001	230210	7.257	-0.001	297619	22.61	20.72	8.7	Endosulfan I
6.791	0.000	482683	7.551	-0.000	652904	44.13	41.14	7.0	Dieldrin
6.453	0.001	459399	7.342	0.000	626653	45.24	43.05	5.0	4,4'-DDE
7.041	-0.000	394363	7.876	0.000	490400	42.42	43.91	3.4	Endrin
7.279	0.001	393789	8.087	-0.000	513396	47.05	44.84	4.8	Endosulfan II
7.100	0.001	395806	7.949	-0.000	511666	47.26	47.10	0.3	4,4'-DDD
8.141	0.000	354154	8.685	-0.001	459113	44.57	45.67	2.4	Endosulfan sulfate
7.391	0.000	393592	8.266	-0.001	483447	46.50	46.10	0.9	4,4'-DDT
7.878	0.001	847067	8.908	-0.000	1062778	225.86	229.03	1.4	Methoxychlor
8.414	-0.000	410516	9.209	-0.001	498999	45.09	45.95	1.9	Endrin ketone
7.707	0.000	301889	8.418	-0.000	372573	45.23	46.13	2.0	Endrin aldehyde
6.230	0.001	250914	7.025	-0.000	339291	22.27	20.87	6.5	trans-Chlordane
6.376	0.001	246122	7.184	-0.000	325101	21.78	20.45	6.3	cis-Chlordane
2.304	-0.000	314922	2.482	-0.000	369381	20.31	17.32	15.9	Hexachlorobutadiene
4.153	0.000	285917	4.692	-0.000	419437	20.81	20.52	1.4	Hexachlorobenzene
3.801	0.001	416291	4.196	0.000	636547	39.82	40.36	1.3	Tetrachloro-m-xylene
9.319	-0.000	283254	10.428	-0.001	341126	39.42	39.29	0.3	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

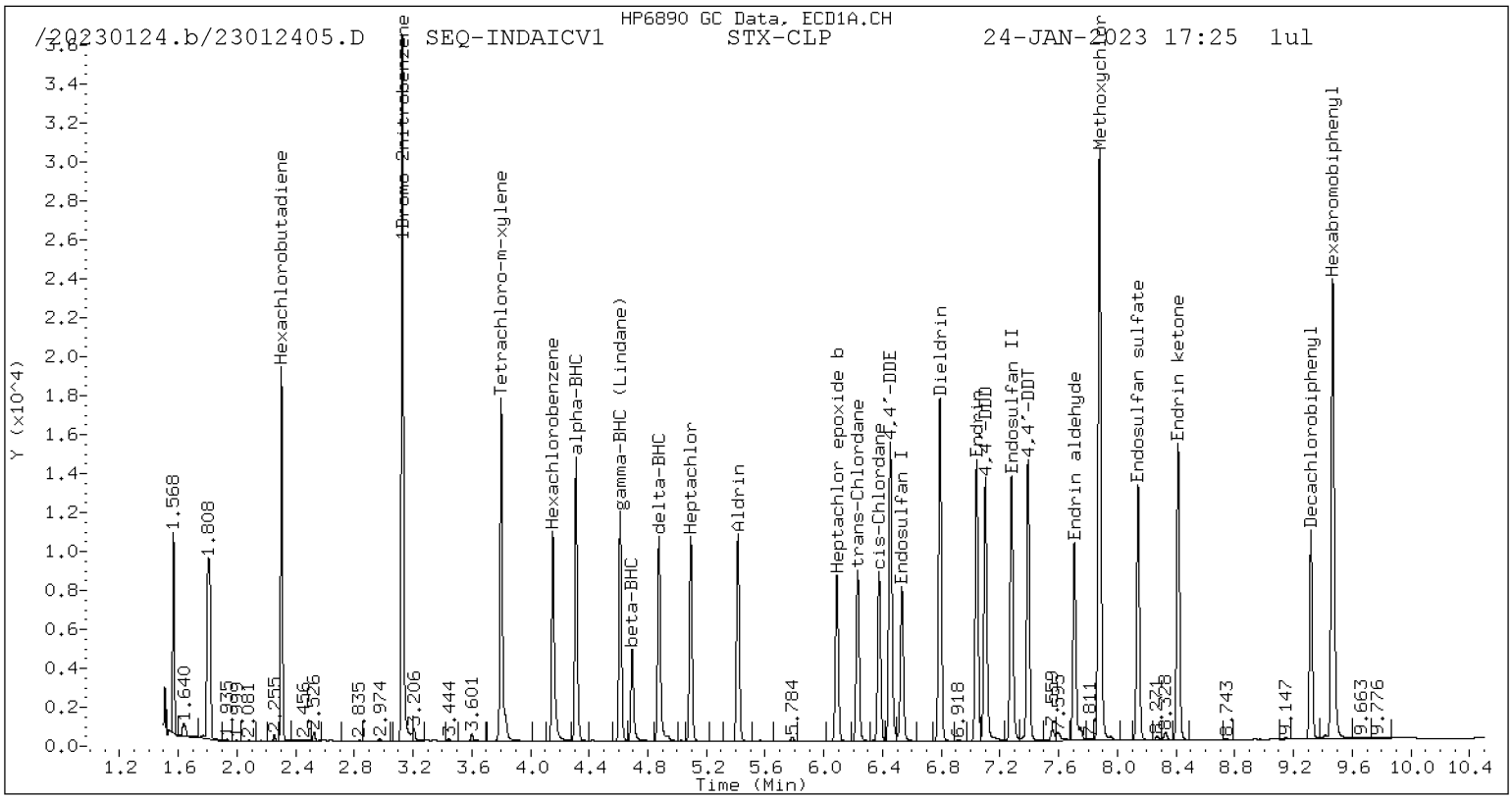
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	768694	14.3
Hexabromobiphenyl	609723	709115	16.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1120536	11.3
Hexabromobiphenyl	769764	785548	2.1

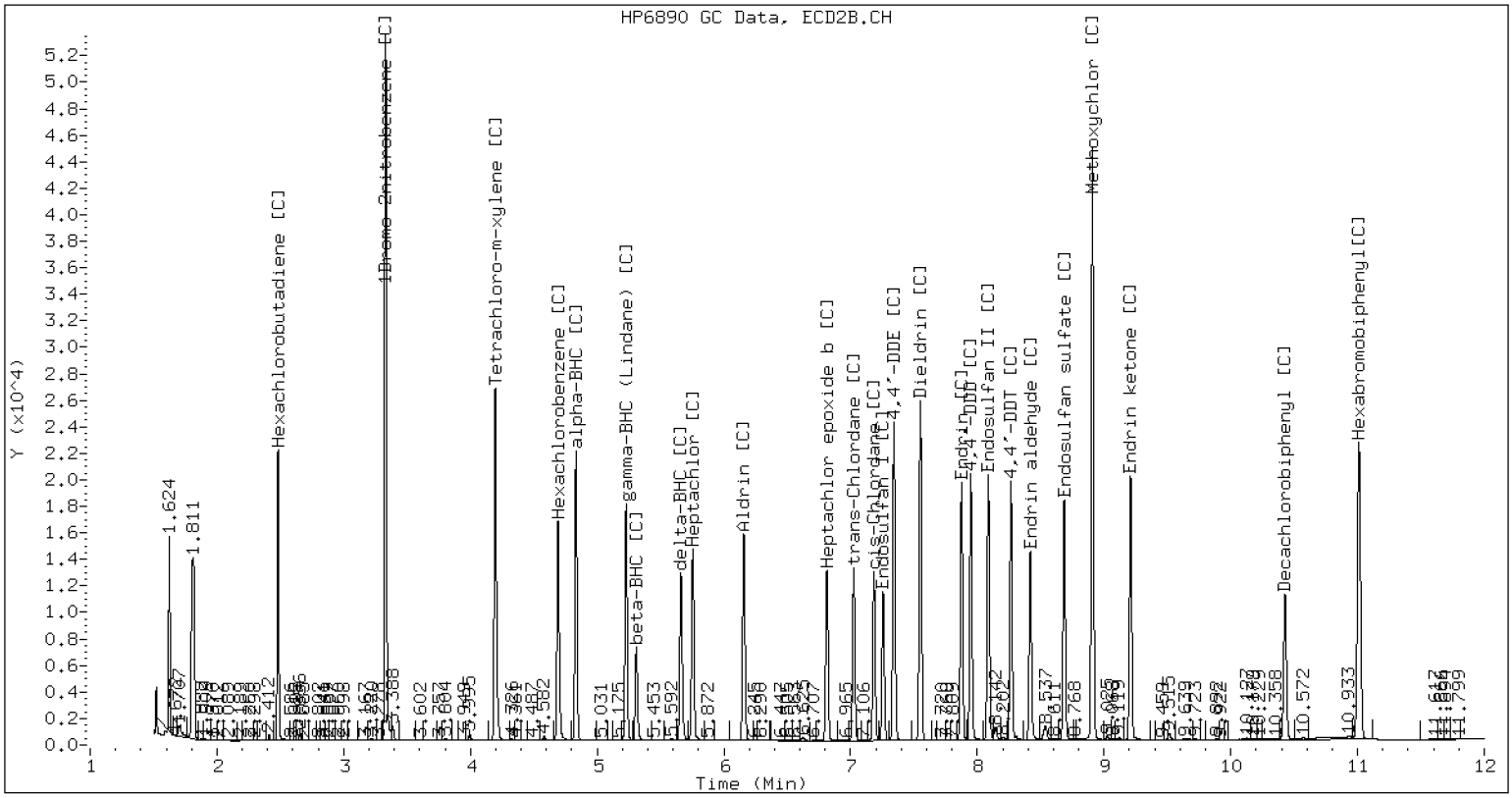
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230124.b/B20230124.b/23012405.D SEQ-INDAICV1 CLP2



CLP-2 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	23012604.D	Calibration Date:	12/14/2022
Sequence:	SLA0301	Injection Date:	01/26/23
Lab Sample ID:	SLA0301-ICV1	Injection Time:	09:31
Sequence Name:	INDAE		

		CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Hexachlorobenzene	A	20.000	21.4	1.4298940	1.5276820		6.8	+/-20
Hexachlorobenzene [2C]	A	20.000	21.1	1.4591090	1.5384690		5.4	+/-20
Decachlorobiphenyl	A	40.000	39.5	0.8105886	0.8011869		-1.2	+/-20
Decachlorobiphenyl [2C]	A	40.000	39.6	0.8841805	0.8747631		-1.1	+/-20
Tetrachlorometaxylene	A	40.000	41.2	1.0879510	1.1209070		3.0	+/-20
Tetrachlorometaxylene [2C]	A	40.000	41.9	1.1261070	1.1794960		4.7	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230126.b/23012604.D
Data file 2: /20230126.b/B20230126.b/23012604.D
Method: \20230126.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: SEQ-INDAICV1
Client ID:
Injection Date: 26-JAN-2023 09:31
Report Date: 01/27/2023 08:21
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.310	-0.001	337746	4.831	-0.001	507698	23.16	23.01	0.7	alpha-BHC
4.692	-0.000	130180	5.308	-0.001	187199	23.19	22.31	3.9	beta-BHC
4.875	-0.000	293349	5.660	-0.001	358301	24.62	19.71	22.1	delta-BHC
4.611	-0.001	288041	5.227	-0.002	431378	22.78	23.03	1.1	gamma-BHC (Lindane)
5.092	-0.001	266334	5.753	-0.002	382145	23.68	22.53	5.0	Heptachlor
5.414	-0.000	290755	6.156	-0.002	425309	23.07	21.96	4.9	Aldrin
6.087	-0.001	245747	6.812	-0.002	341878	22.48	21.34	5.2	Heptachlor epoxide b
6.530	-0.001	233568	7.256	-0.002	301558	23.29	21.36	8.6	Endosulfan I
6.790	-0.001	482752	7.549	-0.002	655235	44.80	42.01	6.4	Dieldrin
6.452	0.000	453186	7.341	-0.001	621607	45.30	43.46	4.1	4,4'-DDE
7.040	-0.001	377523	7.874	-0.002	468908	41.26	42.54	3.1	Endrin
7.278	-0.000	401294	8.085	-0.002	517725	48.72	45.82	6.1	Endosulfan II
7.099	-0.000	393228	7.947	-0.002	510295	47.70	47.60	0.2	4,4'-DDD
8.140	-0.001	356188	8.684	-0.002	462353	45.54	46.60	2.3	Endosulfan sulfate
7.391	-0.000	394649	8.265	-0.002	485894	47.38	46.95	0.9	4,4'-DDT
7.877	0.000	858320	8.907	-0.001	1066727	232.53	232.94	0.2	Methoxychlor
8.413	-0.001	419828	9.208	-0.002	513939	46.86	47.96	2.3	Endrin ketone
7.706	-0.001	313109	8.416	-0.002	384053	47.66	48.19	1.1	Endrin aldehyde
6.229	-0.000	254182	7.023	-0.002	344725	22.90	21.58	5.9	trans-Chlordane
6.376	-0.000	248564	7.183	-0.002	330100	22.33	21.12	5.5	cis-Chlordane
2.300	-0.004	312716	2.479	-0.003	364756	20.47	17.40	16.2	Hexachlorobutadiene
4.152	-0.001	289252	4.691	-0.001	423539	21.37	21.09	1.3	Hexachlorobenzene
3.800	-0.001	424466	4.195	-0.002	649428	41.21	41.90	1.6	Tetrachloro-m-xylene
9.318	-0.001	279585	10.427	-0.003	339070	39.54	39.57	0.1	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

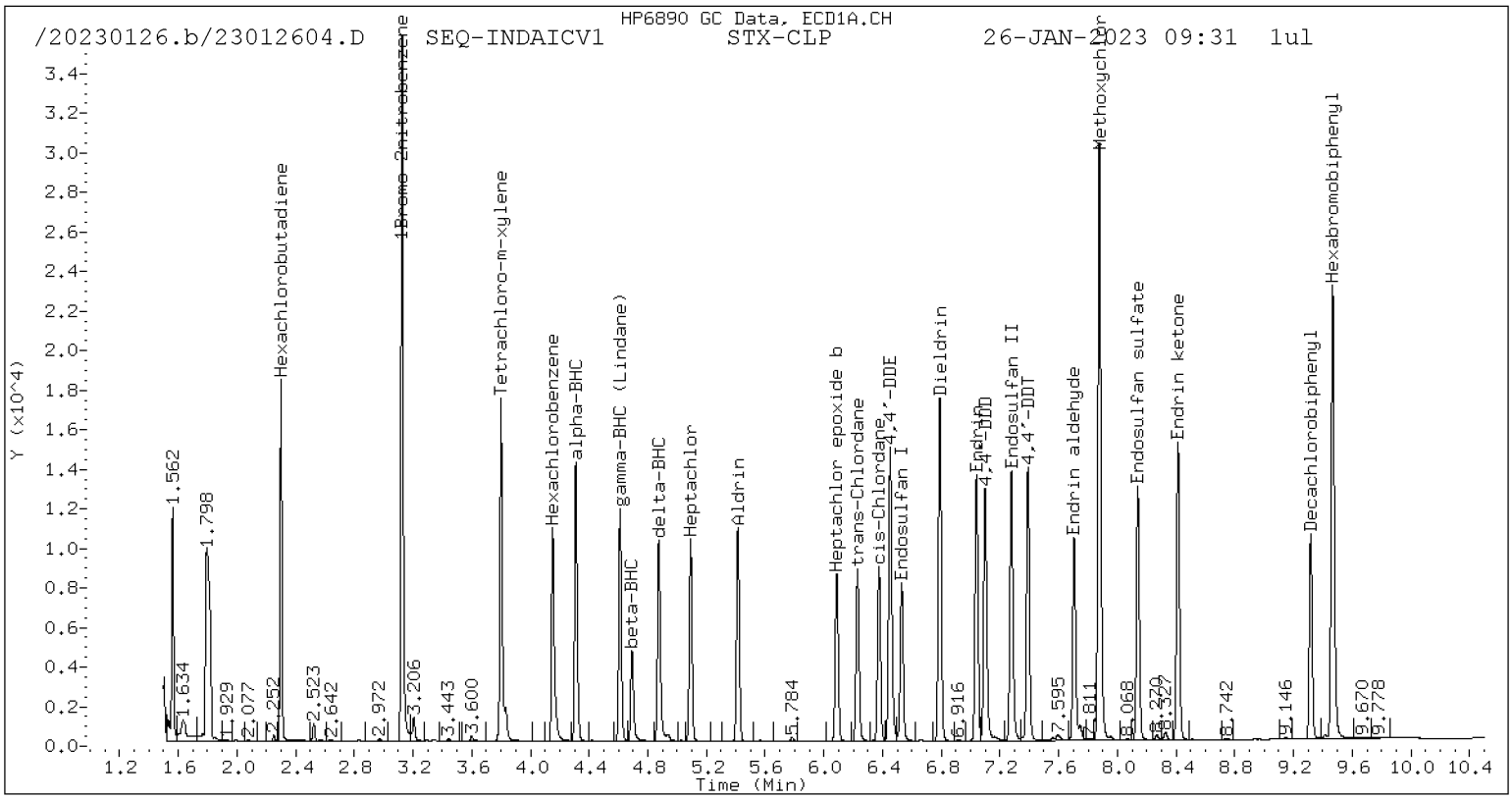
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	757362	12.6
Hexabromobiphenyl	609723	697927	14.5

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1101196	9.4
Hexabromobiphenyl	769764	775227	0.7

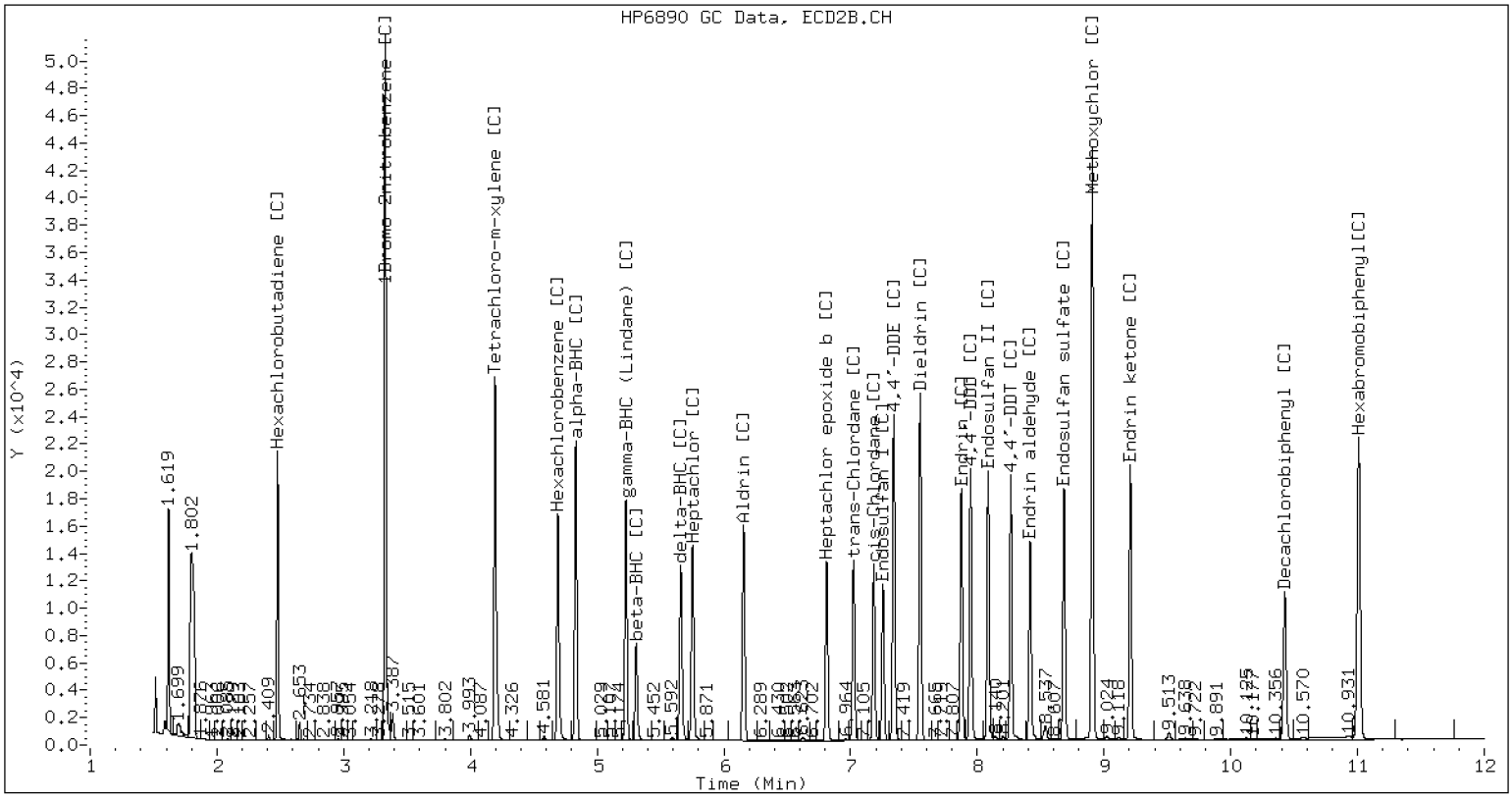
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230126.b/B20230126.b/23012604.D SEQ-INDAICV1 CLP2



CLP-2 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	23012422.D	Calibration Date:	12/14/2022
Sequence:	SLA0299	Injection Date:	01/24/23
Lab Sample ID:	SLA0299-CCV1	Injection Time:	22:30
Sequence Name:	INDAE		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	20.8	1.4298940	1.4883130		4.1	+/-20
Hexachlorobenzene [2C]	A	20.000	20.1	1.4591090	1.4678420		0.6	+/-20
Decachlorobiphenyl	A	40.000	38.6	0.8105886	0.7817065		-3.6	+/-20
Decachlorobiphenyl [2C]	A	40.000	38.8	0.8841805	0.8584222		-2.9	+/-20
Tetrachlorometaxylene	A	40.000	39.9	1.0879510	1.0848930		-0.3	+/-20
Tetrachlorometaxylene [2C]	A	40.000	39.7	1.1261070	1.1184280		-0.7	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230124.b/23012422.D
Data file 2: /20230124.b/B20230124.b/23012422.D
Method: \20230124.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: SEQ-INDACCV1
Client ID:
Injection Date: 24-JAN-2023 22:30
Report Date: 01/27/2023 08:03
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.311	0.000	344261	4.832	-0.001	518823	22.72	22.00	3.2	alpha-BHC
4.694	0.001	133349	5.309	-0.000	188041	22.86	20.98	8.6	beta-BHC
4.876	0.001	301212	5.660	-0.002	363878	24.32	18.74	25.9	delta-BHC
4.612	0.000	294947	5.228	-0.001	436247	22.45	21.80	2.9	gamma-BHC (Lindane)
5.093	0.000	279663	5.754	-0.001	394585	23.92	21.77	9.4	Heptachlor
5.415	0.001	293225	6.157	-0.001	412579	22.38	19.94	11.6	Aldrin
6.088	-0.000	247386	6.813	-0.001	333848	21.78	19.51	11.0	Heptachlor epoxide b
6.532	0.001	232074	7.257	-0.001	286174	22.26	18.97	15.9	Endosulfan I
6.792	0.001	487258	7.550	-0.001	629110	43.50	37.75	14.2	Dieldrin
6.452	0.001	461797	7.341	-0.001	597454	44.41	39.09	12.7	4,4'-DDE
7.041	0.000	363921	7.875	-0.001	428779	38.74	37.64	2.9	Endrin
7.279	0.001	395380	8.087	-0.000	492525	46.76	42.19	10.3	Endosulfan II
7.100	0.000	395713	7.948	-0.001	489070	46.76	44.14	5.8	4,4'-DDD
8.140	-0.000	356690	8.685	-0.001	455344	44.42	44.41	0.0	Endosulfan sulfate
7.391	0.000	392406	8.266	-0.001	468685	45.89	43.83	4.6	4,4'-DDT
7.878	0.000	860183	8.908	-0.001	1095763	226.99	231.56	2.0	Methoxychlor
8.414	-0.000	420307	9.209	-0.001	509724	45.70	46.03	0.7	Endrin ketone
7.706	-0.000	311642	8.417	-0.001	372784	46.21	45.26	2.1	Endrin aldehyde
6.230	0.000	253224	7.025	-0.001	327208	21.95	19.17	13.5	trans-Chlordane
6.376	0.000	247831	7.184	-0.001	313052	21.42	18.75	13.3	cis-Chlordane
2.304	0.000	326252	2.482	-0.000	391444	20.55	17.48	16.1	Hexachlorobutadiene
4.154	0.001	292891	4.691	-0.001	431730	20.82	20.12	3.4	Hexachlorobenzene
3.801	0.000	427001	4.196	-0.001	657917	39.89	39.73	0.4	Tetrachloro-m-xylene
9.318	-0.001	280044	10.428	-0.001	343832	38.57	38.83	0.7	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

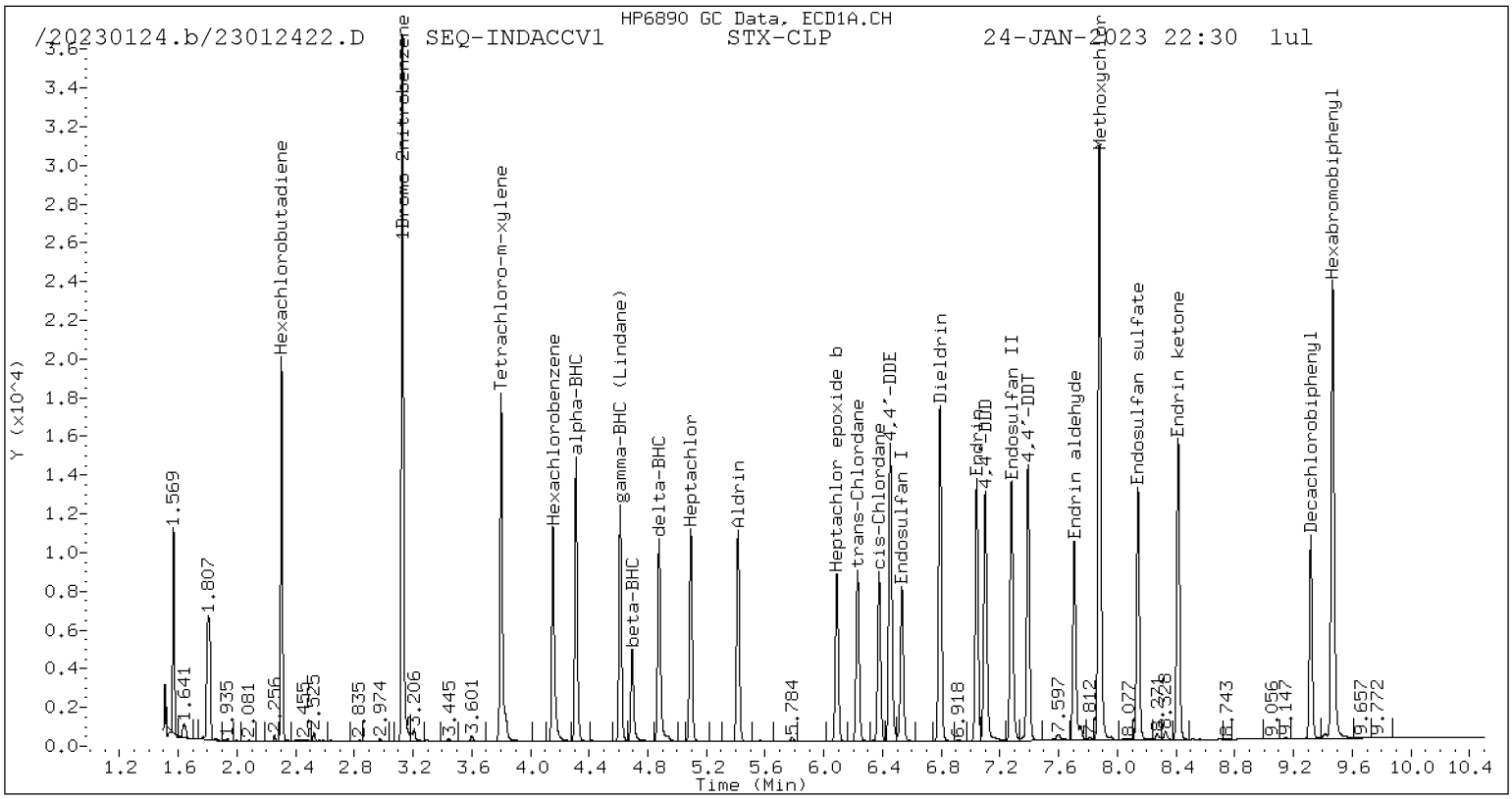
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	787176	17.1
Hexabromobiphenyl	609723	716494	17.5

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1176503	16.9
Hexabromobiphenyl	769764	801079	4.1

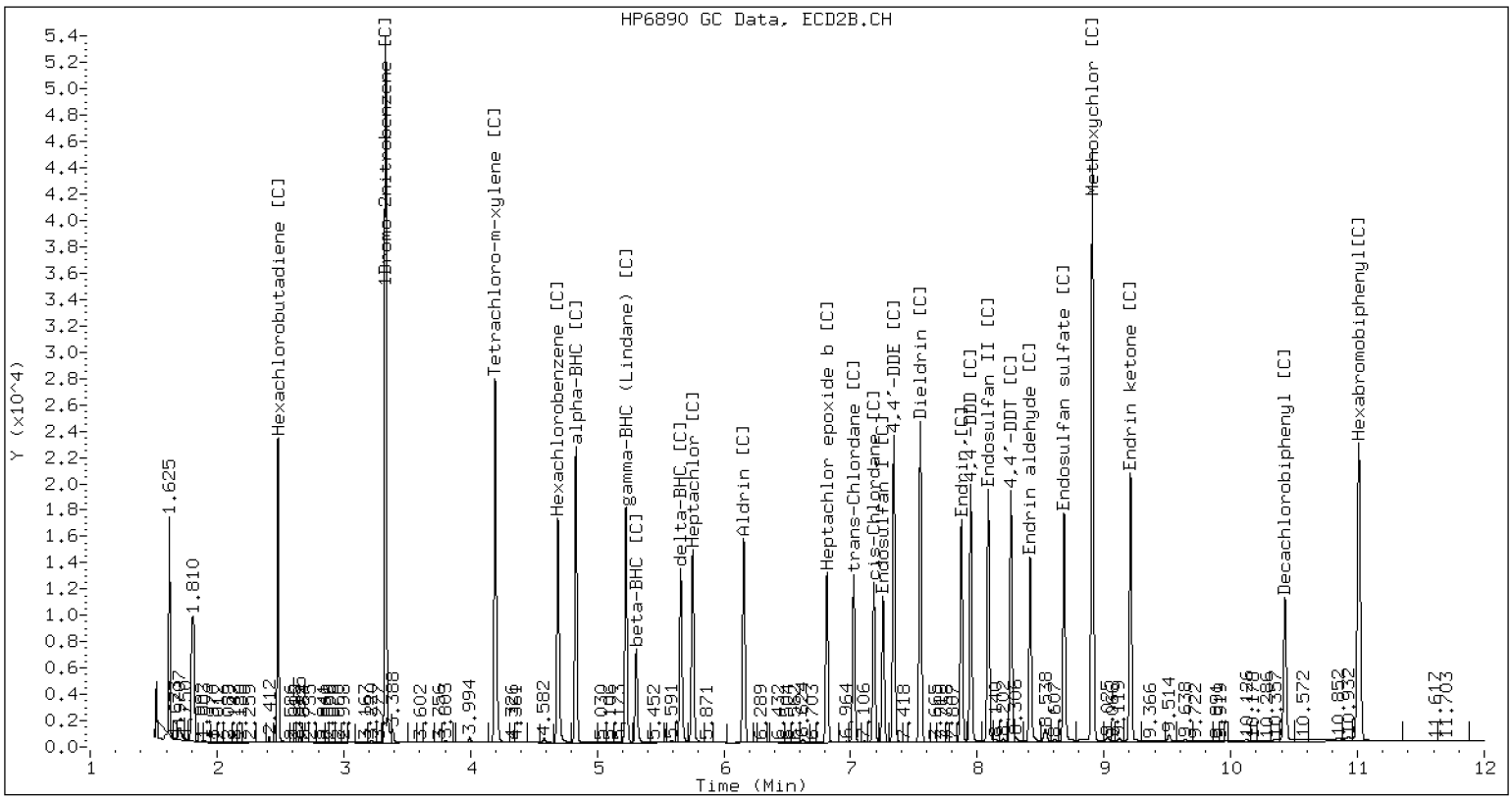
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230124.b/B20230124.b/23012422.D SEQ-INDACCV1 CLP2



CLP-2 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	23012436.D	Calibration Date:	12/14/2022
Sequence:	SLA0299	Injection Date:	01/25/23
Lab Sample ID:	SLA0299-CCV2	Injection Time:	02:41
Sequence Name:	INDAE		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	20.8	1.4298940	1.4854880		3.9	+/-20
Hexachlorobenzene [2C]	A	20.000	19.9	1.4591090	1.4514900		-0.5	+/-20
Decachlorobiphenyl	A	40.000	38.4	0.8105886	0.7789218		-3.9	+/-20
Decachlorobiphenyl [2C]	A	40.000	38.8	0.8841805	0.8565596		-3.1	+/-20
Tetrachlorometaxylene	A	40.000	39.9	1.0879510	1.0844790		-0.3	+/-20
Tetrachlorometaxylene [2C]	A	40.000	39.3	1.1261070	1.1075550		-1.6	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230124.b/23012436.D
Data file 2: /20230124.b/B20230124.b/23012436.D
Method: \20230124.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: SEQ-INDACCV2
Client ID:
Injection Date: 25-JAN-2023 02:41
Report Date: 01/27/2023 08:04
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.311	0.000	347952	4.832	-0.001	528247	22.56	21.79	3.5	alpha-BHC
4.694	0.001	134454	5.309	-0.000	192213	22.65	20.85	8.2	beta-BHC
4.876	0.000	304863	5.660	-0.001	374802	24.19	18.77	25.2	delta-BHC
4.612	0.000	298238	5.228	-0.001	446289	22.31	21.69	2.8	gamma-BHC (Lindane)
5.094	0.001	284164	5.754	-0.000	404979	23.89	21.73	9.5	Heptachlor
5.414	0.000	296860	6.157	-0.001	418720	22.27	19.68	12.3	Aldrin
6.088	-0.001	250307	6.813	-0.001	336952	21.65	19.15	12.3	Heptachlor epoxide b
6.531	0.000	233802	7.256	-0.001	286942	22.04	18.50	17.4	Endosulfan I
6.791	-0.000	492552	7.550	-0.001	631847	43.22	36.87	15.8	Dieldrin
6.452	0.001	468016	7.341	-0.001	601247	44.23	38.26	14.5	4,4'-DDE
7.041	-0.000	354859	7.875	-0.001	415247	37.48	35.98	4.1	Endrin
7.278	0.000	399886	8.087	-0.001	495396	46.92	41.88	11.4	Endosulfan II
7.099	-0.000	399615	7.948	-0.001	495666	46.85	44.15	5.9	4,4'-DDD
8.140	-0.000	387657	8.685	-0.002	459244	47.90	44.21	8.0	Endosulfan sulfate
7.391	0.000	397984	8.266	-0.001	473810	46.17	43.73	5.4	4,4'-DDT
7.878	0.001	866994	8.908	-0.001	1107739	226.98	231.03	1.8	Methoxychlor
8.414	-0.000	427942	9.209	-0.001	518695	46.16	46.23	0.2	Endrin ketone
7.707	-0.000	319352	8.417	-0.001	379124	46.97	45.43	3.3	Endrin aldehyde
6.230	0.001	255518	7.024	-0.001	328981	21.76	18.75	14.9	trans-Chlordane
6.376	0.001	250156	7.184	-0.001	313863	21.24	18.28	15.0	cis-Chlordane
2.304	0.000	329567	2.482	-0.000	405602	20.40	17.62	14.6	Hexachlorobutadiene
4.154	0.001	297485	4.692	-0.000	438990	20.78	19.90	4.3	Hexachlorobenzene
3.801	0.001	434357	4.196	-0.000	669940	39.87	39.34	1.3	Tetrachloro-m-xylene
9.319	0.000	281271	10.428	-0.001	347633	38.44	38.75	0.8	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

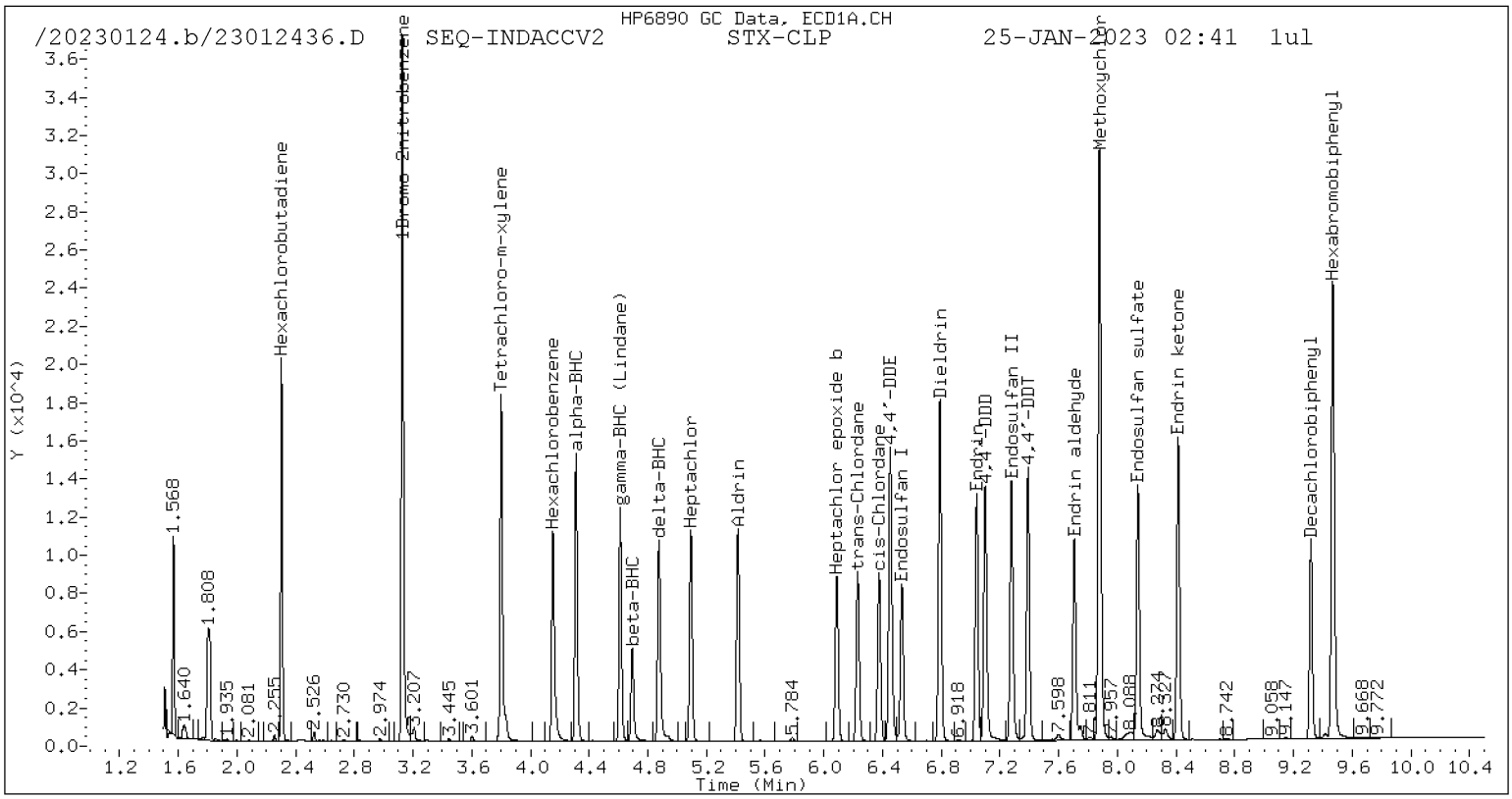
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	801043	19.1
Hexabromobiphenyl	609723	722206	18.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1209764	20.2
Hexabromobiphenyl	769764	811696	5.4

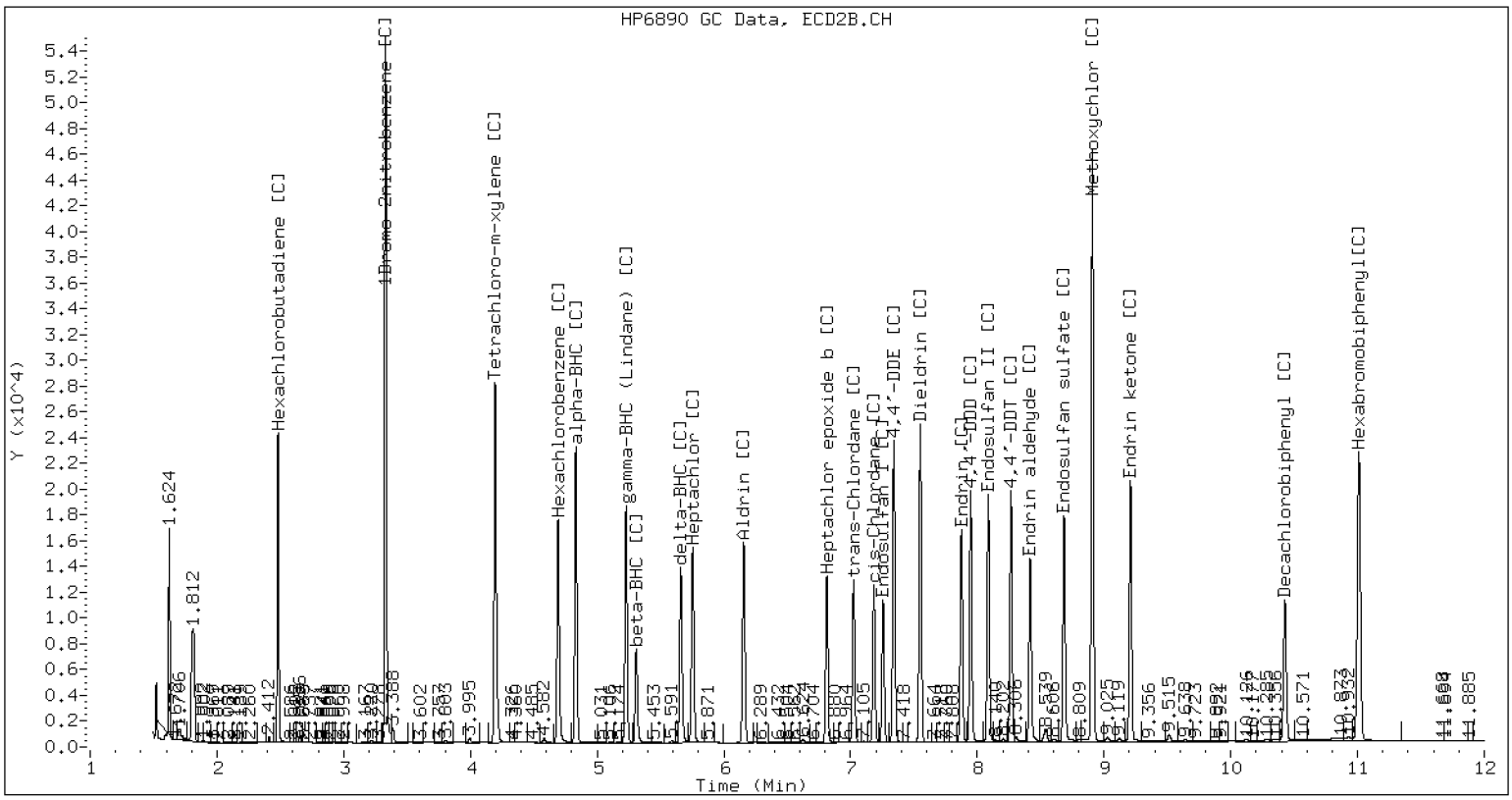
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230124.b/B20230124.b/23012436.D SEQ-INDACCV2 CLP2



CLP-2 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	23012607.D	Calibration Date:	12/14/2022
Sequence:	SLA0301	Injection Date:	01/26/23
Lab Sample ID:	SLA0301-CCV1	Injection Time:	10:24
Sequence Name:	INDAE		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	21.3	1.4298940	1.5214980		6.4	+/-20
Hexachlorobenzene [2C]	A	20.000	21.0	1.4591090	1.5285020		4.8	+/-20
Decachlorobiphenyl	A	40.000	37.5	0.8105886	0.7607995		-6.1	+/-20
Decachlorobiphenyl [2C]	A	40.000	39.0	0.8841805	0.8617837		-2.5	+/-20
Tetrachlorometaxylene	A	40.000	41.3	1.0879510	1.1243740		3.3	+/-20
Tetrachlorometaxylene [2C]	A	40.000	41.6	1.1261070	1.1722120		4.1	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230126.b/23012607.D
Data file 2: /20230126.b/B20230126.b/23012607.D
Method: \20230126.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: SEQ-INDACCV1
Client ID:
Injection Date: 26-JAN-2023 10:24
Report Date: 01/27/2023 08:21
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.310	-0.000	339611	4.832	-0.001	511197	23.22	22.93	1.3	alpha-BHC
4.693	0.000	130576	5.308	-0.001	187629	23.19	22.13	4.6	beta-BHC
4.876	0.000	294432	5.660	-0.002	360290	24.63	19.62	22.7	delta-BHC
4.611	-0.000	288782	5.227	-0.002	433226	22.77	22.90	0.5	gamma-BHC (Lindane)
5.092	-0.000	269916	5.753	-0.001	387499	23.92	22.61	5.6	Heptachlor
5.414	-0.000	292139	6.156	-0.002	422450	23.10	21.59	6.8	Aldrin
6.088	-0.001	245451	6.812	-0.002	340082	22.39	21.01	6.3	Heptachlor epoxide b
6.531	0.000	233461	7.255	-0.002	297269	23.20	20.84	10.7	Endosulfan I
6.791	-0.000	481231	7.549	-0.002	644664	44.52	40.91	8.5	Dieldrin
6.452	0.000	454003	7.341	-0.001	613242	45.23	42.43	6.4	4,4'-DDE
7.041	-0.001	372859	7.873	-0.002	455872	38.55	41.17	6.6	Endrin
7.277	-0.001	397574	8.085	-0.002	528110	45.66	46.53	1.9	Endosulfan II
7.099	-0.000	392441	7.947	-0.001	501479	45.03	46.56	3.3	4,4'-DDD
8.139	-0.001	355873	8.684	-0.002	457755	43.04	45.93	6.5	Endosulfan sulfate
7.391	-0.000	392258	8.265	-0.002	486958	44.54	46.84	5.0	4,4'-DDT
7.877	0.000	860263	8.907	-0.002	1075881	220.45	233.86	5.9	Methoxychlor
8.413	-0.001	416632	9.208	-0.002	506644	43.99	47.06	6.8	Endrin ketone
7.706	-0.001	311865	8.416	-0.002	378620	44.90	47.29	5.2	Endrin aldehyde
6.230	0.000	253369	7.024	-0.002	341829	22.75	21.18	7.1	trans-Chlordane
6.376	0.000	247264	7.183	-0.002	325268	22.14	20.60	7.2	cis-Chlordane
2.301	-0.003	316530	2.479	-0.003	368906	20.66	17.42	17.0	Hexachlorobutadiene
4.152	-0.001	288996	4.691	-0.001	425146	21.28	20.95	1.6	Hexachlorobenzene
3.800	-0.000	427131	4.195	-0.001	652091	41.34	41.64	0.7	Tetrachloro-m-xylene
9.318	-0.001	280673	10.427	-0.002	335576	37.54	38.99	3.8	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

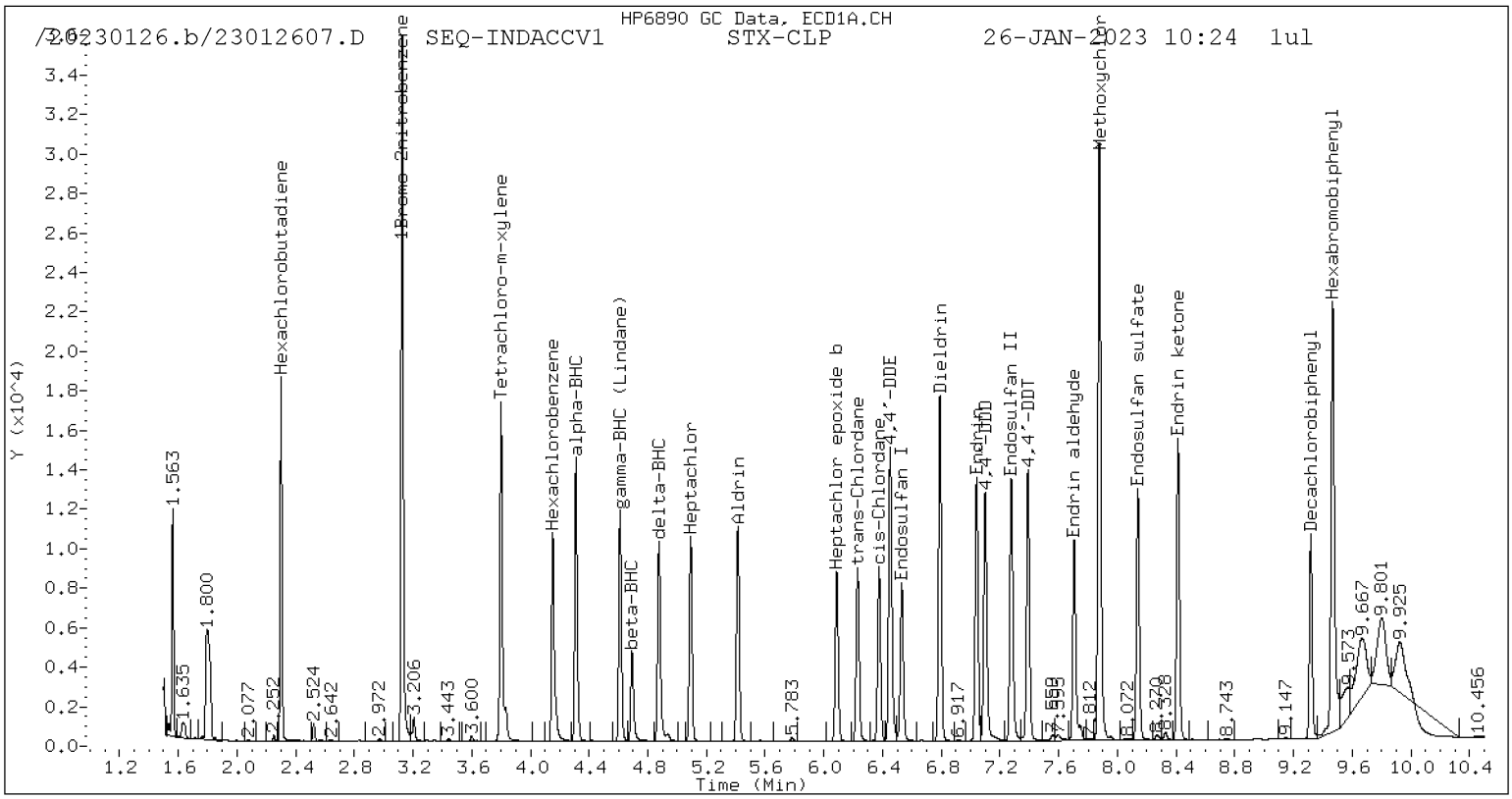
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	759767	13.0
Hexabromobiphenyl	609723	737837	21.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1112582	10.5
Hexabromobiphenyl	769764	778794	1.2

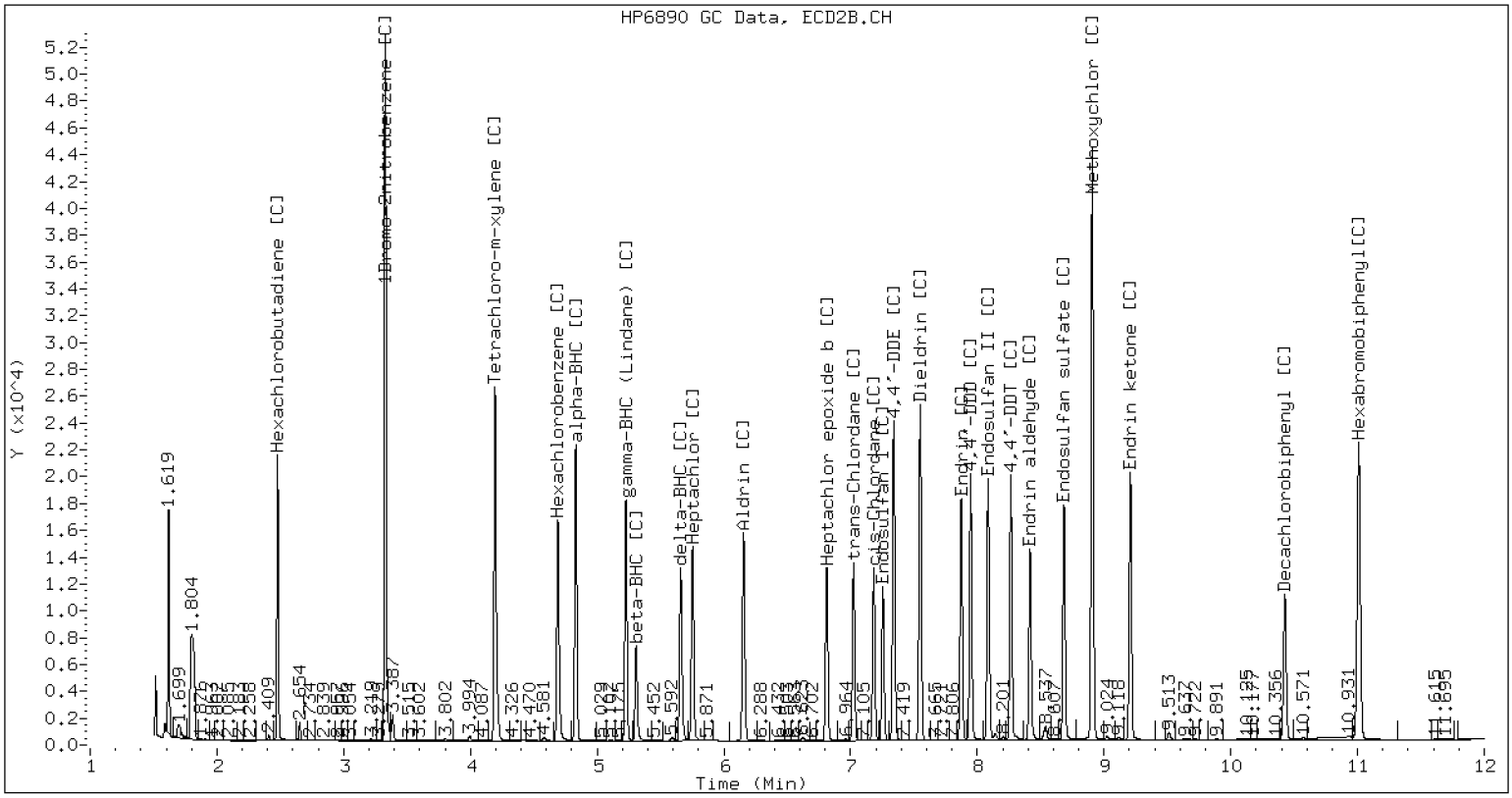
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

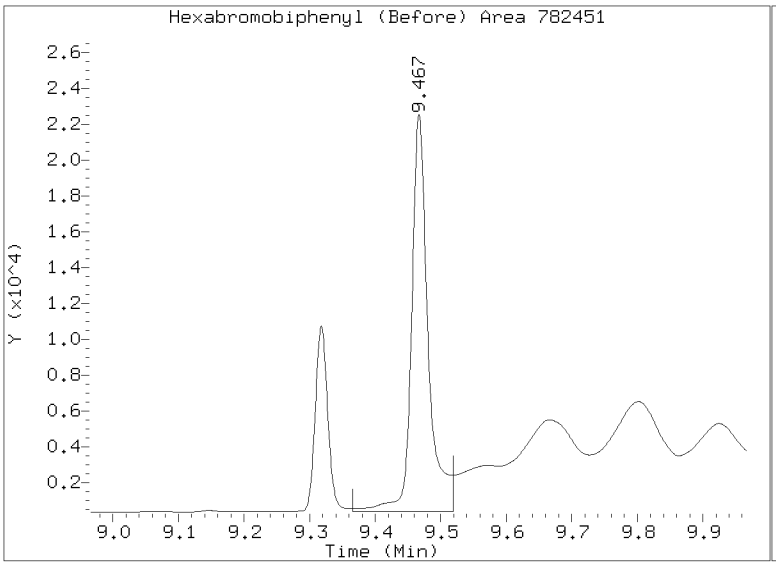
/20230126.b/B20230126.b/23012607.D SEQ-INDACCV1 CLP2

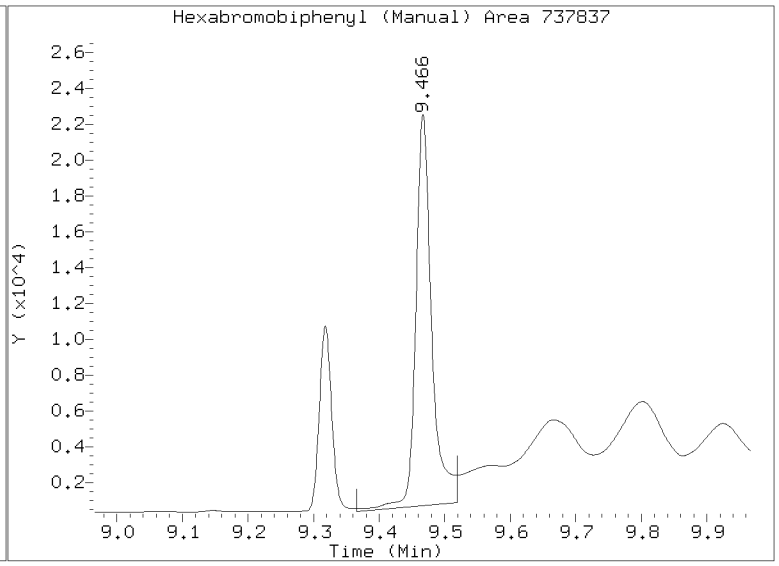


CLP-2 Manual Integration: NO

Manual Peak Adjustment Report, STX-CLP

Datafile: /20230126.b/23012607.D
Injection Date: 26-JAN-2023 10:24
Lab ID:SEQ-INDACCV1 Client ID:
Report Date: 01/27/2023 08:21





Analytical Resources, LLC
Analytical Chemists and Consultants

PERFORMANCE EVAUATION DATA SHEET

DS1

EPA 8081B

Laboratory:	Analytical Resources, LLC	Laboratory ID:	SKL0233-PEM1	File ID:	22121404.D
Client:	Anchor QEA, LLC	Matrix:	Water	Instrument:	ECD6
Project:	AOC5 MR Phase 1	Analyzed:	12/14/2022	Sequence:	SKL0233
SDG:	23A0171	Calibration:	FL00041	Column:	1

PEM COMPOUND	RT	Response
4,4'-DDE	6.49	6258
Endrin	7.08	745471
4,4'-DDD	7.14	15566
Endrin Aldehyde	7.75	21328
4,4'-DDT	7.43	629664
Endrin Ketone	8.45	19276

4,4'-DDT %Breakdown (1): 3.3

Endrin %Breakdown (1): 5.2

Analytical Resources, LLC
Analytical Chemists and Consultants

PERFORMANCE EVAUATION DATA SHEET

DS1

EPA 8081B

Laboratory:	Analytical Resources, LLC	Laboratory ID:	SKL0233-PEM1	File ID:	22121404.D
Client:	Anchor QEA, LLC	Matrix:	Water	Instrument:	ECD6
Project:	AOC5 MR Phase 1	Analyzed:	12/14/2022	Sequence:	SKL0233
SDG:	23A0171	Calibration:	FL00041	Column:	2

PEM COMPOUND	RT	Response
4,4'-DDE	7.37	11906
Endrin	7.91	1029194
4,4'-DDD	7.98	32697
Endrin Aldehyde	8.45	31426
4,4'-DDT	8.30	890195
Endrin Ketone	9.24	28268

4,4'-DDT %Breakdown (1): 4.8

Endrin %Breakdown (1): 5.5

7E

8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: SEQ-PEM1 InstID,Data File: ecd6.i, 22121404.D

Analysis Date: 14-DEC-2022 20:20 Init. Calib. Date: 14-DEC-2022

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene	3.151	683485
4,4'-DDE	6.490	6258
Endrin	7.082	745471
4,4'-DDD	7.136	15566
4,4'-DDT	7.428	629664
Endrin ketone	8.453	19276
Endrin aldehyde	7.747	21328
Hexabromobiphenyl	9.504	619012
Tetrachloro-m-xylene	3.828	1161664
Decachlorobiphenyl	9.355	833312

DDT Percent Breakdown = 3.3 %
((6258+15566) * 100)/(6258+15566+629664)

Endrin Percent Breakdown = 5.2 %
((21328+19276) * 100)/(21328+19276+745471)

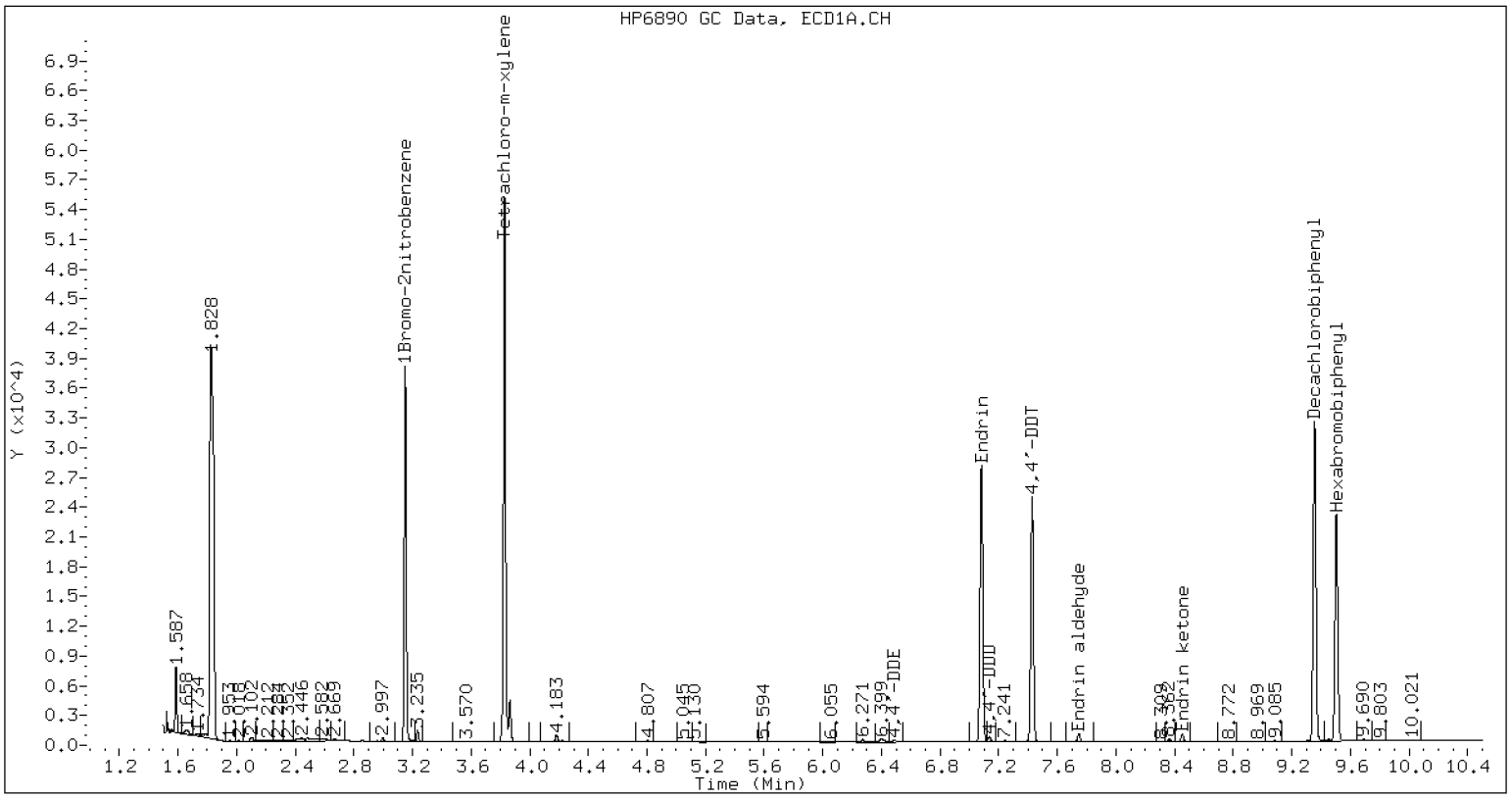
GC Column: STX-CLP2 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene [C]	3.350	1005375
4,4'-DDE [C]	7.370	11906
Endrin [C]	7.907	1029194
4,4'-DDD [C]	7.977	32697
4,4'-DDT [C]	8.295	890195
Endrin ketone [C]	9.239	28268
Endrin aldehyde [C]	8.448	31426
Hexabromobiphenyl[C]	11.054	772586
Tetrachloro-m-xylene [C]	4.220	1890294
Decachlorobiphenyl [C]	10.467	1140978

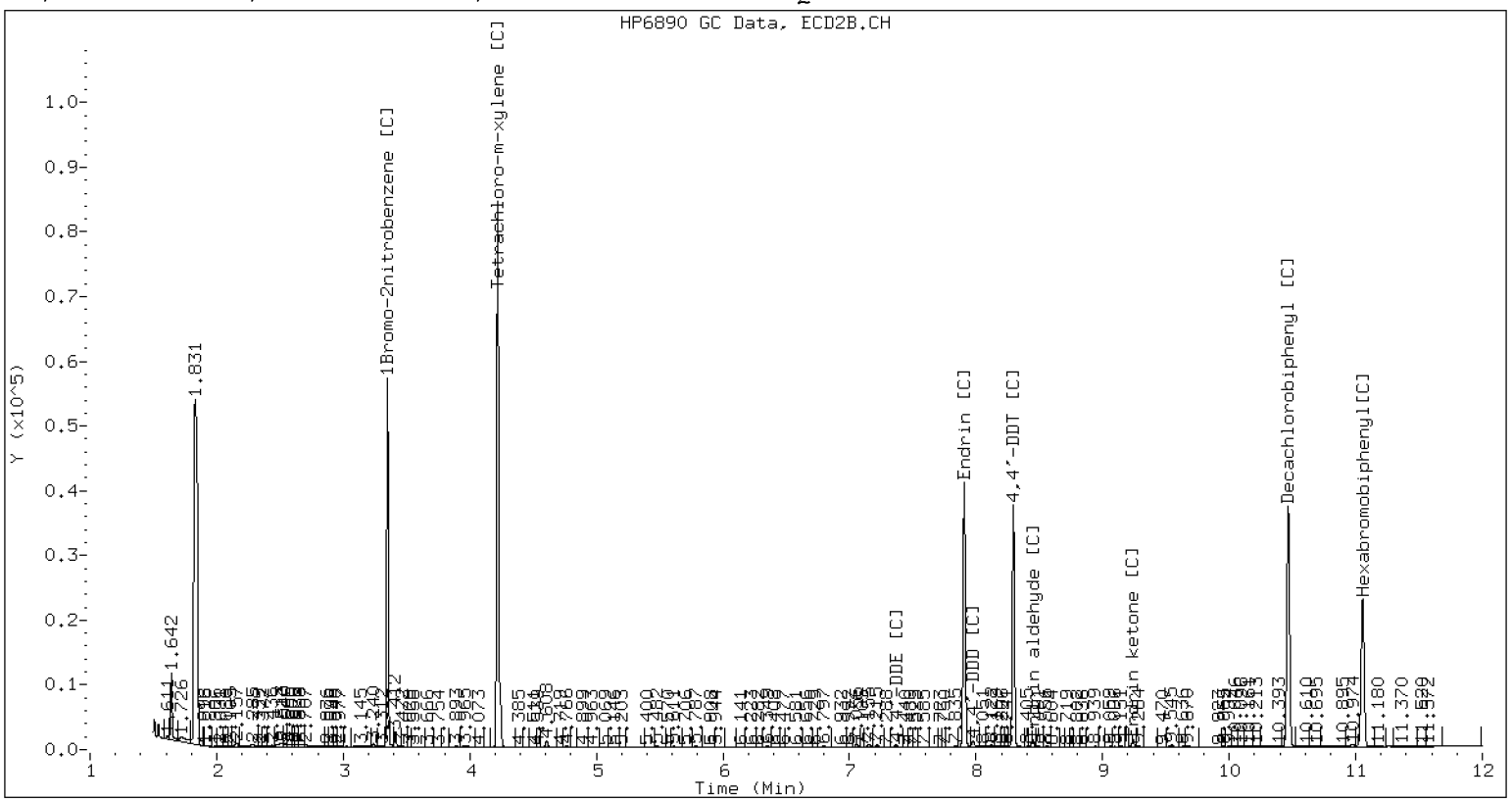
DDT Percent Breakdown = 4.8 %
((11906+32697) * 100)/(11906+32697+890195)

Endrin Percent Breakdown = 5.5 %
((31426+28268) * 100)/(31426+28268+1029194)

/20221214.b/22121404.D SEQ-PEM1 STX-CLP 14-DEC-2022 20:20 1ul



/20221214.b/B20221214.b/22121404.D SEQ-PEM1 CLP2 14-DEC-2022



7E

8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: SEQ-PEM1 InstID,Data File: ecd6.i, 22121404.D

Analysis Date: 14-DEC-2022 20:20 Init. Calib. Date: 14-DEC-2022

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene	3.151	683485
4,4'-DDE	6.490	6258
Endrin	7.082	745471
4,4'-DDD	7.136	15566
4,4'-DDT	7.428	629664
Endrin ketone	8.453	19276
Endrin aldehyde	7.747	21328
Hexabromobiphenyl	9.504	619012
Tetrachloro-m-xylene	3.828	1161664
Decachlorobiphenyl	9.355	833312

DDT Percent Breakdown = 3.3 %
((6258+15566) * 100)/(6258+15566+629664)

Endrin Percent Breakdown = 5.2 %
((21328+19276) * 100)/(21328+19276+745471)

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312

Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312

Dual Column

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8081B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SKL0233
Instrument: ECD6
Calibration: FL00041

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Performance Mix	SKL0233-PEM1	22121404.D	22121404.D	NA	12/14/22 20:20
Cal Standard	SKL0233-CAL1	22121405.D	22121405.D	NA	12/14/22 20:38
Cal Standard	SKL0233-CAL2	22121406.D	22121406.D	NA	12/14/22 20:56
Cal Standard	SKL0233-CAL3	22121407.D	22121407.D	NA	12/14/22 21:14
Cal Standard	SKL0233-CAL4	22121408.D	22121408.D	NA	12/14/22 21:31
Cal Standard	SKL0233-CAL5	22121409.D	22121409.D	NA	12/14/22 21:49
Cal Standard	SKL0233-CAL6	22121410.D	22121410.D	NA	12/14/22 22:07
Cal Standard	SKL0233-CAL7	22121411.D	22121411.D	NA	12/14/22 22:25
Cal Standard	SKL0233-CAL8	22121412.D	22121412.D	NA	12/14/22 22:43
Cal Standard	SKL0233-CAL9	22121413.D	22121413.D	NA	12/14/22 23:01
Cal Standard	SKL0233-CALA	22121414.D	22121414.D	NA	12/14/22 23:19
Cal Standard	SKL0233-CALB	22121415.D	22121415.D	NA	12/14/22 23:36
Cal Standard	SKL0233-CALC	22121416.D	22121416.D	NA	12/14/22 23:54
Cal Standard	SKL0233-CALD	22121417.D	22121417.D	NA	12/15/22 00:12
Cal Standard	SKL0233-CALE	22121418.D	22121418.D	NA	12/15/22 00:30

Printed: 12/17/2022 10:57:45AM

ANALYSIS SEQUENCE

SKL0233

Instrument: ECD6 Element Column ID:
Calibration ID: FL00041

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SKL0233-PEM1	DS1	QC		1	K007286	K006953		
SKL0233-CAL1	INDAA	QC		2	K011594	K006953		
SKL0233-CAL2	INDAB	QC		3	K011593	K006953		
SKL0233-CAL3	INDAC	QC		4	K011592	K006953		
SKL0233-CAL4	INDAD	QC		5	K011591	K006953		
SKL0233-CAL5	INDAE	QC		6	K011590	K006953		
SKL0233-CAL6	INDAF	QC		7	K011589	K006953		
SKL0233-CAL7	INDAG	QC		8	K011463	K006953		
SKL0233-CAL8	WNDA	QC		9	K011595	K006953		
SKL0233-CAL9	WNDB	QC		10	K007148	K006953		
SKL0233-CALA	WNDC	QC		11	K007147	K006953		
SKL0233-CALB	WNDD	QC		12	K007146	K006953		
SKL0233-CALC	WNDE	QC		13	K007145	K006953		
SKL0233-CALD	WNDF	QC		14	K007144	K006953		
SKL0233-CALE	WNDG	QC		15	K007093	K006953		
SKL0233-CALM	NOS1	QC		16	K007375	K006953		
SKL0233-CALN	NOS2	QC		17	K007374	K006953		
SKL0233-CALO	NOS3	QC		18	K007373	K006953		
SKL0233-CALP	NOS4	QC		19	K007372	K006953		
SKL0233-CALQ	NOS5	QC		20	K007371	K006953		
SKL0233-CALR	NOS6	QC		21	K007370	K006953		
SKL0233-CALS	NOS7	QC		22	K007287	K006953		

Printed: 12/17/2022 10:57:45AM

ANALYSIS SEQUENCE

SKL0233

Instrument: ECD6 Element Column ID:
Calibration ID: FL00041

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SKL0233-CALF	TOXAPH1	QC		23	K011601	K006953		
SKL0233-CALG	TOXAPH2	QC		24	K011600	K006953		
SKL0233-CALH	TOXAPH3	QC		25	K011599	K006953		
SKL0233-CALI	TOXAPH4	QC		26	K011598	K006953		
SKL0233-CALJ	TOXAPH5	QC		27	K011597	K006953		
SKL0233-CALK	TOXAPH6	QC		28	K011596	K006953		
SKL0233-CALL	TOXAPH7	QC		29	K008546	K006953		

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	14-DEC-2022 19:27	22121401.D	1	RINSE	
2	14-DEC-2022 19:44	22121402.D	1	RINSE	
3	14-DEC-2022 20:02	22121403.D	1	SEQ-IBL1	
4	14-DEC-2022 20:20	22121404.D	1	SEQ-PEM1	
5	14-DEC-2022 20:38	22121405.D	1	SEQ-CAL1	
6	14-DEC-2022 20:56	22121406.D	1	SEQ-CAL2	
7	14-DEC-2022 21:14	22121407.D	1	SEQ-CAL3	
8	14-DEC-2022 21:31	22121408.D	1	SEQ-CAL4	
9	14-DEC-2022 21:49	22121409.D	1	SEQ-CAL5	
10	14-DEC-2022 22:07	22121410.D	1	SEQ-CAL6	
11	14-DEC-2022 22:25	22121411.D	1	SEQ-CAL7	
12	14-DEC-2022 22:43	22121412.D	1	SEQ-CAL8	
13	14-DEC-2022 23:01	22121413.D	1	SEQ-CAL9	
14	14-DEC-2022 23:19	22121414.D	1	SEQ-CALA	
15	14-DEC-2022 23:36	22121415.D	1	SEQ-CALB	
16	14-DEC-2022 23:54	22121416.D	1	SEQ-CALC	
17	15-DEC-2022 00:12	22121417.D	1	SEQ-CALD	
18	15-DEC-2022 00:30	22121418.D	1	SEQ-CALE	
19	15-DEC-2022 00:48	22121419.D	1	SEQ-SCV1	
20	15-DEC-2022 01:06	22121420.D	1	SEQ-SCV2	
21	15-DEC-2022 01:24	22121421.D	1	SEQ-CAL1A	
22	15-DEC-2022 01:42	22121422.D	1	SEQ-CAL2A	
23	15-DEC-2022 01:59	22121423.D	1	SEQ-CAL3A	
24	15-DEC-2022 02:17	22121424.D	1	SEQ-CAL4A	
25	15-DEC-2022 02:35	22121425.D	1	SEQ-CAL5A	
26	15-DEC-2022 02:53	22121426.D	1	SEQ-CAL6A	
27	15-DEC-2022 03:11	22121427.D	1	SEQ-CAL7A	
28	15-DEC-2022 03:29	22121428.D	1	SEQ-CAL8A	
29	15-DEC-2022 03:46	22121429.D	1	SEQ-CAL9A	
30	15-DEC-2022 04:04	22121430.D	1	SEQ-CALAA	
31	15-DEC-2022 04:22	22121431.D	1	SEQ-CALAB	
32	15-DEC-2022 04:40	22121432.D	1	SEQ-CALAC	
33	15-DEC-2022 04:58	22121433.D	1	SEQ-CALAD	
34	15-DEC-2022 05:16	22121434.D	1	SEQ-CALAE	
35	15-DEC-2022 05:33	22121435.D	1	SEQ-PEM2	
36	15-DEC-2022 05:51	22121436.D	1	SEQ-ICV1	
37	15-DEC-2022 06:09	22121437.D	1	SEQ-ICV2	
38	15-DEC-2022 06:27	22121438.D	1	SEQ-ICV3	
39	15-DEC-2022 06:45	22121439.D	1	SEQ-ICV4	
40	15-DEC-2022 07:03	22121440.D	1	BKK0688-BLK1	
41	15-DEC-2022 07:21	22121441.D	1	BKK0688-BS1	
42	15-DEC-2022 07:39	22121442.D	1	BKK0688-BS2	
43	15-DEC-2022 07:57	22121443.D	1	BKK0688-BS3	
44	15-DEC-2022 08:15	22121444.D	1	BKK0688-BSD1	
45	15-DEC-2022 08:32	22121445.D	1	BKK0142-BLK1	
46	15-DEC-2022 08:50	22121446.D	1	BKK0142-BS1	
47	15-DEC-2022 09:08	22121447.D	1	BKK0142-BS2	
48	15-DEC-2022 09:26	22121448.D	1	BKK0142-BSD1	
49	15-DEC-2022 09:44	22121449.D	1	BKK0142-MS1	
50	15-DEC-2022 10:02	22121450.D	1	BKK0142-MSD1	

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b p

	Inject Date/Time	Filename	DF	LabID	ClientID
51	15-DEC-2022 10:20	22121451.D	1	22J0513-01	
52	15-DEC-2022 10:38	22121452.D	1	22J0513-04	
53	15-DEC-2022 10:55	22121453.D	1	22J0535-01	
54	15-DEC-2022 11:13	22121454.D	1	22K0429-01	
55	15-DEC-2022 11:31	22121455.D	1	22K0429-02	
56	15-DEC-2022 11:49	22121456.D	1	22K0429-03	
57	15-DEC-2022 12:07	22121457.D	1	SEQ-PEM3	
58	15-DEC-2022 12:25	22121458.D	1	SEQ-CCV1	
59	15-DEC-2022 12:43	22121459.D	1	SEQ-CCV2	
60	15-DEC-2022 13:01	22121460.D	1	SEQ-CCV3	
61	15-DEC-2022 13:19	22121461.D	1	SEQ-CCV4	
62	15-DEC-2022 13:36	22121462.D	1	BKK0380-BLK1	
63	15-DEC-2022 13:54	22121463.D	1	BKK0380-BS1	
64	15-DEC-2022 14:12	22121464.D	1	BKK0380-BSD1	
65	15-DEC-2022 14:30	22121465.D	1	22K0157-01	
66	15-DEC-2022 14:48	22121466.D	1	22K0230-01	
67	15-DEC-2022 15:06	22121467.D	1	22K0231-01	
68	15-DEC-2022 15:24	22121468.D	1	BKK0382-BLK1	
69	15-DEC-2022 15:42	22121469.D	1	BKK0382-BS1	
70	15-DEC-2022 16:00	22121470.D	1	BKK0382-BS2	
71	15-DEC-2022 16:18	22121471.D	1	BKK0382-BSD1	
72	15-DEC-2022 16:35	22121472.D	1	22K0075-01	
73	15-DEC-2022 16:53	22121473.D	1	SEQ-PEM4	
74	15-DEC-2022 17:11	22121474.D	1	SEQ-CCV5	
75	15-DEC-2022 17:29	22121475.D	1	SEQ-CCV6	
76	15-DEC-2022 17:47	22121476.D	1	SEQ-CCV7	
77	15-DEC-2022 18:05	22121477.D	1	SEQ-CCV8	
78	15-DEC-2022 18:23	22121478.D	1	BKK0537-BLK1	
79	15-DEC-2022 18:40	22121479.D	1	BKK0537-BS1	
80	15-DEC-2022 18:58	22121480.D	1	BKK0537-BS2	
81	15-DEC-2022 19:16	22121481.D	1	22K0194-01	
82	15-DEC-2022 19:34	22121482.D	1	22K0194-01RE1	10
83	15-DEC-2022 19:52	22121483.D	1	SEQ-PEM5	
84	15-DEC-2022 20:09	22121484.D	1	SEQ-CCV9	
85	15-DEC-2022 20:27	22121485.D	1	SEQ-CCVA	
86	15-DEC-2022 20:45	22121486.D	1	SEQ-CCVB	
87	15-DEC-2022 21:03	22121487.D	1	SEQ-CCVC	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

ARI Job No.: RINS Method: PEST.m Instrument: ecd6.i Date: 14-DEC-2022

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1927	22121401.D	RINSE		1	NO MANUAL INTEGRATION
1944	22121402.D	RINSE		1	NO MANUAL INTEGRATION
2002	22121403.D	SEQ-IBL1		1	NO MANUAL INTEGRATION
2020	22121404.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
2038	22121405.D	SEQ-CAL1		1	NO MANUAL INTEGRATION
2056	22121406.D	SEQ-CAL2		1	NO MANUAL INTEGRATION
2114	22121407.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
2131	22121408.D	SEQ-CAL4		1	NO MANUAL INTEGRATION
2149	22121409.D	SEQ-CAL5		1	NO MANUAL INTEGRATION
2207	22121410.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
2225	22121411.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
2243	22121412.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
2301	22121413.D	SEQ-CAL9		1	NO MANUAL INTEGRATION
2319	22121414.D	SEQ-CALA		1	NO MANUAL INTEGRATION
2336	22121415.D	SEQ-CALB		1	NO MANUAL INTEGRATION
2354	22121416.D	SEQ-CALC		1	NO MANUAL INTEGRATION
0012	22121417.D	SEQ-CALD		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0030	22121418.D	SEQ-CALE		1	NO MANUAL INTEGRATION
0048	22121419.D	SEQ-SCV1		1	NO MANUAL INTEGRATION
0106	22121420.D	SEQ-SCV2		1	NO MANUAL INTEGRATION
0124	22121421.D	SEQ-CAL1A		1	NO MANUAL INTEGRATION
0142	22121422.D	SEQ-CAL2A		1	NO MANUAL INTEGRATION
0159	22121423.D	SEQ-CAL3A		1	NO MANUAL INTEGRATION
0217	22121424.D	SEQ-CAL4A		1	NO MANUAL INTEGRATION
0235	22121425.D	SEQ-CAL5A		1	NO MANUAL INTEGRATION
0253	22121426.D	SEQ-CAL6A		1	NO MANUAL INTEGRATION
0311	22121427.D	SEQ-CAL7A		1	NO MANUAL INTEGRATION
0329	22121428.D	SEQ-CAL8A		1	NO MANUAL INTEGRATION
0346	22121429.D	SEQ-CAL9A		1	NO MANUAL INTEGRATION
0404	22121430.D	SEQ-CALAA		1	NO MANUAL INTEGRATION
0422	22121431.D	SEQ-CALAB		1	NO MANUAL INTEGRATION
0440	22121432.D	SEQ-CALAC		1	NO MANUAL INTEGRATION
0458	22121433.D	SEQ-CALAD		1	NO MANUAL INTEGRATION
0516	22121434.D	SEQ-CALAE		1	NO MANUAL INTEGRATION
0533	22121435.D	SEQ-PEM2		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0551	22121436.D	SEQ-ICV1		1	NO MANUAL INTEGRATION
0609	22121437.D	SEQ-ICV2		1	NO MANUAL INTEGRATION
0627	22121438.D	SEQ-ICV3		1	NO MANUAL INTEGRATION
0645	22121439.D	SEQ-ICV4		1	NO MANUAL INTEGRATION
0703	22121440.D	BKK0688-BLK1		1	NO MANUAL INTEGRATION
0721	22121441.D	BKK0688-BS1		1	NO MANUAL INTEGRATION
0739	22121442.D	BKK0688-BS2		1	NO MANUAL INTEGRATION
0757	22121443.D	BKK0688-BS3		1	NO MANUAL INTEGRATION
0815	22121444.D	BKK0688-BSD1		1	NO MANUAL INTEGRATION
0832	22121445.D	BKK0142-BLK1		1	NO MANUAL INTEGRATION
0850	22121446.D	BKK0142-BS1		1	NO MANUAL INTEGRATION
0908	22121447.D	BKK0142-BS2		1	NO MANUAL INTEGRATION
0926	22121448.D	BKK0142-BSD1		1	NO MANUAL INTEGRATION
0944	22121449.D	BKK0142-MS1		1	NO MANUAL INTEGRATION
1002	22121450.D	BKK0142-MSD1		1	NO MANUAL INTEGRATION
1020	22121451.D	22J0513-01		1	NO MANUAL INTEGRATION
1038	22121452.D	22J0513-04		1	NO MANUAL INTEGRATION
1055	22121453.D	22J0535-01		1	trans-Chlordane,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1113	22121454.D	22K0429-01		1	Heptachlor epoxide b,
1131	22121455.D	22K0429-02		1	Heptachlor epoxide b,
1149	22121456.D	22K0429-03		1	Hexachlorobenzene,
1207	22121457.D	SEQ-PEM3		1	NO MANUAL INTEGRATION
1225	22121458.D	SEQ-CCV1		1	NO MANUAL INTEGRATION
1243	22121459.D	SEQ-CCV2		1	NO MANUAL INTEGRATION
1301	22121460.D	SEQ-CCV3		1	NO MANUAL INTEGRATION
1319	22121461.D	SEQ-CCV4		1	NO MANUAL INTEGRATION
1336	22121462.D	BKK0380-BLK1		1	NO MANUAL INTEGRATION
1354	22121463.D	BKK0380-BS1		1	NO MANUAL INTEGRATION
1412	22121464.D	BKK0380-BSD1		1	NO MANUAL INTEGRATION
1430	22121465.D	22K0157-01		1	NO MANUAL INTEGRATION
1448	22121466.D	22K0230-01		1	NO MANUAL INTEGRATION
1506	22121467.D	22K0231-01		1	NO MANUAL INTEGRATION
1524	22121468.D	BKK0382-BLK1		1	NO MANUAL INTEGRATION
1542	22121469.D	BKK0382-BS1		1	NO MANUAL INTEGRATION
1600	22121470.D	BKK0382-BS2		1	NO MANUAL INTEGRATION
1618	22121471.D	BKK0382-BSD1		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1635	22121472.D	22K0075-01		1	NO MANUAL INTEGRATION
1653	22121473.D	SEQ-PEM4		1	NO MANUAL INTEGRATION
1711	22121474.D	SEQ-CCV5		1	NO MANUAL INTEGRATION
1729	22121475.D	SEQ-CCV6		1	NO MANUAL INTEGRATION
1747	22121476.D	SEQ-CCV7		1	NO MANUAL INTEGRATION
1805	22121477.D	SEQ-CCV8		1	NO MANUAL INTEGRATION
1823	22121478.D	BKK0537-BLK1		1	NO MANUAL INTEGRATION
1840	22121479.D	BKK0537-BS1		1	NO MANUAL INTEGRATION
1858	22121480.D	BKK0537-BS2		1	NO MANUAL INTEGRATION
1916	22121481.D	22K0194-01		1	NO MANUAL INTEGRATION
1934	22121482.D	22K0194-01RE1	10	1	NO MANUAL INTEGRATION
1952	22121483.D	SEQ-PEM5		1	NO MANUAL INTEGRATION
2009	22121484.D	SEQ-CCV9		1	NO MANUAL INTEGRATION
2027	22121485.D	SEQ-CCVA		1	NO MANUAL INTEGRATION
2045	22121486.D	SEQ-CCVB		1	NO MANUAL INTEGRATION
2103	22121487.D	SEQ-CCVC		1	NO MANUAL INTEGRATION
1927	22121401.D	RINSE		1	NO MANUAL INTEGRATION
1944	22121402.D	RINSE		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2002	22121403.D	SEQ-IBL1		1	NO MANUAL INTEGRATION
2020	22121404.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
2038	22121405.D	SEQ-CAL1		1	NO MANUAL INTEGRATION
2056	22121406.D	SEQ-CAL2		1	NO MANUAL INTEGRATION
2114	22121407.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
2131	22121408.D	SEQ-CAL4		1	NO MANUAL INTEGRATION
2149	22121409.D	SEQ-CAL5		1	NO MANUAL INTEGRATION
2207	22121410.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
2225	22121411.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
2243	22121412.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
2301	22121413.D	SEQ-CAL9		1	NO MANUAL INTEGRATION
2319	22121414.D	SEQ-CALA		1	NO MANUAL INTEGRATION
2336	22121415.D	SEQ-CALB		1	NO MANUAL INTEGRATION
2354	22121416.D	SEQ-CALC		1	NO MANUAL INTEGRATION
0012	22121417.D	SEQ-CALD		1	NO MANUAL INTEGRATION
0030	22121418.D	SEQ-CALE		1	NO MANUAL INTEGRATION
0048	22121419.D	SEQ-SCV1		1	NO MANUAL INTEGRATION
0106	22121420.D	SEQ-SCV2		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0124	22121421.D	SEQ-CAL1A		1	NO MANUAL INTEGRATION
0142	22121422.D	SEQ-CAL2A		1	NO MANUAL INTEGRATION
0159	22121423.D	SEQ-CAL3A		1	NO MANUAL INTEGRATION
0217	22121424.D	SEQ-CAL4A		1	NO MANUAL INTEGRATION
0235	22121425.D	SEQ-CAL5A		1	NO MANUAL INTEGRATION
0253	22121426.D	SEQ-CAL6A		1	NO MANUAL INTEGRATION
0311	22121427.D	SEQ-CAL7A		1	NO MANUAL INTEGRATION
0329	22121428.D	SEQ-CAL8A		1	NO MANUAL INTEGRATION
0346	22121429.D	SEQ-CAL9A		1	NO MANUAL INTEGRATION
0404	22121430.D	SEQ-CALAA		1	NO MANUAL INTEGRATION
0422	22121431.D	SEQ-CALAB		1	NO MANUAL INTEGRATION
0440	22121432.D	SEQ-CALAC		1	NO MANUAL INTEGRATION
0458	22121433.D	SEQ-CALAD		1	NO MANUAL INTEGRATION
0516	22121434.D	SEQ-CALAE		1	NO MANUAL INTEGRATION
0533	22121435.D	SEQ-PEM2		1	NO MANUAL INTEGRATION
0551	22121436.D	SEQ-ICV1		1	NO MANUAL INTEGRATION
0609	22121437.D	SEQ-ICV2		1	NO MANUAL INTEGRATION
0627	22121438.D	SEQ-ICV3		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0645	22121439.D	SEQ-ICV4		1	NO MANUAL INTEGRATION
0703	22121440.D	BKK0688-BLK1		1	NO MANUAL INTEGRATION
0721	22121441.D	BKK0688-BS1		1	NO MANUAL INTEGRATION
0739	22121442.D	BKK0688-BS2		1	NO MANUAL INTEGRATION
0757	22121443.D	BKK0688-BS3		1	NO MANUAL INTEGRATION
0815	22121444.D	BKK0688-BSD1		1	NO MANUAL INTEGRATION
0832	22121445.D	BKK0142-BLK1		1	NO MANUAL INTEGRATION
0850	22121446.D	BKK0142-BS1		1	NO MANUAL INTEGRATION
0908	22121447.D	BKK0142-BS2		1	NO MANUAL INTEGRATION
0926	22121448.D	BKK0142-BSD1		1	NO MANUAL INTEGRATION
0944	22121449.D	BKK0142-MS1		1	NO MANUAL INTEGRATION
1002	22121450.D	BKK0142-MSD1		1	NO MANUAL INTEGRATION
1020	22121451.D	22J0513-01		1	NO MANUAL INTEGRATION
1038	22121452.D	22J0513-04		1	NO MANUAL INTEGRATION
1055	22121453.D	22J0535-01		1	trans-Chlordane [C],
1113	22121454.D	22K0429-01		1	NO MANUAL INTEGRATION
1131	22121455.D	22K0429-02		1	Aldrin [C], Heptachlor epoxide b [C], trans-Chlordane [C],
1149	22121456.D	22K0429-03		1	Aldrin [C],

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1207	22121457.D	SEQ-PEM3		1	NO MANUAL INTEGRATION
1225	22121458.D	SEQ-CCV1		1	NO MANUAL INTEGRATION
1243	22121459.D	SEQ-CCV2		1	NO MANUAL INTEGRATION
1301	22121460.D	SEQ-CCV3		1	NO MANUAL INTEGRATION
1319	22121461.D	SEQ-CCV4		1	NO MANUAL INTEGRATION
1336	22121462.D	BKK0380-BLK1		1	NO MANUAL INTEGRATION
1354	22121463.D	BKK0380-BS1		1	NO MANUAL INTEGRATION
1412	22121464.D	BKK0380-BSD1		1	NO MANUAL INTEGRATION
1430	22121465.D	22K0157-01		1	NO MANUAL INTEGRATION
1448	22121466.D	22K0230-01		1	NO MANUAL INTEGRATION
1506	22121467.D	22K0231-01		1	NO MANUAL INTEGRATION
1524	22121468.D	BKK0382-BLK1		1	NO MANUAL INTEGRATION
1542	22121469.D	BKK0382-BS1		1	NO MANUAL INTEGRATION
1600	22121470.D	BKK0382-BS2		1	NO MANUAL INTEGRATION
1618	22121471.D	BKK0382-BSD1		1	NO MANUAL INTEGRATION
1635	22121472.D	22K0075-01		1	NO MANUAL INTEGRATION
1653	22121473.D	SEQ-PEM4		1	NO MANUAL INTEGRATION
1711	22121474.D	SEQ-CCV5		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1729	22121475.D	SEQ-CCV6		1	NO MANUAL INTEGRATION
1747	22121476.D	SEQ-CCV7		1	NO MANUAL INTEGRATION
1805	22121477.D	SEQ-CCV8		1	NO MANUAL INTEGRATION
1823	22121478.D	BKK0537-BLK1		1	NO MANUAL INTEGRATION
1840	22121479.D	BKK0537-BS1		1	NO MANUAL INTEGRATION
1858	22121480.D	BKK0537-BS2		1	NO MANUAL INTEGRATION
1916	22121481.D	22K0194-01		1	NO MANUAL INTEGRATION
1934	22121482.D	22K0194-01RE1	10	1	NO MANUAL INTEGRATION
1952	22121483.D	SEQ-PEM5		1	NO MANUAL INTEGRATION
2010	22121484.D	SEQ-CCV9		1	NO MANUAL INTEGRATION
2027	22121485.D	SEQ-CCVA		1	NO MANUAL INTEGRATION
2045	22121486.D	SEQ-CCVB		1	NO MANUAL INTEGRATION
2103	22121487.D	SEQ-CCVC		1	NO MANUAL INTEGRATION

Security Status Report

Date: 17-Dec-2022 10:57

22121401.D	Data Locked	jrains, 17-Dec-2022 10:57
22121402.D	Data Locked	jrains, 17-Dec-2022 10:57
22121403.D	Data Locked	jrains, 17-Dec-2022 10:57
22121404.D	Data Locked	jrains, 17-Dec-2022 10:57
22121405.D	Data Locked	jrains, 17-Dec-2022 10:57
22121406.D	Data Locked	jrains, 17-Dec-2022 10:57
22121407.D	Data Locked	jrains, 17-Dec-2022 10:57
22121408.D	Data Locked	jrains, 17-Dec-2022 10:57
22121409.D	Data Locked	jrains, 17-Dec-2022 10:57
22121410.D	Data Locked	jrains, 17-Dec-2022 10:57
22121411.D	Data Locked	jrains, 17-Dec-2022 10:57
22121412.D	Data Locked	jrains, 17-Dec-2022 10:57
22121413.D	Data Locked	jrains, 17-Dec-2022 10:57
22121414.D	Data Locked	jrains, 17-Dec-2022 10:57
22121415.D	Data Locked	jrains, 17-Dec-2022 10:57
22121416.D	Data Locked	jrains, 17-Dec-2022 10:57
22121417.D	Data Locked	jrains, 17-Dec-2022 10:57
22121418.D	Data Locked	jrains, 17-Dec-2022 10:57
22121419.D	Data Locked	jrains, 17-Dec-2022 10:57
22121420.D	Data Locked	jrains, 17-Dec-2022 10:57
22121421.D	Data Locked	jrains, 17-Dec-2022 10:57
22121422.D	Data Locked	jrains, 17-Dec-2022 10:57
22121423.D	Data Locked	jrains, 17-Dec-2022 10:57
22121424.D	Data Locked	jrains, 17-Dec-2022 10:57
22121425.D	Data Locked	jrains, 17-Dec-2022 10:57
22121426.D	Data Locked	jrains, 17-Dec-2022 10:57
22121427.D	Data Locked	jrains, 17-Dec-2022 10:57
22121428.D	Data Locked	jrains, 17-Dec-2022 10:57
22121429.D	Data Locked	jrains, 17-Dec-2022 10:57
22121430.D	Data Locked	jrains, 17-Dec-2022 10:57
22121431.D	Data Locked	jrains, 17-Dec-2022 10:57
22121432.D	Data Locked	jrains, 17-Dec-2022 10:57
22121433.D	Data Locked	jrains, 17-Dec-2022 10:57
22121434.D	Data Locked	jrains, 17-Dec-2022 10:57

Dual Column

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8081B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLA0299
Instrument: ECD6
Calibration: FL00041

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Initial Cal Check	SLA0299-ICV1	23012405.D	23012405.D	NA	01/24/23 17:25
Calibration Check	SLA0299-CCV1	23012422.D	23012422.D	NA	01/24/23 22:30
Blank	BLA0340-BLK1	23012423.D	23012423.D	Solid	01/24/23 22:48
LCS	BLA0340-BS1	23012424.D	23012424.D	Solid	01/24/23 23:06
LCS Dup	BLA0340-BSD1	23012425.D	23012425.D	Solid	01/24/23 23:24
LDW23-SS1254	23A0171-01	23012431.D	23012431.D	Solid	01/25/23 01:11
LDW23-SS1257	23A0171-02	23012432.D	23012432.D	Solid	01/25/23 01:29
LDW23-SS1262	23A0171-03	23012433.D	23012433.D	Solid	01/25/23 01:47
LDW23-SS1245	23A0171-04	23012434.D	23012434.D	Solid	01/25/23 02:05
Calibration Check	SLA0299-CCV2	23012436.D	23012436.D	NA	01/25/23 02:41

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLA0299

Instrument: ECD6
Calibration ID: FL00041

Printed: 1/26/2023 3:18:23PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLA0299-PEM1	QC		1		K007286	L000844		
SLA0299-ICV1	QC		2		L000845	L000844		
BLA0218-BLK1	QC		3			L000844		
BLA0218-BS1	QC		4			L000844		
BLA0218-BSD1	QC		5			L000844		
BLA0218-MS1	QC		6			L000844		
BLA0218-MSD1	QC		7			L000844		
23A0088-06	8081B Pest (PSDDA)	A 04	8			L000844	Anchor QEA, LLC	
23A0088-07	8081B Pest (PSDDA)	A 04	9			L000844	Anchor QEA, LLC	
23A0088-08	8081B Pest (PSDDA)	A 04	10			L000844	Anchor QEA, LLC	
23A0088-09	8081B Pest (PSDDA)	A 04	11			L000844	Anchor QEA, LLC	
23A0088-10	8081B Pest (PSDDA)	A 04	12			L000844	Anchor QEA, LLC	
23A0088-11	8081B Pest (PSDDA)	A 04	13			L000844	Anchor QEA, LLC	
23A0088-12	8081B Pest (PSDDA)	A 04	14			L000844	Anchor QEA, LLC	
23A0088-13	8081B Pest (PSDDA)	A 04	15			L000844	Anchor QEA, LLC	
23A0088-14	8081B Pest (PSDDA)	A 04	16			L000844	Anchor QEA, LLC	
23A0088-15	8081B Pest (PSDDA)	A 04	17			L000844	Anchor QEA, LLC	
SLA0299-PEM2	QC		18		K007286	L000844		
SLA0299-CCV1	QC		19		L000845	L000844		
BLA0340-BLK1	QC		20			L000844		
BLA0340-BS1	QC		21			L000844		

Samples Loaded By Date

Data Processed By Date

ANALYSIS SEQUENCE

SLA0299

Instrument: ECD6
Calibration ID: FL00041

Printed: 1/26/2023 3:18:23PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
BLA0340-BSD1	QC		22			L000844		
BLA0340-MSD1	QC		23			L000844		
23A0100-21	8081B Pest (PSDDA)	A 04	24			L000844	Anchor QEA, LLC	
23A0100-22	8081B Pest (PSDDA)	A 04	25			L000844	Anchor QEA, LLC	
23A0100-23	8081B Pest (PSDDA)	A 04	26			L000844	Anchor QEA, LLC	
23A0171-01	8081B Pest (PSDDA)	A 03	27			L000844	Anchor QEA, LLC	
23A0171-02	8081B Pest (PSDDA)	A 04	28			L000844	Anchor QEA, LLC	
23A0171-03	8081B Pest (PSDDA)	A 03	29			L000844	Anchor QEA, LLC	
23A0171-04	8081B Pest (PSDDA)	A 04	30			L000844	Anchor QEA, LLC	
SLA0299-PEM3	QC		31		K007286	L000844		
SLA0299-CCV2	QC		32		L000845	L000844		

Samples Loaded By Date

Data Processed By Date

GC LOG SUMMARY FOR DATABATCH - \ecd6.i\20230124.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	24-JAN-2023 16:14	23012401.D	1	RINSE	
2	24-JAN-2023 16:31	23012402.D	1	RINSE	
3	24-JAN-2023 16:49	23012403.D	1	RINSE	
4	24-JAN-2023 17:07	23012404.D	1	SEQ-DS1	
5	24-JAN-2023 17:25	23012405.D	1	SEQ-INDAICV1	
6	24-JAN-2023 17:43	23012406.D	1	BLA0218-BLK1	
7	24-JAN-2023 18:01	23012407.D	1	BLA0218-BS1	
8	24-JAN-2023 18:19	23012408.D	1	BLA0218-BSD1	
9	24-JAN-2023 18:37	23012409.D	1	BLA0218-MS1	
10	24-JAN-2023 18:55	23012410.D	1	BLA0218-MSD1	
11	24-JAN-2023 19:13	23012411.D	1	23A0088-06	
12	24-JAN-2023 19:31	23012412.D	1	23A0088-07	
13	24-JAN-2023 19:49	23012413.D	1	23A0088-08	
14	24-JAN-2023 20:07	23012414.D	1	23A0088-09	
15	24-JAN-2023 20:25	23012415.D	1	23A0088-10	
16	24-JAN-2023 20:43	23012416.D	1	23A0088-11	
17	24-JAN-2023 21:01	23012417.D	1	23A0088-12	
18	24-JAN-2023 21:18	23012418.D	1	23A0088-13	
19	24-JAN-2023 21:36	23012419.D	1	23A0088-14	
20	24-JAN-2023 21:54	23012420.D	1	23A0088-15	
21	24-JAN-2023 22:12	23012421.D	1	SEQ-DS2	
22	24-JAN-2023 22:30	23012422.D	1	SEQ-INDACCV1	
23	24-JAN-2023 22:48	23012423.D	1	BLA0340-BLK1	
24	24-JAN-2023 23:06	23012424.D	1	BLA0340-BS1	
25	24-JAN-2023 23:24	23012425.D	1	BLA0340-BSD1	
26	24-JAN-2023 23:42	23012426.D	1	BLA0340-MS1	
27	24-JAN-2023 00:00	23012427.D	1	BLA0340-MSD1	
28	25-JAN-2023 00:18	23012428.D	1	23A0100-21	
29	25-JAN-2023 00:35	23012429.D	1	23A0100-22	
30	25-JAN-2023 00:53	23012430.D	1	23A0100-23	
31	25-JAN-2023 01:11	23012431.D	1	23A0171-01	
32	25-JAN-2023 01:29	23012432.D	1	23A0171-02	
33	25-JAN-2023 01:47	23012433.D	1	23A0171-03	
34	25-JAN-2023 02:05	23012434.D	1	23A0171-04	
35	25-JAN-2023 02:23	23012435.D	1	SEQ-DS3	
36	25-JAN-2023 02:41	23012436.D	1	SEQ-INDACCV2	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230124.b

ARI Job No.: RINS Method: PEST.m Instrument: ecd6.i Date: 24-JAN-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1614	23012401.D	RINSE		1	NO MANUAL INTEGRATION
1631	23012402.D	RINSE		1	NO MANUAL INTEGRATION
1649	23012403.D	RINSE		1	NO MANUAL INTEGRATION
1707	23012404.D	SEQ-DS1		1	NO MANUAL INTEGRATION
1725	23012405.D	SEQ-INDAICV1		1	NO MANUAL INTEGRATION
1743	23012406.D	BLA0218-BLK1		1	NO MANUAL INTEGRATION
1801	23012407.D	BLA0218-BS1		1	NO MANUAL INTEGRATION
1819	23012408.D	BLA0218-BSD1		1	Hexabromobiphenyl, Decachlorobiphenyl,
1837	23012409.D	BLA0218-MS1		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Endosulfan I, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Endrin ketone, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobutadiene,
1855	23012410.D	BLA0218-MSD1		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Endosulfan I, Dieldrin, 4,4'-DDE, Endosulfan II, 4,4'-DDD, Endosulfan sulfate, 4,4'-DDT, Endrin ketone, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobutadiene, Hexac
1913	23012411.D	23A0088-06		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Endrin ketone, Endrin aldehyde, cis-Chlordane, Hexachlorobutadiene, Hexachlorobenzene, Hexabromobiph
1931	23012412.D	23A0088-07		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Endrin ketone, Endrin aldehyde, cis-Chlordane, Hexachlorobutadiene, Hexachlorobenzene, Hexabromobiph
1949	23012413.D	23A0088-08		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Endrin ketone, Endrin aldehyde, cis-Chlordane, Hexachlorobutadiene, Hexachlorobenzene, Hexabromobiph
2007	23012414.D	23A0088-09		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Endrin aldehyde, cis-Chlordane, Hexachlorobutadiene, Hexachlorobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachl
2025	23012415.D	23A0088-10		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin,

			Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Endrin aldehyde, cis-Chlordane, Hexachlorobutadiene, Hexachlorobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachl
2043	23012416.D 23A0088-11	1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, 4,4'-DDT, Endrin aldehyde, cis-Chlordane, Hexachlorobutadiene, Hexachlorobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobipheny
2101	23012417.D 23A0088-12	1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Endrin aldehyde, cis-Chlordane, Hexachlorobutadiene, Hexachlorobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachl

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230124.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2118	23012418.D	23A0088-13		1	1Bromo-2nitrobenzene, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Endrin aldehyde, cis-Chlordane, Hexachlorobenzene, Tetrachloro-m-xylene, Decachlorobiphenyl,
2136	23012419.D	23A0088-14		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Endrin ketone, Endrin aldehyde, cis-Chlordane, Hexachlorobutadiene, Hexachlorobenzene, Tetrachloro-m-xylene,
2154	23012420.D	23A0088-15		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Endrin ketone, Endrin aldehyde, cis-Chlordane, Hexachlorobutadiene, Hexachlorobenzene, Hexabromobiphenyl, Tetrachloro-m-
2212	23012421.D	SEQ-DS2		1	NO MANUAL INTEGRATION
2230	23012422.D	SEQ-INDACCV1		1	NO MANUAL INTEGRATION
2248	23012423.D	BLA0340-BLK1		1	NO MANUAL INTEGRATION
2306	23012424.D	BLA0340-BS1		1	NO MANUAL INTEGRATION
2324	23012425.D	BLA0340-BSD1		1	NO MANUAL INTEGRATION
2342	23012426.D	BLA0340-MS1		1	Aldrin, Heptachlor epoxide b, Endosulfan I, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, 4,4'-DDT, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane,
0000	23012427.D	BLA0340-MSD1		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Endosulfan I, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Methoxychlor, Endrin ketone, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachl
0018	23012428.D	23A0100-21		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Methoxychlor, Endrin aldehyde, cis-Chlordane, Hexachlorobutadiene, Hexachlorobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Dec
0035	23012429.D	23A0100-22		1	Hexachlorobenzene, Tetrachloro-m-xylene,
0053	23012430.D	23A0100-23		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Methoxychlor, Endrin aldehyde, Hexachlorobutadiene, Hexachlorobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlo
0111	23012431.D	23A0171-01		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorob

0129	23012432.D 23A0171-02	1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Endrin ketone, Endrin aldehyde, cis-Chlordane, Hexachlorobutadiene, Hexachlorobenzene, Hexabromobiphenyl, Tetrachloro-m-
0147	23012433.D 23A0171-03	1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Endrin aldehyde, cis-Chlordane, Hexachlorobutadiene, Hexachlorobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobipheny
0205	23012434.D 23A0171-04	1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Methoxychlor, Endrin aldehyde, cis-Chlordane, Hexachlorobutadiene, Hexachlorobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Dec
0223	23012435.D SEQ-DS3	1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230124.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0241	23012436.D	SEQ-INDACCV2		1	NO MANUAL INTEGRATION
1614	23012401.D	RINSE		1	NO MANUAL INTEGRATION
1631	23012402.D	RINSE		1	NO MANUAL INTEGRATION
1649	23012403.D	RINSE		1	NO MANUAL INTEGRATION
1707	23012404.D	SEQ-DS1		1	Endrin [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],
1725	23012405.D	SEQ-INDAICV1		1	NO MANUAL INTEGRATION
1743	23012406.D	BLA0218-BLK1		1	NO MANUAL INTEGRATION
1801	23012407.D	BLA0218-BS1		1	NO MANUAL INTEGRATION
1819	23012408.D	BLA0218-BSD1		1	NO MANUAL INTEGRATION
1837	23012409.D	BLA0218-MS1		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Hexachlorobenzene [C], Tetrachloro-m-xylene [C],
1855	23012410.D	BLA0218-MSD1		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexachlorobe
1913	23012411.D	23A0088-06		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], Heptachlor [C], Aldrin [C], Hexachlorobenzene [C], Tetrachloro-m-xylene [C],
1931	23012412.D	23A0088-07		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexachlorobenzene [C], Hexabromobipheny
1949	23012413.D	23A0088-08		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexachlorobenzene [C], Hexabromobipheny
2007	23012414.D	23A0088-09		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexachlorobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C],
2025	23012415.D	23A0088-10		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endosulfan II [C],

			4,4'-DDD [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexachlorobenzene [C], He
2043	23012416.D	23A0088-11	1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexachlorobenzene [C], Hexabromobiphenyl[C]
2101	23012417.D	23A0088-12	1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexachlorobenzene [C], Hexabromobiphenyl[C], Tetrachl

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230124.b\B20230124.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2118	23012418.D	23A0088-13		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endosulfan II [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexachlorobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
2136	23012419.D	23A0088-14		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexachlorobenzene [C], Hexabromobipheny
2154	23012420.D	23A0088-15		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexachlorobenzene [C], Hexabromobiphenyl[C], Tetrachl
2212	23012421.D	SEQ-DS2		1	4,4'-DDE [C], Endrin [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C],
2230	23012422.D	SEQ-INDACCV1		1	NO MANUAL INTEGRATION
2248	23012423.D	BLA0340-BLK1		1	NO MANUAL INTEGRATION
2306	23012424.D	BLA0340-BS1		1	NO MANUAL INTEGRATION
2324	23012425.D	BLA0340-BSD1		1	NO MANUAL INTEGRATION
2342	23012426.D	BLA0340-MS1		1	Hexachlorobenzene [C], Tetrachloro-m-xylene [C],
0000	23012427.D	BLA0340-MSD1		1	Hexachlorobenzene [C], Tetrachloro-m-xylene [C],
0018	23012428.D	23A0100-21		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexachlorobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C],
0035	23012429.D	23A0100-22		1	delta-BHC [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexachlorobenzene [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],
0053	23012430.D	23A0100-23		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexachlorobenzene [C], Hexabromobiphenyl[C]
0111	23012431.D	23A0171-01		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexachlorobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C],
0129	23012432.D	23A0171-02		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C],

			Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexachlorobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C],
0147	23012433.D 23A0171-03	1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexachlorobenzene [C], Hexabromobipheny
0205	23012434.D 23A0171-04	1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexachlorobenzene [C], Hexabromobiphenyl[C], Tetrachloro-
0223	23012435.D SEQ-DS3	1	4,4'-DDE [C], Endrin [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230124.b\B20230124.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0241	23012436.D	SEQ-INDACCV2		1	NO MANUAL INTEGRATION

Security Status Report

Date: 26-Jan-2023 15:19

23012401.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012402.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012403.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012404.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012405.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012406.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012407.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012408.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012409.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012410.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012411.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012412.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012413.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012414.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012415.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012416.D	Data Locked	alfonso, 26-Jan-2023 15:19
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23012418.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012419.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012420.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012421.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012422.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012423.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012424.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012425.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012426.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012427.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012428.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012429.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012430.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012431.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012432.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012433.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012434.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012435.D	Data Locked	alfonso, 26-Jan-2023 15:19
23012436.D	Data Locked	alfonso, 26-Jan-2023 15:19

Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLA0301	Instrument:	ECD6
		Calibration:	FL00041

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Initial Cal Check	SLA0301-ICV1	23012604.D	23012604.D	NA	01/26/23 09:31
Calibration Check	SLA0301-CCV1	23012607.D	23012607.D	NA	01/26/23 10:24

ANALYSIS SEQUENCE

SLA0301

Instrument: ECD6
Calibration ID: FL00041

Printed: 1/27/2023 8:51:49AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLA0301-PEM1	QC		1		K007286	L000844		
SLA0301-ICV1	QC		2		L000845	L000844		
BLA0340-MS1	QC		3			L000844		
SLA0301-PEM2	QC		4		K007286	L000844		
SLA0301-CCV1	QC		5		L000845	L000844		

Samples Loaded By Date

Data Processed By Date

GC LOG SUMMARY FOR DATABATCH - \ecd6.i\20230126.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	26-JAN-2023 08:37	23012601.D	1	RINSE	
2	26-JAN-2023 08:55	23012602.D	1	RINSE	
3	26-JAN-2023 09:13	23012603.D	1	SEQ-DS1	
4	26-JAN-2023 09:31	23012604.D	1	SEQ-INDAICV1	
5	26-JAN-2023 09:49	23012605.D	1	BLA0340-MS1	
6	26-JAN-2023 10:07	23012606.D	1	SEQ-DS2	
7	26-JAN-2023 10:24	23012607.D	1	SEQ-INDACCV1	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230126.b

ARI Job No.: RINS Method: PEST.m Instrument: ecd6.i Date: 26-JAN-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0837	23012601.D	RINSE		1	NO MANUAL INTEGRATION
0855	23012602.D	RINSE		1	NO MANUAL INTEGRATION
0913	23012603.D	SEQ-DS1		1	NO MANUAL INTEGRATION
0931	23012604.D	SEQ-INDAICV1		1	NO MANUAL INTEGRATION
0949	23012605.D	BLA0340-MS1		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Endosulfan I, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Methoxychlor, Endrin ketone, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobenzene, Hex
1007	23012606.D	SEQ-DS2		1	NO MANUAL INTEGRATION
1024	23012607.D	SEQ-INDACCV1		1	Hexabromobiphenyl,
0837	23012601.D	RINSE		1	NO MANUAL INTEGRATION
0855	23012602.D	RINSE		1	NO MANUAL INTEGRATION
0913	23012603.D	SEQ-DS1		1	NO MANUAL INTEGRATION
0931	23012604.D	SEQ-INDAICV1		1	NO MANUAL INTEGRATION
0949	23012605.D	BLA0340-MS1		1	beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobip
1007	23012606.D	SEQ-DS2		1	NO MANUAL INTEGRATION
1024	23012607.D	SEQ-INDACCV1		1	NO MANUAL INTEGRATION

Security Status Report

Date: 27-Jan-2023 08:52

23012601.D	Data Locked	alfonso, 27-Jan-2023 08:52
23012602.D	Data Locked	alfonso, 27-Jan-2023 08:52
23012603.D	Data Locked	alfonso, 27-Jan-2023 08:52
23012604.D	Data Locked	alfonso, 27-Jan-2023 08:52
23012605.D	Data Locked	alfonso, 27-Jan-2023 08:52
23012606.D	Data Locked	alfonso, 27-Jan-2023 08:52
23012607.D	Data Locked	alfonso, 27-Jan-2023 08:52

SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SKL0233	Instrument:	ECD6
Calibration:	FL00041	Calibration Date:	12/15/2022

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SKL0233-PEM1 (Water)				Lab File ID: 22121404.D			Analyzed: 12/14/22 20:20	
Decachlorobiphenyl	160.00	83.0	0 - 200	9.355	9.354666	0.0003	+/-0.1	
Decachlorobiphenyl [2C]	160.00	83.5	0 - 200	10.466	10.4655	0.0005	+/-0.1	
Tetrachlorometaxylene	160.00	78.1	0 - 200	3.828	3.827833	0.0002	+/-0.1	
Tetrachlorometaxylene [2C]	160.00	83.5	0 - 200	4.22	4.219666	0.0003	+/-0.1	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLA0299
Instrument: ECD6
Calibration: FL00041
Calibration Date: 12/14/2022

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLA0299-ICV1 (Solid)				Lab File ID: 23012405.D			Analyzed: 01/24/23 17:25	
Decachlorobiphenyl	40.000	98.6	80 - 120	9.318	9.354666	-0.0367	+/-0.1	
Decachlorobiphenyl [2C]	40.000	98.2	80 - 120	10.428	10.4655	-0.0375	+/-0.1	
Tetrachlorometaxylene	40.000	99.6	80 - 120	3.8	3.827833	-0.0278	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	101	80 - 120	4.196	4.219666	-0.0237	+/-0.1	
SLA0299-CCV1 (Solid)				Lab File ID: 23012422.D			Analyzed: 01/24/23 22:30	
Decachlorobiphenyl	40.000	96.4	80 - 120	9.317	9.354666	-0.0377	+/-0.1	
Decachlorobiphenyl [2C]	40.000	97.1	80 - 120	10.427	10.4655	-0.0385	+/-0.1	
Tetrachlorometaxylene	40.000	99.7	80 - 120	3.8	3.827833	-0.0278	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	99.3	80 - 120	4.195	4.219666	-0.0247	+/-0.1	
BLA0340-BLK1 (Solid)				Lab File ID: 23012423.D			Analyzed: 01/24/23 22:48	
Decachlorobiphenyl	8.0000	120	30 - 160	9.317	9.354666	-0.0377	+/-0.1	
Decachlorobiphenyl [2C]	8.0000	127	30 - 160	10.427	10.4655	-0.0385	+/-0.1	
Tetrachlorometaxylene	8.0000	91.2	30 - 160	3.8	3.827833	-0.0278	+/-0.1	
Tetrachlorometaxylene [2C]	8.0000	88.8	30 - 160	4.195	4.219666	-0.0247	+/-0.1	
BLA0340-BS1 (Solid)				Lab File ID: 23012424.D			Analyzed: 01/24/23 23:06	
Decachlorobiphenyl	8.0000	111	30 - 160	9.318	9.354666	-0.0367	+/-0.1	
Decachlorobiphenyl [2C]	8.0000	115	30 - 160	10.427	10.4655	-0.0385	+/-0.1	
Tetrachlorometaxylene	8.0000	83.3	30 - 160	3.8	3.827833	-0.0278	+/-0.1	
Tetrachlorometaxylene [2C]	8.0000	81.8	30 - 160	4.195	4.219666	-0.0247	+/-0.1	
BLA0340-BSD1 (Solid)				Lab File ID: 23012425.D			Analyzed: 01/24/23 23:24	
Decachlorobiphenyl	8.0000	108	30 - 160	9.317	9.354666	-0.0377	+/-0.1	
Decachlorobiphenyl [2C]	8.0000	119	30 - 160	10.427	10.4655	-0.0385	+/-0.1	
Tetrachlorometaxylene	8.0000	89.7	30 - 160	3.8	3.827833	-0.0278	+/-0.1	
Tetrachlorometaxylene [2C]	8.0000	87.2	30 - 160	4.195	4.219666	-0.0247	+/-0.1	
23A0171-01 (Solid)				Lab File ID: 23012431.D			Analyzed: 01/25/23 01:11	
Decachlorobiphenyl	7.8218	115	30 - 160	9.32	9.354666	-0.0347	+/-0.1	
Decachlorobiphenyl [2C]	7.8218	119	30 - 160	10.428	10.4655	-0.0375	+/-0.1	
Tetrachlorometaxylene	7.8218	81.6	30 - 160	3.799	3.827833	-0.0288	+/-0.1	
Tetrachlorometaxylene [2C]	7.8218	80.6	30 - 160	4.195	4.219666	-0.0247	+/-0.1	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLA0299	Instrument:	ECD6
Calibration:	FL00041	Calibration Date:	12/15/2022

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0171-02 (Solid)				Lab File ID: 23012432.D			Analyzed: 01/25/23 01:29	
Decachlorobiphenyl	8.0004	116	30 - 160	9.32	9.354666	-0.0347	+/-0.1	
Decachlorobiphenyl [2C]	8.0004	118	30 - 160	10.429	10.4655	-0.0365	+/-0.1	
Tetrachlorometaxylene	8.0004	75.9	30 - 160	3.8	3.827833	-0.0278	+/-0.1	
Tetrachlorometaxylene [2C]	8.0004	78.1	30 - 160	4.195	4.219666	-0.0247	+/-0.1	
23A0171-03 (Solid)				Lab File ID: 23012433.D			Analyzed: 01/25/23 01:47	
Decachlorobiphenyl	7.9280	115	30 - 160	9.321	9.354666	-0.0337	+/-0.1	
Decachlorobiphenyl [2C]	7.9280	119	30 - 160	10.429	10.4655	-0.0365	+/-0.1	
Tetrachlorometaxylene	7.9280	85.6	30 - 160	3.8	3.827833	-0.0278	+/-0.1	
Tetrachlorometaxylene [2C]	7.9280	80.8	30 - 160	4.195	4.219666	-0.0247	+/-0.1	
23A0171-04 (Solid)				Lab File ID: 23012434.D			Analyzed: 01/25/23 02:05	
Decachlorobiphenyl	7.9339	112	30 - 160	9.32	9.354666	-0.0347	+/-0.1	
Decachlorobiphenyl [2C]	7.9339	113	30 - 160	10.429	10.4655	-0.0365	+/-0.1	
Tetrachlorometaxylene	7.9339	81.8	30 - 160	3.8	3.827833	-0.0278	+/-0.1	
Tetrachlorometaxylene [2C]	7.9339	76.7	30 - 160	4.195	4.219666	-0.0247	+/-0.1	
SLA0299-CCV2 (Solid)				Lab File ID: 23012436.D			Analyzed: 01/25/23 02:41	
Decachlorobiphenyl	40.000	96.1	80 - 120	9.318	9.354666	-0.0367	+/-0.1	
Decachlorobiphenyl [2C]	40.000	96.9	80 - 120	10.427	10.4655	-0.0385	+/-0.1	
Tetrachlorometaxylene	40.000	99.7	80 - 120	3.801	3.827833	-0.0268	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	98.4	80 - 120	4.195	4.219666	-0.0247	+/-0.1	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLA0301	Instrument:	ECD6
Calibration:	FL00041	Calibration Date:	12/14/2022

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLA0301-ICV1 (Solid)				Lab File ID: 23012604.D			Analyzed: 01/26/23 09:31	
Decachlorobiphenyl	40.000	98.8	80 - 120	9.317	9.354666	-0.0377	+/-0.1	
Decachlorobiphenyl [2C]	40.000	98.9	80 - 120	10.426	10.4655	-0.0395	+/-0.1	
Tetrachlorometaxylene	40.000	103	80 - 120	3.799	3.827833	-0.0288	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	105	80 - 120	4.194	4.219666	-0.0257	+/-0.1	
SLA0301-CCV1 (Solid)				Lab File ID: 23012607.D			Analyzed: 01/26/23 10:24	
Decachlorobiphenyl	40.000	93.9	80 - 120	9.318	9.354666	-0.0367	+/-0.1	
Decachlorobiphenyl [2C]	40.000	97.5	80 - 120	10.426	10.4655	-0.0395	+/-0.1	
Tetrachlorometaxylene	40.000	103	80 - 120	3.799	3.827833	-0.0288	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	104	80 - 120	4.194	4.219666	-0.0257	+/-0.1	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SKL0233	Instrument:	ECD6
		Calibration:	FL00041

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Performance Mix (SKL0233-PEM1)		(Water)		Lab File ID: 22121404.D				Analyzed: 12/14/22 20:20	
1-Bromo-2-Nitrobenzene	683485	3.15	672426	3.15	102	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	619012	9.503	609723	9.504	102	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1005375	3.35	1006482	3.35	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	772586	11.054	769764	11.053	100	50 - 200	0.001	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8081B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLA0299
Instrument: ECD6
Calibration: FL00041

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLA0299-ICV1)		(Solid)		Lab File ID: 23012405.D			Analyzed: 01/24/23 17:25		
1-Bromo-2-Nitrobenzene	768694	3.127	768694	3.127	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	709115	9.467	709115	9.467	100	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1120536	3.33	1120536	3.33	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	785548	11.011	785548	11.011	100	50 - 200	0.000	+/-0.50	
Blank (BLA0340-BLK1)		(Solid)		Lab File ID: 23012423.D			Analyzed: 01/24/23 22:48		
1-Bromo-2-Nitrobenzene	712572	3.126	768694	3.127	93	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	635766	9.465	709115	9.467	90	50 - 200	-0.002	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1104256	3.329	1120536	3.33	99	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	700304	11.01	785548	11.011	89	50 - 200	-0.001	+/-0.50	
LCS (BLA0340-BS1)		(Solid)		Lab File ID: 23012424.D			Analyzed: 01/24/23 23:06		
1-Bromo-2-Nitrobenzene	805373	3.127	768694	3.127	105	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	693688	9.466	709115	9.467	98	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1215444	3.329	1120536	3.33	108	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	790491	11.009	785548	11.011	101	50 - 200	-0.002	+/-0.50	
LCS Dup (BLA0340-BSD1)		(Solid)		Lab File ID: 23012425.D			Analyzed: 01/24/23 23:24		
1-Bromo-2-Nitrobenzene	806665	3.126	768694	3.127	105	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	702591	9.466	709115	9.467	99	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1233222	3.329	1120536	3.33	110	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	798068	11.01	785548	11.011	102	50 - 200	-0.001	+/-0.50	
LDW23-SS1254 (23A0171-01)		(Solid)		Lab File ID: 23012431.D			Analyzed: 01/25/23 01:11		
1-Bromo-2-Nitrobenzene	816226	3.126	768694	3.127	106	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	642341	9.47	709115	9.467	91	50 - 200	0.003	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1174983	3.329	1120536	3.33	105	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	739499	11.012	785548	11.011	94	50 - 200	0.001	+/-0.50	
LDW23-SS1257 (23A0171-02)		(Solid)		Lab File ID: 23012432.D			Analyzed: 01/25/23 01:29		
1-Bromo-2-Nitrobenzene	927930	3.126	768694	3.127	121	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	656497	9.47	709115	9.467	93	50 - 200	0.003	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1206668	3.329	1120536	3.33	108	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	747250	11.012	785548	11.011	95	50 - 200	0.001	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLA0299	Instrument:	ECD6
		Calibration:	FL00041

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SS1262 (23A0171-03)		(Solid)		Lab File ID: 23012433.D				Analyzed: 01/25/23 01:47	
1-Bromo-2-Nitrobenzene	810829	3.126	768694	3.127	105	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	648583	9.47	709115	9.467	91	50 - 200	0.003	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1177138	3.329	1120536	3.33	105	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	749650	11.013	785548	11.011	95	50 - 200	0.002	+/-0.50	
LDW23-SS1245 (23A0171-04)		(Solid)		Lab File ID: 23012434.D				Analyzed: 01/25/23 02:05	
1-Bromo-2-Nitrobenzene	851130	3.126	768694	3.127	111	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	649686	9.47	709115	9.467	92	50 - 200	0.003	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1200510	3.329	1120536	3.33	107	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	752099	11.012	785548	11.011	96	50 - 200	0.001	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLA0301	Instrument:	ECD6
		Calibration:	FL00041

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLA0301-ICV1)		(Solid)		Lab File ID: 23012604.D				Analyzed: 01/26/23 09:31	
1-Bromo-2-Nitrobenzene	757362	3.125	757362	3.125	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	697927	9.467	697927	9.467	100	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1101196	3.327	1101196	3.327	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	775227	11.009	775227	11.009	100	50 - 200	0.000	+/-0.50	

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0171
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0171-01	File ID:	23012431.D
Sampled:	12/08/22 08:39	Prepared:	01/17/23 13:07	Analyzed:	01/25/23 01:11
Solids:	42.83	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD6
Batch:	BLA0340	Sequence:	SLA0299		
GC Column(1):	STX-CLP			GC Column(2):	STX-CLPII

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Hexachlorobenzene	1	4.152	4.182	0.03	12461	0.17	41.9
	* 2	4.689	4.717833	0.0288	28696	0.26	

* Column used for quantitation

Analytical Resources, LLC
Analytical Chemists and Consultants

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0171
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0171-02	File ID:	23012432.D
Sampled:	12/08/22 09:16	Prepared:	01/17/23 13:07	Analyzed:	01/25/23 01:29
Solids:	41.72	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD6
Batch:	BLA0340	Sequence:	SLA0299		
GC Column(1):	STX-CLP			GC Column(2):	STX-CLPII

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Hexachlorobenzene	* 1	4.152	4.182	0.03	22741	0.27	75.9
	2	4.69	4.717833	0.0278	65500	0.60	

* Column used for quantitation

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0171
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0171-03	File ID:	23012433.D
Sampled:	12/08/22 10:36	Prepared:	01/17/23 13:07	Analyzed:	01/25/23 01:47
Solids:	43.54	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD6
Batch:	BLA0340	Sequence:	SLA0299		
GC Column(1):	STX-CLP			GC Column(2):	STX-CLPII

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Hexachlorobenzene	* 1	4.151	4.182	0.031	13391	0.18	11.8
	2	4.684	4.717833	0.0338	17577	0.16	

* Column used for quantitation

Analytical Resources, LLC
Analytical Chemists and Consultants

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0171
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0171-04	File ID:	23012434.D
Sampled:	12/08/22 11:14	Prepared:	01/17/23 13:07	Analyzed:	01/25/23 02:05
Solids:	48.44	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD6
Batch:	BLA0340	Sequence:	SLA0299		
GC Column(1):	STX-CLP			GC Column(2):	STX-CLPII

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Hexachlorobenzene	* 1	4.151	4.182	0.031	15123	0.20	N/A
	2	4.685	4.717833	0.0328	10941	ND	

* Column used for quantitation

HOLDING TIME SUMMARY

Analysis: EPA 8081B

Laboratory: Analytical Resources, LLC SDG: 23A0171

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

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1254 23A0171-01	12/08/22 08:39	12/08/22 17:18	01/17/23 13:07	40	365	01/25/23 01:11	8	40	
LDW23-SS1257 23A0171-02	12/08/22 09:16	12/08/22 17:18	01/17/23 13:07	40	365	01/25/23 01:29	8	40	
LDW23-SS1262 23A0171-03	12/08/22 10:36	12/08/22 17:18	01/17/23 13:07	40	365	01/25/23 01:47	8	40	
LDW23-SS1245 23A0171-04	12/08/22 11:14	12/08/22 17:18	01/17/23 13:07	40	365	01/25/23 02:05	8	40	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 8081B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: ECD6

Analyte	MDL	RL	Units
Hexachlorobenzene	0.15	0.50	ug/kg
Hexachlorobenzene [2C]	0.15	0.50	ug/kg

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CERTIFICATE OF ANALYSIS

Catalog No: S-279N
Description: Tetrachloro-m-xylene
Lot: 0052481B-1
Solvent: N/A
Hazards: *Refer to SDS for complete safety information*

Signal Word: Warning

Date Certified: Jul 28, 2005
Expiration: Jul 28, 2015
Sample Size: 100 mg
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

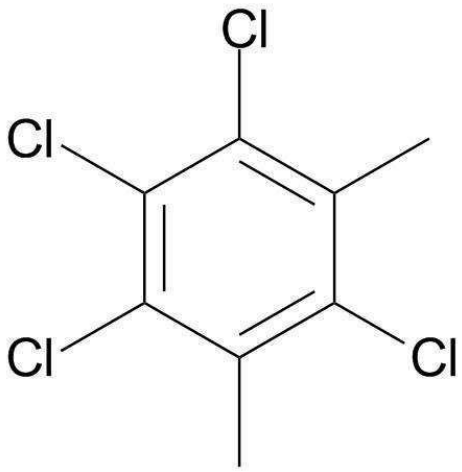
ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/FID)	Prepared Concentration	Certified Analyte Concentration[1]
Tetrachloro-meta-xylene	877-09-8	96.0	N/A	N/A

Identification:

Molecular formula: C8H6Cl4
Molecular weight: 243.94



C000147
tetrachlormetaxylene
Expires 1/15/2020
Prepared By Joshua Rains 1/15/2014

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] The Uncertainty calculated for this product is ±2.4%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Metrological traceability is established through in-house validated methods.

Purity, if stated, is equal to 100% minus found impurity components. Impurity components have not been identified.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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CERTIFICATE OF PRODUCT DATA

PRODUCT: C-209N
DESCRIPTION: 2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl
LOT #: 990521LB-AC
SOLVENT: N/A

EXPIRATION: Jul 28, 2015

This product is guaranteed accurate to ±0.5% of the Certified Analyte concentration through the Expiration Date on the Label.

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[1]	Certified Analyte Concentration[2]
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl	2051-24-3	100	N/A	N/A

C000148
decachlorbiphenyl
Expires 1/15/2020
Prepared By Joshua Rains 1/15/2014

* I1768A

Certified by: R. Cooper

1. All weights are traceable through National Institute of Standards & Technology, Test No. 822/254480
2. Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty calculated for this product is ±4% which is the Combined Uncertainty uc(y). It represents an estimated standard deviation equal to the positive square root of the total variance of the uncertainty of components. The Expanded Uncertainty is U which is Uc(y) *K where K is the coverage factor at the 95% confidence level (K=2).
3. A product with a suffix (-1A, -2B, etc.) on its lot# has had its expiration date extended and is identical to the same lot# without the suffix.

Please note: AccuStandard follows the U.S. conventions in reporting numerical values, on both certificates and labels.

A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

This product was manufactured in accordance to quality system requirements of ISO 9001:2000 and ISO 17025

* Recertified 2 4-6-09 JS

Analytical Standard Record

Standard ID: C000148 **Printed: 4/23/2015 11:54:44AM**

Description:	decachlorbiphenyl	Expires:	15-Jan-2020
Standard Type:	Other	Prepared:	15-Jan-2014
Solvent:	na/a	Prepared By:	Joshua Rains
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	27-Feb-2015 13:03 by JGR
Vendor:	Accustandard	Lot #:	990521lb-ac
Vendor Catalog #:			

Comments

see i1768a
SOM calibrations added 06/12/14 sdrd

Analyte	CAS Number	Concentration	Units
Decachlorobiphenyl [2C]	2051-24-3	1000000	ug/mL
Decachlorobiphenyl	2051-24-3	1000000	ug/mL
DCB 1660 [2C]	2051-24-3	1000000	ug/mL
DCB 1660	2051-24-3	1000000	ug/mL
DCB [2C]	2051-24-3	1000000	ug/mL
DCB (A) [2C]	2051-24-3	1000000	ug/mL
DCB (A)	2051-24-3	1000000	ug/mL
DCB	2051-24-3	1000000	ug/mL

Reviewed By Date

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CERTIFICATE OF ANALYSIS

Catalog No: P-066S
Description: Mirex
Lot: 219051741-01
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Jun 5, 2020
Expiration: Jun 5, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Mirex	2385-85-5	98.2	100.2	98.4

I007970
Mirex 2d source
Solvent / Lot: MeOH
Prep: 9/7/2020 by JR
Exp: 6/5/2024
Location:

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Certified By: Larry Decker, Organic QC Manager

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CERTIFICATE OF ANALYSIS

Catalog No: P-026S
Description: o,p'-DDE
Lot: 218021093-01
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Feb 10, 2020
Expiration: Feb 10, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463
ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY AT-1339
ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
o,p'-DDE	3424-82-6	99.9	100.4	100.3

I7971

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 822-275872-11

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Certified By: Larry Decker, Organic QC Manager

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CERTIFICATE OF ANALYSIS

Catalog No: P-184S
Description: trans-Nonachlor
Lot: 218011470
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Jan 30, 2018
Expiration: Jan 30, 2028
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463
ANAB ACCREDITED TESTING LABORATORY AT-1339
ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
trans-Nonachlor	39765-80-5	99.0	100.2	99.2

I 7974

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 822-275872-11

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Certified By: Larry Decker, Organic QC Manager

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CERTIFICATE OF ANALYSIS

Catalog No: P-024S
Description: o,p'-DDD
Lot: 220051307
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: May 27, 2020
Expiration: Jun 27, 2022
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
o,p'-DDD	53-19-0	100.0	100.2	100.2

I010773
o,p-DDD
Solvent / Lot: methanol
Prep: 11/20/2020 by VS
Exp: 6/27/2022
Location:

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

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1. **Quality Standards:**

   ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

   ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

2 **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7

3 **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this .

4 **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5 **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6 **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7 **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

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CERTIFICATE OF ANALYSIS

Catalog No: P-331S
Description: Oxychlordane Isomer
Lot: 218101131
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Oct 8, 2018
Expiration: Nov 8, 2020
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Oxychlordane Isomer	27304-13-8	97.7	102.4*	100.0

I010795
Oxychlordane isomer
Solvent / Lot: methanol
Prep: 11/20/2020 by VS
Exp: 6/20/2022
Location:

* Weight compensated to 100% purity.

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Certified By: Larry Decker, Organic QC Manager

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1. **Quality Standards:**

   ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

   ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

2 **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7

3 **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this CRM.

4 **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5 **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6 **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7 **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

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CERTIFICATE OF ANALYSIS

Catalog No: P-297S
Description: cis-Nonachlor
Lot: 217121240
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Dec 13, 2017
Expiration: Dec 13, 2020
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
cis-Nonachlor	5103-73-1	98.6	100.4	99.0

I010796
cis-Nonochlor-Accustd-100ug/ml
Solvent / Lot: methanol
Prep: 11/20/2020 by VS
Exp: 11/27/2022
Location:

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] All weights are traceable through NIST, Test No. 822-275872-11

[2] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Certified By: Larry Decker, Organic QC Manager

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1. **Quality Standards:**

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   ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 11.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this CRM.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

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CERTIFICATE OF ANALYSIS

Catalog No: APP-9-112-D-20X
Description: Hexachlorobenzene in Dichloromethane
Lot: 219051389
Solvent: Dichloromethane
Hazards: *Refer to SDS for complete safety information*

Signal Word: Warning

Date Certified: May 13, 2019
Expiration: May 13, 2029
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463
ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY AT-1339
ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Hexachlorobenzene	118-74-1	99.0	2002	1982

J006504
Hexachlorobenzene
Solvent / Lot: Dichloromethane
Prep: 6/21/2021 by YZ
Exp: 5/13/2029
Location:

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Certified By: Larry Decker, Organic QC Manager

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Rev. 5/18

1. **Quality Standards:**

   ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

   ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

2 **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7

3 **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this .

4 **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5 **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6 **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7 **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

125 Market Street
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AccuStandard® Inc.

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CERTIFICATE OF ANALYSIS

Catalog No: P-028S
Description: o,p'-DDT
Lot: 221071322
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Jul 21, 2021
Expiration: Aug 21, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
o,p'-DDT	789-02-6	99.9	100.1	100.0

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 5/18

1. **Quality Standards:**

   ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers

   ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

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CERTIFICATE OF ANALYSIS

Catalog No: P-024S
Description: o,p'-DDD
Lot: 220051307-01
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Jul 6, 2021
Expiration: Aug 6, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
o,p'-DDD	53-19-0	100.0	100.2	100.2

K 0448

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

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Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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CERTIFICATE OF ANALYSIS

Catalog No: P-331S
Description: Oxychlordane Isomer
Lot: 221051706
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: May 28, 2021
Expiration: Jun 28, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Oxychlordane Isomer	27304-13-8	99.2	100.1	99.3

K000449
Oxychlordane isomer
Solvent / Lot: methanol
Prep: 1/13/2022 by YZ
Exp: 6/28/2023
Location:

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

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Rev. 5/18

1. **Quality Standards:**

   ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers

   ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

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CERTIFICATE OF ANALYSIS

Catalog No: P-297S
Description: cis-Nonachlor
Lot: 221041461
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Apr 22, 2021
Expiration: Apr 22, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463
ANAB ACCREDITED TESTING LABORATORY AT-1339
ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
cis-Nonachlor	5103-73-1	98.6	101.1	99.7

K 000450

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By:
Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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CERTIFICATE OF ANALYSIS

Catalog No: P-184S
Description: trans-Nonachlor
Lot: 220091107
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Sep 11, 2020
Expiration: Sep 11, 2030
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB AR-1463 ANAB AT-1339 ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
trans-Nonachlor	39765-80-5	99.0	100.2	99.2

K 0045 I

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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CERTIFICATE OF ANALYSIS

Catalog No: P-066S
Description: Mirex
Lot: 219051741-01
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Jun 5, 2020
Expiration: Jun 5, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463
ANAB ACCREDITED TESTING LABORATORY AT-1339
ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Mirex	2385-85-5	98.2	100.2	98.4

K 000452

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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K 000 452

CERTIFICATE OF ANALYSIS

Catalog No: P-066S
Description: Mirex
Lot: 221121451
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Dec 27, 2021
Expiration: Dec 27, 2025
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Mirex	2385-85-5	98.2	100.0	98.2

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

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Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

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Rev. 7/20

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CERTIFICATE OF ANALYSIS

Catalog No: M-8081-DS
Description: 4,4'-DDT & Endrin
Lot: 221031488-04
Solvent: Hexane
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Apr 8, 2022
Expiration: May 8, 2023
Sample Size: 1 mL
Components: 2
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
4,4'-DDT	50-29-3	100.0	200.9	200.9
Endrin	72-20-8	99.8	200.0	199.6

K7002

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

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Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32292 **Lot No.:** A0185477

Description : Organochlorine Pesticide Mix AB # 2

Organochlorine Pesticide Mix AB # 2 8-80 µg/mL, Hexane/Toluene(1:1), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2026 **Storage:** 10°C or colder

Ship: Ambient

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	alpha-BHC	8.1 µg/mL	+/- 0.0660 µg/mL	Gravimetric
	CAS # 319-84-6 (Lot 12307600)		+/- 0.3703 µg/mL	Unstressed
	Purity 99%		+/- 0.5325 µg/mL	Stressed
2	gamma-BHC (Lindane)	8.0 µg/mL	+/- 0.0654 µg/mL	Gravimetric
	CAS # 58-89-9 (Lot 13087200)		+/- 0.3672 µg/mL	Unstressed
	Purity 99%		+/- 0.5281 µg/mL	Stressed
3	beta-BHC	8.1 µg/mL	+/- 0.0660 µg/mL	Gravimetric
	CAS # 319-85-7 (Lot 0588007-4)		+/- 0.3703 µg/mL	Unstressed
	Purity 99%		+/- 0.5325 µg/mL	Stressed
4	delta-BHC	8.1 µg/mL	+/- 0.0660 µg/mL	Gravimetric
	CAS # 319-86-8 (Lot 13112400)		+/- 0.3703 µg/mL	Unstressed
	Purity 99%		+/- 0.5325 µg/mL	Stressed
5	Heptachlor	8.0 µg/mL	+/- 0.0654 µg/mL	Gravimetric
	CAS # 76-44-8 (Lot 803759)		+/- 0.3672 µg/mL	Unstressed
	Purity 99%		+/- 0.5281 µg/mL	Stressed
6	Aldrin	8.1 µg/mL	+/- 0.0660 µg/mL	Gravimetric
	CAS # 309-00-2 (Lot 12983100)		+/- 0.3702 µg/mL	Unstressed
	Purity 96%		+/- 0.5323 µg/mL	Stressed
7	Heptachlor epoxide (isomer B)	8.1 µg/mL	+/- 0.0660 µg/mL	Gravimetric
	CAS # 1024-57-3 (Lot 13168200)		+/- 0.3703 µg/mL	Unstressed
	Purity 99%		+/- 0.5325 µg/mL	Stressed

8	trans-Chlordane		8.0	µg/mL	+/-	0.0657	µg/mL	Gravimetric
	CAS # 5103-74-2	(Lot 32943)			+/-	0.3689	µg/mL	Unstressed
	Purity 98%				+/-	0.5305	µg/mL	Stressed
9	cis-Chlordane		8.0	µg/mL	+/-	0.0657	µg/mL	Gravimetric
	CAS # 5103-71-9	(Lot 31766)			+/-	0.3689	µg/mL	Unstressed
	Purity 98%				+/-	0.5305	µg/mL	Stressed
10	Endosulfan I		8.0	µg/mL	+/-	0.0654	µg/mL	Gravimetric
	CAS # 959-98-8	(Lot BCCF4060)			+/-	0.3672	µg/mL	Unstressed
	Purity 99%				+/-	0.5281	µg/mL	Stressed
11	4,4'-DDE		16.1	µg/mL	+/-	0.1314	µg/mL	Gravimetric
	CAS # 72-55-9	(Lot GHYQG)			+/-	0.7375	µg/mL	Unstressed
	Purity 99%				+/-	1.0606	µg/mL	Stressed
12	Dieldrin		16.1	µg/mL	+/-	0.1320	µg/mL	Gravimetric
	CAS # 60-57-1	(Lot 11129900)			+/-	0.7408	µg/mL	Unstressed
	Purity 98%				+/-	1.0653	µg/mL	Stressed
13	Endrin		16.1	µg/mL	+/-	0.1320	µg/mL	Gravimetric
	CAS # 72-20-8	(Lot 13157400)			+/-	0.7406	µg/mL	Unstressed
	Purity 99%				+/-	1.0650	µg/mL	Stressed
14	4,4'-DDD		16.1	µg/mL	+/-	0.1320	µg/mL	Gravimetric
	CAS # 72-54-8	(Lot HAN02)			+/-	0.7406	µg/mL	Unstressed
	Purity 99%				+/-	1.0650	µg/mL	Stressed
15	Endosulfan II		16.0	µg/mL	+/-	0.1309	µg/mL	Gravimetric
	CAS # 33213-65-9	(Lot 12448900)			+/-	0.7345	µg/mL	Unstressed
	Purity 99%				+/-	1.0562	µg/mL	Stressed
16	4,4'-DDT		16.1	µg/mL	+/-	0.1315	µg/mL	Gravimetric
	CAS # 50-29-3	(Lot 220428JLM)			+/-	0.7378	µg/mL	Unstressed
	Purity 98%				+/-	1.0610	µg/mL	Stressed
17	Endrin aldehyde		16.1	µg/mL	+/-	0.1314	µg/mL	Gravimetric
	CAS # 7421-93-4	(Lot 30720)			+/-	0.7375	µg/mL	Unstressed
	Purity 99%				+/-	1.0606	µg/mL	Stressed
18	Endosulfan sulfate		16.1	µg/mL	+/-	0.1320	µg/mL	Gravimetric
	CAS # 1031-07-8	(Lot BCCB0424)			+/-	0.7406	µg/mL	Unstressed
	Purity 99%				+/-	1.0650	µg/mL	Stressed
19	Methoxychlor		80.2	µg/mL	+/-	0.5781	µg/mL	Gravimetric
	CAS # 72-43-5	(Lot 13027000)			+/-	3.6697	µg/mL	Unstressed
	Purity 98%				+/-	5.2871	µg/mL	Stressed
20	Endrin ketone		16.1	µg/mL	+/-	0.1314	µg/mL	Gravimetric
	CAS # 53494-70-5	(Lot 13026800)			+/-	0.7375	µg/mL	Unstressed
	Purity 99%				+/-	1.0606	µg/mL	Stressed

Solvent: Hexane/Toluene (50:50)
CAS # 110-54-3/108-88-3
Purity 99%

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

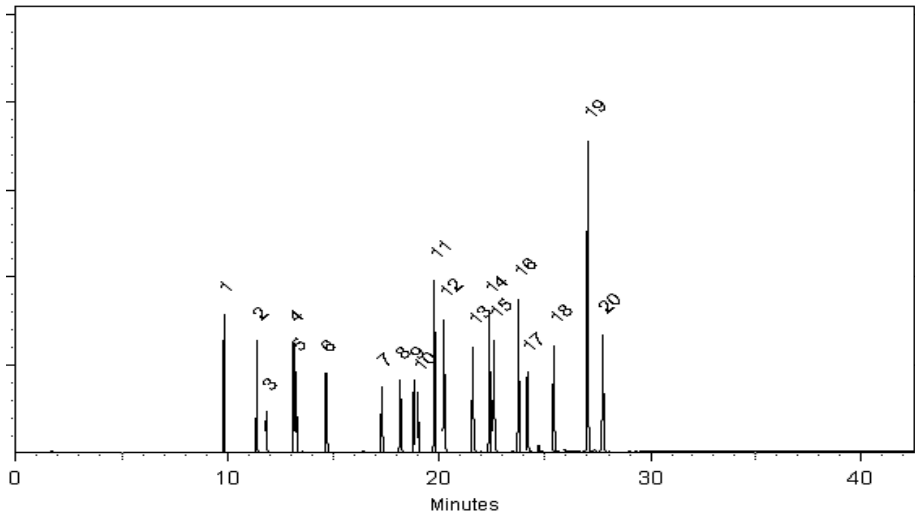
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Morgan Craighead - Mix Technician

Date Mixed: 19-May-2022 **Balance:** B442140311

Fang-Yun Lo - QC Analyst

Date Passed: 26-May-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-502-36-10X
Description: Hexachlorobutadiene
Lot: 222031188
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Mar 11, 2022
Expiration: Apr 11, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Hexachlorobutadiene	87-68-3	98.0	2002	1962

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: _____
Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 5/18

1. **Quality Standards:**

   ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers

   ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

125 Market Street
New Haven, CT 06513
USA

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CERTIFICATE OF ANALYSIS

Catalog No: M-502-36-10X
Description: Hexachlorobutadiene
Lot: 222031188
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Mar 11, 2022
Expiration: Apr 11, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Hexachlorobutadiene	87-68-3	98.0	2002	1962

K 011468

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1257

Form 1
ORGANIC ANALYSIS DATA SHEET
EPA 1613B
Dioxins/Furans by HRGC/HRMS

Laboratory:	Analytical Resources, LLC			SDG:	23A0171
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-02 A	File ID:	23031708
Sampled:	12/08/22 09:16	Prepared:	03/07/23 14:50	Analyzed:	03/17/23 16:05
% Solids:	42.41	Preparation:	EPA 1613	Initial/Final:	23.61 g Wet / 20 uL
Result Basis:	Dry	Sequence:	SLC0258	Calibration:	GC00015
Batch:	BLC0136	Instrument:	AUTOSPEC01	Column:	RTX-Dioxin2

CAS NO.	COMPOUND	DF/Split	Ion Ratio	Ratio Limits	EDL	RL	Result	Units	Q
51207-31-9	2,3,7,8-TCDF	1	0.797	0.655-0.886	0.208	0.999	3.38	ng/kg	X
1746-01-6	2,3,7,8-TCDD	1	0.610	0.655-0.886	0.142	0.999	0.440	ng/kg	EMPC, J
57117-41-6	1,2,3,7,8-PeCDF	1	1.118	1.318-1.783	0.349	0.999	1.21	ng/kg	EMPC
57117-31-4	2,3,4,7,8-PeCDF	1	1.559	1.318-1.783	0.318	0.999	2.37	ng/kg	
40321-76-4	1,2,3,7,8-PeCDD	1	1.146	1.318-1.783	0.251	0.999	1.75	ng/kg	EMPC
70648-26-9	1,2,3,4,7,8-HxCDF	1	1.209	1.054-1.426	0.123	0.999	7.72	ng/kg	
57117-44-9	1,2,3,6,7,8-HxCDF	1	1.047	1.054-1.426	0.129	0.999	2.20	ng/kg	EMPC
60851-34-5	2,3,4,6,7,8-HxCDF	1	1.337	1.054-1.426	0.129	0.999	3.13	ng/kg	
72918-21-9	1,2,3,7,8,9-HxCDF	1	1.065	1.054-1.426	0.143	0.999	1.70	ng/kg	
39227-28-6	1,2,3,4,7,8-HxCDD	1	1.139	1.054-1.426	0.211	0.999	1.86	ng/kg	
57653-85-7	1,2,3,6,7,8-HxCDD	1	1.212	1.054-1.426	0.203	0.999	7.12	ng/kg	
19408-74-3	1,2,3,7,8,9-HxCDD	1	1.075	1.054-1.426	0.228	0.999	4.29	ng/kg	
67562-39-4	1,2,3,4,6,7,8-HpCDF	1	0.995	0.893-1.208	0.204	0.999	60.1	ng/kg	
55673-89-7	1,2,3,4,7,8,9-HpCDF	1	1.059	0.893-1.208	0.284	0.999	5.53	ng/kg	
35822-46-9	1,2,3,4,6,7,8-HpCDD	1	1.033	0.893-1.208	0.399	2.50	244	ng/kg	B
39001-02-0	OCDF	1	0.901	0.757-1.024	0.413	2.50	179	ng/kg	
3268-87-9	OCDD	1	0.870	0.757-1.024	0.617	9.99	2460	ng/kg	B

Homologue Groups

55722-27-5	Total TCDF	1	0.000			0.999	30.1	ng/kg	
41903-57-5	Total TCDD	1	0.000			0.999	2.13	ng/kg	
30402-15-4	Total PeCDF	1	0.000			0.999	35.8	ng/kg	
36088-22-9	Total PeCDD	1	0.000			0.999	3.69	ng/kg	
55684-94-1	Total HxCDF	1	0.000			0.999	77.9	ng/kg	
34465-46-8	Total HxCDD	1	0.000			0.999	59.8	ng/kg	
38998-75-3	Total HpCDF	1	0.000			0.999	230	ng/kg	
37871-00-4	Total HpCDD	1	0.000			0.999	573	ng/kg	

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=0, Including EMPC): 9.97
Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=1/2 EDL, Including EMPC): 9.97

LDW23-SS1257

Form 2

ORGANIC ANALYSIS DATA SHEET

EPA 1613B

Dioxins/Furans by HRGC/HRMS

Laboratory:	Analytical Resources, LLC			SDG:	23A0171
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0171-02	File ID:	23031708
Sampled:	12/08/22 09:16	Prepared:	03/07/23 14:50	Analyzed:	03/17/23 16:05
Solids Wt%:	42.41	Preparation:	EPA 1613	Initial/Final:	23.61 g / 20 uL
Result Basis:	Dry	Sequence:	SLC0258	Calibration:	GC00015
Batch:	BLC0136	Instrument:	AUTOSPEC01	Column:	RTX-Dioxin2

Labels	DF/Split	Ion Ratio	Ratio Limits	EDL	% REC	QC LIMITS	Q
13C12-2,3,7,8-TCDF		0.754	0.655-0.886	0.140	97.8	24 - 169 %	
13C12-2,3,7,8-TCDD		0.775	0.655-0.886	0.199	116	25 - 164 %	
13C12-1,2,3,7,8-PeCDF		1.520	1.318-1.783	0.217	102	24 - 185 %	
13C12-2,3,4,7,8-PeCDF		1.518	1.318-1.783	0.241	106	21 - 178 %	
13C12-1,2,3,7,8-PeCDD		1.662	1.318-1.783	0.181	100	25 - 181 %	
13C12-1,2,3,4,7,8-HxCDF		0.504	0.434-0.587	0.144	90.4	26 - 152 %	
13C12-1,2,3,6,7,8-HxCDF		0.515	0.434-0.587	0.121	85.2	26 - 123 %	
13C12-2,3,4,6,7,8-HxCDF		0.508	0.434-0.587	0.149	91.7	28 - 136 %	
13C12-1,2,3,7,8,9-HxCDF		0.501	0.434-0.587	0.180	100	29 - 147 %	
13C12-1,2,3,4,7,8-HxCDD		1.297	1.054-1.426	0.212	107	32 - 141 %	
13C12-1,2,3,6,7,8-HxCDD		1.252	1.054-1.426	0.183	103	28 - 130 %	
13C12-1,2,3,4,6,7,8-HpCDF		0.447	0.374-0.506	0.238	80.2	28 - 143 %	
13C12-1,2,3,4,7,8,9-HpCDF		0.446	0.374-0.506	0.277	79.6	26 - 138 %	
13C12-1,2,3,4,6,7,8-HpCDD		1.045	0.893-1.208	0.149	82.8	23 - 140 %	
13C12-OCDD		0.911	0.757-1.024	0.240	83.4	17 - 157 %	
37Cl4-2,3,7,8-TCDD		328.000		0.054	94.5	35 - 197 %	

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230317.qld
Last Altered: Monday, March 20, 2023 11:38:42 Pacific Daylight Time
Printed: Monday, March 20, 2023 11:43:21 Pacific Daylight Time

Method: T:\Autospec\Methods\Dioxin230315.mdb 20 Mar 2023 10:42:09
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: 23A0171-02, Name: 23031708, Date: 17-Mar-2023, Time: 16:05:07, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.605	1.001	4.062e3	5.098e3	0.702	0.797	0.770	1272	1597	5.96e4	7.49e4	46.8	46.9	NO	dd	bd	1.690
12378-PeCDF	29.780	1.001	1.339e3	1.198e3	0.679	1.118	1.550	2241	1412	1.84e4	1.64e4	8.2	11.6	YES	bd	bd	0.608
23478-PeCDF	31.117	1.001	3.276e3	2.101e3	0.786	1.559	1.550	2241	1412	4.41e4	3.06e4	19.7	21.6	NO	db	db	1.188
123478-HxCDF	34.761	1.001	1.431e4	1.184e4	1.166	1.209	1.240	1185	987	2.16e5	1.75e5	181.8	177.6	NO	dd	dd	3.863
234678-HxCDF	35.719	0.999	5.815e3	4.349e3	1.140	1.337	1.240	1185	987	5.22e4	3.98e4	44.0	40.4	NO	bb	MM	1.566
123678-HxCDF	34.905	1.001	3.987e3	3.808e3	1.091	1.047	1.240	1185	987	5.99e4	5.44e4	50.5	55.2	YES	db	db	1.101
123789-HxCDF	36.755	0.999	2.564e3	2.407e3	1.137	1.065	1.240	1185	987	3.29e4	3.01e4	27.8	30.5	NO	bb	bb	0.850
1234678-HpCDF	38.660	1.000	5.945e4	5.973e4	1.003	0.995	1.050	1271	975	9.46e5	9.59e5	744.8	982.8	NO	bb	bb	30.080
1234789-HpCDF	40.866	1.000	4.572e3	4.318e3	0.953	1.059	1.050	1271	975	5.95e4	6.62e4	46.8	67.9	NO	bb	bb	2.766
OCDF	45.084	1.005	1.160e5	1.288e5	0.778	0.901	0.890	938	1369	1.37e6	1.56e6	1464.0	1141.9	NO	bb	bb	89.449
2378-TCDD	26.254	1.001	6.247e2	1.024e3	1.149	0.610	0.770	1780	947	8.22e3	1.49e4	4.6	15.7	YES	bd	bd	0.221
12378-PeCDD	31.362	1.000	1.940e3	1.692e3	1.022	1.146	1.550	1331	1234	2.55e4	2.07e4	19.1	16.8	YES	db	bb	0.878
123478-HxCDD	35.886	1.001	2.886e3	2.533e3	0.996	1.139	1.240	1626	1647	4.80e4	4.29e4	29.5	26.1	NO	bd	bd	0.933
123678-HxCDD	35.997	1.000	1.283e4	1.059e4	1.001	1.212	1.240	1626	1647	2.00e5	1.72e5	123.0	104.1	NO	dd	dd	3.565
123789-HxCDD	36.387	1.011	6.253e3	5.816e3	0.907	1.075	1.240	1626	1647	1.02e5	9.41e4	62.8	57.1	NO	db	bb	2.146
1234678-HpCDD	40.142	1.000	2.469e5	2.390e5	1.039	1.033	1.050	2516	1452	3.79e6	3.66e6	1505.1	2518.6	NO	bb	bb	122.197
OCDD	44.865	1.000	1.852e6	2.129e6	0.920	0.870	0.890	2128	1949	2.34e7	2.71e7	10994.3	13875.9	NO	bb	bb	1229.801
13C-2378-TCDF	25.591	1.007	3.322e5	4.406e5	1.620	0.754	0.770	1761	1166	5.06e6	6.74e6	2870.5	5776.1	NO	bb	bb	97.824
13C-12378-PeCDF	29.758	1.171	3.705e5	2.438e5	1.240	1.520	1.550	1747	1721	5.57e6	3.66e6	3187.1	2126.9	NO	bb	bb	101.582
13C-23478-PeCDF	31.095	1.224	3.470e5	2.285e5	1.118	1.518	1.550	1747	1721	5.27e6	3.49e6	3016.9	2025.5	NO	bb	bb	105.594
13C-123478-HxCDF	34.738	0.955	1.946e5	3.859e5	1.168	0.504	0.510	1032	1386	3.04e6	6.09e6	2944.2	4396.6	NO	bd	bd	90.353
13C-123678-HxCDF	34.883	0.959	2.208e5	4.285e5	1.386	0.515	0.510	1032	1386	3.16e6	6.27e6	3059.1	4521.7	NO	db	dd	85.151
13C-234678-HxCDF	35.752	0.983	1.918e5	3.777e5	1.129	0.508	0.510	1032	1386	2.99e6	5.84e6	2900.9	4215.6	NO	bb	bb	91.713
13C-123789-HxCDF	36.777	1.011	1.717e5	3.427e5	0.932	0.501	0.510	1032	1386	2.68e6	5.40e6	2599.0	3893.5	NO	bb	bb	100.388
13C-1234678-HpCDF	38.649	1.062	1.220e5	2.730e5	0.895	0.447	0.440	1322	1749	2.03e6	4.65e6	1536.9	2659.1	NO	bb	bb	80.239
13C-1234789-HpCDF	40.855	1.123	1.040e5	2.332e5	0.770	0.446	0.440	1322	1749	1.53e6	3.43e6	1160.1	1959.4	NO	bb	bb	79.642
13C-1234-TCDD	25.407	0.000	2.134e5	2.742e5	1.000	0.778	0.770	1876	1086	3.38e6	4.30e6	1802.4	3962.0	NO	bb	bb	100.000
13C-2378-TCDD	26.226	1.032	2.841e5	3.667e5	1.152	0.775	0.770	1876	1086	4.37e6	5.63e6	2330.0	5185.5	NO	bb	bb	115.830
13C-12378-PeCDD	31.351	1.234	2.528e5	1.521e5	0.829	1.662	1.550	1075	856	3.74e6	2.30e6	3481.8	2686.9	NO	bb	bb	100.202
13C-123478-HxCDD	35.863	0.986	3.294e5	2.539e5	0.995	1.297	1.240	1700	1340	5.27e6	4.17e6	3102.0	3113.3	NO	bd	bd	106.588
13C-123678-HxCDD	35.986	0.989	3.650e5	2.915e5	1.157	1.252	1.240	1700	1340	5.36e6	4.23e6	3155.4	3153.4	NO	db	db	103.207
13C-1234678-HpCDD	40.131	1.103	1.955e5	1.872e5	0.840	1.045	1.050	1016	791	2.93e6	2.81e6	2884.2	3555.3	NO	bb	bb	82.828
13C-OCDD	44.847	1.233	3.355e5	3.682e5	0.767	0.911	0.890	1796	859	4.10e6	4.56e6	2285.1	5301.6	NO	bb	bb	166.724
13C-123789-HxCDD	36.376	0.000	3.038e5	2.461e5	1.000	1.234	1.240	1700	1340	4.76e6	3.92e6	2802.5	2922.7	NO	bb	bb	100.000
37CL-2378-TCDD	26.240	1.033	2.372e5		1.288			896		3.55e6		3964.5			bb		37.787

Dataset: T:\Autospec\Processed Data Batch\230317.qld
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Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.102	0.864	4.725e2	9.126e2	0.802	0.518	0.770	1272	1597	7.49e3	1.52e4	5.9	9.5	YES	bb	bb	0.224
1289-TCDF	27.201	1.063	3.288e2	6.027e2	0.678	0.545	0.770	1272	1597	5.82e3	9.82e3	4.6	6.1	YES	db	db	0.178
13468-PECDF					1.246		1.550	1023	1040								
12389-PECDF					0.496		1.550	2241	1412								
123468-HXCDF	33.090	0.953	1.264e4	9.207e3	1.169	1.372	1.240	1185	987	1.91e5	1.37e5	160.8	138.6	NO	bd	bb	3.218
1368-TCDD	23.373	0.891	2.274e3	2.366e3	1.015	0.961	0.770	1780	947	3.34e4	3.50e4	18.8	37.0	YES	bb	MM	0.702
1289-TCDD	26.834	1.023	2.542e2	1.964e2	0.909	1.294	0.770	1780	947	3.99e3	4.11e3	2.2	4.3	YES	bb	bd	0.076
12479-PECDD	28.666	0.914	5.198e3	3.412e3	2.301	1.523	1.550	1331	1234	5.22e4	3.47e4	39.2	28.1	NO	bb	bb	0.924
12389-PECDD	31.764	1.013	6.741e2	3.578e2	1.184	1.884	1.550	1331	1234	8.76e3	6.03e3	6.6	4.9	YES	bb	bb	0.215
124679-HXCDD	33.869	0.944	3.384e4	2.744e4	1.115	1.233	1.240	1626	1647	5.02e5	4.19e5	308.5	254.1	NO	bb	bb	9.420
1234679-HPCDD	39.106	0.974	3.626e5	3.532e5	1.137	1.027	1.050	2516	1452	5.79e6	5.64e6	2302.2	3885.4	NO	bb	bb	164.538
Total-tetrafurans			3.679e4		0.727			1272		5.02e5							15.086
Total-penta1			2.469e4					1023		3.56e5							7.330
Total-pentafurans			2.585e4		0.654			2241		3.13e5							10.612
Total-hexafurans			1.428e5		1.141			1185		2.11e6							38.999
Total-heptafurans			2.106e5		0.978			1271		3.33e6							115.140
Total-Furans			5.567e5		0.922			1272		7.97e6							276.616
Total-tetradioxins			3.198e3		1.024			1780		4.59e4							1.065
Total-pentadioxins			8.562e3		1.502			1331		1.06e5							1.848
Total-hexadioxins			1.035e5		1.005			1626		1.40e6							29.915
Total-heptadioxins			6.095e5		1.088			2516		9.58e6							286.736
Total-Dioxins			2.577e6		1.130			1780		3.45e7							1549.365
Total-TEQ			3.133e6					1780		4.25e7							1825.981
FUNCTION1 PFK			7.249e4					669809		2.04e6							
FUNCTION2 PFK			7.851e4					192779		5.59e5							0.000
FUNCTION3 PFK			8.765e5					574504		2.64e7							0.000
FUNCTION4 PFK			3.423e6					280124		3.30e7							
FUNCTION5 PFK			9.233e4					226887		4.14e6							
FUNCTION1 HXCD...			7.335e3					834		1.24e5							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			9.647e2					631		1.66e4							0.000
FUNCTION3 OCDPE			8.127e2					588		1.90e4							0.000
FUNCTION4 NCDPE			2.946e4					792		4.98e5							0.000
FUNCTION5 DCDPE			0.000e0					669		0.00e0							

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TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	23.60	1.523e3	2.271e3	0.727	0.67	0.77	19.1	YES	NO	bd	bd	0.675
2	Total-tetrafurans	23.36	2.854e3	3.854e3	0.727	0.74	0.77	34.2	YES	NO	dd	dd	1.194
3	Total-tetrafurans	23.26	5.143e3	6.470e3	0.727	0.79	0.77	51.3	YES	NO	dd	dd	2.067
4	Total-tetrafurans	23.08	1.117e3	1.528e3	0.727	0.73	0.77	11.3	YES	NO	dd	dd	0.471
5	Total-tetrafurans	22.94	2.295e3	3.074e3	0.727	0.75	0.77	24.9	YES	NO	bd	bd	0.956
6	Total-tetrafurans	22.37	9.217e2	1.044e3	0.727	0.88	0.77	11.0	YES	NO	db	bb	0.350
7	Total-tetrafurans	25.96	2.937e2	3.324e2	0.727	0.88	0.77	4.3	YES	NO	db	db	0.111
8	Total-tetrafurans	25.84	1.587e3	2.096e3	0.727	0.76	0.77	16.7	YES	NO	dd	dd	0.656
9	Total-tetrafurans	25.73	1.094e3	1.557e3	0.727	0.70	0.77	11.1	YES	NO	dd	dd	0.472
10	2378-TCDF	25.60	4.062e3	5.098e3	0.702	0.80	0.77	46.8	YES	NO	dd	bd	1.690
11	Total-tetrafurans	25.38	4.694e3	6.306e3	0.727	0.74	0.77	38.0	YES	NO	bd	db	1.958
12	Total-tetrafurans	25.11	5.316e2	6.260e2	0.727	0.85	0.77	5.9	YES	NO	db	db	0.206
13	Total-tetrafurans	24.93	1.125e3	1.360e3	0.727	0.83	0.77	13.5	YES	NO	dd	dd	0.442
14	Total-tetrafurans	24.70	2.366e3	3.062e3	0.727	0.77	0.77	29.4	YES	NO	bd	bd	0.966
15	Total-tetrafurans	24.50	2.054e3	2.694e3	0.727	0.76	0.77	24.7	YES	NO	db	db	0.845
16	Total-tetrafurans	24.26	2.488e3	3.056e3	0.727	0.81	0.77	23.5	YES	NO	bd	bd	0.987
17	Total-tetrafurans	23.85	1.588e3	1.946e3	0.727	0.82	0.77	17.0	YES	NO	db	db	0.629
18	Total-tetrafurans	23.71	1.051e3	1.255e3	0.727	0.84	0.77	11.9	YES	NO	dd	dd	0.411

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-penta1	27.05	2.469e4	1.660e4		1.49	1.55	348.0	YES	NO	bb	bb	7.330

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentafurans	30.07	7.396e2	4.964e2	0.654	1.49	1.55	4.6	YES	NO	db	db	0.318
2	Total-pentafurans	29.97	2.486e3	1.449e3	0.654	1.72	1.55	16.4	YES	NO	dd	dd	1.012
3	Total-pentafurans	29.29	5.714e2	3.603e2	0.654	1.59	1.55	3.6	YES	NO	dd	dd	0.239
4	Total-pentafurans	28.71	1.315e4	8.180e3	0.654	1.61	1.55	62.1	YES	NO	dd	db	5.484
5	Total-pentafurans	28.51	3.435e3	2.052e3	0.654	1.67	1.55	19.8	YES	NO	dd	dd	1.410
6	23478-PeCDF	31.12	3.276e3	2.101e3	0.786	1.56	1.55	19.7	YES	NO	db	db	1.188
7	Total-pentafurans	30.96	2.186e3	1.549e3	0.654	1.41	1.55	13.3	YES	NO	dd	dd	0.960

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HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-hexafurans	33.30	3.785e4	3.016e4	1.141	1.25	1.24	464.1	YES	NO	dd	bb	10.308
2	123468-HXCDF	33.09	1.264e4	9.207e3	1.169	1.37	1.24	160.8	YES	NO	bd	bb	3.218
3	123789-HxCDF	36.75	2.564e3	2.407e3	1.137	1.07	1.24	27.8	YES	NO	bb	bb	0.850
4	234678-HxCDF	35.72	5.815e3	4.349e3	1.140	1.34	1.24	44.0	YES	NO	bb	MM	1.566
5	123478-HxCDF	34.76	1.431e4	1.184e4	1.166	1.21	1.24	181.8	YES	NO	dd	dd	3.863
6	Total-hexafurans	34.60	1.890e3	1.644e3	1.141	1.15	1.24	26.9	YES	NO	bd	bd	0.536
7	Total-hexafurans	34.13	6.773e4	5.536e4	1.141	1.22	1.24	870.4	YES	NO	bb	bb	18.658

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-heptafurans	39.07	8.018e2	8.823e2	0.978	0.91	1.05	9.8	YES	NO	db	bb	0.470
2	1234678-HpCDF	38.66	5.945e4	5.973e4	1.003	1.00	1.05	744.8	YES	NO	bb	bb	30.080
3	1234789-HpCDF	40.87	4.572e3	4.318e3	0.953	1.06	1.05	46.8	YES	NO	bb	bb	2.766
4	Total-heptafurans	39.31	1.457e5	1.472e5	0.978	0.99	1.05	1815.5	YES	NO	bd	bd	81.822

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	23.60	1.523e3	2.271e3	0.727	0.67	0.77	19.1	YES	NO	bd	bd	0.675
2	Total-tetrafurans	23.36	2.854e3	3.854e3	0.727	0.74	0.77	34.2	YES	NO	dd	dd	1.194
3	Total-tetrafurans	23.26	5.143e3	6.470e3	0.727	0.79	0.77	51.3	YES	NO	dd	dd	2.067
4	Total-tetrafurans	23.08	1.117e3	1.528e3	0.727	0.73	0.77	11.3	YES	NO	dd	dd	0.471
5	Total-tetrafurans	22.94	2.295e3	3.074e3	0.727	0.75	0.77	24.9	YES	NO	bd	bd	0.956
6	Total-tetrafurans	22.37	9.217e2	1.044e3	0.727	0.88	0.77	11.0	YES	NO	db	bb	0.350
7	Total-tetrafurans	25.96	2.937e2	3.324e2	0.727	0.88	0.77	4.3	YES	NO	db	db	0.111
8	Total-tetrafurans	25.84	1.587e3	2.096e3	0.727	0.76	0.77	16.7	YES	NO	dd	dd	0.656
9	Total-tetrafurans	25.73	1.094e3	1.557e3	0.727	0.70	0.77	11.1	YES	NO	dd	dd	0.472
10	2378-TCDF	25.60	4.062e3	5.098e3	0.702	0.80	0.77	46.8	YES	NO	dd	bd	1.690
11	Total-tetrafurans	25.38	4.694e3	6.306e3	0.727	0.74	0.77	38.0	YES	NO	bd	db	1.958
12	Total-tetrafurans	25.11	5.316e2	6.260e2	0.727	0.85	0.77	5.9	YES	NO	db	db	0.206
13	Total-tetrafurans	24.93	1.125e3	1.360e3	0.727	0.83	0.77	13.5	YES	NO	dd	dd	0.442
14	Total-tetrafurans	24.70	2.366e3	3.062e3	0.727	0.77	0.77	29.4	YES	NO	bd	bd	0.966
15	Total-tetrafurans	24.50	2.054e3	2.694e3	0.727	0.76	0.77	24.7	YES	NO	db	db	0.845
16	Total-tetrafurans	24.26	2.488e3	3.056e3	0.727	0.81	0.77	23.5	YES	NO	bd	bd	0.987
17	Total-tetrafurans	23.85	1.588e3	1.946e3	0.727	0.82	0.77	17.0	YES	NO	db	db	0.629
18	Total-tetrafurans	23.71	1.051e3	1.255e3	0.727	0.84	0.77	11.9	YES	NO	dd	dd	0.411
19	Total-pentafurans	30.07	7.396e2	4.964e2	0.654	1.49	1.55	4.6	YES	NO	db	db	0.318
20	Total-pentafurans	29.97	2.486e3	1.449e3	0.654	1.72	1.55	16.4	YES	NO	dd	dd	1.012
21	Total-pentafurans	29.29	5.714e2	3.603e2	0.654	1.59	1.55	3.6	YES	NO	dd	dd	0.239
22	Total-pentafurans	28.71	1.315e4	8.180e3	0.654	1.61	1.55	62.1	YES	NO	dd	db	5.484
23	Total-pentafurans	28.51	3.435e3	2.052e3	0.654	1.67	1.55	19.8	YES	NO	dd	dd	1.410
24	23478-PeCDF	31.12	3.276e3	2.101e3	0.786	1.56	1.55	19.7	YES	NO	db	db	1.188
25	Total-pentafurans	30.96	2.186e3	1.549e3	0.654	1.41	1.55	13.3	YES	NO	dd	dd	0.960
26	Total-hexafurans	33.30	3.785e4	3.016e4	1.141	1.25	1.24	464.1	YES	NO	dd	bb	10.308
27	123468-HXCDF	33.09	1.264e4	9.207e3	1.169	1.37	1.24	160.8	YES	NO	bd	bb	3.218
28	123789-HxCDF	36.75	2.564e3	2.407e3	1.137	1.07	1.24	27.8	YES	NO	bb	bb	0.850
29	234678-HxCDF	35.72	5.815e3	4.349e3	1.140	1.34	1.24	44.0	YES	NO	bb	MM	1.566
30	123478-HxCDF	34.76	1.431e4	1.184e4	1.166	1.21	1.24	181.8	YES	NO	dd	dd	3.863
31	Total-hexafurans	34.60	1.890e3	1.644e3	1.141	1.15	1.24	26.9	YES	NO	bd	bd	0.536
32	Total-hexafurans	34.13	6.773e4	5.536e4	1.141	1.22	1.24	870.4	YES	NO	bb	bb	18.658
33	Total-heptafurans	39.07	8.018e2	8.823e2	0.978	0.91	1.05	9.8	YES	NO	db	bb	0.470
34	1234678-HpCDF	38.66	5.945e4	5.973e4	1.003	1.00	1.05	744.8	YES	NO	bb	bb	30.080
35	1234789-HpCDF	40.87	4.572e3	4.318e3	0.953	1.06	1.05	46.8	YES	NO	bb	bb	2.766
36	Total-heptafurans	39.31	1.457e5	1.472e5	0.978	0.99	1.05	1815.5	YES	NO	bd	bd	81.822
37	OCDF	45.08	1.160e5	1.288e5	0.778	0.90	0.89	1464.0	YES	NO	bb	bb	89.449

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	Total-penta1	27.05	2.469e4	1.660e4		1.49	1.55	348.0	YES	NO	bb	bb	7.330

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	24.86	9.559e2	1.152e3	1.024	0.83	0.77	7.4	YES	NO	bb	bd	0.316
2	Total-tetradioxins	24.38	9.930e2	1.233e3	1.024	0.81	0.77	9.0	YES	NO	bb	bb	0.334
3	Total-tetradioxins	23.64	1.249e3	1.516e3	1.024	0.82	0.77	9.4	YES	NO	bd	bd	0.415

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentadioxins	29.98	2.090e3	1.464e3	1.502	1.43	1.55	25.1	YES	NO	bd	bd	0.584
2	Total-pentadioxins	29.15	1.274e3	7.924e2	1.502	1.61	1.55	15.6	YES	NO	bb	bb	0.340
3	12479-PECDD	28.67	5.198e3	3.412e3	2.301	1.52	1.55	39.2	YES	NO	bb	bb	0.924

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.39	6.253e3	5.816e3	0.907	1.08	1.24	62.8	YES	NO	db	bb	2.146
2	Total-hexadioxins	36.16	2.518e3	1.843e3	1.005	1.37	1.24	22.4	YES	NO	db	db	0.700
3	123678-HxCDD	36.00	1.283e4	1.059e4	1.001	1.21	1.24	123.0	YES	NO	dd	dd	3.565
4	123478-HxCDD	35.89	2.886e3	2.533e3	0.996	1.14	1.24	29.5	YES	NO	bd	bd	0.933
5	Total-hexadioxins	34.99	3.784e4	3.126e4	1.005	1.21	1.24	244.6	YES	NO	bd	bd	11.093
6	Total-hexadioxins	34.64	7.350e3	5.466e3	1.005	1.34	1.24	70.0	YES	NO	bd	bb	2.058
7	124679-HXCDD	33.87	3.384e4	2.744e4	1.115	1.23	1.24	308.5	YES	NO	bb	bb	9.420

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234679-HPCDD	39.11	3.626e5	3.532e5	1.137	1.03	1.05	2302.2	YES	NO	bb	bb	164.538
2	1234678-HpCDD	40.14	2.469e5	2.390e5	1.039	1.03	1.05	1505.1	YES	NO	bb	bb	122.197

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ID: 23A0171-02, Name: 23031708, Date: 17-Mar-2023, Time: 16:05:07, Conditions: AUTOSPEC01, User: pk

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	24.86	9.559e2	1.152e3	1.024	0.83	0.77	7.4	YES	NO	bb	bd	0.316
2	Total-tetradioxins	24.38	9.930e2	1.233e3	1.024	0.81	0.77	9.0	YES	NO	bb	bb	0.334
3	Total-tetradioxins	23.64	1.249e3	1.516e3	1.024	0.82	0.77	9.4	YES	NO	bd	bd	0.415
4	Total-pentadioxins	29.98	2.090e3	1.464e3	1.502	1.43	1.55	25.1	YES	NO	bd	bd	0.584
5	Total-pentadioxins	29.15	1.274e3	7.924e2	1.502	1.61	1.55	15.6	YES	NO	bb	bb	0.340
6	12479-PECDD	28.67	5.198e3	3.412e3	2.301	1.52	1.55	39.2	YES	NO	bb	bb	0.924
7	123789-HxCDD	36.39	6.253e3	5.816e3	0.907	1.08	1.24	62.8	YES	NO	db	bb	2.146
8	Total-hexadioxins	36.16	2.518e3	1.843e3	1.005	1.37	1.24	22.4	YES	NO	db	db	0.700
9	123678-HxCDD	36.00	1.283e4	1.059e4	1.001	1.21	1.24	123.0	YES	NO	dd	dd	3.565
10	123478-HxCDD	35.89	2.886e3	2.533e3	0.996	1.14	1.24	29.5	YES	NO	bd	bd	0.933
11	Total-hexadioxins	34.99	3.784e4	3.126e4	1.005	1.21	1.24	244.6	YES	NO	bd	bd	11.093
12	Total-hexadioxins	34.64	7.350e3	5.466e3	1.005	1.34	1.24	70.0	YES	NO	bd	bb	2.058
13	124679-HXCDD	33.87	3.384e4	2.744e4	1.115	1.23	1.24	308.5	YES	NO	bb	bb	9.420
14	1234679-HPCDD	39.11	3.626e5	3.532e5	1.137	1.03	1.05	2302.2	YES	NO	bb	bb	164.538
15	OCDD	44.87	1.852e6	2.129e6	0.920	0.87	0.89	10994.3	YES	NO	bb	bb	1229.8...
16	1234678-HpCDD	40.14	2.469e5	2.390e5	1.039	1.03	1.05	1505.1	YES	NO	bb	bb	122.197

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	23.60	1.523e3	2.271e3	0.727	0.67	0.77	19.1	YES	NO	bd	bd	0.675
2	Total-tetrafurans	23.36	2.854e3	3.854e3	0.727	0.74	0.77	34.2	YES	NO	dd	dd	1.194
3	Total-tetrafurans	23.26	5.143e3	6.470e3	0.727	0.79	0.77	51.3	YES	NO	dd	dd	2.067
4	Total-tetrafurans	23.08	1.117e3	1.528e3	0.727	0.73	0.77	11.3	YES	NO	dd	dd	0.471
5	Total-tetrafurans	22.94	2.295e3	3.074e3	0.727	0.75	0.77	24.9	YES	NO	bd	bd	0.956
6	Total-tetrafurans	22.37	9.217e2	1.044e3	0.727	0.88	0.77	11.0	YES	NO	db	bb	0.350
7	Total-tetrafurans	25.96	2.937e2	3.324e2	0.727	0.88	0.77	4.3	YES	NO	db	db	0.111
8	Total-tetrafurans	25.84	1.587e3	2.096e3	0.727	0.76	0.77	16.7	YES	NO	dd	dd	0.656
9	Total-tetrafurans	25.73	1.094e3	1.557e3	0.727	0.70	0.77	11.1	YES	NO	dd	dd	0.472
10	2378-TCDF	25.60	4.062e3	5.098e3	0.702	0.80	0.77	46.8	YES	NO	dd	bd	1.690
11	Total-tetrafurans	25.38	4.694e3	6.306e3	0.727	0.74	0.77	38.0	YES	NO	bd	db	1.958
12	Total-tetrafurans	25.11	5.316e2	6.260e2	0.727	0.85	0.77	5.9	YES	NO	db	db	0.206
13	Total-tetrafurans	24.93	1.125e3	1.360e3	0.727	0.83	0.77	13.5	YES	NO	dd	dd	0.442
14	Total-tetrafurans	24.70	2.366e3	3.062e3	0.727	0.77	0.77	29.4	YES	NO	bd	bd	0.966
15	Total-tetrafurans	24.50	2.054e3	2.694e3	0.727	0.76	0.77	24.7	YES	NO	db	db	0.845
16	Total-tetrafurans	24.26	2.488e3	3.056e3	0.727	0.81	0.77	23.5	YES	NO	bd	bd	0.987
17	Total-tetrafurans	23.85	1.588e3	1.946e3	0.727	0.82	0.77	17.0	YES	NO	db	db	0.629
18	Total-tetrafurans	23.71	1.051e3	1.255e3	0.727	0.84	0.77	11.9	YES	NO	dd	dd	0.411
19	Total-pentafurans	30.07	7.396e2	4.964e2	0.654	1.49	1.55	4.6	YES	NO	db	db	0.318
20	Total-pentafurans	29.97	2.486e3	1.449e3	0.654	1.72	1.55	16.4	YES	NO	dd	dd	1.012
21	Total-pentafurans	29.29	5.714e2	3.603e2	0.654	1.59	1.55	3.6	YES	NO	dd	dd	0.239
22	Total-pentafurans	28.71	1.315e4	8.180e3	0.654	1.61	1.55	62.1	YES	NO	dd	db	5.484
23	Total-pentafurans	28.51	3.435e3	2.052e3	0.654	1.67	1.55	19.8	YES	NO	dd	dd	1.410
24	23478-PeCDF	31.12	3.276e3	2.101e3	0.786	1.56	1.55	19.7	YES	NO	db	db	1.188
25	Total-pentafurans	30.96	2.186e3	1.549e3	0.654	1.41	1.55	13.3	YES	NO	dd	dd	0.960
26	Total-hexafurans	33.30	3.785e4	3.016e4	1.141	1.25	1.24	464.1	YES	NO	dd	bb	10.308
27	123468-HXCDF	33.09	1.264e4	9.207e3	1.169	1.37	1.24	160.8	YES	NO	bd	bb	3.218
28	123789-HxCDF	36.75	2.564e3	2.407e3	1.137	1.07	1.24	27.8	YES	NO	bb	bb	0.850
29	234678-HxCDF	35.72	5.815e3	4.349e3	1.140	1.34	1.24	44.0	YES	NO	bb	MM	1.566
30	123478-HxCDF	34.76	1.431e4	1.184e4	1.166	1.21	1.24	181.8	YES	NO	dd	dd	3.863
31	Total-hexafurans	34.60	1.890e3	1.644e3	1.141	1.15	1.24	26.9	YES	NO	bd	bd	0.536
32	Total-hexafurans	34.13	6.773e4	5.536e4	1.141	1.22	1.24	870.4	YES	NO	bb	bb	18.658
33	Total-heptafurans	39.07	8.018e2	8.823e2	0.978	0.91	1.05	9.8	YES	NO	db	bb	0.470
34	1234678-HpCDF	38.66	5.945e4	5.973e4	1.003	1.00	1.05	744.8	YES	NO	bb	bb	30.080
35	1234789-HpCDF	40.87	4.572e3	4.318e3	0.953	1.06	1.05	46.8	YES	NO	bb	bb	2.766
36	Total-heptafurans	39.31	1.457e5	1.472e5	0.978	0.99	1.05	1815.5	YES	NO	bd	bd	81.822
37	OCDF	45.08	1.160e5	1.288e5	0.778	0.90	0.89	1464.0	YES	NO	bb	bb	89.449

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	Total-penta1	27.05	2.469e4	1.660e4		1.49	1.55	348.0	YES	NO	bb	bb	7.330
39	Total-tetradioxins	24.86	9.559e2	1.152e3	1.024	0.83	0.77	7.4	YES	NO	bb	bd	0.316
40	Total-tetradioxins	24.38	9.930e2	1.233e3	1.024	0.81	0.77	9.0	YES	NO	bb	bb	0.334
41	Total-tetradioxins	23.64	1.249e3	1.516e3	1.024	0.82	0.77	9.4	YES	NO	bd	bd	0.415
42	Total-pentadioxins	29.98	2.090e3	1.464e3	1.502	1.43	1.55	25.1	YES	NO	bd	bd	0.584
43	Total-pentadioxins	29.15	1.274e3	7.924e2	1.502	1.61	1.55	15.6	YES	NO	bb	bb	0.340
44	12479-PECDD	28.67	5.198e3	3.412e3	2.301	1.52	1.55	39.2	YES	NO	bb	bb	0.924
45	123789-HxCDD	36.39	6.253e3	5.816e3	0.907	1.08	1.24	62.8	YES	NO	db	bb	2.146
46	Total-hexadioxins	36.16	2.518e3	1.843e3	1.005	1.37	1.24	22.4	YES	NO	db	db	0.700
47	123678-HxCDD	36.00	1.283e4	1.059e4	1.001	1.21	1.24	123.0	YES	NO	dd	dd	3.565
48	123478-HxCDD	35.89	2.886e3	2.533e3	0.996	1.14	1.24	29.5	YES	NO	bd	bd	0.933
49	Total-hexadioxins	34.99	3.784e4	3.126e4	1.005	1.21	1.24	244.6	YES	NO	bd	bd	11.093
50	Total-hexadioxins	34.64	7.350e3	5.466e3	1.005	1.34	1.24	70.0	YES	NO	bd	bb	2.058
51	124679-HXCDD	33.87	3.384e4	2.744e4	1.115	1.23	1.24	308.5	YES	NO	bb	bb	9.420
52	1234679-HPCDD	39.11	3.626e5	3.532e5	1.137	1.03	1.05	2302.2	YES	NO	bb	bb	164.538
53	OCDD	44.87	1.852e6	2.129e6	0.920	0.87	0.89	10994.3	YES	NO	bb	bb	1229.8...
54	1234678-HpCDD	40.14	2.469e5	2.390e5	1.039	1.03	1.05	1505.1	YES	NO	bb	bb	122.197

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	25.05	5.472e3					0.6	NO		bb		
2	FUNCTION1 PFK	23.97	1.504e4					0.9	NO		bb		
3	FUNCTION1 PFK	22.24	5.197e4					1.5	NO		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	29.02	7.851e4					2.9	NO		bb		0.000

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PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	32.70	2.824e4					1.4	NO		bb		0.000
2	FUNCTION3 PFK	34.16	1.882e4					1.2	NO		db		0.000
3	FUNCTION3 PFK	34.14	1.928e4					1.4	NO		bd		0.000
4	FUNCTION3 PFK	34.09	8.341e3					0.7	NO		db		0.000
5	FUNCTION3 PFK	34.06	3.269e3					0.4	NO		bd		0.000
6	FUNCTION3 PFK	34.01	4.983e3					0.5	NO		bb		0.000
7	FUNCTION3 PFK	33.90	3.014e4					1.1	NO		db		0.000
8	FUNCTION3 PFK	33.82	7.783e3					0.7	NO		bd		0.000
9	FUNCTION3 PFK	33.79	2.073e3					0.3	NO		bb		0.000
10	FUNCTION3 PFK	33.68	1.211e4					0.8	NO		bb		0.000
11	FUNCTION3 PFK	33.47	1.995e4					0.9	NO		db		0.000
12	FUNCTION3 PFK	33.40	2.468e4					1.2	NO		bd		0.000
13	FUNCTION3 PFK	33.32	1.392e4					1.2	NO		bb		0.000
14	FUNCTION3 PFK	33.23	5.430e3					0.6	NO		bb		0.000
15	FUNCTION3 PFK	33.04	1.210e4					0.9	NO		bb		0.000
16	FUNCTION3 PFK	32.97	3.049e4					1.5	NO		bb		0.000
17	FUNCTION3 PFK	32.86	9.581e3					0.7	NO		bb		0.000
18	FUNCTION3 PFK	36.55	2.082e4					1.0	NO		db		0.000
19	FUNCTION3 PFK	36.50	2.127e4					1.2	NO		bd		0.000
20	FUNCTION3 PFK	36.26	1.347e4					1.0	NO		bb		0.000
21	FUNCTION3 PFK	36.14	1.071e4					0.9	NO		bb		0.000
22	FUNCTION3 PFK	35.87	5.276e4					1.0	NO		bb		0.000
23	FUNCTION3 PFK	35.71	8.899e3					0.7	NO		bb		0.000
24	FUNCTION3 PFK	35.51	2.130e4					1.2	NO		db		0.000
25	FUNCTION3 PFK	35.46	2.042e4					1.1	NO		dd		0.000
26	FUNCTION3 PFK	35.42	1.730e4					1.1	NO		bd		0.000
27	FUNCTION3 PFK	35.13	1.707e4					1.3	NO		bb		0.000
28	FUNCTION3 PFK	34.69	9.606e3					0.5	NO		bb		0.000
29	FUNCTION3 PFK	34.65	1.226e4					1.0	NO		bb		0.000
30	FUNCTION3 PFK	34.58	2.231e4					1.4	NO		db		0.000
31	FUNCTION3 PFK	34.52	2.251e4					1.2	NO		bd		0.000
32	FUNCTION3 PFK	34.47	7.324e3					0.7	NO		bb		0.000
33	FUNCTION3 PFK	34.27	4.015e4					1.6	NO		bb		0.000
34	FUNCTION3 PFK	37.45	9.025e4					2.3	NO		db		0.000
35	FUNCTION3 PFK	37.39	1.971e4					1.5	NO		bd		0.000
36	FUNCTION3 PFK	37.33	5.286e4					2.2	NO		db		0.000
37	FUNCTION3 PFK	37.26	2.595e4					1.3	NO		dd		0.000

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PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	FUNCTION3 PFK	37.22	3.243e4					1.8	NO		bd		0.000
39	FUNCTION3 PFK	37.01	1.177e4					0.7	NO		bb		0.000
40	FUNCTION3 PFK	36.89	2.446e4					1.1	NO		db		0.000
41	FUNCTION3 PFK	36.82	2.581e4					1.2	NO		dd		0.000
42	FUNCTION3 PFK	36.75	1.894e4					1.2	NO		bd		0.000
43	FUNCTION3 PFK	36.62	4.909e3					0.5	NO		bb		0.000

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PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	38.45	2.072e4					2.0	NO		bb		
2	FUNCTION4 PFK	38.31	4.650e3					0.9	NO		bb		
3	FUNCTION4 PFK	37.91	1.359e6					20.2	YES		db		
4	FUNCTION4 PFK	37.84	7.975e5					23.1	YES		dd		
5	FUNCTION4 PFK	37.68	8.581e5					31.9	YES		bd		
6	FUNCTION4 PFK	40.07	2.480e3					0.4	NO		bd		
7	FUNCTION4 PFK	39.94	3.250e4					1.9	NO		db		
8	FUNCTION4 PFK	39.87	3.785e4					1.7	NO		dd		
9	FUNCTION4 PFK	39.76	1.127e4					1.2	NO		bd		
10	FUNCTION4 PFK	39.64	3.879e3					0.6	NO		bb		
11	FUNCTION4 PFK	39.55	4.247e3					0.9	NO		bb		
12	FUNCTION4 PFK	39.51	6.840e3					1.0	NO		db		
13	FUNCTION4 PFK	39.46	1.300e4					1.3	NO		bd		
14	FUNCTION4 PFK	39.36	7.048e3					1.0	NO		db		
15	FUNCTION4 PFK	39.32	4.616e3					0.7	NO		bd		
16	FUNCTION4 PFK	39.27	1.124e4					1.5	NO		db		
17	FUNCTION4 PFK	39.22	1.462e4					1.4	NO		bd		
18	FUNCTION4 PFK	39.12	4.261e3					0.7	NO		bb		
19	FUNCTION4 PFK	38.85	1.099e4					1.0	NO		bb		
20	FUNCTION4 PFK	38.58	1.941e4					2.4	NO		db		
21	FUNCTION4 PFK	38.54	1.429e4					1.7	NO		bd		
22	FUNCTION4 PFK	42.33	8.955e3					1.1	NO		bb		
23	FUNCTION4 PFK	42.25	4.947e3					0.9	NO		bb		
24	FUNCTION4 PFK	42.18	1.170e4					1.5	NO		bb		
25	FUNCTION4 PFK	41.79	5.831e3					0.8	NO		bb		
26	FUNCTION4 PFK	41.42	1.181e4					1.8	NO		bb		
27	FUNCTION4 PFK	41.29	2.209e4					1.5	NO		bb		
28	FUNCTION4 PFK	41.19	2.048e4					1.6	NO		db		
29	FUNCTION4 PFK	41.13	2.143e4					2.0	NO		dd		
30	FUNCTION4 PFK	41.08	2.694e4					2.4	NO		dd		
31	FUNCTION4 PFK	41.02	1.106e4					1.6	NO		bd		
32	FUNCTION4 PFK	40.97	4.964e3					0.7	NO		bb		
33	FUNCTION4 PFK	40.87	1.395e4					1.9	NO		bb		
34	FUNCTION4 PFK	40.65	1.521e3					0.5	NO		bb		
35	FUNCTION4 PFK	40.44	7.186e3					0.9	NO		bb		
36	FUNCTION4 PFK	40.18	1.156e4					0.9	NO		db		

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PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	45.57	2.070e3					0.6	NO		bb		
2	FUNCTION5 PFK	45.33	5.477e3					1.1	NO		bb		
3	FUNCTION5 PFK	45.27	7.727e3					1.0	NO		bb		
4	FUNCTION5 PFK	45.04	2.164e3					0.6	NO		bb		
5	FUNCTION5 PFK	44.87	8.481e3					1.5	NO		db		
6	FUNCTION5 PFK	44.84	8.635e3					1.1	NO		bd		
7	FUNCTION5 PFK	44.22	1.299e3					0.5	NO		db		
8	FUNCTION5 PFK	44.20	4.397e3					1.0	NO		bd		
9	FUNCTION5 PFK	44.11	1.214e3					0.6	NO		bb		
10	FUNCTION5 PFK	44.01	5.247e3					1.1	NO		bb		
11	FUNCTION5 PFK	43.82	1.061e4					0.9	NO		bb		
12	FUNCTION5 PFK	43.78	8.703e2					0.4	NO		bb		
13	FUNCTION5 PFK	43.17	8.314e2					0.4	NO		bb		
14	FUNCTION5 PFK	43.14	9.581e2					0.5	NO		bb		
15	FUNCTION5 PFK	42.60	9.403e3					2.2	NO		db		
16	FUNCTION5 PFK	42.57	1.586e4					2.6	NO		bd		
17	FUNCTION5 PFK	45.78	3.881e3					1.1	NO		bb		
18	FUNCTION5 PFK	45.66	3.207e3					0.9	NO		bb		

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ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	24.81	1.647e2					2.2	NO		bd		0.000
2	FUNCTION1 HXCD...	24.33	8.927e1					1.7	NO		bb		0.000
3	FUNCTION1 HXCD...	23.83	9.549e1					1.4	NO		db		0.000
4	FUNCTION1 HXCD...	23.73	1.528e2					1.9	NO		dd		0.000
5	FUNCTION1 HXCD...	23.58	2.502e2					4.9	YES		bd		0.000
6	FUNCTION1 HXCD...	23.22	9.659e1					1.7	NO		db		0.000
7	FUNCTION1 HXCD...	23.13	7.988e1					2.0	NO		dd		0.000
8	FUNCTION1 HXCD...	23.09	7.028e1					1.8	NO		dd		0.000
9	FUNCTION1 HXCD...	22.99	1.300e2					2.7	NO		bd		0.000
10	FUNCTION1 HXCD...	22.13	2.017e2					4.1	YES		bb		0.000
11	FUNCTION1 HXCD...	21.61	1.903e2					5.1	YES		bb		0.000
12	FUNCTION1 HXCD...	21.34	7.017e1					1.7	NO		bb		0.000
13	FUNCTION1 HXCD...	21.23	7.286e1					2.1	NO		bb		0.000
14	FUNCTION1 HXCD...	26.62	2.591e2					5.7	YES		db		0.000
15	FUNCTION1 HXCD...	26.55	1.842e2					3.4	YES		bd		0.000
16	FUNCTION1 HXCD...	26.44	7.318e1					1.3	NO		bb		0.000
17	FUNCTION1 HXCD...	25.94	4.576e2					9.6	YES		bb		0.000
18	FUNCTION1 HXCD...	25.73	3.788e3					73.9	YES		db		0.000
19	FUNCTION1 HXCD...	25.60	1.903e2					4.8	YES		bd		0.000
20	FUNCTION1 HXCD...	25.39	2.246e2					4.7	YES		bb		0.000
21	FUNCTION1 HXCD...	25.15	1.212e2					2.3	NO		db		0.000
22	FUNCTION1 HXCD...	25.00	1.074e2					2.0	NO		dd		0.000
23	FUNCTION1 HXCD...	24.94	9.829e1					3.5	YES		dd		0.000
24	FUNCTION1 HXCD...	24.91	1.672e2					3.6	YES		dd		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ID: 23A0171-02, Name: 23031708, Date: 17-Mar-2023, Time: 16:05:07, Conditions: AUTOSPEC01, User: pk

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.13	1.333e2					2.5	NO		bd		0.000
2	FUNCTION2 HPCD...	29.70	2.863e2					7.2	YES		bb		0.000
3	FUNCTION2 HPCD...	28.78	1.247e2					4.0	YES		bb		0.000
4	FUNCTION2 HPCD...	28.04	8.792e1					3.5	YES		bb		0.000
5	FUNCTION2 HPCD...	32.03	8.791e1					2.4	NO		bb		0.000
6	FUNCTION2 HPCD...	31.33	1.656e2					3.6	YES		bb		0.000
7	FUNCTION2 HPCD...	31.25	7.889e1					3.0	YES		db		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.41	7.641e1					1.8	NO		bb		0.000
2	FUNCTION3 OCDPE	34.81	1.300e2					6.0	YES		db		0.000
3	FUNCTION3 OCDPE	34.77	8.648e1					4.3	YES		bd		0.000
4	FUNCTION3 OCDPE	34.31	8.043e1					2.0	NO		bb		0.000
5	FUNCTION3 OCDPE	34.14	7.003e1					3.8	YES		bb		0.000
6	FUNCTION3 OCDPE	34.04	1.300e2					4.3	YES		db		0.000
7	FUNCTION3 OCDPE	33.96	1.103e2					5.4	YES		dd		0.000
8	FUNCTION3 OCDPE	33.84	1.291e2					4.9	YES		bd		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	39.02	7.104e1					2.4	NO		bb		0.000
2	FUNCTION4 NCDPE	38.39	1.050e2					0.0	NO		bb		0.000
3	FUNCTION4 NCDPE	38.27	2.929e4					626.6	YES		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
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ID: 23A0171-02, Name: 23031708, Date: 17-Mar-2023, Time: 16:05:07, Conditions: AUTOSPEC01, User: pk

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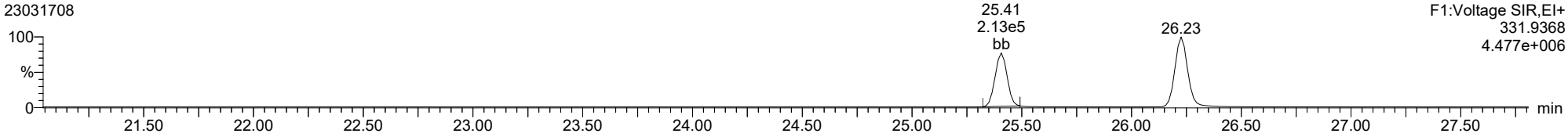

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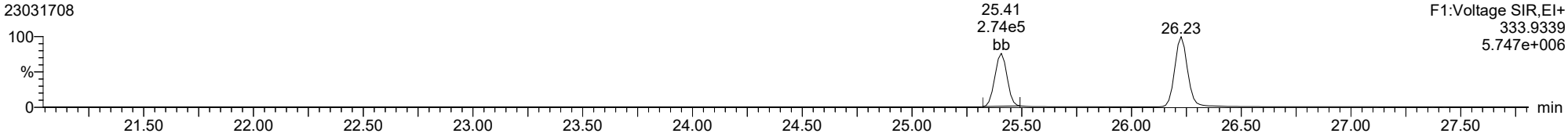

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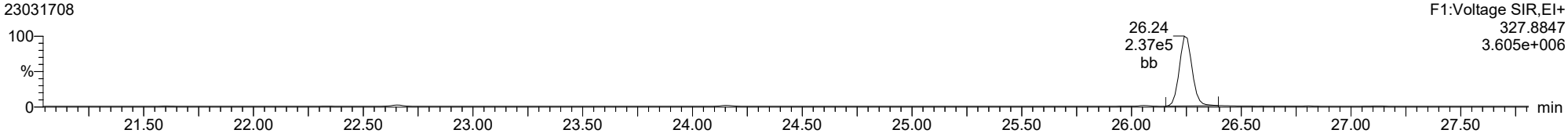

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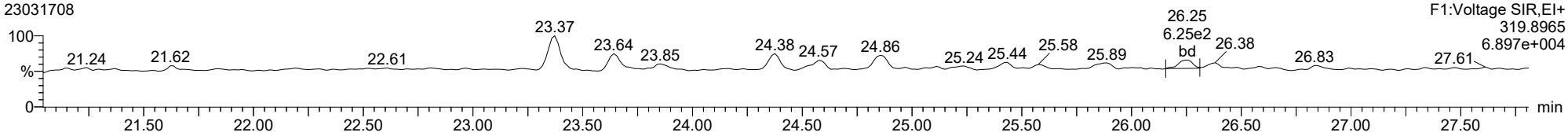

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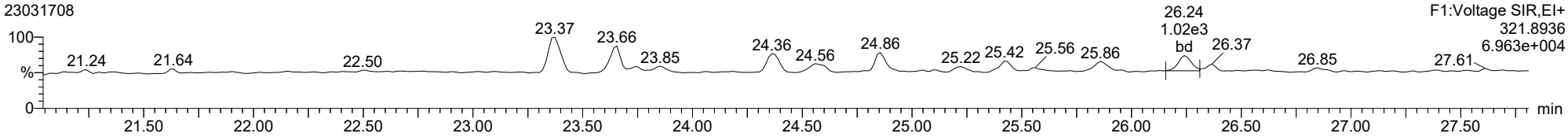

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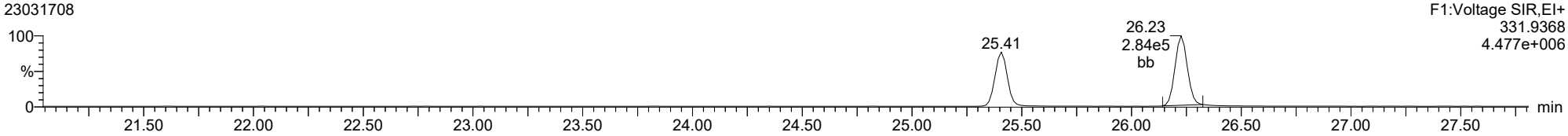

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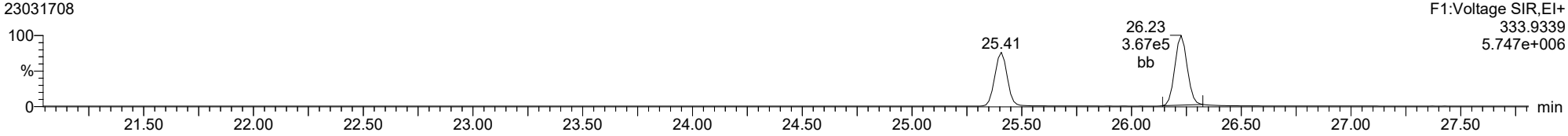

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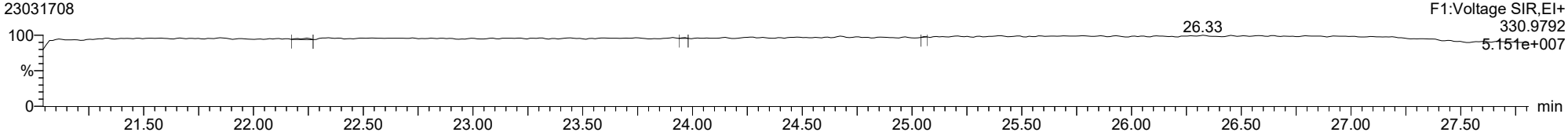

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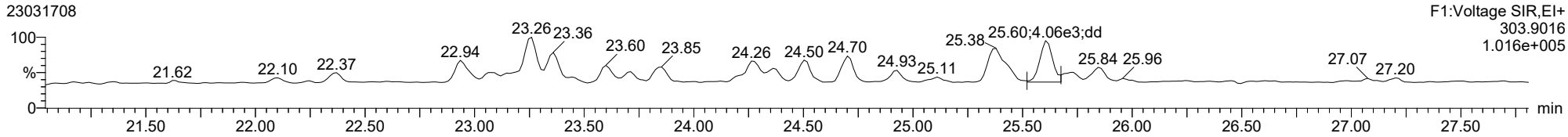

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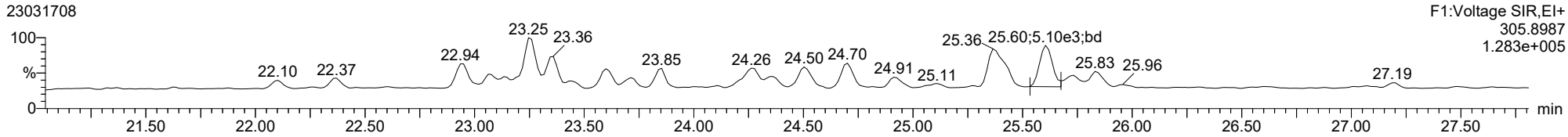

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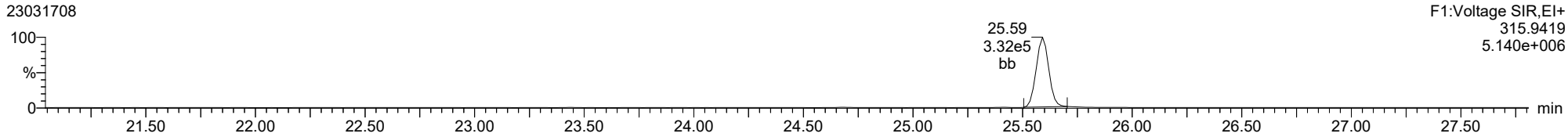

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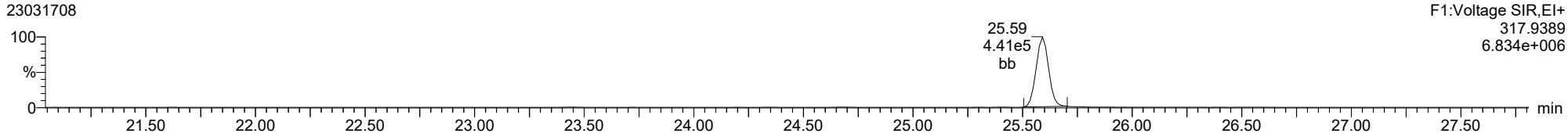
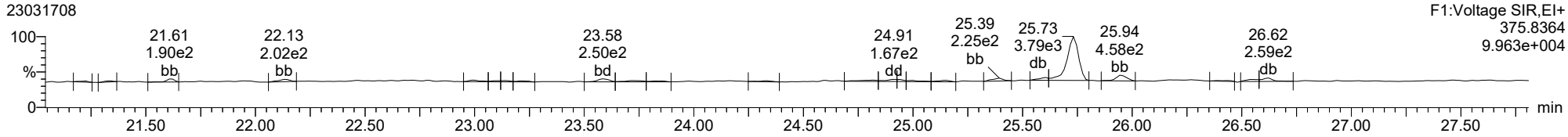


FUNCTION1 HXCDPE



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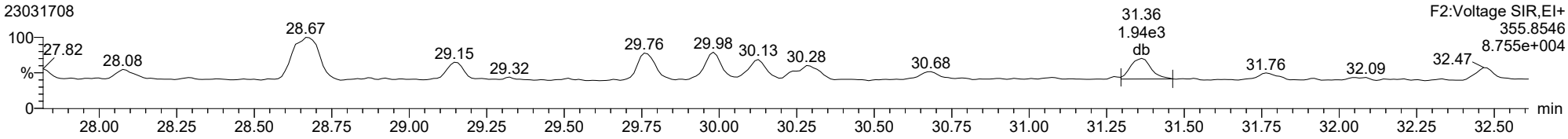

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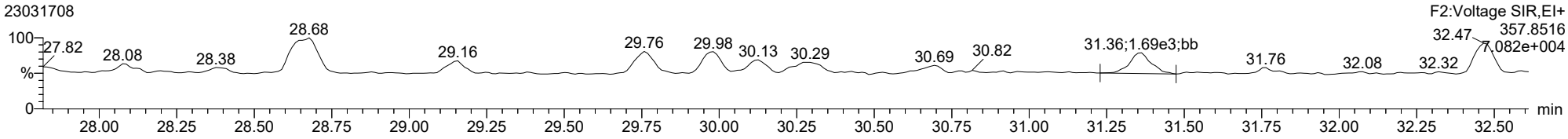

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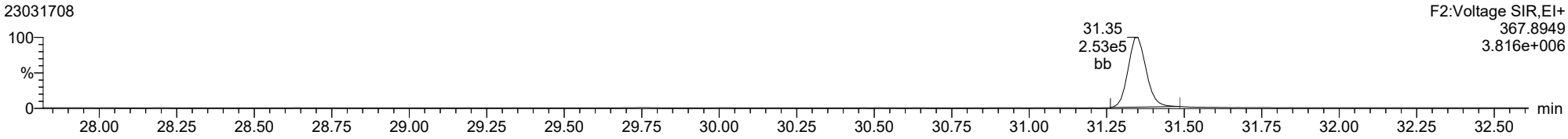

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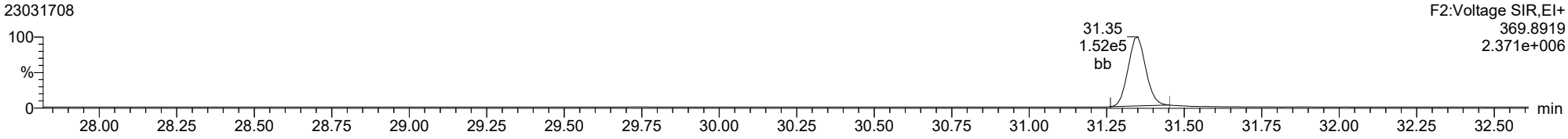

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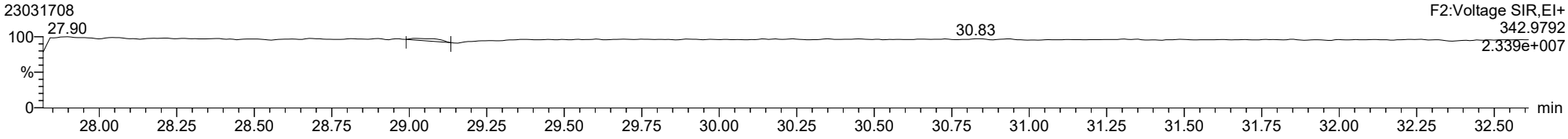

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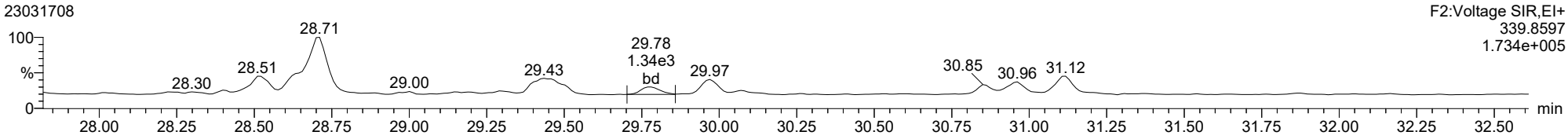

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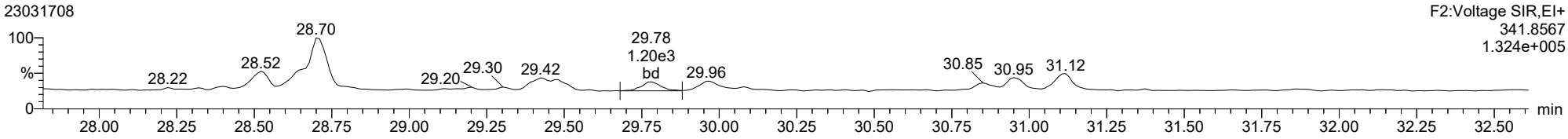

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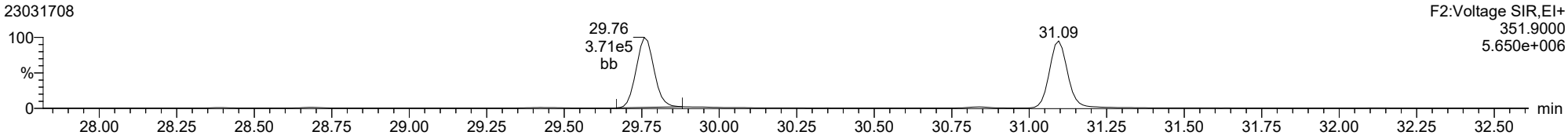

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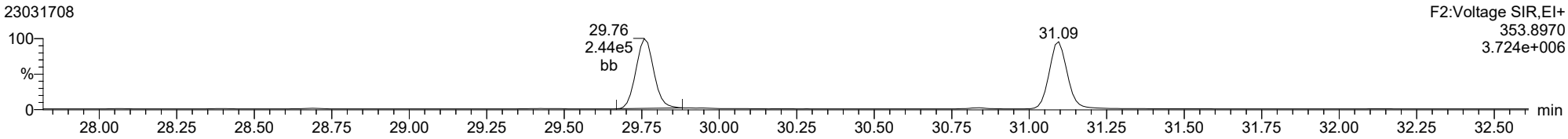

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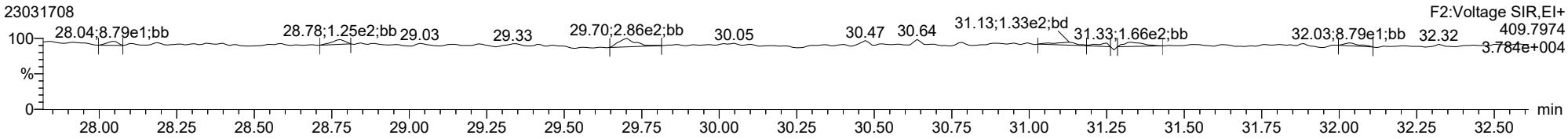

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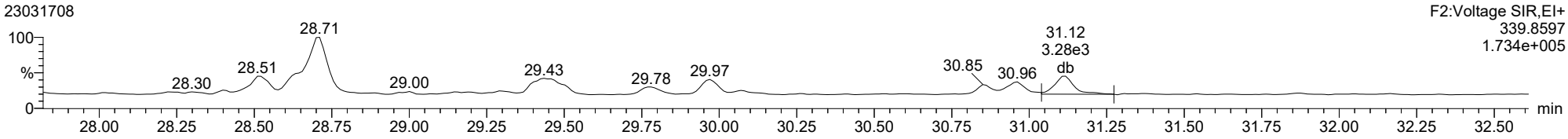

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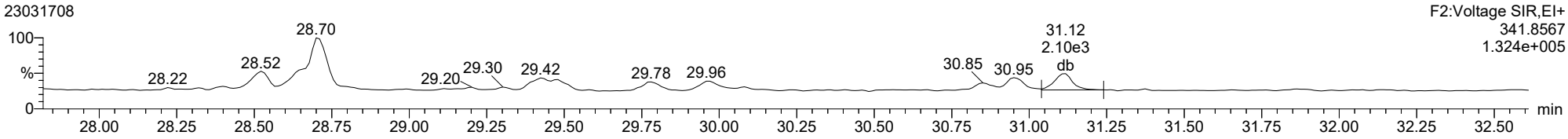

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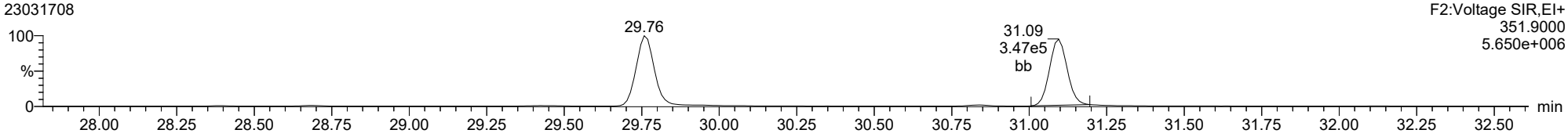

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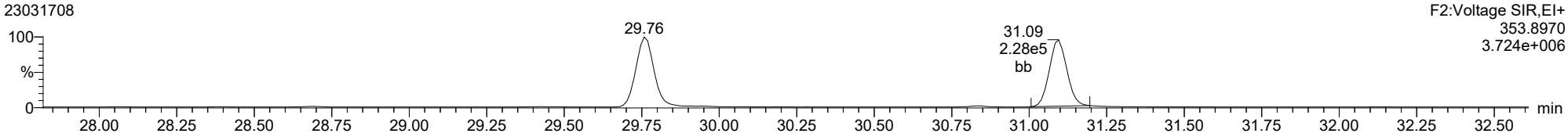

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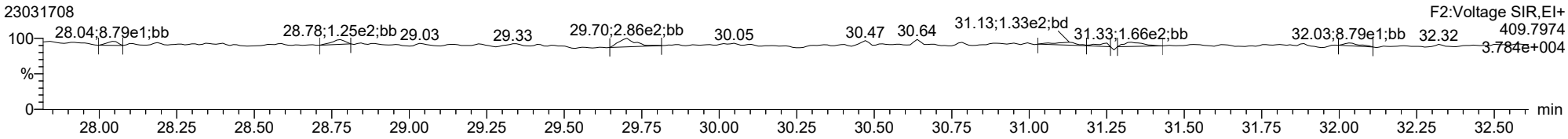

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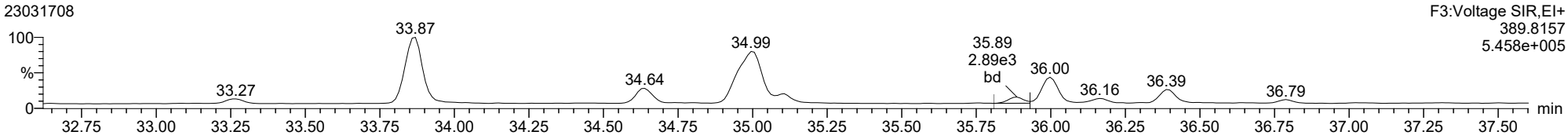

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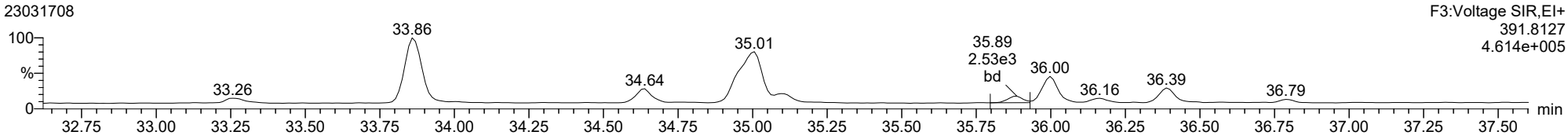

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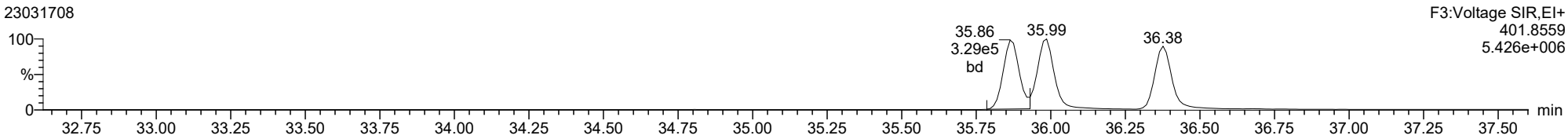

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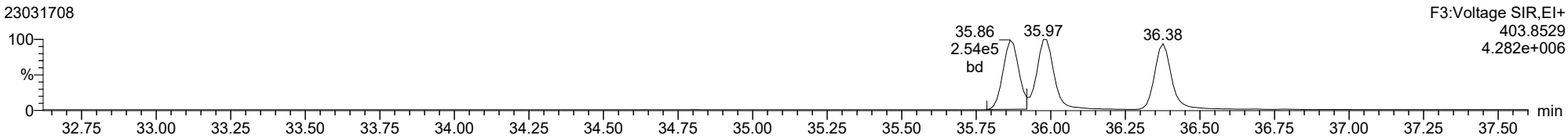

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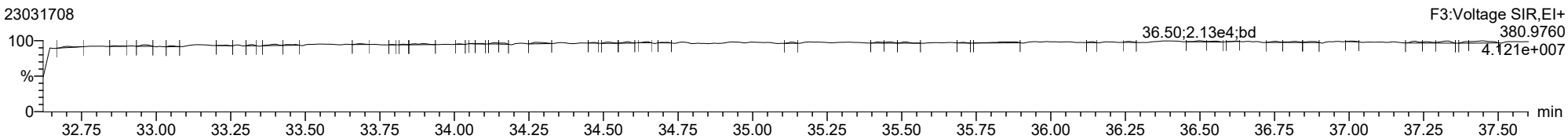

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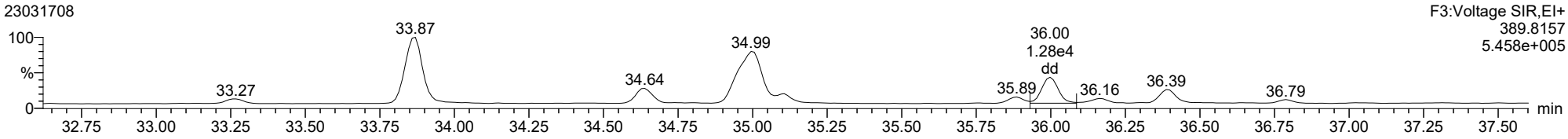

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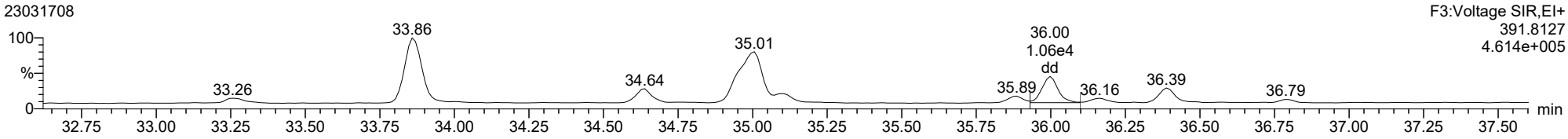

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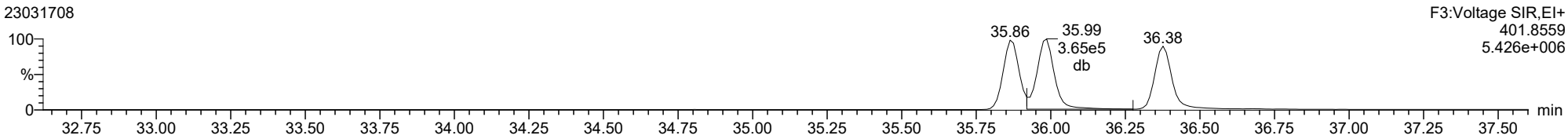

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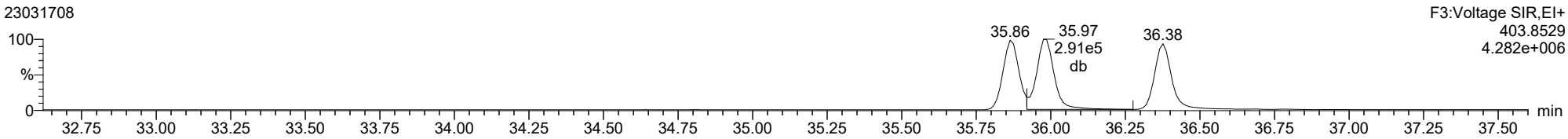

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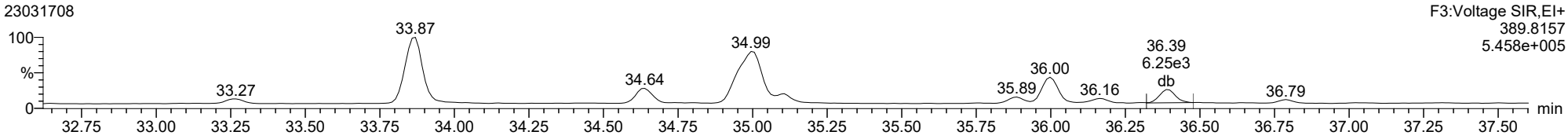

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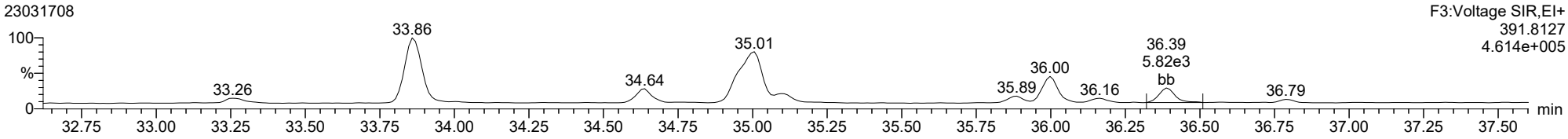

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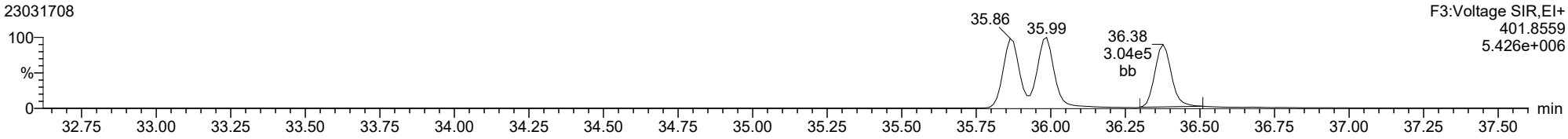

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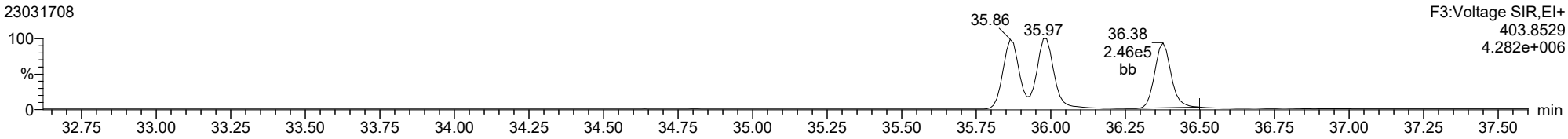

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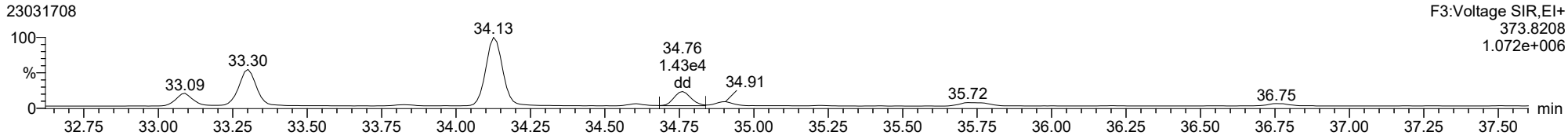

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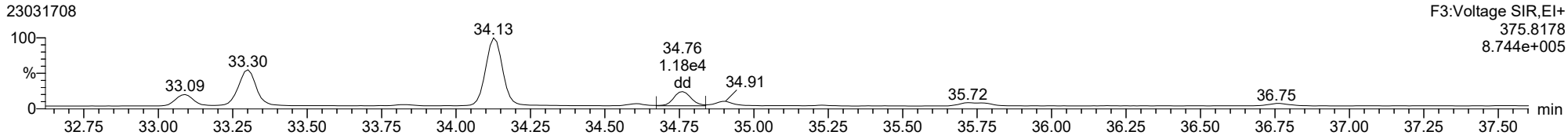

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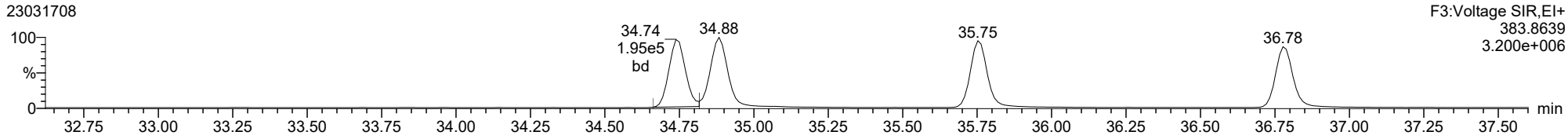

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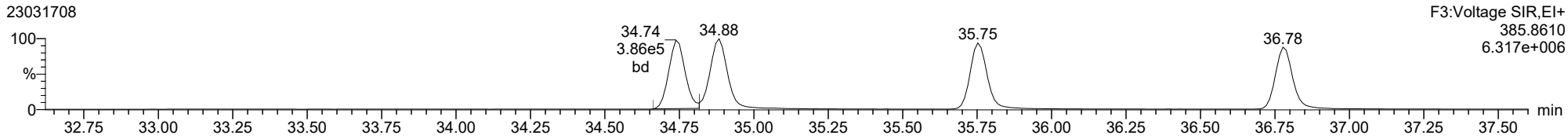

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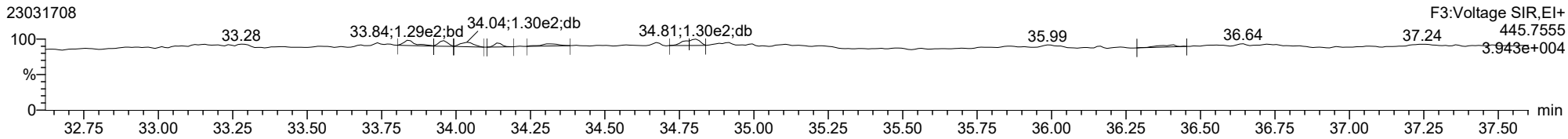

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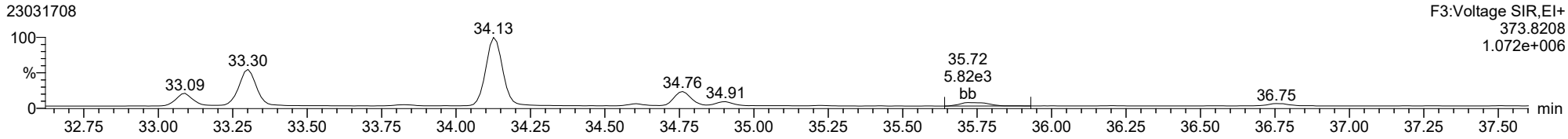

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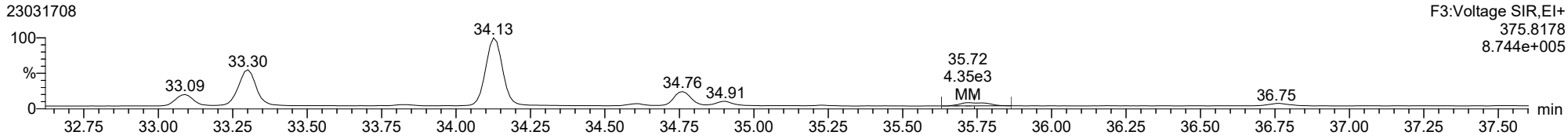

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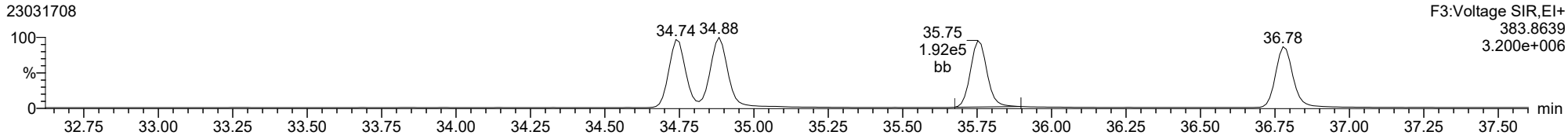

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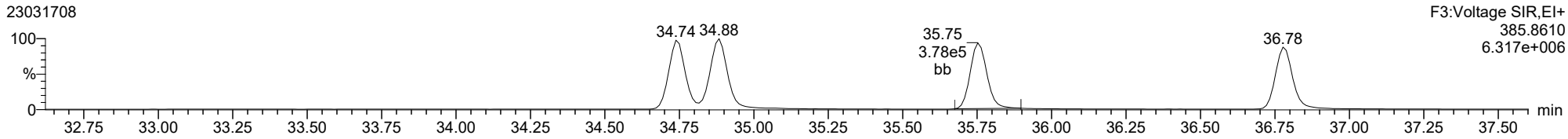

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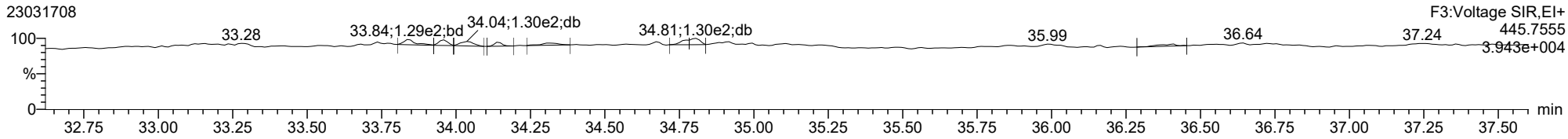

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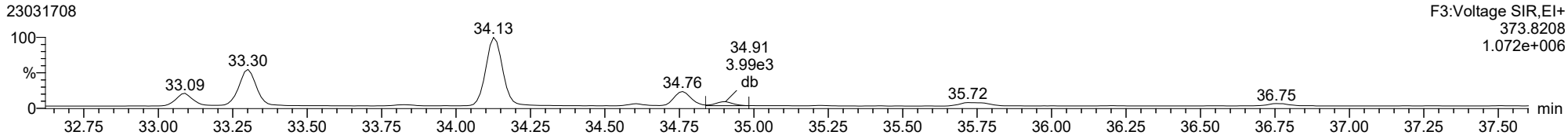

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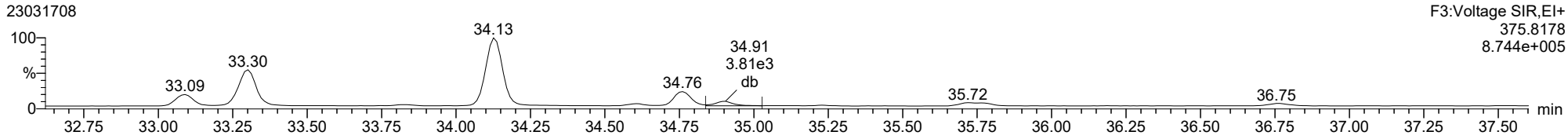

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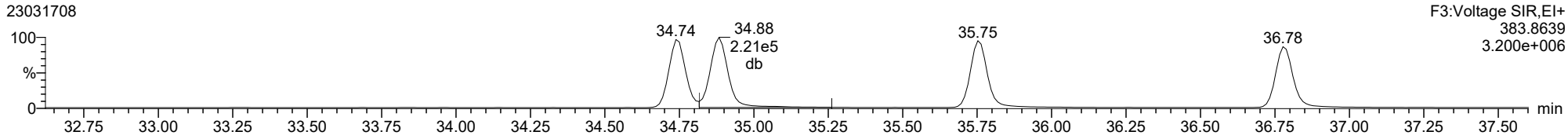

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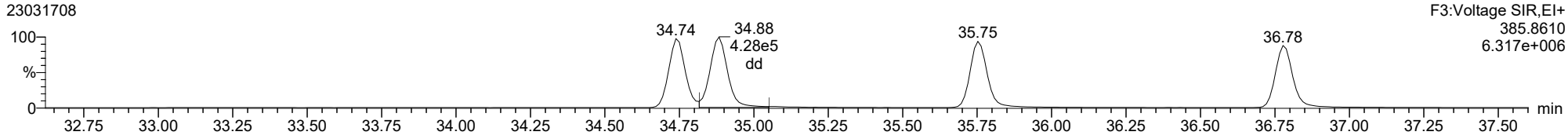

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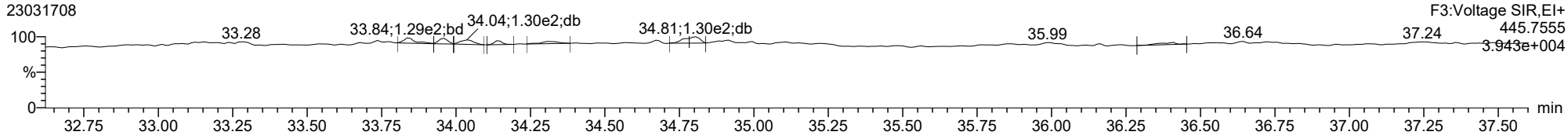

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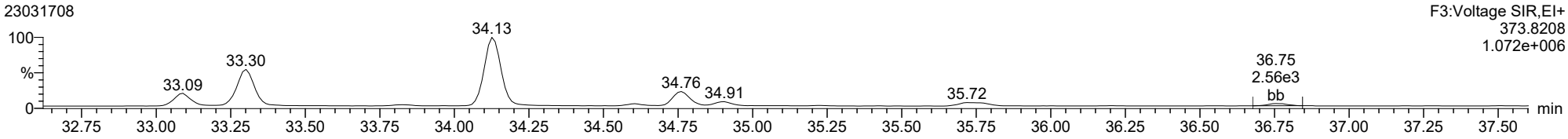

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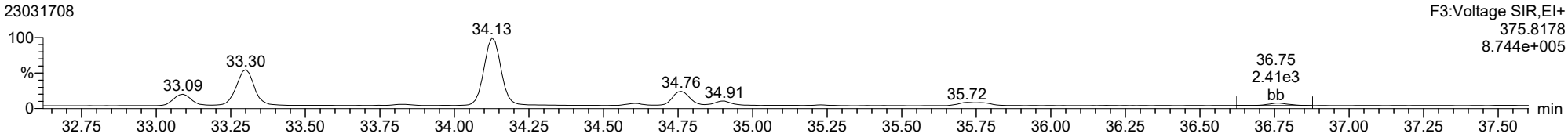

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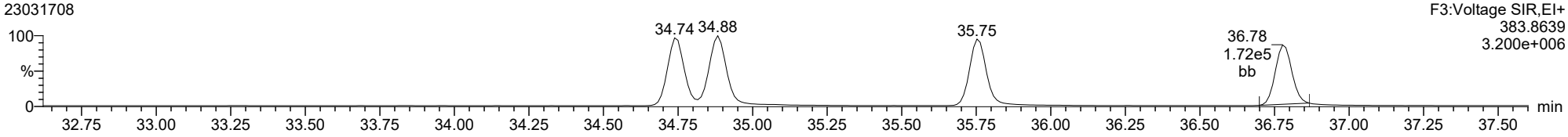

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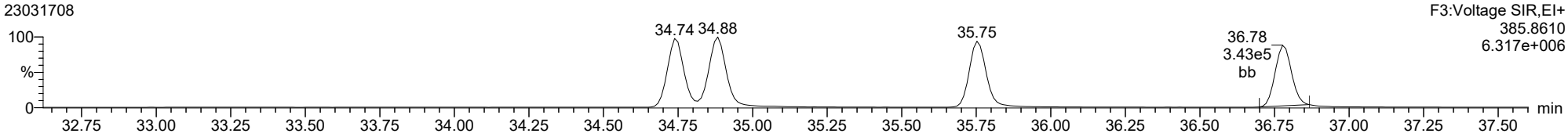

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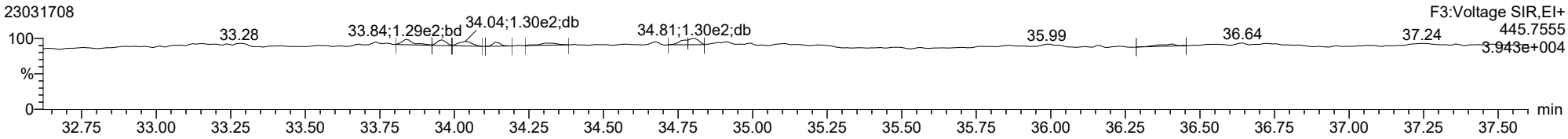

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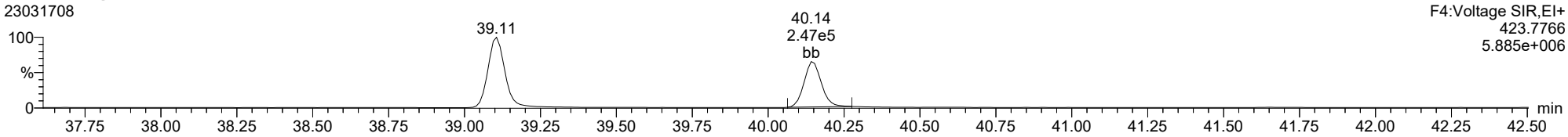

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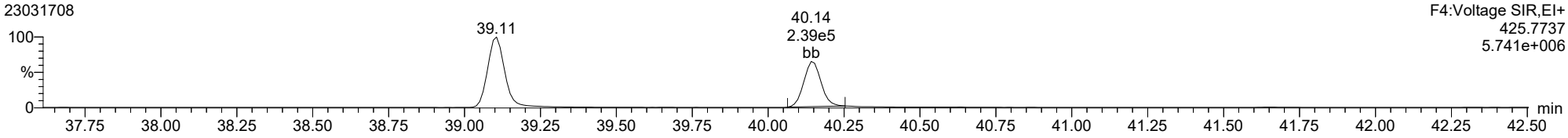

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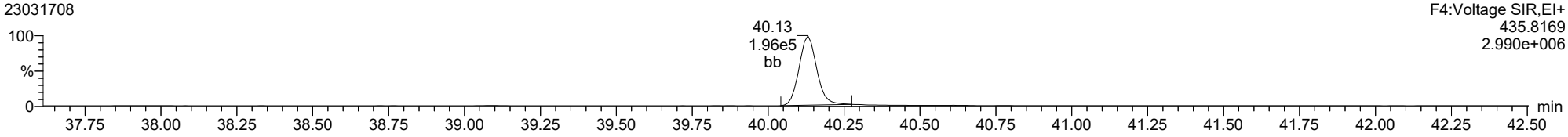

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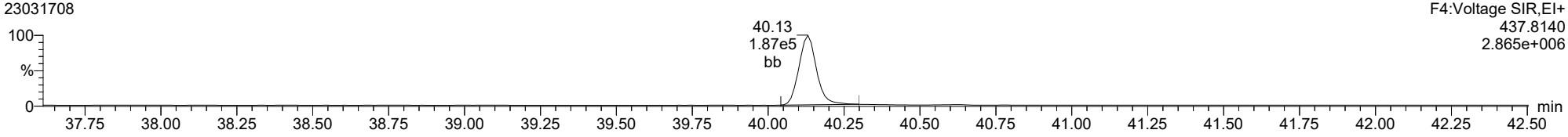

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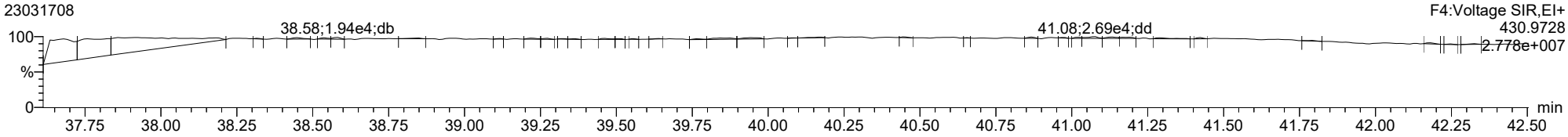

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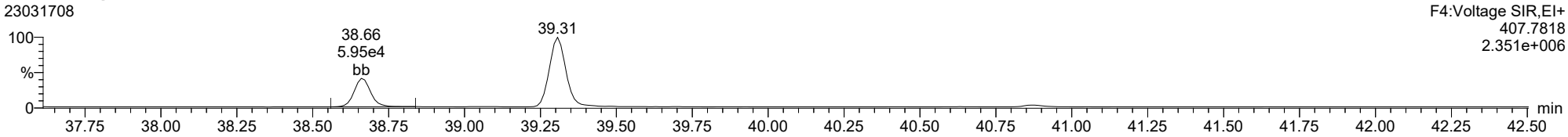

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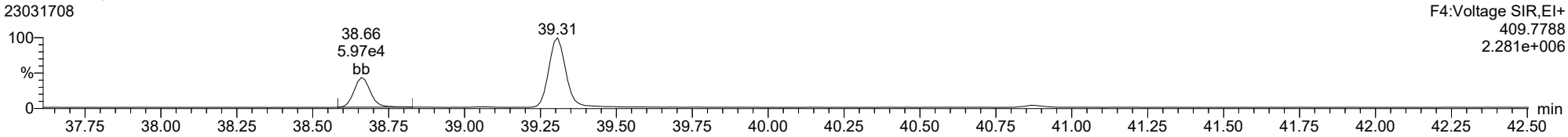

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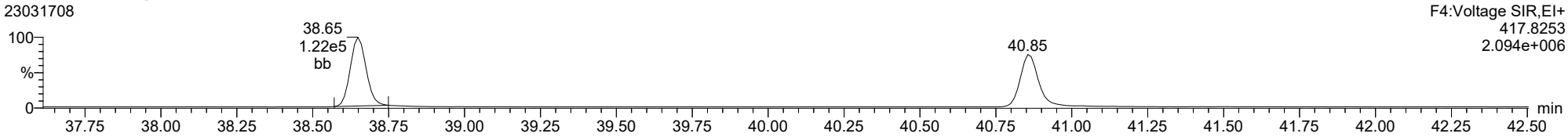

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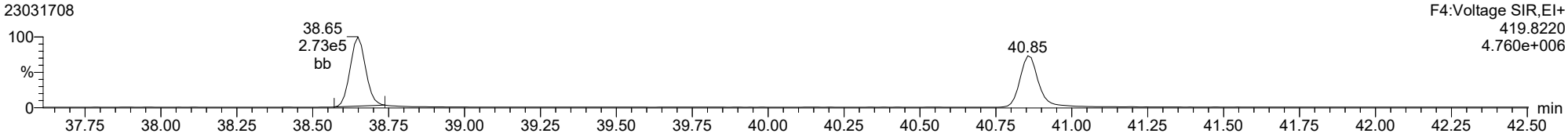

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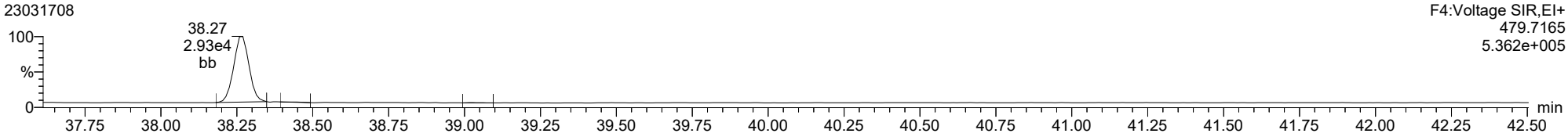

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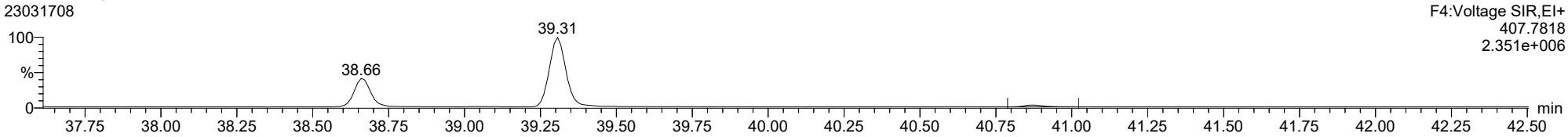

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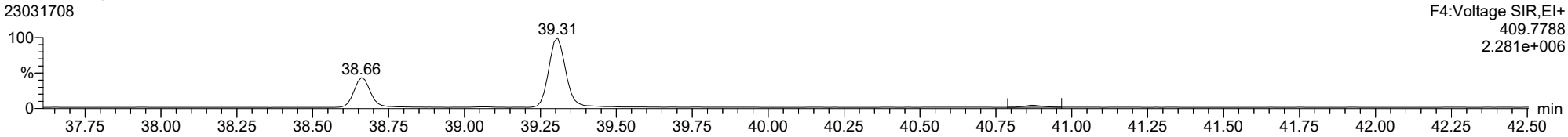

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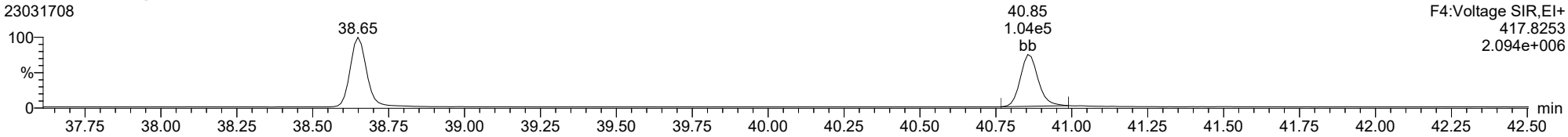

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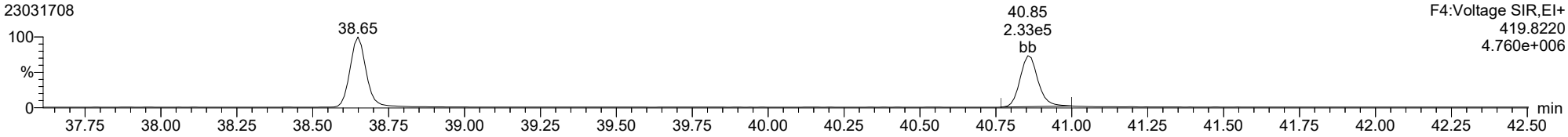

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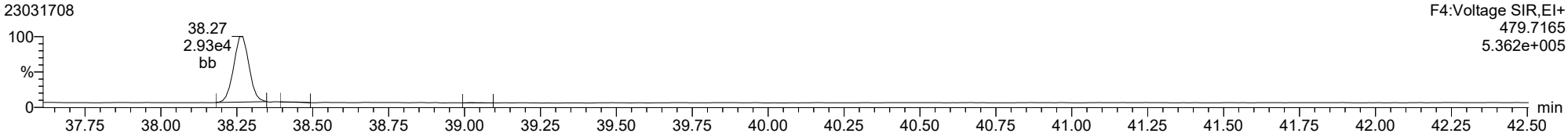

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ID: 23A0171-02, Name: 23031708, Date: 17-Mar-2023, Time: 16:05:07, Conditions: AUTOSPEC01, User: pk

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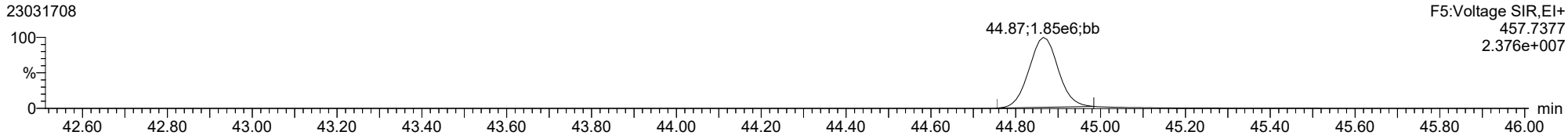

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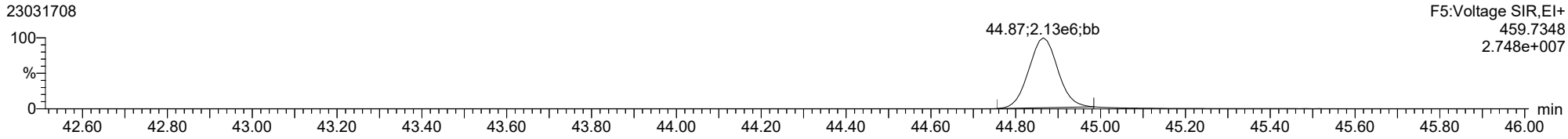

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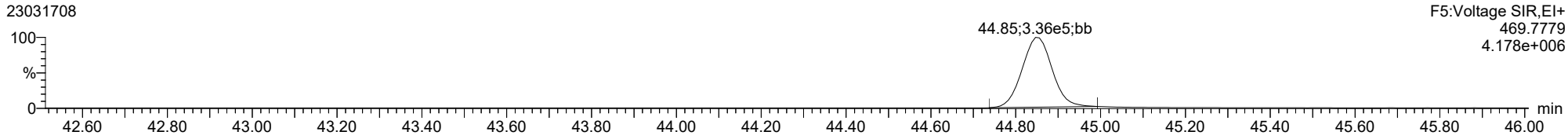

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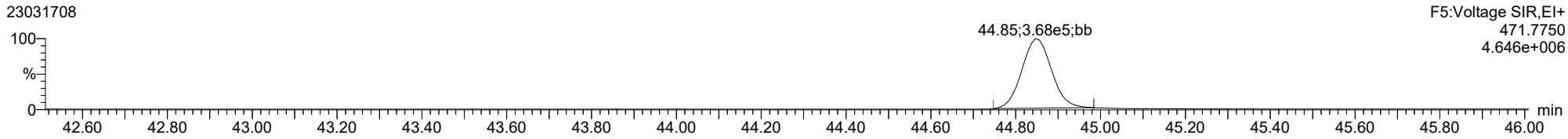
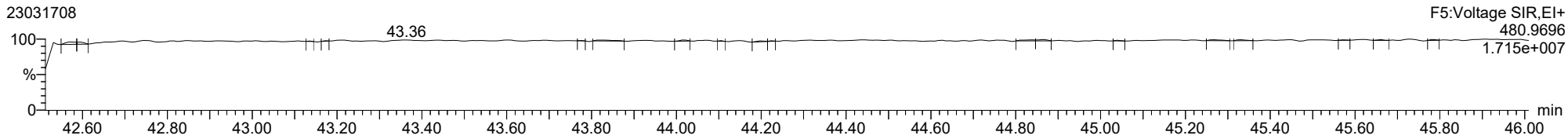


FUNCTION5 PFK



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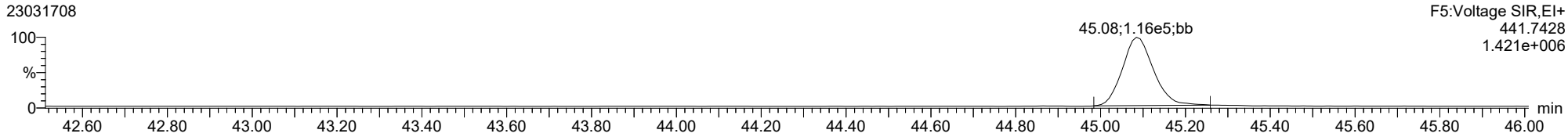

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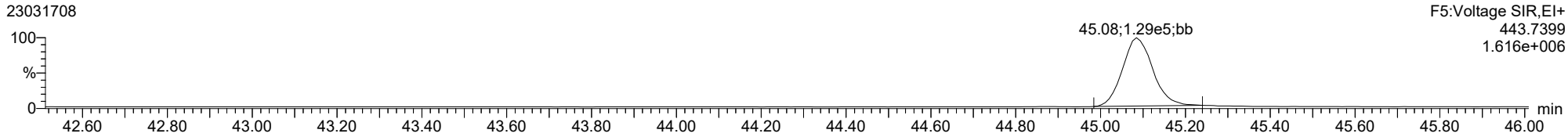

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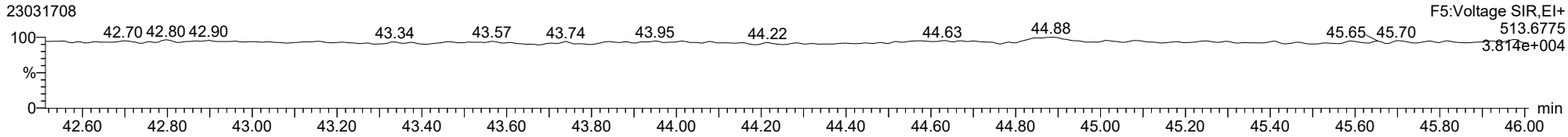

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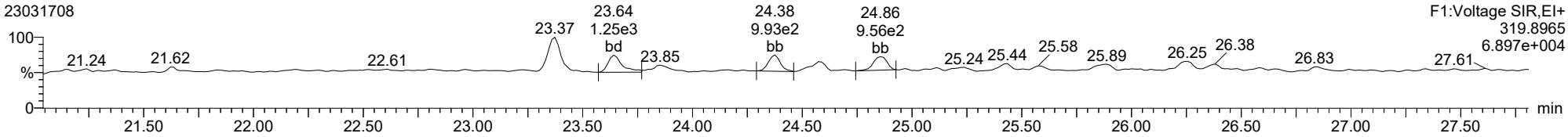
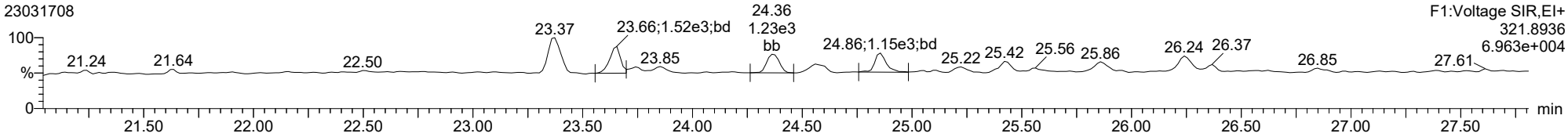
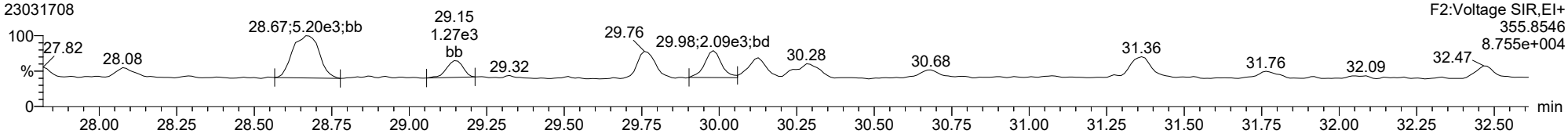
Total-tetradioxins



Total-tetradioxins



Total-pentadioxins



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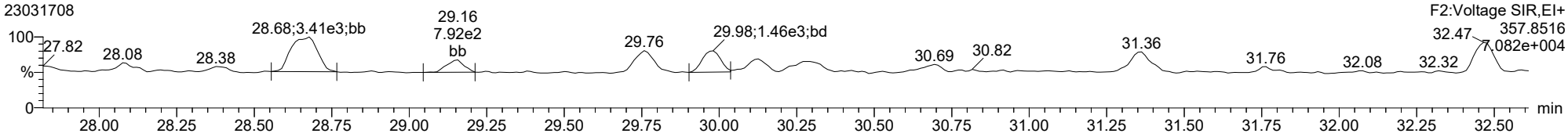
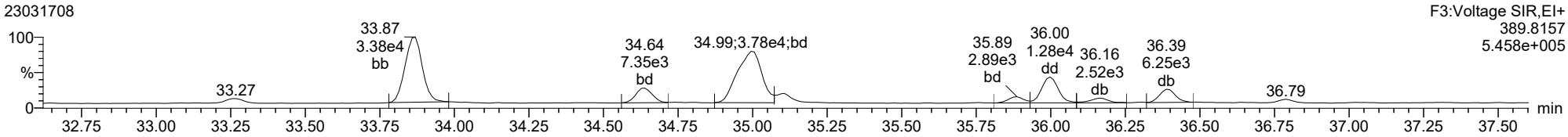


ID: 23A0171-02, Name: 23031708, Date: 17-Mar-2023, Time: 16:05:07, Conditions: AUTOSPEC01, User: pk

Total-hexadioxins



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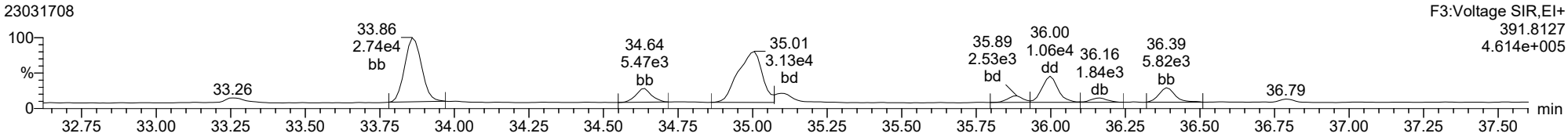

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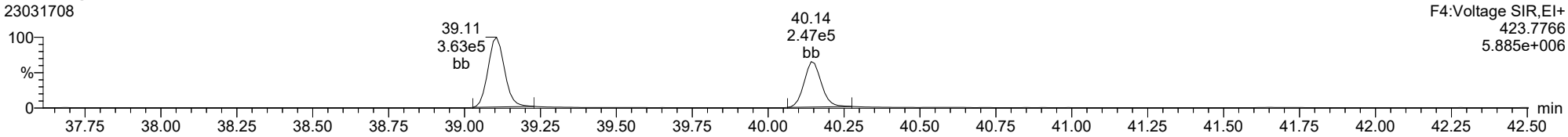

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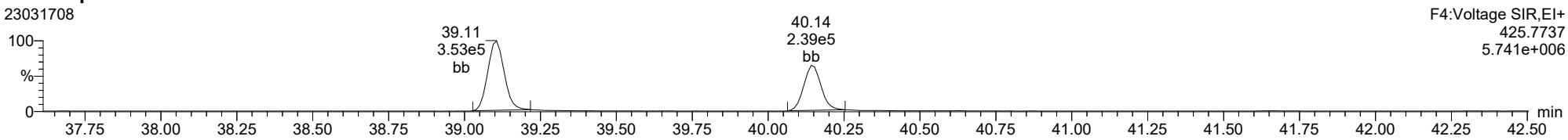
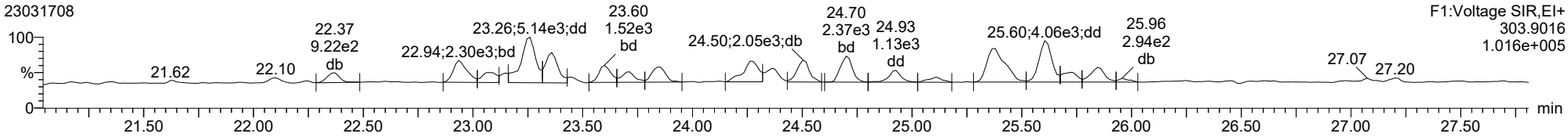


ID: 23A0171-02, Name: 23031708, Date: 17-Mar-2023, Time: 16:05:07, Conditions: AUTOSPEC01, User: pk

Total-tetrafurans



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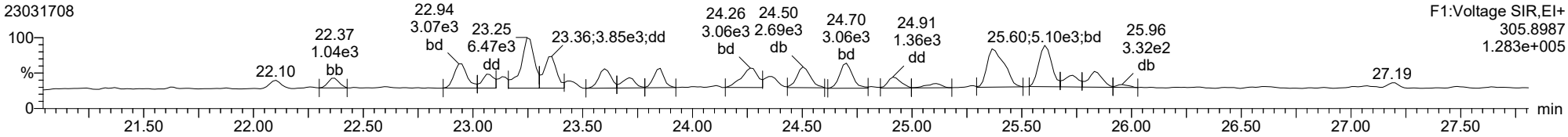

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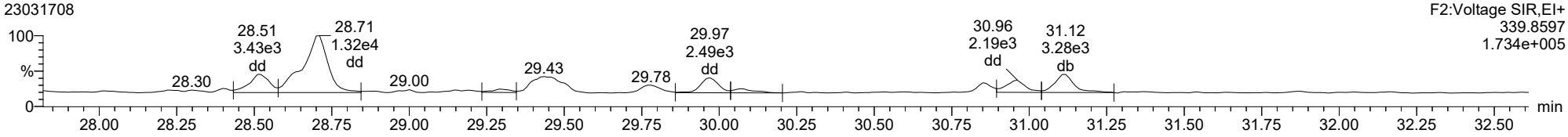
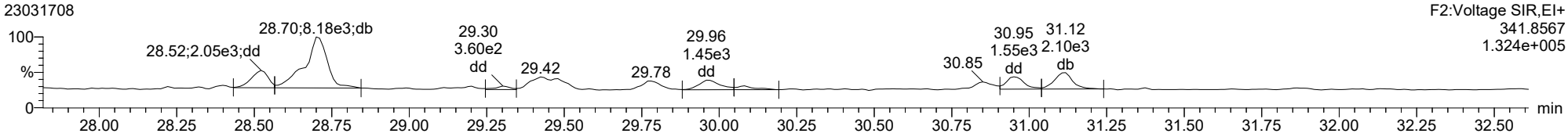


Total-pentafurans



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ID: 23A0171-02, Name: 23031708, Date: 17-Mar-2023, Time: 16:05:07, Conditions: AUTOSPEC01, User: pk

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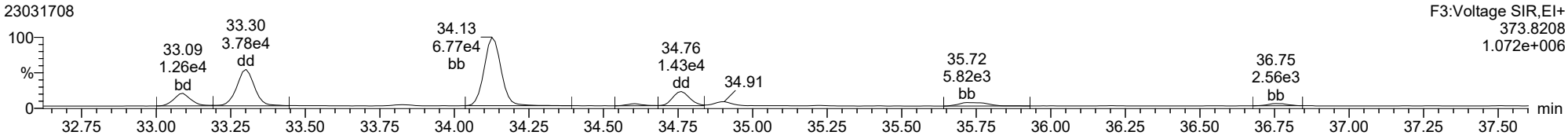
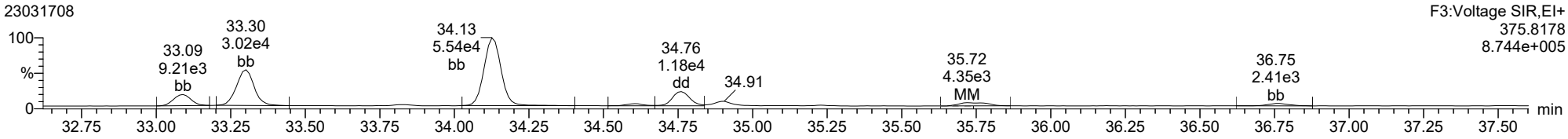


Total-hexafurans



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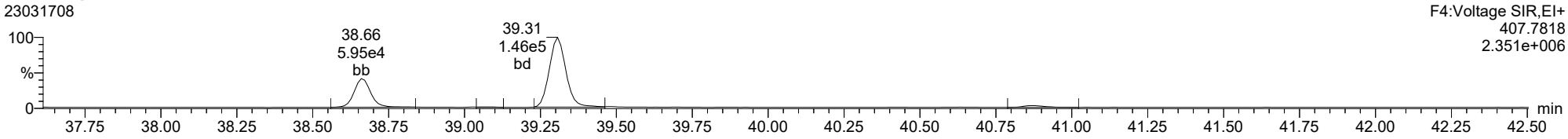

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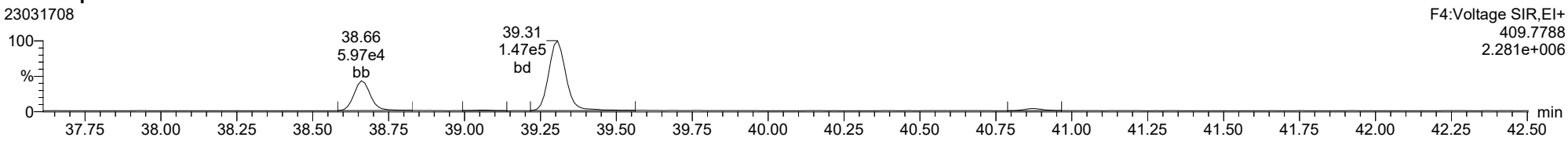

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1245

Form 1
ORGANIC ANALYSIS DATA SHEET
EPA 1613B
Dioxins/Furans by HRGC/HRMS

Laboratory:	Analytical Resources, LLC			SDG:	23A0171
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-04 A	File ID:	23031709
Sampled:	12/08/22 11:14	Prepared:	03/07/23 14:50	Analyzed:	03/17/23 16:53
% Solids:	47.05	Preparation:	EPA 1613	Initial/Final:	21.26 g Wet / 20 uL
Result Basis:	Dry	Sequence:	SLC0258	Calibration:	GC00015
Batch:	BLC0136	Instrument:	AUTOSPEC01	Column:	RTX-Dioxin2

CAS NO.	COMPOUND	DF/Split	Ion Ratio	Ratio Limits	EDL	RL	Result	Units	Q
51207-31-9	2,3,7,8-TCDF	1	0.675	0.655-0.886	0.177	1.00	0.892	ng/kg	J
1746-01-6	2,3,7,8-TCDD	1	0.394	0.655-0.886	0.124	1.00	0.436	ng/kg	EMPC, J
57117-41-6	1,2,3,7,8-PeCDF	1	1.896	1.318-1.783	0.226	1.00	0.665	ng/kg	EMPC, J
57117-31-4	2,3,4,7,8-PeCDF	1	1.383	1.318-1.783	0.199	1.00	1.35	ng/kg	
40321-76-4	1,2,3,7,8-PeCDD	1	1.367	1.318-1.783	0.219	1.00	1.36	ng/kg	
70648-26-9	1,2,3,4,7,8-HxCDF	1	1.197	1.054-1.426	0.089	1.00	4.63	ng/kg	
57117-44-9	1,2,3,6,7,8-HxCDF	1	1.143	1.054-1.426	0.090	1.00	1.56	ng/kg	
60851-34-5	2,3,4,6,7,8-HxCDF	1	1.262	1.054-1.426	0.091	1.00	2.05	ng/kg	
72918-21-9	1,2,3,7,8,9-HxCDF	1	1.054	1.054-1.426	0.098	1.00	1.16	ng/kg	EMPC
39227-28-6	1,2,3,4,7,8-HxCDD	1	1.087	1.054-1.426	0.148	1.00	1.46	ng/kg	
57653-85-7	1,2,3,6,7,8-HxCDD	1	1.207	1.054-1.426	0.142	1.00	4.96	ng/kg	
19408-74-3	1,2,3,7,8,9-HxCDD	1	1.096	1.054-1.426	0.160	1.00	3.04	ng/kg	
67562-39-4	1,2,3,4,6,7,8-HpCDF	1	1.017	0.893-1.208	0.205	1.00	38.7	ng/kg	
55673-89-7	1,2,3,4,7,8,9-HpCDF	1	0.932	0.893-1.208	0.333	1.00	3.52	ng/kg	
35822-46-9	1,2,3,4,6,7,8-HpCDD	1	1.032	0.893-1.208	0.372	2.50	167	ng/kg	B
39001-02-0	OCDF	1	0.906	0.757-1.024	0.304	2.50	118	ng/kg	
3268-87-9	OCDD	1	0.864	0.757-1.024	0.371	10.0	1490	ng/kg	B

Homologue Groups

55722-27-5	Total TCDF	1	0.000			1.00	12.5	ng/kg	
41903-57-5	Total TCDD	1	0.000			1.00	4.05	ng/kg	
30402-15-4	Total PeCDF	1	0.000			1.00	18.8	ng/kg	
36088-22-9	Total PeCDD	1	0.000			1.00	3.49	ng/kg	
55684-94-1	Total HxCDF	1	0.000			1.00	50.1	ng/kg	
34465-46-8	Total HxCDD	1	0.000			1.00	42.4	ng/kg	
38998-75-3	Total HpCDF	1	0.000			1.00	149	ng/kg	
37871-00-4	Total HpCDD	1	0.000			1.00	392	ng/kg	

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=0, Including EMPC): 6.77
Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=1/2 EDL, Including EMPC): 6.77

LDW23-SS1245

Form 2
ORGANIC ANALYSIS DATA SHEET
EPA 1613B
Dioxins/Furans by HRGC/HRMS

Laboratory:	Analytical Resources, LLC			SDG:	23A0171
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0171-04	File ID:	23031709
Sampled:	12/08/22 11:14	Prepared:	03/07/23 14:50	Analyzed:	03/17/23 16:53
Solids Wt%:	47.05	Preparation:	EPA 1613	Initial/Final:	21.26 g / 20 uL
Result Basis:	Dry	Sequence:	SLC0258	Calibration:	GC00015
Batch:	BLC0136	Instrument:	AUTOSPEC01	Column:	RTX-Dioxin2

Labels	DF/Split	Ion Ratio	Ratio Limits	EDL	% REC	QC LIMITS	Q
13C12-2,3,7,8-TCDF		0.777	0.655-0.886	0.190	102	24 - 169 %	
13C12-2,3,7,8-TCDD		0.776	0.655-0.886	0.208	118	25 - 164 %	
13C12-1,2,3,7,8-PeCDF		1.555	1.318-1.783	0.302	120	24 - 185 %	
13C12-2,3,4,7,8-PeCDF		1.526	1.318-1.783	0.335	126	21 - 178 %	
13C12-1,2,3,7,8-PeCDD		1.589	1.318-1.783	0.195	118	25 - 181 %	
13C12-1,2,3,4,7,8-HxCDF		0.509	0.434-0.587	0.164	91.4	26 - 152 %	
13C12-1,2,3,6,7,8-HxCDF		0.502	0.434-0.587	0.138	87.0	26 - 123 %	
13C12-2,3,4,6,7,8-HxCDF		0.502	0.434-0.587	0.170	93.5	28 - 136 %	
13C12-1,2,3,7,8,9-HxCDF		0.509	0.434-0.587	0.206	103	29 - 147 %	
13C12-1,2,3,4,7,8-HxCDD		1.303	1.054-1.426	0.153	109	32 - 141 %	
13C12-1,2,3,6,7,8-HxCDD		1.207	1.054-1.426	0.131	103	28 - 130 %	
13C12-1,2,3,4,6,7,8-HpCDF		0.439	0.374-0.506	0.187	82.8	28 - 143 %	
13C12-1,2,3,4,7,8,9-HpCDF		0.428	0.374-0.506	0.217	72.1	26 - 138 %	
13C12-1,2,3,4,6,7,8-HpCDD		1.046	0.893-1.208	0.177	83.6	23 - 140 %	
13C12-OCDD		0.920	0.757-1.024	0.195	86.3	17 - 157 %	
37Cl4-2,3,7,8-TCDD		328.000		0.068	98.9	35 - 197 %	

* Values outside of QC limits

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Printed: Monday, March 20, 2023 11:43:37 Pacific Daylight Time

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Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: 23A0171-04, Name: 23031709, Date: 17-Mar-2023, Time: 16:53:27, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.591	1.001	9.164e2	1.358e3	0.702	0.675	0.770	1129	1143	1.41e4	2.09e4	12.5	18.3	NO	bd	bd	0.446
12378-PeCDF	29.758	1.000	9.700e2	5.117e2	0.679	1.896	1.550	1302	1167	1.41e4	9.41e3	10.8	8.1	YES	bb	bb	0.332
23478-PeCDF	31.095	1.001	1.908e3	1.379e3	0.786	1.383	1.550	1302	1167	2.75e4	1.93e4	21.1	16.5	NO	dd	db	0.675
123478-HxCDF	34.750	1.001	9.015e3	7.533e3	1.166	1.197	1.240	854	798	1.36e5	1.14e5	159.4	143.1	NO	dd	dd	2.316
234678-HxCDF	35.719	0.999	3.949e3	3.129e3	1.140	1.262	1.240	854	798	3.90e4	3.03e4	45.7	37.9	NO	MM	bb	1.025
123678-HxCDF	34.883	1.000	3.146e3	2.752e3	1.091	1.143	1.240	854	798	4.70e4	4.12e4	55.0	51.7	NO	db	db	0.781
123789-HxCDF	36.755	1.000	1.862e3	1.767e3	1.137	1.054	1.240	854	798	2.39e4	2.16e4	27.9	27.1	YES	bb	bb	0.580
1234678-HpCDF	38.649	1.000	4.161e4	4.093e4	1.003	1.017	1.050	1319	1161	6.77e5	6.83e5	513.1	588.6	NO	bd	bd	19.346
1234789-HpCDF	40.855	1.000	2.579e3	2.768e3	0.953	0.932	1.050	1319	1161	3.52e4	3.86e4	26.7	33.3	NO	bb	bb	1.762
OCDF	45.076	1.005	8.253e4	9.111e4	0.778	0.906	0.890	960	875	9.68e5	1.09e6	1008.3	1244.6	NO	bb	bb	58.769
2378-TCDD	26.226	1.001	4.264e2	1.081e3	1.149	0.394	0.770	1305	900	6.71e3	1.69e4	5.1	18.8	YES	bb	bd	0.218
12378-PeCDD	31.362	1.001	1.736e3	1.270e3	1.022	1.367	1.550	1574	904	2.21e4	1.75e4	14.0	19.4	NO	bb	MM	0.683
123478-HxCDD	35.864	1.000	2.351e3	2.163e3	0.996	1.087	1.240	1123	1344	3.92e4	3.42e4	35.0	25.4	NO	bd	bd	0.730
123678-HxCDD	35.986	1.000	9.249e3	7.664e3	1.001	1.207	1.240	1123	1344	1.44e5	1.31e5	127.9	97.2	NO	dd	dd	2.479
123789-HxCDD	36.376	1.011	4.696e3	4.285e3	0.907	1.096	1.240	1123	1344	7.68e4	6.91e4	68.4	51.4	NO	bb	bb	1.520
1234678-HpCDD	40.131	1.000	1.774e5	1.718e5	1.039	1.032	1.050	1888	1883	2.66e6	2.64e6	1410.0	1401.3	NO	bb	bb	83.421
OCDD	44.856	1.000	1.209e6	1.399e6	0.920	0.864	0.890	1610	1040	1.49e7	1.73e7	9263.3	16672.1	NO	bb	bb	746.497
13C-2378-TCDF	25.576	1.007	3.178e5	4.091e5	1.620	0.777	0.770	2133	1405	4.80e6	6.12e6	2250.5	4358.5	NO	bb	bb	101.882
13C-12378-PeCDF	29.747	1.171	3.994e5	2.569e5	1.240	1.555	1.550	2047	2257	5.89e6	3.90e6	2874.4	1725.8	NO	bd	bb	120.156
13C-23478-PeCDF	31.073	1.224	3.741e5	2.452e5	1.118	1.526	1.550	2047	2257	5.72e6	3.80e6	2792.2	1682.2	NO	bb	bb	125.830
13C-123478-HxCDF	34.727	0.955	2.068e5	4.061e5	1.168	0.509	0.510	1220	1698	3.21e6	6.34e6	2635.1	3731.4	NO	bd	bd	91.449
13C-123678-HxCDF	34.872	0.959	2.313e5	4.609e5	1.386	0.502	0.510	1220	1698	3.38e6	6.64e6	2775.2	3907.5	NO	dd	dd	87.035
13C-234678-HxCDF	35.741	0.983	2.024e5	4.035e5	1.129	0.502	0.510	1220	1698	3.18e6	6.33e6	2606.4	3729.1	NO	bb	bb	93.540
13C-123789-HxCDF	36.766	1.011	1.856e5	3.649e5	0.932	0.509	0.510	1220	1698	2.99e6	5.89e6	2453.9	3465.5	NO	bb	bb	103.001
13C-1234678-HpCDF	38.638	1.062	1.298e5	2.956e5	0.895	0.439	0.440	1102	1444	2.21e6	5.06e6	2006.9	3500.1	NO	bb	bb	82.838
13C-1234789-HpCDF	40.844	1.123	9.538e4	2.231e5	0.770	0.428	0.440	1102	1444	1.40e6	3.24e6	1275.1	2241.5	NO	bb	bb	72.117
13C-1234-TCDD	25.393	0.000	1.939e5	2.464e5	1.000	0.787	0.770	1631	1124	3.03e6	3.86e6	1860.6	3430.2	NO	bb	bb	100.000
13C-2378-TCDD	26.212	1.032	2.626e5	3.386e5	1.152	0.776	0.770	1631	1124	4.06e6	5.20e6	2487.7	4627.1	NO	bb	bb	118.464
13C-12378-PeCDD	31.329	1.234	2.645e5	1.664e5	0.829	1.589	1.550	860	994	4.08e6	2.53e6	4740.4	2548.3	NO	bb	bb	118.082
13C-123478-HxCDD	35.853	0.986	3.513e5	2.697e5	0.995	1.303	1.240	1232	1079	5.68e6	4.50e6	4613.1	4173.0	NO	bd	bd	108.800
13C-123678-HxCDD	35.975	0.989	3.727e5	3.088e5	1.157	1.207	1.240	1232	1079	5.68e6	4.59e6	4613.7	4256.3	NO	db	db	102.707
13C-1234678-HpCDD	40.120	1.103	2.060e5	1.969e5	0.840	1.046	1.050	974	1294	2.99e6	2.82e6	3071.2	2183.6	NO	bb	bb	83.598
13C-OCDD	44.838	1.233	3.640e5	3.957e5	0.767	0.920	0.890	1005	1270	4.46e6	4.92e6	4441.5	3875.5	NO	bb	bb	172.563
13C-123789-HxCDD	36.365	0.000	3.181e5	2.555e5	1.000	1.245	1.240	1232	1079	5.06e6	4.07e6	4108.7	3770.1	NO	bb	bb	100.000
37CL-2378-TCDD	26.226	1.033	2.244e5		1.288			1009		3.45e6		3417.2			bb		39.564

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Printed: Monday, March 20, 2023 11:43:37 Pacific Daylight Time

ID: 23A0171-04, Name: 23031709, Date: 17-Mar-2023, Time: 16:53:27, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.073	0.863	3.806e2	5.503e2	0.802	0.692	0.770	1129	1143	6.67e3	1.10e4	5.9	9.6	NO	bb	bb	0.160
1289-TCDF	27.187	1.063	3.484e2	5.229e2	0.678	0.666	0.770	1129	1143	6.68e3	8.62e3	5.9	7.5	NO	bb	bb	0.177
13468-PECDF					1.246		1.550	845	807								
12389-PECDF					0.496		1.550	1302	1167								
123468-HXCDF	33.067	0.952	7.894e3	6.224e3	1.169	1.268	1.240	854	798	1.18e5	9.51e4	138.4	119.2	NO	bd	bb	1.970
1368-TCDD	23.345	0.891	1.915e3	2.405e3	1.015	0.796	0.770	1305	900	2.89e4	3.73e4	22.1	41.5	NO	bb	bb	0.708
1289-TCDD					0.909		0.770	1305	900								
12479-PECDD	28.655	0.915	4.410e3	1.875e3	2.301	2.352	1.550	1574	904	4.88e4	3.05e4	31.0	33.8	YES	bb	db	0.634
12389-PECDD					1.184		1.550	1574	904								
124679-HXCDD	33.847	0.944	2.486e4	2.033e4	1.115	1.223	1.240	1123	1344	3.83e5	3.24e5	340.7	241.4	NO	bb	bb	6.524
1234679-HPCDD	39.095	0.974	2.629e5	2.541e5	1.137	1.035	1.050	1888	1883	4.42e6	4.28e6	2340.4	2275.4	NO	bb	bb	112.875
Total-tetrafurans			1.417e4		0.727			1129		1.97e5							6.235
Total-penta1			1.597e4					845		2.34e5							4.340
Total-pentafurans			1.327e4		0.654			1302		2.06e5							5.064
Total-hexafurans			9.763e4		1.141			854		1.45e6							25.062
Total-heptafurans			1.409e5		0.978			1319		2.26e6							74.657
Total-Furans			3.645e5		0.922			1129		5.31e6							174.127
Total-tetradioxins			5.476e3		1.024			1305		8.10e4							2.024
Total-pentadioxins			5.967e3		1.502			1574		8.86e4							1.745
Total-hexadioxins			7.765e4		1.005			1123		1.05e6							21.227
Total-heptadioxins			4.402e5		1.088			1888		7.08e6							196.296
Total-Dioxins			1.739e6		1.130			1305		2.32e7							967.790
Total-TEQ			2.103e6					1305		2.85e7							1141.917
FUNCTION1 PFK			2.210e6					575722		3.63e6							
FUNCTION2 PFK			0.000e0					135113		0.00e0							
FUNCTION3 PFK			9.747e4					634180		5.12e6							0.000
FUNCTION4 PFK			1.076e7					289043		9.78e6							
FUNCTION5 PFK			1.260e5					181689		5.52e6							
FUNCTION1 HXCD...			2.522e3					736		4.07e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			1.177e3					665		2.29e4							0.000
FUNCTION3 OCDPE			5.148e2					619		7.36e3							0.000
FUNCTION4 NCDPE			2.456e4					915		4.16e5							0.000
FUNCTION5 DCDPE			7.074e1					554		1.17e3							0.000

Method: T:\Autospec\Methods\Dioxin230315.mdb 20 Mar 2023 10:42:09
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

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TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	23.68	8.148e2	1.130e3	0.727	0.72	0.77	10.0	YES	NO	dd	dd	0.368
2	Total-tetrafurans	23.33	1.853e3	2.815e3	0.727	0.66	0.77	25.8	YES	NO	dd	db	0.883
3	Total-tetrafurans	22.92	1.687e3	2.507e3	0.727	0.67	0.77	23.1	YES	NO	bd	bd	0.794
4	Total-tetrafurans	22.34	7.682e2	9.052e2	0.727	0.85	0.77	9.4	YES	NO	bb	bb	0.317
5	1368-TCDF	22.07	3.806e2	5.503e2	0.802	0.69	0.77	5.9	YES	NO	bb	bb	0.160
6	1289-TCDF	27.19	3.484e2	5.229e2	0.678	0.67	0.77	5.9	YES	NO	bb	bb	0.177
7	Total-tetrafurans	25.82	1.128e3	1.322e3	0.727	0.85	0.77	12.0	YES	NO	db	db	0.464
8	2378-TCDF	25.59	9.164e2	1.358e3	0.702	0.67	0.77	12.5	YES	NO	bd	bd	0.446
9	Total-tetrafurans	25.35	2.794e3	3.322e3	0.727	0.84	0.77	26.9	YES	NO	db	bb	1.158
10	Total-tetrafurans	24.67	9.138e2	1.061e3	0.727	0.86	0.77	11.0	YES	NO	dd	bb	0.374
11	Total-tetrafurans	24.49	1.753e3	2.118e3	0.727	0.83	0.77	20.8	YES	NO	dd	db	0.733
12	Total-tetrafurans	24.33	8.134e2	1.104e3	0.727	0.74	0.77	10.9	YES	NO	dd	dd	0.363

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-penta1	27.03	1.597e4	1.015e4		1.57	1.55	277.4	YES	NO	bb	bb	4.340

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentafurans	28.69	6.778e3	3.805e3	0.654	1.78	1.55	74.9	YES	NO	db	db	2.537
2	Total-pentafurans	28.63	2.260e3	1.594e3	0.654	1.42	1.55	34.8	YES	NO	dd	dd	0.924
3	23478-PeCDF	31.09	1.908e3	1.379e3	0.786	1.38	1.55	21.1	YES	NO	dd	db	0.675
4	Total-pentafurans	30.85	9.996e2	6.644e2	0.654	1.50	1.55	10.1	YES	NO	bd	bd	0.399
5	Total-pentafurans	29.95	1.325e3	8.807e2	0.654	1.50	1.55	17.3	YES	NO	bb	bb	0.529

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HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-hexafurans	33.29	2.698e4	2.220e4	1.141	1.22	1.24	453.9	YES	NO	db	bb	7.007
2	123468-HXCDF	33.07	7.894e3	6.224e3	1.169	1.27	1.24	138.4	YES	NO	bd	bb	1.970
3	234678-HxCDF	35.72	3.949e3	3.129e3	1.140	1.26	1.24	45.7	YES	NO	MM	bb	1.025
4	123678-HxCDF	34.88	3.146e3	2.752e3	1.091	1.14	1.24	55.0	YES	NO	db	db	0.781
5	123478-HxCDF	34.75	9.015e3	7.533e3	1.166	1.20	1.24	159.4	YES	NO	dd	dd	2.316
6	Total-hexafurans	34.59	1.350e3	1.062e3	1.141	1.27	1.24	26.0	YES	NO	bd	bd	0.344
7	Total-hexafurans	34.11	4.440e4	3.545e4	1.141	1.25	1.24	799.6	YES	NO	bb	bb	11.377
8	Total-hexafurans	33.81	8.968e2	8.026e2	1.141	1.12	1.24	15.6	YES	NO	bb	bb	0.242

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-heptafurans	39.30	9.601e4	9.724e4	0.978	0.99	1.05	1163.8	YES	NO	bb	bd	53.126
2	Total-heptafurans	39.05	7.411e2	8.012e2	0.978	0.93	1.05	8.8	YES	NO	bb	bb	0.424
3	1234678-HpCDF	38.65	4.161e4	4.093e4	1.003	1.02	1.05	513.1	YES	NO	bd	bd	19.346
4	1234789-HpCDF	40.85	2.579e3	2.768e3	0.953	0.93	1.05	26.7	YES	NO	bb	bb	1.762

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	23.68	8.148e2	1.130e3	0.727	0.72	0.77	10.0	YES	NO	dd	dd	0.368
2	Total-tetrafurans	23.33	1.853e3	2.815e3	0.727	0.66	0.77	25.8	YES	NO	dd	db	0.883
3	Total-tetrafurans	22.92	1.687e3	2.507e3	0.727	0.67	0.77	23.1	YES	NO	bd	bd	0.794
4	Total-tetrafurans	22.34	7.682e2	9.052e2	0.727	0.85	0.77	9.4	YES	NO	bb	bb	0.317
5	1368-TCDF	22.07	3.806e2	5.503e2	0.802	0.69	0.77	5.9	YES	NO	bb	bb	0.160
6	1289-TCDF	27.19	3.484e2	5.229e2	0.678	0.67	0.77	5.9	YES	NO	bb	bb	0.177
7	Total-tetrafurans	25.82	1.128e3	1.322e3	0.727	0.85	0.77	12.0	YES	NO	db	db	0.464
8	2378-TCDF	25.59	9.164e2	1.358e3	0.702	0.67	0.77	12.5	YES	NO	bd	bd	0.446
9	Total-tetrafurans	25.35	2.794e3	3.322e3	0.727	0.84	0.77	26.9	YES	NO	db	bb	1.158
10	Total-tetrafurans	24.67	9.138e2	1.061e3	0.727	0.86	0.77	11.0	YES	NO	dd	bb	0.374
11	Total-tetrafurans	24.49	1.753e3	2.118e3	0.727	0.83	0.77	20.8	YES	NO	dd	db	0.733
12	Total-tetrafurans	24.33	8.134e2	1.104e3	0.727	0.74	0.77	10.9	YES	NO	dd	dd	0.363
13	Total-pentafurans	28.69	6.778e3	3.805e3	0.654	1.78	1.55	74.9	YES	NO	db	db	2.537
14	Total-pentafurans	28.63	2.260e3	1.594e3	0.654	1.42	1.55	34.8	YES	NO	dd	dd	0.924
15	23478-PeCDF	31.09	1.908e3	1.379e3	0.786	1.38	1.55	21.1	YES	NO	dd	db	0.675
16	Total-pentafurans	30.85	9.996e2	6.644e2	0.654	1.50	1.55	10.1	YES	NO	bd	bd	0.399
17	Total-pentafurans	29.95	1.325e3	8.807e2	0.654	1.50	1.55	17.3	YES	NO	bb	bb	0.529
18	Total-hexafurans	33.29	2.698e4	2.220e4	1.141	1.22	1.24	453.9	YES	NO	db	bb	7.007
19	123468-HXCDF	33.07	7.894e3	6.224e3	1.169	1.27	1.24	138.4	YES	NO	bd	bb	1.970
20	234678-HxCDF	35.72	3.949e3	3.129e3	1.140	1.26	1.24	45.7	YES	NO	MM	bb	1.025
21	123678-HxCDF	34.88	3.146e3	2.752e3	1.091	1.14	1.24	55.0	YES	NO	db	db	0.781
22	123478-HxCDF	34.75	9.015e3	7.533e3	1.166	1.20	1.24	159.4	YES	NO	dd	dd	2.316
23	Total-hexafurans	34.59	1.350e3	1.062e3	1.141	1.27	1.24	26.0	YES	NO	bd	bd	0.344
24	Total-hexafurans	34.11	4.440e4	3.545e4	1.141	1.25	1.24	799.6	YES	NO	bb	bb	11.377
25	Total-hexafurans	33.81	8.968e2	8.026e2	1.141	1.12	1.24	15.6	YES	NO	bb	bb	0.242
26	Total-heptafurans	39.30	9.601e4	9.724e4	0.978	0.99	1.05	1163.8	YES	NO	bb	bd	53.126
27	Total-heptafurans	39.05	7.411e2	8.012e2	0.978	0.93	1.05	8.8	YES	NO	bb	bb	0.424
28	1234678-HpCDF	38.65	4.161e4	4.093e4	1.003	1.02	1.05	513.1	YES	NO	bd	bd	19.346
29	OCDF	45.08	8.253e4	9.111e4	0.778	0.91	0.89	1008.3	YES	NO	bb	bb	58.769
30	1234789-HpCDF	40.85	2.579e3	2.768e3	0.953	0.93	1.05	26.7	YES	NO	bb	bb	1.762
31	Total-penta1	27.03	1.597e4	1.015e4		1.57	1.55	277.4	YES	NO	bb	bb	4.340

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TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	25.84	7.304e2	9.601e2	1.024	0.76	0.77	6.6	YES	NO	bb	bb	0.275
2	Total-tetradioxins	24.84	8.706e2	9.954e2	1.024	0.87	0.77	9.4	YES	NO	bb	bb	0.303
3	Total-tetradioxins	24.36	9.950e2	1.330e3	1.024	0.75	0.77	10.9	YES	NO	bd	bd	0.378
4	Total-tetradioxins	23.63	9.647e2	1.261e3	1.024	0.77	0.77	13.0	YES	NO	bb	bd	0.361
5	1368-TCDD	23.34	1.915e3	2.405e3	1.015	0.80	0.77	22.1	YES	NO	bb	bb	0.708

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.36	1.736e3	1.270e3	1.022	1.37	1.55	14.0	YES	NO	bb	MM	0.683
2	Total-pentadioxins	30.10	1.210e3	7.821e2	1.502	1.55	1.55	12.4	YES	NO	dd	db	0.308
3	Total-pentadioxins	29.96	1.499e3	8.818e2	1.502	1.70	1.55	14.4	YES	NO	dd	bd	0.368
4	Total-pentadioxins	29.75	1.523e3	9.823e2	1.502	1.55	1.55	15.4	YES	NO	bd	bb	0.387

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	124679-HXCDD	33.85	2.486e4	2.033e4	1.115	1.22	1.24	340.7	YES	NO	bb	bb	6.524
2	123789-HxCDD	36.38	4.696e3	4.285e3	0.907	1.10	1.24	68.4	YES	NO	bb	bb	1.520
3	Total-hexadioxins	36.14	2.015e3	1.495e3	1.005	1.35	1.24	25.3	YES	NO	db	db	0.536
4	123678-HxCDD	35.99	9.249e3	7.664e3	1.001	1.21	1.24	127.9	YES	NO	dd	dd	2.479
5	123478-HxCDD	35.86	2.351e3	2.163e3	0.996	1.09	1.24	35.0	YES	NO	bd	bd	0.730
6	Total-hexadioxins	34.98	2.829e4	2.279e4	1.005	1.24	1.24	259.1	YES	NO	bd	bd	7.806
7	Total-hexadioxins	34.62	6.184e3	4.492e3	1.005	1.38	1.24	81.8	YES	NO	bb	bb	1.632

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.13	1.774e5	1.718e5	1.039	1.03	1.05	1410.0	YES	NO	bb	bb	83.421
2	1234679-HPCDD	39.09	2.629e5	2.541e5	1.137	1.03	1.05	2340.4	YES	NO	bb	bb	112.875

Dataset: T:\Autospec\Processed Data Batch\230317.qld
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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	25.84	7.304e2	9.601e2	1.024	0.76	0.77	6.6	YES	NO	bb	bb	0.275
2	Total-tetradioxins	24.84	8.706e2	9.954e2	1.024	0.87	0.77	9.4	YES	NO	bb	bb	0.303
3	Total-tetradioxins	24.36	9.950e2	1.330e3	1.024	0.75	0.77	10.9	YES	NO	bd	bd	0.378
4	Total-tetradioxins	23.63	9.647e2	1.261e3	1.024	0.77	0.77	13.0	YES	NO	bb	bd	0.361
5	1368-TCDD	23.34	1.915e3	2.405e3	1.015	0.80	0.77	22.1	YES	NO	bb	bb	0.708
6	12378-PeCDD	31.36	1.736e3	1.270e3	1.022	1.37	1.55	14.0	YES	NO	bb	MM	0.683
7	Total-pentadioxins	30.10	1.210e3	7.821e2	1.502	1.55	1.55	12.4	YES	NO	dd	db	0.308
8	Total-pentadioxins	29.96	1.499e3	8.818e2	1.502	1.70	1.55	14.4	YES	NO	dd	bd	0.368
9	Total-pentadioxins	29.75	1.523e3	9.823e2	1.502	1.55	1.55	15.4	YES	NO	bd	bb	0.387
10	124679-HXCDD	33.85	2.486e4	2.033e4	1.115	1.22	1.24	340.7	YES	NO	bb	bb	6.524
11	123789-HxCDD	36.38	4.696e3	4.285e3	0.907	1.10	1.24	68.4	YES	NO	bb	bb	1.520
12	Total-hexadioxins	36.14	2.015e3	1.495e3	1.005	1.35	1.24	25.3	YES	NO	db	db	0.536
13	123678-HxCDD	35.99	9.249e3	7.664e3	1.001	1.21	1.24	127.9	YES	NO	dd	dd	2.479
14	123478-HxCDD	35.86	2.351e3	2.163e3	0.996	1.09	1.24	35.0	YES	NO	bd	bd	0.730
15	Total-hexadioxins	34.98	2.829e4	2.279e4	1.005	1.24	1.24	259.1	YES	NO	bd	bd	7.806
16	Total-hexadioxins	34.62	6.184e3	4.492e3	1.005	1.38	1.24	81.8	YES	NO	bb	bb	1.632
17	1234678-HpCDD	40.13	1.774e5	1.718e5	1.039	1.03	1.05	1410.0	YES	NO	bb	bb	83.421
18	1234679-HPCDD	39.09	2.629e5	2.541e5	1.137	1.03	1.05	2340.4	YES	NO	bb	bb	112.875
19	OCDD	44.86	1.209e6	1.399e6	0.920	0.86	0.89	9263.3	YES	NO	bb	bb	746.497

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	23.68	8.148e2	1.130e3	0.727	0.72	0.77	10.0	YES	NO	dd	dd	0.368
2	Total-tetrafurans	23.33	1.853e3	2.815e3	0.727	0.66	0.77	25.8	YES	NO	dd	db	0.883
3	Total-tetrafurans	22.92	1.687e3	2.507e3	0.727	0.67	0.77	23.1	YES	NO	bd	bd	0.794
4	Total-tetrafurans	22.34	7.682e2	9.052e2	0.727	0.85	0.77	9.4	YES	NO	bb	bb	0.317
5	1368-TCDF	22.07	3.806e2	5.503e2	0.802	0.69	0.77	5.9	YES	NO	bb	bb	0.160
6	1289-TCDF	27.19	3.484e2	5.229e2	0.678	0.67	0.77	5.9	YES	NO	bb	bb	0.177
7	Total-tetrafurans	25.82	1.128e3	1.322e3	0.727	0.85	0.77	12.0	YES	NO	db	db	0.464
8	2378-TCDF	25.59	9.164e2	1.358e3	0.702	0.67	0.77	12.5	YES	NO	bd	bd	0.446
9	Total-tetrafurans	25.35	2.794e3	3.322e3	0.727	0.84	0.77	26.9	YES	NO	db	bb	1.158
10	Total-tetrafurans	24.67	9.138e2	1.061e3	0.727	0.86	0.77	11.0	YES	NO	dd	bb	0.374
11	Total-tetrafurans	24.49	1.753e3	2.118e3	0.727	0.83	0.77	20.8	YES	NO	dd	db	0.733
12	Total-tetrafurans	24.33	8.134e2	1.104e3	0.727	0.74	0.77	10.9	YES	NO	dd	dd	0.363
13	Total-pentafurans	28.69	6.778e3	3.805e3	0.654	1.78	1.55	74.9	YES	NO	db	db	2.537
14	Total-pentafurans	28.63	2.260e3	1.594e3	0.654	1.42	1.55	34.8	YES	NO	dd	dd	0.924
15	23478-PeCDF	31.09	1.908e3	1.379e3	0.786	1.38	1.55	21.1	YES	NO	dd	db	0.675
16	Total-pentafurans	30.85	9.996e2	6.644e2	0.654	1.50	1.55	10.1	YES	NO	bd	bd	0.399
17	Total-pentafurans	29.95	1.325e3	8.807e2	0.654	1.50	1.55	17.3	YES	NO	bb	bb	0.529
18	Total-hexafurans	33.29	2.698e4	2.220e4	1.141	1.22	1.24	453.9	YES	NO	db	bb	7.007
19	123468-HXCDF	33.07	7.894e3	6.224e3	1.169	1.27	1.24	138.4	YES	NO	bd	bb	1.970
20	234678-HxCDF	35.72	3.949e3	3.129e3	1.140	1.26	1.24	45.7	YES	NO	MM	bb	1.025
21	123678-HxCDF	34.88	3.146e3	2.752e3	1.091	1.14	1.24	55.0	YES	NO	db	db	0.781
22	123478-HxCDF	34.75	9.015e3	7.533e3	1.166	1.20	1.24	159.4	YES	NO	dd	dd	2.316
23	Total-hexafurans	34.59	1.350e3	1.062e3	1.141	1.27	1.24	26.0	YES	NO	bd	bd	0.344
24	Total-hexafurans	34.11	4.440e4	3.545e4	1.141	1.25	1.24	799.6	YES	NO	bb	bb	11.377
25	Total-hexafurans	33.81	8.968e2	8.026e2	1.141	1.12	1.24	15.6	YES	NO	bb	bb	0.242
26	Total-heptafurans	39.30	9.601e4	9.724e4	0.978	0.99	1.05	1163.8	YES	NO	bb	bd	53.126
27	Total-heptafurans	39.05	7.411e2	8.012e2	0.978	0.93	1.05	8.8	YES	NO	bb	bb	0.424
28	1234678-HpCDF	38.65	4.161e4	4.093e4	1.003	1.02	1.05	513.1	YES	NO	bd	bd	19.346
29	OCDF	45.08	8.253e4	9.111e4	0.778	0.91	0.89	1008.3	YES	NO	bb	bb	58.769
30	1234789-HpCDF	40.85	2.579e3	2.768e3	0.953	0.93	1.05	26.7	YES	NO	bb	bb	1.762
31	Total-penta1	27.03	1.597e4	1.015e4		1.57	1.55	277.4	YES	NO	bb	bb	4.340
32	Total-tetradioxins	25.84	7.304e2	9.601e2	1.024	0.76	0.77	6.6	YES	NO	bb	bb	0.275
33	Total-tetradioxins	24.84	8.706e2	9.954e2	1.024	0.87	0.77	9.4	YES	NO	bb	bb	0.303
34	Total-tetradioxins	24.36	9.950e2	1.330e3	1.024	0.75	0.77	10.9	YES	NO	bd	bd	0.378
35	Total-tetradioxins	23.63	9.647e2	1.261e3	1.024	0.77	0.77	13.0	YES	NO	bb	bd	0.361
36	1368-TCDD	23.34	1.915e3	2.405e3	1.015	0.80	0.77	22.1	YES	NO	bb	bb	0.708
37	12378-PeCDD	31.36	1.736e3	1.270e3	1.022	1.37	1.55	14.0	YES	NO	bb	MM	0.683

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	Total-pentadioxins	30.10	1.210e3	7.821e2	1.502	1.55	1.55	12.4	YES	NO	dd	db	0.308
39	Total-pentadioxins	29.96	1.499e3	8.818e2	1.502	1.70	1.55	14.4	YES	NO	dd	bd	0.368
40	Total-pentadioxins	29.75	1.523e3	9.823e2	1.502	1.55	1.55	15.4	YES	NO	bd	bb	0.387
41	124679-HXCDD	33.85	2.486e4	2.033e4	1.115	1.22	1.24	340.7	YES	NO	bb	bb	6.524
42	123789-HxCDD	36.38	4.696e3	4.285e3	0.907	1.10	1.24	68.4	YES	NO	bb	bb	1.520
43	Total-hexadioxins	36.14	2.015e3	1.495e3	1.005	1.35	1.24	25.3	YES	NO	db	db	0.536
44	123678-HxCDD	35.99	9.249e3	7.664e3	1.001	1.21	1.24	127.9	YES	NO	dd	dd	2.479
45	123478-HxCDD	35.86	2.351e3	2.163e3	0.996	1.09	1.24	35.0	YES	NO	bd	bd	0.730
46	Total-hexadioxins	34.98	2.829e4	2.279e4	1.005	1.24	1.24	259.1	YES	NO	bd	bd	7.806
47	Total-hexadioxins	34.62	6.184e3	4.492e3	1.005	1.38	1.24	81.8	YES	NO	bb	bb	1.632
48	1234678-HpCDD	40.13	1.774e5	1.718e5	1.039	1.03	1.05	1410.0	YES	NO	bb	bb	83.421
49	1234679-HPCDD	39.09	2.629e5	2.541e5	1.137	1.03	1.05	2340.4	YES	NO	bb	bb	112.875
50	OCDD	44.86	1.209e6	1.399e6	0.920	0.86	0.89	9263.3	YES	NO	bb	bb	746.497

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	25.45	1.597e5					1.7	NO		bb		
2	FUNCTION1 PFK	24.33	1.998e5					2.0	NO		bb		
3	FUNCTION1 PFK	21.65	1.850e6					2.6	NO		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	36.74	1.311e4					1.0	NO		bb		0.000
2	FUNCTION3 PFK	35.94	9.560e3					0.8	NO		bb		0.000
3	FUNCTION3 PFK	35.83	1.315e4					1.0	NO		bb		0.000
4	FUNCTION3 PFK	35.25	1.069e4					0.9	NO		bb		0.000
5	FUNCTION3 PFK	33.87	1.617e4					1.0	NO		bb		0.000
6	FUNCTION3 PFK	33.20	3.942e3					0.6	NO		bb		0.000
7	FUNCTION3 PFK	33.03	3.648e3					0.5	NO		bb		0.000
8	FUNCTION3 PFK	32.93	1.083e4					0.9	NO		bb		0.000
9	FUNCTION3 PFK	32.84	9.403e3					0.8	NO		bb		0.000
10	FUNCTION3 PFK	32.71	6.966e3					0.7	NO		bb		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	38.06	1.076e7					33.9	YES		bb		

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PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	42.61	8.413e2					0.5	NO		bb		
2	FUNCTION5 PFK	42.58	6.518e3					1.7	NO		bb		
3	FUNCTION5 PFK	44.59	5.848e3					1.4	NO		bb		
4	FUNCTION5 PFK	44.52	3.328e3					1.0	NO		bb		
5	FUNCTION5 PFK	44.42	6.915e2					0.4	NO		bb		
6	FUNCTION5 PFK	44.38	4.384e3					1.3	NO		bb		
7	FUNCTION5 PFK	44.28	4.187e3					1.2	NO		bb		
8	FUNCTION5 PFK	44.16	7.288e3					1.2	NO		db		
9	FUNCTION5 PFK	44.13	4.155e3					1.0	NO		dd		
10	FUNCTION5 PFK	44.11	1.950e3					0.7	NO		bd		
11	FUNCTION5 PFK	44.01	8.129e2					0.5	NO		bb		
12	FUNCTION5 PFK	43.49	7.298e3					1.5	NO		bb		
13	FUNCTION5 PFK	43.42	5.499e3					1.6	NO		bb		
14	FUNCTION5 PFK	43.37	8.034e3					1.5	NO		bb		
15	FUNCTION5 PFK	43.00	1.520e3					0.6	NO		bb		
16	FUNCTION5 PFK	42.89	3.923e3					1.1	NO		db		
17	FUNCTION5 PFK	42.85	4.595e3					1.1	NO		dd		
18	FUNCTION5 PFK	42.80	1.683e4					1.7	NO		bd		
19	FUNCTION5 PFK	45.90	5.240e3					1.4	NO		db		
20	FUNCTION5 PFK	45.86	7.407e3					1.5	NO		dd		
21	FUNCTION5 PFK	45.84	6.335e3					1.5	NO		bd		
22	FUNCTION5 PFK	45.73	8.975e2					0.5	NO		bb		
23	FUNCTION5 PFK	45.28	3.377e3					1.3	NO		bb		
24	FUNCTION5 PFK	45.03	3.677e3					1.1	NO		bb		
25	FUNCTION5 PFK	44.91	1.546e3					0.7	NO		bb		
26	FUNCTION5 PFK	44.88	1.100e3					0.7	NO		bb		
27	FUNCTION5 PFK	44.85	2.969e3					0.8	NO		bb		
28	FUNCTION5 PFK	44.68	5.779e3					0.9	NO		bb		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	25.93	1.838e2					4.6	YES		bb		0.000
2	FUNCTION1 HXCD...	25.72	1.832e3					39.6	YES		bb		0.000
3	FUNCTION1 HXCD...	23.57	2.109e2					4.8	YES		bb		0.000
4	FUNCTION1 HXCD...	22.10	2.959e2					6.3	YES		bb		0.000

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ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	32.00	8.886e1					2.4	NO		db		0.000
2	FUNCTION2 HPCD...	31.86	1.535e2					3.1	YES		bd		0.000
3	FUNCTION2 HPCD...	31.34	1.918e2					5.0	YES		bb		0.000
4	FUNCTION2 HPCD...	31.06	1.104e2					3.0	NO		db		0.000
5	FUNCTION2 HPCD...	31.01	7.926e1					2.5	NO		bd		0.000
6	FUNCTION2 HPCD...	28.76	1.715e2					5.1	YES		db		0.000
7	FUNCTION2 HPCD...	28.64	1.825e2					6.1	YES		dd		0.000
8	FUNCTION2 HPCD...	28.62	1.986e2					7.2	YES		bd		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.34	1.269e2					2.9	NO		bb		0.000
2	FUNCTION3 OCDPE	35.57	7.760e1					2.3	NO		db		0.000
3	FUNCTION3 OCDPE	35.43	8.933e1					2.2	NO		bd		0.000
4	FUNCTION3 OCDPE	34.82	7.750e1					2.1	NO		bb		0.000
5	FUNCTION3 OCDPE	33.84	1.435e2					2.5	NO		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	38.25	2.427e4					448.2	YES		bd		0.000
2	FUNCTION4 NCDPE	38.36	2.890e2					6.9	YES		db		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	43.58	7.074e1					2.1	NO		bb		0.000

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Printed: Monday, March 20, 2023 11:43:37 Pacific Daylight Time

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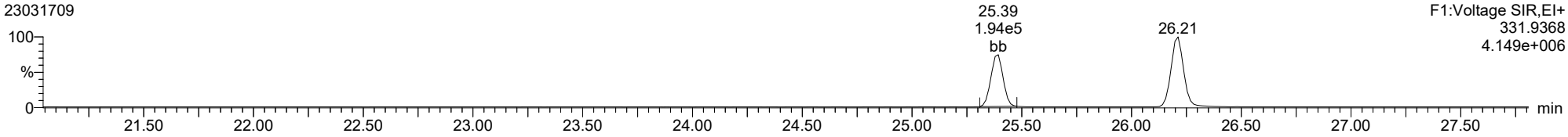

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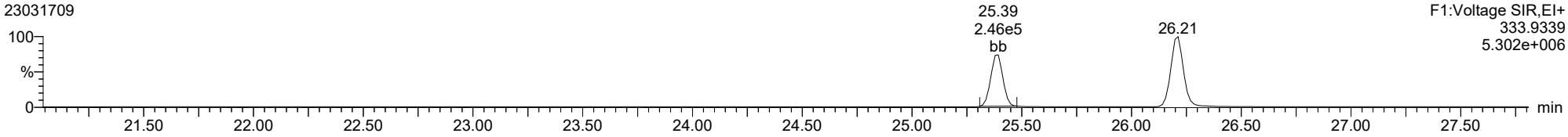

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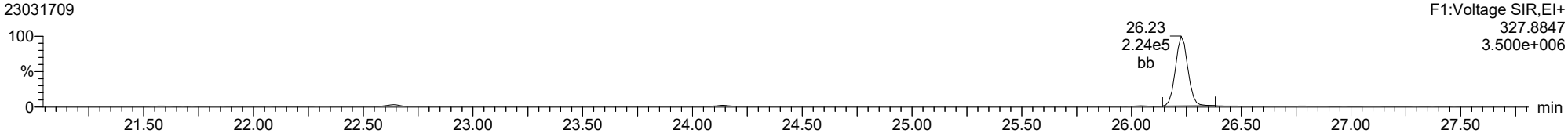

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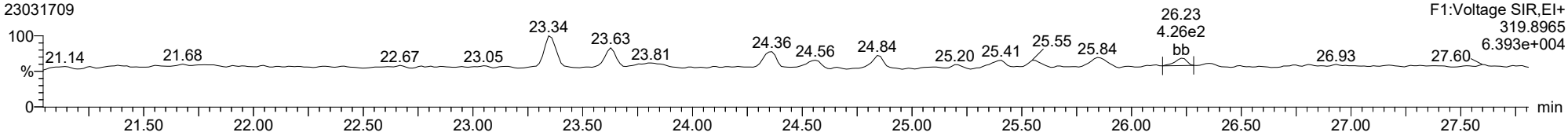

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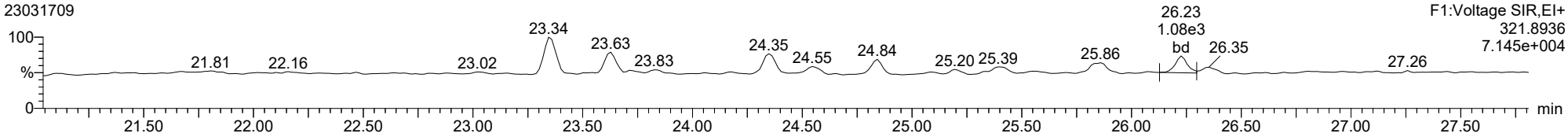

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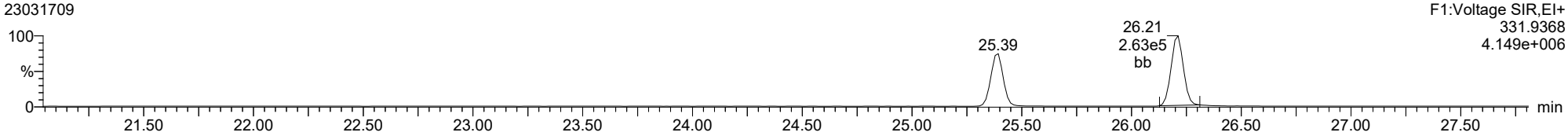

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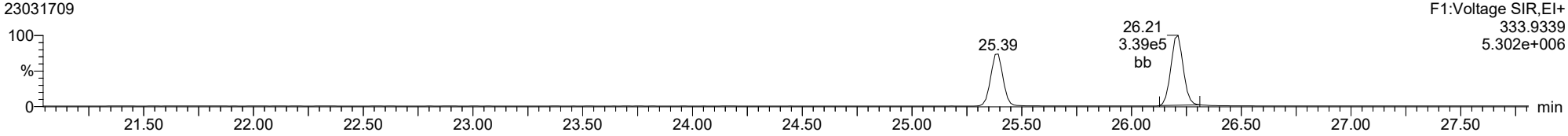

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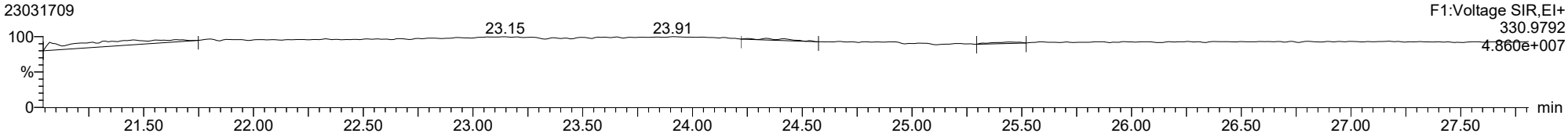

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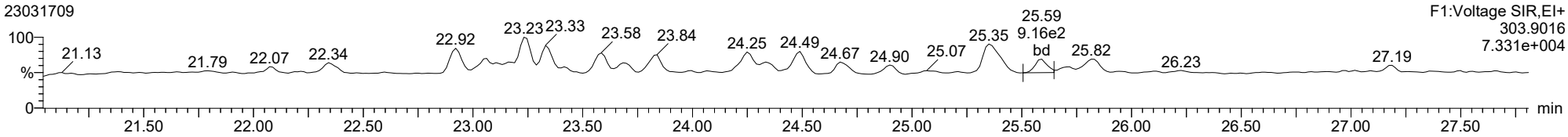

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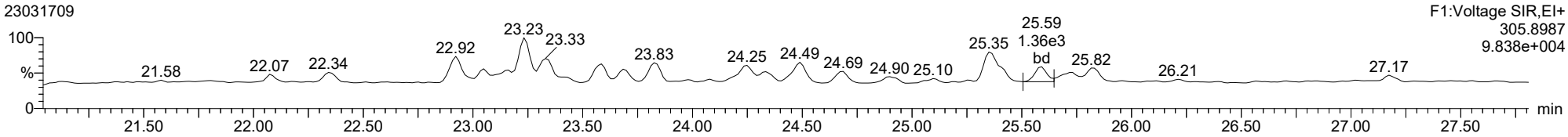

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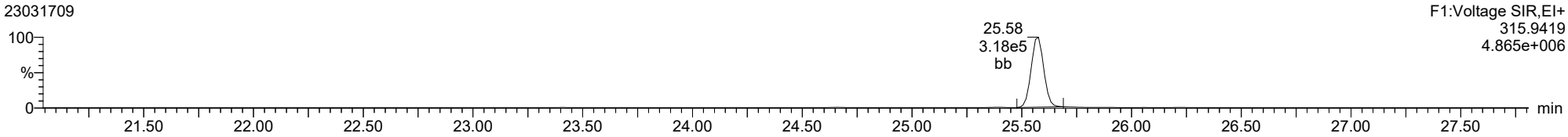

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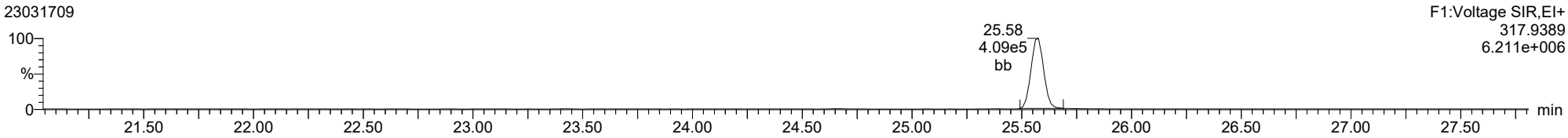

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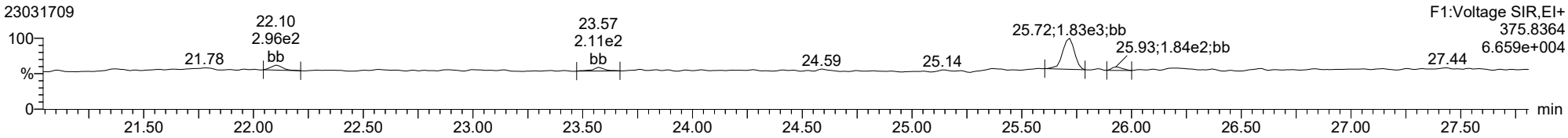

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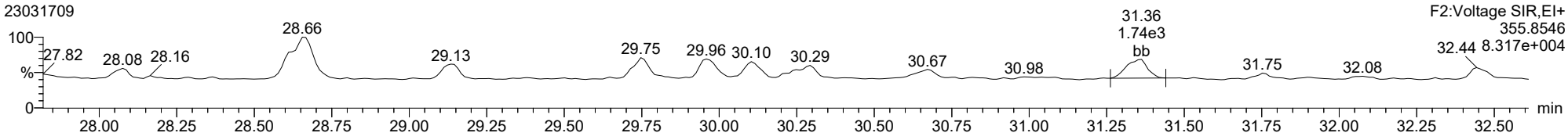
12378-PeCDD



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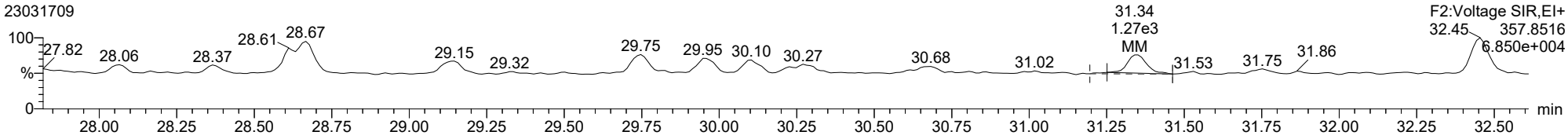

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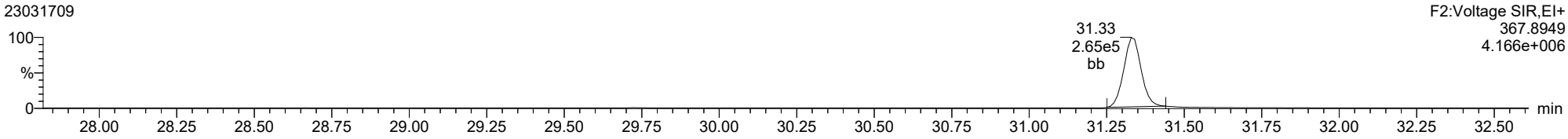

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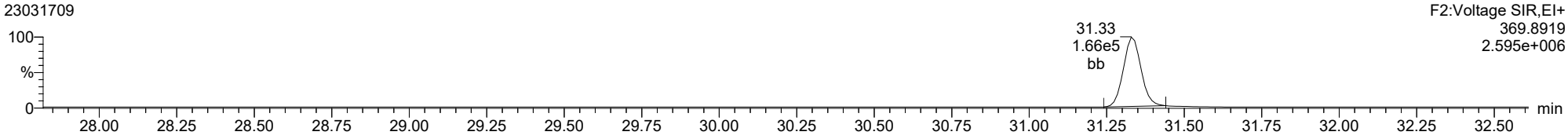

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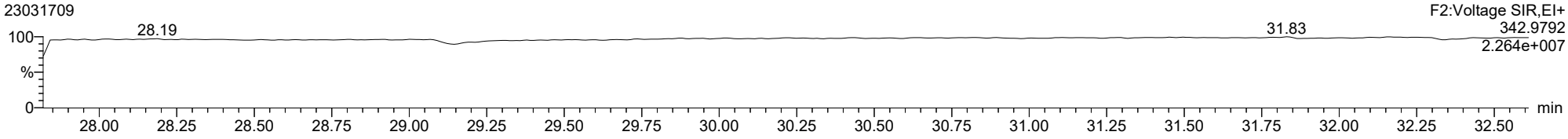

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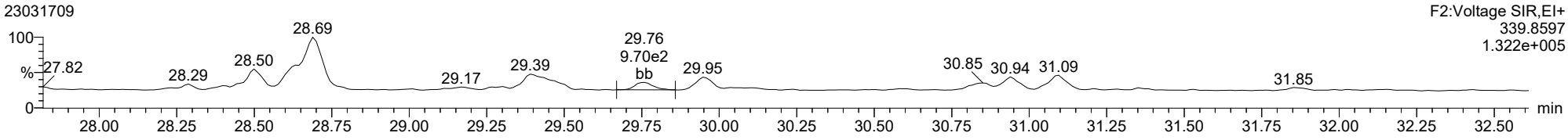
12378-PeCDF



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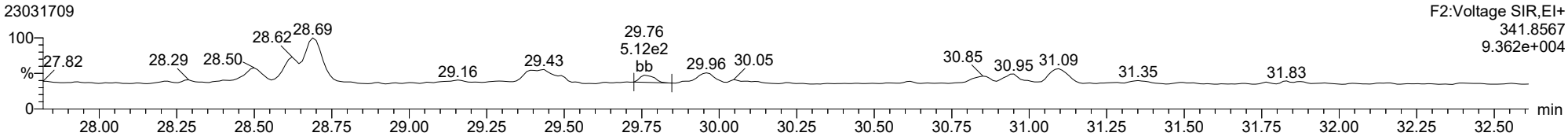

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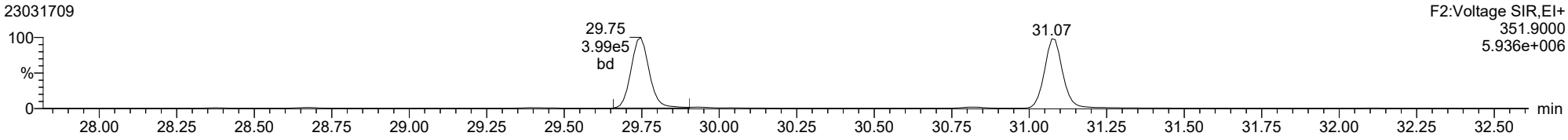

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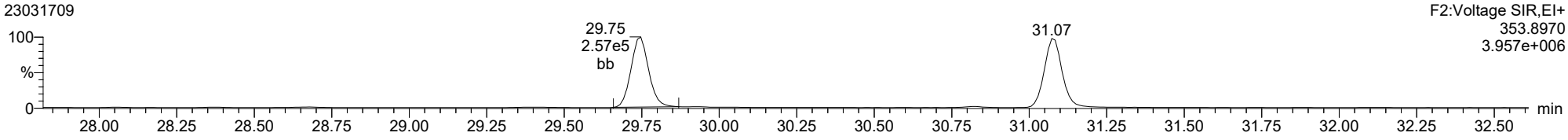

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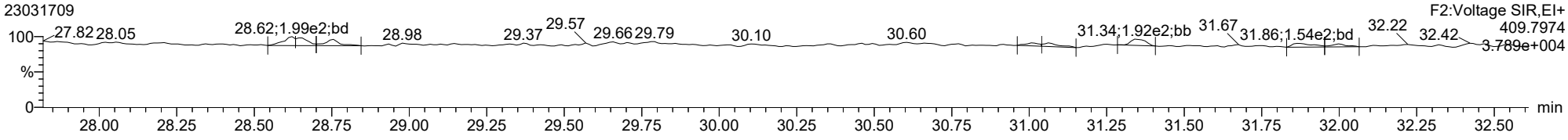

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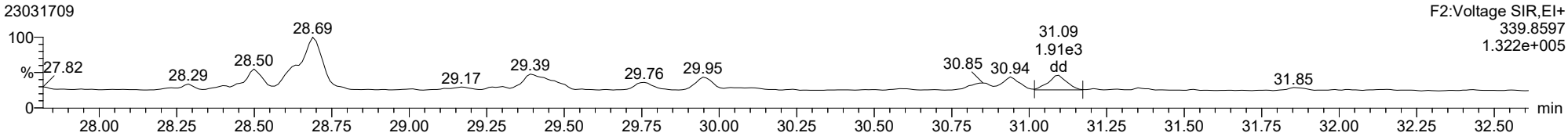
23478-PeCDF



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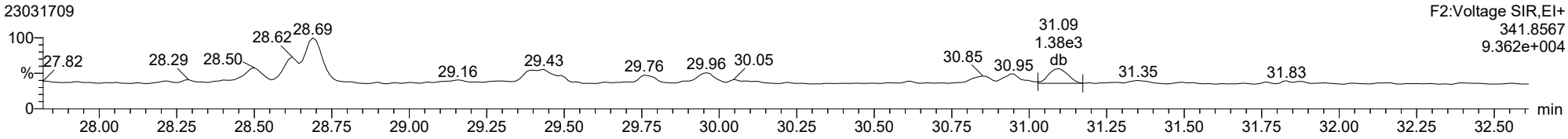

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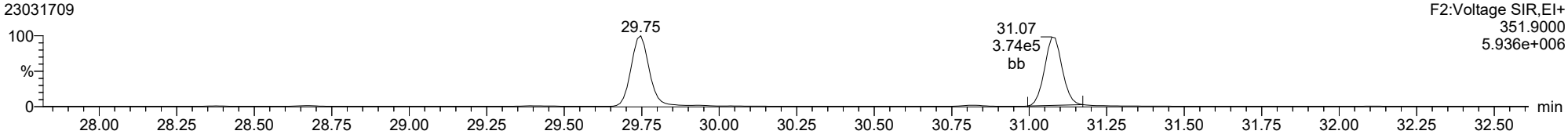

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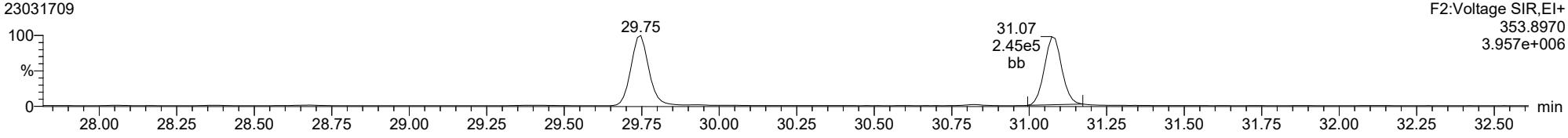

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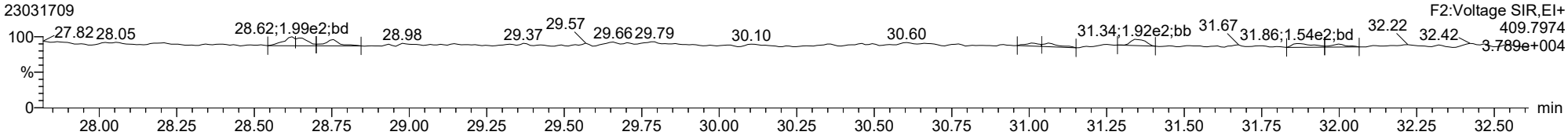

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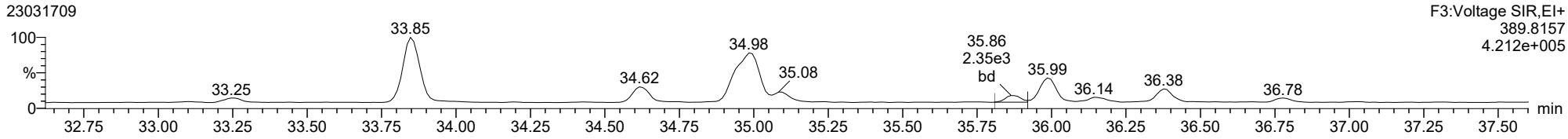

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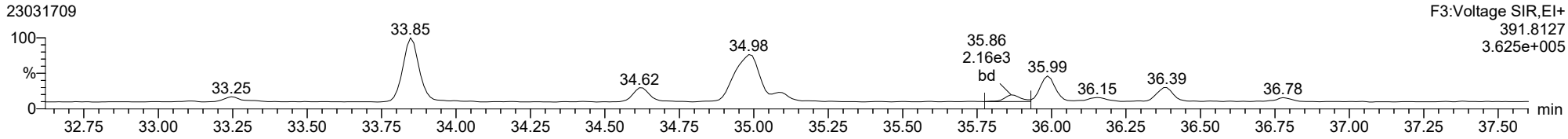

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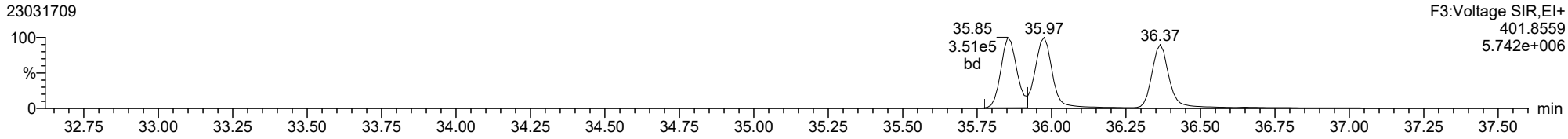

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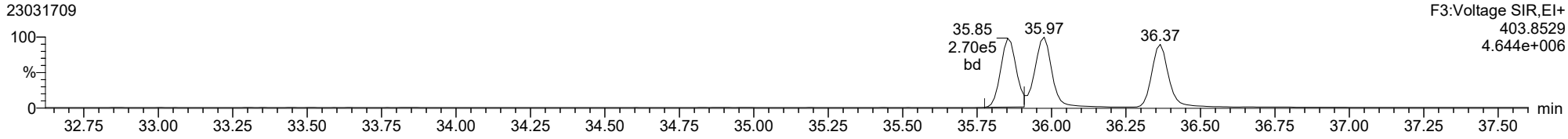

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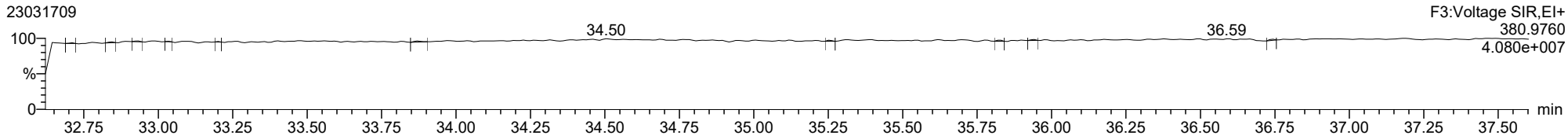

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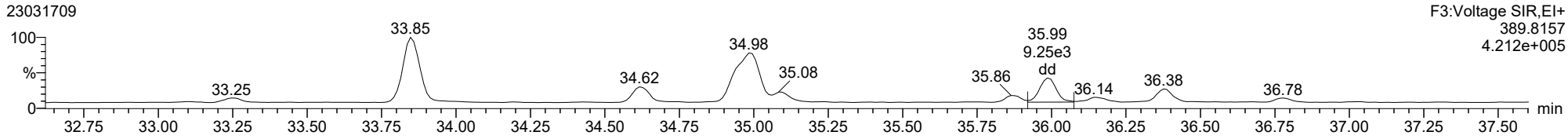

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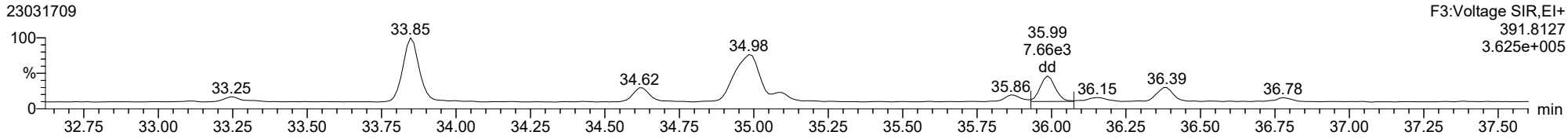

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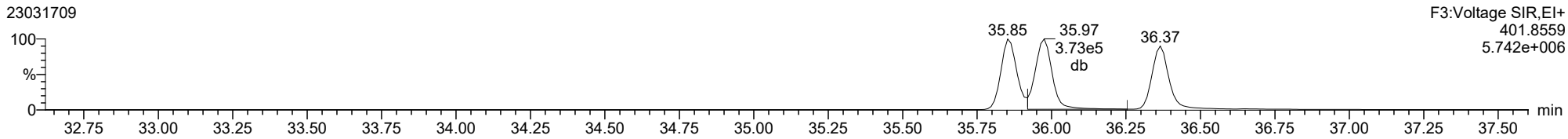

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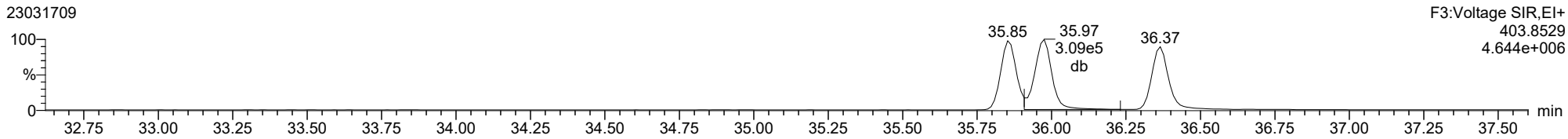

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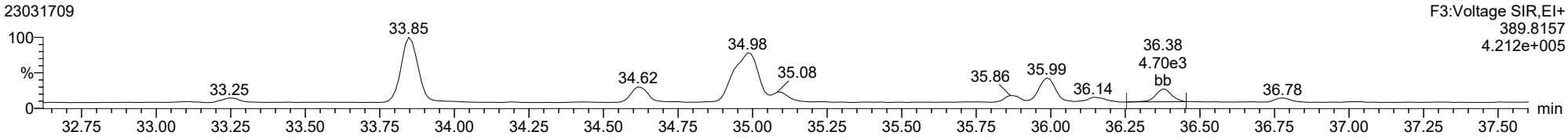

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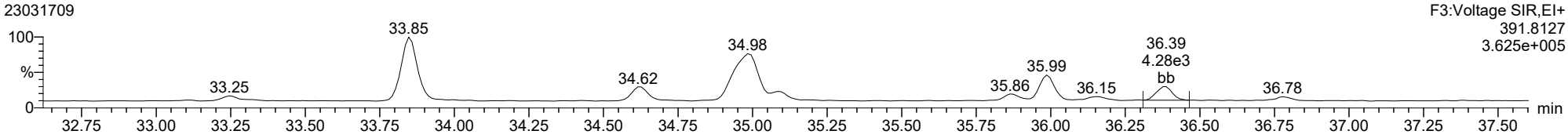

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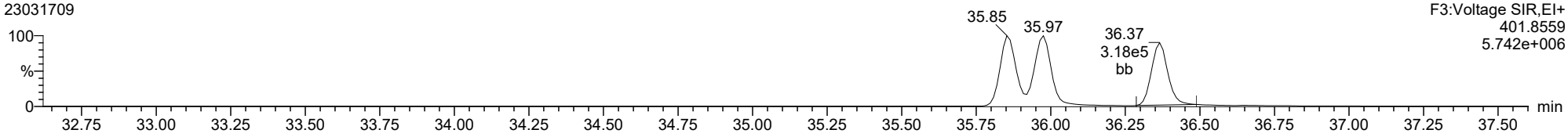

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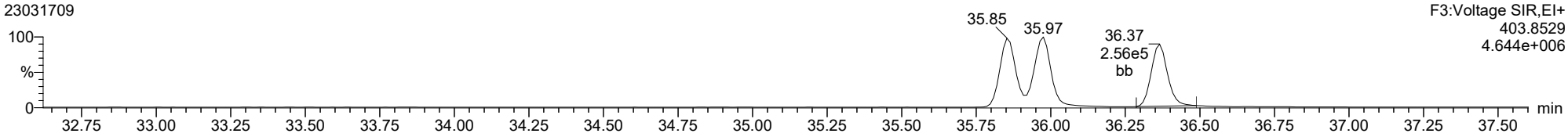

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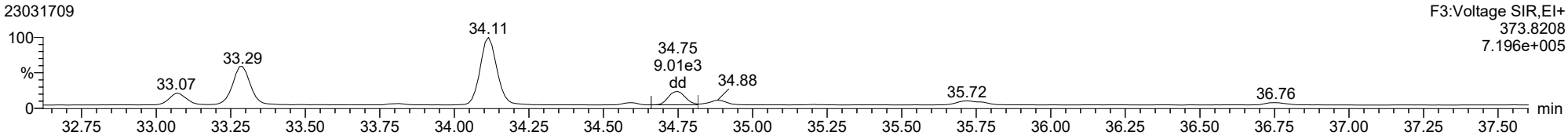

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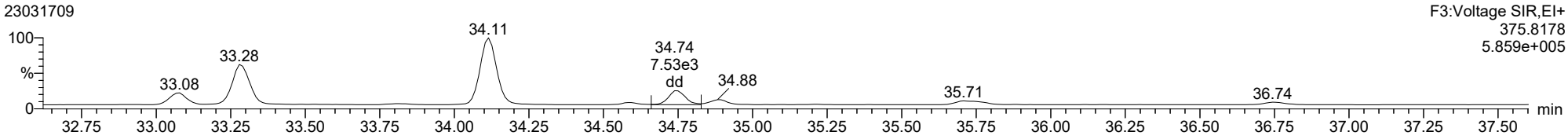

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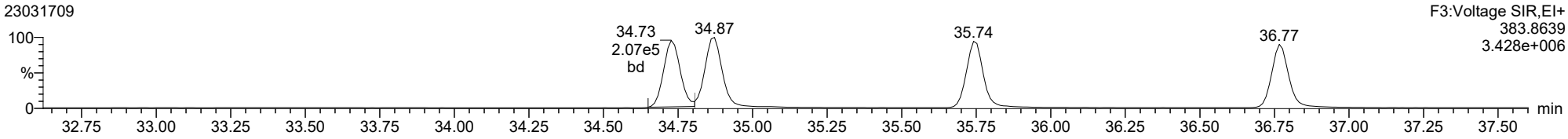

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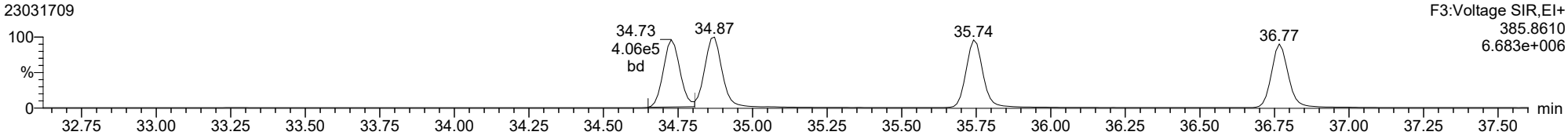

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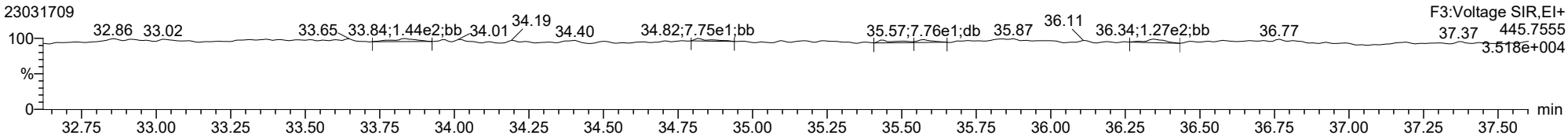

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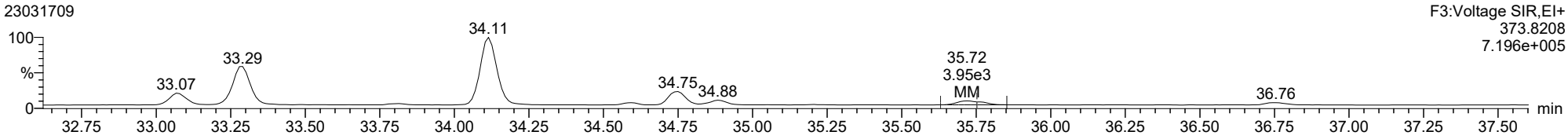
234678-HxCDF



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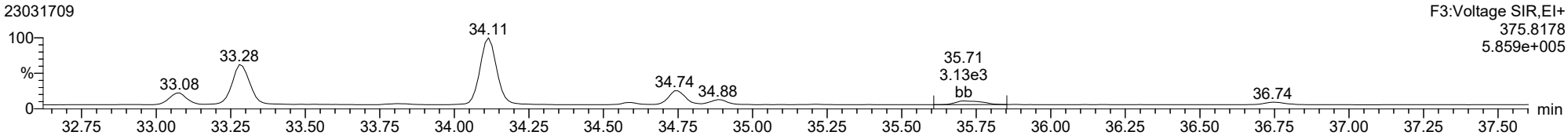

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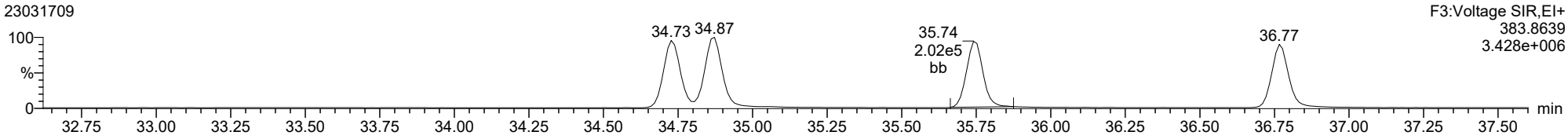

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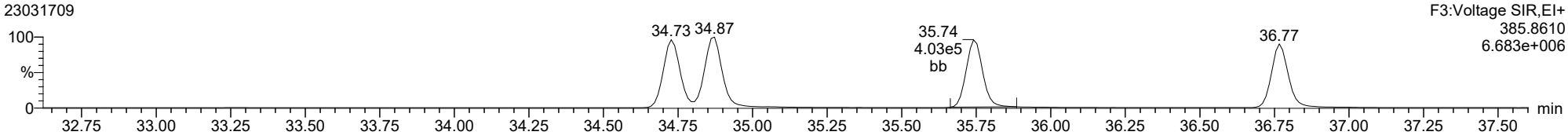

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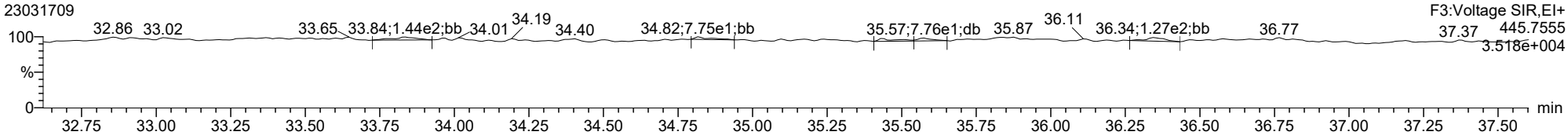

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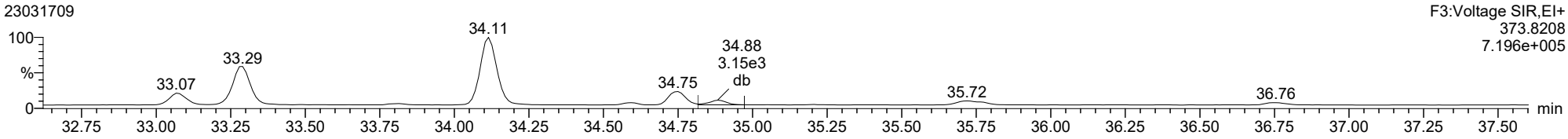

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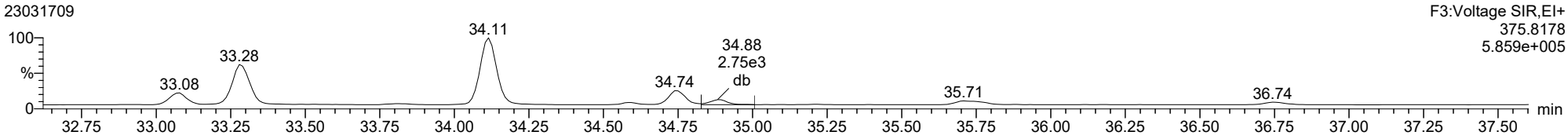

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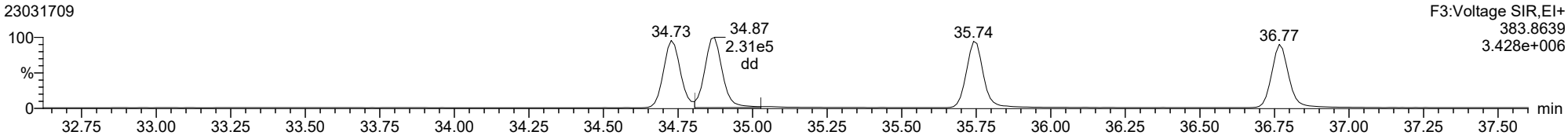

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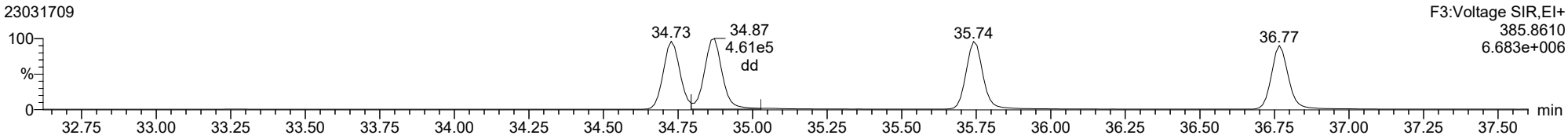

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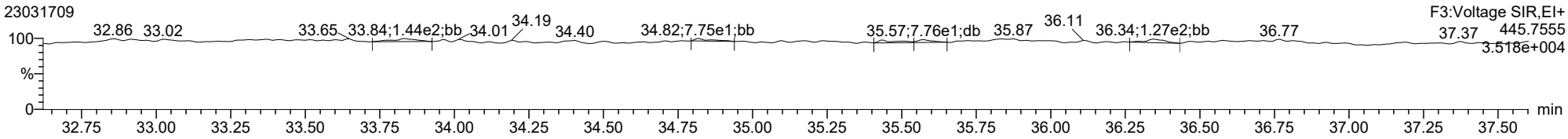

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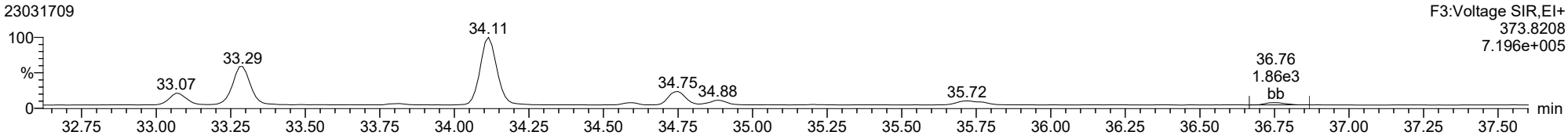

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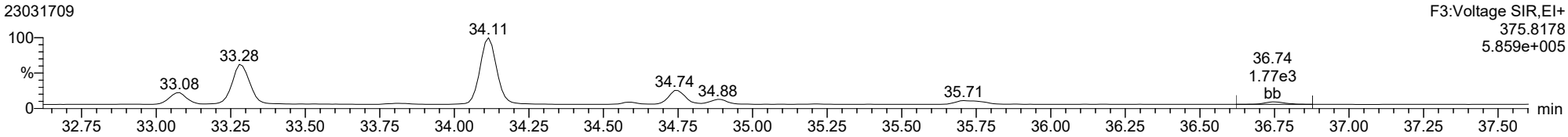

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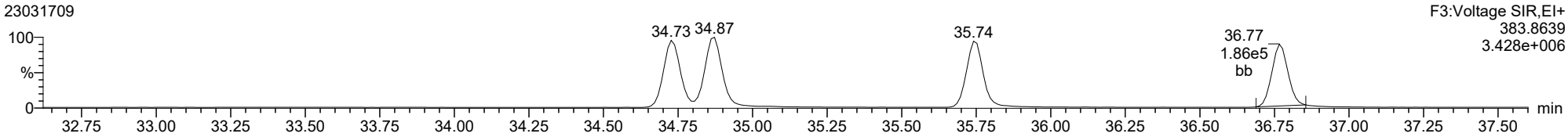

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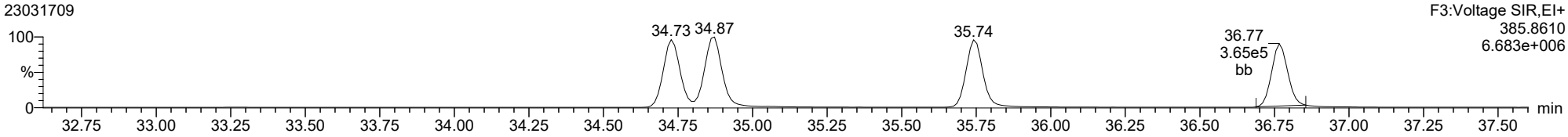
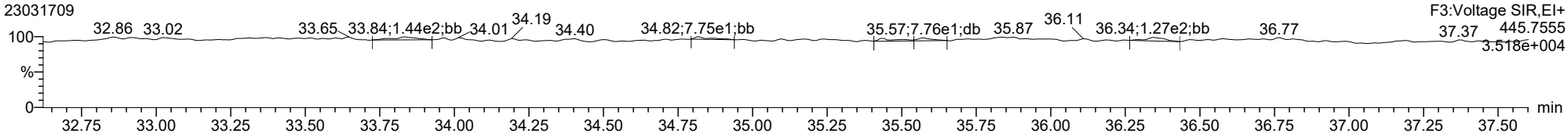


FUNCTION3 OCDPE



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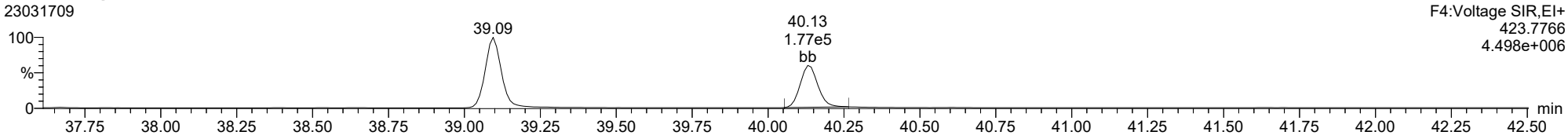

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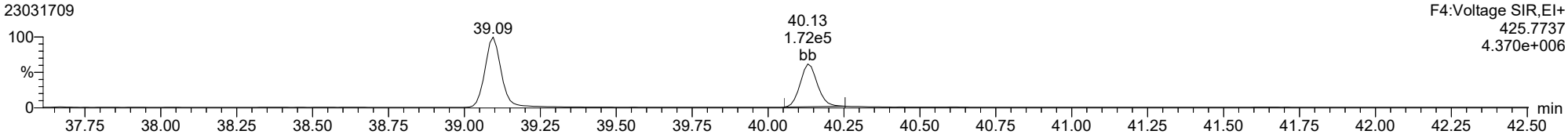

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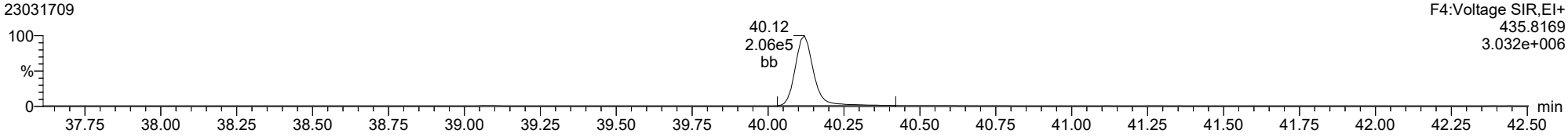

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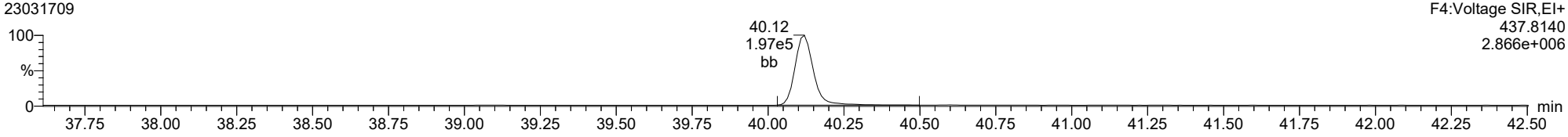

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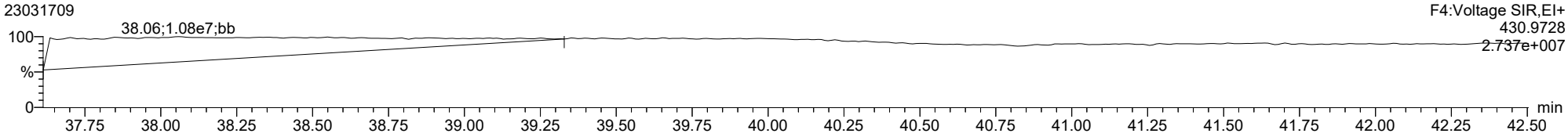

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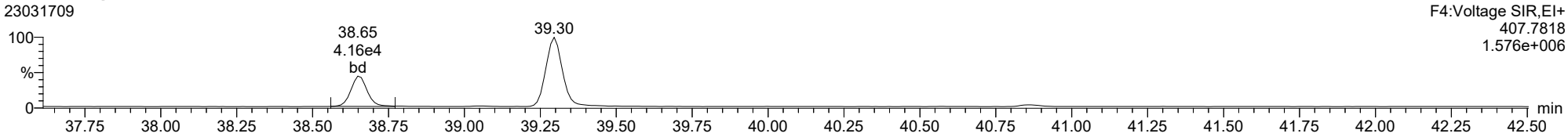

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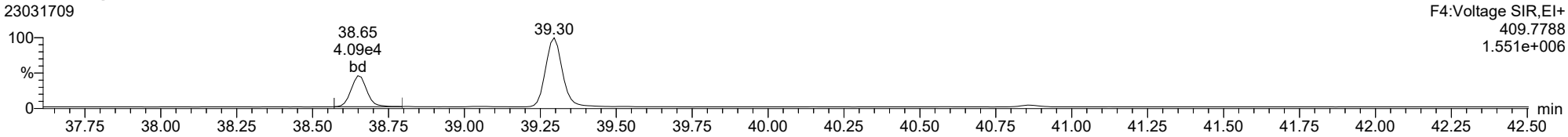

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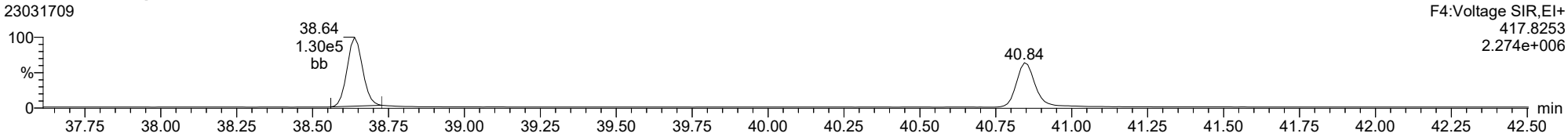

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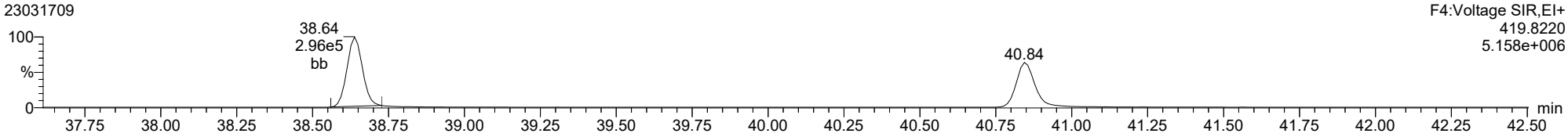

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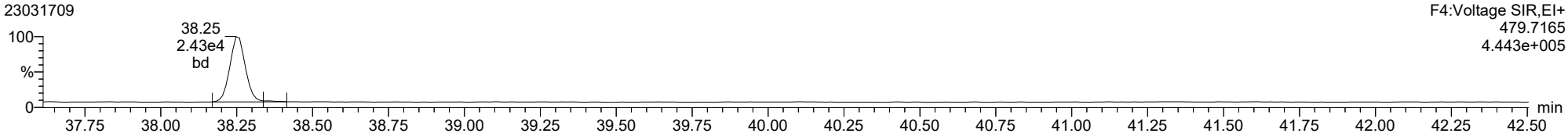

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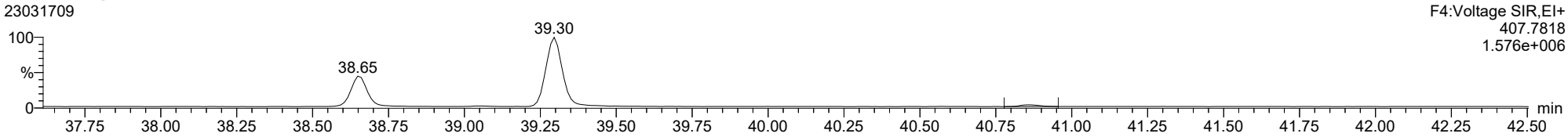

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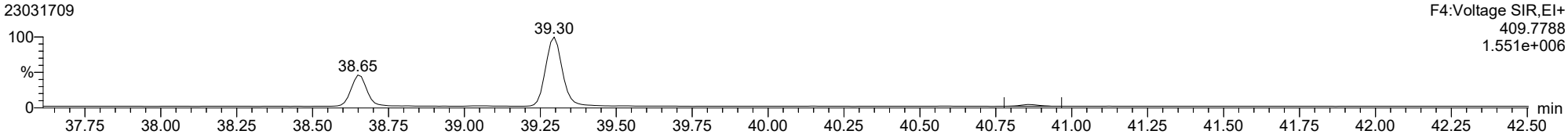

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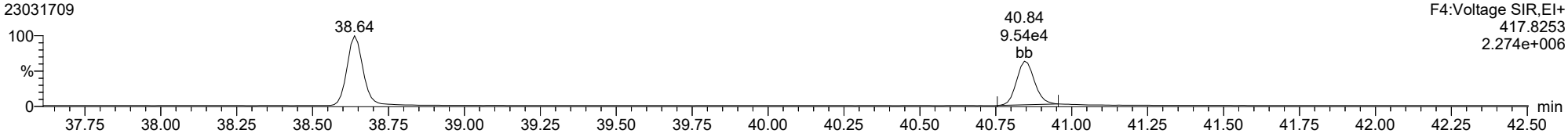

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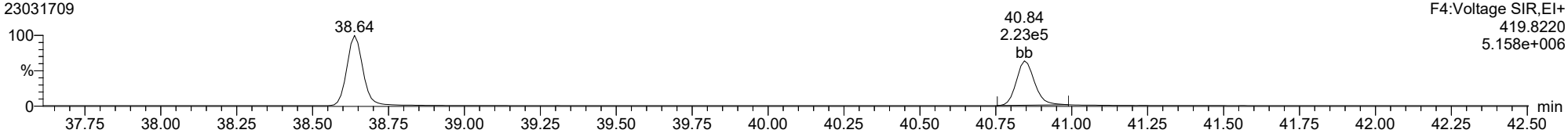

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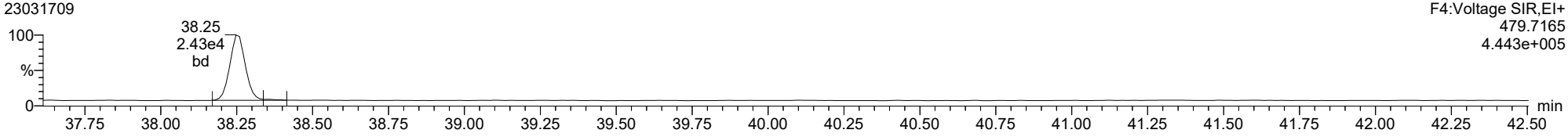

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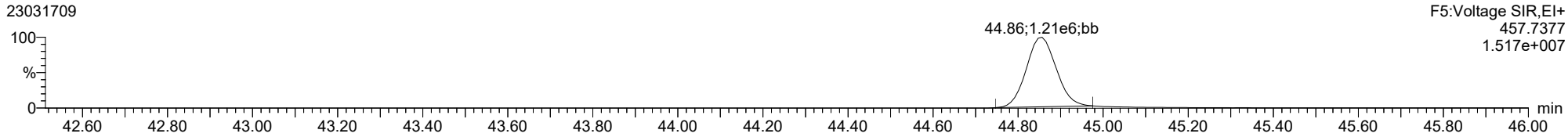

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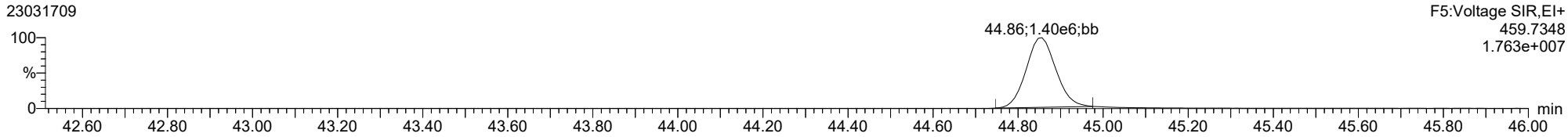

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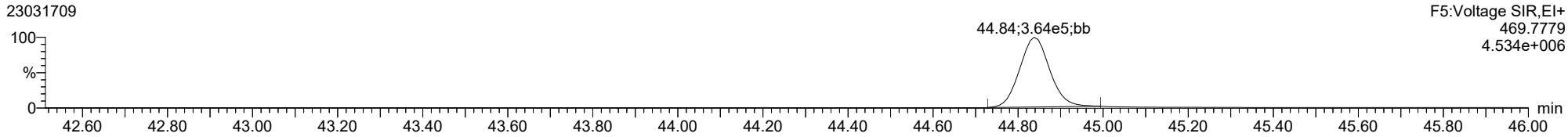

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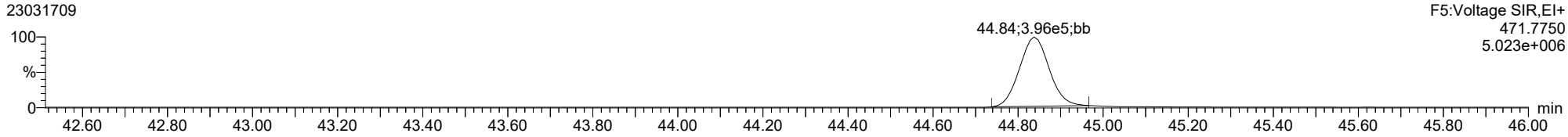

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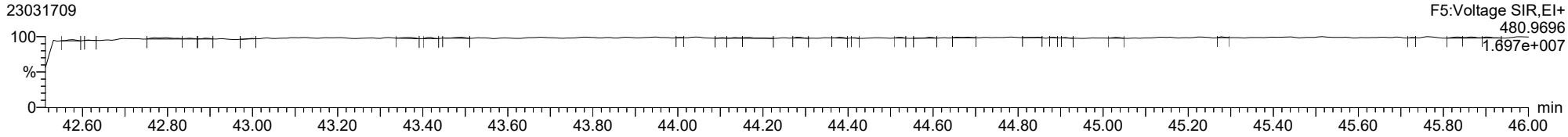

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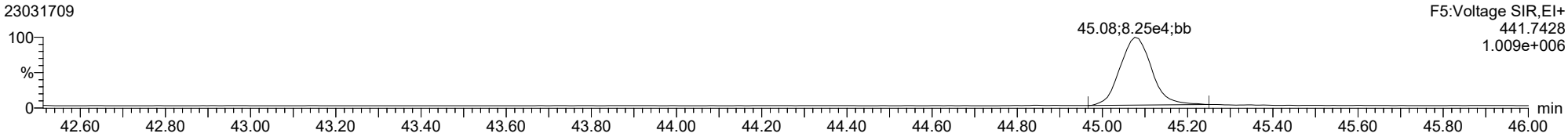

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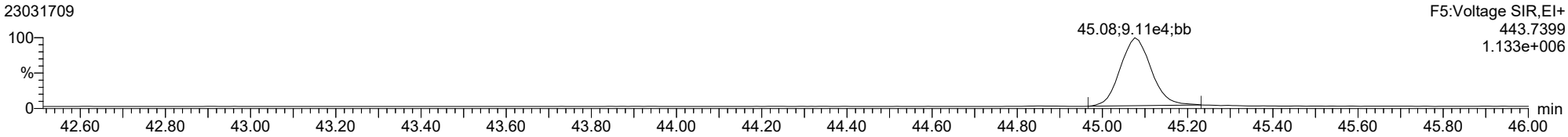

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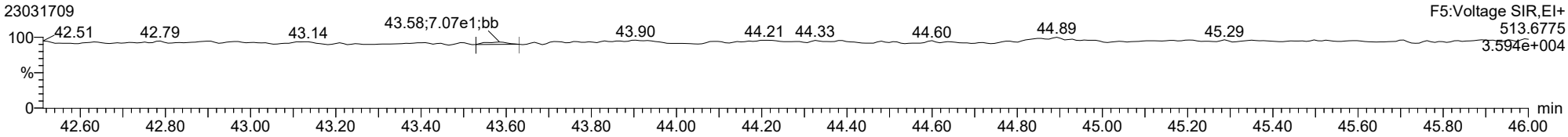
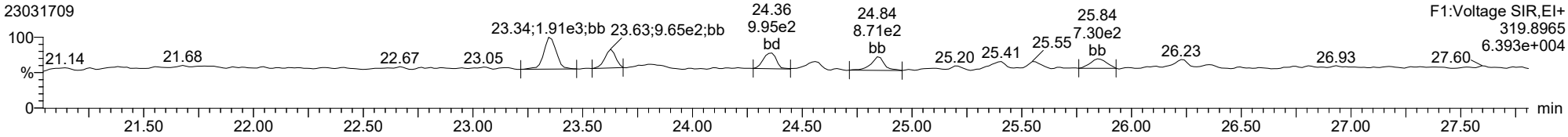


ID: 23A0171-04, Name: 23031709, Date: 17-Mar-2023, Time: 16:53:27, Conditions: AUTOSPEC01, User: pk

Total-tetradioxins



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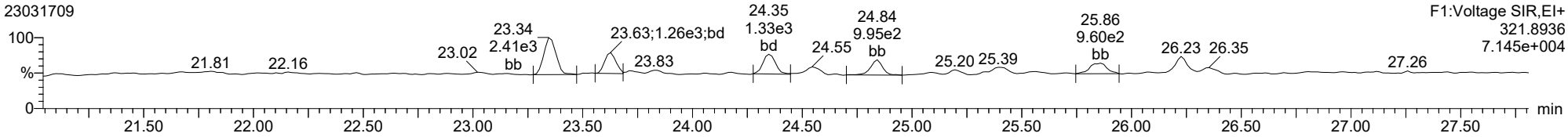

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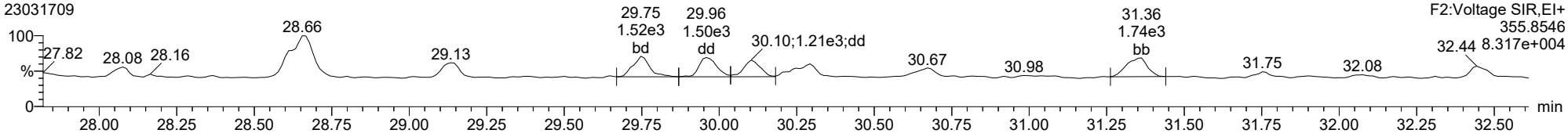
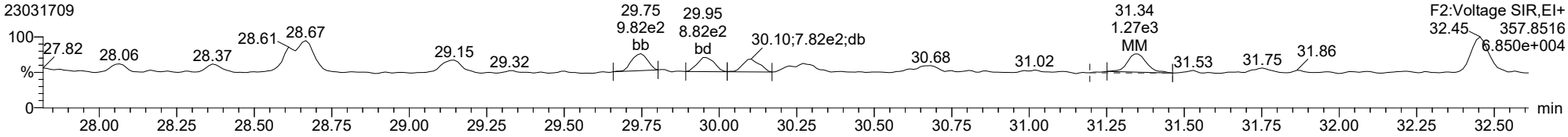


Total-pentadioxins



ID: 23A0171-04, Name: 23031709, Date: 17-Mar-2023, Time: 16:53:27, Conditions: AUTOSPEC01, User: pk

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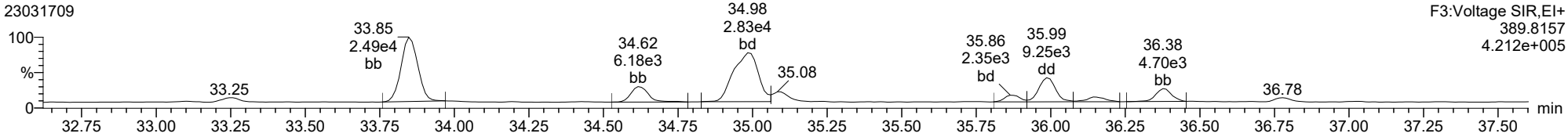

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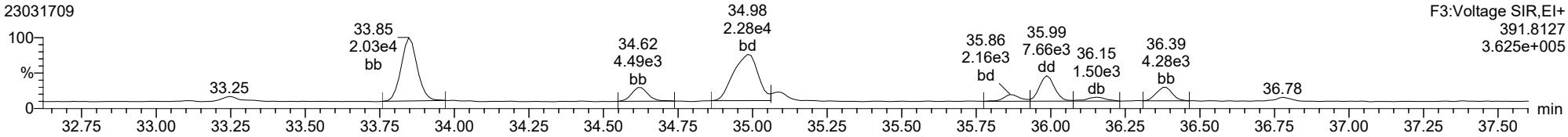

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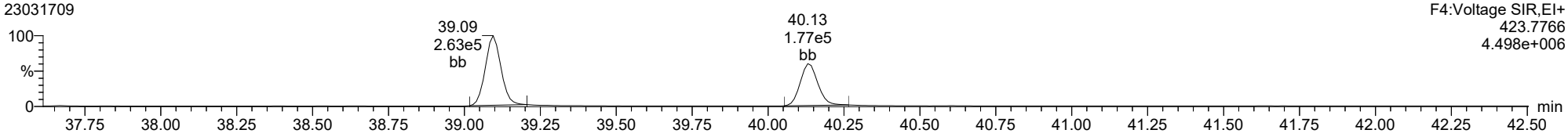

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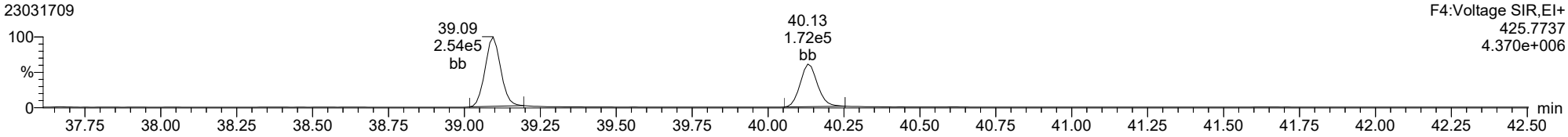

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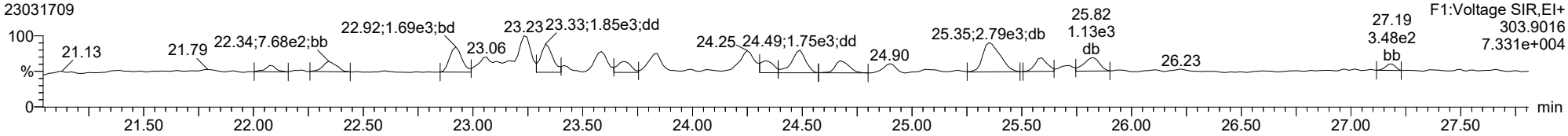
Printed: Monday, March 20, 2023 11:43:37 Pacific Daylight Time

ID: 23A0171-04, Name: 23031709, Date: 17-Mar-2023, Time: 16:53:27, Conditions: AUTOSPEC01, User: pk

Total-tetrafurans



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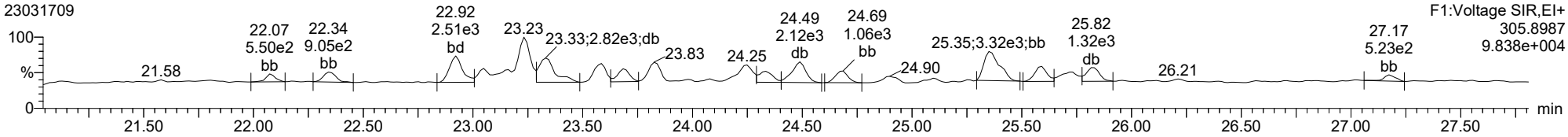

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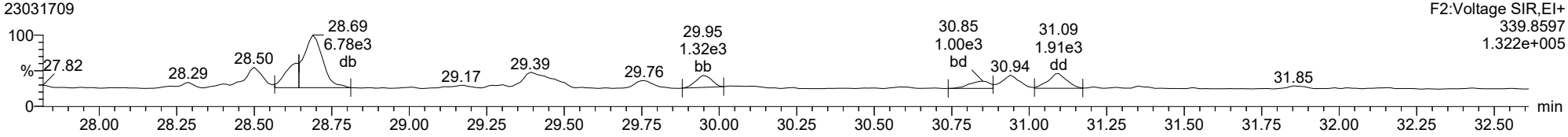

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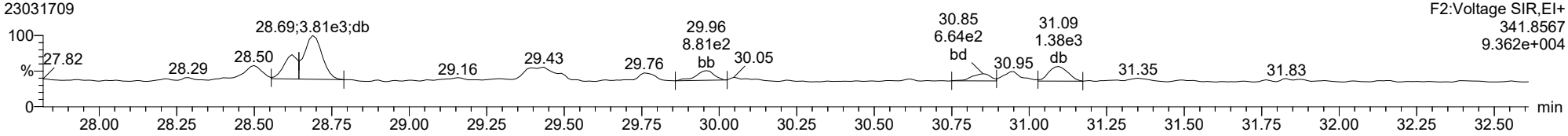

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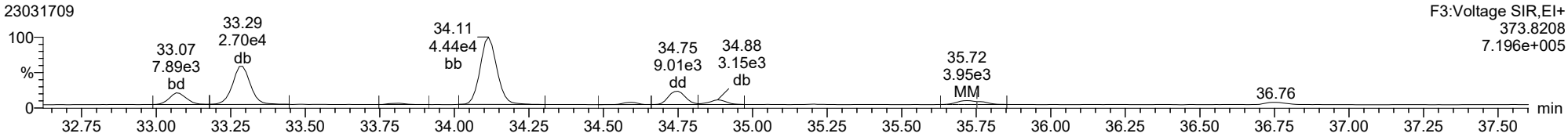

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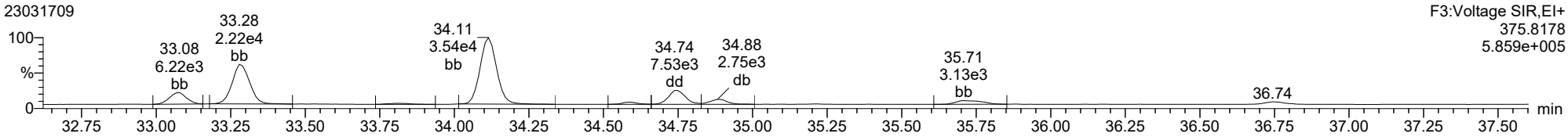

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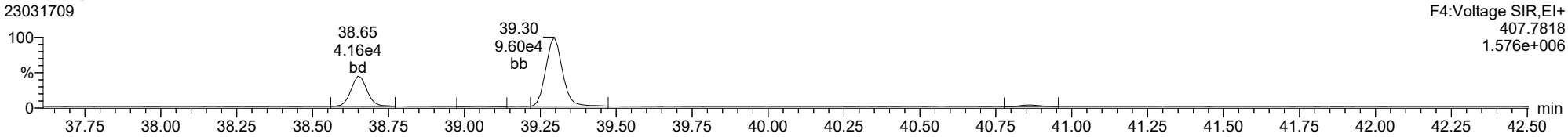

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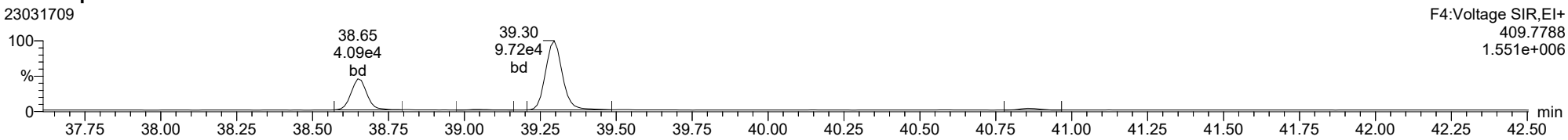

PREPARATION BATCH SUMMARY

EPA 1613B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLC0136 Batch Matrix: Solid
Preparation: EPA 1613

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1257	23A0171-02	23031708	03/07/23 14:50	From BLA0400 by NPL on 07-Mar-2023
LDW23-SS1245	23A0171-04	23031709	03/07/23 14:50	From BLA0400 by NPL on 07-Mar-2023
Blank	BLC0136-BLK1	23031512	03/07/23 07:38	
LCS	BLC0136-BS1	23031513	03/07/23 07:38	
Reference	BLC0136-SRM1	23031515	03/07/23 07:38	

Analytical Resources, LLC
Analytical Chemists and Consultants

HRGCMS Dioxin/Furan Preparation Bench Sheet EPA Methods 8290A or 1613B

Batch: BLC0136

Solid Samples

From BLA0400 on 07-Mar-2023 by NPL

ARI Work Orders:	23A0158,23A0171,23A0206		
Matrix (circle one)	Soil	Sediment	Oil Tissue
Extraction Method	Start Date/Time:	End Date/Time:	
Soxhlet SepF Shake out	3/7/23 14:50	3/8/23 0705	

Reagents/Equipment Used	NA	ID / Lot Number	Initials	Date
Glasswool		J012850	TW	3/9/23
Basic Silica		L000716	TW	3/9/23
Acid Silica		L001728	TW	3/9/23
Activated Florisil		K005956	TW	3/9/23
Balance		24650344	TW	3/7/23
Toluene		K011233	TW	3/7/23
Hexane		L000889	TW	3/8/23
CH2Cl2		K005941	TW	3/9/23
H2SO4		L001033	TW	3/9/23
Na2SO4		L001285	TW	3/7/23
Other (RM)		L001274	TW	3/7/23
0% Silica		K011054	TW	3/9/23
Nonane		M000638	TW	3/10/23

Lab Number & Container	Sample Name	% Solids	Sample Weight Equal to dry (g) (Target Dry)	Actual	RotoVap °C	Water Trap Vol (mL)	Final Vol. (uL)
23A0158-06 C	LDW23-SS1222	56.9	(17.58)	17.60	1/2	5.5	20
23A0158-07 C	LDW23-SS1215	58.29	(17.16)	17.17	1/2	7.0	20
23A0158-09 C	LDW23-SS1077	78.04	(12.81)	12.81	1/2	2.5	20
23A0158-10 C	LDW23-SS1070	47.26	(21.16)	21.19	1/2	10.0	20
23A0158-11 C	LDW23-SS1065	54.63	(18.31)	18.31	1/2	7.5	20
23A0158-12 C	LDW23-SS1064	57.39	(17.43)	17.43	1/2	7.0	20
23A0158-13 C	LDW23-SS1060	52.67	(18.99)	19.01	1/2	7.5	20
23A0158-14 C	LDW23-SS1059	53.17	(18.81)	18.84	1/2	8.0	20
23A0158-15 C	LDW23-SS1053	52.28	(19.13)	19.13	1/2	8.0	20
23A0171-02 A	LDW23-SS1257	42.41	(23.58)	23.61	1/2	12.0	20
23A0171-04 A	LDW23-SS1245	47.05	(21.25)	21.26	1/2	9.0	20
23A0206-13 C	LDW23-SS1066	60.59	(16.50)	16.51	1/2	6.0	20
BLC0136-BLK1	Blank	100	()	10.00	1/2	0.0	20
BLC0136-BS1	LCS	100	()	10.00	1/2	0.0	20
BLC0136-DUP1	Duplicate 23A0158-06c	56.9	(17.58)	17.60	1/2	6.0	20
BLC0136-SRM1	Reference	100	()	10.03	1/2	0.0	20
Prep Analyst / Date:			TW 3/7/23		TW 3/8/23	TW 3/8/23	

Standards Used	Vol	ID / Lot Number	Concentration	Expiration Date	Analyst	Witness	Date
Recovery Standard	1.0 mL	K011158	2/4 ng/mL	12/2/23	TW	MW	3/7/23
OPR	1.0 mL	~~K006003~~ L000046 TW 3/7/23	0.2/1.0/2.0 ng/mL	~~6/30/23~~ 1/3/24 TW 3/7/23	TW	MW	3/7/23
~~QLS Standard~~	~~1.0 mL~~		0.01/0.05/0.1ng/mL ng/l				
Cleanu-up Standard	1.0 mL	L001332	0.8 ng/mL	2/8/24	TW	DP	3/9/23

Verify Client ID
Analyst / Date: TW 3/7/23

Acid Clean Y / N
Analyst / Date: TW 3/9/23

Silica-Florisil Clean Y / N
Analyst / Date: TW 3/9/23

Supervisor Review By 3/13/23 Date

Printed: 3/7/2023 7:44:01AM

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Page 1 of 1

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Dioxin Extraction Laboratory – Glassware

Batch ID: BLCΦ136 Work Order: 23AΦ158, 23AΦ171 23AΦ2Φ6 Extraction Parameter: Dioxin ARI Analyst TW

ARI Sample ID	300 mL Flat Bottom	Small Soxhlet	Large Soxhlet	250 mL Beaker	Funnel	Column	Florisil Column	Turbo Tube	Sep Funnel	Erlenmeyer Flask	Centrifuge Bottle	Turbo-Vap	Vortex Mixer	Heating Mantle
BLCΦ136 - BlK1	12	18		21	13	191	68	4				4	4	A1
BS1	60	74		9	94	16	70	48				4	4	A2
Dup1	44		35	3	6	40	54	7				4	4	A3
SRM1	48	19		46	68	170	38	34				4	4	A5
23AΦ158 - ΦGC	16		59	4	56	20	150	16				4	4	A6
Φ7C	26		49	8	35	35	29	29				4	4	B1
Φ9C	47	6		23	31	198	8	61				4	4	B2
10C	79		65	239	58	217	49	62				4	4	B3
11C	6		2	138	52	31	10	68				4	4	B4
12C	43		71	22	65	38	6	46				4	4	B5
13C	29		23	245	94	36	37	70				4	4	B6
14C	68		3	41	64	225	58	6				4	4	C1
15C	11		28	11	54	2	115	2				4	4	C2
23AΦ171 - Φ2A	20		31	37	19	9	120	66				4	4	C3
Φ4A	87		25	10	43	62	77	72				4	4	C4
23AΦ2Φ6 - 13C	2	28		32	93	14	7	50				4	4	C5
												4	4	
												4	4	
												4	4	
												4	4	
												4	4	
												4	4	
												4	4	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLA0187	Cleanup Type:	Sulfuric Acid
Cleanup Method:	EPA 3665 Sulfuric Acid Cleanup - uL	Analysis:	EPA 1613B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1245	23A0171-04	23031709	01/19/2023	
LDW23-SS1257	23A0171-02	23031708	01/19/2023	

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CLEANUP BENCH SHEET

CLA0187

Matrix: Solid **Cleanup using: HRGCMS - EPA 3665 Sulfuric Acid Cleanup - uL** **Printed: 1/20/2023 4:21:07PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0158-06	C	LDW23-SS1222	C 01	20	20	1613B Dioxin	1/19/2023	TW	
23A0158-07	C	LDW23-SS1215	C 01	20	20	1613B Dioxin	1/19/2023	TW	
23A0158-09	C	LDW23-SS1077	C 01	20	20	1613B Dioxin	1/19/2023	TW	
23A0158-10	C	LDW23-SS1070	C 01	20	20	1613B Dioxin	1/19/2023	TW	
23A0158-11	C	LDW23-SS1065	C 01	20	20	1613B Dioxin	1/19/2023	TW	
23A0158-12	C	LDW23-SS1064	C 01	20	20	1613B Dioxin	1/19/2023	TW	
23A0158-13	C	LDW23-SS1060	C 01	20	20	1613B Dioxin	1/19/2023	TW	
23A0158-14	C	LDW23-SS1059	C 01	20	20	1613B Dioxin	1/19/2023	TW	
23A0158-15	C	LDW23-SS1053	C 01	20	20	1613B Dioxin	1/19/2023	TW	
23A0171-02	A	LDW23-SS1257	A 04	20	20	1613B Dioxin	1/19/2023	TW	
23A0171-04	A	LDW23-SS1245	A 04	20	20	1613B Dioxin	1/19/2023	TW	
23A0206-13	C	LDW23-SS1066	C 01	20	20	1613B Dioxin	1/19/2023	TW	
BLA0400-BLK1	-	Blank	-	20	20	-	1/19/2023	TW	
BLA0400-BS1	-	LCS	-	20	20	-	1/19/2023	TW	
BLA0400-DUP1	-	Duplicate	-	20	20	-	1/19/2023	TW	
BLA0400-SRM1	-	Reference	-	20	20	-	1/19/2023	TW	

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CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLA0188	Cleanup Type:	Silica Gel
Cleanup Method:	EPA 3630C Silica Gel Cleanup - uL	Analysis:	EPA 1613B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1257	23A0171-02	23031708	01/20/2023	
LDW23-SS1245	23A0171-04	23031709	01/20/2023	

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CLEANUP BENCH SHEET

CLA0188

Matrix: Solid **Cleanup using: HRGCMS - EPA 3660C Silica Gel Cleanup - uL** **Printed: 1/20/2023 4:21:29PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0158-06	C	LDW23-SS1222	C 01	20	20	1613B Dioxin	1/20/2023	TW	
23A0158-07	C	LDW23-SS1215	C 01	20	20	1613B Dioxin	1/20/2023	TW	
23A0158-09	C	LDW23-SS1077	C 01	20	20	1613B Dioxin	1/20/2023	TW	
23A0158-10	C	LDW23-SS1070	C 01	20	20	1613B Dioxin	1/20/2023	TW	
23A0158-11	C	LDW23-SS1065	C 01	20	20	1613B Dioxin	1/20/2023	TW	
23A0158-12	C	LDW23-SS1064	C 01	20	20	1613B Dioxin	1/20/2023	TW	
23A0158-13	C	LDW23-SS1060	C 01	20	20	1613B Dioxin	1/20/2023	TW	
23A0158-14	C	LDW23-SS1059	C 01	20	20	1613B Dioxin	1/20/2023	TW	
23A0158-15	C	LDW23-SS1053	C 01	20	20	1613B Dioxin	1/20/2023	TW	
23A0171-02	A	LDW23-SS1257	A 04	20	20	1613B Dioxin	1/20/2023	TW	
23A0171-04	A	LDW23-SS1245	A 04	20	20	1613B Dioxin	1/20/2023	TW	
23A0206-13	C	LDW23-SS1066	C 01	20	20	1613B Dioxin	1/20/2023	TW	
BLA0400-BLK1	-	Blank	-	20	20	-	1/20/2023	TW	
BLA0400-BS1	-	LCS	-	20	20	-	1/20/2023	TW	
BLA0400-DUP1	-	Duplicate	-	20	20	-	1/20/2023	TW	
BLA0400-SRM1	-	Reference	-	20	20	-	1/20/2023	TW	

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CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLA0189	Cleanup Type:	Florisil
Cleanup Method:	EPA 3620B Florisil Cleanup (uL)	Analysis:	EPA 1613B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1257	23A0171-02	23031708	01/20/2023	
LDW23-SS1245	23A0171-04	23031709	01/20/2023	

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CLEANUP BENCH SHEET

CLA0189

Matrix: Solid **Cleanup using: HRGCMS - EPA 3620B Florisil Cleanup (uL)** **Check Standard: CKK0015-FLO1** **Printed: 1/20/2023 4:21:44PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0158-06	C	LDW23-SS1222	C 01	20	20	1613B Dioxin	1/20/2023	TW	
23A0158-07	C	LDW23-SS1215	C 01	20	20	1613B Dioxin	1/20/2023	TW	
23A0158-09	C	LDW23-SS1077	C 01	20	20	1613B Dioxin	1/20/2023	TW	
23A0158-10	C	LDW23-SS1070	C 01	20	20	1613B Dioxin	1/20/2023	TW	
23A0158-11	C	LDW23-SS1065	C 01	20	20	1613B Dioxin	1/20/2023	TW	
23A0158-12	C	LDW23-SS1064	C 01	20	20	1613B Dioxin	1/20/2023	TW	
23A0158-13	C	LDW23-SS1060	C 01	20	20	1613B Dioxin	1/20/2023	TW	
23A0158-14	C	LDW23-SS1059	C 01	20	20	1613B Dioxin	1/20/2023	TW	
23A0158-15	C	LDW23-SS1053	C 01	20	20	1613B Dioxin	1/20/2023	TW	
23A0171-02	A	LDW23-SS1257	A 04	20	20	1613B Dioxin	1/20/2023	TW	
23A0171-04	A	LDW23-SS1245	A 04	20	20	1613B Dioxin	1/20/2023	TW	
23A0206-13	C	LDW23-SS1066	C 01	20	20	1613B Dioxin	1/20/2023	TW	
BLA0400-BLK1	-	Blank	-	20	20	-	1/20/2023	TW	
BLA0400-BS1	-	LCS	-	20	20	-	1/20/2023	TW	
BLA0400-DUP1	-	Duplicate	-	20	20	-	1/20/2023	TW	
BLA0400-SRM1	-	Reference	-	20	20	-	1/20/2023	TW	

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLC0084	Cleanup Type:	Sulfuric Acid
Cleanup Method:	EPA 3665 Sulfuric Acid Cleanup - uL	Analysis:	EPA 1613B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1245	23A0171-04	23031709	03/09/2023	
LDW23-SS1257	23A0171-02	23031708	03/09/2023	
Blank	BLC0136-BLK1	23031512	03/09/2023	
LCS	BLC0136-BS1	23031513	03/09/2023	
Reference	BLC0136-SRM1	23031515	03/09/2023	

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CLEANUP BENCH SHEET

CLC0084

Matrix: Solid **Cleanup using: HRGCMS - EPA 3665 Sulfuric Acid Cleanup - uL** **Printed: 3/10/2023 10:14:44AM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0158-06	C	LDW23-SS1222	C 02	20	20	1613B Dioxin	3/9/2023	TW	
23A0158-07	C	LDW23-SS1215	C 02	20	20	1613B Dioxin	3/9/2023	TW	
23A0158-09	C	LDW23-SS1077	C 02	20	20	1613B Dioxin	3/9/2023	TW	
23A0158-10	C	LDW23-SS1070	C 02	20	20	1613B Dioxin	3/9/2023	TW	
23A0158-11	C	LDW23-SS1065	C 02	20	20	1613B Dioxin	3/9/2023	TW	
23A0158-12	C	LDW23-SS1064	C 02	20	20	1613B Dioxin	3/9/2023	TW	
23A0158-13	C	LDW23-SS1060	C 02	20	20	1613B Dioxin	3/9/2023	TW	
23A0158-14	C	LDW23-SS1059	C 02	20	20	1613B Dioxin	3/9/2023	TW	
23A0158-15	C	LDW23-SS1053	C 02	20	20	1613B Dioxin	3/9/2023	TW	
23A0171-02	A	LDW23-SS1257	A 05	20	20	1613B Dioxin	3/9/2023	TW	
23A0171-04	A	LDW23-SS1245	A 05	20	20	1613B Dioxin	3/9/2023	TW	
23A0206-13	C	LDW23-SS1066	C 02	20	20	1613B Dioxin	3/9/2023	TW	
BLC0136-BLK1	-	Blank	-	20	20	-	3/9/2023	TW	
BLC0136-BS1	-	LCS	-	20	20	-	3/9/2023	TW	
BLC0136-DUP1	-	Duplicate	-	20	20	-	3/9/2023	TW	
BLC0136-SRM1	-	Reference	-	20	20	-	3/9/2023	TW	

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLC0085	Cleanup Type:	Silica Gel
Cleanup Method:	EPA 3630C Silica Gel Cleanup - uL	Analysis:	EPA 1613B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1245	23A0171-04	23031709	03/09/2023	
Reference	BLC0136-SRM1	23031515	03/09/2023	
LCS	BLC0136-BS1	23031513	03/09/2023	
Blank	BLC0136-BLK1	23031512	03/09/2023	
LDW23-SS1257	23A0171-02	23031708	03/09/2023	

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CLEANUP BENCH SHEET

CLC0085

Matrix: Solid **Cleanup using: HRGCMS - EPA 3630C Silica Gel Cleanup - uL** **Printed: 3/10/2023 10:15:43AM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0158-06	C	LDW23-SS1222	C 02	20	20	1613B Dioxin	3/9/2023	TW	
23A0158-07	C	LDW23-SS1215	C 02	20	20	1613B Dioxin	3/9/2023	TW	
23A0158-09	C	LDW23-SS1077	C 02	20	20	1613B Dioxin	3/9/2023	TW	
23A0158-10	C	LDW23-SS1070	C 02	20	20	1613B Dioxin	3/9/2023	TW	
23A0158-11	C	LDW23-SS1065	C 02	20	20	1613B Dioxin	3/9/2023	TW	
23A0158-12	C	LDW23-SS1064	C 02	20	20	1613B Dioxin	3/9/2023	TW	
23A0158-13	C	LDW23-SS1060	C 02	20	20	1613B Dioxin	3/9/2023	TW	
23A0158-14	C	LDW23-SS1059	C 02	20	20	1613B Dioxin	3/9/2023	TW	
23A0158-15	C	LDW23-SS1053	C 02	20	20	1613B Dioxin	3/9/2023	TW	
23A0171-02	A	LDW23-SS1257	A 05	20	20	1613B Dioxin	3/9/2023	TW	
23A0171-04	A	LDW23-SS1245	A 05	20	20	1613B Dioxin	3/9/2023	TW	
23A0206-13	C	LDW23-SS1066	C 02	20	20	1613B Dioxin	3/9/2023	TW	
BLC0136-BLK1	-	Blank	-	20	20	-	3/9/2023	TW	
BLC0136-BS1	-	LCS	-	20	20	-	3/9/2023	TW	
BLC0136-DUP1	-	Duplicate	-	20	20	-	3/9/2023	TW	
BLC0136-SRM1	-	Reference	-	20	20	-	3/9/2023	TW	

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLC0086	Cleanup Type:	Florisil
Cleanup Method:	EPA 3620B Florisil Cleanup (uL)	Analysis:	EPA 1613B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LCS	BLC0136-BS1	23031513	03/09/2023	
Blank	BLC0136-BLK1	23031512	03/09/2023	
LDW23-SS1257	23A0171-02	23031708	03/09/2023	
LDW23-SS1245	23A0171-04	23031709	03/09/2023	
Reference	BLC0136-SRM1	23031515	03/09/2023	

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CLEANUP BENCH SHEET

CLC0086

Matrix: Solid **Cleanup using: HRGCMS - EPA 3620B Florisil Cleanup (uL)** **Check Standard: CKK0015-FLO1** **Printed: 3/10/2023 10:16:27AM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0158-06	C	LDW23-SS1222	C 02	20	20	1613B Dioxin	3/9/2023	TW	
23A0158-07	C	LDW23-SS1215	C 02	20	20	1613B Dioxin	3/9/2023	TW	
23A0158-09	C	LDW23-SS1077	C 02	20	20	1613B Dioxin	3/9/2023	TW	
23A0158-10	C	LDW23-SS1070	C 02	20	20	1613B Dioxin	3/9/2023	TW	
23A0158-11	C	LDW23-SS1065	C 02	20	20	1613B Dioxin	3/9/2023	TW	
23A0158-12	C	LDW23-SS1064	C 02	20	20	1613B Dioxin	3/9/2023	TW	
23A0158-13	C	LDW23-SS1060	C 02	20	20	1613B Dioxin	3/9/2023	TW	
23A0158-14	C	LDW23-SS1059	C 02	20	20	1613B Dioxin	3/9/2023	TW	
23A0158-15	C	LDW23-SS1053	C 02	20	20	1613B Dioxin	3/9/2023	TW	
23A0171-02	A	LDW23-SS1257	A 05	20	20	1613B Dioxin	3/9/2023	TW	
23A0171-04	A	LDW23-SS1245	A 05	20	20	1613B Dioxin	3/9/2023	TW	
23A0206-13	C	LDW23-SS1066	C 02	20	20	1613B Dioxin	3/9/2023	TW	
BLC0136-BLK1	-	Blank	-	20	20	-	3/9/2023	TW	
BLC0136-BS1	-	LCS	-	20	20	-	3/9/2023	TW	
BLC0136-DUP1	-	Duplicate	-	20	20	-	3/9/2023	TW	
BLC0136-SRM1	-	Reference	-	20	20	-	3/9/2023	TW	

Analytical Resources, LLC
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Blank

Form 1
METHOD BLANK DATA SHEET
EPA 1613B
Dioxins/Furans by HRGC/HRMS

Laboratory:	Analytical Resources, LLC			SDG:	23A0171
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLC0136-BLK1	File ID:	23031512
Sampled:	N/A	Prepared:	03/07/23 07:38	Analyzed:	03/15/23 19:33
Solids Wt%:		Preparation:	EPA 1613	Initial/Final:	10 g / 20 uL
Result Basis:	Dry	Sequence:	SLC0176	Calibration:	GC00015
Batch:	BLC0136	Instrument:	AUTOSPEC01	Column:	RTX-Dioxin2

CAS NO.	COMPOUND	DF/Split	Ion Ratio	Ratio Limits	EDL	RL	Result	Units	Q
51207-31-9	2,3,7,8-TCDF	1	0.000	0.655-0.886	0.191	1.00	ND	ng/kg	U
1746-01-6	2,3,7,8-TCDD	1	0.000	0.655-0.886	0.153	1.00	ND	ng/kg	U
57117-41-6	1,2,3,7,8-PeCDF	1	0.000	1.318-1.783	0.217	1.00	ND	ng/kg	U
57117-31-4	2,3,4,7,8-PeCDF	1	0.000	1.318-1.783	0.199	1.00	ND	ng/kg	U
40321-76-4	1,2,3,7,8-PeCDD	1	0.000	1.318-1.783	0.181	1.00	ND	ng/kg	U
70648-26-9	1,2,3,4,7,8-HxCDF	1	0.000	1.054-1.426	0.094	1.00	ND	ng/kg	U
57117-44-9	1,2,3,6,7,8-HxCDF	1	0.000	1.054-1.426	0.095	1.00	ND	ng/kg	U
60851-34-5	2,3,4,6,7,8-HxCDF	1	0.000	1.054-1.426	0.098	1.00	ND	ng/kg	U
72918-21-9	1,2,3,7,8,9-HxCDF	1	0.000	1.054-1.426	0.126	1.00	ND	ng/kg	U
39227-28-6	1,2,3,4,7,8-HxCDD	1	0.000	1.054-1.426	0.121	1.00	ND	ng/kg	U
57653-85-7	1,2,3,6,7,8-HxCDD	1	0.000	1.054-1.426	0.121	1.00	ND	ng/kg	U
19408-74-3	1,2,3,7,8,9-HxCDD	1	0.000	1.054-1.426	0.133	1.00	ND	ng/kg	U
67562-39-4	1,2,3,4,6,7,8-HpCDF	1	0.000	0.893-1.208	0.188	1.00	ND	ng/kg	U
55673-89-7	1,2,3,4,7,8,9-HpCDF	1	0.000	0.893-1.208	0.264	1.00	ND	ng/kg	U
35822-46-9	1,2,3,4,6,7,8-HpCDD	1	1.143	0.893-1.208	0.185	2.50	0.350	ng/kg	J
39001-02-0	OCDF	1	0.000	0.757-1.024	0.391	2.50	ND	ng/kg	U
3268-87-9	OCDD	1	1.005	0.757-1.024	0.276	10.0	2.18	ng/kg	J

Homologue Groups

55722-27-5	Total TCDF	1	0.000			1.00	ND	ng/kg
41903-57-5	Total TCDD	1	0.000			1.00	ND	ng/kg
30402-15-4	Total PeCDF	1	0.000			1.00	ND	ng/kg
36088-22-9	Total PeCDD	1	0.000			1.00	ND	ng/kg
55684-94-1	Total HxCDF	1	0.000			1.00	ND	ng/kg
34465-46-8	Total HxCDD	1	0.000			1.00	ND	ng/kg
38998-75-3	Total HpCDF	1	0.000			1.00	ND	ng/kg
37871-00-4	Total HpCDD	1	0.000			1.00	0.350	ng/kg

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=0, Including EMPC): 0.004
Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=1/2 EDL, Including EMPC): 0.256

Blank

Form 2
METHOD BLANK DATA SHEET
EPA 1613B
Dioxins/Furans by HRGC/HRMS

Laboratory:	Analytical Resources, LLC			SDG:	23A0171
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLC0136-BLK1	File ID:	23031512
Sampled:	N/A	Prepared:	03/07/23 07:38	Analyzed:	03/15/23 19:33
Solids Wt%:	0.00	Preparation:	EPA 1613	Initial/Final:	10 g / 20 uL
Result Basis:	Dry	Sequence:	SLC0176	Calibration:	GC00015
Batch:	BLC0136	Instrument:	AUTOSPEC01	Column:	RTX-Dioxin2

Labels	DF/Split	Ion Ratio	Ratio Limits	EDL	% REC	QC LIMITS	Q
13C12-2,3,7,8-TCDF	1	0.757	0.655-0.886	0.30	102	24 - 169 %	
13C12-2,3,7,8-TCDD	1	0.777	0.655-0.886	0.39	131	25 - 164 %	
13C12-1,2,3,7,8-PeCDF	1	1.507	1.318-1.783	0.38	115	24 - 185 %	
13C12-2,3,4,7,8-PeCDF	1	1.472	1.318-1.783	0.42	119	21 - 178 %	
13C12-1,2,3,7,8-PeCDD	1	1.603	1.318-1.783	0.28	130	25 - 181 %	
13C12-1,2,3,4,7,8-HxCDF	1	0.504	0.434-0.587	0.30	101	26 - 152 %	
13C12-1,2,3,6,7,8-HxCDF	1	0.518	0.434-0.587	0.25	97.7	26 - 123 %	
13C12-2,3,4,6,7,8-HxCDF	1	0.506	0.434-0.587	0.31	101	28 - 136 %	
13C12-1,2,3,7,8,9-HxCDF	1	0.504	0.434-0.587	0.38	94.7	29 - 147 %	
13C12-1,2,3,4,7,8-HxCDD	1	1.239	1.054-1.426	0.24	128	32 - 141 %	
13C12-1,2,3,6,7,8-HxCDD	1	1.254	1.054-1.426	0.21	120	28 - 130 %	
13C12-1,2,3,4,6,7,8-HpCDF	1	0.451	0.374-0.506	0.27	69.7	28 - 143 %	
13C12-1,2,3,4,7,8,9-HpCDF	1	0.432	0.374-0.506	0.31	68.4	26 - 138 %	
13C12-1,2,3,4,6,7,8-HpCDD	1	1.051	0.893-1.208	0.23	76.9	23 - 140 %	
13C12-OCDD	1	0.901	0.757-1.024	0.35	80.2	17 - 157 %	
37Cl4-2,3,7,8-TCDD	1	328.000		0.14	102	35 - 197 %	

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230315D1.qld
Last Altered: Thursday, March 16, 2023 09:12:10 Pacific Daylight Time
Printed: Thursday, March 16, 2023 10:00:10 Pacific Daylight Time

Method: T:\Autospec\Methods\Dioxin230315.mdb 16 Mar 2023 08:38:23
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: BLC0136-BLK1, Name: 23031512, Date: 15-Mar-2023, Time: 19:33:06, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF					0.702		0.770	491	772								
12378-PeCDF					0.679		1.550	555	640								
23478-PeCDF					0.786		1.550	555	640								
123478-HxCDF					1.166		1.240	522	428								
234678-HxCDF					1.140		1.240	522	428								
123678-HxCDF					1.091		1.240	522	428								
123789-HxCDF					1.137		1.240	522	428								
1234678-HpCDF					1.003		1.050	457	488								
1234789-HpCDF					0.953		1.050	457	488								
OCDF					0.778		0.890	563	573								
2378-TCDD					1.149		0.770	890	637								
12378-PeCDD					1.022		1.550	545	586								
123478-HxCDD					0.996		1.240	653	558								
123678-HxCDD					1.001		1.240	653	558								
123789-HxCDD					0.907		1.240	653	558								
1234678-HpCDD	40.086	1.001	1.783e2	1.560e2	1.039	1.143	1.050	423	491	2.75e3	2.19e3	6.5	4.4	NO	bb	bb	0.175
OCDD	44.801	1.001	8.806e2	8.761e2	0.920	1.005	0.890	460	488	8.99e3	1.00e4	19.5	20.6	NO	bb	bb	1.089
13C-2378-TCDF	25.534	1.007	1.599e5	2.113e5	1.620	0.757	0.770	1683	1257	2.44e6	3.29e6	1447.4	2613.9	NO	bb	bb	101.545
13C-12378-PeCDF	29.702	1.172	1.928e5	1.280e5	1.240	1.507	1.550	1768	1046	2.93e6	1.95e6	1656.6	1866.3	NO	bb	bb	114.604
13C-23478-PeCDF	31.028	1.224	1.785e5	1.213e5	1.118	1.472	1.550	1768	1046	2.72e6	1.82e6	1540.6	1738.1	NO	bb	bb	118.883
13C-123478-HxCDF	34.682	0.955	1.129e5	2.238e5	1.168	0.504	0.510	1046	1613	1.75e6	3.41e6	1673.5	2116.1	NO	bd	bd	101.126
13C-123678-HxCDF	34.816	0.959	1.317e5	2.542e5	1.386	0.518	0.510	1046	1613	1.87e6	3.66e6	1787.0	2268.8	NO	db	dd	97.670
13C-234678-HxCDF	35.696	0.983	1.089e5	2.152e5	1.129	0.506	0.510	1046	1613	1.72e6	3.33e6	1642.4	2066.1	NO	bb	bb	100.714
13C-123789-HxCDF	36.722	1.011	8.424e4	1.672e5	0.932	0.504	0.510	1046	1613	1.33e6	2.69e6	1271.8	1666.8	NO	bb	bb	94.693
13C-1234678-HpCDF	38.593	1.063	5.531e4	1.226e5	0.895	0.451	0.440	878	959	9.37e5	2.10e6	1067.0	2188.6	NO	bb	bb	69.733
13C-1234789-HpCDF	40.799	1.124	4.525e4	1.047e5	0.770	0.432	0.440	878	959	6.80e5	1.54e6	774.6	1607.6	NO	bb	bb	68.370
13C-1234-TCDD	25.351	0.000	9.933e4	1.263e5	1.000	0.786	0.770	1812	878	1.60e6	2.00e6	881.4	2279.8	NO	bb	bb	100.000
13C-2378-TCDD	26.170	1.032	1.490e5	1.916e5	1.152	0.777	0.770	1812	878	2.29e6	2.96e6	1262.2	3371.5	NO	bb	bb	130.984
13C-12378-PeCDD	31.285	1.234	1.495e5	9.323e4	0.829	1.603	1.550	774	636	2.25e6	1.45e6	2910.2	2286.3	NO	bb	bb	129.771
13C-123478-HxCDD	35.808	0.986	2.016e5	1.627e5	0.995	1.239	1.240	927	886	3.33e6	2.64e6	3593.9	2974.4	NO	bd	bd	128.470
13C-123678-HxCDD	35.919	0.989	2.197e5	1.752e5	1.157	1.254	1.240	927	886	3.33e6	2.69e6	3593.2	3031.7	NO	db	db	119.803
13C-1234678-HpCDD	40.064	1.103	9.434e4	8.980e4	0.840	1.051	1.050	692	761	1.46e6	1.40e6	2116.6	1835.0	NO	bb	bb	76.905
13C-OCDD	44.764	1.233	1.663e5	1.845e5	0.767	0.901	0.890	966	1061	2.12e6	2.35e6	2195.9	2214.3	NO	bb	bb	160.369
13C-123789-HxCDD	36.309	0.000	1.579e5	1.271e5	1.000	1.242	1.240	927	886	2.52e6	2.05e6	2720.2	2312.1	NO	bb	bb	100.000
37CL-2378-TCDD	26.184	1.033	1.180e5		1.288			1096		1.74e6		1590.3			bb		40.617

Dataset: T:\Autospec\Processed Data Batch\230315D1.qld
Last Altered: Thursday, March 16, 2023 09:12:10 Pacific Daylight Time
Printed: Thursday, March 16, 2023 10:00:10 Pacific Daylight Time

ID: BLC0136-BLK1, Name: 23031512, Date: 15-Mar-2023, Time: 19:33:06, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					0.802		0.770	491	772								
1289-TCDF					0.678		0.770	491	772								
13468-PECDF					1.246		1.550	533	679								
12389-PECDF					0.496		1.550	555	640								
123468-HXCDF					1.169		1.240	522	428								
1368-TCDD					1.015		0.770	890	637								
1289-TCDD					0.909		0.770	890	637								
12479-PECDD					2.301		1.550	545	586								
12389-PECDD					1.184		1.550	545	586								
124679-HXCDD					1.115		1.240	653	558								
1234679-HPCDD	39.028	0.974	2.192e2	2.809e2	1.137	0.780	1.050	423	491	3.61e3	5.22e3	8.5	10.6	YES	bb	bb	0.239
Total-tetrafurans			0.000e0		0.727			491		0.00e0							
Total-penta1			0.000e0					533		0.00e0							
Total-pentafurans			0.000e0		0.654			555		0.00e0							
Total-hexafurans			0.000e0		1.141			522		0.00e0							
Total-heptafurans			0.000e0		0.978			457		0.00e0							
Total-Furans			0.000e0		0.922			491		0.00e0							
Total-tetradioxins			0.000e0		1.024			890		0.00e0							
Total-pentadioxins			0.000e0		1.502			545		0.00e0							
Total-hexadioxins			0.000e0		1.005			653		0.00e0							
Total-heptadioxins			1.783e2		1.088			423		2.75e3							0.175
Total-Dioxins			1.059e3		1.130			890		1.17e4							1.264
Total-TEQ			1.059e3					890		1.17e4							1.264
FUNCTION1 PFK			3.830e5					606742		8.20e6							
FUNCTION2 PFK			1.060e5					219892		3.26e6							0.000
FUNCTION3 PFK			3.262e6					541417		1.11e6							0.000
FUNCTION4 PFK			1.181e6					303769		2.59e7							
FUNCTION5 PFK			1.581e5					189206		5.76e6							
FUNCTION1 HXCD...			6.491e2					512		5.89e3							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			2.923e2					564		5.53e3							0.000
FUNCTION3 OCDPE			1.557e2					510		2.87e3							0.000
FUNCTION4 NCDPE			8.353e1					468		2.07e3							0.000
FUNCTION5 DCDPE			0.000e0					571		0.00e0							

Method: T:\Autospec\Methods\Dioxin230315.mdb 16 Mar 2023 08:38:23
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: BLC0136-BLK1, Name: 23031512, Date: 15-Mar-2023, Time: 19:33:06, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ID: BLC0136-BLK1, Name: 23031512, Date: 15-Mar-2023, Time: 19:33:06, Conditions: AUTOSPEC01, User: pk

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.09	1.783e2	1.560e2	1.039	1.14	1.05	6.5	YES	NO	bb	bb	0.175

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	OCDD	44.80	8.806e2	8.761e2	0.920	1.01	0.89	19.5	YES	NO	bb	bb	1.089
2	1234678-HpCDD	40.09	1.783e2	1.560e2	1.039	1.14	1.05	6.5	YES	NO	bb	bb	0.175

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	27.54	1.316e4					0.6	NO		bb		
2	FUNCTION1 PFK	27.36	4.522e4					1.4	NO		bb		
3	FUNCTION1 PFK	26.65	2.138e4					0.3	NO		bb		
4	FUNCTION1 PFK	26.10	1.091e4					0.8	NO		bb		
5	FUNCTION1 PFK	25.75	1.365e4					0.8	NO		bb		
6	FUNCTION1 PFK	25.05	9.101e4					1.8	NO		bb		
7	FUNCTION1 PFK	23.77	3.730e3					0.4	NO		bb		
8	FUNCTION1 PFK	23.40	3.913e3					0.5	NO		bb		
9	FUNCTION1 PFK	22.81	1.728e4					1.2	NO		bb		
10	FUNCTION1 PFK	22.72	2.958e4					1.2	NO		bb		
11	FUNCTION1 PFK	22.31	1.546e4					0.7	NO		bb		
12	FUNCTION1 PFK	21.41	6.108e3					0.7	NO		bb		
13	FUNCTION1 PFK	21.28	2.823e4					0.8	NO		bb		
14	FUNCTION1 PFK	21.17	8.333e4					2.4	NO		bb		

ID: BLC0136-BLK1, Name: 23031512, Date: 15-Mar-2023, Time: 19:33:06, Conditions: AUTOSPEC01, User: pk

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	28.00	8.298e3					1.5	NO		bb		0.000
2	FUNCTION2 PFK	32.21	6.225e3					0.9	NO		bb		0.000
3	FUNCTION2 PFK	31.92	3.843e3					0.8	NO		bb		0.000
4	FUNCTION2 PFK	31.88	6.841e3					1.2	NO		bb		0.000
5	FUNCTION2 PFK	31.05	3.966e3					0.9	NO		bb		0.000
6	FUNCTION2 PFK	30.95	2.817e4					2.0	NO		bb		0.000
7	FUNCTION2 PFK	30.79	3.428e3					0.7	NO		db		0.000
8	FUNCTION2 PFK	30.76	2.418e3					0.8	NO		bd		0.000
9	FUNCTION2 PFK	30.44	1.381e3					0.6	NO		bb		0.000
10	FUNCTION2 PFK	29.66	1.988e4					1.8	NO		bb		0.000
11	FUNCTION2 PFK	29.23	5.883e3					0.9	NO		bb		0.000
12	FUNCTION2 PFK	29.03	9.522e3					1.5	NO		bb		0.000
13	FUNCTION2 PFK	28.38	6.128e3					1.3	NO		bb		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	33.84	3.262e6					2.0	NO		bb		0.000

Dataset: T:\Autospec\Processed Data Batch\230315D1.qld
Last Altered: Thursday, March 16, 2023 09:12:10 Pacific Daylight Time
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ID: BLC0136-BLK1, Name: 23031512, Date: 15-Mar-2023, Time: 19:33:06, Conditions: AUTOSPEC01, User: pk

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	37.67	1.009e5					5.2	YES		bd		
2	FUNCTION4 PFK	39.52	1.236e4					1.2	NO		bd		
3	FUNCTION4 PFK	39.28	5.935e3					0.7	NO		bb		
4	FUNCTION4 PFK	39.11	4.703e3					0.6	NO		db		
5	FUNCTION4 PFK	39.04	2.632e4					1.2	NO		bd		
6	FUNCTION4 PFK	38.92	3.970e4					1.6	NO		db		
7	FUNCTION4 PFK	38.72	6.719e4					1.6	NO		dd		
8	FUNCTION4 PFK	38.54	6.356e4					1.9	NO		dd		
9	FUNCTION4 PFK	38.49	2.190e4					1.9	NO		bd		
10	FUNCTION4 PFK	38.43	1.021e3					0.3	NO		bb		
11	FUNCTION4 PFK	38.16	1.098e4					1.2	NO		db		
12	FUNCTION4 PFK	38.10	1.384e4					1.4	NO		dd		
13	FUNCTION4 PFK	38.06	7.882e3					1.2	NO		bd		
14	FUNCTION4 PFK	37.96	2.424e4					2.0	NO		db		
15	FUNCTION4 PFK	37.82	1.180e5					4.0	YES		dd		
16	FUNCTION4 PFK	37.77	6.682e4					4.7	YES		dd		
17	FUNCTION4 PFK	37.74	7.586e4					4.4	YES		dd		
18	FUNCTION4 PFK	41.02	2.517e4					1.7	NO		bd		
19	FUNCTION4 PFK	40.91	3.650e4					1.9	NO		bb		
20	FUNCTION4 PFK	40.82	6.122e3					0.7	NO		db		
21	FUNCTION4 PFK	40.79	7.379e3					0.8	NO		bd		
22	FUNCTION4 PFK	40.59	1.192e4					1.2	NO		bb		
23	FUNCTION4 PFK	40.39	6.582e3					0.8	NO		bb		
24	FUNCTION4 PFK	40.33	8.353e3					1.0	NO		bb		
25	FUNCTION4 PFK	40.06	1.406e4					1.2	NO		db		
26	FUNCTION4 PFK	39.99	1.490e4					1.5	NO		dd		
27	FUNCTION4 PFK	39.94	1.191e4					1.3	NO		bd		
28	FUNCTION4 PFK	39.89	9.830e3					1.1	NO		db		
29	FUNCTION4 PFK	39.85	5.434e3					1.0	NO		dd		
30	FUNCTION4 PFK	39.82	5.595e3					0.9	NO		bd		
31	FUNCTION4 PFK	39.64	1.334e3					0.3	NO		db		
32	FUNCTION4 PFK	39.61	8.392e3					1.1	NO		bd		
33	FUNCTION4 PFK	39.55	1.186e4					1.3	NO		db		
34	FUNCTION4 PFK	42.00	6.016e3					0.7	NO		dd		
35	FUNCTION4 PFK	41.89	2.261e4					1.3	NO		bd		
36	FUNCTION4 PFK	41.77	5.811e3					0.9	NO		bb		
37	FUNCTION4 PFK	41.71	2.091e4					2.0	NO		db		

ID: BLC0136-BLK1, Name: 23031512, Date: 15-Mar-2023, Time: 19:33:06, Conditions: AUTOSPEC01, User: pk

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	FUNCTION4 PFK	41.65	2.341e4					1.6	NO		dd		
39	FUNCTION4 PFK	41.59	1.536e4					1.6	NO		bd		
40	FUNCTION4 PFK	41.52	8.941e3					1.1	NO		bb		
41	FUNCTION4 PFK	41.43	6.394e3					0.6	NO		bb		
42	FUNCTION4 PFK	41.39	1.281e4					1.2	NO		db		
43	FUNCTION4 PFK	41.31	2.555e4					1.9	NO		dd		
44	FUNCTION4 PFK	41.27	1.858e4					1.8	NO		dd		
45	FUNCTION4 PFK	41.22	1.325e4					1.7	NO		dd		
46	FUNCTION4 PFK	41.19	1.873e4					1.6	NO		dd		
47	FUNCTION4 PFK	41.16	1.088e4					1.3	NO		dd		
48	FUNCTION4 PFK	41.12	8.938e3					1.3	NO		dd		
49	FUNCTION4 PFK	41.08	1.778e4					2.1	NO		dd		
50	FUNCTION4 PFK	42.46	1.006e4					1.2	NO		bb		
51	FUNCTION4 PFK	42.41	4.285e3					0.8	NO		bb		
52	FUNCTION4 PFK	42.34	2.086e4					1.4	NO		db		
53	FUNCTION4 PFK	42.27	8.886e3					0.8	NO		bd		
54	FUNCTION4 PFK	42.17	1.456e4					1.2	NO		db		
55	FUNCTION4 PFK	42.12	1.168e4					1.1	NO		dd		
56	FUNCTION4 PFK	42.08	1.741e4					1.6	NO		dd		
57	FUNCTION4 PFK	42.05	1.052e4					1.5	NO		dd		

ID: BLC0136-BLK1, Name: 23031512, Date: 15-Mar-2023, Time: 19:33:06, Conditions: AUTOSPEC01, User: pk

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	43.37	1.291e4					1.9	NO		bb		
2	FUNCTION5 PFK	43.31	3.619e3					1.0	NO		db		
3	FUNCTION5 PFK	43.25	9.658e3					1.4	NO		dd		
4	FUNCTION5 PFK	43.22	8.203e3					1.6	NO		bd		
5	FUNCTION5 PFK	42.80	6.899e3					1.1	NO		bb		
6	FUNCTION5 PFK	42.72	1.366e4					1.4	NO		bb		
7	FUNCTION5 PFK	42.60	1.047e4					1.1	NO		bb		
8	FUNCTION5 PFK	45.68	2.762e3					0.9	NO		bb		
9	FUNCTION5 PFK	45.55	8.659e3					1.7	NO		bb		
10	FUNCTION5 PFK	45.47	2.398e3					0.7	NO		db		
11	FUNCTION5 PFK	45.43	7.716e3					1.6	NO		bd		
12	FUNCTION5 PFK	45.29	5.188e3					1.0	NO		bb		
13	FUNCTION5 PFK	45.19	8.429e3					1.1	NO		bb		
14	FUNCTION5 PFK	45.09	4.899e3					1.4	NO		bb		
15	FUNCTION5 PFK	44.68	5.341e3					0.9	NO		bb		
16	FUNCTION5 PFK	44.33	8.875e3					1.5	NO		db		
17	FUNCTION5 PFK	44.28	5.152e3					1.3	NO		bd		
18	FUNCTION5 PFK	44.24	3.823e3					0.9	NO		bb		
19	FUNCTION5 PFK	44.08	2.524e3					0.8	NO		bb		
20	FUNCTION5 PFK	43.90	4.964e3					1.1	NO		bb		
21	FUNCTION5 PFK	43.47	2.415e3					0.7	NO		db		
22	FUNCTION5 PFK	43.44	2.000e3					0.6	NO		dd		
23	FUNCTION5 PFK	43.41	9.261e2					0.5	NO		bd		
24	FUNCTION5 PFK	45.90	3.559e3					1.0	NO		bb		
25	FUNCTION5 PFK	45.84	7.560e3					1.6	NO		db		
26	FUNCTION5 PFK	45.79	4.764e3					0.9	NO		dd		
27	FUNCTION5 PFK	45.76	7.431e2					0.4	NO		bd		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.71	1.213e2					2.6	NO		bb		0.000
2	FUNCTION1 HXCD...	24.84	1.886e2					2.4	NO		bb		0.000
3	FUNCTION1 HXCD...	23.66	9.220e1					2.8	NO		bb		0.000
4	FUNCTION1 HXCD...	22.84	7.743e1					1.5	NO		bb		0.000
5	FUNCTION1 HXCD...	21.17	1.696e2					2.3	NO		bb		0.000

ID: BLC0136-BLK1, Name: 23031512, Date: 15-Mar-2023, Time: 19:33:06, Conditions: AUTOSPEC01, User: pk

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.70	1.020e2					2.3	NO		bb		0.000
2	FUNCTION2 HPCD...	31.18	1.145e2					5.5	YES		bb		0.000
3	FUNCTION2 HPCD...	30.99	7.578e1					2.1	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	34.83	7.311e1					2.5	NO		bb		0.000
2	FUNCTION3 OCDPE	36.30	8.257e1					3.1	YES		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	38.66	8.353e1					4.4	YES		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
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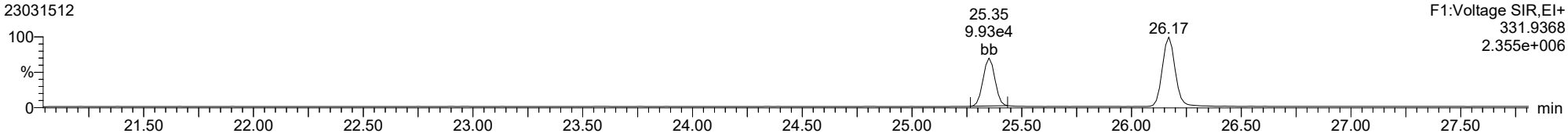

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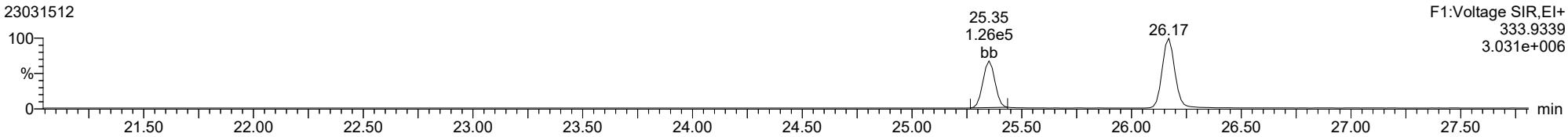

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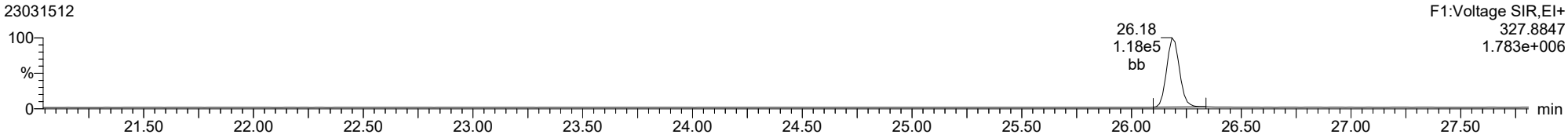

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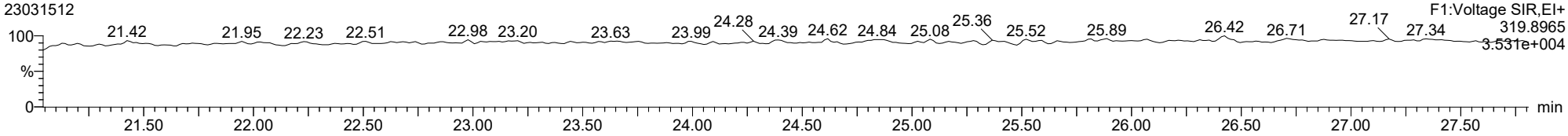

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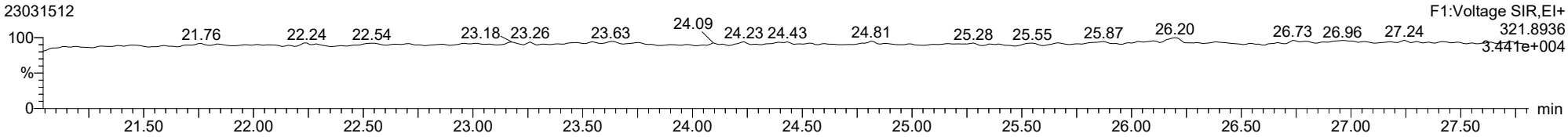

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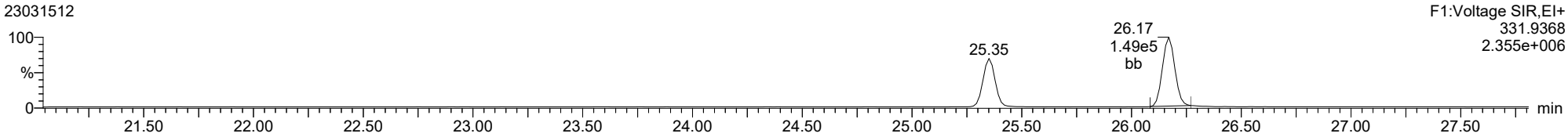

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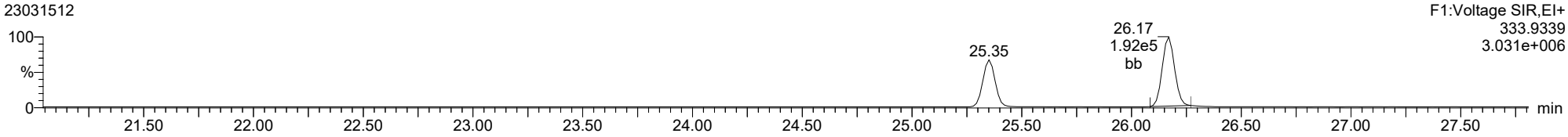

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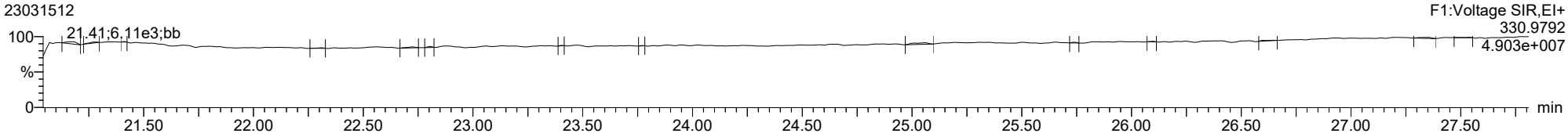

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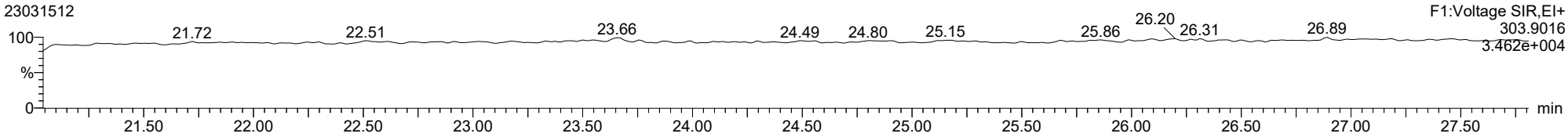

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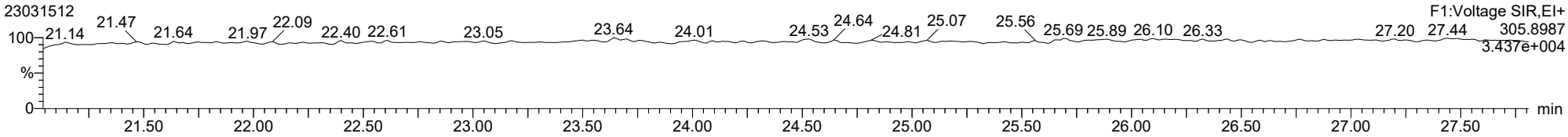

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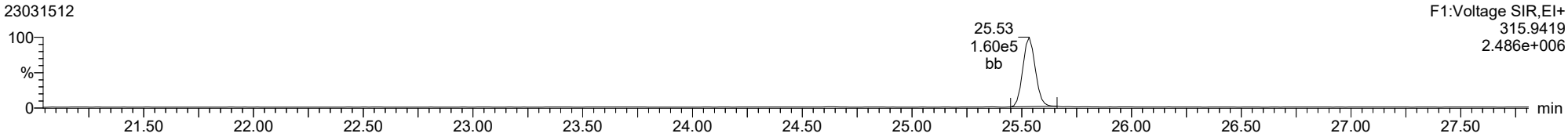

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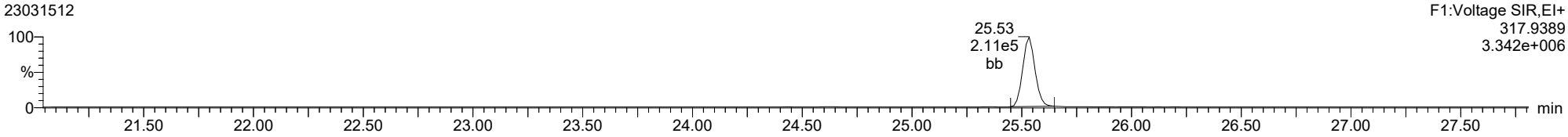

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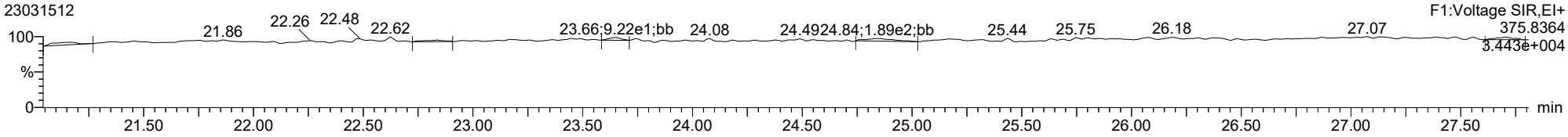

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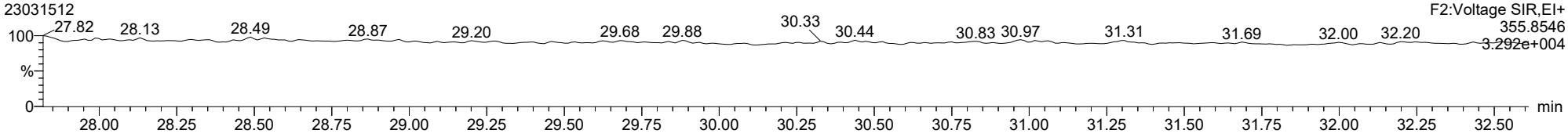

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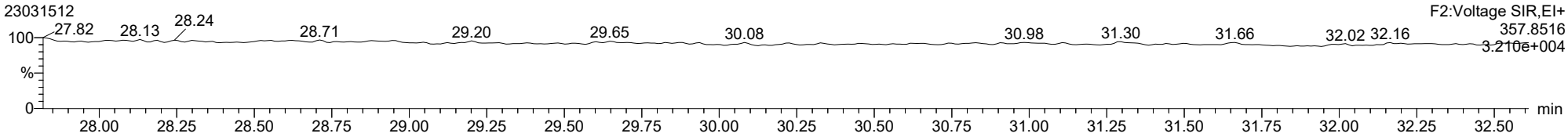

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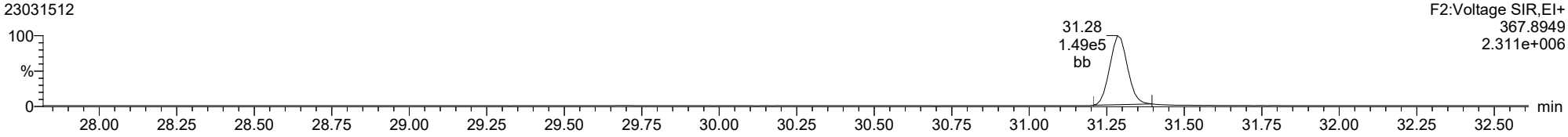

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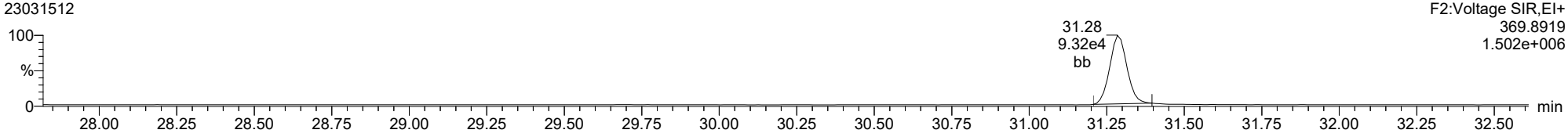

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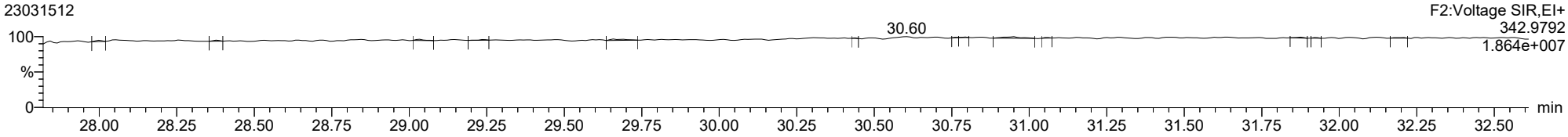

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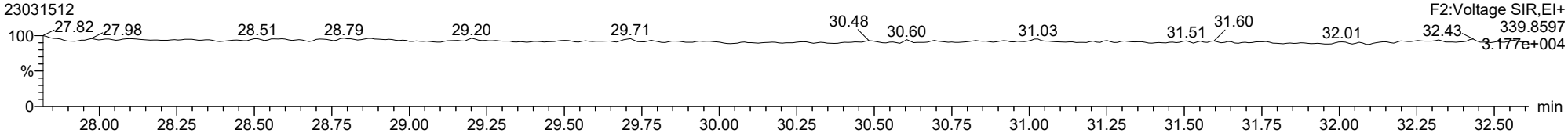

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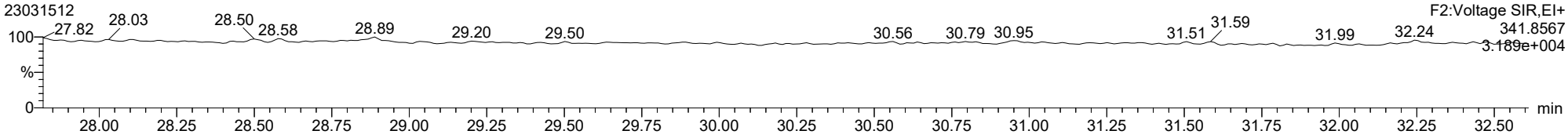

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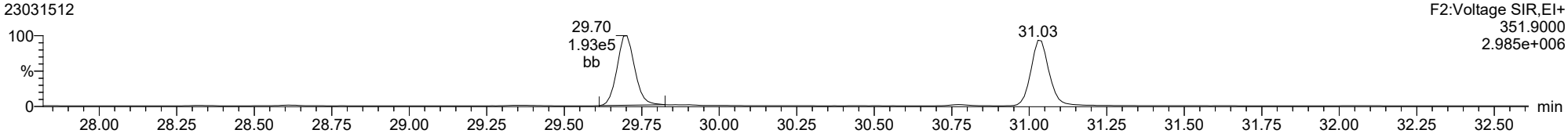

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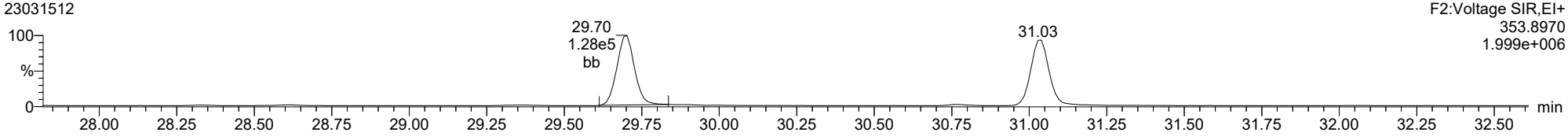
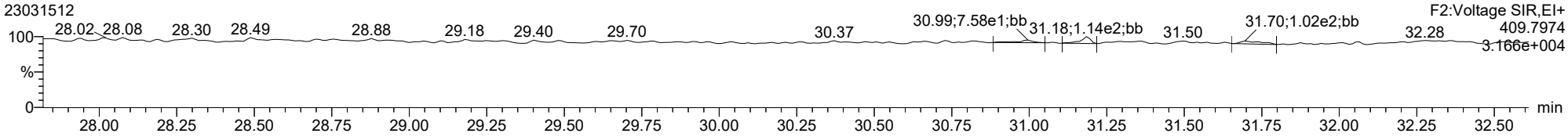


FUNCTION2 HPCDPE



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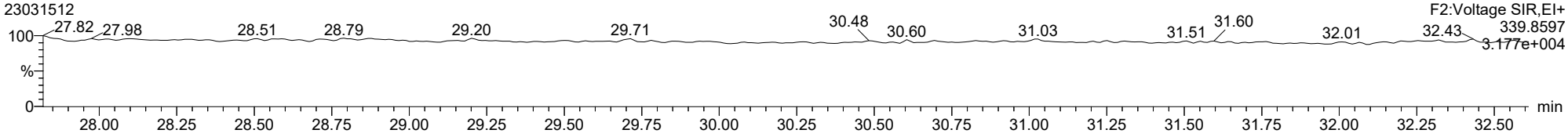

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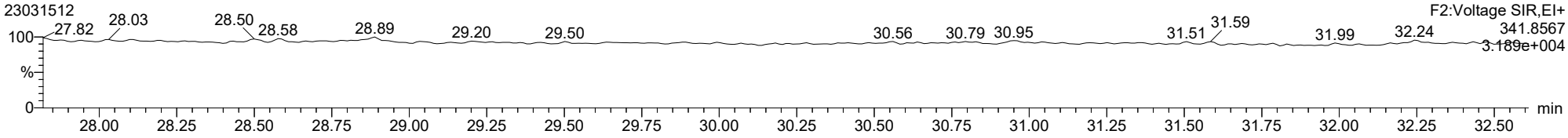

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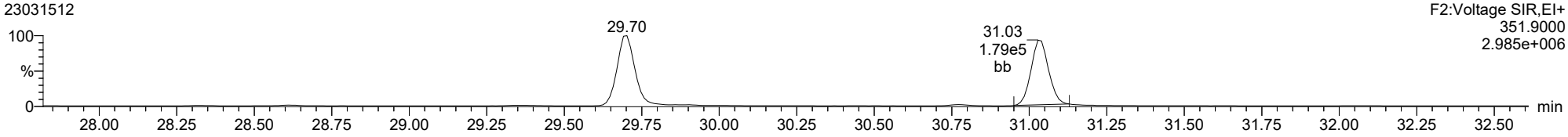

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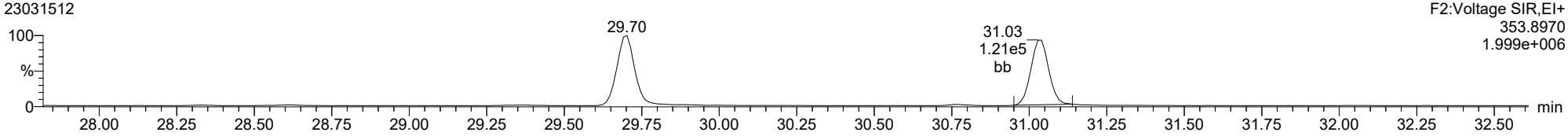

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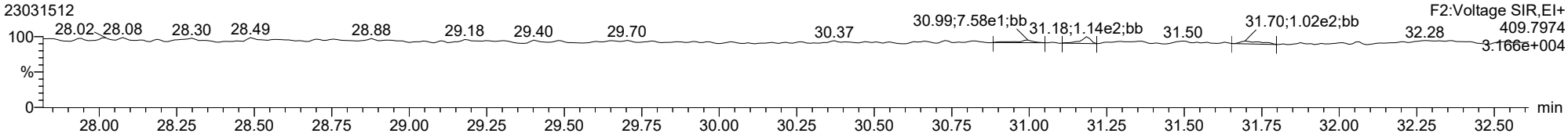

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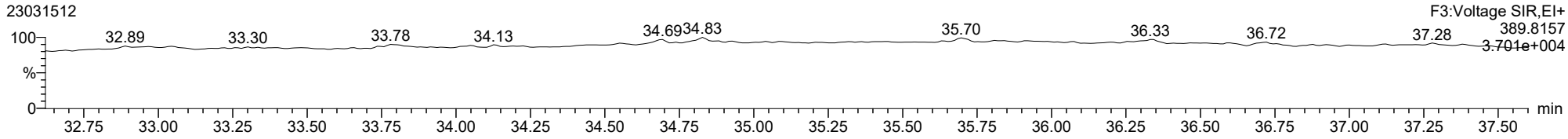

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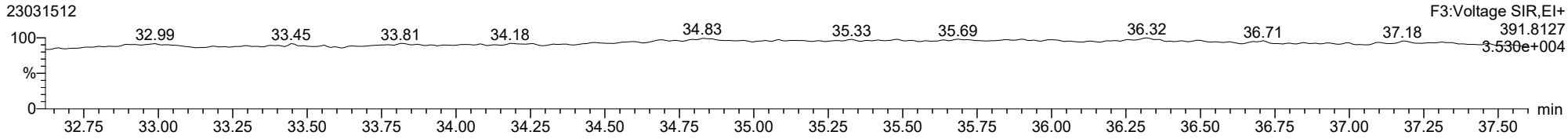

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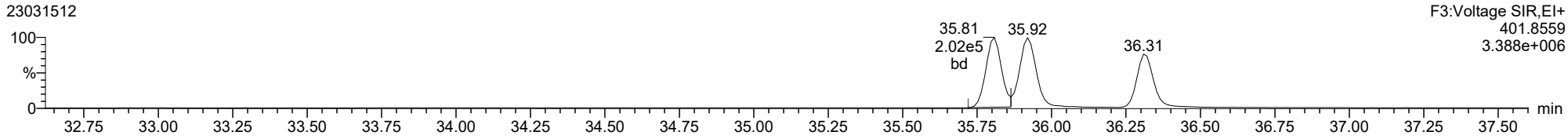

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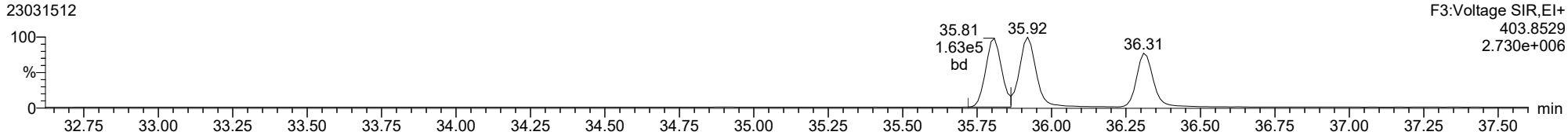

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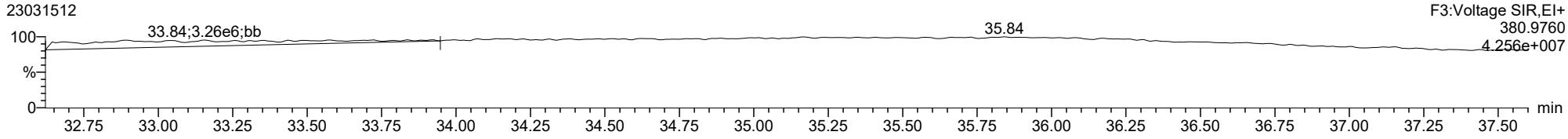

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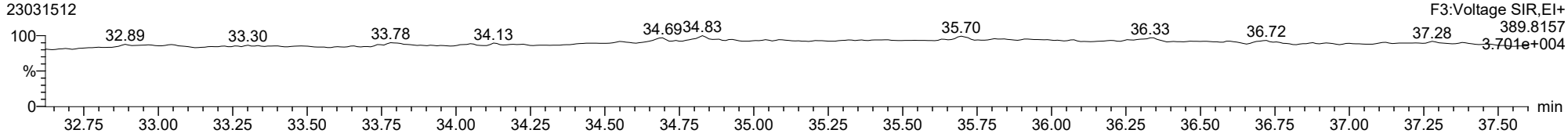

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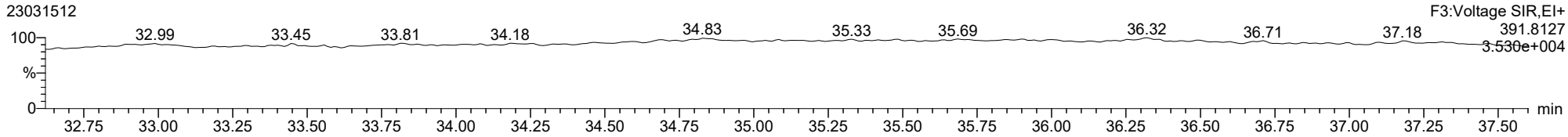

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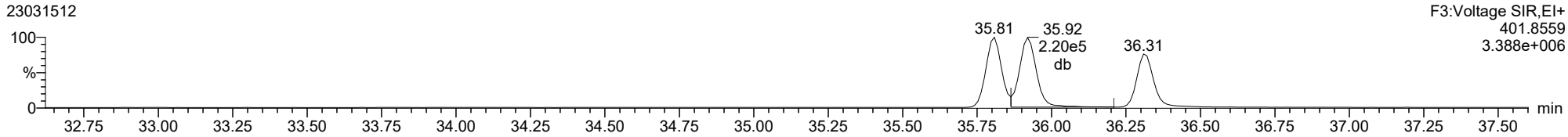

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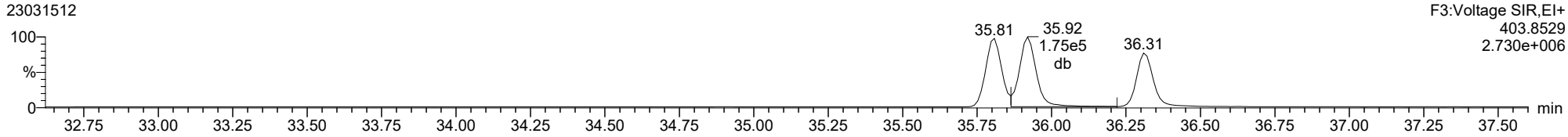

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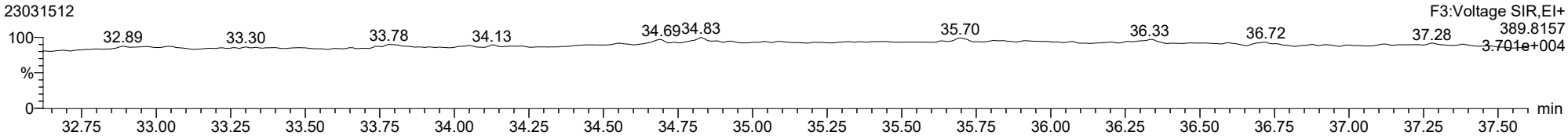

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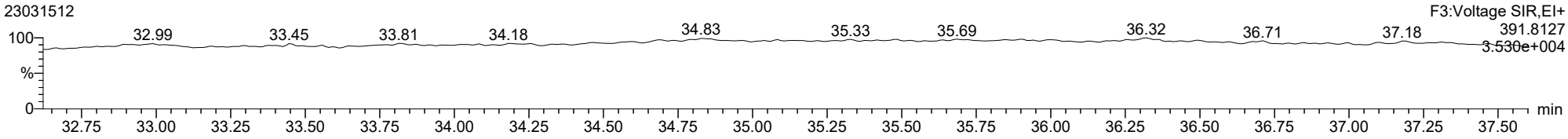

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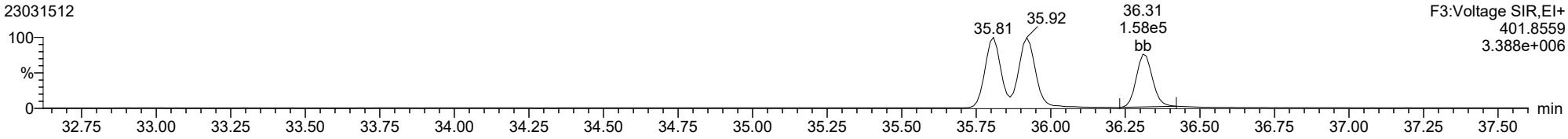

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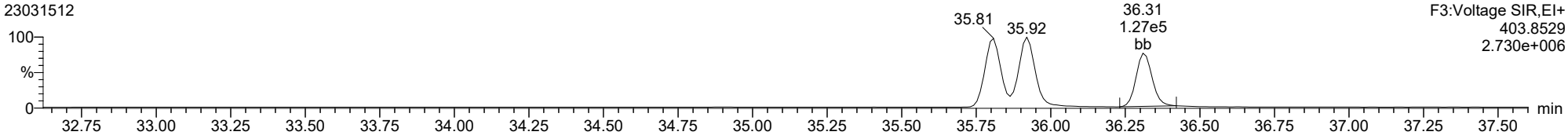

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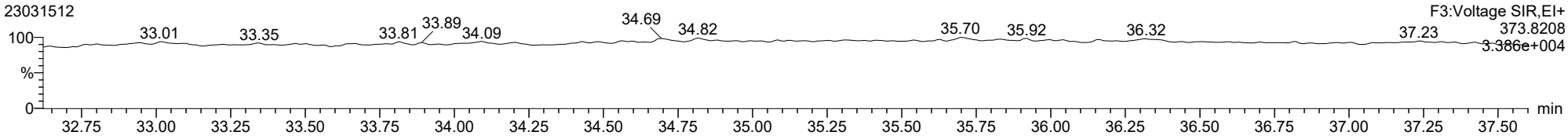

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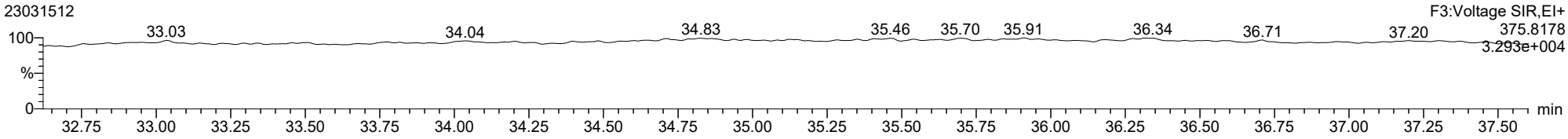

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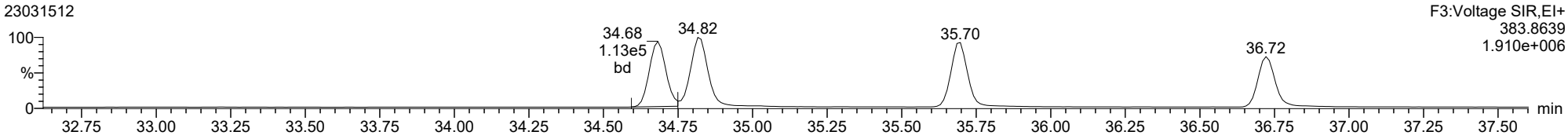

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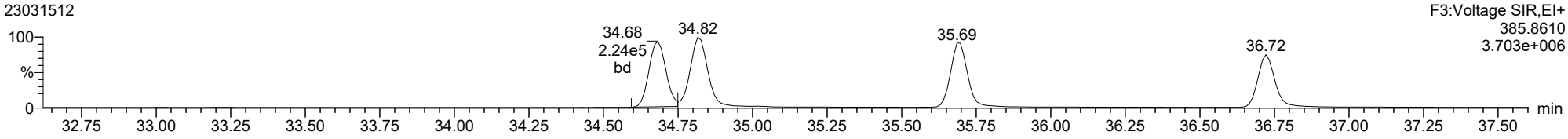

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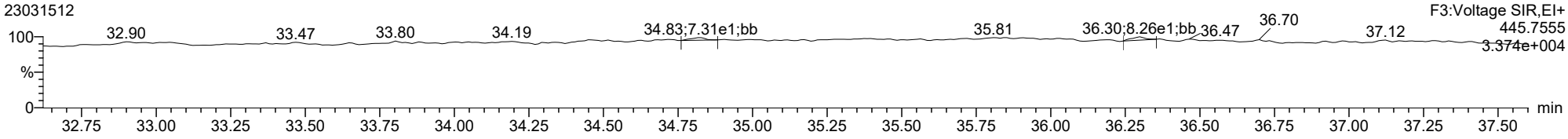

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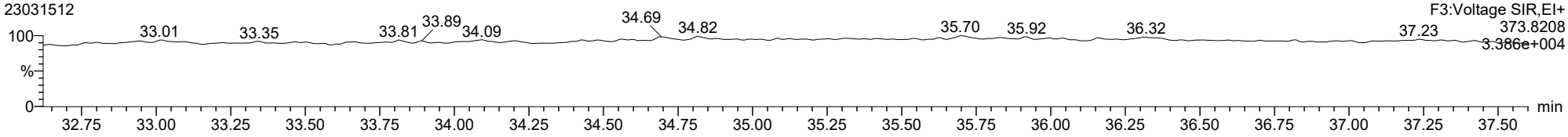

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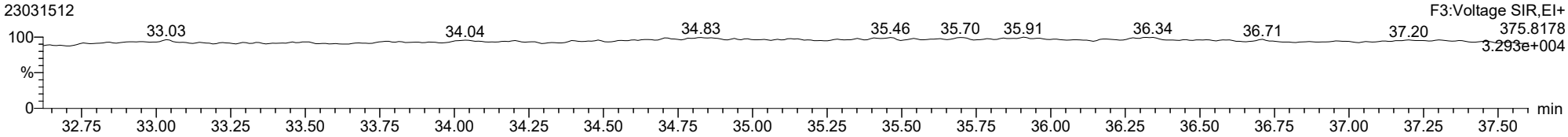

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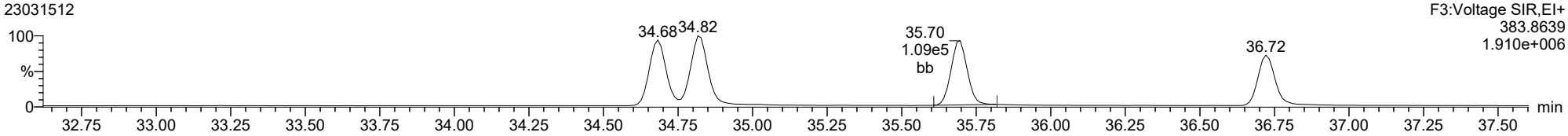

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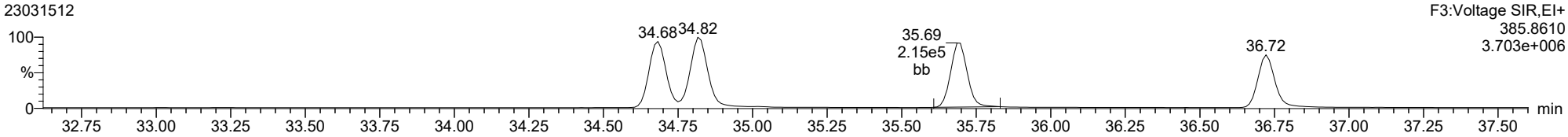

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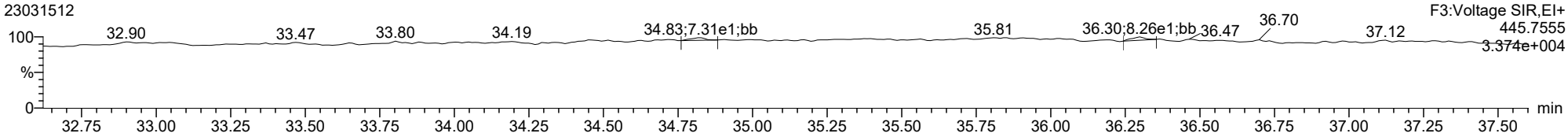

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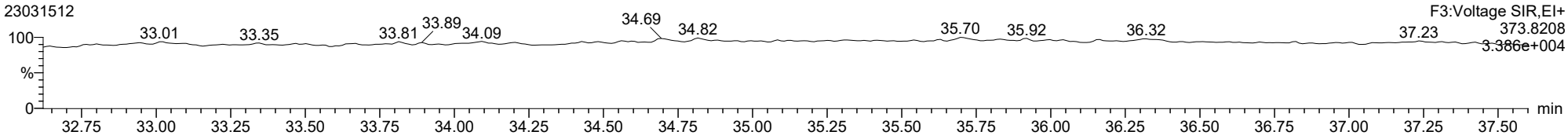

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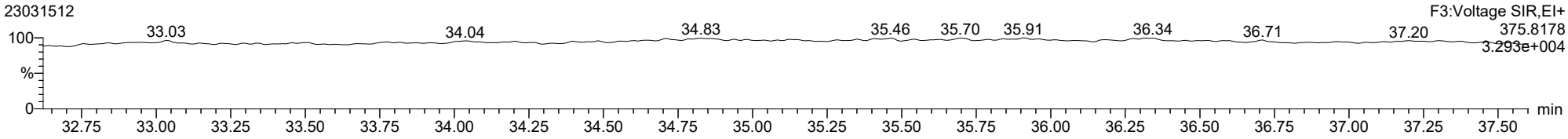

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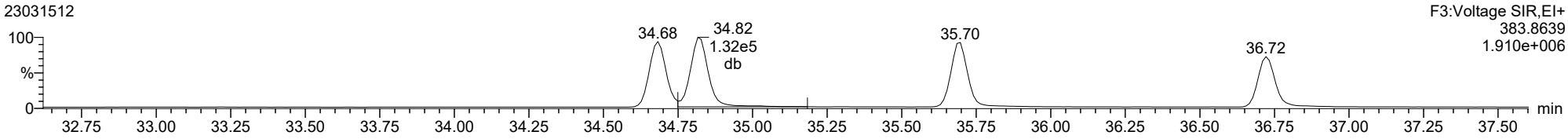

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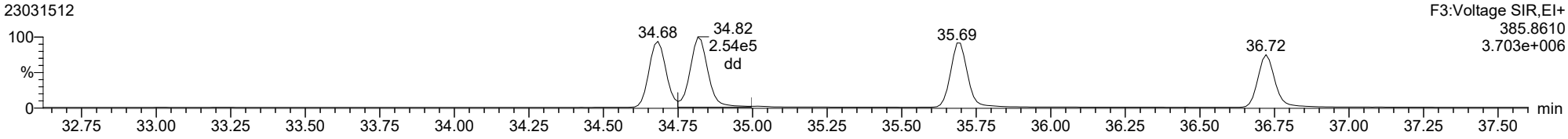

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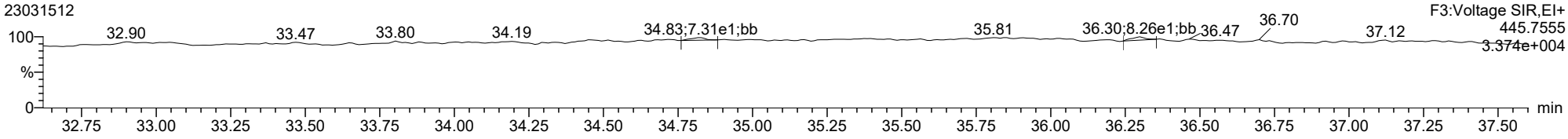

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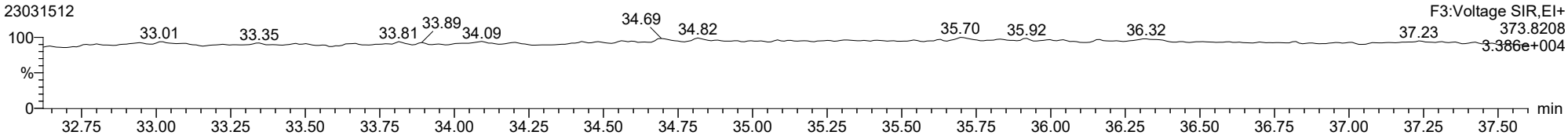

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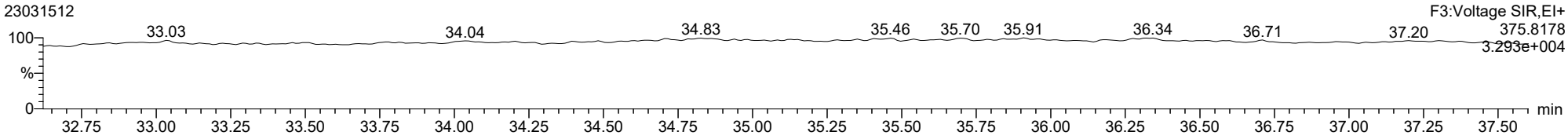

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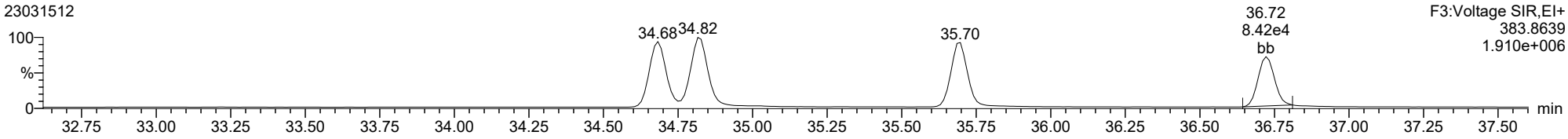

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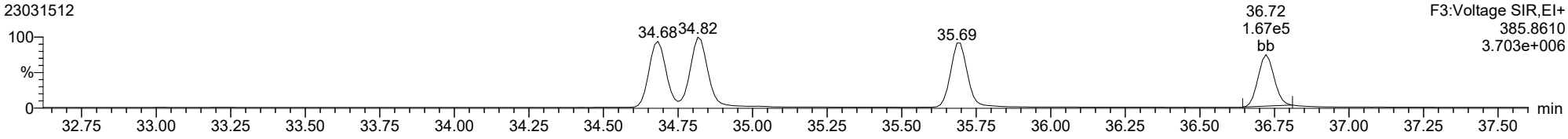

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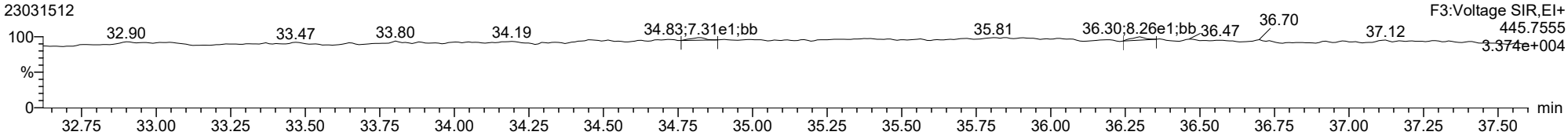

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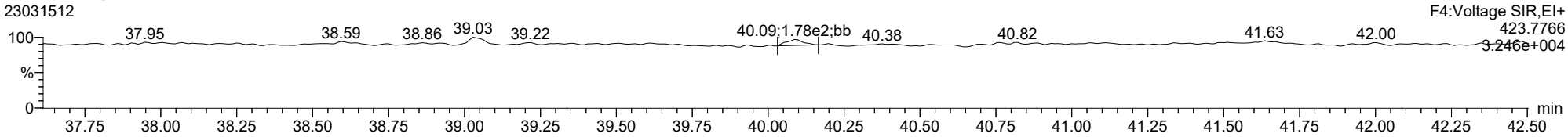

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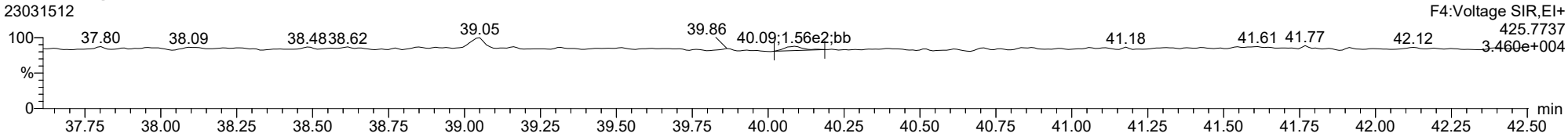

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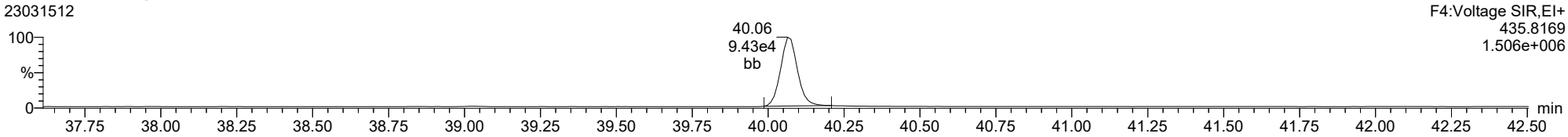

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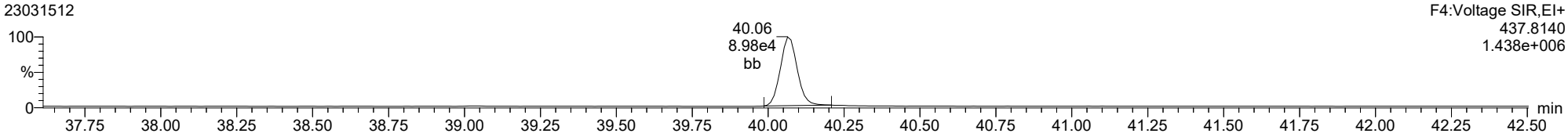

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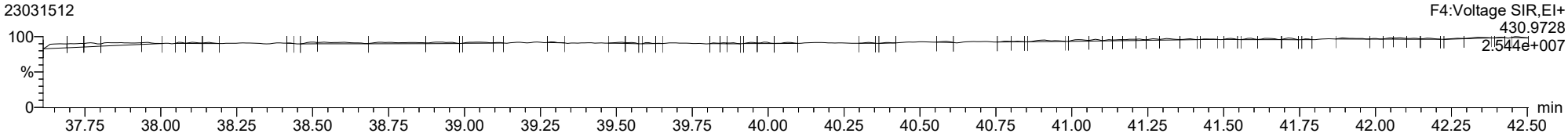

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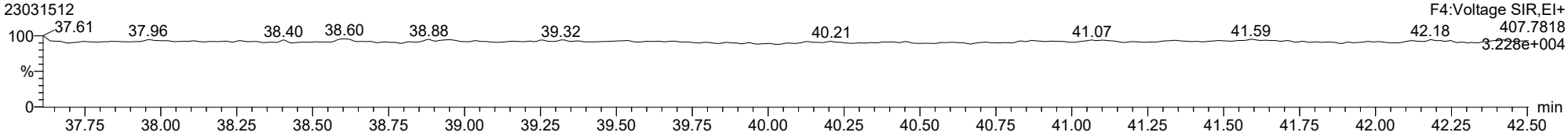

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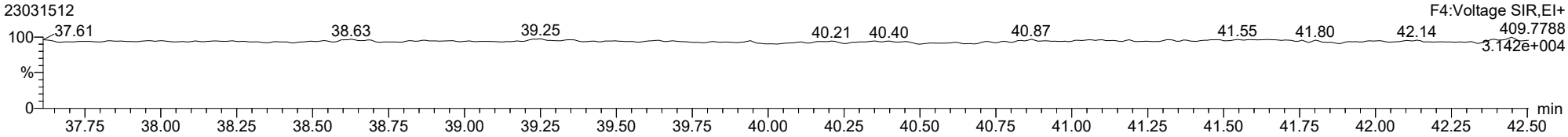

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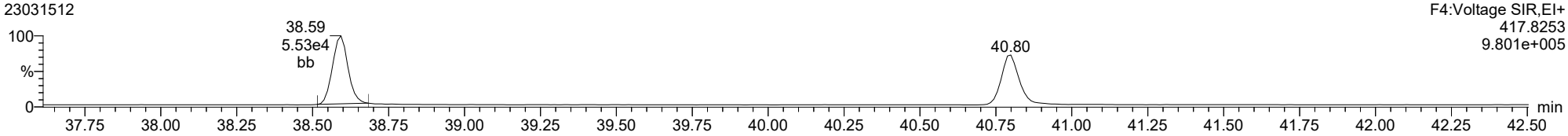

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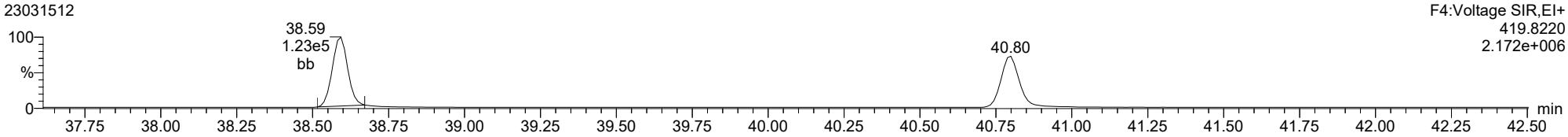

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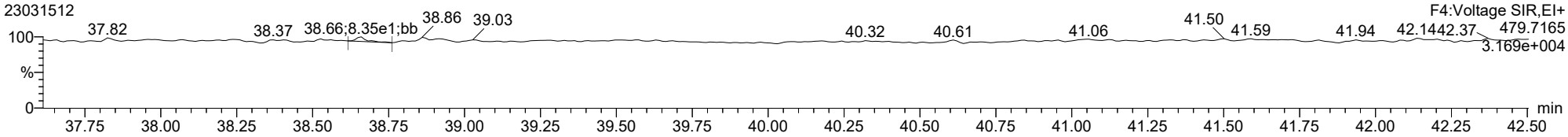

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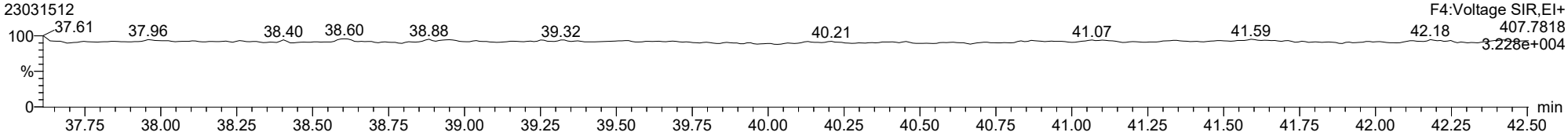

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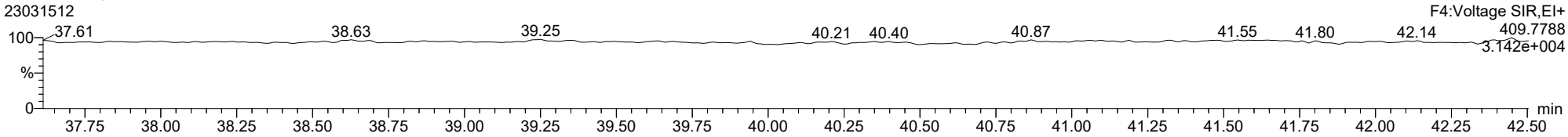

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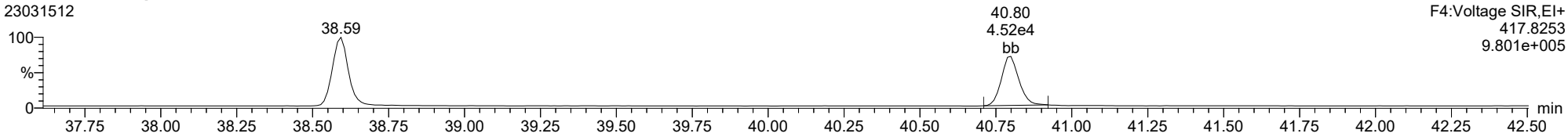

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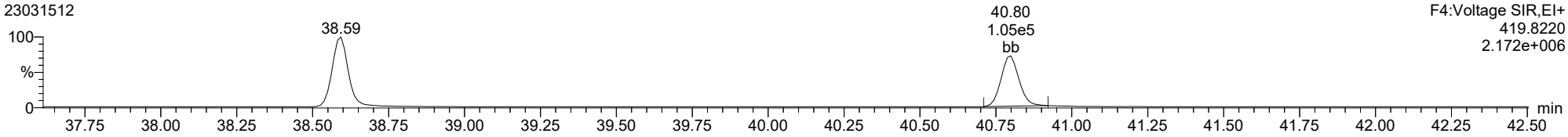

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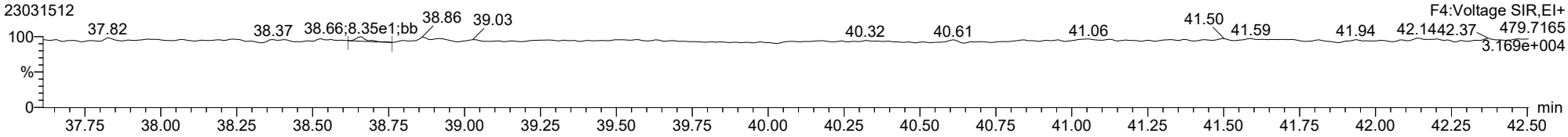

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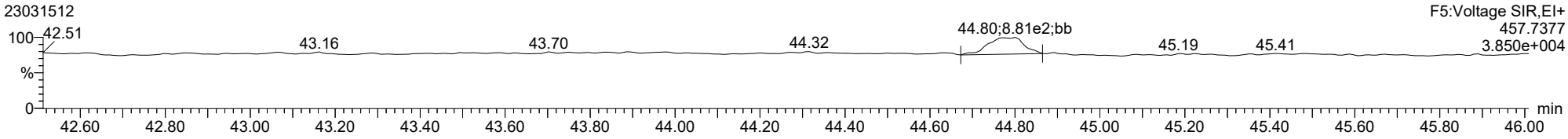

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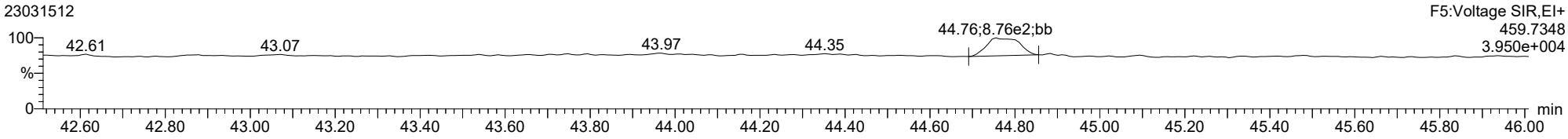

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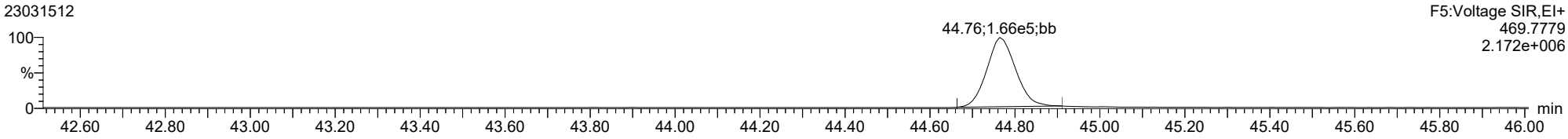

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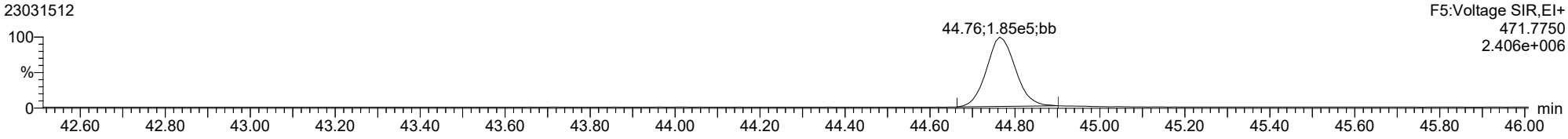

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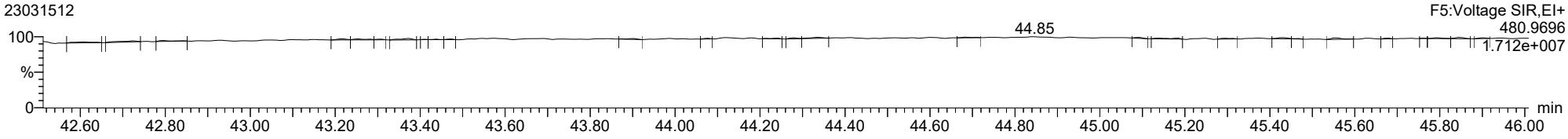

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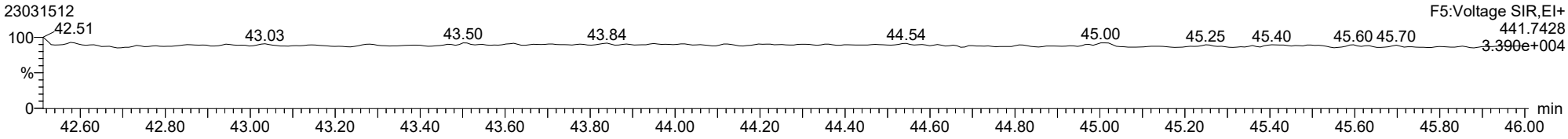

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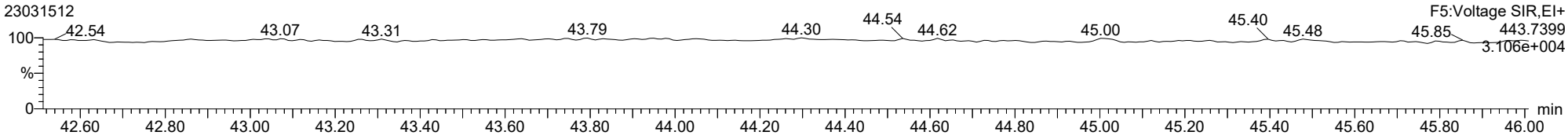

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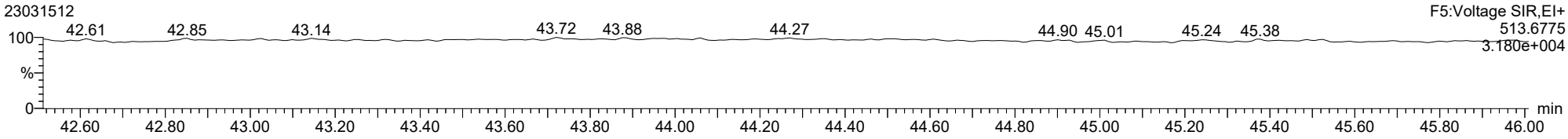

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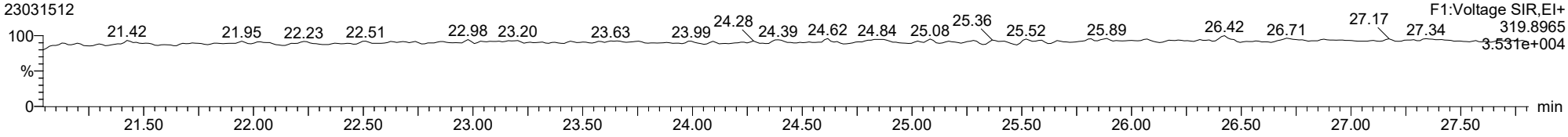
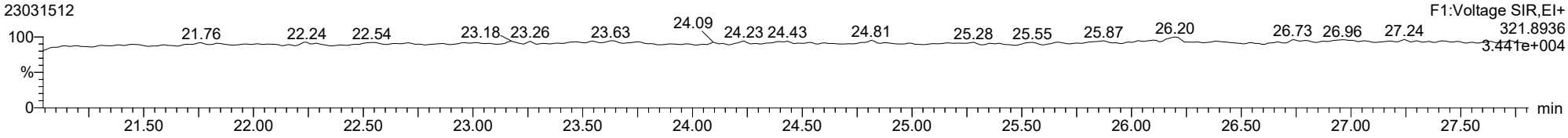
ID: BLC0136-BLK1, Name: 23031512, Date: 15-Mar-2023, Time: 19:33:06, Conditions: AUTOSPEC01, User: pk

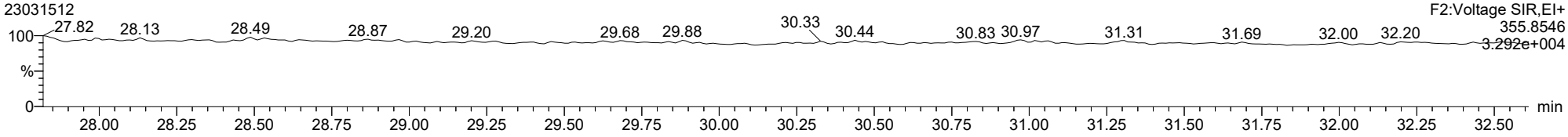
Total-tetradioxins



Total-tetradioxins



Total-pentadioxins



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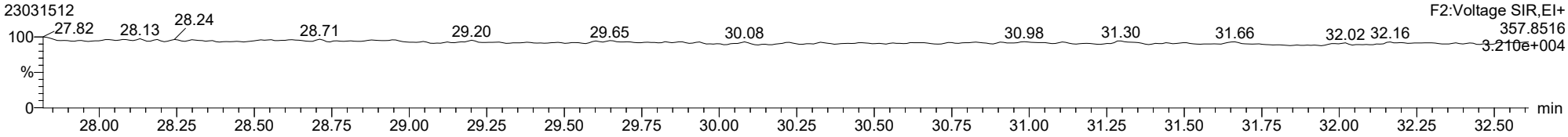
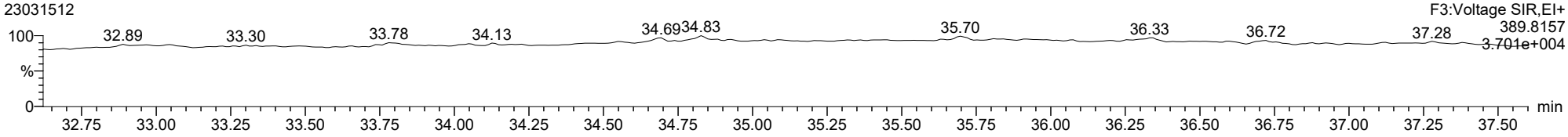


ID: BLC0136-BLK1, Name: 23031512, Date: 15-Mar-2023, Time: 19:33:06, Conditions: AUTOSPEC01, User: pk

Total-hexadioxins



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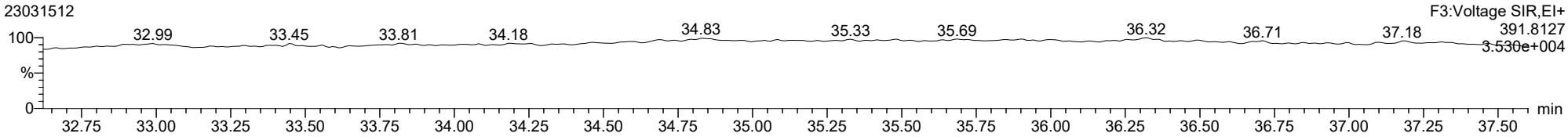

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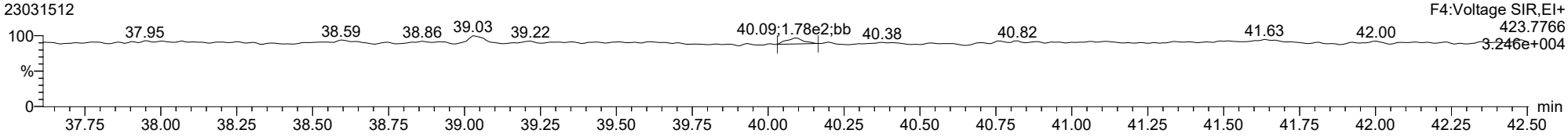

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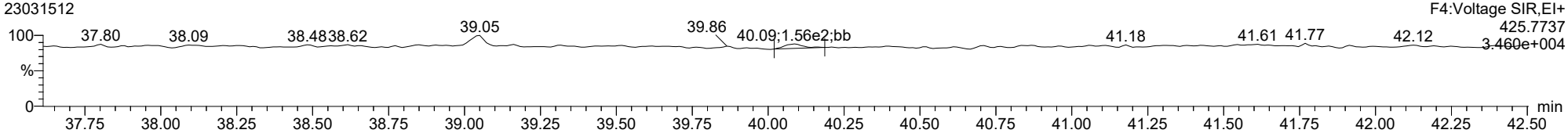

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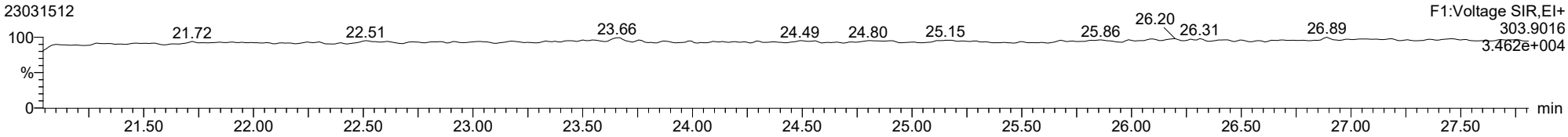
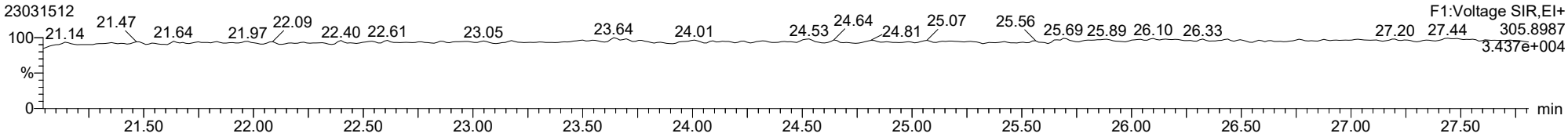
Total-tetrafurans



Total-tetrafurans



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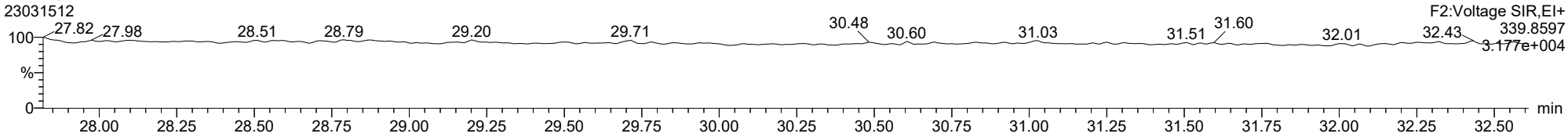

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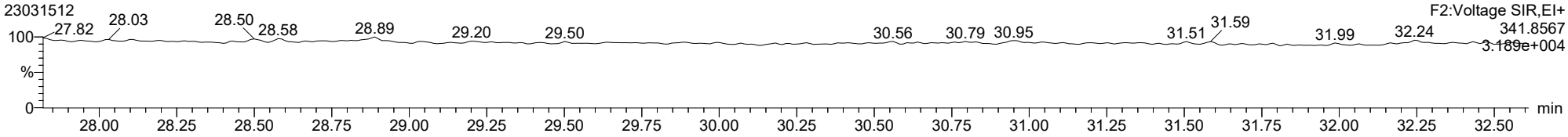

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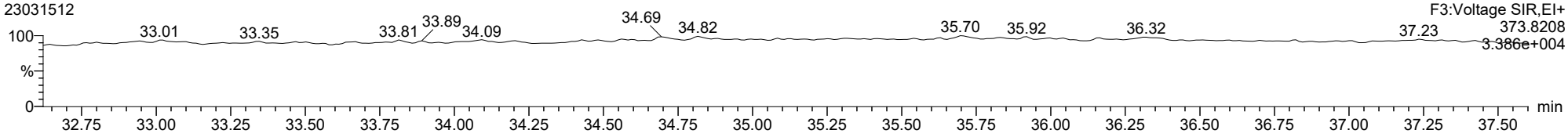
Last Altered: Thursday, March 16, 2023 09:12:10 Pacific Daylight Time
Printed: Thursday, March 16, 2023 10:00:10 Pacific Daylight Time

ID: BLC0136-BLK1, Name: 23031512, Date: 15-Mar-2023, Time: 19:33:06, Conditions: AUTOSPEC01, User: pk

Total-hexafurans



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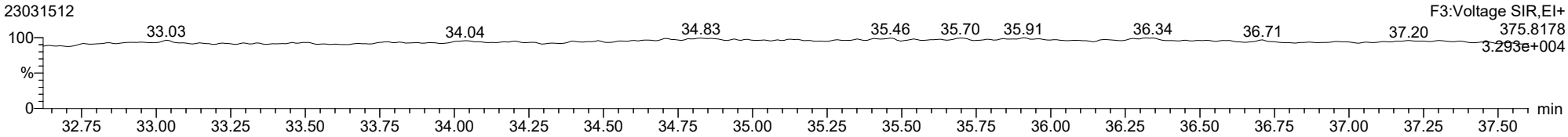
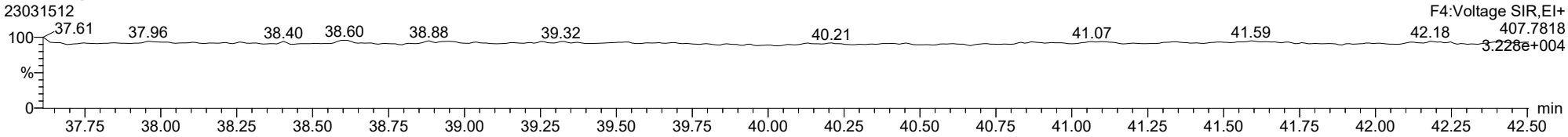
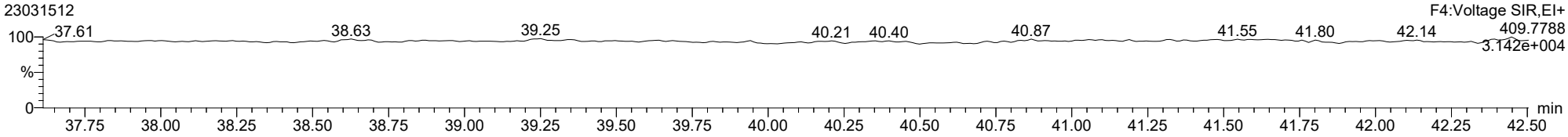


Total-heptafurans



Total-heptafurans



LCS RECOVERY
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	03/15/23 20:22
Batch:	BLC0136	Laboratory ID:	BLC0136-BS1
Preparation:	EPA 1613	Sequence Name:	LCS
Initial/Final:	10 g / 20 uL		

COMPOUND	SPIKE ADDED (ng/kg wet)	LCS CONCENTRATION (ng/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
2,3,7,8-TCDF	20.0	17.1		85.4	75 - 158
2,3,7,8-TCDD	20.0	16.2		80.8	67 - 158
1,2,3,7,8-PeCDF	100	87.0		87.0	80 - 134
2,3,4,7,8-PeCDF	100	82.6		82.6	68 - 160
1,2,3,7,8-PeCDD	100	87.8		87.8	70 - 142
1,2,3,4,7,8-HxCDF	100	81.7		81.7	72 - 134
1,2,3,6,7,8-HxCDF	100	85.7		85.7	84 - 130
2,3,4,6,7,8-HxCDF	100	88.7		88.7	70 - 156
1,2,3,7,8,9-HxCDF	100	88.4		88.4	78 - 130
1,2,3,4,7,8-HxCDD	100	82.7		82.7	70 - 164
1,2,3,6,7,8-HxCDD	100	82.7		82.7	76 - 134
1,2,3,7,8,9-HxCDD	100	87.0		87.0	64 - 162
1,2,3,4,6,7,8-HpCDF	100	84.9		84.9	82 - 122
1,2,3,4,7,8,9-HpCDF	100	92.2		92.2	78 - 138
1,2,3,4,6,7,8-HpCDD	100	82.1	B	82.1	70 - 140
OCDF	200	147		73.5	63 - 170
OCDD	200	169	B	84.3	78 - 144

* Indicates values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230315D1.qld
Last Altered: Thursday, March 16, 2023 09:12:10 Pacific Daylight Time
Printed: Thursday, March 16, 2023 10:00:22 Pacific Daylight Time

Method: T:\Autospec\Methods\Dioxin230315.mdb 16 Mar 2023 08:38:23
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: BLC0136-BS1, Name: 23031513, Date: 15-Mar-2023, Time: 20:22:11, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.548	1.001	1.201e4	1.629e4	0.702	0.737	0.770	605	876	1.82e5	2.38e5	301.3	272.2	NO	bb	bb	8.541
12378-PeCDF	29.713	1.001	6.631e4	4.428e4	0.679	1.497	1.550	1105	918	1.00e6	6.66e5	908.0	725.3	NO	bb	bb	43.500
23478-PeCDF	31.050	1.001	6.708e4	4.452e4	0.786	1.507	1.550	1105	918	9.99e5	6.61e5	904.3	719.9	NO	bb	bb	41.297
123478-HxCDF	34.693	1.001	8.823e4	7.204e4	1.166	1.225	1.240	1121	915	1.37e6	1.12e6	1219.9	1228.4	NO	bd	bd	40.833
234678-HxCDF	35.707	1.001	8.531e4	6.798e4	1.140	1.255	1.240	1121	915	1.29e6	1.02e6	1154.6	1116.5	NO	bd	bd	44.362
123678-HxCDF	34.827	1.000	9.737e4	7.688e4	1.091	1.266	1.240	1121	915	1.38e6	1.10e6	1227.0	1200.2	NO	dd	dd	42.855
123789-HxCDF	36.732	1.000	7.228e4	5.741e4	1.137	1.259	1.240	1121	915	1.08e6	8.53e5	958.9	932.4	NO	bd	bd	44.207
1234678-HpCDF	38.593	1.000	4.519e4	4.600e4	1.003	0.982	1.050	848	978	7.28e5	7.34e5	858.4	751.0	NO	bb	bd	42.426
1234789-HpCDF	40.799	1.000	3.935e4	4.032e4	0.953	0.976	1.050	848	978	5.61e5	5.79e5	661.7	591.8	NO	bd	bb	46.112
OCDF	45.002	1.005	5.540e4	6.437e4	0.778	0.861	0.890	966	614	6.68e5	7.78e5	691.2	1267.7	NO	bb	bd	73.535
2378-TCDD	26.184	1.000	1.593e4	2.190e4	1.149	0.727	0.770	956	702	2.38e5	3.29e5	249.4	468.6	NO	bb	bd	8.075
12378-PeCDD	31.295	1.000	7.288e4	4.820e4	1.022	1.512	1.550	634	657	1.13e6	7.25e5	1786.3	1104.2	NO	bb	bb	43.910
123478-HxCDD	35.819	1.001	7.444e4	6.168e4	0.996	1.207	1.240	750	819	1.20e6	9.89e5	1602.6	1208.8	NO	bd	bd	41.350
123678-HxCDD	35.930	1.000	8.202e4	6.774e4	1.001	1.211	1.240	750	819	1.26e6	1.04e6	1672.9	1273.7	NO	db	dd	41.344
123789-HxCDD	36.320	1.011	7.468e4	6.194e4	0.907	1.206	1.240	750	819	1.18e6	9.85e5	1569.3	1203.6	NO	bb	bb	43.496
1234678-HpCDD	40.075	1.000	5.228e4	4.900e4	1.039	1.067	1.050	866	1197	7.80e5	7.60e5	900.6	634.5	NO	bb	bb	41.074
OCDD	44.773	1.000	7.227e4	9.012e4	0.920	0.802	0.890	716	750	9.10e5	1.09e6	1270.3	1448.2	NO	bb	bd	84.294
13C-2378-TCDF	25.520	1.007	2.027e5	2.696e5	1.620	0.752	0.770	1574	1355	3.03e6	4.03e6	1924.8	2975.5	NO	bb	bb	96.318
13C-12378-PeCDF	29.691	1.171	2.230e5	1.514e5	1.240	1.473	1.550	2900	988	3.41e6	2.29e6	1176.3	2322.9	NO	bb	bb	99.692
13C-23478-PeCDF	31.028	1.224	2.062e5	1.376e5	1.118	1.499	1.550	2900	988	3.15e6	2.11e6	1087.5	2137.6	NO	bb	bb	101.593
13C-123478-HxCDF	34.671	0.955	1.129e5	2.237e5	1.168	0.505	0.510	1222	1206	1.74e6	3.48e6	1421.9	2887.5	NO	bd	bd	100.236
13C-123678-HxCDF	34.816	0.959	1.242e5	2.486e5	1.386	0.500	0.510	1222	1206	1.81e6	3.62e6	1480.1	2999.5	NO	dd	db	93.531
13C-234678-HxCDF	35.685	0.983	1.026e5	2.006e5	1.129	0.511	0.510	1222	1206	1.60e6	3.14e6	1306.2	2606.5	NO	bb	bb	93.405
13C-123789-HxCDF	36.721	1.011	8.493e4	1.731e5	0.932	0.491	0.510	1222	1206	1.36e6	2.71e6	1112.2	2250.5	NO	bb	bb	96.332
13C-1234678-HpCDF	38.582	1.063	6.365e4	1.507e5	0.895	0.423	0.440	1027	1620	1.06e6	2.48e6	1036.6	1528.7	NO	bb	bb	83.282
13C-1234789-HpCDF	40.787	1.123	5.796e4	1.233e5	0.770	0.470	0.440	1027	1620	8.10e5	1.85e6	789.4	1139.2	NO	bb	bb	81.925
13C-1234-TCDD	25.350	0.000	1.322e5	1.705e5	1.000	0.775	0.770	1611	799	2.07e6	2.64e6	1283.0	3308.3	NO	bb	bb	100.000
13C-2378-TCDD	26.170	1.032	1.774e5	2.304e5	1.152	0.770	0.770	1611	799	2.64e6	3.43e6	1636.2	4290.3	NO	bb	bb	116.909
13C-12378-PeCDD	31.284	1.234	1.648e5	1.050e5	0.829	1.570	1.550	946	738	2.46e6	1.55e6	2599.8	2101.1	NO	bb	bb	107.562
13C-123478-HxCDD	35.796	0.986	1.874e5	1.433e5	0.995	1.308	1.240	1112	1074	2.96e6	2.33e6	2661.1	2169.0	NO	bd	bd	115.606
13C-123678-HxCDD	35.919	0.989	1.977e5	1.642e5	1.157	1.204	1.240	1112	1074	2.96e6	2.42e6	2662.0	2251.7	NO	db	db	108.841
13C-1234678-HpCDD	40.063	1.103	1.219e5	1.154e5	0.840	1.056	1.050	998	639	1.78e6	1.70e6	1788.1	2663.0	NO	bd	bd	98.269
13C-OCDD	44.755	1.233	1.982e5	2.206e5	0.767	0.899	0.890	1159	1123	2.41e6	2.73e6	2077.8	2433.4	NO	bb	bb	189.838
13C-123789-HxCDD	36.309	0.000	1.609e5	1.266e5	1.000	1.271	1.240	1112	1074	2.53e6	2.02e6	2279.5	1877.6	NO	bb	bb	100.000
37CL-2378-TCDD	26.184	1.033	1.397e5		1.288			1010		2.12e6		2100.6			bb		35.837

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Last Altered: Thursday, March 16, 2023 09:12:10 Pacific Daylight Time
Printed: Thursday, March 16, 2023 10:00:22 Pacific Daylight Time

ID: BLC0136-BS1, Name: 23031513, Date: 15-Mar-2023, Time: 20:22:11, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					0.802		0.770	605	876								
1289-TCDF					0.678		0.770	605	876								
13468-PECDF					1.246		1.550	513	754								
12389-PECDF	32.075	1.080	4.757e2	2.376e2	0.496	2.002	1.550	1105	918	7.32e3	4.60e3	6.6	5.0	YES	bb	db	0.384
123468-HXCDF					1.169		1.240	1121	915								
1368-TCDD					1.015		0.770	956	702								
1289-TCDD					0.909		0.770	956	702								
12479-PECDD					2.301		1.550	634	657								
12389-PECDD					1.184		1.550	634	657								
124679-HXCDD					1.115		1.240	750	819								
1234679-HPCDD	39.038	0.974	4.283e2	4.828e2	1.137	0.887	1.050	866	1197	7.84e3	8.00e3	9.1	6.7	YES	bb	bb	0.338
Total-tetrafurans			1.201e4		0.727			605		1.82e5							8.541
Total-penta1			0.000e0					513		0.00e0							
Total-pentafurans			1.334e5		0.654			1105		2.00e6							84.797
Total-hexafurans			3.432e5		1.141			1121		5.11e6							172.258
Total-heptafurans			8.478e4		0.978			848		1.29e6							88.799
Total-Furans			6.288e5		0.922			605		9.26e6							427.929
Total-tetradioxins			1.593e4		1.024			956		2.38e5							8.075
Total-pentadioxins			7.288e4		1.502			634		1.13e6							43.910
Total-hexadioxins			2.311e5		1.005			750		3.63e6							126.190
Total-heptadioxins			5.228e4		1.088			866		7.80e5							41.074
Total-Dioxins			4.445e5		1.130			956		6.69e6							303.544
Total-TEQ			1.073e6					956		1.60e7							731.472
FUNCTION1 PFK			0.000e0					614412		0.00e0							
FUNCTION2 PFK			2.181e5					212672		6.87e6							0.000
FUNCTION3 PFK			2.862e6					462183		4.47e7							0.000
FUNCTION4 PFK			3.297e5					299169		1.00e7							
FUNCTION5 PFK			1.314e5					170286		4.86e6							
FUNCTION1 HXCD...			1.318e2					457		1.08e3							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			0.000e0					549		0.00e0							
FUNCTION3 OCDPE			0.000e0					568		0.00e0							
FUNCTION4 NCDPE			1.634e2					490		2.22e3							0.000
FUNCTION5 DCDPE			0.000e0					505		0.00e0							

Method: T:\Autospec\Methods\Dioxin230315.mdb 16 Mar 2023 08:38:23
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: BLC0136-BS1, Name: 23031513, Date: 15-Mar-2023, Time: 20:22:11, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.55	1.201e4	1.629e4	0.702	0.74	0.77	301.3	YES	NO	bb	bb	8.541

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.05	6.708e4	4.452e4	0.786	1.51	1.55	904.3	YES	NO	bb	bb	41.297
2	12378-PeCDF	29.71	6.631e4	4.428e4	0.679	1.50	1.55	908.0	YES	NO	bb	bb	43.500

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.73	7.228e4	5.741e4	1.137	1.26	1.24	958.9	YES	NO	bd	bd	44.207
2	234678-HxCDF	35.71	8.531e4	6.798e4	1.140	1.25	1.24	1154.6	YES	NO	bd	bd	44.362
3	123678-HxCDF	34.83	9.737e4	7.688e4	1.091	1.27	1.24	1227.0	YES	NO	dd	dd	42.855
4	123478-HxCDF	34.69	8.823e4	7.204e4	1.166	1.22	1.24	1219.9	YES	NO	bd	bd	40.833

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	40.80	3.935e4	4.032e4	0.953	0.98	1.05	661.7	YES	NO	bd	bb	46.112
2	Total-heptafurans	39.24	2.394e2	2.655e2	0.978	0.90	1.05	4.8	YES	NO	bb	bb	0.261
3	1234678-HpCDF	38.59	4.519e4	4.600e4	1.003	0.98	1.05	858.4	YES	NO	bb	bd	42.426

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.55	1.201e4	1.629e4	0.702	0.74	0.77	301.3	YES	NO	bb	bb	8.541
2	23478-PeCDF	31.05	6.708e4	4.452e4	0.786	1.51	1.55	904.3	YES	NO	bb	bb	41.297
3	12378-PeCDF	29.71	6.631e4	4.428e4	0.679	1.50	1.55	908.0	YES	NO	bb	bb	43.500
4	123789-HxCDF	36.73	7.228e4	5.741e4	1.137	1.26	1.24	958.9	YES	NO	bd	bd	44.207
5	234678-HxCDF	35.71	8.531e4	6.798e4	1.140	1.25	1.24	1154.6	YES	NO	bd	bd	44.362
6	123678-HxCDF	34.83	9.737e4	7.688e4	1.091	1.27	1.24	1227.0	YES	NO	dd	dd	42.855
7	123478-HxCDF	34.69	8.823e4	7.204e4	1.166	1.22	1.24	1219.9	YES	NO	bd	bd	40.833
8	OCDF	45.00	5.540e4	6.437e4	0.778	0.86	0.89	691.2	YES	NO	bb	bd	73.535
9	1234789-HpCDF	40.80	3.935e4	4.032e4	0.953	0.98	1.05	661.7	YES	NO	bd	bb	46.112
10	Total-heptafurans	39.24	2.394e2	2.655e2	0.978	0.90	1.05	4.8	YES	NO	bb	bb	0.261
11	1234678-HpCDF	38.59	4.519e4	4.600e4	1.003	0.98	1.05	858.4	YES	NO	bb	bd	42.426

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.18	1.593e4	2.190e4	1.149	0.73	0.77	249.4	YES	NO	bb	bd	8.075

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.30	7.288e4	4.820e4	1.022	1.51	1.55	1786.3	YES	NO	bb	bb	43.910

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.32	7.468e4	6.194e4	0.907	1.21	1.24	1569.3	YES	NO	bb	bb	43.496
2	123678-HxCDD	35.93	8.202e4	6.774e4	1.001	1.21	1.24	1672.9	YES	NO	db	dd	41.344
3	123478-HxCDD	35.82	7.444e4	6.168e4	0.996	1.21	1.24	1602.6	YES	NO	bd	bd	41.350

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.07	5.228e4	4.900e4	1.039	1.07	1.05	900.6	YES	NO	bb	bb	41.074

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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.30	7.288e4	4.820e4	1.022	1.51	1.55	1786.3	YES	NO	bb	bb	43.910
2	2378-TCDD	26.18	1.593e4	2.190e4	1.149	0.73	0.77	249.4	YES	NO	bb	bd	8.075
3	123789-HxCDD	36.32	7.468e4	6.194e4	0.907	1.21	1.24	1569.3	YES	NO	bb	bb	43.496
4	123678-HxCDD	35.93	8.202e4	6.774e4	1.001	1.21	1.24	1672.9	YES	NO	db	dd	41.344
5	123478-HxCDD	35.82	7.444e4	6.168e4	0.996	1.21	1.24	1602.6	YES	NO	bd	bd	41.350
6	OCDD	44.77	7.227e4	9.012e4	0.920	0.80	0.89	1270.3	YES	NO	bb	bd	84.294
7	1234678-HpCDD	40.07	5.228e4	4.900e4	1.039	1.07	1.05	900.6	YES	NO	bb	bb	41.074

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.55	1.201e4	1.629e4	0.702	0.74	0.77	301.3	YES	NO	bb	bb	8.541
2	23478-PeCDF	31.05	6.708e4	4.452e4	0.786	1.51	1.55	904.3	YES	NO	bb	bb	41.297
3	12378-PeCDF	29.71	6.631e4	4.428e4	0.679	1.50	1.55	908.0	YES	NO	bb	bb	43.500
4	123789-HxCDF	36.73	7.228e4	5.741e4	1.137	1.26	1.24	958.9	YES	NO	bd	bd	44.207
5	234678-HxCDF	35.71	8.531e4	6.798e4	1.140	1.25	1.24	1154.6	YES	NO	bd	bd	44.362
6	123678-HxCDF	34.83	9.737e4	7.688e4	1.091	1.27	1.24	1227.0	YES	NO	dd	dd	42.855
7	123478-HxCDF	34.69	8.823e4	7.204e4	1.166	1.22	1.24	1219.9	YES	NO	bd	bd	40.833
8	OCDF	45.00	5.540e4	6.437e4	0.778	0.86	0.89	691.2	YES	NO	bb	bd	73.535
9	1234789-HpCDF	40.80	3.935e4	4.032e4	0.953	0.98	1.05	661.7	YES	NO	bd	bb	46.112
10	Total-heptafurans	39.24	2.394e2	2.655e2	0.978	0.90	1.05	4.8	YES	NO	bb	bb	0.261
11	1234678-HpCDF	38.59	4.519e4	4.600e4	1.003	0.98	1.05	858.4	YES	NO	bb	bd	42.426
12	12378-PeCDD	31.30	7.288e4	4.820e4	1.022	1.51	1.55	1786.3	YES	NO	bb	bb	43.910
13	2378-TCDD	26.18	1.593e4	2.190e4	1.149	0.73	0.77	249.4	YES	NO	bb	bd	8.075
14	123789-HxCDD	36.32	7.468e4	6.194e4	0.907	1.21	1.24	1569.3	YES	NO	bb	bb	43.496
15	123678-HxCDD	35.93	8.202e4	6.774e4	1.001	1.21	1.24	1672.9	YES	NO	db	dd	41.344
16	123478-HxCDD	35.82	7.444e4	6.168e4	0.996	1.21	1.24	1602.6	YES	NO	bd	bd	41.350
17	OCDD	44.77	7.227e4	9.012e4	0.920	0.80	0.89	1270.3	YES	NO	bb	bd	84.294
18	1234678-HpCDD	40.07	5.228e4	4.900e4	1.039	1.07	1.05	900.6	YES	NO	bb	bb	41.074

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	29.17	3.865e3					0.8	NO		bb		0.000
2	FUNCTION2 PFK	28.92	9.871e3					1.6	NO		bb		0.000
3	FUNCTION2 PFK	28.77	1.615e4					1.6	NO		bb		0.000
4	FUNCTION2 PFK	28.41	8.554e3					1.6	NO		db		0.000
5	FUNCTION2 PFK	28.33	7.736e3					0.9	NO		bd		0.000
6	FUNCTION2 PFK	27.99	3.169e3					0.7	NO		bb		0.000
7	FUNCTION2 PFK	27.94	1.414e4					1.9	NO		db		0.000
8	FUNCTION2 PFK	27.86	2.051e4					2.2	NO		bd		0.000
9	FUNCTION2 PFK	32.42	7.017e3					1.3	NO		db		0.000
10	FUNCTION2 PFK	32.38	1.010e4					1.8	NO		bd		0.000
11	FUNCTION2 PFK	32.24	4.743e3					0.9	NO		bb		0.000
12	FUNCTION2 PFK	32.01	8.055e3					1.3	NO		bb		0.000
13	FUNCTION2 PFK	31.84	9.090e3					1.5	NO		bb		0.000
14	FUNCTION2 PFK	31.35	6.242e3					1.3	NO		bb		0.000
15	FUNCTION2 PFK	31.26	7.212e3					1.2	NO		bb		0.000
16	FUNCTION2 PFK	31.11	9.312e3					1.2	NO		bb		0.000
17	FUNCTION2 PFK	30.97	1.457e4					1.5	NO		bb		0.000
18	FUNCTION2 PFK	30.65	3.193e3					0.9	NO		bb		0.000
19	FUNCTION2 PFK	30.60	1.097e3					0.5	NO		bb		0.000
20	FUNCTION2 PFK	30.30	9.014e3					1.5	NO		db		0.000
21	FUNCTION2 PFK	30.23	1.395e4					1.4	NO		bd		0.000
22	FUNCTION2 PFK	30.13	4.272e3					0.9	NO		bb		0.000
23	FUNCTION2 PFK	29.89	8.296e3					1.3	NO		bb		0.000
24	FUNCTION2 PFK	29.45	1.509e4					1.8	NO		bb		0.000
25	FUNCTION2 PFK	32.55	2.880e3					0.8	NO		bb		0.000

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PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	33.82	9.497e4					3.9	YES		dd		0.000
2	FUNCTION3 PFK	33.65	3.402e5					5.1	YES		dd		0.000
3	FUNCTION3 PFK	33.61	8.258e4					4.6	YES		dd		0.000
4	FUNCTION3 PFK	33.53	1.711e5					5.0	YES		dd		0.000
5	FUNCTION3 PFK	33.46	1.097e5					4.8	YES		dd		0.000
6	FUNCTION3 PFK	33.41	6.420e4					4.8	YES		dd		0.000
7	FUNCTION3 PFK	33.38	1.403e5					4.7	YES		dd		0.000
8	FUNCTION3 PFK	33.28	2.084e5					5.2	YES		dd		0.000
9	FUNCTION3 PFK	33.14	3.225e5					5.5	YES		dd		0.000
10	FUNCTION3 PFK	33.03	1.448e5					5.2	YES		dd		0.000
11	FUNCTION3 PFK	32.98	2.725e5					5.0	YES		dd		0.000
12	FUNCTION3 PFK	32.84	2.128e5					6.2	YES		dd		0.000
13	FUNCTION3 PFK	32.72	8.943e4					3.8	YES		dd		0.000
14	FUNCTION3 PFK	32.69	1.120e5					3.8	YES		bd		0.000
15	FUNCTION3 PFK	36.14	6.332e4					1.6	NO		db		0.000
16	FUNCTION3 PFK	35.97	3.001e4					1.7	NO		bd		0.000
17	FUNCTION3 PFK	35.91	2.089e4					1.6	NO		bb		0.000
18	FUNCTION3 PFK	35.81	3.257e4					2.1	NO		bb		0.000
19	FUNCTION3 PFK	35.66	3.023e4					1.0	NO		bb		0.000
20	FUNCTION3 PFK	35.51	3.642e3					0.5	NO		bb		0.000
21	FUNCTION3 PFK	35.14	2.263e4					1.4	NO		bb		0.000
22	FUNCTION3 PFK	35.04	3.412e4					0.9	NO		bb		0.000
23	FUNCTION3 PFK	34.64	2.027e4					1.1	NO		bb		0.000
24	FUNCTION3 PFK	34.56	1.449e3					0.3	NO		bb		0.000
25	FUNCTION3 PFK	34.48	4.241e3					0.5	NO		bb		0.000
26	FUNCTION3 PFK	34.35	7.812e3					0.7	NO		bb		0.000
27	FUNCTION3 PFK	34.29	2.663e4					1.4	NO		db		0.000
28	FUNCTION3 PFK	34.25	1.665e4					1.1	NO		bd		0.000
29	FUNCTION3 PFK	34.02	4.200e3					0.5	NO		bb		0.000
30	FUNCTION3 PFK	33.91	2.991e4					1.6	NO		db		0.000
31	FUNCTION3 PFK	37.57	8.871e3					0.6	NO		bb		0.000
32	FUNCTION3 PFK	37.52	2.178e3					0.4	NO		bb		0.000
33	FUNCTION3 PFK	37.14	9.615e3					0.8	NO		bb		0.000
34	FUNCTION3 PFK	37.09	1.114e4					0.9	NO		bb		0.000
35	FUNCTION3 PFK	37.00	4.685e3					0.6	NO		bb		0.000
36	FUNCTION3 PFK	36.87	1.369e4					1.2	NO		bb		0.000
37	FUNCTION3 PFK	36.63	8.251e3					0.9	NO		bb		0.000

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PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	FUNCTION3 PFK	36.55	2.646e4					1.9	NO		db		0.000
39	FUNCTION3 PFK	36.51	1.195e4					0.9	NO		dd		0.000
40	FUNCTION3 PFK	36.45	1.306e4					0.9	NO		bd		0.000
41	FUNCTION3 PFK	36.30	1.842e3					0.4	NO		bb		0.000
42	FUNCTION3 PFK	36.22	3.664e4					1.7	NO		bb		0.000

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PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	37.85	2.694e4					1.7	NO		db		
2	FUNCTION4 PFK	37.77	1.828e4					2.5	NO		bd		
3	FUNCTION4 PFK	37.67	2.097e4					1.3	NO		bb		
4	FUNCTION4 PFK	40.99	1.144e4					1.7	NO		bb		
5	FUNCTION4 PFK	40.64	1.667e4					1.4	NO		bb		
6	FUNCTION4 PFK	40.41	2.544e3					0.5	NO		bb		
7	FUNCTION4 PFK	40.17	7.479e3					0.9	NO		db		
8	FUNCTION4 PFK	40.13	7.572e3					1.0	NO		bd		
9	FUNCTION4 PFK	40.01	3.289e4					1.8	NO		db		
10	FUNCTION4 PFK	39.96	4.175e3					0.7	NO		bd		
11	FUNCTION4 PFK	39.78	2.267e4					1.9	NO		bb		
12	FUNCTION4 PFK	39.52	1.142e4					1.3	NO		bb		
13	FUNCTION4 PFK	39.29	1.420e3					0.4	NO		bb		
14	FUNCTION4 PFK	39.25	1.201e3					0.4	NO		bb		
15	FUNCTION4 PFK	38.83	6.162e3					1.0	NO		bb		
16	FUNCTION4 PFK	38.73	7.892e3					0.6	NO		bb		
17	FUNCTION4 PFK	38.47	1.027e4					1.4	NO		bb		
18	FUNCTION4 PFK	38.34	6.857e3					1.0	NO		bb		
19	FUNCTION4 PFK	38.02	5.540e3					0.9	NO		bb		
20	FUNCTION4 PFK	42.38	7.644e3					0.9	NO		bb		
21	FUNCTION4 PFK	41.99	4.774e3					0.6	NO		db		
22	FUNCTION4 PFK	41.95	6.925e3					0.7	NO		bd		
23	FUNCTION4 PFK	41.80	8.097e3					1.0	NO		bb		
24	FUNCTION4 PFK	41.73	6.931e3					1.0	NO		bb		
25	FUNCTION4 PFK	41.42	2.733e4					2.2	NO		db		
26	FUNCTION4 PFK	41.34	8.716e3					1.0	NO		bd		
27	FUNCTION4 PFK	41.23	4.841e3					0.6	NO		bb		
28	FUNCTION4 PFK	41.14	6.227e3					1.0	NO		bb		
29	FUNCTION4 PFK	41.09	2.587e4					2.0	NO		bb		

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PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	42.92	2.428e3					0.9	NO		bb		
2	FUNCTION5 PFK	42.82	8.261e2					0.5	NO		bb		
3	FUNCTION5 PFK	42.72	4.106e4					2.9	NO		bb		
4	FUNCTION5 PFK	42.61	1.029e4					2.5	NO		db		
5	FUNCTION5 PFK	42.59	7.823e3					2.1	NO		bd		
6	FUNCTION5 PFK	44.78	2.822e3					1.0	NO		bb		
7	FUNCTION5 PFK	44.72	2.430e3					1.0	NO		bb		
8	FUNCTION5 PFK	44.57	3.849e3					1.3	NO		bb		
9	FUNCTION5 PFK	44.53	8.812e2					0.6	NO		bb		
10	FUNCTION5 PFK	44.40	2.008e3					0.7	NO		bb		
11	FUNCTION5 PFK	44.28	9.085e3					1.1	NO		bb		
12	FUNCTION5 PFK	44.18	3.627e3					0.9	NO		bb		
13	FUNCTION5 PFK	43.95	9.078e2					0.6	NO		bb		
14	FUNCTION5 PFK	43.91	4.553e3					1.5	NO		bb		
15	FUNCTION5 PFK	43.86	5.357e3					1.5	NO		bb		
16	FUNCTION5 PFK	43.47	1.189e3					0.8	NO		bb		
17	FUNCTION5 PFK	43.45	7.688e2					0.5	NO		bb		
18	FUNCTION5 PFK	43.41	3.895e3					1.1	NO		bb		
19	FUNCTION5 PFK	43.26	9.795e2					0.6	NO		bb		
20	FUNCTION5 PFK	43.22	6.585e3					1.6	NO		bb		
21	FUNCTION5 PFK	42.94	3.326e3					1.3	NO		bb		
22	FUNCTION5 PFK	45.20	1.077e4					1.8	NO		bb		
23	FUNCTION5 PFK	44.84	5.915e3					1.8	NO		bb		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	26.69	1.318e2					2.4	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	41.77	9.142e1					2.4	NO		bb		0.000
2	FUNCTION4 NCDPE	38.92	7.197e1					2.1	NO		bb		0.000

ETHERS6

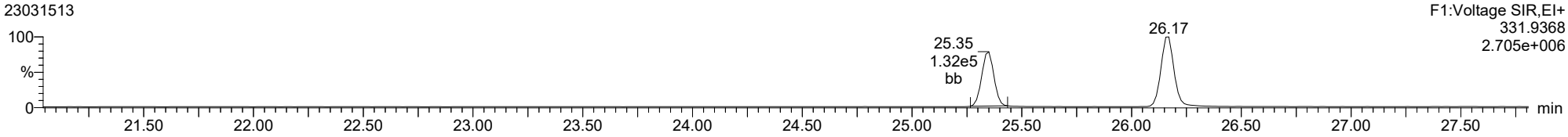
	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

Dataset: T:\Autospec\Processed Data Batch\230315D1.qld
Last Altered: Thursday, March 16, 2023 09:12:10 Pacific Daylight Time
Printed: Thursday, March 16, 2023 10:00:22 Pacific Daylight Time

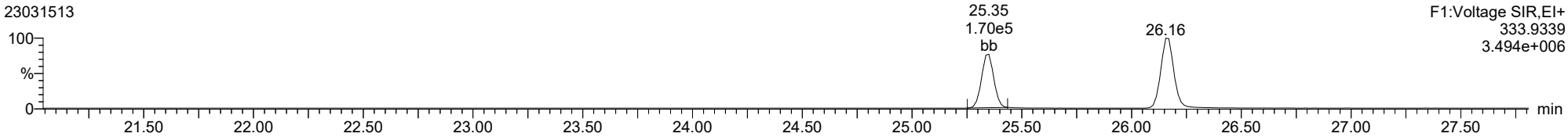
Method: T:\Autospec\Methods\Dioxin230315.mdb 16 Mar 2023 08:38:23
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: BLC0136-BS1, Name: 23031513, Date: 15-Mar-2023, Time: 20:22:11, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD



13C-1234-TCDD



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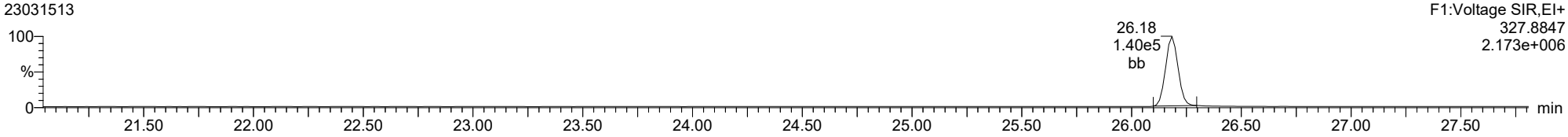

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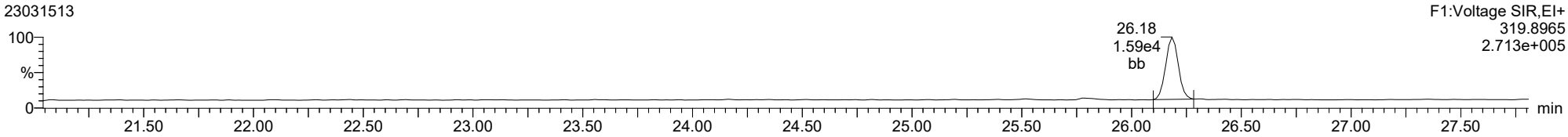

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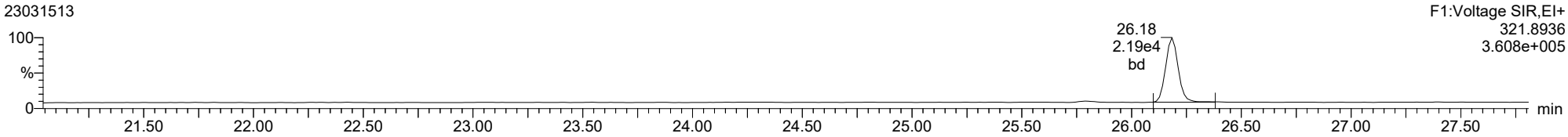

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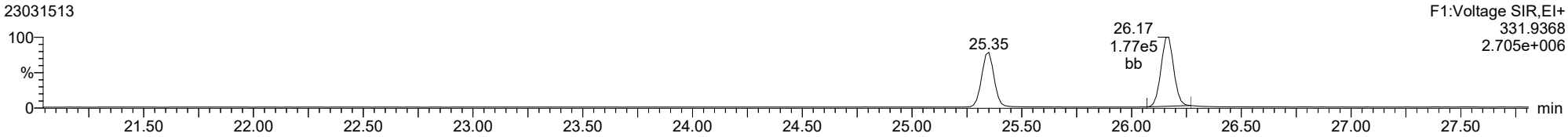

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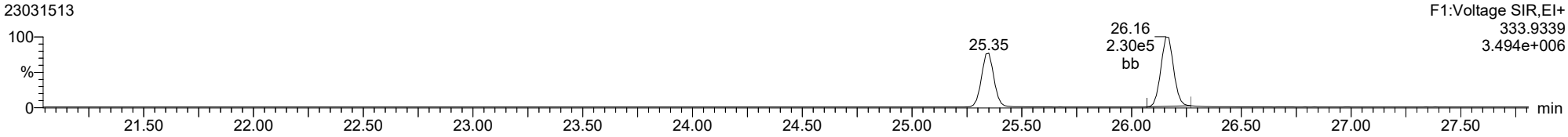

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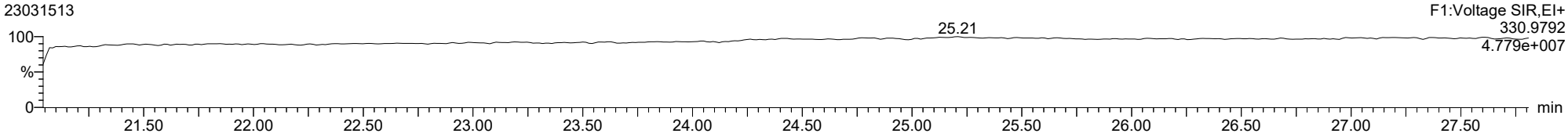

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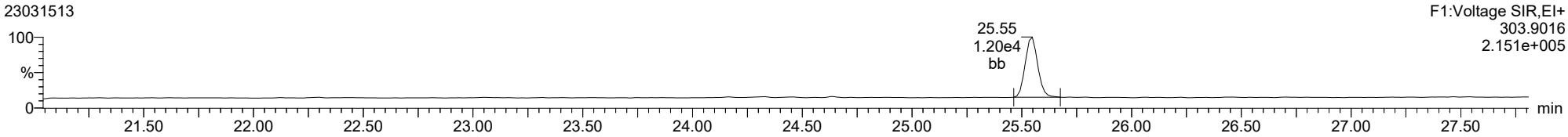

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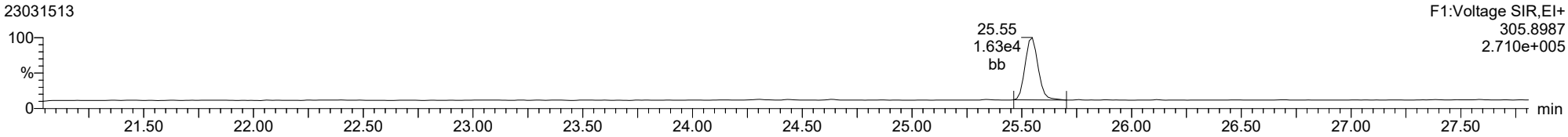

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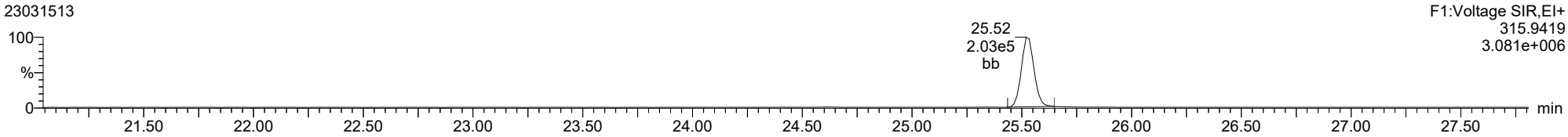

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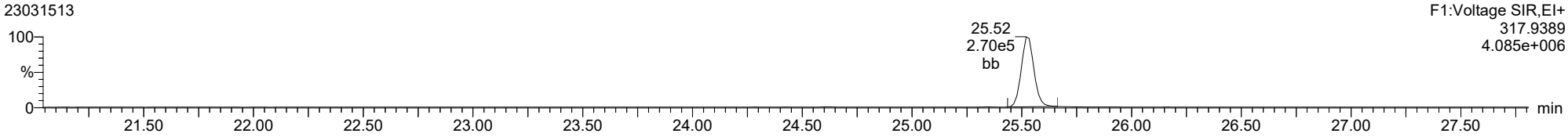

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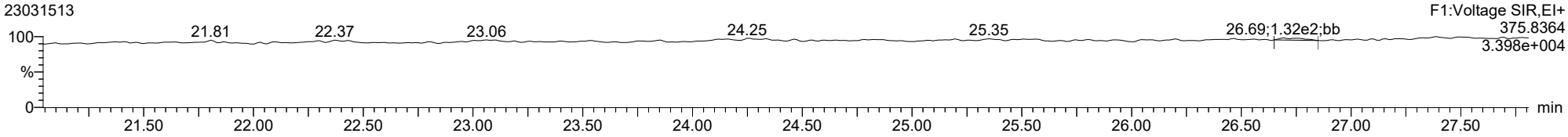

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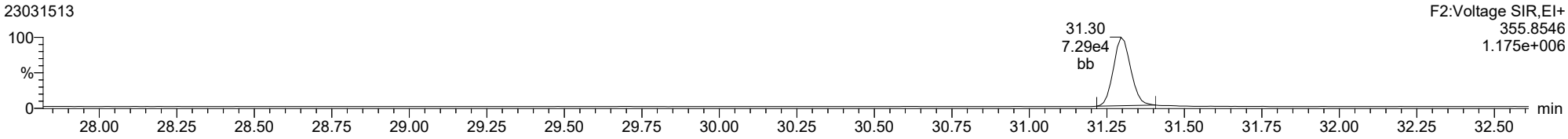
12378-PeCDD



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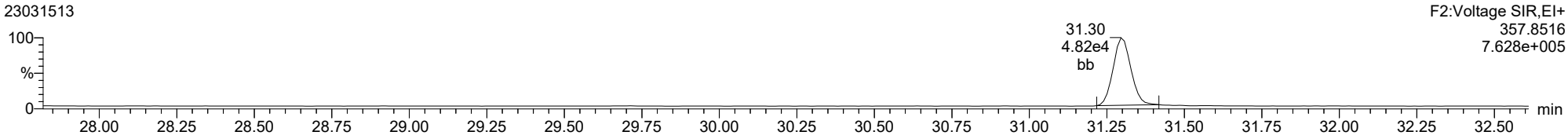

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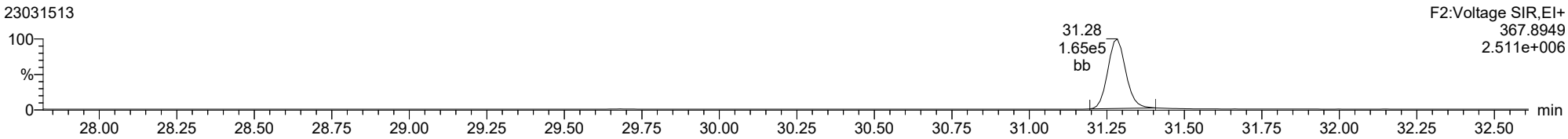

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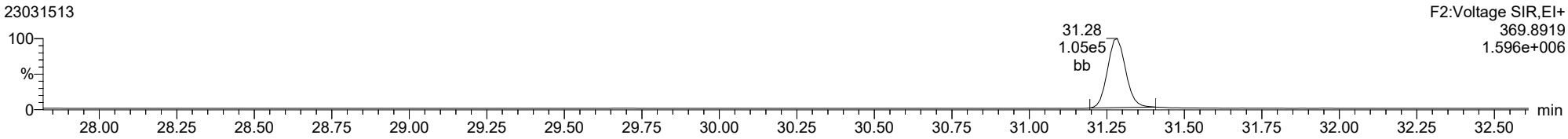

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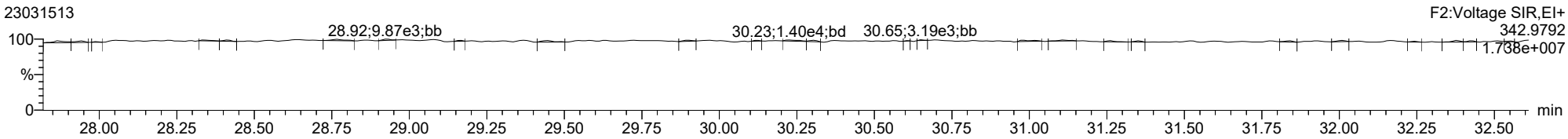

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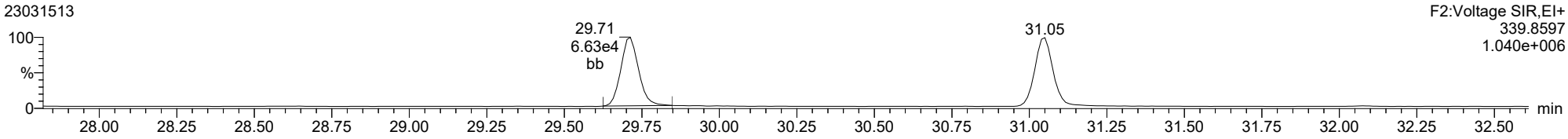

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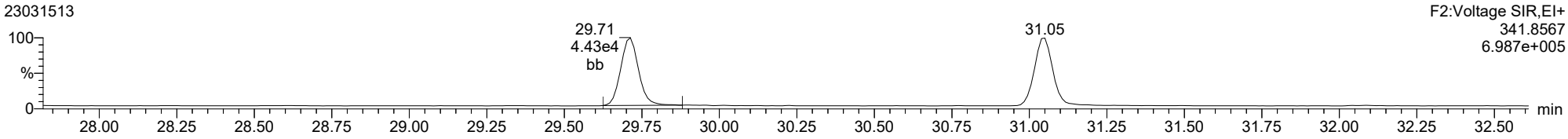

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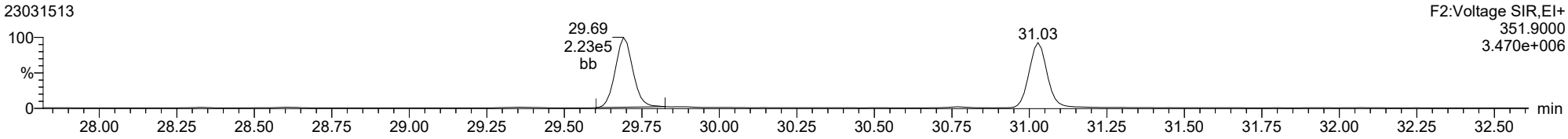

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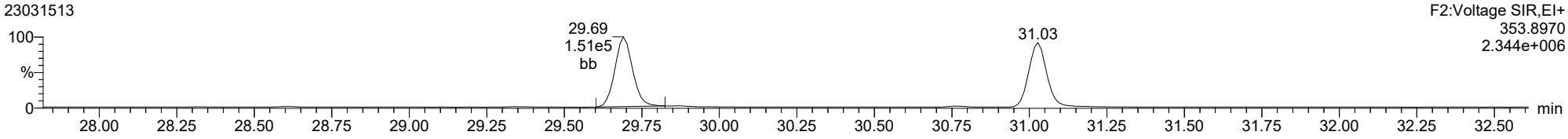

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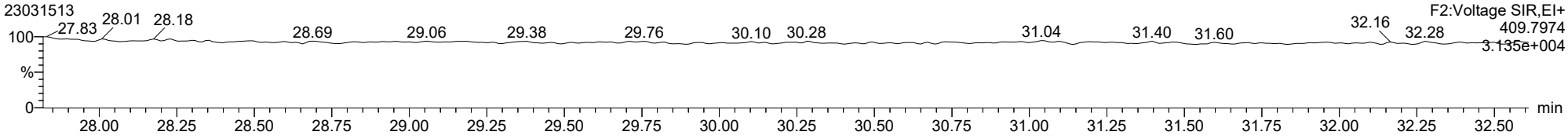

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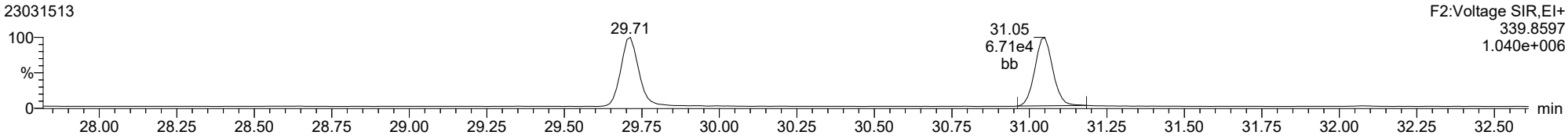

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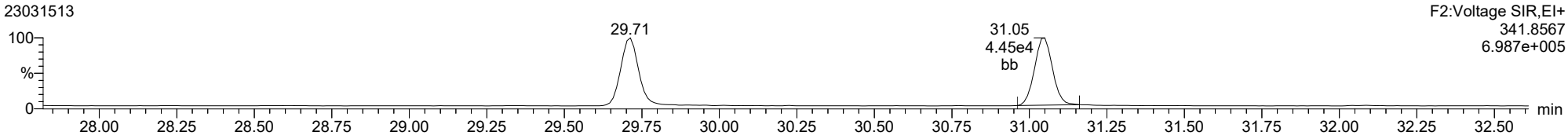

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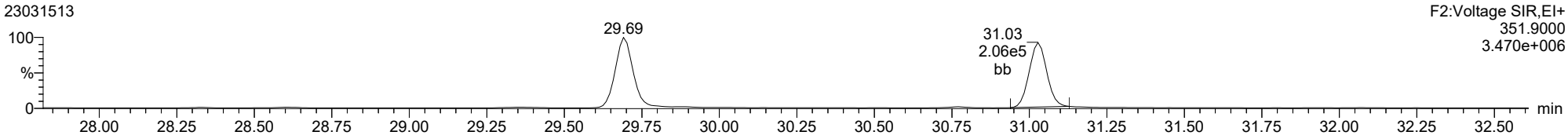

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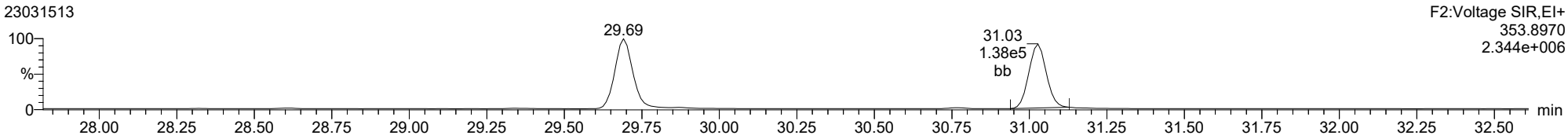

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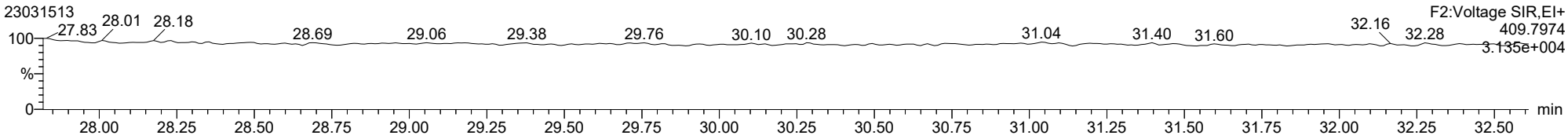

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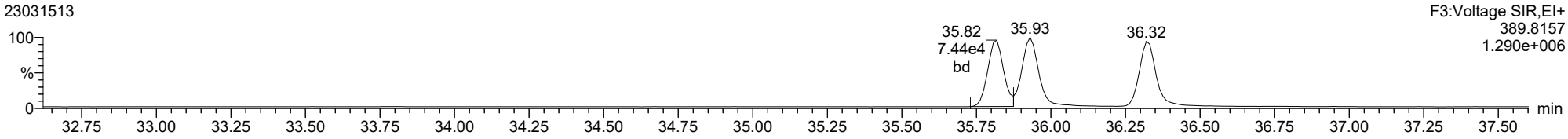

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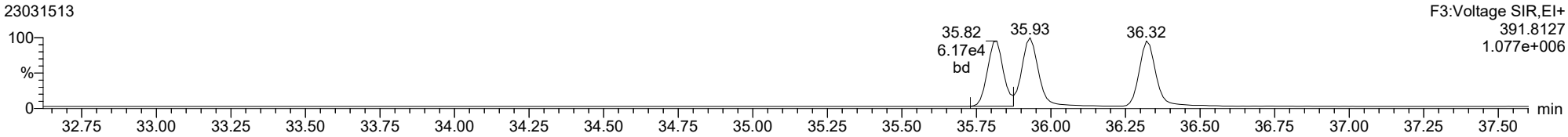

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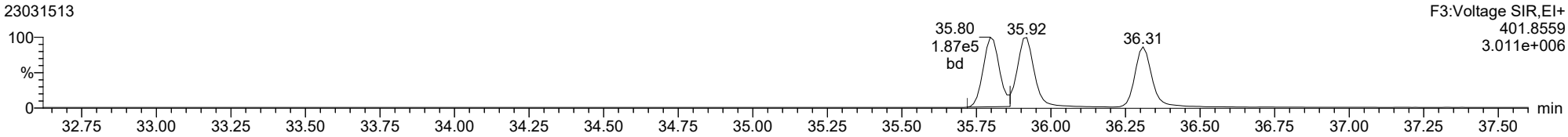

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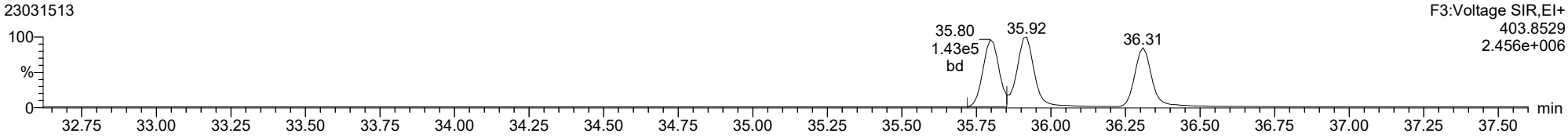

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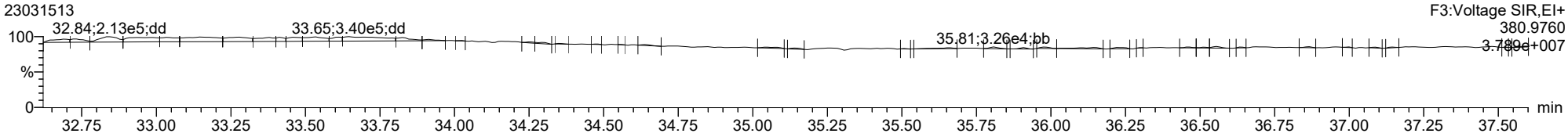

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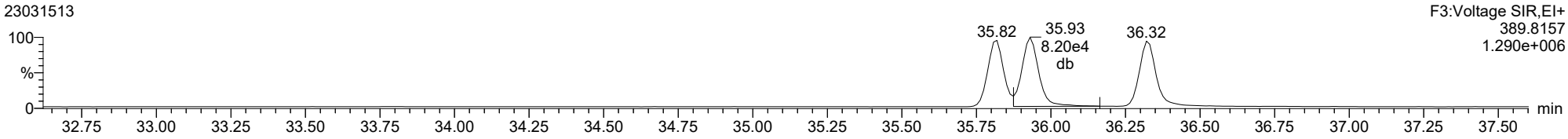

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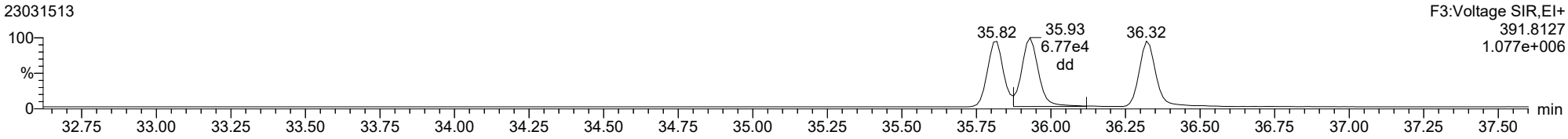

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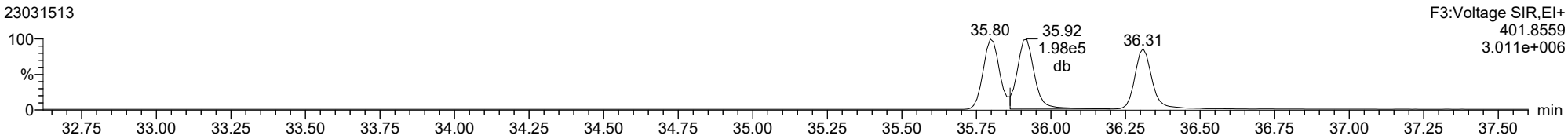

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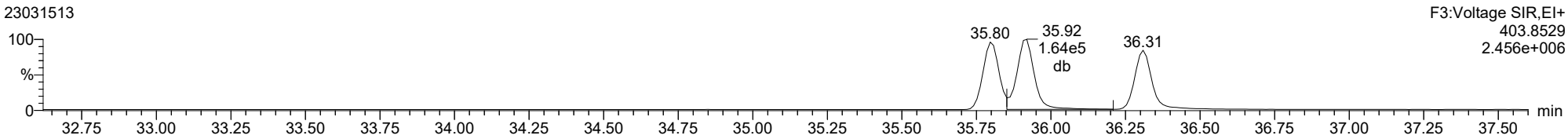

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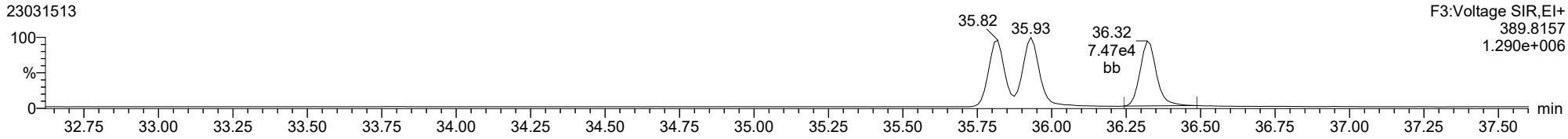

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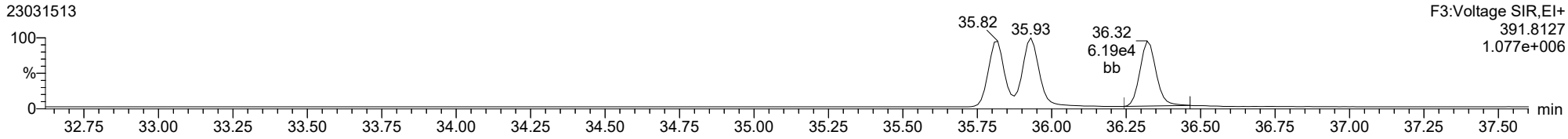

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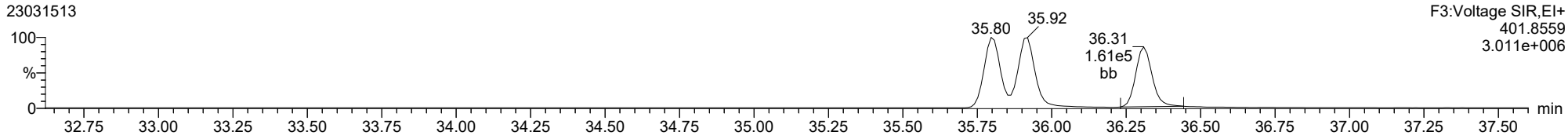

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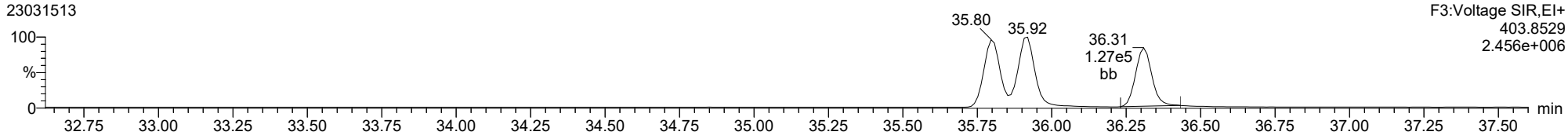

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Printed: Thursday, March 16, 2023 10:00:22 Pacific Daylight Time

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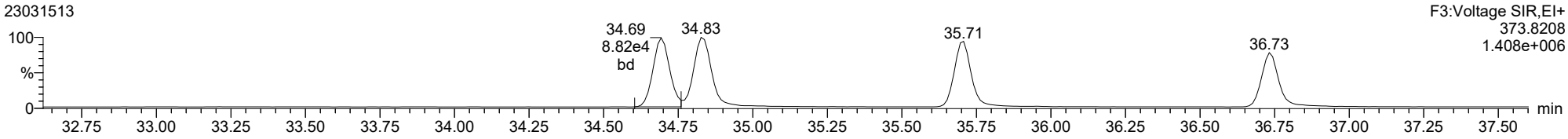

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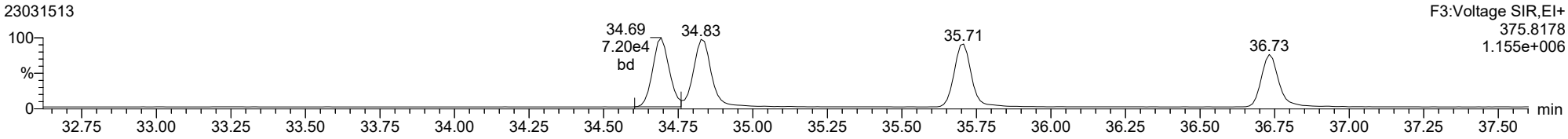

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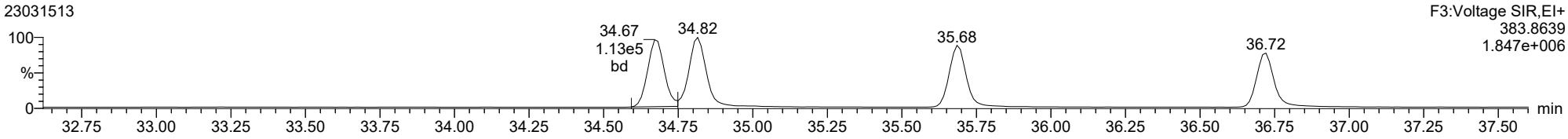

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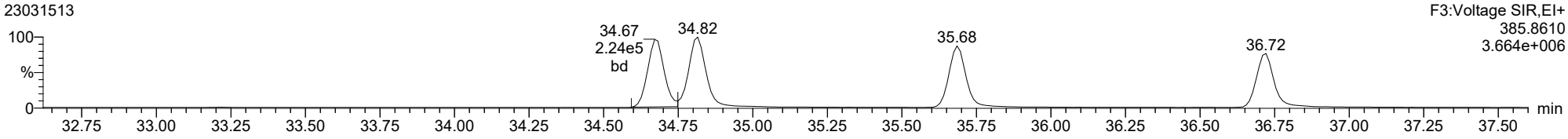
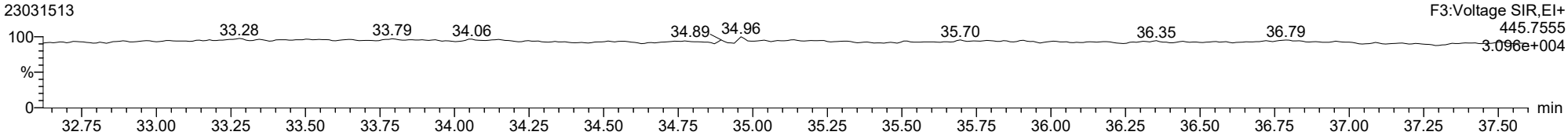


FUNCTION3 OCDPE



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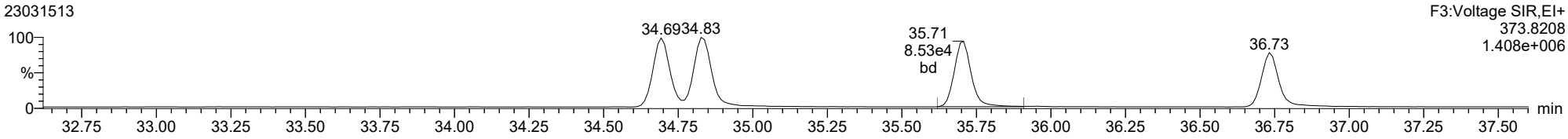

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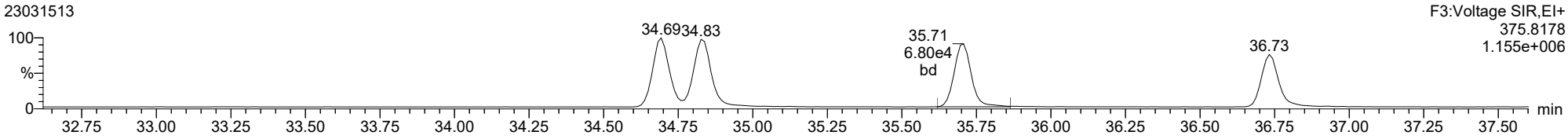

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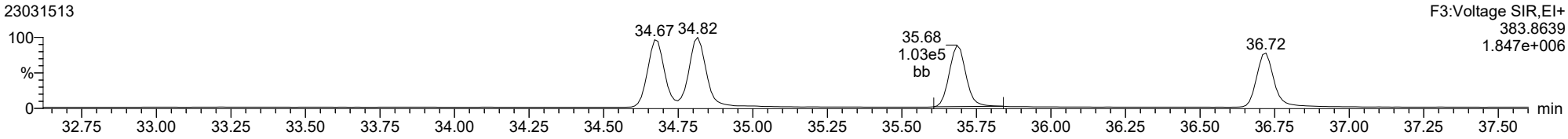

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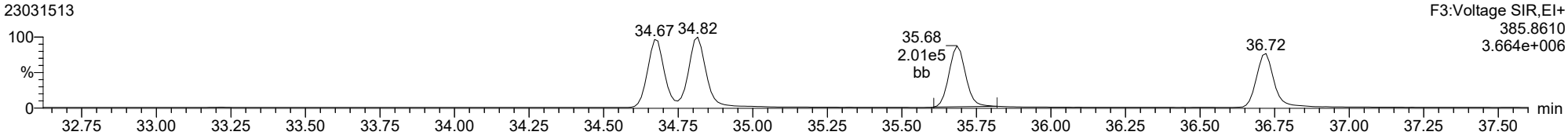

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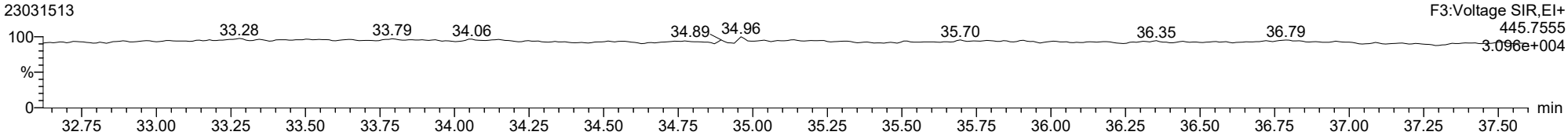

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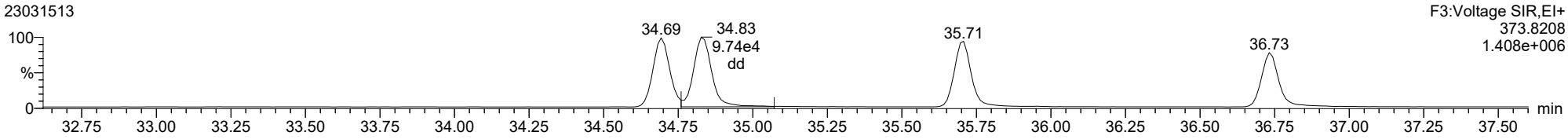

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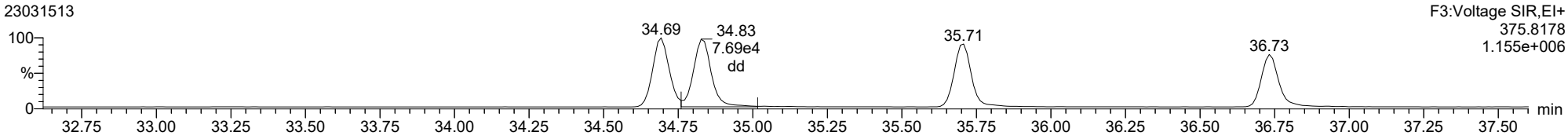

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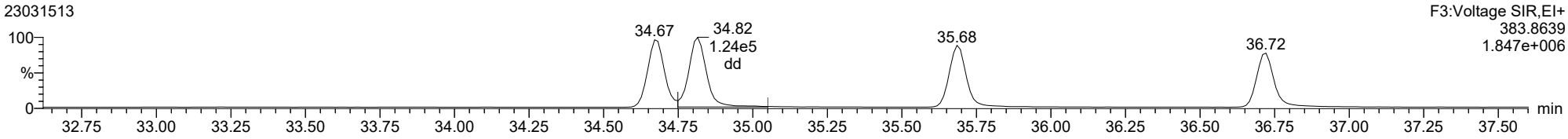

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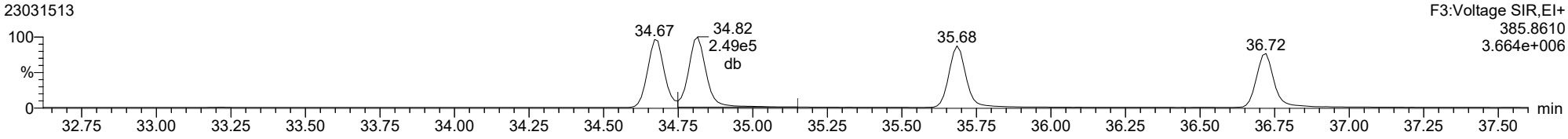

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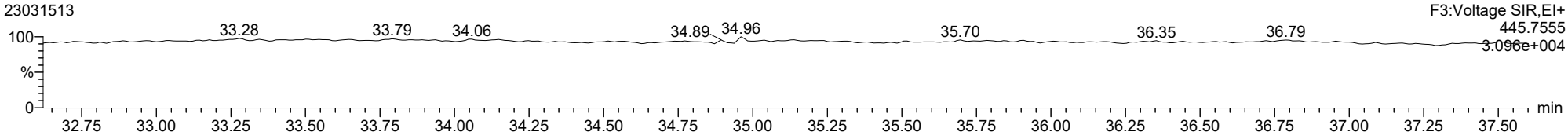

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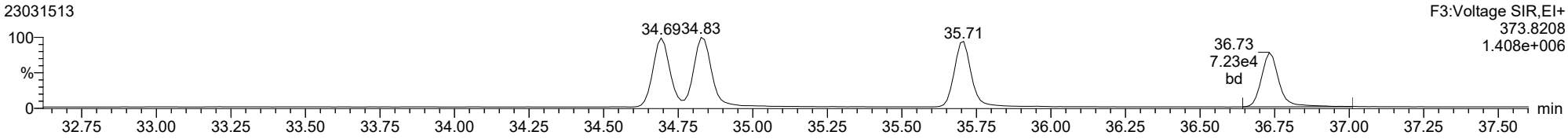

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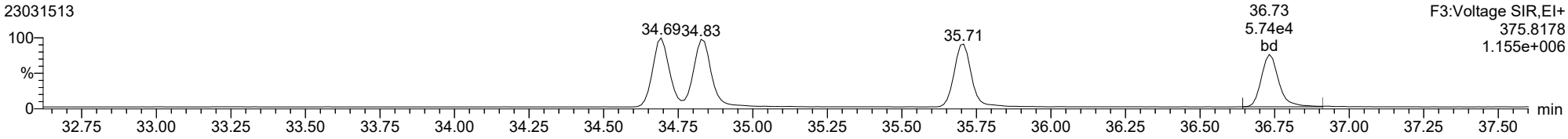

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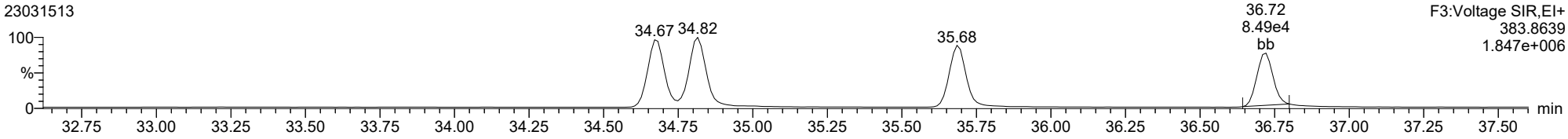

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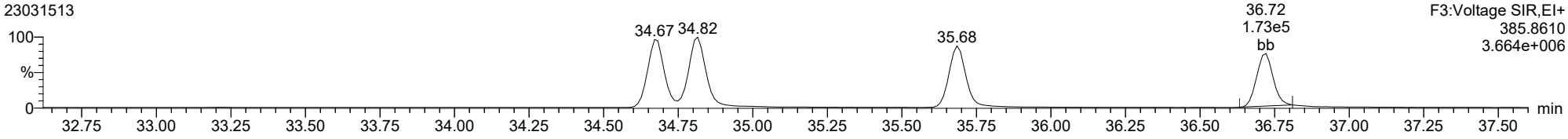

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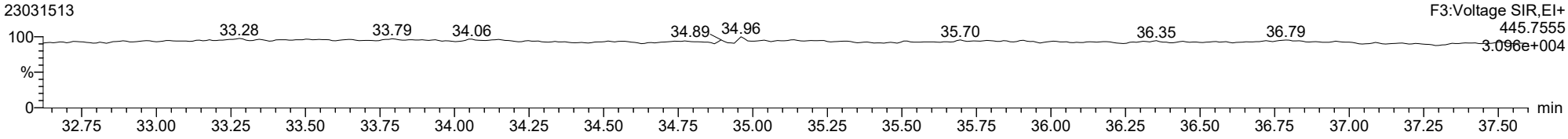

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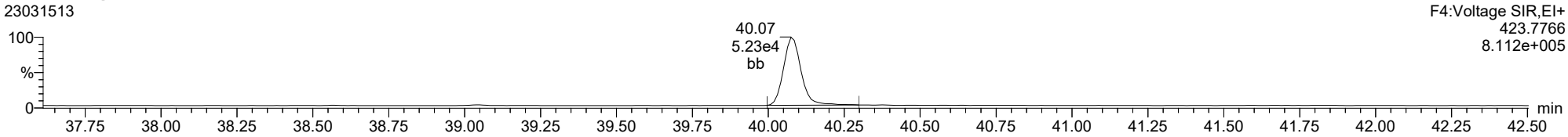

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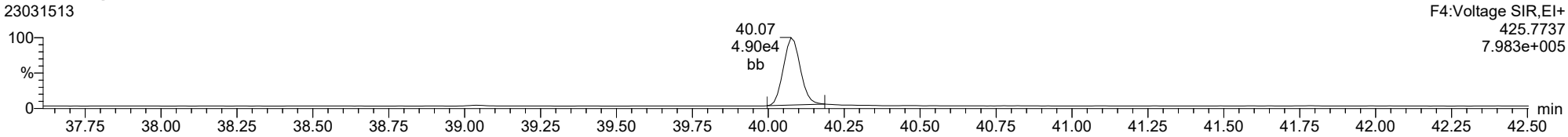

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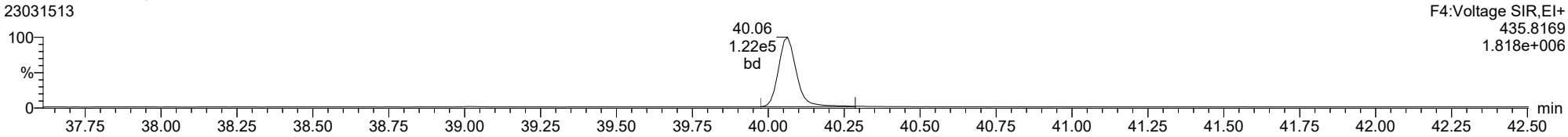

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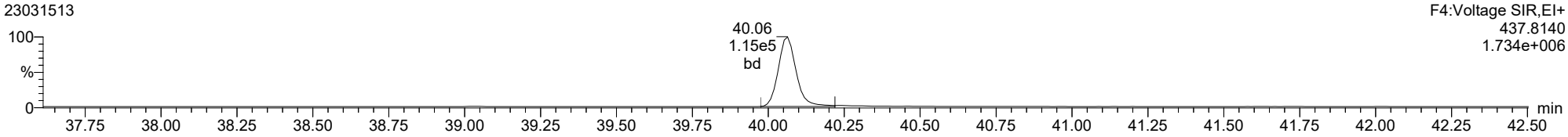

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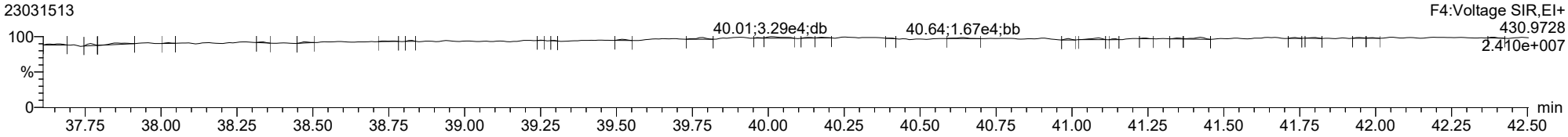

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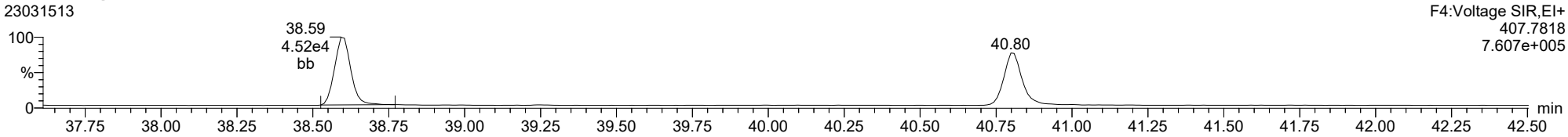

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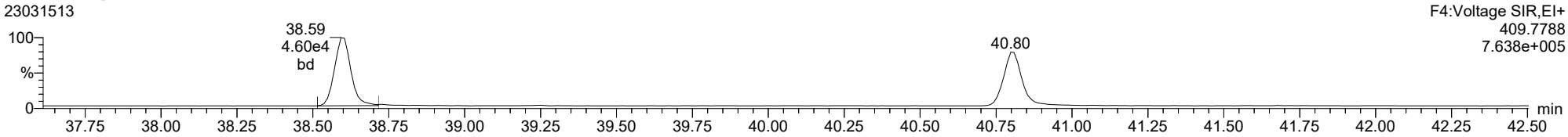

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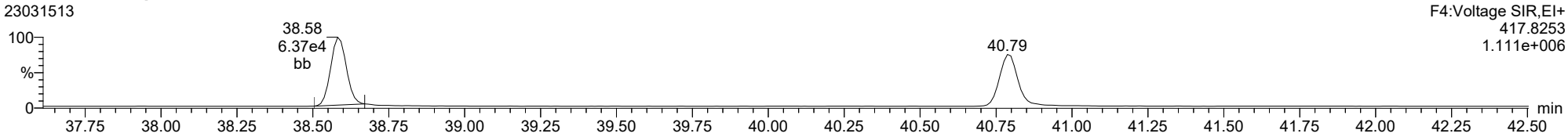

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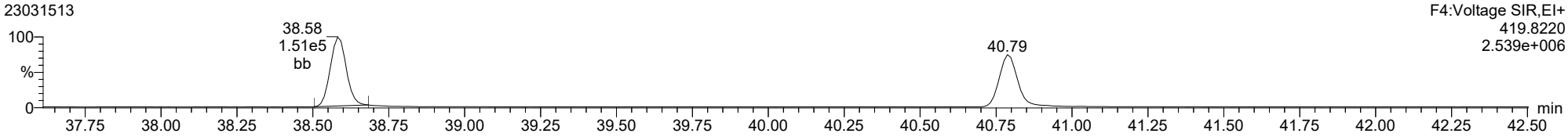

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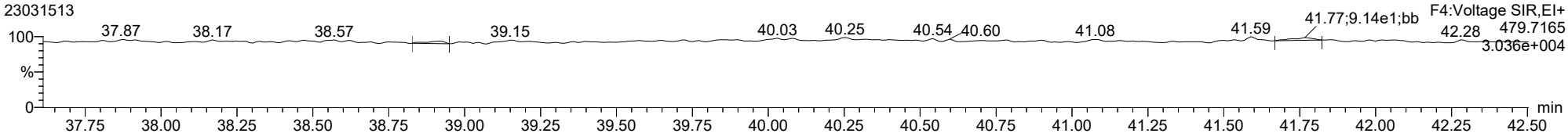

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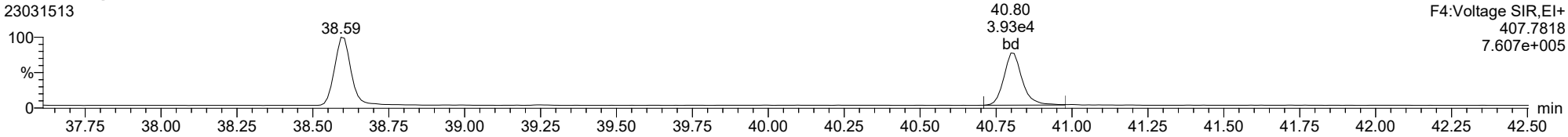

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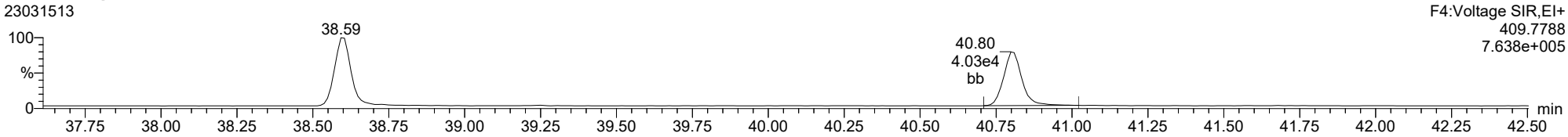

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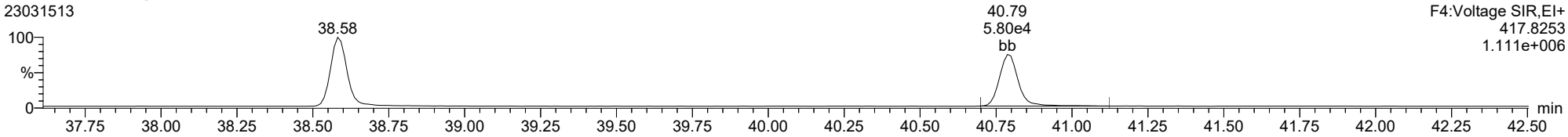

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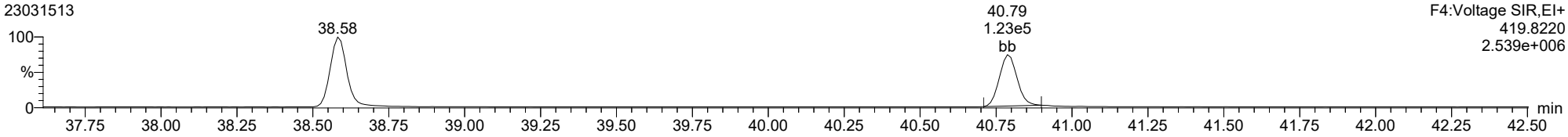

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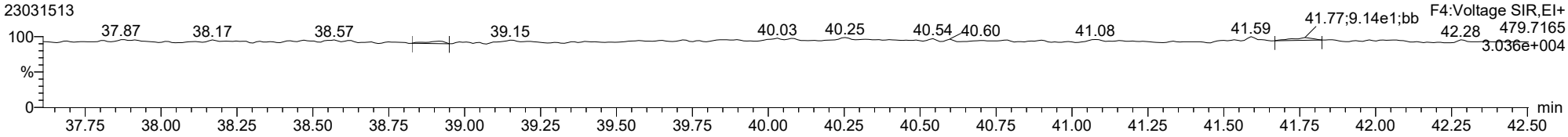

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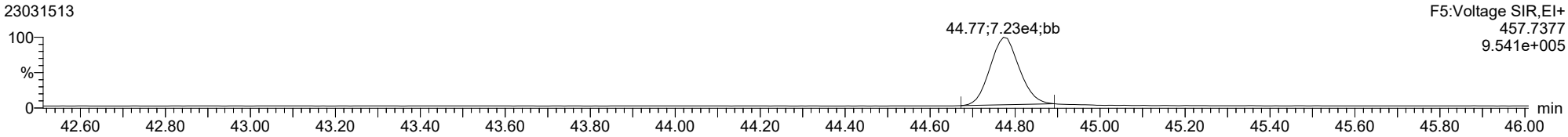

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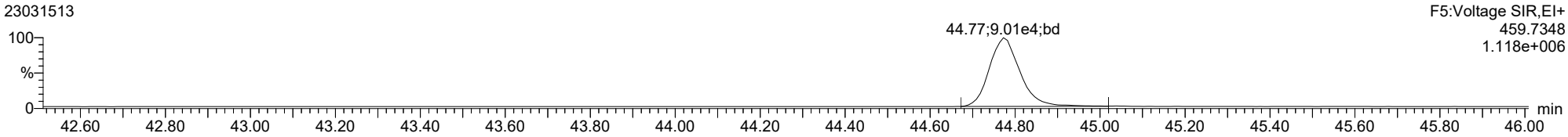

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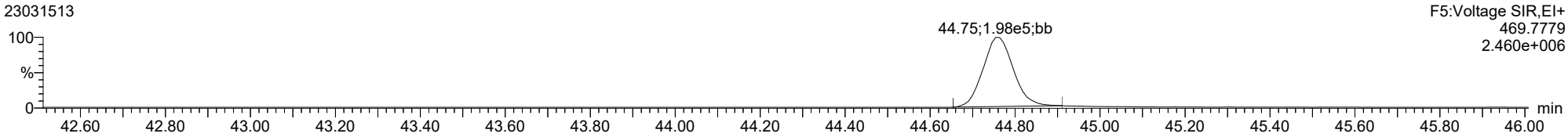

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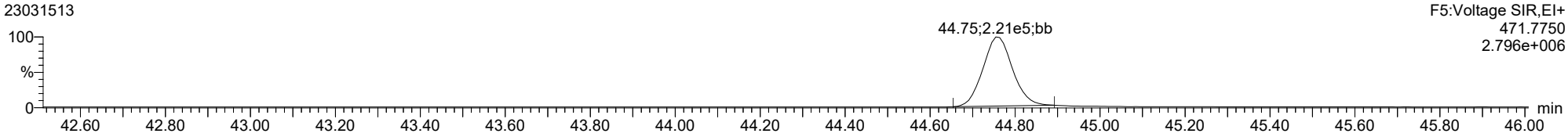

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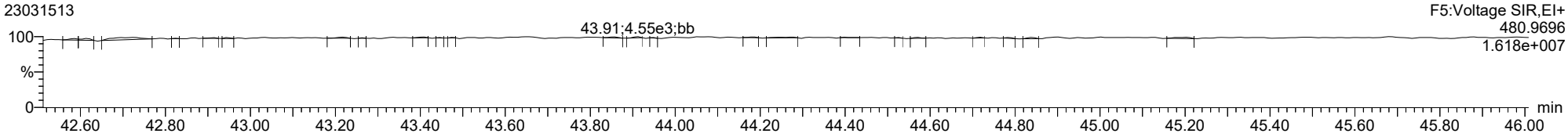

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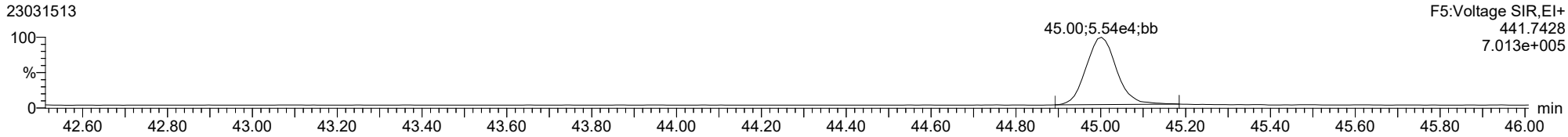

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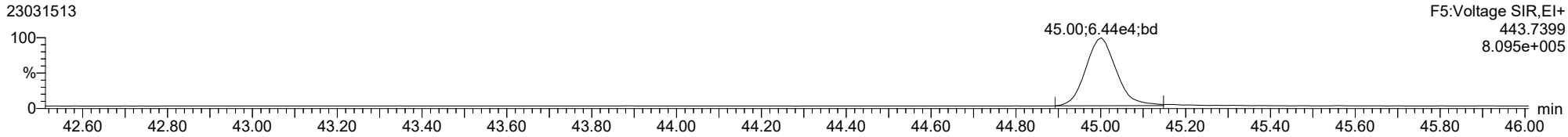

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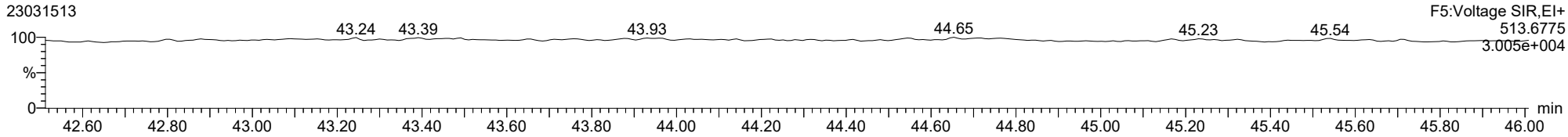

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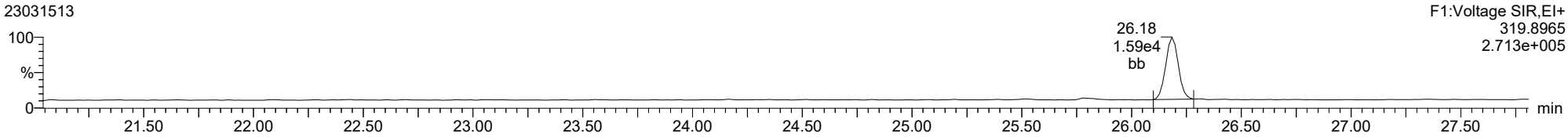

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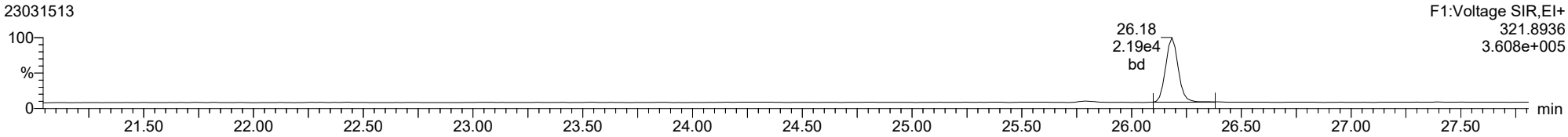

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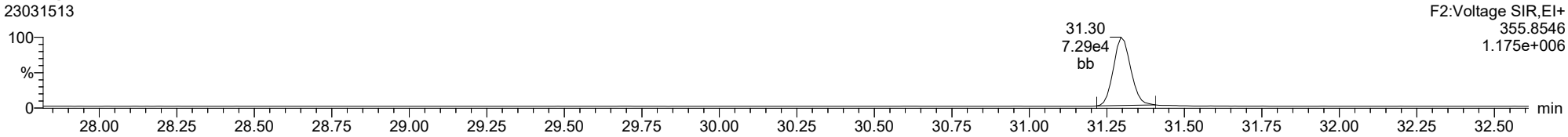

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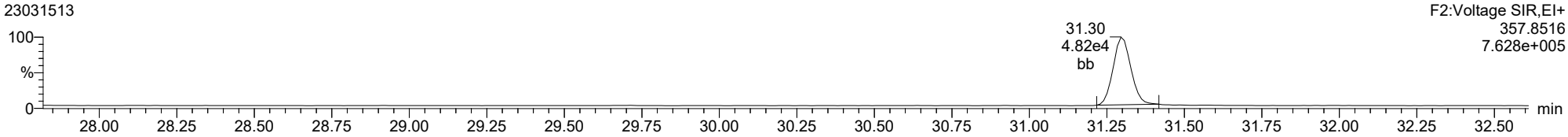

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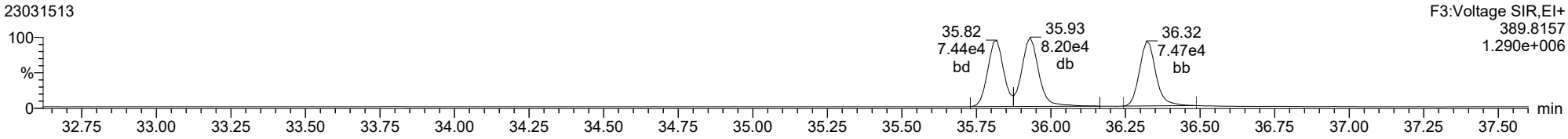

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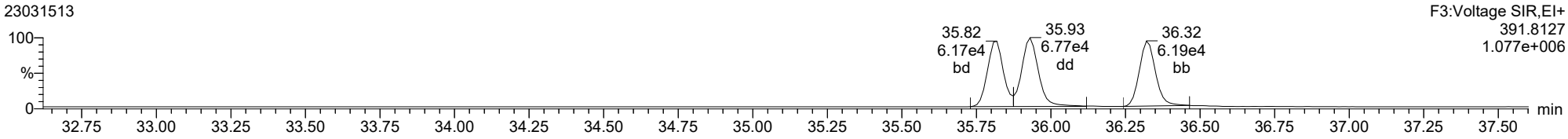

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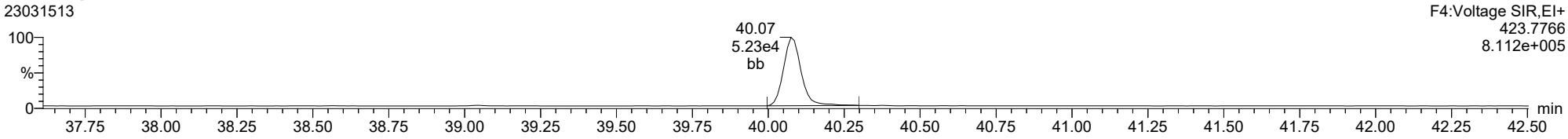

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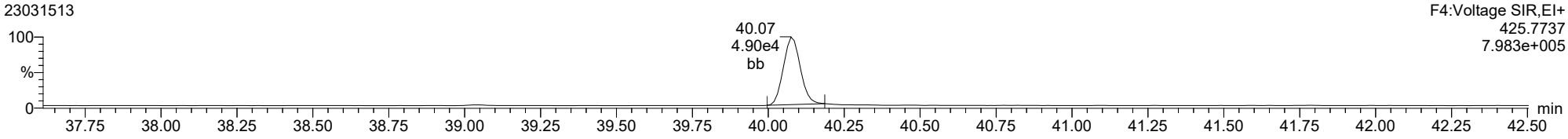

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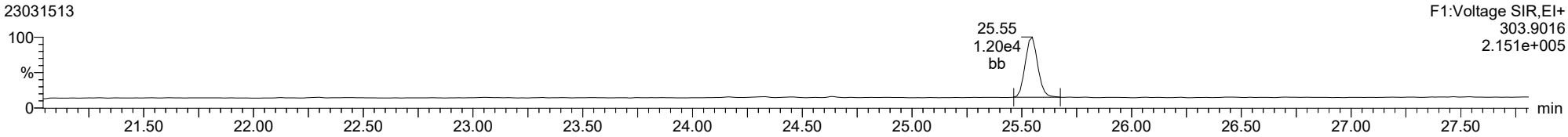
Total-tetrafurans



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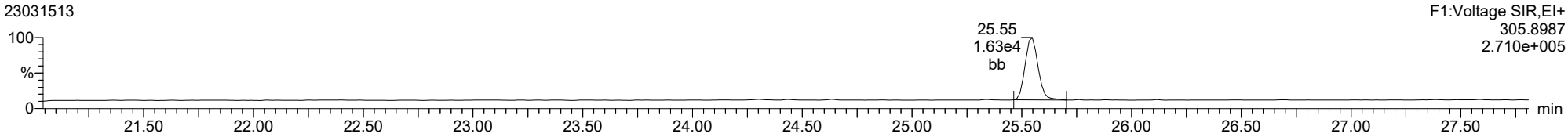

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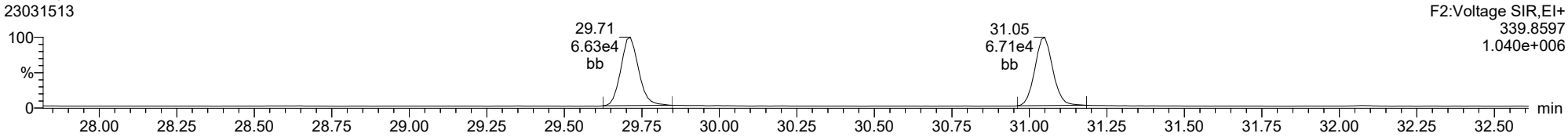

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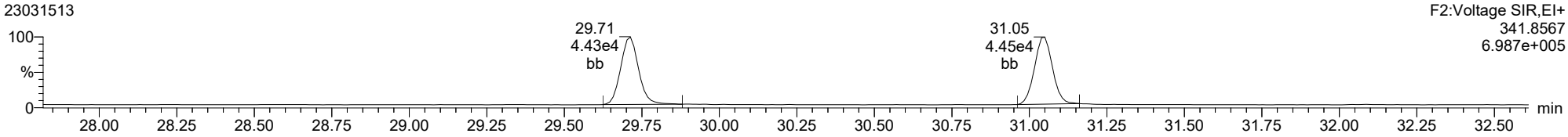

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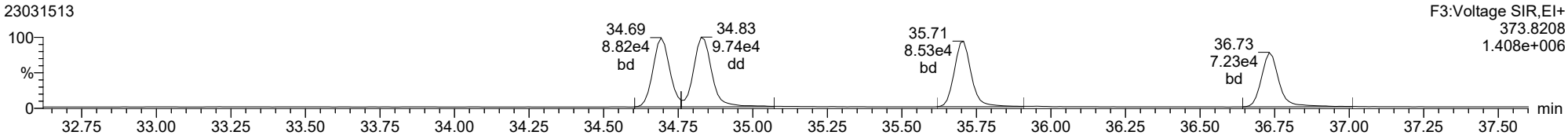
Total-hexafurans



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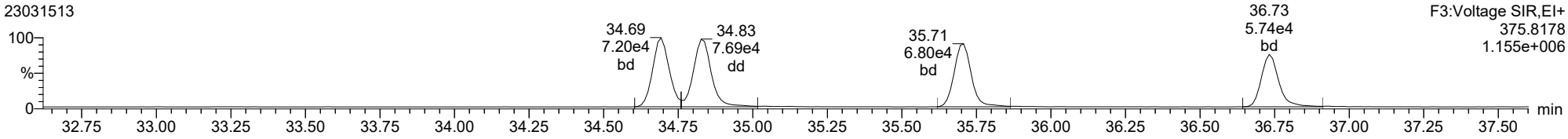
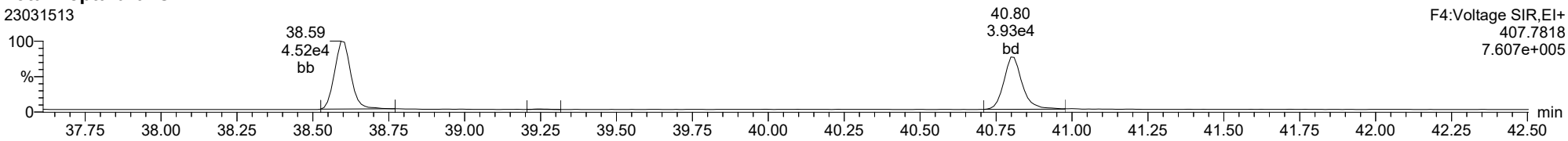
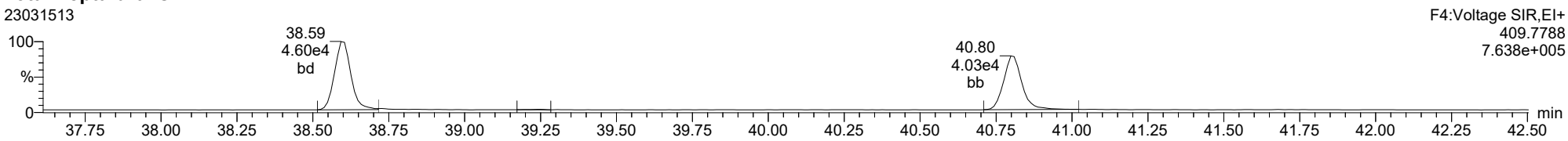


Total-heptafurans



Total-heptafurans



Analytical Resources, LLC
Analytical Chemists and Consultants

STANDARD REFERENCE MATERIAL RECOVERY

EPA 1613B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLC0136-SRM1
Batch: BLC0136
Initial/Final: 10.03 g / 20 uL
Preparation: EPA 1613
Analyzed: 03/15/2023 22:00
Standard ID: L001274
Expires: 08/05/2023
Standard Lot#: PSRM0173
Description: Puget Sound reference-SRM

ANALYTE	TRUE (ng/kg wet)	FOUND (ng/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
2,3,7,8-TCDF	1.1100	0.554	0.221	0.997	*, EMPC, J	49.9 *	50 - 150
2,3,7,8-TCDD	1.0500	0.712	0.150	0.997	EMPC, J	67.8	50 - 150
1,2,3,7,8-PeCDF	1.2300	0.768	0.319	0.997	J	62.5	50 - 150
2,3,4,7,8-PeCDF	1.0700	0.739	0.273	0.997	J	69.1	50 - 150
1,2,3,7,8-PeCDD	1.0800	1.04	0.267	0.997	EMPC	96.5	50 - 150
1,2,3,4,7,8-HxCDF	3.0200	2.15	0.279	0.997		71.1	50 - 150
1,2,3,6,7,8-HxCDF	1.0900	0.772	0.199	0.997	J	70.9	50 - 150
2,3,4,6,7,8-HxCDF	1.8300	1.71	0.169	0.997		93.4	50 - 150
1,2,3,7,8,9-HxCDF	0.51100	0.475	0.189	0.997	EMPC, J	93.0	50 - 150
1,2,3,4,7,8-HxCDD	1.5900	0.977	0.169	0.997	J	61.4	50 - 150
1,2,3,6,7,8-HxCDD	3.8800	2.66	0.179	0.997		68.5	50 - 150
1,2,3,7,8,9-HxCDD	3.0400	2.08	0.219	0.997		68.4	50 - 150
1,2,3,4,6,7,8-HpCDF	18.700	16.5	0.259	0.997		88.3	50 - 150
1,2,3,4,7,8,9-HpCDF	1.6300	1.12	0.400	0.997		68.9	50 - 150
1,2,3,4,6,7,8-HpCDD	90.600	77.5	0.558	2.49	B	85.5	50 - 150
OCDF	58.400	40.1	1.10	2.49		68.7	50 - 150
OCDD	811.00	705	4.59	9.97	B	87.0	50 - 150

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230315SRM.qld
Last Altered: Thursday, March 16, 2023 09:35:30 Pacific Daylight Time
Printed: Thursday, March 16, 2023 09:37:25 Pacific Daylight Time

Method: T:\Autospec\Methods\Dioxin230315.mdb 16 Mar 2023 08:38:23
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: BLC0136-SRM1, Name: 23031515, Date: 15-Mar-2023, Time: 22:00:09, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.562	1.001	2.895e2	5.659e2	0.702	0.512	0.770	954	761	5.02e3	8.56e3	5.3	11.2	YES	bd	dd	0.278
12378-PeCDF	29.713	1.000	5.467e2	3.779e2	0.679	1.447	1.550	861	1056	8.10e3	7.70e3	9.4	7.3	NO	bb	bb	0.385
23478-PeCDF	31.061	1.001	6.145e2	3.842e2	0.786	1.600	1.550	861	1056	6.83e3	5.77e3	7.9	5.5	NO	db	dd	0.371
123478-HxCDF	34.704	1.000	2.736e3	2.002e3	1.166	1.367	1.240	587	615	4.33e4	3.06e4	73.7	49.7	NO	dd	bd	1.076
234678-HxCDF	35.729	1.001	2.169e3	1.567e3	1.140	1.384	1.240	587	615	2.31e4	1.86e4	39.4	30.2	NO	bb	bb	0.857
123678-HxCDF	34.849	1.001	1.027e3	7.914e2	1.091	1.298	1.240	587	615	1.49e4	1.33e4	25.4	21.6	NO	db	db	0.387
123789-HxCDF	36.699	0.999	5.826e2	3.833e2	1.137	1.520	1.240	587	615	6.21e3	4.72e3	10.6	7.7	YES	bb	bb	0.238
1234678-HpCDF	38.615	1.000	9.235e3	8.721e3	1.003	1.059	1.050	1069	566	1.52e5	1.51e5	142.7	267.0	NO	bb	bd	8.281
1234789-HpCDF	40.832	1.001	5.222e2	4.447e2	0.953	1.174	1.050	1069	566	8.19e3	7.13e3	7.7	12.6	NO	bb	bb	0.563
OCDF	45.020	1.005	1.457e4	1.610e4	0.778	0.905	0.890	814	571	1.68e5	2.10e5	206.4	368.2	NO	bb	bb	20.125
2378-TCDD	26.198	1.001	5.593e2	9.637e2	1.149	0.580	0.770	843	683	9.55e3	1.49e4	11.3	21.8	YES	bd	bb	0.357
12378-PeCDD	31.306	1.000	8.331e2	6.562e2	1.022	1.270	1.550	891	996	1.27e4	8.67e3	14.2	8.7	YES	bb	bb	0.522
123478-HxCDD	35.841	1.000	1.084e3	9.574e2	0.996	1.132	1.240	939	725	2.07e4	1.65e4	22.1	22.8	NO	bd	bd	0.490
123678-HxCDD	35.952	1.000	3.214e3	2.695e3	1.001	1.193	1.240	939	725	4.94e4	4.48e4	52.7	61.8	NO	dd	dd	1.333
123789-HxCDD	36.342	1.011	2.100e3	1.977e3	0.907	1.062	1.240	939	725	3.25e4	3.32e4	34.6	45.7	NO	bb	bb	1.044
1234678-HpCDD	40.097	1.001	4.829e4	4.864e4	1.039	0.993	1.050	878	1175	7.50e5	7.32e5	854.6	623.6	NO	bb	bb	38.860
OCDD	44.800	1.000	2.845e5	3.534e5	0.920	0.805	0.890	1454	780	3.51e6	4.13e6	2411.9	5299.5	NO	bb	bd	353.780
13C-2378-TCDF	25.534	1.007	1.877e5	2.515e5	1.620	0.746	0.770	1571	1218	2.83e6	3.77e6	1799.5	3093.5	NO	bb	bb	95.737
13C-12378-PeCDF	29.702	1.171	2.125e5	1.408e5	1.240	1.509	1.550	1317	1711	3.18e6	2.12e6	2417.3	1238.8	NO	bb	bb	100.576
13C-23478-PeCDF	31.039	1.224	2.069e5	1.359e5	1.118	1.523	1.550	1317	1711	3.22e6	2.13e6	2445.8	1245.9	NO	bb	bb	108.325
13C-123478-HxCDF	34.693	0.955	1.257e5	2.517e5	1.168	0.500	0.510	714	1019	1.98e6	3.93e6	2774.5	3862.4	NO	bd	bd	87.287
13C-123678-HxCDF	34.827	0.959	1.444e5	2.861e5	1.386	0.505	0.510	714	1019	2.09e6	4.16e6	2923.6	4088.8	NO	dd	dd	83.879
13C-234678-HxCDF	35.707	0.983	1.275e5	2.551e5	1.129	0.500	0.510	714	1019	2.02e6	4.02e6	2828.7	3942.3	NO	bb	bb	91.524
13C-123789-HxCDF	36.732	1.011	1.190e5	2.373e5	0.932	0.501	0.510	714	1019	1.91e6	3.88e6	2674.2	3809.8	NO	bb	bb	103.305
13C-1234678-HpCDF	38.604	1.063	6.491e4	1.513e5	0.895	0.429	0.440	761	1087	1.13e6	2.60e6	1482.0	2389.2	NO	bb	bb	65.241
13C-1234789-HpCDF	40.810	1.123	5.546e4	1.247e5	0.770	0.445	0.440	761	1087	7.89e5	1.83e6	1035.8	1685.6	NO	bd	bb	63.241
13C-1234-TCDD	25.365	0.000	1.211e5	1.620e5	1.000	0.748	0.770	1646	998	1.89e6	2.49e6	1148.9	2493.0	NO	bb	bb	100.000
13C-2378-TCDD	26.170	1.032	1.619e5	2.093e5	1.152	0.774	0.770	1646	998	2.43e6	3.11e6	1478.2	3117.4	NO	bb	bb	113.750
13C-12378-PeCDD	31.295	1.234	1.713e5	1.077e5	0.829	1.592	1.550	629	716	2.54e6	1.62e6	4041.5	2265.8	NO	bb	bb	118.880
13C-123478-HxCDD	35.830	0.986	2.309e5	1.876e5	0.995	1.231	1.240	820	873	3.61e6	2.97e6	4401.4	3398.3	NO	bd	bd	113.623
13C-123678-HxCDD	35.941	0.989	2.459e5	1.970e5	1.157	1.249	1.240	820	873	3.72e6	2.97e6	4536.6	3397.3	NO	db	db	103.440
13C-1234678-HpCDD	40.074	1.103	1.258e5	1.142e5	0.840	1.102	1.050	856	687	1.90e6	1.77e6	2220.5	2570.1	NO	bd	bb	77.196
13C-OCDD	44.782	1.233	1.841e5	2.078e5	0.767	0.886	0.890	1069	703	2.30e6	2.61e6	2155.6	3717.0	NO	bb	bb	137.974
13C-123789-HxCDD	36.331	0.000	2.071e5	1.630e5	1.000	1.270	1.240	820	873	3.34e6	2.66e6	4067.4	3052.3	NO	bb	bb	100.000
37CL-2378-TCDD	26.198	1.033	1.289e5		1.288			873		1.98e6		2264.7			bb		35.339

Dataset: T:\Autospec\Processed Data Batch\230315SRM.qld
Last Altered: Thursday, March 16, 2023 09:35:30 Pacific Daylight Time
Printed: Thursday, March 16, 2023 09:37:25 Pacific Daylight Time

ID: BLC0136-SRM1, Name: 23031515, Date: 15-Mar-2023, Time: 22:00:09, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.087	0.865	1.199e2	2.502e2	0.802	0.479	0.770	954	761	1.91e3	3.99e3	2.0	5.2	YES	bb	bb	0.105
1289-TCDF					0.678		0.770	954	761								
13468-PECDF	26.862	0.904	3.675e2	4.029e2	1.246	0.912	1.550	845	605	5.54e3	4.97e3	6.6	8.2	YES	bd	bd	0.175
12389-PECDF					0.496		1.550	861	1056								
123468-HXCDF	33.033	0.952	2.730e3	2.165e3	1.169	1.261	1.240	587	615	4.23e4	3.37e4	72.0	54.7	NO	bd	bd	1.109
1368-TCDD	23.316	0.891	5.558e2	7.946e2	1.015	0.699	0.770	843	683	9.79e3	1.24e4	11.6	18.2	NO	bb	bb	0.358
1289-TCDD					0.909		0.770	843	683								
12479-PECDD	28.632	0.915	7.062e2	2.711e2	2.301	2.605	1.550	891	996	1.18e4	6.19e3	13.3	6.2	YES	db	db	0.152
12389-PECDD					1.184		1.550	891	996								
124679-HXCDD	33.813	0.944	8.756e3	6.924e3	1.115	1.265	1.240	939	725	1.33e5	1.05e5	141.8	144.8	NO	bd	bb	3.359
1234679-HPCDD	39.049	0.974	7.459e4	7.593e4	1.137	0.982	1.050	878	1175	1.21e6	1.25e6	1376.6	1060.4	NO	bb	bb	55.150
Total-tetrafurans			2.763e3		0.727			954		4.07e4							2.109
Total-penta1			6.598e3					845		8.98e4							3.316
Total-pentafurans			2.045e3		0.654			861		2.86e4							1.392
Total-hexafurans			2.805e4		1.141			587		4.06e5							11.571
Total-heptafurans			2.838e4		0.978			1069		4.54e5							28.468
Total-Furans			8.241e4		0.922			954		1.19e6							66.981
Total-tetradioxins			1.507e3		1.024			843		2.57e4							0.939
Total-pentadioxins			4.501e2		1.502			891		7.87e3							0.172
Total-hexadioxins			2.765e4		1.005			939		3.79e5							11.628
Total-heptadioxins			1.229e5		1.088			878		1.96e6							94.010
Total-Dioxins			4.369e5		1.130			843		5.88e6							460.528
Total-TEQ			5.194e5					843		7.06e6							527.510
FUNCTION1 PFK			1.096e7					588394		3.79e6							
FUNCTION2 PFK			0.000e0					182146		0.00e0							
FUNCTION3 PFK			1.560e6					481702		3.45e7							0.000
FUNCTION4 PFK			1.187e6					248935		3.56e6							
FUNCTION5 PFK			2.599e5					157948		9.07e6							
FUNCTION1 HXCD...			1.216e3					548		1.69e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			2.254e2					498		3.74e3							0.000
FUNCTION3 OCDPE			7.311e1					499		1.13e3							0.000
FUNCTION4 NCDPE			6.993e3					628		1.23e5							0.000
FUNCTION5 DCDPE			0.000e0					435		0.00e0							

Method: T:\Autospec\Methods\Dioxin230315.mdb 16 Mar 2023 08:38:23
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: BLC0136-SRM1, Name: 23031515, Date: 15-Mar-2023, Time: 22:00:09, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	23.80	5.285e2	7.534e2	0.727	0.70	0.77	8.1	YES	NO	dd	bd	0.401
2	Total-tetrafurans	23.64	3.505e2	5.288e2	0.727	0.66	0.77	6.8	YES	NO	dd	db	0.275
3	Total-tetrafurans	22.88	6.752e2	9.845e2	0.727	0.69	0.77	8.8	YES	NO	bd	bd	0.520
4	Total-tetrafurans	24.64	7.039e2	9.821e2	0.727	0.72	0.77	10.0	YES	NO	bd	bd	0.528
5	Total-tetrafurans	24.45	5.046e2	7.239e2	0.727	0.70	0.77	8.9	YES	NO	db	db	0.385

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-penta1	26.99	6.598e3	4.142e3		1.59	1.55	106.2	YES	NO	db	db	3.316

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentafurans	28.25	4.970e2	2.873e2	0.654	1.73	1.55	9.7	YES	NO	db	db	0.345
2	23478-PeCDF	31.06	6.145e2	3.842e2	0.786	1.60	1.55	7.9	YES	NO	db	dd	0.371
3	Total-pentafurans	30.91	3.865e2	2.781e2	0.654	1.39	1.55	6.2	YES	NO	dd	dd	0.292
4	12378-PeCDF	29.71	5.467e2	3.779e2	0.679	1.45	1.55	9.4	YES	NO	bb	bb	0.385

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-hexafurans	33.24	8.615e3	7.387e3	1.141	1.17	1.24	205.5	YES	NO	dd	db	3.628
2	123468-HXCDF	33.03	2.730e3	2.165e3	1.169	1.26	1.24	72.0	YES	NO	bd	bd	1.109
3	234678-HxCDF	35.73	2.169e3	1.567e3	1.140	1.38	1.24	39.4	YES	NO	bb	bb	0.857
4	123678-HxCDF	34.85	1.027e3	7.914e2	1.091	1.30	1.24	25.4	YES	NO	db	db	0.387
5	123478-HxCDF	34.70	2.736e3	2.002e3	1.166	1.37	1.24	73.7	YES	NO	dd	bd	1.076
6	Total-hexafurans	34.08	1.077e4	9.130e3	1.141	1.18	1.24	275.5	YES	NO	bb	bb	4.513

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	40.83	5.222e2	4.447e2	0.953	1.17	1.05	7.7	YES	NO	bb	bb	0.563
2	Total-heptafurans	39.26	1.862e4	1.942e4	0.978	0.96	1.05	274.2	YES	NO	bb	bb	19.624
3	1234678-HpCDF	38.61	9.235e3	8.721e3	1.003	1.06	1.05	142.7	YES	NO	bb	bd	8.281

ID: BLC0136-SRM1, Name: 23031515, Date: 15-Mar-2023, Time: 22:00:09, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	23.80	5.285e2	7.534e2	0.727	0.70	0.77	8.1	YES	NO	dd	bd	0.401
2	Total-tetrafurans	23.64	3.505e2	5.288e2	0.727	0.66	0.77	6.8	YES	NO	dd	db	0.275
3	Total-tetrafurans	22.88	6.752e2	9.845e2	0.727	0.69	0.77	8.8	YES	NO	bd	bd	0.520
4	Total-tetrafurans	24.64	7.039e2	9.821e2	0.727	0.72	0.77	10.0	YES	NO	bd	bd	0.528
5	Total-tetrafurans	24.45	5.046e2	7.239e2	0.727	0.70	0.77	8.9	YES	NO	db	db	0.385
6	Total-pentafurans	28.25	4.970e2	2.873e2	0.654	1.73	1.55	9.7	YES	NO	db	db	0.345
7	23478-PeCDF	31.06	6.145e2	3.842e2	0.786	1.60	1.55	7.9	YES	NO	db	dd	0.371
8	Total-pentafurans	30.91	3.865e2	2.781e2	0.654	1.39	1.55	6.2	YES	NO	dd	dd	0.292
9	12378-PeCDF	29.71	5.467e2	3.779e2	0.679	1.45	1.55	9.4	YES	NO	bb	bb	0.385
10	Total-hexafurans	33.24	8.615e3	7.387e3	1.141	1.17	1.24	205.5	YES	NO	dd	db	3.628
11	123468-HXCDF	33.03	2.730e3	2.165e3	1.169	1.26	1.24	72.0	YES	NO	bd	bd	1.109
12	234678-HxCDF	35.73	2.169e3	1.567e3	1.140	1.38	1.24	39.4	YES	NO	bb	bb	0.857
13	123678-HxCDF	34.85	1.027e3	7.914e2	1.091	1.30	1.24	25.4	YES	NO	db	db	0.387
14	123478-HxCDF	34.70	2.736e3	2.002e3	1.166	1.37	1.24	73.7	YES	NO	dd	bd	1.076
15	Total-hexafurans	34.08	1.077e4	9.130e3	1.141	1.18	1.24	275.5	YES	NO	bb	bb	4.513
16	1234789-HpCDF	40.83	5.222e2	4.447e2	0.953	1.17	1.05	7.7	YES	NO	bb	bb	0.563
17	Total-heptafurans	39.26	1.862e4	1.942e4	0.978	0.96	1.05	274.2	YES	NO	bb	bb	19.624
18	1234678-HpCDF	38.61	9.235e3	8.721e3	1.003	1.06	1.05	142.7	YES	NO	bb	bd	8.281
19	OCDF	45.02	1.457e4	1.610e4	0.778	0.90	0.89	206.4	YES	NO	bb	bb	20.125
20	Total-penta1	26.99	6.598e3	4.142e3		1.59	1.55	106.2	YES	NO	db	db	3.316

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	25.38	6.267e2	8.151e2	1.024	0.77	0.77	12.2	YES	NO	bb	bb	0.379
2	Total-tetradioxins	23.60	3.241e2	4.424e2	1.024	0.73	0.77	6.7	YES	NO	bb	bb	0.202
3	1368-TCDD	23.32	5.558e2	7.946e2	1.015	0.70	0.77	11.6	YES	NO	bb	bb	0.358

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentadioxins	29.10	4.501e2	2.689e2	1.502	1.67	1.55	8.8	YES	NO	bb	bb	0.172

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HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-hexadioxins	35.04	1.027e3	9.280e2	1.005	1.11	1.24	17.9	YES	NO	db	db	0.452
2	Total-hexadioxins	34.95	9.492e3	8.485e3	1.005	1.12	1.24	102.2	YES	NO	bd	bd	4.154
3	Total-hexadioxins	34.58	1.972e3	1.475e3	1.005	1.34	1.24	32.8	YES	NO	bb	bb	0.796
4	124679-HXCDD	33.81	8.756e3	6.924e3	1.115	1.26	1.24	141.8	YES	NO	bd	bb	3.359
5	123789-HxCDD	36.34	2.100e3	1.977e3	0.907	1.06	1.24	34.6	YES	NO	bb	bb	1.044
6	123678-HxCDD	35.95	3.214e3	2.695e3	1.001	1.19	1.24	52.7	YES	NO	dd	dd	1.333
7	123478-HxCDD	35.84	1.084e3	9.574e2	0.996	1.13	1.24	22.1	YES	NO	bd	bd	0.490

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.10	4.829e4	4.864e4	1.039	0.99	1.05	854.6	YES	NO	bb	bb	38.860
2	1234679-HPCDD	39.05	7.459e4	7.593e4	1.137	0.98	1.05	1376.6	YES	NO	bb	bb	55.150

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	25.38	6.267e2	8.151e2	1.024	0.77	0.77	12.2	YES	NO	bb	bb	0.379
2	Total-tetradioxins	23.60	3.241e2	4.424e2	1.024	0.73	0.77	6.7	YES	NO	bb	bb	0.202
3	1368-TCDD	23.32	5.558e2	7.946e2	1.015	0.70	0.77	11.6	YES	NO	bb	bb	0.358
4	Total-pentadioxins	29.10	4.501e2	2.689e2	1.502	1.67	1.55	8.8	YES	NO	bb	bb	0.172
5	Total-hexadioxins	35.04	1.027e3	9.280e2	1.005	1.11	1.24	17.9	YES	NO	db	db	0.452
6	Total-hexadioxins	34.95	9.492e3	8.485e3	1.005	1.12	1.24	102.2	YES	NO	bd	bd	4.154
7	Total-hexadioxins	34.58	1.972e3	1.475e3	1.005	1.34	1.24	32.8	YES	NO	bb	bb	0.796
8	124679-HXCDD	33.81	8.756e3	6.924e3	1.115	1.26	1.24	141.8	YES	NO	bd	bb	3.359
9	123789-HxCDD	36.34	2.100e3	1.977e3	0.907	1.06	1.24	34.6	YES	NO	bb	bb	1.044
10	123678-HxCDD	35.95	3.214e3	2.695e3	1.001	1.19	1.24	52.7	YES	NO	dd	dd	1.333
11	123478-HxCDD	35.84	1.084e3	9.574e2	0.996	1.13	1.24	22.1	YES	NO	bd	bd	0.490
12	1234678-HpCDD	40.10	4.829e4	4.864e4	1.039	0.99	1.05	854.6	YES	NO	bb	bb	38.860
13	1234679-HPCDD	39.05	7.459e4	7.593e4	1.137	0.98	1.05	1376.6	YES	NO	bb	bb	55.150
14	OCDD	44.80	2.845e5	3.534e5	0.920	0.80	0.89	2411.9	YES	NO	bb	bd	353.780

Dataset: T:\Autospec\Processed Data Batch\230315SRM.qld
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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	23.80	5.285e2	7.534e2	0.727	0.70	0.77	8.1	YES	NO	dd	bd	0.401
2	Total-tetrafurans	23.64	3.505e2	5.288e2	0.727	0.66	0.77	6.8	YES	NO	dd	db	0.275
3	Total-tetrafurans	22.88	6.752e2	9.845e2	0.727	0.69	0.77	8.8	YES	NO	bd	bd	0.520
4	Total-tetrafurans	24.64	7.039e2	9.821e2	0.727	0.72	0.77	10.0	YES	NO	bd	bd	0.528
5	Total-tetrafurans	24.45	5.046e2	7.239e2	0.727	0.70	0.77	8.9	YES	NO	db	db	0.385
6	Total-pentafurans	28.25	4.970e2	2.873e2	0.654	1.73	1.55	9.7	YES	NO	db	db	0.345
7	23478-PeCDF	31.06	6.145e2	3.842e2	0.786	1.60	1.55	7.9	YES	NO	db	dd	0.371
8	Total-pentafurans	30.91	3.865e2	2.781e2	0.654	1.39	1.55	6.2	YES	NO	dd	dd	0.292
9	12378-PeCDF	29.71	5.467e2	3.779e2	0.679	1.45	1.55	9.4	YES	NO	bb	bb	0.385
10	Total-hexafurans	33.24	8.615e3	7.387e3	1.141	1.17	1.24	205.5	YES	NO	dd	db	3.628
11	123468-HXCDF	33.03	2.730e3	2.165e3	1.169	1.26	1.24	72.0	YES	NO	bd	bd	1.109
12	234678-HxCDF	35.73	2.169e3	1.567e3	1.140	1.38	1.24	39.4	YES	NO	bb	bb	0.857
13	123678-HxCDF	34.85	1.027e3	7.914e2	1.091	1.30	1.24	25.4	YES	NO	db	db	0.387
14	123478-HxCDF	34.70	2.736e3	2.002e3	1.166	1.37	1.24	73.7	YES	NO	dd	bd	1.076
15	Total-hexafurans	34.08	1.077e4	9.130e3	1.141	1.18	1.24	275.5	YES	NO	bb	bb	4.513
16	1234789-HpCDF	40.83	5.222e2	4.447e2	0.953	1.17	1.05	7.7	YES	NO	bb	bb	0.563
17	Total-heptafurans	39.26	1.862e4	1.942e4	0.978	0.96	1.05	274.2	YES	NO	bb	bb	19.624
18	1234678-HpCDF	38.61	9.235e3	8.721e3	1.003	1.06	1.05	142.7	YES	NO	bb	bd	8.281
19	OCDF	45.02	1.457e4	1.610e4	0.778	0.90	0.89	206.4	YES	NO	bb	bb	20.125
20	Total-penta1	26.99	6.598e3	4.142e3		1.59	1.55	106.2	YES	NO	db	db	3.316
21	Total-tetradioxins	25.38	6.267e2	8.151e2	1.024	0.77	0.77	12.2	YES	NO	bb	bb	0.379
22	Total-tetradioxins	23.60	3.241e2	4.424e2	1.024	0.73	0.77	6.7	YES	NO	bb	bb	0.202
23	1368-TCDD	23.32	5.558e2	7.946e2	1.015	0.70	0.77	11.6	YES	NO	bb	bb	0.358
24	Total-pentadioxins	29.10	4.501e2	2.689e2	1.502	1.67	1.55	8.8	YES	NO	bb	bb	0.172
25	Total-hexadioxins	35.04	1.027e3	9.280e2	1.005	1.11	1.24	17.9	YES	NO	db	db	0.452
26	Total-hexadioxins	34.95	9.492e3	8.485e3	1.005	1.12	1.24	102.2	YES	NO	bd	bd	4.154
27	Total-hexadioxins	34.58	1.972e3	1.475e3	1.005	1.34	1.24	32.8	YES	NO	bb	bb	0.796
28	124679-HXCDD	33.81	8.756e3	6.924e3	1.115	1.26	1.24	141.8	YES	NO	bd	bb	3.359
29	123789-HxCDD	36.34	2.100e3	1.977e3	0.907	1.06	1.24	34.6	YES	NO	bb	bb	1.044
30	123678-HxCDD	35.95	3.214e3	2.695e3	1.001	1.19	1.24	52.7	YES	NO	dd	dd	1.333
31	123478-HxCDD	35.84	1.084e3	9.574e2	0.996	1.13	1.24	22.1	YES	NO	bd	bd	0.490
32	1234678-HpCDD	40.10	4.829e4	4.864e4	1.039	0.99	1.05	854.6	YES	NO	bb	bb	38.860
33	1234679-HPCDD	39.05	7.459e4	7.593e4	1.137	0.98	1.05	1376.6	YES	NO	bb	bb	55.150
34	OCDD	44.80	2.845e5	3.534e5	0.920	0.80	0.89	2411.9	YES	NO	bb	bd	353.780

Dataset: T:\Autospec\Processed Data Batch\230315SRM.qld
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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	23.12	4.257e5					3.4	YES		bb		
2	FUNCTION1 PFK	22.54	1.054e7					3.0	YES		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	33.22	2.784e4					1.6	NO		bb		0.000
2	FUNCTION3 PFK	33.03	1.328e4					1.2	NO		bb		0.000
3	FUNCTION3 PFK	32.69	1.518e4					1.4	NO		db		0.000
4	FUNCTION3 PFK	32.65	1.692e4					1.4	NO		bd		0.000
5	FUNCTION3 PFK	35.04	4.594e4					1.8	NO		dd		0.000
6	FUNCTION3 PFK	34.97	3.148e4					2.1	NO		dd		0.000
7	FUNCTION3 PFK	34.93	2.726e4					1.7	NO		dd		0.000
8	FUNCTION3 PFK	34.89	2.634e4					2.0	NO		bd		0.000
9	FUNCTION3 PFK	34.76	1.447e5					2.5	NO		db		0.000
10	FUNCTION3 PFK	34.64	4.475e4					2.1	NO		dd		0.000
11	FUNCTION3 PFK	34.58	3.407e4					2.0	NO		dd		0.000
12	FUNCTION3 PFK	34.53	3.443e4					1.5	NO		dd		0.000
13	FUNCTION3 PFK	34.43	2.135e4					1.5	NO		bd		0.000
14	FUNCTION3 PFK	34.35	3.503e4					2.0	NO		db		0.000
15	FUNCTION3 PFK	34.26	2.303e4					1.2	NO		bd		0.000
16	FUNCTION3 PFK	34.09	1.904e4					1.1	NO		db		0.000
17	FUNCTION3 PFK	33.97	3.766e4					1.4	NO		bd		0.000
18	FUNCTION3 PFK	33.53	3.241e4					1.8	NO		bb		0.000
19	FUNCTION3 PFK	33.37	2.911e4					1.9	NO		db		0.000
20	FUNCTION3 PFK	33.30	1.932e4					1.4	NO		bd		0.000
21	FUNCTION3 PFK	36.59	4.813e4					2.4	NO		db		0.000
22	FUNCTION3 PFK	36.56	1.333e5					3.8	YES		dd		0.000
23	FUNCTION3 PFK	36.45	1.506e4					1.1	NO		bd		0.000
24	FUNCTION3 PFK	36.33	1.499e4					1.4	NO		bb		0.000
25	FUNCTION3 PFK	36.28	1.421e4					0.7	NO		bb		0.000
26	FUNCTION3 PFK	36.11	1.693e4					1.4	NO		bb		0.000
27	FUNCTION3 PFK	36.05	3.711e4					1.6	NO		db		0.000
28	FUNCTION3 PFK	35.97	9.214e3					0.9	NO		bd		0.000
29	FUNCTION3 PFK	35.77	6.450e3					0.6	NO		db		0.000
30	FUNCTION3 PFK	35.74	7.532e3					0.8	NO		bd		0.000
31	FUNCTION3 PFK	35.64	5.308e4					2.2	NO		db		0.000
32	FUNCTION3 PFK	35.58	4.275e4					1.9	NO		dd		0.000
33	FUNCTION3 PFK	35.54	1.372e4					1.3	NO		dd		0.000
34	FUNCTION3 PFK	35.48	1.936e4					1.2	NO		bd		0.000
35	FUNCTION3 PFK	35.25	7.953e3					0.6	NO		bb		0.000
36	FUNCTION3 PFK	35.08	8.719e3					0.9	NO		db		0.000
37	FUNCTION3 PFK	37.52	2.057e4					1.1	NO		bb		0.000

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PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	FUNCTION3 PFK	36.92	9.526e4					3.7	YES		db		0.000
39	FUNCTION3 PFK	36.85	8.346e4					3.4	YES		dd		0.000
40	FUNCTION3 PFK	36.79	1.699e5					4.3	YES		dd		0.000
41	FUNCTION3 PFK	36.71	6.314e4					3.0	NO		bd		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	40.95	4.001e5					5.1	YES		bb		
2	FUNCTION4 PFK	39.88	5.877e5					5.4	YES		bb		
3	FUNCTION4 PFK	37.88	1.993e5					3.8	YES		bb		

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PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	42.92	7.978e3					1.7	NO		dd		
2	FUNCTION5 PFK	42.82	1.672e4					2.1	NO		dd		
3	FUNCTION5 PFK	42.79	1.717e4					2.4	NO		dd		
4	FUNCTION5 PFK	42.73	1.142e4					2.3	NO		dd		
5	FUNCTION5 PFK	42.70	9.465e3					2.2	NO		bd		
6	FUNCTION5 PFK	42.58	8.305e3					2.8	NO		bb		
7	FUNCTION5 PFK	44.16	7.354e3					1.9	NO		bb		
8	FUNCTION5 PFK	44.10	1.709e3					0.8	NO		bb		
9	FUNCTION5 PFK	44.07	6.347e2					0.4	NO		bb		
10	FUNCTION5 PFK	44.02	1.839e3					0.7	NO		bb		
11	FUNCTION5 PFK	43.97	8.933e2					0.5	NO		db		
12	FUNCTION5 PFK	43.94	2.925e3					0.8	NO		bd		
13	FUNCTION5 PFK	43.88	3.966e3					1.0	NO		bb		
14	FUNCTION5 PFK	43.81	6.399e3					1.3	NO		bb		
15	FUNCTION5 PFK	43.74	7.001e3					1.8	NO		db		
16	FUNCTION5 PFK	43.69	4.900e3					1.0	NO		dd		
17	FUNCTION5 PFK	43.66	3.918e3					1.4	NO		bd		
18	FUNCTION5 PFK	43.56	4.758e3					1.2	NO		bb		
19	FUNCTION5 PFK	43.50	6.604e3					1.4	NO		bb		
20	FUNCTION5 PFK	43.42	8.378e3					1.2	NO		bb		
21	FUNCTION5 PFK	42.97	1.265e3					0.6	NO		db		
22	FUNCTION5 PFK	42.95	3.271e3					1.0	NO		dd		
23	FUNCTION5 PFK	45.61	9.660e3					1.7	NO		bd		
24	FUNCTION5 PFK	45.52	1.446e4					1.6	NO		bb		
25	FUNCTION5 PFK	45.27	6.008e3					1.4	NO		db		
26	FUNCTION5 PFK	45.22	7.428e3					1.5	NO		bd		
27	FUNCTION5 PFK	45.18	5.746e3					1.9	NO		bb		
28	FUNCTION5 PFK	45.07	6.369e3					1.3	NO		bb		
29	FUNCTION5 PFK	44.85	1.701e3					0.5	NO		bb		
30	FUNCTION5 PFK	44.80	8.252e3					2.0	NO		bb		
31	FUNCTION5 PFK	44.72	1.315e3					0.9	NO		bb		
32	FUNCTION5 PFK	44.65	2.152e3					0.7	NO		bb		
33	FUNCTION5 PFK	44.46	8.502e2					0.6	NO		bb		
34	FUNCTION5 PFK	44.38	1.112e4					2.2	NO		db		
35	FUNCTION5 PFK	44.35	5.260e3					1.7	NO		dd		
36	FUNCTION5 PFK	44.30	7.560e3					1.5	NO		bd		
37	FUNCTION5 PFK	44.26	2.577e3					0.9	NO		db		

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PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	FUNCTION5 PFK	44.22	2.598e3					0.8	NO		bd		
39	FUNCTION5 PFK	45.95	2.506e3					0.8	NO		bb		
40	FUNCTION5 PFK	45.90	8.283e3					1.7	NO		bb		
41	FUNCTION5 PFK	45.83	1.894e3					0.7	NO		bb		
42	FUNCTION5 PFK	45.72	1.374e4					1.4	NO		db		
43	FUNCTION5 PFK	45.65	3.549e3					1.1	NO		dd		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.29	7.459e1					2.3	NO		bb		0.000
2	FUNCTION1 HXCD...	26.79	1.533e2					1.6	NO		bb		0.000
3	FUNCTION1 HXCD...	25.69	4.767e2					16.5	YES		bb		0.000
4	FUNCTION1 HXCD...	24.19	7.701e1					1.7	NO		bb		0.000
5	FUNCTION1 HXCD...	22.09	2.268e2					4.0	YES		db		0.000
6	FUNCTION1 HXCD...	21.90	1.328e2					3.1	YES		bd		0.000
7	FUNCTION1 HXCD...	21.21	7.473e1					1.5	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.46	1.237e2					3.4	YES		bb		0.000
2	FUNCTION2 HPCD...	29.66	1.017e2					4.1	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	37.28	7.311e1					2.3	NO		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	38.22	6.993e3					195.8	YES		bb		0.000

Dataset: T:\Autospec\Processed Data Batch\230315SRM.qld
Last Altered: Thursday, March 16, 2023 09:35:30 Pacific Daylight Time
Printed: Thursday, March 16, 2023 09:37:25 Pacific Daylight Time

ID: BLC0136-SRM1, Name: 23031515, Date: 15-Mar-2023, Time: 22:00:09, Conditions: AUTOSPEC01, User: pk

ETHERS6

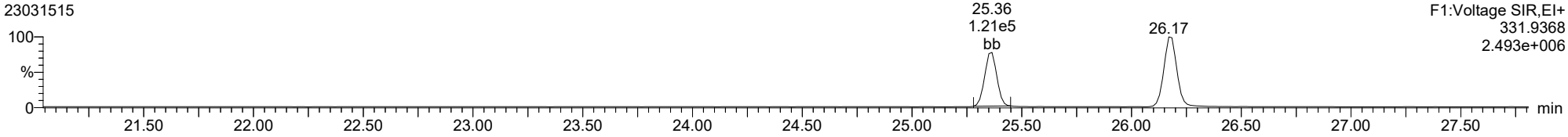
	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

Dataset: T:\Autospec\Processed Data Batch\230315SRM.qld
Last Altered: Thursday, March 16, 2023 09:35:30 Pacific Daylight Time
Printed: Thursday, March 16, 2023 09:37:25 Pacific Daylight Time

Method: T:\Autospec\Methods\Dioxin230315.mdb 16 Mar 2023 08:38:23
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: BLC0136-SRM1, Name: 23031515, Date: 15-Mar-2023, Time: 22:00:09, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD



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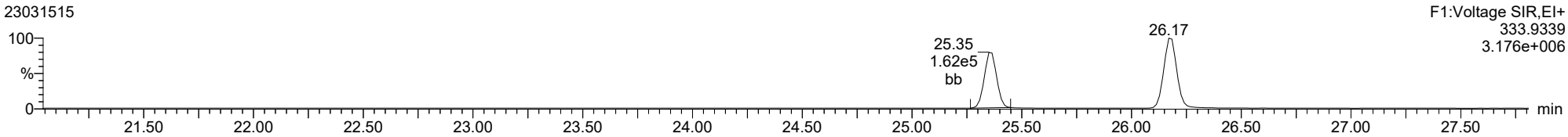
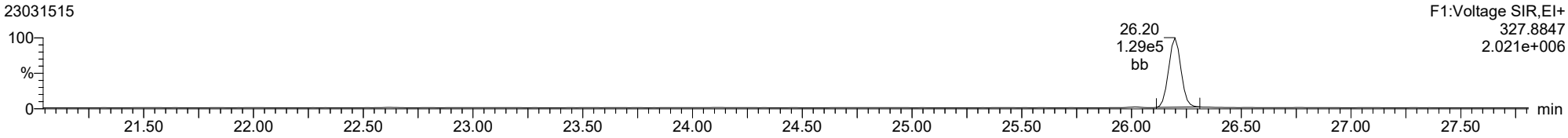
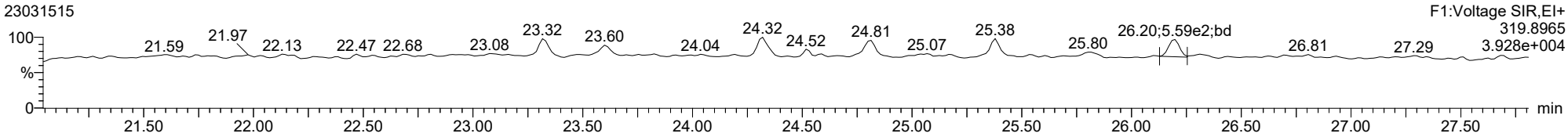


37CL-2378-TCDD



ID: BLC0136-SRM1, Name: 23031515, Date: 15-Mar-2023, Time: 22:00:09, Conditions: AUTOSPEC01, User: pk

2378-TCDD



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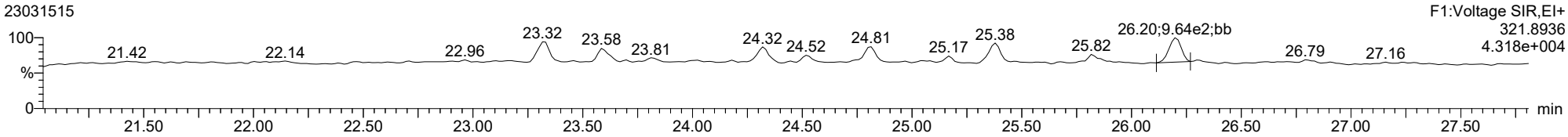

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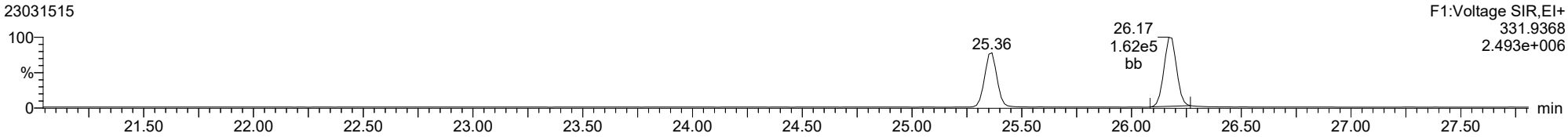

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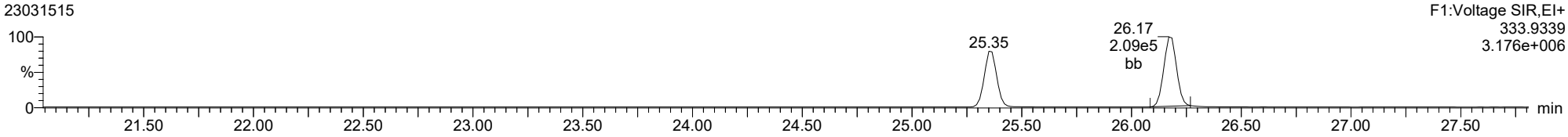

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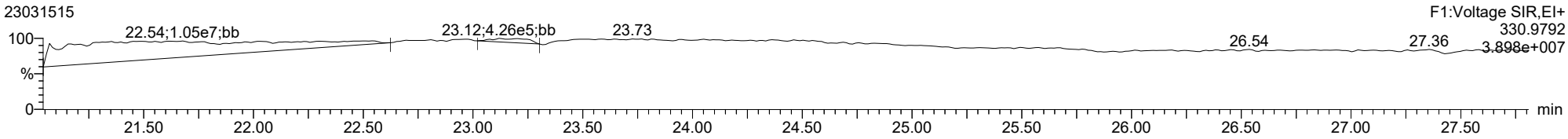
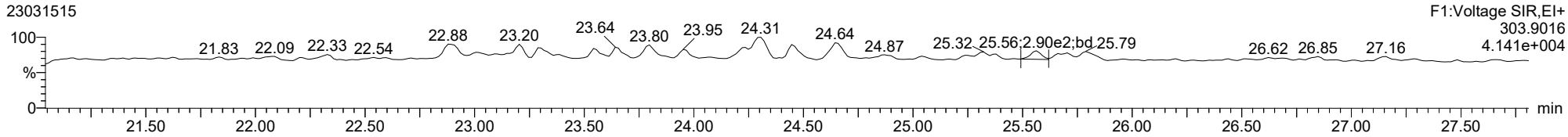


ID: BLC0136-SRM1, Name: 23031515, Date: 15-Mar-2023, Time: 22:00:09, Conditions: AUTOSPEC01, User: pk

2378-TCDF



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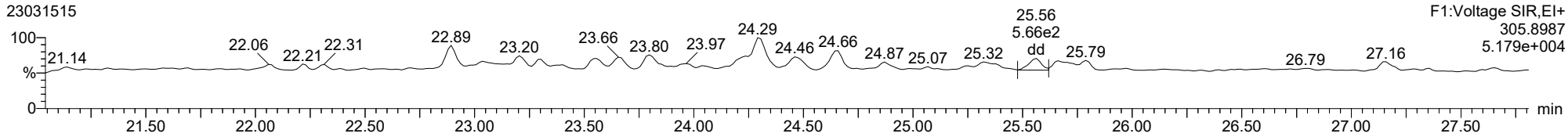

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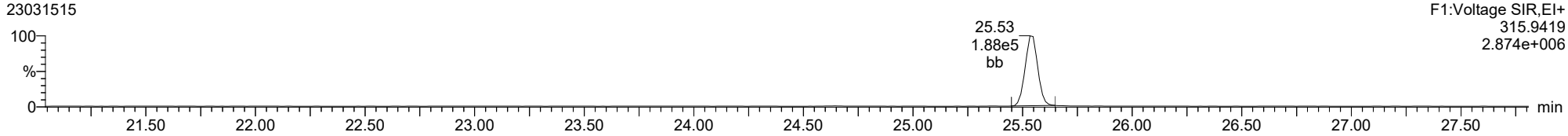

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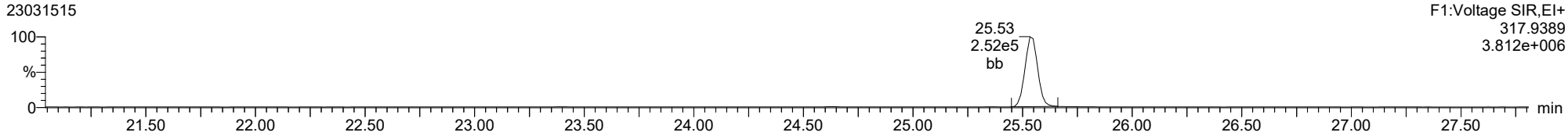
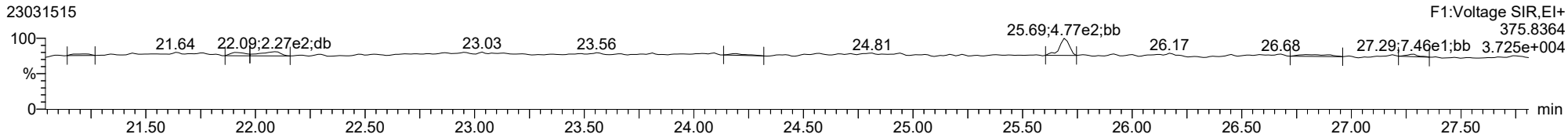
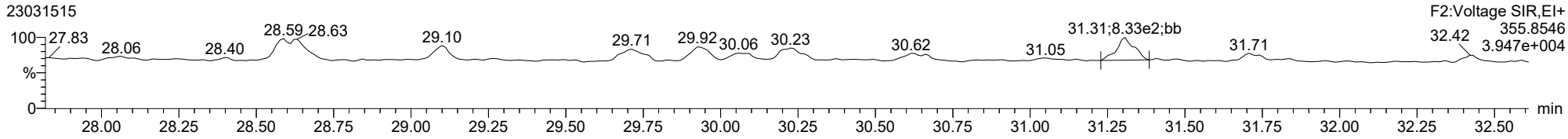


FUNCTION1 HXCDPE



ID: BLC0136-SRM1, Name: 23031515, Date: 15-Mar-2023, Time: 22:00:09, Conditions: AUTOSPEC01, User: pk

12378-PeCDD



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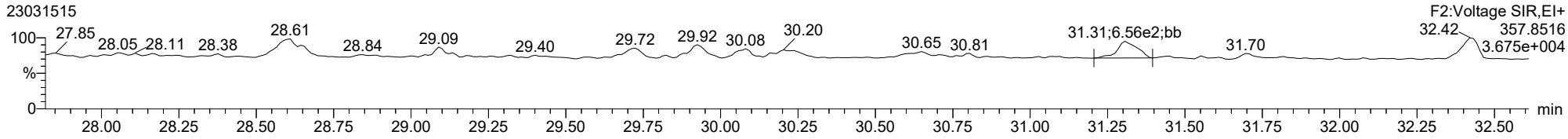

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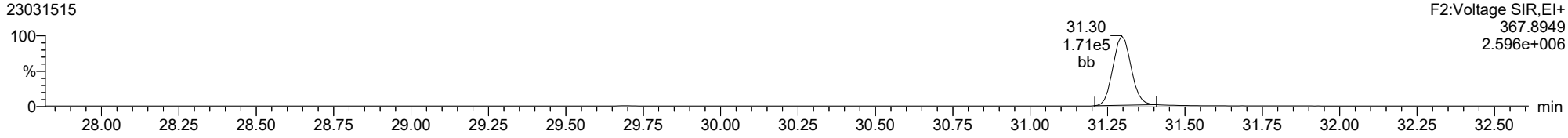

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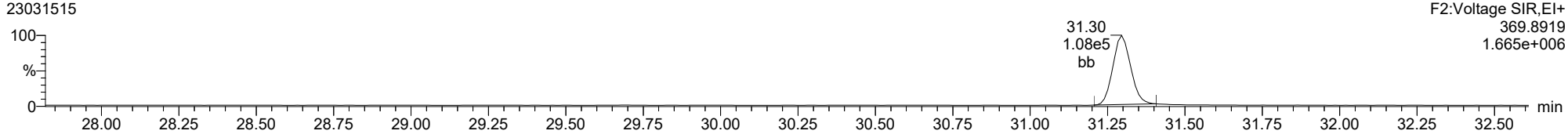
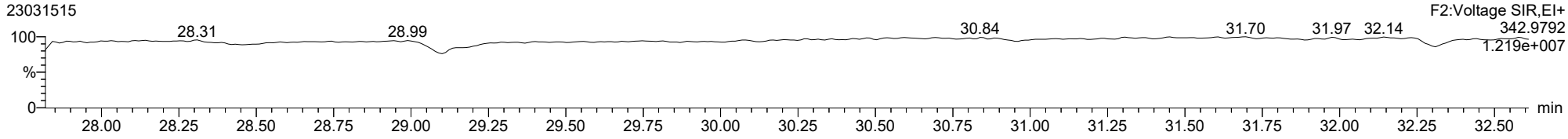
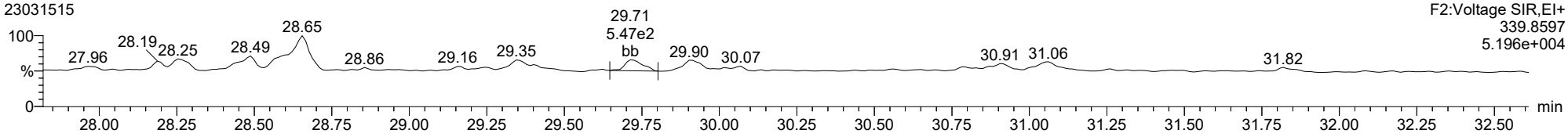


FUNCTION2 PFK

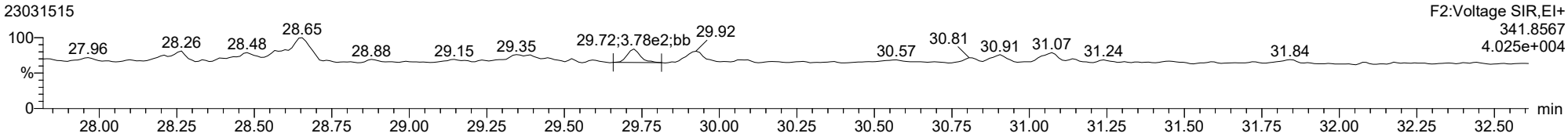


ID: BLC0136-SRM1, Name: 23031515, Date: 15-Mar-2023, Time: 22:00:09, Conditions: AUTOSPEC01, User: pk

12378-PeCDF



12378-PeCDF



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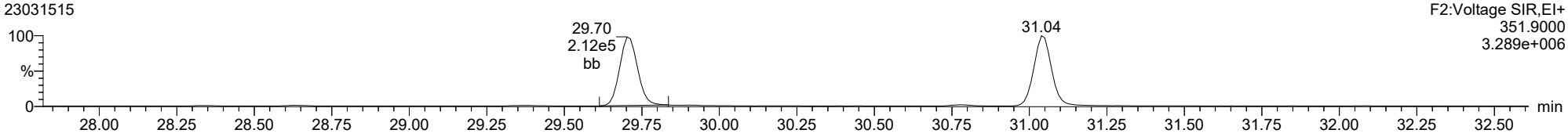

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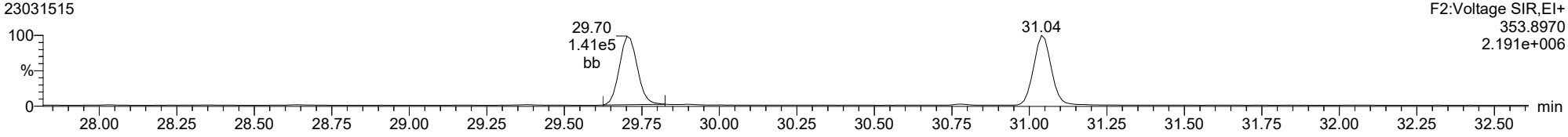
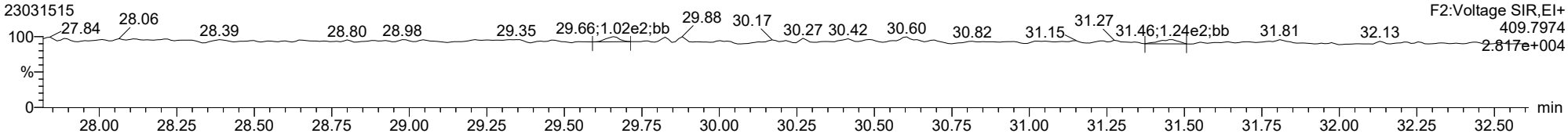


FUNCTION2 HPCDPE



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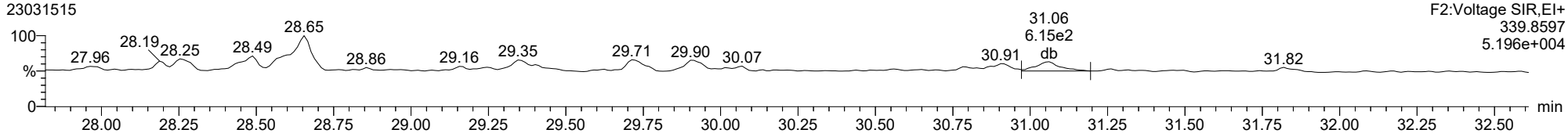
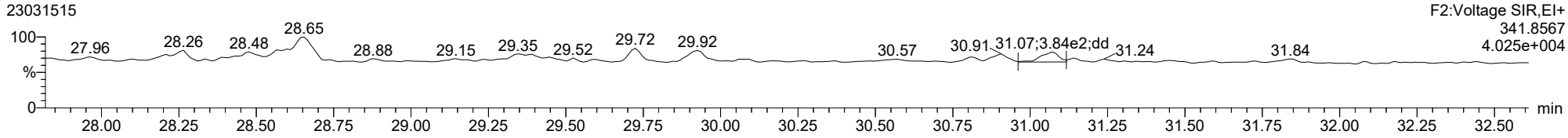
23478-PeCDF



23478-PeCDF



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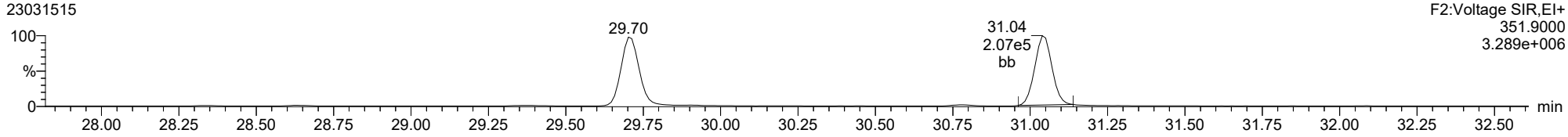

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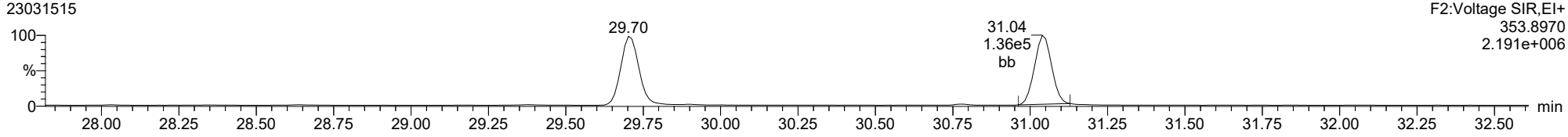
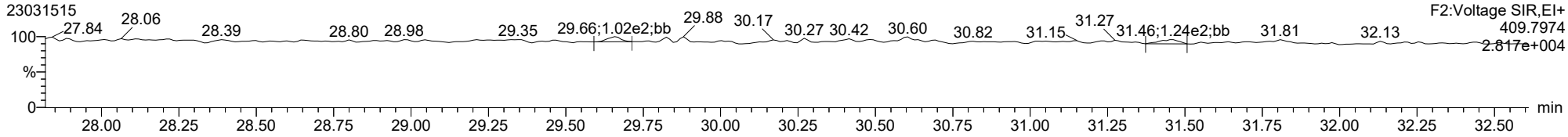


FUNCTION2 HPCDPE



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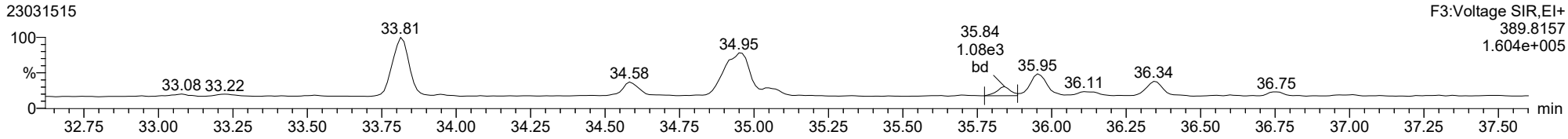
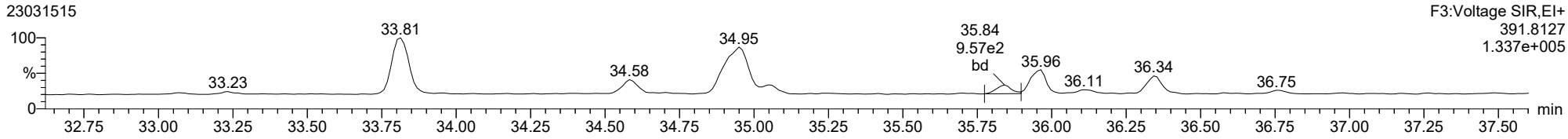
123478-HxCDD



123478-HxCDD



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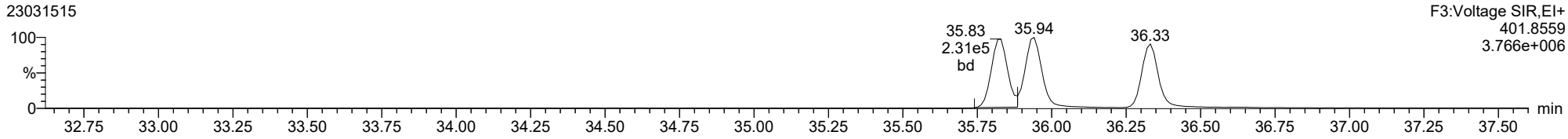

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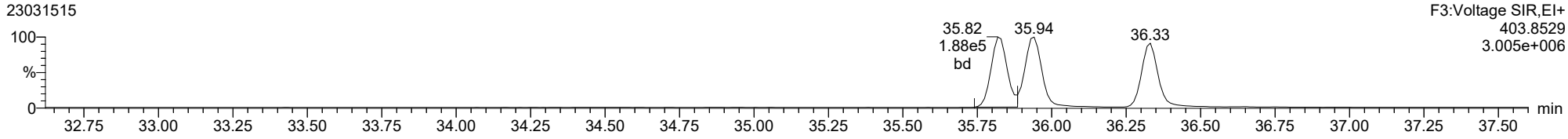
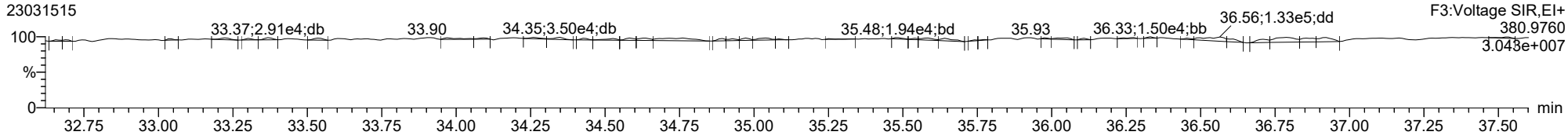


FUNCTION3 PFK



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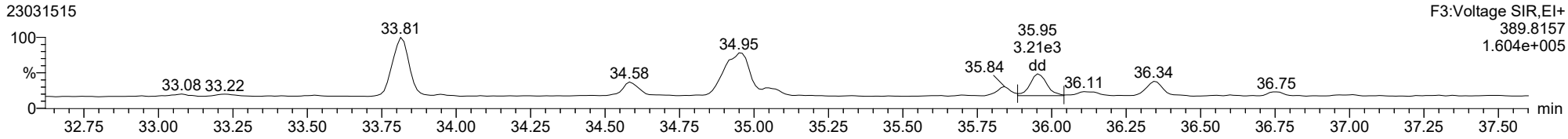

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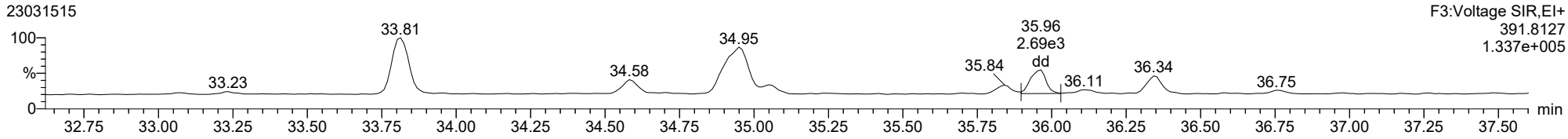

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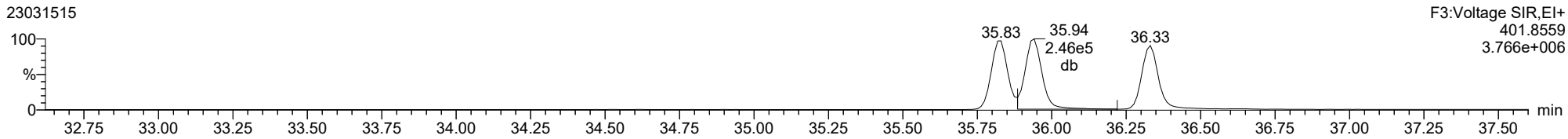

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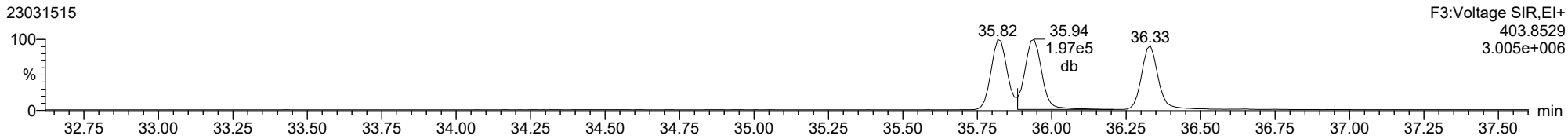

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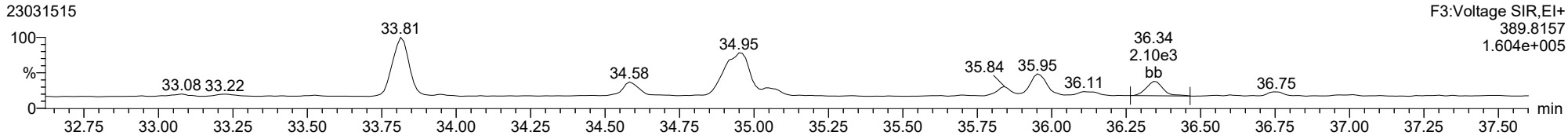

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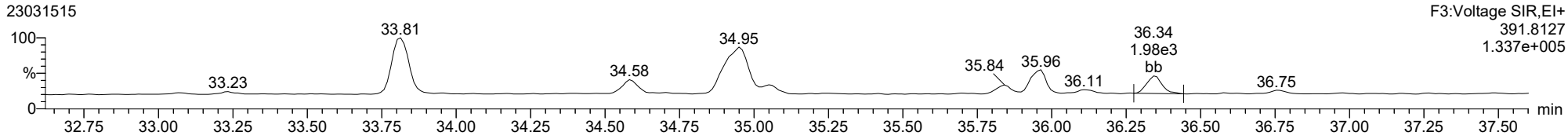

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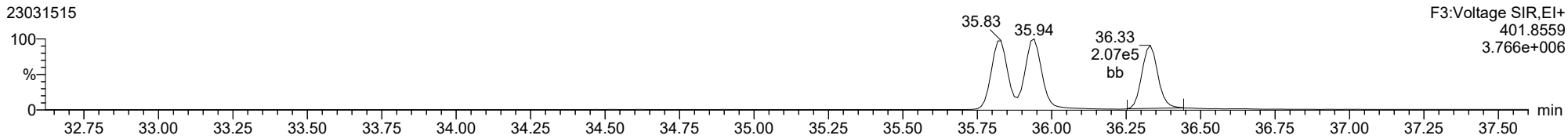

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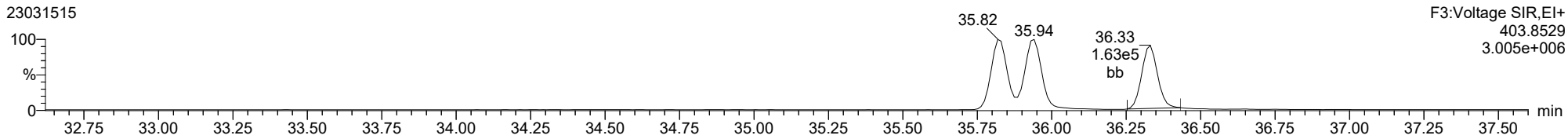

ID: BLC0136-SRM1, Name: 23031515, Date: 15-Mar-2023, Time: 22:00:09, Conditions: AUTOSPEC01, User: pk

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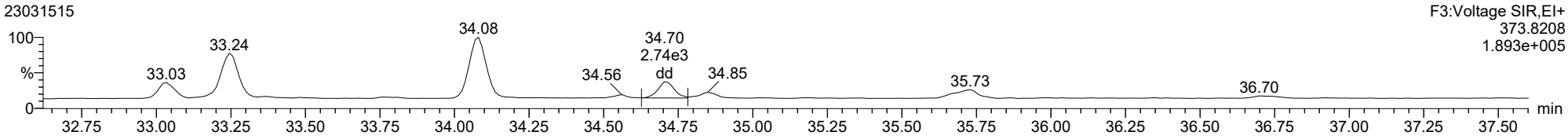

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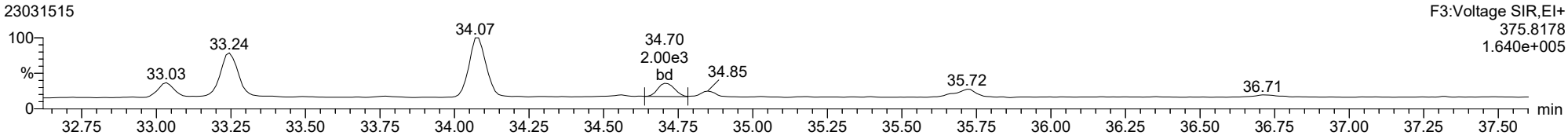

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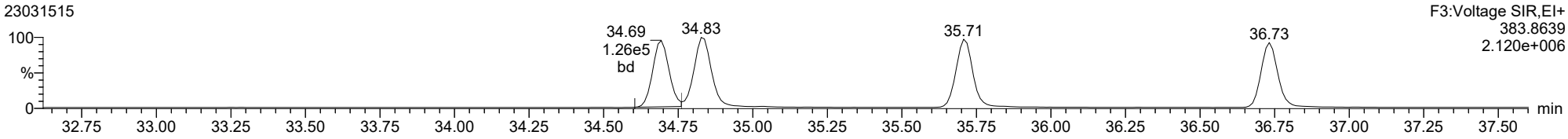

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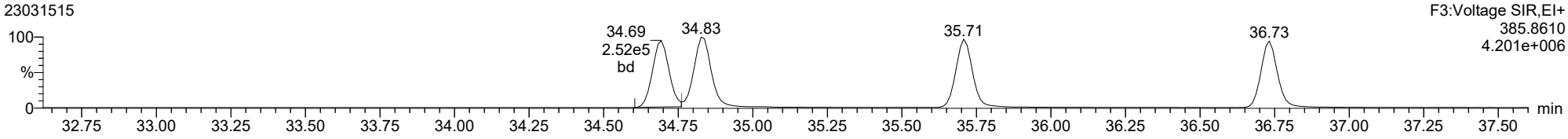
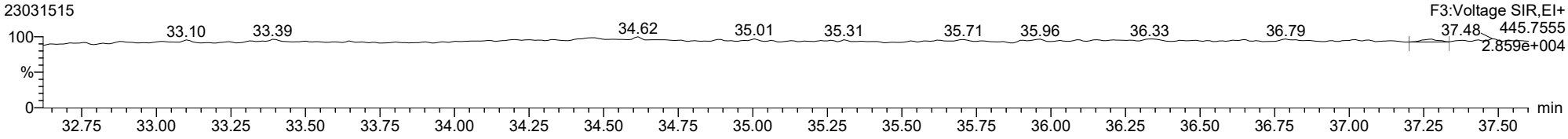


FUNCTION3 OCDPE



ID: BLC0136-SRM1, Name: 23031515, Date: 15-Mar-2023, Time: 22:00:09, Conditions: AUTOSPEC01, User: pk

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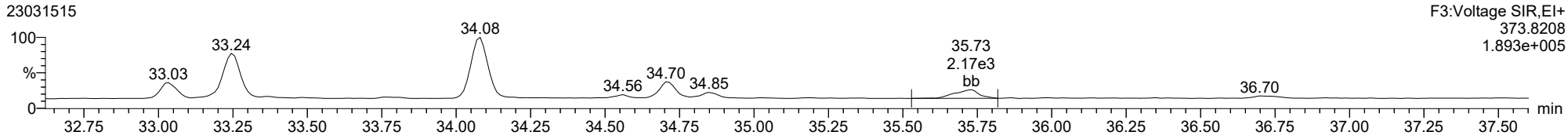

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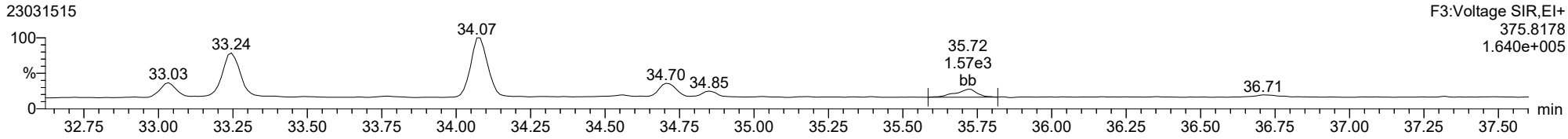

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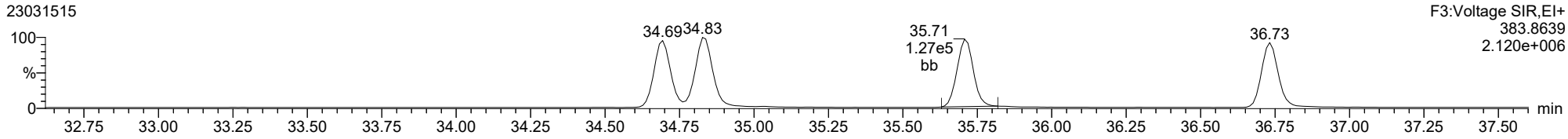

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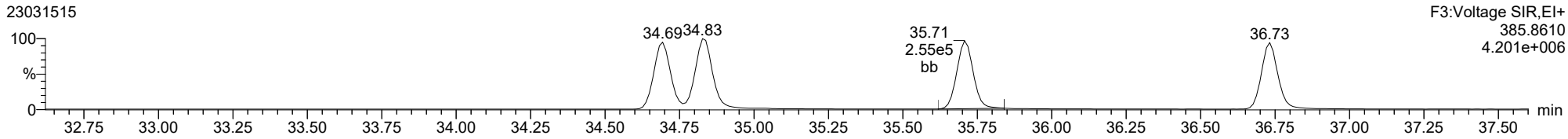

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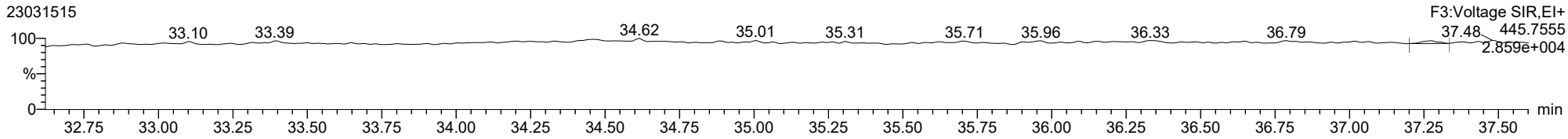

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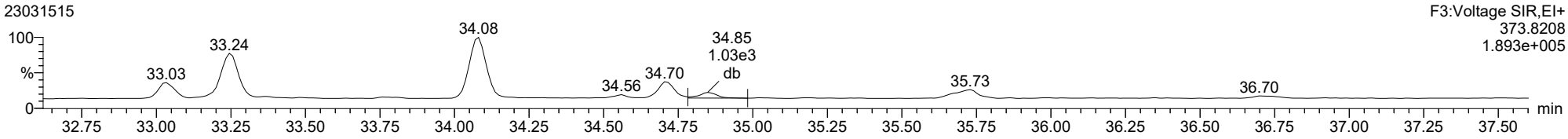

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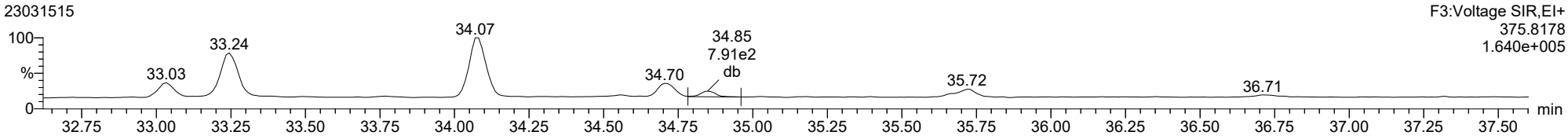

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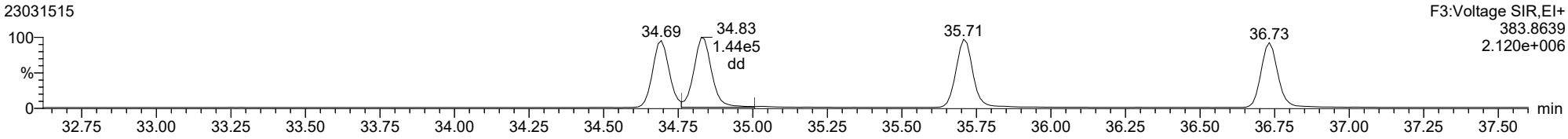

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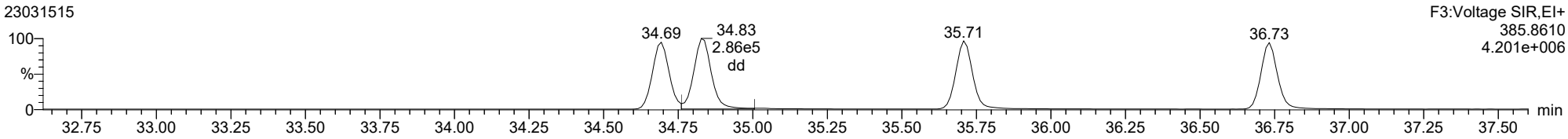

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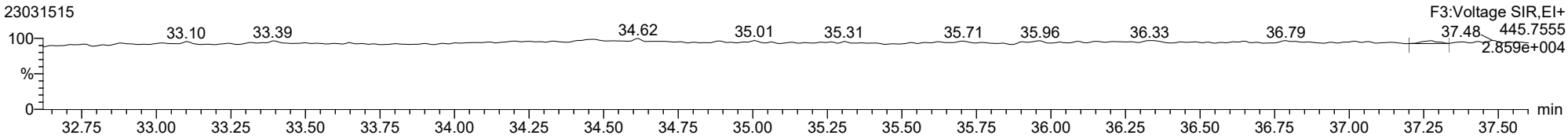

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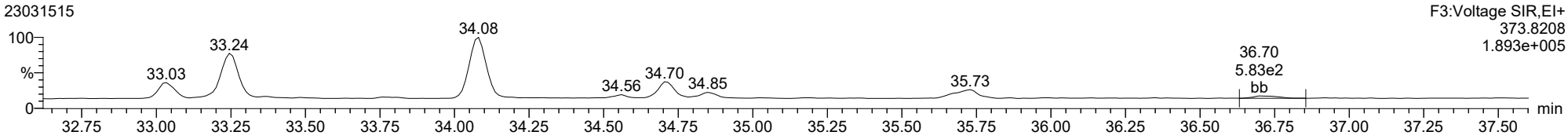

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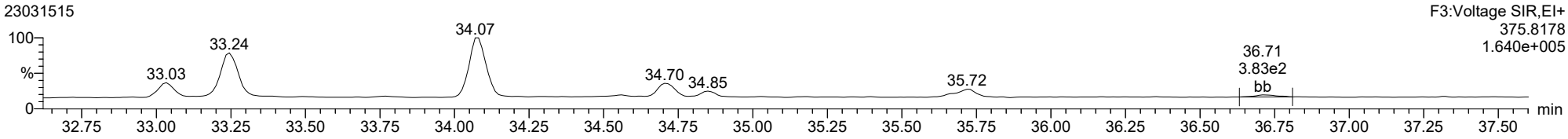

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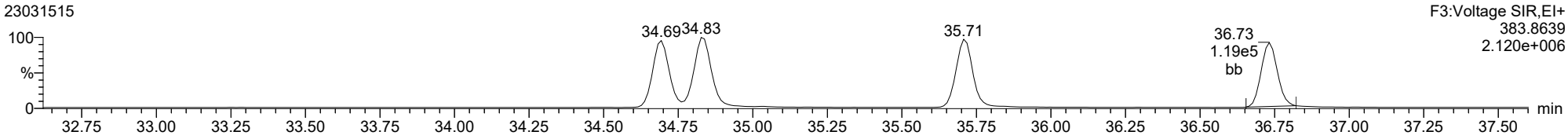

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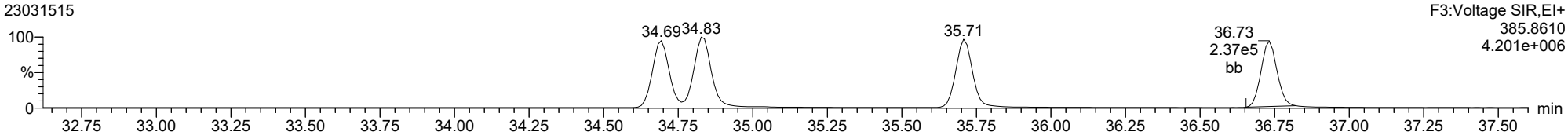

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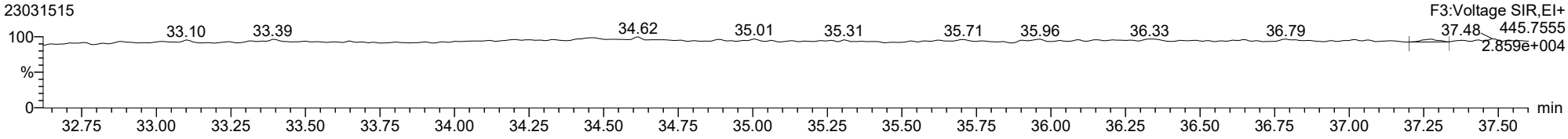

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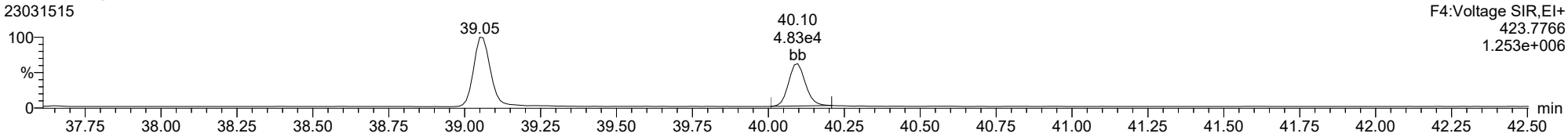

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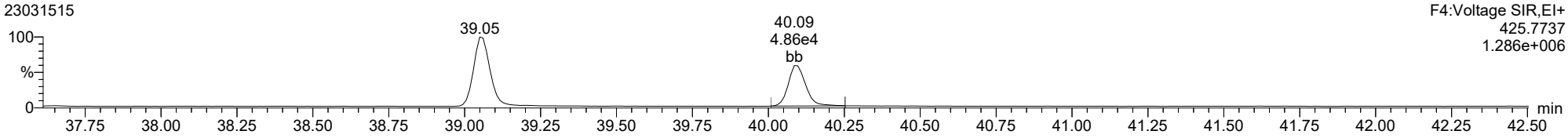

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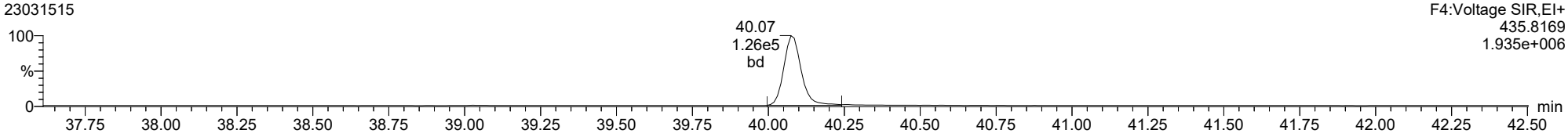

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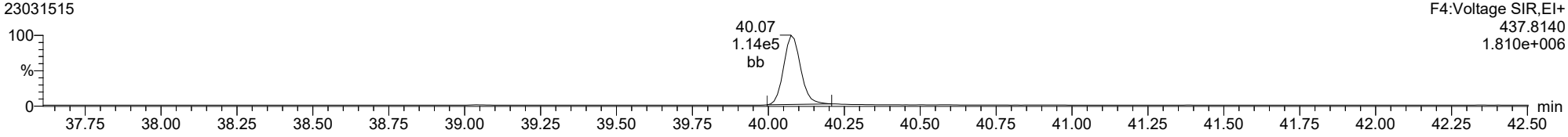
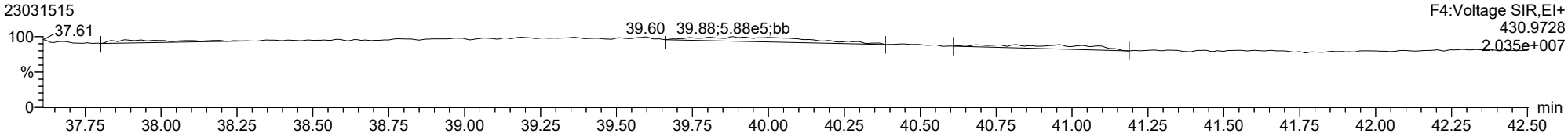


FUNCTION4 PFK



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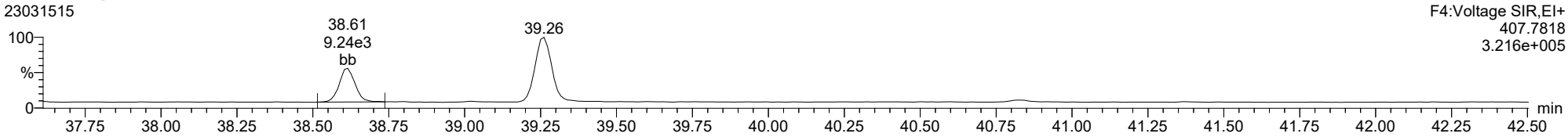

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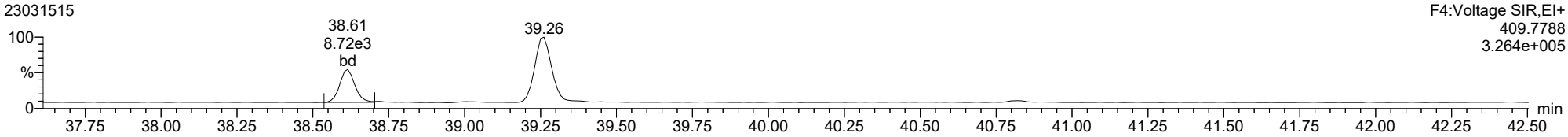

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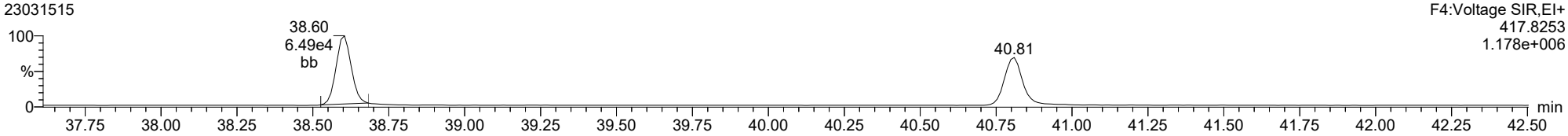

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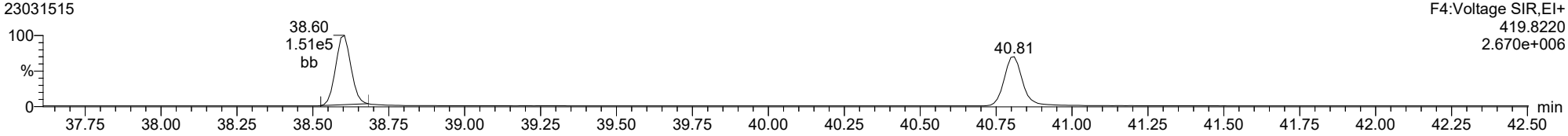

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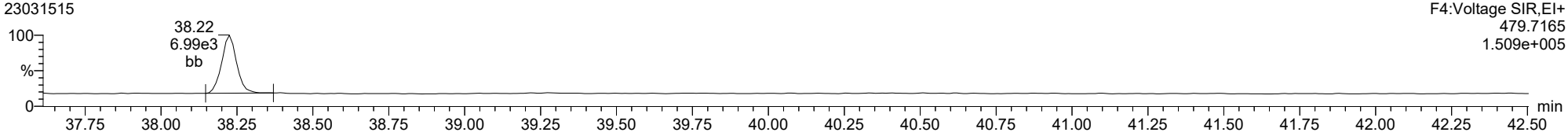

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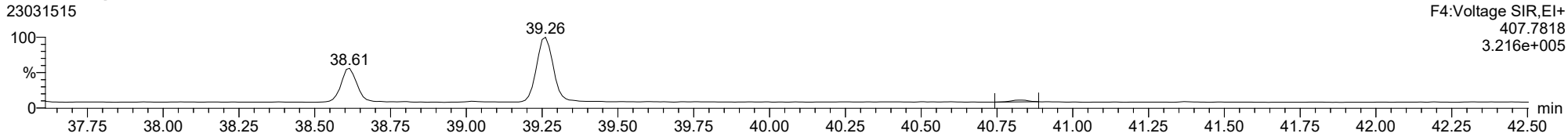

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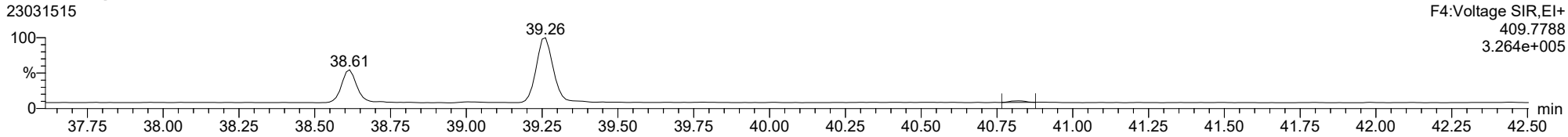

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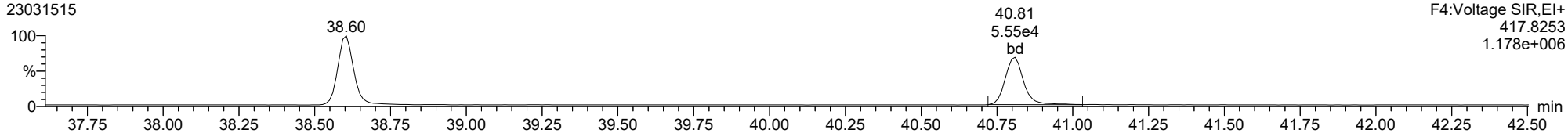

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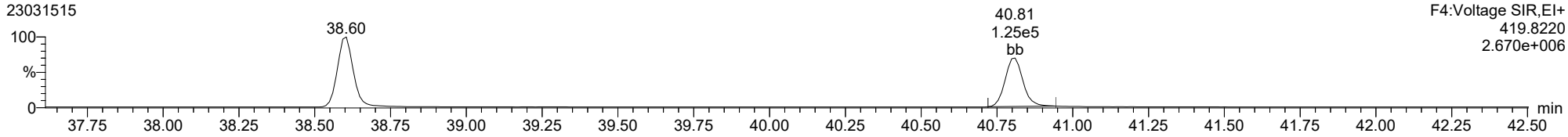

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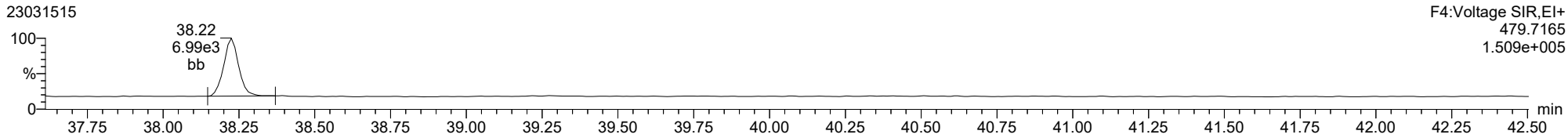

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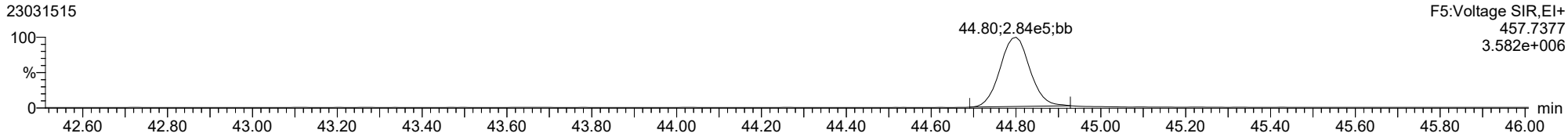
OCDD



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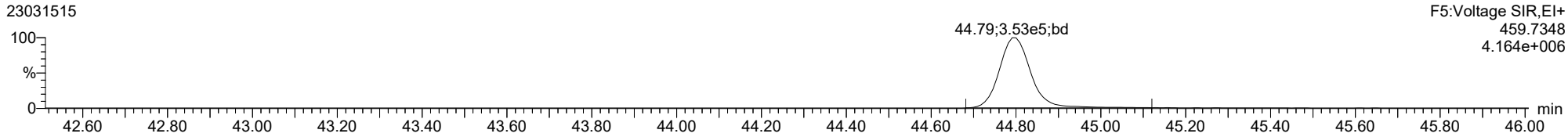

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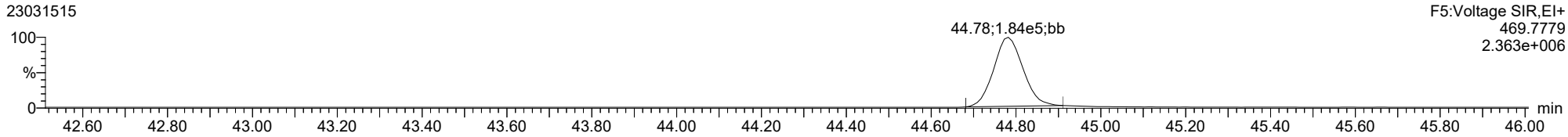

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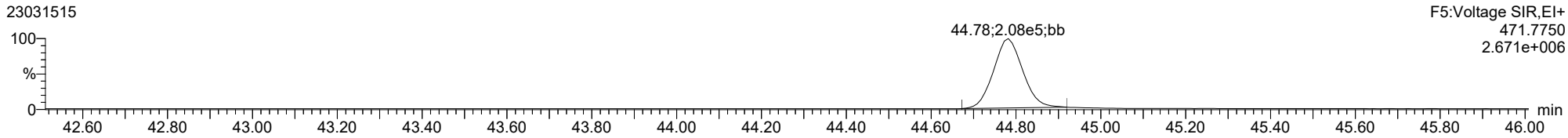
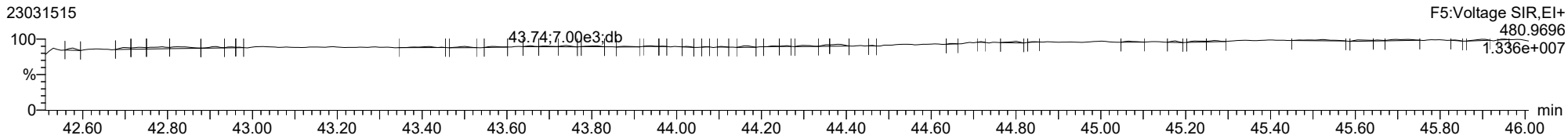


FUNCTION5 PFK



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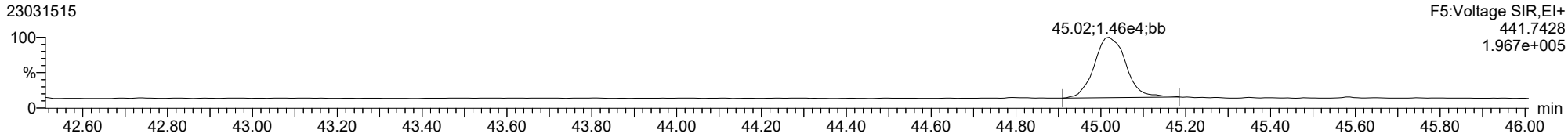

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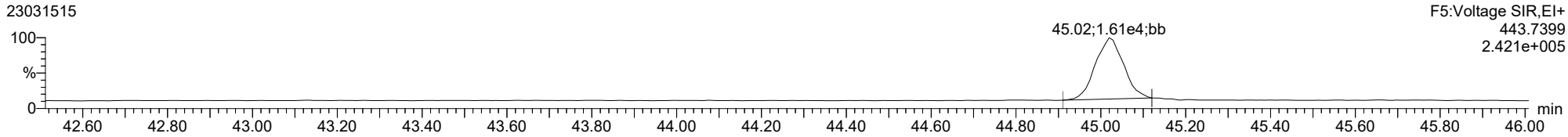
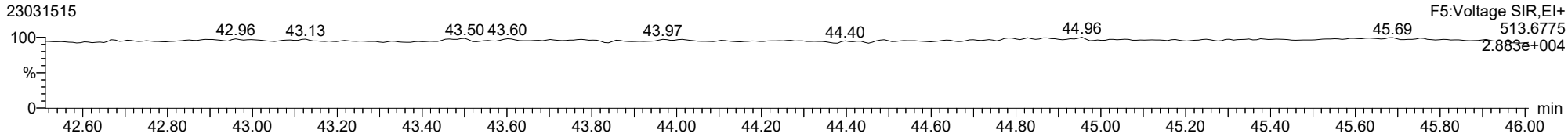
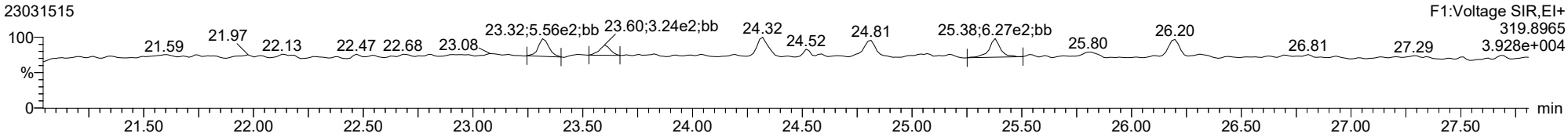


FUNCTION5 DCDPE

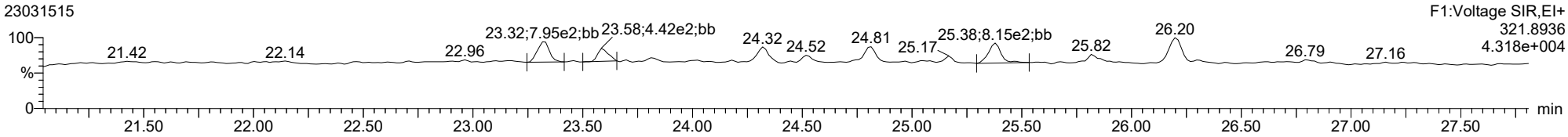


ID: BLC0136-SRM1, Name: 23031515, Date: 15-Mar-2023, Time: 22:00:09, Conditions: AUTOSPEC01, User: pk

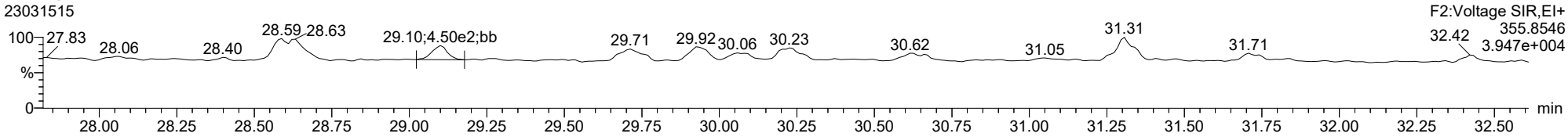
Total-tetradioxins



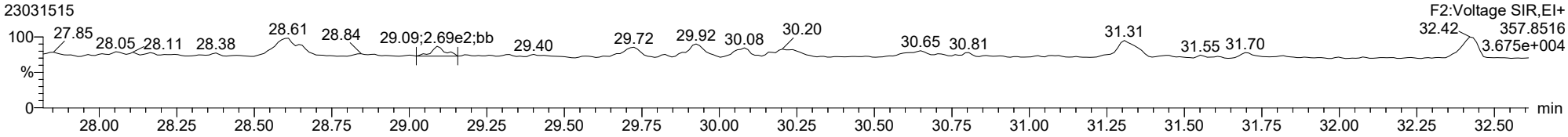
Total-tetradioxins



Total-pentadioxins

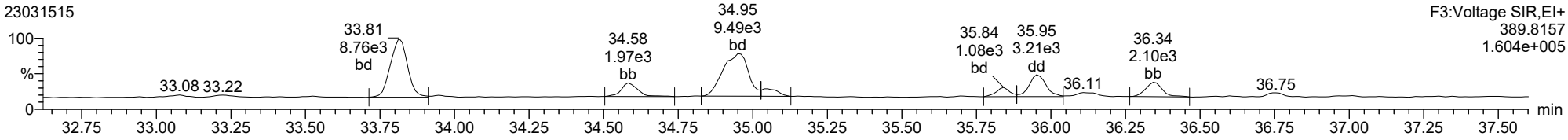


Total-pentadioxins

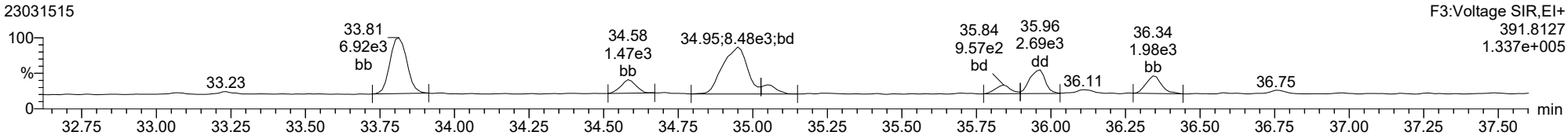


ID: BLC0136-SRM1, Name: 23031515, Date: 15-Mar-2023, Time: 22:00:09, Conditions: AUTOSPEC01, User: pk

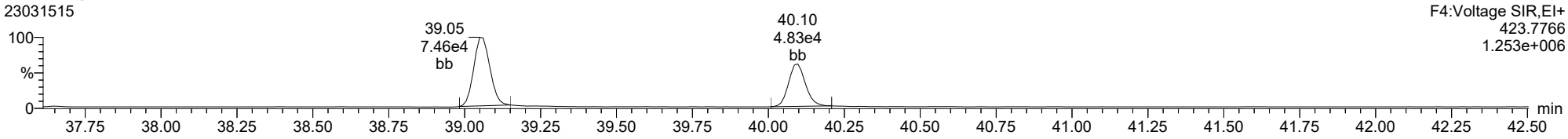
Total-hexadioxins



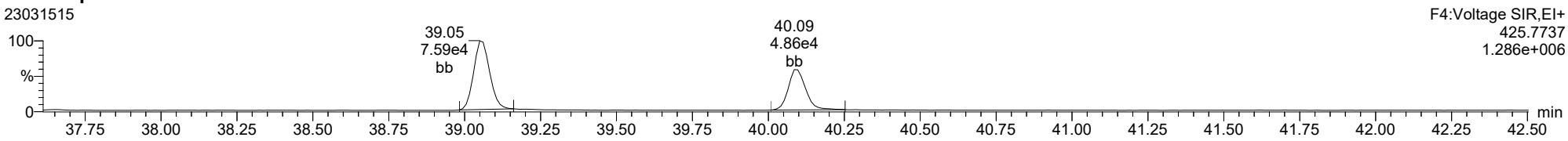
Total-hexadioxins



Total-heptadioxins

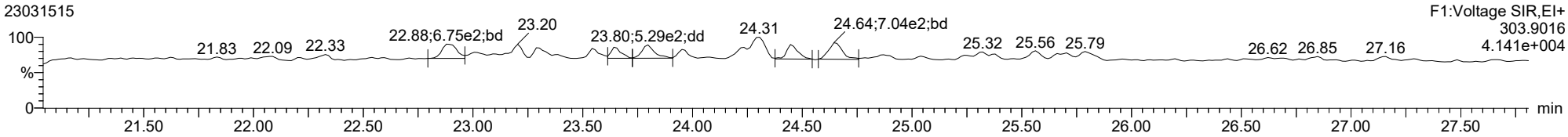


Total-heptadioxins

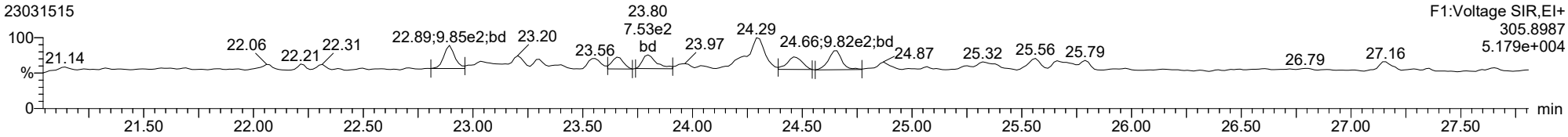


ID: BLC0136-SRM1, Name: 23031515, Date: 15-Mar-2023, Time: 22:00:09, Conditions: AUTOSPEC01, User: pk

Total-tetrafurans



Total-tetrafurans



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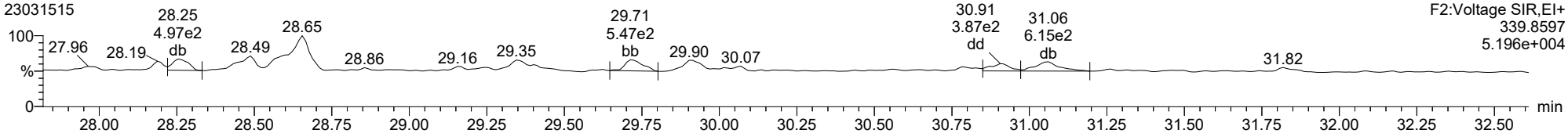

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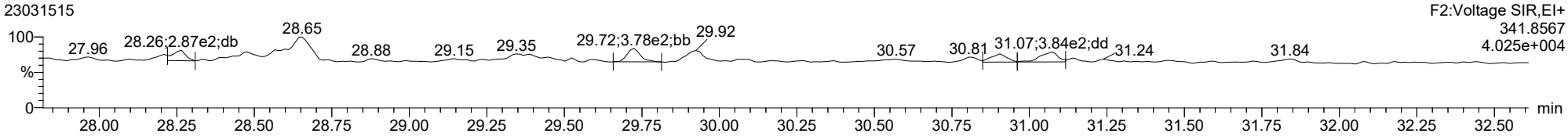

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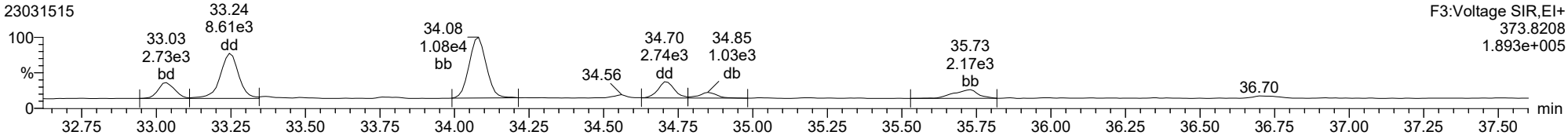

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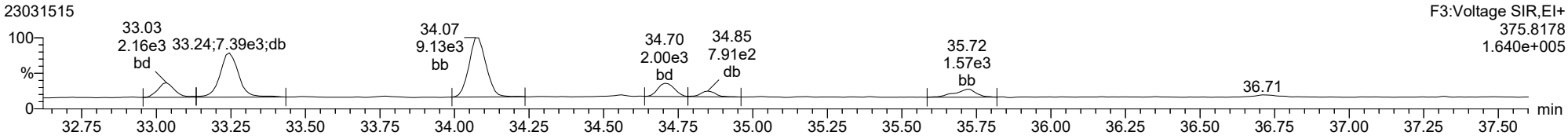

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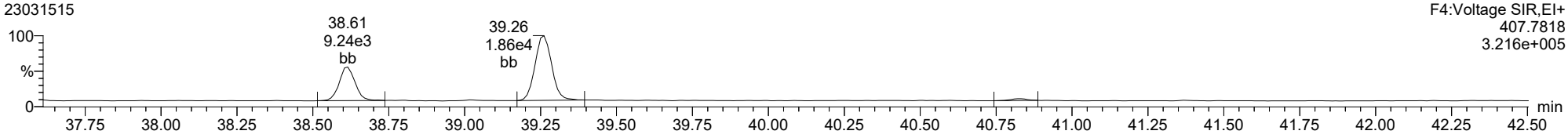

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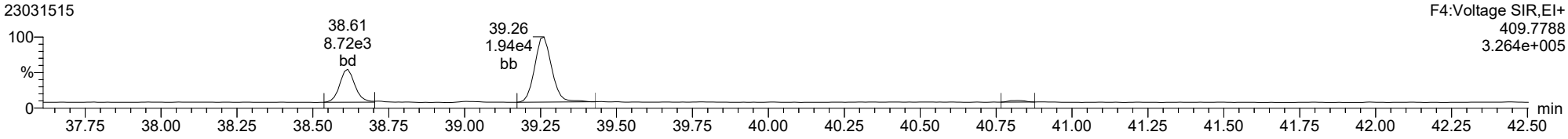

INITIAL CALIBRATION DATA
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00015	Instrument:	AUTOSPEC01
Calibration Date:	03/03/2023	Column (1):	RTX-Dioxin2

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	**RRF**	Conc	RRF	Conc	RRF	Conc	**RRF**	Conc	**RRF**
2,3,7,8-TCDF			0.5	0.6926363	2	0.6813224	10	0.7107923	40	0.719723	200	0.7031621
2,3,7,8-TCDD			0.5	1.116738	2	1.187915	10	1.134128	40	1.147736	200	1.156792
1,2,3,7,8-PeCDF	0.5	0.7064839	2.5	0.5889757	10	0.710829	50	0.6668491	200	0.6891968	1000	0.7130453
2,3,4,7,8-PeCDF	0.5	0.7979673	2.5	0.750268	10	0.8092124	50	0.7777683	200	0.7907891	1000	0.7910175
1,2,3,7,8-PeCDD	0.5	1.103364	2.5	0.959607	10	1.01992	50	1.019473	200	1.01999	1000	1.008719
1,2,3,4,7,8-HxCDF	0.5	1.217557	2.5	1.181192	10	1.149885	50	1.142227	200	1.15269	1000	1.152678
1,2,3,6,7,8-HxCDF	0.5	1.080855	2.5	1.053928	10	1.175308	50	1.102076	200	1.035098	1000	1.097184
2,3,4,6,7,8-HxCDF	0.5	1.045907	2.5	1.140857	10	1.199347	50	1.11691	200	1.197861	1000	1.13731
1,2,3,7,8,9-HxCDF	0.5	1.190403	2.5	1.119796	10	1.130872	50	1.147742	200	1.139146	1000	1.094601
1,2,3,4,7,8-HxCDD	0.5	1.079554	2.5	0.961704	10	0.973768	50	0.967789	200	0.9862736	1000	1.004325
1,2,3,6,7,8-HxCDD	0.5	0.9586431	2.5	0.9983677	10	0.9838912	50	1.030566	200	1.022077	1000	1.012084
1,2,3,7,8,9-HxCDD	0.5	0.930997	2.5	0.8854269	10	0.8092562	50	0.9267543	200	0.9251392	1000	0.9651099
1,2,3,4,6,7,8-HpCDF	0.5	0.934103	2.5	1.075239	10	1.011687	50	0.9661089	200	1.026311	1000	1.004508
1,2,3,4,7,8,9-HpCDF	0.5	0.8861422	2.5	0.8930411	10	1.006144	50	0.9387033	200	0.9934576	1000	1.001203
1,2,3,4,6,7,8-HpCDD	0.5	1.103772	2.5	0.971421	10	1.040117	50	1.038088	200	1.030577	1000	1.050103
OCDF	1	0.8118871	5	0.7091624	20	0.7657645	100	0.7266152	400	0.8162858	2000	0.8371317
OCDD			5	1.012935	20	0.8906655	100	0.878436	400	0.9061913	2000	0.9115405
13C12-2,3,7,8-TCDF	100	1.631571	100	1.588495	100	1.670669	100	1.492829	100	1.645068	100	1.692541
13C12-2,3,7,8-TCDD	100	1.103543	100	1.165686	100	1.103763	100	1.147762	100	1.181831	100	1.211872
13C12-1,2,3,7,8-PeCDF	100	1.373516	100	0.8861478	100	1.254697	100	1.157546	100	1.425701	100	1.345107
13C12-2,3,4,7,8-PeCDF	100	1.219579	100	0.8983995	100	1.113808	100	0.8611233	100	1.32733	100	1.286474
13C12-1,2,3,7,8-PeCDD	100	0.9177021	100	0.7002528	100	0.8365419	100	0.5962156	100	0.9821822	100	0.939983
13C12-1,2,3,4,7,8-HxCDF	100	1.152029	100	1.095885	100	1.513935	100	1.121285	100	1.094572	100	1.032122
13C12-1,2,3,6,7,8-HxCDF	100	1.353853	100	1.348693	100	1.689158	100	1.367383	100	1.37092	100	1.188788
13C12-2,3,4,6,7,8-HxCDF	100	1.092029	100	1.127896	100	1.240354	100	1.126074	100	1.087409	100	1.101774
13C12-1,2,3,7,8,9-HxCDF	100	0.8958406	100	0.9493947	100	0.9152119	100	0.9630403	100	0.8996667	100	0.9673701
13C12-1,2,3,4,7,8-HxCDD	100	0.9718531	100	0.9656819	100	1.113686	100	0.9864835	100	0.9766715	100	0.95586
13C12-1,2,3,6,7,8-HxCDD	100	1.184228	100	1.157253	100	1.278683	100	1.163318	100	1.111106	100	1.045546

INITIAL CALIBRATION DATA

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00015	Instrument:	AUTOSPEC01
Calibration Date:	03/03/2023	Column (1):	RTX-Dioxin2

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
13C12-1,2,3,4,6,7,8-HpCDF	100	0.7396157	100	0.9023055	100	1.063192	100	0.9589237	100	0.7622694	100	0.9449039
13C12-1,2,3,4,7,8,9-HpCDF	100	0.6488087	100	0.8119515	100	0.8176949	100	0.8667001	100	0.665459	100	0.8078955
13C12-1,2,3,4,6,7,8-HpCDD	100	0.724191	100	0.8737196	100	0.9555336	100	0.9094052	100	0.7229358	100	0.8549505
13C12-OCDD	200	0.701507	200	0.6312376	200	0.823691	200	0.8980531	200	0.7066522	200	0.8436876
37Cl4-2,3,7,8-TCDD	0.1	1.576039	0.5	1.320077	2	1.177166	10	1.132717	40	1.2366	200	1.284223
13C12-1,2,3,4-TCDD	100	1	100	1	100	1	100	1	100	1	100	1
13C12-1,2,3,7,8,9-HxCDD	100	1	100	1	100	1	100	1	100	1	100	1

INITIAL CALIBRATION DATA

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00015	Instrument:	AUTOSPEC01
Calibration Date:	03/03/2023	Column (1):	RTX-Dioxin2

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
2,3,7,8-TCDF	0.7015272	2.1			RSD ()	
2,3,7,8-TCDD	1.148662	2.3			RSD ()	
1,2,3,7,8-PeCDF	0.67923	7.0			RSD ()	
2,3,4,7,8-PeCDF	0.7861704	2.6			RSD ()	
1,2,3,7,8-PeCDD	1.021845	4.5			RSD ()	
1,2,3,4,7,8-HxCDF	1.166038	2.4			RSD ()	
1,2,3,6,7,8-HxCDF	1.090741	4.5			RSD ()	
2,3,4,6,7,8-HxCDF	1.139699	5.0			RSD ()	
1,2,3,7,8,9-HxCDF	1.137093	2.8			RSD ()	
1,2,3,4,7,8-HxCDD	0.9955689	4.4			RSD ()	
1,2,3,6,7,8-HxCDD	1.000938	2.7			RSD ()	
1,2,3,7,8,9-HxCDD	0.9071139	6.0			RSD ()	
1,2,3,4,6,7,8-HpCDF	1.002993	4.9			RSD ()	
1,2,3,4,7,8,9-HpCDF	0.9531152	5.8			RSD ()	
1,2,3,4,6,7,8-HpCDD	1.039013	4.1			RSD ()	
OCDF	0.7778078	6.7			RSD ()	
OCDD	0.9199537	5.8			RSD ()	
13C12-2,3,7,8-TCDF	1.620196	4.4			RSD ()	
13C12-2,3,7,8-TCDD	1.152409	3.8			RSD ()	
13C12-1,2,3,7,8-PeCDF	1.240452	15.9			RSD ()	
13C12-2,3,4,7,8-PeCDF	1.117786	17.7			RSD ()	
13C12-1,2,3,7,8-PeCDD	0.8288129	18.3			RSD ()	
13C12-1,2,3,4,7,8-HxCDF	1.168305	14.9			RSD ()	
13C12-1,2,3,6,7,8-HxCDF	1.386466	11.8			RSD ()	
13C12-2,3,4,6,7,8-HxCDF	1.129256	5.0			RSD ()	
13C12-1,2,3,7,8,9-HxCDF	0.9317541	3.4			RSD ()	
13C12-1,2,3,4,7,8-HxCDD	0.9950393	5.9			RSD ()	
13C12-1,2,3,6,7,8-HxCDD	1.156689	6.7			RSD ()	
13C12-1,2,3,4,6,7,8-HpCDF	0.8952017	13.8			RSD ()	
13C12-1,2,3,4,7,8,9-HpCDF	0.7697516	11.7			RSD ()	
13C12-1,2,3,4,6,7,8-HpCDD	0.8401226	11.5			RSD ()	

INITIAL CALIBRATION DATA

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00015	Instrument:	AUTOSPEC01
Calibration Date:	03/03/2023	Column (1):	RTX-Dioxin2

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
13C12-OCDD	0.7674714	13.4			RSD ()	
37Cl4-2,3,7,8-TCDD	1.287804	12.2			RSD ()	
13C12-1,2,3,4-TCDD	1	0.0			RSD ()	
13C12-1,2,3,7,8,9-HxCDD	1	0.0			RSD ()	

ANALYSIS SEQUENCE

SLC0045

Instrument: AUTOSPEC01 HRGCMS Column ID: K2310
Calibration ID: GC00015 Tune File: FEB0923_1-5
EM Voltage: 350 Resolution check times : 9:51, 18:18

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0045-ICV1	CS3W1	QC		1	K009821		03/03/2023 09:51	23030302	PK	
SLC0045-RES1	ISCW1	QC		2	L002084		03/03/2023 10:39	23030303	PK	
SLC0045-CAL1	CSLCW	QC		3	I005460		03/03/2023 11:28	23030304	PK	
SLC0045-CAL2	CS1CW	QC		4	I005456		03/03/2023 12:23	23030305	PK	
SLC0045-CAL3	CS2CW	QC		5	I005457		03/03/2023 13:16	23030306	PK	
SLC0045-CAL4	CS3CW	QC		6	K009821		03/03/2023 14:06	23030307	PK	
SLC0045-CAL5	CS4CW	QC		7	I005458		03/03/2023 14:59	23030308	PK	
SLC0045-CAL6	CS5CW	QC		8	I005459		03/03/2023 15:47	23030309	PK	
SLC0045-SCV1	ICVCW	QC		9	H008219		03/03/2023 16:36	23030310	PK	
SLC0045-CCV1	CS3V4	QC		10	K009821		03/03/2023 17:25	23030311	PK	
SLC0045-RES2	ISCV4	QC		11	L002084		03/03/2023 18:18	23030312	PK	

Dataset: T:\Autospec\Processed Data Batch\230303ICIH.qld
Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
Printed: Monday, March 06, 2023 10:58:44 Pacific Standard Time

3/6/23 PK

Event	Details	Sample ID
Process Extract		
Process Integrate		
Process Calibrate		
Process Quantify		
Dataset Created		
Peak deleted	Sample:23030304, Compound:TD, RT:26.410	1
Peak deleted	Sample:23030304, Compound:OD, RT:44.990	1
Peak deleted	Sample:23030304, Compound:TF, RT:25.774	1
Pre modification peak	Sample:23030305, Compound:TF, RT:25.774	2
Peak modified	Sample:23030305, Compound:TF, RT:25.774	2
Pre modification peak	Sample:23030304, Compound:HPD, RT:40.261	1
Peak modified	Sample:23030304, Compound:HPD, RT:40.261	1
Peak deleted	Sample:23030308, Compound:PF, RT:32.328	5
Peak deleted	Sample:23030309, Compound:PF, RT:32.307	6
Peak deleted	Sample:23030309, Compound:HF, RT:33.220	6
Peak deleted	Sample:23030309, Compound:TD, RT:27.017	6
Peak deleted	Sample:23030309, Compound:PD, RT:31.995	6
Peak deleted	Sample:23030309, Compound:PD, RT:31.917	6
Peak deleted	Sample:23030308, Compound:HD, RT:34.000	5
Peak deleted	Sample:23030308, Compound:HPD, RT:39.225	5
Peak deleted	Sample:23030309, Compound:HPD, RT:39.214	6
Pre modification peak	Sample:23030305, Compound:OF, RT:45.237	2
Peak modified	Sample:23030305, Compound:OF, RT:45.237	2
Dataset Saved	Saved to 'T:\Autospec\Processed Data Batch\230303ICIH.qld'	

Dataset: T:\Autospec\Processed Data Batch\230303IHOP.qld
Last Altered: Monday, March 06, 2023 11:36:30 Pacific Standard Time
Printed: Monday, March 06, 2023 11:37:17 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.788	1.001	4.469e4	5.839e4	0.702	0.765	0.770	894	1638	6.87e5	9.09e5	769.3	554.8	NO	bb	bb	9.550
12378-PeCDF	29.956	1.001	2.355e5	1.540e5	0.679	1.529	1.550	2187	1572	3.61e6	2.40e6	1652.4	1526.9	NO	bb	bb	49.641
23478-PeCDF	31.293	1.001	2.214e5	1.482e5	0.786	1.494	1.550	2187	1572	3.41e6	2.30e6	1560.8	1464.8	NO	bb	bb	47.528
123478-HxCDF	34.914	1.001	2.600e5	2.102e5	1.166	1.237	1.240	1592	1910	4.13e6	3.31e6	2594.2	1730.9	NO	bd	bd	47.118
234678-HxCDF	35.917	1.001	2.733e5	2.175e5	1.140	1.257	1.240	1592	1910	4.33e6	3.47e6	2719.2	1818.9	NO	bb	bb	49.341
123678-HxCDF	35.048	1.000	2.727e5	2.151e5	1.091	1.268	1.240	1592	1910	4.23e6	3.33e6	2659.9	1743.3	NO	db	db	49.569
123789-HxCDF	36.941	1.000	2.420e5	1.912e5	1.137	1.266	1.240	1592	1910	3.95e6	3.13e6	2482.2	1637.3	NO	bb	bb	46.959
1234678-HpCDF	38.780	1.000	1.767e5	1.776e5	1.003	0.995	1.050	1849	2300	2.99e6	3.02e6	1618.0	1311.0	NO	bb	bb	47.490
1234789-HpCDF	41.019	1.000	1.595e5	1.575e5	0.953	1.013	1.050	1849	2300	2.36e6	2.33e6	1274.2	1012.6	NO	bb	bb	50.221
OCDF	45.246	1.005	2.326e5	2.612e5	0.778	0.891	0.890	910	1225	2.82e6	3.14e6	3100.2	2559.9	NO	bb	bb	88.591
2378-TCDD	26.438	1.001	5.709e4	7.150e4	1.149	0.798	0.770	1506	757	9.09e5	1.12e6	603.1	1485.0	NO	bb	bb	9.450
12378-PeCDD	31.549	1.001	2.156e5	1.424e5	1.022	1.514	1.550	2044	1419	3.32e6	2.17e6	1626.0	1530.4	NO	bb	bb	49.654
123478-HxCDD	36.028	1.000	2.225e5	1.815e5	0.996	1.226	1.240	1845	1377	3.65e6	2.93e6	1979.4	2130.4	NO	bd	bd	50.053
123678-HxCDD	36.150	1.000	2.361e5	1.995e5	1.001	1.184	1.240	1845	1377	3.83e6	3.15e6	2076.5	2285.7	NO	db	db	49.648
123789-HxCDD	36.529	1.011	2.267e5	1.883e5	0.907	1.204	1.240	1845	1377	3.65e6	3.02e6	1979.8	2191.3	NO	bb	bb	54.229
1234678-HpCDD	40.284	1.001	1.918e5	1.891e5	1.039	1.015	1.050	2026	1655	2.99e6	2.92e6	1477.4	1764.9	NO	bb	bb	47.619
OCDD	45.008	1.000	3.015e5	3.475e5	0.920	0.868	0.890	1418	1100	3.70e6	4.29e6	2606.9	3904.9	NO	bb	bb	98.432
13C-2378-TCDF	25.774	1.007	6.611e5	8.775e5	1.620	0.753	0.770	2458	1918	1.00e7	1.34e7	4080.0	6997.2	NO	bb	bb	94.015
13C-12378-PeCDF	29.934	1.169	6.937e5	4.618e5	1.240	1.502	1.550	2176	1857	1.07e7	7.10e6	4925.2	3826.5	NO	bb	bb	92.213
13C-23478-PeCDF	31.271	1.221	5.928e5	3.963e5	1.118	1.496	1.550	2176	1857	9.20e6	6.25e6	4229.1	3368.5	NO	bb	bb	87.601
13C-123478-HxCDF	34.891	0.955	2.871e5	5.687e5	1.168	0.505	0.510	1657	1593	4.56e6	9.04e6	2750.7	5674.1	NO	bd	bd	84.013
13C-123678-HxCDF	35.036	0.959	3.069e5	5.954e5	1.386	0.515	0.510	1657	1593	4.75e6	9.14e6	2868.0	5738.5	NO	db	db	74.642
13C-234678-HxCDF	35.894	0.983	2.954e5	5.775e5	1.129	0.512	0.510	1657	1593	4.85e6	9.48e6	2926.1	5951.0	NO	bb	bb	88.651
13C-123789-HxCDF	36.930	1.011	2.724e5	5.390e5	0.932	0.505	0.510	1657	1593	4.39e6	8.57e6	2648.2	5379.8	NO	bb	bb	99.871
13C-1234678-HpCDF	38.769	1.062	2.262e5	5.177e5	0.895	0.437	0.440	2036	2545	3.83e6	8.70e6	1881.8	3416.5	NO	bb	bb	95.295
13C-1234789-HpCDF	41.008	1.123	1.995e5	4.627e5	0.770	0.431	0.440	2036	2545	2.95e6	6.70e6	1450.8	2632.3	NO	bb	bb	98.667
13C-1234-TCDD	25.605	0.000	4.500e5	5.601e5	1.000	0.803	0.770	1910	1117	7.08e6	8.81e6	3705.2	7891.1	NO	bb	bb	100.000
13C-2378-TCDD	26.424	1.032	5.241e5	6.605e5	1.152	0.794	0.770	1910	1117	7.92e6	9.96e6	4144.8	8917.7	NO	bb	bb	101.762
13C-12378-PeCDD	31.527	1.231	4.348e5	2.708e5	0.829	1.606	1.550	951	872	6.72e6	4.16e6	7062.4	4771.1	NO	bb	bb	84.283
13C-123478-HxCDD	36.017	0.986	4.575e5	3.533e5	0.995	1.295	1.240	1714	1036	7.67e6	5.90e6	4475.1	5696.2	NO	bd	bd	93.458
13C-123678-HxCDD	36.139	0.990	4.929e5	3.835e5	1.157	1.285	1.240	1714	1036	7.72e6	6.07e6	4504.9	5859.4	NO	db	db	86.905
13C-1234678-HpCDD	40.262	1.103	3.870e5	3.828e5	0.840	1.011	1.050	1736	1260	5.92e6	5.62e6	3411.3	4462.2	NO	bb	bb	105.085
13C-OCDD	44.999	1.232	6.781e5	7.554e5	0.767	0.898	0.890	1440	1232	8.22e6	9.13e6	5710.3	7413.0	NO	bb	bb	214.218
13C-123789-HxCDD	36.518	0.000	4.889e5	3.830e5	1.000	1.277	1.240	1714	1036	7.91e6	6.13e6	4618.2	5918.8	NO	bb	bb	100.000
37CL-2378-TCDD	26.438	1.033	1.177e5		1.288			2053		1.80e6		877.6			bb		9.046

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Last Altered: Monday, March 06, 2023 11:36:30 Pacific Standard Time
Printed: Monday, March 06, 2023 11:37:17 Pacific Standard Time

ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.285	0.865	4.825e4	6.619e4	0.802	0.729	0.770	894	1638	7.69e5	1.08e6	860.8	657.5	NO	bb	bb	9.280
1289-TCDF	27.286	1.059	4.233e4	5.922e4	0.678	0.715	0.770	894	1638	6.48e5	8.96e5	725.0	547.0	NO	db	db	9.735
13468-PECDF	27.145	0.907	4.529e5	2.964e5	1.246	1.528	1.550	639	866	7.07e6	4.64e6	11052.6	5356.5	NO	bb	bb	52.031
12389-PECDF	32.329	1.080	1.727e5	1.137e5	0.496	1.519	1.550	2187	1572	2.66e6	1.70e6	1217.2	1080.5	NO	bb	bb	49.938
123468-HXCDF	33.243	0.953	2.450e5	1.964e5	1.169	1.248	1.240	1592	1910	3.71e6	2.99e6	2333.1	1567.3	NO	bb	bb	44.113
1368-TCDD	23.571	0.892	5.082e4	6.674e4	1.015	0.761	0.770	1506	757	8.30e5	1.09e6	551.2	1438.0	NO	bb	bb	9.774
1289-TCDD	27.031	1.023	4.817e4	6.482e4	0.909	0.743	0.770	1506	757	7.39e5	9.76e5	490.7	1289.2	NO	bb	bb	10.496
12479-PECDD	28.831	0.914	4.117e5	2.743e5	2.301	1.501	1.550	2044	1419	3.99e6	2.64e6	1950.7	1862.6	NO	bb	bb	42.238
12389-PECDD	31.939	1.013	2.280e5	1.502e5	1.184	1.518	1.550	2044	1419	3.50e6	2.32e6	1711.4	1633.6	NO	bb	bb	45.288
124679-HXCDD	34.022	0.945	2.111e5	1.738e5	1.115	1.214	1.240	1845	1377	3.36e6	2.72e6	1819.4	1971.8	NO	bb	bb	42.563
1234679-HPCDD	39.236	0.975	2.063e5	2.043e5	1.137	1.010	1.050	2026	1655	3.38e6	3.38e6	1668.0	2041.4	NO	bb	bb	46.924
Total-tetrafurans			1.368e5		0.727			894		2.13e6							28.888
Total-penta1			4.529e5					639		7.07e6							52.031
Total-pentafurans			6.685e5		0.654			2187		1.03e7							156.333
Total-hexafurans			1.293e6		1.141			1592		2.04e7							237.100
Total-heptafurans			3.381e5		0.978			1849		5.38e6							98.217
Total-Furans			3.122e6		0.922			894		4.80e7							661.160
Total-tetradioxins			2.626e5		1.024			1506		3.74e6							49.711
Total-pentadioxins			8.563e5		1.502			2044		1.08e7							137.339
Total-hexadioxins			8.975e5		1.005			1845		1.45e7							196.701
Total-heptadioxins			3.982e5		1.088			2026		6.38e6							94.566
Total-Dioxins			2.716e6		1.130			1506		3.92e7							576.750
Total-TEQ			5.838e6					1506		8.72e7							1237.909
FUNCTION1 PFK			0.000e0					705807		0.00e0							
FUNCTION2 PFK			1.098e6					272509		2.65e6							0.000
FUNCTION3 PFK			8.030e5					419872		3.44e6							0.000
FUNCTION4 PFK			2.346e5					346452		6.90e6							
FUNCTION5 PFK			5.429e4					176842		2.44e6							
FUNCTION1 HXCD...			8.708e2					511		1.38e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			1.374e3					1181		2.70e4							0.000
FUNCTION3 OCDPE			4.232e2					570		6.10e3							0.000
FUNCTION4 NCDPE			7.938e2					683		4.57e3							0.000
FUNCTION5 DCDPE			0.000e0					526		0.00e0							

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TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.29	4.233e4	5.922e4	0.678	0.71	0.77	725.0	YES	NO	db	db	9.735
2	Total-tetrafurans	27.16	6.976e2	1.059e3	0.727	0.66	0.77	14.1	YES	NO	bd	bd	0.157
3	2378-TCDF	25.79	4.469e4	5.839e4	0.702	0.77	0.77	769.3	YES	NO	bb	bb	9.550
4	Total-tetrafurans	24.88	4.805e2	5.664e2	0.727	0.85	0.77	7.5	YES	NO	bb	bb	0.094
5	Total-tetrafurans	24.57	3.491e2	4.664e2	0.727	0.75	0.77	6.2	YES	NO	bd	bd	0.073
6	1368-TCDF	22.29	4.825e4	6.619e4	0.802	0.73	0.77	860.8	YES	NO	bb	bb	9.280

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	27.14	4.529e5	2.964e5	1.246	1.53	1.55	11052.6	YES	NO	bb	bb	52.031

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDF	29.96	2.355e5	1.540e5	0.679	1.53	1.55	1652.4	YES	NO	bb	bb	49.641
2	Total-pentafurans	28.81	3.891e4	2.579e4	0.654	1.51	1.55	273.1	YES	NO	bb	bb	9.226
3	12389-PECDF	32.33	1.727e5	1.137e5	0.496	1.52	1.55	1217.2	YES	NO	bb	bb	49.938
4	23478-PeCDF	31.29	2.214e5	1.482e5	0.786	1.49	1.55	1560.8	YES	NO	bb	bb	47.528

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.94	2.420e5	1.912e5	1.137	1.27	1.24	2482.2	YES	NO	bb	bb	46.959
2	234678-HxCDF	35.92	2.733e5	2.175e5	1.140	1.26	1.24	2719.2	YES	NO	bb	bb	49.341
3	123678-HxCDF	35.05	2.727e5	2.151e5	1.091	1.27	1.24	2659.9	YES	NO	db	db	49.569
4	123478-HxCDF	34.91	2.600e5	2.102e5	1.166	1.24	1.24	2594.2	YES	NO	bd	bd	47.118
5	123468-HXCDF	33.24	2.450e5	1.964e5	1.169	1.25	1.24	2333.1	YES	NO	bb	bb	44.113

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HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-heptafurans	41.38	1.097e2	1.037e2	0.978	1.06	1.05	1.8	NO	NO	bb	bb	0.031
2	1234789-HpCDF	41.02	1.595e5	1.575e5	0.953	1.01	1.05	1274.2	YES	NO	bb	bb	50.221
3	Total-heptafurans	39.45	1.654e3	1.420e3	0.978	1.17	1.05	14.3	YES	NO	bb	bb	0.447
4	Total-heptafurans	39.28	9.725e1	9.433e1	0.978	1.03	1.05	1.5	NO	NO	bb	bb	0.028
5	1234678-HpCDF	38.78	1.767e5	1.776e5	1.003	1.00	1.05	1618.0	YES	NO	bb	bb	47.490

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.29	4.233e4	5.922e4	0.678	0.71	0.77	725.0	YES	NO	db	db	9.735
2	Total-tetrafurans	27.16	6.976e2	1.059e3	0.727	0.66	0.77	14.1	YES	NO	bd	bd	0.157
3	2378-TCDF	25.79	4.469e4	5.839e4	0.702	0.77	0.77	769.3	YES	NO	bb	bb	9.550
4	Total-tetrafurans	24.88	4.805e2	5.664e2	0.727	0.85	0.77	7.5	YES	NO	bb	bb	0.094
5	Total-tetrafurans	24.57	3.491e2	4.664e2	0.727	0.75	0.77	6.2	YES	NO	bd	bd	0.073
6	1368-TCDF	22.29	4.825e4	6.619e4	0.802	0.73	0.77	860.8	YES	NO	bb	bb	9.280
7	12378-PeCDF	29.96	2.355e5	1.540e5	0.679	1.53	1.55	1652.4	YES	NO	bb	bb	49.641
8	Total-pentafurans	28.81	3.891e4	2.579e4	0.654	1.51	1.55	273.1	YES	NO	bb	bb	9.226
9	12389-PECDF	32.33	1.727e5	1.137e5	0.496	1.52	1.55	1217.2	YES	NO	bb	bb	49.938
10	23478-PeCDF	31.29	2.214e5	1.482e5	0.786	1.49	1.55	1560.8	YES	NO	bb	bb	47.528
11	123789-HxCDF	36.94	2.420e5	1.912e5	1.137	1.27	1.24	2482.2	YES	NO	bb	bb	46.959
12	234678-HxCDF	35.92	2.733e5	2.175e5	1.140	1.26	1.24	2719.2	YES	NO	bb	bb	49.341
13	123678-HxCDF	35.05	2.727e5	2.151e5	1.091	1.27	1.24	2659.9	YES	NO	db	db	49.569
14	123478-HxCDF	34.91	2.600e5	2.102e5	1.166	1.24	1.24	2594.2	YES	NO	bd	bd	47.118
15	123468-HXCDF	33.24	2.450e5	1.964e5	1.169	1.25	1.24	2333.1	YES	NO	bb	bb	44.113
16	Total-heptafurans	41.38	1.097e2	1.037e2	0.978	1.06	1.05	1.8	NO	NO	bb	bb	0.031
17	1234789-HpCDF	41.02	1.595e5	1.575e5	0.953	1.01	1.05	1274.2	YES	NO	bb	bb	50.221
18	Total-heptafurans	39.45	1.654e3	1.420e3	0.978	1.17	1.05	14.3	YES	NO	bb	bb	0.447
19	Total-heptafurans	39.28	9.725e1	9.433e1	0.978	1.03	1.05	1.5	NO	NO	bb	bb	0.028
20	1234678-HpCDF	38.78	1.767e5	1.776e5	1.003	1.00	1.05	1618.0	YES	NO	bb	bb	47.490
21	OCDF	45.25	2.326e5	2.612e5	0.778	0.89	0.89	3100.2	YES	NO	bb	bb	88.591
22	13468-PECDF	27.14	4.529e5	2.964e5	1.246	1.53	1.55	11052.6	YES	NO	bb	bb	52.031

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TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.57	5.082e4	6.674e4	1.015	0.76	0.77	551.2	YES	NO	bb	bb	9.774
2	1289-TCDD	27.03	4.817e4	6.482e4	0.909	0.74	0.77	490.7	YES	NO	bb	bb	10.496
3	2378-TCDD	26.44	5.709e4	7.150e4	1.149	0.80	0.77	603.1	YES	NO	bb	bb	9.450
4	Total-tetradioxins	26.11	8.149e4	1.045e5	1.024	0.78	0.77	583.1	YES	NO	bb	bb	15.330
5	Total-tetradioxins	25.62	2.499e4	3.156e4	1.024	0.79	0.77	257.1	YES	NO	bb	bb	4.660

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	31.94	2.280e5	1.502e5	1.184	1.52	1.55	1711.4	YES	NO	bb	bb	45.288
2	12378-PeCDD	31.55	2.156e5	1.424e5	1.022	1.51	1.55	1626.0	YES	NO	bb	bb	49.654
3	Total-pentadioxins	30.87	1.016e3	6.817e2	1.502	1.49	1.55	7.9	YES	NO	bb	bb	0.160
4	12479-PECDD	28.83	4.117e5	2.743e5	2.301	1.50	1.55	1950.7	YES	NO	bb	bb	42.238

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.53	2.267e5	1.883e5	0.907	1.20	1.24	1979.8	YES	NO	bb	bb	54.229
2	123678-HxCDD	36.15	2.361e5	1.995e5	1.001	1.18	1.24	2076.5	YES	NO	db	db	49.648
3	123478-HxCDD	36.03	2.225e5	1.815e5	0.996	1.23	1.24	1979.4	YES	NO	bd	bd	50.053
4	Total-hexadioxins	35.14	9.946e2	7.755e2	1.005	1.28	1.24	9.3	YES	NO	db	bd	0.209
5	124679-HXCDD	34.02	2.111e5	1.738e5	1.115	1.21	1.24	1819.4	YES	NO	bb	bb	42.563

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234679-HPCDD	39.24	2.063e5	2.043e5	1.137	1.01	1.05	1668.0	YES	NO	bb	bb	46.924
2	Total-heptadioxins	40.58	1.040e2	8.729e1	1.088	1.19	1.05	2.1	NO	NO	bb	bb	0.023
3	1234678-HpCDD	40.28	1.918e5	1.891e5	1.039	1.01	1.05	1477.4	YES	NO	bb	bb	47.619

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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.57	5.082e4	6.674e4	1.015	0.76	0.77	551.2	YES	NO	bb	bb	9.774
2	1289-TCDD	27.03	4.817e4	6.482e4	0.909	0.74	0.77	490.7	YES	NO	bb	bb	10.496
3	2378-TCDD	26.44	5.709e4	7.150e4	1.149	0.80	0.77	603.1	YES	NO	bb	bb	9.450
4	Total-tetradioxins	26.11	8.149e4	1.045e5	1.024	0.78	0.77	583.1	YES	NO	bb	bb	15.330
5	Total-tetradioxins	25.62	2.499e4	3.156e4	1.024	0.79	0.77	257.1	YES	NO	bb	bb	4.660
6	12389-PECDD	31.94	2.280e5	1.502e5	1.184	1.52	1.55	1711.4	YES	NO	bb	bb	45.288
7	12378-PeCDD	31.55	2.156e5	1.424e5	1.022	1.51	1.55	1626.0	YES	NO	bb	bb	49.654
8	Total-pentadioxins	30.87	1.016e3	6.817e2	1.502	1.49	1.55	7.9	YES	NO	bb	bb	0.160
9	12479-PECDD	28.83	4.117e5	2.743e5	2.301	1.50	1.55	1950.7	YES	NO	bb	bb	42.238
10	123789-HxCDD	36.53	2.267e5	1.883e5	0.907	1.20	1.24	1979.8	YES	NO	bb	bb	54.229
11	123678-HxCDD	36.15	2.361e5	1.995e5	1.001	1.18	1.24	2076.5	YES	NO	db	db	49.648
12	123478-HxCDD	36.03	2.225e5	1.815e5	0.996	1.23	1.24	1979.4	YES	NO	bd	bd	50.053
13	Total-hexadioxins	35.14	9.946e2	7.755e2	1.005	1.28	1.24	9.3	YES	NO	db	bd	0.209
14	124679-HXCDD	34.02	2.111e5	1.738e5	1.115	1.21	1.24	1819.4	YES	NO	bb	bb	42.563
15	1234679-HPCDD	39.24	2.063e5	2.043e5	1.137	1.01	1.05	1668.0	YES	NO	bb	bb	46.924
16	Total-heptadioxins	40.58	1.040e2	8.729e1	1.088	1.19	1.05	2.1	NO	NO	bb	bb	0.023
17	1234678-HpCDD	40.28	1.918e5	1.891e5	1.039	1.01	1.05	1477.4	YES	NO	bb	bb	47.619
18	OCDD	45.01	3.015e5	3.475e5	0.920	0.87	0.89	2606.9	YES	NO	bb	bb	98.432

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.29	4.233e4	5.922e4	0.678	0.71	0.77	725.0	YES	NO	db	db	9.735
2	Total-tetrafurans	27.16	6.976e2	1.059e3	0.727	0.66	0.77	14.1	YES	NO	bd	bd	0.157
3	2378-TCDF	25.79	4.469e4	5.839e4	0.702	0.77	0.77	769.3	YES	NO	bb	bb	9.550
4	Total-tetrafurans	24.88	4.805e2	5.664e2	0.727	0.85	0.77	7.5	YES	NO	bb	bb	0.094
5	Total-tetrafurans	24.57	3.491e2	4.664e2	0.727	0.75	0.77	6.2	YES	NO	bd	bd	0.073
6	1368-TCDF	22.29	4.825e4	6.619e4	0.802	0.73	0.77	860.8	YES	NO	bb	bb	9.280
7	12378-PeCDF	29.96	2.355e5	1.540e5	0.679	1.53	1.55	1652.4	YES	NO	bb	bb	49.641
8	Total-pentafurans	28.81	3.891e4	2.579e4	0.654	1.51	1.55	273.1	YES	NO	bb	bb	9.226
9	12389-PECDF	32.33	1.727e5	1.137e5	0.496	1.52	1.55	1217.2	YES	NO	bb	bb	49.938
10	23478-PeCDF	31.29	2.214e5	1.482e5	0.786	1.49	1.55	1560.8	YES	NO	bb	bb	47.528
11	123789-HxCDF	36.94	2.420e5	1.912e5	1.137	1.27	1.24	2482.2	YES	NO	bb	bb	46.959
12	234678-HxCDF	35.92	2.733e5	2.175e5	1.140	1.26	1.24	2719.2	YES	NO	bb	bb	49.341
13	123678-HxCDF	35.05	2.727e5	2.151e5	1.091	1.27	1.24	2659.9	YES	NO	db	db	49.569
14	123478-HxCDF	34.91	2.600e5	2.102e5	1.166	1.24	1.24	2594.2	YES	NO	bd	bd	47.118
15	123468-HXCDF	33.24	2.450e5	1.964e5	1.169	1.25	1.24	2333.1	YES	NO	bb	bb	44.113
16	Total-heptafurans	41.38	1.097e2	1.037e2	0.978	1.06	1.05	1.8	NO	NO	bb	bb	0.031
17	1234789-HpCDF	41.02	1.595e5	1.575e5	0.953	1.01	1.05	1274.2	YES	NO	bb	bb	50.221
18	Total-heptafurans	39.45	1.654e3	1.420e3	0.978	1.17	1.05	14.3	YES	NO	bb	bb	0.447
19	Total-heptafurans	39.28	9.725e1	9.433e1	0.978	1.03	1.05	1.5	NO	NO	bb	bb	0.028
20	1234678-HpCDF	38.78	1.767e5	1.776e5	1.003	1.00	1.05	1618.0	YES	NO	bb	bb	47.490
21	OCDF	45.25	2.326e5	2.612e5	0.778	0.89	0.89	3100.2	YES	NO	bb	bb	88.591
22	13468-PECDF	27.14	4.529e5	2.964e5	1.246	1.53	1.55	11052.6	YES	NO	bb	bb	52.031
23	1368-TCDD	23.57	5.082e4	6.674e4	1.015	0.76	0.77	551.2	YES	NO	bb	bb	9.774
24	1289-TCDD	27.03	4.817e4	6.482e4	0.909	0.74	0.77	490.7	YES	NO	bb	bb	10.496
25	2378-TCDD	26.44	5.709e4	7.150e4	1.149	0.80	0.77	603.1	YES	NO	bb	bb	9.450
26	Total-tetradioxins	26.11	8.149e4	1.045e5	1.024	0.78	0.77	583.1	YES	NO	bb	bb	15.330
27	Total-tetradioxins	25.62	2.499e4	3.156e4	1.024	0.79	0.77	257.1	YES	NO	bb	bb	4.660
28	12389-PECDD	31.94	2.280e5	1.502e5	1.184	1.52	1.55	1711.4	YES	NO	bb	bb	45.288
29	12378-PeCDD	31.55	2.156e5	1.424e5	1.022	1.51	1.55	1626.0	YES	NO	bb	bb	49.654
30	Total-pentadioxins	30.87	1.016e3	6.817e2	1.502	1.49	1.55	7.9	YES	NO	bb	bb	0.160
31	12479-PECDD	28.83	4.117e5	2.743e5	2.301	1.50	1.55	1950.7	YES	NO	bb	bb	42.238
32	123789-HxCDD	36.53	2.267e5	1.883e5	0.907	1.20	1.24	1979.8	YES	NO	bb	bb	54.229
33	123678-HxCDD	36.15	2.361e5	1.995e5	1.001	1.18	1.24	2076.5	YES	NO	db	db	49.648
34	123478-HxCDD	36.03	2.225e5	1.815e5	0.996	1.23	1.24	1979.4	YES	NO	bd	bd	50.053
35	Total-hexadioxins	35.14	9.946e2	7.755e2	1.005	1.28	1.24	9.3	YES	NO	db	bd	0.209
36	124679-HXCDD	34.02	2.111e5	1.738e5	1.115	1.21	1.24	1819.4	YES	NO	bb	bb	42.563
37	1234679-HPCDD	39.24	2.063e5	2.043e5	1.137	1.01	1.05	1668.0	YES	NO	bb	bb	46.924

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	Total-heptadioxins	40.58	1.040e2	8.729e1	1.088	1.19	1.05	2.1	NO	NO	bb	bb	0.023
39	1234678-HpCDD	40.28	1.918e5	1.891e5	1.039	1.01	1.05	1477.4	YES	NO	bb	bb	47.619
40	OCDD	45.01	3.015e5	3.475e5	0.920	0.87	0.89	2606.9	YES	NO	bb	bb	98.432

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	30.96	1.058e5					1.1	NO		bb		0.000
2	FUNCTION2 PFK	30.15	5.471e5					3.7	YES		bb		0.000
3	FUNCTION2 PFK	28.28	4.455e5					4.9	YES		bb		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	35.89	2.667e5					4.7	YES		bb		0.000
2	FUNCTION3 PFK	33.03	5.362e5					3.5	YES		bb		0.000

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PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	38.07	4.905e4					2.0	NO		db		
2	FUNCTION4 PFK	37.96	1.071e4					1.3	NO		bd		
3	FUNCTION4 PFK	37.89	4.848e3					0.7	NO		bb		
4	FUNCTION4 PFK	42.18	1.359e4					1.2	NO		bb		
5	FUNCTION4 PFK	41.91	8.056e3					0.9	NO		db		
6	FUNCTION4 PFK	41.83	2.292e4					1.6	NO		bd		
7	FUNCTION4 PFK	41.77	1.673e4					1.5	NO		bb		
8	FUNCTION4 PFK	41.48	1.418e4					1.4	NO		bb		
9	FUNCTION4 PFK	41.32	2.104e3					0.5	NO		bb		
10	FUNCTION4 PFK	41.13	8.695e3					1.0	NO		bb		
11	FUNCTION4 PFK	40.63	8.163e3					0.8	NO		bb		
12	FUNCTION4 PFK	40.08	1.008e4					1.1	NO		db		
13	FUNCTION4 PFK	40.04	1.572e4					1.4	NO		bd		
14	FUNCTION4 PFK	39.51	7.181e3					1.0	NO		bb		
15	FUNCTION4 PFK	39.44	5.021e3					0.7	NO		bb		
16	FUNCTION4 PFK	38.96	9.511e3					1.3	NO		db		
17	FUNCTION4 PFK	38.92	2.806e4					1.5	NO		bd		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	42.57	1.411e3					0.9	NO		bb		
2	FUNCTION5 PFK	45.95	2.307e4					3.9	YES		bb		
3	FUNCTION5 PFK	45.69	1.018e3					0.6	NO		bb		
4	FUNCTION5 PFK	45.54	1.146e3					0.7	NO		bb		
5	FUNCTION5 PFK	45.12	9.805e3					2.3	NO		bb		
6	FUNCTION5 PFK	44.83	5.276e3					1.3	NO		bb		
7	FUNCTION5 PFK	44.58	5.554e3					1.4	NO		bb		
8	FUNCTION5 PFK	44.38	2.760e3					0.9	NO		db		
9	FUNCTION5 PFK	44.35	3.252e3					1.1	NO		bd		
10	FUNCTION5 PFK	42.99	9.959e2					0.6	NO		bb		

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ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	25.01	7.970e1					3.2	YES		bb		0.000
2	FUNCTION1 HXCD...	23.47	8.919e1					3.0	YES		db		0.000
3	FUNCTION1 HXCD...	23.40	8.065e1					2.9	NO		dd		0.000
4	FUNCTION1 HXCD...	23.32	1.305e2					3.4	YES		dd		0.000
5	FUNCTION1 HXCD...	23.22	1.146e2					2.8	NO		bd		0.000
6	FUNCTION1 HXCD...	22.41	7.936e1					4.3	YES		bb		0.000
7	FUNCTION1 HXCD...	27.40	7.698e1					2.2	NO		bb		0.000
8	FUNCTION1 HXCD...	27.14	1.376e2					3.3	YES		bb		0.000
9	FUNCTION1 HXCD...	25.79	8.222e1					1.9	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.53	2.999e2					2.9	NO		bb		0.000
2	FUNCTION2 HPCD...	31.17	3.219e2					4.5	YES		bb		0.000
3	FUNCTION2 HPCD...	29.58	8.369e1					1.2	NO		db		0.000
4	FUNCTION2 HPCD...	29.50	8.185e1					1.4	NO		bd		0.000
5	FUNCTION2 HPCD...	29.43	9.066e1					2.2	NO		bb		0.000
6	FUNCTION2 HPCD...	28.26	1.049e2					2.5	NO		db		0.000
7	FUNCTION2 HPCD...	28.22	1.658e2					2.8	NO		bd		0.000
8	FUNCTION2 HPCD...	28.15	1.360e2					3.3	YES		db		0.000
9	FUNCTION2 HPCD...	28.11	8.921e1					2.1	NO		bd		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.53	2.562e2					6.2	YES		bb		0.000
2	FUNCTION3 OCDPE	36.14	1.671e2					4.5	YES		bb		0.000

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ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	42.04	8.282e1					2.4	NO		bb		0.000
2	FUNCTION4 NCDPE	38.07	5.777e2					4.3	YES		bb		0.000
3	FUNCTION4 NCDPE	37.82	1.333e2					0.0	NO		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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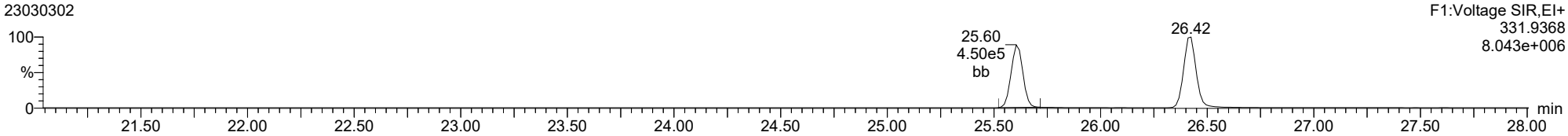

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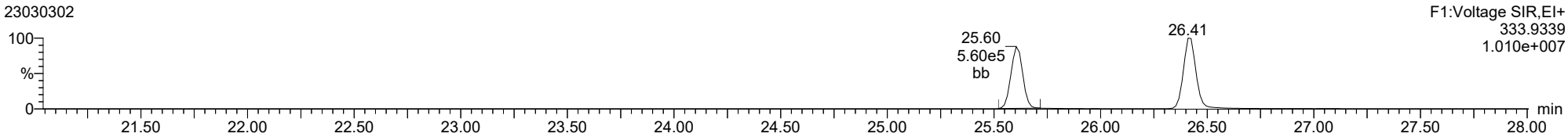
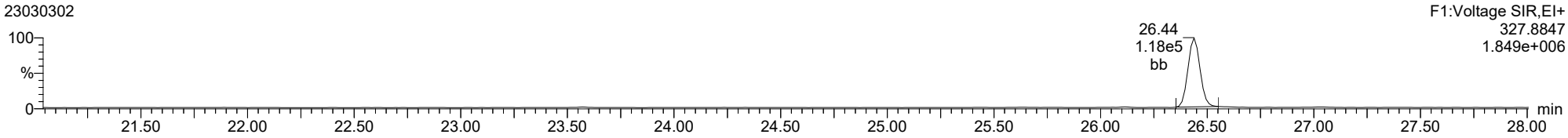


37CL-2378-TCDD



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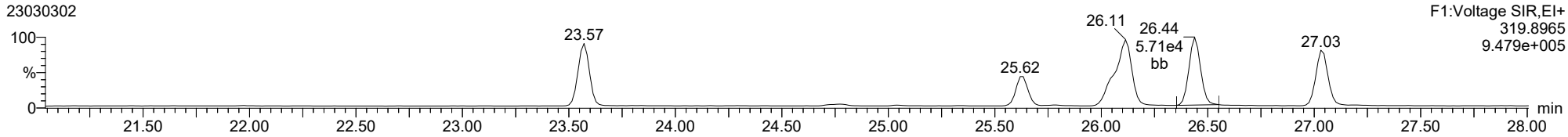
2378-TCDD



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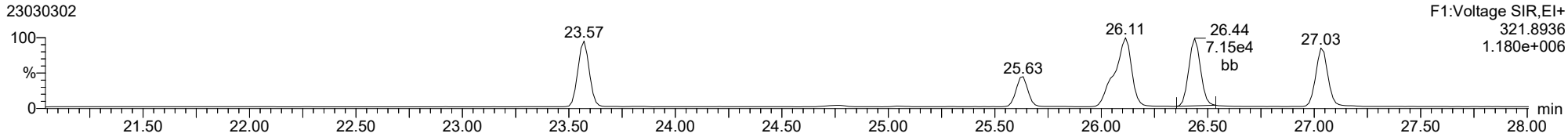

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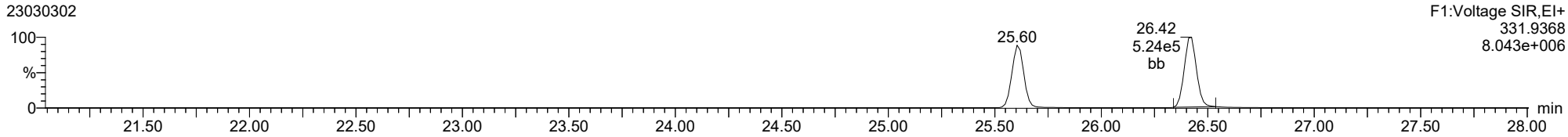

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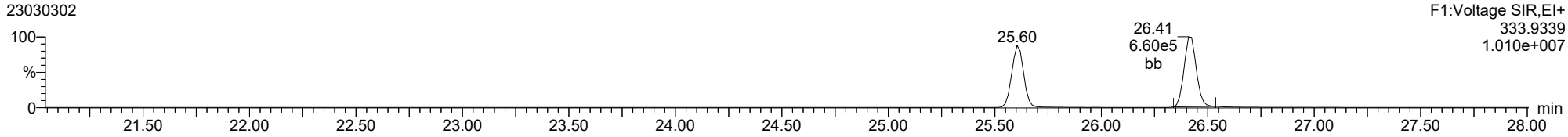
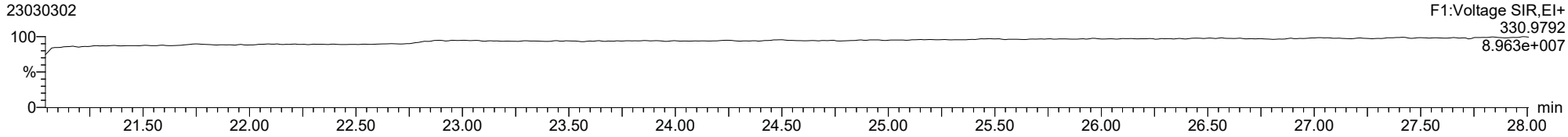


FUNCTION1 PFK



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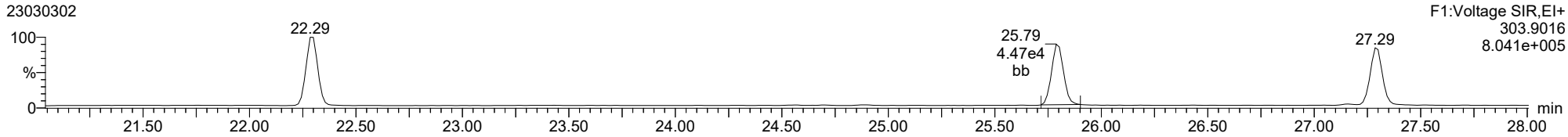
2378-TCDF



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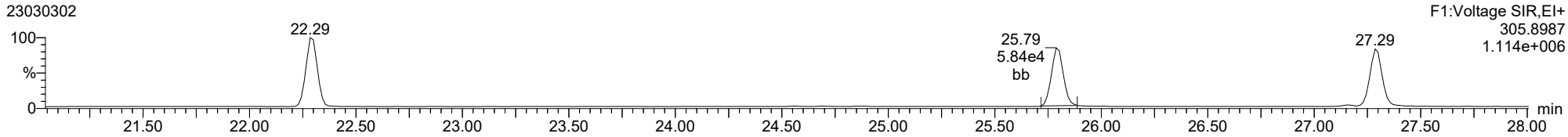

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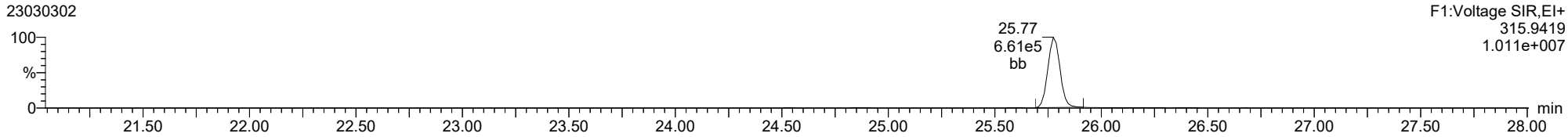

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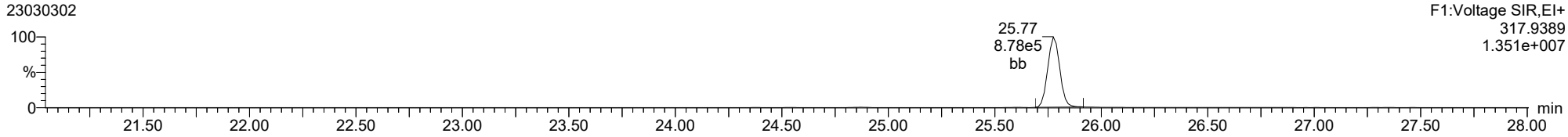

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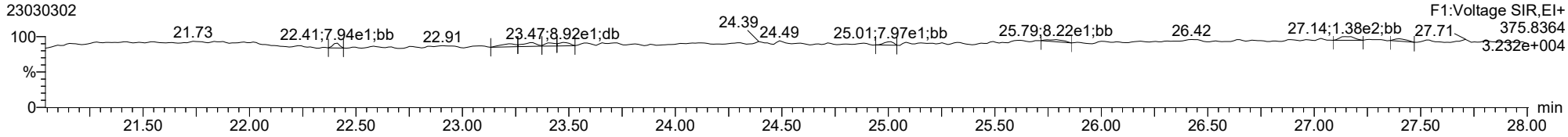

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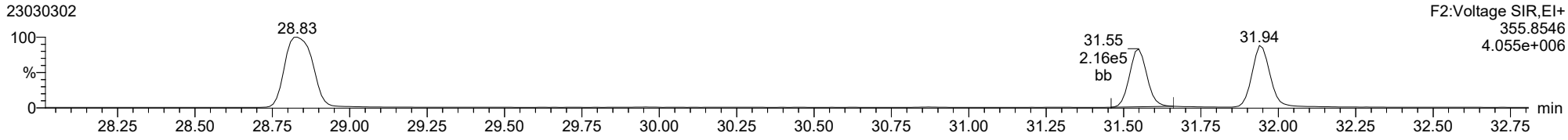
12378-PeCDD



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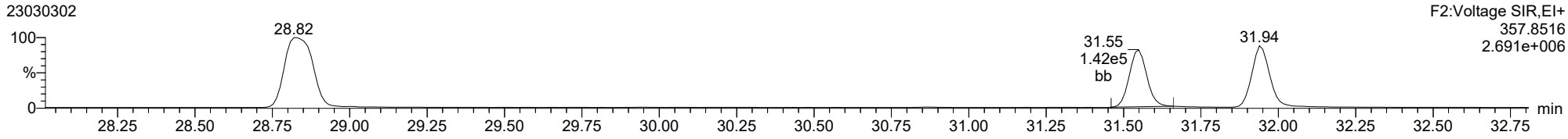

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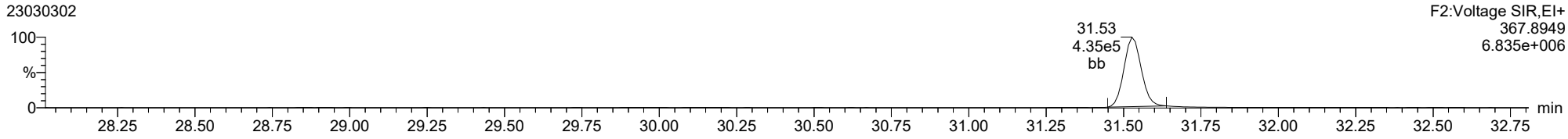

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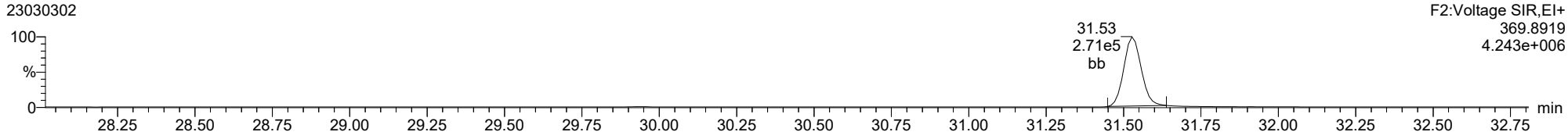
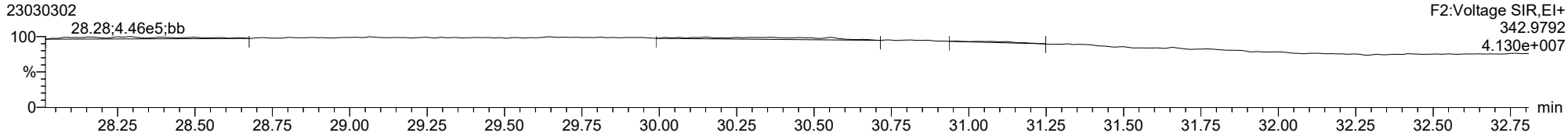


FUNCTION2 PFK



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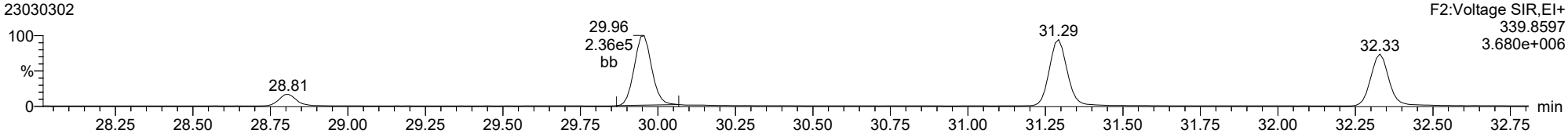
12378-PeCDF



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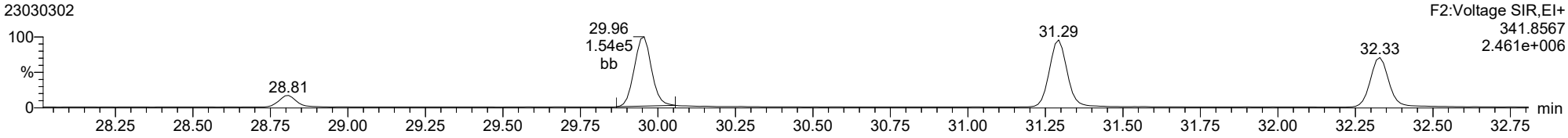

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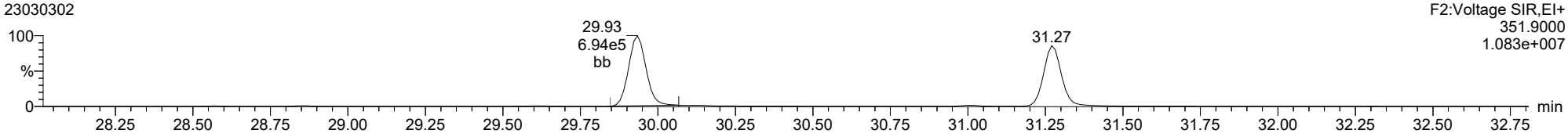

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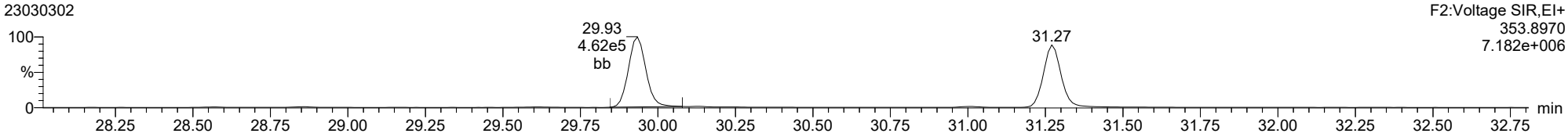

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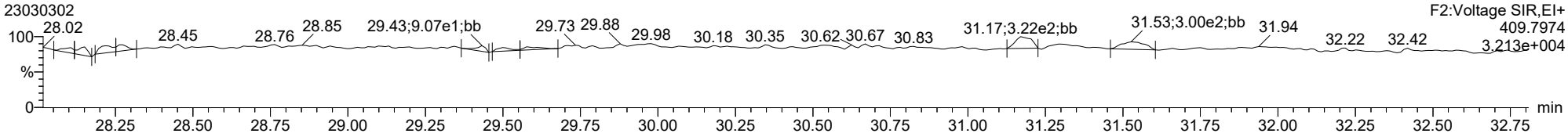

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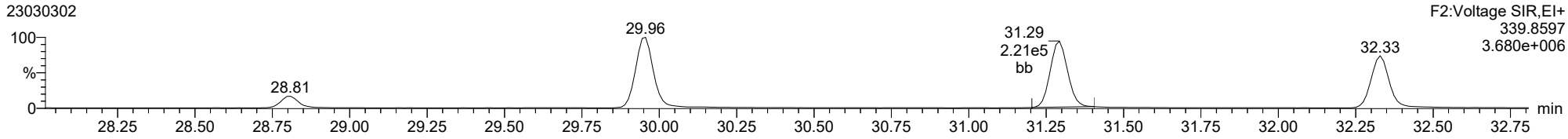
23478-PeCDF



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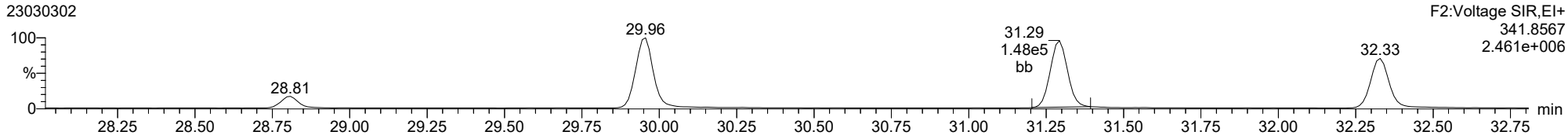

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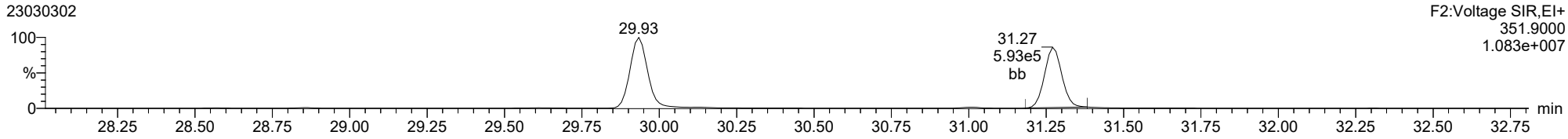

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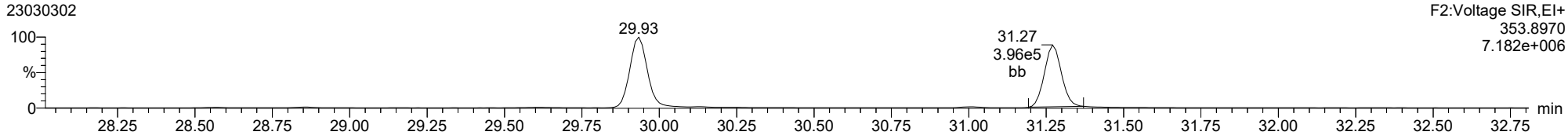

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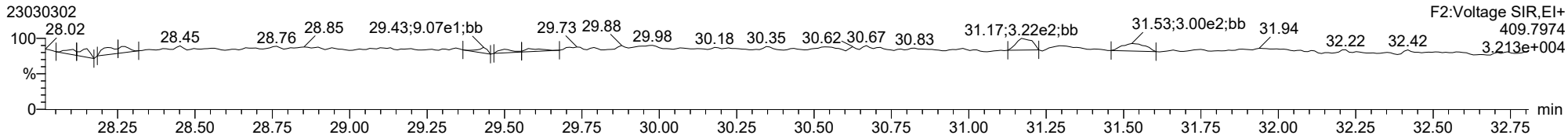

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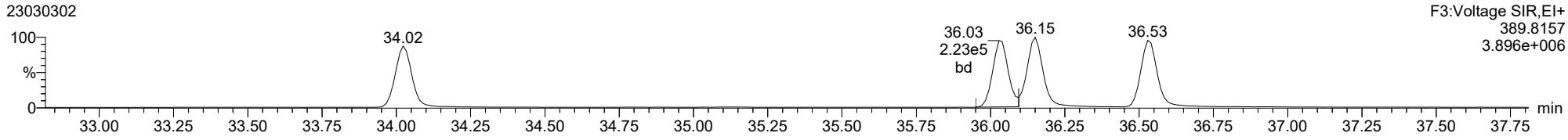

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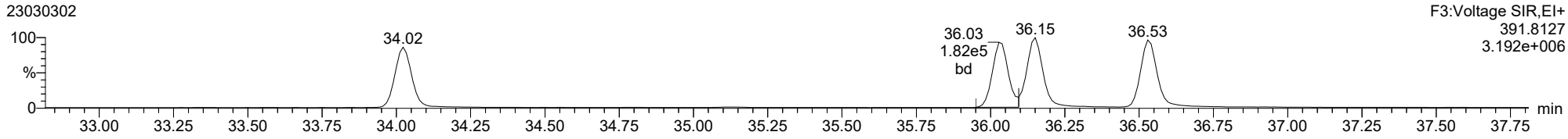

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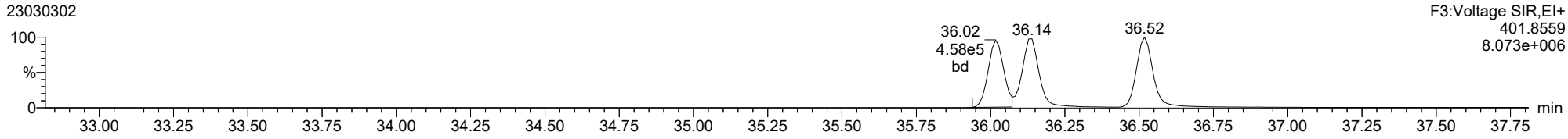

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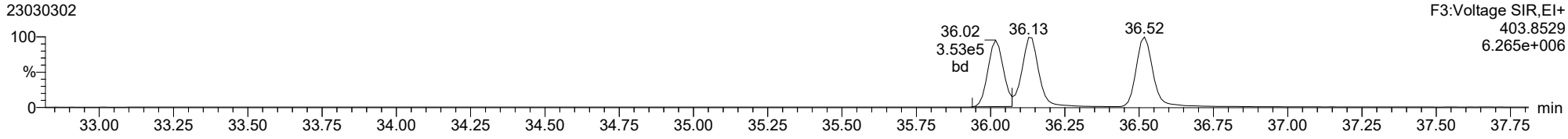

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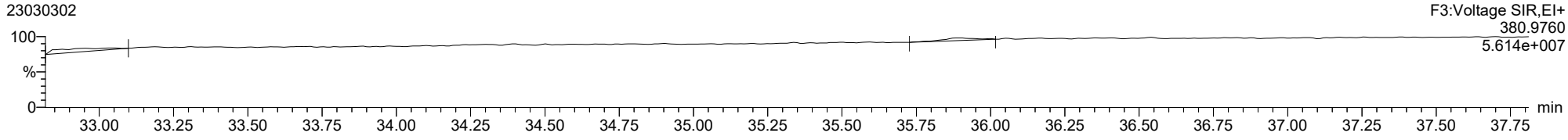

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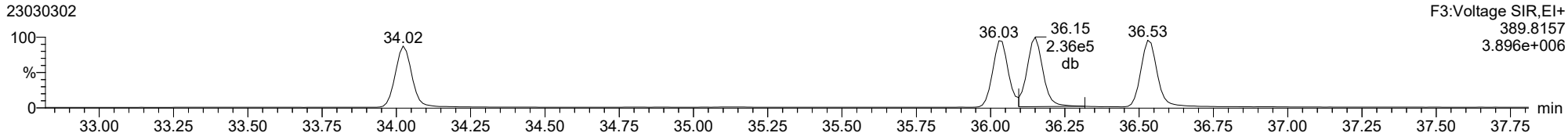

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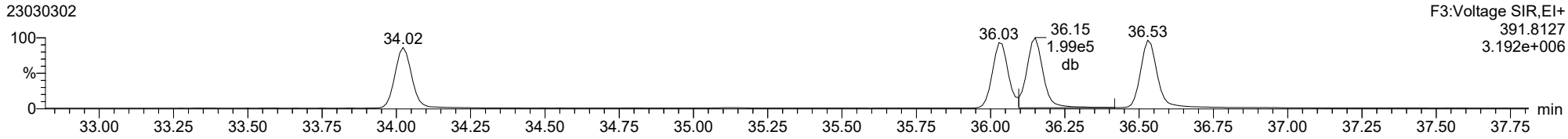

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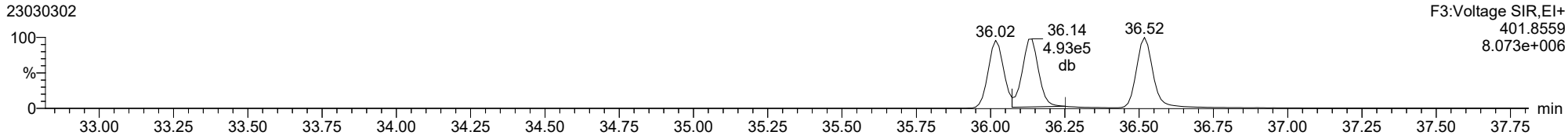

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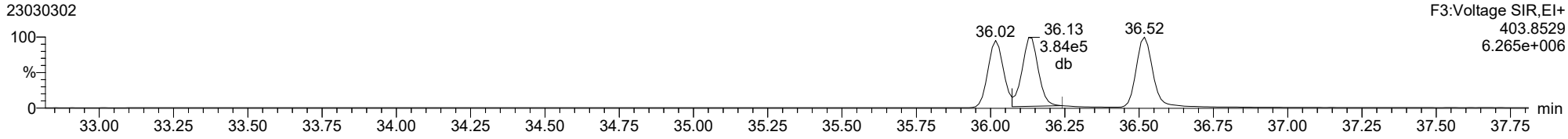

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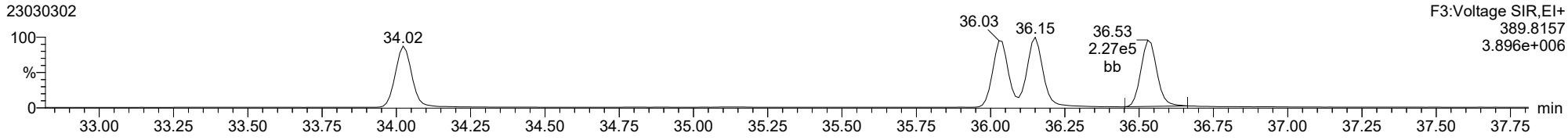

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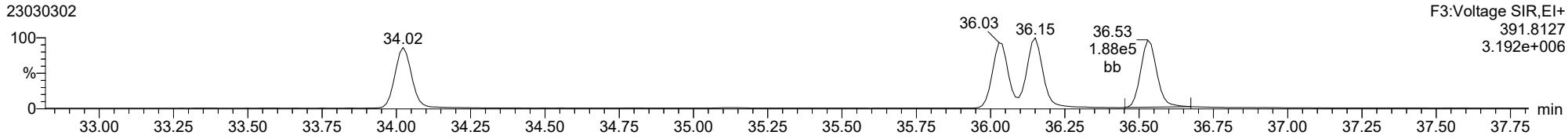

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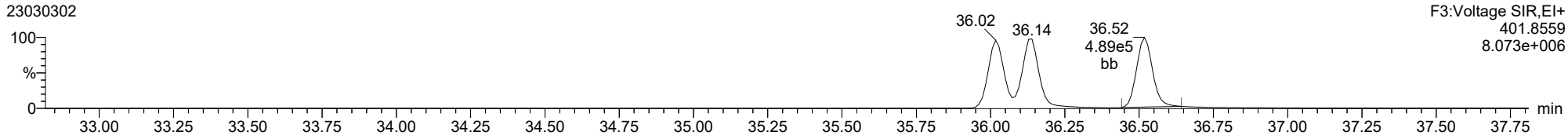

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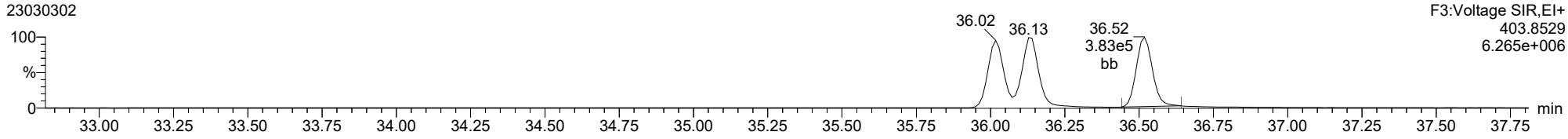

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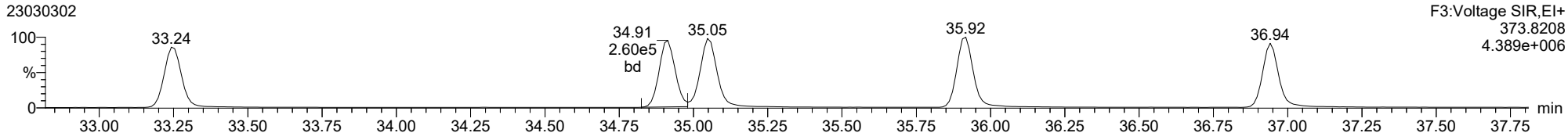

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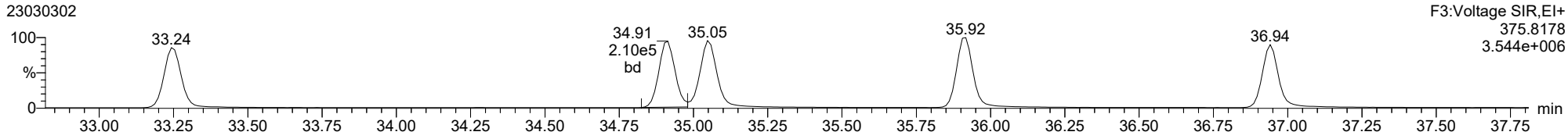

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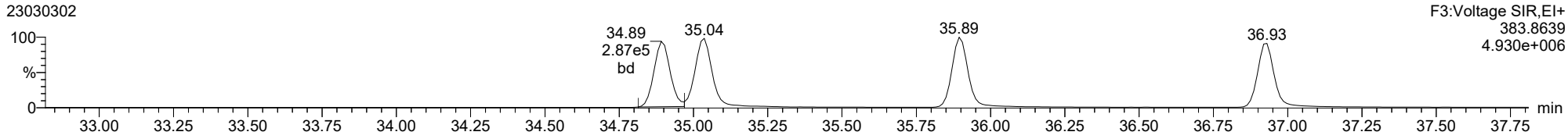

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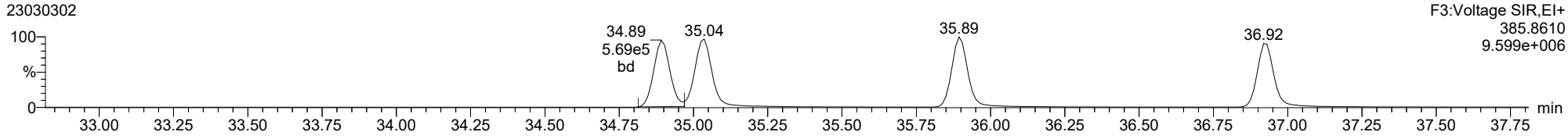

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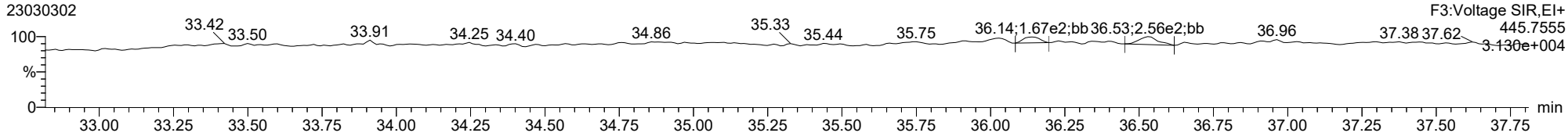

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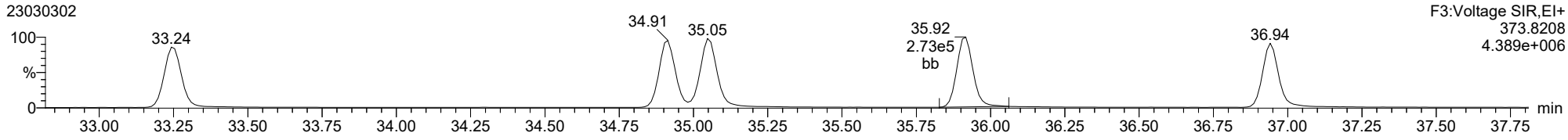
234678-HxCDF



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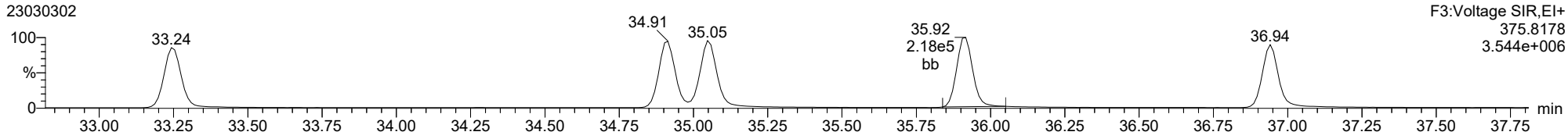

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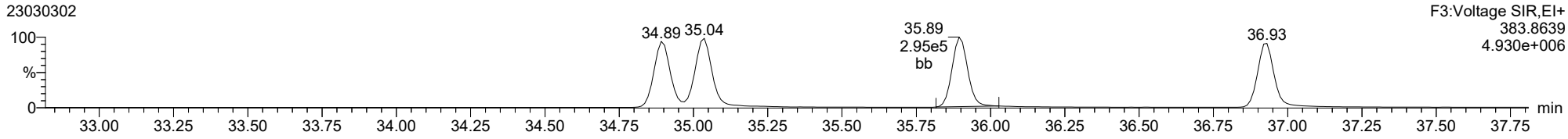

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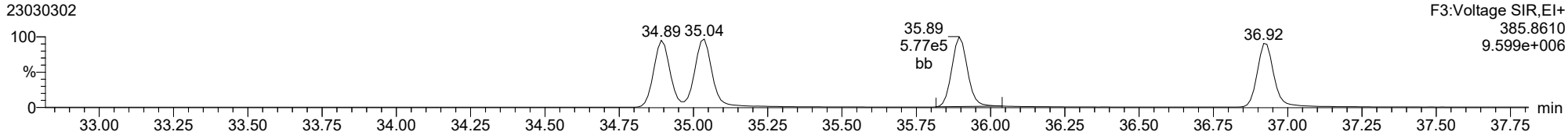

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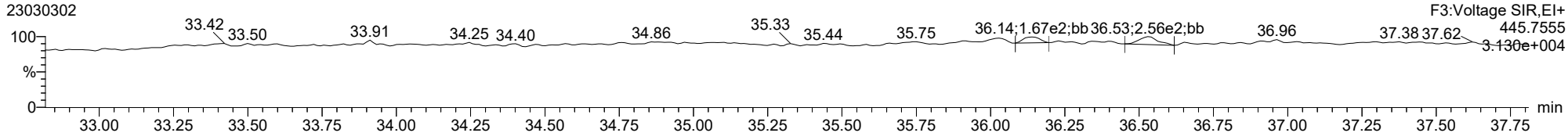

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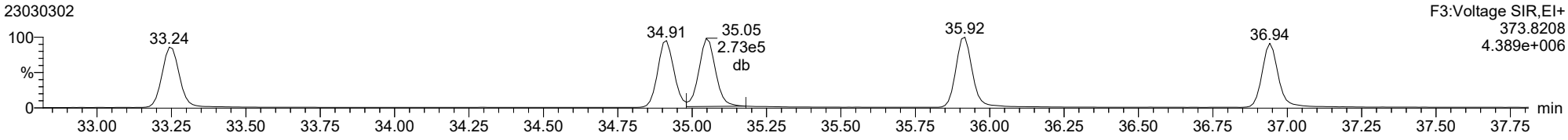
123678-HxCDF



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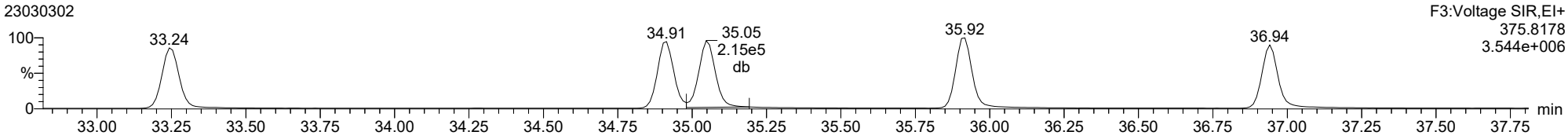

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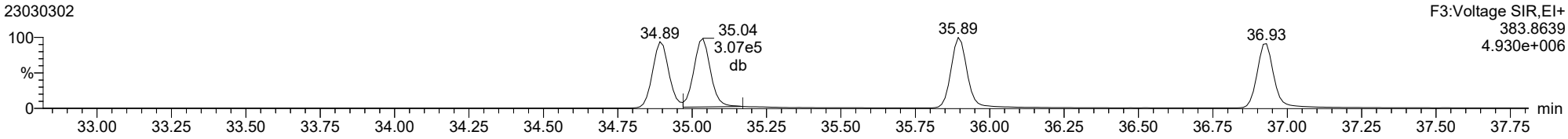

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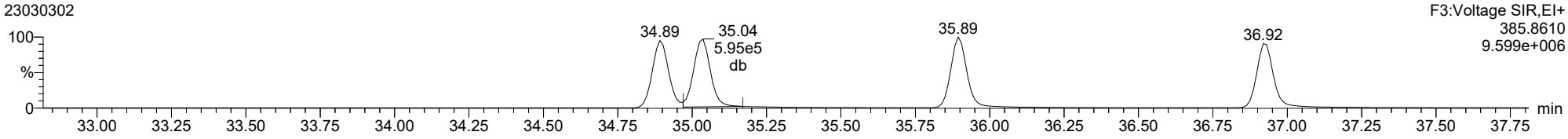

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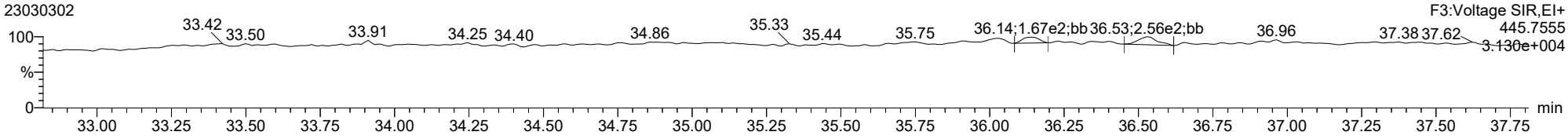

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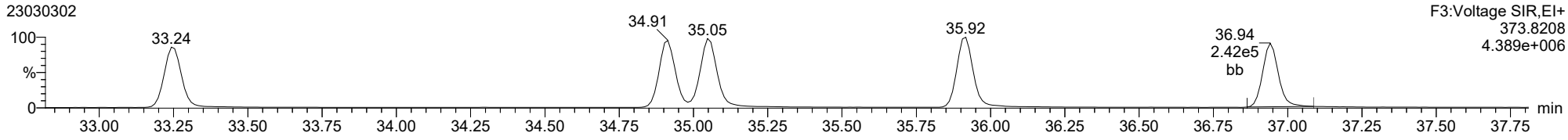

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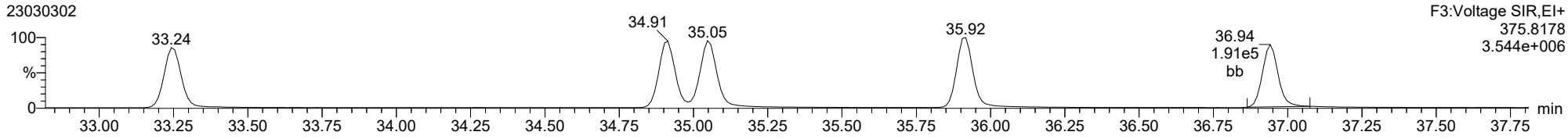

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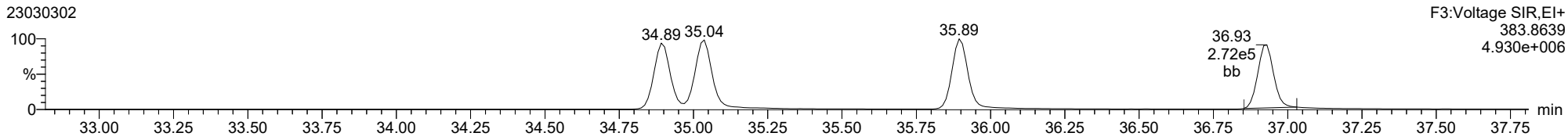

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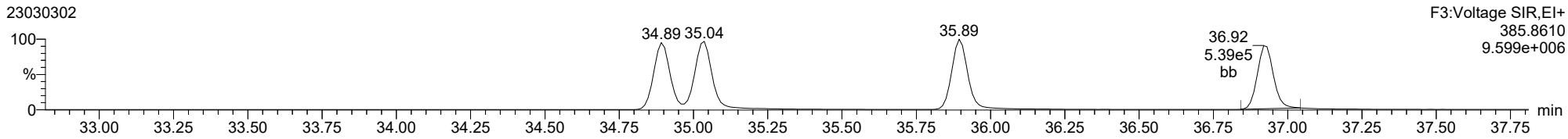
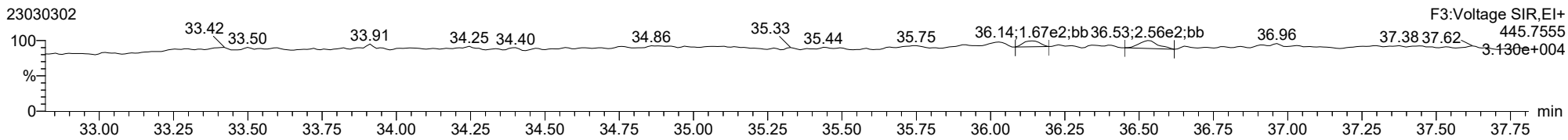


FUNCTION3 OCDPE



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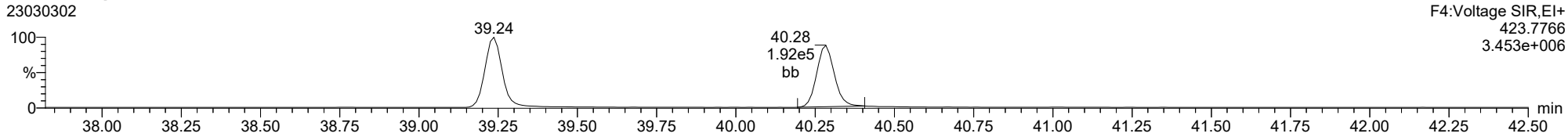
1234678-HpCDD



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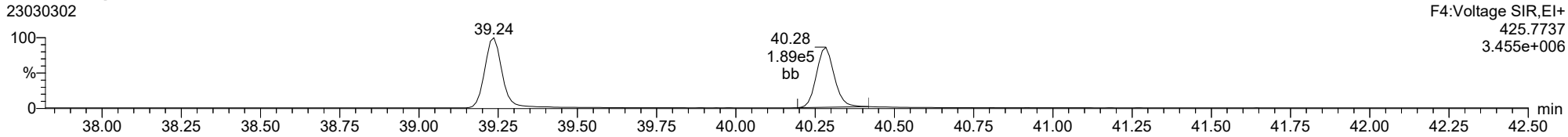

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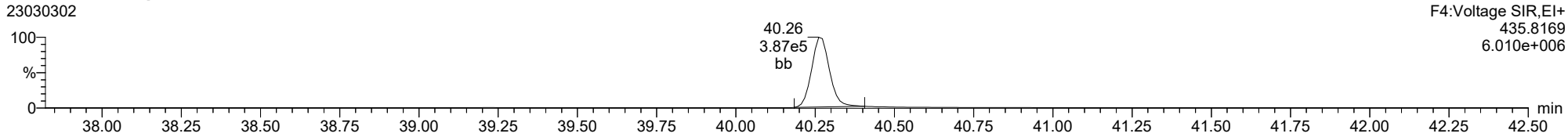

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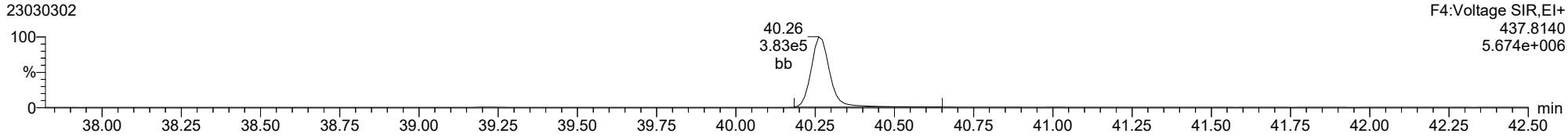
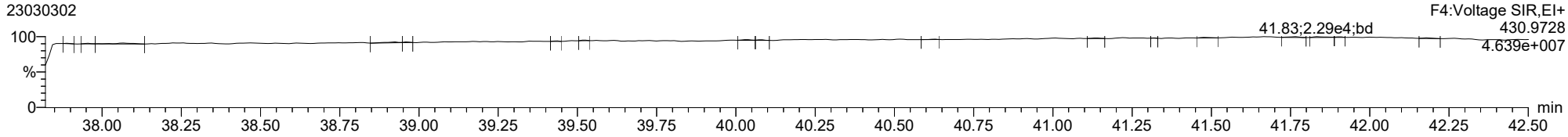


FUNCTION4 PFK



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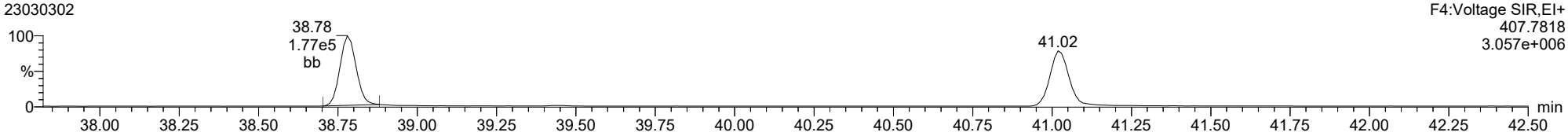

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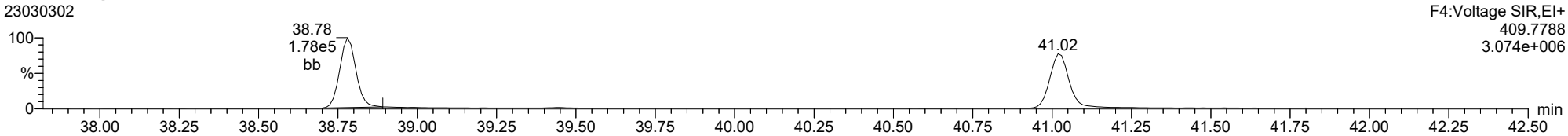

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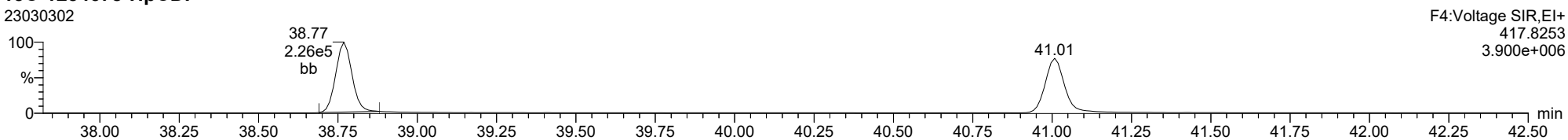

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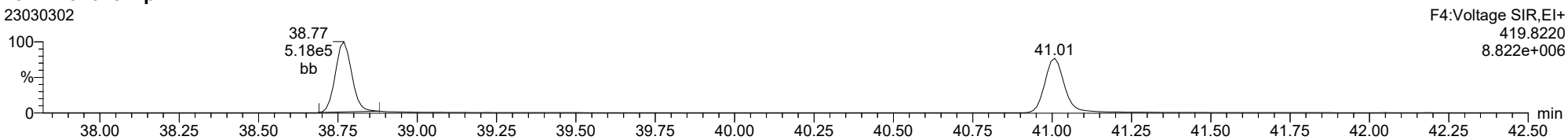

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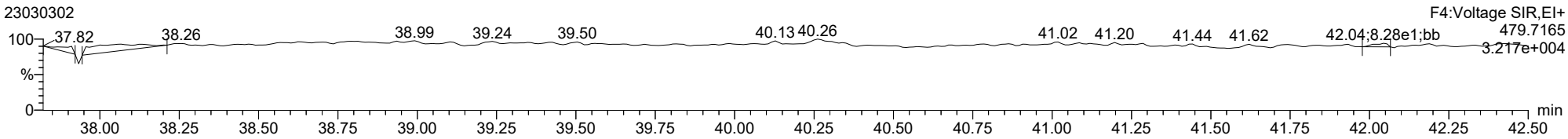

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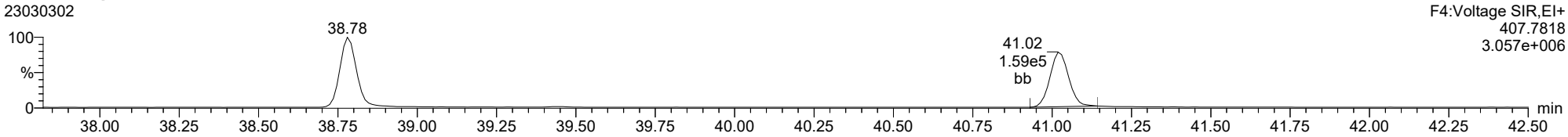

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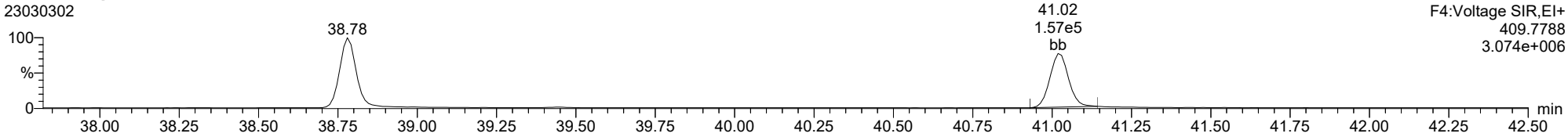

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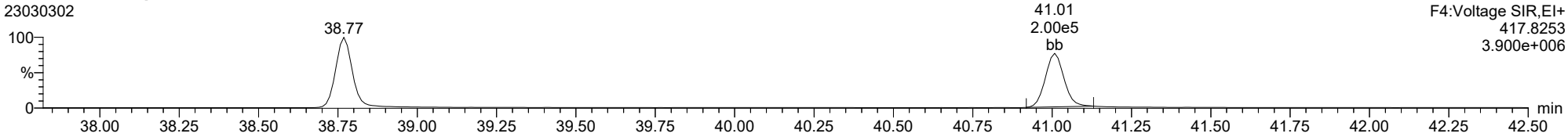

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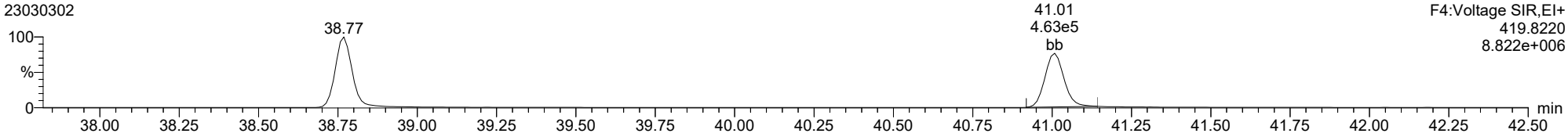

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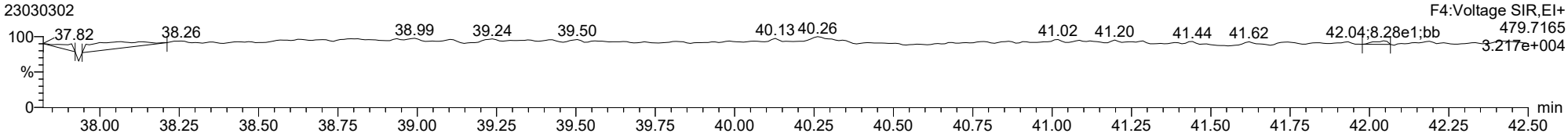

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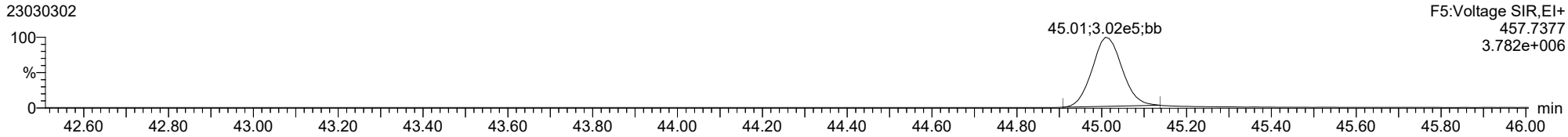

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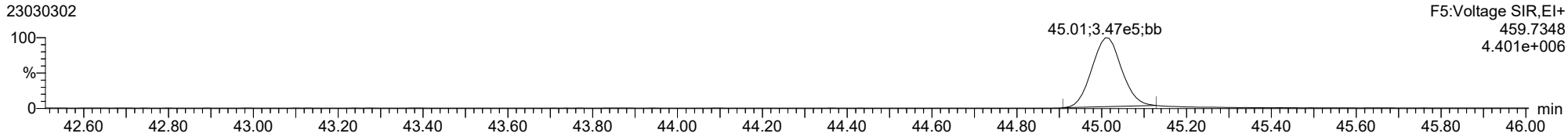

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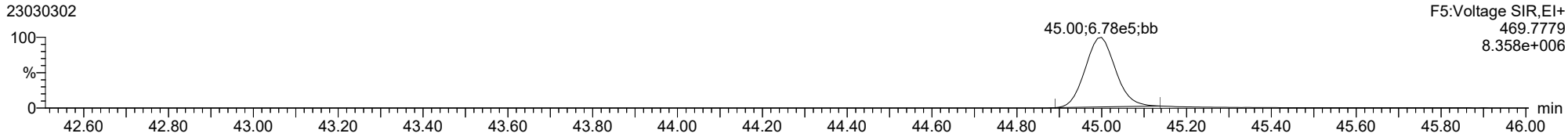

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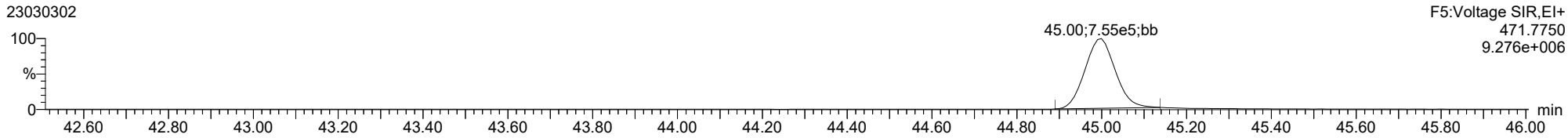

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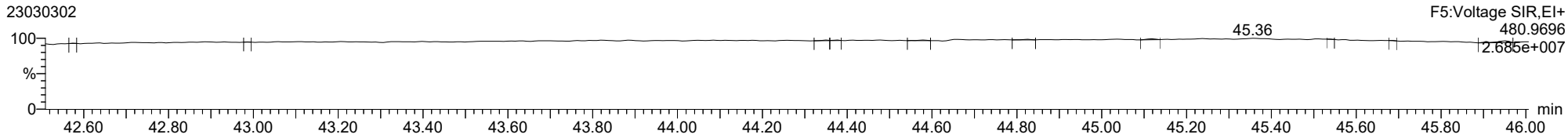

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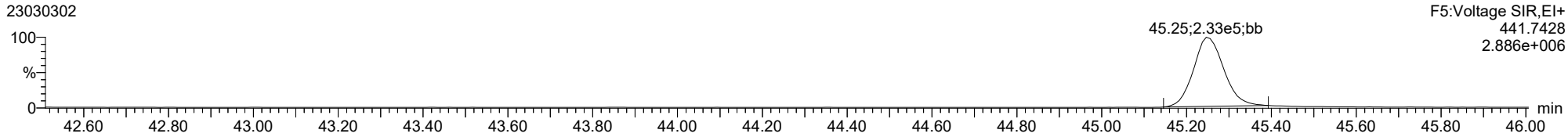

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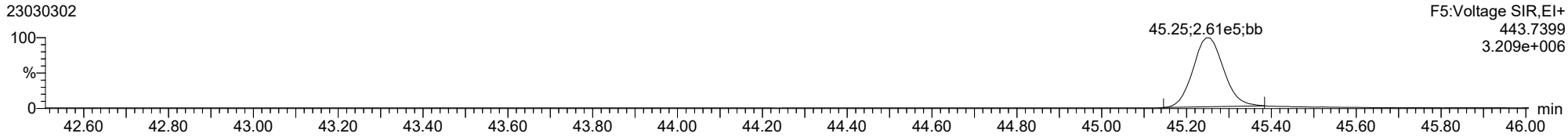
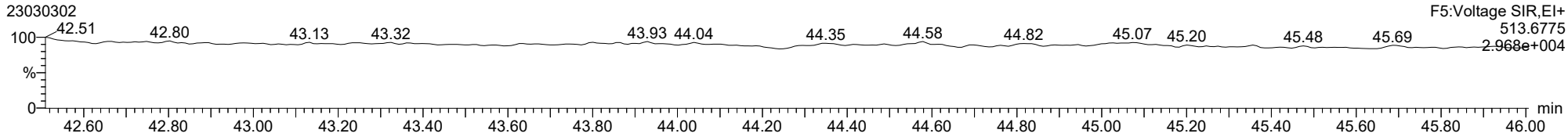


FUNCTION5 DCDPE



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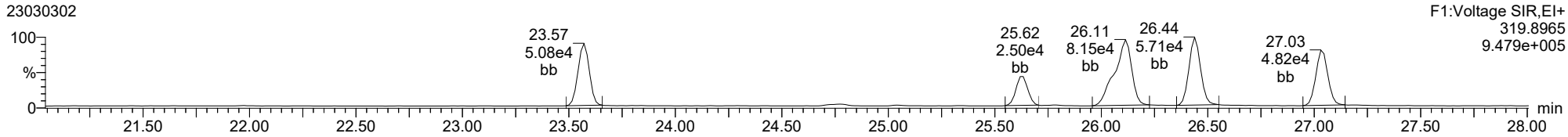
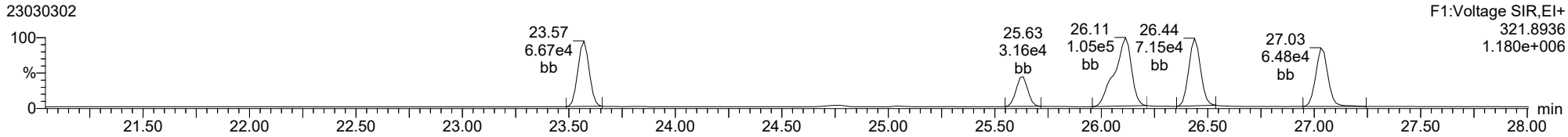
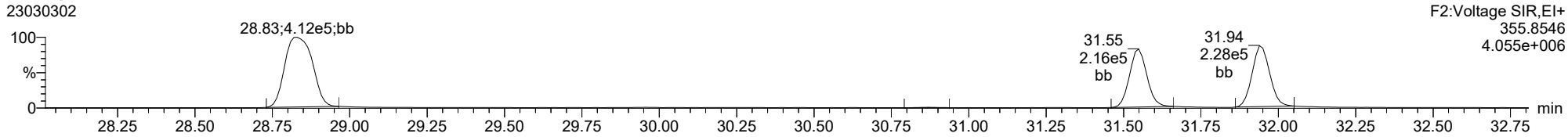


Total-tetradioxins



Total-pentadioxins



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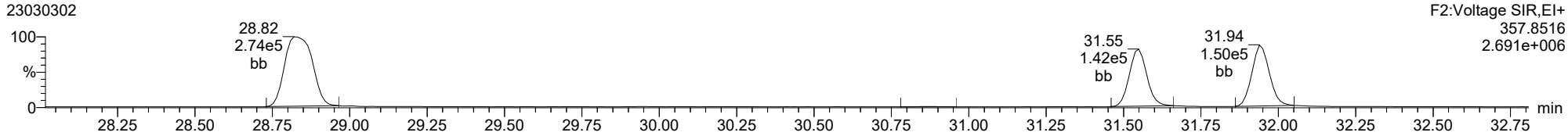

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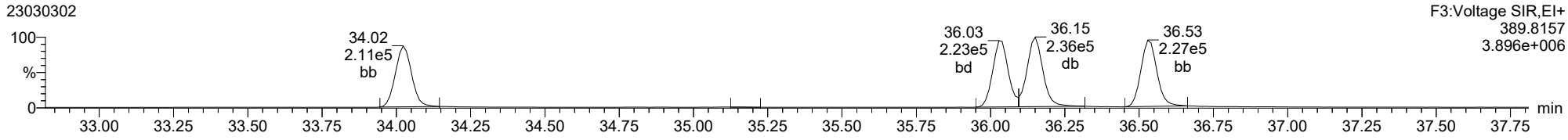

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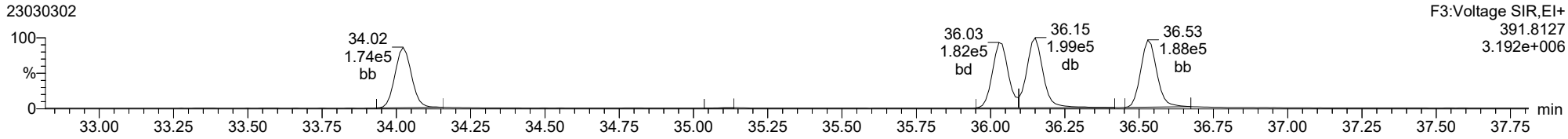

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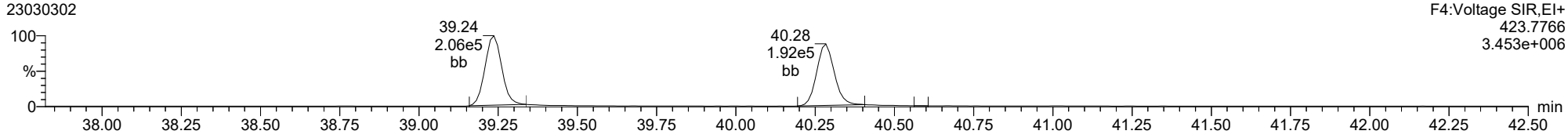

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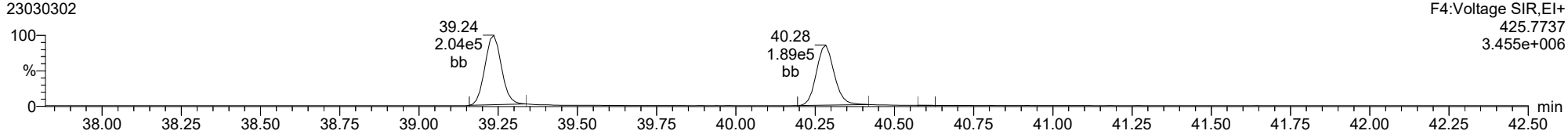

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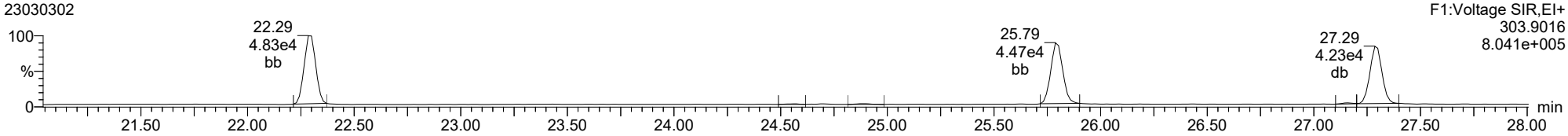

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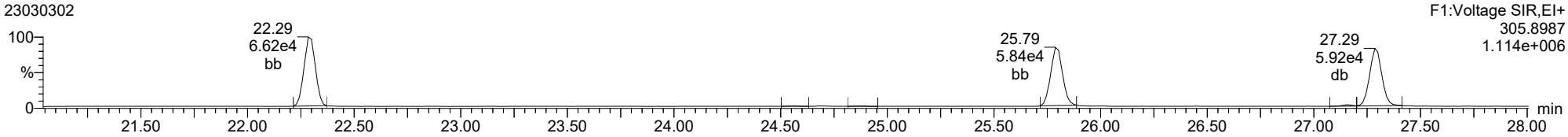

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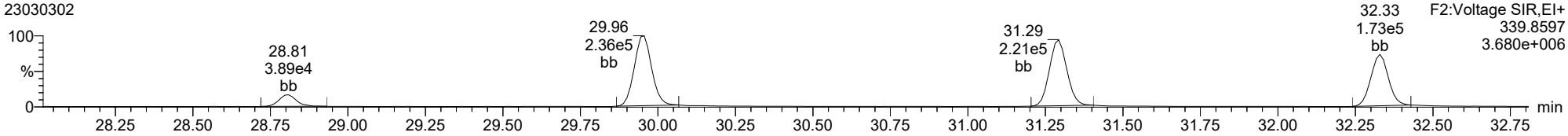

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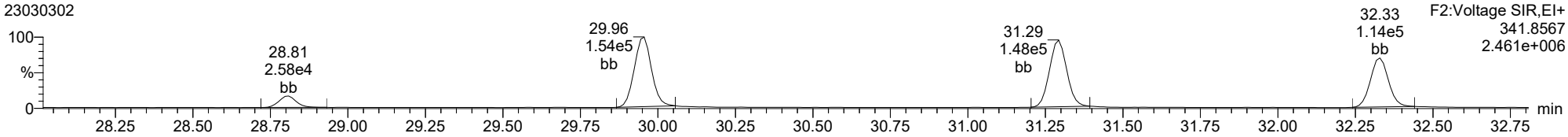

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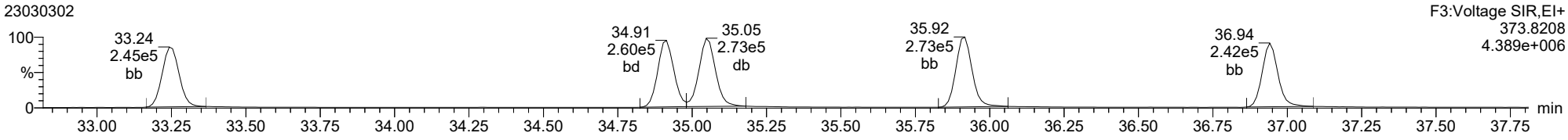

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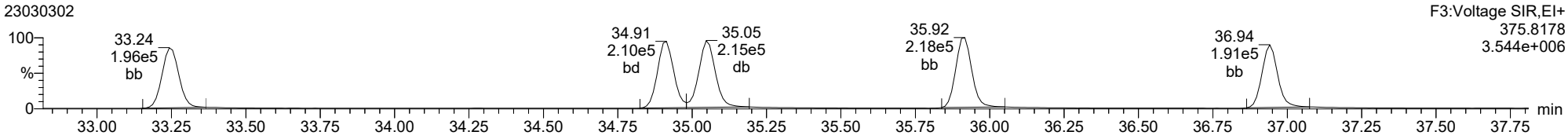

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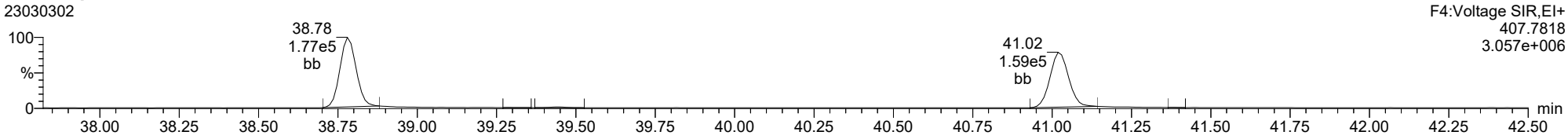

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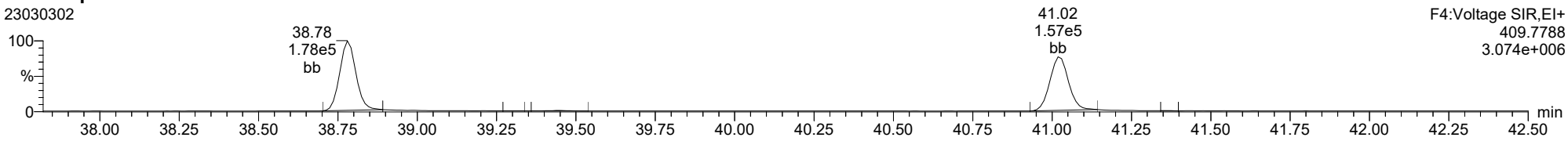

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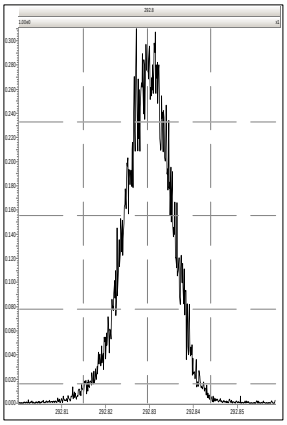

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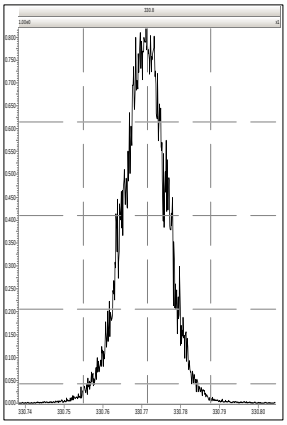

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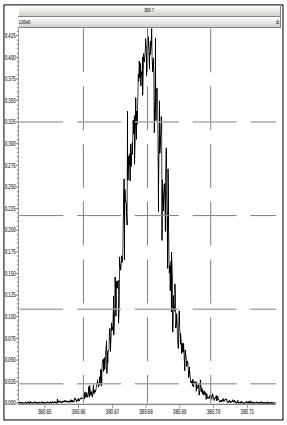

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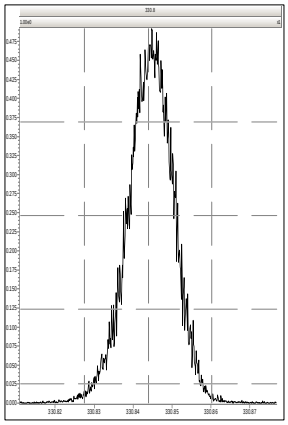

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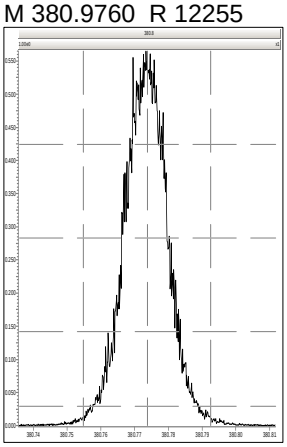

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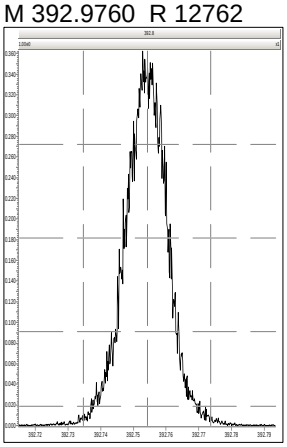

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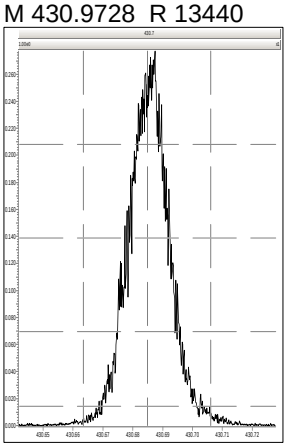

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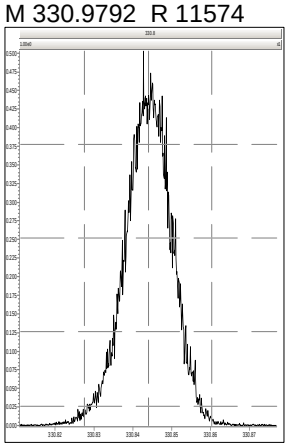

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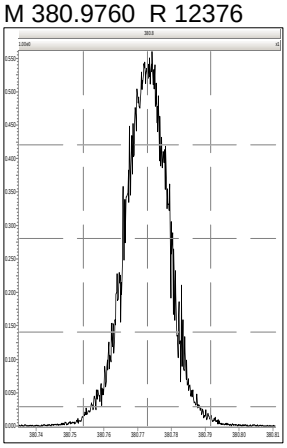

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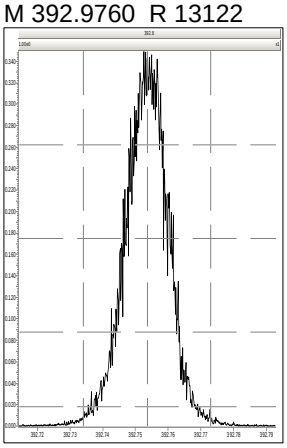

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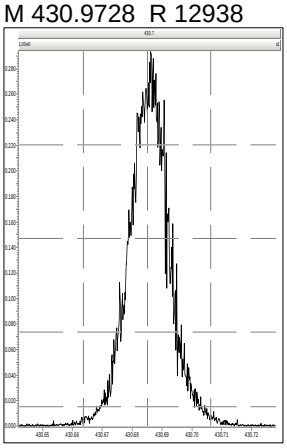

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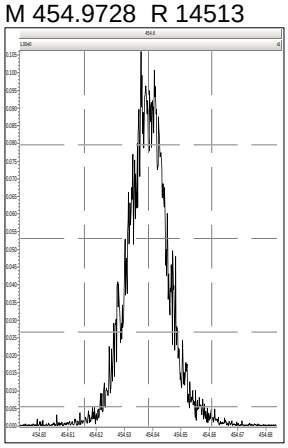

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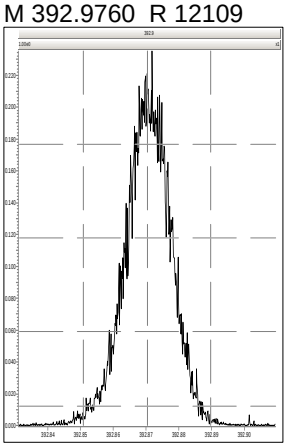

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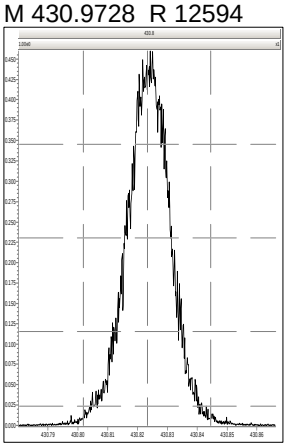

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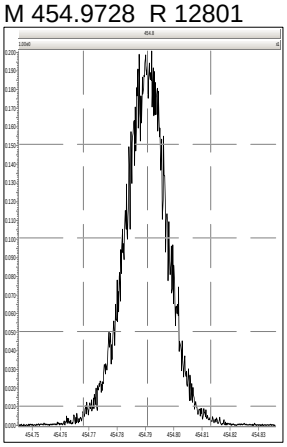

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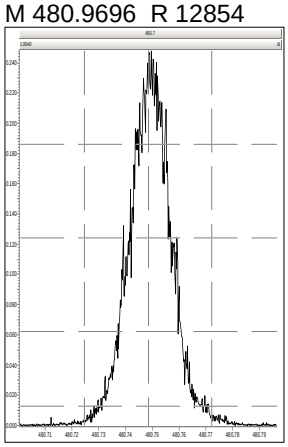
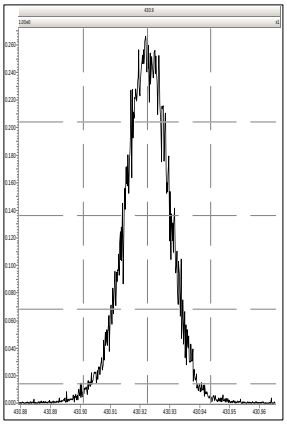
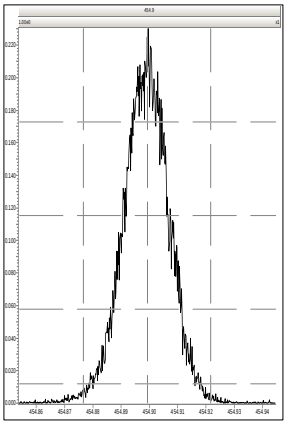


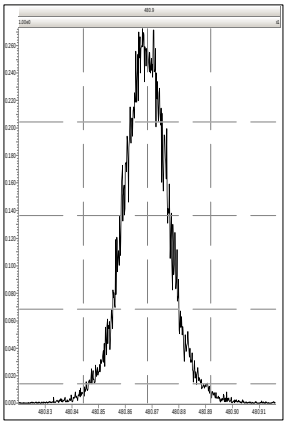
M 430.9728 R 12109



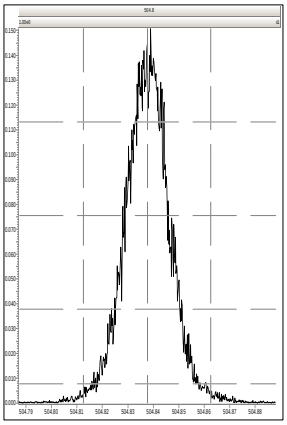
M 454.9728 R 12077



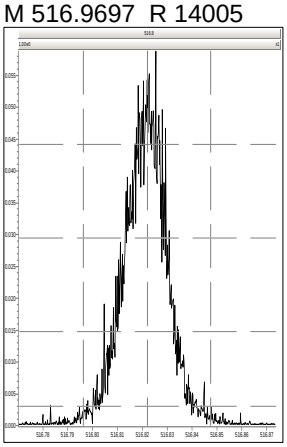
M 480.9696 R 11443

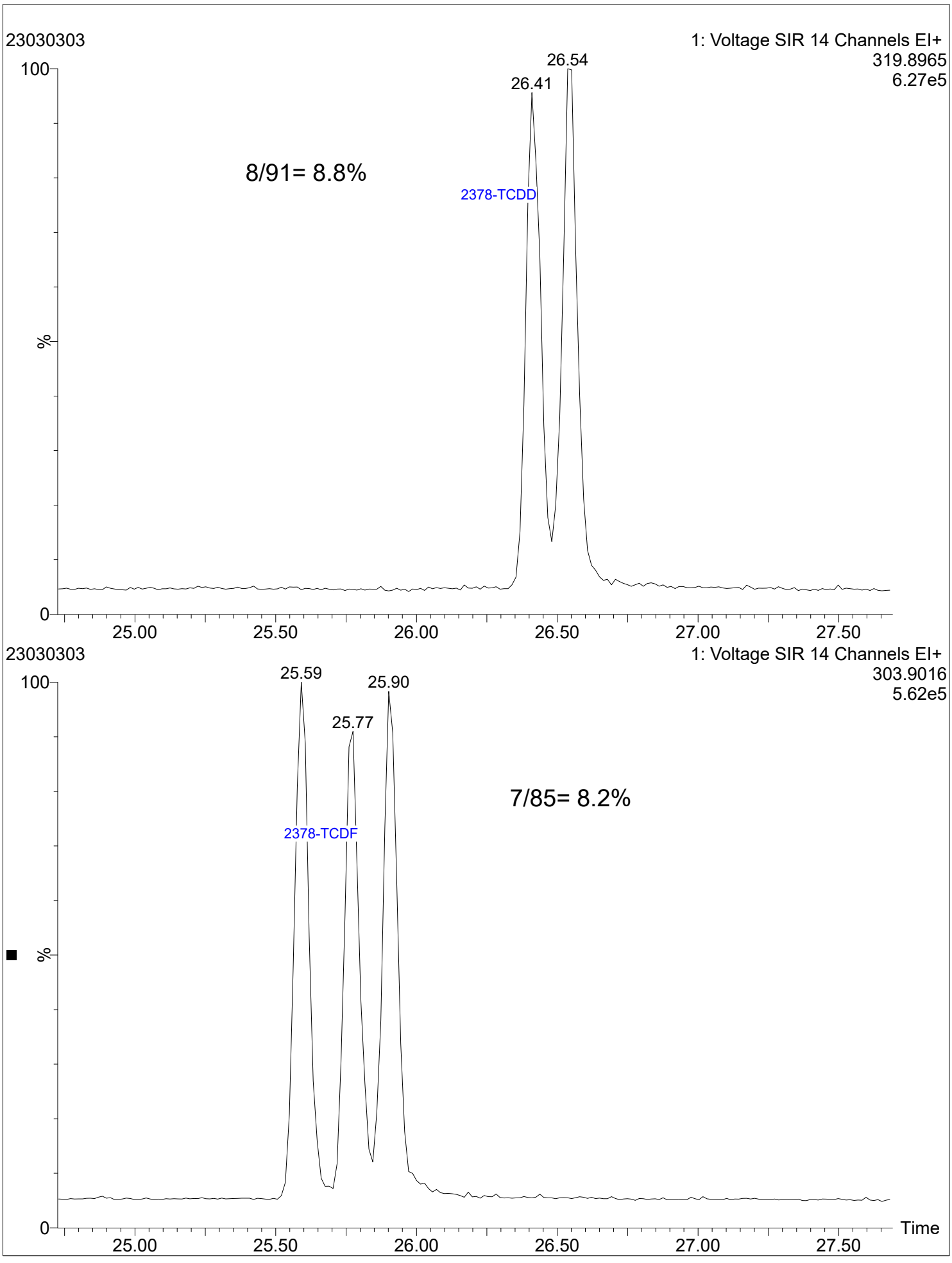


M 504.9696 R 12722



M 516.9697 R 14005




23030303
1: Voltage SIR 14 Channels EI+
319.8965
6.27e5
100
26.54
26.41
8/91= 8.8%
2378-TCDD
%
0
25.00
25.50
26.00
26.50
27.00
27.50
23030303
1: Voltage SIR 14 Channels EI+
303.9016
5.62e5
100
25.59
25.90
25.77
7/85= 8.2%
2378-TCDF
%
0
Time
25.00
25.50
26.00
26.50
27.00
27.50

Dataset: T:\Autospec\Processed Data Batch\230303ICIH.qld
Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
Printed: Monday, March 06, 2023 11:33:58 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF					0.702		0.770	1141	1568								
12378-PeCDF	29.922	1.000	2.331e3	1.631e3	0.679	1.429	1.550	717	1165	3.89e4	2.49e4	54.3	21.4	NO	bb	bd	0.520
23478-PeCDF	31.270	1.001	2.446e3	1.527e3	0.786	1.602	1.550	717	1165	3.60e4	2.25e4	50.1	19.4	NO	bb	bb	0.508
123478-HxCDF	34.891	1.001	2.740e3	2.578e3	1.166	1.063	1.240	675	706	4.36e4	3.63e4	64.6	51.5	NO	bd	bd	0.522
234678-HxCDF	35.894	1.001	2.363e3	1.967e3	1.140	1.201	1.240	675	706	3.52e4	3.17e4	52.2	44.9	NO	bb	bb	0.459
123678-HxCDF	35.025	1.000	2.955e3	2.593e3	1.091	1.140	1.240	675	706	3.97e4	3.71e4	58.8	52.6	NO	db	dd	0.495
123789-HxCDF	36.919	1.000	2.292e3	1.751e3	1.137	1.309	1.240	675	706	3.51e4	2.45e4	52.0	34.7	NO	bd	bb	0.523
1234678-HpCDF	38.769	1.001	1.264e3	1.356e3	1.003	0.932	1.050	1176	1150	2.17e4	2.11e4	18.4	18.3	NO	bd	bb	0.466
1234789-HpCDF	40.997	1.000	1.144e3	1.036e3	0.953	1.105	1.050	1176	1150	1.78e4	1.51e4	15.1	13.1	NO	bb	bd	0.465
OCDF	45.228	1.006	2.105e3	2.214e3	0.778	0.951	0.890	762	984	2.31e4	2.16e4	30.2	22.0	NO	bb	bb	1.044
2378-TCDD					1.149		0.770	1186	741								
12378-PeCDD	31.527	1.001	2.628e3	1.506e3	1.022	1.745	1.550	935	615	3.66e4	1.58e4	39.1	25.7	NO	bb	bb	0.540
123478-HxCDD	36.016	1.001	2.113e3	1.865e3	0.996	1.133	1.240	725	812	3.30e4	2.93e4	45.6	36.1	NO	dd	bd	0.542
123678-HxCDD	36.128	1.001	2.428e3	1.876e3	1.001	1.294	1.240	725	812	3.70e4	2.39e4	51.1	29.5	NO	db	db	0.479
123789-HxCDD	36.507	1.011	2.154e3	1.651e3	0.907	1.304	1.240	725	812	3.30e4	2.34e4	45.5	28.9	NO	bd	bb	0.513
1234678-HpCDD	40.261	1.000	1.634e3	1.397e3	1.039	1.170	1.050	985	1205	2.31e4	2.24e4	23.5	18.6	NO	MM	bb	0.531
OCDD					0.920		0.890	1090	941								
13C-2378-TCDF	25.746	1.007	5.730e5	7.592e5	1.620	0.755	0.770	2498	2006	8.42e6	1.11e7	3371.3	5556.4	NO	bb	bb	100.702
13C-12378-PeCDF	29.911	1.169	6.805e5	4.409e5	1.240	1.543	1.550	2678	2220	9.20e6	6.10e6	3433.8	2749.3	NO	bb	bd	110.727
13C-23478-PeCDF	31.248	1.222	6.001e5	3.956e5	1.118	1.517	1.550	2678	2220	8.66e6	5.74e6	3235.2	2585.6	NO	bb	bb	109.107
13C-123478-HxCDF	34.869	0.955	2.965e5	5.770e5	1.168	0.514	0.510	1558	3112	4.38e6	8.54e6	2813.2	2745.5	NO	bd	bd	98.607
13C-123678-HxCDF	35.014	0.959	3.446e5	6.820e5	1.386	0.505	0.510	1558	3112	4.56e6	9.02e6	2927.1	2898.6	NO	db	dd	97.648
13C-234678-HxCDF	35.872	0.983	2.821e5	5.460e5	1.129	0.517	0.510	1558	3112	4.13e6	8.00e6	2652.6	2572.0	NO	bb	bb	96.703
13C-123789-HxCDF	36.908	1.011	2.282e5	4.511e5	0.932	0.506	0.510	1558	3112	3.31e6	6.47e6	2122.2	2079.8	NO	bb	bb	96.146
13C-1234678-HpCDF	38.746	1.062	1.794e5	3.814e5	0.895	0.470	0.440	2435	3572	2.60e6	5.93e6	1069.0	1659.1	NO	bd	bb	82.620
13C-1234789-HpCDF	40.986	1.123	1.404e5	3.516e5	0.770	0.399	0.440	2435	3572	1.98e6	4.51e6	813.8	1262.1	NO	bb	bb	84.288
13C-1234-TCDD	25.576	0.000	3.640e5	4.524e5	1.000	0.805	0.770	1931	1352	5.55e6	6.91e6	2875.2	5114.0	NO	bb	bb	100.000
13C-2378-TCDD	26.396	1.032	4.012e5	4.998e5	1.152	0.803	0.770	1931	1352	5.75e6	7.10e6	2979.4	5249.9	NO	bb	bb	95.760
13C-12378-PeCDD	31.504	1.232	4.613e5	2.880e5	0.829	1.602	1.550	1401	1533	6.70e6	4.14e6	4781.1	2700.1	NO	bb	bb	110.725
13C-123478-HxCDD	35.994	0.986	4.133e5	3.236e5	0.995	1.277	1.240	1744	1461	6.55e6	5.10e6	3756.0	3493.2	NO	bd	bd	97.670
13C-123678-HxCDD	36.106	0.989	5.195e5	3.785e5	1.157	1.372	1.240	1744	1461	6.84e6	5.29e6	3920.0	3622.3	NO	db	db	102.381
13C-1234678-HpCDD	40.250	1.103	2.785e5	2.707e5	0.840	1.029	1.050	1497	2275	3.82e6	3.65e6	2553.8	1605.5	NO	bb	bd	86.201
13C-OCDD	44.972	1.232	5.210e5	5.429e5	0.767	0.960	0.890	2989	1436	5.87e6	6.48e6	1964.2	4513.5	NO	bd	bb	182.810
13C-123789-HxCDD	36.496	0.000	4.181e5	3.402e5	1.000	1.229	1.240	1744	1461	6.11e6	4.85e6	3503.9	3317.8	NO	bb	bb	100.000
37CL-2378-TCDD	26.410	1.033	1.287e3		1.288			1959		1.53e4		7.8			db		0.122

Dataset: T:\Autospec\Processed Data Batch\230303ICIH.qld
Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
Printed: Monday, March 06, 2023 11:33:58 Pacific Standard Time

ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					0.802		0.770	1141	1568								
1289-TCDF					0.678		0.770	1141	1568								
13468-PECDF					1.246		1.550	669	893								
12389-PECDF					0.496		1.550	717	1165								
123468-HXCDF					1.169		1.240	675	706								
1368-TCDD					1.015		0.770	1186	741								
1289-TCDD					0.909		0.770	1186	741								
12479-PECDD					2.301		1.550	935	615								
12389-PECDD					1.184		1.550	935	615								
124679-HXCDD					1.115		1.240	725	812								
1234679-HPCDD					1.137		1.050	985	1205								
Total-tetrafurans			0.000e0		0.727			1141		0.00e0							
Total-penta1			0.000e0					669		0.00e0							
Total-pentafurans			4.777e3		0.654			717		7.49e4							1.028
Total-hexafurans			1.035e4		1.141			675		1.54e5							2.000
Total-heptafurans			2.408e3		0.978			1176		3.94e4							0.931
Total-Furans			1.971e4		0.922			1141		2.93e5							5.016
Total-tetradioxins			0.000e0		1.024			1186		0.00e0							
Total-pentadioxins			2.628e3		1.502			935		3.66e4							0.540
Total-hexadioxins			6.694e3		1.005			725		1.03e5							1.534
Total-heptadioxins			1.634e3		1.088			985		2.31e4							0.531
Total-Dioxins			1.096e4		1.130			1186		1.63e5							2.605
Total-TEQ			3.067e4					1186		4.55e5							7.621
FUNCTION1 PFK			3.116e6					620464		1.62e6							
FUNCTION2 PFK			1.698e6					301200		2.24e6							0.000
FUNCTION3 PFK			5.380e7					450736		2.93e7							0.000
FUNCTION4 PFK			1.391e7					291095		1.60e7							
FUNCTION5 PFK			7.208e4					238350		2.59e6							
FUNCTION1 HXCD...			4.809e2					559		5.84e3							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			8.084e2					933		1.50e4							0.000
FUNCTION3 OCDPE			0.000e0					494		0.00e0							
FUNCTION4 NCDPE			6.931e2					845		1.26e4							0.000
FUNCTION5 DCDPE			7.511e2					821		1.86e4							0.000

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.27	2.446e3	1.527e3	0.786	1.60	1.55	50.1	YES	NO	bb	bb	0.508
2	12378-PeCDF	29.92	2.331e3	1.631e3	0.679	1.43	1.55	54.3	YES	NO	bb	bd	0.520

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.92	2.292e3	1.751e3	1.137	1.31	1.24	52.0	YES	NO	bd	bb	0.523
2	234678-HxCDF	35.89	2.363e3	1.967e3	1.140	1.20	1.24	52.2	YES	NO	bb	bb	0.459
3	123678-HxCDF	35.03	2.955e3	2.593e3	1.091	1.14	1.24	58.8	YES	NO	db	dd	0.495
4	123478-HxCDF	34.89	2.740e3	2.578e3	1.166	1.06	1.24	64.6	YES	NO	bd	bd	0.522

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDF	38.77	1.264e3	1.356e3	1.003	0.93	1.05	18.4	YES	NO	bd	bb	0.466
2	1234789-HpCDF	41.00	1.144e3	1.036e3	0.953	1.10	1.05	15.1	YES	NO	bb	bd	0.465

ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-Furans	21.68	7.033e1	1.021e2	0.922	0.69	0.77	1.5	NO	NO	bb	bb	0.014
2	123789-HxCDF	36.92	2.292e3	1.751e3	1.137	1.31	1.24	52.0	YES	NO	bd	bb	0.523
3	234678-HxCDF	35.89	2.363e3	1.967e3	1.140	1.20	1.24	52.2	YES	NO	bb	bb	0.459
4	123678-HxCDF	35.03	2.955e3	2.593e3	1.091	1.14	1.24	58.8	YES	NO	db	dd	0.495
5	123478-HxCDF	34.89	2.740e3	2.578e3	1.166	1.06	1.24	64.6	YES	NO	bd	bd	0.522
6	23478-PeCDF	31.27	2.446e3	1.527e3	0.786	1.60	1.55	50.1	YES	NO	bb	bb	0.508
7	12378-PeCDF	29.92	2.331e3	1.631e3	0.679	1.43	1.55	54.3	YES	NO	bb	bd	0.520
8	1234678-HpCDF	38.77	1.264e3	1.356e3	1.003	0.93	1.05	18.4	YES	NO	bd	bb	0.466
9	1234789-HpCDF	41.00	1.144e3	1.036e3	0.953	1.10	1.05	15.1	YES	NO	bb	bd	0.465
10	OCDF	45.23	2.105e3	2.214e3	0.778	0.95	0.89	30.2	YES	NO	bb	bb	1.044

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.53	2.628e3	1.506e3	1.022	1.75	1.55	39.1	YES	NO	bb	bb	0.540

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.51	2.154e3	1.651e3	0.907	1.30	1.24	45.5	YES	NO	bd	bb	0.513
2	123678-HxCDD	36.13	2.428e3	1.876e3	1.001	1.29	1.24	51.1	YES	NO	db	db	0.479
3	123478-HxCDD	36.02	2.113e3	1.865e3	0.996	1.13	1.24	45.6	YES	NO	dd	bd	0.542

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.26	1.634e3	1.397e3	1.039	1.17	1.05	23.5	YES	NO	MM	bb	0.531

ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.53	2.628e3	1.506e3	1.022	1.75	1.55	39.1	YES	NO	bb	bb	0.540
2	123789-HxCDD	36.51	2.154e3	1.651e3	0.907	1.30	1.24	45.5	YES	NO	bd	bb	0.513
3	123678-HxCDD	36.13	2.428e3	1.876e3	1.001	1.29	1.24	51.1	YES	NO	db	db	0.479
4	123478-HxCDD	36.02	2.113e3	1.865e3	0.996	1.13	1.24	45.6	YES	NO	dd	bd	0.542
5	1234678-HpCDD	40.26	1.634e3	1.397e3	1.039	1.17	1.05	23.5	YES	NO	MM	bb	0.531

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-Furans	21.68	7.033e1	1.021e2	0.922	0.69	0.77	1.5	NO	NO	bb	bb	0.014
2	123789-HxCDF	36.92	2.292e3	1.751e3	1.137	1.31	1.24	52.0	YES	NO	bd	bb	0.523
3	234678-HxCDF	35.89	2.363e3	1.967e3	1.140	1.20	1.24	52.2	YES	NO	bb	bb	0.459
4	123678-HxCDF	35.03	2.955e3	2.593e3	1.091	1.14	1.24	58.8	YES	NO	db	dd	0.495
5	123478-HxCDF	34.89	2.740e3	2.578e3	1.166	1.06	1.24	64.6	YES	NO	bd	bd	0.522
6	23478-PeCDF	31.27	2.446e3	1.527e3	0.786	1.60	1.55	50.1	YES	NO	bb	bb	0.508
7	12378-PeCDF	29.92	2.331e3	1.631e3	0.679	1.43	1.55	54.3	YES	NO	bb	bd	0.520
8	1234678-HpCDF	38.77	1.264e3	1.356e3	1.003	0.93	1.05	18.4	YES	NO	bd	bb	0.466
9	1234789-HpCDF	41.00	1.144e3	1.036e3	0.953	1.10	1.05	15.1	YES	NO	bb	bd	0.465
10	OCDF	45.23	2.105e3	2.214e3	0.778	0.95	0.89	30.2	YES	NO	bb	bb	1.044
11	12378-PeCDD	31.53	2.628e3	1.506e3	1.022	1.75	1.55	39.1	YES	NO	bb	bb	0.540
12	123789-HxCDD	36.51	2.154e3	1.651e3	0.907	1.30	1.24	45.5	YES	NO	bd	bb	0.513
13	123678-HxCDD	36.13	2.428e3	1.876e3	1.001	1.29	1.24	51.1	YES	NO	db	db	0.479
14	123478-HxCDD	36.02	2.113e3	1.865e3	0.996	1.13	1.24	45.6	YES	NO	dd	bd	0.542
15	1234678-HpCDD	40.26	1.634e3	1.397e3	1.039	1.17	1.05	23.5	YES	NO	MM	bb	0.531

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	24.18	3.116e6					2.6	NO		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	30.19	1.560e6					3.1	YES		bb		0.000
2	FUNCTION2 PFK	28.13	1.376e5					4.3	YES		bb		0.000

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PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	37.12	2.560e6					15.7	YES		db		0.000
2	FUNCTION3 PFK	36.37	7.058e6					24.4	YES		dd		0.000
3	FUNCTION3 PFK	36.11	4.418e7					24.8	YES		bd		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	42.43	1.404e5					1.6	NO		bb		
2	FUNCTION4 PFK	37.89	1.377e7					53.2	YES		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	45.15	7.152e3					1.1	NO		bb		
2	FUNCTION5 PFK	45.07	1.178e3					0.5	NO		bb		
3	FUNCTION5 PFK	44.98	1.177e3					0.5	NO		bb		
4	FUNCTION5 PFK	44.19	7.772e3					0.8	NO		bb		
5	FUNCTION5 PFK	43.72	7.921e3					1.3	NO		bb		
6	FUNCTION5 PFK	43.60	4.474e3					0.7	NO		bb		
7	FUNCTION5 PFK	43.17	6.636e3					1.2	NO		bb		
8	FUNCTION5 PFK	43.01	5.001e3					0.7	NO		bb		
9	FUNCTION5 PFK	42.76	1.253e4					1.4	NO		bb		
10	FUNCTION5 PFK	45.91	8.220e3					0.4	NO		bb		
11	FUNCTION5 PFK	45.75	6.523e3					1.4	NO		bb		
12	FUNCTION5 PFK	45.25	3.501e3					0.7	NO		bb		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.60	9.542e1					2.4	NO		bb		0.000
2	FUNCTION1 HXCD...	26.42	7.837e1					1.9	NO		bb		0.000
3	FUNCTION1 HXCD...	25.58	1.709e2					3.5	YES		bb		0.000
4	FUNCTION1 HXCD...	23.40	1.362e2					2.7	NO		bb		0.000

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ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	32.36	1.308e2					1.8	NO		bb		0.000
2	FUNCTION2 HPCD...	31.75	8.377e1					1.7	NO		bb		0.000
3	FUNCTION2 HPCD...	31.30	1.170e2					2.2	NO		db		0.000
4	FUNCTION2 HPCD...	31.24	1.138e2					2.6	NO		bd		0.000
5	FUNCTION2 HPCD...	30.92	1.786e2					3.2	YES		bb		0.000
6	FUNCTION2 HPCD...	30.04	8.034e1					1.7	NO		bb		0.000
7	FUNCTION2 HPCD...	29.47	1.041e2					2.9	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	42.04	9.826e1					2.2	NO		bb		0.000
2	FUNCTION4 NCDPE	41.83	1.085e2					2.1	NO		bb		0.000
3	FUNCTION4 NCDPE	41.67	8.318e1					2.8	NO		db		0.000
4	FUNCTION4 NCDPE	41.58	1.047e2					2.5	NO		bd		0.000
5	FUNCTION4 NCDPE	41.32	1.741e2					2.4	NO		bb		0.000
6	FUNCTION4 NCDPE	41.15	1.244e2					2.8	NO		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	43.53	7.557e1					1.5	NO		bb		0.000
2	FUNCTION5 DCDPE	43.39	1.767e2					2.9	NO		bb		0.000
3	FUNCTION5 DCDPE	43.31	8.303e1					2.9	NO		db		0.000
4	FUNCTION5 DCDPE	43.27	1.217e2					4.5	YES		bd		0.000
5	FUNCTION5 DCDPE	43.04	1.550e2					3.9	YES		bb		0.000
6	FUNCTION5 DCDPE	42.73	1.390e2					7.0	YES		bb		0.000

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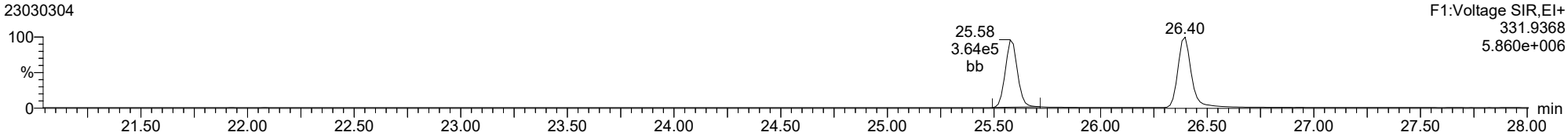

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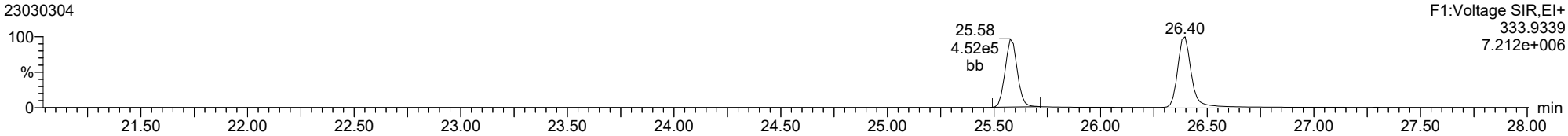

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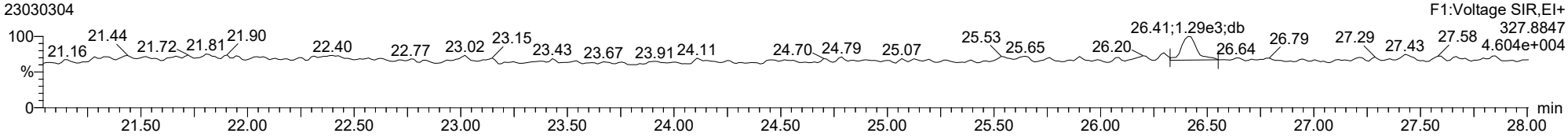

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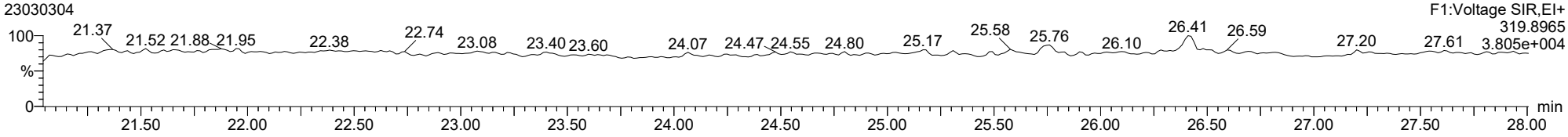

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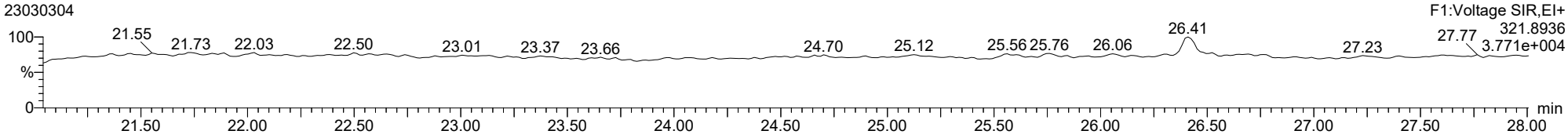

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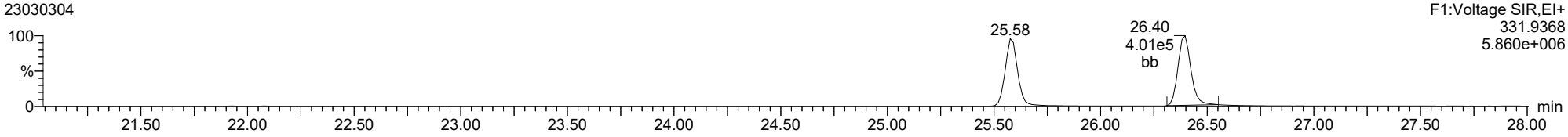

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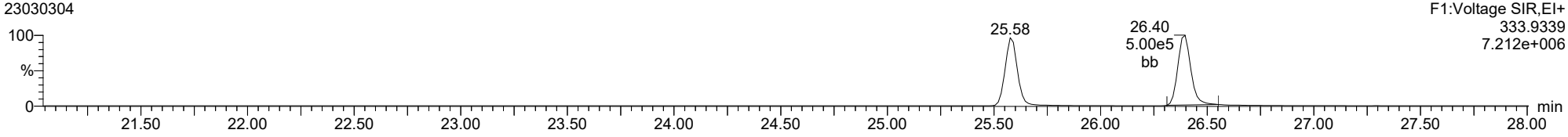

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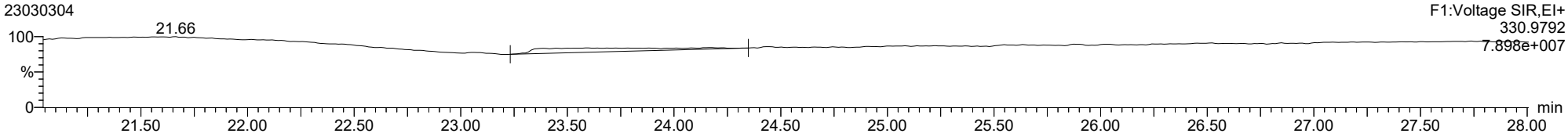

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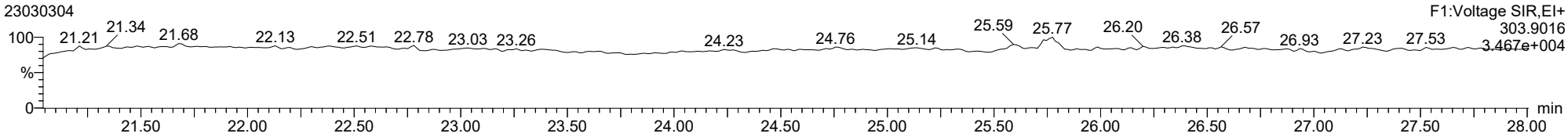

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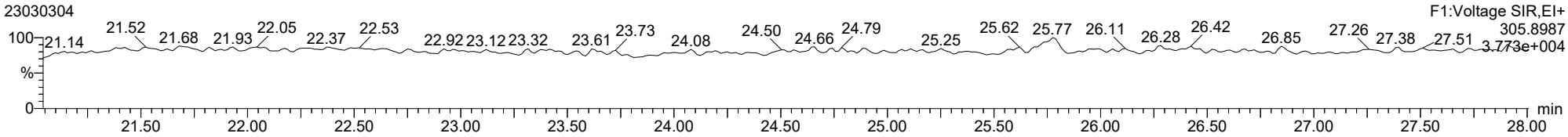

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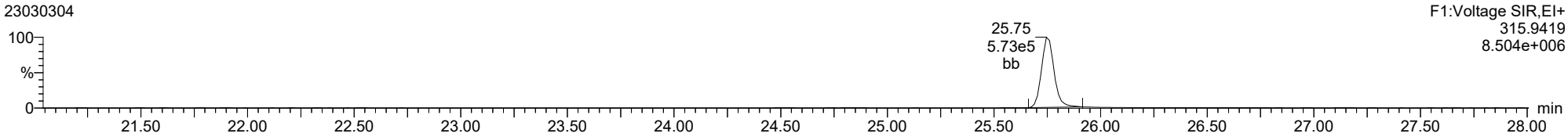

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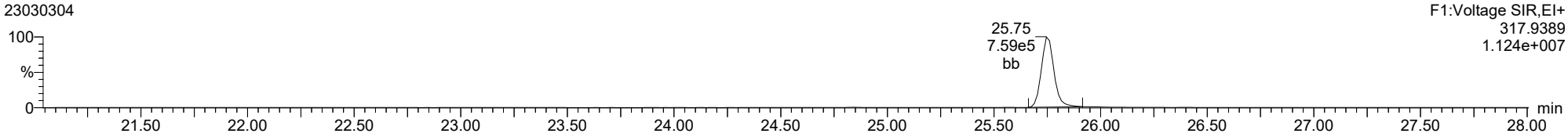

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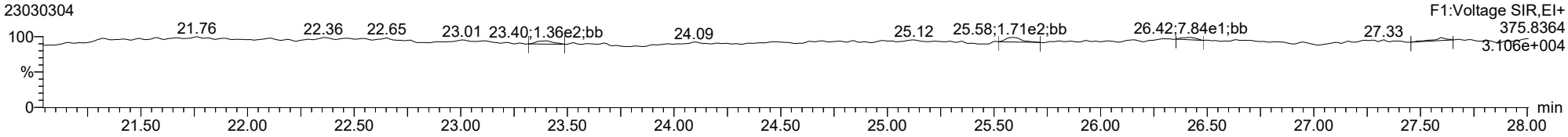

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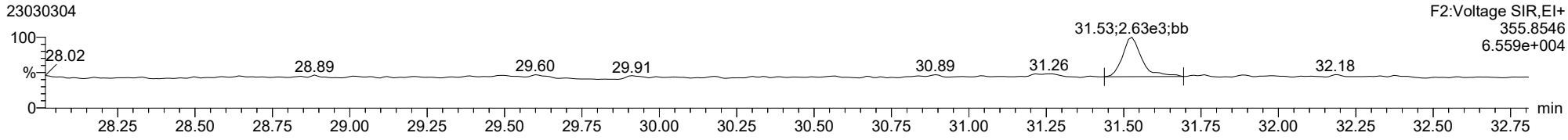
12378-PeCDD



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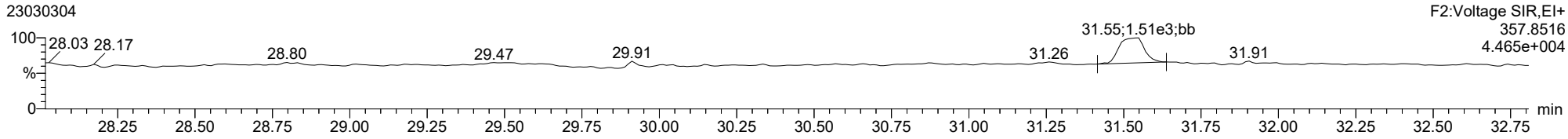

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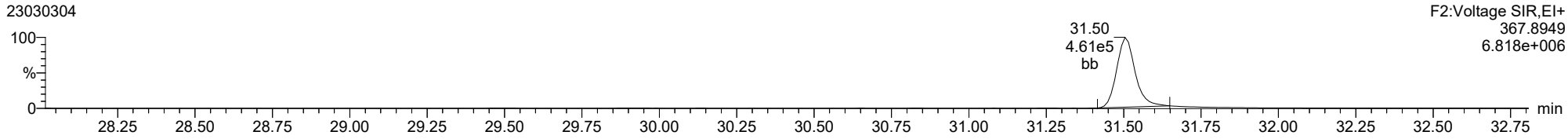

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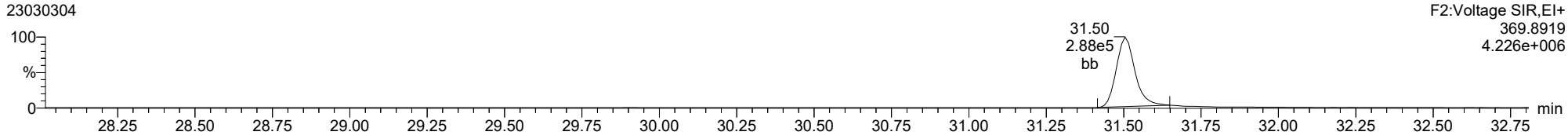

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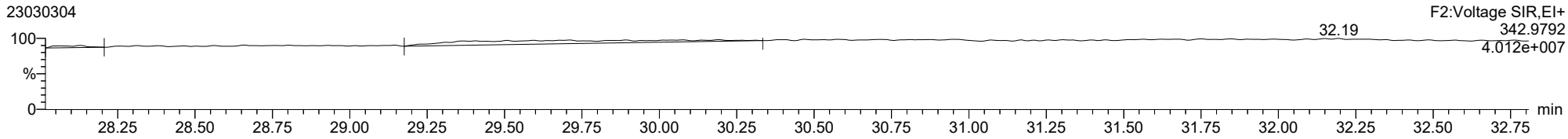

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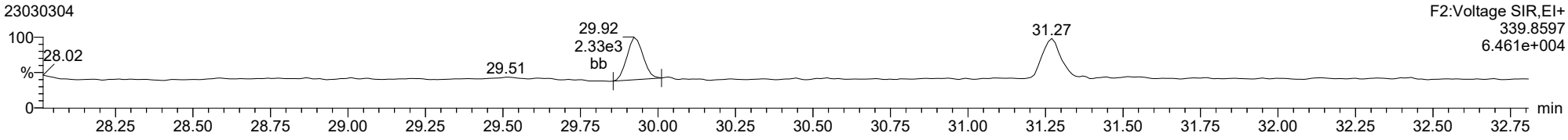

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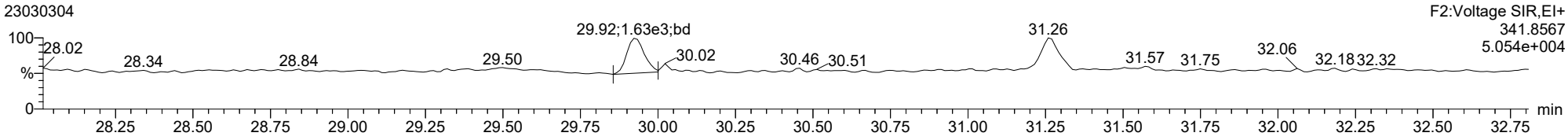

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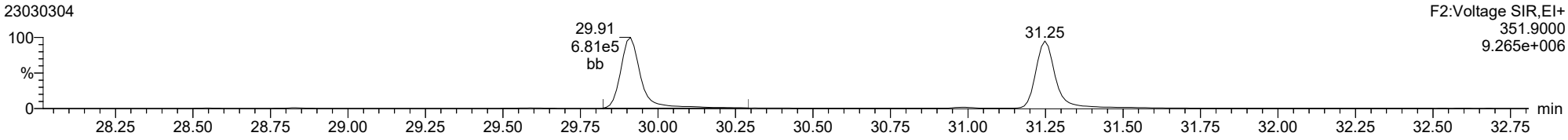

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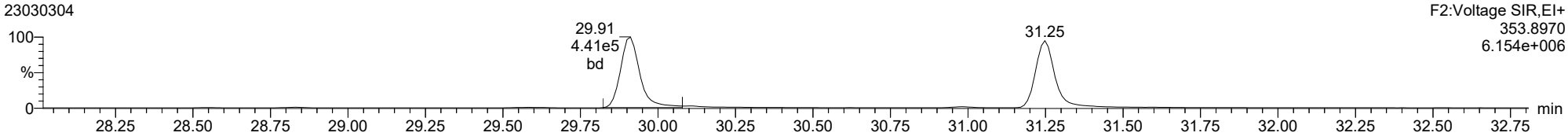
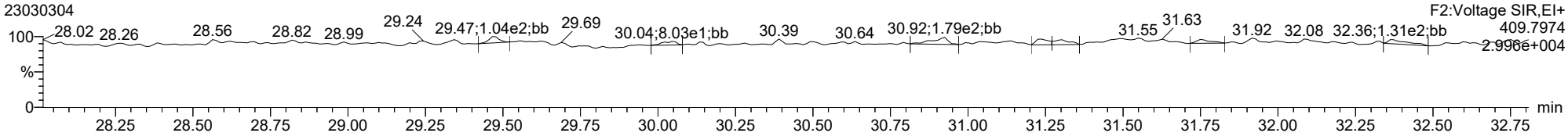


FUNCTION2 HPCDPE



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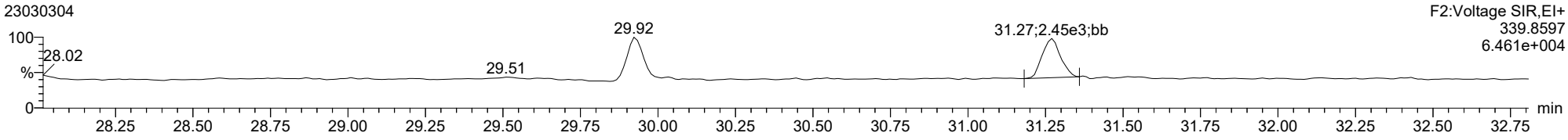
23478-PeCDF



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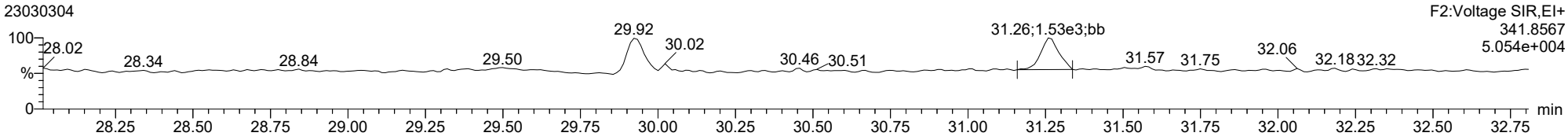

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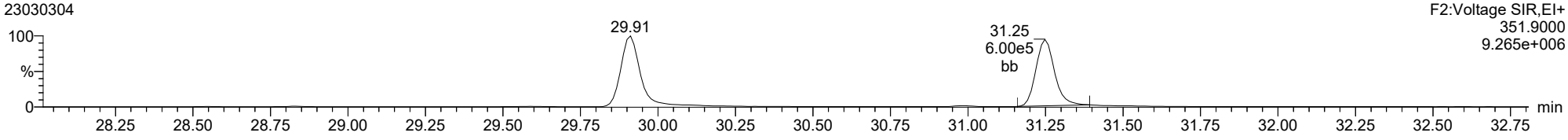

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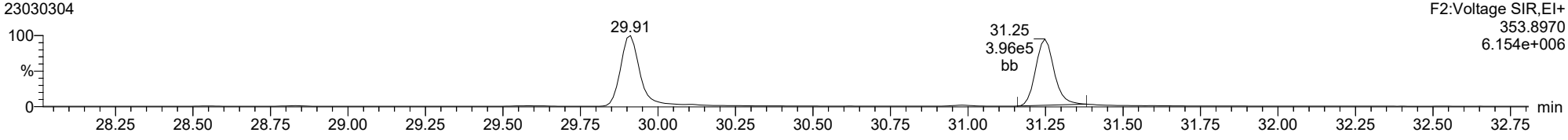

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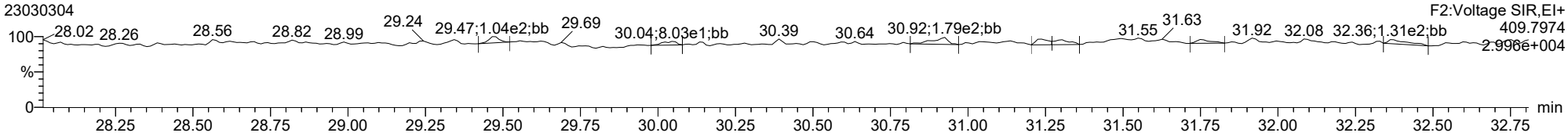

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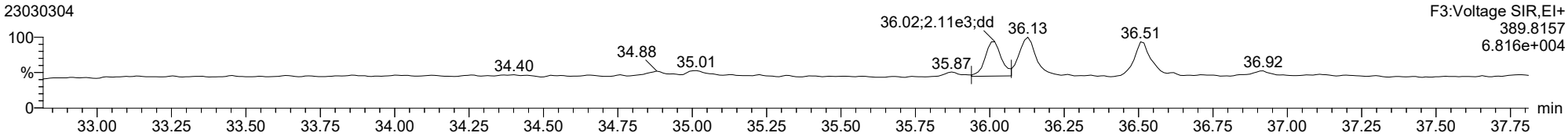
123478-HxCDD



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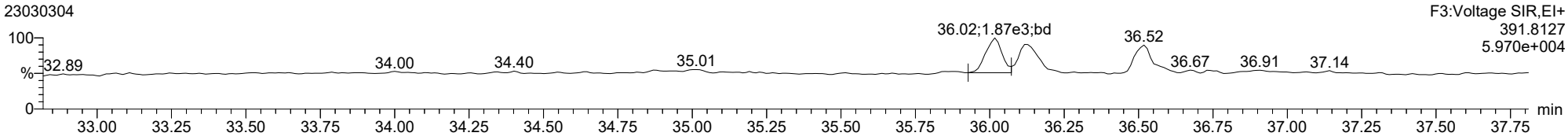

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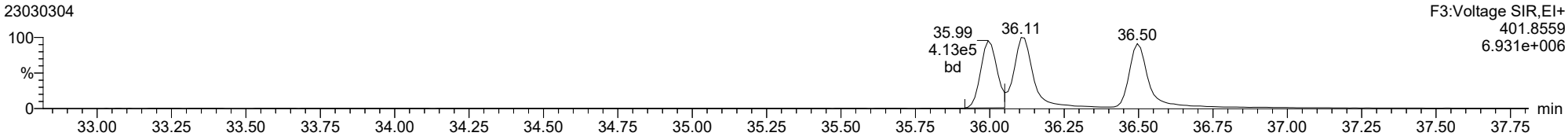

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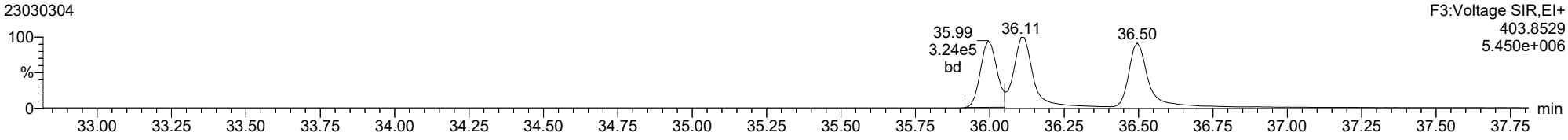

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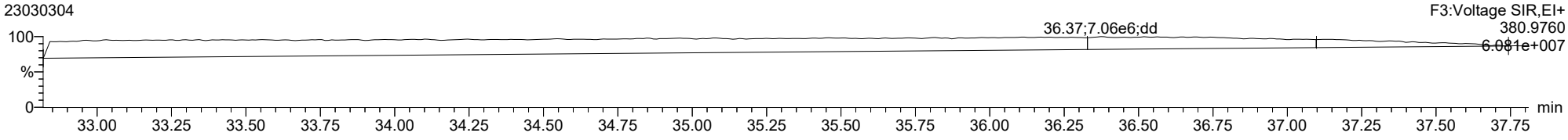

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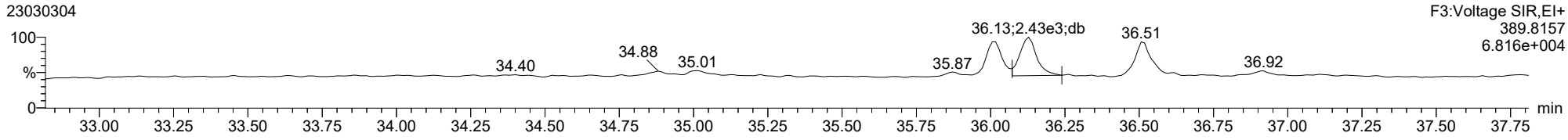

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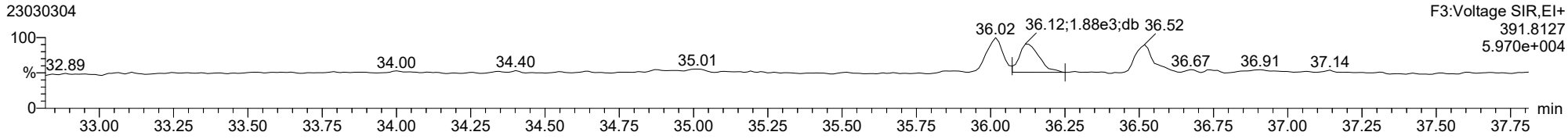

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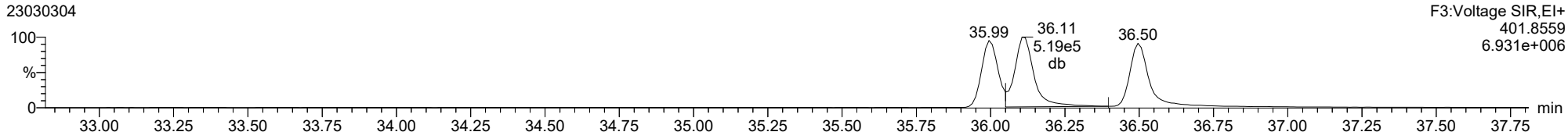

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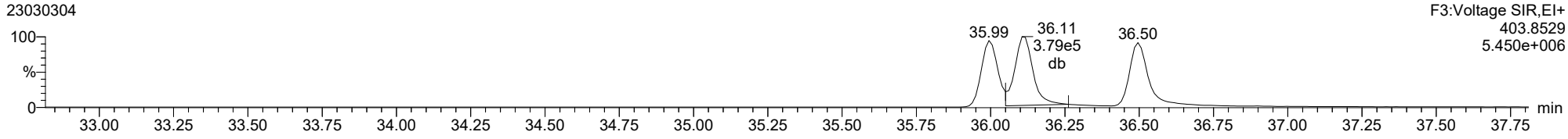

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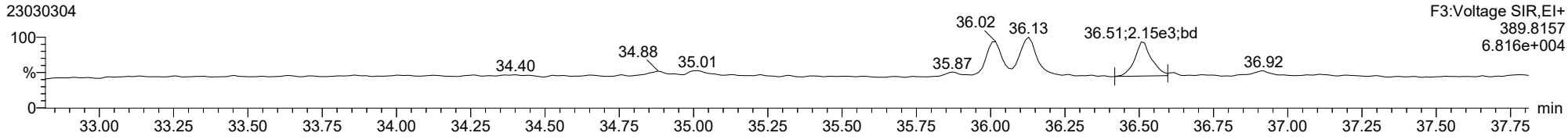

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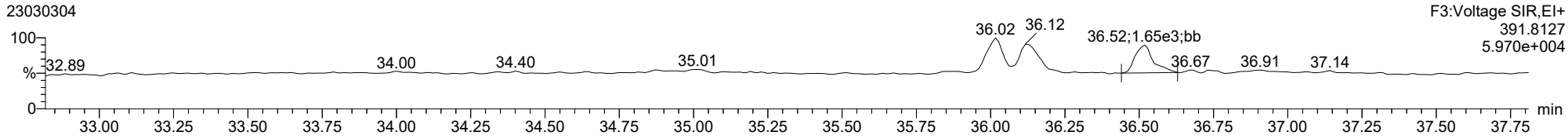

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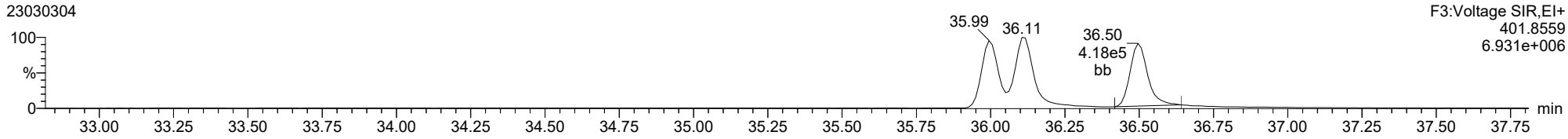

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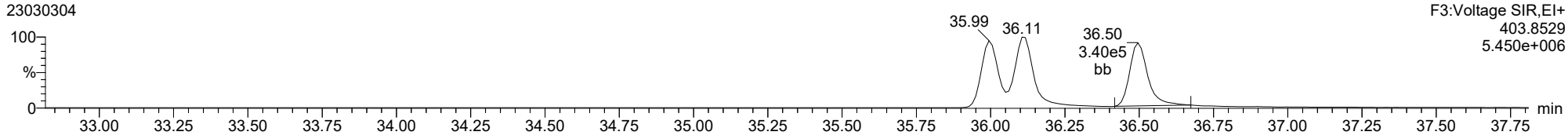

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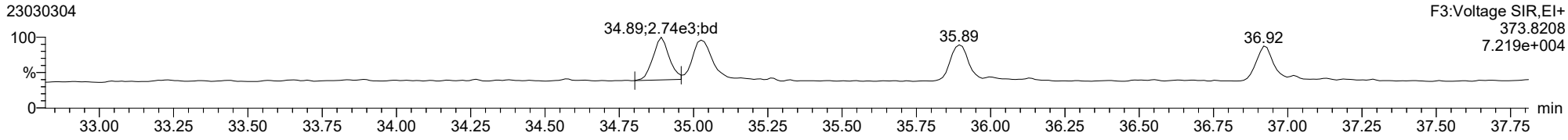

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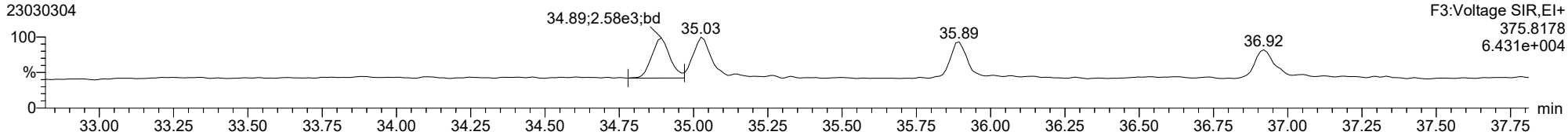

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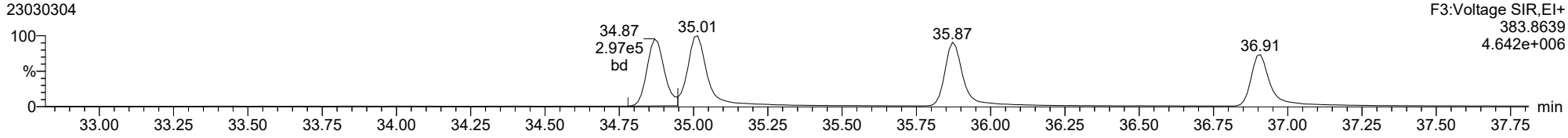

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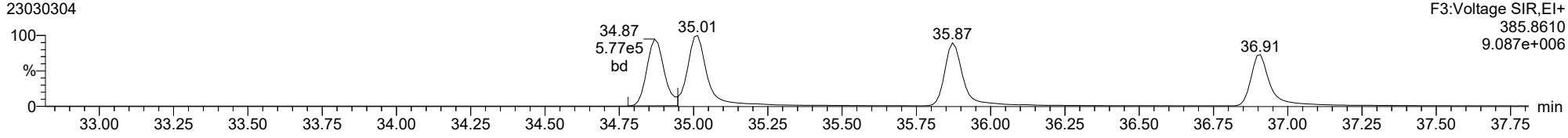

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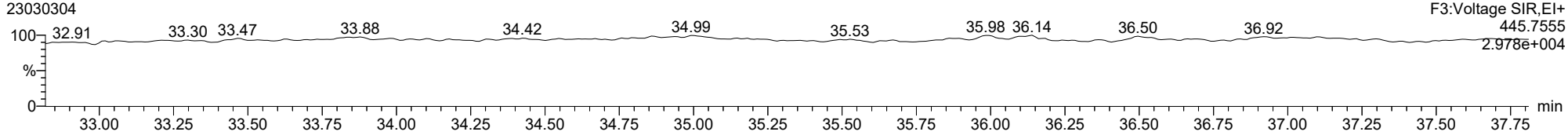

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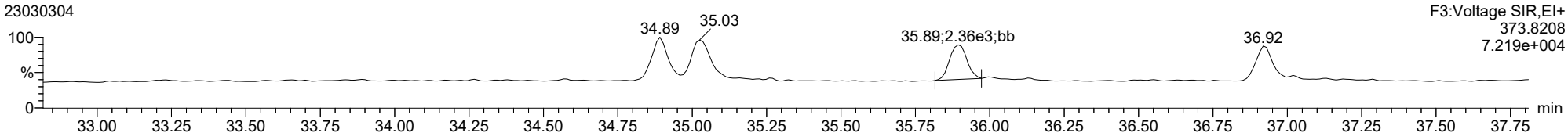

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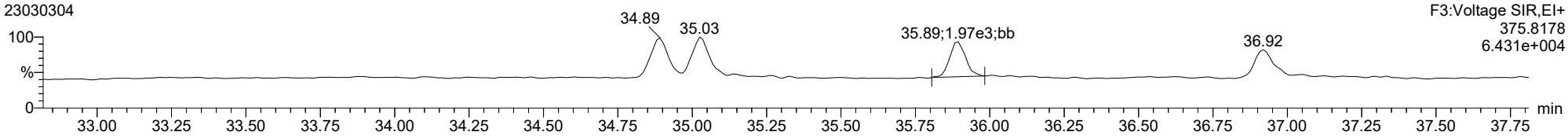

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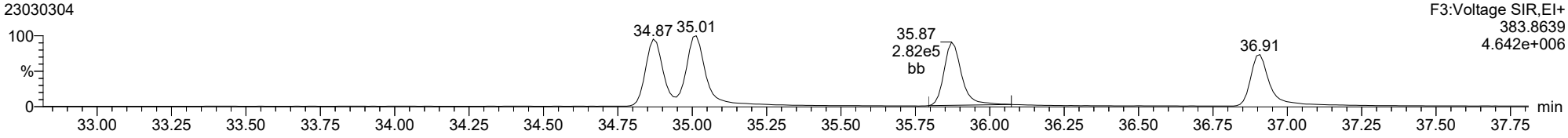

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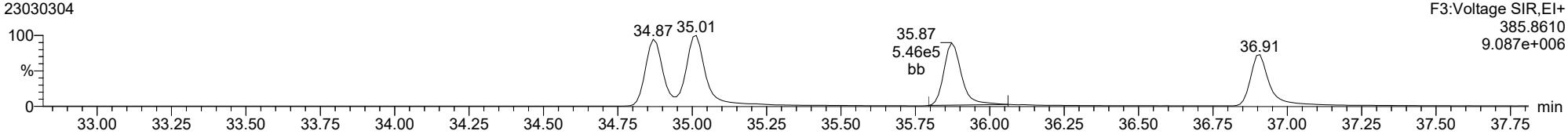

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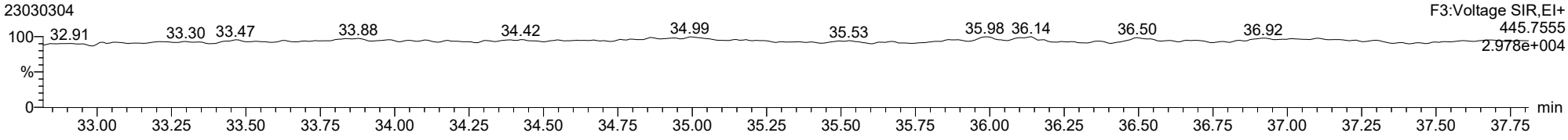

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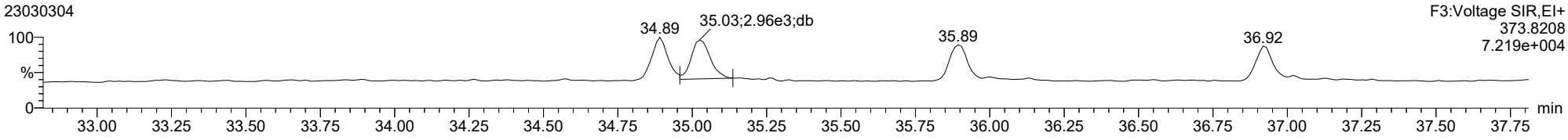

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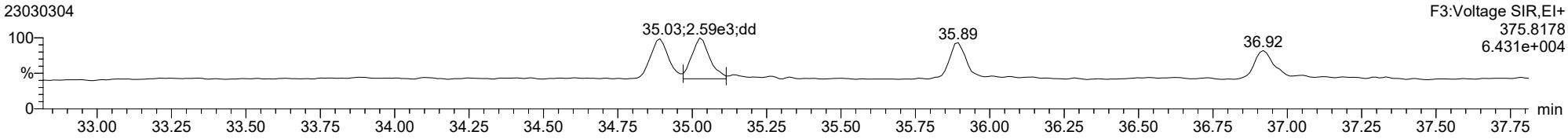

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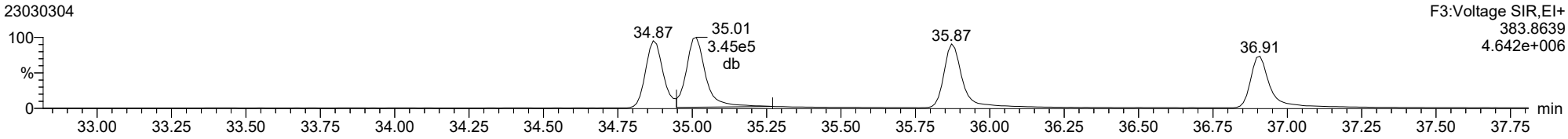

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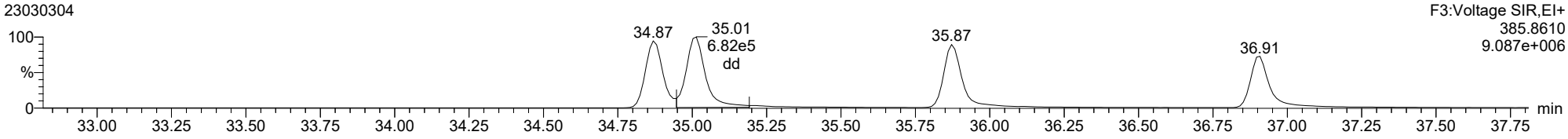

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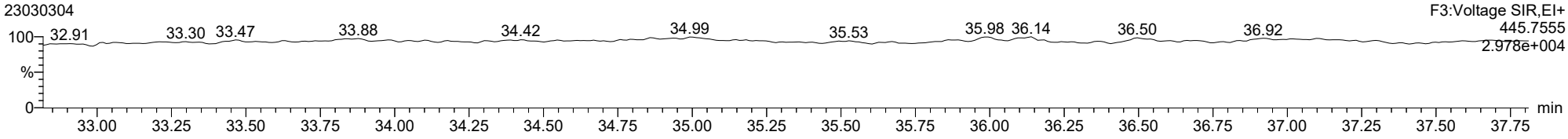

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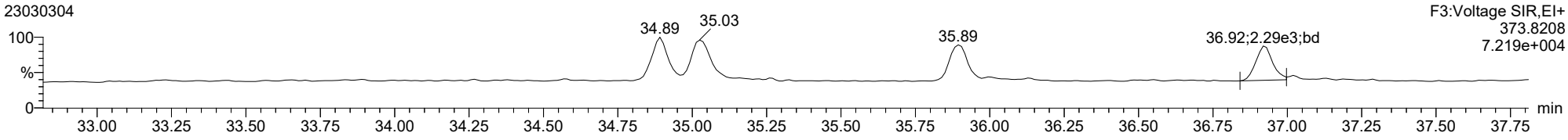

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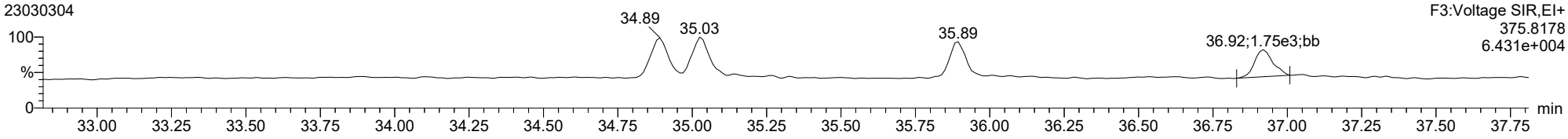

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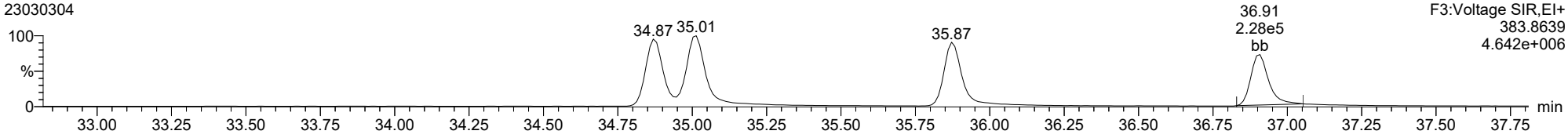

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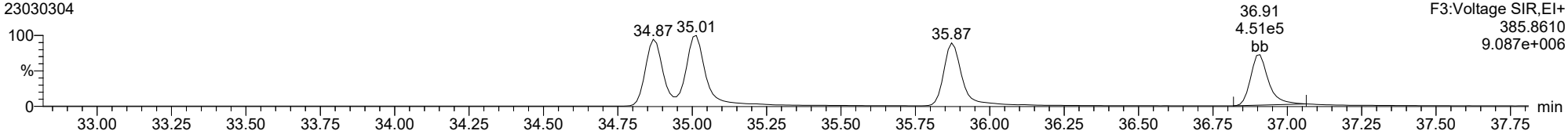

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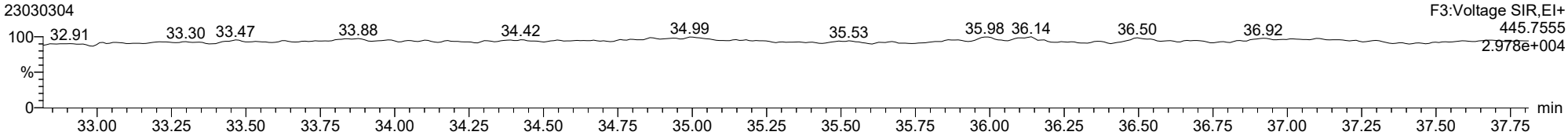

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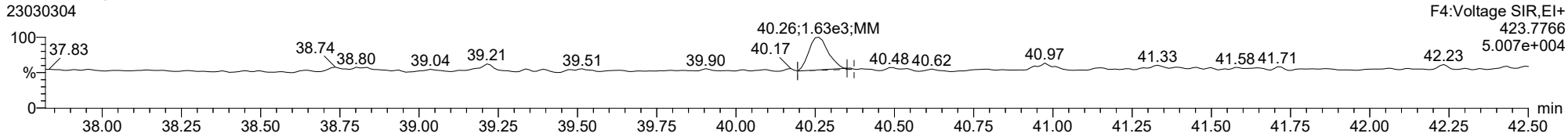

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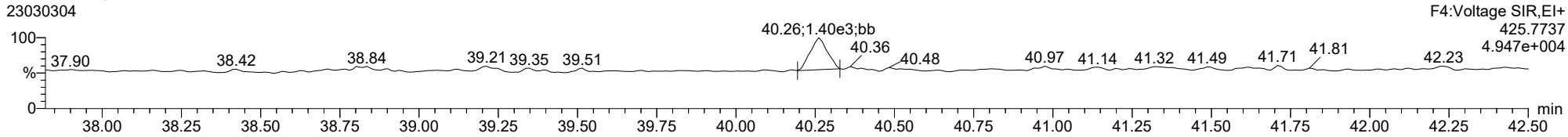

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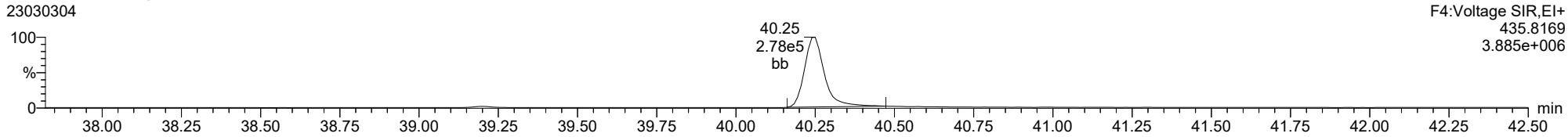

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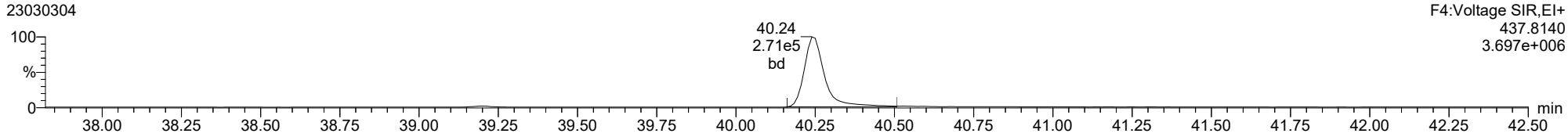

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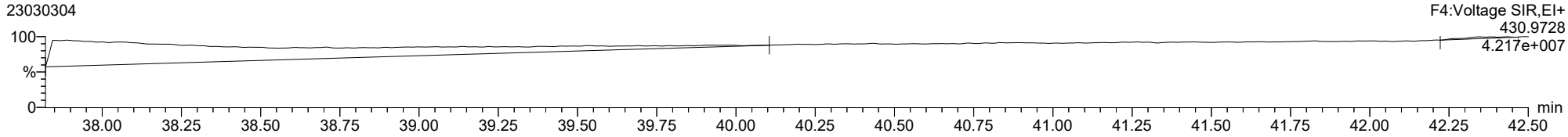

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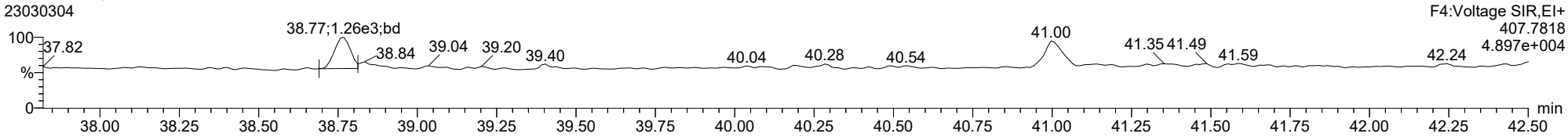

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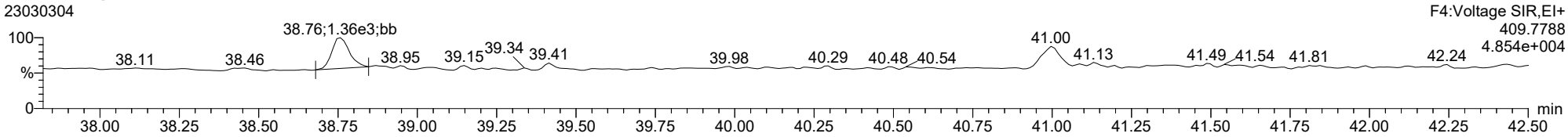

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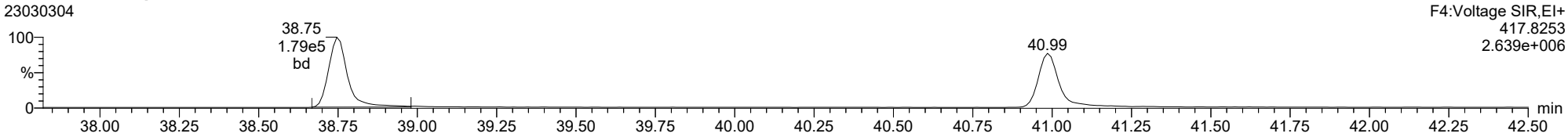

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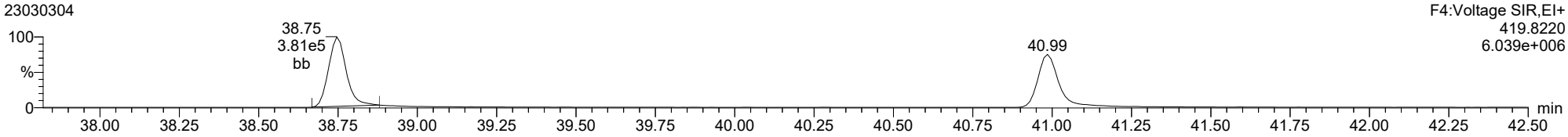

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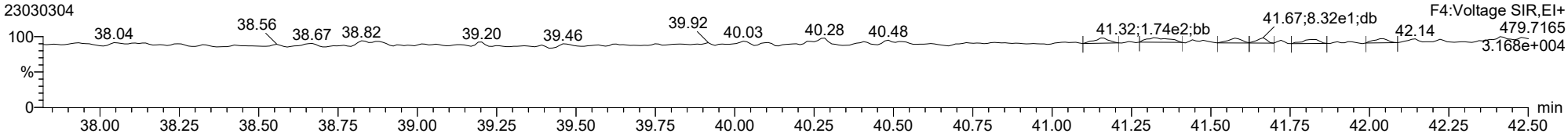

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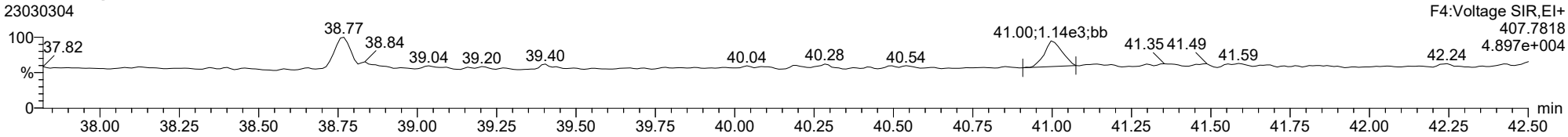

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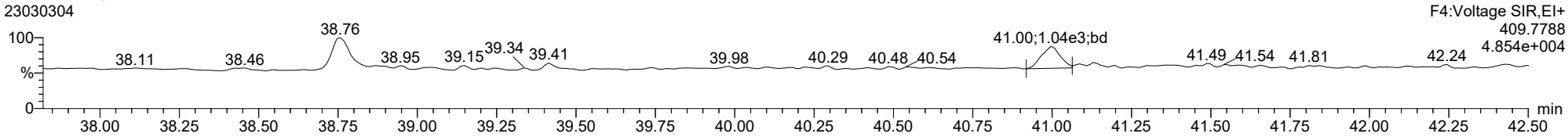

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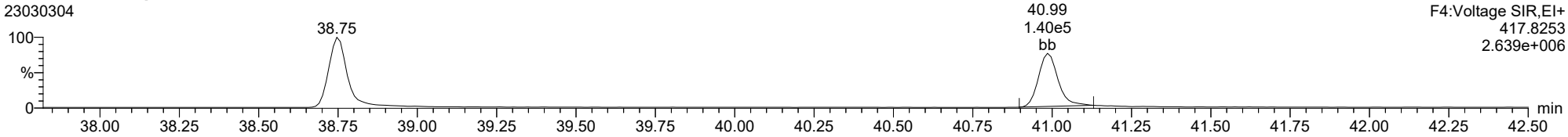

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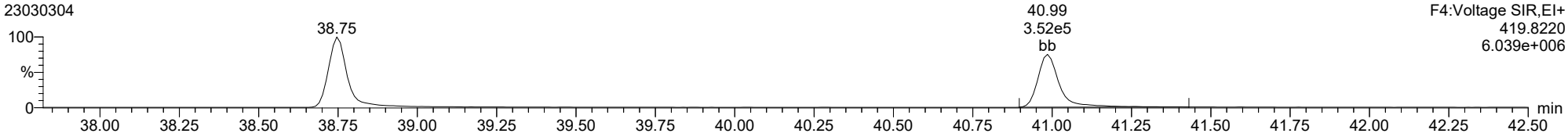

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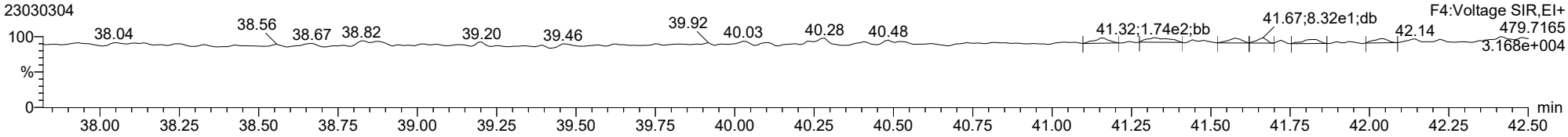

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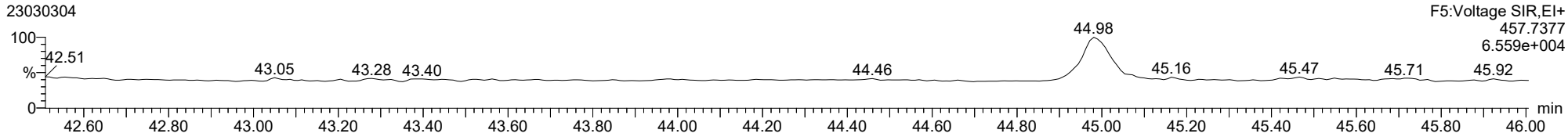

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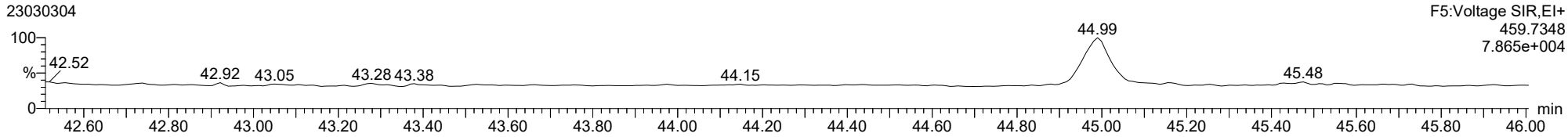

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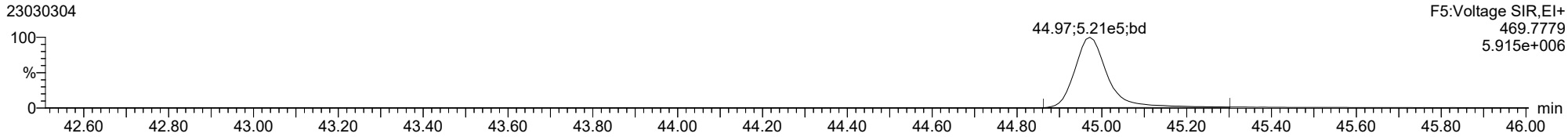

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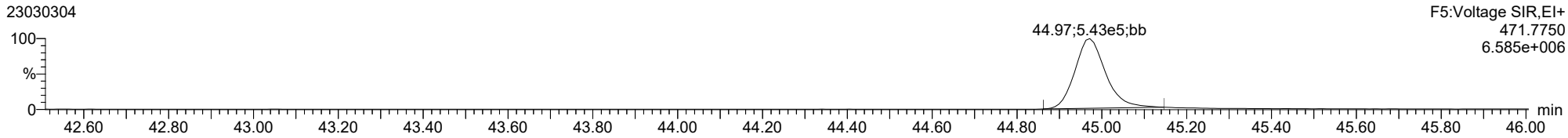

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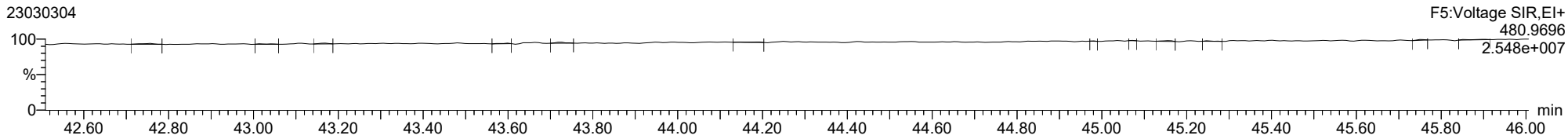

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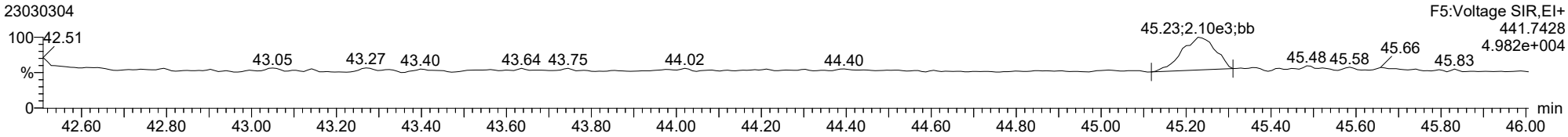
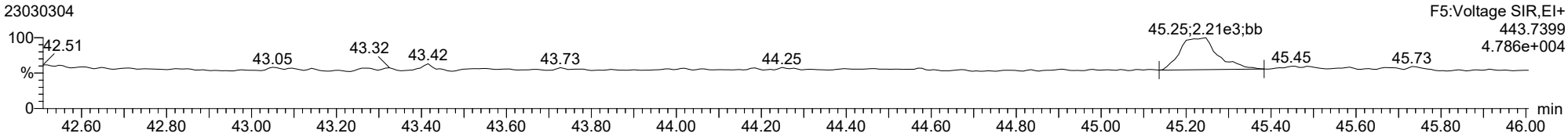
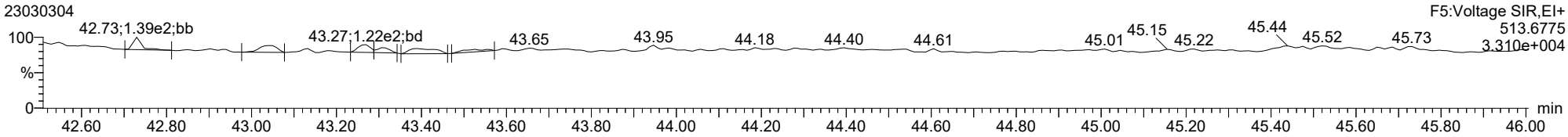
OCDF



OCDF

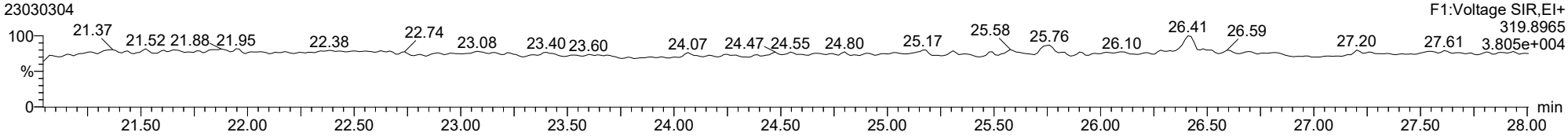


FUNCTION5 DCDPE

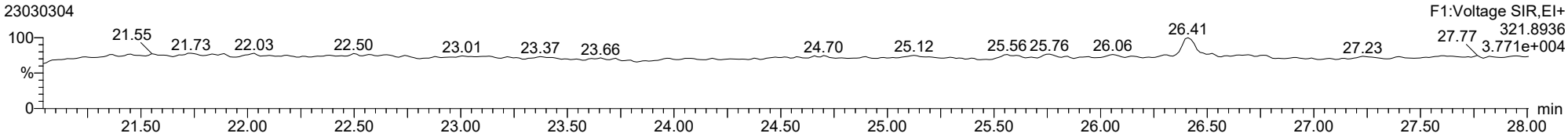


ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

Total-tetradioxins



Total-tetradioxins



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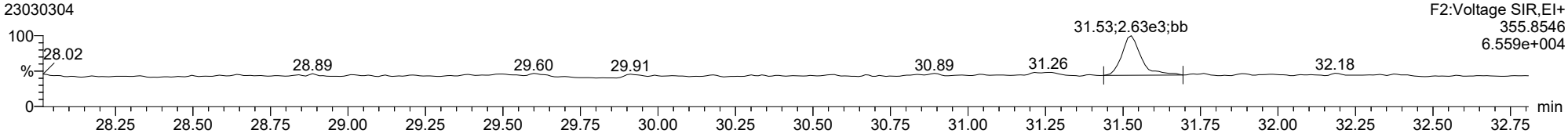

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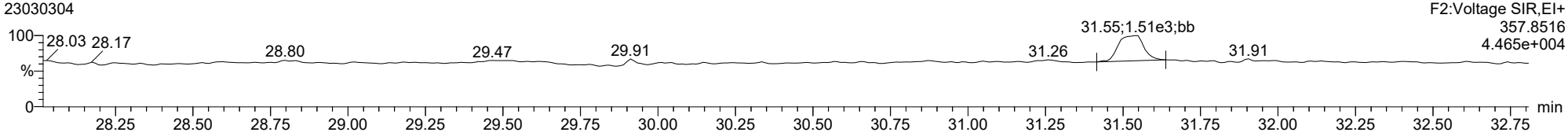
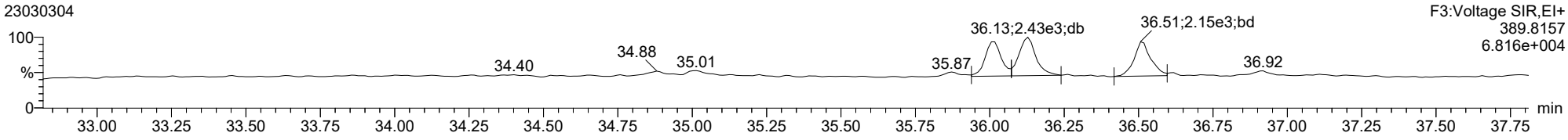


ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

Total-hexadioxins



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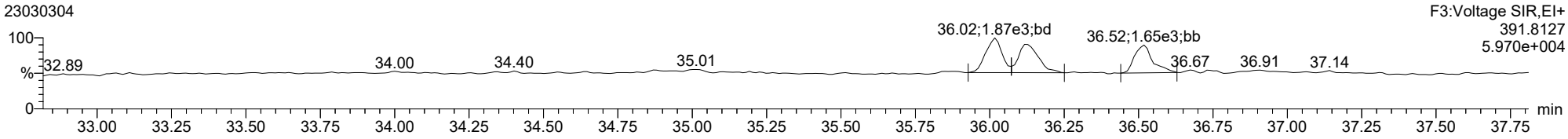

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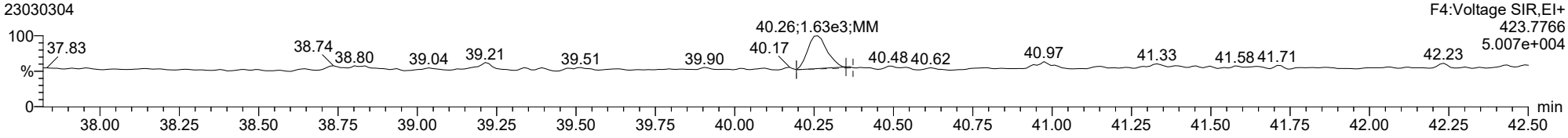

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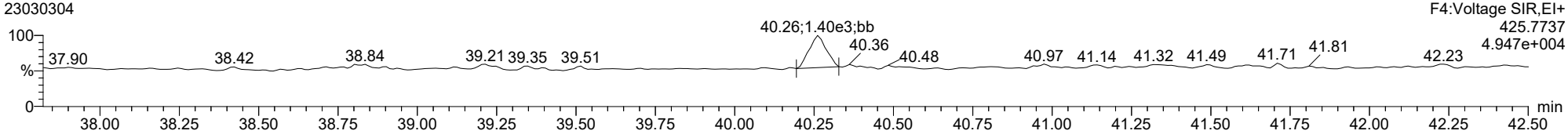
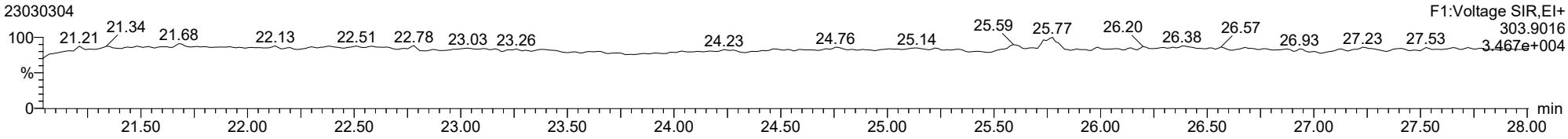
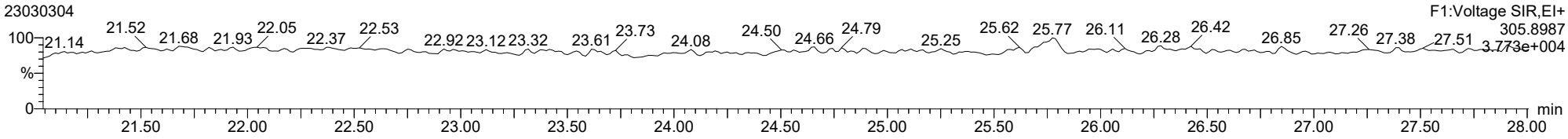


ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

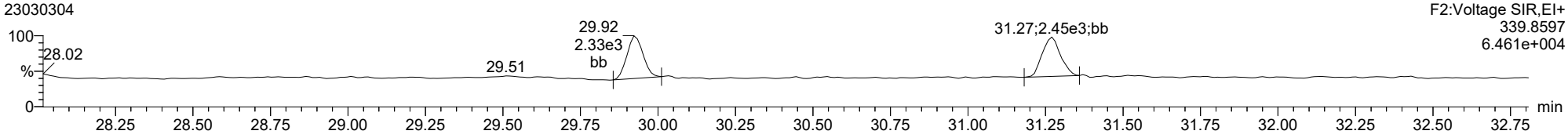
Total-tetrafurans



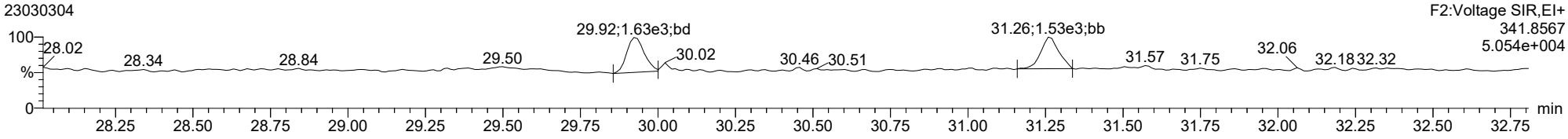
Total-tetrafurans



Total-pentafurans



Total-pentafurans



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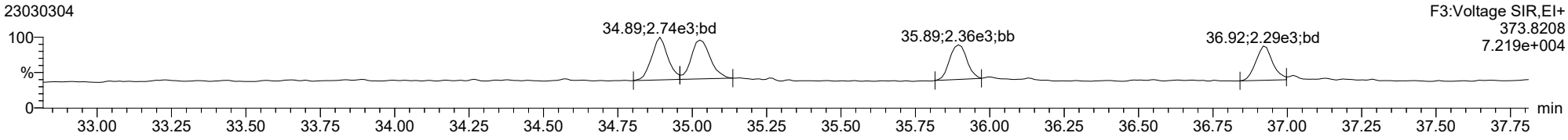
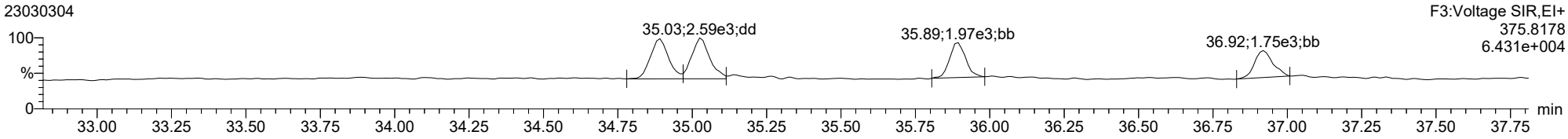
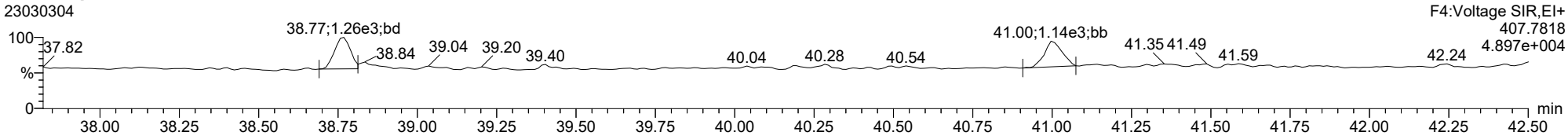
Total-hexafurans



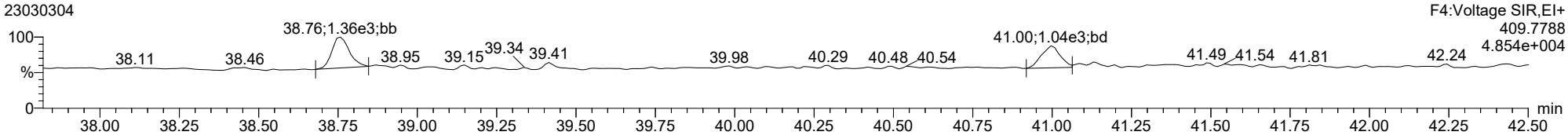
Total-hexafurans



Total-heptafurans



Total-heptafurans



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Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
Printed: Monday, March 06, 2023 11:34:10 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.788	1.001	1.705e3	2.516e3	0.702	0.678	0.770	886	1799	2.34e4	3.87e4	26.4	21.5	NO	bb	MM	0.494
12378-PeCDF	29.933	1.000	5.914e3	4.099e3	0.679	1.442	1.550	1151	1276	9.10e4	6.48e4	79.1	50.8	NO	bb	bb	2.168
23478-PeCDF	31.270	1.000	7.974e3	4.958e3	0.786	1.608	1.550	1151	1276	1.22e5	6.97e4	106.1	54.6	NO	bb	bb	2.386
123478-HxCDF	34.891	1.000	1.063e4	7.851e3	1.166	1.354	1.240	1046	1170	1.58e5	1.17e5	151.4	100.1	NO	bd	bd	2.532
234678-HxCDF	35.894	1.000	1.057e4	7.802e3	1.140	1.354	1.240	1046	1170	1.51e5	1.18e5	143.9	100.6	NO	bb	bb	2.503
123678-HxCDF	35.036	1.001	1.161e4	8.676e3	1.091	1.339	1.240	1046	1170	1.53e5	1.27e5	146.1	108.8	NO	dd	dd	2.416
123789-HxCDF	36.930	1.001	8.482e3	6.693e3	1.137	1.267	1.240	1046	1170	1.18e5	8.92e4	112.7	76.2	NO	bd	bb	2.462
1234678-HpCDF	38.768	1.000	7.253e3	6.596e3	1.003	1.100	1.050	811	627	1.05e5	9.73e4	128.9	155.1	NO	bb	bb	2.680
1234789-HpCDF	41.008	1.000	5.116e3	5.234e3	0.953	0.978	1.050	811	627	7.22e4	7.17e4	89.0	114.3	NO	bb	bb	2.342
OCDF	45.237	1.006	5.981e3	6.798e3	0.778	0.880	0.890	709	890	6.92e4	8.13e4	97.6	91.3	NO	MM	bd	4.559
2378-TCDD	26.424	1.001	2.272e3	2.723e3	1.149	0.834	0.770	1286	820	3.35e4	3.73e4	26.0	45.5	NO	bb	bb	0.486
12378-PeCDD	31.538	1.001	7.831e3	5.061e3	1.022	1.548	1.550	902	618	1.00e5	7.05e4	111.4	114.0	NO	bb	bd	2.348
123478-HxCDD	36.016	1.000	7.381e3	5.875e3	0.996	1.256	1.240	655	843	1.17e5	9.68e4	178.2	114.9	NO	bd	bd	2.415
123678-HxCDD	36.139	1.001	9.152e3	7.340e3	1.001	1.247	1.240	655	843	1.26e5	9.90e4	192.8	117.4	NO	db	dd	2.494
123789-HxCDD	36.518	1.011	7.480e3	5.936e3	0.907	1.260	1.240	655	843	1.06e5	8.62e4	162.4	102.3	NO	bd	bd	2.440
1234678-HpCDD	40.272	1.001	6.283e3	5.832e3	1.039	1.077	1.050	694	917	8.98e4	8.16e4	129.4	89.0	NO	bb	bd	2.337
OCDD	44.999	1.000	8.578e3	9.676e3	0.920	0.887	0.890	635	634	9.84e4	1.12e5	154.9	175.9	NO	bd	bb	5.505
13C-2378-TCDF	25.760	1.007	5.230e5	6.960e5	1.620	0.752	0.770	2566	1723	7.68e6	1.02e7	2994.2	5911.4	NO	bb	bb	98.043
13C-12378-PeCDF	29.922	1.169	4.082e5	2.718e5	1.240	1.502	1.550	3092	2294	5.44e6	3.64e6	1758.1	1584.9	NO	bd	bb	71.437
13C-23478-PeCDF	31.259	1.222	4.106e5	2.788e5	1.118	1.473	1.550	3092	2294	5.91e6	4.02e6	1912.5	1751.3	NO	bb	bb	80.373
13C-123478-HxCDF	34.880	0.955	2.117e5	4.140e5	1.168	0.511	0.510	1778	2186	3.18e6	6.21e6	1786.5	2841.3	NO	bd	bd	93.801
13C-123678-HxCDF	35.014	0.959	2.754e5	4.947e5	1.386	0.557	0.510	1778	2186	3.40e6	6.43e6	1911.3	2941.0	NO	db	db	97.276
13C-234678-HxCDF	35.882	0.983	2.122e5	4.318e5	1.129	0.491	0.510	1778	2186	3.04e6	5.98e6	1709.4	2734.1	NO	bb	bd	99.880
13C-123789-HxCDF	36.908	1.011	1.853e5	3.568e5	0.932	0.519	0.510	1778	2186	2.62e6	5.01e6	1471.0	2293.6	NO	bb	bb	101.893
13C-1234678-HpCDF	38.757	1.062	1.579e5	3.573e5	0.895	0.442	0.440	2049	3174	2.36e6	5.45e6	1151.3	1718.3	NO	bb	bb	100.794
13C-1234789-HpCDF	40.997	1.123	1.372e5	3.264e5	0.770	0.420	0.440	2049	3174	1.74e6	3.92e6	851.0	1236.7	NO	bd	bd	105.482
13C-1234-TCDD	25.591	0.000	3.429e5	4.245e5	1.000	0.808	0.770	2519	1748	5.22e6	6.49e6	2072.6	3712.2	NO	bb	bb	100.000
13C-2378-TCDD	26.396	1.031	3.982e5	4.964e5	1.152	0.802	0.770	2519	1748	5.51e6	6.93e6	2188.2	3962.8	NO	bb	bb	101.152
13C-12378-PeCDD	31.515	1.232	3.242e5	2.131e5	0.829	1.521	1.550	1586	877	4.46e6	2.78e6	2809.5	3168.1	NO	bb	bd	84.489
13C-123478-HxCDD	36.005	0.986	3.100e5	2.413e5	0.995	1.285	1.240	2517	1649	4.83e6	3.77e6	1920.9	2283.3	NO	bd	bd	97.050
13C-123678-HxCDD	36.117	0.989	3.700e5	2.908e5	1.157	1.273	1.240	2517	1649	5.06e6	4.03e6	2012.2	2442.3	NO	db	db	100.049
13C-1234678-HpCDD	40.250	1.102	2.556e5	2.433e5	0.840	1.051	1.050	2183	1602	3.48e6	3.29e6	1594.9	2052.3	NO	bb	bb	103.999
13C-OCDD	44.980	1.232	3.386e5	3.823e5	0.767	0.886	0.890	3187	1733	3.80e6	4.27e6	1193.7	2462.5	NO	bb	bb	164.498
13C-123789-HxCDD	36.507	0.000	3.194e5	2.515e5	1.000	1.270	1.240	2517	1649	4.46e6	3.59e6	1770.5	2177.4	NO	bb	bb	100.000
37CL-2378-TCDD	26.424	1.033	5.065e3		1.288			2040		7.28e4		35.7			bb		0.513

Dataset: T:\Autospec\Processed Data Batch\230303ICIH.qld
Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
Printed: Monday, March 06, 2023 11:34:10 Pacific Standard Time

ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					0.802		0.770	886	1799								
1289-TCDF					0.678		0.770	886	1799								
13468-PECDF					1.246		1.550	811	1221								
12389-PECDF					0.496		1.550	1151	1276								
123468-HXCDF					1.169		1.240	1046	1170								
1368-TCDD					1.015		0.770	1286	820								
1289-TCDD					0.909		0.770	1286	820								
12479-PECDD					2.301		1.550	902	618								
12389-PECDD					1.184		1.550	902	618								
124679-HXCDD					1.115		1.240	655	843								
1234679-HPCDD					1.137		1.050	694	917								
Total-tetrafurans			1.705e3		0.727			886		2.34e4							0.494
Total-penta1			0.000e0					811		0.00e0							
Total-pentafurans			1.389e4		0.654			1151		2.13e5							4.554
Total-hexafurans			4.139e4		1.141			1046		5.82e5							9.938
Total-heptafurans			1.237e4		0.978			811		1.77e5							5.023
Total-Furans			7.533e4		0.922			886		1.06e6							24.566
Total-tetradioxins			2.272e3		1.024			1286		3.35e4							0.486
Total-pentadioxins			7.831e3		1.502			902		1.00e5							2.348
Total-hexadioxins			2.401e4		1.005			655		3.49e5							7.349
Total-heptadioxins			6.283e3		1.088			694		8.98e4							2.337
Total-Dioxins			4.898e4		1.130			1286		6.72e5							18.025
Total-TEQ			1.243e5					1286		1.74e6							42.592
FUNCTION1 PFK			0.000e0					501375		0.00e0							
FUNCTION2 PFK			7.687e6					300953		7.99e6							0.000
FUNCTION3 PFK			1.081e7					473463		1.95e7							0.000
FUNCTION4 PFK			1.035e7					332160		2.87e6							
FUNCTION5 PFK			6.101e5					195111		8.38e5							
FUNCTION1 HXCD...			6.739e2					611		6.36e3							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			7.361e2					923		1.83e4							0.000
FUNCTION3 OCDPE			2.008e2					596		2.61e3							0.000
FUNCTION4 NCDPE			9.397e1					539		1.40e3							0.000
FUNCTION5 DCDPE			1.677e2					561		3.39e3							0.000

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.79	1.705e3	2.516e3	0.702	0.68	0.77	26.4	YES	NO	bb	MM	0.494

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.27	7.974e3	4.958e3	0.786	1.61	1.55	106.1	YES	NO	bb	bb	2.386
2	12378-PeCDF	29.93	5.914e3	4.099e3	0.679	1.44	1.55	79.1	YES	NO	bb	bb	2.168

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.93	8.482e3	6.693e3	1.137	1.27	1.24	112.7	YES	NO	bd	bb	2.462
2	234678-HxCDF	35.89	1.057e4	7.802e3	1.140	1.35	1.24	143.9	YES	NO	bb	bb	2.503
3	Total-hexafurans	35.23	1.011e2	8.523e1	1.141	1.19	1.24	2.2	NO	NO	db	db	0.025
4	123678-HxCDF	35.04	1.161e4	8.676e3	1.091	1.34	1.24	146.1	YES	NO	dd	dd	2.416
5	123478-HxCDF	34.89	1.063e4	7.851e3	1.166	1.35	1.24	151.4	YES	NO	bd	bd	2.532

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDF	38.77	7.253e3	6.596e3	1.003	1.10	1.05	128.9	YES	NO	bb	bb	2.680
2	1234789-HpCDF	41.01	5.116e3	5.234e3	0.953	0.98	1.05	89.0	YES	NO	bb	bb	2.342

ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.27	7.974e3	4.958e3	0.786	1.61	1.55	106.1	YES	NO	bb	bb	2.386
2	12378-PeCDF	29.93	5.914e3	4.099e3	0.679	1.44	1.55	79.1	YES	NO	bb	bb	2.168
3	2378-TCDF	25.79	1.705e3	2.516e3	0.702	0.68	0.77	26.4	YES	NO	bb	MM	0.494
4	123789-HxCDF	36.93	8.482e3	6.693e3	1.137	1.27	1.24	112.7	YES	NO	bd	bb	2.462
5	234678-HxCDF	35.89	1.057e4	7.802e3	1.140	1.35	1.24	143.9	YES	NO	bb	bb	2.503
6	Total-hexafurans	35.23	1.011e2	8.523e1	1.141	1.19	1.24	2.2	NO	NO	db	db	0.025
7	123678-HxCDF	35.04	1.161e4	8.676e3	1.091	1.34	1.24	146.1	YES	NO	dd	dd	2.416
8	123478-HxCDF	34.89	1.063e4	7.851e3	1.166	1.35	1.24	151.4	YES	NO	bd	bd	2.532
9	1234678-HpCDF	38.77	7.253e3	6.596e3	1.003	1.10	1.05	128.9	YES	NO	bb	bb	2.680
10	OCDF	45.24	5.981e3	6.798e3	0.778	0.88	0.89	97.6	YES	NO	MM	bd	4.559
11	1234789-HpCDF	41.01	5.116e3	5.234e3	0.953	0.98	1.05	89.0	YES	NO	bb	bb	2.342

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.42	2.272e3	2.723e3	1.149	0.83	0.77	26.0	YES	NO	bb	bb	0.486

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.54	7.831e3	5.061e3	1.022	1.55	1.55	111.4	YES	NO	bb	bd	2.348

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.52	7.480e3	5.936e3	0.907	1.26	1.24	162.4	YES	NO	bd	bd	2.440
2	123678-HxCDD	36.14	9.152e3	7.340e3	1.001	1.25	1.24	192.8	YES	NO	db	dd	2.494
3	123478-HxCDD	36.02	7.381e3	5.875e3	0.996	1.26	1.24	178.2	YES	NO	bd	bd	2.415

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.27	6.283e3	5.832e3	1.039	1.08	1.05	129.4	YES	NO	bb	bd	2.337

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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.42	2.272e3	2.723e3	1.149	0.83	0.77	26.0	YES	NO	bb	bb	0.486
2	123789-HxCDD	36.52	7.480e3	5.936e3	0.907	1.26	1.24	162.4	YES	NO	bd	bd	2.440
3	123678-HxCDD	36.14	9.152e3	7.340e3	1.001	1.25	1.24	192.8	YES	NO	db	dd	2.494
4	123478-HxCDD	36.02	7.381e3	5.875e3	0.996	1.26	1.24	178.2	YES	NO	bd	bd	2.415
5	12378-PeCDD	31.54	7.831e3	5.061e3	1.022	1.55	1.55	111.4	YES	NO	bb	bd	2.348
6	1234678-HpCDD	40.27	6.283e3	5.832e3	1.039	1.08	1.05	129.4	YES	NO	bb	bd	2.337
7	OCDD	45.00	8.578e3	9.676e3	0.920	0.89	0.89	154.9	YES	NO	bd	bb	5.505

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.27	7.974e3	4.958e3	0.786	1.61	1.55	106.1	YES	NO	bb	bb	2.386
2	12378-PeCDF	29.93	5.914e3	4.099e3	0.679	1.44	1.55	79.1	YES	NO	bb	bb	2.168
3	2378-TCDF	25.79	1.705e3	2.516e3	0.702	0.68	0.77	26.4	YES	NO	bb	MM	0.494
4	123789-HxCDF	36.93	8.482e3	6.693e3	1.137	1.27	1.24	112.7	YES	NO	bd	bb	2.462
5	234678-HxCDF	35.89	1.057e4	7.802e3	1.140	1.35	1.24	143.9	YES	NO	bb	bb	2.503
6	Total-hexafurans	35.23	1.011e2	8.523e1	1.141	1.19	1.24	2.2	NO	NO	db	db	0.025
7	123678-HxCDF	35.04	1.161e4	8.676e3	1.091	1.34	1.24	146.1	YES	NO	dd	dd	2.416
8	123478-HxCDF	34.89	1.063e4	7.851e3	1.166	1.35	1.24	151.4	YES	NO	bd	bd	2.532
9	1234678-HpCDF	38.77	7.253e3	6.596e3	1.003	1.10	1.05	128.9	YES	NO	bb	bb	2.680
10	OCDF	45.24	5.981e3	6.798e3	0.778	0.88	0.89	97.6	YES	NO	MM	bd	4.559
11	1234789-HpCDF	41.01	5.116e3	5.234e3	0.953	0.98	1.05	89.0	YES	NO	bb	bb	2.342
12	2378-TCDD	26.42	2.272e3	2.723e3	1.149	0.83	0.77	26.0	YES	NO	bb	bb	0.486
13	123789-HxCDD	36.52	7.480e3	5.936e3	0.907	1.26	1.24	162.4	YES	NO	bd	bd	2.440
14	123678-HxCDD	36.14	9.152e3	7.340e3	1.001	1.25	1.24	192.8	YES	NO	db	dd	2.494
15	123478-HxCDD	36.02	7.381e3	5.875e3	0.996	1.26	1.24	178.2	YES	NO	bd	bd	2.415
16	12378-PeCDD	31.54	7.831e3	5.061e3	1.022	1.55	1.55	111.4	YES	NO	bb	bd	2.348
17	1234678-HpCDD	40.27	6.283e3	5.832e3	1.039	1.08	1.05	129.4	YES	NO	bb	bd	2.337
18	OCDD	45.00	8.578e3	9.676e3	0.920	0.89	0.89	154.9	YES	NO	bd	bb	5.505

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	30.41	6.929e5					4.3	YES		bb		0.000
2	FUNCTION2 PFK	28.05	6.994e6					22.3	YES		bb		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	37.60	1.788e4					1.3	NO		bb		0.000
2	FUNCTION3 PFK	36.61	1.585e4					1.4	NO		bb		0.000
3	FUNCTION3 PFK	36.53	6.942e3					0.8	NO		bb		0.000
4	FUNCTION3 PFK	33.99	9.502e3					0.9	NO		bb		0.000
5	FUNCTION3 PFK	33.78	4.298e6					7.0	YES		db		0.000
6	FUNCTION3 PFK	33.15	6.467e6					29.8	YES		bd		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	38.85	1.035e7					8.6	YES		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	42.97	6.101e5					4.3	YES		bb		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.27	8.033e1					1.9	NO		bb		0.000
2	FUNCTION1 HXCD...	24.98	2.706e2					3.4	YES		bb		0.000
3	FUNCTION1 HXCD...	22.17	1.286e2					2.0	NO		bb		0.000
4	FUNCTION1 HXCD...	21.47	8.089e1					1.9	NO		bb		0.000
5	FUNCTION1 HXCD...	21.17	1.135e2					1.3	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	32.66	1.045e2					4.3	YES		db		0.000
2	FUNCTION2 HPCD...	32.58	1.134e2					3.0	NO		bd		0.000
3	FUNCTION2 HPCD...	31.88	7.272e1					1.9	NO		bb		0.000
4	FUNCTION2 HPCD...	30.71	7.070e1					1.8	NO		bb		0.000
5	FUNCTION2 HPCD...	30.13	1.134e2					2.5	NO		bb		0.000
6	FUNCTION2 HPCD...	28.92	7.142e1					2.0	NO		bb		0.000
7	FUNCTION2 HPCD...	28.66	9.983e1					2.2	NO		bb		0.000
8	FUNCTION2 HPCD...	28.24	9.016e1					2.1	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.50	2.008e2					4.4	YES		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	41.59	9.397e1					2.6	NO		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	44.72	7.355e1					2.5	NO		bb		0.000
2	FUNCTION5 DCDPE	44.30	9.416e1					3.6	YES		bb		0.000

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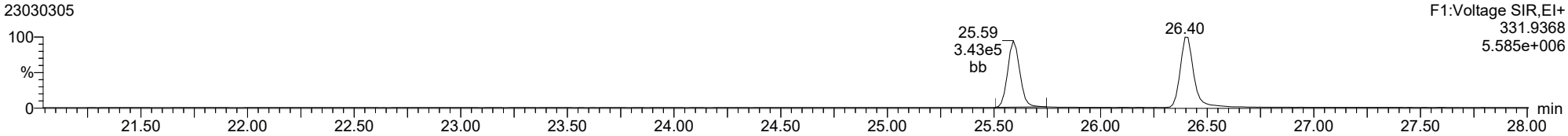
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD



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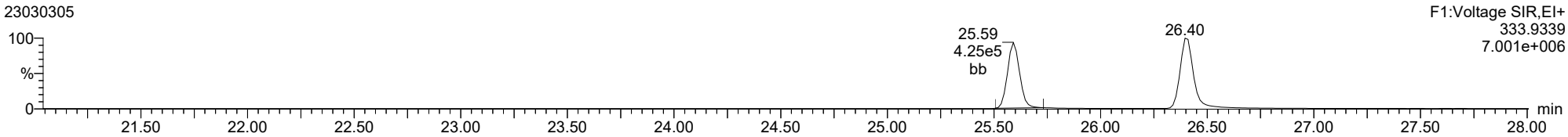

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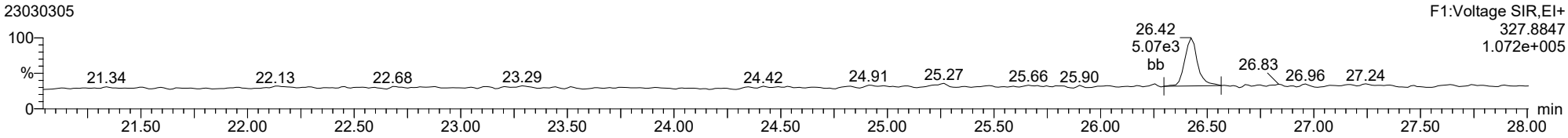

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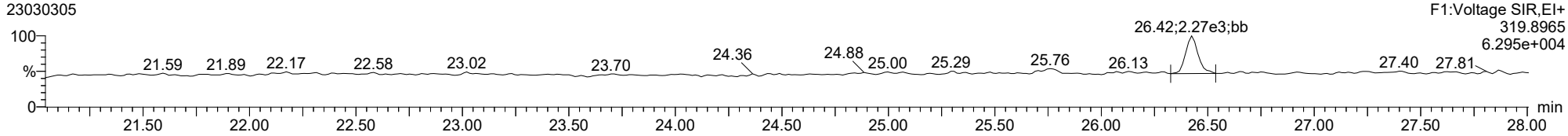

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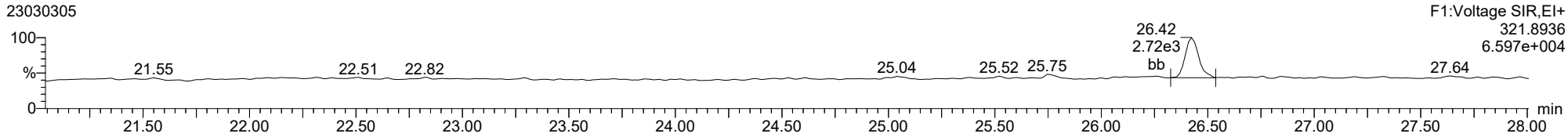

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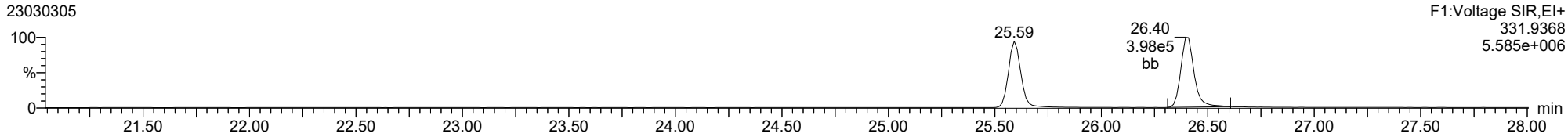

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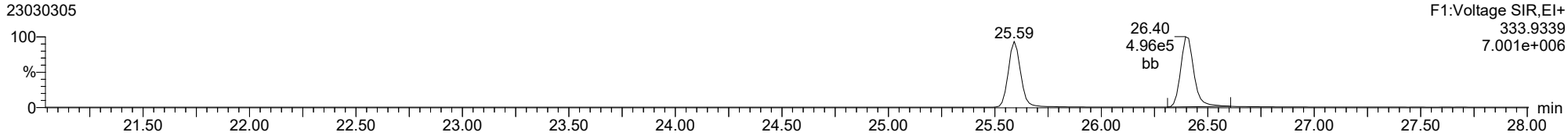
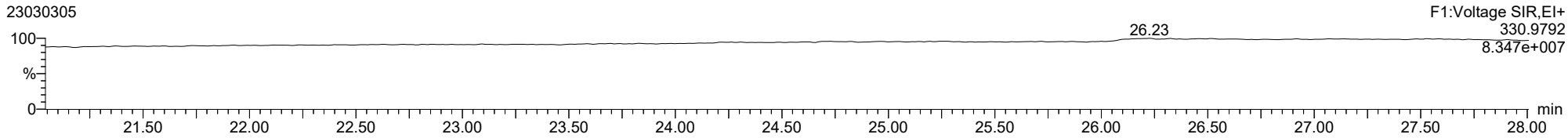


FUNCTION1 PFK



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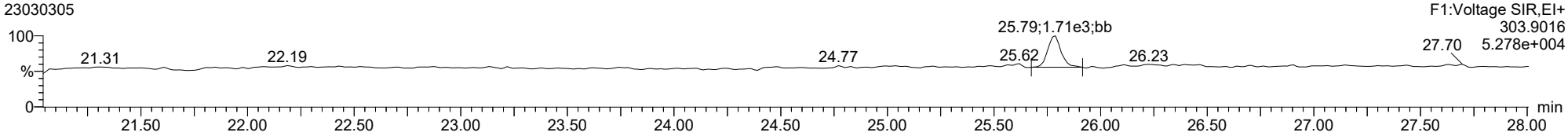

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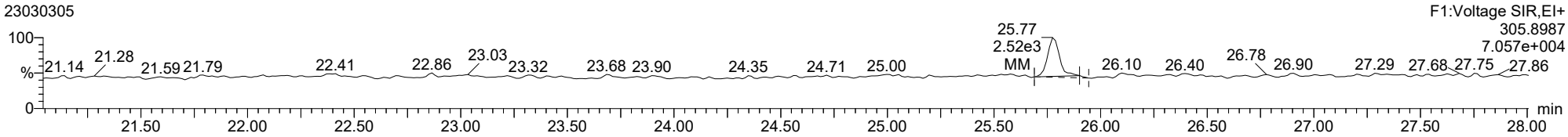

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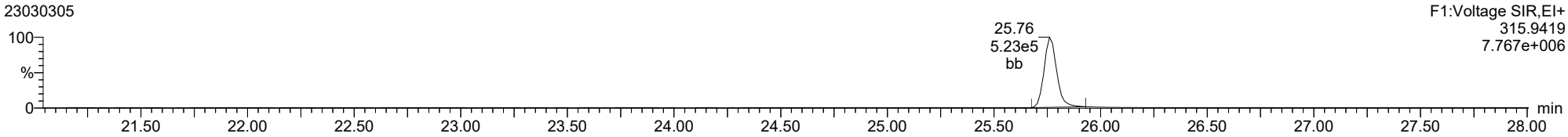

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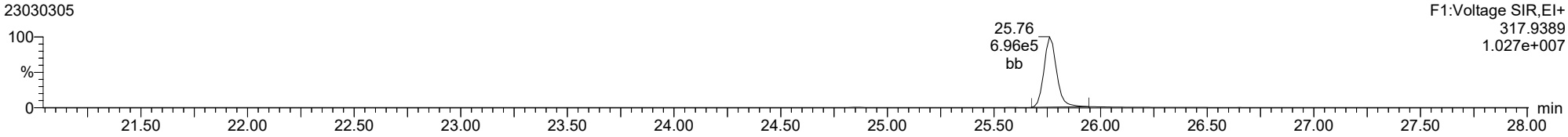

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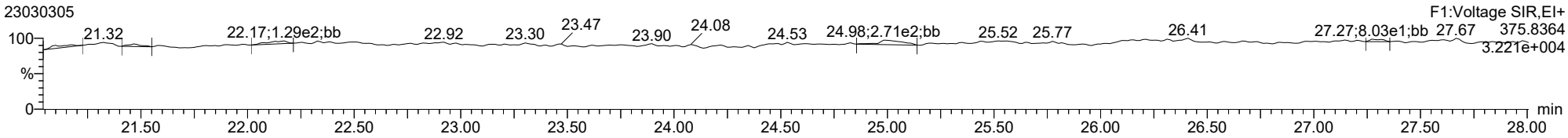
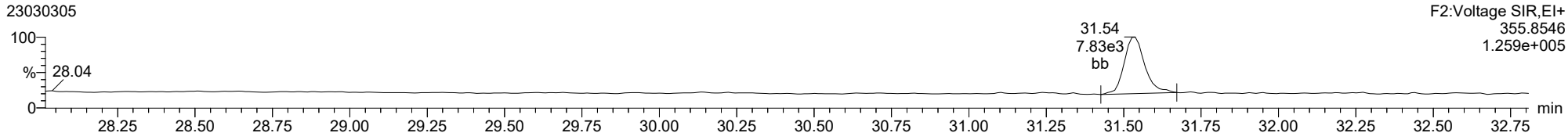


ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

12378-PeCDD



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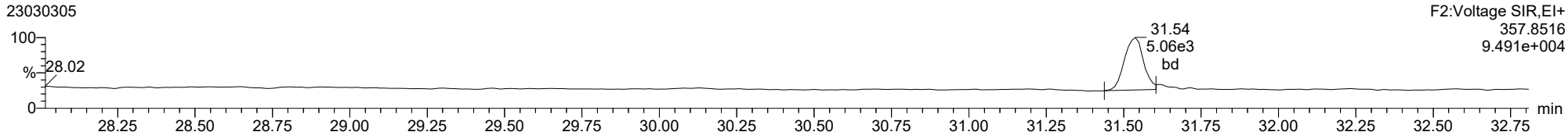

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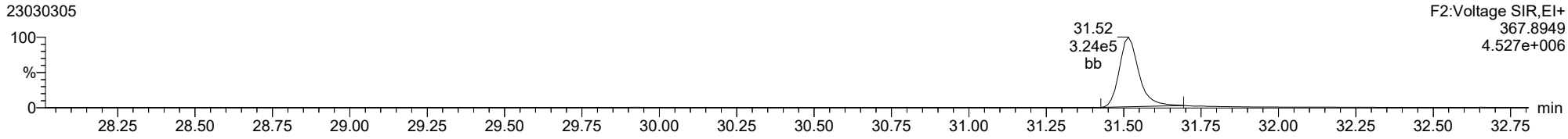

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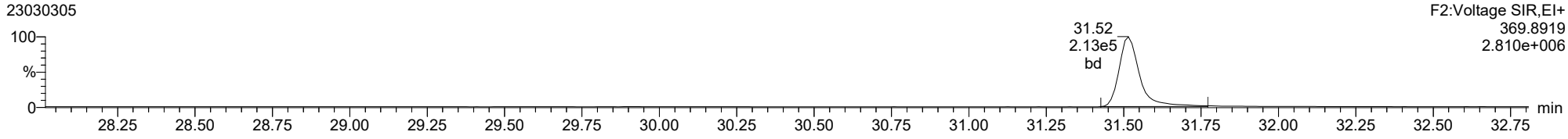
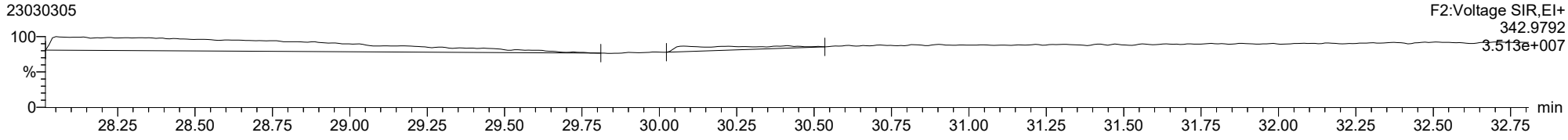


FUNCTION2 PFK



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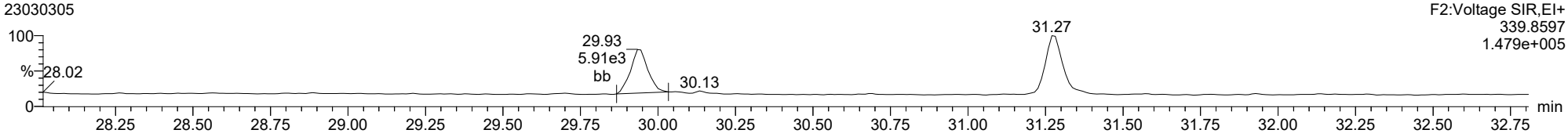
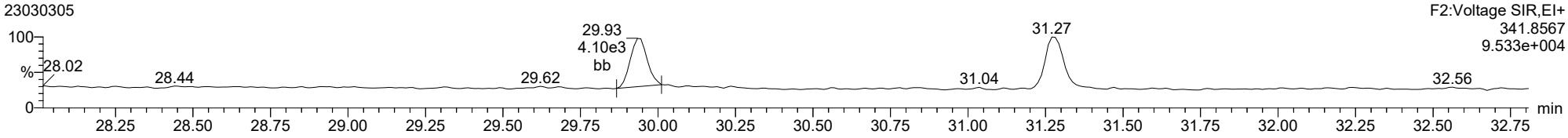
12378-PeCDF



12378-PeCDF



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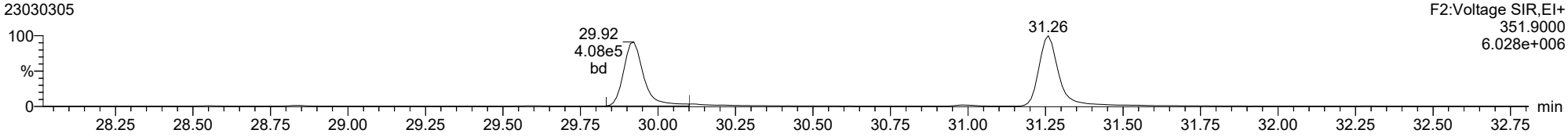

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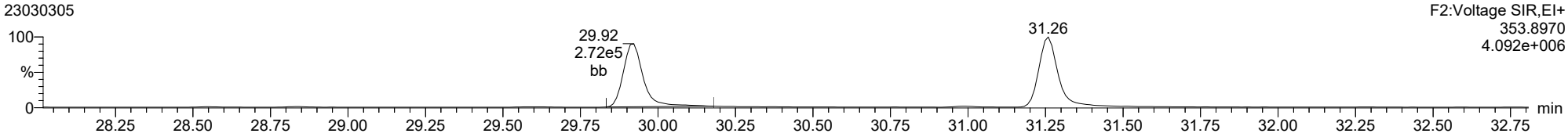

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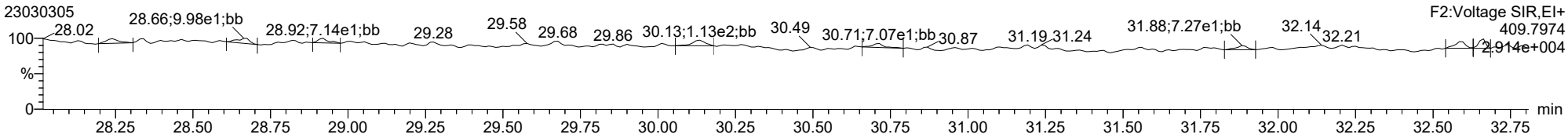

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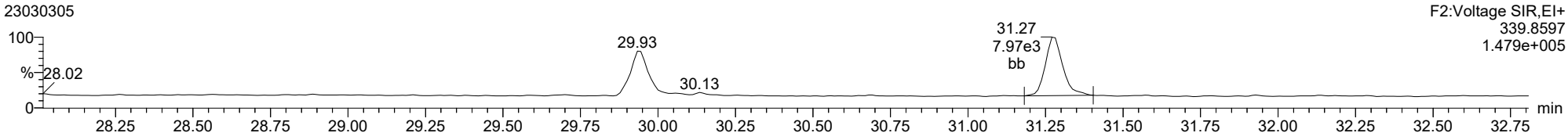
23478-PeCDF



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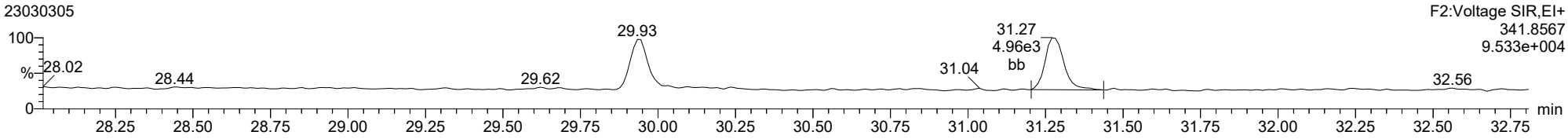

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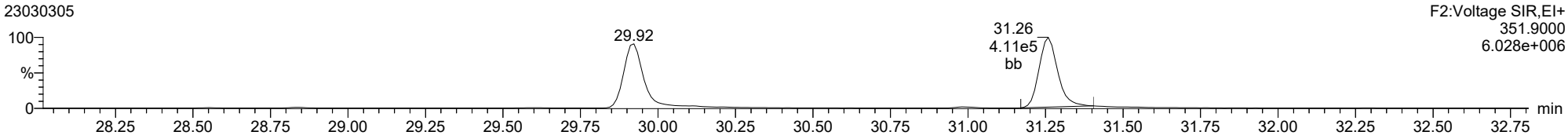

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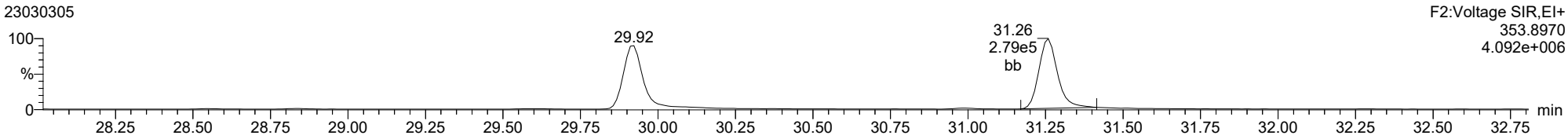

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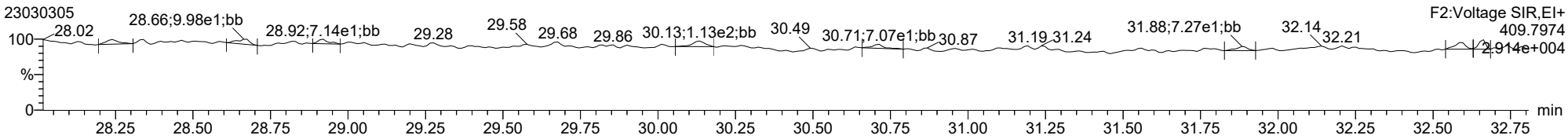

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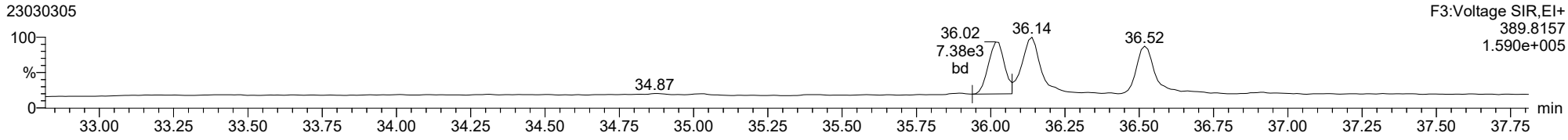

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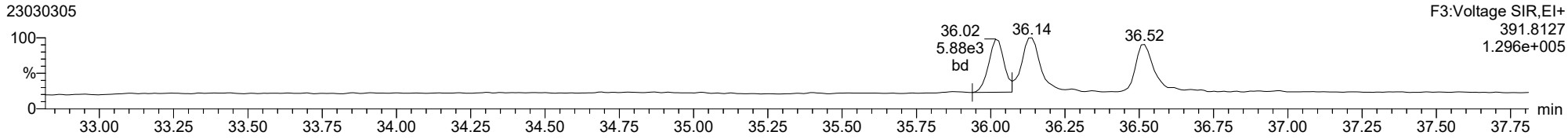

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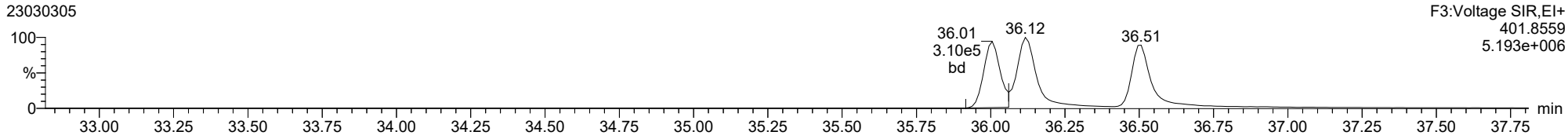

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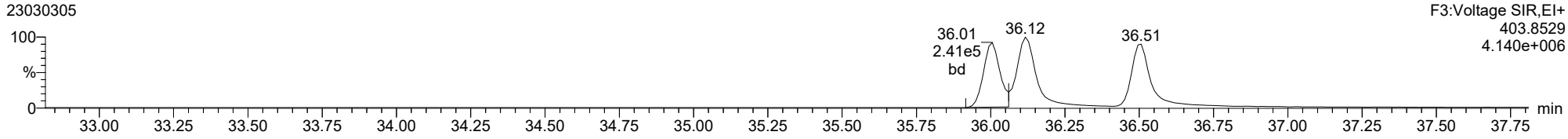
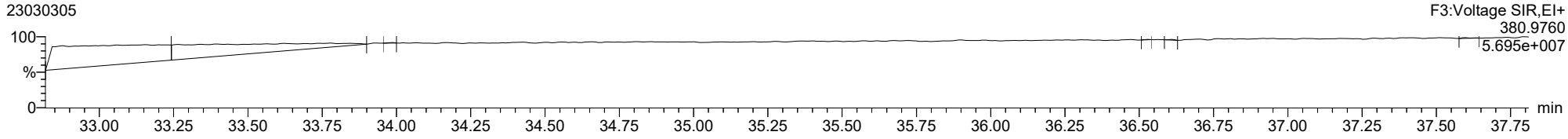


FUNCTION3 PFK



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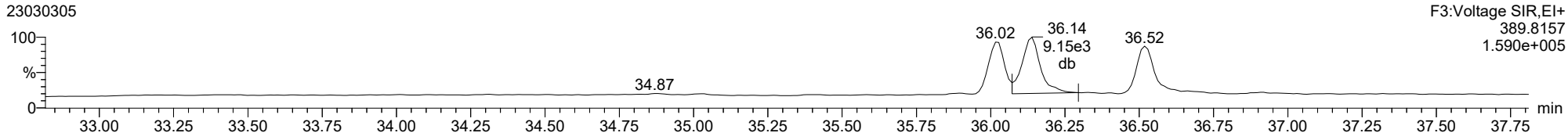

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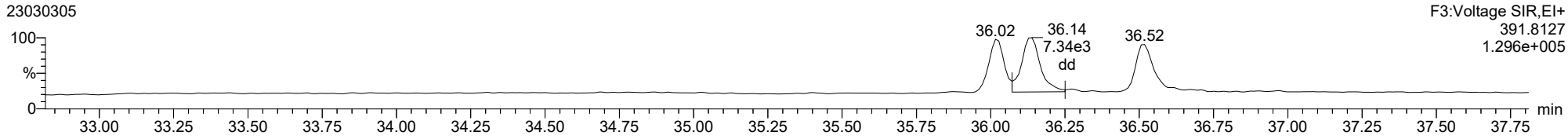

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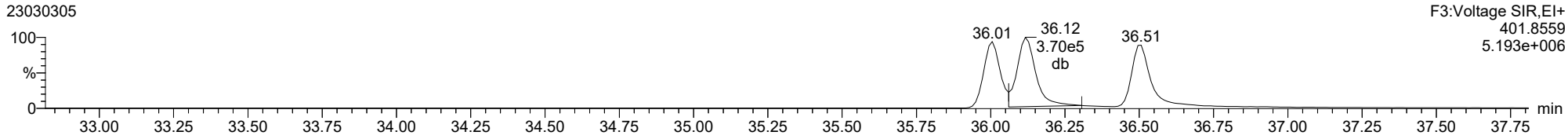

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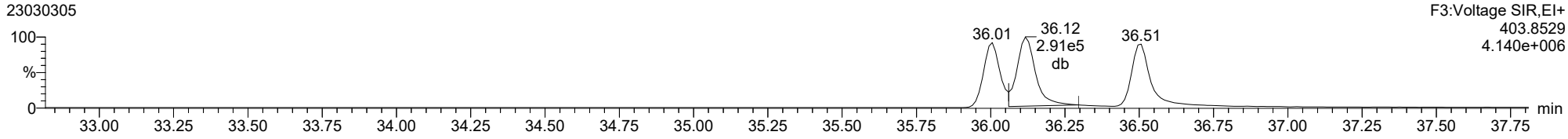

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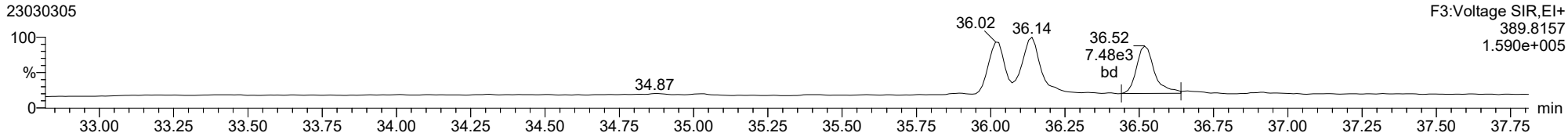

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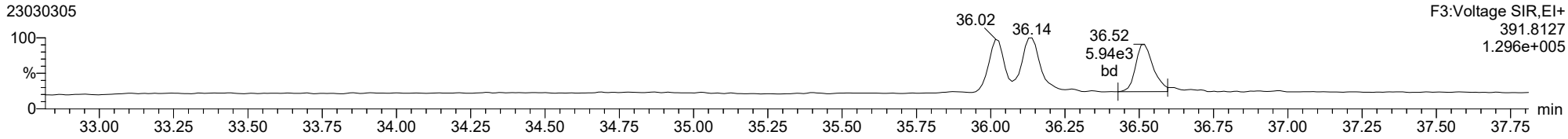

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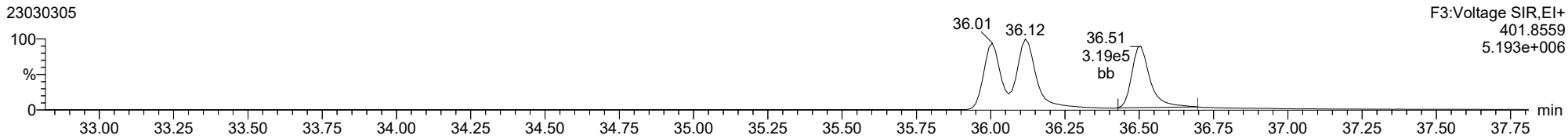

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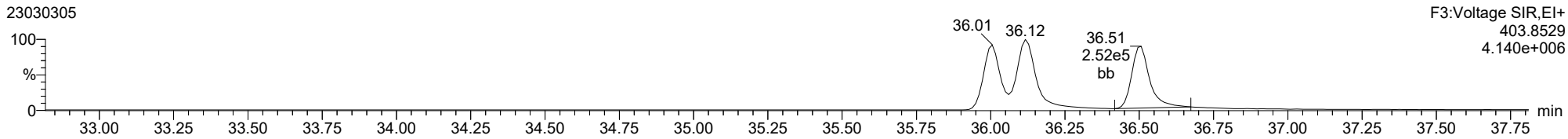

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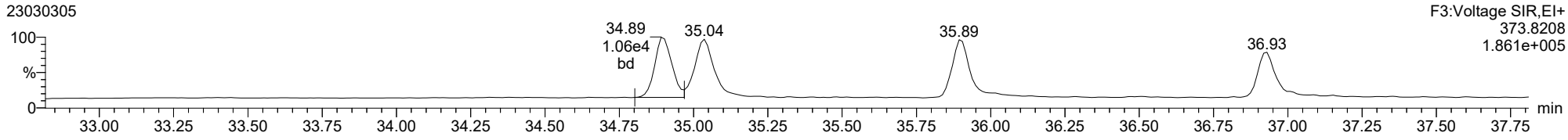

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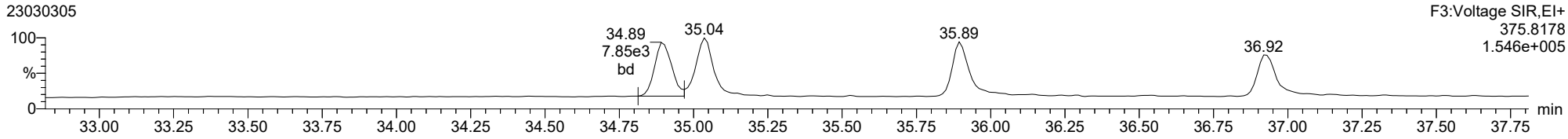

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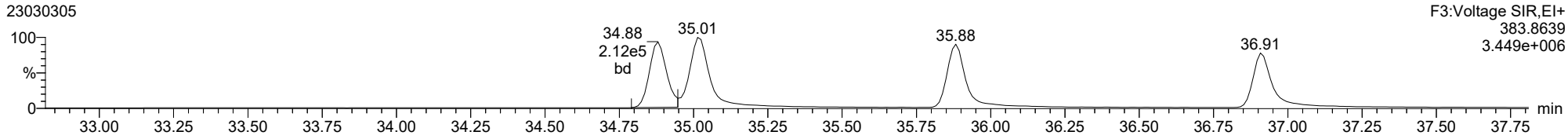

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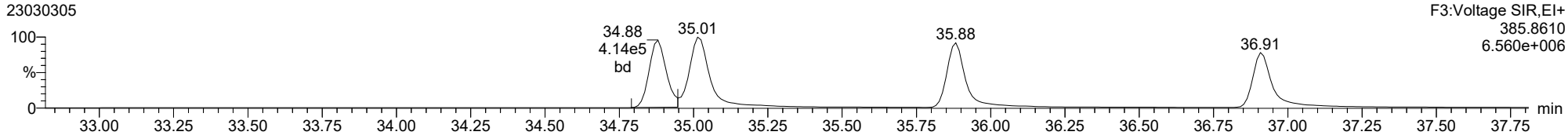

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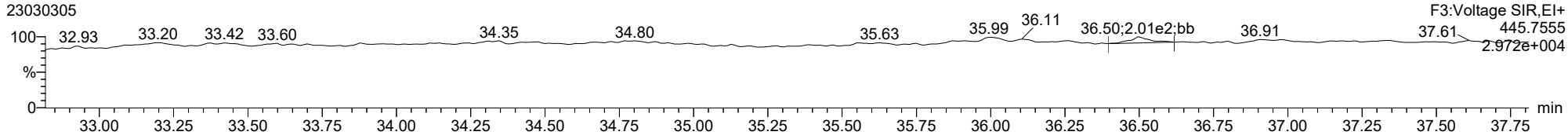

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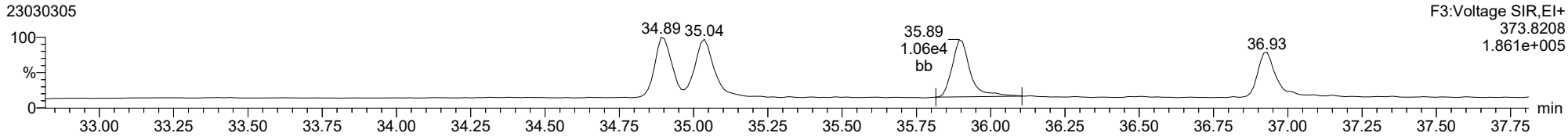

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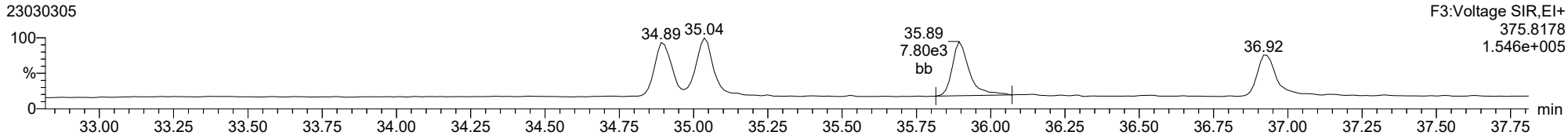

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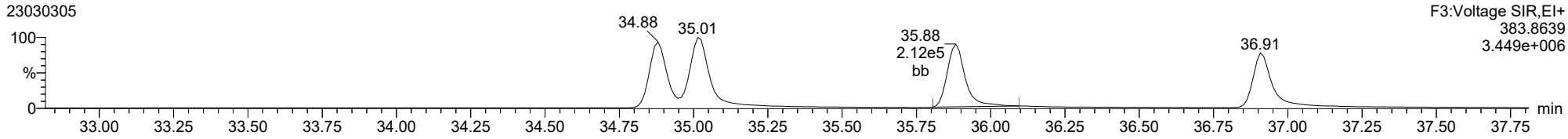

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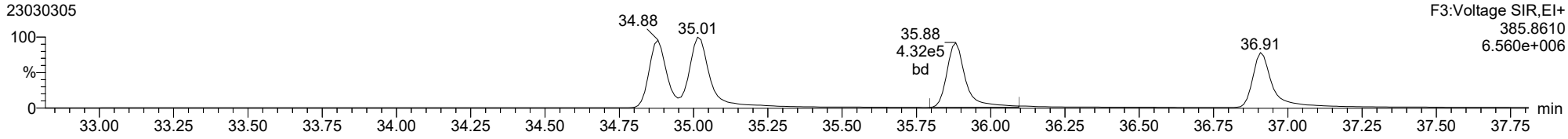

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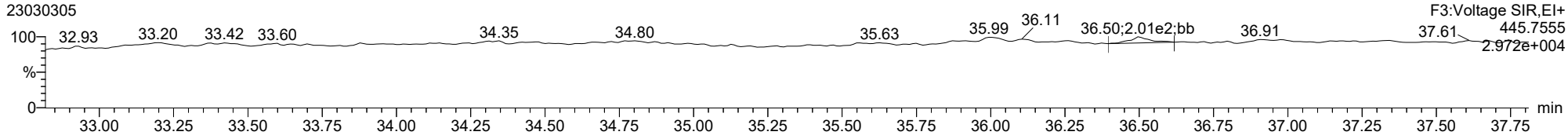

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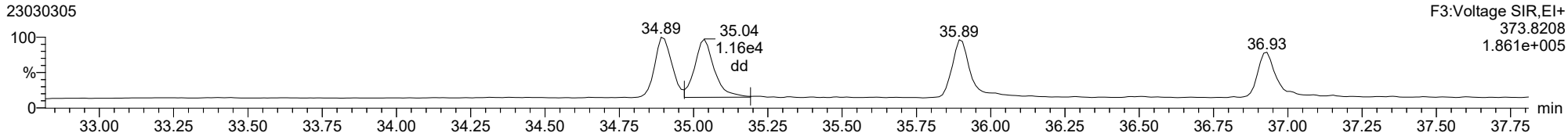

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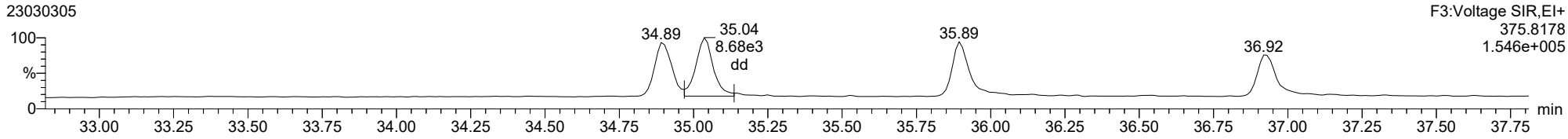

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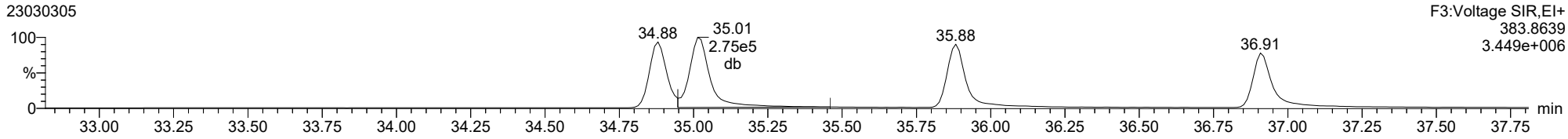

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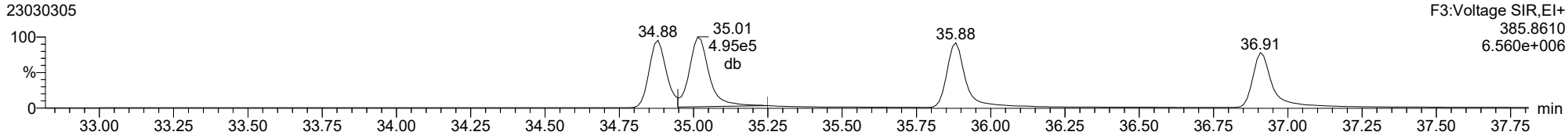

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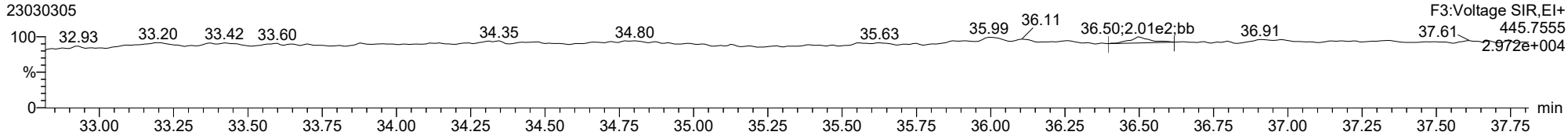

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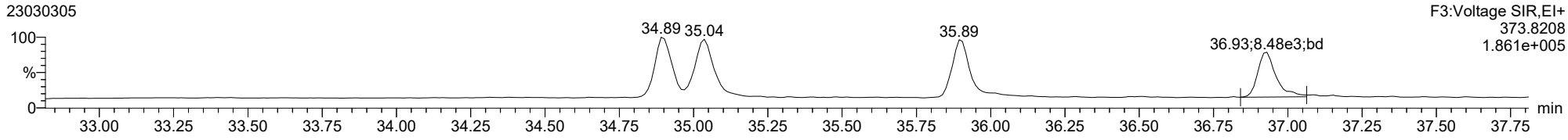

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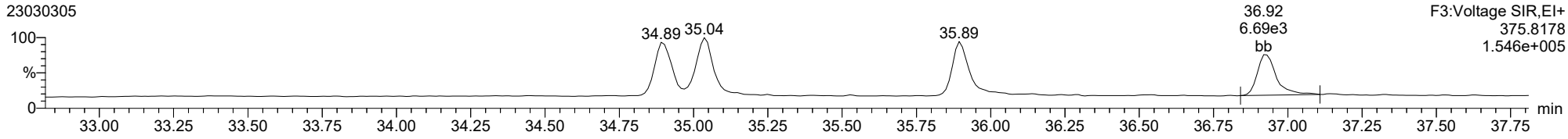

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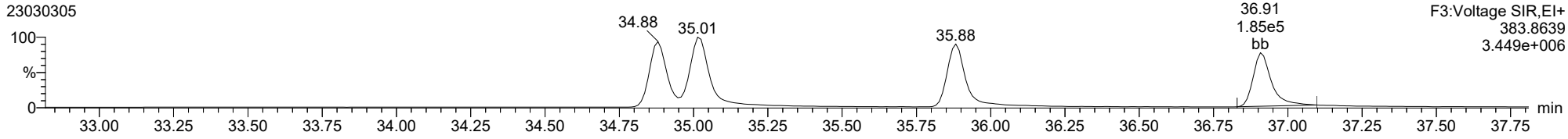

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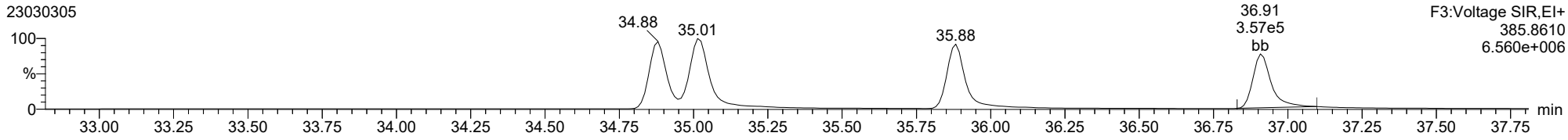
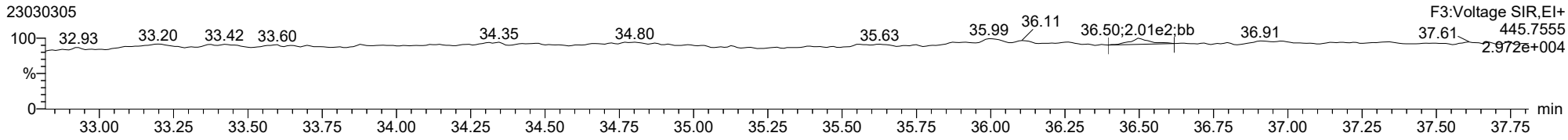


FUNCTION3 OCDPE



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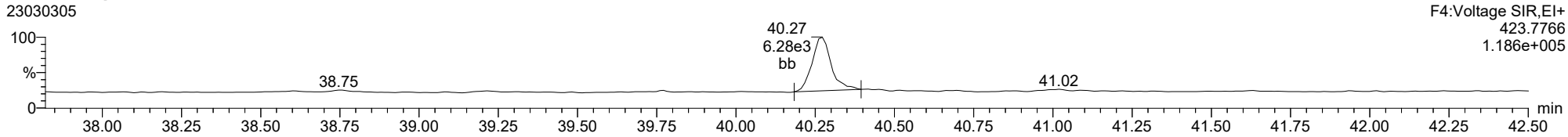

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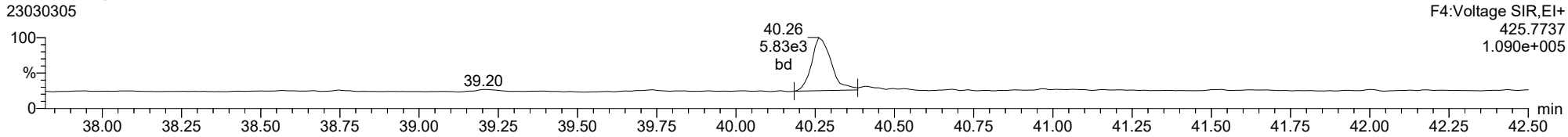

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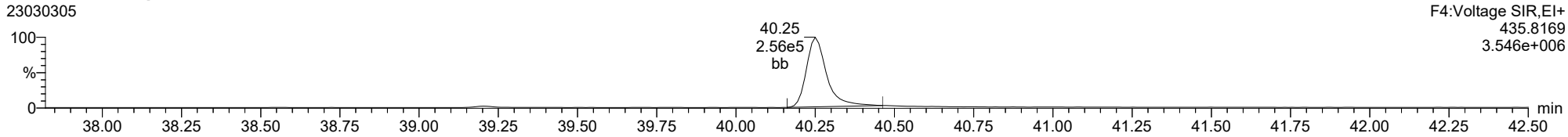

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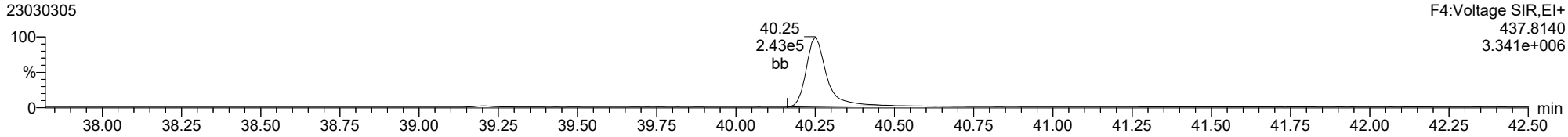
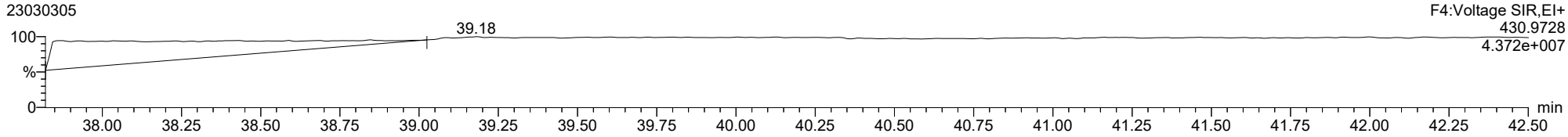


FUNCTION4 PFK



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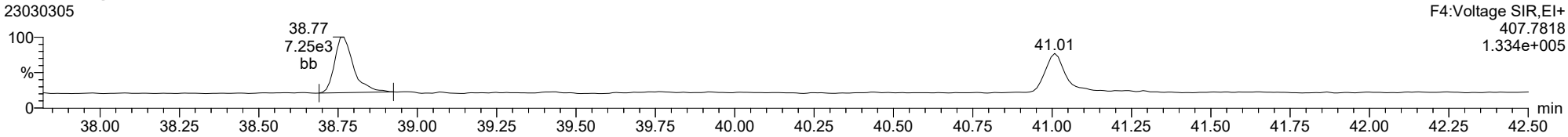

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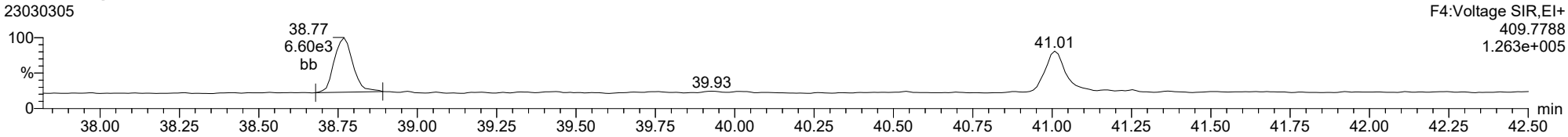

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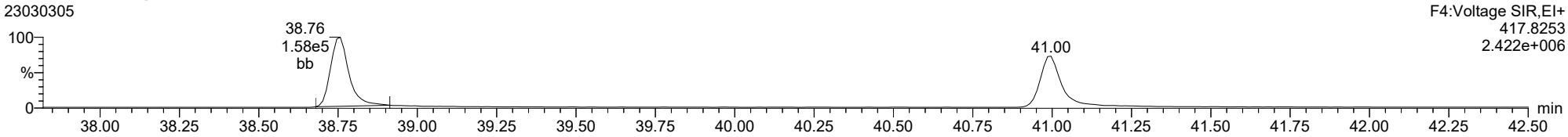

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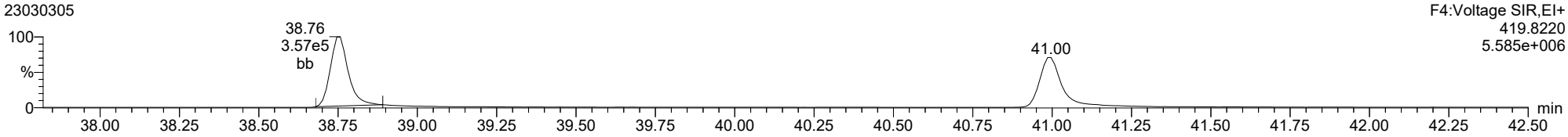

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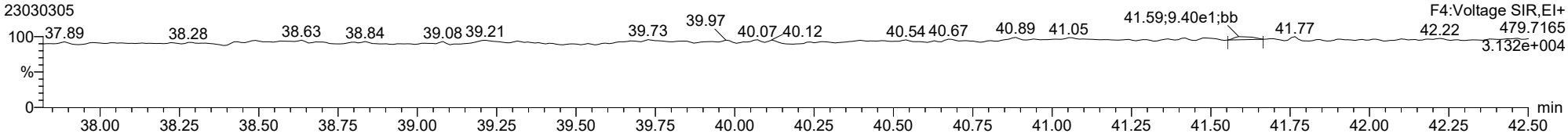

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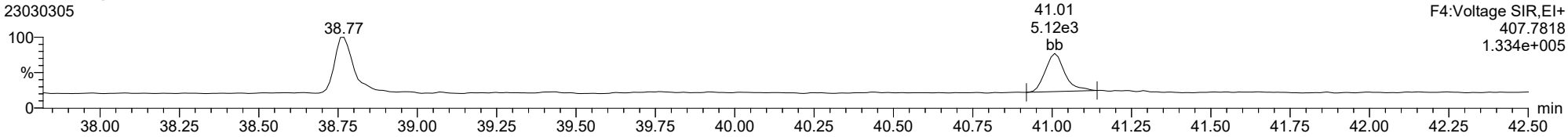
1234789-HpCDF



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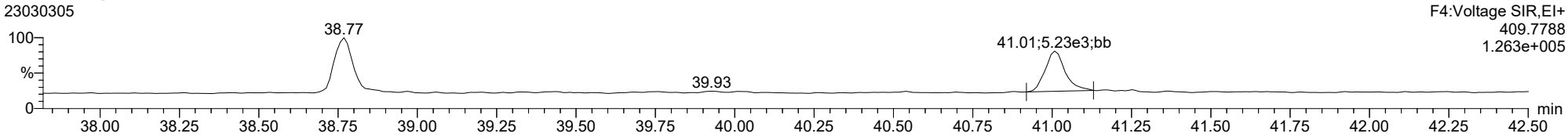

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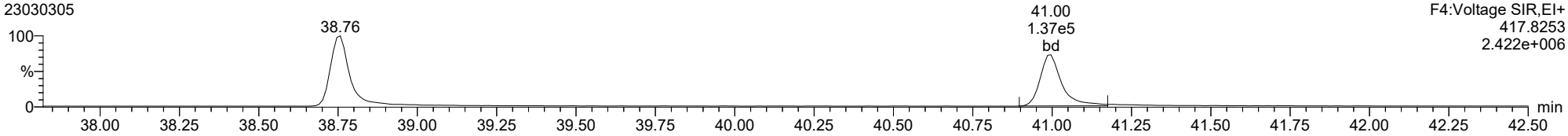

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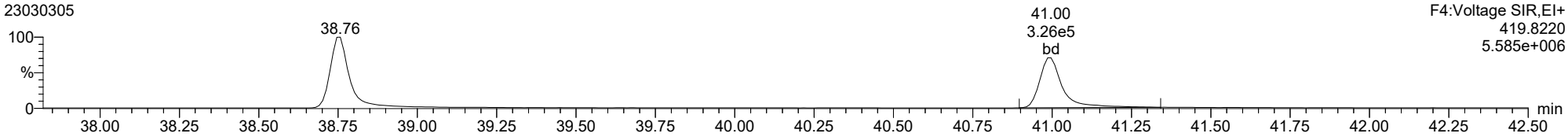
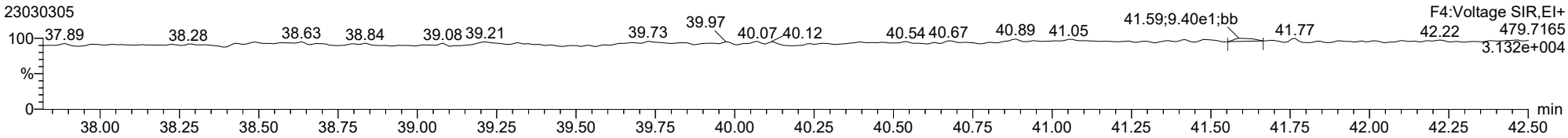


FUNCTION4 NCDPE



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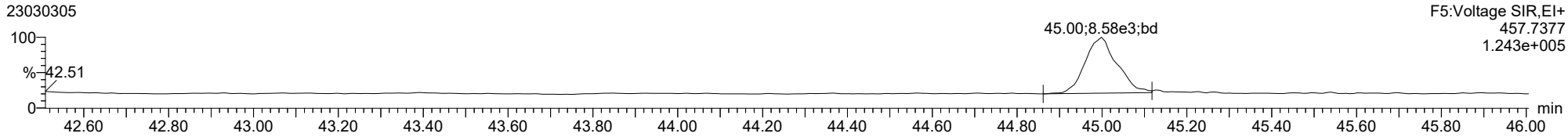

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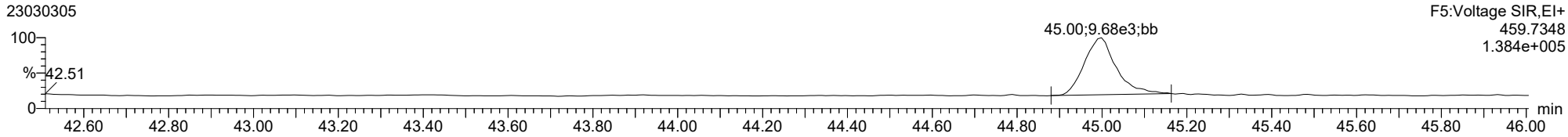

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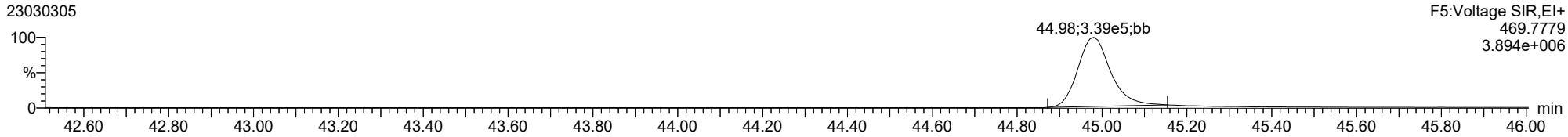

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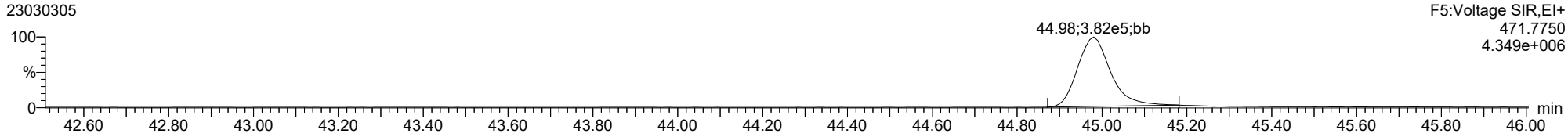
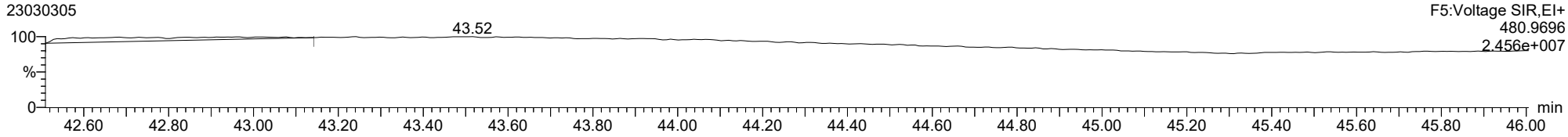


FUNCTION5 PFK



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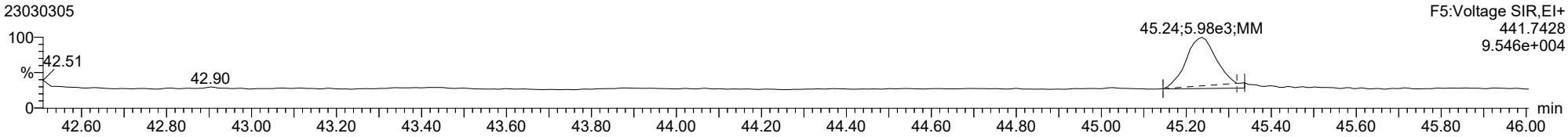

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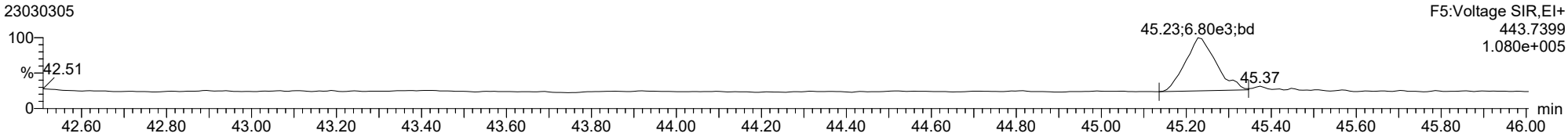
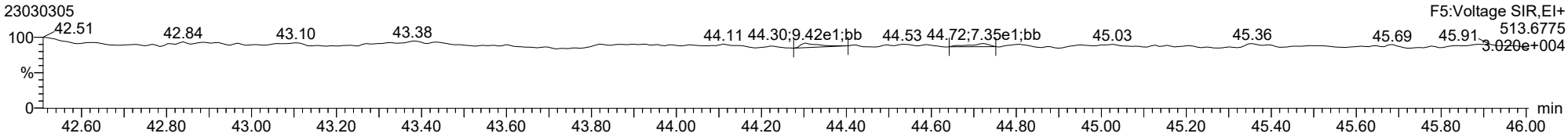


FUNCTION5 DCDPE



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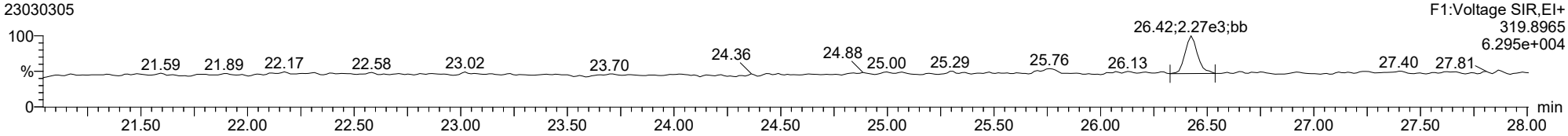
Total-tetradioxins



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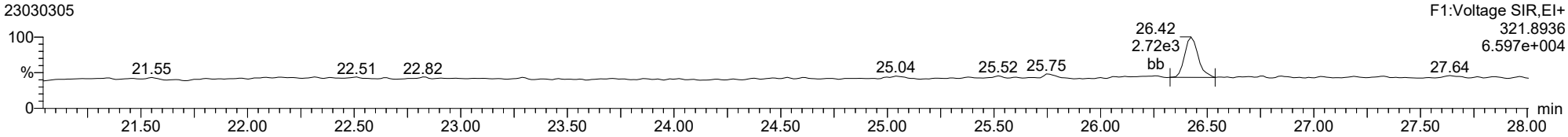

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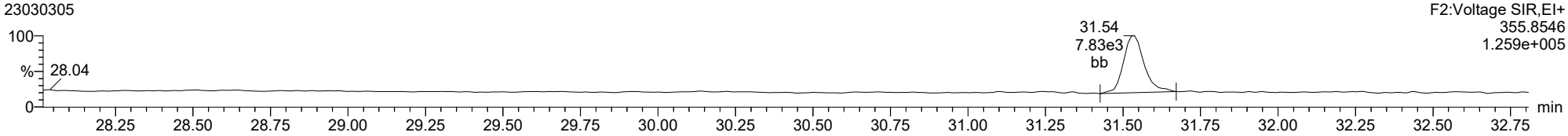

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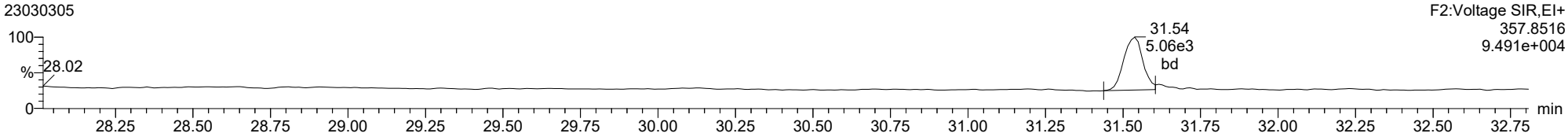

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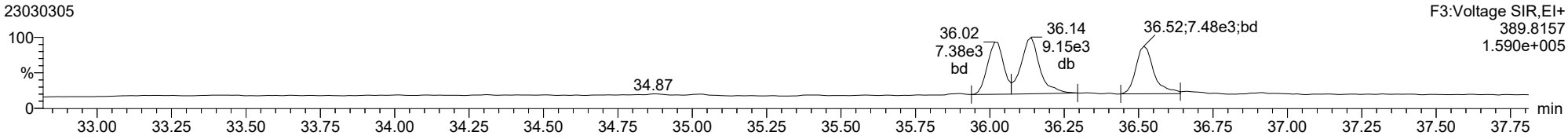
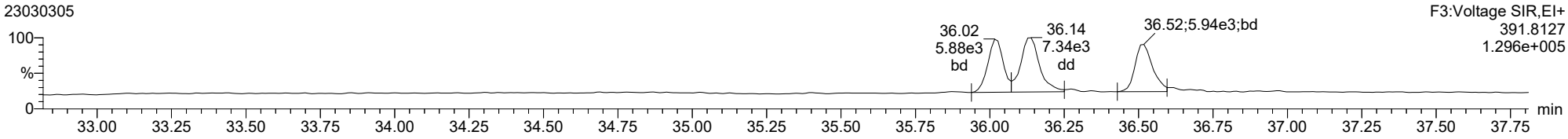


Total-hexadioxins



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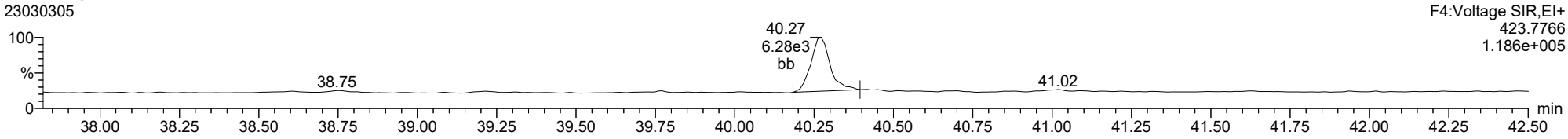

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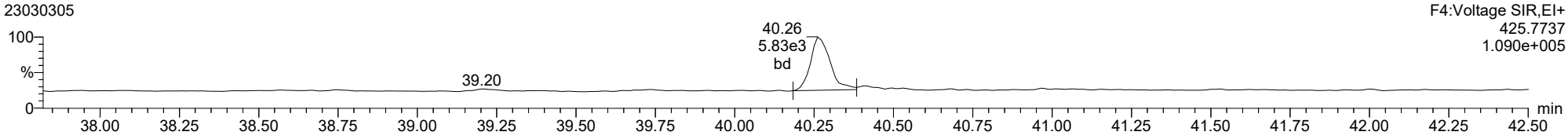

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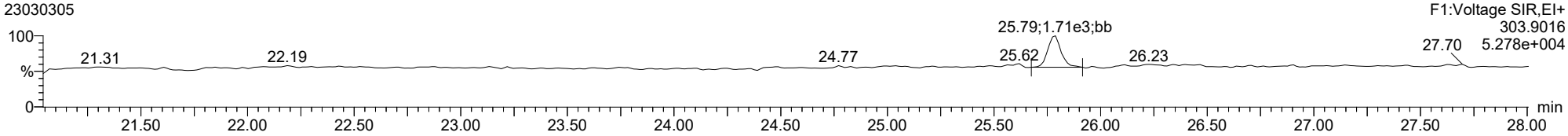
Total-tetrafurans



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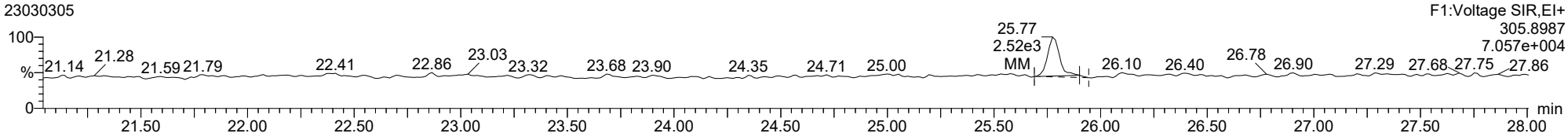

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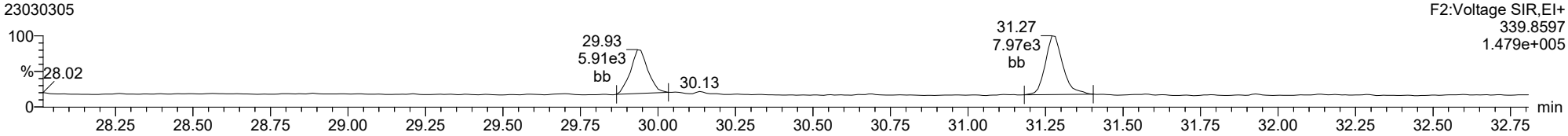

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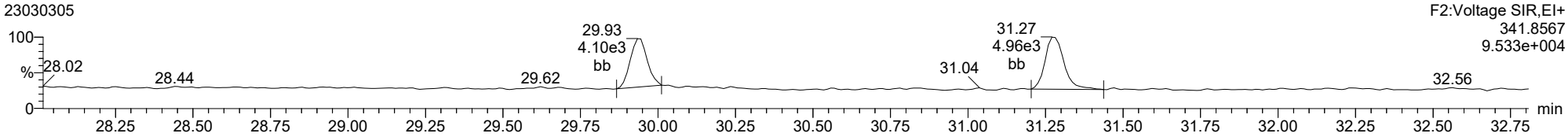

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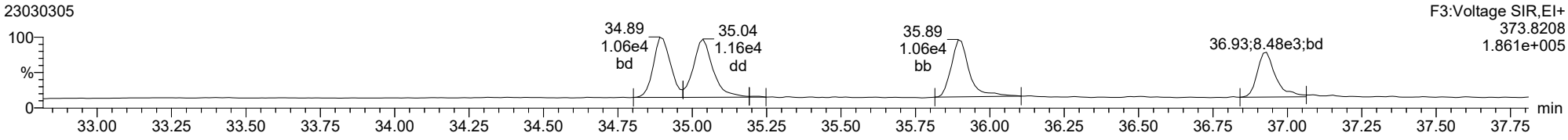

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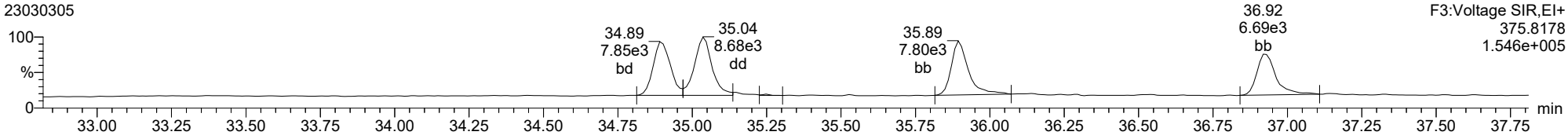

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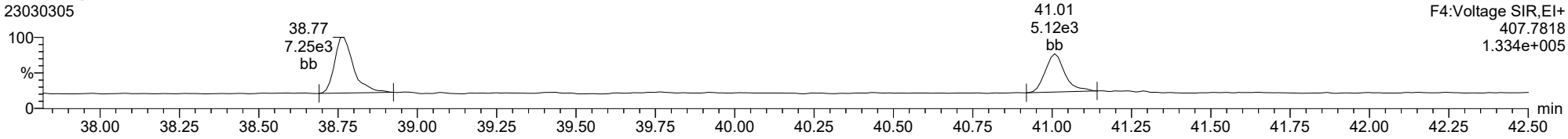

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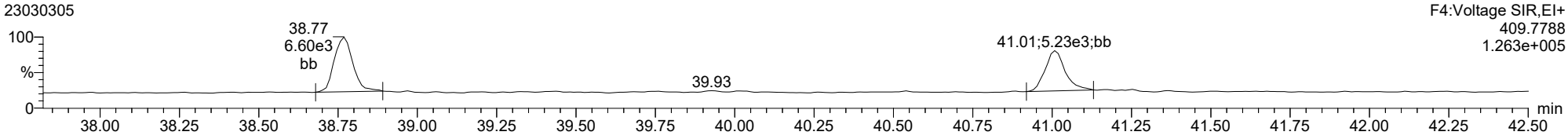

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ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.789	1.001	8.311e3	1.080e4	0.702	0.769	0.770	1017	2375	1.17e5	1.59e5	114.9	67.2	NO	bd	bb	1.942
12378-PeCDF	29.945	1.001	4.669e4	2.820e4	0.679	1.656	1.550	1114	1452	6.51e5	4.26e5	583.9	293.2	NO	bd	bb	10.465
23478-PeCDF	31.282	1.000	4.676e4	2.892e4	0.786	1.617	1.550	1114	1452	6.63e5	4.21e5	595.0	289.8	NO	bb	bb	10.293
123478-HxCDF	34.903	1.000	5.097e4	3.855e4	1.166	1.322	1.240	1081	974	7.67e5	5.88e5	709.2	604.2	NO	bd	bd	9.861
234678-HxCDF	35.906	1.000	4.287e4	3.364e4	1.140	1.274	1.240	1081	974	6.16e5	4.95e5	570.0	508.0	NO	bd	bb	10.523
123678-HxCDF	35.048	1.001	5.830e4	4.380e4	1.091	1.331	1.240	1081	974	7.78e5	6.16e5	719.4	632.0	NO	dd	db	10.775
123789-HxCDF	36.942	1.001	3.050e4	2.273e4	1.137	1.342	1.240	1081	974	4.14e5	3.24e5	383.3	332.2	NO	bb	bb	9.945
1234678-HpCDF	38.780	1.001	2.871e4	2.660e4	1.003	1.079	1.050	1234	1299	4.33e5	4.29e5	350.5	330.3	NO	bd	bb	10.087
1234789-HpCDF	41.020	1.000	2.198e4	2.032e4	0.953	1.082	1.050	1234	1299	3.09e5	2.76e5	250.5	212.3	NO	bb	bb	10.556
OCDF	45.247	1.006	3.160e4	3.327e4	0.778	0.950	0.890	832	1108	3.53e5	3.88e5	424.8	350.5	NO	bd	bb	19.690
2378-TCDD	26.438	1.001	9.033e3	1.299e4	1.149	0.696	0.770	1078	937	1.34e5	1.84e5	124.1	196.6	NO	bb	bb	2.068
12378-PeCDD	31.538	1.000	4.287e4	2.877e4	1.022	1.490	1.550	1012	882	6.26e5	3.88e5	618.4	440.6	NO	bb	bb	9.981
123478-HxCDD	36.028	1.001	3.011e4	2.566e4	0.996	1.173	1.240	1087	1355	4.81e5	4.17e5	442.1	307.5	NO	bd	bd	9.781
123678-HxCDD	36.140	1.000	3.660e4	2.810e4	1.001	1.303	1.240	1087	1355	5.13e5	3.98e5	471.9	293.4	NO	dd	db	9.830
123789-HxCDD	36.530	1.011	2.694e4	2.285e4	0.907	1.179	1.240	1087	1355	3.87e5	3.22e5	355.7	237.4	NO	bb	bb	8.921
1234678-HpCDD	40.273	1.000	2.448e4	2.664e4	1.039	0.919	1.050	853	881	3.43e5	3.58e5	402.1	405.9	NO	bb	bd	10.011
OCDD	45.009	1.000	3.531e4	4.015e4	0.920	0.879	0.890	1050	1012	4.08e5	4.99e5	388.3	492.6	NO	bb	bb	19.363
13C-2378-TCDF	25.774	1.007	6.035e5	7.993e5	1.620	0.755	0.770	2457	1835	8.64e6	1.14e7	3516.1	6186.3	NO	bb	bb	103.115
13C-12378-PeCDF	29.923	1.169	6.526e5	4.010e5	1.240	1.628	1.550	3002	2090	8.73e6	5.82e6	2907.1	2783.7	NO	bb	bb	101.148
13C-23478-PeCDF	31.271	1.221	5.554e5	3.799e5	1.118	1.462	1.550	3002	2090	8.01e6	5.41e6	2667.8	2586.4	NO	bb	bb	99.644
13C-123478-HxCDF	34.892	0.956	2.641e5	5.144e5	1.168	0.513	0.510	1857	2488	3.90e6	7.62e6	2100.8	3063.0	NO	bd	bd	129.584
13C-123678-HxCDF	35.026	0.959	2.932e5	5.755e5	1.386	0.510	0.510	1857	2488	4.18e6	8.13e6	2249.4	3269.5	NO	db	db	121.832
13C-234678-HxCDF	35.895	0.983	2.180e5	4.199e5	1.129	0.519	0.510	1857	2488	3.14e6	6.08e6	1689.2	2442.9	NO	bb	bb	109.838
13C-123789-HxCDF	36.920	1.011	1.570e5	3.137e5	0.932	0.501	0.510	1857	2488	2.29e6	4.45e6	1232.1	1790.1	NO	bb	bb	98.225
13C-1234678-HpCDF	38.758	1.062	1.644e5	3.823e5	0.895	0.430	0.440	2012	3375	2.57e6	5.95e6	1277.0	1763.6	NO	bb	bb	118.766
13C-1234789-HpCDF	40.998	1.123	1.271e5	2.934e5	0.770	0.433	0.440	2012	3375	1.71e6	4.02e6	850.7	1191.4	NO	bb	bb	106.228
13C-1234-TCDD	25.605	0.000	3.763e5	4.634e5	1.000	0.812	0.770	2552	2183	5.75e6	7.05e6	2254.8	3231.1	NO	bb	bb	100.000
13C-2378-TCDD	26.410	1.031	4.085e5	5.183e5	1.152	0.788	0.770	2552	2183	5.98e6	7.56e6	2342.4	3461.2	NO	bb	bb	95.779
13C-12378-PeCDD	31.527	1.231	4.337e5	2.688e5	0.829	1.614	1.550	1077	1542	6.15e6	3.74e6	5715.6	2425.2	NO	bb	bb	100.933
13C-123478-HxCDD	36.006	0.986	3.223e5	2.505e5	0.995	1.287	1.240	2237	1883	4.87e6	3.76e6	2175.2	1999.6	NO	bd	bd	111.924
13C-123678-HxCDD	36.129	0.990	3.608e5	2.967e5	1.157	1.216	1.240	2237	1883	5.10e6	4.02e6	2277.5	2137.4	NO	db	db	110.547
13C-1234678-HpCDD	40.262	1.103	2.573e5	2.341e5	0.840	1.099	1.050	2349	1481	3.41e6	3.22e6	1450.8	2172.3	NO	bd	bb	113.737
13C-OCDD	44.991	1.232	4.017e5	4.455e5	0.767	0.902	0.890	2278	1800	4.53e6	5.05e6	1990.6	2807.7	NO	bb	bb	214.651
13C-123789-HxCDD	36.507	0.000	2.902e5	2.240e5	1.000	1.296	1.240	2237	1883	4.20e6	3.27e6	1878.6	1737.5	NO	bb	bb	100.000
37CL-2378-TCDD	26.424	1.032	1.977e4		1.288			2484		2.93e5		117.9			bb		1.828

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ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					0.802		0.770	1017	2375								
1289-TCDF					0.678		0.770	1017	2375								
13468-PECDF					1.246		1.550	633	1159								
12389-PECDF					0.496		1.550	1114	1452								
123468-HXCDF					1.169		1.240	1081	974								
1368-TCDD					1.015		0.770	1078	937								
1289-TCDD					0.909		0.770	1078	937								
12479-PECDD					2.301		1.550	1012	882								
12389-PECDD					1.184		1.550	1012	882								
124679-HXCDD					1.115		1.240	1087	1355								
1234679-HPCDD					1.137		1.050	853	881								
Total-tetrafurans			8.311e3		0.727			1017		1.17e5							1.942
Total-penta1			0.000e0					633		0.00e0							
Total-pentafurans			9.345e4		0.654			1114		1.31e6							20.758
Total-hexafurans			1.826e5		1.141			1081		2.58e6							41.105
Total-heptafurans			5.070e4		0.978			1234		7.42e5							20.643
Total-Furans			3.667e5		0.922			1017		5.10e6							104.140
Total-tetradioxins			9.033e3		1.024			1078		1.34e5							2.068
Total-pentadioxins			4.287e4		1.502			1012		6.26e5							9.981
Total-hexadioxins			9.364e4		1.005			1087		1.38e6							28.532
Total-heptadioxins			2.448e4		1.088			853		3.43e5							10.011
Total-Dioxins			2.053e5		1.130			1078		2.89e6							69.955
Total-TEQ			5.720e5					1078		7.99e6							174.095
FUNCTION1 PFK			1.995e6					567717		7.69e6							
FUNCTION2 PFK			1.258e5					282093		4.74e6							0.000
FUNCTION3 PFK			4.711e7					382868		3.34e7							0.000
FUNCTION4 PFK			2.092e7					278389		1.32e7							
FUNCTION5 PFK			6.777e4					239180		2.68e6							
FUNCTION1 HXCD...			0.000e0					613		0.00e0							
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			1.408e2					965		2.85e3							0.000
FUNCTION3 OCDPE			0.000e0					571		0.00e0							
FUNCTION4 NCDPE			3.810e2					638		4.39e3							0.000
FUNCTION5 DCDPE			0.000e0					603		0.00e0							

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TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.79	8.311e3	1.080e4	0.702	0.77	0.77	114.9	YES	NO	bd	bb	1.942

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.28	4.676e4	2.892e4	0.786	1.62	1.55	595.0	YES	NO	bb	bb	10.293
2	12378-PeCDF	29.94	4.669e4	2.820e4	0.679	1.66	1.55	583.9	YES	NO	bd	bb	10.465

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.94	3.050e4	2.273e4	1.137	1.34	1.24	383.3	YES	NO	bb	bb	9.945
2	234678-HxCDF	35.91	4.287e4	3.364e4	1.140	1.27	1.24	570.0	YES	NO	bd	bb	10.523
3	123678-HxCDF	35.05	5.830e4	4.380e4	1.091	1.33	1.24	719.4	YES	NO	dd	db	10.775
4	123478-HxCDF	34.90	5.097e4	3.855e4	1.166	1.32	1.24	709.2	YES	NO	bd	bd	9.861

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	41.02	2.198e4	2.032e4	0.953	1.08	1.05	250.5	YES	NO	bb	bb	10.556
2	1234678-HpCDF	38.78	2.871e4	2.660e4	1.003	1.08	1.05	350.5	YES	NO	bd	bb	10.087

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.28	4.676e4	2.892e4	0.786	1.62	1.55	595.0	YES	NO	bb	bb	10.293
2	12378-PeCDF	29.94	4.669e4	2.820e4	0.679	1.66	1.55	583.9	YES	NO	bd	bb	10.465
3	2378-TCDF	25.79	8.311e3	1.080e4	0.702	0.77	0.77	114.9	YES	NO	bd	bb	1.942
4	123789-HxCDF	36.94	3.050e4	2.273e4	1.137	1.34	1.24	383.3	YES	NO	bb	bb	9.945
5	234678-HxCDF	35.91	4.287e4	3.364e4	1.140	1.27	1.24	570.0	YES	NO	bd	bb	10.523
6	123678-HxCDF	35.05	5.830e4	4.380e4	1.091	1.33	1.24	719.4	YES	NO	dd	db	10.775
7	123478-HxCDF	34.90	5.097e4	3.855e4	1.166	1.32	1.24	709.2	YES	NO	bd	bd	9.861
8	1234789-HpCDF	41.02	2.198e4	2.032e4	0.953	1.08	1.05	250.5	YES	NO	bb	bb	10.556
9	1234678-HpCDF	38.78	2.871e4	2.660e4	1.003	1.08	1.05	350.5	YES	NO	bd	bb	10.087
10	OCDF	45.25	3.160e4	3.327e4	0.778	0.95	0.89	424.8	YES	NO	bd	bb	19.690

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.44	9.033e3	1.299e4	1.149	0.70	0.77	124.1	YES	NO	bb	bb	2.068

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.54	4.287e4	2.877e4	1.022	1.49	1.55	618.4	YES	NO	bb	bb	9.981

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.53	2.694e4	2.285e4	0.907	1.18	1.24	355.7	YES	NO	bb	bb	8.921
2	123678-HxCDD	36.14	3.660e4	2.810e4	1.001	1.30	1.24	471.9	YES	NO	dd	db	9.830
3	123478-HxCDD	36.03	3.011e4	2.566e4	0.996	1.17	1.24	442.1	YES	NO	bd	bd	9.781

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.27	2.448e4	2.664e4	1.039	0.92	1.05	402.1	YES	NO	bb	bd	10.011

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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.54	4.287e4	2.877e4	1.022	1.49	1.55	618.4	YES	NO	bb	bb	9.981
2	2378-TCDD	26.44	9.033e3	1.299e4	1.149	0.70	0.77	124.1	YES	NO	bb	bb	2.068
3	123789-HxCDD	36.53	2.694e4	2.285e4	0.907	1.18	1.24	355.7	YES	NO	bb	bb	8.921
4	123678-HxCDD	36.14	3.660e4	2.810e4	1.001	1.30	1.24	471.9	YES	NO	dd	db	9.830
5	123478-HxCDD	36.03	3.011e4	2.566e4	0.996	1.17	1.24	442.1	YES	NO	bd	bd	9.781
6	1234678-HpCDD	40.27	2.448e4	2.664e4	1.039	0.92	1.05	402.1	YES	NO	bb	bd	10.011
7	OCDD	45.01	3.531e4	4.015e4	0.920	0.88	0.89	388.3	YES	NO	bb	bb	19.363

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.28	4.676e4	2.892e4	0.786	1.62	1.55	595.0	YES	NO	bb	bb	10.293
2	12378-PeCDF	29.94	4.669e4	2.820e4	0.679	1.66	1.55	583.9	YES	NO	bd	bb	10.465
3	2378-TCDF	25.79	8.311e3	1.080e4	0.702	0.77	0.77	114.9	YES	NO	bd	bb	1.942
4	123789-HxCDF	36.94	3.050e4	2.273e4	1.137	1.34	1.24	383.3	YES	NO	bb	bb	9.945
5	234678-HxCDF	35.91	4.287e4	3.364e4	1.140	1.27	1.24	570.0	YES	NO	bd	bb	10.523
6	123678-HxCDF	35.05	5.830e4	4.380e4	1.091	1.33	1.24	719.4	YES	NO	dd	db	10.775
7	123478-HxCDF	34.90	5.097e4	3.855e4	1.166	1.32	1.24	709.2	YES	NO	bd	bd	9.861
8	1234789-HpCDF	41.02	2.198e4	2.032e4	0.953	1.08	1.05	250.5	YES	NO	bb	bb	10.556
9	1234678-HpCDF	38.78	2.871e4	2.660e4	1.003	1.08	1.05	350.5	YES	NO	bd	bb	10.087
10	OCDF	45.25	3.160e4	3.327e4	0.778	0.95	0.89	424.8	YES	NO	bd	bb	19.690
11	12378-PeCDD	31.54	4.287e4	2.877e4	1.022	1.49	1.55	618.4	YES	NO	bb	bb	9.981
12	2378-TCDD	26.44	9.033e3	1.299e4	1.149	0.70	0.77	124.1	YES	NO	bb	bb	2.068
13	123789-HxCDD	36.53	2.694e4	2.285e4	0.907	1.18	1.24	355.7	YES	NO	bb	bb	8.921
14	123678-HxCDD	36.14	3.660e4	2.810e4	1.001	1.30	1.24	471.9	YES	NO	dd	db	9.830
15	123478-HxCDD	36.03	3.011e4	2.566e4	0.996	1.17	1.24	442.1	YES	NO	bd	bd	9.781
16	1234678-HpCDD	40.27	2.448e4	2.664e4	1.039	0.92	1.05	402.1	YES	NO	bb	bd	10.011
17	OCDD	45.01	3.531e4	4.015e4	0.920	0.88	0.89	388.3	YES	NO	bb	bb	19.363

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	25.73	8.333e5					6.7	YES		bb		
2	FUNCTION1 PFK	21.10	1.162e6					6.9	YES		bb		

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PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	28.61	1.110e4					1.3	NO		bb		0.000
2	FUNCTION2 PFK	28.31	1.183e4					1.5	NO		bb		0.000
3	FUNCTION2 PFK	31.85	7.066e3					1.3	NO		bb		0.000
4	FUNCTION2 PFK	31.75	1.168e4					1.4	NO		bb		0.000
5	FUNCTION2 PFK	30.95	1.613e4					2.1	NO		bb		0.000
6	FUNCTION2 PFK	30.06	7.806e3					1.3	NO		bb		0.000
7	FUNCTION2 PFK	29.77	1.198e4					1.4	NO		bb		0.000
8	FUNCTION2 PFK	29.47	1.476e4					2.1	NO		bb		0.000
9	FUNCTION2 PFK	29.28	1.360e4					2.0	NO		db		0.000
10	FUNCTION2 PFK	29.22	1.980e4					2.4	NO		bd		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	34.30	3.856e7					44.6	YES		db		0.000
2	FUNCTION3 PFK	33.18	8.558e6					42.7	YES		bd		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	40.24	1.285e7					8.2	YES		db		
2	FUNCTION4 PFK	38.41	8.070e6					39.3	YES		bd		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	42.68	1.647e4					1.8	NO		bb		
2	FUNCTION5 PFK	45.75	3.282e3					1.0	NO		bb		
3	FUNCTION5 PFK	45.28	6.957e3					1.1	NO		bb		
4	FUNCTION5 PFK	44.90	6.364e3					1.0	NO		bb		
5	FUNCTION5 PFK	44.84	1.531e3					0.5	NO		bb		
6	FUNCTION5 PFK	44.40	6.282e3					1.0	NO		bb		
7	FUNCTION5 PFK	44.21	4.626e3					1.1	NO		bb		
8	FUNCTION5 PFK	44.03	7.842e3					1.2	NO		bb		
9	FUNCTION5 PFK	43.96	6.415e3					1.4	NO		bb		
10	FUNCTION5 PFK	43.84	7.992e3					1.2	NO		bb		

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ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.54	1.408e2					3.0	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	40.65	1.069e2					1.9	NO		bb		0.000
2	FUNCTION4 NCDPE	40.25	1.358e2					2.2	NO		bb		0.000
3	FUNCTION4 NCDPE	41.02	1.383e2					2.8	NO		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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Printed: Monday, March 06, 2023 11:34:24 Pacific Standard Time

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Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

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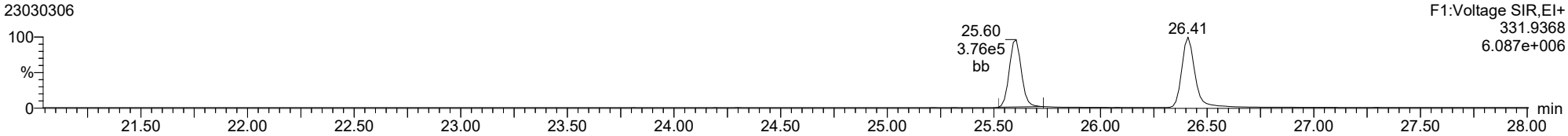

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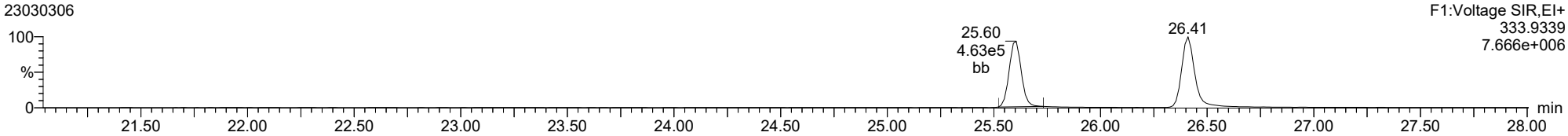

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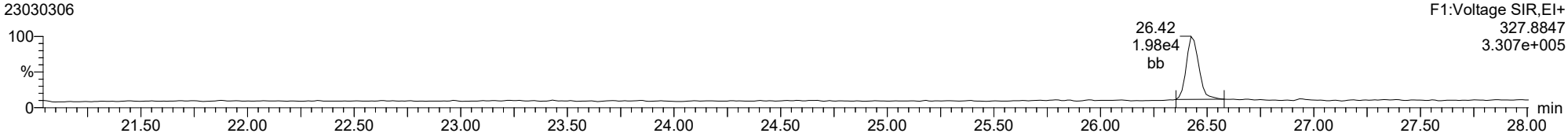

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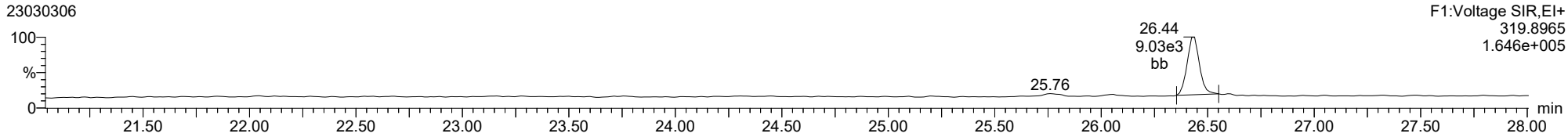

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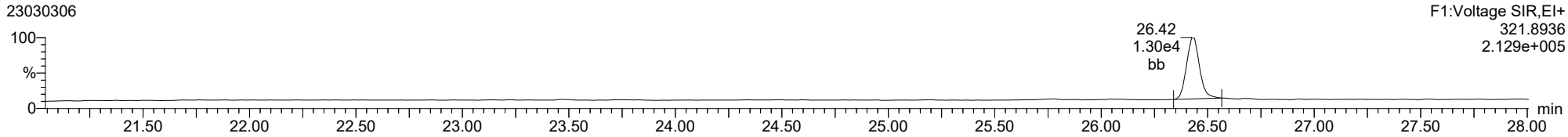

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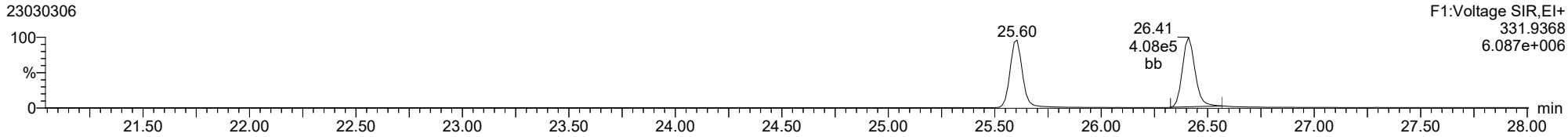

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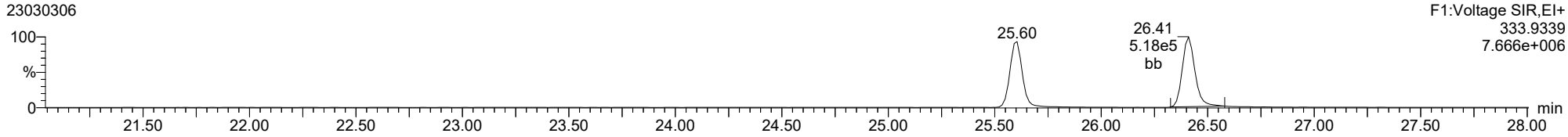

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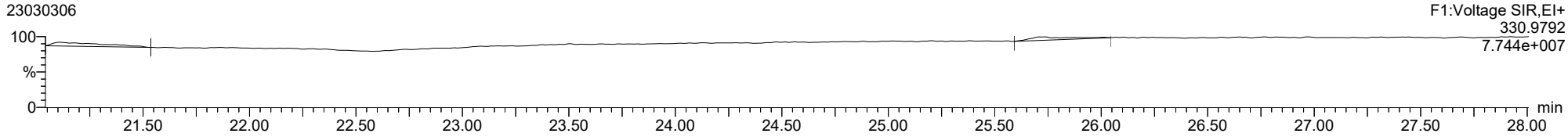

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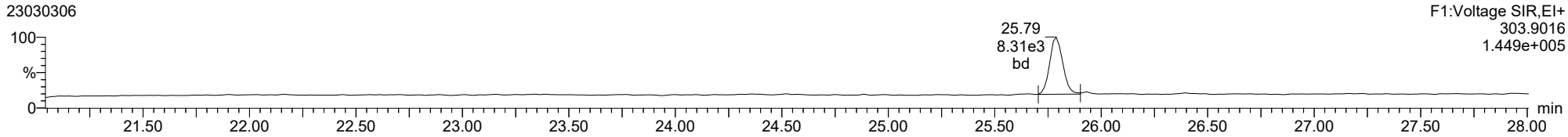

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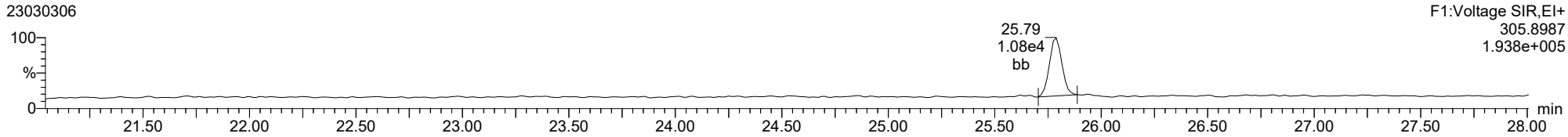

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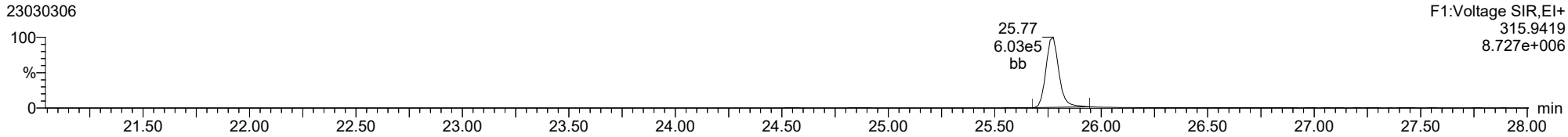

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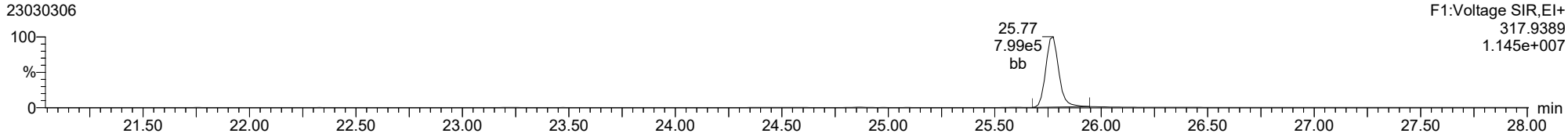

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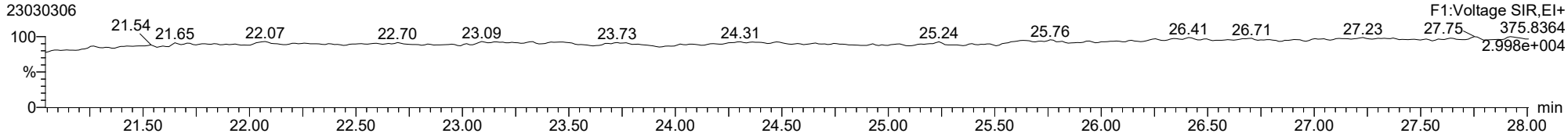

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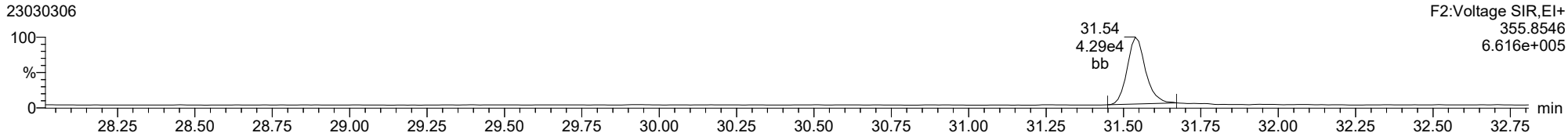

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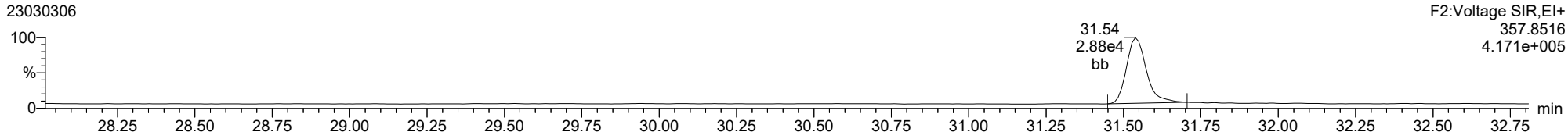

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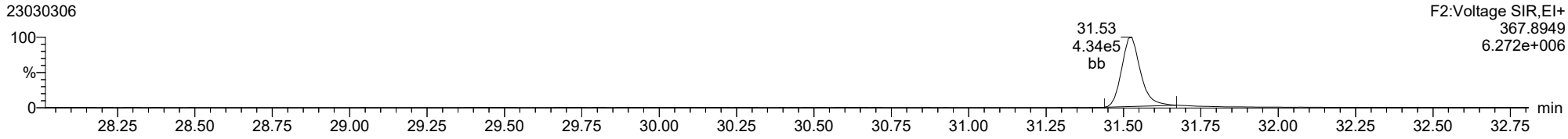

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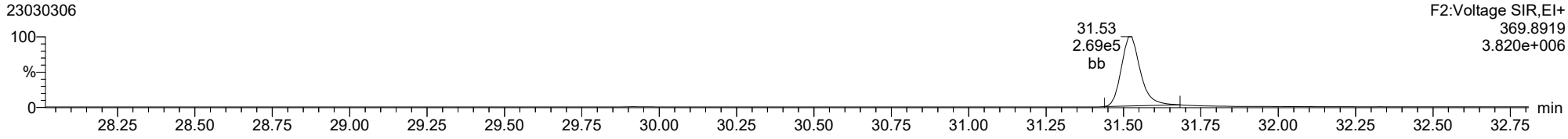

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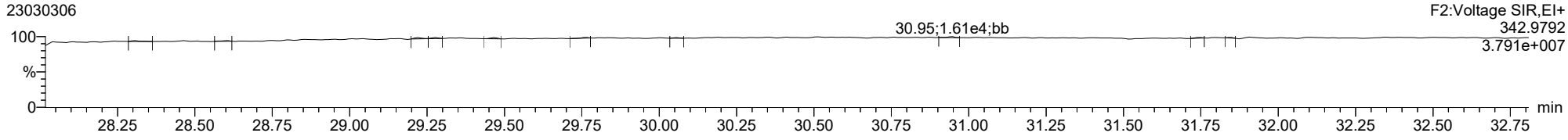

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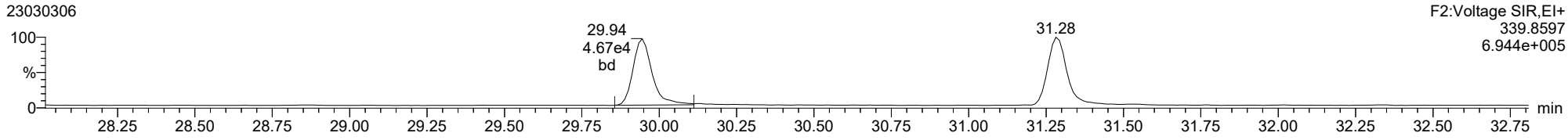

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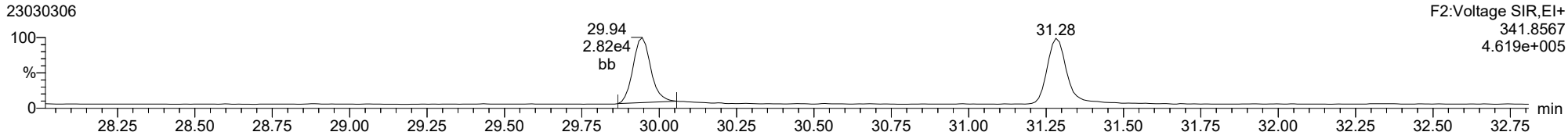

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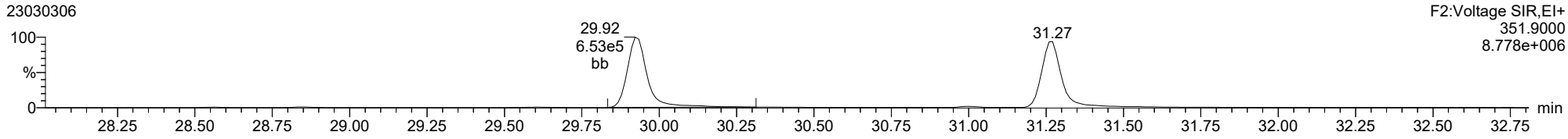

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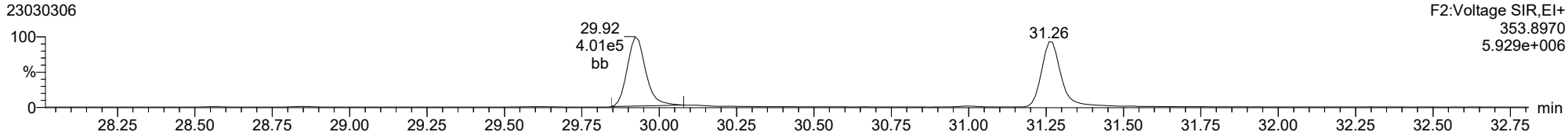

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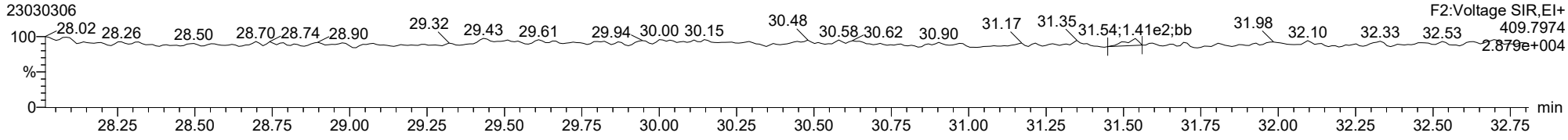

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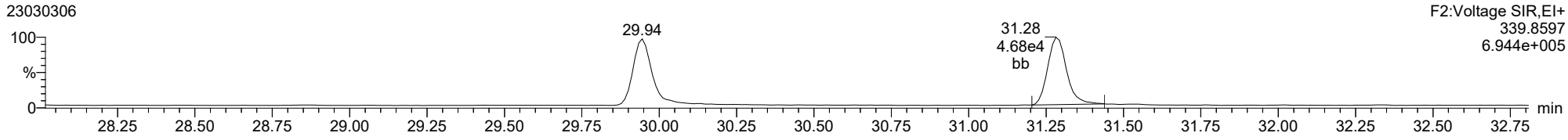

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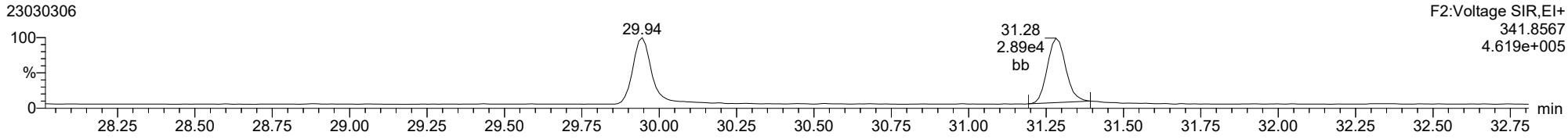

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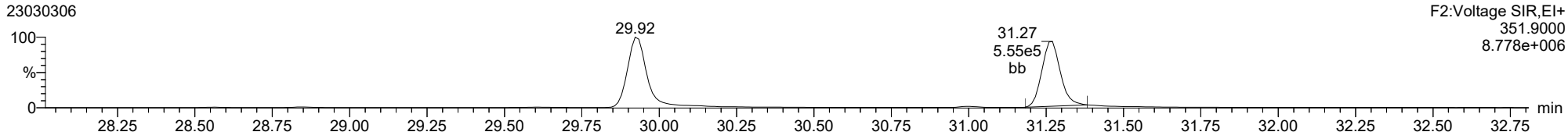

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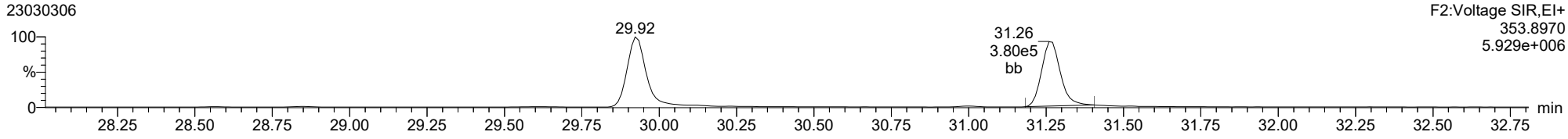

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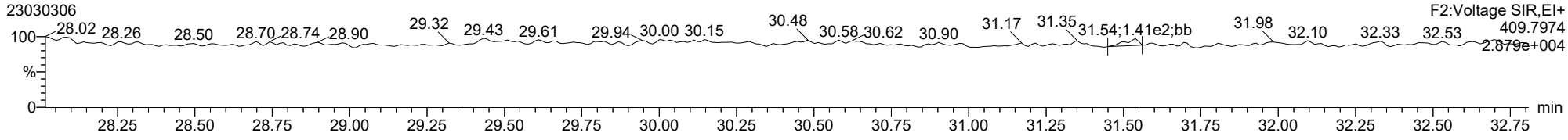

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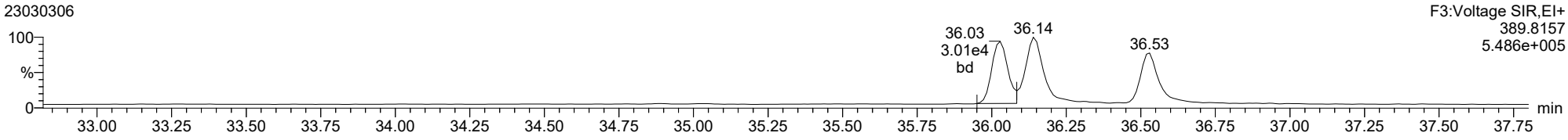

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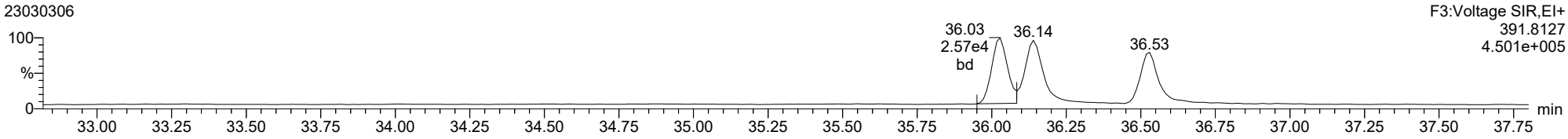

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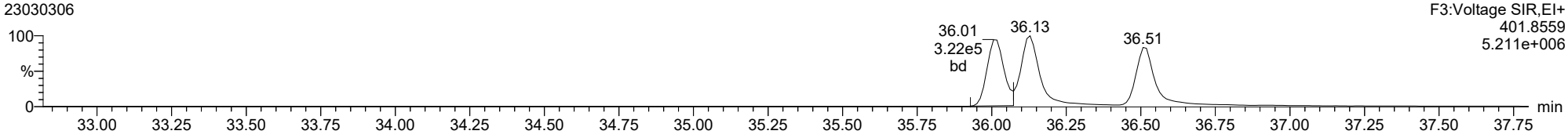

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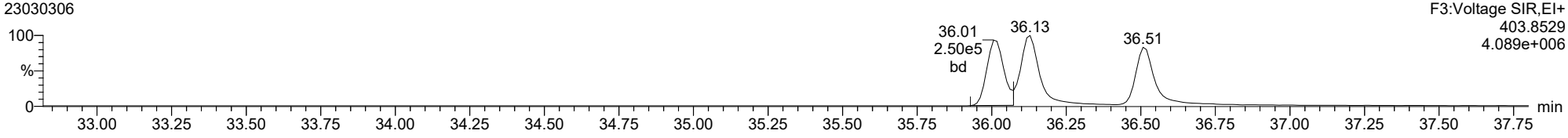

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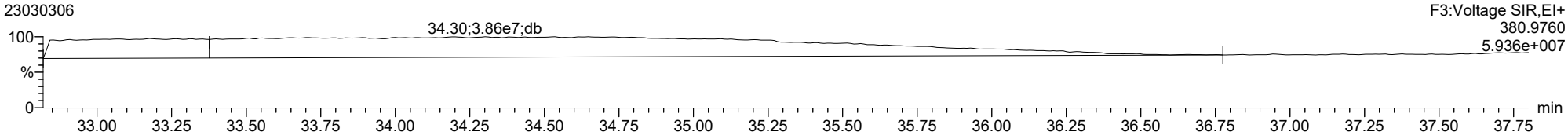

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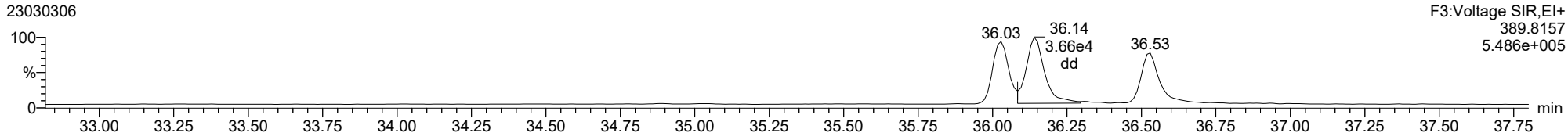

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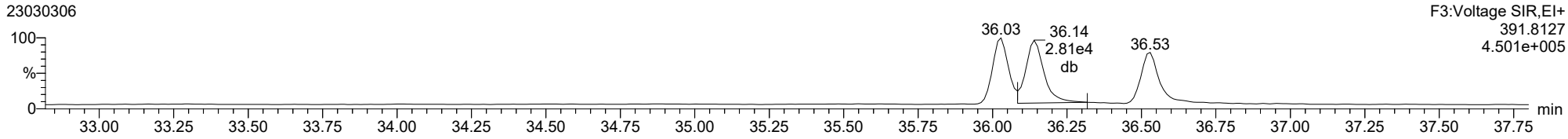

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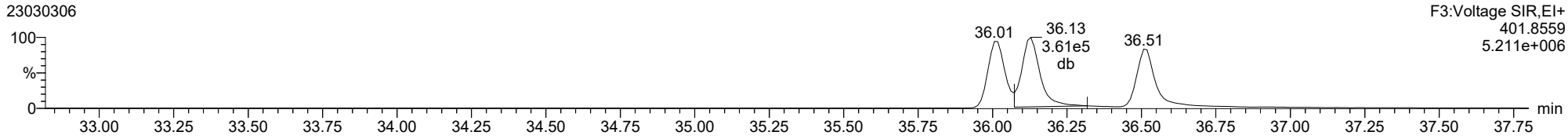

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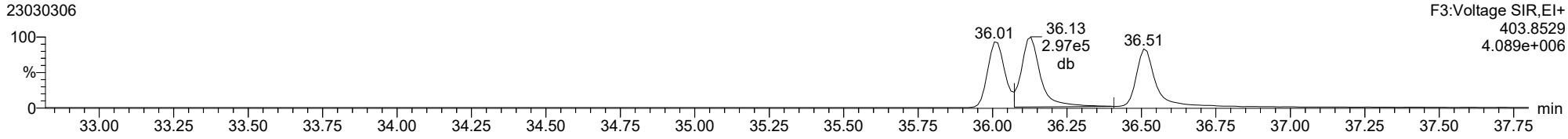

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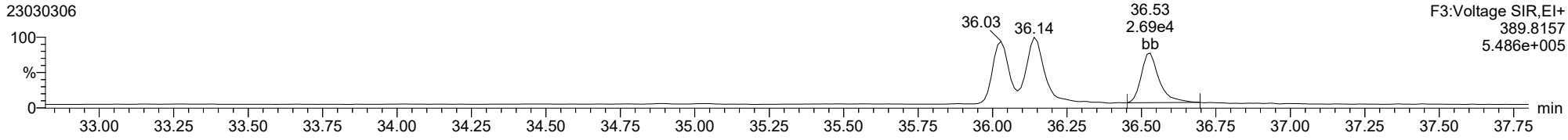

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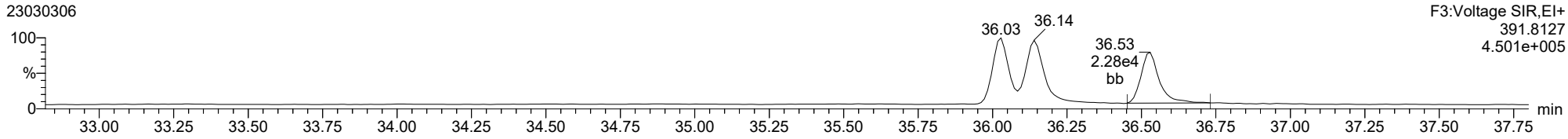

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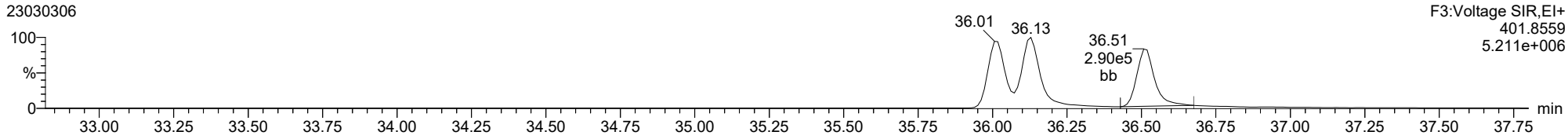

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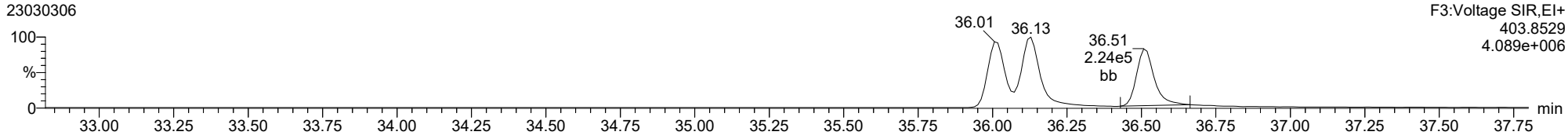

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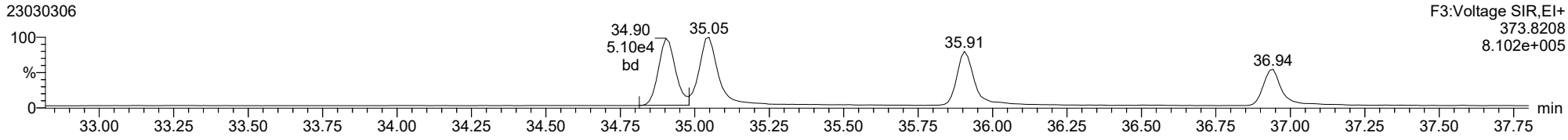

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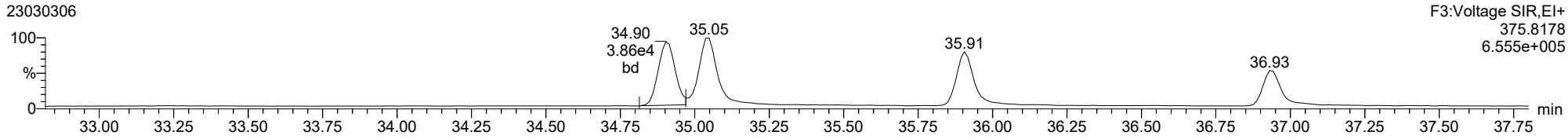

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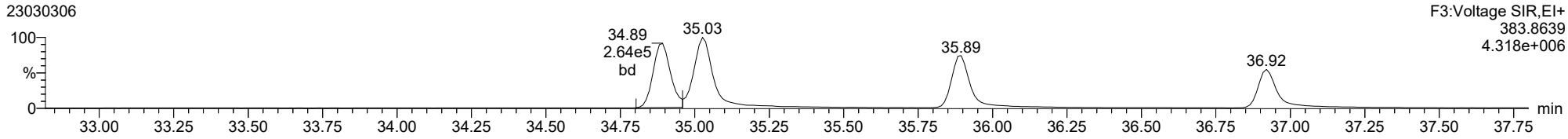

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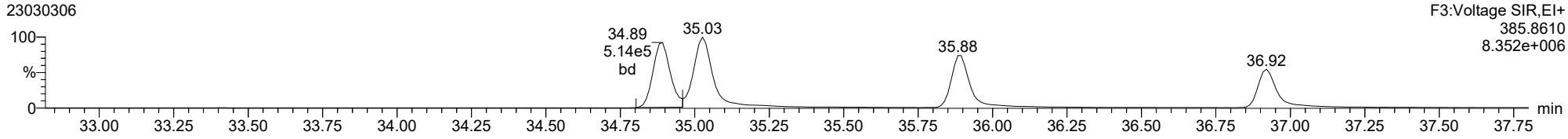

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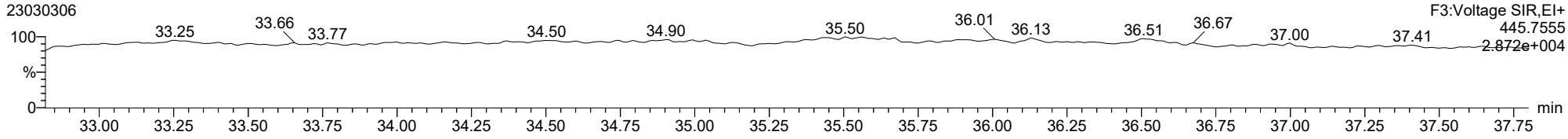

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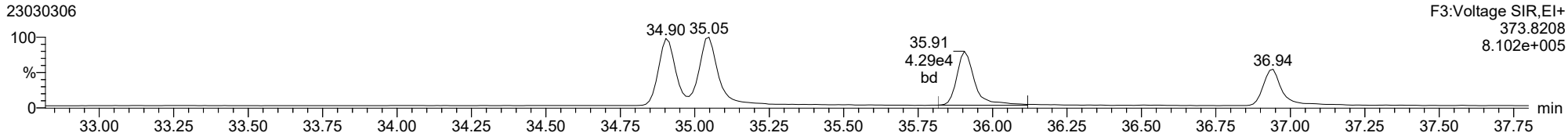

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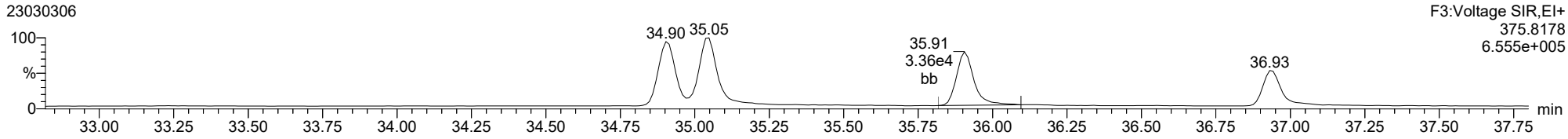

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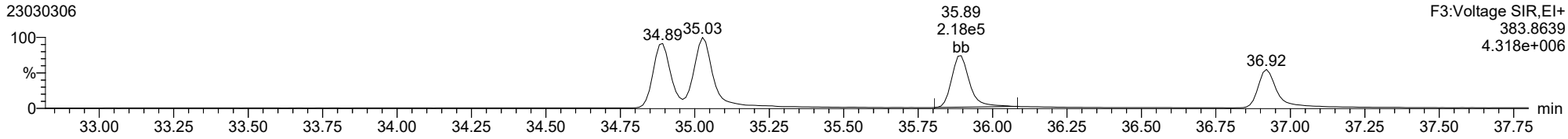

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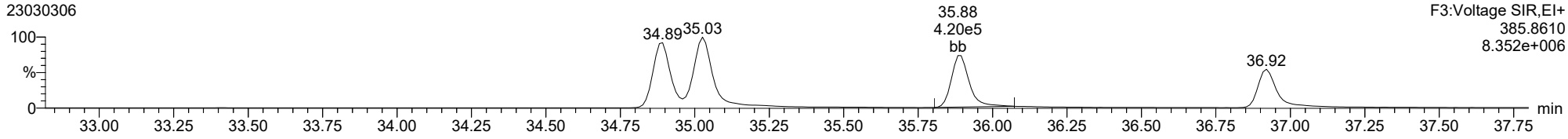

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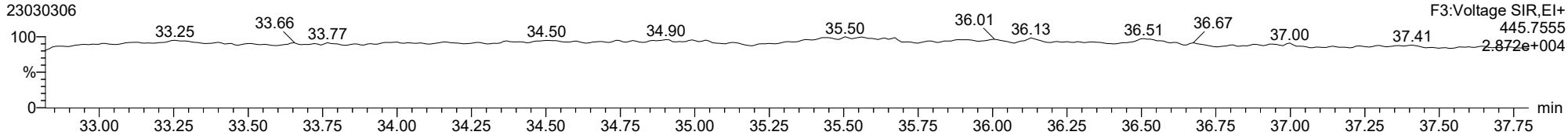

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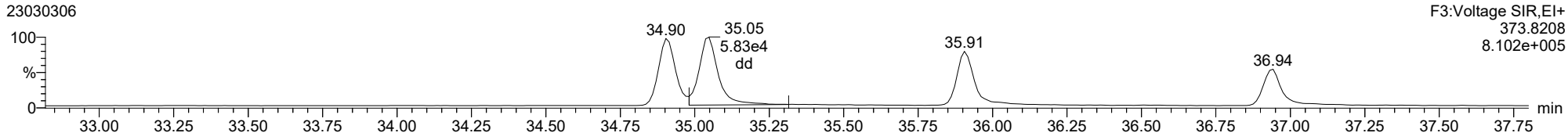

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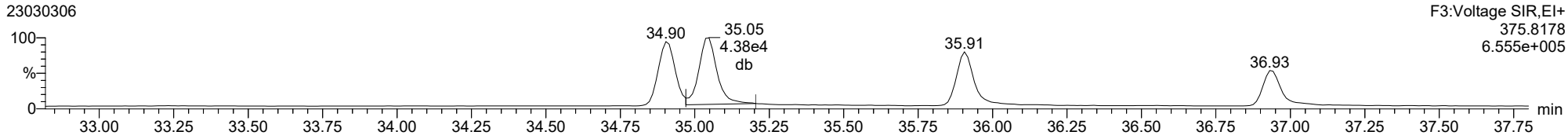

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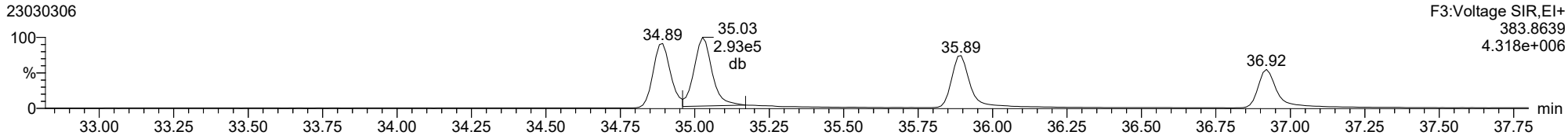

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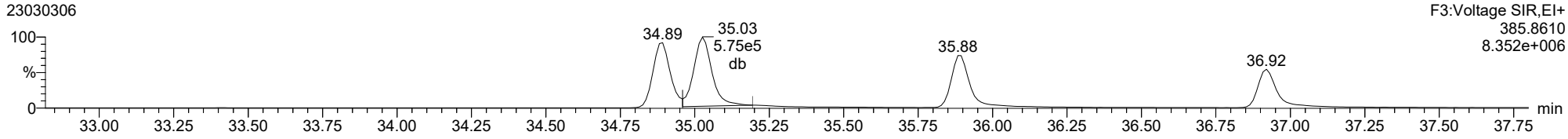

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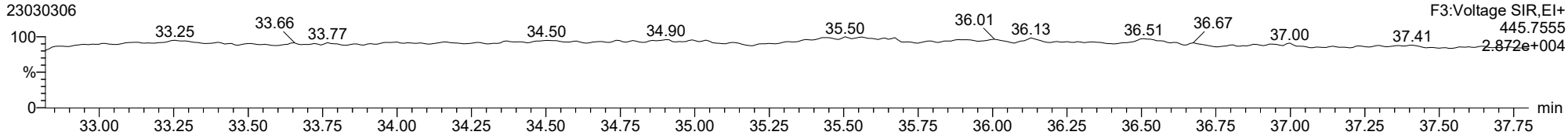

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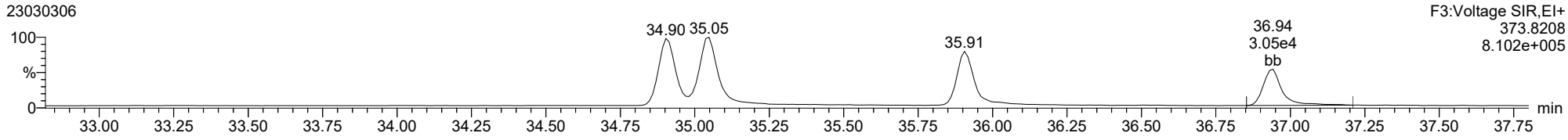

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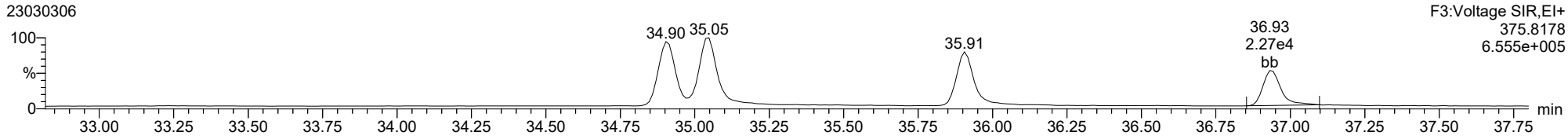

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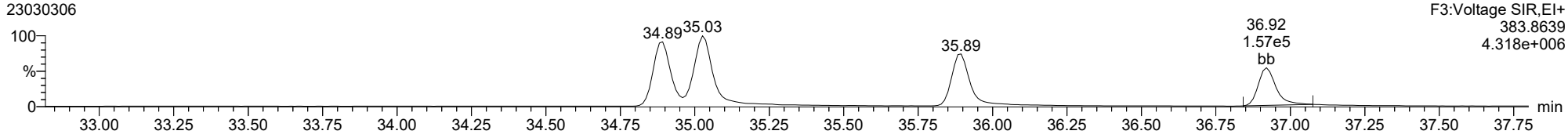

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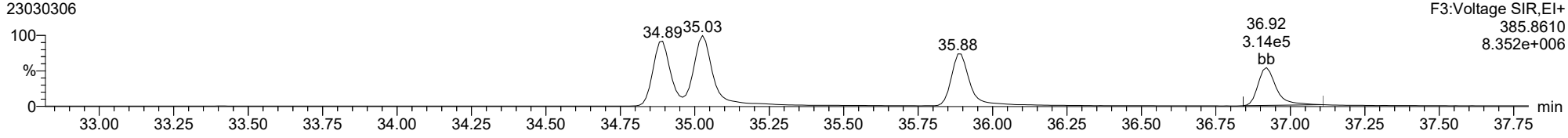

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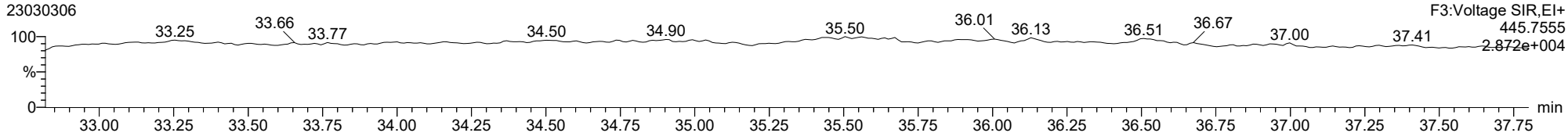

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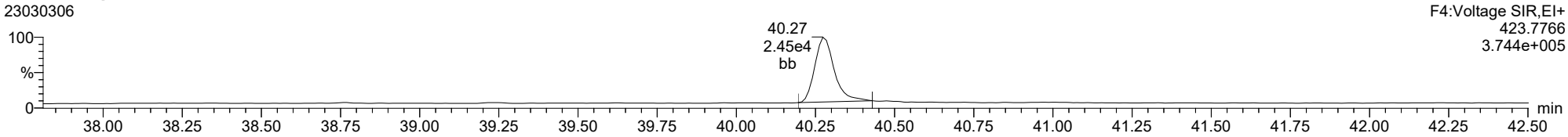

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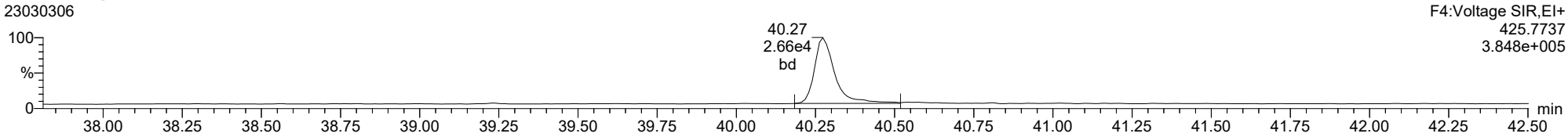

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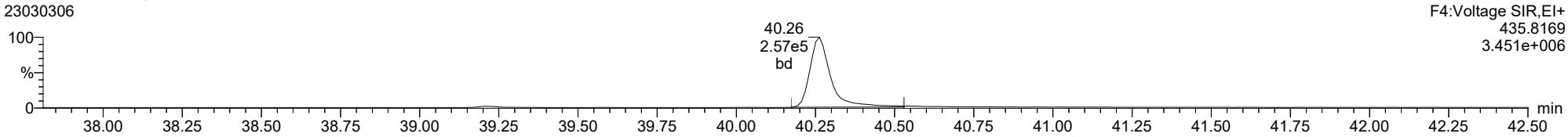

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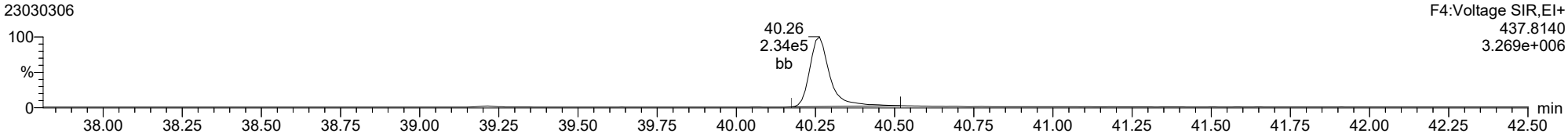
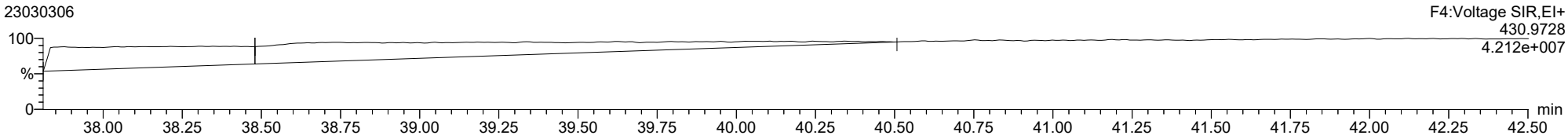


FUNCTION4 PFK



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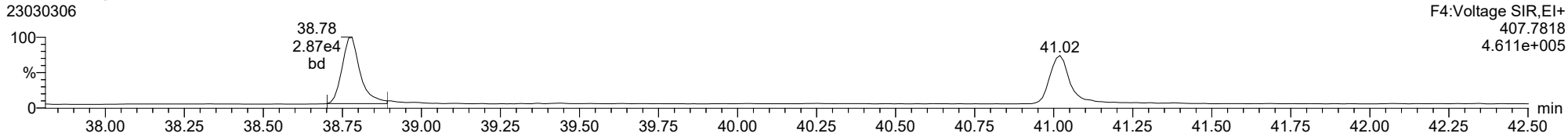

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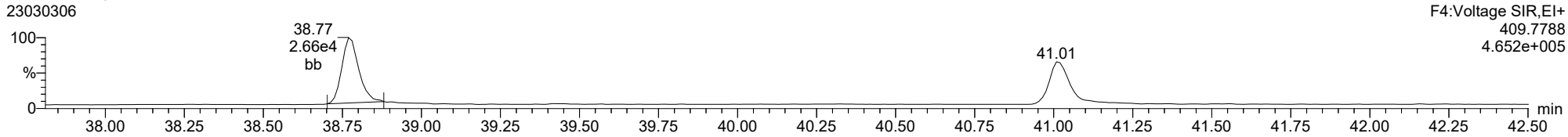

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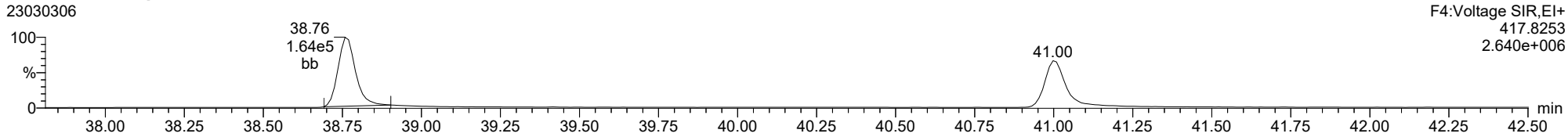

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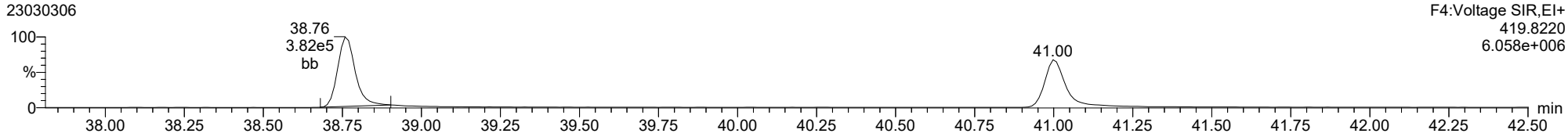

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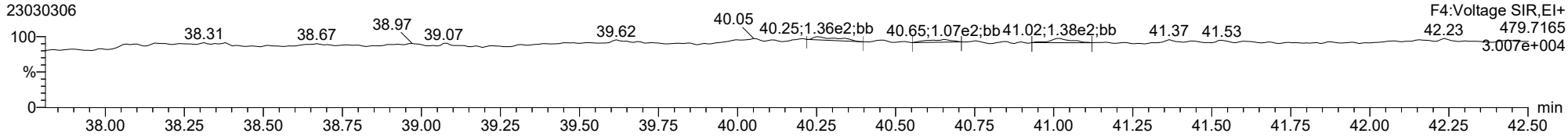

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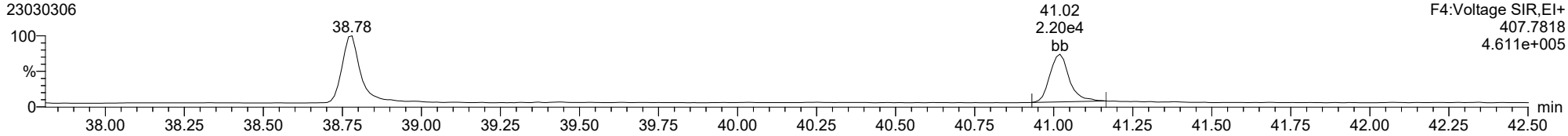

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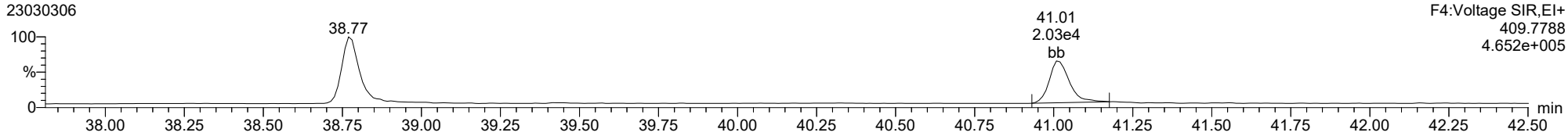

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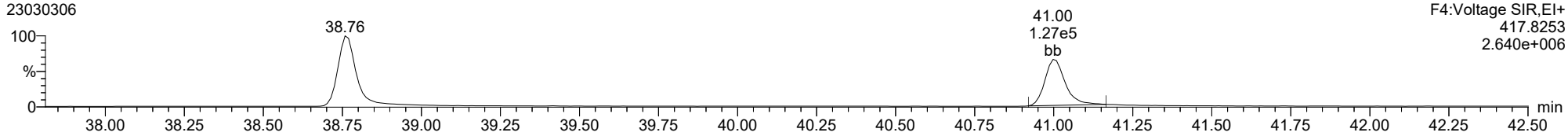

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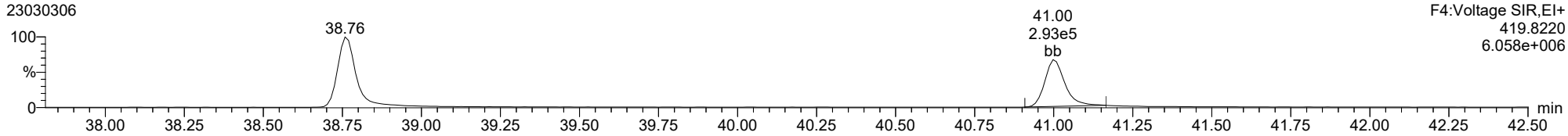
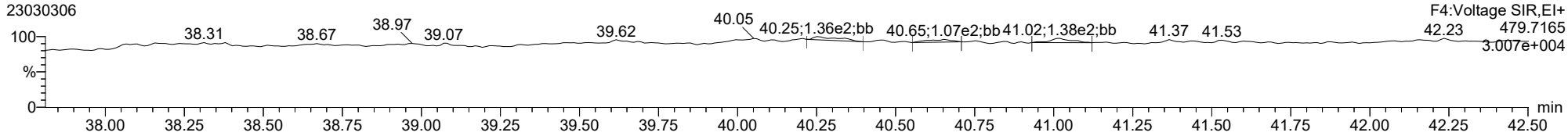


FUNCTION4 NCDPE



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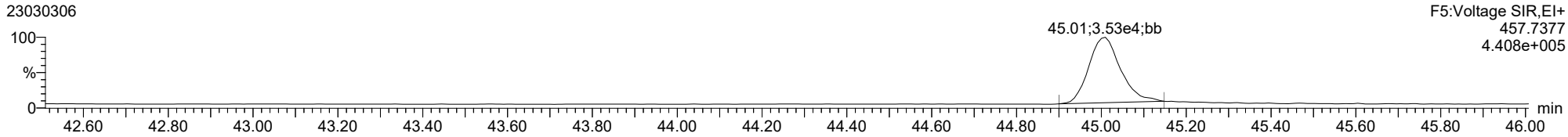

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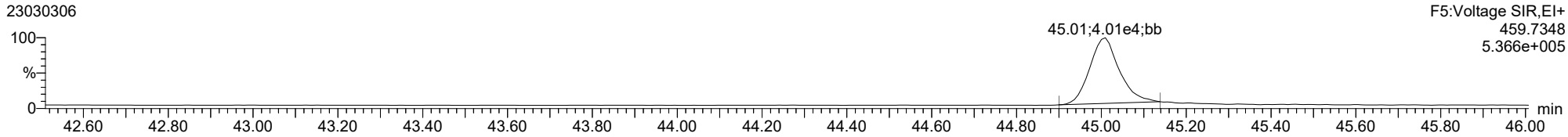

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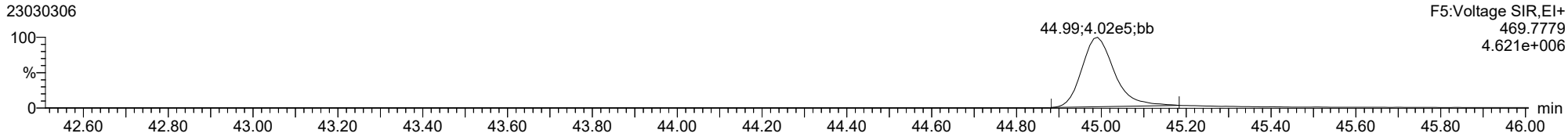

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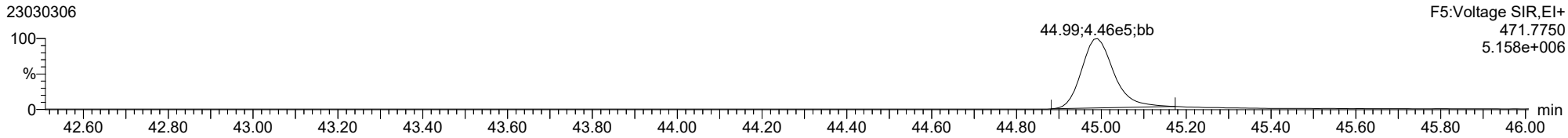
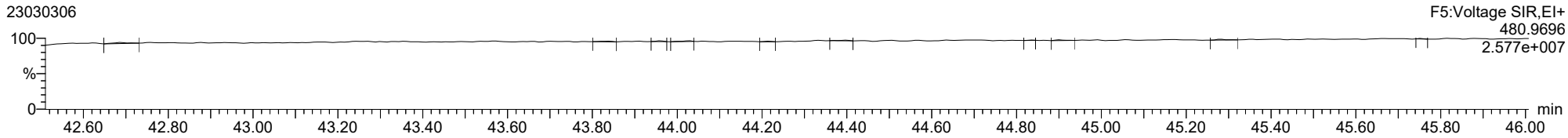


FUNCTION5 PFK



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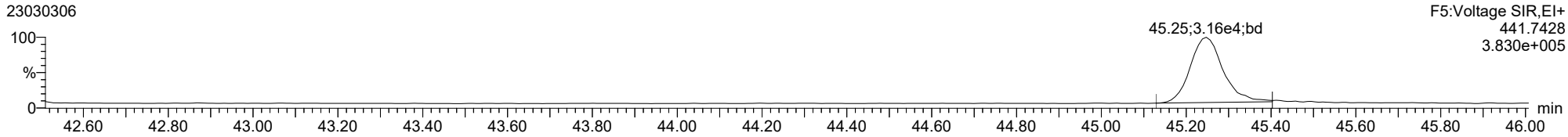

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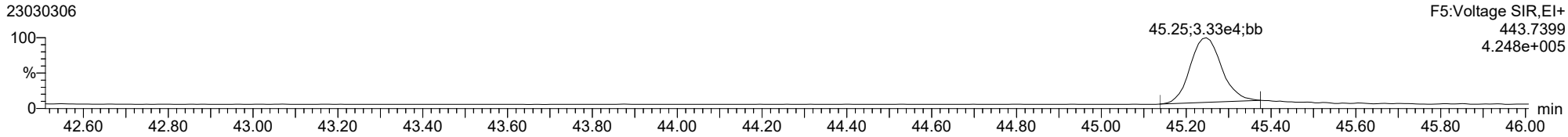

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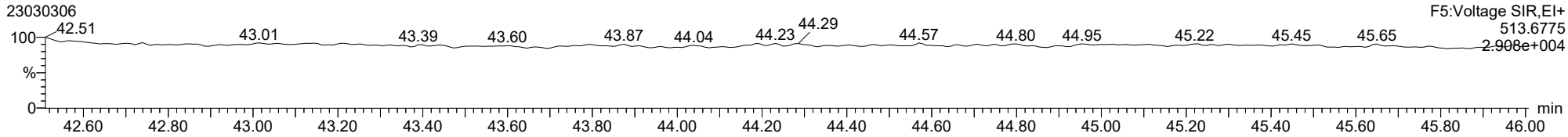

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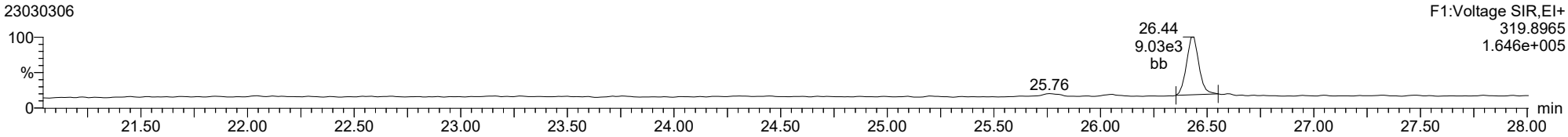
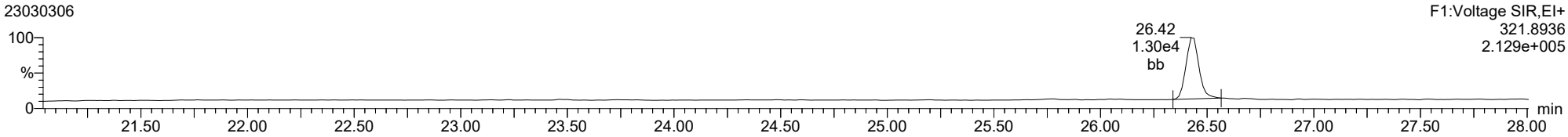
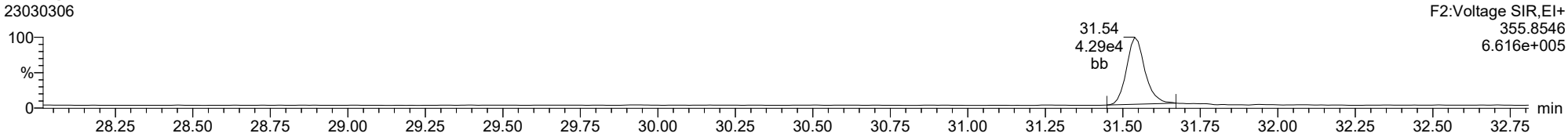


Total-tetradioxins



Total-pentadioxins



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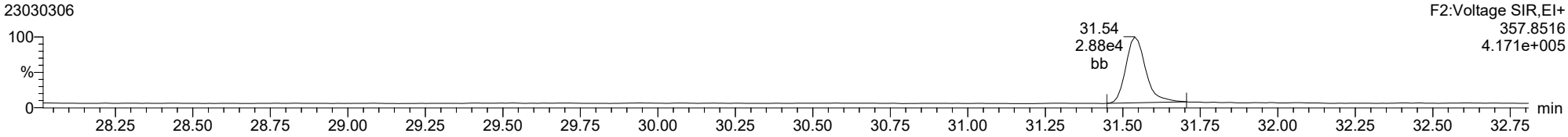

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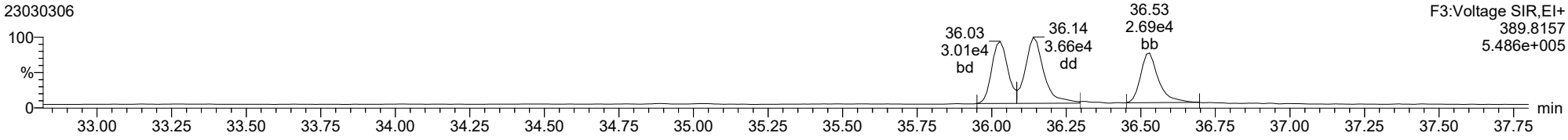

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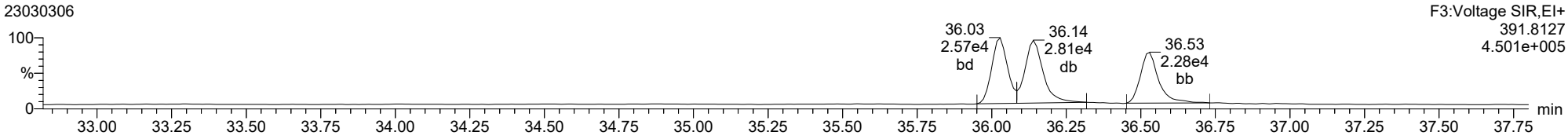

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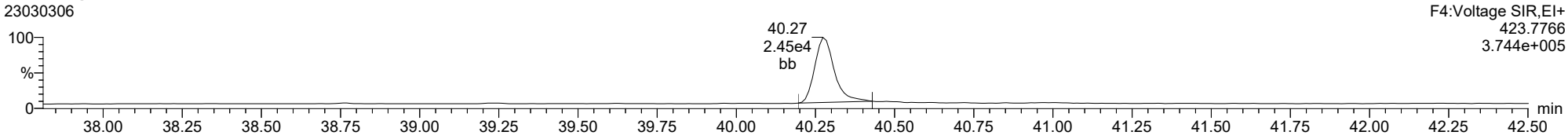
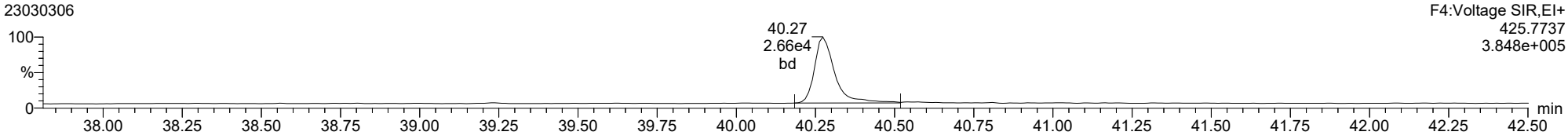


Total-heptadioxins



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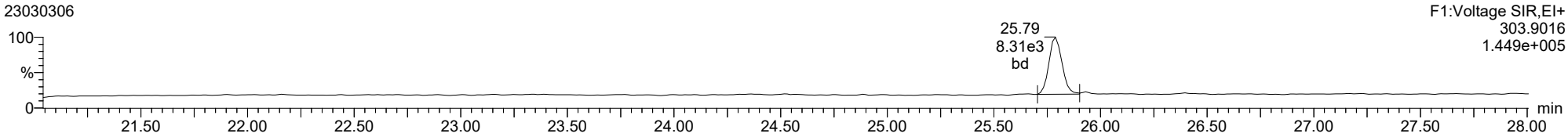
Total-tetrafurans



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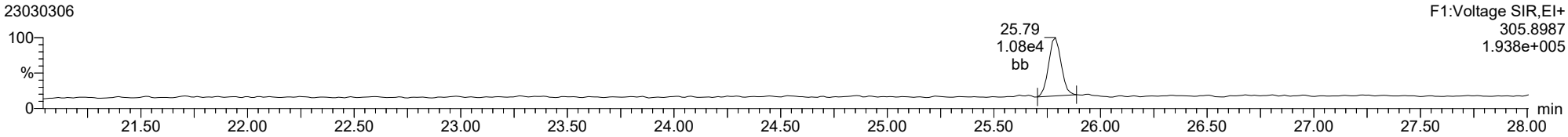

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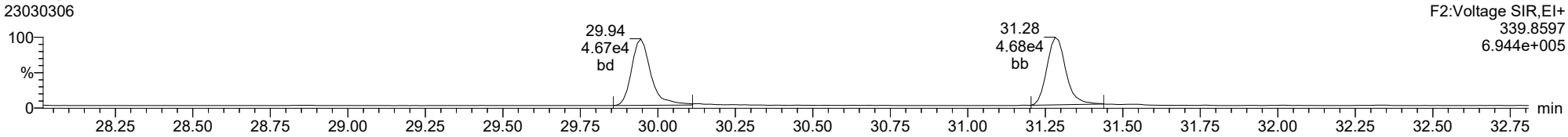

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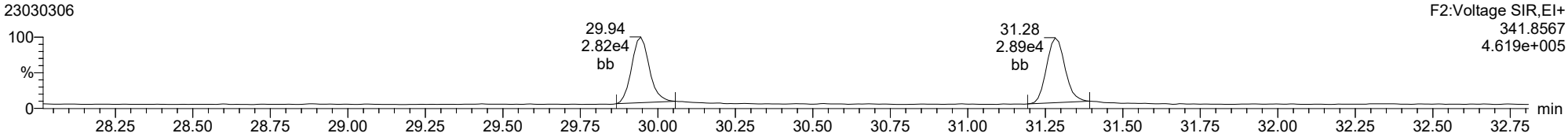

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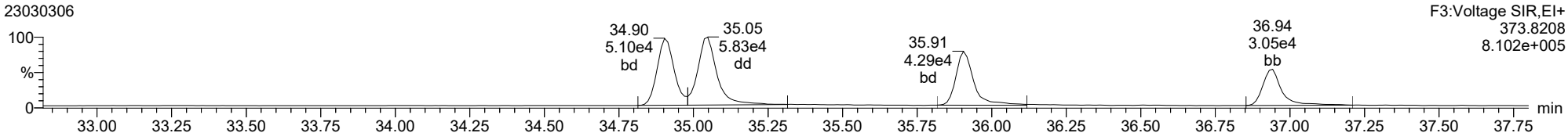

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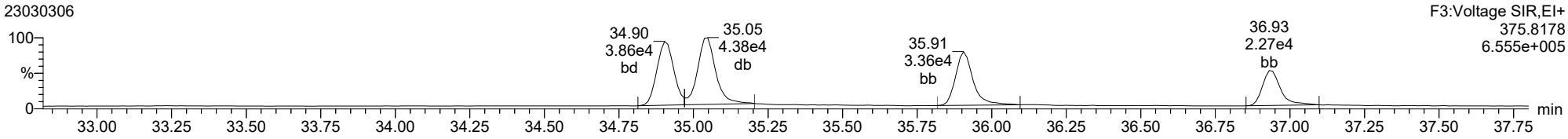

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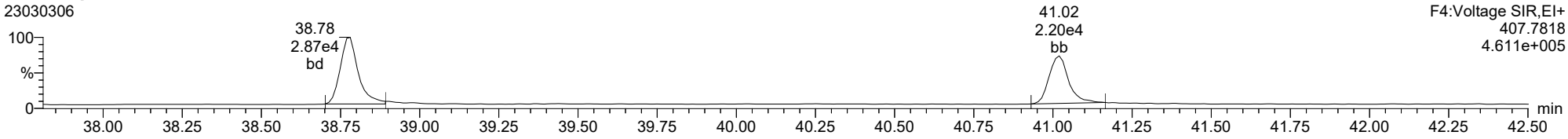
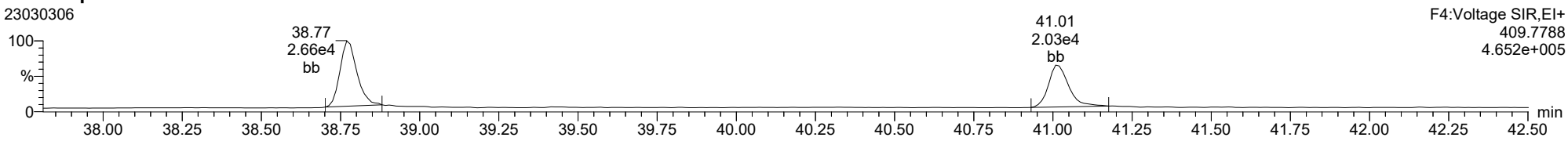


Total-heptafurans



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Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
Printed: Monday, March 06, 2023 11:34:37 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
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ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.788	1.001	4.563e4	6.298e4	0.702	0.724	0.770	1455	2151	7.03e5	9.46e5	483.4	440.0	NO	bb	bb	10.132
12378-PeCDF	29.945	1.001	2.374e5	1.577e5	0.679	1.505	1.550	2714	2519	3.51e6	2.28e6	1294.3	903.8	NO	bb	bb	49.089
23478-PeCDF	31.282	1.001	2.063e5	1.364e5	0.786	1.512	1.550	2714	2519	3.03e6	1.99e6	1118.0	788.5	NO	bb	bb	49.466
123478-HxCDF	34.903	1.000	2.473e5	1.941e5	1.166	1.275	1.240	3008	2708	3.76e6	2.98e6	1248.4	1099.9	NO	bd	bd	48.979
234678-HxCDF	35.905	1.000	2.404e5	1.930e5	1.140	1.246	1.240	3008	2708	3.53e6	2.85e6	1172.2	1053.8	NO	bb	bb	49.000
123678-HxCDF	35.048	1.001	2.970e5	2.223e5	1.091	1.336	1.240	3008	2708	3.95e6	3.09e6	1312.5	1142.3	NO	db	db	50.520
123789-HxCDF	36.942	1.001	2.103e5	1.706e5	1.137	1.233	1.240	3008	2708	2.89e6	2.30e6	959.2	849.3	NO	bd	bd	50.468
1234678-HpCDF	38.780	1.000	1.592e5	1.601e5	1.003	0.994	1.050	2672	2189	2.51e6	2.53e6	939.2	1157.5	NO	bb	bb	48.161
1234789-HpCDF	41.019	1.000	1.361e5	1.443e5	0.953	0.943	1.050	2672	2189	1.84e6	1.86e6	689.1	851.7	NO	bb	bd	49.244
OCDF	45.247	1.006	2.019e5	2.478e5	0.778	0.815	0.890	1393	1380	2.32e6	2.62e6	1663.0	1900.3	NO	bb	bd	93.418
2378-TCDD	26.424	1.000	5.877e4	7.446e4	1.149	0.789	0.770	1483	1021	8.00e5	1.03e6	539.5	1013.7	NO	bd	bb	9.873
12378-PeCDD	31.538	1.000	1.890e5	1.221e5	1.022	1.548	1.550	1651	2172	2.74e6	1.77e6	1662.3	815.6	NO	bb	bb	49.884
123478-HxCDD	36.028	1.000	1.812e5	1.479e5	0.996	1.225	1.240	1690	2600	2.90e6	2.38e6	1717.5	913.7	NO	bd	bd	48.605
123678-HxCDD	36.139	1.000	2.270e5	1.862e5	1.001	1.219	1.240	1690	2600	3.05e6	2.54e6	1803.3	977.3	NO	db	db	51.480
123789-HxCDD	36.529	1.011	1.887e5	1.546e5	0.907	1.221	1.240	1690	2600	2.71e6	2.20e6	1606.4	846.3	NO	bb	bb	51.083
1234678-HpCDD	40.273	1.000	1.573e5	1.681e5	1.039	0.936	1.050	2523	2313	2.21e6	2.22e6	874.4	957.9	NO	bb	bd	49.956
OCDD	45.009	1.000	2.508e5	2.930e5	0.920	0.856	0.890	1279	1652	2.91e6	3.41e6	2272.5	2065.6	NO	bb	bb	95.487
13C-2378-TCDF	25.774	1.007	6.575e5	8.705e5	1.620	0.755	0.770	2127	1667	9.70e6	1.27e7	4562.2	7600.8	NO	bb	bb	92.139
13C-12378-PeCDF	29.922	1.169	7.106e5	4.742e5	1.240	1.498	1.550	3150	3257	9.76e6	6.54e6	3098.5	2009.5	NO	bd	bd	93.316
13C-23478-PeCDF	31.259	1.221	5.241e5	3.573e5	1.118	1.467	1.550	3150	3257	7.68e6	5.27e6	2437.6	1617.5	NO	bb	bb	77.038
13C-123478-HxCDF	34.891	0.956	2.605e5	5.124e5	1.168	0.508	0.510	2130	2302	3.94e6	7.71e6	1851.1	3349.5	NO	bd	bd	95.975
13C-123678-HxCDF	35.025	0.959	3.029e5	6.396e5	1.386	0.474	0.510	2130	2302	4.25e6	8.39e6	1994.1	3646.7	NO	db	db	98.624
13C-234678-HxCDF	35.894	0.983	2.705e5	5.057e5	1.129	0.535	0.510	2130	2302	3.77e6	7.17e6	1772.4	3115.7	NO	bd	bb	99.718
13C-123789-HxCDF	36.919	1.011	2.253e5	4.385e5	0.932	0.514	0.510	2130	2302	3.30e6	6.48e6	1548.0	2814.2	NO	bb	bb	103.358
13C-1234678-HpCDF	38.769	1.062	2.032e5	4.578e5	0.895	0.444	0.440	2209	3025	3.15e6	7.13e6	1428.1	2357.0	NO	bb	bb	107.118
13C-1234789-HpCDF	41.008	1.123	1.757e5	4.217e5	0.770	0.417	0.440	2209	3025	2.29e6	5.20e6	1036.4	1717.4	NO	bb	bb	112.595
13C-1234-TCDD	25.605	0.000	4.555e5	5.681e5	1.000	0.802	0.770	2485	1606	6.85e6	8.57e6	2757.9	5335.2	NO	bb	bb	100.000
13C-2378-TCDD	26.410	1.031	5.228e5	6.520e5	1.152	0.802	0.770	2485	1606	7.70e6	9.63e6	3097.5	5999.3	NO	bb	bb	99.597
13C-12378-PeCDD	31.527	1.231	3.747e5	2.356e5	0.829	1.590	1.550	1413	1348	5.28e6	3.29e6	3736.6	2437.5	NO	bb	bb	71.936
13C-123478-HxCDD	36.017	0.986	3.837e5	2.963e5	0.995	1.295	1.240	1796	1719	5.91e6	4.54e6	3293.9	2638.3	NO	bd	bd	99.140
13C-123678-HxCDD	36.128	0.989	4.675e5	3.344e5	1.157	1.398	1.240	1796	1719	6.38e6	4.87e6	3554.2	2831.4	NO	db	db	100.573
13C-1234678-HpCDD	40.262	1.102	3.210e5	3.059e5	0.840	1.049	1.050	2165	1959	4.38e6	4.15e6	2024.2	2117.7	NO	bb	bb	108.247
13C-OCDD	44.990	1.232	6.075e5	6.305e5	0.767	0.963	0.890	2629	1930	6.50e6	7.26e6	2473.3	3761.0	NO	bd	bb	234.029
13C-123789-HxCDD	36.518	0.000	3.849e5	3.043e5	1.000	1.265	1.240	1796	1719	5.52e6	4.36e6	3076.5	2537.0	NO	bb	bb	100.000
37CL-2378-TCDD	26.424	1.032	1.159e5		1.288			2383		1.68e6		703.2			bb		8.796

Dataset: T:\Autospec\Processed Data Batch\230303ICIH.qld
Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
Printed: Monday, March 06, 2023 11:34:37 Pacific Standard Time

ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.285	0.865	5.143e4	7.104e4	0.802	0.724	0.770	1455	2151	8.64e5	1.17e6	593.7	544.2	NO	bb	bb	10.000
1289-TCDF	27.286	1.059	4.449e4	5.910e4	0.678	0.753	0.770	1455	2151	6.41e5	8.65e5	440.8	402.3	NO	bb	db	10.000
13468-PECDF	27.144	0.907	4.471e5	2.913e5	1.246	1.535	1.550	765	1431	6.85e6	4.42e6	8952.4	3092.4	NO	bb	bb	50.000
12389-PECDF	32.318	1.080	1.756e5	1.185e5	0.496	1.482	1.550	2714	2519	2.46e6	1.67e6	905.1	663.5	NO	bb	bb	50.000
123468-HXCDF	33.243	0.953	2.474e5	2.044e5	1.169	1.210	1.240	3008	2708	3.57e6	2.89e6	1187.3	1066.9	NO	bb	bd	50.000
1368-TCDD	23.557	0.892	5.333e4	6.596e4	1.015	0.808	0.770	1483	1021	8.25e5	1.09e6	556.5	1064.4	NO	bb	bb	10.000
1289-TCDD	27.031	1.023	4.649e4	6.027e4	0.909	0.771	0.770	1483	1021	6.71e5	8.87e5	452.4	868.9	NO	bb	bb	10.000
12479-PECDD	28.830	0.914	4.152e5	2.870e5	2.301	1.447	1.550	1651	2172	3.89e6	2.64e6	2354.1	1214.5	NO	bb	bd	50.000
12389-PECDD	31.939	1.013	2.202e5	1.409e5	1.184	1.563	1.550	1651	2172	2.97e6	1.93e6	1798.8	887.7	NO	bd	bd	50.000
124679-HXCDD	34.011	0.944	2.133e5	1.659e5	1.115	1.286	1.240	1690	2600	2.98e6	2.42e6	1762.3	930.8	NO	bd	bb	50.000
1234679-HPCDD	39.225	0.974	1.868e5	1.696e5	1.137	1.101	1.050	2523	2313	2.68e6	2.60e6	1062.7	1125.2	NO	bd	bb	50.000
Total-tetrafurans			1.415e5		0.727			1455		2.21e6							30.132
Total-penta1			4.471e5					765		6.85e6							50.000
Total-pentafurans			6.595e5		0.654			2714		9.58e6							158.378
Total-hexafurans			1.243e6		1.141			3008		1.77e7							249.074
Total-heptafurans			2.965e5		0.978			2672		4.37e6							97.824
Total-Furans			2.990e6		0.922			1455		4.30e7							678.826
Total-tetradioxins			2.666e5		1.024			1483		3.52e6							50.252
Total-pentadioxins			8.253e5		1.502			1651		9.61e6							150.025
Total-hexadioxins			8.102e5		1.005			1690		1.16e7							201.167
Total-heptadioxins			3.440e5		1.088			2523		4.89e6							99.956
Total-Dioxins			2.497e6		1.130			1483		3.26e7							596.887
Total-TEQ			5.487e6					1483		7.56e7							1275.713
FUNCTION1 PFK			2.078e5					640846		4.44e6							
FUNCTION2 PFK			1.544e7					302960		1.17e7							0.000
FUNCTION3 PFK			6.335e6					441696		3.43e7							0.000
FUNCTION4 PFK			1.606e7					302692		2.36e6							
FUNCTION5 PFK			3.357e4					240421		1.60e6							
FUNCTION1 HXCD...			1.444e3					587		1.68e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			9.034e2					1003		1.66e4							0.000
FUNCTION3 OCDPE			5.560e2					494		8.57e3							0.000
FUNCTION4 NCDPE			9.205e2					776		1.78e4							0.000
FUNCTION5 DCDPE			9.291e1					548		1.29e3							0.000

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Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

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TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.29	4.449e4	5.910e4	0.678	0.75	0.77	440.8	YES	NO	bb	db	10.000
2	2378-TCDF	25.79	4.563e4	6.298e4	0.702	0.72	0.77	483.4	YES	NO	bb	bb	10.132
3	1368-TCDF	22.29	5.143e4	7.104e4	0.802	0.72	0.77	593.7	YES	NO	bb	bb	10.000

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	27.14	4.471e5	2.913e5	1.246	1.53	1.55	8952.4	YES	NO	bb	bb	50.000

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDF	32.32	1.756e5	1.185e5	0.496	1.48	1.55	905.1	YES	NO	bb	bb	50.000
2	23478-PeCDF	31.28	2.063e5	1.364e5	0.786	1.51	1.55	1118.0	YES	NO	bb	bb	49.466
3	Total-pentafurans	30.13	4.319e2	3.264e2	0.654	1.32	1.55	1.8	NO	NO	bb	bb	0.112
4	12378-PeCDF	29.94	2.374e5	1.577e5	0.679	1.51	1.55	1294.3	YES	NO	bb	bb	49.089
5	Total-pentafurans	28.80	3.978e4	2.583e4	0.654	1.54	1.55	212.5	YES	NO	bb	bb	9.712

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-hexafurans	37.33	5.073e2	4.522e2	1.141	1.12	1.24	4.2	YES	NO	db	dd	0.107
2	123789-HxCDF	36.94	2.103e5	1.706e5	1.137	1.23	1.24	959.2	YES	NO	bd	bd	50.468
3	234678-HxCDF	35.91	2.404e5	1.930e5	1.140	1.25	1.24	1172.2	YES	NO	bb	bb	49.000
4	123678-HxCDF	35.05	2.970e5	2.223e5	1.091	1.34	1.24	1312.5	YES	NO	db	db	50.520
5	123478-HxCDF	34.90	2.473e5	1.941e5	1.166	1.27	1.24	1248.4	YES	NO	bd	bd	48.979
6	123468-HXCDF	33.24	2.474e5	2.044e5	1.169	1.21	1.24	1187.3	YES	NO	bb	bd	50.000

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	41.02	1.361e5	1.443e5	0.953	0.94	1.05	689.1	YES	NO	bb	bd	49.244
2	Total-heptafurans	39.44	1.302e3	1.273e3	0.978	1.02	1.05	8.5	YES	NO	bb	bb	0.418
3	1234678-HpCDF	38.78	1.592e5	1.601e5	1.003	0.99	1.05	939.2	YES	NO	bb	bb	48.161

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.29	4.449e4	5.910e4	0.678	0.75	0.77	440.8	YES	NO	bb	db	10.000
2	2378-TCDF	25.79	4.563e4	6.298e4	0.702	0.72	0.77	483.4	YES	NO	bb	bb	10.132
3	1368-TCDF	22.29	5.143e4	7.104e4	0.802	0.72	0.77	593.7	YES	NO	bb	bb	10.000
4	12389-PECDF	32.32	1.756e5	1.185e5	0.496	1.48	1.55	905.1	YES	NO	bb	bb	50.000
5	23478-PeCDF	31.28	2.063e5	1.364e5	0.786	1.51	1.55	1118.0	YES	NO	bb	bb	49.466
6	Total-pentafurans	30.13	4.319e2	3.264e2	0.654	1.32	1.55	1.8	NO	NO	bb	bb	0.112
7	12378-PeCDF	29.94	2.374e5	1.577e5	0.679	1.51	1.55	1294.3	YES	NO	bb	bb	49.089
8	Total-pentafurans	28.80	3.978e4	2.583e4	0.654	1.54	1.55	212.5	YES	NO	bb	bb	9.712
9	Total-hexafurans	37.33	5.073e2	4.522e2	1.141	1.12	1.24	4.2	YES	NO	db	dd	0.107
10	123789-HxCDF	36.94	2.103e5	1.706e5	1.137	1.23	1.24	959.2	YES	NO	bd	bd	50.468
11	234678-HxCDF	35.91	2.404e5	1.930e5	1.140	1.25	1.24	1172.2	YES	NO	bb	bb	49.000
12	123678-HxCDF	35.05	2.970e5	2.223e5	1.091	1.34	1.24	1312.5	YES	NO	db	db	50.520
13	123478-HxCDF	34.90	2.473e5	1.941e5	1.166	1.27	1.24	1248.4	YES	NO	bd	bd	48.979
14	123468-HXCDF	33.24	2.474e5	2.044e5	1.169	1.21	1.24	1187.3	YES	NO	bb	bd	50.000
15	1234789-HpCDF	41.02	1.361e5	1.443e5	0.953	0.94	1.05	689.1	YES	NO	bb	bd	49.244
16	Total-heptafurans	39.44	1.302e3	1.273e3	0.978	1.02	1.05	8.5	YES	NO	bb	bb	0.418
17	1234678-HpCDF	38.78	1.592e5	1.601e5	1.003	0.99	1.05	939.2	YES	NO	bb	bb	48.161
18	OCDF	45.25	2.019e5	2.478e5	0.778	0.81	0.89	1663.0	YES	NO	bb	bd	93.418
19	13468-PECDF	27.14	4.471e5	2.913e5	1.246	1.53	1.55	8952.4	YES	NO	bb	bb	50.000

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.56	5.333e4	6.596e4	1.015	0.81	0.77	556.5	YES	NO	bb	bb	10.000
2	1289-TCDD	27.03	4.649e4	6.027e4	0.909	0.77	0.77	452.4	YES	NO	bb	bb	10.000
3	2378-TCDD	26.42	5.877e4	7.446e4	1.149	0.79	0.77	539.5	YES	NO	bd	bb	9.873
4	Total-tetradioxins	26.10	8.105e4	1.035e5	1.024	0.78	0.77	553.1	YES	NO	bb	bb	15.333
5	Total-tetradioxins	25.62	2.642e4	3.299e4	1.024	0.80	0.77	267.0	YES	NO	bd	bb	4.937
6	Total-tetradioxins	25.04	5.856e2	7.161e2	1.024	0.82	0.77	7.0	YES	NO	bb	bb	0.108

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	31.94	2.202e5	1.409e5	1.184	1.56	1.55	1798.8	YES	NO	bd	bd	50.000
2	12378-PeCDD	31.54	1.890e5	1.221e5	1.022	1.55	1.55	1662.3	YES	NO	bb	bb	49.884
3	Total-pentadioxins	30.88	8.263e2	4.657e2	1.502	1.77	1.55	8.6	YES	NO	bb	bb	0.141
4	12479-PECDD	28.83	4.152e5	2.870e5	2.301	1.45	1.55	2354.1	YES	NO	bb	bd	50.000

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HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.53	1.887e5	1.546e5	0.907	1.22	1.24	1606.4	YES	NO	bb	bb	51.083
2	123678-HxCDD	36.14	2.270e5	1.862e5	1.001	1.22	1.24	1803.3	YES	NO	db	db	51.480
3	123478-HxCDD	36.03	1.812e5	1.479e5	0.996	1.23	1.24	1717.5	YES	NO	bd	bd	48.605
4	124679-HXCDD	34.01	2.133e5	1.659e5	1.115	1.29	1.24	1762.3	YES	NO	bd	bb	50.000

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.27	1.573e5	1.681e5	1.039	0.94	1.05	874.4	YES	NO	bb	bd	49.956
2	1234679-HPCDD	39.23	1.868e5	1.696e5	1.137	1.10	1.05	1062.7	YES	NO	bd	bb	50.000

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.56	5.333e4	6.596e4	1.015	0.81	0.77	556.5	YES	NO	bb	bb	10.000
2	1289-TCDD	27.03	4.649e4	6.027e4	0.909	0.77	0.77	452.4	YES	NO	bb	bb	10.000
3	2378-TCDD	26.42	5.877e4	7.446e4	1.149	0.79	0.77	539.5	YES	NO	bd	bb	9.873
4	Total-tetradioxins	26.10	8.105e4	1.035e5	1.024	0.78	0.77	553.1	YES	NO	bb	bb	15.333
5	Total-tetradioxins	25.62	2.642e4	3.299e4	1.024	0.80	0.77	267.0	YES	NO	bd	bb	4.937
6	Total-tetradioxins	25.04	5.856e2	7.161e2	1.024	0.82	0.77	7.0	YES	NO	bb	bb	0.108
7	12389-PECDD	31.94	2.202e5	1.409e5	1.184	1.56	1.55	1798.8	YES	NO	bd	bd	50.000
8	12378-PeCDD	31.54	1.890e5	1.221e5	1.022	1.55	1.55	1662.3	YES	NO	bb	bb	49.884
9	Total-pentadioxins	30.88	8.263e2	4.657e2	1.502	1.77	1.55	8.6	YES	NO	bb	bb	0.141
10	12479-PECDD	28.83	4.152e5	2.870e5	2.301	1.45	1.55	2354.1	YES	NO	bb	bd	50.000
11	123789-HxCDD	36.53	1.887e5	1.546e5	0.907	1.22	1.24	1606.4	YES	NO	bb	bb	51.083
12	123678-HxCDD	36.14	2.270e5	1.862e5	1.001	1.22	1.24	1803.3	YES	NO	db	db	51.480
13	123478-HxCDD	36.03	1.812e5	1.479e5	0.996	1.23	1.24	1717.5	YES	NO	bd	bd	48.605
14	124679-HXCDD	34.01	2.133e5	1.659e5	1.115	1.29	1.24	1762.3	YES	NO	bd	bb	50.000
15	1234678-HpCDD	40.27	1.573e5	1.681e5	1.039	0.94	1.05	874.4	YES	NO	bb	bd	49.956
16	1234679-HPCDD	39.23	1.868e5	1.696e5	1.137	1.10	1.05	1062.7	YES	NO	bd	bb	50.000
17	OCDD	45.01	2.508e5	2.930e5	0.920	0.86	0.89	2272.5	YES	NO	bb	bb	95.487

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.29	4.449e4	5.910e4	0.678	0.75	0.77	440.8	YES	NO	bb	db	10.000
2	2378-TCDF	25.79	4.563e4	6.298e4	0.702	0.72	0.77	483.4	YES	NO	bb	bb	10.132
3	1368-TCDF	22.29	5.143e4	7.104e4	0.802	0.72	0.77	593.7	YES	NO	bb	bb	10.000
4	12389-PECDF	32.32	1.756e5	1.185e5	0.496	1.48	1.55	905.1	YES	NO	bb	bb	50.000
5	23478-PeCDF	31.28	2.063e5	1.364e5	0.786	1.51	1.55	1118.0	YES	NO	bb	bb	49.466
6	Total-pentafurans	30.13	4.319e2	3.264e2	0.654	1.32	1.55	1.8	NO	NO	bb	bb	0.112
7	12378-PeCDF	29.94	2.374e5	1.577e5	0.679	1.51	1.55	1294.3	YES	NO	bb	bb	49.089
8	Total-pentafurans	28.80	3.978e4	2.583e4	0.654	1.54	1.55	212.5	YES	NO	bb	bb	9.712
9	Total-hexafurans	37.33	5.073e2	4.522e2	1.141	1.12	1.24	4.2	YES	NO	db	dd	0.107
10	123789-HxCDF	36.94	2.103e5	1.706e5	1.137	1.23	1.24	959.2	YES	NO	bd	bd	50.468
11	234678-HxCDF	35.91	2.404e5	1.930e5	1.140	1.25	1.24	1172.2	YES	NO	bb	bb	49.000
12	123678-HxCDF	35.05	2.970e5	2.223e5	1.091	1.34	1.24	1312.5	YES	NO	db	db	50.520
13	123478-HxCDF	34.90	2.473e5	1.941e5	1.166	1.27	1.24	1248.4	YES	NO	bd	bd	48.979
14	123468-HXCDF	33.24	2.474e5	2.044e5	1.169	1.21	1.24	1187.3	YES	NO	bb	bd	50.000
15	1234789-HpCDF	41.02	1.361e5	1.443e5	0.953	0.94	1.05	689.1	YES	NO	bb	bd	49.244
16	Total-heptafurans	39.44	1.302e3	1.273e3	0.978	1.02	1.05	8.5	YES	NO	bb	bb	0.418
17	1234678-HpCDF	38.78	1.592e5	1.601e5	1.003	0.99	1.05	939.2	YES	NO	bb	bb	48.161
18	OCDF	45.25	2.019e5	2.478e5	0.778	0.81	0.89	1663.0	YES	NO	bb	bd	93.418
19	13468-PECDF	27.14	4.471e5	2.913e5	1.246	1.53	1.55	8952.4	YES	NO	bb	bb	50.000
20	1368-TCDD	23.56	5.333e4	6.596e4	1.015	0.81	0.77	556.5	YES	NO	bb	bb	10.000
21	1289-TCDD	27.03	4.649e4	6.027e4	0.909	0.77	0.77	452.4	YES	NO	bb	bb	10.000
22	2378-TCDD	26.42	5.877e4	7.446e4	1.149	0.79	0.77	539.5	YES	NO	bd	bb	9.873
23	Total-tetradioxins	26.10	8.105e4	1.035e5	1.024	0.78	0.77	553.1	YES	NO	bb	bb	15.333
24	Total-tetradioxins	25.62	2.642e4	3.299e4	1.024	0.80	0.77	267.0	YES	NO	bd	bb	4.937
25	Total-tetradioxins	25.04	5.856e2	7.161e2	1.024	0.82	0.77	7.0	YES	NO	bb	bb	0.108
26	12389-PECDD	31.94	2.202e5	1.409e5	1.184	1.56	1.55	1798.8	YES	NO	bd	bd	50.000
27	12378-PeCDD	31.54	1.890e5	1.221e5	1.022	1.55	1.55	1662.3	YES	NO	bb	bb	49.884
28	Total-pentadioxins	30.88	8.263e2	4.657e2	1.502	1.77	1.55	8.6	YES	NO	bb	bb	0.141
29	12479-PECDD	28.83	4.152e5	2.870e5	2.301	1.45	1.55	2354.1	YES	NO	bb	bd	50.000
30	123789-HxCDD	36.53	1.887e5	1.546e5	0.907	1.22	1.24	1606.4	YES	NO	bb	bb	51.083
31	123678-HxCDD	36.14	2.270e5	1.862e5	1.001	1.22	1.24	1803.3	YES	NO	db	db	51.480
32	123478-HxCDD	36.03	1.812e5	1.479e5	0.996	1.23	1.24	1717.5	YES	NO	bd	bd	48.605
33	124679-HXCDD	34.01	2.133e5	1.659e5	1.115	1.29	1.24	1762.3	YES	NO	bd	bb	50.000
34	1234678-HpCDD	40.27	1.573e5	1.681e5	1.039	0.94	1.05	874.4	YES	NO	bb	bd	49.956
35	1234679-HPCDD	39.23	1.868e5	1.696e5	1.137	1.10	1.05	1062.7	YES	NO	bd	bb	50.000
36	OCDD	45.01	2.508e5	2.930e5	0.920	0.86	0.89	2272.5	YES	NO	bb	bb	95.487

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Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	27.24	1.621e5					3.0	YES		bb		
2	FUNCTION1 PFK	26.04	7.004e3					0.8	NO		bb		
3	FUNCTION1 PFK	25.20	1.505e4					1.0	NO		bb		
4	FUNCTION1 PFK	24.33	1.235e4					0.8	NO		bb		
5	FUNCTION1 PFK	23.94	5.589e3					0.6	NO		bb		
6	FUNCTION1 PFK	23.61	5.711e3					0.6	NO		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	32.40	1.216e5					2.2	NO		bb		0.000
2	FUNCTION2 PFK	29.43	1.324e7					19.8	YES		db		0.000
3	FUNCTION2 PFK	28.41	2.080e6					16.6	YES		bd		0.000

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PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	33.64	4.177e4					1.9	NO		bb		0.000
2	FUNCTION3 PFK	33.49	1.199e5					5.0	YES		db		0.000
3	FUNCTION3 PFK	33.44	2.654e6					7.0	YES		dd		0.000
4	FUNCTION3 PFK	33.06	2.958e6					23.7	YES		bd		0.000
5	FUNCTION3 PFK	35.38	2.169e4					1.0	NO		bb		0.000
6	FUNCTION3 PFK	35.25	5.928e3					0.6	NO		bb		0.000
7	FUNCTION3 PFK	35.11	7.037e3					0.7	NO		bb		0.000
8	FUNCTION3 PFK	34.99	1.627e4					1.0	NO		bb		0.000
9	FUNCTION3 PFK	34.92	1.103e4					1.1	NO		db		0.000
10	FUNCTION3 PFK	34.86	1.305e4					1.0	NO		bd		0.000
11	FUNCTION3 PFK	34.80	9.642e3					0.9	NO		bb		0.000
12	FUNCTION3 PFK	34.66	1.233e4					0.9	NO		db		0.000
13	FUNCTION3 PFK	34.64	7.688e3					0.8	NO		bd		0.000
14	FUNCTION3 PFK	34.57	9.132e3					0.8	NO		bb		0.000
15	FUNCTION3 PFK	34.47	7.208e3					0.8	NO		bb		0.000
16	FUNCTION3 PFK	34.31	1.503e4					1.0	NO		bb		0.000
17	FUNCTION3 PFK	34.22	2.675e4					1.4	NO		bb		0.000
18	FUNCTION3 PFK	34.01	3.007e4					2.1	NO		db		0.000
19	FUNCTION3 PFK	33.97	1.328e4					1.1	NO		bd		0.000
20	FUNCTION3 PFK	33.91	6.249e3					0.6	NO		bb		0.000
21	FUNCTION3 PFK	36.99	2.219e4					1.1	NO		bd		0.000
22	FUNCTION3 PFK	36.87	2.133e3					0.4	NO		bb		0.000
23	FUNCTION3 PFK	36.83	5.225e3					0.6	NO		bb		0.000
24	FUNCTION3 PFK	36.70	4.929e4					1.7	NO		bb		0.000
25	FUNCTION3 PFK	36.43	1.980e4					1.2	NO		bb		0.000
26	FUNCTION3 PFK	36.38	7.184e3					0.9	NO		bb		0.000
27	FUNCTION3 PFK	36.27	4.220e3					0.5	NO		bb		0.000
28	FUNCTION3 PFK	36.24	2.102e3					0.4	NO		bb		0.000
29	FUNCTION3 PFK	36.19	3.748e3					0.5	NO		bb		0.000
30	FUNCTION3 PFK	35.87	3.133e4					1.6	NO		db		0.000
31	FUNCTION3 PFK	35.83	1.912e4					1.5	NO		bd		0.000
32	FUNCTION3 PFK	35.78	2.675e3					0.4	NO		db		0.000
33	FUNCTION3 PFK	35.74	3.023e4					1.5	NO		dd		0.000
34	FUNCTION3 PFK	35.67	1.673e4					1.4	NO		bd		0.000
35	FUNCTION3 PFK	35.58	2.145e4					1.4	NO		db		0.000
36	FUNCTION3 PFK	35.53	1.268e4					1.1	NO		bd		0.000
37	FUNCTION3 PFK	37.67	2.243e4					1.6	NO		bb		0.000

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PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	FUNCTION3 PFK	37.45	8.583e3					0.7	NO		db		0.000
39	FUNCTION3 PFK	37.43	4.891e3					0.7	NO		bd		0.000
40	FUNCTION3 PFK	37.30	6.956e3					0.6	NO		bb		0.000
41	FUNCTION3 PFK	37.23	5.682e3					0.7	NO		db		0.000
42	FUNCTION3 PFK	37.20	9.815e3					0.9	NO		dd		0.000
43	FUNCTION3 PFK	37.15	5.475e3					0.6	NO		dd		0.000
44	FUNCTION3 PFK	37.11	7.631e3					0.8	NO		bd		0.000
45	FUNCTION3 PFK	37.06	2.709e4					1.4	NO		db		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	40.40	1.889e5					2.4	NO		bb		
2	FUNCTION4 PFK	39.68	1.587e7					5.4	YES		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	43.63	9.422e3					1.5	NO		bb		
2	FUNCTION5 PFK	43.24	1.576e3					0.7	NO		bb		
3	FUNCTION5 PFK	43.00	1.263e4					1.7	NO		bb		
4	FUNCTION5 PFK	45.90	6.371e3					1.4	NO		bb		
5	FUNCTION5 PFK	45.34	1.310e3					0.6	NO		bb		
6	FUNCTION5 PFK	43.79	2.270e3					0.7	NO		bb		

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ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.16	2.360e2					3.4	YES		bb		0.000
2	FUNCTION1 HXCD...	26.52	1.410e2					3.2	YES		db		0.000
3	FUNCTION1 HXCD...	26.41	1.480e2					3.3	YES		bd		0.000
4	FUNCTION1 HXCD...	26.16	8.707e1					1.9	NO		db		0.000
5	FUNCTION1 HXCD...	26.10	7.515e1					2.1	NO		bd		0.000
6	FUNCTION1 HXCD...	25.79	8.971e1					2.2	NO		bb		0.000
7	FUNCTION1 HXCD...	25.63	1.156e2					2.5	NO		bb		0.000
8	FUNCTION1 HXCD...	24.52	1.119e2					2.7	NO		db		0.000
9	FUNCTION1 HXCD...	24.43	1.844e2					3.5	YES		bd		0.000
10	FUNCTION1 HXCD...	23.75	1.728e2					2.1	NO		bb		0.000
11	FUNCTION1 HXCD...	21.31	8.251e1					1.7	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.95	1.010e2					1.7	NO		bb		0.000
2	FUNCTION2 HPCD...	31.18	4.333e2					5.6	YES		bb		0.000
3	FUNCTION2 HPCD...	30.70	7.244e1					2.1	NO		bb		0.000
4	FUNCTION2 HPCD...	30.31	7.131e1					1.6	NO		bb		0.000
5	FUNCTION2 HPCD...	29.76	7.422e1					1.6	NO		bb		0.000
6	FUNCTION2 HPCD...	29.04	7.307e1					1.9	NO		bb		0.000
7	FUNCTION2 HPCD...	28.55	7.813e1					2.1	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.51	1.400e2					5.4	YES		bb		0.000
2	FUNCTION3 OCDPE	35.04	1.909e2					5.6	YES		db		0.000
3	FUNCTION3 OCDPE	34.94	2.251e2					6.4	YES		bd		0.000

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ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	40.60	9.374e1					3.5	YES		bb		0.000
2	FUNCTION4 NCDPE	40.25	1.903e2					3.2	YES		bb		0.000
3	FUNCTION4 NCDPE	39.09	7.390e1					1.9	NO		bb		0.000
4	FUNCTION4 NCDPE	38.97	7.768e1					2.4	NO		bb		0.000
5	FUNCTION4 NCDPE	41.21	8.604e1					3.3	YES		bb		0.000
6	FUNCTION4 NCDPE	41.01	1.089e2					3.1	YES		bb		0.000
7	FUNCTION4 NCDPE	40.86	1.930e2					2.9	NO		db		0.000
8	FUNCTION4 NCDPE	40.74	9.692e1					2.6	NO		bd		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	44.90	9.291e1					2.4	NO		bb		0.000

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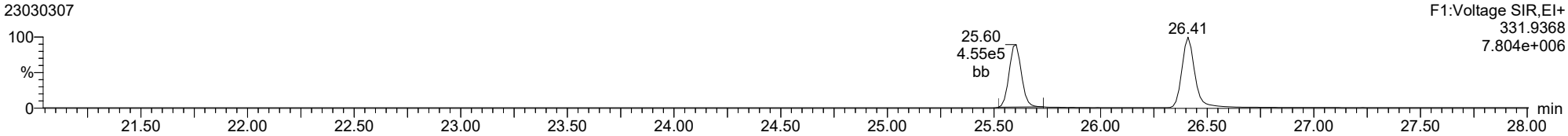
ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD



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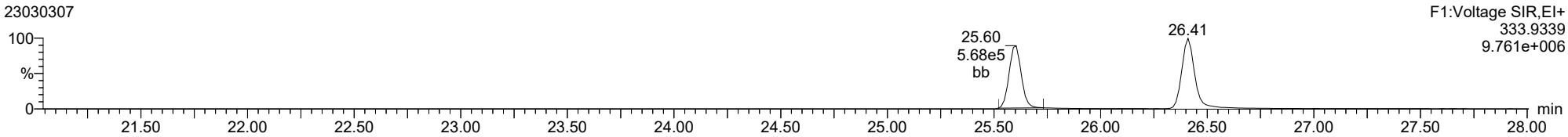

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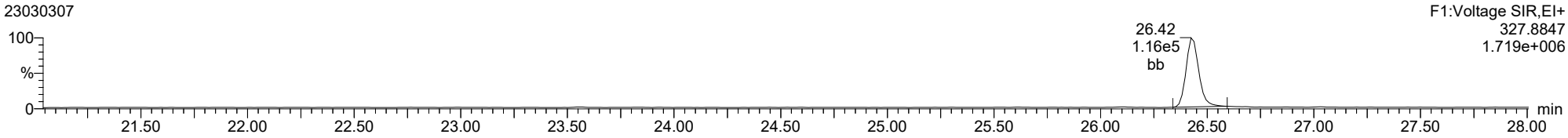

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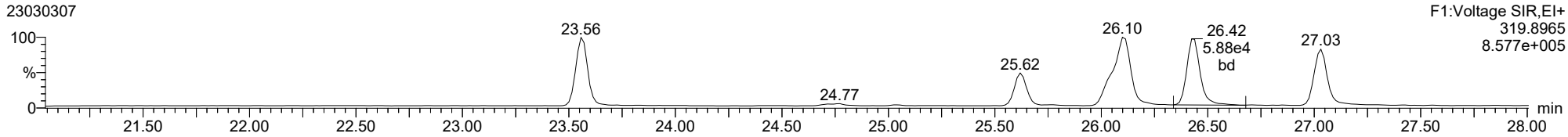
2378-TCDD



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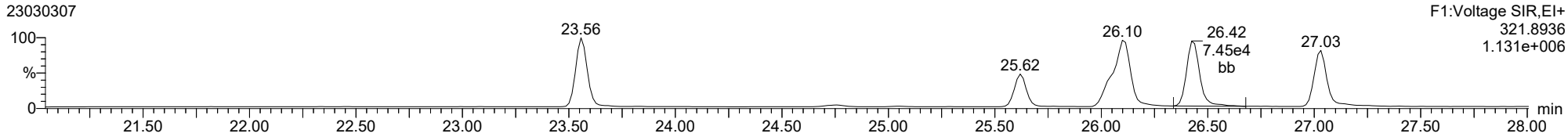

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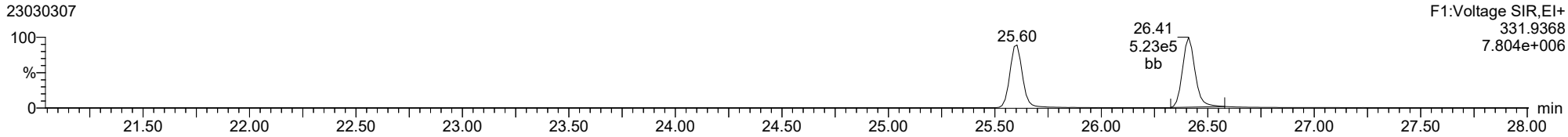

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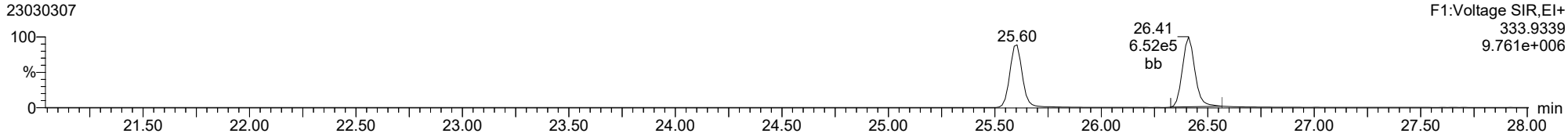

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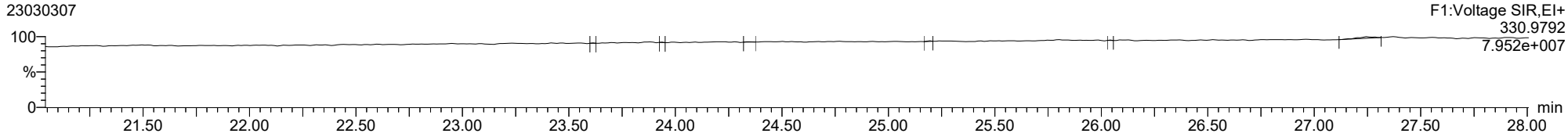

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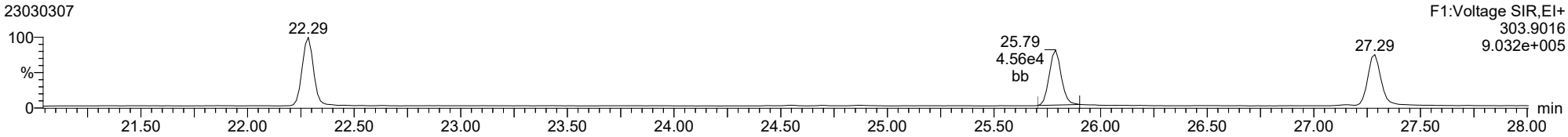
2378-TCDF



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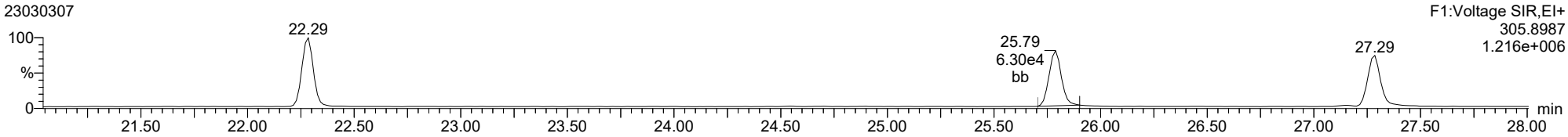
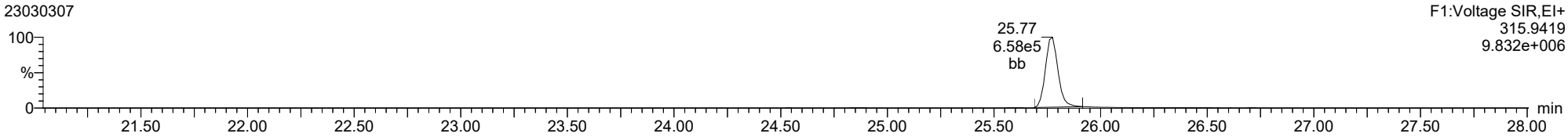
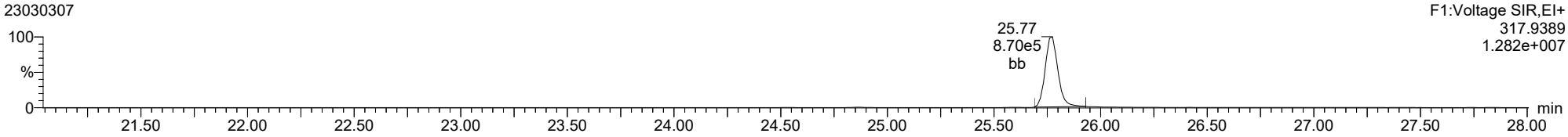


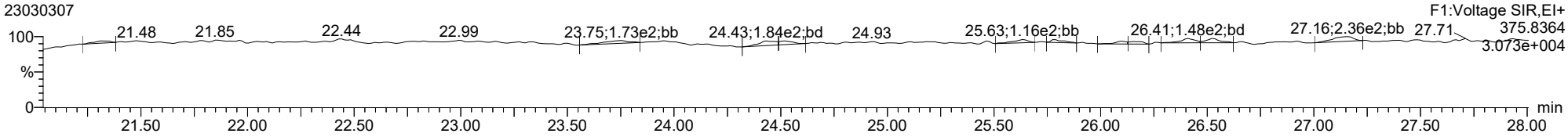
13C-2378-TCDF



13C-2378-TCDF



FUNCTION1 HXCDPE



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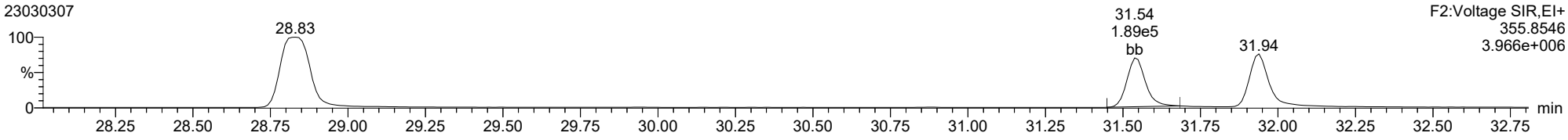
12378-PeCDD



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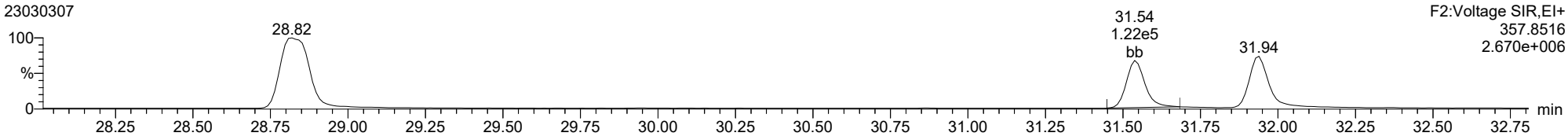

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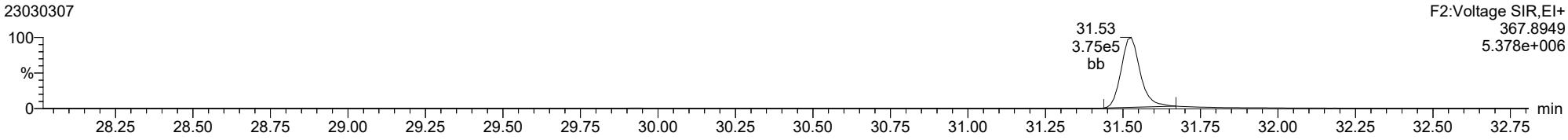

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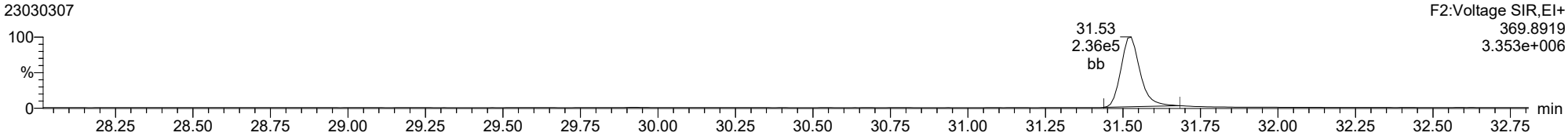
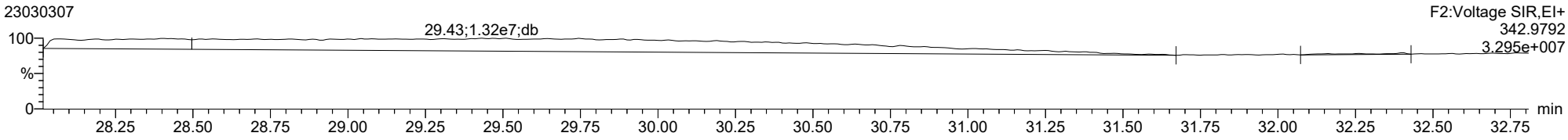


FUNCTION2 PFK



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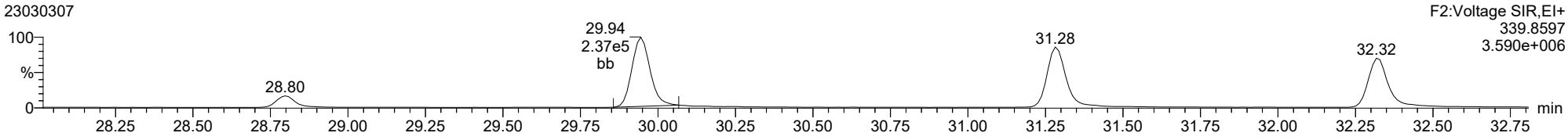
12378-PeCDF



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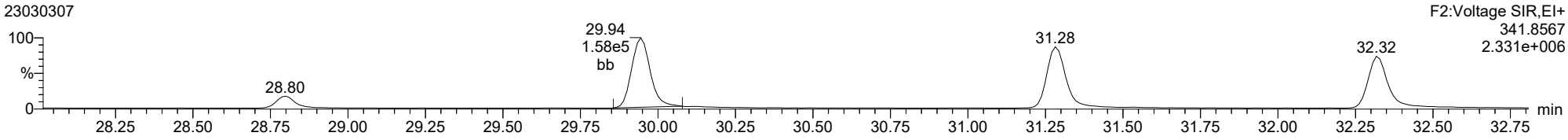

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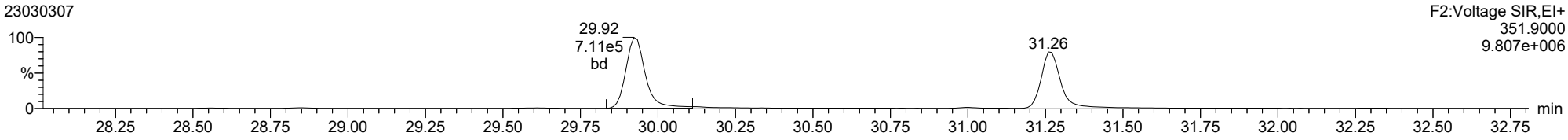

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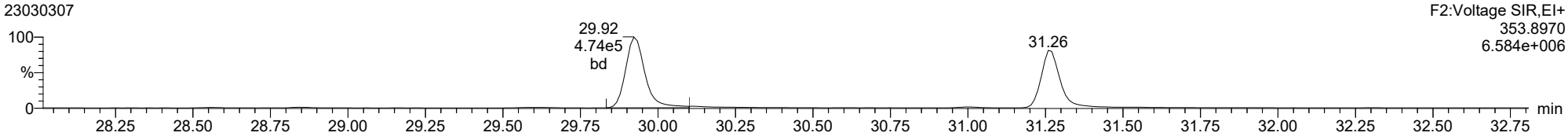

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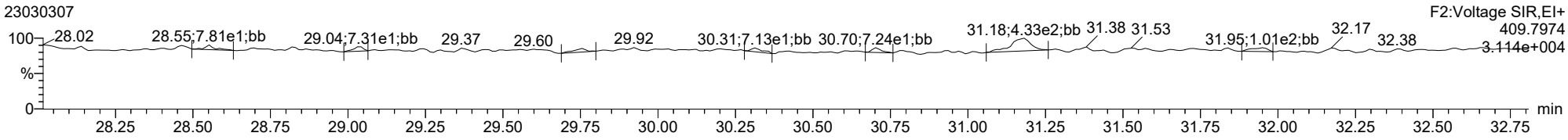

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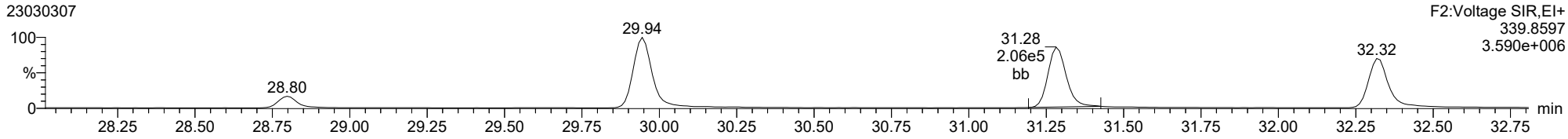
23478-PeCDF



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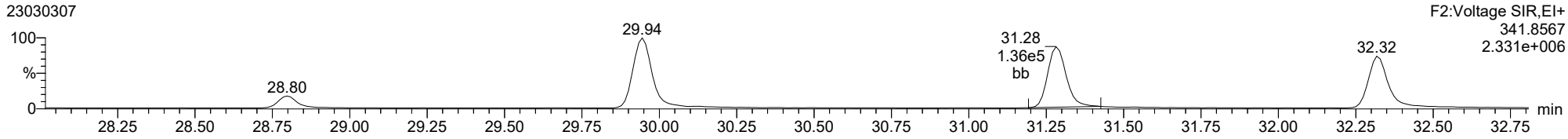

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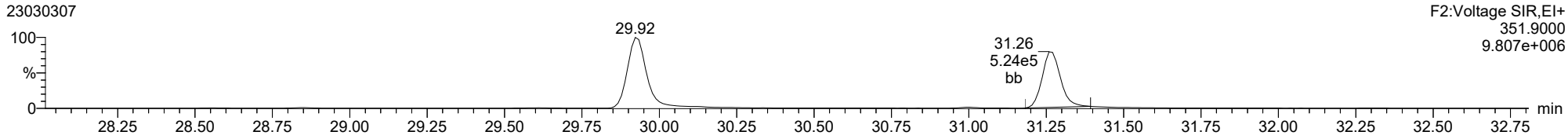

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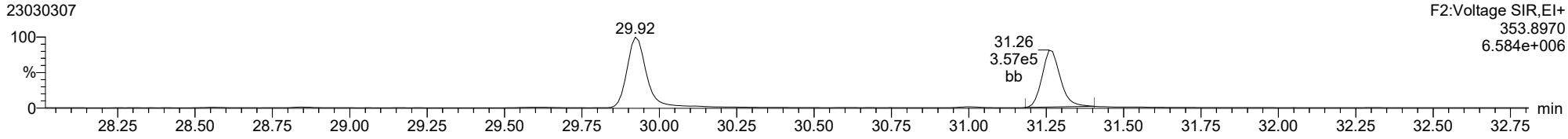

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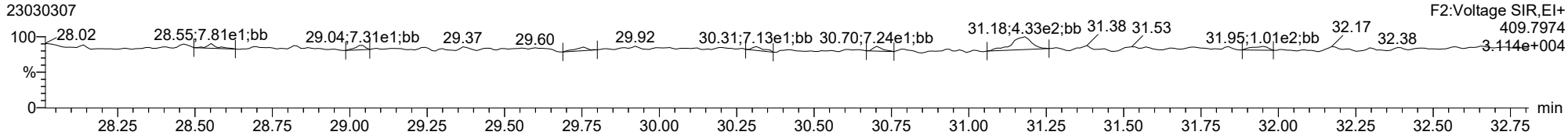

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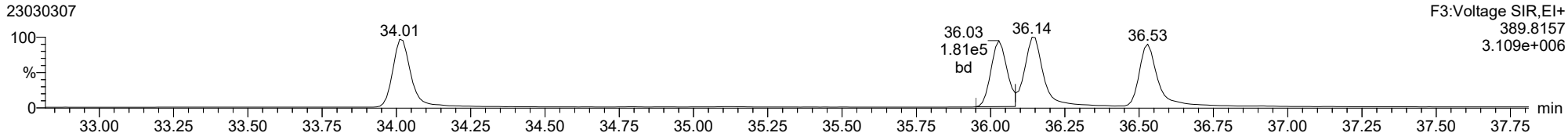

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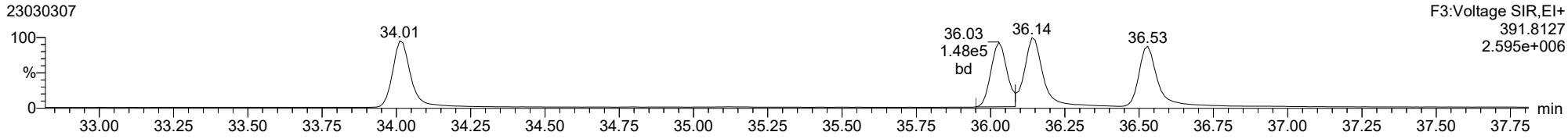

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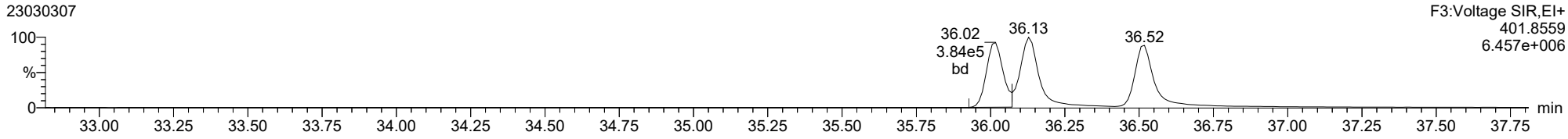

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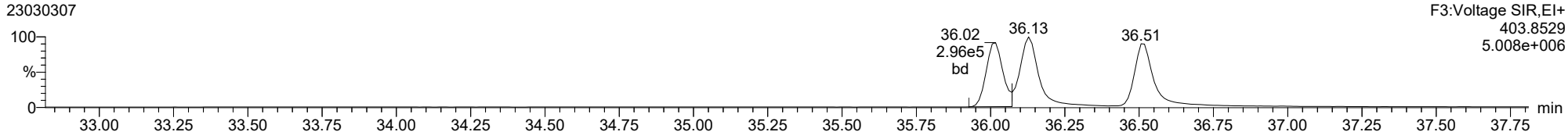
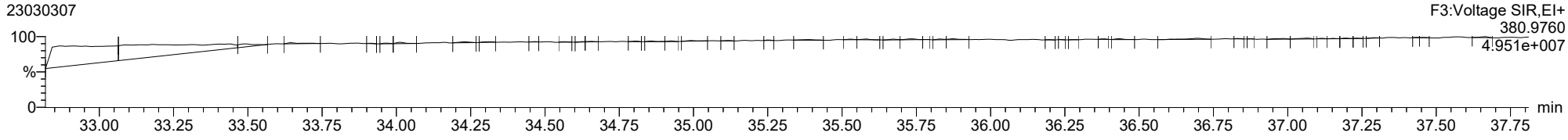


FUNCTION3 PFK



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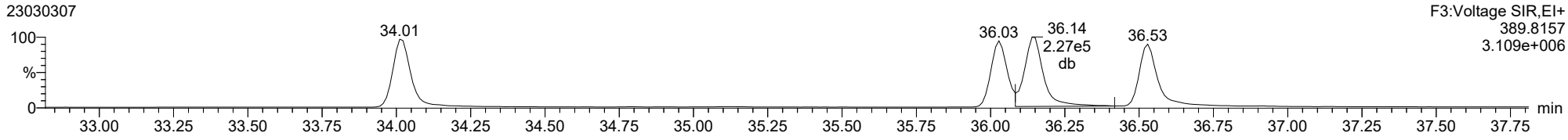

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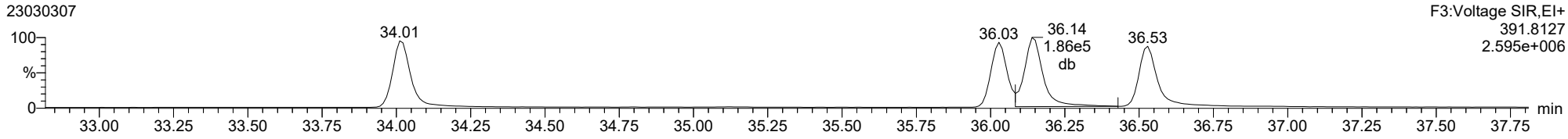

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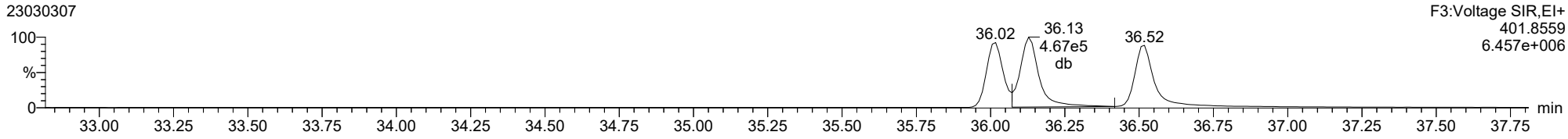

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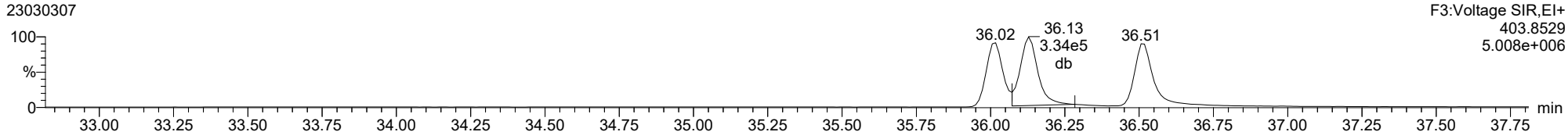

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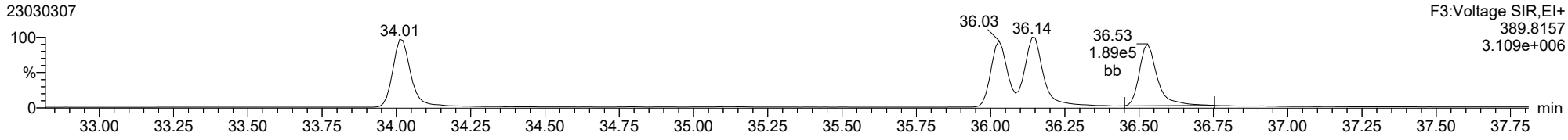

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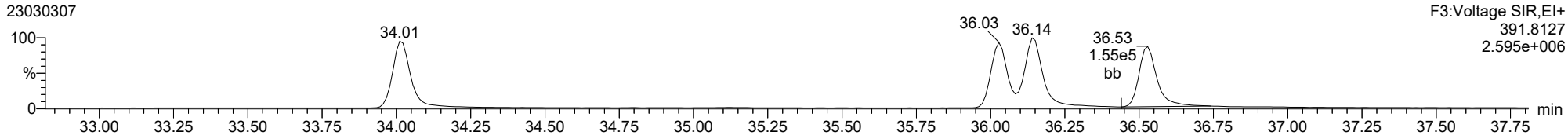

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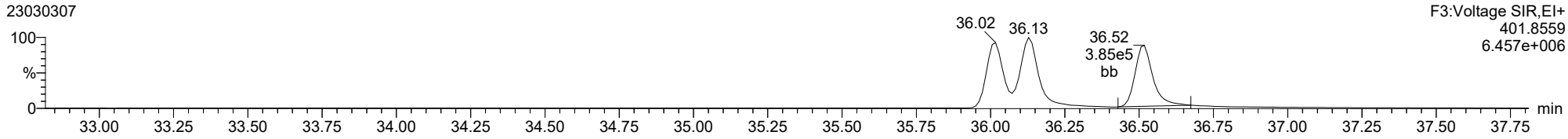

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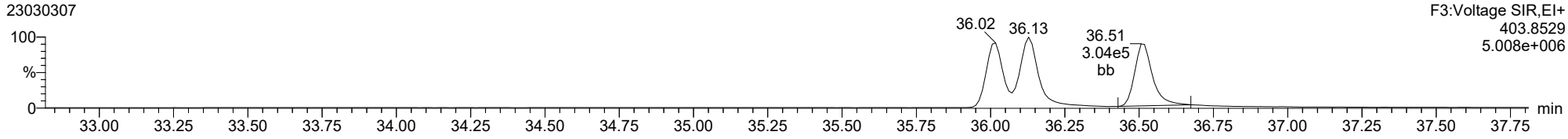

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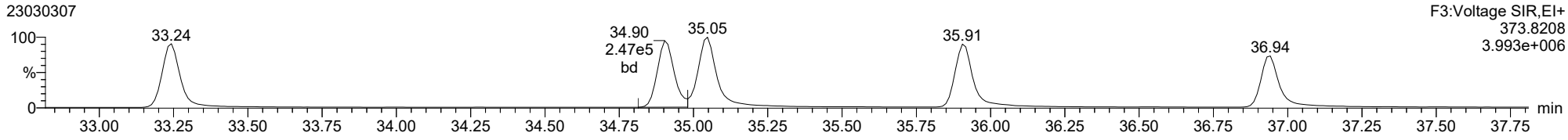

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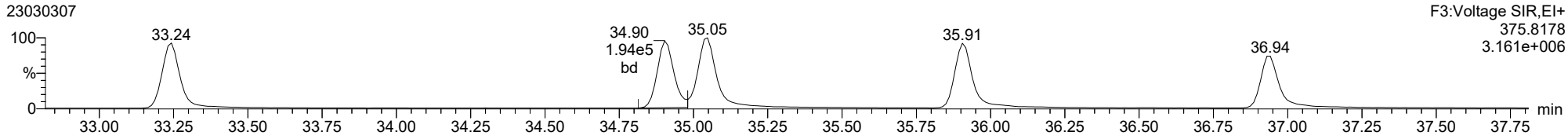

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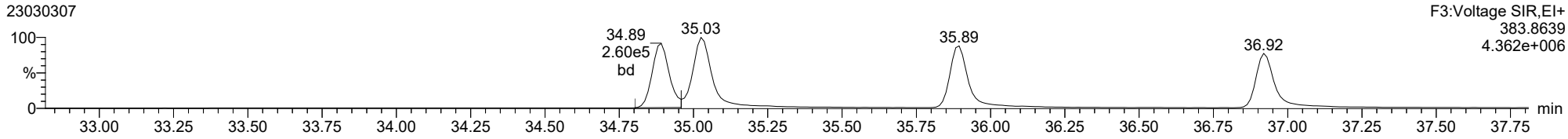

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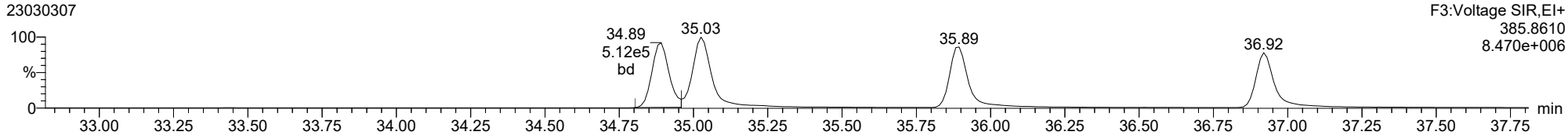
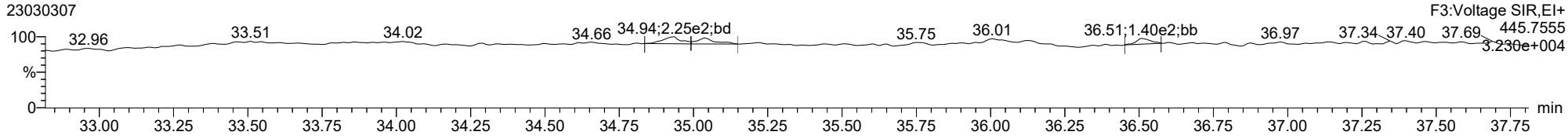


FUNCTION3 OCDPE



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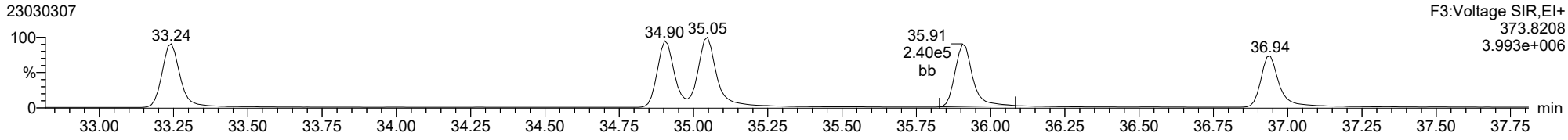
234678-HxCDF



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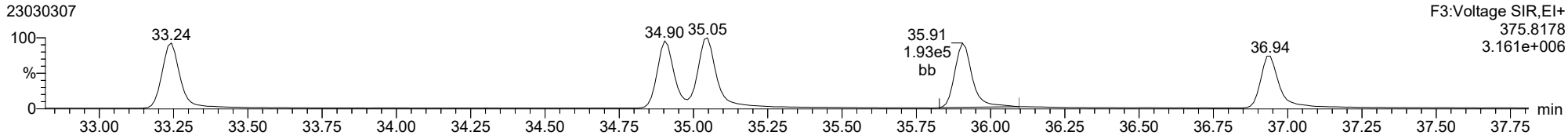

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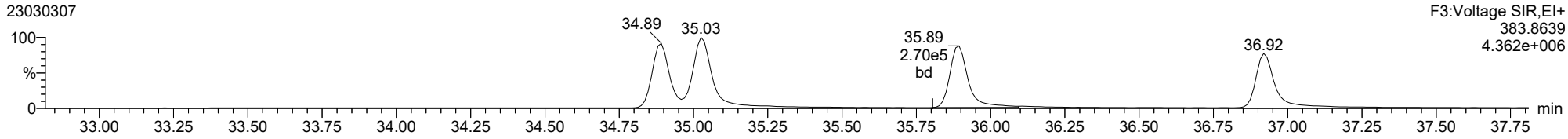

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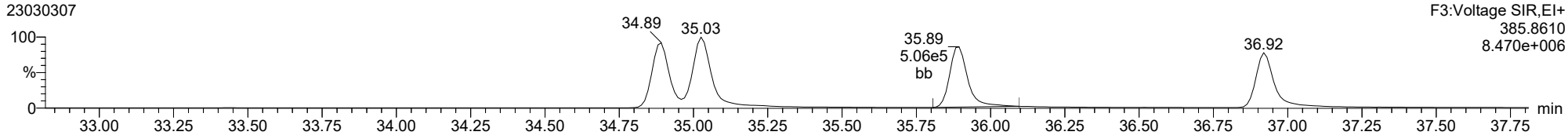
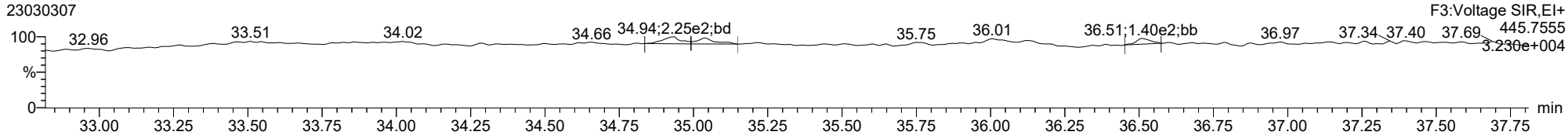


FUNCTION3 OCDPE



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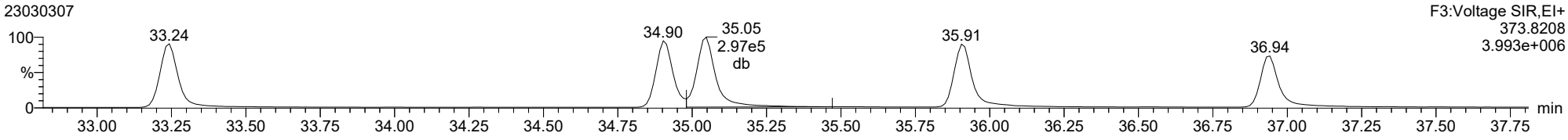

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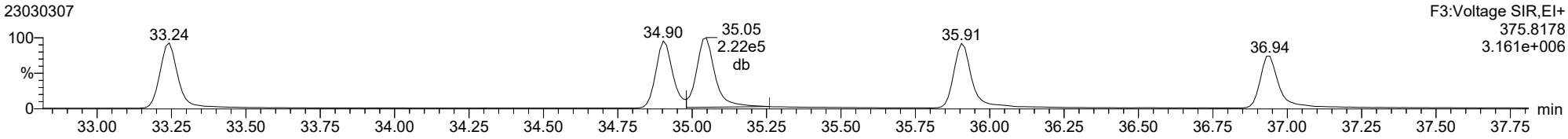

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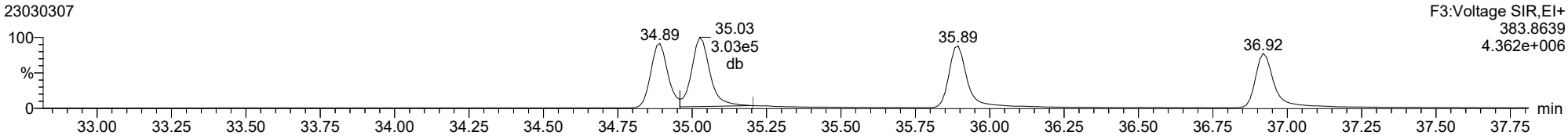

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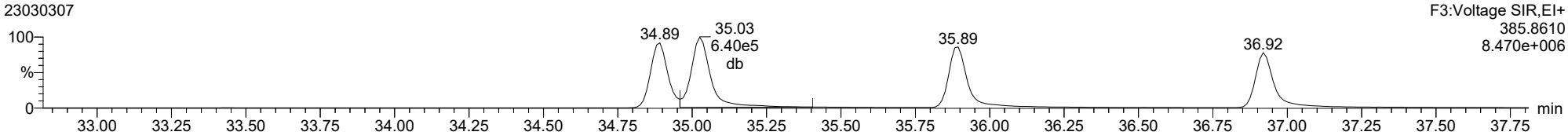
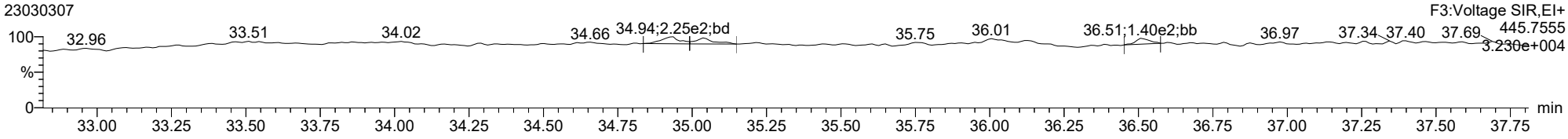


FUNCTION3 OCDPE



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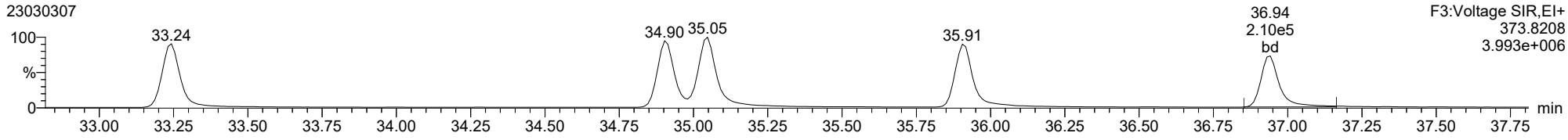

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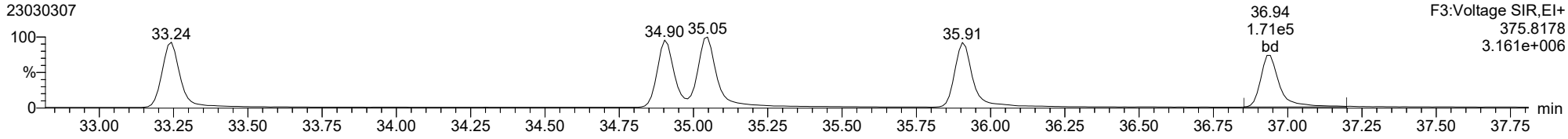

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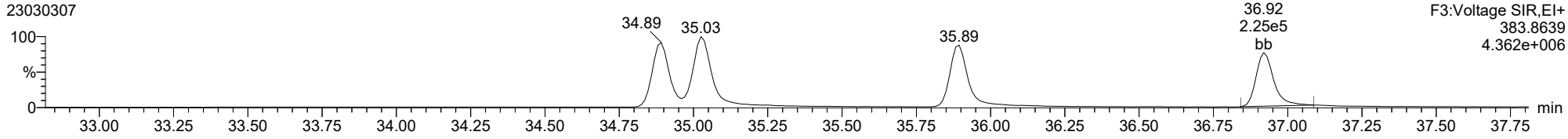

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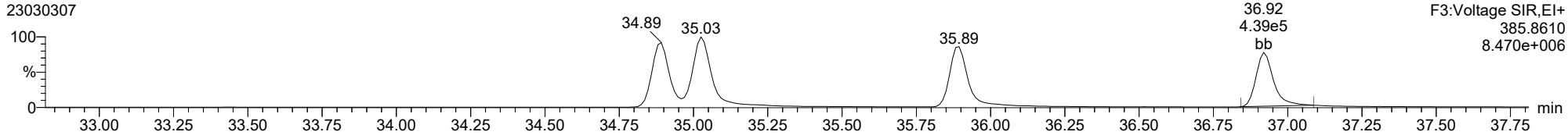
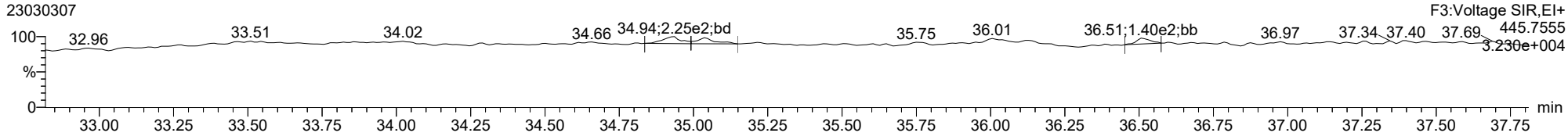


FUNCTION3 OCDPE



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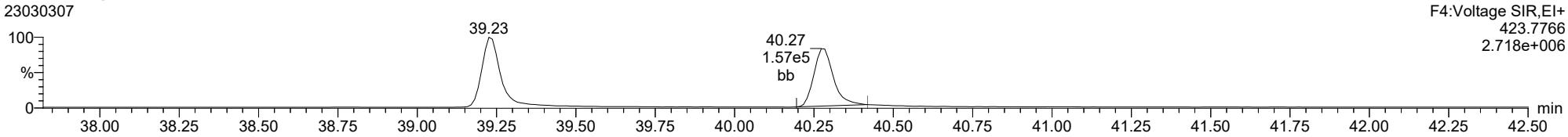

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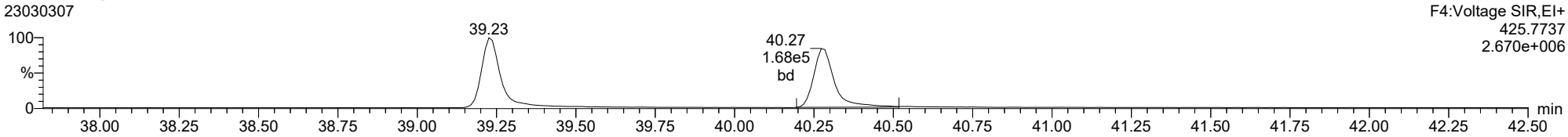

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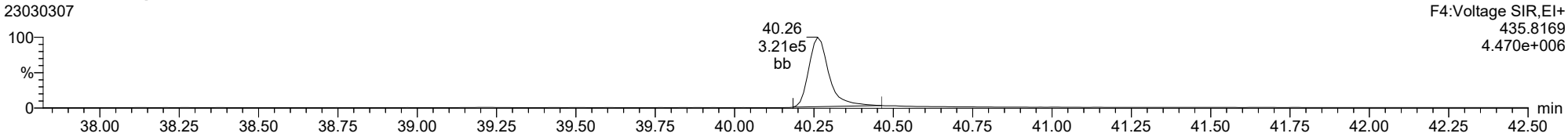

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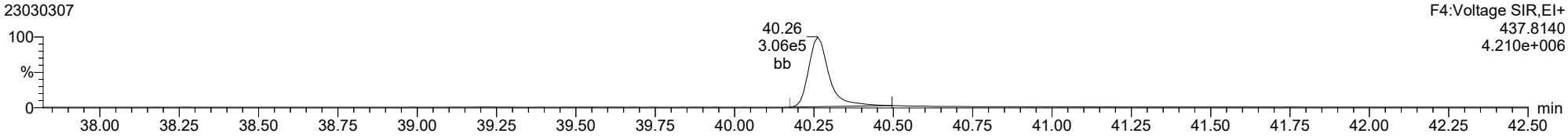
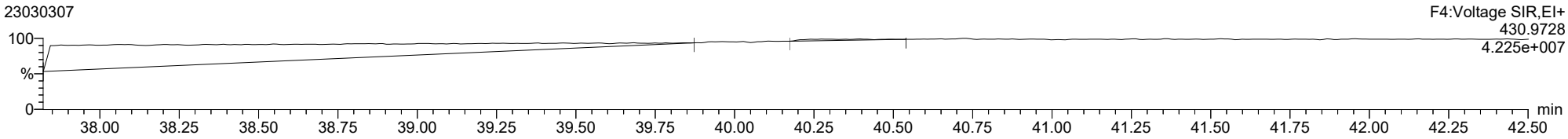


FUNCTION4 PFK



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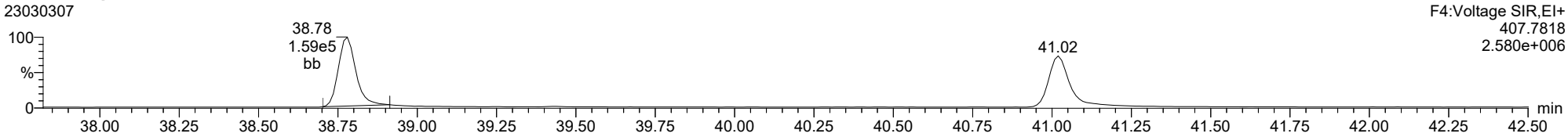

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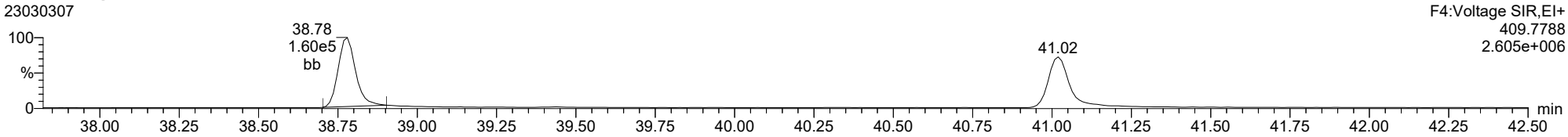

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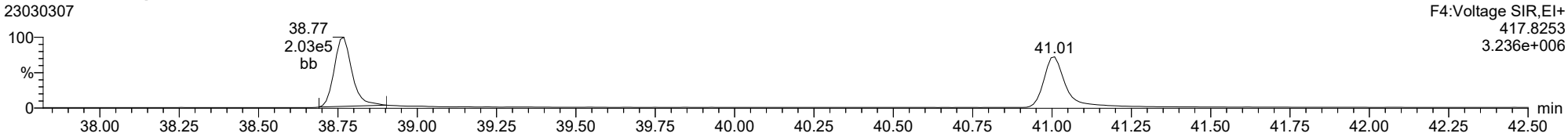

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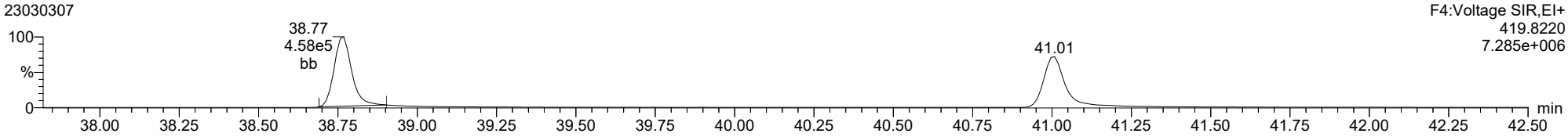

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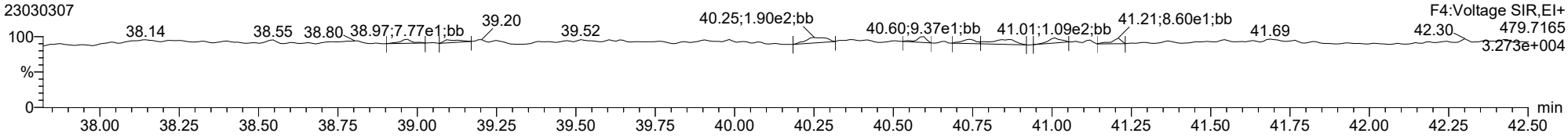

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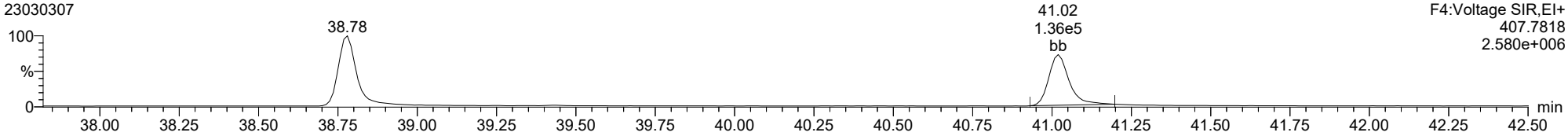

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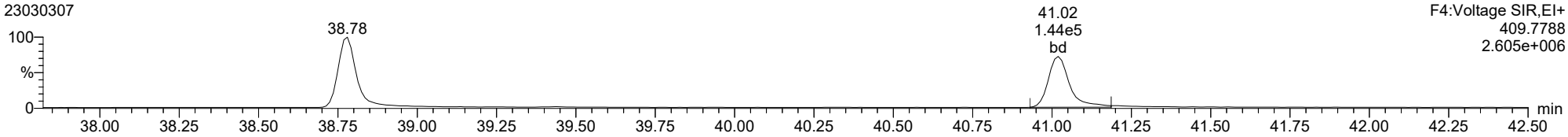

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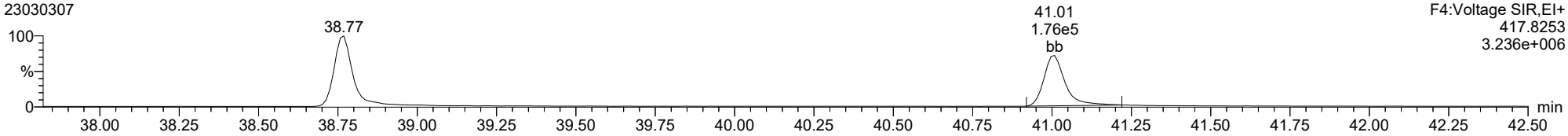

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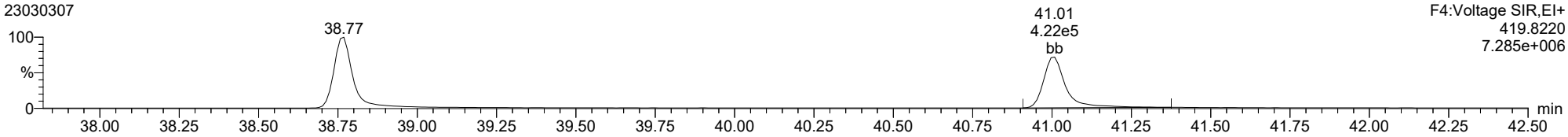
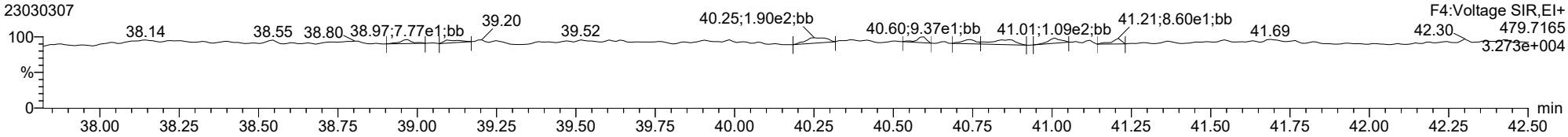


FUNCTION4 NCDPE



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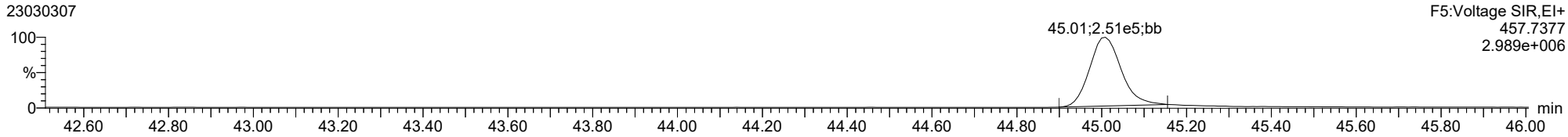

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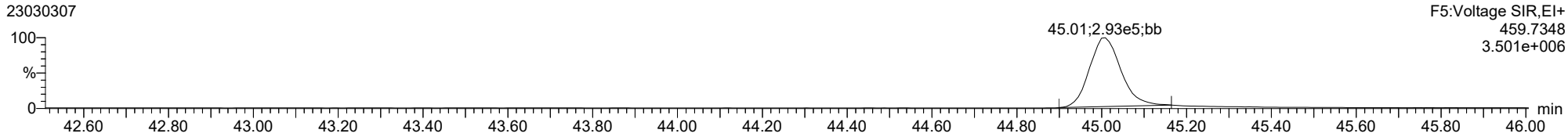

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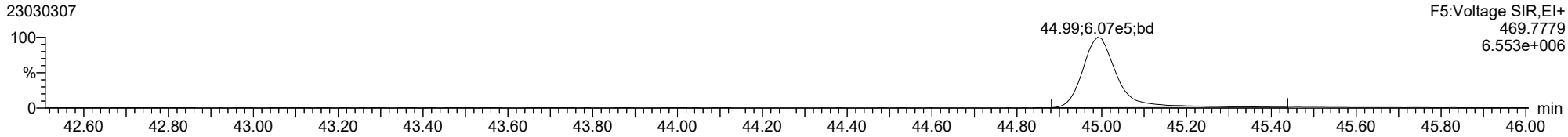

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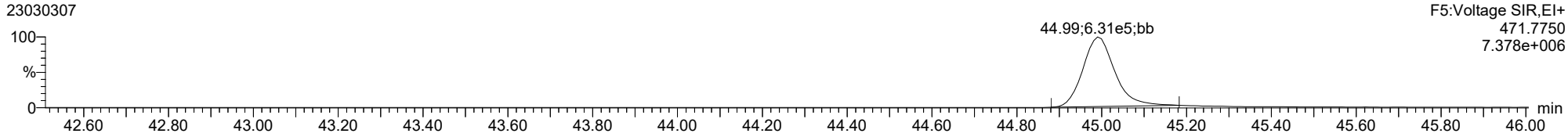
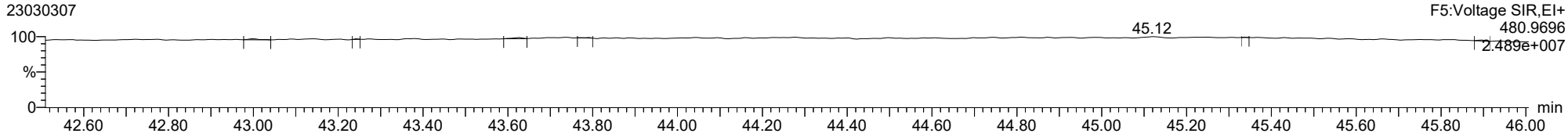


FUNCTION5 PFK



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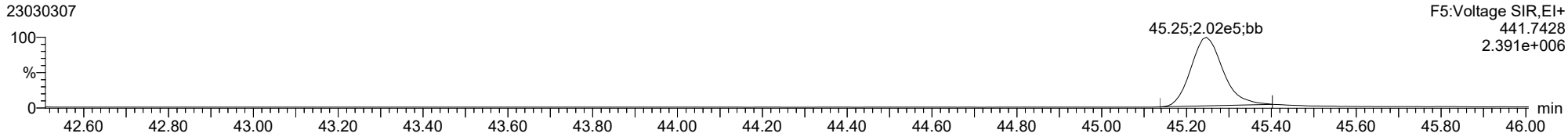

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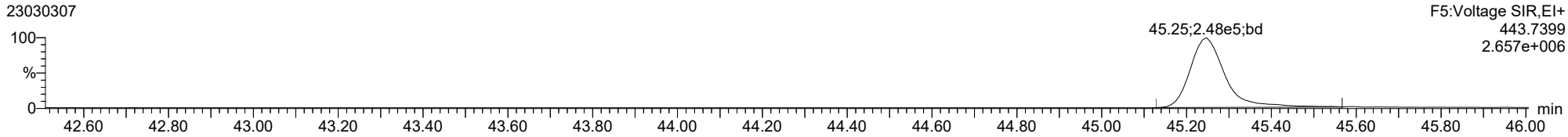

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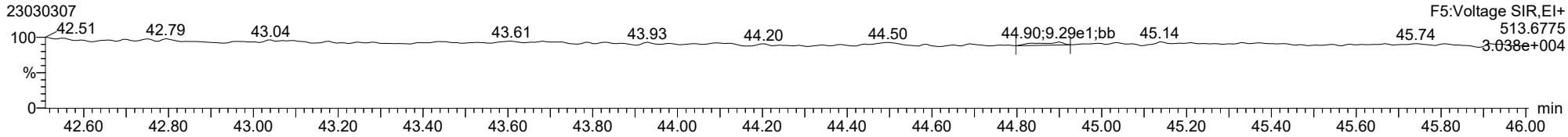

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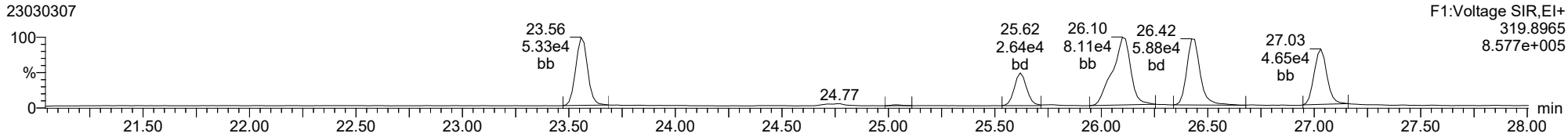
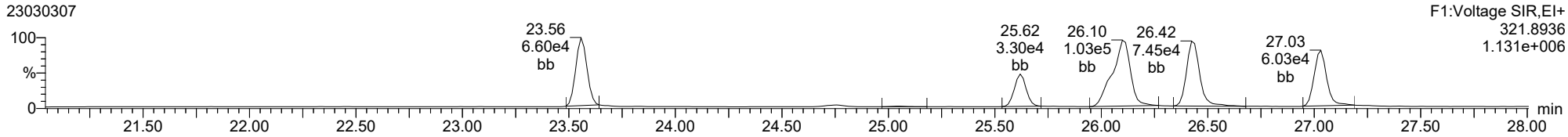
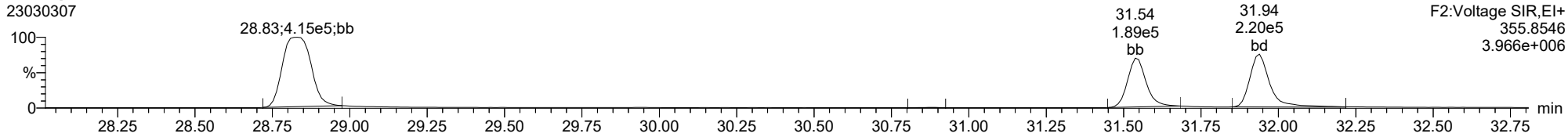
Total-tetradioxins



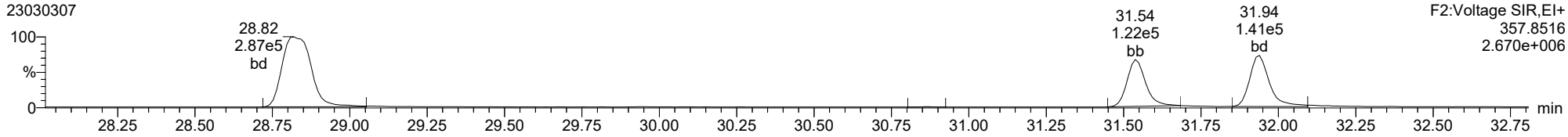
Total-tetradioxins



Total-pentadioxins



Total-pentadioxins



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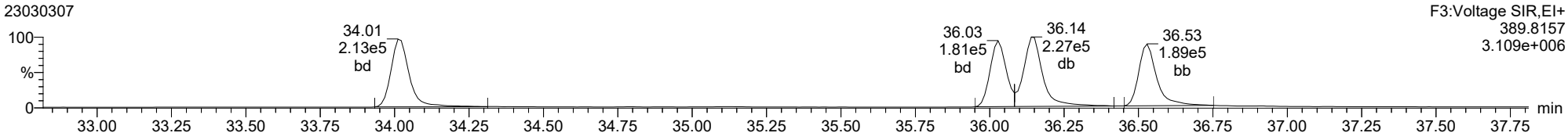
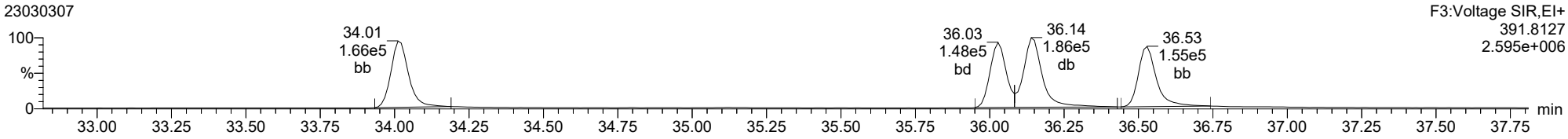
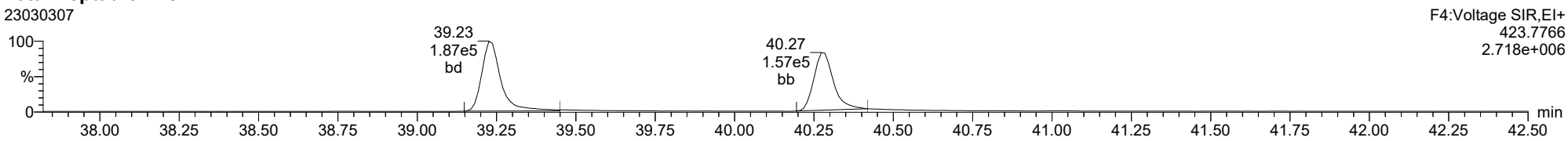


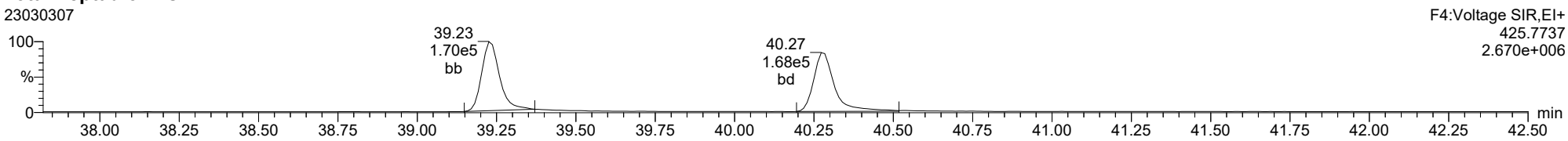
Total-hexadioxins



Total-heptadioxins



Total-heptadioxins



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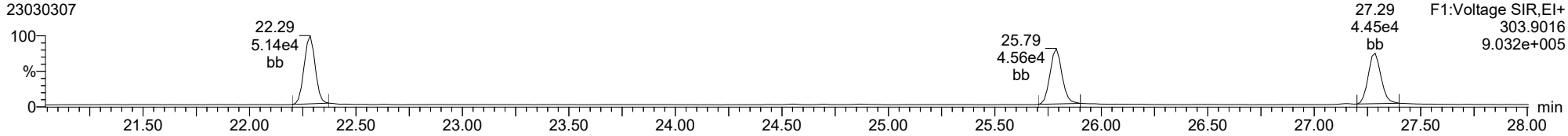
Total-tetrafurans



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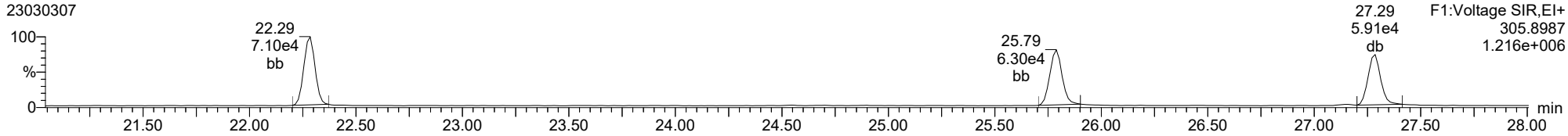

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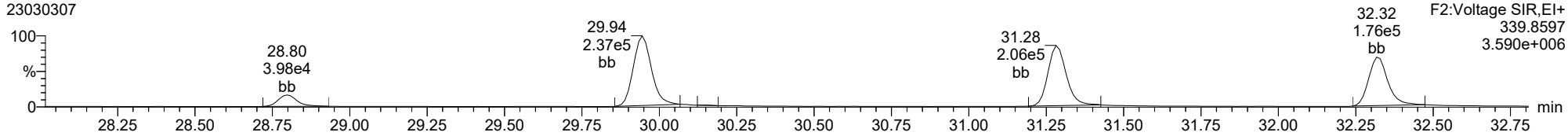

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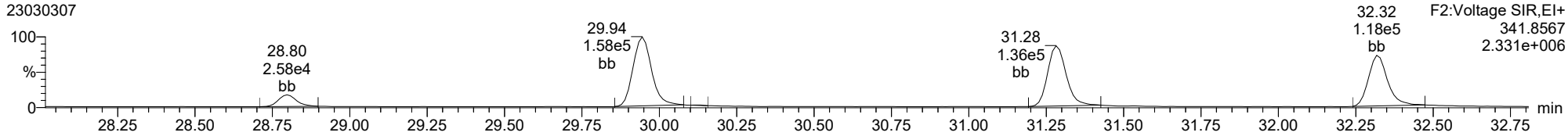

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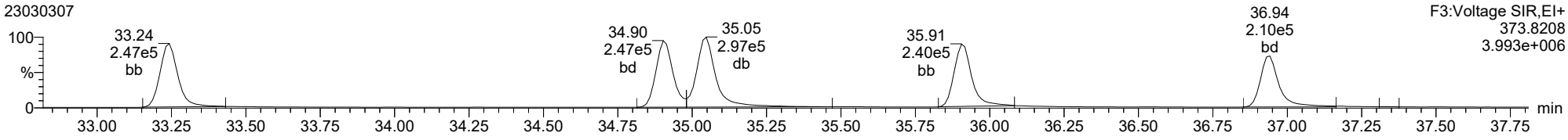

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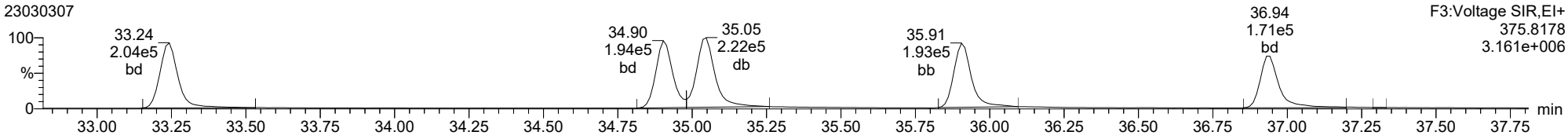

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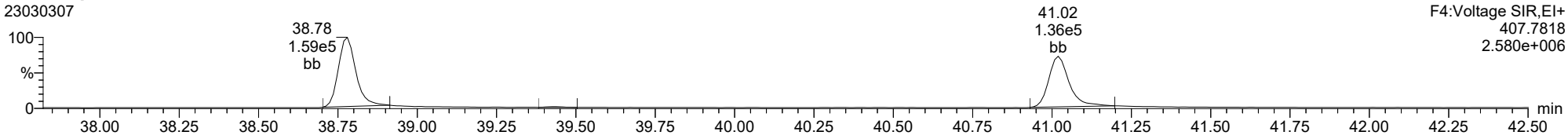
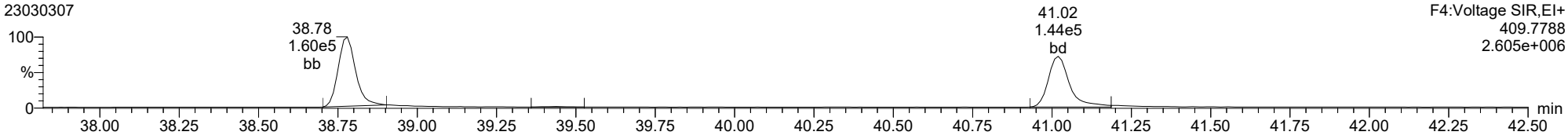


Total-heptafurans



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Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
Printed: Monday, March 06, 2023 11:34:51 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
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ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.788	1.001	2.145e5	2.910e5	0.702	0.737	0.770	1085	2356	3.19e6	4.36e6	2939.3	1849.8	NO	bb	bb	41.038
12378-PeCDF	29.944	1.000	1.256e6	8.416e5	0.679	1.492	1.550	4273	3650	1.86e7	1.25e7	4360.5	3425.9	NO	bb	bb	202.935
23478-PeCDF	31.292	1.001	1.346e6	8.943e5	0.786	1.505	1.550	4273	3650	2.02e7	1.34e7	4738.5	3680.0	NO	bb	bb	201.175
123478-HxCDF	34.913	1.001	1.546e6	1.218e6	1.166	1.269	1.240	1919	2508	2.36e7	1.86e7	12323.4	7421.9	NO	bd	bd	197.711
234678-HxCDF	35.916	1.001	1.547e6	1.307e6	1.140	1.184	1.240	1919	2508	2.33e7	1.85e7	12125.4	7387.3	NO	bb	bd	210.207
123678-HxCDF	35.047	1.000	1.740e6	1.369e6	1.091	1.271	1.240	1919	2508	2.57e7	2.04e7	13394.0	8153.6	NO	db	db	189.797
123789-HxCDF	36.941	1.000	1.209e6	1.036e6	1.137	1.167	1.240	1919	2508	1.81e7	1.44e7	9441.6	5749.5	NO	bb	bd	200.361
1234678-HpCDF	38.779	1.000	8.720e5	8.418e5	1.003	1.036	1.050	3326	3780	1.44e7	1.42e7	4339.3	3745.4	NO	bb	bb	204.650
1234789-HpCDF	41.019	1.000	7.221e5	7.262e5	0.953	0.994	1.050	3326	3780	1.01e7	1.02e7	3041.3	2689.4	NO	bb	bb	208.465
OCDF	45.255	1.006	1.195e6	1.333e6	0.778	0.897	0.890	1809	2070	1.43e7	1.59e7	7923.8	7701.9	NO	bb	bb	419.788
2378-TCDD	26.438	1.001	2.573e5	3.218e5	1.149	0.799	0.770	1559	1107	3.81e6	4.84e6	2446.0	4371.1	NO	bb	bb	39.968
12378-PeCDD	31.549	1.001	1.294e6	8.446e5	1.022	1.532	1.550	1566	1736	1.89e7	1.24e7	12077.0	7164.9	NO	bb	bb	199.637
123478-HxCDD	36.027	1.000	1.162e6	9.482e5	0.996	1.225	1.240	1816	1276	1.93e7	1.57e7	10622.2	12327.7	NO	bd	bd	198.133
123678-HxCDD	36.150	1.001	1.363e6	1.125e6	1.001	1.212	1.240	1816	1276	1.97e7	1.61e7	10823.8	12618.8	NO	db	db	204.224
123789-HxCDD	36.528	1.011	1.168e6	9.477e5	0.907	1.232	1.240	1816	1276	1.77e7	1.44e7	9764.9	11291.0	NO	bb	bb	203.974
1234678-HpCDD	40.283	1.001	8.284e5	8.038e5	1.039	1.031	1.050	3177	2938	1.22e7	1.19e7	3841.2	4046.8	NO	bb	bb	198.376
OCDD	45.008	1.000	1.293e6	1.512e6	0.920	0.855	0.890	1475	2373	1.59e7	1.85e7	10744.0	7810.6	NO	bb	bb	394.016
13C-2378-TCDF	25.774	1.007	7.645e5	9.914e5	1.620	0.771	0.770	1843	2282	1.15e7	1.49e7	6238.3	6526.6	NO	bb	bb	101.535
13C-12378-PeCDF	29.933	1.169	9.119e5	6.098e5	1.240	1.495	1.550	3738	4574	1.28e7	8.50e6	3418.3	1857.5	NO	bd	bd	114.934
13C-23478-PeCDF	31.270	1.221	8.522e5	5.645e5	1.118	1.510	1.550	3738	4574	1.28e7	8.47e6	3423.2	1851.3	NO	bb	bb	118.746
13C-123478-HxCDF	34.891	0.956	4.043e5	7.946e5	1.168	0.509	0.510	3379	2646	6.26e6	1.23e7	1851.5	4643.3	NO	bd	bd	93.689
13C-123678-HxCDF	35.036	0.959	5.122e5	9.895e5	1.386	0.518	0.510	3379	2646	6.72e6	1.32e7	1988.7	4975.1	NO	db	dd	98.879
13C-234678-HxCDF	35.894	0.983	4.066e5	7.845e5	1.129	0.518	0.510	3379	2646	6.03e6	1.18e7	1785.1	4452.3	NO	bb	bb	96.294
13C-123789-HxCDF	36.930	1.011	3.312e5	6.542e5	0.932	0.506	0.510	3379	2646	4.85e6	9.52e6	1434.9	3598.2	NO	bb	bb	96.556
13C-1234678-HpCDF	38.768	1.062	2.524e5	5.825e5	0.895	0.433	0.440	1935	3511	4.16e6	9.49e6	2148.5	2703.4	NO	bb	bb	85.151
13C-1234789-HpCDF	41.007	1.123	2.205e5	5.084e5	0.770	0.434	0.440	1935	3511	3.02e6	6.92e6	1559.8	1971.4	NO	bb	bb	86.451
13C-1234-TCDD	25.605	0.000	4.743e5	5.931e5	1.000	0.800	0.770	2271	1813	7.33e6	9.12e6	3228.4	5028.5	NO	bb	bb	100.000
13C-2378-TCDD	26.410	1.031	5.640e5	6.974e5	1.152	0.809	0.770	2271	1813	8.09e6	1.01e7	3563.4	5571.0	NO	bb	bb	102.553
13C-12378-PeCDD	31.526	1.231	6.480e5	4.003e5	0.829	1.619	1.550	1212	1529	9.47e6	5.85e6	7814.9	3827.1	NO	bb	bb	118.505
13C-123478-HxCDD	36.016	0.986	6.052e5	4.646e5	0.995	1.303	1.240	1807	1475	9.78e6	7.54e6	5412.5	5108.2	NO	bd	bd	98.154
13C-123678-HxCDD	36.127	0.989	6.753e5	5.418e5	1.157	1.246	1.240	1807	1475	1.01e7	8.01e6	5594.1	5426.8	NO	db	db	96.059
13C-1234678-HpCDD	40.261	1.102	3.968e5	3.950e5	0.840	1.005	1.050	2357	2248	5.68e6	5.37e6	2408.3	2387.8	NO	bb	bb	86.051
13C-OCDD	44.999	1.232	7.332e5	8.149e5	0.767	0.900	0.890	1459	1173	8.67e6	9.61e6	5943.8	8191.6	NO	bb	bb	184.151
13C-123789-HxCDD	36.518	0.000	6.173e5	4.781e5	1.000	1.291	1.240	1807	1475	9.34e6	7.24e6	5171.1	4908.4	NO	bb	bb	100.000
37CL-2378-TCDD	26.438	1.033	5.280e5		1.288			2576		7.74e6		3003.1			bb		38.410

Dataset: T:\Autospec\Processed Data Batch\230303ICIH.qld
Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
Printed: Monday, March 06, 2023 11:34:51 Pacific Standard Time

ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					0.802		0.770	1085	2356								
1289-TCDF					0.678		0.770	1085	2356								
13468-PECDF					1.246		1.550	728	1112								
12389-PECDF					0.496		1.550	4273	3650								
123468-HXCDF					1.169		1.240	1919	2508								
1368-TCDD					1.015		0.770	1559	1107								
1289-TCDD					0.909		0.770	1559	1107								
12479-PECDD					2.301		1.550	1566	1736								
12389-PECDD					1.184		1.550	1566	1736								
124679-HXCDD					1.115		1.240	1816	1276								
1234679-HPCDD					1.137		1.050	3177	2938								
Total-tetrafurans			2.178e5		0.727			1085		3.24e6							41.692
Total-penta1			0.000e0					728		0.00e0							
Total-pentafurans			2.604e6		0.654			4273		3.89e7							404.382
Total-hexafurans			6.043e6		1.141			1919		9.07e7							798.266
Total-heptafurans			1.594e6		0.978			3326		2.45e7							413.115
Total-Furans			1.165e7		0.922			1085		1.72e8							2077.243
Total-tetradioxins			2.634e5		1.024			1559		3.88e6							41.026
Total-pentadioxins			1.295e6		1.502			1566		1.89e7							199.743
Total-hexadioxins			3.693e6		1.005			1816		5.67e7							606.331
Total-heptadioxins			8.286e5		1.088			3177		1.22e7							198.425
Total-Dioxins			7.373e6		1.130			1559		1.08e8							1439.540
Total-TEQ			1.903e7					1559		2.79e8							3516.783
FUNCTION1 PFK			2.654e6					566854		2.19e6							
FUNCTION2 PFK			2.398e5					242860		6.75e6							0.000
FUNCTION3 PFK			5.441e7					394639		2.11e7							0.000
FUNCTION4 PFK			0.000e0					306708		0.00e0							
FUNCTION5 PFK			3.395e4					230570		1.65e6							
FUNCTION1 HXCD...			4.934e2					625		6.74e3							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			1.574e3					915		2.35e4							0.000
FUNCTION3 OCDPE			8.696e2					844		1.47e4							0.000
FUNCTION4 NCDPE			3.767e2					925		5.85e3							0.000
FUNCTION5 DCDPE			0.000e0					629		0.00e0							

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

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TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.79	2.145e5	2.910e5	0.702	0.74	0.77	2939.3	YES	NO	bb	bb	41.038
2	Total-tetrafurans	24.88	1.531e3	2.327e3	0.727	0.66	0.77	20.3	YES	NO	bb	bb	0.302
3	Total-tetrafurans	24.56	1.778e3	2.714e3	0.727	0.66	0.77	29.5	YES	NO	bb	bb	0.352

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentafurans	31.01	1.644e3	9.764e2	0.654	1.68	1.55	5.6	YES	NO	db	bd	0.273
2	12378-PeCDF	29.94	1.256e6	8.416e5	0.679	1.49	1.55	4360.5	YES	NO	bb	bb	202.935
3	23478-PeCDF	31.29	1.346e6	8.943e5	0.786	1.51	1.55	4738.5	YES	NO	bb	bb	201.175

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.94	1.209e6	1.036e6	1.137	1.17	1.24	9441.6	YES	NO	bb	bd	200.361
2	234678-HxCDF	35.92	1.547e6	1.307e6	1.140	1.18	1.24	12125.4	YES	NO	bb	bd	210.207
3	Total-hexafurans	35.77	1.562e2	1.389e2	1.141	1.12	1.24	3.4	NO	NO	bb	bb	0.021
4	123678-HxCDF	35.05	1.740e6	1.369e6	1.091	1.27	1.24	13394.0	YES	NO	db	db	189.797
5	123478-HxCDF	34.91	1.546e6	1.218e6	1.166	1.27	1.24	12323.4	YES	NO	bd	bd	197.711
6	Total-hexafurans	34.76	1.255e3	1.100e3	1.141	1.14	1.24	11.9	YES	NO	bb	bb	0.169

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDF	38.78	8.720e5	8.418e5	1.003	1.04	1.05	4339.3	YES	NO	bb	bb	204.650
2	1234789-HpCDF	41.02	7.221e5	7.262e5	0.953	0.99	1.05	3041.3	YES	NO	bb	bb	208.465

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.79	2.145e5	2.910e5	0.702	0.74	0.77	2939.3	YES	NO	bb	bb	41.038
2	Total-tetrafurans	24.88	1.531e3	2.327e3	0.727	0.66	0.77	20.3	YES	NO	bb	bb	0.302
3	Total-tetrafurans	24.56	1.778e3	2.714e3	0.727	0.66	0.77	29.5	YES	NO	bb	bb	0.352
4	Total-pentafurans	31.01	1.644e3	9.764e2	0.654	1.68	1.55	5.6	YES	NO	db	bd	0.273
5	12378-PeCDF	29.94	1.256e6	8.416e5	0.679	1.49	1.55	4360.5	YES	NO	bb	bb	202.935
6	23478-PeCDF	31.29	1.346e6	8.943e5	0.786	1.51	1.55	4738.5	YES	NO	bb	bb	201.175
7	123789-HxCDF	36.94	1.209e6	1.036e6	1.137	1.17	1.24	9441.6	YES	NO	bb	bd	200.361
8	234678-HxCDF	35.92	1.547e6	1.307e6	1.140	1.18	1.24	12125.4	YES	NO	bb	bd	210.207
9	Total-hexafurans	35.77	1.562e2	1.389e2	1.141	1.12	1.24	3.4	NO	NO	bb	bb	0.021
10	123678-HxCDF	35.05	1.740e6	1.369e6	1.091	1.27	1.24	13394.0	YES	NO	db	db	189.797
11	123478-HxCDF	34.91	1.546e6	1.218e6	1.166	1.27	1.24	12323.4	YES	NO	bd	bd	197.711
12	Total-hexafurans	34.76	1.255e3	1.100e3	1.141	1.14	1.24	11.9	YES	NO	bb	bb	0.169
13	1234678-HpCDF	38.78	8.720e5	8.418e5	1.003	1.04	1.05	4339.3	YES	NO	bb	bb	204.650
14	1234789-HpCDF	41.02	7.221e5	7.262e5	0.953	0.99	1.05	3041.3	YES	NO	bb	bb	208.465
15	OCDF	45.26	1.195e6	1.333e6	0.778	0.90	0.89	7923.8	YES	NO	bb	bb	419.788

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.44	2.573e5	3.218e5	1.149	0.80	0.77	2446.0	YES	NO	bb	bb	39.968
2	Total-tetradioxins	26.06	6.115e3	7.563e3	1.024	0.81	0.77	45.2	YES	NO	bb	bb	1.059

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.55	1.294e6	8.446e5	1.022	1.53	1.55	12077.0	YES	NO	bb	bb	199.637
2	Total-pentadioxins	29.94	9.896e2	6.778e2	1.502	1.46	1.55	7.8	YES	NO	bb	bb	0.106

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.53	1.168e6	9.477e5	0.907	1.23	1.24	9764.9	YES	NO	bb	bb	203.974
2	123678-HxCDD	36.15	1.363e6	1.125e6	1.001	1.21	1.24	10823.8	YES	NO	db	db	204.224
3	123478-HxCDD	36.03	1.162e6	9.482e5	0.996	1.23	1.24	10622.2	YES	NO	bd	bd	198.133

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HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-heptadioxins	40.57	2.148e2	2.026e2	1.088	1.06	1.05	2.3	NO	NO	bb	bb	0.048
2	1234678-HpCDD	40.28	8.284e5	8.038e5	1.039	1.03	1.05	3841.2	YES	NO	bb	bb	198.376

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.44	2.573e5	3.218e5	1.149	0.80	0.77	2446.0	YES	NO	bb	bb	39.968
2	Total-tetradioxins	26.06	6.115e3	7.563e3	1.024	0.81	0.77	45.2	YES	NO	bb	bb	1.059
3	12378-PeCDD	31.55	1.294e6	8.446e5	1.022	1.53	1.55	12077.0	YES	NO	bb	bb	199.637
4	Total-pentadioxins	29.94	9.896e2	6.778e2	1.502	1.46	1.55	7.8	YES	NO	bb	bb	0.106
5	123789-HxCDD	36.53	1.168e6	9.477e5	0.907	1.23	1.24	9764.9	YES	NO	bb	bb	203.974
6	123678-HxCDD	36.15	1.363e6	1.125e6	1.001	1.21	1.24	10823.8	YES	NO	db	db	204.224
7	123478-HxCDD	36.03	1.162e6	9.482e5	0.996	1.23	1.24	10622.2	YES	NO	bd	bd	198.133
8	Total-heptadioxins	40.57	2.148e2	2.026e2	1.088	1.06	1.05	2.3	NO	NO	bb	bb	0.048
9	1234678-HpCDD	40.28	8.284e5	8.038e5	1.039	1.03	1.05	3841.2	YES	NO	bb	bb	198.376
10	OCDD	45.01	1.293e6	1.512e6	0.920	0.86	0.89	10744.0	YES	NO	bb	bb	394.016

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.79	2.145e5	2.910e5	0.702	0.74	0.77	2939.3	YES	NO	bb	bb	41.038
2	Total-tetrafurans	24.88	1.531e3	2.327e3	0.727	0.66	0.77	20.3	YES	NO	bb	bb	0.302
3	Total-tetrafurans	24.56	1.778e3	2.714e3	0.727	0.66	0.77	29.5	YES	NO	bb	bb	0.352
4	Total-pentafurans	31.01	1.644e3	9.764e2	0.654	1.68	1.55	5.6	YES	NO	db	bd	0.273
5	12378-PeCDF	29.94	1.256e6	8.416e5	0.679	1.49	1.55	4360.5	YES	NO	bb	bb	202.935
6	23478-PeCDF	31.29	1.346e6	8.943e5	0.786	1.51	1.55	4738.5	YES	NO	bb	bb	201.175
7	123789-HxCDF	36.94	1.209e6	1.036e6	1.137	1.17	1.24	9441.6	YES	NO	bb	bd	200.361
8	234678-HxCDF	35.92	1.547e6	1.307e6	1.140	1.18	1.24	12125.4	YES	NO	bb	bd	210.207
9	Total-hexafurans	35.77	1.562e2	1.389e2	1.141	1.12	1.24	3.4	NO	NO	bb	bb	0.021
10	123678-HxCDF	35.05	1.740e6	1.369e6	1.091	1.27	1.24	13394.0	YES	NO	db	db	189.797
11	123478-HxCDF	34.91	1.546e6	1.218e6	1.166	1.27	1.24	12323.4	YES	NO	bd	bd	197.711
12	Total-hexafurans	34.76	1.255e3	1.100e3	1.141	1.14	1.24	11.9	YES	NO	bb	bb	0.169
13	1234678-HpCDF	38.78	8.720e5	8.418e5	1.003	1.04	1.05	4339.3	YES	NO	bb	bb	204.650
14	1234789-HpCDF	41.02	7.221e5	7.262e5	0.953	0.99	1.05	3041.3	YES	NO	bb	bb	208.465
15	OCDF	45.26	1.195e6	1.333e6	0.778	0.90	0.89	7923.8	YES	NO	bb	bb	419.788
16	2378-TCDD	26.44	2.573e5	3.218e5	1.149	0.80	0.77	2446.0	YES	NO	bb	bb	39.968
17	Total-tetradioxins	26.06	6.115e3	7.563e3	1.024	0.81	0.77	45.2	YES	NO	bb	bb	1.059
18	12378-PeCDD	31.55	1.294e6	8.446e5	1.022	1.53	1.55	12077.0	YES	NO	bb	bb	199.637
19	Total-pentadioxins	29.94	9.896e2	6.778e2	1.502	1.46	1.55	7.8	YES	NO	bb	bb	0.106
20	123789-HxCDD	36.53	1.168e6	9.477e5	0.907	1.23	1.24	9764.9	YES	NO	bb	bb	203.974
21	123678-HxCDD	36.15	1.363e6	1.125e6	1.001	1.21	1.24	10823.8	YES	NO	db	db	204.224
22	123478-HxCDD	36.03	1.162e6	9.482e5	0.996	1.23	1.24	10622.2	YES	NO	bd	bd	198.133
23	Total-heptadioxins	40.57	2.148e2	2.026e2	1.088	1.06	1.05	2.3	NO	NO	bb	bb	0.048
24	1234678-HpCDD	40.28	8.284e5	8.038e5	1.039	1.03	1.05	3841.2	YES	NO	bb	bb	198.376
25	OCDD	45.01	1.293e6	1.512e6	0.920	0.86	0.89	10744.0	YES	NO	bb	bb	394.016

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	26.75	1.219e6					0.4	NO		bb		
2	FUNCTION1 PFK	21.17	1.435e6					3.4	YES		bb		

ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	28.26	4.048e3					0.9	NO		bb		0.000
2	FUNCTION2 PFK	28.22	4.511e3					0.9	NO		bb		0.000
3	FUNCTION2 PFK	28.09	1.180e4					1.6	NO		bb		0.000
4	FUNCTION2 PFK	32.40	7.400e3					1.4	NO		bd		0.000
5	FUNCTION2 PFK	31.78	3.780e3					0.8	NO		db		0.000
6	FUNCTION2 PFK	31.75	1.880e3					0.6	NO		bd		0.000
7	FUNCTION2 PFK	31.70	9.648e3					1.7	NO		db		0.000
8	FUNCTION2 PFK	31.63	2.054e4					2.2	NO		bd		0.000
9	FUNCTION2 PFK	31.52	5.247e4					2.4	NO		db		0.000
10	FUNCTION2 PFK	31.37	1.454e4					1.4	NO		bd		0.000
11	FUNCTION2 PFK	31.10	7.031e3					1.1	NO		bb		0.000
12	FUNCTION2 PFK	30.32	1.036e4					1.3	NO		bb		0.000
13	FUNCTION2 PFK	30.01	2.058e3					0.8	NO		bb		0.000
14	FUNCTION2 PFK	29.82	6.711e3					1.2	NO		db		0.000
15	FUNCTION2 PFK	29.78	1.288e4					1.7	NO		bd		0.000
16	FUNCTION2 PFK	29.02	5.997e3					0.8	NO		bb		0.000
17	FUNCTION2 PFK	28.82	2.827e4					1.7	NO		bb		0.000
18	FUNCTION2 PFK	28.47	4.519e3					0.9	NO		bb		0.000
19	FUNCTION2 PFK	28.42	5.823e3					1.1	NO		bb		0.000
20	FUNCTION2 PFK	32.71	1.137e4					1.6	NO		bb		0.000
21	FUNCTION2 PFK	32.44	1.418e4					1.8	NO		db		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	36.64	7.406e6					25.3	YES		db		0.000
2	FUNCTION3 PFK	36.25	4.701e7					28.1	YES		bd		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	45.68	7.516e3					1.5	NO		bb		
2	FUNCTION5 PFK	45.50	5.255e3					1.2	NO		bb		
3	FUNCTION5 PFK	43.66	5.108e3					1.2	NO		bb		
4	FUNCTION5 PFK	43.06	3.867e3					1.1	NO		bb		
5	FUNCTION5 PFK	42.63	1.220e4					2.1	NO		bb		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	21.64	8.072e1					1.8	NO		bb		0.000
2	FUNCTION1 HXCD...	21.44	1.165e2					2.1	NO		db		0.000
3	FUNCTION1 HXCD...	21.34	7.544e1					2.3	NO		bd		0.000
4	FUNCTION1 HXCD...	26.42	1.399e2					2.7	NO		bb		0.000
5	FUNCTION1 HXCD...	21.99	8.086e1					2.0	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.18	1.574e3					25.7	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.15	3.227e2					5.7	YES		db		0.000
2	FUNCTION3 OCDPE	36.03	2.331e2					4.4	YES		bd		0.000
3	FUNCTION3 OCDPE	35.36	1.234e2					4.0	YES		bb		0.000
4	FUNCTION3 OCDPE	35.06	1.904e2					3.3	YES		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	39.00	2.677e2					3.2	YES		bb		0.000
2	FUNCTION4 NCDPE	38.18	1.090e2					3.1	YES		bb		0.000

ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
Printed: Monday, March 06, 2023 11:34:51 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
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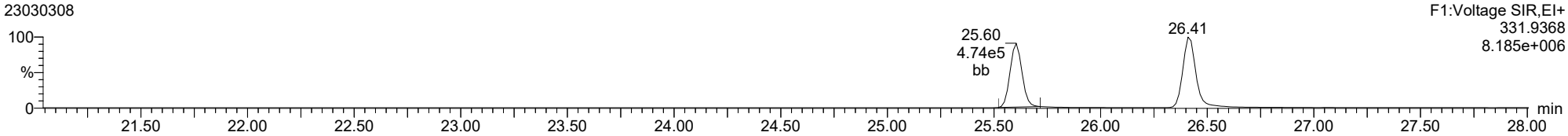
ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD



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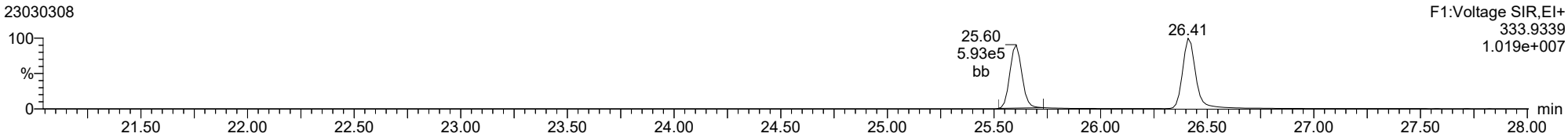

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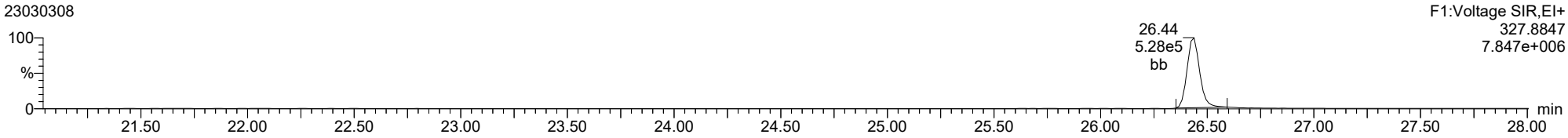

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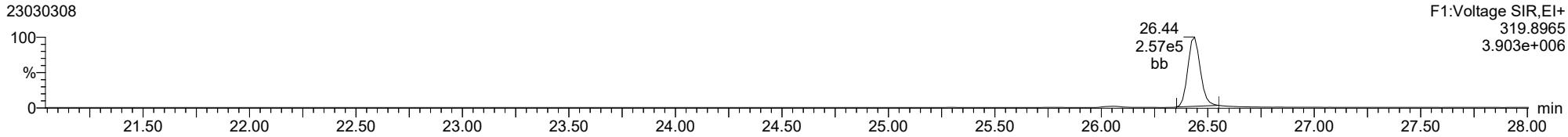

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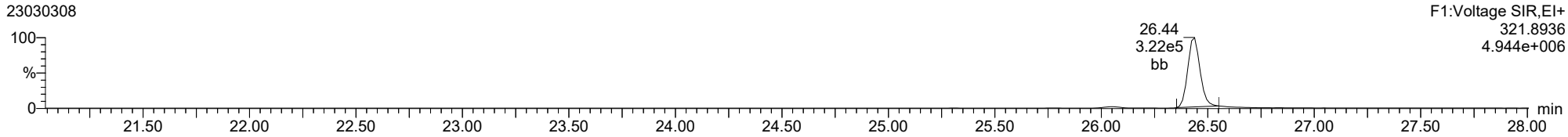

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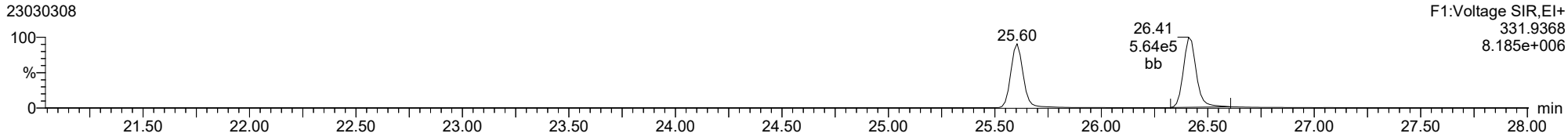

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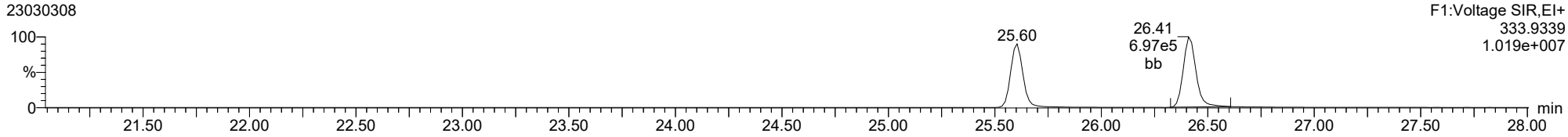

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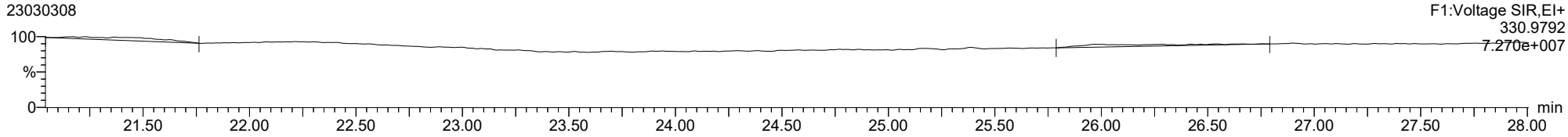

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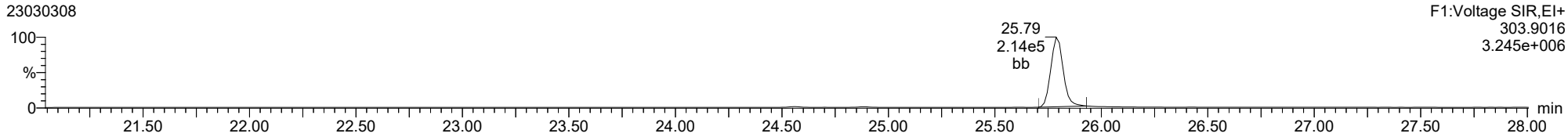

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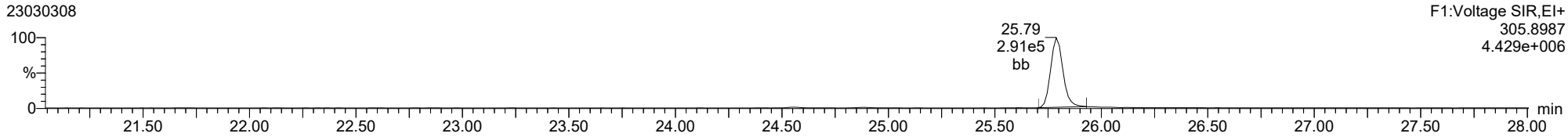

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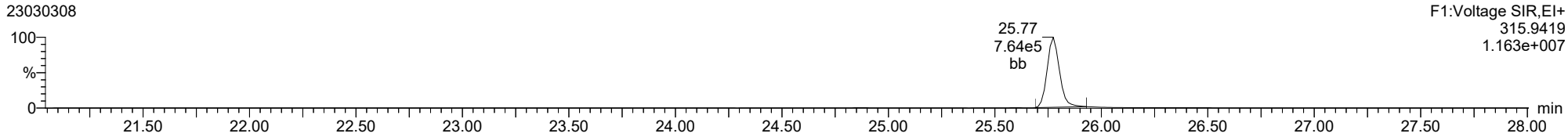

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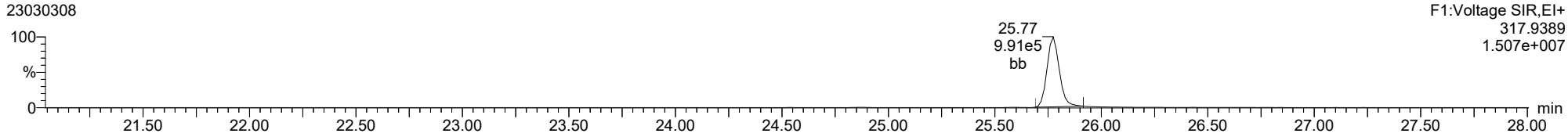
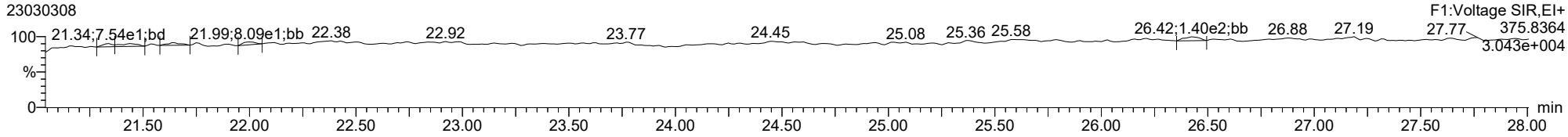


FUNCTION1 HXCDPE



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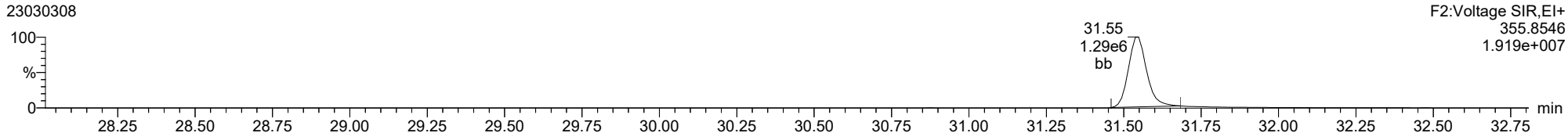
12378-PeCDD



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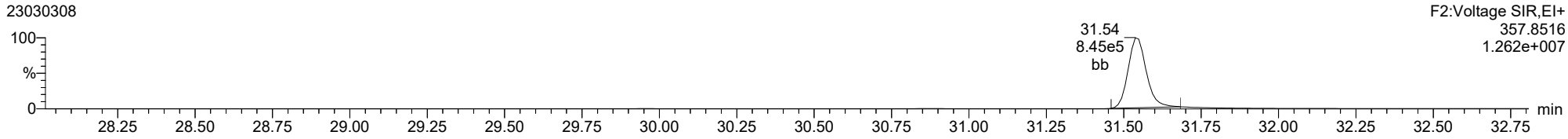

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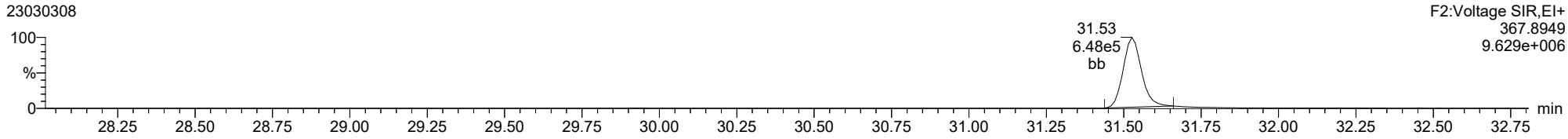

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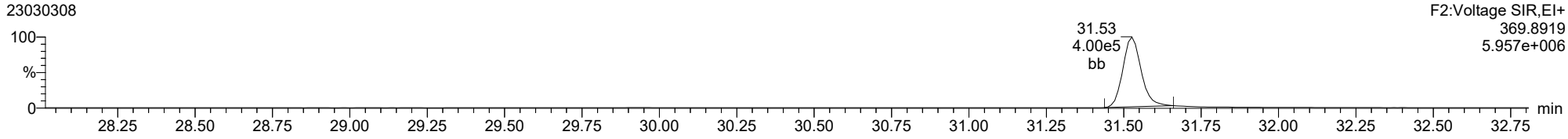

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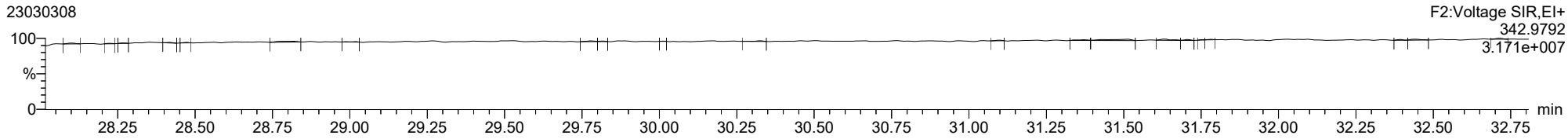

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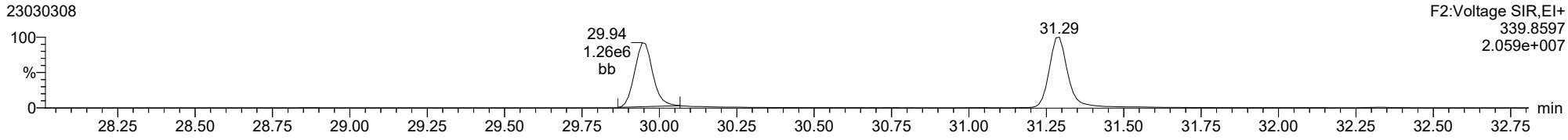

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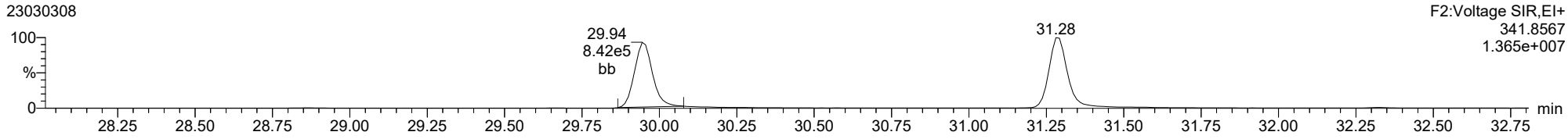

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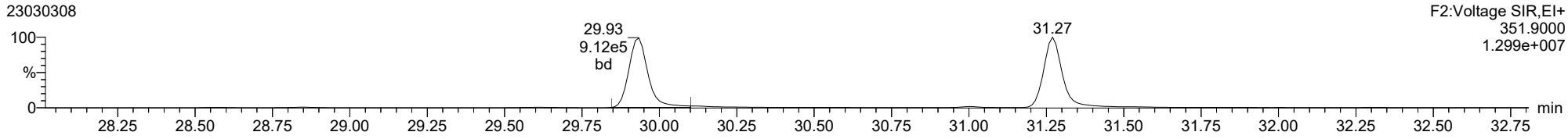

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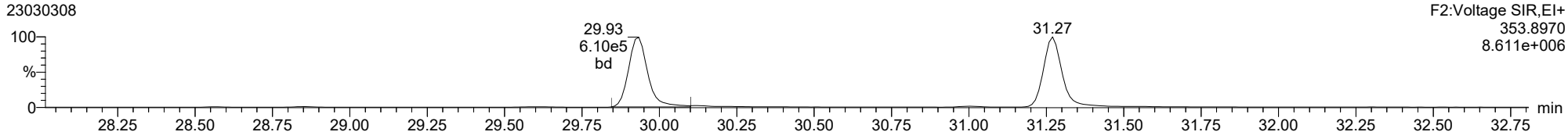
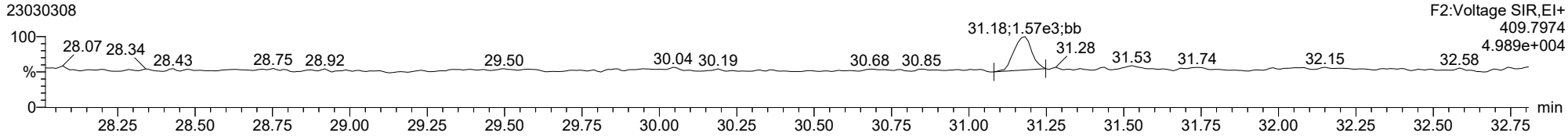


FUNCTION2 HPCDPE



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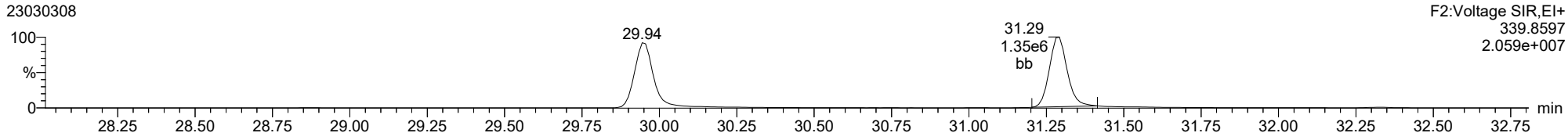
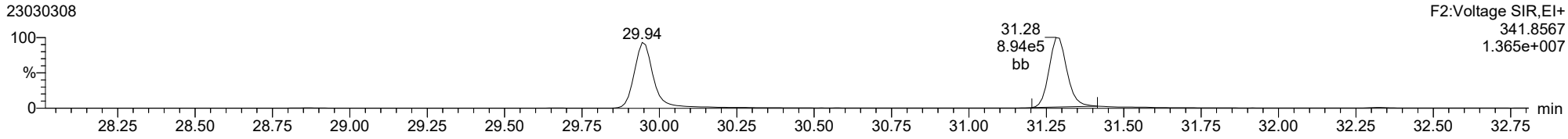
23478-PeCDF



23478-PeCDF



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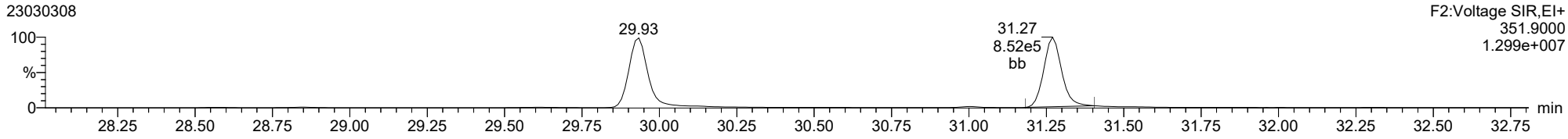

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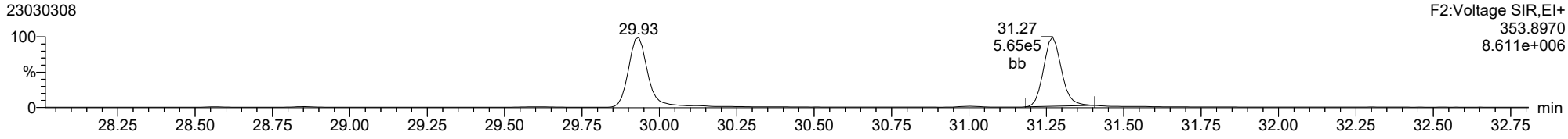

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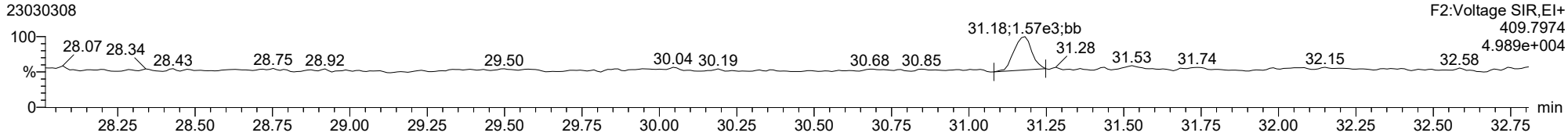

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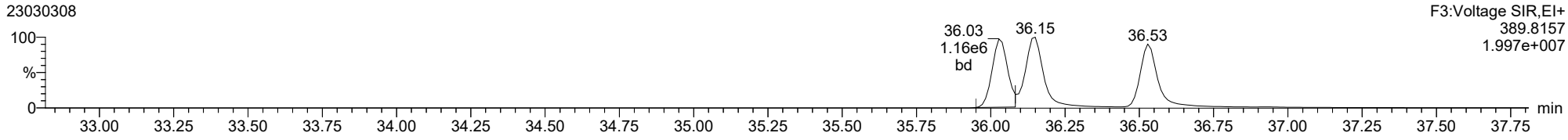
123478-HxCDD



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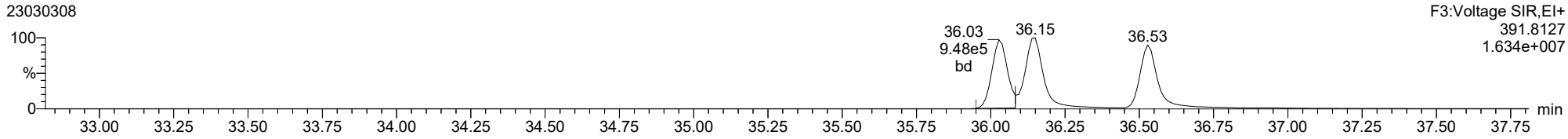

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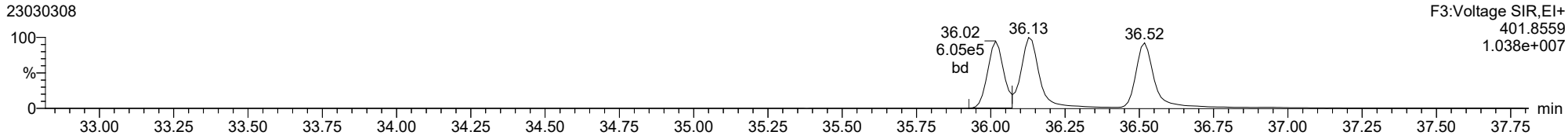

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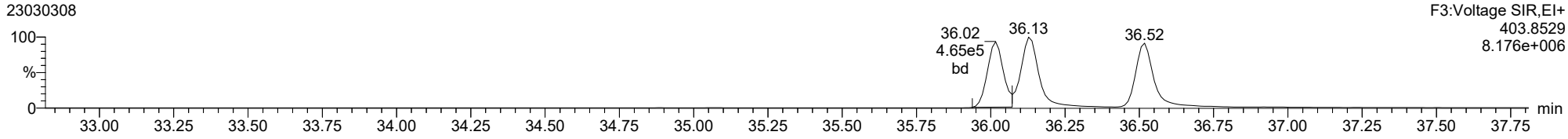

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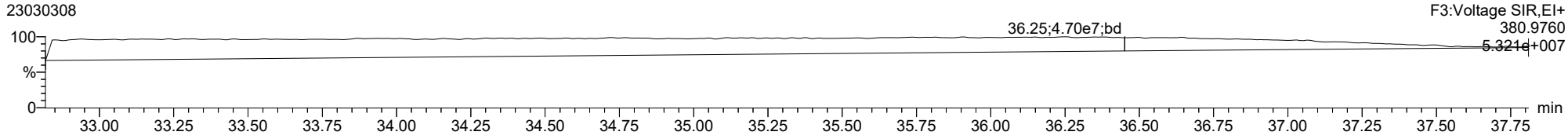

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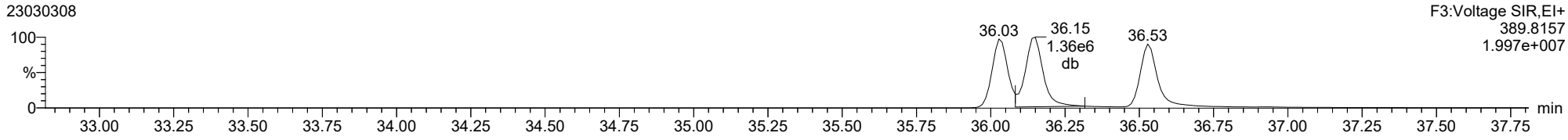

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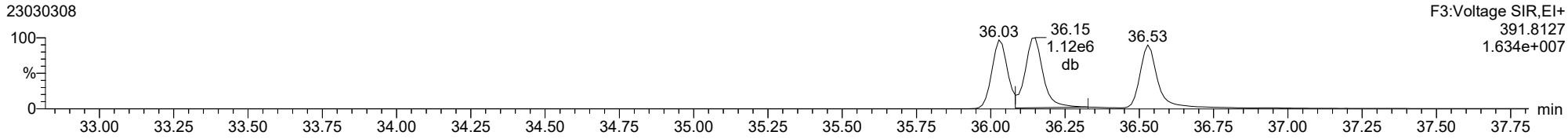

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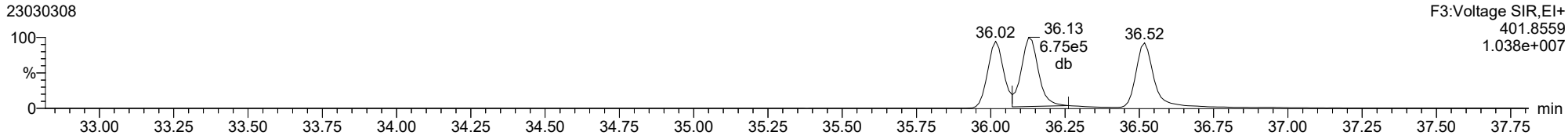

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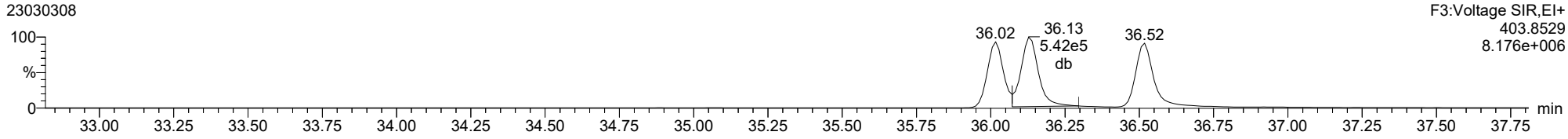

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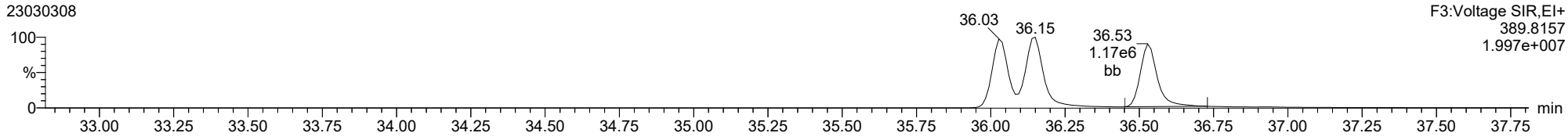

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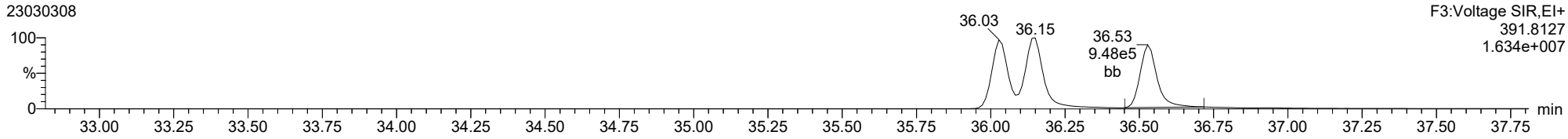

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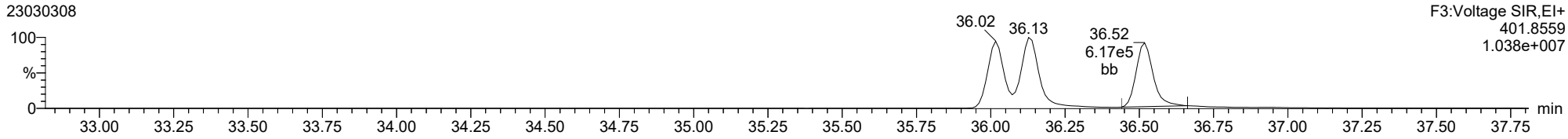

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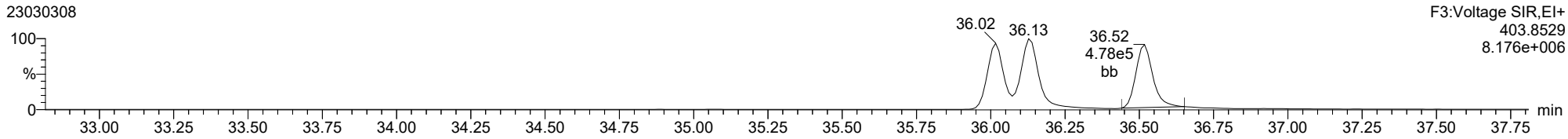

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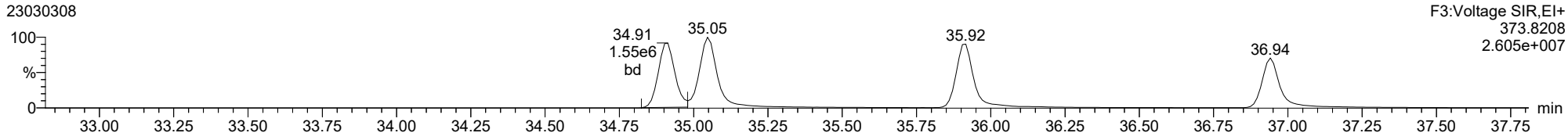

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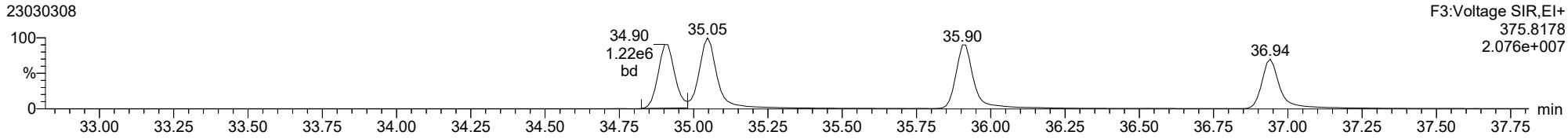

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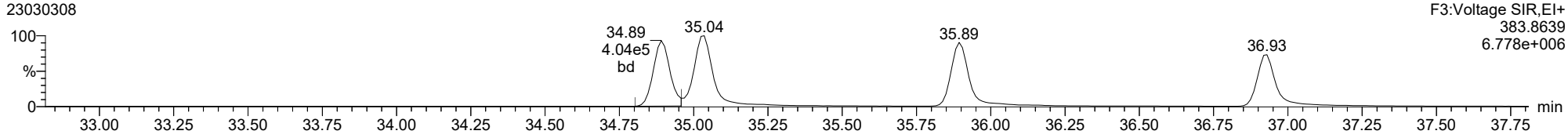

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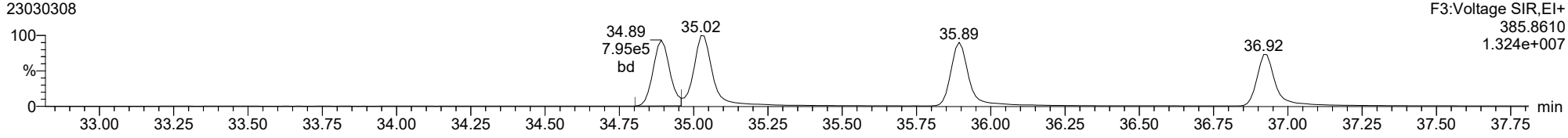

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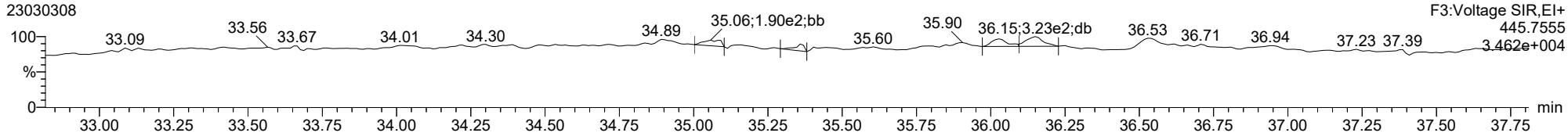

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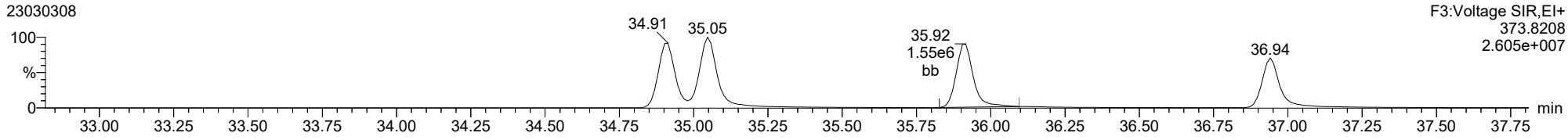

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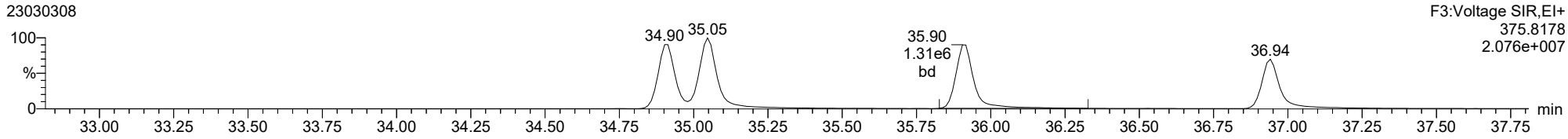

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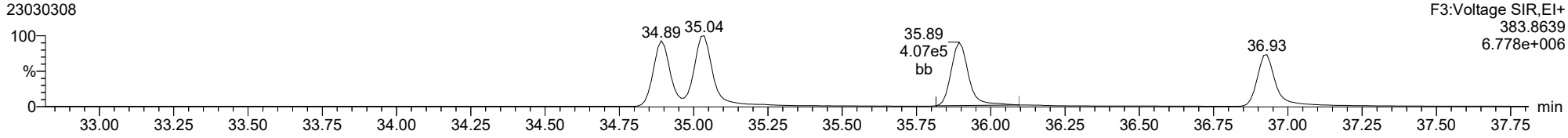

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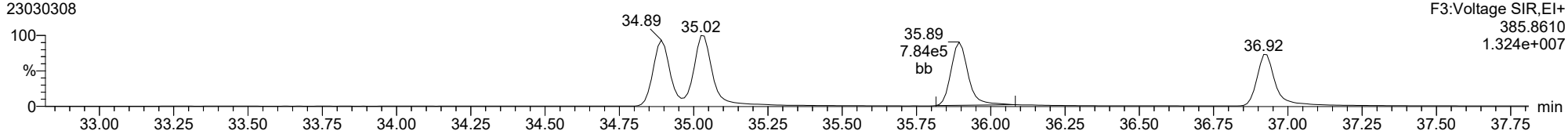

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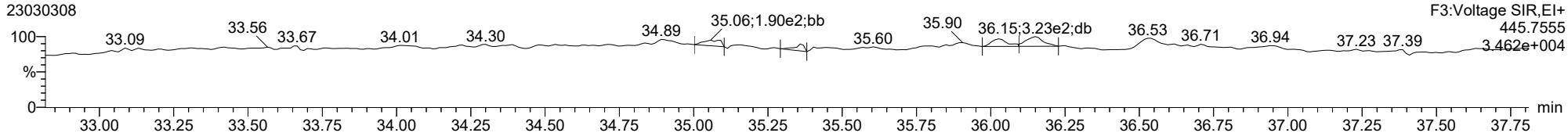

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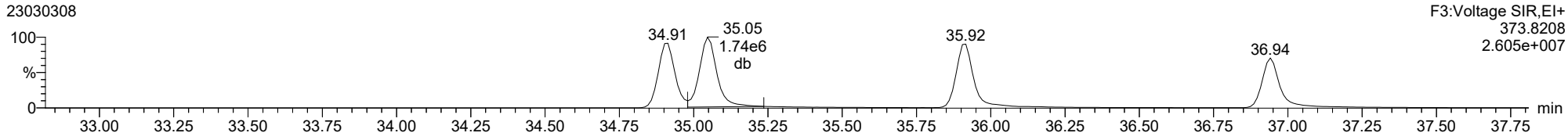

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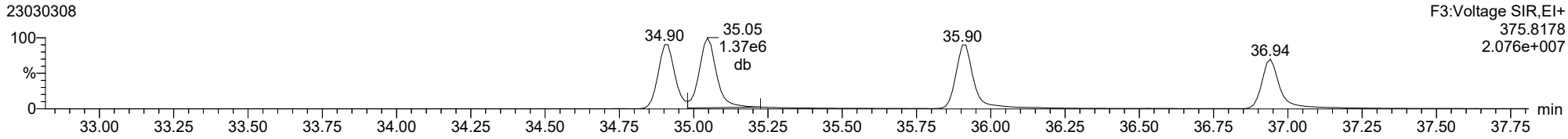

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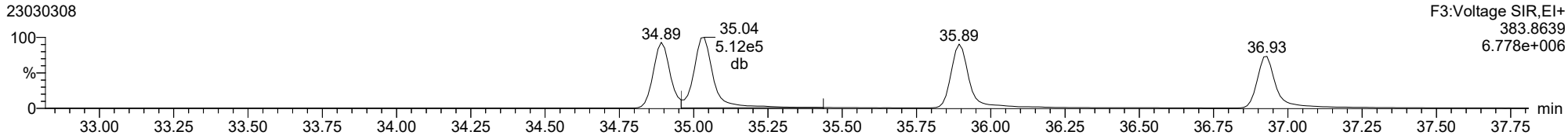

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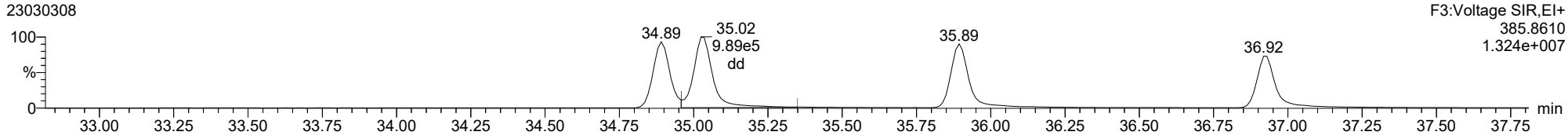

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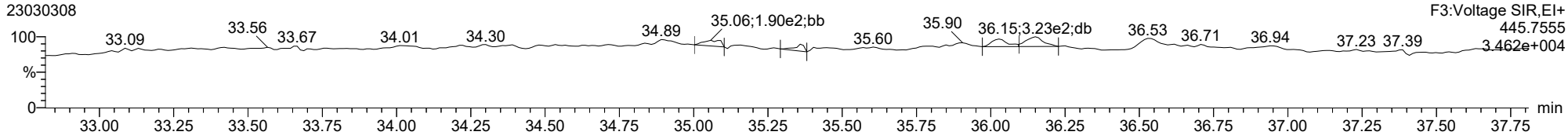

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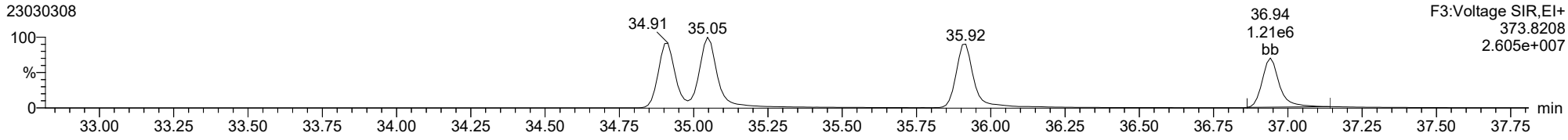

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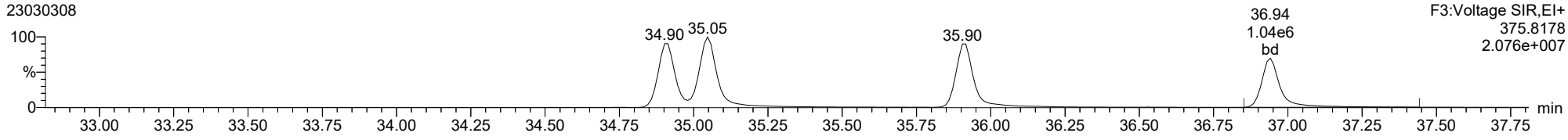

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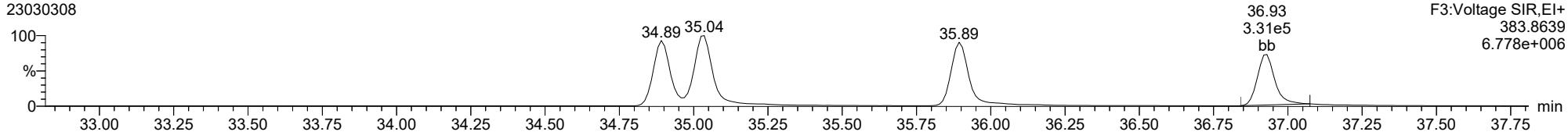

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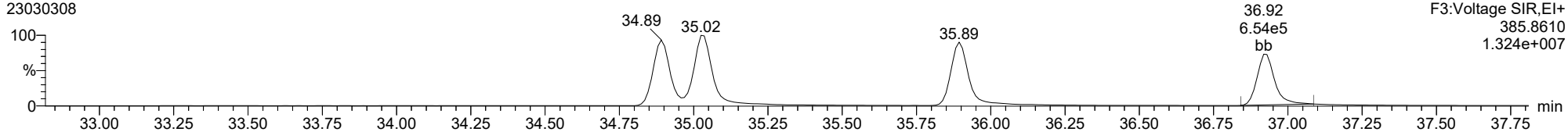

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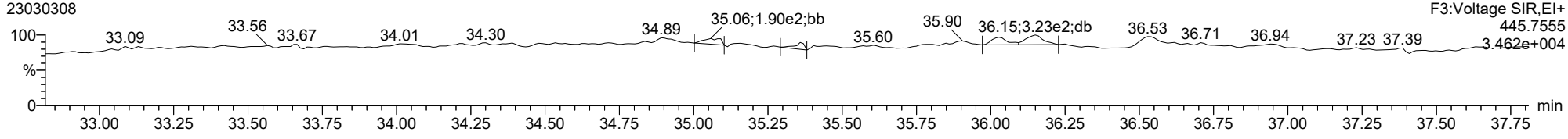

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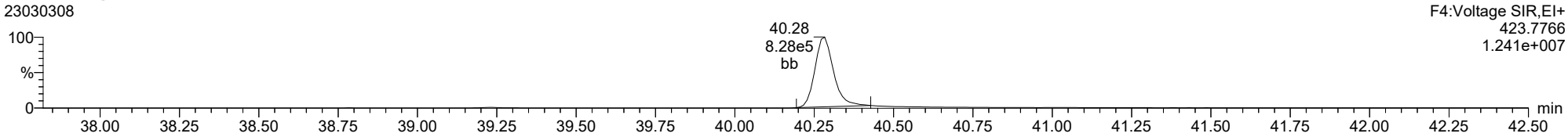

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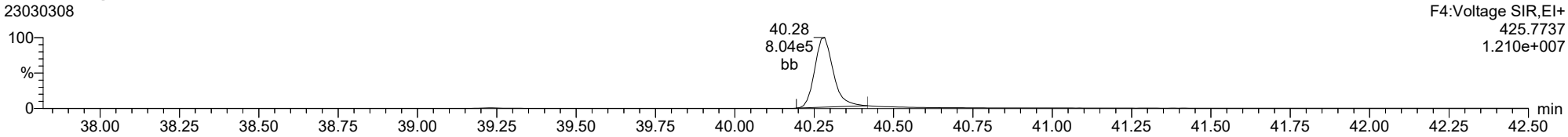

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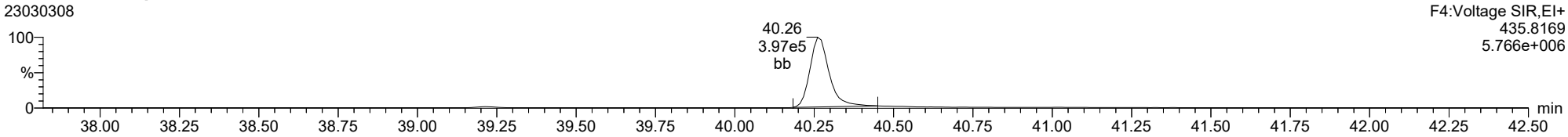

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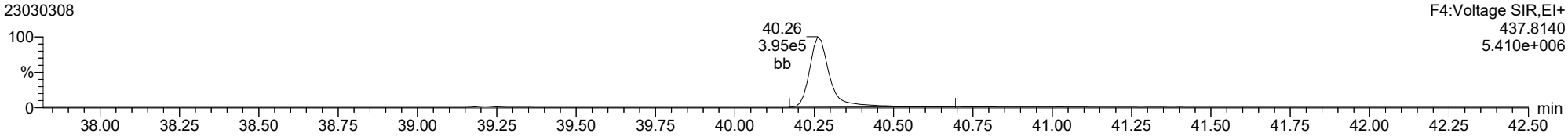

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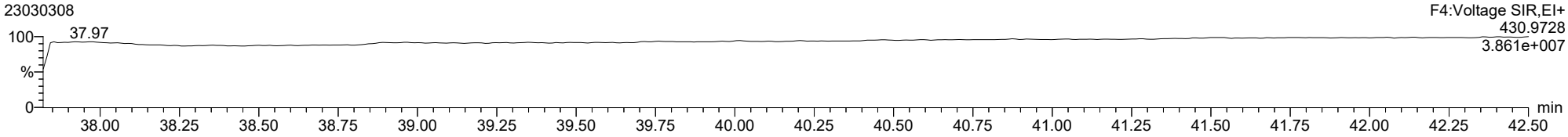

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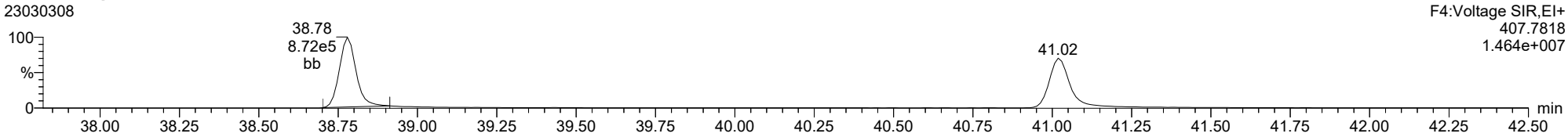

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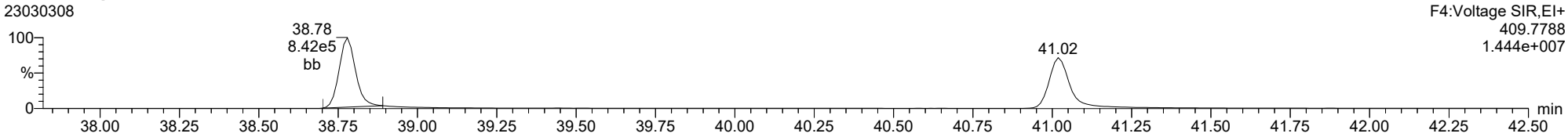

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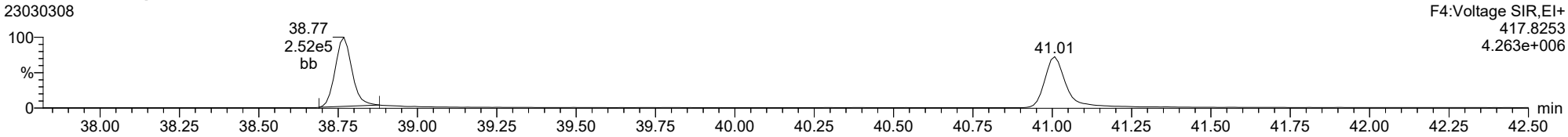

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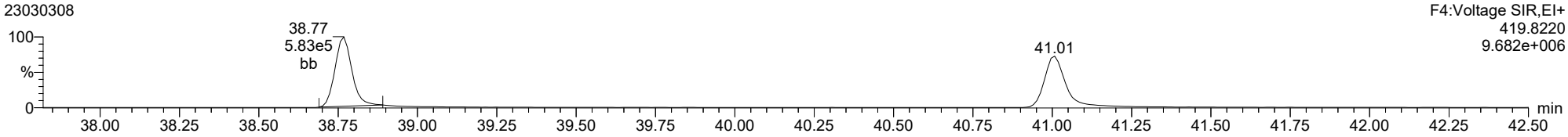

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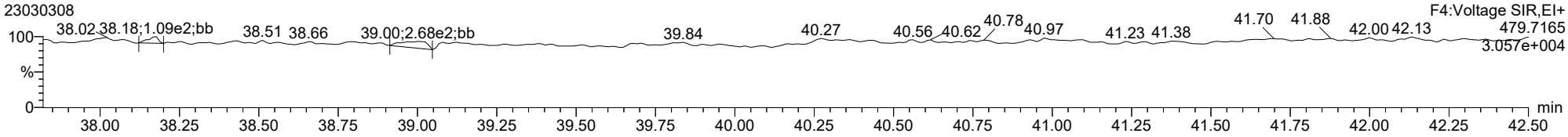

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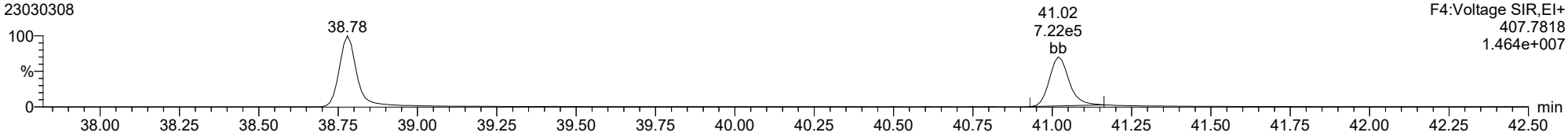

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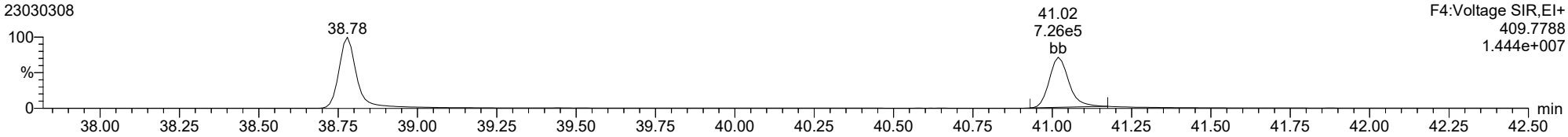

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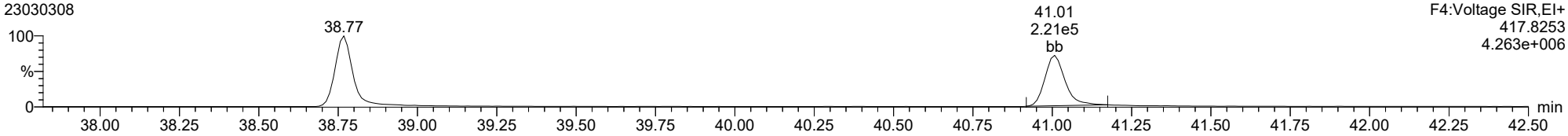

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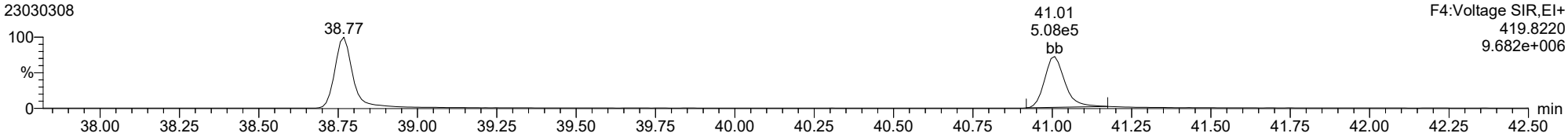

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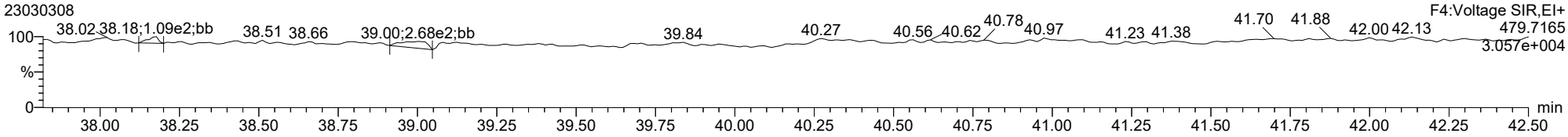

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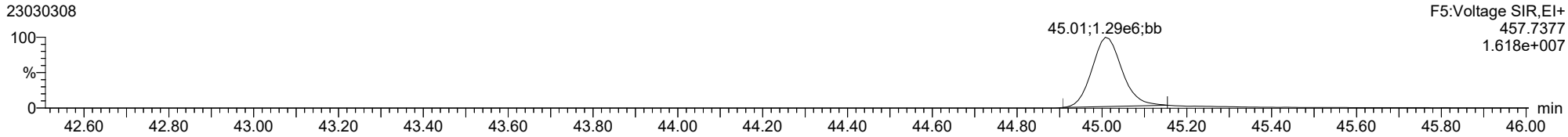

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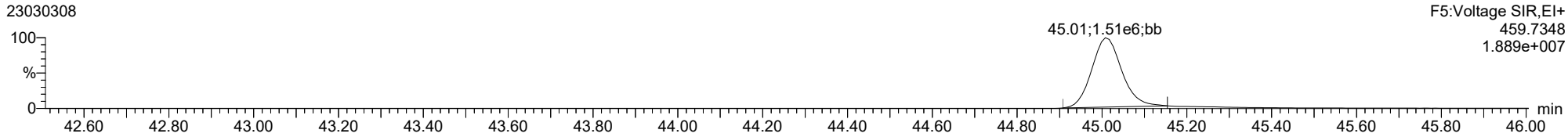

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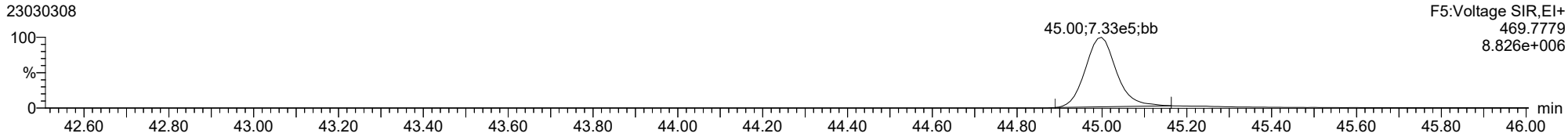

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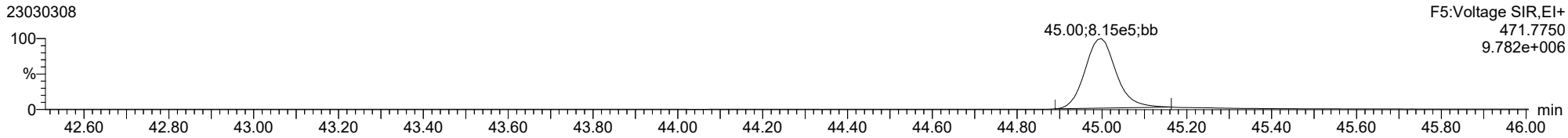
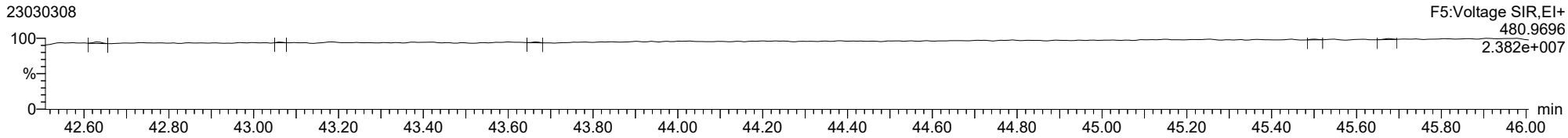


FUNCTION5 PFK



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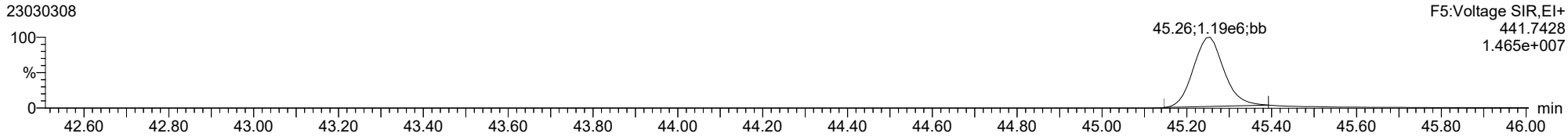

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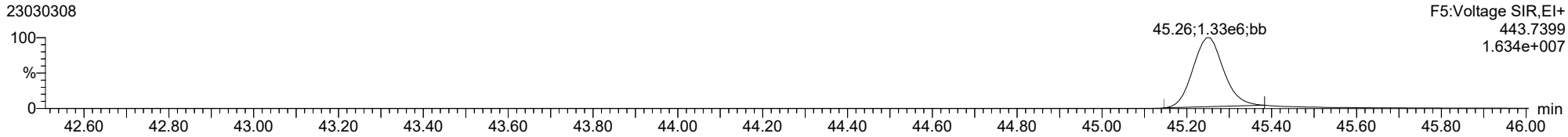
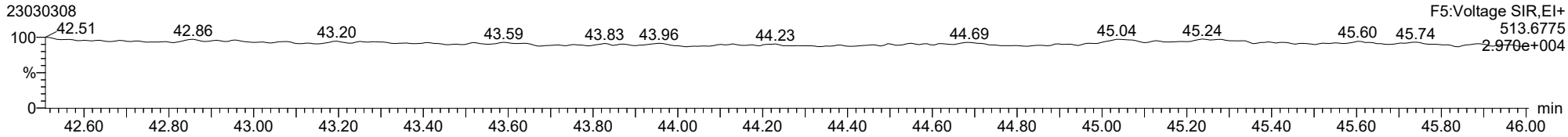


FUNCTION5 DCDPE



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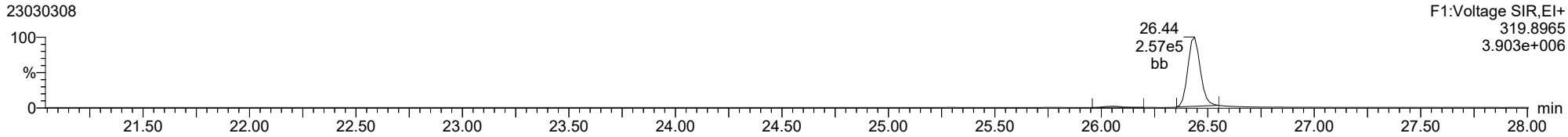
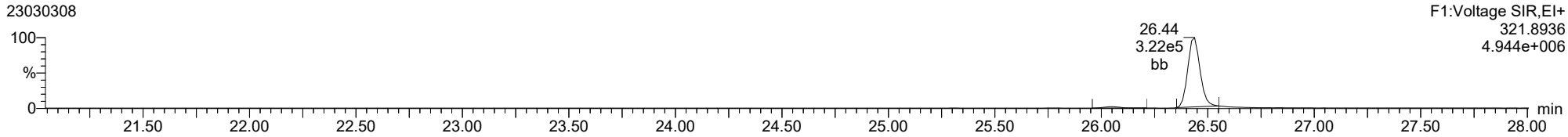
Total-tetradioxins



Total-tetradioxins



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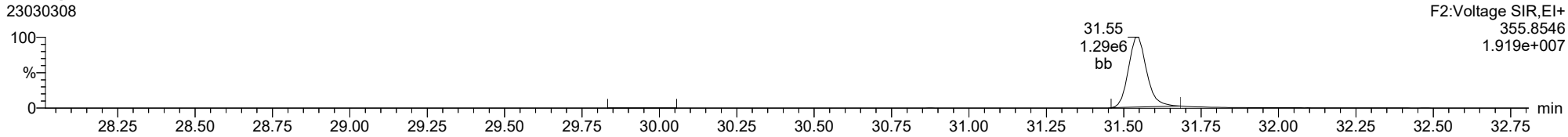

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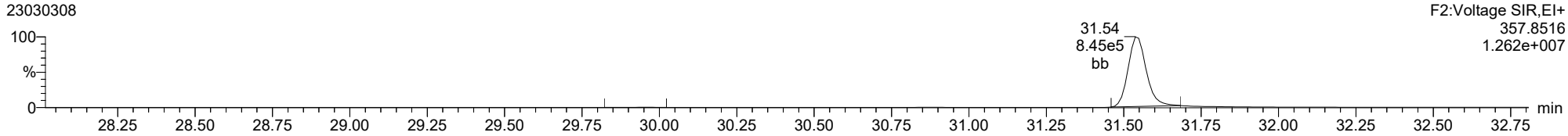
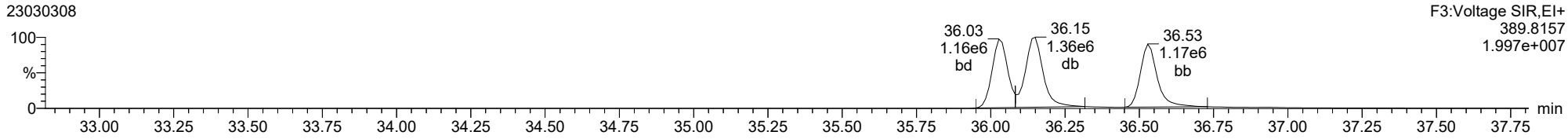


ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

Total-hexadioxins



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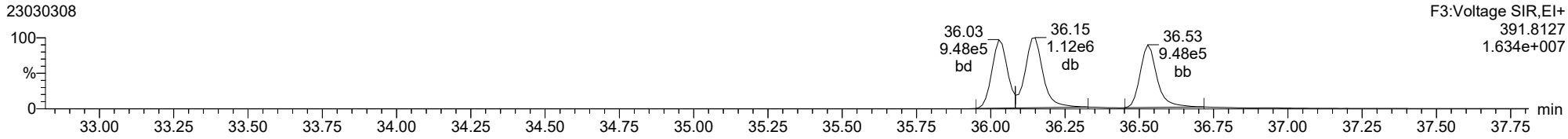

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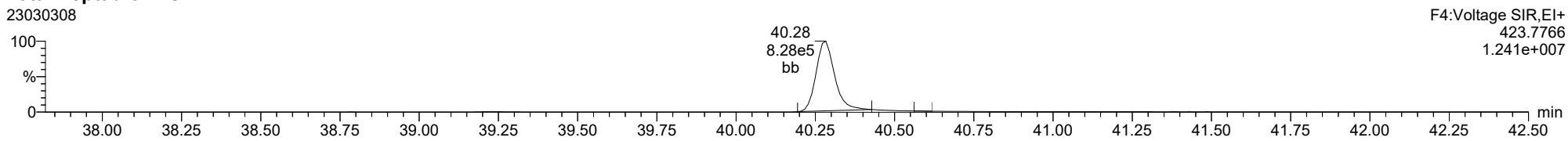

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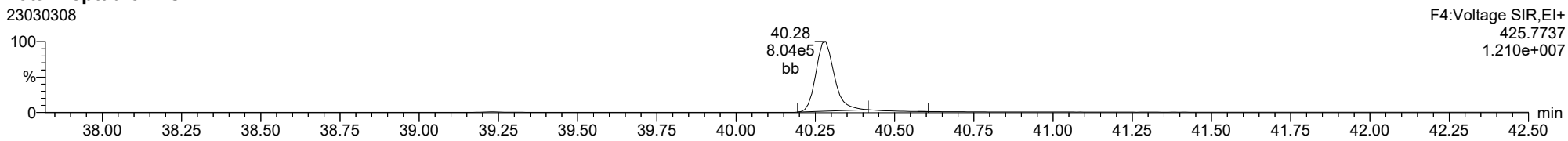

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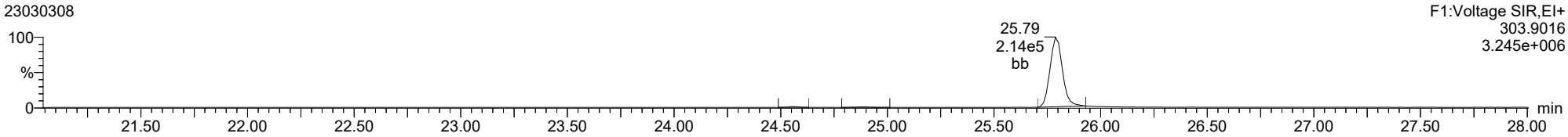
Total-tetrafurans



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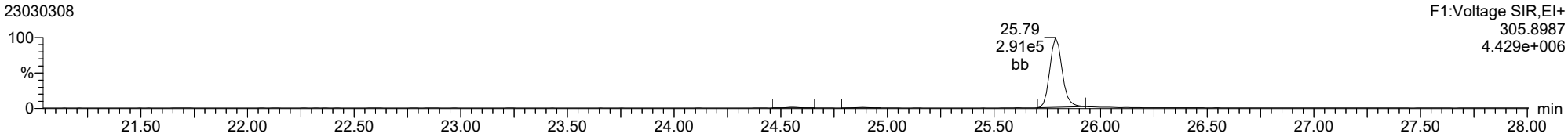
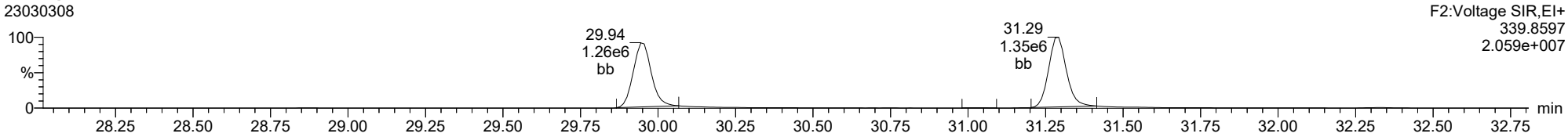
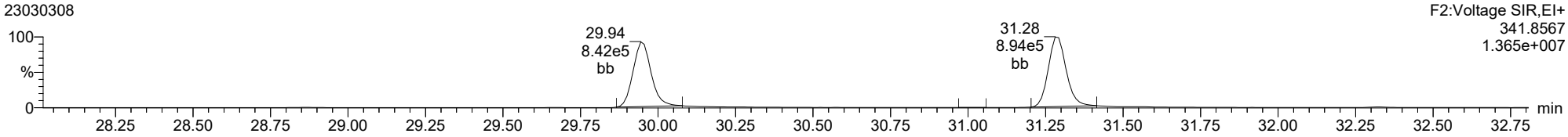


Total-pentafurans



Total-pentafurans



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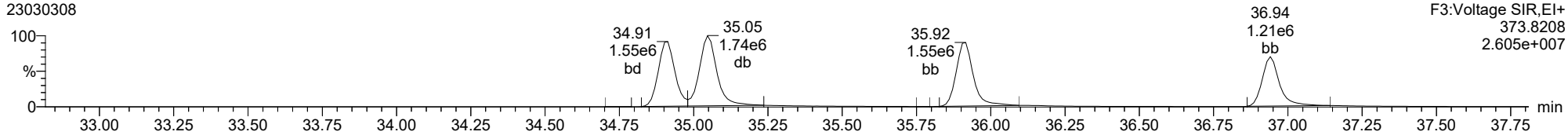
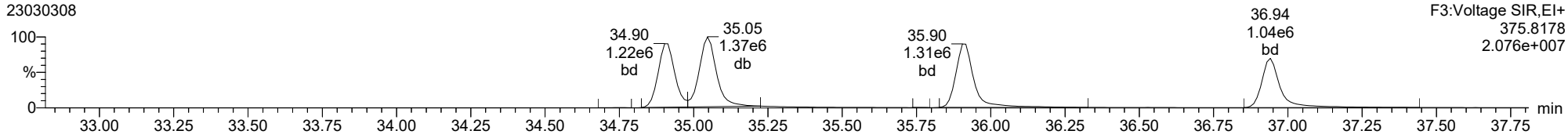
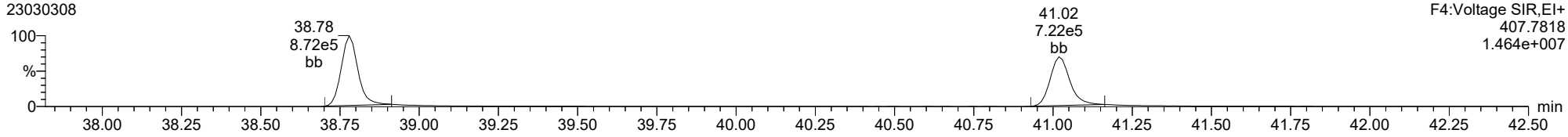
Total-hexafurans



Total-hexafurans



Total-heptafurans



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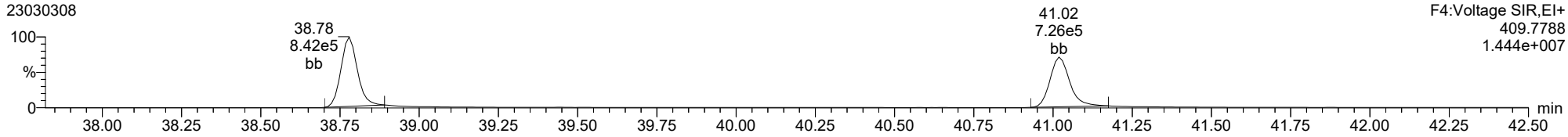

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Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
Printed: Monday, March 06, 2023 11:35:04 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.774	1.000	1.334e6	1.787e6	0.702	0.746	0.770	1816	2705	2.07e7	2.78e7	11389.3	10270.6	NO	bb	bb	200.466
12378-PeCDF	29.934	1.000	7.598e6	4.979e6	0.679	1.526	1.550	4787	5694	1.20e8	7.84e7	24983.0	13764.4	NO	bb	bb	1049.785
23478-PeCDF	31.271	1.000	8.034e6	5.310e6	0.786	1.513	1.550	4787	5694	1.23e8	8.18e7	25734.3	14361.4	NO	bb	bb	1006.165
123478-HxCDF	34.903	1.001	7.954e6	6.371e6	1.166	1.248	1.240	1657	3079	1.28e8	1.02e8	76946.6	33145.2	NO	bd	bd	988.542
234678-HxCDF	35.894	1.000	8.440e6	6.648e6	1.140	1.270	1.240	1657	3079	1.32e8	1.04e8	79492.3	33730.7	NO	bd	bd	997.904
123678-HxCDF	35.036	1.000	8.729e6	6.976e6	1.091	1.251	1.240	1657	3079	1.37e8	1.09e8	82564.4	35544.8	NO	db	db	1005.907
123789-HxCDF	36.930	1.000	7.107e6	5.643e6	1.137	1.259	1.240	1657	3079	1.15e8	9.05e7	69330.3	29396.1	NO	bb	bb	962.631
1234678-HpCDF	38.769	1.000	5.729e6	5.700e6	1.003	1.005	1.050	5984	6276	9.87e7	9.77e7	16498.3	15567.0	NO	bb	bb	1001.511
1234789-HpCDF	41.008	1.000	4.891e6	4.848e6	0.953	1.009	1.050	5984	6276	7.31e7	7.29e7	12213.8	11617.0	NO	bb	bb	1050.453
OCDF	45.246	1.006	8.007e6	9.001e6	0.778	0.890	0.890	617	1698	1.01e8	1.14e8	163878.0	67066.1	NO	bb	bb	2152.541
2378-TCDD	26.424	1.001	1.623e6	2.053e6	1.149	0.791	0.770	1583	1421	2.49e7	3.15e7	15719.4	22173.2	NO	bb	bb	201.416
12378-PeCDD	31.527	1.000	7.500e6	4.933e6	1.022	1.520	1.550	3207	3258	1.15e8	7.59e7	35906.6	23308.0	NO	bb	bb	987.154
123478-HxCDD	36.017	1.000	6.446e6	5.113e6	0.996	1.261	1.240	1269	1319	1.05e8	8.63e7	82869.7	65420.3	NO	bd	bd	1008.795
123678-HxCDD	36.139	1.001	6.944e6	5.798e6	1.001	1.198	1.240	1269	1319	1.11e8	8.98e7	87214.8	68064.1	NO	db	db	1011.135
123789-HxCDD	36.518	1.011	6.387e6	5.242e6	0.907	1.218	1.240	1269	1319	1.04e8	8.52e7	81996.1	64539.0	NO	bb	bb	1063.935
1234678-HpCDD	40.273	1.000	5.468e6	5.342e6	1.039	1.023	1.050	4639	3285	8.81e7	8.56e7	19002.3	26055.7	NO	bb	bb	1010.673
OCDD	45.008	1.000	8.523e6	9.997e6	0.920	0.853	0.890	1224	2738	1.09e8	1.28e8	89206.2	46574.8	NO	bb	bb	1981.710
13C-2378-TCDF	25.760	1.007	9.657e5	1.254e6	1.620	0.770	0.770	2759	1757	1.47e7	1.88e7	5325.4	10693.5	NO	bb	bb	104.465
13C-12378-PeCDF	29.923	1.169	1.058e6	7.059e5	1.240	1.499	1.550	2137	2181	1.59e7	1.06e7	7426.1	4845.6	NO	bb	bb	108.437
13C-23478-PeCDF	31.259	1.222	1.010e6	6.768e5	1.118	1.492	1.550	2137	2181	1.54e7	1.03e7	7192.1	4709.7	NO	bb	bb	115.091
13C-123478-HxCDF	34.880	0.955	4.197e5	8.230e5	1.168	0.510	0.510	2074	3087	6.86e6	1.33e7	3308.7	4323.9	NO	bd	bd	88.344
13C-123678-HxCDF	35.025	0.959	4.843e5	9.471e5	1.386	0.511	0.510	2074	3087	7.37e6	1.42e7	3551.0	4614.4	NO	db	db	85.742
13C-234678-HxCDF	35.883	0.983	4.483e5	8.783e5	1.129	0.510	0.510	2074	3087	6.95e6	1.37e7	3352.7	4438.0	NO	bd	bd	97.566
13C-123789-HxCDF	36.919	1.011	3.958e5	7.690e5	0.932	0.515	0.510	2074	3087	6.35e6	1.23e7	3061.9	3979.7	NO	bb	bb	103.822
13C-1234678-HpCDF	38.757	1.062	3.445e5	7.933e5	0.895	0.434	0.440	2404	3556	5.77e6	1.33e7	2401.1	3732.0	NO	bb	bb	105.552
13C-1234789-HpCDF	40.997	1.123	2.963e5	6.765e5	0.770	0.438	0.440	2404	3556	4.35e6	9.96e6	1811.4	2800.3	NO	bb	bb	104.955
13C-1234-TCDD	25.591	0.000	5.845e5	7.267e5	1.000	0.804	0.770	2994	1335	8.98e6	1.11e7	2999.9	8316.3	NO	bb	bb	100.000
13C-2378-TCDD	26.396	1.031	7.030e5	8.860e5	1.152	0.794	0.770	2994	1335	1.05e7	1.32e7	3492.1	9847.6	NO	bb	bb	105.160
13C-12378-PeCDD	31.515	1.232	7.626e5	4.699e5	0.829	1.623	1.550	1207	1205	1.17e7	7.16e6	9657.3	5939.7	NO	bb	bb	113.413
13C-123478-HxCDD	36.006	0.986	6.492e5	5.017e5	0.995	1.294	1.240	1422	1281	1.08e7	8.26e6	7562.7	6444.6	NO	bd	bd	96.063
13C-123678-HxCDD	36.117	0.989	7.072e5	5.517e5	1.157	1.282	1.240	1422	1281	1.11e7	8.74e6	7828.3	6824.3	NO	db	db	90.391
13C-1234678-HpCDD	40.262	1.103	5.341e5	4.953e5	0.840	1.078	1.050	2026	1583	8.10e6	7.45e6	3998.5	4702.7	NO	bb	bb	101.765
13C-OCDD	44.990	1.232	9.650e5	1.067e6	0.767	0.905	0.890	1467	1005	1.21e7	1.35e7	8264.7	13401.8	NO	bb	bb	219.862
13C-123789-HxCDD	36.507	0.000	6.722e5	5.319e5	1.000	1.264	1.240	1422	1281	1.10e7	8.62e6	7719.2	6727.3	NO	bb	bb	100.000
37CL-2378-TCDD	26.424	1.033	3.368e6		1.288			2667		5.07e7		19022.1			bb		199.444

Dataset: T:\Autospec\Processed Data Batch\230303ICIH.qld
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Printed: Monday, March 06, 2023 11:35:04 Pacific Standard Time

ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					0.802		0.770	1816	2705								
1289-TCDF					0.678		0.770	1816	2705								
13468-PECDF					1.246		1.550	665	1133								
12389-PECDF					0.496		1.550	4787	5694								
123468-HXCDF					1.169		1.240	1657	3079								
1368-TCDD					1.015		0.770	1583	1421								
1289-TCDD					0.909		0.770	1583	1421								
12479-PECDD					2.301		1.550	3207	3258								
12389-PECDD					1.184		1.550	3207	3258								
124679-HXCDD					1.115		1.240	1269	1319								
1234679-HPCDD					1.137		1.050	4639	3285								
Total-tetrafurans			1.355e6		0.727			1816		2.10e7							203.619
Total-penta1			0.000e0					665		0.00e0							
Total-pentafurans			1.567e7		0.654			4787		2.43e8							2061.969
Total-hexafurans			3.237e7		1.141			1657		5.13e8							3971.633
Total-heptafurans			1.063e7		0.978			5984		1.72e8							2053.620
Total-Furans			6.803e7		0.922			1816		1.05e9							10443.382
Total-tetradioxins			1.660e6		1.024			1583		2.53e7							206.551
Total-pentadioxins			7.518e6		1.502			3207		1.15e8							988.757
Total-hexadioxins			1.981e7		1.005			1269		3.20e8							3089.249
Total-heptadioxins			5.468e6		1.088			4639		8.81e7							1010.701
Total-Dioxins			4.298e7		1.130			1583		6.58e8							7276.969
Total-TEQ			1.110e8					1583		1.71e9							17720.350
FUNCTION1 PFK			8.364e4					590794		3.29e6							
FUNCTION2 PFK			1.452e7					287139		1.24e7							0.000
FUNCTION3 PFK			2.904e5					447834		7.86e6							0.000
FUNCTION4 PFK			1.983e5					258971		5.49e6							
FUNCTION5 PFK			1.360e5					213310		3.56e6							
FUNCTION1 HXCD...			9.848e2					660		1.37e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			9.974e3					875		1.52e5							0.000
FUNCTION3 OCDPE			5.118e3					487		5.72e4							0.000
FUNCTION4 NCDPE			1.842e3					616		1.81e4							0.000
FUNCTION5 DCDPE			3.423e3					534		2.47e4							0.000

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.77	1.334e6	1.787e6	0.702	0.75	0.77	11389.3	YES	NO	bb	bb	200.466
2	Total-tetrafurans	24.87	8.544e3	1.186e4	0.727	0.72	0.77	70.8	YES	NO	bb	bb	1.264
3	Total-tetrafurans	24.67	1.054e3	1.493e3	0.727	0.71	0.77	9.1	YES	NO	db	db	0.158
4	Total-tetrafurans	24.55	1.152e4	1.641e4	0.727	0.70	0.77	91.4	YES	NO	bd	bd	1.731

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.27	8.034e6	5.310e6	0.786	1.51	1.55	25734.3	YES	NO	bb	bb	1006.1...
2	Total-pentafurans	31.00	7.155e3	5.348e3	0.654	1.34	1.55	24.5	YES	NO	bb	bb	1.108
3	Total-pentafurans	30.22	6.707e3	3.991e3	0.654	1.68	1.55	18.6	YES	NO	bb	bb	0.948
4	12378-PeCDF	29.93	7.598e6	4.979e6	0.679	1.53	1.55	24983.0	YES	NO	bb	bb	1049.7...
5	Total-pentafurans	29.57	3.743e3	2.429e3	0.654	1.54	1.55	12.5	YES	NO	bd	bd	0.547
6	Total-pentafurans	28.85	2.348e4	1.505e4	0.654	1.56	1.55	59.4	YES	NO	bb	bb	3.415

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123678-HxCDF	35.04	8.729e6	6.976e6	1.091	1.25	1.24	82564.4	YES	NO	db	db	1005.9...
2	123478-HxCDF	34.90	7.954e6	6.371e6	1.166	1.25	1.24	76946.6	YES	NO	bd	bd	988.542
3	Total-hexafurans	34.75	7.748e3	5.706e3	1.141	1.36	1.24	87.3	YES	NO	bb	bb	0.913
4	Total-hexafurans	33.44	5.026e3	3.534e3	1.141	1.42	1.24	38.8	YES	NO	db	bb	0.581
5	123789-HxCDF	36.93	7.107e6	5.643e6	1.137	1.26	1.24	69330.3	YES	NO	bb	bb	962.631
6	Total-hexafurans	36.53	1.628e4	1.267e4	1.141	1.29	1.24	124.4	YES	NO	dd	bd	1.966
7	Total-hexafurans	36.13	1.100e5	8.424e4	1.141	1.31	1.24	706.6	YES	NO	dd	dd	13.189
8	234678-HxCDF	35.89	8.440e6	6.648e6	1.140	1.27	1.24	79492.3	YES	NO	bd	bd	997.904

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HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	41.01	4.891e6	4.848e6	0.953	1.01	1.05	12213.8	YES	NO	bb	bb	1050.4...
2	Total-heptafurans	39.43	9.256e3	7.833e3	0.978	1.18	1.05	24.5	YES	NO	bb	bb	1.656
3	1234678-HpCDF	38.77	5.729e6	5.700e6	1.003	1.01	1.05	16498.3	YES	NO	bb	bb	1001.5...

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.77	1.334e6	1.787e6	0.702	0.75	0.77	11389.3	YES	NO	bb	bb	200.466
2	Total-tetrafurans	24.87	8.544e3	1.186e4	0.727	0.72	0.77	70.8	YES	NO	bb	bb	1.264
3	Total-tetrafurans	24.67	1.054e3	1.493e3	0.727	0.71	0.77	9.1	YES	NO	db	db	0.158
4	Total-tetrafurans	24.55	1.152e4	1.641e4	0.727	0.70	0.77	91.4	YES	NO	bd	bd	1.731
5	23478-PeCDF	31.27	8.034e6	5.310e6	0.786	1.51	1.55	25734.3	YES	NO	bb	bb	1006.1...
6	Total-pentafurans	31.00	7.155e3	5.348e3	0.654	1.34	1.55	24.5	YES	NO	bb	bb	1.108
7	Total-pentafurans	30.22	6.707e3	3.991e3	0.654	1.68	1.55	18.6	YES	NO	bb	bb	0.948
8	12378-PeCDF	29.93	7.598e6	4.979e6	0.679	1.53	1.55	24983.0	YES	NO	bb	bb	1049.7...
9	Total-pentafurans	29.57	3.743e3	2.429e3	0.654	1.54	1.55	12.5	YES	NO	bd	bd	0.547
10	Total-pentafurans	28.85	2.348e4	1.505e4	0.654	1.56	1.55	59.4	YES	NO	bb	bb	3.415
11	123678-HxCDF	35.04	8.729e6	6.976e6	1.091	1.25	1.24	82564.4	YES	NO	db	db	1005.9...
12	123478-HxCDF	34.90	7.954e6	6.371e6	1.166	1.25	1.24	76946.6	YES	NO	bd	bd	988.542
13	Total-hexafurans	34.75	7.748e3	5.706e3	1.141	1.36	1.24	87.3	YES	NO	bb	bb	0.913
14	Total-hexafurans	33.44	5.026e3	3.534e3	1.141	1.42	1.24	38.8	YES	NO	db	bb	0.581
15	123789-HxCDF	36.93	7.107e6	5.643e6	1.137	1.26	1.24	69330.3	YES	NO	bb	bb	962.631
16	Total-hexafurans	36.53	1.628e4	1.267e4	1.141	1.29	1.24	124.4	YES	NO	dd	bd	1.966
17	Total-hexafurans	36.13	1.100e5	8.424e4	1.141	1.31	1.24	706.6	YES	NO	dd	dd	13.189
18	234678-HxCDF	35.89	8.440e6	6.648e6	1.140	1.27	1.24	79492.3	YES	NO	bd	bd	997.904
19	1234789-HpCDF	41.01	4.891e6	4.848e6	0.953	1.01	1.05	12213.8	YES	NO	bb	bb	1050.4...
20	Total-heptafurans	39.43	9.256e3	7.833e3	0.978	1.18	1.05	24.5	YES	NO	bb	bb	1.656
21	1234678-HpCDF	38.77	5.729e6	5.700e6	1.003	1.01	1.05	16498.3	YES	NO	bb	bb	1001.5...
22	OCDF	45.25	8.007e6	9.001e6	0.778	0.89	0.89	16387...	YES	NO	bb	bb	2152.5...

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.42	1.623e6	2.053e6	1.149	0.79	0.77	15719.4	YES	NO	bb	bb	201.416
2	Total-tetradioxins	26.03	3.492e4	4.469e4	1.024	0.78	0.77	261.5	YES	NO	bb	bb	4.891
3	Total-tetradioxins	25.59	3.088e2	4.283e2	1.024	0.72	0.77	3.2	YES	NO	bb	bb	0.045
4	Total-tetradioxins	25.29	1.293e3	1.946e3	1.024	0.66	0.77	15.2	YES	NO	bb	bb	0.199

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PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentadioxins	30.29	1.049e3	6.224e2	1.502	1.68	1.55	4.4	YES	NO	dd	db	0.090
2	Total-pentadioxins	30.15	1.847e3	1.302e3	1.502	1.42	1.55	8.1	YES	NO	dd	dd	0.170
3	Total-pentadioxins	29.93	6.137e3	4.352e3	1.502	1.41	1.55	24.1	YES	NO	bd	bd	0.567
4	12378-PeCDD	31.53	7.500e6	4.933e6	1.022	1.52	1.55	35906.6	YES	NO	bb	bb	987.154
5	Total-pentadioxins	30.86	8.777e3	5.596e3	1.502	1.57	1.55	39.8	YES	NO	bd	bb	0.776

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-hexadioxins	36.92	3.612e4	2.906e4	1.005	1.24	1.24	377.1	YES	NO	bb	bb	5.383
2	123789-HxCDD	36.52	6.387e6	5.242e6	0.907	1.22	1.24	81996.1	YES	NO	bb	bb	1063.9...
3	123678-HxCDD	36.14	6.944e6	5.798e6	1.001	1.20	1.24	87214.8	YES	NO	db	db	1011.1...
4	123478-HxCDD	36.02	6.446e6	5.113e6	0.996	1.26	1.24	82869.7	YES	NO	bd	bd	1008.7...

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-heptadioxins	40.66	1.670e2	1.486e2	1.088	1.12	1.05	0.0	NO	NO	bb	bb	0.028
2	1234678-HpCDD	40.27	5.468e6	5.342e6	1.039	1.02	1.05	19002.3	YES	NO	bb	bb	1010.6...

Dataset: T:\Autospec\Processed Data Batch\230303ICIH.qld
Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
Printed: Monday, March 06, 2023 11:35:04 Pacific Standard Time

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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.42	1.623e6	2.053e6	1.149	0.79	0.77	15719.4	YES	NO	bb	bb	201.416
2	Total-tetradioxins	26.03	3.492e4	4.469e4	1.024	0.78	0.77	261.5	YES	NO	bb	bb	4.891
3	Total-tetradioxins	25.59	3.088e2	4.283e2	1.024	0.72	0.77	3.2	YES	NO	bb	bb	0.045
4	Total-tetradioxins	25.29	1.293e3	1.946e3	1.024	0.66	0.77	15.2	YES	NO	bb	bb	0.199
5	Total-pentadioxins	30.29	1.049e3	6.224e2	1.502	1.68	1.55	4.4	YES	NO	dd	db	0.090
6	Total-pentadioxins	30.15	1.847e3	1.302e3	1.502	1.42	1.55	8.1	YES	NO	dd	dd	0.170
7	Total-pentadioxins	29.93	6.137e3	4.352e3	1.502	1.41	1.55	24.1	YES	NO	bd	bd	0.567
8	12378-PeCDD	31.53	7.500e6	4.933e6	1.022	1.52	1.55	35906.6	YES	NO	bb	bb	987.154
9	Total-pentadioxins	30.86	8.777e3	5.596e3	1.502	1.57	1.55	39.8	YES	NO	bd	bb	0.776
10	Total-hexadioxins	36.92	3.612e4	2.906e4	1.005	1.24	1.24	377.1	YES	NO	bb	bb	5.383
11	123789-HxCDD	36.52	6.387e6	5.242e6	0.907	1.22	1.24	81996.1	YES	NO	bb	bb	1063.9...
12	123678-HxCDD	36.14	6.944e6	5.798e6	1.001	1.20	1.24	87214.8	YES	NO	db	db	1011.1...
13	123478-HxCDD	36.02	6.446e6	5.113e6	0.996	1.26	1.24	82869.7	YES	NO	bd	bd	1008.7...
14	Total-heptadioxins	40.66	1.670e2	1.486e2	1.088	1.12	1.05	0.0	NO	NO	bb	bb	0.028
15	1234678-HpCDD	40.27	5.468e6	5.342e6	1.039	1.02	1.05	19002.3	YES	NO	bb	bb	1010.6...
16	OCDD	45.01	8.523e6	9.997e6	0.920	0.85	0.89	89206.2	YES	NO	bb	bb	1981.7...

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.77	1.334e6	1.787e6	0.702	0.75	0.77	11389.3	YES	NO	bb	bb	200.466
2	Total-tetrafurans	24.87	8.544e3	1.186e4	0.727	0.72	0.77	70.8	YES	NO	bb	bb	1.264
3	Total-tetrafurans	24.67	1.054e3	1.493e3	0.727	0.71	0.77	9.1	YES	NO	db	db	0.158
4	Total-tetrafurans	24.55	1.152e4	1.641e4	0.727	0.70	0.77	91.4	YES	NO	bd	bd	1.731
5	23478-PeCDF	31.27	8.034e6	5.310e6	0.786	1.51	1.55	25734.3	YES	NO	bb	bb	1006.1...
6	Total-pentafurans	31.00	7.155e3	5.348e3	0.654	1.34	1.55	24.5	YES	NO	bb	bb	1.108
7	Total-pentafurans	30.22	6.707e3	3.991e3	0.654	1.68	1.55	18.6	YES	NO	bb	bb	0.948
8	12378-PeCDF	29.93	7.598e6	4.979e6	0.679	1.53	1.55	24983.0	YES	NO	bb	bb	1049.7...
9	Total-pentafurans	29.57	3.743e3	2.429e3	0.654	1.54	1.55	12.5	YES	NO	bd	bd	0.547
10	Total-pentafurans	28.85	2.348e4	1.505e4	0.654	1.56	1.55	59.4	YES	NO	bb	bb	3.415
11	123678-HxCDF	35.04	8.729e6	6.976e6	1.091	1.25	1.24	82564.4	YES	NO	db	db	1005.9...
12	123478-HxCDF	34.90	7.954e6	6.371e6	1.166	1.25	1.24	76946.6	YES	NO	bd	bd	988.542
13	Total-hexafurans	34.75	7.748e3	5.706e3	1.141	1.36	1.24	87.3	YES	NO	bb	bb	0.913
14	Total-hexafurans	33.44	5.026e3	3.534e3	1.141	1.42	1.24	38.8	YES	NO	db	bb	0.581
15	123789-HxCDF	36.93	7.107e6	5.643e6	1.137	1.26	1.24	69330.3	YES	NO	bb	bb	962.631
16	Total-hexafurans	36.53	1.628e4	1.267e4	1.141	1.29	1.24	124.4	YES	NO	dd	bd	1.966
17	Total-hexafurans	36.13	1.100e5	8.424e4	1.141	1.31	1.24	706.6	YES	NO	dd	dd	13.189
18	234678-HxCDF	35.89	8.440e6	6.648e6	1.140	1.27	1.24	79492.3	YES	NO	bd	bd	997.904
19	1234789-HpCDF	41.01	4.891e6	4.848e6	0.953	1.01	1.05	12213.8	YES	NO	bb	bb	1050.4...
20	Total-heptafurans	39.43	9.256e3	7.833e3	0.978	1.18	1.05	24.5	YES	NO	bb	bb	1.656
21	1234678-HpCDF	38.77	5.729e6	5.700e6	1.003	1.01	1.05	16498.3	YES	NO	bb	bb	1001.5...
22	OCDF	45.25	8.007e6	9.001e6	0.778	0.89	0.89	16387...	YES	NO	bb	bb	2152.5...
23	2378-TCDD	26.42	1.623e6	2.053e6	1.149	0.79	0.77	15719.4	YES	NO	bb	bb	201.416
24	Total-tetradioxins	26.03	3.492e4	4.469e4	1.024	0.78	0.77	261.5	YES	NO	bb	bb	4.891
25	Total-tetradioxins	25.59	3.088e2	4.283e2	1.024	0.72	0.77	3.2	YES	NO	bb	bb	0.045
26	Total-tetradioxins	25.29	1.293e3	1.946e3	1.024	0.66	0.77	15.2	YES	NO	bb	bb	0.199
27	Total-pentadioxins	30.29	1.049e3	6.224e2	1.502	1.68	1.55	4.4	YES	NO	dd	db	0.090
28	Total-pentadioxins	30.15	1.847e3	1.302e3	1.502	1.42	1.55	8.1	YES	NO	dd	dd	0.170
29	Total-pentadioxins	29.93	6.137e3	4.352e3	1.502	1.41	1.55	24.1	YES	NO	bd	bd	0.567
30	12378-PeCDD	31.53	7.500e6	4.933e6	1.022	1.52	1.55	35906.6	YES	NO	bb	bb	987.154
31	Total-pentadioxins	30.86	8.777e3	5.596e3	1.502	1.57	1.55	39.8	YES	NO	bd	bb	0.776
32	Total-hexadioxins	36.92	3.612e4	2.906e4	1.005	1.24	1.24	377.1	YES	NO	bb	bb	5.383
33	123789-HxCDD	36.52	6.387e6	5.242e6	0.907	1.22	1.24	81996.1	YES	NO	bb	bb	1063.9...
34	123678-HxCDD	36.14	6.944e6	5.798e6	1.001	1.20	1.24	87214.8	YES	NO	db	db	1011.1...
35	123478-HxCDD	36.02	6.446e6	5.113e6	0.996	1.26	1.24	82869.7	YES	NO	bd	bd	1008.7...
36	Total-heptadioxins	40.66	1.670e2	1.486e2	1.088	1.12	1.05	0.0	NO	NO	bb	bb	0.028
37	1234678-HpCDD	40.27	5.468e6	5.342e6	1.039	1.02	1.05	19002.3	YES	NO	bb	bb	1010.6...

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	OCDD	45.01	8.523e6	9.997e6	0.920	0.85	0.89	89206.2	YES	NO	bb	bb	1981.7...

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	23.64	6.068e3					0.7	NO		bb		
2	FUNCTION1 PFK	21.78	2.376e4					1.4	NO		bb		
3	FUNCTION1 PFK	26.65	6.322e3					0.8	NO		bb		
4	FUNCTION1 PFK	26.20	6.018e3					0.7	NO		bb		
5	FUNCTION1 PFK	24.62	4.147e4					1.9	NO		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	31.96	1.329e6					11.3	YES		db		0.000
2	FUNCTION2 PFK	29.68	9.729e6					13.1	YES		dd		0.000
3	FUNCTION2 PFK	29.12	3.197e6					12.0	YES		dd		0.000
4	FUNCTION2 PFK	28.11	2.639e5					6.8	YES		bd		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	35.58	5.268e3					0.6	NO		bb		0.000
2	FUNCTION3 PFK	35.20	2.459e4					1.4	NO		bb		0.000
3	FUNCTION3 PFK	34.94	1.904e4					1.3	NO		bb		0.000
4	FUNCTION3 PFK	34.64	1.893e4					1.6	NO		bb		0.000
5	FUNCTION3 PFK	34.45	3.091e4					1.7	NO		bb		0.000
6	FUNCTION3 PFK	34.20	2.876e3					0.6	NO		bb		0.000
7	FUNCTION3 PFK	34.01	8.291e4					2.8	NO		bb		0.000
8	FUNCTION3 PFK	37.45	2.878e4					1.5	NO		bb		0.000
9	FUNCTION3 PFK	37.14	1.025e4					1.2	NO		bb		0.000
10	FUNCTION3 PFK	36.92	2.201e4					1.4	NO		bb		0.000
11	FUNCTION3 PFK	36.82	6.882e3					0.7	NO		bb		0.000
12	FUNCTION3 PFK	36.27	2.697e4					1.6	NO		bb		0.000
13	FUNCTION3 PFK	35.83	1.096e4					1.2	NO		bb		0.000

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PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	40.36	1.487e4					2.2	NO		db		
2	FUNCTION4 PFK	40.28	5.399e4					2.8	NO		bd		
3	FUNCTION4 PFK	39.84	7.632e3					1.3	NO		bb		
4	FUNCTION4 PFK	39.63	5.817e3					1.3	NO		bb		
5	FUNCTION4 PFK	39.58	2.233e4					2.4	NO		bb		
6	FUNCTION4 PFK	39.26	1.840e3					0.6	NO		bb		
7	FUNCTION4 PFK	39.15	1.821e4					2.0	NO		bb		
8	FUNCTION4 PFK	38.75	4.539e3					0.9	NO		bb		
9	FUNCTION4 PFK	38.40	3.735e3					0.9	NO		bb		
10	FUNCTION4 PFK	42.22	2.101e4					1.9	NO		bb		
11	FUNCTION4 PFK	41.91	9.871e3					1.2	NO		bb		
12	FUNCTION4 PFK	41.56	2.609e4					2.3	NO		bb		
13	FUNCTION4 PFK	40.96	8.343e3					1.4	NO		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	45.55	1.986e4					1.8	NO		bb		
2	FUNCTION5 PFK	44.84	1.038e4					2.0	NO		bb		
3	FUNCTION5 PFK	44.32	5.641e3					1.1	NO		bb		
4	FUNCTION5 PFK	44.16	5.508e3					1.3	NO		bb		
5	FUNCTION5 PFK	43.92	3.533e3					1.2	NO		bb		
6	FUNCTION5 PFK	43.74	1.099e4					1.6	NO		bb		
7	FUNCTION5 PFK	43.65	5.197e4					3.3	YES		db		
8	FUNCTION5 PFK	43.53	1.828e4					2.1	NO		bd		
9	FUNCTION5 PFK	42.94	8.618e3					1.5	NO		bb		
10	FUNCTION5 PFK	42.73	1.271e3					0.6	NO		bb		

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ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.02	8.181e1					1.9	NO		bb		0.000
2	FUNCTION1 HXCD...	26.42	2.971e2					5.1	YES		bb		0.000
3	FUNCTION1 HXCD...	25.83	8.848e1					2.3	NO		db		0.000
4	FUNCTION1 HXCD...	25.77	1.170e2					2.5	NO		dd		0.000
5	FUNCTION1 HXCD...	25.59	1.285e2					2.6	NO		bd		0.000
6	FUNCTION1 HXCD...	24.84	1.183e2					1.2	NO		bb		0.000
7	FUNCTION1 HXCD...	24.11	7.501e1					1.5	NO		bb		0.000
8	FUNCTION1 HXCD...	22.26	7.865e1					3.6	YES		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.55	8.739e2					12.4	YES		bb		0.000
2	FUNCTION2 HPCD...	31.16	9.100e3					161.2	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.02	1.011e3					23.2	YES		dd		0.000
2	FUNCTION3 OCDPE	35.92	4.171e2					12.8	YES		bd		0.000
3	FUNCTION3 OCDPE	35.05	6.001e2					12.0	YES		db		0.000
4	FUNCTION3 OCDPE	34.90	4.386e2					11.4	YES		bd		0.000
5	FUNCTION3 OCDPE	36.94	5.713e2					12.4	YES		bb		0.000
6	FUNCTION3 OCDPE	36.52	9.647e2					21.7	YES		bb		0.000
7	FUNCTION3 OCDPE	36.14	1.116e3					24.0	YES		db		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	41.03	4.935e2					7.5	YES		bb		0.000
2	FUNCTION4 NCDPE	40.28	7.486e2					12.2	YES		bb		0.000
3	FUNCTION4 NCDPE	38.78	6.004e2					9.6	YES		bb		0.000

ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	45.26	1.761e3					22.2	YES		db		0.000
2	FUNCTION5 DCDPE	45.02	1.661e3					24.0	YES		bd		0.000

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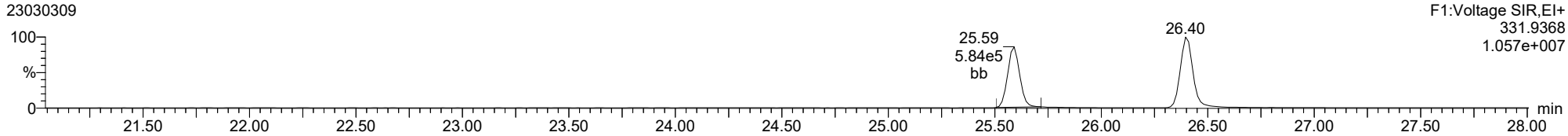
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD



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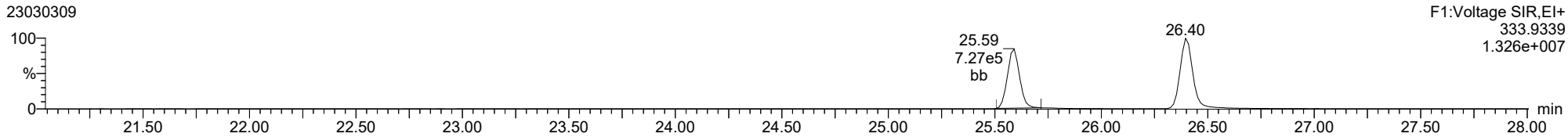
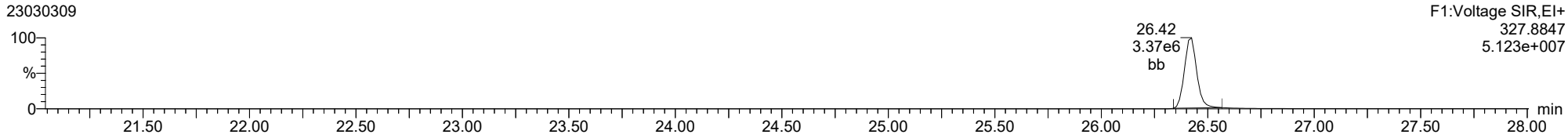


37CL-2378-TCDD



ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

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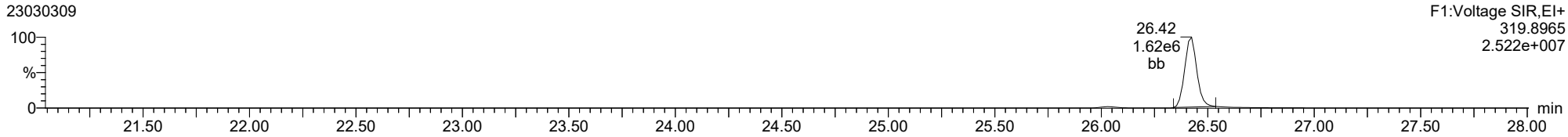

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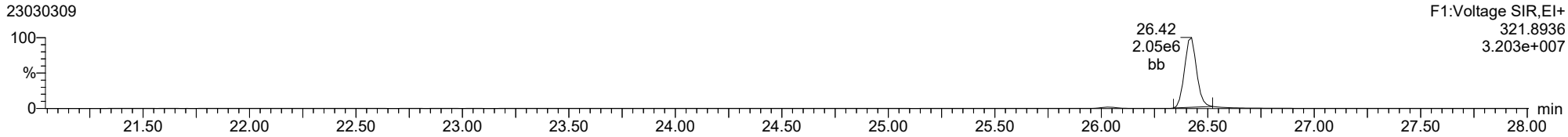

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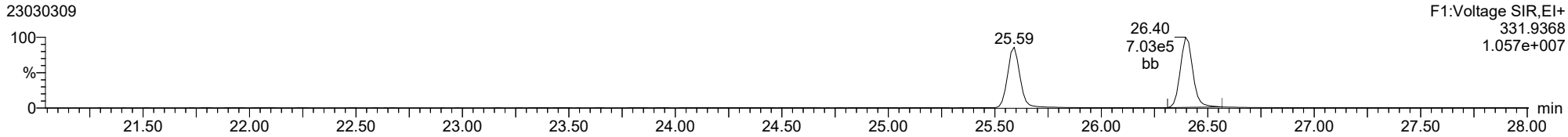

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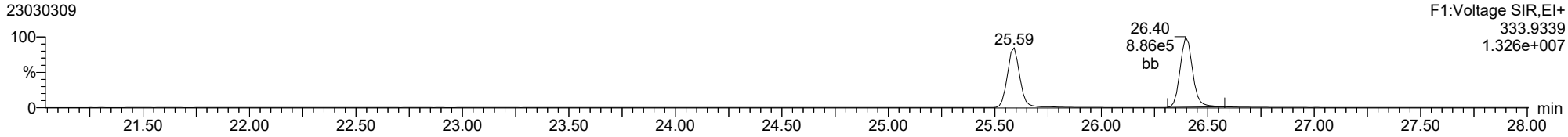

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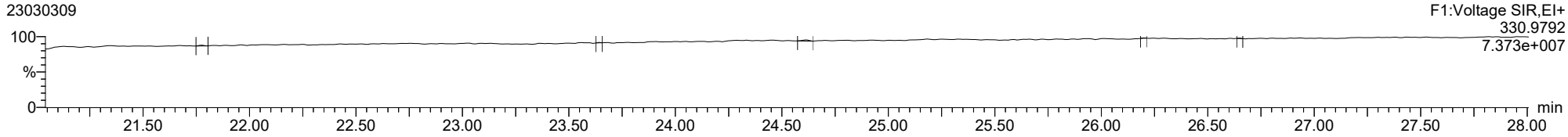
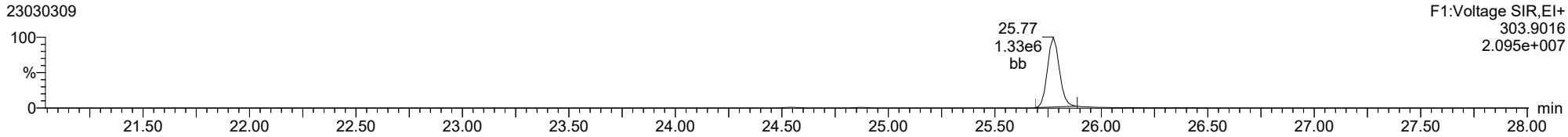


ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

2378-TCDF



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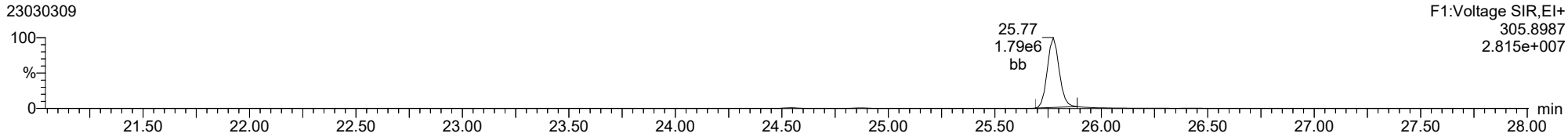

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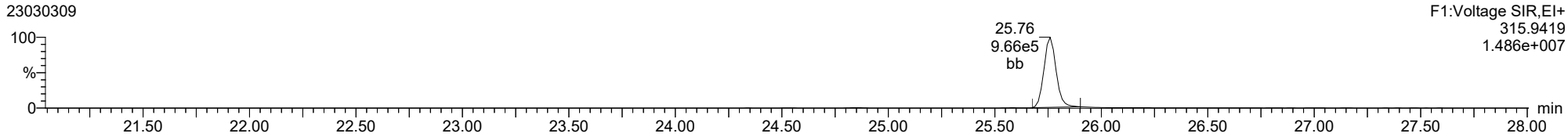

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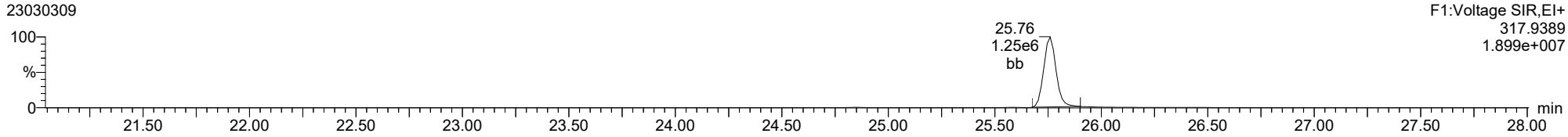
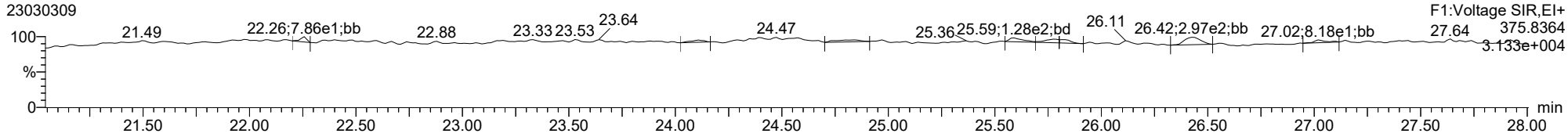


FUNCTION1 HXCDPE



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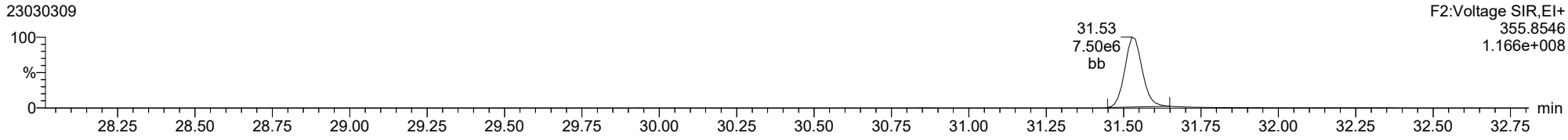
12378-PeCDD



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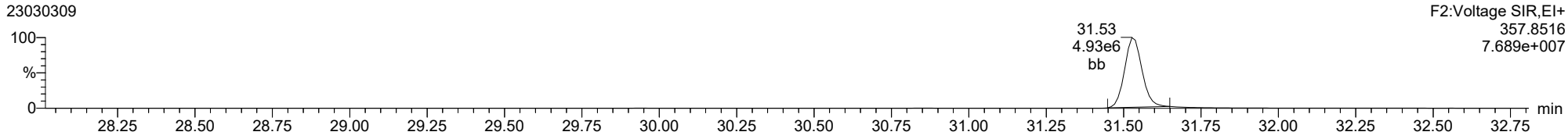

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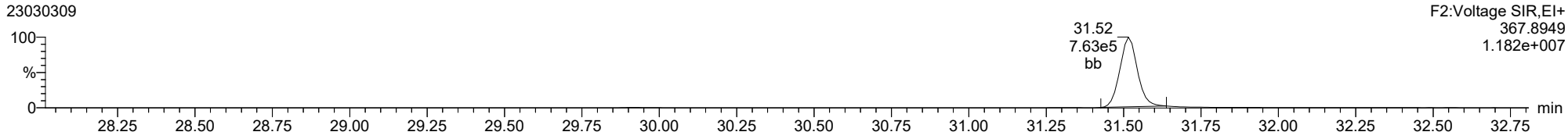

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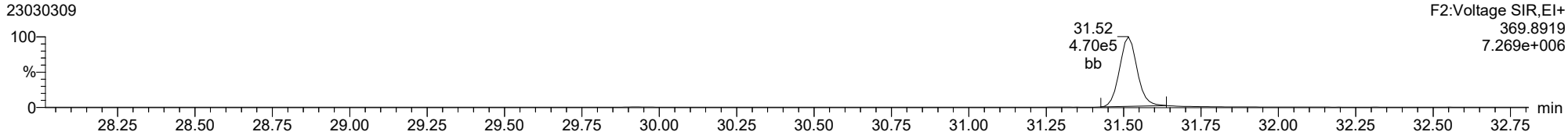

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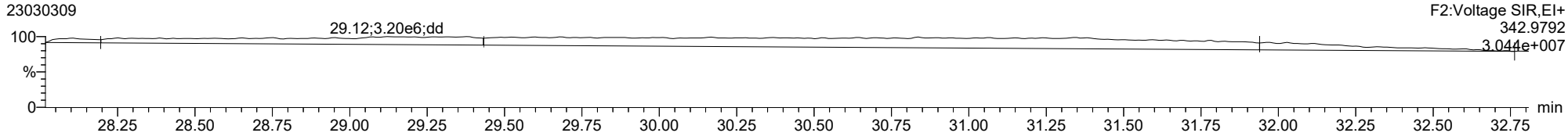

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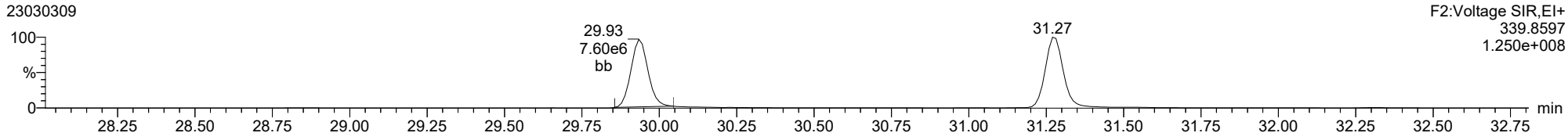

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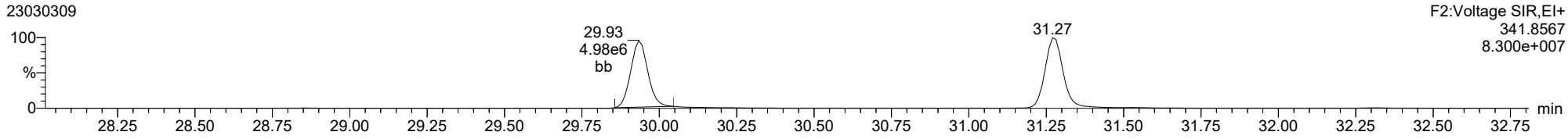

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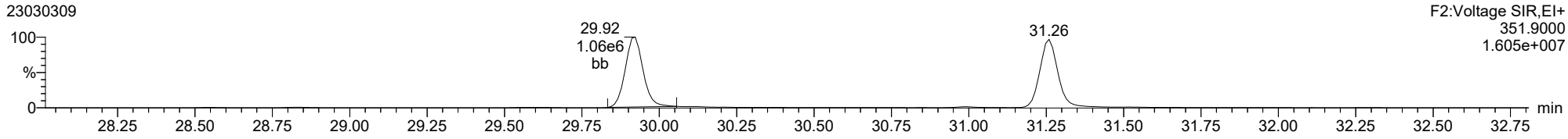

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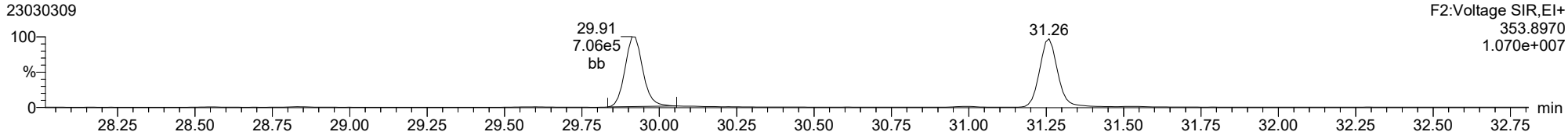
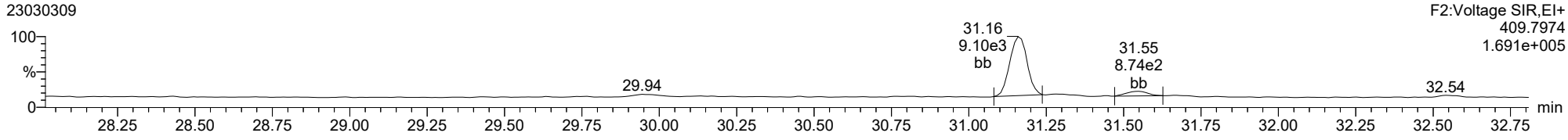


FUNCTION2 HPCDPE



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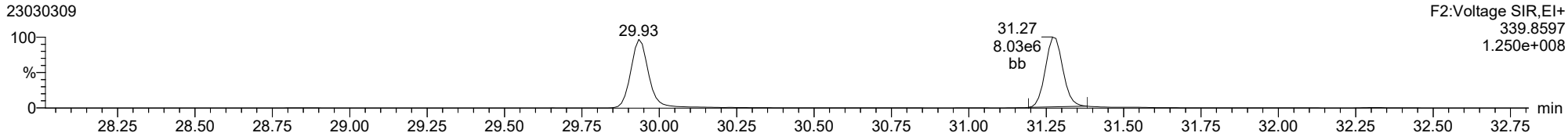
23478-PeCDF



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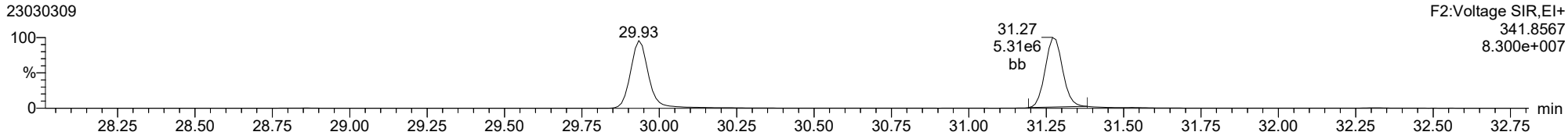

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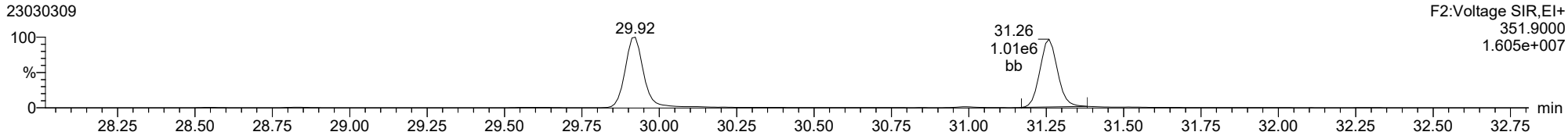

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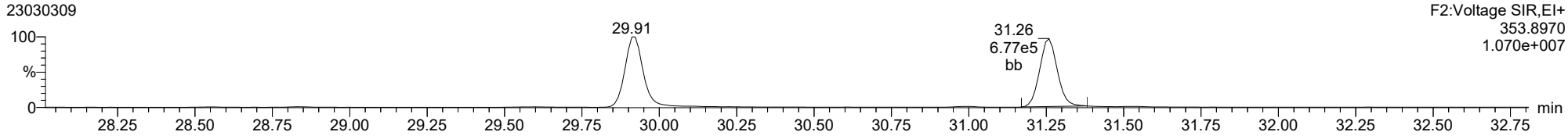

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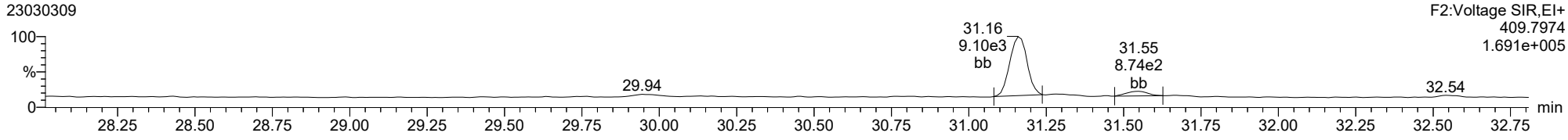

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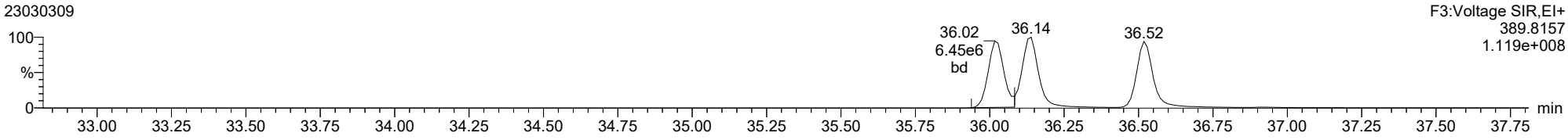
123478-HxCDD



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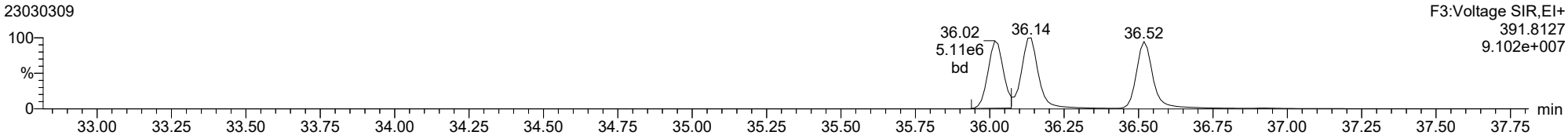

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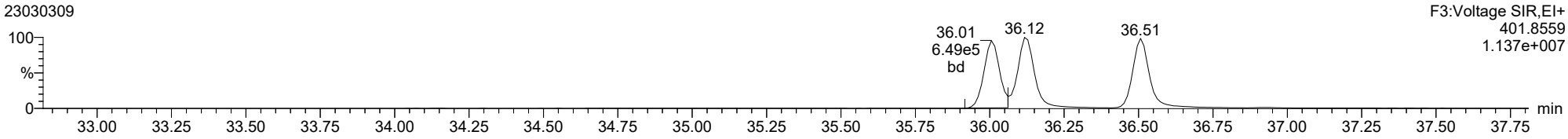

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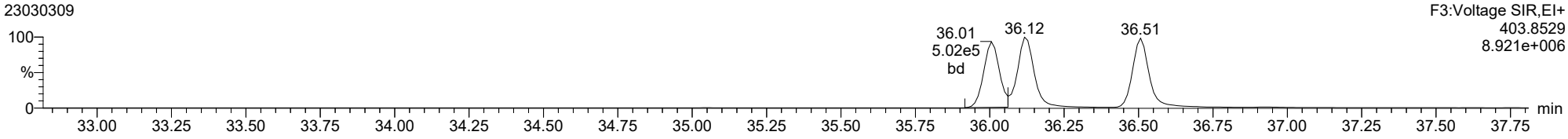

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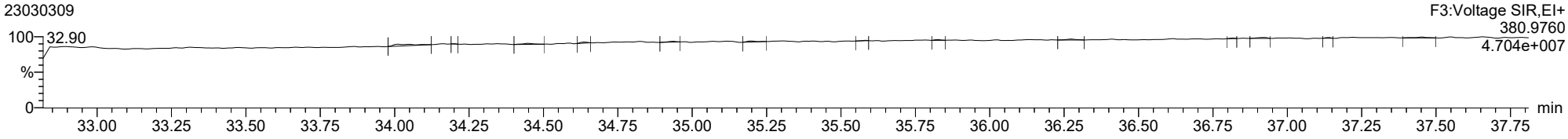

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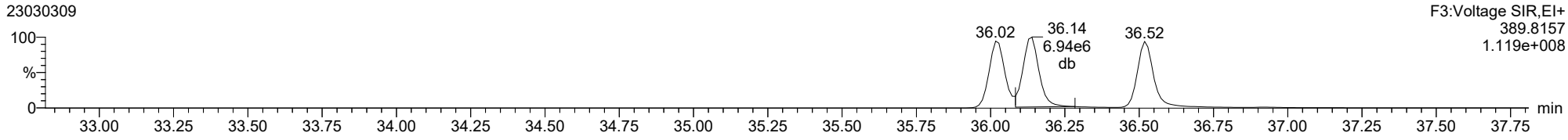

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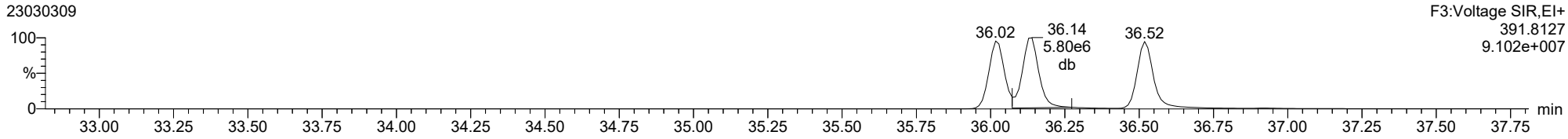

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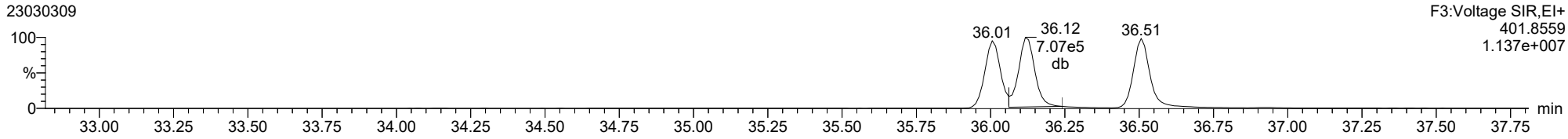

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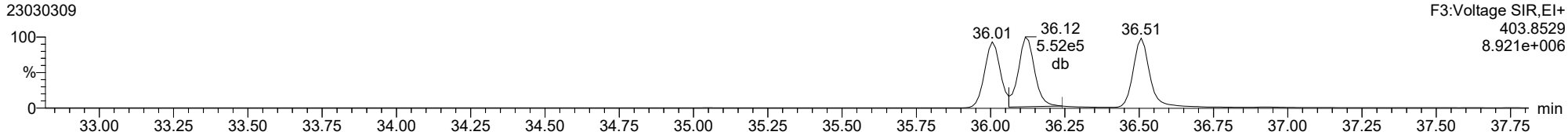

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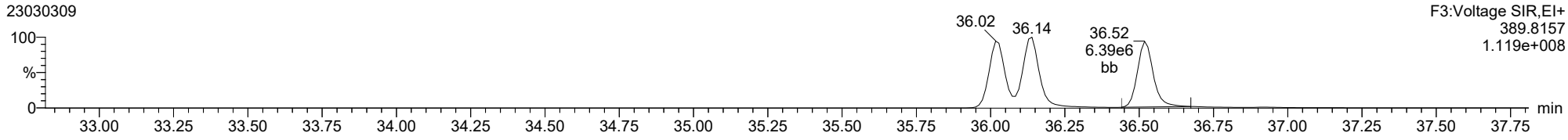

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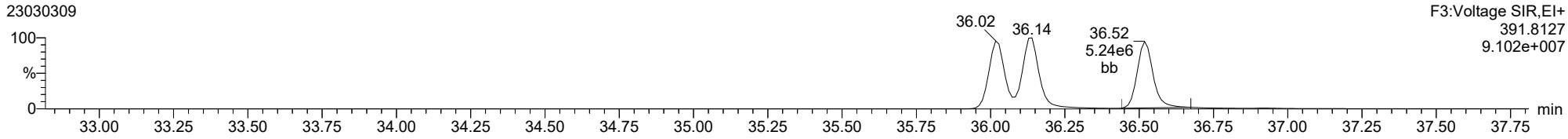

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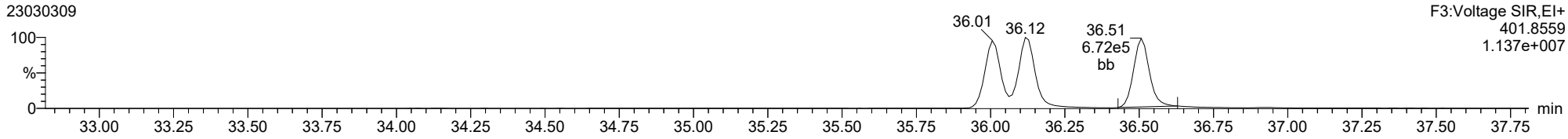

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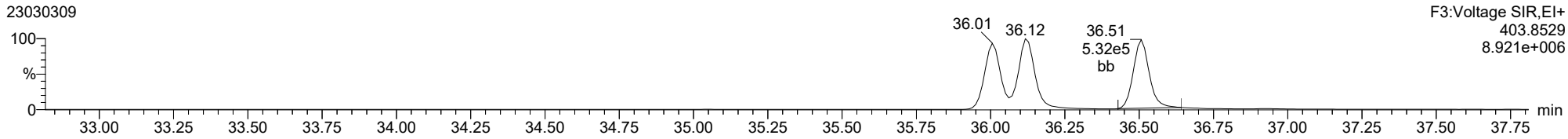

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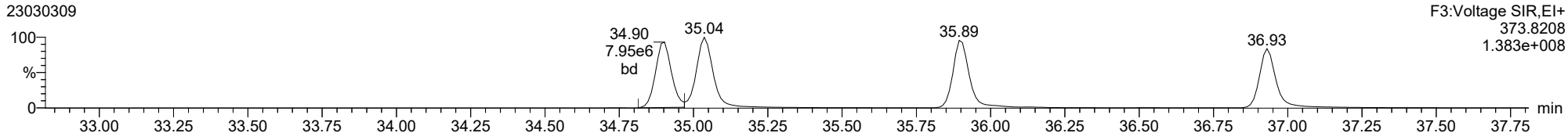

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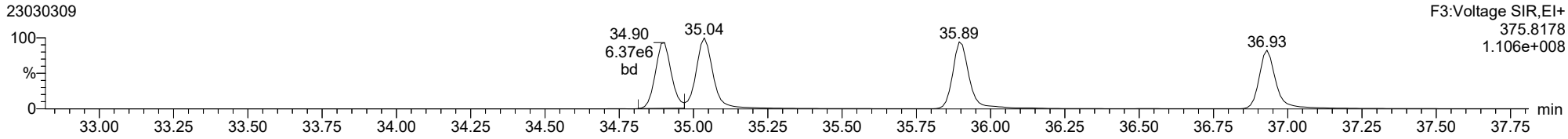

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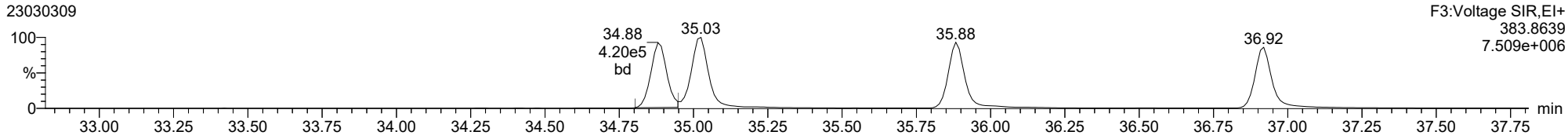

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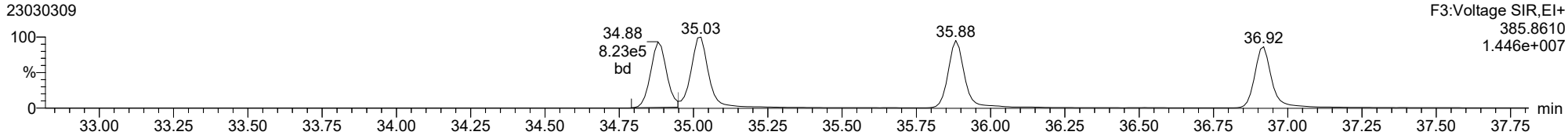

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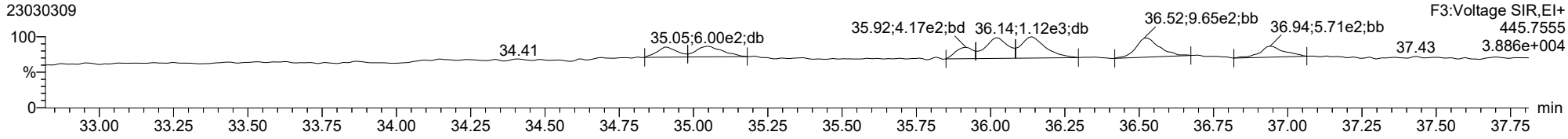

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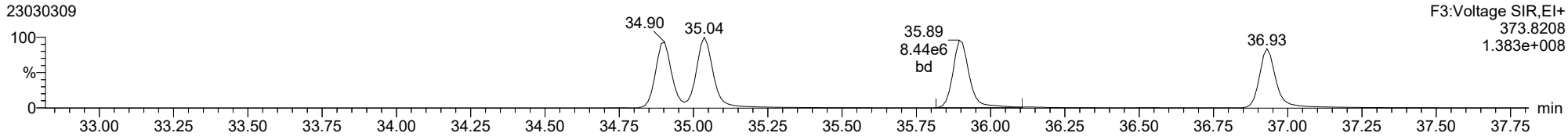

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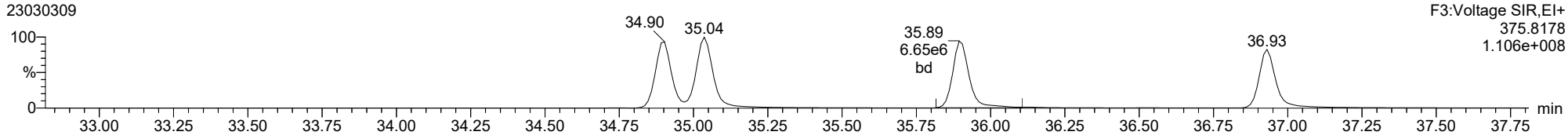

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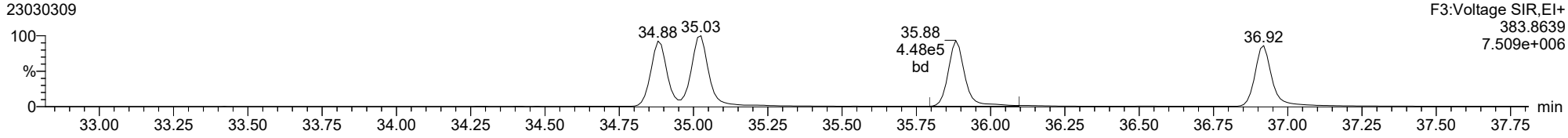

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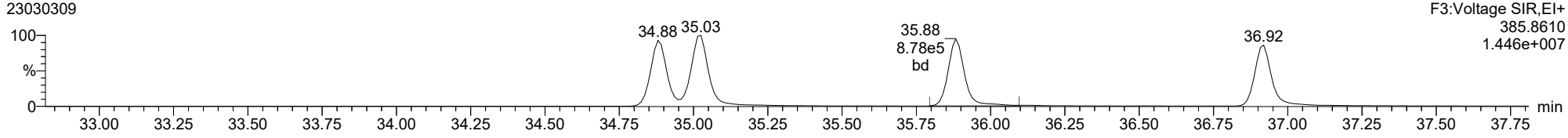

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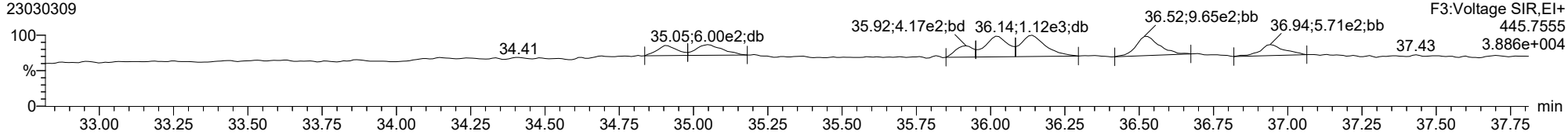

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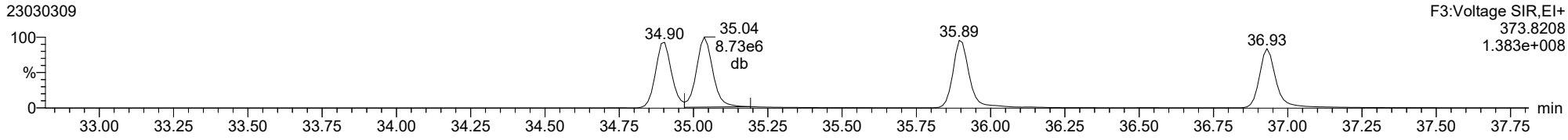

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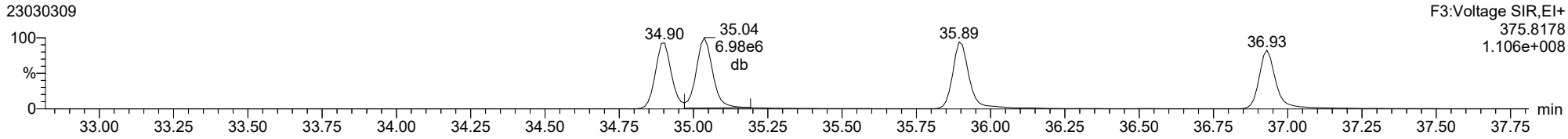

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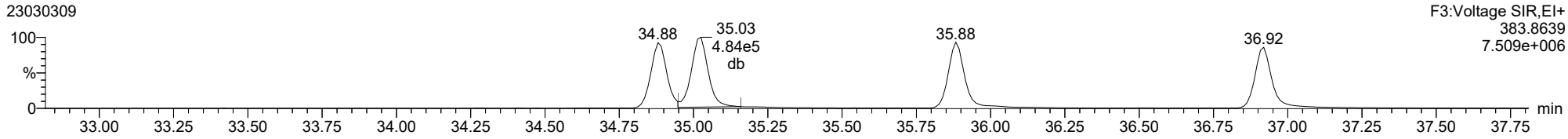

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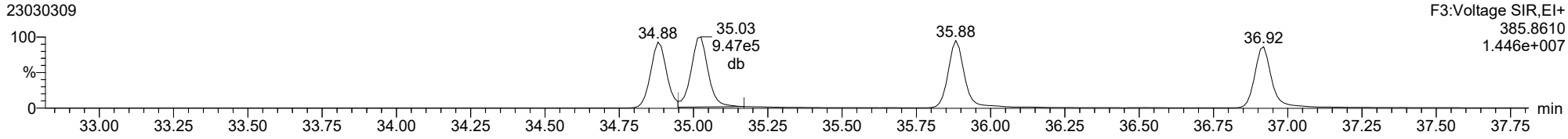

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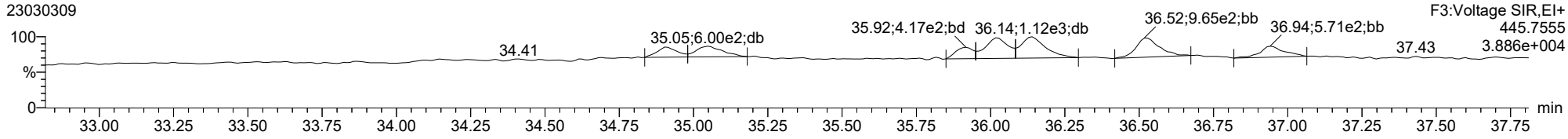

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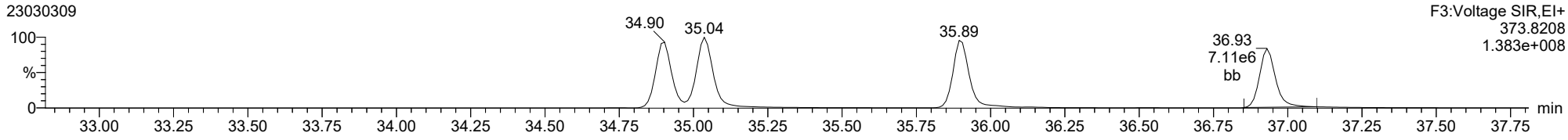

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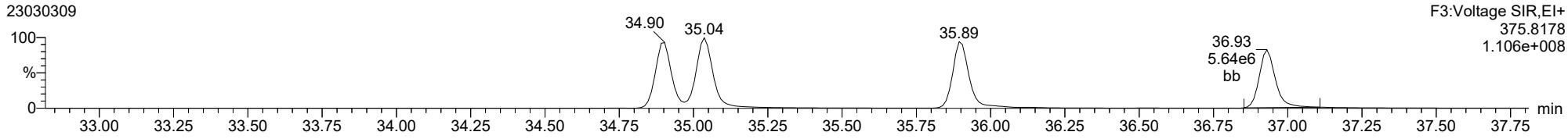

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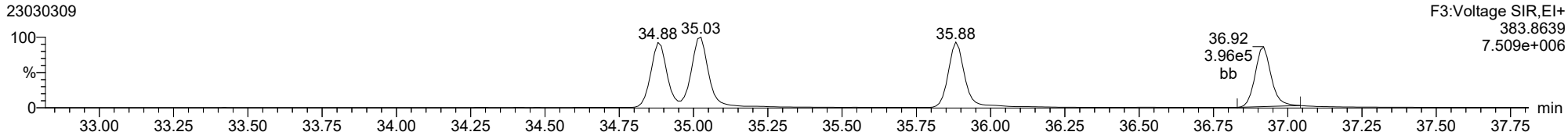

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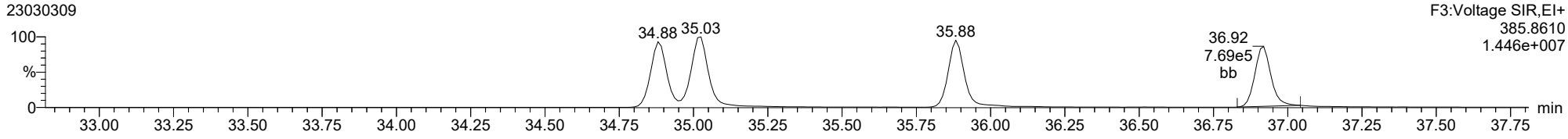

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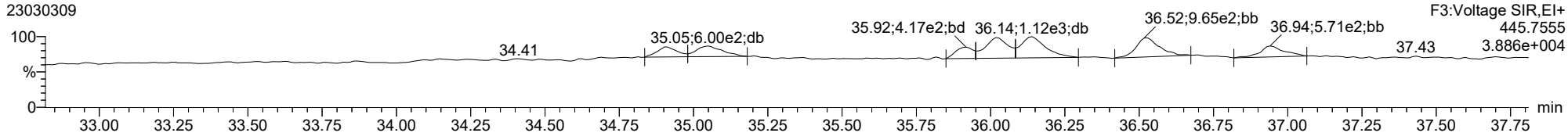

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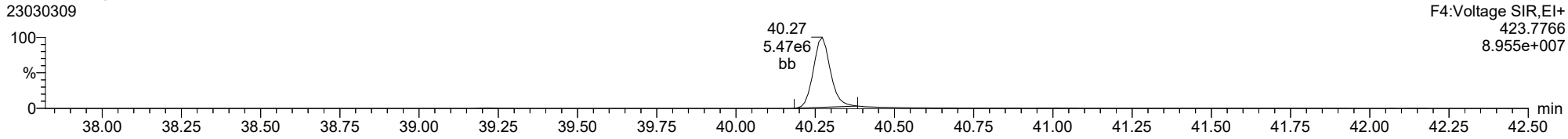

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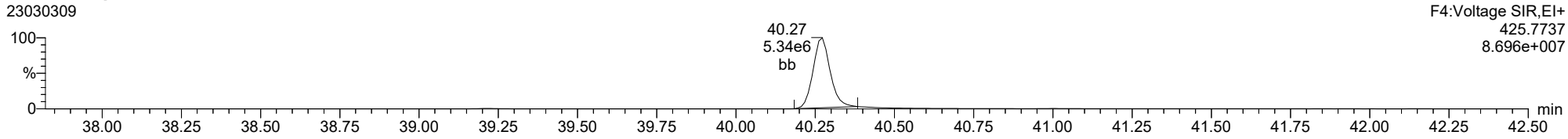

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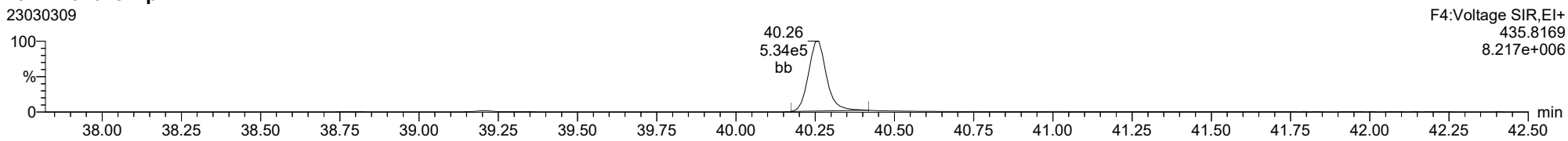

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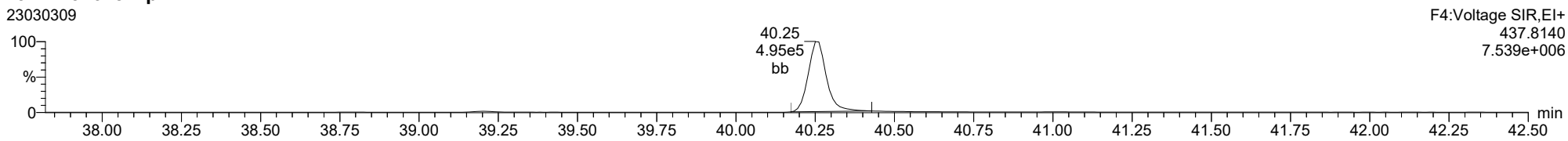

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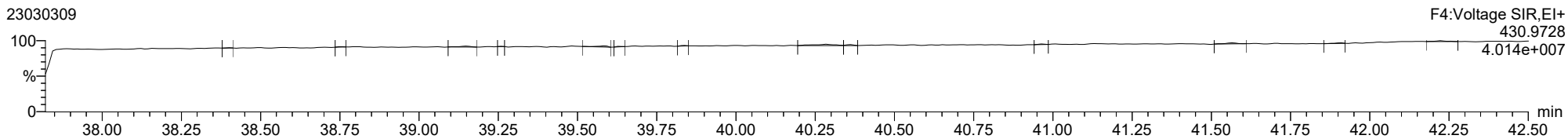

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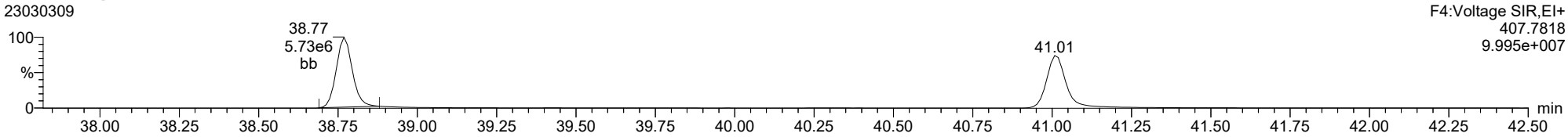

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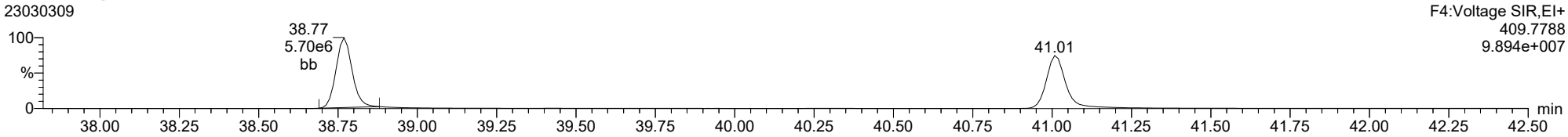

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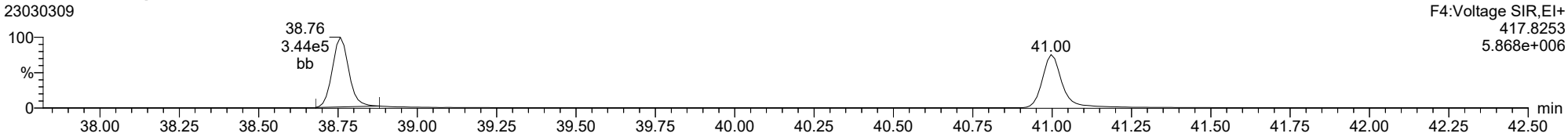

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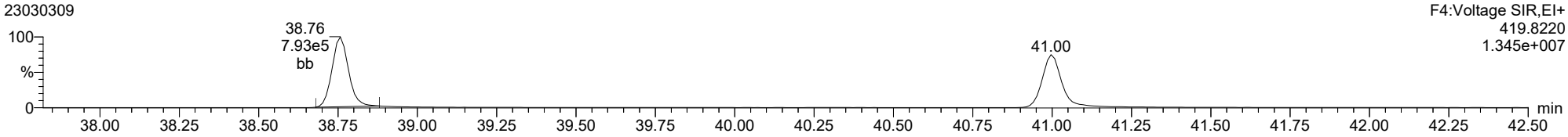

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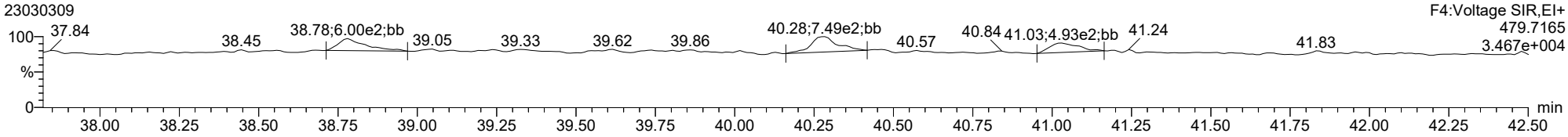

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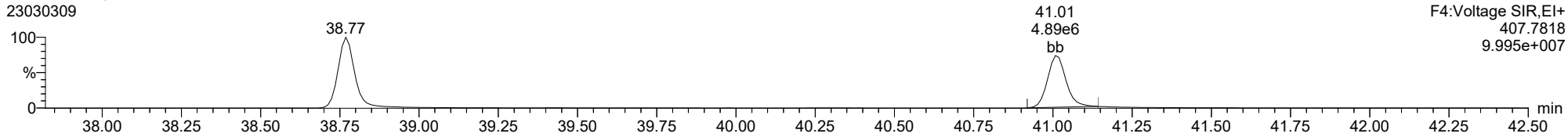

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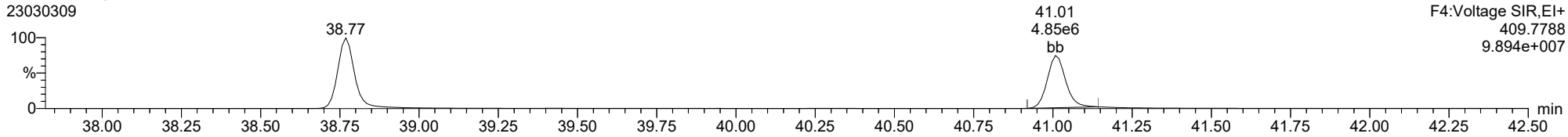

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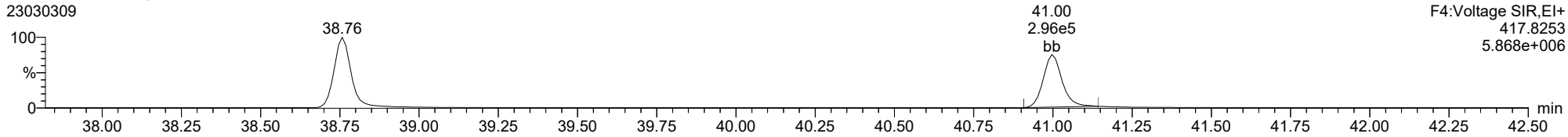

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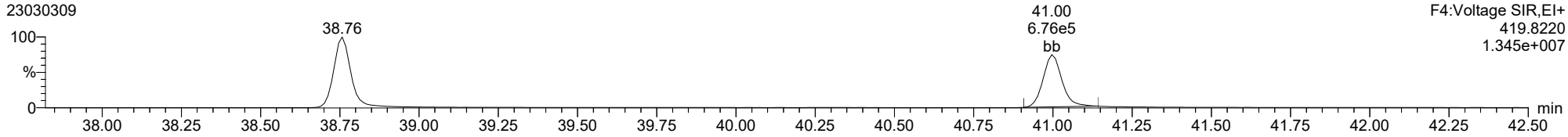

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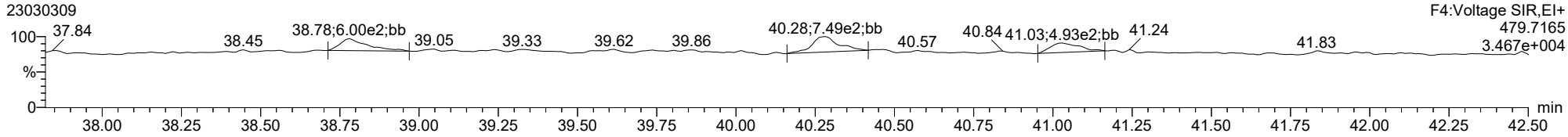

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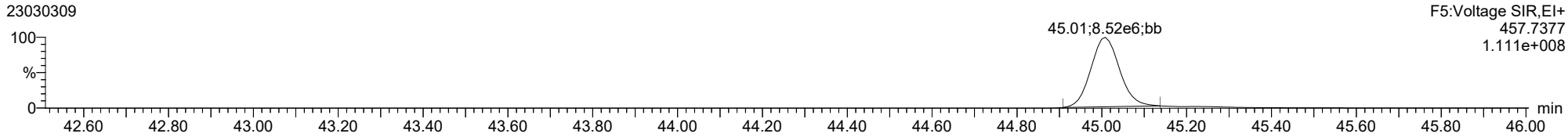

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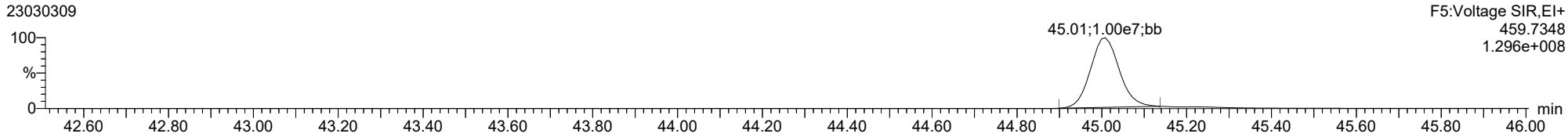

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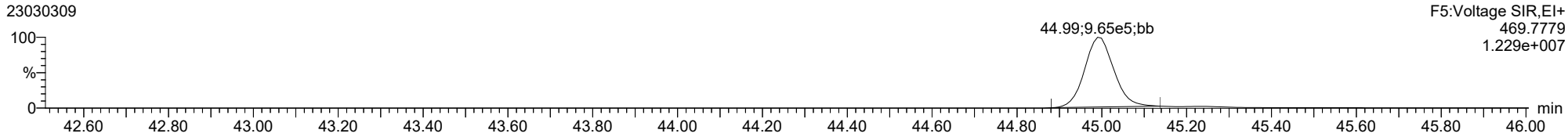

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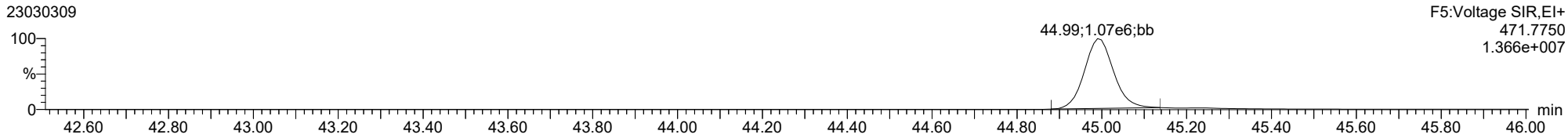

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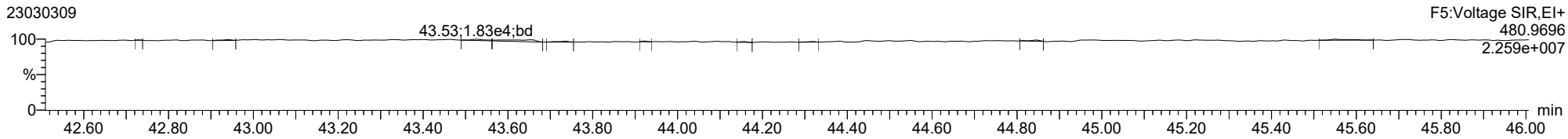

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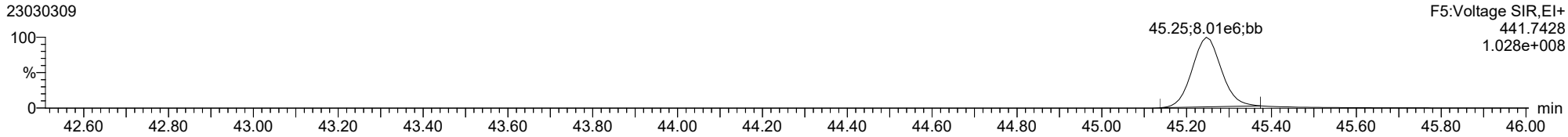

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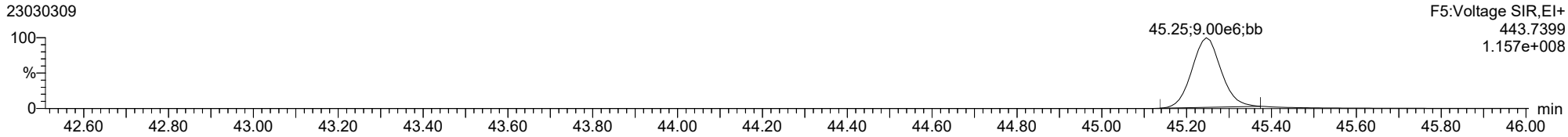

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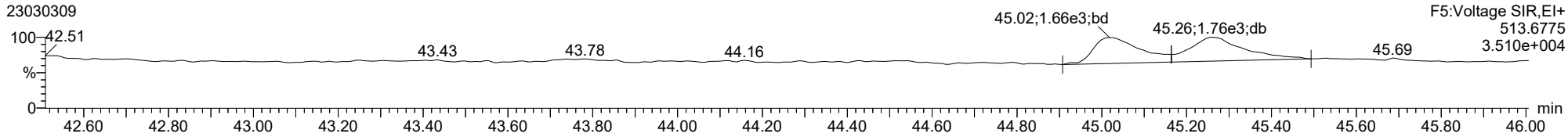

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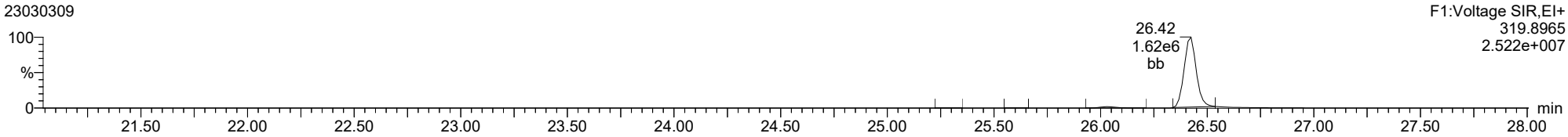
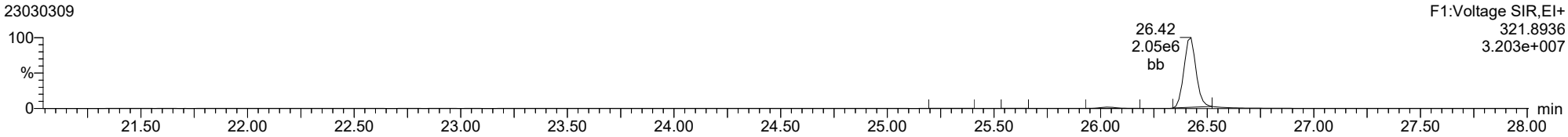
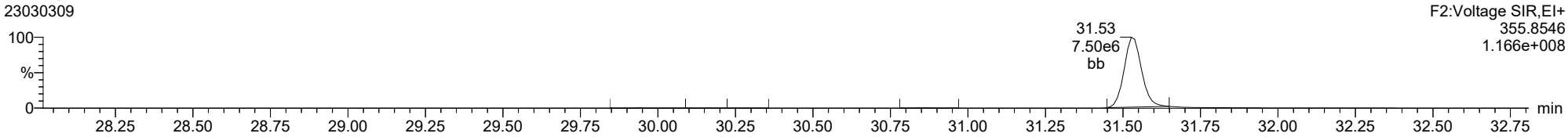


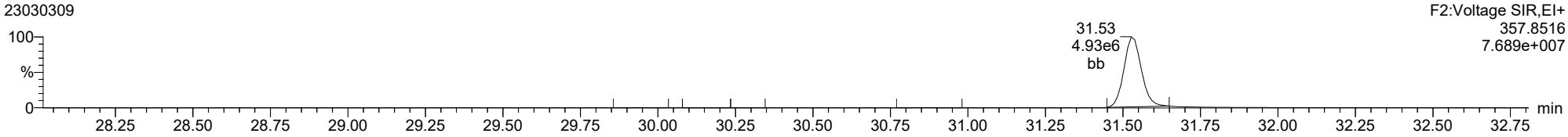
Total-tetradioxins



Total-pentadioxins



Total-pentadioxins



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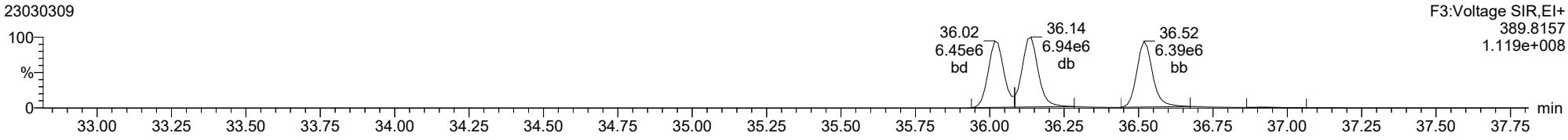
Total-hexadioxins



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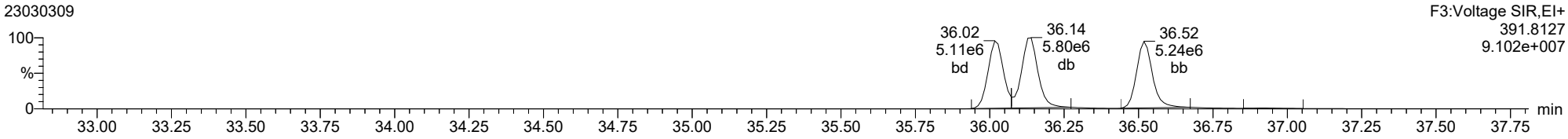
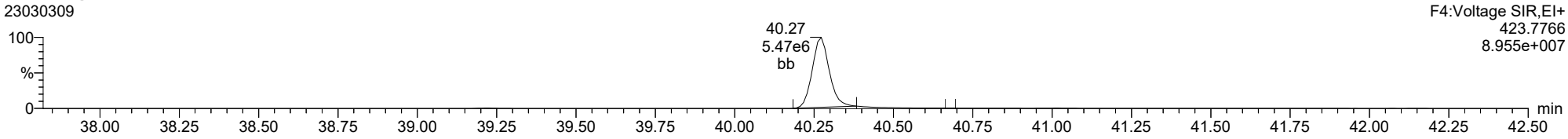
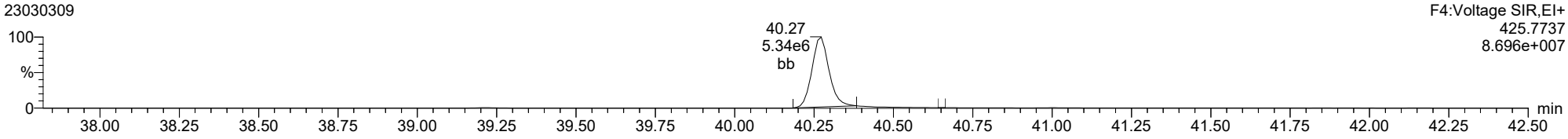


Total-heptadioxins



Total-heptadioxins



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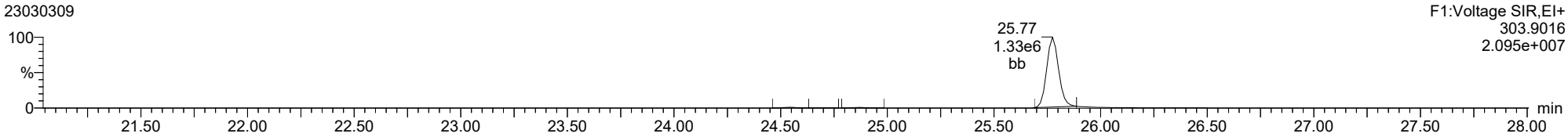
Total-tetrafurans



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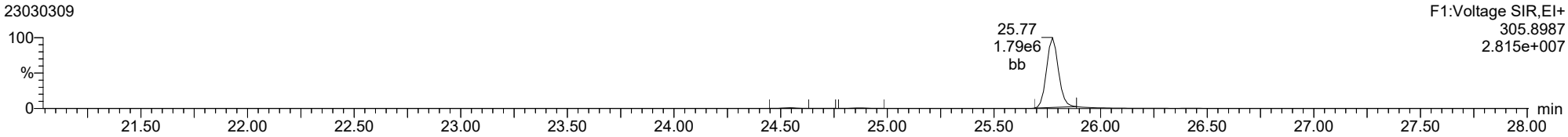

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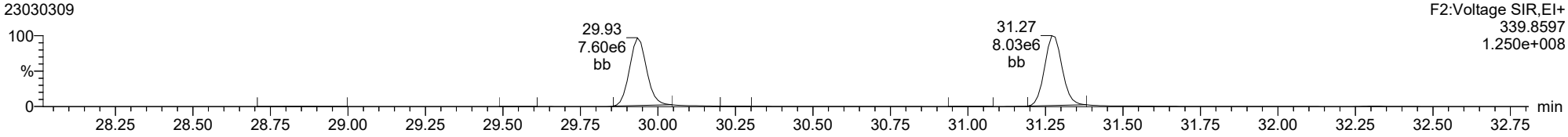

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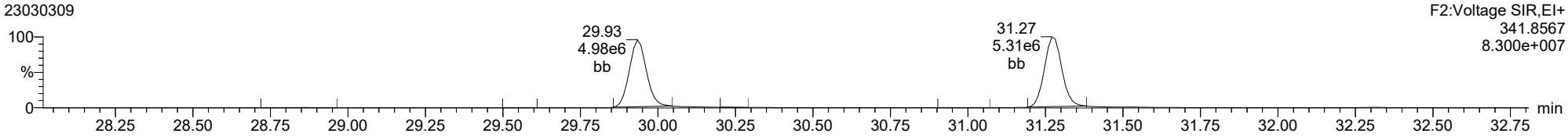

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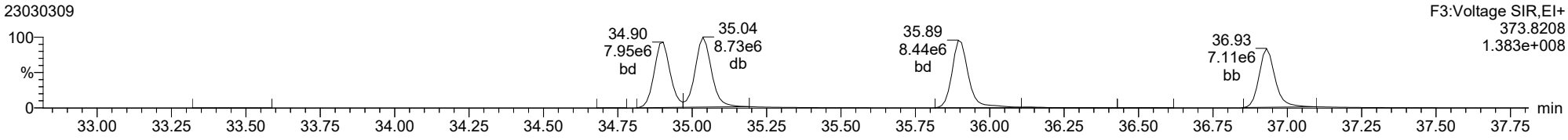

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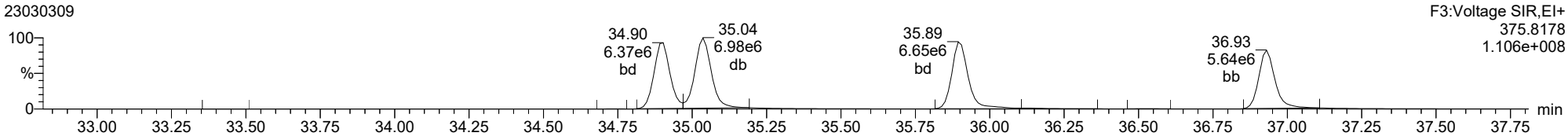

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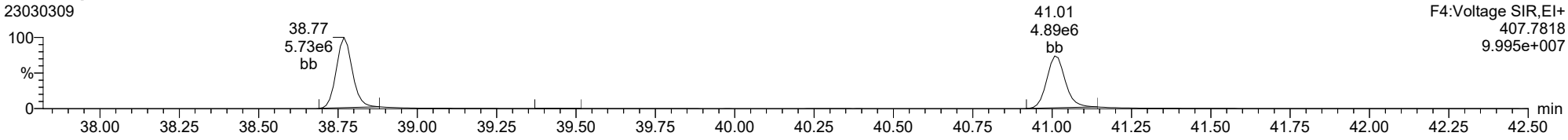

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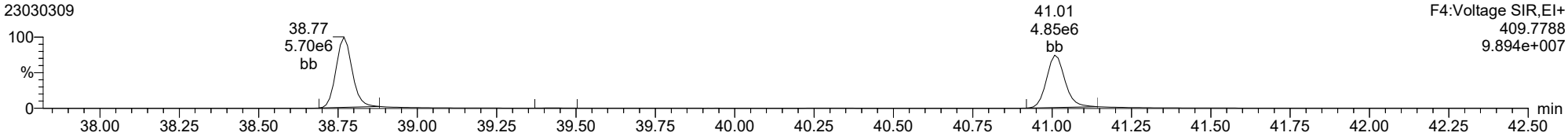

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Last Altered: Monday, March 06, 2023 11:49:27 Pacific Standard Time
Printed: Monday, March 06, 2023 14:47:19 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.774	1.000	5.338e4	7.452e4	0.702	0.716	0.770	1163	2029	8.36e5	1.13e6	718.7	556.3	NO	bb	bb	9.838
12378-PeCDF	29.934	1.000	2.214e5	1.526e5	0.679	1.451	1.550	3022	2812	3.24e6	2.15e6	1073.8	764.7	NO	bb	bd	51.391
23478-PeCDF	31.271	1.000	2.350e5	1.508e5	0.786	1.559	1.550	3022	2812	3.42e6	2.23e6	1131.6	792.3	NO	bb	bb	48.980
123478-HxCDF	34.903	1.001	2.903e5	2.325e5	1.166	1.248	1.240	3142	2543	4.30e6	3.42e6	1370.1	1344.7	NO	bd	bd	48.245
234678-HxCDF	35.905	1.001	2.873e5	2.291e5	1.140	1.254	1.240	3142	2543	4.27e6	3.38e6	1358.7	1330.7	NO	bb	bb	50.224
123678-HxCDF	35.036	1.001	3.271e5	2.812e5	1.091	1.163	1.240	3142	2543	4.70e6	3.76e6	1497.0	1479.3	NO	db	db	47.992
123789-HxCDF	36.930	1.001	2.403e5	1.952e5	1.137	1.231	1.240	3142	2543	3.49e6	2.77e6	1110.7	1088.1	NO	bb	bb	49.077
1234678-HpCDF	38.769	1.000	2.051e5	2.017e5	1.003	1.017	1.050	2774	2508	3.29e6	3.29e6	1185.4	1309.8	NO	bb	bb	51.838
1234789-HpCDF	41.008	1.000	1.584e5	1.578e5	0.953	1.004	1.050	2774	2508	2.19e6	2.22e6	790.9	884.0	NO	bb	bb	48.461
OCDF	45.237	1.006	2.094e5	2.177e5	0.778	0.962	0.890	1876	1660	2.24e6	2.46e6	1194.3	1483.7	NO	bd	bb	103.506
2378-TCDD	26.424	1.001	6.583e4	8.225e4	1.149	0.800	0.770	1514	1206	9.92e5	1.24e6	654.9	1028.2	NO	bb	bb	9.815
12378-PeCDD	31.538	1.001	2.257e5	1.459e5	1.022	1.547	1.550	2000	2144	3.28e6	2.13e6	1638.2	994.7	NO	bb	bb	48.547
123478-HxCDD	36.016	1.000	2.316e5	1.815e5	0.996	1.276	1.240	2983	1710	3.62e6	3.01e6	1214.5	1762.3	NO	bd	bd	50.799
123678-HxCDD	36.139	1.001	2.694e5	2.159e5	1.001	1.248	1.240	2983	1710	3.76e6	3.05e6	1260.5	1785.9	NO	db	db	50.174
123789-HxCDD	36.518	1.011	2.330e5	1.844e5	0.907	1.263	1.240	2983	1710	3.29e6	2.69e6	1104.0	1571.7	NO	bd	bb	51.608
1234678-HpCDD	40.272	1.001	1.962e5	1.803e5	1.039	1.088	1.050	2922	2339	2.72e6	2.60e6	932.5	1113.0	NO	bd	bb	49.199
OCDD	44.999	1.000	2.234e5	2.618e5	0.920	0.853	0.890	1774	1393	2.65e6	3.06e6	1496.5	2199.2	NO	bb	bb	99.422
13C-2378-TCDF	25.760	1.007	7.988e5	1.054e6	1.620	0.758	0.770	2799	1492	1.21e7	1.60e7	4320.8	10737.9	NO	bb	bb	96.925
13C-12378-PeCDF	29.923	1.169	6.425e5	4.290e5	1.240	1.498	1.550	3398	4585	8.78e6	5.86e6	2583.4	1278.4	NO	bd	bd	73.193
13C-23478-PeCDF	31.259	1.222	6.035e5	3.982e5	1.118	1.515	1.550	3398	4585	8.73e6	5.79e6	2568.3	1261.6	NO	bb	bb	75.943
13C-123478-HxCDF	34.880	0.955	3.186e5	6.107e5	1.168	0.522	0.510	2913	2215	4.74e6	9.25e6	1627.4	4175.4	NO	bd	bd	92.972
13C-123678-HxCDF	35.014	0.959	3.885e5	7.735e5	1.386	0.502	0.510	2913	2215	5.29e6	1.03e7	1816.0	4636.7	NO	dd	db	97.958
13C-234678-HxCDF	35.883	0.983	3.009e5	6.013e5	1.129	0.500	0.510	2913	2215	4.56e6	8.94e6	1567.0	4037.6	NO	bb	bb	93.371
13C-123789-HxCDF	36.908	1.011	2.634e5	5.171e5	0.932	0.509	0.510	2913	2215	3.83e6	7.41e6	1313.2	3346.2	NO	bb	bb	97.906
13C-1234678-HpCDF	38.757	1.062	2.395e5	5.428e5	0.895	0.441	0.440	2666	4327	3.79e6	8.70e6	1422.6	2009.5	NO	bb	bb	102.148
13C-1234789-HpCDF	40.997	1.123	1.971e5	4.875e5	0.770	0.404	0.440	2666	4327	2.64e6	6.15e6	990.0	1422.1	NO	bb	bb	103.953
13C-1234-TCDD	25.591	0.000	5.239e5	6.562e5	1.000	0.798	0.770	2541	1448	8.13e6	1.01e7	3200.8	6994.1	NO	bb	bb	100.000
13C-2378-TCDD	26.396	1.031	5.859e5	7.277e5	1.152	0.805	0.770	2541	1448	8.48e6	1.06e7	3338.5	7327.1	NO	bb	bb	96.583
13C-12378-PeCDD	31.515	1.232	4.640e5	2.850e5	0.829	1.628	1.550	1690	813	6.82e6	4.16e6	4037.7	5122.1	NO	bb	bb	76.570
13C-123478-HxCDD	36.005	0.986	4.566e5	3.601e5	0.995	1.268	1.240	2230	1571	7.33e6	5.72e6	3288.3	3642.7	NO	bd	bd	95.938
13C-123678-HxCDD	36.117	0.989	5.277e5	4.388e5	1.157	1.203	1.240	2230	1571	7.53e6	5.98e6	3378.3	3806.0	NO	db	db	97.660
13C-1234678-HpCDD	40.250	1.102	3.788e5	3.578e5	0.840	1.059	1.050	1327	2781	5.06e6	4.73e6	3813.0	1700.4	NO	bd	bb	102.476
13C-OCDD	44.981	1.232	5.015e5	5.594e5	0.767	0.896	0.890	2228	1562	5.65e6	6.37e6	2536.4	4080.5	NO	bb	bb	161.563
13C-123789-HxCDD	36.507	0.000	4.814e5	3.742e5	1.000	1.287	1.240	2230	1571	7.02e6	5.48e6	3149.1	3490.5	NO	bb	bb	100.000
37CL-2378-TCDD	26.424	1.033	1.324e5		1.288			2249		1.92e6		853.0			bb		8.714

Dataset: T:\Autospec\Processed Data Batch\230303IHICV.qld
Last Altered: Monday, March 06, 2023 11:49:27 Pacific Standard Time
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ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.271	0.865	6.666e4	8.755e4	0.802	0.761	0.770	1163	2029	1.09e6	1.45e6	933.7	713.4	NO	bb	bb	10.382
1289-TCDF	27.272	1.059	5.306e4	7.400e4	0.678	0.717	0.770	1163	2029	8.00e5	1.11e6	688.3	549.0	NO	bb	db	10.112
13468-PECDF	27.130	0.907	5.428e5	3.536e5	1.246	1.535	1.550	921	1306	8.56e6	5.56e6	9287.8	4254.6	NO	bb	bb	67.124
12389-PECDF	32.307	1.080	2.363e5	1.551e5	0.496	1.524	1.550	3022	2812	3.29e6	2.19e6	1088.1	777.6	NO	bb	bb	73.589
123468-HXCDF	33.231	0.953	3.102e5	2.472e5	1.169	1.255	1.240	3142	2543	4.60e6	3.67e6	1465.3	1443.2	NO	bb	bb	51.304
1368-TCDD	23.557	0.892	6.641e4	8.365e4	1.015	0.794	0.770	1514	1206	1.07e6	1.32e6	704.3	1092.4	NO	bb	bb	11.251
1289-TCDD	27.017	1.023	6.055e4	8.062e4	0.909	0.751	0.770	1514	1206	8.59e5	1.12e6	567.6	932.6	NO	bd	bd	11.826
12479-PECDD	28.819	0.914	4.776e5	3.067e5	2.301	1.557	1.550	2000	2144	4.46e6	2.89e6	2227.8	1348.6	NO	bb	bb	45.504
12389-PECDD	31.928	1.013	2.675e5	1.746e5	1.184	1.532	1.550	2000	2144	3.96e6	2.51e6	1980.6	1171.6	NO	bb	bb	49.870
124679-HXCDD	34.011	0.945	2.545e5	2.054e5	1.115	1.239	1.240	2983	1710	3.72e6	3.05e6	1245.7	1780.9	NO	bb	bb	50.484
1234679-HPCDD	39.225	0.975	2.082e5	2.022e5	1.137	1.029	1.050	2922	2339	3.21e6	3.09e6	1099.8	1322.5	NO	bb	bb	49.010
Total-tetrafurans			1.731e5		0.727			1163		2.72e6							30.332
Total-penta1			5.428e5					921		8.56e6							67.124
Total-pentafurans			7.375e5		0.654			3022		1.06e7							184.995
Total-hexafurans			1.455e6		1.141			3142		2.14e7							246.841
Total-heptafurans			3.635e5		0.978			2774		5.48e6							100.299
Total-Furans			3.482e6		0.922			1163		5.10e7							733.097
Total-tetradioxins			3.292e5		1.024			1514		4.53e6							56.345
Total-pentadioxins			9.708e5		1.502			2000		1.17e7							143.922
Total-hexadioxins			9.885e5		1.005			2983		1.44e7							203.065
Total-heptadioxins			4.044e5		1.088			2922		5.94e6							98.208
Total-Dioxins			2.916e6		1.130			1514		3.92e7							600.962
Total-TEQ			6.398e6					1514		9.02e7							1334.059
FUNCTION1 PFK			0.000e0					539943		0.00e0							
FUNCTION2 PFK			2.253e6					228820		1.84e6							0.000
FUNCTION3 PFK			3.977e4					386595		8.75e5							0.000
FUNCTION4 PFK			7.296e4					280107		2.70e6							
FUNCTION5 PFK			1.323e3					209307		1.46e5							
FUNCTION1 HXCD...			6.633e2					708		9.34e3							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			5.152e2					1165		9.44e3							0.000
FUNCTION3 OCDPE			5.246e2					459		6.83e3							0.000
FUNCTION4 NCDPE			4.889e2					641		6.04e3							0.000
FUNCTION5 DCDPE			0.000e0					644		0.00e0							

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Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.27	5.306e4	7.400e4	0.678	0.72	0.77	688.3	YES	NO	bb	db	10.112
2	2378-TCDF	25.77	5.338e4	7.452e4	0.702	0.72	0.77	718.7	YES	NO	bb	bb	9.838
3	1368-TCDF	22.27	6.666e4	8.755e4	0.802	0.76	0.77	933.7	YES	NO	bb	bb	10.382

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	27.13	5.428e5	3.536e5	1.246	1.54	1.55	9287.8	YES	NO	bb	bb	67.124

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDF	32.31	2.363e5	1.551e5	0.496	1.52	1.55	1088.1	YES	NO	bb	bb	73.589
2	23478-PeCDF	31.27	2.350e5	1.508e5	0.786	1.56	1.55	1131.6	YES	NO	bb	bb	48.980
3	12378-PeCDF	29.93	2.214e5	1.526e5	0.679	1.45	1.55	1073.8	YES	NO	bb	bd	51.391
4	Total-pentafurans	28.79	4.479e4	3.002e4	0.654	1.49	1.55	225.2	YES	NO	bb	bb	11.035

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123478-HxCDF	34.90	2.903e5	2.325e5	1.166	1.25	1.24	1370.1	YES	NO	bd	bd	48.245
2	123468-HXCDF	33.23	3.102e5	2.472e5	1.169	1.26	1.24	1465.3	YES	NO	bb	bb	51.304
3	123789-HxCDF	36.93	2.403e5	1.952e5	1.137	1.23	1.24	1110.7	YES	NO	bb	bb	49.077
4	234678-HxCDF	35.91	2.873e5	2.291e5	1.140	1.25	1.24	1358.7	YES	NO	bb	bb	50.224
5	123678-HxCDF	35.04	3.271e5	2.812e5	1.091	1.16	1.24	1497.0	YES	NO	db	db	47.992

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDF	38.77	2.051e5	2.017e5	1.003	1.02	1.05	1185.4	YES	NO	bb	bb	51.838
2	1234789-HpCDF	41.01	1.584e5	1.578e5	0.953	1.00	1.05	790.9	YES	NO	bb	bb	48.461

ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.27	5.306e4	7.400e4	0.678	0.72	0.77	688.3	YES	NO	bb	db	10.112
2	2378-TCDF	25.77	5.338e4	7.452e4	0.702	0.72	0.77	718.7	YES	NO	bb	bb	9.838
3	1368-TCDF	22.27	6.666e4	8.755e4	0.802	0.76	0.77	933.7	YES	NO	bb	bb	10.382
4	12389-PECDF	32.31	2.363e5	1.551e5	0.496	1.52	1.55	1088.1	YES	NO	bb	bb	73.589
5	23478-PeCDF	31.27	2.350e5	1.508e5	0.786	1.56	1.55	1131.6	YES	NO	bb	bb	48.980
6	12378-PeCDF	29.93	2.214e5	1.526e5	0.679	1.45	1.55	1073.8	YES	NO	bb	bd	51.391
7	Total-pentafurans	28.79	4.479e4	3.002e4	0.654	1.49	1.55	225.2	YES	NO	bb	bb	11.035
8	123478-HxCDF	34.90	2.903e5	2.325e5	1.166	1.25	1.24	1370.1	YES	NO	bd	bd	48.245
9	123468-HXCDF	33.23	3.102e5	2.472e5	1.169	1.26	1.24	1465.3	YES	NO	bb	bb	51.304
10	123789-HxCDF	36.93	2.403e5	1.952e5	1.137	1.23	1.24	1110.7	YES	NO	bb	bb	49.077
11	234678-HxCDF	35.91	2.873e5	2.291e5	1.140	1.25	1.24	1358.7	YES	NO	bb	bb	50.224
12	123678-HxCDF	35.04	3.271e5	2.812e5	1.091	1.16	1.24	1497.0	YES	NO	db	db	47.992
13	1234678-HpCDF	38.77	2.051e5	2.017e5	1.003	1.02	1.05	1185.4	YES	NO	bb	bb	51.838
14	1234789-HpCDF	41.01	1.584e5	1.578e5	0.953	1.00	1.05	790.9	YES	NO	bb	bb	48.461
15	OCDF	45.24	2.094e5	2.177e5	0.778	0.96	0.89	1194.3	YES	NO	bd	bb	103.506
16	13468-PECDF	27.13	5.428e5	3.536e5	1.246	1.54	1.55	9287.8	YES	NO	bb	bb	67.124

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	25.60	3.327e4	3.983e4	1.024	0.84	0.77	333.8	YES	NO	bd	bb	5.433
2	Total-tetradioxins	25.04	8.004e2	1.202e3	1.024	0.67	0.77	7.4	YES	NO	bb	db	0.149
3	Total-tetradioxins	24.74	2.704e3	4.097e3	1.024	0.66	0.77	17.7	YES	NO	bb	bd	0.506
4	1368-TCDD	23.56	6.641e4	8.365e4	1.015	0.79	0.77	704.3	YES	NO	bb	bb	11.251
5	1289-TCDD	27.02	6.055e4	8.062e4	0.909	0.75	0.77	567.6	YES	NO	bd	bd	11.826
6	Total-tetradioxins	26.76	1.054e2	1.391e2	1.024	0.76	0.77	2.1	NO	NO	bb	bb	0.018
7	2378-TCDD	26.42	6.583e4	8.225e4	1.149	0.80	0.77	654.9	YES	NO	bb	bb	9.815
8	Total-tetradioxins	26.10	9.949e4	1.339e5	1.024	0.74	0.77	703.4	YES	NO	bb	bb	17.347

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	31.93	2.675e5	1.746e5	1.184	1.53	1.55	1980.6	YES	NO	bb	bb	49.870
2	12378-PeCDD	31.54	2.257e5	1.459e5	1.022	1.55	1.55	1638.2	YES	NO	bb	bb	48.547
3	12479-PECDD	28.82	4.776e5	3.067e5	2.301	1.56	1.55	2227.8	YES	NO	bb	bb	45.504

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HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	124679-HXCDD	34.01	2.545e5	2.054e5	1.115	1.24	1.24	1245.7	YES	NO	bb	bb	50.484
2	123789-HxCDD	36.52	2.330e5	1.844e5	0.907	1.26	1.24	1104.0	YES	NO	bd	bb	51.608
3	123678-HxCDD	36.14	2.694e5	2.159e5	1.001	1.25	1.24	1260.5	YES	NO	db	db	50.174
4	123478-HxCDD	36.02	2.316e5	1.815e5	0.996	1.28	1.24	1214.5	YES	NO	bd	bd	50.799

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234679-HPCDD	39.23	2.082e5	2.022e5	1.137	1.03	1.05	1099.8	YES	NO	bb	bb	49.010
2	1234678-HpCDD	40.27	1.962e5	1.803e5	1.039	1.09	1.05	932.5	YES	NO	bd	bb	49.199

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	25.60	3.327e4	3.983e4	1.024	0.84	0.77	333.8	YES	NO	bd	bb	5.433
2	Total-tetradioxins	25.04	8.004e2	1.202e3	1.024	0.67	0.77	7.4	YES	NO	bb	db	0.149
3	Total-tetradioxins	24.74	2.704e3	4.097e3	1.024	0.66	0.77	17.7	YES	NO	bb	bd	0.506
4	1368-TCDD	23.56	6.641e4	8.365e4	1.015	0.79	0.77	704.3	YES	NO	bb	bb	11.251
5	1289-TCDD	27.02	6.055e4	8.062e4	0.909	0.75	0.77	567.6	YES	NO	bd	bd	11.826
6	Total-tetradioxins	26.76	1.054e2	1.391e2	1.024	0.76	0.77	2.1	NO	NO	bb	bb	0.018
7	2378-TCDD	26.42	6.583e4	8.225e4	1.149	0.80	0.77	654.9	YES	NO	bb	bb	9.815
8	Total-tetradioxins	26.10	9.949e4	1.339e5	1.024	0.74	0.77	703.4	YES	NO	bb	bb	17.347
9	12389-PECDD	31.93	2.675e5	1.746e5	1.184	1.53	1.55	1980.6	YES	NO	bb	bb	49.870
10	12378-PeCDD	31.54	2.257e5	1.459e5	1.022	1.55	1.55	1638.2	YES	NO	bb	bb	48.547
11	12479-PECDD	28.82	4.776e5	3.067e5	2.301	1.56	1.55	2227.8	YES	NO	bb	bb	45.504
12	124679-HXCDD	34.01	2.545e5	2.054e5	1.115	1.24	1.24	1245.7	YES	NO	bb	bb	50.484
13	123789-HxCDD	36.52	2.330e5	1.844e5	0.907	1.26	1.24	1104.0	YES	NO	bd	bb	51.608
14	123678-HxCDD	36.14	2.694e5	2.159e5	1.001	1.25	1.24	1260.5	YES	NO	db	db	50.174
15	123478-HxCDD	36.02	2.316e5	1.815e5	0.996	1.28	1.24	1214.5	YES	NO	bd	bd	50.799
16	1234679-HPCDD	39.23	2.082e5	2.022e5	1.137	1.03	1.05	1099.8	YES	NO	bb	bb	49.010
17	1234678-HpCDD	40.27	1.962e5	1.803e5	1.039	1.09	1.05	932.5	YES	NO	bd	bb	49.199
18	OCDD	45.00	2.234e5	2.618e5	0.920	0.85	0.89	1496.5	YES	NO	bb	bb	99.422

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.27	5.306e4	7.400e4	0.678	0.72	0.77	688.3	YES	NO	bb	db	10.112
2	2378-TCDF	25.77	5.338e4	7.452e4	0.702	0.72	0.77	718.7	YES	NO	bb	bb	9.838
3	1368-TCDF	22.27	6.666e4	8.755e4	0.802	0.76	0.77	933.7	YES	NO	bb	bb	10.382
4	12389-PECDF	32.31	2.363e5	1.551e5	0.496	1.52	1.55	1088.1	YES	NO	bb	bb	73.589
5	23478-PeCDF	31.27	2.350e5	1.508e5	0.786	1.56	1.55	1131.6	YES	NO	bb	bb	48.980
6	12378-PeCDF	29.93	2.214e5	1.526e5	0.679	1.45	1.55	1073.8	YES	NO	bb	bd	51.391
7	Total-pentafurans	28.79	4.479e4	3.002e4	0.654	1.49	1.55	225.2	YES	NO	bb	bb	11.035
8	123478-HxCDF	34.90	2.903e5	2.325e5	1.166	1.25	1.24	1370.1	YES	NO	bd	bd	48.245
9	123468-HXCDF	33.23	3.102e5	2.472e5	1.169	1.26	1.24	1465.3	YES	NO	bb	bb	51.304
10	123789-HxCDF	36.93	2.403e5	1.952e5	1.137	1.23	1.24	1110.7	YES	NO	bb	bb	49.077
11	234678-HxCDF	35.91	2.873e5	2.291e5	1.140	1.25	1.24	1358.7	YES	NO	bb	bb	50.224
12	123678-HxCDF	35.04	3.271e5	2.812e5	1.091	1.16	1.24	1497.0	YES	NO	db	db	47.992
13	1234678-HpCDF	38.77	2.051e5	2.017e5	1.003	1.02	1.05	1185.4	YES	NO	bb	bb	51.838
14	1234789-HpCDF	41.01	1.584e5	1.578e5	0.953	1.00	1.05	790.9	YES	NO	bb	bb	48.461
15	OCDF	45.24	2.094e5	2.177e5	0.778	0.96	0.89	1194.3	YES	NO	bd	bb	103.506
16	13468-PECDF	27.13	5.428e5	3.536e5	1.246	1.54	1.55	9287.8	YES	NO	bb	bb	67.124
17	Total-tetradioxins	25.60	3.327e4	3.983e4	1.024	0.84	0.77	333.8	YES	NO	bd	bb	5.433
18	Total-tetradioxins	25.04	8.004e2	1.202e3	1.024	0.67	0.77	7.4	YES	NO	bb	db	0.149
19	Total-tetradioxins	24.74	2.704e3	4.097e3	1.024	0.66	0.77	17.7	YES	NO	bb	bd	0.506
20	1368-TCDD	23.56	6.641e4	8.365e4	1.015	0.79	0.77	704.3	YES	NO	bb	bb	11.251
21	1289-TCDD	27.02	6.055e4	8.062e4	0.909	0.75	0.77	567.6	YES	NO	bd	bd	11.826
22	Total-tetradioxins	26.76	1.054e2	1.391e2	1.024	0.76	0.77	2.1	NO	NO	bb	bb	0.018
23	2378-TCDD	26.42	6.583e4	8.225e4	1.149	0.80	0.77	654.9	YES	NO	bb	bb	9.815
24	Total-tetradioxins	26.10	9.949e4	1.339e5	1.024	0.74	0.77	703.4	YES	NO	bb	bb	17.347
25	12389-PECDD	31.93	2.675e5	1.746e5	1.184	1.53	1.55	1980.6	YES	NO	bb	bb	49.870
26	12378-PeCDD	31.54	2.257e5	1.459e5	1.022	1.55	1.55	1638.2	YES	NO	bb	bb	48.547
27	12479-PECDD	28.82	4.776e5	3.067e5	2.301	1.56	1.55	2227.8	YES	NO	bb	bb	45.504
28	124679-HXCDD	34.01	2.545e5	2.054e5	1.115	1.24	1.24	1245.7	YES	NO	bb	bb	50.484
29	123789-HxCDD	36.52	2.330e5	1.844e5	0.907	1.26	1.24	1104.0	YES	NO	bd	bb	51.608
30	123678-HxCDD	36.14	2.694e5	2.159e5	1.001	1.25	1.24	1260.5	YES	NO	db	db	50.174
31	123478-HxCDD	36.02	2.316e5	1.815e5	0.996	1.28	1.24	1214.5	YES	NO	bd	bd	50.799
32	1234679-HPCDD	39.23	2.082e5	2.022e5	1.137	1.03	1.05	1099.8	YES	NO	bb	bb	49.010
33	1234678-HpCDD	40.27	1.962e5	1.803e5	1.039	1.09	1.05	932.5	YES	NO	bd	bb	49.199
34	OCDD	45.00	2.234e5	2.618e5	0.920	0.85	0.89	1496.5	YES	NO	bb	bb	99.422

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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	28.14	2.253e6					8.0	YES		bb		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	34.08	3.977e4					2.3	NO		bb		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	41.32	4.162e3					0.8	NO		bb		
2	FUNCTION4 PFK	40.68	1.340e4					1.2	NO		bb		
3	FUNCTION4 PFK	40.50	1.024e4					1.3	NO		bb		
4	FUNCTION4 PFK	40.07	1.056e4					1.2	NO		bb		
5	FUNCTION4 PFK	39.50	1.007e4					1.4	NO		bb		
6	FUNCTION4 PFK	42.14	1.085e4					1.0	NO		bb		
7	FUNCTION4 PFK	42.10	6.400e3					1.1	NO		bb		
8	FUNCTION4 PFK	41.87	1.885e3					0.6	NO		bb		
9	FUNCTION4 PFK	41.61	5.389e3					0.9	NO		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	43.23	1.323e3					0.7	NO		bb		

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ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	26.55	1.589e2					2.0	NO		db		0.000
2	FUNCTION1 HXCD...	26.42	1.755e2					3.2	YES		bd		0.000
3	FUNCTION1 HXCD...	25.59	9.854e1					1.9	NO		bb		0.000
4	FUNCTION1 HXCD...	23.87	7.096e1					1.9	NO		bb		0.000
5	FUNCTION1 HXCD...	23.56	8.003e1					2.4	NO		bb		0.000
6	FUNCTION1 HXCD...	22.40	7.940e1					1.8	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	30.33	1.101e2					1.7	NO		bb		0.000
2	FUNCTION2 HPCD...	28.89	7.875e1					1.7	NO		bb		0.000
3	FUNCTION2 HPCD...	31.17	3.263e2					4.7	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.51	1.586e2					5.0	YES		bb		0.000
2	FUNCTION3 OCDPE	36.13	1.909e2					4.9	YES		db		0.000
3	FUNCTION3 OCDPE	35.99	1.751e2					5.1	YES		bd		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	41.06	1.247e2					2.2	NO		db		0.000
2	FUNCTION4 NCDPE	40.94	7.187e1					1.7	NO		bd		0.000
3	FUNCTION4 NCDPE	40.37	7.003e1					1.7	NO		db		0.000
4	FUNCTION4 NCDPE	40.26	2.223e2					3.8	YES		bd		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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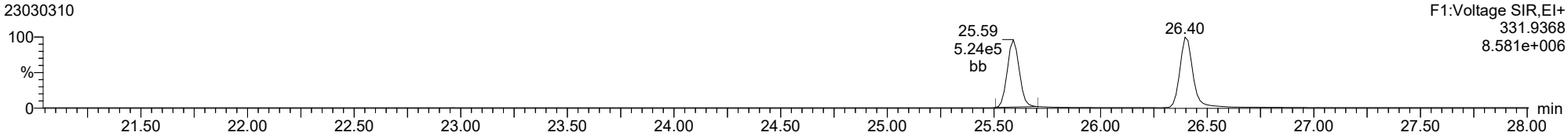
13C-1234-TCDD



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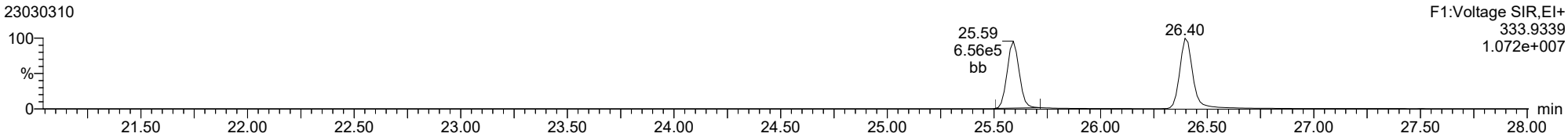

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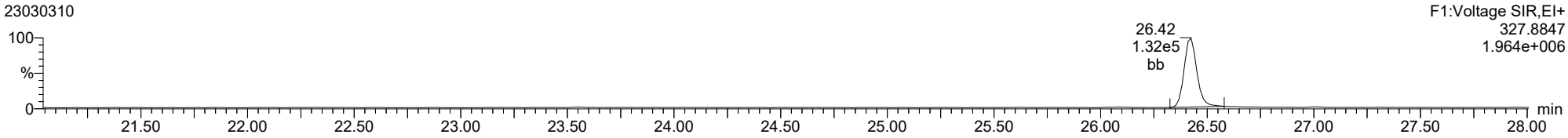

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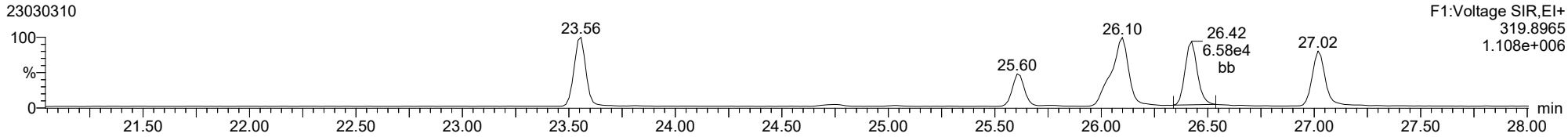

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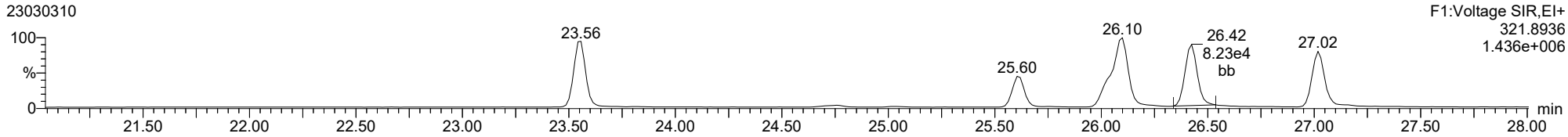

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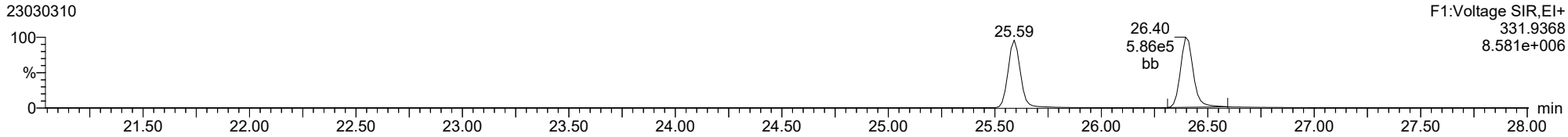

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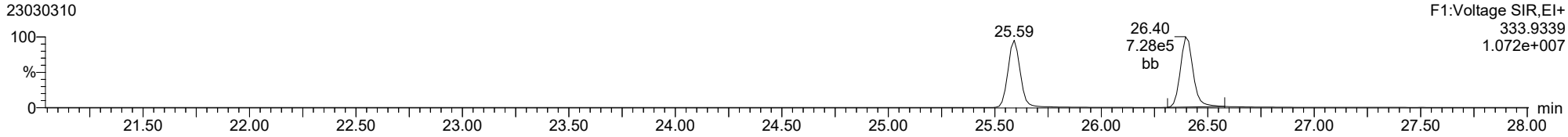
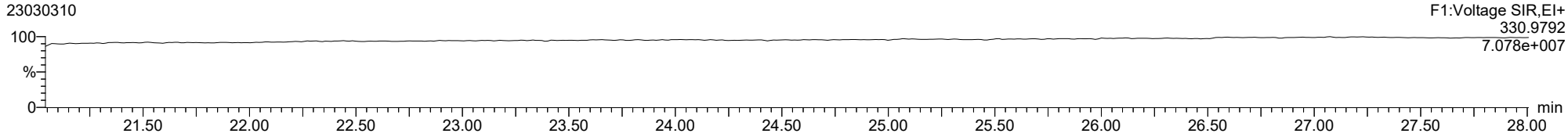


FUNCTION1 PFK



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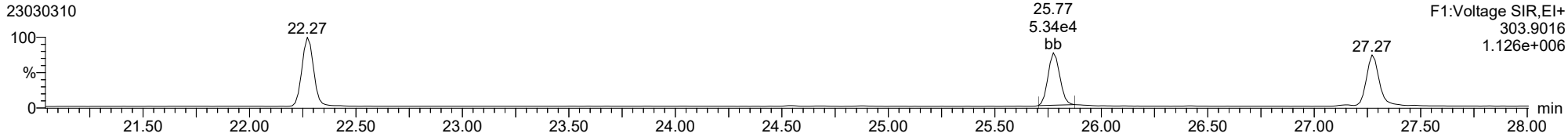
2378-TCDF



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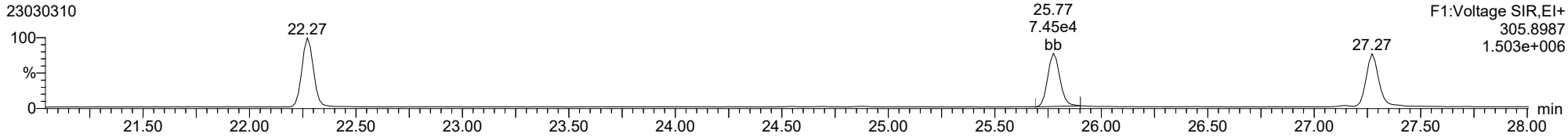

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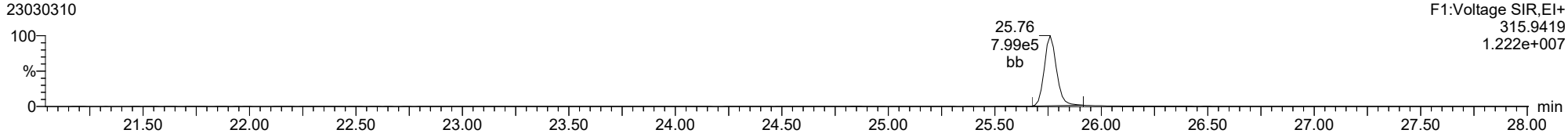

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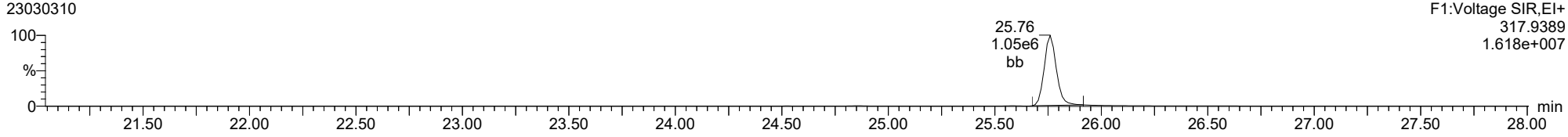

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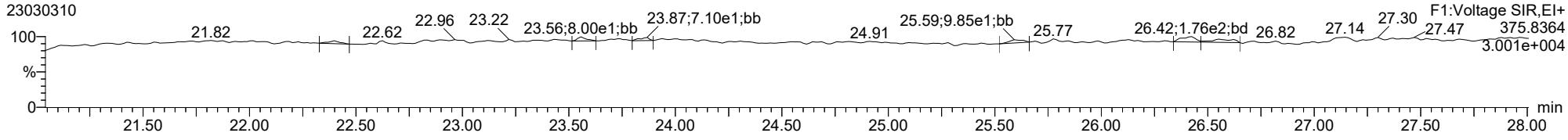

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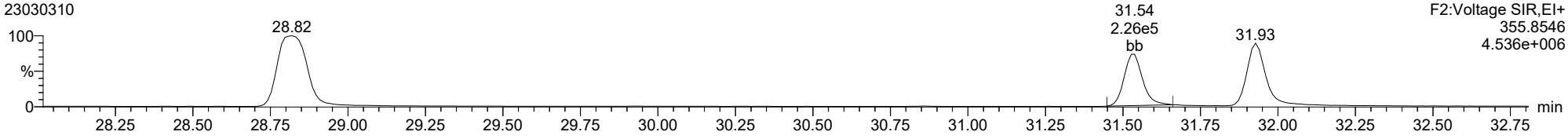
12378-PeCDD



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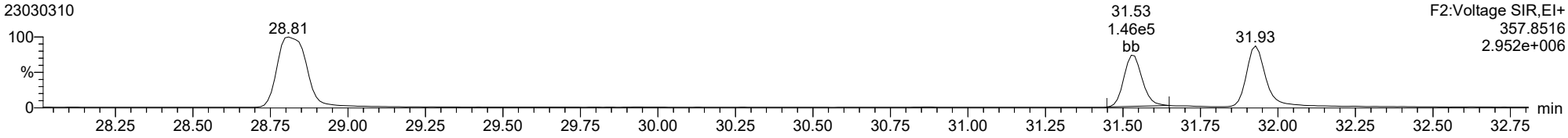

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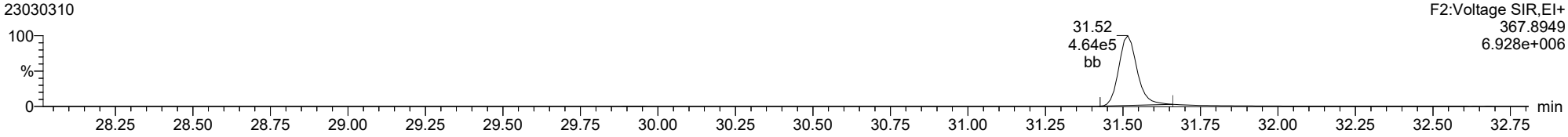

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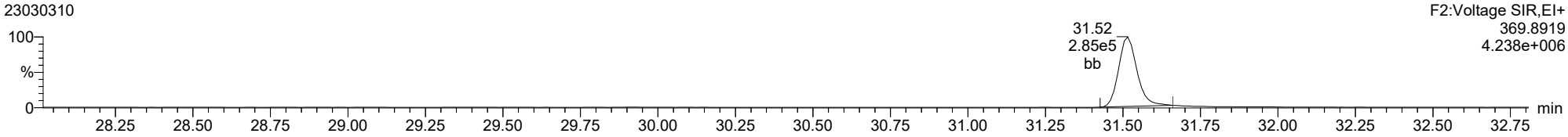

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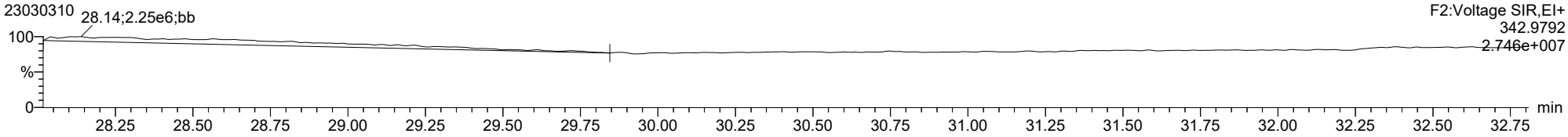

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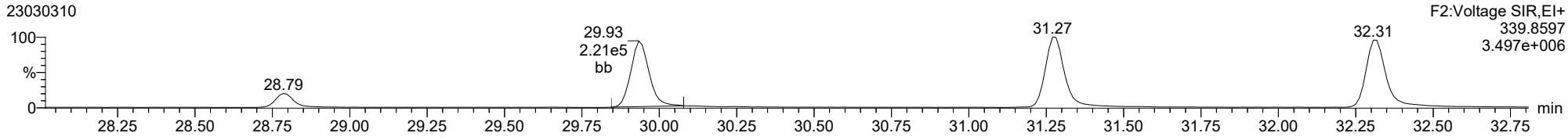

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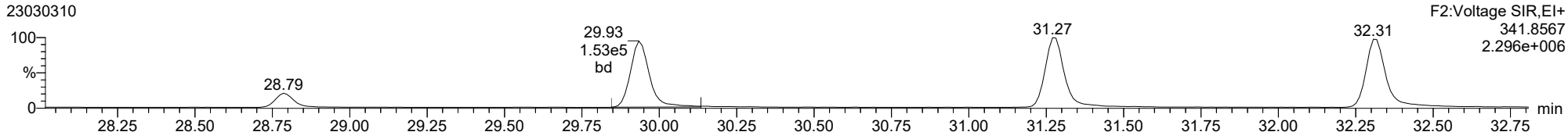

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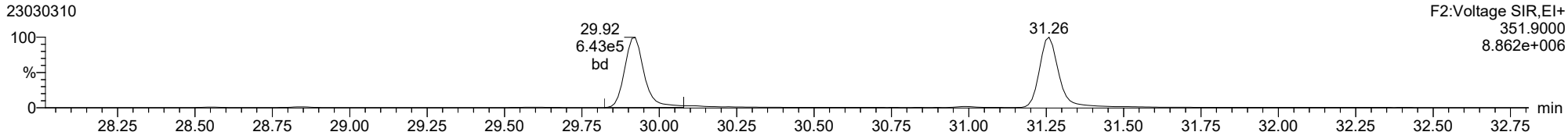

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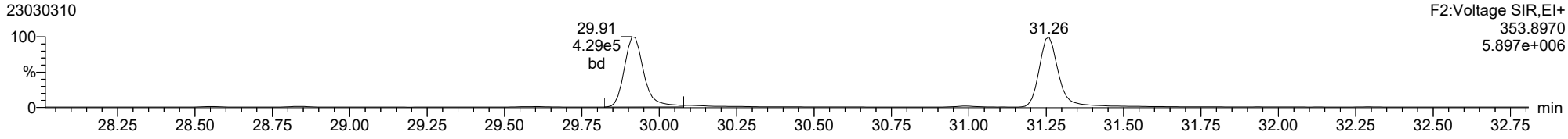

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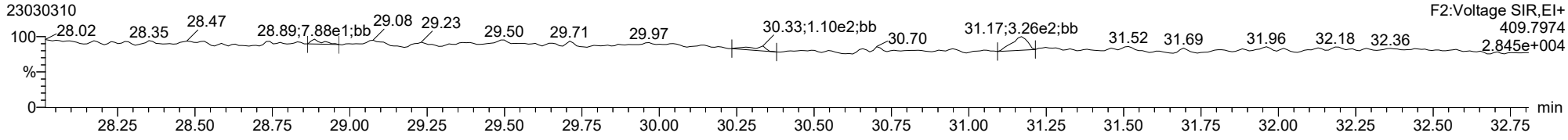

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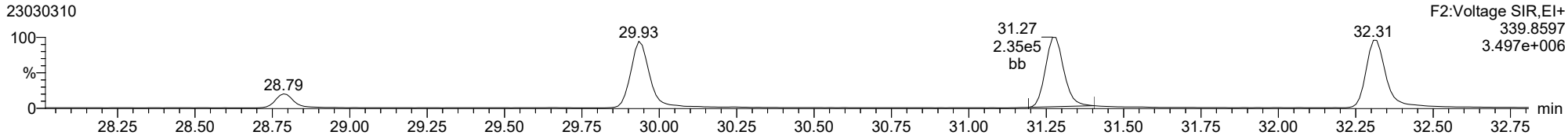

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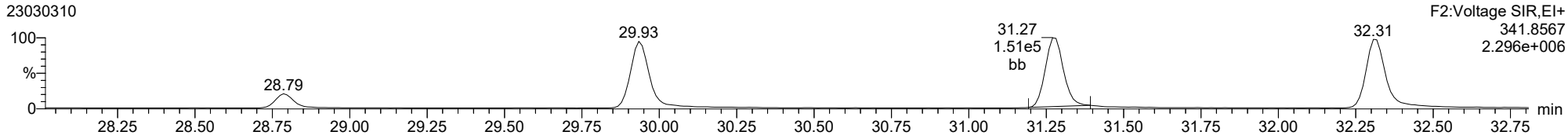

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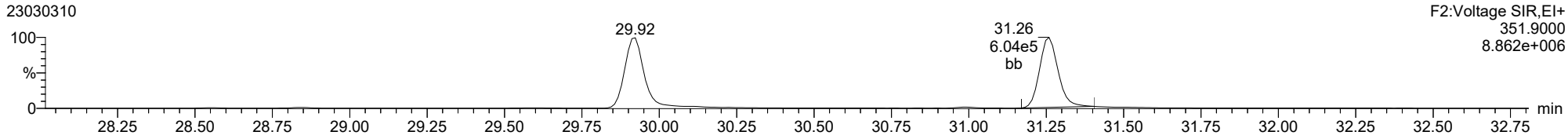

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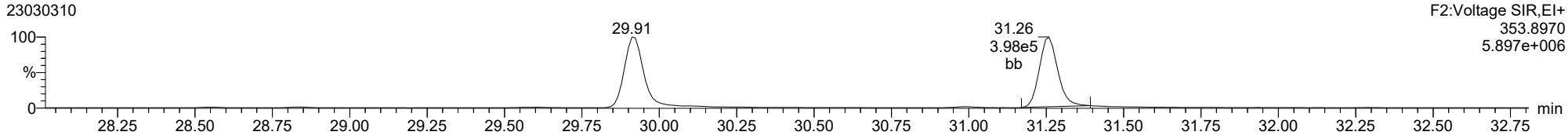

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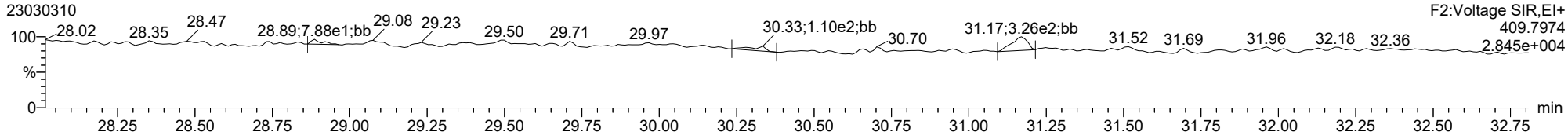

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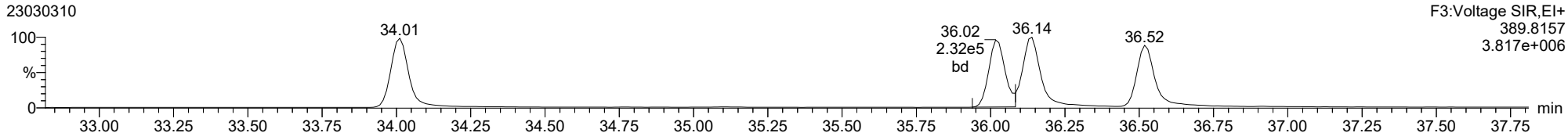

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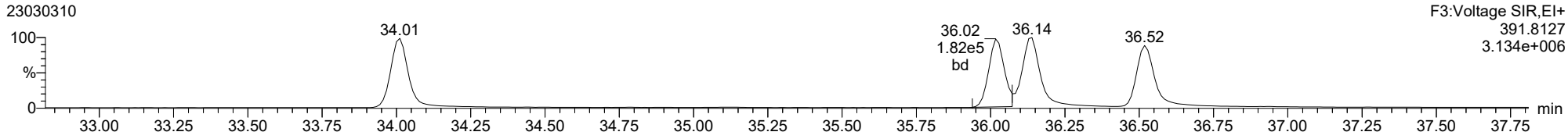

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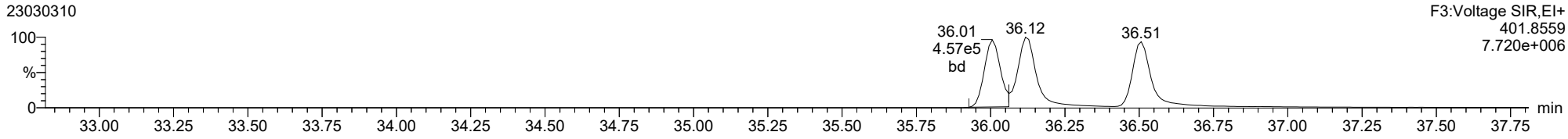

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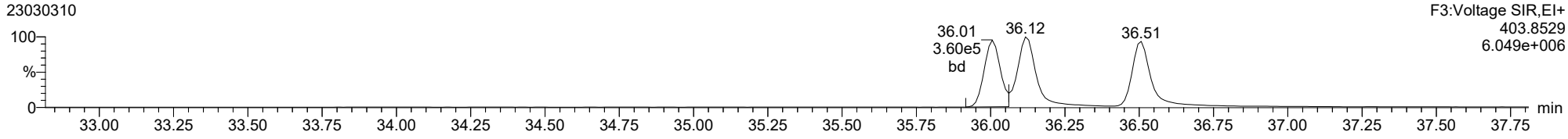

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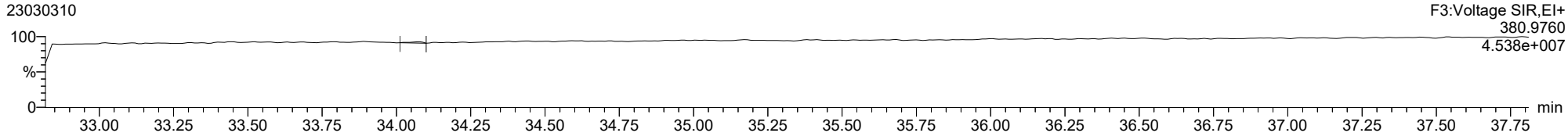

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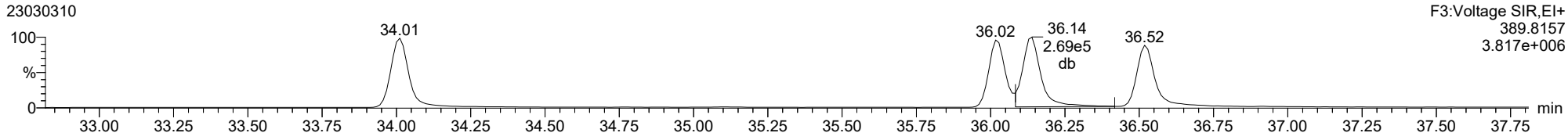

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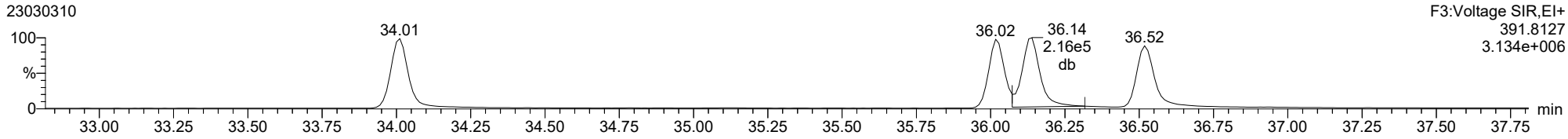

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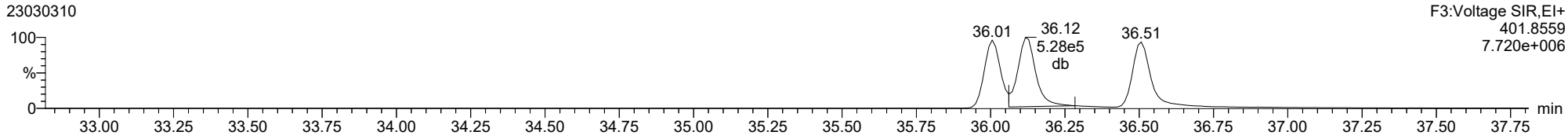

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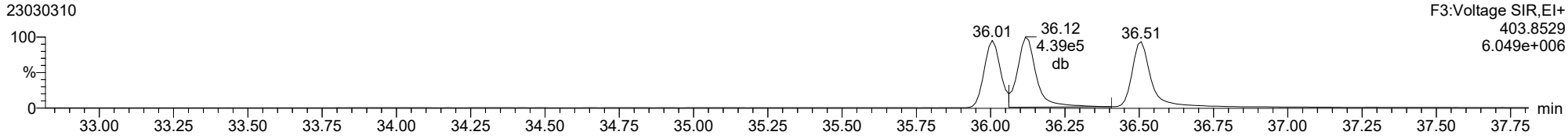

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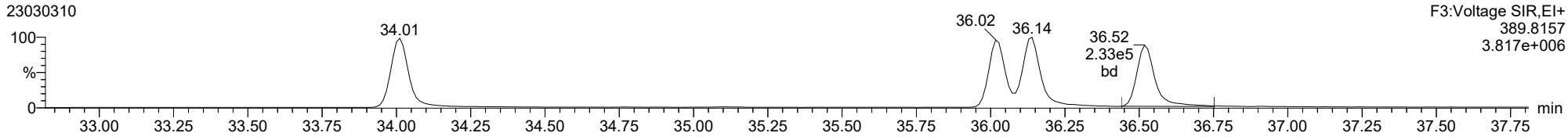

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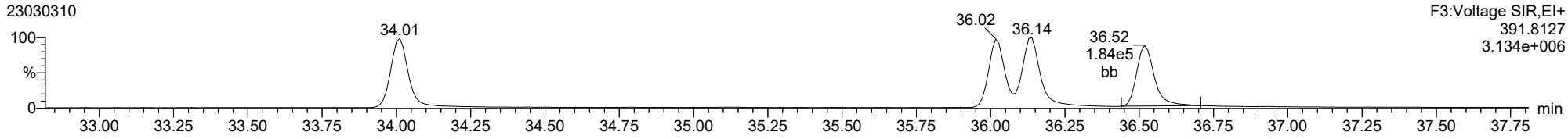

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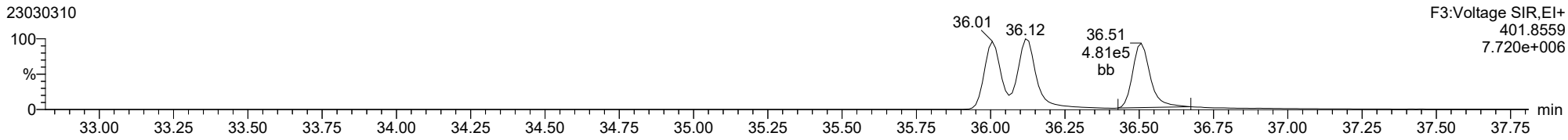

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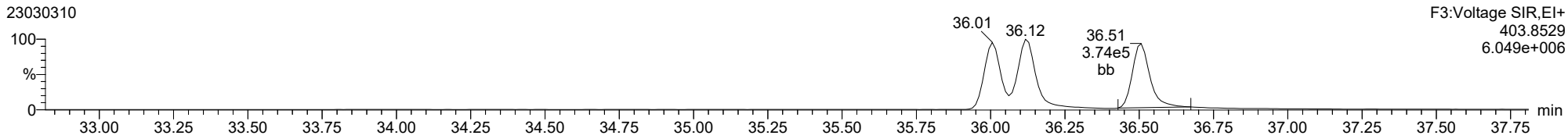

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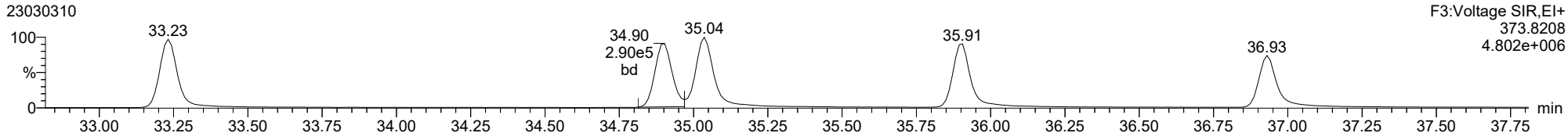

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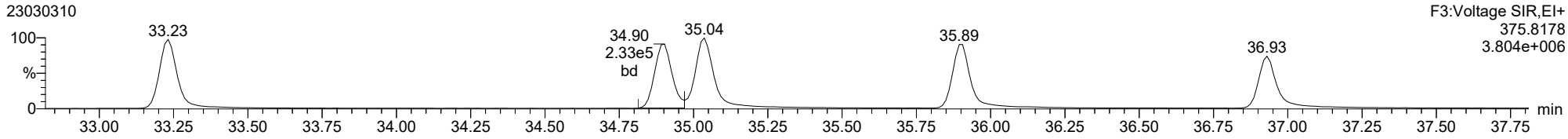

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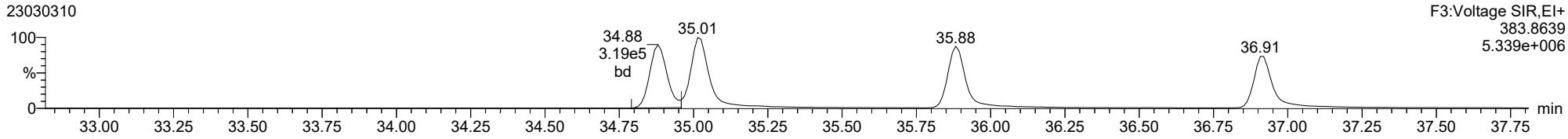

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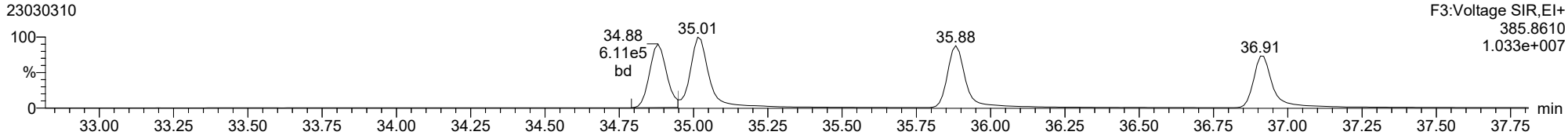

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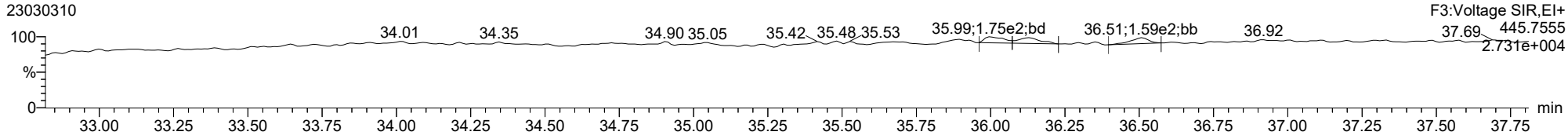

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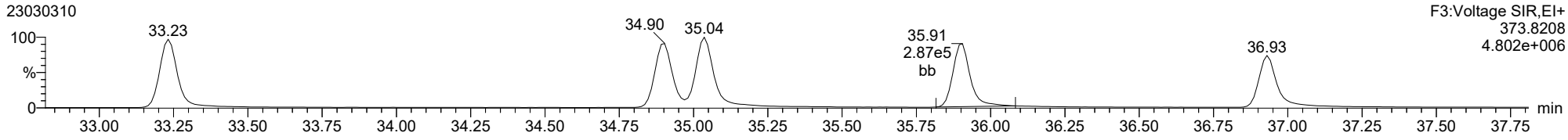

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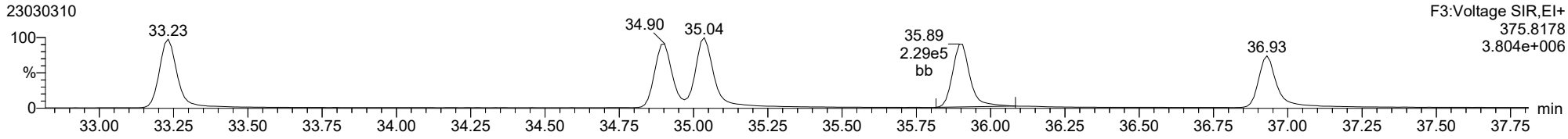

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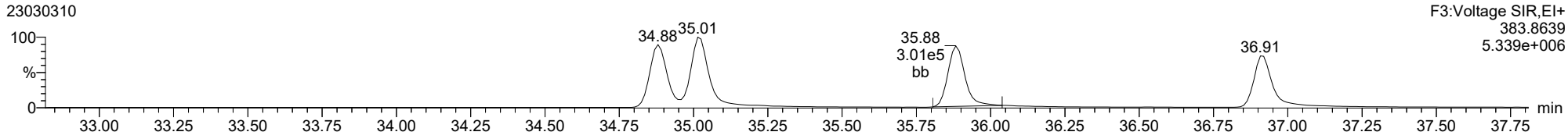

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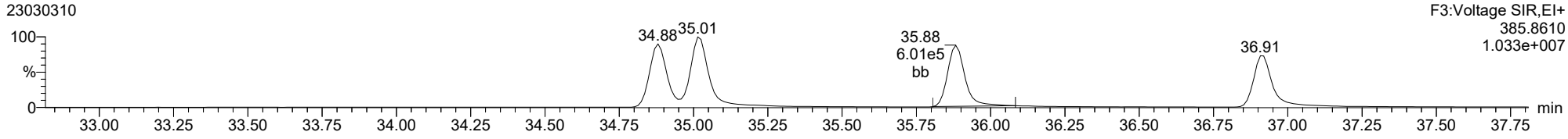

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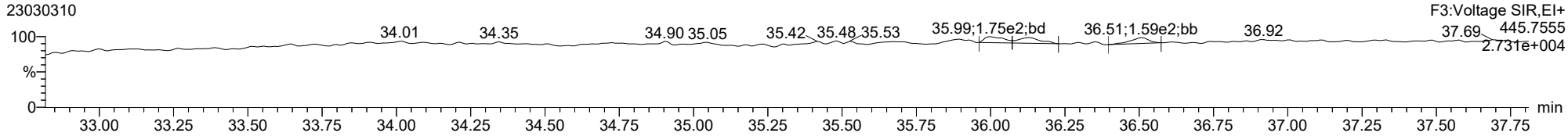

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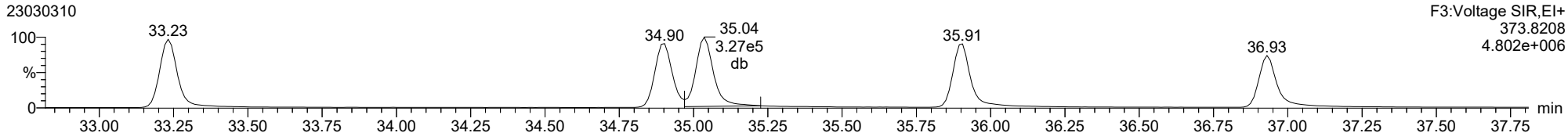

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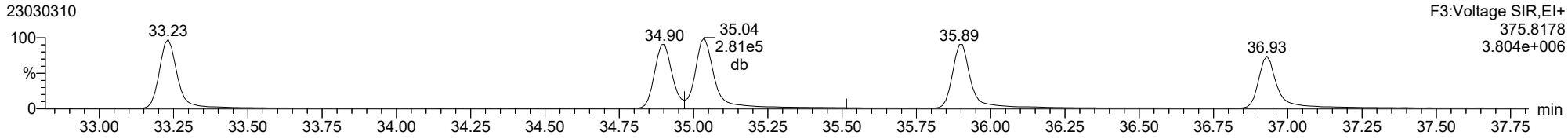

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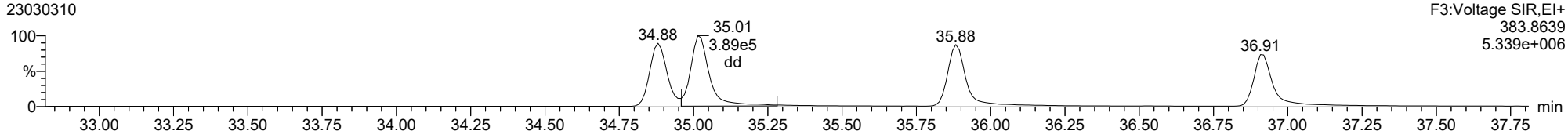

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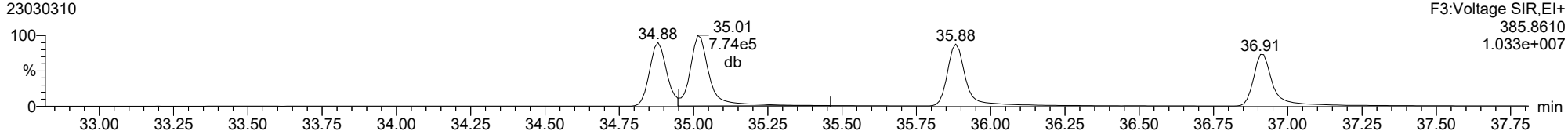

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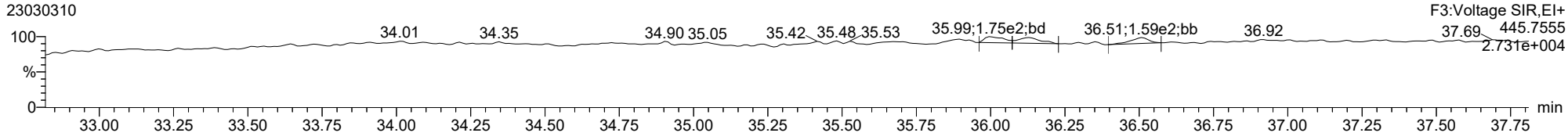

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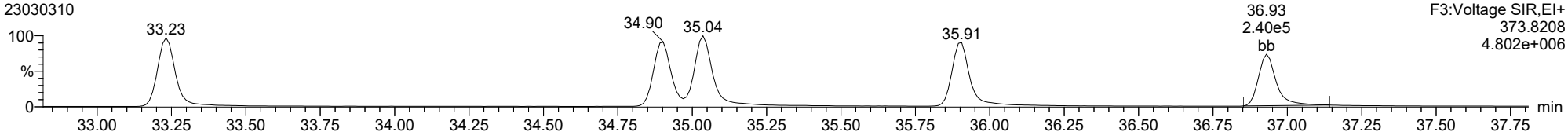

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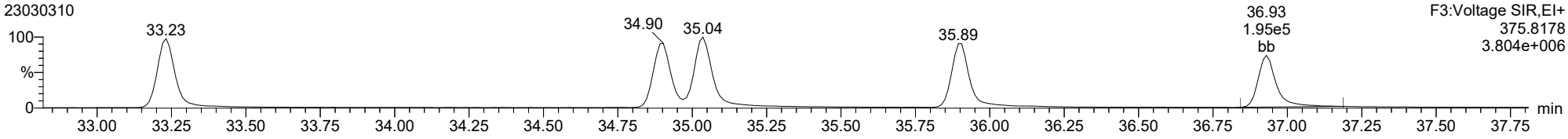

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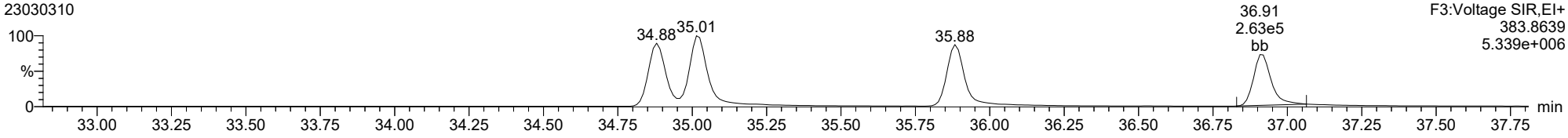

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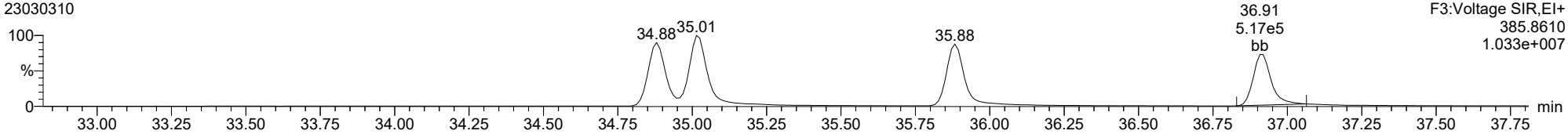
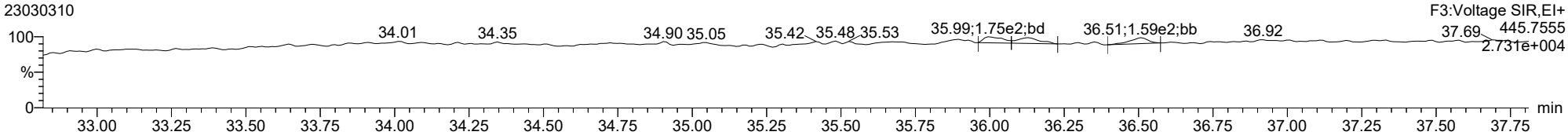


FUNCTION3 OCDPE



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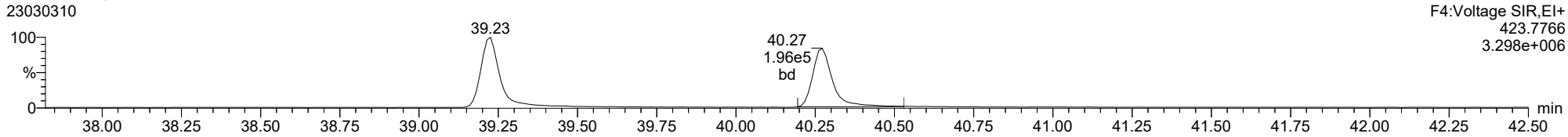

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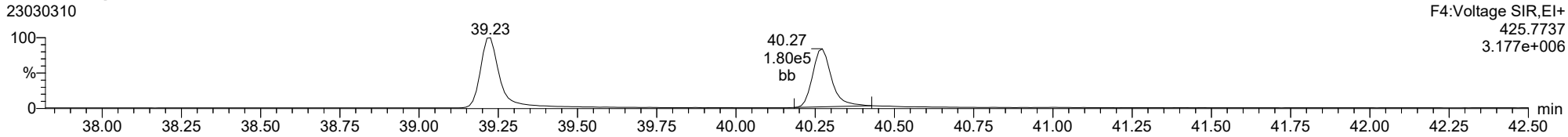

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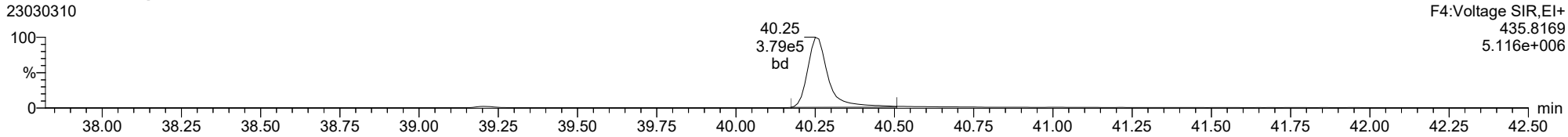

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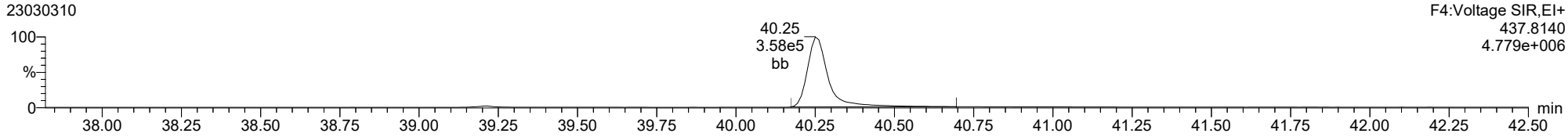
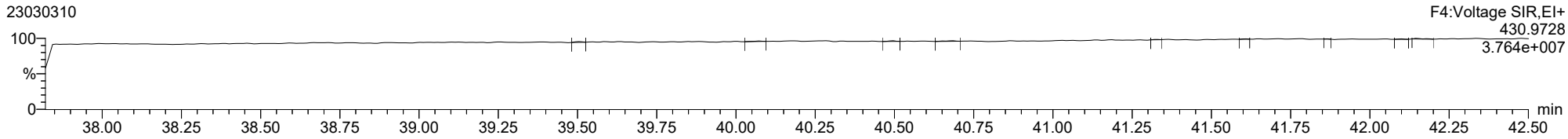


FUNCTION4 PFK



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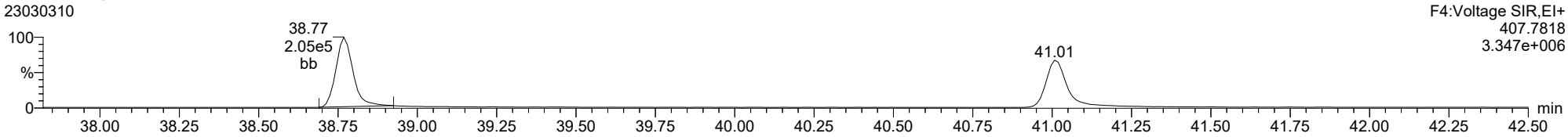

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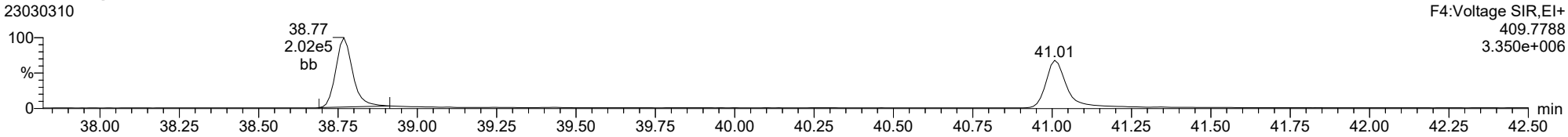

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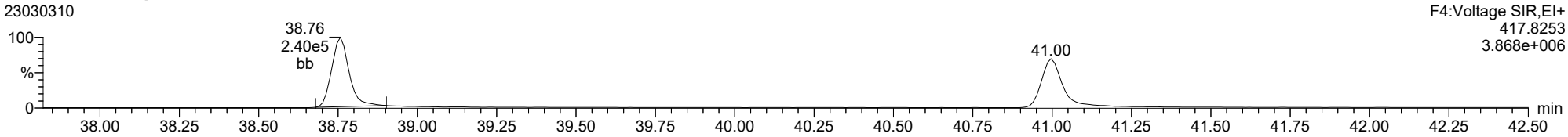

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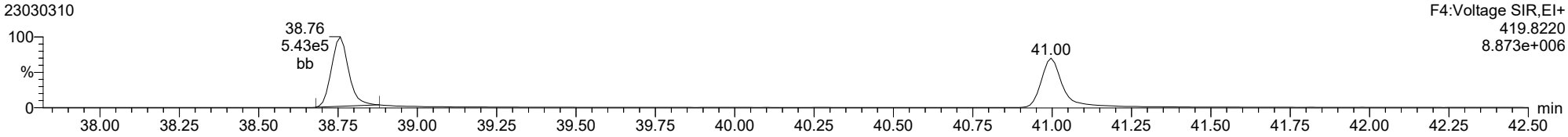
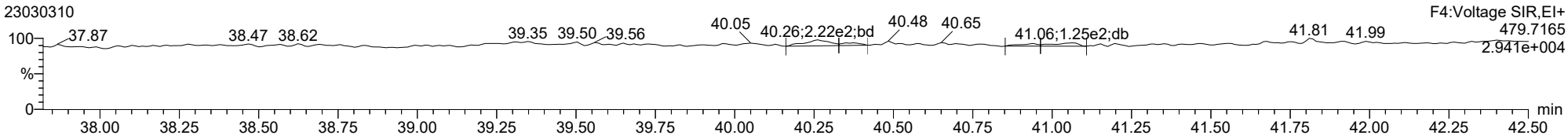


FUNCTION4 NCDPE



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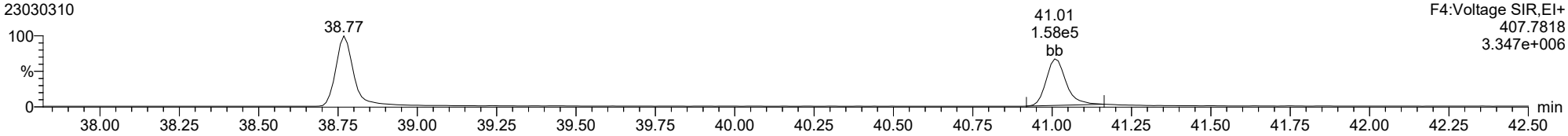

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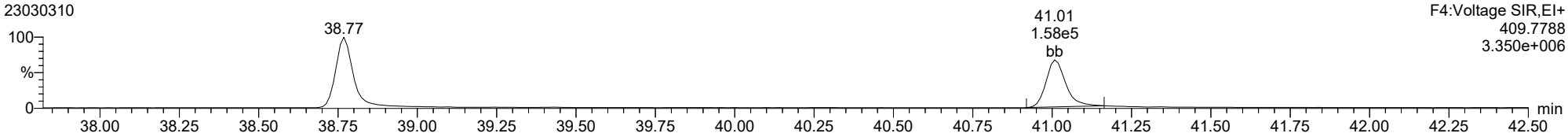

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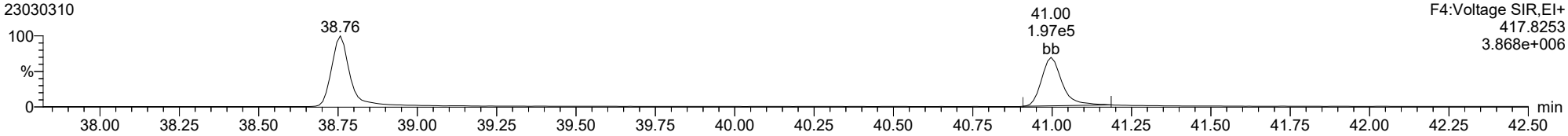

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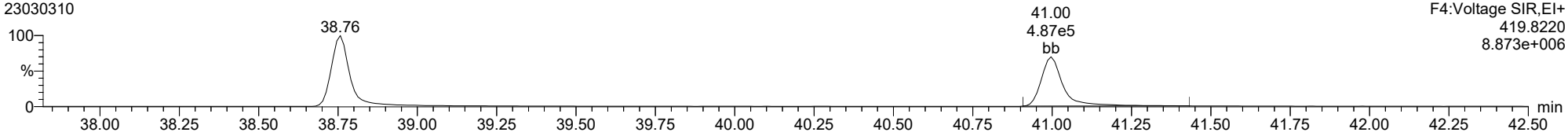

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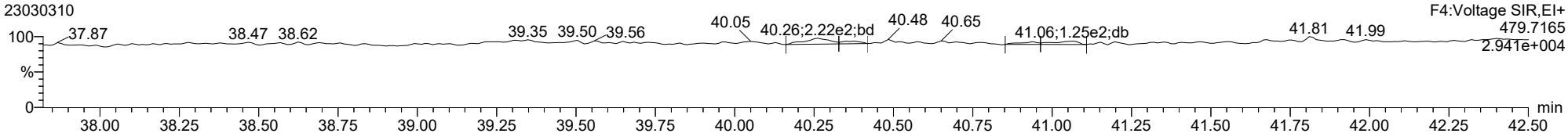

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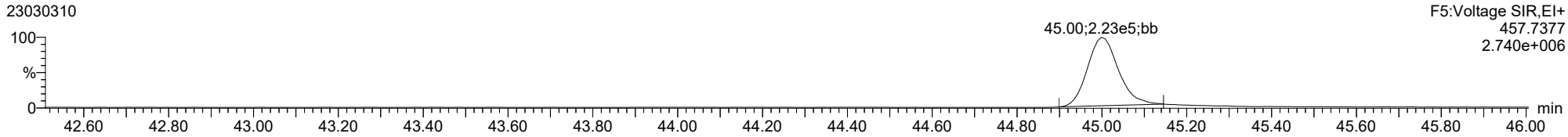

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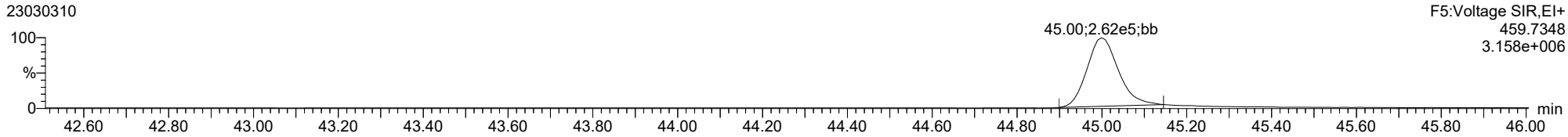

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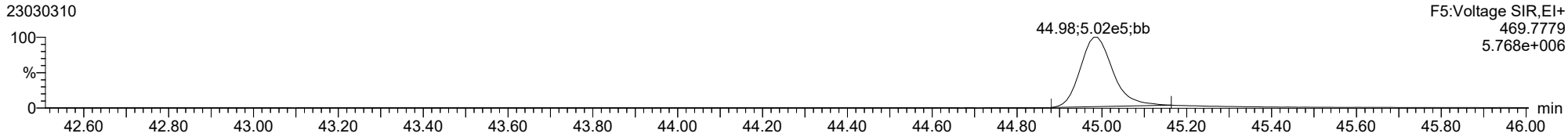

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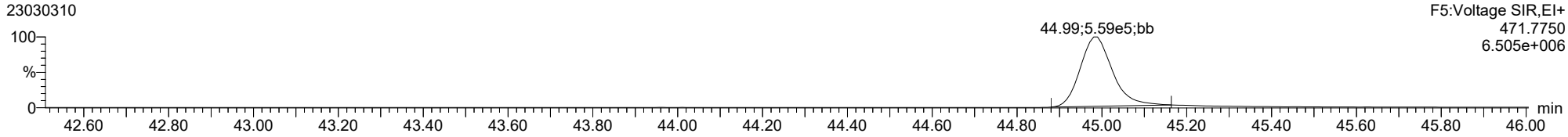
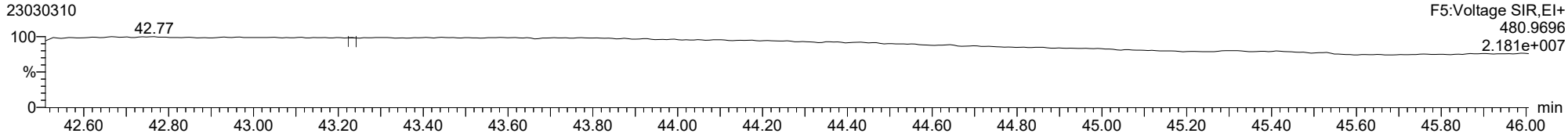


FUNCTION5 PFK



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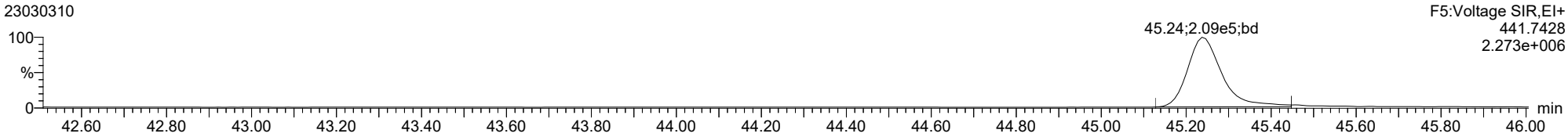

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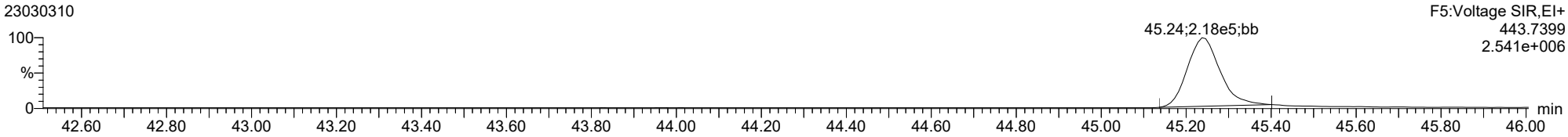
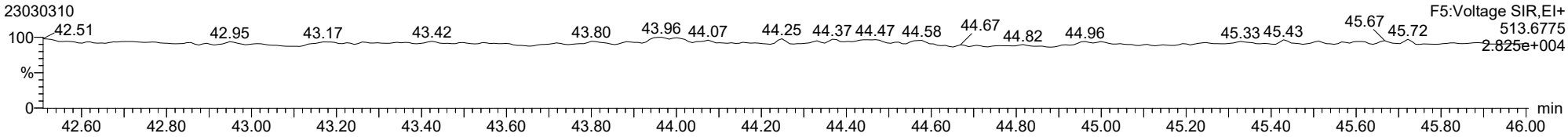


FUNCTION5 DCDPE



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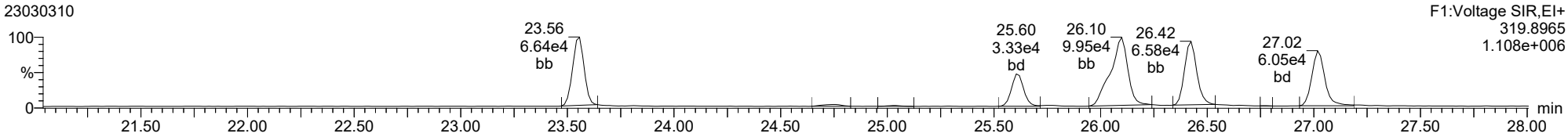
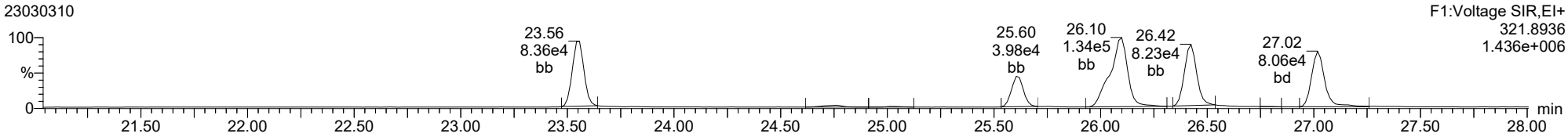
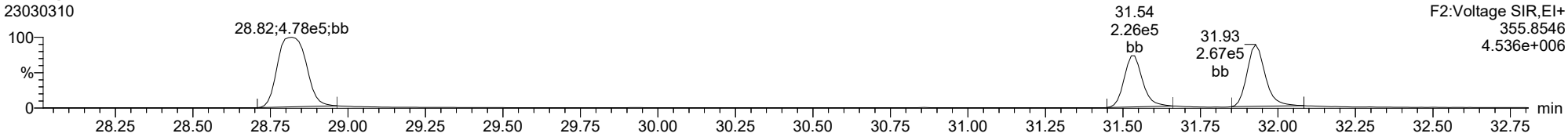
Total-tetradioxins



Total-tetradioxins



Total-pentadioxins



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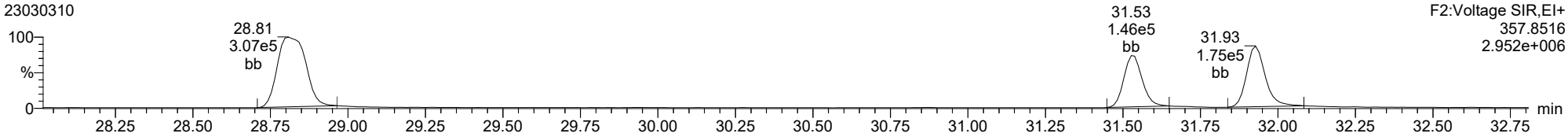

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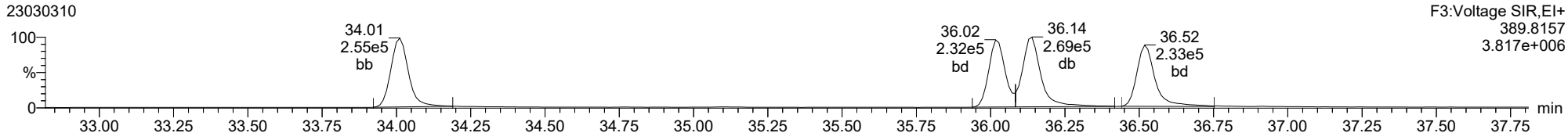
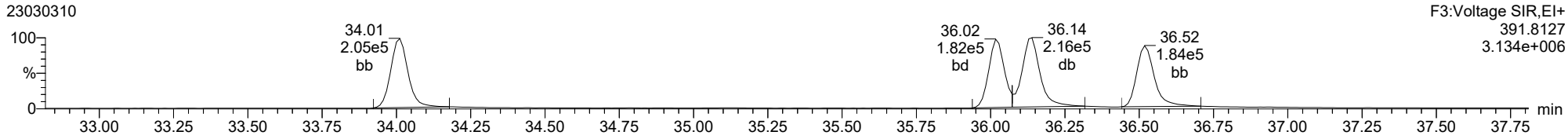


Total-hexadioxins



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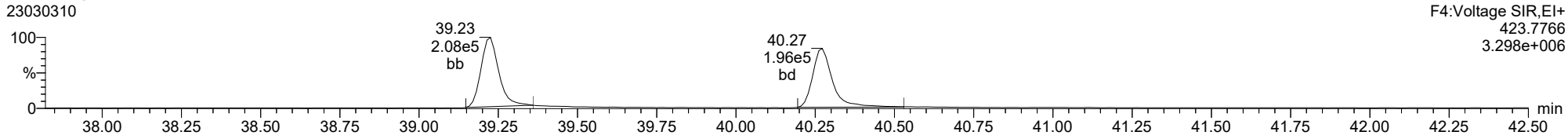
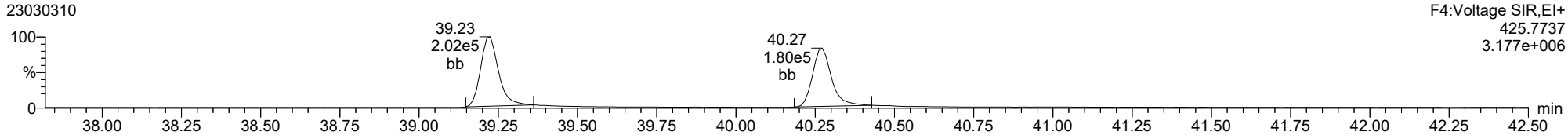


Total-heptadioxins



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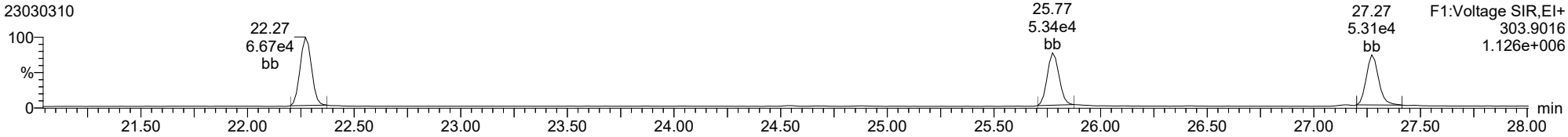
Total-tetrafurans



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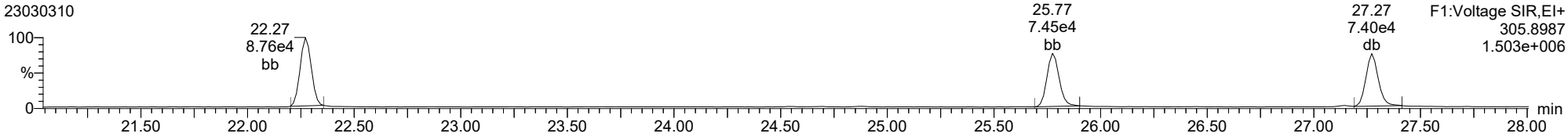

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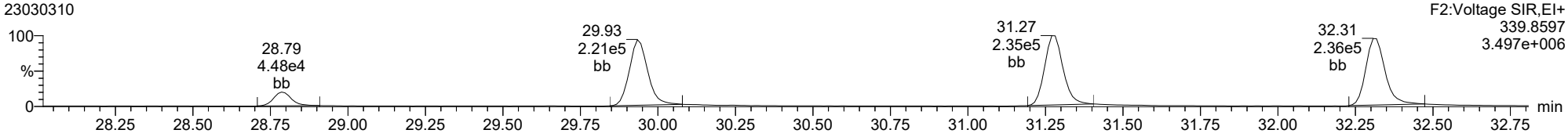

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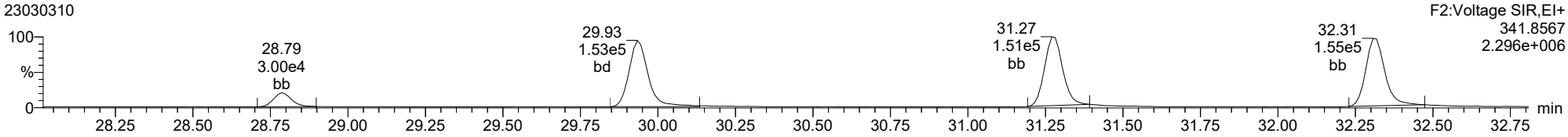

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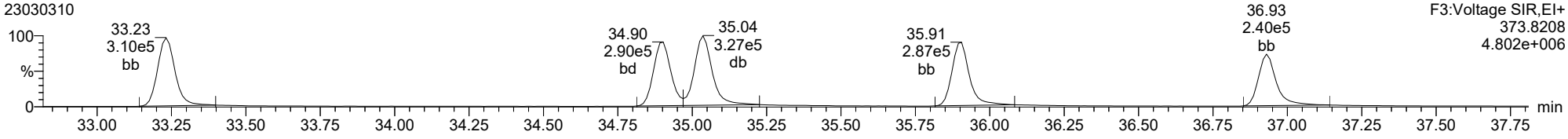

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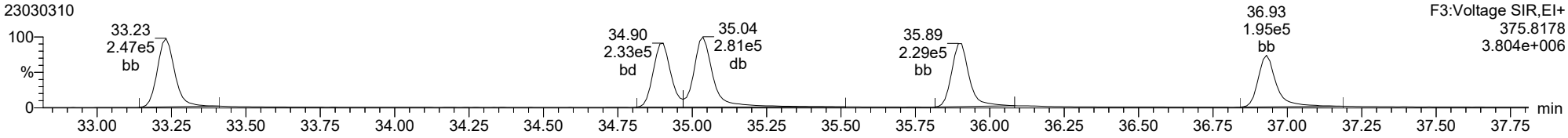

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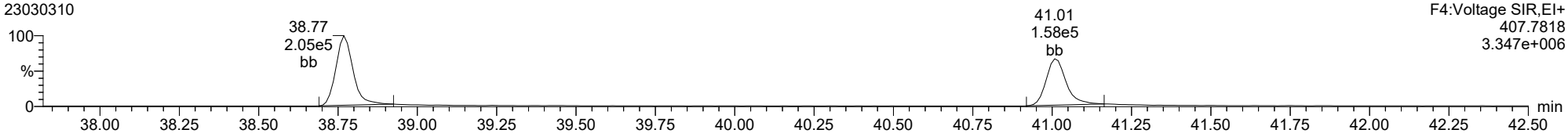
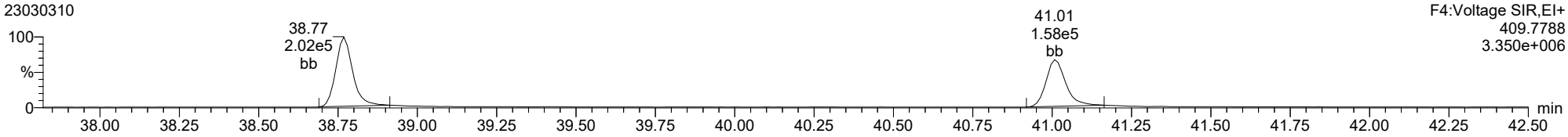


Total-heptafurans



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ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.774	1.000	4.131e4	5.488e4	0.702	0.753	0.770	1493	2220	6.02e5	8.13e5	403.0	366.2	NO	bb	bb	10.126
12378-PeCDF	29.934	1.000	2.094e5	1.387e5	0.679	1.510	1.550	3237	2768	3.10e6	2.08e6	956.2	750.8	NO	bb	bb	47.721
23478-PeCDF	31.282	1.001	2.189e5	1.466e5	0.786	1.493	1.550	3237	2768	3.25e6	2.13e6	1004.6	769.0	NO	bb	bb	48.580
123478-HxCDF	34.903	1.001	2.702e5	2.168e5	1.166	1.247	1.240	2948	2161	4.14e6	3.34e6	1404.3	1544.7	NO	bd	bd	47.304
234678-HxCDF	35.905	1.001	2.808e5	2.345e5	1.140	1.198	1.240	2948	2161	4.05e6	3.23e6	1375.6	1495.3	NO	bb	bd	52.050
123678-HxCDF	35.036	1.000	3.125e5	2.496e5	1.091	1.252	1.240	2948	2161	4.44e6	3.55e6	1506.3	1641.4	NO	db	db	51.387
123789-HxCDF	36.931	1.000	2.304e5	1.857e5	1.137	1.240	1.240	2948	2161	3.37e6	2.68e6	1143.7	1240.6	NO	bb	bb	48.904
1234678-HpCDF	38.769	1.000	1.725e5	1.737e5	1.003	0.993	1.050	2044	2260	2.71e6	2.74e6	1326.3	1210.9	NO	bb	bb	47.690
1234789-HpCDF	41.008	1.000	1.395e5	1.236e5	0.953	1.128	1.050	2044	2260	1.71e6	1.64e6	836.3	725.6	NO	bd	bb	53.601
OCDF	45.237	1.005	1.863e5	1.970e5	0.778	0.946	0.890	1162	1746	2.03e6	2.27e6	1745.6	1302.8	NO	bd	bb	95.021
2378-TCDD	26.424	1.001	4.111e4	5.488e4	1.149	0.749	0.770	1210	797	6.31e5	8.06e5	521.2	1010.5	NO	bb	bb	9.017
12378-PeCDD	31.538	1.001	2.212e5	1.442e5	1.022	1.534	1.550	2794	1649	3.14e6	2.05e6	1124.1	1244.9	NO	bb	bb	50.849
123478-HxCDD	36.017	1.000	2.147e5	1.744e5	0.996	1.231	1.240	3133	1871	3.31e6	2.68e6	1055.8	1434.4	NO	bd	bd	50.696
123678-HxCDD	36.139	1.001	2.532e5	2.091e5	1.001	1.211	1.240	3133	1871	3.49e6	2.85e6	1112.6	1520.4	NO	db	db	51.126
123789-HxCDD	36.518	1.011	2.114e5	1.814e5	0.907	1.166	1.240	3133	1871	3.08e6	2.54e6	982.1	1355.5	NO	bb	bd	51.723
1234678-HpCDD	40.273	1.000	1.700e5	1.663e5	1.039	1.022	1.050	1948	2105	2.22e6	2.15e6	1138.4	1022.1	NO	bd	bd	52.721
OCDD	45.000	1.000	2.152e5	2.483e5	0.920	0.867	0.890	885	1554	2.46e6	2.84e6	2785.0	1828.9	NO	bb	bb	97.150
13C-2378-TCDF	25.760	1.007	5.853e5	7.688e5	1.620	0.761	0.770	1921	2018	8.54e6	1.13e7	4445.5	5599.2	NO	bb	bb	89.420
13C-12378-PeCDF	29.923	1.169	6.466e5	4.272e5	1.240	1.513	1.550	2442	3390	8.85e6	5.90e6	3622.7	1739.1	NO	bb	bd	92.612
13C-23478-PeCDF	31.259	1.222	5.702e5	3.869e5	1.118	1.474	1.550	2442	3390	8.42e6	5.62e6	3447.3	1659.1	NO	bb	bb	91.616
13C-123478-HxCDF	34.881	0.955	2.992e5	5.837e5	1.168	0.513	0.510	2430	2952	4.46e6	8.67e6	1835.4	2935.2	NO	bd	bd	95.179
13C-123678-HxCDF	35.025	0.959	3.347e5	6.682e5	1.386	0.501	0.510	2430	2952	4.76e6	9.19e6	1958.9	3111.9	NO	db	db	91.102
13C-234678-HxCDF	35.883	0.983	2.956e5	5.730e5	1.129	0.516	0.510	2430	2952	4.27e6	8.35e6	1756.5	2829.2	NO	bb	bb	96.885
13C-123789-HxCDF	36.919	1.011	2.519e5	4.965e5	0.932	0.507	0.510	2430	2952	3.69e6	7.15e6	1518.9	2421.6	NO	bb	bb	101.167
13C-1234678-HpCDF	38.758	1.062	2.307e5	4.931e5	0.895	0.468	0.440	2487	3339	3.35e6	7.56e6	1347.2	2263.7	NO	bd	bb	101.839
13C-1234789-HpCDF	40.997	1.123	1.602e5	3.548e5	0.770	0.452	0.440	2487	3339	2.05e6	4.72e6	823.7	1413.6	NO	bb	bb	84.268
13C-1234-TCDD	25.591	0.000	4.152e5	5.195e5	1.000	0.799	0.770	2224	1360	6.53e6	8.14e6	2938.6	5984.1	NO	bb	bb	100.000
13C-2378-TCDD	26.396	1.031	4.083e5	5.184e5	1.152	0.788	0.770	2224	1360	5.76e6	7.36e6	2588.5	5411.0	NO	bb	bb	86.032
13C-12378-PeCDD	31.516	1.232	4.323e5	2.709e5	0.829	1.595	1.550	1217	913	6.32e6	3.99e6	5187.9	4362.9	NO	bb	bb	90.774
13C-123478-HxCDD	36.006	0.986	4.338e5	3.372e5	0.995	1.286	1.240	3851	1371	6.85e6	5.33e6	1778.6	3884.7	NO	bd	bd	97.589
13C-123678-HxCDD	36.117	0.989	5.114e5	3.919e5	1.157	1.305	1.240	3851	1371	7.20e6	5.65e6	1870.4	4120.3	NO	db	db	98.370
13C-1234678-HpCDD	40.262	1.103	3.166e5	2.972e5	0.840	1.065	1.050	1699	1520	4.20e6	3.95e6	2473.2	2598.3	NO	bb	bb	92.030
13C-OCDD	44.990	1.232	5.160e5	5.214e5	0.767	0.990	0.890	2001	1870	5.29e6	5.84e6	2645.0	3123.1	NO	bd	bb	170.247
13C-123789-HxCDD	36.507	0.000	4.452e5	3.487e5	1.000	1.277	1.240	3851	1371	6.49e6	5.07e6	1686.5	3694.9	NO	bb	bb	100.000
37CL-2378-TCDD	26.424	1.033	9.071e4		1.288			1721		1.34e6		776.4			bb		7.536

Dataset: T:\Autospec\Processed Data Batch\230303IHICV.qld
Last Altered: Monday, March 06, 2023 11:49:27 Pacific Standard Time
Printed: Monday, March 06, 2023 14:47:33 Pacific Standard Time

ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.271	0.865	5.764e4	7.805e4	0.802	0.738	0.770	1493	2220	9.22e5	1.25e6	617.6	564.2	NO	bb	bb	12.503
1289-TCDF	27.272	1.059	3.446e4	4.665e4	0.678	0.739	0.770	1493	2220	5.07e5	6.62e5	339.5	298.3	NO	bb	db	8.835
13468-PECDF	27.130	0.907	3.611e5	2.330e5	1.246	1.550	1.550	743	1090	5.44e6	3.55e6	7323.2	3255.0	NO	bb	bb	44.390
12389-PECDF	32.318	1.080	2.101e5	1.516e5	0.496	1.387	1.550	3237	2768	2.95e6	1.97e6	910.6	713.0	NO	bb	bd	67.866
123468-HXCDF	33.231	0.953	2.880e5	2.384e5	1.169	1.208	1.240	2948	2161	4.12e6	3.25e6	1397.4	1503.0	NO	bb	bb	51.002
1368-TCDD	23.557	0.892	5.668e4	7.180e4	1.015	0.789	0.770	1210	797	9.15e5	1.16e6	755.8	1460.4	NO	bb	bb	13.654
1289-TCDD	27.017	1.023	3.648e4	4.783e4	0.909	0.763	0.770	1210	797	5.40e5	6.90e5	445.8	865.4	NO	bb	bb	10.012
12479-PECDD	28.819	0.914	3.593e5	2.367e5	2.301	1.518	1.550	2794	1649	3.42e6	2.21e6	1224.5	1341.7	NO	bb	bb	36.832
12389-PECDD	31.928	1.013	2.423e5	1.700e5	1.184	1.426	1.550	2794	1649	3.48e6	2.31e6	1246.0	1399.4	NO	bb	bd	49.543
124679-HXCDD	34.011	0.945	2.330e5	1.909e5	1.115	1.220	1.240	3133	1871	3.38e6	2.76e6	1078.1	1473.6	NO	bb	bb	49.292
1234679-HPCDD	39.225	0.974	2.020e5	1.832e5	1.137	1.103	1.050	1948	2105	2.83e6	2.72e6	1451.0	1293.3	NO	bd	bb	55.196
Total-tetrafurans			1.346e5		0.727			1493		2.05e6							31.724
Total-penta1			3.611e5					743		5.44e6							44.390
Total-pentafurans			6.730e5		0.654			3237		9.80e6							172.856
Total-hexafurans			1.382e6		1.141			2948		2.01e7							250.647
Total-heptafurans			3.120e5		0.978			2044		4.42e6							101.291
Total-Furans			3.049e6		0.922			1493		4.39e7							695.930
Total-tetradioxins			2.249e5		1.024			1210		3.13e6							54.516
Total-pentadioxins			8.229e5		1.502			2794		1.00e7							137.223
Total-hexadioxins			9.123e5		1.005			3133		1.32e7							202.837
Total-heptadioxins			3.720e5		1.088			1948		5.04e6							107.918
Total-Dioxins			2.547e6		1.130			1210		3.39e7							599.643
Total-TEQ			5.596e6					1210		7.78e7							1295.573
FUNCTION1 PFK			7.521e6					557945		8.00e6							
FUNCTION2 PFK			4.110e5					226700		1.13e7							0.000
FUNCTION3 PFK			8.443e6					414812		2.82e6							0.000
FUNCTION4 PFK			2.598e7					304689		2.22e7							
FUNCTION5 PFK			7.163e4					189891		2.74e6							
FUNCTION1 HXCD...			3.794e2					593		5.61e3							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			8.042e2					818		1.73e4							0.000
FUNCTION3 OCDPE			9.563e1					429		1.87e3							0.000
FUNCTION4 NCDPE			0.000e0					545		0.00e0							
FUNCTION5 DCDPE			0.000e0					542		0.00e0							

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Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

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TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.27	3.446e4	4.665e4	0.678	0.74	0.77	339.5	YES	NO	bb	db	8.835
2	2378-TCDF	25.77	4.131e4	5.488e4	0.702	0.75	0.77	403.0	YES	NO	bb	bb	10.126
3	Total-tetrafurans	24.86	6.389e2	7.978e2	0.727	0.80	0.77	6.2	YES	NO	bb	bb	0.146
4	Total-tetrafurans	24.55	5.238e2	5.981e2	0.727	0.88	0.77	6.0	YES	NO	bb	bb	0.114
5	1368-TCDF	22.27	5.764e4	7.805e4	0.802	0.74	0.77	617.6	YES	NO	bb	bb	12.503

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	27.13	3.611e5	2.330e5	1.246	1.55	1.55	7323.2	YES	NO	bb	bb	44.390

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDF	32.32	2.101e5	1.516e5	0.496	1.39	1.55	910.6	YES	NO	bb	bd	67.866
2	23478-PeCDF	31.28	2.189e5	1.466e5	0.786	1.49	1.55	1004.6	YES	NO	bb	bb	48.580
3	12378-PeCDF	29.93	2.094e5	1.387e5	0.679	1.51	1.55	956.2	YES	NO	bb	bb	47.721
4	Total-pentafurans	28.80	3.458e4	2.311e4	0.654	1.50	1.55	155.8	YES	NO	bb	bb	8.688

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123478-HxCDF	34.90	2.702e5	2.168e5	1.166	1.25	1.24	1404.3	YES	NO	bd	bd	47.304
2	123468-HXCDF	33.23	2.880e5	2.384e5	1.169	1.21	1.24	1397.4	YES	NO	bb	bb	51.002
3	123789-HxCDF	36.93	2.304e5	1.857e5	1.137	1.24	1.24	1143.7	YES	NO	bb	bb	48.904
4	234678-HxCDF	35.91	2.808e5	2.345e5	1.140	1.20	1.24	1375.6	YES	NO	bb	bd	52.050
5	123678-HxCDF	35.04	3.125e5	2.496e5	1.091	1.25	1.24	1506.3	YES	NO	db	db	51.387

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	41.01	1.395e5	1.236e5	0.953	1.13	1.05	836.3	YES	NO	bd	bb	53.601
2	1234678-HpCDF	38.77	1.725e5	1.737e5	1.003	0.99	1.05	1326.3	YES	NO	bb	bb	47.690

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.27	3.446e4	4.665e4	0.678	0.74	0.77	339.5	YES	NO	bb	db	8.835
2	2378-TCDF	25.77	4.131e4	5.488e4	0.702	0.75	0.77	403.0	YES	NO	bb	bb	10.126
3	Total-tetrafurans	24.86	6.389e2	7.978e2	0.727	0.80	0.77	6.2	YES	NO	bb	bb	0.146
4	Total-tetrafurans	24.55	5.238e2	5.981e2	0.727	0.88	0.77	6.0	YES	NO	bb	bb	0.114
5	1368-TCDF	22.27	5.764e4	7.805e4	0.802	0.74	0.77	617.6	YES	NO	bb	bb	12.503
6	12389-PECDF	32.32	2.101e5	1.516e5	0.496	1.39	1.55	910.6	YES	NO	bb	bd	67.866
7	23478-PeCDF	31.28	2.189e5	1.466e5	0.786	1.49	1.55	1004.6	YES	NO	bb	bb	48.580
8	12378-PeCDF	29.93	2.094e5	1.387e5	0.679	1.51	1.55	956.2	YES	NO	bb	bb	47.721
9	Total-pentafurans	28.80	3.458e4	2.311e4	0.654	1.50	1.55	155.8	YES	NO	bb	bb	8.688
10	123478-HxCDF	34.90	2.702e5	2.168e5	1.166	1.25	1.24	1404.3	YES	NO	bd	bd	47.304
11	123468-HXCDF	33.23	2.880e5	2.384e5	1.169	1.21	1.24	1397.4	YES	NO	bb	bb	51.002
12	123789-HxCDF	36.93	2.304e5	1.857e5	1.137	1.24	1.24	1143.7	YES	NO	bb	bb	48.904
13	234678-HxCDF	35.91	2.808e5	2.345e5	1.140	1.20	1.24	1375.6	YES	NO	bb	bd	52.050
14	123678-HxCDF	35.04	3.125e5	2.496e5	1.091	1.25	1.24	1506.3	YES	NO	db	db	51.387
15	1234789-HpCDF	41.01	1.395e5	1.236e5	0.953	1.13	1.05	836.3	YES	NO	bd	bb	53.601
16	1234678-HpCDF	38.77	1.725e5	1.737e5	1.003	0.99	1.05	1326.3	YES	NO	bb	bb	47.690
17	OCDF	45.24	1.863e5	1.970e5	0.778	0.95	0.89	1745.6	YES	NO	bd	bb	95.021
18	13468-PECDF	27.13	3.611e5	2.330e5	1.246	1.55	1.55	7323.2	YES	NO	bb	bb	44.390

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.56	5.668e4	7.180e4	1.015	0.79	0.77	755.8	YES	NO	bb	bb	13.654
2	1289-TCDD	27.02	3.648e4	4.783e4	0.909	0.76	0.77	445.8	YES	NO	bb	bb	10.012
3	2378-TCDD	26.42	4.111e4	5.488e4	1.149	0.75	0.77	521.2	YES	NO	bb	bb	9.017
4	Total-tetradioxins	26.10	6.719e4	8.697e4	1.024	0.77	0.77	561.8	YES	NO	bb	bb	16.242
5	Total-tetradioxins	25.60	2.343e4	2.963e4	1.024	0.79	0.77	301.6	YES	NO	bb	bb	5.591

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	31.93	2.423e5	1.700e5	1.184	1.43	1.55	1246.0	YES	NO	bb	bd	49.543
2	12378-PeCDD	31.54	2.212e5	1.442e5	1.022	1.53	1.55	1124.1	YES	NO	bb	bb	50.849
3	12479-PECDD	28.82	3.593e5	2.367e5	2.301	1.52	1.55	1224.5	YES	NO	bb	bb	36.832

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HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	124679-HXCDD	34.01	2.330e5	1.909e5	1.115	1.22	1.24	1078.1	YES	NO	bb	bb	49.292
2	123789-HxCDD	36.52	2.114e5	1.814e5	0.907	1.17	1.24	982.1	YES	NO	bb	bd	51.723
3	123678-HxCDD	36.14	2.532e5	2.091e5	1.001	1.21	1.24	1112.6	YES	NO	db	db	51.126
4	123478-HxCDD	36.02	2.147e5	1.744e5	0.996	1.23	1.24	1055.8	YES	NO	bd	bd	50.696

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.27	1.700e5	1.663e5	1.039	1.02	1.05	1138.4	YES	NO	bd	bd	52.721
2	1234679-HPCDD	39.23	2.020e5	1.832e5	1.137	1.10	1.05	1451.0	YES	NO	bd	bb	55.196

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.56	5.668e4	7.180e4	1.015	0.79	0.77	755.8	YES	NO	bb	bb	13.654
2	1289-TCDD	27.02	3.648e4	4.783e4	0.909	0.76	0.77	445.8	YES	NO	bb	bb	10.012
3	2378-TCDD	26.42	4.111e4	5.488e4	1.149	0.75	0.77	521.2	YES	NO	bb	bb	9.017
4	Total-tetradioxins	26.10	6.719e4	8.697e4	1.024	0.77	0.77	561.8	YES	NO	bb	bb	16.242
5	Total-tetradioxins	25.60	2.343e4	2.963e4	1.024	0.79	0.77	301.6	YES	NO	bb	bb	5.591
6	12389-PECDD	31.93	2.423e5	1.700e5	1.184	1.43	1.55	1246.0	YES	NO	bb	bd	49.543
7	12378-PeCDD	31.54	2.212e5	1.442e5	1.022	1.53	1.55	1124.1	YES	NO	bb	bb	50.849
8	12479-PECDD	28.82	3.593e5	2.367e5	2.301	1.52	1.55	1224.5	YES	NO	bb	bb	36.832
9	124679-HXCDD	34.01	2.330e5	1.909e5	1.115	1.22	1.24	1078.1	YES	NO	bb	bb	49.292
10	123789-HxCDD	36.52	2.114e5	1.814e5	0.907	1.17	1.24	982.1	YES	NO	bb	bd	51.723
11	123678-HxCDD	36.14	2.532e5	2.091e5	1.001	1.21	1.24	1112.6	YES	NO	db	db	51.126
12	123478-HxCDD	36.02	2.147e5	1.744e5	0.996	1.23	1.24	1055.8	YES	NO	bd	bd	50.696
13	1234678-HpCDD	40.27	1.700e5	1.663e5	1.039	1.02	1.05	1138.4	YES	NO	bd	bd	52.721
14	1234679-HPCDD	39.23	2.020e5	1.832e5	1.137	1.10	1.05	1451.0	YES	NO	bd	bb	55.196
15	OCDD	45.00	2.152e5	2.483e5	0.920	0.87	0.89	2785.0	YES	NO	bb	bb	97.150

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.27	3.446e4	4.665e4	0.678	0.74	0.77	339.5	YES	NO	bb	db	8.835
2	2378-TCDF	25.77	4.131e4	5.488e4	0.702	0.75	0.77	403.0	YES	NO	bb	bb	10.126
3	Total-tetrafurans	24.86	6.389e2	7.978e2	0.727	0.80	0.77	6.2	YES	NO	bb	bb	0.146
4	Total-tetrafurans	24.55	5.238e2	5.981e2	0.727	0.88	0.77	6.0	YES	NO	bb	bb	0.114
5	1368-TCDF	22.27	5.764e4	7.805e4	0.802	0.74	0.77	617.6	YES	NO	bb	bb	12.503
6	12389-PECDF	32.32	2.101e5	1.516e5	0.496	1.39	1.55	910.6	YES	NO	bb	bd	67.866
7	23478-PeCDF	31.28	2.189e5	1.466e5	0.786	1.49	1.55	1004.6	YES	NO	bb	bb	48.580
8	12378-PeCDF	29.93	2.094e5	1.387e5	0.679	1.51	1.55	956.2	YES	NO	bb	bb	47.721
9	Total-pentafurans	28.80	3.458e4	2.311e4	0.654	1.50	1.55	155.8	YES	NO	bb	bb	8.688
10	123478-HxCDF	34.90	2.702e5	2.168e5	1.166	1.25	1.24	1404.3	YES	NO	bd	bd	47.304
11	123468-HXCDF	33.23	2.880e5	2.384e5	1.169	1.21	1.24	1397.4	YES	NO	bb	bb	51.002
12	123789-HxCDF	36.93	2.304e5	1.857e5	1.137	1.24	1.24	1143.7	YES	NO	bb	bb	48.904
13	234678-HxCDF	35.91	2.808e5	2.345e5	1.140	1.20	1.24	1375.6	YES	NO	bb	bd	52.050
14	123678-HxCDF	35.04	3.125e5	2.496e5	1.091	1.25	1.24	1506.3	YES	NO	db	db	51.387
15	1234789-HpCDF	41.01	1.395e5	1.236e5	0.953	1.13	1.05	836.3	YES	NO	bd	bb	53.601
16	1234678-HpCDF	38.77	1.725e5	1.737e5	1.003	0.99	1.05	1326.3	YES	NO	bb	bb	47.690
17	OCDF	45.24	1.863e5	1.970e5	0.778	0.95	0.89	1745.6	YES	NO	bd	bb	95.021
18	13468-PECDF	27.13	3.611e5	2.330e5	1.246	1.55	1.55	7323.2	YES	NO	bb	bb	44.390
19	1368-TCDD	23.56	5.668e4	7.180e4	1.015	0.79	0.77	755.8	YES	NO	bb	bb	13.654
20	1289-TCDD	27.02	3.648e4	4.783e4	0.909	0.76	0.77	445.8	YES	NO	bb	bb	10.012
21	2378-TCDD	26.42	4.111e4	5.488e4	1.149	0.75	0.77	521.2	YES	NO	bb	bb	9.017
22	Total-tetradioxins	26.10	6.719e4	8.697e4	1.024	0.77	0.77	561.8	YES	NO	bb	bb	16.242
23	Total-tetradioxins	25.60	2.343e4	2.963e4	1.024	0.79	0.77	301.6	YES	NO	bb	bb	5.591
24	12389-PECDD	31.93	2.423e5	1.700e5	1.184	1.43	1.55	1246.0	YES	NO	bb	bd	49.543
25	12378-PeCDD	31.54	2.212e5	1.442e5	1.022	1.53	1.55	1124.1	YES	NO	bb	bb	50.849
26	12479-PECDD	28.82	3.593e5	2.367e5	2.301	1.52	1.55	1224.5	YES	NO	bb	bb	36.832
27	124679-HXCDD	34.01	2.330e5	1.909e5	1.115	1.22	1.24	1078.1	YES	NO	bb	bb	49.292
28	123789-HxCDD	36.52	2.114e5	1.814e5	0.907	1.17	1.24	982.1	YES	NO	bb	bd	51.723
29	123678-HxCDD	36.14	2.532e5	2.091e5	1.001	1.21	1.24	1112.6	YES	NO	db	db	51.126
30	123478-HxCDD	36.02	2.147e5	1.744e5	0.996	1.23	1.24	1055.8	YES	NO	bd	bd	50.696
31	1234678-HpCDD	40.27	1.700e5	1.663e5	1.039	1.02	1.05	1138.4	YES	NO	bd	bd	52.721
32	1234679-HPCDD	39.23	2.020e5	1.832e5	1.137	1.10	1.05	1451.0	YES	NO	bd	bb	55.196
33	OCDD	45.00	2.152e5	2.483e5	0.920	0.87	0.89	2785.0	YES	NO	bb	bb	97.150

ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	22.45	3.397e6					9.1	YES		db		
2	FUNCTION1 PFK	22.00	4.124e6					5.2	YES		bd		

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PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	28.25	2.674e4					2.5	NO		db		0.000
2	FUNCTION2 PFK	28.20	5.558e3					1.1	NO		dd		0.000
3	FUNCTION2 PFK	28.15	1.333e4					1.7	NO		bd		0.000
4	FUNCTION2 PFK	28.11	4.408e3					0.8	NO		bb		0.000
5	FUNCTION2 PFK	30.52	5.287e3					0.9	NO		bd		0.000
6	FUNCTION2 PFK	30.38	1.568e4					1.4	NO		bb		0.000
7	FUNCTION2 PFK	30.23	2.380e4					1.5	NO		db		0.000
8	FUNCTION2 PFK	30.10	2.694e4					1.7	NO		bd		0.000
9	FUNCTION2 PFK	29.99	2.076e3					0.5	NO		bb		0.000
10	FUNCTION2 PFK	29.89	7.421e3					1.2	NO		bb		0.000
11	FUNCTION2 PFK	29.80	6.022e3					0.5	NO		bb		0.000
12	FUNCTION2 PFK	29.62	1.101e4					1.2	NO		bb		0.000
13	FUNCTION2 PFK	29.52	2.200e4					2.0	NO		bb		0.000
14	FUNCTION2 PFK	29.42	7.036e3					1.0	NO		bb		0.000
15	FUNCTION2 PFK	29.29	2.309e4					2.2	NO		bb		0.000
16	FUNCTION2 PFK	29.03	1.036e4					1.7	NO		db		0.000
17	FUNCTION2 PFK	29.00	8.382e3					1.3	NO		bd		0.000
18	FUNCTION2 PFK	28.80	5.680e3					0.9	NO		bb		0.000
19	FUNCTION2 PFK	28.70	1.413e4					1.3	NO		bb		0.000
20	FUNCTION2 PFK	28.60	2.690e3					0.7	NO		bb		0.000
21	FUNCTION2 PFK	32.35	9.362e3					1.3	NO		bd		0.000
22	FUNCTION2 PFK	32.28	5.282e3					0.9	NO		bb		0.000
23	FUNCTION2 PFK	31.94	5.478e3					0.6	NO		bb		0.000
24	FUNCTION2 PFK	31.86	9.539e3					1.3	NO		bb		0.000
25	FUNCTION2 PFK	31.70	8.598e3					0.9	NO		bb		0.000
26	FUNCTION2 PFK	31.56	1.164e4					1.5	NO		bb		0.000
27	FUNCTION2 PFK	31.44	9.870e3					1.2	NO		bb		0.000
28	FUNCTION2 PFK	31.37	5.651e3					1.2	NO		bb		0.000
29	FUNCTION2 PFK	31.16	3.906e3					0.7	NO		db		0.000
30	FUNCTION2 PFK	31.10	5.259e3					1.0	NO		bd		0.000
31	FUNCTION2 PFK	31.00	2.220e3					0.5	NO		bb		0.000
32	FUNCTION2 PFK	30.93	4.197e3					0.6	NO		bb		0.000
33	FUNCTION2 PFK	30.84	1.813e4					1.7	NO		bb		0.000
34	FUNCTION2 PFK	30.68	6.046e3					1.3	NO		db		0.000
35	FUNCTION2 PFK	30.64	6.706e3					1.2	NO		dd		0.000
36	FUNCTION2 PFK	30.58	1.475e4					1.4	NO		dd		0.000
37	FUNCTION2 PFK	32.74	9.704e3					1.1	NO		bb		0.000

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PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	FUNCTION2 PFK	32.61	1.975e3					0.6	NO		bb		0.000
39	FUNCTION2 PFK	32.55	1.171e3					0.5	NO		bb		0.000
40	FUNCTION2 PFK	32.51	7.325e3					1.0	NO		db		0.000
41	FUNCTION2 PFK	32.45	9.340e3					1.3	NO		dd		0.000
42	FUNCTION2 PFK	32.41	1.322e4					1.9	NO		dd		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	37.70	5.175e4					1.9	NO		bb		0.000
2	FUNCTION3 PFK	35.52	3.681e5					3.3	YES		bb		0.000
3	FUNCTION3 PFK	34.42	8.023e6					1.5	NO		bb		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	40.67	5.668e6					23.1	YES		db		
2	FUNCTION4 PFK	39.84	1.814e7					26.9	YES		dd		
3	FUNCTION4 PFK	38.09	2.173e6					22.8	YES		bd		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	42.82	4.953e3					1.4	NO		bb		
2	FUNCTION5 PFK	45.79	4.078e3					1.3	NO		db		
3	FUNCTION5 PFK	45.76	2.296e3					0.8	NO		bd		
4	FUNCTION5 PFK	45.37	1.499e4					1.8	NO		bb		
5	FUNCTION5 PFK	45.31	3.040e3					1.0	NO		bb		
6	FUNCTION5 PFK	44.94	1.866e3					0.7	NO		bb		
7	FUNCTION5 PFK	44.62	4.342e3					1.3	NO		bb		
8	FUNCTION5 PFK	43.85	4.909e3					1.2	NO		bb		
9	FUNCTION5 PFK	43.55	9.698e3					1.7	NO		bb		
10	FUNCTION5 PFK	43.31	1.818e4					2.2	NO		bb		
11	FUNCTION5 PFK	43.18	3.274e3					1.0	NO		bb		

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ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.14	7.703e1					2.6	NO		bb		0.000
2	FUNCTION1 HXCD...	25.58	1.369e2					3.0	NO		bb		0.000
3	FUNCTION1 HXCD...	24.29	7.654e1					1.4	NO		bb		0.000
4	FUNCTION1 HXCD...	23.49	8.895e1					2.4	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	32.41	1.026e2					2.4	NO		db		0.000
2	FUNCTION2 HPCD...	32.32	1.299e2					2.2	NO		bd		0.000
3	FUNCTION2 HPCD...	31.19	1.035e2					3.9	YES		db		0.000
4	FUNCTION2 HPCD...	31.15	2.274e2					6.9	YES		bd		0.000
5	FUNCTION2 HPCD...	29.21	1.504e2					2.9	NO		bb		0.000
6	FUNCTION2 HPCD...	28.77	9.035e1					2.8	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.51	9.563e1					4.4	YES		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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Printed: Monday, March 06, 2023 14:47:33 Pacific Standard Time

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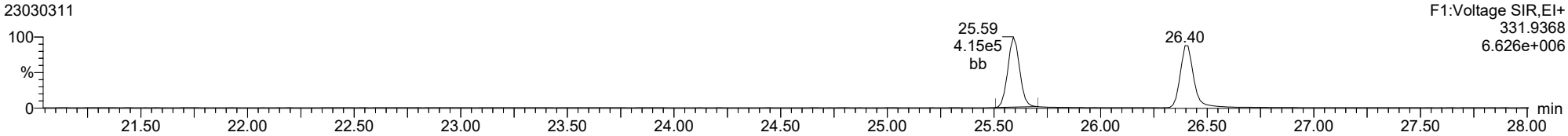
ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD



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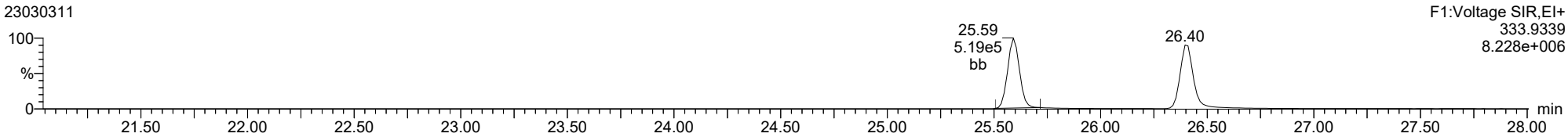

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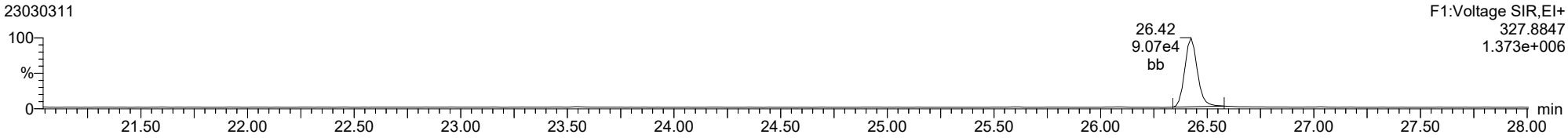

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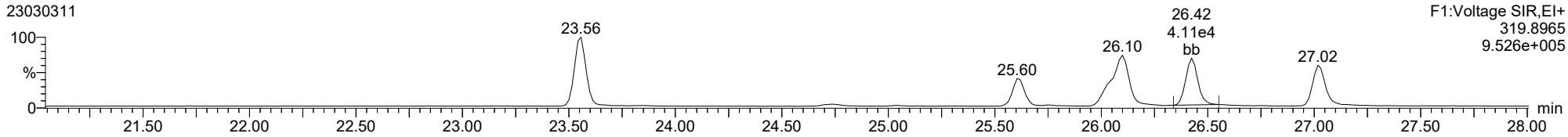

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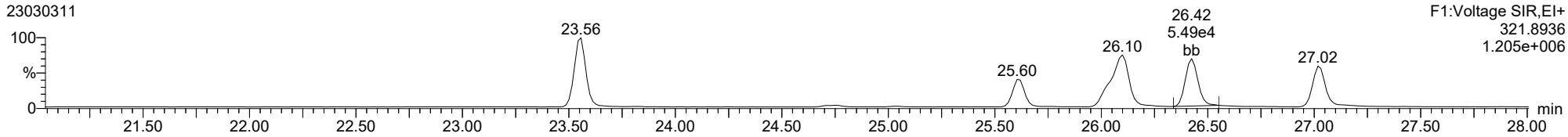

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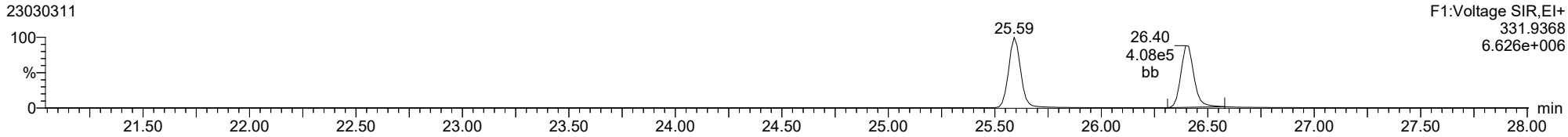

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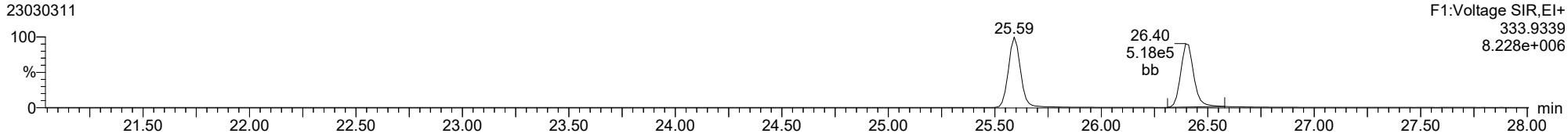

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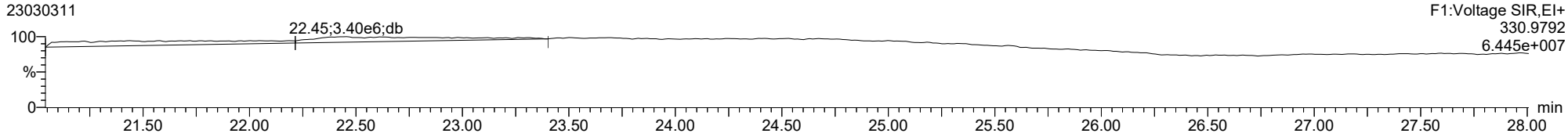

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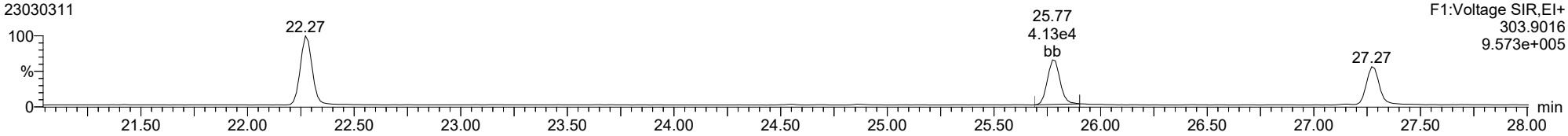

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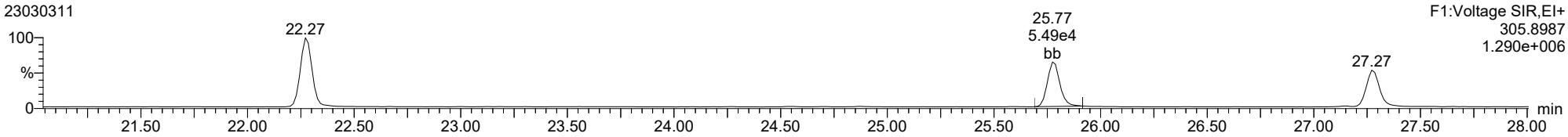

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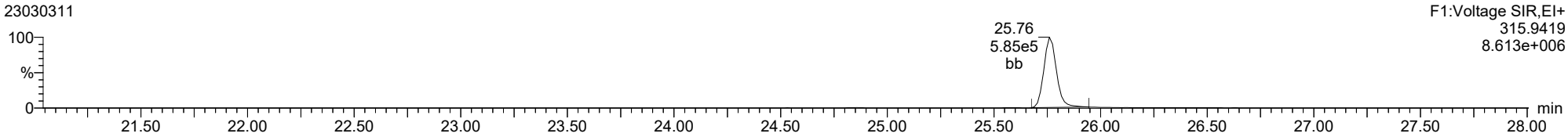

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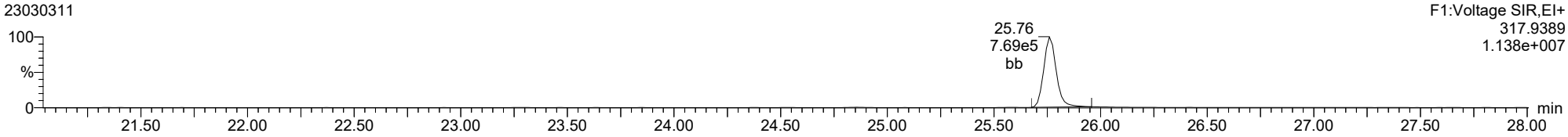

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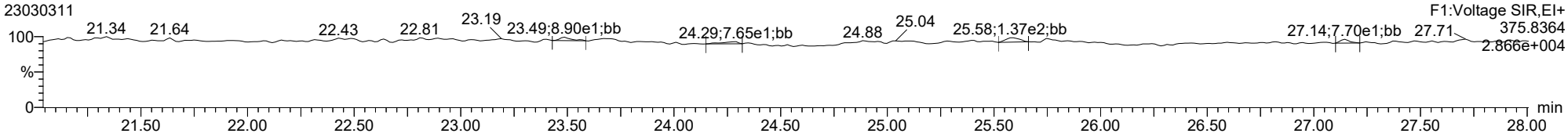

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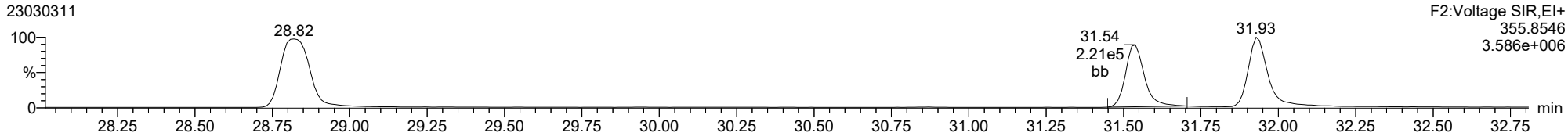
12378-PeCDD



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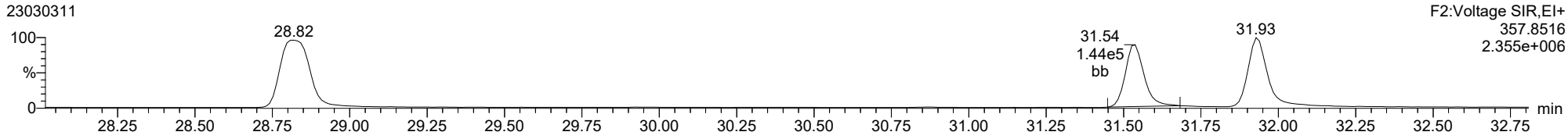

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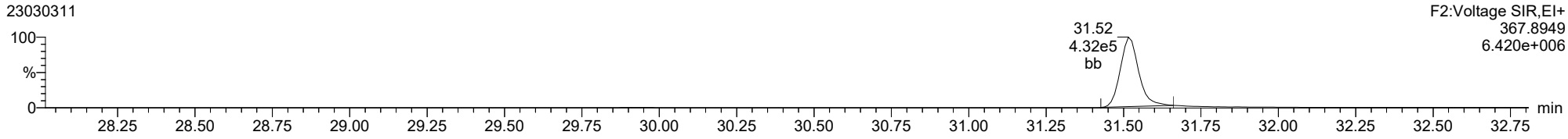

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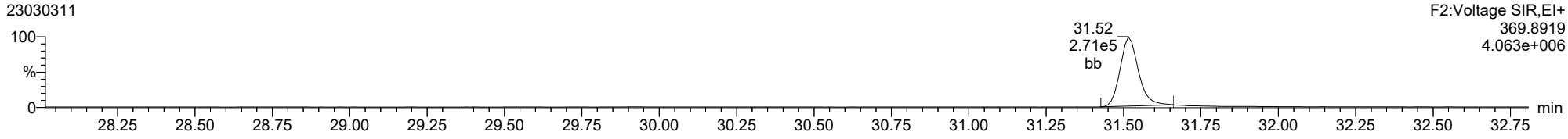
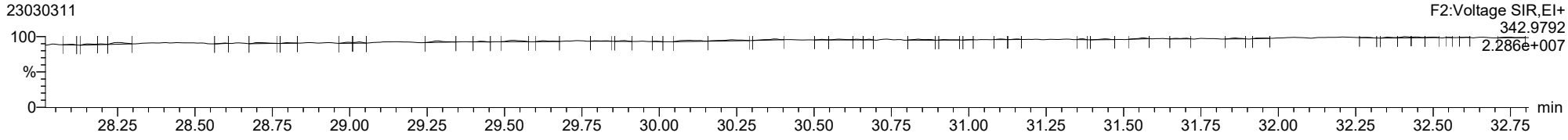


FUNCTION2 PFK



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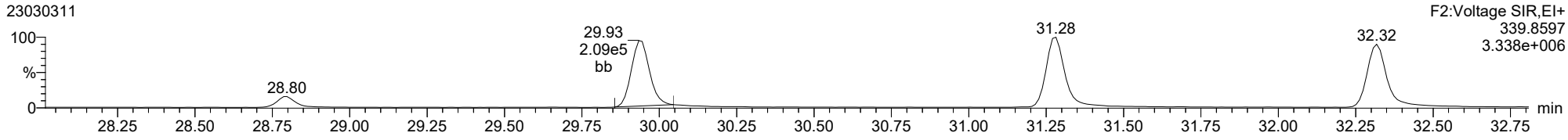
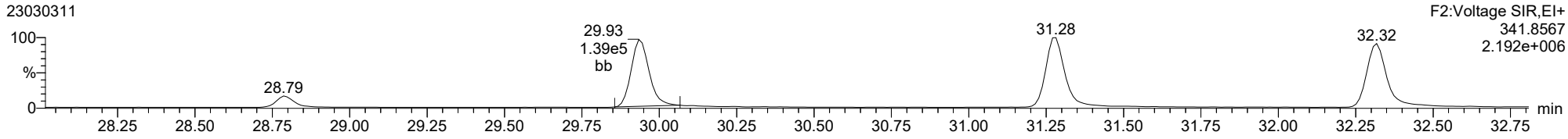


12378-PeCDF



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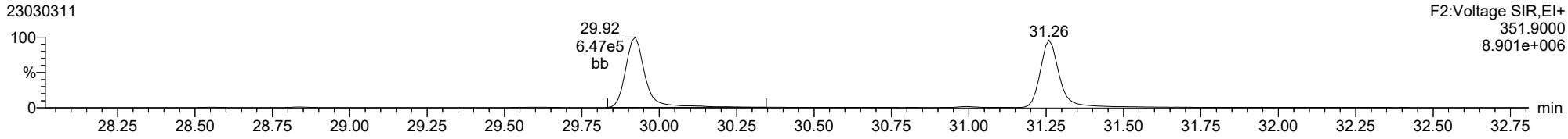

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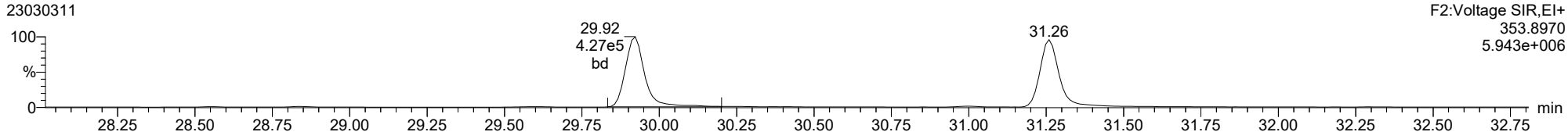

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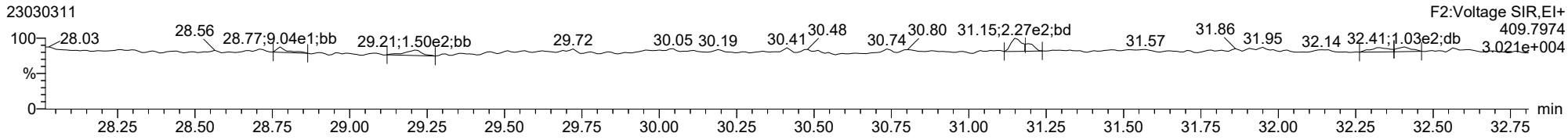

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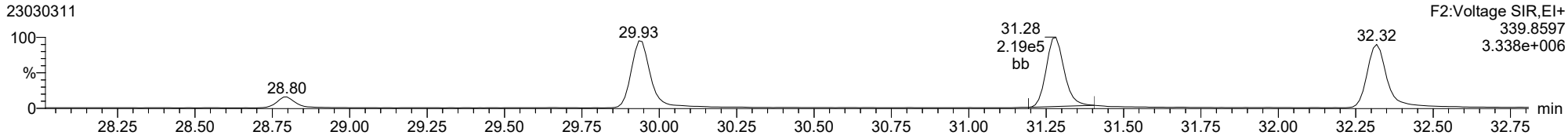

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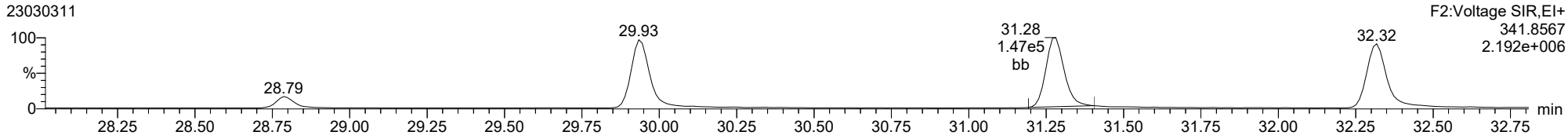

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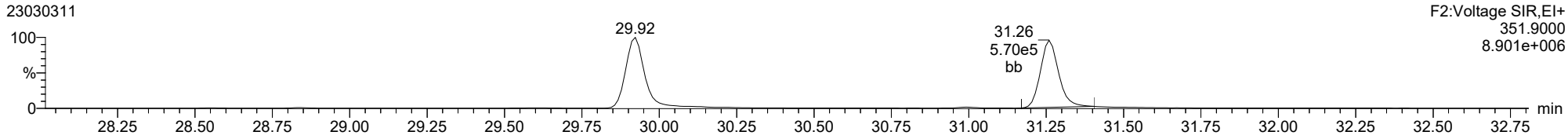

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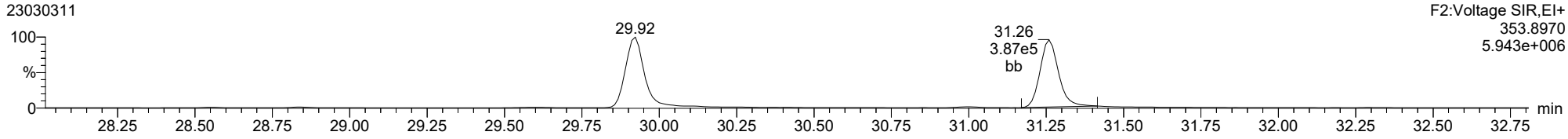

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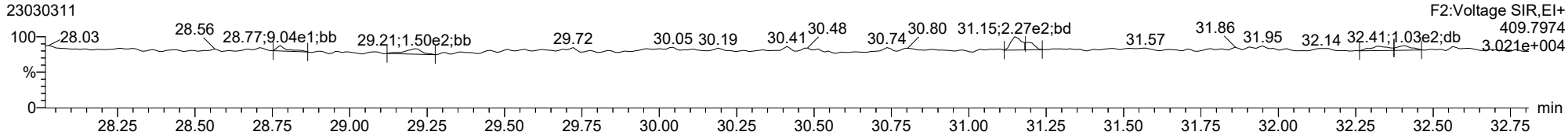

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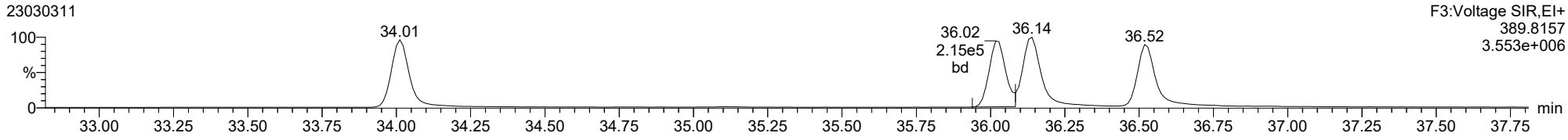

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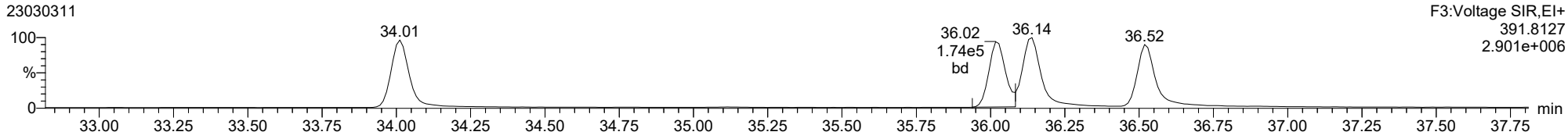

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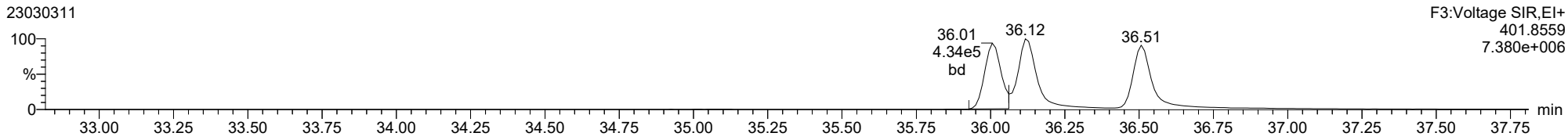

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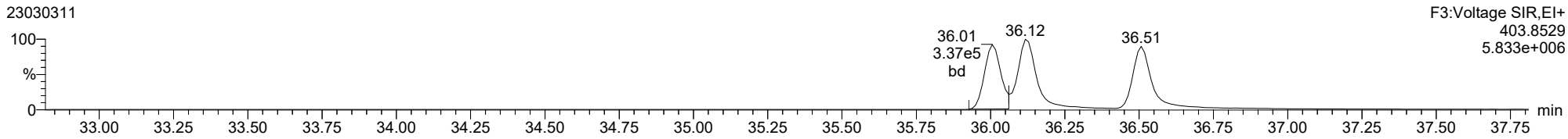

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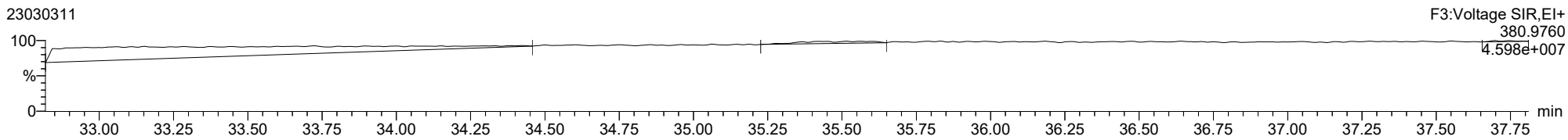

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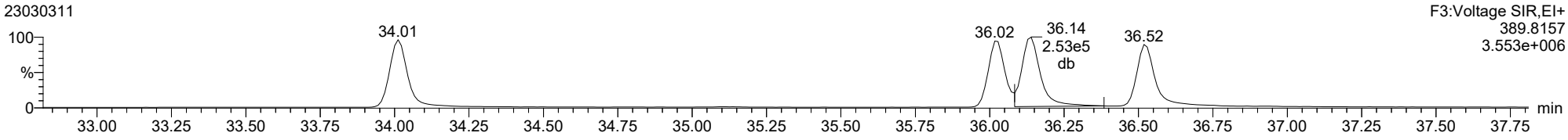

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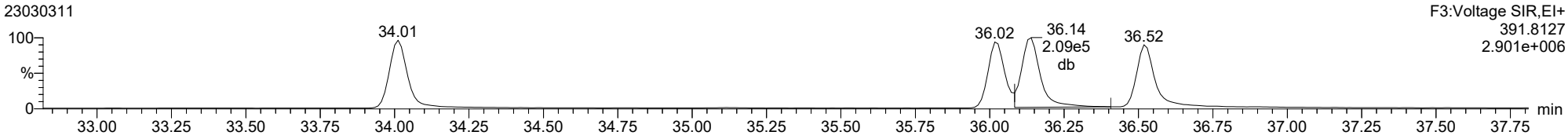

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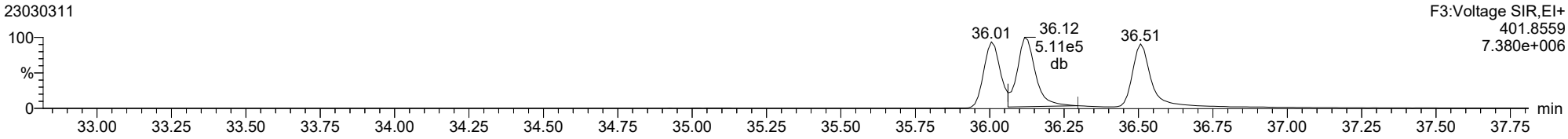

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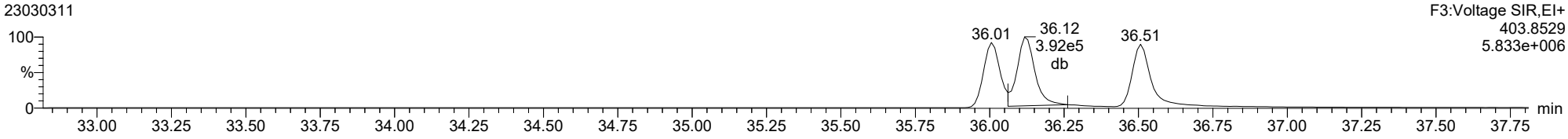

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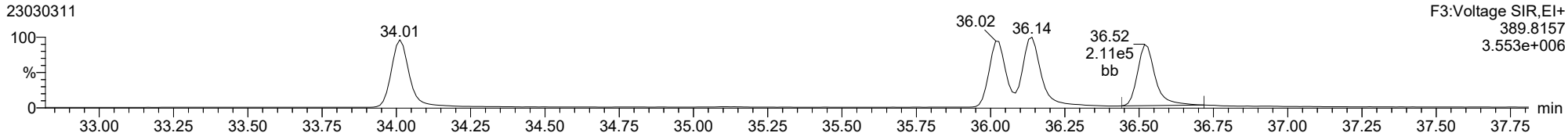

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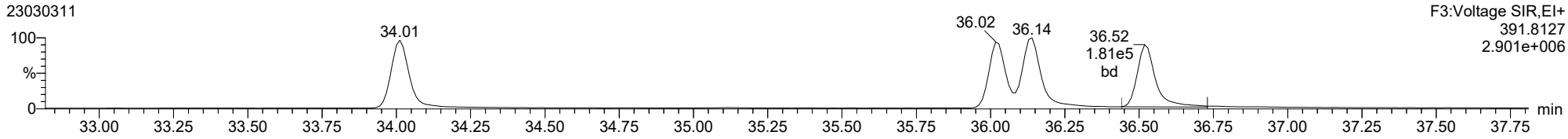

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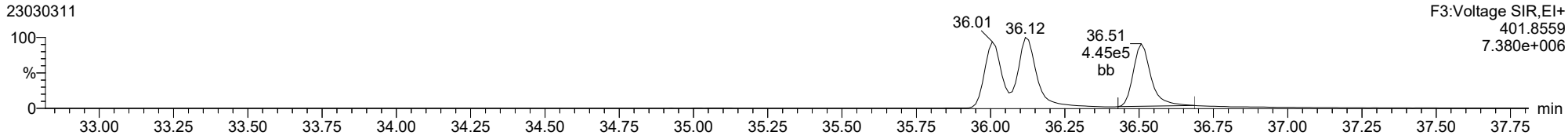

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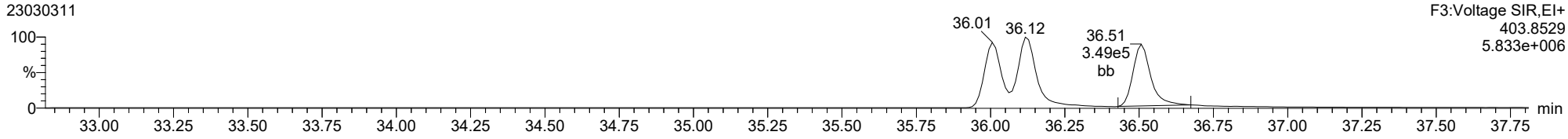

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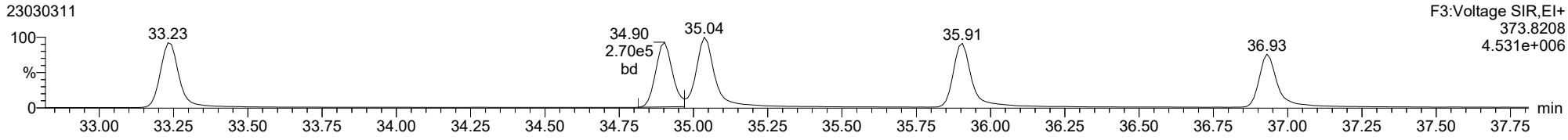

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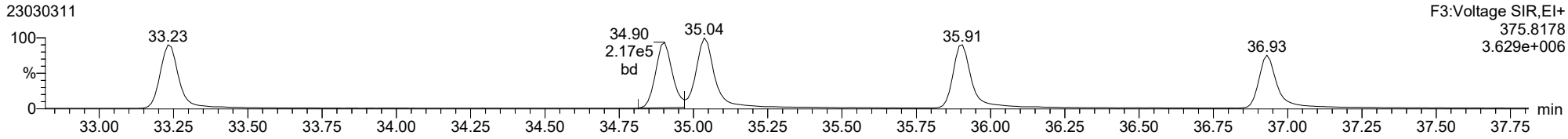

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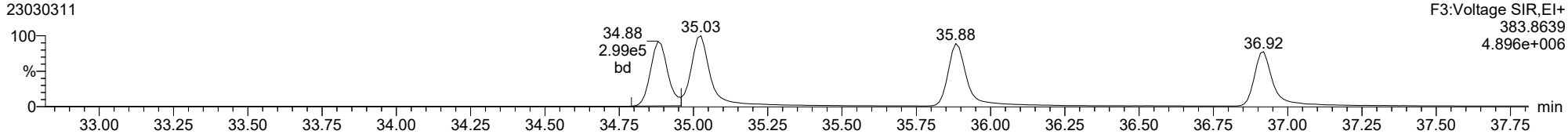

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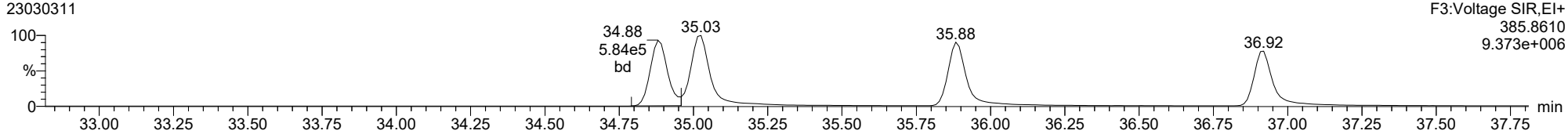

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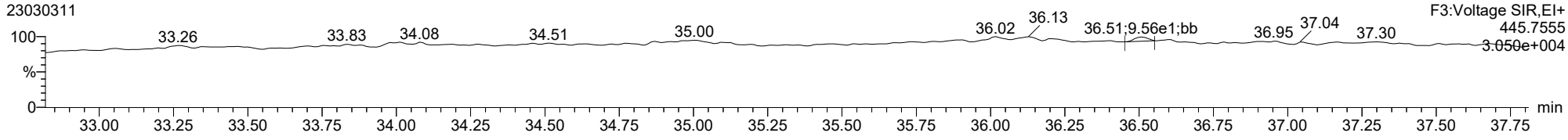

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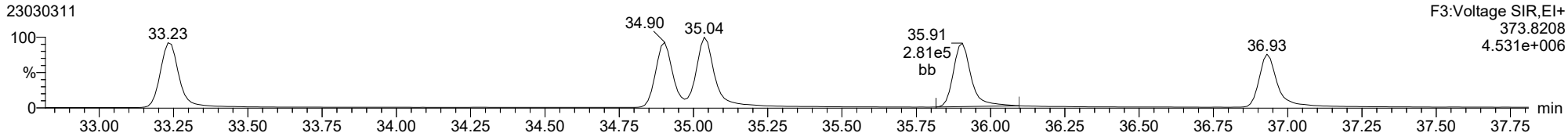
234678-HxCDF



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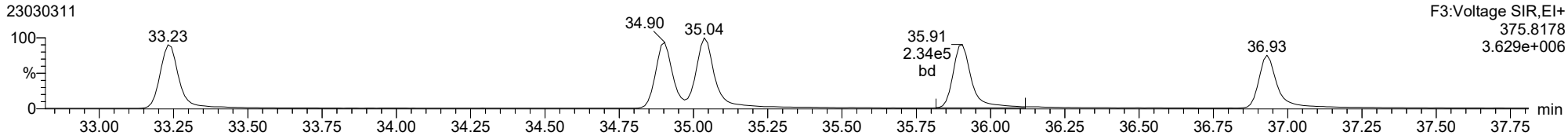

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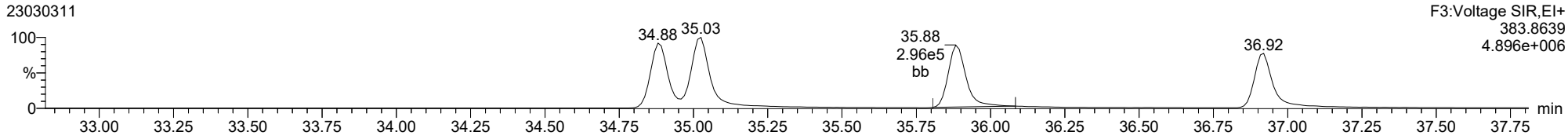

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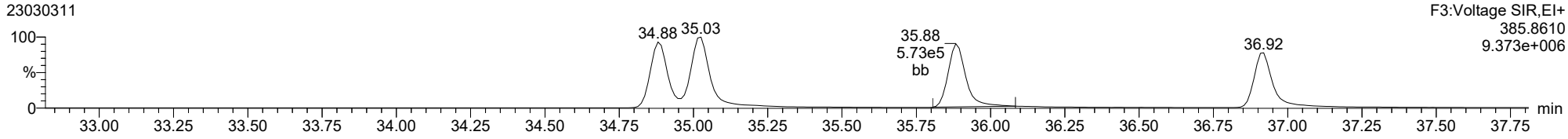

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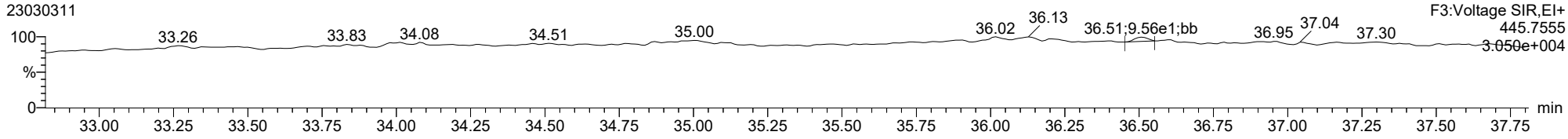

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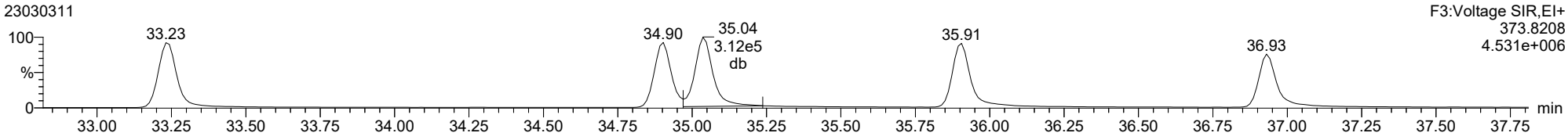

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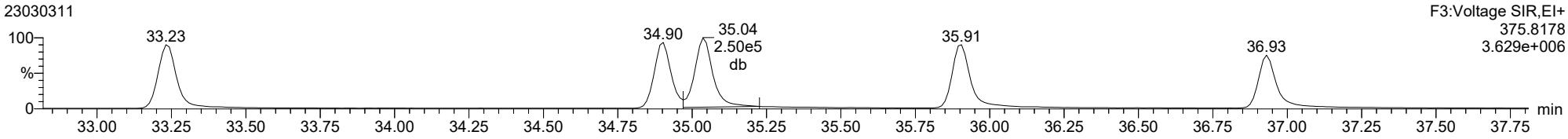

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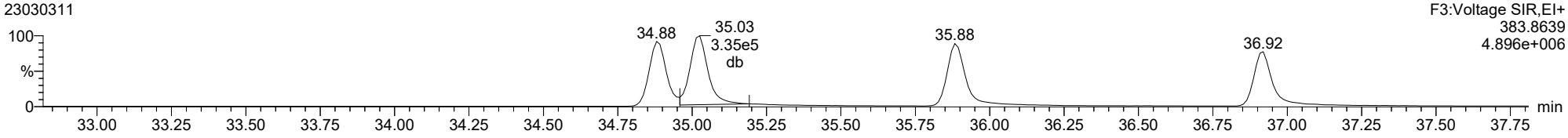

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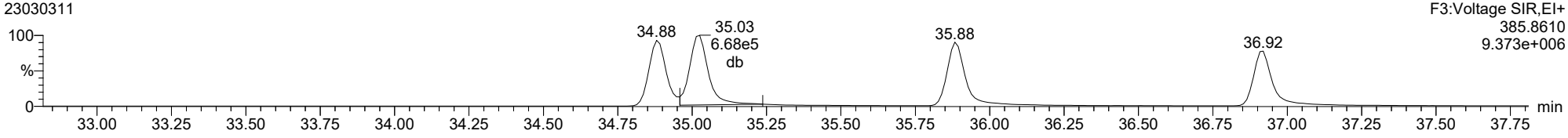

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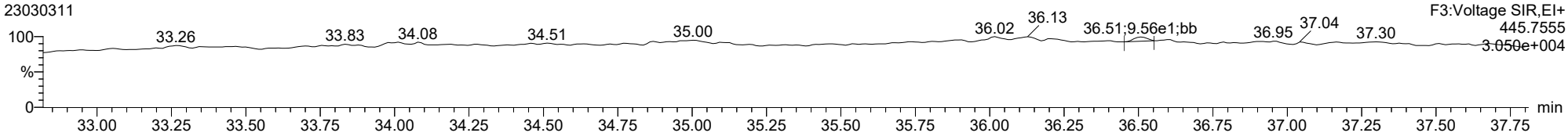

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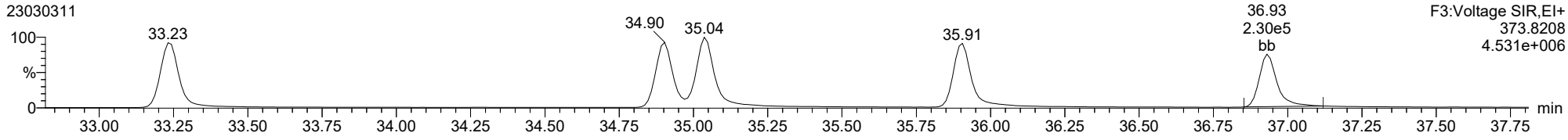

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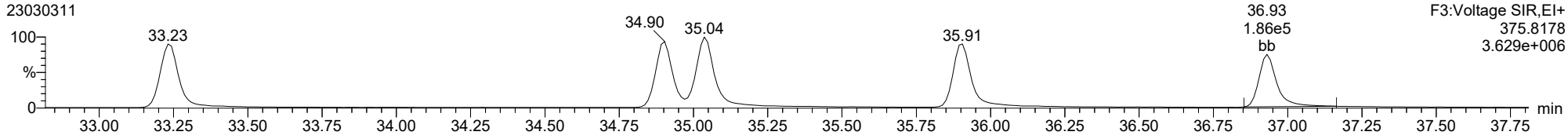

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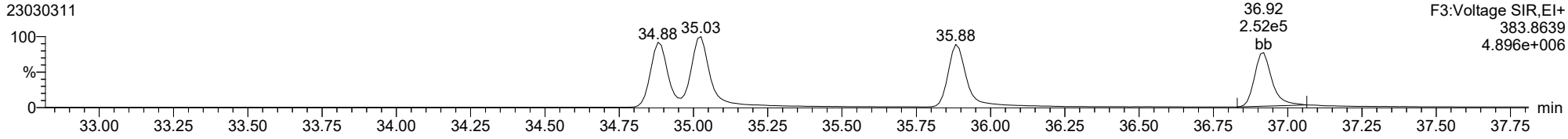

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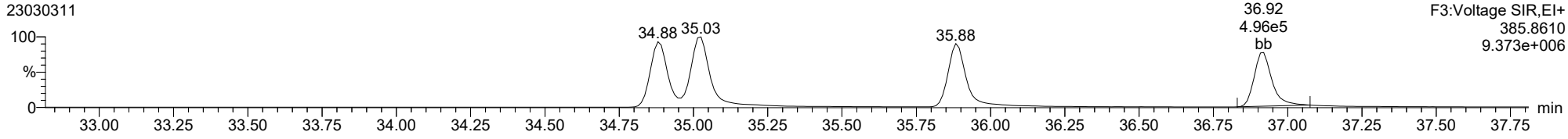

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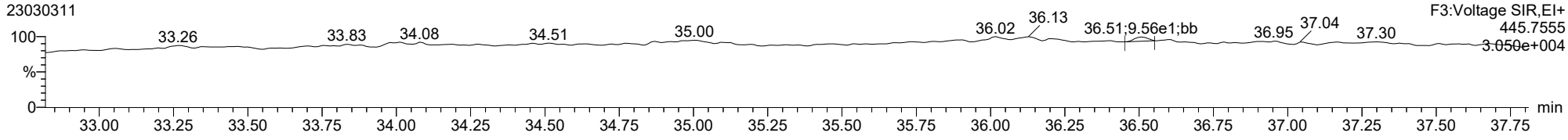

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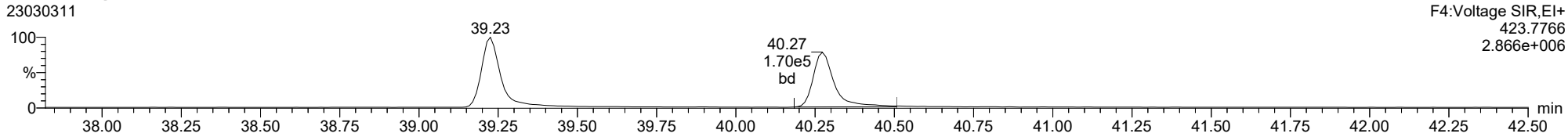

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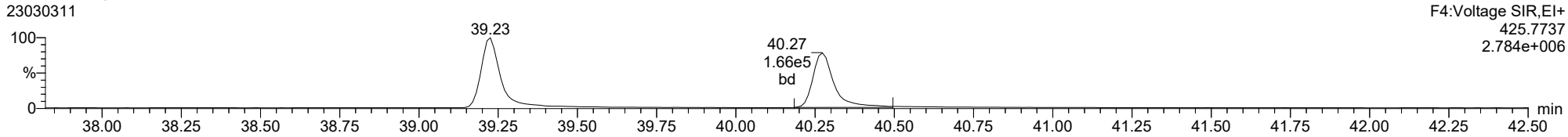

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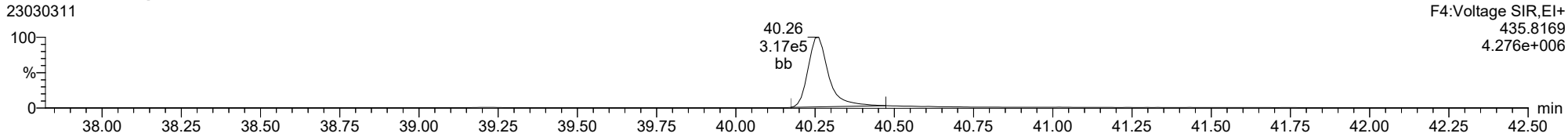

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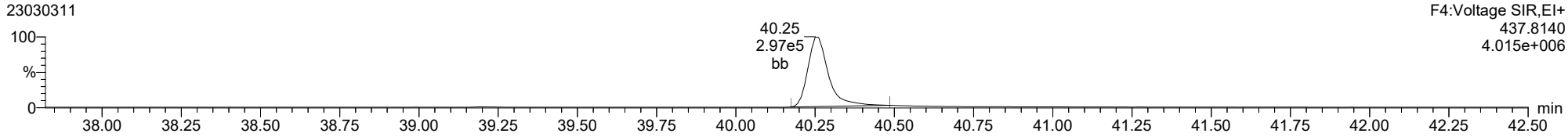

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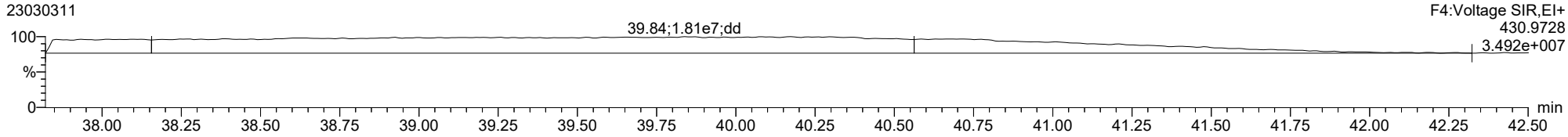

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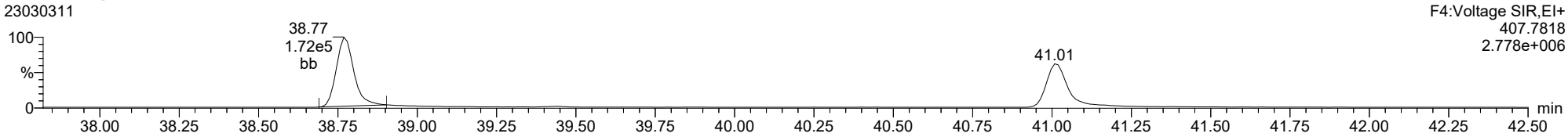

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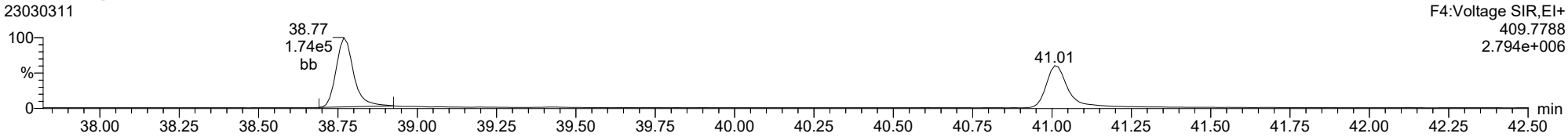

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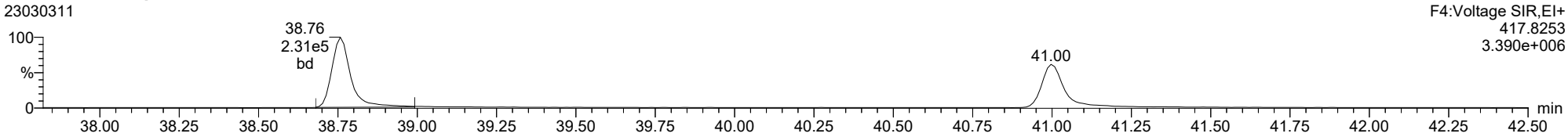

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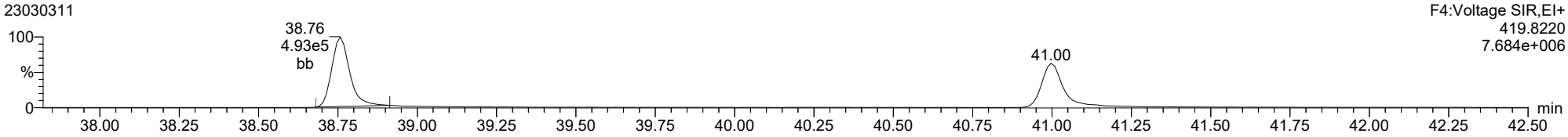

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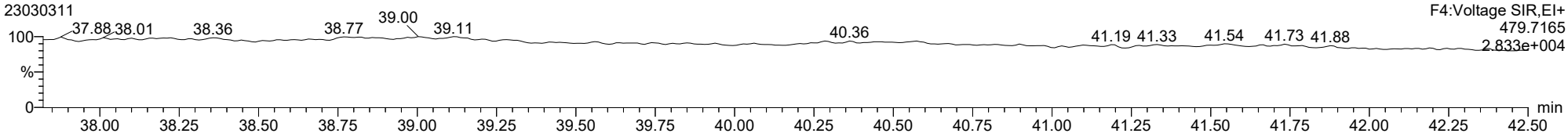

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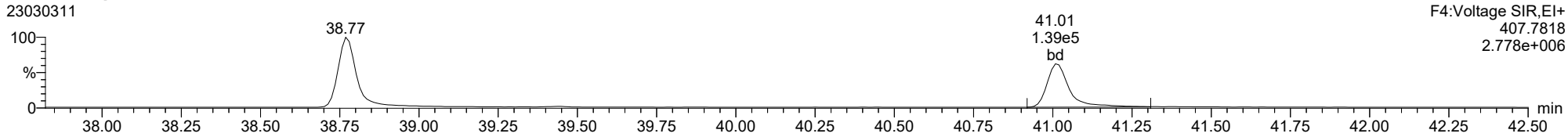

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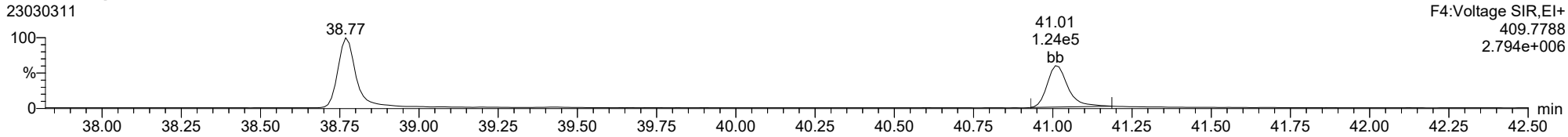

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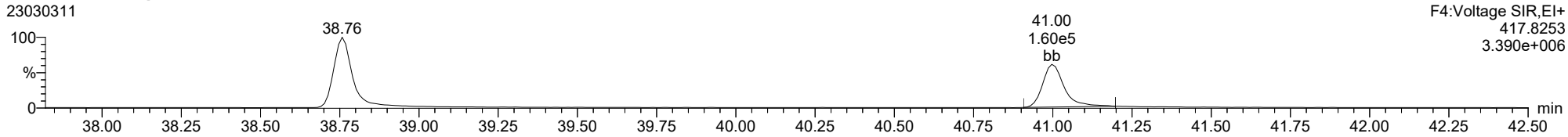

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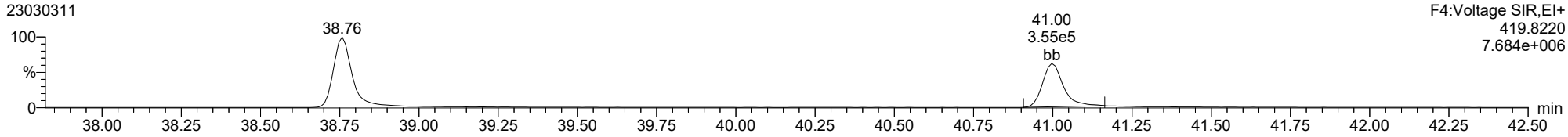

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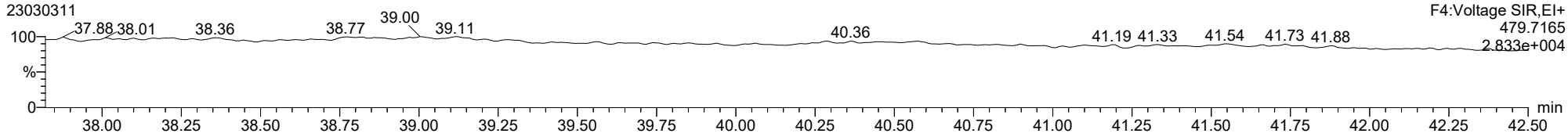

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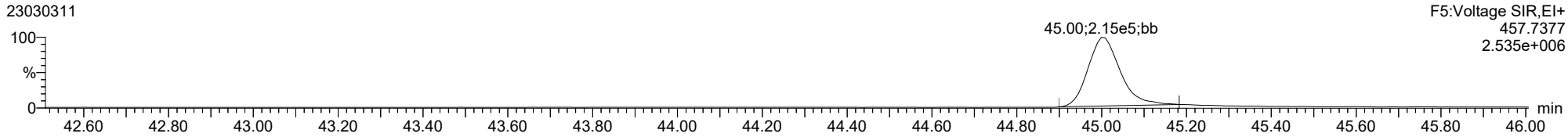

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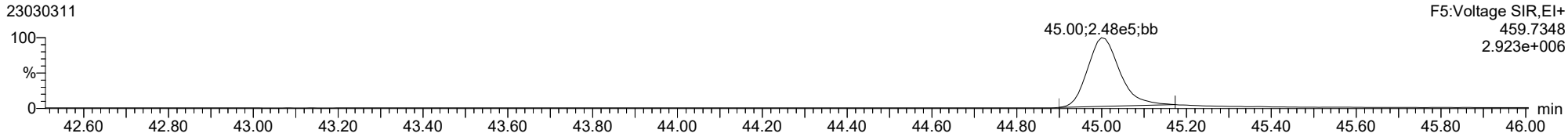

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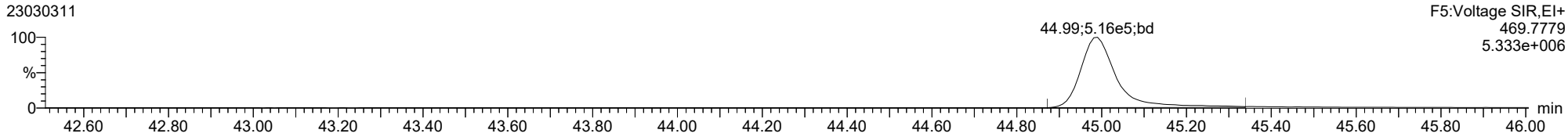

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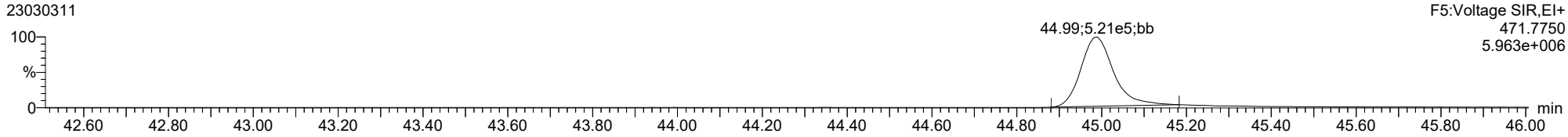

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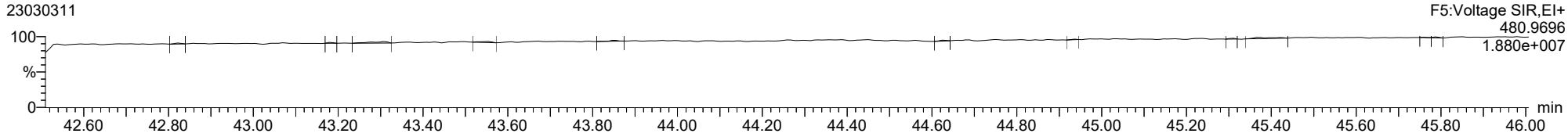

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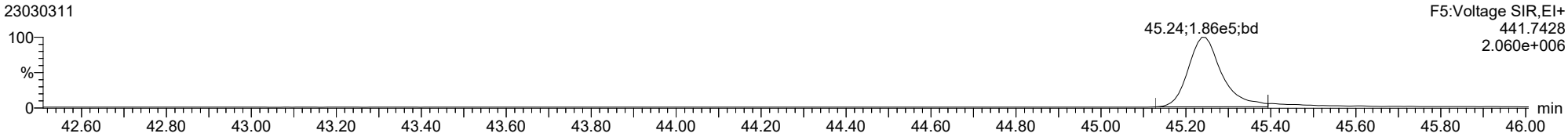

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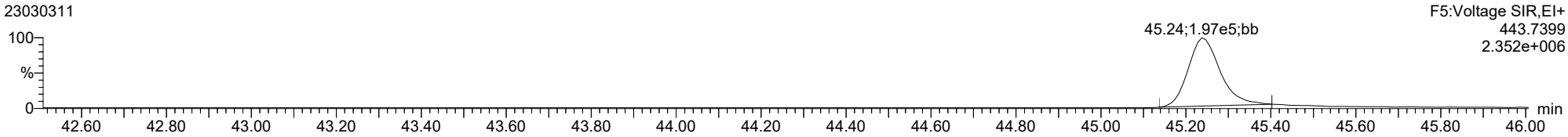

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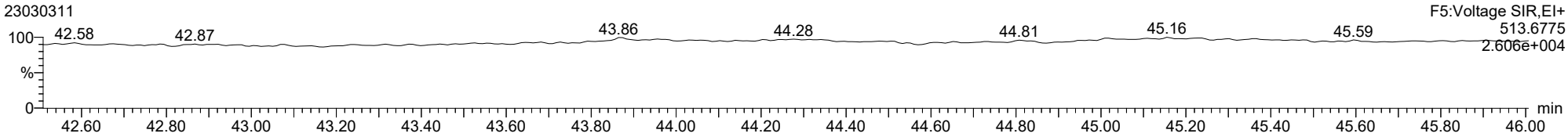

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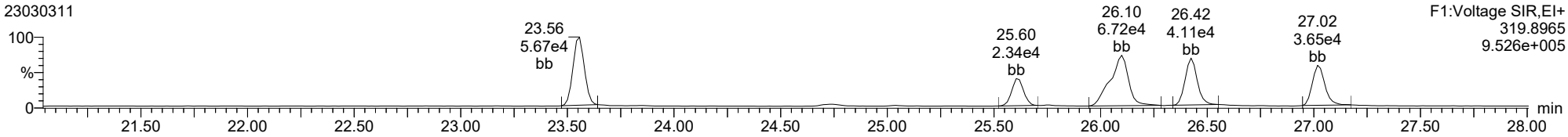

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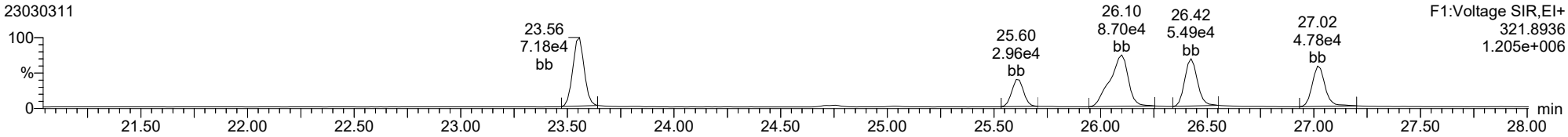

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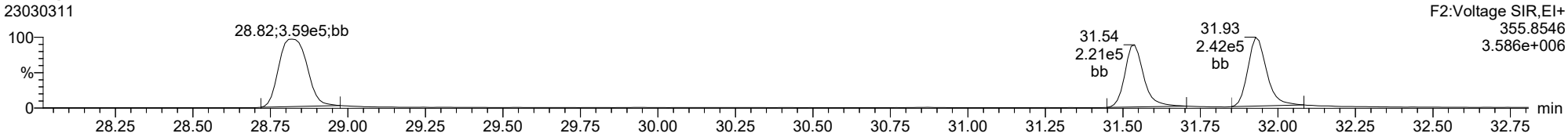

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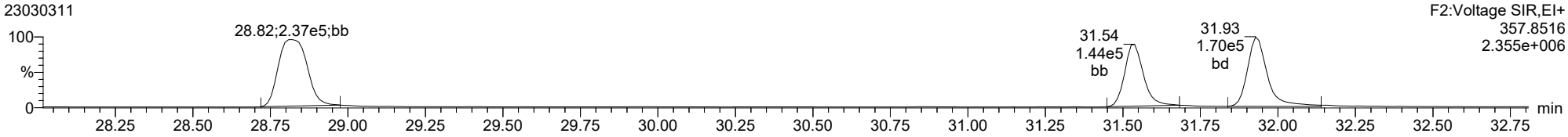

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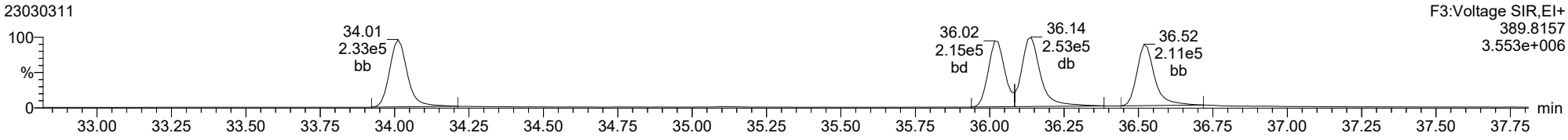

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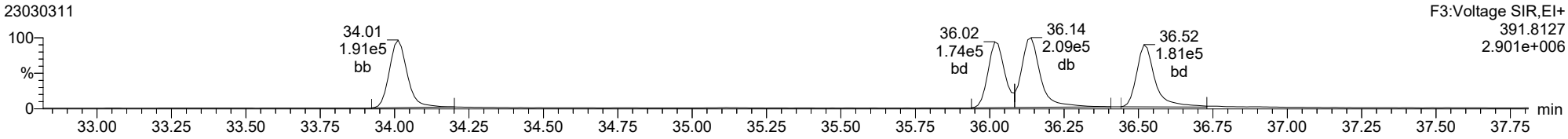

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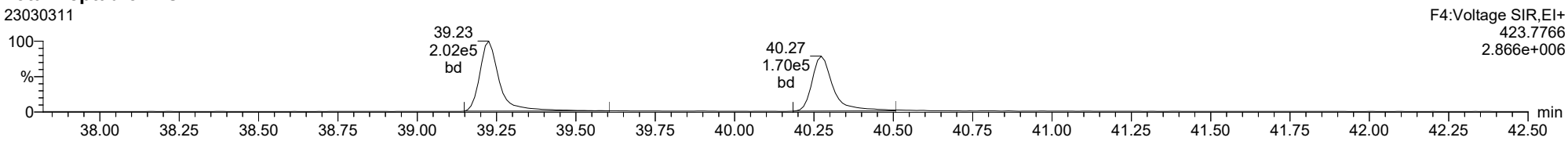

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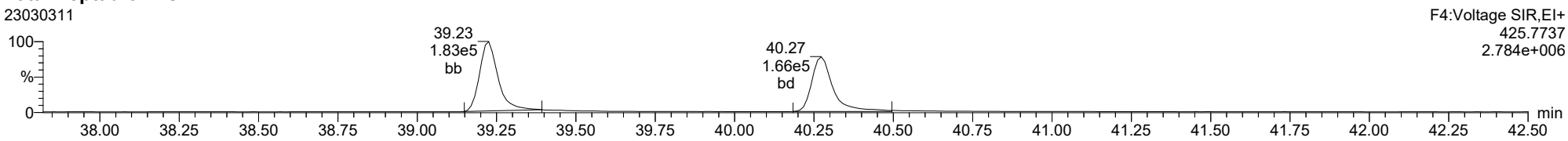

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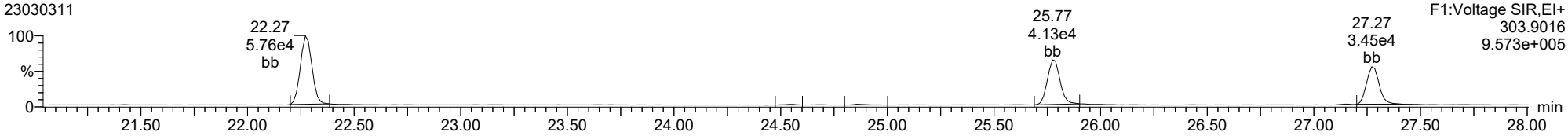

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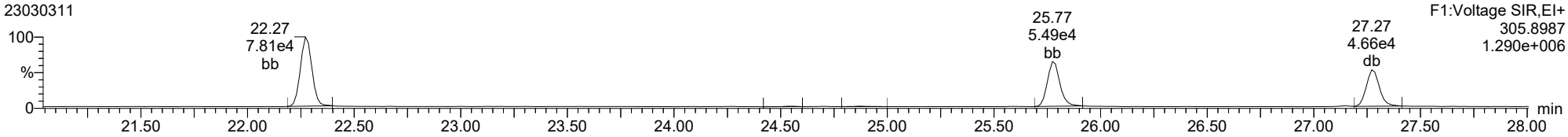

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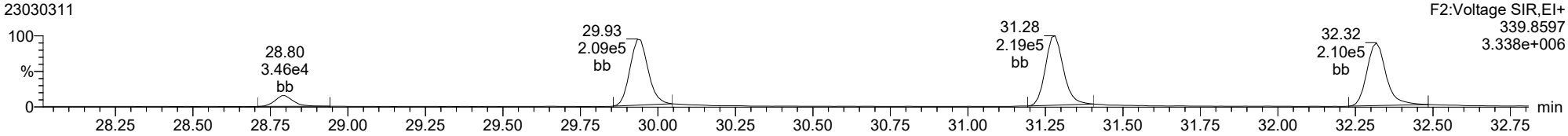

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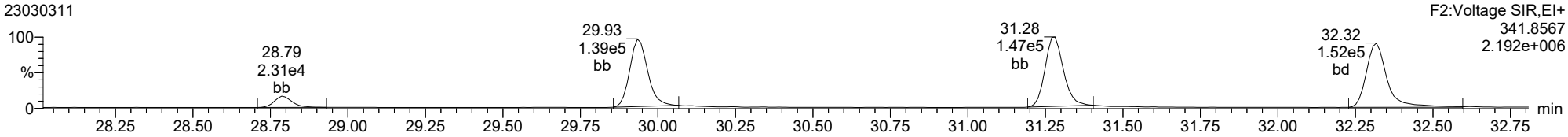

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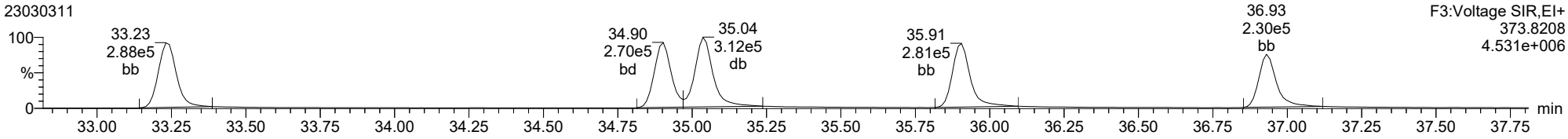

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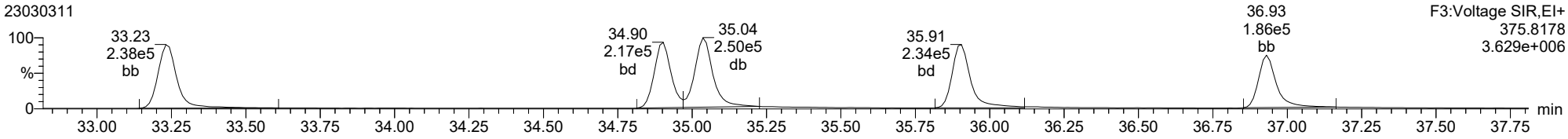

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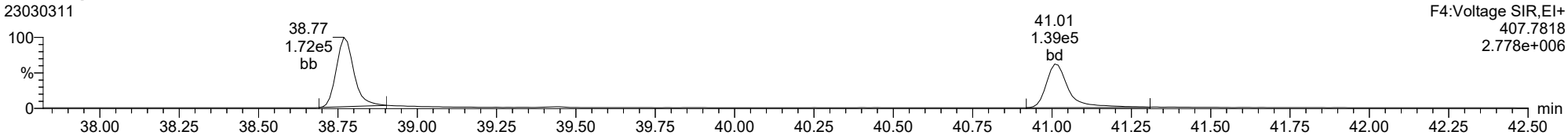

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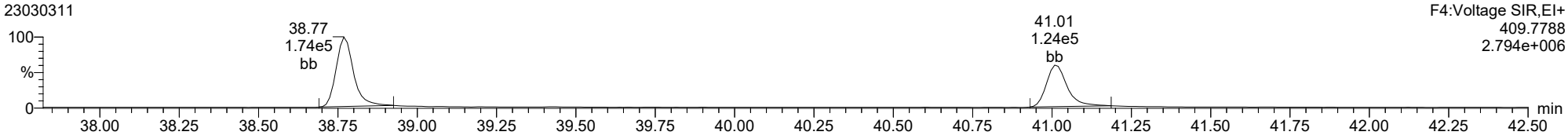

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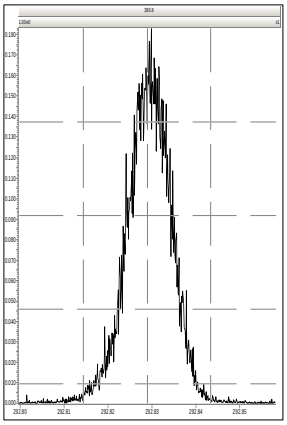

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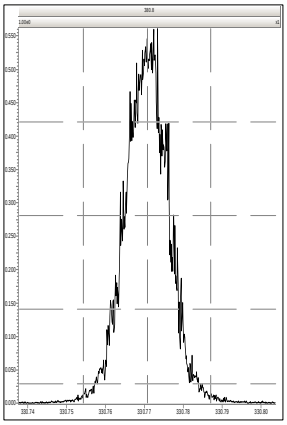

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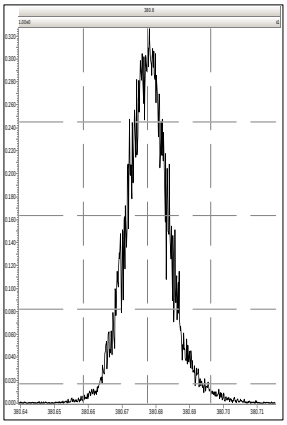

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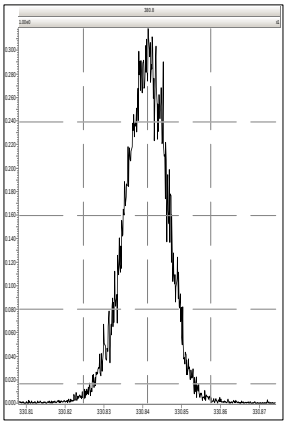

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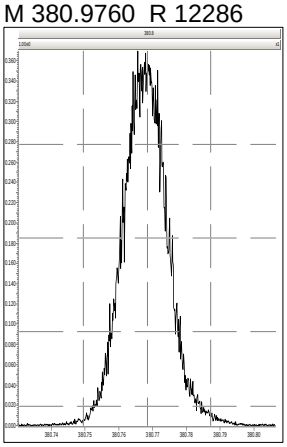

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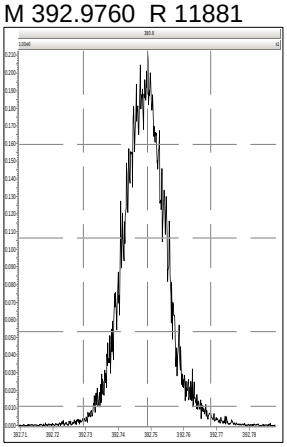

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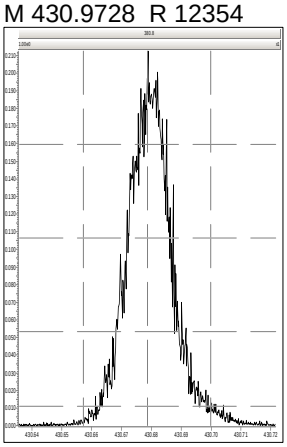

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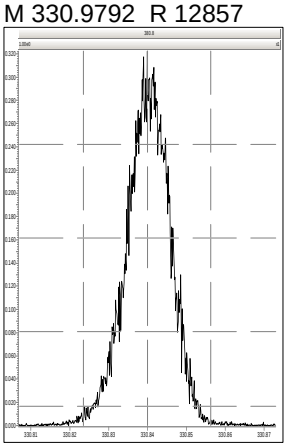

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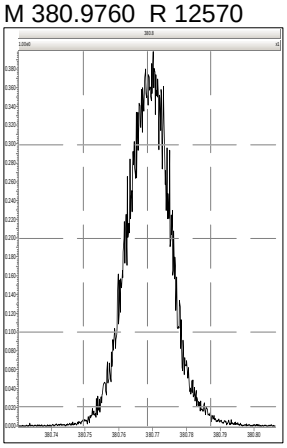

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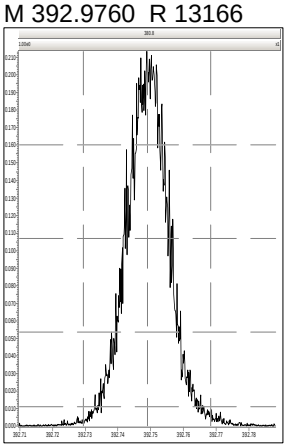

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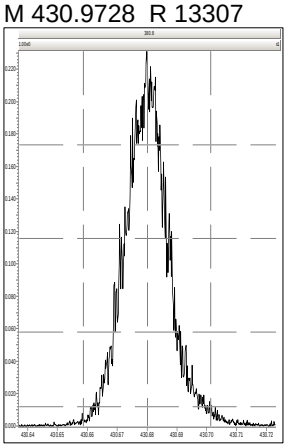

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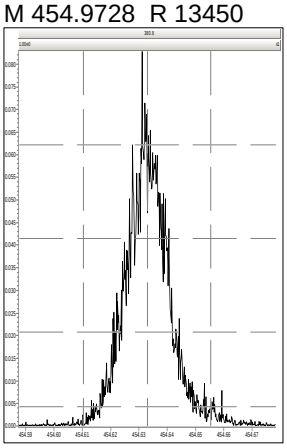

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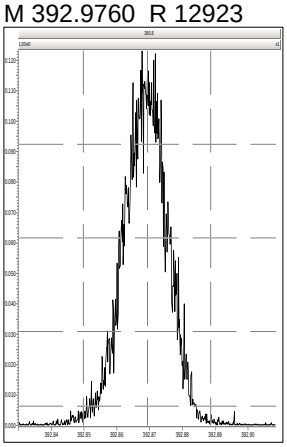

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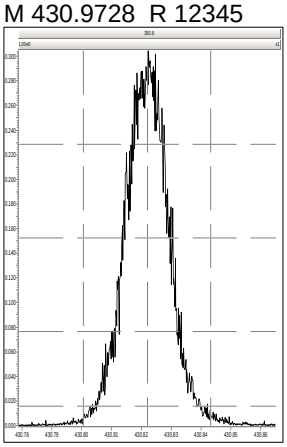

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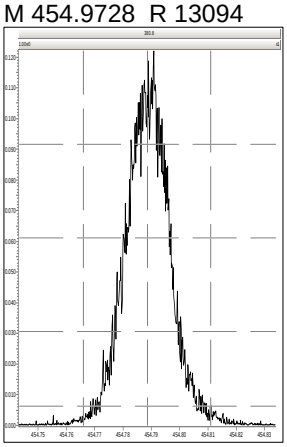

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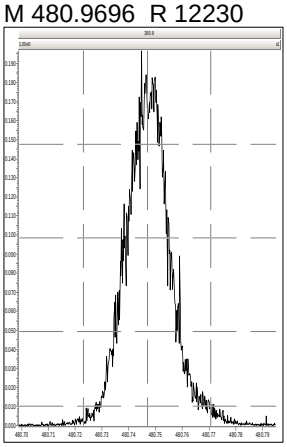
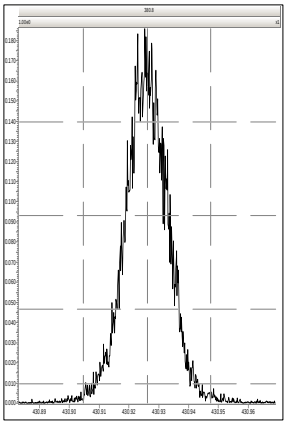
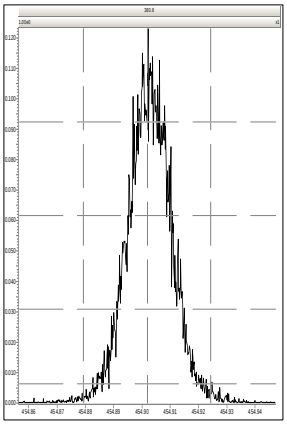


Printed: Friday, March 03, 2023 18:18:18 Pacific Standard Time

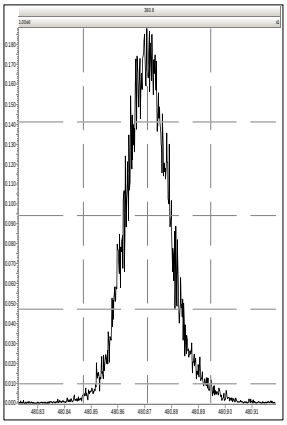
M 430.9728 R 12854



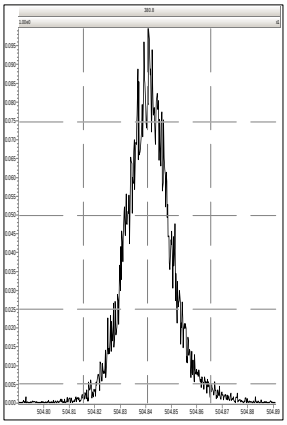
M 454.9728 R 13400



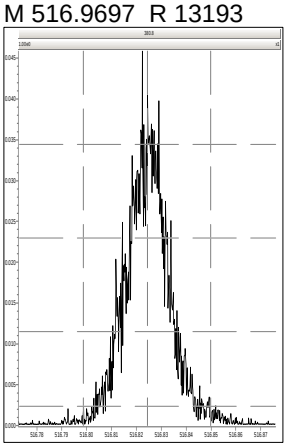
M 480.9696 R 11904

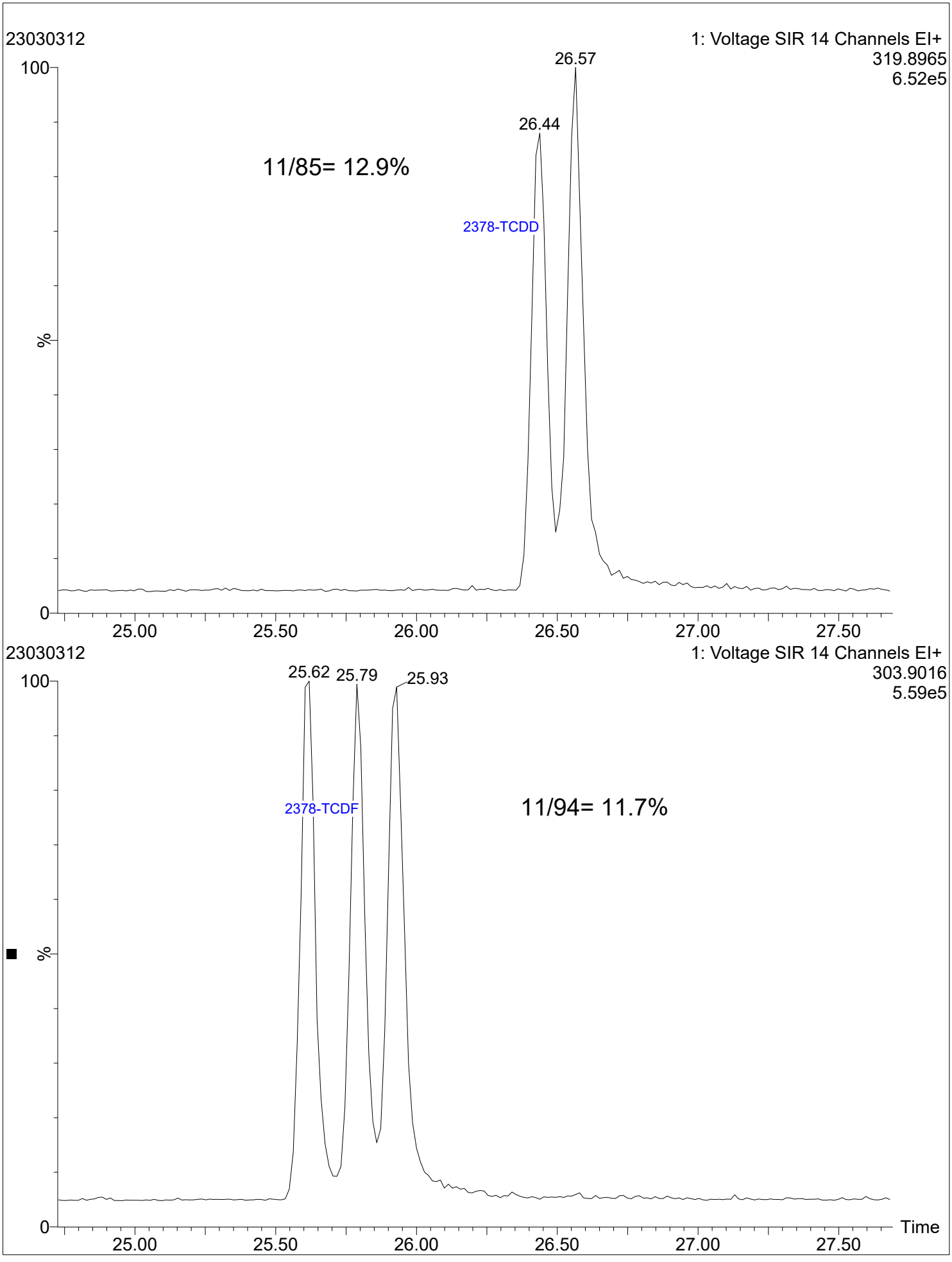


M 504.9696 R 12168



M 516.9697 R 13193

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319.8965
6.52e5
26.57
26.44
11/85= 12.9%
2378-TCDD
100
%
0
25.00
25.50
26.00
26.50
27.00
27.50
23030312
1: Voltage SIR 14 Channels EI+
303.9016
5.59e5
25.62
25.79
25.93
2378-TCDF
11/94= 11.7%
100
%
0
Time
25.00
25.50
26.00
26.50
27.00
27.50

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 1613B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00015
Laboratory ID: SLC0045-SCV1
Sequence: SLC0045
Sequence Name: ICVCW
Standard ID: H008219

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
2,3,7,8-TCDF	10.000	9.84	-1.6	
2,3,7,8-TCDD	10.000	9.81	-1.9	
1,2,3,7,8-PeCDF	50.000	51.4	2.8	
2,3,4,7,8-PeCDF	50.000	49.0	-2.0	
1,2,3,7,8-PeCDD	50.000	48.5	-2.9	
1,2,3,4,7,8-HxCDF	50.000	48.2	-3.5	
1,2,3,6,7,8-HxCDF	50.000	48.0	-4.0	
2,3,4,6,7,8-HxCDF	50.000	50.2	0.4	
1,2,3,7,8,9-HxCDF	50.000	49.1	-1.8	
1,2,3,4,7,8-HxCDD	50.000	50.8	1.6	
1,2,3,6,7,8-HxCDD	50.000	50.2	0.3	
1,2,3,7,8,9-HxCDD	50.000	51.6	3.2	
1,2,3,4,6,7,8-HpCDF	50.000	51.8	3.7	
1,2,3,4,7,8,9-HpCDF	50.000	48.5	-3.1	
1,2,3,4,6,7,8-HpCDD	50.000	49.2	-1.6	
OCDF	100.00	104	3.5	
OCDD	100.00	99.4	-0.6	
13C12-2,3,7,8-TCDF	100.00	96.9	-3.1	
13C12-2,3,7,8-TCDD	100.00	96.6	-3.4	
13C12-1,2,3,7,8-PeCDF	100.00	73.2	-26.8	
13C12-2,3,4,7,8-PeCDF	100.00	75.9	-24.1	
13C12-1,2,3,7,8-PeCDD	100.00	76.6	-23.4	
13C12-1,2,3,4,7,8-HxCDF	100.00	93.0	-7.0	
13C12-1,2,3,6,7,8-HxCDF	100.00	98.0	-2.0	
13C12-2,3,4,6,7,8-HxCDF	100.00	93.4	-6.6	
13C12-1,2,3,7,8,9-HxCDF	100.00	97.9	-2.1	
13C12-1,2,3,4,7,8-HxCDD	100.00	95.9	-4.1	
13C12-1,2,3,6,7,8-HxCDD	100.00	97.7	-2.3	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	102	2.1	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	104	4.0	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	102	2.5	
13C12-OCDD	200.00	162	-19.2	
37Cl4-2,3,7,8-TCDD	10.000	8.71	-12.9	

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 1613B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Calibration: GC00015
Sequence: SLC0045

SDG: 23A0171
Project: AOC5 MR Phase 1
Laboratory ID: SLC0045-SCV1
Sequence Name: ICVCW
Standard ID: H008219

* Indicates values outside of QC limits

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 1613B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00015
Laboratory ID: SLC0045-SCV1
Sequence: SLC0045
Standard ID: H008219

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
OCDF	100.00	104	3.5	
OCDD	100.00	99.4	-0.6	
13C12-2,3,7,8-TCDF	100.00	96.9	-3.1	
13C12-2,3,7,8-TCDD	100.00	96.6	-3.4	
13C12-1,2,3,7,8-PeCDF	100.00	73.2	-26.8	
13C12-2,3,4,7,8-PeCDF	100.00	75.9	-24.1	
13C12-1,2,3,7,8-PeCDD	100.00	76.6	-23.4	
13C12-1,2,3,4,7,8-HxCDF	100.00	93.0	-7.0	
13C12-1,2,3,6,7,8-HxCDF	100.00	98.0	-2.0	
13C12-2,3,4,6,7,8-HxCDF	100.00	93.4	-6.6	
13C12-1,2,3,7,8,9-HxCDF	100.00	97.9	-2.1	
13C12-1,2,3,4,7,8-HxCDD	100.00	95.9	-4.1	
13C12-1,2,3,6,7,8-HxCDD	100.00	97.7	-2.3	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	102	2.1	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	104	4.0	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	102	2.5	
13C12-OCDD	200.00	162	-19.2	
37Cl4-2,3,7,8-TCDD	10.000	8.71	-12.9	

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GC00015
Lab File ID:	23030302	Calibration Date:	03/03/2023
Sequence:	SLC0045	Injection Date:	03/03/23
Lab Sample ID:	SLC0045-ICV1	Injection Time:	09:51
Sequence Name:	CS3W1		

		CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
2,3,7,8-TCDF	A	10.000	9.55	0.7015272	0.6699659		-4.5	+/-16
2,3,7,8-TCDD	A	10.000	9.45	1.1486620	1.0855020		-5.5	+/-22
1,2,3,7,8-PeCDF	A	50.000	49.6	0.6792300	0.6743560		-0.7	+/-18
2,3,4,7,8-PeCDF	A	50.000	47.5	0.7861704	0.7472986		-4.9	+/-18
1,2,3,7,8-PeCDD	A	50.000	49.7	1.0218450	1.0147700		-0.7	+/-22
1,2,3,4,7,8-HxCDF	A	50.000	47.1	1.1660380	1.0988190		-5.8	+/-10
1,2,3,6,7,8-HxCDF	A	50.000	49.6	1.0907410	1.0813380		-0.9	+/-12
2,3,4,6,7,8-HxCDF	A	50.000	49.3	1.1396990	1.1246750		-1.3	+/-12
1,2,3,7,8,9-HxCDF	A	50.000	47.0	1.1370930	1.0679460		-6.1	+/-10
1,2,3,4,7,8-HxCDD	A	50.000	50.1	0.9955689	0.9966266		0.1	+/-22
1,2,3,6,7,8-HxCDD	A	50.000	49.6	1.0009380	0.9938861		-0.7	+/-22
1,2,3,7,8,9-HxCDD	A	50.000	54.2	0.9071139	0.9838286		8.5	+/-18
1,2,3,4,6,7,8-HpCDF	A	50.000	47.5	1.0029930	0.9526502		-5.0	+/-10
1,2,3,4,7,8,9-HpCDF	A	50.000	50.2	0.9531152	0.9573187		0.4	+/-14
1,2,3,4,6,7,8-HpCDD	A	50.000	47.6	1.0390130	0.9895371		-4.8	+/-14
OCDF	A	100.00	88.6	0.7778078	0.6890651		-11.4	+/-37
OCDD	A	100.00	98.4	0.9199537	0.9055309		-1.6	+/-21
13C12-2,3,7,8-TCDF	A	100.00	94.0	1.6201960	1.5232274		-6.0	+/-29
13C12-2,3,7,8-TCDD	A	100.00	102	1.1524090	1.1727116		1.8	+/-18
13C12-1,2,3,7,8-PeCDF	A	100.00	92.2	1.2404520	1.1438587		-7.8	+/-24
13C12-2,3,4,7,8-PeCDF	A	100.00	87.6	1.1177860	0.9791895		-12.4	+/-23
13C12-1,2,3,7,8-PeCDD	A	100.00	84.3	0.8288129	0.6985475		-15.7	+/-38
13C12-1,2,3,4,7,8-HxCDF	A	100.00	84.0	1.1683050	0.9815313		-16.0	+/-24
13C12-1,2,3,6,7,8-HxCDF	A	100.00	74.6	1.3864660	1.0348865		-25.4	+/-30
13C12-2,3,4,6,7,8-HxCDF	A	100.00	88.7	1.1292560	1.0010969		-11.3	+/-27
13C12-1,2,3,7,8,9-HxCDF	A	100.00	99.9	0.9317541	0.9305560		-0.1	+/-26
13C12-1,2,3,4,7,8-HxCDD	A	100.00	93.5	0.9950393	0.9299453		-6.5	+/-15
13C12-1,2,3,6,7,8-HxCDD	A	100.00	86.9	1.1566890	1.0052205		-13.1	+/-15
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	95.3	0.8952017	0.8530837		-4.7	+/-22
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	98.7	0.7697516	0.7594900		-1.3	+/-23

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GC00015
Lab File ID:	23030302	Calibration Date:	03/03/2023
Sequence:	SLC0045	Injection Date:	03/03/23
Lab Sample ID:	SLC0045-ICV1	Injection Time:	09:51
Sequence Name:	CS3W1		

		CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	105	0.8401226	0.8828452		5.1	+/-28
13C12-OCDD	A	200.00	214	0.7674714	0.8220320		7.1	+/-52
37Cl4-2,3,7,8-TCDD	A	10.000	9.05	1.2878040	1.1649542		-9.5	

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GC00015
Lab File ID:	23031502	Calibration Date:	03/03/2023
Sequence:	SLC0176	Injection Date:	03/15/23
Lab Sample ID:	SLC0176-ICV1	Injection Time:	11:02
Sequence Name:	CS3Z4		

		CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
2,3,7,8-TCDF	A	10.000	10.7	0.7015272	0.7491013		6.8	+/-16
2,3,7,8-TCDD	A	10.000	9.14	1.1486620	1.0495520		-8.6	+/-22
1,2,3,7,8-PeCDF	A	50.000	52.0	0.6792300	0.7069506		4.1	+/-18
2,3,4,7,8-PeCDF	A	50.000	49.9	0.7861704	0.7847233		-0.2	+/-18
1,2,3,7,8-PeCDD	A	50.000	50.1	1.0218450	1.0243230		0.2	+/-22
1,2,3,4,7,8-HxCDF	A	50.000	48.3	1.1660380	1.1273660		-3.3	+/-10
1,2,3,6,7,8-HxCDF	A	50.000	49.0	1.0907410	1.0690270		-2.0	+/-12
2,3,4,6,7,8-HxCDF	A	50.000	50.7	1.1396990	1.1564260		1.5	+/-12
1,2,3,7,8,9-HxCDF	A	50.000	48.0	1.1370930	1.0907050		-4.1	+/-10
1,2,3,4,7,8-HxCDD	A	50.000	48.1	0.9955689	0.9568005		-3.9	+/-22
1,2,3,6,7,8-HxCDD	A	50.000	47.3	1.0009380	0.9466622		-5.4	+/-22
1,2,3,7,8,9-HxCDD	A	50.000	52.4	0.9071139	0.9499178		4.7	+/-18
1,2,3,4,6,7,8-HpCDF	A	50.000	48.3	1.0029930	0.9680206		-3.5	+/-10
1,2,3,4,7,8,9-HpCDF	A	50.000	52.0	0.9531152	0.9907253		3.9	+/-14
1,2,3,4,6,7,8-HpCDD	A	50.000	50.2	1.0390130	1.0435310		0.4	+/-14
OCDF	A	100.00	95.3	0.7778078	0.7408728		-4.7	+/-37
OCDD	A	100.00	103	0.9199537	0.9435841		2.6	+/-21
13C12-2,3,7,8-TCDF	A	100.00	85.8	1.6201960	1.3896086		-14.2	+/-29
13C12-2,3,7,8-TCDD	A	100.00	100	1.1524090	1.1576123		0.5	+/-18
13C12-1,2,3,7,8-PeCDF	A	100.00	80.0	1.2404520	0.9919367		-20.0	+/-24
13C12-2,3,4,7,8-PeCDF	A	100.00	81.5	1.1177860	0.9107706		-18.5	+/-23
13C12-1,2,3,7,8-PeCDD	A	100.00	83.2	0.8288129	0.6894064		-16.8	+/-38
13C12-1,2,3,4,7,8-HxCDF	A	100.00	80.3	1.1683050	0.9384741		-19.7	+/-24
13C12-1,2,3,6,7,8-HxCDF	A	100.00	71.8	1.3864660	0.9954735		-28.2	+/-30
13C12-2,3,4,6,7,8-HxCDF	A	100.00	82.7	1.1292560	0.9343331		-17.3	+/-27
13C12-1,2,3,7,8,9-HxCDF	A	100.00	90.8	0.9317541	0.8461563		-9.2	+/-26
13C12-1,2,3,4,7,8-HxCDD	A	100.00	97.1	0.9950393	0.9661449		-2.9	+/-15
13C12-1,2,3,6,7,8-HxCDD	A	100.00	85.9	1.1566890	0.9936743		-14.1	+/-15
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	83.7	0.8952017	0.7490321		-16.3	+/-22
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	83.0	0.7697516	0.6387781		-17.0	+/-23

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GC00015
Lab File ID:	23031502	Calibration Date:	03/03/2023
Sequence:	SLC0176	Injection Date:	03/15/23
Lab Sample ID:	SLC0176-ICV1	Injection Time:	11:02
Sequence Name:	CS3Z4		

		CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	84.3	0.8401226	0.7086402		-15.7	+/-28
13C12-OCDD	A	200.00	151	0.7674714	0.5811518		-24.3	+/-52
37Cl4-2,3,7,8-TCDD	A	10.000	8.61	1.2878040	1.1090972		-13.9	

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230315D1.qld
Last Altered: Thursday, March 16, 2023 09:12:10 Pacific Daylight Time
Printed: Thursday, March 16, 2023 09:57:12 Pacific Daylight Time

Method: T:\Autospec\Methods\Dioxin230315.mdb 16 Mar 2023 08:38:23
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: CS3Z4, Name: 23031502, Date: 15-Mar-2023, Time: 11:02:56, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.576	1.001	2.816e4	3.691e4	0.702	0.763	0.770	684	849	4.43e5	5.84e5	647.3	687.9	NO	bb	bb	10.678
12378-PeCDF	29.747	1.001	1.315e5	8.767e4	0.679	1.500	1.550	962	866	2.09e6	1.36e6	2175.8	1571.2	NO	bb	bb	52.041
23478-PeCDF	31.084	1.001	1.351e5	8.831e4	0.786	1.529	1.550	962	866	2.13e6	1.40e6	2215.9	1619.7	NO	bb	bb	49.908
123478-HxCDF	34.716	1.000	1.914e5	1.534e5	1.166	1.248	1.240	919	907	3.19e6	2.55e6	3473.9	2807.4	NO	bd	bd	48.342
234678-HxCDF	35.730	1.001	1.962e5	1.559e5	1.140	1.258	1.240	919	907	3.34e6	2.67e6	3633.5	2948.3	NO	bb	bb	50.734
123678-HxCDF	34.861	1.001	1.927e5	1.541e5	1.091	1.250	1.240	919	907	3.13e6	2.51e6	3407.8	2763.2	NO	db	dd	49.005
123789-HxCDF	36.755	1.000	1.661e5	1.346e5	1.137	1.234	1.240	919	907	2.73e6	2.17e6	2967.7	2396.5	NO	bd	bd	47.960
1234678-HpCDF	38.615	1.000	1.185e5	1.178e5	1.003	1.007	1.050	1014	1030	2.06e6	2.09e6	2027.8	2028.8	NO	bb	bb	48.257
1234789-HpCDF	40.832	1.000	1.034e5	1.028e5	0.953	1.006	1.050	1014	1030	1.61e6	1.58e6	1588.5	1537.0	NO	bb	bb	51.973
OCDF	45.029	1.005	1.325e5	1.481e5	0.778	0.895	0.890	657	818	1.68e6	1.88e6	2564.8	2297.2	NO	bb	bb	95.251
2378-TCDD	26.226	1.001	3.319e4	4.276e4	1.149	0.776	0.770	942	804	5.09e5	6.59e5	540.5	820.0	NO	bb	bd	9.137
12378-PeCDD	31.329	1.000	1.327e5	8.802e4	1.022	1.508	1.550	835	994	2.09e6	1.39e6	2499.8	1400.8	NO	bb	bb	50.121
123478-HxCDD	35.841	1.000	1.657e5	1.356e5	0.996	1.222	1.240	706	774	2.83e6	2.30e6	4009.0	2969.2	NO	bd	bd	48.053
123678-HxCDD	35.953	1.000	1.680e5	1.385e5	1.001	1.213	1.240	706	774	2.84e6	2.33e6	4015.9	3004.4	NO	db	db	47.289
123789-HxCDD	36.354	1.012	1.666e5	1.367e5	0.907	1.219	1.240	706	774	2.80e6	2.28e6	3965.6	2938.5	NO	bb	bb	52.359
1234678-HpCDD	40.097	1.000	1.225e5	1.185e5	1.039	1.034	1.050	816	836	2.05e6	2.00e6	2509.8	2392.0	NO	bb	bb	50.217
OCDD	44.801	1.000	1.673e5	1.901e5	0.920	0.880	0.890	1003	1039	2.16e6	2.46e6	2157.1	2369.8	NO	bb	bb	102.569
13C-2378-TCDF	25.562	1.007	3.751e5	4.935e5	1.620	0.760	0.770	1851	952	6.02e6	7.90e6	3251.0	8298.5	NO	bb	bb	85.768
13C-12378-PeCDF	29.725	1.171	3.752e5	2.449e5	1.240	1.532	1.550	1410	980	5.98e6	3.87e6	4245.1	3945.4	NO	bb	bb	79.966
13C-23478-PeCDF	31.062	1.224	3.438e5	2.255e5	1.118	1.524	1.550	1410	980	5.49e6	3.54e6	3897.5	3608.3	NO	bb	bb	81.480
13C-123478-HxCDF	34.705	0.955	1.950e5	4.167e5	1.168	0.468	0.510	1024	1263	3.45e6	6.94e6	3364.4	5492.7	NO	bb	bd	80.328
13C-123678-HxCDF	34.839	0.959	2.202e5	4.287e5	1.386	0.514	0.510	1024	1263	3.55e6	6.92e6	3462.5	5477.9	NO	dd	dd	71.799
13C-234678-HxCDF	35.708	0.983	2.059e5	4.031e5	1.129	0.511	0.510	1024	1263	3.40e6	6.71e6	3325.1	5310.7	NO	bb	bb	82.739
13C-123789-HxCDF	36.743	1.011	1.867e5	3.648e5	0.932	0.512	0.510	1024	1263	3.20e6	6.20e6	3124.8	4909.7	NO	bb	bb	90.813
13C-1234678-HpCDF	38.604	1.063	1.480e5	3.402e5	0.895	0.435	0.440	814	1216	2.65e6	6.09e6	3259.7	5007.9	NO	bb	bb	83.672
13C-1234789-HpCDF	40.810	1.123	1.283e5	2.881e5	0.770	0.445	0.440	814	1216	2.00e6	4.60e6	2457.4	3781.2	NO	bb	bb	82.985
13C-1234-TCDD	25.379	0.000	2.756e5	3.495e5	1.000	0.789	0.770	1244	696	4.42e6	5.62e6	3551.9	8078.4	NO	bb	bb	100.000
13C-2378-TCDD	26.198	1.032	3.197e5	4.039e5	1.152	0.792	0.770	1244	696	5.13e6	6.45e6	4126.0	9263.9	NO	bb	bb	100.452
13C-12378-PeCDD	31.318	1.234	2.672e5	1.637e5	0.829	1.632	1.550	892	567	4.14e6	2.51e6	4638.5	4432.4	NO	bb	bb	83.180
13C-123478-HxCDD	35.830	0.986	3.533e5	2.764e5	0.995	1.278	1.240	996	896	5.96e6	4.59e6	5985.3	5123.1	NO	bd	bd	97.096
13C-123678-HxCDD	35.942	0.989	3.644e5	2.833e5	1.157	1.286	1.240	996	896	6.19e6	4.85e6	6216.7	5415.0	NO	db	dd	85.907
13C-1234678-HpCDD	40.086	1.103	2.385e5	2.233e5	0.840	1.068	1.050	733	846	4.00e6	3.75e6	5462.9	4431.8	NO	bb	bb	84.350
13C-OCDD	44.783	1.233	3.606e5	3.970e5	0.767	0.908	0.890	880	1180	4.76e6	5.23e6	5410.1	4433.1	NO	bb	bb	151.446
13C-123789-HxCDD	36.332	0.000	3.679e5	2.838e5	1.000	1.296	1.240	996	896	6.22e6	4.75e6	6245.5	5298.8	NO	bb	bb	100.000
37CL-2378-TCDD	26.212	1.033	6.933e4		1.288			742		1.07e6		1444.8			bb		8.612

Dataset: T:\Autospec\Processed Data Batch\230315D1.qld
Last Altered: Thursday, March 16, 2023 09:12:10 Pacific Daylight Time
Printed: Thursday, March 16, 2023 09:57:12 Pacific Daylight Time

ID: CS3Z4, Name: 23031502, Date: 15-Mar-2023, Time: 11:02:56, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.073	0.863	2.997e4	3.989e4	0.802	0.751	0.770	684	849	4.75e5	6.45e5	694.2	759.5	NO	bb	bb	10.034
1289-TCDF	27.074	1.059	2.668e4	3.495e4	0.678	0.763	0.770	684	849	4.02e5	5.33e5	588.1	627.5	NO	db	db	10.465
13468-PECDF	26.933	0.906	2.592e5	1.716e5	1.246	1.510	1.550	584	577	4.04e6	2.70e6	6920.4	4681.1	NO	bb	bb	55.741
12389-PECDF	32.109	1.080	1.343e5	8.957e4	0.496	1.499	1.550	962	866	2.10e6	1.43e6	2181.6	1657.7	NO	bb	bb	72.733
123468-HXCDF	33.045	0.952	1.758e5	1.388e5	1.169	1.267	1.240	919	907	2.77e6	2.21e6	3020.5	2435.0	NO	bb	bb	43.981
1368-TCDD	23.345	0.891	3.001e4	3.792e4	1.015	0.791	0.770	942	804	4.84e5	6.16e5	513.1	766.3	NO	bb	bb	9.246
1289-TCDD	26.819	1.024	3.035e4	3.755e4	0.909	0.808	0.770	942	804	4.69e5	5.85e5	497.6	728.5	NO	bb	bb	10.326
12479-PECDD	28.599	0.913	2.111e5	1.365e5	2.301	1.547	1.550	835	994	2.09e6	1.33e6	2496.6	1340.4	NO	bb	bb	35.046
12389-PECDD	31.730	1.013	1.562e5	1.002e5	1.184	1.559	1.550	835	994	2.47e6	1.58e6	2961.6	1585.9	NO	bb	bb	50.274
124679-HXCDD	33.825	0.944	1.596e5	1.323e5	1.115	1.207	1.240	706	774	2.61e6	2.14e6	3692.7	2763.6	NO	bb	bb	41.554
1234679-HPCDD	39.061	0.974	1.352e5	1.299e5	1.137	1.040	1.050	816	836	2.32e6	2.25e6	2850.1	2687.7	NO	bb	bb	50.485
Total-tetrafurans			8.635e4		0.727			684		1.34e6							31.755
Total-penta1			2.592e5					584		4.04e6							55.741
Total-pentafurans			4.208e5		0.654			962		6.64e6							183.245
Total-hexafurans			9.222e5		1.141			919		1.52e7							240.022
Total-heptafurans			2.231e5		0.978			1014		3.68e6							100.771
Total-Furans			2.044e6		0.922			684		3.26e7							706.785
Total-tetradioxins			1.586e5		1.024			942		2.24e6							48.667
Total-pentadioxins			5.000e5		1.502			835		6.65e6							135.441
Total-hexadioxins			6.599e5		1.005			706		1.11e7							189.255
Total-heptadioxins			2.576e5		1.088			816		4.37e6							100.702
Total-Dioxins			1.743e6		1.130			942		2.65e7							576.633
Total-TEQ			3.788e6					942		5.91e7							1283.418
FUNCTION1 PFK			8.159e4					342903		1.14e6							
FUNCTION2 PFK			3.495e5					203889		9.85e6							0.000
FUNCTION3 PFK			0.000e0					282294		0.00e0							
FUNCTION4 PFK			2.479e7					196557		6.98e6							
FUNCTION5 PFK			5.267e4					120149		1.99e6							
FUNCTION1 HXCD...			6.392e2					622		9.03e3							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			3.906e2					612		8.69e3							0.000
FUNCTION3 OCDPE			0.000e0					457		0.00e0							
FUNCTION4 NCDPE			8.503e1					621		1.93e3							0.000
FUNCTION5 DCDPE			7.719e1					682		1.34e3							0.000

Method: T:\Autospec\Methods\Dioxin230315.mdb 16 Mar 2023 08:38:23
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: CS3Z4, Name: 23031502, Date: 15-Mar-2023, Time: 11:02:56, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.07	2.668e4	3.495e4	0.678	0.76	0.77	588.1	YES	NO	db	db	10.465
2	Total-tetrafurans	26.95	9.768e2	1.368e3	0.727	0.71	0.77	21.2	YES	NO	bd	bd	0.371
3	2378-TCDF	25.58	2.816e4	3.691e4	0.702	0.76	0.77	647.3	YES	NO	bb	bb	10.678
4	Total-tetrafurans	24.69	2.943e2	4.181e2	0.727	0.70	0.77	6.6	YES	NO	bb	bb	0.113
5	Total-tetrafurans	24.35	2.742e2	3.185e2	0.727	0.86	0.77	8.4	YES	NO	bb	bb	0.094
6	1368-TCDF	22.07	2.997e4	3.989e4	0.802	0.75	0.77	694.2	YES	NO	bb	bb	10.034

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	26.93	2.592e5	1.716e5	1.246	1.51	1.55	6920.4	YES	NO	bb	bb	55.741

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDF	32.11	1.343e5	8.957e4	0.496	1.50	1.55	2181.6	YES	NO	bb	bb	72.733
2	23478-PeCDF	31.08	1.351e5	8.831e4	0.786	1.53	1.55	2215.9	YES	NO	bb	bb	49.908
3	12378-PeCDF	29.75	1.315e5	8.767e4	0.679	1.50	1.55	2175.8	YES	NO	bb	bb	52.041
4	Total-pentafurans	28.60	2.001e4	1.329e4	0.654	1.51	1.55	326.6	YES	NO	bb	bb	8.563

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	234678-HxCDF	35.73	1.962e5	1.559e5	1.140	1.26	1.24	3633.5	YES	NO	bb	bb	50.734
2	123678-HxCDF	34.86	1.927e5	1.541e5	1.091	1.25	1.24	3407.8	YES	NO	db	dd	49.005
3	123478-HxCDF	34.72	1.914e5	1.534e5	1.166	1.25	1.24	3473.9	YES	NO	bd	bd	48.342
4	123468-HXCDF	33.04	1.758e5	1.388e5	1.169	1.27	1.24	3020.5	YES	NO	bb	bb	43.981
5	123789-HxCDF	36.75	1.661e5	1.346e5	1.137	1.23	1.24	2967.7	YES	NO	bd	bd	47.960

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HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-heptafurans	40.99	7.195e1	7.350e1	0.978	0.98	1.05	0.0	NO	NO	bb	bb	0.033
2	1234789-HpCDF	40.83	1.034e5	1.028e5	0.953	1.01	1.05	1588.5	YES	NO	bb	bb	51.973
3	Total-heptafurans	39.26	1.085e3	1.165e3	0.978	0.93	1.05	17.9	YES	NO	bb	bb	0.509
4	1234678-HpCDF	38.62	1.185e5	1.178e5	1.003	1.01	1.05	2027.8	YES	NO	bb	bb	48.257

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.07	2.668e4	3.495e4	0.678	0.76	0.77	588.1	YES	NO	db	db	10.465
2	Total-tetrafurans	26.95	9.768e2	1.368e3	0.727	0.71	0.77	21.2	YES	NO	bd	bd	0.371
3	2378-TCDF	25.58	2.816e4	3.691e4	0.702	0.76	0.77	647.3	YES	NO	bb	bb	10.678
4	Total-tetrafurans	24.69	2.943e2	4.181e2	0.727	0.70	0.77	6.6	YES	NO	bb	bb	0.113
5	Total-tetrafurans	24.35	2.742e2	3.185e2	0.727	0.86	0.77	8.4	YES	NO	bb	bb	0.094
6	1368-TCDF	22.07	2.997e4	3.989e4	0.802	0.75	0.77	694.2	YES	NO	bb	bb	10.034
7	12389-PECDF	32.11	1.343e5	8.957e4	0.496	1.50	1.55	2181.6	YES	NO	bb	bb	72.733
8	23478-PeCDF	31.08	1.351e5	8.831e4	0.786	1.53	1.55	2215.9	YES	NO	bb	bb	49.908
9	12378-PeCDF	29.75	1.315e5	8.767e4	0.679	1.50	1.55	2175.8	YES	NO	bb	bb	52.041
10	Total-pentafurans	28.60	2.001e4	1.329e4	0.654	1.51	1.55	326.6	YES	NO	bb	bb	8.563
11	234678-HxCDF	35.73	1.962e5	1.559e5	1.140	1.26	1.24	3633.5	YES	NO	bb	bb	50.734
12	123678-HxCDF	34.86	1.927e5	1.541e5	1.091	1.25	1.24	3407.8	YES	NO	db	dd	49.005
13	123478-HxCDF	34.72	1.914e5	1.534e5	1.166	1.25	1.24	3473.9	YES	NO	bd	bd	48.342
14	123468-HXCDF	33.04	1.758e5	1.388e5	1.169	1.27	1.24	3020.5	YES	NO	bb	bb	43.981
15	123789-HxCDF	36.75	1.661e5	1.346e5	1.137	1.23	1.24	2967.7	YES	NO	bd	bd	47.960
16	Total-heptafurans	40.99	7.195e1	7.350e1	0.978	0.98	1.05	0.0	NO	NO	bb	bb	0.033
17	1234789-HpCDF	40.83	1.034e5	1.028e5	0.953	1.01	1.05	1588.5	YES	NO	bb	bb	51.973
18	Total-heptafurans	39.26	1.085e3	1.165e3	0.978	0.93	1.05	17.9	YES	NO	bb	bb	0.509
19	1234678-HpCDF	38.62	1.185e5	1.178e5	1.003	1.01	1.05	2027.8	YES	NO	bb	bb	48.257
20	OCDF	45.03	1.325e5	1.481e5	0.778	0.89	0.89	2564.8	YES	NO	bb	bb	95.251
21	13468-PECDF	26.93	2.592e5	1.716e5	1.246	1.51	1.55	6920.4	YES	NO	bb	bb	55.741

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TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.23	3.319e4	4.276e4	1.149	0.78	0.77	540.5	YES	NO	bb	bd	9.137
2	Total-tetradioxins	25.90	4.919e4	6.319e4	1.024	0.78	0.77	542.7	YES	NO	bb	bb	15.163
3	Total-tetradioxins	25.41	1.541e4	1.912e4	1.024	0.81	0.77	271.6	YES	NO	bb	bb	4.659
4	Total-tetradioxins	24.83	4.333e2	5.728e2	1.024	0.76	0.77	7.3	YES	NO	bb	bb	0.136
5	1368-TCDD	23.34	3.001e4	3.792e4	1.015	0.79	0.77	513.1	YES	NO	bb	bb	9.246
6	1289-TCDD	26.82	3.035e4	3.755e4	0.909	0.81	0.77	497.6	YES	NO	bb	bb	10.326

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12479-PECDD	28.60	2.111e5	1.365e5	2.301	1.55	1.55	2496.6	YES	NO	bb	bb	35.046
2	12389-PECDD	31.73	1.562e5	1.002e5	1.184	1.56	1.55	2961.6	YES	NO	bb	bb	50.274
3	12378-PeCDD	31.33	1.327e5	8.802e4	1.022	1.51	1.55	2499.8	YES	NO	bb	bb	50.121

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123478-HxCDD	35.84	1.657e5	1.356e5	0.996	1.22	1.24	4009.0	YES	NO	bd	bd	48.053
2	124679-HXCDD	33.82	1.596e5	1.323e5	1.115	1.21	1.24	3692.7	YES	NO	bb	bb	41.554
3	123789-HxCDD	36.35	1.666e5	1.367e5	0.907	1.22	1.24	3965.6	YES	NO	bb	bb	52.359
4	123678-HxCDD	35.95	1.680e5	1.385e5	1.001	1.21	1.24	4015.9	YES	NO	db	db	47.289

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.10	1.225e5	1.185e5	1.039	1.03	1.05	2509.8	YES	NO	bb	bb	50.217
2	1234679-HPCDD	39.06	1.352e5	1.299e5	1.137	1.04	1.05	2850.1	YES	NO	bb	bb	50.485

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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.23	3.319e4	4.276e4	1.149	0.78	0.77	540.5	YES	NO	bb	bd	9.137
2	Total-tetradioxins	25.90	4.919e4	6.319e4	1.024	0.78	0.77	542.7	YES	NO	bb	bb	15.163
3	Total-tetradioxins	25.41	1.541e4	1.912e4	1.024	0.81	0.77	271.6	YES	NO	bb	bb	4.659
4	Total-tetradioxins	24.83	4.333e2	5.728e2	1.024	0.76	0.77	7.3	YES	NO	bb	bb	0.136
5	1368-TCDD	23.34	3.001e4	3.792e4	1.015	0.79	0.77	513.1	YES	NO	bb	bb	9.246
6	12479-PECDD	28.60	2.111e5	1.365e5	2.301	1.55	1.55	2496.6	YES	NO	bb	bb	35.046
7	1289-TCDD	26.82	3.035e4	3.755e4	0.909	0.81	0.77	497.6	YES	NO	bb	bb	10.326
8	123478-HxCDD	35.84	1.657e5	1.356e5	0.996	1.22	1.24	4009.0	YES	NO	bd	bd	48.053
9	124679-HXCDD	33.82	1.596e5	1.323e5	1.115	1.21	1.24	3692.7	YES	NO	bb	bb	41.554
10	12389-PECDD	31.73	1.562e5	1.002e5	1.184	1.56	1.55	2961.6	YES	NO	bb	bb	50.274
11	12378-PeCDD	31.33	1.327e5	8.802e4	1.022	1.51	1.55	2499.8	YES	NO	bb	bb	50.121
12	123789-HxCDD	36.35	1.666e5	1.367e5	0.907	1.22	1.24	3965.6	YES	NO	bb	bb	52.359
13	123678-HxCDD	35.95	1.680e5	1.385e5	1.001	1.21	1.24	4015.9	YES	NO	db	db	47.289
14	OCDD	44.80	1.673e5	1.901e5	0.920	0.88	0.89	2157.1	YES	NO	bb	bb	102.569
15	1234678-HpCDD	40.10	1.225e5	1.185e5	1.039	1.03	1.05	2509.8	YES	NO	bb	bb	50.217
16	1234679-HPCDD	39.06	1.352e5	1.299e5	1.137	1.04	1.05	2850.1	YES	NO	bb	bb	50.485

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.07	2.668e4	3.495e4	0.678	0.76	0.77	588.1	YES	NO	db	db	10.465
2	Total-tetrafurans	26.95	9.768e2	1.368e3	0.727	0.71	0.77	21.2	YES	NO	bd	bd	0.371
3	2378-TCDF	25.58	2.816e4	3.691e4	0.702	0.76	0.77	647.3	YES	NO	bb	bb	10.678
4	Total-tetrafurans	24.69	2.943e2	4.181e2	0.727	0.70	0.77	6.6	YES	NO	bb	bb	0.113
5	Total-tetrafurans	24.35	2.742e2	3.185e2	0.727	0.86	0.77	8.4	YES	NO	bb	bb	0.094
6	1368-TCDF	22.07	2.997e4	3.989e4	0.802	0.75	0.77	694.2	YES	NO	bb	bb	10.034
7	12389-PECDF	32.11	1.343e5	8.957e4	0.496	1.50	1.55	2181.6	YES	NO	bb	bb	72.733
8	23478-PeCDF	31.08	1.351e5	8.831e4	0.786	1.53	1.55	2215.9	YES	NO	bb	bb	49.908
9	12378-PeCDF	29.75	1.315e5	8.767e4	0.679	1.50	1.55	2175.8	YES	NO	bb	bb	52.041
10	Total-pentafurans	28.60	2.001e4	1.329e4	0.654	1.51	1.55	326.6	YES	NO	bb	bb	8.563
11	234678-HxCDF	35.73	1.962e5	1.559e5	1.140	1.26	1.24	3633.5	YES	NO	bb	bb	50.734
12	123678-HxCDF	34.86	1.927e5	1.541e5	1.091	1.25	1.24	3407.8	YES	NO	db	dd	49.005
13	123478-HxCDF	34.72	1.914e5	1.534e5	1.166	1.25	1.24	3473.9	YES	NO	bd	bd	48.342
14	123468-HXCDF	33.04	1.758e5	1.388e5	1.169	1.27	1.24	3020.5	YES	NO	bb	bb	43.981
15	123789-HxCDF	36.75	1.661e5	1.346e5	1.137	1.23	1.24	2967.7	YES	NO	bd	bd	47.960
16	Total-heptafurans	40.99	7.195e1	7.350e1	0.978	0.98	1.05	0.0	NO	NO	bb	bb	0.033
17	1234789-HpCDF	40.83	1.034e5	1.028e5	0.953	1.01	1.05	1588.5	YES	NO	bb	bb	51.973
18	Total-heptafurans	39.26	1.085e3	1.165e3	0.978	0.93	1.05	17.9	YES	NO	bb	bb	0.509
19	1234678-HpCDF	38.62	1.185e5	1.178e5	1.003	1.01	1.05	2027.8	YES	NO	bb	bb	48.257
20	OCDF	45.03	1.325e5	1.481e5	0.778	0.89	0.89	2564.8	YES	NO	bb	bb	95.251
21	13468-PECDF	26.93	2.592e5	1.716e5	1.246	1.51	1.55	6920.4	YES	NO	bb	bb	55.741
22	2378-TCDD	26.23	3.319e4	4.276e4	1.149	0.78	0.77	540.5	YES	NO	bb	bd	9.137
23	Total-tetradioxins	25.90	4.919e4	6.319e4	1.024	0.78	0.77	542.7	YES	NO	bb	bb	15.163
24	Total-tetradioxins	25.41	1.541e4	1.912e4	1.024	0.81	0.77	271.6	YES	NO	bb	bb	4.659
25	Total-tetradioxins	24.83	4.333e2	5.728e2	1.024	0.76	0.77	7.3	YES	NO	bb	bb	0.136
26	1368-TCDD	23.34	3.001e4	3.792e4	1.015	0.79	0.77	513.1	YES	NO	bb	bb	9.246
27	12479-PECDD	28.60	2.111e5	1.365e5	2.301	1.55	1.55	2496.6	YES	NO	bb	bb	35.046
28	1289-TCDD	26.82	3.035e4	3.755e4	0.909	0.81	0.77	497.6	YES	NO	bb	bb	10.326
29	123478-HxCDD	35.84	1.657e5	1.356e5	0.996	1.22	1.24	4009.0	YES	NO	bd	bd	48.053
30	124679-HXCDD	33.82	1.596e5	1.323e5	1.115	1.21	1.24	3692.7	YES	NO	bb	bb	41.554
31	12389-PECDD	31.73	1.562e5	1.002e5	1.184	1.56	1.55	2961.6	YES	NO	bb	bb	50.274
32	12378-PeCDD	31.33	1.327e5	8.802e4	1.022	1.51	1.55	2499.8	YES	NO	bb	bb	50.121
33	123789-HxCDD	36.35	1.666e5	1.367e5	0.907	1.22	1.24	3965.6	YES	NO	bb	bb	52.359
34	123678-HxCDD	35.95	1.680e5	1.385e5	1.001	1.21	1.24	4015.9	YES	NO	db	db	47.289
35	OCDD	44.80	1.673e5	1.901e5	0.920	0.88	0.89	2157.1	YES	NO	bb	bb	102.569
36	1234678-HpCDD	40.10	1.225e5	1.185e5	1.039	1.03	1.05	2509.8	YES	NO	bb	bb	50.217
37	1234679-HPCDD	39.06	1.352e5	1.299e5	1.137	1.04	1.05	2850.1	YES	NO	bb	bb	50.485

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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	22.92	8.159e4					3.3	YES		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	30.25	4.722e3					0.9	NO		db		0.000
2	FUNCTION2 PFK	30.20	1.048e4					1.8	NO		bd		0.000
3	FUNCTION2 PFK	30.16	5.443e3					1.5	NO		bb		0.000
4	FUNCTION2 PFK	29.99	4.735e3					1.1	NO		bb		0.000
5	FUNCTION2 PFK	29.85	8.188e3					1.6	NO		bb		0.000
6	FUNCTION2 PFK	28.86	3.376e4					1.8	NO		bb		0.000
7	FUNCTION2 PFK	28.37	7.243e3					1.4	NO		bb		0.000
8	FUNCTION2 PFK	28.23	1.434e3					0.6	NO		bb		0.000
9	FUNCTION2 PFK	28.15	1.876e4					1.4	NO		bb		0.000
10	FUNCTION2 PFK	28.08	2.293e4					3.0	NO		bb		0.000
11	FUNCTION2 PFK	27.92	1.627e4					3.3	YES		db		0.000
12	FUNCTION2 PFK	27.89	4.523e4					5.3	YES		bd		0.000
13	FUNCTION2 PFK	32.33	1.903e4					2.3	NO		dd		0.000
14	FUNCTION2 PFK	32.26	2.502e4					2.3	NO		dd		0.000
15	FUNCTION2 PFK	32.16	2.870e4					2.2	NO		dd		0.000
16	FUNCTION2 PFK	32.12	1.464e4					2.2	NO		bd		0.000
17	FUNCTION2 PFK	31.88	3.558e3					0.9	NO		db		0.000
18	FUNCTION2 PFK	31.84	3.277e3					0.6	NO		bd		0.000
19	FUNCTION2 PFK	31.43	5.894e3					1.1	NO		bb		0.000
20	FUNCTION2 PFK	31.28	4.211e3					1.1	NO		bb		0.000
21	FUNCTION2 PFK	31.08	6.813e3					1.3	NO		bb		0.000
22	FUNCTION2 PFK	30.95	1.061e3					0.5	NO		bb		0.000
23	FUNCTION2 PFK	30.83	5.301e3					1.1	NO		bb		0.000
24	FUNCTION2 PFK	30.77	6.751e3					1.0	NO		bb		0.000
25	FUNCTION2 PFK	30.63	5.403e3					1.1	NO		bb		0.000
26	FUNCTION2 PFK	30.53	1.851e3					0.8	NO		bb		0.000
27	FUNCTION2 PFK	30.48	2.038e3					0.9	NO		bb		0.000
28	FUNCTION2 PFK	30.43	6.557e3					1.2	NO		bb		0.000
29	FUNCTION2 PFK	32.54	1.021e4					1.7	NO		bb		0.000
30	FUNCTION2 PFK	32.40	1.997e4					2.2	NO		db		0.000

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PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	39.28	2.479e7					35.5	YES		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	45.27	3.769e3					1.3	NO		bb		
2	FUNCTION5 PFK	44.64	5.896e2					0.5	NO		bb		
3	FUNCTION5 PFK	44.58	4.275e3					1.5	NO		db		
4	FUNCTION5 PFK	44.54	4.461e3					1.5	NO		bd		
5	FUNCTION5 PFK	44.36	4.981e3					2.2	NO		bb		
6	FUNCTION5 PFK	44.30	1.159e3					0.7	NO		bb		
7	FUNCTION5 PFK	44.24	4.783e3					1.4	NO		bb		
8	FUNCTION5 PFK	44.12	5.458e3					1.6	NO		bb		
9	FUNCTION5 PFK	43.94	1.051e4					2.3	NO		bb		
10	FUNCTION5 PFK	43.33	4.153e3					1.4	NO		bb		
11	FUNCTION5 PFK	45.76	6.520e2					0.6	NO		bb		
12	FUNCTION5 PFK	45.58	7.881e3					1.6	NO		bb		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	26.72	1.042e2					1.8	NO		bb		0.000
2	FUNCTION1 HXCD...	26.47	7.762e1					4.4	YES		bb		0.000
3	FUNCTION1 HXCD...	24.91	1.528e2					2.3	NO		bb		0.000
4	FUNCTION1 HXCD...	23.78	1.417e2					2.5	NO		db		0.000
5	FUNCTION1 HXCD...	23.61	7.094e1					1.6	NO		bd		0.000
6	FUNCTION1 HXCD...	22.88	9.197e1					1.9	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	30.92	2.534e2					9.2	YES		bb		0.000
2	FUNCTION2 HPCD...	30.62	1.372e2					5.0	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	41.84	8.503e1					3.1	YES		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	44.78	7.719e1					2.0	NO		bb		0.000

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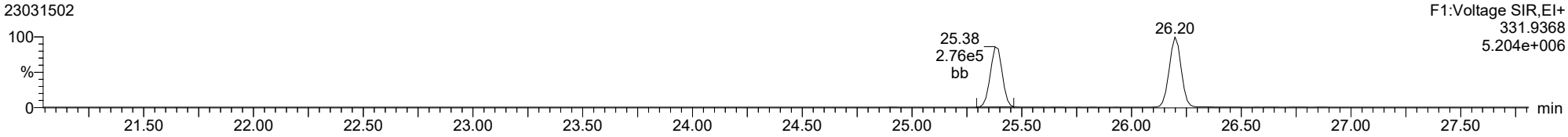
ID: CS3Z4, Name: 23031502, Date: 15-Mar-2023, Time: 11:02:56, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD



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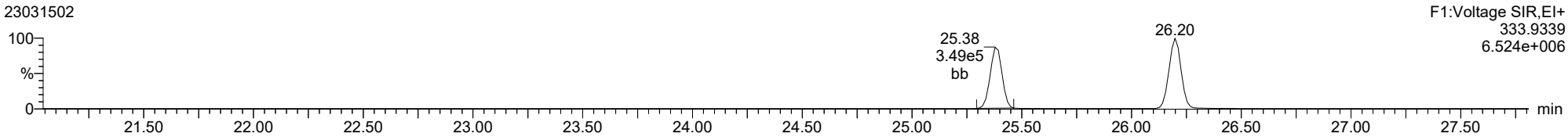

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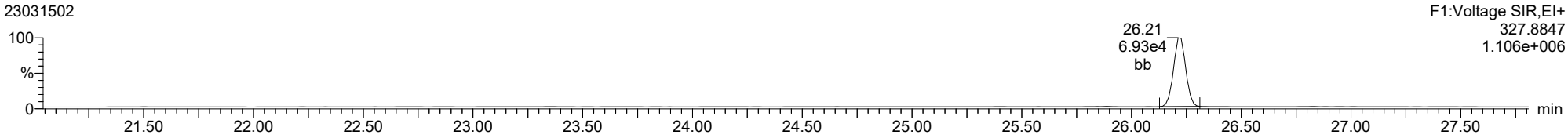

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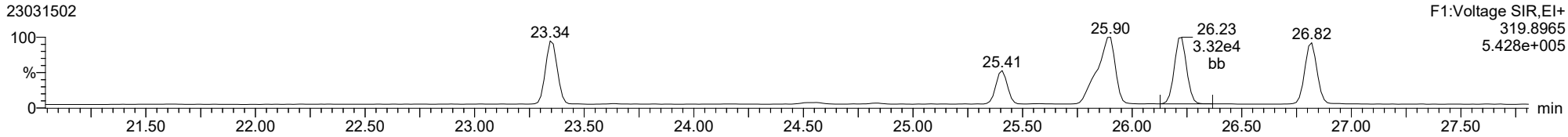

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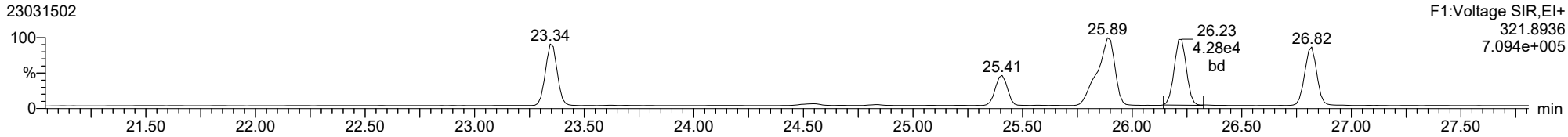

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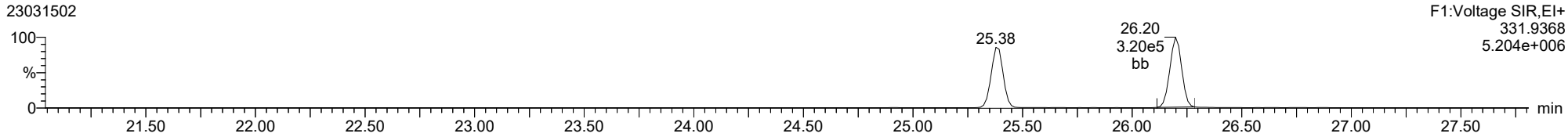

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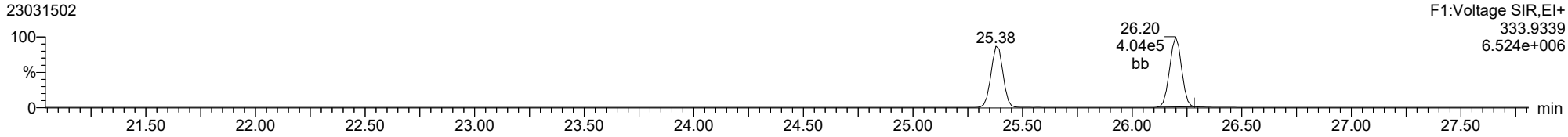

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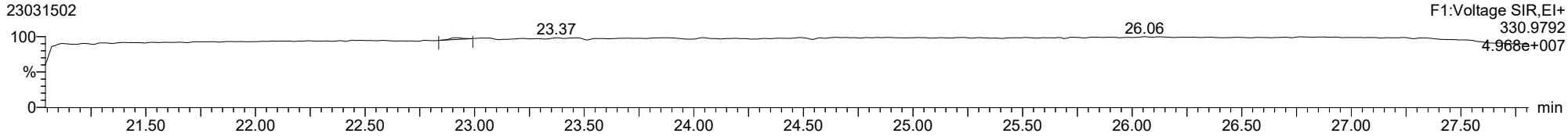

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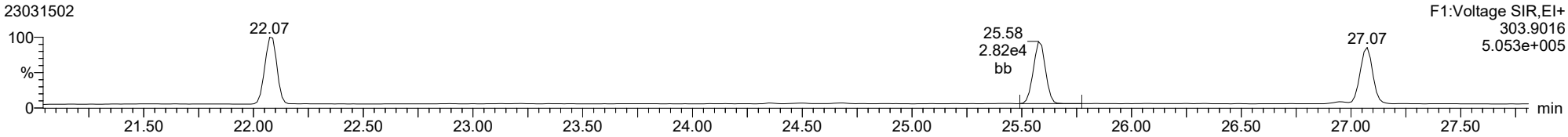
2378-TCDF



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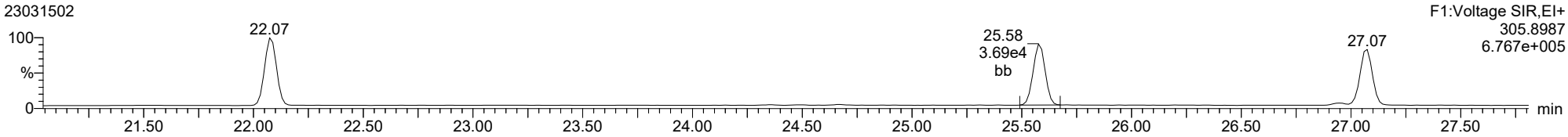

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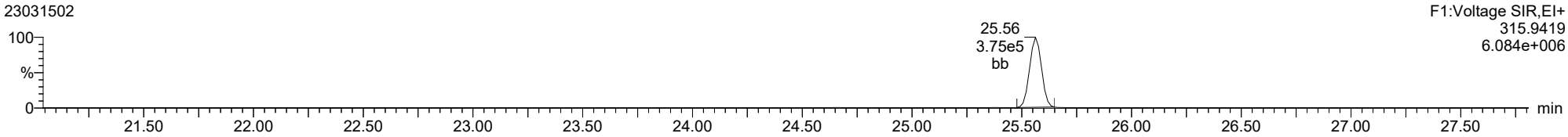

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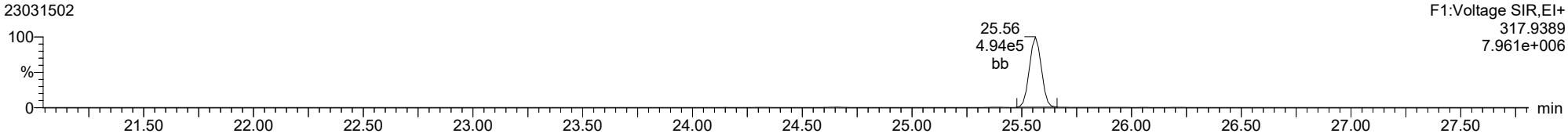

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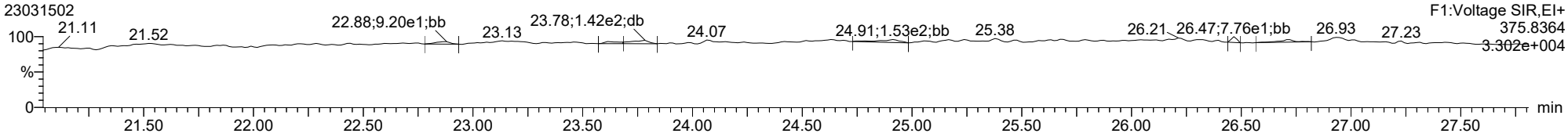
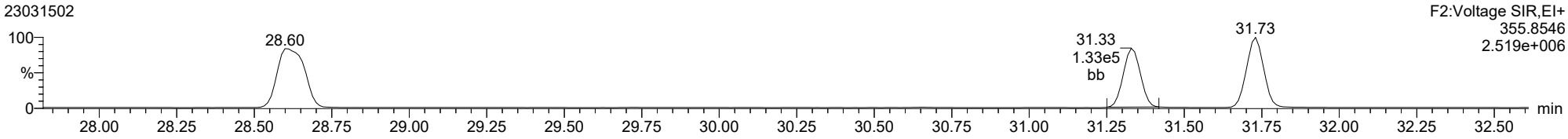


ID: CS3Z4, Name: 23031502, Date: 15-Mar-2023, Time: 11:02:56, Conditions: AUTOSPEC01, User: pk

12378-PeCDD



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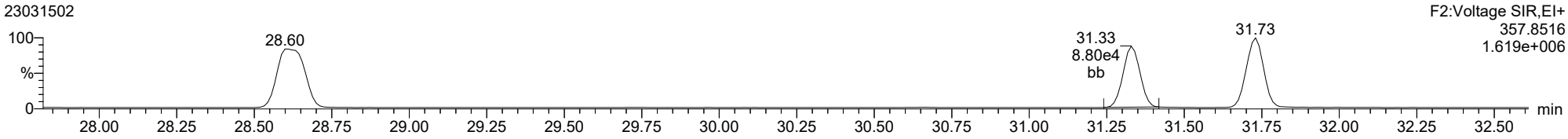

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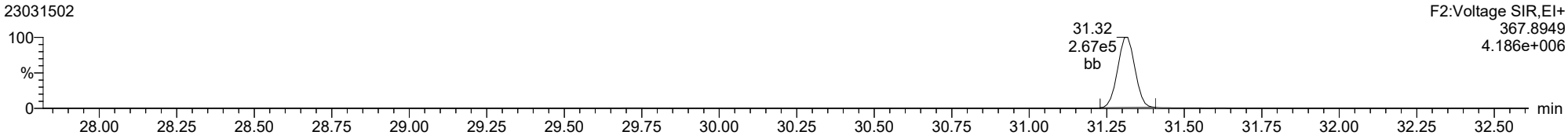

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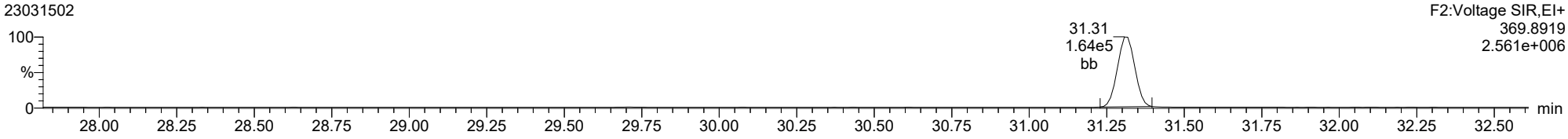

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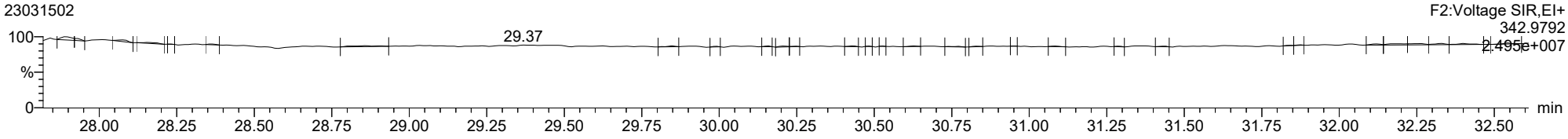

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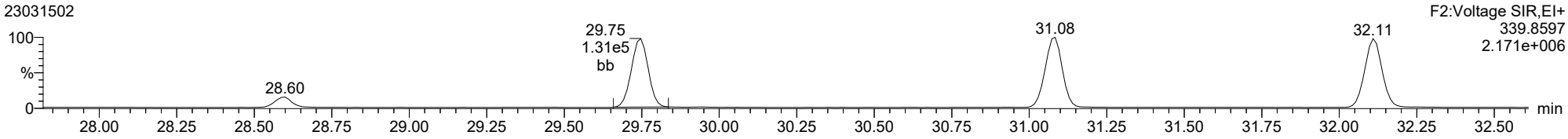

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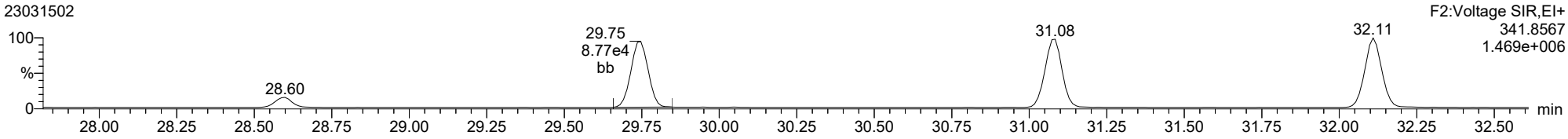

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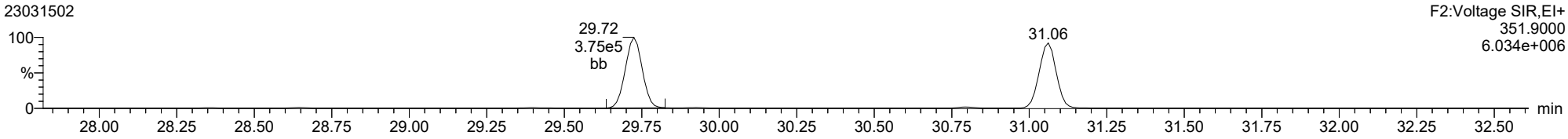

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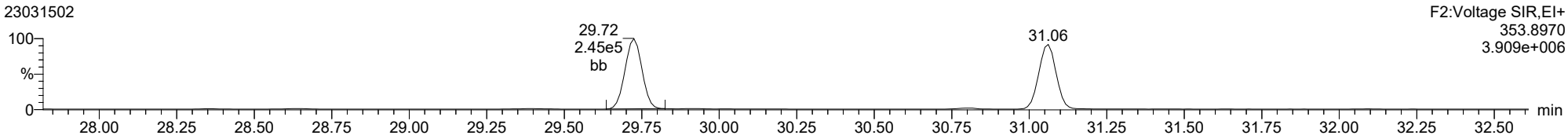

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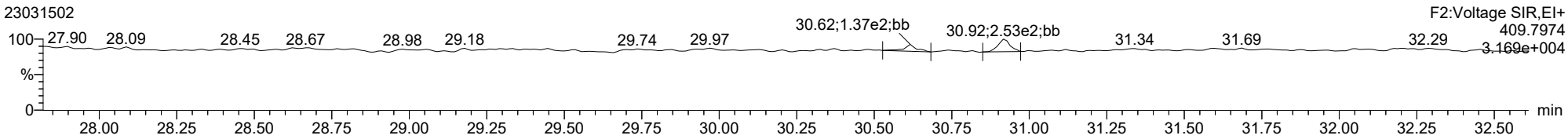

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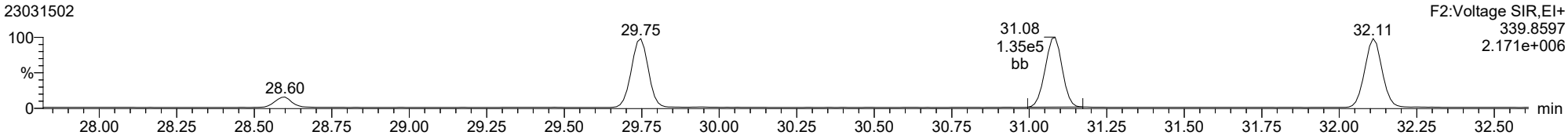

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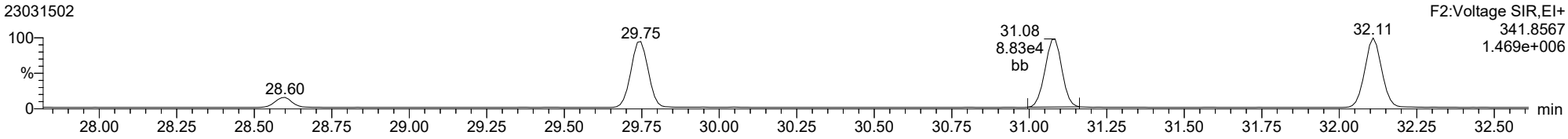

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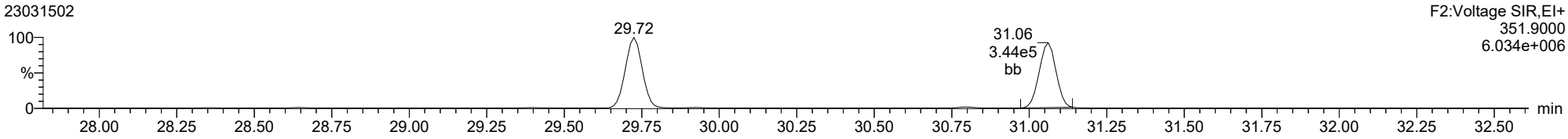

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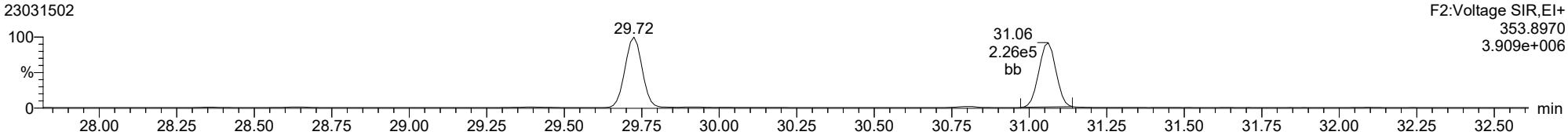

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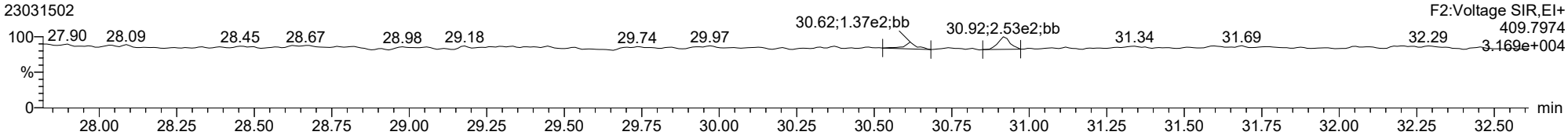

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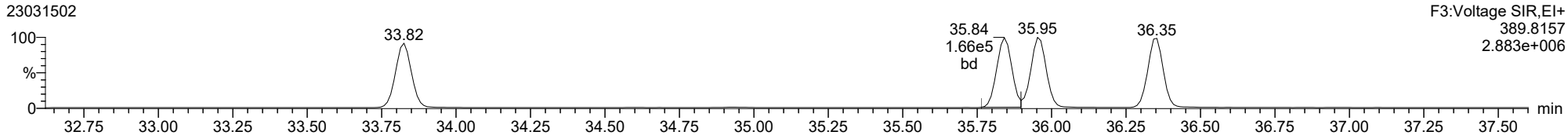

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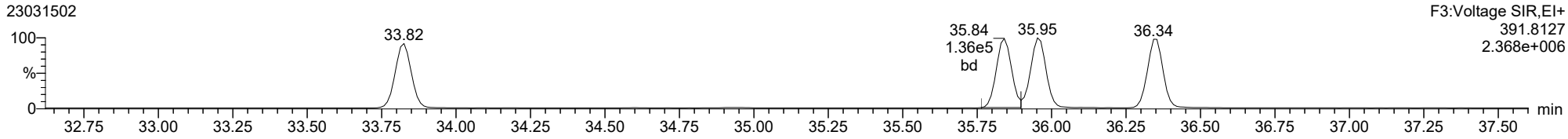

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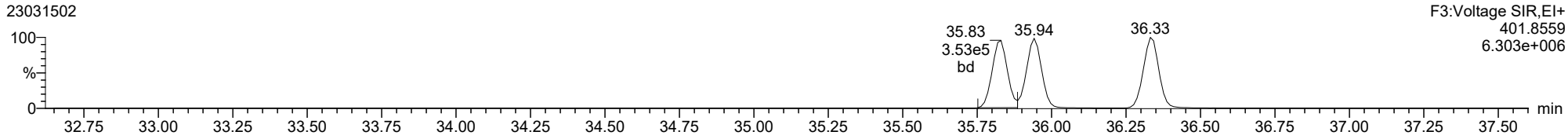

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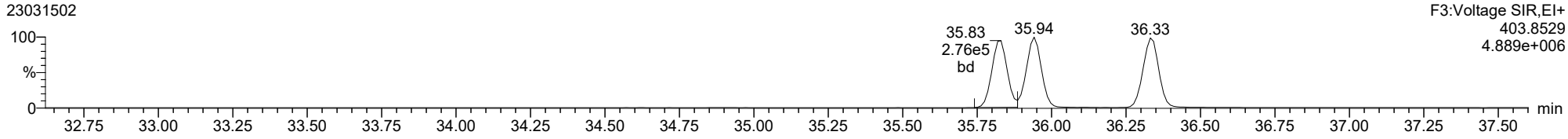

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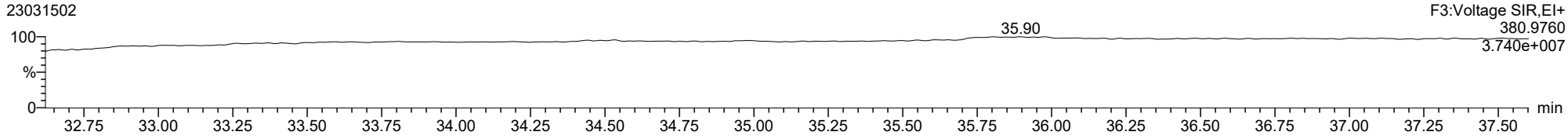

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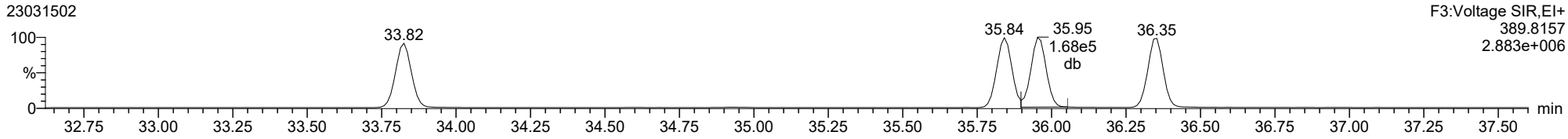

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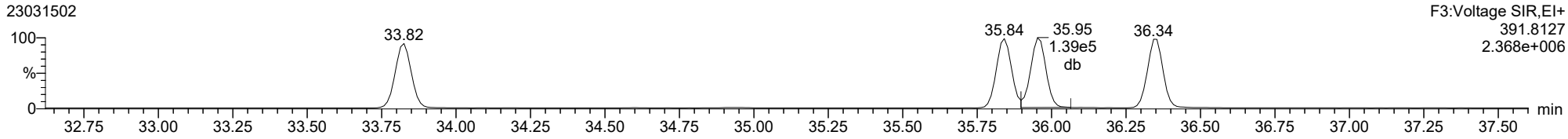

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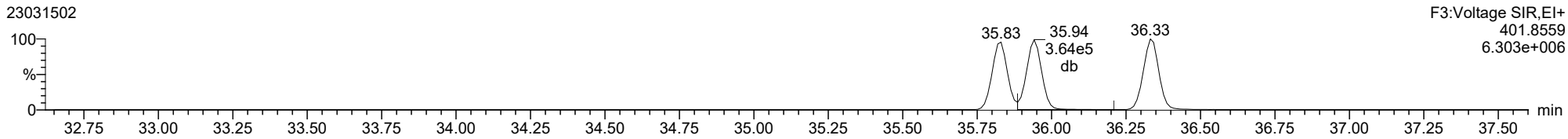

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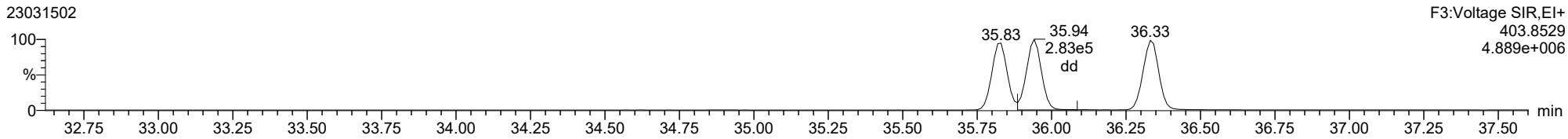

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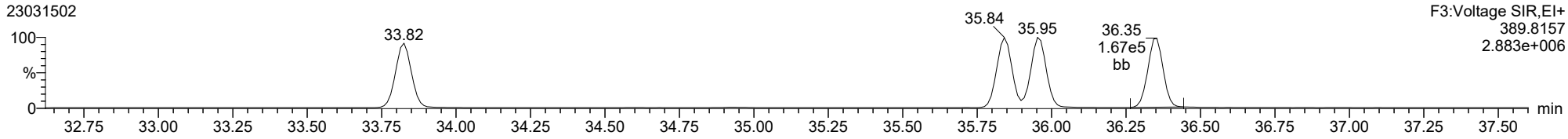

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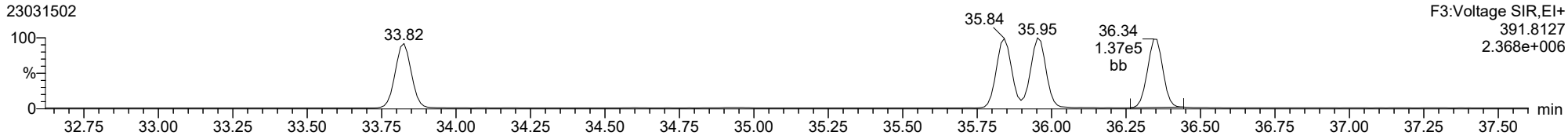

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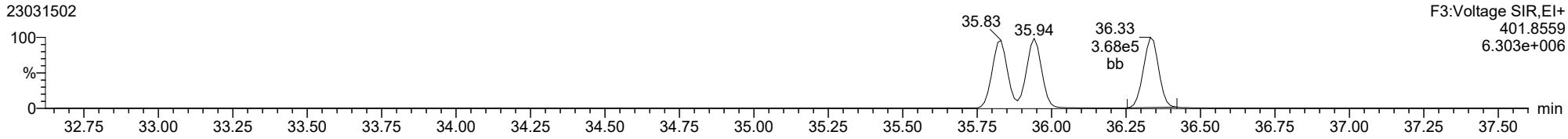

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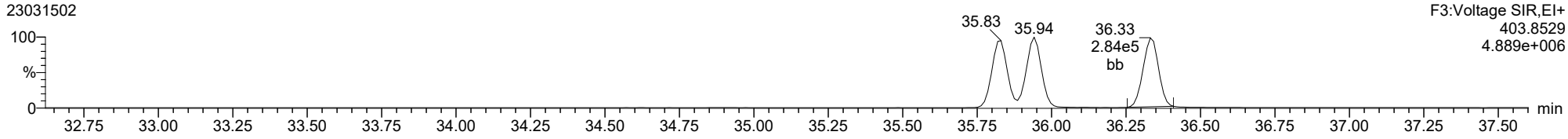

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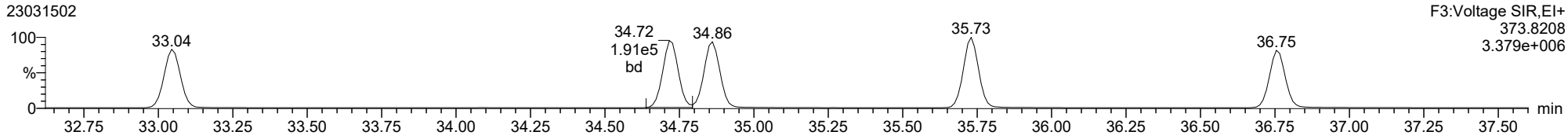

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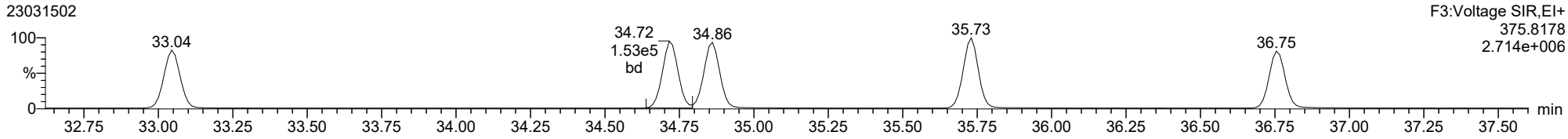

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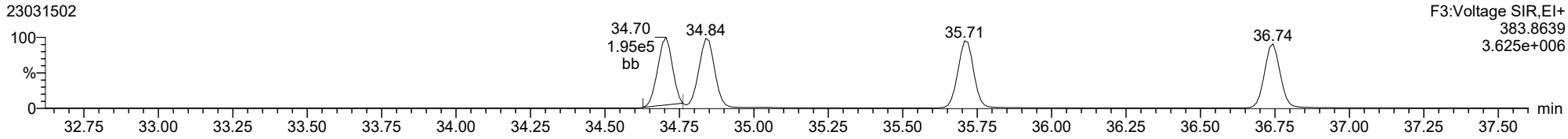

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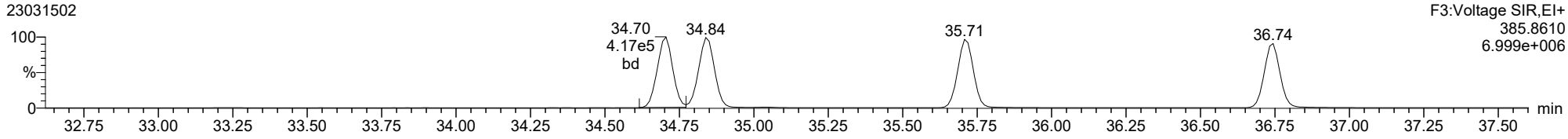

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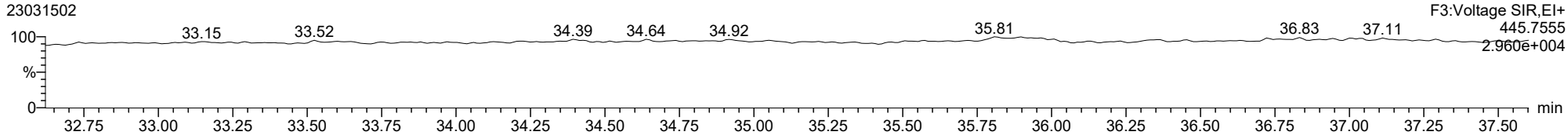

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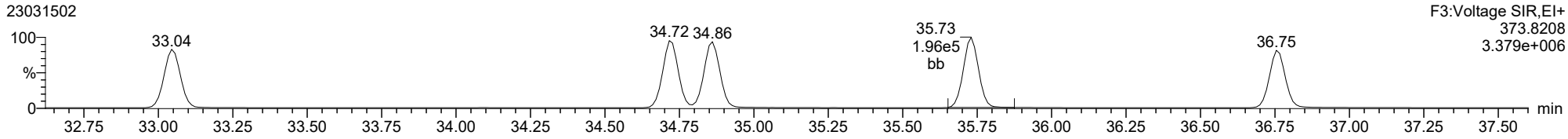
234678-HxCDF



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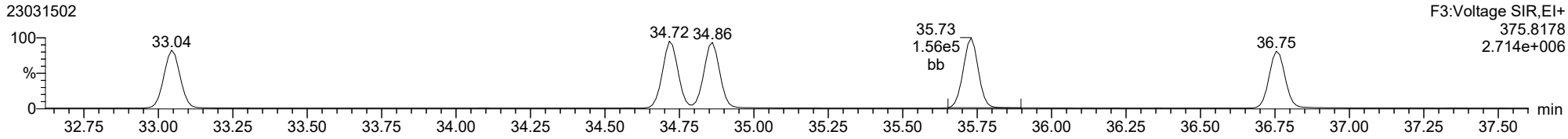

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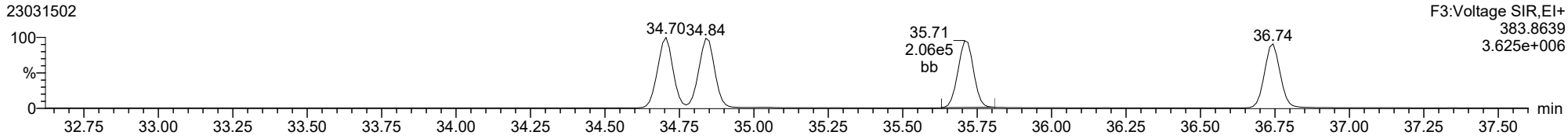

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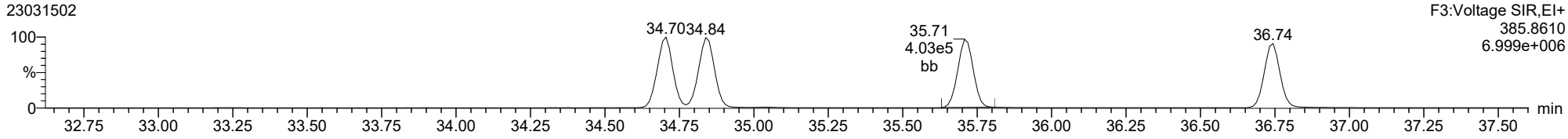

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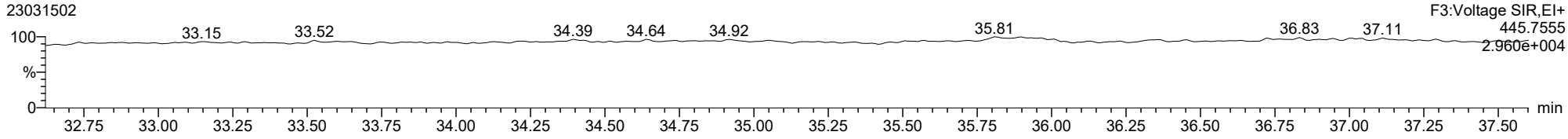

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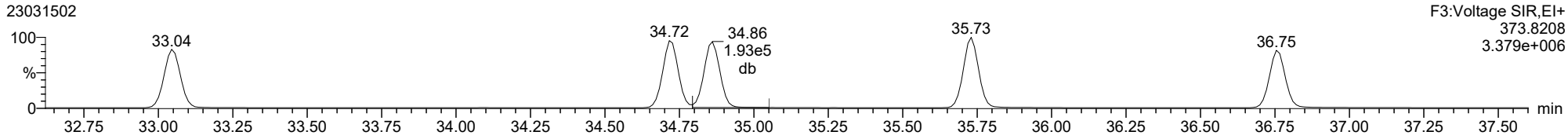

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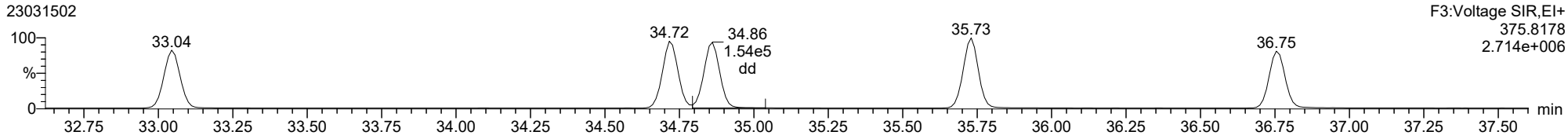

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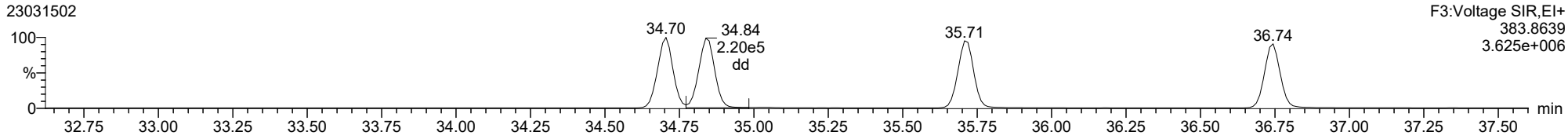

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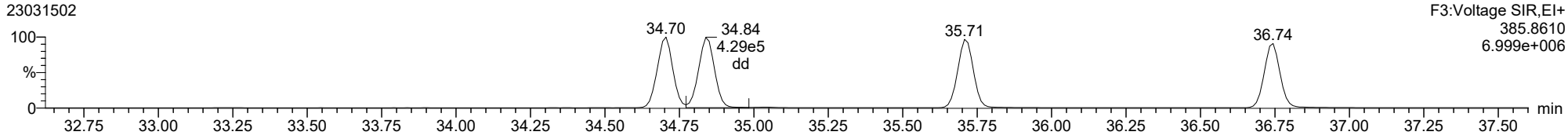

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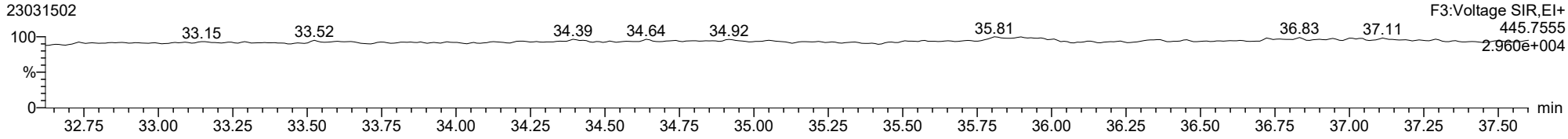

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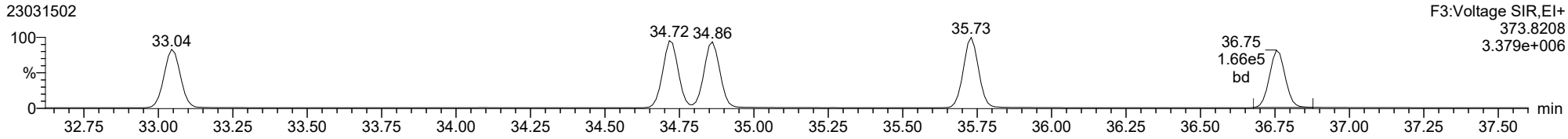

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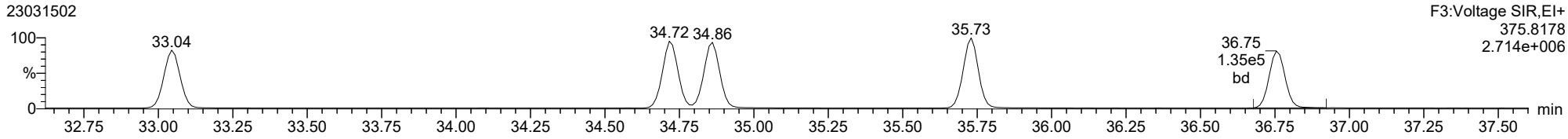

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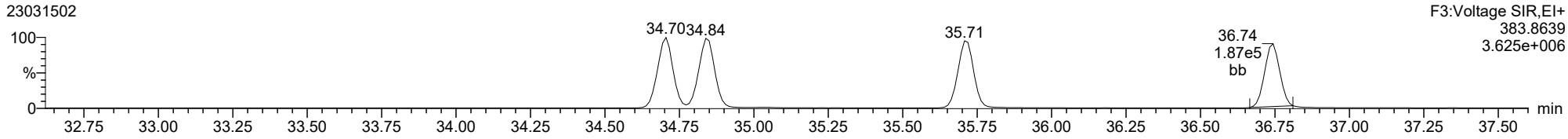

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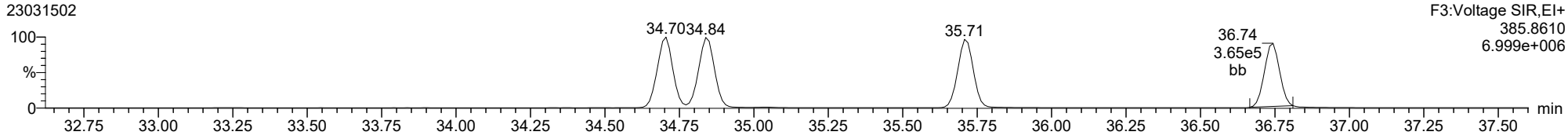

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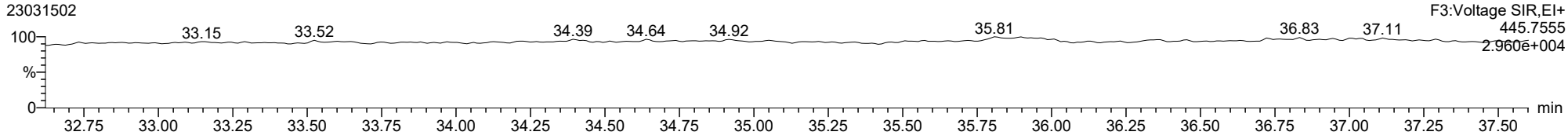

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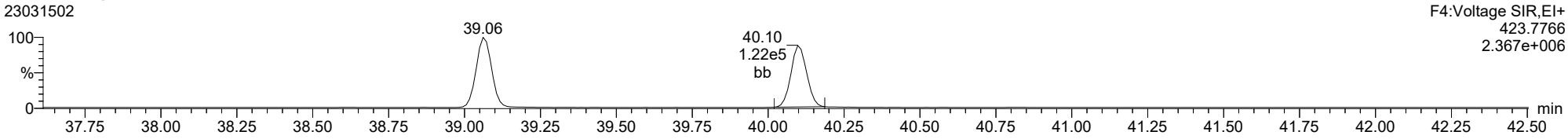
1234678-HpCDD



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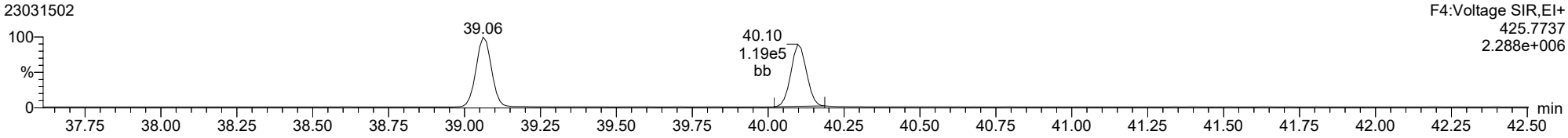

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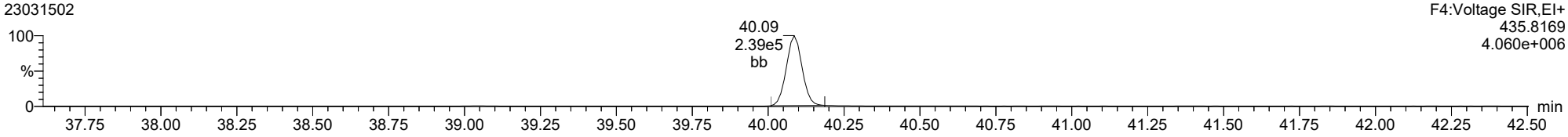

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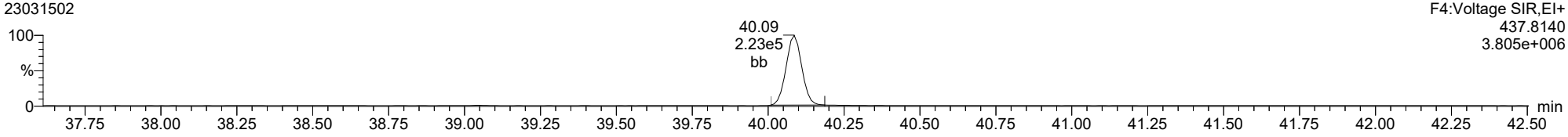

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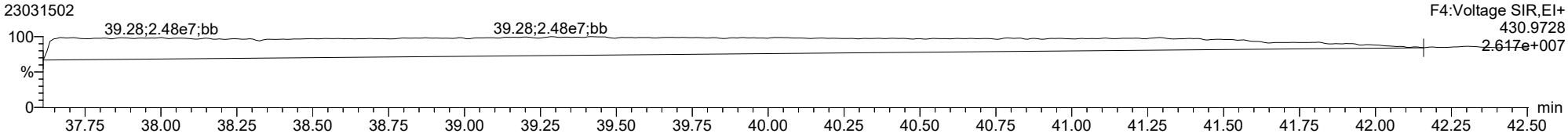

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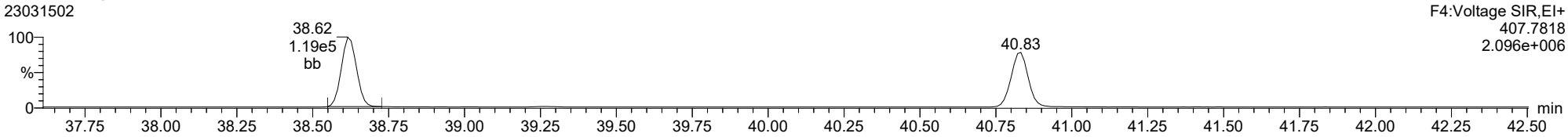

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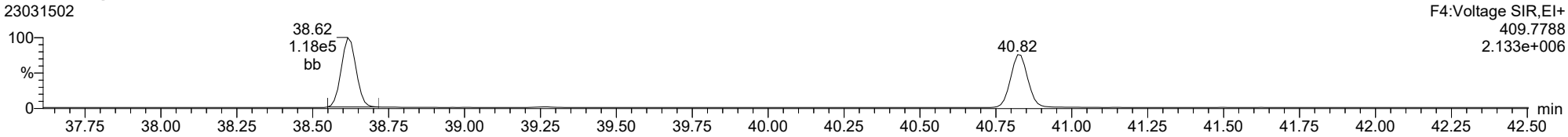

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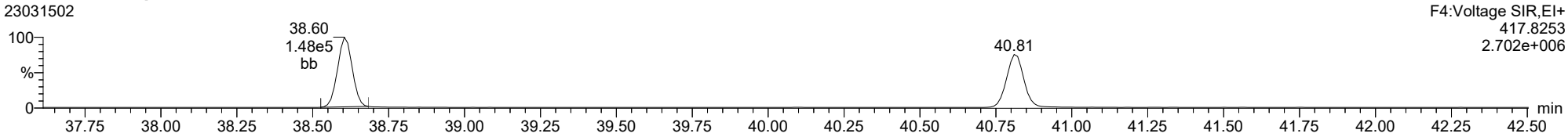

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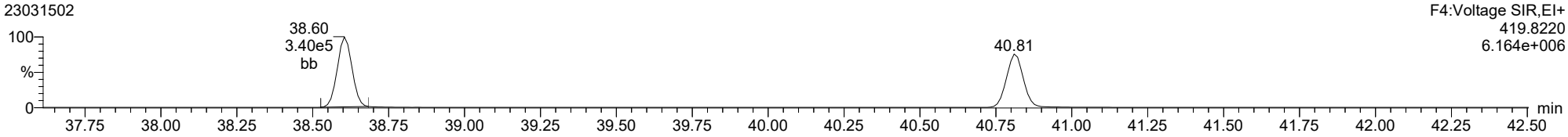

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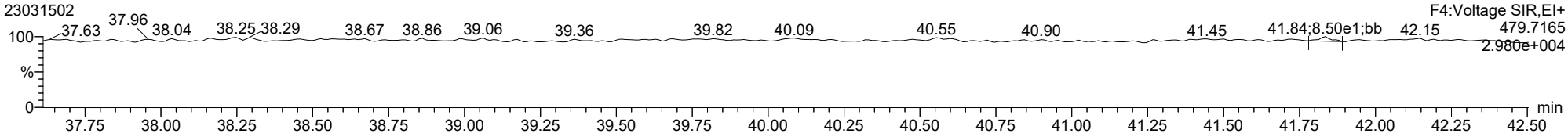

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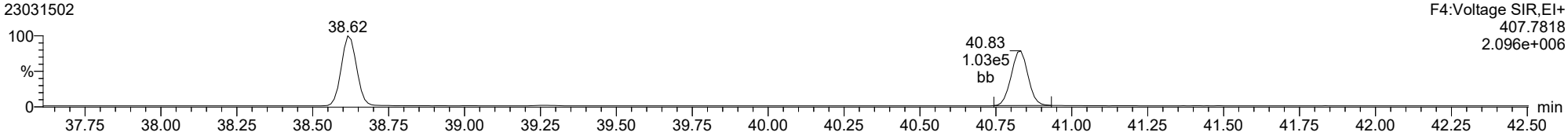

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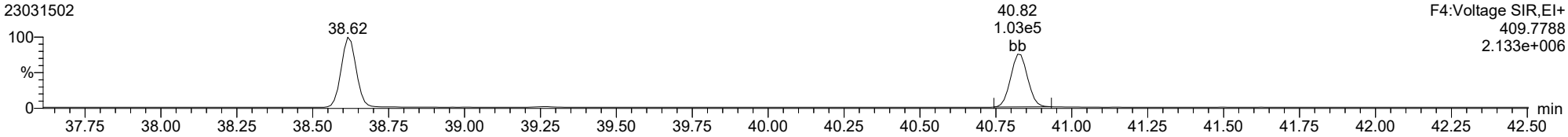

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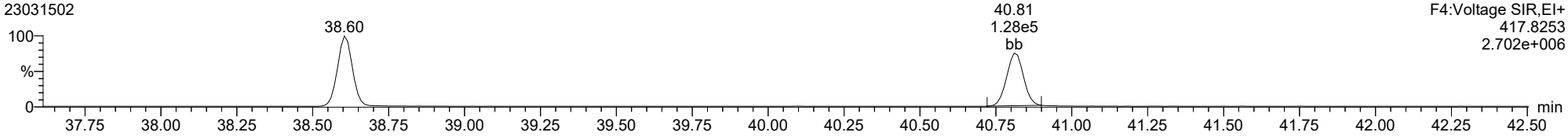

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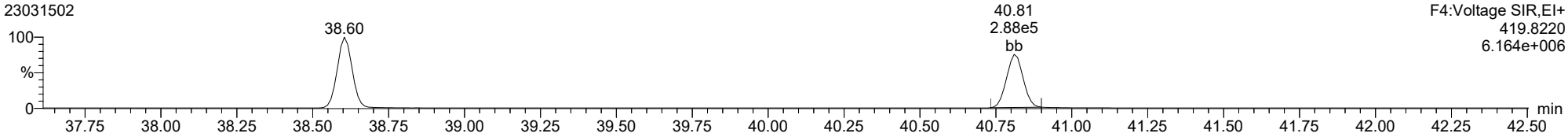

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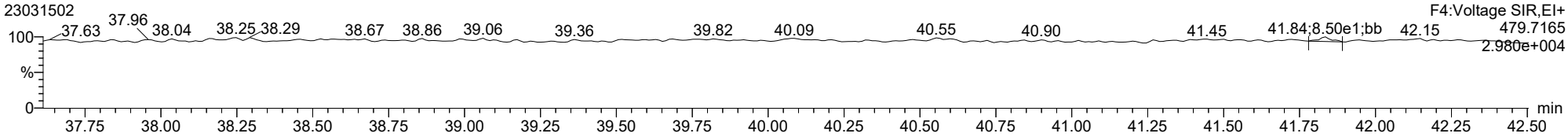

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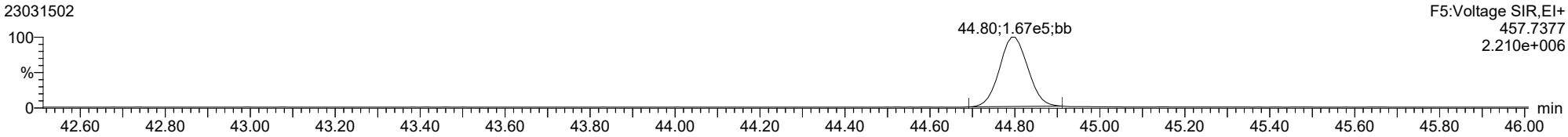

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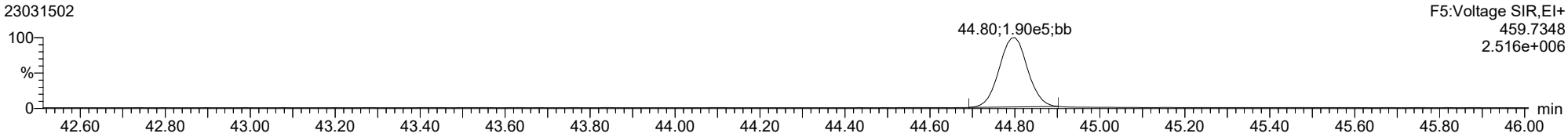

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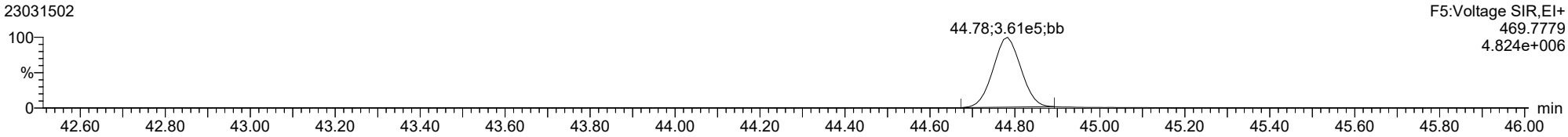

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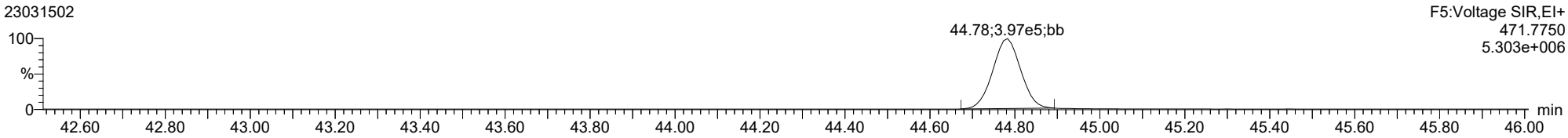

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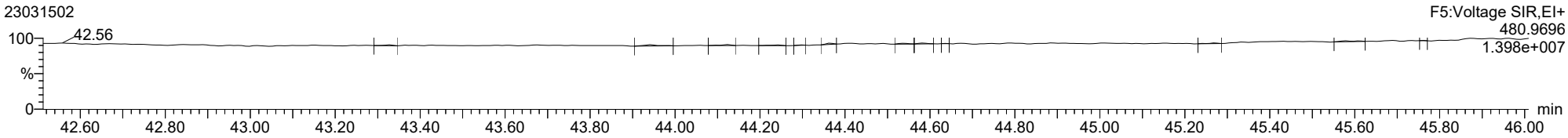

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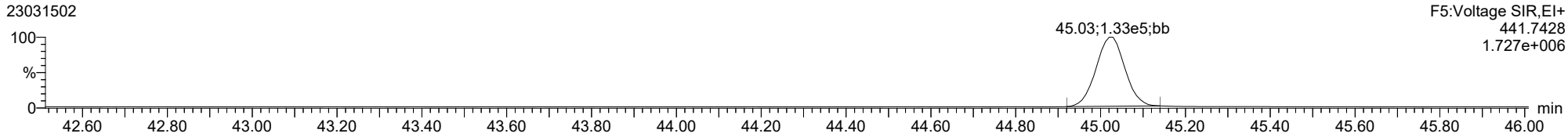

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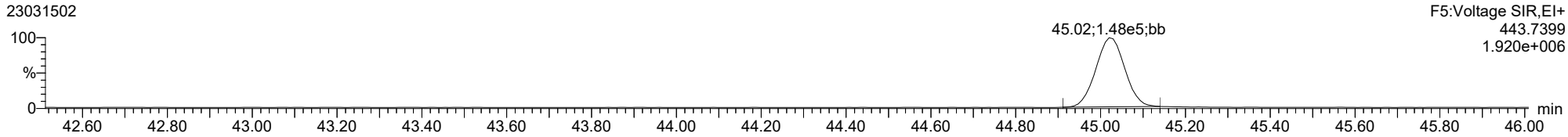

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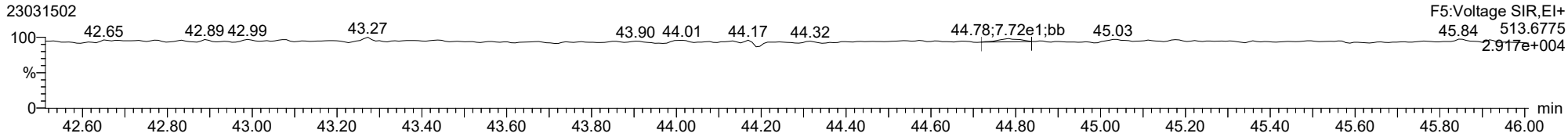

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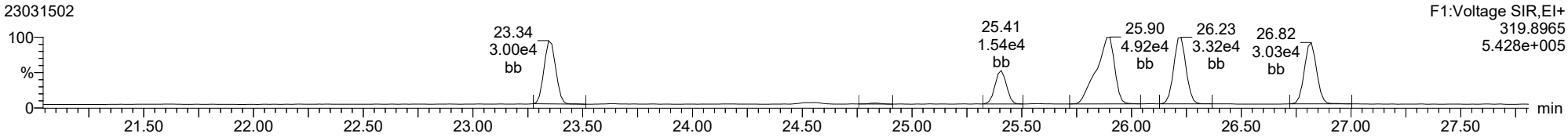

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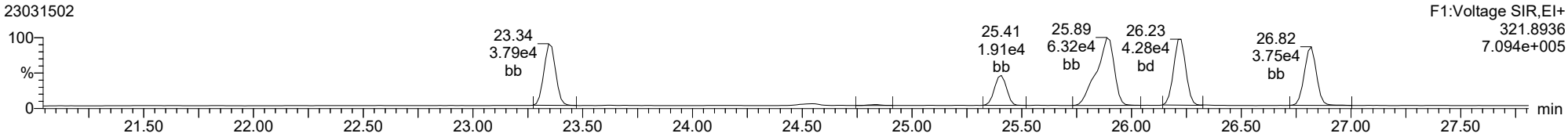

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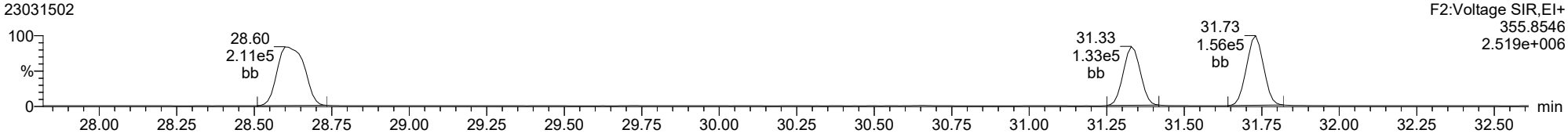

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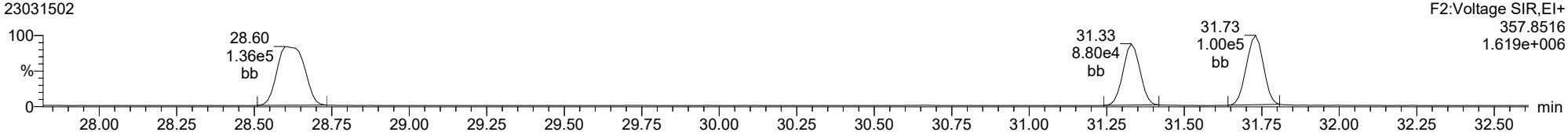

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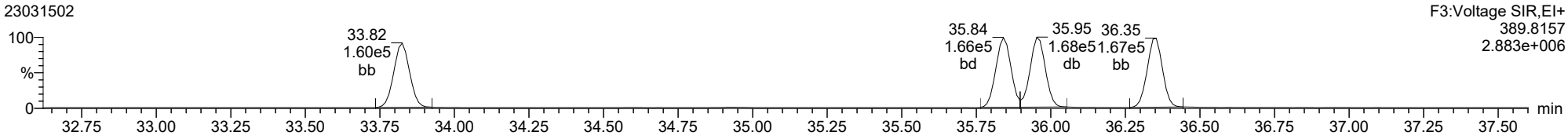

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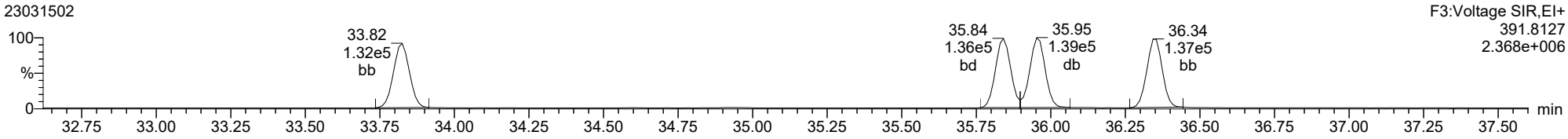

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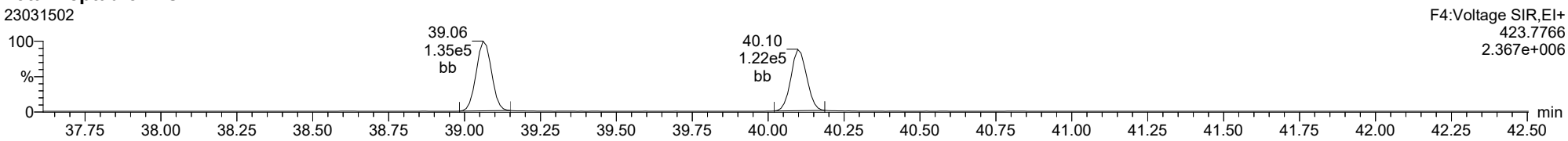

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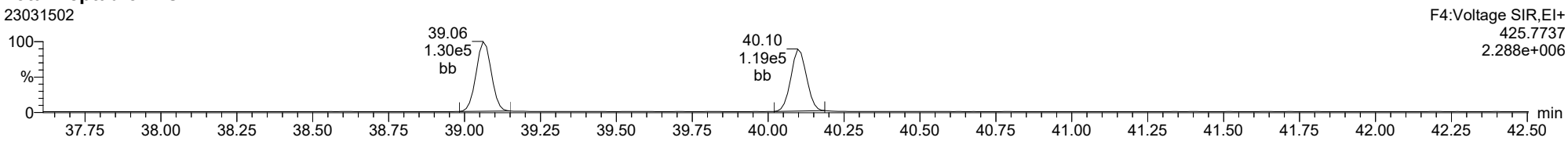

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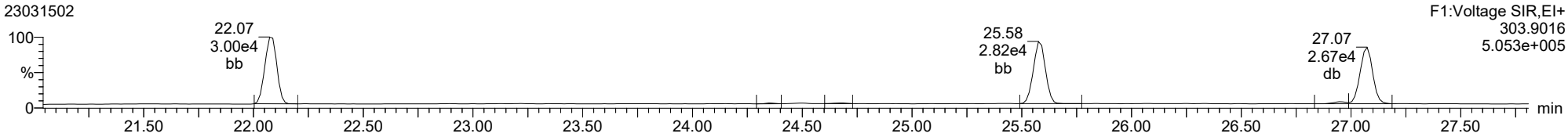
Total-tetrafurans



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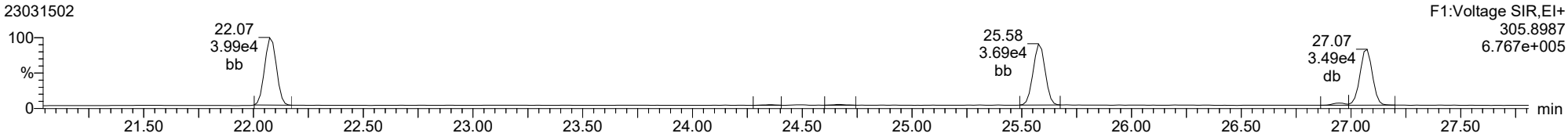

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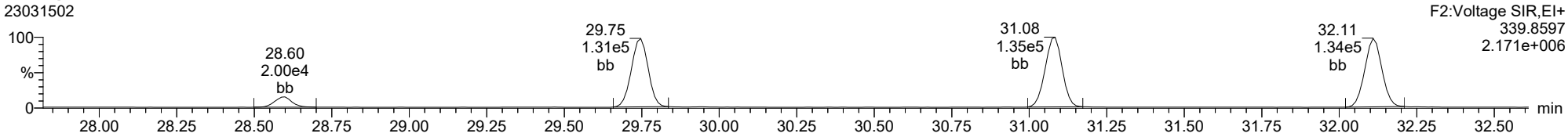

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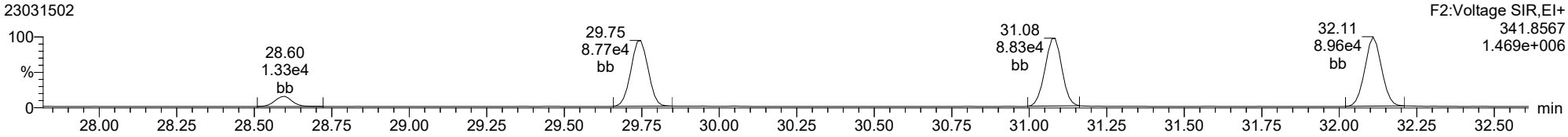

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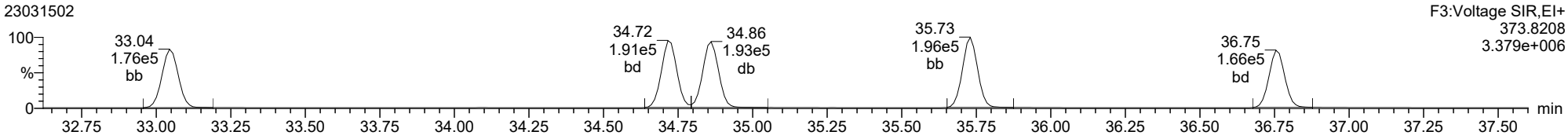

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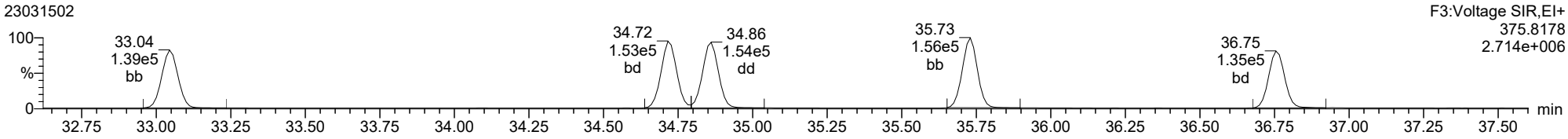

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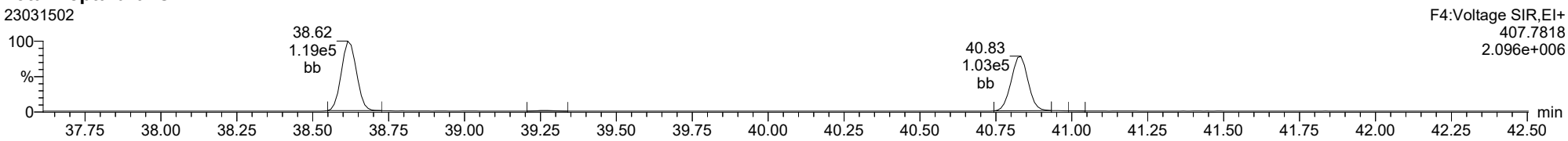

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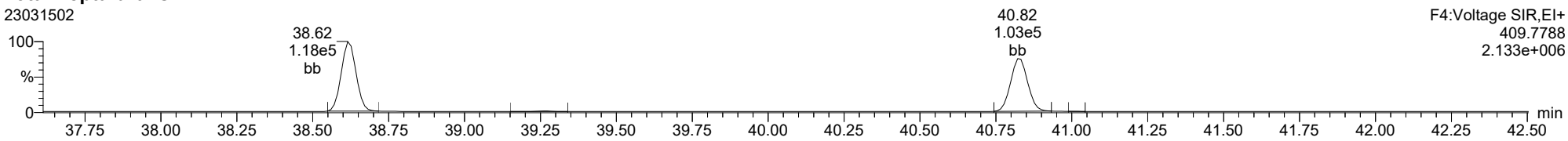

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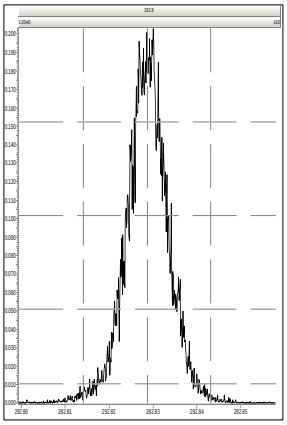

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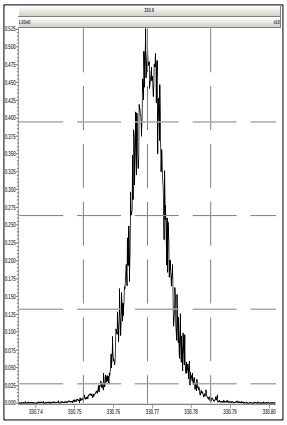

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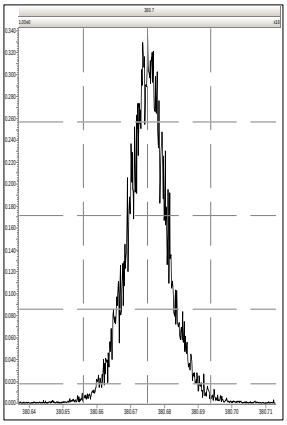

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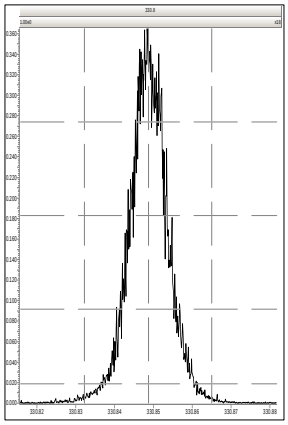

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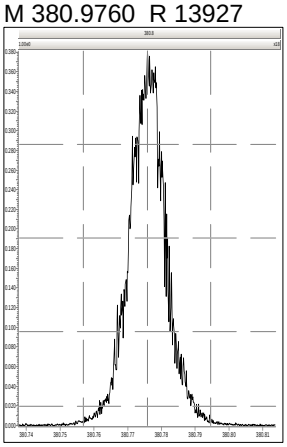

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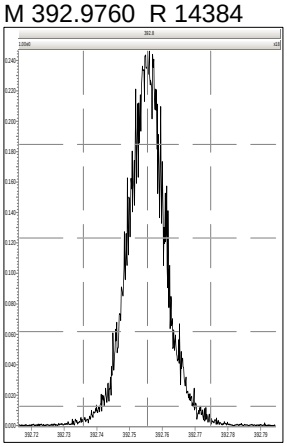

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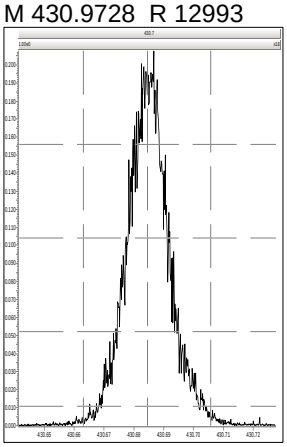

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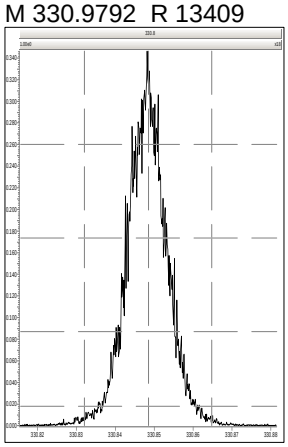

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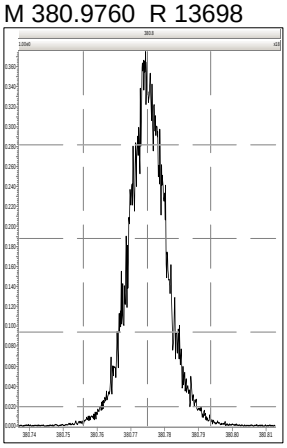

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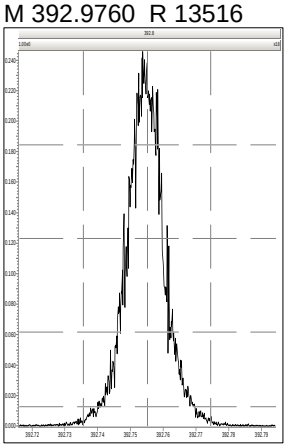

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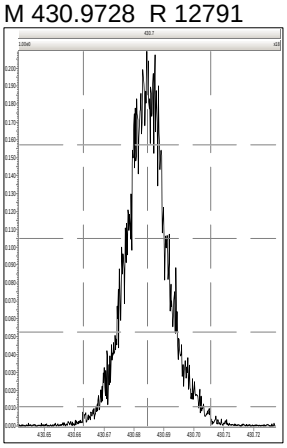

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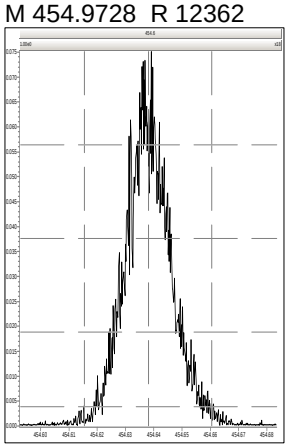
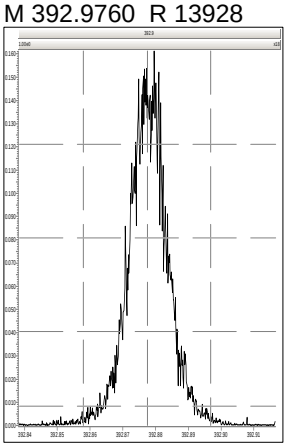
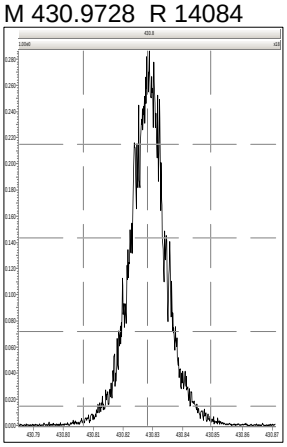


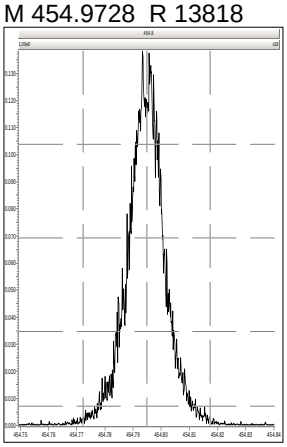
M 392.9760 R 13928



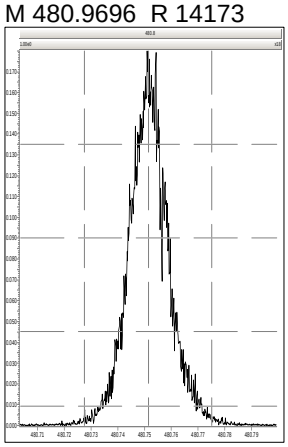
M 430.9728 R 14084



M 454.9728 R 13818

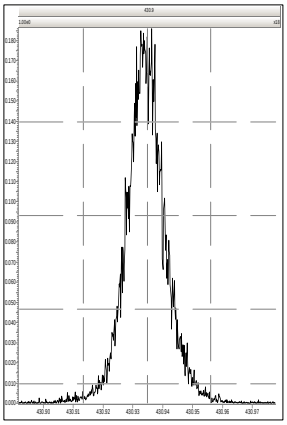


M 480.9696 R 14173

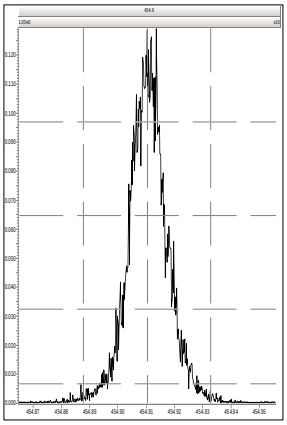


Printed: Wednesday, March 15, 2023 11:02:27 Pacific Daylight Time

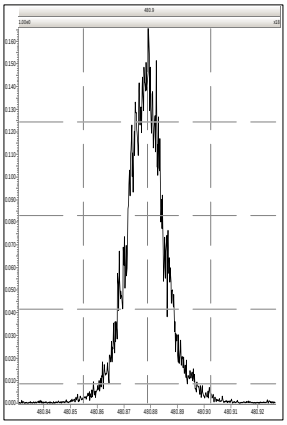
M 430.9728 R 13935



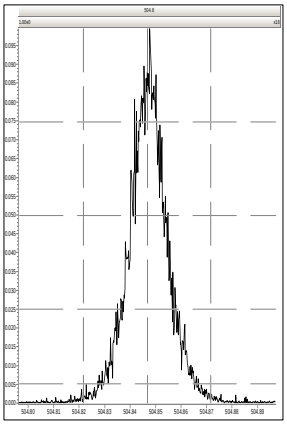
M 454.9728 R 15351



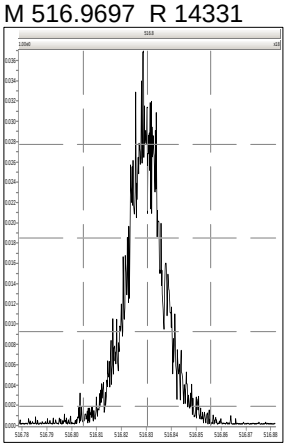
M 480.9696 R 13778

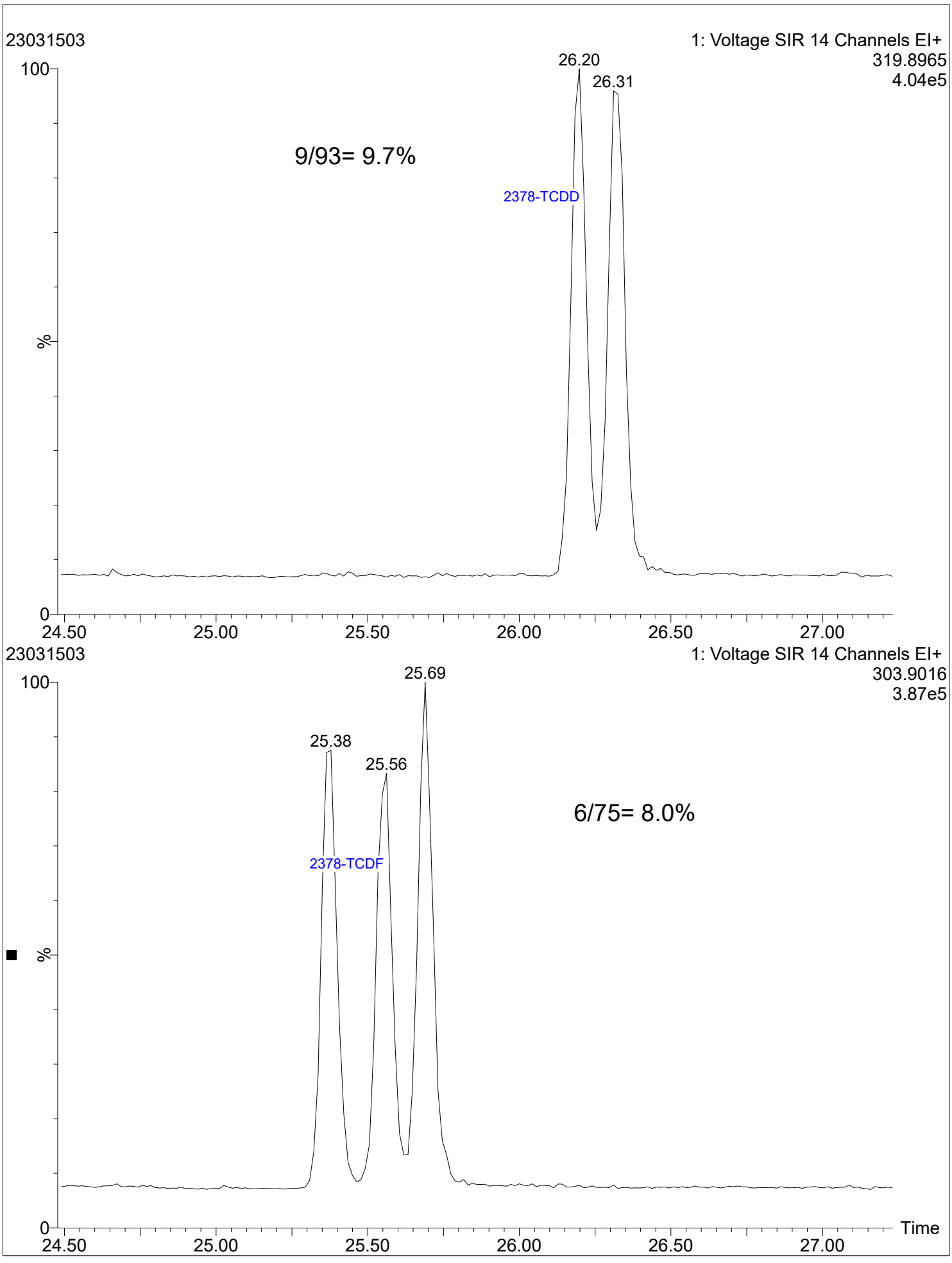


M 504.9696 R 13850



M 516.9697 R 14331




23031503
1: Voltage SIR 14 Channels EI+
319.8965
4.04e5
26.20
26.31
9/93= 9.7%
2378-TCDD
100
%
0
24.50
25.00
25.50
26.00
26.50
27.00
23031503
1: Voltage SIR 14 Channels EI+
303.9016
3.87e5
25.69
25.38
25.56
6/75= 8.0%
2378-TCDF
100
%
0
Time
24.50
25.00
25.50
26.00
26.50
27.00

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GC00015
Lab File ID:	23031702	Calibration Date:	03/03/2023
Sequence:	SLC0258	Injection Date:	03/17/23
Lab Sample ID:	SLC0258-ICV1	Injection Time:	10:40
Sequence Name:	CS3A1		

		CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
2,3,7,8-TCDF	A	10.000	11.0	0.7015272	0.7691466		9.6	+/-16
2,3,7,8-TCDD	A	10.000	8.82	1.1486620	1.0126970		-11.8	+/-22
1,2,3,7,8-PeCDF	A	50.000	52.4	0.6792300	0.7122400		4.9	+/-18
2,3,4,7,8-PeCDF	A	50.000	52.8	0.7861704	0.8298405		5.6	+/-18
1,2,3,7,8-PeCDD	A	50.000	50.3	1.0218450	1.0274310		0.5	+/-22
1,2,3,4,7,8-HxCDF	A	50.000	45.4	1.1660380	1.0581770		-9.3	+/-10
1,2,3,6,7,8-HxCDF	A	50.000	46.0	1.0907410	1.0036840		-8.0	+/-12
2,3,4,6,7,8-HxCDF	A	50.000	47.7	1.1396990	1.0862290		-4.7	+/-12
1,2,3,7,8,9-HxCDF	A	50.000	48.8	1.1370930	1.1108820		-2.3	+/-10
1,2,3,4,7,8-HxCDD	A	50.000	47.4	0.9955689	0.9430088		-5.3	+/-22
1,2,3,6,7,8-HxCDD	A	50.000	43.9	1.0009380	0.8781711		-12.3	+/-22
1,2,3,7,8,9-HxCDD	A	50.000	49.9	0.9071139	0.9054246		-0.2	+/-18
1,2,3,4,6,7,8-HpCDF	A	50.000	51.0	1.0029930	1.0237760		2.1	+/-10
1,2,3,4,7,8,9-HpCDF	A	50.000	55.2	0.9531152	1.0530360		10.5	+/-14
1,2,3,4,6,7,8-HpCDD	A	50.000	48.2	1.0390130	1.0023460		-3.5	+/-14
OCDF	A	100.00	103	0.7778078	0.8021057		3.1	+/-37
OCDD	A	100.00	105	0.9199537	0.9686315		5.3	+/-21
13C12-2,3,7,8-TCDF	A	100.00	85.7	1.6201960	1.3885753		-14.3	+/-29
13C12-2,3,7,8-TCDD	A	100.00	103	1.1524090	1.1908720		3.3	+/-18
13C12-1,2,3,7,8-PeCDF	A	100.00	90.6	1.2404520	1.1237245		-9.4	+/-24
13C12-2,3,4,7,8-PeCDF	A	100.00	91.4	1.1177860	1.0215180		-8.6	+/-23
13C12-1,2,3,7,8-PeCDD	A	100.00	92.1	0.8288129	0.7634633		-7.9	+/-38
13C12-1,2,3,4,7,8-HxCDF	A	100.00	80.3	1.1683050	0.9381353		-19.7	+/-24
13C12-1,2,3,6,7,8-HxCDF	A	100.00	78.1	1.3864660	1.0830936		-21.9	+/-30
13C12-2,3,4,6,7,8-HxCDF	A	100.00	82.2	1.1292560	0.9283671		-17.8	+/-27
13C12-1,2,3,7,8,9-HxCDF	A	100.00	87.0	0.9317541	0.8105234		-13.0	+/-26
13C12-1,2,3,4,7,8-HxCDD	A	100.00	93.6	0.9950393	0.9312862		-6.4	+/-15
13C12-1,2,3,6,7,8-HxCDD	A	100.00	96.2	1.1566890	1.1130053		-3.8	+/-15
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	78.1	0.8952017	0.6995307		-21.9	+/-22
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	77.8	0.7697516	0.5991133		-22.2	+/-23

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GC00015
Lab File ID:	23031702	Calibration Date:	03/03/2023
Sequence:	SLC0258	Injection Date:	03/17/23
Lab Sample ID:	SLC0258-ICV1	Injection Time:	10:40
Sequence Name:	CS3A1		

		CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	79.4	0.8401226	0.6669764		-20.6	+/-28
13C12-OCDD	A	200.00	161	0.7674714	0.6186550		-19.4	+/-52
37Cl4-2,3,7,8-TCDD	A	10.000	8.65	1.2878040	1.1140309		-13.5	

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230317.qld
Last Altered: Monday, March 20, 2023 11:38:42 Pacific Daylight Time
Printed: Monday, March 20, 2023 11:41:42 Pacific Daylight Time

Method: T:\Autospec\Methods\Dioxin230315.mdb 20 Mar 2023 10:42:09
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: CS3A1, Name: 23031702, Date: 17-Mar-2023, Time: 10:40:34, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.590	1.001	3.088e4	4.193e4	0.702	0.736	0.770	660	1216	4.56e5	6.02e5	689.9	495.4	NO	bb	bb	10.964
12378-PeCDF	29.747	1.000	1.630e5	1.098e5	0.679	1.484	1.550	1844	1416	2.37e6	1.60e6	1287.7	1127.1	NO	bb	bd	52.430
23478-PeCDF	31.083	1.001	1.740e5	1.150e5	0.786	1.513	1.550	1844	1416	2.63e6	1.72e6	1429.1	1211.8	NO	bb	bb	52.777
123478-HxCDF	34.727	1.000	2.140e5	1.719e5	1.166	1.245	1.240	1634	1598	3.32e6	2.65e6	2033.6	1655.6	NO	bd	bd	45.375
234678-HxCDF	35.741	1.001	2.183e5	1.737e5	1.140	1.257	1.240	1634	1598	3.29e6	2.61e6	2011.6	1635.5	NO	bb	bd	47.654
123678-HxCDF	34.871	1.001	2.319e5	1.906e5	1.091	1.217	1.240	1634	1598	3.32e6	2.67e6	2030.9	1670.2	NO	dd	db	46.009
123789-HxCDF	36.765	1.000	1.941e5	1.559e5	1.137	1.245	1.240	1634	1598	2.87e6	2.31e6	1759.3	1445.2	NO	bb	bd	48.847
1234678-HpCDF	38.626	1.000	1.376e5	1.408e5	1.003	0.977	1.050	1191	1376	2.24e6	2.27e6	1882.7	1650.1	NO	bb	bd	51.036
1234789-HpCDF	40.843	1.001	1.224e5	1.228e5	0.953	0.997	1.050	1191	1376	1.72e6	1.67e6	1446.7	1215.8	NO	bd	bd	55.242
OCDF	45.047	1.005	1.844e5	2.014e5	0.778	0.916	0.890	841	1068	2.08e6	2.29e6	2469.6	2146.5	NO	bd	bb	103.124
2378-TCDD	26.226	1.001	3.625e4	4.597e4	1.149	0.789	0.770	1306	1120	5.33e5	6.83e5	408.3	610.0	NO	bb	bb	8.816
12378-PeCDD	31.340	1.001	1.632e5	1.042e5	1.022	1.567	1.550	1497	1076	2.41e6	1.55e6	1610.9	1439.9	NO	bb	bb	50.273
123478-HxCDD	35.852	1.001	1.875e5	1.538e5	0.996	1.219	1.240	1643	1279	3.01e6	2.46e6	1833.8	1924.2	NO	bd	bd	47.360
123678-HxCDD	35.963	1.000	2.104e5	1.695e5	1.001	1.242	1.240	1643	1279	3.12e6	2.60e6	1900.4	2029.6	NO	db	db	43.867
123789-HxCDD	36.353	1.011	2.013e5	1.584e5	0.907	1.271	1.240	1643	1279	2.96e6	2.43e6	1802.3	1897.6	NO	bd	bb	49.907
1234678-HpCDD	40.108	1.000	1.309e5	1.290e5	1.039	1.015	1.050	1040	1230	1.98e6	1.94e6	1899.0	1578.0	NO	bb	bb	48.235
OCDD	44.819	1.000	2.192e5	2.467e5	0.920	0.888	0.890	963	1826	2.70e6	3.06e6	2798.1	1676.8	NO	bb	bb	105.291
13C-2378-TCDF	25.562	1.007	4.121e5	5.346e5	1.620	0.771	0.770	2041	1162	6.13e6	8.09e6	3004.7	6963.7	NO	bb	bb	85.704
13C-12378-PeCDF	29.736	1.172	4.666e5	2.995e5	1.240	1.558	1.550	3053	1463	6.78e6	4.45e6	2219.6	3042.2	NO	bd	bb	90.590
13C-23478-PeCDF	31.061	1.224	4.220e5	2.744e5	1.118	1.538	1.550	3053	1463	6.36e6	4.18e6	2084.7	2853.9	NO	bb	bb	91.388
13C-123478-HxCDF	34.715	0.955	2.452e5	4.841e5	1.168	0.507	0.510	1286	1836	3.83e6	7.44e6	2978.7	4049.8	NO	bd	bd	80.299
13C-123678-HxCDF	34.849	0.959	2.825e5	5.595e5	1.386	0.505	0.510	1286	1836	4.02e6	7.92e6	3122.7	4312.1	NO	db	db	78.119
13C-234678-HxCDF	35.718	0.983	2.410e5	4.807e5	1.129	0.501	0.510	1286	1836	3.78e6	7.54e6	2939.4	4105.6	NO	bb	bb	82.211
13C-123789-HxCDF	36.754	1.011	2.099e5	4.202e5	0.932	0.499	0.510	1286	1836	3.36e6	6.63e6	2611.9	3608.5	NO	bb	bb	86.989
13C-1234678-HpCDF	38.615	1.063	1.657e5	3.781e5	0.895	0.438	0.440	1222	1872	2.82e6	6.50e6	2305.1	3471.6	NO	bb	bb	78.142
13C-1234789-HpCDF	40.821	1.123	1.437e5	3.220e5	0.770	0.446	0.440	1222	1872	2.09e6	4.73e6	1712.1	2527.7	NO	bb	bb	77.832
13C-1234-TCDD	25.379	0.000	3.000e5	3.818e5	1.000	0.786	0.770	1525	993	4.74e6	6.04e6	3110.6	6088.2	NO	bb	bb	100.000
13C-2378-TCDD	26.198	1.032	3.556e5	4.563e5	1.152	0.779	0.770	1525	993	5.45e6	7.00e6	3571.7	7057.6	NO	bb	bb	103.338
13C-12378-PeCDD	31.317	1.234	3.205e5	2.000e5	0.829	1.603	1.550	1397	898	4.74e6	2.94e6	3391.4	3275.7	NO	bb	bb	92.115
13C-123478-HxCDD	35.829	0.986	4.064e5	3.175e5	0.995	1.280	1.240	1412	1325	6.60e6	5.15e6	4672.5	3888.6	NO	bd	bd	93.593
13C-123678-HxCDD	35.952	0.989	4.833e5	3.820e5	1.157	1.265	1.240	1412	1325	6.94e6	5.49e6	4912.8	4145.3	NO	db	db	96.223
13C-1234678-HpCDD	40.097	1.103	2.665e5	2.520e5	0.840	1.058	1.050	982	989	3.97e6	3.71e6	4041.3	3746.9	NO	bb	bb	79.390
13C-OCDD	44.809	1.233	4.557e5	5.061e5	0.767	0.900	0.890	1559	1613	5.53e6	6.15e6	3546.1	3813.3	NO	bb	bb	161.219
13C-123789-HxCDD	36.342	0.000	4.335e5	3.439e5	1.000	1.260	1.240	1412	1325	6.64e6	5.22e6	4699.5	3938.2	NO	bb	bb	100.000
37CL-2378-TCDD	26.226	1.033	7.595e4		1.288			1044		1.11e6		1061.5			bb		8.651

Dataset: T:\Autospec\Processed Data Batch\230317.qld
Last Altered: Monday, March 20, 2023 11:38:42 Pacific Daylight Time
Printed: Monday, March 20, 2023 11:41:42 Pacific Daylight Time

ID: CS3A1, Name: 23031702, Date: 17-Mar-2023, Time: 10:40:34, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.073	0.864	3.685e4	4.877e4	0.802	0.756	0.770	660	1216	5.75e5	7.74e5	871.2	636.2	NO	bb	bb	11.284
1289-TCDF	27.074	1.059	2.828e4	4.024e4	0.678	0.703	0.770	660	1216	4.10e5	5.62e5	621.5	462.5	NO	bb	dd	10.676
13468-PECDF	26.947	0.906	3.183e5	2.081e5	1.246	1.530	1.550	696	678	4.90e6	3.19e6	7048.4	4703.9	NO	bb	bb	55.128
12389-PECDF	32.120	1.080	1.708e5	1.110e5	0.496	1.539	1.550	1844	1416	2.44e6	1.60e6	1321.6	1126.8	NO	bb	bb	74.110
123468-HXCDF	33.056	0.952	2.209e5	1.773e5	1.169	1.246	1.240	1634	1598	3.15e6	2.51e6	1929.2	1568.5	NO	bd	bb	46.712
1368-TCDD	23.345	0.891	3.357e4	4.340e4	1.015	0.774	0.770	1306	1120	5.38e5	6.94e5	412.2	619.8	NO	bb	bb	9.337
1289-TCDD	26.819	1.024	3.196e4	4.038e4	0.909	0.792	0.770	1306	1120	4.58e5	5.84e5	350.8	522.0	NO	bd	bb	9.805
12479-PECDD	28.632	0.914	2.679e5	1.738e5	2.301	1.541	1.550	1497	1076	2.53e6	1.66e6	1690.0	1540.3	NO	bb	bb	36.877
12389-PECDD	31.730	1.013	1.874e5	1.201e5	1.184	1.561	1.550	1497	1076	2.73e6	1.76e6	1824.9	1638.5	NO	bb	bb	49.919
124679-HXCDD	33.835	0.944	1.934e5	1.604e5	1.115	1.206	1.240	1643	1279	2.87e6	2.41e6	1743.8	1886.0	NO	bb	bb	43.805
1234679-HPCDD	39.072	0.974	1.446e5	1.407e5	1.137	1.028	1.050	1040	1230	2.34e6	2.29e6	2247.4	1863.3	NO	bb	bb	48.405
Total-tetrafurans			9.632e4		0.727			660		1.45e6							33.033
Total-penta1			3.183e5					696		4.90e6							55.128
Total-pentafurans			5.347e5		0.654			1844		7.85e6							188.736
Total-hexafurans			1.079e6		1.141			1634		1.60e7							234.598
Total-heptafurans			2.600e5		0.978			1191		3.97e6							106.278
Total-Furans			2.473e6		0.922			660		3.62e7							720.897
Total-tetradioxins			1.690e5		1.024			1306		2.30e6							46.439
Total-pentadioxins			6.193e5		1.502			1497		7.68e6							137.212
Total-hexadioxins			7.943e5		1.005			1643		1.20e7							185.313
Total-heptadioxins			2.755e5		1.088			1040		4.31e6							96.641
Total-Dioxins			2.077e6		1.130			1306		2.90e7							570.896
Total-TEQ			4.550e6					1306		6.52e7							1291.793
FUNCTION1 PFK			2.257e7					421044		9.03e6							
FUNCTION2 PFK			4.311e5					311405		1.21e7							0.000
FUNCTION3 PFK			7.791e5					379964		1.82e7							0.000
FUNCTION4 PFK			0.000e0					253018		0.00e0							
FUNCTION5 PFK			7.522e4					163509		2.41e6							
FUNCTION1 HXCD...			7.964e2					601		1.19e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			5.288e2					588		6.63e3							0.000
FUNCTION3 OCDPE			4.965e2					524		7.80e3							0.000
FUNCTION4 NCDPE			5.970e2					634		7.17e3							0.000
FUNCTION5 DCDPE			0.000e0					529		0.00e0							

Method: T:\Autospec\Methods\Dioxin230315.mdb 20 Mar 2023 10:42:09
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

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TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.07	2.828e4	4.024e4	0.678	0.70	0.77	621.5	YES	NO	bb	dd	10.676
2	2378-TCDF	25.59	3.088e4	4.193e4	0.702	0.74	0.77	689.9	YES	NO	bb	bb	10.964
3	Total-tetrafurans	24.49	3.047e2	4.456e2	0.727	0.68	0.77	6.8	YES	NO	dd	db	0.109
4	1368-TCDF	22.07	3.685e4	4.877e4	0.802	0.76	0.77	871.2	YES	NO	bb	bb	11.284

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	26.95	3.183e5	2.081e5	1.246	1.53	1.55	7048.4	YES	NO	bb	bb	55.128

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDF	32.12	1.708e5	1.110e5	0.496	1.54	1.55	1321.6	YES	NO	bb	bb	74.110
2	Total-pentafurans	31.28	2.397e2	1.620e2	0.654	1.48	1.55	2.5	NO	NO	bb	bb	0.084
3	23478-PeCDF	31.08	1.740e5	1.150e5	0.786	1.51	1.55	1429.1	YES	NO	bb	bb	52.777
4	12378-PeCDF	29.75	1.630e5	1.098e5	0.679	1.48	1.55	1287.7	YES	NO	bb	bd	52.430
5	Total-pentafurans	28.60	2.668e4	1.796e4	0.654	1.49	1.55	215.6	YES	NO	bb	bb	9.335

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123678-HxCDF	34.87	2.319e5	1.906e5	1.091	1.22	1.24	2030.9	YES	NO	dd	db	46.009
2	123478-HxCDF	34.73	2.140e5	1.719e5	1.166	1.24	1.24	2033.6	YES	NO	bd	bd	45.375
3	123468-HXCDF	33.06	2.209e5	1.773e5	1.169	1.25	1.24	1929.2	YES	NO	bd	bb	46.712
4	123789-HxCDF	36.77	1.941e5	1.559e5	1.137	1.25	1.24	1759.3	YES	NO	bb	bd	48.847
5	234678-HxCDF	35.74	2.183e5	1.737e5	1.140	1.26	1.24	2011.6	YES	NO	bb	bd	47.654

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	40.84	1.224e5	1.228e5	0.953	1.00	1.05	1446.7	YES	NO	bd	bd	55.242
2	1234678-HpCDF	38.63	1.376e5	1.408e5	1.003	0.98	1.05	1882.7	YES	NO	bb	bd	51.036

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.07	2.828e4	4.024e4	0.678	0.70	0.77	621.5	YES	NO	bb	dd	10.676
2	2378-TCDF	25.59	3.088e4	4.193e4	0.702	0.74	0.77	689.9	YES	NO	bb	bb	10.964
3	Total-tetrafurans	24.49	3.047e2	4.456e2	0.727	0.68	0.77	6.8	YES	NO	dd	db	0.109
4	1368-TCDF	22.07	3.685e4	4.877e4	0.802	0.76	0.77	871.2	YES	NO	bb	bb	11.284
5	12389-PECDF	32.12	1.708e5	1.110e5	0.496	1.54	1.55	1321.6	YES	NO	bb	bb	74.110
6	Total-pentafurans	31.28	2.397e2	1.620e2	0.654	1.48	1.55	2.5	NO	NO	bb	bb	0.084
7	23478-PeCDF	31.08	1.740e5	1.150e5	0.786	1.51	1.55	1429.1	YES	NO	bb	bb	52.777
8	12378-PeCDF	29.75	1.630e5	1.098e5	0.679	1.48	1.55	1287.7	YES	NO	bb	bd	52.430
9	Total-pentafurans	28.60	2.668e4	1.796e4	0.654	1.49	1.55	215.6	YES	NO	bb	bb	9.335
10	123678-HxCDF	34.87	2.319e5	1.906e5	1.091	1.22	1.24	2030.9	YES	NO	dd	db	46.009
11	123478-HxCDF	34.73	2.140e5	1.719e5	1.166	1.24	1.24	2033.6	YES	NO	bd	bd	45.375
12	123468-HXCDF	33.06	2.209e5	1.773e5	1.169	1.25	1.24	1929.2	YES	NO	bd	bb	46.712
13	123789-HxCDF	36.77	1.941e5	1.559e5	1.137	1.25	1.24	1759.3	YES	NO	bb	bd	48.847
14	234678-HxCDF	35.74	2.183e5	1.737e5	1.140	1.26	1.24	2011.6	YES	NO	bb	bd	47.654
15	1234789-HpCDF	40.84	1.224e5	1.228e5	0.953	1.00	1.05	1446.7	YES	NO	bd	bd	55.242
16	1234678-HpCDF	38.63	1.376e5	1.408e5	1.003	0.98	1.05	1882.7	YES	NO	bb	bd	51.036
17	OCDF	45.05	1.844e5	2.014e5	0.778	0.92	0.89	2469.6	YES	NO	bd	bb	103.124
18	13468-PECDF	26.95	3.183e5	2.081e5	1.246	1.53	1.55	7048.4	YES	NO	bb	bb	55.128

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.34	3.357e4	4.340e4	1.015	0.77	0.77	412.2	YES	NO	bb	bb	9.337
2	1289-TCDD	26.82	3.196e4	4.038e4	0.909	0.79	0.77	350.8	YES	NO	bd	bb	9.805
3	2378-TCDD	26.23	3.625e4	4.597e4	1.149	0.79	0.77	408.3	YES	NO	bb	bb	8.816
4	Total-tetradioxins	25.89	5.118e4	6.601e4	1.024	0.78	0.77	401.0	YES	NO	bb	bb	14.093
5	Total-tetradioxins	25.41	1.605e4	2.044e4	1.024	0.79	0.77	185.7	YES	NO	bb	bb	4.388

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	31.73	1.874e5	1.201e5	1.184	1.56	1.55	1824.9	YES	NO	bb	bb	49.919
2	12378-PeCDD	31.34	1.632e5	1.042e5	1.022	1.57	1.55	1610.9	YES	NO	bb	bb	50.273
3	Total-pentadioxins	30.66	6.611e2	4.513e2	1.502	1.46	1.55	6.4	YES	NO	bb	bb	0.142
4	12479-PECDD	28.63	2.679e5	1.738e5	2.301	1.54	1.55	1690.0	YES	NO	bb	bb	36.877

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HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.35	2.013e5	1.584e5	0.907	1.27	1.24	1802.3	YES	NO	bd	bb	49.907
2	123678-HxCDD	35.96	2.104e5	1.695e5	1.001	1.24	1.24	1900.4	YES	NO	db	db	43.867
3	123478-HxCDD	35.85	1.875e5	1.538e5	0.996	1.22	1.24	1833.8	YES	NO	bd	bd	47.360
4	Total-hexadioxins	34.96	1.594e3	1.384e3	1.005	1.15	1.24	9.5	YES	NO	bb	bb	0.373
5	124679-HXCDD	33.84	1.934e5	1.604e5	1.115	1.21	1.24	1743.8	YES	NO	bb	bb	43.805

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234679-HPCDD	39.07	1.446e5	1.407e5	1.137	1.03	1.05	2247.4	YES	NO	bb	bb	48.405
2	1234678-HpCDD	40.11	1.309e5	1.290e5	1.039	1.01	1.05	1899.0	YES	NO	bb	bb	48.235

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.34	3.357e4	4.340e4	1.015	0.77	0.77	412.2	YES	NO	bb	bb	9.337
2	1289-TCDD	26.82	3.196e4	4.038e4	0.909	0.79	0.77	350.8	YES	NO	bd	bb	9.805
3	2378-TCDD	26.23	3.625e4	4.597e4	1.149	0.79	0.77	408.3	YES	NO	bb	bb	8.816
4	Total-tetradioxins	25.89	5.118e4	6.601e4	1.024	0.78	0.77	401.0	YES	NO	bb	bb	14.093
5	Total-tetradioxins	25.41	1.605e4	2.044e4	1.024	0.79	0.77	185.7	YES	NO	bb	bb	4.388
6	12389-PECDD	31.73	1.874e5	1.201e5	1.184	1.56	1.55	1824.9	YES	NO	bb	bb	49.919
7	12378-PeCDD	31.34	1.632e5	1.042e5	1.022	1.57	1.55	1610.9	YES	NO	bb	bb	50.273
8	Total-pentadioxins	30.66	6.611e2	4.513e2	1.502	1.46	1.55	6.4	YES	NO	bb	bb	0.142
9	12479-PECDD	28.63	2.679e5	1.738e5	2.301	1.54	1.55	1690.0	YES	NO	bb	bb	36.877
10	123789-HxCDD	36.35	2.013e5	1.584e5	0.907	1.27	1.24	1802.3	YES	NO	bd	bb	49.907
11	123678-HxCDD	35.96	2.104e5	1.695e5	1.001	1.24	1.24	1900.4	YES	NO	db	db	43.867
12	123478-HxCDD	35.85	1.875e5	1.538e5	0.996	1.22	1.24	1833.8	YES	NO	bd	bd	47.360
13	Total-hexadioxins	34.96	1.594e3	1.384e3	1.005	1.15	1.24	9.5	YES	NO	bb	bb	0.373
14	124679-HXCDD	33.84	1.934e5	1.604e5	1.115	1.21	1.24	1743.8	YES	NO	bb	bb	43.805
15	1234679-HPCDD	39.07	1.446e5	1.407e5	1.137	1.03	1.05	2247.4	YES	NO	bb	bb	48.405
16	1234678-HpCDD	40.11	1.309e5	1.290e5	1.039	1.01	1.05	1899.0	YES	NO	bb	bb	48.235
17	OCDD	44.82	2.192e5	2.467e5	0.920	0.89	0.89	2798.1	YES	NO	bb	bb	105.291

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.07	2.828e4	4.024e4	0.678	0.70	0.77	621.5	YES	NO	bb	dd	10.676
2	2378-TCDF	25.59	3.088e4	4.193e4	0.702	0.74	0.77	689.9	YES	NO	bb	bb	10.964
3	Total-tetrafurans	24.49	3.047e2	4.456e2	0.727	0.68	0.77	6.8	YES	NO	dd	db	0.109
4	1368-TCDF	22.07	3.685e4	4.877e4	0.802	0.76	0.77	871.2	YES	NO	bb	bb	11.284
5	12389-PECDF	32.12	1.708e5	1.110e5	0.496	1.54	1.55	1321.6	YES	NO	bb	bb	74.110
6	Total-pentafurans	31.28	2.397e2	1.620e2	0.654	1.48	1.55	2.5	NO	NO	bb	bb	0.084
7	23478-PeCDF	31.08	1.740e5	1.150e5	0.786	1.51	1.55	1429.1	YES	NO	bb	bb	52.777
8	12378-PeCDF	29.75	1.630e5	1.098e5	0.679	1.48	1.55	1287.7	YES	NO	bb	bd	52.430
9	Total-pentafurans	28.60	2.668e4	1.796e4	0.654	1.49	1.55	215.6	YES	NO	bb	bb	9.335
10	123678-HxCDF	34.87	2.319e5	1.906e5	1.091	1.22	1.24	2030.9	YES	NO	dd	db	46.009
11	123478-HxCDF	34.73	2.140e5	1.719e5	1.166	1.24	1.24	2033.6	YES	NO	bd	bd	45.375
12	123468-HXCDF	33.06	2.209e5	1.773e5	1.169	1.25	1.24	1929.2	YES	NO	bd	bb	46.712
13	123789-HxCDF	36.77	1.941e5	1.559e5	1.137	1.25	1.24	1759.3	YES	NO	bb	bd	48.847
14	234678-HxCDF	35.74	2.183e5	1.737e5	1.140	1.26	1.24	2011.6	YES	NO	bb	bd	47.654
15	1234789-HpCDF	40.84	1.224e5	1.228e5	0.953	1.00	1.05	1446.7	YES	NO	bd	bd	55.242
16	1234678-HpCDF	38.63	1.376e5	1.408e5	1.003	0.98	1.05	1882.7	YES	NO	bb	bd	51.036
17	OCDF	45.05	1.844e5	2.014e5	0.778	0.92	0.89	2469.6	YES	NO	bd	bb	103.124
18	13468-PECDF	26.95	3.183e5	2.081e5	1.246	1.53	1.55	7048.4	YES	NO	bb	bb	55.128
19	1368-TCDD	23.34	3.357e4	4.340e4	1.015	0.77	0.77	412.2	YES	NO	bb	bb	9.337
20	1289-TCDD	26.82	3.196e4	4.038e4	0.909	0.79	0.77	350.8	YES	NO	bd	bb	9.805
21	2378-TCDD	26.23	3.625e4	4.597e4	1.149	0.79	0.77	408.3	YES	NO	bb	bb	8.816
22	Total-tetradioxins	25.89	5.118e4	6.601e4	1.024	0.78	0.77	401.0	YES	NO	bb	bb	14.093
23	Total-tetradioxins	25.41	1.605e4	2.044e4	1.024	0.79	0.77	185.7	YES	NO	bb	bb	4.388
24	12389-PECDD	31.73	1.874e5	1.201e5	1.184	1.56	1.55	1824.9	YES	NO	bb	bb	49.919
25	12378-PeCDD	31.34	1.632e5	1.042e5	1.022	1.57	1.55	1610.9	YES	NO	bb	bb	50.273
26	Total-pentadioxins	30.66	6.611e2	4.513e2	1.502	1.46	1.55	6.4	YES	NO	bb	bb	0.142
27	12479-PECDD	28.63	2.679e5	1.738e5	2.301	1.54	1.55	1690.0	YES	NO	bb	bb	36.877
28	123789-HxCDD	36.35	2.013e5	1.584e5	0.907	1.27	1.24	1802.3	YES	NO	bd	bb	49.907
29	123678-HxCDD	35.96	2.104e5	1.695e5	1.001	1.24	1.24	1900.4	YES	NO	db	db	43.867
30	123478-HxCDD	35.85	1.875e5	1.538e5	0.996	1.22	1.24	1833.8	YES	NO	bd	bd	47.360
31	Total-hexadioxins	34.96	1.594e3	1.384e3	1.005	1.15	1.24	9.5	YES	NO	bb	bb	0.373
32	124679-HXCDD	33.84	1.934e5	1.604e5	1.115	1.21	1.24	1743.8	YES	NO	bb	bb	43.805
33	1234679-HPCDD	39.07	1.446e5	1.407e5	1.137	1.03	1.05	2247.4	YES	NO	bb	bb	48.405
34	1234678-HpCDD	40.11	1.309e5	1.290e5	1.039	1.01	1.05	1899.0	YES	NO	bb	bb	48.235
35	OCDD	44.82	2.192e5	2.467e5	0.920	0.89	0.89	2798.1	YES	NO	bb	bb	105.291

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Last Altered: Monday, March 20, 2023 11:38:42 Pacific Daylight Time
Printed: Monday, March 20, 2023 11:41:42 Pacific Daylight Time

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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	22.29	2.257e7					21.5	YES		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	28.79	1.448e4					1.5	NO		bb		0.000
2	FUNCTION2 PFK	28.72	1.104e4					1.3	NO		bb		0.000
3	FUNCTION2 PFK	28.44	1.568e4					1.3	NO		bb		0.000
4	FUNCTION2 PFK	28.39	3.013e3					0.5	NO		bb		0.000
5	FUNCTION2 PFK	28.20	8.876e3					1.2	NO		db		0.000
6	FUNCTION2 PFK	28.14	5.349e4					3.0	YES		dd		0.000
7	FUNCTION2 PFK	28.06	8.126e4					3.4	YES		bd		0.000
8	FUNCTION2 PFK	27.99	3.105e3					0.9	NO		bb		0.000
9	FUNCTION2 PFK	27.92	1.189e4					1.6	NO		bb		0.000
10	FUNCTION2 PFK	31.72	1.248e4					1.4	NO		bd		0.000
11	FUNCTION2 PFK	31.58	1.604e4					2.2	NO		db		0.000
12	FUNCTION2 PFK	31.53	1.701e4					1.6	NO		bd		0.000
13	FUNCTION2 PFK	31.17	5.654e3					0.6	NO		bb		0.000
14	FUNCTION2 PFK	31.12	3.963e3					0.8	NO		bb		0.000
15	FUNCTION2 PFK	31.02	1.049e4					1.2	NO		bb		0.000
16	FUNCTION2 PFK	30.84	1.658e4					1.7	NO		bb		0.000
17	FUNCTION2 PFK	30.64	2.776e4					2.1	NO		bb		0.000
18	FUNCTION2 PFK	30.57	2.166e3					0.6	NO		bb		0.000
19	FUNCTION2 PFK	29.95	1.880e4					1.2	NO		bb		0.000
20	FUNCTION2 PFK	29.57	1.269e4					1.4	NO		bb		0.000
21	FUNCTION2 PFK	29.41	2.290e4					1.1	NO		bb		0.000
22	FUNCTION2 PFK	29.10	2.399e3					0.5	NO		bb		0.000
23	FUNCTION2 PFK	29.03	7.599e3					1.3	NO		bb		0.000
24	FUNCTION2 PFK	28.99	8.445e3					1.1	NO		bb		0.000
25	FUNCTION2 PFK	28.89	1.186e4					1.2	NO		bb		0.000
26	FUNCTION2 PFK	32.44	6.230e3					1.0	NO		bb		0.000
27	FUNCTION2 PFK	32.40	7.517e3					0.8	NO		bb		0.000
28	FUNCTION2 PFK	32.08	1.450e3					0.4	NO		bb		0.000
29	FUNCTION2 PFK	31.91	4.180e3					0.6	NO		bb		0.000
30	FUNCTION2 PFK	31.77	1.205e4					1.2	NO		db		0.000

ID: CS3A1, Name: 23031702, Date: 17-Mar-2023, Time: 10:40:34, Conditions: AUTOSPEC01, User: pk

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	33.86	1.488e4					1.6	NO		db		0.000
2	FUNCTION3 PFK	33.81	8.915e3					0.9	NO		bd		0.000
3	FUNCTION3 PFK	33.38	6.712e3					1.0	NO		bb		0.000
4	FUNCTION3 PFK	33.27	2.161e4					2.3	NO		db		0.000
5	FUNCTION3 PFK	33.23	4.945e4					2.9	NO		dd		0.000
6	FUNCTION3 PFK	33.18	2.572e4					2.1	NO		dd		0.000
7	FUNCTION3 PFK	33.13	1.368e4					1.3	NO		bd		0.000
8	FUNCTION3 PFK	33.08	5.842e3					0.9	NO		bb		0.000
9	FUNCTION3 PFK	32.89	3.125e4					0.4	NO		bb		0.000
10	FUNCTION3 PFK	32.78	1.407e4					1.3	NO		bb		0.000
11	FUNCTION3 PFK	36.40	1.373e4					1.3	NO		bd		0.000
12	FUNCTION3 PFK	36.21	1.884e3					0.4	NO		bb		0.000
13	FUNCTION3 PFK	36.11	2.575e4					1.3	NO		bb		0.000
14	FUNCTION3 PFK	35.84	1.785e3					0.4	NO		bb		0.000
15	FUNCTION3 PFK	35.80	1.083e4					1.1	NO		bb		0.000
16	FUNCTION3 PFK	35.56	8.647e3					0.7	NO		bb		0.000
17	FUNCTION3 PFK	35.26	1.233e4					1.1	NO		db		0.000
18	FUNCTION3 PFK	35.22	1.633e4					1.5	NO		bd		0.000
19	FUNCTION3 PFK	34.87	2.124e3					0.5	NO		bb		0.000
20	FUNCTION3 PFK	34.64	8.993e3					1.1	NO		db		0.000
21	FUNCTION3 PFK	34.60	1.045e4					0.9	NO		dd		0.000
22	FUNCTION3 PFK	34.55	1.584e4					1.5	NO		bd		0.000
23	FUNCTION3 PFK	34.45	3.076e4					2.0	NO		bb		0.000
24	FUNCTION3 PFK	34.25	8.256e3					0.7	NO		bb		0.000
25	FUNCTION3 PFK	34.10	3.139e4					1.7	NO		bb		0.000
26	FUNCTION3 PFK	34.04	2.307e4					1.8	NO		bb		0.000
27	FUNCTION3 PFK	37.31	1.960e4					1.4	NO		bb		0.000
28	FUNCTION3 PFK	37.09	9.012e4					2.9	NO		db		0.000
29	FUNCTION3 PFK	36.97	8.790e4					3.4	YES		dd		0.000
30	FUNCTION3 PFK	36.85	6.551e4					2.1	NO		bd		0.000
31	FUNCTION3 PFK	36.60	3.886e3					0.9	NO		bb		0.000
32	FUNCTION3 PFK	36.55	6.957e4					2.9	NO		db		0.000
33	FUNCTION3 PFK	36.46	2.819e4					1.8	NO		dd		0.000

ID: CS3A1, Name: 23031702, Date: 17-Mar-2023, Time: 10:40:34, Conditions: AUTOSPEC01, User: pk

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	44.44	7.499e3					1.5	NO		bb		
2	FUNCTION5 PFK	44.38	2.267e4					2.0	NO		bb		
3	FUNCTION5 PFK	44.20	2.141e3					0.9	NO		bb		
4	FUNCTION5 PFK	43.67	7.599e2					0.5	NO		bb		
5	FUNCTION5 PFK	43.52	1.229e4					2.3	NO		bb		
6	FUNCTION5 PFK	42.96	5.571e3					1.5	NO		bb		
7	FUNCTION5 PFK	42.78	9.218e3					1.2	NO		bb		
8	FUNCTION5 PFK	45.68	2.351e3					0.9	NO		bb		
9	FUNCTION5 PFK	45.47	8.478e2					0.6	NO		bb		
10	FUNCTION5 PFK	45.25	3.786e3					1.1	NO		bb		
11	FUNCTION5 PFK	44.84	3.641e3					1.2	NO		bb		
12	FUNCTION5 PFK	44.63	4.451e3					1.1	NO		bb		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	26.92	1.090e2					2.5	NO		bb		0.000
2	FUNCTION1 HXCD...	26.21	1.366e2					2.8	NO		bb		0.000
3	FUNCTION1 HXCD...	25.53	8.172e1					1.7	NO		bb		0.000
4	FUNCTION1 HXCD...	24.66	1.095e2					2.1	NO		bb		0.000
5	FUNCTION1 HXCD...	24.31	1.193e2					2.9	NO		bb		0.000
6	FUNCTION1 HXCD...	23.87	1.625e2					4.5	YES		bb		0.000
7	FUNCTION1 HXCD...	22.47	7.781e1					3.5	YES		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ID: CS3A1, Name: 23031702, Date: 17-Mar-2023, Time: 10:40:34, Conditions: AUTOSPEC01, User: pk

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	30.89	4.549e2					9.2	YES		bb		0.000
2	FUNCTION2 HPCD...	30.54	7.382e1					2.0	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.74	1.123e2					2.7	NO		bb		0.000
2	FUNCTION3 OCDPE	36.33	1.645e2					4.1	YES		bb		0.000
3	FUNCTION3 OCDPE	35.95	8.057e1					3.2	YES		bb		0.000
4	FUNCTION3 OCDPE	35.84	1.391e2					4.8	YES		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	41.50	2.480e2					2.5	NO		bb		0.000
2	FUNCTION4 NCDPE	40.39	8.399e1					2.5	NO		bb		0.000
3	FUNCTION4 NCDPE	39.92	7.223e1					2.9	NO		bb		0.000
4	FUNCTION4 NCDPE	39.17	1.051e2					1.7	NO		bb		0.000
5	FUNCTION4 NCDPE	38.95	8.767e1					1.7	NO		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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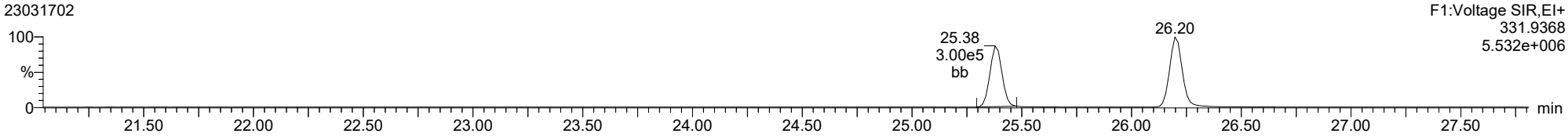

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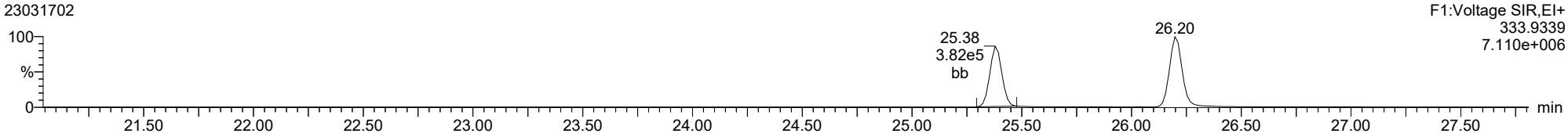

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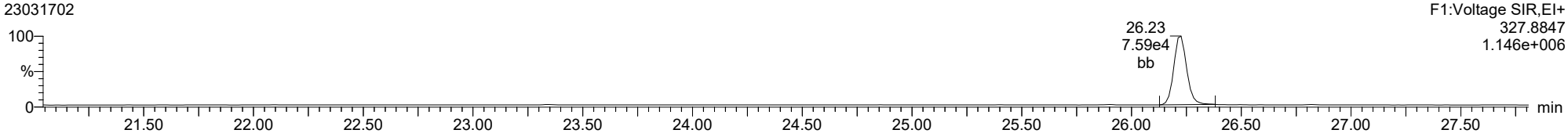

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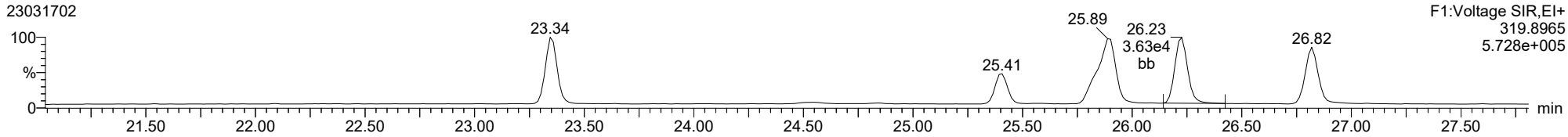

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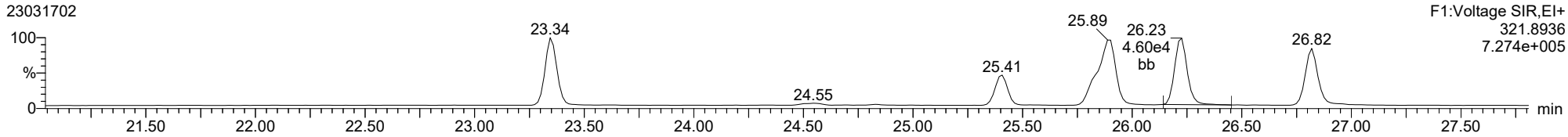

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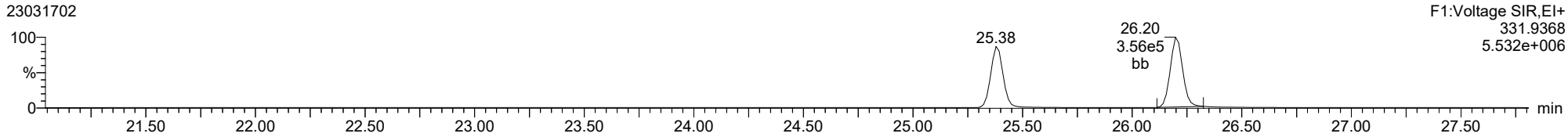

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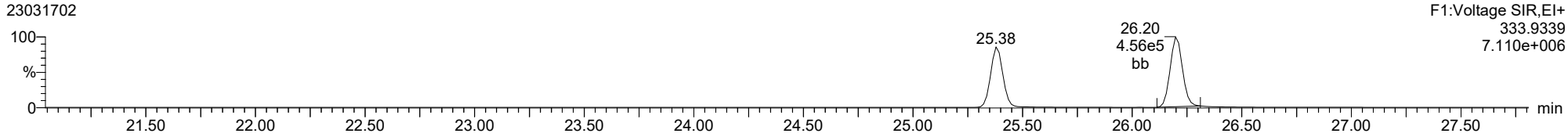

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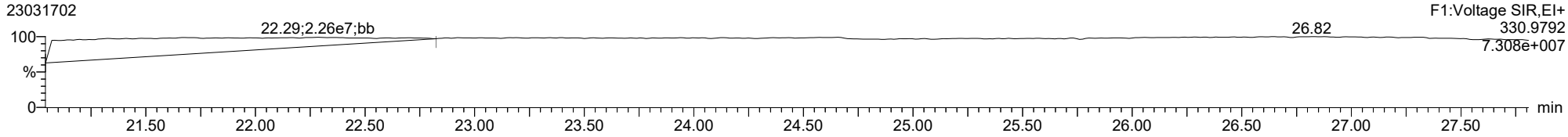

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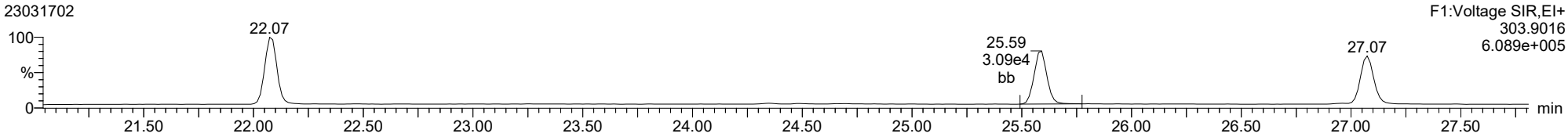

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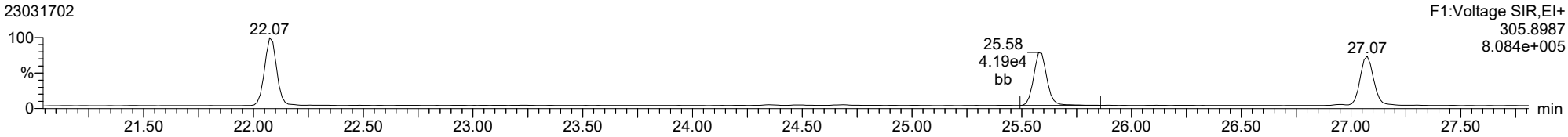

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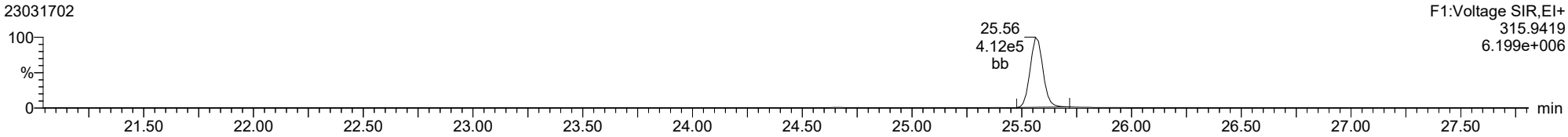

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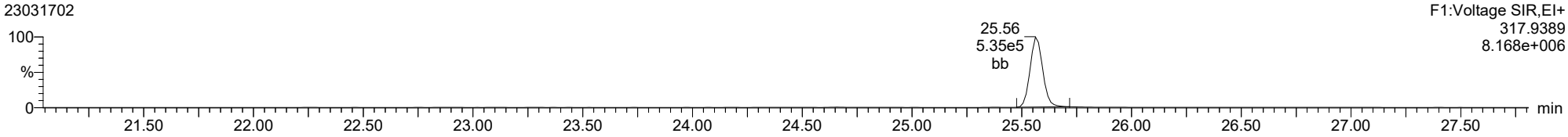

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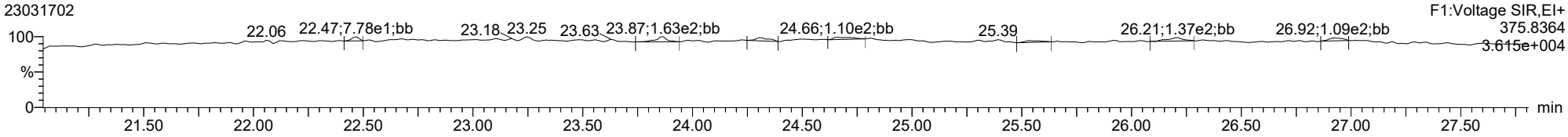

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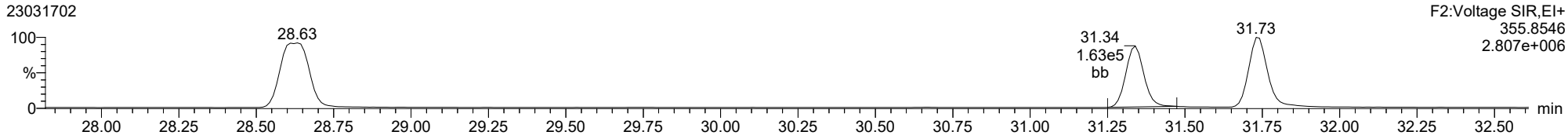

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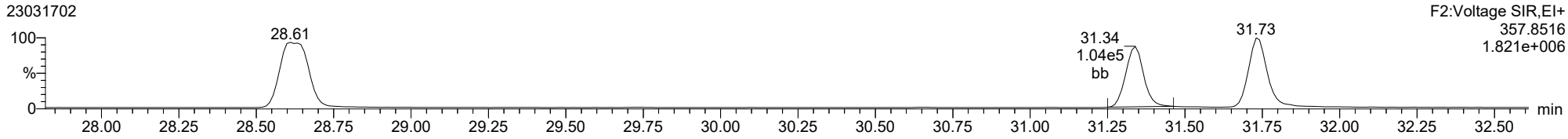

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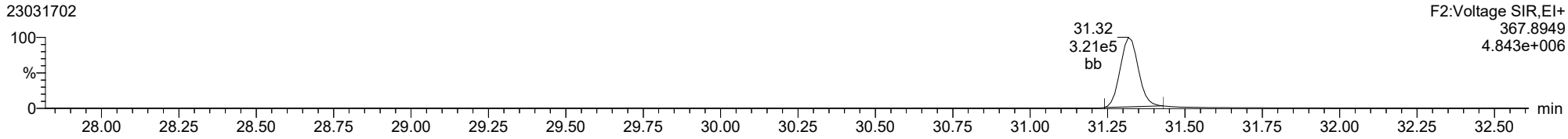

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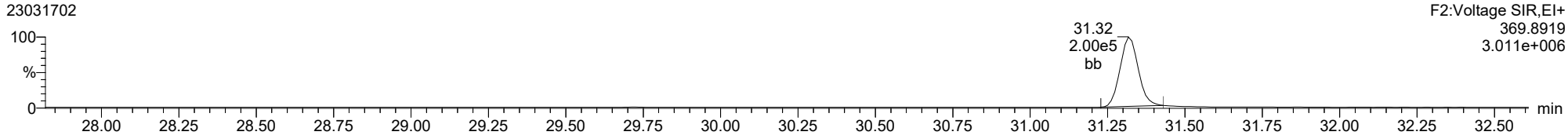

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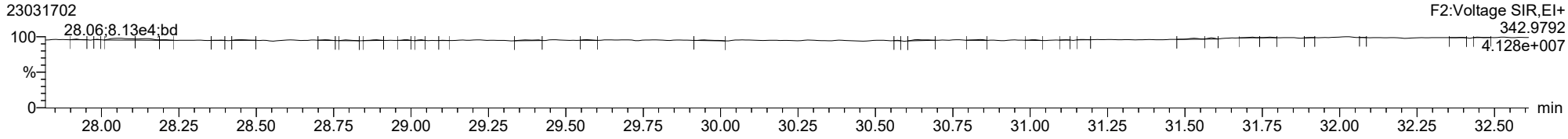

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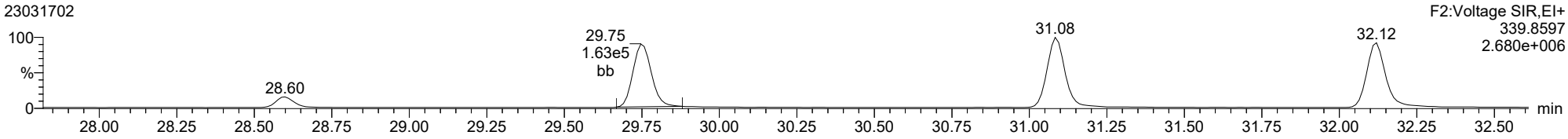

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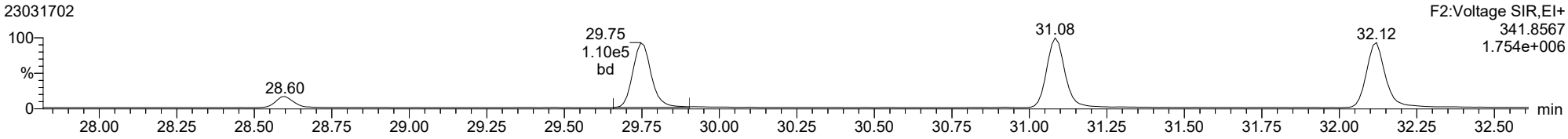

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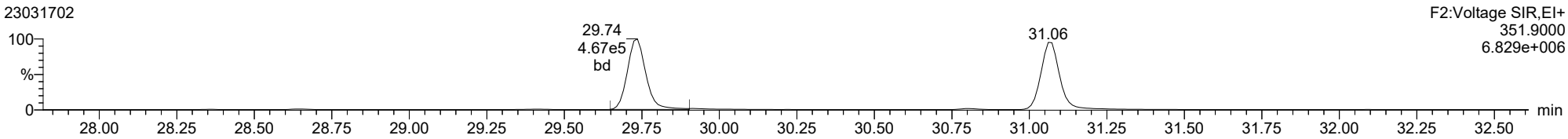

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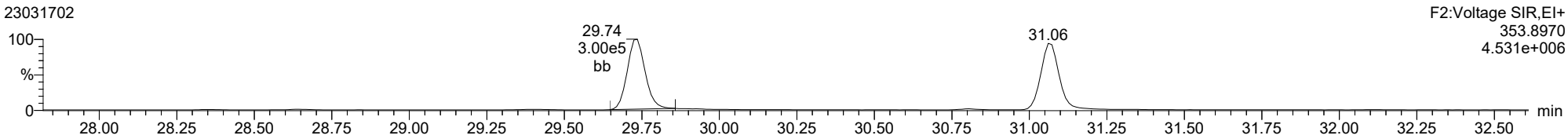

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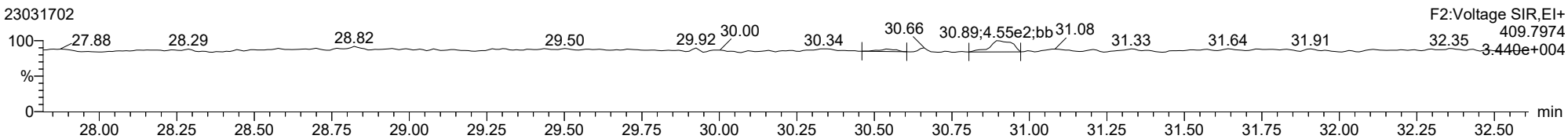

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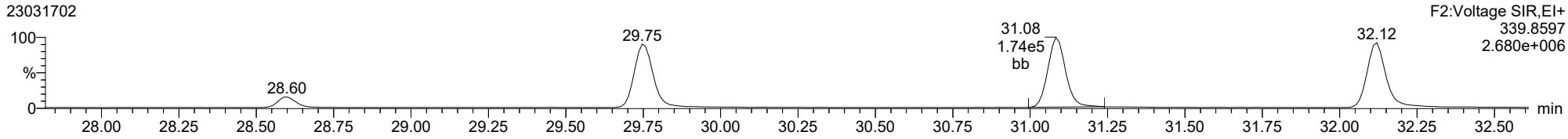

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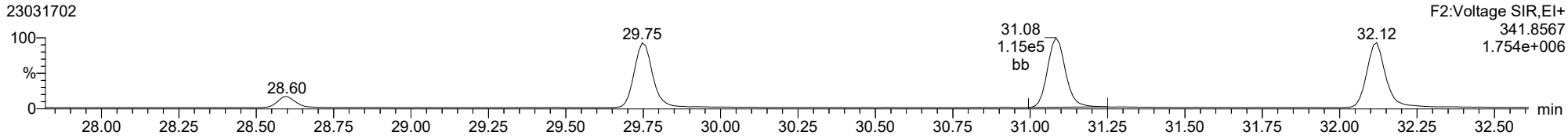

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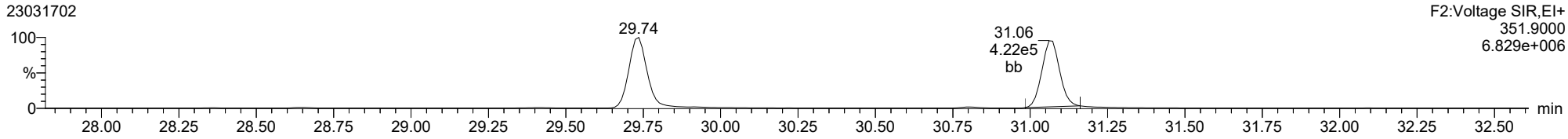

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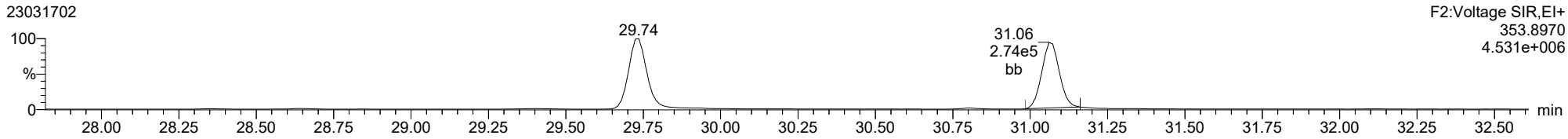

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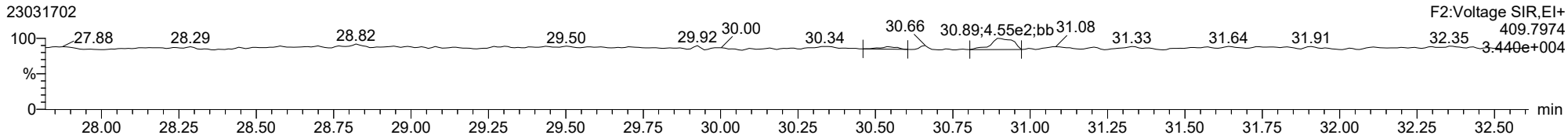

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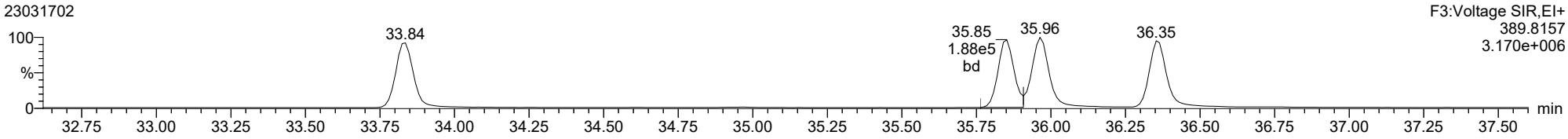
123478-HxCDD



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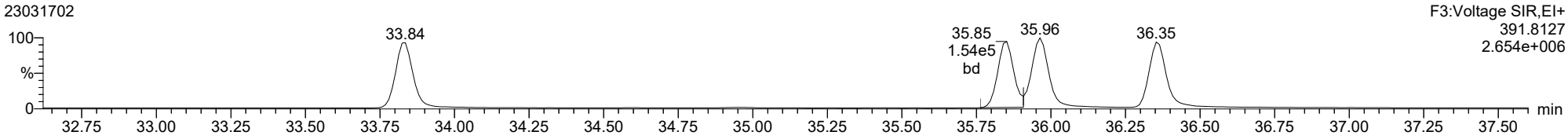

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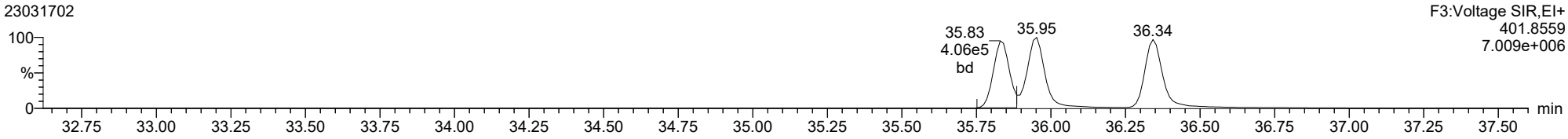

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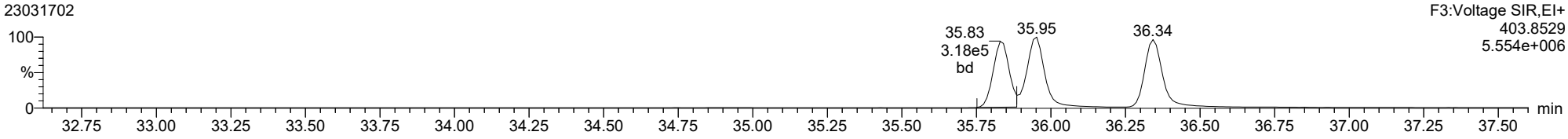

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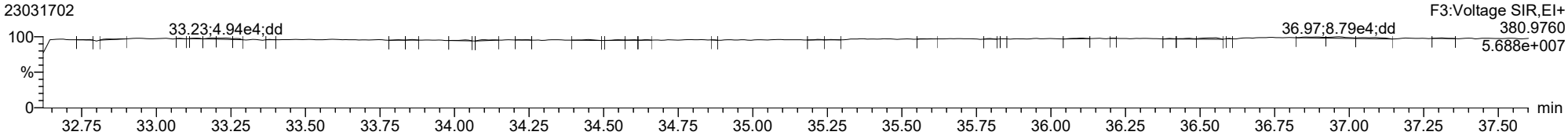

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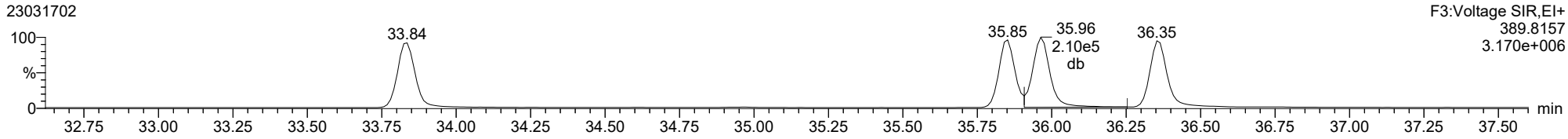

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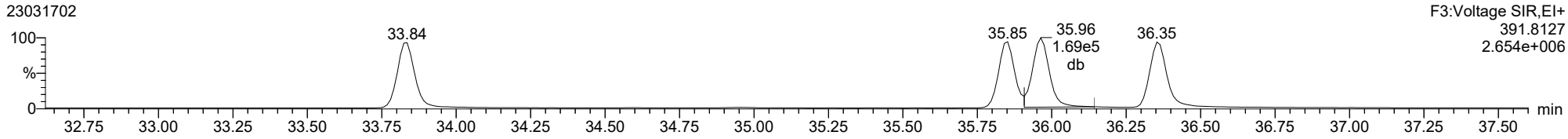

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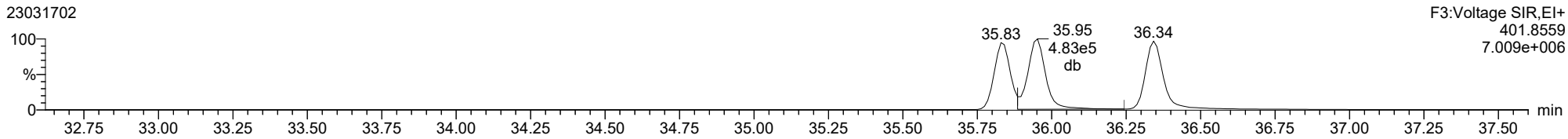

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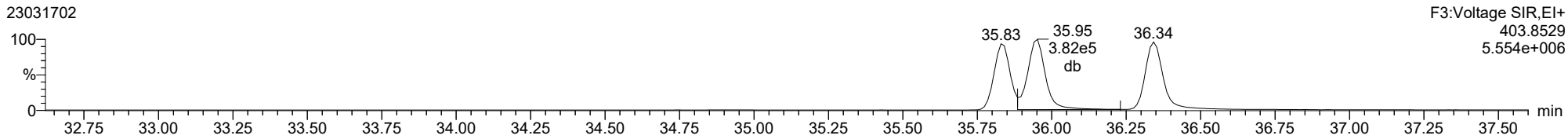

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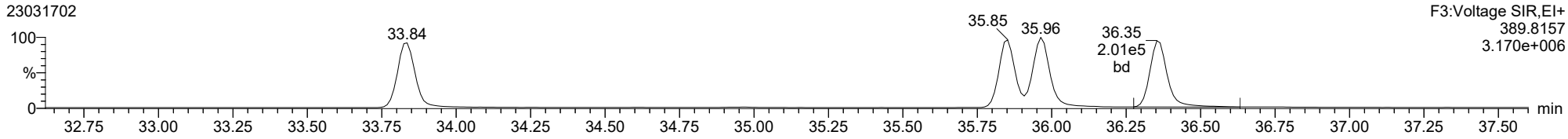

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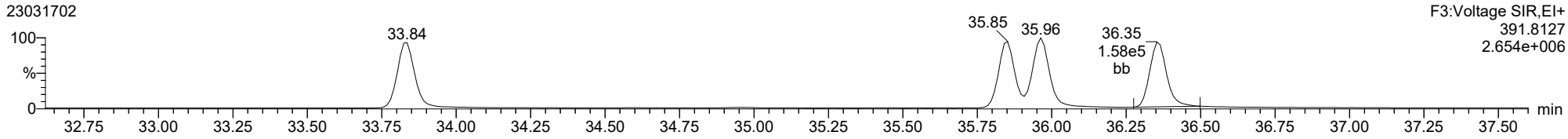

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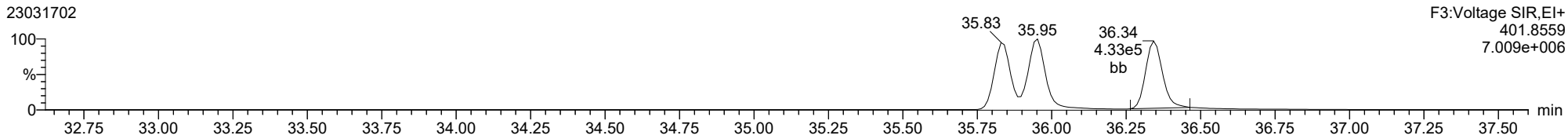

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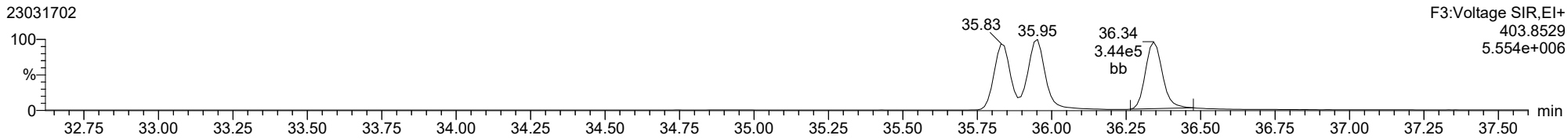

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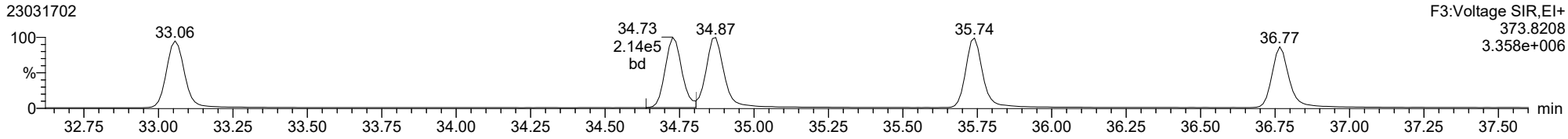

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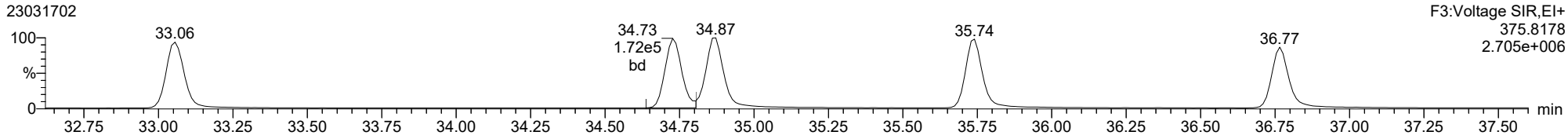

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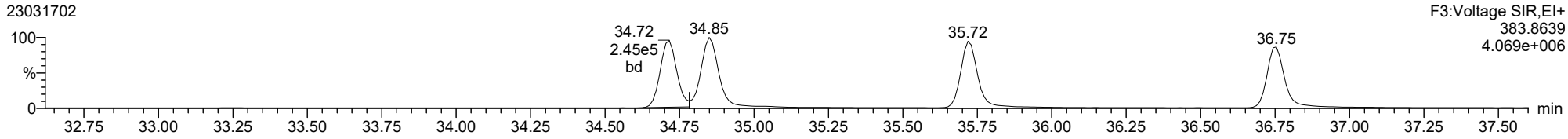

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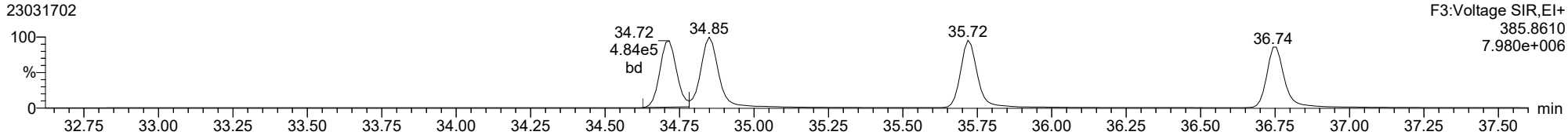

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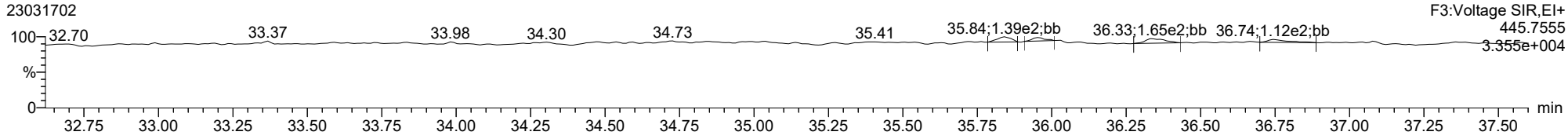

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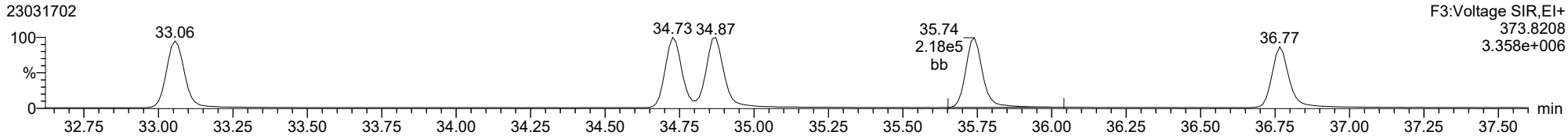

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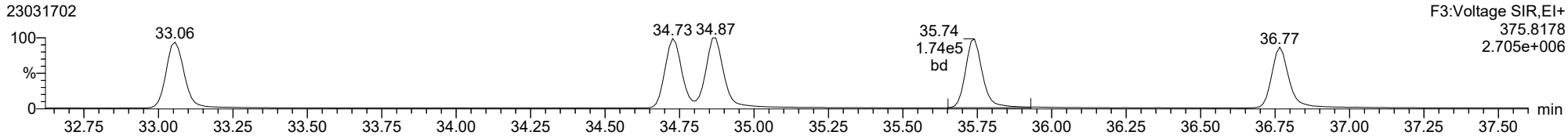

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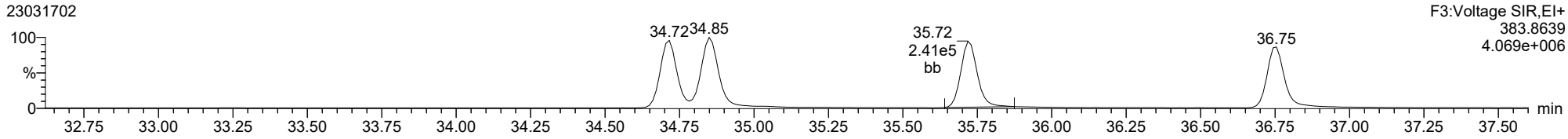

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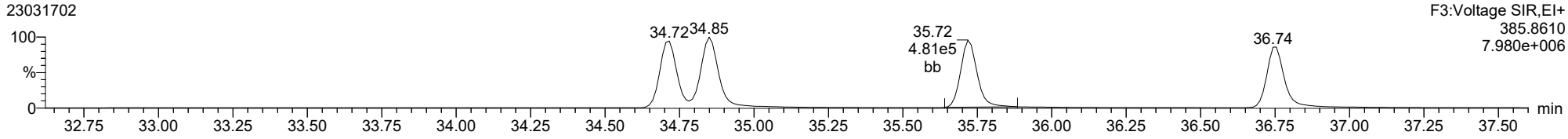

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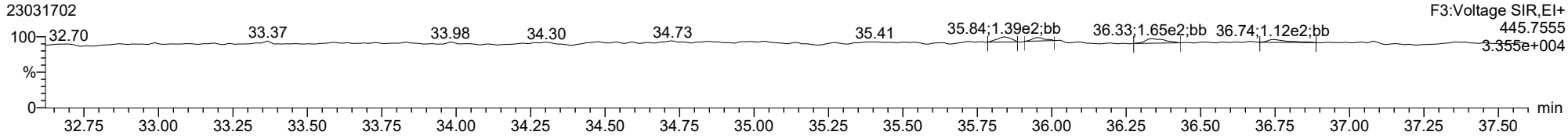

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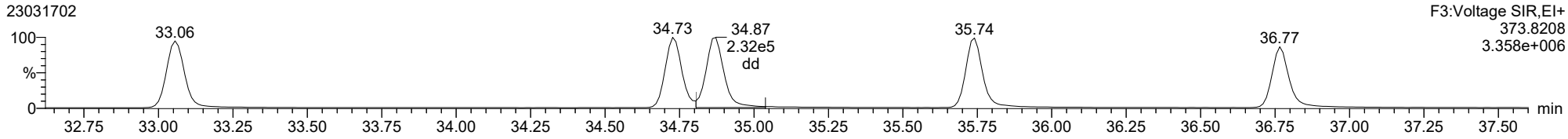

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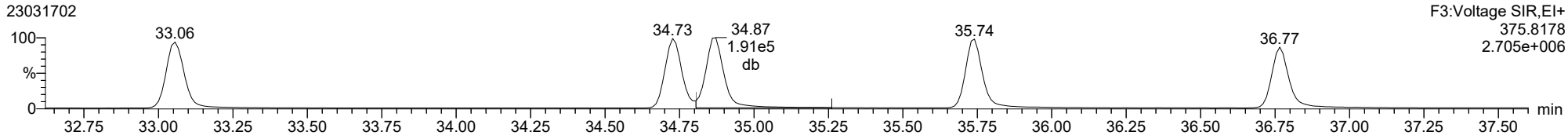

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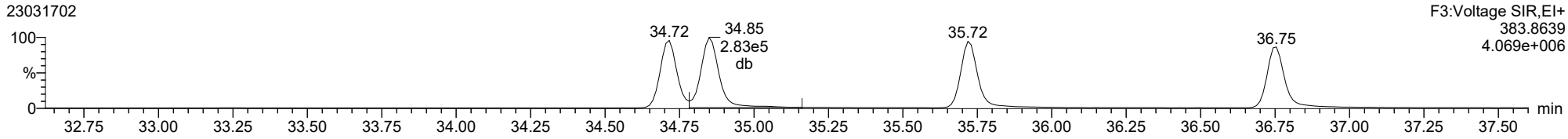

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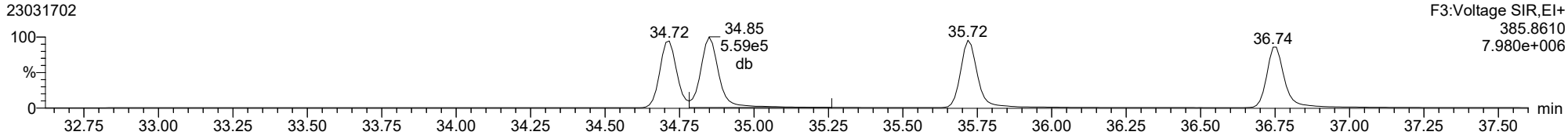

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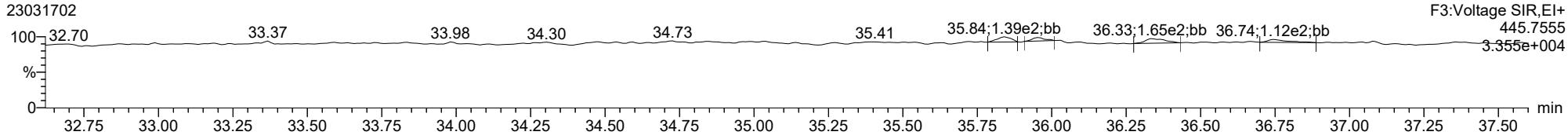

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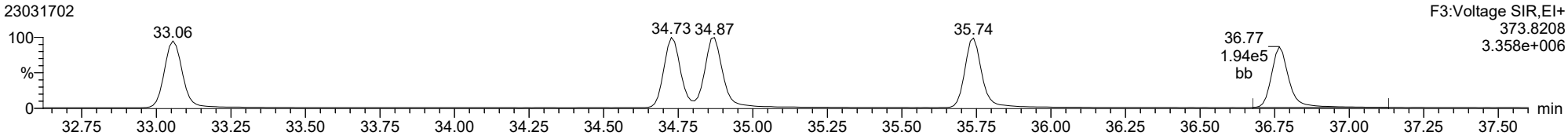

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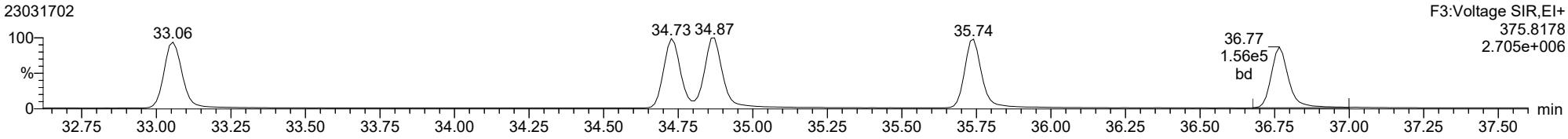

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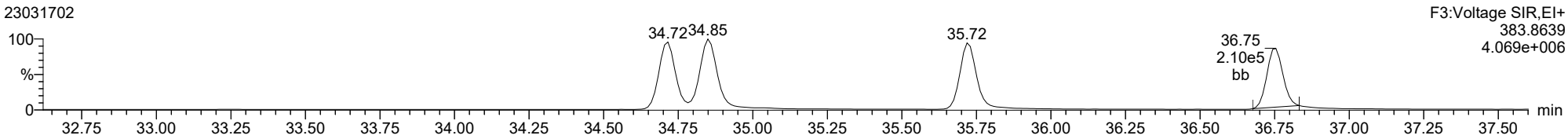

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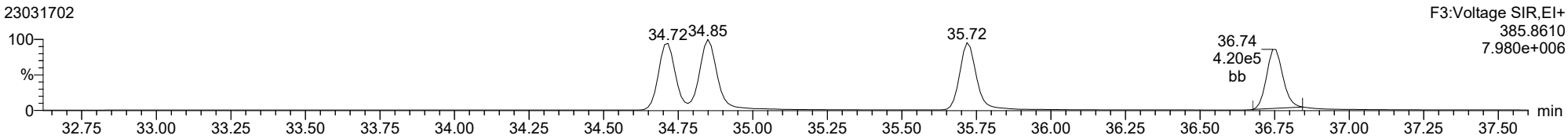

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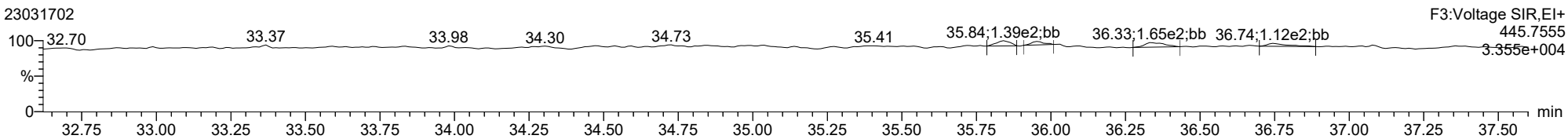

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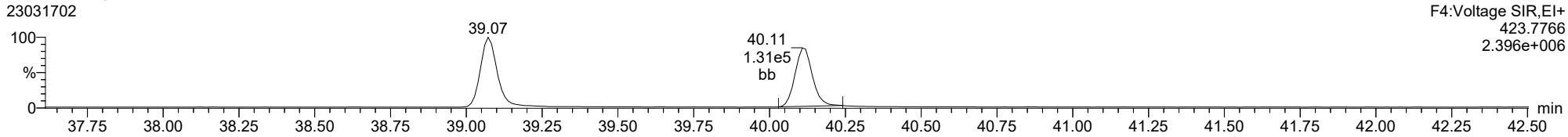

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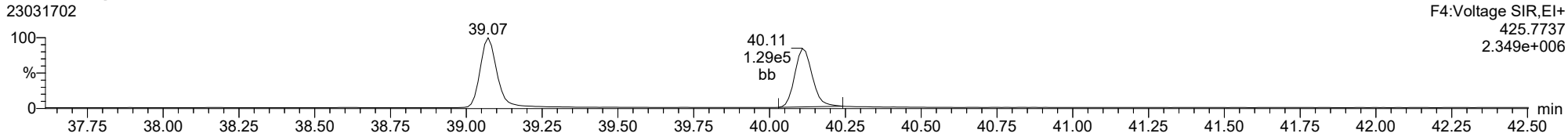

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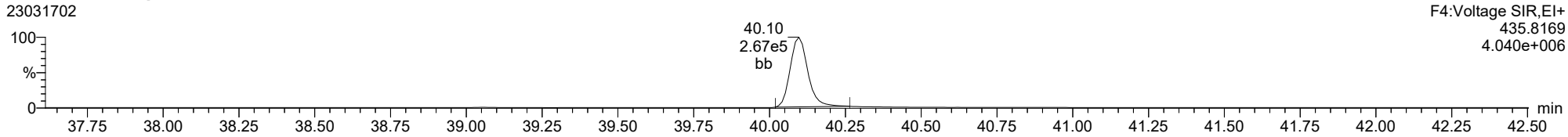

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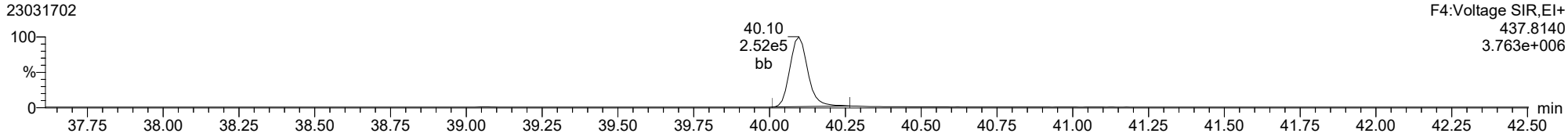

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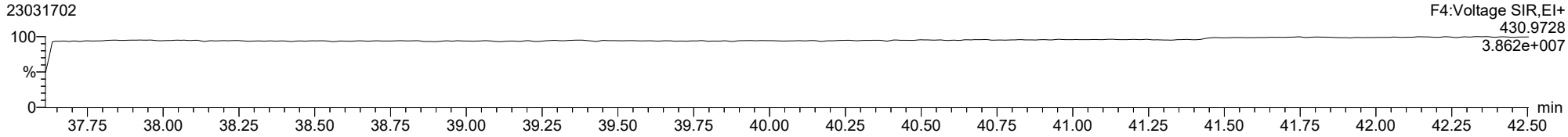

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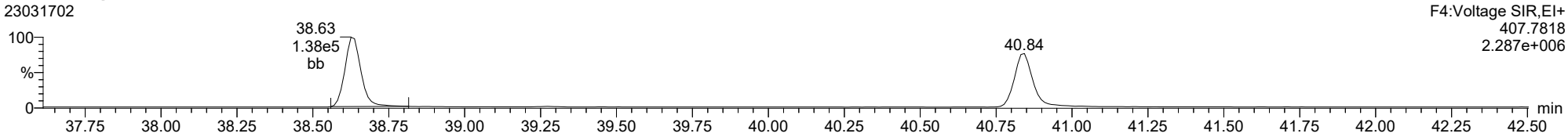

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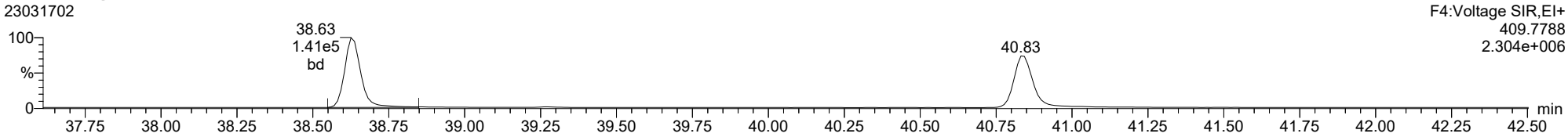

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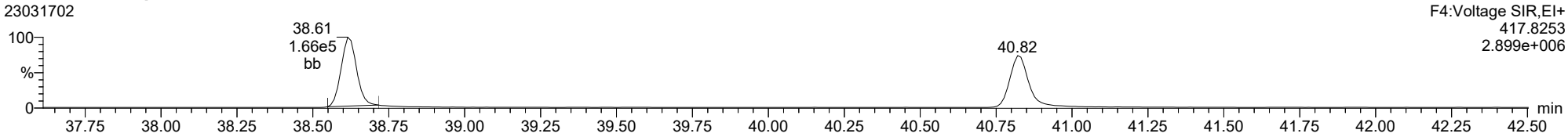

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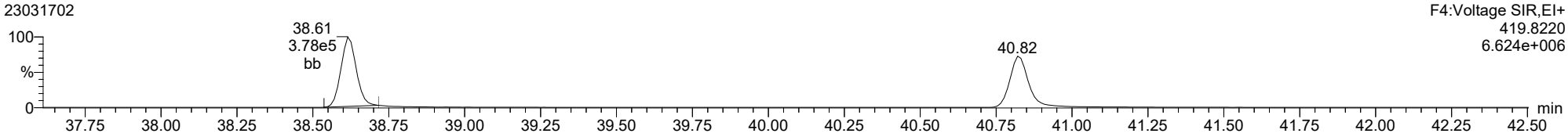

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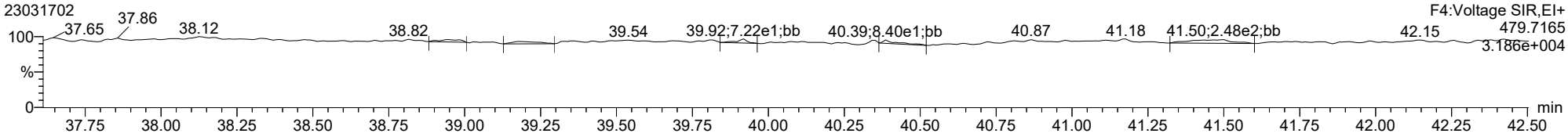

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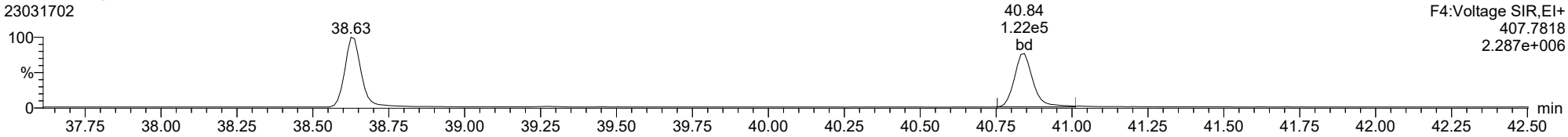

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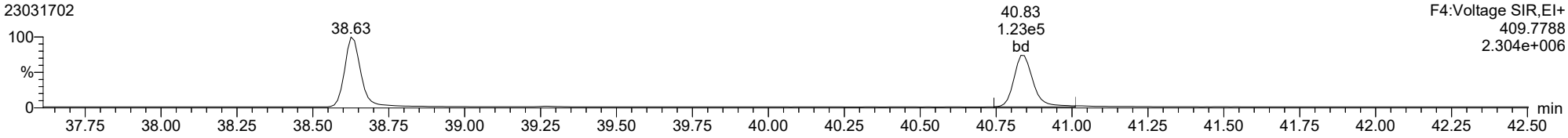

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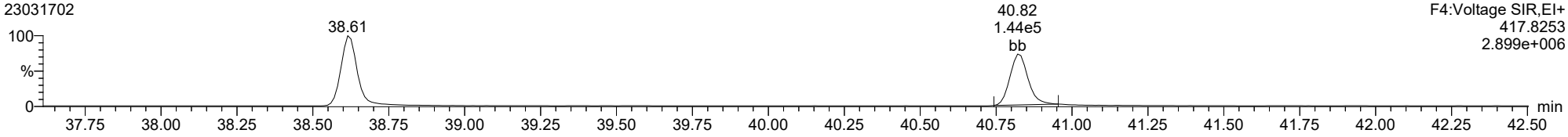

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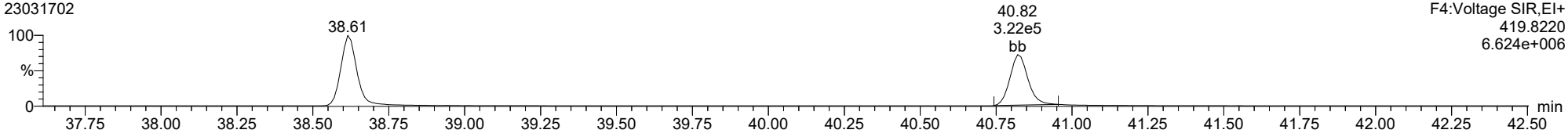

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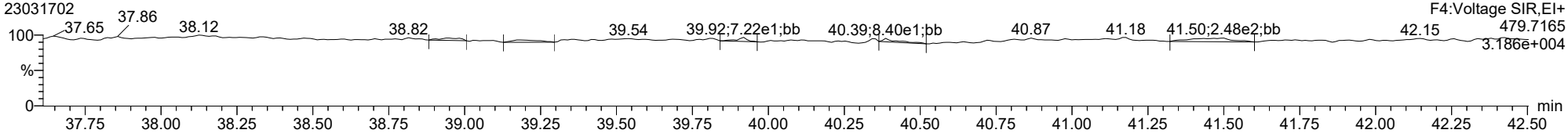

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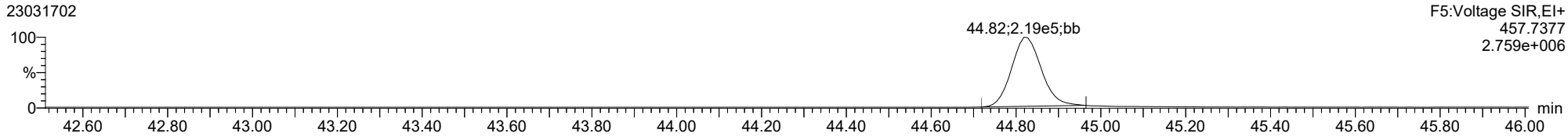

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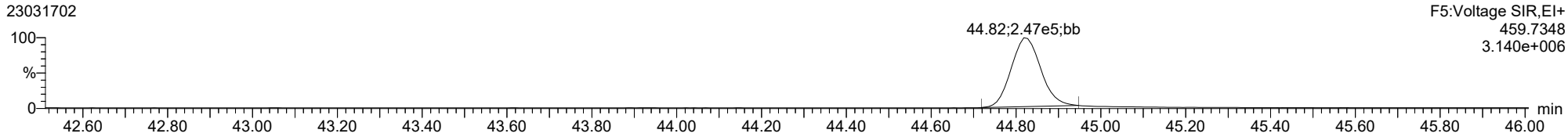
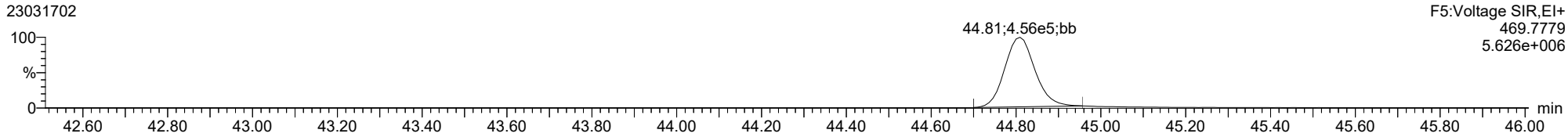


13C-OCDD



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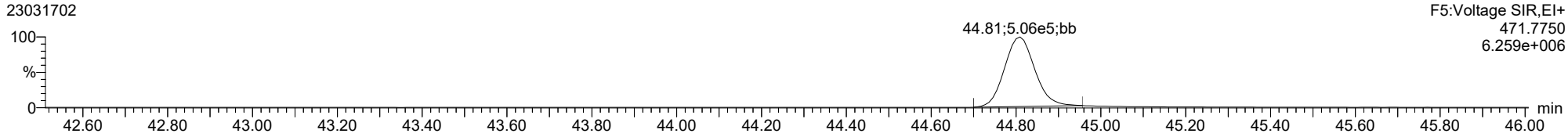
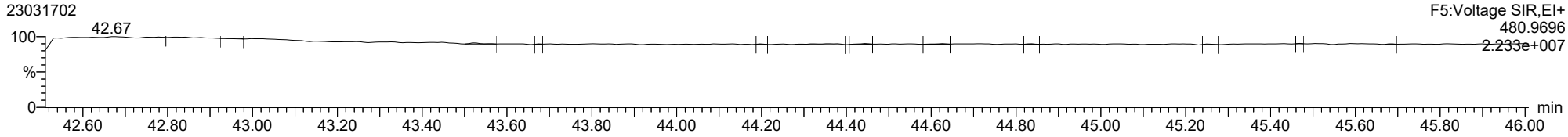


FUNCTION5 PFK



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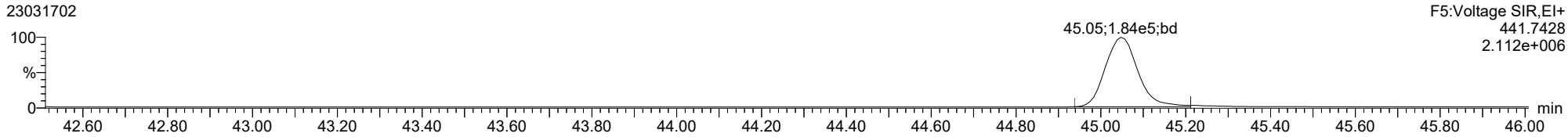
OCDF



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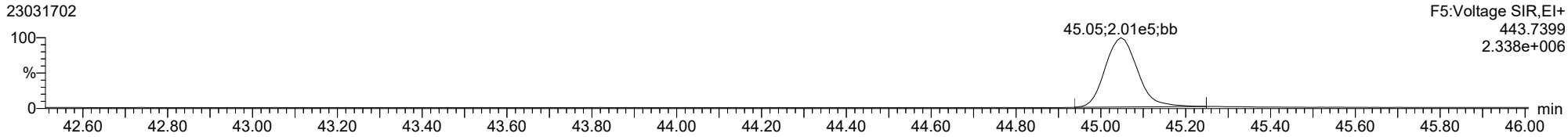

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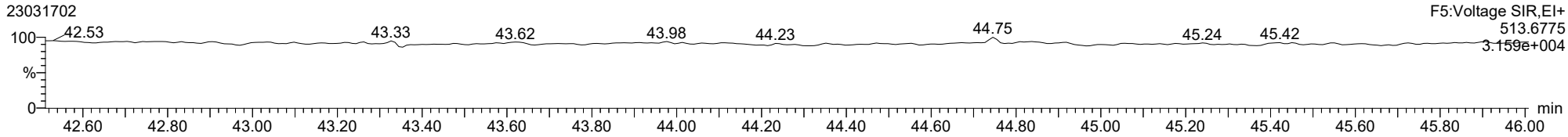

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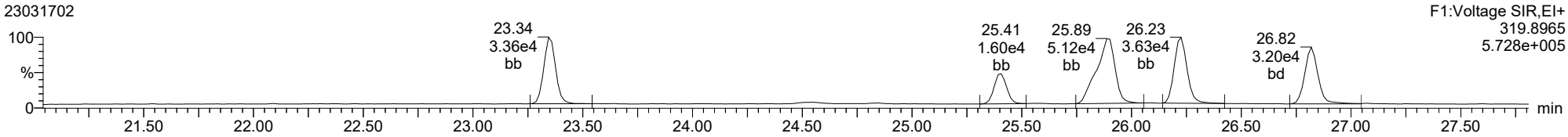
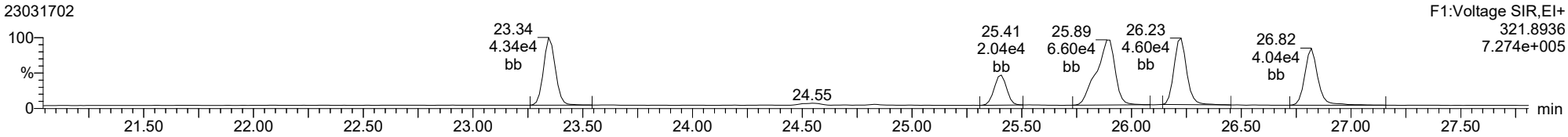
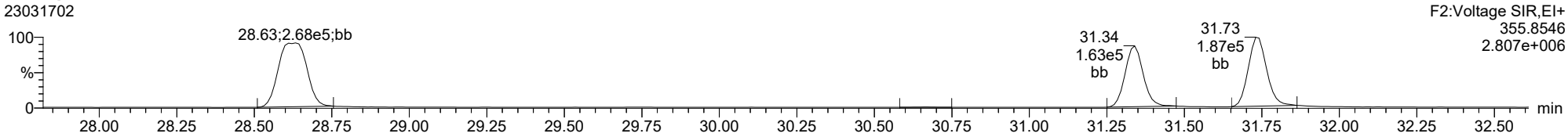
Total-tetradioxins



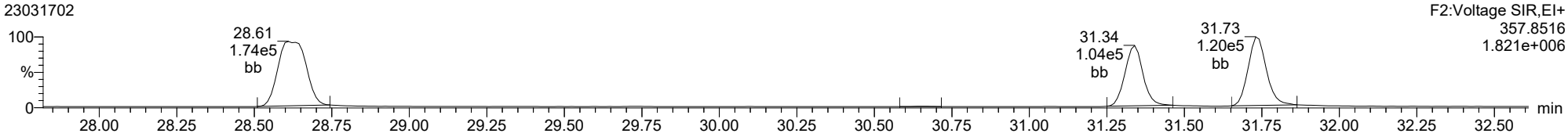
Total-tetradioxins



Total-pentadioxins

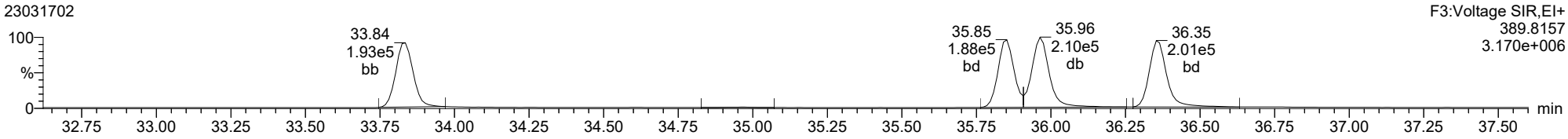


Total-pentadioxins



ID: CS3A1, Name: 23031702, Date: 17-Mar-2023, Time: 10:40:34, Conditions: AUTOSPEC01, User: pk

Total-hexadioxins



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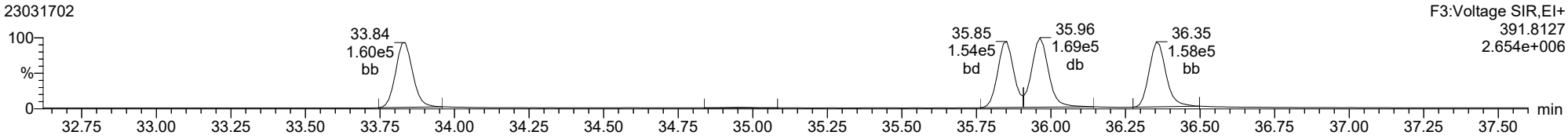

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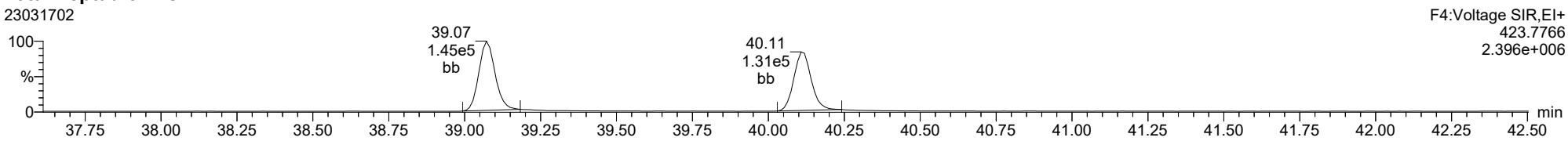

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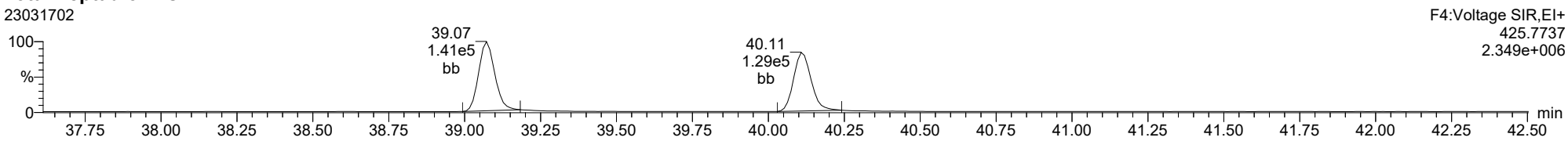

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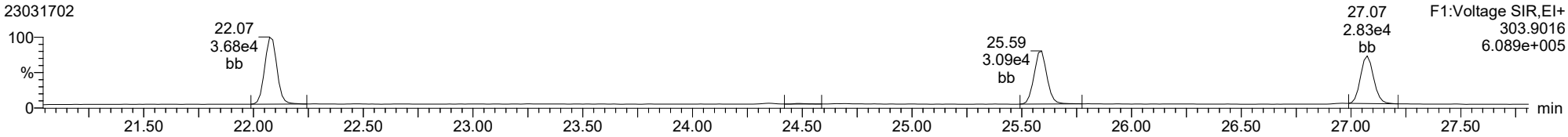
Total-tetrafurans



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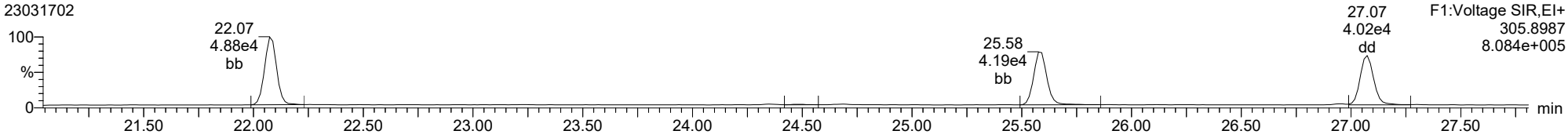

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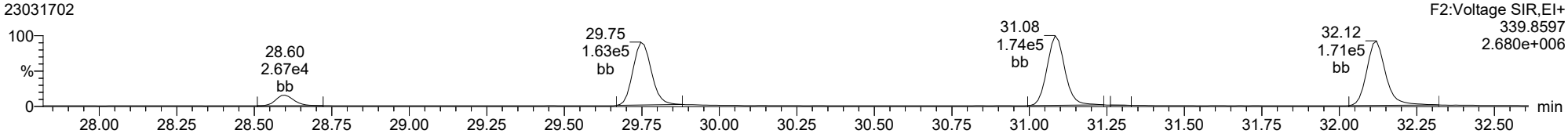

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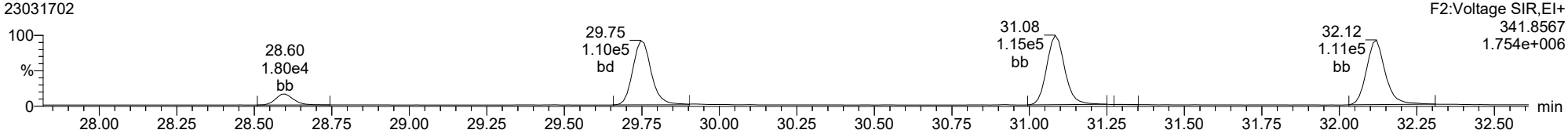

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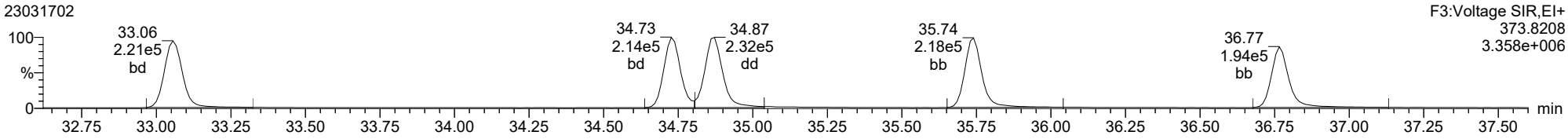

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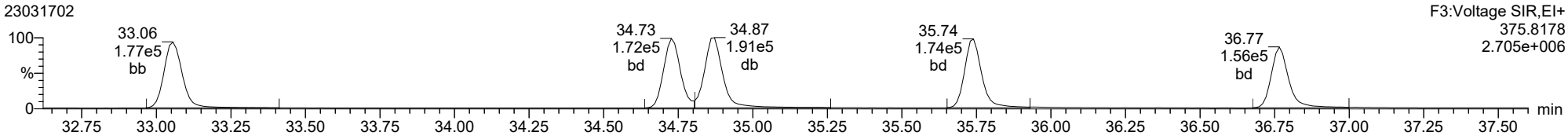

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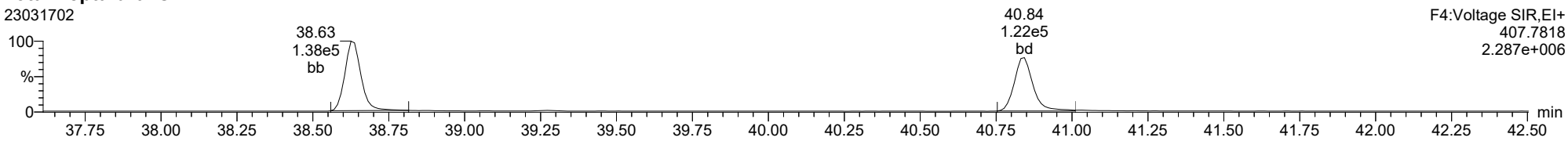

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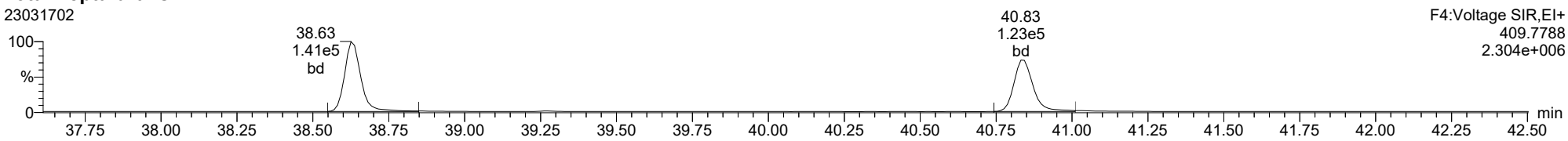

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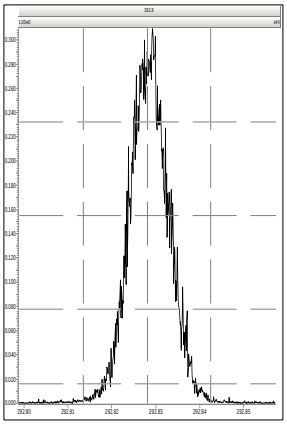
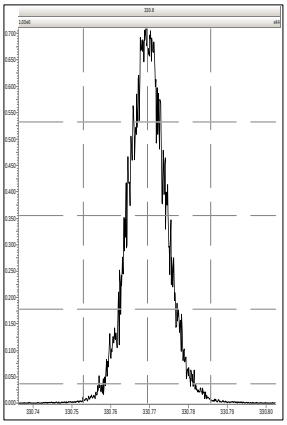
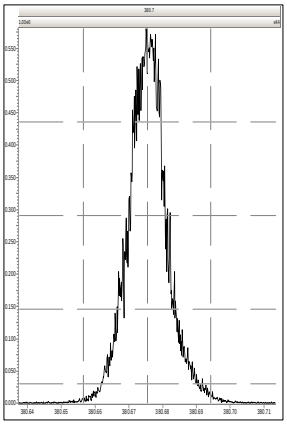


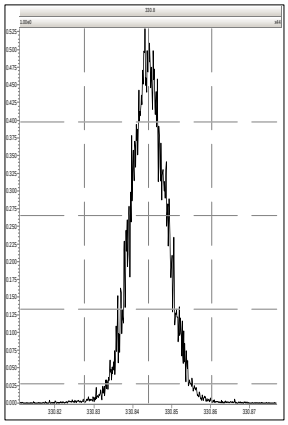
M 330.9792 R 14637



M 380.9760 R 13161



M 330.9792 R 15728



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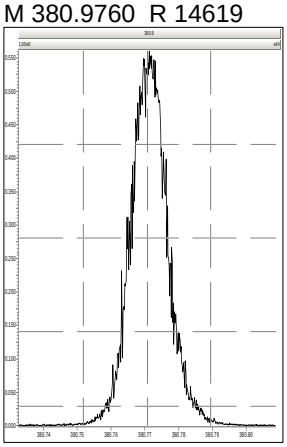
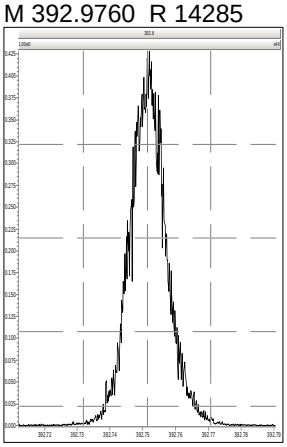
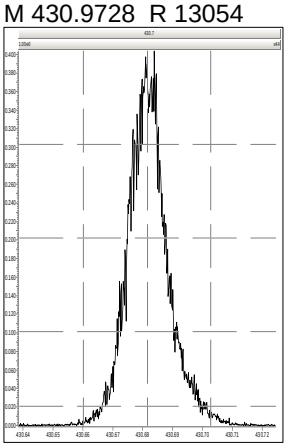


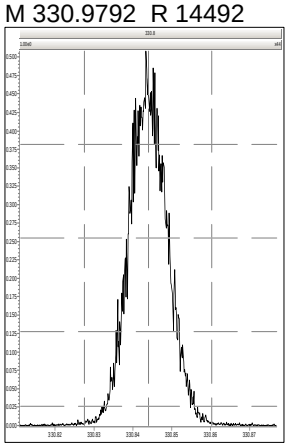
M 392.9760 R 14285



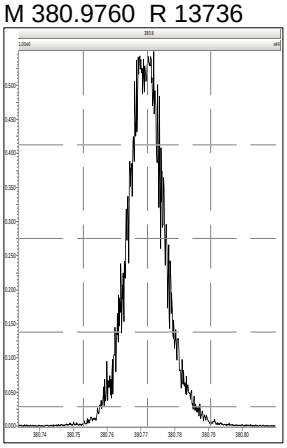
M 430.9728 R 13054



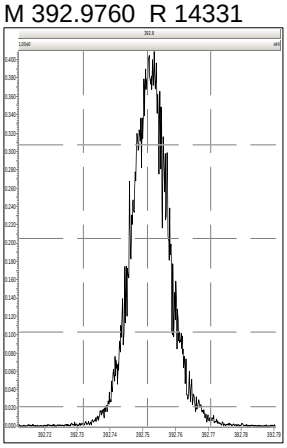
M 330.9792 R 14492



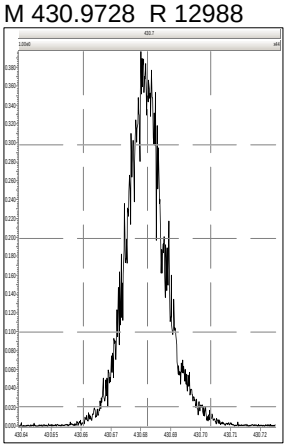
M 380.9760 R 13736



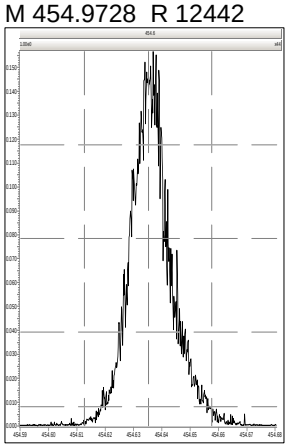
M 392.9760 R 14331



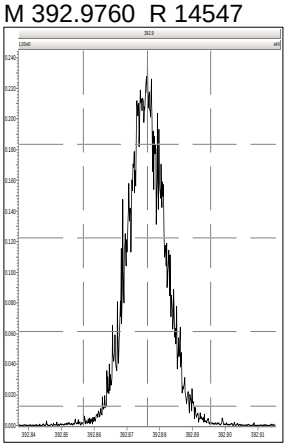
M 430.9728 R 12988



M 454.9728 R 12442



M 392.9760 R 14547



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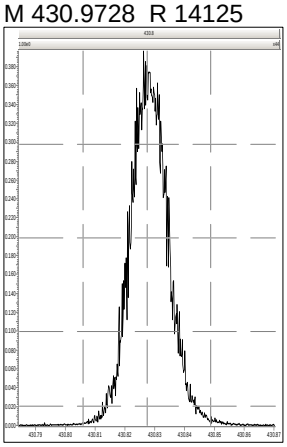
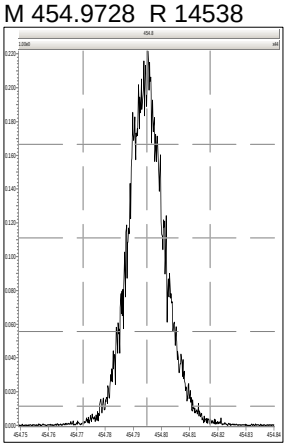
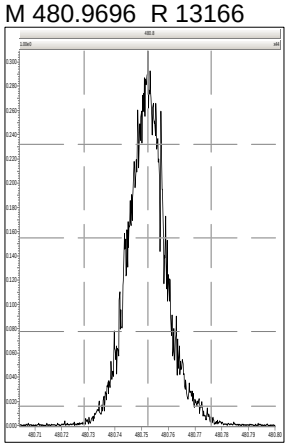


M 454.9728 R 14538



M 480.9696 R 13166



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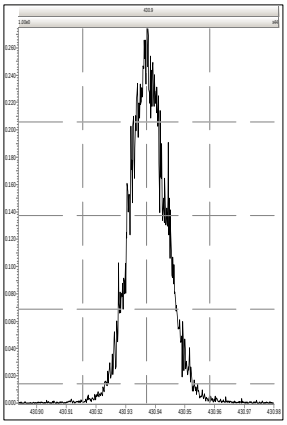
M 430.9728 R 14983



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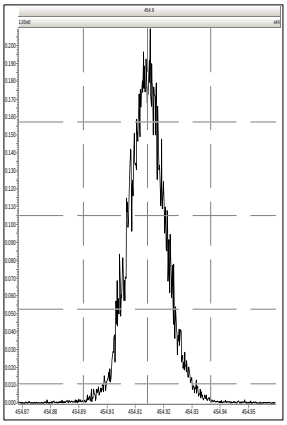
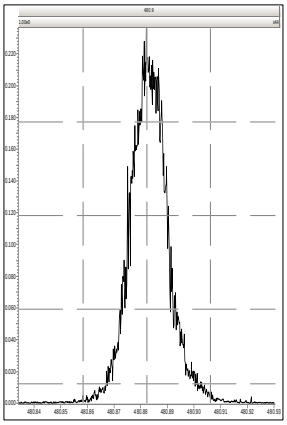
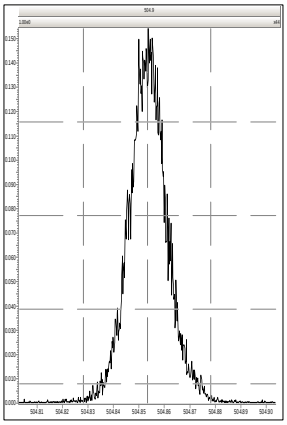


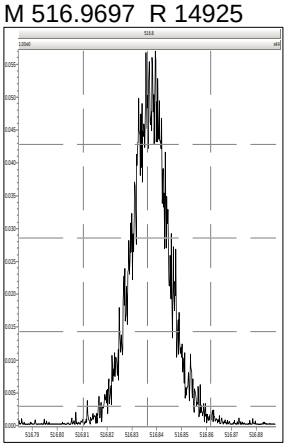
M 480.9696 R 14125

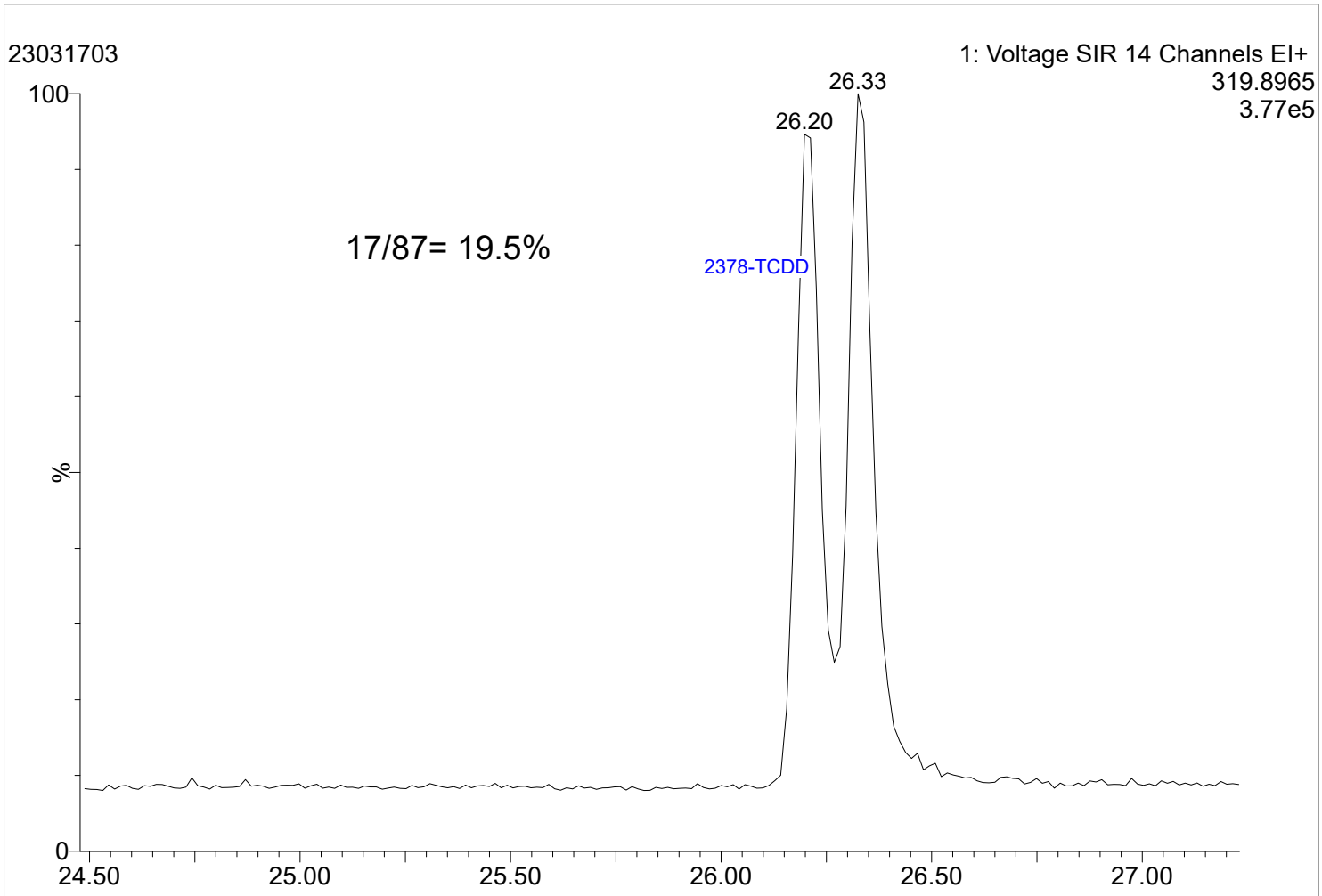


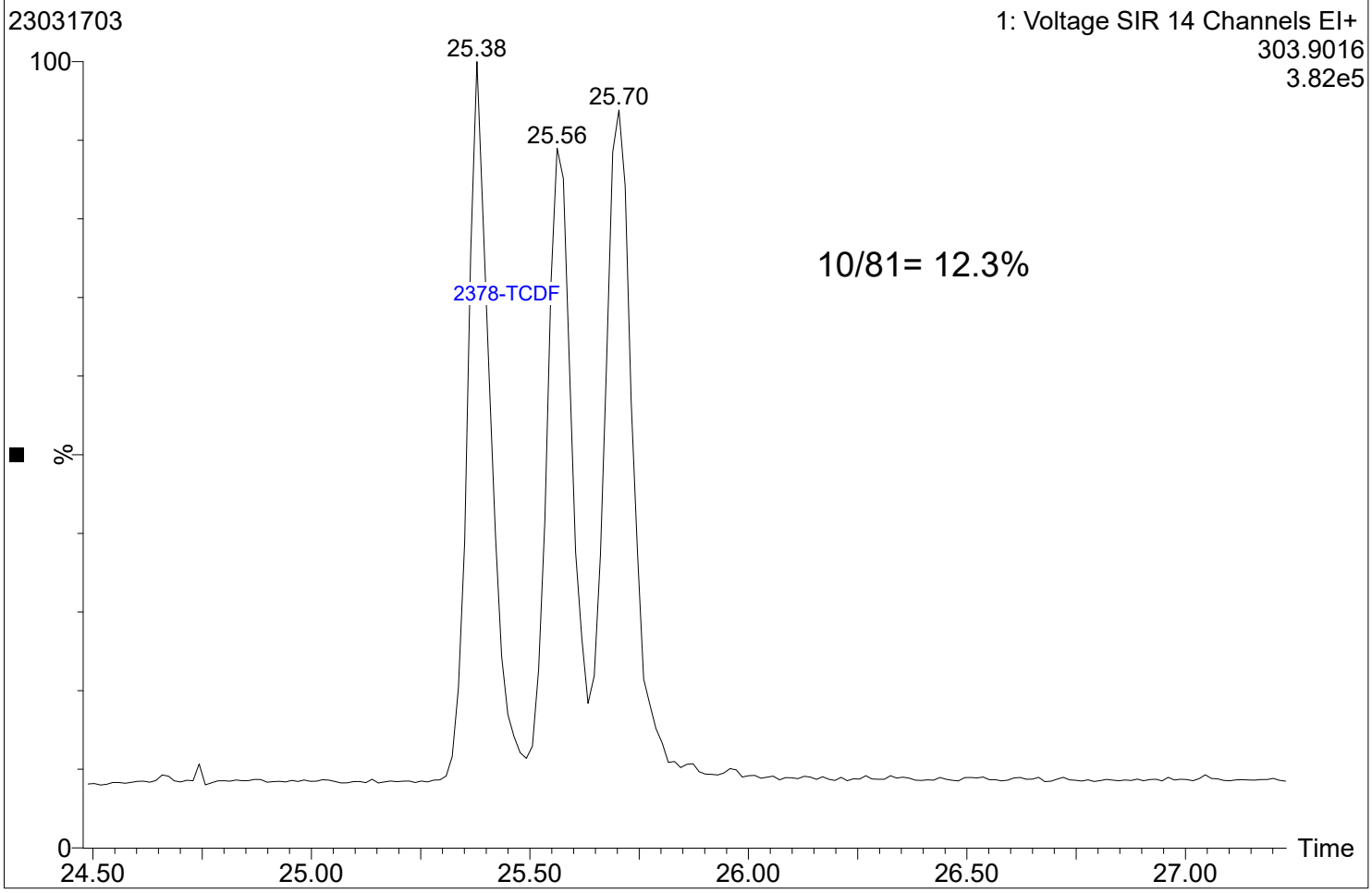
M 504.9696 R 14169



M 516.9697 R 14925




23031703
1: Voltage SIR 14 Channels EI+
319.8965
3.77e5
26.33
26.20
17/87= 19.5%
2378-TCDD
100
%
0
24.50
25.00
25.50
26.00
26.50
27.00


23031703
1: Voltage SIR 14 Channels EI+
303.9016
3.82e5
25.38
25.70
25.56
10/81= 12.3%
2378-TCDF
100
%
0
Time
24.50
25.00
25.50
26.00
26.50
27.00

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GC00015
Lab File ID:	23030311	Calibration Date:	03/03/2023
Sequence:	SLC0045	Injection Date:	03/03/23
Lab Sample ID:	SLC0045-CCV1	Injection Time:	17:25
Sequence Name:	CS3V4		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
2,3,7,8-TCDF	A	10.000	10.1	0.7015272	0.7103909		1.3	+/-16
2,3,7,8-TCDD	A	10.000	9.02	1.1486620	1.0358000		-9.8	+/-22
1,2,3,7,8-PeCDF	A	50.000	47.7	0.6792300	0.6482723		-4.6	+/-18
2,3,4,7,8-PeCDF	A	50.000	48.6	0.7861704	0.7638484		-2.8	+/-18
1,2,3,7,8-PeCDD	A	50.000	50.8	1.0218450	1.0391930		1.7	+/-22
1,2,3,4,7,8-HxCDF	A	50.000	47.3	1.1660380	1.1031690		-5.4	+/-10
1,2,3,6,7,8-HxCDF	A	50.000	51.4	1.0907410	1.1209930		2.8	+/-12
2,3,4,6,7,8-HxCDF	A	50.000	52.1	1.1396990	1.1864330		4.1	+/-12
1,2,3,7,8,9-HxCDF	A	50.000	48.9	1.1370930	1.1121660		-2.2	+/-10
1,2,3,4,7,8-HxCDD	A	50.000	50.7	0.9955689	1.0094320		1.4	+/-22
1,2,3,6,7,8-HxCDD	A	50.000	51.1	1.0009380	1.0234880		2.3	+/-22
1,2,3,7,8,9-HxCDD	A	50.000	51.7	0.9071139	0.9383686		3.4	+/-18
1,2,3,4,6,7,8-HpCDF	A	50.000	47.7	1.0029930	0.9566603		-4.6	+/-10
1,2,3,4,7,8,9-HpCDF	A	50.000	53.6	0.9531152	1.0217610		7.2	+/-14
1,2,3,4,6,7,8-HpCDD	A	50.000	52.7	1.0390130	1.0955650		5.4	+/-14
OCDF	A	100.00	95.0	0.7778078	0.7390842		-5.0	+/-37
OCDD	A	100.00	97.1	0.9199537	0.8937318		-2.9	+/-21
13C12-2,3,7,8-TCDF	A	100.00	89.4	1.6201960	1.4487738		-10.6	+/-29
13C12-2,3,7,8-TCDD	A	100.00	86.0	1.1524090	0.9914363		-14.0	+/-18
13C12-1,2,3,7,8-PeCDF	A	100.00	92.6	1.2404520	1.1488109		-7.4	+/-24
13C12-2,3,4,7,8-PeCDF	A	100.00	91.6	1.1177860	1.0240744		-8.4	+/-23
13C12-1,2,3,7,8-PeCDD	A	100.00	90.8	0.8288129	0.7523463		-9.2	+/-38
13C12-1,2,3,4,7,8-HxCDF	A	100.00	95.2	1.1683050	1.1119828		-4.8	+/-24
13C12-1,2,3,6,7,8-HxCDF	A	100.00	91.1	1.3864660	1.2630996		-8.9	+/-30
13C12-2,3,4,6,7,8-HxCDF	A	100.00	96.9	1.1292560	1.0940819		-3.1	+/-27
13C12-1,2,3,7,8,9-HxCDF	A	100.00	101	0.9317541	0.9426254		1.2	+/-26
13C12-1,2,3,4,7,8-HxCDD	A	100.00	97.6	0.9950393	0.9710534		-2.4	+/-15
13C12-1,2,3,6,7,8-HxCDD	A	100.00	98.4	1.1566890	1.1378328		-1.6	+/-15
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	102	0.8952017	0.9116661		1.8	+/-22
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	84.3	0.7697516	0.6486548		-15.7	+/-23
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	92.0	0.8401226	0.7731635		-8.0	+/-28
13C12-OCDD	A	200.00	170	0.7674714	0.6532994		-14.9	+/-52
37Cl4-2,3,7,8-TCDD	A	10.000	7.54	1.2878040	0.9705402		-24.6	

* Values outside of QC limits

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GC00015
Lab File ID:	23030310	Calibration Date:	03/03/2023
Sequence:	SLC0045	Injection Date:	03/03/23
Lab Sample ID:	SLC0045-SCV1	Injection Time:	16:36
Sequence Name:	ICVCW		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
2,3,7,8-TCDF	A	10.000	9.84	0.7015272	0.6901560		-1.6	
2,3,7,8-TCDD	A	10.000	9.81	1.1486620	1.1273700		-1.9	
1,2,3,7,8-PeCDF	A	50.000	51.4	0.6792300	0.6981249		2.8	
2,3,4,7,8-PeCDF	A	50.000	49.0	0.7861704	0.7701368		-2.0	
1,2,3,7,8-PeCDD	A	50.000	48.5	1.0218450	0.9921504		-2.9	
1,2,3,4,7,8-HxCDF	A	50.000	48.2	1.1660380	1.1251100		-3.5	
1,2,3,6,7,8-HxCDF	A	50.000	48.0	1.0907410	1.0469270		-4.0	
2,3,4,6,7,8-HxCDF	A	50.000	50.2	1.1396990	1.1448090		0.4	
1,2,3,7,8,9-HxCDF	A	50.000	49.1	1.1370930	1.1161010		-1.8	
1,2,3,4,7,8-HxCDD	A	50.000	50.8	0.9955689	1.0114830		1.6	
1,2,3,6,7,8-HxCDD	A	50.000	50.2	1.0009380	1.0044310		0.3	
1,2,3,7,8,9-HxCDD	A	50.000	51.6	0.9071139	8347.938		3.2	
1,2,3,4,6,7,8-HpCDF	A	50.000	51.8	1.0029930	1.0398620		3.7	
1,2,3,4,7,8,9-HpCDF	A	50.000	48.5	0.9531152	0.9237809		-3.1	
1,2,3,4,6,7,8-HpCDD	A	50.000	49.2	1.0390130	1.0223590		-1.6	
OCDF	A	100.00	104	0.7778078	0.8050743		3.5	
OCDD	A	100.00	99.4	0.9199537	0.9146365		-0.6	
13C12-2,3,7,8-TCDF	A	100.00	96.9	1.6201960	1.5703703		-3.1	
13C12-2,3,7,8-TCDD	A	100.00	96.6	1.1524090	1.1130294		-3.4	
13C12-1,2,3,7,8-PeCDF	A	100.00	73.2	1.2404520	0.9079224		-26.8	
13C12-2,3,4,7,8-PeCDF	A	100.00	75.9	1.1177860	0.8488817		-24.1	
13C12-1,2,3,7,8-PeCDD	A	100.00	76.6	0.8288129	0.6346243		-23.4	
13C12-1,2,3,4,7,8-HxCDF	A	100.00	93.0	1.1683050	1.0861993		-7.0	
13C12-1,2,3,6,7,8-HxCDF	A	100.00	98.0	1.3864660	1.3581552		-2.0	
13C12-2,3,4,6,7,8-HxCDF	A	100.00	93.4	1.1292560	1.0544008		-6.6	
13C12-1,2,3,7,8,9-HxCDF	A	100.00	97.9	0.9317541	0.9122440		-2.1	
13C12-1,2,3,4,7,8-HxCDD	A	100.00	95.9	0.9950393	0.9546162		-4.1	
13C12-1,2,3,6,7,8-HxCDD	A	100.00	97.7	1.1566890	1.1296183		-2.3	
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	102	0.8952017	0.9144345		2.1	
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	104	0.7697516	0.8001798		4.0	
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	102	0.8401226	0.8609226		2.5	
13C12-OCDD	A	200.00	162	0.7674714	0.6199758		-19.2	
37Cl4-2,3,7,8-TCDD	A	10.000	8.71	1.2878040	1.1221835		-12.9	

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GC00015
Lab File ID:	23031510	Calibration Date:	03/03/2023
Sequence:	SLC0176	Injection Date:	03/15/23
Lab Sample ID:	SLC0176-CCV1	Injection Time:	17:48
Sequence Name:	CS3Z5		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
2,3,7,8-TCDF	A	10.000	9.19	0.7015272	0.6449612		-8.1	+/-16	
2,3,7,8-TCDD	A	10.000	8.62	1.1486620	0.9904082		-13.8	+/-22	
1,2,3,7,8-PeCDF	A	50.000	46.8	0.6792300	0.6359218		-6.4	+/-18	
2,3,4,7,8-PeCDF	A	50.000	44.3	0.7861704	0.6964221		-11.4	+/-18	
1,2,3,7,8-PeCDD	A	50.000	46.8	1.0218450	0.9568295		-6.4	+/-22	
1,2,3,4,7,8-HxCDF	A	50.000	44.5	1.1660380	1.0380760		-11.0	+/-10	*
1,2,3,6,7,8-HxCDF	A	50.000	47.2	1.0907410	1.0286120		-5.7	+/-12	
2,3,4,6,7,8-HxCDF	A	50.000	46.7	1.1396990	1.0646360		-6.6	+/-12	
1,2,3,7,8,9-HxCDF	A	50.000	45.7	1.1370930	1.0384750		-8.7	+/-10	
1,2,3,4,7,8-HxCDD	A	50.000	45.7	0.9955689	0.9098876		-8.6	+/-22	
1,2,3,6,7,8-HxCDD	A	50.000	43.2	1.0009380	0.8641645		-13.7	+/-22	
1,2,3,7,8,9-HxCDD	A	50.000	46.3	0.9071139	0.8399319		-7.4	+/-18	
1,2,3,4,6,7,8-HpCDF	A	50.000	45.1	1.0029930	0.9046625		-9.8	+/-10	
1,2,3,4,7,8,9-HpCDF	A	50.000	47.7	0.9531152	0.9094624		-4.6	+/-14	
1,2,3,4,6,7,8-HpCDD	A	50.000	45.8	1.0390130	0.9507112		-8.5	+/-14	
OCDF	A	100.00	77.9	0.7778078	0.6058564		-22.1	+/-37	
OCDD	A	100.00	94.4	0.9199537	0.8682801		-5.6	+/-21	
13C12-2,3,7,8-TCDF	A	100.00	81.2	1.6201960	1.3150040		-18.8	+/-29	
13C12-2,3,7,8-TCDD	A	100.00	109	1.1524090	1.2608664		9.4	+/-18	
13C12-1,2,3,7,8-PeCDF	A	100.00	89.8	1.2404520	1.1144953		-10.2	+/-24	
13C12-2,3,4,7,8-PeCDF	A	100.00	91.7	1.1177860	1.0244712		-8.3	+/-23	
13C12-1,2,3,7,8-PeCDD	A	100.00	104	0.8288129	0.8582641		3.6	+/-38	
13C12-1,2,3,4,7,8-HxCDF	A	100.00	92.3	1.1683050	1.0787790		-7.7	+/-24	
13C12-1,2,3,6,7,8-HxCDF	A	100.00	82.6	1.3864660	1.1455117		-17.4	+/-30	
13C12-2,3,4,6,7,8-HxCDF	A	100.00	81.0	1.1292560	0.9150105		-19.0	+/-27	
13C12-1,2,3,7,8,9-HxCDF	A	100.00	81.1	0.9317541	0.7557350		-18.9	+/-26	
13C12-1,2,3,4,7,8-HxCDD	A	100.00	99.3	0.9950393	0.9879157		-0.7	+/-15	
13C12-1,2,3,6,7,8-HxCDD	A	100.00	89.4	1.1566890	1.0336339		-10.6	+/-15	
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	67.1	0.8952017	0.6010170		-32.9	+/-22	*
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	73.7	0.7697516	0.5674264		-26.3	+/-23	*
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	81.9	0.8401226	0.6882668		-18.1	+/-28	
13C12-OCDD	A	200.00	183	0.7674714	0.7035644		-8.3	+/-52	
37Cl4-2,3,7,8-TCDD	A	10.000	9.23	1.2878040	1.1889283		-7.7		

* Values outside of QC limits

* Values outside of QC limits

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230315D1.qld
Last Altered: Thursday, March 16, 2023 09:12:10 Pacific Daylight Time
Printed: Thursday, March 16, 2023 09:59:13 Pacific Daylight Time

Method: T:\Autospec\Methods\Dioxin230315.mdb 16 Mar 2023 08:38:23
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: CS3Z5, Name: 23031510, Date: 15-Mar-2023, Time: 17:48:31, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.548	1.000	1.979e4	2.712e4	0.702	0.730	0.770	701	853	3.10e5	4.12e5	442.7	483.7	NO	bb	bb	9.194
12378-PeCDF	29.725	1.001	1.171e5	7.894e4	0.679	1.483	1.550	942	813	1.85e6	1.23e6	1964.1	1511.5	NO	bb	bb	46.812
23478-PeCDF	31.062	1.001	1.184e5	7.896e4	0.786	1.499	1.550	942	813	1.86e6	1.22e6	1971.7	1505.9	NO	bb	bb	44.292
123478-HxCDF	34.705	1.001	2.097e5	1.702e5	1.166	1.233	1.240	1442	1122	3.41e6	2.75e6	2367.3	2452.8	NO	bd	bd	44.513
234678-HxCDF	35.718	1.001	1.827e5	1.478e5	1.140	1.236	1.240	1442	1122	2.94e6	2.38e6	2042.3	2122.8	NO	bb	bd	46.707
123678-HxCDF	34.838	1.000	2.211e5	1.786e5	1.091	1.238	1.240	1442	1122	3.45e6	2.83e6	2393.2	2521.5	NO	dd	db	47.152
123789-HxCDF	36.743	1.000	1.458e5	1.204e5	1.137	1.211	1.240	1442	1122	2.39e6	1.96e6	1656.1	1748.5	NO	bd	bd	45.664
1234678-HpCDF	38.604	1.000	9.033e4	9.412e4	1.003	0.960	1.050	900	854	1.56e6	1.60e6	1729.7	1872.8	NO	bb	bd	45.098
1234789-HpCDF	40.821	1.000	8.807e4	8.700e4	0.953	1.012	1.050	900	854	1.30e6	1.29e6	1449.3	1509.5	NO	bb	bb	47.710
OCDF	45.020	1.005	1.357e5	1.535e5	0.778	0.884	0.890	736	1056	1.69e6	1.88e6	2288.4	1785.3	NO	bb	bb	77.893
2378-TCDD	26.198	1.001	2.973e4	3.935e4	1.149	0.756	0.770	1171	720	4.67e5	6.03e5	398.6	838.0	NO	bb	bb	8.622
12378-PeCDD	31.306	1.000	1.355e5	9.163e4	1.022	1.479	1.550	1155	1038	2.14e6	1.46e6	1853.3	1405.8	NO	bb	bb	46.819
123478-HxCDD	35.830	1.001	1.678e5	1.372e5	0.996	1.223	1.240	1077	867	2.74e6	2.24e6	2540.5	2584.3	NO	bd	bd	45.697
123678-HxCDD	35.941	1.000	1.666e5	1.365e5	1.001	1.221	1.240	1077	867	2.87e6	2.31e6	2668.2	2667.0	NO	db	db	43.168
123789-HxCDD	36.331	1.011	1.574e5	1.306e5	0.907	1.206	1.240	1077	867	2.66e6	2.22e6	2472.9	2562.2	NO	bb	bb	46.297
1234678-HpCDD	40.086	1.000	1.123e5	1.097e5	1.039	1.023	1.050	1057	905	1.78e6	1.74e6	1688.2	1925.9	NO	bb	bb	45.751
OCDD	44.792	1.000	1.918e5	2.227e5	0.920	0.861	0.890	780	1028	2.48e6	2.85e6	3176.6	2774.7	NO	bb	bb	94.383
13C-2378-TCDF	25.534	1.007	3.124e5	4.150e5	1.620	0.753	0.770	1758	1133	4.89e6	6.59e6	2779.0	5815.4	NO	bb	bb	81.163
13C-12378-PeCDF	29.702	1.172	3.679e5	2.485e5	1.240	1.480	1.550	965	2263	5.78e6	3.94e6	5989.3	1739.0	NO	bb	bb	89.846
13C-23478-PeCDF	31.039	1.224	3.353e5	2.314e5	1.118	1.449	1.550	965	2263	5.43e6	3.68e6	5620.6	1628.2	NO	bb	bb	91.652
13C-123478-HxCDF	34.682	0.955	2.451e5	4.869e5	1.168	0.503	0.510	1041	1477	3.94e6	7.90e6	3784.8	5348.4	NO	bd	bd	92.337
13C-123678-HxCDF	34.827	0.959	2.610e5	5.163e5	1.386	0.506	0.510	1041	1477	4.14e6	8.18e6	3973.1	5538.5	NO	dd	dd	82.621
13C-234678-HxCDF	35.696	0.983	2.088e5	4.120e5	1.129	0.507	0.510	1041	1477	3.50e6	6.86e6	3364.7	4643.7	NO	bb	bb	81.028
13C-123789-HxCDF	36.732	1.011	1.728e5	3.400e5	0.932	0.508	0.510	1041	1477	2.86e6	5.64e6	2751.4	3821.1	NO	bb	bb	81.109
13C-1234678-HpCDF	38.593	1.063	1.238e5	2.840e5	0.895	0.436	0.440	925	1132	2.18e6	5.02e6	2354.9	4433.9	NO	bb	bb	67.138
13C-1234789-HpCDF	40.799	1.123	1.177e5	2.673e5	0.770	0.440	0.440	925	1132	1.79e6	4.11e6	1940.3	3630.9	NO	bb	bb	73.716
13C-1234-TCDD	25.351	0.000	2.407e5	3.125e5	1.000	0.770	0.770	1552	897	3.85e6	5.00e6	2479.5	5575.6	NO	bb	bb	100.000
13C-2378-TCDD	26.170	1.032	3.039e5	3.935e5	1.152	0.772	0.770	1552	897	4.67e6	6.13e6	3008.3	6840.5	NO	bb	bb	109.411
13C-12378-PeCDD	31.295	1.235	2.922e5	1.825e5	0.829	1.601	1.550	834	829	4.51e6	2.85e6	5406.3	3438.8	NO	bb	bb	103.553
13C-123478-HxCDD	35.808	0.986	3.744e5	2.959e5	0.995	1.265	1.240	1512	1015	6.36e6	5.02e6	4209.5	4952.1	NO	bd	bd	99.284
13C-123678-HxCDD	35.930	0.989	3.913e5	3.100e5	1.157	1.262	1.240	1512	1015	6.38e6	5.07e6	4220.0	4994.1	NO	db	db	89.361
13C-1234678-HpCDD	40.075	1.103	2.390e5	2.280e5	0.840	1.048	1.050	796	743	3.82e6	3.66e6	4801.3	4925.7	NO	bb	bb	81.925
13C-OCDD	44.773	1.233	4.481e5	5.066e5	0.767	0.885	0.890	935	896	5.68e6	6.49e6	6078.9	7247.3	NO	bb	bb	183.346
13C-123789-HxCDD	36.320	0.000	3.763e5	3.022e5	1.000	1.245	1.240	1512	1015	6.39e6	5.15e6	4230.2	5077.8	NO	bb	bb	100.000
37CL-2378-TCDD	26.198	1.033	6.576e4		1.288			1066		1.04e6		975.6			bb		9.232

Dataset: T:\Autospec\Processed Data Batch\230315D1.qld
Last Altered: Thursday, March 16, 2023 09:12:10 Pacific Daylight Time
Printed: Thursday, March 16, 2023 09:59:13 Pacific Daylight Time

ID: CS3Z5, Name: 23031510, Date: 15-Mar-2023, Time: 17:48:31, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.045	0.863	2.008e4	2.842e4	0.802	0.706	0.770	701	853	3.19e5	4.58e5	455.0	536.8	NO	bb	bb	8.320
1289-TCDF	27.045	1.059	1.921e4	2.611e4	0.678	0.736	0.770	701	853	2.97e5	3.96e5	424.5	464.2	NO	db	db	9.190
13468-PECDF	26.918	0.906	2.773e5	1.834e5	1.246	1.512	1.550	810	839	4.38e6	2.88e6	5412.4	3431.5	NO	bb	bb	59.957
12389-PECDF	32.086	1.080	1.181e5	8.079e4	0.496	1.462	1.550	942	813	1.77e6	1.21e6	1874.1	1489.7	NO	bb	bb	65.009
123468-HXCDF	33.022	0.952	2.009e5	1.592e5	1.169	1.262	1.240	1442	1122	3.01e6	2.41e6	2090.1	2150.2	NO	bb	bb	42.092
1368-TCDD	23.316	0.891	2.305e4	3.108e4	1.015	0.742	0.770	1171	720	3.60e5	4.86e5	307.6	675.4	NO	bb	bb	7.644
1289-TCDD	26.791	1.024	2.446e4	3.167e4	0.909	0.772	0.770	1171	720	3.72e5	4.90e5	317.6	680.7	NO	bd	bb	8.857
12479-PECDD	28.588	0.914	2.164e5	1.433e5	2.301	1.510	1.550	1155	1038	2.15e6	1.42e6	1857.9	1365.9	NO	bb	bb	32.930
12389-PECDD	31.708	1.013	1.582e5	1.067e5	1.184	1.482	1.550	1155	1038	2.48e6	1.65e6	2145.7	1593.6	NO	bb	bb	47.149
124679-HXCDD	33.802	0.944	1.872e5	1.529e5	1.115	1.224	1.240	1077	867	2.93e6	2.42e6	2721.0	2788.5	NO	bb	bb	45.484
1234679-HPCDD	39.050	0.974	1.142e5	1.125e5	1.137	1.015	1.050	1057	905	1.99e6	1.95e6	1880.7	2157.7	NO	bb	bb	42.686
Total-tetrafurans			5.962e4		0.727			701		9.35e5							26.932
Total-penta1			2.773e5					810		4.38e6							59.957
Total-pentafurans			3.714e5		0.654			942		5.75e6							163.906
Total-hexafurans			9.602e5		1.141			1442		1.52e7							226.127
Total-heptafurans			1.793e5		0.978			900		2.88e6							93.232
Total-Furans			1.984e6		0.922			701		3.08e7							648.046
Total-tetradioxins			1.332e5		1.024			1171		1.86e6							43.066
Total-pentadioxins			5.101e5		1.502			1155		6.77e6							126.898
Total-hexadioxins			6.794e5		1.005			1077		1.12e7							180.765
Total-heptadioxins			2.264e5		1.088			1057		3.77e6							88.436
Total-Dioxins			1.741e6		1.130			1171		2.61e7							533.548
Total-TEQ			3.724e6					1171		5.69e7							1181.594
FUNCTION1 PFK			1.175e5					507385		2.52e6							
FUNCTION2 PFK			2.802e5					225143		5.89e6							0.000
FUNCTION3 PFK			3.346e7					405815		3.32e7							0.000
FUNCTION4 PFK			3.611e5					318803		9.28e6							
FUNCTION5 PFK			5.312e5					203453		1.20e7							
FUNCTION1 HXCD...			8.615e2					632		1.32e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			7.138e2					680		1.05e4							0.000
FUNCTION3 OCDPE			8.617e2					657		1.23e4							0.000
FUNCTION4 NCDPE			2.097e2					548		3.07e3							0.000
FUNCTION5 DCDPE			9.336e1					585		1.54e3							0.000

Method: T:\Autospec\Methods\Dioxin230315.mdb 16 Mar 2023 08:38:23
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

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TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.05	1.921e4	2.611e4	0.678	0.74	0.77	424.5	YES	NO	db	db	9.190
2	Total-tetrafurans	26.93	5.407e2	6.669e2	0.727	0.81	0.77	12.1	YES	NO	bd	bd	0.228
3	2378-TCDF	25.55	1.979e4	2.712e4	0.702	0.73	0.77	442.7	YES	NO	bb	bb	9.194
4	1368-TCDF	22.05	2.008e4	2.842e4	0.802	0.71	0.77	455.0	YES	NO	bb	bb	8.320

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	26.92	2.773e5	1.834e5	1.246	1.51	1.55	5412.4	YES	NO	bb	bb	59.957

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDF	32.09	1.181e5	8.079e4	0.496	1.46	1.55	1874.1	YES	NO	bb	bb	65.009
2	23478-PeCDF	31.06	1.184e5	7.896e4	0.786	1.50	1.55	1971.7	YES	NO	bb	bb	44.292
3	Total-pentafurans	30.91	2.336e2	1.696e2	0.654	1.38	1.55	5.0	YES	NO	bb	bb	0.104
4	12378-PeCDF	29.72	1.171e5	7.894e4	0.679	1.48	1.55	1964.1	YES	NO	bb	bb	46.812
5	Total-pentafurans	28.58	1.763e4	1.212e4	0.654	1.45	1.55	284.2	YES	NO	bb	bb	7.689

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.74	1.458e5	1.204e5	1.137	1.21	1.24	1656.1	YES	NO	bd	bd	45.664
2	234678-HxCDF	35.72	1.827e5	1.478e5	1.140	1.24	1.24	2042.3	YES	NO	bb	bd	46.707
3	123678-HxCDF	34.84	2.211e5	1.786e5	1.091	1.24	1.24	2393.2	YES	NO	dd	db	47.152
4	123478-HxCDF	34.70	2.097e5	1.702e5	1.166	1.23	1.24	2367.3	YES	NO	bd	bd	44.513
5	123468-HXCDF	33.02	2.009e5	1.592e5	1.169	1.26	1.24	2090.1	YES	NO	bb	bb	42.092

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	40.82	8.807e4	8.700e4	0.953	1.01	1.05	1449.3	YES	NO	bb	bb	47.710
2	Total-heptafurans	39.25	8.749e2	7.667e2	0.978	1.14	1.05	18.1	YES	NO	bb	bb	0.423
3	1234678-HpCDF	38.60	9.033e4	9.412e4	1.003	0.96	1.05	1729.7	YES	NO	bb	bd	45.098

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.05	1.921e4	2.611e4	0.678	0.74	0.77	424.5	YES	NO	db	db	9.190
2	Total-tetrafurans	26.93	5.407e2	6.669e2	0.727	0.81	0.77	12.1	YES	NO	bd	bd	0.228
3	2378-TCDF	25.55	1.979e4	2.712e4	0.702	0.73	0.77	442.7	YES	NO	bb	bb	9.194
4	1368-TCDF	22.05	2.008e4	2.842e4	0.802	0.71	0.77	455.0	YES	NO	bb	bb	8.320
5	12389-PECDF	32.09	1.181e5	8.079e4	0.496	1.46	1.55	1874.1	YES	NO	bb	bb	65.009
6	23478-PeCDF	31.06	1.184e5	7.896e4	0.786	1.50	1.55	1971.7	YES	NO	bb	bb	44.292
7	Total-pentafurans	30.91	2.336e2	1.696e2	0.654	1.38	1.55	5.0	YES	NO	bb	bb	0.104
8	12378-PeCDF	29.72	1.171e5	7.894e4	0.679	1.48	1.55	1964.1	YES	NO	bb	bb	46.812
9	Total-pentafurans	28.58	1.763e4	1.212e4	0.654	1.45	1.55	284.2	YES	NO	bb	bb	7.689
10	123789-HxCDF	36.74	1.458e5	1.204e5	1.137	1.21	1.24	1656.1	YES	NO	bd	bd	45.664
11	234678-HxCDF	35.72	1.827e5	1.478e5	1.140	1.24	1.24	2042.3	YES	NO	bb	bd	46.707
12	123678-HxCDF	34.84	2.211e5	1.786e5	1.091	1.24	1.24	2393.2	YES	NO	dd	db	47.152
13	123478-HxCDF	34.70	2.097e5	1.702e5	1.166	1.23	1.24	2367.3	YES	NO	bd	bd	44.513
14	123468-HXCDF	33.02	2.009e5	1.592e5	1.169	1.26	1.24	2090.1	YES	NO	bb	bb	42.092
15	1234789-HpCDF	40.82	8.807e4	8.700e4	0.953	1.01	1.05	1449.3	YES	NO	bb	bb	47.710
16	Total-heptafurans	39.25	8.749e2	7.667e2	0.978	1.14	1.05	18.1	YES	NO	bb	bb	0.423
17	1234678-HpCDF	38.60	9.033e4	9.412e4	1.003	0.96	1.05	1729.7	YES	NO	bb	bd	45.098
18	OCDF	45.02	1.357e5	1.535e5	0.778	0.88	0.89	2288.4	YES	NO	bb	bb	77.893
19	13468-PECDF	26.92	2.773e5	1.834e5	1.246	1.51	1.55	5412.4	YES	NO	bb	bb	59.957

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDD	26.79	2.446e4	3.167e4	0.909	0.77	0.77	317.6	YES	NO	bd	bb	8.857
2	2378-TCDD	26.20	2.973e4	3.935e4	1.149	0.76	0.77	398.6	YES	NO	bb	bb	8.622
3	Total-tetradioxins	25.86	4.154e4	5.400e4	1.024	0.77	0.77	377.0	YES	NO	bb	bd	13.374
4	Total-tetradioxins	25.38	1.310e4	1.653e4	1.024	0.79	0.77	177.2	YES	NO	bd	bd	4.148
5	Total-tetradioxins	24.52	1.356e3	1.639e3	1.024	0.83	0.77	12.1	YES	NO	bb	bb	0.419
6	1368-TCDD	23.32	2.305e4	3.108e4	1.015	0.74	0.77	307.6	YES	NO	bb	bb	7.644

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	31.71	1.582e5	1.067e5	1.184	1.48	1.55	2145.7	YES	NO	bb	bb	47.149
2	12378-PeCDD	31.31	1.355e5	9.163e4	1.022	1.48	1.55	1853.3	YES	NO	bb	bb	46.819
3	12479-PECDD	28.59	2.164e5	1.433e5	2.301	1.51	1.55	1857.9	YES	NO	bb	bb	32.930

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HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	124679-HXCDD	33.80	1.872e5	1.529e5	1.115	1.22	1.24	2721.0	YES	NO	bb	bb	45.484
2	123789-HxCDD	36.33	1.574e5	1.306e5	0.907	1.21	1.24	2472.9	YES	NO	bb	bb	46.297
3	123678-HxCDD	35.94	1.666e5	1.365e5	1.001	1.22	1.24	2668.2	YES	NO	db	db	43.168
4	123478-HxCDD	35.83	1.678e5	1.372e5	0.996	1.22	1.24	2540.5	YES	NO	bd	bd	45.697
5	Total-hexadioxins	34.58	4.486e2	3.746e2	1.005	1.20	1.24	6.5	YES	NO	bd	bb	0.119

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.09	1.123e5	1.097e5	1.039	1.02	1.05	1688.2	YES	NO	bb	bb	45.751
2	1234679-HPCDD	39.05	1.142e5	1.125e5	1.137	1.01	1.05	1880.7	YES	NO	bb	bb	42.686

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDD	26.79	2.446e4	3.167e4	0.909	0.77	0.77	317.6	YES	NO	bd	bb	8.857
2	2378-TCDD	26.20	2.973e4	3.935e4	1.149	0.76	0.77	398.6	YES	NO	bb	bb	8.622
3	Total-tetradioxins	25.86	4.154e4	5.400e4	1.024	0.77	0.77	377.0	YES	NO	bb	bd	13.374
4	Total-tetradioxins	25.38	1.310e4	1.653e4	1.024	0.79	0.77	177.2	YES	NO	bd	bd	4.148
5	Total-tetradioxins	24.52	1.356e3	1.639e3	1.024	0.83	0.77	12.1	YES	NO	bb	bb	0.419
6	1368-TCDD	23.32	2.305e4	3.108e4	1.015	0.74	0.77	307.6	YES	NO	bb	bb	7.644
7	124679-HXCDD	33.80	1.872e5	1.529e5	1.115	1.22	1.24	2721.0	YES	NO	bb	bb	45.484
8	12389-PECDD	31.71	1.582e5	1.067e5	1.184	1.48	1.55	2145.7	YES	NO	bb	bb	47.149
9	12378-PeCDD	31.31	1.355e5	9.163e4	1.022	1.48	1.55	1853.3	YES	NO	bb	bb	46.819
10	12479-PECDD	28.59	2.164e5	1.433e5	2.301	1.51	1.55	1857.9	YES	NO	bb	bb	32.930
11	123789-HxCDD	36.33	1.574e5	1.306e5	0.907	1.21	1.24	2472.9	YES	NO	bb	bb	46.297
12	123678-HxCDD	35.94	1.666e5	1.365e5	1.001	1.22	1.24	2668.2	YES	NO	db	db	43.168
13	123478-HxCDD	35.83	1.678e5	1.372e5	0.996	1.22	1.24	2540.5	YES	NO	bd	bd	45.697
14	Total-hexadioxins	34.58	4.486e2	3.746e2	1.005	1.20	1.24	6.5	YES	NO	bd	bb	0.119
15	1234678-HpCDD	40.09	1.123e5	1.097e5	1.039	1.02	1.05	1688.2	YES	NO	bb	bb	45.751
16	1234679-HPCDD	39.05	1.142e5	1.125e5	1.137	1.01	1.05	1880.7	YES	NO	bb	bb	42.686
17	OCDD	44.79	1.918e5	2.227e5	0.920	0.86	0.89	3176.6	YES	NO	bb	bb	94.383

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.05	1.921e4	2.611e4	0.678	0.74	0.77	424.5	YES	NO	db	db	9.190
2	Total-tetrafurans	26.93	5.407e2	6.669e2	0.727	0.81	0.77	12.1	YES	NO	bd	bd	0.228
3	2378-TCDF	25.55	1.979e4	2.712e4	0.702	0.73	0.77	442.7	YES	NO	bb	bb	9.194
4	1368-TCDF	22.05	2.008e4	2.842e4	0.802	0.71	0.77	455.0	YES	NO	bb	bb	8.320
5	12389-PECDF	32.09	1.181e5	8.079e4	0.496	1.46	1.55	1874.1	YES	NO	bb	bb	65.009
6	23478-PeCDF	31.06	1.184e5	7.896e4	0.786	1.50	1.55	1971.7	YES	NO	bb	bb	44.292
7	Total-pentafurans	30.91	2.336e2	1.696e2	0.654	1.38	1.55	5.0	YES	NO	bb	bb	0.104
8	12378-PeCDF	29.72	1.171e5	7.894e4	0.679	1.48	1.55	1964.1	YES	NO	bb	bb	46.812
9	Total-pentafurans	28.58	1.763e4	1.212e4	0.654	1.45	1.55	284.2	YES	NO	bb	bb	7.689
10	123789-HxCDF	36.74	1.458e5	1.204e5	1.137	1.21	1.24	1656.1	YES	NO	bd	bd	45.664
11	234678-HxCDF	35.72	1.827e5	1.478e5	1.140	1.24	1.24	2042.3	YES	NO	bb	bd	46.707
12	123678-HxCDF	34.84	2.211e5	1.786e5	1.091	1.24	1.24	2393.2	YES	NO	dd	db	47.152
13	123478-HxCDF	34.70	2.097e5	1.702e5	1.166	1.23	1.24	2367.3	YES	NO	bd	bd	44.513
14	123468-HXCDF	33.02	2.009e5	1.592e5	1.169	1.26	1.24	2090.1	YES	NO	bb	bb	42.092
15	1234789-HpCDF	40.82	8.807e4	8.700e4	0.953	1.01	1.05	1449.3	YES	NO	bb	bb	47.710
16	Total-heptafurans	39.25	8.749e2	7.667e2	0.978	1.14	1.05	18.1	YES	NO	bb	bb	0.423
17	1234678-HpCDF	38.60	9.033e4	9.412e4	1.003	0.96	1.05	1729.7	YES	NO	bb	bd	45.098
18	OCDF	45.02	1.357e5	1.535e5	0.778	0.88	0.89	2288.4	YES	NO	bb	bb	77.893
19	13468-PECDF	26.92	2.773e5	1.834e5	1.246	1.51	1.55	5412.4	YES	NO	bb	bb	59.957
20	1289-TCDD	26.79	2.446e4	3.167e4	0.909	0.77	0.77	317.6	YES	NO	bd	bb	8.857
21	2378-TCDD	26.20	2.973e4	3.935e4	1.149	0.76	0.77	398.6	YES	NO	bb	bb	8.622
22	Total-tetradioxins	25.86	4.154e4	5.400e4	1.024	0.77	0.77	377.0	YES	NO	bb	bd	13.374
23	Total-tetradioxins	25.38	1.310e4	1.653e4	1.024	0.79	0.77	177.2	YES	NO	bd	bd	4.148
24	Total-tetradioxins	24.52	1.356e3	1.639e3	1.024	0.83	0.77	12.1	YES	NO	bb	bb	0.419
25	1368-TCDD	23.32	2.305e4	3.108e4	1.015	0.74	0.77	307.6	YES	NO	bb	bb	7.644
26	124679-HXCDD	33.80	1.872e5	1.529e5	1.115	1.22	1.24	2721.0	YES	NO	bb	bb	45.484
27	12389-PECDD	31.71	1.582e5	1.067e5	1.184	1.48	1.55	2145.7	YES	NO	bb	bb	47.149
28	12378-PeCDD	31.31	1.355e5	9.163e4	1.022	1.48	1.55	1853.3	YES	NO	bb	bb	46.819
29	12479-PECDD	28.59	2.164e5	1.433e5	2.301	1.51	1.55	1857.9	YES	NO	bb	bb	32.930
30	123789-HxCDD	36.33	1.574e5	1.306e5	0.907	1.21	1.24	2472.9	YES	NO	bb	bb	46.297
31	123678-HxCDD	35.94	1.666e5	1.365e5	1.001	1.22	1.24	2668.2	YES	NO	db	db	43.168
32	123478-HxCDD	35.83	1.678e5	1.372e5	0.996	1.22	1.24	2540.5	YES	NO	bd	bd	45.697
33	Total-hexadioxins	34.58	4.486e2	3.746e2	1.005	1.20	1.24	6.5	YES	NO	bd	bb	0.119
34	1234678-HpCDD	40.09	1.123e5	1.097e5	1.039	1.02	1.05	1688.2	YES	NO	bb	bb	45.751
35	1234679-HPCDD	39.05	1.142e5	1.125e5	1.137	1.01	1.05	1880.7	YES	NO	bb	bb	42.686
36	OCDD	44.79	1.918e5	2.227e5	0.920	0.86	0.89	3176.6	YES	NO	bb	bb	94.383

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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	26.03	9.098e4					3.1	YES		bb		
2	FUNCTION1 PFK	23.12	2.655e4					1.8	NO		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	31.47	1.411e4					2.2	NO		bd		0.000
2	FUNCTION2 PFK	31.27	7.740e3					1.1	NO		bb		0.000
3	FUNCTION2 PFK	31.12	6.984e3					1.3	NO		bb		0.000
4	FUNCTION2 PFK	30.63	1.860e3					0.7	NO		bb		0.000
5	FUNCTION2 PFK	28.84	1.543e3					0.6	NO		bb		0.000
6	FUNCTION2 PFK	28.37	2.093e4					2.1	NO		db		0.000
7	FUNCTION2 PFK	28.29	8.837e3					1.8	NO		dd		0.000
8	FUNCTION2 PFK	28.21	3.579e4					2.6	NO		dd		0.000
9	FUNCTION2 PFK	28.04	8.404e4					3.2	YES		bd		0.000
10	FUNCTION2 PFK	32.41	8.720e3					1.6	NO		db		0.000
11	FUNCTION2 PFK	32.35	8.681e3					1.7	NO		bd		0.000
12	FUNCTION2 PFK	31.82	2.245e4					2.2	NO		bb		0.000
13	FUNCTION2 PFK	31.63	2.457e4					2.6	NO		bb		0.000
14	FUNCTION2 PFK	31.57	3.395e4					2.4	NO		db		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	34.97	8.636e6					26.0	YES		db		0.000
2	FUNCTION3 PFK	34.54	4.685e6					26.8	YES		dd		0.000
3	FUNCTION3 PFK	33.76	2.014e7					29.1	YES		bd		0.000

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PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	39.45	7.650e4					2.4	NO		bd		
2	FUNCTION4 PFK	39.13	1.144e4					0.9	NO		bb		
3	FUNCTION4 PFK	39.05	1.229e4					1.6	NO		bb		
4	FUNCTION4 PFK	38.51	3.008e4					1.7	NO		bb		
5	FUNCTION4 PFK	38.23	1.118e4					0.8	NO		bb		
6	FUNCTION4 PFK	38.05	6.338e3					0.9	NO		bb		
7	FUNCTION4 PFK	41.82	2.005e3					0.6	NO		bb		
8	FUNCTION4 PFK	41.71	3.645e3					0.7	NO		bb		
9	FUNCTION4 PFK	41.09	9.682e3					1.2	NO		bb		
10	FUNCTION4 PFK	40.97	2.867e4					1.9	NO		bb		
11	FUNCTION4 PFK	40.88	1.667e4					1.9	NO		db		
12	FUNCTION4 PFK	40.83	6.646e3					1.0	NO		bd		
13	FUNCTION4 PFK	40.63	1.060e4					1.3	NO		bb		
14	FUNCTION4 PFK	40.44	1.107e4					1.0	NO		db		
15	FUNCTION4 PFK	40.40	5.822e3					0.9	NO		bd		
16	FUNCTION4 PFK	40.28	1.400e3					0.4	NO		bb		
17	FUNCTION4 PFK	40.22	7.290e3					0.9	NO		bb		
18	FUNCTION4 PFK	40.16	2.657e4					2.1	NO		db		
19	FUNCTION4 PFK	40.12	1.255e4					1.5	NO		bd		
20	FUNCTION4 PFK	39.86	5.868e3					0.9	NO		db		
21	FUNCTION4 PFK	39.83	6.548e3					1.0	NO		bd		
22	FUNCTION4 PFK	39.60	2.265e4					1.4	NO		db		
23	FUNCTION4 PFK	42.19	3.256e4					1.6	NO		bb		
24	FUNCTION4 PFK	41.97	2.975e3					0.5	NO		bb		

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PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	43.57	7.714e3					1.6	NO		dd		
2	FUNCTION5 PFK	43.52	1.166e4					2.2	NO		bd		
3	FUNCTION5 PFK	43.46	5.463e3					1.3	NO		bb		
4	FUNCTION5 PFK	43.41	2.975e3					0.8	NO		bb		
5	FUNCTION5 PFK	43.31	4.615e3					1.1	NO		bb		
6	FUNCTION5 PFK	43.15	7.483e3					1.1	NO		bb		
7	FUNCTION5 PFK	42.94	5.587e2					0.3	NO		bb		
8	FUNCTION5 PFK	42.89	1.144e4					1.9	NO		db		
9	FUNCTION5 PFK	42.82	2.831e4					2.7	NO		dd		
10	FUNCTION5 PFK	42.79	3.996e4					3.8	YES		dd		
11	FUNCTION5 PFK	42.71	4.542e4					4.6	YES		dd		
12	FUNCTION5 PFK	42.68	8.908e4					5.2	YES		dd		
13	FUNCTION5 PFK	42.56	1.260e5					8.0	YES		bd		
14	FUNCTION5 PFK	45.20	3.646e3					0.9	NO		db		
15	FUNCTION5 PFK	45.17	1.181e4					1.6	NO		bd		
16	FUNCTION5 PFK	44.97	7.051e3					1.0	NO		db		
17	FUNCTION5 PFK	44.93	8.984e3					1.7	NO		dd		
18	FUNCTION5 PFK	44.84	2.140e4					1.7	NO		dd		
19	FUNCTION5 PFK	44.81	4.182e3					1.1	NO		dd		
20	FUNCTION5 PFK	44.77	2.664e3					0.8	NO		dd		
21	FUNCTION5 PFK	44.75	4.345e3					1.0	NO		dd		
22	FUNCTION5 PFK	44.72	5.279e3					1.1	NO		bd		
23	FUNCTION5 PFK	44.40	4.431e3					0.9	NO		bb		
24	FUNCTION5 PFK	44.22	5.649e3					1.1	NO		bb		
25	FUNCTION5 PFK	43.98	3.284e3					0.9	NO		db		
26	FUNCTION5 PFK	43.95	1.620e4					1.5	NO		bd		
27	FUNCTION5 PFK	43.86	7.936e3					1.6	NO		db		
28	FUNCTION5 PFK	43.79	9.367e3					0.9	NO		bd		
29	FUNCTION5 PFK	43.62	3.408e3					0.8	NO		db		
30	FUNCTION5 PFK	45.92	2.035e3					0.6	NO		db		
31	FUNCTION5 PFK	45.87	4.010e3					0.8	NO		bd		
32	FUNCTION5 PFK	45.83	3.737e3					1.2	NO		bb		
33	FUNCTION5 PFK	45.79	9.499e3					1.2	NO		bb		
34	FUNCTION5 PFK	45.64	2.065e3					0.6	NO		bb		
35	FUNCTION5 PFK	45.53	9.559e3					1.2	NO		bb		

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ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.43	1.258e2					2.8	NO		bb		0.000
2	FUNCTION1 HXCD...	27.27	8.085e1					2.0	NO		bb		0.000
3	FUNCTION1 HXCD...	26.90	1.461e2					4.0	YES		bb		0.000
4	FUNCTION1 HXCD...	25.53	8.349e1					1.6	NO		bb		0.000
5	FUNCTION1 HXCD...	23.68	7.671e1					2.7	NO		bb		0.000
6	FUNCTION1 HXCD...	23.44	9.696e1					2.2	NO		bb		0.000
7	FUNCTION1 HXCD...	22.21	8.301e1					2.1	NO		bb		0.000
8	FUNCTION1 HXCD...	21.88	9.170e1					1.6	NO		db		0.000
9	FUNCTION1 HXCD...	21.71	7.685e1					1.8	NO		bd		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.28	1.760e2					2.6	NO		bb		0.000
2	FUNCTION2 HPCD...	31.06	8.334e1					2.5	NO		bb		0.000
3	FUNCTION2 HPCD...	30.88	4.544e2					10.3	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.72	1.340e2					2.4	NO		bb		0.000
2	FUNCTION3 OCDPE	36.33	1.439e2					3.1	YES		bb		0.000
3	FUNCTION3 OCDPE	35.93	2.094e2					3.9	YES		db		0.000
4	FUNCTION3 OCDPE	35.81	1.864e2					3.6	YES		dd		0.000
5	FUNCTION3 OCDPE	35.72	9.432e1					3.1	YES		bd		0.000
6	FUNCTION3 OCDPE	34.69	9.370e1					2.6	NO		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	41.70	1.149e2					2.8	NO		bb		0.000
2	FUNCTION4 NCDPE	38.01	9.486e1					2.8	NO		bb		0.000

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ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	44.40	9.336e1					2.6	NO		bb		0.000

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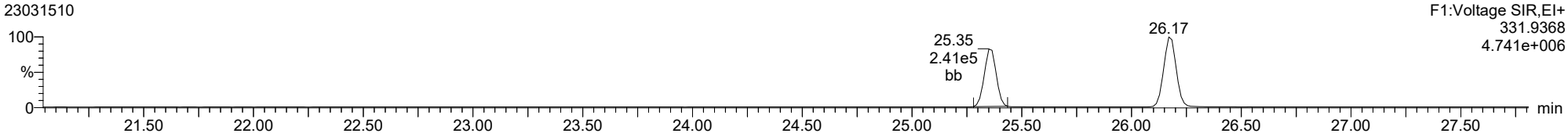

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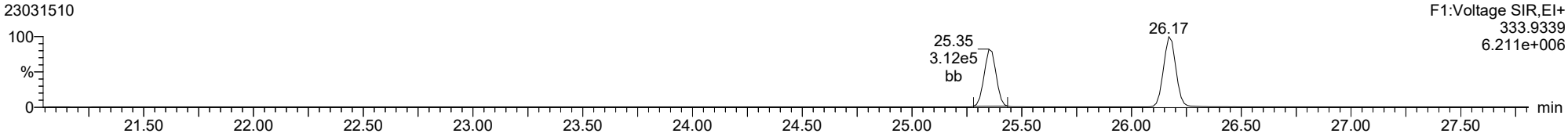

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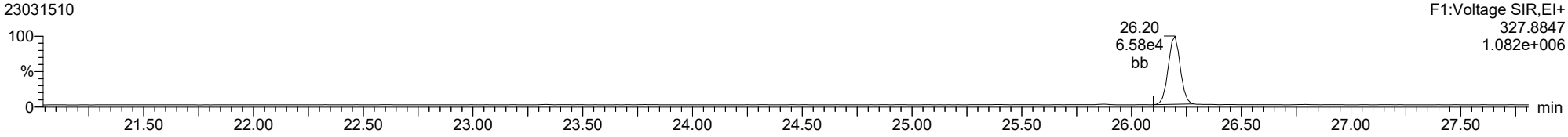

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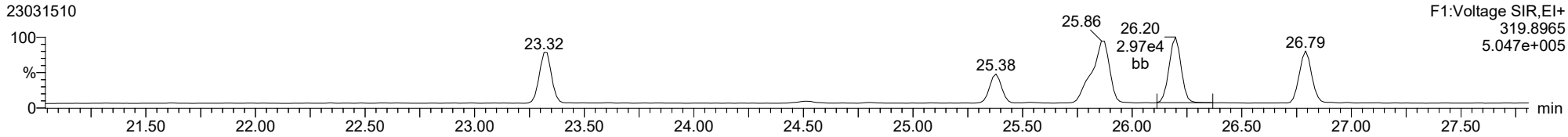

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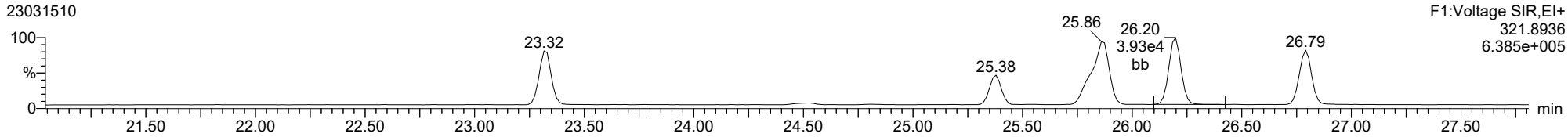

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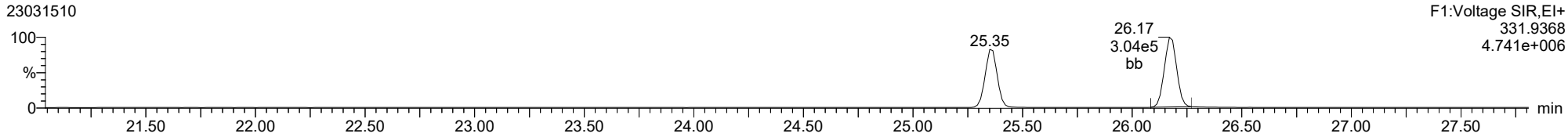

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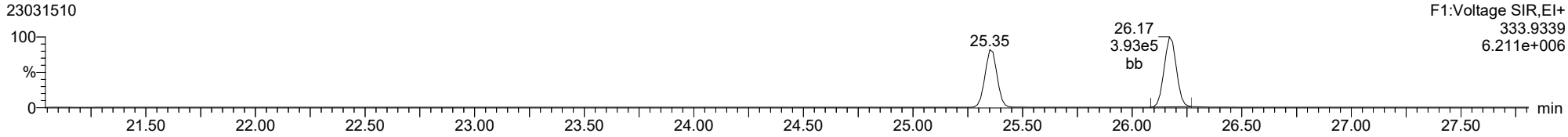
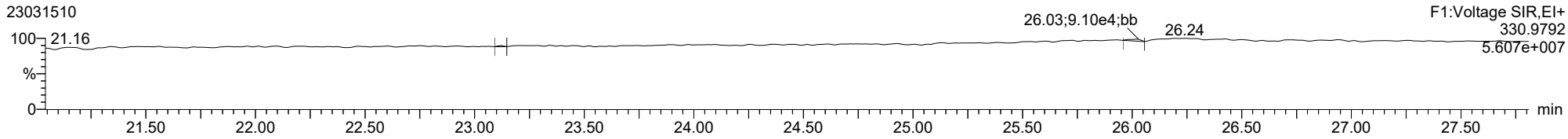


FUNCTION1 PFK



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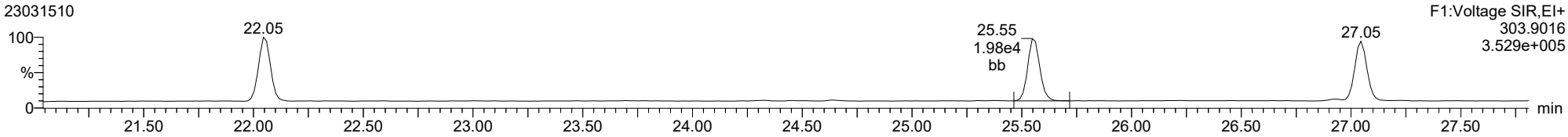

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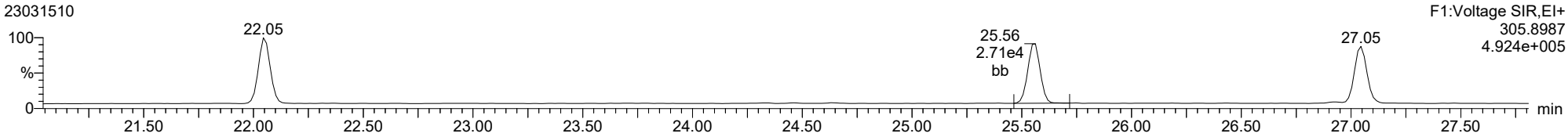

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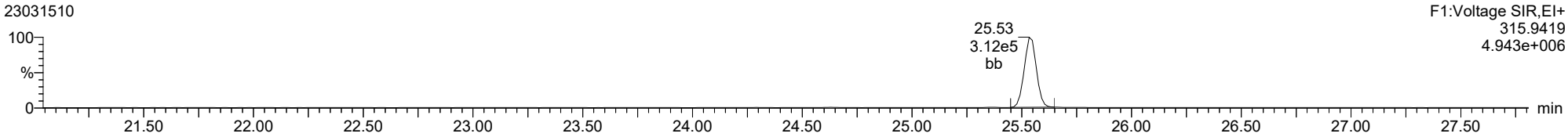

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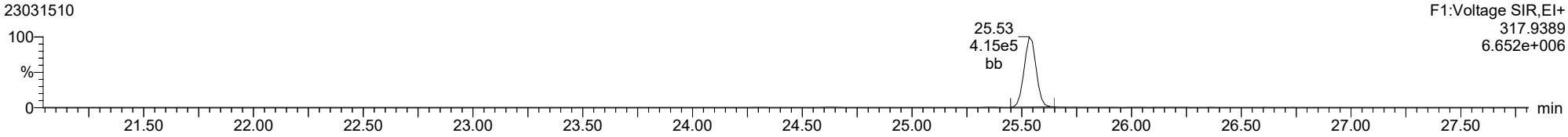
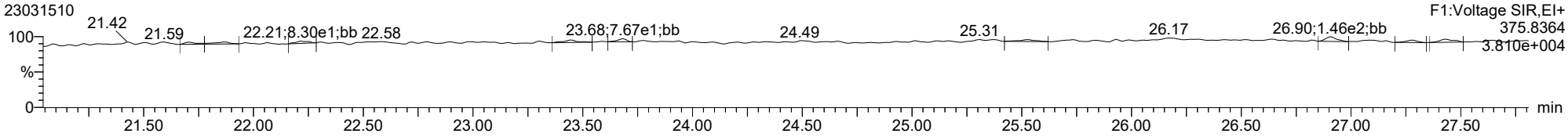


FUNCTION1 HXCDPE



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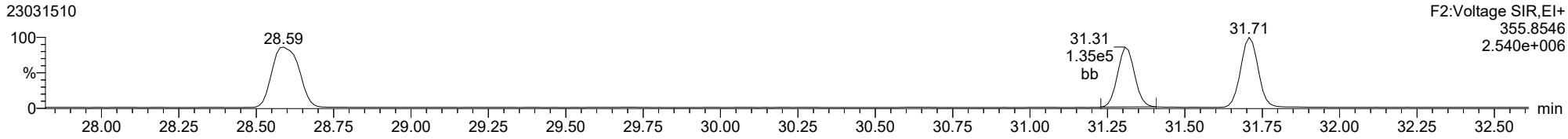
12378-PeCDD



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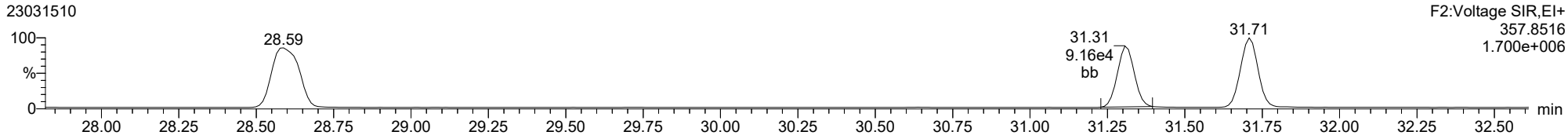

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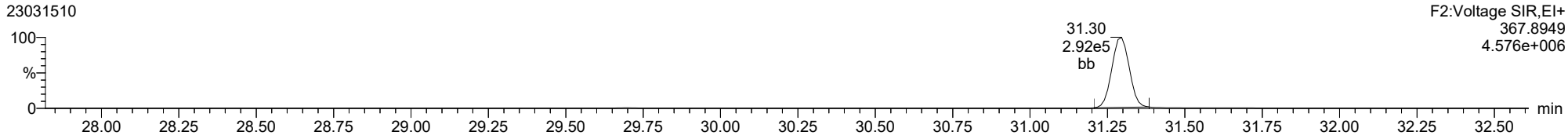

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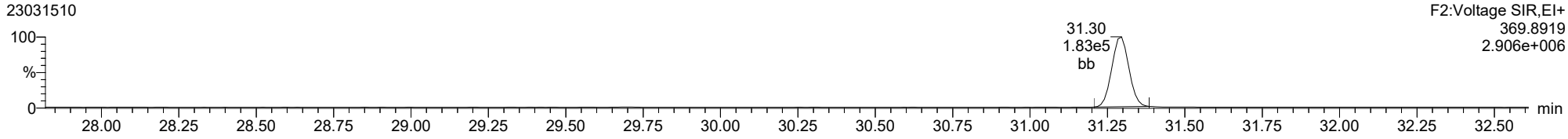

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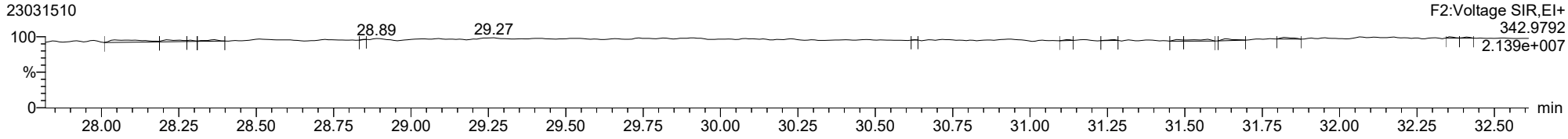

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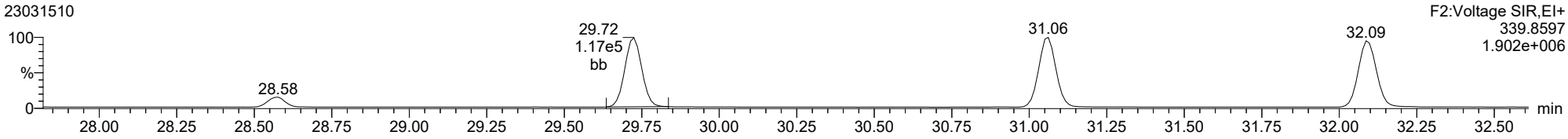
12378-PeCDF



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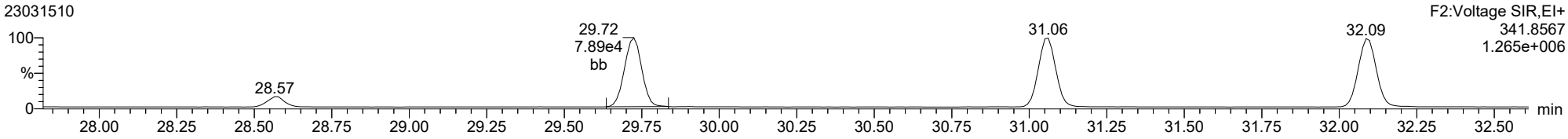

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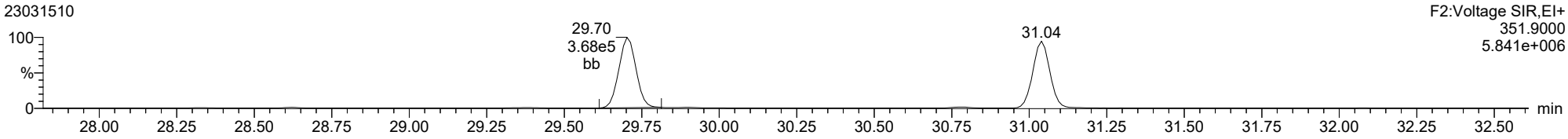

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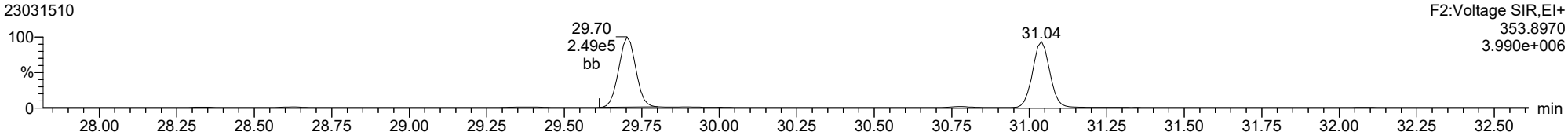
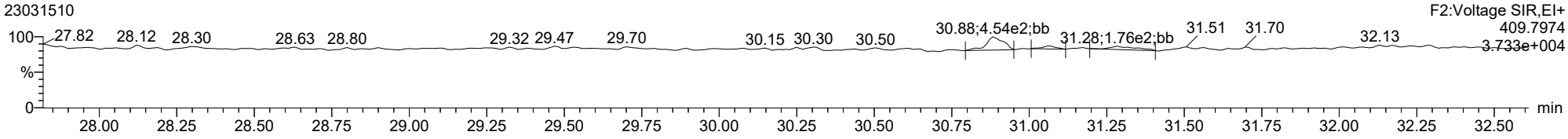


FUNCTION2 HPCDPE



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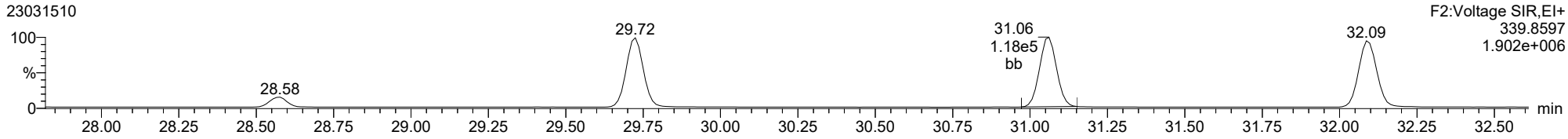
23478-PeCDF



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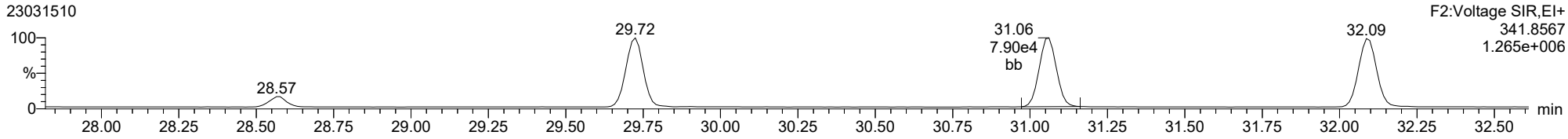

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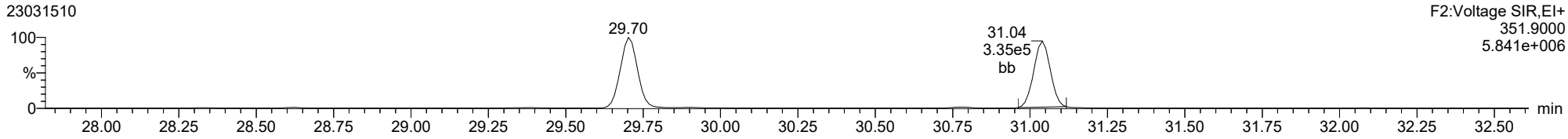

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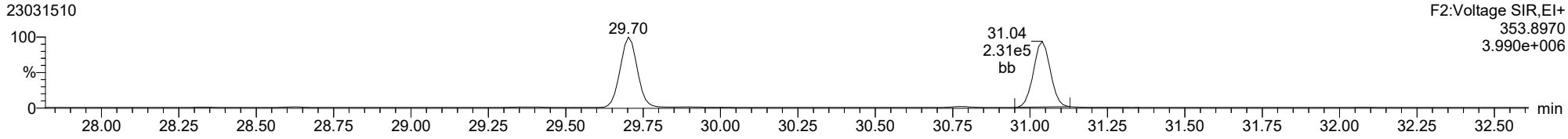

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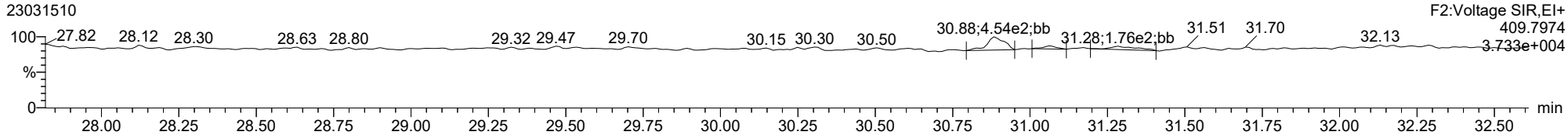

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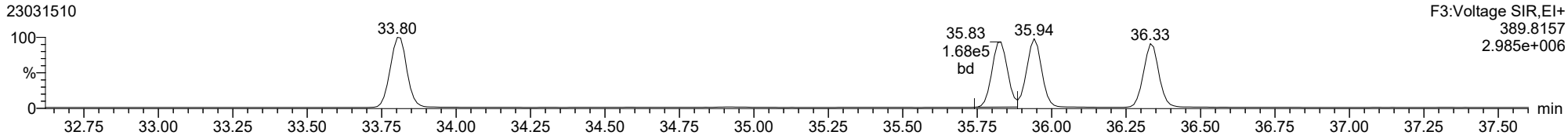

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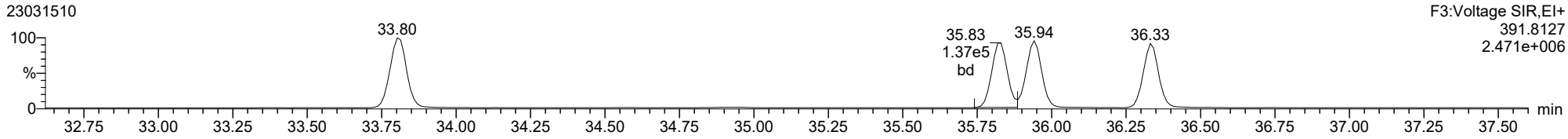

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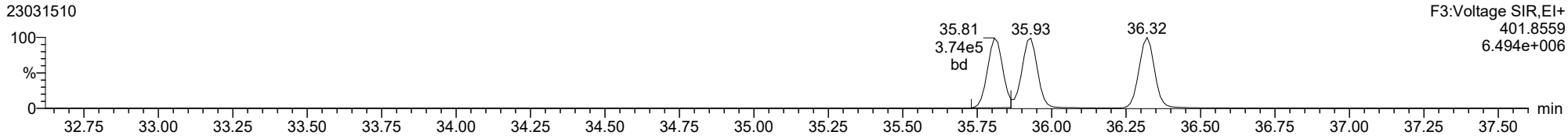

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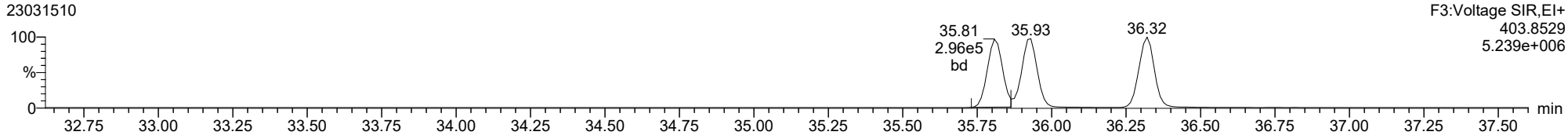

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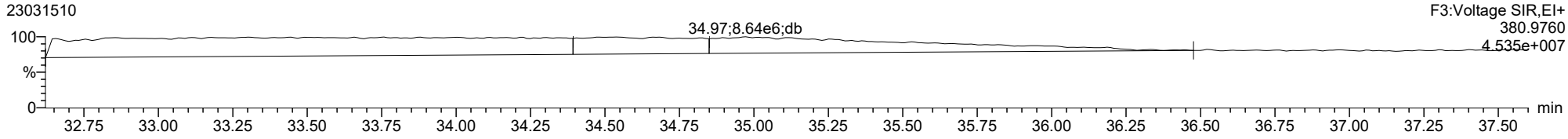

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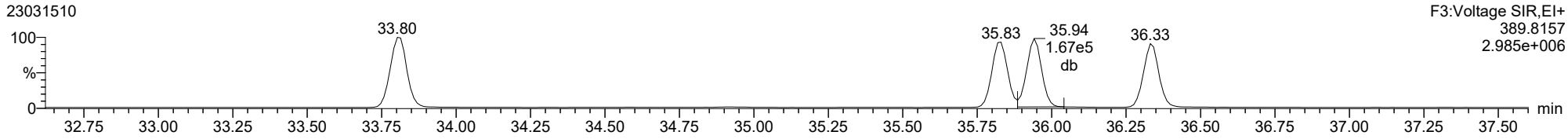

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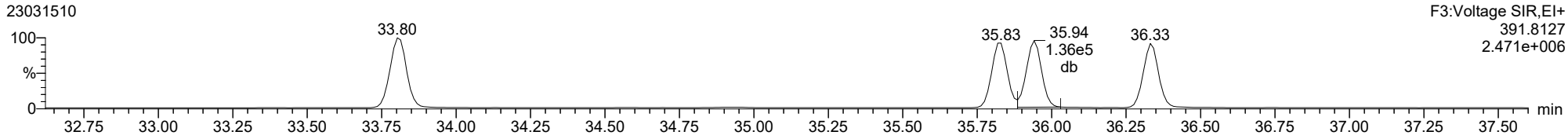

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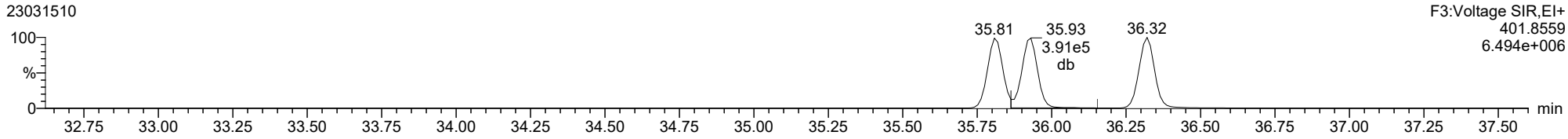

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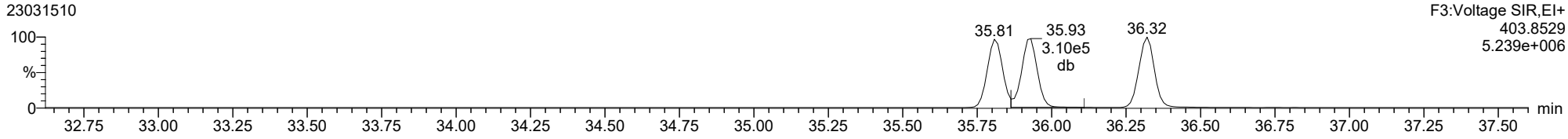

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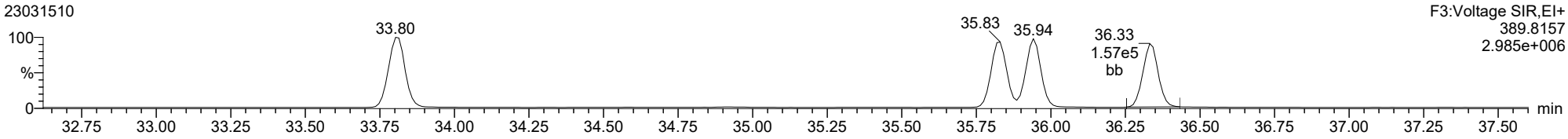

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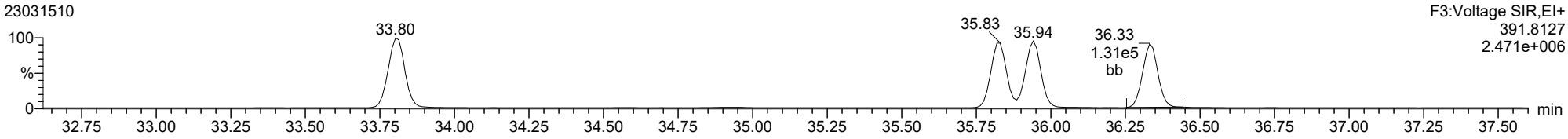

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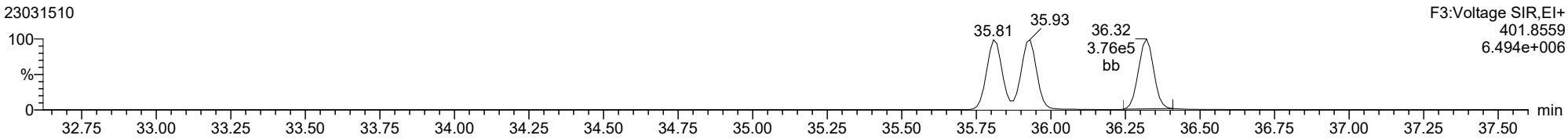

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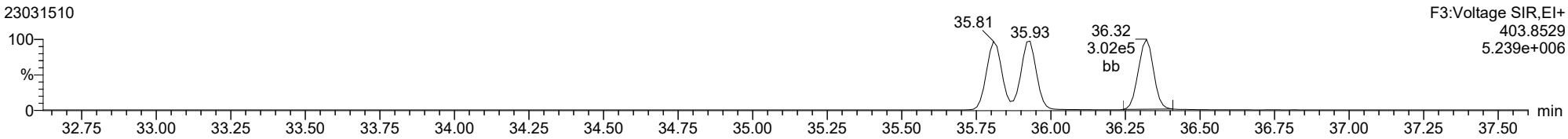

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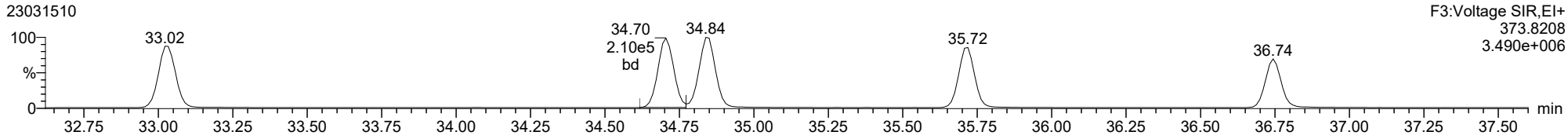

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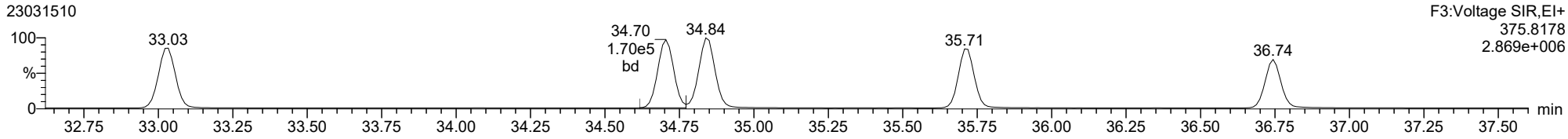

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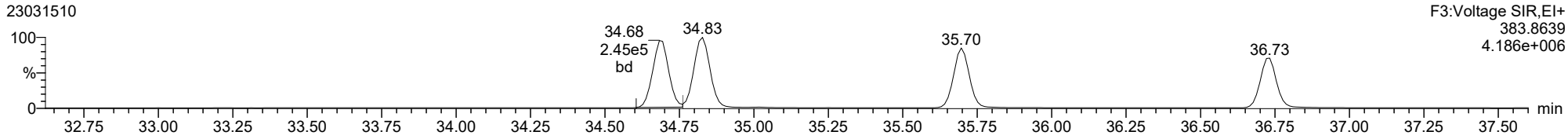

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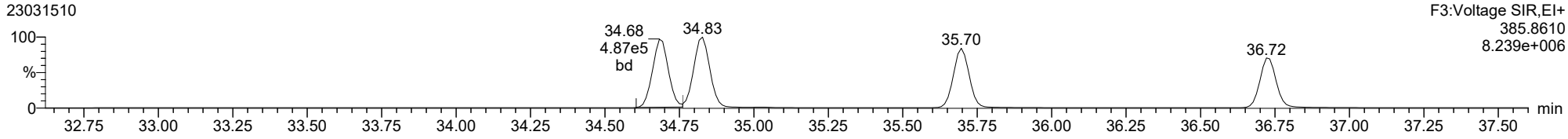

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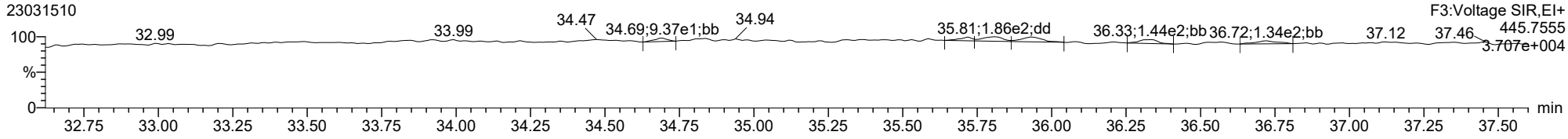

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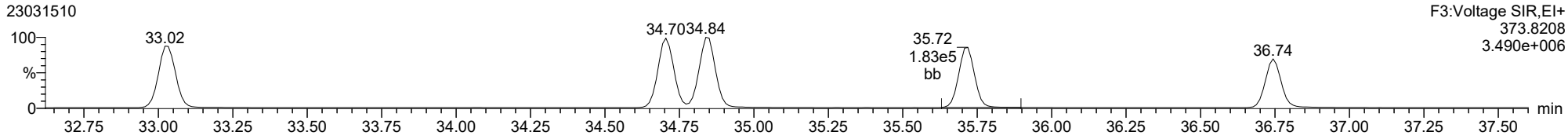
234678-HxCDF



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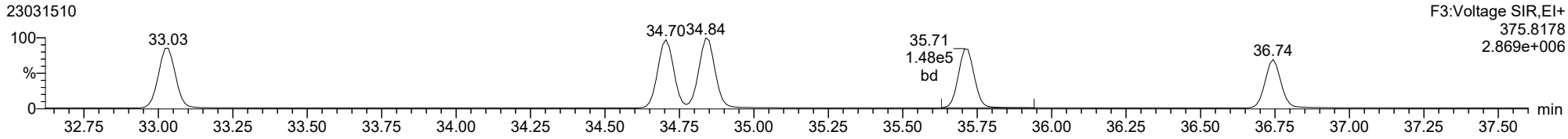

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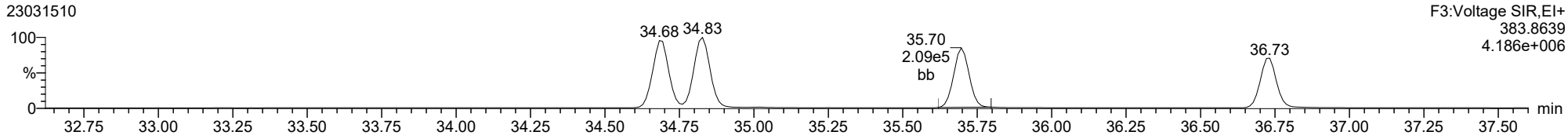

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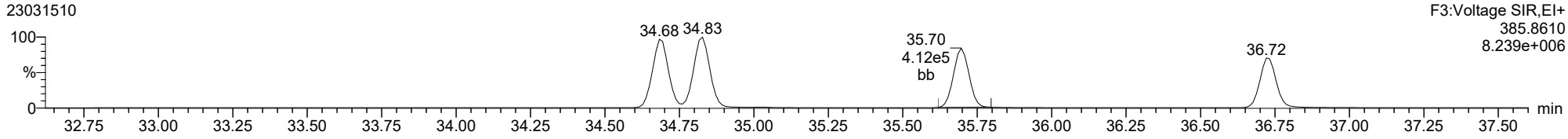
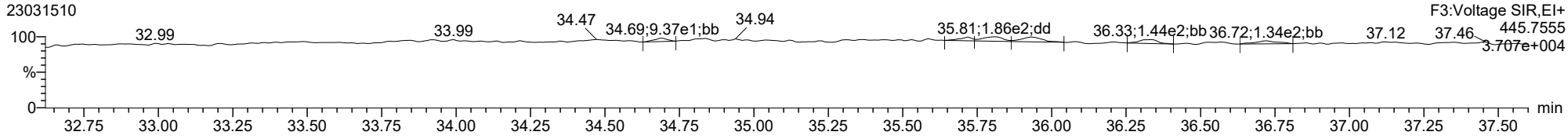


FUNCTION3 OCDPE



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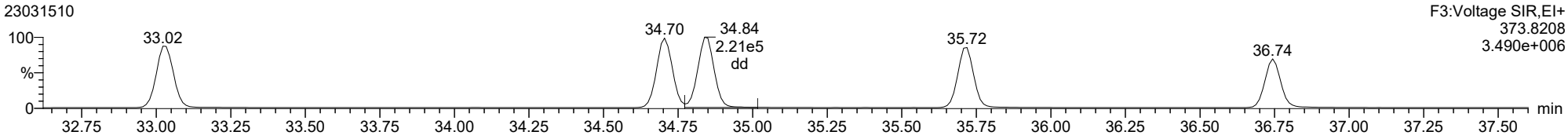

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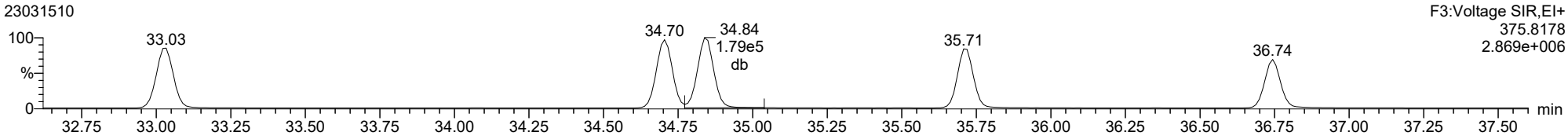

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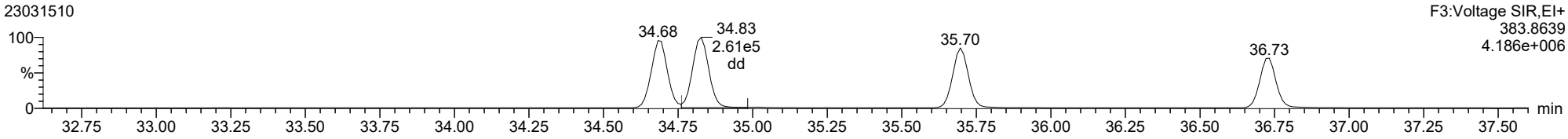

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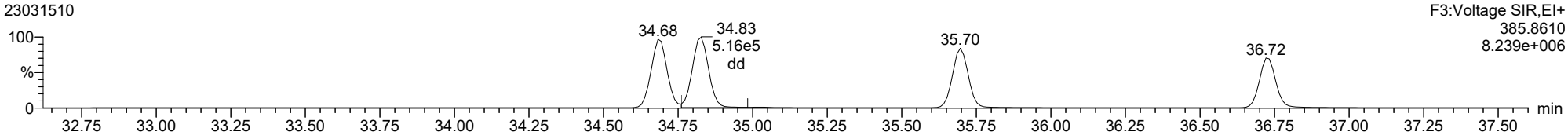
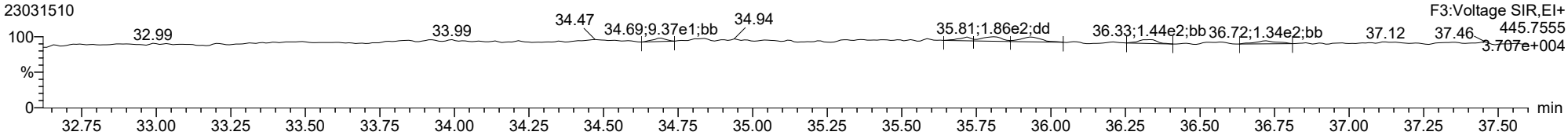


FUNCTION3 OCDPE



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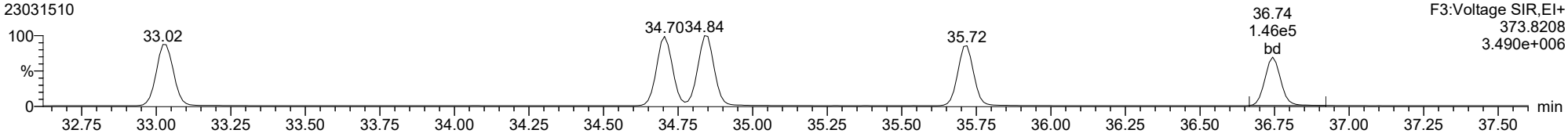

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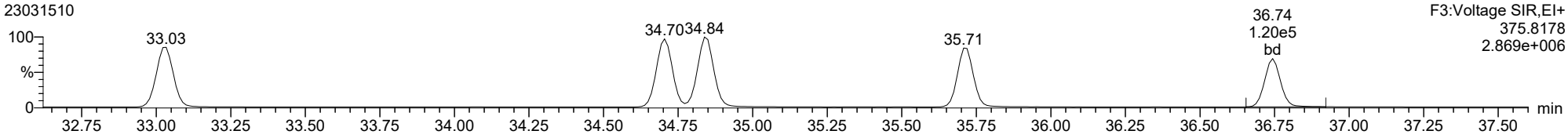

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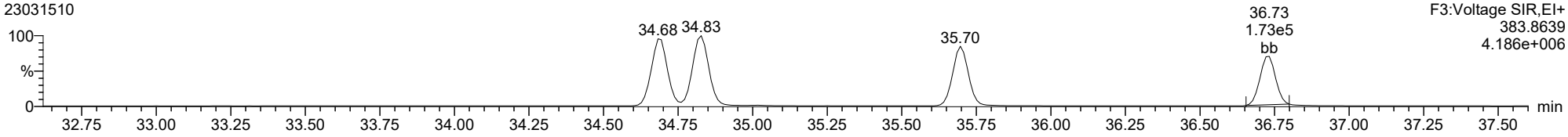

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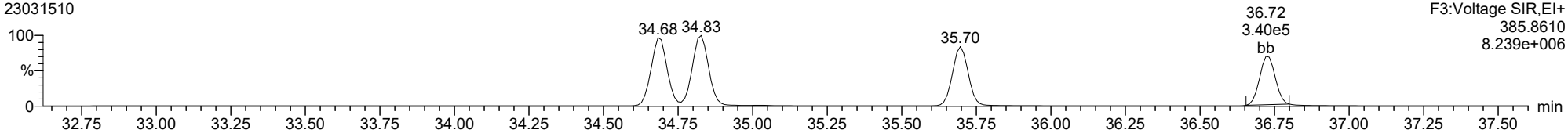

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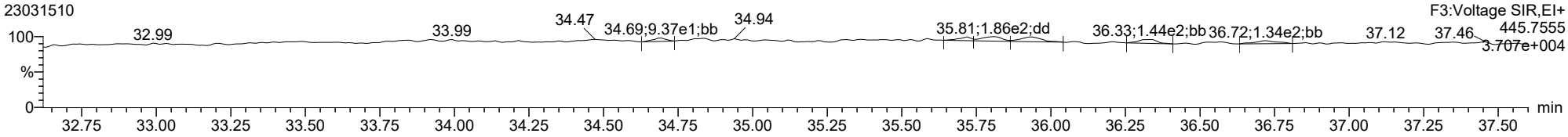

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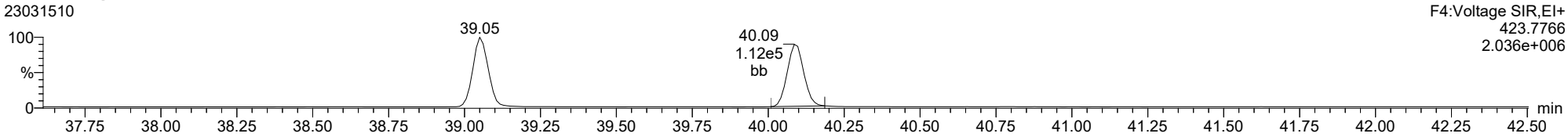
1234678-HpCDD



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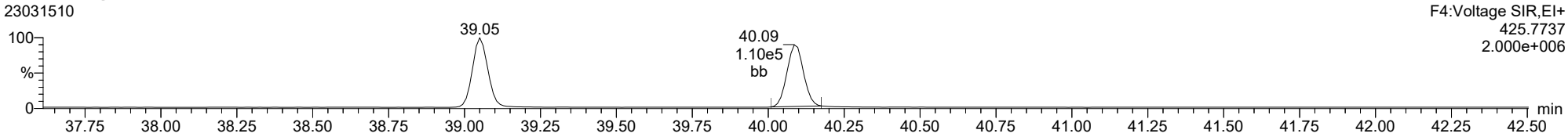

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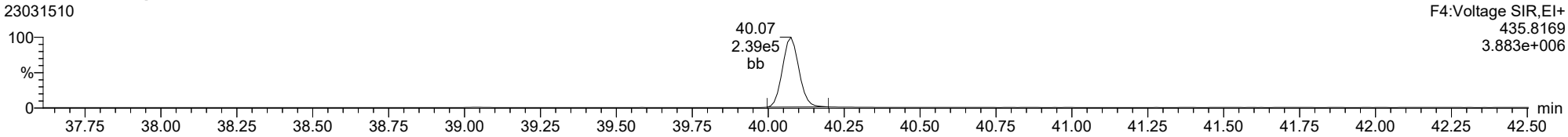

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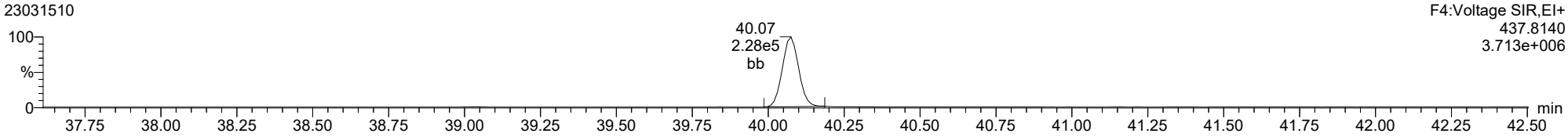
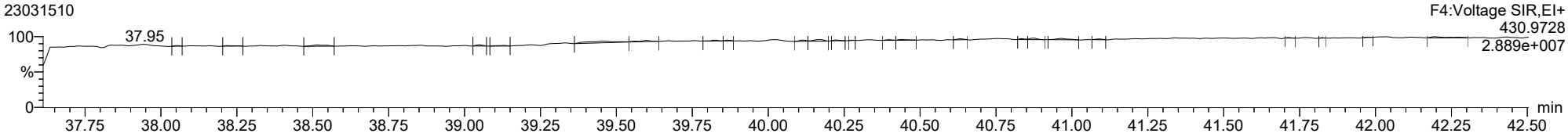


FUNCTION4 PFK



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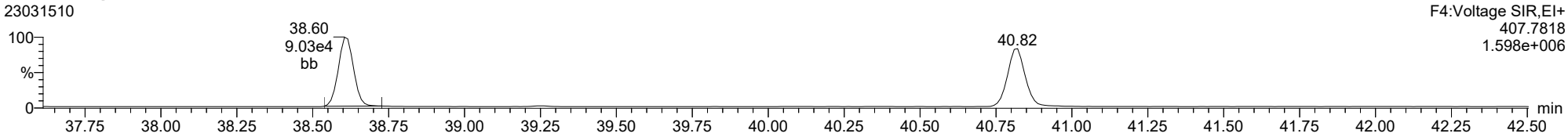

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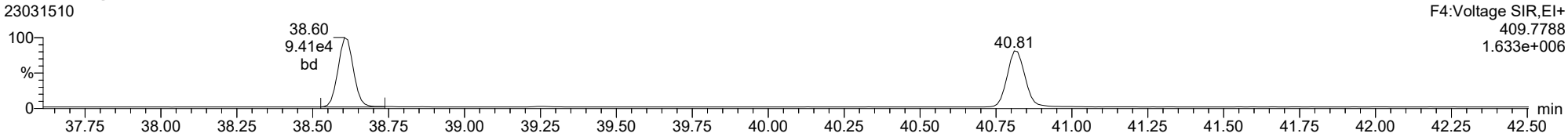

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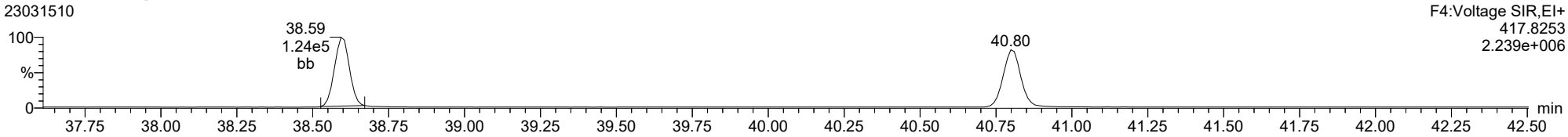

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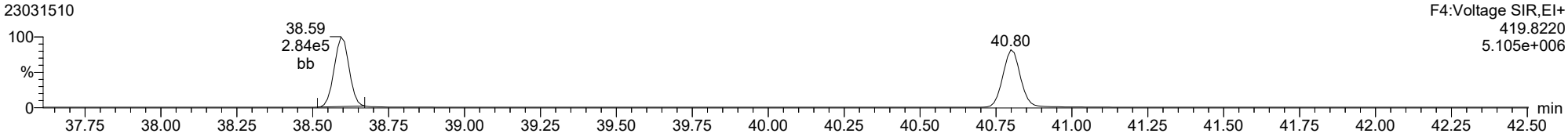
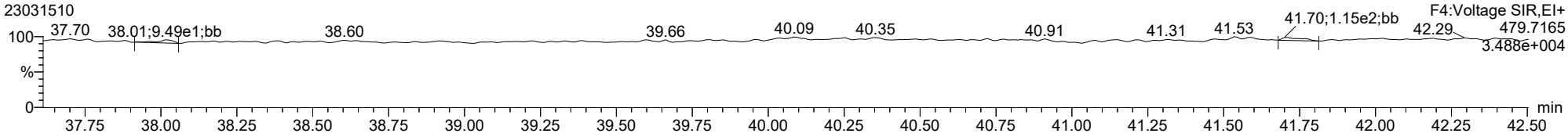


FUNCTION4 NCDPE



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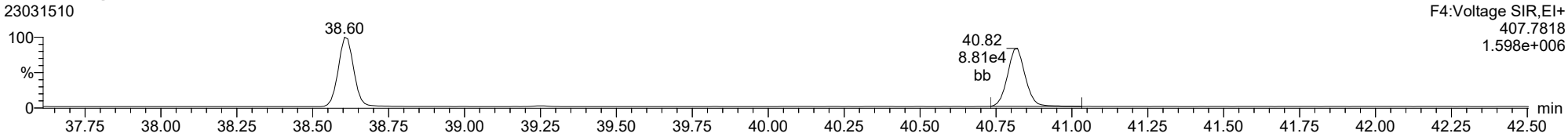

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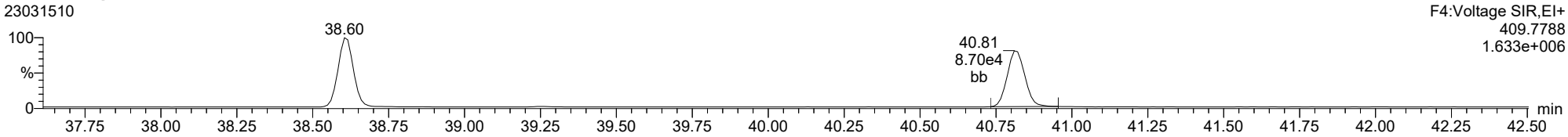

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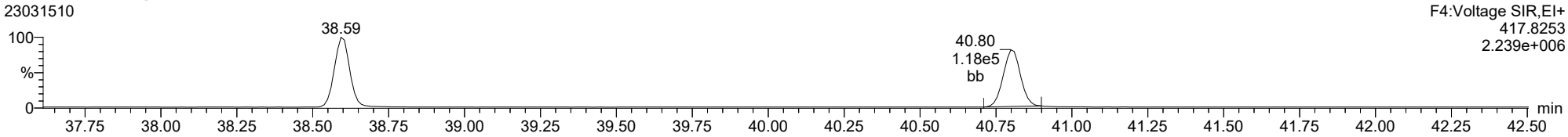

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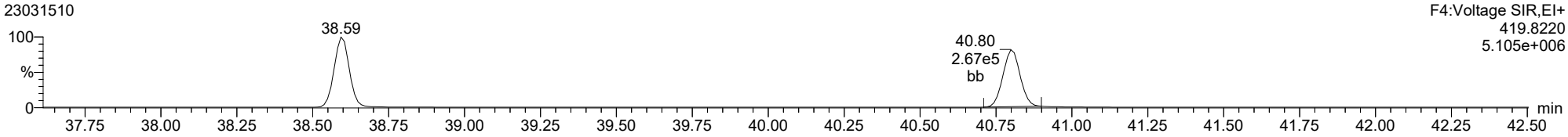

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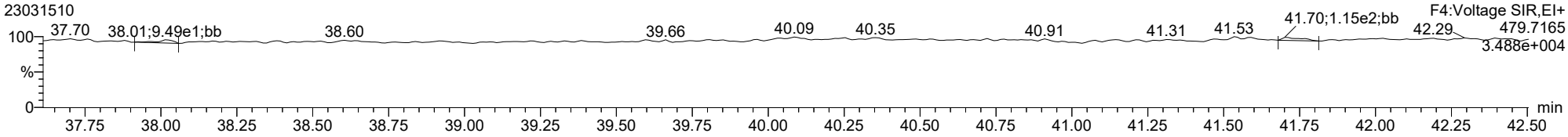

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Printed: Thursday, March 16, 2023 09:59:13 Pacific Daylight Time

ID: CS3Z5, Name: 23031510, Date: 15-Mar-2023, Time: 17:48:31, Conditions: AUTOSPEC01, User: pk

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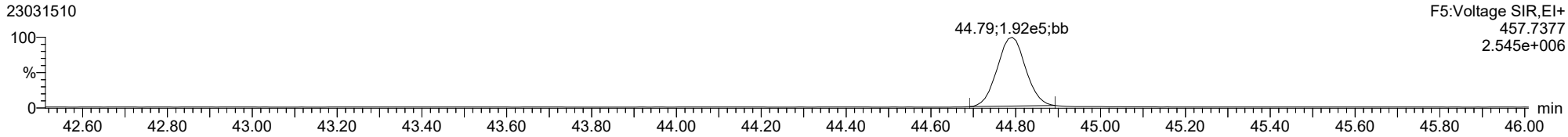

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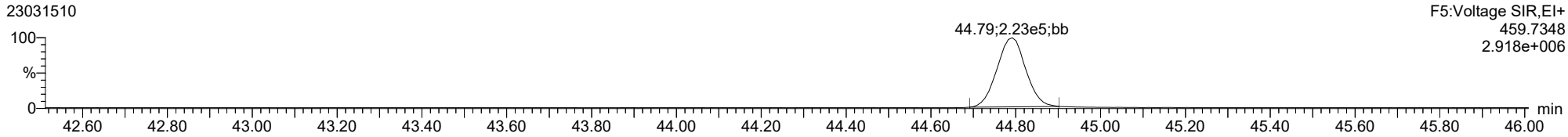

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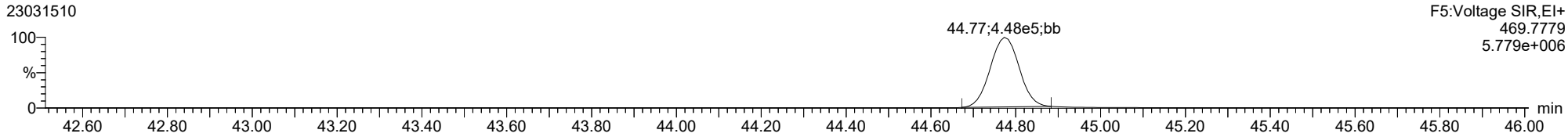

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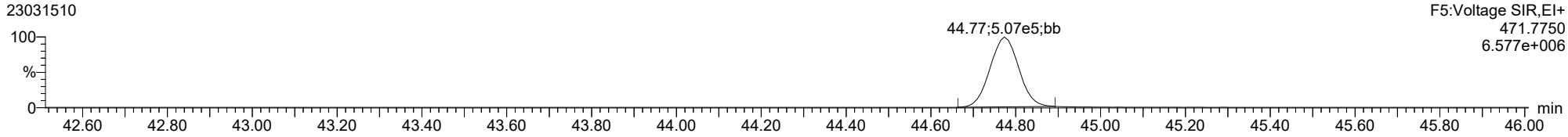
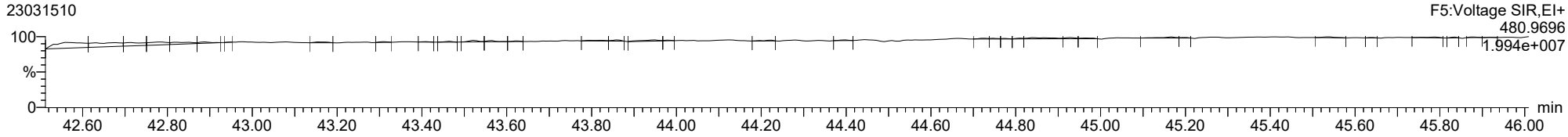


FUNCTION5 PFK



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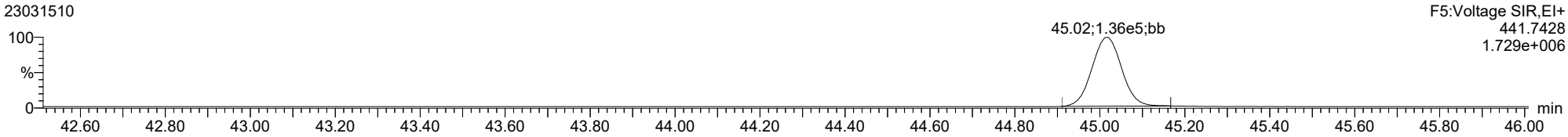

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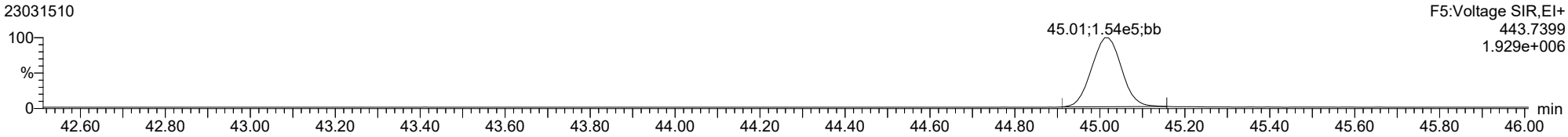
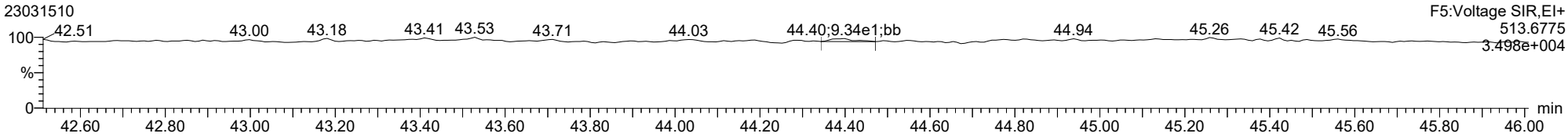


FUNCTION5 DCDPE



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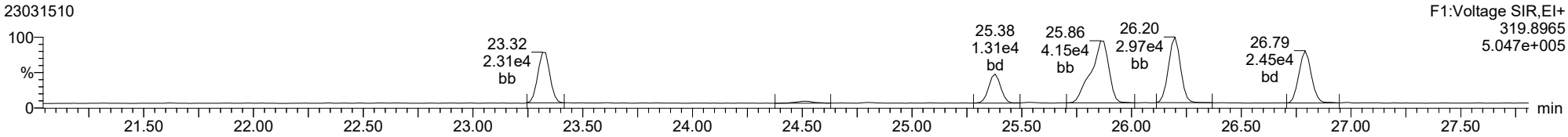
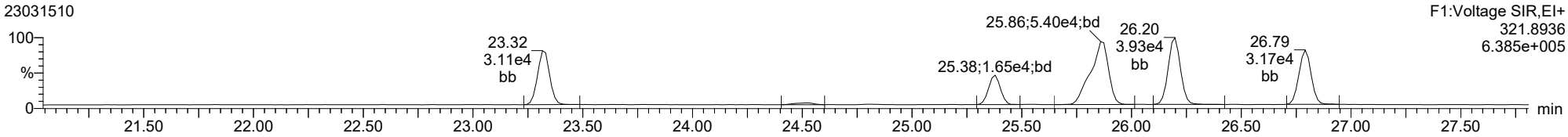


Total-tetradioxins



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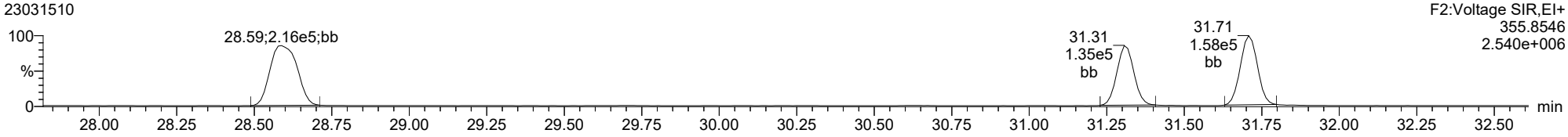

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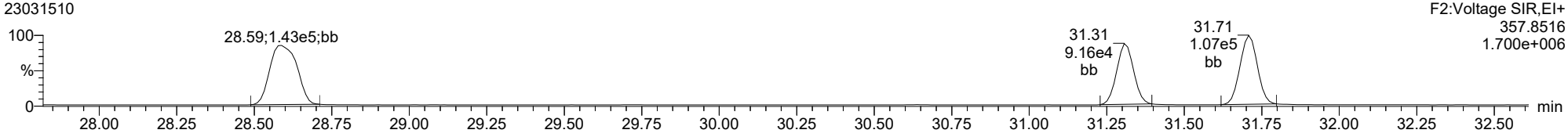

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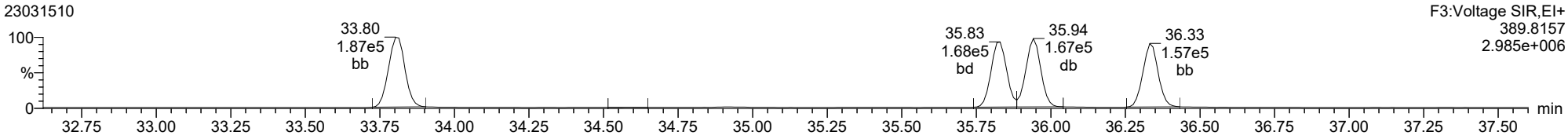

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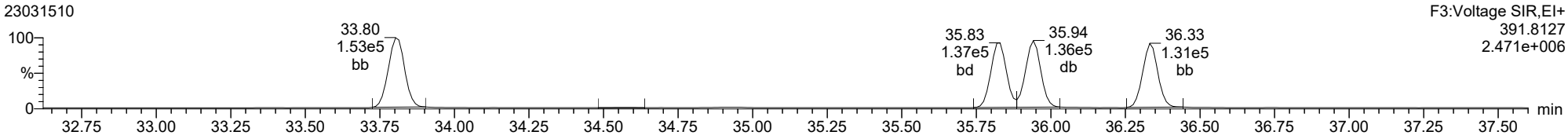

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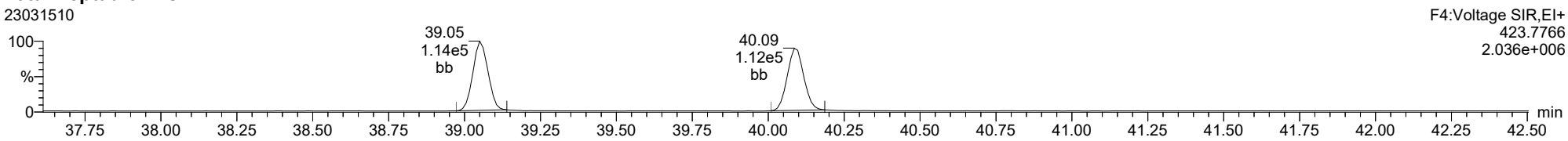

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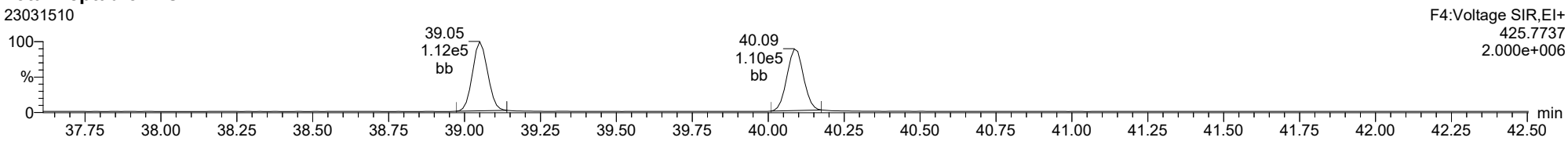

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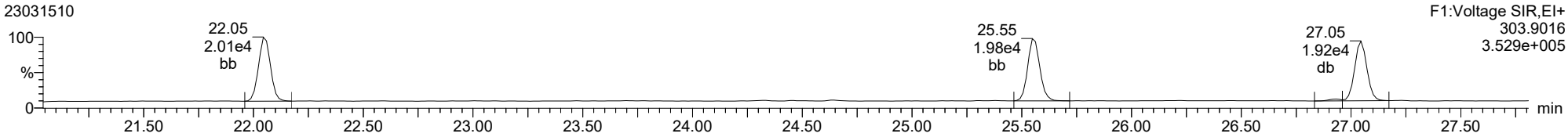
Total-tetrafurans



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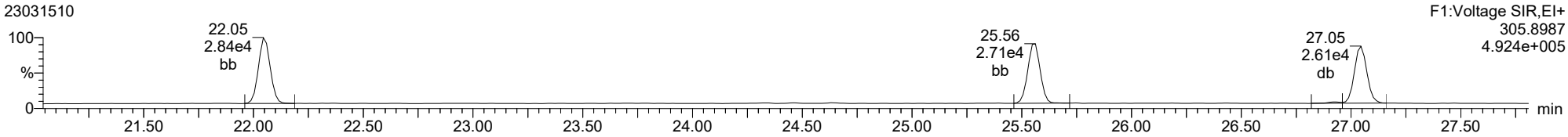

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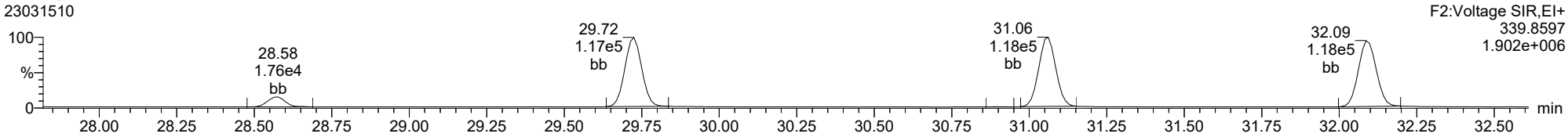

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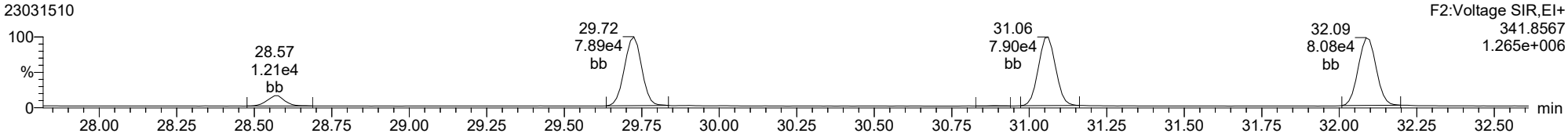

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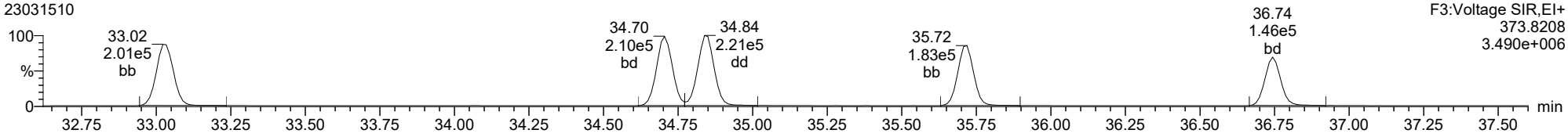

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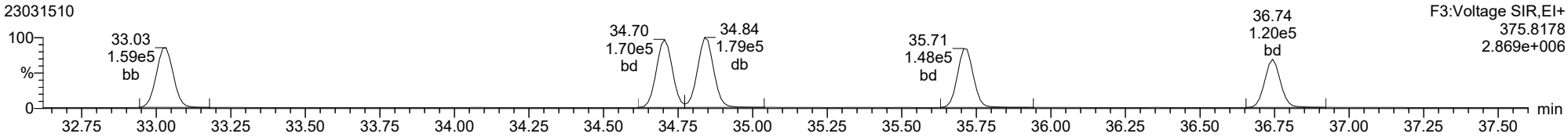

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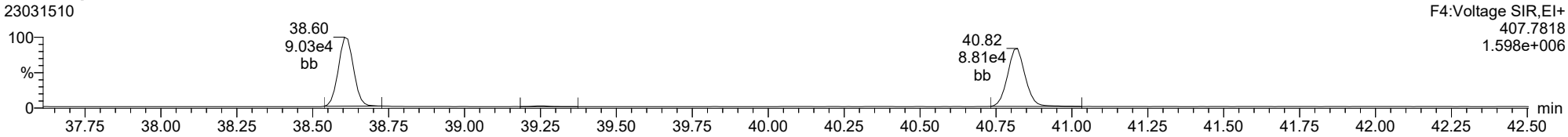

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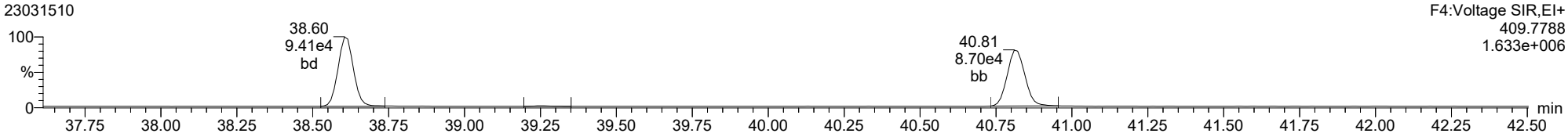

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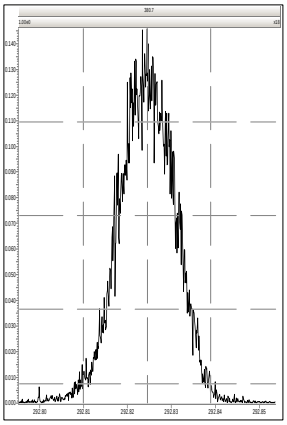
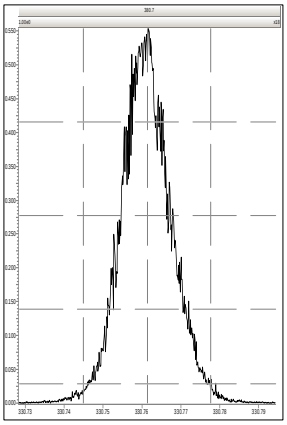


M 330.9792 R 10619



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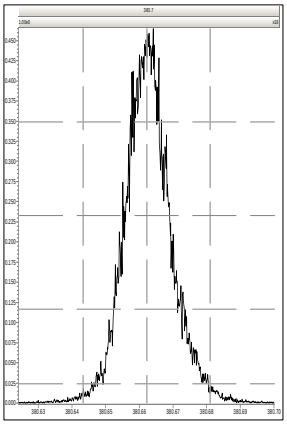

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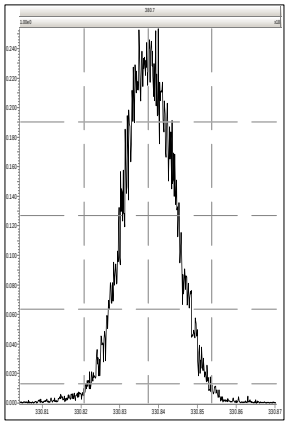

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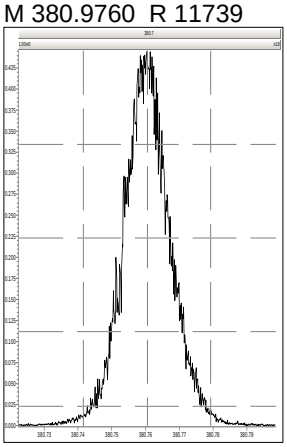

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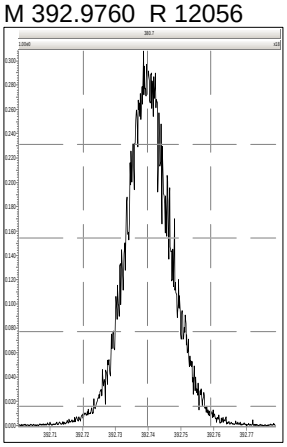
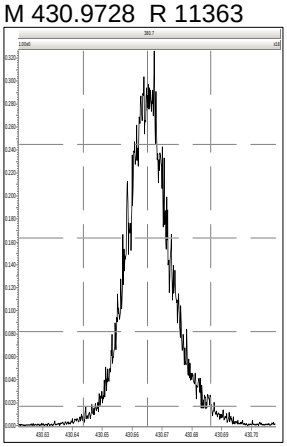


M 430.9728 R 11363



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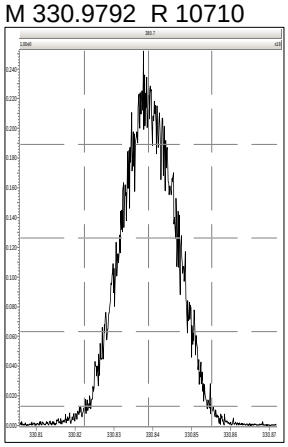

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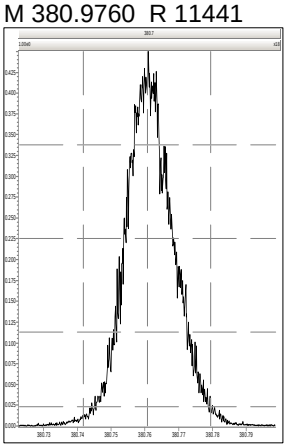

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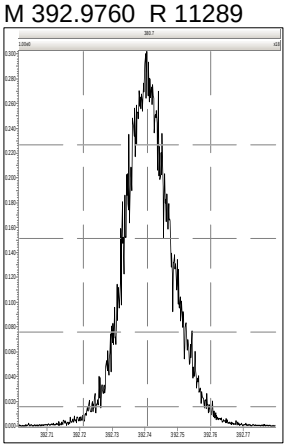

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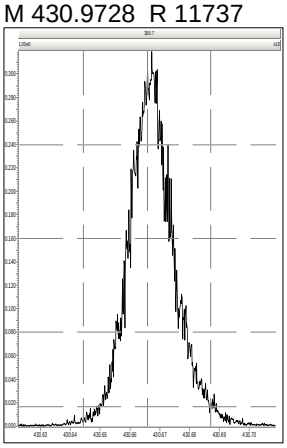

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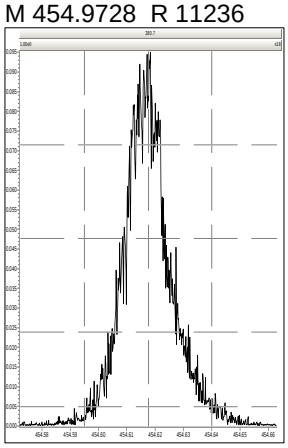

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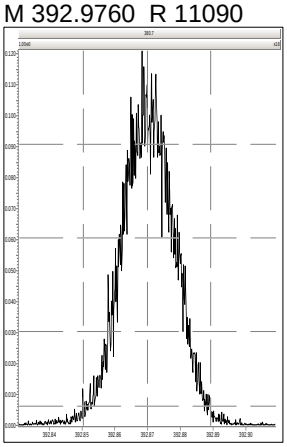

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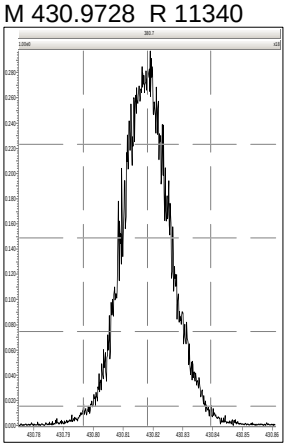
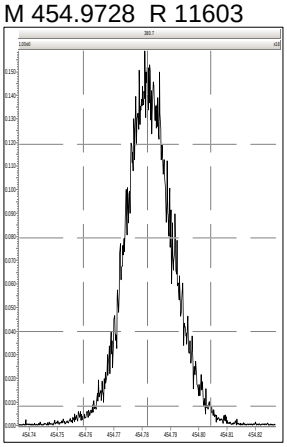


M 454.9728 R 11603



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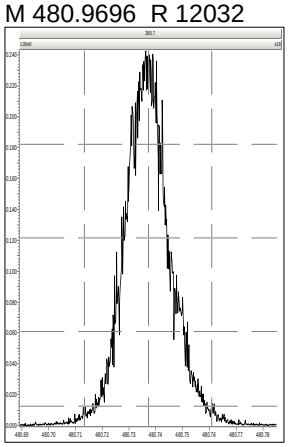

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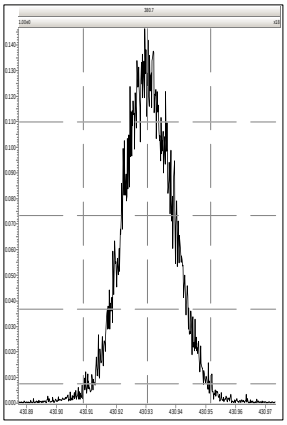

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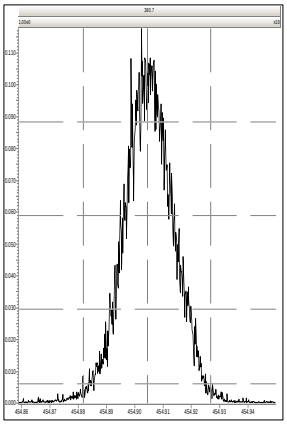

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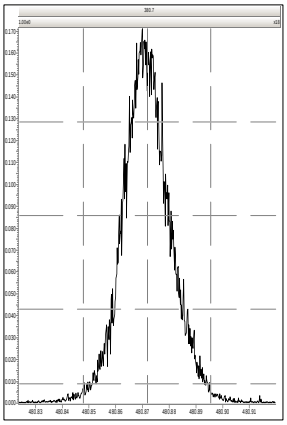
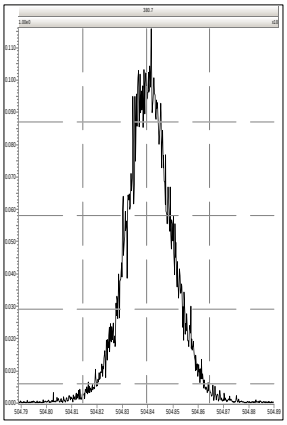
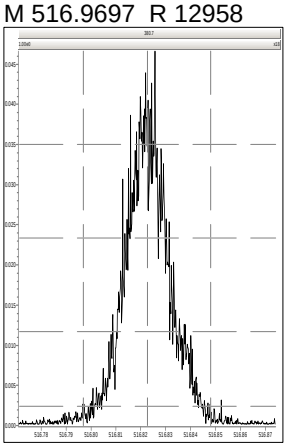
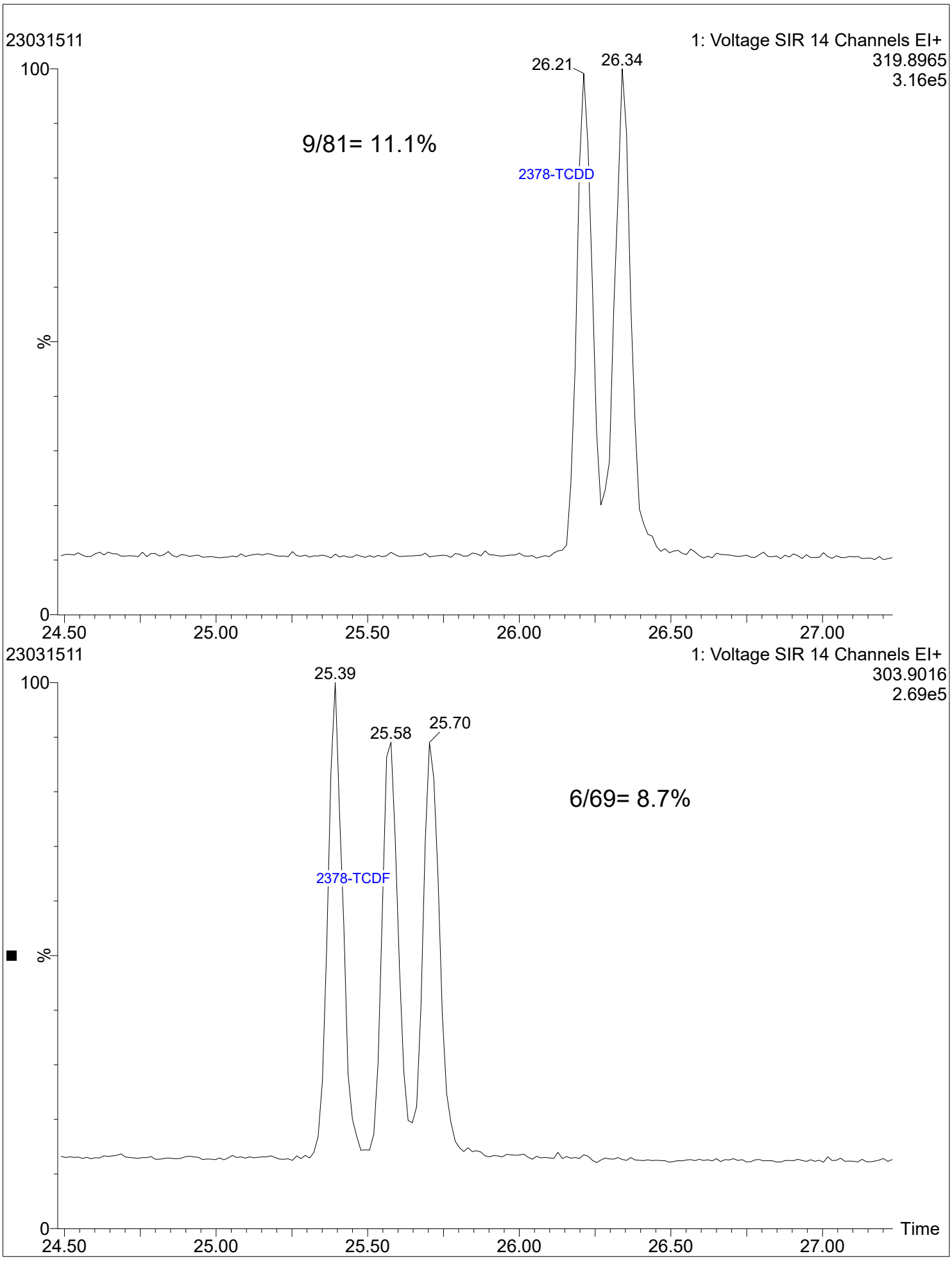


M 504.9696 R 12036



M 516.9697 R 12958




23031511
1: Voltage SIR 14 Channels EI+
319.8965
3.16e5
26.21
26.34
9/81= 11.1%
2378-TCDD
100
%
0
24.50
25.00
25.50
26.00
26.50
27.00
23031511
1: Voltage SIR 14 Channels EI+
303.9016
2.69e5
25.39
25.58
25.70
6/69= 8.7%
2378-TCDF
100
%
0
Time
24.50
25.00
25.50
26.00
26.50
27.00

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GC00015
Lab File ID:	23031521	Calibration Date:	03/03/2023
Sequence:	SLC0176	Injection Date:	03/16/23
Lab Sample ID:	SLC0176-CCV2	Injection Time:	02:54
Sequence Name:	CS3Z6		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
2,3,7,8-TCDF	A	10.000	9.22	0.7015272	0.6469883		-7.8	+/-16	
2,3,7,8-TCDD	A	10.000	9.14	1.1486620	1.0495420		-8.6	+/-22	
1,2,3,7,8-PeCDF	A	50.000	46.4	0.6792300	0.6308803		-7.1	+/-18	
2,3,4,7,8-PeCDF	A	50.000	44.2	0.7861704	0.6949475		-11.6	+/-18	
1,2,3,7,8-PeCDD	A	50.000	48.9	1.0218450	0.9993182		-2.2	+/-22	
1,2,3,4,7,8-HxCDF	A	50.000	45.4	1.1660380	1.0584400		-9.2	+/-10	
1,2,3,6,7,8-HxCDF	A	50.000	47.1	1.0907410	1.0268190		-5.9	+/-12	
2,3,4,6,7,8-HxCDF	A	50.000	46.7	1.1396990	1.0645230		-6.6	+/-12	
1,2,3,7,8,9-HxCDF	A	50.000	46.2	1.1370930	1.0513660		-7.5	+/-10	
1,2,3,4,7,8-HxCDD	A	50.000	44.0	0.9955689	0.8762757		-12.0	+/-22	
1,2,3,6,7,8-HxCDD	A	50.000	42.3	1.0009380	0.8475773		-15.3	+/-22	
1,2,3,7,8,9-HxCDD	A	50.000	48.8	0.9071139	0.8846149		-2.5	+/-18	
1,2,3,4,6,7,8-HpCDF	A	50.000	45.1	1.0029930	0.9052528		-9.7	+/-10	
1,2,3,4,7,8,9-HpCDF	A	50.000	48.9	0.9531152	0.9317902		-2.2	+/-14	
1,2,3,4,6,7,8-HpCDD	A	50.000	47.6	1.0390130	0.9889239		-4.8	+/-14	
OCDF	A	100.00	79.4	0.7778078	0.6178842		-20.6	+/-37	
OCDD	A	100.00	96.0	0.9199537	0.8831553		-4.0	+/-21	
13C12-2,3,7,8-TCDF	A	100.00	84.0	1.6201960	1.3617259		-16.0	+/-29	
13C12-2,3,7,8-TCDD	A	100.00	101	1.1524090	1.1654504		1.1	+/-18	
13C12-1,2,3,7,8-PeCDF	A	100.00	89.0	1.2404520	1.1037280		-11.0	+/-24	
13C12-2,3,4,7,8-PeCDF	A	100.00	95.3	1.1177860	1.0656872		-4.7	+/-23	
13C12-1,2,3,7,8-PeCDD	A	100.00	98.2	0.8288129	0.8142999		-1.8	+/-38	
13C12-1,2,3,4,7,8-HxCDF	A	100.00	74.3	1.1683050	0.8681265		-25.7	+/-24	*
13C12-1,2,3,6,7,8-HxCDF	A	100.00	67.8	1.3864660	0.9407065		-32.2	+/-30	*
13C12-2,3,4,6,7,8-HxCDF	A	100.00	77.5	1.1292560	0.8753166		-22.5	+/-27	
13C12-1,2,3,7,8,9-HxCDF	A	100.00	85.5	0.9317541	0.7963141		-14.5	+/-26	
13C12-1,2,3,4,7,8-HxCDD	A	100.00	91.3	0.9950393	0.9085762		-8.7	+/-15	
13C12-1,2,3,6,7,8-HxCDD	A	100.00	86.4	1.1566890	0.9995953		-13.6	+/-15	
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	76.1	0.8952017	0.6813698		-23.9	+/-22	*
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	79.4	0.7697516	0.6112471		-20.6	+/-23	
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	83.7	0.8401226	0.7034531		-16.3	+/-28	
13C12-OCDD	A	200.00	201	0.7674714	0.7719532		0.6	+/-52	
37Cl4-2,3,7,8-TCDD	A	10.000	8.52	1.2878040	1.0966729		-14.8		

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230315D1.qld
Last Altered: Thursday, March 16, 2023 09:12:10 Pacific Daylight Time
Printed: Thursday, March 16, 2023 10:02:15 Pacific Daylight Time

Method: T:\Autospec\Methods\Dioxin230315.mdb 16 Mar 2023 08:38:23
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: CS3Z6, Name: 23031521, Date: 16-Mar-2023, Time: 02:54:10, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.548	1.001	1.260e4	1.712e4	0.702	0.736	0.770	641	655	1.97e5	2.67e5	306.9	407.7	NO	bb	bb	9.223
12378-PeCDF	29.713	1.000	7.069e4	4.677e4	0.679	1.512	1.550	952	848	1.08e6	7.23e5	1139.5	852.2	NO	bb	bb	46.441
23478-PeCDF	31.050	1.000	7.424e4	5.068e4	0.786	1.465	1.550	952	848	1.16e6	7.99e5	1216.9	941.7	NO	bb	bb	44.198
123478-HxCDF	34.704	1.001	1.027e5	8.457e4	1.166	1.215	1.240	1021	1060	1.62e6	1.31e6	1582.4	1240.1	NO	bd	bd	45.386
234678-HxCDF	35.707	1.000	1.045e5	8.547e4	1.140	1.222	1.240	1021	1060	1.64e6	1.36e6	1608.2	1285.0	NO	bb	bd	46.702
123678-HxCDF	34.838	1.000	1.083e5	8.859e4	1.091	1.222	1.240	1021	1060	1.62e6	1.34e6	1584.9	1266.9	NO	db	dd	47.070
123789-HxCDF	36.743	1.001	9.405e4	7.661e4	1.137	1.228	1.240	1021	1060	1.41e6	1.16e6	1384.1	1092.4	NO	bd	bd	46.230
1234678-HpCDF	38.604	1.000	6.306e4	6.268e4	1.003	1.006	1.050	763	992	1.01e6	1.03e6	1322.1	1043.7	NO	bd	bb	45.128
1234789-HpCDF	40.810	1.000	5.680e4	5.930e4	0.953	0.958	1.050	763	992	8.10e5	8.52e5	1062.2	858.8	NO	bd	bd	48.881
OCDF	45.020	1.005	8.945e4	1.050e5	0.778	0.852	0.890	1123	593	1.06e6	1.23e6	946.0	2080.5	NO	bd	bd	79.439
2378-TCDD	26.184	1.000	1.804e4	2.322e4	1.149	0.777	0.770	536	530	2.66e5	3.38e5	495.9	637.1	NO	dd	db	9.137
12378-PeCDD	31.306	1.001	8.330e4	5.396e4	1.022	1.544	1.550	1001	648	1.31e6	8.31e5	1307.9	1283.6	NO	bb	bb	48.898
123478-HxCDD	35.819	1.000	9.000e4	7.229e4	0.996	1.245	1.240	1107	1075	1.53e6	1.22e6	1380.4	1139.0	NO	bd	bd	44.009
123678-HxCDD	35.941	1.001	9.463e4	7.808e4	1.001	1.212	1.240	1107	1075	1.49e6	1.24e6	1349.5	1149.8	NO	db	db	42.339
123789-HxCDD	36.331	1.012	9.389e4	7.815e4	0.907	1.201	1.240	1107	1075	1.51e6	1.28e6	1365.8	1191.3	NO	bb	bb	48.760
1234678-HpCDD	40.085	1.000	7.137e4	7.044e4	1.039	1.013	1.050	1309	801	1.10e6	1.11e6	842.9	1391.1	NO	bb	bb	47.590
OCDD	44.791	1.000	1.277e5	1.503e5	0.920	0.850	0.890	763	929	1.63e6	1.90e6	2130.6	2046.2	NO	bb	bb	96.000
13C-2378-TCDF	25.534	1.007	1.978e5	2.615e5	1.620	0.757	0.770	1257	771	3.03e6	4.00e6	2412.7	5187.6	NO	bb	bb	84.047
13C-12378-PeCDF	29.702	1.172	2.219e5	1.504e5	1.240	1.475	1.550	909	1108	3.42e6	2.29e6	3755.7	2064.1	NO	bb	bb	88.978
13C-23478-PeCDF	31.039	1.224	2.146e5	1.449e5	1.118	1.481	1.550	909	1108	3.35e6	2.30e6	3688.1	2072.8	NO	bb	bb	95.339
13C-123478-HxCDF	34.682	0.955	1.216e5	2.324e5	1.168	0.523	0.510	1306	1636	1.94e6	3.70e6	1488.0	2259.7	NO	bd	bd	74.307
13C-123678-HxCDF	34.827	0.959	1.267e5	2.568e5	1.386	0.493	0.510	1306	1636	1.89e6	3.87e6	1446.2	2364.1	NO	dd	dd	67.849
13C-234678-HxCDF	35.696	0.983	1.216e5	2.353e5	1.129	0.517	0.510	1306	1636	1.95e6	3.80e6	1491.7	2321.6	NO	bd	bb	77.513
13C-123789-HxCDF	36.721	1.011	1.082e5	2.164e5	0.932	0.500	0.510	1306	1636	1.73e6	3.54e6	1327.7	2161.8	NO	bb	bb	85.464
13C-1234678-HpCDF	38.593	1.063	8.559e4	1.922e5	0.895	0.445	0.440	875	1359	1.42e6	3.24e6	1628.0	2387.1	NO	bb	bb	76.114
13C-1234789-HpCDF	40.799	1.123	7.426e4	1.749e5	0.770	0.424	0.440	875	1359	1.12e6	2.65e6	1283.2	1948.7	NO	bb	bb	79.408
13C-1234-TCDD	25.351	0.000	1.457e5	1.917e5	1.000	0.760	0.770	1304	665	2.36e6	3.14e6	1807.8	4717.4	NO	bb	bb	100.000
13C-2378-TCDD	26.170	1.032	1.701e5	2.231e5	1.152	0.762	0.770	1304	665	2.59e6	3.43e6	1989.2	5161.5	NO	bb	bb	101.132
13C-12378-PeCDD	31.284	1.234	1.680e5	1.067e5	0.829	1.576	1.550	524	545	2.54e6	1.64e6	4838.3	3008.5	NO	bb	bb	98.249
13C-123478-HxCDD	35.807	0.986	2.049e5	1.655e5	0.995	1.238	1.240	816	822	3.41e6	2.81e6	4177.6	3416.9	NO	bd	bd	91.311
13C-123678-HxCDD	35.919	0.989	2.260e5	1.815e5	1.157	1.245	1.240	816	822	3.48e6	2.81e6	4268.6	3421.6	NO	db	db	86.419
13C-1234678-HpCDD	40.074	1.103	1.446e5	1.422e5	0.840	1.016	1.050	746	735	2.21e6	2.18e6	2954.7	2967.3	NO	bb	bb	83.732
13C-OCDD	44.782	1.233	2.973e5	3.322e5	0.767	0.895	0.890	991	1276	3.64e6	4.08e6	3671.2	3197.7	NO	bb	bb	201.168
13C-123789-HxCDD	36.320	0.000	2.252e5	1.824e5	1.000	1.235	1.240	816	822	3.73e6	2.98e6	4566.0	3627.3	NO	bb	bb	100.000
37CL-2378-TCDD	26.184	1.033	3.700e4		1.288			1019		5.60e5		549.6			bb		8.516

Dataset: T:\Autospec\Processed Data Batch\230315D1.qld
Last Altered: Thursday, March 16, 2023 09:12:10 Pacific Daylight Time
Printed: Thursday, March 16, 2023 10:02:15 Pacific Daylight Time

ID: CS3Z6, Name: 23031521, Date: 16-Mar-2023, Time: 02:54:10, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.045	0.863	1.368e4	1.897e4	0.802	0.721	0.770	641	655	2.20e5	3.07e5	342.6	469.0	NO	bb	bb	8.869
1289-TCDF	27.045	1.059	1.183e4	1.657e4	0.678	0.714	0.770	641	655	1.69e5	2.40e5	264.3	366.3	NO	db	dd	9.116
13468-PECDF	26.904	0.906	1.715e5	1.157e5	1.246	1.482	1.550	404	631	2.66e6	1.80e6	6593.9	2845.4	NO	bb	bb	61.889
12389-PECDF	32.086	1.080	6.556e4	4.453e4	0.496	1.472	1.550	952	848	9.59e5	6.61e5	1008.0	779.4	NO	bb	bb	59.567
123468-HXCDF	33.022	0.952	1.017e5	8.177e4	1.169	1.243	1.240	1021	1060	1.52e6	1.21e6	1490.6	1137.4	NO	bb	bb	44.334
1368-TCDD	23.316	0.891	1.595e4	2.068e4	1.015	0.771	0.770	536	530	2.60e5	3.35e5	485.4	631.5	NO	bd	bb	9.175
1289-TCDD	26.791	1.024	1.483e4	1.920e4	0.909	0.773	0.770	536	530	2.14e5	2.75e5	399.8	519.0	NO	bd	bb	9.525
12479-PECDD	28.577	0.914	1.274e5	8.605e4	2.301	1.480	1.550	1001	648	1.24e6	8.41e5	1235.7	1298.3	NO	bb	bb	33.762
12389-PECDD	31.708	1.013	8.978e4	6.045e4	1.184	1.485	1.550	1001	648	1.36e6	9.04e5	1355.8	1394.9	NO	bb	bb	46.206
124679-HXCDD	33.802	0.944	8.984e4	7.451e4	1.115	1.206	1.240	1107	1075	1.37e6	1.16e6	1238.7	1076.2	NO	bb	bb	39.778
1234679-HPCDD	39.049	0.974	7.683e4	7.411e4	1.137	1.037	1.050	1309	801	1.29e6	1.24e6	983.0	1542.6	NO	bb	bb	46.294
Total-tetrafurans			3.843e4		0.727			641		5.92e5							27.413
Total-penta1			1.715e5					404		2.66e6							61.889
Total-pentafurans			2.212e5		0.654			952		3.37e6							157.654
Total-hexafurans			5.112e5		1.141			1021		7.81e6							229.722
Total-heptafurans			1.201e5		0.978			763		1.82e6							94.211
Total-Furans			1.152e6		0.922			641		1.73e7							650.328
Total-tetradioxins			8.222e4		1.024			536		1.12e6							46.566
Total-pentadioxins			3.005e5		1.502			1001		3.91e6							128.866
Total-hexadioxins			3.684e5		1.005			1107		5.91e6							174.885
Total-heptadioxins			1.483e5		1.088			1309		2.39e6							93.944
Total-Dioxins			1.027e6		1.130			536		1.49e7							540.261
Total-TEQ			2.179e6					536		3.23e7							1190.589
FUNCTION1 PFK			2.552e5					474245		8.94e6							
FUNCTION2 PFK			3.735e5					89985		8.57e5							0.000
FUNCTION3 PFK			3.371e5					383880		9.65e6							0.000
FUNCTION4 PFK			3.037e5					235386		8.78e6							
FUNCTION5 PFK			2.619e4					163055		1.03e6							
FUNCTION1 HXCD...			8.257e1					328		8.96e2							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			2.190e2					658		5.45e3							0.000
FUNCTION3 OCDPE			0.000e0					297		0.00e0							
FUNCTION4 NCDPE			8.932e1					530		3.08e3							0.000
FUNCTION5 DCDPE			0.000e0					328		0.00e0							

Method: T:\Autospec\Methods\Dioxin230315.mdb 16 Mar 2023 08:38:23
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: CS3Z6, Name: 23031521, Date: 16-Mar-2023, Time: 02:54:10, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.05	1.183e4	1.657e4	0.678	0.71	0.77	264.3	YES	NO	db	dd	9.116
2	Total-tetrafurans	26.92	3.193e2	3.673e2	0.727	0.87	0.77	10.0	YES	NO	bd	bd	0.206
3	2378-TCDF	25.55	1.260e4	1.712e4	0.702	0.74	0.77	306.9	YES	NO	bb	bb	9.223
4	1368-TCDF	22.05	1.368e4	1.897e4	0.802	0.72	0.77	342.6	YES	NO	bb	bb	8.869

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	26.90	1.715e5	1.157e5	1.246	1.48	1.55	6593.9	YES	NO	bb	bb	61.889

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDF	32.09	6.556e4	4.453e4	0.496	1.47	1.55	1008.0	YES	NO	bb	bb	59.567
2	23478-PeCDF	31.05	7.424e4	5.068e4	0.786	1.46	1.55	1216.9	YES	NO	bb	bb	44.198
3	12378-PeCDF	29.71	7.069e4	4.677e4	0.679	1.51	1.55	1139.5	YES	NO	bb	bb	46.441
4	Total-pentafurans	28.57	1.066e4	7.159e3	0.654	1.49	1.55	179.2	YES	NO	bb	bb	7.448

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.74	9.405e4	7.661e4	1.137	1.23	1.24	1384.1	YES	NO	bd	bd	46.230
2	234678-HxCDF	35.71	1.045e5	8.547e4	1.140	1.22	1.24	1608.2	YES	NO	bb	bd	46.702
3	123678-HxCDF	34.84	1.083e5	8.859e4	1.091	1.22	1.24	1584.9	YES	NO	db	dd	47.070
4	123478-HxCDF	34.70	1.027e5	8.457e4	1.166	1.21	1.24	1582.4	YES	NO	bd	bd	45.386
5	123468-HXCDF	33.02	1.017e5	8.177e4	1.169	1.24	1.24	1490.6	YES	NO	bb	bb	44.334

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDF	38.60	6.306e4	6.268e4	1.003	1.01	1.05	1322.1	YES	NO	bd	bb	45.128
2	Total-heptafurans	41.05	2.461e2	2.744e2	0.978	0.90	1.05	6.1	YES	NO	dd	dd	0.202
3	1234789-HpCDF	40.81	5.680e4	5.930e4	0.953	0.96	1.05	1062.2	YES	NO	bd	bd	48.881

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.05	1.183e4	1.657e4	0.678	0.71	0.77	264.3	YES	NO	db	dd	9.116
2	Total-tetrafurans	26.92	3.193e2	3.673e2	0.727	0.87	0.77	10.0	YES	NO	bd	bd	0.206
3	2378-TCDF	25.55	1.260e4	1.712e4	0.702	0.74	0.77	306.9	YES	NO	bb	bb	9.223
4	1368-TCDF	22.05	1.368e4	1.897e4	0.802	0.72	0.77	342.6	YES	NO	bb	bb	8.869
5	12389-PECDF	32.09	6.556e4	4.453e4	0.496	1.47	1.55	1008.0	YES	NO	bb	bb	59.567
6	23478-PeCDF	31.05	7.424e4	5.068e4	0.786	1.46	1.55	1216.9	YES	NO	bb	bb	44.198
7	12378-PeCDF	29.71	7.069e4	4.677e4	0.679	1.51	1.55	1139.5	YES	NO	bb	bb	46.441
8	Total-pentafurans	28.57	1.066e4	7.159e3	0.654	1.49	1.55	179.2	YES	NO	bb	bb	7.448
9	123789-HxCDF	36.74	9.405e4	7.661e4	1.137	1.23	1.24	1384.1	YES	NO	bd	bd	46.230
10	234678-HxCDF	35.71	1.045e5	8.547e4	1.140	1.22	1.24	1608.2	YES	NO	bb	bd	46.702
11	123678-HxCDF	34.84	1.083e5	8.859e4	1.091	1.22	1.24	1584.9	YES	NO	db	dd	47.070
12	123478-HxCDF	34.70	1.027e5	8.457e4	1.166	1.21	1.24	1582.4	YES	NO	bd	bd	45.386
13	123468-HXCDF	33.02	1.017e5	8.177e4	1.169	1.24	1.24	1490.6	YES	NO	bb	bb	44.334
14	1234678-HpCDF	38.60	6.306e4	6.268e4	1.003	1.01	1.05	1322.1	YES	NO	bd	bb	45.128
15	Total-heptafurans	41.05	2.461e2	2.744e2	0.978	0.90	1.05	6.1	YES	NO	dd	dd	0.202
16	1234789-HpCDF	40.81	5.680e4	5.930e4	0.953	0.96	1.05	1062.2	YES	NO	bd	bd	48.881
17	OCDF	45.02	8.945e4	1.050e5	0.778	0.85	0.89	946.0	YES	NO	bd	bd	79.439
18	13468-PECDF	26.90	1.715e5	1.157e5	1.246	1.48	1.55	6593.9	YES	NO	bb	bb	61.889

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.18	1.804e4	2.322e4	1.149	0.78	0.77	495.9	YES	NO	dd	db	9.137
2	Total-tetradioxins	25.86	2.536e4	3.228e4	1.024	0.79	0.77	481.6	YES	NO	bd	bd	14.315
3	Total-tetradioxins	25.36	8.032e3	9.746e3	1.024	0.82	0.77	223.6	YES	NO	bb	bb	4.415
4	1368-TCDD	23.32	1.595e4	2.068e4	1.015	0.77	0.77	485.4	YES	NO	bd	bb	9.175
5	1289-TCDD	26.79	1.483e4	1.920e4	0.909	0.77	0.77	399.8	YES	NO	bd	bb	9.525

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.31	8.330e4	5.396e4	1.022	1.54	1.55	1307.9	YES	NO	bb	bb	48.898
2	12479-PECDD	28.58	1.274e5	8.605e4	2.301	1.48	1.55	1235.7	YES	NO	bb	bb	33.762
3	12389-PECDD	31.71	8.978e4	6.045e4	1.184	1.49	1.55	1355.8	YES	NO	bb	bb	46.206

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HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123678-HxCDD	35.94	9.463e4	7.808e4	1.001	1.21	1.24	1349.5	YES	NO	db	db	42.339
2	123478-HxCDD	35.82	9.000e4	7.229e4	0.996	1.24	1.24	1380.4	YES	NO	bd	bd	44.009
3	124679-HXCDD	33.80	8.984e4	7.451e4	1.115	1.21	1.24	1238.7	YES	NO	bb	bb	39.778
4	123789-HxCDD	36.33	9.389e4	7.815e4	0.907	1.20	1.24	1365.8	YES	NO	bb	bb	48.760

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.09	7.137e4	7.044e4	1.039	1.01	1.05	842.9	YES	NO	bb	bb	47.590
2	Total-heptadioxins	39.18	9.125e1	9.648e1	1.088	0.95	1.05	0.0	NO	NO	bb	bb	0.060
3	1234679-HPCDD	39.05	7.683e4	7.411e4	1.137	1.04	1.05	983.0	YES	NO	bb	bb	46.294

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.18	1.804e4	2.322e4	1.149	0.78	0.77	495.9	YES	NO	dd	db	9.137
2	Total-tetradioxins	25.86	2.536e4	3.228e4	1.024	0.79	0.77	481.6	YES	NO	bd	bd	14.315
3	Total-tetradioxins	25.36	8.032e3	9.746e3	1.024	0.82	0.77	223.6	YES	NO	bb	bb	4.415
4	1368-TCDD	23.32	1.595e4	2.068e4	1.015	0.77	0.77	485.4	YES	NO	bd	bb	9.175
5	12378-PeCDD	31.31	8.330e4	5.396e4	1.022	1.54	1.55	1307.9	YES	NO	bb	bb	48.898
6	12479-PECDD	28.58	1.274e5	8.605e4	2.301	1.48	1.55	1235.7	YES	NO	bb	bb	33.762
7	1289-TCDD	26.79	1.483e4	1.920e4	0.909	0.77	0.77	399.8	YES	NO	bd	bb	9.525
8	123678-HxCDD	35.94	9.463e4	7.808e4	1.001	1.21	1.24	1349.5	YES	NO	db	db	42.339
9	123478-HxCDD	35.82	9.000e4	7.229e4	0.996	1.24	1.24	1380.4	YES	NO	bd	bd	44.009
10	124679-HXCDD	33.80	8.984e4	7.451e4	1.115	1.21	1.24	1238.7	YES	NO	bb	bb	39.778
11	12389-PECDD	31.71	8.978e4	6.045e4	1.184	1.49	1.55	1355.8	YES	NO	bb	bb	46.206
12	123789-HxCDD	36.33	9.389e4	7.815e4	0.907	1.20	1.24	1365.8	YES	NO	bb	bb	48.760
13	OCDD	44.79	1.277e5	1.503e5	0.920	0.85	0.89	2130.6	YES	NO	bb	bb	96.000
14	1234678-HpCDD	40.09	7.137e4	7.044e4	1.039	1.01	1.05	842.9	YES	NO	bb	bb	47.590
15	Total-heptadioxins	39.18	9.125e1	9.648e1	1.088	0.95	1.05	0.0	NO	NO	bb	bb	0.060
16	1234679-HPCDD	39.05	7.683e4	7.411e4	1.137	1.04	1.05	983.0	YES	NO	bb	bb	46.294

Dataset: T:\Autospec\Processed Data Batch\230315D1.qld
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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.05	1.183e4	1.657e4	0.678	0.71	0.77	264.3	YES	NO	db	dd	9.116
2	Total-tetrafurans	26.92	3.193e2	3.673e2	0.727	0.87	0.77	10.0	YES	NO	bd	bd	0.206
3	2378-TCDF	25.55	1.260e4	1.712e4	0.702	0.74	0.77	306.9	YES	NO	bb	bb	9.223
4	1368-TCDF	22.05	1.368e4	1.897e4	0.802	0.72	0.77	342.6	YES	NO	bb	bb	8.869
5	12389-PECDF	32.09	6.556e4	4.453e4	0.496	1.47	1.55	1008.0	YES	NO	bb	bb	59.567
6	23478-PeCDF	31.05	7.424e4	5.068e4	0.786	1.46	1.55	1216.9	YES	NO	bb	bb	44.198
7	12378-PeCDF	29.71	7.069e4	4.677e4	0.679	1.51	1.55	1139.5	YES	NO	bb	bb	46.441
8	Total-pentafurans	28.57	1.066e4	7.159e3	0.654	1.49	1.55	179.2	YES	NO	bb	bb	7.448
9	123789-HxCDF	36.74	9.405e4	7.661e4	1.137	1.23	1.24	1384.1	YES	NO	bd	bd	46.230
10	234678-HxCDF	35.71	1.045e5	8.547e4	1.140	1.22	1.24	1608.2	YES	NO	bb	bd	46.702
11	123678-HxCDF	34.84	1.083e5	8.859e4	1.091	1.22	1.24	1584.9	YES	NO	db	dd	47.070
12	123478-HxCDF	34.70	1.027e5	8.457e4	1.166	1.21	1.24	1582.4	YES	NO	bd	bd	45.386
13	123468-HXCDF	33.02	1.017e5	8.177e4	1.169	1.24	1.24	1490.6	YES	NO	bb	bb	44.334
14	1234678-HpCDF	38.60	6.306e4	6.268e4	1.003	1.01	1.05	1322.1	YES	NO	bd	bb	45.128
15	Total-heptafurans	41.05	2.461e2	2.744e2	0.978	0.90	1.05	6.1	YES	NO	dd	dd	0.202
16	1234789-HpCDF	40.81	5.680e4	5.930e4	0.953	0.96	1.05	1062.2	YES	NO	bd	bd	48.881
17	OCDF	45.02	8.945e4	1.050e5	0.778	0.85	0.89	946.0	YES	NO	bd	bd	79.439
18	13468-PECDF	26.90	1.715e5	1.157e5	1.246	1.48	1.55	6593.9	YES	NO	bb	bb	61.889
19	2378-TCDD	26.18	1.804e4	2.322e4	1.149	0.78	0.77	495.9	YES	NO	dd	db	9.137
20	Total-tetradioxins	25.86	2.536e4	3.228e4	1.024	0.79	0.77	481.6	YES	NO	bd	bd	14.315
21	Total-tetradioxins	25.36	8.032e3	9.746e3	1.024	0.82	0.77	223.6	YES	NO	bb	bb	4.415
22	1368-TCDD	23.32	1.595e4	2.068e4	1.015	0.77	0.77	485.4	YES	NO	bd	bb	9.175
23	12378-PeCDD	31.31	8.330e4	5.396e4	1.022	1.54	1.55	1307.9	YES	NO	bb	bb	48.898
24	12479-PECDD	28.58	1.274e5	8.605e4	2.301	1.48	1.55	1235.7	YES	NO	bb	bb	33.762
25	1289-TCDD	26.79	1.483e4	1.920e4	0.909	0.77	0.77	399.8	YES	NO	bd	bb	9.525
26	123678-HxCDD	35.94	9.463e4	7.808e4	1.001	1.21	1.24	1349.5	YES	NO	db	db	42.339
27	123478-HxCDD	35.82	9.000e4	7.229e4	0.996	1.24	1.24	1380.4	YES	NO	bd	bd	44.009
28	124679-HXCDD	33.80	8.984e4	7.451e4	1.115	1.21	1.24	1238.7	YES	NO	bb	bb	39.778
29	12389-PECDD	31.71	8.978e4	6.045e4	1.184	1.49	1.55	1355.8	YES	NO	bb	bb	46.206
30	123789-HxCDD	36.33	9.389e4	7.815e4	0.907	1.20	1.24	1365.8	YES	NO	bb	bb	48.760
31	OCDD	44.79	1.277e5	1.503e5	0.920	0.85	0.89	2130.6	YES	NO	bb	bb	96.000
32	1234678-HpCDD	40.09	7.137e4	7.044e4	1.039	1.01	1.05	842.9	YES	NO	bb	bb	47.590
33	Total-heptadioxins	39.18	9.125e1	9.648e1	1.088	0.95	1.05	0.0	NO	NO	bb	bb	0.060
34	1234679-HPCDD	39.05	7.683e4	7.411e4	1.137	1.04	1.05	983.0	YES	NO	bb	bb	46.294

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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	25.11	3.757e3					0.6	NO		bd		
2	FUNCTION1 PFK	24.76	3.994e3					0.6	NO		bb		
3	FUNCTION1 PFK	24.56	9.886e3					0.8	NO		db		
4	FUNCTION1 PFK	24.52	4.594e3					0.6	NO		bd		
5	FUNCTION1 PFK	24.15	4.921e3					0.7	NO		bb		
6	FUNCTION1 PFK	23.71	1.957e4					1.2	NO		bb		
7	FUNCTION1 PFK	23.20	3.542e3					0.5	NO		bb		
8	FUNCTION1 PFK	22.89	1.118e4					1.0	NO		bb		
9	FUNCTION1 PFK	22.82	3.333e4					1.4	NO		db		
10	FUNCTION1 PFK	22.75	2.314e4					1.2	NO		bd		
11	FUNCTION1 PFK	22.65	1.267e4					0.9	NO		bb		
12	FUNCTION1 PFK	22.21	2.008e4					1.0	NO		bb		
13	FUNCTION1 PFK	22.09	9.710e3					0.7	NO		bb		
14	FUNCTION1 PFK	21.24	1.536e4					1.1	NO		bb		
15	FUNCTION1 PFK	27.64	3.607e3					0.5	NO		bb		
16	FUNCTION1 PFK	27.60	3.982e3					0.6	NO		bb		
17	FUNCTION1 PFK	27.41	6.708e3					0.8	NO		bb		
18	FUNCTION1 PFK	27.36	1.669e4					1.2	NO		bb		
19	FUNCTION1 PFK	26.38	1.041e4					0.9	NO		bb		
20	FUNCTION1 PFK	25.63	8.797e3					0.9	NO		bb		
21	FUNCTION1 PFK	25.55	3.725e3					0.6	NO		bb		
22	FUNCTION1 PFK	25.20	2.553e4					1.0	NO		db		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	32.01	3.135e4					1.5	NO		bb		0.000
2	FUNCTION2 PFK	31.30	2.224e5					4.0	YES		bb		0.000
3	FUNCTION2 PFK	29.91	1.198e5					4.0	YES		bb		0.000

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PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	33.08	8.575e3					0.9	NO		bb		0.000
2	FUNCTION3 PFK	32.97	8.354e3					1.1	NO		bb		0.000
3	FUNCTION3 PFK	32.70	7.395e3					0.9	NO		bb		0.000
4	FUNCTION3 PFK	36.91	4.136e4					1.7	NO		bb		0.000
5	FUNCTION3 PFK	36.55	7.253e3					0.9	NO		bb		0.000
6	FUNCTION3 PFK	35.85	2.558e4					2.0	NO		bb		0.000
7	FUNCTION3 PFK	35.62	1.169e4					1.1	NO		bb		0.000
8	FUNCTION3 PFK	35.57	7.075e3					0.9	NO		bb		0.000
9	FUNCTION3 PFK	35.04	1.698e4					1.2	NO		bb		0.000
10	FUNCTION3 PFK	34.89	1.376e4					1.1	NO		bb		0.000
11	FUNCTION3 PFK	34.60	1.774e4					1.3	NO		db		0.000
12	FUNCTION3 PFK	34.53	1.127e4					1.1	NO		bd		0.000
13	FUNCTION3 PFK	34.21	2.220e3					0.5	NO		bb		0.000
14	FUNCTION3 PFK	34.14	4.065e3					0.6	NO		bb		0.000
15	FUNCTION3 PFK	34.04	3.839e3					0.7	NO		bb		0.000
16	FUNCTION3 PFK	33.85	3.503e4					2.1	NO		bb		0.000
17	FUNCTION3 PFK	33.45	1.051e4					1.1	NO		db		0.000
18	FUNCTION3 PFK	33.40	2.729e4					1.6	NO		dd		0.000
19	FUNCTION3 PFK	33.32	3.465e4					1.8	NO		bd		0.000
20	FUNCTION3 PFK	37.41	9.963e3					1.1	NO		bb		0.000
21	FUNCTION3 PFK	37.13	3.251e4					1.6	NO		bb		0.000

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PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	39.23	1.088e4					1.3	NO		db		
2	FUNCTION4 PFK	39.18	1.430e4					1.3	NO		bd		
3	FUNCTION4 PFK	39.04	4.917e3					1.1	NO		bb		
4	FUNCTION4 PFK	38.99	1.451e3					0.6	NO		bb		
5	FUNCTION4 PFK	38.94	2.358e4					1.9	NO		bb		
6	FUNCTION4 PFK	38.51	1.721e4					1.6	NO		bb		
7	FUNCTION4 PFK	38.31	7.894e3					1.3	NO		bb		
8	FUNCTION4 PFK	38.24	5.849e3					1.1	NO		db		
9	FUNCTION4 PFK	38.19	7.592e3					1.3	NO		bd		
10	FUNCTION4 PFK	38.14	6.944e3					0.7	NO		bb		
11	FUNCTION4 PFK	37.99	1.253e4					1.4	NO		bb		
12	FUNCTION4 PFK	37.89	3.032e3					0.6	NO		bb		
13	FUNCTION4 PFK	37.78	3.159e3					0.5	NO		bb		
14	FUNCTION4 PFK	42.28	5.355e3					1.0	NO		bb		
15	FUNCTION4 PFK	42.12	2.248e4					1.5	NO		db		
16	FUNCTION4 PFK	42.05	1.480e4					1.8	NO		dd		
17	FUNCTION4 PFK	41.96	2.330e4					2.0	NO		bd		
18	FUNCTION4 PFK	41.18	8.394e3					1.3	NO		bb		
19	FUNCTION4 PFK	40.88	8.104e3					1.2	NO		bb		
20	FUNCTION4 PFK	40.78	2.482e4					2.0	NO		db		
21	FUNCTION4 PFK	40.69	7.245e3					1.3	NO		bd		
22	FUNCTION4 PFK	40.58	7.510e3					1.3	NO		bb		
23	FUNCTION4 PFK	40.50	6.216e3					0.7	NO		bb		
24	FUNCTION4 PFK	39.94	1.490e4					1.7	NO		db		
25	FUNCTION4 PFK	39.91	9.594e3					1.4	NO		bd		
26	FUNCTION4 PFK	39.84	5.271e3					0.8	NO		db		
27	FUNCTION4 PFK	39.80	5.967e3					1.1	NO		dd		
28	FUNCTION4 PFK	39.76	8.318e3					1.2	NO		bd		
29	FUNCTION4 PFK	39.39	1.007e3					0.4	NO		bb		
30	FUNCTION4 PFK	42.44	1.611e3					0.6	NO		bb		
31	FUNCTION4 PFK	42.35	9.507e3					1.4	NO		bb		

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PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	45.82	9.281e3					1.9	NO		bb		
2	FUNCTION5 PFK	45.67	9.930e2					0.7	NO		bb		
3	FUNCTION5 PFK	43.67	4.997e3					1.7	NO		bb		
4	FUNCTION5 PFK	42.62	1.092e4					2.1	NO		bb		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	23.51	8.257e1					2.7	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	30.88	7.548e1					2.5	NO		bb		0.000
2	FUNCTION2 HPCD...	30.74	7.206e1					2.2	NO		bb		0.000
3	FUNCTION2 HPCD...	29.72	7.145e1					3.6	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	40.93	8.932e1					5.8	YES		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
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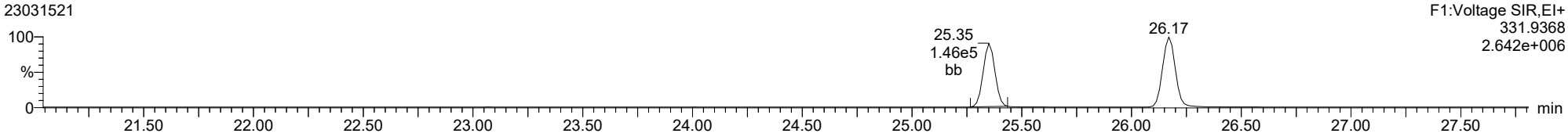

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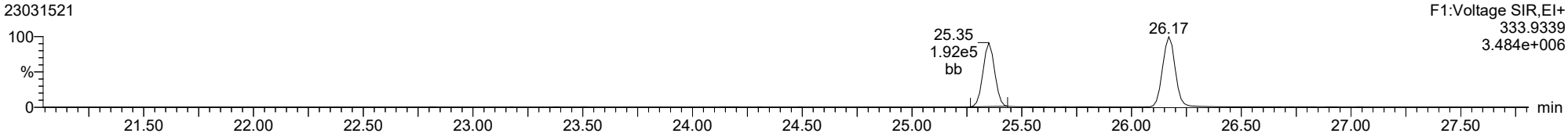
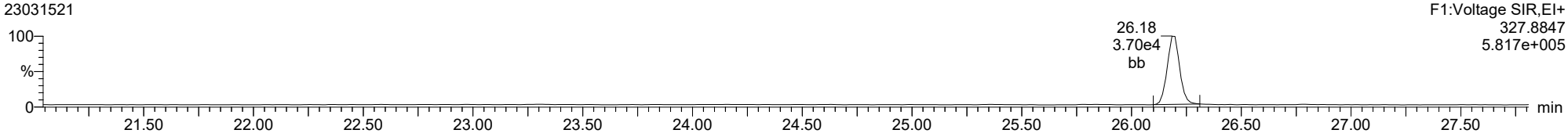


37CL-2378-TCDD



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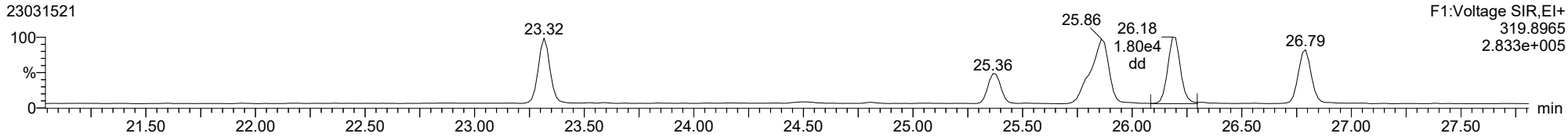

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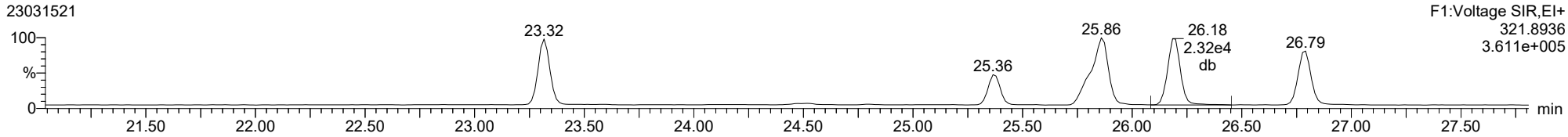

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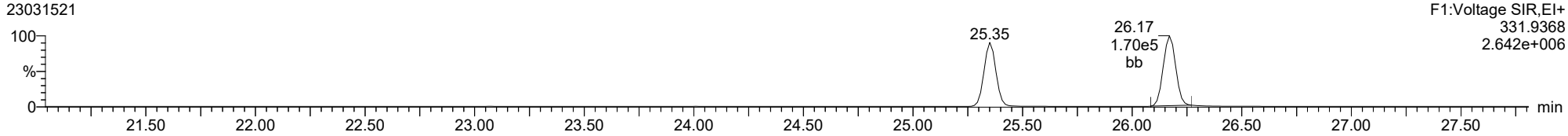

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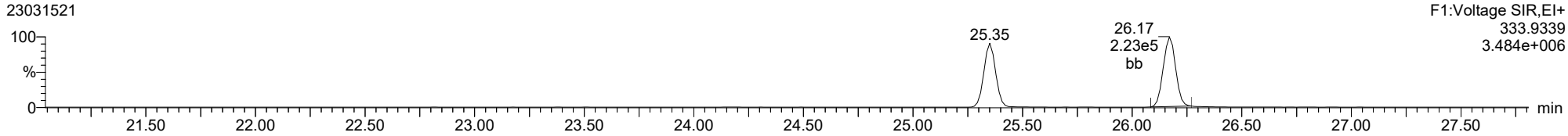

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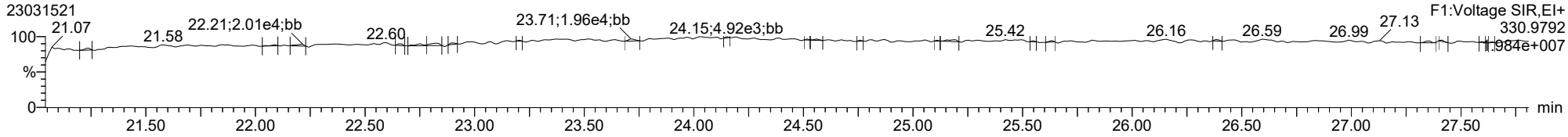

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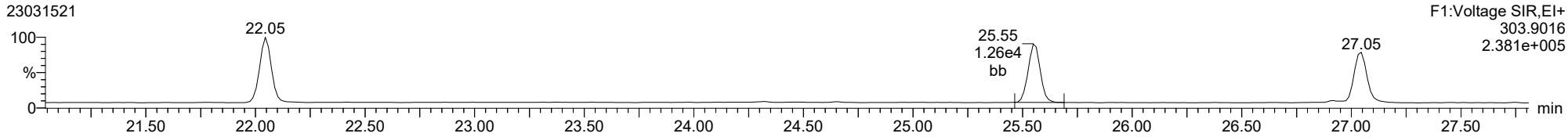

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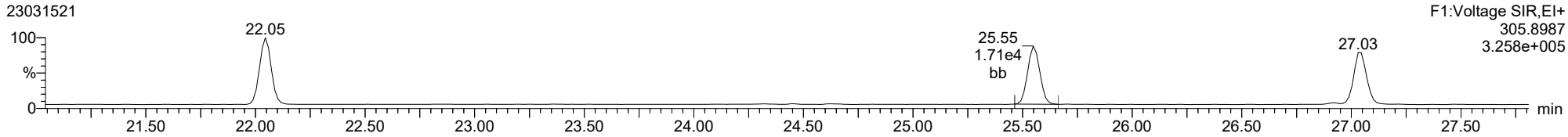

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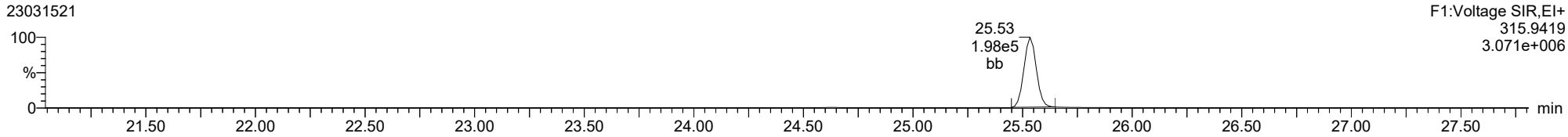

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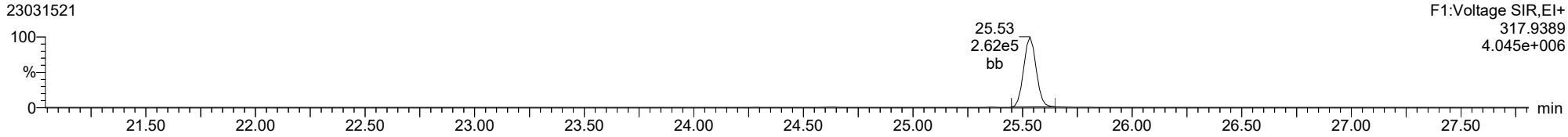

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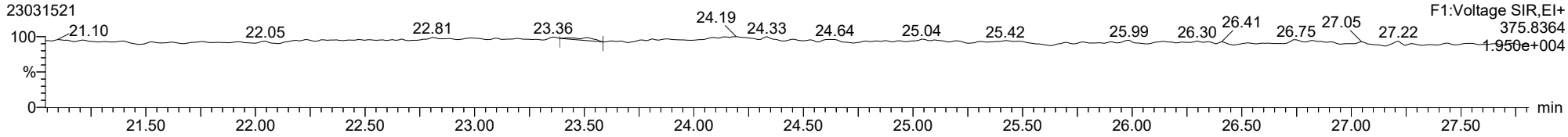

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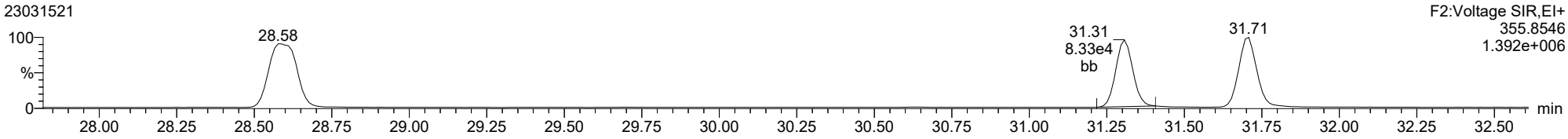
12378-PeCDD



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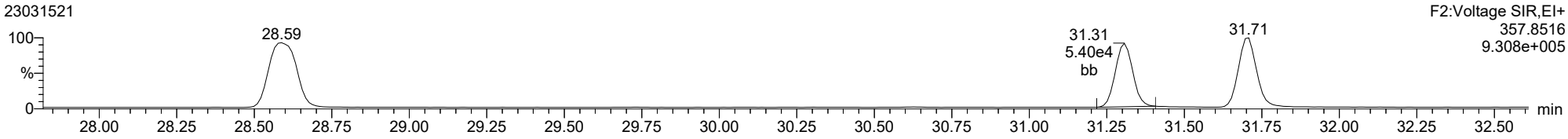

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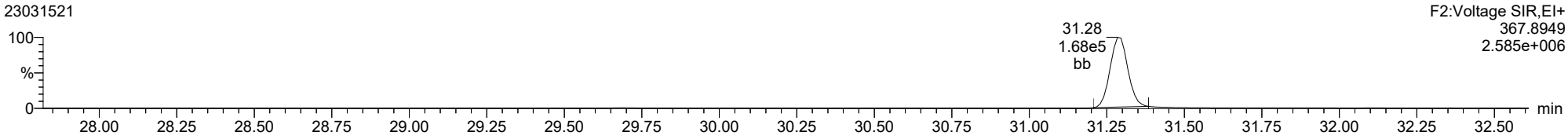

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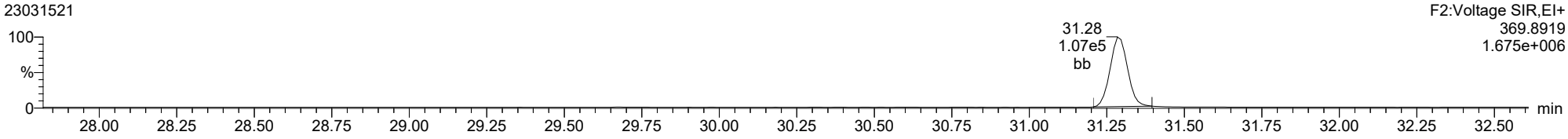

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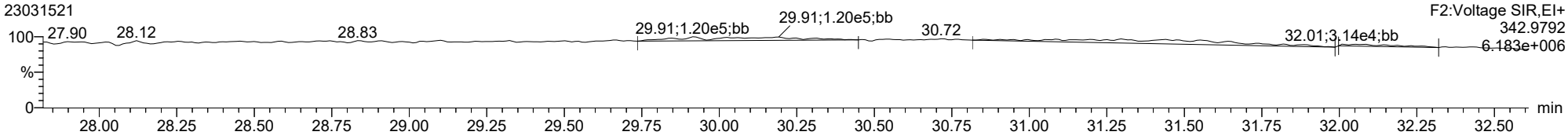

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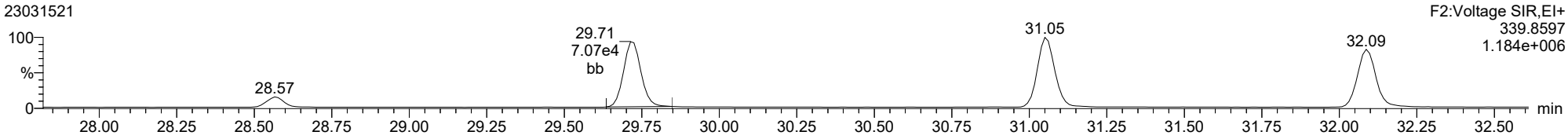

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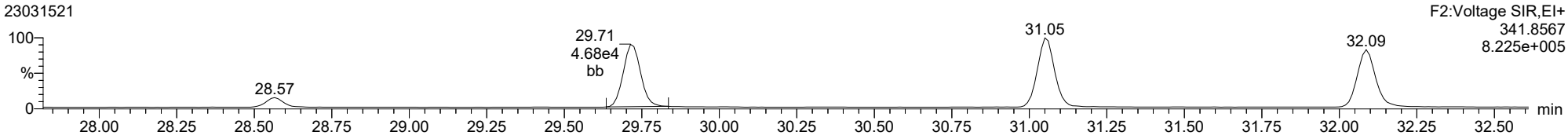

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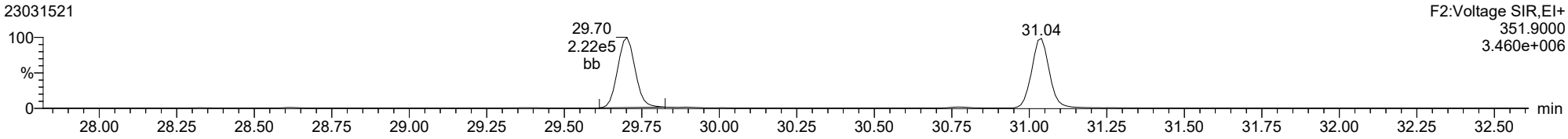

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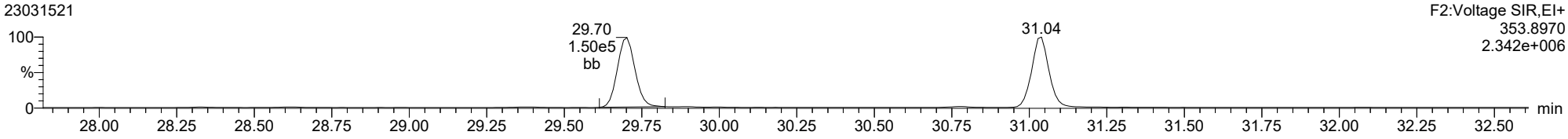
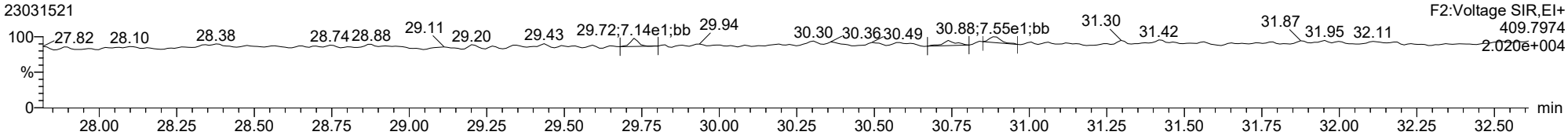


FUNCTION2 HPCDPE



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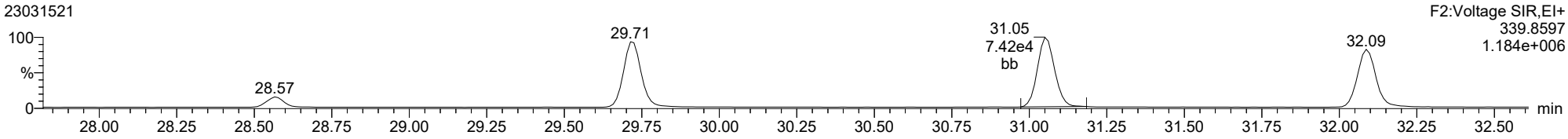

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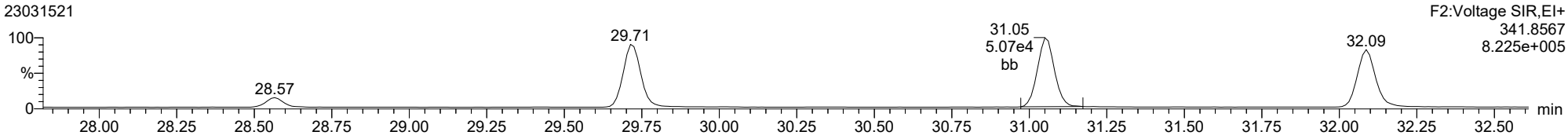

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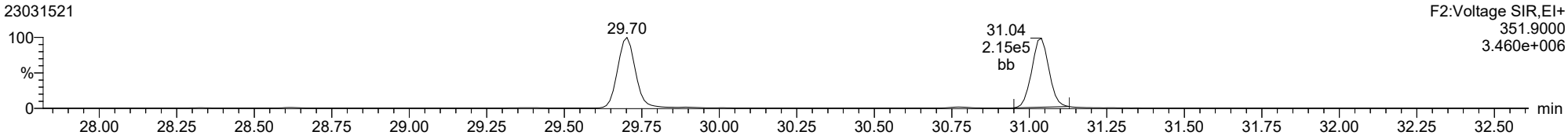

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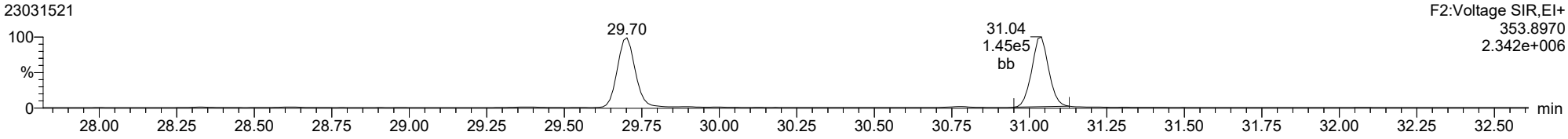

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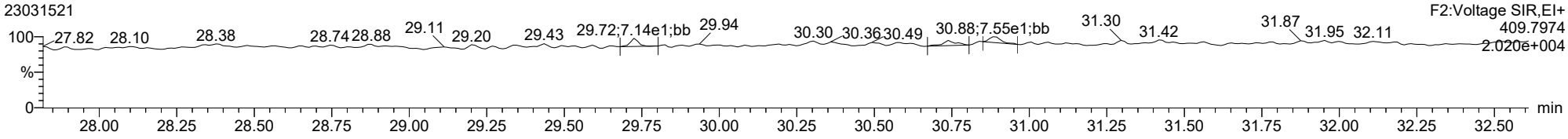

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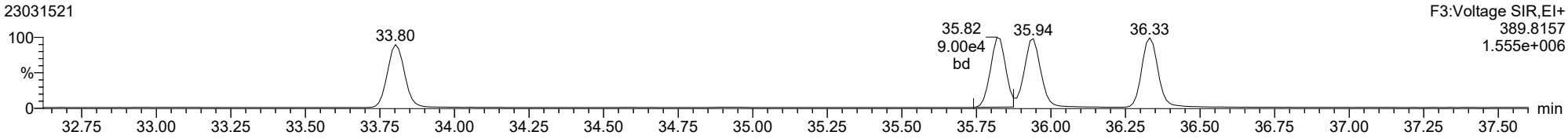

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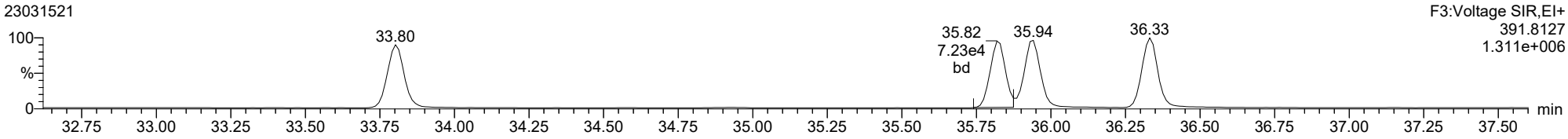

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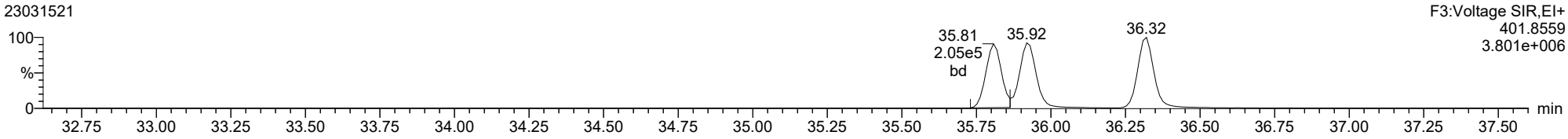

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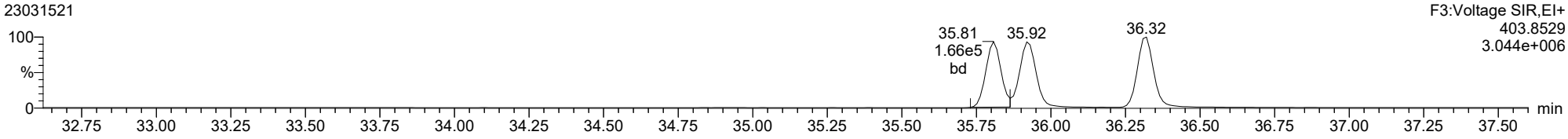

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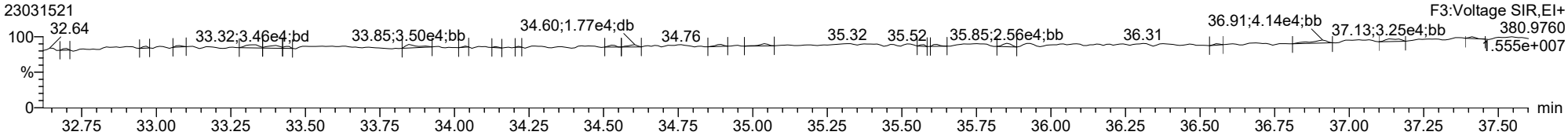

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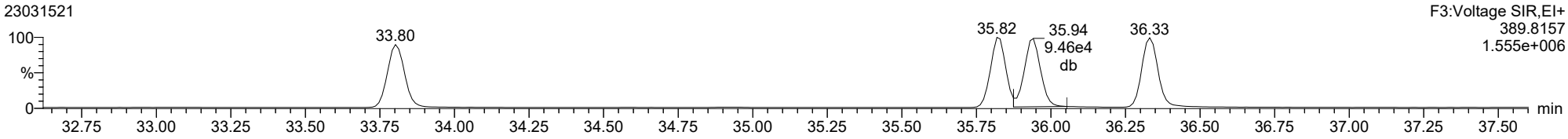

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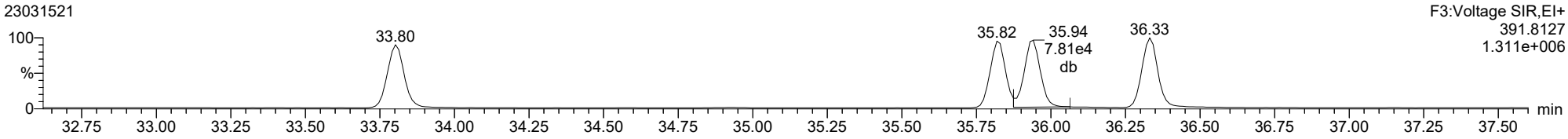

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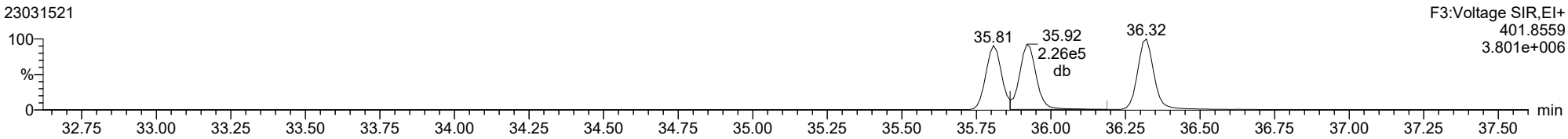

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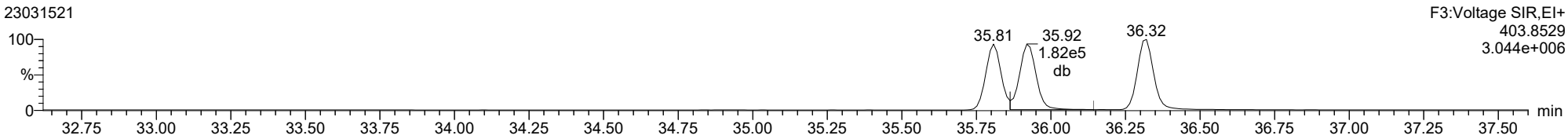

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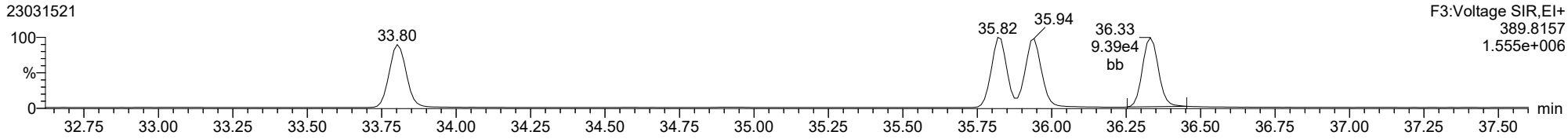

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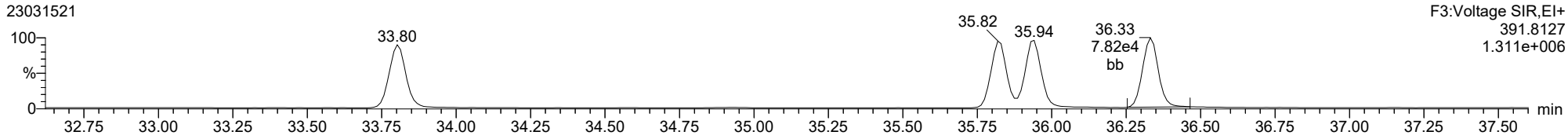

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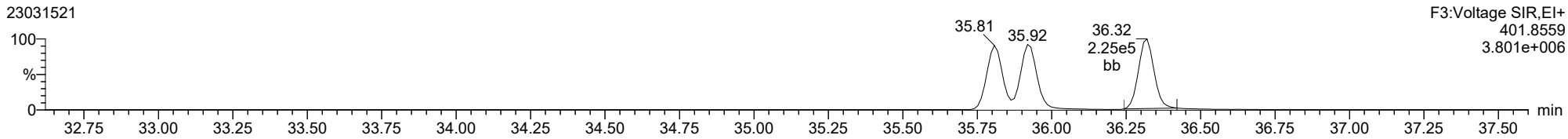

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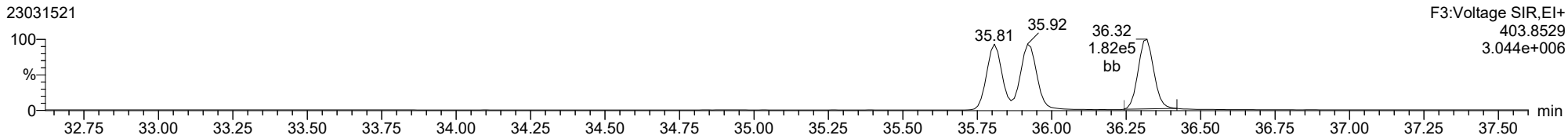

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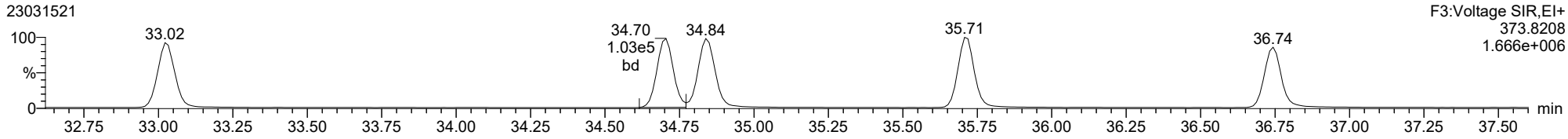

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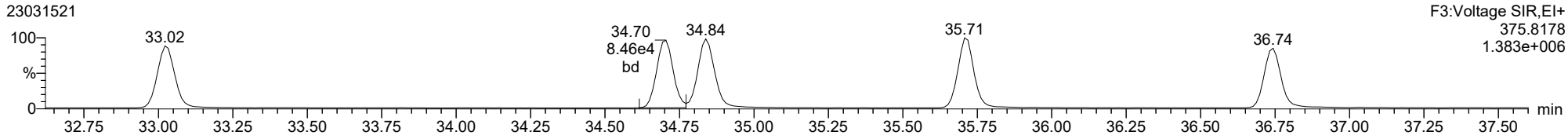

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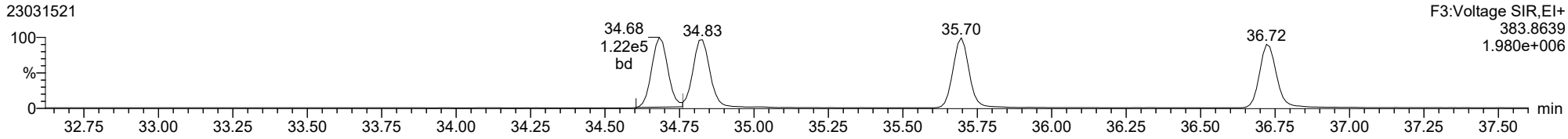

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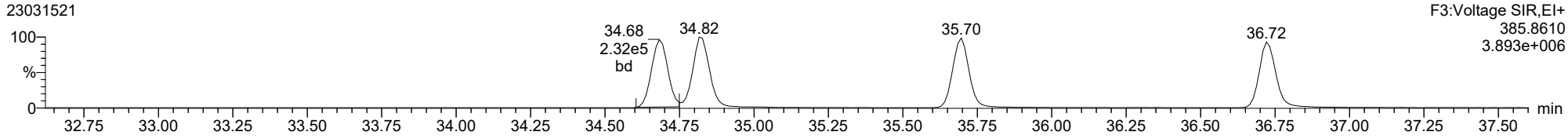

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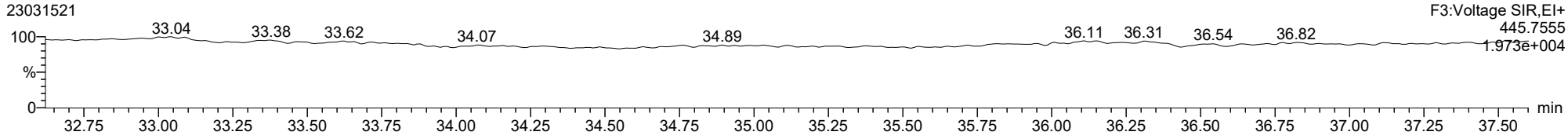

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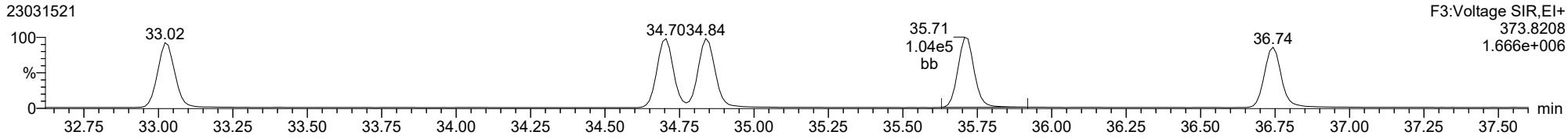

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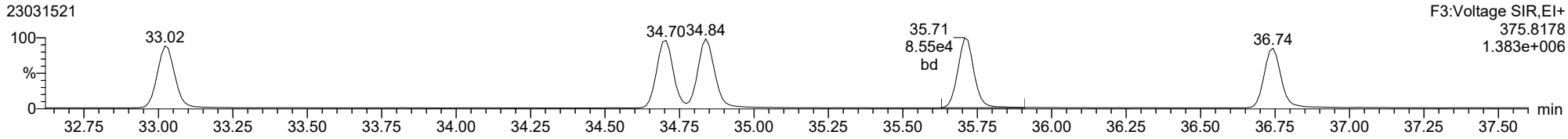

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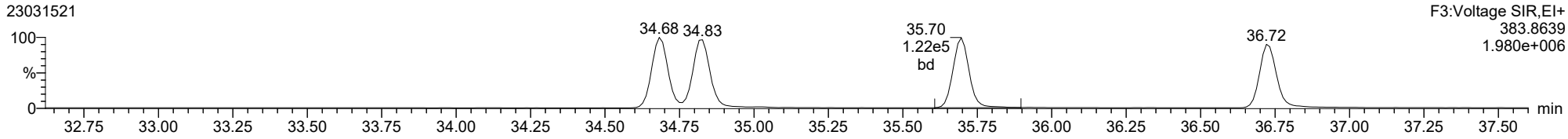

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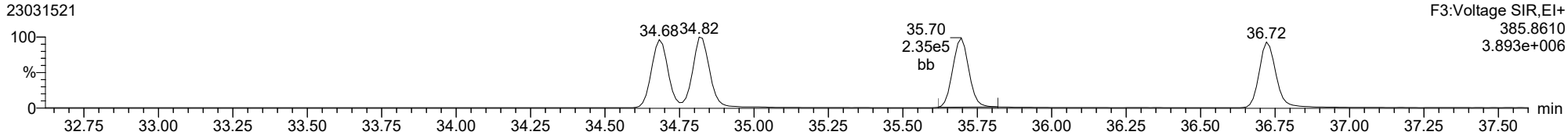

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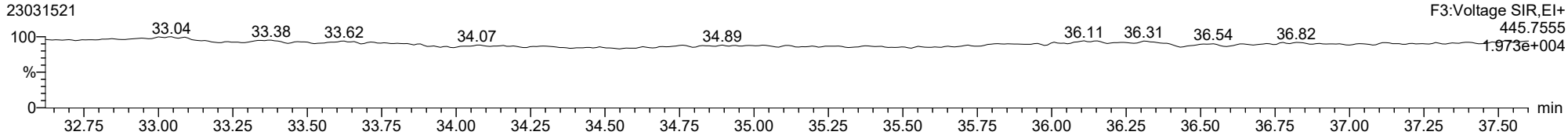

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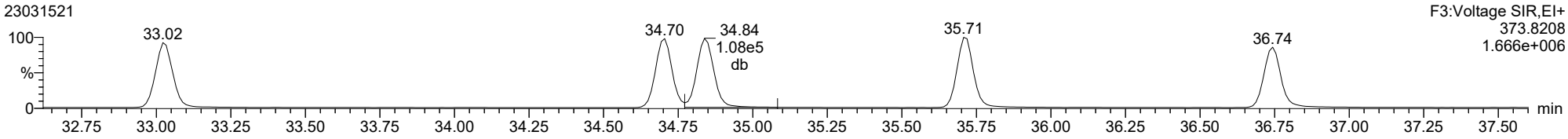

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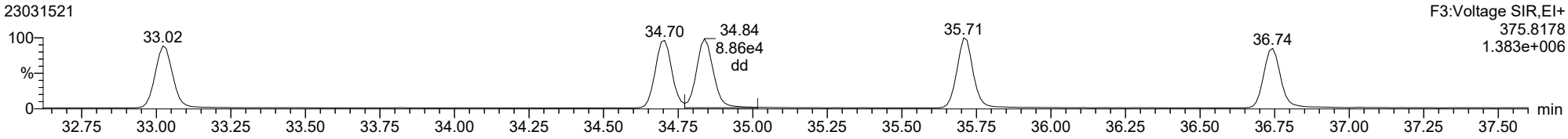

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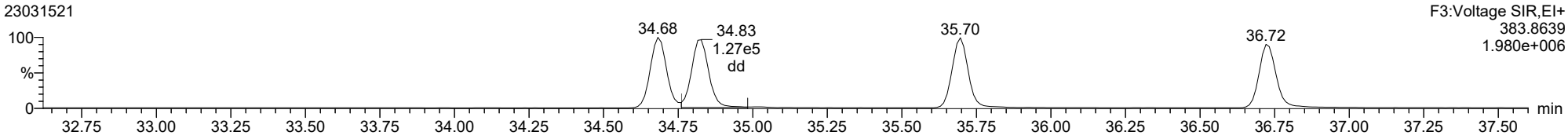

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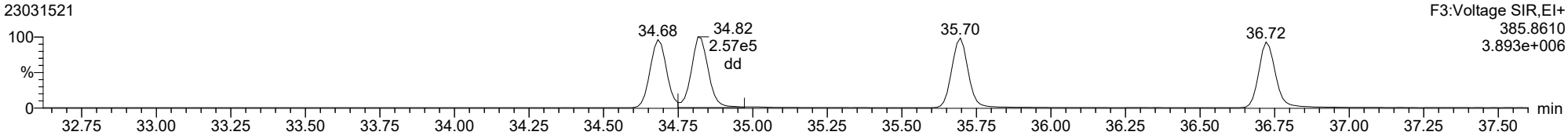

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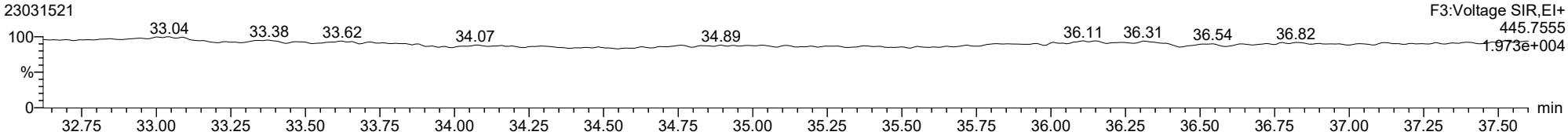

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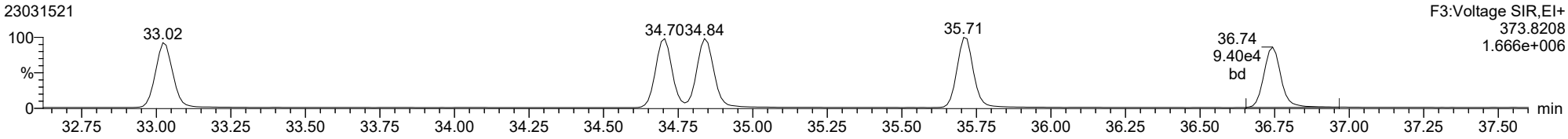

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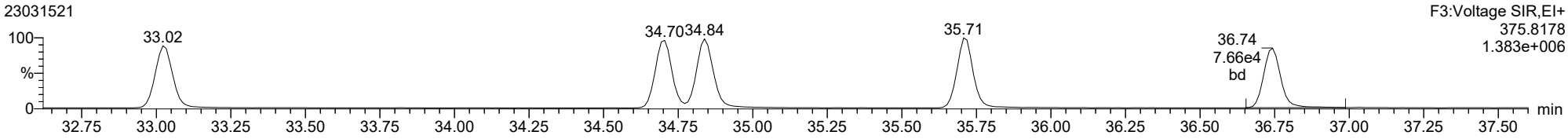

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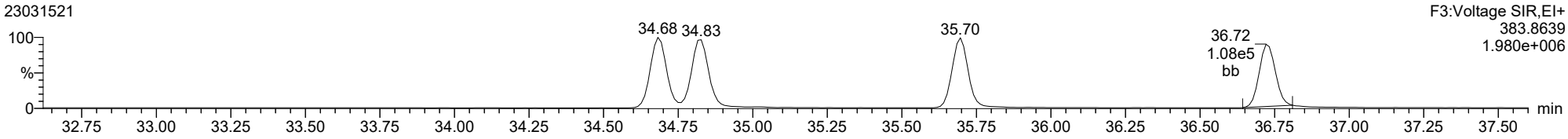

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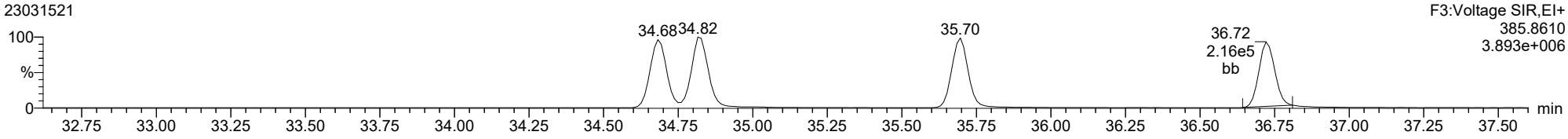

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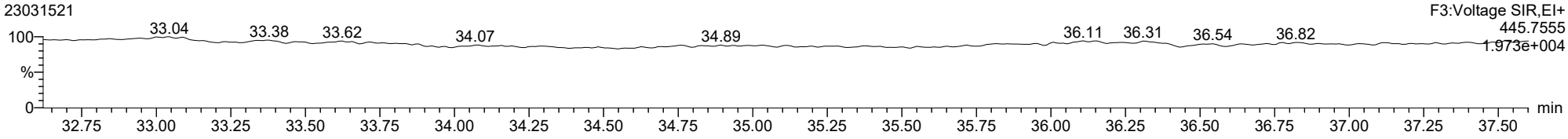

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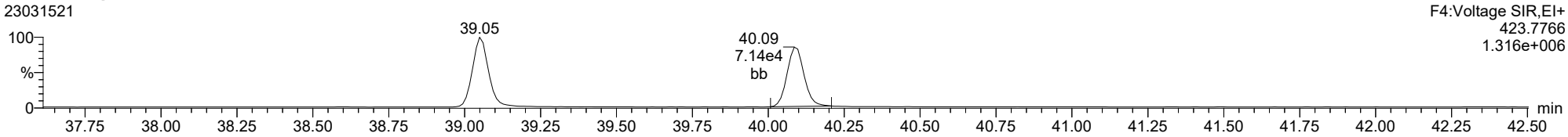

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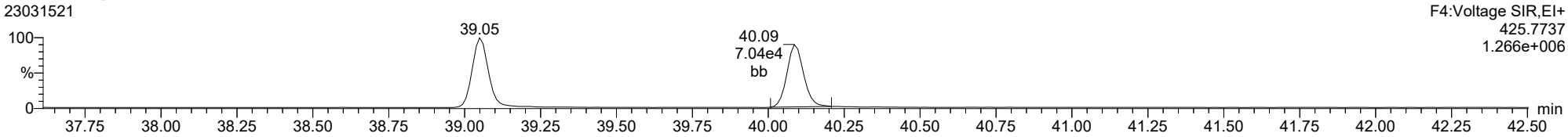

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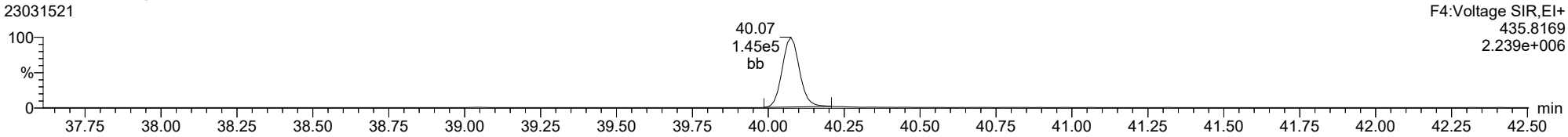

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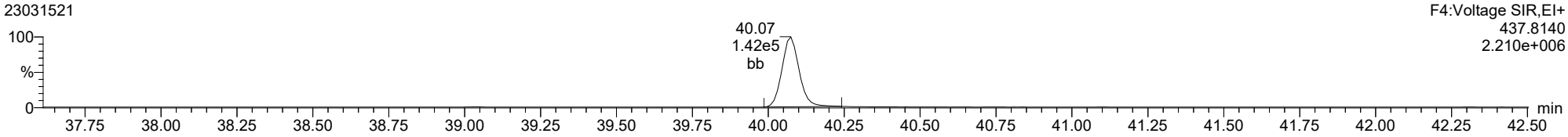

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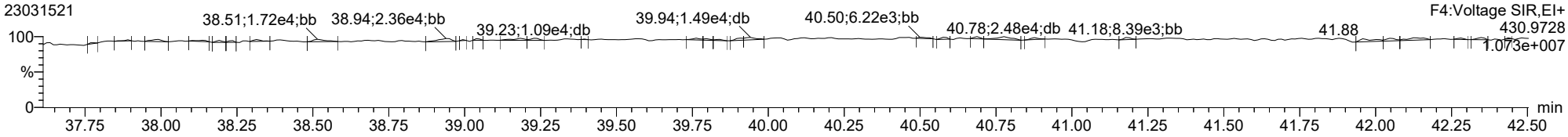

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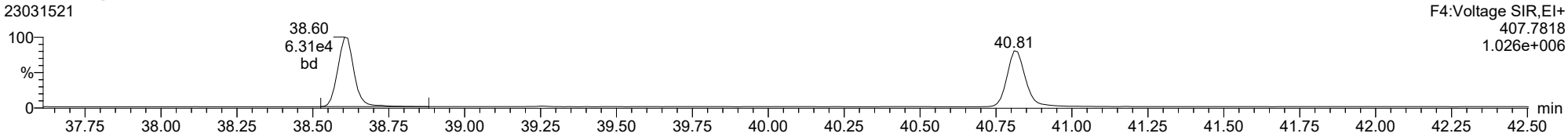

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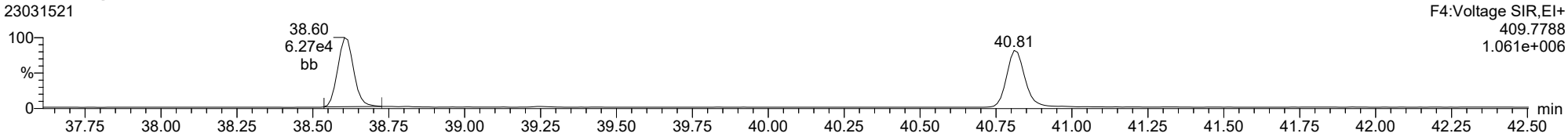

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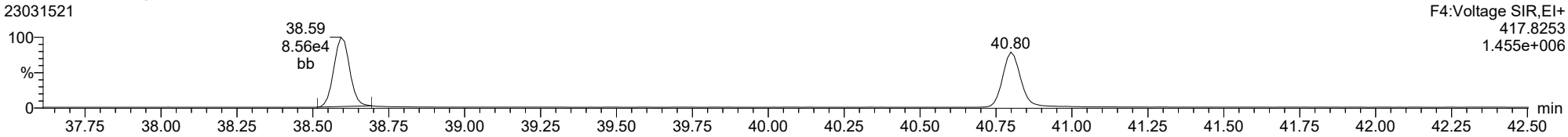

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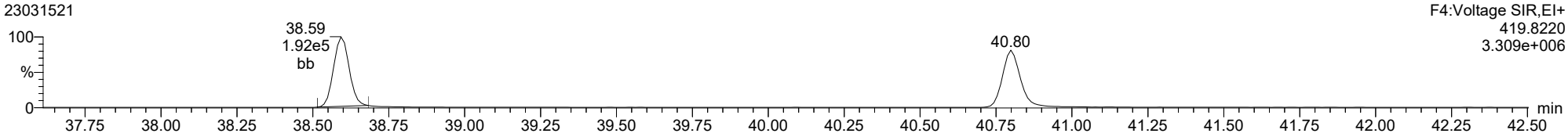

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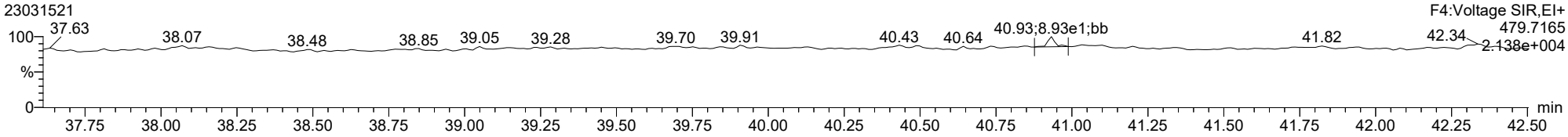

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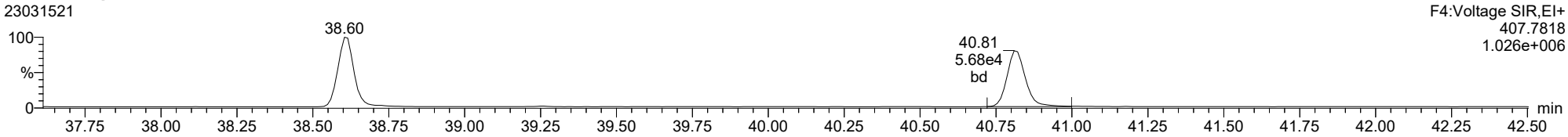

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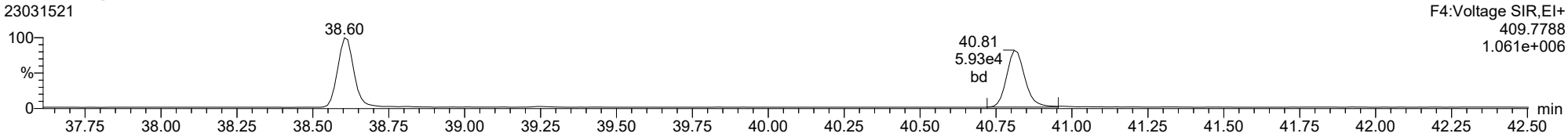

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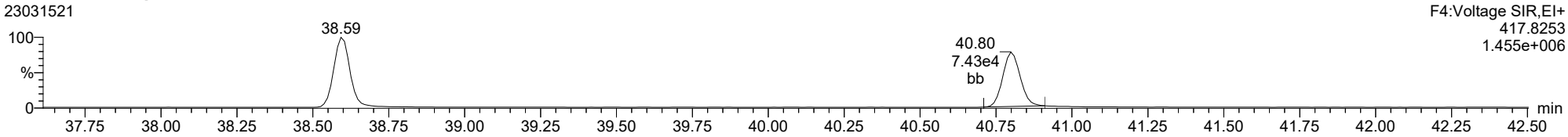

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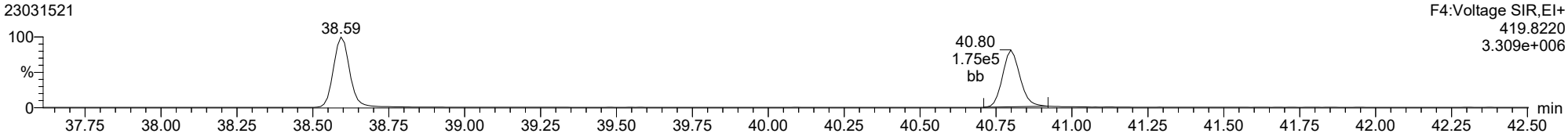

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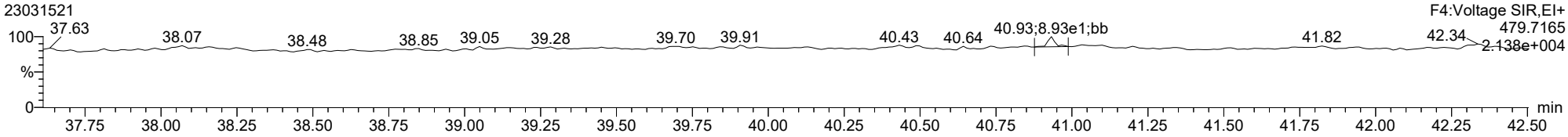

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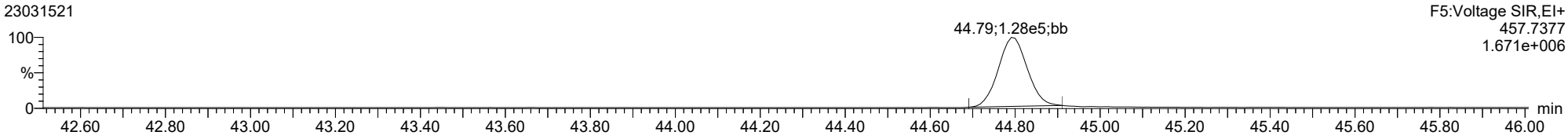

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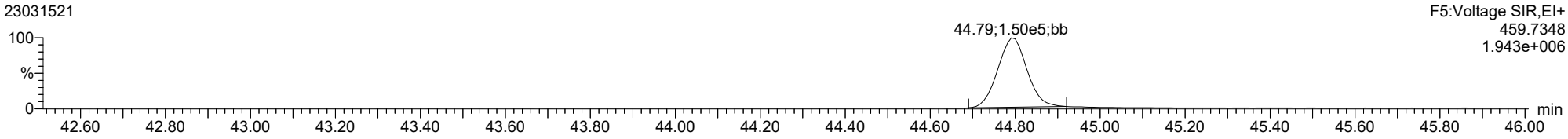

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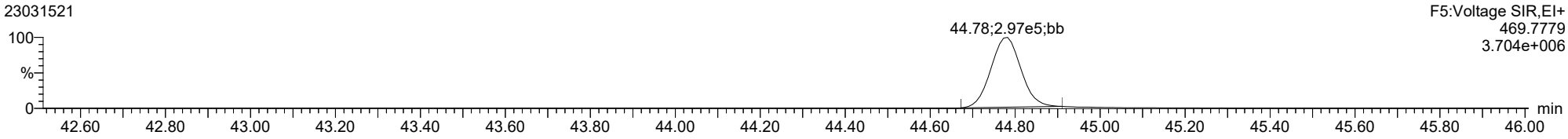

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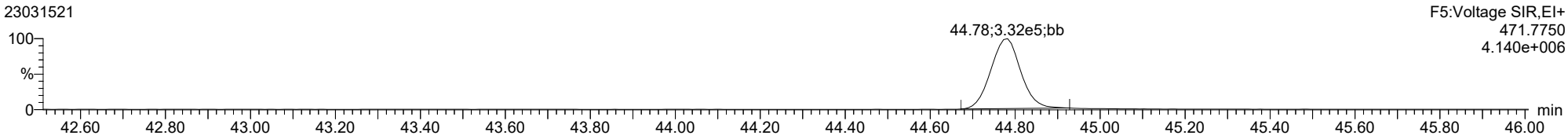

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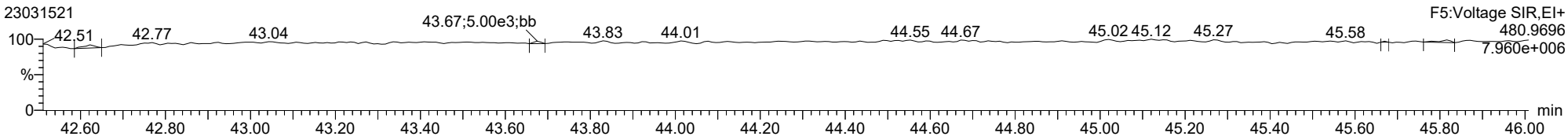

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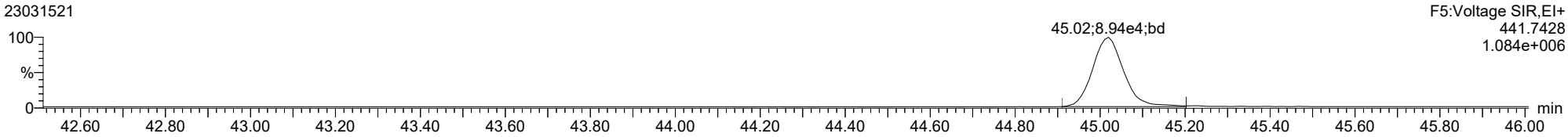
OCDF



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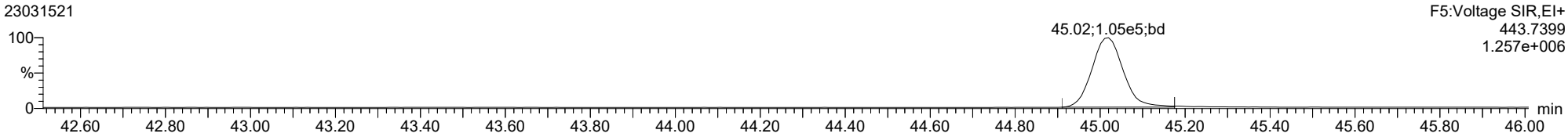

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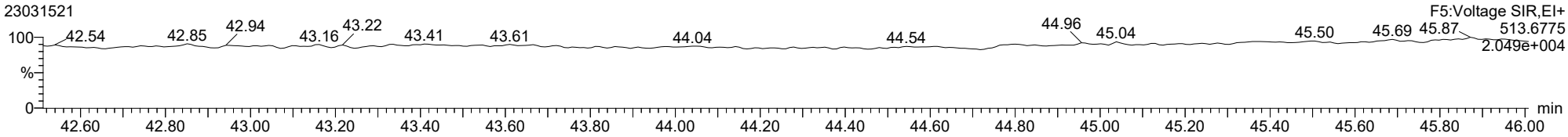

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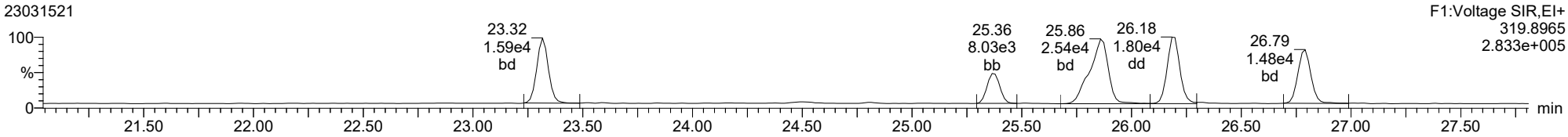

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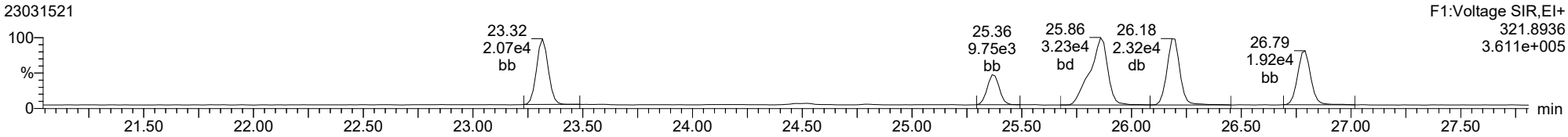

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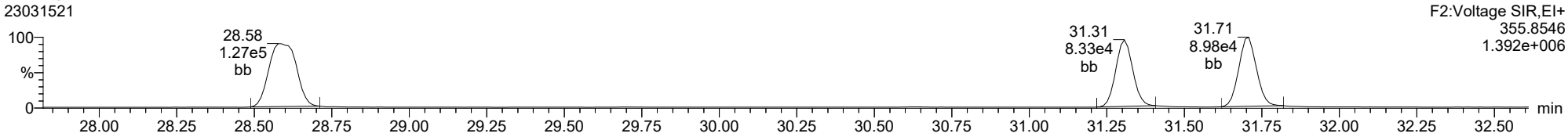

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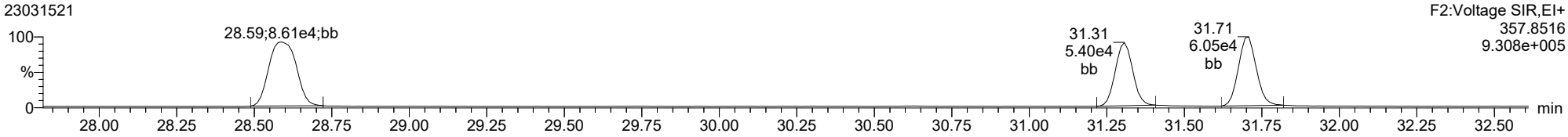

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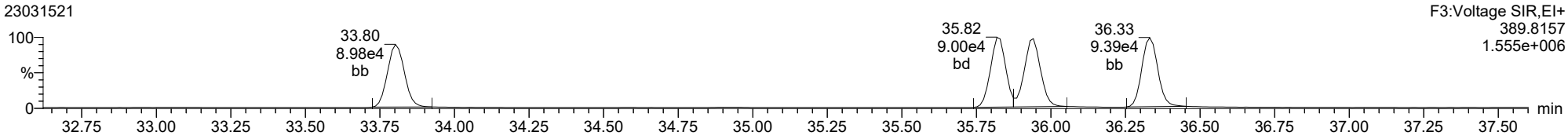
Total-hexadioxins



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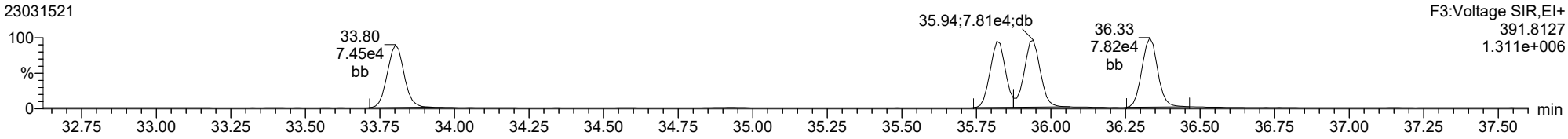
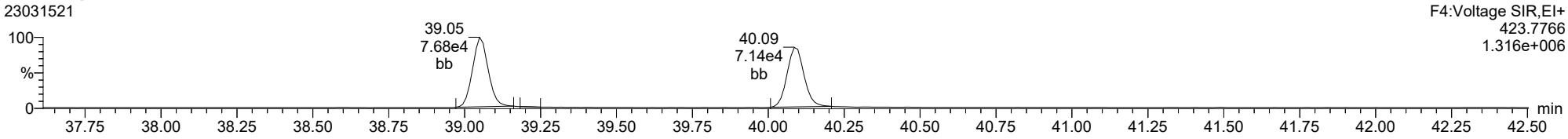
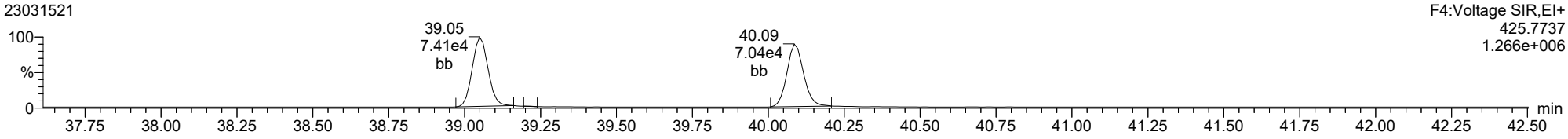


Total-heptadioxins

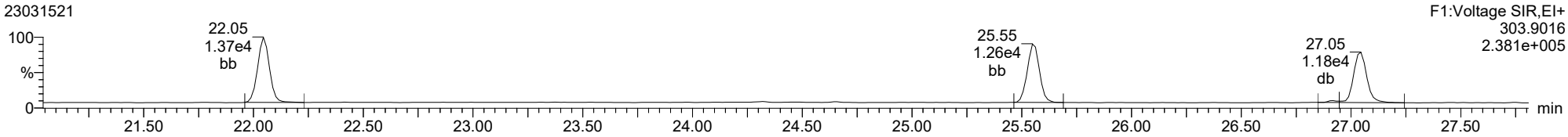


Total-heptadioxins

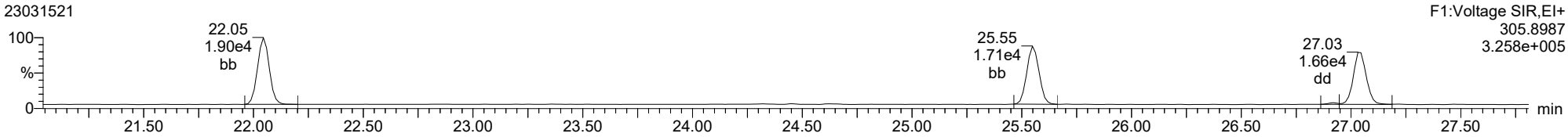


ID: CS3Z6, Name: 23031521, Date: 16-Mar-2023, Time: 02:54:10, Conditions: AUTOSPEC01, User: pk

Total-tetrafurans



Total-tetrafurans



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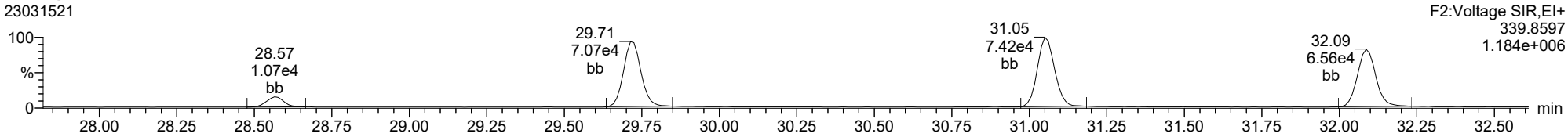

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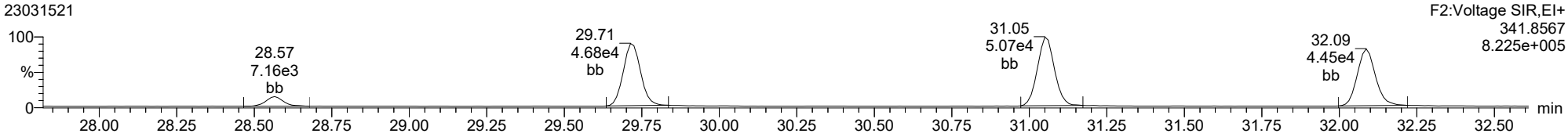

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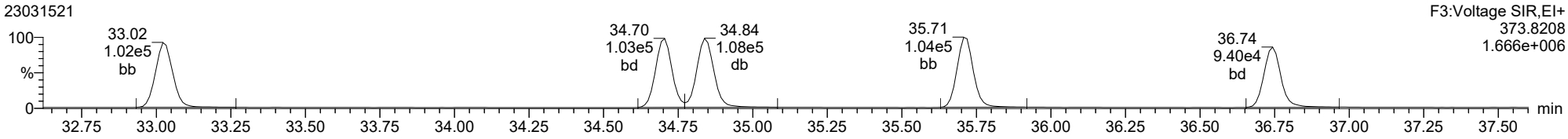

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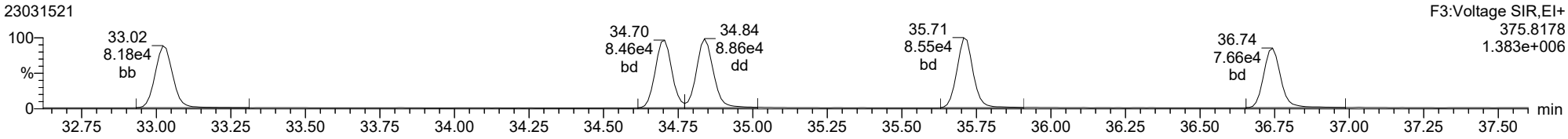

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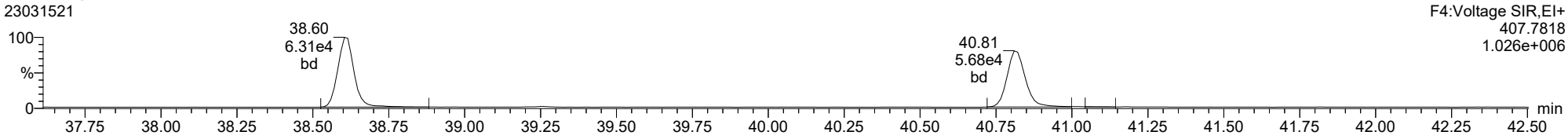

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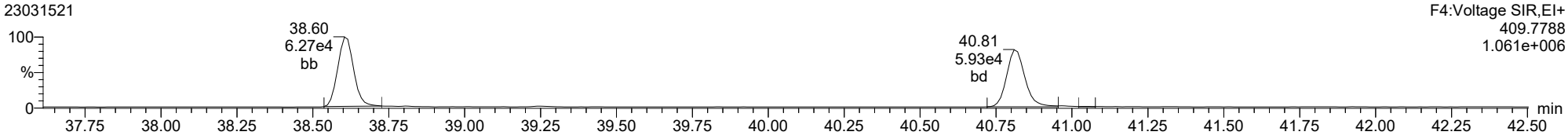
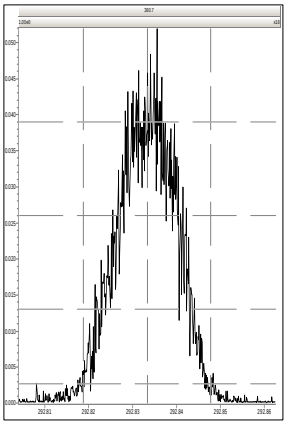
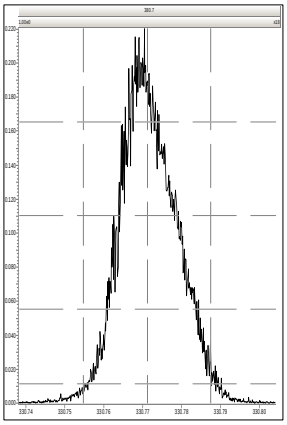


Printed: Thursday, March 16, 2023 03:47:00 Pacific Daylight Time

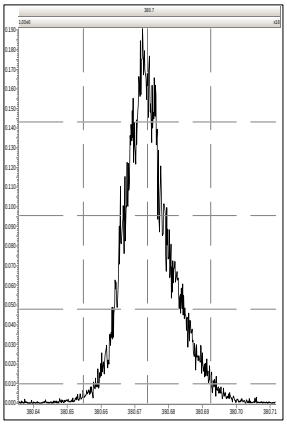
M 292.9824 R 10716



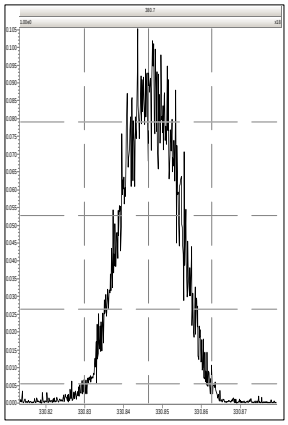
M 330.9792 R 10000



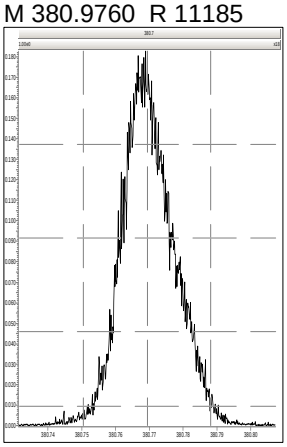
M 380.9760 R 11079



M 330.9792 R 10416



M 380.9760 R 11185



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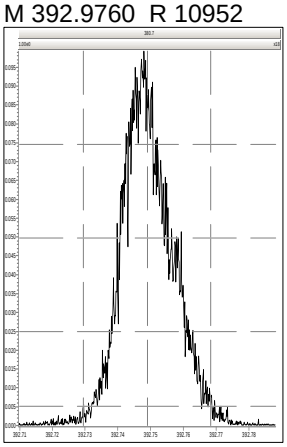
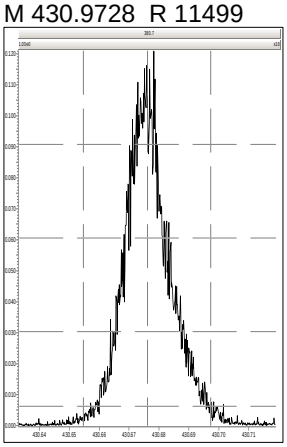
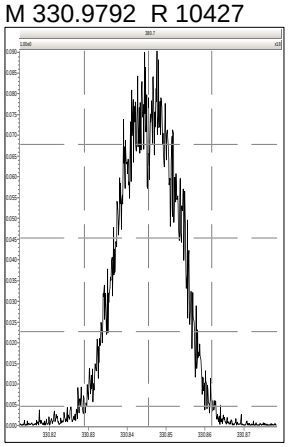


M 430.9728 R 11499



M 330.9792 R 10427



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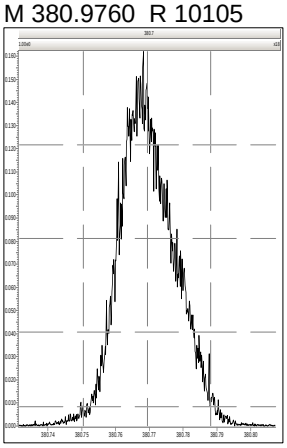
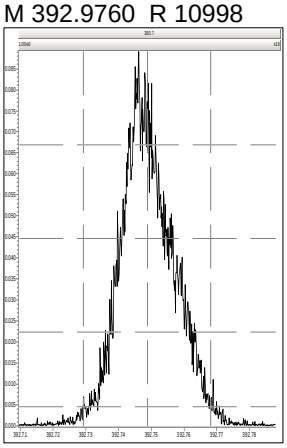


M 392.9760 R 10998



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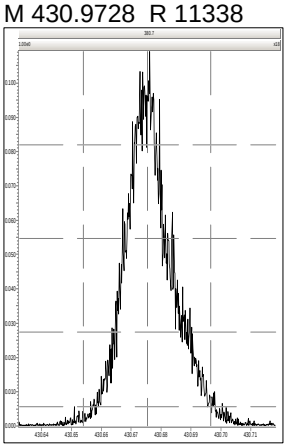

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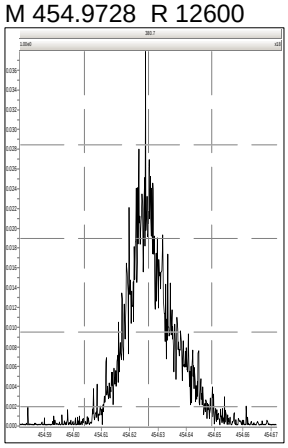
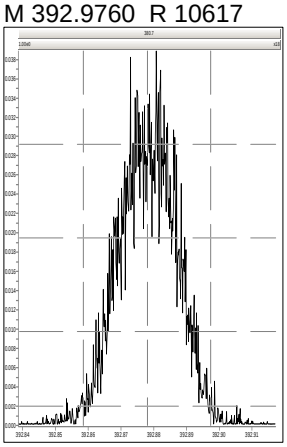


M 392.9760 R 10617



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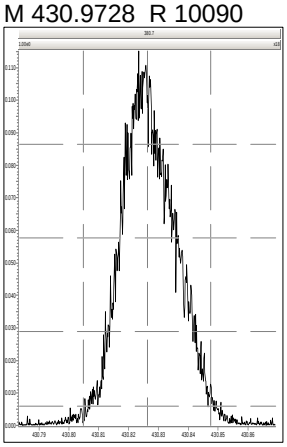
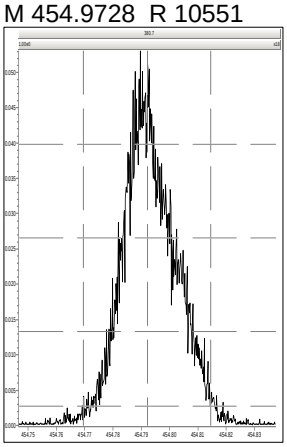
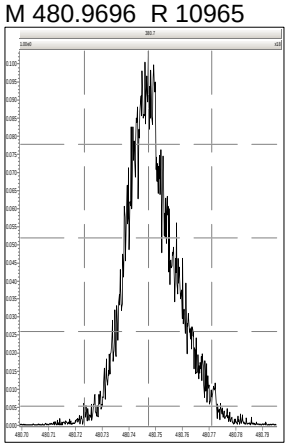


M 454.9728 R 10551



M 480.9696 R 10965



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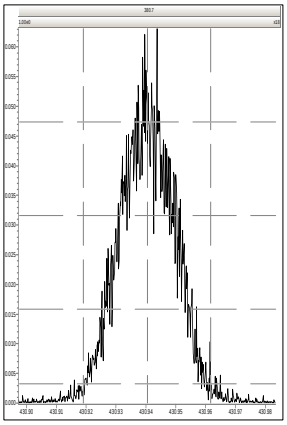
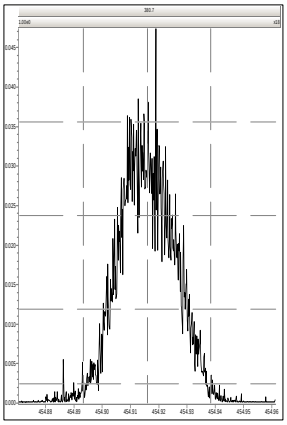
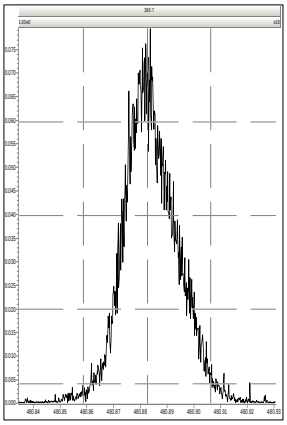
M 430.9728 R 10234



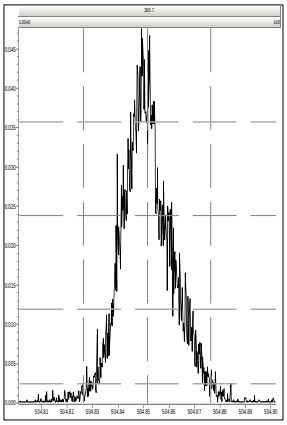
M 454.9728 R 10807



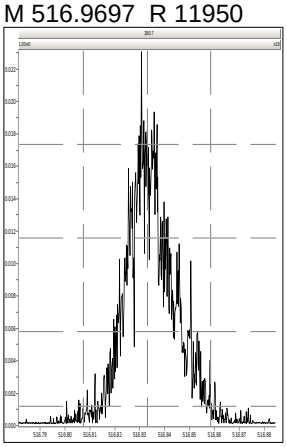
M 480.9696 R 10799

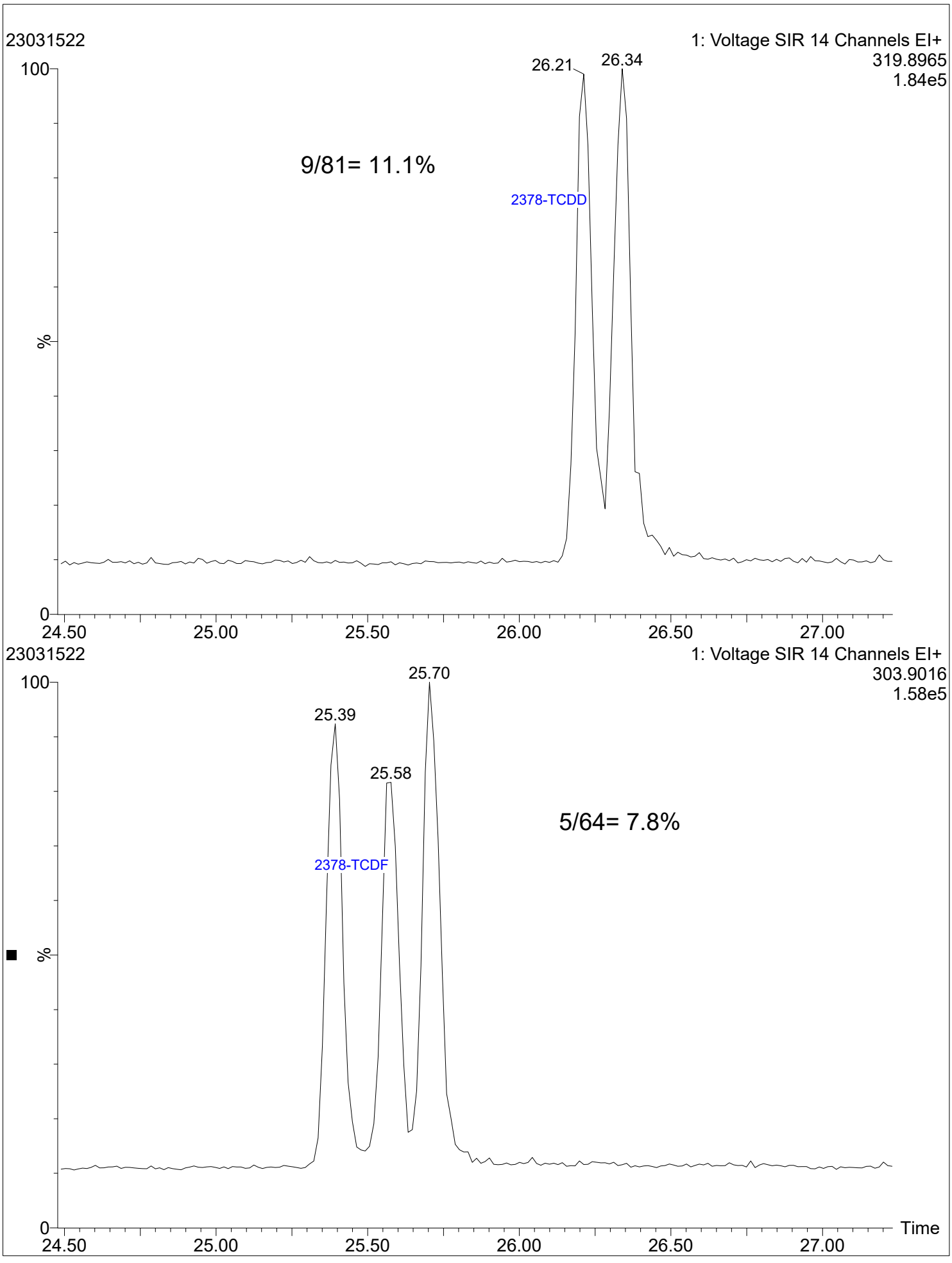


M 504.9696 R 11557



M 516.9697 R 11950




23031522
1: Voltage SIR 14 Channels EI+
319.8965
1.84e5
26.21
26.34
9/81= 11.1%
2378-TCDD
100
%
0
24.50
25.00
25.50
26.00
26.50
27.00
23031522
1: Voltage SIR 14 Channels EI+
303.9016
1.58e5
25.70
25.39
25.58
5/64= 7.8%
2378-TCDF
100
%
0
Time
24.50
25.00
25.50
26.00
26.50
27.00

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GC00015
Lab File ID:	23031711	Calibration Date:	03/03/2023
Sequence:	SLC0258	Injection Date:	03/17/23
Lab Sample ID:	SLC0258-CCV1	Injection Time:	18:31
Sequence Name:	CS3A2		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
2,3,7,8-TCDF	A	10.000	10.5	0.7015272	0.7343627		4.7	+/-16
2,3,7,8-TCDD	A	10.000	9.47	1.1486620	1.0874810		-5.3	+/-22
1,2,3,7,8-PeCDF	A	50.000	56.2	0.6792300	0.7639047		12.5	+/-18
2,3,4,7,8-PeCDF	A	50.000	54.0	0.7861704	0.8485577		7.9	+/-18
1,2,3,7,8-PeCDD	A	50.000	53.3	1.0218450	1.0901250		6.7	+/-22
1,2,3,4,7,8-HxCDF	A	50.000	47.4	1.1660380	1.1048400		-5.2	+/-10
1,2,3,6,7,8-HxCDF	A	50.000	47.9	1.0907410	1.0446890		-4.2	+/-12
2,3,4,6,7,8-HxCDF	A	50.000	49.1	1.1396990	1.1181500		-1.9	+/-12
1,2,3,7,8,9-HxCDF	A	50.000	48.2	1.1370930	1.0971480		-3.5	+/-10
1,2,3,4,7,8-HxCDD	A	50.000	46.7	0.9955689	0.9300809		-6.6	+/-22
1,2,3,6,7,8-HxCDD	A	50.000	44.3	1.0009380	0.8868115		-11.4	+/-22
1,2,3,7,8,9-HxCDD	A	50.000	51.7	0.9071139	0.9377058		3.4	+/-18
1,2,3,4,6,7,8-HpCDF	A	50.000	51.3	1.0029930	1.0296570		2.7	+/-10
1,2,3,4,7,8,9-HpCDF	A	50.000	54.3	0.9531152	1.0341630		8.5	+/-14
1,2,3,4,6,7,8-HpCDD	A	50.000	49.6	1.0390130	1.0296620		-0.9	+/-14
OCDF	A	100.00	101	0.7778078	0.7854134		1.0	+/-37
OCDD	A	100.00	99.8	0.9199537	0.9178852		-0.2	+/-21
13C12-2,3,7,8-TCDF	A	100.00	89.3	1.6201960	1.4469520		-10.7	+/-29
13C12-2,3,7,8-TCDD	A	100.00	102	1.1524090	1.1756270		2.0	+/-18
13C12-1,2,3,7,8-PeCDF	A	100.00	103	1.2404520	1.2761662		2.9	+/-24
13C12-2,3,4,7,8-PeCDF	A	100.00	109	1.1177860	1.2196392		9.1	+/-23
13C12-1,2,3,7,8-PeCDD	A	100.00	103	0.8288129	0.8516406		2.8	+/-38
13C12-1,2,3,4,7,8-HxCDF	A	100.00	82.9	1.1683050	0.9679616		-17.1	+/-24
13C12-1,2,3,6,7,8-HxCDF	A	100.00	75.4	1.3864660	1.0456094		-24.6	+/-30
13C12-2,3,4,6,7,8-HxCDF	A	100.00	81.6	1.1292560	0.9212308		-18.4	+/-27
13C12-1,2,3,7,8,9-HxCDF	A	100.00	89.1	0.9317541	0.8301927		-10.9	+/-26
13C12-1,2,3,4,7,8-HxCDD	A	100.00	93.8	0.9950393	0.9329793		-6.2	+/-15
13C12-1,2,3,6,7,8-HxCDD	A	100.00	86.8	1.1566890	1.0044224		-13.2	+/-15
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	85.0	0.8952017	0.7606883		-15.0	+/-22
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	88.4	0.7697516	0.6802011		-11.6	+/-23
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	87.1	0.8401226	0.7320299		-12.9	+/-28
13C12-OCDD	A	200.00	208	0.7674714	0.7973666		3.9	+/-52
37Cl4-2,3,7,8-TCDD	A	10.000	8.91	1.2878040	1.1472358		-10.9	

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230317.qld
Last Altered: Monday, March 20, 2023 11:38:42 Pacific Daylight Time
Printed: Monday, March 20, 2023 11:44:07 Pacific Daylight Time

Method: T:\Autospec\Methods\Dioxin230315.mdb 20 Mar 2023 10:42:09
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: CS3A2, Name: 23031711, Date: 17-Mar-2023, Time: 18:31:26, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.577	1.001	2.228e4	2.860e4	0.702	0.779	0.770	832	1054	3.33e5	4.34e5	399.6	412.2	NO	bb	bb	10.468
12378-PeCDF	29.747	1.001	1.402e5	9.316e4	0.679	1.505	1.550	1584	1172	2.12e6	1.37e6	1335.8	1172.9	NO	bb	bb	56.233
23478-PeCDF	31.084	1.001	1.495e5	9.829e4	0.786	1.521	1.550	1584	1172	2.28e6	1.49e6	1439.6	1273.4	NO	bb	bb	53.968
123478-HxCDF	34.727	1.000	1.656e5	1.316e5	1.166	1.258	1.240	1369	1022	2.56e6	2.03e6	1868.7	1983.1	NO	bd	bd	47.376
234678-HxCDF	35.741	1.001	1.588e5	1.274e5	1.140	1.247	1.240	1369	1022	2.57e6	2.03e6	1881.5	1989.2	NO	bb	bd	49.055
123678-HxCDF	34.872	1.001	1.690e5	1.346e5	1.091	1.255	1.240	1369	1022	2.58e6	2.03e6	1883.4	1991.0	NO	dd	db	47.889
123789-HxCDF	36.766	1.000	1.392e5	1.140e5	1.137	1.221	1.240	1369	1022	2.09e6	1.72e6	1527.5	1681.9	NO	bb	bd	48.244
1234678-HpCDF	38.638	1.000	1.105e5	1.072e5	1.003	1.030	1.050	1014	1127	1.82e6	1.75e6	1796.2	1556.8	NO	bb	bb	51.329
1234789-HpCDF	40.844	1.000	9.807e4	9.743e4	0.953	1.007	1.050	1014	1127	1.35e6	1.35e6	1333.4	1199.2	NO	bb	bd	54.252
OCDF	45.057	1.005	1.645e5	1.836e5	0.778	0.896	0.890	1175	1193	1.89e6	2.09e6	1608.8	1755.2	NO	bd	bd	100.978
2378-TCDD	26.212	1.001	2.745e4	3.377e4	1.149	0.813	0.770	835	1086	3.99e5	5.11e5	478.1	470.5	NO	bb	bb	9.467
12378-PeCDD	31.329	1.000	1.342e5	8.811e4	1.022	1.523	1.550	1497	982	2.00e6	1.32e6	1334.1	1345.3	NO	bb	bb	53.341
123478-HxCDD	35.853	1.001	1.333e5	1.079e5	0.996	1.235	1.240	1127	1551	2.18e6	1.73e6	1930.3	1113.4	NO	bd	bd	46.711
123678-HxCDD	35.964	1.000	1.368e5	1.108e5	1.001	1.234	1.240	1127	1551	2.20e6	1.77e6	1949.6	1143.0	NO	db	db	44.299
123789-HxCDD	36.354	1.011	1.386e5	1.139e5	0.907	1.217	1.240	1127	1551	2.24e6	1.82e6	1984.3	1172.6	NO	bb	bb	51.686
1234678-HpCDD	40.120	1.001	1.056e5	1.039e5	1.039	1.016	1.050	1185	1075	1.66e6	1.59e6	1400.5	1480.8	NO	bb	bb	49.550
OCDD	44.838	1.000	1.883e5	2.185e5	0.920	0.861	0.890	919	854	2.30e6	2.64e6	2505.4	3092.7	NO	bb	bb	99.775
13C-2378-TCDF	25.563	1.007	2.975e5	3.953e5	1.620	0.752	0.770	1807	1495	4.44e6	5.87e6	2456.1	3927.7	NO	bb	bb	89.307
13C-12378-PeCDF	29.725	1.171	3.678e5	2.432e5	1.240	1.513	1.550	1454	1528	5.38e6	3.60e6	3699.4	2356.5	NO	bb	bb	102.879
13C-23478-PeCDF	31.062	1.224	3.522e5	2.318e5	1.118	1.520	1.550	1454	1528	5.54e6	3.63e6	3809.6	2376.3	NO	bb	bb	109.112
13C-123478-HxCDF	34.716	0.955	1.812e5	3.568e5	1.168	0.508	0.510	1144	1226	2.82e6	5.52e6	2462.9	4506.7	NO	bd	bd	82.852
13C-123678-HxCDF	34.850	0.959	1.945e5	3.867e5	1.386	0.503	0.510	1144	1226	2.91e6	5.82e6	2545.4	4752.1	NO	dd	dd	75.415
13C-234678-HxCDF	35.719	0.983	1.727e5	3.393e5	1.129	0.509	0.510	1144	1226	2.75e6	5.45e6	2403.4	4446.5	NO	bb	bb	81.579
13C-123789-HxCDF	36.755	1.011	1.553e5	3.061e5	0.932	0.507	0.510	1144	1226	2.47e6	4.86e6	2157.2	3962.2	NO	bb	bb	89.100
13C-1234678-HpCDF	38.627	1.063	1.313e5	2.915e5	0.895	0.450	0.440	956	1405	2.20e6	4.91e6	2298.8	3494.2	NO	bb	bb	84.974
13C-1234789-HpCDF	40.833	1.124	1.150e5	2.630e5	0.770	0.437	0.440	956	1405	1.67e6	3.79e6	1750.5	2695.8	NO	bb	bb	88.366
13C-1234-TCDD	25.379	0.000	2.117e5	2.671e5	1.000	0.792	0.770	1880	900	3.30e6	4.17e6	1756.0	4632.2	NO	bb	bb	100.000
13C-2378-TCDD	26.198	1.032	2.449e5	3.180e5	1.152	0.770	0.770	1880	900	3.67e6	4.79e6	1952.9	5322.1	NO	bb	bb	102.015
13C-12378-PeCDD	31.318	1.234	2.522e5	1.555e5	0.829	1.622	1.550	938	686	3.84e6	2.34e6	4090.5	3408.1	NO	bb	bb	102.754
13C-123478-HxCDD	35.830	0.986	2.911e5	2.275e5	0.995	1.280	1.240	1540	962	4.63e6	3.71e6	3004.6	3855.3	NO	bd	bd	93.763
13C-123678-HxCDD	35.953	0.989	3.081e5	2.502e5	1.157	1.232	1.240	1540	962	4.79e6	3.78e6	3110.3	3926.9	NO	db	db	86.836
13C-1234678-HpCDD	40.097	1.103	2.107e5	1.961e5	0.840	1.074	1.050	1138	940	3.16e6	2.99e6	2777.2	3183.4	NO	bb	bb	87.134
13C-OCDD	44.819	1.233	4.167e5	4.697e5	0.767	0.887	0.890	1421	791	4.93e6	5.59e6	3471.3	7073.9	NO	bb	bb	207.791
13C-123789-HxCDD	36.343	0.000	3.057e5	2.501e5	1.000	1.222	1.240	1540	962	4.98e6	4.04e6	3230.6	4201.0	NO	bb	bb	100.000
37CL-2378-TCDD	26.212	1.033	5.493e4		1.288			1383		8.26e5		597.1			bb		8.908

Dataset: T:\Autospec\Processed Data Batch\230317.qld
Last Altered: Monday, March 20, 2023 11:38:42 Pacific Daylight Time
Printed: Monday, March 20, 2023 11:44:07 Pacific Daylight Time

ID: CS3A2, Name: 23031711, Date: 17-Mar-2023, Time: 18:31:26, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.073	0.864	2.452e4	3.328e4	0.802	0.737	0.770	832	1054	3.77e5	5.08e5	453.0	481.9	NO	bb	bb	10.409
1289-TCDF	27.060	1.059	2.172e4	2.848e4	0.678	0.763	0.770	832	1054	3.05e5	4.02e5	366.4	381.5	NO	db	db	10.686
13468-PECDF	26.933	0.906	2.331e5	1.555e5	1.246	1.500	1.550	597	847	3.52e6	2.39e6	5902.0	2817.3	NO	bb	bb	51.018
12389-PECDF	32.120	1.081	1.431e5	9.364e4	0.496	1.528	1.550	1584	1172	2.02e6	1.28e6	1273.3	1094.1	NO	bb	bd	78.039
123468-HXCDF	33.056	0.952	1.768e5	1.416e5	1.169	1.248	1.240	1369	1022	2.51e6	2.04e6	1834.1	1994.2	NO	bb	bb	50.627
1368-TCDD	23.345	0.891	2.391e4	3.066e4	1.015	0.780	0.770	835	1086	3.67e5	4.62e5	440.1	426.0	NO	bb	bd	9.548
1289-TCDD	26.806	1.023	2.360e4	3.023e4	0.909	0.780	0.770	835	1086	3.36e5	4.24e5	402.6	390.2	NO	bb	bd	10.524
12479-PECDD	28.611	0.914	2.210e5	1.426e5	2.301	1.550	1.550	1497	982	2.17e6	1.38e6	1449.1	1410.4	NO	bb	bb	38.741
12389-PECDD	31.730	1.013	1.573e5	1.030e5	1.184	1.528	1.550	1497	982	2.32e6	1.54e6	1547.2	1565.7	NO	bb	bb	53.936
124679-HXCDD	33.836	0.944	1.512e5	1.250e5	1.115	1.209	1.240	1127	1551	2.25e6	1.85e6	1993.2	1193.5	NO	bb	bb	47.740
1234679-HPCDD	39.072	0.974	1.149e5	1.136e5	1.137	1.011	1.050	1185	1075	1.82e6	1.76e6	1532.2	1640.7	NO	bb	bb	49.411
Total-tetrafurans			6.851e4		0.727			832		1.01e6							31.563
Total-penta1			2.331e5					597		3.52e6							51.018
Total-pentafurans			4.554e5		0.654			1584		6.74e6							197.841
Total-hexafurans			8.094e5		1.141			1369		1.23e7							243.190
Total-heptafurans			2.094e5		0.978			1014		3.19e6							106.005
Total-Furans			1.940e6		0.922			832		2.87e7							730.596
Total-tetradioxins			1.247e5		1.024			835		1.68e6							49.146
Total-pentadioxins			5.124e5		1.502			1497		6.48e6							146.018
Total-hexadioxins			5.597e5		1.005			1127		8.86e6							190.436
Total-heptadioxins			2.205e5		1.088			1185		3.48e6							98.961
Total-Dioxins			1.606e6		1.130			835		2.28e7							584.337
Total-TEQ			3.546e6					835		5.15e7							1314.933
FUNCTION1 PFK			5.443e5					383997		1.34e7							
FUNCTION2 PFK			1.756e6					156173		1.35e7							0.000
FUNCTION3 PFK			3.803e7					521904		2.74e7							0.000
FUNCTION4 PFK			2.083e5					266064		6.54e6							
FUNCTION5 PFK			4.170e4					208376		1.88e6							
FUNCTION1 HXCD...			9.450e2					664		1.45e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			8.357e2					957		1.90e4							0.000
FUNCTION3 OCDPE			1.937e2					640		2.99e3							0.000
FUNCTION4 NCDPE			9.084e1					587		1.11e3							0.000
FUNCTION5 DCDPE			0.000e0					733		0.00e0							

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Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

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TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.06	2.172e4	2.848e4	0.678	0.76	0.77	366.4	YES	NO	db	db	10.686
2	2378-TCDF	25.58	2.228e4	2.860e4	0.702	0.78	0.77	399.6	YES	NO	bb	bb	10.468
3	1368-TCDF	22.07	2.452e4	3.328e4	0.802	0.74	0.77	453.0	YES	NO	bb	bb	10.409

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	26.93	2.331e5	1.555e5	1.246	1.50	1.55	5902.0	YES	NO	bb	bb	51.018

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDF	32.12	1.431e5	9.364e4	0.496	1.53	1.55	1273.3	YES	NO	bb	bd	78.039
2	23478-PeCDF	31.08	1.495e5	9.829e4	0.786	1.52	1.55	1439.6	YES	NO	bb	bb	53.968
3	Total-pentafurans	30.04	2.046e2	1.397e2	0.654	1.46	1.55	1.8	NO	NO	bb	bb	0.088
4	12378-PeCDF	29.75	1.402e5	9.316e4	0.679	1.51	1.55	1335.8	YES	NO	bb	bb	56.233
5	Total-pentafurans	28.59	2.245e4	1.471e4	0.654	1.53	1.55	208.7	YES	NO	bb	bb	9.513

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.77	1.392e5	1.140e5	1.137	1.22	1.24	1527.5	YES	NO	bb	bd	48.244
2	234678-HxCDF	35.74	1.588e5	1.274e5	1.140	1.25	1.24	1881.5	YES	NO	bb	bd	49.055
3	123678-HxCDF	34.87	1.690e5	1.346e5	1.091	1.26	1.24	1883.4	YES	NO	dd	db	47.889
4	123478-HxCDF	34.73	1.656e5	1.316e5	1.166	1.26	1.24	1868.7	YES	NO	bd	bd	47.376
5	123468-HXCDF	33.06	1.768e5	1.416e5	1.169	1.25	1.24	1834.1	YES	NO	bb	bb	50.627

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	40.84	9.807e4	9.743e4	0.953	1.01	1.05	1333.4	YES	NO	bb	bd	54.252
2	Total-heptafurans	39.27	8.311e2	8.309e2	0.978	1.00	1.05	12.1	YES	NO	bb	bb	0.424
3	1234678-HpCDF	38.64	1.105e5	1.072e5	1.003	1.03	1.05	1796.2	YES	NO	bb	bb	51.329

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.06	2.172e4	2.848e4	0.678	0.76	0.77	366.4	YES	NO	db	db	10.686
2	2378-TCDF	25.58	2.228e4	2.860e4	0.702	0.78	0.77	399.6	YES	NO	bb	bb	10.468
3	1368-TCDF	22.07	2.452e4	3.328e4	0.802	0.74	0.77	453.0	YES	NO	bb	bb	10.409
4	12389-PECDF	32.12	1.431e5	9.364e4	0.496	1.53	1.55	1273.3	YES	NO	bb	bd	78.039
5	23478-PeCDF	31.08	1.495e5	9.829e4	0.786	1.52	1.55	1439.6	YES	NO	bb	bb	53.968
6	Total-pentafurans	30.04	2.046e2	1.397e2	0.654	1.46	1.55	1.8	NO	NO	bb	bb	0.088
7	12378-PeCDF	29.75	1.402e5	9.316e4	0.679	1.51	1.55	1335.8	YES	NO	bb	bb	56.233
8	Total-pentafurans	28.59	2.245e4	1.471e4	0.654	1.53	1.55	208.7	YES	NO	bb	bb	9.513
9	123789-HxCDF	36.77	1.392e5	1.140e5	1.137	1.22	1.24	1527.5	YES	NO	bb	bd	48.244
10	234678-HxCDF	35.74	1.588e5	1.274e5	1.140	1.25	1.24	1881.5	YES	NO	bb	bd	49.055
11	123678-HxCDF	34.87	1.690e5	1.346e5	1.091	1.26	1.24	1883.4	YES	NO	dd	db	47.889
12	123478-HxCDF	34.73	1.656e5	1.316e5	1.166	1.26	1.24	1868.7	YES	NO	bd	bd	47.376
13	123468-HXCDF	33.06	1.768e5	1.416e5	1.169	1.25	1.24	1834.1	YES	NO	bb	bb	50.627
14	1234789-HpCDF	40.84	9.807e4	9.743e4	0.953	1.01	1.05	1333.4	YES	NO	bb	bd	54.252
15	Total-heptafurans	39.27	8.311e2	8.309e2	0.978	1.00	1.05	12.1	YES	NO	bb	bb	0.424
16	1234678-HpCDF	38.64	1.105e5	1.072e5	1.003	1.03	1.05	1796.2	YES	NO	bb	bb	51.329
17	OCDF	45.06	1.645e5	1.836e5	0.778	0.90	0.89	1608.8	YES	NO	bd	bd	100.978
18	13468-PECDF	26.93	2.331e5	1.555e5	1.246	1.50	1.55	5902.0	YES	NO	bb	bb	51.018

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.34	2.391e4	3.066e4	1.015	0.78	0.77	440.1	YES	NO	bb	bd	9.548
2	1289-TCDD	26.81	2.360e4	3.023e4	0.909	0.78	0.77	402.6	YES	NO	bb	bd	10.524
3	2378-TCDD	26.21	2.745e4	3.377e4	1.149	0.81	0.77	478.1	YES	NO	bb	bb	9.467
4	Total-tetradioxins	25.89	3.810e4	4.891e4	1.024	0.78	0.77	471.7	YES	NO	bb	bd	15.092
5	Total-tetradioxins	25.39	1.162e4	1.441e4	1.024	0.81	0.77	215.6	YES	NO	bb	bb	4.515

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	31.73	1.573e5	1.030e5	1.184	1.53	1.55	1547.2	YES	NO	bb	bb	53.936
2	12378-PeCDD	31.33	1.342e5	8.811e4	1.022	1.52	1.55	1334.1	YES	NO	bb	bb	53.341
3	12479-PECDD	28.61	2.210e5	1.426e5	2.301	1.55	1.55	1449.1	YES	NO	bb	bb	38.741

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HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.35	1.386e5	1.139e5	0.907	1.22	1.24	1984.3	YES	NO	bb	bb	51.686
2	123678-HxCDD	35.96	1.368e5	1.108e5	1.001	1.23	1.24	1949.6	YES	NO	db	db	44.299
3	123478-HxCDD	35.85	1.333e5	1.079e5	0.996	1.23	1.24	1930.3	YES	NO	bd	bd	46.711
4	124679-HXCDD	33.84	1.512e5	1.250e5	1.115	1.21	1.24	1993.2	YES	NO	bb	bb	47.740

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.12	1.056e5	1.039e5	1.039	1.02	1.05	1400.5	YES	NO	bb	bb	49.550
2	1234679-HPCDD	39.07	1.149e5	1.136e5	1.137	1.01	1.05	1532.2	YES	NO	bb	bb	49.411

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.34	2.391e4	3.066e4	1.015	0.78	0.77	440.1	YES	NO	bb	bd	9.548
2	1289-TCDD	26.81	2.360e4	3.023e4	0.909	0.78	0.77	402.6	YES	NO	bb	bd	10.524
3	2378-TCDD	26.21	2.745e4	3.377e4	1.149	0.81	0.77	478.1	YES	NO	bb	bb	9.467
4	Total-tetradioxins	25.89	3.810e4	4.891e4	1.024	0.78	0.77	471.7	YES	NO	bb	bd	15.092
5	Total-tetradioxins	25.39	1.162e4	1.441e4	1.024	0.81	0.77	215.6	YES	NO	bb	bb	4.515
6	12389-PECDD	31.73	1.573e5	1.030e5	1.184	1.53	1.55	1547.2	YES	NO	bb	bb	53.936
7	12378-PeCDD	31.33	1.342e5	8.811e4	1.022	1.52	1.55	1334.1	YES	NO	bb	bb	53.341
8	12479-PECDD	28.61	2.210e5	1.426e5	2.301	1.55	1.55	1449.1	YES	NO	bb	bb	38.741
9	123789-HxCDD	36.35	1.386e5	1.139e5	0.907	1.22	1.24	1984.3	YES	NO	bb	bb	51.686
10	123678-HxCDD	35.96	1.368e5	1.108e5	1.001	1.23	1.24	1949.6	YES	NO	db	db	44.299
11	123478-HxCDD	35.85	1.333e5	1.079e5	0.996	1.23	1.24	1930.3	YES	NO	bd	bd	46.711
12	124679-HXCDD	33.84	1.512e5	1.250e5	1.115	1.21	1.24	1993.2	YES	NO	bb	bb	47.740
13	OCDD	44.84	1.883e5	2.185e5	0.920	0.86	0.89	2505.4	YES	NO	bb	bb	99.775
14	1234678-HpCDD	40.12	1.056e5	1.039e5	1.039	1.02	1.05	1400.5	YES	NO	bb	bb	49.550
15	1234679-HPCDD	39.07	1.149e5	1.136e5	1.137	1.01	1.05	1532.2	YES	NO	bb	bb	49.411

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.06	2.172e4	2.848e4	0.678	0.76	0.77	366.4	YES	NO	db	db	10.686
2	2378-TCDF	25.58	2.228e4	2.860e4	0.702	0.78	0.77	399.6	YES	NO	bb	bb	10.468
3	1368-TCDF	22.07	2.452e4	3.328e4	0.802	0.74	0.77	453.0	YES	NO	bb	bb	10.409
4	12389-PECDF	32.12	1.431e5	9.364e4	0.496	1.53	1.55	1273.3	YES	NO	bb	bd	78.039
5	23478-PeCDF	31.08	1.495e5	9.829e4	0.786	1.52	1.55	1439.6	YES	NO	bb	bb	53.968
6	Total-pentafurans	30.04	2.046e2	1.397e2	0.654	1.46	1.55	1.8	NO	NO	bb	bb	0.088
7	12378-PeCDF	29.75	1.402e5	9.316e4	0.679	1.51	1.55	1335.8	YES	NO	bb	bb	56.233
8	Total-pentafurans	28.59	2.245e4	1.471e4	0.654	1.53	1.55	208.7	YES	NO	bb	bb	9.513
9	123789-HxCDF	36.77	1.392e5	1.140e5	1.137	1.22	1.24	1527.5	YES	NO	bb	bd	48.244
10	234678-HxCDF	35.74	1.588e5	1.274e5	1.140	1.25	1.24	1881.5	YES	NO	bb	bd	49.055
11	123678-HxCDF	34.87	1.690e5	1.346e5	1.091	1.26	1.24	1883.4	YES	NO	dd	db	47.889
12	123478-HxCDF	34.73	1.656e5	1.316e5	1.166	1.26	1.24	1868.7	YES	NO	bd	bd	47.376
13	123468-HXCDF	33.06	1.768e5	1.416e5	1.169	1.25	1.24	1834.1	YES	NO	bb	bb	50.627
14	1234789-HpCDF	40.84	9.807e4	9.743e4	0.953	1.01	1.05	1333.4	YES	NO	bb	bd	54.252
15	Total-heptafurans	39.27	8.311e2	8.309e2	0.978	1.00	1.05	12.1	YES	NO	bb	bb	0.424
16	1234678-HpCDF	38.64	1.105e5	1.072e5	1.003	1.03	1.05	1796.2	YES	NO	bb	bb	51.329
17	OCDF	45.06	1.645e5	1.836e5	0.778	0.90	0.89	1608.8	YES	NO	bd	bd	100.978
18	13468-PECDF	26.93	2.331e5	1.555e5	1.246	1.50	1.55	5902.0	YES	NO	bb	bb	51.018
19	1368-TCDD	23.34	2.391e4	3.066e4	1.015	0.78	0.77	440.1	YES	NO	bb	bd	9.548
20	1289-TCDD	26.81	2.360e4	3.023e4	0.909	0.78	0.77	402.6	YES	NO	bb	bd	10.524
21	2378-TCDD	26.21	2.745e4	3.377e4	1.149	0.81	0.77	478.1	YES	NO	bb	bb	9.467
22	Total-tetradioxins	25.89	3.810e4	4.891e4	1.024	0.78	0.77	471.7	YES	NO	bb	bd	15.092
23	Total-tetradioxins	25.39	1.162e4	1.441e4	1.024	0.81	0.77	215.6	YES	NO	bb	bb	4.515
24	12389-PECDD	31.73	1.573e5	1.030e5	1.184	1.53	1.55	1547.2	YES	NO	bb	bb	53.936
25	12378-PeCDD	31.33	1.342e5	8.811e4	1.022	1.52	1.55	1334.1	YES	NO	bb	bb	53.341
26	12479-PECDD	28.61	2.210e5	1.426e5	2.301	1.55	1.55	1449.1	YES	NO	bb	bb	38.741
27	123789-HxCDD	36.35	1.386e5	1.139e5	0.907	1.22	1.24	1984.3	YES	NO	bb	bb	51.686
28	123678-HxCDD	35.96	1.368e5	1.108e5	1.001	1.23	1.24	1949.6	YES	NO	db	db	44.299
29	123478-HxCDD	35.85	1.333e5	1.079e5	0.996	1.23	1.24	1930.3	YES	NO	bd	bd	46.711
30	124679-HXCDD	33.84	1.512e5	1.250e5	1.115	1.21	1.24	1993.2	YES	NO	bb	bb	47.740
31	OCDD	44.84	1.883e5	2.185e5	0.920	0.86	0.89	2505.4	YES	NO	bb	bb	99.775
32	1234678-HpCDD	40.12	1.056e5	1.039e5	1.039	1.02	1.05	1400.5	YES	NO	bb	bb	49.550
33	1234679-HPCDD	39.07	1.149e5	1.136e5	1.137	1.01	1.05	1532.2	YES	NO	bb	bb	49.411

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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	23.91	1.577e4					1.3	NO		db		
2	FUNCTION1 PFK	23.87	5.647e3					0.7	NO		bd		
3	FUNCTION1 PFK	23.49	3.108e3					0.6	NO		bb		
4	FUNCTION1 PFK	23.40	1.748e4					1.4	NO		bb		
5	FUNCTION1 PFK	23.23	3.655e4					1.9	NO		bb		
6	FUNCTION1 PFK	23.12	1.788e4					1.2	NO		bb		
7	FUNCTION1 PFK	22.44	5.871e3					0.8	NO		db		
8	FUNCTION1 PFK	22.40	2.784e4					1.3	NO		dd		
9	FUNCTION1 PFK	22.31	1.120e4					1.1	NO		dd		
10	FUNCTION1 PFK	22.27	9.590e3					1.0	NO		bd		
11	FUNCTION1 PFK	22.21	2.187e4					1.5	NO		bb		
12	FUNCTION1 PFK	21.55	1.234e4					1.0	NO		db		
13	FUNCTION1 PFK	21.49	2.261e4					1.3	NO		bd		
14	FUNCTION1 PFK	21.13	7.163e3					0.8	NO		bb		
15	FUNCTION1 PFK	27.58	2.507e4					1.4	NO		bb		
16	FUNCTION1 PFK	27.10	7.380e4					2.6	NO		bb		
17	FUNCTION1 PFK	26.66	6.166e4					1.6	NO		bb		
18	FUNCTION1 PFK	26.58	1.454e4					1.2	NO		bb		
19	FUNCTION1 PFK	26.52	5.919e3					0.9	NO		db		
20	FUNCTION1 PFK	26.48	8.169e3					0.9	NO		bd		
21	FUNCTION1 PFK	26.25	1.649e4					1.4	NO		bb		
22	FUNCTION1 PFK	26.20	1.901e4					1.2	NO		bb		
23	FUNCTION1 PFK	25.84	4.485e4					2.1	NO		bb		
24	FUNCTION1 PFK	25.70	9.516e3					1.1	NO		bb		
25	FUNCTION1 PFK	25.66	6.214e3					0.7	NO		bb		
26	FUNCTION1 PFK	25.24	1.622e4					1.3	NO		bb		
27	FUNCTION1 PFK	25.05	4.572e3					0.8	NO		bb		
28	FUNCTION1 PFK	24.36	3.719e3					0.7	NO		bb		
29	FUNCTION1 PFK	24.28	1.965e4					1.2	NO		bb		

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PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	30.53	5.005e3					1.1	NO		bb		0.000
2	FUNCTION2 PFK	30.48	8.016e2					0.5	NO		bb		0.000
3	FUNCTION2 PFK	30.29	2.997e3					0.8	NO		bb		0.000
4	FUNCTION2 PFK	30.05	1.890e3					0.7	NO		bb		0.000
5	FUNCTION2 PFK	29.95	4.452e3					1.2	NO		db		0.000
6	FUNCTION2 PFK	29.89	1.303e4					2.2	NO		bd		0.000
7	FUNCTION2 PFK	29.81	3.168e3					0.9	NO		bb		0.000
8	FUNCTION2 PFK	29.68	1.625e4					1.5	NO		bb		0.000
9	FUNCTION2 PFK	29.00	8.978e2					0.5	NO		bb		0.000
10	FUNCTION2 PFK	28.89	9.353e2					0.5	NO		bb		0.000
11	FUNCTION2 PFK	28.82	5.077e3					1.2	NO		db		0.000
12	FUNCTION2 PFK	28.77	3.341e3					0.9	NO		bd		0.000
13	FUNCTION2 PFK	28.71	3.025e3					1.0	NO		bb		0.000
14	FUNCTION2 PFK	28.33	1.384e5					9.0	YES		db		0.000
15	FUNCTION2 PFK	28.12	1.004e6					18.0	YES		dd		0.000
16	FUNCTION2 PFK	27.89	4.291e5					29.1	YES		bd		0.000
17	FUNCTION2 PFK	32.41	3.665e3					1.0	NO		db		0.000
18	FUNCTION2 PFK	32.31	1.695e4					1.7	NO		bd		0.000
19	FUNCTION2 PFK	32.16	8.289e3					1.3	NO		bb		0.000
20	FUNCTION2 PFK	31.95	1.772e3					0.6	NO		bb		0.000
21	FUNCTION2 PFK	31.82	4.094e3					1.2	NO		db		0.000
22	FUNCTION2 PFK	31.77	7.367e3					1.3	NO		dd		0.000
23	FUNCTION2 PFK	31.72	2.198e4					2.5	NO		dd		0.000
24	FUNCTION2 PFK	31.59	3.840e3					1.0	NO		bd		0.000
25	FUNCTION2 PFK	31.18	1.838e4					1.8	NO		db		0.000
26	FUNCTION2 PFK	31.14	3.848e3					1.1	NO		bd		0.000
27	FUNCTION2 PFK	30.93	2.423e4					2.7	NO		bb		0.000
28	FUNCTION2 PFK	30.84	9.732e3					1.5	NO		bb		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	33.99	1.823e7					25.7	YES		db		0.000
2	FUNCTION3 PFK	33.88	1.980e7					26.9	YES		bd		0.000

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PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	40.63	1.326e3					0.4	NO		bb		
2	FUNCTION4 PFK	40.58	1.016e4					1.2	NO		bb		
3	FUNCTION4 PFK	40.43	7.005e3					1.0	NO		bb		
4	FUNCTION4 PFK	40.11	1.645e3					0.6	NO		bb		
5	FUNCTION4 PFK	40.01	1.281e3					0.4	NO		bb		
6	FUNCTION4 PFK	39.75	1.786e4					1.4	NO		db		
7	FUNCTION4 PFK	39.69	1.635e4					1.7	NO		dd		
8	FUNCTION4 PFK	39.65	1.044e4					1.7	NO		bd		
9	FUNCTION4 PFK	39.55	3.446e4					1.5	NO		bb		
10	FUNCTION4 PFK	39.42	3.625e3					0.7	NO		bb		
11	FUNCTION4 PFK	39.08	3.845e3					0.7	NO		bb		
12	FUNCTION4 PFK	38.94	8.730e3					1.3	NO		bb		
13	FUNCTION4 PFK	38.88	6.574e3					1.1	NO		bb		
14	FUNCTION4 PFK	38.65	1.359e3					0.5	NO		bb		
15	FUNCTION4 PFK	38.60	8.158e3					1.2	NO		bb		
16	FUNCTION4 PFK	37.92	3.142e3					0.7	NO		bb		
17	FUNCTION4 PFK	41.72	2.251e4					1.7	NO		bb		
18	FUNCTION4 PFK	41.62	1.080e4					1.4	NO		bb		
19	FUNCTION4 PFK	41.53	2.087e3					0.7	NO		bb		
20	FUNCTION4 PFK	41.23	1.143e4					1.3	NO		bb		
21	FUNCTION4 PFK	41.17	3.125e3					0.7	NO		bb		
22	FUNCTION4 PFK	41.09	1.767e3					0.5	NO		db		
23	FUNCTION4 PFK	41.04	2.064e4					2.2	NO		bd		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	44.68	1.270e4					1.5	NO		bb		
2	FUNCTION5 PFK	44.43	1.015e3					0.5	NO		bb		
3	FUNCTION5 PFK	44.36	9.536e2					0.5	NO		bb		
4	FUNCTION5 PFK	44.26	8.331e3					1.4	NO		bb		
5	FUNCTION5 PFK	43.79	3.103e3					1.0	NO		bb		
6	FUNCTION5 PFK	43.18	8.910e3					1.5	NO		bb		
7	FUNCTION5 PFK	43.00	1.025e3					0.5	NO		bb		
8	FUNCTION5 PFK	42.61	2.932e3					1.0	NO		bb		
9	FUNCTION5 PFK	45.91	9.530e2					0.5	NO		bb		
10	FUNCTION5 PFK	45.64	1.774e3					0.6	NO		bb		

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ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.41	1.265e2					4.1	YES		bb		0.000
2	FUNCTION1 HXCD...	26.25	9.971e1					2.0	NO		bb		0.000
3	FUNCTION1 HXCD...	24.49	1.002e2					2.2	NO		bb		0.000
4	FUNCTION1 HXCD...	24.12	9.905e1					2.4	NO		db		0.000
5	FUNCTION1 HXCD...	24.05	9.238e1					2.6	NO		bd		0.000
6	FUNCTION1 HXCD...	23.77	1.367e2					1.9	NO		db		0.000
7	FUNCTION1 HXCD...	23.60	1.006e2					2.4	NO		bd		0.000
8	FUNCTION1 HXCD...	22.34	8.474e1					2.1	NO		bb		0.000
9	FUNCTION1 HXCD...	21.13	1.051e2					2.1	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	29.26	9.590e1					1.5	NO		bb		0.000
2	FUNCTION2 HPCD...	28.22	2.330e2					4.9	YES		bb		0.000
3	FUNCTION2 HPCD...	27.99	8.838e1					2.0	NO		bb		0.000
4	FUNCTION2 HPCD...	30.97	7.727e1					2.0	NO		db		0.000
5	FUNCTION2 HPCD...	30.91	9.260e1					2.9	NO		dd		0.000
6	FUNCTION2 HPCD...	30.88	7.639e1					3.0	NO		bd		0.000
7	FUNCTION2 HPCD...	30.03	8.520e1					2.0	NO		db		0.000
8	FUNCTION2 HPCD...	29.97	8.702e1					1.5	NO		bd		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	33.65	8.874e1					2.2	NO		bb		0.000
2	FUNCTION3 OCDPE	33.33	1.049e2					2.5	NO		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	39.22	9.084e1					1.9	NO		bb		0.000

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Printed: Monday, March 20, 2023 11:44:07 Pacific Daylight Time

ID: CS3A2, Name: 23031711, Date: 17-Mar-2023, Time: 18:31:26, Conditions: AUTOSPEC01, User: pk

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

Dataset: T:\Autospec\Processed Data Batch\230317.qld
Last Altered: Monday, March 20, 2023 11:38:42 Pacific Daylight Time
Printed: Monday, March 20, 2023 11:44:07 Pacific Daylight Time

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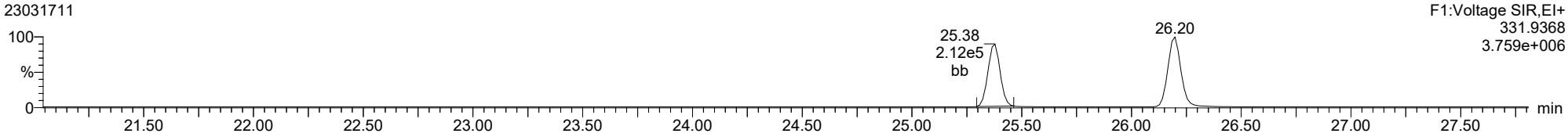
ID: CS3A2, Name: 23031711, Date: 17-Mar-2023, Time: 18:31:26, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD



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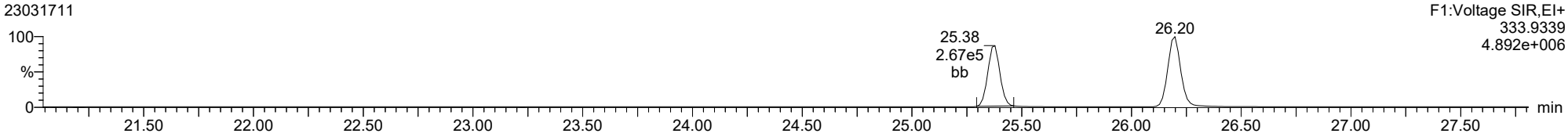

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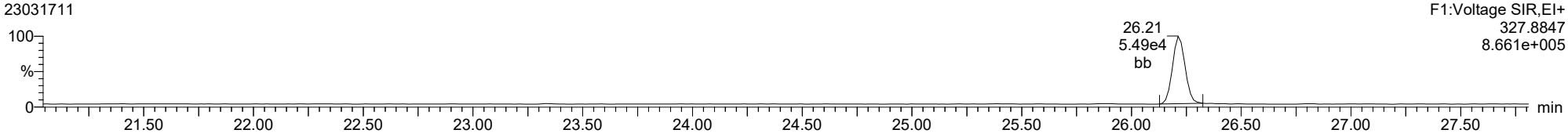

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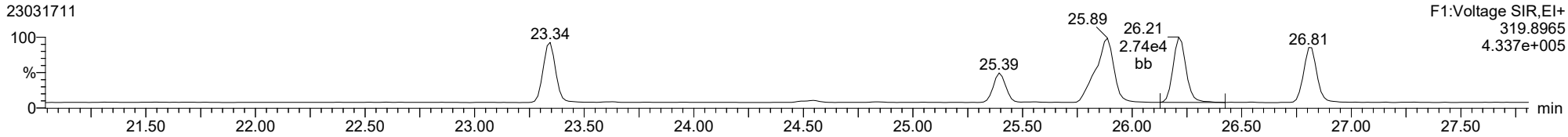
ID: CS3A2, Name: 23031711, Date: 17-Mar-2023, Time: 18:31:26, Conditions: AUTOSPEC01, User: pk

2378-TCDD



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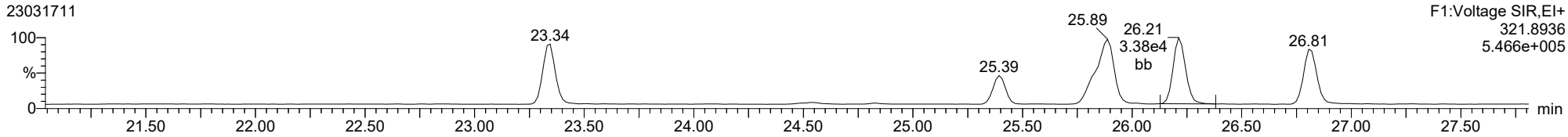

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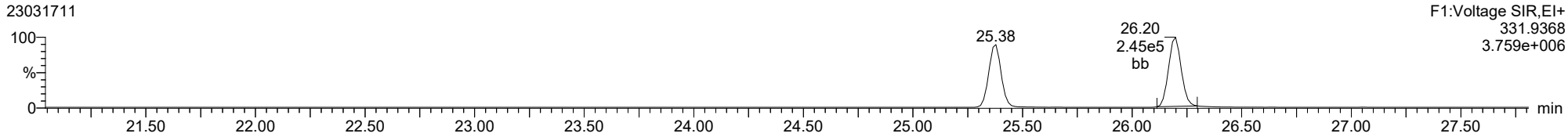

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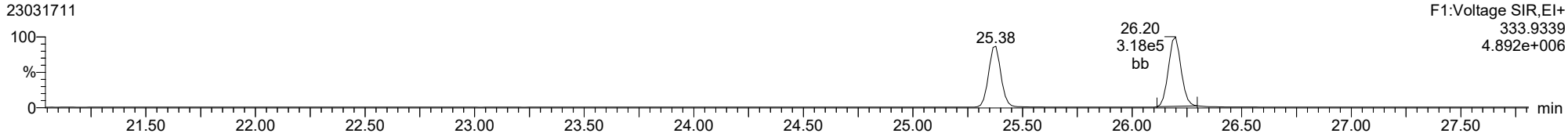

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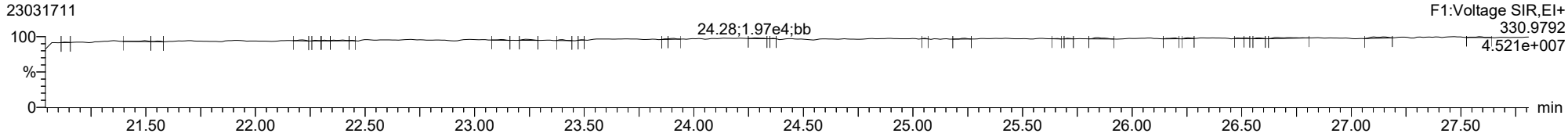

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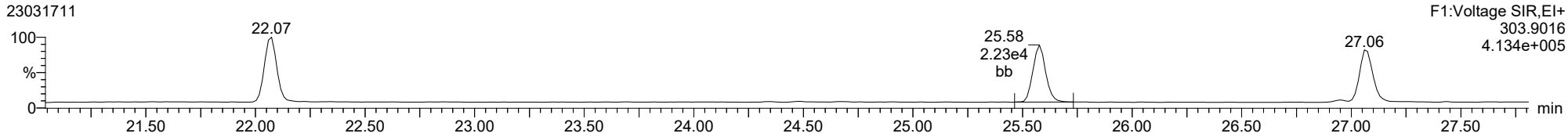
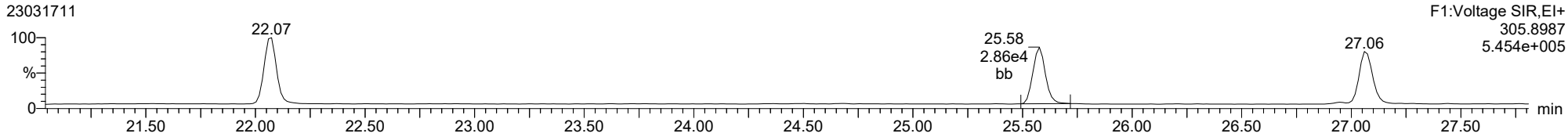
2378-TCDF



2378-TCDF



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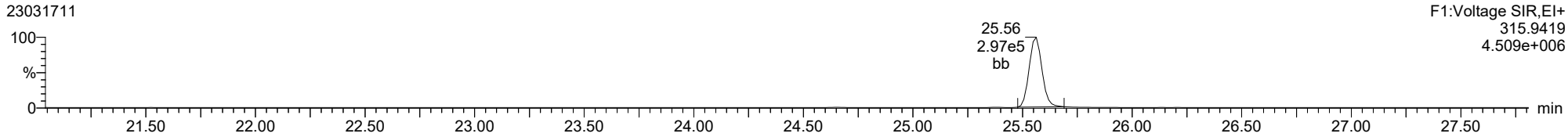

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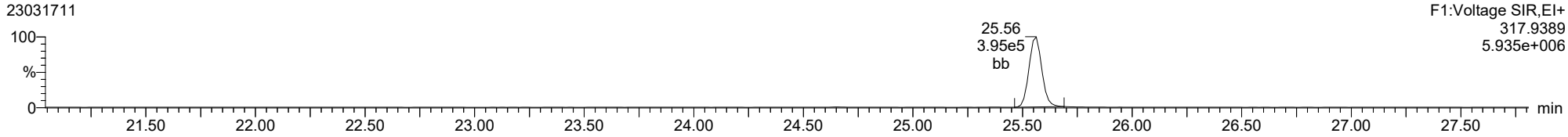

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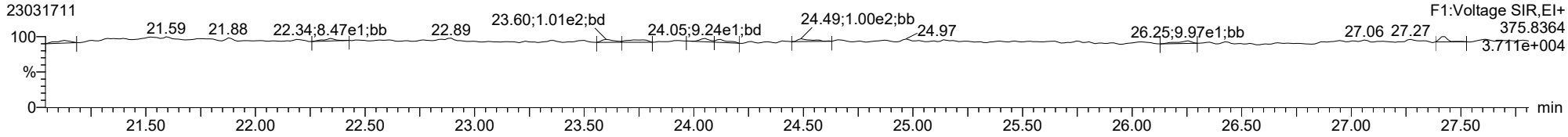

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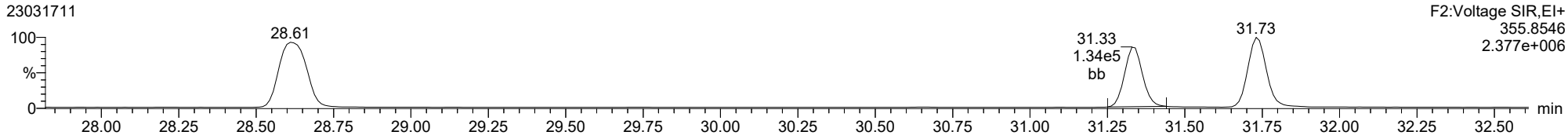

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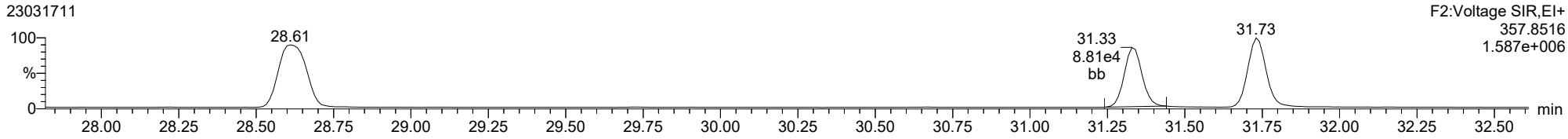

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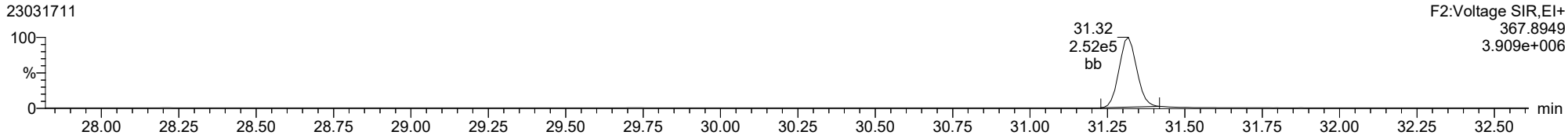

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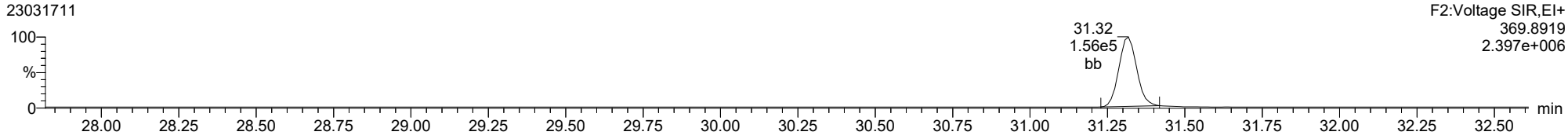

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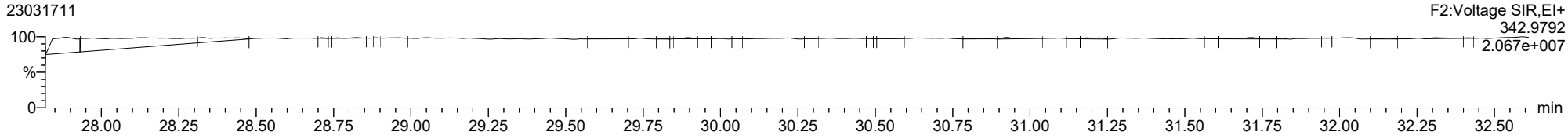

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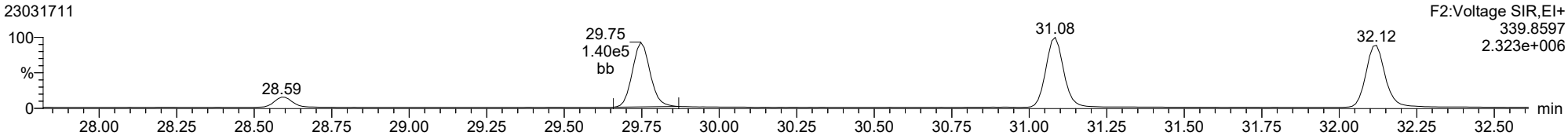

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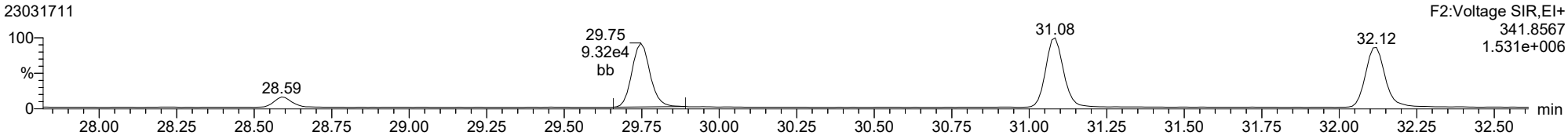

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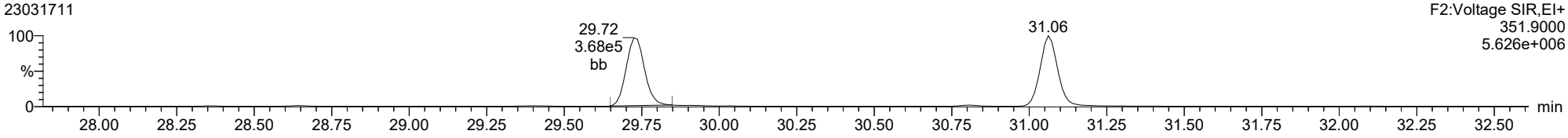

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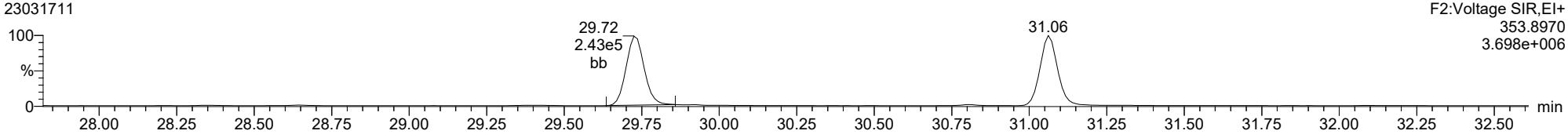

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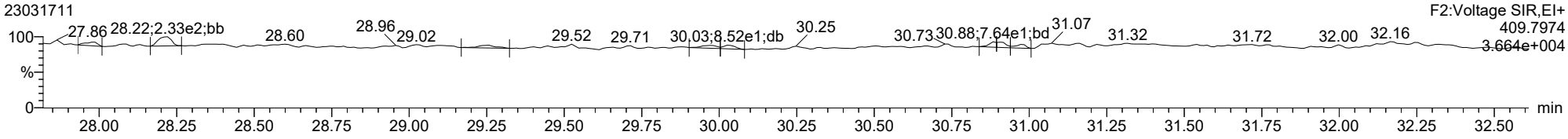

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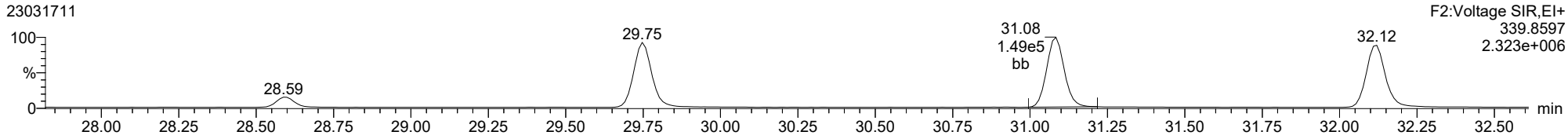

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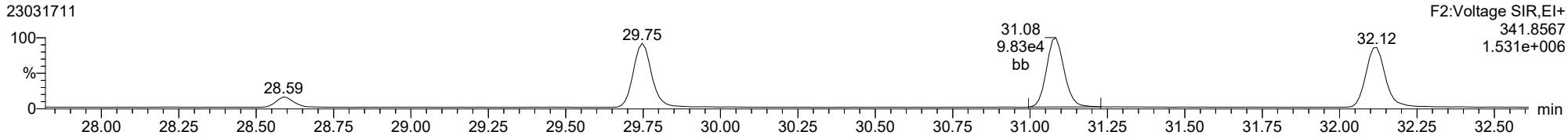

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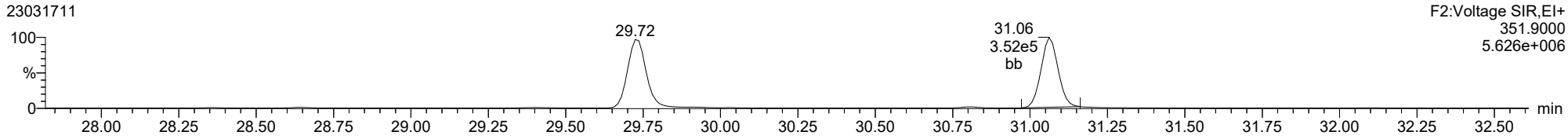

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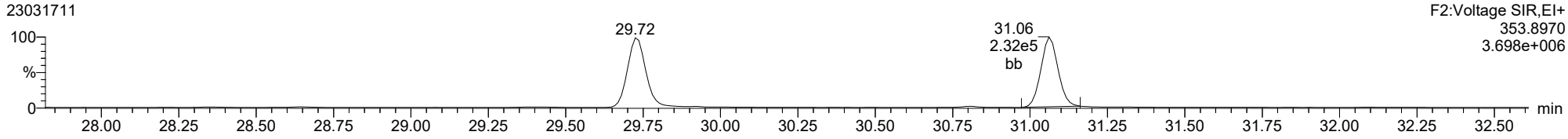

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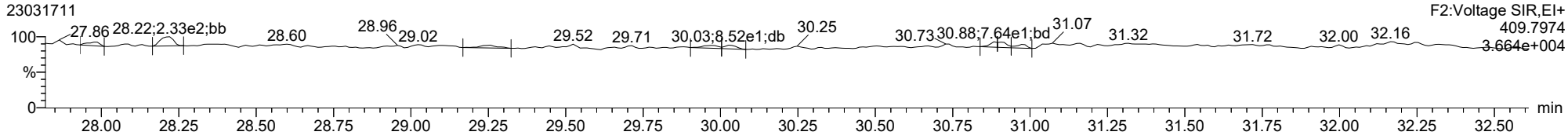

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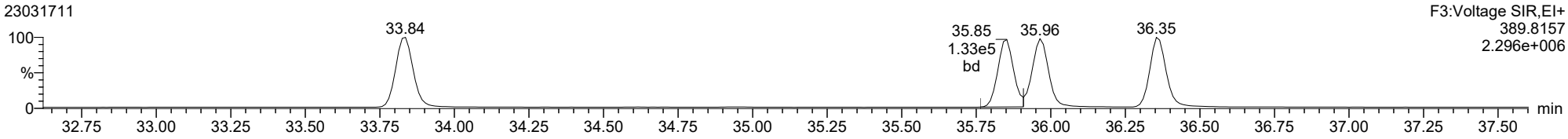
123478-HxCDD



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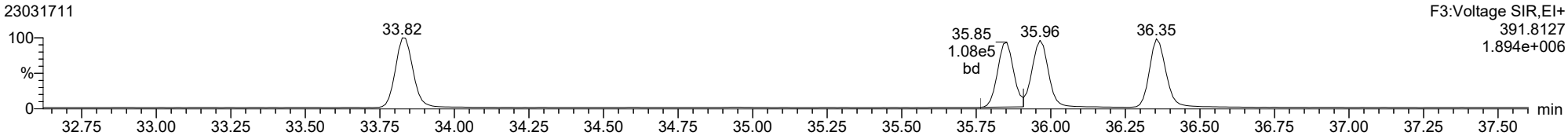

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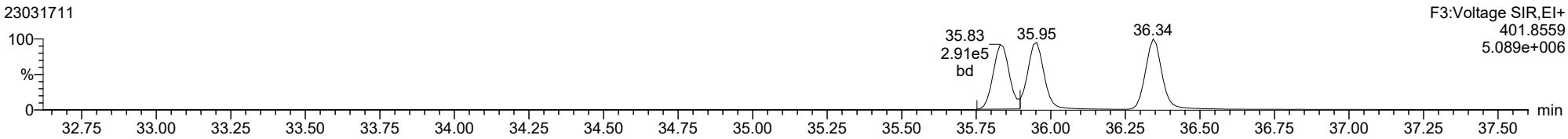

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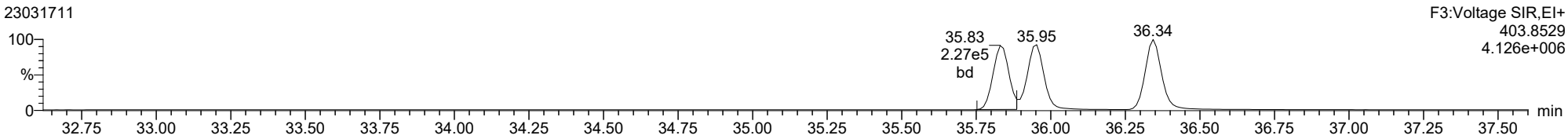

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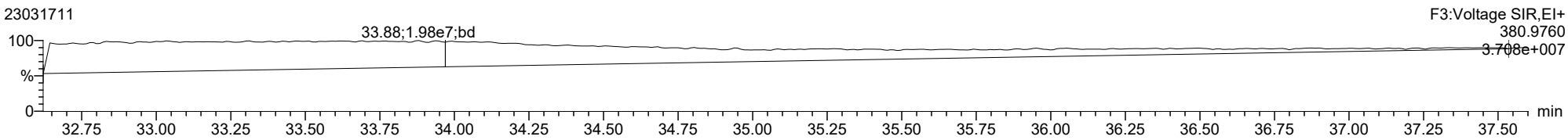

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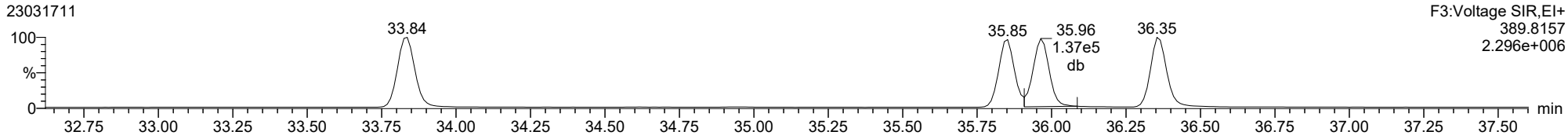

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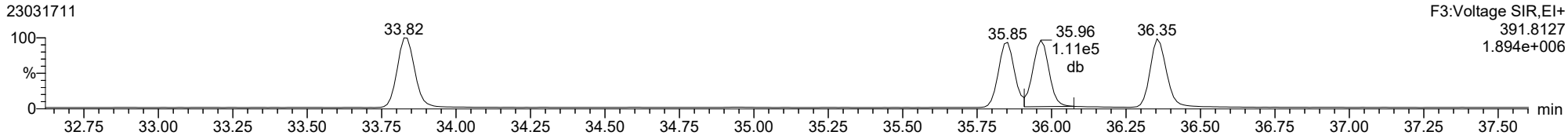

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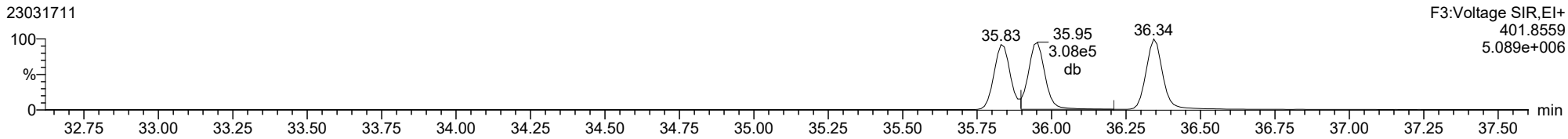

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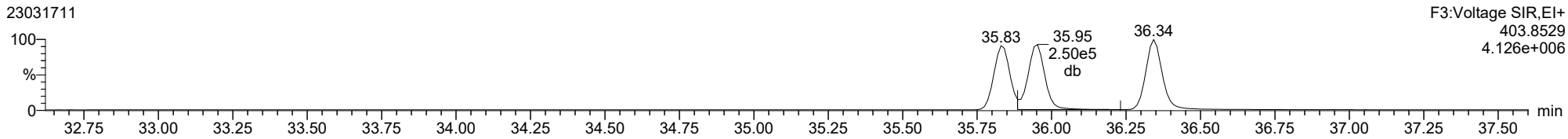

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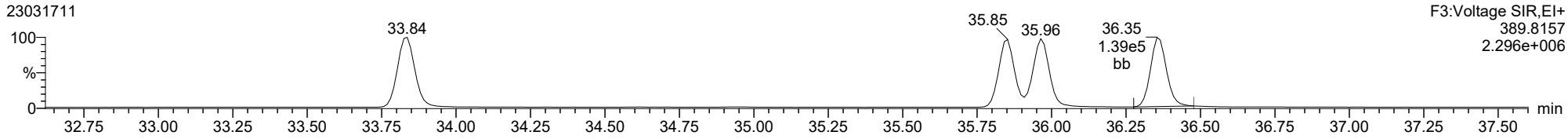

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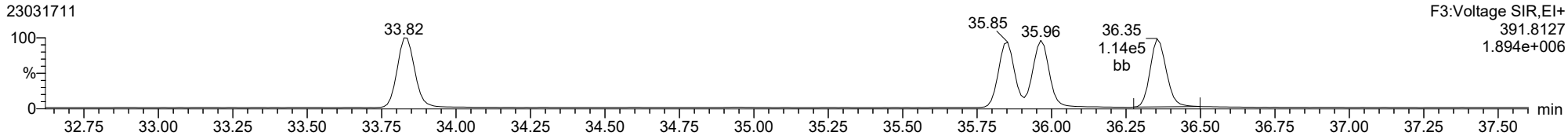

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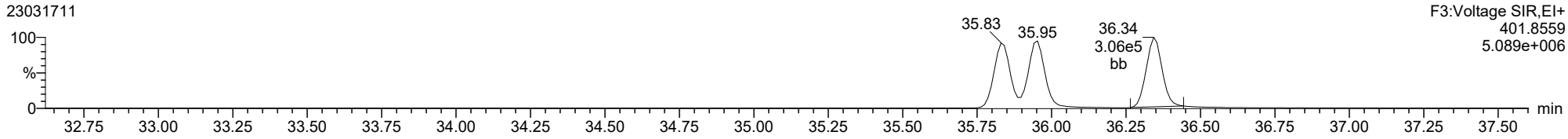

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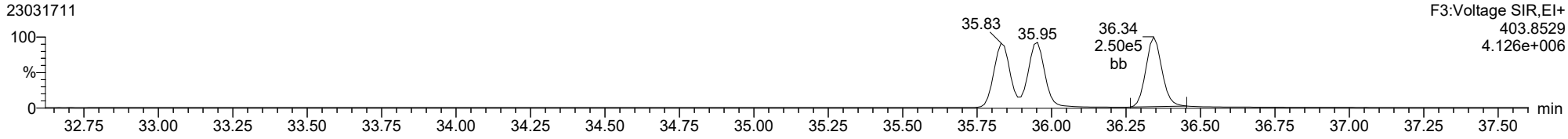

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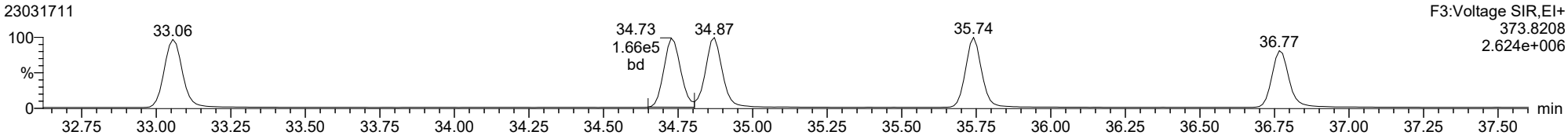
123478-HxCDF



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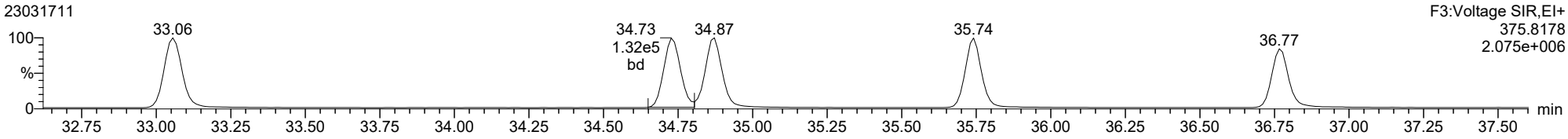

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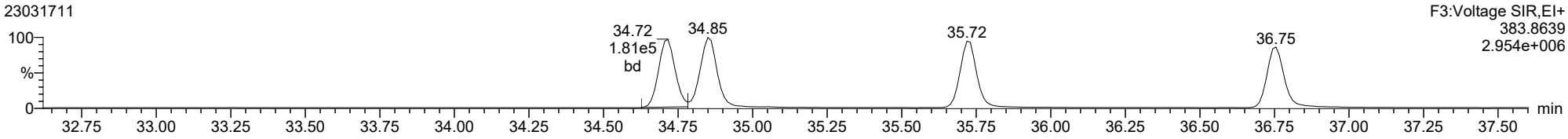

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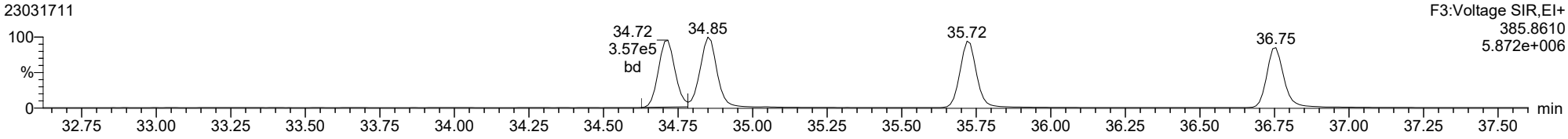

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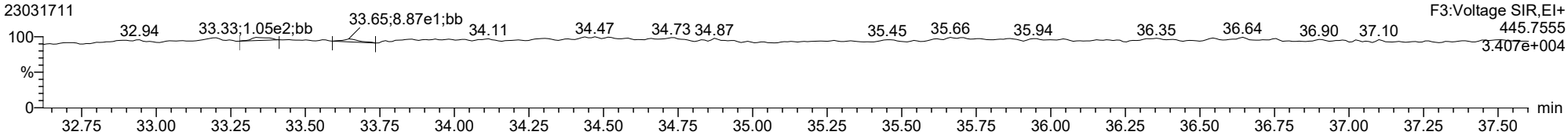

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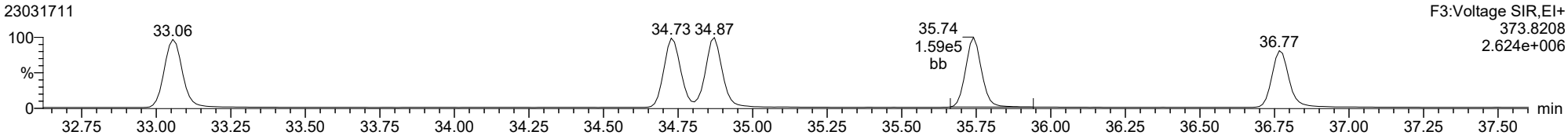
234678-HxCDF



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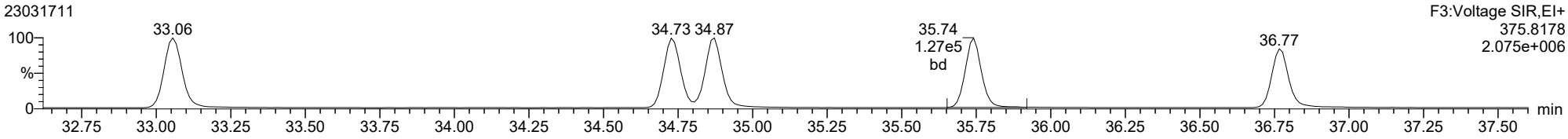

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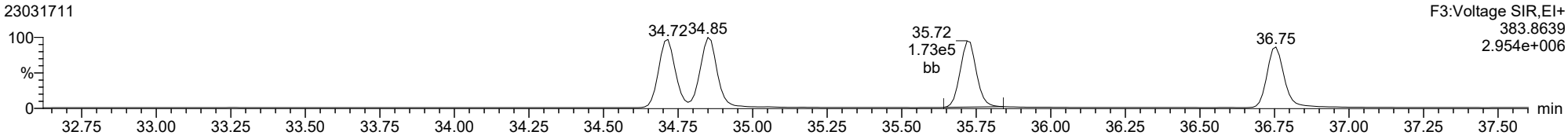

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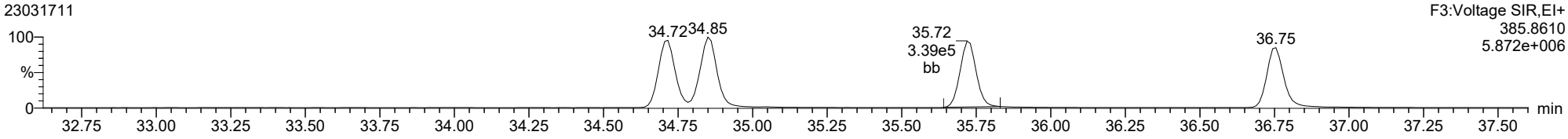
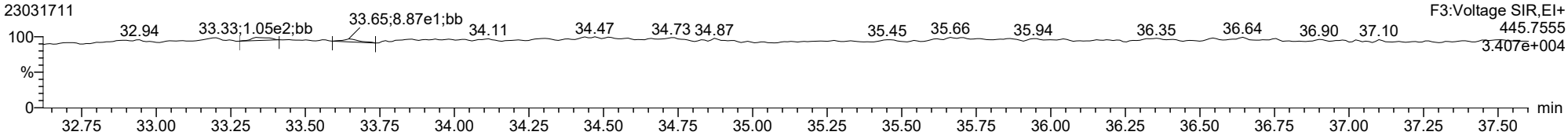


FUNCTION3 OCDPE



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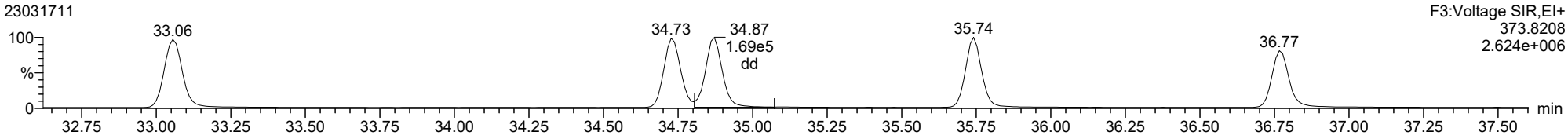
123678-HxCDF



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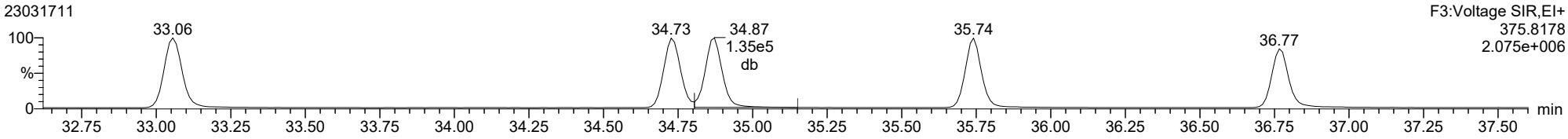

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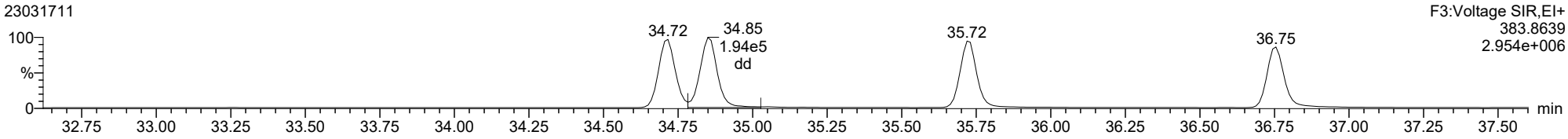

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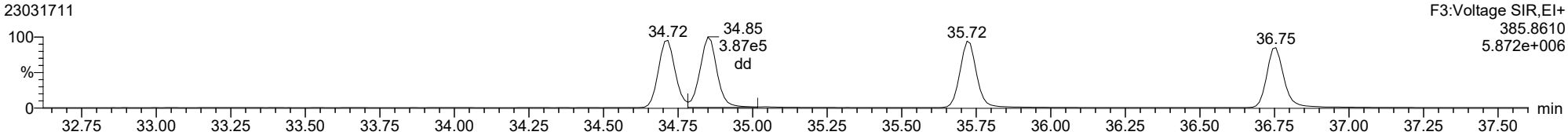

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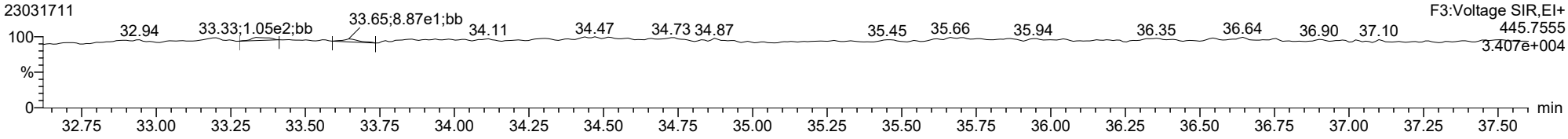

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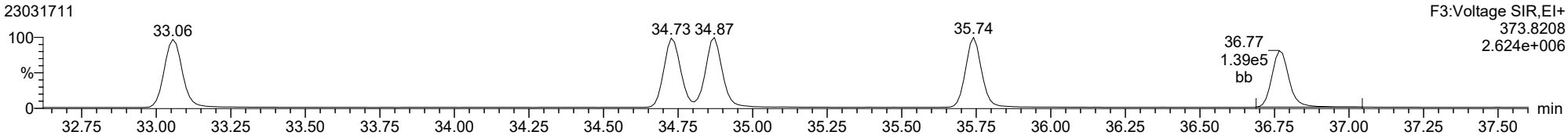

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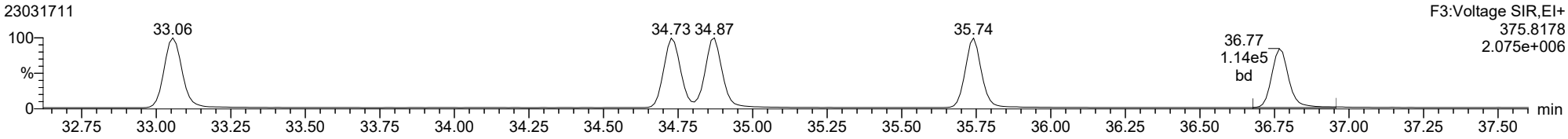

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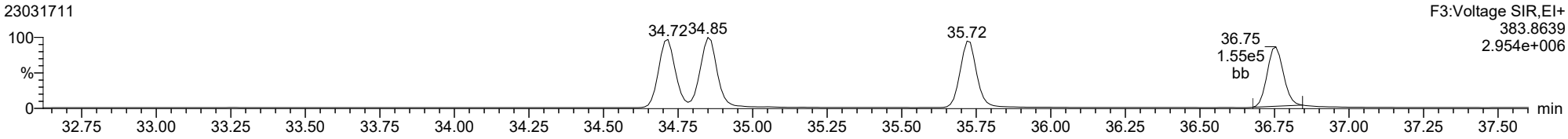

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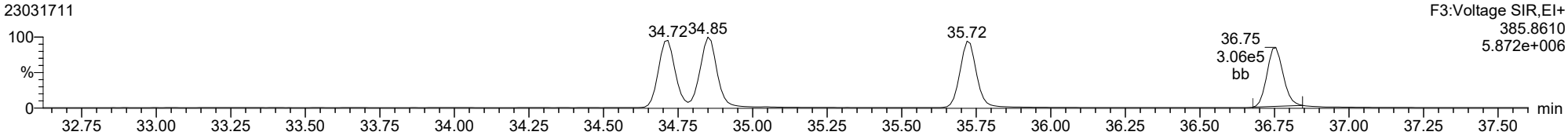

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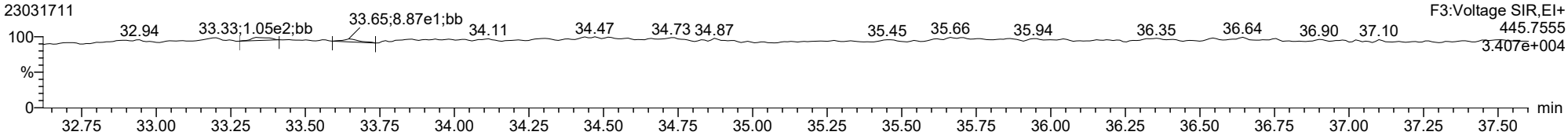

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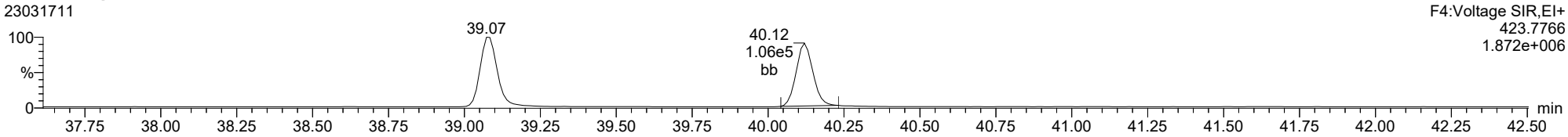

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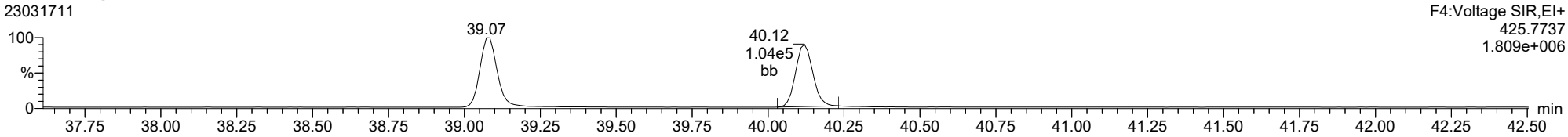

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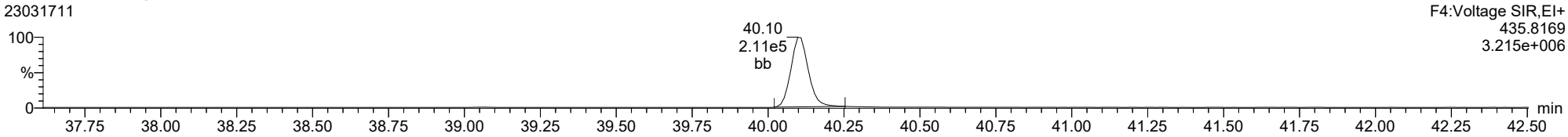

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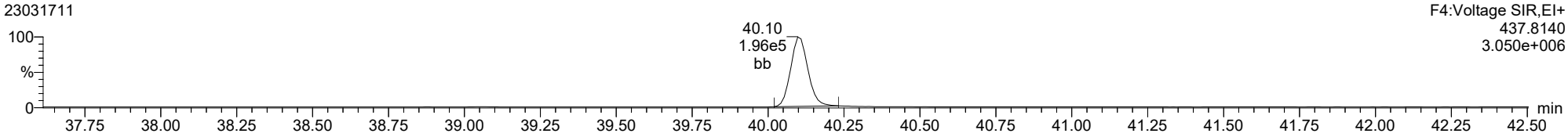

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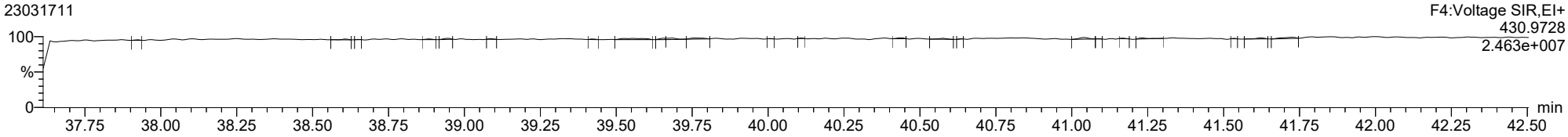

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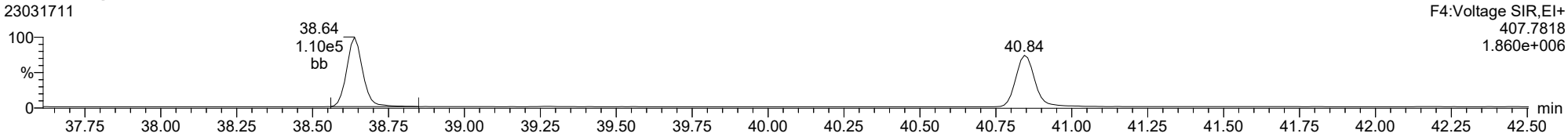

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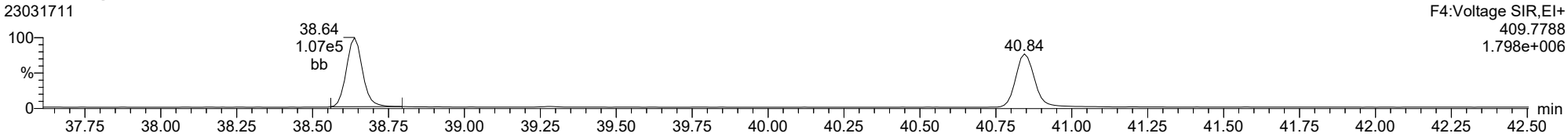

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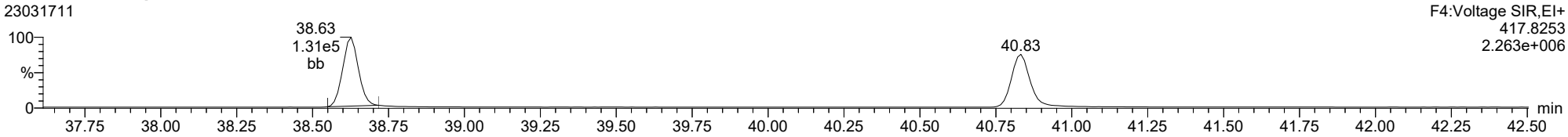

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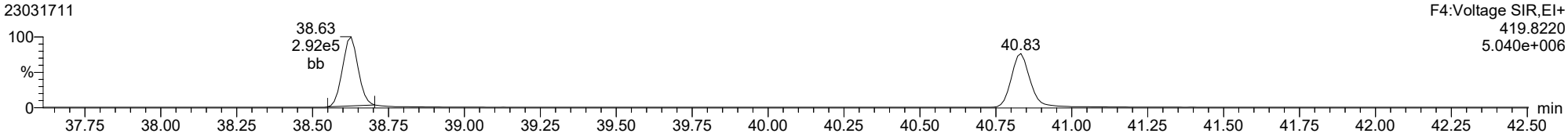

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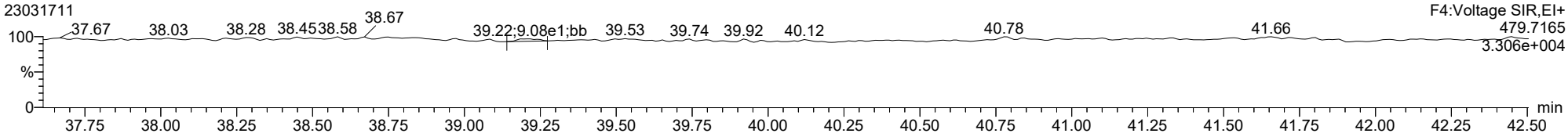

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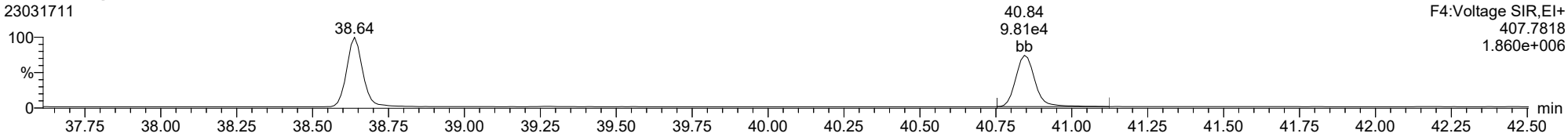

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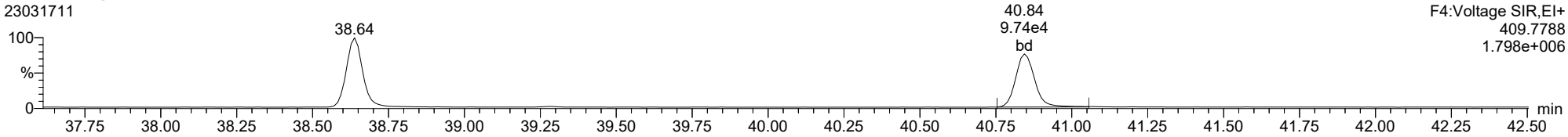

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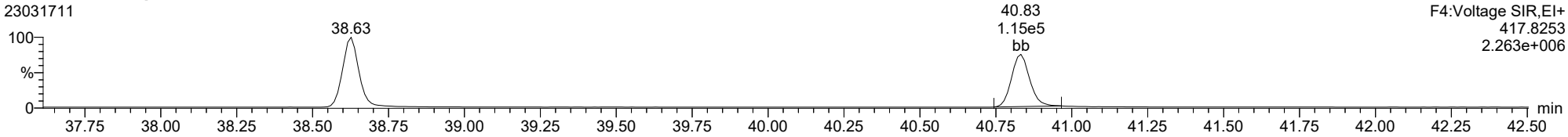

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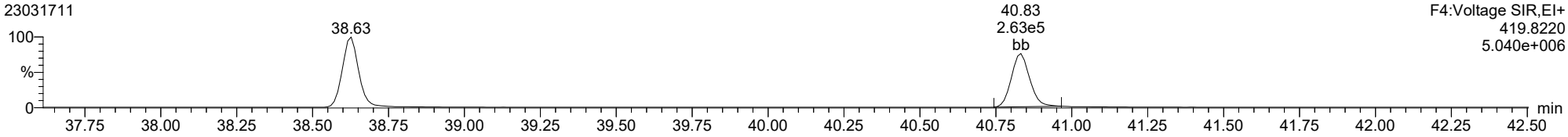

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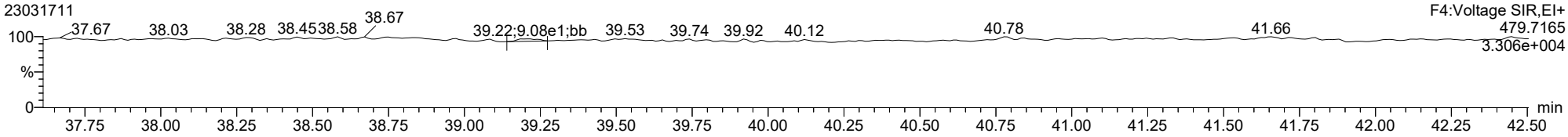

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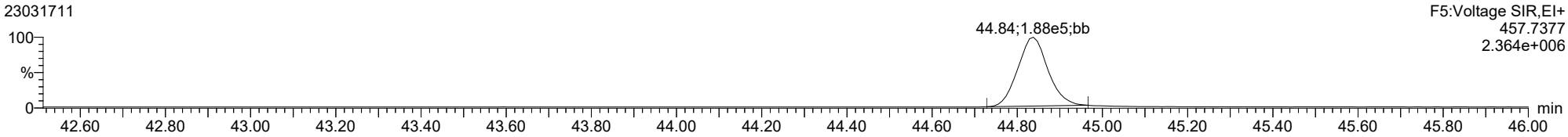

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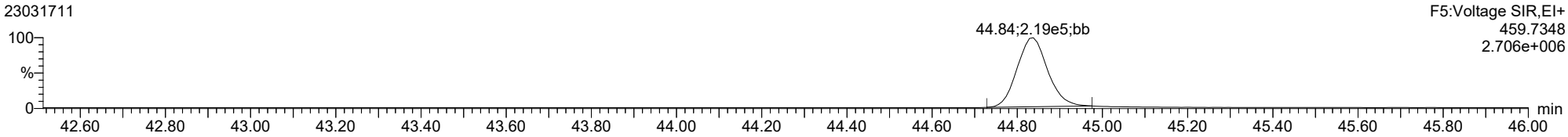

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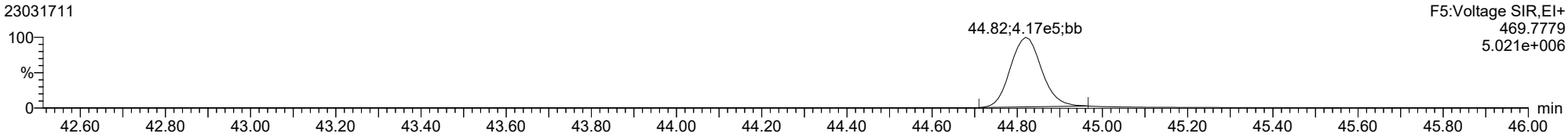

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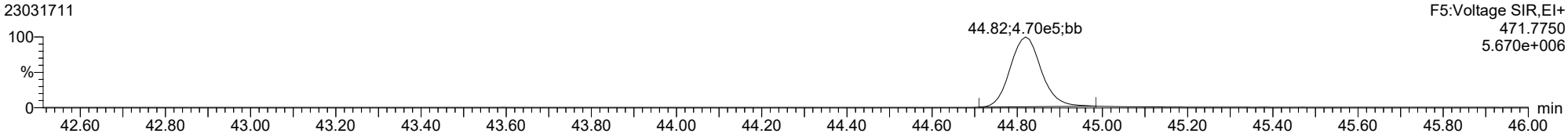

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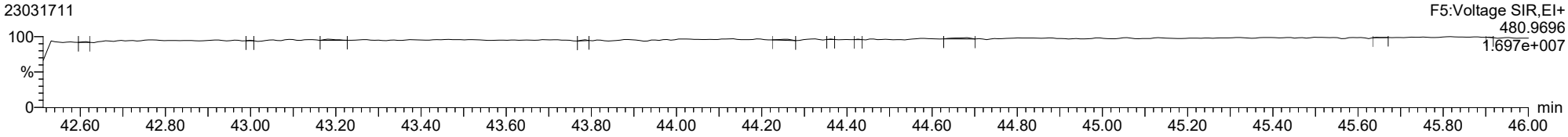

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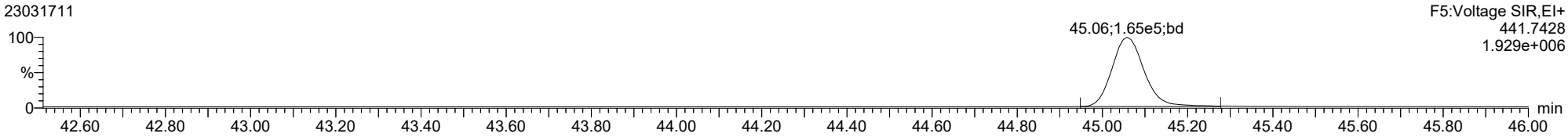

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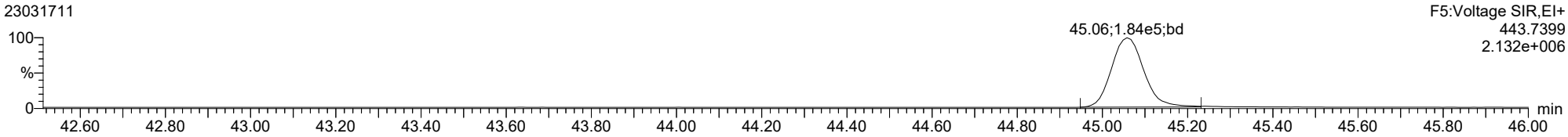
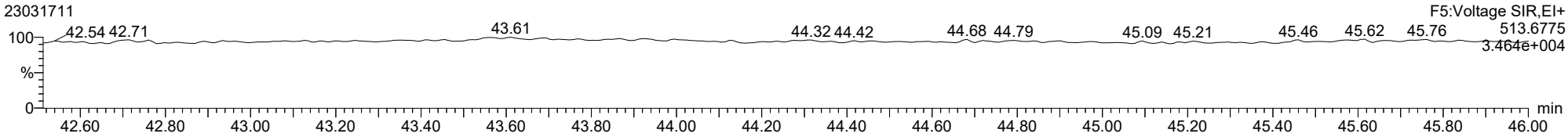


FUNCTION5 DCDPE



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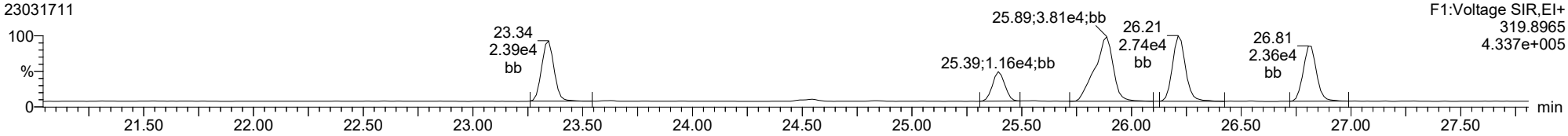
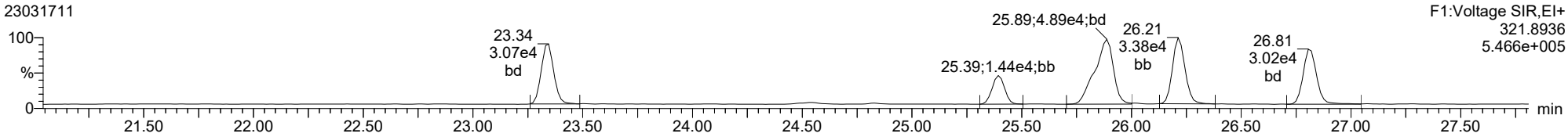
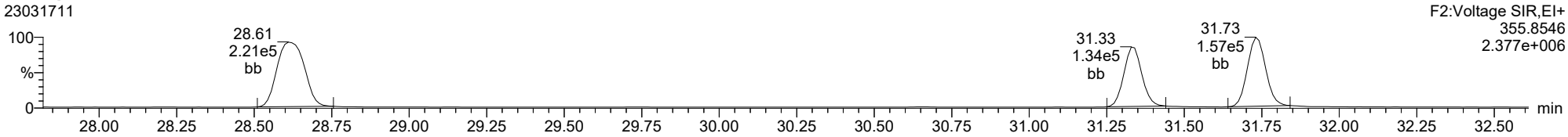


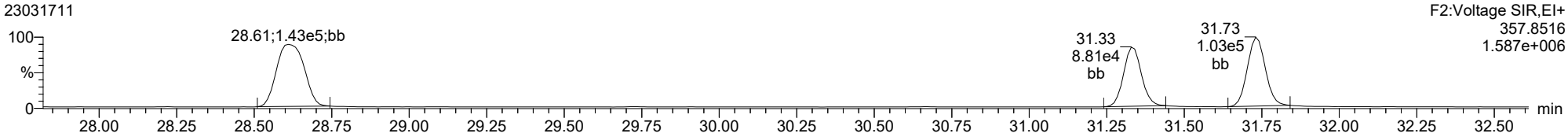
Total-tetradioxins



Total-pentadioxins



Total-pentadioxins



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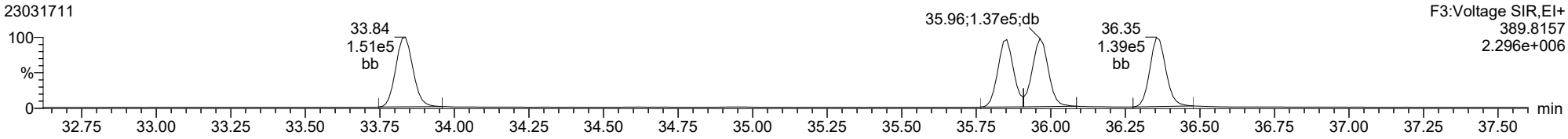
Total-hexadioxins



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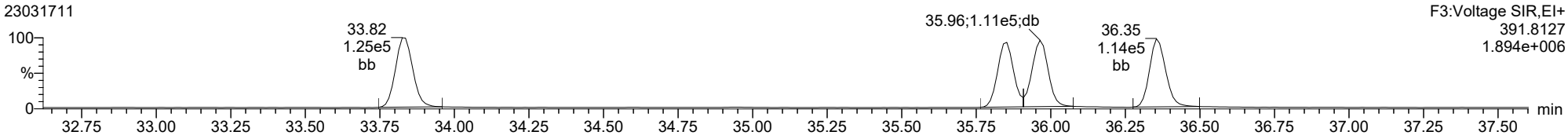

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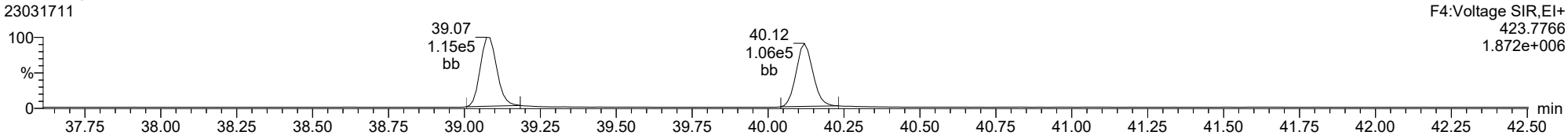

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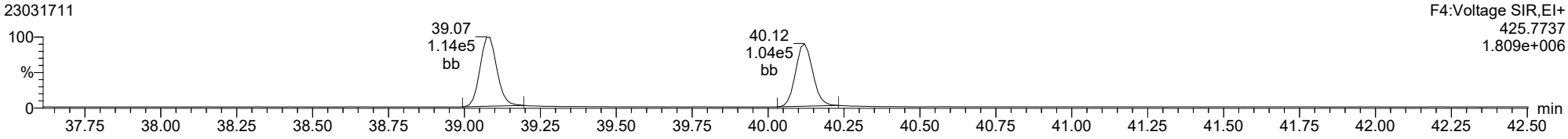

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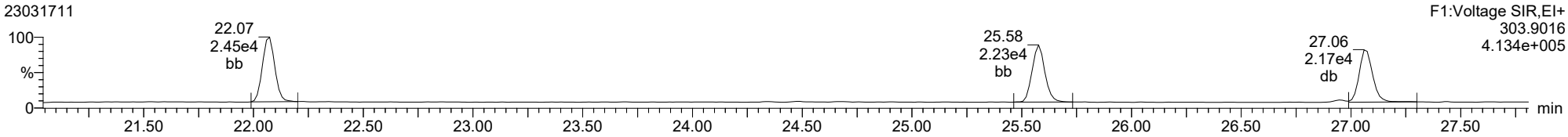
Total-tetrafurans



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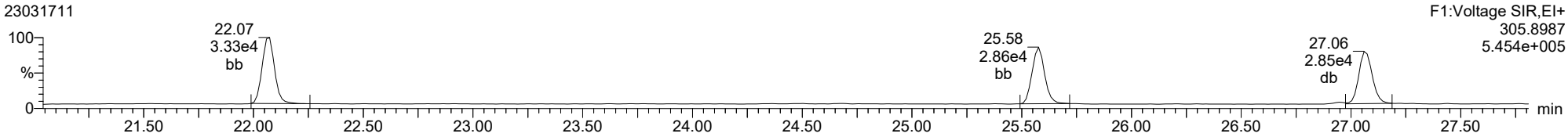

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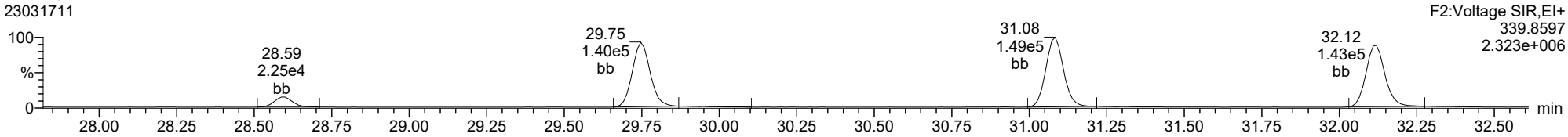

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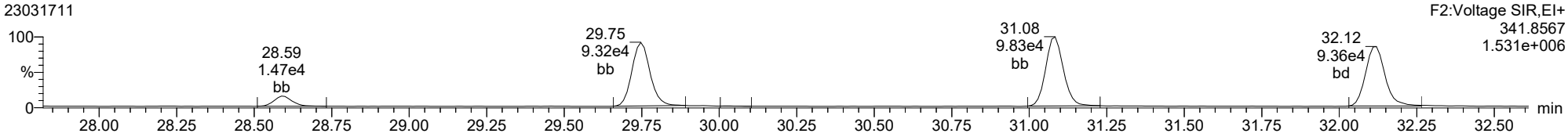

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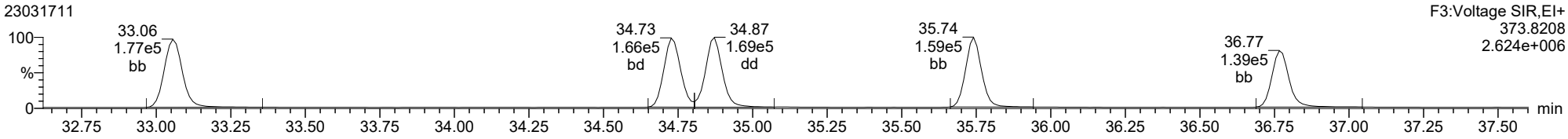

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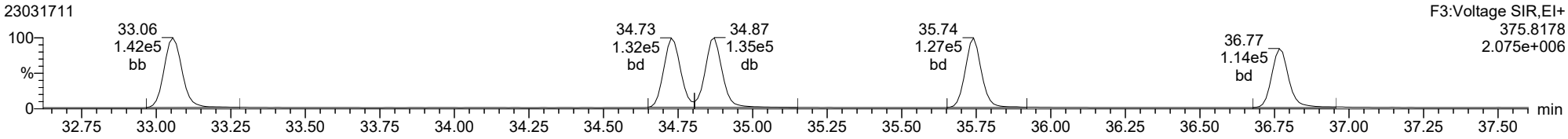

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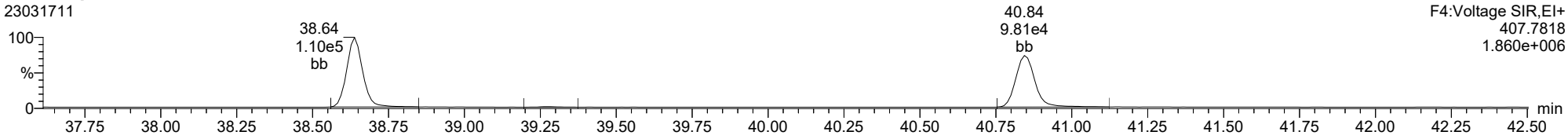

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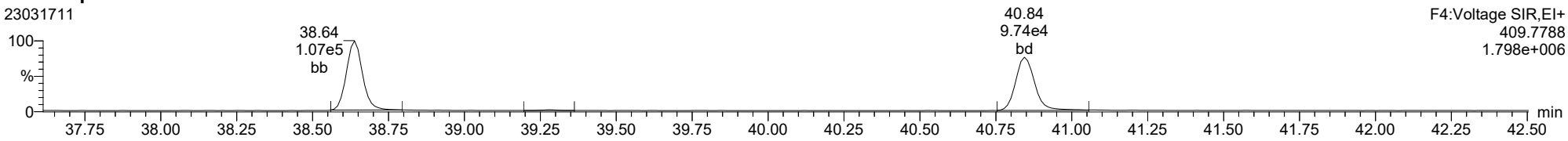

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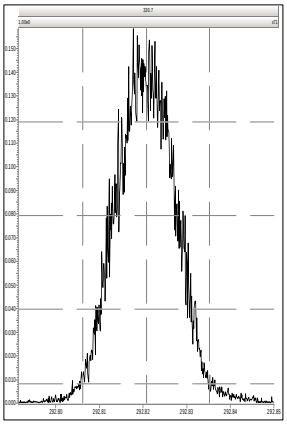

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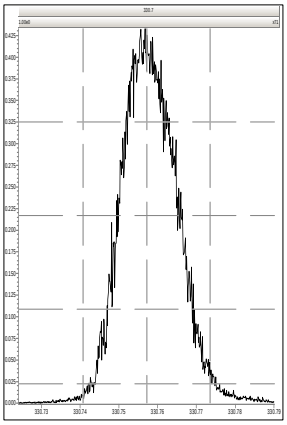

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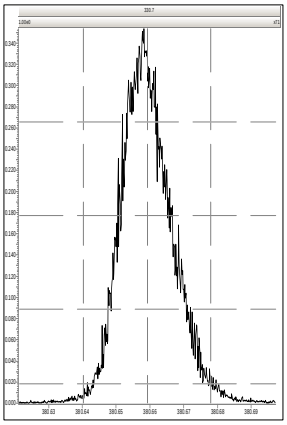

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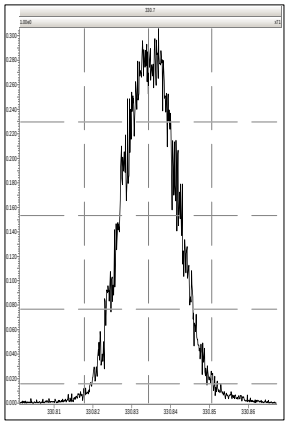

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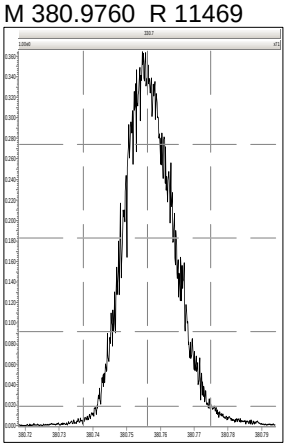

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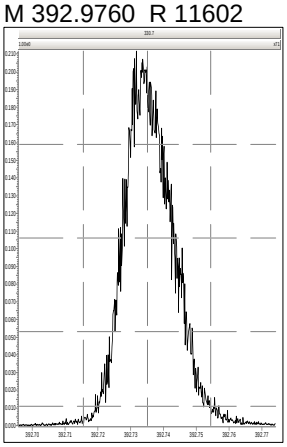
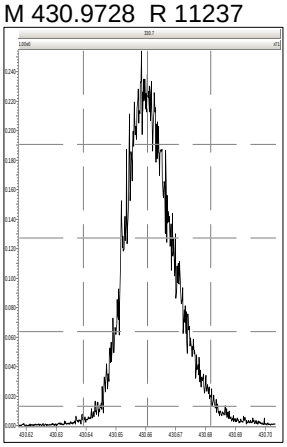
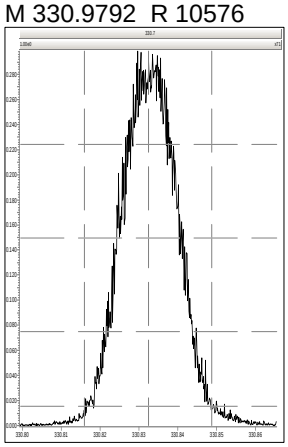


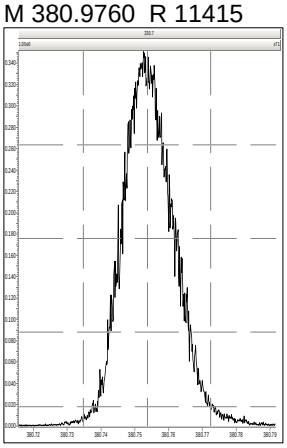
M 430.9728 R 11237



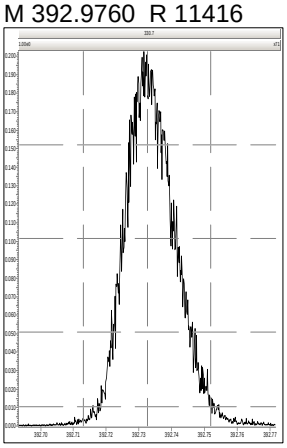
M 330.9792 R 10576



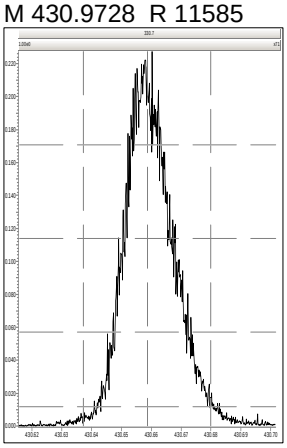
M 380.9760 R 11415



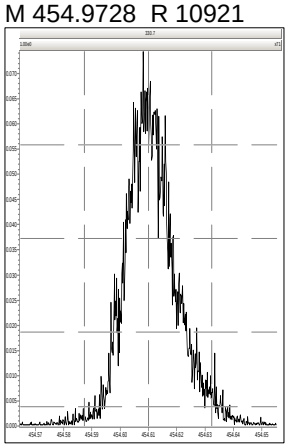
M 392.9760 R 11416



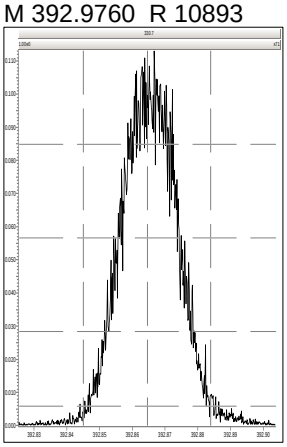
M 430.9728 R 11585



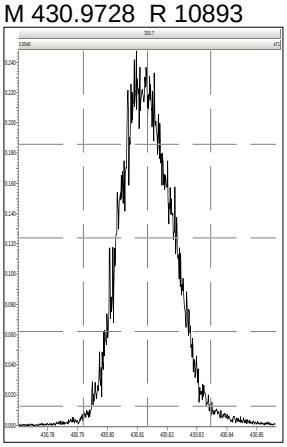
M 454.9728 R 10921



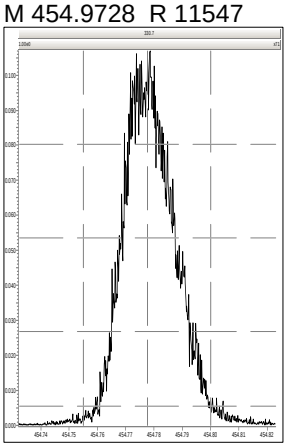
M 392.9760 R 10893



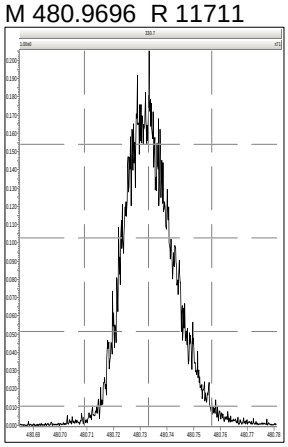
M 430.9728 R 10893



M 454.9728 R 11547

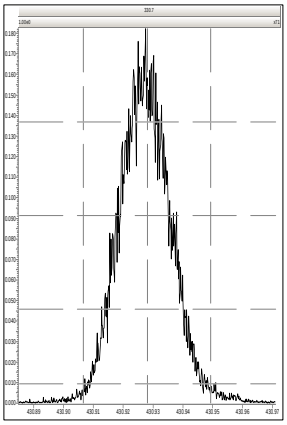


M 480.9696 R 11711

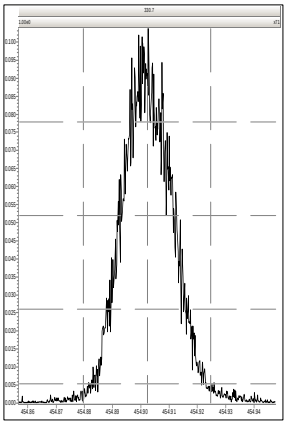


Printed: Friday, March 17, 2023 19:24:24 Pacific Daylight Time

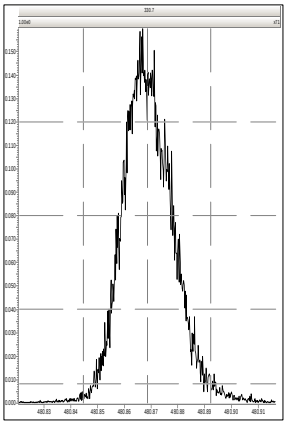
M 430.9728 R 11188



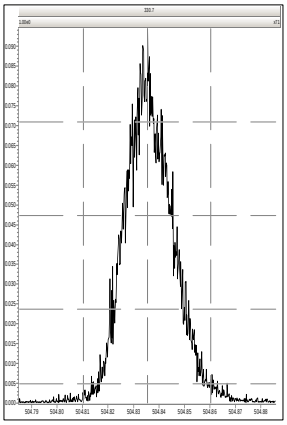
M 454.9728 R 11557



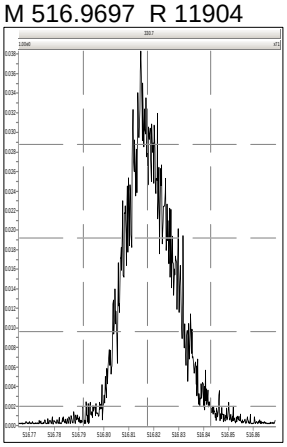
M 480.9696 R 11720

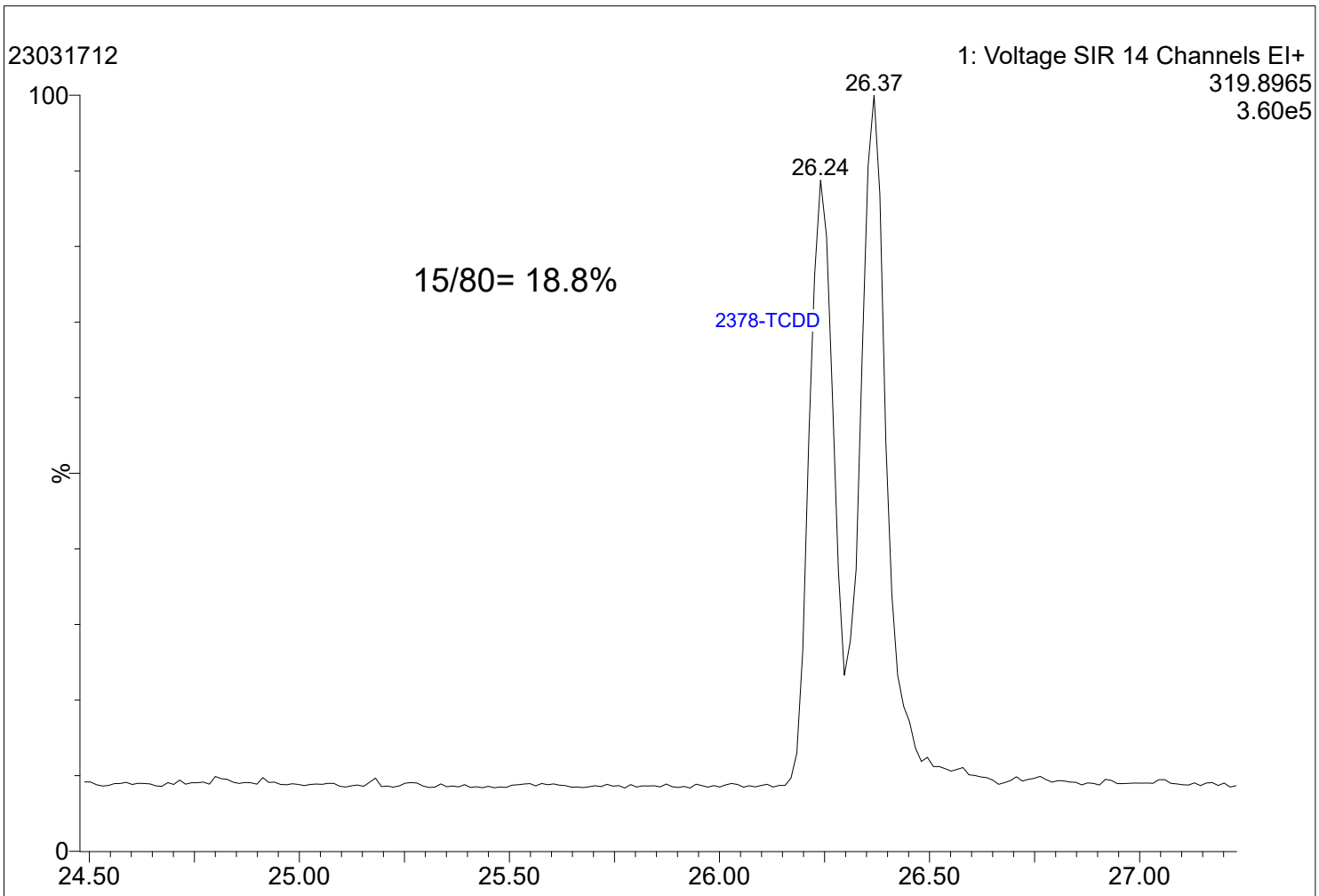


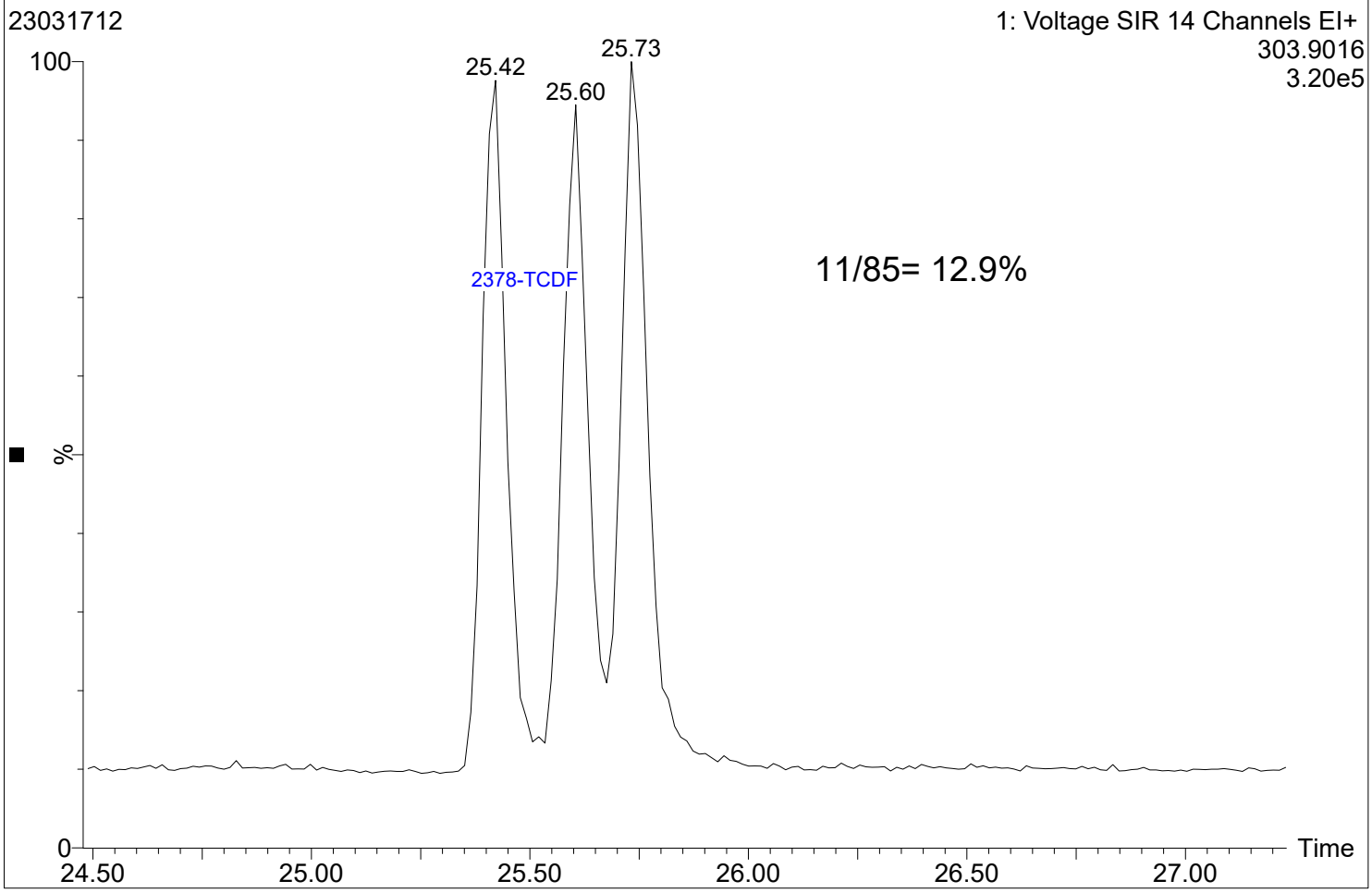
M 504.9696 R 12317



M 516.9697 R 11904




23031712
1: Voltage SIR 14 Channels EI+
319.8965
3.60e5
26.37
26.24
15/80= 18.8%
2378-TCDD
100
%
0
24.50
25.00
25.50
26.00
26.50
27.00


23031712
1: Voltage SIR 14 Channels EI+
303.9016
3.20e5
25.73
25.42
25.60
11/85= 12.9%
2378-TCDF
100
%
0
Time
24.50
25.00
25.50
26.00
26.50
27.00

Analytical Resources, LLC
Analytical Chemists and Consultants

CDD/CDF CHROMATOGRAPHIC RESOLUTION SUMMARY

EPA 1613B

Lab Name: Analytical Resources, LLC
SDG: 23A0171
Instrument .ID: AUTOSPEC01
Lab File ID: 23030303
Date Analyzed: 03/03/23
Time Analyzed: 10:39
Lab Sample ID: SLC0045-RES1
Sequence: SLC0045

Percent Valley Determination for Column: RTX-Dioxin2 ID: 0.25 (mm)

1278-TCDD/2378-TCDD: 8.8

3467-TCDF/2378-TCDF: 8.2

Quality Control (QC) Limits: ≤ 25%

Lab Sample ID	Sample Name	Lab File ID	Data Analyzed	Time Analyzed
SLC0045-ICV1	CS3W1	23030302	03/03/2023	09:51
SLC0045-RES1	ISCW1	23030303	03/03/2023	10:39
SLC0045-CAL1	CSLCW	23030304	03/03/2023	11:28
SLC0045-CAL2	CS1CW	23030305	03/03/2023	12:23
SLC0045-CAL3	CS2CW	23030306	03/03/2023	13:16
SLC0045-CAL4	CS3CW	23030307	03/03/2023	14:06
SLC0045-CAL5	CS4CW	23030308	03/03/2023	14:59
SLC0045-CAL6	CS5CW	23030309	03/03/2023	15:47
SLC0045-SCV1	ICVCW	23030310	03/03/2023	16:36
SLC0045-CCV1	CS3V4	23030311	03/03/2023	17:25
SLC0045-RES2	ISCV4	23030312	03/03/2023	18:18

Analytical Resources, LLC
Analytical Chemists and Consultants

CDD/CDF CHROMATOGRAPHIC RESOLUTION SUMMARY

EPA 1613B

Lab Name: Analytical Resources, LLC
SDG: 23A0171
Instrument .ID: AUTOSPEC01
Lab File ID: 23030312
Date Analyzed: 03/03/23
Time Analyzed: 18:18
Lab Sample ID: SLC0045-RES2
Sequence: SLC0045

Percent Valley Determination for Column: RTX-Dioxin2 ID: 0.25 (mm)

1278-TCDD/2378-TCDD: 12.9

3467-TCDF/2378-TCDF: 11.7

Quality Control (QC) Limits: ≤ 25%

Lab Sample ID	Sample Name	Lab File ID	Data Analyzed	Time Analyzed
SLC0045-ICV1	CS3W1	23030302	03/03/2023	09:51
SLC0045-RES1	ISCW1	23030303	03/03/2023	10:39
SLC0045-CAL1	CSLCW	23030304	03/03/2023	11:28
SLC0045-CAL2	CS1CW	23030305	03/03/2023	12:23
SLC0045-CAL3	CS2CW	23030306	03/03/2023	13:16
SLC0045-CAL4	CS3CW	23030307	03/03/2023	14:06
SLC0045-CAL5	CS4CW	23030308	03/03/2023	14:59
SLC0045-CAL6	CS5CW	23030309	03/03/2023	15:47
SLC0045-SCV1	ICVCW	23030310	03/03/2023	16:36
SLC0045-CCV1	CS3V4	23030311	03/03/2023	17:25
SLC0045-RES2	ISCV4	23030312	03/03/2023	18:18

Analytical Resources, LLC
Analytical Chemists and Consultants

CDD/CDF CHROMATOGRAPHIC RESOLUTION SUMMARY

EPA 1613B

Lab Name: Analytical Resources, LLC SDG: 23A0171

Instrument .ID: AUTOSPEC01 Lab File ID: 23031503

Date Analyzed: 03/15/23 Time Analyzed: 11:54

Lab Sample ID: SLC0176-RES1 Sequence: SLC0176

Percent Valley Determination for Column: RTX-Dioxin2 ID: 0.25 (mm)

1278-TCDD/2378-TCDD: 9.7

3467-TCDF/2378-TCDF: 8

Quality Control (QC) Limits: ≤ 25%

Lab Sample ID	Sample Name	Lab File ID	Data Analyzed	Time Analyzed
SLC0176-ICV1	CS3Z4	23031502	03/15/2023	11:02
SLC0176-RES1	ISCZ4	23031503	03/15/2023	11:54
SLC0176-CCV1	CS3Z5	23031510	03/15/2023	17:48
SLC0176-RES2	ISCZ5	23031511	03/15/2023	18:41
BLC0136-BLK1	Blank	23031512	03/15/2023	19:33
BLC0136-BS1	LCS	23031513	03/15/2023	20:22
BLC0136-SRM1	Reference	23031515	03/15/2023	22:00
SLC0176-CCV2	CS3Z6	23031521	03/16/2023	02:54
SLC0176-RES3	ISCZ6	23031522	03/16/2023	03:47

Analytical Resources, LLC
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CDD/CDF CHROMATOGRAPHIC RESOLUTION SUMMARY

EPA 1613B

Lab Name: Analytical Resources, LLC
SDG: 23A0171
Instrument .ID: AUTOSPEC01
Lab File ID: 23031511
Date Analyzed: 03/15/23
Time Analyzed: 18:41
Lab Sample ID: SLC0176-RES2
Sequence: SLC0176

Percent Valley Determination for Column: RTX-Dioxin2 ID: 0.25 (mm)

1278-TCDD/2378-TCDD: 11.1

3467-TCDF/2378-TCDF: 8.7

Quality Control (QC) Limits: ≤ 25%

Lab Sample ID	Sample Name	Lab File ID	Data Analyzed	Time Analyzed
SLC0176-ICV1	CS3Z4	23031502	03/15/2023	11:02
SLC0176-RES1	ISCZ4	23031503	03/15/2023	11:54
SLC0176-CCV1	CS3Z5	23031510	03/15/2023	17:48
SLC0176-RES2	ISCZ5	23031511	03/15/2023	18:41
BLC0136-BLK1	Blank	23031512	03/15/2023	19:33
BLC0136-BS1	LCS	23031513	03/15/2023	20:22
BLC0136-SRM1	Reference	23031515	03/15/2023	22:00
SLC0176-CCV2	CS3Z6	23031521	03/16/2023	02:54
SLC0176-RES3	ISCZ6	23031522	03/16/2023	03:47

Analytical Resources, LLC
Analytical Chemists and Consultants

CDD/CDF CHROMATOGRAPHIC RESOLUTION SUMMARY

EPA 1613B

Lab Name: Analytical Resources, LLC
SDG: 23A0171
Instrument .ID: AUTOSPEC01
Lab File ID: 23031522
Date Analyzed: 03/16/23
Time Analyzed: 03:47
Lab Sample ID: SLC0176-RES3
Sequence: SLC0176

Percent Valley Determination for Column: RTX-Dioxin2 ID: 0.25 (mm)

1278-TCDD/2378-TCDD: 11.1

3467-TCDF/2378-TCDF: 7.8

Quality Control (QC) Limits: ≤ 25%

Lab Sample ID	Sample Name	Lab File ID	Data Analyzed	Time Analyzed
SLC0176-ICV1	CS3Z4	23031502	03/15/2023	11:02
SLC0176-RES1	ISCZ4	23031503	03/15/2023	11:54
SLC0176-CCV1	CS3Z5	23031510	03/15/2023	17:48
SLC0176-RES2	ISCZ5	23031511	03/15/2023	18:41
BLC0136-BLK1	Blank	23031512	03/15/2023	19:33
BLC0136-BS1	LCS	23031513	03/15/2023	20:22
BLC0136-SRM1	Reference	23031515	03/15/2023	22:00
SLC0176-CCV2	CS3Z6	23031521	03/16/2023	02:54
SLC0176-RES3	ISCZ6	23031522	03/16/2023	03:47

Analytical Resources, LLC
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CDD/CDF CHROMATOGRAPHIC RESOLUTION SUMMARY

EPA 1613B

Lab Name: Analytical Resources, LLC SDG: 23A0171

Instrument .ID: AUTOSPEC01 Lab File ID: 23031703

Date Analyzed: 03/17/23 Time Analyzed: 11:30

Lab Sample ID: SLC0258-RES1 Sequence: SLC0258

Percent Valley Determination for Column: RTX-Dioxin2 ID: 0.25 (mm)

1278-TCDD/2378-TCDD: 19.5

3467-TCDF/2378-TCDF: 12.3

Quality Control (QC) Limits: ≤ 25%

Lab Sample ID	Sample Name	Lab File ID	Data Analyzed	Time Analyzed
SLC0258-ICV1	CS3A1	23031702	03/17/2023	10:40
SLC0258-RES1	ISCA1	23031703	03/17/2023	11:30
23A0171-02	LDW23-SS1257	23031708	03/17/2023	16:05
23A0171-04	LDW23-SS1245	23031709	03/17/2023	16:53
SLC0258-CCV1	CS3A2	23031711	03/17/2023	18:31
SLC0258-RES2	ISCA2	23031712	03/17/2023	19:24

Analytical Resources, LLC
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CDD/CDF CHROMATOGRAPHIC RESOLUTION SUMMARY

EPA 1613B

Lab Name: Analytical Resources, LLC
SDG: 23A0171
Instrument .ID: AUTOSPEC01
Lab File ID: 23031712
Date Analyzed: 03/17/23
Time Analyzed: 19:24
Lab Sample ID: SLC0258-RES2
Sequence: SLC0258

Percent Valley Determination for Column: RTX-Dioxin2 ID: 0.25 (mm)

1278-TCDD/2378-TCDD: 18.8

3467-TCDF/2378-TCDF: 12.9

Quality Control (QC) Limits: ≤ 25%

Lab Sample ID	Sample Name	Lab File ID	Data Analyzed	Time Analyzed
SLC0258-ICV1	CS3A1	23031702	03/17/2023	10:40
SLC0258-RES1	ISCA1	23031703	03/17/2023	11:30
23A0171-02	LDW23-SS1257	23031708	03/17/2023	16:05
23A0171-04	LDW23-SS1245	23031709	03/17/2023	16:53
SLC0258-CCV1	CS3A2	23031711	03/17/2023	18:31
SLC0258-RES2	ISCA2	23031712	03/17/2023	19:24

Analytical Resources, LLC
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ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0045	Instrument:	AUTOSPEC01
		Calibration:	GC00015

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CS3W1	SLC0045-ICV1	23030302	NA	03/03/23 09:51
ISCW1	SLC0045-RES1	23030303	NA	03/03/23 10:39
CSLCW	SLC0045-CAL1	23030304	NA	03/03/23 11:28
CS1CW	SLC0045-CAL2	23030305	NA	03/03/23 12:23
CS2CW	SLC0045-CAL3	23030306	NA	03/03/23 13:16
CS3CW	SLC0045-CAL4	23030307	NA	03/03/23 14:06
CS4CW	SLC0045-CAL5	23030308	NA	03/03/23 14:59
CS5CW	SLC0045-CAL6	23030309	NA	03/03/23 15:47
ICVCW	SLC0045-SCV1	23030310	NA	03/03/23 16:36
CS3V4	SLC0045-CCV1	23030311	NA	03/03/23 17:25
ISCV4	SLC0045-RES2	23030312	NA	03/03/23 18:18

ANALYSIS SEQUENCE

SLC0045

Instrument: AUTOSPEC01 HRGCMS Column ID: K2310
Calibration ID: GC00015 Tune File: FEB0923_1-5
EM Voltage: 350 Resolution check times : 9:51, 18:18

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0045-ICV1	CS3W1	QC		1	K009821		03/03/2023 09:51	23030302	PK	
SLC0045-RES1	ISCW1	QC		2	L002084		03/03/2023 10:39	23030303	PK	
SLC0045-CAL1	CSLCW	QC		3	I005460		03/03/2023 11:28	23030304	PK	
SLC0045-CAL2	CS1CW	QC		4	I005456		03/03/2023 12:23	23030305	PK	
SLC0045-CAL3	CS2CW	QC		5	I005457		03/03/2023 13:16	23030306	PK	
SLC0045-CAL4	CS3CW	QC		6	K009821		03/03/2023 14:06	23030307	PK	
SLC0045-CAL5	CS4CW	QC		7	I005458		03/03/2023 14:59	23030308	PK	
SLC0045-CAL6	CS5CW	QC		8	I005459		03/03/2023 15:47	23030309	PK	
SLC0045-SCV1	ICVCW	QC		9	H008219		03/03/2023 16:36	23030310	PK	
SLC0045-CCV1	CS3V4	QC		10	K009821		03/03/2023 17:25	23030311	PK	
SLC0045-RES2	ISCV4	QC		11	L002084		03/03/2023 18:18	23030312	PK	

Dataset: T:\Autospec\Processed Data Batch\230303ICIH.qld
Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
Printed: Monday, March 06, 2023 10:58:44 Pacific Standard Time

3/6/23 PK

Event	Details	Sample ID
Process Extract		
Process Integrate		
Process Calibrate		
Process Quantify		
Dataset Created		
Peak deleted	Sample:23030304, Compound:TD, RT:26.410	1
Peak deleted	Sample:23030304, Compound:OD, RT:44.990	1
Peak deleted	Sample:23030304, Compound:TF, RT:25.774	1
Pre modification peak	Sample:23030305, Compound:TF, RT:25.774	2
Peak modified	Sample:23030305, Compound:TF, RT:25.774	2
Pre modification peak	Sample:23030304, Compound:HPD, RT:40.261	1
Peak modified	Sample:23030304, Compound:HPD, RT:40.261	1
Peak deleted	Sample:23030308, Compound:PF, RT:32.328	5
Peak deleted	Sample:23030309, Compound:PF, RT:32.307	6
Peak deleted	Sample:23030309, Compound:HF, RT:33.220	6
Peak deleted	Sample:23030309, Compound:TD, RT:27.017	6
Peak deleted	Sample:23030309, Compound:PD, RT:31.995	6
Peak deleted	Sample:23030309, Compound:PD, RT:31.917	6
Peak deleted	Sample:23030308, Compound:HD, RT:34.000	5
Peak deleted	Sample:23030308, Compound:HPD, RT:39.225	5
Peak deleted	Sample:23030309, Compound:HPD, RT:39.214	6
Pre modification peak	Sample:23030305, Compound:OF, RT:45.237	2
Peak modified	Sample:23030305, Compound:OF, RT:45.237	2
Dataset Saved	Saved to 'T:\Autospec\Processed Data Batch\230303ICIH.qld'	

Analytical Resources, LLC
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ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0176	Instrument:	AUTOSPEC01
		Calibration:	GC00015

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CS3Z4	SLC0176-ICV1	23031502	NA	03/15/23 11:02
ISCZ4	SLC0176-RES1	23031503	NA	03/15/23 11:54
CS3Z5	SLC0176-CCV1	23031510	NA	03/15/23 17:48
ISCZ5	SLC0176-RES2	23031511	NA	03/15/23 18:41
Blank	BLC0136-BLK1	23031512	Solid	03/15/23 19:33
LCS	BLC0136-BS1	23031513	Solid	03/15/23 20:22
Reference	BLC0136-SRM1	23031515	Solid	03/15/23 22:00
CS3Z6	SLC0176-CCV2	23031521	NA	03/16/23 02:54
ISCZ6	SLC0176-RES3	23031522	NA	03/16/23 03:47

ANALYSIS SEQUENCE

SLC0176

Instrument: AUTOSPEC01 HRGCMS Column ID: K2310
Calibration ID: GC00015 Tune File: FEB0923_1-5
EM Voltage: 345 Resolution check times : 11:02, 18:41, 03:47

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0176-ICV1	CS3Z4	QC		1	K009821		03/15/2023 11:02	23031502	PK	
SLC0176-RES1	ISCZ4	QC		2	L002084		03/15/2023 11:54	23031503	PK	
23A0420-08	LDW23-SC1004	1613B Dioxin	C 01	3		K011414	03/15/2023 12:48	23031504	PK	
23A0455-03	LDW23-SS1031	1613B Dioxin	B 01	4		K011414	03/15/2023 13:37	23031505	PK	
23A0455-08	LDW23-SS1023	1613B Dioxin	B 01	5		K011414	03/15/2023 14:33	23031506	PK	
23A0455-15	LDW23-SS1051	1613B Dioxin	B 01	6		K011414	03/15/2023 15:21	23031507	PK	
23A0455-16	LDW23-SS1052	1613B Dioxin	B 01	7		K011414	03/15/2023 16:10	23031508	PK	
23A0295-04	LDW23-SC1023B	1613B Dioxin	A 04	8		K011414	03/15/2023 16:59	23031509	PK	
SLC0176-CCV1	CS3Z5	QC		9	K009821		03/15/2023 17:48	23031510	PK	
SLC0176-RES2	ISCZ5	QC		10	L002084		03/15/2023 18:41	23031511	PK	
BLC0136-BLK1	Blank	QC		11		K011414	03/15/2023 19:33	23031512	PK	
BLC0136-BS1	LCS	QC		12		K011414	03/15/2023 20:22	23031513	PK	
BLC0136-SRM1	Reference	QC		13		K011414	03/15/2023 22:00	23031515	PK	
BLC0136-DUP1	Duplicate	QC		14		K011414	03/15/2023 21:11	23031514	PK	
23A0158-06	LDW23-SS1222	1613B Dioxin	C 02	15		K011414	03/15/2023 22:49	23031516	PK	
23A0158-07	LDW23-SS1215	1613B Dioxin	C 02	16		K011414	03/15/2023 23:38	23031517	PK	
23A0158-09	LDW23-SS1077	1613B Dioxin	C 02	17		K011414	03/16/2023 00:27	23031518	PK	
23A0158-10	LDW23-SS1070	1613B Dioxin	C 02	18		K011414	03/16/2023 01:16	23031519	PK	
23A0158-11	LDW23-SS1065	1613B Dioxin	C 02	19		K011414	03/16/2023 02:05	23031520	PK	
SLC0176-CCV2	CS3Z6	QC		20	K009821		03/16/2023 02:54	23031521	PK	
SLC0176-RES3	ISCZ6	QC		21	K003933		03/16/2023 03:47	23031522	PK	
23A0158-12	LDW23-SS1064	1613B Dioxin	C 02	22		K011414				

ANALYSIS SEQUENCE

SLC0176

Instrument: AUTOSPEC01 HRGCMS Column ID: K2310
Calibration ID: GC00015 Tune File: FEB0923_1-5
EM Voltage: 345 Resolution check times : 11:02, 18:41, 03:47

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
23A0158-13	LDW23-SS1060	1613B Dioxin	C 02	23		K011414				
23A0158-14	LDW23-SS1059	1613B Dioxin	C 02	24		K011414				
23A0158-15	LDW23-SS1053	1613B Dioxin	C 02	25		K011414				
23A0171-02	LDW23-SS1257	1613B Dioxin	A 05	26		K011414				
23A0171-04	LDW23-SS1245	1613B Dioxin	A 05	27		K011414				
23A0206-13	LDW23-SS1066	1613B Dioxin	C 02	28		K011414				
SLC0176-CCV3	CS3Z7	QC		29	K009821					
SLC0176-RES4	ISCZ7	QC		30	K003933					

Dataset: T:\Autospec\Processed Data Batch\230315D1.qld
Last Altered: Thursday, March 16, 2023 09:12:10 Pacific Daylight Time
Printed: Thursday, March 16, 2023 09:13:35 Pacific Daylight Time 3/16/23 pk

Event	Details	Sample ID
Process Extract		
Process Integrate		
Process Quantify		
Dataset Created		
Peak deleted	Sample:23031503, Compound:13C-1234-TCDD, RT:25.351	2
Peak deleted	Sample:23031503, Compound:13C-123789-HxCDD, RT:36.309	2
Peak deleted	Sample:23031511, Compound:13C-123789-HxCDD, RT:36.343	10
Peak deleted	Sample:23031511, Compound:13C-1234-TCDD, RT:25.379	10
Peak deleted	Sample:23031522, Compound:13C-123789-HxCDD, RT:36.331	21
Pre modification peak	Sample:23031504, Compound:PF, RT:29.736	3
Peak modified	Sample:23031504, Compound:PF, RT:29.736	3
Pre modification peak	Sample:23031505, Compound:PF, RT:29.735	4
Peak modified	Sample:23031505, Compound:PF, RT:29.735	4
Pre modification peak	Sample:23031505, Compound:PF, RT:31.072	4
Peak modified	Sample:23031505, Compound:PF, RT:31.072	4
Pre modification peak	Sample:23031505, Compound:PF, RT:31.072	4
Peak modified	Sample:23031505, Compound:PF, RT:31.072	4
Pre modification peak	Sample:23031505, Compound:HF, RT:35.740	4
Peak modified	Sample:23031505, Compound:HF, RT:35.740	4
Pre modification peak	Sample:23031505, Compound:HF, RT:35.707	4
Peak modified	Sample:23031505, Compound:HF, RT:35.707	4
Peak added	Sample:23031505, Compound:HF, RT:35.740	4
Peak added	Sample:23031505, Compound:HF, RT:35.718	4
Peak deleted	Sample:23031506, Compound:PF, RT:29.747	5
Pre modification peak	Sample:23031506, Compound:HF, RT:35.741	5
Peak modified	Sample:23031506, Compound:HF, RT:35.741	5
Pre modification peak	Sample:23031506, Compound:HF, RT:35.719	5
Peak modified	Sample:23031506, Compound:HF, RT:35.719	5
Peak deleted	Sample:23031506, Compound:TD, RT:26.212	5
Pre modification peak	Sample:23031507, Compound:HF, RT:35.786	6
Peak modified	Sample:23031507, Compound:HF, RT:35.786	6
Pre modification peak	Sample:23031507, Compound:HPF, RT:40.899	6
Peak modified	Sample:23031507, Compound:HPF, RT:40.899	6
Peak deleted	Sample:23031508, Compound:TD, RT:26.212	7
Pre modification peak	Sample:23031509, Compound:PF, RT:29.747	8
Peak modified	Sample:23031509, Compound:PF, RT:29.747	8
Peak deleted	Sample:23031512, Compound:PD, RT:31.296	11
Pre modification peak	Sample:23031517, Compound:PF, RT:31.062	16
Peak modified	Sample:23031517, Compound:PF, RT:31.062	16
Pre modification peak	Sample:23031517, Compound:HF, RT:35.708	16
Peak modified	Sample:23031517, Compound:HF, RT:35.708	16
Peak deleted	Sample:23031517, Compound:HPF, RT:40.833	16
Pre modification peak	Sample:23031517, Compound:PD, RT:31.318	16
Peak modified	Sample:23031517, Compound:PD, RT:31.318	16
Pre modification peak	Sample:23031517, Compound:PD, RT:31.318	16
Peak modified	Sample:23031517, Compound:PD, RT:31.318	16
Pre modification peak	Sample:23031518, Compound:HF, RT:36.722	17
Peak modified	Sample:23031518, Compound:HF, RT:36.722	17
Pre modification peak	Sample:23031518, Compound:HF, RT:36.710	17
Peak modified	Sample:23031518, Compound:HF, RT:36.710	17
Pre modification peak	Sample:23031519, Compound:TD, RT:26.198	18
Peak modified	Sample:23031519, Compound:TD, RT:26.198	18
Pre modification peak	Sample:23031519, Compound:PD, RT:31.307	18
Peak modified	Sample:23031519, Compound:PD, RT:31.307	18
Pre modification peak	Sample:23031520, Compound:HF, RT:35.710	19

Dataset: T:\Autospec\Processed Data Batch\230315D1.qld
Last Altered: Thursday, March 16, 2023 09:12:10 Pacific Daylight Time
Printed: Thursday, March 16, 2023 09:13:35 Pacific Daylight Time

Event	Details	Sample ID
Peak modified	Sample:23031520, Compound:HF, RT:35.741	19
Dataset Saved	Saved to 'T:\Autospec\Processed Data Batch\230315D1.qld'	
Peak deleted	Sample:23031504, Compound:TF, RT:27.356	3
Pre modification peak	Sample:23031505, Compound:PF, RT:28.677	4
Peak modified	Sample:23031505, Compound:PF, RT:28.677	4
Pre modification peak	Sample:23031505, Compound:PF, RT:28.666	4
Peak modified	Sample:23031505, Compound:PF, RT:28.666	4
Pre modification peak	Sample:23031505, Compound:PF, RT:28.666	4
Peak modified	Sample:23031505, Compound:PF, RT:28.666	4
Peak added	Sample:23031505, Compound:HF, RT:35.685	4
Peak added	Sample:23031505, Compound:HF, RT:35.685	4
Peak deleted	Sample:23031506, Compound:TD, RT:25.407	5
Peak deleted	Sample:23031506, Compound:PD, RT:30.649	5
Peak deleted	Sample:23031507, Compound:TF, RT:27.187	6
Peak deleted	Sample:23031507, Compound:PF, RT:29.479	6
Peak deleted	Sample:23031507, Compound:PF, RT:28.310	6
Pre modification peak	Sample:23031507, Compound:PD, RT:28.655	6
Peak modified	Sample:23031507, Compound:PD, RT:28.655	6
Pre modification peak	Sample:23031507, Compound:PD, RT:28.644	6
Peak modified	Sample:23031507, Compound:PD, RT:28.644	6
Peak deleted	Sample:23031507, Compound:HD, RT:36.788	6
Peak added	Sample:23031508, Compound:HF, RT:35.696	7
Peak added	Sample:23031508, Compound:HF, RT:35.696	7
Peak deleted	Sample:23031508, Compound:TD, RT:25.379	7
Peak deleted	Sample:23031508, Compound:HD, RT:36.766	7
Peak deleted	Sample:23031516, Compound:TF, RT:24.051	15
Peak deleted	Sample:23031516, Compound:TD, RT:26.791	15
Peak added	Sample:23031516, Compound:TD, RT:23.330	15
Peak added	Sample:23031516, Compound:TD, RT:23.330	15
Peak deleted	Sample:23031517, Compound:TF, RT:25.336	16
Peak deleted	Sample:23031518, Compound:TF, RT:22.073	17
Peak deleted	Sample:23031518, Compound:TD, RT:26.791	17
Peak deleted	Sample:23031518, Compound:TD, RT:25.817	17
Peak deleted	Sample:23031518, Compound:TD, RT:25.379	17
Peak deleted	Sample:23031518, Compound:HD, RT:36.755	17
Peak added	Sample:23031519, Compound:PF, RT:28.655	18
Peak added	Sample:23031519, Compound:PF, RT:28.666	18
Peak deleted	Sample:23031519, Compound:PF, RT:28.956	18
Pre modification peak	Sample:23031520, Compound:PF, RT:28.655	19
Peak modified	Sample:23031520, Compound:PF, RT:28.655	19
Peak deleted	Sample:23031520, Compound:PF, RT:28.265	19
Pre modification peak	Sample:23031520, Compound:PF, RT:28.677	19
Peak modified	Sample:23031520, Compound:PF, RT:28.677	19
Peak added	Sample:23031520, Compound:HF, RT:35.685	19
Peak added	Sample:23031520, Compound:HF, RT:35.674	19
Peak deleted	Sample:23031520, Compound:TD, RT:23.811	19
Peak deleted	Sample:23031520, Compound:PD, RT:30.638	19
Dataset Saved	Saved to 'T:\Autospec\Processed Data Batch\230315D1.qld'	

Dataset: T:\Autospec\Processed Data Batch\230315SRM.qld
Last Altered: Thursday, March 16, 2023 09:35:30 Pacific Daylight Time
Printed: Thursday, March 16, 2023 09:36:30 Pacific Daylight Time 3/16/23 pk

Event	Details	Sample ID
Process Extract		
Process Integrate		
Process Quantify		
Dataset Created		
Peak deleted	Sample:23031514, Compound:TF, RT:24.065	1
Peak added	Sample:23031514, Compound:PF, RT:28.655	1
Peak added	Sample:23031514, Compound:PF, RT:28.655	1
Peak added	Sample:23031514, Compound:TD, RT:23.345	1
Peak added	Sample:23031514, Compound:TD, RT:23.345	1
Peak deleted	Sample:23031515, Compound:TF, RT:25.251	2
Peak deleted	Sample:23031515, Compound:TF, RT:24.870	2
Peak deleted	Sample:23031515, Compound:PD, RT:31.696	2
Peak deleted	Sample:23031515, Compound:HD, RT:36.754	2
Peak deleted	Sample:23031515, Compound:HPD, RT:39.205	2
Dataset Saved	Saved to 'T:\Autospec\Processed Data Batch\230315SRM.qld'	

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0258	Instrument:	AUTOSPEC01
		Calibration:	GC00015

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CS3A1	SLC0258-ICV1	23031702	NA	03/17/23 10:40
ISCA1	SLC0258-RES1	23031703	NA	03/17/23 11:30
LDW23-SS1257	23A0171-02	23031708	Solid	03/17/23 16:05
LDW23-SS1245	23A0171-04	23031709	Solid	03/17/23 16:53
CS3A2	SLC0258-CCV1	23031711	NA	03/17/23 18:31
ISCA2	SLC0258-RES2	23031712	NA	03/17/23 19:24

ANALYSIS SEQUENCE

SLC0258

Instrument: AUTOSPEC01 HRGCMS Column ID: K2310
Calibration ID: GC00015 Tune File: FEB0923_1-5
EM Voltage: 345 Resolution check times : 10:35, 19:24

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0258-ICV1	CS3A1	QC		1	K009821		03/17/2023 10:40	23031702	PK	
SLC0258-RES1	ISCA1	QC		2	L002084		03/17/2023 11:30	23031703	PK	
23A0158-12	LDW23-SS1064	1613B Dioxin	C 02	3		K011414	03/17/2023 12:22	23031704	PK	
23A0158-13	LDW23-SS1060	1613B Dioxin	C 02	4		K011414	03/17/2023 13:10	23031705	PK	
23A0158-14	LDW23-SS1059	1613B Dioxin	C 02	5		K011414	03/17/2023 14:06	23031706	PK	
23A0158-15	LDW23-SS1053	1613B Dioxin	C 02	6		K011414	03/17/2023 14:54	23031707	PK	
23A0171-02	LDW23-SS1257	1613B Dioxin	A 05	7		K011414	03/17/2023 16:05	23031708	PK	
23A0171-04	LDW23-SS1245	1613B Dioxin	A 05	8		K011414	03/17/2023 16:53	23031709	PK	
23A0206-13	LDW23-SS1066	1613B Dioxin	C 02	9		K011414	03/17/2023 17:42	23031710	PK	
SLC0258-CCV1	CS3A2	QC		10	K009821		03/17/2023 18:31	23031711	PK	
SLC0258-RES2	ISCA2	QC		11	L002084		03/17/2023 19:24	23031712	PK	

Dataset: T:\Autospec\Processed Data Batch\230317.qld
Last Altered: Monday, March 20, 2023 11:38:42 Pacific Daylight Time
Printed: Monday, March 20, 2023 11:39:39 Pacific Daylight Time 3/20/23 pk

Event	Details	Sample ID
Process Extract		
Process Integrate		
Process Quantify		
Dataset Created		
Peak deleted	Sample:23031703, Compound:13C-123789-HxCDD, RT:36.342	2
Peak deleted	Sample:23031712, Compound:13C-123789-HxCDD, RT:36.354	11
Peak deleted	Sample:23031712, Compound:13C-123789-HxCDD, RT:36.388	11
Pre modification peak	Sample:23031704, Compound:PF, RT:29.747	3
Peak modified	Sample:23031704, Compound:PF, RT:29.747	3
Pre modification peak	Sample:23031704, Compound:PF, RT:31.095	3
Peak modified	Sample:23031704, Compound:PF, RT:31.095	3
Pre modification peak	Sample:23031704, Compound:TD, RT:26.226	3
Peak modified	Sample:23031704, Compound:TD, RT:26.226	3
Pre modification peak	Sample:23031705, Compound:HF, RT:35.741	4
Peak modified	Sample:23031705, Compound:HF, RT:35.741	4
Pre modification peak	Sample:23031706, Compound:HPF, RT:40.866	5
Peak modified	Sample:23031706, Compound:HPF, RT:40.866	5
Pre modification peak	Sample:23031707, Compound:TF, RT:25.591	6
Peak modified	Sample:23031707, Compound:TF, RT:25.591	6
Pre modification peak	Sample:23031708, Compound:HF, RT:35.719	7
Peak modified	Sample:23031708, Compound:HF, RT:35.719	7
Pre modification peak	Sample:23031709, Compound:HF, RT:35.719	8
Peak modified	Sample:23031709, Compound:HF, RT:35.719	8
Pre modification peak	Sample:23031709, Compound:PD, RT:31.340	8
Peak modified	Sample:23031709, Compound:PD, RT:31.340	8
Dataset Saved	Saved to 'T:\Autospec\Processed Data Batch\230317.qld'	
Peak added	Sample:23031704, Compound:HF, RT:35.730	3
Peak added	Sample:23031704, Compound:HF, RT:35.708	3
Peak added	Sample:23031704, Compound:HF, RT:35.741	3
Peak added	Sample:23031704, Compound:HF, RT:35.752	3
Peak deleted	Sample:23031704, Compound:HD, RT:36.777	3
Peak deleted	Sample:23031705, Compound:HD, RT:36.777	4
Peak added	Sample:23031706, Compound:HF, RT:35.719	5
Peak added	Sample:23031706, Compound:HF, RT:35.719	5
Peak added	Sample:23031706, Compound:PD, RT:28.667	5
Peak added	Sample:23031706, Compound:PD, RT:28.677	5
Peak deleted	Sample:23031706, Compound:HD, RT:36.789	5
Peak deleted	Sample:23031707, Compound:HPF, RT:41.122	6
Peak deleted	Sample:23031707, Compound:HPF, RT:41.021	6
Peak deleted	Sample:23031707, Compound:HD, RT:36.777	6
Peak deleted	Sample:23031708, Compound:TF, RT:27.074	7
Peak deleted	Sample:23031708, Compound:PF, RT:28.321	7
Peak deleted	Sample:23031708, Compound:TD, RT:25.562	7
Peak added	Sample:23031708, Compound:TD, RT:23.373	7
Peak added	Sample:23031708, Compound:TD, RT:23.373	7
Peak deleted	Sample:23031708, Compound:HD, RT:36.788	7
Peak deleted	Sample:23031709, Compound:TF, RT:25.096	8
Peak deleted	Sample:23031709, Compound:TD, RT:25.195	8
Peak deleted	Sample:23031709, Compound:HD, RT:36.777	8
Peak deleted	Sample:23031710, Compound:TD, RT:25.563	9
Dataset Saved	Saved to 'T:\Autospec\Processed Data Batch\230317.qld'	

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0045	Instrument:	AUTOSPEC01
Sample ID:	SLC0045-ICV1	Calibration:	GC00015
File ID:	23030302	Analyzed:	03/03/23 09:51

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	94.0	71 - 129	25.7745	25.76487	0.0096	N/A	
13C12-2,3,7,8-TCDD	100.00	102	82 - 118	26.4242	26.40287	0.0213	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	92.2	76 - 124	29.9337	29.92235	0.0114	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	87.6	77 - 123	31.2707	31.2611	0.0096	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	84.3	62 - 138	31.5268	31.5192	0.0076	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	84.0	76 - 124	34.8915	34.88393	0.0076	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	74.6	70 - 130	35.0363	35.02318	0.0131	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	88.7	73 - 127	35.8942	35.88653	0.0077	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	99.9	74 - 126	36.9303	36.91718	0.0131	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	93.5	85 - 115	36.0167	36.00728	0.0094	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	86.9	85 - 115	36.1393	36.12053	0.0188	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	95.3	78 - 122	38.7685	38.7593	0.0092	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	98.7	77 - 123	41.008	40.99867	0.0093	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	105	72 - 128	40.2615	40.25773	0.0038	N/A	
13C12-OCDD	200.00	107	48 - 152	44.9993	44.98705	0.0122	N/A	
37Cl4-2,3,7,8-TCDD	10.000	90.5	0 - 200	26.4383	26.42402	0.0143	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0045	Instrument:	AUTOSPEC01
Sample ID:	SLC0045-SCV1	Calibration:	GC00015
File ID:	23030310	Analyzed:	03/03/23 16:36

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	96.9	0 - 200	25.7602	25.76487	-0.0047	N/A	
13C12-2,3,7,8-TCDD	100.00	96.6	0 - 200	26.3958	26.40287	-0.0071	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	73.2	0 - 200	29.9225	29.92235	0.0001	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	75.9	0 - 200	31.2593	31.2611	-0.0018	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	76.6	0 - 200	31.5155	31.5192	-0.0037	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	93.0	0 - 200	34.8802	34.88393	-0.0037	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	98.0	0 - 200	35.014	35.02318	-0.0092	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	93.4	0 - 200	35.8828	35.88653	-0.0037	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	97.9	0 - 200	36.9078	36.91718	-0.0094	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	95.9	0 - 200	36.0053	36.00728	-0.0020	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	97.7	0 - 200	36.1168	36.12053	-0.0037	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	102	0 - 200	38.7573	38.7593	-0.0020	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	104	0 - 200	40.9967	40.99867	-0.0020	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	102	0 - 200	40.2502	40.25773	-0.0075	N/A	
13C12-OCDD	200.00	80.8	0 - 200	44.9807	44.98705	-0.0064	N/A	
37Cl4-2,3,7,8-TCDD	10.000	87.1	0 - 200	26.4242	26.42402	0.0002	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0045	Instrument:	AUTOSPEC01
Sample ID:	SLC0045-CCV1	Calibration:	GC00015
File ID:	23030311	Analyzed:	03/03/23 17:25

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	89.4	71 - 129	25.7602	25.76487	-0.0047	N/A	
13C12-2,3,7,8-TCDD	100.00	86.0	82 - 118	26.3958	26.40287	-0.0071	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	92.6	76 - 124	29.9225	29.92235	0.0001	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	91.6	77 - 123	31.2593	31.2611	-0.0018	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	90.8	62 - 138	31.5157	31.5192	-0.0035	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	95.2	76 - 124	34.8805	34.88393	-0.0034	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	91.1	70 - 130	35.0253	35.02318	0.0021	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	96.9	73 - 127	35.883	35.88653	-0.0035	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	101	74 - 126	36.9193	36.91718	0.0021	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	97.6	85 - 115	36.0057	36.00728	-0.0016	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	98.4	85 - 115	36.117	36.12053	-0.0035	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	102	78 - 122	38.7577	38.7593	-0.0016	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	84.3	77 - 123	40.997	40.99867	-0.0017	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	92.0	72 - 128	40.2617	40.25773	0.0040	N/A	
13C12-OCDD	200.00	85.1	48 - 152	44.9903	44.98705	0.0032	N/A	
37Cl4-2,3,7,8-TCDD	10.000	75.4	0 - 200	26.424	26.42402	0.0000	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0176	Instrument:	AUTOSPEC01
Sample ID:	SLC0176-ICV1	Calibration:	GC00015
File ID:	23031502	Analyzed:	03/15/23 11:02

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	85.8	71 - 129	25.5623	25.76487	-0.2026	N/A	
13C12-2,3,7,8-TCDD	100.00	100	82 - 118	26.198	26.40287	-0.2049	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	80.0	76 - 124	29.7247	29.92235	-0.1977	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	81.5	77 - 123	31.0617	31.2611	-0.1994	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	83.2	62 - 138	31.3178	31.5192	-0.2014	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	80.3	76 - 124	34.7048	34.88393	-0.1791	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	71.8	70 - 130	34.8385	35.02318	-0.1847	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	82.7	73 - 127	35.7075	35.88653	-0.1790	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	90.8	74 - 126	36.7435	36.91718	-0.1737	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	97.1	85 - 115	35.8302	36.00728	-0.1771	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	85.9	85 - 115	35.9415	36.12053	-0.1790	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	83.7	78 - 122	38.6042	38.7593	-0.1551	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	83.0	77 - 123	40.8102	40.99867	-0.1885	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	84.3	72 - 128	40.086	40.25773	-0.1717	N/A	
13C12-OCDD	200.00	75.7	48 - 152	44.7825	44.98705	-0.2046	N/A	
37Cl4-2,3,7,8-TCDD	10.000	86.1	0 - 200	26.2122	26.42402	-0.2118	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0176	Instrument:	AUTOSPEC01
Sample ID:	SLC0176-CCV1	Calibration:	GC00015
File ID:	23031510	Analyzed:	03/15/23 17:48

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	81.2	71 - 129	25.5342	25.76487	-0.2307	N/A	
13C12-2,3,7,8-TCDD	100.00	109	82 - 118	26.1697	26.40287	-0.2332	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	89.8	76 - 124	29.7023	29.92235	-0.2201	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	91.7	77 - 123	31.0392	31.2611	-0.2219	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	104	62 - 138	31.2955	31.5192	-0.2237	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	92.3	76 - 124	34.6825	34.88393	-0.2014	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	82.6	70 - 130	34.8273	35.02318	-0.1959	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	81.0	73 - 127	35.6963	35.88653	-0.1902	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	81.1	74 - 126	36.7323	36.91718	-0.1849	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	99.3	85 - 115	35.8077	36.00728	-0.1996	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	89.4	85 - 115	35.9303	36.12053	-0.1902	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	67.1	78 - 122	38.593	38.7593	-0.1663	N/A	*
13C12-1,2,3,4,7,8,9-HpCDF	100.00	73.7	77 - 123	40.799	40.99867	-0.1997	N/A	*
13C12-1,2,3,4,6,7,8-HpCDD	100.00	81.9	72 - 128	40.0748	40.25773	-0.1829	N/A	
13C12-OCDD	200.00	91.7	48 - 152	44.7732	44.98705	-0.2139	N/A	
37Cl4-2,3,7,8-TCDD	10.000	92.3	0 - 200	26.198	26.42402	-0.2260	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0176	Instrument:	AUTOSPEC01
Sample ID:	BLC0136-BLK1	Calibration:	GC00015
File ID:	23031512	Analyzed:	03/15/23 19:33

Surrogate Compound	Spike Level ng/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	200.00	102	24 - 169	25.5342	25.76487	-0.2307	N/A	
13C12-2,3,7,8-TCDD	200.00	131	25 - 164	26.1698	26.40287	-0.2331	N/A	
13C12-1,2,3,7,8-PeCDF	200.00	115	24 - 185	29.7023	29.92235	-0.2201	N/A	
13C12-2,3,4,7,8-PeCDF	200.00	119	21 - 178	31.0282	31.2611	-0.2329	N/A	
13C12-1,2,3,7,8-PeCDD	200.00	130	25 - 181	31.2845	31.5192	-0.2347	N/A	
13C12-1,2,3,4,7,8-HxCDF	200.00	101	26 - 152	34.6825	34.88393	-0.2014	N/A	
13C12-1,2,3,6,7,8-HxCDF	200.00	97.7	26 - 123	34.8163	35.02318	-0.2069	N/A	
13C12-2,3,4,6,7,8-HxCDF	200.00	101	28 - 136	35.6965	35.88653	-0.1900	N/A	
13C12-1,2,3,7,8,9-HxCDF	200.00	94.7	29 - 147	36.7215	36.91718	-0.1957	N/A	
13C12-1,2,3,4,7,8-HxCDD	200.00	128	32 - 141	35.808	36.00728	-0.1993	N/A	
13C12-1,2,3,6,7,8-HxCDD	200.00	120	28 - 130	35.9193	36.12053	-0.2012	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	200.00	69.7	28 - 143	38.5932	38.7593	-0.1661	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	200.00	68.4	26 - 138	40.799	40.99867	-0.1997	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	200.00	76.9	23 - 140	40.0638	40.25773	-0.1939	N/A	
13C12-OCDD	400.00	80.2	17 - 157	44.7642	44.98705	-0.2229	N/A	
37Cl4-2,3,7,8-TCDD	80.000	102	35 - 197	26.184	26.42402	-0.2400	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0176	Instrument:	AUTOSPEC01
Sample ID:	BLC0136-BS1	Calibration:	GC00015
File ID:	23031513	Analyzed:	03/15/23 20:22

Surrogate Compound	Spike Level ng/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	200.00	96.3	24 - 169	25.5198	25.76487	-0.2451	N/A	
13C12-2,3,7,8-TCDD	200.00	117	25 - 164	26.1697	26.40287	-0.2332	N/A	
13C12-1,2,3,7,8-PeCDF	200.00	99.7	24 - 185	29.691	29.92235	-0.2314	N/A	
13C12-2,3,4,7,8-PeCDF	200.00	102	21 - 178	31.0278	31.2611	-0.2333	N/A	
13C12-1,2,3,7,8-PeCDD	200.00	108	25 - 181	31.284	31.5192	-0.2352	N/A	
13C12-1,2,3,4,7,8-HxCDF	200.00	100	26 - 152	34.6708	34.88393	-0.2131	N/A	
13C12-1,2,3,6,7,8-HxCDF	200.00	93.5	26 - 123	34.8157	35.02318	-0.2075	N/A	
13C12-2,3,4,6,7,8-HxCDF	200.00	93.4	28 - 136	35.6848	35.88653	-0.2017	N/A	
13C12-1,2,3,7,8,9-HxCDF	200.00	96.3	29 - 147	36.7208	36.91718	-0.1964	N/A	
13C12-1,2,3,4,7,8-HxCDD	200.00	116	32 - 141	35.7962	36.00728	-0.2111	N/A	
13C12-1,2,3,6,7,8-HxCDD	200.00	109	28 - 130	35.9188	36.12053	-0.2017	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	200.00	83.3	28 - 143	38.5815	38.7593	-0.1778	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	200.00	81.9	26 - 138	40.7873	40.99867	-0.2114	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	200.00	98.3	23 - 140	40.0633	40.25773	-0.1944	N/A	
13C12-OCDD	400.00	94.9	17 - 157	44.7545	44.98705	-0.2326	N/A	
37Cl4-2,3,7,8-TCDD	80.000	89.6	35 - 197	26.1838	26.42402	-0.2402	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0176	Instrument:	AUTOSPEC01
Sample ID:	BLC0136-SRM1	Calibration:	GC00015
File ID:	23031515	Analyzed:	03/15/23 22:00

Surrogate Compound	Spike Level ng/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	199.40	95.7	24 - 169	25.534	25.76487	-0.2309	N/A	
13C12-2,3,7,8-TCDD	199.40	114	25 - 164	26.1697	26.40287	-0.2332	N/A	
13C12-1,2,3,7,8-PeCDF	199.40	101	24 - 185	29.7022	29.92235	-0.2202	N/A	
13C12-2,3,4,7,8-PeCDF	199.40	108	21 - 178	31.039	31.2611	-0.2221	N/A	
13C12-1,2,3,7,8-PeCDD	199.40	119	25 - 181	31.2952	31.5192	-0.2240	N/A	
13C12-1,2,3,4,7,8-HxCDF	199.40	87.3	26 - 152	34.6933	34.88393	-0.1906	N/A	
13C12-1,2,3,6,7,8-HxCDF	199.40	83.9	26 - 123	34.827	35.02318	-0.1962	N/A	
13C12-2,3,4,6,7,8-HxCDF	199.40	91.5	28 - 136	35.7072	35.88653	-0.1793	N/A	
13C12-1,2,3,7,8,9-HxCDF	199.40	103	29 - 147	36.7322	36.91718	-0.1850	N/A	
13C12-1,2,3,4,7,8-HxCDD	199.40	114	32 - 141	35.8297	36.00728	-0.1776	N/A	
13C12-1,2,3,6,7,8-HxCDD	199.40	103	28 - 130	35.9412	36.12053	-0.1793	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	199.40	65.2	28 - 143	38.6037	38.7593	-0.1556	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	199.40	63.2	26 - 138	40.8097	40.99867	-0.1890	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	199.40	77.2	23 - 140	40.0743	40.25773	-0.1834	N/A	
13C12-OCDD	398.80	69.0	17 - 157	44.7818	44.98705	-0.2053	N/A	
37Cl4-2,3,7,8-TCDD	79.761	88.3	35 - 197	26.1978	26.42402	-0.2262	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0176	Instrument:	AUTOSPEC01
Sample ID:	SLC0176-CCV2	Calibration:	GC00015
File ID:	23031521	Analyzed:	03/16/23 02:54

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	84.0	71 - 129	25.5342	25.76487	-0.2307	N/A	
13C12-2,3,7,8-TCDD	100.00	101	82 - 118	26.1697	26.40287	-0.2332	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	89.0	76 - 124	29.7023	29.92235	-0.2201	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	95.3	77 - 123	31.0392	31.2611	-0.2219	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	98.2	62 - 138	31.2842	31.5192	-0.2350	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	74.3	76 - 124	34.6822	34.88393	-0.2017	N/A	*
13C12-1,2,3,6,7,8-HxCDF	100.00	67.8	70 - 130	34.827	35.02318	-0.1962	N/A	*
13C12-2,3,4,6,7,8-HxCDF	100.00	77.5	73 - 127	35.696	35.88653	-0.1905	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	85.5	74 - 126	36.721	36.91718	-0.1962	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	91.3	85 - 115	35.8075	36.00728	-0.1998	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	86.4	85 - 115	35.9188	36.12053	-0.2017	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	76.1	78 - 122	38.5927	38.7593	-0.1666	N/A	*
13C12-1,2,3,4,7,8,9-HpCDF	100.00	79.4	77 - 123	40.7985	40.99867	-0.2002	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	83.7	72 - 128	40.0743	40.25773	-0.1834	N/A	
13C12-OCDD	200.00	101	48 - 152	44.782	44.98705	-0.2051	N/A	
37Cl4-2,3,7,8-TCDD	10.000	85.2	0 - 200	26.1838	26.42402	-0.2402	N/A	

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0258	Instrument:	AUTOSPEC01
Sample ID:	SLC0258-ICV1	Calibration:	GC00015
File ID:	23031702	Analyzed:	03/17/23 10:40

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	85.7	71 - 129	25.5623	25.76487	-0.2026	N/A	
13C12-2,3,7,8-TCDD	100.00	103	82 - 118	26.1978	26.40287	-0.2051	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	90.6	76 - 124	29.7355	29.92235	-0.1869	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	91.4	77 - 123	31.0613	31.2611	-0.1998	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	92.1	62 - 138	31.3175	31.5192	-0.2017	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	80.3	76 - 124	34.7155	34.88393	-0.1684	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	78.1	70 - 130	34.8492	35.02318	-0.1740	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	82.2	73 - 127	35.7182	35.88653	-0.1683	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	87.0	74 - 126	36.7542	36.91718	-0.1630	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	93.6	85 - 115	35.8295	36.00728	-0.1778	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	96.2	85 - 115	35.9522	36.12053	-0.1683	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	78.1	78 - 122	38.6148	38.7593	-0.1445	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	77.8	77 - 123	40.8207	40.99867	-0.1780	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	79.4	72 - 128	40.0967	40.25773	-0.1610	N/A	
13C12-OCDD	200.00	80.6	48 - 152	44.8093	44.98705	-0.1778	N/A	
37Cl4-2,3,7,8-TCDD	10.000	86.5	0 - 200	26.2262	26.42402	-0.1978	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0258	Instrument:	AUTOSPEC01
Sample ID:	23A0171-02	Calibration:	GC00015
File ID:	23031708	Analyzed:	03/17/23 16:05

Surrogate Compound	Spike Level ng/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	199.74	97.8	24 - 169	25.5907	25.76487	-0.1742	N/A	
13C12-2,3,7,8-TCDD	199.74	116	25 - 164	26.2263	26.40287	-0.1766	N/A	
13C12-1,2,3,7,8-PeCDF	199.74	102	24 - 185	29.7582	29.92235	-0.1642	N/A	
13C12-2,3,4,7,8-PeCDF	199.74	106	21 - 178	31.095	31.2611	-0.1661	N/A	
13C12-1,2,3,7,8-PeCDD	199.74	100	25 - 181	31.3513	31.5192	-0.1679	N/A	
13C12-1,2,3,4,7,8-HxCDF	199.74	90.4	26 - 152	34.7383	34.88393	-0.1456	N/A	
13C12-1,2,3,6,7,8-HxCDF	199.74	85.2	26 - 123	34.8832	35.02318	-0.1400	N/A	
13C12-2,3,4,6,7,8-HxCDF	199.74	91.7	28 - 136	35.7522	35.88653	-0.1343	N/A	
13C12-1,2,3,7,8,9-HxCDF	199.74	100	29 - 147	36.7772	36.91718	-0.1400	N/A	
13C12-1,2,3,4,7,8-HxCDD	199.74	107	32 - 141	35.8635	36.00728	-0.1438	N/A	
13C12-1,2,3,6,7,8-HxCDD	199.74	103	28 - 130	35.9862	36.12053	-0.1343	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	199.74	80.2	28 - 143	38.6488	38.7593	-0.1105	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	199.74	79.6	26 - 138	40.8548	40.99867	-0.1439	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	199.74	82.8	23 - 140	40.1307	40.25773	-0.1270	N/A	
13C12-OCDD	399.48	83.4	17 - 157	44.8467	44.98705	-0.1404	N/A	
37Cl4-2,3,7,8-TCDD	79.896	94.5	35 - 197	26.2405	26.42402	-0.1835	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0258	Instrument:	AUTOSPEC01
Sample ID:	23A0171-04	Calibration:	GC00015
File ID:	23031709	Analyzed:	03/17/23 16:53

Surrogate Compound	Spike Level ng/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	199.94	102	24 - 169	25.5765	25.76487	-0.1884	N/A	
13C12-2,3,7,8-TCDD	199.94	118	25 - 164	26.2122	26.40287	-0.1907	N/A	
13C12-1,2,3,7,8-PeCDF	199.94	120	24 - 185	29.747	29.92235	-0.1754	N/A	
13C12-2,3,4,7,8-PeCDF	199.94	126	21 - 178	31.0728	31.2611	-0.1883	N/A	
13C12-1,2,3,7,8-PeCDD	199.94	118	25 - 181	31.329	31.5192	-0.1902	N/A	
13C12-1,2,3,4,7,8-HxCDF	199.94	91.4	26 - 152	34.7272	34.88393	-0.1567	N/A	
13C12-1,2,3,6,7,8-HxCDF	199.94	87.0	26 - 123	34.872	35.02318	-0.1512	N/A	
13C12-2,3,4,6,7,8-HxCDF	199.94	93.5	28 - 136	35.7412	35.88653	-0.1453	N/A	
13C12-1,2,3,7,8,9-HxCDF	199.94	103	29 - 147	36.766	36.91718	-0.1512	N/A	
13C12-1,2,3,4,7,8-HxCDD	199.94	109	32 - 141	35.8525	36.00728	-0.1548	N/A	
13C12-1,2,3,6,7,8-HxCDD	199.94	103	28 - 130	35.975	36.12053	-0.1455	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	199.94	82.8	28 - 143	38.6378	38.7593	-0.1215	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	199.94	72.1	26 - 138	40.844	40.99867	-0.1547	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	199.94	83.6	23 - 140	40.1197	40.25773	-0.1380	N/A	
13C12-OCDD	399.89	86.3	17 - 157	44.8378	44.98705	-0.1493	N/A	
37Cl4-2,3,7,8-TCDD	79.977	98.9	35 - 197	26.2263	26.42402	-0.1977	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0258	Instrument:	AUTOSPEC01
Sample ID:	SLC0258-CCV1	Calibration:	GC00015
File ID:	23031711	Analyzed:	03/17/23 18:31

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	89.3	71 - 129	25.5625	25.76487	-0.2024	N/A	
13C12-2,3,7,8-TCDD	100.00	102	82 - 118	26.1982	26.40287	-0.2047	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	103	76 - 124	29.7247	29.92235	-0.1977	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	109	77 - 123	31.0617	31.2611	-0.1994	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	103	62 - 138	31.3178	31.5192	-0.2014	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	82.9	76 - 124	34.716	34.88393	-0.1679	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	75.4	70 - 130	34.8497	35.02318	-0.1735	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	81.6	73 - 127	35.7187	35.88653	-0.1678	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	89.1	74 - 126	36.7548	36.91718	-0.1624	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	93.8	85 - 115	35.8302	36.00728	-0.1771	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	86.8	85 - 115	35.9527	36.12053	-0.1678	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	85.0	78 - 122	38.6267	38.7593	-0.1326	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	88.4	77 - 123	40.8327	40.99867	-0.1660	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	87.1	72 - 128	40.0973	40.25773	-0.1604	N/A	
13C12-OCDD	200.00	104	48 - 152	44.8195	44.98705	-0.1676	N/A	
37Cl4-2,3,7,8-TCDD	10.000	89.1	0 - 200	26.2123	26.42402	-0.2117	N/A	

* Values outside of QC limits

HOLDING TIME SUMMARY

Analysis: EPA 1613B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1257 23A0171-02	12/08/22 09:16	12/08/22 17:18	03/07/23 14:50	89	365	03/17/23 16:05	10	365	
LDW23-SS1245 23A0171-04	12/08/22 11:14	12/08/22 17:18	03/07/23 14:50	89	365	03/17/23 16:53	10	365	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 1613B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: AUTOSPEC01

Analyte	MDL	RL	Units
2,3,7,8-TCDF	0.058	1.00	ng/kg
2,3,7,8-TCDD	0.150	1.00	ng/kg
1,2,3,7,8-PeCDF	0.240	1.00	ng/kg
2,3,4,7,8-PeCDF	0.220	1.00	ng/kg
1,2,3,7,8-PeCDD	0.170	1.00	ng/kg
1,2,3,4,7,8-HxCDF	0.280	1.00	ng/kg
1,2,3,6,7,8-HxCDF	0.200	1.00	ng/kg
2,3,4,6,7,8-HxCDF	0.170	1.00	ng/kg
1,2,3,7,8,9-HxCDF	0.190	1.00	ng/kg
1,2,3,4,7,8-HxCDD	0.170	1.00	ng/kg
1,2,3,6,7,8-HxCDD	0.180	1.00	ng/kg
1,2,3,7,8,9-HxCDD	0.220	1.00	ng/kg
1,2,3,4,6,7,8-HpCDF	0.210	1.00	ng/kg
1,2,3,4,7,8,9-HpCDF	0.240	1.00	ng/kg
1,2,3,4,6,7,8-HpCDD	0.560	2.50	ng/kg
OCDF	1.10	2.50	ng/kg
OCDD	4.60	10.0	ng/kg
Total TCDF		1.00	ng/kg
Total TCDD		1.00	ng/kg
Total PeCDF		1.00	ng/kg
Total PeCDD		1.00	ng/kg
Total HxCDF		1.00	ng/kg
Total HxCDD		1.00	ng/kg
Total HpCDF		1.00	ng/kg
Total HpCDD		1.00	ng/kg

CS3WT

Calibration and Verification Solution (EPA-1613CS3) combined with Window Defining and 2,3,7,8-TCDD Resolution Testing Congeners

PRODUCT CODE:	CS3WT
LOT NUMBER:	CS3WT0918
SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/24/2018
LAST TESTED: (mm/dd/yyyy)	10/29/2018
EXPIRY DATE: (mm/dd/yyyy)	10/29/2025
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

DESCRIPTION:

CS3WT is a solution/mixture of native and $^{13}C_{12}$-labelled chlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs). The components and their concentrations are given in Table A.

CS3WT was designed and prepared to be used as a HRMS calibration standard according to U.S. EPA Method 1613B.

It is to be used for calibration verification in place of EPA-1613CS3 (Lot: 13CS30918). It also contains the PCDD and PCDF window defining congeners for a DB-5 (or equivalent) capillary column as well as the TCDD isomers required to test and confirm the resolution of 2,3,7,8-TCDD.

The individual ^{13}C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-$^{37}Cl_4$-tetrachlorodibenzo-p-dioxin has a chemical purity of >98% and an isotopic (^{37}Cl) purity of ≥95%. The individual native 2,3,7,8-substituted PCDD and PCDF congeners all have chemical purities of >98%; the other congeners (window defining and resolution testing) should only be considered semi-quantitative.

This current lot of CS3WT is to be used with the 1613 calibration solutions having the following lot numbers:

PRODUCT CODE	LOT NUMBER
EPA-1613CS1	13CS10918
EPA-1613CS2	13CS20918
EPA-1613CS3	13CS30918
EPA-1613CS4	13CS40918
EPA-1613CS5	13CS50918
EPA-1613CSL	13CSL0918
EPA-1613CS0.5	13CS0.50918

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: HRGC/HRMS Data (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 3 for further details.
- Only the 2,3,7,8-substituted PCDDs and PCDFs should be used for quantitation. The other congeners (window defining and 2378-TCDD resolution testing) should be considered semi-quantitative (within ±20% of their design value). Impurities have been identified where possible.

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2,...x_n on which it depends is:

$$u_c(y(x_1, x_2, ...x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **CS3WT; Components and Concentrations (ng/ml, in nonane/4.5% toluene)**

QUANTITATIVE ANALYTES (ng/ml, ±5%)	
Native PCDDs & PCDFs:	
2,3,7,8-TCDD	10
2,3,7,8-TCDF	10
1,2,3,7,8-PeCDD	50
1,2,3,7,8-PeCDF	50
2,3,4,7,8-PeCDF	50
1,2,3,4,7,8-HxCDD	50
1,2,3,6,7,8-HxCDD	50
1,2,3,7,8,9-HxCDD	50
1,2,3,4,7,8-HxCDF	50
1,2,3,6,7,8-HxCDF	50
1,2,3,7,8,9-HxCDF	50
2,3,4,6,7,8-HxCDF	50
1,2,3,4,6,7,8-HpCDD *(WD)*	50
1,2,3,4,6,7,8-HpCDF *(WD)*	50
1,2,3,4,7,8,9-HpCDF *(WD)*	50
OCDD	100
OCDF	100
Labelled PCDDs & PCDFs:	
$^{13}C_{12}$-2,3,7,8-TCDD	100
$^{13}C_{12}$-2,3,7,8-TCDF	100
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100
$^{13}C_{12}$-OCDD	200
Cleanup Standard:	
$^{37}Cl_4$-2,3,7,8-TCDD	10
Internal Standards:	
$^{13}C_{12}$-1,2,3,4-TCDD	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	100

SEMI-QUANTITATIVE ANALYTES (ng/ml, ±20%)	
Window Definers:*	
1,3,6,8-TCDD	10
1,2,8,9-TCDD	10
1,3,6,8-TCDF	10
1,2,8,9-TCDF	10
1,2,4,6,8/1,2,4,7,9-PeCDD	50
1,2,3,8,9-PeCDD	50
1,3,4,6,8-PeCDF	50
1,2,3,8,9-PeCDF	50
1,2,4,6,7,9-HxCDD	50
1,2,3,4,6,8-HxCDF	50
1,2,3,4,6,7,9-HpCDD	50
2378-TCDD Resolution Testing Isomers:	
1,2,3,4-TCDD	5
1,2,3,7/1,2,3,8-TCDD	5
1,2,3,9-TCDD	10

** 1,2,3,4,6,7-HxCDD (last eluting HxCDD) not included; coelutes with 1,2,3,7,8,9-HxCDD. Use 1,2,3,4,6,7,9-HpCDD to set window.*

** 1,2,3,4,8,9-HxCDF (last eluting HxCDF) not included; can interfere with 1,2,3,7,8,9-HxCDF. Use 1,2,3,4,6,7,8-HpCDF to set window.*

WD – Window Definer

Certified By: _____ **Date:** 10/30/2018 (mm/dd/yyyy)

B.G. Chittim, General Manager

Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**

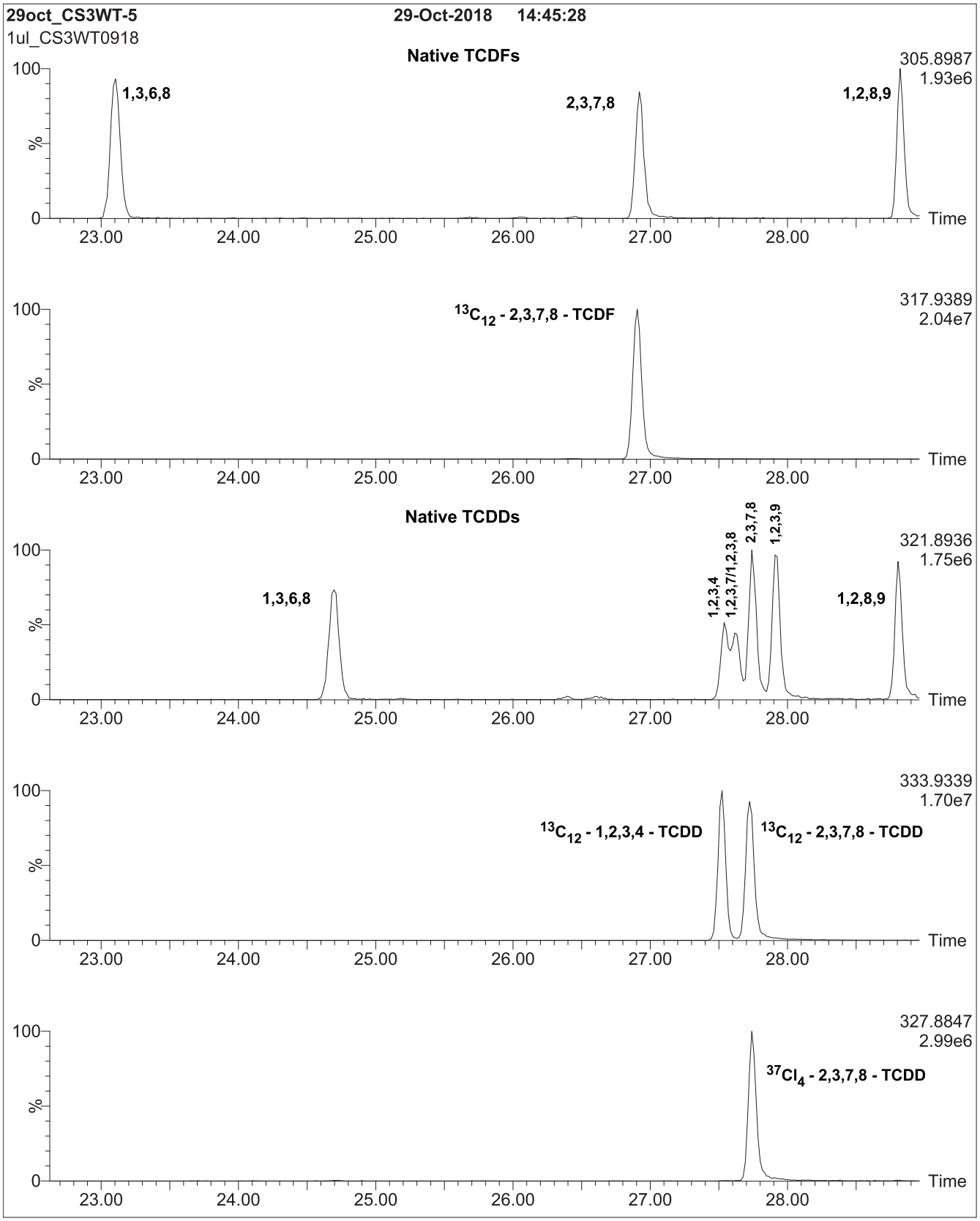


Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**

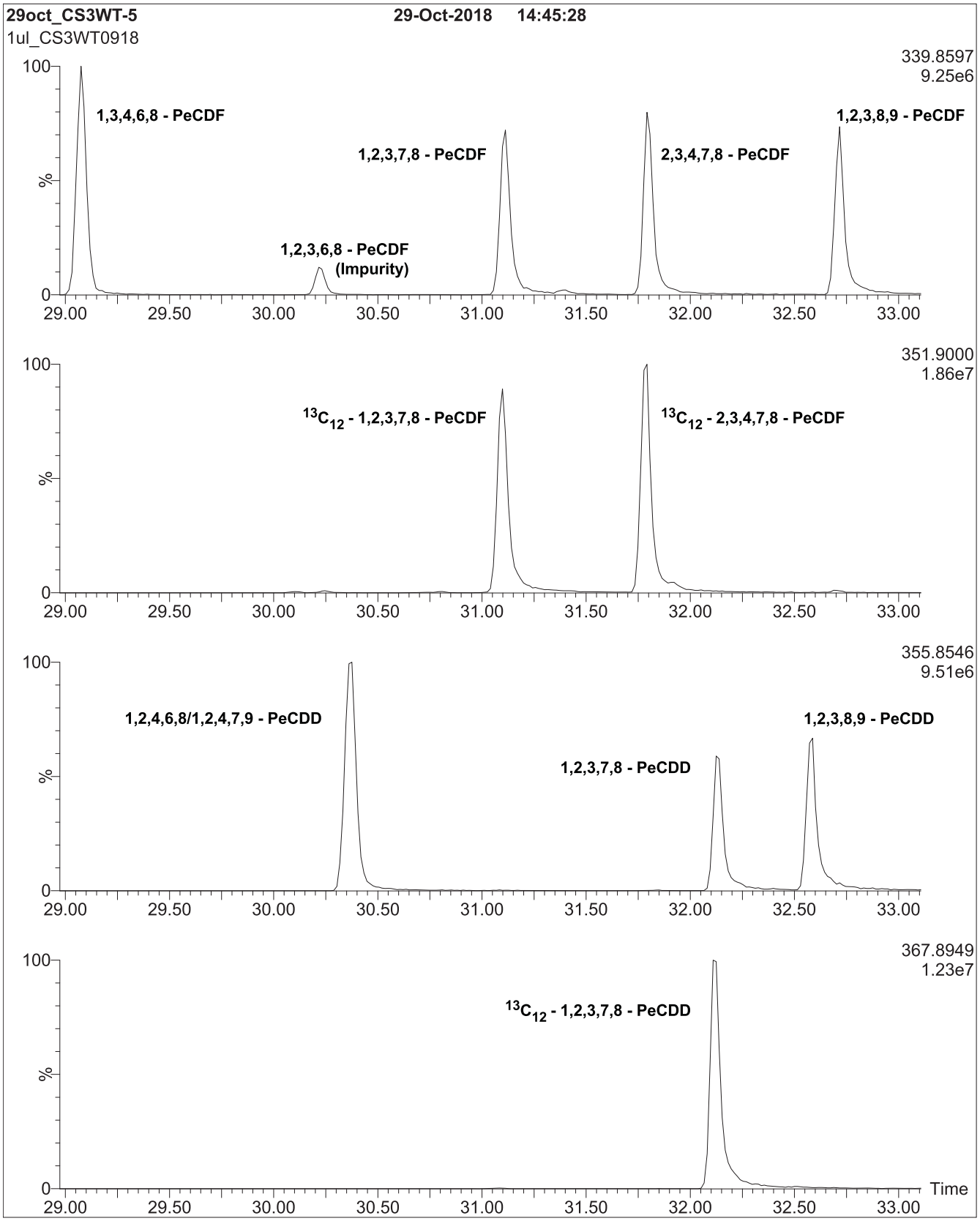


Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**

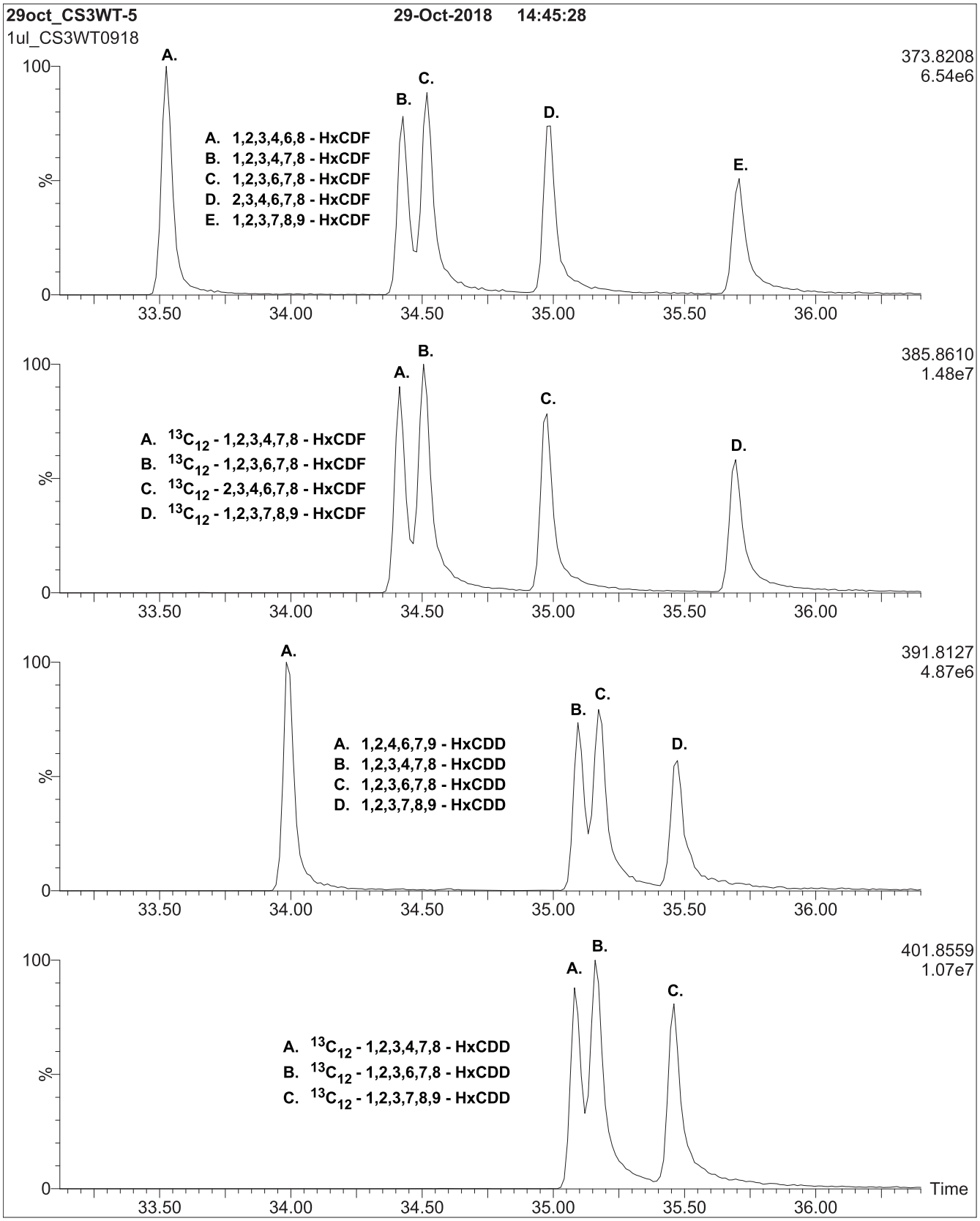


Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**

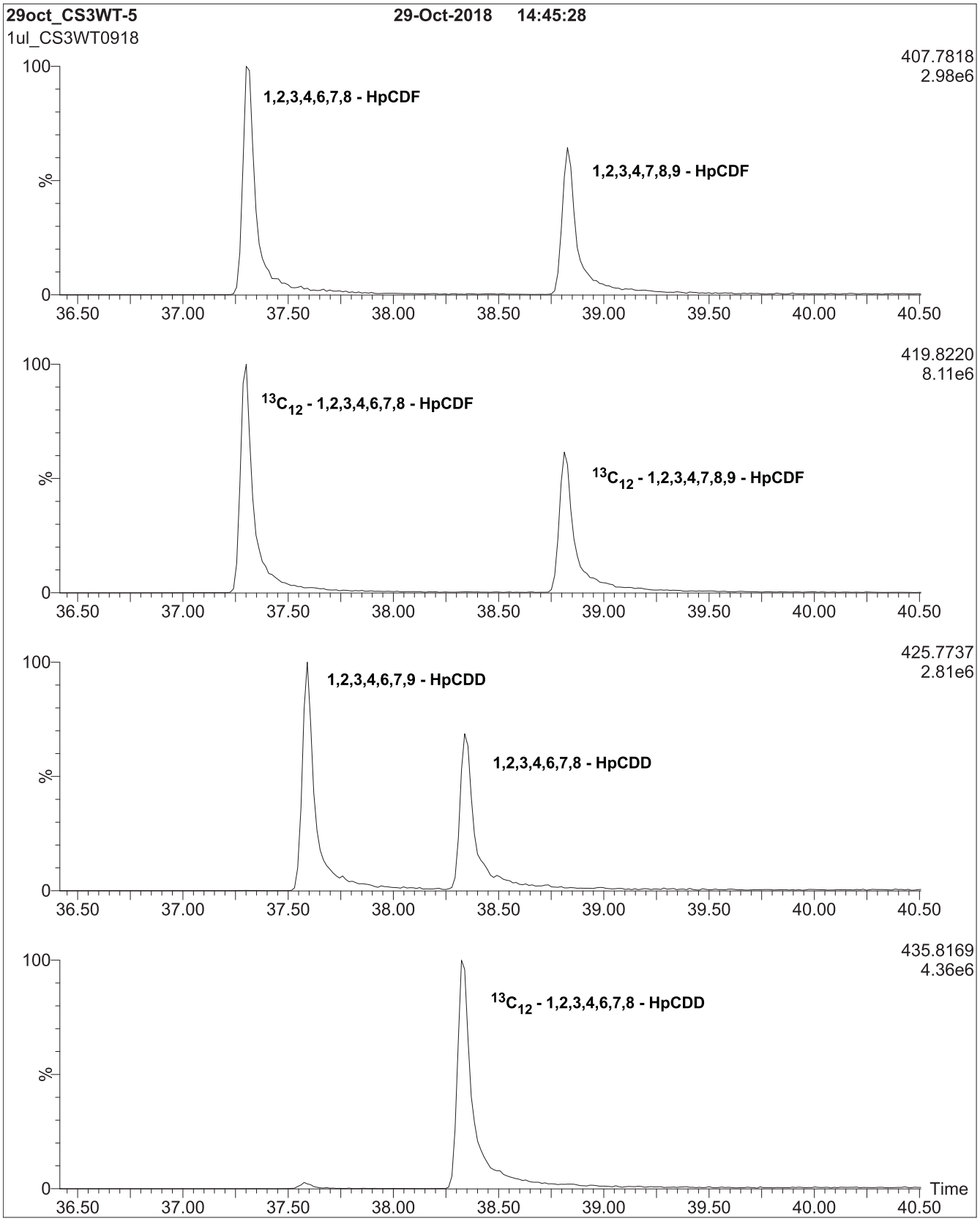
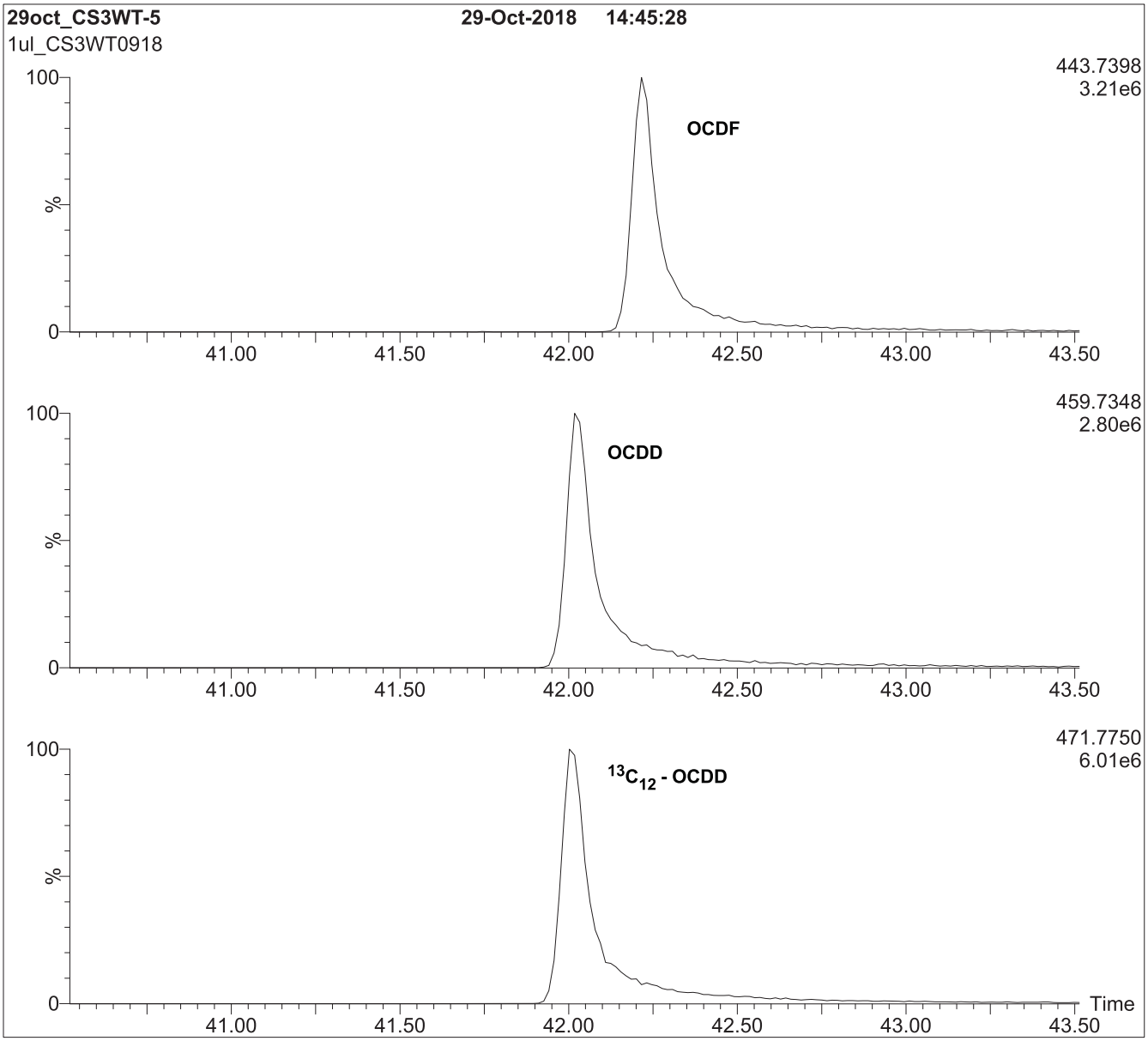


Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**



HRGC/HRMS:

Agilent 6890N (HRGC)
Autospec Ultima (HRMS)

Chromatographic Conditions:

Column: 60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W

Flow:	Constant at 1 ml/min	Oven:	150 °C (1 min)
Injector:	280 °C (Splitless Injection)		12 °C/min to 200 °C
Ionization:	EI+		3 °C/min to 235 °C
Detector:	280 °C		235 °C (8 min)
	SIR at 10,000 mass resolving power		8 °C/min to 310 °C
			310 °C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613CVS

U.S. EPA Method 1613 Calibration and Verification Solutions
plus Supplemental Calibration Solutions EPA-1613CSL & EPA-1613CS0.5

PRODUCT CODES:	EPA-1613CVS	**LOT NUMBERS:**	(see below)
	EPA-1613CS1		13CS11019
	EPA-1613CS2		13CS21019
	EPA-1613CS3		13CS31019
	EPA-1613CS4		13CS41019
	EPA-1613CS5		13CS51019

Note: EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to this calibration set that must be ordered separately.

EPA-1613CS0.5	13CS0.51019
EPA-1613CSL	13CSL1019

SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/22/2019
LAST TESTED: (mm/dd/yyyy)	10/24/2019
EXPIRY DATE: (mm/dd/yyyy)	10/24/2026
RECOMMENDED STORAGE:	Store ampoules in a cool, dark place

I005456
1613 CS1 CAL STD
Expires 10/24/2026
Prepared By Joshua Rains 6/23/2020

DESCRIPTION:

EPA-1613CVS is a series of 5 calibration solutions containing native ($^{12}C_{12}$) and mass-labelled ($^{13}C_{12}$ and $^{37}Cl_4$) chlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs). The components of each solution, and their concentrations, are given in Table A.

They were designed for, and prepared to be used according to, U.S. EPA Method 1613 (Revision B). They are to be used as received.

EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to EPA-1613CVS. Neither is required by the method, but either or both can be used to extend the calibration to lower levels.

The individual native PCDDs and PCDFs all have chemical purities of >98%. The individual ^{13}C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-$^{37}Cl_4$-Tetrachlorodibenzo-p-dioxin has a chemical purity of >98% and an isotopic (^{37}Cl) purity of ≥95%.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations
Table B: 5-point HRGC/HRMS Calibration and RRF Summary
Table C: 7-point HRGC/HRMS Calibration and RRF Summary
Figure 1: HRGC/HRMS Data for EPA-1613CS3 (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 3 for further details.

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a series of standards for the identification and quantification of specific chemical compounds.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned values, and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2,...x_n on which it depends is:

$$u_c(y(x_1, x_2, ...x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analytes is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

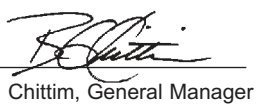
CALA Testing Accreditation No. A 1226

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); Components and Concentrations (ng/ml, ± 5% in nonane/toluene)**

Compound	Concentration (ng/ml)						
Native PCDDs and PCDFs:	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CSL**	**CS0.5**
2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
2,3,7,8-TCDF	0.5	2	10	40	200	0.1	0.25
1,2,3,7,8-PeCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8,9-HpCDF	2.5	10	50	200	1000	0.5	1.25
OCDD	5.0	20	100	400	2000	1.0	2.5
OCDF	5.0	20	100	400	2000	1.0	2.5
Labelled PCDDs and PCDFs:							
$^{13}C_{12}$-2,3,7,8-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,7,8-TCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-OCDD	200	200	200	200	200	200	200
Cleanup Standard:							
$^{37}Cl_4$-2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
Internal Standards:							
$^{13}C_{12}$-1,2,3,4-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	100	100	100	100	100	100	100
Percent toluene (v/v)	3.6%	3.7%	4.2%	6.1%	16.2%	3.6%	3.6%

Certified By:  **Date:** 10/25/2019
(mm/dd/yyyy)

B.G. Chittim, General Manager

Table B: **EPA-1613CVS; 5-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard				
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5
2,3,7,8-TCDF	0.93	0.013	1.4	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.015	1.6	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.04	0.019	1.8	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.035	3.7	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.93	0.013	1.4	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.96	0.022	2.3	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.89	0.021	2.4	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.91	0.011	1.2	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.010	1.1	0.90	0.90	0.92	0.91	0.92
OCDF	1.19	0.056	4.7	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.05	0.023	2.2	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.97	0.018	1.9	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	1.00	0.019	1.9	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.98	0.032	3.2	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.97	0.016	1.6	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.025	2.5	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.013	1.3	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.57	0.047	3.0	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.21	0.078	6.5	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.17	0.081	6.9	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.020	1.5	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.51	0.034	2.2	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.38	0.012	0.9	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.014	1.2	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.033	2.5	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.08	0.046	4.3	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.13	0.036	3.2	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.79	0.047	5.9	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.027	3.1	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.04	0.010	1.0	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.017	2.1	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.74	0.055	7.4	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.026	2.6	0.95	0.94	0.99	0.99	0.99

Table C: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); 7-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard						
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CSL	CS0.5	CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6	RRF#7
2,3,7,8-TCDF	0.92	0.045	4.8	0.96	0.83	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.013	1.4	0.94	0.92	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.02	0.058	5.7	0.90	1.00	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.029	3.0	0.96	0.97	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.92	0.030	3.3	0.90	0.86	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.94	0.047	5.0	0.87	0.89	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.88	0.029	3.3	0.83	0.88	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.90	0.033	3.7	0.83	0.93	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.018	1.9	0.89	0.94	0.90	0.90	0.92	0.91	0.92
OCDF	1.18	0.052	4.4	1.15	1.14	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.03	0.051	5.0	1.03	0.92	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.95	0.042	4.4	0.87	0.98	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	0.97	0.066	6.8	0.83	0.98	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.96	0.044	4.5	0.90	0.92	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.94	0.054	5.7	0.83	0.92	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.033	3.3	0.95	1.03	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.023	2.3	0.95	1.00	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.56	0.042	2.7	1.52	1.54	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.20	0.066	5.5	1.18	1.17	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.16	0.071	6.1	1.12	1.13	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.018	1.4	1.32	1.35	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.53	0.045	3.0	1.60	1.56	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.39	0.019	1.4	1.39	1.42	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.012	1.0	1.19	1.19	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.028	2.2	1.30	1.33	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.07	0.045	4.2	1.02	1.08	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.12	0.033	3.0	1.09	1.11	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.78	0.040	5.1	0.75	0.78	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.025	2.9	0.86	0.90	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.05	0.015	1.5	1.08	1.06	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.016	2.0	0.79	0.81	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.73	0.046	6.3	0.71	0.72	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.053	5.4	0.90	1.07	0.95	0.94	0.99	0.99	0.99

Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

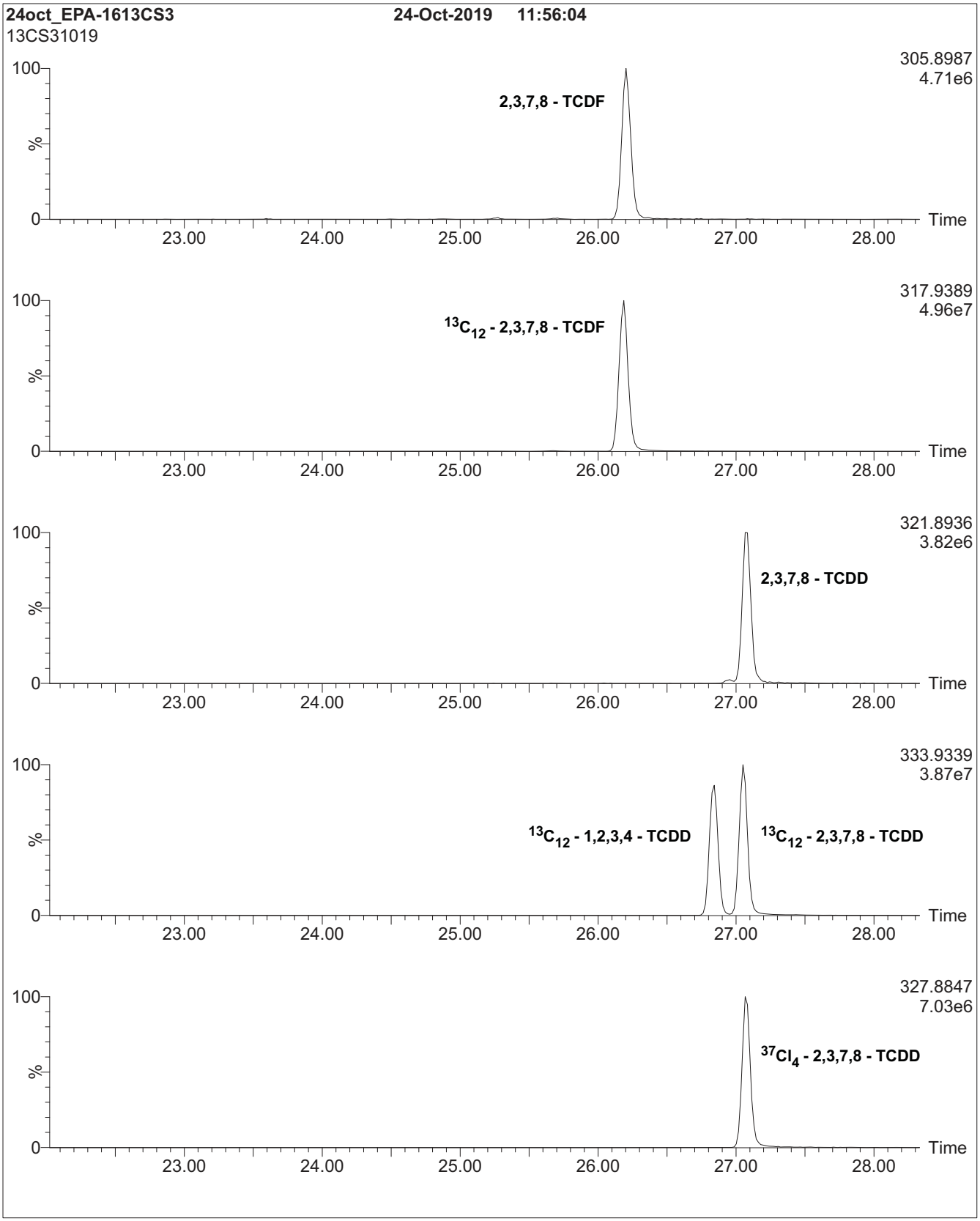


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

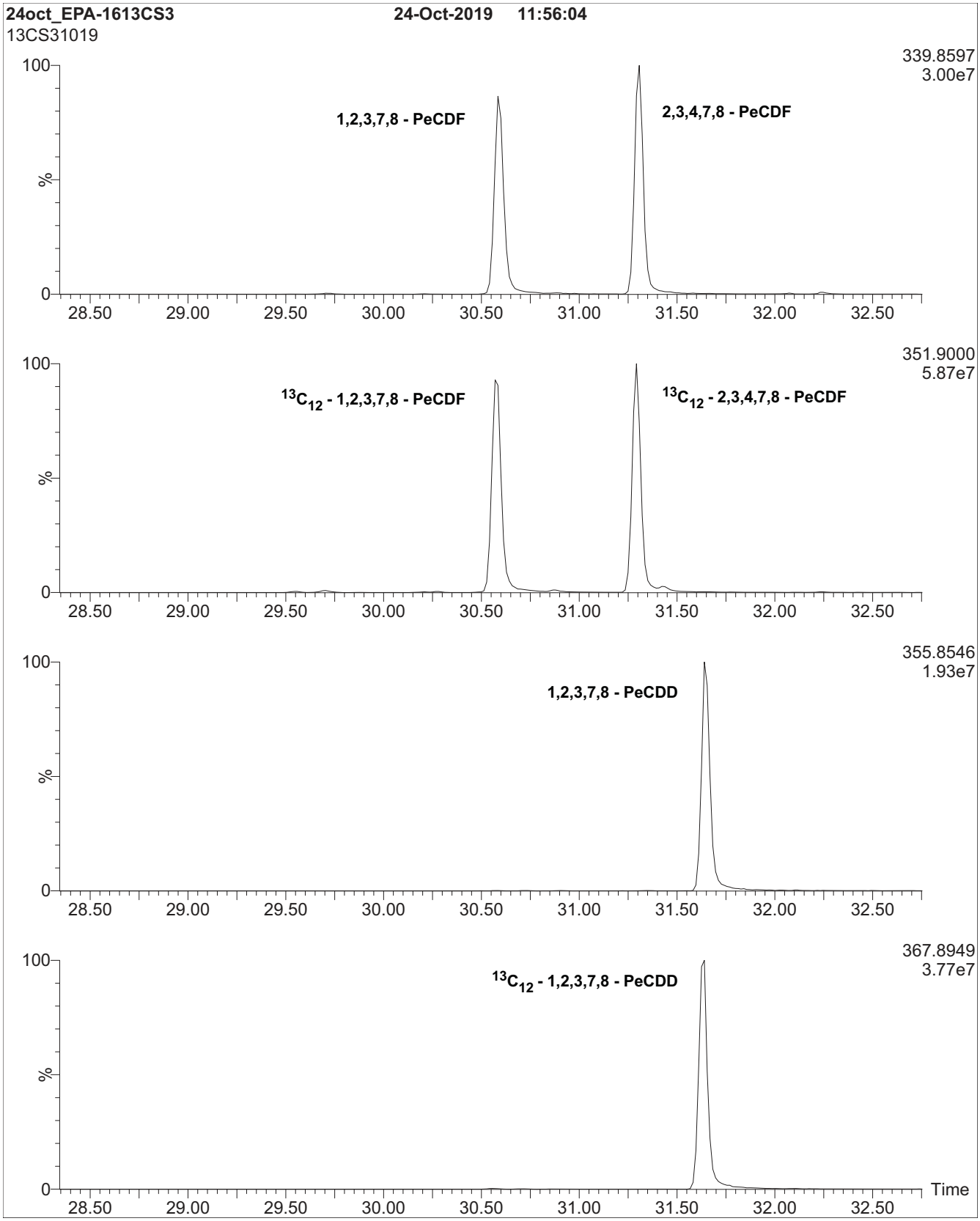


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

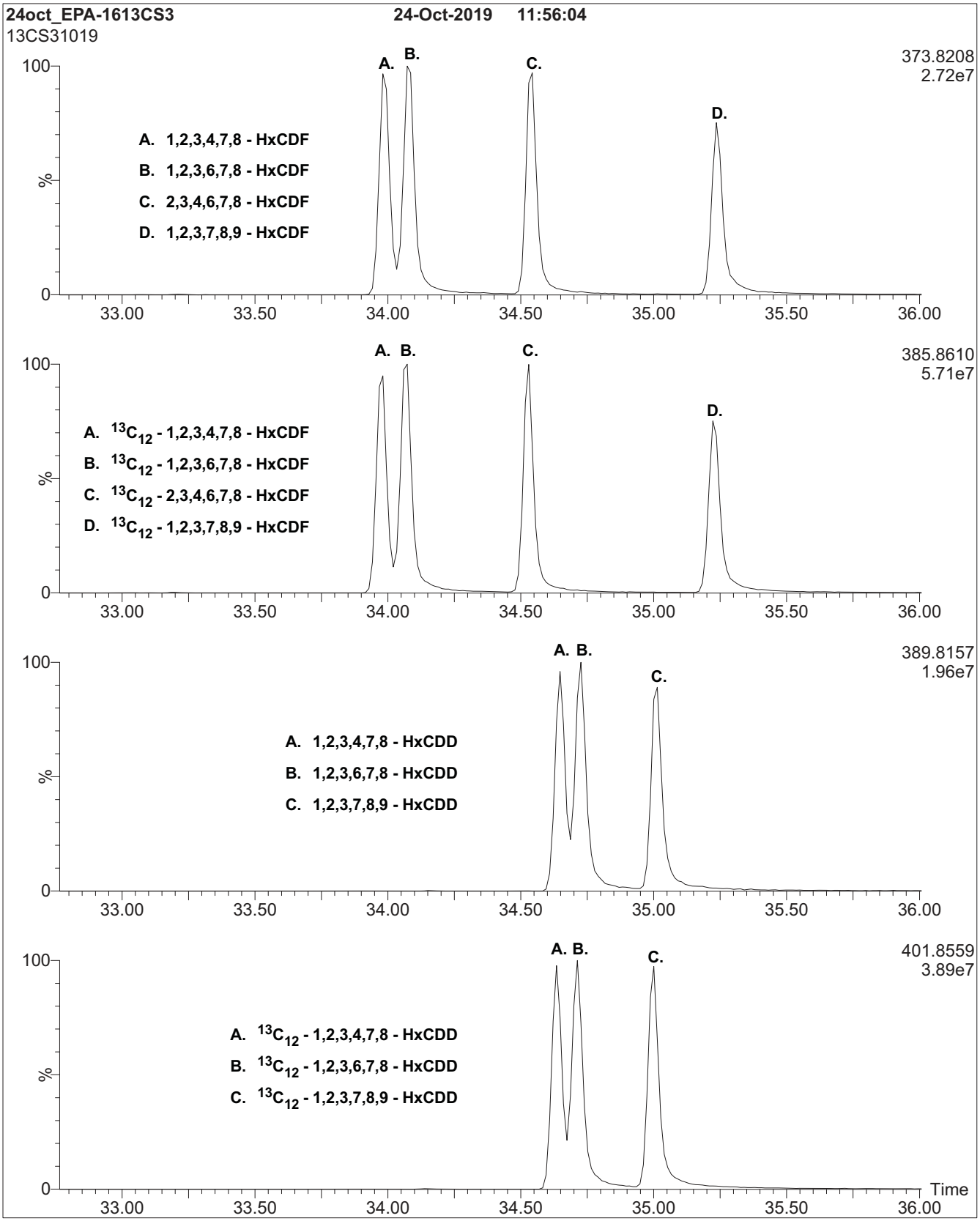


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

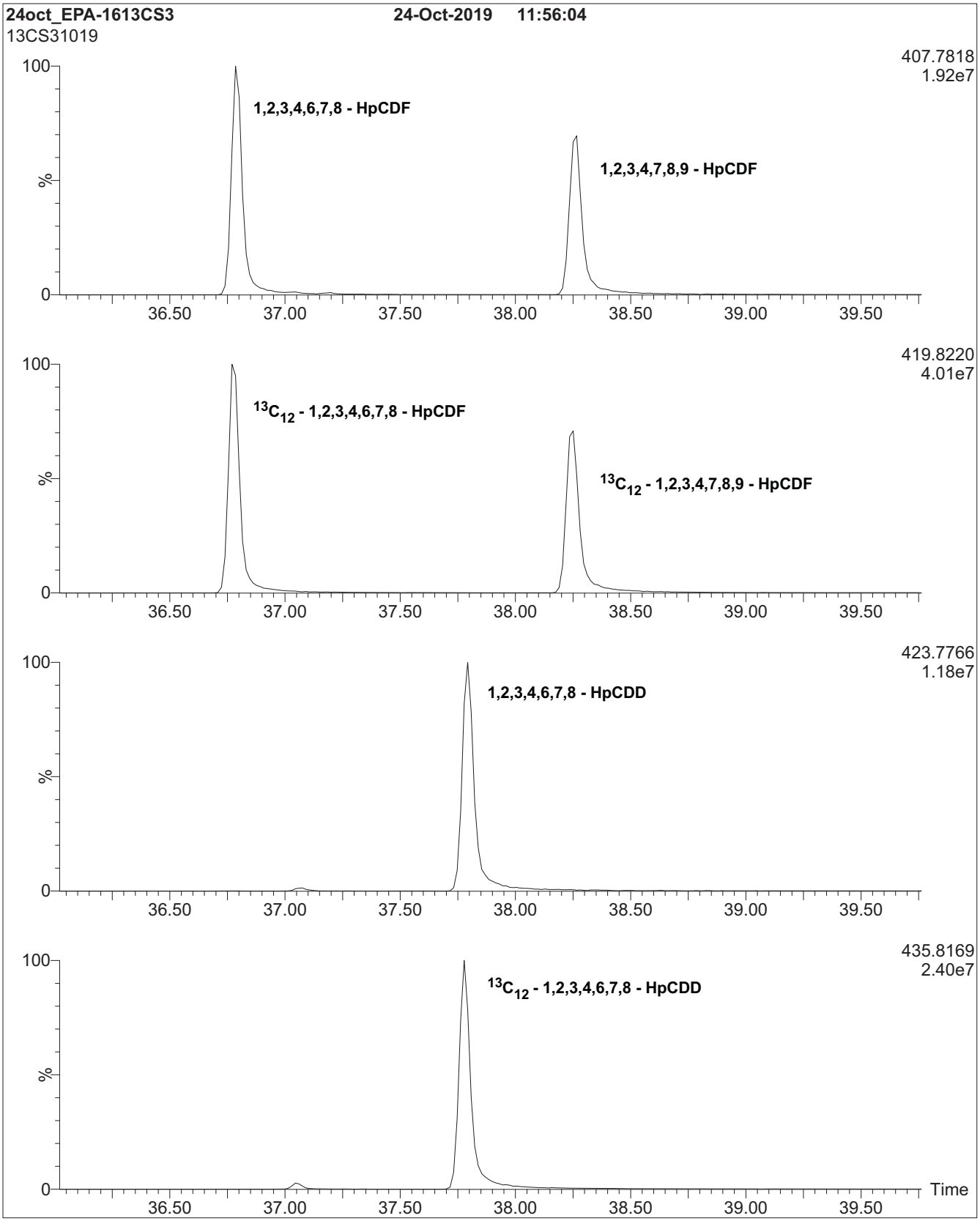
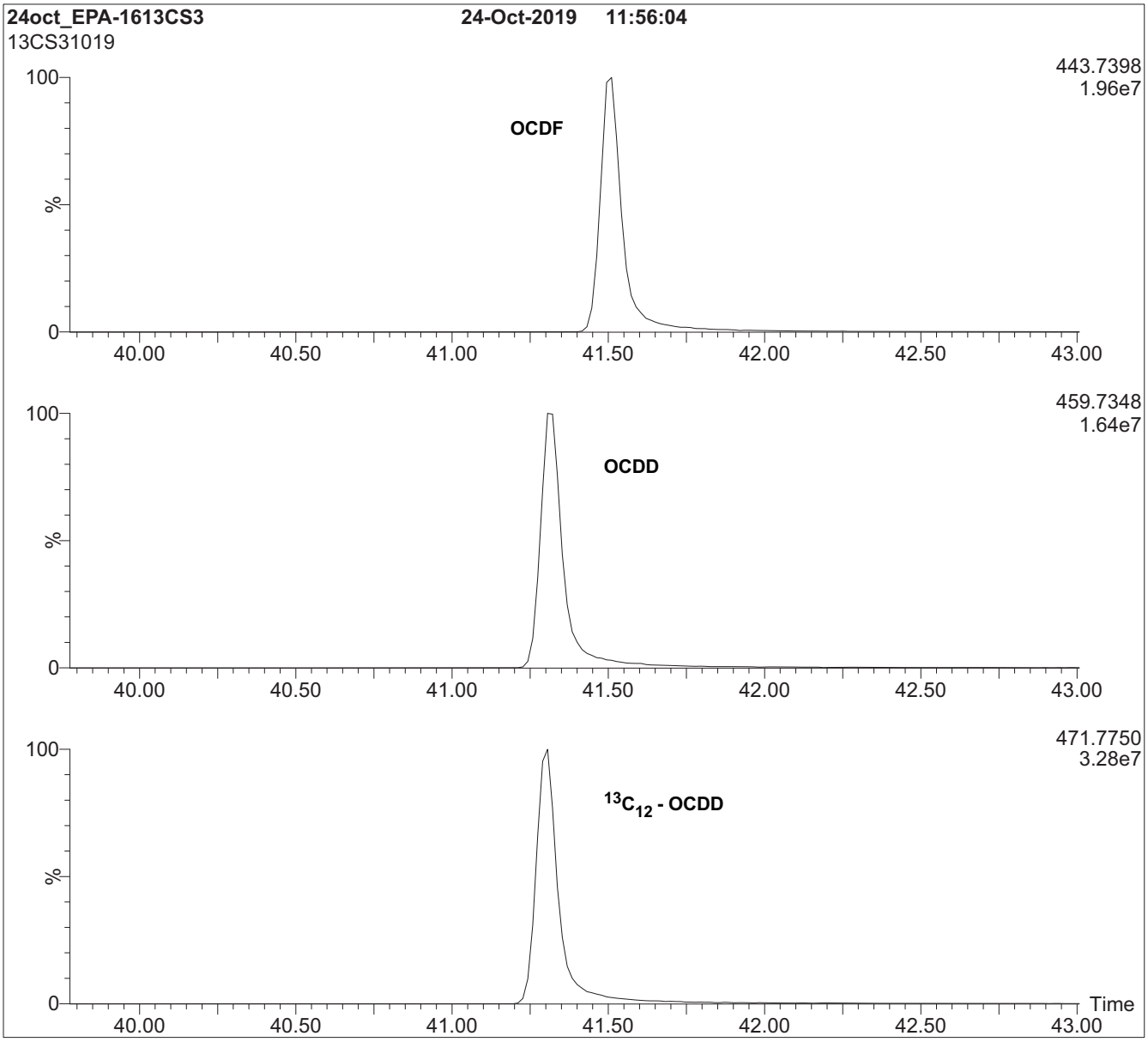


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**



HRGC/HRMS:

Agilent 6890N (HRGC)
Autospec Ultima (HRMS)

Chromatographic Conditions:

Column: 60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W

Flow:	Constant at 1 ml/min	Oven:	150 °C (1 min)
Injector:	280 °C (Splitless Injection)		12 °C/min to 200 °C
Ionization:	EI+		3 °C/min to 235 °C
Detector:	280 °C		235 °C (8 min)
	SIR at 10,000 mass resolving power		8 °C/min to 310 °C
			310 °C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613CVS

U.S. EPA Method 1613 Calibration and Verification Solutions
plus Supplemental Calibration Solutions EPA-1613CSL & EPA-1613CS0.5

PRODUCT CODES:	EPA-1613CVS	**LOT NUMBERS:**	(see below)
	EPA-1613CS1		13CS11019
	EPA-1613CS2		13CS21019
	EPA-1613CS3		13CS31019
	EPA-1613CS4		13CS41019
	EPA-1613CS5		13CS51019

Note: EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to this calibration set that must be ordered separately.

EPA-1613CS0.5	13CS0.51019
EPA-1613CSL	13CSL1019

SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/22/2019
LAST TESTED: (mm/dd/yyyy)	10/24/2019
EXPIRY DATE: (mm/dd/yyyy)	10/24/2026
RECOMMENDED STORAGE:	Store ampoules in a cool, dark place

I005457
1613 CS2 CAL STD
Expires 10/24/2026
Prepared By Joshua Rains 6/23/2020

DESCRIPTION:

EPA-1613CVS is a series of 5 calibration solutions containing native ($^{12}C_{12}$) and mass-labelled ($^{13}C_{12}$ and $^{37}Cl_4$) chlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs). The components of each solution, and their concentrations, are given in Table A.

They were designed for, and prepared to be used according to, U.S. EPA Method 1613 (Revision B). They are to be used as received.

EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to EPA-1613CVS. Neither is required by the method, but either or both can be used to extend the calibration to lower levels.

The individual native PCDDs and PCDFs all have chemical purities of >98%. The individual ^{13}C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-$^{37}Cl_4$-Tetrachlorodibenzo-p-dioxin has a chemical purity of >98% and an isotopic (^{37}Cl) purity of ≥95%.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations
Table B: 5-point HRGC/HRMS Calibration and RRF Summary
Table C: 7-point HRGC/HRMS Calibration and RRF Summary
Figure 1: HRGC/HRMS Data for EPA-1613CS3 (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 3 for further details.

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a series of standards for the identification and quantification of specific chemical compounds.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned values, and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2,...x_n on which it depends is:

$$u_c(y(x_1, x_2, ...x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analytes is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

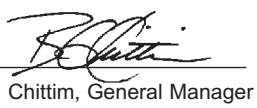
CALA Testing Accreditation No. A 1226

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); Components and Concentrations (ng/ml, ± 5% in nonane/toluene)**

Compound	Concentration (ng/ml)						
Native PCDDs and PCDFs:	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CSL**	**CS0.5**
2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
2,3,7,8-TCDF	0.5	2	10	40	200	0.1	0.25
1,2,3,7,8-PeCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8,9-HpCDF	2.5	10	50	200	1000	0.5	1.25
OCDD	5.0	20	100	400	2000	1.0	2.5
OCDF	5.0	20	100	400	2000	1.0	2.5
Labelled PCDDs and PCDFs:							
$^{13}C_{12}$-2,3,7,8-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,7,8-TCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-OCDD	200	200	200	200	200	200	200
Cleanup Standard:							
$^{37}Cl_4$-2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
Internal Standards:							
$^{13}C_{12}$-1,2,3,4-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	100	100	100	100	100	100	100
Percent toluene (v/v)	3.6%	3.7%	4.2%	6.1%	16.2%	3.6%	3.6%

Certified By:  **Date:** 10/25/2019
(mm/dd/yyyy)

B.G. Chittim, General Manager

Table B: **EPA-1613CVS; 5-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard				
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5
2,3,7,8-TCDF	0.93	0.013	1.4	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.015	1.6	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.04	0.019	1.8	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.035	3.7	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.93	0.013	1.4	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.96	0.022	2.3	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.89	0.021	2.4	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.91	0.011	1.2	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.010	1.1	0.90	0.90	0.92	0.91	0.92
OCDF	1.19	0.056	4.7	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.05	0.023	2.2	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.97	0.018	1.9	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	1.00	0.019	1.9	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.98	0.032	3.2	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.97	0.016	1.6	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.025	2.5	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.013	1.3	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.57	0.047	3.0	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.21	0.078	6.5	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.17	0.081	6.9	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.020	1.5	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.51	0.034	2.2	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.38	0.012	0.9	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.014	1.2	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.033	2.5	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.08	0.046	4.3	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.13	0.036	3.2	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.79	0.047	5.9	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.027	3.1	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.04	0.010	1.0	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.017	2.1	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.74	0.055	7.4	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.026	2.6	0.95	0.94	0.99	0.99	0.99

Table C: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); 7-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard						
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CSL	CS0.5	CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6	RRF#7
2,3,7,8-TCDF	0.92	0.045	4.8	0.96	0.83	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.013	1.4	0.94	0.92	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.02	0.058	5.7	0.90	1.00	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.029	3.0	0.96	0.97	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.92	0.030	3.3	0.90	0.86	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.94	0.047	5.0	0.87	0.89	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.88	0.029	3.3	0.83	0.88	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.90	0.033	3.7	0.83	0.93	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.018	1.9	0.89	0.94	0.90	0.90	0.92	0.91	0.92
OCDF	1.18	0.052	4.4	1.15	1.14	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.03	0.051	5.0	1.03	0.92	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.95	0.042	4.4	0.87	0.98	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	0.97	0.066	6.8	0.83	0.98	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.96	0.044	4.5	0.90	0.92	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.94	0.054	5.7	0.83	0.92	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.033	3.3	0.95	1.03	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.023	2.3	0.95	1.00	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.56	0.042	2.7	1.52	1.54	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.20	0.066	5.5	1.18	1.17	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.16	0.071	6.1	1.12	1.13	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.018	1.4	1.32	1.35	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.53	0.045	3.0	1.60	1.56	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.39	0.019	1.4	1.39	1.42	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.012	1.0	1.19	1.19	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.028	2.2	1.30	1.33	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.07	0.045	4.2	1.02	1.08	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.12	0.033	3.0	1.09	1.11	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.78	0.040	5.1	0.75	0.78	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.025	2.9	0.86	0.90	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.05	0.015	1.5	1.08	1.06	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.016	2.0	0.79	0.81	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.73	0.046	6.3	0.71	0.72	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.053	5.4	0.90	1.07	0.95	0.94	0.99	0.99	0.99

Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

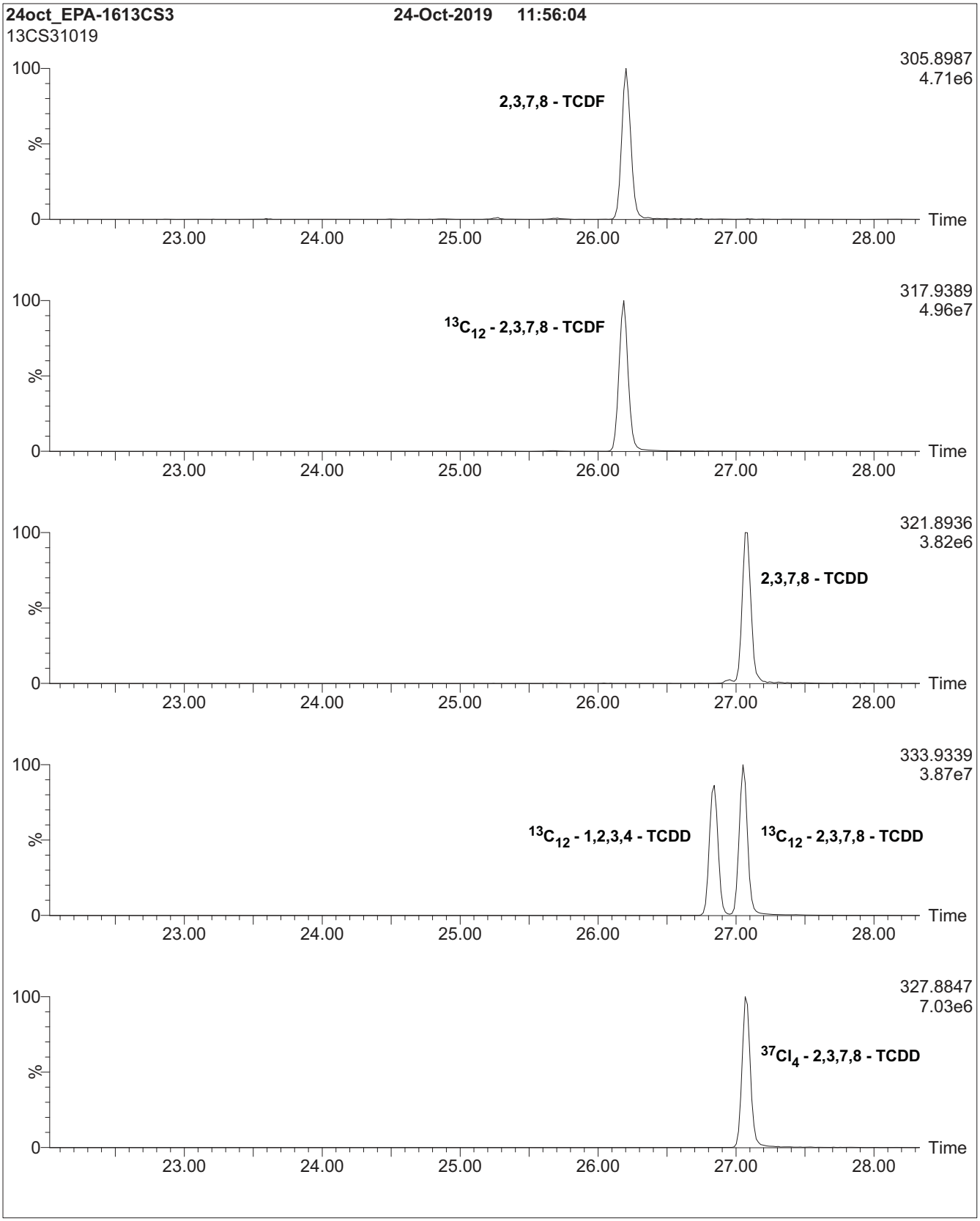


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

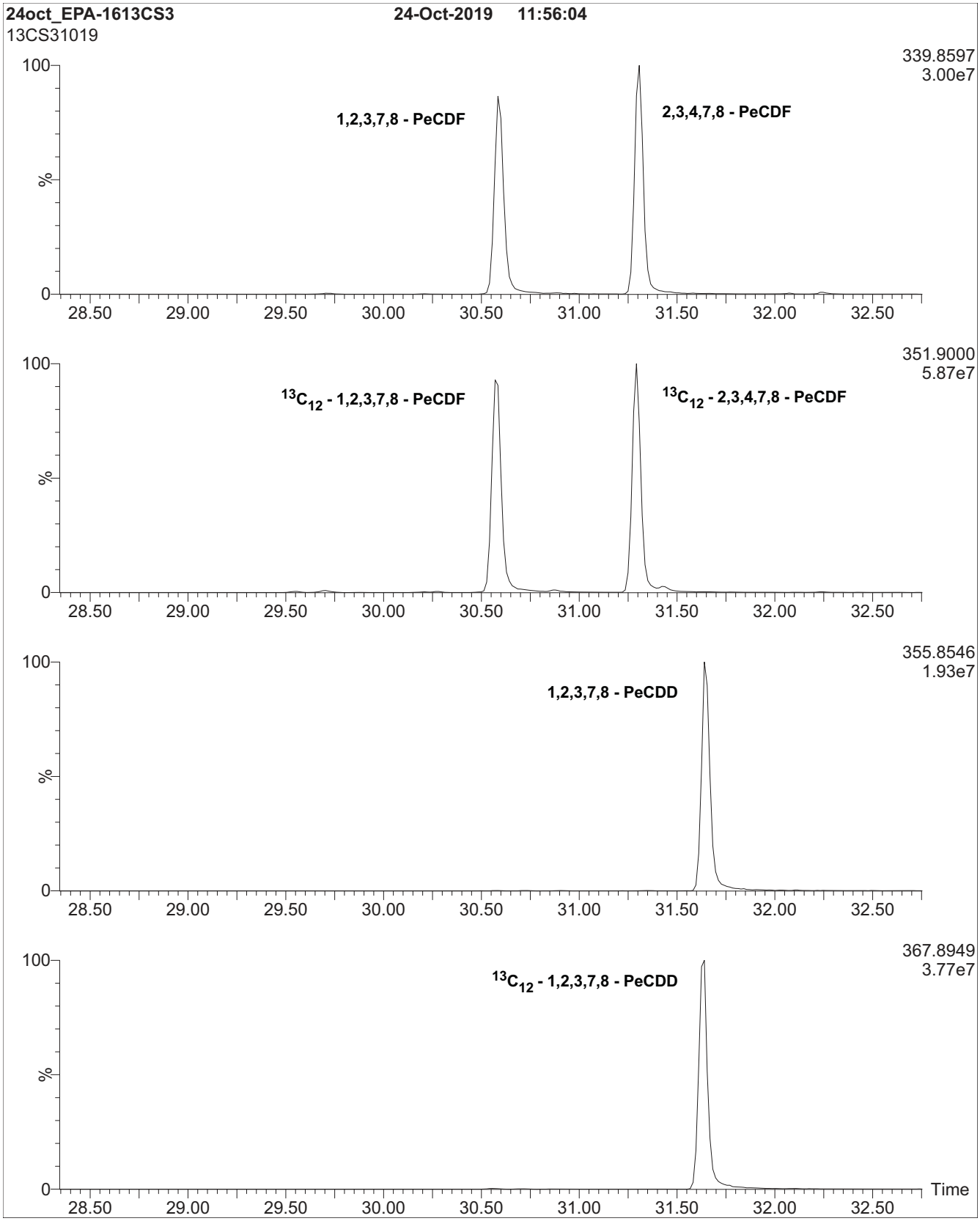


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

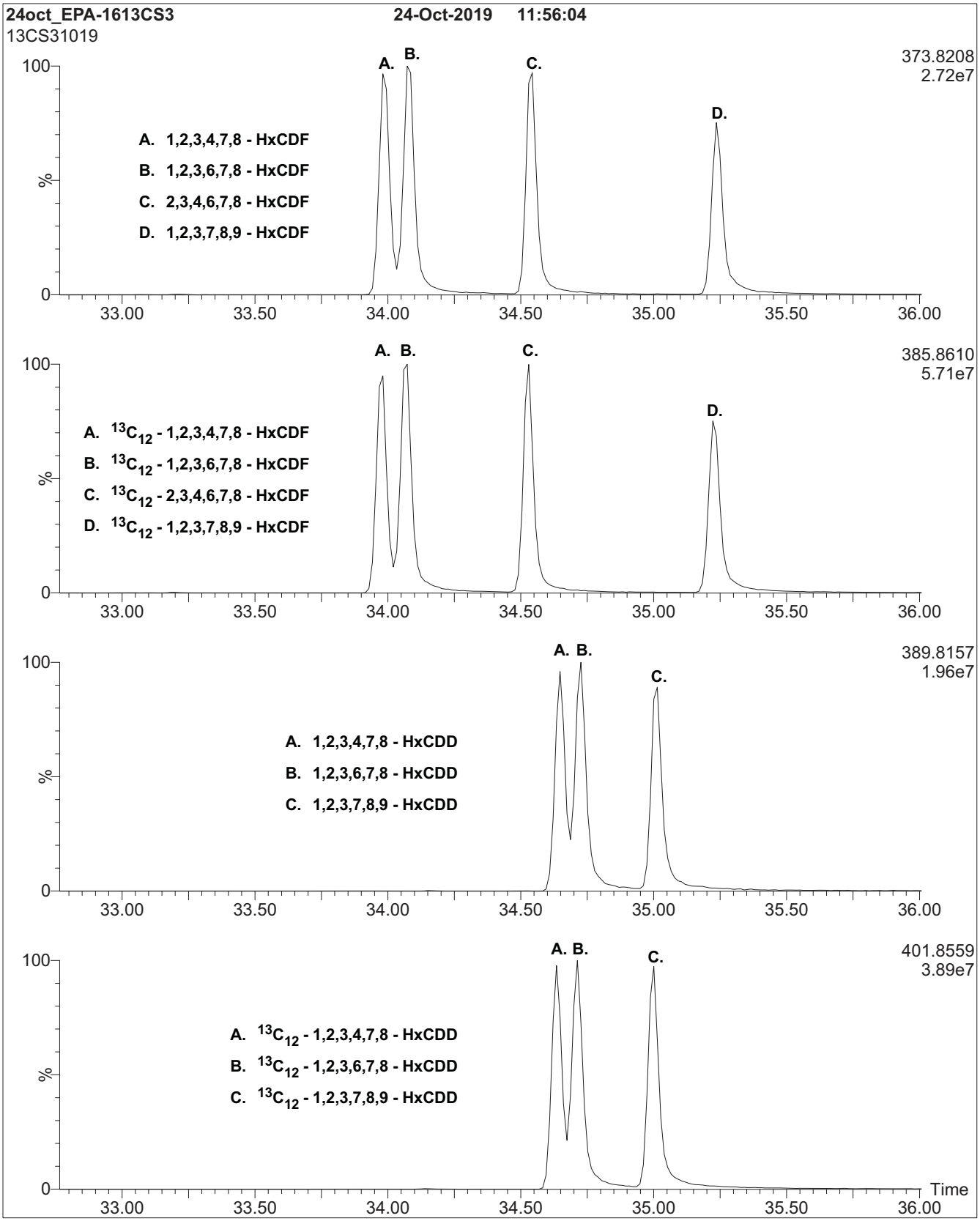


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

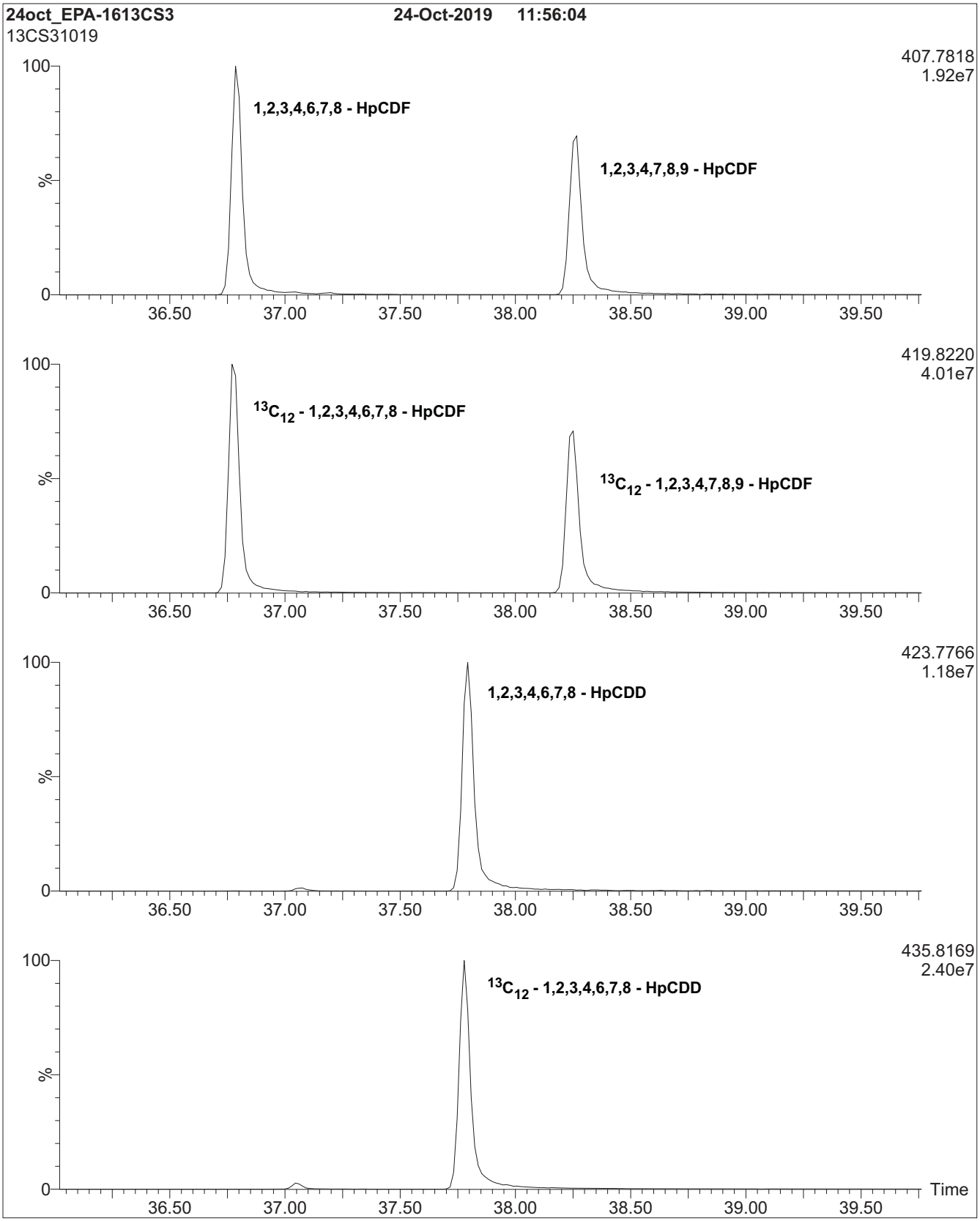
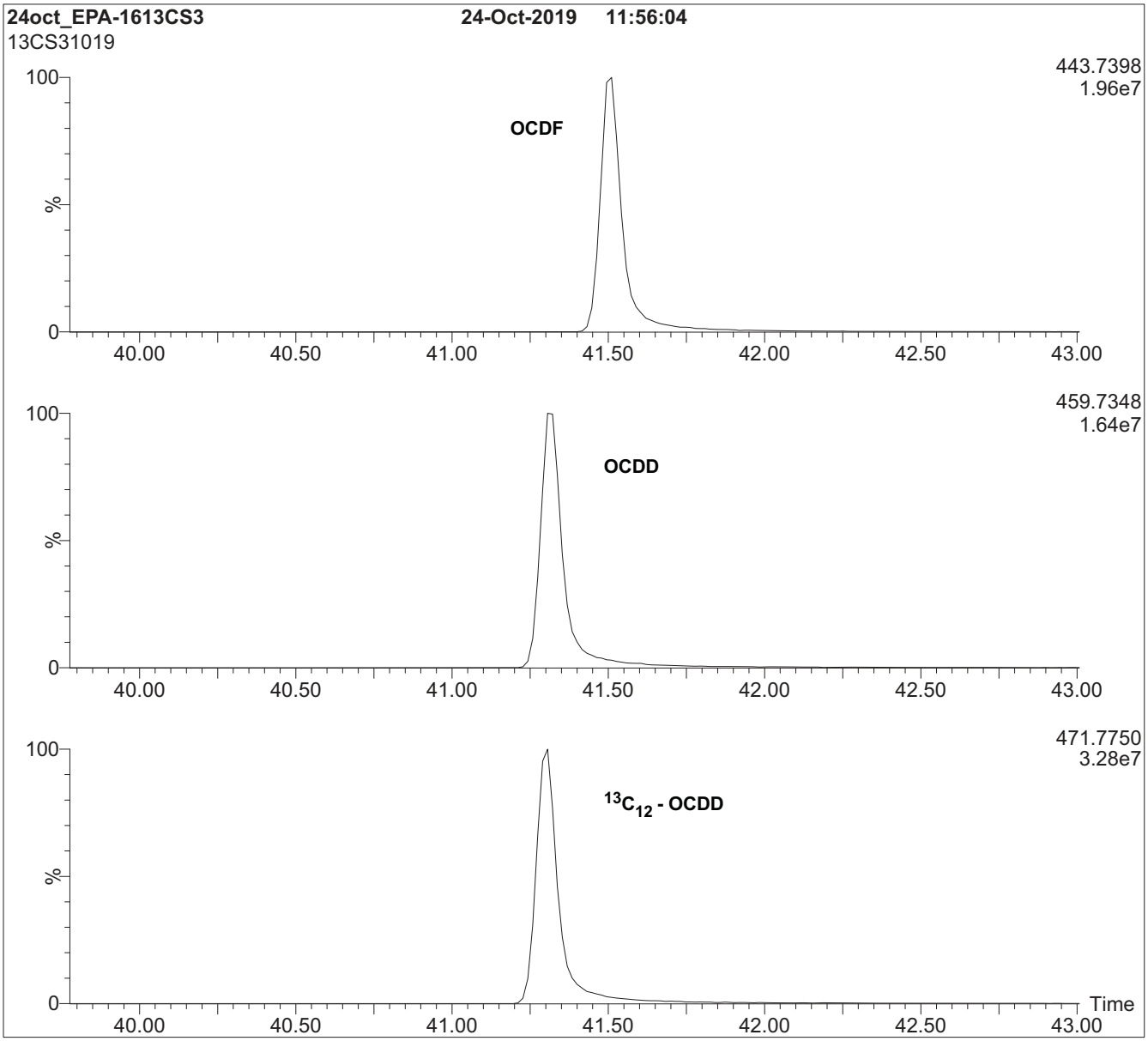


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**



HRGC/HRMS:

Agilent 6890N (HRGC)
Autospec Ultima (HRMS)

Chromatographic Conditions:

Column: 60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W

Flow:	Constant at 1 ml/min	Oven:	150 °C (1 min)
Injector:	280 °C (Splitless Injection)		12 °C/min to 200 °C
Ionization:	EI+		3 °C/min to 235 °C
Detector:	280 °C		235 °C (8 min)
	SIR at 10,000 mass resolving power		8 °C/min to 310 °C
			310 °C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613CVS

U.S. EPA Method 1613 Calibration and Verification Solutions
plus Supplemental Calibration Solutions EPA-1613CSL & EPA-1613CS0.5

PRODUCT CODES:	EPA-1613CVS	**LOT NUMBERS:**	(see below)
	EPA-1613CS1		13CS11019
	EPA-1613CS2		13CS21019
	EPA-1613CS3		13CS31019
	EPA-1613CS4		13CS41019
	EPA-1613CS5		13CS51019

Note: EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to this calibration set that must be ordered separately.

EPA-1613CS0.5	13CS0.51019
EPA-1613CSL	13CSL1019

SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/22/2019
LAST TESTED: (mm/dd/yyyy)	10/24/2019
EXPIRY DATE: (mm/dd/yyyy)	10/24/2026
RECOMMENDED STORAGE:	Store ampoules in a cool, dark place

I005458
1613 CS4 CAL STD
Expires 10/24/2026
Prepared By Joshua Rains 6/23/2020

DESCRIPTION:

EPA-1613CVS is a series of 5 calibration solutions containing native ($^{12}C_{12}$) and mass-labelled ($^{13}C_{12}$ and $^{37}Cl_4$) chlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs). The components of each solution, and their concentrations, are given in Table A.

They were designed for, and prepared to be used according to, U.S. EPA Method 1613 (Revision B). They are to be used as received.

EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to EPA-1613CVS. Neither is required by the method, but either or both can be used to extend the calibration to lower levels.

The individual native PCDDs and PCDFs all have chemical purities of >98%. The individual ^{13}C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-$^{37}Cl_4$-Tetrachlorodibenzo-p-dioxin has a chemical purity of >98% and an isotopic (^{37}Cl) purity of ≥95%.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations
Table B: 5-point HRGC/HRMS Calibration and RRF Summary
Table C: 7-point HRGC/HRMS Calibration and RRF Summary
Figure 1: HRGC/HRMS Data for EPA-1613CS3 (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 3 for further details.

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a series of standards for the identification and quantification of specific chemical compounds.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned values, and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2,...x_n on which it depends is:

$$u_c(y(x_1, x_2, ...x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analytes is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A 1226

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); Components and Concentrations (ng/ml, ± 5% in nonane/toluene)**

Compound	Concentration (ng/ml)						
Native PCDDs and PCDFs:	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CSL**	**CS0.5**
2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
2,3,7,8-TCDF	0.5	2	10	40	200	0.1	0.25
1,2,3,7,8-PeCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8,9-HpCDF	2.5	10	50	200	1000	0.5	1.25
OCDD	5.0	20	100	400	2000	1.0	2.5
OCDF	5.0	20	100	400	2000	1.0	2.5
Labelled PCDDs and PCDFs:							
$^{13}C_{12}$-2,3,7,8-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,7,8-TCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-OCDD	200	200	200	200	200	200	200
Cleanup Standard:							
$^{37}Cl_4$-2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
Internal Standards:							
$^{13}C_{12}$-1,2,3,4-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	100	100	100	100	100	100	100
Percent toluene (v/v)	3.6%	3.7%	4.2%	6.1%	16.2%	3.6%	3.6%

Certified By: _____ **Date:** 10/25/2019
(mm/dd/yyyy)
B.G. Chittim, General Manager

Table B: **EPA-1613CVS; 5-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard				
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5
2,3,7,8-TCDF	0.93	0.013	1.4	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.015	1.6	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.04	0.019	1.8	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.035	3.7	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.93	0.013	1.4	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.96	0.022	2.3	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.89	0.021	2.4	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.91	0.011	1.2	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.010	1.1	0.90	0.90	0.92	0.91	0.92
OCDF	1.19	0.056	4.7	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.05	0.023	2.2	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.97	0.018	1.9	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	1.00	0.019	1.9	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.98	0.032	3.2	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.97	0.016	1.6	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.025	2.5	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.013	1.3	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.57	0.047	3.0	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.21	0.078	6.5	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.17	0.081	6.9	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.020	1.5	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.51	0.034	2.2	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.38	0.012	0.9	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.014	1.2	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.033	2.5	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.08	0.046	4.3	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.13	0.036	3.2	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.79	0.047	5.9	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.027	3.1	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.04	0.010	1.0	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.017	2.1	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.74	0.055	7.4	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.026	2.6	0.95	0.94	0.99	0.99	0.99

Table C: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); 7-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard						
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CSL	CS0.5	CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6	RRF#7
2,3,7,8-TCDF	0.92	0.045	4.8	0.96	0.83	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.013	1.4	0.94	0.92	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.02	0.058	5.7	0.90	1.00	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.029	3.0	0.96	0.97	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.92	0.030	3.3	0.90	0.86	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.94	0.047	5.0	0.87	0.89	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.88	0.029	3.3	0.83	0.88	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.90	0.033	3.7	0.83	0.93	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.018	1.9	0.89	0.94	0.90	0.90	0.92	0.91	0.92
OCDF	1.18	0.052	4.4	1.15	1.14	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.03	0.051	5.0	1.03	0.92	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.95	0.042	4.4	0.87	0.98	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	0.97	0.066	6.8	0.83	0.98	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.96	0.044	4.5	0.90	0.92	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.94	0.054	5.7	0.83	0.92	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.033	3.3	0.95	1.03	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.023	2.3	0.95	1.00	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.56	0.042	2.7	1.52	1.54	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.20	0.066	5.5	1.18	1.17	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.16	0.071	6.1	1.12	1.13	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.018	1.4	1.32	1.35	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.53	0.045	3.0	1.60	1.56	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.39	0.019	1.4	1.39	1.42	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.012	1.0	1.19	1.19	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.028	2.2	1.30	1.33	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.07	0.045	4.2	1.02	1.08	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.12	0.033	3.0	1.09	1.11	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.78	0.040	5.1	0.75	0.78	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.025	2.9	0.86	0.90	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.05	0.015	1.5	1.08	1.06	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.016	2.0	0.79	0.81	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.73	0.046	6.3	0.71	0.72	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.053	5.4	0.90	1.07	0.95	0.94	0.99	0.99	0.99

Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

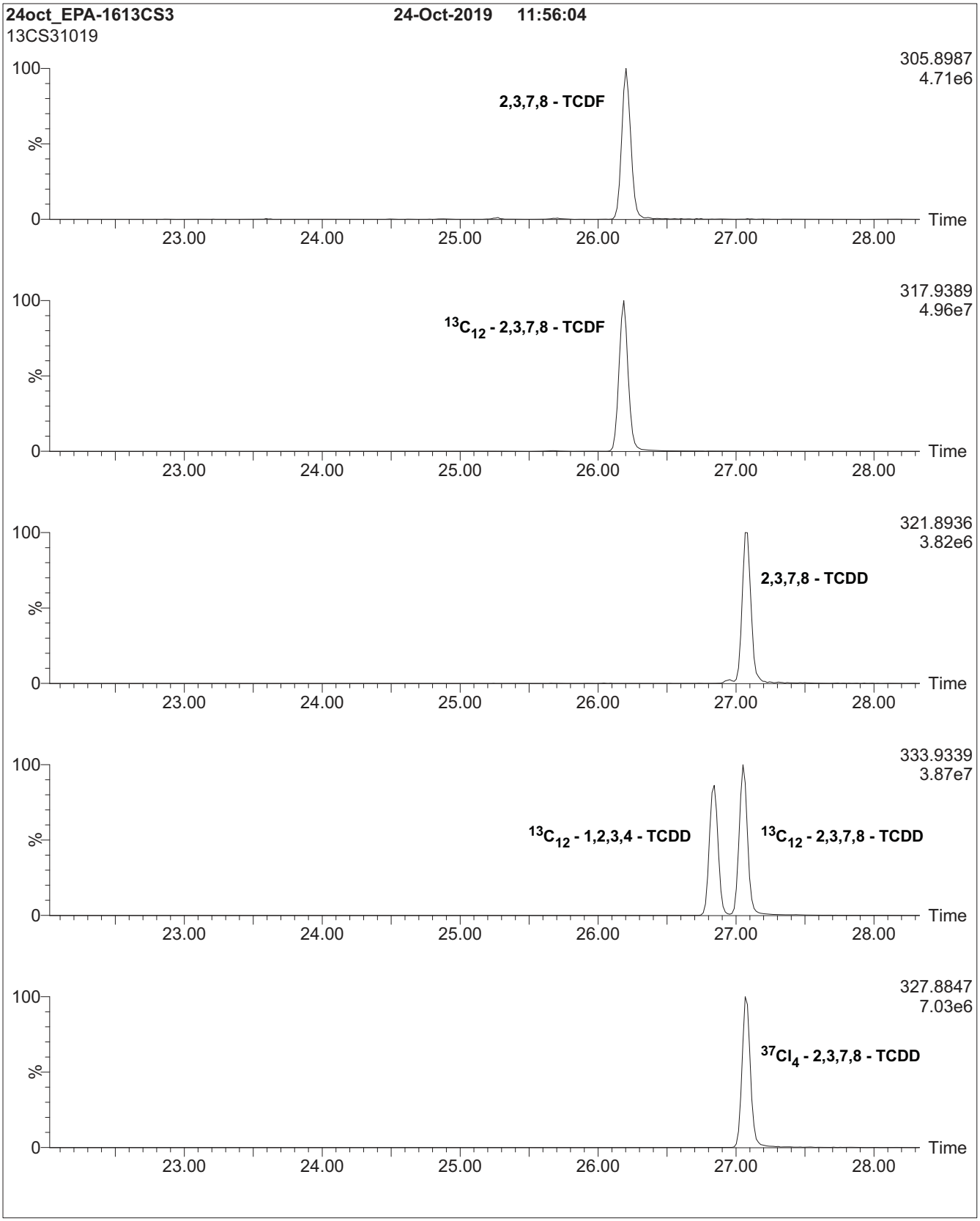


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

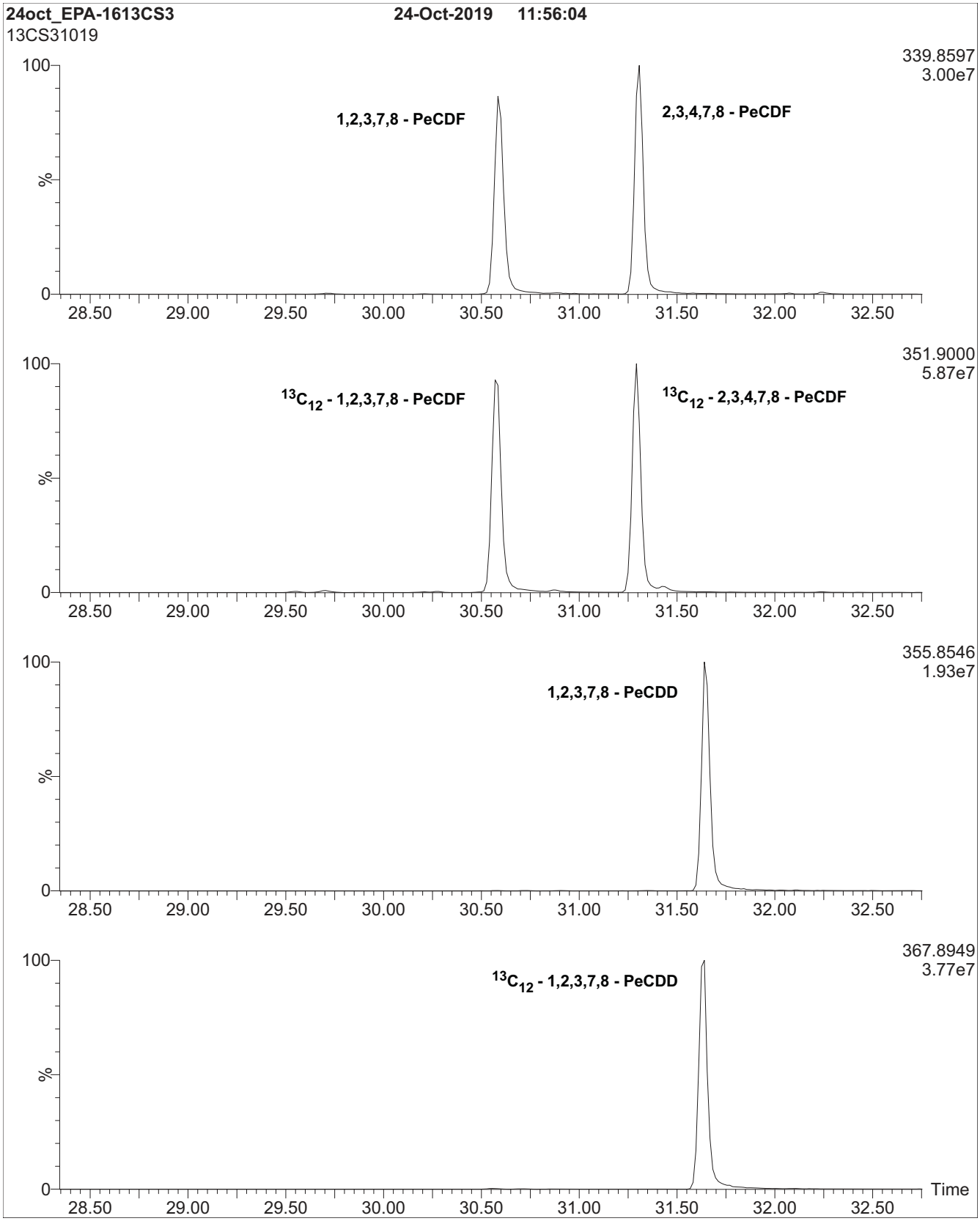


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

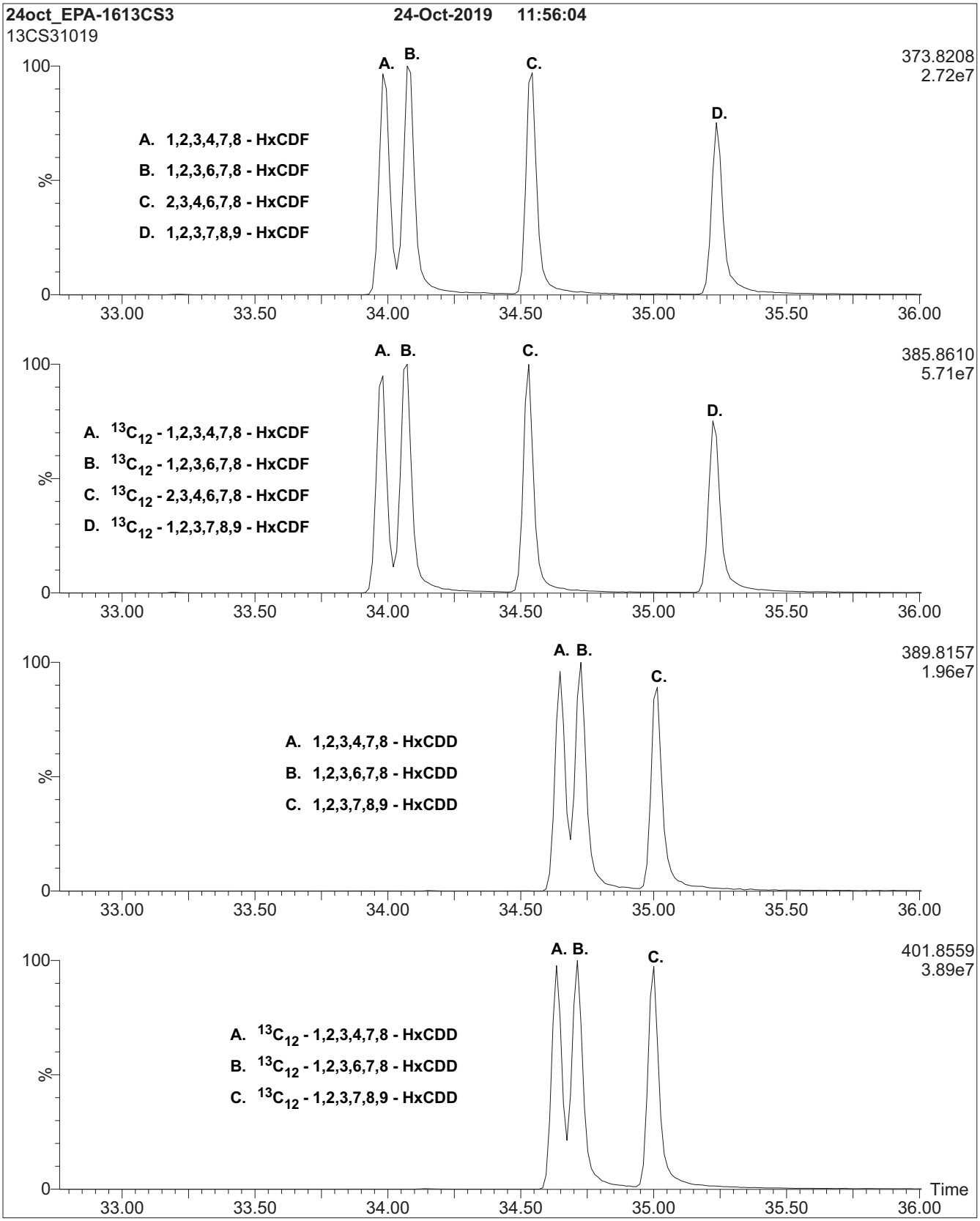


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

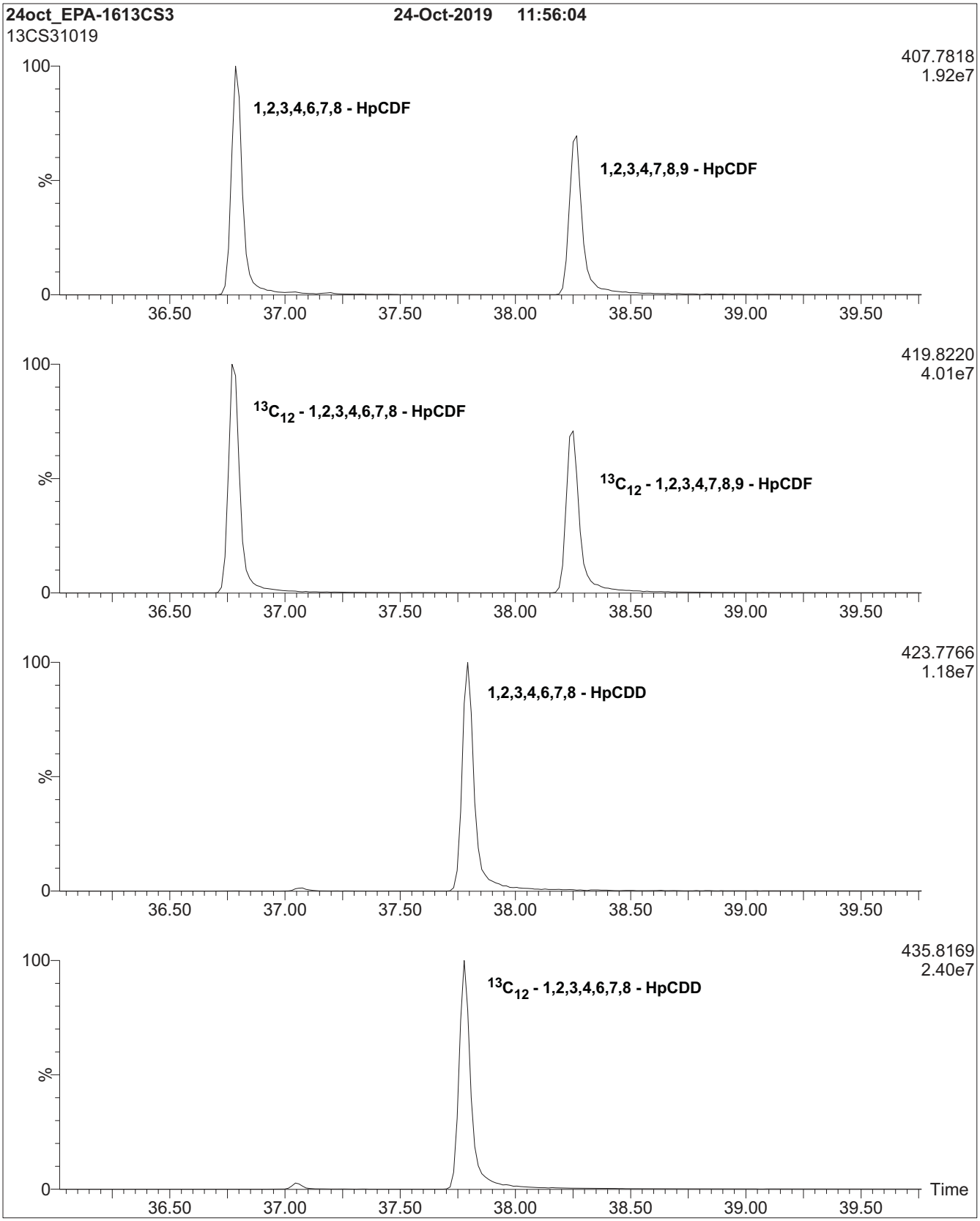
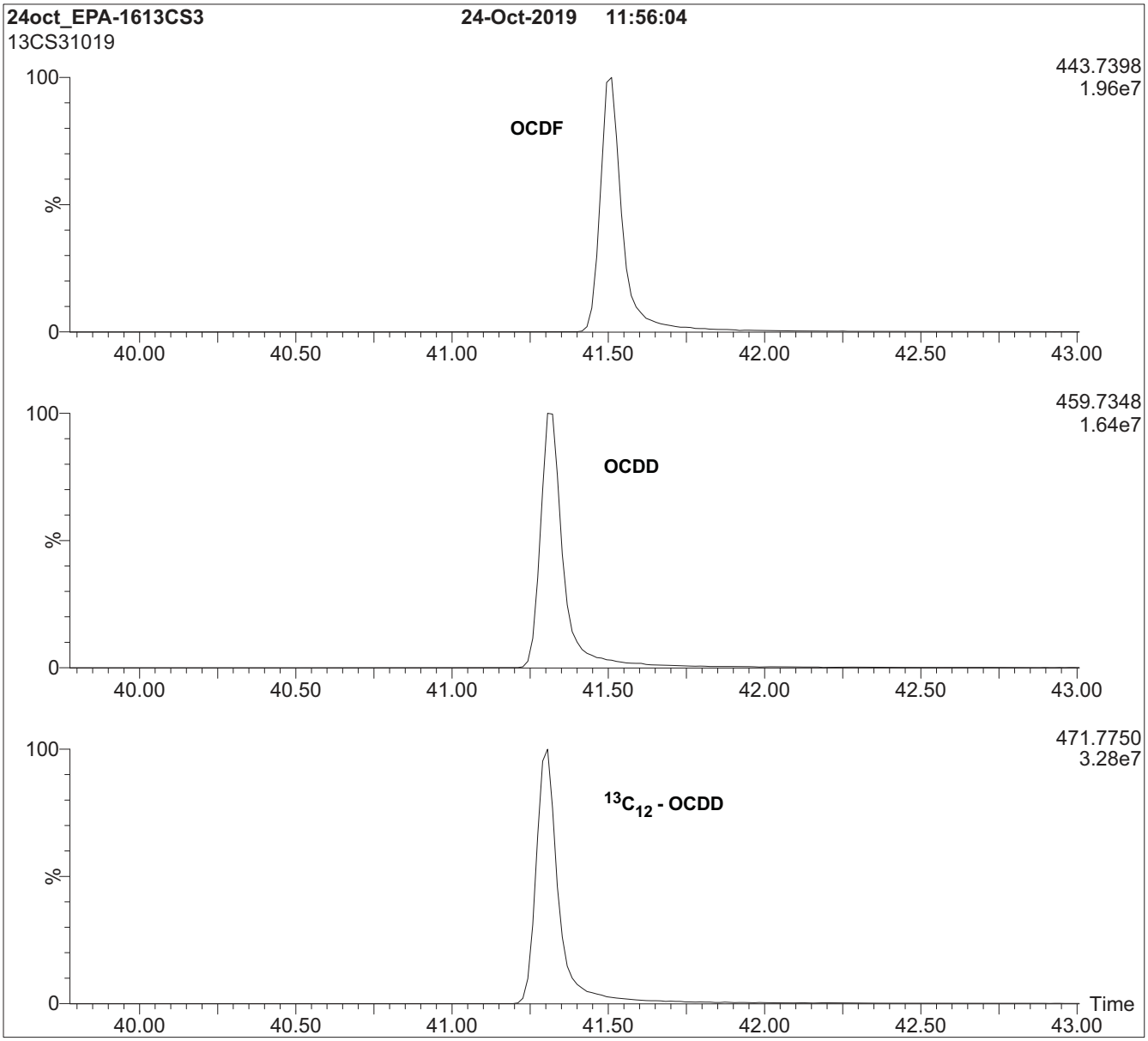


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**



HRGC/HRMS:

Agilent 6890N (HRGC)
Autospec Ultima (HRMS)

Chromatographic Conditions:

Column: 60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W

Flow:	Constant at 1 ml/min	Oven:	150 °C (1 min)
Injector:	280 °C (Splitless Injection)		12 °C/min to 200 °C
Ionization:	EI+		3 °C/min to 235 °C
Detector:	280 °C		235 °C (8 min)
	SIR at 10,000 mass resolving power		8 °C/min to 310 °C
			310 °C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613CVS

U.S. EPA Method 1613 Calibration and Verification Solutions
plus Supplemental Calibration Solutions EPA-1613CSL & EPA-1613CS0.5

PRODUCT CODES:	EPA-1613CVS	**LOT NUMBERS:**	(see below)
	EPA-1613CS1		13CS11019
	EPA-1613CS2		13CS21019
	EPA-1613CS3		13CS31019
	EPA-1613CS4		13CS41019
	EPA-1613CS5		13CS51019

Note: EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to this calibration set that must be ordered separately.

EPA-1613CS0.5	13CS0.51019
EPA-1613CSL	13CSL1019

SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/22/2019
LAST TESTED: (mm/dd/yyyy)	10/24/2019
EXPIRY DATE: (mm/dd/yyyy)	10/24/2026
RECOMMENDED STORAGE:	Store ampoules in a cool, dark place

I005459
1613 CS5 CAL STD
Expires 10/24/2026
Prepared By Joshua Rains 6/23/2020

DESCRIPTION:

EPA-1613CVS is a series of 5 calibration solutions containing native ($^{12}C_{12}$) and mass-labelled ($^{13}C_{12}$ and $^{37}Cl_4$) chlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs). The components of each solution, and their concentrations, are given in Table A.

They were designed for, and prepared to be used according to, U.S. EPA Method 1613 (Revision B). They are to be used as received.

EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to EPA-1613CVS. Neither is required by the method, but either or both can be used to extend the calibration to lower levels.

The individual native PCDDs and PCDFs all have chemical purities of >98%. The individual ^{13}C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-$^{37}Cl_4$-Tetrachlorodibenzo-p-dioxin has a chemical purity of >98% and an isotopic (^{37}Cl) purity of ≥95%.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations
Table B: 5-point HRGC/HRMS Calibration and RRF Summary
Table C: 7-point HRGC/HRMS Calibration and RRF Summary
Figure 1: HRGC/HRMS Data for EPA-1613CS3 (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 3 for further details.

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a series of standards for the identification and quantification of specific chemical compounds.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned values, and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2,...x_n on which it depends is:

$$u_c(y(x_1, x_2, ...x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analytes is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A 1226

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); Components and Concentrations (ng/ml, ± 5% in nonane/toluene)**

Compound	Concentration (ng/ml)						
Native PCDDs and PCDFs:	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CSL**	**CS0.5**
2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
2,3,7,8-TCDF	0.5	2	10	40	200	0.1	0.25
1,2,3,7,8-PeCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8,9-HpCDF	2.5	10	50	200	1000	0.5	1.25
OCDD	5.0	20	100	400	2000	1.0	2.5
OCDF	5.0	20	100	400	2000	1.0	2.5
Labelled PCDDs and PCDFs:							
$^{13}C_{12}$-2,3,7,8-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,7,8-TCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-OCDD	200	200	200	200	200	200	200
Cleanup Standard:							
$^{37}Cl_4$-2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
Internal Standards:							
$^{13}C_{12}$-1,2,3,4-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	100	100	100	100	100	100	100
Percent toluene (v/v)	3.6%	3.7%	4.2%	6.1%	16.2%	3.6%	3.6%

Certified By: _____ **Date:** 10/25/2019
(mm/dd/yyyy)
B.G. Chittim, General Manager

Table B: **EPA-1613CVS; 5-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard				
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5
2,3,7,8-TCDF	0.93	0.013	1.4	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.015	1.6	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.04	0.019	1.8	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.035	3.7	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.93	0.013	1.4	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.96	0.022	2.3	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.89	0.021	2.4	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.91	0.011	1.2	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.010	1.1	0.90	0.90	0.92	0.91	0.92
OCDF	1.19	0.056	4.7	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.05	0.023	2.2	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.97	0.018	1.9	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	1.00	0.019	1.9	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.98	0.032	3.2	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.97	0.016	1.6	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.025	2.5	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.013	1.3	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.57	0.047	3.0	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.21	0.078	6.5	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.17	0.081	6.9	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.020	1.5	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.51	0.034	2.2	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.38	0.012	0.9	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.014	1.2	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.033	2.5	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.08	0.046	4.3	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.13	0.036	3.2	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.79	0.047	5.9	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.027	3.1	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.04	0.010	1.0	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.017	2.1	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.74	0.055	7.4	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.026	2.6	0.95	0.94	0.99	0.99	0.99

Table C: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); 7-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard						
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CSL	CS0.5	CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6	RRF#7
2,3,7,8-TCDF	0.92	0.045	4.8	0.96	0.83	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.013	1.4	0.94	0.92	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.02	0.058	5.7	0.90	1.00	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.029	3.0	0.96	0.97	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.92	0.030	3.3	0.90	0.86	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.94	0.047	5.0	0.87	0.89	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.88	0.029	3.3	0.83	0.88	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.90	0.033	3.7	0.83	0.93	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.018	1.9	0.89	0.94	0.90	0.90	0.92	0.91	0.92
OCDF	1.18	0.052	4.4	1.15	1.14	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.03	0.051	5.0	1.03	0.92	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.95	0.042	4.4	0.87	0.98	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	0.97	0.066	6.8	0.83	0.98	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.96	0.044	4.5	0.90	0.92	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.94	0.054	5.7	0.83	0.92	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.033	3.3	0.95	1.03	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.023	2.3	0.95	1.00	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.56	0.042	2.7	1.52	1.54	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.20	0.066	5.5	1.18	1.17	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.16	0.071	6.1	1.12	1.13	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.018	1.4	1.32	1.35	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.53	0.045	3.0	1.60	1.56	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.39	0.019	1.4	1.39	1.42	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.012	1.0	1.19	1.19	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.028	2.2	1.30	1.33	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.07	0.045	4.2	1.02	1.08	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.12	0.033	3.0	1.09	1.11	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.78	0.040	5.1	0.75	0.78	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.025	2.9	0.86	0.90	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.05	0.015	1.5	1.08	1.06	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.016	2.0	0.79	0.81	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.73	0.046	6.3	0.71	0.72	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.053	5.4	0.90	1.07	0.95	0.94	0.99	0.99	0.99

Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

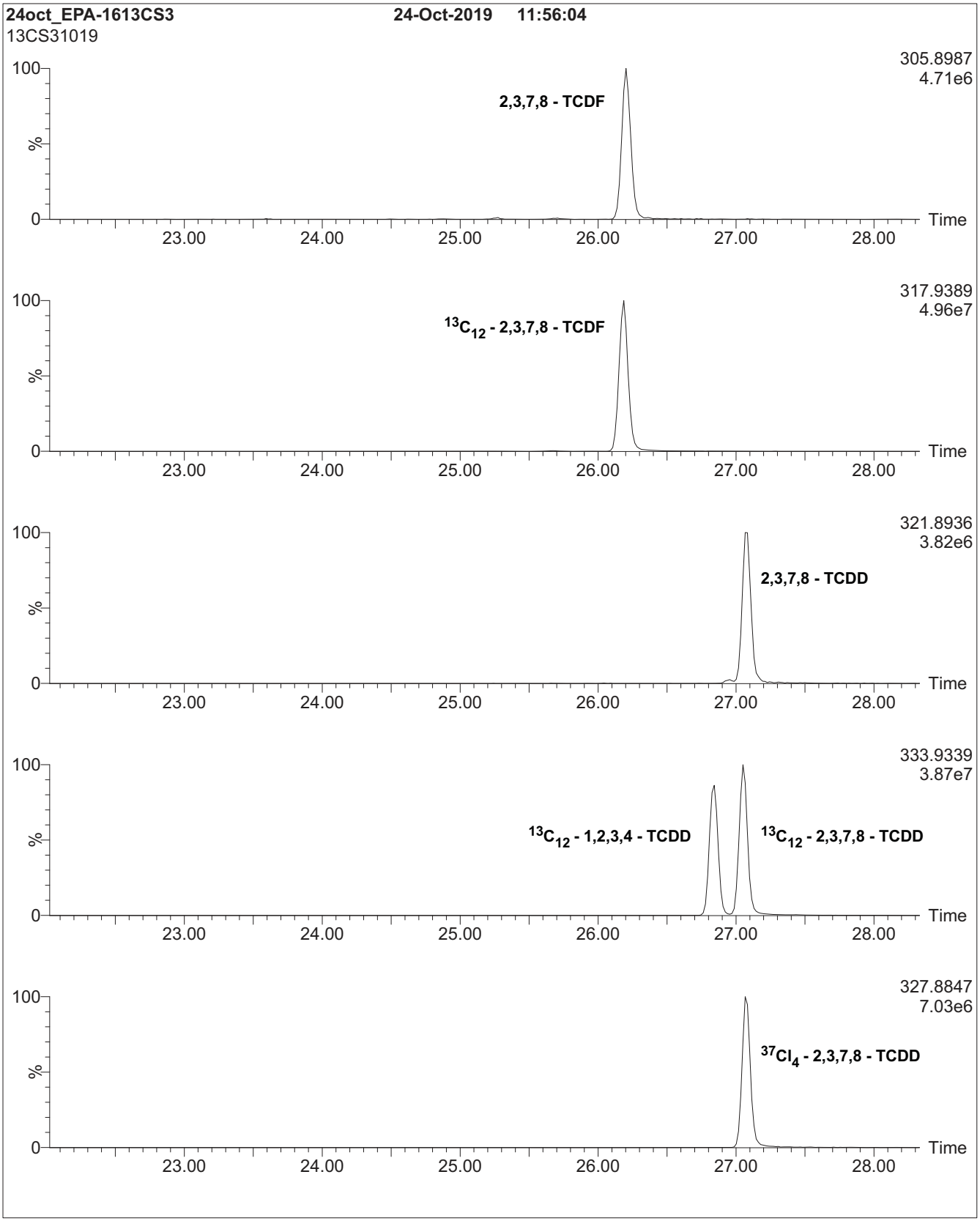


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

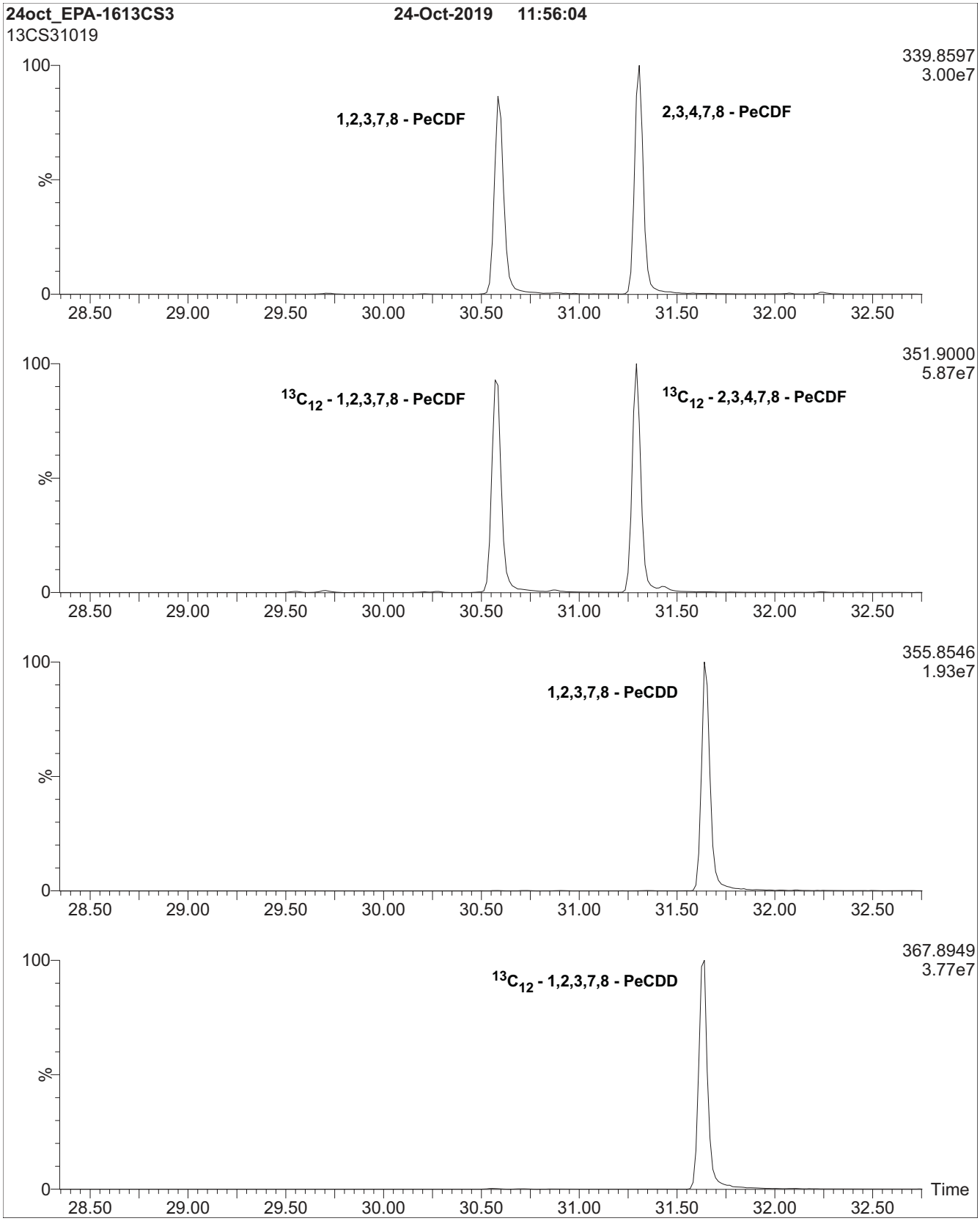


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

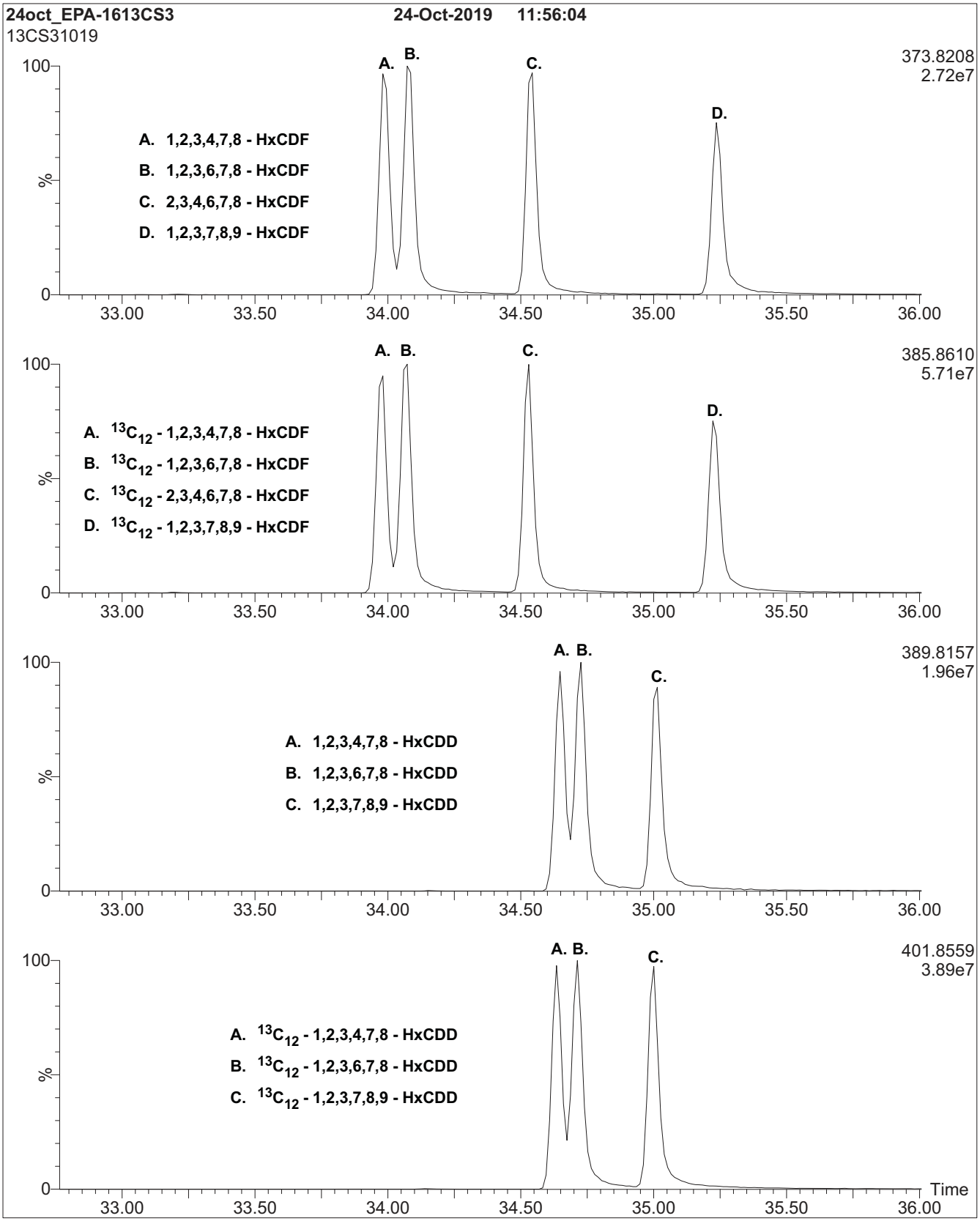


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

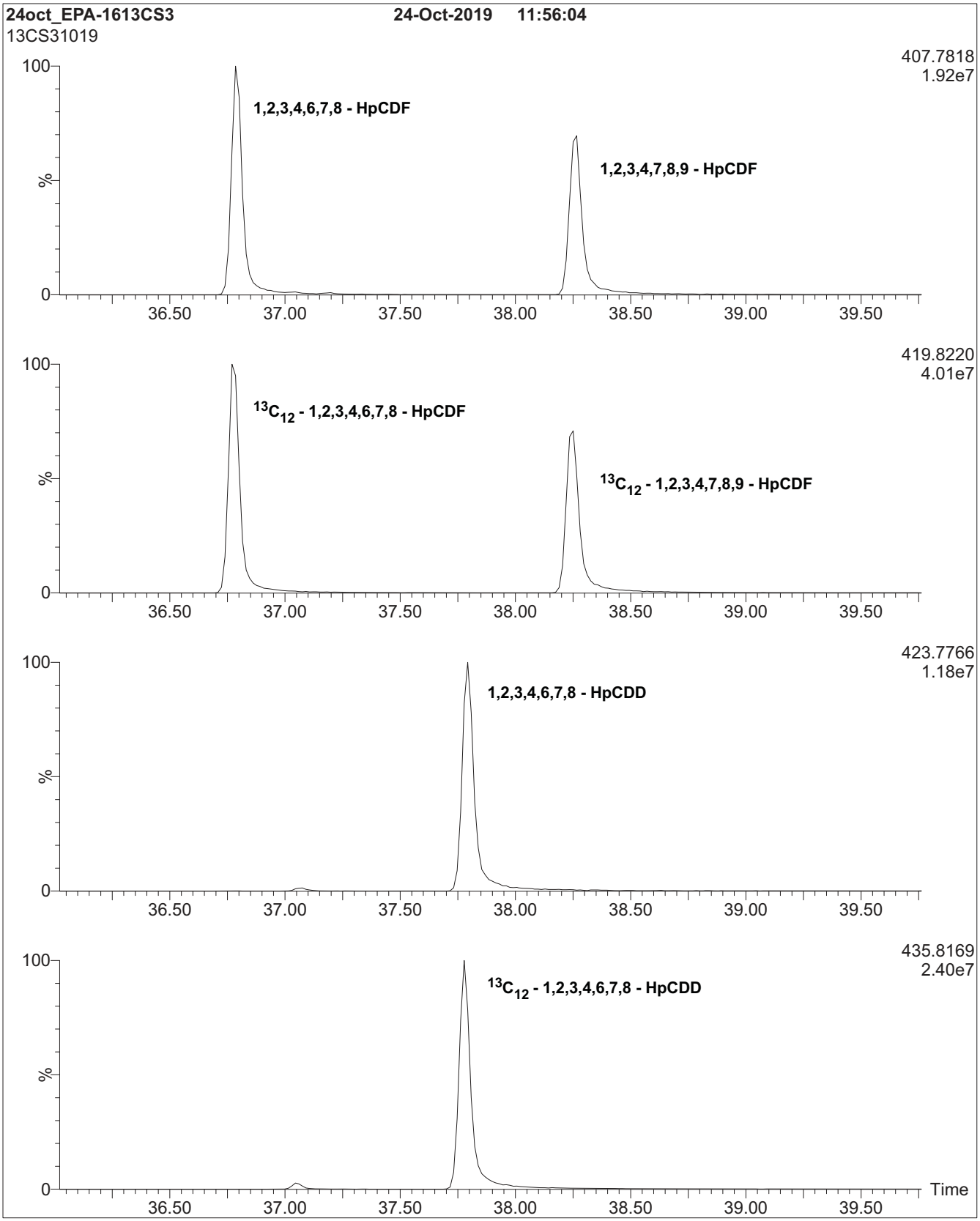
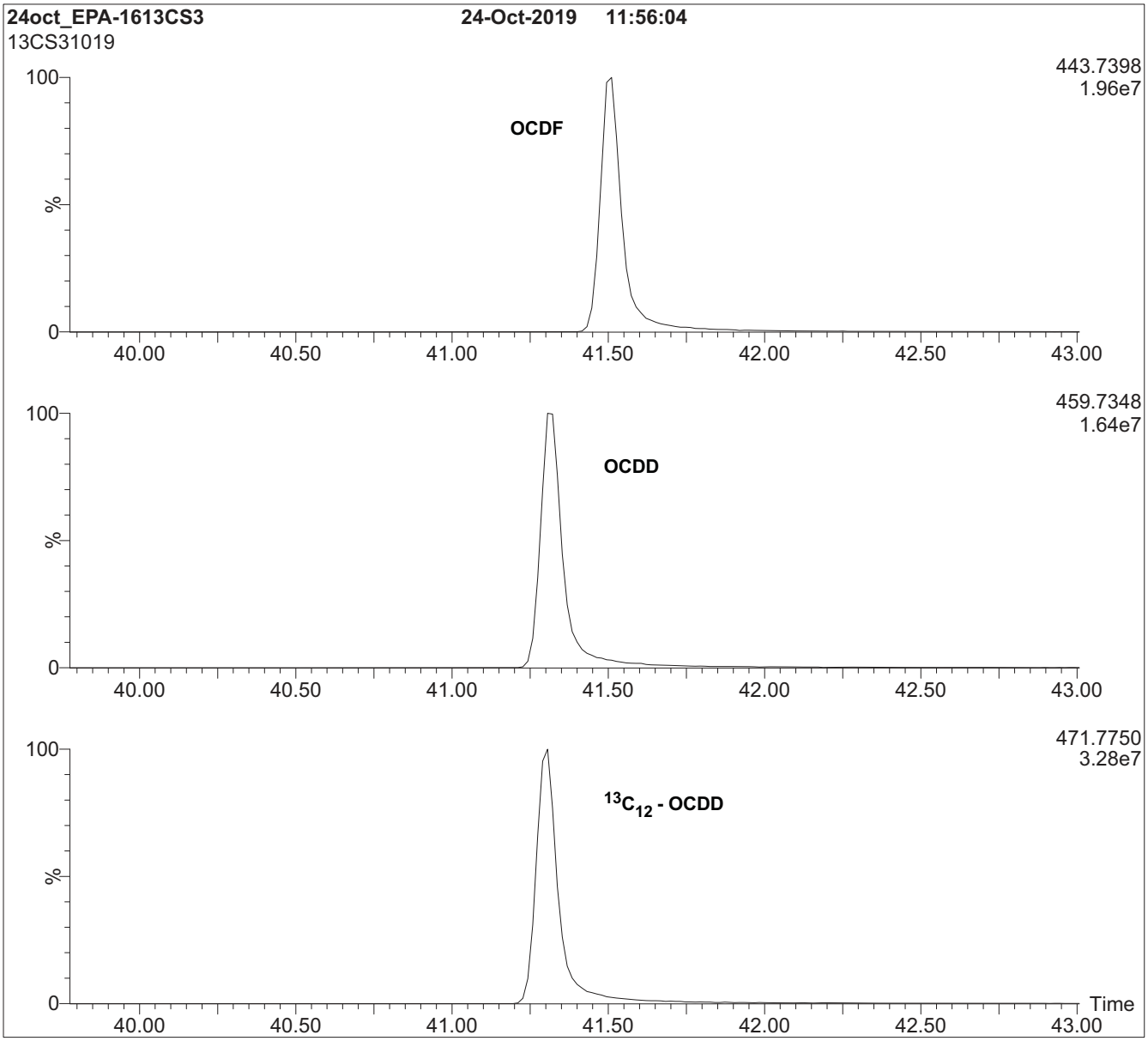


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**



HRGC/HRMS:

Agilent 6890N (HRGC)
Autospec Ultima (HRMS)

Chromatographic Conditions:

Column: 60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W

Flow:	Constant at 1 ml/min	Oven:	150 °C (1 min)
Injector:	280 °C (Splitless Injection)		12 °C/min to 200 °C
Ionization:	EI+		3 °C/min to 235 °C
Detector:	280 °C		235 °C (8 min)
	SIR at 10,000 mass resolving power		8 °C/min to 310 °C
			310 °C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613CVS

U.S. EPA Method 1613 Calibration and Verification Solutions
plus Supplemental Calibration Solutions EPA-1613CSL & EPA-1613CS0.5

PRODUCT CODES:	EPA-1613CVS	**LOT NUMBERS:**	(see below)
	EPA-1613CS1		13CS11019
	EPA-1613CS2		13CS21019
	EPA-1613CS3		13CS31019
	EPA-1613CS4		13CS41019
	EPA-1613CS5		13CS51019

Note: EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to this calibration set that must be ordered separately.

EPA-1613CS0.5	13CS0.51019
EPA-1613CSL	13CSL1019

SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/22/2019
LAST TESTED: (mm/dd/yyyy)	10/24/2019
EXPIRY DATE: (mm/dd/yyyy)	10/24/2026
RECOMMENDED STORAGE:	Store ampoules in a cool, dark place

I005460
1613 CSL CAL STD
Expires 10/24/2026
Prepared By Joshua Rains 6/23/2020

DESCRIPTION:

EPA-1613CVS is a series of 5 calibration solutions containing native ($^{12}C_{12}$) and mass-labelled ($^{13}C_{12}$ and $^{37}Cl_4$) chlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs). The components of each solution, and their concentrations, are given in Table A.

They were designed for, and prepared to be used according to, U.S. EPA Method 1613 (Revision B). They are to be used as received.

EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to EPA-1613CVS. Neither is required by the method, but either or both can be used to extend the calibration to lower levels.

The individual native PCDDs and PCDFs all have chemical purities of >98%. The individual ^{13}C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-$^{37}Cl_4$-Tetrachlorodibenzo-p-dioxin has a chemical purity of >98% and an isotopic (^{37}Cl) purity of ≥95%.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations
Table B: 5-point HRGC/HRMS Calibration and RRF Summary
Table C: 7-point HRGC/HRMS Calibration and RRF Summary
Figure 1: HRGC/HRMS Data for EPA-1613CS3 (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 3 for further details.

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a series of standards for the identification and quantification of specific chemical compounds.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned values, and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2,...x_n on which it depends is:

$$u_c(y(x_1, x_2, ...x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analytes is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A 1226

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); Components and Concentrations (ng/ml, ± 5% in nonane/toluene)**

Compound	Concentration (ng/ml)						
Native PCDDs and PCDFs:	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CSL**	**CS0.5**
2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
2,3,7,8-TCDF	0.5	2	10	40	200	0.1	0.25
1,2,3,7,8-PeCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8,9-HpCDF	2.5	10	50	200	1000	0.5	1.25
OCDD	5.0	20	100	400	2000	1.0	2.5
OCDF	5.0	20	100	400	2000	1.0	2.5
Labelled PCDDs and PCDFs:							
$^{13}C_{12}$-2,3,7,8-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,7,8-TCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-OCDD	200	200	200	200	200	200	200
Cleanup Standard:							
$^{37}Cl_4$-2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
Internal Standards:							
$^{13}C_{12}$-1,2,3,4-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	100	100	100	100	100	100	100
Percent toluene (v/v)	3.6%	3.7%	4.2%	6.1%	16.2%	3.6%	3.6%

Certified By: _____ **Date:** 10/25/2019
(mm/dd/yyyy)
B.G. Chittim, General Manager

Table B: **EPA-1613CVS; 5-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard				
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5
2,3,7,8-TCDF	0.93	0.013	1.4	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.015	1.6	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.04	0.019	1.8	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.035	3.7	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.93	0.013	1.4	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.96	0.022	2.3	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.89	0.021	2.4	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.91	0.011	1.2	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.010	1.1	0.90	0.90	0.92	0.91	0.92
OCDF	1.19	0.056	4.7	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.05	0.023	2.2	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.97	0.018	1.9	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	1.00	0.019	1.9	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.98	0.032	3.2	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.97	0.016	1.6	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.025	2.5	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.013	1.3	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.57	0.047	3.0	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.21	0.078	6.5	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.17	0.081	6.9	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.020	1.5	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.51	0.034	2.2	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.38	0.012	0.9	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.014	1.2	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.033	2.5	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.08	0.046	4.3	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.13	0.036	3.2	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.79	0.047	5.9	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.027	3.1	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.04	0.010	1.0	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.017	2.1	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.74	0.055	7.4	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.026	2.6	0.95	0.94	0.99	0.99	0.99

Table C: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); 7-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard						
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CSL	CS0.5	CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6	RRF#7
2,3,7,8-TCDF	0.92	0.045	4.8	0.96	0.83	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.013	1.4	0.94	0.92	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.02	0.058	5.7	0.90	1.00	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.029	3.0	0.96	0.97	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.92	0.030	3.3	0.90	0.86	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.94	0.047	5.0	0.87	0.89	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.88	0.029	3.3	0.83	0.88	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.90	0.033	3.7	0.83	0.93	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.018	1.9	0.89	0.94	0.90	0.90	0.92	0.91	0.92
OCDF	1.18	0.052	4.4	1.15	1.14	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.03	0.051	5.0	1.03	0.92	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.95	0.042	4.4	0.87	0.98	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	0.97	0.066	6.8	0.83	0.98	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.96	0.044	4.5	0.90	0.92	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.94	0.054	5.7	0.83	0.92	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.033	3.3	0.95	1.03	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.023	2.3	0.95	1.00	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.56	0.042	2.7	1.52	1.54	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.20	0.066	5.5	1.18	1.17	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.16	0.071	6.1	1.12	1.13	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.018	1.4	1.32	1.35	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.53	0.045	3.0	1.60	1.56	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.39	0.019	1.4	1.39	1.42	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.012	1.0	1.19	1.19	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.028	2.2	1.30	1.33	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.07	0.045	4.2	1.02	1.08	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.12	0.033	3.0	1.09	1.11	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.78	0.040	5.1	0.75	0.78	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.025	2.9	0.86	0.90	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.05	0.015	1.5	1.08	1.06	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.016	2.0	0.79	0.81	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.73	0.046	6.3	0.71	0.72	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.053	5.4	0.90	1.07	0.95	0.94	0.99	0.99	0.99

Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

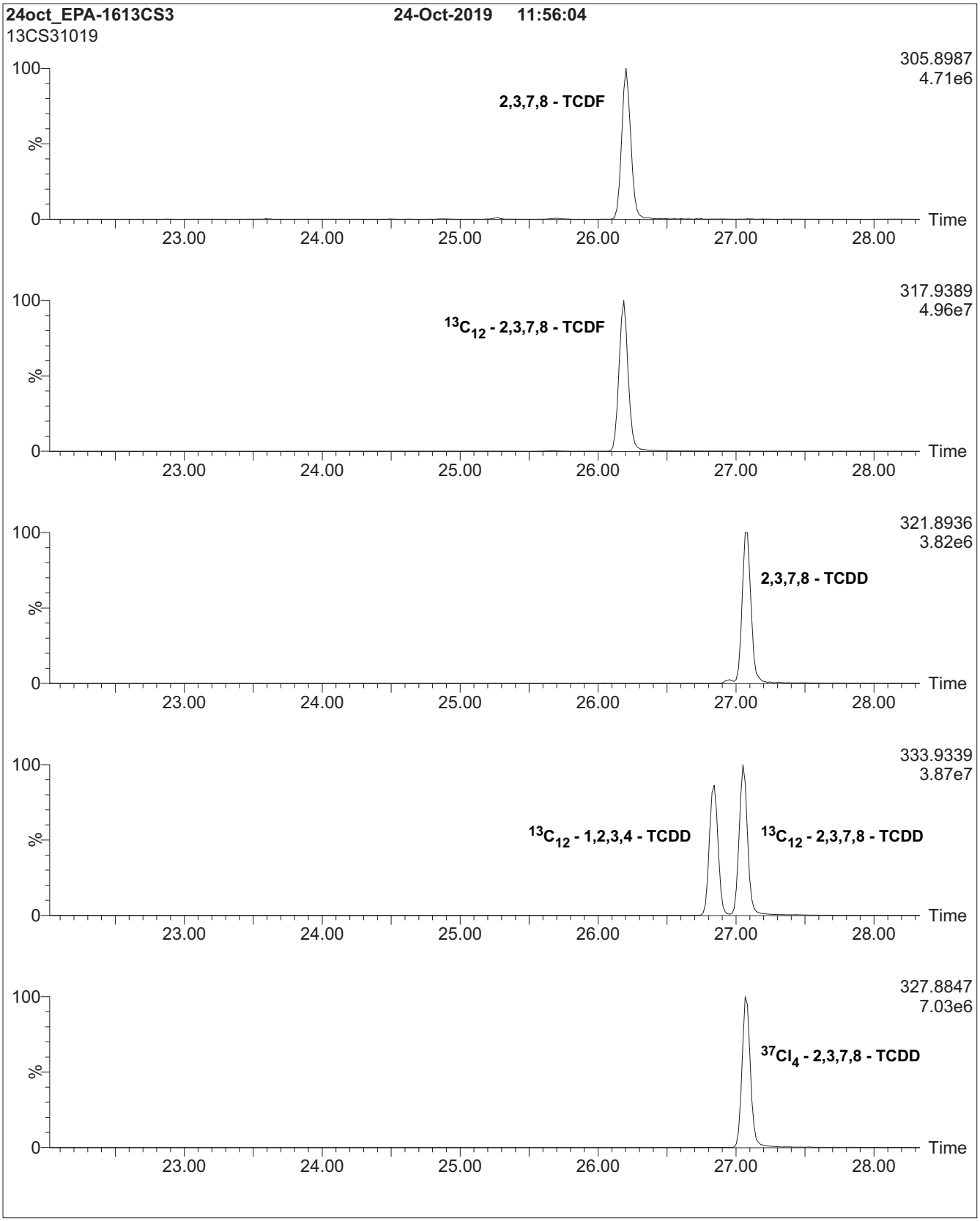


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

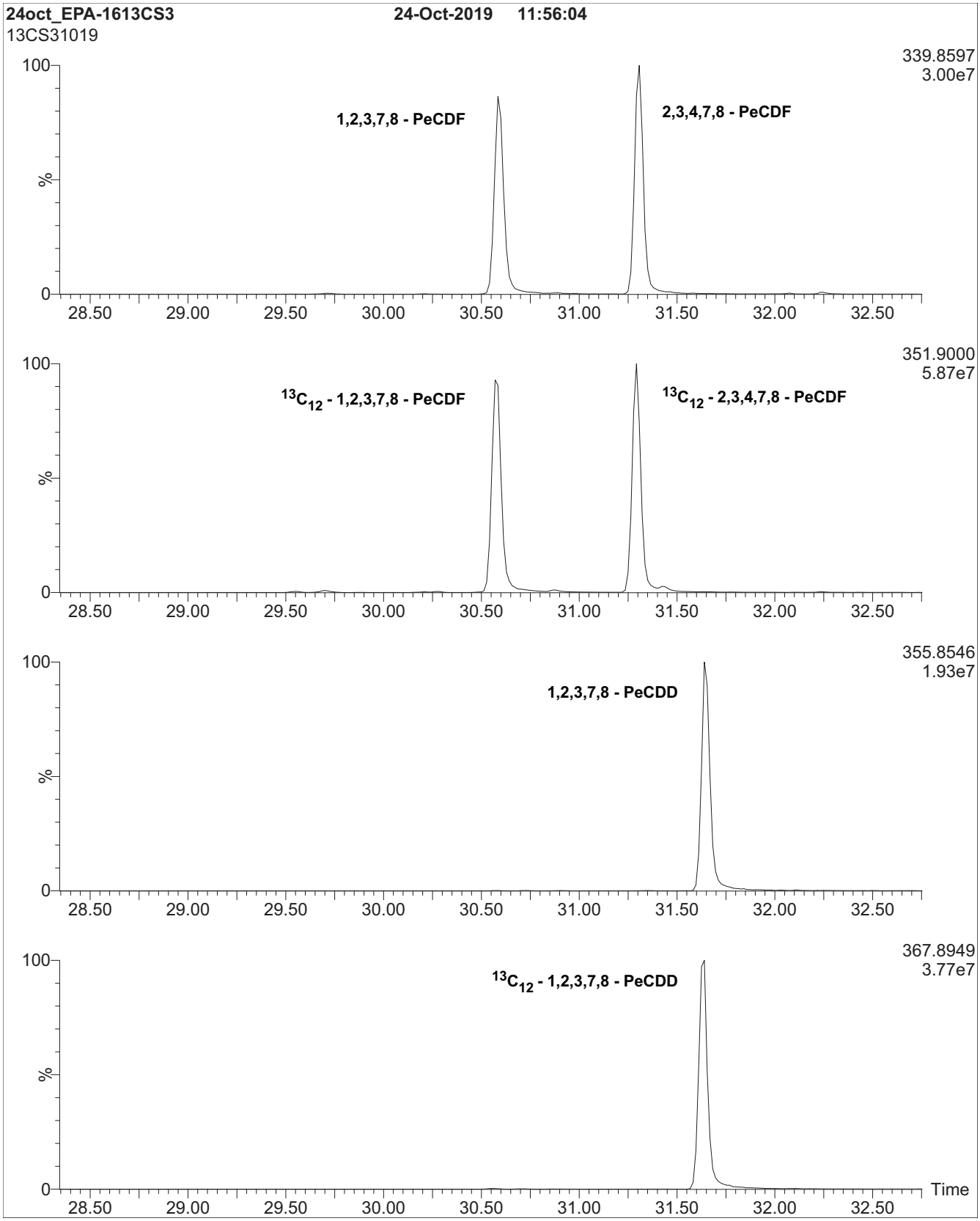


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

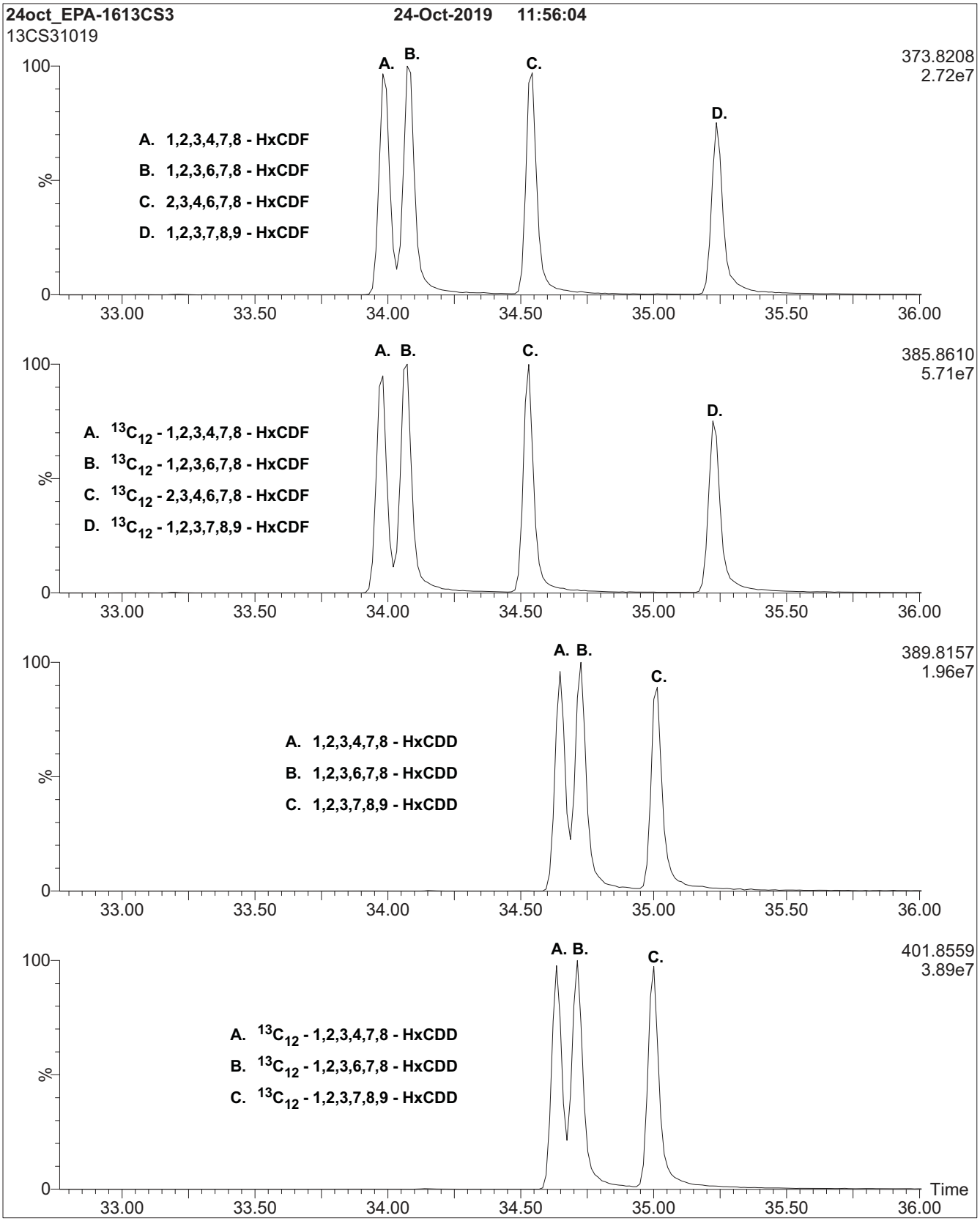


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

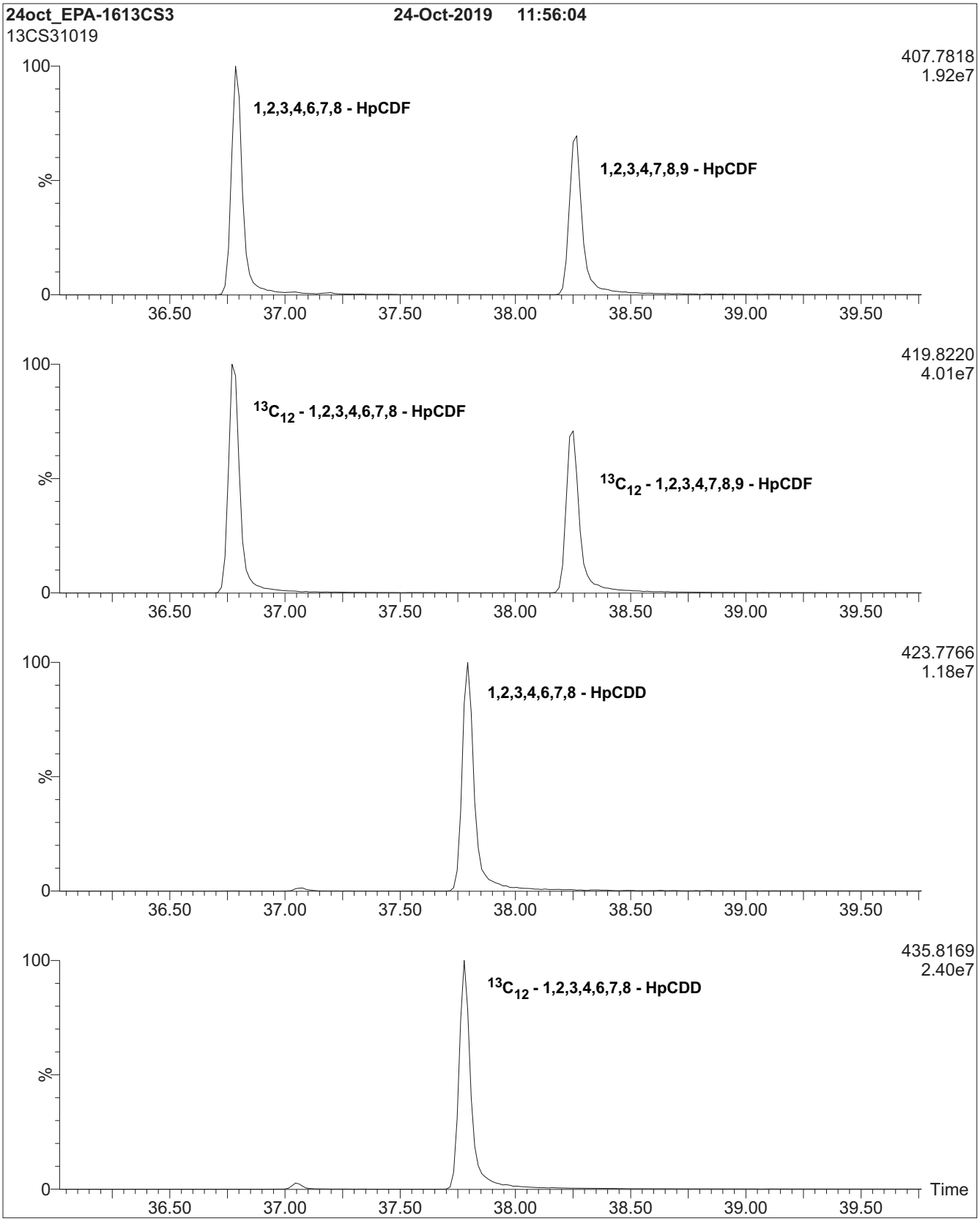
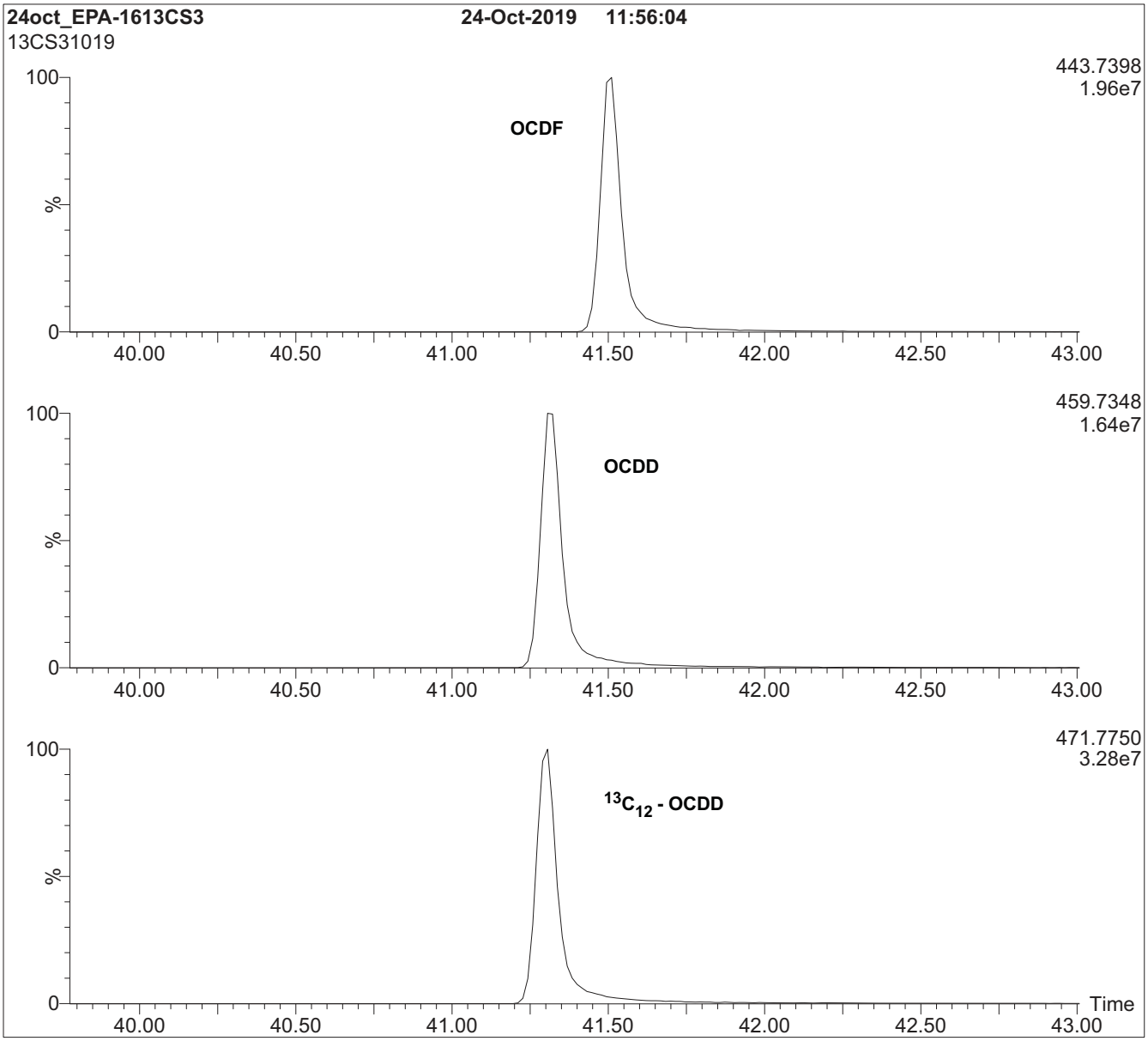


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**



HRGC/HRMS:

Agilent 6890N (HRGC)
Autospec Ultima (HRMS)

Chromatographic Conditions:

Column: 60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W

Flow:	Constant at 1 ml/min	Oven:	150 °C (1 min)
Injector:	280 °C (Splitless Injection)		12 °C/min to 200 °C
Ionization:	EI+		3 °C/min to 235 °C
Detector:	280 °C		235 °C (8 min)
	SIR at 10,000 mass resolving power		8 °C/min to 310 °C
			310 °C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613PAR

U.S. EPA Method 1613 Native PCDD/PCDF Precision and Recovery Stock Solution

PRODUCT CODE:	EPA-1613PAR
LOT NUMBER:	13PAR1021
SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/25/2021
LAST TESTED: (mm/dd/yyyy)	11/03/2021
EXPIRY DATE: (mm/dd/yyyy)	11/03/2028
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

J013397
Recd. JR
12/20/21

DESCRIPTION:

EPA-1613PAR is a solution/mixture of all the 2,3,7,8-substituted polychlorinated dibenzo-*p*-dioxins (PCDDs) and dibenzofurans (PCDFs). The components and their concentrations are given in Table A.

EPA-1613PAR was designed and prepared to be used according to U.S. EPA Method 1613, Revision B.

The individual PCDDs and PCDFs all have chemical purities of >98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: HRGC/HRMS Data (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 2 for further details.

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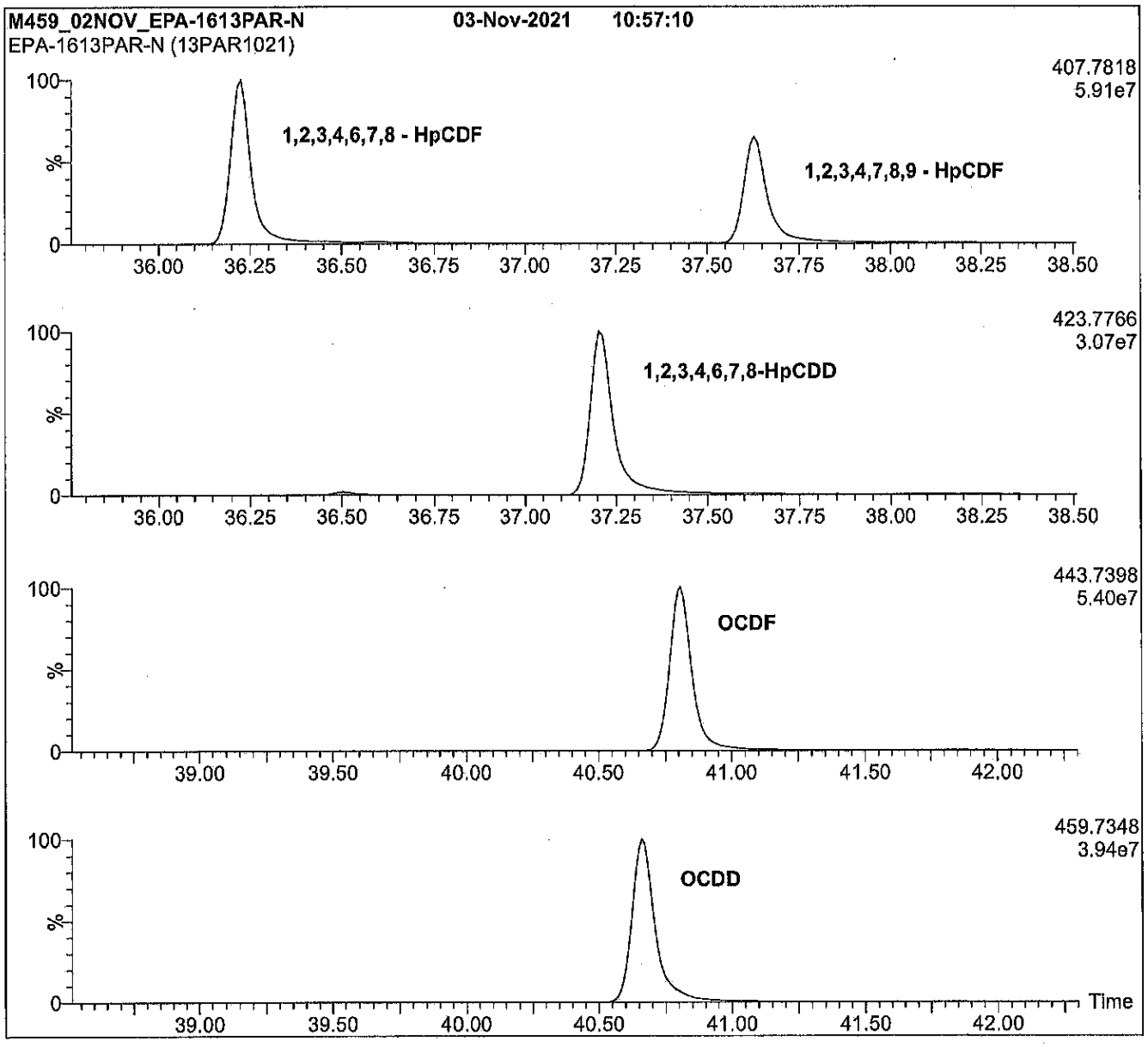
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

Table A: **EPA-1613PAR; Components and Concentrations (ng/mL, ± 5% in nonane/2.4% toluene)**

Compound	Acronym	CAS #	Concentration (ng/mL)
PCDDs:			
2,3,7,8-Tetrachlorodibenzo-*p*-dioxin	2,3,7,8-TCDD	1746-01-6	40.0
1,2,3,7,8-Pentachlorodibenzo-*p*-dioxin	1,2,3,7,8-PeCDD	40321-76-4	200
1,2,3,4,7,8-Hexachlorodibenzo-*p*-dioxin	1,2,3,4,7,8-HxCDD	39227-28-6	200
1,2,3,6,7,8-Hexachlorodibenzo-*p*-dioxin	1,2,3,6,7,8-HxCDD	57653-85-7	200
1,2,3,7,8,9-Hexachlorodibenzo-*p*-dioxin	1,2,3,7,8,9-HxCDD	19408-74-3	200
1,2,3,4,6,7,8-Heptachlorodibenzo-*p*-dioxin	1,2,3,4,6,7,8-HpCDD	35822-46-9	200
Octachlorodibenzo-*p*-dioxin	OCDD	3268-87-9	400
PCDFs:			
2,3,7,8-Tetrachlorodibenzofuran	2,3,7,8-TCDF	51207-31-9	40.0
1,2,3,7,8-Pentachlorodibenzofuran	1,2,3,7,8-PeCDF	57117-41-6	200
2,3,4,7,8-Pentachlorodibenzofuran	2,3,4,7,8-PeCDF	57117-31-4	200
1,2,3,4,7,8-Hexachlorodibenzofuran	1,2,3,4,7,8-HxCDF	70648-26-9	200
1,2,3,6,7,8-Hexachlorodibenzofuran	1,2,3,6,7,8-HxCDF	57117-44-9	200
1,2,3,7,8,9-Hexachlorodibenzofuran	1,2,3,7,8,9-HxCDF	72918-21-9	200
2,3,4,6,7,8-Hexachlorodibenzofuran	2,3,4,6,7,8-HxCDF	60851-34-5	200
1,2,3,4,6,7,8-Heptachlorodibenzofuran	1,2,3,4,6,7,8-HpCDF	67562-39-4	200
1,2,3,4,7,8,9-Heptachlorodibenzofuran	1,2,3,4,7,8,9-HpCDF	55673-89-7	200
Octachlorodibenzofuran	OCDF	39001-02-0	400

Certified By: _____ **Date:** 11/05/2021
(mm/dd/yyyy)
B.G. Chittim, General Manager

Figure 1: **EPA-1613PAR; HRGC/HRMS Data (60 m DB-5 Column)**



Conditions for Figure 1:

Agilent 6890N HRGC
Autospec Ultima HRMS

Chromatographic Conditions:

Column:	60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W		
Flow:	Constant at 1.4 mL/min	Oven:	150°C (1 min)
Injector:	280°C (Splitless Injection)		12°C/min to 200°C
Ionization:	EI+		3°C/min to 235°C
Detector:	280°C		235°C (8 min)
	SIR at 10,000 mass resolving power		8°C/min to 310°C
			310°C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613PAR

U.S. EPA Method 1613 Native PCDD/PCDF
Precision and Recovery Stock Solution

PRODUCT CODE:	EPA-1613PAR
LOT NUMBER:	13PAR1021
SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/25/2021
LAST TESTED: (mm/dd/yyyy)	11/03/2021
EXPIRY DATE: (mm/dd/yyyy)	11/03/2028
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

J013397
Read. JR
12/20/21

DESCRIPTION:

EPA-1613PAR is a solution/mixture of all the 2,3,7,8-substituted polychlorinated dibenzo-*p*-dioxins (PCDDs) and dibenzofurans (PCDFs). The components and their concentrations are given in Table A.

EPA-1613PAR was designed and prepared to be used according to U.S. EPA Method 1613, Revision B.

The individual PCDDs and PCDFs all have chemical purities of >98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: HRGC/HRMS Data (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ANSI National Accreditation Board ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

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Compound	Acronym	CAS #	Concentration (ng/mL)
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1,2,3,7,8-Pentachlorodibenzo-*p*-dioxin	1,2,3,7,8-PeCDD	40321-76-4	200
1,2,3,4,7,8-Hexachlorodibenzo-*p*-dioxin	1,2,3,4,7,8-HxCDD	39227-28-6	200
1,2,3,6,7,8-Hexachlorodibenzo-*p*-dioxin	1,2,3,6,7,8-HxCDD	57653-85-7	200
1,2,3,7,8,9-Hexachlorodibenzo-*p*-dioxin	1,2,3,7,8,9-HxCDD	19408-74-3	200
1,2,3,4,6,7,8-Heptachlorodibenzo-*p*-dioxin	1,2,3,4,6,7,8-HpCDD	35822-46-9	200
Octachlorodibenzo-*p*-dioxin	OCDD	3268-87-9	400
PCDFs:			
2,3,7,8-Tetrachlorodibenzofuran	2,3,7,8-TCDF	51207-31-9	40.0
1,2,3,7,8-Pentachlorodibenzofuran	1,2,3,7,8-PeCDF	57117-41-6	200
2,3,4,7,8-Pentachlorodibenzofuran	2,3,4,7,8-PeCDF	57117-31-4	200
1,2,3,4,7,8-Hexachlorodibenzofuran	1,2,3,4,7,8-HxCDF	70648-26-9	200
1,2,3,6,7,8-Hexachlorodibenzofuran	1,2,3,6,7,8-HxCDF	57117-44-9	200
1,2,3,7,8,9-Hexachlorodibenzofuran	1,2,3,7,8,9-HxCDF	72918-21-9	200
2,3,4,6,7,8-Hexachlorodibenzofuran	2,3,4,6,7,8-HxCDF	60851-34-5	200
1,2,3,4,6,7,8-Heptachlorodibenzofuran	1,2,3,4,6,7,8-HpCDF	67562-39-4	200
1,2,3,4,7,8,9-Heptachlorodibenzofuran	1,2,3,4,7,8,9-HpCDF	55673-89-7	200
Octachlorodibenzofuran	OCDF	39001-02-0	400

Certified By: _____ **Date:** 11/05/2021
(mm/dd/yyyy)
B.G. Chittim, General Manager

Figure 1: **EPA-1613PAR; HRGC/HRMS Data (60 m DB-5 Column)**

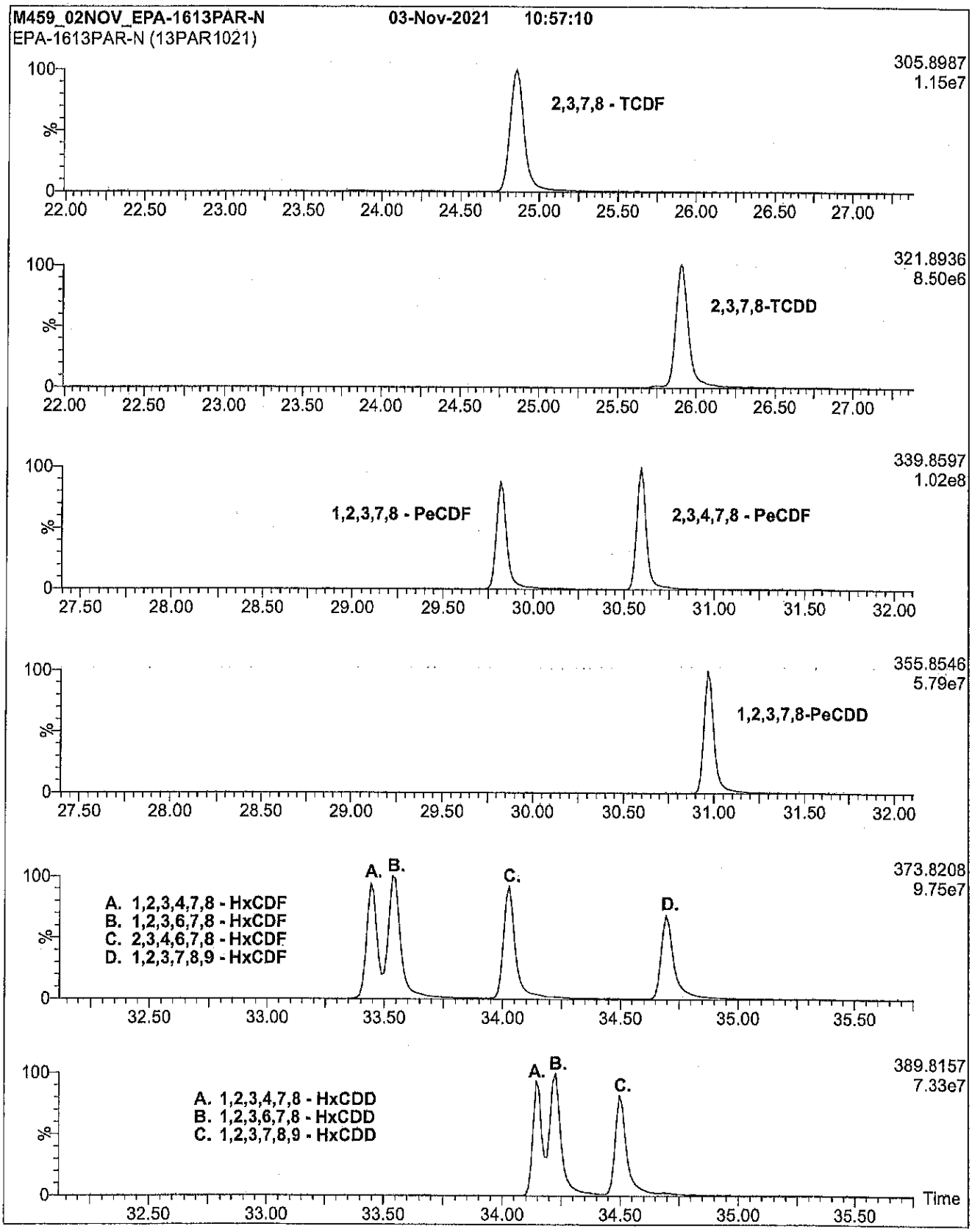
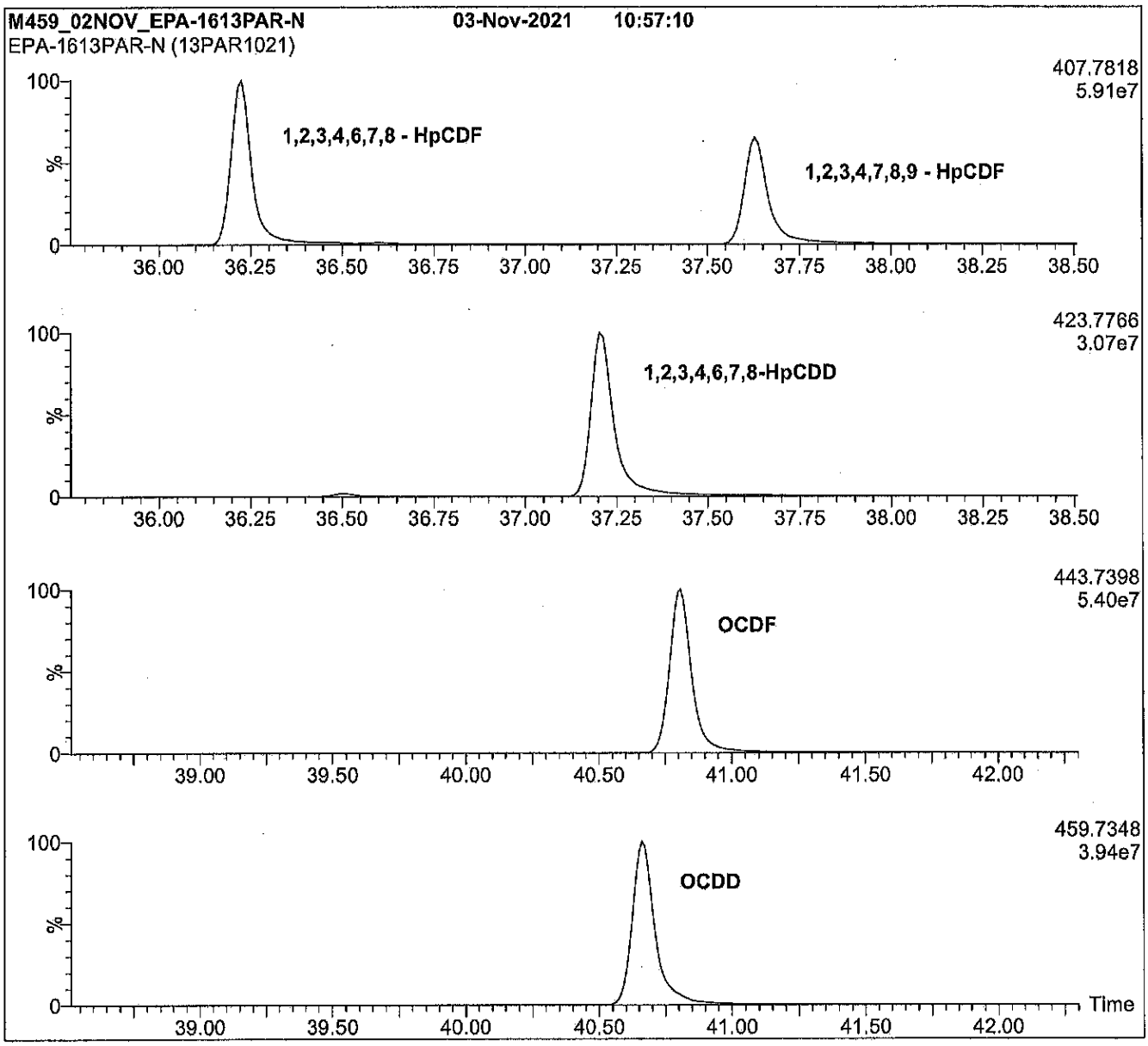


Figure 1: **EPA-1613PAR; HRGC/HRMS Data (60 m DB-5 Column)**



Conditions for Figure 1:

Agilent 6890N HRGC
Autospec Ultima HRMS

Chromatographic Conditions:

Column:	60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W		
Flow:	Constant at 1.4 mL/min	Oven:	150°C (1 min)
Injector:	280°C (Splitless Injection)		12°C/min to 200°C
Ionization:	EI+		3°C/min to 235°C
Detector:	280°C		235°C (8 min)
	SIR at 10,000 mass resolving power		8°C/min to 310°C
			310°C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613CSS

U.S. EPA Method 1613 Cleanup Standard Spiking Solution

PRODUCT CODE:	EPA-1613CSS
LOT NUMBER:	13CSS1021
SOLVENT(S):	Nonane
DATE PREPARED: (mm/dd/yyyy)	10/29/2021
LAST TESTED: (mm/dd/yyyy)	10/31/2021
EXPIRY DATE: (mm/dd/yyyy)	10/31/2028
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

DESCRIPTION: K003104

EPA-1613CSS contains 2,3,7,8-($^{37}Cl_4$)tetrachlorodibenzo-*p*-dioxin at the concentration given in Table A.

EPA-1613CSS was designed and prepared to be used according to U.S. EPA Method 1613, Revision B.

2,3,7,8-($^{37}Cl_4$)Tetrachlorodibenzo-*p*-dioxin has a chemical purity of >98% and an isotopic (^{37}Cl) purity of ≥95%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution
Figure 1: HRGC/HRMS Data (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 2 for further details.

Table A: **EPA-1613CSS; Components and Concentrations (ng/mL, ± 5% in nonane)**

Compound	Acronym	CAS #	Concentration (ng/mL)
2,3,7,8-($^{37}Cl_4$)Tetrachlorodibenzo-*p*-dioxin	$^{37}Cl_4$-2,3,7,8-TCDD	85508-50-5	40.0

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: _____ **Date:** 11/05/2021 (mm/dd/yyyy)
B.G. Chittim, General Manager

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

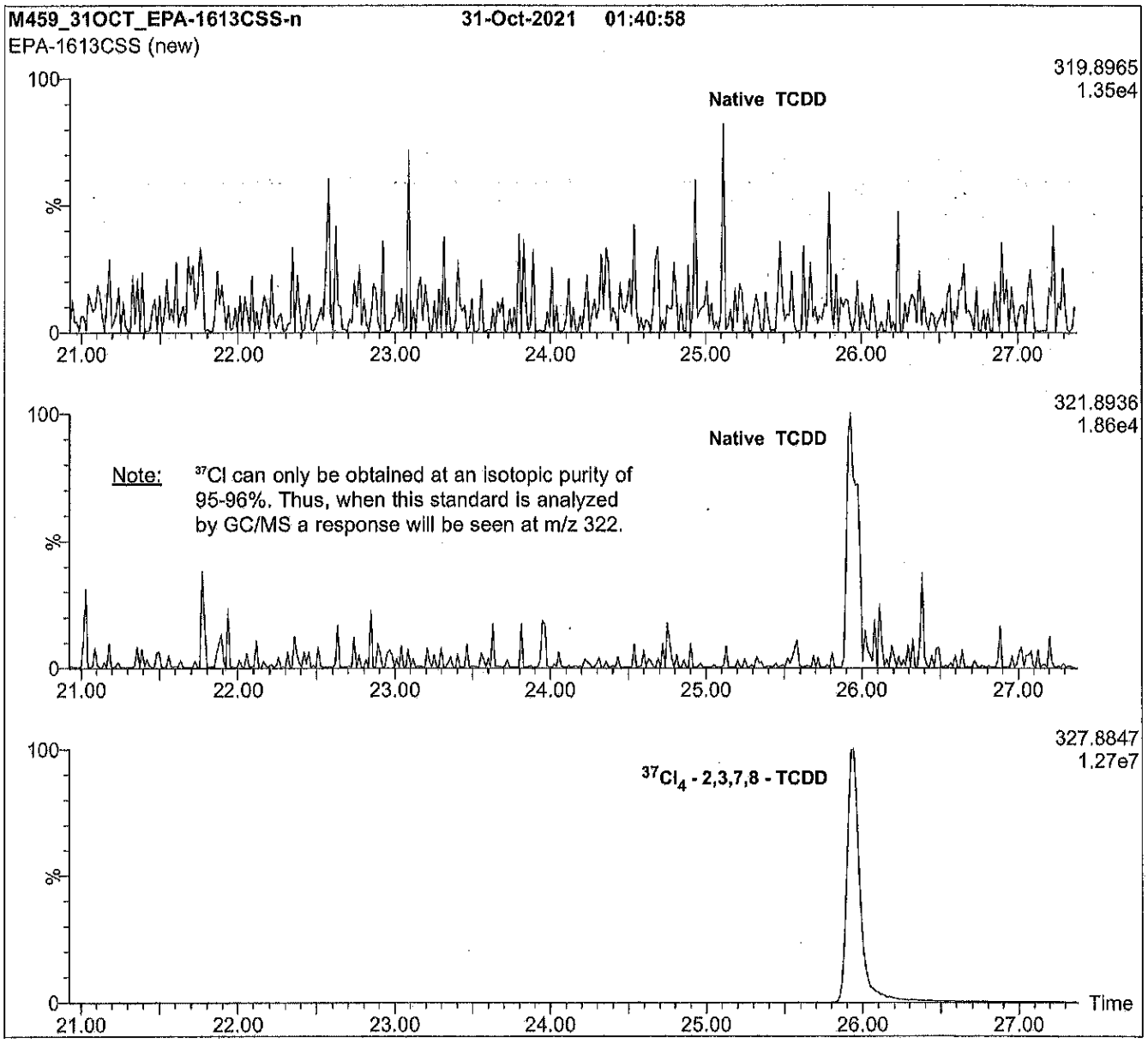
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ANSI National Accreditation Board ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: **EPA-1613CSS; HRGC/HRMS Data (60 m DB-5 Column)**



Conditions for Figure 1:

Agilent 6890N HRGC
Autospec Ultima HRMS

Chromatographic Conditions:

Column:	60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W		
Flow:	Constant at 1.4 mL/min	Oven:	150°C (1 min)
Injector:	280°C (Splitless Injection)		12°C/min to 200°C
Ionization:	EI+		3°C/min to 235°C
Detector:	280°C		235°C (8 min)
	SIR at 10,000 mass resolving power		8°C/min to 310°C
			310°C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613LCS

U.S. EPA Method 1613
Labelled Compound Stock Solution

PRODUCT CODE:	EPA-1613LCS
LOT NUMBER:	13LCS1021
SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/29/2021
LAST TESTED: (mm/dd/yyyy)	10/31/2021
EXPIRY DATE: (mm/dd/yyyy)	10/31/2028
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

DESCRIPTION: K3105

EPA-1613LCS is a solution/mixture of mass-labelled ($^{13}C_{12}$) polychlorinated dibenzo-*p*-dioxins (PCDDs) and dibenzofurans (PCDFs). The components and their concentrations are given in Table A.

EPA-1613LCS was designed and prepared to be used according to U.S. EPA Method 1613, Revision B.

The individual ^{13}C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations
Figure 1: HRGC/HRMS Data (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 2 for further details.

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Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ANSI National Accreditation Board ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

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Table A: **EPA-1613LCS; Components and Concentrations (ng/mL, ± 5% in nonane/3.2% toluene)**

Compound	Acronym	CAS #	Concentration (ng/mL)
Mass-Labelled PCDDs:			
2,3,7,8-Tetrachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-2,3,7,8-TCDD	76523-40-5	100
1,2,3,7,8-Pentachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-1,2,3,7,8-PeCDD	109719-79-1	100
1,2,3,4,7,8-Hexachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	109719-80-4	100
1,2,3,6,7,8-Hexachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	109719-81-5	100
1,2,3,4,6,7,8-Heptachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	109719-83-7	100
Octachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-OCDD	114423-97-1	200
Mass-Labelled PCDFs:			
2,3,7,8-Tetrachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-2,3,7,8-TCDF	89059-46-1	100
1,2,3,7,8-Pentachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,7,8-PeCDF	109719-77-9	100
2,3,4,7,8-Pentachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-2,3,4,7,8-PeCDF	116843-02-8	100
1,2,3,4,7,8-Hexachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	114423-98-2	100
1,2,3,6,7,8-Hexachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	116843-03-9	100
1,2,3,7,8,9-Hexachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	116843-04-0	100
2,3,4,6,7,8-Hexachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	116843-05-1	100
1,2,3,4,6,7,8-Heptachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	109719-84-8	100
1,2,3,4,7,8,9-Heptachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	109719-94-0	100

Certified By: _____ **Date:** 11/05/2021
(mm/dd/yyyy)
B.G. Chittim, General Manager

Figure 1: **EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)**

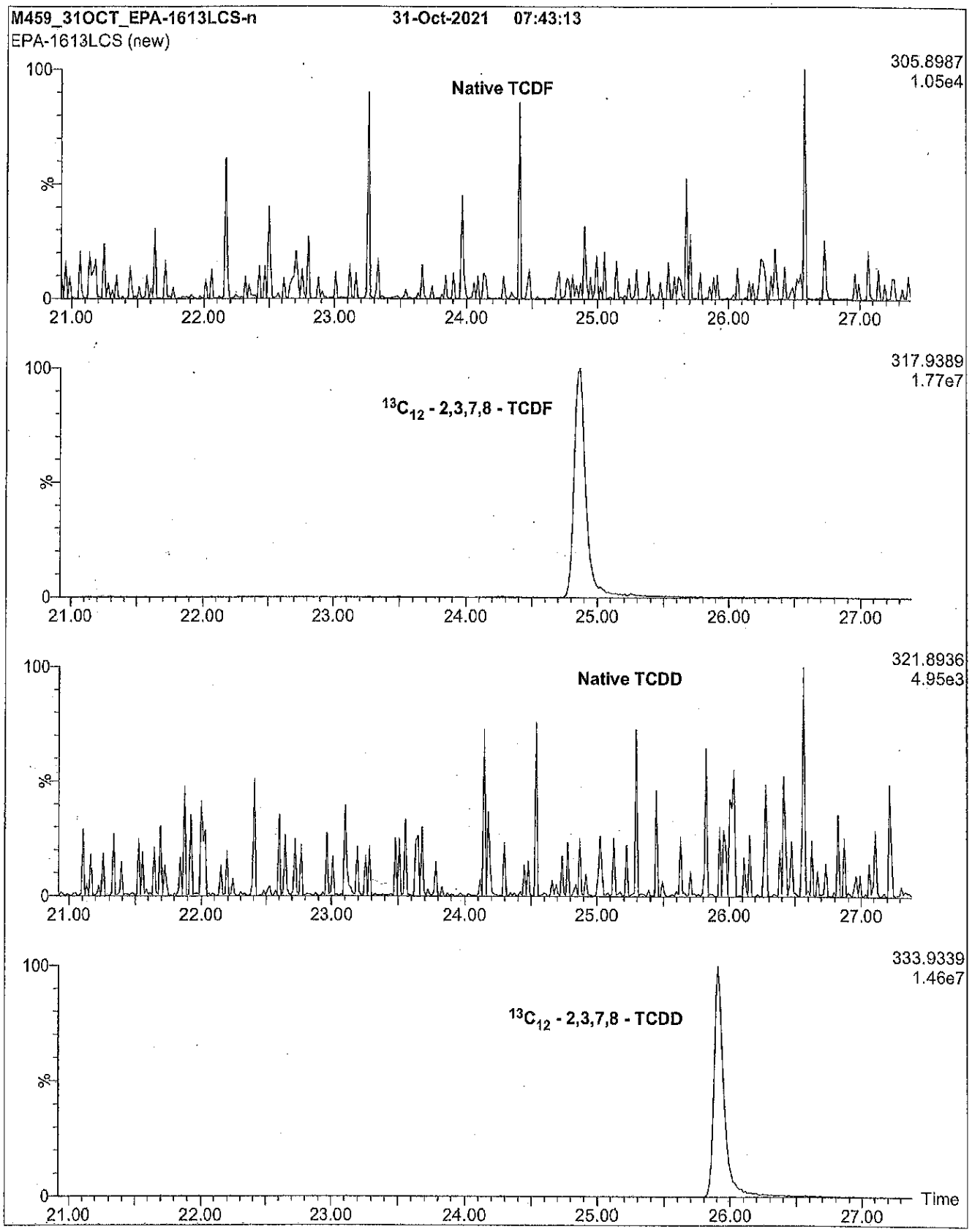


Figure 1: **EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)**

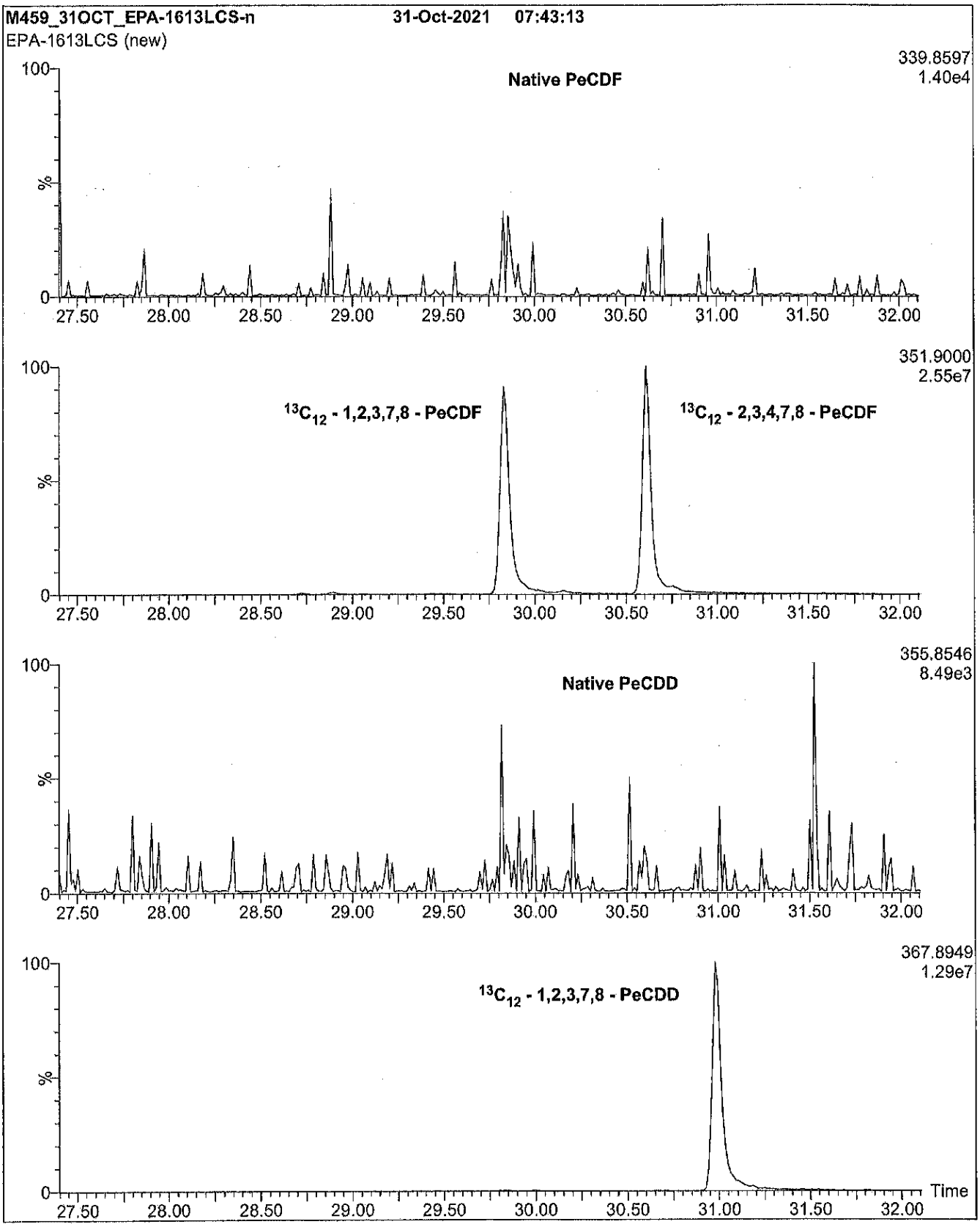


Figure 1: **EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)**

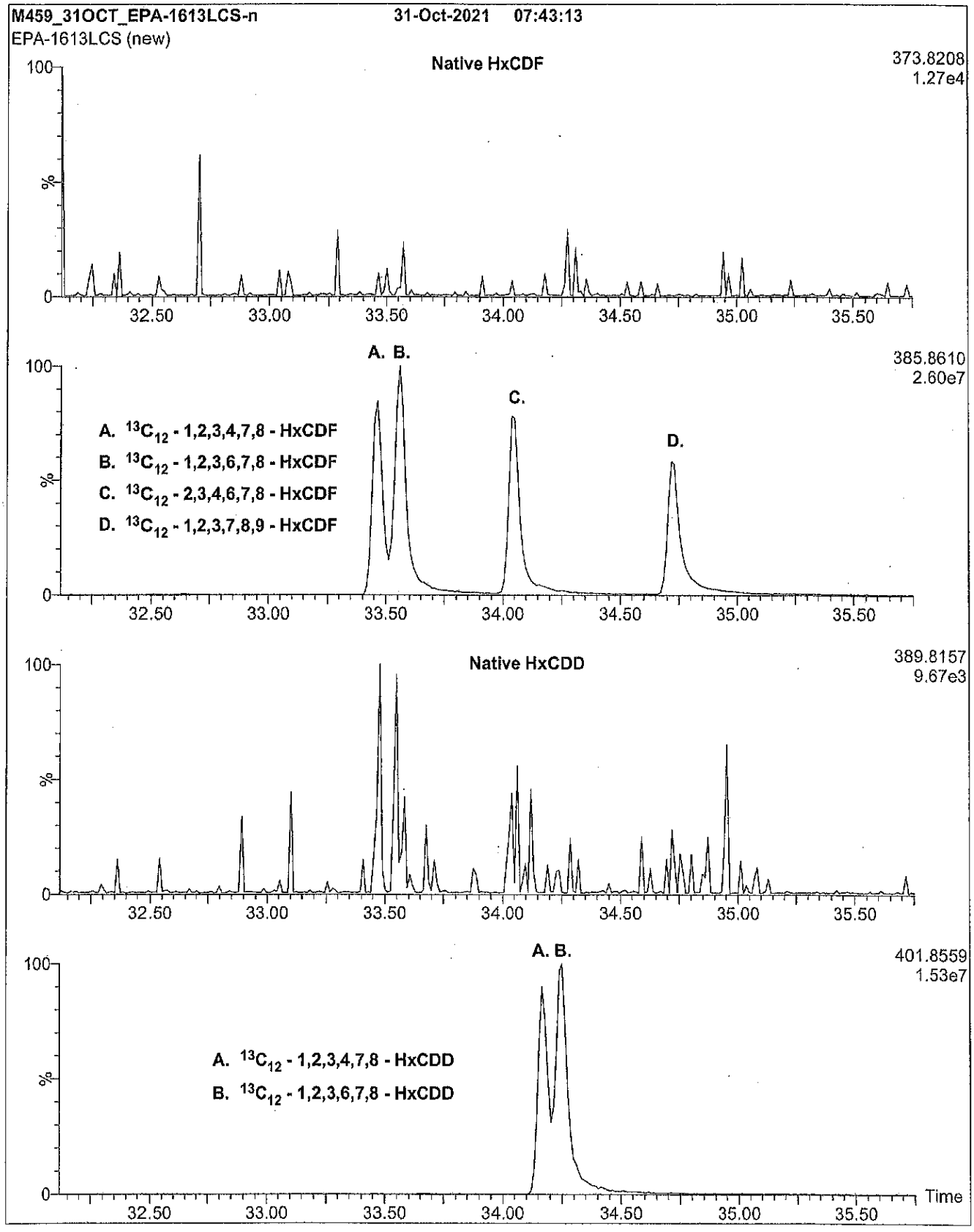


Figure 1: **EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)**

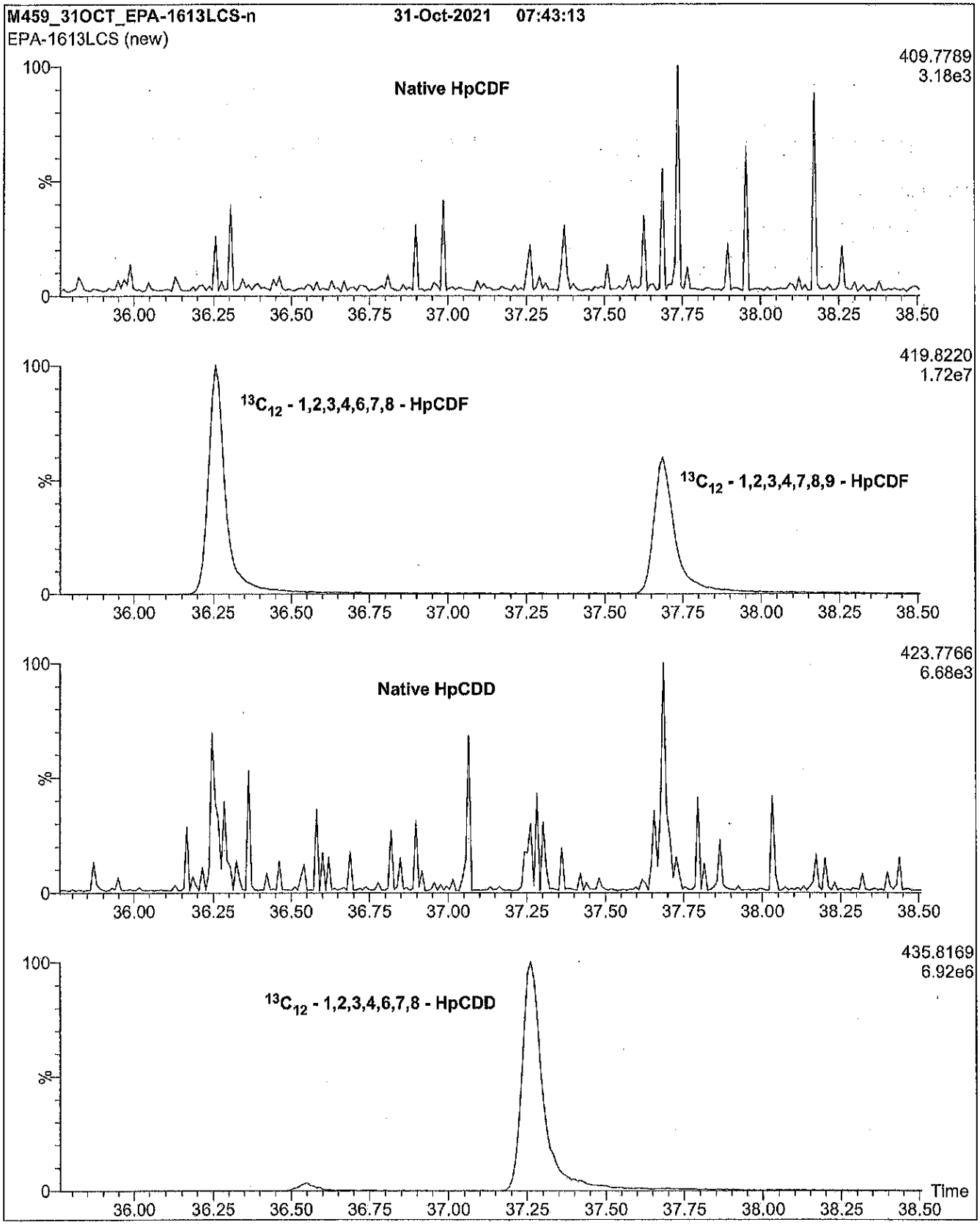
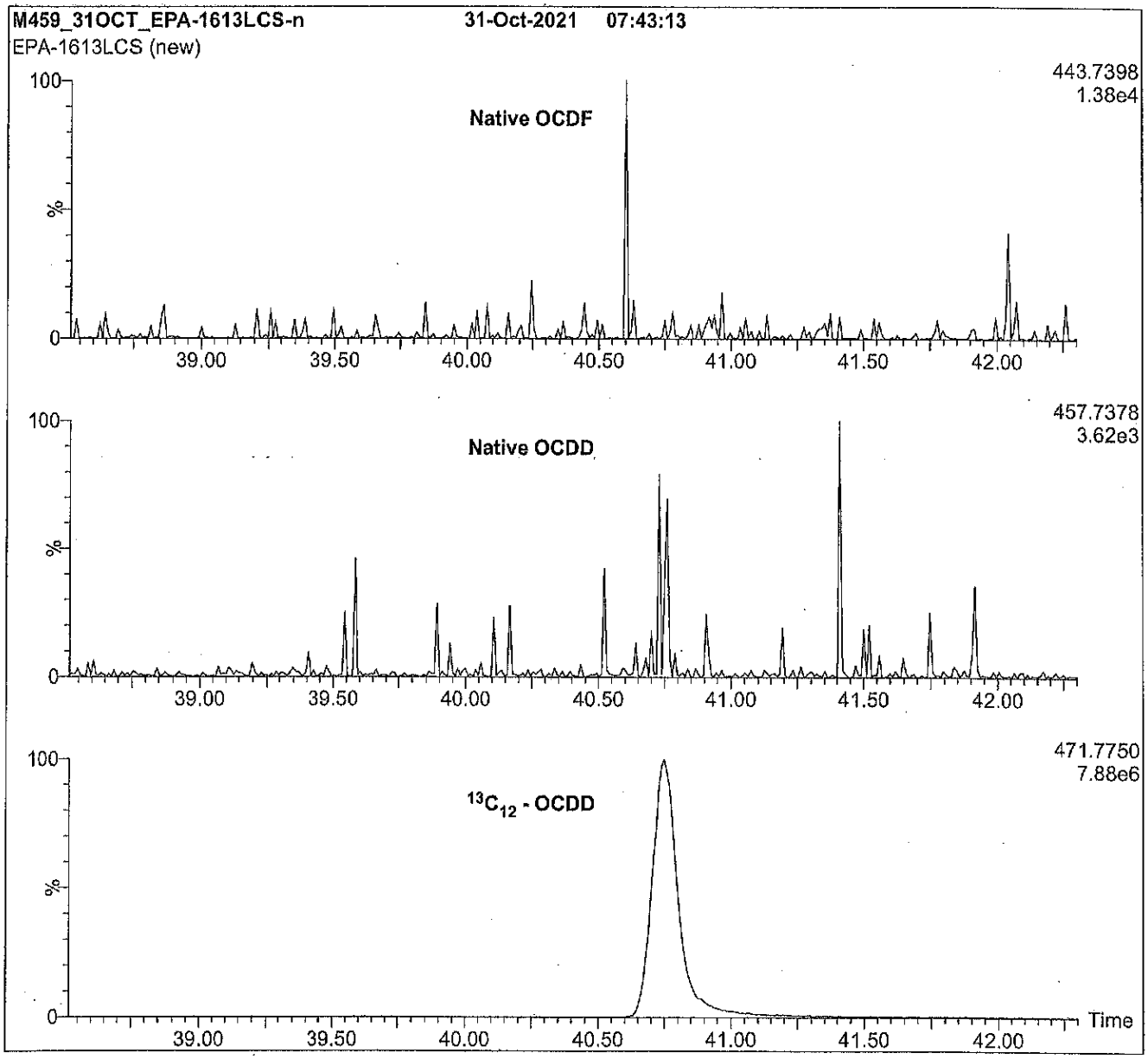


Figure 1: **EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)**



Conditions for Figure 1:

Agilent 6890N HRGC
Autospec Ultima HRMS

Chromatographic Conditions:

Column:	60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W		
Flow:	Constant at 1.4 mL/min	Oven:	150°C (1 min)
Injector:	280°C (Splitless Injection)		12°C/min to 200°C
Ionization:	EI+		3°C/min to 235°C
Detector:	280°C		235°C (8 min)
	SIR at 10,000 mass resolving power		8°C/min to 310°C
			310°C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

K9821

CS3WT

Calibration and Verification Solution (EPA-1613CS3) combined with Window Defining and 2,3,7,8-TCDD Resolution Testing Congeners

PRODUCT CODE:	CS3WT
LOT NUMBER:	CS3WT1021
SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	11/01/2021
LAST TESTED: (mm/dd/yyyy)	11/02/2021
EXPIRY DATE: (mm/dd/yyyy)	11/02/2028
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

DESCRIPTION:

CS3WT is a solution/mixture of native ($^{12}C_{12}$) and mass-labelled ($^{13}C_{12}$) polychlorinated dibenzo-*p*-dioxins (PCDDs) and dibenzofurans (PCDFs). The components and their concentrations are given in Tables A and B.

CS3WT is an HRGC/HRMS calibration solution that was designed and prepared to be used according to U.S. EPA Method 1613, Revision B, in place of EPA-1613CS3 (lot: 13CS31021). Additionally, it contains the PCDD and PCDF isomers required to set retention time windows as well as test and establish isomer specificity for 2,3,7,8-TCDD on a DB-5 (or equivalent) capillary column.

The individual ^{13}C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-($^{37}Cl_4$)tetrachlorodibenzo-*p*-dioxin has a chemical purity of >98% and an isotopic (^{37}Cl) purity of ≥95%. The individual native 2,3,7,8-substituted PCDD and PCDF congeners all have chemical purities of >98%; the other congeners (window defining and resolution testing) should only be considered semi-quantitative.

This current lot of CS3WT is to be used with the 1613 calibration solutions having the following lot numbers:

PRODUCT CODE	LOT NUMBER
EPA-1613CS1	13CS11021
EPA-1613CS2	13CS21021
EPA-1613CS3	13CS31021
EPA-1613CS4	13CS41021
EPA-1613CS5	13CS51021
EPA-1613CSL	13CSL1021
EPA-1613CS0.5	13CS0.51021

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Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

Form#:13, Issued 2004-11-10
Revision#:9, Revised 2020-12-23

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2,...x_n on which it depends is:

$$u_c(y(x_1, x_2, ...x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) has been assigned to the quantitative components in this product. A maximum combined percent relative uncertainty of ±20% has been assigned to the semi-quantitative components in this product.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ANSI National Accreditation Board ACCREDITED ISO17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **CS3WT; Quantitative Components and Concentrations (ng/mL, ± 5%, in nonane/4.5% toluene)**

Compound		Acronym	CAS #	Concentration (ng/mL)
Native PCDDs:	**Designation[a]**			
2,3,7,8-Tetrachlorodibenzo-*p*-dioxin		2,3,7,8-TCDD	1746-01-6	10.0
1,2,3,7,8-Pentachlorodibenzo-*p*-dioxin		1,2,3,7,8-PeCDD	40321-76-4	50.0
1,2,3,4,7,8-Hexachlorodibenzo-*p*-dioxin		1,2,3,4,7,8-HxCDD	39227-28-6	50.0
1,2,3,6,7,8-Hexachlorodibenzo-*p*-dioxin		1,2,3,6,7,8-HxCDD	57653-85-7	50.0
1,2,3,7,8,9-Hexachlorodibenzo-*p*-dioxin	Last HxCDD[b]	1,2,3,7,8,9-HxCDD	19408-74-3	50.0
1,2,3,4,6,7,8-Heptachlorodibenzo-*p*-dioxin	Last HpCDD	1,2,3,4,6,7,8-HpCDD	35822-46-9	50.0
Octachlorodibenzo-*p*-dioxin		OCDD	3268-87-9	100
Native PCDFs:	**Designation[a]**			
2,3,7,8-Tetrachlorodibenzofuran		2,3,7,8-TCDF	51207-31-9	10.0
1,2,3,7,8-Pentachlorodibenzofuran		1,2,3,7,8-PeCDF	57117-41-6	50.0
2,3,4,7,8-Pentachlorodibenzofuran		2,3,4,7,8-PeCDF	57117-31-4	50.0
1,2,3,4,7,8-Hexachlorodibenzofuran		1,2,3,4,7,8-HxCDF	70648-26-9	50.0
1,2,3,6,7,8-Hexachlorodibenzofuran		1,2,3,6,7,8-HxCDF	57117-44-9	50.0
1,2,3,7,8,9-Hexachlorodibenzofuran		1,2,3,7,8,9-HxCDF	72918-21-9	50.0
2,3,4,6,7,8-Hexachlorodibenzofuran		2,3,4,6,7,8-HxCDF	60851-34-5	50.0
1,2,3,4,6,7,8-Heptachlorodibenzofuran	First HpCDF[c]	1,2,3,4,6,7,8-HpCDF	67562-39-4	50.0
1,2,3,4,7,8,9-Heptachlorodibenzofuran	Last HpCDF	1,2,3,4,7,8,9-HpCDF	55673-89-7	50.0
Octachlorodibenzofuran		OCDF	39001-02-0	100
Mass-Labelled PCDDs:				
2,3,7,8-Tetrachloro($^{13}C_{12}$)dibenzo-*p*-dioxin		$^{13}C_{12}$-2,3,7,8-TCDD	76523-40-5	100
1,2,3,7,8-Pentachloro($^{13}C_{12}$)dibenzo-*p*-dioxin		$^{13}C_{12}$-1,2,3,7,8-PeCDD	109719-79-1	100
1,2,3,4,7,8-Hexachloro($^{13}C_{12}$)dibenzo-*p*-dioxin		$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	109719-80-4	100
1,2,3,6,7,8-Hexachloro($^{13}C_{12}$)dibenzo-*p*-dioxin		$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	109719-81-5	100
1,2,3,4,6,7,8-Heptachloro($^{13}C_{12}$)dibenzo-*p*-dioxin		$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	109719-83-7	100
Octachloro($^{13}C_{12}$)dibenzo-*p*-dioxin		$^{13}C_{12}$-OCDD	114423-97-1	200
Mass-Labelled PCDFs:				
2,3,7,8-Tetrachloro($^{13}C_{12}$)dibenzofuran		$^{13}C_{12}$-2,3,7,8-TCDF	89059-46-1	100
1,2,3,7,8-Pentachloro($^{13}C_{12}$)dibenzofuran		$^{13}C_{12}$-1,2,3,7,8-PeCDF	109719-77-9	100
2,3,4,7,8-Pentachloro($^{13}C_{12}$)dibenzofuran		$^{13}C_{12}$-2,3,4,7,8-PeCDF	116843-02-8	100
1,2,3,4,7,8-Hexachloro($^{13}C_{12}$)dibenzofuran		$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	114423-98-2	100
1,2,3,6,7,8-Hexachloro($^{13}C_{12}$)dibenzofuran		$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	116843-03-9	100
1,2,3,7,8,9-Hexachloro($^{13}C_{12}$)dibenzofuran		$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	116843-04-0	100
2,3,4,6,7,8-Hexachloro($^{13}C_{12}$)dibenzofuran		$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	116843-05-1	100
1,2,3,4,6,7,8-Heptachloro($^{13}C_{12}$)dibenzofuran		$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	109719-84-8	100
1,2,3,4,7,8,9-Heptachloro($^{13}C_{12}$)dibenzofuran		$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	109719-94-0	100
Cleanup Standard:				
2,3,7,8-($^{37}Cl_4$)Tetrachlorodibenzo-*p*-dioxin		$^{37}Cl_4$-2,3,7,8-TCDD	85508-50-5	10.0
Internal Standards:				
1,2,3,4-Tetrachloro($^{13}C_{12}$)dibenzo-*p*-dioxin		$^{13}C_{12}$-1,2,3,4-TCDD	114423-99-3	100
1,2,3,7,8,9-Hexachloro($^{13}C_{12}$)dibenzo-*p*-dioxin		$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	109719-82-6	100

[a] First/Last eluting isomer for the specified homologue group (see Table B for additional Window Definers).
[b, c] – see Table B for footnote.

Table B: **CS3WT; Semi-Quantitative Components and Concentrations (ng/mL, ± 20%, in nonane/4.5% toluene)**

Compound		Acronym	CAS #	Concentration (ng/mL)
PCDD Window Definers:	**Designation[a]**			
1,3,6,8-Tetrachlorodibenzo-*p*-dioxin	First TCDD	1,3,6,8-TCDD	33423-92-6	10.0
1,2,8,9-Tetrachlorodibenzo-*p*-dioxin	Last TCDD	1,2,8,9-TCDD	62470-54-6	10.0
1,2,4,6,8-/1,2,4,7,9-Pentachlorodibenzo-*p*-dioxin	First PeCDD	1,2,4,6,8-PeCDD 1,2,4,7,9-PeCDD	71998-76-0 82291-37-0	50.0[d]
1,2,3,8,9-Pentachlorodibenzo-*p*-dioxin	Last PeCDD	1,2,3,8,9-PeCDD	71925-18-3	50.0
1,2,4,6,7,9-Hexachlorodibenzo-*p*-dioxin	First HxCDD	1,2,4,6,7,9-HxCDD	39227-62-8	50.0
1,2,3,4,6,7,9-Heptachlorodibenzo-*p*-dioxin	First HpCDD	1,2,3,4,6,7,9-HpCDD	58200-70-7	50.0
PCDF Window Definers:	**Designation[a]**			
1,3,6,8-Tetrachlorodibenzofuran	First TCDF	1,3,6,8-TCDF	71998-72-6	10.0
1,2,8,9-Tetrachlorodibenzofuran	Last TCDF	1,2,8,9-TCDF	70648-22-5	10.0
1,3,4,6,8-Pentachlorodibenzofuran	First PeCDF	1,3,4,6,8-PeCDF	83704-55-6	50.0
1,2,3,8,9-Pentachlorodibenzofuran	Last PeCDF	1,2,3,8,9-PeCDF	83704-54-5	50.0
1,2,3,4,6,8-Hexachlorodibenzofuran	First HxCDF	1,2,3,4,6,8-HxCDF	69698-60-8	50.0
2,3,7,8-TCDD Resolution Testing Isomers:				
1,2,3,4-Tetrachlorodibenzo-*p*-dioxin		1,2,3,4-TCDD	30746-58-8	5.00
1,2,3,7-/1,2,3,8-Tetrachlorodibenzo-*p*-dioxin		1,2,3,7-TCDD 1,2,3,8-TCDD	67028-18-6 53555-02-5	5.00[d]
1,2,3,9-Tetrachlorodibenzo-*p*-dioxin		1,2,3,9-TCDD	71669-26-6	10.0

[a] First/Last eluting isomer for the specified homologue group (see Table A for additional Window Definers).

[b] 1,2,3,4,6,7-HxCDD (last eluting HxCDD) not included; coelutes with 1,2,3,7,8,9-HxCDD on a 60 m DB-5 column. Use 1,2,3,7,8,9-HxCDD (see Table A) and 1,2,3,4,6,7,9-HpCDD to approximate the end of the HxCDD window.

[c] 1,2,3,4,8,9-HxCDF (last eluting HxCDF) not included; can interfere with 1,2,3,7,8,9-HxCDF on a 60 m DB-5 column. Use 1,2,3,4,6,7,8-HpCDF (see Table A) to approximate the end of the HxCDF window.

[d] Total concentration of isomers.

Certified By: _____ **Date:** 11/05/2021 (mm/dd/yyyy)

B.G. Chittim, General Manager

Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**

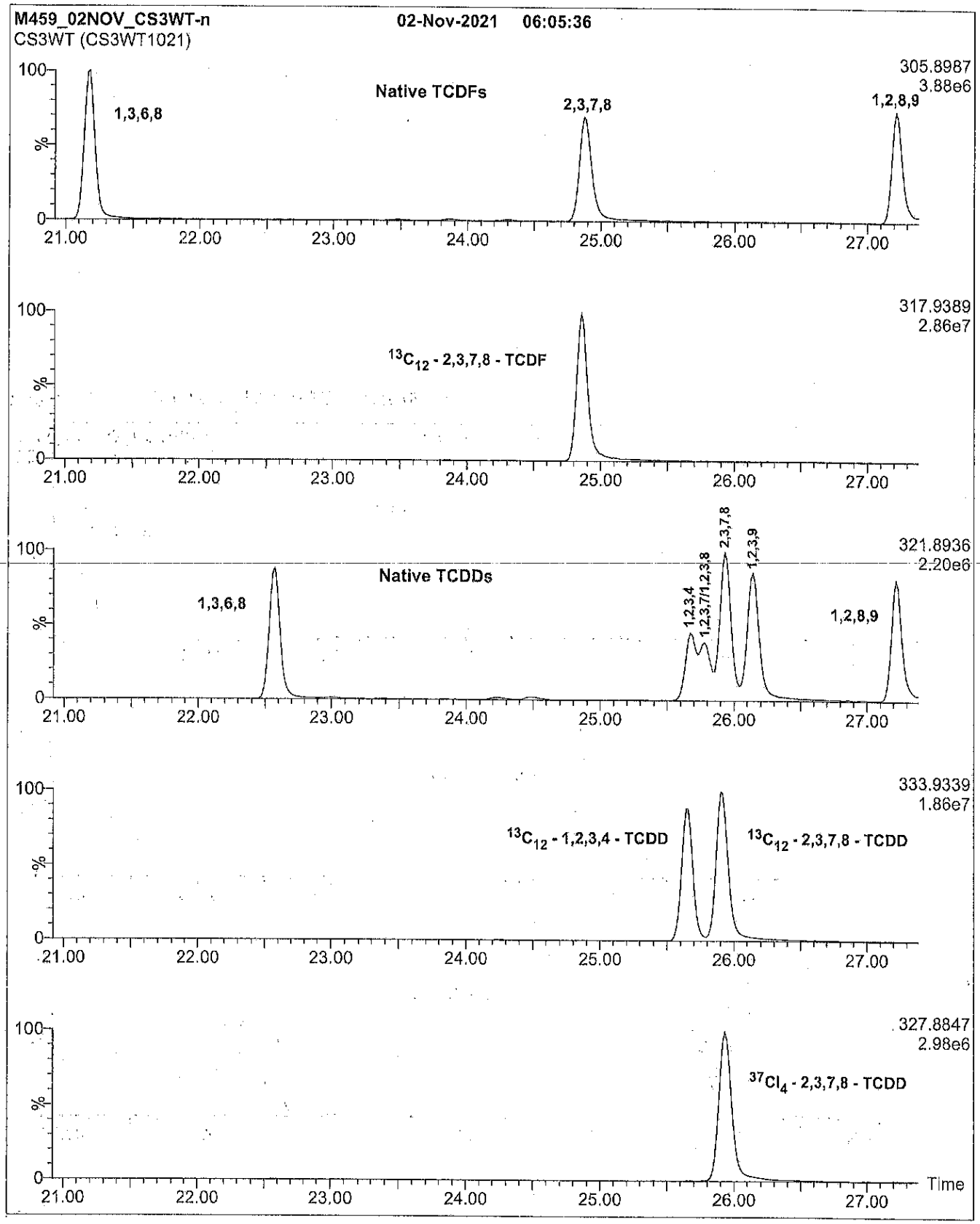


Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**

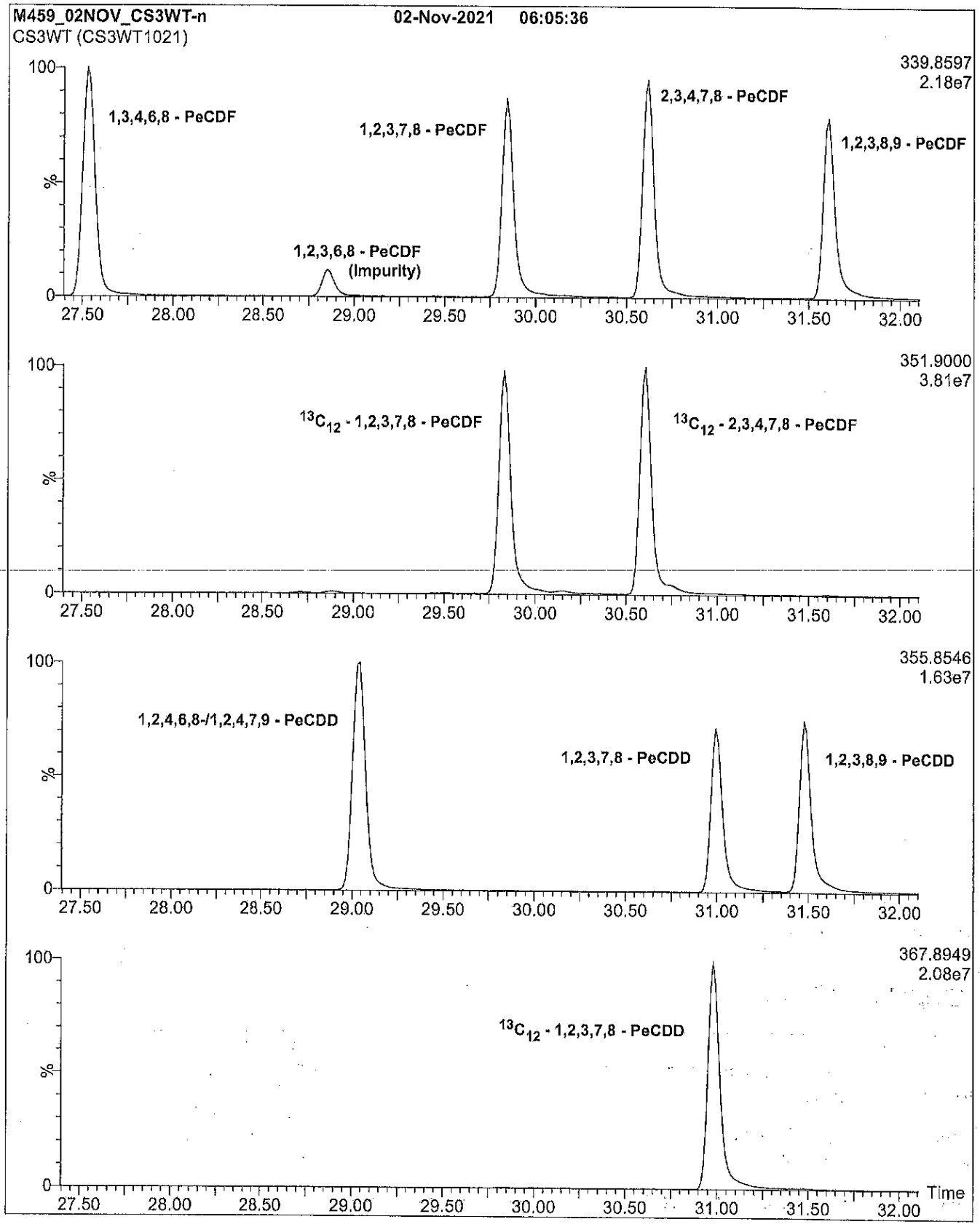


Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**

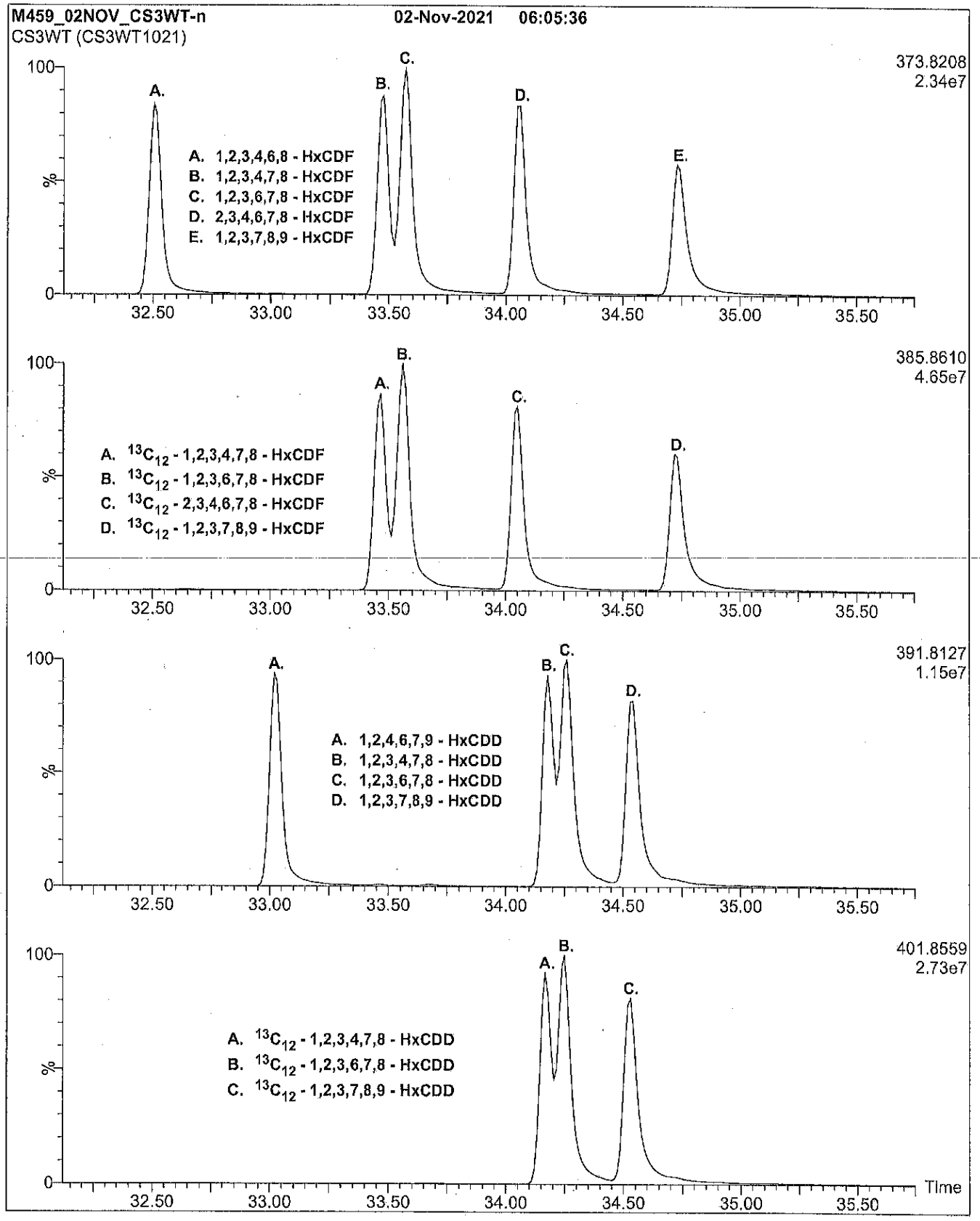


Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**

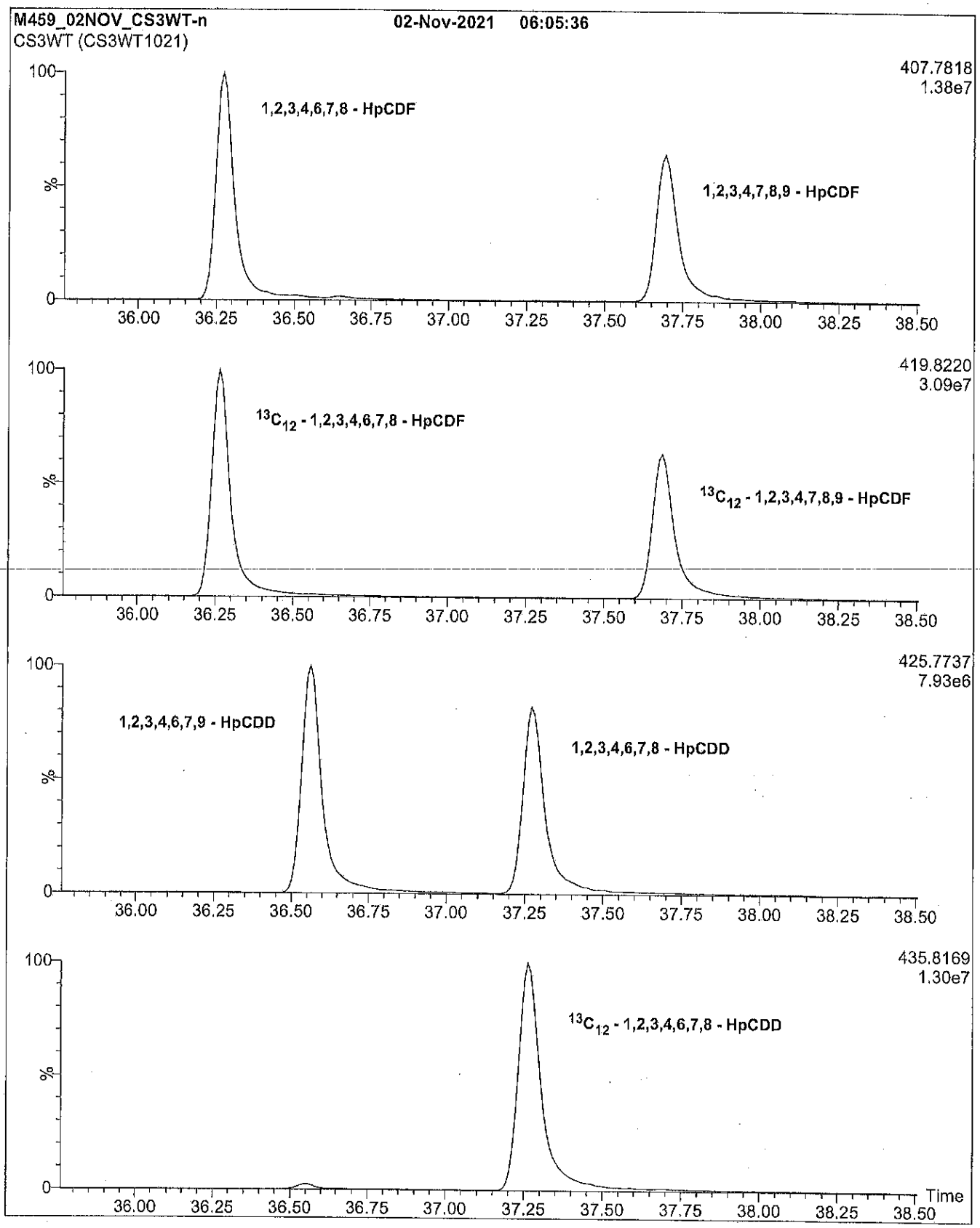
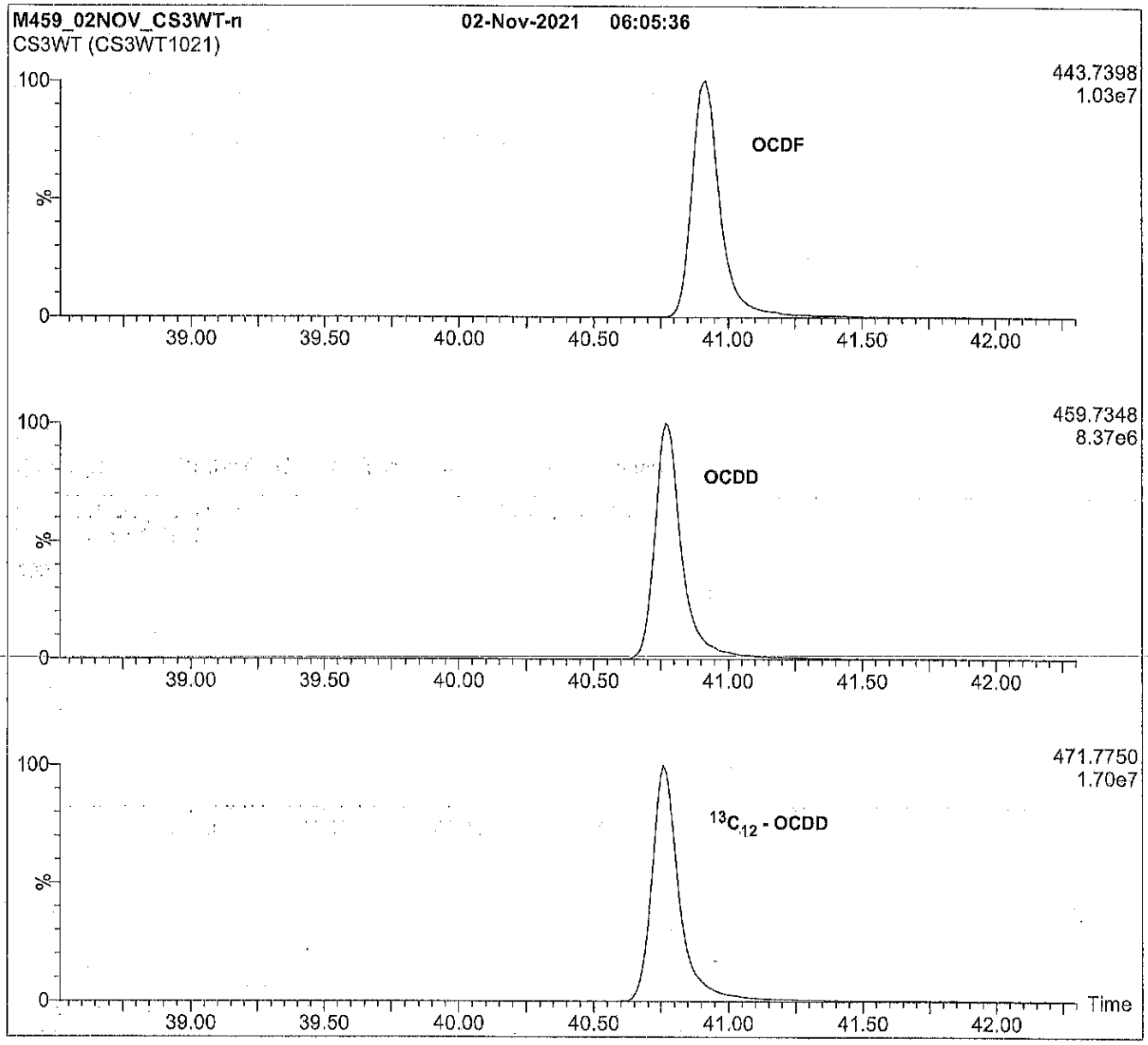


Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**



Conditions for Figure 1:

Agilent 6890N HRGC
Autospec Ultima HRMS

Chromatographic Conditions:

Column:	60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W		
Flow:	Constant at 1.4 mL/min	Oven:	150°C (1 min)
Injector:	280°C (Splitless Injection)		12°C/min to 200°C
Ionization:	EI+		3°C/min to 235°C
Detector:	280°C		235°C (8 min)
	SIR at 10,000 mass resolving power		8°C/min to 310°C
			310°C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613LCS

U.S. EPA Method 1613
Labelled Compound Stock Solution

PRODUCT CODE:	EPA-1613LCS
LOT NUMBER:	13LCS1021
SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/29/2021
LAST TESTED: (mm/dd/yyyy)	10/31/2021
EXPIRY DATE: (mm/dd/yyyy)	10/31/2028
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

K 9985
JK Reed
10/27/22

DESCRIPTION:

EPA-1613LCS is a solution/mixture of mass-labelled ($^{13}C_{12}$) polychlorinated dibenzo-*p*-dioxins (PCDDs) and dibenzofurans (PCDFs). The components and their concentrations are given in Table A.

EPA-1613LCS was designed and prepared to be used according to U.S. EPA Method 1613, Revision B.

The individual ^{13}C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations
Figure 1: HRGC/HRMS Data (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots, x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ANSI National Accreditation Board ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **EPA-1613LCS; Components and Concentrations (ng/mL, ± 5% in nonane/3.2% toluene)**

Compound	Acronym	CAS #	Concentration (ng/mL)
Mass-Labelled PCDDs:			
2,3,7,8-Tetrachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-2,3,7,8-TCDD	76523-40-5	100
1,2,3,7,8-Pentachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-1,2,3,7,8-PeCDD	109719-79-1	100
1,2,3,4,7,8-Hexachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	109719-80-4	100
1,2,3,6,7,8-Hexachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	109719-81-5	100
1,2,3,4,6,7,8-Heptachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	109719-83-7	100
Octachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-OCDD	114423-97-1	200
Mass-Labelled PCDFs:			
2,3,7,8-Tetrachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-2,3,7,8-TCDF	89059-46-1	100
1,2,3,7,8-Pentachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,7,8-PeCDF	109719-77-9	100
2,3,4,7,8-Pentachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-2,3,4,7,8-PeCDF	116843-02-8	100
1,2,3,4,7,8-Hexachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	114423-98-2	100
1,2,3,6,7,8-Hexachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	116843-03-9	100
1,2,3,7,8,9-Hexachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	116843-04-0	100
2,3,4,6,7,8-Hexachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	116843-05-1	100
1,2,3,4,6,7,8-Heptachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	109719-84-8	100
1,2,3,4,7,8,9-Heptachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	109719-94-0	100

Certified By: _____ **Date:** 11/05/2021
(mm/dd/yyyy)
B.G. Chittim, General Manager

Figure 1: **EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)**

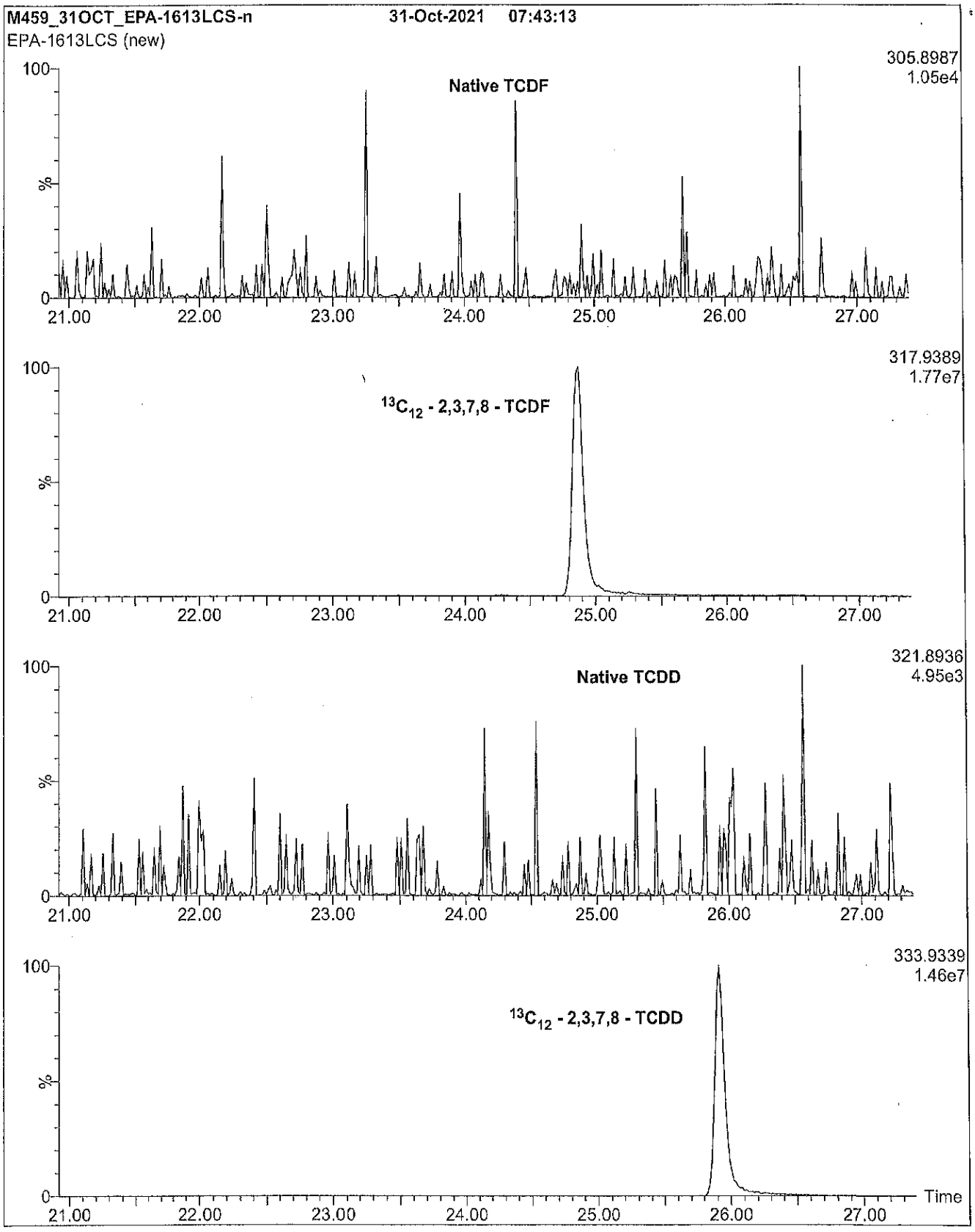


Figure 1: EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)

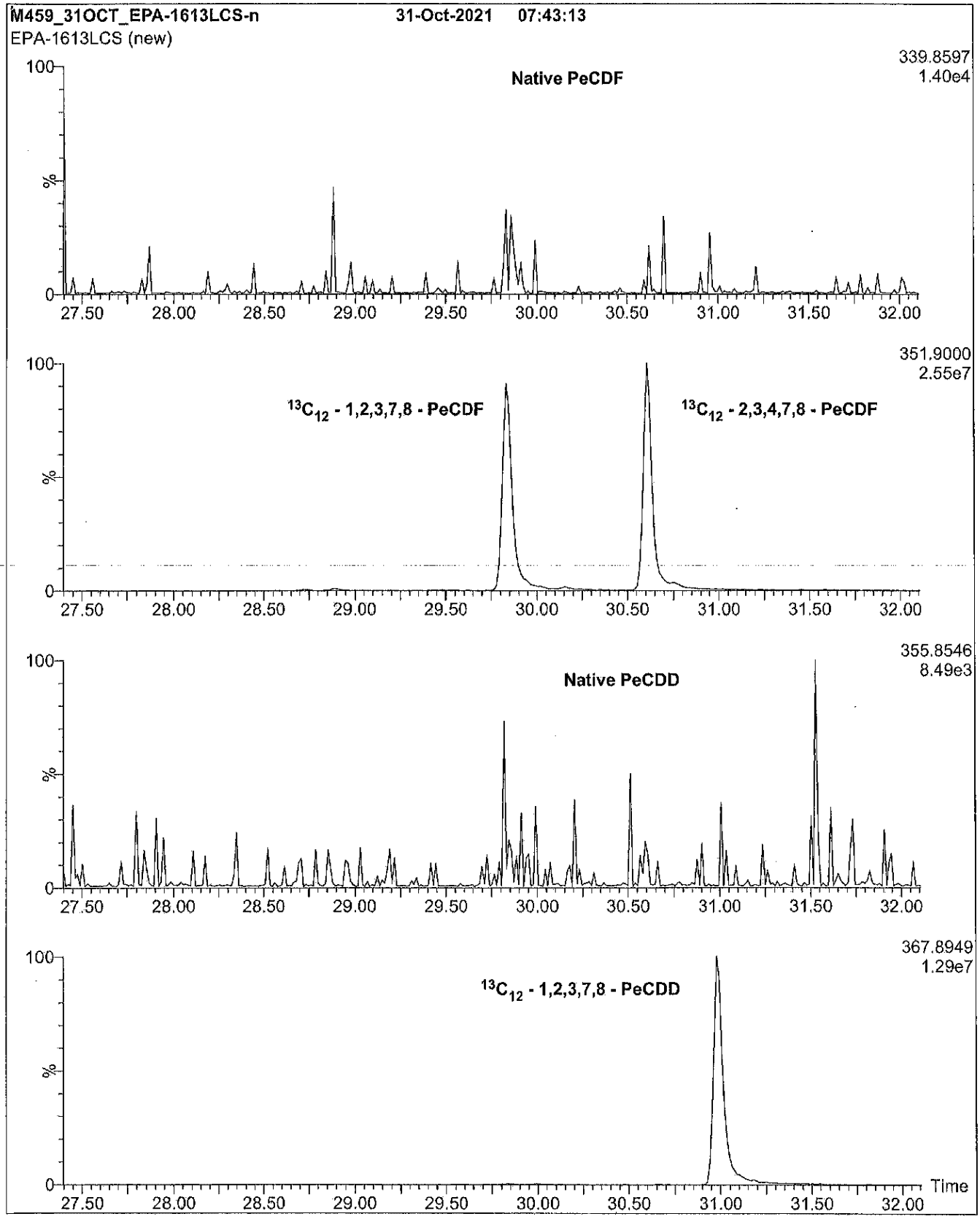


Figure 1: **EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)**

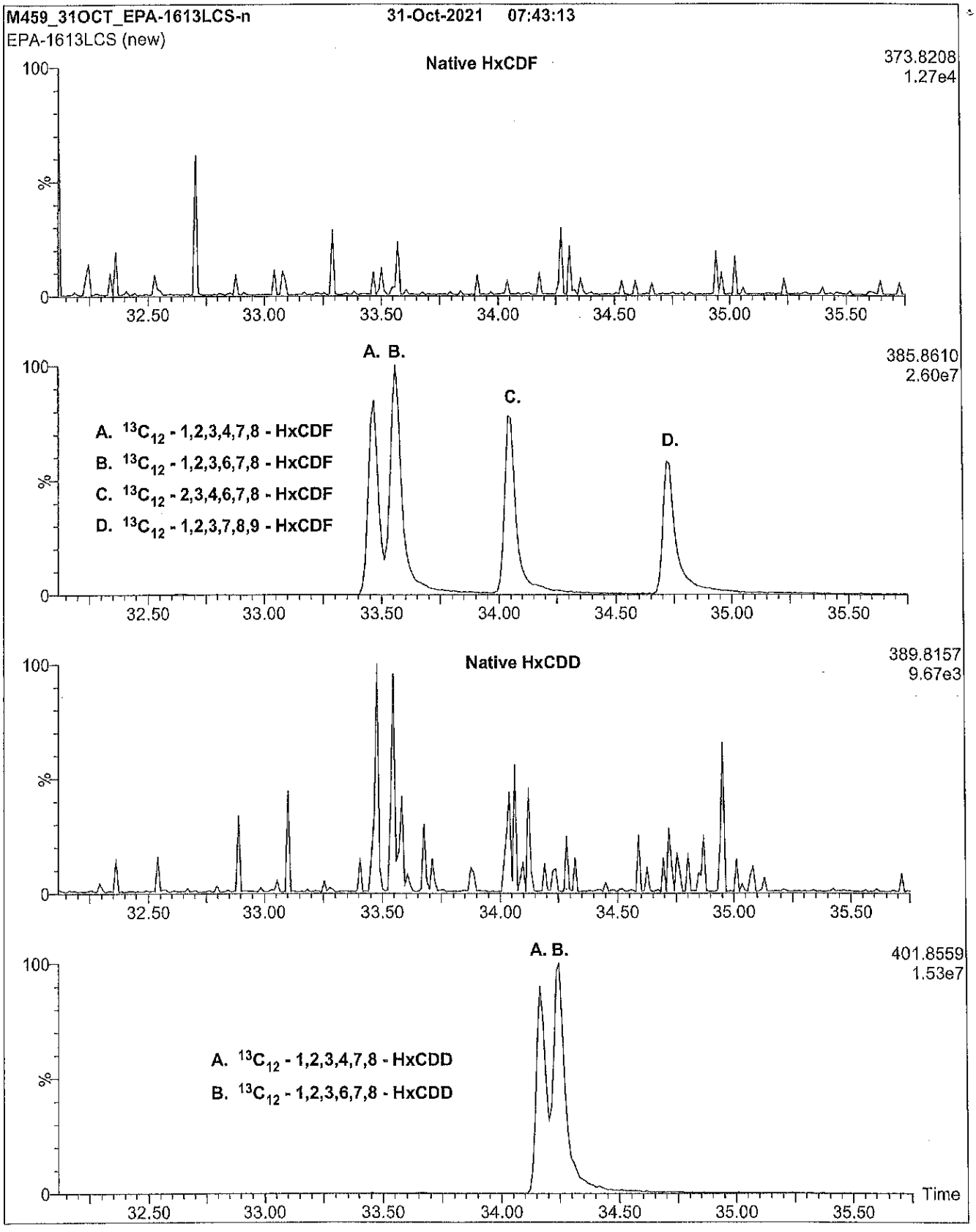


Figure 1: **EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)**

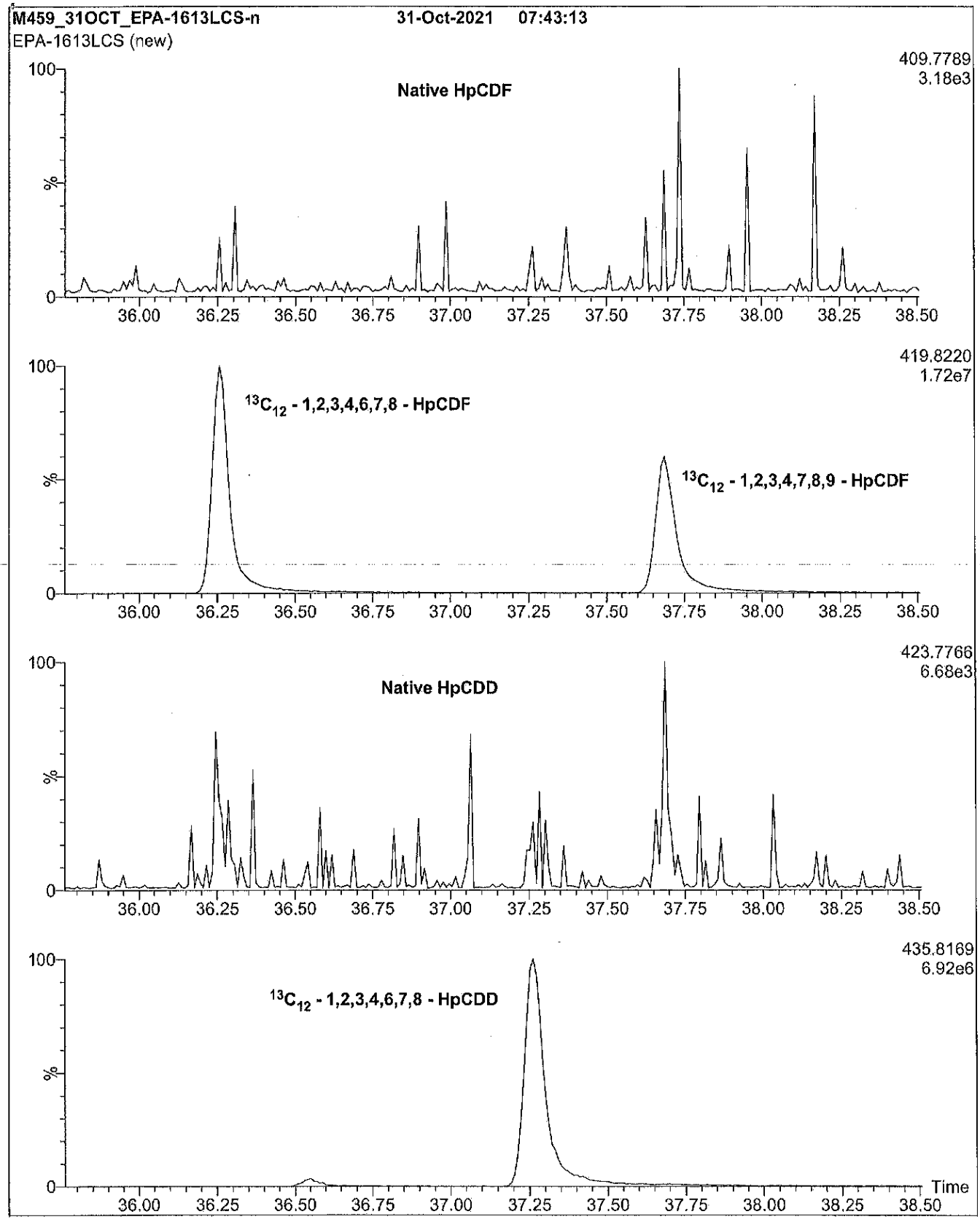
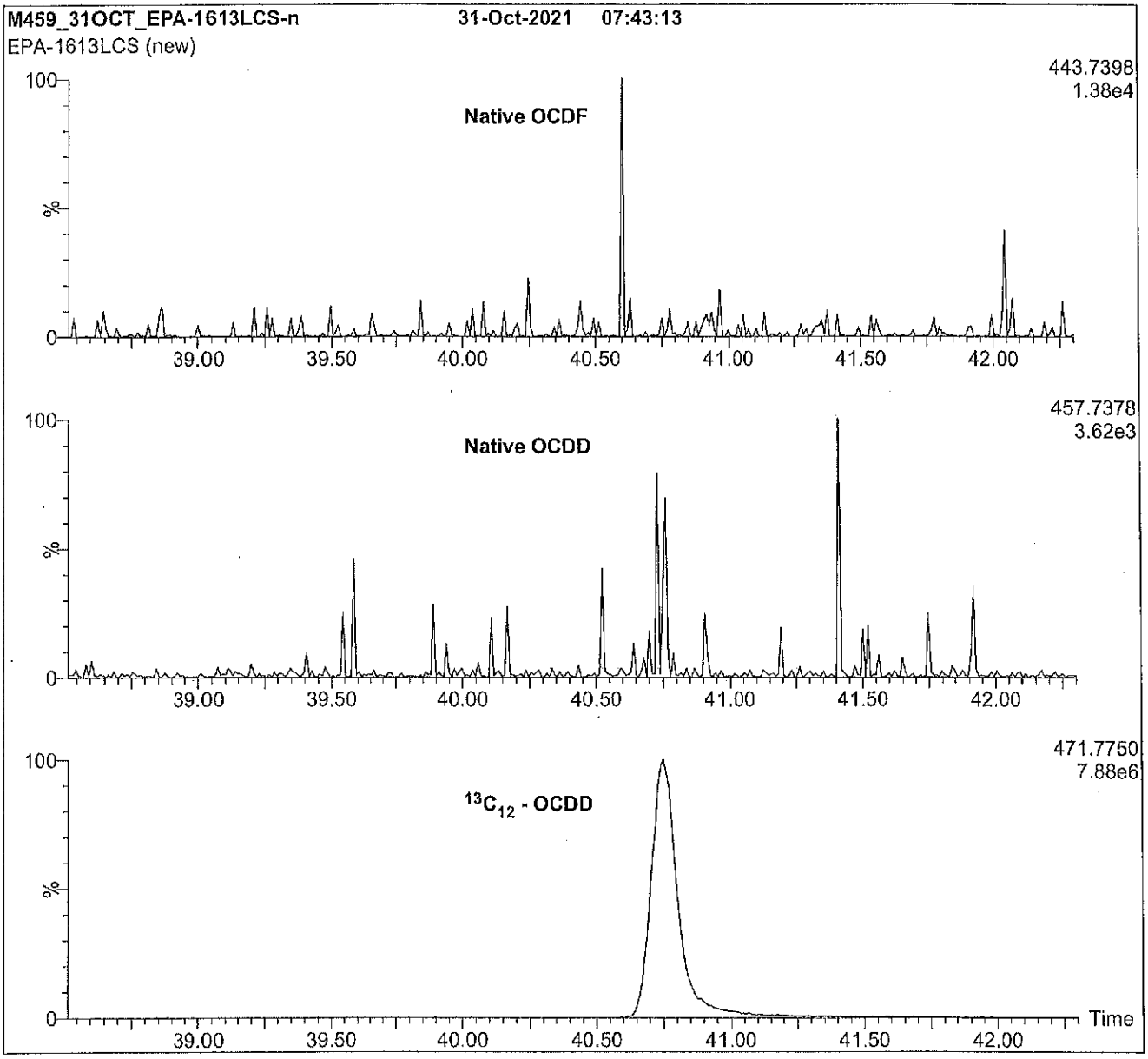


Figure 1: **EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)**



Conditions for Figure 1:

Agilent 6890N HRGC
Autospec Ultima HRMS

Chromatographic Conditions:

Column:	60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W		
Flow:	Constant at 1.4 mL/min	Oven:	150°C (1 min)
Injector:	280°C (Splitless Injection)		12°C/min to 200°C
Ionization:	EI+		3°C/min to 235°C
Detector:	280°C		235°C (8 min)
	SIR at 10,000 mass resolving power		8°C/min to 310°C
			310°C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613CSS

U.S. EPA Method 1613 Cleanup Standard Spiking Solution

PRODUCT CODE:	EPA-1613CSS
LOT NUMBER:	13CSS1021
SOLVENT(S):	Nonane
DATE PREPARED: (mm/dd/yyyy)	10/29/2021
LAST TESTED: (mm/dd/yyyy)	10/31/2021
EXPIRY DATE: (mm/dd/yyyy)	10/31/2028
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

K 9986
Recd. 10/27/22 JR

DESCRIPTION:

EPA-1613CSS contains 2,3,7,8-($^{37}Cl_4$)tetrachlorodibenzo-*p*-dioxin at the concentration given in Table A.

EPA-1613CSS was designed and prepared to be used according to U.S. EPA Method 1613, Revision B.

2,3,7,8-($^{37}Cl_4$)Tetrachlorodibenzo-*p*-dioxin has a chemical purity of >98% and an isotopic (^{37}Cl) purity of ≥95%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution
Figure 1: HRGC/HRMS Data (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 2 for further details.

Table A: **EPA-1613CSS; Components and Concentrations (ng/mL, ± 5% in nonane)**

Compound	Acronym	CAS #	Concentration (ng/mL)
2,3,7,8-($^{37}Cl_4$)Tetrachlorodibenzo-*p*-dioxin	$^{37}Cl_4$-2,3,7,8-TCDD	85508-50-5	40.0

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: _____ **Date:** 11/05/2021 (mm/dd/yyyy)
B.G. Chittim, General Manager

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

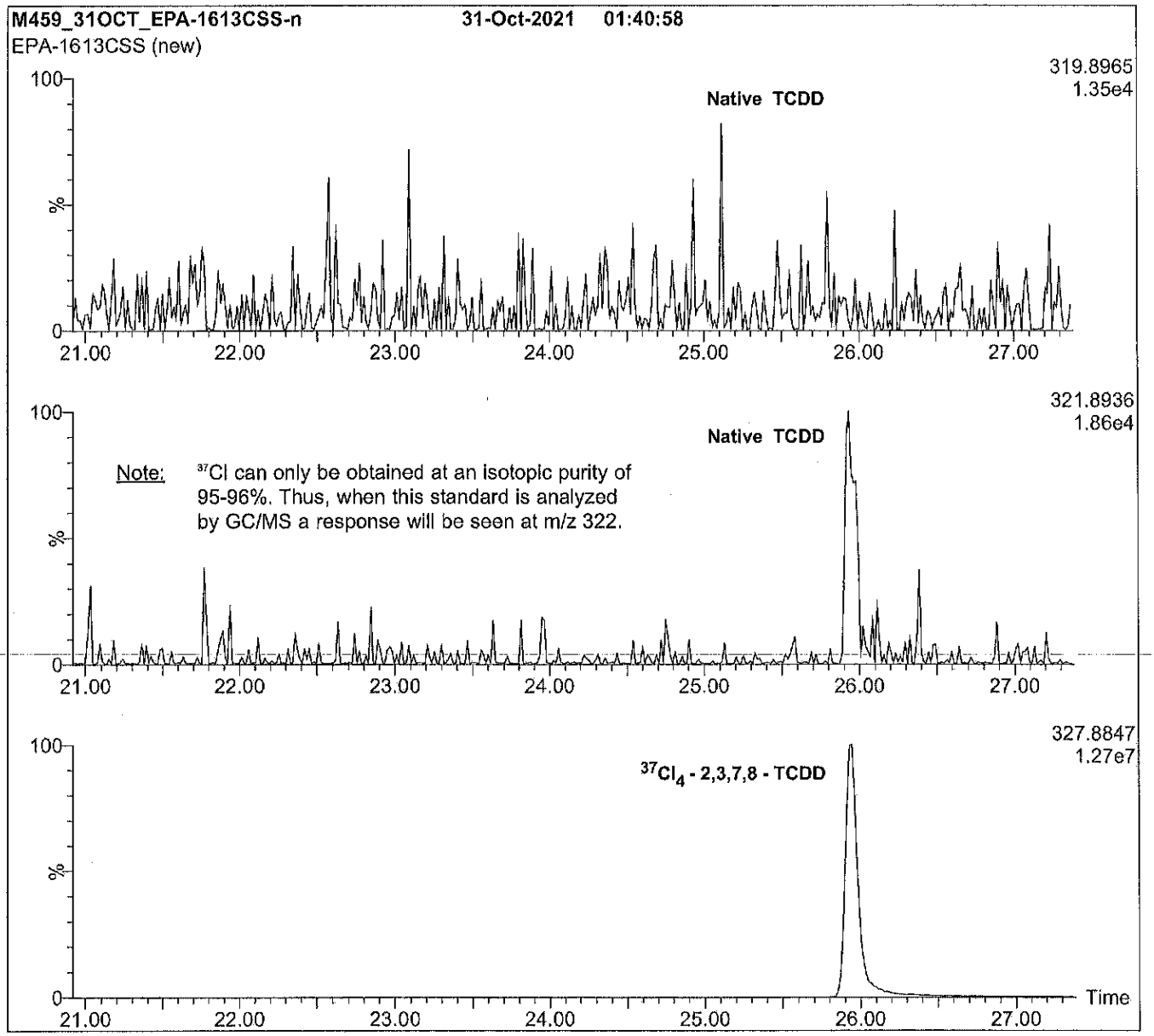
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ANSI National Accreditation Board ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: **EPA-1613CSS; HRGC/HRMS Data (60 m DB-5 Column)**



Conditions for Figure 1:

Agilent 6890N HRGC
Autospec Ultima HRMS

Chromatographic Conditions:

Column:	60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W		
Flow:	Constant at 1.4 mL/min	Oven:	150°C (1 min)
Injector:	280°C (Splitless Injection)		12°C/min to 200°C
Ionization:	EI+		3°C/min to 235°C
Detector:	280°C		235°C (8 min)
	SIR at 10,000 mass resolving power		8°C/min to 310°C
			310°C (8 min)

Recipient Copy

CHAIN-OF-CUSTODY RECORD

COC No. 15600

Order Number: CB015015 Date Shipped: 1/31/2023 AirBill No(s): 633163298570

From: QATS LABORATORY
2700 CHANDLER AVENUE, BLDG. B
LAS VEGAS, NV 89120
PHONE: 1-702-895-8712

To: SUE DUNNIHOO
ANALYTICAL RESOURCES INC.
4611 S. 134TH PLACE SUITE 100
TUKWILA WA 98168
250-695-6207

Sample ID	Qty	Description/Remarks	→ Catalogue Number
PSRM0172 - L441373	1	PUGET SOUND SEDIMENT RM	PS-SRM
PSRM0173 - L441374	1	PUGET SOUND SEDIMENT RM	PS-SRM
PSRM0174 - ~~L441374~~ L441375 JS 02/06/23	1	PUGET SOUND SEDIMENT RM	PS-SRM

01/31/2023

PUGET SOUND SRM FOR THE DUWAMISH AOC5 PROJECT

Please use the enclosed Sample Preparation Instructions. If catalogue number(s) are listed at the top of the Sample Preparation Instructions use the Sample Preparation Instructions with catalogue number(s) matching the catalogue number(s) of each of the samples listed above.

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	(1400) 01/31/2023	Jacob Shafer	02/06/23 1415
Custody Seal(s): Present/Absent	Remarks:		
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

Report No. 00, 9/11/2014 *SMP Version 3.3*

Analytical Resources, LLC
Analytical Chemists and Consultants

Analytical Standard Record

Standard ID: L002084

Printed: 3/2/2023 8:59:18AM

Description:	Dioxin ISC Mix	Expires:	24-Feb-2024
Standard Type:	Other	Prepared:	24-Feb-2023
Solvent:	Nonane	Prepared By:	Peter Kepler
Final Volume (mls):	1	Department:	HRGCMS
Vials:	1	Last Edit:	24-Feb-2023 11:19 by PK
Vendor:	NA	Lot #:	1234
Vendor Catalog #:			

Comments

Stock: H9902: 2378-TCDF, 3467-TCDF, 2348-TCDF, 1278-TCDD, 2378-TCDD. each @ 1000 ng/mL

10 ul to 1 mL FV in Nonane. Final Conc = 10 ng/mL. Analytes and units not available in Element.

Analyte	CAS Number	Concentration	Units
2,3,7,8-TCDF	51207-31-9	10	ug/mL
2,3,7,8-TCDD	1746-01-6	10	ug/mL

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED

Total Metals

LDW23-SS1254

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-01 B	SDG:	23A0171
Sampled:	12/08/22 08:39	Prepared:	02/24/23 16:23	File ID:	XDT_m2230306-184
% Solids:	37.79	Preparation:	SWN EPA 3050B	Analyzed:	03/07/23 04:17
Batch:	BLB0518	Sequence:	SLC0078	Initial/Final:	1.006 g Wet / 50 mL
Instrument:	ICPMS1			Calibration:	GC00021

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	18.0	20	0.10	0.53	
7440-43-9	Cadmium	0.47	20	0.08	0.26	
7440-50-8	Copper	66.2	20	0.46	1.32	
7440-66-6	Zinc	124	20	7.7	15.8	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED

Total Metals

LDW23-SS1257

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-02 B	SDG:	23A0171
Sampled:	12/08/22 09:16	Prepared:	02/24/23 16:23	File ID:	XDT_m2230306-185
% Solids:	34.26	Preparation:	SWN EPA 3050B	Analyzed:	03/07/23 04:21
Batch:	BLB0518	Sequence:	SLC0078	Initial/Final:	1.003 g Wet / 50 mL
Instrument:	ICPMS1			Calibration:	GC00021

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	23.7	20	0.11	0.58	
7440-43-9	Cadmium	0.54	20	0.09	0.29	
7440-50-8	Copper	80.8	20	0.51	1.46	
7440-66-6	Zinc	152	20	8.5	17.5	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED

Total Metals

LDW23-SS1262

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-03 B	SDG:	23A0171
Sampled:	12/08/22 10:36	Prepared:	02/24/23 16:23	File ID:	XDT_m2230306-186
% Solids:	36.08	Preparation:	SWN EPA 3050B	Analyzed:	03/07/23 04:26
Batch:	BLB0518	Sequence:	SLC0078	Initial/Final:	1.054 g Wet / 50 mL
Instrument:	ICPMS1			Calibration:	GC00021

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	20.2	20	0.10	0.53	
7440-43-9	Cadmium	0.50	20	0.08	0.26	
7440-50-8	Copper	72.7	20	0.46	1.31	
7440-66-6	Zinc	143	20	7.7	15.8	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED

Total Metals

LDW23-SS1245

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-04 B	SDG:	23A0171
Sampled:	12/08/22 11:14	Prepared:	02/24/23 16:23	File ID:	XDT_m2230306-187
% Solids:	39.48	Preparation:	SWN EPA 3050B	Analyzed:	03/07/23 04:30
Batch:	BLB0518	Sequence:	SLC0078	Initial/Final:	1.064 g Wet / 50 mL
Instrument:	ICPMS1			Calibration:	GC00021

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	16.0	20	0.09	0.48	
7440-43-9	Cadmium	0.42	20	0.07	0.24	
7440-50-8	Copper	60.1	20	0.41	1.19	
7440-66-6	Zinc	119	20	7.0	14.3	

PREPARATION BATCH SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC SDG: 23A0171

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

Batch: BLB0518 Batch Matrix: Solid Preparation: SWN EPA 3050B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1254	23A0171-01	XDT_m2230306-184	02/24/23 16:23	
LDW23-SS1257	23A0171-02	XDT_m2230306-185	02/24/23 16:23	
LDW23-SS1262	23A0171-03	XDT_m2230306-186	02/24/23 16:23	
LDW23-SS1245	23A0171-04	XDT_m2230306-187	02/24/23 16:23	
Blank	BLB0518-BLK1	XDT_m2230301-060	02/24/23 16:23	
Blank	BLB0518-BLK2	XDT_m2230306-081	02/24/23 16:23	Added 3/7/2023 by MCB
LCS	BLB0518-BS1	XDT_m2230301-061	02/24/23 16:23	
LCS	BLB0518-BS2	XDT_m2230306-082	02/24/23 16:23	Added 3/7/2023 by MCB

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Digestion Log

Analyst: ML Date: 02/24/23 Time: 1100-1623 Balance ID: 16

Matrix: Soil Block ID: 3 Block Temp: 95° Thermometer: 20-4

ARI Sample ID	Btl #	pH<2	Prep Code: SNN Initial Wt (g) Vol (mL)	Prep Code: SNN Final Vol (mL)	Prep Code: Initial Wt (g) Vol (mL)	Prep Code: Final Vol (mL)	Comments
23A0171-01	D		1.072	1.072			
23A0032-01	B		1.070 (2)	~~1.069~~			
-02	C		1.029	1.029			
-03	↓		1.026	1.026			
-04	A		1.009	1.009			
-05	↓		1.015	~~1.014~~ (1)			
-06	B		1.014	1.014			
-07	↓		1.093	1.093			
-08	C		1.022	1.022			
-11	B		1.029	1.029			
23A0171-01			1.006	1.006			
-02			1.003	1.003			
-03			1.054	1.054			
-04			1.064	1.064			
23B0051-01	A		1.074	1.071			
-02			1.084	1.084			
-03			1.041	1.041			
23B0276-01	C		1.034	1.034			
BLB0518-bla	—		—	—			
-bs1	—		—	—			
-Dup1	—		1.070	1.070			23A0032-01 ↓
-MS1	—		1.075	1.075			
-MSD1	—		1.073	1.073			
-Semi	—		1.001	1.001	(3)		
—	—	—	—	—	ML 02/24/23	—	—
—	—	—	—	—	—	—	—

Chemical/Reagent ID:

HNO_3: L492 1:1 HNO_3: L1314 HCl: — H_2O_2: K110560

Tube Lot#: 220805 Boiling Chip Lot#: — (DoD Only)

(1) 1.015 (2) 1.070

(3) 50ml

Form I

METHOD BLANK DATA SHEET

EPA 6020B UCT-KED

Total Metals

Blank

Laboratory: Analytical Resources, LLC | SDG: 23A0171

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

Batch: BLB0518 | Laboratory ID: BLB0518-BLK1 | Prepared: 02/24/23 16:23

Matrix: Solid | Preparation: SWN EPA 3050B | Analyzed: 03/01/23 21:11

Sequence: SLC0028 | Calibration: GC00005 | Instrument: ICPMS2

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic-75a	ND	20	0.04	0.20	U
7440-50-8	Copper-63	ND	20	0.17	0.50	U
7440-66-6	Zinc-66	ND	20	2.9	6.0	U

Form I

METHOD BLANK DATA SHEET

EPA 6020B UCT-KED

Total Metals

Blank

Laboratory: Analytical Resources, LLC | SDG: 23A0171

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

Batch: BLB0518 | Laboratory ID: BLB0518-BLK2 | Prepared: 02/24/23 16:23

Matrix: Solid | Preparation: SWN EPA 3050B | Analyzed: 03/06/23 20:01

Sequence: SLC0078 | Calibration: GC00021 | Instrument: ICPMS1

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7440-43-9	Cadmium-111	ND	20	0.03	0.10	U

LCS / LCS DUPLICATE RECOVERY

EPA 6020B UCT-KED

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	03/01/23 21:16
Batch:	BLB0518	Laboratory ID:	BLB0518-BS1
Preparation:	SWN EPA 3050B	Sequence Name:	LCS
Initial/Final:	1 g / 50 mL		

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Arsenic-75a	25.0	24.8		99.2	80 - 120
Copper-63	25.0	25.5		102	80 - 120
Zinc-66	80.0	80.0		100	80 - 120

* Indicates values outside of QC limits

* Indicates values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 6020B UCT-KED

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	03/06/23 20:05
Batch:	BLB0518	Laboratory ID:	BLB0518-BS2
Preparation:	SWN EPA 3050B	Sequence Name:	LCS
Initial/Final:	1 g / 50 mL		

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Cadmium-111	25.0	24.8		99.0	80 - 120

* Indicates values outside of QC limits

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00005	Instrument:	ICPMS2
Calibration Date:	03/01/2023 16:36		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Silver-107	0	0	0.2	10830	10	11072.9	20	10736.5	50	10448.78	100	10433.77
Chromium-52	0	0	0.5	40794	10	17610.2	20	16461.65	50	15736.4	100	16030.98
Chromium-53	0	0	0.5	1918	10	1880.8	20	1827.7	50	1793.9	100	1844.82
Lead-208	0	0	0.1	38050	10	38598.4	20	37718.45	50	36783.7	100	36762.39

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory: Analytical Resources, LLC
Instrument: ICPMS2
Calibration: GC00005
Calibration Date: 3/1/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Silver-107	8920.325	49.1	0.9999		0.998	
Chromium-52	17772.21	73.6	0.9998		0.998	
Chromium-53	1544.203	49.1	0.9998		0.998	
Lead-208	31318.82	49.0	1.0000		0.998	

INITIAL CALIBRATION DATA

EPA 6020B UCT-KED

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00005	Instrument:	ICPMS2
Calibration Date:	03/01/2023 16:36		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Arsenic-75a	0	0	0.2	170	10	170	20	166.05	50	163.18	100	163.91
Copper-63	0	0	0.5	2590	10	2703.2	20	2615.2	50	2552.64	100	2545.04
Copper-65	0	0	0.5	1338	10	1306.9	20	1279.35	50	1254.66	100	1267.76
Zinc-66	0	0	6	335.3333	10	341.6	20	335.3	50	324.4	100	322.91
Zinc-67	0	0	6	51.5	10	57.3	20	53.15	50	55.06	100	53.29

INITIAL CALIBRATION DATA

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

Instrument: ICPMS2

Calibration: GC00005

Calibration Date: 3/1/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Arsenic-75a	138.8567	49.0	1.0000		0.998	
Copper-63	2167.68	49.1	1.0000		0.998	
Copper-65	1074.445	49.1	1.0000		0.998	
Zinc-66	276.5906	49.1	1.0000		0.998	
Zinc-67	45.05	49.2	0.9997		0.998	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/1/23 **Analyst:** SD **Sequence:** SLC0028 **Cal:** GC00005

All corrections made by analyst unless otherwise noted. SD 3/1/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
	✓	SEQ -CAL1			
		-CAL2			
		-CAL3			Mo NOISY
		-CAL4			
		-CAL5			Mo & Cd NOISY
		-CAL6			
		-IBL1			
		-CAL1	L2232		
		-CAL2	L2200		
		-CAL3	L2201		
		-CAL4	L2202		Mo & Cd noisy ~~-int.~~, NO Mo/Cd
		-CAL5	L2203		
		-CAL6	L2204		Ag sl. noisy
		-IBL1	—		
		-ICV1	L243		
		-ICB1	L2232		Se↑ NO Se
		-CCV1	L2203		
		-CCB1	L2232		
		-CRL1	L2200		
		-IFA1	L2006		Cr 53↑ ↓
	✓	-IFA1			
		-IFB1	L2007		Ni^{62} noisy, %R & int. std. OK
		-HCV1	L2008		Ag sl. noisy
		-HCV2	L2009		Se↓ Cd^{111} noisy & Cd^{114} sl. noisy ~~-Cd<200~~

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 3/1/23 **Analyst:** SD **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted. SD 3/1/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-IBL2			
		-IBL3			
		-CCV2			~~Mo&~~ Mo&Cd noisy NO Mo/Cd ~~%R & int. std. OK~~
		-CCB2			Sc sl. noisy In&Tb noisy
		-CCB2			
		BLC0008-BLK1	REN		NO Cd, Mo, Se, Tl
		-BS1			Zn^{67}, Cd noisy
		23B0551-01		10	Zn↑ NO Cd; Zn NR
REI		-01REI		100	
	✓	23C0004-01		20	
	✓	23B0511-01			ALL INT. STDs↓
		SEQ-IBL4			
		23C0004-01	REN	5	NO Cd
		23B0511-01		50	
		SEQ-IBL5			
		-CCV3			Mo&Tl↓
		-CCB3			In-1 noisy Cr^{53}↑
		23B0501-02	REN	2	NO Cd
		-03			
		-04			
		23B0367-01			
		23B0379-01			
		-03			
		23B0501-01		2	NO Cd, Mo, Se, Tl

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/1/23 **Analyst:** SD **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted. SD 3/1/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		BLC0008-DUP1	REN	2	Cr52 sl. noisy, Mn noisy value matches parent NO Cd, Mo, Se, Tl
		↓ -MS1	↓	↓	↓
		SEQ-IBL6			
		↓ -CCV4			
		↓ -CCB4			Cr53↑
		BLB0518-BLK1	SWN	20	↓ NO Cd
		↓ -BS1	↓	↓	↓
		23A0232-02	↓	↓	SC↑
		↓ -03	↓	↓	↓
		↓ -04	↓	↓	↓
		↓ -01	↓	↓	SC↑ NOCd/Cr
		BLB0518-DUP1	↓	↓	↓
		↓ -MS1	↓	↓	Pb & Zn % R↑
		↓ -MSD1	↓	↓	~~Cu~~ Zn % R↑ Pb RPD↑ Cu % R↓
		↓ -PS1	↓	↓	↓
		SEQ-CCV5			Mo & Cd noisy
		↓ -CCB5			
		BLB0724-BLK1	SPN	2	
		↓ -BS1	↓	↓	
		23B0330-29	REN	5	As noisy NO As; Cr ONLY
		↓ -39	↓	↓	Cr ONLY
		23B0387-01	↓	50	NO Cd
		23A0324-02	SPN	2	
		BLB0724-DUP1	↓	↓	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/1/23 **Analyst:** SD **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		BLB0724-MS1	SPN	2	Ge sl. noisy Cu noisy; value matches DUP & parent
		SEQ-IBL7			
		↓ -CCV6			Mn sl. noisy
		↓ -CCB6			
		BLB0716-BLK1	SPN	2	SC↑
		↓ -BS1	↓	↓	↓
		23A0324-02RE1			
		BLB0716-DUP1			
		↓ -MS1	↓	↓	↓
		SEQ-IBL8			
		↓ -CCV7			Mo sl. noisy Cd114 noisy
		↓ -CCB7			
		RINSE/DI			

SD 3/1/23

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Wednesday, March 01, 2023 14:59:12
Sample Description:
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\STD Performance Check.mth
Dataset File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\DataSet\Default\STD Performance Check.5296
MassCal File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	12204.8	12204.803	1448.694	11.9	Standard
	In	114.9	62922.7	62922.683	6035.955	9.6	Standard
	U	238.1	52132.3	52132.332	4573.286	8.8	Standard
⎡	CeO	155.9	1500.6	0.029	0.002	6.7	Standard
⎢>	Ce	139.9	52055.2	52055.180	4555.471	8.8	Standard
⎣	Ce++	70.0	2058.7	0.040	0.000	1.1	Standard
	Bkgd	220.0	0.1	0.067	0.091	136.9	Standard

Current Conditions File Data

Current Value	Description
1.06	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-11.25	Deflector Voltage
1600.00	ICP RF Power
-1675.00	Analog Stage Voltage
1400.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-8.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-4.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.25	RPq
1.06	DRC Mode NEB
-10.00	DRC Mode QRO
-3.00	DRC Mode CRO
-7.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
250.00	Axial Field Voltage
-16.50	KED Mode CRO
-12.00	KED Mode QRO
-4.00	KED Mode Cell Entrance Voltage
-39.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
5.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Start Time: 3/1/2023 2:59:08 PM
End Time: 3/1/2023 3:06:38 PM

STD Performance Check - [Failed]
Obtained Intensity (Be 9): 12204.80
Obtained Intensity (In 115): 62922.68
Obtained Intensity (U 238): 52132.33
Obtained Intensity (Bkgd 220): 0.07
Obtained Formula (Ce++ 70 / Ce 140): 0.040 (=2058.68 / 52055.18) - <Target not achieved>
Obtained Formula (CeO 156 / Ce 140): 0.029 (=1500.61 / 52055.18) - <Target not achieved>
Obtained RSD (Be 9): 0.1187 - <Target not achieved>
Obtained RSD (In 115): 0.0959 - <Target not achieved>
Obtained RSD (U 238): 0.0877 - <Target not achieved>

Torch Alignment - [Passed]

Vertical	Horizontal	Intensity
0.85 mm	0.32 mm	66869.14

Nebulizer Gas Flow STD/KED [NEB] - [Passed] Optimum value(s): 1.05
Obtained Intensity (In 115): 55247.62
Obtained Formula (CeO 156 / Ce 140): 0.0198 (=895.03 / 45267.61)

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.694)
Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.722)
Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.700)
Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.691)

QID STD/DRC - Optimum value(s): Correlation Coefficient = 0.986; Intercept = -12.64

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Optimization Status

Start Time: 3/1/2023 2:59:08 PM

STD Performance Check
	Optimization Settings:
		Method: STD Performance Check.mth.
		Intensity Criterion: Be 9 > 2000
		Intensity Criterion: In 115 > 40000
		Intensity Criterion: U 238 > 30000
		Intensity Criterion: Bkgd 220 <= 1
		Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
		Formula Criterion: CeO 156 / Ce 140 <= 0.025
		RSD Criterion: Be 9.0122 < 0.05
		RSD Criterion: In 114.904 < 0.05
		RSD Criterion: U 238.05 < 0.05

	Optimization Results:
	Initial Try
		Obtained Intensity (Be 9): 12204.80
		Obtained Intensity (In 115): 62922.68
		Obtained Intensity (U 238): 52132.33
		Obtained Intensity (Bkgd 220): 0.07
		Obtained Formula (Ce++ 70 / Ce 140): 0.040 (=2058.68 / 52055.18) - <Target not achieved>
		Obtained Formula (CeO 156 / Ce 140): 0.029 (=1500.61 / 52055.18) - <Target not achieved>
		Obtained RSD (Be 9): 0.1187 - <Target not achieved>
		Obtained RSD (In 115): 0.0959 - <Target not achieved>
		Obtained RSD (U 238): 0.0877 - <Target not achieved>

		[Failed]
[Failed]

Torch Alignment
	Optimization Settings:
		Method: Torch Alignment.mth.
		Intensity Criterion: In 115 Maximum

	Optimization Results:
		Vertical	Horizontal	Intensity
[Passed]	0.85 mm	0.32 mm	66869.14

Nebulizer Gas Flow STD/KED [NEB]
	Optimization Settings:
		Method: Optimize.mth.
			Initial Try - Start/End/Step: 1/1.1/0.01.
		Intensity Criterion: In 115 Maximum
		Formula Criterion: CeO 156 / Ce 140 <= 0.025

	Optimization Results:
	Initial Try

		Obtained Intensity (In 115): 55247.62
		Obtained Formula (CeO 156 / Ce 140): 0.0198 (=895.03 / 45267.61)
[Passed] Optimum value(s): 1.05

Mass Calibration and Resolution
Optimization Settings:
Method: Tuning.mth.
MassCal File: Default.tun
Iterations: 6
Target accuracy (+/- amu): 0.05 for Mass Cal. and 0.03 for Resolution
Peak height (%) for Res. Opt.: 10

Optimization Results:
Initial Try
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.694)
Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.722)
Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.700)
Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.691)
[Passed] Optimum value(s): N/A

QID STD/DRC
Optimization Settings:
Method: QID Calibration.mth.
Initial Try - Start/End/Step: -20/0/0.5.

Optimization Results:
Initial Try

Optimum value(s): Correlation Coefficient = 0.986; Intercept = -12.64

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-13	46692.2
Mg	24	41	-13	38527.9
In	115	41	-10.5	62138.9
Ce	140	41	-8.5	50790.1
Pb	208	41	-7.5	27129.7
U	238	41	-7.5	49509.6

End Time: 3/1/2023 3:06:38 PM

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Start Time: 3/1/2023 3:09:39 PM
End Time: 3/1/2023 3:10:46 PM

QID STD/DRC - Optimum value(s): Correlation Coefficient = 0.991; Intercept = -12.34

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Optimization Status

Start Time: 3/1/2023 3:09:39 PM

QID STD/DRC
Optimization Settings:
Method: QID Calibration.mth.
Initial Try - Start/End/Step: -20/0/0.5.

Optimization Results:
Initial Try

Optimum value(s): Correlation Coefficient = 0.991; Intercept = -12.34

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-13	42715.8
Mg	24	41	-13.5	37886.2
In	115	41	-10.5	59889.3
Ce	140	41	-8.5	50625.5
Pb	208	41	-7.5	27037.6
U	238	41	-7	50541.2

End Time: 3/1/2023 3:10:46 PM

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Start Time: 3/1/2023 3:10:58 PM
End Time: 3/1/2023 3:12:14 PM

KED Mode QID - Optimum value(s): Correlation Coefficient = 0.995; Intercept = -12.81

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Optimization Status

Start Time: 3/1/2023 3:10:58 PM

KED Mode QID

Optimization Settings:

Method: QID Calibration.mth.

Initial Try - Start/End/Step: -20/0/0.5.

Optimization Results:

Initial Try

Optimum value(s): Correlation Coefficient = 0.995; Intercept = -12.81

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-13	33880.1
Mg	24	41	-13	25258.3
In	115	41	-11	39827.4
Ce	140	41	-9	42523.2
Pb	208	41	-6.5	19605.4
U	238	41	-7	33964.3

End Time: 3/1/2023 3:12:14 PM

Performance Check Report

Sample ID: STD Performance Check

Sample Date/Time: Wednesday, March 01, 2023 15:17:37
Sample Description:
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\STD Performance Check.mth
Dataset File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\DataSet\Default\STD Performance Check.5307
MassCal File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	9161.3	9161.337	154.793	1.7	Standard
	In	114.9	52812.8	52812.779	380.312	0.7	Standard
	U	238.1	46018.4	46018.405	404.310	0.9	Standard
⌈	CeO	155.9	597.9	0.013	0.001	4.1	Standard
| >	Ce	139.9	45604.5	45604.544	162.699	0.4	Standard
⌊	Ce++	70.0	1252.9	0.027	0.000	1.7	Standard
	Bkgd	220.0	0.1	0.067	0.091	136.9	Standard

Current Conditions File Data

Current Value	Description
1.04	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-11.25	Deflector Voltage
1600.00	ICP RF Power
-1675.00	Analog Stage Voltage
1400.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-8.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-4.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.25	RPq
1.05	DRC Mode NEB
-10.00	DRC Mode QRO
-3.00	DRC Mode CRO
-7.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
250.00	Axial Field Voltage
-16.50	KED Mode CRO
-12.00	KED Mode QRO
-4.00	KED Mode Cell Entrance Voltage
-39.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
5.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Start Time: 3/1/2023 3:17:35 PM
End Time: 3/1/2023 3:19:41 PM

STD Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9): 9161.34
Obtained Intensity (In 115): 52812.78
Obtained Intensity (U 238): 46018.40
Obtained Intensity (Bkgd 220): 0.07
Obtained Formula (Ce++ 70 / Ce 140): 0.027 (=1252.85 / 45604.54)
Obtained Formula (CeO 156 / Ce 140): 0.013 (=597.88 / 45604.54)
Obtained RSD (Be 9): 0.0169
Obtained RSD (In 115): 0.0072
Obtained RSD (U 238): 0.0088

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Optimization Status

Start Time: 3/1/2023 3:17:35 PM

STD Performance Check
    Optimization Settings:
        Method: STD Performance Check.mth.
        Intensity Criterion: Be 9 > 2000
        Intensity Criterion: In 115 > 40000
        Intensity Criterion: U 238 > 30000
        Intensity Criterion: Bkgd 220 <= 1
        Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
        Formula Criterion: CeO 156 / Ce 140 <= 0.025
        RSD Criterion: Be 9.0122 < 0.05
        RSD Criterion: In 114.904 < 0.05
        RSD Criterion: U 238.05 < 0.05

    Optimization Results:
    Initial Try
        Obtained Intensity (Be 9): 9161.34
        Obtained Intensity (In 115): 52812.78
        Obtained Intensity (U 238): 46018.40
        Obtained Intensity (Bkgd 220): 0.07
        Obtained Formula (Ce++ 70 / Ce 140): 0.027 (=1252.85 / 45604.54)
        Obtained Formula (CeO 156 / Ce 140): 0.013 (=597.88 / 45604.54)
        Obtained RSD (Be 9): 0.0169
        Obtained RSD (In 115): 0.0072
        Obtained RSD (U 238): 0.0088

[Passed] Optimum value(s): N/A

End Time: 3/1/2023 3:19:41 PM

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor: DEL
Comments:
Sample Date/Time: Wednesday, March 01, 2023 15:54:34
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				32629	1	Standard
	Cl	**37**		ug/L				3758523	1	Standard
⎡>	**Sc**	**45**		ug/L				435309	0	Standard
⎢	**Cr**	**52**		ug/L				12147	1	Standard
⎢	**Cr**	**53**		ug/L				106	9	Standard
⎣	**Mn**	**55**		ug/L				1152	3	Standard
⎡>	**Ge**	**72**		ug/L				27422	0	KED
⎢	**Ni**	**60**		ug/L				25	35	KED
⎢	**Ni**	**62**		ug/L				1	100	KED
⎢	**Cu**	**63**		ug/L				66	16	KED
⎢	**Cu**	**65**		ug/L				22	26	KED
⎢	**Zn**	**66**		ug/L				44	31	KED
⎢	**Zn**	**67**		ug/L				2	43	KED
⎢	**As**	**75**		ug/L				6	24	KED
⎣	**Se**	**78**		ug/L				12	19	KED
	Y	**89**		ug/L				271902	0	Standard
	Kr	**83**		ug/L				67	8	Standard
⎡>	**In-1**	**115**		ug/L				7697	2	KED
⎢	**Mo**	**98**		ug/L				10	39	KED
⎢	**Cd**	**111**		ug/L				3	25	KED
⎣	**Cd**	**114**		ug/L				0	245	KED
⎡>	**In**	**115**		ug/L				457197	1	Standard
⎢	**Ag**	**107**		ug/L				34	22	Standard
⎢	**Sb**	**121**		ug/L				60	4	Standard
⎣	**Sb**	**123**		ug/L				40	15	Standard
⎡>	**Tb**	**159**		ug/L				495809	2	Standard
⎢	**Tl**	**205**		ug/L				8	53	Standard
⎣	**Pb**	**208**		ug/L				118	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL2
Sample Dil Factor: DEL
Comments:
Sample Date/Time: Wednesday, March 01, 2023 15:59:25
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			32629	39973	0	Standard
	Cl	**37**		ug/L			3758523	3796523	0	Standard
⌈>	**Sc**	**45**		ug/L			435309	436341	0	Standard
|	**Cr**	**52**	**0.500**	ug/L	0.046	9	12147	19839	3	Standard
|	**Cr**	**53**	**0.500**	ug/L	0.021	4	106	973	3	Standard
⌊	**Mn**	**55**	**0.500**	ug/L	0.012	2	1152	11480	1	Standard
⌈>	**Ge**	**72**		ug/L			27422	27381	2	KED
|	**Ni**	**60**	**0.500**	ug/L	0.052	10	25	465	8	KED
|	**Ni**	**62**	**0.500**	ug/L	0.093	18	1	80	20	KED
|	**Cu**	**63**	**0.500**	ug/L	0.020	4	66	1309	6	KED
|	**Cu**	**65**	**0.500**	ug/L	0.038	7	22	674	9	KED
|	**Zn**	**66**	**6.000**	ug/L	0.202	3	44	1916	5	KED
|	**Zn**	**67**	**6.000**	ug/L	0.658	10	2	299	8	KED
|	**As**	**75**	**0.200**	ug/L	0.013	6	6	37	8	KED
⌊	**Se**	**78**	**0.500**	ug/L	0.334	66	12	19	27	KED
	Y	**89**		ug/L			271902	274734	1	Standard
	Kr	**83**		ug/L			67	60	28	Standard
⌈>	**In-1**	**115**		ug/L			7697	7642	2	KED
|	**Mo**	**98**	**0.200**	ug/L	0.030	14	10	135	14	KED
|	**Cd**	**111**	**0.100**	ug/L	0.040	40	3	22	32	KED
⌊	**Cd**	**114**	**0.100**	ug/L	0.015	14	0	48	12	KED
⌈>	**In**	**115**		ug/L			457197	472553	1	Standard
|	**Ag**	**107**	**0.200**	ug/L	0.009	4	34	2113	3	Standard
|	**Sb**	**121**	**0.200**	ug/L	0.002	1	60	1822	2	Standard
⌊	**Sb**	**123**	**0.200**	ug/L	0.003	1	40	1402	0	Standard
⌈>	**Tb**	**159**		ug/L			495809	500720	2	Standard
|	**Tl**	**205**	**0.200**	ug/L	0.008	4	8	5562	1	Standard
⌊	**Pb**	**208**	**0.100**	ug/L	0.006	6	118	3812	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 16:04:16

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			32629	42725	1	Standard
Cl	37		ug/L			3758523	3900248	1	Standard
> Sc	45		ug/L			435309	455622	2	Standard
Cr	52	10.000	ug/L	0.547	5	12147	171584	4	Standard
Cr	53	10.001	ug/L	0.447	4	106	18758	3	Standard
Mn	55	10.000	ug/L	0.431	4	1152	221202	3	Standard
> Ge	72		ug/L			27422	27017	4	KED
Ni	60	10.001	ug/L	0.332	3	25	8962	1	KED
Ni	62	9.999	ug/L	0.419	4	1	1488	1	KED
Cu	63	10.002	ug/L	0.462	4	66	26389	2	KED
Cu	65	10.001	ug/L	0.479	4	22	13263	1	KED
Zn	66	10.244	ug/L	0.358	3	44	3422	2	KED
Zn	67	10.455	ug/L	0.377	3	2	587	2	KED
As	75	10.000	ug/L	0.298	2	6	1647	2	KED
Se	78	10.003	ug/L	0.497	4	12	182	3	KED
Y	89		ug/L			271902	288108	1	Standard
Kr	83		ug/L			67	55	3	Standard
> In-1	115		ug/L			7697	7890	3	KED
Mo	98	10.000	ug/L	0.912	9	10	7057	7	KED
Cd	111	10.000	ug/L	0.674	6	3	1727	4	KED
Cd	114	10.000	ug/L	0.638	6	0	4249	5	KED
> In	115		ug/L			457197	485026	1	Standard
Ag	107	10.000	ug/L	0.450	4	34	109546	5	Standard
Sb	121	10.000	ug/L	0.252	2	60	94907	3	Standard
Sb	123	10.000	ug/L	0.153	1	40	72736	2	Standard
> Tb	159		ug/L			495809	524277	2	Standard
Tl	205	10.000	ug/L	0.329	3	8	290550	4	Standard
Pb	208	10.000	ug/L	0.219	2	118	380973	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL4

DEL

Sample Dil Factor:

Comments:

Sample Date/Time: Wednesday, March 01, 2023 16:09:21

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			32629	42835	0	Standard
	Cl	**37**		ug/L			3758523	3938510	1	Standard
⌈>	**Sc**	**45**		ug/L			435309	440750	1	Standard
|	**Cr**	**52**	**19.962**	ug/L	0.520	2	12147	316888	3	Standard
|	**Cr**	**53**	**19.953**	ug/L	0.386	1	106	35780	3	Standard
⌊	**Mn**	**55**	**19.955**	ug/L	0.781	3	1152	422379	5	Standard
⌈>	**Ge**	**72**		ug/L			27422	28413	1	KED
|	**Ni**	**60**	**19.763**	ug/L	0.618	3	25	17777	1	KED
|	**Ni**	**62**	**19.871**	ug/L	0.813	4	1	3034	2	KED
|	**Cu**	**63**	**19.744**	ug/L	0.533	2	66	52117	1	KED
|	**Cu**	**65**	**19.626**	ug/L	0.817	4	22	25477	2	KED
|	**Zn**	**66**	**19.855**	ug/L	0.437	2	44	6794	1	KED
|	**Zn**	**67**	**19.663**	ug/L	0.770	3	2	1107	5	KED
|	**As**	**75**	**19.830**	ug/L	0.313	1	6	3318	1	KED
⌊	**Se**	**78**	**19.899**	ug/L	0.492	2	12	362	0	KED
	Y	**89**		ug/L			271902	280996	3	Standard
	Kr	**83**		ug/L			67	62	15	Standard
⌈>	**In-1**	**115**		ug/L			7697	7798	1	KED
|	**Mo**	**98**	**20.043**	ug/L	0.482	2	10	14113	3	KED
|	**Cd**	**111**	**20.186**	ug/L	0.492	2	3	3579	1	KED
⌊	**Cd**	**114**	**20.093**	ug/L	0.491	2	0	8608	3	KED
⌈>	**In**	**115**		ug/L			457197	475284	1	Standard
|	**Ag**	**107**	**19.923**	ug/L	0.627	3	34	210618	4	Standard
|	**Sb**	**121**	**19.969**	ug/L	0.596	2	60	184504	3	Standard
⌊	**Sb**	**123**	**19.926**	ug/L	0.455	2	40	139891	2	Standard
⌈>	**Tb**	**159**		ug/L			495809	512600	2	Standard
|	**Tl**	**205**	**19.953**	ug/L	1.169	5	8	560822	3	Standard
⌊	**Pb**	**208**	**19.920**	ug/L	0.984	4	118	729573	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL5

DEL

Sample Dil Factor:

Comments:

Sample Date/Time: Wednesday, March 01, 2023 16:14:36

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			32629	35346	2	Standard
	Cl	**37**		ug/L			3758523	4115545	3	Standard
⌈>	**Sc**	**45**		ug/L			435309	437539	0	Standard
|	**Cr**	**52**	**50.072**	ug/L	0.790	1	12147	775999	1	Standard
|	**Cr**	**53**	**49.994**	ug/L	1.613	3	106	88768	3	Standard
⌊	**Mn**	**55**	**50.102**	ug/L	1.326	2	1152	1061499	3	Standard
⌈>	**Ge**	**72**		ug/L			27422	27426	0	KED
|	**Ni**	**60**	**49.875**	ug/L	2.026	4	25	42734	3	KED
|	**Ni**	**62**	**49.690**	ug/L	2.059	4	1	7103	3	KED
|	**Cu**	**63**	**49.803**	ug/L	2.132	4	66	124347	3	KED
|	**Cu**	**65**	**49.792**	ug/L	1.244	2	22	61110	1	KED
|	**Zn**	**66**	**49.648**	ug/L	1.742	3	44	15814	2	KED
|	**Zn**	**67**	**50.059**	ug/L	2.304	4	2	2731	3	KED
|	**As**	**75**	**49.787**	ug/L	1.883	3	6	7865	2	KED
⌊	**Se**	**78**	**50.089**	ug/L	1.077	2	12	869	1	KED
	Y	**89**		ug/L			271902	277494	3	Standard
	Kr	**83**		ug/L			67	69	31	Standard
⌈>	**In-1**	**115**		ug/L			7697	7690	4	KED
|	**Mo**	**98**	**49.770**	ug/L	4.188	8	10	33715	7	KED
|	**Cd**	**111**	**49.698**	ug/L	4.149	8	3	8424	8	KED
⌊	**Cd**	**114**	**49.628**	ug/L	4.323	8	0	20179	7	KED
⌈>	**In**	**115**		ug/L			457197	455869	0	Standard
|	**Ag**	**107**	**50.234**	ug/L	1.682	3	34	521430	3	Standard
|	**Sb**	**121**	**50.375**	ug/L	1.218	2	60	463733	3	Standard
⌊	**Sb**	**123**	**50.295**	ug/L	1.054	2	40	348921	2	Standard
⌈>	**Tb**	**159**		ug/L			495809	504937	3	Standard
|	**Tl**	**205**	**50.075**	ug/L	1.635	3	8	1397608	1	Standard
⌊	**Pb**	**208**	**50.104**	ug/L	1.385	2	118	1827848	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL6
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 16:21:30

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			32629	42864	3	Standard
	Cl	**37**		ug/L			3758523	4239160	3	Standard
⌈>	**Sc**	**45**		ug/L			435309	457930	1	Standard
|	**Cr**	**52**	**100.084**	ug/L	4.197	4	12147	1614514	2	Standard
|	**Cr**	**53**	**99.910**	ug/L	4.257	4	106	184953	3	Standard
⌊	**Mn**	**55**	**100.986**	ug/L	5.410	5	1152	2313146	4	Standard
⌈>	**Ge**	**72**		ug/L			27422	27996	2	KED
|	**Ni**	**60**	**100.500**	ug/L	5.778	5	25	89371	5	KED
|	**Ni**	**62**	**99.586**	ug/L	4.165	4	1	14329	3	KED
|	**Cu**	**63**	**99.445**	ug/L	2.977	2	66	248814	3	KED
|	**Cu**	**65**	**100.074**	ug/L	3.653	3	22	125674	4	KED
|	**Zn**	**66**	**99.711**	ug/L	2.015	2	44	32080	3	KED
|	**Zn**	**67**	**98.966**	ug/L	3.419	3	2	5329	4	KED
|	**As**	**75**	**100.349**	ug/L	3.851	3	6	16367	4	KED
⌊	**Se**	**78**	**99.984**	ug/L	4.230	4	12	1757	4	KED
	Y	**89**		ug/L			271902	291114	1	Standard
	Kr	**83**		ug/L			67	73	10	Standard
⌈>	**In-1**	**115**		ug/L			7697	7507	0	KED
|	**Mo**	**98**	**102.182**	ug/L	3.186	3	10	72943	2	KED
|	**Cd**	**111**	**101.296**	ug/L	1.134	1	3	17528	0	KED
⌊	**Cd**	**114**	**101.795**	ug/L	1.167	1	0	43040	0	KED
⌈>	**In**	**115**		ug/L			457197	480624	1	Standard
|	**Ag**	**107**	**98.582**	ug/L	1.708	1	34	1030178	3	Standard
|	**Sb**	**121**	**99.202**	ug/L	0.723	0	60	937696	1	Standard
⌊	**Sb**	**123**	**99.502**	ug/L	1.692	1	40	715783	2	Standard
⌈>	**Tb**	**159**		ug/L			495809	535970	3	Standard
|	**Tl**	**205**	**100.750**	ug/L	4.723	4	8	3061053	3	Standard
⌊	**Pb**	**208**	**99.139**	ug/L	4.256	4	118	3732614	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL1

DEL

Sample Dil Factor:

Comments:

Sample Date/Time: Wednesday, March 01, 2023 16:29:05

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			32629	38322	1	Standard
	Cl	**37**		ug/L			3758523	4048138	2	Standard
⌈>	**Sc**	**45**		ug/L			435309	423106	5	Standard
|	**Cr**	**52**	**0.049**	ug/L	0.030	62	12147	12515	2	Standard
|	**Cr**	**53**	**0.010**	ug/L	0.004	40	106	121	8	Standard
⌊	**Mn**	**55**	**-0.007**	ug/L	0.002	26	1152	963	2	Standard
⌈>	**Ge**	**72**		ug/L			27422	28161	2	KED
|	**Ni**	**60**	**-0.001**	ug/L	0.011	845	25	24	38	KED
|	**Ni**	**62**	**0.052**	ug/L	0.001	2	1	9	0	KED
|	**Cu**	**63**	**0.003**	ug/L	0.003	99	66	75	9	KED
|	**Cu**	**65**	**0.015**	ug/L	0.010	67	22	41	29	KED
|	**Zn**	**66**	**-0.002**	ug/L	0.014	824	44	45	8	KED
|	**Zn**	**67**	**0.105**	ug/L	0.143	136	2	8	93	KED
|	**As**	**75**	**0.006**	ug/L	0.011	193	6	7	24	KED
⌊	**Se**	**78**	**-0.079**	ug/L	0.089	112	12	11	12	KED
	Y	**89**		ug/L			271902	265740	6	Standard
	Kr	**83**		ug/L			67	59	25	Standard
⌈>	**In-1**	**115**		ug/L			7697	7601	1	KED
|	**Mo**	**98**	**0.013**	ug/L	0.006	44	10	19	20	KED
|	**Cd**	**111**	**0.006**	ug/L	0.011	192	3	4	40	KED
⌊	**Cd**	**114**	**0.013**	ug/L	0.012	86	0	6	78	KED
⌈>	**In**	**115**		ug/L			457197	451819	6	Standard
|	**Ag**	**107**	**0.006**	ug/L	0.001	7	34	97	3	Standard
|	**Sb**	**121**	**0.199**	ug/L	0.017	8	60	1817	2	Standard
⌊	**Sb**	**123**	**0.207**	ug/L	0.012	5	40	1437	1	Standard
⌈>	**Tb**	**159**		ug/L			495809	480761	6	Standard
|	**Tl**	**205**	**0.003**	ug/L	0.000	3	8	88	3	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.001	71	118	162	17	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 16:36:39
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				34622	3	Standard
	Cl	**37**		ug/L				3977931	0	Standard
>	**Sc**	**45**		ug/L				439931	0	Standard
	Cr	**52**		ug/L				12483	2	Standard
	Cr	**53**		ug/L				120	12	Standard
	Mn	**55**		ug/L				1073	2	Standard
>	**Ge**	**72**		ug/L				28119	1	KED
	Ni	**60**		ug/L				28	17	KED
	Ni	**62**		ug/L				5	21	KED
	Cu	**63**		ug/L				42	27	KED
	Cu	**65**		ug/L				27	52	KED
	Zn	**66**		ug/L				29	30	KED
	Zn	**67**		ug/L				8	44	KED
	As	**75**		ug/L				7	35	KED
	Se	**78**		ug/L				11	32	KED
	Y	**89**		ug/L				276255	3	Standard
	Kr	**83**		ug/L				52	10	Standard
>	**In-1**	**115**		ug/L				7782	2	KED
	Mo	**98**		ug/L				8	11	KED
	Cd	**111**		ug/L				4	48	KED
	Cd	**114**		ug/L				5	31	KED
>	**In**	**115**		ug/L				475417	1	Standard
	Ag	**107**		ug/L				135	24	Standard
	Sb	**121**		ug/L				596	6	Standard
	Sb	**123**		ug/L				475	10	Standard
>	**Tb**	**159**		ug/L				499801	1	Standard
	Tl	**205**		ug/L				224	12	Standard
	Pb	**208**		ug/L				359	13	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 16:41:30
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	39551	0	Standard
	Cl	**37**		ug/L			3977931	3956290	2	Standard
⎡>	**Sc**	**45**		ug/L			439931	447141	4	Standard
⎢	**Cr**	**52**	**0.500**	ug/L	0.022	4	12483	20397	2	Standard
⎢	**Cr**	**53**	**0.500**	ug/L	0.030	5	120	959	4	Standard
⎣	**Mn**	**55**	**0.500**	ug/L	0.023	4	1073	11365	1	Standard
⎡>	**Ge**	**72**		ug/L			28119	28400	1	KED
⎢	**Ni**	**60**	**0.500**	ug/L	0.059	11	28	450	11	KED
⎢	**Ni**	**62**	**0.500**	ug/L	0.112	22	5	69	20	KED
⎢	**Cu**	**63**	**0.500**	ug/L	0.025	4	42	1295	3	KED
⎢	**Cu**	**65**	**0.500**	ug/L	0.037	7	27	669	6	KED
⎢	**Zn**	**66**	**6.000**	ug/L	0.120	1	29	2012	0	KED
⎢	**Zn**	**67**	**6.000**	ug/L	1.064	17	8	309	17	KED
⎢	**As**	**75**	**0.200**	ug/L	0.042	20	7	34	15	KED
⎣	**Se**	**78**	**0.500**	ug/L	0.107	21	11	17	8	KED
	Y	**89**		ug/L			276255	280837	4	Standard
	Kr	**83**		ug/L			52	64	19	Standard
⎡>	**In-1**	**115**		ug/L			7782	7574	5	KED
⎢	**Mo**	**98**	**0.200**	ug/L	0.037	18	8	136	13	KED
⎢	**Cd**	**111**	**0.100**	ug/L	0.028	28	4	16	15	KED
⎣	**Cd**	**114**	**0.100**	ug/L	0.021	21	5	56	15	KED
⎡>	**In**	**115**		ug/L			475417	485072	1	Standard
⎢	**Ag**	**107**	**0.200**	ug/L	0.014	7	135	2166	7	Standard
⎢	**Sb**	**121**	**0.200**	ug/L	0.011	5	596	2045	2	Standard
⎣	**Sb**	**123**	**0.200**	ug/L	0.006	2	475	1596	1	Standard
⎡>	**Tb**	**159**		ug/L			499801	507887	4	Standard
⎢	**Tl**	**205**	**0.200**	ug/L	0.010	4	224	5595	2	Standard
⎣	**Pb**	**208**	**0.100**	ug/L	0.008	7	359	3805	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 16:46:22
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	44416	1	Standard
	Cl	**37**		ug/L			3977931	4060221	1	Standard
⎡>	**Sc**	**45**		ug/L			439931	465233	1	Standard
⎢	**Cr**	**52**	**10.000**	ug/L	0.308	3	12483	176102	1	Standard
⎢	**Cr**	**53**	**10.002**	ug/L	0.420	4	120	18808	2	Standard
⎣	**Mn**	**55**	**10.001**	ug/L	0.347	3	1073	224356	3	Standard
⎡>	**Ge**	**72**		ug/L			28119	28465	2	KED
⎢	**Ni**	**60**	**10.002**	ug/L	0.190	1	28	9296	3	KED
⎢	**Ni**	**62**	**10.004**	ug/L	0.240	2	5	1506	0	KED
⎢	**Cu**	**63**	**10.002**	ug/L	0.145	1	42	27032	2	KED
⎢	**Cu**	**65**	**10.000**	ug/L	0.077	0	27	13069	2	KED
⎢	**Zn**	**66**	**10.058**	ug/L	0.216	2	29	3416	3	KED
⎢	**Zn**	**67**	**10.301**	ug/L	0.776	7	8	573	7	KED
⎢	**As**	**75**	**10.001**	ug/L	0.370	3	7	1700	3	KED
⎣	**Se**	**78**	**10.010**	ug/L	0.544	5	11	196	2	KED
	Y	**89**		ug/L			276255	288797	3	Standard
	Kr	**83**		ug/L			52	53	23	Standard
⎡>	**In-1**	**115**		ug/L			7782	7880	3	KED
⎢	**Mo**	**98**	**10.000**	ug/L	0.473	4	8	7207	1	KED
⎢	**Cd**	**111**	**10.000**	ug/L	0.286	2	4	1792	0	KED
⎣	**Cd**	**114**	**10.000**	ug/L	0.458	4	5	4531	3	KED
⎡>	**In**	**115**		ug/L			475417	490666	1	Standard
⎢	**Ag**	**107**	**10.000**	ug/L	0.061	0	135	110729	1	Standard
⎢	**Sb**	**121**	**10.001**	ug/L	0.231	2	596	94911	2	Standard
⎣	**Sb**	**123**	**10.001**	ug/L	0.143	1	475	72086	2	Standard
⎡>	**Tb**	**159**		ug/L			499801	522161	1	Standard
⎢	**Tl**	**205**	**10.000**	ug/L	0.441	4	224	292727	2	Standard
⎣	**Pb**	**208**	**10.000**	ug/L	0.315	3	359	385984	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL4
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 16:51:26
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	43117	1	Standard
	Cl	**37**		ug/L			3977931	4193559	3	Standard
⎡>	**Sc**	**45**		ug/L			439931	465884	2	Standard
⎢	**Cr**	**52**	**19.868**	ug/L	0.855	4	12483	329233	5	Standard
⎢	**Cr**	**53**	**19.890**	ug/L	0.550	2	120	36554	3	Standard
⎣	**Mn**	**55**	**19.888**	ug/L	0.608	3	1073	435915	3	Standard
⎡>	**Ge**	**72**		ug/L			28119	28827	1	KED
⎢	**Ni**	**60**	**19.769**	ug/L	0.596	3	28	17757	2	KED
⎢	**Ni**	**62**	**19.914**	ug/L	0.637	3	5	2981	1	KED
⎢	**Cu**	**63**	**19.820**	ug/L	0.956	4	42	52304	3	KED
⎢	**Cu**	**65**	**19.868**	ug/L	0.531	2	27	25587	1	KED
⎢	**Zn**	**66**	**19.893**	ug/L	0.752	3	29	6706	2	KED
⎢	**Zn**	**67**	**19.735**	ug/L	1.392	7	8	1063	5	KED
⎢	**As**	**75**	**19.863**	ug/L	0.882	4	7	3321	3	KED
⎣	**Se**	**78**	**19.763**	ug/L	0.258	1	11	364	0	KED
	Y	**89**		ug/L			276255	285464	1	Standard
	Kr	**83**		ug/L			52	60	27	Standard
⎡>	**In-1**	**115**		ug/L			7782	8151	1	KED
⎢	**Mo**	**98**	**19.661**	ug/L	1.960	9	8	13722	8	KED
⎢	**Cd**	**111**	**19.773**	ug/L	1.672	8	4	3503	7	KED
⎣	**Cd**	**114**	**19.548**	ug/L	1.826	9	5	8399	8	KED
⎡>	**In**	**115**		ug/L			475417	488111	0	Standard
⎢	**Ag**	**107**	**19.899**	ug/L	0.845	4	135	214730	4	Standard
⎢	**Sb**	**121**	**20.002**	ug/L	0.415	2	596	188313	2	Standard
⎣	**Sb**	**123**	**20.066**	ug/L	0.658	3	475	145331	3	Standard
⎡>	**Tb**	**159**		ug/L			499801	526054	2	Standard
⎢	**Tl**	**205**	**19.921**	ug/L	0.334	1	224	578340	2	Standard
⎣	**Pb**	**208**	**19.879**	ug/L	0.671	3	359	754369	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL5
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 16:56:41
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	35813	1	Standard
	Cl	**37**		ug/L			3977931	4208332	0	Standard
⎡>	**Sc**	**45**		ug/L			439931	462748	1	Standard
⎢	**Cr**	**52**	**49.831**	ug/L	1.387	2	12483	786820	1	Standard
⎢	**Cr**	**53**	**49.874**	ug/L	2.019	4	120	89695	3	Standard
⎣	**Mn**	**55**	**49.795**	ug/L	2.629	5	1073	1060387	4	Standard
⎡>	**Ge**	**72**		ug/L			28119	28180	3	KED
⎢	**Ni**	**60**	**50.253**	ug/L	1.995	3	28	45209	2	KED
⎢	**Ni**	**62**	**49.748**	ug/L	3.129	6	5	7088	3	KED
⎢	**Cu**	**63**	**49.919**	ug/L	2.123	4	42	127632	1	KED
⎢	**Cu**	**65**	**49.979**	ug/L	2.099	4	27	62733	3	KED
⎢	**Zn**	**66**	**49.893**	ug/L	3.532	7	29	16220	4	KED
⎢	**Zn**	**67**	**50.434**	ug/L	3.363	6	8	2753	5	KED
⎢	**As**	**75**	**50.001**	ug/L	1.858	3	7	8159	1	KED
⎣	**Se**	**78**	**50.163**	ug/L	2.514	5	11	901	1	KED
	Y	**89**		ug/L			276255	287871	2	Standard
	Kr	**83**		ug/L			52	65	21	Standard
⎡>	**In-1**	**115**		ug/L			7782	7894	1	KED
⎢	**Mo**	**98**	**50.102**	ug/L	5.500	10	8	34191	9	KED
⎢	**Cd**	**111**	**50.012**	ug/L	4.750	9	4	8583	8	KED
⎣	**Cd**	**114**	**50.130**	ug/L	4.360	8	5	21125	7	KED
⎡>	**In**	**115**		ug/L			475417	484697	2	Standard
⎢	**Ag**	**107**	**49.794**	ug/L	1.304	2	135	522439	2	Standard
⎢	**Sb**	**121**	**49.956**	ug/L	1.431	2	596	463941	2	Standard
⎣	**Sb**	**123**	**49.833**	ug/L	1.439	2	475	351747	3	Standard
⎡>	**Tb**	**159**		ug/L			499801	523883	1	Standard
⎢	**Tl**	**205**	**49.874**	ug/L	1.527	3	224	1423464	2	Standard
⎣	**Pb**	**208**	**49.774**	ug/L	1.082	2	359	1839185	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL6
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 17:03:36
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	42916	1	Standard
	Cl	**37**		ug/L			3977931	4269449	2	Standard
⎡>	**Sc**	**45**		ug/L			439931	460214	1	Standard
⎢	**Cr**	**52**	**100.678**	ug/L	5.876	5	12483	1603098	4	Standard
⎢	**Cr**	**53**	**100.731**	ug/L	5.728	5	120	184482	4	Standard
⎣	**Mn**	**55**	**101.320**	ug/L	7.255	7	1073	2242760	5	Standard
⎡>	**Ge**	**72**		ug/L			28119	27666	1	KED
⎢	**Ni**	**60**	**100.635**	ug/L	3.202	3	28	90799	1	KED
⎢	**Ni**	**62**	**101.088**	ug/L	4.662	4	5	14678	2	KED
⎢	**Cu**	**63**	**100.302**	ug/L	0.940	0	42	254504	1	KED
⎢	**Cu**	**65**	**100.650**	ug/L	3.154	3	27	126776	1	KED
⎢	**Zn**	**66**	**100.271**	ug/L	4.462	4	29	32291	3	KED
⎢	**Zn**	**67**	**99.887**	ug/L	6.102	6	8	5329	5	KED
⎢	**As**	**75**	**100.528**	ug/L	4.094	4	7	16391	2	KED
⎣	**Se**	**78**	**100.300**	ug/L	6.966	6	11	1775	5	KED
	Y	**89**		ug/L			276255	287419	3	Standard
	Kr	**83**		ug/L			52	81	14	Standard
⎡>	**In-1**	**115**		ug/L			7782	7757	0	KED
⎢	**Mo**	**98**	**102.074**	ug/L	0.495	0	8	73597	1	KED
⎢	**Cd**	**111**	**101.188**	ug/L	0.763	0	4	17777	1	KED
⎣	**Cd**	**114**	**100.768**	ug/L	1.563	1	5	42844	1	KED
⎡>	**In**	**115**		ug/L			475417	470636	0	Standard
⎢	**Ag**	**107**	**100.549**	ug/L	6.868	6	135	1043377	6	Standard
⎢	**Sb**	**121**	**100.938**	ug/L	3.822	3	596	939093	3	Standard
⎣	**Sb**	**123**	**100.770**	ug/L	2.927	2	475	708378	2	Standard
⎡>	**Tb**	**159**		ug/L			499801	526976	1	Standard
⎢	**Tl**	**205**	**101.120**	ug/L	3.341	3	224	3015821	3	Standard
⎣	**Pb**	**208**	**99.748**	ug/L	4.550	4	359	3676239	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 17:11:11
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	38959	2	Standard
	Cl	**37**		ug/L			3977931	4146111	2	Standard
⎡>	**Sc**	**45**		ug/L			439931	445194	1	Standard
⎢	**Cr**	**52**	**0.016**	ug/L	0.036	223	12483	12877	4	Standard
⎢	**Cr**	**53**	**-0.015**	ug/L	0.001	7	120	96	2	Standard
⎣	**Mn**	**55**	**-0.009**	ug/L	0.001	10	1073	887	1	Standard
⎡>	**Ge**	**72**		ug/L			28119	27892	2	KED
⎢	**Ni**	**60**	**-0.009**	ug/L	0.003	36	28	20	14	KED
⎢	**Ni**	**62**	**0.005**	ug/L	0.014	285	5	5	33	KED
⎢	**Cu**	**63**	**0.017**	ug/L	0.002	13	42	84	5	KED
⎢	**Cu**	**65**	**0.015**	ug/L	0.003	19	27	46	6	KED
⎢	**Zn**	**66**	**-0.003**	ug/L	0.006	198	29	28	6	KED
⎢	**Zn**	**67**	**-0.033**	ug/L	0.104	313	8	6	78	KED
⎢	**As**	**75**	**-0.002**	ug/L	0.003	189	7	6	8	KED
⎣	**Se**	**78**	**0.245**	ug/L	0.252	102	11	15	27	KED
	Y	**89**		ug/L			276255	289127	3	Standard
	Kr	**83**		ug/L			52	59	6	Standard
⎡>	**In-1**	**115**		ug/L			7782	8011	4	KED
⎢	**Mo**	**98**	**0.011**	ug/L	0.005	51	8	17	28	KED
⎢	**Cd**	**111**	**0.006**	ug/L	0.007	108	4	5	20	KED
⎣	**Cd**	**114**	**-0.005**	ug/L	0.005	97	5	3	51	KED
⎡>	**In**	**115**		ug/L			475417	490055	3	Standard
⎢	**Ag**	**107**	**-0.004**	ug/L	0.001	24	135	93	12	Standard
⎢	**Sb**	**121**	**0.148**	ug/L	0.006	4	596	2043	2	Standard
⎣	**Sb**	**123**	**0.146**	ug/L	0.016	10	475	1559	3	Standard
⎡>	**Tb**	**159**		ug/L			499801	514005	3	Standard
⎢	**Tl**	**205**	**-0.002**	ug/L	0.001	24	224	166	7	Standard
⎣	**Pb**	**208**	**-0.006**	ug/L	0.000	3	359	158	1	Standard

Sample Information

Sample Date/Time: Wednesday, March 01, 2023 17:03:36
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED
Mass Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

Calibration

Analyte	Mass	**r Corr Coef**	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
C	13							
Cl	37							
Sc	45							
Cr	52	**0.9999**	0.034	0.50	10	20	50	100
Cr	53	**0.9999**	0.004	0.50	10	20	50	100
Mn	55	**0.9997**	0.048	0.50	10	20	50	100
Ge	72							
Ni	60	**0.9999**	0.033	0.50	10	20	50	100
Ni	62	**0.9998**	0.005	0.50	10	20	50	100
Cu	63	**1.0000**	0.092	0.50	10	20	50	100
Cu	65	**0.9999**	0.046	0.50	10	20	50	100
Zn	66	**1.0000**	0.012	6.00	10	20	50	100
Zn	67	**0.9999**	0.002	6.00	10	20	50	100
As	75	**0.9999**	0.006	0.20	10	20	50	100
Se	78	**1.0000**	0.001	0.50	10	20	50	100
Y	89							
Kr	83							
In-1	115							
Mo	98	**0.9993**	0.093	0.20	10	20	50	100
Cd	111	**0.9998**	0.023	0.10	10	20	50	100
Cd	114	**0.9999**	0.055	0.10	10	20	50	100
In	115							
Ag	107	**0.9999**	0.022	0.20	10	20	50	100
Sb	121	**0.9999**	0.020	0.20	10	20	50	100
Sb	123	**0.9999**	0.015	0.20	10	20	50	100
Tb	159							
Tl	205	**0.9998**	0.057	0.20	10	20	50	100
Pb	208	**1.0000**	0.070	0.10	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICV1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 17:23:47
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	44483	3	Standard
	Cl	**37**		ug/L			3977931	4235656	2	Standard
⎡>	**Sc**	**45**		ug/L			439931	482193	0	Standard
⎢	**Cr**	**52**	**48.648**	ug/L	0.852	1	12483	819093	1	Standard
⎢	**Cr**	**53**	**49.010**	ug/L	1.430	2	120	94149	2	Standard
⎣	**Mn**	**55**	**47.189**	ug/L	2.060	4	1073	1095471	3	Standard
⎡>	**Ge**	**72**		ug/L			28119	28500	1	KED
⎢	**Ni**	**60**	**49.075**	ug/L	2.669	5	28	45648	5	KED
⎢	**Ni**	**62**	**49.977**	ug/L	2.548	5	5	7481	5	KED
⎢	**Cu**	**63**	**50.870**	ug/L	1.744	3	42	133001	3	KED
⎢	**Cu**	**65**	**50.589**	ug/L	2.096	4	27	65675	4	KED
⎢	**Zn**	**66**	**48.502**	ug/L	1.365	2	29	16112	3	KED
⎢	**Zn**	**67**	**49.036**	ug/L	1.000	2	8	2699	1	KED
⎢	**As**	**75**	**45.888**	ug/L	0.722	1	7	7715	2	KED
⎣	**Se**	**78**	**72.781**	ug/L	0.745	1	11	1331	1	KED
	Y	**89**		ug/L			276255	292405	1	Standard
	Kr	**83**		ug/L			52	83	13	Standard
⎡>	**In-1**	**115**		ug/L			7782	7938	1	KED
⎢	**Mo**	**98**	**48.044**	ug/L	1.202	2	8	35458	3	KED
⎢	**Cd**	**111**	**49.916**	ug/L	0.398	0	4	8976	1	KED
⎣	**Cd**	**114**	**49.692**	ug/L	0.568	1	5	21623	1	KED
⎡>	**In**	**115**		ug/L			475417	481756	0	Standard
⎢	**Ag**	**107**	**51.232**	ug/L	1.167	2	135	544301	1	Standard
⎢	**Sb**	**121**	**50.219**	ug/L	0.748	1	596	478593	0	Standard
⎣	**Sb**	**123**	**50.153**	ug/L	2.005	3	475	361102	3	Standard
⎡>	**Tb**	**159**		ug/L			499801	530940	2	Standard
⎢	**Tl**	**205**	**48.973**	ug/L	2.030	4	224	1471426	3	Standard
⎣	**Pb**	**208**	**50.809**	ug/L	2.163	4	359	1886404	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICB1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 17:31:22
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	36105	1	Standard
	Cl	**37**		ug/L			3977931	3991572	1	Standard
⌈>	**Sc**	**45**		ug/L			439931	446866	1	Standard
|	**Cr**	**52**	**0.006**	ug/L	0.036	620	12483	12767	4	Standard
|	**Cr**	**53**	**-0.010**	ug/L	0.005	45	120	105	7	Standard
⌊	**Mn**	**55**	**-0.008**	ug/L	0.002	20	1073	907	3	Standard
⌈>	**Ge**	**72**		ug/L			28119	28033	1	KED
|	**Ni**	**60**	**-0.014**	ug/L	0.009	60	28	15	50	KED
|	**Ni**	**62**	**0.035**	ug/L	0.032	92	5	10	47	KED
|	**Cu**	**63**	**0.004**	ug/L	0.002	50	42	51	9	KED
|	**Cu**	**65**	**0.001**	ug/L	0.009	871	27	28	41	KED
|	**Zn**	**66**	**0.030**	ug/L	0.021	71	29	39	16	KED
|	**Zn**	**67**	**-0.011**	ug/L	0.042	390	8	8	26	KED
|	**As**	**75**	**0.003**	ug/L	0.010	325	7	7	21	KED
⌊	**Se**	**78**	**0.273**	ug/L	0.227	83	11	16	22	KED
	Y	**89**		ug/L			276255	278459	1	Standard
	Kr	**83**		ug/L			52	60	14	Standard
⌈>	**In-1**	**115**		ug/L			7782	7741	4	KED
|	**Mo**	**98**	**0.001**	ug/L	0.001	144	8	9	12	KED
|	**Cd**	**111**	**-0.005**	ug/L	0.008	142	4	3	45	KED
⌊	**Cd**	**114**	**-0.000**	ug/L	0.011	5628	5	5	89	KED
⌈>	**In**	**115**		ug/L			475417	473143	1	Standard
|	**Ag**	**107**	**-0.006**	ug/L	0.001	12	135	71	12	Standard
|	**Sb**	**121**	**-0.020**	ug/L	0.001	5	596	410	1	Standard
⌊	**Sb**	**123**	**-0.020**	ug/L	0.003	17	475	334	7	Standard
⌈>	**Tb**	**159**		ug/L			499801	500782	3	Standard
|	**Tl**	**205**	**-0.005**	ug/L	0.000	8	224	69	17	Standard
⌊	**Pb**	**208**	**-0.007**	ug/L	0.001	7	359	128	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 17:37:21
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	37025	0	Standard
	Cl	**37**		ug/L			3977931	4272691	1	Standard
⎡>	**Sc**	**45**		ug/L			439931	463378	0	Standard
⎢	**Cr**	**52**	**50.586**	ug/L	0.311	0	12483	818018	1	Standard
⎢	**Cr**	**53**	**50.950**	ug/L	1.707	3	120	94078	4	Standard
⎣	**Mn**	**55**	**50.009**	ug/L	1.807	3	1073	1115982	4	Standard
⎡>	**Ge**	**72**		ug/L			28119	28827	1	KED
⎢	**Ni**	**60**	**48.716**	ug/L	2.406	4	28	45814	3	KED
⎢	**Ni**	**62**	**50.264**	ug/L	0.662	1	5	7610	0	KED
⎢	**Cu**	**63**	**49.266**	ug/L	2.212	4	42	130233	3	KED
⎢	**Cu**	**65**	**48.731**	ug/L	1.504	3	27	63977	2	KED
⎢	**Zn**	**66**	**49.698**	ug/L	2.285	4	29	16692	3	KED
⎢	**Zn**	**67**	**50.245**	ug/L	2.038	4	8	2797	3	KED
⎢	**As**	**75**	**49.197**	ug/L	1.399	2	7	8364	1	KED
⎣	**Se**	**78**	**48.075**	ug/L	1.630	3	11	893	2	KED
	Y	**89**		ug/L			276255	288629	1	Standard
	Kr	**83**		ug/L			52	74	38	Standard
⎡>	**In-1**	**115**		ug/L			7782	8014	0	KED
⎢	**Mo**	**98**	**47.901**	ug/L	0.748	1	8	35684	1	KED
⎢	**Cd**	**111**	**49.398**	ug/L	0.457	0	4	8968	1	KED
⎣	**Cd**	**114**	**50.408**	ug/L	0.480	0	5	22146	1	KED
⎡>	**In**	**115**		ug/L			475417	487619	0	Standard
⎢	**Ag**	**107**	**49.462**	ug/L	1.827	3	135	531817	2	Standard
⎢	**Sb**	**121**	**49.073**	ug/L	1.493	3	596	473312	2	Standard
⎣	**Sb**	**123**	**49.183**	ug/L	2.233	4	475	358388	3	Standard
⎡>	**Tb**	**159**		ug/L			499801	532905	2	Standard
⎢	**Tl**	**205**	**47.899**	ug/L	1.440	3	224	1444572	2	Standard
⎣	**Pb**	**208**	**50.671**	ug/L	1.352	2	359	1888618	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 17:44:36
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	35100	3	Standard
	Cl	**37**		ug/L			3977931	4089462	2	Standard
⎡>	**Sc**	**45**		ug/L			439931	452770	1	Standard
⎢	**Cr**	**52**	**0.004**	ug/L	0.022	518	12483	12914	2	Standard
⎢	**Cr**	**53**	**-0.012**	ug/L	0.006	47	120	102	10	Standard
⎣	**Mn**	**55**	**-0.012**	ug/L	0.002	13	1073	840	2	Standard
⎡>	**Ge**	**72**		ug/L			28119	28008	3	KED
⎢	**Ni**	**60**	**-0.010**	ug/L	0.011	106	28	19	55	KED
⎢	**Ni**	**62**	**0.005**	ug/L	0.027	578	5	5	66	KED
⎢	**Cu**	**63**	**-0.000**	ug/L	0.003	727	42	41	17	KED
⎢	**Cu**	**65**	**-0.002**	ug/L	0.008	476	27	25	41	KED
⎢	**Zn**	**66**	**0.007**	ug/L	0.033	438	29	32	36	KED
⎢	**Zn**	**67**	**0.037**	ug/L	0.059	158	8	10	26	KED
⎢	**As**	**75**	**-0.001**	ug/L	0.017	1423	7	6	43	KED
⎣	**Se**	**78**	**0.108**	ug/L	0.112	103	11	13	18	KED
	Y	**89**		ug/L			276255	282656	2	Standard
	Kr	**83**		ug/L			52	53	16	Standard
⎡>	**In-1**	**115**		ug/L			7782	7929	2	KED
⎢	**Mo**	**98**	**0.002**	ug/L	0.004	209	8	10	30	KED
⎢	**Cd**	**111**	**0.007**	ug/L	0.017	243	4	5	53	KED
⎣	**Cd**	**114**	**-0.000**	ug/L	0.007	1803	5	5	57	KED
⎡>	**In**	**115**		ug/L			475417	472621	0	Standard
⎢	**Ag**	**107**	**-0.006**	ug/L	0.000	6	135	74	6	Standard
⎢	**Sb**	**121**	**0.068**	ug/L	0.002	2	596	1231	2	Standard
⎣	**Sb**	**123**	**0.066**	ug/L	0.002	3	475	940	2	Standard
⎡>	**Tb**	**159**		ug/L			499801	508988	1	Standard
⎢	**Tl**	**205**	**-0.004**	ug/L	0.001	16	224	103	20	Standard
⎣	**Pb**	**208**	**-0.006**	ug/L	0.001	13	359	135	23	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CRL1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 17:49:27
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	37348	1	Standard
	Cl	**37**		ug/L			3977931	4057711	1	Standard
⎡>	**Sc**	**45**		ug/L			439931	464021	0	Standard
⎢	**Cr**	**52**	**0.446**	ug/L	0.038	8	12483	20263	2	Standard
⎢	**Cr**	**53**	**0.480**	ug/L	0.020	4	120	1014	3	Standard
⎣	**Mn**	**55**	**0.461**	ug/L	0.014	3	1073	11426	2	Standard
⎡>	**Ge**	**72**		ug/L			28119	28719	3	KED
⎢	**Ni**	**60**	**0.452**	ug/L	0.046	10	28	452	9	KED
⎢	**Ni**	**62**	**0.429**	ug/L	0.087	20	5	69	19	KED
⎢	**Cu**	**63**	**0.492**	ug/L	0.039	7	42	1341	10	KED
⎢	**Cu**	**65**	**0.460**	ug/L	0.021	4	27	629	5	KED
⎢	**Zn**	**66**	**6.168**	ug/L	0.339	5	29	2090	5	KED
⎢	**Zn**	**67**	**5.395**	ug/L	0.718	13	8	307	13	KED
⎢	**As**	**75**	**0.185**	ug/L	0.010	5	7	38	2	KED
⎣	**Se**	**78**	**0.260**	ug/L	0.159	61	11	16	19	KED
	Y	**89**		ug/L			276255	286887	3	Standard
	Kr	**83**		ug/L			52	55	15	Standard
⎡>	**In-1**	**115**		ug/L			7782	7914	2	KED
⎢	**Mo**	**98**	**0.176**	ug/L	0.012	6	8	137	4	KED
⎢	**Cd**	**111**	**0.071**	ug/L	0.015	21	4	16	14	KED
⎣	**Cd**	**114**	**0.079**	ug/L	0.003	4	5	39	4	KED
⎡>	**In**	**115**		ug/L			475417	487172	1	Standard
⎢	**Ag**	**107**	**0.192**	ug/L	0.007	3	135	2195	2	Standard
⎢	**Sb**	**121**	**0.167**	ug/L	0.009	5	596	2216	3	Standard
⎣	**Sb**	**123**	**0.165**	ug/L	0.010	6	475	1685	3	Standard
⎡>	**Tb**	**159**		ug/L			499801	514479	2	Standard
⎢	**Tl**	**205**	**0.191**	ug/L	0.007	3	224	5784	3	Standard
⎣	**Pb**	**208**	**0.098**	ug/L	0.006	5	359	3904	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFA1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 17:55:01
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	156038	2	Standard
	Cl	**37**		ug/L			3977931	10037429	1	Standard
⌈>	**Sc**	**45**		ug/L			439931	483663	0	Standard
|	**Cr**	**52**	**0.839**	ug/L	0.063	7	12483	27662	3	Standard
|	**Cr**	**53**	**4.405**	ug/L	0.210	4	120	8609	4	Standard
⌊	**Mn**	**55**	**0.098**	ug/L	0.009	8	1073	3462	5	Standard
⌈>	**Ge**	**72**		ug/L			28119	27476	1	KED
|	**Ni**	**60**	**0.083**	ug/L	0.013	15	28	102	12	KED
|	**Ni**	**62**	**0.212**	ug/L	0.012	5	5	35	6	KED
|	**Cu**	**63**	**0.074**	ug/L	0.004	4	42	226	2	KED
|	**Cu**	**65**	**0.063**	ug/L	0.016	24	27	105	16	KED
|	**Zn**	**66**	**0.338**	ug/L	0.063	18	29	137	13	KED
|	**Zn**	**67**	**0.218**	ug/L	0.192	88	8	20	51	KED
|	**As**	**75**	**0.035**	ug/L	0.018	51	7	12	20	KED
⌊	**Se**	**78**	**0.221**	ug/L	0.057	25	11	15	4	KED
	Y	**89**		ug/L			276255	294819	3	Standard
	Kr	**83**		ug/L			52	114	13	Standard
⌈>	**In-1**	**115**		ug/L			7782	7910	3	KED
|	**Mo**	**98**	**371.210**	ug/L	29.988	8	8	272476	5	KED
|	**Cd**	**111**	**0.073**	ug/L	0.049	66	4	17	47	KED
⌊	**Cd**	**114**	**0.049**	ug/L	0.012	23	5	27	15	KED
⌈>	**In**	**115**		ug/L			475417	487505	1	Standard
|	**Ag**	**107**	**-0.002**	ug/L	0.001	72	135	118	13	Standard
|	**Sb**	**121**	**-0.004**	ug/L	0.001	24	596	576	2	Standard
⌊	**Sb**	**123**	**-0.004**	ug/L	0.004	92	475	455	7	Standard
⌈>	**Tb**	**159**		ug/L			499801	545008	0	Standard
|	**Tl**	**205**	**0.014**	ug/L	0.000	2	224	679	2	Standard
⌊	**Pb**	**208**	**0.024**	ug/L	0.002	9	359	1315	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFA1
Sample Dil Factor:
Comments: DEL
Sample Date/Time: Wednesday, March 01, 2023 18:03:09
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	154600	2	Standard
	Cl	**37**		ug/L			3977931	10085967	1	Standard
⌈>	**Sc**	**45**		ug/L			439931	482115	1	Standard
|	**Cr**	**52**	**0.821**	ug/L	0.015	1	12483	27270	2	Standard
|	**Cr**	**53**	**4.607**	ug/L	0.018	0	120	8969	1	Standard
⌊	**Mn**	**55**	**0.091**	ug/L	0.005	5	1073	3278	2	Standard
⌈>	**Ge**	**72**		ug/L			28119	28029	1	KED
|	**Ni**	**60**	**0.088**	ug/L	0.010	10	28	109	8	KED
|	**Ni**	**62**	**0.169**	ug/L	0.049	28	5	29	22	KED
|	**Cu**	**63**	**0.068**	ug/L	0.004	6	42	217	5	KED
|	**Cu**	**65**	**0.072**	ug/L	0.028	39	27	118	29	KED
|	**Zn**	**66**	**0.188**	ug/L	0.075	40	29	90	26	KED
|	**Zn**	**67**	**0.107**	ug/L	0.045	41	8	14	15	KED
|	**As**	**75**	**0.018**	ug/L	0.010	55	7	10	17	KED
⌊	**Se**	**78**	**0.150**	ug/L	0.174	115	11	14	22	KED
	Y	**89**		ug/L			276255	291487	0	Standard
	Kr	**83**		ug/L			52	126	14	Standard
⌈>	**In-1**	**115**		ug/L			7782	7883	6	KED
|	**Mo**	**98**	**363.037**	ug/L	46.057	12	8	264541	6	KED
|	**Cd**	**111**	**0.066**	ug/L	0.012	18	4	15	12	KED
⌊	**Cd**	**114**	**0.041**	ug/L	0.008	20	5	23	12	KED
⌈>	**In**	**115**		ug/L			475417	482286	1	Standard
|	**Ag**	**107**	**-0.002**	ug/L	0.001	42	135	113	8	Standard
|	**Sb**	**121**	**-0.007**	ug/L	0.003	40	596	540	3	Standard
⌊	**Sb**	**123**	**-0.008**	ug/L	0.001	16	475	424	2	Standard
⌈>	**Tb**	**159**		ug/L			499801	535044	2	Standard
|	**Tl**	**205**	**0.012**	ug/L	0.001	5	224	608	5	Standard
⌊	**Pb**	**208**	**0.023**	ug/L	0.001	3	359	1230	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFB1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 18:08:23
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	160306	3	Standard
	Cl	**37**		ug/L			3977931	10182077	2	Standard
⌈>	**Sc**	**45**		ug/L			439931	491587	1	Standard
|	**Cr**	**52**	**19.858**	ug/L	0.784	3	12483	349007	2	Standard
|	**Cr**	**53**	**23.335**	ug/L	0.404	1	120	45769	0	Standard
⌊	**Mn**	**55**	**18.675**	ug/L	0.442	2	1073	442706	0	Standard
⌈>	**Ge**	**72**		ug/L			28119	28754	0	KED
|	**Ni**	**60**	**19.627**	ug/L	0.503	2	28	18434	2	KED
|	**Ni**	**62**	**20.592**	ug/L	1.633	7	5	3114	8	KED
|	**Cu**	**63**	**19.273**	ug/L	0.722	3	42	50870	4	KED
|	**Cu**	**65**	**19.304**	ug/L	0.434	2	27	25304	2	KED
|	**Zn**	**66**	**19.020**	ug/L	0.837	4	29	6394	5	KED
|	**Zn**	**67**	**16.721**	ug/L	1.084	6	8	935	7	KED
|	**As**	**75**	**18.233**	ug/L	0.780	4	7	3097	4	KED
⌊	**Se**	**78**	**0.174**	ug/L	0.112	64	11	15	12	KED
	Y	**89**		ug/L			276255	298499	2	Standard
	Kr	**83**		ug/L			52	93	13	Standard
⌈>	**In-1**	**115**		ug/L			7782	7703	2	KED
|	**Mo**	**98**	**388.577**	ug/L	2.838	0	8	278202	3	KED
|	**Cd**	**111**	**18.832**	ug/L	0.165	0	4	3288	2	KED
⌊	**Cd**	**114**	**19.267**	ug/L	0.498	2	5	8139	3	KED
⌈>	**In**	**115**		ug/L			475417	485066	2	Standard
|	**Ag**	**107**	**17.996**	ug/L	0.544	3	135	192521	0	Standard
|	**Sb**	**121**	**-0.014**	ug/L	0.004	30	596	474	11	Standard
⌊	**Sb**	**123**	**-0.016**	ug/L	0.003	17	475	366	7	Standard
⌈>	**Tb**	**159**		ug/L			499801	537347	1	Standard
|	**Tl**	**205**	**0.013**	ug/L	0.002	16	224	638	11	Standard
⌊	**Pb**	**208**	**0.035**	ug/L	0.002	6	359	1697	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 18:13:14
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	45098	3	Standard
	Cl	**37**		ug/L			3977931	4480126	2	Standard
⎡>	**Sc**	**45**		ug/L			439931	473478	1	Standard
⎢	**Cr**	**52**	**200.923**	ug/L	4.711	2	12483	3280763	4	Standard
⎢	**Cr**	**53**	**195.319**	ug/L	0.468	0	120	368103	1	Standard
⎣	**Mn**	**55**	**196.446**	ug/L	1.264	0	1073	4475473	2	Standard
⎡>	**Ge**	**72**		ug/L			28119	27306	1	KED
⎢	**Ni**	**60**	**199.686**	ug/L	7.524	3	28	177831	3	KED
⎢	**Ni**	**62**	**202.956**	ug/L	6.733	3	5	29090	2	KED
⎢	**Cu**	**63**	**199.185**	ug/L	3.167	1	42	498696	0	KED
⎢	**Cu**	**65**	**202.481**	ug/L	3.428	1	27	251789	2	KED
⎢	**Zn**	**66**	**199.828**	ug/L	6.951	3	29	63493	2	KED
⎢	**Zn**	**67**	**198.172**	ug/L	7.097	3	8	10427	3	KED
⎢	**As**	**75**	**201.281**	ug/L	5.306	2	7	32398	2	KED
⎣	**Se**	**78**	**195.778**	ug/L	4.846	2	11	3412	2	KED
	Y	**89**		ug/L			276255	292341	1	Standard
	Kr	**83**		ug/L			52	110	12	Standard
⎡>	**In-1**	**115**		ug/L			7782	7650	4	KED
⎢	**Mo**	**98**	**194.536**	ug/L	17.279	8	8	137985	5	KED
⎢	**Cd**	**111**	**191.134**	ug/L	15.870	8	4	33037	4	KED
⎣	**Cd**	**114**	**192.597**	ug/L	15.525	8	5	80577	4	KED
⎡>	**In**	**115**		ug/L			475417	474061	2	Standard
⎢	**Ag**	**107**	**194.208**	ug/L	10.137	5	135	2030868	6	Standard
⎢	**Sb**	**121**	**197.884**	ug/L	5.055	2	596	1854032	3	Standard
⎣	**Sb**	**123**	**199.424**	ug/L	5.352	2	475	1411955	4	Standard
⎡>	**Tb**	**159**		ug/L			499801	540259	3	Standard
⎢	**Tl**	**205**	**191.949**	ug/L	5.737	2	224	5865866	2	Standard
⎣	**Pb**	**208**	**197.655**	ug/L	7.062	3	359	7463526	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 18:18:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	44120	2	Standard
	Cl	**37**		ug/L			3977931	4504029	0	Standard
⌈>	**Sc**	**45**		ug/L			439931	461060	4	Standard
|	**Cr**	**52**	**301.181**	ug/L	15.552	5	12483	4776364	3	Standard
|	**Cr**	**53**	**297.067**	ug/L	15.094	5	120	544423	2	Standard
⌊	**Mn**	**55**	**296.634**	ug/L	12.569	4	1073	6572383	0	Standard
⌈>	**Ge**	**72**		ug/L			28119	26423	2	KED
|	**Ni**	**60**	**290.355**	ug/L	14.197	4	28	250005	1	KED
|	**Ni**	**62**	**291.950**	ug/L	9.590	3	5	40476	1	KED
|	**Cu**	**63**	**285.178**	ug/L	13.913	4	42	690381	2	KED
|	**Cu**	**65**	**284.823**	ug/L	12.703	4	27	342433	2	KED
|	**Zn**	**66**	**277.844**	ug/L	11.752	4	29	85367	1	KED
|	**Zn**	**67**	**276.489**	ug/L	8.447	3	8	14069	0	KED
|	**As**	**75**	**287.242**	ug/L	10.876	3	7	44707	0	KED
⌊	**Se**	**78**	**269.644**	ug/L	14.601	5	11	4539	2	KED
	Y	**89**		ug/L			276255	288834	4	Standard
	Kr	**83**		ug/L			52	179	12	Standard
⌈>	**In-1**	**115**		ug/L			7782	7228	2	KED
|	**Mo**	**98**	**296.693**	ug/L	23.766	8	8	199100	5	KED
|	**Cd**	**111**	**275.144**	ug/L	24.609	8	4	44989	7	KED
⌊	**Cd**	**114**	**279.578**	ug/L	22.483	8	5	110650	6	KED
⌈>	**In**	**115**		ug/L			475417	456363	1	Standard
|	**Ag**	**107**	**296.839**	ug/L	10.556	3	135	2986005	2	Standard
|	**Sb**	**121**	**309.869**	ug/L	11.005	3	596	2793766	2	Standard
⌊	**Sb**	**123**	**310.233**	ug/L	20.152	6	475	2112564	5	Standard
⌈>	**Tb**	**159**		ug/L			499801	523106	2	Standard
|	**Tl**	**205**	**294.797**	ug/L	10.541	3	224	8722318	0	Standard
⌊	**Pb**	**208**	**305.523**	ug/L	8.397	2	359	11173066	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 18:25:42
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	40508	2	Standard
	Cl	**37**		ug/L			3977931	4384884	2	Standard
>	**Sc**	**45**		ug/L			439931	460596	1	Standard
	Cr	**52**	**0.028**	ug/L	0.035	123	12483	13511	3	Standard
	Cr	**53**	**0.063**	ug/L	0.005	8	120	241	2	Standard
	Mn	**55**	**0.059**	ug/L	0.003	4	1073	2432	1	Standard
>	**Ge**	**72**		ug/L			28119	28580	3	KED
	Ni	**60**	**0.000**	ug/L	0.006	4656	28	29	20	KED
	Ni	**62**	**0.008**	ug/L	0.019	239	5	6	45	KED
	Cu	**63**	**0.030**	ug/L	0.004	14	42	122	11	KED
	Cu	**65**	**0.028**	ug/L	0.004	12	27	64	10	KED
	Zn	**66**	**0.258**	ug/L	0.010	4	29	116	4	KED
	Zn	**67**	**0.149**	ug/L	0.100	67	8	17	29	KED
	As	**75**	**0.079**	ug/L	0.040	50	7	20	28	KED
	Se	**78**	**0.177**	ug/L	0.173	98	11	15	16	KED
	Y	**89**		ug/L			276255	289312	2	Standard
	Kr	**83**		ug/L			52	54	2	Standard
>	**In-1**	**115**		ug/L			7782	8002	5	KED
	Mo	**98**	**0.058**	ug/L	0.013	22	8	52	24	KED
	Cd	**111**	**-0.004**	ug/L	0.009	238	4	3	41	KED
	Cd	**114**	**-0.001**	ug/L	0.009	1674	5	5	62	KED
>	**In**	**115**		ug/L			475417	489551	0	Standard
	Ag	**107**	**0.004**	ug/L	0.001	19	135	180	4	Standard
	Sb	**121**	**0.431**	ug/L	0.005	1	596	4779	0	Standard
	Sb	**123**	**0.428**	ug/L	0.017	3	475	3616	2	Standard
>	**Tb**	**159**		ug/L			499801	519076	2	Standard
	Tl	**205**	**0.023**	ug/L	0.001	2	224	917	4	Standard
	Pb	**208**	**0.031**	ug/L	0.002	6	359	1503	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 18:32:27
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	39744	2	Standard
	Cl	**37**		ug/L			3977931	4245422	1	Standard
⎡>	**Sc**	**45**		ug/L			439931	464965	3	Standard
⎢	**Cr**	**52**	**0.010**	ug/L	0.016	163	12483	13344	2	Standard
⎢	**Cr**	**53**	**0.052**	ug/L	0.009	17	120	223	4	Standard
⎣	**Mn**	**55**	**0.054**	ug/L	0.007	13	1073	2336	4	Standard
⎡>	**Ge**	**72**		ug/L			28119	28423	0	KED
⎢	**Ni**	**60**	**0.002**	ug/L	0.009	547	28	30	28	KED
⎢	**Ni**	**62**	**0.034**	ug/L	0.029	87	5	10	43	KED
⎢	**Cu**	**63**	**0.034**	ug/L	0.010	28	42	132	19	KED
⎢	**Cu**	**65**	**0.026**	ug/L	0.006	23	27	61	12	KED
⎢	**Zn**	**66**	**0.299**	ug/L	0.008	2	29	128	2	KED
⎢	**Zn**	**67**	**0.230**	ug/L	0.122	53	8	21	30	KED
⎢	**As**	**75**	**0.018**	ug/L	0.009	47	7	10	14	KED
⎣	**Se**	**78**	**0.152**	ug/L	0.096	62	11	14	11	KED
	Y	**89**		ug/L			276255	287271	4	Standard
	Kr	**83**		ug/L			52	62	9	Standard
⎡>	**In-1**	**115**		ug/L			7782	7929	2	KED
⎢	**Mo**	**98**	**0.018**	ug/L	0.018	99	8	21	58	KED
⎢	**Cd**	**111**	**-0.002**	ug/L	0.015	634	4	3	75	KED
⎣	**Cd**	**114**	**-0.006**	ug/L	0.002	36	5	2	35	KED
⎡>	**In**	**115**		ug/L			475417	490136	1	Standard
⎢	**Ag**	**107**	**-0.003**	ug/L	0.000	14	135	102	5	Standard
⎢	**Sb**	**121**	**0.089**	ug/L	0.004	4	596	1473	2	Standard
⎣	**Sb**	**123**	**0.086**	ug/L	0.006	7	475	1120	2	Standard
⎡>	**Tb**	**159**		ug/L			499801	517847	3	Standard
⎢	**Tl**	**205**	**0.005**	ug/L	0.000	10	224	366	3	Standard
⎣	**Pb**	**208**	**0.029**	ug/L	0.002	6	359	1433	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 18:39:13
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	38115	2	Standard
	Cl	**37**		ug/L			3977931	4530209	1	Standard
⎡>	**Sc**	**45**		ug/L			439931	481697	2	Standard
⎢	**Cr**	**52**	**49.508**	ug/L	1.869	3	12483	832783	5	Standard
⎢	**Cr**	**53**	**49.486**	ug/L	1.968	3	120	95010	5	Standard
⎣	**Mn**	**55**	**47.816**	ug/L	1.647	3	1073	1109573	5	Standard
⎡>	**Ge**	**72**		ug/L			28119	28015	1	KED
⎢	**Ni**	**60**	**49.556**	ug/L	1.375	2	28	45320	4	KED
⎢	**Ni**	**62**	**49.995**	ug/L	1.491	2	5	7359	4	KED
⎢	**Cu**	**63**	**50.387**	ug/L	1.503	2	42	129495	3	KED
⎢	**Cu**	**65**	**51.120**	ug/L	1.209	2	27	65247	3	KED
⎢	**Zn**	**66**	**50.163**	ug/L	1.170	2	29	16382	3	KED
⎢	**Zn**	**67**	**48.758**	ug/L	0.774	1	8	2638	0	KED
⎢	**As**	**75**	**49.345**	ug/L	1.340	2	7	8156	4	KED
⎣	**Se**	**78**	**47.931**	ug/L	1.612	3	11	866	4	KED
	Y	**89**		ug/L			276255	304203	1	Standard
	Kr	**83**		ug/L			52	64	30	Standard
⎡>	**In-1**	**115**		ug/L			7782	8064	1	KED
⎢	**Mo**	**98**	**46.569**	ug/L	4.736	10	8	34884	9	KED
⎢	**Cd**	**111**	**47.404**	ug/L	4.464	9	4	8655	8	KED
⎣	**Cd**	**114**	**48.130**	ug/L	4.989	10	5	21262	9	KED
⎡>	**In**	**115**		ug/L			475417	500424	1	Standard
⎢	**Ag**	**107**	**49.010**	ug/L	0.758	1	135	540990	2	Standard
⎢	**Sb**	**121**	**48.692**	ug/L	1.791	3	596	482140	4	Standard
⎣	**Sb**	**123**	**49.070**	ug/L	1.793	3	475	367143	4	Standard
⎡>	**Tb**	**159**		ug/L			499801	535189	2	Standard
⎢	**Tl**	**205**	**48.209**	ug/L	0.304	0	224	1460538	2	Standard
⎣	**Pb**	**208**	**51.464**	ug/L	0.256	0	359	1926841	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB2
Sample Dil Factor:
Comments:
DEL
Sample Date/Time: Wednesday, March 01, 2023 18:46:48
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	37364	0	Standard
	Cl	**37**		ug/L			3977931	4308539	2	Standard
>	**Sc**	**45**		ug/L			439931	453557	6	Standard
	Cr	**52**	**-0.020**	ug/L	0.019	94	12483	12548	4	Standard
	Cr	**53**	**0.018**	ug/L	0.003	17	120	156	4	Standard
	Mn	**55**	**0.007**	ug/L	0.003	45	1073	1255	3	Standard
>	**Ge**	**72**		ug/L			28119	28418	2	KED
	Ni	**60**	**-0.014**	ug/L	0.005	32	28	15	30	KED
	Ni	**62**	**-0.013**	ug/L	0.027	204	5	3	124	KED
	Cu	**63**	**-0.001**	ug/L	0.005	797	42	41	26	KED
	Cu	**65**	**-0.002**	ug/L	0.014	871	27	25	68	KED
	Zn	**66**	**0.012**	ug/L	0.010	78	29	34	9	KED
	Zn	**67**	**-0.036**	ug/L	0.023	64	8	6	15	KED
	As	**75**	**0.006**	ug/L	0.013	207	7	8	26	KED
	Se	**78**	**0.029**	ug/L	0.217	737	11	12	30	KED
	Y	**89**		ug/L			276255	285927	6	Standard
	Kr	**83**		ug/L			52	59	27	Standard
>	**In-1**	**115**		ug/L			7782	7767	1	KED
	Mo	**98**	**0.013**	ug/L	0.009	71	8	17	37	KED
	Cd	**111**	**0.002**	ug/L	0.012	599	4	4	44	KED
	Cd	**114**	**-0.006**	ug/L	0.007	120	5	3	100	KED
>	**In**	**115**		ug/L			475417	476078	7	Standard
	Ag	**107**	**-0.003**	ug/L	0.002	60	135	107	8	Standard
	Sb	**121**	**0.107**	ug/L	0.028	26	596	1588	8	Standard
	Sb	**123**	**0.107**	ug/L	0.015	14	475	1231	1	Standard
>	**Tb**	**159**		ug/L			499801	498943	8	Standard
	Tl	**205**	**0.000**	ug/L	0.001	573	224	228	9	Standard
	Pb	**208**	**-0.005**	ug/L	0.001	14	359	166	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 18:51:39
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	37595	1	Standard
	Cl	**37**		ug/L			3977931	4191187	2	Standard
⎡>	**Sc**	**45**		ug/L			439931	452308	0	Standard
⎢	**Cr**	**52**	**-0.030**	ug/L	0.010	33	12483	12368	0	Standard
⎢	**Cr**	**53**	**0.026**	ug/L	0.004	16	120	171	4	Standard
⎣	**Mn**	**55**	**0.003**	ug/L	0.002	75	1073	1162	4	Standard
⎡>	**Ge**	**72**		ug/L			28119	27995	1	KED
⎢	**Ni**	**60**	**-0.013**	ug/L	0.001	11	28	16	6	KED
⎢	**Ni**	**62**	**0.030**	ug/L	0.046	153	5	9	72	KED
⎢	**Cu**	**63**	**0.000**	ug/L	0.002	3638	42	42	14	KED
⎢	**Cu**	**65**	**0.006**	ug/L	0.005	90	27	34	20	KED
⎢	**Zn**	**66**	**0.032**	ug/L	0.017	54	29	40	14	KED
⎢	**Zn**	**67**	**0.000**	ug/L	0.051	57339	8	8	32	KED
⎢	**As**	**75**	**0.006**	ug/L	0.016	265	7	8	31	KED
⎣	**Se**	**78**	**0.091**	ug/L	0.091	99	11	13	12	KED
	Y	**89**		ug/L			276255	286290	1	Standard
	Kr	**83**		ug/L			52	60	32	Standard
⎡>	**In-1**	**115**		ug/L			7782	7792	1	KED
⎢	**Mo**	**98**	**0.007**	ug/L	0.004	54	8	14	21	KED
⎢	**Cd**	**111**	**0.023**	ug/L	0.012	51	4	8	26	KED
⎣	**Cd**	**114**	**0.004**	ug/L	0.000	3	5	7	0	KED
⎡>	**In**	**115**		ug/L			475417	485943	1	Standard
⎢	**Ag**	**107**	**-0.006**	ug/L	0.001	21	135	71	21	Standard
⎢	**Sb**	**121**	**-0.006**	ug/L	0.001	13	596	549	2	Standard
⎣	**Sb**	**123**	**-0.012**	ug/L	0.001	4	475	396	1	Standard
⎡>	**Tb**	**159**		ug/L			499801	506292	2	Standard
⎢	**Tl**	**205**	**-0.004**	ug/L	0.000	5	224	100	7	Standard
⎣	**Pb**	**208**	**-0.007**	ug/L	0.001	8	359	129	17	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0008-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 19:00:48
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			34622	51234	2	Standard
	Cl	37		ug/L			3977931	4266346	1	Standard
>	Sc	45		ug/L			439931	481305	2	Standard
	Cr	52	0.060	ug/L	0.015	24	12483	14656	3	Standard
	Cr	53	0.075	ug/L	0.007	9	120	275	3	Standard
	Mn	55	0.002	ug/L	0.000	22	1073	1212	1	Standard
>	Ge	72		ug/L			28119	28560	2	KED
	Ni	60	-0.013	ug/L	0.008	60	28	17	40	KED
	Ni	62	-0.005	ug/L	0.031	594	5	4	107	KED
	Cu	63	0.032	ug/L	0.005	15	42	128	9	KED
	Cu	65	0.019	ug/L	0.007	34	27	52	17	KED
	Zn	66	0.133	ug/L	0.031	23	29	74	12	KED
	Zn	67	0.126	ug/L	0.079	62	8	15	24	KED
	As	75	0.010	ug/L	0.014	136	7	9	29	KED
	Se	78	0.175	ug/L	0.119	68	11	15	13	KED
	Y	89		ug/L			276255	297339	4	Standard
	Kr	83		ug/L			52	50	28	Standard
>	In-1	115		ug/L			7782	7979	4	KED
	Mo	98	0.017	ug/L	0.004	23	8	21	17	KED
	Cd	111	0.001	ug/L	0.011	959	4	4	44	KED
	Cd	114	-0.001	ug/L	0.008	1467	5	5	61	KED
>	In	115		ug/L			475417	495755	0	Standard
	Ag	107	-0.005	ug/L	0.001	23	135	91	13	Standard
	Sb	121	0.021	ug/L	0.004	17	596	824	4	Standard
	Sb	123	0.022	ug/L	0.003	11	475	661	2	Standard
>	Tb	159		ug/L			499801	523298	2	Standard
	Tl	205	-0.004	ug/L	0.001	17	224	126	17	Standard
	Pb	208	-0.003	ug/L	0.000	7	359	248	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0008-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 19:05:39
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			34622	52552	4	Standard
	Cl	37		ug/L			3977931	4256415	0	Standard
>	Sc	45		ug/L			439931	460928	2	Standard
	Cr	52	25.701	ug/L	1.434	5	12483	419698	4	Standard
	Cr	53	25.311	ug/L	0.720	2	120	46530	1	Standard
	Mn	55	25.235	ug/L	1.195	4	1073	560292	3	Standard
>	Ge	72		ug/L			28119	28793	1	KED
	Ni	60	25.372	ug/L	0.856	3	28	23847	2	KED
	Ni	62	26.103	ug/L	0.949	3	5	3950	3	KED
	Cu	63	26.051	ug/L	0.428	1	42	68819	1	KED
	Cu	65	26.472	ug/L	0.828	3	27	34731	3	KED
	Zn	66	87.602	ug/L	2.168	2	29	29369	1	KED
	Zn	67	78.076	ug/L	4.786	6	8	4339	7	KED
	As	75	25.490	ug/L	0.816	3	7	4331	2	KED
	Se	78	79.341	ug/L	3.165	3	11	1465	3	KED
	Y	89		ug/L			276255	290344	0	Standard
	Kr	83		ug/L			52	57	16	Standard
>	In-1	115		ug/L			7782	7904	3	KED
	Mo	98	24.723	ug/L	1.254	5	8	18164	5	KED
	Cd	111	24.762	ug/L	2.186	8	4	4435	9	KED
	Cd	114	25.468	ug/L	1.746	6	5	11038	7	KED
>	In	115		ug/L			475417	490069	1	Standard
	Ag	107	25.840	ug/L	0.949	3	135	279277	2	Standard
	Sb	121	25.862	ug/L	0.873	3	596	250980	2	Standard
	Sb	123	25.980	ug/L	0.759	2	475	190529	2	Standard
>	Tb	159		ug/L			499801	509418	1	Standard
	Tl	205	25.976	ug/L	0.959	3	224	748868	2	Standard
	Pb	208	27.367	ug/L	0.811	2	359	975137	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0551-01
Sample Dil Factor: 10
Comments:
Sample Date/Time: Wednesday, March 01, 2023 19:10:30
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			34622	42076	2	Standard
	Cl	37		ug/L			3977931	4369905	0	Standard
>	Sc	45		ug/L			439931	471780	1	Standard
	Cr	52	0.065	ug/L	0.017	26	12483	14443	2	Standard
	Cr	53	0.100	ug/L	0.008	8	120	317	6	Standard
	Mn	55	8.883	ug/L	0.267	3	1073	202815	4	Standard
>	Ge	72		ug/L			28119	28404	0	KED
	Ni	60	0.122	ug/L	0.016	13	28	142	11	KED
	Ni	62	0.230	ug/L	0.058	25	5	39	21	KED
	Cu	63	21.346	ug/L	0.565	2	42	55637	2	KED
	Cu	65	21.332	ug/L	0.600	2	27	27613	2	KED
	Zn	66	843.857	ug/L	41.090	4	29	278846	4	KED
	Zn	67	768.664	ug/L	18.933	2	8	42051	2	KED
	As	75	0.011	ug/L	0.010	93	7	9	18	KED
	Se	78	-0.041	ug/L	0.196	477	11	11	30	KED
	Y	89		ug/L			276255	292821	3	Standard
	Kr	83		ug/L			52	51	32	Standard
>	In-1	115		ug/L			7782	8013	1	KED
	Mo	98	0.018	ug/L	0.007	35	8	22	21	KED
	Cd	111	0.387	ug/L	0.098	25	4	74	22	KED
	Cd	114	0.394	ug/L	0.015	3	5	178	4	KED
>	In	115		ug/L			475417	495728	0	Standard
	Ag	107	-0.002	ug/L	0.001	29	135	115	6	Standard
	Sb	121	0.013	ug/L	0.004	32	596	750	5	Standard
	Sb	123	0.013	ug/L	0.002	17	475	591	2	Standard
>	Tb	159		ug/L			499801	518342	3	Standard
	Tl	205	-0.004	ug/L	0.000	4	224	119	6	Standard
	Pb	208	0.067	ug/L	0.005	7	359	2810	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0551-01RE1
Sample Dil Factor: 100
Comments:
Sample Date/Time: Wednesday, March 01, 2023 19:18:12
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	42343	2	Standard
	Cl	**37**		ug/L			3977931	4218070	1	Standard
⌈>	**Sc**	**45**		ug/L			439931	464815	1	Standard
|	**Cr**	**52**	**-0.023**	ug/L	0.021	92	12483	12831	3	Standard
|	**Cr**	**53**	**0.011**	ug/L	0.006	52	120	148	7	Standard
⌊	**Mn**	**55**	**0.824**	ug/L	0.019	2	1073	19551	3	Standard
⌈>	**Ge**	**72**		ug/L			28119	28179	2	KED
|	**Ni**	**60**	**0.014**	ug/L	0.016	117	28	41	34	KED
|	**Ni**	**62**	**0.018**	ug/L	0.040	227	5	7	75	KED
|	**Cu**	**63**	**2.129**	ug/L	0.064	3	42	5543	2	KED
|	**Cu**	**65**	**2.077**	ug/L	0.102	4	27	2689	2	KED
|	**Zn**	**66**	**80.801**	ug/L	4.735	5	29	26509	5	KED
|	**Zn**	**67**	**73.988**	ug/L	4.528	6	8	4020	4	KED
|	**As**	**75**	**-0.011**	ug/L	0.004	34	7	5	13	KED
⌊	**Se**	**78**	**-0.065**	ug/L	0.069	107	11	10	9	KED
	Y	**89**		ug/L			276255	282427	1	Standard
	Kr	**83**		ug/L			52	59	6	Standard
⌈>	**In-1**	**115**		ug/L			7782	7772	3	KED
|	**Mo**	**98**	**-0.002**	ug/L	0.008	428	8	7	76	KED
|	**Cd**	**111**	**0.025**	ug/L	0.008	32	4	8	19	KED
⌊	**Cd**	**114**	**0.037**	ug/L	0.019	52	5	21	40	KED
⌈>	**In**	**115**		ug/L			475417	491966	0	Standard
|	**Ag**	**107**	**-0.007**	ug/L	0.002	32	135	63	37	Standard
|	**Sb**	**121**	**-0.037**	ug/L	0.002	5	596	259	8	Standard
⌊	**Sb**	**123**	**-0.041**	ug/L	0.004	9	475	191	14	Standard
⌈>	**Tb**	**159**		ug/L			499801	507820	2	Standard
|	**Tl**	**205**	**-0.007**	ug/L	0.000	7	224	33	44	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.001	188	359	386	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0004-01
Sample Dil Factor: 20
DEL
Comments:
Sample Date/Time: Wednesday, March 01, 2023 19:23:03
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	53509	4	Standard
	Cl	**37**		ug/L			3977931	4446857	1	Standard
⌈>	**Sc**	**45**		ug/L			439931	472570	2	Standard
|	**Cr**	**52**	**0.488**	ug/L	0.017	3	12483	21324	2	Standard
|	**Cr**	**53**	**0.363**	ug/L	0.020	5	120	813	7	Standard
⌊	**Mn**	**55**	**2.160**	ug/L	0.011	0	1073	50250	3	Standard
⌈>	**Ge**	**72**		ug/L			28119	29307	1	KED
|	**Ni**	**60**	**0.253**	ug/L	0.031	12	28	271	9	KED
|	**Ni**	**62**	**0.234**	ug/L	0.049	21	5	41	18	KED
|	**Cu**	**63**	**0.010**	ug/L	0.003	25	42	71	8	KED
|	**Cu**	**65**	**0.017**	ug/L	0.014	81	27	51	37	KED
|	**Zn**	**66**	**0.393**	ug/L	0.025	6	29	165	3	KED
|	**Zn**	**67**	**0.398**	ug/L	0.068	17	8	31	12	KED
|	**As**	**75**	**0.008**	ug/L	0.012	138	7	8	22	KED
⌊	**Se**	**78**	**0.046**	ug/L	0.129	282	11	13	19	KED
	Y	**89**		ug/L			276255	289924	0	Standard
	Kr	**83**		ug/L			52	59	27	Standard
⌈>	**In-1**	**115**		ug/L			7782	7706	2	KED
|	**Mo**	**98**	**0.061**	ug/L	0.015	25	8	52	22	KED
|	**Cd**	**111**	**-0.011**	ug/L	0.003	26	4	2	24	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.013	450	5	6	84	KED
⌈>	**In**	**115**		ug/L			475417	486999	1	Standard
|	**Ag**	**107**	**-0.008**	ug/L	0.000	3	135	55	3	Standard
|	**Sb**	**121**	**-0.039**	ug/L	0.000	0	596	240	2	Standard
⌊	**Sb**	**123**	**-0.042**	ug/L	0.002	5	475	185	9	Standard
⌈>	**Tb**	**159**		ug/L			499801	513732	2	Standard
|	**Tl**	**205**	**-0.006**	ug/L	0.000	5	224	46	20	Standard
⌊	**Pb**	**208**	**-0.002**	ug/L	0.001	31	359	283	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0511-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 19:28:47

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			34622	24632	0	Standard
Cl	37		ug/L			3977931	184645048	2	Standard
> Sc	45		ug/L			439931	180994	0	Standard
Cr	52	**2.454**	ug/L	0.064	2	12483	20384	2	Standard
Cr	53	**106.740**	ug/L	2.165	2	120	76916	1	Standard
Mn	55	**11.418**	ug/L	0.348	3	1073	99841	2	Standard
> Ge	72		ug/L			28119	6847	2	KED
Ni	60	**0.806**	ug/L	0.111	13	28	186	11	KED
Ni	62	**21.977**	ug/L	0.841	3	5	791	4	KED
Cu	63	**12.177**	ug/L	0.549	4	42	7650	2	KED
Cu	65	**4.089**	ug/L	0.184	4	27	1281	4	KED
Zn	66	**6.789**	ug/L	0.468	6	29	548	8	KED
Zn	67	**7.928**	ug/L	0.616	7	8	106	7	KED
As	75	**2.645**	ug/L	0.318	12	7	108	12	KED
Se	78	**8.937**	ug/L	1.165	13	11	41	10	KED
Y	89		ug/L			276255	110443	1	Standard
Kr	83		ug/L			52	582334	4	Standard
> In-1	115		ug/L			7782	2264	1	KED
Mo	98	**10.013**	ug/L	0.491	4	8	2108	3	KED
Cd	111	**0.088**	ug/L	0.036	40	4	5	33	KED
Cd	114	**0.015**	ug/L	0.040	273	5	3	145	KED
> In	115		ug/L			475417	155828	1	Standard
Ag	107	**0.014**	ug/L	0.002	12	135	93	6	Standard
Sb	121	**0.874**	ug/L	0.090	10	596	2883	7	Standard
Sb	123	**0.564**	ug/L	0.021	3	475	1467	1	Standard
> Tb	159		ug/L			499801	203821	3	Standard
Tl	205	**0.003**	ug/L	0.001	20	224	123	7	Standard
Pb	208	**0.080**	ug/L	0.005	5	359	1279	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL4
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 19:35:23
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	36397	2	Standard
	Cl	**37**		ug/L			3977931	5576847	3	Standard
⎡>	**Sc**	**45**		ug/L			439931	443056	3	Standard
⎢	**Cr**	**52**	**0.243**	ug/L	0.030	12	12483	16264	1	Standard
⎢	**Cr**	**53**	**5.155**	ug/L	0.170	3	120	9202	0	Standard
⎣	**Mn**	**55**	**0.023**	ug/L	0.004	17	1073	1574	3	Standard
⎡>	**Ge**	**72**		ug/L			28119	32434	0	KED
⎢	**Ni**	**60**	**-0.024**	ug/L	0.003	12	28	7	43	KED
⎢	**Ni**	**62**	**1.252**	ug/L	0.033	2	5	219	1	KED
⎢	**Cu**	**63**	**0.106**	ug/L	0.007	6	42	364	5	KED
⎢	**Cu**	**65**	**0.044**	ug/L	0.010	23	27	95	15	KED
⎢	**Zn**	**66**	**0.043**	ug/L	0.028	64	29	50	20	KED
⎢	**Zn**	**67**	**-0.083**	ug/L	0.036	43	8	5	43	KED
⎢	**As**	**75**	**0.001**	ug/L	0.019	2139	7	8	43	KED
⎣	**Se**	**78**	**0.186**	ug/L	0.052	28	11	17	7	KED
	Y	**89**		ug/L			276255	281758	2	Standard
	Kr	**83**		ug/L			52	139	13	Standard
⎡>	**In-1**	**115**		ug/L			7782	9265	3	KED
⎢	**Mo**	**98**	**-0.006**	ug/L	0.002	37	8	4	39	KED
⎢	**Cd**	**111**	**0.005**	ug/L	0.005	85	4	6	18	KED
⎣	**Cd**	**114**	**-0.010**	ug/L	0.004	38	5	1	112	KED
⎡>	**In**	**115**		ug/L			475417	476768	1	Standard
⎢	**Ag**	**107**	**-0.009**	ug/L	0.000	5	135	42	11	Standard
⎢	**Sb**	**121**	**-0.053**	ug/L	0.003	4	596	102	22	Standard
⎣	**Sb**	**123**	**-0.056**	ug/L	0.002	3	475	79	15	Standard
⎡>	**Tb**	**159**		ug/L			499801	570437	2	Standard
⎢	**Tl**	**205**	**-0.003**	ug/L	0.000	3	224	147	3	Standard
⎣	**Pb**	**208**	**0.010**	ug/L	0.002	16	359	794	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0004-01
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, March 01, 2023 19:41:17
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			34622	81027	2	Standard
	Cl	37		ug/L			3977931	4687506	2	Standard
>	Sc	45		ug/L			439931	439055	4	Standard
	Cr	52	1.549	ug/L	0.064	4	12483	35789	2	Standard
	Cr	53	4.514	ug/L	0.142	3	120	7999	1	Standard
	Mn	55	8.135	ug/L	0.058	0	1073	172905	5	Standard
>	Ge	72		ug/L			28119	31321	1	KED
	Ni	60	0.980	ug/L	0.081	8	28	1033	9	KED
	Ni	62	1.488	ug/L	0.076	5	5	250	3	KED
	Cu	63	0.082	ug/L	0.007	8	42	281	8	KED
	Cu	65	0.051	ug/L	0.012	23	27	102	17	KED
	Zn	66	1.199	ug/L	0.094	7	29	470	8	KED
	Zn	67	1.407	ug/L	0.258	18	8	94	14	KED
	As	75	0.054	ug/L	0.015	28	7	17	16	KED
	Se	78	0.031	ug/L	0.193	616	11	13	27	KED
	Y	89		ug/L			276255	275213	3	Standard
	Kr	83		ug/L			52	60	25	Standard
>	In-1	115		ug/L			7782	9218	2	KED
	Mo	98	0.181	ug/L	0.021	11	8	165	13	KED
	Cd	111	0.002	ug/L	0.005	210	4	5	20	KED
	Cd	114	0.003	ug/L	0.006	182	5	8	34	KED
>	In	115		ug/L			475417	457733	2	Standard
	Ag	107	-0.008	ug/L	0.001	13	135	53	21	Standard
	Sb	121	-0.007	ug/L	0.004	59	596	512	6	Standard
	Sb	123	-0.013	ug/L	0.002	13	475	367	1	Standard
>	Tb	159		ug/L			499801	552209	2	Standard
	Tl	205	-0.004	ug/L	0.000	12	224	137	12	Standard
	Pb	208	0.008	ug/L	0.001	14	359	718	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0511-01
Sample Dil Factor: 50
Comments:
Sample Date/Time: Wednesday, March 01, 2023 19:46:07
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	40081	0	Standard
	Cl	**37**		ug/L			3977931	13510903	2	Standard
⌈>	**Sc**	**45**		ug/L			439931	434835	1	Standard
|	**Cr**	**52**	**0.543**	ug/L	0.059	10	12483	20460	5	Standard
|	**Cr**	**53**	**15.214**	ug/L	0.478	3	120	26450	4	Standard
⌊	**Mn**	**55**	**0.273**	ug/L	0.013	4	1073	6771	5	Standard
⌈>	**Ge**	**72**		ug/L			28119	28319	3	KED
|	**Ni**	**60**	**0.007**	ug/L	0.009	135	28	34	25	KED
|	**Ni**	**62**	**0.430**	ug/L	0.072	16	5	69	17	KED
|	**Cu**	**63**	**0.157**	ug/L	0.002	1	42	450	3	KED
|	**Cu**	**65**	**0.117**	ug/L	0.012	10	27	179	11	KED
|	**Zn**	**66**	**0.300**	ug/L	0.026	8	29	128	7	KED
|	**Zn**	**67**	**0.197**	ug/L	0.040	20	8	19	11	KED
|	**As**	**75**	**0.055**	ug/L	0.022	39	7	16	24	KED
⌊	**Se**	**78**	**0.160**	ug/L	0.156	97	11	14	18	KED
	Y	**89**		ug/L			276255	261674	3	Standard
	Kr	**83**		ug/L			52	243	3	Standard
⌈>	**In-1**	**115**		ug/L			7782	8105	4	KED
|	**Mo**	**98**	**0.146**	ug/L	0.013	9	8	119	4	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.022	3026	4	4	96	KED
⌊	**Cd**	**114**	**-0.004**	ug/L	0.002	52	5	4	24	KED
⌈>	**In**	**115**		ug/L			475417	449605	1	Standard
|	**Ag**	**107**	**-0.008**	ug/L	0.001	13	135	46	23	Standard
|	**Sb**	**121**	**-0.051**	ug/L	0.003	6	596	112	25	Standard
⌊	**Sb**	**123**	**-0.053**	ug/L	0.003	4	475	96	16	Standard
⌈>	**Tb**	**159**		ug/L			499801	554212	2	Standard
|	**Tl**	**205**	**-0.006**	ug/L	0.000	4	224	51	16	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.001	30	359	485	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL5
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 19:50:59
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	37253	3	Standard
	Cl	**37**		ug/L			3977931	4648127	3	Standard
⌈>	**Sc**	**45**		ug/L			439931	434881	2	Standard
|	**Cr**	**52**	**0.251**	ug/L	0.025	9	12483	16090	4	Standard
|	**Cr**	**53**	**2.239**	ug/L	0.022	0	120	3993	2	Standard
⌊	**Mn**	**55**	**0.004**	ug/L	0.002	65	1073	1137	2	Standard
⌈>	**Ge**	**72**		ug/L			28119	30870	1	KED
|	**Ni**	**60**	**-0.015**	ug/L	0.006	38	28	16	33	KED
|	**Ni**	**62**	**0.216**	ug/L	0.045	20	5	40	18	KED
|	**Cu**	**63**	**0.021**	ug/L	0.005	24	42	104	12	KED
|	**Cu**	**65**	**0.013**	ug/L	0.009	65	27	48	25	KED
|	**Zn**	**66**	**0.010**	ug/L	0.005	48	29	36	5	KED
|	**Zn**	**67**	**-0.046**	ug/L	0.038	81	8	6	31	KED
|	**As**	**75**	**-0.006**	ug/L	0.014	221	7	6	37	KED
⌊	**Se**	**78**	**0.093**	ug/L	0.108	116	11	14	15	KED
	Y	**89**		ug/L			276255	270896	0	Standard
	Kr	**83**		ug/L			52	56	24	Standard
⌈>	**In-1**	**115**		ug/L			7782	8913	1	KED
|	**Mo**	**98**	**-0.004**	ug/L	0.004	118	8	6	55	KED
|	**Cd**	**111**	**-0.005**	ug/L	0.012	261	4	3	66	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.006	207	5	5	57	KED
⌈>	**In**	**115**		ug/L			475417	471128	0	Standard
|	**Ag**	**107**	**-0.010**	ug/L	0.000	2	135	34	6	Standard
|	**Sb**	**121**	**-0.056**	ug/L	0.001	2	596	69	17	Standard
⌊	**Sb**	**123**	**-0.059**	ug/L	0.002	3	475	59	21	Standard
⌈>	**Tb**	**159**		ug/L			499801	550657	1	Standard
|	**Tl**	**205**	**-0.000**	ug/L	0.001	119	224	232	5	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.001	243	359	408	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 19:56:54
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	35203	4	Standard
	Cl	**37**		ug/L			3977931	4264691	3	Standard
>	**Sc**	**45**		ug/L			439931	441518	2	Standard
	Cr	**52**	**49.081**	ug/L	1.394	2	12483	756671	4	Standard
	Cr	**53**	**51.136**	ug/L	1.976	3	120	89947	4	Standard
	Mn	**55**	**48.173**	ug/L	1.845	3	1073	1024074	4	Standard
>	**Ge**	**72**		ug/L			28119	30252	2	KED
	Ni	**60**	**45.749**	ug/L	1.420	3	28	45144	0	KED
	Ni	**62**	**46.991**	ug/L	0.927	1	5	7465	0	KED
	Cu	**63**	**47.207**	ug/L	0.687	1	42	130970	1	KED
	Cu	**65**	**47.344**	ug/L	0.915	1	27	65226	1	KED
	Zn	**66**	**47.641**	ug/L	2.101	4	29	16787	2	KED
	Zn	**67**	**49.230**	ug/L	1.140	2	8	2876	0	KED
	As	**75**	**48.728**	ug/L	0.490	1	7	8694	1	KED
	Se	**78**	**48.312**	ug/L	1.603	3	11	942	3	KED
	Y	**89**		ug/L			276255	277390	4	Standard
	Kr	**83**		ug/L			52	60	32	Standard
>	**In-1**	**115**		ug/L			7782	8509	1	KED
	Mo	**98**	**44.603**	ug/L	1.085	2	8	35269	0	KED
	Cd	**111**	**48.329**	ug/L	1.745	3	4	9311	1	KED
	Cd	**114**	**48.067**	ug/L	1.587	3	5	22414	2	KED
>	**In**	**115**		ug/L			475417	463955	2	Standard
	Ag	**107**	**54.272**	ug/L	1.332	2	135	555455	4	Standard
	Sb	**121**	**48.557**	ug/L	1.447	2	596	445856	4	Standard
	Sb	**123**	**49.154**	ug/L	1.249	2	475	340898	3	Standard
>	**Tb**	**159**		ug/L			499801	550353	3	Standard
	Tl	**205**	**44.583**	ug/L	1.086	2	224	1388065	1	Standard
	Pb	**208**	**46.929**	ug/L	0.642	1	359	1806255	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 20:04:29
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	34019	4	Standard
	Cl	**37**		ug/L			3977931	4135642	2	Standard
⌈>	**Sc**	**45**		ug/L			439931	411756	1	Standard
|	**Cr**	**52**	**0.015**	ug/L	0.029	187	12483	11901	3	Standard
|	**Cr**	**53**	**1.566**	ug/L	0.018	1	120	2678	1	Standard
⌊	**Mn**	**55**	**-0.007**	ug/L	0.003	43	1073	870	5	Standard
⌈>	**Ge**	**72**		ug/L			28119	28669	1	KED
|	**Ni**	**60**	**-0.024**	ug/L	0.003	13	28	6	41	KED
|	**Ni**	**62**	**0.075**	ug/L	0.044	58	5	16	40	KED
|	**Cu**	**63**	**0.008**	ug/L	0.003	33	42	64	11	KED
|	**Cu**	**65**	**-0.002**	ug/L	0.003	137	27	24	15	KED
|	**Zn**	**66**	**0.014**	ug/L	0.013	96	29	34	11	KED
|	**Zn**	**67**	**-0.050**	ug/L	0.078	158	8	6	69	KED
|	**As**	**75**	**-0.009**	ug/L	0.010	103	7	5	30	KED
⌊	**Se**	**78**	**0.073**	ug/L	0.171	233	11	13	22	KED
	Y	**89**		ug/L			276255	263926	2	Standard
	Kr	**83**		ug/L			52	46	6	Standard
⌈>	**In-1**	**115**		ug/L			7782	7680	12	KED
|	**Mo**	**98**	**0.003**	ug/L	0.002	53	8	11	21	KED
|	**Cd**	**111**	**0.005**	ug/L	0.009	166	4	5	39	KED
⌊	**Cd**	**114**	**-0.005**	ug/L	0.004	76	5	3	51	KED
⌈>	**In**	**115**		ug/L			475417	455687	2	Standard
|	**Ag**	**107**	**-0.007**	ug/L	0.000	6	135	60	7	Standard
|	**Sb**	**121**	**0.047**	ug/L	0.005	10	596	993	6	Standard
⌊	**Sb**	**123**	**0.042**	ug/L	0.006	14	475	744	3	Standard
⌈>	**Tb**	**159**		ug/L			499801	525379	1	Standard
|	**Tl**	**205**	**0.004**	ug/L	0.001	20	224	350	5	Standard
⌊	**Pb**	**208**	**-0.003**	ug/L	0.000	19	359	283	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0501-02
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, March 01, 2023 20:09:21
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			34622	49689	3	Standard
	Cl	37		ug/L			3977931	4256608	1	Standard
>	Sc	45		ug/L			439931	433106	0	Standard
	Cr	52	7.036	ug/L	0.128	1	12483	116914	0	Standard
	Cr	53	8.342	ug/L	0.150	1	120	14494	1	Standard
	Mn	55	7.707	ug/L	0.223	2	1073	161598	2	Standard
>	Ge	72		ug/L			28119	26837	0	KED
	Ni	60	0.726	ug/L	0.092	12	28	662	11	KED
	Ni	62	1.029	ug/L	0.168	16	5	149	16	KED
	Cu	63	1.288	ug/L	0.082	6	42	3209	6	KED
	Cu	65	1.285	ug/L	0.040	3	27	1595	2	KED
	Zn	66	2.889	ug/L	0.199	6	29	930	6	KED
	Zn	67	2.685	ug/L	0.376	14	8	147	13	KED
	As	75	0.054	ug/L	0.018	32	7	15	18	KED
	Se	78	0.159	ug/L	0.114	72	11	13	13	KED
	Y	89		ug/L			276255	271733	3	Standard
	Kr	83		ug/L			52	68	12	Standard
>	In-1	115		ug/L			7782	8104	3	KED
	Mo	98	4.756	ug/L	0.302	6	8	3592	7	KED
	Cd	111	0.014	ug/L	0.009	65	4	6	28	KED
	Cd	114	0.006	ug/L	0.003	43	5	8	11	KED
>	In	115		ug/L			475417	440296	2	Standard
	Ag	107	-0.006	ug/L	0.001	14	135	66	13	Standard
	Sb	121	0.119	ug/L	0.002	1	596	1592	3	Standard
	Sb	123	0.137	ug/L	0.015	10	475	1343	9	Standard
>	Tb	159		ug/L			499801	524667	2	Standard
	Tl	205	-0.002	ug/L	0.001	67	224	186	18	Standard
	Pb	208	0.002	ug/L	0.000	9	359	443	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0501-03
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, March 01, 2023 20:14:12
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			34622	49326	2	Standard
	Cl	37		ug/L			3977931	4251960	1	Standard
>	Sc	45		ug/L			439931	434771	2	Standard
	Cr	52	4.643	ug/L	0.296	6	12483	81592	4	Standard
	Cr	53	5.891	ug/L	0.281	4	120	10304	3	Standard
	Mn	55	6.215	ug/L	0.278	4	1073	130938	1	Standard
>	Ge	72		ug/L			28119	27508	0	KED
	Ni	60	0.605	ug/L	0.034	5	28	570	4	KED
	Ni	62	0.858	ug/L	0.044	5	5	128	4	KED
	Cu	63	1.581	ug/L	0.021	1	42	4029	1	KED
	Cu	65	1.560	ug/L	0.069	4	27	1980	4	KED
	Zn	66	2.021	ug/L	0.159	7	29	676	8	KED
	Zn	67	2.016	ug/L	0.148	7	8	115	7	KED
	As	75	0.071	ug/L	0.015	20	7	18	11	KED
	Se	78	0.252	ug/L	0.113	44	11	15	12	KED
	Y	89		ug/L			276255	260735	1	Standard
	Kr	83		ug/L			52	55	22	Standard
>	In-1	115		ug/L			7782	8141	4	KED
	Mo	98	5.387	ug/L	0.133	2	8	4084	5	KED
	Cd	111	0.016	ug/L	0.007	43	4	7	15	KED
	Cd	114	0.000	ug/L	0.009	2656	5	5	65	KED
>	In	115		ug/L			475417	430946	2	Standard
	Ag	107	-0.007	ug/L	0.002	28	135	54	33	Standard
	Sb	121	0.117	ug/L	0.010	8	596	1534	6	Standard
	Sb	123	0.112	ug/L	0.002	1	475	1149	2	Standard
>	Tb	159		ug/L			499801	527191	3	Standard
	Tl	205	-0.004	ug/L	0.001	14	224	121	11	Standard
	Pb	208	-0.001	ug/L	0.001	62	359	333	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0501-04
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, March 01, 2023 20:19:02
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			34622	49155	2	Standard
	Cl	37		ug/L			3977931	4355160	3	Standard
>	Sc	45		ug/L			439931	447008	3	Standard
	Cr	52	8.242	ug/L	0.406	4	12483	139073	3	Standard
	Cr	53	9.153	ug/L	0.363	3	120	16387	2	Standard
	Mn	55	7.190	ug/L	0.159	2	1073	155654	3	Standard
>	Ge	72		ug/L			28119	27136	1	KED
	Ni	60	0.540	ug/L	0.021	3	28	505	3	KED
	Ni	62	0.814	ug/L	0.189	23	5	120	21	KED
	Cu	63	1.893	ug/L	0.003	0	42	4750	1	KED
	Cu	65	1.878	ug/L	0.039	2	27	2346	3	KED
	Zn	66	2.276	ug/L	0.146	6	29	747	6	KED
	Zn	67	1.827	ug/L	0.204	11	8	104	11	KED
	As	75	0.084	ug/L	0.010	11	7	20	6	KED
	Se	78	0.299	ug/L	0.234	78	11	16	23	KED
	Y	89		ug/L			276255	271224	3	Standard
	Kr	83		ug/L			52	63	35	Standard
>	In-1	115		ug/L			7782	7993	1	KED
	Mo	98	5.752	ug/L	0.156	2	8	4280	1	KED
	Cd	111	-0.009	ug/L	0.006	62	4	2	43	KED
	Cd	114	0.006	ug/L	0.009	154	5	8	48	KED
>	In	115		ug/L			475417	438691	3	Standard
	Ag	107	-0.007	ug/L	0.001	16	135	52	19	Standard
	Sb	121	0.100	ug/L	0.006	5	596	1413	1	Standard
	Sb	123	0.099	ug/L	0.004	3	475	1085	1	Standard
>	Tb	159		ug/L			499801	533073	2	Standard
	Tl	205	-0.004	ug/L	0.001	12	224	104	15	Standard
	Pb	208	0.004	ug/L	0.001	27	359	544	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0367-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 20:23:53
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	58549	1	Standard
	Cl	**37**		ug/L			3977931	4387395	1	Standard
⌈>	**Sc**	**45**		ug/L			439931	444110	0	Standard
|	**Cr**	**52**	**0.866**	ug/L	0.029	3	12483	25812	1	Standard
|	**Cr**	**53**	**2.181**	ug/L	0.036	1	120	3975	1	Standard
⌊	**Mn**	**55**	**7.995**	ug/L	0.254	3	1073	171865	2	Standard
⌈>	**Ge**	**72**		ug/L			28119	29188	4	KED
|	**Ni**	**60**	**0.480**	ug/L	0.073	15	28	484	10	KED
|	**Ni**	**62**	**0.586**	ug/L	0.116	19	5	94	14	KED
|	**Cu**	**63**	**4.452**	ug/L	0.104	2	42	11952	2	KED
|	**Cu**	**65**	**4.400**	ug/L	0.319	7	27	5865	4	KED
|	**Zn**	**66**	**169.695**	ug/L	12.869	7	29	57530	3	KED
|	**Zn**	**67**	**154.435**	ug/L	9.329	6	8	8676	3	KED
|	**As**	**75**	**1.248**	ug/L	0.105	8	7	221	5	KED
⌊	**Se**	**78**	**0.121**	ug/L	0.161	133	11	14	19	KED
	Y	**89**		ug/L			276255	281823	0	Standard
	Kr	**83**		ug/L			52	47	4	Standard
⌈>	**In-1**	**115**		ug/L			7782	8488	3	KED
|	**Mo**	**98**	**0.206**	ug/L	0.037	17	8	171	13	KED
|	**Cd**	**111**	**0.059**	ug/L	0.005	8	4	15	9	KED
⌊	**Cd**	**114**	**0.056**	ug/L	0.012	20	5	32	18	KED
⌈>	**In**	**115**		ug/L			475417	468227	0	Standard
|	**Ag**	**107**	**-0.005**	ug/L	0.001	27	135	80	17	Standard
|	**Sb**	**121**	**0.612**	ug/L	0.024	3	596	6247	2	Standard
⌊	**Sb**	**123**	**0.619**	ug/L	0.026	4	475	4796	2	Standard
⌈>	**Tb**	**159**		ug/L			499801	545374	3	Standard
|	**Tl**	**205**	**-0.004**	ug/L	0.000	11	224	118	14	Standard
⌊	**Pb**	**208**	**0.421**	ug/L	0.016	3	359	16429	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0379-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 20:28:44
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	65218	2	Standard
	Cl	**37**		ug/L			3977931	8179615	5	Standard
⌈>	**Sc**	**45**		ug/L			439931	464512	1	Standard
|	**Cr**	**52**	**13.467**	ug/L	0.366	2	12483	228006	3	Standard
|	**Cr**	**53**	**19.435**	ug/L	0.443	2	120	36050	2	Standard
⌊	**Mn**	**55**	**69.085**	ug/L	0.159	0	1073	1544849	1	Standard
⌈>	**Ge**	**72**		ug/L			28119	26831	1	KED
|	**Ni**	**60**	**5.236**	ug/L	0.292	5	28	4610	6	KED
|	**Ni**	**62**	**5.584**	ug/L	0.193	3	5	791	2	KED
|	**Cu**	**63**	**30.921**	ug/L	0.468	1	42	76122	2	KED
|	**Cu**	**65**	**30.632**	ug/L	0.987	3	27	37454	3	KED
|	**Zn**	**66**	**129.179**	ug/L	3.585	2	29	40359	3	KED
|	**Zn**	**67**	**126.904**	ug/L	1.513	1	8	6565	1	KED
|	**As**	**75**	**2.132**	ug/L	0.131	6	7	343	6	KED
⌊	**Se**	**78**	**0.416**	ug/L	0.097	23	11	18	10	KED
	Y	**89**		ug/L			276255	290776	2	Standard
	Kr	**83**		ug/L			52	107	13	Standard
⌈>	**In-1**	**115**		ug/L			7782	7932	1	KED
|	**Mo**	**98**	**3.190**	ug/L	0.187	5	8	2359	4	KED
|	**Cd**	**111**	**0.145**	ug/L	0.034	23	4	30	19	KED
⌊	**Cd**	**114**	**0.140**	ug/L	0.038	27	5	66	24	KED
⌈>	**In**	**115**		ug/L			475417	454572	1	Standard
|	**Ag**	**107**	**0.038**	ug/L	0.004	11	135	507	9	Standard
|	**Sb**	**121**	**4.765**	ug/L	0.071	1	596	43367	2	Standard
⌊	**Sb**	**123**	**4.781**	ug/L	0.183	3	475	32910	5	Standard
⌈>	**Tb**	**159**		ug/L			499801	548292	1	Standard
|	**Tl**	**205**	**0.001**	ug/L	0.001	47	224	288	5	Standard
⌊	**Pb**	**208**	**6.988**	ug/L	0.162	2	359	268305	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0379-03
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 20:33:34
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	62708	3	Standard
	Cl	**37**		ug/L			3977931	8752734	5	Standard
⎡>	**Sc**	**45**		ug/L			439931	473938	2	Standard
⎢	**Cr**	**52**	**6.262**	ug/L	0.182	2	12483	115376	4	Standard
⎢	**Cr**	**53**	**13.111**	ug/L	0.137	1	120	24857	2	Standard
⎣	**Mn**	**55**	**63.430**	ug/L	1.167	1	1073	1447539	3	Standard
⎡>	**Ge**	**72**		ug/L			28119	28351	1	KED
⎢	**Ni**	**60**	**4.878**	ug/L	0.173	3	28	4539	3	KED
⎢	**Ni**	**62**	**5.162**	ug/L	0.504	9	5	772	8	KED
⎢	**Cu**	**63**	**12.605**	ug/L	0.528	4	42	32804	3	KED
⎢	**Cu**	**65**	**12.311**	ug/L	0.344	2	27	15918	2	KED
⎢	**Zn**	**66**	**34.224**	ug/L	1.732	5	29	11314	4	KED
⎢	**Zn**	**67**	**34.716**	ug/L	0.756	2	8	1904	2	KED
⎢	**As**	**75**	**0.672**	ug/L	0.025	3	7	119	3	KED
⎣	**Se**	**78**	**0.117**	ug/L	0.143	122	11	13	17	KED
	Y	**89**		ug/L			276255	289378	1	Standard
	Kr	**83**		ug/L			52	101	2	Standard
⎡>	**In-1**	**115**		ug/L			7782	8024	0	KED
⎢	**Mo**	**98**	**2.611**	ug/L	0.190	7	8	1956	7	KED
⎢	**Cd**	**111**	**0.048**	ug/L	0.022	44	4	13	29	KED
⎣	**Cd**	**114**	**0.051**	ug/L	0.014	26	5	28	20	KED
⎡>	**In**	**115**		ug/L			475417	469895	1	Standard
⎢	**Ag**	**107**	**0.006**	ug/L	0.001	22	135	192	5	Standard
⎢	**Sb**	**121**	**2.386**	ug/L	0.124	5	596	22731	3	Standard
⎣	**Sb**	**123**	**2.396**	ug/L	0.095	3	475	17276	3	Standard
⎡>	**Tb**	**159**		ug/L			499801	561480	2	Standard
⎢	**Tl**	**205**	**-0.003**	ug/L	0.000	11	224	153	5	Standard
⎣	**Pb**	**208**	**2.231**	ug/L	0.119	5	359	87933	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0501-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, March 01, 2023 20:38:25
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			34622	59166	1	Standard
	Cl	37		ug/L			3977931	4366663	2	Standard
>	Sc	45		ug/L			439931	442851	1	Standard
	Cr	52	8.881	ug/L	0.269	3	12483	147636	4	Standard
	Cr	53	9.918	ug/L	0.156	1	120	17599	2	Standard
	Mn	55	7.719	ug/L	0.309	4	1073	165556	5	Standard
>	Ge	72		ug/L			28119	26966	3	KED
	Ni	60	1.039	ug/L	0.023	2	28	940	1	KED
	Ni	62	1.251	ug/L	0.133	10	5	182	13	KED
	Cu	63	1.571	ug/L	0.106	6	42	3925	7	KED
	Cu	65	1.558	ug/L	0.093	5	27	1941	9	KED
	Zn	66	3.722	ug/L	0.113	3	29	1196	4	KED
	Zn	67	2.942	ug/L	0.558	18	8	161	18	KED
	As	75	0.056	ug/L	0.021	37	7	15	22	KED
	Se	78	0.461	ug/L	0.088	18	11	19	10	KED
	Y	89		ug/L			276255	267963	1	Standard
	Kr	83		ug/L			52	60	14	Standard
>	In-1	115		ug/L			7782	7816	2	KED
	Mo	98	4.237	ug/L	0.312	7	8	3083	4	KED
	Cd	111	0.027	ug/L	0.011	40	4	8	22	KED
	Cd	114	0.003	ug/L	0.007	266	5	6	43	KED
>	In	115		ug/L			475417	436948	1	Standard
	Ag	107	-0.008	ug/L	0.001	14	135	46	23	Standard
	Sb	121	0.133	ug/L	0.006	4	596	1694	2	Standard
	Sb	123	0.134	ug/L	0.012	8	475	1313	5	Standard
>	Tb	159		ug/L			499801	532505	1	Standard
	Tl	205	-0.004	ug/L	0.000	11	224	123	10	Standard
	Pb	208	0.007	ug/L	0.001	16	359	634	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0008-DUP1
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, March 01, 2023 20:43:16
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			34622	59602	5	Standard
	Cl	37		ug/L			3977931	4339532	4	Standard
>	Sc	45		ug/L			439931	449298	1	Standard
	Cr	52	8.482	ug/L	0.538	6	12483	143667	6	Standard
	Cr	53	9.203	ug/L	0.407	4	120	16581	5	Standard
	Mn	55	7.635	ug/L	0.462	6	1073	166180	7	Standard
>	Ge	72		ug/L			28119	27542	0	KED
	Ni	60	1.072	ug/L	0.049	4	28	991	4	KED
	Ni	62	1.200	ug/L	0.149	12	5	178	11	KED
	Cu	63	1.581	ug/L	0.096	6	42	4034	5	KED
	Cu	65	1.640	ug/L	0.057	3	27	2083	3	KED
	Zn	66	3.664	ug/L	0.112	3	29	1203	2	KED
	Zn	67	3.535	ug/L	0.284	8	8	196	7	KED
	As	75	0.061	ug/L	0.014	23	7	16	14	KED
	Se	78	0.159	ug/L	0.038	23	11	14	5	KED
	Y	89		ug/L			276255	276901	3	Standard
	Kr	83		ug/L			52	65	32	Standard
>	In-1	115		ug/L			7782	8014	2	KED
	Mo	98	4.416	ug/L	0.218	4	8	3296	3	KED
	Cd	111	0.014	ug/L	0.015	110	4	6	37	KED
	Cd	114	0.005	ug/L	0.010	197	5	8	56	KED
>	In	115		ug/L			475417	452259	2	Standard
	Ag	107	-0.009	ug/L	0.001	8	135	39	22	Standard
	Sb	121	0.120	ug/L	0.016	13	596	1636	6	Standard
	Sb	123	0.120	ug/L	0.019	15	475	1264	8	Standard
>	Tb	159		ug/L			499801	535416	4	Standard
	Tl	205	-0.005	ug/L	0.000	6	224	99	11	Standard
	Pb	208	0.005	ug/L	0.001	18	359	553	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0008-MS1
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, March 01, 2023 20:48:06
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			34622	57246	2	Standard
	Cl	37		ug/L			3977931	4422043	1	Standard
⌈>	Sc	45		ug/L			439931	449988	4	Standard
|	Cr	52	21.515	ug/L	0.531	2	12483	344963	1	Standard
|	Cr	53	22.281	ug/L	0.805	3	120	39980	1	Standard
⌊	Mn	55	20.377	ug/L	0.505	2	1073	441950	2	Standard
⌈>	Ge	72		ug/L			28119	27458	0	KED
|	Ni	60	13.553	ug/L	0.638	4	28	12163	4	KED
|	Ni	62	13.485	ug/L	0.410	3	5	1948	3	KED
|	Cu	63	14.204	ug/L	0.457	3	42	35801	2	KED
|	Cu	65	14.091	ug/L	0.124	0	27	17643	0	KED
|	Zn	66	43.025	ug/L	1.343	3	29	13771	2	KED
|	Zn	67	40.408	ug/L	1.239	3	8	2145	3	KED
|	As	75	13.233	ug/L	0.249	1	7	2148	1	KED
⌊	Se	78	40.807	ug/L	1.522	3	11	724	3	KED
	Y	89		ug/L			276255	273960	2	Standard
	Kr	83		ug/L			52	71	5	Standard
⌈>	In-1	115		ug/L			7782	7791	1	KED
|	Mo	98	17.449	ug/L	1.254	7	8	12642	7	KED
|	Cd	111	12.057	ug/L	0.573	4	4	2131	5	KED
⌊	Cd	114	11.953	ug/L	0.814	6	5	5107	5	KED
⌈>	In	115		ug/L			475417	449823	4	Standard
|	Ag	107	12.930	ug/L	0.583	4	135	128259	3	Standard
|	Sb	121	13.310	ug/L	0.520	3	596	118746	1	Standard
⌊	Sb	123	13.375	ug/L	0.481	3	475	90171	0	Standard
⌈>	Tb	159		ug/L			499801	527856	5	Standard
|	Tl	205	11.697	ug/L	0.410	3	224	349231	2	Standard
⌊	Pb	208	12.246	ug/L	0.534	4	359	451736	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL6
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 20:52:58
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	38738	2	Standard
	Cl	**37**		ug/L			3977931	4534043	1	Standard
⎡>	**Sc**	**45**		ug/L			439931	446014	2	Standard
⎢	**Cr**	**52**	**0.210**	ug/L	0.036	17	12483	15871	1	Standard
⎢	**Cr**	**53**	**0.670**	ug/L	0.058	8	120	1310	6	Standard
⎣	**Mn**	**55**	**-0.005**	ug/L	0.001	14	1073	972	4	Standard
⎡>	**Ge**	**72**		ug/L			28119	29719	3	KED
⎢	**Ni**	**60**	**-0.021**	ug/L	0.002	9	28	9	20	KED
⎢	**Ni**	**62**	**0.027**	ug/L	0.002	7	5	9	0	KED
⎢	**Cu**	**63**	**0.016**	ug/L	0.004	27	42	88	14	KED
⎢	**Cu**	**65**	**0.005**	ug/L	0.002	48	27	35	8	KED
⎢	**Zn**	**66**	**-0.018**	ug/L	0.031	169	29	25	43	KED
⎢	**Zn**	**67**	**-0.087**	ug/L	0.075	86	8	4	98	KED
⎢	**As**	**75**	**-0.003**	ug/L	0.014	412	7	6	37	KED
⎣	**Se**	**78**	**0.025**	ug/L	0.063	248	11	12	5	KED
	Y	**89**		ug/L			276255	279642	0	Standard
	Kr	**83**		ug/L			52	48	19	Standard
⎡>	**In-1**	**115**		ug/L			7782	8251	4	KED
⎢	**Mo**	**98**	**-0.003**	ug/L	0.005	165	8	7	55	KED
⎢	**Cd**	**111**	**0.007**	ug/L	0.015	207	4	5	50	KED
⎣	**Cd**	**114**	**-0.002**	ug/L	0.006	275	5	4	58	KED
⎡>	**In**	**115**		ug/L			475417	478122	2	Standard
⎢	**Ag**	**107**	**-0.008**	ug/L	0.001	15	135	53	21	Standard
⎢	**Sb**	**121**	**-0.054**	ug/L	0.000	0	596	86	4	Standard
⎣	**Sb**	**123**	**-0.057**	ug/L	0.000	0	475	71	0	Standard
⎡>	**Tb**	**159**		ug/L			499801	535219	2	Standard
⎢	**Tl**	**205**	**-0.005**	ug/L	0.000	2	224	79	4	Standard
⎣	**Pb**	**208**	**-0.006**	ug/L	0.000	3	359	174	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 20:58:53
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	37816	3	Standard
	Cl	**37**		ug/L			3977931	4403381	2	Standard
⌈>	**Sc**	**45**		ug/L			439931	452241	2	Standard
|	**Cr**	**52**	**49.572**	ug/L	1.369	2	12483	782863	4	Standard
|	**Cr**	**53**	**50.023**	ug/L	0.796	1	120	90155	3	Standard
⌊	**Mn**	**55**	**49.088**	ug/L	0.628	1	1073	1069012	2	Standard
⌈>	**Ge**	**72**		ug/L			28119	29062	2	KED
|	**Ni**	**60**	**48.616**	ug/L	1.531	3	28	46115	4	KED
|	**Ni**	**62**	**49.510**	ug/L	1.452	2	5	7561	5	KED
|	**Cu**	**63**	**48.764**	ug/L	0.859	1	42	130012	3	KED
|	**Cu**	**65**	**49.640**	ug/L	0.750	1	27	65733	4	KED
|	**Zn**	**66**	**50.570**	ug/L	0.945	1	29	17132	4	KED
|	**Zn**	**67**	**50.977**	ug/L	3.031	5	8	2864	8	KED
|	**As**	**75**	**50.218**	ug/L	0.977	1	7	8609	3	KED
⌊	**Se**	**78**	**49.018**	ug/L	1.376	2	11	918	3	KED
	Y	**89**		ug/L			276255	289364	1	Standard
	Kr	**83**		ug/L			52	49	19	Standard
⌈>	**In-1**	**115**		ug/L			7782	8529	0	KED
|	**Mo**	**98**	**46.587**	ug/L	1.492	3	8	36930	2	KED
|	**Cd**	**111**	**48.715**	ug/L	0.656	1	4	9411	0	KED
⌊	**Cd**	**114**	**49.261**	ug/L	1.944	3	5	23029	3	KED
⌈>	**In**	**115**		ug/L			475417	482001	1	Standard
|	**Ag**	**107**	**51.838**	ug/L	3.224	6	135	550819	5	Standard
|	**Sb**	**121**	**48.429**	ug/L	2.059	4	596	461630	3	Standard
⌊	**Sb**	**123**	**48.407**	ug/L	2.248	4	475	348588	2	Standard
⌈>	**Tb**	**159**		ug/L			499801	555388	1	Standard
|	**Tl**	**205**	**45.594**	ug/L	2.238	4	224	1432878	3	Standard
⌊	**Pb**	**208**	**47.478**	ug/L	1.846	3	359	1844224	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 21:06:28
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	35668	2	Standard
	Cl	**37**		ug/L			3977931	4278360	1	Standard
⌈>	**Sc**	**45**		ug/L			439931	431623	2	Standard
|	**Cr**	**52**	**0.033**	ug/L	0.025	76	12483	12730	1	Standard
|	**Cr**	**53**	**0.585**	ug/L	0.017	2	120	1122	1	Standard
⌊	**Mn**	**55**	**-0.018**	ug/L	0.001	4	1073	681	1	Standard
⌈>	**Ge**	**72**		ug/L			28119	28774	0	KED
|	**Ni**	**60**	**-0.026**	ug/L	0.003	11	28	4	65	KED
|	**Ni**	**62**	**0.016**	ug/L	0.012	78	5	7	25	KED
|	**Cu**	**63**	**0.005**	ug/L	0.001	23	42	55	5	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.006	631	27	26	31	KED
|	**Zn**	**66**	**-0.002**	ug/L	0.008	396	29	29	9	KED
|	**Zn**	**67**	**-0.027**	ug/L	0.034	127	8	7	25	KED
|	**As**	**75**	**-0.011**	ug/L	0.010	86	7	5	30	KED
⌊	**Se**	**78**	**0.080**	ug/L	0.102	127	11	13	14	KED
	Y	**89**		ug/L			276255	275778	4	Standard
	Kr	**83**		ug/L			52	40	21	Standard
⌈>	**In-1**	**115**		ug/L			7782	8195	2	KED
|	**Mo**	**98**	**0.003**	ug/L	0.007	205	8	11	42	KED
|	**Cd**	**111**	**0.007**	ug/L	0.015	204	4	5	50	KED
⌊	**Cd**	**114**	**0.009**	ug/L	0.006	69	5	10	27	KED
⌈>	**In**	**115**		ug/L			475417	465068	2	Standard
|	**Ag**	**107**	**-0.005**	ug/L	0.001	14	135	78	10	Standard
|	**Sb**	**121**	**0.045**	ug/L	0.011	24	596	993	9	Standard
⌊	**Sb**	**123**	**0.048**	ug/L	0.012	25	475	794	8	Standard
⌈>	**Tb**	**159**		ug/L			499801	516034	1	Standard
|	**Tl**	**205**	**-0.004**	ug/L	0.000	6	224	111	5	Standard
⌊	**Pb**	**208**	**-0.006**	ug/L	0.000	3	359	165	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0518-BLK1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, March 01, 2023 21:11:20
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			34622	47915	2	Standard
	Cl	37		ug/L			3977931	4378636	2	Standard
>	Sc	45		ug/L			439931	459171	4	Standard
	Cr	52	0.044	ug/L	0.024	53	12483	13714	2	Standard
	Cr	53	0.539	ug/L	0.027	4	120	1109	0	Standard
	Mn	55	-0.013	ug/L	0.001	10	1073	827	1	Standard
>	Ge	72		ug/L			28119	30027	3	KED
	Ni	60	0.040	ug/L	0.023	58	28	70	35	KED
	Ni	62	0.114	ug/L	0.026	22	5	23	18	KED
	Cu	63	0.007	ug/L	0.003	39	42	64	8	KED
	Cu	65	0.006	ug/L	0.004	62	27	37	11	KED
	Zn	66	0.337	ug/L	0.067	19	29	149	13	KED
	Zn	67	0.297	ug/L	0.083	28	8	26	18	KED
	As	75	-0.014	ug/L	0.007	47	7	5	21	KED
	Se	78	0.042	ug/L	0.173	410	11	13	20	KED
	Y	89		ug/L			276255	286258	2	Standard
	Kr	83		ug/L			52	42	32	Standard
>	In-1	115		ug/L			7782	8468	3	KED
	Mo	98	-0.001	ug/L	0.007	504	8	8	69	KED
	Cd	111	-0.004	ug/L	0.017	432	4	3	90	KED
	Cd	114	-0.004	ug/L	0.008	232	5	4	91	KED
>	In	115		ug/L			475417	479005	2	Standard
	Ag	107	-0.008	ug/L	0.003	34	135	55	53	Standard
	Sb	121	-0.026	ug/L	0.007	26	596	357	17	Standard
	Sb	123	-0.028	ug/L	0.002	8	475	280	4	Standard
>	Tb	159		ug/L			499801	545206	1	Standard
	Tl	205	-0.005	ug/L	0.000	9	224	103	13	Standard
	Pb	208	-0.005	ug/L	0.001	11	359	218	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0518-BS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, March 01, 2023 21:16:10
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	46986	0	Standard
	Cl	**37**		ug/L			3977931	4431271	0	Standard
⌈>	**Sc**	**45**		ug/L			439931	456397	1	Standard
|	**Cr**	**52**	**25.963**	ug/L	1.042	4	12483	419630	2	Standard
|	**Cr**	**53**	**26.333**	ug/L	0.671	2	120	47930	0	Standard
⌊	**Mn**	**55**	**25.802**	ug/L	1.040	4	1073	567374	2	Standard
⌈>	**Ge**	**72**		ug/L			28119	29668	0	KED
|	**Ni**	**60**	**25.232**	ug/L	0.622	2	28	24443	1	KED
|	**Ni**	**62**	**25.646**	ug/L	0.801	3	5	3999	2	KED
|	**Cu**	**63**	**25.536**	ug/L	0.215	0	42	69519	0	KED
|	**Cu**	**65**	**25.528**	ug/L	0.580	2	27	34516	2	KED
|	**Zn**	**66**	**80.006**	ug/L	0.278	0	29	27646	0	KED
|	**Zn**	**67**	**76.062**	ug/L	1.341	1	8	4354	1	KED
|	**As**	**75**	**24.800**	ug/L	0.350	1	7	4343	1	KED
⌊	**Se**	**78**	**78.467**	ug/L	5.151	6	11	1493	6	KED
	Y	**89**		ug/L			276255	286491	3	Standard
	Kr	**83**		ug/L			52	57	24	Standard
⌈>	**In-1**	**115**		ug/L			7782	8600	2	KED
|	**Mo**	**98**	**0.004**	ug/L	0.003	60	8	13	15	KED
|	**Cd**	**111**	**24.487**	ug/L	1.055	4	4	4770	3	KED
⌊	**Cd**	**114**	**24.559**	ug/L	1.525	6	5	11577	5	KED
⌈>	**In**	**115**		ug/L			475417	486689	0	Standard
|	**Ag**	**107**	**26.995**	ug/L	0.935	3	135	289807	3	Standard
|	**Sb**	**121**	**-0.043**	ug/L	0.002	5	596	198	11	Standard
⌊	**Sb**	**123**	**-0.043**	ug/L	0.005	10	475	175	19	Standard
⌈>	**Tb**	**159**		ug/L			499801	543743	1	Standard
|	**Tl**	**205**	**24.449**	ug/L	0.296	1	224	752699	2	Standard
⌊	**Pb**	**208**	**25.998**	ug/L	0.177	0	359	989034	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0032-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, March 01, 2023 21:21:01
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			34622	62144	4	Standard
Cl	37		ug/L			3977931	4446967	1	Standard
> Sc	45		ug/L			439931	572313	1	Standard
Cr	52	13.483	ug/L	0.293	2	12483	281138	0	Standard
Cr	53	13.919	ug/L	0.453	3	120	31843	1	Standard
Mn	55	134.324	ug/L	6.256	4	1073	3697844	3	Standard
> Ge	72		ug/L			28119	30377	1	KED
Ni	60	11.114	ug/L	0.198	1	28	11042	2	KED
Ni	62	11.539	ug/L	0.513	4	5	1845	4	KED
Cu	63	55.880	ug/L	1.319	2	42	155713	3	KED
Cu	65	54.802	ug/L	0.733	1	27	75822	1	KED
Zn	66	172.532	ug/L	1.826	1	29	61004	1	KED
Zn	67	161.741	ug/L	4.971	3	8	9473	4	KED
As	75	17.671	ug/L	0.092	0	7	3171	1	KED
Se	78	0.972	ug/L	0.080	8	11	31	6	KED
Y	89		ug/L			276255	466927	0	Standard
Kr	83		ug/L			52	95	19	Standard
> In-1	115		ug/L			7782	8729	0	KED
Mo	98	0.890	ug/L	0.071	8	8	732	8	KED
Cd	111	0.211	ug/L	0.045	21	4	46	19	KED
Cd	114	0.193	ug/L	0.039	19	5	98	19	KED
> In	115		ug/L			475417	510904	0	Standard
Ag	107	0.126	ug/L	0.008	6	135	1564	5	Standard
Sb	121	0.139	ug/L	0.005	3	596	2044	2	Standard
Sb	123	0.141	ug/L	0.006	4	475	1590	3	Standard
> Tb	159		ug/L			499801	602200	3	Standard
Tl	205	0.036	ug/L	0.003	7	224	1490	3	Standard
Pb	208	53.735	ug/L	2.771	5	359	2261310	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0032-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, March 01, 2023 21:25:52
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	64955	2	Standard
	Cl	**37**		ug/L			3977931	4491560	0	Standard
⌈>	**Sc**	**45**		ug/L			439931	548399	1	Standard
|	**Cr**	**52**	**14.289**	ug/L	0.106	0	12483	284599	0	Standard
|	**Cr**	**53**	**14.704**	ug/L	0.035	0	120	32234	0	Standard
⌊	**Mn**	**55**	**86.501**	ug/L	2.667	3	1073	2283590	3	Standard
⌈>	**Ge**	**72**		ug/L			28119	30558	0	KED
|	**Ni**	**60**	**8.900**	ug/L	0.194	2	28	8900	1	KED
|	**Ni**	**62**	**8.671**	ug/L	0.420	4	5	1396	4	KED
|	**Cu**	**63**	**24.338**	ug/L	0.459	1	42	68244	1	KED
|	**Cu**	**65**	**24.170**	ug/L	0.095	0	27	33660	0	KED
|	**Zn**	**66**	**62.261**	ug/L	1.830	2	29	22166	2	KED
|	**Zn**	**67**	**60.212**	ug/L	1.458	2	8	3552	2	KED
|	**As**	**75**	**8.944**	ug/L	0.140	1	7	1618	1	KED
⌊	**Se**	**78**	**0.872**	ug/L	0.061	7	11	29	4	KED
	Y	**89**		ug/L			276255	444361	1	Standard
	Kr	**83**		ug/L			52	80	23	Standard
⌈>	**In-1**	**115**		ug/L			7782	8851	0	KED
|	**Mo**	**98**	**0.530**	ug/L	0.040	7	8	445	6	KED
|	**Cd**	**111**	**0.078**	ug/L	0.019	24	4	20	18	KED
⌊	**Cd**	**114**	**0.068**	ug/L	0.037	55	5	39	46	KED
⌈>	**In**	**115**		ug/L			475417	499389	1	Standard
|	**Ag**	**107**	**0.060**	ug/L	0.006	9	135	807	6	Standard
|	**Sb**	**121**	**0.027**	ug/L	0.002	7	596	892	3	Standard
⌊	**Sb**	**123**	**0.024**	ug/L	0.003	12	475	677	2	Standard
⌈>	**Tb**	**159**		ug/L			499801	586539	0	Standard
|	**Tl**	**205**	**0.029**	ug/L	0.001	3	224	1212	2	Standard
⌊	**Pb**	**208**	**14.038**	ug/L	0.194	1	359	576284	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0032-04
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, March 01, 2023 21:30:42
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	56435	5	Standard
	Cl	**37**		ug/L			3977931	4502333	0	Standard
⌈>	**Sc**	**45**		ug/L			439931	528873	0	Standard
|	**Cr**	**52**	**8.945**	ug/L	0.304	3	12483	177447	3	Standard
|	**Cr**	**53**	**9.481**	ug/L	0.472	4	120	20097	5	Standard
⌊	**Mn**	**55**	**60.106**	ug/L	0.617	1	1073	1530470	1	Standard
⌈>	**Ge**	**72**		ug/L			28119	30383	1	KED
|	**Ni**	**60**	**4.824**	ug/L	0.121	2	28	4809	1	KED
|	**Ni**	**62**	**4.942**	ug/L	0.321	6	5	793	6	KED
|	**Cu**	**63**	**10.308**	ug/L	0.246	2	42	28769	3	KED
|	**Cu**	**65**	**10.326**	ug/L	0.242	2	27	14314	2	KED
|	**Zn**	**66**	**20.085**	ug/L	0.768	3	29	7129	2	KED
|	**Zn**	**67**	**19.193**	ug/L	0.924	4	8	1132	3	KED
|	**As**	**75**	**2.394**	ug/L	0.095	3	7	436	4	KED
⌊	**Se**	**78**	**0.668**	ug/L	0.059	8	11	25	4	KED
	Y	**89**		ug/L			276255	393194	0	Standard
	Kr	**83**		ug/L			52	69	28	Standard
⌈>	**In-1**	**115**		ug/L			7782	8475	4	KED
|	**Mo**	**98**	**0.585**	ug/L	0.007	1	8	470	4	KED
|	**Cd**	**111**	**0.005**	ug/L	0.002	40	4	5	10	KED
⌊	**Cd**	**114**	**0.009**	ug/L	0.007	79	5	10	30	KED
⌈>	**In**	**115**		ug/L			475417	495358	1	Standard
|	**Ag**	**107**	**0.029**	ug/L	0.003	11	135	452	6	Standard
|	**Sb**	**121**	**-0.036**	ug/L	0.001	4	596	274	6	Standard
⌊	**Sb**	**123**	**-0.041**	ug/L	0.002	5	475	190	7	Standard
⌈>	**Tb**	**159**		ug/L			499801	581407	1	Standard
|	**Tl**	**205**	**0.013**	ug/L	0.001	8	224	700	4	Standard
⌊	**Pb**	**208**	**8.568**	ug/L	0.278	3	359	348699	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0032-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, March 01, 2023 21:35:33
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			34622	62179	3	Standard
Cl	37		ug/L			3977931	4521367	1	Standard
> Sc	45		ug/L			439931	568209	3	Standard
Cr	52	15.292	ug/L	0.265	1	12483	314415	3	Standard
Cr	53	15.650	ug/L	0.167	1	120	35538	3	Standard
Mn	55	106.977	ug/L	1.175	1	1073	2925087	3	Standard
> Ge	72		ug/L			28119	31225	1	KED
Ni	60	16.049	ug/L	0.857	5	28	16365	3	KED
Ni	62	16.480	ug/L	1.072	6	5	2705	4	KED
Cu	63	69.670	ug/L	2.037	2	42	199475	1	KED
Cu	65	69.809	ug/L	2.008	2	27	99260	2	KED
Zn	66	100.947	ug/L	6.152	6	29	36678	4	KED
Zn	67	93.941	ug/L	4.453	4	8	5655	3	KED
As	75	4.576	ug/L	0.286	6	7	849	4	KED
Se	78	1.037	ug/L	0.145	14	11	33	9	KED
Y	89		ug/L			276255	487185	3	Standard
Kr	83		ug/L			52	100	8	Standard
> In-1	115		ug/L			7782	7951	11	KED
Mo	98	1.076	ug/L	0.100	9	8	798	1	KED
Cd	111	0.243	ug/L	0.027	10	4	48	21	KED
Cd	114	0.267	ug/L	0.069	26	5	120	18	KED
> In	115		ug/L			475417	498835	3	Standard
Ag	107	0.301	ug/L	0.012	4	135	3452	6	Standard
Sb	121	0.009	ug/L	0.002	17	596	717	5	Standard
Sb	123	0.005	ug/L	0.006	115	475	534	7	Standard
> Tb	159		ug/L			499801	592669	1	Standard
Tl	205	0.034	ug/L	0.002	5	224	1408	4	Standard
Pb	208	33.482	ug/L	1.413	4	359	1387593	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0518-DUP1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, March 01, 2023 21:40:24
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			34622	68291	1	Standard
Cl	37		ug/L			3977931	4556678	2	Standard
> Sc	45		ug/L			439931	563835	2	Standard
Cr	52	16.418	ug/L	0.217	1	12483	333784	0	Standard
Cr	53	16.918	ug/L	0.440	2	120	38096	0	Standard
Mn	55	98.690	ug/L	3.016	3	1073	2677033	1	Standard
> Ge	72		ug/L			28119	31117	3	KED
Ni	60	12.443	ug/L	0.672	5	28	12645	2	KED
Ni	62	12.932	ug/L	0.452	3	5	2117	4	KED
Cu	63	57.627	ug/L	2.887	5	42	164348	3	KED
Cu	65	58.031	ug/L	1.919	3	27	82199	1	KED
Zn	66	92.607	ug/L	3.217	3	29	33535	1	KED
Zn	67	84.687	ug/L	5.600	6	8	5078	4	KED
As	75	4.398	ug/L	0.191	4	7	814	4	KED
Se	78	0.814	ug/L	0.194	23	11	29	13	KED
Y	89		ug/L			276255	487288	0	Standard
Kr	83		ug/L			52	97	8	Standard
> In-1	115		ug/L			7782	8897	2	KED
Mo	98	0.946	ug/L	0.103	10	8	793	12	KED
Cd	111	0.194	ug/L	0.020	10	4	43	11	KED
Cd	114	0.159	ug/L	0.033	20	5	83	19	KED
> In	115		ug/L			475417	504858	2	Standard
Ag	107	0.147	ug/L	0.010	6	135	1783	3	Standard
Sb	121	0.001	ug/L	0.002	157	596	646	2	Standard
Sb	123	-0.004	ug/L	0.009	212	475	472	11	Standard
> Tb	159		ug/L			499801	588547	1	Standard
Tl	205	0.030	ug/L	0.001	4	224	1267	1	Standard
Pb	208	28.919	ug/L	0.683	2	359	1190495	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0518-MS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, March 01, 2023 21:45:15
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			34622	64776	3	Standard
Cl	37		ug/L			3977931	4521602	2	Standard
> Sc	45		ug/L			439931	563778	2	Standard
Cr	52	37.826	ug/L	1.077	2	12483	747976	1	Standard
Cr	53	38.246	ug/L	1.239	3	120	85911	1	Standard
Mn	55	125.664	ug/L	3.931	3	1073	3409571	4	Standard
> Ge	72		ug/L			28119	30846	5	KED
Ni	60	40.947	ug/L	3.617	8	28	41113	5	KED
Ni	62	41.911	ug/L	2.706	6	5	6779	4	KED
Cu	63	93.101	ug/L	4.907	5	42	262903	1	KED
Cu	65	92.096	ug/L	4.639	5	27	129212	4	KED
Zn	66	217.827	ug/L	13.770	6	29	78040	2	KED
Zn	67	198.453	ug/L	9.928	5	8	11779	2	KED
As	75	27.934	ug/L	1.688	6	7	5076	2	KED
Se	78	71.275	ug/L	2.476	3	11	1410	3	KED
Y	89		ug/L			276255	482839	3	Standard
Kr	83		ug/L			52	100	25	Standard
> In-1	115		ug/L			7782	8596	2	KED
Mo	98	1.362	ug/L	0.077	5	8	1096	4	KED
Cd	111	25.488	ug/L	0.704	2	4	4963	0	KED
Cd	114	25.932	ug/L	0.524	2	5	12219	0	KED
> In	115		ug/L			475417	502680	0	Standard
Ag	107	25.861	ug/L	1.193	4	135	286735	4	Standard
Sb	121	0.076	ug/L	0.008	10	596	1381	5	Standard
Sb	123	0.070	ug/L	0.007	9	475	1030	4	Standard
> Tb	159		ug/L			499801	591238	2	Standard
Tl	205	22.447	ug/L	0.406	1	224	751223	2	Standard
Pb	208	67.697	ug/L	1.720	2	359	2799473	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0518-MSD1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, March 01, 2023 21:50:05
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			34622	62020	1	Standard
Cl	37		ug/L			3977931	4552692	0	Standard
> Sc	45		ug/L			439931	554030	2	Standard
Cr	52	37.189	ug/L	2.587	6	12483	722270	4	Standard
Cr	53	37.827	ug/L	2.154	5	120	83462	3	Standard
Mn	55	136.371	ug/L	6.723	4	1073	3633069	3	Standard
> Ge	72		ug/L			28119	30527	0	KED
Ni	60	38.543	ug/L	1.465	3	28	38396	3	KED
Ni	62	38.639	ug/L	3.360	8	5	6194	7	KED
Cu	63	85.936	ug/L	1.804	2	42	240579	1	KED
Cu	65	87.287	ug/L	2.896	3	27	121334	2	KED
Zn	66	207.846	ug/L	9.584	4	29	73828	3	KED
Zn	67	191.126	ug/L	3.435	1	8	11244	1	KED
As	75	28.698	ug/L	1.107	3	7	5169	3	KED
Se	78	73.529	ug/L	3.002	4	11	1440	3	KED
Y	89		ug/L			276255	476808	1	Standard
Kr	83		ug/L			52	118	16	Standard
> In-1	115		ug/L			7782	8496	7	KED
Mo	98	1.028	ug/L	0.135	13	8	817	8	KED
Cd	111	24.737	ug/L	2.831	11	4	4734	4	KED
Cd	114	25.334	ug/L	2.433	9	5	11745	3	KED
> In	115		ug/L			475417	492036	2	Standard
Ag	107	27.078	ug/L	0.919	3	135	293799	2	Standard
Sb	121	0.018	ug/L	0.003	17	596	787	4	Standard
Sb	123	0.019	ug/L	0.008	38	475	634	6	Standard
> Tb	159		ug/L			499801	571706	4	Standard
Tl	205	23.219	ug/L	0.945	4	224	750906	3	Standard
Pb	208	55.193	ug/L	2.164	3	359	2204924	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0518-PS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, March 01, 2023 21:54:56
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			34622	64280	2	Standard
Cl	37		ug/L			3977931	4588002	3	Standard
> Sc	45		ug/L			439931	577213	4	Standard
Cr	52	37.216	ug/L	0.702	1	12483	753986	4	Standard
Cr	53	37.446	ug/L	0.739	1	120	86146	4	Standard
Mn	55	125.032	ug/L	1.790	1	1073	3474210	5	Standard
> Ge	72		ug/L			28119	31360	1	KED
Ni	60	40.882	ug/L	2.967	7	28	41821	6	KED
Ni	62	42.397	ug/L	2.618	6	5	6980	4	KED
Cu	63	95.673	ug/L	6.308	6	42	275008	5	KED
Cu	65	95.280	ug/L	5.900	6	27	136000	4	KED
Zn	66	175.495	ug/L	10.704	6	29	64015	4	KED
Zn	67	165.642	ug/L	9.949	6	8	10006	4	KED
As	75	28.524	ug/L	1.643	5	7	5277	4	KED
Se	78	73.674	ug/L	3.361	4	11	1482	3	KED
Y	89		ug/L			276255	489985	5	Standard
Kr	83		ug/L			52	112	7	Standard
> In-1	115		ug/L			7782	8799	3	KED
Mo	98	0.921	ug/L	0.015	1	8	763	3	KED
Cd	111	24.101	ug/L	0.314	1	4	4807	3	KED
Cd	114	24.333	ug/L	0.289	1	5	11738	1	KED
> In	115		ug/L			475417	500347	2	Standard
Ag	107	27.559	ug/L	0.761	2	135	304310	5	Standard
Sb	121	0.008	ug/L	0.001	15	596	711	0	Standard
Sb	123	0.001	ug/L	0.006	483	475	510	9	Standard
> Tb	159		ug/L			499801	581396	3	Standard
Tl	205	22.947	ug/L	0.439	1	224	755297	3	Standard
Pb	208	58.919	ug/L	1.655	2	359	2395967	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 22:00:52
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	41609	1	Standard
	Cl	**37**		ug/L			3977931	4797575	4	Standard
⎡>	**Sc**	**45**		ug/L			439931	485378	1	Standard
⎢	**Cr**	**52**	**49.576**	ug/L	1.036	2	12483	840000	2	Standard
⎢	**Cr**	**53**	**49.968**	ug/L	1.826	3	120	96623	3	Standard
⎣	**Mn**	**55**	**48.875**	ug/L	1.536	3	1073	1142271	3	Standard
⎡>	**Ge**	**72**		ug/L			28119	30581	4	KED
⎢	**Ni**	**60**	**49.623**	ug/L	3.341	6	28	49426	2	KED
⎢	**Ni**	**62**	**50.354**	ug/L	3.611	7	5	8072	2	KED
⎢	**Cu**	**63**	**49.914**	ug/L	3.304	6	42	139748	2	KED
⎢	**Cu**	**65**	**49.743**	ug/L	3.806	7	27	69139	3	KED
⎢	**Zn**	**66**	**50.749**	ug/L	3.826	7	29	18047	3	KED
⎢	**Zn**	**67**	**50.202**	ug/L	4.858	9	8	2957	5	KED
⎢	**As**	**75**	**49.118**	ug/L	4.453	9	7	8837	4	KED
⎣	**Se**	**78**	**49.362**	ug/L	3.871	7	11	970	3	KED
	Y	**89**		ug/L			276255	296616	2	Standard
	Kr	**83**		ug/L			52	55	10	Standard
⎡>	**In-1**	**115**		ug/L			7782	8382	1	KED
⎢	**Mo**	**98**	**46.491**	ug/L	3.096	6	8	36231	7	KED
⎢	**Cd**	**111**	**47.258**	ug/L	3.362	7	4	8975	7	KED
⎣	**Cd**	**114**	**47.944**	ug/L	4.513	9	5	22034	9	KED
⎡>	**In**	**115**		ug/L			475417	491152	2	Standard
⎢	**Ag**	**107**	**53.317**	ug/L	1.917	3	135	577719	5	Standard
⎢	**Sb**	**121**	**48.619**	ug/L	0.703	1	596	472487	3	Standard
⎣	**Sb**	**123**	**48.839**	ug/L	1.031	2	475	358587	3	Standard
⎡>	**Tb**	**159**		ug/L			499801	557297	3	Standard
⎢	**Tl**	**205**	**46.361**	ug/L	1.486	3	224	1461640	2	Standard
⎣	**Pb**	**208**	**49.350**	ug/L	1.487	3	359	1922803	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 22:08:27
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	40003	3	Standard
	Cl	**37**		ug/L			3977931	4598071	1	Standard
⎡>	**Sc**	**45**		ug/L			439931	460440	1	Standard
⎢	**Cr**	**52**	**-0.024**	ug/L	0.032	136	12483	12691	4	Standard
⎢	**Cr**	**53**	**0.305**	ug/L	0.008	2	120	684	3	Standard
⎣	**Mn**	**55**	**-0.013**	ug/L	0.001	4	1073	828	3	Standard
⎡>	**Ge**	**72**		ug/L			28119	29278	3	KED
⎢	**Ni**	**60**	**-0.022**	ug/L	0.002	11	28	8	26	KED
⎢	**Ni**	**62**	**0.003**	ug/L	0.024	890	5	5	66	KED
⎢	**Cu**	**63**	**0.001**	ug/L	0.003	302	42	46	16	KED
⎢	**Cu**	**65**	**-0.003**	ug/L	0.006	195	27	24	32	KED
⎢	**Zn**	**66**	**-0.007**	ug/L	0.021	291	29	28	23	KED
⎢	**Zn**	**67**	**0.017**	ug/L	0.043	257	8	10	21	KED
⎢	**As**	**75**	**0.001**	ug/L	0.024	1949	7	7	54	KED
⎣	**Se**	**78**	**-0.037**	ug/L	0.060	161	11	11	11	KED
	Y	**89**		ug/L			276255	285004	1	Standard
	Kr	**83**		ug/L			52	49	38	Standard
⎡>	**In-1**	**115**		ug/L			7782	8229	3	KED
⎢	**Mo**	**98**	**0.006**	ug/L	0.005	74	8	14	29	KED
⎢	**Cd**	**111**	**0.007**	ug/L	0.014	190	4	5	44	KED
⎣	**Cd**	**114**	**-0.003**	ug/L	0.011	321	5	4	113	KED
⎡>	**In**	**115**		ug/L			475417	482433	1	Standard
⎢	**Ag**	**107**	**-0.006**	ug/L	0.002	33	135	75	27	Standard
⎢	**Sb**	**121**	**0.043**	ug/L	0.006	13	596	1014	4	Standard
⎣	**Sb**	**123**	**0.037**	ug/L	0.007	18	475	751	5	Standard
⎡>	**Tb**	**159**		ug/L			499801	526817	1	Standard
⎢	**Tl**	**205**	**-0.003**	ug/L	0.000	7	224	148	4	Standard
⎣	**Pb**	**208**	**-0.006**	ug/L	0.000	4	359	158	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0724-BLK1
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, March 01, 2023 22:13:18
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	47669	0	Standard
	Cl	**37**		ug/L			3977931	4537436	0	Standard
⎡>	**Sc**	**45**		ug/L			439931	466549	1	Standard
⎢	**Cr**	**52**	**-0.001**	ug/L	0.050	4715	12483	13217	5	Standard
⎢	**Cr**	**53**	**0.308**	ug/L	0.008	2	120	699	1	Standard
⎣	**Mn**	**55**	**-0.002**	ug/L	0.002	116	1073	1097	3	Standard
⎡>	**Ge**	**72**		ug/L			28119	30086	1	KED
⎢	**Ni**	**60**	**-0.014**	ug/L	0.007	48	28	16	43	KED
⎢	**Ni**	**62**	**0.026**	ug/L	0.021	79	5	9	34	KED
⎢	**Cu**	**63**	**0.009**	ug/L	0.005	56	42	71	18	KED
⎢	**Cu**	**65**	**0.007**	ug/L	0.007	105	27	38	25	KED
⎢	**Zn**	**66**	**0.180**	ug/L	0.047	25	29	95	19	KED
⎢	**Zn**	**67**	**0.110**	ug/L	0.054	48	8	15	18	KED
⎢	**As**	**75**	**-0.001**	ug/L	0.009	793	7	7	22	KED
⎣	**Se**	**78**	**0.107**	ug/L	0.255	237	11	14	32	KED
	Y	**89**		ug/L			276255	286234	3	Standard
	Kr	**83**		ug/L			52	63	45	Standard
⎡>	**In-1**	**115**		ug/L			7782	8539	1	KED
⎢	**Mo**	**98**	**0.003**	ug/L	0.003	83	8	12	18	KED
⎢	**Cd**	**111**	**0.013**	ug/L	0.007	57	4	6	20	KED
⎣	**Cd**	**114**	**-0.003**	ug/L	0.008	304	5	4	82	KED
⎡>	**In**	**115**		ug/L			475417	491227	1	Standard
⎢	**Ag**	**107**	**-0.007**	ug/L	0.000	4	135	63	4	Standard
⎢	**Sb**	**121**	**-0.032**	ug/L	0.000	1	596	308	1	Standard
⎣	**Sb**	**123**	**-0.034**	ug/L	0.003	7	475	245	8	Standard
⎡>	**Tb**	**159**		ug/L			499801	541317	5	Standard
⎢	**Tl**	**205**	**-0.004**	ug/L	0.000	10	224	123	14	Standard
⎣	**Pb**	**208**	**-0.006**	ug/L	0.000	5	359	160	12	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0724-BS1
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, March 01, 2023 22:18:09
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	49558	3	Standard
	Cl	**37**		ug/L			3977931	4566885	2	Standard
⎡>	**Sc**	**45**		ug/L			439931	485923	1	Standard
⎢	**Cr**	**52**	**12.597**	ug/L	0.516	4	12483	223943	3	Standard
⎢	**Cr**	**53**	**12.993**	ug/L	0.465	3	120	25256	4	Standard
⎣	**Mn**	**55**	**12.728**	ug/L	0.904	7	1073	298518	5	Standard
⎡>	**Ge**	**72**		ug/L			28119	30689	1	KED
⎢	**Ni**	**60**	**12.058**	ug/L	0.798	6	28	12090	4	KED
⎢	**Ni**	**62**	**12.629**	ug/L	0.836	6	5	2038	5	KED
⎢	**Cu**	**63**	**12.364**	ug/L	0.586	4	42	34822	2	KED
⎢	**Cu**	**65**	**12.549**	ug/L	0.638	5	27	17556	3	KED
⎢	**Zn**	**66**	**40.088**	ug/L	1.898	4	29	14337	2	KED
⎢	**Zn**	**67**	**36.238**	ug/L	4.564	12	8	2148	10	KED
⎢	**As**	**75**	**11.958**	ug/L	0.678	5	7	2169	3	KED
⎣	**Se**	**78**	**37.955**	ug/L	1.994	5	11	753	3	KED
	Y	**89**		ug/L			276255	298385	2	Standard
	Kr	**83**		ug/L			52	49	26	Standard
⎡>	**In-1**	**115**		ug/L			7782	8394	0	KED
⎢	**Mo**	**98**	**0.000**	ug/L	0.007	2018	8	9	59	KED
⎢	**Cd**	**111**	**13.221**	ug/L	0.289	2	4	2517	1	KED
⎣	**Cd**	**114**	**12.962**	ug/L	0.532	4	5	5969	4	KED
⎡>	**In**	**115**		ug/L			475417	500605	0	Standard
⎢	**Ag**	**107**	**13.476**	ug/L	0.795	5	135	148852	5	Standard
⎢	**Sb**	**121**	**-0.044**	ug/L	0.002	4	596	195	8	Standard
⎣	**Sb**	**123**	**-0.045**	ug/L	0.004	9	475	165	19	Standard
⎡>	**Tb**	**159**		ug/L			499801	536353	2	Standard
⎢	**Tl**	**205**	**12.582**	ug/L	0.574	4	224	381874	2	Standard
⎣	**Pb**	**208**	**13.176**	ug/L	0.693	5	359	494209	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0330-29
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, March 01, 2023 22:23:00
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	51076	2	Standard
	Cl	**37**		ug/L			3977931	4627395	0	Standard
>	**Sc**	**45**		ug/L			439931	533130	2	Standard
	Cr	**52**	**0.102**	ug/L	0.011	10	12483	16984	1	Standard
	Cr	**53**	**0.762**	ug/L	0.021	2	120	1763	2	Standard
	Mn	**55**	**303.045**	ug/L	9.613	3	1073	7769273	1	Standard
>	**Ge**	**72**		ug/L			28119	30785	1	KED
	Ni	**60**	**0.456**	ug/L	0.055	12	28	489	11	KED
	Ni	**62**	**0.590**	ug/L	0.039	6	5	100	6	KED
	Cu	**63**	**0.189**	ug/L	0.007	3	42	579	4	KED
	Cu	**65**	**0.188**	ug/L	0.021	11	27	293	9	KED
	Zn	**66**	**0.459**	ug/L	0.021	4	29	196	2	KED
	Zn	**67**	**0.489**	ug/L	0.110	22	8	38	17	KED
	As	**75**	**5.476**	ug/L	0.422	7	7	1001	8	KED
	Se	**78**	**0.144**	ug/L	0.176	122	11	15	23	KED
	Y	**89**		ug/L			276255	310856	0	Standard
	Kr	**83**		ug/L			52	62	25	Standard
>	**In-1**	**115**		ug/L			7782	8562	2	KED
	Mo	**98**	**0.195**	ug/L	0.030	15	8	165	15	KED
	Cd	**111**	**-0.010**	ug/L	0.005	51	4	2	43	KED
	Cd	**114**	**0.007**	ug/L	0.005	68	5	9	21	KED
>	**In**	**115**		ug/L			475417	506739	3	Standard
	Ag	**107**	**-0.006**	ug/L	0.000	5	135	73	3	Standard
	Sb	**121**	**-0.042**	ug/L	0.001	2	596	215	7	Standard
	Sb	**123**	**-0.048**	ug/L	0.003	6	475	146	17	Standard
>	**Tb**	**159**		ug/L			499801	555681	1	Standard
	Tl	**205**	**-0.003**	ug/L	0.000	15	224	166	6	Standard
	Pb	**208**	**0.010**	ug/L	0.001	7	359	804	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0330-39
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, March 01, 2023 22:27:50
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	52437	2	Standard
	Cl	**37**		ug/L			3977931	4642789	1	Standard
⎡>	**Sc**	**45**		ug/L			439931	541732	2	Standard
⎢	**Cr**	**52**	**0.158**	ug/L	0.020	12	12483	18305	1	Standard
⎢	**Cr**	**53**	**0.800**	ug/L	0.024	3	120	1872	2	Standard
⎣	**Mn**	**55**	**752.507**	ug/L	22.742	3	1073	19601625	1	Standard
⎡>	**Ge**	**72**		ug/L			28119	29796	0	KED
⎢	**Ni**	**60**	**0.393**	ug/L	0.013	3	28	412	3	KED
⎢	**Ni**	**62**	**0.505**	ug/L	0.007	1	5	84	1	KED
⎢	**Cu**	**63**	**0.255**	ug/L	0.021	8	42	742	6	KED
⎢	**Cu**	**65**	**0.263**	ug/L	0.006	2	27	386	2	KED
⎢	**Zn**	**66**	**0.442**	ug/L	0.038	8	29	184	7	KED
⎢	**Zn**	**67**	**0.566**	ug/L	0.168	29	8	41	23	KED
⎢	**As**	**75**	**1.813**	ug/L	0.067	3	7	326	4	KED
⎣	**Se**	**78**	**0.203**	ug/L	0.025	12	11	16	3	KED
	Y	**89**		ug/L			276255	307567	2	Standard
	Kr	**83**		ug/L			52	73	18	Standard
⎡>	**In-1**	**115**		ug/L			7782	8350	0	KED
⎢	**Mo**	**98**	**0.452**	ug/L	0.022	4	8	360	4	KED
⎢	**Cd**	**111**	**0.010**	ug/L	0.010	102	4	6	31	KED
⎣	**Cd**	**114**	**-0.005**	ug/L	0.004	80	5	3	53	KED
⎡>	**In**	**115**		ug/L			475417	495667	1	Standard
⎢	**Ag**	**107**	**-0.007**	ug/L	0.000	2	135	69	4	Standard
⎢	**Sb**	**121**	**-0.042**	ug/L	0.001	1	596	215	3	Standard
⎣	**Sb**	**123**	**-0.047**	ug/L	0.003	5	475	150	12	Standard
⎡>	**Tb**	**159**		ug/L			499801	554360	3	Standard
⎢	**Tl**	**205**	**-0.003**	ug/L	0.000	7	224	142	7	Standard
⎣	**Pb**	**208**	**0.060**	ug/L	0.001	2	359	2742	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0387-01
Sample Dil Factor: 50
Comments:
Sample Date/Time: Wednesday, March 01, 2023 22:32:41
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			34622	73546	4	Standard
	Cl	37		ug/L			3977931	4413905	2	Standard
>	Sc	45		ug/L			439931	507739	0	Standard
	Cr	52	28.788	ug/L	0.399	1	12483	516291	1	Standard
	Cr	53	28.887	ug/L	0.430	1	120	58499	1	Standard
	Mn	55	7.078	ug/L	0.243	3	1073	174103	3	Standard
>	Ge	72		ug/L			28119	30803	1	KED
	Ni	60	0.180	ug/L	0.036	19	28	212	16	KED
	Ni	62	0.236	ug/L	0.052	21	5	43	19	KED
	Cu	63	0.538	ug/L	0.049	9	42	1564	7	KED
	Cu	65	0.534	ug/L	0.047	8	27	779	7	KED
	Zn	66	43.939	ug/L	2.730	6	29	15771	5	KED
	Zn	67	39.724	ug/L	2.212	5	8	2365	4	KED
	As	75	0.037	ug/L	0.007	17	7	14	8	KED
	Se	78	0.006	ug/L	0.179	2887	11	13	28	KED
	Y	89		ug/L			276255	307619	0	Standard
	Kr	83		ug/L			52	48	22	Standard
>	In-1	115		ug/L			7782	8757	6	KED
	Mo	98	0.042	ug/L	0.011	27	8	44	19	KED
	Cd	111	0.271	ug/L	0.022	8	4	58	11	KED
	Cd	114	0.268	ug/L	0.065	24	5	133	17	KED
>	In	115		ug/L			475417	512781	1	Standard
	Ag	107	0.006	ug/L	0.002	31	135	216	11	Standard
	Sb	121	-0.031	ug/L	0.003	8	596	328	6	Standard
	Sb	123	-0.033	ug/L	0.002	5	475	258	4	Standard
>	Tb	159		ug/L			499801	560671	1	Standard
	Tl	205	-0.006	ug/L	0.000	2	224	74	7	Standard
	Pb	208	0.041	ug/L	0.003	6	359	2029	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0324-02
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, March 01, 2023 22:37:32
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	52670	3	Standard
	Cl	**37**		ug/L			3977931	4456043	2	Standard
⌈>	**Sc**	**45**		ug/L			439931	520555	2	Standard
|	**Cr**	**52**	**0.259**	ug/L	0.032	12	12483	19401	5	Standard
|	**Cr**	**53**	**0.552**	ug/L	0.026	4	120	1286	6	Standard
⌊	**Mn**	**55**	**4.311**	ug/L	0.145	3	1073	109259	5	Standard
⌈>	**Ge**	**72**		ug/L			28119	31337	1	KED
|	**Ni**	**60**	**0.400**	ug/L	0.050	12	28	440	10	KED
|	**Ni**	**62**	**0.356**	ug/L	0.082	22	5	64	18	KED
|	**Cu**	**63**	**0.374**	ug/L	0.027	7	42	1120	5	KED
|	**Cu**	**65**	**0.356**	ug/L	0.038	10	27	538	10	KED
|	**Zn**	**66**	**0.525**	ug/L	0.078	14	29	224	10	KED
|	**Zn**	**67**	**0.425**	ug/L	0.024	5	8	35	3	KED
|	**As**	**75**	**0.190**	ug/L	0.017	9	7	43	9	KED
⌊	**Se**	**78**	**0.092**	ug/L	0.111	120	11	14	12	KED
	Y	**89**		ug/L			276255	318951	3	Standard
	Kr	**83**		ug/L			52	53	14	Standard
⌈>	**In-1**	**115**		ug/L			7782	8772	4	KED
|	**Mo**	**98**	**0.022**	ug/L	0.006	25	8	28	18	KED
|	**Cd**	**111**	**-0.007**	ug/L	0.006	79	4	3	34	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.003	185	5	7	26	KED
⌈>	**In**	**115**		ug/L			475417	525615	1	Standard
|	**Ag**	**107**	**-0.002**	ug/L	0.002	89	135	123	20	Standard
|	**Sb**	**121**	**-0.043**	ug/L	0.002	4	596	217	9	Standard
⌊	**Sb**	**123**	**-0.045**	ug/L	0.005	10	475	176	20	Standard
⌈>	**Tb**	**159**		ug/L			499801	567335	1	Standard
|	**Tl**	**205**	**-0.007**	ug/L	0.001	8	224	41	42	Standard
⌊	**Pb**	**208**	**0.043**	ug/L	0.001	1	359	2120	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0724-DUP1
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, March 01, 2023 22:42:22
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	53546	2	Standard
	Cl	**37**		ug/L			3977931	4323243	2	Standard
>	**Sc**	**45**		ug/L			439931	506634	1	Standard
	Cr	**52**	**0.322**	ug/L	0.042	13	12483	19976	2	Standard
	Cr	**53**	**0.559**	ug/L	0.018	3	120	1265	1	Standard
	Mn	**55**	**4.398**	ug/L	0.080	1	1073	108415	2	Standard
>	**Ge**	**72**		ug/L			28119	31380	2	KED
	Ni	**60**	**0.380**	ug/L	0.008	2	28	420	1	KED
	Ni	**62**	**0.369**	ug/L	0.083	22	5	66	22	KED
	Cu	**63**	**0.352**	ug/L	0.038	10	42	1059	8	KED
	Cu	**65**	**0.372**	ug/L	0.032	8	27	561	6	KED
	Zn	**66**	**0.457**	ug/L	0.078	17	29	200	14	KED
	Zn	**67**	**0.625**	ug/L	0.073	11	8	47	6	KED
	As	**75**	**0.198**	ug/L	0.005	2	7	44	4	KED
	Se	**78**	**-0.021**	ug/L	0.097	454	11	12	13	KED
	Y	**89**		ug/L			276255	305470	3	Standard
	Kr	**83**		ug/L			52	46	22	Standard
>	**In-1**	**115**		ug/L			7782	8826	2	KED
	Mo	**98**	**0.031**	ug/L	0.008	25	8	35	20	KED
	Cd	**111**	**0.002**	ug/L	0.010	498	4	5	39	KED
	Cd	**114**	**-0.007**	ug/L	0.005	64	5	2	79	KED
>	**In**	**115**		ug/L			475417	517494	1	Standard
	Ag	**107**	**-0.003**	ug/L	0.001	39	135	107	15	Standard
	Sb	**121**	**-0.046**	ug/L	0.003	5	596	181	13	Standard
	Sb	**123**	**-0.047**	ug/L	0.003	7	475	151	16	Standard
>	**Tb**	**159**		ug/L			499801	556197	0	Standard
	Tl	**205**	**-0.006**	ug/L	0.001	8	224	48	32	Standard
	Pb	**208**	**0.045**	ug/L	0.002	3	359	2168	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0724-MS1
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, March 01, 2023 22:47:13
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			34622	52357	1	Standard
	Cl	37		ug/L			3977931	4411339	0	Standard
>	Sc	45		ug/L			439931	512589	2	Standard
	Cr	52	12.186	ug/L	0.779	6	12483	228871	4	Standard
	Cr	53	12.501	ug/L	0.808	6	120	25623	5	Standard
	Mn	55	16.550	ug/L	0.843	5	1073	409121	3	Standard
>	Ge	72		ug/L			28119	30330	6	KED
	Ni	60	12.827	ug/L	0.616	4	28	12704	5	KED
	Ni	62	13.373	ug/L	0.555	4	5	2132	5	KED
	Cu	63	12.891	ug/L	0.143	1	42	35916	7	KED
	Cu	65	12.949	ug/L	0.599	4	27	17903	6	KED
	Zn	66	40.612	ug/L	0.931	2	29	14357	5	KED
	Zn	67	38.506	ug/L	1.323	3	8	2258	7	KED
	As	75	12.307	ug/L	0.277	2	7	2206	5	KED
	Se	78	36.554	ug/L	0.551	1	11	718	7	KED
	Y	89		ug/L			276255	313157	0	Standard
	Kr	83		ug/L			52	60	25	Standard
>	In-1	115		ug/L			7782	8498	2	KED
	Mo	98	0.040	ug/L	0.011	28	8	40	19	KED
	Cd	111	12.039	ug/L	0.353	2	4	2320	1	KED
	Cd	114	12.172	ug/L	0.299	2	5	5673	1	KED
>	In	115		ug/L			475417	519349	1	Standard
	Ag	107	12.904	ug/L	0.556	4	135	147875	3	Standard
	Sb	121	-0.047	ug/L	0.002	3	596	167	9	Standard
	Sb	123	-0.048	ug/L	0.001	2	475	149	5	Standard
>	Tb	159		ug/L			499801	563624	1	Standard
	Tl	205	11.493	ug/L	0.490	4	224	366681	2	Standard
	Pb	208	12.343	ug/L	0.600	4	359	486662	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL7
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 22:52:04
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	42792	2	Standard
	Cl	**37**		ug/L			3977931	4289242	2	Standard
⎡>	**Sc**	**45**		ug/L			439931	475949	1	Standard
⎢	**Cr**	**52**	**-0.013**	ug/L	0.011	83	12483	13289	3	Standard
⎢	**Cr**	**53**	**0.213**	ug/L	0.027	12	120	533	7	Standard
⎣	**Mn**	**55**	**-0.004**	ug/L	0.001	14	1073	1068	0	Standard
⎡>	**Ge**	**72**		ug/L			28119	30412	1	KED
⎢	**Ni**	**60**	**-0.024**	ug/L	0.005	21	28	7	66	KED
⎢	**Ni**	**62**	**-0.011**	ug/L	0.000	3	5	3	0	KED
⎢	**Cu**	**63**	**0.012**	ug/L	0.002	18	42	80	9	KED
⎢	**Cu**	**65**	**0.004**	ug/L	0.009	230	27	34	35	KED
⎢	**Zn**	**66**	**-0.002**	ug/L	0.021	1299	29	31	24	KED
⎢	**Zn**	**67**	**-0.056**	ug/L	0.067	118	8	6	62	KED
⎢	**As**	**75**	**-0.013**	ug/L	0.008	62	7	5	25	KED
⎣	**Se**	**78**	**0.024**	ug/L	0.257	1055	11	13	36	KED
	Y	**89**		ug/L			276255	292426	0	Standard
	Kr	**83**		ug/L			52	53	10	Standard
⎡>	**In-1**	**115**		ug/L			7782	8660	2	KED
⎢	**Mo**	**98**	**-0.006**	ug/L	0.006	101	8	4	103	KED
⎢	**Cd**	**111**	**-0.012**	ug/L	0.012	99	4	2	107	KED
⎣	**Cd**	**114**	**0.001**	ug/L	0.008	653	5	6	58	KED
⎡>	**In**	**115**		ug/L			475417	495036	1	Standard
⎢	**Ag**	**107**	**-0.008**	ug/L	0.000	0	135	54	2	Standard
⎢	**Sb**	**121**	**-0.056**	ug/L	0.001	1	596	72	9	Standard
⎣	**Sb**	**123**	**-0.060**	ug/L	0.002	3	475	53	29	Standard
⎡>	**Tb**	**159**		ug/L			499801	531431	1	Standard
⎢	**Tl**	**205**	**-0.007**	ug/L	0.000	6	224	30	45	Standard
⎣	**Pb**	**208**	**-0.006**	ug/L	0.001	8	359	154	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV6
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 22:56:56
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	42224	3	Standard
	Cl	**37**		ug/L			3977931	4741313	2	Standard
⌈>	**Sc**	**45**		ug/L			439931	499103	0	Standard
|	**Cr**	**52**	**46.778**	ug/L	2.606	5	12483	815894	5	Standard
|	**Cr**	**53**	**47.309**	ug/L	2.972	6	120	94098	6	Standard
⌊	**Mn**	**55**	**45.516**	ug/L	2.357	5	1073	1094097	5	Standard
⌈>	**Ge**	**72**		ug/L			28119	30746	0	KED
|	**Ni**	**60**	**48.826**	ug/L	2.011	4	28	49002	4	KED
|	**Ni**	**62**	**49.109**	ug/L	1.404	2	5	7932	3	KED
|	**Cu**	**63**	**49.382**	ug/L	0.497	1	42	139282	1	KED
|	**Cu**	**65**	**49.506**	ug/L	0.639	1	27	69338	1	KED
|	**Zn**	**66**	**50.417**	ug/L	1.473	2	29	18069	3	KED
|	**Zn**	**67**	**49.300**	ug/L	3.698	7	8	2929	8	KED
|	**As**	**75**	**48.902**	ug/L	0.996	2	7	8870	2	KED
⌊	**Se**	**78**	**50.006**	ug/L	2.492	4	11	991	5	KED
	Y	**89**		ug/L			276255	302033	0	Standard
	Kr	**83**		ug/L			52	62	30	Standard
⌈>	**In-1**	**115**		ug/L			7782	8652	1	KED
|	**Mo**	**98**	**47.919**	ug/L	0.532	1	8	38540	2	KED
|	**Cd**	**111**	**48.934**	ug/L	0.915	1	4	9592	3	KED
⌊	**Cd**	**114**	**50.988**	ug/L	0.442	0	5	24184	2	KED
⌈>	**In**	**115**		ug/L			475417	496220	1	Standard
|	**Ag**	**107**	**49.141**	ug/L	3.435	6	135	537505	5	Standard
|	**Sb**	**121**	**47.192**	ug/L	2.905	6	596	463077	4	Standard
⌊	**Sb**	**123**	**46.478**	ug/L	2.871	6	475	344609	4	Standard
⌈>	**Tb**	**159**		ug/L			499801	548988	0	Standard
|	**Tl**	**205**	**45.930**	ug/L	1.618	3	224	1427203	3	Standard
⌊	**Pb**	**208**	**48.585**	ug/L	1.852	3	359	1865896	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB6
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 23:04:31
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	40331	2	Standard
	Cl	**37**		ug/L			3977931	4610347	2	Standard
⎡>	**Sc**	**45**		ug/L			439931	488594	0	Standard
⎢	**Cr**	**52**	**-0.007**	ug/L	0.006	90	12483	13748	1	Standard
⎢	**Cr**	**53**	**0.210**	ug/L	0.010	4	120	542	3	Standard
⎣	**Mn**	**55**	**-0.014**	ug/L	0.001	3	1073	859	0	Standard
⎡>	**Ge**	**72**		ug/L			28119	28918	5	KED
⎢	**Ni**	**60**	**-0.021**	ug/L	0.009	40	28	9	87	KED
⎢	**Ni**	**62**	**0.008**	ug/L	0.034	406	5	6	75	KED
⎢	**Cu**	**63**	**-0.001**	ug/L	0.005	570	42	41	27	KED
⎢	**Cu**	**65**	**-0.004**	ug/L	0.007	183	27	22	36	KED
⎢	**Zn**	**66**	**-0.002**	ug/L	0.006	259	29	29	7	KED
⎢	**Zn**	**67**	**-0.062**	ug/L	0.088	141	8	5	88	KED
⎢	**As**	**75**	**-0.008**	ug/L	0.000	4	7	6	4	KED
⎣	**Se**	**78**	**0.314**	ug/L	0.136	43	11	17	18	KED
	Y	**89**		ug/L			276255	293437	0	Standard
	Kr	**83**		ug/L			52	48	19	Standard
⎡>	**In-1**	**115**		ug/L			7782	8272	0	KED
⎢	**Mo**	**98**	**-0.001**	ug/L	0.005	743	8	8	41	KED
⎢	**Cd**	**111**	**0.005**	ug/L	0.008	143	4	5	26	KED
⎣	**Cd**	**114**	**0.003**	ug/L	0.011	314	5	7	65	KED
⎡>	**In**	**115**		ug/L			475417	497215	2	Standard
⎢	**Ag**	**107**	**-0.006**	ug/L	0.001	14	135	74	12	Standard
⎢	**Sb**	**121**	**0.045**	ug/L	0.005	10	596	1065	3	Standard
⎣	**Sb**	**123**	**0.042**	ug/L	0.008	19	475	805	7	Standard
⎡>	**Tb**	**159**		ug/L			499801	532664	1	Standard
⎢	**Tl**	**205**	**-0.005**	ug/L	0.000	1	224	73	1	Standard
⎣	**Pb**	**208**	**-0.006**	ug/L	0.001	14	359	154	19	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0716-BLK1
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, March 01, 2023 23:09:23
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			34622	58337	2	Standard
Cl	37		ug/L			3977931	4694940	2	Standard
> Sc	45		ug/L			439931	559288	1	Standard
Cr	52	0.160	ug/L	0.042	25	12483	18943	3	Standard
Cr	53	0.373	ug/L	0.002	0	120	982	0	Standard
Mn	55	0.166	ug/L	0.009	5	1073	5830	3	Standard
> Ge	72		ug/L			28119	31647	1	KED
Ni	60	0.079	ug/L	0.011	13	28	113	10	KED
Ni	62	0.107	ug/L	0.058	54	5	23	41	KED
Cu	63	0.444	ug/L	0.033	7	42	1334	6	KED
Cu	65	0.462	ug/L	0.044	9	27	695	8	KED
Zn	66	1.379	ug/L	0.115	8	29	540	7	KED
Zn	67	1.212	ug/L	0.182	14	8	83	12	KED
As	75	0.006	ug/L	0.013	207	7	9	25	KED
Se	78	-0.003	ug/L	0.100	3983	11	13	14	KED
Y	89		ug/L			276255	340054	2	Standard
Kr	83		ug/L			52	49	21	Standard
> In-1	115		ug/L			7782	9243	6	KED
Mo	98	0.029	ug/L	0.008	27	8	35	21	KED
Cd	111	-0.006	ug/L	0.006	100	4	3	31	KED
Cd	114	-0.004	ug/L	0.007	187	5	4	74	KED
> In	115		ug/L			475417	538825	1	Standard
Ag	107	0.005	ug/L	0.002	36	135	217	9	Standard
Sb	121	-0.007	ug/L	0.002	28	596	605	4	Standard
Sb	123	-0.008	ug/L	0.004	46	475	478	5	Standard
> Tb	159		ug/L			499801	583406	2	Standard
Tl	205	-0.005	ug/L	0.000	6	224	86	12	Standard
Pb	208	0.053	ug/L	0.003	6	359	2577	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0716-BS1
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, March 01, 2023 23:14:13
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			34622	55356	3	Standard
Cl	37		ug/L			3977931	4646416	1	Standard
> Sc	45		ug/L			439931	550586	0	Standard
Cr	52	12.281	ug/L	0.650	5	12483	247709	3	Standard
Cr	53	12.470	ug/L	0.580	4	120	27461	3	Standard
Mn	55	12.336	ug/L	0.461	3	1073	328000	2	Standard
> Ge	72		ug/L			28119	32244	1	KED
Ni	60	12.442	ug/L	0.125	1	28	13115	0	KED
Ni	62	12.578	ug/L	0.571	4	5	2134	3	KED
Cu	63	12.612	ug/L	0.191	1	42	37336	0	KED
Cu	65	12.814	ug/L	0.235	1	27	18841	0	KED
Zn	66	33.569	ug/L	0.840	2	29	12624	1	KED
Zn	67	30.174	ug/L	0.297	0	8	1883	1	KED
As	75	10.289	ug/L	0.024	0	7	1963	1	KED
Se	78	27.117	ug/L	0.529	1	11	569	2	KED
Y	89		ug/L			276255	341294	2	Standard
Kr	83		ug/L			52	54	15	Standard
> In-1	115		ug/L			7782	9241	0	KED
Mo	98	0.041	ug/L	0.009	21	8	45	16	KED
Cd	111	10.414	ug/L	0.261	2	4	2183	2	KED
Cd	114	10.380	ug/L	0.377	3	5	5263	3	KED
> In	115		ug/L			475417	535148	1	Standard
Ag	107	12.765	ug/L	0.255	2	135	150796	3	Standard
Sb	121	-0.033	ug/L	0.002	7	596	326	9	Standard
Sb	123	-0.034	ug/L	0.004	11	475	260	11	Standard
> Tb	159		ug/L			499801	580093	1	Standard
Tl	205	11.889	ug/L	0.473	3	224	390559	3	Standard
Pb	208	12.430	ug/L	0.361	2	359	504645	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0324-02RE1
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, March 01, 2023 23:19:04
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			34622	58181	0	Standard
Cl	37		ug/L			3977931	4481657	1	Standard
> Sc	45		ug/L			439931	600978	1	Standard
Cr	52	2.764	ug/L	0.081	2	12483	74097	3	Standard
Cr	53	3.062	ug/L	0.095	3	120	7488	4	Standard
Mn	55	39.684	ug/L	0.998	2	1073	1148912	3	Standard
> Ge	72		ug/L			28119	32165	0	KED
Ni	60	3.924	ug/L	0.140	3	28	4148	3	KED
Ni	62	4.317	ug/L	0.188	4	5	734	3	KED
Cu	63	3.133	ug/L	0.165	5	42	9289	4	KED
Cu	65	3.196	ug/L	0.131	4	27	4711	3	KED
Zn	66	3.399	ug/L	0.085	2	29	1306	3	KED
Zn	67	4.110	ug/L	0.222	5	8	264	5	KED
As	75	0.558	ug/L	0.015	2	7	113	2	KED
Se	78	0.326	ug/L	0.123	37	11	20	12	KED
Y	89		ug/L			276255	371012	0	Standard
Kr	83		ug/L			52	70	24	Standard
> In-1	115		ug/L			7782	9249	1	KED
Mo	98	0.045	ug/L	0.012	26	8	48	22	KED
Cd	111	0.002	ug/L	0.003	108	4	5	10	KED
Cd	114	0.008	ug/L	0.007	83	5	10	29	KED
> In	115		ug/L			475417	541878	1	Standard
Ag	107	0.004	ug/L	0.002	48	135	206	12	Standard
Sb	121	-0.020	ug/L	0.001	3	596	469	1	Standard
Sb	123	-0.024	ug/L	0.003	10	475	350	6	Standard
> Tb	159		ug/L			499801	585989	2	Standard
Tl	205	0.001	ug/L	0.001	58	224	307	7	Standard
Pb	208	0.447	ug/L	0.018	4	359	18727	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0716-DUP1
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, March 01, 2023 23:23:55
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			34622	60185	1	Standard
Cl	37		ug/L			3977931	4475271	1	Standard
> Sc	45		ug/L			439931	599778	1	Standard
Cr	52	2.649	ug/L	0.091	3	12483	71569	1	Standard
Cr	53	2.901	ug/L	0.144	4	120	7085	3	Standard
Mn	55	38.488	ug/L	2.182	5	1073	1111489	4	Standard
> Ge	72		ug/L			28119	31797	3	KED
Ni	60	3.969	ug/L	0.021	0	28	4148	3	KED
Ni	62	4.109	ug/L	0.240	5	5	690	2	KED
Cu	63	3.399	ug/L	0.128	3	42	9952	0	KED
Cu	65	3.423	ug/L	0.028	0	27	4986	2	KED
Zn	66	3.513	ug/L	0.188	5	29	1332	3	KED
Zn	67	4.683	ug/L	0.386	8	8	297	10	KED
As	75	0.586	ug/L	0.082	13	7	118	15	KED
Se	78	0.024	ug/L	0.182	747	11	13	23	KED
Y	89		ug/L			276255	357458	2	Standard
Kr	83		ug/L			52	66	3	Standard
> In-1	115		ug/L			7782	9287	1	KED
Mo	98	0.035	ug/L	0.009	25	8	40	18	KED
Cd	111	-0.010	ug/L	0.008	81	4	2	57	KED
Cd	114	0.003	ug/L	0.008	235	5	8	46	KED
> In	115		ug/L			475417	533466	2	Standard
Ag	107	0.008	ug/L	0.002	26	135	243	11	Standard
Sb	121	0.020	ug/L	0.010	50	596	875	10	Standard
Sb	123	0.015	ug/L	0.006	40	475	653	5	Standard
> Tb	159		ug/L			499801	583055	3	Standard
Tl	205	0.002	ug/L	0.001	74	224	314	10	Standard
Pb	208	0.431	ug/L	0.021	4	359	17991	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0716-MS1
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, March 01, 2023 23:28:45
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			34622	57345	1	Standard
Cl	37		ug/L			3977931	4554457	2	Standard
> Sc	45		ug/L			439931	639325	3	Standard
Cr	52	14.391	ug/L	0.572	3	12483	334146	6	Standard
Cr	53	14.900	ug/L	0.717	4	120	38098	7	Standard
Mn	55	59.562	ug/L	2.033	3	1073	1834178	6	Standard
> Ge	72		ug/L			28119	32070	0	KED
Ni	60	17.606	ug/L	0.486	2	28	18447	2	KED
Ni	62	17.851	ug/L	0.452	2	5	3011	2	KED
Cu	63	16.591	ug/L	0.411	2	42	48838	2	KED
Cu	65	16.517	ug/L	0.322	1	27	24148	1	KED
Zn	66	36.750	ug/L	1.139	3	29	13744	2	KED
Zn	67	35.807	ug/L	2.127	5	8	2221	5	KED
As	75	10.768	ug/L	0.251	2	7	2043	1	KED
Se	78	27.598	ug/L	0.335	1	11	576	0	KED
Y	89		ug/L			276255	380471	5	Standard
Kr	83		ug/L			52	61	25	Standard
> In-1	115		ug/L			7782	9112	1	KED
Mo	98	0.044	ug/L	0.004	8	8	47	7	KED
Cd	111	10.821	ug/L	0.383	3	4	2237	4	KED
Cd	114	10.765	ug/L	0.217	2	5	5382	0	KED
> In	115		ug/L			475417	539893	2	Standard
Ag	107	12.901	ug/L	0.228	1	135	153760	3	Standard
Sb	121	-0.019	ug/L	0.003	16	596	470	8	Standard
Sb	123	-0.025	ug/L	0.003	10	475	338	6	Standard
> Tb	159		ug/L			499801	598416	5	Standard
Tl	205	12.046	ug/L	0.413	3	224	407732	2	Standard
Pb	208	13.167	ug/L	0.278	2	359	551111	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL8
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 23:33:37
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	43832	1	Standard
	Cl	**37**		ug/L			3977931	4374346	3	Standard
⎡>	**Sc**	**45**		ug/L			439931	479674	2	Standard
⎢	**Cr**	**52**	**-0.060**	ug/L	0.042	70	12483	12603	3	Standard
⎢	**Cr**	**53**	**0.176**	ug/L	0.001	0	120	467	2	Standard
⎣	**Mn**	**55**	**0.002**	ug/L	0.003	171	1073	1203	3	Standard
⎡>	**Ge**	**72**		ug/L			28119	29561	0	KED
⎢	**Ni**	**60**	**-0.025**	ug/L	0.006	23	28	5	100	KED
⎢	**Ni**	**62**	**0.010**	ug/L	0.049	476	5	6	110	KED
⎢	**Cu**	**63**	**0.012**	ug/L	0.001	7	42	77	3	KED
⎢	**Cu**	**65**	**0.008**	ug/L	0.005	66	27	39	18	KED
⎢	**Zn**	**66**	**0.009**	ug/L	0.006	74	29	34	5	KED
⎢	**Zn**	**67**	**-0.019**	ug/L	0.039	206	8	8	26	KED
⎢	**As**	**75**	**0.002**	ug/L	0.003	123	7	7	6	KED
⎣	**Se**	**78**	**-0.007**	ug/L	0.224	3123	11	12	35	KED
	Y	**89**		ug/L			276255	291420	1	Standard
	Kr	**83**		ug/L			52	54	21	Standard
⎡>	**In-1**	**115**		ug/L			7782	8242	5	KED
⎢	**Mo**	**98**	**-0.000**	ug/L	0.001	471	8	9	2	KED
⎢	**Cd**	**111**	**-0.003**	ug/L	0.009	269	4	3	50	KED
⎣	**Cd**	**114**	**0.001**	ug/L	0.002	404	5	6	16	KED
⎡>	**In**	**115**		ug/L			475417	492781	2	Standard
⎢	**Ag**	**107**	**-0.008**	ug/L	0.001	17	135	52	27	Standard
⎢	**Sb**	**121**	**-0.056**	ug/L	0.001	1	596	72	9	Standard
⎣	**Sb**	**123**	**-0.060**	ug/L	0.001	1	475	51	11	Standard
⎡>	**Tb**	**159**		ug/L			499801	519307	3	Standard
⎢	**Tl**	**205**	**-0.007**	ug/L	0.000	3	224	34	17	Standard
⎣	**Pb**	**208**	**-0.006**	ug/L	0.001	8	359	138	13	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV7
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 23:38:28
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	43693	0	Standard
	Cl	**37**		ug/L			3977931	4808320	1	Standard
⌈>	**Sc**	**45**		ug/L			439931	499683	3	Standard
|	**Cr**	**52**	**48.449**	ug/L	2.057	4	12483	844761	1	Standard
|	**Cr**	**53**	**48.145**	ug/L	1.196	2	120	95838	3	Standard
⌊	**Mn**	**55**	**48.346**	ug/L	1.642	3	1073	1162693	2	Standard
⌈>	**Ge**	**72**		ug/L			28119	30446	1	KED
|	**Ni**	**60**	**47.682**	ug/L	1.790	3	28	47387	4	KED
|	**Ni**	**62**	**49.415**	ug/L	0.941	1	5	7904	2	KED
|	**Cu**	**63**	**48.764**	ug/L	2.355	4	42	136188	4	KED
|	**Cu**	**65**	**48.550**	ug/L	1.596	3	27	67338	3	KED
|	**Zn**	**66**	**48.791**	ug/L	1.985	4	29	17313	4	KED
|	**Zn**	**67**	**49.585**	ug/L	3.095	6	8	2917	6	KED
|	**As**	**75**	**48.108**	ug/L	1.489	3	7	8640	3	KED
⌊	**Se**	**78**	**48.501**	ug/L	2.069	4	11	952	3	KED
	Y	**89**		ug/L			276255	307772	2	Standard
	Kr	**83**		ug/L			52	60	39	Standard
⌈>	**In-1**	**115**		ug/L			7782	8179	0	KED
|	**Mo**	**98**	**47.503**	ug/L	3.304	6	8	36116	6	KED
|	**Cd**	**111**	**48.572**	ug/L	2.787	5	4	8999	5	KED
⌊	**Cd**	**114**	**49.098**	ug/L	3.687	7	5	22014	7	KED
⌈>	**In**	**115**		ug/L			475417	503044	2	Standard
|	**Ag**	**107**	**50.271**	ug/L	3.263	6	135	557285	4	Standard
|	**Sb**	**121**	**47.500**	ug/L	2.167	4	596	472478	3	Standard
⌊	**Sb**	**123**	**47.017**	ug/L	2.457	5	475	353353	3	Standard
⌈>	**Tb**	**159**		ug/L			499801	560652	2	Standard
|	**Tl**	**205**	**45.571**	ug/L	3.445	7	224	1444629	5	Standard
⌊	**Pb**	**208**	**48.467**	ug/L	3.276	6	359	1899070	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB7
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 23:46:04
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	41947	2	Standard
	Cl	**37**		ug/L			3977931	4602678	1	Standard
⎡>	**Sc**	**45**		ug/L			439931	475576	2	Standard
⎢	**Cr**	**52**	**-0.049**	ug/L	0.041	83	12483	12689	4	Standard
⎢	**Cr**	**53**	**0.193**	ug/L	0.031	15	120	495	10	Standard
⎣	**Mn**	**55**	**-0.009**	ug/L	0.000	5	1073	957	3	Standard
⎡>	**Ge**	**72**		ug/L			28119	29738	2	KED
⎢	**Ni**	**60**	**-0.017**	ug/L	0.003	16	28	13	20	KED
⎢	**Ni**	**62**	**0.002**	ug/L	0.012	547	5	5	33	KED
⎢	**Cu**	**63**	**0.004**	ug/L	0.000	4	42	55	3	KED
⎢	**Cu**	**65**	**-0.004**	ug/L	0.004	83	27	22	22	KED
⎢	**Zn**	**66**	**0.002**	ug/L	0.007	274	29	32	5	KED
⎢	**Zn**	**67**	**-0.075**	ug/L	0.051	68	8	5	57	KED
⎢	**As**	**75**	**-0.003**	ug/L	0.010	312	7	6	27	KED
⎣	**Se**	**78**	**-0.113**	ug/L	0.059	51	11	10	8	KED
	Y	**89**		ug/L			276255	294762	3	Standard
	Kr	**83**		ug/L			52	50	31	Standard
⎡>	**In-1**	**115**		ug/L			7782	8258	0	KED
⎢	**Mo**	**98**	**0.005**	ug/L	0.006	123	8	13	35	KED
⎢	**Cd**	**111**	**0.000**	ug/L	0.012	2972	4	4	49	KED
⎣	**Cd**	**114**	**-0.002**	ug/L	0.003	114	5	4	23	KED
⎡>	**In**	**115**		ug/L			475417	491722	2	Standard
⎢	**Ag**	**107**	**-0.006**	ug/L	0.002	25	135	75	23	Standard
⎢	**Sb**	**121**	**0.043**	ug/L	0.002	3	596	1035	3	Standard
⎣	**Sb**	**123**	**0.042**	ug/L	0.008	18	475	797	7	Standard
⎡>	**Tb**	**159**		ug/L			499801	519915	1	Standard
⎢	**Tl**	**205**	**-0.005**	ug/L	0.001	13	224	95	20	Standard
⎣	**Pb**	**208**	**-0.005**	ug/L	0.001	12	359	193	13	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 23:50:54
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	49350	1	Standard
	Cl	**37**		ug/L			3977931	4710430	1	Standard
⎡>	**Sc**	**45**		ug/L			439931	584834	0	Standard
⎢	**Cr**	**52**	**0.004**	ug/L	0.025	667	12483	16667	2	Standard
⎢	**Cr**	**53**	**0.145**	ug/L	0.020	13	120	497	8	Standard
⎣	**Mn**	**55**	**0.004**	ug/L	0.002	38	1073	1544	3	Standard
⎡>	**Ge**	**72**		ug/L			28119	31601	1	KED
⎢	**Ni**	**60**	**-0.022**	ug/L	0.007	30	28	9	72	KED
⎢	**Ni**	**62**	**0.008**	ug/L	0.023	311	5	6	56	KED
⎢	**Cu**	**63**	**0.003**	ug/L	0.004	131	42	55	18	KED
⎢	**Cu**	**65**	**0.005**	ug/L	0.007	138	27	38	26	KED
⎢	**Zn**	**66**	**-0.015**	ug/L	0.011	71	29	27	15	KED
⎢	**Zn**	**67**	**-0.070**	ug/L	0.033	46	8	5	33	KED
⎢	**As**	**75**	**-0.004**	ug/L	0.009	231	7	7	24	KED
⎣	**Se**	**78**	**0.016**	ug/L	0.166	1045	11	13	25	KED
	Y	**89**		ug/L			276255	353157	2	Standard
	Kr	**83**		ug/L			52	62	23	Standard
⎡>	**In-1**	**115**		ug/L			7782	9431	2	KED
⎢	**Mo**	**98**	**-0.006**	ug/L	0.002	26	8	5	25	KED
⎢	**Cd**	**111**	**-0.003**	ug/L	0.003	117	4	4	12	KED
⎣	**Cd**	**114**	**0.006**	ug/L	0.003	43	5	10	11	KED
⎡>	**In**	**115**		ug/L			475417	557206	2	Standard
⎢	**Ag**	**107**	**-0.008**	ug/L	0.000	3	135	64	4	Standard
⎢	**Sb**	**121**	**-0.012**	ug/L	0.005	43	596	570	9	Standard
⎣	**Sb**	**123**	**-0.013**	ug/L	0.004	27	475	448	8	Standard
⎡>	**Tb**	**159**		ug/L			499801	593603	3	Standard
⎢	**Tl**	**205**	**-0.006**	ug/L	0.000	2	224	56	7	Standard
⎣	**Pb**	**208**	**-0.008**	ug/L	0.000	1	359	108	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 01, 2023 23:55:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	50160	2	Standard
	Cl	**37**		ug/L			3977931	4766555	2	Standard
⎡>	**Sc**	**45**		ug/L			439931	589999	0	Standard
⎢	**Cr**	**52**	**0.002**	ug/L	0.032	1399	12483	16791	4	Standard
⎢	**Cr**	**53**	**0.139**	ug/L	0.008	5	120	487	3	Standard
⎣	**Mn**	**55**	**0.003**	ug/L	0.002	62	1073	1534	4	Standard
⎡>	**Ge**	**72**		ug/L			28119	32345	0	KED
⎢	**Ni**	**60**	**-0.025**	ug/L	0.006	22	28	6	83	KED
⎢	**Ni**	**62**	**0.018**	ug/L	0.007	37	5	8	12	KED
⎢	**Cu**	**63**	**0.013**	ug/L	0.003	25	42	88	10	KED
⎢	**Cu**	**65**	**0.006**	ug/L	0.000	2	27	40	0	KED
⎢	**Zn**	**66**	**-0.025**	ug/L	0.009	33	29	24	13	KED
⎢	**Zn**	**67**	**-0.052**	ug/L	0.093	177	8	6	83	KED
⎢	**As**	**75**	**-0.016**	ug/L	0.009	56	7	5	35	KED
⎣	**Se**	**78**	**0.083**	ug/L	0.067	80	11	15	8	KED
	Y	**89**		ug/L			276255	359116	1	Standard
	Kr	**83**		ug/L			52	51	9	Standard
⎡>	**In-1**	**115**		ug/L			7782	9469	1	KED
⎢	**Mo**	**98**	**-0.006**	ug/L	0.006	95	8	5	94	KED
⎢	**Cd**	**111**	**-0.011**	ug/L	0.007	60	4	2	57	KED
⎣	**Cd**	**114**	**-0.004**	ug/L	0.011	310	5	4	119	KED
⎡>	**In**	**115**		ug/L			475417	558067	1	Standard
⎢	**Ag**	**107**	**-0.009**	ug/L	0.001	12	135	50	28	Standard
⎢	**Sb**	**121**	**-0.037**	ug/L	0.001	2	596	293	2	Standard
⎣	**Sb**	**123**	**-0.041**	ug/L	0.002	5	475	214	6	Standard
⎡>	**Tb**	**159**		ug/L			499801	599290	3	Standard
⎢	**Tl**	**205**	**-0.007**	ug/L	0.000	5	224	28	40	Standard
⎣	**Pb**	**208**	**-0.008**	ug/L	0.000	2	359	103	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 02, 2023 00:00:37
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	49902	4	Standard
	Cl	**37**		ug/L			3977931	4617602	1	Standard
⎡>	**Sc**	**45**		ug/L			439931	557678	2	Standard
⎢	**Cr**	**52**	**0.017**	ug/L	0.026	147	12483	16154	3	Standard
⎢	**Cr**	**53**	**0.157**	ug/L	0.007	4	120	501	1	Standard
⎣	**Mn**	**55**	**0.005**	ug/L	0.002	35	1073	1497	1	Standard
⎡>	**Ge**	**72**		ug/L			28119	32092	1	KED
⎢	**Ni**	**60**	**-0.023**	ug/L	0.001	4	28	8	13	KED
⎢	**Ni**	**62**	**0.015**	ug/L	0.013	91	5	8	26	KED
⎢	**Cu**	**63**	**0.010**	ug/L	0.003	29	42	78	9	KED
⎢	**Cu**	**65**	**0.007**	ug/L	0.014	185	27	41	48	KED
⎢	**Zn**	**66**	**-0.049**	ug/L	0.011	22	29	15	24	KED
⎢	**Zn**	**67**	**-0.093**	ug/L	0.035	37	8	4	49	KED
⎢	**As**	**75**	**-0.012**	ug/L	0.004	31	7	5	12	KED
⎣	**Se**	**78**	**0.206**	ug/L	0.070	33	11	17	9	KED
	Y	**89**		ug/L			276255	345131	5	Standard
	Kr	**83**		ug/L			52	47	4	Standard
⎡>	**In-1**	**115**		ug/L			7782	9254	2	KED
⎢	**Mo**	**98**	**-0.002**	ug/L	0.007	265	8	8	69	KED
⎢	**Cd**	**111**	**-0.013**	ug/L	0.010	76	4	2	89	KED
⎣	**Cd**	**114**	**-0.003**	ug/L	0.004	117	5	4	41	KED
⎡>	**In**	**115**		ug/L			475417	533941	4	Standard
⎢	**Ag**	**107**	**-0.009**	ug/L	0.001	7	135	50	11	Standard
⎢	**Sb**	**121**	**-0.047**	ug/L	0.002	3	596	170	13	Standard
⎣	**Sb**	**123**	**-0.049**	ug/L	0.002	3	475	147	10	Standard
⎡>	**Tb**	**159**		ug/L			499801	570747	6	Standard
⎢	**Tl**	**205**	**-0.007**	ug/L	0.000	4	224	24	46	Standard
⎣	**Pb**	**208**	**-0.008**	ug/L	0.000	1	359	97	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 02, 2023 00:05:28
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	44295	0	Standard
	Cl	**37**		ug/L			3977931	4400153	0	Standard
⎡>	**Sc**	**45**		ug/L			439931	456064	1	Standard
⎢	**Cr**	**52**	**-0.060**	ug/L	0.033	55	12483	11996	3	Standard
⎢	**Cr**	**53**	**0.158**	ug/L	0.005	3	120	412	2	Standard
⎣	**Mn**	**55**	**0.004**	ug/L	0.001	28	1073	1198	1	Standard
⎡>	**Ge**	**72**		ug/L			28119	28952	3	KED
⎢	**Ni**	**60**	**-0.025**	ug/L	0.002	8	28	5	33	KED
⎢	**Ni**	**62**	**-0.005**	ug/L	0.006	118	5	4	24	KED
⎢	**Cu**	**63**	**-0.006**	ug/L	0.006	103	42	28	52	KED
⎢	**Cu**	**65**	**-0.014**	ug/L	0.003	21	27	10	39	KED
⎢	**Zn**	**66**	**-0.040**	ug/L	0.007	17	29	17	11	KED
⎢	**Zn**	**67**	**-0.153**	ug/L	0.020	13	8	0	173	KED
⎢	**As**	**75**	**-0.009**	ug/L	0.002	26	7	5	4	KED
⎣	**Se**	**78**	**0.093**	ug/L	0.033	35	11	13	2	KED
	Y	**89**		ug/L			276255	280137	0	Standard
	Kr	**83**		ug/L			52	48	8	Standard
⎡>	**In-1**	**115**		ug/L			7782	7958	3	KED
⎢	**Mo**	**98**	**0.002**	ug/L	0.002	63	8	10	9	KED
⎢	**Cd**	**111**	**0.007**	ug/L	0.006	94	4	5	20	KED
⎣	**Cd**	**114**	**-0.000**	ug/L	0.014	97933	5	5	102	KED
⎡>	**In**	**115**		ug/L			475417	476446	1	Standard
⎢	**Ag**	**107**	**-0.009**	ug/L	0.001	7	135	42	18	Standard
⎢	**Sb**	**121**	**-0.056**	ug/L	0.001	2	596	69	17	Standard
⎣	**Sb**	**123**	**-0.059**	ug/L	0.003	5	475	57	39	Standard
⎡>	**Tb**	**159**		ug/L			499801	517769	4	Standard
⎢	**Tl**	**205**	**-0.005**	ug/L	0.000	3	224	72	4	Standard
⎣	**Pb**	**208**	**-0.009**	ug/L	0.000	2	359	34	22	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 02, 2023 00:10:19
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	44233	1	Standard
	Cl	**37**		ug/L			3977931	4378829	1	Standard
⌈>	**Sc**	**45**		ug/L			439931	465793	1	Standard
|	**Cr**	**52**	**-0.061**	ug/L	0.025	40	12483	12232	2	Standard
|	**Cr**	**53**	**0.160**	ug/L	0.005	3	120	424	0	Standard
⌊	**Mn**	**55**	**-0.003**	ug/L	0.001	23	1073	1068	1	Standard
⌈>	**Ge**	**72**		ug/L			28119	28885	1	KED
|	**Ni**	**60**	**-0.027**	ug/L	0.004	14	28	3	100	KED
|	**Ni**	**62**	**-0.009**	ug/L	0.013	136	5	3	50	KED
|	**Cu**	**63**	**-0.006**	ug/L	0.006	101	42	27	55	KED
|	**Cu**	**65**	**-0.010**	ug/L	0.004	43	27	14	39	KED
|	**Zn**	**66**	**-0.042**	ug/L	0.043	101	29	16	85	KED
|	**Zn**	**67**	**-0.073**	ug/L	0.086	117	8	5	94	KED
|	**As**	**75**	**-0.011**	ug/L	0.005	41	7	5	13	KED
⌊	**Se**	**78**	**0.212**	ug/L	0.085	40	11	15	10	KED
	Y	**89**		ug/L			276255	280463	3	Standard
	Kr	**83**		ug/L			52	52	15	Standard
⌈>	**In-1**	**115**		ug/L			7782	8053	3	KED
|	**Mo**	**98**	**0.004**	ug/L	0.006	123	8	12	31	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.017	1548	4	4	81	KED
⌊	**Cd**	**114**	**-0.005**	ug/L	0.007	157	5	3	86	KED
⌈>	**In**	**115**		ug/L			475417	478778	2	Standard
|	**Ag**	**107**	**-0.009**	ug/L	0.001	7	135	36	19	Standard
|	**Sb**	**121**	**-0.058**	ug/L	0.001	0	596	48	8	Standard
⌊	**Sb**	**123**	**-0.062**	ug/L	0.002	2	475	37	33	Standard
⌈>	**Tb**	**159**		ug/L			499801	508950	4	Standard
|	**Tl**	**205**	**-0.005**	ug/L	0.000	4	224	72	13	Standard
⌊	**Pb**	**208**	**-0.009**	ug/L	0.000	3	359	42	20	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 02, 2023 00:15:10
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			34622	43698	2	Standard
	Cl	**37**		ug/L			3977931	4312994	2	Standard
⎡>	**Sc**	**45**		ug/L			439931	442849	1	Standard
⎢	**Cr**	**52**	**-0.032**	ug/L	0.026	82	12483	12074	3	Standard
⎢	**Cr**	**53**	**0.166**	ug/L	0.015	8	120	414	5	Standard
⎣	**Mn**	**55**	**-0.005**	ug/L	0.000	1	1073	978	1	Standard
⎡>	**Ge**	**72**		ug/L			28119	29282	1	KED
⎢	**Ni**	**60**	**-0.025**	ug/L	0.006	23	28	6	86	KED
⎢	**Ni**	**62**	**-0.014**	ug/L	0.007	51	5	3	34	KED
⎢	**Cu**	**63**	**-0.008**	ug/L	0.000	3	42	23	4	KED
⎢	**Cu**	**65**	**-0.009**	ug/L	0.006	61	27	15	48	KED
⎢	**Zn**	**66**	**-0.043**	ug/L	0.008	18	29	16	17	KED
⎢	**Zn**	**67**	**-0.108**	ug/L	0.019	17	8	3	34	KED
⎢	**As**	**75**	**-0.001**	ug/L	0.003	400	7	7	7	KED
⎣	**Se**	**78**	**0.295**	ug/L	0.080	27	11	17	8	KED
	Y	**89**		ug/L			276255	277365	0	Standard
	Kr	**83**		ug/L			52	40	4	Standard
⎡>	**In-1**	**115**		ug/L			7782	8119	1	KED
⎢	**Mo**	**98**	**-0.007**	ug/L	0.004	61	8	3	83	KED
⎢	**Cd**	**111**	**-0.015**	ug/L	0.008	53	4	1	91	KED
⎣	**Cd**	**114**	**0.001**	ug/L	0.003	327	5	6	17	KED
⎡>	**In**	**115**		ug/L			475417	471298	1	Standard
⎢	**Ag**	**107**	**-0.010**	ug/L	0.001	7	135	32	21	Standard
⎢	**Sb**	**121**	**-0.058**	ug/L	0.001	1	596	47	14	Standard
⎣	**Sb**	**123**	**-0.062**	ug/L	0.001	2	475	38	25	Standard
⎡>	**Tb**	**159**		ug/L			499801	505983	3	Standard
⎢	**Tl**	**205**	**-0.006**	ug/L	0.001	10	224	60	24	Standard
⎣	**Pb**	**208**	**-0.009**	ug/L	0.000	1	359	36	18	Standard

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00021	Instrument:	ICPMS1
Calibration Date:	03/06/2023 13:12		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Silver-107	0	0	0.2	17805	10	18779.4	20	18032	50	18176.18	100	17247.94
Chromium-52	0	0	0.5	80658	10	28363.1	20	26427.5	50	25143.74	100	23697.46
Chromium-53	0	0	0.5	3312	10	2946.9	20	2867.6	50	2883.06	100	2763.11
Lead-208	0	0	0.1	64340	10	63240.7	20	62056.65	50	62465.22	100	60657.47

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory: Analytical Resources, LLC
Instrument: ICPMS1
Calibration: GC00021
Calibration Date: 3/6/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Silver-107	15006.75	49.1	0.9993		0.998	
Chromium-52	30714.97	86.7	0.9993		0.998	
Chromium-53	2462.112	49.6	0.9996		0.998	
Lead-208	52126.67	49.0	0.9998		0.998	

INITIAL CALIBRATION DATA

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00021
Instrument: ICPMS1
Calibration Date: 03/06/2023 13:12

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Arsenic-75a	0	0	0.2	265	10	237	20	234.1	50	229.18	100	232.76
Cadmium-111	0	0	0.1	250	10	251.7	20	249.85	50	243.72	100	238.61
Cadmium-114	0	0	0.1	660	10	594.1	20	601	50	596.42	100	590.77
Copper-63	0	0	0.5	4344	10	4175.6	20	4137.4	50	3904.58	100	4002.94
Copper-65	0	0	0.5	2028	10	2062.8	20	1985.05	50	1933.84	100	1914.29
Zinc-66	0	0	6	493.8333	10	494.2	20	483.8	50	466.36	100	474.45
Zinc-67	0	0	6	75	10	82	20	81.3	50	77.2	100	78.33

INITIAL CALIBRATION DATA

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Instrument: ICPMS1
Calibration: GC00021
Calibration Date: 3/6/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Arsenic-75a	199.6733	49.4	0.9999		0.998	
Cadmium-111	205.6467	49.0	0.9998		0.998	
Cadmium-114	507.0483	49.3	1.0000		0.998	
Copper-63	3427.42	49.2	0.9997		0.998	
Copper-65	1653.997	49.1	0.9999		0.998	
Zinc-66	402.1072	49.1	0.9999		0.998	
Zinc-67	65.63833	49.1	0.9998		0.998	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 3/6/23 **Analyst:** MS **Sequence:** SLCØØ78 **Cal:** GCØØØ21

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CAL1	L2232		
		-CAL2	L22ØØ		
		-CAL3	L22Ø1		
		-CAL4	L22Ø2		
		-CAL5	L22Ø3		
		-CAL6	L22Ø4		Sc+group SL noisy-%R int, R-Values + QC OK
		-IBL1	—		
		-ICV1	LØ243		Sc+group SL noisy-%R+Analytes OK
		-ICB1	L2232		Ge, In, Tb SL. noisy-%R+Analytes OK
		-CCV1	L22Ø3		
		-CCB1	L2232		
		-CRL1	L22ØØ		Tb SL. noisy-%R+Analytes OK
	✓	-IFA1	—		Cr↑
		-IFB1	L2ØØ7		
		-HCV1	L2ØØ8		
		-HCV2	L2ØØ9		Pb↓ - Pb<200
		-IBL2	—		
		-IFA1	L2ØØ6		Cr^{53}↑
		-IBL3	—		
		-CCV2			Sc SL. noisy-%R+Analytes OK
		-CCB2			
	✓	-CAL1			
		-CCV3			
		-CCB3			

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 3/6/23 **Analyst:** MB **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		BLCΦΦΦ8-BLK2	REN		Cd only
		↓ -BS2	↓		↓
		BLCΦΦ45-BLK1			
		↓ -BS1			
		23CΦΦ26-Φ1		2	
		23CΦΦ27-Φ1		↓	
		23CΦΦΦ4-Φ1		5	Cd only
		23BΦ551-Φ1		10	↓
		23CΦΦ95-Φ1	↓	20	
		SEQ-IBL4			
		↓ -CCV4			
		↓ -CCB4			
		BLCΦ1Φ8-BLK1	REN		
		↓ -BS1	↓		
		23BΦ5Φ1-Φ2		2	Cd only
		↓ -Φ3		↑	↓
		↓ -Φ4		↑	↓
		↓ -Φ1		↑	↓
		BLCΦΦΦ8-DUP2		↑	↓
		↓ -MS2		↓	↓
		23BΦ33Φ-29	↓	5	As only
		SEQ-IBL5			
		↓ -CCV5			
		↓ -CCB5			

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ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 3/6/23 **Analyst:** MB **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23CΦΦ47-Φ1	REN		Zn↑ Zn NR
		23CΦΦ48-Φ1			
		↓ -Φ2			
		23BΦ556-Φ2		2	
		-Φ3			
		-Φ4			
		↓ -Φ1			
		BLCΦ1Φ8-DUP1			
		↓ -MS1			
		23CΦΦ47-Φ1RE1		5	Zn only
		SEQ-CCV6			
		-CCB6			
		BLCΦΦ83-BLK1	REN		
		↓ -BS1			Sc Sl. noisy - %R+ Analytes OK
	✓	23BΦ581-Φ1		20	Zn↑
	✓	↓ -Φ2			Re-run to Check C.O.
		↓ -Φ3			
		BLCΦΦ45-DUP1			
		↓ -MS1			Cu, Zn STL
		23BΦ387-Φ1		50	Cd only
		23CΦΦ37-Φ1		2	
		SEQ-IBL7			
		-CCV7			
		↓ -CCB7			Ge, Tb sl. noisy - %R & Analytes OK

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ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 3/6/23 **Analyst:** MB **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		BLBØSØ8-BLK1	SWN	20	
		↓ -BS1	↓	↓	
		BLBØS18-BLK2			Cd only
		↓ -BS2			↓
		23AØØ32-Ø1			Cd, Cr only
		BLBØS18-DUP2			↓
		-MS2			
		-MSD2			
		↓ -PS2	↓	↓	60 mL K7409 ↓
		SEQ-IBL8			
		-CCV8			
		↓ -CCB8			
		BLCØØ446-BLK1	REN		Mn↑ Re-run to confirm — No Mn ↓
		↓ -BS1	↓		
		BLBØ615-BLK1	SWN	20	
		↓ -BS1			
		23AØØ31-Ø2			
		BLBØ5Ø8-DUP1			
		-MS1			Ag %R ↓
		-MSD1			↓
		↓ -PS1	↓	↓	60 mL K7409
		SEQ-IBL9			
		-CCV9			
		↓ -CCB9			

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ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 3/6/23 **Analyst:** MB **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted. MB 3/6/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23BΦ379-Φ2	REN		
		↓ -Φ4	↓		
		23BΦ388-Φ3	↓	2	~~No Mn~~
		↓ -Φ1	↓	5	Tb sl. noisy - %R + Analytes OK
		BLCΦΦ83-DUP1	↓	↓	
		↓ -MS1	↓	↓	
		23BΦ217-Φ2	SWN	20	
		BLBΦ615-DUP1	↓	↓	
		↓ -MS1	↓	↓	
		↓ -MSD1	↓	↓	
		SEQ-CCVA			Cu 65 sl. noisy - value OK + consistent
		↓ -CCBA			Sc sl. noisy / Tb no. sy - %R + Analytes OK
✓		↓ -CAL1			
		↓ -CCVB			
		↓ -CCBB			Tb sl. noisy - %R + Analytes OK
		BLBΦ6Φ7-BLK1	SWN	20	
		↓ -BS1	↓	↓	Tb sl. noisy - %R + Analytes OK
		↓ -SRL1	↓	100	
		23BΦ41Φ-Φ1	↓	20	Sc ↑ Not Needed
		BLBΦ6Φ7-DUP1	↓	↓	Ca sl. noisy - %R + Analytes OK / Match parent
		↓ -MS1	↓	↓	↓
		↓ -MSD1	↓	↓	↓
		↓ -PS1	↓	↓	↓ 60mL K7409
		↓ -SRM1	↓	~~X~~50	

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ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/6/23 **Analyst:** MB **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted. MB 3/6/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-IBLC			
		-CCVC			
		-CCBC			
		BLBΦ687-BLK1	SWN	20	
		-BS1		↓	
		-SRL1		100	
DEL Extra Φ		23BΦ411-Φ1		20	Sc↑ - Not Needed
		BLBΦ687-DUP1			Tb sl. noisy - %R + Analytes OK
		-MS1			
		-MSD1			
		-PS1			60 mL K7409
		-SRM1		50	
		SEQ-IBLD			
		-CCVD			Std Mode sl. noisy - Values OK
		-CCBD			
		23BΦ388-Φ4	REN		Mn↑ No Mn
		-Φ2			
		BLCΦΦ46-DUP1			
		-MS1			
		23AΦΦ31-Φ1	SWN	20	
		-Φ3			
		-Φ4			
		-Φ5			Sc↑ No Cr
		-Φ6			

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ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/6/23 **Analyst:** MB **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23AΦΦ31-Φ7	SWN	20	
		SEQ-CCVE			
		↓ -CCBE			
		23AΦΦ31-Φ8	SWN	20	
		-Φ9	↓	↓	
		-1Φ			
		-11			
		-12			
		-13			
		-14			
		-15			
		-16			
		↓ -17	↓	↓	
		SEQ-CCVF			
		↓ -CCBF			
		23AΦΦ31-18	SWN	20	
		-19	↓	↓	
		-2Φ			
		↓ -21			
		23AΦΦ32-Φ5			
		-Φ6			
		-Φ7			
		-Φ8			
		↓ -11	↓	↓	

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ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/6/23 **Analyst:** MB **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23BΦ276-Φ1	SWN	20	
		SEQ-CCVG			
		-CCBG			
	✓	-CAL1			
		-CCVH			
		-CCBH			
		23BΦ396-Φ1	REN	5	
		23BΦ430-Φ1	↓	2	
		23BΦ450-Φ1	↓	↓	
		23AΦ171-Φ1	SWN	20	Sc↑ No Cr
		-Φ2	↓	↓	↓ ↓
		-Φ3	↓	↓	
		-Φ4	↓	↓	
		23BΦΦ51-Φ1	↓	↓	Sc↑/Pb↑ No Cr, Pb
		-Φ2	↓	↓	↓ No Cr
		-Φ3	↓	↓	
		SEQ-CCVI			
		-CCBI			
		23BΦ217-Φ3	SWN	20	
		-Φ4	↓	↓	
		-Φ5	↓	↓	
		-Φ6	↓	↓	
		23BΦ429-Φ1	REN		
		23BΦ446-Φ3	↓		

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ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/6/23 **Analyst:** MB **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23BΦ446-Φ1	REN	2	
		23BΦ448-Φ1	↓	↓	
		↓ -Φ3	↓		
		SEQ-IBLJ			
		↓ -CCVJ			
		↓ -CCBJ			
		23BΦ469-Φ1	REN		
		↓ -Φ2	↓		
		↓ -Φ3	↓		
		23BΦ421-Φ1	↓		
		↓ -Φ3	↓		
		↓ -Φ5	↓		
		↓ -Φ7	↓		
		↓ -Φ9	↓		
		↓ -11	↓		
		SEQ-IBLK			
		↓ -CCVK			
		↓ -CCBK			Gesl. noisy- %R ↓ Analytes OK
		23BΦ421-13	REN		
		↓ -15	↓		
		SEQ-IBLM			
		23BΦ581-Φ2	REN	20	
		↓ -Φ1	↓	200	
		SEQ-IBLL			

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ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: ~~6/3~~ 3/6/23 **Analyst:** MS **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted. ~~MS 6/3~~ MS 3/6/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CCVL			
		↓ -CCBL			
		Rinse/DI			
			MS 3/6/23		

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Monday, March 06, 2023 12:21:11
Sample Description:
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\STD Performance Check.mth
Dataset File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\DataSet\Default\STD Performance Check.5367
MassCal File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	5866.3	5866.338	149.884	2.6	Standard
	In	114.9	62491.3	-674380.777	1360.321	0.2	Standard
	U	238.1	58721.0	58721.005	1104.489	1.9	Standard
⌈	CeO	155.9	457.9	0.009	0.000	4.9	Standard
| >	Ce	139.9	53371.3	53371.269	936.684	1.8	Standard
⌊	Ce++	70.0	1057.2	0.020	0.001	2.8	Standard
	Bkgd	220.0	0.2	0.167	0.167	100.0	Standard

Current Conditions File Data

Current Value	Description
1.04	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-11.25	Deflector Voltage
1600.00	ICP RF Power
-1712.00	Analog Stage Voltage
1500.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-8.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-4.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.25	RPq
1.05	DRC Mode NEB
-10.00	DRC Mode QRO
-3.00	DRC Mode CRO
-7.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
250.00	Axial Field Voltage
-16.50	KED Mode CRO
-12.00	KED Mode QRO
-4.00	KED Mode Cell Entrance Voltage
-39.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
5.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Start Time: 3/6/2023 12:21:06 PM
End Time: 3/6/2023 12:24:17 PM

STD Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9): 5866.34
Obtained Intensity (In 115): 62491.30
Obtained Intensity (U 238): 58721.01
Obtained Intensity (Bkgd 220): 0.17
Obtained Formula (Ce++ 70 / Ce 140): 0.020 (=1057.17 / 53371.27)
Obtained Formula (CeO 156 / Ce 140): 0.009 (=457.94 / 53371.27)
Obtained RSD (Be 9): 0.0255
Obtained RSD (In 115): 0.0020
Obtained RSD (U 238): 0.0188

Torch Alignment - [Passed]

Vertical	Horizontal	Intensity
0.56 mm	0.46 mm	56221.41

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Optimization Status

Start Time: 3/6/2023 12:21:06 PM

STD Performance Check

Optimization Settings:

Method: STD Performance Check.mth.
Intensity Criterion: Be 9 > 2000
Intensity Criterion: In 115 > 40000
Intensity Criterion: U 238 > 30000
Intensity Criterion: Bkgd 220 <= 1
Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
Formula Criterion: CeO 156 / Ce 140 <= 0.025
RSD Criterion: Be 9.0122 < 0.05
RSD Criterion: In 114.904 < 0.05
RSD Criterion: U 238.05 < 0.05

Optimization Results:

Initial Try

Obtained Intensity (Be 9): 5866.34
Obtained Intensity (In 115): 62491.30
Obtained Intensity (U 238): 58721.01
Obtained Intensity (Bkgd 220): 0.17
Obtained Formula (Ce++ 70 / Ce 140): 0.020 (=1057.17 / 53371.27)
Obtained Formula (CeO 156 / Ce 140): 0.009 (=457.94 / 53371.27)
Obtained RSD (Be 9): 0.0255
Obtained RSD (In 115): 0.0020
Obtained RSD (U 238): 0.0188

[Passed] Optimum value(s): N/A

Torch Alignment

Optimization Settings:

Method: Torch Alignment.mth.
Intensity Criterion: In 115 Maximum

Optimization Results:

	Vertical	Horizontal	Intensity
[Passed]	0.56 mm	0.46 mm	56221.41

End Time: 3/6/2023 12:24:17 PM

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Monday, March 06, 2023 12:30:59
Sample Description:
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\STD Performance Check.mth
Dataset File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\DataSet\Default\STD Performance Check.5374
MassCal File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	11005.7	11005.706	250.649	2.3	Standard
	In	114.9	97967.1	97967.095	2154.932	2.2	Standard
	U	238.1	87812.5	87812.503	1251.614	1.4	Standard
⎡	CeO	155.9	1988.4	0.026	0.001	3.9	Standard
| >	Ce	139.9	75549.9	75549.857	1678.922	2.2	Standard
⎣	Ce++	70.0	2723.7	0.036	0.001	1.4	Standard
	Bkgd	220.0	0.1	0.067	0.091	136.9	Standard

Current Conditions File Data

Current Value	Description
1.07	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-11.25	Deflector Voltage
1600.00	ICP RF Power
-1712.00	Analog Stage Voltage
1500.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-8.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-4.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.25	RPq
1.07	DRC Mode NEB
-10.00	DRC Mode QRO
-3.00	DRC Mode CRO
-7.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
250.00	Axial Field Voltage
-16.50	KED Mode CRO
-12.00	KED Mode QRO
-4.00	KED Mode Cell Entrance Voltage
-39.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
5.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Start Time: 3/6/2023 12:24:28 PM
End Time: 3/6/2023 12:33:03 PM

Torch Alignment - [Passed]

Vertical	Horizontal	Intensity
0.75 mm	0.41 mm	69565.97

Nebulizer Gas Flow STD/KED [NEB] - [Passed] Optimum value(s): 1.07
Obtained Intensity (In 115): 94505.57
Obtained Formula (CeO 156 / Ce 140): 0.0231 (=1660.10 / 71954.76)

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.685)
Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.701)
Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.698)
Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.705)

QID STD/DRC - Optimum value(s): Correlation Coefficient = 0.997; Intercept = -13.25

KED Mode QID - Optimum value(s): Correlation Coefficient = 1.000; Intercept = -13.46

STD Performance Check - [Failed]
Obtained Intensity (Be 9): 11005.71
Obtained Intensity (In 115): 97967.10
Obtained Intensity (U 238): 87812.50
Obtained Intensity (Bkgd 220): 0.07
Obtained Formula (Ce++ 70 / Ce 140): 0.036 (=2723.66 / 75549.86) - <Target not achieved>
Obtained Formula (CeO 156 / Ce 140): 0.026 (=1988.41 / 75549.86) - <Target not achieved>
Obtained RSD (Be 9): 0.0228
Obtained RSD (In 115): 0.0220
Obtained RSD (U 238): 0.0143

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Optimization Status

Start Time: 3/6/2023 12:24:28 PM

Torch Alignment
	Optimization Settings:
		Method: Torch Alignment.mth.
		Intensity Criterion: In 115 Maximum

	Optimization Results:
		Vertical	Horizontal	Intensity
[Passed]	0.75 mm	0.41 mm	69565.97

Nebulizer Gas Flow STD/KED [NEB]
	Optimization Settings:
		Method: Optimize.mth.
			Initial Try - Start/End/Step: 1/1.1/0.01.
		Intensity Criterion: In 115 Maximum
		Formula Criterion: CeO 156 / Ce 140 <= 0.025

	Optimization Results:
	Initial Try

		Obtained Intensity (In 115): 94505.57
		Obtained Formula (CeO 156 / Ce 140): 0.0231 (=1660.10 / 71954.76)
[Passed] Optimum value(s): 1.07

Mass Calibration and Resolution
	Optimization Settings:
		Method: Tuning.mth.
		MassCal File: Default.tun
		Iterations: 6
		Target accuracy (+/- amu): 0.05 for Mass Cal. and 0.03 for Resolution
		Peak height (%) for Res. Opt.: 10

	Optimization Results:
	Initial Try
		Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.685)
		Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.701)
		Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.698)
		Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.705)
[Passed] Optimum value(s): N/A

QID STD/DRC
	Optimization Settings:
		Method: QID Calibration.mth.
			Initial Try - Start/End/Step: -20/0/0.5.

	Optimization Results:
	Initial Try

  Optimum value(s): Correlation Coefficient = 0.997; Intercept = -13.25

	Analyte	Mass	Points	DAC	MaxIntensity

Li	7	41	-13.5	41307.6
Mg	24	41	-13.5	52383.9
In	115	41	-10.5	103320
Ce	140	41	-9	76777.8
Pb	208	41	-7.5	49140.4
U	238	41	-7	89954.3

KED Mode QID

Optimization Settings:

Method: QID Calibration.mth.

Initial Try - Start/End/Step: -20/0/0.5.

Optimization Results:

Initial Try

Optimum value(s): Correlation Coefficient = 1.000; Intercept = -13.46

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-13.5	34212.9
Mg	24	41	-13.5	36779.3
In	115	41	-11.5	81475.7
Ce	140	41	-10.5	68499.8
Pb	208	41	-8	32785.6
U	238	41	-7.5	57065.8

STD Performance Check

Optimization Settings:

Method: STD Performance Check.mth.

Intensity Criterion: Be 9 > 2000

Intensity Criterion: In 115 > 40000

Intensity Criterion: U 238 > 30000

Intensity Criterion: Bkgd 220 <= 1

Formula Criterion: Ce++ 70 / Ce 140 <= 0.03

Formula Criterion: CeO 156 / Ce 140 <= 0.025

RSD Criterion: Be 9.0122 < 0.05

RSD Criterion: In 114.904 < 0.05

RSD Criterion: U 238.05 < 0.05

Optimization Results:

Initial Try

Obtained Intensity (Be 9): 11005.71

Obtained Intensity (In 115): 97967.10

Obtained Intensity (U 238): 87812.50

Obtained Intensity (Bkgd 220): 0.07

Obtained Formula (Ce++ 70 / Ce 140): 0.036 (=2723.66 / 75549.86) - <Target not achieved>

Obtained Formula (CeO 156 / Ce 140): 0.026 (=1988.41 / 75549.86) - <Target not achieved>

Obtained RSD (Be 9): 0.0228

Obtained RSD (In 115): 0.0220

Obtained RSD (U 238): 0.0143

[Failed]

[Failed]

End Time: 3/6/2023 12:33:03 PM

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Start Time: 3/6/2023 12:35:44 PM
End Time: 3/6/2023 12:37:50 PM

STD Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9): 9180.42
Obtained Intensity (In 115): 88143.84
Obtained Intensity (U 238): 80298.60
Obtained Intensity (Bkgd 220): 0.00
Obtained Formula (Ce++ 70 / Ce 140): 0.028 (=1994.47 / 70619.00)
Obtained Formula (CeO 156 / Ce 140): 0.015 (=1043.97 / 70619.00)
Obtained RSD (Be 9): 0.0165
Obtained RSD (In 115): 0.0194
Obtained RSD (U 238): 0.0118

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Optimization Status

Start Time: 3/6/2023 12:35:44 PM

STD Performance Check
- Optimization Settings:
  - Method: STD Performance Check.mth.
  - Intensity Criterion: Be 9 > 2000
  - Intensity Criterion: In 115 > 40000
  - Intensity Criterion: U 238 > 30000
  - Intensity Criterion: Bkgd 220 <= 1
  - Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
  - Formula Criterion: CeO 156 / Ce 140 <= 0.025
  - RSD Criterion: Be 9.0122 < 0.05
  - RSD Criterion: In 114.904 < 0.05
  - RSD Criterion: U 238.05 < 0.05
- Optimization Results:
- Initial Try
  - Obtained Intensity (Be 9): 9180.42
  - Obtained Intensity (In 115): 88143.84
  - Obtained Intensity (U 238): 80298.60
  - Obtained Intensity (Bkgd 220): 0.00
  - Obtained Formula (Ce++ 70 / Ce 140): 0.028 (=1994.47 / 70619.00)
  - Obtained Formula (CeO 156 / Ce 140): 0.015 (=1043.97 / 70619.00)
  - Obtained RSD (Be 9): 0.0165
  - Obtained RSD (In 115): 0.0194
  - Obtained RSD (U 238): 0.0118

[Passed] Optimum value(s): N/A

End Time: 3/6/2023 12:37:50 PM

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Monday, March 06, 2023 12:35:45
Sample Description:
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\STD Performance Check.mth
Dataset File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\DataSet\Default\STD Performance Check.5376
MassCal File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	9180.4	9180.416	151.259	1.6	Standard
	In	114.9	88143.8	88143.839	1713.217	1.9	Standard
	U	238.1	80298.6	80298.601	949.439	1.2	Standard
⌈	CeO	155.9	1044.0	0.015	0.001	4.1	Standard
| >	Ce	139.9	70619.0	70619.003	854.502	1.2	Standard
⌊	Ce++	70.0	1994.5	0.028	0.000	1.4	Standard
	Bkgd	220.0	0.0	0.000	0.000		Standard

Current Conditions File Data

Current Value	Description
1.05	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-11.25	Deflector Voltage
1600.00	ICP RF Power
-1712.00	Analog Stage Voltage
1500.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-8.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-4.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.25	RPq
1.07	DRC Mode NEB
-10.00	DRC Mode QRO
-3.00	DRC Mode CRO
-7.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
250.00	Axial Field Voltage
-16.50	KED Mode CRO
-12.00	KED Mode QRO
-4.00	KED Mode Cell Entrance Voltage
-39.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
5.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

NEB FLOW MANUALLY LOWERED.
-MB 3/6/23

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 13:12:22
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				42851	0	Standard
	Cl	**37**		ug/L				4641047	3	Standard
⎡>	**Sc**	**45**		ug/L				806788	2	Standard
⎢	**Cr**	**52**		ug/L				28671	5	Standard
⎢	**Cr**	**53**		ug/L				315	6	Standard
⎣	**Mn**	**55**		ug/L				1039	4	Standard
⎡>	**Ge**	**72**		ug/L				41788	5	KED
⎢	**Ni**	**60**		ug/L				39	26	KED
⎢	**Ni**	**62**		ug/L				6	41	KED
⎢	**Cu**	**63**		ug/L				158	20	KED
⎢	**Cu**	**65**		ug/L				78	13	KED
⎢	**Zn**	**66**		ug/L				90	3	KED
⎢	**Zn**	**67**		ug/L				14	27	KED
⎣	**As**	**75**		ug/L				9	26	KED
	Y	**89**		ug/L				514828	2	Standard
	Kr	**83**		ug/L				66	28	Standard
⎡>	**In-1**	**115**		ug/L				11154	4	KED
⎢	**Cd**	**111**		ug/L				4	48	KED
⎣	**Cd**	**114**		ug/L				4	22	KED
⎡>	**In**	**115**		ug/L				844649	2	Standard
⎣	**Ag**	**107**		ug/L				74	32	Standard
⎡>	**Tb**	**159**		ug/L				720612	4	Standard
⎣	**Pb**	**208**		ug/L				363	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 13:16:50
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42851	42811	4	Standard
	Cl	**37**		ug/L			4641047	4723029	1	Standard
⎡>	**Sc**	**45**		ug/L			806788	782332	4	Standard
⎢	**Cr**	**52**	**0.500**	ug/L	0.001	0	28671	40329	4	Standard
⎢	**Cr**	**53**	**0.500**	ug/L	0.019	3	315	1656	6	Standard
⎣	**Mn**	**55**	**0.500**	ug/L	0.006	1	1039	18231	4	Standard
⎡>	**Ge**	**72**		ug/L			41788	43607	4	KED
⎢	**Ni**	**60**	**0.500**	ug/L	0.075	14	39	725	13	KED
⎢	**Ni**	**62**	**0.500**	ug/L	0.070	14	6	123	17	KED
⎢	**Cu**	**63**	**0.500**	ug/L	0.012	2	158	2172	2	KED
⎢	**Cu**	**65**	**0.500**	ug/L	0.029	5	78	1014	0	KED
⎢	**Zn**	**66**	**6.000**	ug/L	0.387	6	90	2963	2	KED
⎢	**Zn**	**67**	**6.000**	ug/L	0.252	4	14	450	7	KED
⎣	**As**	**75**	**0.200**	ug/L	0.010	5	9	53	8	KED
	Y	**89**		ug/L			514828	515614	3	Standard
	Kr	**83**		ug/L			66	62	5	Standard
⎡>	**In-1**	**115**		ug/L			11154	11426	1	KED
⎢	**Cd**	**111**	**0.100**	ug/L	0.015	15	4	25	14	KED
⎣	**Cd**	**114**	**0.100**	ug/L	0.012	12	4	66	10	KED
⎡>	**In**	**115**		ug/L			844649	832415	4	Standard
⎣	**Ag**	**107**	**0.200**	ug/L	0.014	6	74	3561	5	Standard
⎡>	**Tb**	**159**		ug/L			720612	729902	3	Standard
⎣	**Pb**	**208**	**0.100**	ug/L	0.006	6	363	6434	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 13:21:18
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42851	55129	1	Standard
	Cl	**37**		ug/L			4641047	4800852	4	Standard
⎡>	**Sc**	**45**		ug/L			806788	802585	2	Standard
⎢	**Cr**	**52**	**10.000**	ug/L	0.282	2	28671	283631	4	Standard
⎢	**Cr**	**53**	**10.001**	ug/L	0.218	2	315	29469	3	Standard
⎣	**Mn**	**55**	**10.001**	ug/L	0.259	2	1039	365595	2	Standard
⎡>	**Ge**	**72**		ug/L			41788	44698	0	KED
⎢	**Ni**	**60**	**10.000**	ug/L	0.056	0	39	14082	0	KED
⎢	**Ni**	**62**	**9.999**	ug/L	0.288	2	6	2287	3	KED
⎢	**Cu**	**63**	**10.000**	ug/L	0.253	2	158	41756	2	KED
⎢	**Cu**	**65**	**10.002**	ug/L	0.112	1	78	20628	0	KED
⎢	**Zn**	**66**	**9.965**	ug/L	0.096	0	90	4942	1	KED
⎢	**Zn**	**67**	**10.210**	ug/L	0.440	4	14	820	3	KED
⎣	**As**	**75**	**10.000**	ug/L	0.143	1	9	2370	1	KED
	Y	**89**		ug/L			514828	528569	3	Standard
	Kr	**83**		ug/L			66	71	6	Standard
⎡>	**In-1**	**115**		ug/L			11154	11711	1	KED
⎢	**Cd**	**111**	**10.000**	ug/L	0.148	1	4	2517	1	KED
⎣	**Cd**	**114**	**10.000**	ug/L	0.298	2	4	5941	2	KED
⎡>	**In**	**115**		ug/L			844649	842700	1	Standard
⎣	**Ag**	**107**	**10.000**	ug/L	0.207	2	74	187794	3	Standard
⎡>	**Tb**	**159**		ug/L			720612	757028	2	Standard
⎣	**Pb**	**208**	**10.000**	ug/L	0.330	3	363	632407	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 13:25:59
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42851	53262	0	Standard
	Cl	**37**		ug/L			4641047	5046059	3	Standard
⎡>	**Sc**	**45**		ug/L			806788	803834	2	Standard
⎢	**Cr**	**52**	**19.912**	ug/L	0.308	1	28671	528550	3	Standard
⎢	**Cr**	**53**	**19.905**	ug/L	0.217	1	315	57352	3	Standard
⎣	**Mn**	**55**	**19.855**	ug/L	0.339	1	1039	705630	3	Standard
⎡>	**Ge**	**72**		ug/L			41788	44064	2	KED
⎢	**Ni**	**60**	**19.941**	ug/L	0.554	2	39	27325	3	KED
⎢	**Ni**	**62**	**19.989**	ug/L	0.435	2	6	4491	4	KED
⎢	**Cu**	**63**	**20.028**	ug/L	0.404	2	158	82748	3	KED
⎢	**Cu**	**65**	**19.911**	ug/L	0.163	0	78	39701	2	KED
⎢	**Zn**	**66**	**19.996**	ug/L	0.682	3	90	9676	4	KED
⎢	**Zn**	**67**	**20.182**	ug/L	0.785	3	14	1626	4	KED
⎣	**As**	**75**	**20.018**	ug/L	0.279	1	9	4682	0	KED
	Y	**89**		ug/L			514828	522988	3	Standard
	Kr	**83**		ug/L			66	66	15	Standard
⎡>	**In-1**	**115**		ug/L			11154	11832	1	KED
⎢	**Cd**	**111**	**19.932**	ug/L	0.615	3	4	4997	2	KED
⎣	**Cd**	**114**	**20.007**	ug/L	0.246	1	4	12020	0	KED
⎡>	**In**	**115**		ug/L			844649	853632	4	Standard
⎣	**Ag**	**107**	**19.784**	ug/L	0.147	0	74	360640	3	Standard
⎡>	**Tb**	**159**		ug/L			720612	770789	4	Standard
⎣	**Pb**	**208**	**19.853**	ug/L	0.543	2	363	1241133	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL5
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 13:30:51
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42851	42010	2	Standard
	Cl	**37**		ug/L			4641047	5093756	2	Standard
⎡>	**Sc**	**45**		ug/L			806788	794447	4	Standard
⎢	**Cr**	**52**	**49.923**	ug/L	0.350	0	28671	1257187	3	Standard
⎢	**Cr**	**53**	**50.131**	ug/L	0.151	0	315	144153	4	Standard
⎣	**Mn**	**55**	**50.114**	ug/L	1.270	2	1039	1779002	5	Standard
⎡>	**Ge**	**72**		ug/L			41788	43166	3	KED
⎢	**Ni**	**60**	**49.780**	ug/L	1.625	3	39	65352	5	KED
⎢	**Ni**	**62**	**49.620**	ug/L	1.255	2	6	10514	5	KED
⎢	**Cu**	**63**	**49.705**	ug/L	1.067	2	158	195229	5	KED
⎢	**Cu**	**65**	**49.925**	ug/L	0.479	0	78	96692	4	KED
⎢	**Zn**	**66**	**49.905**	ug/L	1.641	3	90	23318	5	KED
⎢	**Zn**	**67**	**49.848**	ug/L	0.865	1	14	3860	4	KED
⎣	**As**	**75**	**50.007**	ug/L	1.063	2	9	11459	5	KED
	Y	**89**		ug/L			514828	527443	5	Standard
	Kr	**83**		ug/L			66	82	27	Standard
⎡>	**In-1**	**115**		ug/L			11154	11544	1	KED
⎢	**Cd**	**111**	**49.974**	ug/L	0.916	1	4	12186	1	KED
⎣	**Cd**	**114**	**50.146**	ug/L	1.043	2	4	29821	0	KED
⎡>	**In**	**115**		ug/L			844649	846109	3	Standard
⎣	**Ag**	**107**	**50.050**	ug/L	1.681	3	74	908809	4	Standard
⎡>	**Tb**	**159**		ug/L			720612	775069	3	Standard
⎣	**Pb**	**208**	**49.946**	ug/L	1.320	2	363	3123261	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL6
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 13:37:22
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42851	46844	1	Standard
	Cl	**37**		ug/L			4641047	5067111	3	Standard
⌈>	**Sc**	**45**		ug/L			806788	752435	6	Standard
|	**Cr**	**52**	**100.117**	ug/L	0.867	0	28671	2369746	5	Standard
|	**Cr**	**53**	**100.365**	ug/L	1.640	1	315	276311	6	Standard
⌊	**Mn**	**55**	**100.029**	ug/L	0.416	0	1039	3364769	6	Standard
⌈>	**Ge**	**72**		ug/L			41788	42888	2	KED
|	**Ni**	**60**	**100.598**	ug/L	1.269	1	39	133800	3	KED
|	**Ni**	**62**	**100.940**	ug/L	1.302	1	6	21924	3	KED
|	**Cu**	**63**	**100.600**	ug/L	2.010	1	158	400294	3	KED
|	**Cu**	**65**	**99.886**	ug/L	3.608	3	78	191429	5	KED
|	**Zn**	**66**	**100.563**	ug/L	2.163	2	90	47445	2	KED
|	**Zn**	**67**	**100.470**	ug/L	1.100	1	14	7833	1	KED
⌊	**As**	**75**	**100.528**	ug/L	0.731	0	9	23276	2	KED
	Y	**89**		ug/L			514828	499954	5	Standard
	Kr	**83**		ug/L			66	99	6	Standard
⌈>	**In-1**	**115**		ug/L			11154	11600	2	KED
|	**Cd**	**111**	**99.386**	ug/L	1.101	1	4	23861	1	KED
⌊	**Cd**	**114**	**99.733**	ug/L	1.205	1	4	59077	2	KED
⌈>	**In**	**115**		ug/L			844649	815926	4	Standard
⌊	**Ag**	**107**	**99.653**	ug/L	0.793	0	74	1724794	4	Standard
⌈>	**Tb**	**159**		ug/L			720612	766683	5	Standard
⌊	**Pb**	**208**	**99.549**	ug/L	2.083	2	363	6065747	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 13:44:35
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42851	43609	2	Standard
	Cl	**37**		ug/L			4641047	4994341	2	Standard
⎡>	**Sc**	**45**		ug/L			806788	781760	5	Standard
⎢	**Cr**	**52**	**0.094**	ug/L	0.046	48	28671	30052	5	Standard
⎢	**Cr**	**53**	**-0.005**	ug/L	0.012	239	315	289	8	Standard
⎣	**Mn**	**55**	**0.032**	ug/L	0.001	3	1039	2109	3	Standard
⎡>	**Ge**	**72**		ug/L			41788	42374	3	KED
⎢	**Ni**	**60**	**0.053**	ug/L	0.014	25	39	109	15	KED
⎢	**Ni**	**62**	**0.045**	ug/L	0.037	81	6	16	43	KED
⎢	**Cu**	**63**	**0.037**	ug/L	0.008	21	158	303	9	KED
⎢	**Cu**	**65**	**0.033**	ug/L	0.007	20	78	142	12	KED
⎢	**Zn**	**66**	**0.528**	ug/L	0.033	6	90	337	7	KED
⎢	**Zn**	**67**	**0.344**	ug/L	0.029	8	14	41	5	KED
⎣	**As**	**75**	**0.009**	ug/L	0.004	41	9	12	4	KED
	Y	**89**		ug/L			514828	510336	6	Standard
	Kr	**83**		ug/L			66	68	34	Standard
⎡>	**In-1**	**115**		ug/L			11154	11105	4	KED
⎢	**Cd**	**111**	**0.006**	ug/L	0.005	87	4	5	20	KED
⎣	**Cd**	**114**	**0.004**	ug/L	0.008	214	4	6	59	KED
⎡>	**In**	**115**		ug/L			844649	856392	4	Standard
⎣	**Ag**	**107**	**0.022**	ug/L	0.001	6	74	482	1	Standard
⎡>	**Tb**	**159**		ug/L			720612	747153	6	Standard
⎣	**Pb**	**208**	**0.013**	ug/L	0.001	5	363	1154	3	Standard

Sample Information

Sample Date/Time: Monday, March 06, 2023 13:37:22
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED
Mass Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

Calibration

Analyte	Mass	**r Corr Coef**	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
C	13							
Cl	37							
Sc	45							
Cr	52	**1.0000**	0.031	0.50	10	20	50	100
Cr	53	**1.0000**	0.004	0.50	10	20	50	100
Mn	55	**1.0000**	0.045	0.50	10	20	50	100
Ge	72							
Ni	60	**0.9999**	0.031	0.50	10	20	50	100
Ni	62	**0.9998**	0.005	0.50	10	20	50	100
Cu	63	**0.9999**	0.093	0.50	10	20	50	100
Cu	65	**1.0000**	0.045	0.50	10	20	50	100
Zn	66	**0.9999**	0.011	6.00	10	20	50	100
Zn	67	**0.9999**	0.002	6.00	10	20	50	100
As	75	**1.0000**	0.005	0.20	10	20	50	100
Y	89							
Kr	83							
In-1	115							
Cd	111	**0.9999**	0.021	0.10	10	20	50	100
Cd	114	**1.0000**	0.051	0.10	10	20	50	100
In	115							
Ag	107	**1.0000**	0.021	0.20	10	20	50	100
Tb	159							
Pb	208	**1.0000**	0.080	0.10	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICV1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 13:53:41
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42851	42919	2	Standard
	Cl	**37**		ug/L			4641047	4867225	3	Standard
⌈>	**Sc**	**45**		ug/L			806788	771596	6	Standard
|	**Cr**	**52**	**50.883**	ug/L	0.562	1	28671	1248843	6	Standard
|	**Cr**	**53**	**49.104**	ug/L	0.748	1	315	138840	6	Standard
⌊	**Mn**	**55**	**51.191**	ug/L	0.306	0	1039	1766758	6	Standard
⌈>	**Ge**	**72**		ug/L			41788	45024	1	KED
|	**Ni**	**60**	**50.838**	ug/L	0.787	1	39	70985	1	KED
|	**Ni**	**62**	**50.654**	ug/L	0.903	1	6	11553	3	KED
|	**Cu**	**63**	**50.484**	ug/L	0.592	1	158	210943	1	KED
|	**Cu**	**65**	**50.350**	ug/L	0.684	1	78	101298	1	KED
|	**Zn**	**66**	**49.233**	ug/L	0.913	1	90	24431	0	KED
|	**Zn**	**67**	**49.032**	ug/L	1.646	3	14	4022	4	KED
⌊	**As**	**75**	**46.973**	ug/L	0.817	1	9	11422	1	KED
	Y	**89**		ug/L			514828	513980	8	Standard
	Kr	**83**		ug/L			66	82	14	Standard
⌈>	**In-1**	**115**		ug/L			11154	10969	4	KED
|	**Cd**	**111**	**49.469**	ug/L	0.911	1	4	11228	2	KED
⌊	**Cd**	**114**	**49.909**	ug/L	0.409	0	4	27963	5	KED
⌈>	**In**	**115**		ug/L			844649	830395	4	Standard
⌊	**Ag**	**107**	**51.521**	ug/L	0.463	0	74	907841	5	Standard
⌈>	**Tb**	**159**		ug/L			720612	768575	2	Standard
⌊	**Pb**	**208**	**51.113**	ug/L	1.206	2	363	3124462	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICB1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 14:00:53
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42851	40181	1	Standard
	Cl	**37**		ug/L			4641047	4697704	3	Standard
⌈>	**Sc**	**45**		ug/L			806788	761018	5	Standard
|	**Cr**	**52**	**0.097**	ug/L	0.035	36	28671	29315	4	Standard
|	**Cr**	**53**	**-0.015**	ug/L	0.008	54	315	255	3	Standard
⌊	**Mn**	**55**	**0.001**	ug/L	0.002	157	1039	1019	8	Standard
⌈>	**Ge**	**72**		ug/L			41788	43343	7	KED
|	**Ni**	**60**	**-0.013**	ug/L	0.005	37	39	24	32	KED
|	**Ni**	**62**	**-0.013**	ug/L	0.013	97	6	4	65	KED
|	**Cu**	**63**	**-0.001**	ug/L	0.005	485	158	160	18	KED
|	**Cu**	**65**	**-0.008**	ug/L	0.010	127	78	65	27	KED
|	**Zn**	**66**	**-0.081**	ug/L	0.037	45	90	55	29	KED
|	**Zn**	**67**	**-0.110**	ug/L	0.052	47	14	6	62	KED
⌊	**As**	**75**	**-0.015**	ug/L	0.011	76	9	6	40	KED
	Y	**89**		ug/L			514828	502581	6	Standard
	Kr	**83**		ug/L			66	73	9	Standard
⌈>	**In-1**	**115**		ug/L			11154	11644	3	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.002	303	4	4	13	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.008	454	4	6	78	KED
⌈>	**In**	**115**		ug/L			844649	841313	7	Standard
⌊	**Ag**	**107**	**0.012**	ug/L	0.001	8	74	294	1	Standard
⌈>	**Tb**	**159**		ug/L			720612	745815	6	Standard
⌊	**Pb**	**208**	**-0.000**	ug/L	0.001	157	363	351	12	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 14:05:20
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42851	41748	1	Standard
	Cl	**37**		ug/L			4641047	5088464	2	Standard
⌈>	**Sc**	**45**		ug/L			806788	797438	4	Standard
|	**Cr**	**52**	**50.349**	ug/L	0.903	1	28671	1276995	2	Standard
|	**Cr**	**53**	**48.442**	ug/L	0.612	1	315	141493	2	Standard
⌊	**Mn**	**55**	**49.870**	ug/L	0.397	0	1039	1778915	4	Standard
⌈>	**Ge**	**72**		ug/L			41788	45004	2	KED
|	**Ni**	**60**	**49.345**	ug/L	0.507	1	39	68870	2	KED
|	**Ni**	**62**	**49.359**	ug/L	2.511	5	6	11244	3	KED
|	**Cu**	**63**	**49.041**	ug/L	1.605	3	158	204773	3	KED
|	**Cu**	**65**	**49.144**	ug/L	1.320	2	78	98818	3	KED
|	**Zn**	**66**	**49.928**	ug/L	1.439	2	90	24755	0	KED
|	**Zn**	**67**	**50.753**	ug/L	0.801	1	14	4159	2	KED
⌊	**As**	**75**	**49.488**	ug/L	1.093	2	9	12025	1	KED
	Y	**89**		ug/L			514828	528519	4	Standard
	Kr	**83**		ug/L			66	74	16	Standard
⌈>	**In-1**	**115**		ug/L			11154	12203	1	KED
|	**Cd**	**111**	**49.139**	ug/L	1.514	3	4	12410	1	KED
⌊	**Cd**	**114**	**49.099**	ug/L	1.799	3	4	30585	1	KED
⌈>	**In**	**115**		ug/L			844649	876872	2	Standard
⌊	**Ag**	**107**	**50.176**	ug/L	0.220	0	74	933483	2	Standard
⌈>	**Tb**	**159**		ug/L			720612	807960	2	Standard
⌊	**Pb**	**208**	**49.677**	ug/L	1.926	3	363	3190510	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 14:12:12
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42851	39029	0	Standard
	Cl	**37**		ug/L			4641047	4958094	2	Standard
⌈>	**Sc**	**45**		ug/L			806788	765568	4	Standard
|	**Cr**	**52**	**0.094**	ug/L	0.010	10	28671	29451	4	Standard
|	**Cr**	**53**	**-0.011**	ug/L	0.006	54	315	268	10	Standard
⌊	**Mn**	**55**	**0.000**	ug/L	0.001	171	1039	1000	6	Standard
⌈>	**Ge**	**72**		ug/L			41788	44225	1	KED
|	**Ni**	**60**	**-0.012**	ug/L	0.009	77	39	24	50	KED
|	**Ni**	**62**	**-0.007**	ug/L	0.038	543	6	5	145	KED
|	**Cu**	**63**	**-0.005**	ug/L	0.005	97	158	147	14	KED
|	**Cu**	**65**	**-0.012**	ug/L	0.010	80	78	59	30	KED
|	**Zn**	**66**	**-0.092**	ug/L	0.016	17	90	51	16	KED
|	**Zn**	**67**	**-0.098**	ug/L	0.084	86	14	7	90	KED
⌊	**As**	**75**	**-0.016**	ug/L	0.004	23	9	6	12	KED
	Y	**89**		ug/L			514828	513097	3	Standard
	Kr	**83**		ug/L			66	73	33	Standard
⌈>	**In-1**	**115**		ug/L			11154	11591	2	KED
|	**Cd**	**111**	**0.001**	ug/L	0.013	1511	4	4	65	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.006	281	4	3	89	KED
⌈>	**In**	**115**		ug/L			844649	854918	3	Standard
⌊	**Ag**	**107**	**0.015**	ug/L	0.002	10	74	354	9	Standard
⌈>	**Tb**	**159**		ug/L			720612	748990	0	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.001	269	363	389	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CRL1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 14:16:39
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42851	43903	3	Standard
	Cl	**37**		ug/L			4641047	4790219	1	Standard
⌈>	**Sc**	**45**		ug/L			806788	780075	2	Standard
|	**Cr**	**52**	**0.579**	ug/L	0.024	4	28671	41794	3	Standard
|	**Cr**	**53**	**0.465**	ug/L	0.011	2	315	1631	3	Standard
⌊	**Mn**	**55**	**0.484**	ug/L	0.003	0	1039	17873	3	Standard
⌈>	**Ge**	**72**		ug/L			41788	44773	0	KED
|	**Ni**	**60**	**0.451**	ug/L	0.019	4	39	667	3	KED
|	**Ni**	**62**	**0.468**	ug/L	0.011	2	6	113	2	KED
|	**Cu**	**63**	**0.483**	ug/L	0.017	3	158	2176	3	KED
|	**Cu**	**65**	**0.483**	ug/L	0.021	4	78	1050	3	KED
|	**Zn**	**66**	**6.040**	ug/L	0.332	5	90	3065	4	KED
|	**Zn**	**67**	**5.582**	ug/L	0.215	3	14	469	4	KED
⌊	**As**	**75**	**0.185**	ug/L	0.033	18	9	55	14	KED
	Y	**89**		ug/L			514828	508372	3	Standard
	Kr	**83**		ug/L			66	74	4	Standard
⌈>	**In-1**	**115**		ug/L			11154	11578	2	KED
|	**Cd**	**111**	**0.096**	ug/L	0.012	12	4	27	8	KED
⌊	**Cd**	**114**	**0.108**	ug/L	0.011	9	4	69	11	KED
⌈>	**In**	**115**		ug/L			844649	863871	3	Standard
⌊	**Ag**	**107**	**0.207**	ug/L	0.003	1	74	3864	4	Standard
⌈>	**Tb**	**159**		ug/L			720612	762701	6	Standard
⌊	**Pb**	**208**	**0.100**	ug/L	0.004	4	363	6445	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFA1
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Monday, March 06, 2023 14:21:07
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42851	135309	3	Standard
	Cl	**37**		ug/L			4641047	12203010	5	Standard
⌈>	**Sc**	**45**		ug/L			806788	804955	6	Standard
|	**Cr**	**52**	**1.013**	ug/L	0.018	1	28671	53964	5	Standard
|	**Cr**	**53**	**2.863**	ug/L	0.032	1	315	8737	5	Standard
⌊	**Mn**	**55**	**0.087**	ug/L	0.003	3	1039	4175	6	Standard
⌈>	**Ge**	**72**		ug/L			41788	43336	3	KED
|	**Ni**	**60**	**0.062**	ug/L	0.009	14	39	123	12	KED
|	**Ni**	**62**	**0.142**	ug/L	0.058	40	6	38	30	KED
|	**Cu**	**63**	**0.048**	ug/L	0.004	8	158	354	2	KED
|	**Cu**	**65**	**0.041**	ug/L	0.006	14	78	161	9	KED
|	**Zn**	**66**	**0.099**	ug/L	0.021	21	90	140	3	KED
|	**Zn**	**67**	**0.099**	ug/L	0.149	150	14	22	50	KED
⌊	**As**	**75**	**0.030**	ug/L	0.020	65	9	17	29	KED
	Y	**89**		ug/L			514828	524761	4	Standard
	Kr	**83**		ug/L			66	161	4	Standard
⌈>	**In-1**	**115**		ug/L			11154	11572	1	KED
|	**Cd**	**111**	**0.068**	ug/L	0.045	65	4	20	53	KED
⌊	**Cd**	**114**	**0.049**	ug/L	0.013	27	4	34	24	KED
⌈>	**In**	**115**		ug/L			844649	840466	4	Standard
⌊	**Ag**	**107**	**0.012**	ug/L	0.001	4	74	289	7	Standard
⌈>	**Tb**	**159**		ug/L			720612	812019	4	Standard
⌊	**Pb**	**208**	**0.034**	ug/L	0.001	3	363	2605	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFB1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 14:25:34
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42851	135121	1	Standard
	Cl	**37**		ug/L			4641047	12351805	1	Standard
⌈>	**Sc**	**45**		ug/L			806788	810549	2	Standard
|	**Cr**	**52**	**20.054**	ug/L	0.080	0	28671	534586	2	Standard
|	**Cr**	**53**	**22.295**	ug/L	0.442	1	315	66399	3	Standard
⌊	**Mn**	**55**	**19.652**	ug/L	0.435	2	1039	712991	3	Standard
⌈>	**Ge**	**72**		ug/L			41788	43650	2	KED
|	**Ni**	**60**	**20.185**	ug/L	0.184	0	39	27349	1	KED
|	**Ni**	**62**	**20.030**	ug/L	0.399	1	6	4432	2	KED
|	**Cu**	**63**	**19.518**	ug/L	0.500	2	158	79139	0	KED
|	**Cu**	**65**	**19.600**	ug/L	0.211	1	78	38276	1	KED
|	**Zn**	**66**	**18.722**	ug/L	0.352	1	90	9066	2	KED
|	**Zn**	**67**	**16.965**	ug/L	0.776	4	14	1360	6	KED
⌊	**As**	**75**	**19.173**	ug/L	0.169	0	9	4527	2	KED
	Y	**89**		ug/L			514828	534352	3	Standard
	Kr	**83**		ug/L			66	151	5	Standard
⌈>	**In-1**	**115**		ug/L			11154	11521	2	KED
|	**Cd**	**111**	**19.158**	ug/L	0.374	1	4	4570	0	KED
⌊	**Cd**	**114**	**18.639**	ug/L	0.620	3	4	10966	2	KED
⌈>	**In**	**115**		ug/L			844649	852393	2	Standard
⌊	**Ag**	**107**	**18.571**	ug/L	0.200	1	74	335871	2	Standard
⌈>	**Tb**	**159**		ug/L			720612	840357	4	Standard
⌊	**Pb**	**208**	**0.042**	ug/L	0.001	1	363	3218	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 14:30:02
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42851	40715	1	Standard
	Cl	**37**		ug/L			4641047	5030512	1	Standard
⎡>	**Sc**	**45**		ug/L			806788	764286	2	Standard
⎢	**Cr**	**52**	**195.134**	ug/L	1.733	0	28671	4667631	2	Standard
⎢	**Cr**	**53**	**194.875**	ug/L	4.533	2	315	545008	4	Standard
⎣	**Mn**	**55**	**196.425**	ug/L	1.682	0	1039	6710570	1	Standard
⎡>	**Ge**	**72**		ug/L			41788	42605	2	KED
⎢	**Ni**	**60**	**196.562**	ug/L	2.019	1	39	259674	3	KED
⎢	**Ni**	**62**	**192.606**	ug/L	1.244	0	6	41549	3	KED
⎢	**Cu**	**63**	**185.632**	ug/L	3.788	2	158	733529	3	KED
⎢	**Cu**	**65**	**188.244**	ug/L	3.258	1	78	358274	4	KED
⎢	**Zn**	**66**	**188.703**	ug/L	3.078	1	90	88389	4	KED
⎢	**Zn**	**67**	**187.386**	ug/L	4.391	2	14	14508	4	KED
⎣	**As**	**75**	**198.166**	ug/L	0.575	0	9	45575	2	KED
	Y	**89**		ug/L			514828	513598	0	Standard
	Kr	**83**		ug/L			66	152	7	Standard
⎡>	**In-1**	**115**		ug/L			11154	11396	2	KED
⎢	**Cd**	**111**	**197.360**	ug/L	3.963	2	4	46535	1	KED
⎣	**Cd**	**114**	**196.681**	ug/L	5.433	2	4	114401	1	KED
⎡>	**In**	**115**		ug/L			844649	844350	2	Standard
⎣	**Ag**	**107**	**190.674**	ug/L	1.004	0	74	3415510	2	Standard
⎡>	**Tb**	**159**		ug/L			720612	838766	3	Standard
⎣	**Pb**	**208**	**183.786**	ug/L	4.311	2	363	12250266	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 14:34:29
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42851	42044	1	Standard
	Cl	**37**		ug/L			4641047	5071309	0	Standard
⎡>	**Sc**	**45**		ug/L			806788	762123	1	Standard
⎢	**Cr**	**52**	**291.369**	ug/L	4.644	1	28671	6936269	1	Standard
⎢	**Cr**	**53**	**291.419**	ug/L	1.617	0	315	812270	0	Standard
⎣	**Mn**	**55**	**291.664**	ug/L	5.250	1	1039	9935736	1	Standard
⎡>	**Ge**	**72**		ug/L			41788	41249	0	KED
⎢	**Ni**	**60**	**290.970**	ug/L	8.055	2	39	372074	2	KED
⎢	**Ni**	**62**	**289.452**	ug/L	10.072	3	6	60444	3	KED
⎢	**Cu**	**63**	**279.465**	ug/L	16.441	5	158	1069094	5	KED
⎢	**Cu**	**65**	**282.472**	ug/L	8.519	3	78	520327	2	KED
⎢	**Zn**	**66**	**277.107**	ug/L	8.301	2	90	125589	2	KED
⎢	**Zn**	**67**	**275.880**	ug/L	5.432	1	14	20665	1	KED
⎣	**As**	**75**	**296.477**	ug/L	5.337	1	9	66006	1	KED
	Y	**89**		ug/L			514828	513061	2	Standard
	Kr	**83**		ug/L			66	202	4	Standard
⎡>	**In-1**	**115**		ug/L			11154	11000	1	KED
⎢	**Cd**	**111**	**289.384**	ug/L	3.122	1	4	65878	0	KED
⎣	**Cd**	**114**	**286.993**	ug/L	5.827	2	4	161175	1	KED
⎡>	**In**	**115**		ug/L			844649	838215	0	Standard
⎣	**Ag**	**107**	**278.597**	ug/L	6.879	2	74	4953728	2	Standard
⎡>	**Tb**	**159**		ug/L			720612	868323	2	Standard
⎣	**Pb**	**208**	**259.262**	ug/L	7.053	2	363	17891538	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 14:41:40
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42851	39707	0	Standard
	Cl	**37**		ug/L			4641047	5115939	2	Standard
⎡>	**Sc**	**45**		ug/L			806788	796782	1	Standard
⎢	**Cr**	**52**	**0.083**	ug/L	0.040	47	28671	30379	4	Standard
⎢	**Cr**	**53**	**0.013**	ug/L	0.009	70	315	348	7	Standard
⎣	**Mn**	**55**	**0.033**	ug/L	0.001	3	1039	2208	3	Standard
⎡>	**Ge**	**72**		ug/L			41788	44927	4	KED
⎢	**Ni**	**60**	**-0.004**	ug/L	0.004	114	39	36	11	KED
⎢	**Ni**	**62**	**0.026**	ug/L	0.037	146	6	13	65	KED
⎢	**Cu**	**63**	**0.003**	ug/L	0.001	43	158	182	3	KED
⎢	**Cu**	**65**	**-0.001**	ug/L	0.003	443	78	83	2	KED
⎢	**Zn**	**66**	**0.036**	ug/L	0.037	104	90	114	13	KED
⎢	**Zn**	**67**	**0.072**	ug/L	0.013	17	14	21	5	KED
⎣	**As**	**75**	**-0.003**	ug/L	0.022	662	9	9	52	KED
	Y	**89**		ug/L			514828	508202	4	Standard
	Kr	**83**		ug/L			66	67	25	Standard
⎡>	**In-1**	**115**		ug/L			11154	12086	1	KED
⎢	**Cd**	**111**	**0.012**	ug/L	0.013	103	4	7	43	KED
⎣	**Cd**	**114**	**0.006**	ug/L	0.004	64	4	8	25	KED
⎡>	**In**	**115**		ug/L			844649	917118	3	Standard
⎣	**Ag**	**107**	**0.043**	ug/L	0.003	5	74	917	8	Standard
⎡>	**Tb**	**159**		ug/L			720612	810033	3	Standard
⎣	**Pb**	**208**	**0.015**	ug/L	0.001	4	363	1382	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFA1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 14:48:03
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42851	129779	3	Standard
	Cl	**37**		ug/L			4641047	12265210	4	Standard
⌈>	**Sc**	**45**		ug/L			806788	806746	2	Standard
|	**Cr**	**52**	**0.960**	ug/L	0.046	4	28671	52759	0	Standard
|	**Cr**	**53**	**3.224**	ug/L	0.101	3	315	9826	4	Standard
⌊	**Mn**	**55**	**0.091**	ug/L	0.007	7	1039	4315	6	Standard
⌈>	**Ge**	**72**		ug/L			41788	44050	2	KED
|	**Ni**	**60**	**0.130**	ug/L	0.016	12	39	219	10	KED
|	**Ni**	**62**	**0.288**	ug/L	0.029	9	6	71	10	KED
|	**Cu**	**63**	**0.041**	ug/L	0.003	7	158	335	1	KED
|	**Cu**	**65**	**0.059**	ug/L	0.012	21	78	199	13	KED
|	**Zn**	**66**	**0.434**	ug/L	0.054	12	90	306	10	KED
|	**Zn**	**67**	**0.450**	ug/L	0.084	18	14	51	14	KED
⌊	**As**	**75**	**0.029**	ug/L	0.021	73	9	17	26	KED
	Y	**89**		ug/L			514828	527149	3	Standard
	Kr	**83**		ug/L			66	153	11	Standard
⌈>	**In-1**	**115**		ug/L			11154	11262	1	KED
|	**Cd**	**111**	**0.056**	ug/L	0.022	38	4	17	29	KED
⌊	**Cd**	**114**	**0.067**	ug/L	0.020	29	4	43	27	KED
⌈>	**In**	**115**		ug/L			844649	880162	1	Standard
⌊	**Ag**	**107**	**0.032**	ug/L	0.002	6	74	667	5	Standard
⌈>	**Tb**	**159**		ug/L			720612	859222	1	Standard
⌊	**Pb**	**208**	**0.031**	ug/L	0.001	2	363	2555	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 14:52:58
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42851	38811	1	Standard
	Cl	**37**		ug/L			4641047	4879002	2	Standard
⎡>	**Sc**	**45**		ug/L			806788	778378	2	Standard
⎢	**Cr**	**52**	**0.091**	ug/L	0.016	17	28671	29880	3	Standard
⎢	**Cr**	**53**	**0.070**	ug/L	0.011	15	315	504	4	Standard
⎣	**Mn**	**55**	**0.036**	ug/L	0.001	1	1039	2253	2	Standard
⎡>	**Ge**	**72**		ug/L			41788	45723	0	KED
⎢	**Ni**	**60**	**-0.001**	ug/L	0.005	391	39	41	17	KED
⎢	**Ni**	**62**	**0.008**	ug/L	0.016	201	6	9	40	KED
⎢	**Cu**	**63**	**0.007**	ug/L	0.003	51	158	200	7	KED
⎢	**Cu**	**65**	**0.005**	ug/L	0.001	13	78	96	1	KED
⎢	**Zn**	**66**	**0.030**	ug/L	0.033	109	90	114	14	KED
⎢	**Zn**	**67**	**0.006**	ug/L	0.047	747	14	16	24	KED
⎣	**As**	**75**	**-0.009**	ug/L	0.012	129	9	8	33	KED
	Y	**89**		ug/L			514828	513878	3	Standard
	Kr	**83**		ug/L			66	64	28	Standard
⎡>	**In-1**	**115**		ug/L			11154	12092	1	KED
⎢	**Cd**	**111**	**0.002**	ug/L	0.018	806	4	5	92	KED
⎣	**Cd**	**114**	**0.001**	ug/L	0.005	355	4	6	49	KED
⎡>	**In**	**115**		ug/L			844649	891573	2	Standard
⎣	**Ag**	**107**	**0.009**	ug/L	0.001	10	74	255	9	Standard
⎡>	**Tb**	**159**		ug/L			720612	806752	3	Standard
⎣	**Pb**	**208**	**0.014**	ug/L	0.001	7	363	1316	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 14:59:20
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42851	39185	2	Standard
	Cl	**37**		ug/L			4641047	5120715	2	Standard
⌈>	**Sc**	**45**		ug/L			806788	774135	6	Standard
|	**Cr**	**52**	**50.655**	ug/L	0.201	0	28671	1247500	5	Standard
|	**Cr**	**53**	**49.212**	ug/L	1.300	2	315	139451	4	Standard
⌊	**Mn**	**55**	**51.377**	ug/L	1.325	2	1039	1777432	4	Standard
⌈>	**Ge**	**72**		ug/L			41788	46422	0	KED
|	**Ni**	**60**	**48.758**	ug/L	0.962	1	39	70202	1	KED
|	**Ni**	**62**	**49.191**	ug/L	0.759	1	6	11567	2	KED
|	**Cu**	**63**	**49.130**	ug/L	0.341	0	158	211670	0	KED
|	**Cu**	**65**	**49.223**	ug/L	1.245	2	78	102116	2	KED
|	**Zn**	**66**	**49.688**	ug/L	0.647	1	90	25425	0	KED
|	**Zn**	**67**	**51.055**	ug/L	0.601	1	14	4317	1	KED
⌊	**As**	**75**	**48.993**	ug/L	0.428	0	9	12284	1	KED
	Y	**89**		ug/L			514828	526122	4	Standard
	Kr	**83**		ug/L			66	74	22	Standard
⌈>	**In-1**	**115**		ug/L			11154	12144	2	KED
|	**Cd**	**111**	**50.441**	ug/L	1.398	2	4	12677	0	KED
⌊	**Cd**	**114**	**49.967**	ug/L	1.642	3	4	30975	1	KED
⌈>	**In**	**115**		ug/L			844649	891161	2	Standard
⌊	**Ag**	**107**	**48.827**	ug/L	0.505	1	74	923060	2	Standard
⌈>	**Tb**	**159**		ug/L			720612	832730	4	Standard
⌊	**Pb**	**208**	**48.928**	ug/L	1.740	3	363	3237335	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 15:06:32
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42851	37000	4	Standard
	Cl	**37**		ug/L			4641047	4869651	4	Standard
⎡>	**Sc**	**45**		ug/L			806788	756537	3	Standard
⎢	**Cr**	**52**	**0.112**	ug/L	0.019	16	28671	29526	4	Standard
⎢	**Cr**	**53**	**-0.001**	ug/L	0.012	992	315	293	13	Standard
⎣	**Mn**	**55**	**0.013**	ug/L	0.001	4	1039	1414	2	Standard
⎡>	**Ge**	**72**		ug/L			41788	45076	2	KED
⎢	**Ni**	**60**	**-0.008**	ug/L	0.009	120	39	31	38	KED
⎢	**Ni**	**62**	**0.003**	ug/L	0.013	408	6	8	35	KED
⎢	**Cu**	**63**	**-0.008**	ug/L	0.002	23	158	135	4	KED
⎢	**Cu**	**65**	**-0.005**	ug/L	0.001	17	78	75	3	KED
⎢	**Zn**	**66**	**-0.096**	ug/L	0.024	24	90	50	21	KED
⎢	**Zn**	**67**	**-0.045**	ug/L	0.082	181	14	12	55	KED
⎣	**As**	**75**	**-0.006**	ug/L	0.008	130	9	9	21	KED
	Y	**89**		ug/L			514828	509651	4	Standard
	Kr	**83**		ug/L			66	63	14	Standard
⎡>	**In-1**	**115**		ug/L			11154	12250	1	KED
⎢	**Cd**	**111**	**-0.005**	ug/L	0.002	37	4	3	17	KED
⎣	**Cd**	**114**	**0.003**	ug/L	0.003	133	4	6	32	KED
⎡>	**In**	**115**		ug/L			844649	886483	3	Standard
⎣	**Ag**	**107**	**0.017**	ug/L	0.001	5	74	407	5	Standard
⎡>	**Tb**	**159**		ug/L			720612	797382	5	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.001	90	363	442	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 15:12:38
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				36323	3	Standard
	Cl	**37**		ug/L				4837250	1	Standard
>	**Sc**	**45**		ug/L				768932	1	Standard
	Cr	**52**		ug/L				29685	2	Standard
	Cr	**53**		ug/L				273	6	Standard
	Mn	**55**		ug/L				1379	6	Standard
>	**Ge**	**72**		ug/L				45127	2	KED
	Ni	**60**		ug/L				27	24	KED
	Ni	**62**		ug/L				5	33	KED
	Cu	**63**		ug/L				118	8	KED
	Cu	**65**		ug/L				63	17	KED
	Zn	**66**		ug/L				40	11	KED
	Zn	**67**		ug/L				5	0	KED
	As	**75**		ug/L				7	21	KED
	Y	**89**		ug/L				512697	2	Standard
	Kr	**83**		ug/L				65	14	Standard
>	**In-1**	**115**		ug/L				11342	6	KED
	Cd	**111**		ug/L				6	28	KED
	Cd	**114**		ug/L				4	51	KED
>	**In**	**115**		ug/L				888503	0	Standard
	Ag	**107**		ug/L				236	7	Standard
>	**Tb**	**159**		ug/L				797843	4	Standard
	Pb	**208**		ug/L				255	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 15:17:06
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	37598	0	Standard
	Cl	**37**		ug/L			4837250	5126483	2	Standard
⌈>	**Sc**	**45**		ug/L			768932	801390	1	Standard
|	**Cr**	**52**	**49.089**	ug/L	1.077	2	29685	1254622	0	Standard
|	**Cr**	**53**	**48.693**	ug/L	0.967	1	273	142917	0	Standard
⌊	**Mn**	**55**	**50.109**	ug/L	1.657	3	1379	1795738	2	Standard
⌈>	**Ge**	**72**		ug/L			45127	45912	1	KED
|	**Ni**	**60**	**50.385**	ug/L	0.062	0	27	71733	1	KED
|	**Ni**	**62**	**48.787**	ug/L	0.835	1	5	11344	2	KED
|	**Cu**	**63**	**48.115**	ug/L	0.438	0	118	204956	0	KED
|	**Cu**	**65**	**48.892**	ug/L	1.263	2	63	100277	1	KED
|	**Zn**	**66**	**50.399**	ug/L	1.372	2	40	25452	4	KED
|	**Zn**	**67**	**49.568**	ug/L	1.250	2	5	4135	3	KED
⌊	**As**	**75**	**49.752**	ug/L	0.820	1	7	12334	1	KED
	Y	**89**		ug/L			512697	531171	4	Standard
	Kr	**83**		ug/L			65	73	21	Standard
⌈>	**In-1**	**115**		ug/L			11342	12004	2	KED
|	**Cd**	**111**	**50.645**	ug/L	1.375	2	6	12584	0	KED
⌊	**Cd**	**114**	**49.897**	ug/L	1.589	3	4	30577	1	KED
⌈>	**In**	**115**		ug/L			888503	895335	3	Standard
⌊	**Ag**	**107**	**47.844**	ug/L	1.106	2	236	908483	0	Standard
⌈>	**Tb**	**159**		ug/L			797843	846222	4	Standard
⌊	**Pb**	**208**	**48.885**	ug/L	1.526	3	255	3286449	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 15:24:18
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	35916	1	Standard
	Cl	**37**		ug/L			4837250	4928206	0	Standard
⎡>	**Sc**	**45**		ug/L			768932	763038	1	Standard
⎢	**Cr**	**52**	**0.003**	ug/L	0.004	119	29685	29537	1	Standard
⎢	**Cr**	**53**	**0.000**	ug/L	0.000	330	273	271	1	Standard
⎣	**Mn**	**55**	**-0.004**	ug/L	0.002	36	1379	1222	4	Standard
⎡>	**Ge**	**72**		ug/L			45127	43480	4	KED
⎢	**Ni**	**60**	**-0.006**	ug/L	0.004	59	27	18	29	KED
⎢	**Ni**	**62**	**0.006**	ug/L	0.019	309	5	6	62	KED
⎢	**Cu**	**63**	**0.003**	ug/L	0.004	160	118	125	12	KED
⎢	**Cu**	**65**	**0.000**	ug/L	0.001	610	63	61	4	KED
⎢	**Zn**	**66**	**0.002**	ug/L	0.015	706	40	40	14	KED
⎢	**Zn**	**67**	**-0.029**	ug/L	0.015	52	5	3	34	KED
⎣	**As**	**75**	**0.005**	ug/L	0.007	137	7	8	13	KED
	Y	**89**		ug/L			512697	507479	2	Standard
	Kr	**83**		ug/L			65	83	12	Standard
⎡>	**In-1**	**115**		ug/L			11342	12073	3	KED
⎢	**Cd**	**111**	**-0.007**	ug/L	0.008	113	6	5	36	KED
⎣	**Cd**	**114**	**0.010**	ug/L	0.006	59	4	10	36	KED
⎡>	**In**	**115**		ug/L			888503	872208	0	Standard
⎣	**Ag**	**107**	**0.009**	ug/L	0.000	1	236	401	0	Standard
⎡>	**Tb**	**159**		ug/L			797843	798551	2	Standard
⎣	**Pb**	**208**	**0.002**	ug/L	0.000	25	255	362	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0008-BLK2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 15:30:03
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	52352	2	Standard
	Cl	**37**		ug/L			4837250	4651415	5	Standard
⎡>	**Sc**	**45**		ug/L			768932	728446	3	Standard
⎢	**Cr**	**52**	**0.097**	ug/L	0.031	32	29685	30316	4	Standard
⎢	**Cr**	**53**	**0.060**	ug/L	0.008	12	273	419	7	Standard
⎣	**Mn**	**55**	**0.011**	ug/L	0.001	11	1379	1662	5	Standard
⎡>	**Ge**	**72**		ug/L			45127	44586	1	KED
⎢	**Ni**	**60**	**-0.003**	ug/L	0.004	133	27	22	22	KED
⎢	**Ni**	**62**	**0.014**	ug/L	0.029	205	5	8	75	KED
⎢	**Cu**	**63**	**0.029**	ug/L	0.002	6	118	238	2	KED
⎢	**Cu**	**65**	**0.022**	ug/L	0.012	55	63	105	21	KED
⎢	**Zn**	**66**	**0.115**	ug/L	0.034	29	40	96	16	KED
⎢	**Zn**	**67**	**0.102**	ug/L	0.047	45	5	13	28	KED
⎣	**As**	**75**	**0.004**	ug/L	0.005	118	7	8	13	KED
	Y	**89**		ug/L			512697	473482	3	Standard
	Kr	**83**		ug/L			65	57	8	Standard
⎡>	**In-1**	**115**		ug/L			11342	11867	4	KED
⎢	**Cd**	**111**	**-0.003**	ug/L	0.015	564	6	6	60	KED
⎣	**Cd**	**114**	**0.009**	ug/L	0.009	97	4	9	49	KED
⎡>	**In**	**115**		ug/L			888503	849760	3	Standard
⎣	**Ag**	**107**	**0.000**	ug/L	0.002	8395	236	226	13	Standard
⎡>	**Tb**	**159**		ug/L			797843	761228	6	Standard
⎣	**Pb**	**208**	**0.003**	ug/L	0.000	11	255	445	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0008-BS2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 15:34:31
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	53780	2	Standard
	Cl	**37**		ug/L			4837250	4822407	1	Standard
⌈>	**Sc**	**45**		ug/L			768932	771041	3	Standard
|	**Cr**	**52**	**25.660**	ug/L	0.505	1	29685	645199	2	Standard
|	**Cr**	**53**	**25.182**	ug/L	0.820	3	273	71268	4	Standard
⌊	**Mn**	**55**	**26.062**	ug/L	1.033	3	1379	899087	3	Standard
⌈>	**Ge**	**72**		ug/L			45127	44846	0	KED
|	**Ni**	**60**	**26.273**	ug/L	1.127	4	27	36554	4	KED
|	**Ni**	**62**	**26.123**	ug/L	1.797	6	5	5936	7	KED
|	**Cu**	**63**	**26.017**	ug/L	1.039	3	118	108314	3	KED
|	**Cu**	**65**	**26.056**	ug/L	0.801	3	63	52238	3	KED
|	**Zn**	**66**	**84.830**	ug/L	3.945	4	40	41815	5	KED
|	**Zn**	**67**	**79.995**	ug/L	1.075	1	5	6516	2	KED
⌊	**As**	**75**	**25.680**	ug/L	0.521	2	7	6222	2	KED
	Y	**89**		ug/L			512697	509052	1	Standard
	Kr	**83**		ug/L			65	76	17	Standard
⌈>	**In-1**	**115**		ug/L			11342	11584	1	KED
|	**Cd**	**111**	**25.833**	ug/L	0.635	2	6	6199	2	KED
⌊	**Cd**	**114**	**25.303**	ug/L	0.162	0	4	14971	2	KED
⌈>	**In**	**115**		ug/L			888503	901211	1	Standard
⌊	**Ag**	**107**	**24.106**	ug/L	0.262	1	236	461096	1	Standard
⌈>	**Tb**	**159**		ug/L			797843	796817	2	Standard
⌊	**Pb**	**208**	**26.368**	ug/L	0.585	2	255	1670380	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0045-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 15:38:58
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	52661	2	Standard
	Cl	**37**		ug/L			4837250	4812352	4	Standard
⌈>	**Sc**	**45**		ug/L			768932	784101	3	Standard
|	**Cr**	**52**	**0.035**	ug/L	0.020	58	29685	31109	2	Standard
|	**Cr**	**53**	**0.008**	ug/L	0.000	5	273	302	3	Standard
⌊	**Mn**	**55**	**0.062**	ug/L	0.003	4	1379	3592	5	Standard
⌈>	**Ge**	**72**		ug/L			45127	44793	3	KED
|	**Ni**	**60**	**0.003**	ug/L	0.005	188	27	31	24	KED
|	**Ni**	**62**	**0.003**	ug/L	0.004	135	5	6	17	KED
|	**Cu**	**63**	**0.020**	ug/L	0.004	22	118	200	6	KED
|	**Cu**	**65**	**0.009**	ug/L	0.008	91	63	80	18	KED
|	**Zn**	**66**	**0.191**	ug/L	0.022	11	40	133	4	KED
|	**Zn**	**67**	**0.180**	ug/L	0.053	29	5	20	21	KED
⌊	**As**	**75**	**0.013**	ug/L	0.017	126	7	11	38	KED
	Y	**89**		ug/L			512697	511857	3	Standard
	Kr	**83**		ug/L			65	60	14	Standard
⌈>	**In-1**	**115**		ug/L			11342	12180	2	KED
|	**Cd**	**111**	**-0.011**	ug/L	0.009	86	6	4	53	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.008	269	4	6	73	KED
⌈>	**In**	**115**		ug/L			888503	888169	1	Standard
⌊	**Ag**	**107**	**0.007**	ug/L	0.001	18	236	366	5	Standard
⌈>	**Tb**	**159**		ug/L			797843	797241	5	Standard
⌊	**Pb**	**208**	**0.004**	ug/L	0.000	10	255	518	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0045-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 15:43:26
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	53362	1	Standard
	Cl	**37**		ug/L			4837250	4790194	3	Standard
⌈>	**Sc**	**45**		ug/L			768932	768332	3	Standard
|	**Cr**	**52**	**25.312**	ug/L	0.100	0	29685	634727	3	Standard
|	**Cr**	**53**	**24.916**	ug/L	0.263	1	273	70253	2	Standard
⌊	**Mn**	**55**	**25.569**	ug/L	0.319	1	1379	879439	3	Standard
⌈>	**Ge**	**72**		ug/L			45127	45123	3	KED
|	**Ni**	**60**	**25.511**	ug/L	0.665	2	27	35698	3	KED
|	**Ni**	**62**	**24.550**	ug/L	1.553	6	5	5609	5	KED
|	**Cu**	**63**	**24.937**	ug/L	0.746	2	118	104417	2	KED
|	**Cu**	**65**	**25.327**	ug/L	0.692	2	63	51089	4	KED
|	**Zn**	**66**	**82.347**	ug/L	5.293	6	40	40806	5	KED
|	**Zn**	**67**	**75.946**	ug/L	2.746	3	5	6221	2	KED
⌊	**As**	**75**	**25.187**	ug/L	0.981	3	7	6138	3	KED
	Y	**89**		ug/L			512697	518296	3	Standard
	Kr	**83**		ug/L			65	72	11	Standard
⌈>	**In-1**	**115**		ug/L			11342	11221	4	KED
|	**Cd**	**111**	**25.503**	ug/L	0.836	3	6	5923	2	KED
⌊	**Cd**	**114**	**25.207**	ug/L	0.690	2	4	14434	2	KED
⌈>	**In**	**115**		ug/L			888503	886652	2	Standard
⌊	**Ag**	**107**	**24.843**	ug/L	0.735	2	236	467279	0	Standard
⌈>	**Tb**	**159**		ug/L			797843	799457	4	Standard
⌊	**Pb**	**208**	**25.744**	ug/L	1.160	4	255	1634878	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0026-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, March 06, 2023 15:49:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	920398	0	Standard
	Cl	**37**		ug/L			4837250	5267311	2	Standard
⌈>	**Sc**	**45**		ug/L			768932	789749	3	Standard
|	**Cr**	**52**	**4.316**	ug/L	0.105	2	29685	136493	1	Standard
|	**Cr**	**53**	**1.371**	ug/L	0.059	4	273	4234	1	Standard
⌊	**Mn**	**55**	**144.207**	ug/L	4.033	2	1379	5089732	2	Standard
⌈>	**Ge**	**72**		ug/L			45127	41423	1	KED
|	**Ni**	**60**	**16.761**	ug/L	0.327	1	27	21543	1	KED
|	**Ni**	**62**	**16.985**	ug/L	0.292	1	5	3566	0	KED
|	**Cu**	**63**	**2.150**	ug/L	0.015	0	118	8368	1	KED
|	**Cu**	**65**	**2.196**	ug/L	0.044	1	63	4118	0	KED
|	**Zn**	**66**	**14.227**	ug/L	0.649	4	40	6507	4	KED
|	**Zn**	**67**	**13.822**	ug/L	0.793	5	5	1043	4	KED
⌊	**As**	**75**	**0.070**	ug/L	0.005	7	7	23	6	KED
	Y	**89**		ug/L			512697	510979	2	Standard
	Kr	**83**		ug/L			65	95	9	Standard
⌈>	**In-1**	**115**		ug/L			11342	11041	2	KED
|	**Cd**	**111**	**0.002**	ug/L	0.013	623	6	6	43	KED
⌊	**Cd**	**114**	**0.023**	ug/L	0.030	127	4	17	98	KED
⌈>	**In**	**115**		ug/L			888503	806545	1	Standard
⌊	**Ag**	**107**	**0.005**	ug/L	0.001	14	236	296	5	Standard
⌈>	**Tb**	**159**		ug/L			797843	780451	2	Standard
⌊	**Pb**	**208**	**0.185**	ug/L	0.001	0	255	11732	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0027-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, March 06, 2023 15:53:35
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			36323	65154	2	Standard
	Cl	37		ug/L			4837250	9771942	1	Standard
>	Sc	45		ug/L			768932	753577	2	Standard
	Cr	52	135.363	ug/L	1.863	1	29685	3203017	2	Standard
	Cr	53	136.794	ug/L	0.938	0	273	377177	2	Standard
	Mn	55	2.867	ug/L	0.026	0	1379	97908	1	Standard
>	Ge	72		ug/L			45127	43753	4	KED
	Ni	60	1.712	ug/L	0.058	3	27	2350	7	KED
	Ni	62	1.655	ug/L	0.095	5	5	372	9	KED
	Cu	63	12.962	ug/L	0.211	1	118	52684	2	KED
	Cu	65	12.930	ug/L	0.082	0	63	25319	3	KED
	Zn	66	19.451	ug/L	1.027	5	40	9370	1	KED
	Zn	67	18.426	ug/L	0.871	4	5	1467	3	KED
	As	75	0.149	ug/L	0.010	6	7	43	9	KED
	Y	89		ug/L			512697	490049	2	Standard
	Kr	83		ug/L			65	93	34	Standard
>	In-1	115		ug/L			11342	11152	2	KED
	Cd	111	0.944	ug/L	0.081	8	6	224	7	KED
	Cd	114	0.891	ug/L	0.032	3	4	511	2	KED
>	In	115		ug/L			888503	822468	2	Standard
	Ag	107	0.027	ug/L	0.000	1	236	693	1	Standard
>	Tb	159		ug/L			797843	787600	3	Standard
	Pb	208	0.329	ug/L	0.010	2	255	20835	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0004-01
Sample Dil Factor: 5
Comments:
Sample Date/Time: Monday, March 06, 2023 16:02:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	96867	0	Standard
	Cl	**37**		ug/L			4837250	5359172	2	Standard
⌈>	**Sc**	**45**		ug/L			768932	761990	3	Standard
|	**Cr**	**52**	**1.546**	ug/L	0.027	1	29685	66067	2	Standard
|	**Cr**	**53**	**1.437**	ug/L	0.016	1	273	4273	2	Standard
⌊	**Mn**	**55**	**8.575**	ug/L	0.167	1	1379	293315	1	Standard
⌈>	**Ge**	**72**		ug/L			45127	44342	1	KED
|	**Ni**	**60**	**1.060**	ug/L	0.046	4	27	1483	5	KED
|	**Ni**	**62**	**1.159**	ug/L	0.089	7	5	266	9	KED
|	**Cu**	**63**	**0.055**	ug/L	0.011	19	118	342	11	KED
|	**Cu**	**65**	**0.051**	ug/L	0.003	6	63	162	6	KED
|	**Zn**	**66**	**1.296**	ug/L	0.108	8	40	671	8	KED
|	**Zn**	**67**	**1.460**	ug/L	0.082	5	5	123	6	KED
⌊	**As**	**75**	**0.053**	ug/L	0.017	32	7	20	17	KED
	Y	**89**		ug/L			512697	505092	4	Standard
	Kr	**83**		ug/L			65	73	9	Standard
⌈>	**In-1**	**115**		ug/L			11342	12273	2	KED
|	**Cd**	**111**	**0.000**	ug/L	0.005	1807	6	7	19	KED
⌊	**Cd**	**114**	**0.013**	ug/L	0.008	65	4	12	41	KED
⌈>	**In**	**115**		ug/L			888503	869423	4	Standard
⌊	**Ag**	**107**	**-0.004**	ug/L	0.000	8	236	165	3	Standard
⌈>	**Tb**	**159**		ug/L			797843	797520	5	Standard
⌊	**Pb**	**208**	**0.017**	ug/L	0.001	6	255	1309	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0551-01
Sample Dil Factor: 10
Comments:
Sample Date/Time: Monday, March 06, 2023 16:06:45
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	52609	1	Standard
	Cl	**37**		ug/L			4837250	5446094	2	Standard
⌈>	**Sc**	**45**		ug/L			768932	758893	3	Standard
|	**Cr**	**52**	**0.116**	ug/L	0.013	11	29685	32034	4	Standard
|	**Cr**	**53**	**0.126**	ug/L	0.005	3	273	617	2	Standard
⌊	**Mn**	**55**	**8.780**	ug/L	0.074	0	1379	299226	3	Standard
⌈>	**Ge**	**72**		ug/L			45127	44798	3	KED
|	**Ni**	**60**	**0.124**	ug/L	0.017	13	27	200	13	KED
|	**Ni**	**62**	**0.179**	ug/L	0.035	19	5	46	20	KED
|	**Cu**	**63**	**20.719**	ug/L	0.577	2	118	86189	3	KED
|	**Cu**	**65**	**20.827**	ug/L	0.350	1	63	41710	1	KED
|	**Zn**	**66**	**809.569**	ug/L	20.545	2	40	398237	3	KED
|	**Zn**	**67**	**734.327**	ug/L	17.353	2	5	59719	4	KED
⌊	**As**	**75**	**0.012**	ug/L	0.021	167	7	10	44	KED
	Y	**89**		ug/L			512697	499107	1	Standard
	Kr	**83**		ug/L			65	64	1	Standard
⌈>	**In-1**	**115**		ug/L			11342	11741	3	KED
|	**Cd**	**111**	**0.402**	ug/L	0.012	2	6	104	2	KED
⌊	**Cd**	**114**	**0.382**	ug/L	0.023	6	4	233	8	KED
⌈>	**In**	**115**		ug/L			888503	867992	2	Standard
⌊	**Ag**	**107**	**-0.003**	ug/L	0.001	46	236	184	13	Standard
⌈>	**Tb**	**159**		ug/L			797843	782343	1	Standard
⌊	**Pb**	**208**	**0.072**	ug/L	0.003	3	255	4755	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0095-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 16:14:57
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	107306	3	Standard
	Cl	**37**		ug/L			4837250	5124158	2	Standard
⌈>	**Sc**	**45**		ug/L			768932	757553	3	Standard
|	**Cr**	**52**	**38.947**	ug/L	0.413	1	29685	947453	4	Standard
|	**Cr**	**53**	**38.599**	ug/L	0.471	1	273	107159	3	Standard
⌊	**Mn**	**55**	**17.725**	ug/L	0.288	1	1379	601625	4	Standard
⌈>	**Ge**	**72**		ug/L			45127	43975	4	KED
|	**Ni**	**60**	**1.604**	ug/L	0.069	4	27	2210	0	KED
|	**Ni**	**62**	**1.645**	ug/L	0.138	8	5	371	8	KED
|	**Cu**	**63**	**1.177**	ug/L	0.020	1	118	4914	4	KED
|	**Cu**	**65**	**1.151**	ug/L	0.053	4	63	2319	2	KED
|	**Zn**	**66**	**70.896**	ug/L	3.332	4	40	34224	1	KED
|	**Zn**	**67**	**64.611**	ug/L	0.672	1	5	5162	5	KED
⌊	**As**	**75**	**0.046**	ug/L	0.020	42	7	18	28	KED
	Y	**89**		ug/L			512697	492067	6	Standard
	Kr	**83**		ug/L			65	80	9	Standard
⌈>	**In-1**	**115**		ug/L			11342	11986	0	KED
|	**Cd**	**111**	**0.450**	ug/L	0.034	7	6	118	8	KED
⌊	**Cd**	**114**	**0.452**	ug/L	0.037	8	4	280	7	KED
⌈>	**In**	**115**		ug/L			888503	850951	2	Standard
⌊	**Ag**	**107**	**0.023**	ug/L	0.003	14	236	639	10	Standard
⌈>	**Tb**	**159**		ug/L			797843	778582	1	Standard
⌊	**Pb**	**208**	**0.089**	ug/L	0.003	3	255	5764	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 16:22:42
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	38303	4	Standard
	Cl	**37**		ug/L			4837250	5200536	2	Standard
⎡>	**Sc**	**45**		ug/L			768932	719832	2	Standard
⎢	**Cr**	**52**	**0.001**	ug/L	0.028	3133	29685	27819	4	Standard
⎢	**Cr**	**53**	**0.014**	ug/L	0.006	43	273	291	2	Standard
⎣	**Mn**	**55**	**0.020**	ug/L	0.001	3	1379	1948	2	Standard
⎡>	**Ge**	**72**		ug/L			45127	43283	2	KED
⎢	**Ni**	**60**	**0.078**	ug/L	0.016	20	27	131	18	KED
⎢	**Ni**	**62**	**0.079**	ug/L	0.011	13	5	22	8	KED
⎢	**Cu**	**63**	**0.035**	ug/L	0.002	5	118	252	2	KED
⎢	**Cu**	**65**	**0.036**	ug/L	0.006	17	63	129	6	KED
⎢	**Zn**	**66**	**0.605**	ug/L	0.044	7	40	326	6	KED
⎢	**Zn**	**67**	**0.612**	ug/L	0.169	27	5	53	22	KED
⎣	**As**	**75**	**0.003**	ug/L	0.012	485	7	8	37	KED
	Y	**89**		ug/L			512697	486089	3	Standard
	Kr	**83**		ug/L			65	65	16	Standard
⎡>	**In-1**	**115**		ug/L			11342	11675	3	KED
⎢	**Cd**	**111**	**-0.009**	ug/L	0.010	115	6	4	52	KED
⎣	**Cd**	**114**	**0.015**	ug/L	0.021	136	4	13	93	KED
⎡>	**In**	**115**		ug/L			888503	836995	2	Standard
⎣	**Ag**	**107**	**-0.007**	ug/L	0.001	16	236	106	21	Standard
⎡>	**Tb**	**159**		ug/L			797843	749818	3	Standard
⎣	**Pb**	**208**	**0.013**	ug/L	0.001	6	255	1029	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 16:27:10
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	39074	1	Standard
	Cl	**37**		ug/L			4837250	5092335	2	Standard
⌈>	**Sc**	**45**		ug/L			768932	731594	2	Standard
|	**Cr**	**52**	**49.723**	ug/L	0.894	1	29685	1159898	1	Standard
|	**Cr**	**53**	**49.387**	ug/L	0.758	1	273	132328	0	Standard
⌊	**Mn**	**55**	**50.381**	ug/L	0.590	1	1379	1648795	2	Standard
⌈>	**Ge**	**72**		ug/L			45127	43855	2	KED
|	**Ni**	**60**	**49.385**	ug/L	0.786	1	27	67176	3	KED
|	**Ni**	**62**	**49.584**	ug/L	1.000	2	5	11016	4	KED
|	**Cu**	**63**	**49.160**	ug/L	1.439	2	118	200087	4	KED
|	**Cu**	**65**	**48.519**	ug/L	0.783	1	63	95090	3	KED
|	**Zn**	**66**	**50.197**	ug/L	0.339	0	40	24211	3	KED
|	**Zn**	**67**	**51.496**	ug/L	0.704	1	5	4104	3	KED
⌊	**As**	**75**	**49.976**	ug/L	0.455	0	7	11836	3	KED
	Y	**89**		ug/L			512697	489719	2	Standard
	Kr	**83**		ug/L			65	62	6	Standard
⌈>	**In-1**	**115**		ug/L			11342	11947	3	KED
|	**Cd**	**111**	**49.184**	ug/L	0.324	0	6	12166	2	KED
⌊	**Cd**	**114**	**48.890**	ug/L	0.290	0	4	29824	2	KED
⌈>	**In**	**115**		ug/L			888503	834557	1	Standard
⌊	**Ag**	**107**	**48.460**	ug/L	0.832	1	236	858013	0	Standard
⌈>	**Tb**	**159**		ug/L			797843	783434	2	Standard
⌊	**Pb**	**208**	**50.276**	ug/L	1.028	2	255	3131118	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 16:34:22
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	35305	4	Standard
	Cl	**37**		ug/L			4837250	4924624	4	Standard
⎡>	**Sc**	**45**		ug/L			768932	702333	4	Standard
⎢	**Cr**	**52**	**-0.003**	ug/L	0.016	561	29685	27045	3	Standard
⎢	**Cr**	**53**	**-0.007**	ug/L	0.006	81	273	231	8	Standard
⎣	**Mn**	**55**	**-0.011**	ug/L	0.001	13	1379	925	2	Standard
⎡>	**Ge**	**72**		ug/L			45127	43804	2	KED
⎢	**Ni**	**60**	**-0.003**	ug/L	0.004	128	27	22	24	KED
⎢	**Ni**	**62**	**0.004**	ug/L	0.028	779	5	6	96	KED
⎢	**Cu**	**63**	**0.000**	ug/L	0.001	334	118	116	6	KED
⎢	**Cu**	**65**	**0.001**	ug/L	0.007	638	63	63	18	KED
⎢	**Zn**	**66**	**0.021**	ug/L	0.015	70	40	49	15	KED
⎢	**Zn**	**67**	**0.010**	ug/L	0.051	490	5	6	62	KED
⎣	**As**	**75**	**0.004**	ug/L	0.006	124	7	8	12	KED
	Y	**89**		ug/L			512697	466151	3	Standard
	Kr	**83**		ug/L			65	74	24	Standard
⎡>	**In-1**	**115**		ug/L			11342	12072	1	KED
⎢	**Cd**	**111**	**-0.014**	ug/L	0.008	54	6	3	56	KED
⎣	**Cd**	**114**	**0.001**	ug/L	0.006	1101	4	4	78	KED
⎡>	**In**	**115**		ug/L			888503	834288	2	Standard
⎣	**Ag**	**107**	**0.003**	ug/L	0.001	16	236	276	4	Standard
⎡>	**Tb**	**159**		ug/L			797843	733768	3	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.000	2	255	307	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0108-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 16:38:51
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			36323	43448	1	Standard
	Cl	37		ug/L			4837250	4981370	4	Standard
⌈>	Sc	45		ug/L			768932	717289	5	Standard
|	Cr	52	0.047	ug/L	0.032	68	29685	28724	3	Standard
|	Cr	53	0.041	ug/L	0.010	23	273	360	2	Standard
⌊	Mn	55	0.011	ug/L	0.001	10	1379	1646	3	Standard
⌈>	Ge	72		ug/L			45127	44597	0	KED
|	Ni	60	0.001	ug/L	0.006	550	27	28	30	KED
|	Ni	62	-0.002	ug/L	0.018	727	5	5	78	KED
|	Cu	63	0.012	ug/L	0.008	62	118	166	18	KED
|	Cu	65	0.005	ug/L	0.003	60	63	71	8	KED
|	Zn	66	0.183	ug/L	0.016	8	40	129	5	KED
|	Zn	67	0.299	ug/L	0.034	11	5	29	9	KED
⌊	As	75	0.008	ug/L	0.007	92	7	9	17	KED
	Y	89		ug/L			512697	478520	5	Standard
	Kr	83		ug/L			65	64	21	Standard
⌈>	In-1	115		ug/L			11342	11167	1	KED
|	Cd	111	-0.005	ug/L	0.012	234	6	5	53	KED
⌊	Cd	114	0.006	ug/L	0.007	111	4	7	52	KED
⌈>	In	115		ug/L			888503	840548	1	Standard
⌊	Ag	107	-0.002	ug/L	0.001	29	236	179	9	Standard
⌈>	Tb	159		ug/L			797843	746259	4	Standard
⌊	Pb	208	0.002	ug/L	0.000	6	255	365	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0108-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 16:43:18
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			36323	43184	3	Standard
	Cl	37		ug/L			4837250	4816248	0	Standard
>	Sc	45		ug/L			768932	693333	1	Standard
	Cr	52	25.098	ug/L	0.477	1	29685	568116	0	Standard
	Cr	53	25.104	ug/L	0.181	0	273	63882	1	Standard
	Mn	55	25.836	ug/L	0.328	1	1379	801823	0	Standard
>	Ge	72		ug/L			45127	44971	2	KED
	Ni	60	24.357	ug/L	0.298	1	27	33976	2	KED
	Ni	62	23.887	ug/L	0.654	2	5	5441	1	KED
	Cu	63	24.407	ug/L	0.893	3	118	101878	3	KED
	Cu	65	24.737	ug/L	0.402	1	63	49727	1	KED
	Zn	66	81.117	ug/L	1.021	1	40	40087	1	KED
	Zn	67	75.333	ug/L	2.232	2	5	6151	2	KED
	As	75	24.607	ug/L	0.373	1	7	5978	0	KED
	Y	89		ug/L			512697	461551	0	Standard
	Kr	83		ug/L			65	61	18	Standard
>	In-1	115		ug/L			11342	11412	0	KED
	Cd	111	24.484	ug/L	0.333	1	6	5789	0	KED
	Cd	114	24.856	ug/L	0.308	1	4	14487	0	KED
>	In	115		ug/L			888503	812652	1	Standard
	Ag	107	25.097	ug/L	0.394	1	236	432834	1	Standard
>	Tb	159		ug/L			797843	736413	3	Standard
	Pb	208	26.057	ug/L	0.873	3	255	1524977	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0501-02
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, March 06, 2023 16:48:17
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	54730	2	Standard
	Cl	**37**		ug/L			4837250	4950452	3	Standard
⌈>	**Sc**	**45**		ug/L			768932	750962	4	Standard
|	**Cr**	**52**	**6.436**	ug/L	0.168	2	29685	179305	4	Standard
|	**Cr**	**53**	**6.537**	ug/L	0.159	2	273	18206	3	Standard
⌊	**Mn**	**55**	**7.587**	ug/L	0.181	2	1379	255909	3	Standard
⌈>	**Ge**	**72**		ug/L			45127	40447	6	KED
|	**Ni**	**60**	**0.788**	ug/L	0.017	2	27	1012	4	KED
|	**Ni**	**62**	**0.904**	ug/L	0.036	3	5	190	9	KED
|	**Cu**	**63**	**1.310**	ug/L	0.086	6	118	5006	1	KED
|	**Cu**	**65**	**1.351**	ug/L	0.061	4	63	2491	1	KED
|	**Zn**	**66**	**3.186**	ug/L	0.266	8	40	1447	5	KED
|	**Zn**	**67**	**2.929**	ug/L	0.155	5	5	219	2	KED
⌊	**As**	**75**	**0.090**	ug/L	0.028	30	7	26	17	KED
	Y	**89**		ug/L			512697	490405	3	Standard
	Kr	**83**		ug/L			65	83	3	Standard
⌈>	**In-1**	**115**		ug/L			11342	11102	1	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.012	336	6	5	50	KED
⌊	**Cd**	**114**	**0.011**	ug/L	0.002	16	4	10	9	KED
⌈>	**In**	**115**		ug/L			888503	805676	3	Standard
⌊	**Ag**	**107**	**0.004**	ug/L	0.002	60	236	280	14	Standard
⌈>	**Tb**	**159**		ug/L			797843	765640	4	Standard
⌊	**Pb**	**208**	**0.011**	ug/L	0.001	8	255	906	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0501-03
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, March 06, 2023 16:53:05
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	54419	2	Standard
	Cl	**37**		ug/L			4837250	4877569	4	Standard
⌈>	**Sc**	**45**		ug/L			768932	740406	2	Standard
|	**Cr**	**52**	**4.338**	ug/L	0.112	2	29685	128477	0	Standard
|	**Cr**	**53**	**4.389**	ug/L	0.035	0	273	12143	2	Standard
⌊	**Mn**	**55**	**6.489**	ug/L	0.176	2	1379	216061	3	Standard
⌈>	**Ge**	**72**		ug/L			45127	40661	2	KED
|	**Ni**	**60**	**0.630**	ug/L	0.039	6	27	819	7	KED
|	**Ni**	**62**	**0.778**	ug/L	0.054	6	5	165	4	KED
|	**Cu**	**63**	**1.552**	ug/L	0.056	3	118	5956	2	KED
|	**Cu**	**65**	**1.580**	ug/L	0.056	3	63	2927	5	KED
|	**Zn**	**66**	**2.112**	ug/L	0.144	6	40	978	3	KED
|	**Zn**	**67**	**2.224**	ug/L	0.219	9	5	169	11	KED
⌊	**As**	**75**	**0.075**	ug/L	0.013	16	7	23	11	KED
	Y	**89**		ug/L			512697	495058	2	Standard
	Kr	**83**		ug/L			65	81	29	Standard
⌈>	**In-1**	**115**		ug/L			11342	11221	0	KED
|	**Cd**	**111**	**0.013**	ug/L	0.019	149	6	9	45	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.007	243	4	5	68	KED
⌈>	**In**	**115**		ug/L			888503	814572	2	Standard
⌊	**Ag**	**107**	**-0.004**	ug/L	0.000	9	236	142	2	Standard
⌈>	**Tb**	**159**		ug/L			797843	782784	4	Standard
⌊	**Pb**	**208**	**0.006**	ug/L	0.000	3	255	650	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0501-04
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, March 06, 2023 16:57:32
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	54306	0	Standard
	Cl	**37**		ug/L			4837250	4888239	2	Standard
⌈>	**Sc**	**45**		ug/L			768932	754263	4	Standard
|	**Cr**	**52**	**7.859**	ug/L	0.063	0	29685	213518	3	Standard
|	**Cr**	**53**	**7.812**	ug/L	0.287	3	273	21792	2	Standard
⌊	**Mn**	**55**	**7.506**	ug/L	0.139	1	1379	254264	2	Standard
⌈>	**Ge**	**72**		ug/L			45127	41199	0	KED
|	**Ni**	**60**	**0.550**	ug/L	0.011	2	27	727	2	KED
|	**Ni**	**62**	**0.763**	ug/L	0.089	11	5	164	11	KED
|	**Cu**	**63**	**1.622**	ug/L	0.040	2	118	6303	1	KED
|	**Cu**	**65**	**1.612**	ug/L	0.072	4	63	3023	4	KED
|	**Zn**	**66**	**2.220**	ug/L	0.170	7	40	1040	6	KED
|	**Zn**	**67**	**2.291**	ug/L	0.024	1	5	176	1	KED
⌊	**As**	**75**	**0.079**	ug/L	0.010	12	7	24	8	KED
	Y	**89**		ug/L			512697	482266	4	Standard
	Kr	**83**		ug/L			65	69	13	Standard
⌈>	**In-1**	**115**		ug/L			11342	10775	1	KED
|	**Cd**	**111**	**0.006**	ug/L	0.017	296	6	7	50	KED
⌊	**Cd**	**114**	**0.017**	ug/L	0.007	42	4	13	29	KED
⌈>	**In**	**115**		ug/L			888503	812679	2	Standard
⌊	**Ag**	**107**	**-0.005**	ug/L	0.002	31	236	123	20	Standard
⌈>	**Tb**	**159**		ug/L			797843	786820	1	Standard
⌊	**Pb**	**208**	**0.011**	ug/L	0.000	3	255	948	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0501-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, March 06, 2023 17:02:41
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	63577	0	Standard
	Cl	**37**		ug/L			4837250	4809964	1	Standard
⌈>	**Sc**	**45**		ug/L			768932	759932	4	Standard
|	**Cr**	**52**	**8.456**	ug/L	0.266	3	29685	229109	2	Standard
|	**Cr**	**53**	**8.529**	ug/L	0.228	2	273	23945	2	Standard
⌊	**Mn**	**55**	**7.901**	ug/L	0.242	3	1379	269546	3	Standard
⌈>	**Ge**	**72**		ug/L			45127	44161	1	KED
|	**Ni**	**60**	**1.032**	ug/L	0.064	6	27	1438	4	KED
|	**Ni**	**62**	**1.091**	ug/L	0.051	4	5	249	5	KED
|	**Cu**	**63**	**1.516**	ug/L	0.059	3	118	6326	4	KED
|	**Cu**	**65**	**1.525**	ug/L	0.032	2	63	3069	2	KED
|	**Zn**	**66**	**3.481**	ug/L	0.118	3	40	1727	2	KED
|	**Zn**	**67**	**3.385**	ug/L	0.173	5	5	276	4	KED
⌊	**As**	**75**	**0.070**	ug/L	0.013	18	7	24	12	KED
	Y	**89**		ug/L			512697	503794	5	Standard
	Kr	**83**		ug/L			65	83	32	Standard
⌈>	**In-1**	**115**		ug/L			11342	11438	2	KED
|	**Cd**	**111**	**-0.005**	ug/L	0.013	241	6	5	56	KED
⌊	**Cd**	**114**	**-0.000**	ug/L	0.005	1283	4	4	70	KED
⌈>	**In**	**115**		ug/L			888503	818529	3	Standard
⌊	**Ag**	**107**	**-0.006**	ug/L	0.001	23	236	111	18	Standard
⌈>	**Tb**	**159**		ug/L			797843	795337	0	Standard
⌊	**Pb**	**208**	**0.014**	ug/L	0.001	5	255	1151	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0008-DUP2
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, March 06, 2023 17:10:49
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	59590	2	Standard
	Cl	**37**		ug/L			4837250	4878587	1	Standard
⌈>	**Sc**	**45**		ug/L			768932	756031	3	Standard
|	**Cr**	**52**	**8.728**	ug/L	0.213	2	29685	234379	1	Standard
|	**Cr**	**53**	**8.713**	ug/L	0.171	1	273	24340	2	Standard
⌊	**Mn**	**55**	**8.190**	ug/L	0.063	0	1379	278078	3	Standard
⌈>	**Ge**	**72**		ug/L			45127	42040	2	KED
|	**Ni**	**60**	**1.014**	ug/L	0.032	3	27	1346	3	KED
|	**Ni**	**62**	**1.285**	ug/L	0.062	4	5	278	4	KED
|	**Cu**	**63**	**1.563**	ug/L	0.008	0	118	6202	2	KED
|	**Cu**	**65**	**1.565**	ug/L	0.042	2	63	2997	5	KED
|	**Zn**	**66**	**3.644**	ug/L	0.052	1	40	1719	2	KED
|	**Zn**	**67**	**3.213**	ug/L	0.214	6	5	250	4	KED
⌊	**As**	**75**	**0.068**	ug/L	0.009	13	7	22	11	KED
	Y	**89**		ug/L			512697	494113	0	Standard
	Kr	**83**		ug/L			65	78	19	Standard
⌈>	**In-1**	**115**		ug/L			11342	11080	0	KED
|	**Cd**	**111**	**0.008**	ug/L	0.019	247	6	8	52	KED
⌊	**Cd**	**114**	**0.011**	ug/L	0.002	20	4	10	11	KED
⌈>	**In**	**115**		ug/L			888503	832424	1	Standard
⌊	**Ag**	**107**	**-0.006**	ug/L	0.000	6	236	110	7	Standard
⌈>	**Tb**	**159**		ug/L			797843	798751	2	Standard
⌊	**Pb**	**208**	**0.013**	ug/L	0.001	4	255	1058	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0008-MS2
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, March 06, 2023 17:15:16
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	60175	1	Standard
	Cl	**37**		ug/L			4837250	4897829	3	Standard
⌈>	**Sc**	**45**		ug/L			768932	745906	2	Standard
|	**Cr**	**52**	**21.269**	ug/L	0.788	3	29685	522220	2	Standard
|	**Cr**	**53**	**21.151**	ug/L	0.628	2	273	57915	1	Standard
⌊	**Mn**	**55**	**20.963**	ug/L	0.603	2	1379	700092	2	Standard
⌈>	**Ge**	**72**		ug/L			45127	42269	5	KED
|	**Ni**	**60**	**13.420**	ug/L	0.465	3	27	17588	1	KED
|	**Ni**	**62**	**13.775**	ug/L	0.459	3	5	2953	6	KED
|	**Cu**	**63**	**13.878**	ug/L	0.120	0	118	54505	5	KED
|	**Cu**	**65**	**14.082**	ug/L	0.676	4	63	26593	0	KED
|	**Zn**	**66**	**41.067**	ug/L	1.059	2	40	19088	4	KED
|	**Zn**	**67**	**40.045**	ug/L	0.688	1	5	3075	4	KED
⌊	**As**	**75**	**12.922**	ug/L	0.475	3	7	2951	1	KED
	Y	**89**		ug/L			512697	505764	4	Standard
	Kr	**83**		ug/L			65	73	27	Standard
⌈>	**In-1**	**115**		ug/L			11342	11214	0	KED
|	**Cd**	**111**	**12.397**	ug/L	0.244	1	6	2883	1	KED
⌊	**Cd**	**114**	**12.481**	ug/L	0.082	0	4	7151	1	KED
⌈>	**In**	**115**		ug/L			888503	826743	3	Standard
⌊	**Ag**	**107**	**11.854**	ug/L	0.162	1	236	208070	1	Standard
⌈>	**Tb**	**159**		ug/L			797843	804394	1	Standard
⌊	**Pb**	**208**	**12.232**	ug/L	0.321	2	255	782436	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0330-29
Sample Dil Factor: 5
Comments:
Sample Date/Time: Monday, March 06, 2023 17:20:16
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	49546	3	Standard
	Cl	**37**		ug/L			4837250	4980830	1	Standard
⌈>	**Sc**	**45**		ug/L			768932	804430	1	Standard
|	**Cr**	**52**	**0.084**	ug/L	0.033	38	29685	33158	2	Standard
|	**Cr**	**53**	**0.469**	ug/L	0.009	2	273	1663	0	Standard
⌊	**Mn**	**55**	**311.846**	ug/L	5.412	1	1379	11214553	2	Standard
⌈>	**Ge**	**72**		ug/L			45127	44290	4	KED
|	**Ni**	**60**	**0.471**	ug/L	0.016	3	27	673	1	KED
|	**Ni**	**62**	**0.485**	ug/L	0.069	14	5	114	13	KED
|	**Cu**	**63**	**0.174**	ug/L	0.013	7	118	830	1	KED
|	**Cu**	**65**	**0.171**	ug/L	0.012	7	63	400	5	KED
|	**Zn**	**66**	**0.504**	ug/L	0.060	11	40	285	13	KED
|	**Zn**	**67**	**0.521**	ug/L	0.191	36	5	47	34	KED
⌊	**As**	**75**	**5.540**	ug/L	0.188	3	7	1331	5	KED
	Y	**89**		ug/L			512697	523590	0	Standard
	Kr	**83**		ug/L			65	77	14	Standard
⌈>	**In-1**	**115**		ug/L			11342	11851	1	KED
|	**Cd**	**111**	**-0.005**	ug/L	0.008	157	6	5	33	KED
⌊	**Cd**	**114**	**0.011**	ug/L	0.008	78	4	11	45	KED
⌈>	**In**	**115**		ug/L			888503	885860	1	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.000	15	236	209	0	Standard
⌈>	**Tb**	**159**		ug/L			797843	837291	5	Standard
⌊	**Pb**	**208**	**0.018**	ug/L	0.002	8	255	1492	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL5
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 17:25:59
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	40702	1	Standard
	Cl	**37**		ug/L			4837250	4570526	4	Standard
⎡>	**Sc**	**45**		ug/L			768932	725752	5	Standard
⎢	**Cr**	**52**	**-0.019**	ug/L	0.006	29	29685	27587	4	Standard
⎢	**Cr**	**53**	**-0.007**	ug/L	0.006	89	273	240	8	Standard
⎣	**Mn**	**55**	**-0.001**	ug/L	0.001	209	1379	1280	2	Standard
⎡>	**Ge**	**72**		ug/L			45127	44113	3	KED
⎢	**Ni**	**60**	**0.001**	ug/L	0.003	351	27	27	17	KED
⎢	**Ni**	**62**	**0.029**	ug/L	0.022	75	5	12	39	KED
⎢	**Cu**	**63**	**0.002**	ug/L	0.002	139	118	122	8	KED
⎢	**Cu**	**65**	**-0.006**	ug/L	0.004	72	63	50	14	KED
⎢	**Zn**	**66**	**0.029**	ug/L	0.041	140	40	53	34	KED
⎢	**Zn**	**67**	**0.145**	ug/L	0.007	4	5	17	0	KED
⎣	**As**	**75**	**0.003**	ug/L	0.006	221	7	8	18	KED
	Y	**89**		ug/L			512697	473979	5	Standard
	Kr	**83**		ug/L			65	71	12	Standard
⎡>	**In-1**	**115**		ug/L			11342	12007	2	KED
⎢	**Cd**	**111**	**-0.007**	ug/L	0.016	236	6	5	73	KED
⎣	**Cd**	**114**	**0.008**	ug/L	0.013	155	4	9	80	KED
⎡>	**In**	**115**		ug/L			888503	848007	5	Standard
⎣	**Ag**	**107**	**-0.008**	ug/L	0.001	12	236	90	20	Standard
⎡>	**Tb**	**159**		ug/L			797843	770768	6	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.000	40	255	289	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 17:30:27
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	37807	5	Standard
	Cl	**37**		ug/L			4837250	5067098	1	Standard
⎡>	**Sc**	**45**		ug/L			768932	746244	2	Standard
⎢	**Cr**	**52**	**49.382**	ug/L	0.558	1	29685	1175606	3	Standard
⎢	**Cr**	**53**	**49.556**	ug/L	0.900	1	273	135497	4	Standard
⎣	**Mn**	**55**	**50.457**	ug/L	0.701	1	1379	1684658	3	Standard
⎡>	**Ge**	**72**		ug/L			45127	44514	2	KED
⎢	**Ni**	**60**	**48.454**	ug/L	1.164	2	27	66908	4	KED
⎢	**Ni**	**62**	**48.364**	ug/L	0.674	1	5	10903	2	KED
⎢	**Cu**	**63**	**47.535**	ug/L	0.590	1	118	196367	3	KED
⎢	**Cu**	**65**	**49.014**	ug/L	0.129	0	63	97488	2	KED
⎢	**Zn**	**66**	**49.413**	ug/L	0.434	0	40	24189	2	KED
⎢	**Zn**	**67**	**50.004**	ug/L	0.472	0	5	4045	3	KED
⎣	**As**	**75**	**49.964**	ug/L	0.139	0	7	12009	2	KED
	Y	**89**		ug/L			512697	494633	1	Standard
	Kr	**83**		ug/L			65	78	20	Standard
⎡>	**In-1**	**115**		ug/L			11342	11726	3	KED
⎢	**Cd**	**111**	**49.670**	ug/L	0.853	1	6	12056	2	KED
⎣	**Cd**	**114**	**49.294**	ug/L	1.170	2	4	29509	2	KED
⎡>	**In**	**115**		ug/L			888503	877456	3	Standard
⎣	**Ag**	**107**	**49.037**	ug/L	0.387	0	236	913139	3	Standard
⎡>	**Tb**	**159**		ug/L			797843	816464	3	Standard
⎣	**Pb**	**208**	**48.582**	ug/L	1.859	3	255	3152115	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 17:37:38
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	37355	3	Standard
	Cl	**37**		ug/L			4837250	4968764	3	Standard
⎡>	**Sc**	**45**		ug/L			768932	751076	3	Standard
⎢	**Cr**	**52**	**-0.053**	ug/L	0.007	12	29685	27754	3	Standard
⎢	**Cr**	**53**	**-0.012**	ug/L	0.002	17	273	232	6	Standard
⎣	**Mn**	**55**	**-0.011**	ug/L	0.001	10	1379	963	0	Standard
⎡>	**Ge**	**72**		ug/L			45127	44522	4	KED
⎢	**Ni**	**60**	**-0.002**	ug/L	0.002	81	27	23	12	KED
⎢	**Ni**	**62**	**0.014**	ug/L	0.010	68	5	8	24	KED
⎢	**Cu**	**63**	**-0.001**	ug/L	0.001	127	118	113	1	KED
⎢	**Cu**	**65**	**-0.004**	ug/L	0.006	153	63	54	23	KED
⎢	**Zn**	**66**	**0.001**	ug/L	0.016	1440	40	40	19	KED
⎢	**Zn**	**67**	**0.000**	ug/L	0.068	145185	5	5	100	KED
⎣	**As**	**75**	**0.003**	ug/L	0.012	412	7	8	36	KED
	Y	**89**		ug/L			512697	489285	3	Standard
	Kr	**83**		ug/L			65	74	14	Standard
⎡>	**In-1**	**115**		ug/L			11342	11821	4	KED
⎢	**Cd**	**111**	**-0.011**	ug/L	0.007	60	6	4	35	KED
⎣	**Cd**	**114**	**-0.003**	ug/L	0.002	56	4	2	43	KED
⎡>	**In**	**115**		ug/L			888503	862033	2	Standard
⎣	**Ag**	**107**	**0.003**	ug/L	0.001	30	236	288	4	Standard
⎡>	**Tb**	**159**		ug/L			797843	785569	5	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.001	58	255	304	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0047-01
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 17:43:02
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	51983	0	Standard
	Cl	**37**		ug/L			4837250	5180464	0	Standard
⌈>	**Sc**	**45**		ug/L			768932	758073	1	Standard
|	**Cr**	**52**	**4.915**	ug/L	0.120	2	29685	145170	0	Standard
|	**Cr**	**53**	**5.300**	ug/L	0.037	0	273	14957	1	Standard
⌊	**Mn**	**55**	**76.769**	ug/L	2.516	3	1379	2601461	1	Standard
⌈>	**Ge**	**72**		ug/L			45127	45237	1	KED
|	**Ni**	**60**	**5.015**	ug/L	0.247	4	27	7056	4	KED
|	**Ni**	**62**	**5.206**	ug/L	0.239	4	5	1197	3	KED
|	**Cu**	**63**	**24.700**	ug/L	0.223	0	118	103730	0	KED
|	**Cu**	**65**	**24.687**	ug/L	0.482	1	63	49923	1	KED
|	**Zn**	**66**	**319.781**	ug/L	9.139	2	40	158846	2	KED
|	**Zn**	**67**	**299.869**	ug/L	4.777	1	5	24620	0	KED
⌊	**As**	**75**	**2.058**	ug/L	0.043	2	7	510	2	KED
	Y	**89**		ug/L			512697	510032	0	Standard
	Kr	**83**		ug/L			65	73	22	Standard
⌈>	**In-1**	**115**		ug/L			11342	12014	1	KED
|	**Cd**	**111**	**0.074**	ug/L	0.008	10	6	25	7	KED
⌊	**Cd**	**114**	**0.076**	ug/L	0.009	11	4	51	8	KED
⌈>	**In**	**115**		ug/L			888503	864626	3	Standard
⌊	**Ag**	**107**	**0.028**	ug/L	0.001	3	236	735	5	Standard
⌈>	**Tb**	**159**		ug/L			797843	804697	3	Standard
⌊	**Pb**	**208**	**7.451**	ug/L	0.148	1	255	476778	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0048-01
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 17:48:30
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	56792	1	Standard
	Cl	**37**		ug/L			4837250	5464306	3	Standard
⌈>	**Sc**	**45**		ug/L			768932	771306	5	Standard
|	**Cr**	**52**	**0.498**	ug/L	0.030	6	29685	41691	3	Standard
|	**Cr**	**53**	**0.870**	ug/L	0.017	1	273	2725	3	Standard
⌊	**Mn**	**55**	**4.796**	ug/L	0.109	2	1379	166606	3	Standard
⌈>	**Ge**	**72**		ug/L			45127	45003	3	KED
|	**Ni**	**60**	**0.764**	ug/L	0.011	1	27	1094	4	KED
|	**Ni**	**62**	**0.797**	ug/L	0.066	8	5	187	8	KED
|	**Cu**	**63**	**5.284**	ug/L	0.077	1	118	22168	3	KED
|	**Cu**	**65**	**5.371**	ug/L	0.131	2	63	10849	1	KED
|	**Zn**	**66**	**20.469**	ug/L	0.096	0	40	10153	3	KED
|	**Zn**	**67**	**20.208**	ug/L	0.477	2	5	1655	1	KED
⌊	**As**	**75**	**2.255**	ug/L	0.072	3	7	555	5	KED
	Y	**89**		ug/L			512697	493953	3	Standard
	Kr	**83**		ug/L			65	73	19	Standard
⌈>	**In-1**	**115**		ug/L			11342	11563	0	KED
|	**Cd**	**111**	**0.002**	ug/L	0.008	391	6	7	27	KED
⌊	**Cd**	**114**	**0.011**	ug/L	0.006	58	4	10	35	KED
⌈>	**In**	**115**		ug/L			888503	860549	2	Standard
⌊	**Ag**	**107**	**-0.003**	ug/L	0.002	61	236	180	16	Standard
⌈>	**Tb**	**159**		ug/L			797843	787210	3	Standard
⌊	**Pb**	**208**	**0.340**	ug/L	0.011	3	255	21500	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0048-02
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 17:54:10
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	58766	2	Standard
	Cl	**37**		ug/L			4837250	5175977	1	Standard
⌈>	**Sc**	**45**		ug/L			768932	745333	0	Standard
|	**Cr**	**52**	**1.028**	ug/L	0.029	2	29685	52614	2	Standard
|	**Cr**	**53**	**1.374**	ug/L	0.018	1	273	4009	1	Standard
⌊	**Mn**	**55**	**20.434**	ug/L	0.564	2	1379	682078	2	Standard
⌈>	**Ge**	**72**		ug/L			45127	43770	2	KED
|	**Ni**	**60**	**0.895**	ug/L	0.012	1	27	1240	1	KED
|	**Ni**	**62**	**1.019**	ug/L	0.052	5	5	231	2	KED
|	**Cu**	**63**	**5.858**	ug/L	0.223	3	118	23900	5	KED
|	**Cu**	**65**	**6.131**	ug/L	0.112	1	63	12041	1	KED
|	**Zn**	**66**	**55.062**	ug/L	0.733	1	40	26500	2	KED
|	**Zn**	**67**	**52.298**	ug/L	0.857	1	5	4159	2	KED
⌊	**As**	**75**	**0.883**	ug/L	0.117	13	7	215	10	KED
	Y	**89**		ug/L			512697	495568	0	Standard
	Kr	**83**		ug/L			65	65	11	Standard
⌈>	**In-1**	**115**		ug/L			11342	11488	4	KED
|	**Cd**	**111**	**0.007**	ug/L	0.019	279	6	8	52	KED
⌊	**Cd**	**114**	**0.017**	ug/L	0.010	55	4	14	35	KED
⌈>	**In**	**115**		ug/L			888503	872590	1	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.000	53	236	248	3	Standard
⌈>	**Tb**	**159**		ug/L			797843	788106	3	Standard
⌊	**Pb**	**208**	**0.542**	ug/L	0.017	3	255	34168	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0556-02
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, March 06, 2023 17:58:51
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			36323	46074	1	Standard
	Cl	37		ug/L			4837250	4911930	0	Standard
>	Sc	45		ug/L			768932	732797	1	Standard
	Cr	52	8.761	ug/L	0.122	1	29685	228019	0	Standard
	Cr	53	8.689	ug/L	0.016	0	273	23538	1	Standard
	Mn	55	6.189	ug/L	0.099	1	1379	204003	1	Standard
>	Ge	72		ug/L			45127	43044	2	KED
	Ni	60	0.455	ug/L	0.037	8	27	634	10	KED
	Ni	62	0.507	ug/L	0.080	15	5	116	17	KED
	Cu	63	1.517	ug/L	0.004	0	118	6169	2	KED
	Cu	65	1.560	ug/L	0.073	4	63	3056	3	KED
	Zn	66	1.535	ug/L	0.068	4	40	764	5	KED
	Zn	67	1.637	ug/L	0.022	1	5	133	2	KED
	As	75	0.071	ug/L	0.005	7	7	23	4	KED
	Y	89		ug/L			512697	489167	2	Standard
	Kr	83		ug/L			65	75	7	Standard
>	In-1	115		ug/L			11342	11076	1	KED
	Cd	111	0.003	ug/L	0.003	72	6	7	7	KED
	Cd	114	0.009	ug/L	0.009	104	4	9	56	KED
>	In	115		ug/L			888503	810765	1	Standard
	Ag	107	-0.007	ug/L	0.000	6	236	100	6	Standard
>	Tb	159		ug/L			797843	775134	3	Standard
	Pb	208	0.010	ug/L	0.001	7	255	888	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0556-03
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, March 06, 2023 18:03:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	47016	2	Standard
	Cl	**37**		ug/L			4837250	4896120	2	Standard
⌈>	**Sc**	**45**		ug/L			768932	740379	3	Standard
|	**Cr**	**52**	**10.996**	ug/L	0.061	0	29685	281907	3	Standard
|	**Cr**	**53**	**10.936**	ug/L	0.157	1	273	29861	2	Standard
⌊	**Mn**	**55**	**6.346**	ug/L	0.071	1	1379	211374	3	Standard
⌈>	**Ge**	**72**		ug/L			45127	41477	0	KED
|	**Ni**	**60**	**0.503**	ug/L	0.040	7	27	671	6	KED
|	**Ni**	**62**	**0.682**	ug/L	0.104	15	5	148	15	KED
|	**Cu**	**63**	**1.815**	ug/L	0.026	1	118	7090	1	KED
|	**Cu**	**65**	**1.837**	ug/L	0.019	1	63	3460	1	KED
|	**Zn**	**66**	**2.221**	ug/L	0.117	5	40	1048	4	KED
|	**Zn**	**67**	**2.022**	ug/L	0.079	3	5	157	4	KED
⌊	**As**	**75**	**0.082**	ug/L	0.013	15	7	25	10	KED
	Y	**89**		ug/L			512697	492492	2	Standard
	Kr	**83**		ug/L			65	73	18	Standard
⌈>	**In-1**	**115**		ug/L			11342	10914	0	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.007	240	6	5	28	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.008	186	4	6	67	KED
⌈>	**In**	**115**		ug/L			888503	813085	3	Standard
⌊	**Ag**	**107**	**-0.009**	ug/L	0.000	1	236	64	5	Standard
⌈>	**Tb**	**159**		ug/L			797843	785881	3	Standard
⌊	**Pb**	**208**	**0.011**	ug/L	0.001	6	255	961	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0556-04
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, March 06, 2023 18:08:14
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	53297	1	Standard
	Cl	**37**		ug/L			4837250	4617066	2	Standard
>	**Sc**	**45**		ug/L			768932	709740	5	Standard
	Cr	**52**	**4.923**	ug/L	0.107	2	29685	136037	3	Standard
	Cr	**53**	**4.873**	ug/L	0.083	1	273	12889	4	Standard
	Mn	**55**	**8.300**	ug/L	0.086	1	1379	264494	4	Standard
>	**Ge**	**72**		ug/L			45127	43081	3	KED
	Ni	**60**	**0.896**	ug/L	0.063	7	27	1222	8	KED
	Ni	**62**	**0.928**	ug/L	0.033	3	5	207	0	KED
	Cu	**63**	**1.546**	ug/L	0.064	4	118	6284	3	KED
	Cu	**65**	**1.555**	ug/L	0.048	3	63	3053	6	KED
	Zn	**66**	**2.375**	ug/L	0.076	3	40	1162	6	KED
	Zn	**67**	**2.336**	ug/L	0.107	4	5	187	2	KED
	As	**75**	**0.081**	ug/L	0.021	25	7	26	16	KED
	Y	**89**		ug/L			512697	468191	3	Standard
	Kr	**83**		ug/L			65	73	22	Standard
>	**In-1**	**115**		ug/L			11342	10875	2	KED
	Cd	**111**	**0.010**	ug/L	0.016	164	6	8	40	KED
	Cd	**114**	**0.002**	ug/L	0.003	158	4	5	35	KED
>	**In**	**115**		ug/L			888503	805947	4	Standard
	Ag	**107**	**-0.008**	ug/L	0.001	11	236	82	13	Standard
>	**Tb**	**159**		ug/L			797843	776455	4	Standard
	Pb	**208**	**0.008**	ug/L	0.001	9	255	751	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0556-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, March 06, 2023 18:12:41
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			36323	45424	3	Standard
	Cl	37		ug/L			4837250	4878398	2	Standard
>	Sc	45		ug/L			768932	751057	3	Standard
	Cr	52	8.834	ug/L	0.098	1	29685	235381	3	Standard
	Cr	53	8.867	ug/L	0.104	1	273	24607	3	Standard
	Mn	55	6.757	ug/L	0.069	1	1379	228197	4	Standard
>	Ge	72		ug/L			45127	41689	2	KED
	Ni	60	0.579	ug/L	0.042	7	27	773	8	KED
	Ni	62	0.625	ug/L	0.092	14	5	137	13	KED
	Cu	63	1.787	ug/L	0.059	3	118	7020	4	KED
	Cu	65	1.812	ug/L	0.065	3	63	3430	1	KED
	Zn	66	2.584	ug/L	0.123	4	40	1219	2	KED
	Zn	67	2.442	ug/L	0.167	6	5	189	4	KED
	As	75	0.061	ug/L	0.005	8	7	20	3	KED
	Y	89		ug/L			512697	500899	4	Standard
	Kr	83		ug/L			65	88	6	Standard
>	In-1	115		ug/L			11342	11348	3	KED
	Cd	111	0.001	ug/L	0.001	110	6	6	7	KED
	Cd	114	0.007	ug/L	0.006	90	4	8	47	KED
>	In	115		ug/L			888503	835895	2	Standard
	Ag	107	-0.008	ug/L	0.001	9	236	73	18	Standard
>	Tb	159		ug/L			797843	799584	3	Standard
	Pb	208	0.072	ug/L	0.005	6	255	4800	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0108-DUP1
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, March 06, 2023 18:17:09
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			36323	44368	1	Standard
	Cl	37		ug/L			4837250	4850987	4	Standard
>	Sc	45		ug/L			768932	737703	2	Standard
	Cr	52	8.945	ug/L	0.228	2	29685	233697	0	Standard
	Cr	53	8.881	ug/L	0.207	2	273	24204	0	Standard
	Mn	55	6.674	ug/L	0.173	2	1379	221444	4	Standard
>	Ge	72		ug/L			45127	42854	2	KED
	Ni	60	0.507	ug/L	0.025	4	27	698	2	KED
	Ni	62	0.578	ug/L	0.021	3	5	130	3	KED
	Cu	63	1.775	ug/L	0.077	4	118	7164	3	KED
	Cu	65	1.787	ug/L	0.050	2	63	3479	2	KED
	Zn	66	1.694	ug/L	0.078	4	40	836	6	KED
	Zn	67	1.672	ug/L	0.187	11	5	135	8	KED
	As	75	0.059	ug/L	0.013	22	7	21	15	KED
	Y	89		ug/L			512697	490486	2	Standard
	Kr	83		ug/L			65	66	17	Standard
>	In-1	115		ug/L			11342	11147	1	KED
	Cd	111	-0.008	ug/L	0.004	55	6	4	20	KED
	Cd	114	0.006	ug/L	0.008	127	4	7	58	KED
>	In	115		ug/L			888503	833121	3	Standard
	Ag	107	-0.008	ug/L	0.000	2	236	88	6	Standard
>	Tb	159		ug/L			797843	798747	2	Standard
	Pb	208	0.010	ug/L	0.000	2	255	880	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0108-MS1
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, March 06, 2023 18:21:36
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			36323	43206	1	Standard
	Cl	37		ug/L			4837250	4782817	1	Standard
>	Sc	45		ug/L			768932	740891	1	Standard
	Cr	52	20.876	ug/L	0.252	1	29685	509785	1	Standard
	Cr	53	20.534	ug/L	0.370	1	273	55886	2	Standard
	Mn	55	18.876	ug/L	0.425	2	1379	626441	3	Standard
>	Ge	72		ug/L			45127	40732	3	KED
	Ni	60	12.418	ug/L	0.351	2	27	15707	5	KED
	Ni	62	12.351	ug/L	0.246	1	5	2551	3	KED
	Cu	63	13.513	ug/L	0.202	1	118	51134	2	KED
	Cu	65	13.612	ug/L	0.264	1	63	24824	5	KED
	Zn	66	39.461	ug/L	0.262	0	40	17683	3	KED
	Zn	67	34.742	ug/L	1.416	4	5	2572	4	KED
	As	75	12.800	ug/L	0.181	1	7	2819	2	KED
	Y	89		ug/L			512697	485622	3	Standard
	Kr	83		ug/L			65	81	8	Standard
>	In-1	115		ug/L			11342	10677	2	KED
	Cd	111	12.354	ug/L	0.096	0	6	2736	2	KED
	Cd	114	12.366	ug/L	0.313	2	4	6744	2	KED
>	In	115		ug/L			888503	827549	2	Standard
	Ag	107	11.058	ug/L	0.035	0	236	194338	2	Standard
>	Tb	159		ug/L			797843	792415	4	Standard
	Pb	208	11.995	ug/L	0.454	3	255	755243	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0047-01RE1
Sample Dil Factor: 5
Comments:
Sample Date/Time: Monday, March 06, 2023 18:27:22
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	38434	3	Standard
	Cl	**37**		ug/L			4837250	4745715	1	Standard
⌈>	**Sc**	**45**		ug/L			768932	733738	2	Standard
|	**Cr**	**52**	**1.023**	ug/L	0.047	4	29685	51665	2	Standard
|	**Cr**	**53**	**1.116**	ug/L	0.029	2	273	3253	4	Standard
⌊	**Mn**	**55**	**16.437**	ug/L	0.230	1	1379	540232	1	Standard
⌈>	**Ge**	**72**		ug/L			45127	45219	2	KED
|	**Ni**	**60**	**1.052**	ug/L	0.027	2	27	1501	3	KED
|	**Ni**	**62**	**1.013**	ug/L	0.063	6	5	237	5	KED
|	**Cu**	**63**	**4.908**	ug/L	0.154	3	118	20691	2	KED
|	**Cu**	**65**	**4.975**	ug/L	0.165	3	63	10106	3	KED
|	**Zn**	**66**	**65.519**	ug/L	1.677	2	40	32565	3	KED
|	**Zn**	**67**	**60.066**	ug/L	0.421	0	5	4934	2	KED
⌊	**As**	**75**	**0.442**	ug/L	0.026	5	7	115	5	KED
	Y	**89**		ug/L			512697	489928	2	Standard
	Kr	**83**		ug/L			65	64	2	Standard
⌈>	**In-1**	**115**		ug/L			11342	11664	1	KED
|	**Cd**	**111**	**0.009**	ug/L	0.013	146	6	8	32	KED
⌊	**Cd**	**114**	**0.022**	ug/L	0.012	56	4	17	42	KED
⌈>	**In**	**115**		ug/L			888503	868513	3	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.001	44	236	273	9	Standard
⌈>	**Tb**	**159**		ug/L			797843	798880	1	Standard
⌊	**Pb**	**208**	**1.578**	ug/L	0.025	1	255	100491	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV6
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 18:31:50
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	36306	2	Standard
	Cl	**37**		ug/L			4837250	4973842	3	Standard
⎡>	**Sc**	**45**		ug/L			768932	749653	2	Standard
⎢	**Cr**	**52**	**50.179**	ug/L	0.633	1	29685	1199349	2	Standard
⎢	**Cr**	**53**	**48.812**	ug/L	0.554	1	273	134031	1	Standard
⎣	**Mn**	**55**	**49.713**	ug/L	0.121	0	1379	1667052	1	Standard
⎡>	**Ge**	**72**		ug/L			45127	44540	2	KED
⎢	**Ni**	**60**	**47.074**	ug/L	1.165	2	27	65034	4	KED
⎢	**Ni**	**62**	**46.681**	ug/L	1.328	2	5	10534	4	KED
⎢	**Cu**	**63**	**46.529**	ug/L	0.236	0	118	192314	3	KED
⎢	**Cu**	**65**	**46.900**	ug/L	0.800	1	63	93362	4	KED
⎢	**Zn**	**66**	**48.860**	ug/L	1.969	4	40	23922	3	KED
⎢	**Zn**	**67**	**47.916**	ug/L	2.029	4	5	3876	2	KED
⎣	**As**	**75**	**49.023**	ug/L	1.304	2	7	11790	3	KED
	Y	**89**		ug/L			512697	503204	2	Standard
	Kr	**83**		ug/L			65	77	21	Standard
⎡>	**In-1**	**115**		ug/L			11342	11276	2	KED
⎢	**Cd**	**111**	**49.313**	ug/L	0.592	1	6	11512	1	KED
⎣	**Cd**	**114**	**48.996**	ug/L	1.402	2	4	28204	1	KED
⎡>	**In**	**115**		ug/L			888503	875077	2	Standard
⎣	**Ag**	**107**	**48.394**	ug/L	0.393	0	236	898596	2	Standard
⎡>	**Tb**	**159**		ug/L			797843	838095	2	Standard
⎣	**Pb**	**208**	**47.470**	ug/L	1.838	3	255	3161992	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB6
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 18:39:02
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	35843	3	Standard
	Cl	**37**		ug/L			4837250	4897188	3	Standard
⎡>	**Sc**	**45**		ug/L			768932	717811	4	Standard
⎢	**Cr**	**52**	**-0.013**	ug/L	0.035	266	29685	27398	2	Standard
⎢	**Cr**	**53**	**-0.013**	ug/L	0.004	27	273	221	2	Standard
⎣	**Mn**	**55**	**-0.013**	ug/L	0.000	2	1379	885	4	Standard
⎡>	**Ge**	**72**		ug/L			45127	43729	2	KED
⎢	**Ni**	**60**	**-0.001**	ug/L	0.008	1082	27	25	43	KED
⎢	**Ni**	**62**	**0.024**	ug/L	0.022	92	5	10	44	KED
⎢	**Cu**	**63**	**-0.002**	ug/L	0.004	172	118	106	16	KED
⎢	**Cu**	**65**	**-0.009**	ug/L	0.005	57	63	43	24	KED
⎢	**Zn**	**66**	**0.003**	ug/L	0.006	229	40	40	7	KED
⎢	**Zn**	**67**	**0.042**	ug/L	0.014	32	5	8	12	KED
⎣	**As**	**75**	**0.005**	ug/L	0.012	234	7	8	30	KED
	Y	**89**		ug/L			512697	464424	3	Standard
	Kr	**83**		ug/L			65	47	16	Standard
⎡>	**In-1**	**115**		ug/L			11342	11739	2	KED
⎢	**Cd**	**111**	**-0.004**	ug/L	0.015	421	6	6	59	KED
⎣	**Cd**	**114**	**0.006**	ug/L	0.008	129	4	8	55	KED
⎡>	**In**	**115**		ug/L			888503	851050	1	Standard
⎣	**Ag**	**107**	**0.005**	ug/L	0.002	34	236	319	10	Standard
⎡>	**Tb**	**159**		ug/L			797843	778054	4	Standard
⎣	**Pb**	**208**	**0.000**	ug/L	0.000	38	255	274	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0083-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 18:47:30
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			36323	46201	2	Standard
	Cl	37		ug/L			4837250	4520303	2	Standard
>	Sc	45		ug/L			768932	655694	2	Standard
	Cr	52	0.087	ug/L	0.025	28	29685	27080	2	Standard
	Cr	53	0.035	ug/L	0.004	11	273	317	6	Standard
	Mn	55	0.205	ug/L	0.009	4	1379	7190	2	Standard
>	Ge	72		ug/L			45127	44334	1	KED
	Ni	60	0.014	ug/L	0.007	52	27	46	24	KED
	Ni	62	0.026	ug/L	0.026	99	5	11	50	KED
	Cu	63	0.023	ug/L	0.006	27	118	212	10	KED
	Cu	65	0.020	ug/L	0.007	36	63	102	12	KED
	Zn	66	0.491	ug/L	0.077	15	40	278	11	KED
	Zn	67	0.410	ug/L	0.127	30	5	38	28	KED
	As	75	0.007	ug/L	0.004	56	7	9	8	KED
	Y	89		ug/L			512697	433082	3	Standard
	Kr	83		ug/L			65	71	16	Standard
>	In-1	115		ug/L			11342	11567	1	KED
	Cd	111	-0.001	ug/L	0.013	1930	6	6	49	KED
	Cd	114	0.005	ug/L	0.003	66	4	7	27	KED
>	In	115		ug/L			888503	798265	3	Standard
	Ag	107	-0.003	ug/L	0.001	50	236	168	11	Standard
>	Tb	159		ug/L			797843	729482	5	Standard
	Pb	208	0.012	ug/L	0.001	8	255	940	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0083-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 18:51:57
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			36323	51223	1	Standard
	Cl	37		ug/L			4837250	4791702	1	Standard
>	Sc	45		ug/L			768932	708931	7	Standard
	Cr	52	26.223	ug/L	0.993	3	29685	604674	4	Standard
	Cr	53	25.627	ug/L	1.342	5	273	66496	2	Standard
	Mn	55	26.594	ug/L	1.057	3	1379	842268	3	Standard
>	Ge	72		ug/L			45127	43145	1	KED
	Ni	60	24.442	ug/L	0.367	1	27	32709	0	KED
	Ni	62	24.409	ug/L	1.055	4	5	5333	2	KED
	Cu	63	24.600	ug/L	0.599	2	118	98511	1	KED
	Cu	65	24.903	ug/L	0.318	1	63	48029	1	KED
	Zn	66	81.155	ug/L	1.847	2	40	38476	2	KED
	Zn	67	75.022	ug/L	0.818	1	5	5878	0	KED
	As	75	25.162	ug/L	0.538	2	7	5864	0	KED
	Y	89		ug/L			512697	456441	4	Standard
	Kr	83		ug/L			65	77	19	Standard
>	In-1	115		ug/L			11342	11505	0	KED
	Cd	111	25.240	ug/L	0.860	3	6	6016	2	KED
	Cd	114	25.018	ug/L	0.413	1	4	14702	1	KED
>	In	115		ug/L			888503	833784	7	Standard
	Ag	107	26.498	ug/L	0.961	3	236	468127	4	Standard
>	Tb	159		ug/L			797843	764678	4	Standard
	Pb	208	26.174	ug/L	0.488	1	255	1590907	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0581-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 18:57:59

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	44244	1	Standard
	Cl	**37**		ug/L			4837250	4678563	5	Standard
⌈>	**Sc**	**45**		ug/L			768932	718125	3	Standard
|	**Cr**	**52**	**4.794**	ug/L	0.100	2	29685	134796	1	Standard
|	**Cr**	**53**	**4.890**	ug/L	0.050	1	273	13090	2	Standard
⌊	**Mn**	**55**	**25.609**	ug/L	0.250	0	1379	823448	4	Standard
⌈>	**Ge**	**72**		ug/L			45127	44190	3	KED
|	**Ni**	**60**	**4.410**	ug/L	0.126	2	27	6064	1	KED
|	**Ni**	**62**	**15.576**	ug/L	0.749	4	5	3493	7	KED
|	**Cu**	**63**	**4728.574**	ug/L	92.566	1	118	19371217	2	KED
|	**Cu**	**65**	**4751.937**	ug/L	61.037	1	63	9373760	2	KED
|	**Zn**	**66**	**1322.209**	ug/L	14.808	1	40	641430	2	KED
|	**Zn**	**67**	**1219.150**	ug/L	18.452	1	5	97749	2	KED
⌊	**As**	**75**	**0.227**	ug/L	0.010	4	7	61	1	KED
	Y	**89**		ug/L			512697	474615	4	Standard
	Kr	**83**		ug/L			65	76	12	Standard
⌈>	**In-1**	**115**		ug/L			11342	12014	2	KED
|	**Cd**	**111**	**0.055**	ug/L	0.021	39	6	20	25	KED
⌊	**Cd**	**114**	**0.056**	ug/L	0.016	28	4	38	22	KED
⌈>	**In**	**115**		ug/L			888503	830094	2	Standard
⌊	**Ag**	**107**	**1.073**	ug/L	0.004	0	236	19124	2	Standard
⌈>	**Tb**	**159**		ug/L			797843	788416	4	Standard
⌊	**Pb**	**208**	**28.078**	ug/L	0.750	2	255	1759102	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0581-02
Sample Dil Factor: 20
DEL
Comments:
Sample Date/Time: Monday, March 06, 2023 19:03:38
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	43198	1	Standard
	Cl	**37**		ug/L			4837250	5265614	1	Standard
⎡>	**Sc**	**45**		ug/L			768932	719952	1	Standard
⎢	**Cr**	**52**	**0.024**	ug/L	0.015	63	29685	28334	2	Standard
⎢	**Cr**	**53**	**0.696**	ug/L	0.010	1	273	2086	1	Standard
⎣	**Mn**	**55**	**12.389**	ug/L	0.280	2	1379	400032	3	Standard
⎡>	**Ge**	**72**		ug/L			45127	44662	0	KED
⎢	**Ni**	**60**	**0.243**	ug/L	0.010	4	27	363	4	KED
⎢	**Ni**	**62**	**0.304**	ug/L	0.043	14	5	74	12	KED
⎢	**Cu**	**63**	**19.093**	ug/L	0.116	0	118	79195	0	KED
⎢	**Cu**	**65**	**19.347**	ug/L	0.342	1	63	38641	0	KED
⎢	**Zn**	**66**	**34.041**	ug/L	0.484	1	40	16732	1	KED
⎢	**Zn**	**67**	**30.929**	ug/L	0.411	1	5	2512	2	KED
⎣	**As**	**75**	**0.015**	ug/L	0.015	100	7	11	31	KED
	Y	**89**		ug/L			512697	468631	1	Standard
	Kr	**83**		ug/L			65	70	16	Standard
⎡>	**In-1**	**115**		ug/L			11342	11587	3	KED
⎢	**Cd**	**111**	**0.021**	ug/L	0.030	144	6	11	59	KED
⎣	**Cd**	**114**	**0.009**	ug/L	0.002	20	4	9	12	KED
⎡>	**In**	**115**		ug/L			888503	819761	2	Standard
⎣	**Ag**	**107**	**0.004**	ug/L	0.001	32	236	289	10	Standard
⎡>	**Tb**	**159**		ug/L			797843	764333	3	Standard
⎣	**Pb**	**208**	**0.941**	ug/L	0.030	3	255	57376	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0581-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 19:08:06
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			36323	45217	3	Standard
	Cl	37		ug/L			4837250	4944947	2	Standard
>	Sc	45		ug/L			768932	738112	1	Standard
	Cr	52	-0.004	ug/L	0.012	308	29685	28407	1	Standard
	Cr	53	0.412	ug/L	0.013	3	273	1374	3	Standard
	Mn	55	23.545	ug/L	0.273	1	1379	778066	1	Standard
>	Ge	72		ug/L			45127	43050	1	KED
	Ni	60	1.281	ug/L	0.015	1	27	1735	2	KED
	Ni	62	1.237	ug/L	0.061	4	5	274	3	KED
	Cu	63	14.073	ug/L	0.153	1	118	56301	2	KED
	Cu	65	14.394	ug/L	0.701	4	63	27740	6	KED
	Zn	66	91.347	ug/L	2.482	2	40	43228	4	KED
	Zn	67	81.659	ug/L	1.516	1	5	6386	3	KED
	As	75	0.018	ug/L	0.013	73	7	11	26	KED
	Y	89		ug/L			512697	471097	2	Standard
	Kr	83		ug/L			65	73	19	Standard
>	In-1	115		ug/L			11342	11509	3	KED
	Cd	111	0.009	ug/L	0.014	146	6	8	32	KED
	Cd	114	0.007	ug/L	0.002	29	4	8	12	KED
>	In	115		ug/L			888503	864199	3	Standard
	Ag	107	0.006	ug/L	0.001	16	236	340	6	Standard
>	Tb	159		ug/L			797843	793908	5	Standard
	Pb	208	0.276	ug/L	0.006	2	255	17651	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0045-DUP1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 19:13:58
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			36323	43214	2	Standard
	Cl	37		ug/L			4837250	4930770	1	Standard
⌈>	Sc	45		ug/L			768932	718657	0	Standard
|	Cr	52	0.010	ug/L	0.021	201	29685	27978	2	Standard
|	Cr	53	0.442	ug/L	0.014	3	273	1416	1	Standard
⌊	Mn	55	24.667	ug/L	0.789	3	1379	793487	2	Standard
⌈>	Ge	72		ug/L			45127	45215	1	KED
|	Ni	60	1.339	ug/L	0.028	2	27	1904	3	KED
|	Ni	62	1.335	ug/L	0.042	3	5	311	1	KED
|	Cu	63	13.687	ug/L	0.118	0	118	57505	0	KED
|	Cu	65	13.563	ug/L	0.126	0	63	27448	2	KED
|	Zn	66	95.397	ug/L	2.375	2	40	47409	3	KED
|	Zn	67	85.953	ug/L	1.199	1	5	7057	0	KED
⌊	As	75	0.019	ug/L	0.001	7	7	12	2	KED
	Y	89		ug/L			512697	475446	1	Standard
	Kr	83		ug/L			65	67	4	Standard
⌈>	In-1	115		ug/L			11342	11838	1	KED
|	Cd	111	0.002	ug/L	0.015	1000	6	7	49	KED
⌊	Cd	114	0.009	ug/L	0.011	120	4	9	67	KED
⌈>	In	115		ug/L			888503	858556	1	Standard
⌊	Ag	107	0.005	ug/L	0.002	32	236	323	9	Standard
⌈>	Tb	159		ug/L			797843	786043	3	Standard
⌊	Pb	208	0.282	ug/L	0.009	3	255	17867	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0045-MS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 19:18:25
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte		Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C		13		ug/L			36323	45644	3	Standard
	Cl		37		ug/L			4837250	5099374	0	Standard
>	Sc		45		ug/L			768932	726175	1	Standard
	Cr		52	1.283	ug/L	0.022	1	29685	57028	1	Standard
	Cr		53	1.735	ug/L	0.036	2	273	4861	0	Standard
	Mn		55	25.550	ug/L	0.782	3	1379	830343	1	Standard
>	Ge		72		ug/L			45127	44771	1	KED
	Ni		60	2.515	ug/L	0.047	1	27	3516	1	KED
	Ni		62	2.548	ug/L	0.122	4	5	582	3	KED
	Cu	STL	63	14.409	ug/L	0.262	1	118	59942	2	KED
	Cu		65	14.680	ug/L	0.335	2	63	29404	1	KED
	Zn		66	98.653	ug/L	0.835	0	40	48531	0	KED
	Zn	STL	67	87.991	ug/L	1.481	1	5	7154	1	KED
	As		75	1.313	ug/L	0.083	6	7	325	6	KED
	Y		89		ug/L			512697	467599	0	Standard
	Kr		83		ug/L			65	63	12	Standard
>	In-1		115		ug/L			11342	10568	6	KED
	Cd		111	1.254	ug/L	0.120	9	6	280	9	KED
	Cd		114	1.241	ug/L	0.055	4	4	672	4	KED
>	In		115		ug/L			888503	841674	2	Standard
	Ag		107	1.281	ug/L	0.011	0	236	23088	1	Standard
>	Tb		159		ug/L			797843	774003	3	Standard
	Pb		208	1.555	ug/L	0.069	4	255	95864	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0387-01
Sample Dil Factor: 50
Comments:
Sample Date/Time: Monday, March 06, 2023 19:25:34
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	66691	3	Standard
	Cl	**37**		ug/L			4837250	4623715	2	Standard
⌈>	**Sc**	**45**		ug/L			768932	730713	3	Standard
|	**Cr**	**52**	**29.860**	ug/L	0.493	1	29685	706847	1	Standard
|	**Cr**	**53**	**29.089**	ug/L	0.307	1	273	77955	2	Standard
⌊	**Mn**	**55**	**7.438**	ug/L	0.118	1	1379	244152	1	Standard
⌈>	**Ge**	**72**		ug/L			45127	43569	1	KED
|	**Ni**	**60**	**0.208**	ug/L	0.011	5	27	306	5	KED
|	**Ni**	**62**	**0.185**	ug/L	0.046	24	5	46	21	KED
|	**Cu**	**63**	**0.519**	ug/L	0.012	2	118	2212	3	KED
|	**Cu**	**65**	**0.524**	ug/L	0.031	5	63	1080	4	KED
|	**Zn**	**66**	**42.097**	ug/L	0.586	1	40	20176	2	KED
|	**Zn**	**67**	**38.811**	ug/L	1.255	3	5	3073	2	KED
⌊	**As**	**75**	**0.042**	ug/L	0.004	9	7	17	6	KED
	Y	**89**		ug/L			512697	478702	3	Standard
	Kr	**83**		ug/L			65	64	10	Standard
⌈>	**In-1**	**115**		ug/L			11342	12299	1	KED
|	**Cd**	**111**	**0.290**	ug/L	0.007	2	6	80	2	KED
⌊	**Cd**	**114**	**0.252**	ug/L	0.040	15	4	162	14	KED
⌈>	**In**	**115**		ug/L			888503	851740	3	Standard
⌊	**Ag**	**107**	**0.009**	ug/L	0.003	32	236	393	13	Standard
⌈>	**Tb**	**159**		ug/L			797843	783671	5	Standard
⌊	**Pb**	**208**	**0.051**	ug/L	0.003	5	255	3426	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0037-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, March 06, 2023 19:31:25
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	44244	0	Standard
	Cl	**37**		ug/L			4837250	4763650	1	Standard
⌈>	**Sc**	**45**		ug/L			768932	732730	2	Standard
|	**Cr**	**52**	**1.143**	ug/L	0.015	1	29685	54359	3	Standard
|	**Cr**	**53**	**1.454**	ug/L	0.046	3	273	4152	0	Standard
⌊	**Mn**	**55**	**2.930**	ug/L	0.069	2	1379	97225	0	Standard
⌈>	**Ge**	**72**		ug/L			45127	43779	3	KED
|	**Ni**	**60**	**1.779**	ug/L	0.128	7	27	2439	6	KED
|	**Ni**	**62**	**1.959**	ug/L	0.142	7	5	439	6	KED
|	**Cu**	**63**	**9.662**	ug/L	0.218	2	118	39323	1	KED
|	**Cu**	**65**	**9.754**	ug/L	0.538	5	63	19108	3	KED
|	**Zn**	**66**	**7.758**	ug/L	0.321	4	40	3765	2	KED
|	**Zn**	**67**	**7.388**	ug/L	0.180	2	5	592	3	KED
⌊	**As**	**75**	**0.136**	ug/L	0.015	10	7	39	7	KED
	Y	**89**		ug/L			512697	470099	0	Standard
	Kr	**83**		ug/L			65	73	23	Standard
⌈>	**In-1**	**115**		ug/L			11342	11631	2	KED
|	**Cd**	**111**	**0.006**	ug/L	0.009	152	6	8	24	KED
⌊	**Cd**	**114**	**0.005**	ug/L	0.005	88	4	7	38	KED
⌈>	**In**	**115**		ug/L			888503	832833	3	Standard
⌊	**Ag**	**107**	**-0.003**	ug/L	0.001	41	236	168	9	Standard
⌈>	**Tb**	**159**		ug/L			797843	783398	4	Standard
⌊	**Pb**	**208**	**0.063**	ug/L	0.001	2	255	4169	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL7
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 19:36:18
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	38930	3	Standard
	Cl	**37**		ug/L			4837250	4672291	3	Standard
⌈>	**Sc**	**45**		ug/L			768932	710436	3	Standard
|	**Cr**	**52**	**0.088**	ug/L	0.047	53	29685	29365	4	Standard
|	**Cr**	**53**	**0.007**	ug/L	0.009	116	273	271	4	Standard
⌊	**Mn**	**55**	**0.006**	ug/L	0.001	19	1379	1473	3	Standard
⌈>	**Ge**	**72**		ug/L			45127	43866	0	KED
|	**Ni**	**60**	**0.011**	ug/L	0.008	74	27	41	27	KED
|	**Ni**	**62**	**0.038**	ug/L	0.018	47	5	13	28	KED
|	**Cu**	**63**	**0.006**	ug/L	0.002	39	118	140	6	KED
|	**Cu**	**65**	**0.004**	ug/L	0.006	152	63	69	18	KED
|	**Zn**	**66**	**0.128**	ug/L	0.026	20	40	100	12	KED
|	**Zn**	**67**	**0.185**	ug/L	0.068	36	5	20	27	KED
⌊	**As**	**75**	**0.000**	ug/L	0.009	3422	7	7	27	KED
	Y	**89**		ug/L			512697	464398	4	Standard
	Kr	**83**		ug/L			65	66	38	Standard
⌈>	**In-1**	**115**		ug/L			11342	11641	2	KED
|	**Cd**	**111**	**-0.006**	ug/L	0.010	165	6	5	44	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.008	1112	4	4	114	KED
⌈>	**In**	**115**		ug/L			888503	841345	3	Standard
⌊	**Ag**	**107**	**-0.008**	ug/L	0.000	3	236	73	6	Standard
⌈>	**Tb**	**159**		ug/L			797843	766194	0	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.001	37	255	418	15	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV7
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 19:40:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	36282	0	Standard
	Cl	**37**		ug/L			4837250	5031983	3	Standard
⎡>	**Sc**	**45**		ug/L			768932	720219	4	Standard
⎢	**Cr**	**52**	**49.729**	ug/L	1.287	2	29685	1141835	3	Standard
⎢	**Cr**	**53**	**48.829**	ug/L	1.193	2	273	128789	3	Standard
⎣	**Mn**	**55**	**50.224**	ug/L	0.580	1	1379	1617562	3	Standard
⎡>	**Ge**	**72**		ug/L			45127	43458	2	KED
⎢	**Ni**	**60**	**48.047**	ug/L	0.356	0	27	64742	2	KED
⎢	**Ni**	**62**	**48.543**	ug/L	0.754	1	5	10681	1	KED
⎢	**Cu**	**63**	**47.674**	ug/L	0.181	0	118	192253	3	KED
⎢	**Cu**	**65**	**48.759**	ug/L	0.394	0	63	94663	2	KED
⎢	**Zn**	**66**	**49.393**	ug/L	0.752	1	40	23606	3	KED
⎢	**Zn**	**67**	**49.738**	ug/L	0.572	1	5	3927	2	KED
⎣	**As**	**75**	**49.889**	ug/L	0.628	1	7	11705	1	KED
	Y	**89**		ug/L			512697	467578	4	Standard
	Kr	**83**		ug/L			65	67	7	Standard
⎡>	**In-1**	**115**		ug/L			11342	11589	2	KED
⎢	**Cd**	**111**	**49.432**	ug/L	1.010	2	6	11861	2	KED
⎣	**Cd**	**114**	**49.381**	ug/L	1.348	2	4	29215	1	KED
⎡>	**In**	**115**		ug/L			888503	835486	3	Standard
⎣	**Ag**	**107**	**49.695**	ug/L	0.193	0	236	880974	3	Standard
⎡>	**Tb**	**159**		ug/L			797843	777862	4	Standard
⎣	**Pb**	**208**	**48.899**	ug/L	1.314	2	255	3022147	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB7
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 19:47:58
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	33392	3	Standard
	Cl	**37**		ug/L			4837250	4785494	2	Standard
⌈>	**Sc**	**45**		ug/L			768932	679825	5	Standard
|	**Cr**	**52**	**-0.005**	ug/L	0.006	124	29685	26143	6	Standard
|	**Cr**	**53**	**-0.001**	ug/L	0.007	551	273	238	11	Standard
⌊	**Mn**	**55**	**-0.001**	ug/L	0.001	37	1379	1176	7	Standard
⌈>	**Ge**	**72**		ug/L			45127	42203	6	KED
|	**Ni**	**60**	**-0.001**	ug/L	0.006	552	27	24	31	KED
|	**Ni**	**62**	**0.005**	ug/L	0.007	145	5	6	17	KED
|	**Cu**	**63**	**0.004**	ug/L	0.001	20	118	125	6	KED
|	**Cu**	**65**	**-0.000**	ug/L	0.005	1033	63	58	16	KED
|	**Zn**	**66**	**0.180**	ug/L	0.011	6	40	121	2	KED
|	**Zn**	**67**	**0.185**	ug/L	0.062	33	5	19	29	KED
⌊	**As**	**75**	**0.002**	ug/L	0.006	239	7	7	15	KED
	Y	**89**		ug/L			512697	446284	6	Standard
	Kr	**83**		ug/L			65	61	21	Standard
⌈>	**In-1**	**115**		ug/L			11342	11546	3	KED
|	**Cd**	**111**	**0.012**	ug/L	0.014	125	6	9	36	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.006	332	4	5	68	KED
⌈>	**In**	**115**		ug/L			888503	803040	5	Standard
⌊	**Ag**	**107**	**0.003**	ug/L	0.000	3	236	267	5	Standard
⌈>	**Tb**	**159**		ug/L			797843	732756	7	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.000	5	255	424	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0508-BLK1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 19:52:26
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	48889	0	Standard
	Cl	**37**		ug/L			4837250	4890062	1	Standard
⌈>	**Sc**	**45**		ug/L			768932	729968	0	Standard
|	**Cr**	**52**	**0.035**	ug/L	0.023	66	29685	28967	2	Standard
|	**Cr**	**53**	**0.002**	ug/L	0.011	544	273	264	11	Standard
⌊	**Mn**	**55**	**-0.010**	ug/L	0.000	0	1379	972	0	Standard
⌈>	**Ge**	**72**		ug/L			45127	43022	1	KED
|	**Ni**	**60**	**0.047**	ug/L	0.019	40	27	88	29	KED
|	**Ni**	**62**	**0.089**	ug/L	0.040	44	5	24	35	KED
|	**Cu**	**63**	**-0.001**	ug/L	0.007	1062	118	110	25	KED
|	**Cu**	**65**	**-0.003**	ug/L	0.007	227	63	54	22	KED
|	**Zn**	**66**	**0.157**	ug/L	0.052	32	40	113	21	KED
|	**Zn**	**67**	**0.207**	ug/L	0.018	8	5	21	5	KED
⌊	**As**	**75**	**0.006**	ug/L	0.006	94	7	9	15	KED
	Y	**89**		ug/L			512697	470502	2	Standard
	Kr	**83**		ug/L			65	54	16	Standard
⌈>	**In-1**	**115**		ug/L			11342	11324	3	KED
|	**Cd**	**111**	**-0.008**	ug/L	0.014	165	6	4	69	KED
⌊	**Cd**	**114**	**0.010**	ug/L	0.007	73	4	9	39	KED
⌈>	**In**	**115**		ug/L			888503	857828	1	Standard
⌊	**Ag**	**107**	**-0.002**	ug/L	0.002	106	236	198	16	Standard
⌈>	**Tb**	**159**		ug/L			797843	772827	3	Standard
⌊	**Pb**	**208**	**0.006**	ug/L	0.000	4	255	612	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0508-BS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 19:56:54
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			36323	47994	0	Standard
	Cl	37		ug/L			4837250	4899199	2	Standard
>	Sc	45		ug/L			768932	715433	3	Standard
	Cr	52	26.859	ug/L	0.644	2	29685	625358	2	Standard
	Cr	53	26.768	ug/L	0.952	3	273	70220	0	Standard
	Mn	55	26.994	ug/L	0.431	1	1379	864223	1	Standard
>	Ge	72		ug/L			45127	43893	1	KED
	Ni	60	25.663	ug/L	0.552	2	27	34935	1	KED
	Ni	62	26.107	ug/L	0.538	2	5	5806	3	KED
	Cu	63	25.592	ug/L	0.432	1	118	104273	1	KED
	Cu	65	25.946	ug/L	0.283	1	63	50918	2	KED
	Zn	66	80.077	ug/L	0.166	0	40	38629	1	KED
	Zn	67	75.821	ug/L	2.180	2	5	6045	3	KED
	As	75	25.340	ug/L	0.290	1	7	6010	2	KED
	Y	89		ug/L			512697	472721	2	Standard
	Kr	83		ug/L			65	61	11	Standard
>	In-1	115		ug/L			11342	11751	3	KED
	Cd	111	25.780	ug/L	0.596	2	6	6273	1	KED
	Cd	114	25.331	ug/L	1.073	4	4	15187	1	KED
>	In	115		ug/L			888503	843478	3	Standard
	Ag	107	26.808	ug/L	0.837	3	236	479510	0	Standard
>	Tb	159		ug/L			797843	771170	4	Standard
	Pb	208	26.872	ug/L	0.623	2	255	1646985	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0518-BLK2
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 20:01:21
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	47090	2	Standard
	Cl	**37**		ug/L			4837250	4820773	3	Standard
⎡>	**Sc**	**45**		ug/L			768932	691403	2	Standard
⎢	**Cr**	**52**	**0.058**	ug/L	0.026	45	29685	27927	2	Standard
⎢	**Cr**	**53**	**0.001**	ug/L	0.010	1297	273	247	13	Standard
⎣	**Mn**	**55**	**-0.005**	ug/L	0.001	18	1379	1082	4	Standard
⎡>	**Ge**	**72**		ug/L			45127	42810	1	KED
⎢	**Ni**	**60**	**0.009**	ug/L	0.003	27	27	38	10	KED
⎢	**Ni**	**62**	**0.033**	ug/L	0.022	64	5	12	37	KED
⎢	**Cu**	**63**	**0.005**	ug/L	0.004	68	118	133	11	KED
⎢	**Cu**	**65**	**-0.000**	ug/L	0.009	34651	63	60	30	KED
⎢	**Zn**	**66**	**0.330**	ug/L	0.028	8	40	193	6	KED
⎢	**Zn**	**67**	**0.388**	ug/L	0.075	19	5	35	15	KED
⎣	**As**	**75**	**0.000**	ug/L	0.017	3485	7	7	50	KED
	Y	**89**		ug/L			512697	449571	3	Standard
	Kr	**83**		ug/L			65	55	20	Standard
⎡>	**In-1**	**115**		ug/L			11342	11653	1	KED
⎢	**Cd**	**111**	**-0.006**	ug/L	0.009	150	6	5	40	KED
⎣	**Cd**	**114**	**0.007**	ug/L	0.003	38	4	8	20	KED
⎡>	**In**	**115**		ug/L			888503	815391	3	Standard
⎣	**Ag**	**107**	**0.007**	ug/L	0.001	11	236	340	7	Standard
⎡>	**Tb**	**159**		ug/L			797843	755451	6	Standard
⎣	**Pb**	**208**	**0.005**	ug/L	0.000	9	255	533	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0518-BS2
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 20:05:49
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	46438	2	Standard
	Cl	**37**		ug/L			4837250	4810102	1	Standard
⌈>	**Sc**	**45**		ug/L			768932	703198	7	Standard
|	**Cr**	**52**	**25.454**	ug/L	0.400	1	29685	583814	6	Standard
|	**Cr**	**53**	**24.727**	ug/L	0.095	0	273	63832	7	Standard
⌊	**Mn**	**55**	**25.119**	ug/L	0.194	0	1379	790488	6	Standard
⌈>	**Ge**	**72**		ug/L			45127	42538	2	KED
|	**Ni**	**60**	**24.718**	ug/L	0.476	1	27	32609	2	KED
|	**Ni**	**62**	**24.244**	ug/L	0.290	1	5	5226	4	KED
|	**Cu**	**63**	**24.979**	ug/L	0.288	1	118	98643	2	KED
|	**Cu**	**65**	**25.220**	ug/L	0.373	1	63	47953	2	KED
|	**Zn**	**66**	**77.344**	ug/L	2.959	3	40	36154	4	KED
|	**Zn**	**67**	**73.220**	ug/L	2.667	3	5	5655	3	KED
⌊	**As**	**75**	**24.076**	ug/L	0.315	1	7	5533	1	KED
	Y	**89**		ug/L			512697	450015	5	Standard
	Kr	**83**		ug/L			65	65	20	Standard
⌈>	**In-1**	**115**		ug/L			11342	11505	3	KED
|	**Cd**	**111**	**24.754**	ug/L	0.935	3	6	5897	3	KED
⌊	**Cd**	**114**	**24.788**	ug/L	0.073	0	4	14567	3	KED
⌈>	**In**	**115**		ug/L			888503	826129	4	Standard
⌊	**Ag**	**107**	**25.210**	ug/L	0.802	3	236	442264	7	Standard
⌈>	**Tb**	**159**		ug/L			797843	755542	1	Standard
⌊	**Pb**	**208**	**25.496**	ug/L	1.002	3	255	1532175	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0032-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 20:10:17
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	53727	1	Standard
	Cl	**37**		ug/L			4837250	4854531	2	Standard
⌈>	**Sc**	**45**		ug/L			768932	811768	2	Standard
|	**Cr**	**52**	**15.406**	ug/L	0.230	1	29685	420377	1	Standard
|	**Cr**	**53**	**15.345**	ug/L	0.133	0	273	45825	2	Standard
⌊	**Mn**	**55**	**104.730**	ug/L	0.430	0	1379	3801655	3	Standard
⌈>	**Ge**	**72**		ug/L			45127	43694	1	KED
|	**Ni**	**60**	**15.464**	ug/L	0.191	1	27	20969	0	KED
|	**Ni**	**62**	**15.867**	ug/L	0.488	3	5	3515	3	KED
|	**Cu**	**63**	**66.421**	ug/L	0.907	1	118	269275	2	KED
|	**Cu**	**65**	**67.898**	ug/L	1.102	1	63	132533	2	KED
|	**Zn**	**66**	**96.047**	ug/L	1.970	2	40	46108	0	KED
|	**Zn**	**67**	**92.027**	ug/L	2.147	2	5	7303	3	KED
⌊	**As**	**75**	**4.678**	ug/L	0.082	1	7	1110	2	KED
	Y	**89**		ug/L			512697	716086	3	Standard
	Kr	**83**		ug/L			65	109	26	Standard
⌈>	**In-1**	**115**		ug/L			11342	11258	2	KED
|	**Cd**	**111**	**0.258**	ug/L	0.034	13	6	66	10	KED
⌊	**Cd**	**114**	**0.238**	ug/L	0.014	5	4	140	5	KED
⌈>	**In**	**115**		ug/L			888503	814312	3	Standard
⌊	**Ag**	**107**	**0.295**	ug/L	0.011	3	236	5307	2	Standard
⌈>	**Tb**	**159**		ug/L			797843	806920	1	Standard
⌊	**Pb**	**208**	**33.220**	ug/L	1.173	3	255	2131184	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0518-DUP2
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 20:14:44
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	63112	1	Standard
	Cl	**37**		ug/L			4837250	4858792	0	Standard
⌈>	**Sc**	**45**		ug/L			768932	817493	4	Standard
|	**Cr**	**52**	**16.966**	ug/L	0.271	1	29685	462904	3	Standard
|	**Cr**	**53**	**16.784**	ug/L	0.536	3	273	50412	2	Standard
⌊	**Mn**	**55**	**99.395**	ug/L	3.113	3	1379	3630959	3	Standard
⌈>	**Ge**	**72**		ug/L			45127	44147	1	KED
|	**Ni**	**60**	**12.359**	ug/L	0.340	2	27	16938	2	KED
|	**Ni**	**62**	**12.620**	ug/L	0.129	1	5	2825	1	KED
|	**Cu**	**63**	**56.341**	ug/L	0.978	1	118	230810	3	KED
|	**Cu**	**65**	**57.637**	ug/L	1.306	2	63	113689	3	KED
|	**Zn**	**66**	**91.493**	ug/L	2.074	2	40	44385	2	KED
|	**Zn**	**67**	**88.420**	ug/L	0.882	0	5	7088	0	KED
⌊	**As**	**75**	**4.425**	ug/L	0.201	4	7	1061	3	KED
	Y	**89**		ug/L			512697	728232	2	Standard
	Kr	**83**		ug/L			65	107	25	Standard
⌈>	**In-1**	**115**		ug/L			11342	11555	1	KED
|	**Cd**	**111**	**0.205**	ug/L	0.048	23	6	55	19	KED
⌊	**Cd**	**114**	**0.195**	ug/L	0.048	24	4	119	24	KED
⌈>	**In**	**115**		ug/L			888503	829081	3	Standard
⌊	**Ag**	**107**	**0.139**	ug/L	0.002	1	236	2665	3	Standard
⌈>	**Tb**	**159**		ug/L			797843	807704	1	Standard
⌊	**Pb**	**208**	**29.326**	ug/L	1.188	4	255	1882721	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0518-MS2
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 20:19:12
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	58787	1	Standard
	Cl	**37**		ug/L			4837250	4853890	1	Standard
⌈>	**Sc**	**45**		ug/L			768932	816489	4	Standard
|	**Cr**	**52**	**38.424**	ug/L	0.779	2	29685	1007184	2	Standard
|	**Cr**	**53**	**38.755**	ug/L	0.688	1	273	115922	2	Standard
⌊	**Mn**	**55**	**125.027**	ug/L	1.685	1	1379	4562689	3	Standard
⌈>	**Ge**	**72**		ug/L			45127	44396	2	KED
|	**Ni**	**60**	**40.379**	ug/L	0.781	1	27	55580	1	KED
|	**Ni**	**62**	**40.758**	ug/L	1.683	4	5	9159	1	KED
|	**Cu**	**63**	**87.557**	ug/L	2.065	2	118	360589	3	KED
|	**Cu**	**65**	**89.618**	ug/L	2.723	3	63	177669	2	KED
|	**Zn**	**66**	**211.435**	ug/L	6.187	2	40	103058	1	KED
|	**Zn**	**67**	**197.711**	ug/L	3.461	1	5	15930	1	KED
⌊	**As**	**75**	**28.173**	ug/L	0.422	1	7	6756	1	KED
	Y	**89**		ug/L			512697	722696	2	Standard
	Kr	**83**		ug/L			65	122	5	Standard
⌈>	**In-1**	**115**		ug/L			11342	11366	4	KED
|	**Cd**	**111**	**24.087**	ug/L	0.554	2	6	5668	2	KED
⌊	**Cd**	**114**	**23.855**	ug/L	0.711	2	4	13836	1	KED
⌈>	**In**	**115**		ug/L			888503	825518	4	Standard
⌊	**Ag**	**107**	**24.594**	ug/L	0.742	3	236	430894	5	Standard
⌈>	**Tb**	**159**		ug/L			797843	814211	4	Standard
⌊	**Pb**	**208**	**67.397**	ug/L	2.180	3	255	4359752	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0518-MSD2
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 20:23:39
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	58301	0	Standard
	Cl	**37**		ug/L			4837250	4875998	3	Standard
⌈>	**Sc**	**45**		ug/L			768932	820960	2	Standard
|	**Cr**	**52**	**37.000**	ug/L	1.089	2	29685	976406	1	Standard
|	**Cr**	**53**	**36.793**	ug/L	0.923	2	273	110681	0	Standard
⌊	**Mn**	**55**	**130.742**	ug/L	1.795	1	1379	4797949	1	Standard
⌈>	**Ge**	**72**		ug/L			45127	43840	1	KED
|	**Ni**	**60**	**37.531**	ug/L	0.994	2	27	51039	4	KED
|	**Ni**	**62**	**37.200**	ug/L	0.684	1	5	8260	1	KED
|	**Cu**	**63**	**80.305**	ug/L	1.154	1	118	326624	2	KED
|	**Cu**	**65**	**81.583**	ug/L	1.426	1	63	159792	3	KED
|	**Zn**	**66**	**195.558**	ug/L	3.300	1	40	94182	3	KED
|	**Zn**	**67**	**184.291**	ug/L	2.506	1	5	14669	3	KED
⌊	**As**	**75**	**28.198**	ug/L	0.414	1	7	6679	3	KED
	Y	**89**		ug/L			512697	720837	3	Standard
	Kr	**83**		ug/L			65	131	16	Standard
⌈>	**In-1**	**115**		ug/L			11342	11572	1	KED
|	**Cd**	**111**	**24.393**	ug/L	0.615	2	6	5847	1	KED
⌊	**Cd**	**114**	**24.141**	ug/L	0.233	0	4	14268	1	KED
⌈>	**In**	**115**		ug/L			888503	826783	2	Standard
⌊	**Ag**	**107**	**24.651**	ug/L	0.558	2	236	432454	1	Standard
⌈>	**Tb**	**159**		ug/L			797843	812976	2	Standard
⌊	**Pb**	**208**	**52.596**	ug/L	1.091	2	255	3399311	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0518-PS2
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 20:28:07
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	59134	0	Standard
	Cl	**37**		ug/L			4837250	5017441	1	Standard
⌈>	**Sc**	**45**		ug/L			768932	848200	1	Standard
|	**Cr**	**52**	**37.983**	ug/L	0.661	1	29685	1035017	1	Standard
|	**Cr**	**53**	**36.925**	ug/L	0.742	2	273	114786	0	Standard
⌊	**Mn**	**55**	**124.924**	ug/L	3.493	2	1379	4736256	1	Standard
⌈>	**Ge**	**72**		ug/L			45127	44369	1	KED
|	**Ni**	**60**	**39.921**	ug/L	0.337	0	27	54933	1	KED
|	**Ni**	**62**	**40.517**	ug/L	1.105	2	5	9103	1	KED
|	**Cu**	**63**	**91.195**	ug/L	1.467	1	118	375330	1	KED
|	**Cu**	**65**	**92.437**	ug/L	1.050	1	63	183182	0	KED
|	**Zn**	**66**	**172.253**	ug/L	2.966	1	40	83941	0	KED
|	**Zn**	**67**	**161.759**	ug/L	5.232	3	5	13029	3	KED
⌊	**As**	**75**	**28.326**	ug/L	0.197	0	7	6790	1	KED
	Y	**89**		ug/L			512697	733108	2	Standard
	Kr	**83**		ug/L			65	119	15	Standard
⌈>	**In-1**	**115**		ug/L			11342	11710	3	KED
|	**Cd**	**111**	**24.379**	ug/L	0.663	2	6	5911	1	KED
⌊	**Cd**	**114**	**23.877**	ug/L	0.131	0	4	14279	3	KED
⌈>	**In**	**115**		ug/L			888503	838918	0	Standard
⌊	**Ag**	**107**	**25.501**	ug/L	0.423	1	236	454067	2	Standard
⌈>	**Tb**	**159**		ug/L			797843	829581	3	Standard
⌊	**Pb**	**208**	**57.153**	ug/L	0.976	1	255	3768861	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL8
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 20:32:35
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	39968	1	Standard
	Cl	**37**		ug/L			4837250	4672191	1	Standard
⌈>	**Sc**	**45**		ug/L			768932	671414	1	Standard
|	**Cr**	**52**	**-0.036**	ug/L	0.053	146	29685	25174	5	Standard
|	**Cr**	**53**	**-0.013**	ug/L	0.008	58	273	205	10	Standard
⌊	**Mn**	**55**	**0.006**	ug/L	0.002	42	1379	1379	6	Standard
⌈>	**Ge**	**72**		ug/L			45127	42138	2	KED
|	**Ni**	**60**	**0.010**	ug/L	0.007	70	27	38	22	KED
|	**Ni**	**62**	**0.019**	ug/L	0.017	89	5	9	40	KED
|	**Cu**	**63**	**0.007**	ug/L	0.004	56	118	140	13	KED
|	**Cu**	**65**	**0.009**	ug/L	0.003	31	63	76	6	KED
|	**Zn**	**66**	**0.131**	ug/L	0.023	17	40	98	8	KED
|	**Zn**	**67**	**0.228**	ug/L	0.061	26	5	22	22	KED
⌊	**As**	**75**	**0.005**	ug/L	0.001	25	7	8	5	KED
	Y	**89**		ug/L			512697	450712	2	Standard
	Kr	**83**		ug/L			65	71	8	Standard
⌈>	**In-1**	**115**		ug/L			11342	10927	2	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.006	197	6	5	28	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.008	228	4	6	72	KED
⌈>	**In**	**115**		ug/L			888503	807877	1	Standard
⌊	**Ag**	**107**	**0.006**	ug/L	0.001	21	236	310	8	Standard
⌈>	**Tb**	**159**		ug/L			797843	734096	5	Standard
⌊	**Pb**	**208**	**0.006**	ug/L	0.001	9	255	606	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV8
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 20:37:03
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	35864	2	Standard
	Cl	**37**		ug/L			4837250	4993448	2	Standard
⌈>	**Sc**	**45**		ug/L			768932	682275	4	Standard
|	**Cr**	**52**	**51.483**	ug/L	1.142	2	29685	1118673	2	Standard
|	**Cr**	**53**	**50.510**	ug/L	1.536	3	273	126224	4	Standard
⌊	**Mn**	**55**	**52.307**	ug/L	1.525	2	1379	1595552	3	Standard
⌈>	**Ge**	**72**		ug/L			45127	42389	1	KED
|	**Ni**	**60**	**48.593**	ug/L	0.799	1	27	63863	0	KED
|	**Ni**	**62**	**49.273**	ug/L	1.712	3	5	10574	2	KED
|	**Cu**	**63**	**48.029**	ug/L	0.475	0	118	188888	0	KED
|	**Cu**	**65**	**47.775**	ug/L	0.393	0	63	90480	1	KED
|	**Zn**	**66**	**49.765**	ug/L	1.729	3	40	23191	2	KED
|	**Zn**	**67**	**50.547**	ug/L	2.057	4	5	3893	3	KED
⌊	**As**	**75**	**50.488**	ug/L	0.827	1	7	11555	1	KED
	Y	**89**		ug/L			512697	451636	4	Standard
	Kr	**83**		ug/L			65	68	10	Standard
⌈>	**In-1**	**115**		ug/L			11342	11438	0	KED
|	**Cd**	**111**	**48.957**	ug/L	0.097	0	6	11596	0	KED
⌊	**Cd**	**114**	**48.165**	ug/L	0.620	1	4	28134	1	KED
⌈>	**In**	**115**		ug/L			888503	800659	2	Standard
⌊	**Ag**	**107**	**50.410**	ug/L	2.143	4	236	856103	3	Standard
⌈>	**Tb**	**159**		ug/L			797843	752553	2	Standard
⌊	**Pb**	**208**	**49.902**	ug/L	2.310	4	255	2983807	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB8
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 20:44:15
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	34073	2	Standard
	Cl	**37**		ug/L			4837250	4940498	3	Standard
⎡>	**Sc**	**45**		ug/L			768932	698052	1	Standard
⎢	**Cr**	**52**	**-0.017**	ug/L	0.010	55	29685	26577	1	Standard
⎢	**Cr**	**53**	**-0.027**	ug/L	0.011	40	273	178	17	Standard
⎣	**Mn**	**55**	**-0.004**	ug/L	0.001	16	1379	1116	2	Standard
⎡>	**Ge**	**72**		ug/L			45127	42005	4	KED
⎢	**Ni**	**60**	**-0.002**	ug/L	0.005	248	27	22	22	KED
⎢	**Ni**	**62**	**0.002**	ug/L	0.019	947	5	5	66	KED
⎢	**Cu**	**63**	**0.001**	ug/L	0.001	94	118	114	1	KED
⎢	**Cu**	**65**	**0.009**	ug/L	0.005	52	63	76	15	KED
⎢	**Zn**	**66**	**0.132**	ug/L	0.025	18	40	99	15	KED
⎢	**Zn**	**67**	**0.105**	ug/L	0.008	7	5	13	0	KED
⎣	**As**	**75**	**0.001**	ug/L	0.004	435	7	7	16	KED
	Y	**89**		ug/L			512697	456306	3	Standard
	Kr	**83**		ug/L			65	57	17	Standard
⎡>	**In-1**	**115**		ug/L			11342	10942	1	KED
⎢	**Cd**	**111**	**-0.003**	ug/L	0.008	247	6	5	28	KED
⎣	**Cd**	**114**	**0.010**	ug/L	0.010	101	4	9	59	KED
⎡>	**In**	**115**		ug/L			888503	821257	1	Standard
⎣	**Ag**	**107**	**0.004**	ug/L	0.002	53	236	291	11	Standard
⎡>	**Tb**	**159**		ug/L			797843	736335	2	Standard
⎣	**Pb**	**208**	**0.004**	ug/L	0.000	11	255	454	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0046-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 20:48:44
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			36323	47525	3	Standard
	Cl	37		ug/L			4837250	4697038	1	Standard
>	Sc	45		ug/L			768932	667435	0	Standard
	Cr	52	0.154	ug/L	0.068	43	29685	28971	4	Standard
	Cr	53	0.118	ug/L	0.012	10	273	524	5	Standard
	Mn	55	3.154	ug/L	0.087	2	1379	95267	2	Standard
>	Ge	72		ug/L			45127	40032	2	KED
	Ni	60	0.019	ug/L	0.008	41	27	47	22	KED
	Ni	62	0.022	ug/L	0.008	38	5	9	20	KED
	Cu	63	0.028	ug/L	0.009	34	118	207	17	KED
	Cu	65	0.022	ug/L	0.007	33	63	95	15	KED
	Zn	66	2.434	ug/L	0.079	3	40	1106	4	KED
	Zn	67	1.985	ug/L	0.084	4	5	149	3	KED
	As	75	0.001	ug/L	0.004	842	7	7	11	KED
	Y	89		ug/L			512697	435446	1	Standard
	Kr	83		ug/L			65	57	12	Standard
>	In-1	115		ug/L			11342	11149	2	KED
	Cd	111	-0.004	ug/L	0.001	18	6	5	0	KED
	Cd	114	0.007	ug/L	0.010	146	4	8	72	KED
>	In	115		ug/L			888503	776387	2	Standard
	Ag	107	-0.002	ug/L	0.000	20	236	173	5	Standard
>	Tb	159		ug/L			797843	722653	4	Standard
	Pb	208	0.004	ug/L	0.001	12	255	477	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0046-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 20:53:11
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			36323	49716	2	Standard
	Cl	37		ug/L			4837250	5013281	0	Standard
>	Sc	45		ug/L			768932	707187	3	Standard
	Cr	52	25.920	ug/L	0.233	0	29685	597538	2	Standard
	Cr	53	25.090	ug/L	0.487	1	273	65096	1	Standard
	Mn	55	25.387	ug/L	0.239	0	1379	803640	2	Standard
>	Ge	72		ug/L			45127	39613	7	KED
	Ni	60	25.768	ug/L	1.834	7	27	31551	2	KED
	Ni	62	25.883	ug/L	2.268	8	5	5172	2	KED
	Cu	63	24.974	ug/L	1.819	7	118	91501	1	KED
	Cu	65	25.724	ug/L	1.838	7	63	45389	1	KED
	Zn	66	84.581	ug/L	7.068	8	40	36664	1	KED
	Zn	67	79.280	ug/L	6.048	7	5	5683	2	KED
	As	75	25.950	ug/L	1.985	7	7	5532	1	KED
	Y	89		ug/L			512697	447707	2	Standard
	Kr	83		ug/L			65	64	15	Standard
>	In-1	115		ug/L			11342	10658	0	KED
	Cd	111	24.535	ug/L	0.369	1	6	5418	1	KED
	Cd	114	23.853	ug/L	0.404	1	4	12986	2	KED
>	In	115		ug/L			888503	814606	1	Standard
	Ag	107	24.961	ug/L	0.344	1	236	431613	3	Standard
>	Tb	159		ug/L			797843	771034	1	Standard
	Pb	208	24.679	ug/L	0.839	3	255	1512754	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0615-BLK1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 20:57:39
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	51024	2	Standard
	Cl	**37**		ug/L			4837250	4774647	1	Standard
⌈>	**Sc**	**45**		ug/L			768932	689205	2	Standard
|	**Cr**	**52**	**0.043**	ug/L	0.011	24	29685	27530	1	Standard
|	**Cr**	**53**	**-0.010**	ug/L	0.009	88	273	218	9	Standard
⌊	**Mn**	**55**	**-0.007**	ug/L	0.001	13	1379	1027	1	Standard
⌈>	**Ge**	**72**		ug/L			45127	41519	4	KED
|	**Ni**	**60**	**0.016**	ug/L	0.009	56	27	45	22	KED
|	**Ni**	**62**	**0.060**	ug/L	0.038	63	5	17	43	KED
|	**Cu**	**63**	**-0.003**	ug/L	0.004	141	118	97	12	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.004	316	63	56	15	KED
|	**Zn**	**66**	**0.114**	ug/L	0.003	2	40	89	3	KED
|	**Zn**	**67**	**0.131**	ug/L	0.107	81	5	15	54	KED
⌊	**As**	**75**	**0.002**	ug/L	0.014	607	7	7	39	KED
	Y	**89**		ug/L			512697	445325	2	Standard
	Kr	**83**		ug/L			65	58	15	Standard
⌈>	**In-1**	**115**		ug/L			11342	11007	1	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.006	1095	6	6	22	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.004	125	4	6	39	KED
⌈>	**In**	**115**		ug/L			888503	805817	1	Standard
⌊	**Ag**	**107**	**0.003**	ug/L	0.001	15	236	273	5	Standard
⌈>	**Tb**	**159**		ug/L			797843	739924	2	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.000	4	255	429	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0615-BS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 21:02:06
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			36323	48596	3	Standard
	Cl	37		ug/L			4837250	4859357	0	Standard
>	Sc	45		ug/L			768932	711965	0	Standard
	Cr	52	26.620	ug/L	0.661	2	29685	617169	2	Standard
	Cr	53	26.041	ug/L	0.133	0	273	68036	0	Standard
	Mn	55	26.132	ug/L	0.425	1	1379	832816	1	Standard
>	Ge	72		ug/L			45127	41730	4	KED
	Ni	60	25.696	ug/L	0.598	2	27	33241	1	KED
	Ni	62	25.951	ug/L	1.033	3	5	5484	4	KED
	Cu	63	25.443	ug/L	0.738	2	118	98492	1	KED
	Cu	65	25.723	ug/L	0.379	1	63	47969	2	KED
	Zn	66	80.013	ug/L	1.391	1	40	36679	2	KED
	Zn	67	76.930	ug/L	1.843	2	5	5827	1	KED
	As	75	25.372	ug/L	0.382	1	7	5718	2	KED
	Y	89		ug/L			512697	452315	2	Standard
	Kr	83		ug/L			65	69	22	Standard
>	In-1	115		ug/L			11342	11603	2	KED
	Cd	111	24.704	ug/L	0.471	1	6	5937	1	KED
	Cd	114	24.668	ug/L	0.874	3	4	14610	0	KED
>	In	115		ug/L			888503	839144	2	Standard
	Ag	107	25.647	ug/L	1.255	4	236	456369	2	Standard
>	Tb	159		ug/L			797843	758949	2	Standard
	Pb	208	26.345	ug/L	0.870	3	255	1589031	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0031-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 21:06:34
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			36323	55920	3	Standard
	Cl	37		ug/L			4837250	4664386	2	Standard
>	Sc	45		ug/L			768932	799680	2	Standard
	Cr	52	12.526	ug/L	0.042	0	29685	342538	2	Standard
	Cr	53	12.632	ug/L	0.130	1	273	37217	3	Standard
	Mn	55	140.550	ug/L	0.355	0	1379	5024965	2	Standard
>	Ge	72		ug/L			45127	43086	3	KED
	Ni	60	11.002	ug/L	0.132	1	27	14717	2	KED
	Ni	62	11.215	ug/L	0.195	1	5	2451	3	KED
	Cu	63	25.121	ug/L	0.493	1	118	100521	4	KED
	Cu	65	25.494	ug/L	0.304	1	63	49096	2	KED
	Zn	66	48.383	ug/L	0.444	0	40	22928	3	KED
	Zn	67	47.698	ug/L	0.508	1	5	3735	4	KED
	As	75	5.826	ug/L	0.054	0	7	1362	3	KED
	Y	89		ug/L			512697	667904	3	Standard
	Kr	83		ug/L			65	113	23	Standard
>	In-1	115		ug/L			11342	11368	1	KED
	Cd	111	0.156	ug/L	0.023	14	6	43	13	KED
	Cd	114	0.196	ug/L	0.027	13	4	117	13	KED
>	In	115		ug/L			888503	792174	1	Standard
	Ag	107	0.130	ug/L	0.005	3	236	2387	4	Standard
>	Tb	159		ug/L			797843	786015	2	Standard
	Pb	208	12.399	ug/L	0.302	2	255	774916	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0508-DUP1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 21:11:02
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			36323	55209	2	Standard
	Cl	37		ug/L			4837250	4671977	2	Standard
>	Sc	45		ug/L			768932	792731	5	Standard
	Cr	52	12.775	ug/L	0.400	3	29685	345612	5	Standard
	Cr	53	12.623	ug/L	0.137	1	273	36852	4	Standard
	Mn	55	143.607	ug/L	3.856	2	1379	5086404	4	Standard
>	Ge	72		ug/L			45127	40454	1	KED
	Ni	60	11.083	ug/L	0.382	3	27	13921	3	KED
	Ni	62	11.332	ug/L	0.505	4	5	2326	5	KED
	Cu	63	25.454	ug/L	0.400	1	118	95597	2	KED
	Cu	65	25.307	ug/L	0.394	1	63	45768	1	KED
	Zn	66	49.862	ug/L	1.272	2	40	22184	3	KED
	Zn	67	49.481	ug/L	1.059	2	5	3637	2	KED
	As	75	6.006	ug/L	0.091	1	7	1318	1	KED
	Y	89		ug/L			512697	660994	3	Standard
	Kr	83		ug/L			65	104	7	Standard
>	In-1	115		ug/L			11342	10512	3	KED
	Cd	111	0.217	ug/L	0.023	10	6	53	11	KED
	Cd	114	0.180	ug/L	0.022	12	4	100	8	KED
>	In	115		ug/L			888503	782983	4	Standard
	Ag	107	0.147	ug/L	0.002	1	236	2655	5	Standard
>	Tb	159		ug/L			797843	764153	3	Standard
	Pb	208	12.039	ug/L	0.237	1	255	731491	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0508-MS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 21:15:29
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			36323	54209	3	Standard
	Cl	37		ug/L			4837250	4807991	2	Standard
>	Sc	45		ug/L			768932	816331	4	Standard
	Cr	52	35.506	ug/L	0.691	1	29685	932973	3	Standard
	Cr	53	35.096	ug/L	0.502	1	273	104993	2	Standard
	Mn	55	166.761	ug/L	0.741	0	1379	6085819	4	Standard
>	Ge	72		ug/L			45127	41392	1	KED
	Ni	60	36.841	ug/L	0.804	2	27	47299	3	KED
	Ni	62	36.695	ug/L	1.065	2	5	7696	4	KED
	Cu	63	50.430	ug/L	0.861	1	118	193654	0	KED
	Cu	65	51.465	ug/L	0.755	1	63	95179	2	KED
	Zn	66	129.781	ug/L	0.777	0	40	59016	1	KED
	Zn	67	123.844	ug/L	1.180	0	5	9307	0	KED
	As	75	30.997	ug/L	0.232	0	7	6930	0	KED
	Y	89		ug/L			512697	676175	5	Standard
	Kr	83		ug/L			65	125	5	Standard
>	In-1	115		ug/L			11342	10749	0	KED
	Cd	111	25.267	ug/L	0.160	0	6	5627	0	KED
	Cd	114	25.569	ug/L	0.507	1	4	14038	1	KED
>	In	115		ug/L			888503	809012	2	Standard
	Ag	107	18.705	ug/L	0.246	1	236	321262	3	Standard
>	Tb	159		ug/L			797843	786378	0	Standard
	Pb	208	36.202	ug/L	0.736	2	255	2263773	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0508-MSD1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 21:19:57
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			36323	53544	0	Standard
	Cl	37		ug/L			4837250	4774320	2	Standard
>	Sc	45		ug/L			768932	831894	0	Standard
	Cr	52	34.891	ug/L	0.214	0	29685	935192	0	Standard
	Cr	53	35.560	ug/L	0.541	1	273	108455	2	Standard
	Mn	55	163.670	ug/L	4.565	2	1379	6087883	3	Standard
>	Ge	72		ug/L			45127	42993	1	KED
	Ni	60	36.245	ug/L	0.274	0	27	48330	1	KED
	Ni	62	36.124	ug/L	0.807	2	5	7868	3	KED
	Cu	63	49.866	ug/L	2.035	4	118	198939	4	KED
	Cu	65	50.755	ug/L	0.578	1	63	97499	1	KED
	Zn	66	127.522	ug/L	3.088	2	40	60228	2	KED
	Zn	67	122.649	ug/L	2.403	1	5	9573	0	KED
	As	75	31.201	ug/L	0.200	0	7	7246	0	KED
	Y	89		ug/L			512697	699326	2	Standard
	Kr	83		ug/L			65	127	6	Standard
>	In-1	115		ug/L			11342	10810	3	KED
	Cd	111	25.199	ug/L	0.091	0	6	5644	4	KED
	Cd	114	25.106	ug/L	0.889	3	4	13850	1	KED
>	In	115		ug/L			888503	791958	1	Standard
	Ag	107	14.933	ug/L	0.330	2	236	251134	3	Standard
>	Tb	159		ug/L			797843	792205	4	Standard
	Pb	208	36.953	ug/L	1.588	4	255	2325090	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0508-PS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 21:24:24
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	60645	0	Standard
	Cl	**37**		ug/L			4837250	4831104	0	Standard
⌈>	**Sc**	**45**		ug/L			768932	842197	0	Standard
|	**Cr**	**52**	**34.852**	ug/L	0.647	1	29685	945821	2	Standard
|	**Cr**	**53**	**33.901**	ug/L	0.820	2	273	104679	2	Standard
⌊	**Mn**	**55**	**160.830**	ug/L	3.131	1	1379	6055268	1	Standard
⌈>	**Ge**	**72**		ug/L			45127	42512	1	KED
|	**Ni**	**60**	**36.383**	ug/L	1.460	4	27	47950	2	KED
|	**Ni**	**62**	**36.459**	ug/L	0.455	1	5	7850	1	KED
|	**Cu**	**63**	**50.805**	ug/L	0.015	0	118	200401	1	KED
|	**Cu**	**65**	**50.756**	ug/L	1.186	2	63	96379	0	KED
|	**Zn**	**66**	**128.449**	ug/L	4.488	3	40	59968	1	KED
|	**Zn**	**67**	**121.436**	ug/L	2.760	2	5	9375	3	KED
⌊	**As**	**75**	**31.346**	ug/L	0.387	1	7	7198	1	KED
	Y	**89**		ug/L			512697	689557	0	Standard
	Kr	**83**		ug/L			65	113	14	Standard
⌈>	**In-1**	**115**		ug/L			11342	11613	2	KED
|	**Cd**	**111**	**24.664**	ug/L	0.371	1	6	5932	1	KED
⌊	**Cd**	**114**	**24.550**	ug/L	0.611	2	4	14555	1	KED
⌈>	**In**	**115**		ug/L			888503	823095	2	Standard
⌊	**Ag**	**107**	**26.151**	ug/L	0.554	2	236	456692	0	Standard
⌈>	**Tb**	**159**		ug/L			797843	807655	2	Standard
⌊	**Pb**	**208**	**36.449**	ug/L	1.209	3	255	2340002	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL9
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 21:28:53
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	39890	1	Standard
	Cl	**37**		ug/L			4837250	4640255	4	Standard
⎡>	**Sc**	**45**		ug/L			768932	675789	3	Standard
⎢	**Cr**	**52**	**-0.069**	ug/L	0.009	13	29685	24646	2	Standard
⎢	**Cr**	**53**	**-0.014**	ug/L	0.003	17	273	204	3	Standard
⎣	**Mn**	**55**	**0.006**	ug/L	0.002	30	1379	1380	6	Standard
⎡>	**Ge**	**72**		ug/L			45127	42726	4	KED
⎢	**Ni**	**60**	**0.010**	ug/L	0.008	84	27	38	24	KED
⎢	**Ni**	**62**	**0.037**	ug/L	0.002	6	5	13	0	KED
⎢	**Cu**	**63**	**0.008**	ug/L	0.006	75	118	143	16	KED
⎢	**Cu**	**65**	**-0.001**	ug/L	0.005	647	63	58	13	KED
⎢	**Zn**	**66**	**0.108**	ug/L	0.021	19	40	89	14	KED
⎢	**Zn**	**67**	**0.113**	ug/L	0.088	77	5	13	43	KED
⎣	**As**	**75**	**0.005**	ug/L	0.005	98	7	8	11	KED
	Y	**89**		ug/L			512697	442853	2	Standard
	Kr	**83**		ug/L			65	70	18	Standard
⎡>	**In-1**	**115**		ug/L			11342	11137	0	KED
⎢	**Cd**	**111**	**0.001**	ug/L	0.011	1982	6	6	37	KED
⎣	**Cd**	**114**	**0.016**	ug/L	0.006	36	4	13	24	KED
⎡>	**In**	**115**		ug/L			888503	815611	1	Standard
⎣	**Ag**	**107**	**0.001**	ug/L	0.002	132	236	238	13	Standard
⎡>	**Tb**	**159**		ug/L			797843	740374	4	Standard
⎣	**Pb**	**208**	**0.005**	ug/L	0.000	8	255	560	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV9
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 21:33:21
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	35943	1	Standard
	Cl	**37**		ug/L			4837250	4963083	0	Standard
⌈>	**Sc**	**45**		ug/L			768932	705397	0	Standard
|	**Cr**	**52**	**49.950**	ug/L	1.747	3	29685	1123369	2	Standard
|	**Cr**	**53**	**49.215**	ug/L	0.335	0	273	127176	1	Standard
⌊	**Mn**	**55**	**49.479**	ug/L	0.232	0	1379	1561294	1	Standard
⌈>	**Ge**	**72**		ug/L			45127	41999	3	KED
|	**Ni**	**60**	**48.993**	ug/L	1.156	2	27	63779	1	KED
|	**Ni**	**62**	**47.539**	ug/L	0.524	1	5	10112	3	KED
|	**Cu**	**63**	**46.644**	ug/L	0.335	0	118	181766	2	KED
|	**Cu**	**65**	**48.397**	ug/L	1.030	2	63	90778	1	KED
|	**Zn**	**66**	**48.343**	ug/L	1.214	2	40	22319	1	KED
|	**Zn**	**67**	**50.462**	ug/L	1.446	2	5	3850	2	KED
⌊	**As**	**75**	**50.032**	ug/L	0.144	0	7	11347	3	KED
	Y	**89**		ug/L			512697	458482	1	Standard
	Kr	**83**		ug/L			65	65	21	Standard
⌈>	**In-1**	**115**		ug/L			11342	11316	2	KED
|	**Cd**	**111**	**50.032**	ug/L	1.825	3	6	11717	1	KED
⌊	**Cd**	**114**	**49.065**	ug/L	0.794	1	4	28352	2	KED
⌈>	**In**	**115**		ug/L			888503	816543	2	Standard
⌊	**Ag**	**107**	**49.530**	ug/L	0.724	1	236	857950	1	Standard
⌈>	**Tb**	**159**		ug/L			797843	770824	4	Standard
⌊	**Pb**	**208**	**48.663**	ug/L	1.773	3	255	2979435	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB9
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 21:40:33
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	33553	1	Standard
	Cl	**37**		ug/L			4837250	4732619	0	Standard
⎡>	**Sc**	**45**		ug/L			768932	655340	2	Standard
⎢	**Cr**	**52**	**-0.012**	ug/L	0.031	263	29685	25048	0	Standard
⎢	**Cr**	**53**	**-0.018**	ug/L	0.006	34	273	189	7	Standard
⎣	**Mn**	**55**	**-0.004**	ug/L	0.001	29	1379	1069	0	Standard
⎡>	**Ge**	**72**		ug/L			45127	40414	1	KED
⎢	**Ni**	**60**	**-0.002**	ug/L	0.006	359	27	22	34	KED
⎢	**Ni**	**62**	**0.021**	ug/L	0.027	128	5	9	60	KED
⎢	**Cu**	**63**	**0.012**	ug/L	0.008	65	118	152	20	KED
⎢	**Cu**	**65**	**0.009**	ug/L	0.010	119	63	72	25	KED
⎢	**Zn**	**66**	**0.135**	ug/L	0.059	43	40	96	27	KED
⎢	**Zn**	**67**	**0.224**	ug/L	0.050	22	5	21	18	KED
⎣	**As**	**75**	**0.007**	ug/L	0.010	147	7	8	25	KED
	Y	**89**		ug/L			512697	426647	1	Standard
	Kr	**83**		ug/L			65	56	14	Standard
⎡>	**In-1**	**115**		ug/L			11342	10839	4	KED
⎢	**Cd**	**111**	**-0.006**	ug/L	0.006	99	6	5	21	KED
⎣	**Cd**	**114**	**0.004**	ug/L	0.004	112	4	6	35	KED
⎡>	**In**	**115**		ug/L			888503	786015	2	Standard
⎣	**Ag**	**107**	**0.004**	ug/L	0.001	18	236	280	4	Standard
⎡>	**Tb**	**159**		ug/L			797843	714750	4	Standard
⎣	**Pb**	**208**	**0.004**	ug/L	0.001	14	255	466	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0379-02
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 21:45:02
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	58384	2	Standard
	Cl	**37**		ug/L			4837250	10204001	2	Standard
⌈>	**Sc**	**45**		ug/L			768932	690227	2	Standard
|	**Cr**	**52**	**8.848**	ug/L	0.310	3	29685	216557	0	Standard
|	**Cr**	**53**	**12.105**	ug/L	0.345	2	273	30778	0	Standard
⌊	**Mn**	**55**	**25.303**	ug/L	0.440	1	1379	781637	0	Standard
⌈>	**Ge**	**72**		ug/L			45127	39688	1	KED
|	**Ni**	**60**	**2.126**	ug/L	0.048	2	27	2638	2	KED
|	**Ni**	**62**	**2.188**	ug/L	0.112	5	5	444	4	KED
|	**Cu**	**63**	**9.206**	ug/L	0.098	1	118	33990	2	KED
|	**Cu**	**65**	**9.101**	ug/L	0.130	1	63	16185	2	KED
|	**Zn**	**66**	**36.840**	ug/L	1.159	3	40	16092	4	KED
|	**Zn**	**67**	**37.819**	ug/L	1.811	4	5	2729	5	KED
⌊	**As**	**75**	**1.233**	ug/L	0.071	5	7	270	4	KED
	Y	**89**		ug/L			512697	443831	2	Standard
	Kr	**83**		ug/L			65	93	10	Standard
⌈>	**In-1**	**115**		ug/L			11342	10404	5	KED
|	**Cd**	**111**	**0.055**	ug/L	0.033	59	6	18	41	KED
⌊	**Cd**	**114**	**0.051**	ug/L	0.011	20	4	31	13	KED
⌈>	**In**	**115**		ug/L			888503	777365	2	Standard
⌊	**Ag**	**107**	**0.007**	ug/L	0.002	29	236	320	8	Standard
⌈>	**Tb**	**159**		ug/L			797843	743750	4	Standard
⌊	**Pb**	**208**	**0.399**	ug/L	0.013	3	255	23816	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0379-04
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 21:49:29
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	59284	1	Standard
	Cl	**37**		ug/L			4837250	10012121	2	Standard
⌈>	**Sc**	**45**		ug/L			768932	670808	1	Standard
|	**Cr**	**52**	**4.853**	ug/L	0.135	2	29685	127164	1	Standard
|	**Cr**	**53**	**10.136**	ug/L	0.040	0	273	25098	2	Standard
⌊	**Mn**	**55**	**55.979**	ug/L	0.219	0	1379	1679693	2	Standard
⌈>	**Ge**	**72**		ug/L			45127	38141	1	KED
|	**Ni**	**60**	**3.968**	ug/L	0.108	2	27	4713	1	KED
|	**Ni**	**62**	**4.072**	ug/L	0.057	1	5	791	2	KED
|	**Cu**	**63**	**6.454**	ug/L	0.157	2	118	22930	3	KED
|	**Cu**	**65**	**6.814**	ug/L	0.130	1	63	11657	0	KED
|	**Zn**	**66**	**14.661**	ug/L	0.234	1	40	6173	0	KED
|	**Zn**	**67**	**16.202**	ug/L	0.243	1	5	1126	2	KED
⌊	**As**	**75**	**0.470**	ug/L	0.067	14	7	103	12	KED
	Y	**89**		ug/L			512697	432536	0	Standard
	Kr	**83**		ug/L			65	92	13	Standard
⌈>	**In-1**	**115**		ug/L			11342	10683	2	KED
|	**Cd**	**111**	**0.028**	ug/L	0.009	32	6	12	15	KED
⌊	**Cd**	**114**	**0.022**	ug/L	0.012	55	4	15	42	KED
⌈>	**In**	**115**		ug/L			888503	757189	1	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.001	47	236	231	5	Standard
⌈>	**Tb**	**159**		ug/L			797843	733299	3	Standard
⌊	**Pb**	**208**	**0.451**	ug/L	0.013	2	255	26518	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0388-03
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, March 06, 2023 21:53:57
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	46319	1	Standard
	Cl	**37**		ug/L			4837250	5050734	1	Standard
⌈>	**Sc**	**45**		ug/L			768932	806666	2	Standard
|	**Cr**	**52**	**1.371**	ug/L	0.021	1	29685	65545	2	Standard
|	**Cr**	**53**	**1.906**	ug/L	0.022	1	273	5907	2	Standard
⌊	**Mn**	**55**	**224.501**	ug/L	2.534	1	1379	8097493	3	Standard
⌈>	**Ge**	**72**		ug/L			45127	41531	1	KED
|	**Ni**	**60**	**1.466**	ug/L	0.025	1	27	1912	0	KED
|	**Ni**	**62**	**1.547**	ug/L	0.148	9	5	330	10	KED
|	**Cu**	**63**	**3.309**	ug/L	0.039	1	118	12854	2	KED
|	**Cu**	**65**	**3.308**	ug/L	0.037	1	63	6191	0	KED
|	**Zn**	**66**	**19.090**	ug/L	0.497	2	40	8740	1	KED
|	**Zn**	**67**	**18.504**	ug/L	1.365	7	5	1400	8	KED
⌊	**As**	**75**	**0.394**	ug/L	0.044	11	7	95	11	KED
	Y	**89**		ug/L			512697	482247	0	Standard
	Kr	**83**		ug/L			65	67	5	Standard
⌈>	**In-1**	**115**		ug/L			11342	10442	4	KED
|	**Cd**	**111**	**0.039**	ug/L	0.018	46	6	14	30	KED
⌊	**Cd**	**114**	**0.039**	ug/L	0.020	50	4	24	38	KED
⌈>	**In**	**115**		ug/L			888503	815271	4	Standard
⌊	**Ag**	**107**	**0.138**	ug/L	0.003	1	236	2595	3	Standard
⌈>	**Tb**	**159**		ug/L			797843	777276	4	Standard
⌊	**Pb**	**208**	**4.000**	ug/L	0.139	3	255	247221	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0388-01
Sample Dil Factor: 5
Comments:
Sample Date/Time: Monday, March 06, 2023 21:58:18
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			36323	40442	0	Standard
	Cl	37		ug/L			4837250	4755858	1	Standard
>	Sc	45		ug/L			768932	734926	4	Standard
	Cr	52	0.948	ug/L	0.044	4	29685	50021	3	Standard
	Cr	53	1.182	ug/L	0.025	2	273	3434	3	Standard
	Mn	55	68.457	ug/L	1.130	1	1379	2249237	3	Standard
>	Ge	72		ug/L			45127	42458	1	KED
	Ni	60	1.040	ug/L	0.108	10	27	1395	11	KED
	Ni	62	1.174	ug/L	0.093	7	5	257	8	KED
	Cu	63	2.634	ug/L	0.024	0	118	10483	1	KED
	Cu	65	2.738	ug/L	0.071	2	63	5251	2	KED
	Zn	66	9.846	ug/L	0.190	1	40	4628	3	KED
	Zn	67	9.837	ug/L	0.245	2	5	763	1	KED
	As	75	0.324	ug/L	0.059	18	7	81	17	KED
	Y	89		ug/L			512697	455425	2	Standard
	Kr	83		ug/L			65	58	29	Standard
>	In-1	115		ug/L			11342	10239	2	KED
	Cd	111	0.075	ug/L	0.020	27	6	21	22	KED
	Cd	114	0.080	ug/L	0.015	19	4	45	20	KED
>	In	115		ug/L			888503	786623	2	Standard
	Ag	107	0.000	ug/L	0.001	688	236	212	8	Standard
>	Tb	159		ug/L			797843	753450	6	Standard
	Pb	208	3.196	ug/L	0.155	4	255	191334	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0083-DUP1
Sample Dil Factor: 5
Comments:
Sample Date/Time: Monday, March 06, 2023 22:02:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	40264	1	Standard
	Cl	**37**		ug/L			4837250	4725028	2	Standard
⌈>	**Sc**	**45**		ug/L			768932	729502	2	Standard
|	**Cr**	**52**	**0.938**	ug/L	0.077	8	29685	49441	3	Standard
|	**Cr**	**53**	**1.134**	ug/L	0.067	5	273	3281	4	Standard
⌊	**Mn**	**55**	**66.831**	ug/L	1.696	2	1379	2180366	3	Standard
⌈>	**Ge**	**72**		ug/L			45127	42866	2	KED
|	**Ni**	**60**	**0.999**	ug/L	0.036	3	27	1353	3	KED
|	**Ni**	**62**	**1.108**	ug/L	0.021	1	5	245	1	KED
|	**Cu**	**63**	**2.505**	ug/L	0.019	0	118	10072	3	KED
|	**Cu**	**65**	**2.564**	ug/L	0.028	1	63	4967	1	KED
|	**Zn**	**66**	**9.707**	ug/L	0.599	6	40	4602	3	KED
|	**Zn**	**67**	**9.391**	ug/L	0.612	6	5	736	8	KED
⌊	**As**	**75**	**0.318**	ug/L	0.020	6	7	81	7	KED
	Y	**89**		ug/L			512697	464110	0	Standard
	Kr	**83**		ug/L			65	66	15	Standard
⌈>	**In-1**	**115**		ug/L			11342	11361	1	KED
|	**Cd**	**111**	**0.076**	ug/L	0.041	53	6	24	38	KED
⌊	**Cd**	**114**	**0.068**	ug/L	0.027	40	4	43	38	KED
⌈>	**In**	**115**		ug/L			888503	802681	1	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.000	233	236	215	2	Standard
⌈>	**Tb**	**159**		ug/L			797843	749573	1	Standard
⌊	**Pb**	**208**	**3.101**	ug/L	0.090	2	255	185001	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0083-MS1
Sample Dil Factor: 5
Comments:
Sample Date/Time: Monday, March 06, 2023 22:07:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	41649	2	Standard
	Cl	**37**		ug/L			4837250	4759151	1	Standard
⌈>	**Sc**	**45**		ug/L			768932	737379	1	Standard
|	**Cr**	**52**	**5.817**	ug/L	0.174	2	29685	161918	2	Standard
|	**Cr**	**53**	**5.964**	ug/L	0.035	0	273	16339	1	Standard
⌊	**Mn**	**55**	**74.985**	ug/L	0.760	1	1379	2472884	2	Standard
⌈>	**Ge**	**72**		ug/L			45127	42728	2	KED
|	**Ni**	**60**	**5.963**	ug/L	0.160	2	27	7920	0	KED
|	**Ni**	**62**	**6.000**	ug/L	0.118	1	5	1303	4	KED
|	**Cu**	**63**	**7.363**	ug/L	0.073	0	118	29285	2	KED
|	**Cu**	**65**	**7.491**	ug/L	0.088	1	63	14352	2	KED
|	**Zn**	**66**	**26.228**	ug/L	0.379	1	40	12340	1	KED
|	**Zn**	**67**	**24.833**	ug/L	0.520	2	5	1931	4	KED
⌊	**As**	**75**	**5.435**	ug/L	0.052	0	7	1260	2	KED
	Y	**89**		ug/L			512697	456384	3	Standard
	Kr	**83**		ug/L			65	62	0	Standard
⌈>	**In-1**	**115**		ug/L			11342	10751	1	KED
|	**Cd**	**111**	**5.367**	ug/L	0.248	4	6	1201	5	KED
⌊	**Cd**	**114**	**5.177**	ug/L	0.013	0	4	2845	1	KED
⌈>	**In**	**115**		ug/L			888503	807031	1	Standard
⌊	**Ag**	**107**	**5.122**	ug/L	0.148	2	236	87911	3	Standard
⌈>	**Tb**	**159**		ug/L			797843	761757	4	Standard
⌊	**Pb**	**208**	**8.318**	ug/L	0.261	3	255	503572	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0217-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 22:12:59
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	56833	0	Standard
	Cl	**37**		ug/L			4837250	4842868	0	Standard
⌈>	**Sc**	**45**		ug/L			768932	758039	0	Standard
|	**Cr**	**52**	**15.792**	ug/L	0.226	1	29685	401722	1	Standard
|	**Cr**	**53**	**15.840**	ug/L	0.105	0	273	44167	0	Standard
⌊	**Mn**	**55**	**86.903**	ug/L	0.808	0	1379	2945727	0	Standard
⌈>	**Ge**	**72**		ug/L			45127	42938	1	KED
|	**Ni**	**60**	**12.375**	ug/L	0.671	5	27	16485	3	KED
|	**Ni**	**62**	**12.449**	ug/L	0.328	2	5	2710	2	KED
|	**Cu**	**63**	**24.488**	ug/L	0.920	3	118	97579	2	KED
|	**Cu**	**65**	**24.490**	ug/L	1.077	4	63	46988	2	KED
|	**Zn**	**66**	**58.856**	ug/L	1.914	3	40	27775	1	KED
|	**Zn**	**67**	**56.543**	ug/L	1.781	3	5	4410	2	KED
⌊	**As**	**75**	**3.155**	ug/L	0.070	2	7	738	2	KED
	Y	**89**		ug/L			512697	565209	1	Standard
	Kr	**83**		ug/L			65	76	11	Standard
⌈>	**In-1**	**115**		ug/L			11342	11286	0	KED
|	**Cd**	**111**	**0.412**	ug/L	0.010	2	6	102	2	KED
⌊	**Cd**	**114**	**0.395**	ug/L	0.037	9	4	231	8	KED
⌈>	**In**	**115**		ug/L			888503	811942	1	Standard
⌊	**Ag**	**107**	**0.062**	ug/L	0.003	4	236	1282	3	Standard
⌈>	**Tb**	**159**		ug/L			797843	780043	2	Standard
⌊	**Pb**	**208**	**14.799**	ug/L	0.421	2	255	917764	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0615-DUP1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 22:17:27
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			36323	52168	3	Standard
	Cl	37		ug/L			4837250	4867414	4	Standard
⌈>	Sc	45		ug/L			768932	721305	4	Standard
|	Cr	52	15.305	ug/L	0.125	0	29685	371334	4	Standard
|	Cr	53	15.555	ug/L	0.163	1	273	41279	5	Standard
⌊	Mn	55	95.813	ug/L	3.104	3	1379	3092257	7	Standard
⌈>	Ge	72		ug/L			45127	42006	0	KED
|	Ni	60	12.788	ug/L	0.158	1	27	16675	1	KED
|	Ni	62	12.630	ug/L	0.585	4	5	2690	3	KED
|	Cu	63	28.700	ug/L	0.146	0	118	111911	1	KED
|	Cu	65	29.613	ug/L	0.506	1	63	55599	1	KED
|	Zn	66	62.751	ug/L	0.998	1	40	28977	1	KED
|	Zn	67	58.338	ug/L	2.246	3	5	4451	3	KED
⌊	As	75	3.112	ug/L	0.097	3	7	713	3	KED
	Y	89		ug/L			512697	554816	7	Standard
	Kr	83		ug/L			65	80	13	Standard
⌈>	In-1	115		ug/L			11342	10745	3	KED
|	Cd	111	0.457	ug/L	0.010	2	6	107	5	KED
⌊	Cd	114	0.359	ug/L	0.041	11	4	201	12	KED
⌈>	In	115		ug/L			888503	787911	4	Standard
⌊	Ag	107	0.059	ug/L	0.004	7	236	1194	1	Standard
⌈>	Tb	159		ug/L			797843	768125	3	Standard
⌊	Pb	208	13.673	ug/L	0.659	4	255	834433	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0615-MS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 22:21:54
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	52292	1	Standard
	Cl	**37**		ug/L			4837250	4775313	0	Standard
>	**Sc**	**45**		ug/L			768932	727204	1	Standard
	Cr	**52**	**39.381**	ug/L	1.087	2	29685	919090	2	Standard
	Cr	**53**	**38.651**	ug/L	0.338	0	273	103010	0	Standard
	Mn	**55**	**121.586**	ug/L	1.261	1	1379	3952872	0	Standard
>	**Ge**	**72**		ug/L			45127	42265	1	KED
	Ni	**60**	**37.325**	ug/L	0.749	2	27	48932	3	KED
	Ni	**62**	**36.836**	ug/L	1.034	2	5	7887	3	KED
	Cu	**63**	**52.331**	ug/L	0.916	1	118	205241	2	KED
	Cu	**65**	**53.108**	ug/L	1.190	2	63	100284	2	KED
	Zn	**66**	**138.919**	ug/L	2.102	1	40	64509	2	KED
	Zn	**67**	**131.193**	ug/L	1.324	1	5	10068	1	KED
	As	**75**	**27.994**	ug/L	0.399	1	7	6393	2	KED
	Y	**89**		ug/L			512697	569042	2	Standard
	Kr	**83**		ug/L			65	99	6	Standard
>	**In-1**	**115**		ug/L			11342	11474	2	KED
	Cd	**111**	**25.443**	ug/L	0.505	1	6	6046	0	KED
	Cd	**114**	**25.232**	ug/L	0.099	0	4	14786	2	KED
>	**In**	**115**		ug/L			888503	794875	0	Standard
	Ag	**107**	**25.218**	ug/L	0.568	2	236	425397	1	Standard
>	**Tb**	**159**		ug/L			797843	763244	2	Standard
	Pb	**208**	**41.557**	ug/L	0.736	1	255	2521673	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0615-MSD1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 22:26:16
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	50546	1	Standard
	Cl	**37**		ug/L			4837250	4914230	2	Standard
⌈>	**Sc**	**45**		ug/L			768932	757276	2	Standard
|	**Cr**	**52**	**38.014**	ug/L	0.385	1	29685	924907	2	Standard
|	**Cr**	**53**	**37.849**	ug/L	0.615	1	273	105060	3	Standard
⌊	**Mn**	**55**	**113.287**	ug/L	1.395	1	1379	3835449	2	Standard
⌈>	**Ge**	**72**		ug/L			45127	42017	4	KED
|	**Ni**	**60**	**37.158**	ug/L	0.984	2	27	48382	2	KED
|	**Ni**	**62**	**37.353**	ug/L	1.398	3	5	7943	3	KED
|	**Cu**	**63**	**50.236**	ug/L	1.236	2	118	195727	3	KED
|	**Cu**	**65**	**51.669**	ug/L	1.520	2	63	96965	4	KED
|	**Zn**	**66**	**137.576**	ug/L	2.368	1	40	63477	3	KED
|	**Zn**	**67**	**128.203**	ug/L	2.119	1	5	9783	5	KED
⌊	**As**	**75**	**28.299**	ug/L	0.552	1	7	6420	2	KED
	Y	**89**		ug/L			512697	565375	3	Standard
	Kr	**83**		ug/L			65	86	11	Standard
⌈>	**In-1**	**115**		ug/L			11342	11172	2	KED
|	**Cd**	**111**	**25.017**	ug/L	0.560	2	6	5790	3	KED
⌊	**Cd**	**114**	**25.416**	ug/L	0.789	3	4	14505	4	KED
⌈>	**In**	**115**		ug/L			888503	811148	0	Standard
⌊	**Ag**	**107**	**24.881**	ug/L	0.856	3	236	428342	3	Standard
⌈>	**Tb**	**159**		ug/L			797843	788288	3	Standard
⌊	**Pb**	**208**	**37.591**	ug/L	1.348	3	255	2354734	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVA
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 22:32:09
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	36241	4	Standard
	Cl	**37**		ug/L			4837250	5023926	2	Standard
⌈>	**Sc**	**45**		ug/L			768932	680485	1	Standard
|	**Cr**	**52**	**50.281**	ug/L	0.535	1	29685	1090836	2	Standard
|	**Cr**	**53**	**49.598**	ug/L	1.046	2	273	123603	0	Standard
⌊	**Mn**	**55**	**49.973**	ug/L	0.484	0	1379	1521116	1	Standard
⌈>	**Ge**	**72**		ug/L			45127	41219	5	KED
|	**Ni**	**60**	**47.581**	ug/L	1.222	2	27	60762	3	KED
|	**Ni**	**62**	**47.492**	ug/L	0.969	2	5	9907	3	KED
|	**Cu**	**63**	**47.077**	ug/L	0.139	0	118	180036	5	KED
|	**Cu**	**65**	**47.167**	ug/L	1.606	3	63	86894	7	KED
|	**Zn**	**66**	**48.366**	ug/L	1.453	3	40	21908	4	KED
|	**Zn**	**67**	**49.971**	ug/L	1.823	3	5	3738	2	KED
⌊	**As**	**75**	**50.034**	ug/L	1.004	2	7	11128	3	KED
	Y	**89**		ug/L			512697	448715	3	Standard
	Kr	**83**		ug/L			65	64	7	Standard
⌈>	**In-1**	**115**		ug/L			11342	10800	2	KED
|	**Cd**	**111**	**49.222**	ug/L	1.244	2	6	11007	2	KED
⌊	**Cd**	**114**	**49.406**	ug/L	1.060	2	4	27245	1	KED
⌈>	**In**	**115**		ug/L			888503	799518	2	Standard
⌊	**Ag**	**107**	**48.704**	ug/L	1.911	3	236	826105	3	Standard
⌈>	**Tb**	**159**		ug/L			797843	757392	0	Standard
⌊	**Pb**	**208**	**48.770**	ug/L	0.776	1	255	2937092	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBA
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 22:39:21
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			36323	33303	3	Standard
	Cl	**37**		ug/L			4837250	4666560	3	Standard
⌈>	**Sc**	**45**		ug/L			768932	631352	7	Standard
|	**Cr**	**52**	**-0.021**	ug/L	0.030	141	29685	23975	9	Standard
|	**Cr**	**53**	**-0.002**	ug/L	0.013	738	273	218	6	Standard
⌊	**Mn**	**55**	**-0.004**	ug/L	0.002	46	1379	1019	3	Standard
⌈>	**Ge**	**72**		ug/L			45127	42086	1	KED
|	**Ni**	**60**	**0.002**	ug/L	0.003	182	27	27	15	KED
|	**Ni**	**62**	**0.043**	ug/L	0.027	61	5	14	39	KED
|	**Cu**	**63**	**0.006**	ug/L	0.004	76	118	132	13	KED
|	**Cu**	**65**	**0.012**	ug/L	0.016	138	63	81	38	KED
|	**Zn**	**66**	**0.159**	ug/L	0.019	12	40	111	6	KED
|	**Zn**	**67**	**0.188**	ug/L	0.013	7	5	19	5	KED
⌊	**As**	**75**	**0.001**	ug/L	0.014	1721	7	7	43	KED
	Y	**89**		ug/L			512697	406421	7	Standard
	Kr	**83**		ug/L			65	59	27	Standard
⌈>	**In-1**	**115**		ug/L			11342	10675	2	KED
|	**Cd**	**111**	**0.006**	ug/L	0.005	83	6	7	12	KED
⌊	**Cd**	**114**	**0.009**	ug/L	0.009	101	4	8	53	KED
⌈>	**In**	**115**		ug/L			888503	761976	4	Standard
⌊	**Ag**	**107**	**0.005**	ug/L	0.000	6	236	282	3	Standard
⌈>	**Tb**	**159**		ug/L			797843	698069	9	Standard
⌊	**Pb**	**208**	**0.004**	ug/L	0.000	11	255	455	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 22:43:49
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				35047	1	Standard
	Cl	**37**		ug/L				4819880	3	Standard
⎡>	**Sc**	**45**		ug/L				670326	4	Standard
⎢	**Cr**	**52**		ug/L				26049	3	Standard
⎢	**Cr**	**53**		ug/L				231	8	Standard
⎣	**Mn**	**55**		ug/L				1028	4	Standard
⎡>	**Ge**	**72**		ug/L				40960	3	KED
⎢	**Ni**	**60**		ug/L				23	16	KED
⎢	**Ni**	**62**		ug/L				6	75	KED
⎢	**Cu**	**63**		ug/L				124	17	KED
⎢	**Cu**	**65**		ug/L				56	22	KED
⎢	**Zn**	**66**		ug/L				80	30	KED
⎢	**Zn**	**67**		ug/L				19	22	KED
⎣	**As**	**75**		ug/L				7	17	KED
	Y	**89**		ug/L				440630	3	Standard
	Kr	**83**		ug/L				56	10	Standard
⎡>	**In-1**	**115**		ug/L				11294	0	KED
⎢	**Cd**	**111**		ug/L				6	39	KED
⎣	**Cd**	**114**		ug/L				7	47	KED
⎡>	**In**	**115**		ug/L				792758	1	Standard
⎣	**Ag**	**107**		ug/L				158	17	Standard
⎡>	**Tb**	**159**		ug/L				735738	1	Standard
⎣	**Pb**	**208**		ug/L				406	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVB
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 22:48:17
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	35424	2	Standard
	Cl	**37**		ug/L			4819880	5035791	1	Standard
⎡>	**Sc**	**45**		ug/L			670326	690633	2	Standard
⎢	**Cr**	**52**	**50.090**	ug/L	1.293	2	26049	1102727	0	Standard
⎢	**Cr**	**53**	**49.992**	ug/L	1.409	2	231	126409	0	Standard
⎣	**Mn**	**55**	**50.336**	ug/L	0.632	1	1028	1554564	1	Standard
⎡>	**Ge**	**72**		ug/L			40960	40175	3	KED
⎢	**Ni**	**60**	**48.127**	ug/L	0.473	0	23	59945	2	KED
⎢	**Ni**	**62**	**47.601**	ug/L	0.608	1	6	9689	4	KED
⎢	**Cu**	**63**	**47.383**	ug/L	0.364	0	124	176628	2	KED
⎢	**Cu**	**65**	**47.887**	ug/L	0.910	1	56	85928	1	KED
⎢	**Zn**	**66**	**49.451**	ug/L	1.419	2	80	21903	5	KED
⎢	**Zn**	**67**	**49.634**	ug/L	1.227	2	19	3638	4	KED
⎣	**As**	**75**	**50.253**	ug/L	0.359	0	7	10901	2	KED
	Y	**89**		ug/L			440630	439073	2	Standard
	Kr	**83**		ug/L			56	76	15	Standard
⎡>	**In-1**	**115**		ug/L			11294	11002	3	KED
⎢	**Cd**	**111**	**49.813**	ug/L	1.772	3	6	11342	3	KED
⎣	**Cd**	**114**	**49.833**	ug/L	0.809	1	7	28008	4	KED
⎡>	**In**	**115**		ug/L			792758	790337	1	Standard
⎣	**Ag**	**107**	**49.867**	ug/L	0.361	0	158	836273	2	Standard
⎡>	**Tb**	**159**		ug/L			735738	752232	3	Standard
⎣	**Pb**	**208**	**49.542**	ug/L	1.405	2	406	2961691	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBB
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 22:55:29
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	33132	2	Standard
	Cl	**37**		ug/L			4819880	4815821	0	Standard
⌈>	**Sc**	**45**		ug/L			670326	646292	1	Standard
|	**Cr**	**52**	**-0.004**	ug/L	0.014	340	26049	25028	0	Standard
|	**Cr**	**53**	**0.000**	ug/L	0.007	30344	231	223	7	Standard
⌊	**Mn**	**55**	**0.001**	ug/L	0.001	142	1028	1006	2	Standard
⌈>	**Ge**	**72**		ug/L			40960	41305	1	KED
|	**Ni**	**60**	**0.003**	ug/L	0.009	336	23	27	44	KED
|	**Ni**	**62**	**0.012**	ug/L	0.030	242	6	8	68	KED
|	**Cu**	**63**	**-0.001**	ug/L	0.002	384	124	123	4	KED
|	**Cu**	**65**	**-0.000**	ug/L	0.006	3752	56	56	19	KED
|	**Zn**	**66**	**0.059**	ug/L	0.056	94	80	107	22	KED
|	**Zn**	**67**	**-0.044**	ug/L	0.091	204	19	16	40	KED
⌊	**As**	**75**	**-0.001**	ug/L	0.006	590	7	7	16	KED
	Y	**89**		ug/L			440630	421089	5	Standard
	Kr	**83**		ug/L			56	66	23	Standard
⌈>	**In-1**	**115**		ug/L			11294	10932	0	KED
|	**Cd**	**111**	**0.004**	ug/L	0.015	397	6	6	49	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.005	319	7	7	36	KED
⌈>	**In**	**115**		ug/L			792758	766559	5	Standard
⌊	**Ag**	**107**	**0.006**	ug/L	0.001	24	158	248	6	Standard
⌈>	**Tb**	**159**		ug/L			735738	701754	6	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.001	47	406	460	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0607-BLK1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 22:59:58
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35047	43878	1	Standard
	Cl	37		ug/L			4819880	4844313	2	Standard
⌈>	Sc	45		ug/L			670326	694466	0	Standard
|	Cr	52	0.027	ug/L	0.031	113	26049	27574	2	Standard
|	Cr	53	-0.001	ug/L	0.008	927	231	237	8	Standard
⌊	Mn	55	0.000	ug/L	0.001	306	1028	1079	3	Standard
⌈>	Ge	72		ug/L			40960	41718	3	KED
|	Ni	60	0.011	ug/L	0.004	39	23	38	13	KED
|	Ni	62	0.011	ug/L	0.018	156	6	8	44	KED
|	Cu	63	-0.002	ug/L	0.004	217	124	119	10	KED
|	Cu	65	0.003	ug/L	0.001	42	56	63	4	KED
|	Zn	66	0.063	ug/L	0.038	60	80	111	18	KED
|	Zn	67	-0.032	ug/L	0.171	540	19	17	76	KED
⌊	As	75	0.012	ug/L	0.014	113	7	10	25	KED
	Y	89		ug/L			440630	450333	1	Standard
	Kr	83		ug/L			56	53	39	Standard
⌈>	In-1	115		ug/L			11294	11096	2	KED
|	Cd	111	0.014	ug/L	0.005	36	6	9	11	KED
⌊	Cd	114	-0.003	ug/L	0.007	218	7	5	75	KED
⌈>	In	115		ug/L			792758	821842	2	Standard
⌊	Ag	107	-0.000	ug/L	0.001	1065	158	162	8	Standard
⌈>	Tb	159		ug/L			735738	745863	3	Standard
⌊	Pb	208	0.000	ug/L	0.001	219	406	433	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0607-BS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 23:04:25
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35047	41547	2	Standard
	Cl	37		ug/L			4819880	4751760	3	Standard
⌈>	Sc	45		ug/L			670326	658852	4	Standard
|	Cr	52	25.403	ug/L	0.416	1	26049	546381	4	Standard
|	Cr	53	25.187	ug/L	0.519	2	231	60915	5	Standard
⌊	Mn	55	25.469	ug/L	0.915	3	1028	751716	7	Standard
⌈>	Ge	72		ug/L			40960	40613	2	KED
|	Ni	60	24.309	ug/L	0.529	2	23	30625	3	KED
|	Ni	62	23.968	ug/L	0.890	3	6	4934	4	KED
|	Cu	63	24.099	ug/L	0.865	3	124	90931	5	KED
|	Cu	65	24.695	ug/L	0.407	1	56	44850	3	KED
|	Zn	66	76.564	ug/L	1.522	1	80	34228	3	KED
|	Zn	67	75.714	ug/L	0.518	0	19	5599	2	KED
⌊	As	75	24.149	ug/L	0.331	1	7	5300	3	KED
	Y	89		ug/L			440630	431010	4	Standard
	Kr	83		ug/L			56	72	5	Standard
⌈>	In-1	115		ug/L			11294	10981	3	KED
|	Cd	111	24.124	ug/L	0.235	0	6	5487	2	KED
⌊	Cd	114	24.092	ug/L	0.238	0	7	13516	3	KED
⌈>	In	115		ug/L			792758	791869	4	Standard
⌊	Ag	107	24.812	ug/L	0.643	2	158	417111	6	Standard
⌈>	Tb	159		ug/L			735738	723508	6	Standard
⌊	Pb	208	25.015	ug/L	0.445	1	406	1438393	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0607-SRL1
Sample Dil Factor: 100
Comments:
Sample Date/Time: Monday, March 06, 2023 23:08:53
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	40711	0	Standard
	Cl	**37**		ug/L			4819880	4705522	1	Standard
⎡>	**Sc**	**45**		ug/L			670326	743330	2	Standard
⎢	**Cr**	**52**	**4.128**	ug/L	0.074	1	26049	124338	1	Standard
⎢	**Cr**	**53**	**4.235**	ug/L	0.049	1	231	11765	1	Standard
⎣	**Mn**	**55**	**67.447**	ug/L	1.378	2	1028	2241402	0	Standard
⎡>	**Ge**	**72**		ug/L			40960	41535	1	KED
⎢	**Ni**	**60**	**3.678**	ug/L	0.086	2	23	4758	2	KED
⎢	**Ni**	**62**	**3.619**	ug/L	0.273	7	6	767	6	KED
⎢	**Cu**	**63**	**7.961**	ug/L	0.135	1	124	30792	2	KED
⎢	**Cu**	**65**	**8.084**	ug/L	0.093	1	56	15050	2	KED
⎢	**Zn**	**66**	**24.914**	ug/L	0.317	1	80	11442	1	KED
⎢	**Zn**	**67**	**24.442**	ug/L	1.251	5	19	1862	6	KED
⎣	**As**	**75**	**0.731**	ug/L	0.045	6	7	171	7	KED
	Y	**89**		ug/L			440630	532873	1	Standard
	Kr	**83**		ug/L			56	78	15	Standard
⎡>	**In-1**	**115**		ug/L			11294	11281	0	KED
⎢	**Cd**	**111**	**0.048**	ug/L	0.011	22	6	17	14	KED
⎣	**Cd**	**114**	**0.039**	ug/L	0.012	29	7	29	22	KED
⎡>	**In**	**115**		ug/L			792758	789003	2	Standard
⎣	**Ag**	**107**	**0.066**	ug/L	0.003	4	158	1253	2	Standard
⎡>	**Tb**	**159**		ug/L			735738	752088	3	Standard
⎣	**Pb**	**208**	**5.004**	ug/L	0.147	2	406	299404	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0410-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 23:13:20
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35047	55894	3	Standard
	Cl	37		ug/L			4819880	4748392	1	Standard
>	Sc	45		ug/L			670326	991370	1	Standard
	Cr	52	17.059	ug/L	0.319	1	26049	564750	2	Standard
	Cr	53	16.989	ug/L	0.309	1	231	61913	1	Standard
	Mn	55	267.405	ug/L	2.901	1	1028	11850610	2	Standard
>	Ge	72		ug/L			40960	40943	2	KED
	Ni	60	18.861	ug/L	0.233	1	23	23961	2	KED
	Ni	62	19.095	ug/L	1.102	5	6	3966	7	KED
	Cu	63	41.110	ug/L	0.767	1	124	156182	1	KED
	Cu	65	41.446	ug/L	1.364	3	56	75790	1	KED
	Zn	66	123.400	ug/L	1.786	1	80	55542	1	KED
	Zn	67	123.552	ug/L	3.733	3	19	9198	3	KED
	As	75	3.695	ug/L	0.160	4	7	823	3	KED
	Y	89		ug/L			440630	972182	0	Standard
	Kr	83		ug/L			56	222	9	Standard
>	In-1	115		ug/L			11294	10858	1	KED
	Cd	111	0.267	ug/L	0.069	25	6	65	21	KED
	Cd	114	0.269	ug/L	0.028	10	7	156	10	KED
>	In	115		ug/L			792758	796002	0	Standard
	Ag	107	0.293	ug/L	0.010	3	158	5112	2	Standard
>	Tb	159		ug/L			735738	812307	3	Standard
	Pb	208	24.359	ug/L	0.737	3	406	1572811	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0607-DUP1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 23:17:48
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			35047	55829	2	Standard
Cl	37		ug/L			4819880	4871008	3	Standard
Sc	45		ug/L			670326	998184	2	Standard
Cr	52	17.103	ug/L	0.475	2	26049	569750	1	Standard
Cr	53	17.283	ug/L	0.144	0	231	63413	2	Standard
Mn	55	280.895	ug/L	4.320	1	1028	12530662	0	Standard
Ge	72		ug/L			40960	40752	6	KED
Ni	60	20.100	ug/L	0.740	3	23	25376	3	KED
Ni	62	19.895	ug/L	1.628	8	6	4099	4	KED
Cu	63	41.873	ug/L	1.486	3	124	158134	3	KED
Cu	65	43.374	ug/L	2.127	4	56	78825	2	KED
Zn	66	138.534	ug/L	5.691	4	80	61963	2	KED
Zn	67	135.491	ug/L	3.764	2	19	10039	6	KED
As	75	3.864	ug/L	0.217	5	7	855	1	KED
Y	89		ug/L			440630	985923	0	Standard
Kr	83		ug/L			56	219	14	Standard
In-1	115		ug/L			11294	10845	2	KED
Cd	111	0.253	ug/L	0.045	17	6	62	17	KED
Cd	114	0.255	ug/L	0.004	1	7	147	1	KED
In	115		ug/L			792758	792266	1	Standard
Ag	107	0.298	ug/L	0.005	1	158	5159	2	Standard
Tb	159		ug/L			735738	820130	4	Standard
Pb	208	26.462	ug/L	1.118	4	406	1723893	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0607-MS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 23:22:16
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			35047	49337	3	Standard
Cl	37		ug/L			4819880	4681831	2	Standard
> Sc	45		ug/L			670326	924891	3	Standard
Cr	52	35.305	ug/L	0.120	0	26049	1051850	2	Standard
Cr	53	34.267	ug/L	0.184	0	231	116204	3	Standard
Mn	55	306.165	ug/L	1.549	0	1028	12658104	3	Standard
> Ge	72		ug/L			40960	41671	2	KED
Ni	60	41.995	ug/L	1.785	4	23	54245	3	KED
Ni	62	42.156	ug/L	2.039	4	6	8894	3	KED
Cu	63	65.270	ug/L	1.316	2	124	252298	1	KED
Cu	65	65.752	ug/L	1.632	2	56	122406	3	KED
Zn	66	208.338	ug/L	4.094	1	80	95377	1	KED
Zn	67	203.532	ug/L	6.378	3	19	15404	0	KED
As	75	24.060	ug/L	0.478	1	7	5418	2	KED
Y	89		ug/L			440630	937934	3	Standard
Kr	83		ug/L			56	211	1	Standard
> In-1	115		ug/L			11294	10631	0	KED
Cd	111	24.190	ug/L	0.196	0	6	5327	0	KED
Cd	114	23.922	ug/L	0.129	0	7	12992	0	KED
> In	115		ug/L			792758	768466	2	Standard
Ag	107	22.020	ug/L	0.453	2	158	359080	2	Standard
> Tb	159		ug/L			735738	785049	6	Standard
Pb	208	49.486	ug/L	1.951	3	406	3084484	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0607-MSD1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 23:26:43
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			35047	52869	3	Standard
Cl	37		ug/L			4819880	4835226	3	Standard
> Sc	45		ug/L			670326	959034	4	Standard
Cr	52	35.417	ug/L	0.746	2	26049	1093532	3	Standard
Cr	53	35.086	ug/L	0.340	0	231	123323	4	Standard
Mn	55	317.055	ug/L	3.013	0	1028	13593185	5	Standard
> Ge	72		ug/L			40960	41524	2	KED
Ni	60	41.550	ug/L	1.263	3	23	53482	2	KED
Ni	62	42.295	ug/L	0.961	2	6	8898	4	KED
Cu	63	66.130	ug/L	1.005	1	124	254798	3	KED
Cu	65	67.839	ug/L	1.022	1	56	125826	2	KED
Zn	66	221.576	ug/L	4.285	1	80	101122	4	KED
Zn	67	215.289	ug/L	0.897	0	19	16244	3	KED
As	75	23.785	ug/L	0.433	1	7	5336	1	KED
Y	89		ug/L			440630	955143	5	Standard
Kr	83		ug/L			56	200	10	Standard
> In-1	115		ug/L			11294	10778	2	KED
Cd	111	25.156	ug/L	0.709	2	6	5614	0	KED
Cd	114	23.773	ug/L	0.697	2	7	13086	2	KED
> In	115		ug/L			792758	795152	4	Standard
Ag	107	22.570	ug/L	0.185	0	158	380888	5	Standard
> Tb	159		ug/L			735738	808074	5	Standard
Pb	208	55.079	ug/L	1.746	3	406	3535216	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0607-PS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 23:31:11
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	56760	3	Standard
	Cl	**37**		ug/L			4819880	4914381	3	Standard
>	**Sc**	**45**		ug/L			670326	993461	2	Standard
	Cr	**52**	**34.064**	ug/L	0.741	2	26049	1091167	0	Standard
	Cr	**53**	**33.668**	ug/L	0.224	0	231	122623	2	Standard
	Mn	**55**	**283.611**	ug/L	5.334	1	1028	12591001	0	Standard
>	**Ge**	**72**		ug/L			40960	43241	1	KED
	Ni	**60**	**40.595**	ug/L	0.728	1	23	54432	1	KED
	Ni	**62**	**41.566**	ug/L	0.073	0	6	9105	1	KED
	Cu	**63**	**62.926**	ug/L	1.530	2	124	252432	2	KED
	Cu	**65**	**64.078**	ug/L	1.040	1	56	123757	0	KED
	Zn	**66**	**188.857**	ug/L	2.389	1	80	89753	2	KED
	Zn	**67**	**184.281**	ug/L	2.317	1	19	14479	0	KED
	As	**75**	**25.839**	ug/L	0.182	0	7	6037	1	KED
	Y	**89**		ug/L			440630	986894	0	Standard
	Kr	**83**		ug/L			56	231	5	Standard
>	**In-1**	**115**		ug/L			11294	10702	0	KED
	Cd	**111**	**23.084**	ug/L	0.296	1	6	5118	1	KED
	Cd	**114**	**23.054**	ug/L	0.955	4	7	12605	4	KED
>	**In**	**115**		ug/L			792758	808404	2	Standard
	Ag	**107**	**23.162**	ug/L	0.554	2	158	397238	1	Standard
>	**Tb**	**159**		ug/L			735738	823955	2	Standard
	Pb	**208**	**45.002**	ug/L	1.111	2	406	2947411	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0607-SRM1
Sample Dil Factor: 50
Comments:
Sample Date/Time: Monday, March 06, 2023 23:35:33
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	42875	0	Standard
	Cl	**37**		ug/L			4819880	4943075	1	Standard
⌈>	**Sc**	**45**		ug/L			670326	705177	2	Standard
|	**Cr**	**52**	**84.316**	ug/L	2.425	2	26049	1876743	1	Standard
|	**Cr**	**53**	**83.537**	ug/L	2.227	2	231	215542	1	Standard
⌊	**Mn**	**55**	**201.982**	ug/L	2.369	1	1028	6366295	1	Standard
⌈>	**Ge**	**72**		ug/L			40960	40629	1	KED
|	**Ni**	**60**	**127.209**	ug/L	2.866	2	23	160232	3	KED
|	**Ni**	**62**	**129.650**	ug/L	3.454	2	6	26667	2	KED
|	**Cu**	**63**	**50.562**	ug/L	0.520	1	124	190636	2	KED
|	**Cu**	**65**	**51.718**	ug/L	0.599	1	56	93894	3	KED
|	**Zn**	**66**	**58.305**	ug/L	1.297	2	80	26084	1	KED
|	**Zn**	**67**	**66.209**	ug/L	2.810	4	19	4902	5	KED
⌊	**As**	**75**	**30.620**	ug/L	0.338	1	7	6722	2	KED
	Y	**89**		ug/L			440630	567194	1	Standard
	Kr	**83**		ug/L			56	87	19	Standard
⌈>	**In-1**	**115**		ug/L			11294	10784	0	KED
|	**Cd**	**111**	**59.285**	ug/L	1.381	2	6	13235	1	KED
⌊	**Cd**	**114**	**59.725**	ug/L	1.372	2	7	32897	3	KED
⌈>	**In**	**115**		ug/L			792758	786341	1	Standard
⌊	**Ag**	**107**	**20.088**	ug/L	0.165	0	158	335224	1	Standard
⌈>	**Tb**	**159**		ug/L			735738	760923	3	Standard
⌊	**Pb**	**208**	**95.455**	ug/L	3.652	3	406	5771109	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLC
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 23:40:01
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	38763	1	Standard
	Cl	**37**		ug/L			4819880	4655035	1	Standard
⌈>	**Sc**	**45**		ug/L			670326	670068	3	Standard
|	**Cr**	**52**	**-0.065**	ug/L	0.024	37	26049	24676	1	Standard
|	**Cr**	**53**	**-0.007**	ug/L	0.013	179	231	213	12	Standard
⌊	**Mn**	**55**	**0.013**	ug/L	0.001	6	1028	1405	2	Standard
⌈>	**Ge**	**72**		ug/L			40960	40003	1	KED
|	**Ni**	**60**	**0.016**	ug/L	0.003	17	23	43	9	KED
|	**Ni**	**62**	**0.038**	ug/L	0.033	85	6	13	47	KED
|	**Cu**	**63**	**0.004**	ug/L	0.002	65	124	135	7	KED
|	**Cu**	**65**	**0.010**	ug/L	0.005	52	56	73	11	KED
|	**Zn**	**66**	**0.038**	ug/L	0.018	46	80	95	7	KED
|	**Zn**	**67**	**-0.064**	ug/L	0.064	99	19	14	32	KED
⌊	**As**	**75**	**0.000**	ug/L	0.008	17419	7	7	25	KED
	Y	**89**		ug/L			440630	434570	2	Standard
	Kr	**83**		ug/L			56	58	23	Standard
⌈>	**In-1**	**115**		ug/L			11294	10629	3	KED
|	**Cd**	**111**	**-0.006**	ug/L	0.002	33	6	4	12	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.007	388	7	5	68	KED
⌈>	**In**	**115**		ug/L			792758	786999	0	Standard
⌊	**Ag**	**107**	**0.008**	ug/L	0.001	11	158	283	5	Standard
⌈>	**Tb**	**159**		ug/L			735738	728895	3	Standard
⌊	**Pb**	**208**	**0.008**	ug/L	0.001	8	406	871	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVC
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 23:44:29
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	34869	4	Standard
	Cl	**37**		ug/L			4819880	4774961	2	Standard
⌈>	**Sc**	**45**		ug/L			670326	643386	3	Standard
|	**Cr**	**52**	**49.867**	ug/L	0.679	1	26049	1023133	2	Standard
|	**Cr**	**53**	**49.474**	ug/L	0.370	0	231	116581	2	Standard
⌊	**Mn**	**55**	**49.290**	ug/L	0.945	1	1028	1418844	4	Standard
⌈>	**Ge**	**72**		ug/L			40960	40024	4	KED
|	**Ni**	**60**	**47.780**	ug/L	0.773	1	23	59302	4	KED
|	**Ni**	**62**	**48.245**	ug/L	1.311	2	6	9777	3	KED
|	**Cu**	**63**	**46.954**	ug/L	0.456	0	124	174438	5	KED
|	**Cu**	**65**	**48.448**	ug/L	0.834	1	56	86604	2	KED
|	**Zn**	**66**	**50.061**	ug/L	2.005	4	80	22069	4	KED
|	**Zn**	**67**	**51.026**	ug/L	1.086	2	19	3723	2	KED
⌊	**As**	**75**	**49.995**	ug/L	0.549	1	7	10803	3	KED
	Y	**89**		ug/L			440630	415049	4	Standard
	Kr	**83**		ug/L			56	64	15	Standard
⌈>	**In-1**	**115**		ug/L			11294	10321	3	KED
|	**Cd**	**111**	**50.789**	ug/L	1.018	2	6	10850	2	KED
⌊	**Cd**	**114**	**49.198**	ug/L	0.755	1	7	25928	2	KED
⌈>	**In**	**115**		ug/L			792758	758658	2	Standard
⌊	**Ag**	**107**	**49.148**	ug/L	0.815	1	158	790900	1	Standard
⌈>	**Tb**	**159**		ug/L			735738	723555	2	Standard
⌊	**Pb**	**208**	**48.829**	ug/L	1.963	4	406	2807843	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBC
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, March 06, 2023 23:51:41
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	35779	0	Standard
	Cl	**37**		ug/L			4819880	4683477	0	Standard
⌈>	**Sc**	**45**		ug/L			670326	651477	3	Standard
|	**Cr**	**52**	**-0.022**	ug/L	0.017	77	26049	24875	2	Standard
|	**Cr**	**53**	**-0.010**	ug/L	0.008	81	231	202	6	Standard
⌊	**Mn**	**55**	**-0.002**	ug/L	0.001	55	1028	939	2	Standard
⌈>	**Ge**	**72**		ug/L			40960	41533	1	KED
|	**Ni**	**60**	**0.005**	ug/L	0.009	187	23	29	38	KED
|	**Ni**	**62**	**-0.006**	ug/L	0.005	78	6	5	21	KED
|	**Cu**	**63**	**-0.001**	ug/L	0.001	76	124	121	1	KED
|	**Cu**	**65**	**0.002**	ug/L	0.008	533	56	60	26	KED
|	**Zn**	**66**	**0.075**	ug/L	0.043	57	80	116	18	KED
|	**Zn**	**67**	**0.115**	ug/L	0.129	112	19	28	33	KED
⌊	**As**	**75**	**-0.005**	ug/L	0.013	249	7	6	44	KED
	Y	**89**		ug/L			440630	419807	3	Standard
	Kr	**83**		ug/L			56	61	23	Standard
⌈>	**In-1**	**115**		ug/L			11294	10978	3	KED
|	**Cd**	**111**	**-0.006**	ug/L	0.010	158	6	4	49	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.006	666	7	7	43	KED
⌈>	**In**	**115**		ug/L			792758	778274	3	Standard
⌊	**Ag**	**107**	**0.007**	ug/L	0.001	19	158	266	11	Standard
⌈>	**Tb**	**159**		ug/L			735738	716892	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.001	53	406	453	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0687-BLK1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, March 06, 2023 23:56:10
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	44236	3	Standard
	Cl	**37**		ug/L			4819880	4658290	2	Standard
⎡>	**Sc**	**45**		ug/L			670326	664322	5	Standard
⎢	**Cr**	**52**	**0.037**	ug/L	0.030	81	26049	26566	4	Standard
⎢	**Cr**	**53**	**0.017**	ug/L	0.004	24	231	269	1	Standard
⎣	**Mn**	**55**	**0.006**	ug/L	0.000	3	1028	1187	5	Standard
⎡>	**Ge**	**72**		ug/L			40960	41621	0	KED
⎢	**Ni**	**60**	**0.041**	ug/L	0.014	32	23	77	23	KED
⎢	**Ni**	**62**	**0.051**	ug/L	0.027	52	6	17	33	KED
⎢	**Cu**	**63**	**0.019**	ug/L	0.004	18	124	200	6	KED
⎢	**Cu**	**65**	**0.029**	ug/L	0.006	20	56	110	9	KED
⎢	**Zn**	**66**	**0.171**	ug/L	0.046	26	80	160	13	KED
⎢	**Zn**	**67**	**0.172**	ug/L	0.115	67	19	33	26	KED
⎣	**As**	**75**	**0.003**	ug/L	0.013	444	7	8	34	KED
	Y	**89**		ug/L			440630	428274	5	Standard
	Kr	**83**		ug/L			56	60	33	Standard
⎡>	**In-1**	**115**		ug/L			11294	10510	1	KED
⎢	**Cd**	**111**	**0.002**	ug/L	0.013	706	6	6	48	KED
⎣	**Cd**	**114**	**-0.000**	ug/L	0.002	714	7	6	17	KED
⎡>	**In**	**115**		ug/L			792758	788463	3	Standard
⎣	**Ag**	**107**	**0.004**	ug/L	0.000	11	158	219	6	Standard
⎡>	**Tb**	**159**		ug/L			735738	719179	1	Standard
⎣	**Pb**	**208**	**0.003**	ug/L	0.000	12	406	566	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0687-BS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 00:00:37
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	41854	2	Standard
	Cl	**37**		ug/L			4819880	4696762	2	Standard
⌈>	**Sc**	**45**		ug/L			670326	663796	2	Standard
|	**Cr**	**52**	**25.353**	ug/L	0.220	0	26049	549481	3	Standard
|	**Cr**	**53**	**25.111**	ug/L	0.314	1	231	61177	3	Standard
⌊	**Mn**	**55**	**25.586**	ug/L	0.370	1	1028	760224	3	Standard
⌈>	**Ge**	**72**		ug/L			40960	39786	4	KED
|	**Ni**	**60**	**23.987**	ug/L	0.455	1	23	29610	5	KED
|	**Ni**	**62**	**23.960**	ug/L	0.754	3	6	4836	7	KED
|	**Cu**	**63**	**23.944**	ug/L	0.520	2	124	88482	5	KED
|	**Cu**	**65**	**24.360**	ug/L	0.543	2	56	43333	5	KED
|	**Zn**	**66**	**76.989**	ug/L	1.229	1	80	33693	3	KED
|	**Zn**	**67**	**73.016**	ug/L	0.997	1	19	5291	5	KED
⌊	**As**	**75**	**24.401**	ug/L	0.194	0	7	5245	4	KED
	Y	**89**		ug/L			440630	430052	6	Standard
	Kr	**83**		ug/L			56	62	8	Standard
⌈>	**In-1**	**115**		ug/L			11294	11147	3	KED
|	**Cd**	**111**	**23.549**	ug/L	0.864	3	6	5433	0	KED
⌊	**Cd**	**114**	**23.410**	ug/L	0.296	1	7	13328	2	KED
⌈>	**In**	**115**		ug/L			792758	782380	4	Standard
⌊	**Ag**	**107**	**24.693**	ug/L	0.248	1	158	410060	4	Standard
⌈>	**Tb**	**159**		ug/L			735738	725547	4	Standard
⌊	**Pb**	**208**	**25.118**	ug/L	0.586	2	406	1448356	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0687-SRL1
Sample Dil Factor: 100
Comments:
Sample Date/Time: Tuesday, March 07, 2023 00:05:05
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	42201	1	Standard
	Cl	**37**		ug/L			4819880	4754764	2	Standard
⎡>	**Sc**	**45**		ug/L			670326	746413	1	Standard
⎢	**Cr**	**52**	**4.467**	ug/L	0.065	1	26049	132737	1	Standard
⎢	**Cr**	**53**	**4.505**	ug/L	0.064	1	231	12551	1	Standard
⎣	**Mn**	**55**	**99.384**	ug/L	1.570	1	1028	3316273	0	Standard
⎡>	**Ge**	**72**		ug/L			40960	43068	1	KED
⎢	**Ni**	**60**	**3.703**	ug/L	0.131	3	23	4968	4	KED
⎢	**Ni**	**62**	**3.758**	ug/L	0.261	6	6	826	8	KED
⎢	**Cu**	**63**	**8.990**	ug/L	0.199	2	124	36042	3	KED
⎢	**Cu**	**65**	**8.947**	ug/L	0.074	0	56	17266	2	KED
⎢	**Zn**	**66**	**29.285**	ug/L	0.768	2	80	13928	0	KED
⎢	**Zn**	**67**	**29.919**	ug/L	1.232	4	19	2358	3	KED
⎣	**As**	**75**	**0.854**	ug/L	0.037	4	7	206	5	KED
	Y	**89**		ug/L			440630	548538	2	Standard
	Kr	**83**		ug/L			56	66	22	Standard
⎡>	**In-1**	**115**		ug/L			11294	10852	2	KED
⎢	**Cd**	**111**	**0.055**	ug/L	0.022	40	6	18	27	KED
⎣	**Cd**	**114**	**0.048**	ug/L	0.009	19	7	33	15	KED
⎡>	**In**	**115**		ug/L			792758	814213	3	Standard
⎣	**Ag**	**107**	**0.081**	ug/L	0.001	1	158	1558	4	Standard
⎡>	**Tb**	**159**		ug/L			735738	780083	3	Standard
⎣	**Pb**	**208**	**5.329**	ug/L	0.164	3	406	330715	0	Standard

23B0411

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~23B00411~~-01

Sample Dil Factor: 20

Comments:

Sample Date/Time: Tuesday, March 07, 2023 00:09:33

MB 3/6/23

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35047	57372	0	Standard
	Cl	37		ug/L			4819880	4754525	3	Standard
>	Sc	45		ug/L			670326	957981	6	Standard
	Cr	52	18.322	ug/L	0.212	1	26049	583099	5	Standard
	Cr	53	18.124	ug/L	0.509	2	231	63741	3	Standard
	Mn	55	400.780	ug/L	12.720	3	1028	17140018	3	Standard
>	Ge	72		ug/L			40960	40782	2	KED
	Ni	60	18.431	ug/L	0.725	3	23	23307	1	KED
	Ni	62	18.569	ug/L	0.505	2	6	3838	2	KED
	Cu	63	45.684	ug/L	0.682	1	124	172851	1	KED
	Cu	65	45.428	ug/L	1.724	3	56	82758	3	KED
	Zn	66	142.058	ug/L	1.938	1	80	63677	1	KED
	Zn	67	139.968	ug/L	1.885	1	19	10380	3	KED
	As	75	4.099	ug/L	0.240	5	7	909	3	KED
	Y	89		ug/L			440630	989959	5	Standard
	Kr	83		ug/L			56	200	15	Standard
>	In-1	115		ug/L			11294	11030	3	KED
	Cd	111	0.300	ug/L	0.050	16	6	74	15	KED
	Cd	114	0.277	ug/L	0.025	9	7	162	5	KED
>	In	115		ug/L			792758	784531	4	Standard
	Ag	107	0.385	ug/L	0.008	2	158	6555	2	Standard
>	Tb	159		ug/L			735738	812314	1	Standard
	Pb	208	25.759	ug/L	0.672	2	406	1664722	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0687-DUP1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 00:14:00
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			35047	53111	4	Standard
Cl	37		ug/L			4819880	4695128	4	Standard
> Sc	45		ug/L			670326	921671	6	Standard
Cr	52	17.872	ug/L	0.353	1	26049	548481	7	Standard
Cr	53	17.883	ug/L	0.217	1	231	60560	6	Standard
Mn	55	387.117	ug/L	4.278	1	1028	15946656	6	Standard
> Ge	72		ug/L			40960	40944	3	KED
Ni	60	18.156	ug/L	0.333	1	23	23056	1	KED
Ni	62	18.518	ug/L	0.676	3	6	3841	0	KED
Cu	63	44.923	ug/L	0.304	0	124	170712	3	KED
Cu	65	45.356	ug/L	0.492	1	56	82988	4	KED
Zn	66	136.190	ug/L	2.705	1	80	61279	1	KED
Zn	67	134.409	ug/L	3.739	2	19	10000	0	KED
As	75	3.981	ug/L	0.189	4	7	886	1	KED
Y	89		ug/L			440630	951802	5	Standard
Kr	83		ug/L			56	195	6	Standard
> In-1	115		ug/L			11294	11172	2	KED
Cd	111	0.256	ug/L	0.031	12	6	65	11	KED
Cd	114	0.295	ug/L	0.040	13	7	175	14	KED
> In	115		ug/L			792758	766047	4	Standard
Ag	107	0.380	ug/L	0.019	4	158	6332	9	Standard
> Tb	159		ug/L			735738	786493	7	Standard
Pb	208	24.757	ug/L	0.839	3	406	1546607	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0687-MS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 00:18:28
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			35047	51876	1	Standard
Cl	37		ug/L			4819880	4738689	3	Standard
> Sc	45		ug/L			670326	916726	4	Standard
Cr	52	35.358	ug/L	1.166	3	26049	1043161	1	Standard
Cr	53	35.949	ug/L	1.172	3	231	120687	1	Standard
Mn	55	405.572	ug/L	10.907	2	1028	16606351	2	Standard
> Ge	72		ug/L			40960	40696	3	KED
Ni	60	42.129	ug/L	0.323	0	23	53160	2	KED
Ni	62	41.042	ug/L	1.047	2	6	8457	1	KED
Cu	63	75.184	ug/L	1.622	2	124	283792	2	KED
Cu	65	76.547	ug/L	0.896	1	56	139156	3	KED
Zn	66	214.000	ug/L	1.652	0	80	95683	2	KED
Zn	67	204.667	ug/L	0.495	0	19	15135	3	KED
As	75	24.832	ug/L	0.256	1	7	5461	3	KED
Y	89		ug/L			440630	934861	3	Standard
Kr	83		ug/L			56	203	6	Standard
> In-1	115		ug/L			11294	10731	3	KED
Cd	111	22.810	ug/L	0.131	0	6	5071	3	KED
Cd	114	22.300	ug/L	0.442	1	7	12220	1	KED
> In	115		ug/L			792758	762721	3	Standard
Ag	107	22.673	ug/L	0.856	3	158	366867	4	Standard
> Tb	159		ug/L			735738	791549	2	Standard
Pb	208	47.131	ug/L	0.727	1	406	2966534	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0687-MSD1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 00:22:55
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			35047	50971	1	Standard
Cl	37		ug/L			4819880	4752791	1	Standard
> Sc	45		ug/L			670326	938365	3	Standard
Cr	52	36.309	ug/L	0.180	0	26049	1096453	3	Standard
Cr	53	35.931	ug/L	0.776	2	231	123646	5	Standard
Mn	55	427.621	ug/L	9.633	2	1028	17926209	1	Standard
> Ge	72		ug/L			40960	40310	5	KED
Ni	60	43.576	ug/L	2.074	4	23	54390	1	KED
Ni	62	44.245	ug/L	1.886	4	6	9021	1	KED
Cu	63	68.867	ug/L	2.182	3	124	257282	1	KED
Cu	65	70.535	ug/L	4.061	5	56	126793	2	KED
Zn	66	221.254	ug/L	12.512	5	80	97816	0	KED
Zn	67	217.245	ug/L	14.255	6	19	15876	1	KED
As	75	26.372	ug/L	1.330	5	7	5735	1	KED
Y	89		ug/L			440630	985822	1	Standard
Kr	83		ug/L			56	220	22	Standard
> In-1	115		ug/L			11294	10797	3	KED
Cd	111	23.687	ug/L	0.667	2	6	5295	0	KED
Cd	114	23.622	ug/L	0.654	2	7	13023	0	KED
> In	115		ug/L			792758	773766	2	Standard
Ag	107	22.754	ug/L	0.365	1	158	373630	2	Standard
> Tb	159		ug/L			735738	799559	3	Standard
Pb	208	46.744	ug/L	0.673	1	406	2971374	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0687-PS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 00:27:23
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	**13**		ug/L			35047	58227	0	Standard
Cl	**37**		ug/L			4819880	4801820	1	Standard
> **Sc**	**45**		ug/L			670326	928653	3	Standard
Cr	**52**	**36.546**	ug/L	1.194	3	26049	1091334	0	Standard
Cr	**53**	**35.966**	ug/L	0.933	2	231	122366	0	Standard
Mn	**55**	**418.385**	ug/L	11.214	2	1028	17357966	0	Standard
> **Ge**	**72**		ug/L			40960	41524	1	KED
Ni	**60**	**42.012**	ug/L	1.209	2	23	54101	3	KED
Ni	**62**	**41.954**	ug/L	0.359	0	6	8825	2	KED
Cu	**63**	**67.826**	ug/L	0.901	1	124	261301	1	KED
Cu	**65**	**69.169**	ug/L	2.465	3	56	128280	2	KED
Zn	**66**	**215.653**	ug/L	2.658	1	80	98391	0	KED
Zn	**67**	**206.080**	ug/L	2.376	1	19	15548	1	KED
As	**75**	**28.013**	ug/L	0.157	0	7	6284	0	KED
Y	**89**		ug/L			440630	989695	2	Standard
Kr	**83**		ug/L			56	195	5	Standard
> **In-1**	**115**		ug/L			11294	10801	0	KED
Cd	**111**	**23.641**	ug/L	0.674	2	6	5290	2	KED
Cd	**114**	**23.584**	ug/L	0.264	1	7	13013	0	KED
> **In**	**115**		ug/L			792758	777328	3	Standard
Ag	**107**	**23.777**	ug/L	0.689	2	158	391971	1	Standard
> **Tb**	**159**		ug/L			735738	799816	4	Standard
Pb	**208**	**48.055**	ug/L	2.178	4	406	3052333	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0687-SRM1
Sample Dil Factor: 50
Comments:
Sample Date/Time: Tuesday, March 07, 2023 00:31:45
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	42144	0	Standard
	Cl	**37**		ug/L			4819880	4901800	2	Standard
⌈>	**Sc**	**45**		ug/L			670326	699303	1	Standard
|	**Cr**	**52**	**81.440**	ug/L	1.921	2	26049	1798975	2	Standard
|	**Cr**	**53**	**81.176**	ug/L	2.803	3	231	207810	4	Standard
⌊	**Mn**	**55**	**200.911**	ug/L	0.645	0	1028	6280849	1	Standard
⌈>	**Ge**	**72**		ug/L			40960	41877	3	KED
|	**Ni**	**60**	**124.698**	ug/L	0.705	0	23	161908	4	KED
|	**Ni**	**62**	**125.105**	ug/L	2.556	2	6	26514	1	KED
|	**Cu**	**63**	**48.224**	ug/L	1.251	2	124	187437	5	KED
|	**Cu**	**65**	**50.085**	ug/L	0.370	0	56	93710	3	KED
|	**Zn**	**66**	**56.377**	ug/L	1.723	3	80	25992	3	KED
|	**Zn**	**67**	**66.267**	ug/L	1.134	1	19	5056	4	KED
⌊	**As**	**75**	**30.317**	ug/L	0.900	2	7	6855	2	KED
	Y	**89**		ug/L			440630	548532	1	Standard
	Kr	**83**		ug/L			56	93	10	Standard
⌈>	**In-1**	**115**		ug/L			11294	10595	4	KED
|	**Cd**	**111**	**58.656**	ug/L	1.611	2	6	12859	2	KED
⌊	**Cd**	**114**	**58.879**	ug/L	1.779	3	7	31836	1	KED
⌈>	**In**	**115**		ug/L			792758	794009	1	Standard
⌊	**Ag**	**107**	**19.685**	ug/L	0.285	1	158	331669	0	Standard
⌈>	**Tb**	**159**		ug/L			735738	759919	1	Standard
⌊	**Pb**	**208**	**93.737**	ug/L	2.581	2	406	5662825	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLD
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 00:36:13
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	36920	1	Standard
	Cl	**37**		ug/L			4819880	4608545	0	Standard
⌈>	**Sc**	**45**		ug/L			670326	630760	3	Standard
|	**Cr**	**52**	**-0.061**	ug/L	0.009	14	26049	23325	4	Standard
|	**Cr**	**53**	**-0.008**	ug/L	0.008	89	231	198	6	Standard
⌊	**Mn**	**55**	**0.012**	ug/L	0.005	40	1028	1314	10	Standard
⌈>	**Ge**	**72**		ug/L			40960	39351	2	KED
|	**Ni**	**60**	**0.014**	ug/L	0.007	50	23	39	21	KED
|	**Ni**	**62**	**0.008**	ug/L	0.020	249	6	7	50	KED
|	**Cu**	**63**	**-0.000**	ug/L	0.006	3183	124	118	17	KED
|	**Cu**	**65**	**0.006**	ug/L	0.013	210	56	65	36	KED
|	**Zn**	**66**	**0.021**	ug/L	0.008	37	80	86	4	KED
|	**Zn**	**67**	**-0.026**	ug/L	0.065	253	19	17	29	KED
⌊	**As**	**75**	**0.006**	ug/L	0.018	313	7	8	45	KED
	Y	**89**		ug/L			440630	407241	3	Standard
	Kr	**83**		ug/L			56	56	1	Standard
⌈>	**In-1**	**115**		ug/L			11294	10359	2	KED
|	**Cd**	**111**	**0.005**	ug/L	0.007	142	6	6	24	KED
⌊	**Cd**	**114**	**0.006**	ug/L	0.002	41	7	9	11	KED
⌈>	**In**	**115**		ug/L			792758	756516	1	Standard
⌊	**Ag**	**107**	**0.008**	ug/L	0.002	30	158	273	12	Standard
⌈>	**Tb**	**159**		ug/L			735738	705940	4	Standard
⌊	**Pb**	**208**	**0.006**	ug/L	0.001	9	406	716	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVD
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 00:40:41
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	34874	3	Standard
	Cl	**37**		ug/L			4819880	4747412	3	Standard
⌈>	**Sc**	**45**		ug/L			670326	631975	8	Standard
|	**Cr**	**52**	**51.605**	ug/L	0.610	1	26049	1039416	8	Standard
|	**Cr**	**53**	**50.799**	ug/L	0.803	1	231	117532	7	Standard
⌊	**Mn**	**55**	**50.769**	ug/L	0.476	0	1028	1434341	7	Standard
⌈>	**Ge**	**72**		ug/L			40960	40560	1	KED
|	**Ni**	**60**	**46.622**	ug/L	0.964	2	23	58651	3	KED
|	**Ni**	**62**	**46.887**	ug/L	0.702	1	6	9634	2	KED
|	**Cu**	**63**	**47.089**	ug/L	0.055	0	124	177240	1	KED
|	**Cu**	**65**	**47.844**	ug/L	1.446	3	56	86730	4	KED
|	**Zn**	**66**	**48.545**	ug/L	1.122	2	80	21695	2	KED
|	**Zn**	**67**	**49.598**	ug/L	2.484	5	19	3672	6	KED
⌊	**As**	**75**	**49.590**	ug/L	0.300	0	7	10861	1	KED
	Y	**89**		ug/L			440630	418434	7	Standard
	Kr	**83**		ug/L			56	51	14	Standard
⌈>	**In-1**	**115**		ug/L			11294	10368	2	KED
|	**Cd**	**111**	**50.203**	ug/L	0.225	0	6	10777	2	KED
⌊	**Cd**	**114**	**49.607**	ug/L	1.322	2	7	26256	0	KED
⌈>	**In**	**115**		ug/L			792758	753525	6	Standard
⌊	**Ag**	**107**	**48.623**	ug/L	1.327	2	158	778022	8	Standard
⌈>	**Tb**	**159**		ug/L			735738	718651	7	Standard
⌊	**Pb**	**208**	**48.721**	ug/L	1.718	3	406	2780938	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBD
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 00:47:53
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	33946	1	Standard
	Cl	**37**		ug/L			4819880	4734517	2	Standard
⌈>	**Sc**	**45**		ug/L			670326	648763	3	Standard
|	**Cr**	**52**	**-0.039**	ug/L	0.020	52	26049	24423	1	Standard
|	**Cr**	**53**	**-0.018**	ug/L	0.005	25	231	182	8	Standard
⌊	**Mn**	**55**	**-0.002**	ug/L	0.002	86	1028	933	6	Standard
⌈>	**Ge**	**72**		ug/L			40960	40050	1	KED
|	**Ni**	**60**	**0.002**	ug/L	0.002	79	23	25	8	KED
|	**Ni**	**62**	**0.032**	ug/L	0.027	83	6	12	43	KED
|	**Cu**	**63**	**-0.006**	ug/L	0.003	50	124	100	9	KED
|	**Cu**	**65**	**0.004**	ug/L	0.008	193	56	62	24	KED
|	**Zn**	**66**	**0.037**	ug/L	0.050	135	80	95	23	KED
|	**Zn**	**67**	**-0.028**	ug/L	0.081	286	19	17	33	KED
⌊	**As**	**75**	**-0.001**	ug/L	0.008	602	7	7	22	KED
	Y	**89**		ug/L			440630	417562	1	Standard
	Kr	**83**		ug/L			56	65	8	Standard
⌈>	**In-1**	**115**		ug/L			11294	10351	5	KED
|	**Cd**	**111**	**0.009**	ug/L	0.012	143	6	7	32	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.010	321	7	8	58	KED
⌈>	**In**	**115**		ug/L			792758	766226	2	Standard
⌊	**Ag**	**107**	**0.008**	ug/L	0.002	28	158	284	15	Standard
⌈>	**Tb**	**159**		ug/L			735738	712126	3	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.001	133	406	437	14	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0388-04
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 00:52:22
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	53331	1	Standard
	Cl	**37**		ug/L			4819880	4991802	1	Standard
⌈>	**Sc**	**45**		ug/L			670326	797732	1	Standard
|	**Cr**	**52**	**0.204**	ug/L	0.010	4	26049	36066	1	Standard
|	**Cr**	**53**	**0.679**	ug/L	0.008	1	231	2254	0	Standard
⌊	**Mn**	**55**	**383.694**	ug/L	12.402	3	1028	13677199	1	Standard
⌈>	**Ge**	**72**		ug/L			40960	39892	1	KED
|	**Ni**	**60**	**0.396**	ug/L	0.035	8	23	512	9	KED
|	**Ni**	**62**	**0.359**	ug/L	0.040	11	6	78	12	KED
|	**Cu**	**63**	**0.234**	ug/L	0.011	4	124	988	5	KED
|	**Cu**	**65**	**0.249**	ug/L	0.025	10	56	498	10	KED
|	**Zn**	**66**	**2.565**	ug/L	0.089	3	80	1201	1	KED
|	**Zn**	**67**	**3.262**	ug/L	0.127	3	19	255	2	KED
⌊	**As**	**75**	**0.204**	ug/L	0.012	5	7	51	5	KED
	Y	**89**		ug/L			440630	452116	0	Standard
	Kr	**83**		ug/L			56	68	20	Standard
⌈>	**In-1**	**115**		ug/L			11294	9599	8	KED
|	**Cd**	**111**	**0.003**	ug/L	0.007	215	6	5	16	KED
⌊	**Cd**	**114**	**0.006**	ug/L	0.011	194	7	8	64	KED
⌈>	**In**	**115**		ug/L			792758	769637	1	Standard
⌊	**Ag**	**107**	**0.004**	ug/L	0.001	37	158	213	10	Standard
⌈>	**Tb**	**159**		ug/L			735738	748294	4	Standard
⌊	**Pb**	**208**	**0.781**	ug/L	0.038	4	406	46846	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0388-02
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 00:56:43
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	52306	1	Standard
	Cl	**37**		ug/L			4819880	5037362	3	Standard
⎡>	**Sc**	**45**		ug/L			670326	826774	3	Standard
⎢	**Cr**	**52**	**0.035**	ug/L	0.020	57	26049	33011	2	Standard
⎢	**Cr**	**53**	**0.544**	ug/L	0.025	4	231	1929	2	Standard
⎣	**Mn**	**55**	**241.783**	ug/L	9.710	4	1028	8928387	2	Standard
⎡>	**Ge**	**72**		ug/L			40960	38808	2	KED
⎢	**Ni**	**60**	**0.825**	ug/L	0.037	4	23	1014	2	KED
⎢	**Ni**	**62**	**0.929**	ug/L	0.040	4	6	188	5	KED
⎢	**Cu**	**63**	**0.134**	ug/L	0.013	9	124	599	9	KED
⎢	**Cu**	**65**	**0.158**	ug/L	0.019	12	56	328	11	KED
⎢	**Zn**	**66**	**1.692**	ug/L	0.053	3	80	797	3	KED
⎢	**Zn**	**67**	**2.803**	ug/L	0.216	7	19	215	5	KED
⎣	**As**	**75**	**0.436**	ug/L	0.018	4	7	98	3	KED
	Y	**89**		ug/L			440630	452662	4	Standard
	Kr	**83**		ug/L			56	58	4	Standard
⎡>	**In-1**	**115**		ug/L			11294	10092	3	KED
⎢	**Cd**	**111**	**0.014**	ug/L	0.001	8	6	8	6	KED
⎣	**Cd**	**114**	**0.003**	ug/L	0.015	559	7	7	97	KED
⎡>	**In**	**115**		ug/L			792758	760729	4	Standard
⎣	**Ag**	**107**	**-0.001**	ug/L	0.001	139	158	142	5	Standard
⎡>	**Tb**	**159**		ug/L			735738	736504	6	Standard
⎣	**Pb**	**208**	**0.742**	ug/L	0.035	4	406	43775	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0046-DUP1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 01:01:05
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35047	50876	2	Standard
	Cl	37		ug/L			4819880	4807651	0	Standard
>	Sc	45		ug/L			670326	795129	2	Standard
	Cr	52	0.085	ug/L	0.039	45	26049	32995	3	Standard
	Cr	53	0.581	ug/L	0.018	3	231	1964	3	Standard
	Mn	55	246.414	ug/L	3.431	1	1028	8758039	2	Standard
>	Ge	72		ug/L			40960	39027	0	KED
	Ni	60	0.803	ug/L	0.023	2	23	993	2	KED
	Ni	62	0.805	ug/L	0.089	11	6	165	10	KED
	Cu	63	0.127	ug/L	0.010	7	124	577	6	KED
	Cu	65	0.132	ug/L	0.003	2	56	284	2	KED
	Zn	66	1.631	ug/L	0.104	6	80	775	5	KED
	Zn	67	2.496	ug/L	0.140	5	19	195	4	KED
	As	75	0.415	ug/L	0.058	14	7	94	13	KED
	Y	89		ug/L			440630	435387	4	Standard
	Kr	83		ug/L			56	69	15	Standard
>	In-1	115		ug/L			11294	10482	2	KED
	Cd	111	0.011	ug/L	0.003	28	6	7	6	KED
	Cd	114	0.008	ug/L	0.006	82	7	10	30	KED
>	In	115		ug/L			792758	740664	2	Standard
	Ag	107	-0.002	ug/L	0.001	36	158	110	11	Standard
>	Tb	159		ug/L			735738	720594	2	Standard
	Pb	208	0.730	ug/L	0.025	3	406	42197	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0046-MS1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 01:05:56
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	51140	3	Standard
	Cl	**37**		ug/L			4819880	5006972	2	Standard
⌈>	**Sc**	**45**		ug/L			670326	831217	2	Standard
|	**Cr**	**52**	**20.451**	ug/L	0.075	0	26049	561198	2	Standard
|	**Cr**	**53**	**20.659**	ug/L	0.357	1	231	63073	3	Standard
⌊	**Mn**	**55**	**257.262**	ug/L	1.165	0	1028	9559834	2	Standard
⌈>	**Ge**	**72**		ug/L			40960	38308	3	KED
|	**Ni**	**60**	**25.120**	ug/L	0.243	0	23	29856	3	KED
|	**Ni**	**62**	**25.243**	ug/L	0.301	1	6	4901	3	KED
|	**Cu**	**63**	**23.188**	ug/L	0.526	2	124	82503	4	KED
|	**Cu**	**65**	**23.839**	ug/L	0.057	0	56	40828	2	KED
|	**Zn**	**66**	**74.072**	ug/L	0.658	0	80	31227	2	KED
|	**Zn**	**67**	**70.025**	ug/L	1.116	1	19	4885	2	KED
⌊	**As**	**75**	**25.527**	ug/L	0.287	1	7	5285	3	KED
	Y	**89**		ug/L			440630	444252	3	Standard
	Kr	**83**		ug/L			56	89	9	Standard
⌈>	**In-1**	**115**		ug/L			11294	9857	2	KED
|	**Cd**	**111**	**23.542**	ug/L	0.517	2	6	4806	1	KED
⌊	**Cd**	**114**	**23.489**	ug/L	0.256	1	7	11828	2	KED
⌈>	**In**	**115**		ug/L			792758	752139	1	Standard
⌊	**Ag**	**107**	**23.482**	ug/L	0.576	2	158	374915	4	Standard
⌈>	**Tb**	**159**		ug/L			735738	746562	5	Standard
⌊	**Pb**	**208**	**24.247**	ug/L	0.831	3	406	1438180	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0031-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 01:11:48
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	58074	0	Standard
	Cl	**37**		ug/L			4819880	4990733	1	Standard
⌈>	**Sc**	**45**		ug/L			670326	826429	3	Standard
|	**Cr**	**52**	**14.221**	ug/L	0.285	2	26049	397641	1	Standard
|	**Cr**	**53**	**14.504**	ug/L	0.383	2	231	44086	1	Standard
⌊	**Mn**	**55**	**152.866**	ug/L	2.944	1	1028	5645855	1	Standard
⌈>	**Ge**	**72**		ug/L			40960	41606	4	KED
|	**Ni**	**60**	**12.556**	ug/L	0.237	1	23	16212	3	KED
|	**Ni**	**62**	**12.885**	ug/L	0.258	2	6	2720	4	KED
|	**Cu**	**63**	**29.408**	ug/L	0.087	0	124	113589	4	KED
|	**Cu**	**65**	**28.884**	ug/L	0.369	1	56	53710	3	KED
|	**Zn**	**66**	**57.550**	ug/L	0.603	1	80	26364	3	KED
|	**Zn**	**67**	**57.271**	ug/L	1.329	2	19	4341	2	KED
⌊	**As**	**75**	**6.314**	ug/L	0.186	2	7	1424	1	KED
	Y	**89**		ug/L			440630	710207	5	Standard
	Kr	**83**		ug/L			56	146	19	Standard
⌈>	**In-1**	**115**		ug/L			11294	11271	0	KED
|	**Cd**	**111**	**0.175**	ug/L	0.033	18	6	46	16	KED
⌊	**Cd**	**114**	**0.208**	ug/L	0.010	5	7	126	4	KED
⌈>	**In**	**115**		ug/L			792758	802449	2	Standard
⌊	**Ag**	**107**	**0.145**	ug/L	0.001	0	158	2630	3	Standard
⌈>	**Tb**	**159**		ug/L			735738	793266	2	Standard
⌊	**Pb**	**208**	**13.947**	ug/L	0.121	0	406	880027	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0031-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 01:16:16
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	53882	2	Standard
	Cl	**37**		ug/L			4819880	4953607	1	Standard
⌈>	**Sc**	**45**		ug/L			670326	798471	0	Standard
|	**Cr**	**52**	**13.593**	ug/L	0.225	1	26049	368718	1	Standard
|	**Cr**	**53**	**13.666**	ug/L	0.248	1	231	40166	1	Standard
⌊	**Mn**	**55**	**140.030**	ug/L	3.638	2	1028	4998260	2	Standard
⌈>	**Ge**	**72**		ug/L			40960	40124	1	KED
|	**Ni**	**60**	**10.775**	ug/L	0.085	0	23	13424	1	KED
|	**Ni**	**62**	**10.741**	ug/L	0.251	2	6	2187	1	KED
|	**Cu**	**63**	**22.291**	ug/L	0.277	1	124	83056	0	KED
|	**Cu**	**65**	**22.377**	ug/L	0.309	1	56	40140	0	KED
|	**Zn**	**66**	**50.762**	ug/L	0.841	1	80	22439	1	KED
|	**Zn**	**67**	**48.908**	ug/L	1.193	2	19	3580	2	KED
⌊	**As**	**75**	**4.750**	ug/L	0.121	2	7	1036	2	KED
	Y	**89**		ug/L			440630	660831	2	Standard
	Kr	**83**		ug/L			56	109	2	Standard
⌈>	**In-1**	**115**		ug/L			11294	10911	1	KED
|	**Cd**	**111**	**0.126**	ug/L	0.036	28	6	34	21	KED
⌊	**Cd**	**114**	**0.121**	ug/L	0.006	4	7	74	6	KED
⌈>	**In**	**115**		ug/L			792758	790792	0	Standard
⌊	**Ag**	**107**	**0.087**	ug/L	0.006	6	158	1609	6	Standard
⌈>	**Tb**	**159**		ug/L			735738	773798	1	Standard
⌊	**Pb**	**208**	**9.234**	ug/L	0.249	2	406	568433	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0031-04
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 01:20:43
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35047	58028	0	Standard
	Cl	37		ug/L			4819880	4907330	0	Standard
⌈>	Sc	45		ug/L			670326	821203	2	Standard
|	Cr	52	12.427	ug/L	0.243	1	26049	349356	1	Standard
|	Cr	53	12.467	ug/L	0.116	0	231	37710	2	Standard
⌊	Mn	55	138.790	ug/L	0.801	0	1028	5095086	1	Standard
⌈>	Ge	72		ug/L			40960	41932	1	KED
|	Ni	60	11.075	ug/L	0.339	3	23	14416	2	KED
|	Ni	62	11.131	ug/L	0.640	5	6	2369	5	KED
|	Cu	63	23.751	ug/L	0.061	0	124	92486	1	KED
|	Cu	65	23.936	ug/L	0.527	2	56	44869	1	KED
|	Zn	66	47.569	ug/L	1.074	2	80	21980	1	KED
|	Zn	67	46.105	ug/L	0.935	2	19	3528	0	KED
⌊	As	75	4.854	ug/L	0.145	2	7	1106	2	KED
	Y	89		ug/L			440630	687915	2	Standard
	Kr	83		ug/L			56	113	11	Standard
⌈>	In-1	115		ug/L			11294	11309	2	KED
|	Cd	111	0.118	ug/L	0.035	29	6	33	22	KED
⌊	Cd	114	0.129	ug/L	0.015	11	7	81	12	KED
⌈>	In	115		ug/L			792758	804093	1	Standard
⌊	Ag	107	0.101	ug/L	0.004	3	158	1879	2	Standard
⌈>	Tb	159		ug/L			735738	800498	1	Standard
⌊	Pb	208	8.850	ug/L	0.204	2	406	563607	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0031-05
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 01:25:11
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35047	54887	2	Standard
	Cl	37		ug/L			4819880	5009900	0	Standard
>	Sc	45		ug/L			670326	838152	3	Standard
	Cr	52	13.199	ug/L	0.259	1	26049	376639	1	Standard
	Cr	53	13.080	ug/L	0.286	2	231	40354	1	Standard
	Mn	55	142.958	ug/L	3.626	2	1028	5354435	1	Standard
>	Ge	72		ug/L			40960	42363	1	KED
	Ni	60	12.118	ug/L	0.163	1	23	15935	0	KED
	Ni	62	12.213	ug/L	0.234	1	6	2625	2	KED
	Cu	63	23.812	ug/L	0.037	0	124	93674	1	KED
	Cu	65	23.826	ug/L	0.798	3	56	45133	4	KED
	Zn	66	51.223	ug/L	0.209	0	80	23908	1	KED
	Zn	67	50.332	ug/L	1.581	3	19	3890	3	KED
	As	75	6.029	ug/L	0.024	0	7	1386	0	KED
	Y	89		ug/L			440630	717062	2	Standard
	Kr	83		ug/L			56	133	18	Standard
>	In-1	115		ug/L			11294	11041	3	KED
	Cd	111	0.147	ug/L	0.041	27	6	39	20	KED
	Cd	114	0.132	ug/L	0.006	4	7	81	5	KED
>	In	115		ug/L			792758	820851	1	Standard
	Ag	107	0.099	ug/L	0.008	8	158	1888	6	Standard
>	Tb	159		ug/L			735738	811244	3	Standard
	Pb	208	10.789	ug/L	0.394	3	406	695803	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0031-06
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 01:29:38
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35047	55174	3	Standard
	Cl	37		ug/L			4819880	4902127	0	Standard
⌈>	Sc	45		ug/L			670326	810700	2	Standard
|	Cr	52	12.983	ug/L	0.249	1	26049	359083	4	Standard
|	Cr	53	12.904	ug/L	0.281	2	231	38511	1	Standard
⌊	Mn	55	136.817	ug/L	0.412	0	1028	4958626	2	Standard
⌈>	Ge	72		ug/L			40960	42602	1	KED
|	Ni	60	11.340	ug/L	0.352	3	23	14997	2	KED
|	Ni	62	11.379	ug/L	0.327	2	6	2461	4	KED
|	Cu	63	23.212	ug/L	0.073	0	124	91830	1	KED
|	Cu	65	23.338	ug/L	0.347	1	56	44452	1	KED
|	Zn	66	49.606	ug/L	0.299	0	80	23285	1	KED
|	Zn	67	48.181	ug/L	0.462	0	19	3745	1	KED
⌊	As	75	5.767	ug/L	0.240	4	7	1333	2	KED
	Y	89		ug/L			440630	692465	1	Standard
	Kr	83		ug/L			56	106	5	Standard
⌈>	In-1	115		ug/L			11294	10766	5	KED
|	Cd	111	0.153	ug/L	0.013	8	6	39	1	KED
⌊	Cd	114	0.178	ug/L	0.035	19	7	104	12	KED
⌈>	In	115		ug/L			792758	794622	2	Standard
⌊	Ag	107	0.095	ug/L	0.003	3	158	1759	4	Standard
⌈>	Tb	159		ug/L			735738	785721	2	Standard
⌊	Pb	208	9.640	ug/L	0.272	2	406	602402	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0031-07
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 01:34:00
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35047	56349	1	Standard
	Cl	37		ug/L			4819880	4962518	0	Standard
⌈>	Sc	45		ug/L			670326	801560	2	Standard
|	Cr	52	11.666	ug/L	0.149	1	26049	322068	2	Standard
|	Cr	53	11.797	ug/L	0.320	2	231	34839	2	Standard
⌊	Mn	55	140.119	ug/L	0.826	0	1028	5020806	2	Standard
⌈>	Ge	72		ug/L			40960	41245	4	KED
|	Ni	60	10.495	ug/L	0.217	2	23	13436	2	KED
|	Ni	62	10.532	ug/L	0.557	5	6	2208	9	KED
|	Cu	63	23.805	ug/L	0.439	1	124	91213	5	KED
|	Cu	65	24.413	ug/L	0.381	1	56	45022	4	KED
|	Zn	66	48.536	ug/L	1.505	3	80	22042	1	KED
|	Zn	67	47.976	ug/L	0.245	0	19	3610	3	KED
⌊	As	75	6.196	ug/L	0.032	0	7	1386	3	KED
	Y	89		ug/L			440630	679487	4	Standard
	Kr	83		ug/L			56	128	11	Standard
⌈>	In-1	115		ug/L			11294	10988	3	KED
|	Cd	111	0.162	ug/L	0.022	13	6	42	10	KED
⌊	Cd	114	0.108	ug/L	0.029	27	7	67	22	KED
⌈>	In	115		ug/L			792758	801036	1	Standard
⌊	Ag	107	0.098	ug/L	0.004	3	158	1828	4	Standard
⌈>	Tb	159		ug/L			735738	785141	0	Standard
⌊	Pb	208	10.046	ug/L	0.219	2	406	627516	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVE
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 01:39:53
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	35857	2	Standard
	Cl	**37**		ug/L			4819880	5037538	0	Standard
⎡>	**Sc**	**45**		ug/L			670326	677901	1	Standard
⎢	**Cr**	**52**	**50.049**	ug/L	0.472	0	26049	1082055	2	Standard
⎢	**Cr**	**53**	**49.255**	ug/L	0.847	1	231	122330	3	Standard
⎣	**Mn**	**55**	**50.190**	ug/L	0.796	1	1028	1521486	0	Standard
⎡>	**Ge**	**72**		ug/L			40960	40634	2	KED
⎢	**Ni**	**60**	**48.623**	ug/L	0.506	1	23	61272	3	KED
⎢	**Ni**	**62**	**48.716**	ug/L	1.133	2	6	10022	0	KED
⎢	**Cu**	**63**	**48.089**	ug/L	1.183	2	124	181268	1	KED
⎢	**Cu**	**65**	**48.232**	ug/L	0.862	1	56	87593	4	KED
⎢	**Zn**	**66**	**49.551**	ug/L	1.989	4	80	22202	6	KED
⎢	**Zn**	**67**	**50.717**	ug/L	1.691	3	19	3757	1	KED
⎣	**As**	**75**	**50.695**	ug/L	0.671	1	7	11122	1	KED
	Y	**89**		ug/L			440630	433564	3	Standard
	Kr	**83**		ug/L			56	54	12	Standard
⎡>	**In-1**	**115**		ug/L			11294	10669	5	KED
⎢	**Cd**	**111**	**50.436**	ug/L	0.788	1	6	11135	3	KED
⎣	**Cd**	**114**	**50.203**	ug/L	1.355	2	7	27331	3	KED
⎡>	**In**	**115**		ug/L			792758	784998	1	Standard
⎣	**Ag**	**107**	**49.457**	ug/L	1.268	2	158	823880	3	Standard
⎡>	**Tb**	**159**		ug/L			735738	752557	2	Standard
⎣	**Pb**	**208**	**49.261**	ug/L	1.388	2	406	2946972	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBE
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 01:47:05
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	35035	3	Standard
	Cl	**37**		ug/L			4819880	4928307	1	Standard
⌈>	**Sc**	**45**		ug/L			670326	665840	1	Standard
|	**Cr**	**52**	**-0.055**	ug/L	0.020	35	26049	24728	2	Standard
|	**Cr**	**53**	**-0.023**	ug/L	0.002	10	231	174	2	Standard
⌊	**Mn**	**55**	**-0.002**	ug/L	0.000	27	1028	968	0	Standard
⌈>	**Ge**	**72**		ug/L			40960	41019	0	KED
|	**Ni**	**60**	**-0.001**	ug/L	0.004	739	23	22	22	KED
|	**Ni**	**62**	**-0.000**	ug/L	0.014	53537	6	6	45	KED
|	**Cu**	**63**	**-0.009**	ug/L	0.003	32	124	91	11	KED
|	**Cu**	**65**	**-0.002**	ug/L	0.004	145	56	52	12	KED
|	**Zn**	**66**	**-0.055**	ug/L	0.017	31	80	55	13	KED
|	**Zn**	**67**	**-0.154**	ug/L	0.015	9	19	8	13	KED
⌊	**As**	**75**	**0.004**	ug/L	0.007	163	7	8	17	KED
	Y	**89**		ug/L			440630	439202	4	Standard
	Kr	**83**		ug/L			56	60	9	Standard
⌈>	**In-1**	**115**		ug/L			11294	10756	1	KED
|	**Cd**	**111**	**-0.007**	ug/L	0.006	86	6	4	35	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.005	281	7	7	36	KED
⌈>	**In**	**115**		ug/L			792758	805444	2	Standard
⌊	**Ag**	**107**	**0.006**	ug/L	0.002	35	158	262	16	Standard
⌈>	**Tb**	**159**		ug/L			735738	733870	4	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.001	143	406	459	12	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0031-08
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 01:51:33
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35047	58420	0	Standard
	Cl	37		ug/L			4819880	4832348	1	Standard
⌈>	Sc	45		ug/L			670326	791587	4	Standard
|	Cr	52	13.023	ug/L	0.077	0	26049	351455	3	Standard
|	Cr	53	13.007	ug/L	0.454	3	231	37881	1	Standard
⌊	Mn	55	150.686	ug/L	3.168	2	1028	5329942	2	Standard
⌈>	Ge	72		ug/L			40960	40973	0	KED
|	Ni	60	11.519	ug/L	0.295	2	23	14651	2	KED
|	Ni	62	12.073	ug/L	0.207	1	6	2510	2	KED
|	Cu	63	61.365	ug/L	1.228	2	124	233297	2	KED
|	Cu	65	62.575	ug/L	1.144	1	56	114543	2	KED
|	Zn	66	54.157	ug/L	0.569	1	80	24443	1	KED
|	Zn	67	52.122	ug/L	1.624	3	19	3895	3	KED
⌊	As	75	7.101	ug/L	0.200	2	7	1577	2	KED
	Y	89		ug/L			440630	676304	5	Standard
	Kr	83		ug/L			56	115	14	Standard
⌈>	In-1	115		ug/L			11294	10651	1	KED
|	Cd	111	0.161	ug/L	0.007	4	6	41	5	KED
⌊	Cd	114	0.203	ug/L	0.008	4	7	117	4	KED
⌈>	In	115		ug/L			792758	776120	4	Standard
⌊	Ag	107	0.107	ug/L	0.008	7	158	1914	6	Standard
⌈>	Tb	159		ug/L			735738	765705	2	Standard
⌊	Pb	208	11.101	ug/L	0.148	1	406	676182	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0031-09
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 01:56:01
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	58695	3	Standard
	Cl	**37**		ug/L			4819880	4790534	1	Standard
⌈>	**Sc**	**45**		ug/L			670326	807040	4	Standard
|	**Cr**	**52**	**12.416**	ug/L	0.096	0	26049	343129	4	Standard
|	**Cr**	**53**	**12.339**	ug/L	0.194	1	231	36670	2	Standard
⌊	**Mn**	**55**	**161.094**	ug/L	0.525	0	1028	5812008	3	Standard
⌈>	**Ge**	**72**		ug/L			40960	41356	1	KED
|	**Ni**	**60**	**11.097**	ug/L	0.302	2	23	14246	1	KED
|	**Ni**	**62**	**11.230**	ug/L	0.230	2	6	2357	1	KED
|	**Cu**	**63**	**26.642**	ug/L	0.700	2	124	102279	1	KED
|	**Cu**	**65**	**27.421**	ug/L	0.677	2	56	50684	1	KED
|	**Zn**	**66**	**54.607**	ug/L	0.753	1	80	24874	1	KED
|	**Zn**	**67**	**51.956**	ug/L	1.177	2	19	3919	2	KED
⌊	**As**	**75**	**6.950**	ug/L	0.236	3	7	1558	2	KED
	Y	**89**		ug/L			440630	680477	3	Standard
	Kr	**83**		ug/L			56	123	7	Standard
⌈>	**In-1**	**115**		ug/L			11294	11018	3	KED
|	**Cd**	**111**	**0.164**	ug/L	0.051	31	6	43	26	KED
⌊	**Cd**	**114**	**0.159**	ug/L	0.033	20	7	96	20	KED
⌈>	**In**	**115**		ug/L			792758	788312	3	Standard
⌊	**Ag**	**107**	**0.113**	ug/L	0.003	2	158	2047	1	Standard
⌈>	**Tb**	**159**		ug/L			735738	773936	1	Standard
⌊	**Pb**	**208**	**11.694**	ug/L	0.318	2	406	719921	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0031-10
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 02:00:28
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35047	57683	3	Standard
	Cl	37		ug/L			4819880	4840430	1	Standard
⌈>	Sc	45		ug/L			670326	804927	0	Standard
|	Cr	52	12.953	ug/L	0.311	2	26049	355719	2	Standard
|	Cr	53	12.839	ug/L	0.452	3	231	38064	3	Standard
⌊	Mn	55	171.386	ug/L	3.577	2	1028	6167103	2	Standard
⌈>	Ge	72		ug/L			40960	42264	2	KED
|	Ni	60	10.980	ug/L	0.227	2	23	14404	2	KED
|	Ni	62	11.416	ug/L	0.401	3	6	2448	3	KED
|	Cu	63	27.209	ug/L	0.759	2	124	106755	3	KED
|	Cu	65	27.912	ug/L	0.889	3	56	52701	0	KED
|	Zn	66	54.175	ug/L	2.072	3	80	25211	3	KED
|	Zn	67	52.867	ug/L	3.201	6	19	4070	3	KED
⌊	As	75	7.026	ug/L	0.139	1	7	1609	0	KED
	Y	89		ug/L			440630	696197	3	Standard
	Kr	83		ug/L			56	140	25	Standard
⌈>	In-1	115		ug/L			11294	10342	1	KED
|	Cd	111	0.177	ug/L	0.025	13	6	43	13	KED
⌊	Cd	114	0.174	ug/L	0.044	25	7	98	24	KED
⌈>	In	115		ug/L			792758	781794	4	Standard
⌊	Ag	107	0.118	ug/L	0.003	2	158	2122	6	Standard
⌈>	Tb	159		ug/L			735738	775533	3	Standard
⌊	Pb	208	12.104	ug/L	0.351	2	406	746425	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0031-11
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 02:04:56
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35047	55674	1	Standard
	Cl	37		ug/L			4819880	4857057	2	Standard
⌈>	Sc	45		ug/L			670326	809975	0	Standard
|	Cr	52	12.496	ug/L	0.121	0	26049	346388	1	Standard
|	Cr	53	12.414	ug/L	0.082	0	231	37042	1	Standard
⌊	Mn	55	135.075	ug/L	4.874	3	1028	4891471	3	Standard
⌈>	Ge	72		ug/L			40960	42024	1	KED
|	Ni	60	10.941	ug/L	0.272	2	23	14273	1	KED
|	Ni	62	11.023	ug/L	0.303	2	6	2351	3	KED
|	Cu	63	23.229	ug/L	0.519	2	124	90637	1	KED
|	Cu	65	23.468	ug/L	0.448	1	56	44097	2	KED
|	Zn	66	52.453	ug/L	0.982	1	80	24284	2	KED
|	Zn	67	51.753	ug/L	2.010	3	19	3966	3	KED
⌊	As	75	6.359	ug/L	0.160	2	7	1450	2	KED
	Y	89		ug/L			440630	671134	2	Standard
	Kr	83		ug/L			56	104	7	Standard
⌈>	In-1	115		ug/L			11294	10924	3	KED
|	Cd	111	0.190	ug/L	0.039	20	6	48	15	KED
⌊	Cd	114	0.154	ug/L	0.021	13	7	93	14	KED
⌈>	In	115		ug/L			792758	799906	1	Standard
⌊	Ag	107	0.094	ug/L	0.009	9	158	1759	8	Standard
⌈>	Tb	159		ug/L			735738	791682	2	Standard
⌊	Pb	208	12.753	ug/L	0.240	1	406	803083	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0031-12
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 02:09:24
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35047	56473	4	Standard
	Cl	37		ug/L			4819880	4940574	2	Standard
⌈>	Sc	45		ug/L			670326	813267	2	Standard
|	Cr	52	12.824	ug/L	0.215	1	26049	356091	2	Standard
|	Cr	53	12.994	ug/L	0.235	1	231	38905	0	Standard
⌊	Mn	55	138.074	ug/L	4.510	3	1028	5017712	0	Standard
⌈>	Ge	72		ug/L			40960	40838	2	KED
|	Ni	60	11.656	ug/L	0.149	1	23	14779	3	KED
|	Ni	62	11.820	ug/L	1.009	8	6	2445	5	KED
|	Cu	63	24.544	ug/L	0.228	0	124	93082	3	KED
|	Cu	65	25.015	ug/L	0.147	0	56	45665	2	KED
|	Zn	66	54.313	ug/L	1.532	2	80	24422	1	KED
|	Zn	67	51.462	ug/L	1.132	2	19	3832	2	KED
⌊	As	75	6.644	ug/L	0.081	1	7	1471	1	KED
	Y	89		ug/L			440630	672948	0	Standard
	Kr	83		ug/L			56	116	13	Standard
⌈>	In-1	115		ug/L			11294	11208	1	KED
|	Cd	111	0.166	ug/L	0.027	16	6	44	14	KED
⌊	Cd	114	0.154	ug/L	0.017	10	7	95	9	KED
⌈>	In	115		ug/L			792758	811518	1	Standard
⌊	Ag	107	0.101	ug/L	0.005	5	158	1906	5	Standard
⌈>	Tb	159		ug/L			735738	794912	2	Standard
⌊	Pb	208	10.504	ug/L	0.283	2	406	664035	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0031-13
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 02:13:51
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35047	55480	2	Standard
	Cl	37		ug/L			4819880	4788648	2	Standard
>	Sc	45		ug/L			670326	801374	2	Standard
	Cr	52	12.724	ug/L	0.211	1	26049	348361	2	Standard
	Cr	53	12.686	ug/L	0.129	1	231	37452	3	Standard
	Mn	55	133.591	ug/L	2.625	1	1028	4786286	2	Standard
>	Ge	72		ug/L			40960	40565	2	KED
	Ni	60	11.419	ug/L	0.130	1	23	14381	2	KED
	Ni	62	11.680	ug/L	0.454	3	6	2403	2	KED
	Cu	63	23.968	ug/L	0.504	2	124	90257	0	KED
	Cu	65	24.637	ug/L	0.244	0	56	44679	2	KED
	Zn	66	52.691	ug/L	1.297	2	80	23547	3	KED
	Zn	67	52.008	ug/L	1.020	1	19	3846	0	KED
	As	75	5.819	ug/L	0.044	0	7	1281	1	KED
	Y	89		ug/L			440630	689912	3	Standard
	Kr	83		ug/L			56	102	31	Standard
>	In-1	115		ug/L			11294	10785	2	KED
	Cd	111	0.157	ug/L	0.024	15	6	40	11	KED
	Cd	114	0.139	ug/L	0.028	20	7	83	18	KED
>	In	115		ug/L			792758	791560	1	Standard
	Ag	107	0.096	ug/L	0.006	5	158	1764	6	Standard
>	Tb	159		ug/L			735738	784664	4	Standard
	Pb	208	12.589	ug/L	0.406	3	406	785101	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0031-14
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 02:18:19
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	57000	2	Standard
	Cl	**37**		ug/L			4819880	4764040	2	Standard
⌈>	**Sc**	**45**		ug/L			670326	756718	2	Standard
|	**Cr**	**52**	**11.982**	ug/L	0.299	2	26049	311410	1	Standard
|	**Cr**	**53**	**12.185**	ug/L	0.151	1	231	33970	2	Standard
⌊	**Mn**	**55**	**124.906**	ug/L	1.220	0	1028	4225817	2	Standard
⌈>	**Ge**	**72**		ug/L			40960	41108	0	KED
|	**Ni**	**60**	**9.830**	ug/L	0.256	2	23	12549	2	KED
|	**Ni**	**62**	**9.978**	ug/L	0.059	0	6	2082	1	KED
|	**Cu**	**63**	**18.872**	ug/L	0.122	0	124	72065	0	KED
|	**Cu**	**65**	**18.911**	ug/L	0.113	0	56	34767	0	KED
|	**Zn**	**66**	**43.491**	ug/L	0.656	1	80	19708	0	KED
|	**Zn**	**67**	**43.510**	ug/L	0.569	1	19	3265	1	KED
⌊	**As**	**75**	**4.952**	ug/L	0.099	1	7	1106	2	KED
	Y	**89**		ug/L			440630	658371	3	Standard
	Kr	**83**		ug/L			56	104	8	Standard
⌈>	**In-1**	**115**		ug/L			11294	10110	3	KED
|	**Cd**	**111**	**0.129**	ug/L	0.003	2	6	32	5	KED
⌊	**Cd**	**114**	**0.100**	ug/L	0.020	19	7	58	15	KED
⌈>	**In**	**115**		ug/L			792758	775119	3	Standard
⌊	**Ag**	**107**	**0.136**	ug/L	0.008	5	158	2388	2	Standard
⌈>	**Tb**	**159**		ug/L			735738	766431	3	Standard
⌊	**Pb**	**208**	**7.635**	ug/L	0.174	2	406	465539	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0031-15
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 02:22:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35047	56933	2	Standard
	Cl	37		ug/L			4819880	4771191	2	Standard
>	Sc	45		ug/L			670326	757022	2	Standard
	Cr	52	11.942	ug/L	0.060	0	26049	310688	2	Standard
	Cr	53	11.988	ug/L	0.174	1	231	33448	3	Standard
	Mn	55	121.522	ug/L	1.085	0	1028	4113071	2	Standard
>	Ge	72		ug/L			40960	41418	2	KED
	Ni	60	10.916	ug/L	0.306	2	23	14032	1	KED
	Ni	62	11.030	ug/L	0.628	5	6	2317	3	KED
	Cu	63	19.043	ug/L	0.450	2	124	73257	2	KED
	Cu	65	19.240	ug/L	0.418	2	56	35629	0	KED
	Zn	66	50.636	ug/L	0.666	1	80	23103	0	KED
	Zn	67	50.961	ug/L	3.205	6	19	3846	4	KED
	As	75	7.529	ug/L	0.309	4	7	1689	1	KED
	Y	89		ug/L			440630	642412	3	Standard
	Kr	83		ug/L			56	100	1	Standard
>	In-1	115		ug/L			11294	11140	1	KED
	Cd	111	0.134	ug/L	0.024	18	6	36	16	KED
	Cd	114	0.122	ug/L	0.022	18	7	76	18	KED
>	In	115		ug/L			792758	798233	2	Standard
	Ag	107	0.071	ug/L	0.003	4	158	1367	4	Standard
>	Tb	159		ug/L			735738	777487	5	Standard
	Pb	208	10.552	ug/L	0.349	3	406	651908	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0031-16
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 02:27:14
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35047	57266	1	Standard
	Cl	37		ug/L			4819880	4755393	2	Standard
⌈>	Sc	45		ug/L			670326	780471	4	Standard
|	Cr	52	12.225	ug/L	0.353	2	26049	327036	3	Standard
|	Cr	53	12.324	ug/L	0.399	3	231	35408	2	Standard
⌊	Mn	55	142.739	ug/L	2.741	1	1028	4977762	2	Standard
⌈>	Ge	72		ug/L			40960	41488	2	KED
|	Ni	60	11.047	ug/L	0.313	2	23	14234	4	KED
|	Ni	62	11.047	ug/L	0.203	1	6	2325	0	KED
|	Cu	63	21.824	ug/L	0.432	1	124	84062	0	KED
|	Cu	65	22.112	ug/L	0.239	1	56	41022	2	KED
|	Zn	66	46.465	ug/L	1.451	3	80	21253	4	KED
|	Zn	67	45.457	ug/L	1.472	3	19	3442	3	KED
⌊	As	75	6.349	ug/L	0.061	0	7	1429	2	KED
	Y	89		ug/L			440630	664692	3	Standard
	Kr	83		ug/L			56	93	6	Standard
⌈>	In-1	115		ug/L			11294	10854	0	KED
|	Cd	111	0.190	ug/L	0.023	12	6	48	10	KED
⌊	Cd	114	0.134	ug/L	0.016	11	7	81	10	KED
⌈>	In	115		ug/L			792758	785073	2	Standard
⌊	Ag	107	0.091	ug/L	0.003	3	158	1671	4	Standard
⌈>	Tb	159		ug/L			735738	778189	5	Standard
⌊	Pb	208	10.500	ug/L	0.321	3	406	649507	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0031-17
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 02:31:35
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35047	57643	2	Standard
	Cl	37		ug/L			4819880	4716029	0	Standard
⌈>	Sc	45		ug/L			670326	784300	2	Standard
|	Cr	52	12.290	ug/L	0.282	2	26049	330306	1	Standard
|	Cr	53	12.128	ug/L	0.309	2	231	35034	0	Standard
⌊	Mn	55	140.215	ug/L	4.788	3	1028	4914488	2	Standard
⌈>	Ge	72		ug/L			40960	41854	2	KED
|	Ni	60	10.586	ug/L	0.354	3	23	13751	1	KED
|	Ni	62	10.817	ug/L	0.703	6	6	2297	5	KED
|	Cu	63	24.554	ug/L	0.146	0	124	95419	1	KED
|	Cu	65	24.936	ug/L	0.593	2	56	46676	4	KED
|	Zn	66	58.350	ug/L	1.412	2	80	26887	1	KED
|	Zn	67	55.824	ug/L	1.665	2	19	4258	1	KED
⌊	As	75	6.785	ug/L	0.104	1	7	1540	2	KED
	Y	89		ug/L			440630	662493	3	Standard
	Kr	83		ug/L			56	102	16	Standard
⌈>	In-1	115		ug/L			11294	10674	1	KED
|	Cd	111	0.178	ug/L	0.021	12	6	45	12	KED
⌊	Cd	114	0.158	ug/L	0.015	9	7	92	10	KED
⌈>	In	115		ug/L			792758	792901	1	Standard
⌊	Ag	107	0.095	ug/L	0.004	4	158	1749	4	Standard
⌈>	Tb	159		ug/L			735738	781857	1	Standard
⌊	Pb	208	10.651	ug/L	0.201	1	406	662490	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVF
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 02:37:28
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	37415	2	Standard
	Cl	**37**		ug/L			4819880	5039637	3	Standard
⎡>	**Sc**	**45**		ug/L			670326	679526	4	Standard
⎢	**Cr**	**52**	**50.190**	ug/L	1.618	3	26049	1086510	1	Standard
⎢	**Cr**	**53**	**49.782**	ug/L	1.960	3	231	123792	2	Standard
⎣	**Mn**	**55**	**50.635**	ug/L	1.624	3	1028	1537389	1	Standard
⎡>	**Ge**	**72**		ug/L			40960	40795	1	KED
⎢	**Ni**	**60**	**49.077**	ug/L	0.732	1	23	62076	0	KED
⎢	**Ni**	**62**	**47.717**	ug/L	2.130	4	6	9857	3	KED
⎢	**Cu**	**63**	**47.653**	ug/L	0.310	0	124	180388	0	KED
⎢	**Cu**	**65**	**48.441**	ug/L	1.077	2	56	88280	1	KED
⎢	**Zn**	**66**	**50.208**	ug/L	0.234	0	80	22569	1	KED
⎢	**Zn**	**67**	**50.500**	ug/L	0.581	1	19	3757	0	KED
⎣	**As**	**75**	**51.120**	ug/L	0.272	0	7	11261	0	KED
	Y	**89**		ug/L			440630	434640	2	Standard
	Kr	**83**		ug/L			56	55	12	Standard
⎡>	**In-1**	**115**		ug/L			11294	10857	1	KED
⎢	**Cd**	**111**	**49.788**	ug/L	1.115	2	6	11190	0	KED
⎣	**Cd**	**114**	**49.139**	ug/L	1.460	2	7	27239	1	KED
⎡>	**In**	**115**		ug/L			792758	777024	1	Standard
⎣	**Ag**	**107**	**50.570**	ug/L	0.205	0	158	833725	1	Standard
⎡>	**Tb**	**159**		ug/L			735738	745339	5	Standard
⎣	**Pb**	**208**	**49.905**	ug/L	2.165	4	406	2953446	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBF
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 02:44:40
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	35090	2	Standard
	Cl	**37**		ug/L			4819880	4858779	1	Standard
⌈>	**Sc**	**45**		ug/L			670326	661549	0	Standard
|	**Cr**	**52**	**-0.018**	ug/L	0.030	170	26049	25346	2	Standard
|	**Cr**	**53**	**-0.015**	ug/L	0.002	14	231	192	2	Standard
⌊	**Mn**	**55**	**-0.003**	ug/L	0.002	65	1028	919	6	Standard
⌈>	**Ge**	**72**		ug/L			40960	40101	1	KED
|	**Ni**	**60**	**-0.002**	ug/L	0.001	31	23	20	5	KED
|	**Ni**	**62**	**0.016**	ug/L	0.010	60	6	9	20	KED
|	**Cu**	**63**	**-0.008**	ug/L	0.002	23	124	92	6	KED
|	**Cu**	**65**	**0.001**	ug/L	0.000	32	56	57	1	KED
|	**Zn**	**66**	**-0.057**	ug/L	0.026	46	80	53	21	KED
|	**Zn**	**67**	**-0.151**	ug/L	0.017	11	19	8	13	KED
⌊	**As**	**75**	**-0.003**	ug/L	0.013	465	7	6	38	KED
	Y	**89**		ug/L			440630	437392	2	Standard
	Kr	**83**		ug/L			56	64	14	Standard
⌈>	**In-1**	**115**		ug/L			11294	11036	2	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.002	67	6	5	10	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.008	320	7	8	55	KED
⌈>	**In**	**115**		ug/L			792758	788269	1	Standard
⌊	**Ag**	**107**	**0.004**	ug/L	0.002	44	158	220	12	Standard
⌈>	**Tb**	**159**		ug/L			735738	717419	3	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	40	406	448	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0031-18
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 02:49:09
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35047	56808	2	Standard
	Cl	37		ug/L			4819880	4776344	3	Standard
⌈>	Sc	45		ug/L			670326	782353	0	Standard
|	Cr	52	12.973	ug/L	0.145	1	26049	346199	1	Standard
|	Cr	53	12.809	ug/L	0.304	2	231	36912	2	Standard
⌊	Mn	55	148.111	ug/L	5.059	3	1028	5181114	4	Standard
⌈>	Ge	72		ug/L			40960	40505	3	KED
|	Ni	60	11.157	ug/L	0.249	2	23	14037	5	KED
|	Ni	62	11.578	ug/L	0.279	2	6	2379	1	KED
|	Cu	63	24.889	ug/L	0.634	2	124	93646	5	KED
|	Cu	65	25.349	ug/L	0.038	0	56	45902	3	KED
|	Zn	66	58.700	ug/L	0.591	1	80	26189	3	KED
|	Zn	67	55.401	ug/L	1.019	1	19	4092	4	KED
⌊	As	75	21.272	ug/L	0.365	1	7	4659	4	KED
	Y	89		ug/L			440630	644591	4	Standard
	Kr	83		ug/L			56	116	9	Standard
⌈>	In-1	115		ug/L			11294	10547	3	KED
|	Cd	111	0.155	ug/L	0.022	14	6	39	10	KED
⌊	Cd	114	0.165	ug/L	0.006	3	7	95	1	KED
⌈>	In	115		ug/L			792758	772951	2	Standard
⌊	Ag	107	0.099	ug/L	0.003	2	158	1774	5	Standard
⌈>	Tb	159		ug/L			735738	766990	4	Standard
⌊	Pb	208	12.820	ug/L	0.434	3	406	781385	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0031-19
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 02:53:36
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35047	57612	0	Standard
	Cl	37		ug/L			4819880	4796554	1	Standard
⌈>	Sc	45		ug/L			670326	786201	2	Standard
|	Cr	52	13.067	ug/L	0.127	0	26049	350207	3	Standard
|	Cr	53	13.083	ug/L	0.212	1	231	37866	1	Standard
⌊	Mn	55	137.429	ug/L	0.046	0	1028	4830509	2	Standard
⌈>	Ge	72		ug/L			40960	40809	3	KED
|	Ni	60	11.638	ug/L	0.512	4	23	14735	3	KED
|	Ni	62	11.628	ug/L	0.175	1	6	2408	3	KED
|	Cu	63	25.535	ug/L	0.418	1	124	96763	4	KED
|	Cu	65	26.209	ug/L	1.196	4	56	47775	3	KED
|	Zn	66	51.652	ug/L	2.118	4	80	23203	1	KED
|	Zn	67	49.668	ug/L	0.934	1	19	3696	1	KED
⌊	As	75	6.269	ug/L	0.099	1	7	1388	2	KED
	Y	89		ug/L			440630	676106	3	Standard
	Kr	83		ug/L			56	87	15	Standard
⌈>	In-1	115		ug/L			11294	11145	0	KED
|	Cd	111	0.190	ug/L	0.033	17	6	49	15	KED
⌊	Cd	114	0.172	ug/L	0.016	9	7	105	9	KED
⌈>	In	115		ug/L			792758	795966	3	Standard
⌊	Ag	107	0.106	ug/L	0.004	3	158	1953	4	Standard
⌈>	Tb	159		ug/L			735738	775434	3	Standard
⌊	Pb	208	12.049	ug/L	0.510	4	406	742602	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0031-20
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 02:58:04
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35047	60504	1	Standard
	Cl	37		ug/L			4819880	4839236	1	Standard
>	Sc	45		ug/L			670326	794208	1	Standard
	Cr	52	20.017	ug/L	0.322	1	26049	525437	0	Standard
	Cr	53	19.933	ug/L	0.341	1	231	58145	0	Standard
	Mn	55	147.258	ug/L	4.415	2	1028	5227295	1	Standard
>	Ge	72		ug/L			40960	39991	2	KED
	Ni	60	11.405	ug/L	0.033	0	23	14160	2	KED
	Ni	62	11.329	ug/L	0.667	5	6	2301	8	KED
	Cu	63	27.152	ug/L	0.272	1	124	100805	2	KED
	Cu	65	27.707	ug/L	0.120	0	56	49532	2	KED
	Zn	66	55.123	ug/L	0.624	1	80	24282	2	KED
	Zn	67	53.639	ug/L	1.657	3	19	3911	2	KED
	As	75	6.765	ug/L	0.157	2	7	1467	0	KED
	Y	89		ug/L			440630	688006	1	Standard
	Kr	83		ug/L			56	114	11	Standard
>	In-1	115		ug/L			11294	10690	2	KED
	Cd	111	0.165	ug/L	0.039	23	6	42	19	KED
	Cd	114	0.198	ug/L	0.022	11	7	115	9	KED
>	In	115		ug/L			792758	785142	0	Standard
	Ag	107	0.138	ug/L	0.004	3	158	2451	3	Standard
>	Tb	159		ug/L			735738	787710	2	Standard
	Pb	208	12.895	ug/L	0.254	1	406	807835	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0031-21
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 03:02:31
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	53026	1	Standard
	Cl	**37**		ug/L			4819880	4790270	1	Standard
⌈>	**Sc**	**45**		ug/L			670326	763133	3	Standard
|	**Cr**	**52**	**13.875**	ug/L	0.453	3	26049	359015	3	Standard
|	**Cr**	**53**	**14.064**	ug/L	0.166	1	231	39497	2	Standard
⌊	**Mn**	**55**	**241.076**	ug/L	6.190	2	1028	8219850	1	Standard
⌈>	**Ge**	**72**		ug/L			40960	40579	1	KED
|	**Ni**	**60**	**13.969**	ug/L	0.172	1	23	17593	1	KED
|	**Ni**	**62**	**13.839**	ug/L	0.698	5	6	2847	3	KED
|	**Cu**	**63**	**36.308**	ug/L	0.388	1	124	136746	1	KED
|	**Cu**	**65**	**37.509**	ug/L	0.163	0	56	68021	2	KED
|	**Zn**	**66**	**115.392**	ug/L	2.365	2	80	51481	1	KED
|	**Zn**	**67**	**107.998**	ug/L	1.644	1	19	7971	0	KED
⌊	**As**	**75**	**19.936**	ug/L	0.280	1	7	4372	1	KED
	Y	**89**		ug/L			440630	631756	2	Standard
	Kr	**83**		ug/L			56	115	10	Standard
⌈>	**In-1**	**115**		ug/L			11294	11137	3	KED
|	**Cd**	**111**	**0.096**	ug/L	0.021	22	6	27	16	KED
⌊	**Cd**	**114**	**0.112**	ug/L	0.030	26	7	70	22	KED
⌈>	**In**	**115**		ug/L			792758	784005	2	Standard
⌊	**Ag**	**107**	**0.067**	ug/L	0.001	1	158	1265	1	Standard
⌈>	**Tb**	**159**		ug/L			735738	769284	4	Standard
⌊	**Pb**	**208**	**19.684**	ug/L	0.409	2	406	1203750	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0032-05
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 03:06:59
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	57901	3	Standard
	Cl	**37**		ug/L			4819880	4833291	2	Standard
⌈>	**Sc**	**45**		ug/L			670326	778861	3	Standard
|	**Cr**	**52**	**12.870**	ug/L	0.350	2	26049	342072	3	Standard
|	**Cr**	**53**	**12.726**	ug/L	0.402	3	231	36483	0	Standard
⌊	**Mn**	**55**	**85.876**	ug/L	1.924	2	1028	2989344	0	Standard
⌈>	**Ge**	**72**		ug/L			40960	41577	0	KED
|	**Ni**	**60**	**9.682**	ug/L	0.054	0	23	12501	0	KED
|	**Ni**	**62**	**9.772**	ug/L	0.261	2	6	2063	2	KED
|	**Cu**	**63**	**18.860**	ug/L	0.286	1	124	72845	2	KED
|	**Cu**	**65**	**18.953**	ug/L	0.250	1	56	35243	1	KED
|	**Zn**	**66**	**46.649**	ug/L	0.944	2	80	21377	2	KED
|	**Zn**	**67**	**44.716**	ug/L	0.779	1	19	3394	2	KED
⌊	**As**	**75**	**4.808**	ug/L	0.098	2	7	1086	1	KED
	Y	**89**		ug/L			440630	662008	3	Standard
	Kr	**83**		ug/L			56	98	17	Standard
⌈>	**In-1**	**115**		ug/L			11294	10833	2	KED
|	**Cd**	**111**	**0.272**	ug/L	0.020	7	6	66	5	KED
⌊	**Cd**	**114**	**0.254**	ug/L	0.015	5	7	147	6	KED
⌈>	**In**	**115**		ug/L			792758	792983	3	Standard
⌊	**Ag**	**107**	**0.258**	ug/L	0.011	4	158	4489	2	Standard
⌈>	**Tb**	**159**		ug/L			735738	772837	4	Standard
⌊	**Pb**	**208**	**16.561**	ug/L	0.446	2	406	1017330	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0032-06
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 03:11:27
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	55305	1	Standard
	Cl	**37**		ug/L			4819880	4803429	1	Standard
⌈>	**Sc**	**45**		ug/L			670326	763673	2	Standard
|	**Cr**	**52**	**11.664**	ug/L	0.339	2	26049	306706	0	Standard
|	**Cr**	**53**	**11.613**	ug/L	0.386	3	231	32670	1	Standard
⌊	**Mn**	**55**	**113.101**	ug/L	2.913	2	1028	3860220	0	Standard
⌈>	**Ge**	**72**		ug/L			40960	40347	2	KED
|	**Ni**	**60**	**11.348**	ug/L	0.305	2	23	14213	2	KED
|	**Ni**	**62**	**11.172**	ug/L	0.475	4	6	2286	2	KED
|	**Cu**	**63**	**30.997**	ug/L	0.428	1	124	116074	1	KED
|	**Cu**	**65**	**31.397**	ug/L	0.625	1	56	56600	0	KED
|	**Zn**	**66**	**43.552**	ug/L	1.025	2	80	19366	1	KED
|	**Zn**	**67**	**43.624**	ug/L	0.882	2	19	3213	3	KED
⌊	**As**	**75**	**4.673**	ug/L	0.106	2	7	1024	2	KED
	Y	**89**		ug/L			440630	625667	3	Standard
	Kr	**83**		ug/L			56	102	28	Standard
⌈>	**In-1**	**115**		ug/L			11294	10828	1	KED
|	**Cd**	**111**	**0.044**	ug/L	0.011	24	6	15	15	KED
⌊	**Cd**	**114**	**0.035**	ug/L	0.019	53	7	26	38	KED
⌈>	**In**	**115**		ug/L			792758	801768	0	Standard
⌊	**Ag**	**107**	**0.044**	ug/L	0.003	6	158	914	6	Standard
⌈>	**Tb**	**159**		ug/L			735738	772601	4	Standard
⌊	**Pb**	**208**	**58.283**	ug/L	2.427	4	406	3576551	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0032-07
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 03:15:54
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	59321	4	Standard
	Cl	**37**		ug/L			4819880	4758698	1	Standard
⌈>	**Sc**	**45**		ug/L			670326	805264	3	Standard
|	**Cr**	**52**	**14.280**	ug/L	0.224	1	26049	388974	1	Standard
|	**Cr**	**53**	**14.275**	ug/L	0.160	1	231	42314	4	Standard
⌊	**Mn**	**55**	**136.885**	ug/L	0.242	0	1028	4927964	3	Standard
⌈>	**Ge**	**72**		ug/L			40960	41698	0	KED
|	**Ni**	**60**	**11.547**	ug/L	0.336	2	23	14946	2	KED
|	**Ni**	**62**	**11.372**	ug/L	0.458	4	6	2406	3	KED
|	**Cu**	**63**	**24.704**	ug/L	0.835	3	124	95640	2	KED
|	**Cu**	**65**	**25.276**	ug/L	0.835	3	56	47113	2	KED
|	**Zn**	**66**	**56.791**	ug/L	0.485	0	80	26081	0	KED
|	**Zn**	**67**	**54.266**	ug/L	2.524	4	19	4126	5	KED
⌊	**As**	**75**	**5.956**	ug/L	0.017	0	7	1348	0	KED
	Y	**89**		ug/L			440630	691896	4	Standard
	Kr	**83**		ug/L			56	102	7	Standard
⌈>	**In-1**	**115**		ug/L			11294	11000	1	KED
|	**Cd**	**111**	**0.167**	ug/L	0.051	30	6	43	26	KED
⌊	**Cd**	**114**	**0.150**	ug/L	0.022	14	7	91	14	KED
⌈>	**In**	**115**		ug/L			792758	779237	2	Standard
⌊	**Ag**	**107**	**0.139**	ug/L	0.002	1	158	2446	2	Standard
⌈>	**Tb**	**159**		ug/L			735738	766393	2	Standard
⌊	**Pb**	**208**	**16.670**	ug/L	0.539	3	406	1015622	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0032-08
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 03:20:22
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	56191	2	Standard
	Cl	**37**		ug/L			4819880	4694147	1	Standard
⌈>	**Sc**	**45**		ug/L			670326	826962	3	Standard
|	**Cr**	**52**	**12.988**	ug/L	0.145	1	26049	366291	3	Standard
|	**Cr**	**53**	**13.013**	ug/L	0.175	1	231	39617	2	Standard
⌊	**Mn**	**55**	**140.492**	ug/L	3.043	2	1028	5191624	1	Standard
⌈>	**Ge**	**72**		ug/L			40960	40446	3	KED
|	**Ni**	**60**	**12.840**	ug/L	0.279	2	23	16122	4	KED
|	**Ni**	**62**	**13.364**	ug/L	0.311	2	6	2741	3	KED
|	**Cu**	**63**	**23.325**	ug/L	0.187	0	124	87623	4	KED
|	**Cu**	**65**	**23.609**	ug/L	0.330	1	56	42687	3	KED
|	**Zn**	**66**	**53.876**	ug/L	0.906	1	80	24004	3	KED
|	**Zn**	**67**	**52.769**	ug/L	1.509	2	19	3890	1	KED
⌊	**As**	**75**	**5.679**	ug/L	0.101	1	7	1246	3	KED
	Y	**89**		ug/L			440630	738053	1	Standard
	Kr	**83**		ug/L			56	123	9	Standard
⌈>	**In-1**	**115**		ug/L			11294	10660	1	KED
|	**Cd**	**111**	**0.229**	ug/L	0.018	7	6	56	6	KED
⌊	**Cd**	**114**	**0.211**	ug/L	0.049	23	7	121	20	KED
⌈>	**In**	**115**		ug/L			792758	777934	3	Standard
⌊	**Ag**	**107**	**0.172**	ug/L	0.007	4	158	3000	6	Standard
⌈>	**Tb**	**159**		ug/L			735738	778372	5	Standard
⌊	**Pb**	**208**	**13.548**	ug/L	0.337	2	406	838211	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0032-11
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 03:24:50
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35047	62120	3	Standard
	Cl	37		ug/L			4819880	4812629	1	Standard
⌈>	Sc	45		ug/L			670326	788530	2	Standard
|	Cr	52	15.024	ug/L	0.178	1	26049	399289	3	Standard
|	Cr	53	15.015	ug/L	0.218	1	231	43566	3	Standard
⌊	Mn	55	162.712	ug/L	4.995	3	1028	5737444	4	Standard
⌈>	Ge	72		ug/L			40960	40518	2	KED
|	Ni	60	13.738	ug/L	0.246	1	23	17275	2	KED
|	Ni	62	14.324	ug/L	0.157	1	6	2943	1	KED
|	Cu	63	33.740	ug/L	0.552	1	124	126929	4	KED
|	Cu	65	34.276	ug/L	0.507	1	56	62053	1	KED
|	Zn	66	80.664	ug/L	0.707	0	80	35965	2	KED
|	Zn	67	76.970	ug/L	1.952	2	19	5681	4	KED
⌊	As	75	6.475	ug/L	0.142	2	7	1423	3	KED
	Y	89		ug/L			440630	689971	2	Standard
	Kr	83		ug/L			56	111	4	Standard
⌈>	In-1	115		ug/L			11294	10654	2	KED
|	Cd	111	0.164	ug/L	0.023	14	6	41	12	KED
⌊	Cd	114	0.180	ug/L	0.007	4	7	104	3	KED
⌈>	In	115		ug/L			792758	789461	1	Standard
⌊	Ag	107	0.103	ug/L	0.002	1	158	1885	2	Standard
⌈>	Tb	159		ug/L			735738	775987	4	Standard
⌊	Pb	208	15.767	ug/L	0.512	3	406	972280	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0276-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 03:29:11
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35047	56553	3	Standard
	Cl	37		ug/L			4819880	4882332	0	Standard
>	Sc	45		ug/L			670326	830635	0	Standard
	Cr	52	13.200	ug/L	0.281	2	26049	373421	1	Standard
	Cr	53	13.313	ug/L	0.177	1	231	40717	1	Standard
	Mn	55	134.964	ug/L	2.615	1	1028	5011949	1	Standard
>	Ge	72		ug/L			40960	41333	1	KED
	Ni	60	12.738	ug/L	0.119	0	23	16343	1	KED
	Ni	62	12.974	ug/L	0.108	0	6	2720	1	KED
	Cu	63	24.209	ug/L	0.547	2	124	92937	3	KED
	Cu	65	24.612	ug/L	0.104	0	56	45479	1	KED
	Zn	66	50.475	ug/L	1.508	2	80	22982	2	KED
	Zn	67	50.802	ug/L	0.489	0	19	3830	1	KED
	As	75	5.343	ug/L	0.100	1	7	1199	2	KED
	Y	89		ug/L			440630	726422	1	Standard
	Kr	83		ug/L			56	123	1	Standard
>	In-1	115		ug/L			11294	10630	1	KED
	Cd	111	0.169	ug/L	0.017	10	6	42	9	KED
	Cd	114	0.143	ug/L	0.017	11	7	84	11	KED
>	In	115		ug/L			792758	786572	2	Standard
	Ag	107	0.125	ug/L	0.002	1	158	2240	1	Standard
>	Tb	159		ug/L			735738	776101	4	Standard
	Pb	208	16.294	ug/L	0.526	3	406	1005040	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVG
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 03:35:04
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	36866	3	Standard
	Cl	**37**		ug/L			4819880	4984462	1	Standard
⎡>	**Sc**	**45**		ug/L			670326	671185	0	Standard
⎢	**Cr**	**52**	**51.807**	ug/L	1.368	2	26049	1108100	3	Standard
⎢	**Cr**	**53**	**49.769**	ug/L	0.545	1	231	122363	1	Standard
⎣	**Mn**	**55**	**50.342**	ug/L	0.202	0	1028	1511287	0	Standard
⎡>	**Ge**	**72**		ug/L			40960	40913	1	KED
⎢	**Ni**	**60**	**49.105**	ug/L	2.082	4	23	62282	3	KED
⎢	**Ni**	**62**	**48.708**	ug/L	1.251	2	6	10096	4	KED
⎢	**Cu**	**63**	**48.047**	ug/L	0.859	1	124	182416	2	KED
⎢	**Cu**	**65**	**48.770**	ug/L	1.225	2	56	89147	2	KED
⎢	**Zn**	**66**	**49.546**	ug/L	0.602	1	80	22335	1	KED
⎢	**Zn**	**67**	**50.435**	ug/L	0.866	1	19	3764	2	KED
⎣	**As**	**75**	**50.239**	ug/L	1.108	2	7	11100	2	KED
	Y	**89**		ug/L			440630	438466	0	Standard
	Kr	**83**		ug/L			56	64	16	Standard
⎡>	**In-1**	**115**		ug/L			11294	10751	1	KED
⎢	**Cd**	**111**	**49.647**	ug/L	0.973	1	6	11050	0	KED
⎣	**Cd**	**114**	**49.147**	ug/L	0.649	1	7	26985	1	KED
⎡>	**In**	**115**		ug/L			792758	767679	0	Standard
⎣	**Ag**	**107**	**50.057**	ug/L	0.820	1	158	815329	1	Standard
⎡>	**Tb**	**159**		ug/L			735738	734951	4	Standard
⎣	**Pb**	**208**	**50.410**	ug/L	1.511	2	406	2944117	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBG
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 03:42:16
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35047	34882	2	Standard
	Cl	**37**		ug/L			4819880	4858427	2	Standard
⌈>	**Sc**	**45**		ug/L			670326	669224	1	Standard
|	**Cr**	**52**	**-0.021**	ug/L	0.017	80	26049	25566	1	Standard
|	**Cr**	**53**	**-0.029**	ug/L	0.005	18	231	160	9	Standard
⌊	**Mn**	**55**	**-0.004**	ug/L	0.001	14	1028	920	1	Standard
⌈>	**Ge**	**72**		ug/L			40960	40521	2	KED
|	**Ni**	**60**	**-0.000**	ug/L	0.005	1557	23	22	28	KED
|	**Ni**	**62**	**0.007**	ug/L	0.020	287	6	7	50	KED
|	**Cu**	**63**	**-0.005**	ug/L	0.003	54	124	103	12	KED
|	**Cu**	**65**	**-0.003**	ug/L	0.003	106	56	50	10	KED
|	**Zn**	**66**	**-0.057**	ug/L	0.027	47	80	54	22	KED
|	**Zn**	**67**	**-0.162**	ug/L	0.023	14	19	7	25	KED
⌊	**As**	**75**	**0.004**	ug/L	0.003	78	7	8	9	KED
	Y	**89**		ug/L			440630	421971	2	Standard
	Kr	**83**		ug/L			56	54	7	Standard
⌈>	**In-1**	**115**		ug/L			11294	10646	1	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.002	165	6	5	10	KED
⌊	**Cd**	**114**	**0.000**	ug/L	0.005	69425	7	6	42	KED
⌈>	**In**	**115**		ug/L			792758	783641	2	Standard
⌊	**Ag**	**107**	**0.004**	ug/L	0.001	24	158	226	4	Standard
⌈>	**Tb**	**159**		ug/L			735738	722490	4	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.001	91	406	466	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 03:46:44
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				35520	2	Standard
	Cl	**37**		ug/L				4716783	0	Standard
⎡>	**Sc**	**45**		ug/L				639427	2	Standard
⎢	**Cr**	**52**		ug/L				24054	2	Standard
⎢	**Cr**	**53**		ug/L				172	13	Standard
⎣	**Mn**	**55**		ug/L				973	0	Standard
⎡>	**Ge**	**72**		ug/L				40737	2	KED
⎢	**Ni**	**60**		ug/L				20	32	KED
⎢	**Ni**	**62**		ug/L				6	62	KED
⎢	**Cu**	**63**		ug/L				114	6	KED
⎢	**Cu**	**65**		ug/L				63	22	KED
⎢	**Zn**	**66**		ug/L				93	24	KED
⎢	**Zn**	**67**		ug/L				17	19	KED
⎣	**As**	**75**		ug/L				10	17	KED
	Y	**89**		ug/L				414325	2	Standard
	Kr	**83**		ug/L				60	3	Standard
⎡>	**In-1**	**115**		ug/L				10806	2	KED
⎢	**Cd**	**111**		ug/L				7	25	KED
⎣	**Cd**	**114**		ug/L				9	55	KED
⎡>	**In**	**115**		ug/L				759938	2	Standard
⎣	**Ag**	**107**		ug/L				119	12	Standard
⎡>	**Tb**	**159**		ug/L				700907	4	Standard
⎣	**Pb**	**208**		ug/L				382	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVH
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 03:51:12
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	36500	0	Standard
	Cl	**37**		ug/L			4716783	5009674	1	Standard
⎡>	**Sc**	**45**		ug/L			639427	668261	1	Standard
⎢	**Cr**	**52**	**51.416**	ug/L	0.872	1	24054	1093998	0	Standard
⎢	**Cr**	**53**	**50.565**	ug/L	0.580	1	172	123703	0	Standard
⎣	**Mn**	**55**	**50.444**	ug/L	0.770	1	973	1507467	0	Standard
⎡>	**Ge**	**72**		ug/L			40737	40357	2	KED
⎢	**Ni**	**60**	**48.929**	ug/L	0.422	0	20	61219	1	KED
⎢	**Ni**	**62**	**48.654**	ug/L	1.241	2	6	9950	5	KED
⎢	**Cu**	**63**	**47.294**	ug/L	0.956	2	114	177170	4	KED
⎢	**Cu**	**65**	**47.375**	ug/L	1.170	2	63	85436	3	KED
⎢	**Zn**	**66**	**48.227**	ug/L	0.826	1	93	21466	3	KED
⎢	**Zn**	**67**	**49.897**	ug/L	2.148	4	17	3673	6	KED
⎣	**As**	**75**	**50.742**	ug/L	0.224	0	10	11061	2	KED
	Y	**89**		ug/L			414325	429633	0	Standard
	Kr	**83**		ug/L			60	66	31	Standard
⎡>	**In-1**	**115**		ug/L			10806	10781	2	KED
⎢	**Cd**	**111**	**49.842**	ug/L	0.703	1	7	11126	1	KED
⎣	**Cd**	**114**	**48.997**	ug/L	1.064	2	9	26974	1	KED
⎡>	**In**	**115**		ug/L			759938	778578	1	Standard
⎣	**Ag**	**107**	**49.369**	ug/L	1.259	2	119	815321	1	Standard
⎡>	**Tb**	**159**		ug/L			700907	736282	2	Standard
⎣	**Pb**	**208**	**50.165**	ug/L	1.532	3	382	2935705	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBH
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 03:58:24
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	34772	0	Standard
	Cl	**37**		ug/L			4716783	4784249	1	Standard
⌈>	**Sc**	**45**		ug/L			639427	640187	1	Standard
|	**Cr**	**52**	**0.044**	ug/L	0.009	19	24054	24964	1	Standard
|	**Cr**	**53**	**-0.006**	ug/L	0.004	69	172	157	8	Standard
⌊	**Mn**	**55**	**-0.004**	ug/L	0.001	27	973	860	4	Standard
⌈>	**Ge**	**72**		ug/L			40737	40535	1	KED
|	**Ni**	**60**	**0.002**	ug/L	0.003	213	20	22	17	KED
|	**Ni**	**62**	**0.006**	ug/L	0.005	75	6	8	13	KED
|	**Cu**	**63**	**-0.005**	ug/L	0.003	49	114	94	9	KED
|	**Cu**	**65**	**-0.005**	ug/L	0.002	41	63	54	8	KED
|	**Zn**	**66**	**-0.080**	ug/L	0.029	36	93	57	20	KED
|	**Zn**	**67**	**-0.068**	ug/L	0.015	21	17	12	9	KED
⌊	**As**	**75**	**-0.001**	ug/L	0.009	719	10	9	18	KED
	Y	**89**		ug/L			414325	418633	2	Standard
	Kr	**83**		ug/L			60	65	17	Standard
⌈>	**In-1**	**115**		ug/L			10806	10740	0	KED
|	**Cd**	**111**	**0.006**	ug/L	0.013	218	7	8	32	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.006	186	9	7	44	KED
⌈>	**In**	**115**		ug/L			759938	771868	1	Standard
⌊	**Ag**	**107**	**0.007**	ug/L	0.001	18	119	235	7	Standard
⌈>	**Tb**	**159**		ug/L			700907	697972	3	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.001	61	382	428	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0396-01
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, March 07, 2023 04:02:53
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	106970	2	Standard
	Cl	**37**		ug/L			4716783	5010968	1	Standard
⌈>	**Sc**	**45**		ug/L			639427	700644	3	Standard
|	**Cr**	**52**	**11.370**	ug/L	0.107	0	24054	274187	2	Standard
|	**Cr**	**53**	**11.084**	ug/L	0.330	2	172	28569	2	Standard
⌊	**Mn**	**55**	**14.073**	ug/L	0.412	2	973	441574	1	Standard
⌈>	**Ge**	**72**		ug/L			40737	40691	0	KED
|	**Ni**	**60**	**1.936**	ug/L	0.017	0	20	2462	0	KED
|	**Ni**	**62**	**1.973**	ug/L	0.045	2	6	413	2	KED
|	**Cu**	**63**	**0.603**	ug/L	0.014	2	114	2388	2	KED
|	**Cu**	**65**	**0.600**	ug/L	0.046	7	63	1153	6	KED
|	**Zn**	**66**	**21.477**	ug/L	0.709	3	93	9687	2	KED
|	**Zn**	**67**	**19.493**	ug/L	0.176	0	17	1456	1	KED
⌊	**As**	**75**	**0.064**	ug/L	0.011	16	10	24	9	KED
	Y	**89**		ug/L			414325	465449	2	Standard
	Kr	**83**		ug/L			60	63	34	Standard
⌈>	**In-1**	**115**		ug/L			10806	10894	1	KED
|	**Cd**	**111**	**0.101**	ug/L	0.026	25	7	30	17	KED
⌊	**Cd**	**114**	**0.095**	ug/L	0.032	33	9	62	29	KED
⌈>	**In**	**115**		ug/L			759938	804393	3	Standard
⌊	**Ag**	**107**	**0.010**	ug/L	0.000	2	119	298	2	Standard
⌈>	**Tb**	**159**		ug/L			700907	745973	4	Standard
⌊	**Pb**	**208**	**0.050**	ug/L	0.001	2	382	3346	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0430-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, March 07, 2023 04:07:44
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35520	49662	1	Standard
	Cl	37		ug/L			4716783	14953173	3	Standard
>	Sc	45		ug/L			639427	663296	1	Standard
	Cr	52	0.797	ug/L	0.023	2	24054	41404	0	Standard
	Cr	53	8.718	ug/L	0.092	1	172	21320	1	Standard
	Mn	55	20.420	ug/L	0.387	1	973	606394	2	Standard
>	Ge	72		ug/L			40737	37780	2	KED
	Ni	60	0.606	ug/L	0.022	3	20	727	1	KED
	Ni	62	0.727	ug/L	0.048	6	6	145	5	KED
	Cu	63	21.661	ug/L	0.321	1	114	75982	1	KED
	Cu	65	22.301	ug/L	0.335	1	63	37671	0	KED
	Zn	66	62.394	ug/L	2.624	4	93	25955	2	KED
	Zn	67	58.915	ug/L	1.846	3	17	4053	2	KED
	As	75	0.311	ug/L	0.036	11	10	72	11	KED
	Y	89		ug/L			414325	438537	0	Standard
	Kr	83		ug/L			60	121	13	Standard
>	In-1	115		ug/L			10806	9561	1	KED
	Cd	111	0.217	ug/L	0.033	15	7	49	11	KED
	Cd	114	0.228	ug/L	0.023	9	9	119	7	KED
>	In	115		ug/L			759938	733069	0	Standard
	Ag	107	0.008	ug/L	0.001	15	119	234	7	Standard
>	Tb	159		ug/L			700907	711769	3	Standard
	Pb	208	0.353	ug/L	0.013	3	382	20364	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0450-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, March 07, 2023 04:12:36
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	44945	2	Standard
	Cl	**37**		ug/L			4716783	5418432	2	Standard
⌈>	**Sc**	**45**		ug/L			639427	715318	3	Standard
|	**Cr**	**52**	**0.013**	ug/L	0.072	559	24054	27156	2	Standard
|	**Cr**	**53**	**1.042**	ug/L	0.041	3	172	2916	0	Standard
⌊	**Mn**	**55**	**114.380**	ug/L	6.015	5	973	3653575	2	Standard
⌈>	**Ge**	**72**		ug/L			40737	39775	1	KED
|	**Ni**	**60**	**1.163**	ug/L	0.063	5	20	1454	6	KED
|	**Ni**	**62**	**1.155**	ug/L	0.074	6	6	239	6	KED
|	**Cu**	**63**	**0.181**	ug/L	0.006	3	114	779	4	KED
|	**Cu**	**65**	**0.188**	ug/L	0.024	12	63	395	11	KED
|	**Zn**	**66**	**0.953**	ug/L	0.098	10	93	507	9	KED
|	**Zn**	**67**	**2.017**	ug/L	0.321	15	17	162	15	KED
⌊	**As**	**75**	**0.307**	ug/L	0.047	15	10	75	12	KED
	Y	**89**		ug/L			414325	446473	1	Standard
	Kr	**83**		ug/L			60	62	6	Standard
⌈>	**In-1**	**115**		ug/L			10806	10644	1	KED
|	**Cd**	**111**	**-0.007**	ug/L	0.013	195	7	6	48	KED
⌊	**Cd**	**114**	**0.016**	ug/L	0.014	92	9	17	45	KED
⌈>	**In**	**115**		ug/L			759938	773461	1	Standard
⌊	**Ag**	**107**	**-0.002**	ug/L	0.001	56	119	93	18	Standard
⌈>	**Tb**	**159**		ug/L			700907	731790	3	Standard
⌊	**Pb**	**208**	**0.014**	ug/L	0.001	6	382	1230	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0171-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 04:17:28
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35520	56741	2	Standard
	Cl	37		ug/L			4716783	5035640	0	Standard
>	Sc	45		ug/L			639427	799933	2	Standard
	Cr	52	11.949	ug/L	0.157	1	24054	327476	2	Standard
	Cr	53	11.968	ug/L	0.203	1	172	35225	3	Standard
	Mn	55	146.192	ug/L	0.998	0	973	5228100	2	Standard
>	Ge	72		ug/L			40737	41471	1	KED
	Ni	60	10.441	ug/L	0.232	2	20	13443	3	KED
	Ni	62	10.182	ug/L	0.210	2	6	2144	0	KED
	Cu	63	25.149	ug/L	0.413	1	114	96826	1	KED
	Cu	65	25.416	ug/L	0.312	1	63	47128	1	KED
	Zn	66	47.155	ug/L	1.578	3	93	21568	4	KED
	Zn	67	44.660	ug/L	1.272	2	17	3378	2	KED
	As	75	6.843	ug/L	0.121	1	10	1541	2	KED
	Y	89		ug/L			414325	669403	1	Standard
	Kr	83		ug/L			60	116	21	Standard
>	In-1	115		ug/L			10806	10487	1	KED
	Cd	111	0.177	ug/L	0.037	20	7	45	16	KED
	Cd	114	0.158	ug/L	0.005	3	9	93	1	KED
>	In	115		ug/L			759938	799357	3	Standard
	Ag	107	0.109	ug/L	0.006	5	119	1982	8	Standard
>	Tb	159		ug/L			700907	784803	3	Standard
	Pb	208	10.743	ug/L	0.308	2	382	670355	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0171-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 04:21:55
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35520	60315	0	Standard
	Cl	37		ug/L			4716783	5070454	1	Standard
>	Sc	45		ug/L			639427	808147	0	Standard
	Cr	52	12.645	ug/L	0.108	0	24054	348365	1	Standard
	Cr	53	12.605	ug/L	0.272	2	172	37464	2	Standard
	Mn	55	154.513	ug/L	1.638	1	973	5582841	1	Standard
>	Ge	72		ug/L			40737	40329	2	KED
	Ni	60	10.599	ug/L	0.157	1	20	13268	2	KED
	Ni	62	10.520	ug/L	0.132	1	6	2155	3	KED
	Cu	63	27.755	ug/L	0.276	0	114	103928	3	KED
	Cu	65	28.279	ug/L	0.208	0	63	50986	2	KED
	Zn	66	52.154	ug/L	0.811	1	93	23180	1	KED
	Zn	67	49.833	ug/L	1.433	2	17	3665	5	KED
	As	75	8.156	ug/L	0.191	2	10	1784	1	KED
	Y	89		ug/L			414325	665317	1	Standard
	Kr	83		ug/L			60	121	15	Standard
>	In-1	115		ug/L			10806	10541	4	KED
	Cd	111	0.185	ug/L	0.039	21	7	47	22	KED
	Cd	114	0.188	ug/L	0.015	7	9	109	4	KED
>	In	115		ug/L			759938	804065	2	Standard
	Ag	107	0.131	ug/L	0.003	2	119	2362	2	Standard
>	Tb	159		ug/L			700907	781248	4	Standard
	Pb	208	12.470	ug/L	0.514	4	382	774094	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0171-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 04:26:23
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35520	60555	3	Standard
	Cl	37		ug/L			4716783	5032975	1	Standard
>	Sc	45		ug/L			639427	819654	2	Standard
	Cr	52	12.946	ug/L	0.447	3	24054	360789	1	Standard
	Cr	53	12.941	ug/L	0.470	3	172	38976	1	Standard
	Mn	55	137.808	ug/L	4.420	3	973	5047242	1	Standard
>	Ge	72		ug/L			40737	41054	1	KED
	Ni	60	11.011	ug/L	0.175	1	20	14030	0	KED
	Ni	62	11.125	ug/L	0.052	0	6	2318	0	KED
	Cu	63	27.661	ug/L	0.631	2	114	105403	1	KED
	Cu	65	28.330	ug/L	0.224	0	63	51996	1	KED
	Zn	66	54.444	ug/L	0.892	1	93	24631	0	KED
	Zn	67	54.674	ug/L	0.204	0	17	4090	1	KED
	As	75	7.678	ug/L	0.149	1	10	1710	1	KED
	Y	89		ug/L			414325	687499	3	Standard
	Kr	83		ug/L			60	121	11	Standard
>	In-1	115		ug/L			10806	10508	1	KED
	Cd	111	0.189	ug/L	0.038	20	7	48	18	KED
	Cd	114	0.204	ug/L	0.025	12	9	118	11	KED
>	In	115		ug/L			759938	794929	2	Standard
	Ag	107	0.122	ug/L	0.005	4	119	2179	1	Standard
>	Tb	159		ug/L			700907	778611	3	Standard
	Pb	208	12.165	ug/L	0.241	1	382	753295	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0171-04
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 04:30:51
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	55348	3	Standard
	Cl	**37**		ug/L			4716783	4885751	1	Standard
⌈>	**Sc**	**45**		ug/L			639427	793332	3	Standard
|	**Cr**	**52**	**12.151**	ug/L	0.075	0	24054	329814	4	Standard
|	**Cr**	**53**	**12.018**	ug/L	0.083	0	172	35068	3	Standard
⌊	**Mn**	**55**	**131.923**	ug/L	0.929	0	973	4679245	3	Standard
⌈>	**Ge**	**72**		ug/L			40737	40144	0	KED
|	**Ni**	**60**	**10.880**	ug/L	0.303	2	20	13556	2	KED
|	**Ni**	**62**	**11.119**	ug/L	0.230	2	6	2266	1	KED
|	**Cu**	**63**	**25.232**	ug/L	0.310	1	114	94039	0	KED
|	**Cu**	**65**	**25.912**	ug/L	0.576	2	63	46507	2	KED
|	**Zn**	**66**	**49.881**	ug/L	1.512	3	93	22074	2	KED
|	**Zn**	**67**	**48.441**	ug/L	1.235	2	17	3545	2	KED
⌊	**As**	**75**	**6.701**	ug/L	0.240	3	10	1461	3	KED
	Y	**89**		ug/L			414325	683448	3	Standard
	Kr	**83**		ug/L			60	107	13	Standard
⌈>	**In-1**	**115**		ug/L			10806	10700	1	KED
|	**Cd**	**111**	**0.178**	ug/L	0.022	12	7	46	11	KED
⌊	**Cd**	**114**	**0.135**	ug/L	0.013	9	9	82	7	KED
⌈>	**In**	**115**		ug/L			759938	782733	1	Standard
⌊	**Ag**	**107**	**0.104**	ug/L	0.004	3	119	1844	4	Standard
⌈>	**Tb**	**159**		ug/L			700907	762010	5	Standard
⌊	**Pb**	**208**	**10.236**	ug/L	0.409	3	382	619849	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0051-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 04:35:18
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35520	55048	0	Standard
	Cl	37		ug/L			4716783	4971969	2	Standard
>	Sc	45		ug/L			639427	811115	3	Standard
	Cr	52	55.820	ug/L	1.280	2	24054	1438627	1	Standard
	Cr	53	54.371	ug/L	1.576	2	172	161362	1	Standard
	Mn	55	156.576	ug/L	3.165	2	973	5675894	2	Standard
>	Ge	72		ug/L			40737	39285	4	KED
	Ni	60	14.885	ug/L	0.595	3	20	18126	1	KED
	Ni	62	14.938	ug/L	0.685	4	6	2974	2	KED
	Cu	63	38.639	ug/L	2.127	5	114	140665	1	KED
	Cu	65	38.542	ug/L	2.045	5	63	67572	1	KED
	Zn	66	141.734	ug/L	3.929	2	93	61178	1	KED
	Zn	67	139.463	ug/L	8.148	5	17	9945	2	KED
	As	75	7.866	ug/L	0.373	4	10	1675	0	KED
	Y	89		ug/L			414325	708974	2	Standard
	Kr	83		ug/L			60	118	6	Standard
>	In-1	115		ug/L			10806	10789	2	KED
	Cd	111	6.839	ug/L	0.395	5	7	1533	2	KED
	Cd	114	6.892	ug/L	0.156	2	9	3804	1	KED
>	In	115		ug/L			759938	791012	1	Standard
	Ag	107	0.256	ug/L	0.007	2	119	4412	2	Standard
>	Tb	159		ug/L			700907	779302	2	Standard
	Pb	208	311.566	ug/L	9.520	3	382	19296981	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0051-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 04:39:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35520	54863	1	Standard
	Cl	37		ug/L			4716783	4907280	2	Standard
>	Sc	45		ug/L			639427	815388	1	Standard
	Cr	52	15.754	ug/L	0.226	1	24054	430312	1	Standard
	Cr	53	15.579	ug/L	0.240	1	172	46653	0	Standard
	Mn	55	136.835	ug/L	1.257	0	973	4988376	2	Standard
>	Ge	72		ug/L			40737	40652	1	KED
	Ni	60	11.662	ug/L	0.281	2	20	14718	3	KED
	Ni	62	11.783	ug/L	0.154	1	6	2431	2	KED
	Cu	63	24.657	ug/L	0.298	1	114	93065	1	KED
	Cu	65	25.073	ug/L	0.710	2	63	45567	2	KED
	Zn	66	96.253	ug/L	1.646	1	93	43058	2	KED
	Zn	67	88.254	ug/L	2.762	3	17	6529	4	KED
	As	75	132.749	ug/L	0.989	0	10	29130	1	KED
	Y	89		ug/L			414325	737983	3	Standard
	Kr	83		ug/L			60	112	1	Standard
>	In-1	115		ug/L			10806	10298	3	KED
	Cd	111	0.438	ug/L	0.015	3	7	100	3	KED
	Cd	114	0.408	ug/L	0.063	15	9	222	12	KED
>	In	115		ug/L			759938	795879	1	Standard
	Ag	107	0.215	ug/L	0.007	3	119	3750	2	Standard
>	Tb	159		ug/L			700907	765604	2	Standard
	Pb	208	19.704	ug/L	0.366	1	382	1199498	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0051-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 04:44:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35520	52912	1	Standard
	Cl	37		ug/L			4716783	4817756	0	Standard
⌈>	Sc	45		ug/L			639427	786453	0	Standard
|	Cr	52	18.844	ug/L	0.216	1	24054	490710	1	Standard
|	Cr	53	18.887	ug/L	0.347	1	172	54514	1	Standard
⌊	Mn	55	135.276	ug/L	1.948	1	973	4756007	0	Standard
⌈>	Ge	72		ug/L			40737	40118	2	KED
|	Ni	60	13.987	ug/L	0.181	1	20	17410	1	KED
|	Ni	62	13.349	ug/L	0.218	1	6	2718	3	KED
|	Cu	63	24.384	ug/L	0.261	1	114	90816	1	KED
|	Cu	65	25.363	ug/L	0.391	1	63	45502	3	KED
|	Zn	66	141.943	ug/L	0.734	0	93	62609	1	KED
|	Zn	67	135.356	ug/L	1.329	0	17	9872	3	KED
⌊	As	75	27.360	ug/L	0.163	0	10	5932	1	KED
	Y	89		ug/L			414325	706347	3	Standard
	Kr	83		ug/L			60	115	13	Standard
⌈>	In-1	115		ug/L			10806	10588	0	KED
|	Cd	111	0.514	ug/L	0.050	9	7	120	9	KED
⌊	Cd	114	0.505	ug/L	0.090	17	9	281	16	KED
⌈>	In	115		ug/L			759938	784805	1	Standard
⌊	Ag	107	0.224	ug/L	0.010	4	119	3859	4	Standard
⌈>	Tb	159		ug/L			700907	772252	2	Standard
⌊	Pb	208	31.798	ug/L	1.057	3	382	1951693	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVI
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 04:50:00
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	36939	2	Standard
	Cl	**37**		ug/L			4716783	5187477	0	Standard
⎡>	**Sc**	**45**		ug/L			639427	662798	1	Standard
⎢	**Cr**	**52**	**51.190**	ug/L	0.651	1	24054	1080582	1	Standard
⎢	**Cr**	**53**	**50.972**	ug/L	0.456	0	172	123703	2	Standard
⎣	**Mn**	**55**	**51.696**	ug/L	0.516	0	973	1532527	2	Standard
⎡>	**Ge**	**72**		ug/L			40737	40666	1	KED
⎢	**Ni**	**60**	**47.833**	ug/L	0.538	1	20	60317	1	KED
⎢	**Ni**	**62**	**48.172**	ug/L	1.263	2	6	9922	2	KED
⎢	**Cu**	**63**	**46.921**	ug/L	0.957	2	114	177033	1	KED
⎢	**Cu**	**65**	**48.483**	ug/L	0.383	0	63	88100	1	KED
⎢	**Zn**	**66**	**50.054**	ug/L	0.416	0	93	22440	0	KED
⎢	**Zn**	**67**	**51.322**	ug/L	1.919	3	17	3803	2	KED
⎣	**As**	**75**	**50.133**	ug/L	1.231	2	10	11011	2	KED
	Y	**89**		ug/L			414325	444474	2	Standard
	Kr	**83**		ug/L			60	53	7	Standard
⎡>	**In-1**	**115**		ug/L			10806	10852	2	KED
⎢	**Cd**	**111**	**48.369**	ug/L	1.143	2	7	10869	2	KED
⎣	**Cd**	**114**	**48.555**	ug/L	0.893	1	9	26909	0	KED
⎡>	**In**	**115**		ug/L			759938	782303	2	Standard
⎣	**Ag**	**107**	**49.093**	ug/L	1.011	2	119	814501	0	Standard
⎡>	**Tb**	**159**		ug/L			700907	731613	2	Standard
⎣	**Pb**	**208**	**51.023**	ug/L	2.162	4	382	2966456	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBI
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 04:57:12
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	36206	1	Standard
	Cl	**37**		ug/L			4716783	4954864	1	Standard
⎡>	**Sc**	**45**		ug/L			639427	648939	2	Standard
⎢	**Cr**	**52**	**0.047**	ug/L	0.004	9	24054	25363	2	Standard
⎢	**Cr**	**53**	**0.019**	ug/L	0.004	22	172	219	5	Standard
⎣	**Mn**	**55**	**0.001**	ug/L	0.002	123	973	1025	3	Standard
⎡>	**Ge**	**72**		ug/L			40737	41061	1	KED
⎢	**Ni**	**60**	**0.003**	ug/L	0.002	71	20	24	13	KED
⎢	**Ni**	**62**	**0.003**	ug/L	0.024	847	6	7	66	KED
⎢	**Cu**	**63**	**0.000**	ug/L	0.003	1095	114	116	8	KED
⎢	**Cu**	**65**	**-0.005**	ug/L	0.005	92	63	54	16	KED
⎢	**Zn**	**66**	**-0.102**	ug/L	0.006	5	93	48	4	KED
⎢	**Zn**	**67**	**-0.113**	ug/L	0.029	25	17	8	24	KED
⎣	**As**	**75**	**-0.005**	ug/L	0.005	97	10	8	12	KED
	Y	**89**		ug/L			414325	434800	2	Standard
	Kr	**83**		ug/L			60	64	11	Standard
⎡>	**In-1**	**115**		ug/L			10806	10632	2	KED
⎢	**Cd**	**111**	**0.000**	ug/L	0.008	1714	7	7	25	KED
⎣	**Cd**	**114**	**0.005**	ug/L	0.014	285	9	11	65	KED
⎡>	**In**	**115**		ug/L			759938	778407	2	Standard
⎣	**Ag**	**107**	**0.005**	ug/L	0.000	4	119	204	3	Standard
⎡>	**Tb**	**159**		ug/L			700907	714153	2	Standard
⎣	**Pb**	**208**	**0.002**	ug/L	0.000	17	382	517	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0217-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 05:01:41
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	50458	1	Standard
	Cl	**37**		ug/L			4716783	4925466	3	Standard
⌈>	**Sc**	**45**		ug/L			639427	748942	3	Standard
|	**Cr**	**52**	**14.142**	ug/L	0.431	3	24054	357633	3	Standard
|	**Cr**	**53**	**13.972**	ug/L	0.467	3	172	38441	2	Standard
⌊	**Mn**	**55**	**95.872**	ug/L	1.581	1	973	3209812	2	Standard
⌈>	**Ge**	**72**		ug/L			40737	41589	1	KED
|	**Ni**	**60**	**12.993**	ug/L	0.293	2	20	16766	0	KED
|	**Ni**	**62**	**13.362**	ug/L	0.263	1	6	2819	2	KED
|	**Cu**	**63**	**28.651**	ug/L	0.975	3	114	110589	2	KED
|	**Cu**	**65**	**29.134**	ug/L	0.475	1	63	54158	0	KED
|	**Zn**	**66**	**59.711**	ug/L	1.816	3	93	27353	1	KED
|	**Zn**	**67**	**56.512**	ug/L	2.484	4	17	4281	3	KED
⌊	**As**	**75**	**3.686**	ug/L	0.079	2	10	837	0	KED
	Y	**89**		ug/L			414325	577550	2	Standard
	Kr	**83**		ug/L			60	80	5	Standard
⌈>	**In-1**	**115**		ug/L			10806	10796	1	KED
|	**Cd**	**111**	**0.458**	ug/L	0.068	14	7	109	13	KED
⌊	**Cd**	**114**	**0.445**	ug/L	0.059	13	9	254	11	KED
⌈>	**In**	**115**		ug/L			759938	810104	1	Standard
⌊	**Ag**	**107**	**0.073**	ug/L	0.003	3	119	1378	4	Standard
⌈>	**Tb**	**159**		ug/L			700907	766850	1	Standard
⌊	**Pb**	**208**	**15.662**	ug/L	0.413	2	382	955269	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0217-04
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 05:06:09
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	54194	2	Standard
	Cl	**37**		ug/L			4716783	4968990	1	Standard
⌈>	**Sc**	**45**		ug/L			639427	754219	2	Standard
|	**Cr**	**52**	**15.586**	ug/L	0.080	0	24054	394141	2	Standard
|	**Cr**	**53**	**15.610**	ug/L	0.242	1	172	43253	3	Standard
⌊	**Mn**	**55**	**134.204**	ug/L	1.962	1	973	4526292	3	Standard
⌈>	**Ge**	**72**		ug/L			40737	41777	1	KED
|	**Ni**	**60**	**17.540**	ug/L	0.532	3	20	22731	2	KED
|	**Ni**	**62**	**18.241**	ug/L	0.416	2	6	3864	2	KED
|	**Cu**	**63**	**114.956**	ug/L	2.852	2	114	445430	2	KED
|	**Cu**	**65**	**117.357**	ug/L	0.876	0	63	218972	0	KED
|	**Zn**	**66**	**55.923**	ug/L	0.926	1	93	25743	0	KED
|	**Zn**	**67**	**54.215**	ug/L	0.588	1	17	4127	0	KED
⌊	**As**	**75**	**3.092**	ug/L	0.138	4	10	707	3	KED
	Y	**89**		ug/L			414325	597101	1	Standard
	Kr	**83**		ug/L			60	74	9	Standard
⌈>	**In-1**	**115**		ug/L			10806	10811	1	KED
|	**Cd**	**111**	**0.204**	ug/L	0.016	8	7	53	8	KED
⌊	**Cd**	**114**	**0.251**	ug/L	0.005	1	9	147	1	KED
⌈>	**In**	**115**		ug/L			759938	795756	1	Standard
⌊	**Ag**	**107**	**0.085**	ug/L	0.007	8	119	1562	9	Standard
⌈>	**Tb**	**159**		ug/L			700907	766466	2	Standard
⌊	**Pb**	**208**	**11.310**	ug/L	0.403	3	382	689288	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0217-05
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 05:10:36
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	49074	0	Standard
	Cl	**37**		ug/L			4716783	4920125	1	Standard
⌈>	**Sc**	**45**		ug/L			639427	756538	1	Standard
|	**Cr**	**52**	**13.689**	ug/L	0.242	1	24054	350626	0	Standard
|	**Cr**	**53**	**13.494**	ug/L	0.250	1	172	37524	2	Standard
⌊	**Mn**	**55**	**140.349**	ug/L	3.303	2	973	4745733	0	Standard
⌈>	**Ge**	**72**		ug/L			40737	41441	0	KED
|	**Ni**	**60**	**17.763**	ug/L	0.238	1	20	22838	1	KED
|	**Ni**	**62**	**17.767**	ug/L	0.602	3	6	3733	2	KED
|	**Cu**	**63**	**16.702**	ug/L	0.391	2	114	64297	1	KED
|	**Cu**	**65**	**16.994**	ug/L	0.254	1	63	31509	1	KED
|	**Zn**	**66**	**28.705**	ug/L	0.866	3	93	13157	3	KED
|	**Zn**	**67**	**27.557**	ug/L	1.793	6	17	2089	6	KED
⌊	**As**	**75**	**1.845**	ug/L	0.055	2	10	422	2	KED
	Y	**89**		ug/L			414325	637780	3	Standard
	Kr	**83**		ug/L			60	94	3	Standard
⌈>	**In-1**	**115**		ug/L			10806	11083	1	KED
|	**Cd**	**111**	**0.136**	ug/L	0.021	15	7	39	13	KED
⌊	**Cd**	**114**	**0.158**	ug/L	0.021	13	9	98	11	KED
⌈>	**In**	**115**		ug/L			759938	800455	2	Standard
⌊	**Ag**	**107**	**0.043**	ug/L	0.001	3	119	848	4	Standard
⌈>	**Tb**	**159**		ug/L			700907	769110	4	Standard
⌊	**Pb**	**208**	**6.305**	ug/L	0.230	3	382	385625	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0217-06
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 05:15:04
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			35520	50649	1	Standard
	Cl	37		ug/L			4716783	4853614	1	Standard
>	Sc	45		ug/L			639427	727392	1	Standard
	Cr	52	11.497	ug/L	0.215	1	24054	287582	2	Standard
	Cr	53	11.378	ug/L	0.148	1	172	30450	0	Standard
	Mn	55	106.818	ug/L	0.735	0	973	3474032	1	Standard
>	Ge	72		ug/L			40737	39549	2	KED
	Ni	60	13.883	ug/L	0.304	2	20	17033	0	KED
	Ni	62	13.428	ug/L	0.238	1	6	2694	2	KED
	Cu	63	122.046	ug/L	0.660	0	114	447705	1	KED
	Cu	65	125.813	ug/L	0.565	0	63	222244	2	KED
	Zn	66	107.640	ug/L	3.009	2	93	46813	0	KED
	Zn	67	101.493	ug/L	0.578	0	17	7300	2	KED
	As	75	3.111	ug/L	0.092	2	10	673	1	KED
	Y	89		ug/L			414325	572217	2	Standard
	Kr	83		ug/L			60	81	20	Standard
>	In-1	115		ug/L			10806	10185	2	KED
	Cd	111	0.287	ug/L	0.024	8	7	67	7	KED
	Cd	114	0.265	ug/L	0.057	21	9	146	20	KED
>	In	115		ug/L			759938	791040	2	Standard
	Ag	107	0.071	ug/L	0.001	1	119	1311	3	Standard
>	Tb	159		ug/L			700907	750633	3	Standard
	Pb	208	15.965	ug/L	0.724	4	382	952243	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0429-01
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 05:19:55
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	87700	3	Standard
	Cl	**37**		ug/L			4716783	8115695	1	Standard
⎡>	**Sc**	**45**		ug/L			639427	656192	0	Standard
⎢	**Cr**	**52**	**0.934**	ug/L	0.043	4	24054	43753	2	Standard
⎢	**Cr**	**53**	**1.606**	ug/L	0.056	3	172	4029	2	Standard
⎣	**Mn**	**55**	**519.859**	ug/L	12.648	2	973	15245949	1	Standard
⎡>	**Ge**	**72**		ug/L			40737	37222	1	KED
⎢	**Ni**	**60**	**3.950**	ug/L	0.221	5	20	4574	4	KED
⎢	**Ni**	**62**	**3.822**	ug/L	0.123	3	6	726	2	KED
⎢	**Cu**	**63**	**1.676**	ug/L	0.005	0	114	5890	1	KED
⎢	**Cu**	**65**	**1.711**	ug/L	0.034	2	63	2900	1	KED
⎢	**Zn**	**66**	**4.856**	ug/L	0.280	5	93	2070	6	KED
⎢	**Zn**	**67**	**6.527**	ug/L	0.324	4	17	456	4	KED
⎣	**As**	**75**	**5.148**	ug/L	0.052	1	10	1043	2	KED
	Y	**89**		ug/L			414325	455275	1	Standard
	Kr	**83**		ug/L			60	101	12	Standard
⎡>	**In-1**	**115**		ug/L			10806	10057	0	KED
⎢	**Cd**	**111**	**0.019**	ug/L	0.027	141	7	11	51	KED
⎣	**Cd**	**114**	**0.013**	ug/L	0.013	104	9	15	45	KED
⎡>	**In**	**115**		ug/L			759938	709522	2	Standard
⎣	**Ag**	**107**	**0.003**	ug/L	0.001	37	119	151	8	Standard
⎡>	**Tb**	**159**		ug/L			700907	697355	2	Standard
⎣	**Pb**	**208**	**0.127**	ug/L	0.007	5	382	7424	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0446-03
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 05:24:23
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	57829	1	Standard
	Cl	**37**		ug/L			4716783	8334961	2	Standard
⌈>	**Sc**	**45**		ug/L			639427	690103	2	Standard
|	**Cr**	**52**	**9.141**	ug/L	0.071	0	24054	222223	1	Standard
|	**Cr**	**53**	**11.402**	ug/L	0.115	1	172	28950	1	Standard
⌊	**Mn**	**55**	**36.622**	ug/L	0.854	2	973	1130378	1	Standard
⌈>	**Ge**	**72**		ug/L			40737	38765	1	KED
|	**Ni**	**60**	**3.971**	ug/L	0.161	4	20	4789	3	KED
|	**Ni**	**62**	**4.084**	ug/L	0.448	10	6	807	8	KED
|	**Cu**	**63**	**14.982**	ug/L	0.286	1	114	53956	1	KED
|	**Cu**	**65**	**15.447**	ug/L	0.394	2	63	26793	2	KED
|	**Zn**	**66**	**59.803**	ug/L	1.301	2	93	25541	2	KED
|	**Zn**	**67**	**59.128**	ug/L	0.849	1	17	4175	2	KED
⌊	**As**	**75**	**1.554**	ug/L	0.048	3	10	334	4	KED
	Y	**89**		ug/L			414325	436813	1	Standard
	Kr	**83**		ug/L			60	71	24	Standard
⌈>	**In-1**	**115**		ug/L			10806	10316	3	KED
|	**Cd**	**111**	**0.073**	ug/L	0.010	14	7	22	12	KED
⌊	**Cd**	**114**	**0.057**	ug/L	0.014	24	9	38	19	KED
⌈>	**In**	**115**		ug/L			759938	755369	2	Standard
⌊	**Ag**	**107**	**0.013**	ug/L	0.001	5	119	325	2	Standard
⌈>	**Tb**	**159**		ug/L			700907	716924	0	Standard
⌊	**Pb**	**208**	**3.106**	ug/L	0.035	1	382	177429	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0446-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, March 07, 2023 05:28:51
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	49770	3	Standard
	Cl	**37**		ug/L			4716783	6234992	3	Standard
⌈>	**Sc**	**45**		ug/L			639427	682379	1	Standard
|	**Cr**	**52**	**6.638**	ug/L	0.204	3	24054	166643	4	Standard
|	**Cr**	**53**	**7.621**	ug/L	0.084	1	172	19198	2	Standard
⌊	**Mn**	**55**	**42.760**	ug/L	0.510	1	973	1305411	2	Standard
⌈>	**Ge**	**72**		ug/L			40737	39536	0	KED
|	**Ni**	**60**	**3.440**	ug/L	0.114	3	20	4235	2	KED
|	**Ni**	**62**	**3.456**	ug/L	0.182	5	6	698	5	KED
|	**Cu**	**63**	**15.239**	ug/L	0.189	1	114	55981	1	KED
|	**Cu**	**65**	**15.148**	ug/L	0.209	1	63	26801	0	KED
|	**Zn**	**66**	**68.596**	ug/L	0.846	1	93	29866	0	KED
|	**Zn**	**67**	**68.457**	ug/L	2.436	3	17	4928	3	KED
⌊	**As**	**75**	**1.066**	ug/L	0.097	9	10	237	8	KED
	Y	**89**		ug/L			414325	439681	2	Standard
	Kr	**83**		ug/L			60	64	19	Standard
⌈>	**In-1**	**115**		ug/L			10806	10012	2	KED
|	**Cd**	**111**	**0.054**	ug/L	0.035	65	7	18	37	KED
⌊	**Cd**	**114**	**0.076**	ug/L	0.014	17	9	47	13	KED
⌈>	**In**	**115**		ug/L			759938	765881	2	Standard
⌊	**Ag**	**107**	**0.013**	ug/L	0.000	3	119	329	0	Standard
⌈>	**Tb**	**159**		ug/L			700907	726720	4	Standard
⌊	**Pb**	**208**	**4.516**	ug/L	0.143	3	382	261055	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0448-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, March 07, 2023 05:33:19
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	49030	0	Standard
	Cl	**37**		ug/L			4716783	6116348	2	Standard
⌈>	**Sc**	**45**		ug/L			639427	659183	2	Standard
|	**Cr**	**52**	**7.295**	ug/L	0.134	1	24054	174441	3	Standard
|	**Cr**	**53**	**8.227**	ug/L	0.051	0	172	20005	2	Standard
⌊	**Mn**	**55**	**50.246**	ug/L	0.387	0	973	1481585	2	Standard
⌈>	**Ge**	**72**		ug/L			40737	39209	3	KED
|	**Ni**	**60**	**2.753**	ug/L	0.147	5	20	3361	1	KED
|	**Ni**	**62**	**2.800**	ug/L	0.158	5	6	563	9	KED
|	**Cu**	**63**	**16.648**	ug/L	0.275	1	114	60636	3	KED
|	**Cu**	**65**	**16.981**	ug/L	0.225	1	63	29801	5	KED
|	**Zn**	**66**	**74.731**	ug/L	2.324	3	93	32236	0	KED
|	**Zn**	**67**	**72.253**	ug/L	1.194	1	17	5155	2	KED
⌊	**As**	**75**	**1.160**	ug/L	0.012	0	10	255	4	KED
	Y	**89**		ug/L			414325	433122	4	Standard
	Kr	**83**		ug/L			60	60	24	Standard
⌈>	**In-1**	**115**		ug/L			10806	10488	0	KED
|	**Cd**	**111**	**0.083**	ug/L	0.034	40	7	25	28	KED
⌊	**Cd**	**114**	**0.050**	ug/L	0.032	64	9	35	47	KED
⌈>	**In**	**115**		ug/L			759938	761992	0	Standard
⌊	**Ag**	**107**	**0.015**	ug/L	0.001	7	119	362	5	Standard
⌈>	**Tb**	**159**		ug/L			700907	722766	4	Standard
⌊	**Pb**	**208**	**5.072**	ug/L	0.197	3	382	291581	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0448-03
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 05:37:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	54462	0	Standard
	Cl	**37**		ug/L			4716783	7461768	1	Standard
⌈>	**Sc**	**45**		ug/L			639427	668986	2	Standard
|	**Cr**	**52**	**10.648**	ug/L	0.137	1	24054	246761	2	Standard
|	**Cr**	**53**	**12.330**	ug/L	0.164	1	172	30330	2	Standard
⌊	**Mn**	**55**	**48.816**	ug/L	1.118	2	973	1460348	2	Standard
⌈>	**Ge**	**72**		ug/L			40737	38285	1	KED
|	**Ni**	**60**	**3.133**	ug/L	0.043	1	20	3736	1	KED
|	**Ni**	**62**	**3.211**	ug/L	0.221	6	6	629	8	KED
|	**Cu**	**63**	**18.865**	ug/L	0.272	1	114	67095	2	KED
|	**Cu**	**65**	**18.908**	ug/L	0.353	1	63	32387	3	KED
|	**Zn**	**66**	**83.965**	ug/L	0.809	0	93	35378	0	KED
|	**Zn**	**67**	**79.679**	ug/L	1.221	1	17	5552	3	KED
⌊	**As**	**75**	**1.654**	ug/L	0.096	5	10	351	6	KED
	Y	**89**		ug/L			414325	436506	1	Standard
	Kr	**83**		ug/L			60	78	24	Standard
⌈>	**In-1**	**115**		ug/L			10806	10611	2	KED
|	**Cd**	**111**	**0.093**	ug/L	0.024	25	7	27	19	KED
⌊	**Cd**	**114**	**0.073**	ug/L	0.022	30	9	48	22	KED
⌈>	**In**	**115**		ug/L			759938	736034	3	Standard
⌊	**Ag**	**107**	**0.020**	ug/L	0.001	3	119	421	0	Standard
⌈>	**Tb**	**159**		ug/L			700907	712374	2	Standard
⌊	**Pb**	**208**	**4.564**	ug/L	0.006	0	382	258896	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLJ
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 05:42:15
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	36344	1	Standard
	Cl	**37**		ug/L			4716783	4767559	0	Standard
⌈>	**Sc**	**45**		ug/L			639427	622690	2	Standard
|	**Cr**	**52**	**0.048**	ug/L	0.040	83	24054	24353	4	Standard
|	**Cr**	**53**	**0.172**	ug/L	0.016	9	172	559	5	Standard
⌊	**Mn**	**55**	**0.019**	ug/L	0.002	11	973	1482	2	Standard
⌈>	**Ge**	**72**		ug/L			40737	39959	1	KED
|	**Ni**	**60**	**0.012**	ug/L	0.004	34	20	34	14	KED
|	**Ni**	**62**	**0.035**	ug/L	0.011	30	6	13	15	KED
|	**Cu**	**63**	**0.006**	ug/L	0.004	66	114	135	10	KED
|	**Cu**	**65**	**0.002**	ug/L	0.006	328	63	65	16	KED
|	**Zn**	**66**	**-0.019**	ug/L	0.029	150	93	83	15	KED
|	**Zn**	**67**	**-0.004**	ug/L	0.040	916	17	16	17	KED
⌊	**As**	**75**	**-0.009**	ug/L	0.018	200	10	7	49	KED
	Y	**89**		ug/L			414325	407120	4	Standard
	Kr	**83**		ug/L			60	64	21	Standard
⌈>	**In-1**	**115**		ug/L			10806	10408	2	KED
|	**Cd**	**111**	**-0.010**	ug/L	0.013	124	7	5	54	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.004	249	9	7	29	KED
⌈>	**In**	**115**		ug/L			759938	750705	2	Standard
⌊	**Ag**	**107**	**-0.003**	ug/L	0.001	27	119	62	24	Standard
⌈>	**Tb**	**159**		ug/L			700907	696184	3	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.001	28	382	536	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVJ
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 05:46:43
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	35275	4	Standard
	Cl	**37**		ug/L			4716783	4989690	2	Standard
⎡>	**Sc**	**45**		ug/L			639427	633071	4	Standard
⎢	**Cr**	**52**	**51.323**	ug/L	1.989	3	24054	1034421	4	Standard
⎢	**Cr**	**53**	**50.989**	ug/L	1.976	3	172	118133	4	Standard
⎣	**Mn**	**55**	**51.559**	ug/L	1.525	2	973	1460323	5	Standard
⎡>	**Ge**	**72**		ug/L			40737	40124	2	KED
⎢	**Ni**	**60**	**46.871**	ug/L	1.931	4	20	58283	2	KED
⎢	**Ni**	**62**	**47.485**	ug/L	0.904	1	6	9648	0	KED
⎢	**Cu**	**63**	**47.147**	ug/L	1.141	2	114	175477	0	KED
⎢	**Cu**	**65**	**48.218**	ug/L	1.494	3	63	86421	2	KED
⎢	**Zn**	**66**	**48.916**	ug/L	1.139	2	93	21634	0	KED
⎢	**Zn**	**67**	**49.312**	ug/L	0.938	1	17	3607	2	KED
⎣	**As**	**75**	**50.193**	ug/L	1.316	2	10	10874	1	KED
	Y	**89**		ug/L			414325	417823	4	Standard
	Kr	**83**		ug/L			60	58	13	Standard
⎡>	**In-1**	**115**		ug/L			10806	9926	3	KED
⎢	**Cd**	**111**	**50.416**	ug/L	2.561	5	7	10352	2	KED
⎣	**Cd**	**114**	**49.918**	ug/L	2.377	4	9	25280	1	KED
⎡>	**In**	**115**		ug/L			759938	751892	4	Standard
⎣	**Ag**	**107**	**49.867**	ug/L	1.091	2	119	795818	5	Standard
⎡>	**Tb**	**159**		ug/L			700907	718748	0	Standard
⎣	**Pb**	**208**	**49.883**	ug/L	1.394	2	382	2851464	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBJ
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 05:53:55
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	35660	4	Standard
	Cl	**37**		ug/L			4716783	4803743	5	Standard
⌈>	**Sc**	**45**		ug/L			639427	625913	1	Standard
|	**Cr**	**52**	**0.046**	ug/L	0.025	53	24054	24436	0	Standard
|	**Cr**	**53**	**0.052**	ug/L	0.009	17	172	287	8	Standard
⌊	**Mn**	**55**	**0.003**	ug/L	0.002	72	973	1029	6	Standard
⌈>	**Ge**	**72**		ug/L			40737	39283	3	KED
|	**Ni**	**60**	**-0.006**	ug/L	0.004	58	20	12	36	KED
|	**Ni**	**62**	**0.017**	ug/L	0.011	65	6	10	21	KED
|	**Cu**	**63**	**-0.005**	ug/L	0.005	92	114	92	20	KED
|	**Cu**	**65**	**-0.007**	ug/L	0.010	156	63	49	36	KED
|	**Zn**	**66**	**-0.108**	ug/L	0.050	46	93	43	52	KED
|	**Zn**	**67**	**-0.073**	ug/L	0.065	88	17	11	44	KED
⌊	**As**	**75**	**-0.006**	ug/L	0.009	153	10	8	26	KED
	Y	**89**		ug/L			414325	416616	3	Standard
	Kr	**83**		ug/L			60	53	10	Standard
⌈>	**In-1**	**115**		ug/L			10806	10618	1	KED
|	**Cd**	**111**	**0.002**	ug/L	0.018	813	7	7	48	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.007	405	9	8	48	KED
⌈>	**In**	**115**		ug/L			759938	748270	0	Standard
⌊	**Ag**	**107**	**0.006**	ug/L	0.001	15	119	208	7	Standard
⌈>	**Tb**	**159**		ug/L			700907	692970	2	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	5	382	419	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0469-01
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 05:58:23
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	58357	2	Standard
	Cl	**37**		ug/L			4716783	5486062	1	Standard
⌈>	**Sc**	**45**		ug/L			639427	687447	3	Standard
|	**Cr**	**52**	**0.398**	ug/L	0.024	6	24054	34368	2	Standard
|	**Cr**	**53**	**1.153**	ug/L	0.011	0	172	3081	2	Standard
⌊	**Mn**	**55**	**3.787**	ug/L	0.131	3	973	117323	0	Standard
⌈>	**Ge**	**72**		ug/L			40737	39358	2	KED
|	**Ni**	**60**	**0.611**	ug/L	0.046	7	20	763	4	KED
|	**Ni**	**62**	**0.547**	ug/L	0.082	15	6	115	12	KED
|	**Cu**	**63**	**1.696**	ug/L	0.059	3	114	6299	2	KED
|	**Cu**	**65**	**1.757**	ug/L	0.056	3	63	3150	5	KED
|	**Zn**	**66**	**6.921**	ug/L	0.068	0	93	3081	3	KED
|	**Zn**	**67**	**7.544**	ug/L	0.168	2	17	555	4	KED
⌊	**As**	**75**	**0.404**	ug/L	0.012	2	10	95	4	KED
	Y	**89**		ug/L			414325	441434	1	Standard
	Kr	**83**		ug/L			60	61	1	Standard
⌈>	**In-1**	**115**		ug/L			10806	10102	2	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.012	514	7	6	37	KED
⌊	**Cd**	**114**	**0.007**	ug/L	0.006	86	9	12	23	KED
⌈>	**In**	**115**		ug/L			759938	780920	1	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.001	52	119	163	12	Standard
⌈>	**Tb**	**159**		ug/L			700907	726047	1	Standard
⌊	**Pb**	**208**	**0.102**	ug/L	0.006	6	382	6282	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0469-02
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 06:02:51
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	56465	1	Standard
	Cl	**37**		ug/L			4716783	6114035	3	Standard
⌈>	**Sc**	**45**		ug/L			639427	685311	7	Standard
|	**Cr**	**52**	**0.412**	ug/L	0.089	21	24054	34457	2	Standard
|	**Cr**	**53**	**2.509**	ug/L	0.070	2	172	6464	5	Standard
⌊	**Mn**	**55**	**65.494**	ug/L	4.965	7	973	2003201	7	Standard
⌈>	**Ge**	**72**		ug/L			40737	39831	2	KED
|	**Ni**	**60**	**1.096**	ug/L	0.026	2	20	1372	1	KED
|	**Ni**	**62**	**1.034**	ug/L	0.120	11	6	215	10	KED
|	**Cu**	**63**	**1.374**	ug/L	0.031	2	114	5187	2	KED
|	**Cu**	**65**	**1.415**	ug/L	0.099	7	63	2576	4	KED
|	**Zn**	**66**	**24.833**	ug/L	0.315	1	93	10948	1	KED
|	**Zn**	**67**	**24.089**	ug/L	1.003	4	17	1756	1	KED
⌊	**As**	**75**	**1.080**	ug/L	0.036	3	10	241	3	KED
	Y	**89**		ug/L			414325	421058	7	Standard
	Kr	**83**		ug/L			60	58	13	Standard
⌈>	**In-1**	**115**		ug/L			10806	10222	2	KED
|	**Cd**	**111**	**0.008**	ug/L	0.021	270	7	8	50	KED
⌊	**Cd**	**114**	**0.020**	ug/L	0.017	86	9	19	49	KED
⌈>	**In**	**115**		ug/L			759938	737891	5	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.002	406	119	109	18	Standard
⌈>	**Tb**	**159**		ug/L			700907	712673	3	Standard
⌊	**Pb**	**208**	**0.464**	ug/L	0.024	5	382	26664	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0469-03
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 06:07:19
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	58361	2	Standard
	Cl	**37**		ug/L			4716783	5428675	3	Standard
⌈>	**Sc**	**45**		ug/L			639427	730497	5	Standard
|	**Cr**	**52**	**0.842**	ug/L	0.029	3	24054	46597	4	Standard
|	**Cr**	**53**	**2.452**	ug/L	0.084	3	172	6738	2	Standard
⌊	**Mn**	**55**	**215.914**	ug/L	5.294	2	973	7044632	3	Standard
⌈>	**Ge**	**72**		ug/L			40737	40804	1	KED
|	**Ni**	**60**	**1.586**	ug/L	0.038	2	20	2025	1	KED
|	**Ni**	**62**	**1.672**	ug/L	0.178	10	6	352	10	KED
|	**Cu**	**63**	**1.277**	ug/L	0.041	3	114	4946	4	KED
|	**Cu**	**65**	**1.286**	ug/L	0.067	5	63	2406	4	KED
|	**Zn**	**66**	**8.290**	ug/L	0.206	2	93	3806	1	KED
|	**Zn**	**67**	**9.519**	ug/L	0.338	3	17	721	2	KED
⌊	**As**	**75**	**2.898**	ug/L	0.008	0	10	648	0	KED
	Y	**89**		ug/L			414325	443137	3	Standard
	Kr	**83**		ug/L			60	66	17	Standard
⌈>	**In-1**	**115**		ug/L			10806	10528	0	KED
|	**Cd**	**111**	**0.027**	ug/L	0.008	31	7	13	14	KED
⌊	**Cd**	**114**	**0.006**	ug/L	0.008	142	9	12	37	KED
⌈>	**In**	**115**		ug/L			759938	770967	3	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	144	119	137	19	Standard
⌈>	**Tb**	**159**		ug/L			700907	732043	5	Standard
⌊	**Pb**	**208**	**0.717**	ug/L	0.024	3	382	42072	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0421-01
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 06:11:40
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	50170	1	Standard
	Cl	**37**		ug/L			4716783	4711127	2	Standard
⎡>	**Sc**	**45**		ug/L			639427	690476	6	Standard
⎢	**Cr**	**52**	**0.566**	ug/L	0.018	3	24054	38118	5	Standard
⎢	**Cr**	**53**	**1.579**	ug/L	0.081	5	172	4163	2	Standard
⎣	**Mn**	**55**	**33.214**	ug/L	1.389	4	973	1024206	2	Standard
⎡>	**Ge**	**72**		ug/L			40737	37928	0	KED
⎢	**Ni**	**60**	**0.514**	ug/L	0.028	5	20	622	4	KED
⎢	**Ni**	**62**	**0.439**	ug/L	0.040	9	6	90	7	KED
⎢	**Cu**	**63**	**0.855**	ug/L	0.023	2	114	3112	2	KED
⎢	**Cu**	**65**	**0.859**	ug/L	0.011	1	63	1514	1	KED
⎢	**Zn**	**66**	**1.517**	ug/L	0.045	2	93	718	2	KED
⎢	**Zn**	**67**	**2.065**	ug/L	0.122	5	17	158	5	KED
⎣	**As**	**75**	**0.899**	ug/L	0.032	3	10	193	3	KED
	Y	**89**		ug/L			414325	413367	4	Standard
	Kr	**83**		ug/L			60	66	8	Standard
⎡>	**In-1**	**115**		ug/L			10806	10318	0	KED
⎢	**Cd**	**111**	**-0.001**	ug/L	0.017	1195	7	6	51	KED
⎣	**Cd**	**114**	**-0.005**	ug/L	0.002	39	9	6	14	KED
⎡>	**In**	**115**		ug/L			759938	735605	4	Standard
⎣	**Ag**	**107**	**0.000**	ug/L	0.001	623	119	117	10	Standard
⎡>	**Tb**	**159**		ug/L			700907	692475	6	Standard
⎣	**Pb**	**208**	**0.181**	ug/L	0.010	5	382	10346	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0421-03
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 06:16:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	50869	1	Standard
	Cl	**37**		ug/L			4716783	4843634	2	Standard
⌈>	**Sc**	**45**		ug/L			639427	721013	3	Standard
|	**Cr**	**52**	**0.503**	ug/L	0.056	11	24054	38395	3	Standard
|	**Cr**	**53**	**1.619**	ug/L	0.030	1	172	4461	3	Standard
⌊	**Mn**	**55**	**69.141**	ug/L	1.428	2	973	2228948	3	Standard
⌈>	**Ge**	**72**		ug/L			40737	37958	2	KED
|	**Ni**	**60**	**0.719**	ug/L	0.047	6	20	866	8	KED
|	**Ni**	**62**	**0.644**	ug/L	0.085	13	6	130	11	KED
|	**Cu**	**63**	**1.104**	ug/L	0.036	3	114	3995	4	KED
|	**Cu**	**65**	**1.152**	ug/L	0.054	4	63	2011	4	KED
|	**Zn**	**66**	**4.499**	ug/L	0.269	5	93	1960	3	KED
|	**Zn**	**67**	**4.883**	ug/L	0.263	5	17	352	6	KED
⌊	**As**	**75**	**0.877**	ug/L	0.063	7	10	189	7	KED
	Y	**89**		ug/L			414325	437604	1	Standard
	Kr	**83**		ug/L			60	53	8	Standard
⌈>	**In-1**	**115**		ug/L			10806	10198	3	KED
|	**Cd**	**111**	**0.010**	ug/L	0.019	188	7	9	39	KED
⌊	**Cd**	**114**	**0.005**	ug/L	0.011	208	9	11	52	KED
⌈>	**In**	**115**		ug/L			759938	767234	2	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.001	425	119	116	15	Standard
⌈>	**Tb**	**159**		ug/L			700907	722208	5	Standard
⌊	**Pb**	**208**	**0.137**	ug/L	0.004	3	382	8274	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0421-05
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 06:20:35
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	52437	1	Standard
	Cl	**37**		ug/L			4716783	4817379	1	Standard
⌈>	**Sc**	**45**		ug/L			639427	706100	3	Standard
|	**Cr**	**52**	**0.727**	ug/L	0.043	5	24054	42511	2	Standard
|	**Cr**	**53**	**1.818**	ug/L	0.013	0	172	4884	3	Standard
⌊	**Mn**	**55**	**14.816**	ug/L	0.309	2	973	468536	2	Standard
⌈>	**Ge**	**72**		ug/L			40737	40050	1	KED
|	**Ni**	**60**	**0.460**	ug/L	0.011	2	20	590	2	KED
|	**Ni**	**62**	**0.449**	ug/L	0.093	20	6	97	18	KED
|	**Cu**	**63**	**0.568**	ug/L	0.010	1	114	2223	2	KED
|	**Cu**	**65**	**0.609**	ug/L	0.012	2	63	1151	1	KED
|	**Zn**	**66**	**0.951**	ug/L	0.039	4	93	509	2	KED
|	**Zn**	**67**	**1.514**	ug/L	0.231	15	17	126	14	KED
⌊	**As**	**75**	**0.676**	ug/L	0.078	11	10	156	11	KED
	Y	**89**		ug/L			414325	435285	1	Standard
	Kr	**83**		ug/L			60	59	20	Standard
⌈>	**In-1**	**115**		ug/L			10806	10560	2	KED
|	**Cd**	**111**	**0.004**	ug/L	0.015	418	7	8	40	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.006	285	9	7	39	KED
⌈>	**In**	**115**		ug/L			759938	779005	4	Standard
⌊	**Ag**	**107**	**-0.002**	ug/L	0.000	16	119	94	5	Standard
⌈>	**Tb**	**159**		ug/L			700907	739954	5	Standard
⌊	**Pb**	**208**	**0.136**	ug/L	0.004	2	382	8385	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0421-07
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 06:25:03
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	50264	1	Standard
	Cl	**37**		ug/L			4716783	4696611	0	Standard
⌈>	**Sc**	**45**		ug/L			639427	698298	1	Standard
|	**Cr**	**52**	**0.670**	ug/L	0.014	2	24054	40827	1	Standard
|	**Cr**	**53**	**1.594**	ug/L	0.022	1	172	4258	2	Standard
⌊	**Mn**	**55**	**47.144**	ug/L	0.954	2	973	1472462	2	Standard
⌈>	**Ge**	**72**		ug/L			40737	39374	1	KED
|	**Ni**	**60**	**0.627**	ug/L	0.014	2	20	784	1	KED
|	**Ni**	**62**	**0.604**	ug/L	0.119	19	6	126	17	KED
|	**Cu**	**63**	**0.943**	ug/L	0.023	2	114	3554	1	KED
|	**Cu**	**65**	**1.016**	ug/L	0.022	2	63	1846	1	KED
|	**Zn**	**66**	**1.830**	ug/L	0.014	0	93	881	1	KED
|	**Zn**	**67**	**2.744**	ug/L	0.088	3	17	212	4	KED
⌊	**As**	**75**	**0.968**	ug/L	0.030	3	10	215	2	KED
	Y	**89**		ug/L			414325	420850	0	Standard
	Kr	**83**		ug/L			60	60	9	Standard
⌈>	**In-1**	**115**		ug/L			10806	10280	0	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.003	226	7	6	7	KED
⌊	**Cd**	**114**	**0.009**	ug/L	0.005	51	9	13	17	KED
⌈>	**In**	**115**		ug/L			759938	748940	0	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.000	45	119	107	3	Standard
⌈>	**Tb**	**159**		ug/L			700907	713532	2	Standard
⌊	**Pb**	**208**	**0.299**	ug/L	0.008	2	382	17371	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0421-09
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 06:29:55
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	48985	0	Standard
	Cl	**37**		ug/L			4716783	4750013	2	Standard
⌈>	**Sc**	**45**		ug/L			639427	700012	2	Standard
|	**Cr**	**52**	**0.627**	ug/L	0.030	4	24054	39975	1	Standard
|	**Cr**	**53**	**1.562**	ug/L	0.029	1	172	4184	2	Standard
⌊	**Mn**	**55**	**86.541**	ug/L	0.948	1	973	2708203	1	Standard
⌈>	**Ge**	**72**		ug/L			40737	39310	2	KED
|	**Ni**	**60**	**0.618**	ug/L	0.019	3	20	772	4	KED
|	**Ni**	**62**	**0.678**	ug/L	0.014	2	6	141	2	KED
|	**Cu**	**63**	**0.993**	ug/L	0.037	3	114	3730	4	KED
|	**Cu**	**65**	**1.017**	ug/L	0.012	1	63	1846	3	KED
|	**Zn**	**66**	**2.415**	ug/L	0.120	4	93	1131	2	KED
|	**Zn**	**67**	**2.854**	ug/L	0.495	17	17	219	14	KED
⌊	**As**	**75**	**1.022**	ug/L	0.031	2	10	226	1	KED
	Y	**89**		ug/L			414325	426162	1	Standard
	Kr	**83**		ug/L			60	67	21	Standard
⌈>	**In-1**	**115**		ug/L			10806	10614	1	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.017	800	7	6	51	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.011	263	9	11	52	KED
⌈>	**In**	**115**		ug/L			759938	758913	0	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.001	178	119	109	16	Standard
⌈>	**Tb**	**159**		ug/L			700907	726284	2	Standard
⌊	**Pb**	**208**	**0.338**	ug/L	0.011	3	382	19903	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0421-11
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 06:35:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	49305	1	Standard
	Cl	**37**		ug/L			4716783	4703058	2	Standard
⌈>	**Sc**	**45**		ug/L			639427	687996	0	Standard
|	**Cr**	**52**	**0.524**	ug/L	0.007	1	24054	37102	1	Standard
|	**Cr**	**53**	**1.365**	ug/L	0.022	1	172	3619	1	Standard
⌊	**Mn**	**55**	**184.815**	ug/L	1.539	0	973	5684367	1	Standard
⌈>	**Ge**	**72**		ug/L			40737	40466	3	KED
|	**Ni**	**60**	**0.633**	ug/L	0.037	5	20	813	4	KED
|	**Ni**	**62**	**0.637**	ug/L	0.079	12	6	137	9	KED
|	**Cu**	**63**	**0.840**	ug/L	0.028	3	114	3265	1	KED
|	**Cu**	**65**	**0.863**	ug/L	0.040	4	63	1621	1	KED
|	**Zn**	**66**	**2.245**	ug/L	0.094	4	93	1090	4	KED
|	**Zn**	**67**	**2.943**	ug/L	0.154	5	17	233	4	KED
⌊	**As**	**75**	**0.906**	ug/L	0.072	7	10	207	10	KED
	Y	**89**		ug/L			414325	419716	1	Standard
	Kr	**83**		ug/L			60	69	26	Standard
⌈>	**In-1**	**115**		ug/L			10806	9933	3	KED
|	**Cd**	**111**	**-0.016**	ug/L	0.013	83	7	3	75	KED
⌊	**Cd**	**114**	**0.008**	ug/L	0.008	98	9	12	35	KED
⌈>	**In**	**115**		ug/L			759938	741787	1	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.001	76	119	100	10	Standard
⌈>	**Tb**	**159**		ug/L			700907	709650	2	Standard
⌊	**Pb**	**208**	**0.287**	ug/L	0.009	3	382	16561	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLK
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 06:40:09
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	37893	1	Standard
	Cl	**37**		ug/L			4716783	4595487	0	Standard
⌈>	**Sc**	**45**		ug/L			639427	641014	4	Standard
|	**Cr**	**52**	**0.059**	ug/L	0.049	83	24054	25261	2	Standard
|	**Cr**	**53**	**0.127**	ug/L	0.012	9	172	469	2	Standard
⌊	**Mn**	**55**	**0.015**	ug/L	0.002	9	973	1410	1	Standard
⌈>	**Ge**	**72**		ug/L			40737	40617	1	KED
|	**Ni**	**60**	**0.008**	ug/L	0.001	16	20	30	6	KED
|	**Ni**	**62**	**0.015**	ug/L	0.014	87	6	10	28	KED
|	**Cu**	**63**	**0.007**	ug/L	0.004	55	114	140	8	KED
|	**Cu**	**65**	**-0.008**	ug/L	0.004	47	63	49	13	KED
|	**Zn**	**66**	**-0.023**	ug/L	0.030	129	93	82	14	KED
|	**Zn**	**67**	**-0.017**	ug/L	0.061	357	17	15	30	KED
⌊	**As**	**75**	**-0.014**	ug/L	0.013	95	10	6	39	KED
	Y	**89**		ug/L			414325	418605	0	Standard
	Kr	**83**		ug/L			60	38	5	Standard
⌈>	**In-1**	**115**		ug/L			10806	10612	2	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.003	308	7	7	7	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.007	425	9	9	39	KED
⌈>	**In**	**115**		ug/L			759938	782491	2	Standard
⌊	**Ag**	**107**	**-0.004**	ug/L	0.001	23	119	63	19	Standard
⌈>	**Tb**	**159**		ug/L			700907	720337	5	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	92	382	407	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVK
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 06:44:37
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	36379	1	Standard
	Cl	**37**		ug/L			4716783	4989590	1	Standard
⎡>	**Sc**	**45**		ug/L			639427	665656	2	Standard
⎢	**Cr**	**52**	**50.981**	ug/L	1.754	3	24054	1080307	1	Standard
⎢	**Cr**	**53**	**49.980**	ug/L	0.229	0	172	121813	2	Standard
⎣	**Mn**	**55**	**50.463**	ug/L	0.645	1	973	1502059	1	Standard
⎡>	**Ge**	**72**		ug/L			40737	40697	0	KED
⎢	**Ni**	**60**	**47.824**	ug/L	0.764	1	20	60352	1	KED
⎢	**Ni**	**62**	**48.154**	ug/L	0.721	1	6	9927	1	KED
⎢	**Cu**	**63**	**47.435**	ug/L	2.006	4	114	179148	4	KED
⎢	**Cu**	**65**	**47.876**	ug/L	1.208	2	63	87067	2	KED
⎢	**Zn**	**66**	**49.525**	ug/L	0.201	0	93	22222	0	KED
⎢	**Zn**	**67**	**49.891**	ug/L	1.416	2	17	3702	3	KED
⎣	**As**	**75**	**50.641**	ug/L	0.820	1	10	11132	1	KED
	Y	**89**		ug/L			414325	428633	1	Standard
	Kr	**83**		ug/L			60	55	13	Standard
⎡>	**In-1**	**115**		ug/L			10806	10643	1	KED
⎢	**Cd**	**111**	**50.857**	ug/L	1.136	2	7	11208	1	KED
⎣	**Cd**	**114**	**50.253**	ug/L	1.110	2	9	27316	1	KED
⎡>	**In**	**115**		ug/L			759938	767969	1	Standard
⎣	**Ag**	**107**	**49.646**	ug/L	0.822	1	119	808829	1	Standard
⎡>	**Tb**	**159**		ug/L			700907	750333	1	Standard
⎣	**Pb**	**208**	**49.201**	ug/L	1.125	2	382	2935217	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBK
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 06:51:49
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	35719	4	Standard
	Cl	**37**		ug/L			4716783	4885399	1	Standard
⌈>	**Sc**	**45**		ug/L			639427	647076	0	Standard
|	**Cr**	**52**	**0.063**	ug/L	0.010	16	24054	25615	1	Standard
|	**Cr**	**53**	**0.072**	ug/L	0.010	13	172	345	6	Standard
⌊	**Mn**	**55**	**-0.005**	ug/L	0.000	3	973	831	0	Standard
⌈>	**Ge**	**72**		ug/L			40737	38069	8	KED
|	**Ni**	**60**	**0.002**	ug/L	0.007	285	20	21	35	KED
|	**Ni**	**62**	**0.006**	ug/L	0.020	323	6	7	50	KED
|	**Cu**	**63**	**-0.001**	ug/L	0.005	366	114	102	18	KED
|	**Cu**	**65**	**-0.010**	ug/L	0.005	54	63	41	20	KED
|	**Zn**	**66**	**-0.096**	ug/L	0.010	10	93	46	4	KED
|	**Zn**	**67**	**-0.151**	ug/L	0.066	43	17	5	88	KED
⌊	**As**	**75**	**0.004**	ug/L	0.006	141	10	10	20	KED
	Y	**89**		ug/L			414325	423802	1	Standard
	Kr	**83**		ug/L			60	48	15	Standard
⌈>	**In-1**	**115**		ug/L			10806	10598	3	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.009	1028	7	7	30	KED
⌊	**Cd**	**114**	**-0.009**	ug/L	0.004	44	9	4	50	KED
⌈>	**In**	**115**		ug/L			759938	795763	0	Standard
⌊	**Ag**	**107**	**0.004**	ug/L	0.001	16	119	192	6	Standard
⌈>	**Tb**	**159**		ug/L			700907	718925	3	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.001	95	382	434	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0421-13
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 06:56:18
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	55773	0	Standard
	Cl	**37**		ug/L			4716783	4951043	1	Standard
⌈>	**Sc**	**45**		ug/L			639427	710476	0	Standard
|	**Cr**	**52**	**0.340**	ug/L	0.010	2	24054	34244	1	Standard
|	**Cr**	**53**	**1.091**	ug/L	0.030	2	172	3025	1	Standard
⌊	**Mn**	**55**	**22.099**	ug/L	0.561	2	973	702887	3	Standard
⌈>	**Ge**	**72**		ug/L			40737	39654	2	KED
|	**Ni**	**60**	**0.816**	ug/L	0.034	4	20	1022	3	KED
|	**Ni**	**62**	**0.846**	ug/L	0.012	1	6	176	1	KED
|	**Cu**	**63**	**1.428**	ug/L	0.036	2	114	5360	1	KED
|	**Cu**	**65**	**1.433**	ug/L	0.047	3	63	2598	3	KED
|	**Zn**	**66**	**4.117**	ug/L	0.087	2	93	1883	4	KED
|	**Zn**	**67**	**5.558**	ug/L	0.183	3	17	416	1	KED
⌊	**As**	**75**	**0.373**	ug/L	0.032	8	10	89	7	KED
	Y	**89**		ug/L			414325	444882	2	Standard
	Kr	**83**		ug/L			60	57	23	Standard
⌈>	**In-1**	**115**		ug/L			10806	10643	2	KED
|	**Cd**	**111**	**0.016**	ug/L	0.006	38	7	11	13	KED
⌊	**Cd**	**114**	**0.012**	ug/L	0.004	35	9	15	12	KED
⌈>	**In**	**115**		ug/L			759938	778785	3	Standard
⌊	**Ag**	**107**	**0.003**	ug/L	0.001	40	119	175	10	Standard
⌈>	**Tb**	**159**		ug/L			700907	730546	5	Standard
⌊	**Pb**	**208**	**0.246**	ug/L	0.015	5	382	14659	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0421-15
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 07:00:39
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	49085	3	Standard
	Cl	**37**		ug/L			4716783	4736452	3	Standard
⌈>	**Sc**	**45**		ug/L			639427	704678	3	Standard
|	**Cr**	**52**	**0.515**	ug/L	0.035	6	24054	37789	1	Standard
|	**Cr**	**53**	**1.279**	ug/L	0.027	2	172	3484	3	Standard
⌊	**Mn**	**55**	**186.160**	ug/L	0.490	0	973	5864154	3	Standard
⌈>	**Ge**	**72**		ug/L			40737	39581	2	KED
|	**Ni**	**60**	**0.654**	ug/L	0.031	4	20	821	2	KED
|	**Ni**	**62**	**0.631**	ug/L	0.080	12	6	133	12	KED
|	**Cu**	**63**	**1.698**	ug/L	0.024	1	114	6343	1	KED
|	**Cu**	**65**	**1.781**	ug/L	0.040	2	63	3209	3	KED
|	**Zn**	**66**	**2.296**	ug/L	0.030	1	93	1088	2	KED
|	**Zn**	**67**	**3.078**	ug/L	0.263	8	17	238	10	KED
⌊	**As**	**75**	**0.913**	ug/L	0.065	7	10	204	7	KED
	Y	**89**		ug/L			414325	420565	5	Standard
	Kr	**83**		ug/L			60	69	15	Standard
⌈>	**In-1**	**115**		ug/L			10806	10419	0	KED
|	**Cd**	**111**	**0.003**	ug/L	0.009	338	7	7	24	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.004	452	9	8	25	KED
⌈>	**In**	**115**		ug/L			759938	746157	2	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	128	119	126	7	Standard
⌈>	**Tb**	**159**		ug/L			700907	724989	4	Standard
⌊	**Pb**	**208**	**0.287**	ug/L	0.005	1	382	16950	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLM
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 07:05:02
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	36261	1	Standard
	Cl	**37**		ug/L			4716783	4558749	2	Standard
⎡>	**Sc**	**45**		ug/L			639427	640854	0	Standard
⎢	**Cr**	**52**	**0.064**	ug/L	0.026	41	24054	25388	2	Standard
⎢	**Cr**	**53**	**0.067**	ug/L	0.005	7	172	330	3	Standard
⎣	**Mn**	**55**	**0.012**	ug/L	0.001	10	973	1321	2	Standard
⎡>	**Ge**	**72**		ug/L			40737	40269	0	KED
⎢	**Ni**	**60**	**0.004**	ug/L	0.002	57	20	25	11	KED
⎢	**Ni**	**62**	**0.004**	ug/L	0.016	458	6	7	43	KED
⎢	**Cu**	**63**	**0.002**	ug/L	0.001	25	114	122	2	KED
⎢	**Cu**	**65**	**0.001**	ug/L	0.013	906	63	65	36	KED
⎢	**Zn**	**66**	**-0.026**	ug/L	0.041	154	93	80	21	KED
⎢	**Zn**	**67**	**-0.032**	ug/L	0.091	283	17	14	45	KED
⎣	**As**	**75**	**-0.013**	ug/L	0.005	38	10	6	15	KED
	Y	**89**		ug/L			414325	419602	1	Standard
	Kr	**83**		ug/L			60	58	12	Standard
⎡>	**In-1**	**115**		ug/L			10806	10582	1	KED
⎢	**Cd**	**111**	**-0.009**	ug/L	0.011	121	7	5	44	KED
⎣	**Cd**	**114**	**0.005**	ug/L	0.015	268	9	11	65	KED
⎡>	**In**	**115**		ug/L			759938	776861	2	Standard
⎣	**Ag**	**107**	**-0.002**	ug/L	0.000	10	119	82	7	Standard
⎡>	**Tb**	**159**		ug/L			700907	714160	3	Standard
⎣	**Pb**	**208**	**-0.000**	ug/L	0.000	4223	382	389	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0581-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 07:09:30
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	37808	2	Standard
	Cl	**37**		ug/L			4716783	5335959	3	Standard
⌈>	**Sc**	**45**		ug/L			639427	652440	5	Standard
|	**Cr**	**52**	**0.092**	ug/L	0.049	53	24054	26385	2	Standard
|	**Cr**	**53**	**1.516**	ug/L	0.046	3	172	3789	4	Standard
⌊	**Mn**	**55**	**12.754**	ug/L	0.553	4	973	372459	3	Standard
⌈>	**Ge**	**72**		ug/L			40737	41598	1	KED
|	**Ni**	**60**	**0.246**	ug/L	0.012	5	20	338	3	KED
|	**Ni**	**62**	**0.299**	ug/L	0.088	29	6	69	25	KED
|	**Cu**	**63**	**19.088**	ug/L	0.344	1	114	73738	0	KED
|	**Cu**	**65**	**18.921**	ug/L	0.331	1	63	35202	0	KED
|	**Zn**	**66**	**34.187**	ug/L	0.411	1	93	15707	1	KED
|	**Zn**	**67**	**31.727**	ug/L	1.246	3	17	2411	2	KED
⌊	**As**	**75**	**0.005**	ug/L	0.017	306	10	11	32	KED
	Y	**89**		ug/L			414325	427761	4	Standard
	Kr	**83**		ug/L			60	46	6	Standard
⌈>	**In-1**	**115**		ug/L			10806	10804	2	KED
|	**Cd**	**111**	**-0.000**	ug/L	0.004	78908	7	7	12	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.014	1383	9	8	90	KED
⌈>	**In**	**115**		ug/L			759938	776057	4	Standard
⌊	**Ag**	**107**	**0.004**	ug/L	0.002	39	119	188	12	Standard
⌈>	**Tb**	**159**		ug/L			700907	733370	5	Standard
⌊	**Pb**	**208**	**0.750**	ug/L	0.024	3	382	44073	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0581-01
Sample Dil Factor: 200
Comments:
Sample Date/Time: Tuesday, March 07, 2023 07:13:58
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	36799	0	Standard
	Cl	**37**		ug/L			4716783	4457525	3	Standard
⌈>	**Sc**	**45**		ug/L			639427	635342	3	Standard
|	**Cr**	**52**	**0.546**	ug/L	0.034	6	24054	34686	2	Standard
|	**Cr**	**53**	**0.620**	ug/L	0.011	1	172	1611	5	Standard
⌊	**Mn**	**55**	**2.665**	ug/L	0.052	1	973	76628	3	Standard
⌈>	**Ge**	**72**		ug/L			40737	41086	1	KED
|	**Ni**	**60**	**0.428**	ug/L	0.035	8	20	565	8	KED
|	**Ni**	**62**	**1.494**	ug/L	0.141	9	6	317	7	KED
|	**Cu**	**63**	**470.806**	ug/L	13.240	2	114	1793282	0	KED
|	**Cu**	**65**	**480.962**	ug/L	3.409	0	63	882340	1	KED
|	**Zn**	**66**	**134.324**	ug/L	3.889	2	93	60666	1	KED
|	**Zn**	**67**	**121.999**	ug/L	1.359	1	17	9114	2	KED
⌊	**As**	**75**	**0.011**	ug/L	0.014	128	10	12	25	KED
	Y	**89**		ug/L			414325	426746	3	Standard
	Kr	**83**		ug/L			60	57	16	Standard
⌈>	**In-1**	**115**		ug/L			10806	10935	1	KED
|	**Cd**	**111**	**0.001**	ug/L	0.010	942	7	7	27	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.012	328	9	11	58	KED
⌈>	**In**	**115**		ug/L			759938	774782	1	Standard
⌊	**Ag**	**107**	**0.108**	ug/L	0.004	3	119	1890	3	Standard
⌈>	**Tb**	**159**		ug/L			700907	717036	2	Standard
⌊	**Pb**	**208**	**2.960**	ug/L	0.128	4	382	169082	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLL
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 07:18:27
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	36702	2	Standard
	Cl	**37**		ug/L			4716783	4437151	2	Standard
⎡>	**Sc**	**45**		ug/L			639427	634737	2	Standard
⎢	**Cr**	**52**	**0.069**	ug/L	0.034	50	24054	25226	1	Standard
⎢	**Cr**	**53**	**0.063**	ug/L	0.015	23	172	316	8	Standard
⎣	**Mn**	**55**	**0.012**	ug/L	0.001	9	973	1315	0	Standard
⎡>	**Ge**	**72**		ug/L			40737	39357	4	KED
⎢	**Ni**	**60**	**0.015**	ug/L	0.007	45	20	37	17	KED
⎢	**Ni**	**62**	**0.018**	ug/L	0.027	149	6	10	47	KED
⎢	**Cu**	**63**	**0.013**	ug/L	0.005	37	114	157	6	KED
⎢	**Cu**	**65**	**0.005**	ug/L	0.008	140	63	70	16	KED
⎢	**Zn**	**66**	**-0.024**	ug/L	0.037	152	93	80	22	KED
⎢	**Zn**	**67**	**-0.064**	ug/L	0.033	51	17	12	24	KED
⎣	**As**	**75**	**0.002**	ug/L	0.008	410	10	10	22	KED
	Y	**89**		ug/L			414325	418029	2	Standard
	Kr	**83**		ug/L			60	49	13	Standard
⎡>	**In-1**	**115**		ug/L			10806	10185	1	KED
⎢	**Cd**	**111**	**0.016**	ug/L	0.004	23	7	10	9	KED
⎣	**Cd**	**114**	**-0.001**	ug/L	0.006	474	9	8	35	KED
⎡>	**In**	**115**		ug/L			759938	765959	1	Standard
⎣	**Ag**	**107**	**-0.002**	ug/L	0.001	25	119	82	10	Standard
⎡>	**Tb**	**159**		ug/L			700907	713004	4	Standard
⎣	**Pb**	**208**	**0.000**	ug/L	0.000	102	382	414	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVL
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 07:22:55
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	36336	0	Standard
	Cl	**37**		ug/L			4716783	4868620	0	Standard
⎡>	**Sc**	**45**		ug/L			639427	639998	1	Standard
⎢	**Cr**	**52**	**50.893**	ug/L	1.822	3	24054	1037245	2	Standard
⎢	**Cr**	**53**	**49.986**	ug/L	1.103	2	172	117122	1	Standard
⎣	**Mn**	**55**	**50.742**	ug/L	1.502	2	973	1452274	2	Standard
⎡>	**Ge**	**72**		ug/L			40737	40415	0	KED
⎢	**Ni**	**60**	**48.800**	ug/L	0.268	0	20	61155	1	KED
⎢	**Ni**	**62**	**48.212**	ug/L	1.187	2	6	9869	1	KED
⎢	**Cu**	**63**	**47.146**	ug/L	0.534	1	114	176806	0	KED
⎢	**Cu**	**65**	**47.910**	ug/L	1.289	2	63	86531	3	KED
⎢	**Zn**	**66**	**49.578**	ug/L	0.544	1	93	22091	0	KED
⎢	**Zn**	**67**	**49.830**	ug/L	0.699	1	17	3671	1	KED
⎣	**As**	**75**	**51.063**	ug/L	0.822	1	10	11147	1	KED
	Y	**89**		ug/L			414325	418483	2	Standard
	Kr	**83**		ug/L			60	59	14	Standard
⎡>	**In-1**	**115**		ug/L			10806	10542	3	KED
⎢	**Cd**	**111**	**49.691**	ug/L	1.423	2	7	10843	1	KED
⎣	**Cd**	**114**	**49.014**	ug/L	0.491	1	9	26390	2	KED
⎡>	**In**	**115**		ug/L			759938	766074	1	Standard
⎣	**Ag**	**107**	**48.623**	ug/L	0.584	1	119	790262	1	Standard
⎡>	**Tb**	**159**		ug/L			700907	729279	2	Standard
⎣	**Pb**	**208**	**49.537**	ug/L	0.992	2	382	2872011	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBL
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 07:30:07
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	34541	1	Standard
	Cl	**37**		ug/L			4716783	4744194	1	Standard
⌈>	**Sc**	**45**		ug/L			639427	640418	0	Standard
|	**Cr**	**52**	**0.025**	ug/L	0.009	37	24054	24582	1	Standard
|	**Cr**	**53**	**0.040**	ug/L	0.002	4	172	265	1	Standard
⌊	**Mn**	**55**	**-0.003**	ug/L	0.001	26	973	876	2	Standard
⌈>	**Ge**	**72**		ug/L			40737	39767	3	KED
|	**Ni**	**60**	**0.003**	ug/L	0.004	121	20	23	16	KED
|	**Ni**	**62**	**-0.022**	ug/L	0.014	64	6	2	114	KED
|	**Cu**	**63**	**-0.005**	ug/L	0.004	77	114	92	11	KED
|	**Cu**	**65**	**-0.010**	ug/L	0.001	6	63	45	6	KED
|	**Zn**	**66**	**-0.081**	ug/L	0.041	50	93	55	32	KED
|	**Zn**	**67**	**-0.110**	ug/L	0.036	32	17	8	32	KED
⌊	**As**	**75**	**-0.003**	ug/L	0.010	391	10	9	26	KED
	Y	**89**		ug/L			414325	418682	3	Standard
	Kr	**83**		ug/L			60	54	14	Standard
⌈>	**In-1**	**115**		ug/L			10806	10492	0	KED
|	**Cd**	**111**	**0.002**	ug/L	0.013	509	7	7	34	KED
⌊	**Cd**	**114**	**-0.000**	ug/L	0.008	1726	9	8	51	KED
⌈>	**In**	**115**		ug/L			759938	788827	3	Standard
⌊	**Ag**	**107**	**0.005**	ug/L	0.001	23	119	203	9	Standard
⌈>	**Tb**	**159**		ug/L			700907	706710	3	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	48	382	434	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 07:34:35
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	39710	2	Standard
	Cl	**37**		ug/L			4716783	4966062	2	Standard
⎡>	**Sc**	**45**		ug/L			639427	756050	3	Standard
⎢	**Cr**	**52**	**0.074**	ug/L	0.007	8	24054	30182	3	Standard
⎢	**Cr**	**53**	**0.037**	ug/L	0.010	26	172	305	5	Standard
⎣	**Mn**	**55**	**0.024**	ug/L	0.002	6	973	1959	1	Standard
⎡>	**Ge**	**72**		ug/L			40737	42789	0	KED
⎢	**Ni**	**60**	**-0.005**	ug/L	0.003	60	20	15	25	KED
⎢	**Ni**	**62**	**0.019**	ug/L	0.009	48	6	11	16	KED
⎢	**Cu**	**63**	**0.010**	ug/L	0.003	30	114	161	8	KED
⎢	**Cu**	**65**	**0.010**	ug/L	0.002	22	63	85	5	KED
⎢	**Zn**	**66**	**-0.109**	ug/L	0.012	10	93	46	12	KED
⎢	**Zn**	**67**	**-0.134**	ug/L	0.050	37	17	7	50	KED
⎣	**As**	**75**	**-0.017**	ug/L	0.003	20	10	6	12	KED
	Y	**89**		ug/L			414325	492489	2	Standard
	Kr	**83**		ug/L			60	53	14	Standard
⎡>	**In-1**	**115**		ug/L			10806	11910	2	KED
⎢	**Cd**	**111**	**-0.015**	ug/L	0.004	29	7	4	20	KED
⎣	**Cd**	**114**	**-0.008**	ug/L	0.005	71	9	5	57	KED
⎡>	**In**	**115**		ug/L			759938	854601	1	Standard
⎣	**Ag**	**107**	**0.005**	ug/L	0.001	13	119	224	6	Standard
⎡>	**Tb**	**159**		ug/L			700907	783273	2	Standard
⎣	**Pb**	**208**	**0.000**	ug/L	0.000	288	382	434	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 07:39:03
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	40602	1	Standard
	Cl	**37**		ug/L			4716783	5004986	2	Standard
⌈>	**Sc**	**45**		ug/L			639427	770633	3	Standard
|	**Cr**	**52**	**0.077**	ug/L	0.039	50	24054	30808	2	Standard
|	**Cr**	**53**	**0.036**	ug/L	0.008	23	172	308	8	Standard
⌊	**Mn**	**55**	**0.023**	ug/L	0.001	5	973	1967	1	Standard
⌈>	**Ge**	**72**		ug/L			40737	42180	1	KED
|	**Ni**	**60**	**-0.000**	ug/L	0.006	5923	20	20	36	KED
|	**Ni**	**62**	**-0.013**	ug/L	0.022	167	6	4	107	KED
|	**Cu**	**63**	**0.008**	ug/L	0.003	32	114	150	7	KED
|	**Cu**	**65**	**0.003**	ug/L	0.004	132	63	71	11	KED
|	**Zn**	**66**	**-0.122**	ug/L	0.009	7	93	40	9	KED
|	**Zn**	**67**	**-0.149**	ug/L	0.038	25	17	6	45	KED
⌊	**As**	**75**	**-0.003**	ug/L	0.008	267	10	9	18	KED
	Y	**89**		ug/L			414325	507128	1	Standard
	Kr	**83**		ug/L			60	66	24	Standard
⌈>	**In-1**	**115**		ug/L			10806	11743	1	KED
|	**Cd**	**111**	**-0.005**	ug/L	0.016	285	7	6	55	KED
⌊	**Cd**	**114**	**-0.004**	ug/L	0.005	123	9	7	44	KED
⌈>	**In**	**115**		ug/L			759938	880943	1	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.002	304	119	149	21	Standard
⌈>	**Tb**	**159**		ug/L			700907	804919	3	Standard
⌊	**Pb**	**208**	**-0.002**	ug/L	0.001	34	382	339	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 07:43:31
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	39699	1	Standard
	Cl	**37**		ug/L			4716783	4886543	2	Standard
⌈>	**Sc**	**45**		ug/L			639427	734616	0	Standard
|	**Cr**	**52**	**0.078**	ug/L	0.027	34	24054	29419	2	Standard
|	**Cr**	**53**	**0.041**	ug/L	0.001	2	172	307	0	Standard
⌊	**Mn**	**55**	**0.023**	ug/L	0.002	6	973	1864	2	Standard
⌈>	**Ge**	**72**		ug/L			40737	41722	0	KED
|	**Ni**	**60**	**0.001**	ug/L	0.004	615	20	21	22	KED
|	**Ni**	**62**	**0.008**	ug/L	0.022	275	6	8	53	KED
|	**Cu**	**63**	**0.010**	ug/L	0.003	28	114	156	6	KED
|	**Cu**	**65**	**0.008**	ug/L	0.012	159	63	79	29	KED
|	**Zn**	**66**	**-0.130**	ug/L	0.015	11	93	36	18	KED
|	**Zn**	**67**	**-0.165**	ug/L	0.028	17	17	5	43	KED
⌊	**As**	**75**	**-0.019**	ug/L	0.003	16	10	6	12	KED
	Y	**89**		ug/L			414325	473419	1	Standard
	Kr	**83**		ug/L			60	58	13	Standard
⌈>	**In-1**	**115**		ug/L			10806	11350	2	KED
|	**Cd**	**111**	**-0.007**	ug/L	0.010	135	7	6	37	KED
⌊	**Cd**	**114**	**-0.005**	ug/L	0.004	81	9	6	31	KED
⌈>	**In**	**115**		ug/L			759938	837026	1	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.001	65	119	107	13	Standard
⌈>	**Tb**	**159**		ug/L			700907	789752	3	Standard
⌊	**Pb**	**208**	**-0.001**	ug/L	0.000	11	382	349	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 07:47:59
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	34824	1	Standard
	Cl	**37**		ug/L			4716783	4352077	0	Standard
⎡>	**Sc**	**45**		ug/L			639427	566338	1	Standard
⎢	**Cr**	**52**	**0.013**	ug/L	0.021	164	24054	21524	0	Standard
⎢	**Cr**	**53**	**0.031**	ug/L	0.011	34	172	217	9	Standard
⎣	**Mn**	**55**	**0.015**	ug/L	0.000	2	973	1246	0	Standard
⎡>	**Ge**	**72**		ug/L			40737	37514	4	KED
⎢	**Ni**	**60**	**-0.001**	ug/L	0.006	702	20	17	43	KED
⎢	**Ni**	**62**	**-0.017**	ug/L	0.006	36	6	3	34	KED
⎢	**Cu**	**63**	**-0.013**	ug/L	0.002	14	114	60	5	KED
⎢	**Cu**	**65**	**-0.020**	ug/L	0.005	25	63	24	38	KED
⎢	**Zn**	**66**	**-0.164**	ug/L	0.010	6	93	18	26	KED
⎢	**Zn**	**67**	**-0.204**	ug/L	0.001	0	17	1		KED
⎣	**As**	**75**	**-0.004**	ug/L	0.004	89	10	8	13	KED
	Y	**89**		ug/L			414325	379516	1	Standard
	Kr	**83**		ug/L			60	53	26	Standard
⎡>	**In-1**	**115**		ug/L			10806	9533	2	KED
⎢	**Cd**	**111**	**0.009**	ug/L	0.006	61	7	8	11	KED
⎣	**Cd**	**114**	**0.011**	ug/L	0.009	80	9	13	32	KED
⎡>	**In**	**115**		ug/L			759938	699388	0	Standard
⎣	**Ag**	**107**	**-0.004**	ug/L	0.001	14	119	46	20	Standard
⎡>	**Tb**	**159**		ug/L			700907	650430	1	Standard
⎣	**Pb**	**208**	**-0.005**	ug/L	0.000	2	382	85	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 07:52:27
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	35291	1	Standard
	Cl	**37**		ug/L			4716783	4276240	3	Standard
⎡>	**Sc**	**45**		ug/L			639427	565442	2	Standard
⎢	**Cr**	**52**	**0.023**	ug/L	0.013	55	24054	21676	3	Standard
⎢	**Cr**	**53**	**0.028**	ug/L	0.009	30	172	210	5	Standard
⎣	**Mn**	**55**	**0.009**	ug/L	0.002	17	973	1085	1	Standard
⎡>	**Ge**	**72**		ug/L			40737	37970	2	KED
⎢	**Ni**	**60**	**-0.002**	ug/L	0.011	730	20	17	80	KED
⎢	**Ni**	**62**	**-0.014**	ug/L	0.010	69	6	3	50	KED
⎢	**Cu**	**63**	**-0.016**	ug/L	0.001	7	114	51	7	KED
⎢	**Cu**	**65**	**-0.014**	ug/L	0.006	45	63	34	30	KED
⎢	**Zn**	**66**	**-0.154**	ug/L	0.016	10	93	22	30	KED
⎢	**Zn**	**67**	**-0.139**	ug/L	0.044	31	17	6	45	KED
⎣	**As**	**75**	**-0.006**	ug/L	0.008	131	10	8	17	KED
	Y	**89**		ug/L			414325	375393	1	Standard
	Kr	**83**		ug/L			60	55	10	Standard
⎡>	**In-1**	**115**		ug/L			10806	9488	1	KED
⎢	**Cd**	**111**	**0.016**	ug/L	0.005	30	7	9	11	KED
⎣	**Cd**	**114**	**-0.001**	ug/L	0.000	18	9	7	0	KED
⎡>	**In**	**115**		ug/L			759938	707290	1	Standard
⎣	**Ag**	**107**	**-0.004**	ug/L	0.001	12	119	46	16	Standard
⎡>	**Tb**	**159**		ug/L			700907	656160	3	Standard
⎣	**Pb**	**208**	**-0.006**	ug/L	0.000	4	382	70	19	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 07:56:55
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030623.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35520	35496	2	Standard
	Cl	**37**		ug/L			4716783	4160662	0	Standard
⎡>	**Sc**	**45**		ug/L			639427	547812	3	Standard
⎢	**Cr**	**52**	**0.019**	ug/L	0.023	122	24054	20927	3	Standard
⎢	**Cr**	**53**	**0.035**	ug/L	0.004	10	172	218	1	Standard
⎣	**Mn**	**55**	**0.006**	ug/L	0.002	31	973	973	3	Standard
⎡>	**Ge**	**72**		ug/L			40737	36484	3	KED
⎢	**Ni**	**60**	**0.003**	ug/L	0.007	257	20	20	32	KED
⎢	**Ni**	**62**	**0.001**	ug/L	0.017	2137	6	6	45	KED
⎢	**Cu**	**63**	**-0.012**	ug/L	0.004	30	114	63	22	KED
⎢	**Cu**	**65**	**-0.019**	ug/L	0.002	11	63	26	16	KED
⎢	**Zn**	**66**	**-0.154**	ug/L	0.032	20	93	22	60	KED
⎢	**Zn**	**67**	**-0.193**	ug/L	0.018	9	17	2	43	KED
⎣	**As**	**75**	**-0.001**	ug/L	0.015	1121	10	8	36	KED
	Y	**89**		ug/L			414325	358411	2	Standard
	Kr	**83**		ug/L			60	66	11	Standard
⎡>	**In-1**	**115**		ug/L			10806	9459	0	KED
⎢	**Cd**	**111**	**-0.003**	ug/L	0.010	313	7	6	32	KED
⎣	**Cd**	**114**	**-0.006**	ug/L	0.007	128	9	5	64	KED
⎡>	**In**	**115**		ug/L			759938	676405	1	Standard
⎣	**Ag**	**107**	**-0.004**	ug/L	0.001	19	119	48	23	Standard
⎡>	**Tb**	**159**		ug/L			700907	636729	2	Standard
⎣	**Pb**	**208**	**-0.005**	ug/L	0.000	1	382	79	4	Standard

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GC00005
Control Limt: +/- 10.00%
Sequence: SLC0028

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0028-ICV1	Arsenic-75a	50.000	45.9	91.8	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	48.5	97.0	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.0	98.1	ug/L	PA 6020B UCT-KE
SLC0028-CCV1	Arsenic-75a	50.000	49.2	98.4	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.3	98.5	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.7	97.5	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.7	99.4	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.2	100	ug/L	PA 6020B UCT-KE
SLC0028-CCV2	Arsenic-75a	50.000	49.3	98.7	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	48.8	97.5	ug/L	PA 6020B UCT-KE
SLC0028-CCV3	Arsenic-75a	50.000	48.7	97.5	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	47.2	94.4	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	47.3	94.7	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	47.6	95.3	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.2	98.5	ug/L	PA 6020B UCT-KE
SLC0028-CCV4	Arsenic-75a	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	48.8	97.5	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.6	99.3	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.0	102	ug/L	PA 6020B UCT-KE
SLC0028-CCV5	Arsenic-75a	50.000	49.1	98.2	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.9	99.8	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.7	99.5	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.2	100	ug/L	PA 6020B UCT-KE
SLC0028-CCV6	Arsenic-75a	50.000	48.9	97.8	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.4	98.8	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.5	99.0	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.4	101	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GC00005
Control Limt: +/- 10.00%
Sequence: SLC0028

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0028-CCV6	Zinc-67	50.000	49.3	98.6	ug/L	PA 6020B UCT-KE
SLC0028-CCV7	Arsenic-75a	50.000	48.1	96.2	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	48.8	97.5	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.6	97.1	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	48.8	97.6	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.6	99.2	ug/L	PA 6020B UCT-KE

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GC00021
Control Limt: +/- 10.00%
Sequence: SLC0078

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0078-ICV1	Arsenic-75a	50.000	47.0	93.9	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.5	98.9	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.9	99.8	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.5	101	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.2	98.5	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.0	98.1	ug/L	PA 6020B UCT-KE
SLC0078-CCV1	Arsenic-75a	50.000	49.5	99.0	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.1	98.3	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.1	98.2	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.0	98.1	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.1	98.3	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.9	99.9	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.8	102	ug/L	PA 6020B UCT-KE
SLC0078-CCV2	Arsenic-75a	50.000	49.0	98.0	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.0	99.9	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.1	98.3	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.2	98.4	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.7	99.4	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.1	102	ug/L	PA 6020B UCT-KE
SLC0078-CCV3	Arsenic-75a	50.000	49.8	99.5	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.9	99.8	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	48.1	96.2	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.9	97.8	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.6	99.1	ug/L	PA 6020B UCT-KE
SLC0078-CCV4	Arsenic-75a	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.2	98.4	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	48.9	97.8	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.2	98.3	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.5	97.0	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.2	100	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GC00021
Control Limt: +/- 10.00%
Sequence: SLC0078

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0078-CCV4	Zinc-67	50.000	51.5	103	ug/L	PA 6020B UCT-KE
SLC0078-CCV5	Arsenic-75a	50.000	50.0	99.9	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.7	99.3	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.3	98.6	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	47.5	95.1	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.0	98.0	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.4	98.8	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.0	100	ug/L	PA 6020B UCT-KE
SLC0078-CCV6	Arsenic-75a	50.000	49.0	98.0	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.3	98.6	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.0	98.0	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	46.5	93.1	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	46.9	93.8	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	48.9	97.7	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	47.9	95.8	ug/L	PA 6020B UCT-KE
SLC0078-CCV7	Arsenic-75a	50.000	49.9	99.8	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.4	98.9	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.4	98.8	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	47.7	95.3	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.8	97.5	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.4	98.8	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.7	99.5	ug/L	PA 6020B UCT-KE
SLC0078-CCV8	Arsenic-75a	50.000	50.5	101	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.0	97.9	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	48.2	96.3	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	48.0	96.1	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	47.8	95.6	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.8	99.5	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.5	101	ug/L	PA 6020B UCT-KE
SLC0078-CCV9	Arsenic-75a	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.1	98.1	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	46.6	93.3	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.4	96.8	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GC00021
Control Limt: +/- 10.00%
Sequence: SLC0078

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0078-CCV9	Zinc-66	50.000	48.3	96.7	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.5	101	ug/L	PA 6020B UCT-KE
SLC0078-CCVA	Arsenic-75a	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.2	98.4	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.4	98.8	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	47.1	94.2	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	47.2	94.3	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	48.4	96.7	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.0	99.9	ug/L	PA 6020B UCT-KE
SLC0078-CCVB	Arsenic-75a	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.8	99.6	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.8	99.7	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	47.4	94.8	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	47.9	95.8	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.5	98.9	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.6	99.3	ug/L	PA 6020B UCT-KE
SLC0078-CCVC	Arsenic-75a	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.8	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.2	98.4	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	47.0	93.9	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.4	96.9	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.0	102	ug/L	PA 6020B UCT-KE
SLC0078-CCVD	Arsenic-75a	50.000	49.6	99.2	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.6	99.2	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	47.1	94.2	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	47.8	95.7	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	48.5	97.1	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.6	99.2	ug/L	PA 6020B UCT-KE
SLC0078-CCVE	Arsenic-75a	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	48.1	96.2	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GC00021
Control Limt: +/- 10.00%
Sequence: SLC0078

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0078-CCVE	Copper-65	50.000	48.2	96.5	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.6	99.1	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.7	101	ug/L	PA 6020B UCT-KE
SLC0078-CCVF	Arsenic-75a	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.8	99.6	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.1	98.3	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	47.7	95.3	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.4	96.9	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.5	101	ug/L	PA 6020B UCT-KE
SLC0078-CCVG	Arsenic-75a	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.6	99.3	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.1	98.3	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	48.0	96.1	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.8	97.5	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.5	99.1	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.4	101	ug/L	PA 6020B UCT-KE
SLC0078-CCVH	Arsenic-75a	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.8	99.7	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.0	98.0	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	47.3	94.6	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	47.4	94.8	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	48.2	96.5	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.9	99.8	ug/L	PA 6020B UCT-KE
SLC0078-CCVI	Arsenic-75a	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	48.4	96.7	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	48.6	97.1	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	46.9	93.8	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.5	97.0	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.3	103	ug/L	PA 6020B UCT-KE
SLC0078-CCVJ	Arsenic-75a	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.9	99.8	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GC00021
Control Limt: +/- 10.00%
Sequence: SLC0078

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0078-CCVJ	Copper-63	50.000	47.1	94.3	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.2	96.4	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	48.9	97.8	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.3	98.6	ug/L	PA 6020B UCT-KE
SLC0078-CCVK	Arsenic-75a	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	47.4	94.9	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	47.9	95.8	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.5	99.1	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.9	99.8	ug/L	PA 6020B UCT-KE
SLC0078-CCVL	Arsenic-75a	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.7	99.4	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.0	98.0	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	47.1	94.3	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	47.9	95.8	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.6	99.2	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.8	99.7	ug/L	PA 6020B UCT-KE

* Values outside of QC limits

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLC0028

SDG: 23A0171
Project: AOC5 MR Phase 1
Calibration: GC00005
Date Analyzed: 03/01/23 17:11

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0028-IBL1	Arsenic-75a	-0.00200	0.0373	0.200	ug/L	
SLC0028-IBL1	Copper-63	0.0170	0.173	0.500	ug/L	
SLC0028-IBL1	Copper-65	0.0150	0.35	0.500	ug/L	
SLC0028-IBL1	Zinc-66	-0.0030	2.92	6.00	ug/L	
SLC0028-IBL1	Zinc-67	-0.0330	0.94	6.00	ug/L	
SLC0028-ICB1	Arsenic-75a	0.00300	0.0373	0.200	ug/L	
SLC0028-ICB1	Copper-63	0.00400	0.173	0.500	ug/L	
SLC0028-ICB1	Copper-65	0.00100	0.35	0.500	ug/L	
SLC0028-ICB1	Zinc-66	0.0300	2.92	6.00	ug/L	
SLC0028-ICB1	Zinc-67	-0.0110	0.94	6.00	ug/L	
SLC0028-CCB1	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLC0028-CCB1	Copper-63	0.00	0.173	0.500	ug/L	
SLC0028-CCB1	Copper-65	-0.00200	0.35	0.500	ug/L	
SLC0028-CCB1	Zinc-66	0.0070	2.92	6.00	ug/L	
SLC0028-CCB1	Zinc-67	0.0370	0.94	6.00	ug/L	
SLC0028-IBL2	Arsenic-75a	0.0790	0.0373	0.200	ug/L	
SLC0028-IBL2	Copper-63	0.0300	0.173	0.500	ug/L	
SLC0028-IBL2	Copper-65	0.0280	0.35	0.500	ug/L	
SLC0028-IBL2	Zinc-66	0.258	2.92	6.00	ug/L	
SLC0028-IBL2	Zinc-67	0.149	0.94	6.00	ug/L	
SLC0028-IBL3	Arsenic-75a	0.0180	0.0373	0.200	ug/L	
SLC0028-IBL3	Copper-63	0.0340	0.173	0.500	ug/L	
SLC0028-IBL3	Copper-65	0.0260	0.35	0.500	ug/L	
SLC0028-IBL3	Zinc-66	0.299	2.92	6.00	ug/L	
SLC0028-IBL3	Zinc-67	0.230	0.94	6.00	ug/L	
SLC0028-CCB2	Arsenic-75a	0.00600	0.0373	0.200	ug/L	
SLC0028-CCB2	Copper-63	0.00	0.173	0.500	ug/L	
SLC0028-CCB2	Copper-65	0.00600	0.35	0.500	ug/L	
SLC0028-CCB2	Zinc-66	0.0320	2.92	6.00	ug/L	
SLC0028-CCB2	Zinc-67	0.00	0.94	6.00	ug/L	
SLC0028-IBL4	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLC0028-IBL4	Copper-63	0.106	0.173	0.500	ug/L	
SLC0028-IBL4	Copper-65	0.0440	0.35	0.500	ug/L	
SLC0028-IBL4	Zinc-66	0.0430	2.92	6.00	ug/L	
SLC0028-IBL4	Zinc-67	-0.0830	0.94	6.00	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLC0028

SDG: 23A0171
Project: AOC5 MR Phase 1
Calibration: GC00005
Date Analyzed: 03/01/23 19:50

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0028-IBL5	Arsenic-75a	-0.00600	0.0373	0.200	ug/L	
SLC0028-IBL5	Copper-63	0.0210	0.173	0.500	ug/L	
SLC0028-IBL5	Copper-65	0.0130	0.35	0.500	ug/L	
SLC0028-IBL5	Zinc-66	0.0100	2.92	6.00	ug/L	
SLC0028-IBL5	Zinc-67	-0.0460	0.94	6.00	ug/L	
SLC0028-CCB3	Arsenic-75a	-0.00900	0.0373	0.200	ug/L	
SLC0028-CCB3	Copper-63	0.00800	0.173	0.500	ug/L	
SLC0028-CCB3	Copper-65	-0.00200	0.35	0.500	ug/L	
SLC0028-CCB3	Zinc-66	0.0140	2.92	6.00	ug/L	
SLC0028-CCB3	Zinc-67	-0.0500	0.94	6.00	ug/L	
SLC0028-IBL6	Arsenic-75a	-0.00300	0.0373	0.200	ug/L	
SLC0028-IBL6	Copper-63	0.0160	0.173	0.500	ug/L	
SLC0028-IBL6	Copper-65	0.00500	0.35	0.500	ug/L	
SLC0028-IBL6	Zinc-66	-0.0180	2.92	6.00	ug/L	
SLC0028-IBL6	Zinc-67	-0.0870	0.94	6.00	ug/L	
SLC0028-CCB4	Arsenic-75a	-0.0110	0.0373	0.200	ug/L	
SLC0028-CCB4	Copper-63	0.00500	0.173	0.500	ug/L	
SLC0028-CCB4	Copper-65	-0.00100	0.35	0.500	ug/L	
SLC0028-CCB4	Zinc-66	-0.0020	2.92	6.00	ug/L	
SLC0028-CCB4	Zinc-67	-0.0270	0.94	6.00	ug/L	
SLC0028-CCB5	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLC0028-CCB5	Copper-63	0.00100	0.173	0.500	ug/L	
SLC0028-CCB5	Copper-65	-0.00300	0.35	0.500	ug/L	
SLC0028-CCB5	Zinc-66	-0.0070	2.92	6.00	ug/L	
SLC0028-CCB5	Zinc-67	0.0170	0.94	6.00	ug/L	
SLC0028-IBL7	Arsenic-75a	-0.0130	0.0373	0.200	ug/L	
SLC0028-IBL7	Copper-63	0.0120	0.173	0.500	ug/L	
SLC0028-IBL7	Copper-65	0.00400	0.35	0.500	ug/L	
SLC0028-IBL7	Zinc-66	-0.0020	2.92	6.00	ug/L	
SLC0028-IBL7	Zinc-67	-0.0560	0.94	6.00	ug/L	
SLC0028-CCB6	Arsenic-75a	-0.00800	0.0373	0.200	ug/L	
SLC0028-CCB6	Copper-63	-0.00100	0.173	0.500	ug/L	
SLC0028-CCB6	Copper-65	-0.00400	0.35	0.500	ug/L	
SLC0028-CCB6	Zinc-66	-0.0020	2.92	6.00	ug/L	
SLC0028-CCB6	Zinc-67	-0.0620	0.94	6.00	ug/L	
SLC0028-IBL8	Arsenic-75a	0.00200	0.0373	0.200	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLC0028

SDG: 23A0171
Project: AOC5 MR Phase 1
Calibration: GC00005
Date Analyzed: 03/01/23 23:33

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0028-IBL8	Copper-63	0.0120	0.173	0.500	ug/L	
SLC0028-IBL8	Copper-65	0.00800	0.35	0.500	ug/L	
SLC0028-IBL8	Zinc-66	0.0090	2.92	6.00	ug/L	
SLC0028-IBL8	Zinc-67	-0.0190	0.94	6.00	ug/L	
SLC0028-CCB7	Arsenic-75a	-0.00300	0.0373	0.200	ug/L	
SLC0028-CCB7	Copper-63	0.00400	0.173	0.500	ug/L	
SLC0028-CCB7	Copper-65	-0.00400	0.35	0.500	ug/L	
SLC0028-CCB7	Zinc-66	0.0020	2.92	6.00	ug/L	
SLC0028-CCB7	Zinc-67	-0.0750	0.94	6.00	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLC0078

SDG: 23A0171
Project: AOC5 MR Phase 1
Calibration: GC00021
Date Analyzed: 03/06/23 13:44

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0078-IBL1	Arsenic-75a	0.00900	0.0373	0.200	ug/L	
SLC0078-IBL1	Cadmium-111	0.00600	0.03	0.100	ug/L	
SLC0078-IBL1	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLC0078-IBL1	Copper-63	0.0370	0.173	0.500	ug/L	
SLC0078-IBL1	Copper-65	0.0330	0.35	0.500	ug/L	
SLC0078-IBL1	Zinc-66	0.528	2.92	6.00	ug/L	
SLC0078-IBL1	Zinc-67	0.344	0.94	6.00	ug/L	
SLC0078-ICB1	Arsenic-75a	-0.0150	0.0373	0.200	ug/L	
SLC0078-ICB1	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLC0078-ICB1	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLC0078-ICB1	Copper-63	-0.00100	0.173	0.500	ug/L	
SLC0078-ICB1	Copper-65	-0.00800	0.35	0.500	ug/L	
SLC0078-ICB1	Zinc-66	-0.0810	2.92	6.00	ug/L	
SLC0078-ICB1	Zinc-67	-0.110	0.94	6.00	ug/L	
SLC0078-CCB1	Arsenic-75a	-0.0160	0.0373	0.200	ug/L	
SLC0078-CCB1	Cadmium-111	0.00100	0.03	0.100	ug/L	
SLC0078-CCB1	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLC0078-CCB1	Copper-63	-0.00500	0.173	0.500	ug/L	
SLC0078-CCB1	Copper-65	-0.0120	0.35	0.500	ug/L	
SLC0078-CCB1	Zinc-66	-0.0920	2.92	6.00	ug/L	
SLC0078-CCB1	Zinc-67	-0.0980	0.94	6.00	ug/L	
SLC0078-IBL2	Arsenic-75a	-0.00300	0.0373	0.200	ug/L	
SLC0078-IBL2	Cadmium-111	0.0120	0.03	0.100	ug/L	
SLC0078-IBL2	Cadmium-114	0.00600	0.04	0.100	ug/L	
SLC0078-IBL2	Copper-63	0.00300	0.173	0.500	ug/L	
SLC0078-IBL2	Copper-65	-0.00100	0.35	0.500	ug/L	
SLC0078-IBL2	Zinc-66	0.0360	2.92	6.00	ug/L	
SLC0078-IBL2	Zinc-67	0.0720	0.94	6.00	ug/L	
SLC0078-IBL3	Arsenic-75a	-0.00900	0.0373	0.200	ug/L	
SLC0078-IBL3	Cadmium-111	0.00200	0.03	0.100	ug/L	
SLC0078-IBL3	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLC0078-IBL3	Copper-63	0.00700	0.173	0.500	ug/L	
SLC0078-IBL3	Copper-65	0.00500	0.35	0.500	ug/L	
SLC0078-IBL3	Zinc-66	0.0300	2.92	6.00	ug/L	
SLC0078-IBL3	Zinc-67	0.0060	0.94	6.00	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLC0078

SDG: 23A0171
Project: AOC5 MR Phase 1
Calibration: GC00021
Date Analyzed: 03/06/23 15:06

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0078-CCB2	Arsenic-75a	-0.00600	0.0373	0.200	ug/L	
SLC0078-CCB2	Cadmium-111	-0.00500	0.03	0.100	ug/L	
SLC0078-CCB2	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLC0078-CCB2	Copper-63	-0.00800	0.173	0.500	ug/L	
SLC0078-CCB2	Copper-65	-0.00500	0.35	0.500	ug/L	
SLC0078-CCB2	Zinc-66	-0.0960	2.92	6.00	ug/L	
SLC0078-CCB2	Zinc-67	-0.0450	0.94	6.00	ug/L	
SLC0078-CCB3	Arsenic-75a	0.00500	0.0373	0.200	ug/L	
SLC0078-CCB3	Cadmium-111	-0.00700	0.03	0.100	ug/L	
SLC0078-CCB3	Cadmium-114	0.0100	0.04	0.100	ug/L	
SLC0078-CCB3	Copper-63	0.00300	0.173	0.500	ug/L	
SLC0078-CCB3	Copper-65	0.00	0.35	0.500	ug/L	
SLC0078-CCB3	Zinc-66	0.0020	2.92	6.00	ug/L	
SLC0078-CCB3	Zinc-67	-0.0290	0.94	6.00	ug/L	
SLC0078-IBL4	Arsenic-75a	0.00300	0.0373	0.200	ug/L	
SLC0078-IBL4	Cadmium-111	-0.00900	0.03	0.100	ug/L	
SLC0078-IBL4	Cadmium-114	0.0150	0.04	0.100	ug/L	
SLC0078-IBL4	Copper-63	0.0350	0.173	0.500	ug/L	
SLC0078-IBL4	Copper-65	0.0360	0.35	0.500	ug/L	
SLC0078-IBL4	Zinc-66	0.605	2.92	6.00	ug/L	
SLC0078-IBL4	Zinc-67	0.612	0.94	6.00	ug/L	
SLC0078-CCB4	Arsenic-75a	0.00400	0.0373	0.200	ug/L	
SLC0078-CCB4	Cadmium-111	-0.0140	0.03	0.100	ug/L	
SLC0078-CCB4	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLC0078-CCB4	Copper-63	0.00	0.173	0.500	ug/L	
SLC0078-CCB4	Copper-65	0.00100	0.35	0.500	ug/L	
SLC0078-CCB4	Zinc-66	0.0210	2.92	6.00	ug/L	
SLC0078-CCB4	Zinc-67	0.0100	0.94	6.00	ug/L	
SLC0078-IBL5	Arsenic-75a	0.00300	0.0373	0.200	ug/L	
SLC0078-IBL5	Cadmium-111	-0.00700	0.03	0.100	ug/L	
SLC0078-IBL5	Cadmium-114	0.00800	0.04	0.100	ug/L	
SLC0078-IBL5	Copper-63	0.00200	0.173	0.500	ug/L	
SLC0078-IBL5	Copper-65	-0.00600	0.35	0.500	ug/L	
SLC0078-IBL5	Zinc-66	0.0290	2.92	6.00	ug/L	
SLC0078-IBL5	Zinc-67	0.145	0.94	6.00	ug/L	
SLC0078-CCB5	Arsenic-75a	0.00300	0.0373	0.200	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLC0078

SDG: 23A0171
Project: AOC5 MR Phase 1
Calibration: GC00021
Date Analyzed: 03/06/23 17:37

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0078-CCB5	Cadmium-111	-0.0110	0.03	0.100	ug/L	
SLC0078-CCB5	Cadmium-114	-0.00300	0.04	0.100	ug/L	
SLC0078-CCB5	Copper-63	-0.00100	0.173	0.500	ug/L	
SLC0078-CCB5	Copper-65	-0.00400	0.35	0.500	ug/L	
SLC0078-CCB5	Zinc-66	0.0010	2.92	6.00	ug/L	
SLC0078-CCB5	Zinc-67	0.00	0.94	6.00	ug/L	
SLC0078-CCB6	Arsenic-75a	0.00500	0.0373	0.200	ug/L	
SLC0078-CCB6	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLC0078-CCB6	Cadmium-114	0.00600	0.04	0.100	ug/L	
SLC0078-CCB6	Copper-63	-0.00200	0.173	0.500	ug/L	
SLC0078-CCB6	Copper-65	-0.00900	0.35	0.500	ug/L	
SLC0078-CCB6	Zinc-66	0.0030	2.92	6.00	ug/L	
SLC0078-CCB6	Zinc-67	0.0420	0.94	6.00	ug/L	
SLC0078-IBL7	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLC0078-IBL7	Cadmium-111	-0.00600	0.03	0.100	ug/L	
SLC0078-IBL7	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLC0078-IBL7	Copper-63	0.00600	0.173	0.500	ug/L	
SLC0078-IBL7	Copper-65	0.00400	0.35	0.500	ug/L	
SLC0078-IBL7	Zinc-66	0.128	2.92	6.00	ug/L	
SLC0078-IBL7	Zinc-67	0.185	0.94	6.00	ug/L	
SLC0078-CCB7	Arsenic-75a	0.00200	0.0373	0.200	ug/L	
SLC0078-CCB7	Cadmium-111	0.0120	0.03	0.100	ug/L	
SLC0078-CCB7	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLC0078-CCB7	Copper-63	0.00400	0.173	0.500	ug/L	
SLC0078-CCB7	Copper-65	0.00	0.35	0.500	ug/L	
SLC0078-CCB7	Zinc-66	0.180	2.92	6.00	ug/L	
SLC0078-CCB7	Zinc-67	0.185	0.94	6.00	ug/L	
SLC0078-IBL8	Arsenic-75a	0.00500	0.0373	0.200	ug/L	
SLC0078-IBL8	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLC0078-IBL8	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLC0078-IBL8	Copper-63	0.00700	0.173	0.500	ug/L	
SLC0078-IBL8	Copper-65	0.00900	0.35	0.500	ug/L	
SLC0078-IBL8	Zinc-66	0.131	2.92	6.00	ug/L	
SLC0078-IBL8	Zinc-67	0.228	0.94	6.00	ug/L	
SLC0078-CCB8	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLC0078-CCB8	Cadmium-111	-0.00300	0.03	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLC0078

SDG: 23A0171
Project: AOC5 MR Phase 1
Calibration: GC00021
Date Analyzed: 03/06/23 20:44

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0078-CCB8	Cadmium-114	0.0100	0.04	0.100	ug/L	
SLC0078-CCB8	Copper-63	0.00100	0.173	0.500	ug/L	
SLC0078-CCB8	Copper-65	0.00900	0.35	0.500	ug/L	
SLC0078-CCB8	Zinc-66	0.132	2.92	6.00	ug/L	
SLC0078-CCB8	Zinc-67	0.105	0.94	6.00	ug/L	
SLC0078-IBL9	Arsenic-75a	0.00500	0.0373	0.200	ug/L	
SLC0078-IBL9	Cadmium-111	0.00100	0.03	0.100	ug/L	
SLC0078-IBL9	Cadmium-114	0.0160	0.04	0.100	ug/L	
SLC0078-IBL9	Copper-63	0.00800	0.173	0.500	ug/L	
SLC0078-IBL9	Copper-65	-0.00100	0.35	0.500	ug/L	
SLC0078-IBL9	Zinc-66	0.108	2.92	6.00	ug/L	
SLC0078-IBL9	Zinc-67	0.113	0.94	6.00	ug/L	
SLC0078-CCB9	Arsenic-75a	0.00700	0.0373	0.200	ug/L	
SLC0078-CCB9	Cadmium-111	-0.00600	0.03	0.100	ug/L	
SLC0078-CCB9	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLC0078-CCB9	Copper-63	0.0120	0.173	0.500	ug/L	
SLC0078-CCB9	Copper-65	0.00900	0.35	0.500	ug/L	
SLC0078-CCB9	Zinc-66	0.135	2.92	6.00	ug/L	
SLC0078-CCB9	Zinc-67	0.224	0.94	6.00	ug/L	
SLC0078-CCBA	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLC0078-CCBA	Cadmium-111	0.00600	0.03	0.100	ug/L	
SLC0078-CCBA	Cadmium-114	0.00900	0.04	0.100	ug/L	
SLC0078-CCBA	Copper-63	0.00600	0.173	0.500	ug/L	
SLC0078-CCBA	Copper-65	0.0120	0.35	0.500	ug/L	
SLC0078-CCBA	Zinc-66	0.159	2.92	6.00	ug/L	
SLC0078-CCBA	Zinc-67	0.188	0.94	6.00	ug/L	
SLC0078-CCBB	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLC0078-CCBB	Cadmium-111	0.00400	0.03	0.100	ug/L	
SLC0078-CCBB	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLC0078-CCBB	Copper-63	-0.00100	0.173	0.500	ug/L	
SLC0078-CCBB	Copper-65	0.00	0.35	0.500	ug/L	
SLC0078-CCBB	Zinc-66	0.0590	2.92	6.00	ug/L	
SLC0078-CCBB	Zinc-67	-0.0440	0.94	6.00	ug/L	
SLC0078-IBLC	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLC0078-IBLC	Cadmium-111	-0.00600	0.03	0.100	ug/L	
SLC0078-IBLC	Cadmium-114	-0.00200	0.04	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLC0078

SDG: 23A0171
Project: AOC5 MR Phase 1
Calibration: GC00021
Date Analyzed: 03/06/23 23:40

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0078-IBLC	Copper-63	0.00400	0.173	0.500	ug/L	
SLC0078-IBLC	Copper-65	0.0100	0.35	0.500	ug/L	
SLC0078-IBLC	Zinc-66	0.0380	2.92	6.00	ug/L	
SLC0078-IBLC	Zinc-67	-0.0640	0.94	6.00	ug/L	
SLC0078-CCBC	Arsenic-75a	-0.00500	0.0373	0.200	ug/L	
SLC0078-CCBC	Cadmium-111	-0.00600	0.03	0.100	ug/L	
SLC0078-CCBC	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLC0078-CCBC	Copper-63	-0.00100	0.173	0.500	ug/L	
SLC0078-CCBC	Copper-65	0.00200	0.35	0.500	ug/L	
SLC0078-CCBC	Zinc-66	0.0750	2.92	6.00	ug/L	
SLC0078-CCBC	Zinc-67	0.115	0.94	6.00	ug/L	
SLC0078-IBLD	Arsenic-75a	0.00600	0.0373	0.200	ug/L	
SLC0078-IBLD	Cadmium-111	0.00500	0.03	0.100	ug/L	
SLC0078-IBLD	Cadmium-114	0.00600	0.04	0.100	ug/L	
SLC0078-IBLD	Copper-63	0.00	0.173	0.500	ug/L	
SLC0078-IBLD	Copper-65	0.00600	0.35	0.500	ug/L	
SLC0078-IBLD	Zinc-66	0.0210	2.92	6.00	ug/L	
SLC0078-IBLD	Zinc-67	-0.0260	0.94	6.00	ug/L	
SLC0078-CCBD	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLC0078-CCBD	Cadmium-111	0.00900	0.03	0.100	ug/L	
SLC0078-CCBD	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLC0078-CCBD	Copper-63	-0.00600	0.173	0.500	ug/L	
SLC0078-CCBD	Copper-65	0.00400	0.35	0.500	ug/L	
SLC0078-CCBD	Zinc-66	0.0370	2.92	6.00	ug/L	
SLC0078-CCBD	Zinc-67	-0.0280	0.94	6.00	ug/L	
SLC0078-CCBE	Arsenic-75a	0.00400	0.0373	0.200	ug/L	
SLC0078-CCBE	Cadmium-111	-0.00700	0.03	0.100	ug/L	
SLC0078-CCBE	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLC0078-CCBE	Copper-63	-0.00900	0.173	0.500	ug/L	
SLC0078-CCBE	Copper-65	-0.00200	0.35	0.500	ug/L	
SLC0078-CCBE	Zinc-66	-0.0550	2.92	6.00	ug/L	
SLC0078-CCBE	Zinc-67	-0.154	0.94	6.00	ug/L	
SLC0078-CCBF	Arsenic-75a	-0.00300	0.0373	0.200	ug/L	
SLC0078-CCBF	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLC0078-CCBF	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLC0078-CCBF	Copper-63	-0.00800	0.173	0.500	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLC0078

SDG: 23A0171
Project: AOC5 MR Phase 1
Calibration: GC00021
Date Analyzed: 03/07/23 02:44

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0078-CCBF	Copper-65	0.00100	0.35	0.500	ug/L	
SLC0078-CCBF	Zinc-66	-0.0570	2.92	6.00	ug/L	
SLC0078-CCBF	Zinc-67	-0.151	0.94	6.00	ug/L	
SLC0078-CCBG	Arsenic-75a	0.00400	0.0373	0.200	ug/L	
SLC0078-CCBG	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLC0078-CCBG	Cadmium-114	0.00	0.04	0.100	ug/L	
SLC0078-CCBG	Copper-63	-0.00500	0.173	0.500	ug/L	
SLC0078-CCBG	Copper-65	-0.00300	0.35	0.500	ug/L	
SLC0078-CCBG	Zinc-66	-0.0570	2.92	6.00	ug/L	
SLC0078-CCBG	Zinc-67	-0.162	0.94	6.00	ug/L	
SLC0078-CCBH	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLC0078-CCBH	Cadmium-111	0.00600	0.03	0.100	ug/L	
SLC0078-CCBH	Cadmium-114	-0.00300	0.04	0.100	ug/L	
SLC0078-CCBH	Copper-63	-0.00500	0.173	0.500	ug/L	
SLC0078-CCBH	Copper-65	-0.00500	0.35	0.500	ug/L	
SLC0078-CCBH	Zinc-66	-0.0800	2.92	6.00	ug/L	
SLC0078-CCBH	Zinc-67	-0.0680	0.94	6.00	ug/L	
SLC0078-CCBI	Arsenic-75a	-0.00500	0.0373	0.200	ug/L	
SLC0078-CCBI	Cadmium-111	0.00	0.03	0.100	ug/L	
SLC0078-CCBI	Cadmium-114	0.00500	0.04	0.100	ug/L	
SLC0078-CCBI	Copper-63	0.00	0.173	0.500	ug/L	
SLC0078-CCBI	Copper-65	-0.00500	0.35	0.500	ug/L	
SLC0078-CCBI	Zinc-66	-0.102	2.92	6.00	ug/L	
SLC0078-CCBI	Zinc-67	-0.113	0.94	6.00	ug/L	
SLC0078-IBLJ	Arsenic-75a	-0.00900	0.0373	0.200	ug/L	
SLC0078-IBLJ	Cadmium-111	-0.0100	0.03	0.100	ug/L	
SLC0078-IBLJ	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLC0078-IBLJ	Copper-63	0.00600	0.173	0.500	ug/L	
SLC0078-IBLJ	Copper-65	0.00200	0.35	0.500	ug/L	
SLC0078-IBLJ	Zinc-66	-0.0190	2.92	6.00	ug/L	
SLC0078-IBLJ	Zinc-67	-0.0040	0.94	6.00	ug/L	
SLC0078-CCBJ	Arsenic-75a	-0.00600	0.0373	0.200	ug/L	
SLC0078-CCBJ	Cadmium-111	0.00200	0.03	0.100	ug/L	
SLC0078-CCBJ	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLC0078-CCBJ	Copper-63	-0.00500	0.173	0.500	ug/L	
SLC0078-CCBJ	Copper-65	-0.00700	0.35	0.500	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLC0078

SDG: 23A0171
Project: AOC5 MR Phase 1
Calibration: GC00021
Date Analyzed: 03/07/23 05:53

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0078-CCBJ	Zinc-66	-0.108	2.92	6.00	ug/L	
SLC0078-CCBJ	Zinc-67	-0.0730	0.94	6.00	ug/L	
SLC0078-IBLK	Arsenic-75a	-0.0140	0.0373	0.200	ug/L	
SLC0078-IBLK	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLC0078-IBLK	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLC0078-IBLK	Copper-63	0.00700	0.173	0.500	ug/L	
SLC0078-IBLK	Copper-65	-0.00800	0.35	0.500	ug/L	
SLC0078-IBLK	Zinc-66	-0.0230	2.92	6.00	ug/L	
SLC0078-IBLK	Zinc-67	-0.0170	0.94	6.00	ug/L	
SLC0078-CCBK	Arsenic-75a	0.00400	0.0373	0.200	ug/L	
SLC0078-CCBK	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLC0078-CCBK	Cadmium-114	-0.00900	0.04	0.100	ug/L	
SLC0078-CCBK	Copper-63	-0.00100	0.173	0.500	ug/L	
SLC0078-CCBK	Copper-65	-0.0100	0.35	0.500	ug/L	
SLC0078-CCBK	Zinc-66	-0.0960	2.92	6.00	ug/L	
SLC0078-CCBK	Zinc-67	-0.151	0.94	6.00	ug/L	
SLC0078-IBLM	Arsenic-75a	-0.0130	0.0373	0.200	ug/L	
SLC0078-IBLM	Cadmium-111	-0.00900	0.03	0.100	ug/L	
SLC0078-IBLM	Cadmium-114	0.00500	0.04	0.100	ug/L	
SLC0078-IBLM	Copper-63	0.00200	0.173	0.500	ug/L	
SLC0078-IBLM	Copper-65	0.00100	0.35	0.500	ug/L	
SLC0078-IBLM	Zinc-66	-0.0260	2.92	6.00	ug/L	
SLC0078-IBLM	Zinc-67	-0.0320	0.94	6.00	ug/L	
SLC0078-IBLL	Arsenic-75a	0.00200	0.0373	0.200	ug/L	
SLC0078-IBLL	Cadmium-111	0.0160	0.03	0.100	ug/L	
SLC0078-IBLL	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLC0078-IBLL	Copper-63	0.0130	0.173	0.500	ug/L	
SLC0078-IBLL	Copper-65	0.00500	0.35	0.500	ug/L	
SLC0078-IBLL	Zinc-66	-0.0240	2.92	6.00	ug/L	
SLC0078-IBLL	Zinc-67	-0.0640	0.94	6.00	ug/L	
SLC0078-CCBL	Arsenic-75a	-0.00300	0.0373	0.200	ug/L	
SLC0078-CCBL	Cadmium-111	0.00200	0.03	0.100	ug/L	
SLC0078-CCBL	Cadmium-114	0.00	0.04	0.100	ug/L	
SLC0078-CCBL	Copper-63	-0.00500	0.173	0.500	ug/L	
SLC0078-CCBL	Copper-65	-0.0100	0.35	0.500	ug/L	
SLC0078-CCBL	Zinc-66	-0.0810	2.92	6.00	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLC0078

SDG: 23A0171
Project: AOC5 MR Phase 1
Calibration: GC00021
Date Analyzed: 03/07/23 07:30

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0078-CCBL	Zinc-67	-0.110	0.94	6.00	ug/L	

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0028	Instrument:	ICPMS2
		Calibration:	GC00005

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLC0028-CAL1	XDT_m2230301-013	NA	03/01/23 16:36
CAL 1 - LOW CHECK	SLC0028-CAL2	XDT_m2230301-014	NA	03/01/23 16:41
CAL 2	SLC0028-CAL3	XDT_m2230301-015	NA	03/01/23 16:46
CAL 3	SLC0028-CAL4	XDT_m2230301-016	NA	03/01/23 16:51
CAL 4	SLC0028-CAL5	XDT_m2230301-017	NA	03/01/23 16:56
CAL 5	SLC0028-CAL6	XDT_m2230301-018	NA	03/01/23 17:03
RINSE	SLC0028-IBL1	XDT_m2230301-019	NA	03/01/23 17:11
Initial Cal Check	SLC0028-ICV1	XDT_m2230301-021	NA	03/01/23 17:23
Initial Cal Blank	SLC0028-ICB1	XDT_m2230301-022	NA	03/01/23 17:31
Calibration Check	SLC0028-CCV1	XDT_m2230301-023	NA	03/01/23 17:37
Calibration Blank	SLC0028-CCB1	XDT_m2230301-024	NA	03/01/23 17:44
Instrument RL Check	SLC0028-CRL1	XDT_m2230301-025	NA	03/01/23 17:49
Interference Check A	SLC0028-IFA1	XDT_m2230301-026	NA	03/01/23 17:55
Interference Check B	SLC0028-IFB1	XDT_m2230301-028	NA	03/01/23 18:08
LR200	SLC0028-HCV1	XDT_m2230301-029	NA	03/01/23 18:13
LR300	SLC0028-HCV2	XDT_m2230301-030	NA	03/01/23 18:18
Instrument Blank	SLC0028-IBL2	XDT_m2230301-031	NA	03/01/23 18:25
Instrument Blank	SLC0028-IBL3	XDT_m2230301-032	NA	03/01/23 18:32
Calibration Check	SLC0028-CCV2	XDT_m2230301-033	NA	03/01/23 18:39
Calibration Blank	SLC0028-CCB2	XDT_m2230301-035	NA	03/01/23 18:51
ZZZZZ	BLC0008-BLK1	XDT_m2230301-036	Water	03/01/23 19:00
ZZZZZ	BLC0008-BS1	XDT_m2230301-037	Water	03/01/23 19:05
Instrument Blank	SLC0028-IBL4	XDT_m2230301-042	NA	03/01/23 19:35
Instrument Blank	SLC0028-IBL5	XDT_m2230301-045	NA	03/01/23 19:50
Calibration Check	SLC0028-CCV3	XDT_m2230301-046	NA	03/01/23 19:56
Calibration Blank	SLC0028-CCB3	XDT_m2230301-047	NA	03/01/23 20:04
ZZZZZ	23B0501-01	XDT_m2230301-054	Water	03/01/23 20:38
ZZZZZ	BLC0008-DUP1	XDT_m2230301-055	Water	03/01/23 20:43
ZZZZZ	BLC0008-MS1	XDT_m2230301-056	Water	03/01/23 20:48

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0028
Instrument: ICPMS2
Calibration: GC00005

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Instrument Blank	SLC0028-IBL6	XDT_m2230301-057	NA	03/01/23 20:52
Calibration Check	SLC0028-CCV4	XDT_m2230301-058	NA	03/01/23 20:58
Calibration Blank	SLC0028-CCB4	XDT_m2230301-059	NA	03/01/23 21:06
Blank	BLB0518-BLK1	XDT_m2230301-060	Solid	03/01/23 21:11
LCS	BLB0518-BS1	XDT_m2230301-061	Solid	03/01/23 21:16
ZZZZZ	23A0032-02	XDT_m2230301-062	Solid	03/01/23 21:21
ZZZZZ	23A0032-03	XDT_m2230301-063	Solid	03/01/23 21:25
ZZZZZ	23A0032-04	XDT_m2230301-064	Solid	03/01/23 21:30
ZZZZZ	23A0032-01	XDT_m2230301-065	Solid	03/01/23 21:35
ZZZZZ	23A0032-01	XDT_m2230301-065	Solid	03/01/23 21:35
ZZZZZ	23A0032-01	XDT_m2230301-065	Solid	03/01/23 21:35
Calibration Check	SLC0028-CCV5	XDT_m2230301-070	NA	03/01/23 22:00
Calibration Blank	SLC0028-CCB5	XDT_m2230301-071	NA	03/01/23 22:08
Instrument Blank	SLC0028-IBL7	XDT_m2230301-080	NA	03/01/23 22:52
Calibration Check	SLC0028-CCV6	XDT_m2230301-081	NA	03/01/23 22:56
Calibration Blank	SLC0028-CCB6	XDT_m2230301-082	NA	03/01/23 23:04
Instrument Blank	SLC0028-IBL8	XDT_m2230301-088	NA	03/01/23 23:33
Calibration Check	SLC0028-CCV7	XDT_m2230301-089	NA	03/01/23 23:38
Calibration Blank	SLC0028-CCB7	XDT_m2230301-090	NA	03/01/23 23:46

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0078	Instrument:	ICPMS1
		Calibration:	GC00021

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLC0078-CAL1	XDT_m2230306-006	NA	03/06/23 13:12
CAL 1 - LOW CHECK	SLC0078-CAL2	XDT_m2230306-007	NA	03/06/23 13:16
CAL 2	SLC0078-CAL3	XDT_m2230306-008	NA	03/06/23 13:21
CAL 3	SLC0078-CAL4	XDT_m2230306-009	NA	03/06/23 13:25
CAL 4	SLC0078-CAL5	XDT_m2230306-010	NA	03/06/23 13:30
CAL 5	SLC0078-CAL6	XDT_m2230306-011	NA	03/06/23 13:37
RINSE	SLC0078-IBL1	XDT_m2230306-012	NA	03/06/23 13:44
Initial Cal Check	SLC0078-ICV1	XDT_m2230306-014	NA	03/06/23 13:53
Initial Cal Blank	SLC0078-ICB1	XDT_m2230306-015	NA	03/06/23 14:00
Calibration Check	SLC0078-CCV1	XDT_m2230306-016	NA	03/06/23 14:05
Calibration Blank	SLC0078-CCB1	XDT_m2230306-017	NA	03/06/23 14:12
Instrument RL Check	SLC0078-CRL1	XDT_m2230306-018	NA	03/06/23 14:16
Interference Check B	SLC0078-IFB1	XDT_m2230306-020	NA	03/06/23 14:25
LR200	SLC0078-HCV1	XDT_m2230306-021	NA	03/06/23 14:30
LR300	SLC0078-HCV2	XDT_m2230306-022	NA	03/06/23 14:34
Instrument Blank	SLC0078-IBL2	XDT_m2230306-023	NA	03/06/23 14:41
Interference Check A	SLC0078-IFA1	XDT_m2230306-024	NA	03/06/23 14:48
Instrument Blank	SLC0078-IBL3	XDT_m2230306-025	NA	03/06/23 14:52
Calibration Check	SLC0078-CCV2	XDT_m2230306-026	NA	03/06/23 14:59
Calibration Blank	SLC0078-CCB2	XDT_m2230306-027	NA	03/06/23 15:06
Calibration Check	SLC0078-CCV3	XDT_m2230306-029	NA	03/06/23 15:17
Calibration Blank	SLC0078-CCB3	XDT_m2230306-030	NA	03/06/23 15:24
ZZZZZ	BLC0008-BLK2	XDT_m2230306-031	Water	03/06/23 15:30
ZZZZZ	BLC0008-BS2	XDT_m2230306-032	Water	03/06/23 15:34
ZZZZZ	BLC0045-BLK1	XDT_m2230306-033	Water	03/06/23 15:38
ZZZZZ	BLC0045-BS1	XDT_m2230306-034	Water	03/06/23 15:43
Instrument Blank	SLC0078-IBL4	XDT_m2230306-040	NA	03/06/23 16:22
Calibration Check	SLC0078-CCV4	XDT_m2230306-041	NA	03/06/23 16:27
Calibration Blank	SLC0078-CCB4	XDT_m2230306-042	NA	03/06/23 16:34

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0078
Instrument: ICPMS1
Calibration: GC00021

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23B0501-01	XDT_m2230306_PRE-048	Water	03/06/23 17:02
ZZZZZ	BLC0008-DUP2	XDT_m2230306-049	Water	03/06/23 17:10
ZZZZZ	BLC0008-MS2	XDT_m2230306-050	Water	03/06/23 17:15
Instrument Blank	SLC0078-IBL5	XDT_m2230306-052	NA	03/06/23 17:25
Calibration Check	SLC0078-CCV5	XDT_m2230306-053	NA	03/06/23 17:30
Calibration Blank	SLC0078-CCB5	XDT_m2230306-054	NA	03/06/23 17:37
Calibration Check	SLC0078-CCV6	XDT_m2230306-065	NA	03/06/23 18:31
Calibration Blank	SLC0078-CCB6	XDT_m2230306-066	NA	03/06/23 18:39
ZZZZZ	23B0581-03	XDT_m2230306-071	Water	03/06/23 19:08
ZZZZZ	BLC0045-DUP1	XDT_m2230306-072	Water	03/06/23 19:13
ZZZZZ	BLC0045-MS1	XDT_m2230306-073	Water	03/06/23 19:18
Instrument Blank	SLC0078-IBL7	XDT_m2230306-076	NA	03/06/23 19:36
Calibration Check	SLC0078-CCV7	XDT_m2230306-077	NA	03/06/23 19:40
Calibration Blank	SLC0078-CCB7	XDT_m2230306-078	NA	03/06/23 19:47
ZZZZZ	BLB0508-BLK1	XDT_m2230306-079	Solid	03/06/23 19:52
ZZZZZ	BLB0508-BS1	XDT_m2230306-080	Solid	03/06/23 19:56
Blank	BLB0518-BLK2	XDT_m2230306-081	Solid	03/06/23 20:01
LCS	BLB0518-BS2	XDT_m2230306-082	Solid	03/06/23 20:05
ZZZZZ	23A0032-01	XDT_m2230306-083	Solid	03/06/23 20:10
Instrument Blank	SLC0078-IBL8	XDT_m2230306-088	NA	03/06/23 20:32
Calibration Check	SLC0078-CCV8	XDT_m2230306-089	NA	03/06/23 20:37
Calibration Blank	SLC0078-CCB8	XDT_m2230306-090	NA	03/06/23 20:44
ZZZZZ	BLB0615-BLK1	XDT_m2230306-093	Solid	03/06/23 20:57
ZZZZZ	BLB0615-BS1	XDT_m2230306-094	Solid	03/06/23 21:02
ZZZZZ	23A0031-02	XDT_m2230306-095	Solid	03/06/23 21:06
ZZZZZ	23A0031-02	XDT_m2230306-095	Solid	03/06/23 21:06
ZZZZZ	23A0031-02	XDT_m2230306-095	Solid	03/06/23 21:06
ZZZZZ	23A0031-02	XDT_m2230306-095	Solid	03/06/23 21:06
ZZZZZ	BLB0508-DUP1	XDT_m2230306-096	Solid	03/06/23 21:11

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0078
Instrument: ICPMS1
Calibration: GC00021

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	BLB0508-MS1	XDT_m2230306-097	Solid	03/06/23 21:15
ZZZZZ	BLB0508-MSD1	XDT_m2230306-098	Solid	03/06/23 21:19
Instrument Blank	SLC0078-IBL9	XDT_m2230306-100	NA	03/06/23 21:28
Calibration Check	SLC0078-CCV9	XDT_m2230306-101	NA	03/06/23 21:33
Calibration Blank	SLC0078-CCB9	XDT_m2230306-102	NA	03/06/23 21:40
ZZZZZ	23B0217-02	XDT_m2230306-109	Solid	03/06/23 22:12
ZZZZZ	23B0217-02	XDT_m2230306-109	Solid	03/06/23 22:12
ZZZZZ	23B0217-02	XDT_m2230306-109	Solid	03/06/23 22:12
ZZZZZ	23B0217-02	XDT_m2230306-109	Solid	03/06/23 22:12
ZZZZZ	23B0217-02	XDT_m2230306-109	Solid	03/06/23 22:12
ZZZZZ	BLB0615-DUP1	XDT_m2230306-110	Solid	03/06/23 22:17
ZZZZZ	BLB0615-MS1	XDT_m2230306-111	Solid	03/06/23 22:21
ZZZZZ	BLB0615-MSD1	XDT_m2230306-112	Solid	03/06/23 22:26
Calibration Check	SLC0078-CCVA	XDT_m2230306-113	NA	03/06/23 22:32
Calibration Blank	SLC0078-CCBA	XDT_m2230306-114	NA	03/06/23 22:39
Calibration Check	SLC0078-CCVB	XDT_m2230306-116	NA	03/06/23 22:48
Calibration Blank	SLC0078-CCBB	XDT_m2230306-117	NA	03/06/23 22:55
ZZZZZ	BLB0607-BLK1	XDT_m2230306-118	Solid	03/06/23 22:59
ZZZZZ	BLB0607-BS1	XDT_m2230306-119	Solid	03/06/23 23:04
ZZZZZ	BLB0607-SRL1	XDT_m2230306-120	Solid	03/06/23 23:08
ZZZZZ	23B0410-01	XDT_m2230306-121	Solid	03/06/23 23:13
ZZZZZ	23B0410-01	XDT_m2230306-121	Solid	03/06/23 23:13
ZZZZZ	23B0410-01	XDT_m2230306-121	Solid	03/06/23 23:13
ZZZZZ	23B0410-01	XDT_m2230306-121	Solid	03/06/23 23:13
ZZZZZ	BLB0607-DUP1	XDT_m2230306-122	Solid	03/06/23 23:17
ZZZZZ	BLB0607-MS1	XDT_m2230306-123	Solid	03/06/23 23:22
ZZZZZ	BLB0607-MSD1	XDT_m2230306-124	Solid	03/06/23 23:26
ZZZZZ	BLB0607-SRM1	XDT_m2230306-126	Solid	03/06/23 23:35
Instrument Blank	SLC0078-IBLC	XDT_m2230306-127	NA	03/06/23 23:40

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0078

SDG: 23A0171
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GC00021

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Check	SLC0078-CCVC	XDT_m2230306-128	NA	03/06/23 23:44
Calibration Blank	SLC0078-CCBC	XDT_m2230306-129	NA	03/06/23 23:51
ZZZZZ	BLB0687-BLK1	XDT_m2230306-130	Solid	03/06/23 23:56
ZZZZZ	BLB0687-BS1	XDT_m2230306-131	Solid	03/07/23 00:00
ZZZZZ	BLB0687-SRL1	XDT_m2230306-132	Solid	03/07/23 00:05
ZZZZZ	23B0411-01	XDT_m2230306-133	Solid	03/07/23 00:09
ZZZZZ	23B0411-01	XDT_m2230306-133	Solid	03/07/23 00:09
ZZZZZ	23B0411-01	XDT_m2230306-133	Solid	03/07/23 00:09
ZZZZZ	23B0411-01	XDT_m2230306-133	Solid	03/07/23 00:09
ZZZZZ	BLB0687-DUP1	XDT_m2230306-134	Solid	03/07/23 00:14
ZZZZZ	BLB0687-MS1	XDT_m2230306-135	Solid	03/07/23 00:18
ZZZZZ	BLB0687-MSD1	XDT_m2230306-136	Solid	03/07/23 00:22
ZZZZZ	BLB0687-SRM1	XDT_m2230306-138	Solid	03/07/23 00:31
Instrument Blank	SLC0078-IBLD	XDT_m2230306-139	NA	03/07/23 00:36
Calibration Check	SLC0078-CCVD	XDT_m2230306-140	NA	03/07/23 00:40
Calibration Blank	SLC0078-CCBD	XDT_m2230306-141	NA	03/07/23 00:47
ZZZZZ	23A0031-01	XDT_m2230306-146	Solid	03/07/23 01:11
ZZZZZ	23A0031-01	XDT_m2230306-146	Solid	03/07/23 01:11
ZZZZZ	23A0031-01	XDT_m2230306-146	Solid	03/07/23 01:11
ZZZZZ	23A0031-01	XDT_m2230306-146	Solid	03/07/23 01:11
ZZZZZ	23A0031-03	XDT_m2230306-147	Solid	03/07/23 01:16
ZZZZZ	23A0031-03	XDT_m2230306-147	Solid	03/07/23 01:16
ZZZZZ	23A0031-03	XDT_m2230306-147	Solid	03/07/23 01:16
ZZZZZ	23A0031-03	XDT_m2230306-147	Solid	03/07/23 01:16
ZZZZZ	23A0031-04	XDT_m2230306-148	Solid	03/07/23 01:20
ZZZZZ	23A0031-04	XDT_m2230306-148	Solid	03/07/23 01:20
ZZZZZ	23A0031-04	XDT_m2230306-148	Solid	03/07/23 01:20
ZZZZZ	23A0031-04	XDT_m2230306-148	Solid	03/07/23 01:20
ZZZZZ	23A0031-05	XDT_m2230306-149	Solid	03/07/23 01:25

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0078
Instrument: ICPMS1
Calibration: GC00021

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0031-05	XDT_m2230306-149	Solid	03/07/23 01:25
ZZZZZ	23A0031-05	XDT_m2230306-149	Solid	03/07/23 01:25
ZZZZZ	23A0031-05	XDT_m2230306-149	Solid	03/07/23 01:25
ZZZZZ	23A0031-06	XDT_m2230306-150	Solid	03/07/23 01:29
ZZZZZ	23A0031-06	XDT_m2230306-150	Solid	03/07/23 01:29
ZZZZZ	23A0031-06	XDT_m2230306-150	Solid	03/07/23 01:29
ZZZZZ	23A0031-06	XDT_m2230306-150	Solid	03/07/23 01:29
ZZZZZ	23A0031-07	XDT_m2230306-151	Solid	03/07/23 01:34
ZZZZZ	23A0031-07	XDT_m2230306-151	Solid	03/07/23 01:34
ZZZZZ	23A0031-07	XDT_m2230306-151	Solid	03/07/23 01:34
ZZZZZ	23A0031-07	XDT_m2230306-151	Solid	03/07/23 01:34
Calibration Check	SLC0078-CCVE	XDT_m2230306-152	NA	03/07/23 01:39
Calibration Blank	SLC0078-CCBE	XDT_m2230306-153	NA	03/07/23 01:47
ZZZZZ	23A0031-08	XDT_m2230306-154	Solid	03/07/23 01:51
ZZZZZ	23A0031-08	XDT_m2230306-154	Solid	03/07/23 01:51
ZZZZZ	23A0031-08	XDT_m2230306-154	Solid	03/07/23 01:51
ZZZZZ	23A0031-08	XDT_m2230306-154	Solid	03/07/23 01:51
ZZZZZ	23A0031-09	XDT_m2230306-155	Solid	03/07/23 01:56
ZZZZZ	23A0031-09	XDT_m2230306-155	Solid	03/07/23 01:56
ZZZZZ	23A0031-09	XDT_m2230306-155	Solid	03/07/23 01:56
ZZZZZ	23A0031-09	XDT_m2230306-155	Solid	03/07/23 01:56
ZZZZZ	23A0031-10	XDT_m2230306-156	Solid	03/07/23 02:00
ZZZZZ	23A0031-10	XDT_m2230306-156	Solid	03/07/23 02:00
ZZZZZ	23A0031-10	XDT_m2230306-156	Solid	03/07/23 02:00
ZZZZZ	23A0031-10	XDT_m2230306-156	Solid	03/07/23 02:00
ZZZZZ	23A0031-11	XDT_m2230306-157	Solid	03/07/23 02:04
ZZZZZ	23A0031-11	XDT_m2230306-157	Solid	03/07/23 02:04
ZZZZZ	23A0031-11	XDT_m2230306-157	Solid	03/07/23 02:04
ZZZZZ	23A0031-11	XDT_m2230306-157	Solid	03/07/23 02:04

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0078

SDG: 23A0171
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GC00021

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0031-12	XDT_m2230306-158	Solid	03/07/23 02:09
ZZZZZ	23A0031-12	XDT_m2230306-158	Solid	03/07/23 02:09
ZZZZZ	23A0031-12	XDT_m2230306-158	Solid	03/07/23 02:09
ZZZZZ	23A0031-12	XDT_m2230306-158	Solid	03/07/23 02:09
ZZZZZ	23A0031-13	XDT_m2230306-159	Solid	03/07/23 02:13
ZZZZZ	23A0031-13	XDT_m2230306-159	Solid	03/07/23 02:13
ZZZZZ	23A0031-13	XDT_m2230306-159	Solid	03/07/23 02:13
ZZZZZ	23A0031-13	XDT_m2230306-159	Solid	03/07/23 02:13
ZZZZZ	23A0031-14	XDT_m2230306-160	Solid	03/07/23 02:18
ZZZZZ	23A0031-14	XDT_m2230306-160	Solid	03/07/23 02:18
ZZZZZ	23A0031-14	XDT_m2230306-160	Solid	03/07/23 02:18
ZZZZZ	23A0031-14	XDT_m2230306-160	Solid	03/07/23 02:18
ZZZZZ	23A0031-15	XDT_m2230306-161	Solid	03/07/23 02:22
ZZZZZ	23A0031-15	XDT_m2230306-161	Solid	03/07/23 02:22
ZZZZZ	23A0031-15	XDT_m2230306-161	Solid	03/07/23 02:22
ZZZZZ	23A0031-15	XDT_m2230306-161	Solid	03/07/23 02:22
ZZZZZ	23A0031-16	XDT_m2230306-162	Solid	03/07/23 02:27
ZZZZZ	23A0031-16	XDT_m2230306-162	Solid	03/07/23 02:27
ZZZZZ	23A0031-16	XDT_m2230306-162	Solid	03/07/23 02:27
ZZZZZ	23A0031-16	XDT_m2230306-162	Solid	03/07/23 02:27
ZZZZZ	23A0031-17	XDT_m2230306-163	Solid	03/07/23 02:31
ZZZZZ	23A0031-17	XDT_m2230306-163	Solid	03/07/23 02:31
ZZZZZ	23A0031-17	XDT_m2230306-163	Solid	03/07/23 02:31
ZZZZZ	23A0031-17	XDT_m2230306-163	Solid	03/07/23 02:31
Calibration Check	SLC0078-CCVF	XDT_m2230306-164	NA	03/07/23 02:37
Calibration Blank	SLC0078-CCBF	XDT_m2230306-165	NA	03/07/23 02:44
ZZZZZ	23A0031-18	XDT_m2230306-166	Solid	03/07/23 02:49
ZZZZZ	23A0031-18	XDT_m2230306-166	Solid	03/07/23 02:49
ZZZZZ	23A0031-18	XDT_m2230306-166	Solid	03/07/23 02:49

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0078
SDG: 23A0171
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GC00021

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0031-18	XDT_m2230306-166	Solid	03/07/23 02:49
ZZZZZ	23A0031-19	XDT_m2230306-167	Solid	03/07/23 02:53
ZZZZZ	23A0031-19	XDT_m2230306-167	Solid	03/07/23 02:53
ZZZZZ	23A0031-19	XDT_m2230306-167	Solid	03/07/23 02:53
ZZZZZ	23A0031-19	XDT_m2230306-167	Solid	03/07/23 02:53
ZZZZZ	23A0031-20	XDT_m2230306-168	Solid	03/07/23 02:58
ZZZZZ	23A0031-20	XDT_m2230306-168	Solid	03/07/23 02:58
ZZZZZ	23A0031-20	XDT_m2230306-168	Solid	03/07/23 02:58
ZZZZZ	23A0031-20	XDT_m2230306-168	Solid	03/07/23 02:58
ZZZZZ	23A0031-21	XDT_m2230306-169	Solid	03/07/23 03:02
ZZZZZ	23A0031-21	XDT_m2230306-169	Solid	03/07/23 03:02
ZZZZZ	23A0031-21	XDT_m2230306-169	Solid	03/07/23 03:02
ZZZZZ	23A0031-21	XDT_m2230306-169	Solid	03/07/23 03:02
ZZZZZ	23A0032-05	XDT_m2230306-170	Solid	03/07/23 03:06
ZZZZZ	23A0032-05	XDT_m2230306-170	Solid	03/07/23 03:06
ZZZZZ	23A0032-05	XDT_m2230306-170	Solid	03/07/23 03:06
ZZZZZ	23A0032-05	XDT_m2230306-170	Solid	03/07/23 03:06
ZZZZZ	23A0032-06	XDT_m2230306-171	Solid	03/07/23 03:11
ZZZZZ	23A0032-07	XDT_m2230306-172	Solid	03/07/23 03:15
ZZZZZ	23A0032-08	XDT_m2230306-173	Solid	03/07/23 03:20
ZZZZZ	23A0032-08	XDT_m2230306-173	Solid	03/07/23 03:20
ZZZZZ	23A0032-08	XDT_m2230306-173	Solid	03/07/23 03:20
ZZZZZ	23A0032-08	XDT_m2230306-173	Solid	03/07/23 03:20
ZZZZZ	23A0032-11	XDT_m2230306-174	Solid	03/07/23 03:24
ZZZZZ	23A0032-11	XDT_m2230306-174	Solid	03/07/23 03:24
ZZZZZ	23A0032-11	XDT_m2230306-174	Solid	03/07/23 03:24
ZZZZZ	23A0032-11	XDT_m2230306-174	Solid	03/07/23 03:24
ZZZZZ	23B0276-01	XDT_m2230306-175	Solid	03/07/23 03:29
ZZZZZ	23B0276-01	XDT_m2230306-175	Solid	03/07/23 03:29

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0078

SDG: 23A0171
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GC00021

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23B0276-01	XDT_m2230306-175	Solid	03/07/23 03:29
ZZZZZ	23B0276-01	XDT_m2230306-175	Solid	03/07/23 03:29
Calibration Check	SLC0078-CCVG	XDT_m2230306-176	NA	03/07/23 03:35
Calibration Blank	SLC0078-CCBG	XDT_m2230306-177	NA	03/07/23 03:42
Calibration Check	SLC0078-CCVH	XDT_m2230306-179	NA	03/07/23 03:51
Calibration Blank	SLC0078-CCBH	XDT_m2230306-180	NA	03/07/23 03:58
LDW23-SS1254	23A0171-01	XDT_m2230306-184	Solid	03/07/23 04:17
LDW23-SS1254	23A0171-01	XDT_m2230306-184	Solid	03/07/23 04:17
LDW23-SS1254	23A0171-01	XDT_m2230306-184	Solid	03/07/23 04:17
LDW23-SS1254	23A0171-01	XDT_m2230306-184	Solid	03/07/23 04:17
LDW23-SS1257	23A0171-02	XDT_m2230306-185	Solid	03/07/23 04:21
LDW23-SS1257	23A0171-02	XDT_m2230306-185	Solid	03/07/23 04:21
LDW23-SS1257	23A0171-02	XDT_m2230306-185	Solid	03/07/23 04:21
LDW23-SS1257	23A0171-02	XDT_m2230306-185	Solid	03/07/23 04:21
LDW23-SS1262	23A0171-03	XDT_m2230306-186	Solid	03/07/23 04:26
LDW23-SS1262	23A0171-03	XDT_m2230306-186	Solid	03/07/23 04:26
LDW23-SS1262	23A0171-03	XDT_m2230306-186	Solid	03/07/23 04:26
LDW23-SS1262	23A0171-03	XDT_m2230306-186	Solid	03/07/23 04:26
LDW23-SS1245	23A0171-04	XDT_m2230306-187	Solid	03/07/23 04:30
LDW23-SS1245	23A0171-04	XDT_m2230306-187	Solid	03/07/23 04:30
LDW23-SS1245	23A0171-04	XDT_m2230306-187	Solid	03/07/23 04:30
LDW23-SS1245	23A0171-04	XDT_m2230306-187	Solid	03/07/23 04:30
ZZZZZ	23B0051-01	XDT_m2230306-188	Solid	03/07/23 04:35
ZZZZZ	23B0051-01	XDT_m2230306-188	Solid	03/07/23 04:35
ZZZZZ	23B0051-01	XDT_m2230306-188	Solid	03/07/23 04:35
ZZZZZ	23B0051-01	XDT_m2230306-188	Solid	03/07/23 04:35
ZZZZZ	23B0051-02	XDT_m2230306-189	Solid	03/07/23 04:39
ZZZZZ	23B0051-02	XDT_m2230306-189	Solid	03/07/23 04:39
ZZZZZ	23B0051-02	XDT_m2230306-189	Solid	03/07/23 04:39

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0078
Instrument: ICPMS1
Calibration: GC00021

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23B0051-02	XDT_m2230306-189	Solid	03/07/23 04:39
ZZZZZ	23B0051-03	XDT_m2230306-190	Solid	03/07/23 04:44
ZZZZZ	23B0051-03	XDT_m2230306-190	Solid	03/07/23 04:44
ZZZZZ	23B0051-03	XDT_m2230306-190	Solid	03/07/23 04:44
ZZZZZ	23B0051-03	XDT_m2230306-190	Solid	03/07/23 04:44
Calibration Check	SLC0078-CCVI	XDT_m2230306-191	NA	03/07/23 04:50
Calibration Blank	SLC0078-CCBI	XDT_m2230306-192	NA	03/07/23 04:57
ZZZZZ	23B0217-03	XDT_m2230306-193	Solid	03/07/23 05:01
ZZZZZ	23B0217-03	XDT_m2230306-193	Solid	03/07/23 05:01
ZZZZZ	23B0217-03	XDT_m2230306-193	Solid	03/07/23 05:01
ZZZZZ	23B0217-03	XDT_m2230306-193	Solid	03/07/23 05:01
ZZZZZ	23B0217-03	XDT_m2230306-193	Solid	03/07/23 05:01
ZZZZZ	23B0217-04	XDT_m2230306-194	Solid	03/07/23 05:06
ZZZZZ	23B0217-04	XDT_m2230306-194	Solid	03/07/23 05:06
ZZZZZ	23B0217-04	XDT_m2230306-194	Solid	03/07/23 05:06
ZZZZZ	23B0217-04	XDT_m2230306-194	Solid	03/07/23 05:06
ZZZZZ	23B0217-04	XDT_m2230306-194	Solid	03/07/23 05:06
ZZZZZ	23B0217-05	XDT_m2230306-195	Solid	03/07/23 05:10
ZZZZZ	23B0217-05	XDT_m2230306-195	Solid	03/07/23 05:10
ZZZZZ	23B0217-05	XDT_m2230306-195	Solid	03/07/23 05:10
ZZZZZ	23B0217-05	XDT_m2230306-195	Solid	03/07/23 05:10
ZZZZZ	23B0217-05	XDT_m2230306-195	Solid	03/07/23 05:10
ZZZZZ	23B0217-06	XDT_m2230306-196	Solid	03/07/23 05:15
ZZZZZ	23B0217-06	XDT_m2230306-196	Solid	03/07/23 05:15
ZZZZZ	23B0217-06	XDT_m2230306-196	Solid	03/07/23 05:15
ZZZZZ	23B0217-06	XDT_m2230306-196	Solid	03/07/23 05:15
ZZZZZ	23B0217-06	XDT_m2230306-196	Solid	03/07/23 05:15
Instrument Blank	SLC0078-IBLJ	XDT_m2230306-202	NA	03/07/23 05:42
Calibration Check	SLC0078-CCVJ	XDT_m2230306-203	NA	03/07/23 05:46

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0078	Instrument:	ICPMS1
		Calibration:	GC00021

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Blank	SLC0078-CCBJ	XDT_m2230306-204	NA	03/07/23 05:53
Instrument Blank	SLC0078-IBLK	XDT_m2230306-214	NA	03/07/23 06:40
Calibration Check	SLC0078-CCVK	XDT_m2230306-215	NA	03/07/23 06:44
Calibration Blank	SLC0078-CCBK	XDT_m2230306-216	NA	03/07/23 06:51
Instrument Blank	SLC0078-IBLM	XDT_m2230306-219	NA	03/07/23 07:05
ZZZZZ	23B0581-02	XDT_m2230306-220	Water	03/07/23 07:09
ZZZZZ	23B0581-01	XDT_m2230306-221	Water	03/07/23 07:13
Instrument Blank	SLC0078-IBLL	XDT_m2230306-222	NA	03/07/23 07:18
Calibration Check	SLC0078-CCVL	XDT_m2230306-223	NA	03/07/23 07:22
Calibration Blank	SLC0078-CCBL	XDT_m2230306-224	NA	03/07/23 07:30

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GC00005
Sequence: SLC0028
Standard ID: L002006

Lab Sample ID	Analyte	True	Found	%R	Units
SLC0028-IFA1	Arsenic-75a	0	0.0350		ug/L
	Copper-63	0	0.0740		ug/L
	Copper-65	0	0.0630		ug/L
	Zinc-66	0	0.3380		ug/L
	Zinc-67	0	0.2180		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

Analytical Resources, LLC
Analytical Chemists and Consultants

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GC00005
Sequence: SLC0028
Standard ID: L002006

Lab Sample ID	Analyte	True	Found	%R	Units
SLC0028-IFB1	Arsenic-75a	20.000	18.233	91.2	ug/L
	Copper-63	20.000	19.273	96.4	ug/L
	Copper-65	20.000	19.304	96.5	ug/L
	Zinc-66	20.000	19.020	95.1	ug/L
	Zinc-67	20.000	16.721	83.6	ug/L

* Indicates %R outside of QC limits
NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GC00021
Sequence: SLC0078
Standard ID: L002006

Lab Sample ID	Analyte	True	Found	%R	Units
SLC0078-IFA1	Arsenic-75a	0	0.0290		ug/L
	Cadmium-111	0	0.0560		ug/L
	Cadmium-114	0	0.0670		ug/L
	Copper-63	0	0.0410		ug/L
	Copper-65	0	0.0590		ug/L
	Zinc-66	0	0.4340		ug/L
	Zinc-67	0	0.4500		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GC00021
Sequence: SLC0078
Standard ID: L002006

Lab Sample ID	Analyte	True	Found	%R	Units
SLC0078-IFB1	Arsenic-75a	20.000	19.173	95.9	ug/L
	Cadmium-111	20.000	19.158	95.8	ug/L
	Cadmium-114	20.000	18.639	93.2	ug/L
	Copper-63	20.000	19.518	97.6	ug/L
	Copper-65	20.000	19.600	98.0	ug/L
	Zinc-66	20.000	18.722	93.6	ug/L
	Zinc-67	20.000	16.965	84.8	ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

DETECTION LEVEL STANDARD
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GC00005
Sequence: SLC0028
Lab Sample ID: SLC0028-CRL1

Analyte	True	Found	%R	Units	QC Limts
Arsenic-75a	0.20000	0.185	92.5	ug/L	50 - 150
Copper-63	0.50000	0.492	98.4	ug/L	50 - 150
Copper-65	0.50000	0.460	92.0	ug/L	50 - 150
Zinc-66	6.0000	6.17	103	ug/L	50 - 150
Zinc-67	6.0000	5.40	89.9	ug/L	50 - 150

* Values outside of QC limits

DETECTION LEVEL STANDARD
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GC00021
Sequence: SLC0078
Lab Sample ID: SLC0078-CRL1

Analyte	True	Found	%R	Units	QC Limts
Arsenic-75a	0.20000	0.185	92.5	ug/L	50 - 150
Cadmium-111	0.10000	0.0960	96.0	ug/L	50 - 150
Cadmium-114	0.10000	0.108	108	ug/L	50 - 150
Copper-63	0.50000	0.483	96.6	ug/L	50 - 150
Copper-65	0.50000	0.483	96.6	ug/L	50 - 150
Zinc-66	6.0000	6.04	101	ug/L	50 - 150
Zinc-67	6.0000	5.58	93.0	ug/L	50 - 150

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00005
Laboratory ID: SLC0028-HCV1
Sequence: SLC0028
Standard ID: L002008

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Arsenic-75a	200.00	201	0.6	10.00
Copper-63	200.00	199	-0.4	10.00
Copper-65	200.00	202	1.2	10.00
Zinc-66	200.00	200	-0.09	10.00
Zinc-67	200.00	198	-0.9	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00005
Laboratory ID: SLC0028-HCV2
Sequence: SLC0028
Standard ID: L002009

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Arsenic-75a	300.00	287	-4.3	10.00
Copper-63	300.00	285	-4.9	10.00
Copper-65	300.00	285	-5.1	10.00
Zinc-66	300.00	278	-7.4	10.00
Zinc-67	300.00	276	-7.8	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00021
Laboratory ID: SLC0078-HCV1
Sequence: SLC0078
Standard ID: L002008

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Arsenic-75a	200.00	198	-0.9	10.00
Cadmium-111	200.00	197	-1.3	10.00
Cadmium-114	200.00	197	-1.7	10.00
Copper-63	200.00	186	-7.2	10.00
Copper-65	200.00	188	-5.9	10.00
Zinc-66	200.00	189	-5.6	10.00
Zinc-67	200.00	187	-6.3	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00021
Laboratory ID: SLC0078-HCV2
Sequence: SLC0078
Standard ID: L002009

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Arsenic-75a	300.00	296	-1.2	10.00
Cadmium-111	300.00	289	-3.5	10.00
Cadmium-114	300.00	287	-4.3	10.00
Copper-63	300.00	279	-6.8	10.00
Copper-65	300.00	282	-5.8	10.00
Zinc-66	300.00	277	-7.6	10.00
Zinc-67	300.00	276	-8.0	10.00

* Values outside of QC limits

HOLDING TIME SUMMARY

Analysis: EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC SDG: 23A0171

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

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1254 23A0171-01	12/08/22 08:39	12/08/22 17:18	02/24/23 16:23	78	180	03/07/23 04:17	89	180	
LDW23-SS1257 23A0171-02	12/08/22 09:16	12/08/22 17:18	02/24/23 16:23	78	180	03/07/23 04:21	89	180	
LDW23-SS1262 23A0171-03	12/08/22 10:36	12/08/22 17:18	02/24/23 16:23	78	180	03/07/23 04:26	89	180	
LDW23-SS1245 23A0171-04	12/08/22 11:14	12/08/22 17:18	02/24/23 16:23	78	180	03/07/23 04:30	89	180	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: ICPMS1

Analyte	MDL	RL	Units
Arsenic-75a	0.04	0.20	mg/kg
Cadmium-111	0.03	0.10	mg/kg
Cadmium-114	0.04	0.10	mg/kg
Copper-63	0.17	0.50	mg/kg
Copper-65	0.35	0.50	mg/kg
Zinc-66	2.9	6.0	mg/kg
Zinc-67	0.9	6.0	mg/kg

METHOD DETECTION AND REPORTING LIMITS

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: ICPMS2

Analyte	MDL	RL	Units
Arsenic-75a	0.04	0.20	mg/kg
Copper-63	0.17	0.50	mg/kg
Copper-65	0.35	0.50	mg/kg
Zinc-66	2.9	6.0	mg/kg
Zinc-67	0.9	6.0	mg/kg

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCU10
Lot Number:	P2-CU682108
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Copper
Starting Material:	Cu Metal
Starting Material Lot#:	2095
Starting Material Purity:	99.9996%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10013 ± 30 µg/mL

Density: 1.032 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9977 ± 50 µg/mL**
ICP Assay NIST SRM 3114 Lot Number: 121207

Assay Method #2 **10024 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10007 ± 46 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.007542	M	Eu	<	0.000942	O	Na		0.001434	M	Se	<	0.016971	M	Zn	<	0.005657
O	Al	<	0.000609	O	Fe		0.008700	M	Nb	<	0.000942	O	Si		0.003052	M	Zr	<	0.000942
M	As	<	0.010371	M	Ga	<	0.000942	M	Nd	<	0.000942	M	Sm	<	0.000942				
M	Au	<	0.001885	M	Gd	<	0.000942	M	Ni		0.003781	M	Sn	<	0.005657				
O	B		0.003663	M	Ge	<	0.005657	M	Os	<	0.000942	M	Sr	<	0.000942				
M	Ba		0.004253	M	Hf	<	0.000942	O	P	<	0.031668	M	Ta	<	0.000942				
M	Be	<	0.000942	O	Hg	<	0.007064	M	Pb		0.005789	M	Tb	<	0.000942				
M	Bi	<	0.000942	M	Ho	<	0.000942	M	Pd	<	0.000942	M	Te	<	0.004714				
O	Ca		0.002304	M	In	<	0.000942	M	Pr	<	0.000942	M	Th	<	0.000942				
M	Cd	<	0.000942	M	Ir	<	0.000942	M	Pt	<	0.000942	O	Ti	<	0.002801				
M	Ce	<	0.000942	O	K		0.000763	M	Rb	<	0.000942	M	Tl	<	0.000942				
M	Co		0.001890	M	La	<	0.000942	M	Re	<	0.000942	M	Tm	<	0.000942				
M	Cr	<	0.005657	O	Li	<	0.000243	i	Rh	<		M	U	<	0.000942				
M	Cs	<	0.000942	M	Lu	<	0.000942	M	Ru	<	0.039588	M	V	<	0.003771				
s	Cu	<		O	Mg		0.000320	O	S		0.007174	M	W	<	0.005657				
M	Dy	<	0.000942	O	Mn		0.000793	M	Sb	<	0.001885	M	Y	<	0.000942				
M	Er	<	0.000942	M	Mo	<	0.005657	M	Sc	<	0.000942	M	Yb	<	0.000942				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 63.55 +2 6 $Cu(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4, HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Cu Containing Samples (Preparation and Solution) -Metal (soluble in HNO_3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 63 amu	10 ppt	n/a	40Ar23Na 47Ti16O, 14N12C37Cl, 16O12C35Cl, 23Na40Ca
ICP-OES 219.958 nm	0.01/.002 µg/mL	1	Th, Ta, Nb, U, Hf
ICP-OES 224.700 nm	0.01/.001 µg/mL	1	Pb, Ir, Ni, W
ICP-OES 324.754 nm	0.06/.001 µg/mL		Nb, U, Th, Mo, Hf

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 24, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 24, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGPB10
Lot Number:	S2-PB713228
Matrix:	0.5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Lead
Starting Material:	Lead Nitrate
Starting Material Lot#:	2343
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10042 ± 31 µg/mL

Density: 1.015 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10024 ± 41 µg/mL**
ICP Assay NIST SRM 3128 Lot Number: 101026

Assay Method #2 **10054 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000310	M	Eu	<	0.000310	M	Na		0.001470	M	Se	<	0.009100	O	Zn	0.006155
O	Al		0.017098	O	Fe		0.002496	M	Nb	<	0.000310	O	Si		0.003761	O	Zr	< 0.001700
M	As	<	0.003100	M	Ga	<	0.000310	M	Nd	<	0.000310	M	Sm	<	0.000310			
M	Au	<	0.000910	M	Gd	<	0.000310	O	Ni		0.001709	M	Sn	<	0.001300			
O	B	<	0.005600	M	Ge	<	0.002200	M	Os	<	0.000310	O	Sr		0.000444			
O	Ba		0.007865	M	Hf	<	0.000310	O	P	<	0.038000	M	Ta	<	0.000310			
O	Be	<	0.000320	M	Hg	<	0.002200	s	Pb	<		M	Tb	<	0.000610			
M	Bi	<	0.028000	M	Ho	<	0.000310	M	Pd	<	0.000610	M	Te	<	0.000310			
O	Ca		0.019834	M	In	<	0.000310	M	Pr	<	0.000310	M	Th	<	0.000310			
O	Cd	<	0.000630	M	Ir	<	0.000310	M	Pt	<	0.000910	O	Ti		0.005129			
M	Ce		0.004787	O	K		0.008207	M	Rb	<	0.006700	M	Tl	<	0.016000			
M	Co	<	0.000610	M	La	<	0.001900	M	Re	<	0.000310	M	Tm	<	0.000310			
O	Cr	<	0.001500	O	Li	<	0.000110	O	Rh	<	0.007700	M	U	<	0.000310			
M	Cs	<	0.006100	M	Lu	<	0.000310	M	Ru	<	0.001300	M	V	<	0.001600			
M	Cu	<	0.001600	O	Mg		0.003317	O	S	<	0.052000	M	W	<	0.000910			
M	Dy	<	0.000310	O	Mn	<	0.001600	O	Sb	<	0.015000	M	Y	<	0.000310			
M	Er	<	0.000310	M	Mo	<	0.000610	O	Sc	<	0.000630	M	Yb	<	0.000310			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 207.20 +2 6 $Pb(H_2O)_6^{+2}$

Chemical Compatibility - Soluble in HCl, HF and HNO_3. Avoid H_2SO_4. Stable with most metals and inorganic anions forming insoluble carbonate, borate, sulfate, sulfite, sulfide, phosphate, oxalate, chromate, tannate, iodate, and cyanide in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO_3 / LDPE container.

Pb Containing Samples (Preparation and Solution) -Metal (Best dissolved in 1:1 H_2O / HNO_3); Oxides (The many different Pb oxides are soluble in HNO_3 with the exception of PbO_2 which is soluble in HCl or HF); Ores and Alloys (Best attacked using 1:1 H_2O / HNO_3); Organic Matrices (Dry ash and dissolve in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 208 amu	5 ppt	n/a	192Pt16O, 192Os16O
ICP-OES 168.215 nm	0.03 / 0.003 µg/mL	1	Co
ICP-OES 217.000 nm	0.09 / 0.03 µg/mL	1	W, Ir, Hf, Sb, Th
ICP-OES 220.353 nm	0.04 / 0.006 µg/mL	1	Bi, Nb

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

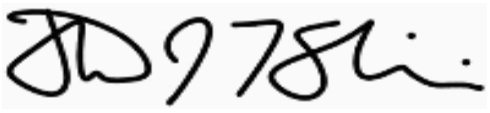
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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inorganicventures.com

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGZN10
Lot Number:	S2-ZN711249
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Zinc
Starting Material:	Zinc Metal
Starting Material Lot#:	2349
Starting Material Purity:	99.9988%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL

Density: 1.029 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9981 ± 56 µg/mL**
ICP Assay NIST SRM 3168a Lot Number: 120629

Assay Method #2 **9987 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10002 ± 32 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002000	M	Eu	<	0.000500	O	Na		0.008713	M	Se	<	0.048000	s	Zn	<
O	Al	<	0.011000	O	Fe		0.015467	M	Nb	<	0.000500	O	Si		0.007842	M	Zr	< 0.000500
O	As	<	0.012000	M	Ga	<	0.004900	M	Nd	<	0.000500	M	Sm	<	0.000500			
M	Au	<	0.006500	M	Gd	<	0.000500	O	Ni		0.003049	M	Sn		0.002614			
O	B	<	0.019000	M	Ge	<	0.009100	M	Os	<	0.000500	M	Sr	<	0.000500			
M	Ba	<	0.000500	M	Hf	<	0.000500	O	P	<	0.059000	M	Ta	<	0.000500			
O	Be	<	0.000230	O	Hg	<	0.003800	M	Pb		0.016774	M	Tb	<	0.000500			
M	Bi	<	0.002400	M	Ho	<	0.000500	M	Pd	<	0.001000	M	Te	<	0.017000			
O	Ca		0.052283	M	In	<	0.003500	M	Pr	<	0.000500	M	Th	<	0.000500			
O	Cd		0.000588	M	Ir	<	0.001000	M	Pt	<	0.000500	M	Ti	<	0.002000			
M	Ce	<	0.000500	O	K		0.017209	M	Rb	<	0.002500	M	Tl	<	0.000500			
M	Co		0.000653	M	La	<	0.000500	M	Re	<	0.000500	M	Tm	<	0.000500			
O	Cr		0.001089	O	Li	<	0.000230	M	Rh	<	0.000500	M	U	<	0.000500			
M	Cs	<	0.000500	M	Lu	<	0.000500	M	Ru	<	0.005000	M	V	<	0.000500			
O	Cu		0.001938	O	Mg		0.000871	O	S	<	0.048000	M	W	<	0.001000			
M	Dy	<	0.000500	O	Mn		0.000172	M	Sb	<	0.004300	M	Y	<	0.000500			
M	Er	<	0.000500	M	Mo	<	0.001500	O	Sc	<	0.000900	M	Yb	<	0.000500			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 65.39 +2 4 Zn(OH)(aq)1+
Chemical Compatibility -Stable in HCl, HNO3, H2SO4 ,HF, H3PO4. Avoid basic media forming insoluble carbonate and hydroxide. Stable with most metals and inorganic anions in acidic media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.
Zn Containing Samples (Preparation and Solution) -Metal (soluble in HNO3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO3); Organic based (dry ash at 4500C and dissolve ash in HCl) (sulfuric/peroxide acid digestion)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 66 amu	7 ppt	N/A	50Ti16O,50Cr16O, 50V16O, 34S16O2, 32S16O18O, 32S17O2, 33S16O17O, 32S34S, 33S2
ICP-OES 202.548 nm	0.004/0.0002 µg/mL	1	Nb, Cu, Co, Hf
ICP-OES 206.200 nm	0.006/0.0006 µg/mL	1	Sb, Ta, Bi, Os
ICP-OES 213.856 nm	0.002/0.0004 µg/mL	1	Ni, Cu, V

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 22, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 22, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

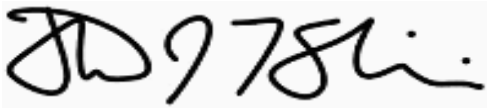
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSE10
Lot Number:	S2-SE711004
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Selenium
Starting Material:	Se Metal
Starting Material Lot#:	1962
Starting Material Purity:	99.9991%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9955 ± 61 µg/mL

Density: 1.035 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9955 ± 50 µg/mL**
ICP Assay NIST SRM 3149 Lot Number: 100901

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002242	M	Eu	<	0.000373	O	Na		0.013654	s	Se	<		O	Zn		0.002374
M	Al		0.004450	M	Fe		0.008478	O	Nb	<	0.002975	O	Si		0.006249	M	Zr	<	0.001868
O	As	<	0.022040	M	Ga	<	0.000373	M	Nd	<	0.000373	M	Sm	<	0.000373				
M	Au	<	0.000373	M	Gd	<	0.000373	O	Ni		0.001843	M	Sn		0.000847				
O	B	<	0.007714	M	Ge	<	0.002616	M	Os	<	0.000373	M	Sr	<	0.001121				
M	Ba	<	0.001495	M	Hf	<	0.000373	O	P	<	0.022040	M	Ta	<	0.000373				
M	Be	<	0.001495	M	Hg	<	0.002240	M	Pb		0.006358	M	Tb	<	0.006353				
M	Bi	<	0.000373	M	Ho	<	0.000373	M	Pd	<	0.000373	M	Te	<	0.012707				
O	Ca		0.006530	M	In	<	0.000373	M	Pr	<	0.001495	M	Th	<	0.002990				
M	Cd		0.001165	M	Ir	<	0.000373	M	Pt	<	0.000373	M	Ti	<	0.003363				
M	Ce	<	0.000373	O	K		0.001999	M	Rb	<	0.001868	M	Tl		0.008584				
M	Co	<	0.000373	M	La	<	0.001121	M	Re	<	0.000373	M	Tm	<	0.000373				
M	Cr		0.002861	O	Li		0.000062	M	Rh	<	0.000373	M	U	<	0.000373				
M	Cs	<	0.001121	M	Lu	<	0.000373	M	Ru	<	0.001493	M	V	<	0.000747				
M	Cu	<	0.000747	O	Mg		0.001156	O	S		0.024591	M	W	<	0.002242				
M	Dy	<	0.000373	M	Mn	<	0.000373	M	Sb	<	0.002242	M	Y	<	0.000373				
M	Er	<	0.000373	O	Mo	<	0.003195	M	Sc	<	0.001121	M	Yb	<	0.000373				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 78.96 +4 6 H_2SeO_3

Chemical Compatibility -Soluble in HCl, HNO_3,H_3PO_4, H_2SO_4 and HF aqueous matrices and water. It is stable with most inorganic anions but many cationic metals form the insoluble selenites under pH neutral conditions. When fluorinated and/or under acidic conditions precipitation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Se Containing Samples (Preparation and Solution) -Metal (soluble in HNO_3); Oxides (readily soluble in water); Minerals and alloys (acid digestion with HNO_3or HNO_3 / HF); Organic Matrices (acid digestion with hot concentrated H_2SO_4 accompanied by the careful dropwise addition of H_2O_2 until clear).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 82 amu	200 ppt	N/A	12C35Cl2
ICP-OES 196.026 nm	0.08/0.006 µg/mL	1	Fe
ICP-OES 203.985 nm	0.2/0.05 µg/mL	1	Sb, Ir, Cr, Ta
ICP-OES 206.279 nm	0.3/0.16 µg/mL	1	Cr, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 17, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMO10
Lot Number:	S2-MO706255
Matrix:	H2O tr. NH4OH
Value / Analyte(s):	10 000 µg/mL ea: Molybdenum
Starting Material:	Ammonium Molybdate
Starting Material Lot#:	2361
Starting Material Purity:	99.9893%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10026 ± 47 µg/mL

Density: 1.011 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10032 ± 68 µg/mL**
ICP Assay NIST SRM 3134 Lot Number: 130418

Assay Method #2 **10020 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000590	M	Eu	<	0.000300	M	Na		0.008739	M	Se	<	0.008000	M	Zn		0.005942
M	Al		0.005592	M	Fe	<	0.006500	M	Nb	<	0.029000	i	Si	<		M	Zr	<	0.001800
M	As	<	0.002100	M	Ga	<	0.000300	i	Nd	<		M	Sm	<	0.000300				
M	Au	<	0.000300	M	Gd	<	0.000300	M	Ni	<	0.008000	M	Sn	<	0.008900				
M	B	<	0.003300	M	Ge	<	0.000300	M	Os	<	0.000590	M	Sr		0.001747				
M	Ba		0.016778	M	Hf	<	0.001800	i	P	<		M	Ta	<	0.004200				
M	Be	<	0.000890	M	Hg	<	0.003300	M	Pb	<	0.000300	M	Tb	<	0.000300				
M	Bi	<	0.000890	M	Ho	<	0.000300	M	Pd	<	0.001800	M	Te	<	0.021000				
O	Ca		0.062920	M	In	<	0.032000	M	Pr	<	0.013000	M	Th	<	0.000300				
O	Cd	<	0.026000	M	Ir	<	0.000300	M	Pt	<	0.000300	O	Ti	<	0.032000				
M	Ce	<	0.008300	M	K		1.293372	M	Rb		0.045442	M	Tl		0.012584				
M	Co		0.005942	M	La	<	0.000300	M	Re	<	0.000300	M	Tm	<	0.000300				
M	Cr		0.005243	O	Li		0.000594	M	Rh	<	0.000300	M	U	<	0.005300				
M	Cs		0.005243	M	Lu	<	0.000300	M	Ru	<	0.079000	M	V	<	0.000890				
M	Cu		0.022371	M	Mg		0.005592	i	S	<		M	W		0.873900				
M	Dy	<	0.000300	M	Mn	<	0.005900	M	Sb		0.015031	M	Y	<	0.000300				
M	Er	<	0.000300	s	Mo	<		M	Sc	<	0.001200	M	Yb	<	0.000300				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 95.94 +6 6,7,8,9 [MoO4]-2(chemical form as received)

Chemical Compatibility -Mo is received in a NH4OH matrix giving the operator the option of using HCl or HF to stabilize acidic solutions. The [MoO4]-2 is soluble in concentrated HCl [MoOCl5]-2, dilute HF / HNO3 [MoOF5]-2 and basic media [MoO4]-2. Stable at ppm levels with some metals provided it is fluorinated. Do not mix with Alkaline or Rare Earths when HF is present. Stable with most inorganic anions provided it is in the [MoO4]-2 chemical form.

Stability - 2-100 ppb levels stable (alone or mixed with all other metals that are at comparable levels) as the [MoOF5]-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the [MoO4]-2 chemically stable for years in 1% NH4OH in a LDPE container.

Mo Containing Samples (Preparation and Solution) -Metal (Soluble in HF / HNO3 or hot dilute HCl); Oxide (soluble in HF or NH4OH) ; Organic Matrices (Dry ash at 450EC in Pt0 and dissolve oxide with HF or HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 95 amu	3 ppt	n/a	40Ar39K16O,79Br16O,190Os2+,190Pt2+
ICP-OES 202.030 nm	0.008 / 0.0002 µg/mL	1	Os, Hf
ICP-OES 203.844 nm	0.012 / 0.002 µg/mL	1	
ICP-OES 204.598 nm	0.012 / 0.001 µg/mL	1	Ir, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 04, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **July 04, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGTL10
Lot Number:	T2-TL714687
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Thallium
Starting Material:	TlNO3
Starting Material Lot#:	2118
Starting Material Purity:	99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10030 ± 42 µg/mL

Density: 1.036 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10040 ± 43 µg/mL**
ICP Assay NIST SRM 3158 Lot Number: 151215

Assay Method #2 **10010 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL(

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000200	M	Eu	<	0.000200	O	Na		0.002489	M	Se	<	0.011019	O	Zn		0.002298
O	Al	<	0.004184	O	Fe	<	0.002824	M	Nb	<	0.000200	O	Si		0.003760	M	Zr	<	0.000200
M	As	<	0.002003	M	Ga	<	0.000200	M	Nd	<	0.000200	M	Sm	<	0.000200				
O	Au	<	0.002824	M	Gd	<	0.000200	M	Ni		0.001724	M	Sn	<	0.000601				
O	B	<	0.004184	M	Ge	<	0.000801	M	Os	<	0.000198	O	Sr	<	0.000313				
M	Ba	<	0.000400	M	Hf	<	0.000200	O	P	<	0.010460	M	Ta	<	0.000200				
O	Be	<	0.000104	M	Hg	<	0.000794	M	Pb		0.000811	M	Tb	<	0.000200				
M	Bi	<	0.005209	M	Ho	<	0.000200	M	Pd	<	0.000400	M	Te	<	0.005008				
O	Ca		0.002436	M	In	<	0.000200	M	Pr	<	0.000200	M	Th	<	0.000200				
M	Cd		0.001318	M	Ir	<	0.000198	M	Pt	<	0.000801	O	Ti	<	0.001255				
M	Ce	<	0.000200	O	K		0.006175	M	Rb	<	0.000200	s	Tl	<					
M	Co	<	0.000601	M	La	<	0.000200	M	Re	<	0.000200	M	Tm	<	0.000200				
M	Cr	<	0.000801	O	Li	<	0.000177	M	Rh	<	0.000200	M	U	<	0.000200				
M	Cs	<	0.003606	M	Lu	<	0.000200	M	Ru	<	0.000397	M	V	<	0.002203				
M	Cu	<	0.001001	O	Mg		0.000529	O	S	<	0.015690	M	W	<	0.000601				
M	Dy	<	0.000200	M	Mn	<	0.000801	M	Sb	<	0.000400	M	Y	<	0.000200				
M	Er	<	0.000200	M	Mo	<	0.001202	O	Sc	<	0.000711	M	Yb	<	0.000200				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 204.38 +1 6 Tl(H2O)61+
Chemical Compatibility - Soluble in HCl, HNO3, and H2SO4. Stable with most metals and inorganic anions. The sulfite, thiocyanate and oxalate are moderately soluble; the phosphate and arsenite are slightly soluble and the sulfide is insoluble.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
Tl Containing Samples)Preparation and Solution) -Metal (Best dissolved in HNO3 which forms chiefly the Tl1+ ion.); Oxide (The thallous oxide is readily soluble in water. The thallic oxide requires high levels of acid); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in HCl).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 205 amu	2 ppt	N/A	189Os16O
ICP-OES 190.864 nm	0.04 / 0.004 µg/mL	1	V, Ti
ICP-OES 276.787 nm	0.1 / 0.01 µg/mL	1	Ta, V, Fe, Cr
ICP-OES 351.924 nm	0.2 / 0.02 µg/mL	1	Th, Ce, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 08, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **February 08, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

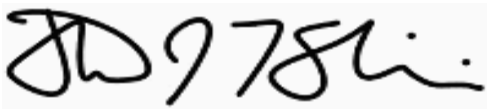
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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Christiansburg, VA 24073 USA
inorganicventures.com

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCD10
Lot Number:	S2-CD710508
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Cadmium
Starting Material:	Cd Metal
Starting Material Lot#:	1953
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10008 ± 30 µg/mL

Density: 1.029 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10010 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #2 **10011 ± 30 µg/mL**
ICP Assay NIST SRM 3108 Lot Number: 130116

Assay Method #3 **10003 ± 30 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag	<	0.003200	O	Eu	<	0.002500	O	Na		0.005499	M	Se	<	0.005700	O	Zn	<	0.001100
O	Al		0.008903	O	Fe		0.000602	M	Nb	<	0.000400	O	Si		0.016758	O	Zr	<	0.002600
M	As	<	0.003600	M	Ga	<	0.001200	M	Nd	<	0.000800	M	Sm	<	0.000400				
M	Au	<	0.000810	M	Gd	<	0.000400	M	Ni	<	0.003600	M	Sn	<	0.003200				
O	B		0.004189	O	Ge	<	0.012000	M	Os	<	0.000810	O	Sr	<	0.000330				
M	Ba	<	0.002400	M	Hf	<	0.000400	O	P	<	0.022000	M	Ta	<	0.000800				
M	Be	<	0.000400	M	Hg	<	0.001700	M	Pb	<	0.002400	M	Tb	<	0.000400				
M	Bi	<	0.000400	M	Ho	<	0.000400	M	Pd	<	0.001200	M	Te	<	0.008000				
O	Ca		0.011259	O	In	<	0.013000	M	Pr	<	0.000400	M	Th	<	0.000400				
s	Cd	<		M	Ir	<	0.000410	M	Pt	<	0.000400	O	Ti		0.000602				
M	Ce	<	0.000400	O	K		0.005237	M	Rb	<	0.004400	M	Tl		0.000523				
M	Co	<	0.000400	M	La	<	0.000400	M	Re	<	0.000400	M	Tm	<	0.000400				
O	Cr	<	0.005100	O	Li	<	0.000054	M	Rh	<	0.000400	M	U	<	0.000400				
M	Cs	<	0.002400	M	Lu	<	0.000400	M	Ru	<	0.002500	M	V	<	0.002000				
O	Cu	<	0.004800	O	Mg		0.000288	O	S	<	0.022000	M	W	<	0.000400				
M	Dy	<	0.000400	O	Mn	<	0.000860	O	Sb	<	0.018000	M	Y	<	0.000400				
M	Er	<	0.000400	M	Mo	<	0.001600	O	Sc	<	0.000430	M	Yb	<	0.000400				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 112.41 +2 4 Cd2(OH) (aq)3+ and Cd(OH)(aq)

Chemical Compatibility -Stable in HCl, HNO3, H2SO4 , and HF. Avoid basic media forming insoluble carbonate and hydroxide.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO3 / LDPE container.

Cd Containing Samples (Preparation and Solution) -Metal (soluble in HNO3); Oxides (soluble in HCl or HNO3); Ores (dissolve in HCl /HNO3 then take to fumes with H2SO4. The silica and lead sulfate are filtered off after the addition of water); Organic based (dry ash at 450°C and dissolve ash in HCl), (sulfuric / peroxide acid digestion).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 111 amu	11 ppt	n/a	95Mo16O
ICP-OES 214.438 nm	0.003 / 0.0003 µg/mL	1	Pt, Ir
ICP-OES 226.502 nm	0.003 / 0.0003 µg/mL	1	Ir
ICP-OES 228.802 nm	0.003 / 0.0003 µg/mL	1	Co, Ir, As, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 01, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 01, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
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info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMN10
Lot Number:	S2-MN704240
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Manganese
Starting Material:	Mn Metal
Starting Material Lot#:	2275
Starting Material Purity:	99.9909%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10011 ± 30 µg/mL

Density: 1.035 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9989 ± 69 µg/mL**
ICP Assay NIST SRM 3132 Lot Number: 050429

Assay Method #2 **10011 ± 25 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10024 ± 47 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001500	M	Eu	<	0.000730	O	Na		0.176097	M	Se	<	0.006600	M	Zn		0.009925
O	Al		0.004322	M	Fe	<	0.650000	M	Nb	<	0.000730	O	Si		0.097654	M	Zr	<	0.000730
M	As	<	0.008000	M	Ga		0.004322	M	Nd	<	0.001500	M	Sm	<	0.000730				
M	Au	<	0.000730	M	Gd	<	0.000730	M	Ni		0.024013	M	Sn	<	0.002200				
M	B		0.068838	M	Ge	<	0.004400	M	Os	<	0.000730	O	Sr		0.000928				
M	Ba	<	0.001500	M	Hf	<	0.000730	i	P	<		M	Ta	<	0.000730				
M	Be	<	0.000730	M	Hg	<	0.002200	M	Pb		0.007364	M	Tb	<	0.000730				
M	Bi	<	0.003000	M	Ho	<	0.000730	M	Pd	<	0.000730	M	Te	<	0.019000				
O	Ca		0.062434	M	In	<	0.003000	M	Pr	<	0.000730	M	Th	<	0.000730				
M	Cd	<	0.001500	M	Ir	<	0.000730	M	Pt	<	0.000730	O	Ti	<	0.006500				
M	Ce	<	0.007300	O	K		0.006403	M	Rb	<	0.006600	M	Tl	<	0.000730				
O	Co		0.014728	M	La	<	0.003000	M	Re	<	0.000730	M	Tm	<	0.000730				
O	Cr		0.272151	O	Li		0.000416	M	Rh	<	0.003000	M	U	<	0.001500				
M	Cs	<	0.000730	M	Lu	<	0.000730	M	Ru	<	0.004400	M	V	<	0.000730				
O	Cu		0.007684	O	Mg		0.320177	i	S	<		M	W	<	0.004400				
M	Dy	<	0.001500	s	Mn	<		M	Sb	<	0.021000	O	Y		0.001360				
M	Er	<	0.001500	M	Mo		0.010245	O	Sc	<	0.004100	M	Yb	<	0.000730				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 54.94 +2 6 $Mn(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4 ,HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO_3/LDPE container.

Mn Containing Samples (Preparation and Solution) -Metal (Soluble in dilute acids); Oxides (Soluble in dilute acids); Ores (Dissolve with HCl. If silica is present add HF and then fume off silica by adding H_2SO_4 and heat to SO_3 fumes - dense white fumes).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 55 amu	10 ppt	n/a	40Ar14N1H,39K16O,37Cl18O,40Ar15N,38Ar17O,36Ar18O1H ,38Ar16O1H,37Cl17O1H,23Na32S
ICP-OES 257.610 nm	0.0014 / 0.00002 µg/mL	1	Ce, W, Re
ICP-OES 259.373 nm	0.0016 / 0.00002 µg/mL	1	U, Ta, Mo, Fe, Nb
ICP-OES 260.569 nm	0.0021 / 0.00002 µg/mL	1	Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 17, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSB10
Lot Number:	R2-SB688559
Matrix:	3% (v/v) HNO3 3% (w/v) tartaric acid
Value / Analyte(s):	10 000 µg/mL ea: Antimony
Starting Material:	Antimony Metal
Starting Material Lot#:	1857
Starting Material Purity:	99.9894%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10003 ± 47 µg/mL

Density: 1.061 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10003 ± 41 µg/mL**
ICP Assay NIST SRM 3102a Lot Number: 140911

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000200	M	Eu	<	0.000300	O	Na		0.140000	M	Se	<	0.007300	O	Zn		0.005000
M	Al		0.003200	O	Fe		0.060000	M	Nb	<	0.000100	O	Si		0.150000	O	Zr	<	0.006300
M	As	<	0.004400	M	Ga	<	0.000400	M	Nd	<	0.000100	M	Sm	<	0.000100				
M	Au	<	0.000210	M	Gd	<	0.000100	O	Ni		0.004800	M	Sn	<	0.001800				
M	B	<	0.011000	M	Ge	<	0.000600	M	Os	<	0.000110	O	Sr		0.000750				
O	Ba	<	0.004900	M	Hf	<	0.000100	O	P		0.540000	M	Ta		0.003300				
M	Be	<	0.000400	M	Hg	<	0.000110	M	Pb	<	0.000400	M	Tb	<	0.000100				
M	Bi	<	0.000200	M	Ho	<	0.000100	M	Pd	<	0.000210	M	Te	<	0.000600				
O	Ca		0.110000	M	In	<	0.000100	M	Pr	<	0.001600	M	Th	<	0.000100				
M	Cd	<	0.000200	M	Ir	<	0.000110	M	Pt	<	0.000600	M	Ti	<	0.002800				
M	Ce		0.006500	O	K		0.020000	M	Rb	<	0.001000	M	Tl	<	0.000100				
M	Co	<	0.000200	O	La	<	0.016000	M	Re	<	0.000100	M	Tm	<	0.000100				
M	Cr		0.006900	O	Li	<	0.000430	M	Rh	<	0.000300	M	U	<	0.000100				
M	Cs	<	0.000200	M	Lu	<	0.000100	M	Ru	<	0.000310	M	V	<	0.000800				
M	Cu	<	0.000600	O	Mg		0.021000	n	S	<		M	W	<	0.000200				
M	Dy	<	0.000100	O	Mn		0.001900	s	Sb	<		M	Y	<	0.000100				
M	Er	<	0.000100	M	Mo	<	0.000500	O	Sc	<	0.002300	M	Yb	<	0.000100				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 121.75 +3 6 Sb(O)C4H4O6-1

Chemical Compatibility -Stable in conc. HCl, dilute or conc. HF. Stable in dilute HNO3 as the fluoride or tartrate complex. Avoid basic media. Stable with most metals and inorganic anions in acidic media as the tartrate provided the acidity is not too high or the acid is oxidizing causing loss of the stabilizing tartrate ion. The fluoride complex of antimony is stable in strong acid but you should only mix with other metals that are fluorinated.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-2% HNO3 / LDPE container.

Sb Containing Samples (Preparation and Solution) -Metal and alloys (Soluble in H2O / HF / HNO3 mixture); Oxides (Soluble in HCl and tartaric acid or H2O / HF / HNO3 mixtures); Ores (fusion with Na2CO3 in Pt0 followed by dissolving the fuseate in a H2O / HF / HNO3 mixture); Organic based (sulfuric acid / hydrogen peroxide digestion)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 121 amu	5 ppt	N/A	105Pd16O, 89Y16O2
ICP-OES 206.833 nm	0.03/0.003 µg/mL	1	Ta, Cr, Ge, Hf
ICP-OES 217.581 nm	0.05/0.005 µg/mL	1	Nb, W, Re, Fe
ICP-OES 231.147 nm	0.06/0.006 µg/mL	1	Ni, Co, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 30, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 30, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAS10
Lot Number:	T2-AS718260
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Arsenic
Starting Material:	As Metal
Starting Material Lot#:	2208
Starting Material Purity:	99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10060 ± 40 µg/mL

Density: 1.037 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10062 ± 46 µg/mL**
ICP Assay NIST SRM 3103a Lot Number: 100818

Assay Method #2 **10055 ± 76 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	< 0.003200	M	Eu	< 0.000530	O	Na	0.032544	M	Se	< 0.006300	O	Zn	0.001952			
M	Al	0.007593	O	Fe	0.001475	O	Nb	< 0.012000	O	Si	0.238658	O	Zr	< 0.004100			
s	As	<	M	Ga	< 0.000530	M	Nd	< 0.000530	M	Sm	< 0.000530						
M	Au	< 0.003100	M	Gd	< 0.000530	M	Ni	< 0.002100	M	Sn	< 0.000530						
M	B	0.026035	M	Ge	< 0.001600	M	Os	< 0.000520	M	Sr	< 0.000530						
M	Ba	< 0.000530	M	Hf	< 0.000530	O	P	< 0.043000	M	Ta	< 0.000530						
O	Be	< 0.000360	M	Hg	< 0.001600	M	Pb	< 0.002100	M	Tb	< 0.000530						
M	Bi	< 0.000530	M	Ho	< 0.000530	M	Pd	< 0.001100	M	Te	< 0.004700						
O	Ca	0.004339	M	In	< 0.023000	M	Pr	< 0.005300	M	Th	< 0.000530						
M	Cd	< 0.001100	M	Ir	< 0.000520	M	Pt	< 0.000530	O	Ti	< 0.002300						
M	Ce	< 0.000530	O	K	0.002061	M	Rb	< 0.000530	M	Tl	< 0.000530						
M	Co	< 0.000530	M	La	< 0.001100	M	Re	< 0.000530	M	Tm	< 0.000530						
O	Cr	< 0.001800	O	Li	< 0.000120	M	Rh	< 0.000530	M	U	< 0.000530						
M	Cs	< 0.005300	M	Lu	< 0.000530	M	Ru	< 0.000520	M	V	< 0.002700						
M	Cu	< 0.001600	O	Mg	0.000154	O	S	0.028205	M	W	< 0.012000						
M	Dy	< 0.000530	O	Mn	0.000154	M	Sb	< 0.000530	M	Y	< 0.000530						
M	Er	< 0.000530	M	Mo	< 0.000530	O	Sc	< 0.001700	M	Yb	< 0.000530						

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 74.92 ; mix of +3 and +5 ; 6 ; H3AsO4 and HAsO2

Chemical Compatibility - Arsenic has no cationic chemistry. It is soluble in HCl, HNO3,H3PO4, H2SO4 and HF aqueous matrices water and NH4OH . It is stable with most inorganic anions (forms arsenate when boiled with chromate) but many cationic metals form the insoluble arsenates under pH neutral conditions. When fluorinated and / or under acidic conditions arsenate formation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO3 / LDPE container.

As Containing Samples (Preparation and Solution) - Metal (soluble in 1:1 H2O / HNO3); Oxides (the oxide exists in crystalline and amorphous forms where the amorphic form is more water soluble. The oxides typically dissolve in dilute acidic solutions when boiled); Minerals (one gram of powered sample is fused in a Ni crucible with 10 grams of a 1:1 mix of K2CO3 and KNO3 and the melt extracted with hot water); Organic Matrices (0.2 to 0.5 grams of sample are fused with 15 grams of a 1:1 Na2CO3 / Na2O2 mix in a Ni crucible. The fuseate is extracted with water and acidified with HNO3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 75 amu	20 ppt	N/A	40Ar35Cl, 59Co16O, 36Ar38Ar1H,8Ar37Cl,Ar39K, 150Nd2+,150Sm2+
ICP-OES 189.042 nm	0.05/0.005 µg/mL	1	Cr
ICP-OES 193.696 nm	0.1/0.01 µg/mL	1	V, Ge
ICP-OES 228.812 nm	0.1/0.01 µg/mL	1	Cd, Pt, Ir, Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGBA10
Lot Number:	R2-BA692576
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Barium
Starting Material:	Barium Nitrate
Starting Material Lot#:	1969
Starting Material Purity:	99.9982%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10022 ± 30 µg/mL

Density: 1.025 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1	**10018 ± 50 µg/mL** ICP Assay NIST SRM 3104a Lot Number: 140909
Assay Method #2	**10023 ± 31 µg/mL** Gravimetric NIST SRM Lot Number: See Sec. 4.2
Assay Method #3	**10023 ± 30 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000410	O	Eu	<	0.005200	O	Na		0.004610	M	Se	<	0.003700	O	Zn		0.000658
M	Al	<	0.003100	O	Fe		0.015707	M	Nb	<	0.000210	O	Si		0.005573	M	Zr	<	0.001300
M	As	<	0.001300	M	Ga	<	0.000210	M	Nd	<	0.000210	O	Sm	<	0.021000				
M	Au	<	0.001300	M	Gd	<	0.000210	M	Ni	<	0.000810	M	Sn	<	0.000410				
O	B	<	0.005200	M	Ge	<	0.002500	M	Os	<	0.000410	O	Sr		0.003850				
s	Ba	<		M	Hf	<	0.000810	O	P	<	0.026000	M	Ta	<	0.000410				
O	Be	<	0.000320	M	Hg	<	0.000210	M	Pb	<	0.002300	M	Tb	<	0.000210				
M	Bi	<	0.000210	M	Ho	<	0.000210	M	Pd	<	0.000210	M	Te	<	0.001900				
O	Ca		0.007093	M	In	<	0.000210	M	Pr	<	0.000210	M	Th	<	0.000210				
M	Cd	<	0.000210	M	Ir	<	0.000210	M	Pt	<	0.000210	M	Ti	<	0.002100				
M	Ce	<	0.001300	O	K		0.035467	M	Rb	<	0.002100	M	Tl	<	0.000210				
M	Co	<	0.000410	O	La	<	0.005200	M	Re	<	0.000210	M	Tm	<	0.000410				
M	Cr	<	0.001700	O	Li	<	0.000630	M	Rh	<	0.000210	M	U	<	0.000210				
M	Cs	<	0.003300	M	Lu	<	0.001700	M	Ru	<	0.000210	O	V	<	0.005200				
M	Cu	<	0.001300	O	Mg		0.000861	O	S		0.268539	M	W	<	0.000410				
M	Dy	<	0.000210	M	Mn	<	0.000410	M	Sb	<	0.001300	O	Y	<	0.005200				
M	Er	<	0.001300	M	Mo	<	0.000410	M	Sc	<	0.000410	M	Yb	<	0.001300				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 137.33 +2 6 $Ba(H_2O)_6^{+2}$
Chemical Compatibility - Soluble in HCl, and HNO_3. Avoid H_2SO_4, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, iodate, molybdate, sulfite and tungstate in neutral aqueous media.
Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1 -10,000 ppm solutions chemically stable for years in 1-3.5% HNO_3 / LDPE container.
Ba Containing Samples (Preparation and Solution) -Metal(is best dissolved in diluted HNO_3); Ores(Carbonate fusion in Pt0 followed by HCl dissolution. If sulfate is present dissolve the fuseate using HCl / tartaric acid to prevent $BaSO_4$ precipitate); Organic Matrices (dry ash and dissolve in dilute HCl.)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 138 amu	1 ppt	N/A	122Sn16O, 122Te16O
ICP-OES 230.424 nm	0.004/0.0005 µg/mL	1	Mo, Ir, Co
ICP-OES 233.527 nm	0.004/0.0003 µg/mL	1	
ICP-OES 455.403 nm	0.002/0.0001 µg/mL	1	Zr, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 11, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 11, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGBE10
Lot Number:	R2-BE692992
Matrix:	6% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Beryllium
Starting Material:	Beryllium Acetate
Starting Material Lot#:	2281
Starting Material Purity:	99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10032 ± 41 µg/mL

Density: 1.128 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10042 ± 67 µg/mL**
ICP Assay NIST SRM 3105a Lot Number: 090514

Assay Method #2 **10025 ± 51 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001100	M	Eu	<	0.000270	O	Na		0.040962	M	Se	<	0.005000	M	Zn		0.013054
O	Al		0.016205	O	Fe		0.015754	M	Nb	<	0.000270	O	Si		0.024307	O	Zr	<	0.001900
M	As	<	0.002900	M	Ga	<	0.000270	M	Nd	<	0.000270	M	Sm	<	0.000270				
M	Au	<	0.000520	M	Gd	<	0.000270	M	Ni	<	0.003700	M	Sn	<	0.000790				
M	B	<	0.091000	M	Ge	<	0.000270	M	Os	<	0.000260	M	Sr		0.000630				
M	Ba		0.002700	M	Hf	<	0.000270	O	P	<	0.066000	M	Ta	<	0.000270				
s	Be	<		M	Hg	<	0.000520	M	Pb	<	0.000270	M	Tb	<	0.000270				
M	Bi	<	0.000530	M	Ho	<	0.000270	M	Pd	<	0.000520	M	Te	<	0.003700				
O	Ca		0.072022	M	In	<	0.000790	M	Pr	<	0.000270	M	Th	<	0.000270				
M	Cd	<	0.000790	M	Ir	<	0.000260	M	Pt	<	0.000270	O	Ti	<	0.000400				
M	Ce	<	0.000270	O	K		0.045014	M	Rb	<	0.000270	M	Tl	<	0.000790				
O	Co	<	0.003200	M	La	<	0.000270	M	Re	<	0.000270	M	Tm	<	0.000270				
O	Cr	<	0.001800	O	Li	<	0.000660	M	Rh	<	0.001100	M	U	<	0.000270				
M	Cs		0.001440	M	Lu	<	0.000270	M	Ru	<	0.000260	M	V	<	0.000790				
M	Cu	<	0.002100	O	Mg		0.016205	i	S	<		M	W	<	0.000530				
M	Dy	<	0.000270	M	Mn		0.001215	M	Sb	<	0.000270	M	Y	<	0.000270				
M	Er	<	0.000270	M	Mo	<	0.000530	O	Sc	<	0.000930	M	Yb	<	0.000270				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 9.01 +2 4 $Be(H_2O)_4^{+2}$

Chemical Compatibility -Soluble in HCl, HNO_3, H_2SO_4 and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1 % HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 5-10 % HNO_3 / LDPE container.

Be Containing Samples (Preparation and Solution) - Meta l(is best dissolved in diluted H_2SO_4); BeO (boiling nitric, hydrochloric, or sulfuric acids or KHSO4 fusion); Ores (H_2SO_4/HF digestion or carbonate fusion in Pt0); Organic Matrices (sulfuric/peroxide digestion or nitric/sulfuric/perchloric acid decomposition, or dry ash and dissolution according to the BeO procedure above).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 9 amu	4 ppt	N/A	
ICP-OES 234.861 nm	0.0003/0.00016 µg/mL	1	Fe, Ta, Mo
ICP-OES 313.042 nm	0.0003/0.00009 µg/mL	1	V, Ce, U
ICP-OES 313.107 nm	0.0007/0.0005 µg/mL	1	Ce, Th, Tm

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION, PERIOD OF VALIDITY AND REVISION HISTORY

11.1 Certification Issue Date

May 13, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 13, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

11.4 Revision Status

- Revision 1 - Revised on Thursday, Jan 14, 2021 by utruong. Revision was made for the following reason: Modified Section 7 Chemical Form in Solution.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCO10
Lot Number:	R2-CO695285
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Cobalt
Starting Material:	Co Metal
Starting Material Lot#:	2326
Starting Material Purity:	99.9934%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10012 ± 31 µg/mL

Density: 1.056 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10031 ± 67 µg/mL**
ICP Assay NIST SRM 3113 Lot Number: 190630

Assay Method #2 **10019 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10000 ± 35 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	0.014660	M	Eu	< 0.000590	O	Na	0.007534	M	Se	< 0.019000	M	Zn	0.003461			
M	Al	< 0.024000	M	Fe	0.050905	M	Nb	< 0.000590	O	Si	0.075340	M	Zr	< 0.001200			
i	As	<	M	Ga	< 0.000590	M	Nd	< 0.000590	M	Sm	< 0.000590						
M	Au	< 0.004100	M	Gd	< 0.000590	O	Ni	0.427608	M	Sn	< 0.001200						
M	B	< 0.031000	M	Ge	< 0.003000	M	Os	< 0.000590	O	Sr	< 0.000260						
M	Ba	< 0.000590	M	Hf	< 0.000590	n	P	<	M	Ta	< 0.001200						
O	Be	< 0.001300	M	Hg	< 0.001800	M	Pb	0.003257	M	Tb	< 0.000590						
M	Bi	< 0.003000	M	Ho	< 0.000590	M	Pd	< 0.000590	M	Te	< 0.005300						
O	Ca	0.010588	M	In	< 0.001200	M	Pr	< 0.000590	M	Th	< 0.000590						
M	Cd	< 0.004700	M	Ir	< 0.001200	M	Pt	< 0.002400	M	Ti	< 0.014000						
M	Ce	< 0.000590	O	K	0.008144	M	Rb	< 0.000590	M	Tl	0.002647						
s	Co	<	M	La	< 0.000590	M	Re	< 0.000590	M	Tm	< 0.000590						
M	Cr	< 0.021000	O	Li	< 0.000130	M	Rh	< 0.000590	M	U	< 0.000590						
M	Cs	< 0.002400	M	Lu	< 0.000590	M	Ru	< 0.007100	O	V	< 0.000880						
M	Cu	0.189369	O	Mg	0.001893	n	S	<	M	W	< 0.000590						
M	Dy	< 0.000590	M	Mn	< 0.001800	M	Sb	< 0.003600	M	Y	< 0.000590						
M	Er	< 0.000590	M	Mo	< 0.002400	O	Sc	< 0.001600	M	Yb	< 0.000590						

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.93 +2 6 $Co(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4 ,HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Co Containing Samples (Preparation and Solution) - Metal (soluble in HNO_3); Oxides (Soluble in HCl); Ores (dissolve in HCl / HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 59 amu	2 ppt	n/a	42Ca16O1H , 40Ar18O1H , 36Ar23Na, 43Ca16O, 24Mg35Cl
ICP-OES 228.616 nm	0.01/0.001 µg/mL	1	
ICP-OES 237.862 nm	0.01/0.002 µg/mL	1	W, Re, Al, Ta
ICP-OES 238.892 nm	0.01/0.002 µg/mL	1	Fe, W, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 04, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 04, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAG10
Lot Number:	S2-AG712977
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Silver
Starting Material:	Ag Shot
Starting Material Lot#:	2289
Starting Material Purity:	99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10051 ± 30 µg/mL

Density: 1.056 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1	**10051 ± 52 µg/mL** ICP Assay NIST SRM 3151 Lot Number: 160729
Assay Method #2	**10051 ± 19 µg/mL** Volhard NIST SRM 999c Lot Number: 999c
Assay Method #3	**10049 ± 31 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

s	Ag	<		M	Eu	<	0.000260	O	Na		0.003811	M	Se	<	0.003900	O	Zn		0.048146
M	Al		0.002688	O	Fe		0.006419	M	Nb	<	0.000260	O	Si		0.005215	M	Zr	<	0.000260
M	As	<	0.001100	M	Ga	<	0.000260	M	Nd	<	0.000260	M	Sm	<	0.000260				
M	Au	<	0.000260	M	Gd	<	0.000260	O	Ni		0.001765	M	Sn		0.020060				
O	B	<	0.004300	M	Ge	<	0.002300	M	Os	<	0.001100	O	Sr	<	0.000110				
M	Ba	<	0.000520	M	Hf	<	0.000260	O	P	<	0.017000	M	Ta	<	0.000260				
O	Be	<	0.001100	M	Hg	<	0.000770	M	Pb	<	0.003600	M	Tb	<	0.000260				
M	Bi		0.004814	M	Ho	<	0.000260	M	Pd		0.044134	M	Te	<	0.009000				
O	Ca		0.005215	M	In		0.003691	M	Pr	<	0.000260	M	Th	<	0.000260				
M	Cd	<	0.000260	M	Ir	<	0.000520	M	Pt	<	0.001100	O	Ti	<	0.000440				
M	Ce	<	0.002100	O	K	<	0.008700	M	Rb	<	0.001100	M	Tl	<	0.004100				
O	Co	<	0.000330	M	La	<	0.000260	M	Re	<	0.000260	M	Tm	<	0.000260				
O	Cr	<	0.002500	O	Li	<	0.000110	M	Rh	<	0.000520	M	U	<	0.000260				
M	Cs	<	0.002600	M	Lu	<	0.000260	M	Ru	<	0.000260	M	V	<	0.000260				
O	Cu		0.357085	O	Mg		0.001203	O	S	<	0.017000	M	W	<	0.000260				
M	Dy	<	0.000260	O	Mn	<	0.000220	M	Sb	<	0.014000	M	Y	<	0.000260				
M	Er	<	0.000260	M	Mo	<	0.000260	O	Sc	<	0.000220	M	Yb	<	0.000260				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 107.87 +1 6 $Ag(H_2O)_6^+$

Chemical Compatibility -Stable in HNO_3, and HF. Avoid basic media. Ag forms more insoluble salts than any other metal. It also is subject to photochemical reduction to the metal in HCl media although 10 µg/mL solutions in 10% HCl [$AgCl_{x1-x}$] are commonly used in the analytical laboratory. The most common solubility problems exist with arsenate, arsenite , bromide, chloride, iodide, carbonate , chromate, cyanide, iodate, oxalate, oxide, sulfate, sulfide, tartrate, and thiocyanate in aqueous media. The addition of nitric acid renders many of these salts soluble.

Stability - 2-100 ppb levels stable for 75+ days when mixed with equivalent levels of all other elements including the precious metals (where chloride is present) when in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Ag Containing Samples (Preparation and Solution) -Metal (Soluble in HNO_3); Oxides (Soluble in HNO_3); Ores (Digestion with conc. HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 107 amu	1 ppt	N/A	91Zr16O
ICP-OES 243.779 nm	0.12/0.01 µg/mL	1	Mn, Th, Ni, Rh
ICP-OES 328.068 nm	0.007/0.0007 µg/mL	1	Ce, Rh, V
ICP-OES 338.289 nm	0.013/0.001 µg/mL	1	Ce, Cr, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
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info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCR(3)10
Lot Number:	S2-CR709784
Matrix:	10% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Chromium
Starting Material:	Cr Metal
Starting Material Lot#:	2328
Starting Material Purity:	99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10027 ± 41 µg/mL

Density: 1.072 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10027 ± 40 µg/mL**
ICP Assay NIST SRM 3112a Lot Number: 170630

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001700	M	Eu	<	0.003400	O	Na		0.090372	M	Se	<	0.012000	O	Zn	<	0.006100
M	Al		0.034916	O	Fe		0.246471	M	Nb	<	0.017000	n	Si	<		M	Zr	<	0.007800
M	As	<	0.028000	O	Ga	<	0.013000	M	Nd	<	0.013000	M	Sm	<	0.006900				
M	Au	<	0.001700	M	Gd	<	0.000560	M	Ni		0.016020	M	Sn		0.006983				
O	B	<	0.025000	O	Ge	<	0.014000	M	Os	<	0.000560	M	Sr		0.006367				
M	Ba	<	0.008900	M	Hf	<	0.000560	i	P	<		M	Ta	<	0.000560				
M	Be	<	0.013000	M	Hg	<	0.001700	M	Pb		0.010064	M	Tb	<	0.000560				
M	Bi	<	0.002300	M	Ho	<	0.000560	M	Pd	<	0.021000	M	Te	<	0.010000				
O	Ca		0.075995	M	In	<	0.000560	M	Pr	<	0.001700	M	Th	<	0.000560				
M	Cd	<	0.000560	M	Ir	<	0.000560	M	Pt	<	0.001200	O	Ti		0.013555				
M	Ce	<	0.001200	O	K		0.043132	i	Rb	<		M	Tl	<	0.000560				
M	Co	<	0.002600	M	La	<	0.001200	M	Re	<	0.001200	O	Tm	<	0.013000				
s	Cr	<		O	Li		0.000390	M	Rh	<	0.095000	M	U	<	0.000560				
M	Cs	<	0.007800	M	Lu	<	0.000560	M	Ru	<	0.087000	O	V		0.014993				
O	Cu		0.007599	O	Mg		0.000883	i	S	<		M	W	<	0.049000				
M	Dy	<	0.000560	M	Mn		0.008626	M	Sb	<	0.003400	M	Y	<	0.001700				
M	Er	<	0.019000	M	Mo	<	0.032000	M	Sc		0.003080	M	Yb	<	0.000560				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 52.00 +3 6 $Cr(H_2O)_6^{3+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4, HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Cr3 Containing Samples (Preparation and Solution) -Metal (soluble in HCl); Oxides/Ores (Chrome ore/oxides are very difficult to dissolve. The following procedures [A-D] are commonly used: A. Fusion with $KHSO_4$ and extraction with hot KCl. The residue fused with Na_2CO_3 and $KClO_3$, 3:1. B. Fusion with $NaKSO_4$ and NaF 2:1, C. Fusion with magnesia or lime and sodium or potassium carbonates, 4:1. D. Fusion with Na_2O_2 or NaOH and KNO_3 or NaOH and Na_2O_2. Nickel, iron, copper, or silver crucibles should be used for D. Platinum may be used for A, <, C); Organic Matrices (ash at 4500C followed by one of the fusion methods above or sulfuric/hydrogen peroxide acid digestions may be applicable to non oxide containing samples).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 52 amu	40 ppt	N/A	36S16O, 36Ar16O - The 50Cr, 53Cr, 54Cr lines suffer from many more potential interferences from sulfur, chlorine and argon compounds of oxygen, nitrogen and carbon.
ICP-OES 205.552 nm	0.006/0.0008 µg/mL	1	Os
ICP-OES 276.654 nm	0.01/0.001 µg/mL	1	Cu, Ta, V
ICP-OES 284.325 nm	0.008/0.0007 µg/mL	1	

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 26, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **October 26, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGNI10
Lot Number:	P2-NI686384
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Nickel
Starting Material:	Ni Metal
Starting Material Lot#:	2277 and 2282
Starting Material Purity:	99.9992%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9979 ± 30 µg/mL

Density: 1.038 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9971 ± 54 µg/mL**
ICP Assay NIST SRM 3136 Lot Number: 120619

Assay Method #2 **9970 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **9993 ± 33 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag		0.002606	M	Eu	<	0.001100	O	Na		0.004965	O	Se	<	0.067000	M	Zn		0.006578
M	Al	<	0.013000	O	Fe		0.018618	M	Nb	<	0.001100	O	Si		0.010923	M	Zr	<	0.001100
O	As	<	0.067000	M	Ga	<	0.001100	M	Nd	<	0.001100	M	Sm	<	0.001100				
M	Au	<	0.002100	M	Gd	<	0.001100	s	Ni	<		M	Sn	<	0.016000				
M	B	<	0.017000	M	Ge	<	0.004200	M	Os		0.002110	O	Sr	<	0.000940				
M	Ba	<	0.001100	M	Hf	<	0.001100	i	P	<		M	Ta	<	0.001100				
O	Be	<	0.000410	M	Hg		0.014895	M	Pb		0.006578	M	Tb	<	0.001100				
M	Bi	<	0.004200	M	Ho	<	0.001100	M	Pd	<	0.001100	M	Te	<	0.015000				
O	Ca		0.003351	M	In	<	0.001100	M	Pr	<	0.001100	M	Th	<	0.001100				
M	Cd		0.001365	M	Ir		0.004716	M	Pt	<	0.001100	M	Ti	<	0.004200				
M	Ce	<	0.001100	O	K		0.004716	M	Rb	<	0.001100	M	Tl	<	0.001100				
O	Co		0.017377	M	La	<	0.001100	M	Re		0.001737	M	Tm	<	0.001100				
O	Cr	<	0.006700	O	Li	<	0.000140	M	Rh	<	0.006300	M	U	<	0.001100				
M	Cs	<	0.007300	M	Lu	<	0.001100	M	Ru	<	0.019000	M	V	<	0.002100				
M	Cu		0.004096	O	Mg		0.000372	i	S	<		M	W	<	0.006300				
M	Dy	<	0.001100	O	Mn	<	0.001900	M	Sb		0.005833	O	Y	<	0.000540				
M	Er	<	0.001100	M	Mo	<	0.008400	M	Sc	<	0.002100	M	Yb	<	0.001100				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.69 +2 6 Ni(H2O)62+

Chemical Compatibility -Stable in HCl, HNO3, H2SO4 ,HF, H3PO4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

Ni Containing Samples (Preparation and Solution) -Metal (Soluble in HNO3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 60 amu	100 ppt	n/a	43Ca16O1H , 44Ca16O, 23Na37Cl
ICP-OES 221.647 nm	0.01 / 0.0009 µg/mL	1	Si
ICP-OES 231.604 nm	0.02 / 0.002 µg/mL	1	Sb, Ta, Co
ICP-OES 232.003 nm	0.02 / 0.006 µg/mL	1	Cr, Re, Os, Nb, Ag, Pt, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 02, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 02, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

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Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGV10
Lot Number:	S2-V711005
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Vanadium
Starting Material:	Vanadium Pentoxide
Starting Material Lot#:	1782
Starting Material Purity:	99.9877%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10014 ± 30 µg/mL

Density: 1.104 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10017 ± 42 µg/mL**
ICP Assay NIST SRM 3165 Lot Number: 160906

Assay Method #2 **10013 ± 30 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000110	M	Eu	<	0.000110	O	Na		0.120000	M	Se	<	0.009400	M	Zn		0.009400
O	Al		0.120000	O	Fe		0.460000	M	Nb	<	0.001300	O	Si		0.270000	M	Zr	<	0.002900
M	As	<	0.000210	M	Ga	<	0.009300	M	Nd	<	0.000610	M	Sm	<	0.000110				
M	Au	<	0.004700	M	Gd	<	0.000110	M	Ni		0.012000	M	Sn		0.003900				
M	B		0.051000	M	Ge	<	0.000410	M	Os	<	0.000110	O	Sr		0.007100				
M	Ba		0.003600	M	Hf	<	0.000110	O	P	<	0.034000	M	Ta	<	0.000110				
O	Be	<	0.000560	M	Hg	<	0.000410	M	Pb		0.001400	M	Tb	<	0.000110				
M	Bi	<	0.000210	M	Ho	<	0.000110	M	Pd	<	0.000410	M	Te	<	0.000110				
O	Ca		0.730000	M	In	<	0.000110	M	Pr	<	0.000110	M	Th	<	0.000210				
M	Cd	<	0.000610	M	Ir	<	0.000110	M	Pt	<	0.000110	M	Ti		0.017000				
M	Ce	<	0.000610	M	K		0.052000	M	Rb	<	0.000310	M	Tl	<	0.000110				
M	Co	<	0.001300	M	La	<	0.000410	M	Re		0.001700	M	Tm	<	0.000110				
O	Cr		0.170000	M	Li	<	0.000810	M	Rh	<	0.000110	M	U	<	0.000410				
M	Cs		0.005600	M	Lu	<	0.000110	M	Ru	<	0.000110	s	V	<					
M	Cu	<	0.001300	M	Mg		0.053000	i	S	<		M	W		0.002000				
M	Dy	<	0.000110	M	Mn		0.007900	M	Sb		0.078000	M	Y	<	0.000110				
M	Er	<	0.000110	M	Mo		0.094000	M	Sc	<	0.000410	M	Yb	<	0.000110				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 50.94 +5 6 H2V10O284-

Chemical Compatibility -Soluble in HCl, HNO3, H2SO4, HF, H3PO4 and strong basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

V Containing Samples (Preparation and Solution) -Metal (Fusion with NaOH or KOH in Ni0 or Na2CO3 / KNO3); Oxides (V2O3 - use HCl, V2O4 - use HCl or HNO3, V2O5 - use concentrated acids); Ores (Na2CO3 / KNO3 in Pt0 caution - nitrates attack Pto followed by water extraction of fuseate); Organic Matrices (Ash at 450 EC followed by dissolving according to V2O5 above) .

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 51 amu	4 ppt	N/A	34S16O1H, 35Cl16O, 38Ar13C, 36Ar15N, 36Ar14N1H, 37Cl14N,36S15N, 33S18O, 34S17O, 102Ru+2,02Pd+2
ICP-OES 290.882 nm	0.008 / 0.0008 µg/mL	1	Hf, Nb
ICP-OES 292.402 nm	0.006 / 0.001 µg/mL	1	Th
ICP-OES 309.311 nm	0.005 / 0.001 µg/mL	1	Mg, U, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

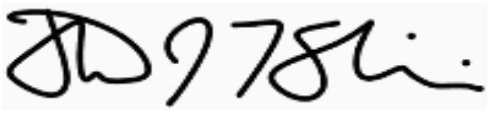
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAL10
Lot Number:	T2-AL716102
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Aluminum
Starting Material:	Aluminum Nitrate Nonahydrate
Starting Material Lot#:	2460
Starting Material Purity:	99.9938%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10049 ± 31 µg/mL

Density: 1.087 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10059 ± 40 µg/mL**
ICP Assay NIST SRM 3101a Lot Number: 140903

Assay Method #2 **10044 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10049 ± 35 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002100	M	Eu	<	0.002100	O	Na		0.352819	M	Se	<	0.005200	M	Zn	0.006018
s	Al	<		O	Fe		0.074714	M	Nb	<	0.000520	O	Si		0.017848	O	Zr	0.004358
M	As		0.008716	O	Ga		0.112072	M	Nd	<	0.000520	M	Sm	<	0.000520			
M	Au	<	0.008400	M	Gd	<	0.001100	O	Ni	<	0.006000	M	Sn		0.000747			
O	B	<	0.014000	M	Ge	<	0.005200	M	Os	<	0.000650	O	Sr		0.000518			
O	Ba		0.012867	M	Hf	<	0.004100	n	P	<		M	Ta	<	0.000520			
O	Be	<	0.000270	M	Hg	<	0.002000	M	Pb		0.002282	M	Tb	<	0.000520			
M	Bi		0.001930	M	Ho	<	0.000520	M	Pd	<	0.000520	M	Te	<	0.001100			
O	Ca		0.076790	M	In	<	0.002100	M	Pr	<	0.000520	M	Th	<	0.000520			
M	Cd	<	0.000520	M	Ir	<	0.000650	M	Pt	<	0.000520	O	Ti		0.001930			
M	Ce	<	0.001100	O	K		0.043583	M	Rb	<	0.000520	M	Tl	<	0.000520			
O	Co	<	0.005400	M	La	<	0.002100	M	Re	<	0.000520	M	Tm	<	0.000520			
O	Cr		0.006018	O	Li		0.000112	M	Rh	<	0.000520	M	U	<	0.000520			
M	Cs		0.000643	M	Lu	<	0.000520	M	Ru	<	0.002000	M	V		0.001286			
O	Cu	<	0.008300	O	Mg		0.068488	i	S	<		M	W	<	0.009800			
M	Dy	<	0.002100	O	Mn		0.000913	M	Sb	<	0.003100	M	Y	<	0.001100			
M	Er	<	0.000520	M	Mo		0.005396	O	Sc	<	0.000950	M	Yb	<	0.000520			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 26.98 +3 6 Al(H2O)6+3
Chemical Compatibility -Soluble in HCl, HNO3, v F and v 2SO4. Avoid neutral media. Soluble in strongly basic NaOH forming the Al(OH)4(H2O)21- species. Stable with most metals and inorganic anions. The phosphate is insoluble in water and only slightly soluble in acid.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
Al Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO3); a- Al2O3 (Na2CO3 fusion in Pt0);
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 27 amu	30 ppt	N/A	12C15N, 13C14N, 1H12C14N, 11B16O, 54Cr2+, 54Fe2+
ICP-OES 167.078 nm	0.1/0.009 µg/mL	1	Fe
ICP-OES 394.401 nm	0.05/0.006 µg/mL	1	U, Ce
ICP-OES 396.152 nm	0.03/0.006 µg/mL	1	Mo, Zr, Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 22, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 22, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

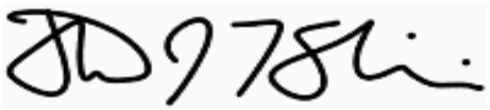
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGK10
Lot Number:	S2-K711973
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Potassium
Starting Material:	KNO3
Starting Material Lot#:	2313
Starting Material Purity:	99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL

Density: 1.024 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9987 ± 24 µg/mL**
Gravimetric NIST SRM Lot Number: See Sec. 4.2

Assay Method #2 **10004 ± 84 µg/mL**
ICP Assay NIST SRM 3141a Lot Number: 140813

Assay Method #3 **10007 ± 45 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001400	M	Eu	<	0.000660	O	Na		0.246220	M	Se	<	0.007900	O	Zn		0.018056
O	Al		0.001592	O	Fe		0.005909	M	Nb	<	0.000660	O	Si		0.011490	O	Zr	<	0.001600
M	As	<	0.005300	M	Ga	<	0.000660	M	Nd	<	0.000660	M	Sm	<	0.000660				
M	Au	<	0.002000	M	Gd	<	0.000660	O	Ni	<	0.004900	M	Sn	<	0.000660				
O	B	<	0.005600	M	Ge	<	0.002000	M	Os	<	0.003300	O	Sr		0.000055				
O	Ba	<	0.000860	M	Hf	<	0.000660	O	P	<	0.032000	M	Ta	<	0.000660				
O	Be	<	0.000082	M	Hg	<	0.002000	M	Pb	<	0.002300	M	Tb	<	0.000660				
M	Bi	<	0.006600	M	Ho	<	0.000660	M	Pd	<	0.000660	M	Te	<	0.017000				
O	Ca		0.031187	M	In	<	0.000660	M	Pr	<	0.000660	M	Th	<	0.000660				
O	Cd	<	0.000450	M	Ir	<	0.000660	M	Pt	<	0.002700	M	Ti	<	0.000660				
M	Ce	<	0.000660	s	K	<		M	Rb		0.476026	M	Tl	<	0.000660				
O	Co	<	0.000780	M	La	<	0.000660	M	Re	<	0.000660	M	Tm	<	0.000660				
O	Cr		0.000541	O	Li	<	0.000084	M	Rh	<	0.000660	M	U	<	0.000660				
M	Cs	<	0.000660	M	Lu	<	0.000660	M	Ru	<	0.000660	O	V	<	0.001100				
M	Cu	<	0.002700	O	Mg		0.006237	O	S		0.027905	M	W	<	0.000660				
M	Dy	<	0.000660	O	Mn		0.000476	M	Sb	<	0.000660	M	Y	<	0.000660				
M	Er	<	0.000660	M	Mo	<	0.000660	O	Sc	<	0.000340	O	Yb	<	0.000270				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 39.10 +1 (6) K+(aq)
Chemical Compatibility -Soluble in HCl, HNO3, H2SO4 and HF aqueous matrices. Avoid use of HClO4 due to insolubility of the perchlorate. Stable with all metals and inorganic anions except ClO4-.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.
K Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Sodium carbonate fusion in Pt0 followed by HCl dissolution-blank levels of K in sodium carbonate critical); Organic Matrices (Sulfuric/peroxide digestion)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 39 amu	10 ppt	n/a	38ArH, 23Na16O, 78Se
ICP-OES 404.721 nm	1.1 / 0.05 µg/mL	1	U, Ce
ICP-OES 766.490 nm	0.4 / 0.001 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 771.531 nm	1.0 / 0.03 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 10, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 10, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

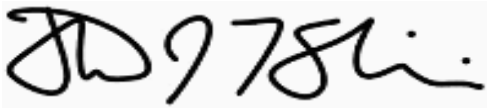
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMG10
Lot Number:	S2-MG704239
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Magnesium
Starting Material:	Magnesium Metal
Starting Material Lot#:	2168
Starting Material Purity:	99.9984%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10053 ± 30 µg/mL

Density: 1.053 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10022 ± 62 µg/mL**
ICP Assay NIST SRM 3131a Lot Number: 140110

Assay Method #2 **10078 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10033 ± 26 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag		0.002106	M	Eu	<	0.000910	O	Na		0.071075	O	Se	<	0.048000	O	Zn	0.003299
M	Al		0.003553	M	Fe		0.002538	M	Nb	<	0.000460	O	Si	<	0.032000	O	Zr	< 0.002700
M	As	<	0.001400	M	Ga	<	0.000460	M	Nd	<	0.000910	M	Sm	<	0.000460			
M	Au	<	0.001400	M	Gd	<	0.000460	O	Ni	<	0.001600	M	Sn	<	0.002300			
O	B		0.006853	M	Ge	<	0.001400	M	Os	<	0.000460	O	Sr		0.000279			
O	Ba		0.000964	M	Hf	<	0.000460	O	P		0.015230	M	Ta	<	0.000460			
O	Be	<	0.000120	M	Hg	<	0.000460	M	Pb	<	0.000460	M	Tb	<	0.000460			
M	Bi	<	0.000460	M	Ho	<	0.000460	M	Pd	<	0.003200	M	Te	<	0.007300			
O	Ca		0.053306	M	In	<	0.000460	M	Pr	<	0.000460	M	Th	<	0.000460			
O	Cd	<	0.000360	M	Ir	<	0.000460	M	Pt	<	0.001900	O	Ti	<	0.001700			
M	Ce	<	0.002300	M	K		0.048229	M	Rb		0.002411	M	Tl		0.003046			
M	Co	<	0.000910	M	La	<	0.002800	M	Re	<	0.000460	M	Tm	<	0.000460			
M	Cr	<	0.002300	O	Li		0.027922	M	Rh	<	0.000460	M	U	<	0.000460			
M	Cs		0.001040	M	Lu	<	0.000460	M	Ru	<	0.000460	M	V	<	0.000460			
O	Cu	<	0.003000	s	Mg	<		O	S	<	0.190000	M	W	<	0.000460			
M	Dy	<	0.000460	O	Mn		0.015230	M	Sb		0.020814	O	Y	<	0.000720			
M	Er	<	0.000460	M	Mo	<	0.000910	O	Sc	<	0.000480	M	Yb	<	0.000460			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 24.31 +2 6 Mg(H2O)6+2
Chemical Compatibility -Soluble in HCl, HNO3, and H2SO4 avoid HF, H3PO4 and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicates, carbonates, hydroxides, oxides, and tungstates in neutral and slightly acidic media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO3 / LDPE container.
Mg Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO3); Oxide (Readily soluble in above compatible aqueous acidic solutions); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric / peroxide digestion or nitric / sulfuric / perchloric acid decomposition, or dry ash and dissolution in dilute HCl).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 24 amu	42 ppt	n/a	7Li17O, 48Ti+2 , 48Ca+2
ICP-OES 279.553 nm	0.0002 / 0.00003 µg/mL	1	Th
ICP-OES 280.270 nm	0.0003 / 0.00005 µg/mL	1	U, V
ICP-OES 285.213 nm	0.002 / 0.00003 µg/mL	1	U, Hf, Cr, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 23, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 23, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCA10
Lot Number:	T2-CA716103
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Calcium
Starting Material:	CaCO3
Starting Material Lot#:	2472
Starting Material Purity:	99.9950%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10005 ± 30 µg/mL

Density: 1.039 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10005 ± 45 µg/mL**
ICP Assay NIST SRM 3109a Lot Number: 130213

Assay Method #2 **10005 ± 25 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10005 ± 31 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001200	M	Eu	<	0.001200	O	Na		0.006112	M	Se	<	0.024000	M	Zn		0.005362
M	Al		0.065419	O	Fe		0.009115	M	Nb	<	0.001200	O	Si		0.139417	O	Zr	<	0.006700
O	As	<	0.013000	M	Ga	<	0.015000	M	Nd	<	0.020000	M	Sm	<	0.001200				
M	Au	<	0.017000	M	Gd	<	0.004800	O	Ni		0.000793	M	Sn	<	0.003600				
O	B		0.001179	M	Ge	<	0.003600	M	Os	<	0.001200	M	Sr		0.081505				
O	Ba		0.002788	M	Hf	<	0.001200	O	P	<	0.041000	M	Ta	<	0.001200				
O	Be	<	0.000410	M	Hg	<	0.004800	M	Pb		0.001608	M	Tb	<	0.001200				
M	Bi		0.001608	M	Ho	<	0.001200	M	Pd	<	0.001200	M	Te	<	0.003600				
s	Ca	<		M	In	<	0.001200	M	Pr		0.000257	M	Th	<	0.001200				
O	Cd	<	0.001300	M	Ir	<	0.001200	M	Pt	<	0.003600	O	Ti	<	0.001900				
M	Ce		0.001029	O	K		0.009759	M	Rb	<	0.001200	M	Tl	<	0.001200				
O	Co		0.000418	M	La		0.001823	M	Re	<	0.001200	M	Tm	<	0.001200				
O	Cr		0.003324	O	Li	<	0.007300	M	Rh	<	0.001200	M	U		0.002144				
M	Cs		0.007399	M	Lu		0.000128	M	Ru	<	0.001200	M	V		0.001286				
O	Cu	<	0.011000	M	Mg		1.286934	O	S		0.055767	O	W	<	0.024000				
M	Dy	<	0.002400	O	Mn		0.004611	M	Sb	<	0.009600	O	Y		0.000536				
M	Er	<	0.002400	M	Mo		0.003539	O	Sc	<	0.001400	M	Yb	<	0.001200				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 40.08 +2 6 Ca(H2O)6+2
Chemical Compatibility - Soluble in HCl and HNO3. Avoid H2SO4, vF, v3PO4 and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, and tungstate in neutral aqueous media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO3 / LDPE container.
Ca Containing Samples)Preparation and Solution) -Metal (best dissolved in diluted HNO3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (dry ash and dissolution in dilute HCl. Do not heat when dissolving to avoid precipitation of SiO2). The oxide, hydroxide, carbonate, phosphate, and fluoride of calcium are soluble in % levels of HCl or HNO3. The sulfates (gypsum, anhydrite, etc.), certain silicates, and complex compounds require fusion with Na2CO3 followed by HCl / water dissolution. Note that contamination is a very real problem when analyzing for trace levels.
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 44 amu	1200 ppt	n/a	16O212C, 28Si16O, 88Sr
ICP-OES 393.366 nm	0.0002 / 0.00004 µg/mL	1	U, Ce
ICP-OES 396.847 nm	0.0005 / 0.00006 µg/mL	1	Th
ICP-OES 422.673 nm	0.01 / 0.001 µg/mL	1	Ge

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 14, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 14, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

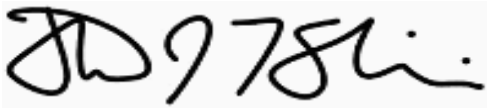
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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inorganicventures.com

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGNA10
Lot Number:	T2-NA717221
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Sodium
Starting Material:	Na2CO3
Starting Material Lot#:	2358 and 2453
Starting Material Purity:	99.9977%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9977 ± 30 µg/mL

Density: 1.033 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9974 ± 18 µg/mL**
Gravimetric NIST SRM Lot Number: See Sec. 4.2

Assay Method #2 **9977 ± 34 µg/mL**
ICP Assay NIST SRM 3152a Lot Number: 200413

Assay Method #3 **9987 ± 31 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000930	M	Eu	<	0.000930	s	Na	<		M	Se	<	0.003800	O	Zn		0.000138
M	Al		0.004409	O	Fe		0.002393	M	Nb	<	0.000930	O	Si		0.056696	O	Zr	<	0.003200
O	As	<	0.023000	M	Ga	<	0.000930	M	Nd	<	0.000930	M	Sm	<	0.000930				
O	Au	<	0.004100	M	Gd	<	0.000930	O	Ni	<	0.003000	M	Sn	<	0.002800				
O	B		0.001385	M	Ge	<	0.004700	M	Os	<	0.000930	O	Sr		0.000251				
M	Ba		0.004031	M	Hf	<	0.000930	O	P		0.010205	M	Ta	<	0.000930				
O	Be	<	0.000130	M	Hg	<	0.000930	M	Pb	<	0.000930	M	Tb	<	0.000930				
M	Bi	<	0.000930	M	Ho	<	0.000930	M	Pd	<	0.000930	M	Te	<	0.001900				
O	Ca		0.176388	M	In	<	0.000930	M	Pr	<	0.000930	M	Th		0.000352				
O	Cd	<	0.000860	M	Ir	<	0.000930	M	Pt	<	0.000930	O	Ti		0.000592				
M	Ce	<	0.001900	O	K		0.302380	M	Rb	<	0.000930	M	Tl	<	0.000930				
O	Co	<	0.001800	O	La	<	0.002100	M	Re	<	0.000930	M	Tm	<	0.000930				
M	Cr	<	0.002800	O	Li		0.000031	M	Rh	<	0.000930	M	U	<	0.000930				
M	Cs	<	0.000930	M	Lu	<	0.000930	M	Ru	<	0.001900	O	V	<	0.001600				
O	Cu	<	0.003900	O	Mg		0.026458	O	S		0.040317	O	W	<	0.028000				
M	Dy	<	0.000930	O	Mn	<	0.000740	M	Sb	<	0.000930	O	Y	<	0.000860				
M	Er	<	0.000930	O	Mo	<	0.003600	O	Sc	<	0.000610	O	Yb	<	0.000250				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 22.99 +1 (6) Na+(aq) largely ionic in nature

Chemical Compatibility -Soluble in HCl, HNO3, H2SO4 and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

Na Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Lithium carbonate fusion in graphite crucible followed by HCl dissolution - blank levels of Na in lithium carbonate critical); Organic Matrices (Sulfuric / peroxide digestion or nitric/sulfuric/perchloric acid decomposition).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 23 amu	310 ppt	n/a	46Ti+2 , 46Ca+2
ICP-OES 330.237 nm	2.0 / 0.09 µg/mL	1	Pd, Zn
ICP-OES 588.995 nm	0.03 / 0.006 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 589.595 nm	0.07 / 0.00009 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 20, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 20, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

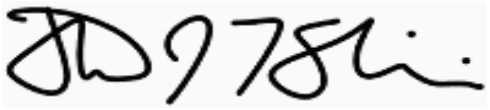
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGU1
Lot Number:	S2-U707914
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Uranium
Starting Material:	Uranyl Nitrate Hexahydrate
Starting Material Lot#:	P2-2322
Starting Material Purity:	99.9997%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 5 µg/mL

Density: 1.010 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **998 ± 5 µg/mL**
ICP Assay NIST SRM 3164 Lot Number: 080521

Assay Method #2 **1001 ± 6 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	< 0.000270	M	Eu	< 0.000270	M	Na	< 0.011000	M	Se	< 0.009300	M	Zn	0.002358			
M	Al	< 0.011000	M	Fe	0.003222	M	Nb	< 0.000270	M	Si	< 0.160000	M	Zr	< 0.001100			
M	As	< 0.002400	M	Ga	< 0.000270	M	Nd	< 0.000270	M	Sm	< 0.000270						
M	Au	< 0.000270	M	Gd	< 0.000270	M	Ni	< 0.020000	M	Sn	< 0.011000						
M	B	< 0.000270	M	Ge	< 0.000800	M	Os	< 0.001900	M	Sr	< 0.000270						
M	Ba	< 0.003800	M	Hf	< 0.000270	i	P	<	M	Ta	< 0.000270						
M	Be	< 0.000270	M	Hg	< 0.000540	M	Pb	< 0.002200	M	Tb	< 0.000270						
M	Bi	< 0.000270	M	Ho	< 0.000270	M	Pd	< 0.000540	M	Te	< 0.003800						
M	Ca	< 0.140000	M	In	< 0.000270	M	Pr	< 0.000270	M	Th	0.000129						
M	Cd	< 0.000270	M	Ir	< 0.000270	M	Pt	< 0.000270	M	Ti	< 0.002700						
M	Ce	< 0.000540	O	K	< 0.250000	M	Rb	< 0.000800	M	Tl	< 0.000270						
M	Co	< 0.000800	M	La	0.000117	M	Re	< 0.064000	M	Tm	< 0.000270						
M	Cr	0.000943	M	Li	< 0.003000	M	Rh	< 0.000270	s	U	<						
M	Cs	0.000106	M	Lu	< 0.000270	M	Ru	< 0.000540	M	V	< 0.000540						
M	Cu	< 0.001100	M	Mg	< 0.003000	i	S	<	M	W	< 0.000540						
M	Dy	< 0.000270	M	Mn	< 0.006900	M	Sb	< 0.000270	M	Y	< 0.000270						
M	Er	< 0.000270	M	Mo	< 0.006400	M	Sc	< 0.000540	M	Yb	< 0.000270						

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 238.03 +6 8 UO_2^{2+}(uranyl)

Chemical Compatibility - Soluble in HCl and HNO_3. Avoid H_3PO_4. H_2SO_4 and HF matrices should not be a problem depending upon [U]. Although the UO_2^{2+} ion is distinctly basic, any U^{+4} will precipitate in basic media. UO_2^{2+}salts are generally soluble in water and UO_2^{2+} is stable with most metals and inorganic anions. The uranyl phosphate is insoluble in water. UF_4 and UF_6 are water soluble.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO_3 / LDPE container.

U Containing Samples (Preparation and Solution) -Metal (Dissolves rapidly in HCl and HNO_3); Oxide (Soluble in HNO_3); Ores (Digest for 1-2 hours with 1 gram of ore to 30 mL 1:1 HNO_3. Silica insolubles are removed by filtration after bringing the sample to fumes with conc. H_2SO_4.)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 238 amu	2 ppt	N/A	206Pb16O2
ICP-OES 263.553 nm	0.3 / 0.01 µg/mL	1	Ce, Ir, Th, Rh, W, Zr, Ta, Ti, V, Hf, Fe, Re, Ru
ICP-OES 367.007 nm	0.3 / 0.02 µg/mL	1	Th, Ce
ICP-OES 385.958 nm	0.3 / 0.01 µg/mL	1	Th, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Certificate of Analysis

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300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-ICVMS-2
Lot Number:	T2-MEB719895
Matrix:	3% (v/v) HNO3 tr. HF
Value / Analyte(s):	2.5 µg/mL ea: Molybdenum, Antimony

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	**2.499 ± 0.015 µg/mL**	**Molybdenum, Mo**	**2.500 ± 0.017 µg/mL**

Density: 1.014 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Mo	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
Sb	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

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- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

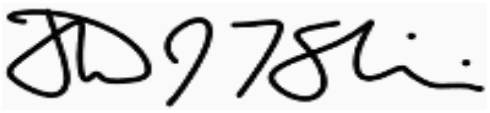
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-ICVMS-3
Lot Number:	T2-MEB719896
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	250 µg/mL ea:

Aluminum, Calcium,
Iron, Potassium,
Magnesium, Sodium,

4 µg/mL ea:
Selenium,

2.5 µg/mL ea:

Thorium,	Thallium,
Uranium,	Vanadium,
Zinc,	Manganese,
Cadmium,	Cobalt,
Chromium,	Copper,
Arsenic,	Barium,
Beryllium,	Nickel,
Lead,	Silver

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	250.0 ± 0.9 µg/mL	Arsenic, As	2.500 ± 0.018 µg/mL
Barium, Ba	2.501 ± 0.013 µg/mL	Beryllium, Be	2.501 ± 0.015 µg/mL
Cadmium, Cd	2.501 ± 0.013 µg/mL	Calcium, Ca	250.0 ± 1.3 µg/mL
Chromium, Cr	2.500 ± 0.015 µg/mL	Cobalt, Co	2.500 ± 0.014 µg/mL
Copper, Cu	2.500 ± 0.014 µg/mL	Iron, Fe	250.0 ± 1.0 µg/mL
Lead, Pb	2.500 ± 0.013 µg/mL	Magnesium, Mg	250.0 ± 1.3 µg/mL
Manganese, Mn	2.500 ± 0.014 µg/mL	Nickel, Ni	2.500 ± 0.014 µg/mL
Potassium, K	250.0 ± 1.2 µg/mL	Selenium, Se	4.002 ± 0.024 µg/mL
Silver, Ag	2.501 ± 0.017 µg/mL	Sodium, Na	250.0 ± 1.2 µg/mL
Thallium, Tl	2.500 ± 0.017 µg/mL	Thorium, Th	2.499 ± 0.013 µg/mL
Uranium, U	2.501 ± 0.015 µg/mL	Vanadium, V	2.500 ± 0.014 µg/mL
Zinc, Zn	2.500 ± 0.014 µg/mL		

Density: 1.042 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ba	ICP Assay	3104a	140909
Ba	Calculated		See Sec. 4.2
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Cd	Calculated		See Sec. 4.2
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Co	Calculated		See Sec. 4.2
Cr	ICP Assay	3112a	170630
Cr	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Cu	Calculated		See Sec. 4.2
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Mn	Calculated		See Sec. 4.2
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Ni	Calculated		See Sec. 4.2
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Pb	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Th	EDTA	928	928
Th	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	151215
Tl	Calculated		See Sec. 4.2
U	ICP Assay	3164	080521
U	Calculated		See Sec. 4.2

V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928
Zn	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information.

https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

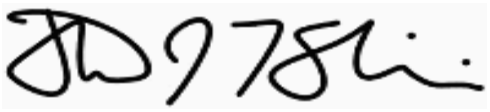
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-6020ICS-0A10
Lot Number:	T2-MEB719898
Matrix:	1.4% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Chloride,
	200 µg/mL ea: Carbon,
	100 µg/mL ea: Calcium, Aluminum, Iron, Potassium, Magnesium, Sodium, Phosphorus, Sulfur,
	2 µg/mL ea: Titanium, Molybdenum

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	**100.0 ± 0.4 µg/mL**	**Calcium, Ca**	**100.0 ± 0.5 µg/mL**
Carbon, C	**200.1 ± 0.5 µg/mL**	**Chloride, Cl**	**1 000 ± 5 µg/mL**
Iron, Fe	**100.0 ± 0.5 µg/mL**	**Magnesium, Mg**	**100.0 ± 0.5 µg/mL**
Molybdenum, Mo	**2.001 ± 0.014 µg/mL**	**Phosphorus, P**	**100.0 ± 0.6 µg/mL**
Potassium, K	**100.0 ± 0.5 µg/mL**	**Sodium, Na**	**100.0 ± 0.5 µg/mL**
Sulfur, S	**100.0 ± 0.5 µg/mL**	**Titanium, Ti**	**2.001 ± 0.015 µg/mL**

Density: 1.009 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
C	Acidimetric	84L	84L
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cl	Acidimetric	84L	84L
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mo	ICP Assay	3134	130418
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
S	Acidimetric	84L	84L
S	ICP Assay	traceable to 3154	P2-S680745
Ti	ICP Assay	3162a	130925

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

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- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 07, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 07, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

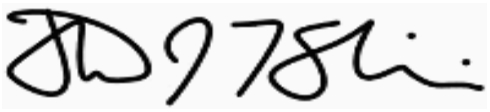
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B

Total Metals

LDW23-SS1254

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-01 B	SDG:	23A0171
Sampled:	12/08/22 08:39	Prepared:	02/23/23 11:49	File ID:	SMM 02-27-23-056
% Solids:	37.79	Preparation:	SMM EPA 7471B	Analyzed:	02/27/23 12:53
Batch:	BLB0517	Sequence:	SLB0365	Initial/Final:	0.249 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GB00073

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.229	1	0.0112	0.0531	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B

Total Metals

LDW23-SS1257

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-02 B	SDG:	23A0171
Sampled:	12/08/22 09:16	Prepared:	02/23/23 11:49	File ID:	SMM 02-27-23-057
% Solids:	34.26	Preparation:	SMM EPA 7471B	Analyzed:	02/27/23 12:56
Batch:	BLB0517	Sequence:	SLB0365	Initial/Final:	0.291 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GB00073

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.209	1	0.0105	0.0502	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B

Total Metals

LDW23-SS1262

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-03 B	SDG:	23A0171
Sampled:	12/08/22 10:36	Prepared:	02/23/23 11:49	File ID:	SMM 02-27-23-058
% Solids:	36.08	Preparation:	SMM EPA 7471B	Analyzed:	02/27/23 12:58
Batch:	BLB0517	Sequence:	SLB0365	Initial/Final:	0.2 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GB00073

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.233	1	0.0146	0.0693	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B

Total Metals

LDW23-SS1245

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-04 B	SDG:	23A0171
Sampled:	12/08/22 11:14	Prepared:	02/23/23 11:49	File ID:	SMM 02-27-23-059
% Solids:	39.48	Preparation:	SMM EPA 7471B	Analyzed:	02/27/23 13:00
Batch:	BLB0517	Sequence:	SLB0365	Initial/Final:	0.258 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GB00073

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.194	1	0.0103	0.0491	

PREPARATION BATCH SUMMARY

EPA 7471B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLB0517 Batch Matrix: Solid
Preparation: SMM EPA 7471B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1254	23A0171-01	SMM 02-27-23-056	02/23/23 11:49	FROZEN VOLUME USED
LDW23-SS1257	23A0171-02	SMM 02-27-23-057	02/23/23 11:49	FROZEN VOLUME USED
LDW23-SS1262	23A0171-03	SMM 02-27-23-058	02/23/23 11:49	FROZEN VOLUME USED
LDW23-SS1245	23A0171-04	SMM 02-27-23-059	02/23/23 11:49	FROZEN VOLUME USED
Blank	BLB0517-BLK1	SMM 02-27-23-046	02/23/23 11:49	
LCS	BLB0517-BS1	SMM 02-27-23-047	02/23/23 11:49	
Reference	BLB0517-SRM1	SMM 02-27-23-066	02/23/23 11:49	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Digestion Log

Prep Code: SMM | Balance ID: 10 | Matrix: Soil
Analyst: ML | Block ID: 9 | Date: 02/23/23
Bath Temp: 95 | Start Time: 1048 | End Time: 1149

ARI Sample ID	Sample Bottle #	pH<2	Initial Weight (g) Volume (mL)	Final Volume (mL)	# $KMnO_4$ Aliquots	CLP	Comments
23A0032-05	A		0.241	50	1		
-08	C		0.285				
-11	B		0.213				
23A0171-01			0.249				
-02			0.291				
-03			0.200				
-04			0.258				
23B0051-01	A		0.215				
-02			~~0.244~~ ①				
-03			0.252				
23B0276-01	C		0.270				
BLB0517-blk1	—		—				
-blk1	—		—				
-DUP1	—		0.245				23A0032-05
-MS1	—		0.246				
-MSD1	—		0.246				
-SRM	—		0.207				

ML 02/23/23

Chemical/Reagent ID:
HNO_3: L492 | H_2SO_4: L112 | HCl: —
5% $K_2S_2O_8$: L437 | 5% $KMnO_4$: K11727 | Digest Tube Lot: 220816S

① 0.246

Form I

METHOD BLANK DATA SHEET

EPA 7471B

Total Metals

Blank

Laboratory: Analytical Resources, LLC | SDG: 23A0171

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

Batch: BLB0517 | Laboratory ID: BLB0517-BLK1 | Prepared: 02/23/23 11:49

Matrix: Solid | Preparation: SMM EPA 7471B | Analyzed: 02/27/23 12:30

Sequence: SLB0365 | Calibration: GB00073 | Instrument: HYDRA

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	ND	1	0.00525	0.0250	U

LCS / LCS DUPLICATE RECOVERY

EPA 7471B

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	02/27/23 12:32
Batch:	BLB0517	Laboratory ID:	BLB0517-BS1
Preparation:	SMM EPA 7471B	Sequence Name:	LCS
Initial/Final:	0.2 g / 50 mL		

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Mercury	0.500	0.453		90.6	80 - 120

* Indicates values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

STANDARD REFERENCE MATERIAL RECOVERY

EPA 7471B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLB0517-SRM1
Batch: BLB0517
Initial/Final: 0.207 g / 50 mL
Preparation: SMM EPA 7471B
Analyzed: 02/27/2023 13:17
Standard ID: K008376
Expires: 04/20/2025
Standard Lot#: D112-540
Description: Metals In Soil

ANALYTE	TRUE (mg/kg wet)	FOUND (mg/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
Mercury	3.3100	3.69	0.0507	0.242	D	112	86.1 - 139.9

* Values outside of QC limits

INITIAL CALIBRATION DATA

EPA 7471B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GB00073	Instrument:	HYDRA
Calibration Date:	02/27/2023 16:35		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Mercury	0	0	0.0001	6920000	0.0005	6610000	0.001	6467000	0.002	6401000	0.005	6280600

INITIAL CALIBRATION DATA

EPA 7471B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GB00073	Instrument:	HYDRA
Calibration Date:	02/27/2023 16:35		

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Mercury	5446433	49.2	0.9999		0.99	

Method: ARI 5 ppb (NO 0.05) Operator: Admin

SMM 02-27-23

SLB0365 GB00073

Date of Analysis: 27 Feb 2023 10:15:47

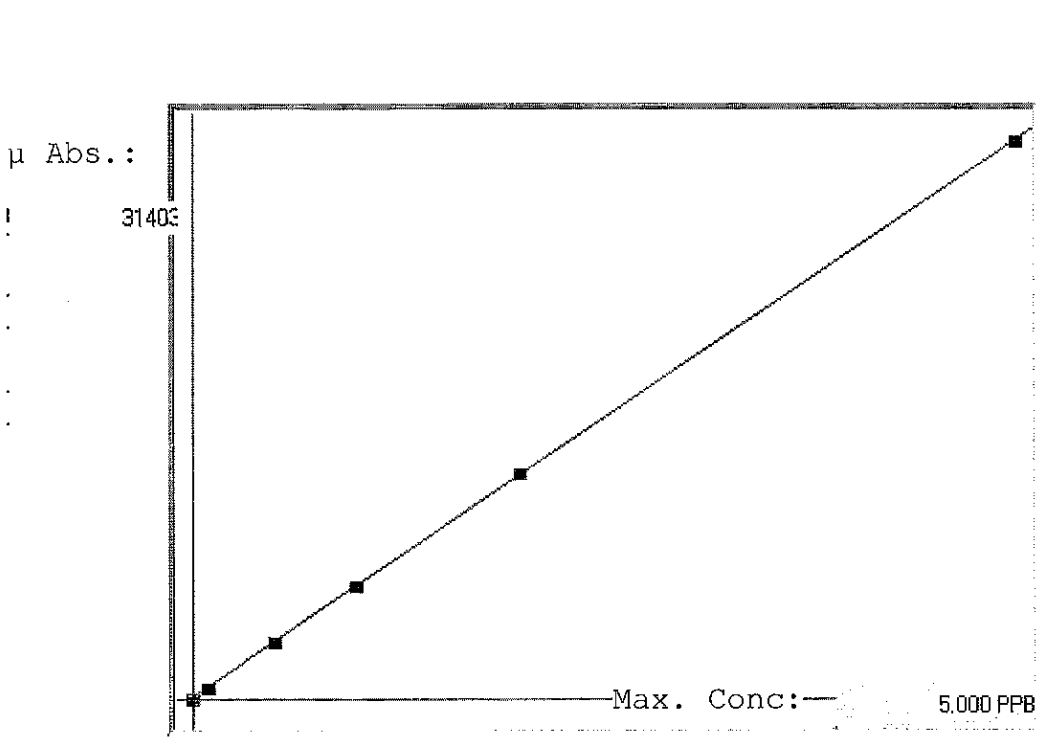
Sample ID	Mean	Units		Date	Method
SEQ-CAL1	70	PPB		27 Feb 2023 10:17:58	ARI 5 ppb (NO 0.05)
SEQ-CAL2	692	PPB		27 Feb 2023 10:20:19	ARI 5 ppb (NO 0.05)
SEQ-CAL3	3305	PPB		27 Feb 2023 10:22:41	ARI 5 ppb (NO 0.05)
SEQ-CAL4	6467	PPB		27 Feb 2023 10:25:01	ARI 5 ppb (NO 0.05)
SEQ-CAL5	12802	PPB		27 Feb 2023 10:27:22	ARI 5 ppb (NO 0.05)
SEQ-CAL6	31403	PPB		27 Feb 2023 10:29:42	ARI 5 ppb (NO 0.05)
SEQ-ICV	103.3% 4.1310	PPB	✓	27 Feb 2023 10:34:09	ARI 5 ppb (NO 0.05)
SEQ-ICB	-0.0218	PPB	✓	27 Feb 2023 10:36:28	ARI 5 ppb (NO 0.05)
SEQ-CRL	81.5% 0.0815	PPB	✓	27 Feb 2023 10:38:50	ARI 5 ppb (NO 0.05)
SEQ-CCV	104.1% 4.1620	PPB	✓	27 Feb 2023 10:41:11	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0242	PPB	✓	27 Feb 2023 10:43:29	ARI 5 ppb (NO 0.05)
BLB0507-BLK1	-0.0210	PPB		27 Feb 2023 10:45:51	ARI 5 ppb (NO 0.05)
BLB0507-BS1	1.8784	PPB	✓	27 Feb 2023 10:48:10	ARI 5 ppb (NO 0.05)
SEQ-CCV	104.3% 4.1724	PPB	✓	27 Feb 2023 10:50:29	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0236	PPB	✓	27 Feb 2023 10:52:47	ARI 5 ppb (NO 0.05)
SEQ-CCV	101.8% 4.0732	PPB	✓	27 Feb 2023 11:20:43	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0234	PPB	✓	27 Feb 2023 11:23:01	ARI 5 ppb (NO 0.05)
23A0031-01	0.4658	PPB		27 Feb 2023 11:25:23	ARI 5 ppb (NO 0.05)
BLB0507-DUP1	0.3509	PPB		27 Feb 2023 11:27:42	ARI 5 ppb (NO 0.05)
BLB0507-MS1	1.5444	PPB	✓	27 Feb 2023 11:30:01	ARI 5 ppb (NO 0.05)
BLB0507-MSD1	1.5029	PPB	✓	27 Feb 2023 11:32:20	ARI 5 ppb (NO 0.05)
23A0031-03	0.2027	PPB		27 Feb 2023 11:34:39	ARI 5 ppb (NO 0.05)
23A0031-04	0.3273	PPB		27 Feb 2023 11:36:58	ARI 5 ppb (NO 0.05)
23A0031-05	0.3475	PPB		27 Feb 2023 11:39:18	ARI 5 ppb (NO 0.05)
23A0031-06	0.2598	PPB		27 Feb 2023 11:41:37	ARI 5 ppb (NO 0.05)
23A0031-07	0.2847	PPB		27 Feb 2023 11:43:57	ARI 5 ppb (NO 0.05)
23A0031-08	0.4059	PPB		27 Feb 2023 11:46:17	ARI 5 ppb (NO 0.05)
SEQ-CCV	103.2% 4.1289	PPB	✓	27 Feb 2023 11:48:37	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0229	PPB	✓	27 Feb 2023 11:50:55	ARI 5 ppb (NO 0.05)
23A0031-09	0.3516	PPB		27 Feb 2023 11:53:17	ARI 5 ppb (NO 0.05)
23A0031-10	0.3750	PPB		27 Feb 2023 11:55:38	ARI 5 ppb (NO 0.05)
23A0031-11	0.3578	PPB		27 Feb 2023 11:57:59	ARI 5 ppb (NO 0.05)
23A0031-12	0.3277	PPB		27 Feb 2023 12:00:18	ARI 5 ppb (NO 0.05)
23A0031-13	0.3034	PPB		27 Feb 2023 12:02:37	ARI 5 ppb (NO 0.05)
23A0031-14	0.2277	PPB		27 Feb 2023 12:04:56	ARI 5 ppb (NO 0.05)
23A0031-15	0.2295	PPB		27 Feb 2023 12:07:15	ARI 5 ppb (NO 0.05)
23A0031-16	0.3961	PPB		27 Feb 2023 12:09:34	ARI 5 ppb (NO 0.05)
23A0031-17	0.3510	PPB		27 Feb 2023 12:11:53	ARI 5 ppb (NO 0.05)
23A0031-18	0.3295	PPB		27 Feb 2023 12:14:12	ARI 5 ppb (NO 0.05)
SEQ-CCV	102.4% 4.0975	PPB	✓	27 Feb 2023 12:16:32	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0232	PPB	✓	27 Feb 2023 12:18:51	ARI 5 ppb (NO 0.05)
23A0031-19	0.3130	PPB		27 Feb 2023 12:21:13	ARI 5 ppb (NO 0.05)
23A0031-20	0.2795	PPB		27 Feb 2023 12:23:33	ARI 5 ppb (NO 0.05)
23A0031-21	0.1490	PPB		27 Feb 2023 12:25:54	ARI 5 ppb (NO 0.05)
BLB0507-SRM1	1.5829	PPB	✓	27 Feb 2023 12:28:14	ARI 5 ppb (NO 0.05)
BLB0517-BLK1	-0.0169	PPB		27 Feb 2023 12:30:35	ARI 5 ppb (NO 0.05)
BLB0517-BS1	1.8111	PPB	✓	27 Feb 2023 12:32:54	ARI 5 ppb (NO 0.05)
23A0032-05	0.4565	PPB		27 Feb 2023 12:35:14	ARI 5 ppb (NO 0.05)
BLB0517-DUP1	0.3581	PPB		27 Feb 2023 12:37:33	ARI 5 ppb (NO 0.05)
BLB0517-MS1	1.5873	PPB	✓	27 Feb 2023 12:39:52	ARI 5 ppb (NO 0.05)
BLB0517-MSD1	1.5496	PPB	✓	27 Feb 2023 12:42:12	ARI 5 ppb (NO 0.05)
SEQ-CCV	103.0% 4.1197	PPB	✓	27 Feb 2023 12:44:31	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0212	PPB	✓	27 Feb 2023 12:46:50	ARI 5 ppb (NO 0.05)
23A0032-08	0.3399	PPB		27 Feb 2023 12:49:11	ARI 5 ppb (NO 0.05)
23A0032-11	0.2981	PPB		27 Feb 2023 12:51:30	ARI 5 ppb (NO 0.05)
23A0171-01	0.4313	PPB		27 Feb 2023 12:53:51	ARI 5 ppb (NO 0.05)
23A0171-02	0.4172	PPB		27 Feb 2023 12:56:10	ARI 5 ppb (NO 0.05)
23A0171-03	0.3359	PPB		27 Feb 2023 12:58:31	ARI 5 ppb (NO 0.05)
23A0171-04	0.3962	PPB		27 Feb 2023 13:00:51	ARI 5 ppb (NO 0.05)
23B0051-01	0.5168	PPB		27 Feb 2023 13:03:13	ARI 5 ppb (NO 0.05)

SMM 02-27-23

Method: ARI 5 ppb (NO 0.05) Operator: Admin Date of Analysis: 27 Feb 2023 10:15:47

Sample ID	Mean	Units		Date	Method
23B0051-02	0.5256	PPB		27 Feb 2023 13:05:33	ARI 5 ppb (NO 0.05)
23B0051-03	0.5067	PPB		27 Feb 2023 13:07:52	ARI 5 ppb (NO 0.05)
23B0276-01	0.3388	PPB		27 Feb 2023 13:10:11	ARI 5 ppb (NO 0.05)
SEQ-CCV	101.2% 4.0490	PPB	✓	27 Feb 2023 13:12:30	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0224	PPB	✓	27 Feb 2023 13:14:49	ARI 5 ppb (NO 0.05)
BLB0517-SRM1	1.5296	PPB	✓	27 Feb 2023 13:17:11	ARI 5 ppb (NO 0.05)
BLB0595-BLK1	-0.0132	PPB		27 Feb 2023 13:19:30	ARI 5 ppb (NO 0.05)
BLB0595-BS1	1.8365	PPB	✓	27 Feb 2023 13:21:49	ARI 5 ppb (NO 0.05)
23B0261-01	0.1046	PPB		27 Feb 2023 13:24:09	ARI 5 ppb (NO 0.05)
BLB0595-DUP1	0.1114	PPB		27 Feb 2023 13:26:29	ARI 5 ppb (NO 0.05)
BLB0595-MS1	1.1135	PPB	✓	27 Feb 2023 13:28:49	ARI 5 ppb (NO 0.05)
BLB0595-MSD1	1.1221	PPB	✓	27 Feb 2023 13:31:10	ARI 5 ppb (NO 0.05)
23A0598-01	0.9669	PPB		27 Feb 2023 13:33:31	ARI 5 ppb (NO 0.05)
23B0194-01	1.3587	PPB		27 Feb 2023 13:35:53	ARI 5 ppb (NO 0.05)
23B0227-04	0.8879	PPB		27 Feb 2023 13:38:12	ARI 5 ppb (NO 0.05)
SEQ-CCV	101.8% 4.0733	PPB	✓	27 Feb 2023 13:40:32	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0236	PPB	✓	27 Feb 2023 13:42:50	ARI 5 ppb (NO 0.05)
23B0261-04	0.1087	PPB		27 Feb 2023 13:45:11	ARI 5 ppb (NO 0.05)
23B0261-07	0.1433	PPB		27 Feb 2023 13:47:31	ARI 5 ppb (NO 0.05)
23B0261-10	0.1464	PPB		27 Feb 2023 13:49:50	ARI 5 ppb (NO 0.05)
23B0261-13	0.1699	PPB		27 Feb 2023 13:52:10	ARI 5 ppb (NO 0.05)
23B0261-16	0.2121	PPB		27 Feb 2023 13:54:30	ARI 5 ppb (NO 0.05)
23B0261-19	0.1623	PPB		27 Feb 2023 13:56:50	ARI 5 ppb (NO 0.05)
23B0261-22	0.1618	PPB		27 Feb 2023 13:59:10	ARI 5 ppb (NO 0.05)
23B0261-25	0.1510	PPB		27 Feb 2023 14:01:30	ARI 5 ppb (NO 0.05)
23B0261-28	0.1307	PPB		27 Feb 2023 14:03:50	ARI 5 ppb (NO 0.05)
23B0261-31	0.1460	PPB		27 Feb 2023 14:06:11	ARI 5 ppb (NO 0.05)
SEQ-CCV	100.2% 4.0095	PPB		27 Feb 2023 14:08:31	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0234	PPB		27 Feb 2023 14:10:49	ARI 5 ppb (NO 0.05)
~~SEQ-CCV~~	~~102.9% 4.1169~~	~~PPB~~	Del	27 Feb 2023 14:13:11	ARI 5 ppb (NO 0.05)
~~23B0335-01~~	~~-0.0228~~	~~PPB~~		27 Feb 2023 14:15:29	ARI 5 ppb (NO 0.05)
23B0261-34	0.1321	PPB		27 Feb 2023 14:15:46	ARI 5 ppb (NO 0.05)
23B0335-01	0.9609	PPB		27 Feb 2023 14:18:06	ARI 5 ppb (NO 0.05)
BLB0595-SRM1	1.6074	PPB		27 Feb 2023 14:20:26	ARI 5 ppb (NO 0.05)
BLB0614-BLK1	-0.0145	PPB		27 Feb 2023 14:22:45	ARI 5 ppb (NO 0.05)
BLB0614-BS1	1.8795	PPB	✓	27 Feb 2023 14:25:05	ARI 5 ppb (NO 0.05)
23B0217-02	0.2389	PPB		27 Feb 2023 14:27:25	ARI 5 ppb (NO 0.05)
BLB0614-DUP1	0.2499	PPB		27 Feb 2023 14:29:45	ARI 5 ppb (NO 0.05)
BLB0614-MS1	1.4459	PPB	✓	27 Feb 2023 14:32:05	ARI 5 ppb (NO 0.05)
BLB0614-MSD1	1.3678	PPB	✓	27 Feb 2023 14:34:25	ARI 5 ppb (NO 0.05)
23B0217-03	0.2419	PPB		27 Feb 2023 14:36:45	ARI 5 ppb (NO 0.05)
SEQ-CCV	103.4% 4.1348	PPB	✓	27 Feb 2023 14:39:07	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0229	PPB	✓	27 Feb 2023 14:41:25	ARI 5 ppb (NO 0.05)
23B0217-04	0.3339	PPB		27 Feb 2023 14:43:47	ARI 5 ppb (NO 0.05)
23B0217-05	0.2869	PPB		27 Feb 2023 14:46:08	ARI 5 ppb (NO 0.05)
23B0217-06	0.6728	PPB		27 Feb 2023 14:48:29	ARI 5 ppb (NO 0.05)
SEQ-CCV	101.4% 4.0569	PPB	✓	27 Feb 2023 14:50:50	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0218	PPB	✓	27 Feb 2023 14:53:09	ARI 5 ppb (NO 0.05)

ARI 5 ppb (NO 0.05)



Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
SEQ-CAL1 - Blank	0.000	-0.012	-0.012	69	4.110	65	69	75		
SEQ-CAL2 - 0.1 PPB	0.100	0.088	-0.012	691	0.6 %	694	695	686		
SEQ-CAL3 - 0.5 PPB	0.500	0.505	0.005	3305	1.6 %	3341	3343	3231		
SEQ-CAL4 - 1.0 PPB	1.000	1.009	0.009	6466	1.4 %	6353	6472	6575		
SEQ-CAL5 - 2.0 PPB	2.000	2.021	0.021	12802	0.6 %	12849	12870	12687		
SEQ-CAL6 - 5.0 PPB	5.000	4.990	-0.010	31403	0.7 %	31099	31643	31467		

Mercury Analysis Log

Analyst: MV
Instrument: HYDRA

Date: 02/27/23
Page: 1 of 4

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
SEQ -CAL1	SMM	1X		
-CAL2				
-CAL3				
-CAL4				
-CAL5				
-CAL6				
-ICV			✓ 4.13	
-ICB			✓ -0.02	
-CRL			✓ 0.081	
-CCV			✓ 4.16	
-CCB			✓ -0.02	
BLB0507 -BLK1				
-BS1			✓ 1.878	93.9% R
SEQ -CCV			✓ 4.17	
-CCB			✓ -0.02	
-CCV			✓ 4.07	
-CCB			✓ -0.02	
23A0031 -02				
BLB0507 -DUP1				NO RPD
-MS1			✓ 1.544	107.8% R
-MSD1			✓ 1.502	103.7% R
23A0031 -03				
-04				
-05				
-06				
-07				
-08				
SEQ -CCV			✓ 4.12	
-CCB			✓ -0.02	
23A0031 -09				

Chemical/Reagent ID:
10% $SnCl_2$: L2064
14% NH_2OH/NaCl: L716
Standard ID:
Standard: L2056 - L2061
ICV/CCV: L2053

Mercury Analysis Log

Analyst: ML
Instrument: HYDRA

Date: —
Page: 2 of 4

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
-10	S'			
-11				
-12				
-13				
-14				
-15				
-16				
-17				
-18				
SEQ -CCV			✓4.09	
↓ -CCB			✓-0.02	
23A0031 -19				
-20				
↓ -21		↓		
BLB0507 -SRM1		10X	✓1.58	118 %R
BLB0517 -BLK1		1X		
↓ -BS1			✓1.811	
23A0032 -05				
BLB0517 -DUP1				NO RPD
-MS1			✓1.587	113 %R
↓ -MSD1			✓1.549	109.3 %R
SEQ -CCV			✓4.11	
↓ -CCB			✓-0.021	
23A0032 -08				
↓ -11				
23A0171 -01				
-02				
-03				
↓ -04				
23B0051 -01				

Chemical/Reagent ID:
10% $SnCl_2$: —
14% NH_2OH/NaCl: —
Standard ID:
Standard: —
ICV/CCV: —

Mercury Analysis Log

Analyst: ← Date: —

Instrument: — Page: 3 of 4

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
-02				
-03				
23B0276 -01				
SEQ -CCV			✓4.04	
-CCB			✓-0.02	
BLB0517 -SRM1		10X	✓1.529	112 %R
BLB0595 -BLK1		1X		
-BS1			✓1.836	91.8 %R
23B0261 -01				
BLB0595 -DUP1				RPD= 0.29
-MS1			✓1.113	
-MSD1			✓1.122	
23A0598 -01				
23B0194 -01				
23B0227 -04				
SEQ -CCV			✓4.07	
-CCB			✓-0.02	
23B0261 -04				
-07				
-10				
-13				
-16				
-19				
-22				
-25				
-28				
-31				
SEQ -CCV			✓4.00	
-CCB			✓-0.02	
-CCV			✓4.11	

Chemical/Reagent ID:

10% $SnCl_2$: — 14% NH_2OH/NaCl: —

Standard ID:

Standard: — ICV/CCV: —

Mercury Analysis Log

Analyst: —

Instrument: —

Date: —

Page: 4 of 4

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
23B0335 -01				No read; del
23B0261 -34				
23B0335 -01				
BLB0595 -SRM1		10X	✓1.607	120%R
BLB0614 -BLK1		1X		
↓ -BS1			1.879	93.9%R
23B0217 -02				
BLB0614 -DUP1				RPD=4.50
↓ -MS1			✓1.445	120.7%R
↓ -MSD1			✓1.367	112.8%R
23B0217 -03				
SEQ -CCV			✓4.13	
↓ -CCB			✓-0.02	
23B0217 -04				
↓ -05				
↓ -06				
SEQ -CCV				
↓ -CCB	↓	↓		
				AM 02/24/23

Chemical/Reagent ID:

10% $SnCl_2$: —

14% $NH_2OH/NaCl$: —

Standard ID:

Standard: —

ICV/CCV: —

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 7471B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: HYDRA
Calibration: GB00073
Control Limt: +/- 20.00%
Sequence: SLB0365

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLB0365-ICV1	Mercury	0.0040000	0.00413	103	mg/L	EPA 7471B
SLB0365-CCV1	Mercury	0.0040000	0.00416	104	mg/L	EPA 7471B
SLB0365-CCV2	Mercury	0.0040000	0.00417	104	mg/L	EPA 7471B
SLB0365-CCV3	Mercury	0.0040000	0.00407	102	mg/L	EPA 7471B
SLB0365-CCV4	Mercury	0.0040000	0.00413	103	mg/L	EPA 7471B
SLB0365-CCV5	Mercury	0.0040000	0.00410	102	mg/L	EPA 7471B
SLB0365-CCV6	Mercury	0.0040000	0.00412	103	mg/L	EPA 7471B
SLB0365-CCV7	Mercury	0.0040000	0.00405	101	mg/L	EPA 7471B
SLB0365-CCV8	Mercury	0.0040000	0.00407	102	mg/L	EPA 7471B
SLB0365-CCV9	Mercury	0.0040000	0.00401	100	mg/L	EPA 7471B
SLB0365-CCVA	Mercury	0.0040000	0.00413	103	mg/L	EPA 7471B
SLB0365-CCVB	Mercury	0.0040000	0.00406	101	mg/L	EPA 7471B

* Values outside of QC limits

INSTRUMENT BLANKS
EPA 7471B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: HYDRA
Sequence: SLB0365

SDG: 23A0171
Project: AOC5 MR Phase 1
Calibration: GB00073
Date Analyzed: 02/27/23 10:36

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLB0365-ICB1	Mercury	-0.000022	0.000021	0.000100	mg/L	
SLB0365-CCB1	Mercury	-0.000024	0.000021	0.000100	mg/L	
SLB0365-CCB2	Mercury	-0.000024	0.000021	0.000100	mg/L	
SLB0365-CCB3	Mercury	-0.000023	0.000021	0.000100	mg/L	
SLB0365-CCB4	Mercury	-0.000023	0.000021	0.000100	mg/L	
SLB0365-CCB5	Mercury	-0.000023	0.000021	0.000100	mg/L	
SLB0365-CCB6	Mercury	-0.000021	0.000021	0.000100	mg/L	
SLB0365-CCB7	Mercury	-0.000022	0.000021	0.000100	mg/L	
SLB0365-CCB8	Mercury	-0.000024	0.000021	0.000100	mg/L	
SLB0365-CCB9	Mercury	-0.000023	0.000021	0.000100	mg/L	
SLB0365-CCBA	Mercury	-0.000023	0.000021	0.000100	mg/L	
SLB0365-CCBB	Mercury	-0.000022	0.000021	0.000100	mg/L	

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 7471B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLB0365
Instrument: HYDRA
Calibration: GB00073

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Cal Standard	SLB0365-CAL1	SMM 02-27-23-001	NA	02/27/23 10:17
Cal Standard	SLB0365-CAL2	SMM 02-27-23-002	NA	02/27/23 10:20
Cal Standard	SLB0365-CAL3	SMM 02-27-23-003	NA	02/27/23 10:22
Cal Standard	SLB0365-CAL4	SMM 02-27-23-004	NA	02/27/23 10:25
Cal Standard	SLB0365-CAL5	SMM 02-27-23-005	NA	02/27/23 10:27
Cal Standard	SLB0365-CAL6	SMM 02-27-23-006	NA	02/27/23 10:29
Initial Cal Check	SLB0365-ICV1	SMM 02-27-23-007	NA	02/27/23 10:34
Initial Cal Blank	SLB0365-ICB1	SMM 02-27-23-008	NA	02/27/23 10:36
Instrument RL Check	SLB0365-CRL1	SMM 02-27-23-009	NA	02/27/23 10:38
Calibration Check	SLB0365-CCV1	SMM 02-27-23-010	NA	02/27/23 10:41
Calibration Blank	SLB0365-CCB1	SMM 02-27-23-011	NA	02/27/23 10:43
Calibration Check	SLB0365-CCV2	SMM 02-27-23-014	NA	02/27/23 10:50
Calibration Blank	SLB0365-CCB2	SMM 02-27-23-015	NA	02/27/23 10:52
Calibration Check	SLB0365-CCV3	SMM 02-27-23-016	NA	02/27/23 11:20
Calibration Blank	SLB0365-CCB3	SMM 02-27-23-017	NA	02/27/23 11:23
Calibration Check	SLB0365-CCV4	SMM 02-27-23-028	NA	02/27/23 11:48
Calibration Blank	SLB0365-CCB4	SMM 02-27-23-029	NA	02/27/23 11:50
Calibration Check	SLB0365-CCV5	SMM 02-27-23-040	NA	02/27/23 12:16
Calibration Blank	SLB0365-CCB5	SMM 02-27-23-041	NA	02/27/23 12:18
Blank	BLB0517-BLK1	SMM 02-27-23-046	Solid	02/27/23 12:30
LCS	BLB0517-BS1	SMM 02-27-23-047	Solid	02/27/23 12:32
Calibration Check	SLB0365-CCV6	SMM 02-27-23-052	NA	02/27/23 12:44
Calibration Blank	SLB0365-CCB6	SMM 02-27-23-053	NA	02/27/23 12:46
LDW23-SS1254	23A0171-01	SMM 02-27-23-056	Solid	02/27/23 12:53
LDW23-SS1257	23A0171-02	SMM 02-27-23-057	Solid	02/27/23 12:56
LDW23-SS1262	23A0171-03	SMM 02-27-23-058	Solid	02/27/23 12:58
LDW23-SS1245	23A0171-04	SMM 02-27-23-059	Solid	02/27/23 13:00
Calibration Check	SLB0365-CCV7	SMM 02-27-23-064	NA	02/27/23 13:12
Calibration Blank	SLB0365-CCB7	SMM 02-27-23-065	NA	02/27/23 13:14

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 7471B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLB0365

SDG: 23A0171
Project: AOC5 MR Phase 1
Instrument: HYDRA
Calibration: GB00073

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Reference	BLB0517-SRM1	SMM 02-27-23-066	Solid	02/27/23 13:17
Calibration Check	SLB0365-CCV8	SMM 02-27-23-076	NA	02/27/23 13:40
Calibration Blank	SLB0365-CCB8	SMM 02-27-23-077	NA	02/27/23 13:42
Calibration Check	SLB0365-CCV9	SMM 02-27-23-088	NA	02/27/23 14:08
Calibration Blank	SLB0365-CCB9	SMM 02-27-23-089	NA	02/27/23 14:10
Calibration Check	SLB0365-CCVA	SMM 02-27-23-102	NA	02/27/23 14:39
Calibration Blank	SLB0365-CCBA	SMM 02-27-23-103	NA	02/27/23 14:41
Calibration Check	SLB0365-CCVB	SMM 02-27-23-107	NA	02/27/23 14:50
Calibration Blank	SLB0365-CCBB	SMM 02-27-23-108	NA	02/27/23 14:53

DETECTION LEVEL STANDARD
EPA 7471B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: HYDRA
Calibration: GB00073
Sequence: SLB0365
Lab Sample ID: SLB0365-CRL1

Analyte	True	Found	%R	Units	QC Limts
Mercury	0.000100	0.000082	81.5	mg/L	70 - 130

* Values outside of QC limits

HOLDING TIME SUMMARY

Analysis: EPA 7471B

Laboratory: Analytical Resources, LLC SDG: 23A0171

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

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1254 23A0171-01	12/08/22 08:39	12/08/22 17:18	02/23/23 11:49	77	365	02/27/23 12:53	81	365	
LDW23-SS1257 23A0171-02	12/08/22 09:16	12/08/22 17:18	02/23/23 11:49	77	365	02/27/23 12:56	81	365	
LDW23-SS1262 23A0171-03	12/08/22 10:36	12/08/22 17:18	02/23/23 11:49	77	365	02/27/23 12:58	81	365	
LDW23-SS1245 23A0171-04	12/08/22 11:14	12/08/22 17:18	02/23/23 11:49	77	365	02/27/23 13:00	81	365	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 7471B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: HYDRA

Analyte	MDL	RL	Units
Mercury	0.00525	0.0250	mg/kg

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Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGHG1
Lot Number:	S2-HG711246
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Mercury
Starting Material:	Hg Metal
Starting Material Lot#:	1959
Starting Material Purity:	99.9993%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1000 ± 3 µg/mL

Density: 1.026 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **1004 ± 6 µg/mL**
ICP Assay NIST SRM 3133 Lot Number: 160921

Assay Method #2 **998 ± 3 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **1001 ± 3 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000210	M	Eu	<	0.000210	O	Na		0.000626	M	Se	<	0.008100	M	Zn	<	0.000810
M	Al		0.000161	O	Fe	<	0.001600	M	Nb	<	0.000410	O	Si		0.000626	M	Zr	<	0.000410
M	As	<	0.002500	M	Ga	<	0.000210	M	Nd	<	0.000210	M	Sm	<	0.000210				
O	Au	<	0.001700	M	Gd	<	0.000210	O	Ni	<	0.001400	M	Sn	<	0.000410				
M	B	<	0.008500	M	Ge	<	0.000410	M	Os	<	0.003900	O	Sr	<	0.000110				
M	Ba	<	0.000210	M	Hf	<	0.000210	O	P	<	0.029000	M	Ta	<	0.000210				
O	Be	<	0.000110	s	Hg	<		M	Pb	<	0.000210	M	Tb	<	0.000210				
M	Bi	<	0.001100	M	Ho	<	0.000210	M	Pd	<	0.003500	M	Te	<	0.005700				
O	Ca		0.004754	M	In	<	0.000210	M	Pr	<	0.000210	M	Th	<	0.000210				
M	Cd	<	0.000210	M	Ir	<	0.000210	M	Pt	<	0.000210	O	Ti	<	0.000430				
M	Ce	<	0.000210	O	K		0.000731	M	Rb	<	0.000210	O	Tl	<	0.005400				
M	Co	<	0.000210	M	La	<	0.000210	M	Re	<	0.000210	M	Tm	<	0.000210				
O	Cr	<	0.003300	O	Li	<	0.000110	M	Rh	<	0.001100	M	U	<	0.000410				
M	Cs	<	0.000410	M	Lu	<	0.000210	M	Ru	<	0.000810	M	V	<	0.000210				
M	Cu	<	0.000810	O	Mg		0.000104	O	S	<	0.022000	M	W	<	0.001100				
M	Dy	<	0.000210	O	Mn	<	0.000430	M	Sb	<	0.000210	M	Y	<	0.000210				
M	Er	<	0.000210	M	Mo	<	0.000210	M	Sc	<	0.000210	M	Yb	<	0.000210				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 200.59 +2 4 Hg(OH)(aq) 1+
Chemical Compatibility - Stable in HNO3. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.
Stability - 2-100 ppb levels not stable in 1% HNO3 / LDPE container, stable in 10% HNO3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO3 / LDPE container.
Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO3); Oxide (Soluble in HNO3); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th ,Rh , Fe, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 18, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 18, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	QCP-QCS-4
Lot Number:	R2-MEB695951
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	5 µg/mL ea: Mercury

Second Source: Whenever possible, this solution was manufactured from a second set of concentrates in our manufacturing facility.

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Mercury, Hg	**5.011 ± 0.023 µg/mL**		

Density: 1.035 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Hg	ICP Assay	3133	061204
Hg	EDTA	928	928
Hg	Calculated		See Sec. 4.2

The follow ing equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 20, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 20, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

K8376

Certified Reference Material

▪ Certificate of Analysis ▪

1. The **Certified Values** are the actual gravimetric/volumetric "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** represents an expanded uncertainty and approximates a 95% confidence interval. The uncertainty is based on the characterization, homogeneity and stability characteristics of the product, multiplied by a coverage factor (k=2). The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product. The formula used to calculate the expanded uncertainty is:
$U_{expanded} = k * SQRT((U_{char}^2) + (U_{homogen}^2) + (U_{LTS}^2) + (U_{STS}^2) + (U_{RSS}^2))$

Where:

$U_{expanded}$ = Expanded uncertainty.
k = Coverage factor.
U_{char} = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.
$U_{homogen}$ = Standard uncertainty of the homogeneity assessment.
U_{LTS} = Standard uncertainty associated with long-term stability.
U_{STS} = Standard uncertainty associated with short-term (transport) stability.
U_{RSS} = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).

3. The **QC Performance Acceptance Limits (QC PALs™)** are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this certified reference material alongside USEPA and NELAC compliant PT study materials. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and therefore, the acceptance limits of this certified reference material and any PT study material may differ relative to their difference in concentrations.

5. The **PT Performance Data** include the mean value, percent recovery and number of data points reported by laboratories in our Proficiency Testing study compared to the Certified Values. In the event this lot was not used in a proficiency testing scheme, the data displayed was generated internally by ERA.

6. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** = [(% recovery ERA certified reference material)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.

7. **Metrological Traceability.** This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.

8. For additional information on this product such as intended use, storage information, instructions for use, minimum sample size, and safety information, please refer to the Product Use Instructions provided.

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer

Brian Miller

Brian Miller

Quality Officer

Matthew Seebeck

16341 Table Mountain Pkwy ▪ Golden, CO 80403 ▪ T: 800.372.0122 ▪ 303.431.8454 ▪ www.eraqc.com

ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number[6]	Recovery
	mg/kg	mg/kg	%			%
Aluminum	10100	7970	78.9	144	-	-
Antimony	277	136	49.1	161	-	-
Arsenic	101	87.4	86.6	188	-	-
Barium	411	347	84.5	173	-	-
Beryllium	124	103	82.8	162	-	-
Boron	220	133	60.4	105	-	-
Cadmium	212	160	75.5	190	-	-
Calcium	5190	4100	79.0	131	-	-
Chromium	282	231	82.0	184	-	-
Cobalt	310	241	77.8	166	-	-
Copper	165	144	87.4	188	-	-
Iron	15000	14200	94.7	144	-	-
Lead	289	266	92.1	196	-	-
Lithium	6.42	6.37	99.2	33	-	-
Magnesium	2570	2220	86.5	132	-	-
Manganese	670	555	82.8	165	-	-
Mercury	3.31	3.74	113	117	-	-
Molybdenum	253	211	83.6	158	-	-
Nickel	458	350	76.5	187	-	-
Potassium	2420	1940	80.2	136	-	-
Selenium	154	130	84.7	174	-	-
Silver	65.0	57.1	87.9	166	-	-
Sodium	161	117	73.0	123	-	-
Strontium	98.8	84.5	85.5	113	-	-
Thallium	87.4	75.4	86.3	163	-	-
Tin	112	93.8	83.8	114	-	-
Titanium	463	333	71.8	115	-	-
Uranium	208	186	89.5	43	-	-
Vanadium	103	88.6	86.0	161	-	-
Zinc	187	160	85.5	186	-	-

16341 Table Mountain Pkwy ▪ Golden, CO 80403 ▪ T: 800.372.0122 ▪ 303.431.8454 ▪ www.eraqc.com

ERA

A Waters Company

Certified Reference Material

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D115-540
Certificate Issue Date: September 14, 2021
Expiration Date: April 20, 2025
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	7970	10.4	3760 - 12200	3960 - 12000
Antimony	277	136	11.1	D.L. - 275	27.7 - 339
Arsenic	101	87.4	14.2	71.5 - 103	61.2 - 114
Barium	411	347	9.45	279 - 415	261 - 452
Beryllium	124	103	6.07	83.1 - 122	77.0 - 136
Boron	220	133	32.2	84.5 - 181	79.7 - 242
Cadmium	212	160	8.65	127 - 193	120 - 233
Calcium	5190	4100	11.2	3220 - 4970	2940 - 5710
Chromium	282	231	14.9	184 - 279	162 - 310
Cobalt	310	241	12.8	193 - 289	181 - 341
Copper	165	144	13.1	119 - 170	108 - 182
Iron	15000	14200	19.2	8600 - 19800	5010 - 23400
Lead	289	266	34.5	217 - 315	197 - 335
Lithium	6.42	6.37	18.0	4.19 - 8.54	3.13 - 9.60
Magnesium	2570	2220	6.94	1660 - 2780	1360 - 3080
Manganese	670	555	10.5	439 - 670	429 - 737
Mercury	3.31	3.74	7.72	2.85 - 4.63	2.24 - 5.23
Molybdenum	253	211	26.1	167 - 256	151 - 278
Nickel	458	350	19.3	277 - 424	245 - 504
Potassium	2420	1940	6.65	1330 - 2550	1130 - 2750
Selenium	154	130	5.42	101 - 160	87.0 - 174
Silver	65.0	57.1	9.66	44.8 - 69.5	40.1 - 74.1
Sodium	161	117	23.8	79.3 - 156	35.7 - 199
Strontium	98.8	84.5	9.49	66.6 - 102	60.3 - 109

16341 Table Mountain Pkwy ▪ Golden, CO 80403 ▪ T: 800.372.0122 ▪ 303.431.8454 ▪ www.eraqc.com

▪ Certificate of Analysis ▪

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Thallium	87.4	75.4	4.33	60.1 - 90.7	48.5 - 102
Tin	112	93.8	10.1	71.9 - 116	52.7 - 135
Titanium	463	333	10.9	54.7 - 610	14.7 - 650
Uranium	208	186	7.30	137 - 235	125 - 247
Vanadium	103	88.6	12.2	68.6 - 109	58.1 - 119
Zinc	187	160	8.03	126 - 194	112 - 208

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NOTE: Do not enter data in blue shaded cells as they are calculated fields. Green shaded cells MAY be altered if a rewigh is called for.

TOTAL SOLIDS (TS) BENCHSHEET for Solid samples

Method: Total Solids, Metals Correction

dry at 104°C (12-24 hr)

Batch:	BLA0523
Date:	1/23/2023 17:34
Analyst:	AR

Instrumentation

Drying Oven: OVEN07

Analytical Balance: BAL10

Batch drying time

record times as mm/dd/yy hh:mm

date/time in oven: 1/23/2023 18:38

date/time out: 1/24/2023 13:47

elapsed hrs = 19.2 OK

Temp in: 105 °C

Temp out: 105 °C

TS (%) calculated as:
Final dry wt (g) = (Dry Wt - Tare Wt)
TS = (Final Dry Wt)/ (grams Sample-Tare)

Sample ID	Tare Weight (g)	Tare + Sample Weight (g)	Tare + Sample Dry Weight @ 104°C (g)			dry Wt (g)	TS (%)	Notes
			1	2	3			
23A0144-01	1.0150	10.0230	8.8700			7.8550	87.20%	
23A0144-02	1.0530	10.0310	8.8160			7.7630	86.47%	
23A0144-03	1.0420	10.0450	8.9410			7.8990	87.74%	
23A0144-04	1.0460	10.0010	8.9000			7.8540	87.71%	
23A0144-05	1.0250	10.0510	8.7950			7.7700	86.08%	
23A0171-01	1.0370	10.0220	4.4320			3.3950	37.79%	
23A0171-02	1.0310	10.0170	4.1100			3.0790	34.26%	
23A0171-03	1.0130	10.0550	4.2750			3.2620	36.08%	
23A0171-04	1.0360	10.0480	4.5940			3.5580	39.48%	
23A0215-01	1.0430	10.0350	9.1150			8.0720	89.77%	
23A0266-01	1.0380	10.0070	8.8460			7.8080	87.06%	
23A0266-02	1.0500	10.0450	8.8990			7.8490	87.26%	
23A0266-03	1.0400	10.0580	8.8390			7.7990	86.48%	
23A0266-04	1.0510	10.0630	8.8000			7.7490	85.99%	
23A0266-05	1.0240	10.0930	8.9090			7.8850	86.94%	
23A0272-01	1.0250	10.0460	8.9110			7.8860	87.42%	
23A0272-02	1.0330	10.0130	8.2080			7.1750	79.90%	
23A0288-01	1.0200	10.0200	9.1510			8.1310	90.34%	
23A0368-01	1.0310	10.0190	4.1200			3.0890	34.37%	
23A0368-02	1.0480	10.0590	9.6380			8.5900	95.33%	
23A0399-01	1.0340	10.0240	9.8690			8.8350	98.28%	
23A0399-02	1.0560	10.0250	9.8140			8.7580	97.65%	
23A0401-01	1.0560	10.0170	9.4110			8.3550	93.24%	
23A0401-02	1.0210	10.0650	9.5180			8.4970	93.95%	
23A0401-03	1.0480	10.0360	9.3040			8.2560	91.86%	
23A0401-04	1.0410	10.0530	9.0400			7.9990	88.76%	
23A0401-05	1.0380	10.0170	8.9450			7.9070	88.06%	
23A0462-01	1.0440	10.0430	10.0280			8.9840	99.83%	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B

Total Metals

LDW23-SS1254

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-01 B	SDG:	23A0171
Sampled:	12/08/22 08:39	Prepared:	02/24/23 16:23	File ID:	XDT_m2230306-184
% Solids:	37.79	Preparation:	SWN EPA 3050B	Analyzed:	03/07/23 04:17
Batch:	BLB0518	Sequence:	SLC0078	Initial/Final:	1.006 g Wet / 50 mL
Instrument:	ICPMS1			Calibration:	GC00021

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-92-1	Lead	28.3	20	0.14	0.26	
7440-22-4	Silver	0.29	20	0.06	0.53	J

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B

Total Metals

LDW23-SS1254

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-01 B	SDG:	23A0171
Sampled:	12/08/22 08:39	Prepared:	02/24/23 16:23	File ID:	XDT_m2230307-126
% Solids:	37.79	Preparation:	SWN EPA 3050B	Analyzed:	03/08/23 00:42
Batch:	BLB0518	Sequence:	SLC0109	Initial/Final:	1.006 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GC00026

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	30.7	50	1.71	3.29	D

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B

Total Metals

LDW23-SS1257

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-02 B	SDG:	23A0171
Sampled:	12/08/22 09:16	Prepared:	02/24/23 16:23	File ID:	XDT_m2230306-185
% Solids:	34.26	Preparation:	SWN EPA 3050B	Analyzed:	03/07/23 04:21
Batch:	BLB0518	Sequence:	SLC0078	Initial/Final:	1.003 g Wet / 50 mL
Instrument:	ICPMS1			Calibration:	GC00021

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-92-1	Lead	36.3	20	0.15	0.29	
7440-22-4	Silver	0.38	20	0.06	0.58	J

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B

Total Metals

LDW23-SS1257

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-02 B	SDG:	23A0171
Sampled:	12/08/22 09:16	Prepared:	02/24/23 16:23	File ID:	XDT_m2230307-127
% Solids:	34.26	Preparation:	SWN EPA 3050B	Analyzed:	03/08/23 00:46
Batch:	BLB0518	Sequence:	SLC0109	Initial/Final:	1.003 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GC00026

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	34.8	50	1.89	3.64	D

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B

Total Metals

LDW23-SS1262

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-03 B	SDG:	23A0171
Sampled:	12/08/22 10:36	Prepared:	02/24/23 16:23	File ID:	XDT_m2230306-186
% Solids:	36.08	Preparation:	SWN EPA 3050B	Analyzed:	03/07/23 04:26
Batch:	BLB0518	Sequence:	SLC0078	Initial/Final:	1.054 g Wet / 50 mL
Instrument:	ICPMS1			Calibration:	GC00021

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-92-1	Lead	32.0	20	0.14	0.26	
7440-22-4	Silver	0.32	20	0.06	0.53	J

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B

Total Metals

LDW23-SS1262

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-03 B	SDG:	23A0171
Sampled:	12/08/22 10:36	Prepared:	02/24/23 16:23	File ID:	XDT_m2230307-128
% Solids:	36.08	Preparation:	SWN EPA 3050B	Analyzed:	03/08/23 00:50
Batch:	BLB0518	Sequence:	SLC0109	Initial/Final:	1.054 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GC00026

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	33.8	50	1.71	3.29	D

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B
Total Metals

LDW23-SS1245

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0171-04 B	SDG:	23A0171
Sampled:	12/08/22 11:14	Prepared:	02/24/23 16:23	File ID:	XDT_m2230306-187
% Solids:	39.48	Preparation:	SWN EPA 3050B	Analyzed:	03/07/23 04:30
Batch:	BLB0518	Sequence:	SLC0078	Initial/Final:	1.064 g Wet / 50 mL
Instrument:	ICPMS1			Calibration:	GC00021

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	28.9	20	0.62	1.19	
7439-92-1	Lead	24.4	20	0.12	0.24	
7440-22-4	Silver	0.25	20	0.05	0.48	J

PREPARATION BATCH SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC SDG: 23A0171

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

Batch: BLB0518 Batch Matrix: Solid Preparation: SWN EPA 3050B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1254	23A0171-01	XDT_m2230307-126	02/24/23 16:23	
LDW23-SS1254	23A0171-01	XDT_m2230306-184	02/24/23 16:23	
LDW23-SS1257	23A0171-02	XDT_m2230307-127	02/24/23 16:23	
LDW23-SS1257	23A0171-02	XDT_m2230306-185	02/24/23 16:23	
LDW23-SS1262	23A0171-03	XDT_m2230307-128	02/24/23 16:23	
LDW23-SS1262	23A0171-03	XDT_m2230306-186	02/24/23 16:23	
LDW23-SS1245	23A0171-04	XDT_m2230306-187	02/24/23 16:23	
Blank	BLB0518-BLK1	XDT_m2230301-060	02/24/23 16:23	
LCS	BLB0518-BS1	XDT_m2230301-061	02/24/23 16:23	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Digestion Log

Analyst: ML Date: 02/24/23 Time: 1100-1623 Balance ID: 16

Matrix: Soil Block ID: 3 Block Temp: 95° Thermometer: 20-4

ARI Sample ID	Btl #	pH<2	Prep Code: SNN Initial Wt (g) Vol (mL)	Prep Code: SNN Final Vol (mL)	Prep Code: Initial Wt (g) Vol (mL)	Prep Code: Final Vol (mL)	Comments
23A0171-01	D		1.072	1.072			
23A0032-01	B		1.070 (2)	~~1.069~~			
-02	C		1.029	1.029			
-03	↓		1.026	1.026			
-04	A		1.009	1.009			
-05	↓		1.015	~~1.014~~ (1)			
-06	B		1.014	1.014			
-07	↓		1.093	1.093			
-08	C		1.022	1.022			
-11	B		1.029	1.029			
23A0171-01			1.006	1.006			
-02			1.003	1.003			
-03			1.054	1.054			
-04			1.064	1.064			
23B0051-01	A		1.074	1.071			
-02			1.084	1.084			
-03			1.041	1.041			
23B0276-01	C		1.034	1.034			
BLB0518-BLK1	—		—	—			
-BS1	—		—	—			
-DUP1	—		1.070	1.070			23A0032-01
-MS1	—		1.075	1.075			↓
-MSD1	—		1.073	1.073			
-Semi	—		1.001	1.001	(3)		
—	—	—	—	—	ML 02/24/23	—	—
—	—	—	—	—	—	—	—

Chemical/Reagent ID:

HNO_3: L492 1:1 HNO_3: L1314 HCl: — H_2O_2: K110560

Tube Lot#: 2208005 Boiling Chip Lot#: — (DoD Only)

(1) 1.015 (2) 1.070

(3) 50ml

Form I

METHOD BLANK DATA SHEET

EPA 6020B

Total Metals

Blank

Laboratory: Analytical Resources, LLC | SDG: 23A0171

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

Batch: BLB0518 | Laboratory ID: BLB0518-BLK1 | Prepared: 02/24/23 16:23

Matrix: Solid | Preparation: SWN EPA 3050B | Analyzed: 03/01/23 21:11

Sequence: SLC0028 | Calibration: GC00005 | Instrument: ICPMS2

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium-52	ND	20	0.26	0.50	U
7439-92-1	Lead-208	ND	20	0.05	0.10	U
7440-22-4	Silver-107	ND	20	0.02	0.20	U

LCS / LCS DUPLICATE RECOVERY

EPA 6020B

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	03/01/23 21:16
Batch:	BLB0518	Laboratory ID:	BLB0518-BS1
Preparation:	SWN EPA 3050B	Sequence Name:	LCS
Initial/Final:	1 g / 50 mL		

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Chromium-52	25.0	26.0		104	80 - 120
Lead-208	25.0	26.0		104	80 - 120
Silver-107	25.0	27.0		108	80 - 120

* Indicates values outside of QC limits

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00026	Instrument:	ICPMS2
Calibration Date:	03/07/2023 13:46		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Chromium-52	0	0	0.5	66304	10	23512.8	20	22400	50	20756.26	100	21579.44
Chromium-53	0	0	0.5	2740	10	2505.8	20	2485.45	50	2394.3	100	2404.1

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory: Analytical Resources, LLC
Instrument: ICPMS2
Calibration: GC00026
Calibration Date: 3/7/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Chromium-52	25758.75	84.5	0.9994		0.998	
Chromium-53	2088.275	49.4	0.9999		0.998	

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ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 3/7/23 **Analyst:** MS **Sequence:** SLCØ1Ø9 **Cal:** GCØØØ26

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CAL1	L2232		
		-CAL2	L22ØØ		
		-CAL3	L22Ø1		Se sl. noisy-mt, R-Value & QC OK
		-CAL4	L22Ø2		Ge sl. noisy-%RT Analytes OK
		-CAL5	L2511		
		-CAL6	L22Ø4		
		-IBL1	—		
		-ICV1	LØ243		
		-ICB1	L2232		
		-CCV1	L2511		
		-CCB1	L2232		
		-CRL1	L22ØØ		
	✓	-IFA1	—		Cr^{53} ↑/Tb noisy
		-IFA1	L2ØØ6		↓
		-IFB1	L2ØØ7		
		-HCV1	L2ØØ8		
		-HCV2	L2ØØ9		
		-IBL2+3	—		
		-CCV2			
		-CCB2			
	✓	-CAL1			
		-CCV3			Tl sl. noisy-Value OK
		-CCB3			
		BLCØØØ8-BLK3	REN		Mo, Se, Tl only

Analytical Resources, Incorporated
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ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 3/7/23 **Analyst:** MB **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		BLCΦΦΦ8-BS3	REN		Mo,Se,Tl only
		BLCΦΦ46-BLK2			Mn↑ - Affected samples >10x; Fe,Mn only
		↓ -BS2			
		23BΦ388-Φ4		2	Mn>10x BLK cont.
		↓ -Φ2			
		BLCΦΦ46-DUP2			
		↓ -MS2			Mn STL
		SEQ.IBL4			
		-CCV4			
		-CCB4			
		BLCΦΦΦ7-BLK1	REN		
		↓ -BS1			
		23BΦ35Φ-Φ2RE1			S6 only
		↓ -Φ1			
		23BΦ36Φ-Φ1			
		↓ -Φ2			
		23BΦ5Φ1-Φ1		2	Mo,Se,Tl only
		BLCΦΦΦ8-DUP3			
		↓ -MS3			
		SEQ.IBL5			
		-CCV5			
		-CCB5			
	✓	-CAL1			Fe,Mn,Mo,Ni,Tl Removed
		-CCV6			

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ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/7/23 **Analyst:** MS **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CCB6			
		BLCΦ145-BLK1	REN		
		↓ -BS1	↓		
		BLBΦ666-BLK1	SWN	20	
		↓ -BS1			
		23BΦ329-Φ2			Mi<2sl. noisy - isotopes agree
		↓ -Φ1			
		BLBΦ666-DUP1			Pb RPD↑
		↓ -MS1			Sb %R↓
		↓ -MSD1	↓	↓	↓
		SEQ-IBL7			
		↓ -CCV7			
		↓ -CCB7			
		23BΦ411Φ-Φ2	SWN	20	Sc↑ Not Needed
		-Φ3			
		-Φ4			
		-Φ5			
		-Φ6			/ As sl. noisy — No Ag
		-Φ7			
		-Φ8			Sc↑ Not Needed / Ge sl. noisy — No As, Cu, Zn
		-Φ9			/ As sl. noisy — No As
		-1Φ			
		-11			/ Tb sl. noisy — No Pb
		SEQ-CCV8			Tb sl. noisy - %R + Analytes OK

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ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/7/23 **Analyst:** MB **Sequence:** ~~~~ **Cal:** ~~~~

All corrections made by analyst unless otherwise noted. MB 3/7/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CCB8			
		23BΦ41Φ-12	SWN	20	Sc↑ - Not Needed
		-13			
		-14			
		-15			
		-16			Ge noisy — No As, Cu, Zn
		-17			
		-18			
		-19			Tb sl. noisy — No Pb
		-2Φ			Sc↑ - Not Needed
		23BΦ411-Φ2			
		SEQ-CCV9			
		↓ -CCB9			
		23BΦ411-Φ3	SWN	20	Sc↑ - Not Needed / As sl. noisy — No As
		-Φ4			
		-Φ5			
		-Φ6			
		-Φ7			
		-Φ8			Tb sl. noisy — No Pb
		-Φ9			Ge sl. noisy — No As, Cu, Pb, Zn
		-1Φ			
		-11			Cu^{65} noisy — No Cu
		-12			
		SEQ-CCVA			

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ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 3/7/23 **Analyst:** MB **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CCBA			
		23BΦΦ51-Φ1	SWN	100	Cr, Pb only
		23BΦ411-13		20	Sc↑ - Not Needed; Cr, Pb only
		-14			↓ ↓
		-15			
		-16			Sc↑ - Not Needed
		-17			↓ ↓
		-18			
		-19			
		-2Φ			
		SEQ-IBLB			(Ge noisy)
		-CCVB			Ge + group noisy
		-CCBB			Ge ↓ / Ge noisy
	✓	-CAL1			Ge noisy
		-CCVC			Ge + group noisy
		-CCBC			Ge noisy
	✓	BLCΦΦ83-BLK2	REN		Ge + group noisy; Se only
		-BS2			
		23BΦ388-Φ1		5	
		BLCΦΦ83-DUP2			
		-MS2			
		23AΦΦ31-Φ5	SWN	50	Cr only
		23AΦ171-Φ1			
		-Φ2			

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ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/7/23 **Analyst:** MB **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23AΦ171-Φ3	SWN	50	Ge+group noisy; Cr only
		23BΦΦ51-Φ2	↓	↓	↓ ↓
		SEQ-CCVD			↓
		↓ -CCBD			
	✓	23BΦ446-Φ2	REN		Ge+group noisy
	✓	↓ -Φ4			
	✓	23BΦ449-Φ1		2	
		↓ -Φ2		↓	Sc↑; Sb only
		BLCΦΦΦ7-DUP1			↓
		↓ -MS1		↓	
	✓	23BΦ421-Φ2			
	✓	BLCΦ145-DUP1			
	✓	↓ -MS1	↓		↓
		SEQ-IBLE			
		-CCVE			
		↓ -CCBE			
	✓	23BΦ448-Φ2	REN		
↓		↓ -Φ4	↓		
		23BΦ421-Φ4			
		-Φ6			Sc↑
		-Φ8			
		-1Φ			
		-12			Sc↑
↓	↓	-14	↓		↓

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ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/7/23 **Analyst:** MB **Sequence:** _____ **Cal:** _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
	✓	23B0421-16	REN		Sc↑ / Ge+group no.34
		SEQ-IBLF			
		-CCVF			
		-CCBF			
		Rinse/DI			
		MB 3/7/23			

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Tuesday, March 07, 2023 12:50:42
Sample Description:
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\STD Performance Check.mth
Dataset File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\DataSet\Default\STD Performance Check.5377
MassCal File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	6285.4	6285.450	153.716	2.4	Standard
	In	114.9	64966.1	-671906.010	743.274	0.1	Standard
	U	238.1	58027.4	58027.391	1272.403	2.2	Standard
⎡	CeO	155.9	707.1	0.012	0.000	2.4	Standard
| >	Ce	139.9	58909.2	58909.163	827.086	1.4	Standard
⎣	Ce++	70.0	1324.3	0.022	0.000	1.8	Standard
	Bkgd	220.0	0.0	0.033	0.075	223.6	Standard

Current Conditions File Data

Current Value	Description
1.05	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-11.25	Deflector Voltage
1600.00	ICP RF Power
-1712.00	Analog Stage Voltage
1500.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-8.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-4.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.25	RPq
1.07	DRC Mode NEB
-10.00	DRC Mode QRO
-3.00	DRC Mode CRO
-7.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
250.00	Axial Field Voltage
-16.50	KED Mode CRO
-12.00	KED Mode QRO
-4.00	KED Mode Cell Entrance Voltage
-39.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
5.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Tuesday, March 07, 2023 13:01:51
Sample Description:
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\STD Performance Check.mth
Dataset File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\DataSet\Default\STD Performance Check.5383
MassCal File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	7094.0	7094.028	104.896	1.5	Standard
	In	114.9	72196.3	72196.309	1601.954	2.2	Standard
	U	238.1	63448.1	63448.142	897.530	1.4	Standard
⌈	CeO	155.9	924.8	0.014	0.001	7.0	Standard
| >	Ce	139.9	67405.8	67405.802	831.889	1.2	Standard
⌊	Ce++	70.0	1530.4	0.023	0.001	3.6	Standard
	Bkgd	220.0	0.0	0.000	0.000		Standard

Current Conditions File Data

Current Value	Description
1.05	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-11.25	Deflector Voltage
1600.00	ICP RF Power
-1712.00	Analog Stage Voltage
1500.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-8.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-4.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.25	RPq
1.05	DRC Mode NEB
-10.00	DRC Mode QRO
-3.00	DRC Mode CRO
-7.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
250.00	Axial Field Voltage
-16.50	KED Mode CRO
-12.00	KED Mode QRO
-4.00	KED Mode Cell Entrance Voltage
-39.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
5.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Start Time: 3/7/2023 12:50:20 PM
End Time: 3/7/2023 1:03:55 PM

STD Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9): 6285.45
Obtained Intensity (In 115): 64966.07
Obtained Intensity (U 238): 58027.39
Obtained Intensity (Bkgd 220): 0.03
Obtained Formula (Ce++ 70 / Ce 140): 0.022 (=1324.26 / 58909.16)
Obtained Formula (CeO 156 / Ce 140): 0.012 (=707.08 / 58909.16)
Obtained RSD (Be 9): 0.0245
Obtained RSD (In 115): 0.0011
Obtained RSD (U 238): 0.0219

Torch Alignment - [Passed]

Vertical	Horizontal	Intensity
0.64 mm	0.50 mm	77694.70

Nebulizer Gas Flow STD/KED [NEB] - [Passed] Optimum value(s): 1.05
Obtained Intensity (In 115): 67747.26
Obtained Formula (CeO 156 / Ce 140): 0.0153 (=1034.04 / 67616.64)

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.690)
Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.722)
Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.697)
Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.698)

QID STD/DRC - Optimum value(s): Correlation Coefficient = 0.995; Intercept = -13.06

KED Mode QID - Optimum value(s): Correlation Coefficient = 0.998; Intercept = -13.27

STD Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9): 7094.03
Obtained Intensity (In 115): 72196.31
Obtained Intensity (U 238): 63448.14
Obtained Intensity (Bkgd 220): 0.00
Obtained Formula (Ce++ 70 / Ce 140): 0.023 (=1530.42 / 67405.80)
Obtained Formula (CeO 156 / Ce 140): 0.014 (=924.76 / 67405.80)
Obtained RSD (Be 9): 0.0148
Obtained RSD (In 115): 0.0222
Obtained RSD (U 238): 0.0141

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Optimization Status

Start Time: 3/7/2023 12:50:20 PM

STD Performance Check
	Optimization Settings:
		Method: STD Performance Check.mth.
		Intensity Criterion: Be 9 > 2000
		Intensity Criterion: In 115 > 40000
		Intensity Criterion: U 238 > 30000
		Intensity Criterion: Bkgd 220 <= 1
		Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
		Formula Criterion: CeO 156 / Ce 140 <= 0.025
		RSD Criterion: Be 9.0122 < 0.05
		RSD Criterion: In 114.904 < 0.05
		RSD Criterion: U 238.05 < 0.05

	Optimization Results:
	Initial Try
		Obtained Intensity (Be 9): 6285.45
		Obtained Intensity (In 115): 64966.07
		Obtained Intensity (U 238): 58027.39
		Obtained Intensity (Bkgd 220): 0.03
		Obtained Formula (Ce++ 70 / Ce 140): 0.022 (=1324.26 / 58909.16)
		Obtained Formula (CeO 156 / Ce 140): 0.012 (=707.08 / 58909.16)
		Obtained RSD (Be 9): 0.0245
		Obtained RSD (In 115): 0.0011
		Obtained RSD (U 238): 0.0219

[Passed] Optimum value(s): N/A

Torch Alignment
	Optimization Settings:
		Method: Torch Alignment.mth.
		Intensity Criterion: In 115 Maximum

	Optimization Results:
		Vertical	Horizontal	Intensity
[Passed]	0.64 mm	0.50 mm	77694.70

Nebulizer Gas Flow STD/KED [NEB]
	Optimization Settings:
		Method: Optimize.mth.
			Initial Try - Start/End/Step: 1/1.1/0.01.
		Intensity Criterion: In 115 Maximum
		Formula Criterion: CeO 156 / Ce 140 <= 0.025

	Optimization Results:
	Initial Try

		Obtained Intensity (In 115): 67747.26
		Obtained Formula (CeO 156 / Ce 140): 0.0153 (=1034.04 / 67616.64)
[Passed] Optimum value(s): 1.05

Mass Calibration and Resolution
Optimization Settings:
Method: Tuning.mth.
MassCal File: Default.tun
Iterations: 6
Target accuracy (+/- amu): 0.05 for Mass Cal. and 0.03 for Resolution
Peak height (%) for Res. Opt.: 10

Optimization Results:
Initial Try
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.690)
Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.722)
Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.697)
Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.698)
[Passed] Optimum value(s): N/A

QID STD/DRC
Optimization Settings:
Method: QID Calibration.mth.
Initial Try - Start/End/Step: -20/0/0.5.

Optimization Results:
Initial Try

Optimum value(s): Correlation Coefficient = 0.995; Intercept = -13.06

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-13	27097.7
Mg	24	41	-12.5	35175.3
In	115	41	-10	75100.9
Ce	140	41	-8.5	69239.4
Pb	208	41	-7	36534.7
U	238	41	-7	63733.9

KED Mode QID
Optimization Settings:
Method: QID Calibration.mth.
Initial Try - Start/End/Step: -20/0/0.5.

Optimization Results:
Initial Try

Optimum value(s): Correlation Coefficient = 0.998; Intercept = -13.27

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-13.5	20018
Mg	24	41	-13.5	22842.2
In	115	41	-10.5	54086.2
Ce	140	41	-9	57298.7
Pb	208	41	-7	26616.8
U	238	41	-6	41588.4

STD Performance Check
Optimization Settings:
Method: STD Performance Check.mth.
Intensity Criterion: Be 9 > 2000
Intensity Criterion: In 115 > 40000

```
            Intensity Criterion: U 238 > 30000
            Intensity Criterion: Bkgd 220 <= 1
            Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
            Formula Criterion: CeO 156 / Ce 140 <= 0.025
            RSD Criterion: Be 9.0122 < 0.05
            RSD Criterion: In 114.904 < 0.05
            RSD Criterion: U 238.05 < 0.05

        Optimization Results:
        Initial Try
            Obtained Intensity (Be 9): 7094.03
            Obtained Intensity (In 115): 72196.31
            Obtained Intensity (U 238): 63448.14
            Obtained Intensity (Bkgd 220): 0.00
            Obtained Formula (Ce++ 70 / Ce 140): 0.023 (=1530.42 / 67405.80)
            Obtained Formula (CeO 156 / Ce 140): 0.014 (=924.76 / 67405.80)
            Obtained RSD (Be 9): 0.0148
            Obtained RSD (In 115): 0.0222
            Obtained RSD (U 238): 0.0141

[Passed]  Optimum value(s): N/A

End Time: 3/7/2023 1:03:55 PM
```

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 13:46:52
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				30441	3	Standard
	Cl	**37**		ug/L				3993957	4	Standard
⌈>	**Sc**	**45**		ug/L				589114	3	Standard
|	**Cr**	**52**		ug/L				23521	5	Standard
|	**Cr**	**53**		ug/L				212	6	Standard
|	**Fe**	**54**		ug/L				75045	5	Standard
|	**Fe**	**57**		ug/L				14090	2	Standard
⌊	**Mn**	**55**		ug/L				719	4	Standard
⌈>	**Ge**	**72**		ug/L				37838	3	KED
|	**Ni**	**60**		ug/L				33	3	KED
|	**Ni**	**62**		ug/L				8	32	KED
|	**Cu**	**63**		ug/L				58	4	KED
|	**Cu**	**65**		ug/L				44	21	KED
|	**Zn**	**66**		ug/L				130	2	KED
|	**Zn**	**67**		ug/L				24	16	KED
|	**As**	**75**		ug/L				5	21	KED
⌊	**Se**	**78**		ug/L				21	19	KED
	Y	**89**		ug/L				382227	3	Standard
	Kr	**83**		ug/L				74	16	Standard
⌈>	**In-1**	**115**		ug/L				12273	4	KED
|	**Mo**	**98**		ug/L				7	46	KED
|	**Cd**	**111**		ug/L				5	10	KED
⌊	**Cd**	**114**		ug/L				4	42	KED
⌈>	**In**	**115**		ug/L				621159	3	Standard
|	**Ag**	**107**		ug/L				68	20	Standard
|	**Sb**	**121**		ug/L				88	13	Standard
⌊	**Sb**	**123**		ug/L				67	10	Standard
⌈>	**Tb**	**159**		ug/L				634101	3	Standard
|	**Tl**	**205**		ug/L				17	52	Standard
⌊	**Pb**	**208**		ug/L				179	15	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 13:51:48
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30441	32169	2	Standard
	Cl	**37**		ug/L			3993957	4007568	2	Standard
⌈>	**Sc**	**45**		ug/L			589114	602614	1	Standard
|	**Cr**	**52**	**0.500**	ug/L	0.028	5	23521	33152	2	Standard
|	**Cr**	**53**	**0.500**	ug/L	0.018	3	212	1370	1	Standard
|	**Fe**	**54**	**36.000**	ug/L	1.961	5	75045	128210	3	Standard
|	**Fe**	**57**	**36.000**	ug/L	1.370	3	14090	35470	2	Standard
⌊	**Mn**	**55**	**0.500**	ug/L	0.015	2	719	14894	1	Standard
⌈>	**Ge**	**72**		ug/L			37838	38895	1	KED
|	**Ni**	**60**	**0.500**	ug/L	0.012	2	33	572	2	KED
|	**Ni**	**62**	**0.500**	ug/L	0.125	24	8	91	20	KED
|	**Cu**	**63**	**0.500**	ug/L	0.019	3	58	1752	1	KED
|	**Cu**	**65**	**0.500**	ug/L	0.041	8	44	892	9	KED
|	**Zn**	**66**	**6.000**	ug/L	0.216	3	130	2536	3	KED
|	**Zn**	**67**	**6.000**	ug/L	0.314	5	24	405	3	KED
|	**As**	**75**	**0.200**	ug/L	0.036	17	5	54	17	KED
⌊	**Se**	**78**	**0.500**	ug/L	0.161	32	21	37	11	KED
	Y	**89**		ug/L			382227	387811	0	Standard
	Kr	**83**		ug/L			74	48	8	Standard
⌈>	**In-1**	**115**		ug/L			12273	12658	4	KED
|	**Mo**	**98**	**0.200**	ug/L	0.016	8	7	198	7	KED
|	**Cd**	**111**	**0.100**	ug/L	0.022	21	5	27	13	KED
⌊	**Cd**	**114**	**0.100**	ug/L	0.027	27	4	61	27	KED
⌈>	**In**	**115**		ug/L			621159	643729	0	Standard
|	**Ag**	**107**	**0.200**	ug/L	0.001	0	68	2928	0	Standard
|	**Sb**	**121**	**0.200**	ug/L	0.010	5	88	2246	5	Standard
⌊	**Sb**	**123**	**0.200**	ug/L	0.006	2	67	1735	2	Standard
⌈>	**Tb**	**159**		ug/L			634101	654580	3	Standard
|	**Tl**	**205**	**0.200**	ug/L	0.006	2	17	6987	1	Standard
⌊	**Pb**	**208**	**0.100**	ug/L	0.003	3	179	4954	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 13:56:45
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30441	40707	2	Standard
	Cl	**37**		ug/L			3993957	4140880	0	Standard
⌈>	**Sc**	**45**		ug/L			589114	629519	1	Standard
|	**Cr**	**52**	**10.002**	ug/L	0.199	1	23521	235128	1	Standard
|	**Cr**	**53**	**10.001**	ug/L	0.116	1	212	25058	0	Standard
|	**Fe**	**54**	**1000.060**	ug/L	37.393	3	75045	1644569	1	Standard
|	**Fe**	**57**	**1000.029**	ug/L	20.544	2	14090	639916	0	Standard
⌊	**Mn**	**55**	**10.001**	ug/L	0.045	0	719	308035	1	Standard
⌈>	**Ge**	**72**		ug/L			37838	40212	1	KED
|	**Ni**	**60**	**10.001**	ug/L	0.196	1	33	11537	3	KED
|	**Ni**	**62**	**10.002**	ug/L	0.536	5	8	1875	5	KED
|	**Cu**	**63**	**10.000**	ug/L	0.256	2	58	34879	3	KED
|	**Cu**	**65**	**9.999**	ug/L	0.185	1	44	17101	2	KED
|	**Zn**	**66**	**10.114**	ug/L	0.594	5	130	4460	4	KED
|	**Zn**	**67**	**10.275**	ug/L	0.585	5	24	754	5	KED
|	**As**	**75**	**10.000**	ug/L	0.453	4	5	2303	4	KED
⌊	**Se**	**78**	**9.992**	ug/L	0.828	8	21	265	7	KED
	Y	**89**		ug/L			382227	416548	2	Standard
	Kr	**83**		ug/L			74	46	6	Standard
⌈>	**In-1**	**115**		ug/L			12273	12540	2	KED
|	**Mo**	**98**	**10.000**	ug/L	0.506	5	7	10401	2	KED
|	**Cd**	**111**	**10.000**	ug/L	0.236	2	5	2702	3	KED
⌊	**Cd**	**114**	**10.000**	ug/L	0.204	2	4	6816	0	KED
⌈>	**In**	**115**		ug/L			621159	683702	3	Standard
|	**Ag**	**107**	**10.000**	ug/L	0.065	0	68	155127	3	Standard
|	**Sb**	**121**	**10.000**	ug/L	0.096	0	88	123309	2	Standard
⌊	**Sb**	**123**	**10.000**	ug/L	0.243	2	67	94516	2	Standard
⌈>	**Tb**	**159**		ug/L			634101	695760	4	Standard
|	**Tl**	**205**	**10.000**	ug/L	0.492	4	17	380052	1	Standard
⌊	**Pb**	**208**	**10.000**	ug/L	0.386	3	179	500647	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 14:01:54
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30441	40508	4	Standard
	Cl	**37**		ug/L			3993957	4467617	0	Standard
>	**Sc**	**45**		ug/L			589114	657703	1	Standard
	Cr	**52**	**19.841**	ug/L	0.469	2	23521	448000	0	Standard
	Cr	**53**	**19.807**	ug/L	0.303	1	212	49709	1	Standard
	Fe	**54**	**1980.433**	ug/L	72.808	3	75045	3198722	1	Standard
	Fe	**57**	**1983.289**	ug/L	4.286	0	14090	1268936	1	Standard
	Mn	**55**	**19.879**	ug/L	0.394	1	719	623820	0	Standard
>	**Ge**	**72**		ug/L			37838	39434	6	KED
	Ni	**60**	**20.048**	ug/L	1.277	6	33	22793	0	KED
	Ni	**62**	**20.024**	ug/L	0.867	4	8	3682	3	KED
	Cu	**63**	**20.060**	ug/L	1.894	9	58	69081	2	KED
	Cu	**65**	**19.999**	ug/L	1.204	6	44	33392	1	KED
	Zn	**66**	**20.106**	ug/L	1.413	7	130	8670	0	KED
	Zn	**67**	**20.337**	ug/L	0.766	3	24	1513	7	KED
	As	**75**	**20.070**	ug/L	0.810	4	5	4585	3	KED
	Se	**78**	**20.163**	ug/L	1.851	9	21	516	3	KED
	Y	**89**		ug/L			382227	420973	2	Standard
	Kr	**83**		ug/L			74	65	11	Standard
>	**In-1**	**115**		ug/L			12273	12888	1	KED
	Mo	**98**	**19.886**	ug/L	0.498	2	7	20792	1	KED
	Cd	**111**	**19.953**	ug/L	0.537	2	5	5483	1	KED
	Cd	**114**	**19.817**	ug/L	0.299	1	4	13392	1	KED
>	**In**	**115**		ug/L			621159	681917	2	Standard
	Ag	**107**	**19.999**	ug/L	0.358	1	68	309308	2	Standard
	Sb	**121**	**19.997**	ug/L	0.220	1	88	245675	1	Standard
	Sb	**123**	**19.979**	ug/L	0.153	0	67	187549	2	Standard
>	**Tb**	**159**		ug/L			634101	713819	4	Standard
	Tl	**205**	**19.904**	ug/L	1.153	5	17	760989	1	Standard
	Pb	**208**	**19.937**	ug/L	0.810	4	179	1010883	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL5
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 14:07:14
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30441	29498	3	Standard
	Cl	**37**		ug/L			3993957	4665705	1	Standard
⌈>	**Sc**	**45**		ug/L			589114	626473	0	Standard
|	**Cr**	**52**	**50.001**	ug/L	0.309	0	23521	1037813	1	Standard
|	**Cr**	**53**	**50.035**	ug/L	1.214	2	212	119715	2	Standard
|	**Fe**	**54**	**4990.420**	ug/L	64.842	1	75045	7488141	0	Standard
|	**Fe**	**57**	**5005.318**	ug/L	6.962	0	14090	3043690	0	Standard
⌊	**Mn**	**55**	**50.040**	ug/L	0.480	0	719	1500732	0	Standard
⌈>	**Ge**	**72**		ug/L			37838	40104	2	KED
|	**Ni**	**60**	**49.712**	ug/L	0.853	1	33	55987	3	KED
|	**Ni**	**62**	**49.703**	ug/L	0.431	0	8	9030	2	KED
|	**Cu**	**63**	**49.467**	ug/L	0.465	0	58	165118	3	KED
|	**Cu**	**65**	**49.867**	ug/L	1.115	2	44	83699	1	KED
|	**Zn**	**66**	**49.966**	ug/L	0.911	1	130	21704	2	KED
|	**Zn**	**67**	**49.534**	ug/L	1.281	2	24	3560	3	KED
|	**As**	**75**	**49.778**	ug/L	0.660	1	5	11329	3	KED
⌊	**Se**	**78**	**49.589**	ug/L	0.099	0	21	1214	3	KED
	Y	**89**		ug/L			382227	408252	3	Standard
	Kr	**83**		ug/L			74	54	8	Standard
⌈>	**In-1**	**115**		ug/L			12273	12473	0	KED
|	**Mo**	**98**	**49.884**	ug/L	1.133	2	7	49896	2	KED
|	**Cd**	**111**	**49.737**	ug/L	0.526	1	5	12885	1	KED
⌊	**Cd**	**114**	**49.681**	ug/L	0.776	1	4	31482	2	KED
⌈>	**In**	**115**		ug/L			621159	668249	2	Standard
|	**Ag**	**107**	**49.766**	ug/L	1.459	2	68	736578	2	Standard
|	**Sb**	**121**	**49.924**	ug/L	1.496	2	88	596177	1	Standard
⌊	**Sb**	**123**	**49.949**	ug/L	1.397	2	67	456841	1	Standard
⌈>	**Tb**	**159**		ug/L			634101	700507	1	Standard
|	**Tl**	**205**	**50.004**	ug/L	0.859	1	17	1880120	0	Standard
⌊	**Pb**	**208**	**49.864**	ug/L	0.713	1	179	2450539	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL6
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 14:14:14
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30441	39906	3	Standard
	Cl	**37**		ug/L			3993957	4775917	3	Standard
⌈>	**Sc**	**45**		ug/L			589114	626688	2	Standard
|	**Cr**	**52**	**101.166**	ug/L	1.550	1	23521	2157944	3	Standard
|	**Cr**	**53**	**100.126**	ug/L	2.056	2	212	240410	3	Standard
|	**Fe**	**54**	**10000.951**	ug/L	226.933	2	75045	14941000	4	Standard
|	**Fe**	**57**	**10062.037**	ug/L	71.574	0	14090	6233538	1	Standard
⌊	**Mn**	**55**	**100.501**	ug/L	3.591	3	719	3064507	2	Standard
⌈>	**Ge**	**72**		ug/L			37838	39788	1	KED
|	**Ni**	**60**	**100.022**	ug/L	1.524	1	33	111790	0	KED
|	**Ni**	**62**	**100.997**	ug/L	2.148	2	8	18821	1	KED
|	**Cu**	**63**	**100.392**	ug/L	0.455	0	58	336809	1	KED
|	**Cu**	**65**	**99.842**	ug/L	1.749	1	44	165384	0	KED
|	**Zn**	**66**	**99.559**	ug/L	2.589	2	130	42158	1	KED
|	**Zn**	**67**	**99.741**	ug/L	1.342	1	24	7029	2	KED
|	**As**	**75**	**100.233**	ug/L	2.092	2	5	22803	2	KED
⌊	**Se**	**78**	**100.255**	ug/L	1.011	1	21	2433	0	KED
	Y	**89**		ug/L			382227	410708	3	Standard
	Kr	**83**		ug/L			74	78	23	Standard
⌈>	**In-1**	**115**		ug/L			12273	12848	1	KED
|	**Mo**	**98**	**100.593**	ug/L	3.309	3	7	105733	3	KED
|	**Cd**	**111**	**99.902**	ug/L	0.491	0	5	26568	1	KED
⌊	**Cd**	**114**	**99.753**	ug/L	1.354	1	4	64584	2	KED
⌈>	**In**	**115**		ug/L			621159	669967	1	Standard
|	**Ag**	**107**	**100.464**	ug/L	3.630	3	68	1515267	5	Standard
|	**Sb**	**121**	**100.446**	ug/L	1.788	1	88	1221211	2	Standard
⌊	**Sb**	**123**	**100.379**	ug/L	1.790	1	67	932482	1	Standard
⌈>	**Tb**	**159**		ug/L			634101	716486	3	Standard
|	**Tl**	**205**	**100.652**	ug/L	4.577	4	17	3953384	2	Standard
⌊	**Pb**	**208**	**100.406**	ug/L	4.496	4	179	5111090	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 14:21:54
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30441	34400	1	Standard
	Cl	**37**		ug/L			3993957	4542750	3	Standard
⎡>	**Sc**	**45**		ug/L			589114	589221	2	Standard
⎢	**Cr**	**52**	**0.014**	ug/L	0.018	123	23521	23806	2	Standard
⎢	**Cr**	**53**	**0.005**	ug/L	0.005	99	212	223	2	Standard
⎢	**Fe**	**54**	**-1.221**	ug/L	1.135	92	75045	73363	3	Standard
⎢	**Fe**	**57**	**-1.478**	ug/L	0.794	53	14090	13225	1	Standard
⎣	**Mn**	**55**	**-0.001**	ug/L	0.001	174	719	700	7	Standard
⎡>	**Ge**	**72**		ug/L			37838	38399	2	KED
⎢	**Ni**	**60**	**-0.019**	ug/L	0.005	24	33	13	37	KED
⎢	**Ni**	**62**	**0.003**	ug/L	0.009	353	8	9	20	KED
⎢	**Cu**	**63**	**0.004**	ug/L	0.006	155	58	71	27	KED
⎢	**Cu**	**65**	**0.000**	ug/L	0.006	7716	44	45	17	KED
⎢	**Zn**	**66**	**-0.225**	ug/L	0.027	12	130	41	29	KED
⎢	**Zn**	**67**	**-0.248**	ug/L	0.030	12	24	7	25	KED
⎢	**As**	**75**	**0.019**	ug/L	0.016	83	5	9	38	KED
⎣	**Se**	**78**	**-0.078**	ug/L	0.222	283	21	20	24	KED
	Y	**89**		ug/L			382227	388013	2	Standard
	Kr	**83**		ug/L			74	61	12	Standard
⎡>	**In-1**	**115**		ug/L			12273	11779	10	KED
⎢	**Mo**	**98**	**0.010**	ug/L	0.008	85	7	16	48	KED
⎢	**Cd**	**111**	**0.000**	ug/L	0.010	4317	5	4	40	KED
⎣	**Cd**	**114**	**-0.001**	ug/L	0.004	539	4	4	66	KED
⎡>	**In**	**115**		ug/L			621159	636112	3	Standard
⎢	**Ag**	**107**	**0.002**	ug/L	0.002	120	68	93	28	Standard
⎢	**Sb**	**121**	**0.042**	ug/L	0.002	4	88	573	2	Standard
⎣	**Sb**	**123**	**0.037**	ug/L	0.004	11	67	398	9	Standard
⎡>	**Tb**	**159**		ug/L			634101	650399	4	Standard
⎢	**Tl**	**205**	**0.003**	ug/L	0.000	7	17	121	2	Standard
⎣	**Pb**	**208**	**-0.001**	ug/L	0.000	40	179	149	9	Standard

Sample Information

Sample Date/Time: Tuesday, March 07, 2023 14:14:14
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED
Mass Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

Calibration

Analyte	Mass	**r Corr Coef**	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
C	13							
Cl	37							
Sc	45							
Cr	52	**0.9998**	0.034	0.50	10	20	50	100
Cr	53	**1.0000**	0.004	0.50	10	20	50	100
Fe	54	**1.0000**	0.002	36.00	1000	2000	5000	10000
Fe	57	**0.9999**	0.001	36.00	1000	2000	5000	10000
Mn	55	**1.0000**	0.049	0.50	10	20	50	100
Ge	72							
Ni	60	**1.0000**	0.028	0.50	10	20	50	100
Ni	62	**0.9998**	0.005	0.50	10	20	50	100
Cu	63	**0.9999**	0.084	0.50	10	20	50	100
Cu	65	**1.0000**	0.042	0.50	10	20	50	100
Zn	66	**1.0000**	0.011	6.00	10	20	50	100
Zn	67	**0.9999**	0.002	6.00	10	20	50	100
As	75	**1.0000**	0.006	0.20	10	20	50	100
Se	78	**0.9999**	0.001	0.50	10	20	50	100
Y	89							
Kr	83							
In-1	115							
Mo	98	**0.9999**	0.082	0.20	10	20	50	100
Cd	111	**1.0000**	0.021	0.10	10	20	50	100
Cd	114	**1.0000**	0.050	0.10	10	20	50	100
In	115							
Ag	107	**1.0000**	0.023	0.20	10	20	50	100
Sb	121	**1.0000**	0.018	0.20	10	20	50	100
Sb	123	**1.0000**	0.014	0.20	10	20	50	100
Tb	159							
Tl	205	**0.9999**	0.055	0.20	10	20	50	100
Pb	208	**1.0000**	0.071	0.10	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICV1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 14:29:34
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30441	34226	1	Standard
	Cl	**37**		ug/L			3993957	4685852	1	Standard
>	**Sc**	**45**		ug/L			589114	675305	3	Standard
	Cr	**52**	**47.408**	ug/L	0.666	1	23521	1103870	3	Standard
	Cr	**53**	**47.899**	ug/L	0.646	1	212	124018	2	Standard
	Fe	**54**	**4981.683**	ug/L	99.729	2	75045	8058335	2	Standard
	Fe	**57**	**4874.021**	ug/L	230.850	4	14090	3259207	2	Standard
	Mn	**55**	**48.054**	ug/L	2.152	4	719	1578491	2	Standard
>	**Ge**	**72**		ug/L			37838	40387	3	KED
	Ni	**60**	**50.327**	ug/L	1.783	3	33	57074	1	KED
	Ni	**62**	**49.283**	ug/L	1.717	3	8	9320	0	KED
	Cu	**63**	**50.528**	ug/L	1.566	3	58	171985	2	KED
	Cu	**65**	**50.530**	ug/L	0.592	1	44	85015	4	KED
	Zn	**66**	**49.086**	ug/L	0.970	1	130	21165	2	KED
	Zn	**67**	**48.751**	ug/L	2.152	4	24	3496	2	KED
	As	**75**	**46.604**	ug/L	0.796	1	5	10761	2	KED
	Se	**78**	**75.774**	ug/L	0.595	0	21	1872	2	KED
	Y	**89**		ug/L			382227	440797	1	Standard
	Kr	**83**		ug/L			74	54	13	Standard
>	**In-1**	**115**		ug/L			12273	13201	2	KED
	Mo	**98**	**47.384**	ug/L	0.971	2	7	51154	0	KED
	Cd	**111**	**49.037**	ug/L	0.954	1	5	13398	1	KED
	Cd	**114**	**49.670**	ug/L	1.281	2	4	33027	1	KED
>	**In**	**115**		ug/L			621159	696137	0	Standard
	Ag	**107**	**48.810**	ug/L	1.010	2	68	764738	2	Standard
	Sb	**121**	**48.239**	ug/L	0.259	0	88	609466	0	Standard
	Sb	**123**	**48.824**	ug/L	0.772	1	67	471374	1	Standard
>	**Tb**	**159**		ug/L			634101	732818	2	Standard
	Tl	**205**	**48.550**	ug/L	2.426	4	17	1950654	2	Standard
	Pb	**208**	**49.963**	ug/L	1.701	3	179	2602661	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICB1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 14:38:06
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30441	30055	3	Standard
	Cl	**37**		ug/L			3993957	4386401	0	Standard
⎡>	**Sc**	**45**		ug/L			589114	597885	1	Standard
⎢	**Cr**	**52**	**-0.026**	ug/L	0.009	32	23521	23341	1	Standard
⎢	**Cr**	**53**	**-0.008**	ug/L	0.004	49	212	198	5	Standard
⎢	**Fe**	**54**	**-1.869**	ug/L	0.792	42	75045	73525	3	Standard
⎢	**Fe**	**57**	**-0.770**	ug/L	0.095	12	14090	13845	1	Standard
⎣	**Mn**	**55**	**-0.004**	ug/L	0.001	24	719	611	5	Standard
⎡>	**Ge**	**72**		ug/L			37838	38609	1	KED
⎢	**Ni**	**60**	**-0.015**	ug/L	0.010	62	33	17	59	KED
⎢	**Ni**	**62**	**-0.026**	ug/L	0.026	101	8	4	107	KED
⎢	**Cu**	**63**	**0.004**	ug/L	0.006	161	58	71	26	KED
⎢	**Cu**	**65**	**-0.005**	ug/L	0.004	66	44	36	16	KED
⎢	**Zn**	**66**	**-0.275**	ug/L	0.016	5	130	20	31	KED
⎢	**Zn**	**67**	**-0.286**	ug/L	0.044	15	24	5	57	KED
⎢	**As**	**75**	**0.015**	ug/L	0.004	23	5	8	8	KED
⎣	**Se**	**78**	**0.041**	ug/L	0.182	438	21	23	18	KED
	Y	**89**		ug/L			382227	388211	3	Standard
	Kr	**83**		ug/L			74	60	30	Standard
⎡>	**In-1**	**115**		ug/L			12273	11956	2	KED
⎢	**Mo**	**98**	**0.004**	ug/L	0.003	83	7	11	31	KED
⎢	**Cd**	**111**	**0.006**	ug/L	0.011	198	5	6	43	KED
⎣	**Cd**	**114**	**-0.003**	ug/L	0.002	64	4	3	36	KED
⎡>	**In**	**115**		ug/L			621159	643009	4	Standard
⎢	**Ag**	**107**	**-0.001**	ug/L	0.000	58	68	61	4	Standard
⎢	**Sb**	**121**	**0.005**	ug/L	0.001	28	88	144	9	Standard
⎣	**Sb**	**123**	**0.007**	ug/L	0.004	65	67	129	27	Standard
⎡>	**Tb**	**159**		ug/L			634101	657531	3	Standard
⎢	**Tl**	**205**	**0.001**	ug/L	0.000	8	17	55	5	Standard
⎣	**Pb**	**208**	**-0.002**	ug/L	0.000	27	179	112	13	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 14:43:07
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30441	29066	3	Standard
	Cl	**37**		ug/L			3993957	4689246	1	Standard
⌈>	**Sc**	**45**		ug/L			589114	630109	2	Standard
|	**Cr**	**52**	**48.084**	ug/L	0.549	1	23521	1044224	1	Standard
|	**Cr**	**53**	**49.480**	ug/L	1.173	2	212	119537	1	Standard
|	**Fe**	**54**	**5045.333**	ug/L	41.521	0	75045	7617163	2	Standard
|	**Fe**	**57**	**4969.970**	ug/L	99.137	1	14090	3103508	2	Standard
⌊	**Mn**	**55**	**48.695**	ug/L	0.989	2	719	1493515	0	Standard
⌈>	**Ge**	**72**		ug/L			37838	39938	1	KED
|	**Ni**	**60**	**49.331**	ug/L	1.140	2	33	55353	0	KED
|	**Ni**	**62**	**49.498**	ug/L	2.465	4	8	9260	3	KED
|	**Cu**	**63**	**50.280**	ug/L	0.666	1	58	169327	1	KED
|	**Cu**	**65**	**49.649**	ug/L	1.071	2	44	82566	0	KED
|	**Zn**	**66**	**49.448**	ug/L	1.345	2	130	21087	1	KED
|	**Zn**	**67**	**51.274**	ug/L	0.562	1	24	3638	0	KED
|	**As**	**75**	**50.210**	ug/L	1.427	2	5	11465	1	KED
⌊	**Se**	**78**	**50.157**	ug/L	1.944	3	21	1233	2	KED
	Y	**89**		ug/L			382227	411423	1	Standard
	Kr	**83**		ug/L			74	66	28	Standard
⌈>	**In-1**	**115**		ug/L			12273	12467	2	KED
|	**Mo**	**98**	**49.765**	ug/L	1.936	3	7	50723	1	KED
|	**Cd**	**111**	**51.231**	ug/L	0.586	1	5	13220	1	KED
⌊	**Cd**	**114**	**50.456**	ug/L	2.139	4	4	31675	1	KED
⌈>	**In**	**115**		ug/L			621159	679743	1	Standard
|	**Ag**	**107**	**47.623**	ug/L	0.909	1	68	728426	1	Standard
|	**Sb**	**121**	**49.343**	ug/L	0.773	1	88	608622	0	Standard
⌊	**Sb**	**123**	**49.110**	ug/L	0.535	1	67	462930	1	Standard
⌈>	**Tb**	**159**		ug/L			634101	715912	2	Standard
|	**Tl**	**205**	**48.332**	ug/L	2.019	4	17	1897630	2	Standard
⌊	**Pb**	**208**	**48.828**	ug/L	1.212	2	179	2485515	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 14:50:27
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30441	31165	0	Standard
	Cl	**37**		ug/L			3993957	4465355	0	Standard
⎡>	**Sc**	**45**		ug/L			589114	618199	3	Standard
⎢	**Cr**	**52**	**-0.027**	ug/L	0.010	36	23521	24118	2	Standard
⎢	**Cr**	**53**	**-0.014**	ug/L	0.012	86	212	190	13	Standard
⎢	**Fe**	**54**	**-2.603**	ug/L	0.777	29	75045	74916	1	Standard
⎢	**Fe**	**57**	**-1.961**	ug/L	1.019	51	14090	13587	5	Standard
⎣	**Mn**	**55**	**-0.004**	ug/L	0.001	29	719	634	3	Standard
⎡>	**Ge**	**72**		ug/L			37838	39434	5	KED
⎢	**Ni**	**60**	**-0.021**	ug/L	0.004	18	33	12	32	KED
⎢	**Ni**	**62**	**-0.006**	ug/L	0.013	223	8	8	35	KED
⎢	**Cu**	**63**	**-0.002**	ug/L	0.004	205	58	54	27	KED
⎢	**Cu**	**65**	**-0.006**	ug/L	0.005	81	44	36	22	KED
⎢	**Zn**	**66**	**-0.270**	ug/L	0.012	4	130	23	26	KED
⎢	**Zn**	**67**	**-0.296**	ug/L	0.046	15	24	4	65	KED
⎢	**As**	**75**	**0.014**	ug/L	0.008	58	5	8	26	KED
⎣	**Se**	**78**	**0.058**	ug/L	0.202	347	21	24	20	KED
	Y	**89**		ug/L			382227	395384	1	Standard
	Kr	**83**		ug/L			74	71	22	Standard
⎡>	**In-1**	**115**		ug/L			12273	12803	1	KED
⎢	**Mo**	**98**	**0.011**	ug/L	0.004	32	7	18	19	KED
⎢	**Cd**	**111**	**0.003**	ug/L	0.007	267	5	6	32	KED
⎣	**Cd**	**114**	**0.005**	ug/L	0.008	140	4	8	57	KED
⎡>	**In**	**115**		ug/L			621159	670537	2	Standard
⎢	**Ag**	**107**	**-0.001**	ug/L	0.001	112	68	62	22	Standard
⎢	**Sb**	**121**	**0.033**	ug/L	0.004	10	88	500	9	Standard
⎣	**Sb**	**123**	**0.030**	ug/L	0.001	2	67	350	4	Standard
⎡>	**Tb**	**159**		ug/L			634101	673308	3	Standard
⎢	**Tl**	**205**	**0.004**	ug/L	0.000	11	17	160	9	Standard
⎣	**Pb**	**208**	**-0.001**	ug/L	0.001	49	179	133	23	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CRL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 14:56:47
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30441	32785	2	Standard
	Cl	**37**		ug/L			3993957	4519474	1	Standard
⌈>	**Sc**	**45**		ug/L			589114	618473	3	Standard
|	**Cr**	**52**	**0.472**	ug/L	0.009	1	23521	34519	3	Standard
|	**Cr**	**53**	**0.499**	ug/L	0.013	2	212	1405	3	Standard
|	**Fe**	**54**	**35.311**	ug/L	2.074	5	75045	130493	1	Standard
|	**Fe**	**57**	**34.803**	ug/L	3.378	9	14090	35977	2	Standard
⌊	**Mn**	**55**	**0.487**	ug/L	0.007	1	719	15421	2	Standard
⌈>	**Ge**	**72**		ug/L			37838	40022	1	KED
|	**Ni**	**60**	**0.488**	ug/L	0.019	3	33	584	3	KED
|	**Ni**	**62**	**0.478**	ug/L	0.077	16	8	99	15	KED
|	**Cu**	**63**	**0.498**	ug/L	0.017	3	58	1741	2	KED
|	**Cu**	**65**	**0.464**	ug/L	0.041	8	44	819	7	KED
|	**Zn**	**66**	**5.933**	ug/L	0.341	5	130	2659	6	KED
|	**Zn**	**67**	**5.972**	ug/L	0.629	10	24	447	11	KED
|	**As**	**75**	**0.181**	ug/L	0.010	5	5	46	5	KED
⌊	**Se**	**78**	**0.528**	ug/L	0.046	8	21	35	2	KED
	Y	**89**		ug/L			382227	408811	1	Standard
	Kr	**83**		ug/L			74	55	37	Standard
⌈>	**In-1**	**115**		ug/L			12273	12890	1	KED
|	**Mo**	**98**	**0.194**	ug/L	0.016	8	7	211	8	KED
|	**Cd**	**111**	**0.099**	ug/L	0.015	14	5	31	12	KED
⌊	**Cd**	**114**	**0.091**	ug/L	0.008	8	4	63	9	KED
⌈>	**In**	**115**		ug/L			621159	669365	1	Standard
|	**Ag**	**107**	**0.201**	ug/L	0.004	1	68	3098	2	Standard
|	**Sb**	**121**	**0.199**	ug/L	0.008	3	88	2515	2	Standard
⌊	**Sb**	**123**	**0.199**	ug/L	0.013	6	67	1918	6	Standard
⌈>	**Tb**	**159**		ug/L			634101	682975	3	Standard
|	**Tl**	**205**	**0.197**	ug/L	0.011	5	17	7386	2	Standard
⌊	**Pb**	**208**	**0.100**	ug/L	0.003	3	179	5050	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFA1
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Tuesday, March 07, 2023 15:02:48
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30441	125733	1	Standard
	Cl	**37**		ug/L			3993957	11954774	4	Standard
>	**Sc**	**45**		ug/L			589114	676277	5	Standard
	Cr	**52**	**0.905**	ug/L	0.103	11	23521	47509	0	Standard
	Cr	**53**	**5.331**	ug/L	0.206	3	212	14026	1	Standard
	Fe	**54**	**20207.728**	ug/L	1100.838	5	75045	32428968	2	Standard
	Fe	**57**	**19692.911**	ug/L	996.012	5	14090	13129423	1	Standard
	Mn	**55**	**0.081**	ug/L	0.008	9	719	3495	1	Standard
>	**Ge**	**72**		ug/L			37838	42136	2	KED
	Ni	**60**	**0.082**	ug/L	0.016	20	33	134	14	KED
	Ni	**62**	**0.183**	ug/L	0.087	47	8	45	36	KED
	Cu	**63**	**0.071**	ug/L	0.008	11	58	315	7	KED
	Cu	**65**	**0.054**	ug/L	0.006	12	44	144	7	KED
	Zn	**66**	**-0.001**	ug/L	0.038	3826	130	145	13	KED
	Zn	**67**	**-0.071**	ug/L	0.059	82	24	21	20	KED
	As	**75**	**0.027**	ug/L	0.005	17	5	12	9	KED
	Se	**78**	**0.097**	ug/L	0.114	116	21	26	9	KED
	Y	**89**		ug/L			382227	439330	7	Standard
	Kr	**83**		ug/L			74	135	8	Standard
>	**In-1**	**115**		ug/L			12273	13055	1	KED
	Mo	**98**	**383.084**	ug/L	13.112	3	7	408941	2	KED
	Cd	**111**	**0.061**	ug/L	0.013	21	5	21	15	KED
	Cd	**114**	**0.054**	ug/L	0.007	12	4	40	11	KED
>	**In**	**115**		ug/L			621159	699875	5	Standard
	Ag	**107**	**0.002**	ug/L	0.001	34	68	107	10	Standard
	Sb	**121**	**0.028**	ug/L	0.000	1	88	459	4	Standard
	Sb	**123**	**0.028**	ug/L	0.003	10	67	342	2	Standard
>	**Tb**	**159**		ug/L			634101	746937	9	Standard
	Tl	**205**	**0.020**	ug/L	0.003	13	17	853	2	Standard
	Pb	**208**	**0.033**	ug/L	0.005	14	179	1964	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFA1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 15:10:39
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30441	121418	1	Standard
	Cl	**37**		ug/L			3993957	11387480	1	Standard
⌈>	**Sc**	**45**		ug/L			589114	685590	0	Standard
|	**Cr**	**52**	**0.865**	ug/L	0.058	6	23521	47326	2	Standard
|	**Cr**	**53**	**5.211**	ug/L	0.056	1	212	13922	0	Standard
|	**Fe**	**54**	**19767.377**	ug/L	245.505	1	75045	32214216	1	Standard
|	**Fe**	**57**	**19090.516**	ug/L	345.519	1	14090	12924501	1	Standard
⌊	**Mn**	**55**	**0.079**	ug/L	0.003	4	719	3467	3	Standard
⌈>	**Ge**	**72**		ug/L			37838	42157	3	KED
|	**Ni**	**60**	**0.066**	ug/L	0.018	26	33	116	18	KED
|	**Ni**	**62**	**0.155**	ug/L	0.043	28	8	40	23	KED
|	**Cu**	**63**	**0.066**	ug/L	0.009	13	58	298	12	KED
|	**Cu**	**65**	**0.059**	ug/L	0.015	25	44	153	18	KED
|	**Zn**	**66**	**-0.027**	ug/L	0.058	210	130	133	22	KED
|	**Zn**	**67**	**-0.053**	ug/L	0.049	92	24	22	14	KED
|	**As**	**75**	**0.050**	ug/L	0.011	22	5	17	11	KED
⌊	**Se**	**78**	**0.224**	ug/L	0.065	29	21	29	2	KED
	Y	**89**		ug/L			382227	439540	1	Standard
	Kr	**83**		ug/L			74	146	15	Standard
⌈>	**In-1**	**115**		ug/L			12273	13511	1	KED
|	**Mo**	**98**	**378.980**	ug/L	7.742	2	7	418911	3	KED
|	**Cd**	**111**	**0.060**	ug/L	0.025	42	5	22	30	KED
⌊	**Cd**	**114**	**0.059**	ug/L	0.007	11	4	45	11	KED
⌈>	**In**	**115**		ug/L			621159	704916	0	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.001	67	68	98	14	Standard
|	**Sb**	**121**	**0.026**	ug/L	0.001	2	88	436	1	Standard
⌊	**Sb**	**123**	**0.028**	ug/L	0.002	6	67	345	4	Standard
⌈>	**Tb**	**159**		ug/L			634101	759694	3	Standard
|	**Tl**	**205**	**0.018**	ug/L	0.000	2	17	756	5	Standard
⌊	**Pb**	**208**	**0.030**	ug/L	0.001	2	179	1859	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFB1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 15:15:34
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30441	123298	2	Standard
	Cl	**37**		ug/L			3993957	11595824	1	Standard
⌈>	**Sc**	**45**		ug/L			589114	691450	1	Standard
|	**Cr**	**52**	**19.835**	ug/L	0.192	0	23521	488946	1	Standard
|	**Cr**	**53**	**24.812**	ug/L	0.058	0	212	65920	1	Standard
|	**Fe**	**54**	**20258.381**	ug/L	375.613	1	75045	33289191	0	Standard
|	**Fe**	**57**	**19701.009**	ug/L	356.488	1	14090	13451900	2	Standard
⌊	**Mn**	**55**	**19.357**	ug/L	0.326	1	719	652129	1	Standard
⌈>	**Ge**	**72**		ug/L			37838	41500	2	KED
|	**Ni**	**60**	**21.110**	ug/L	0.206	0	33	24644	3	KED
|	**Ni**	**62**	**20.471**	ug/L	0.193	0	8	3987	2	KED
|	**Cu**	**63**	**19.948**	ug/L	0.545	2	58	69821	0	KED
|	**Cu**	**65**	**20.545**	ug/L	0.095	0	44	35540	2	KED
|	**Zn**	**66**	**18.810**	ug/L	0.321	1	130	8427	3	KED
|	**Zn**	**67**	**16.640**	ug/L	0.089	0	24	1245	3	KED
|	**As**	**75**	**19.178**	ug/L	0.081	0	5	4555	2	KED
⌊	**Se**	**78**	**0.090**	ug/L	0.079	87	21	26	5	KED
	Y	**89**		ug/L			382227	439490	1	Standard
	Kr	**83**		ug/L			74	137	18	Standard
⌈>	**In-1**	**115**		ug/L			12273	13224	2	KED
|	**Mo**	**98**	**397.374**	ug/L	3.006	0	7	429794	1	KED
|	**Cd**	**111**	**19.066**	ug/L	0.151	0	5	5223	2	KED
⌊	**Cd**	**114**	**18.969**	ug/L	0.519	2	4	12648	4	KED
⌈>	**In**	**115**		ug/L			621159	711853	0	Standard
|	**Ag**	**107**	**17.844**	ug/L	0.246	1	68	285916	1	Standard
|	**Sb**	**121**	**0.027**	ug/L	0.001	3	88	455	2	Standard
⌊	**Sb**	**123**	**0.026**	ug/L	0.002	5	67	332	5	Standard
⌈>	**Tb**	**159**		ug/L			634101	771519	2	Standard
|	**Tl**	**205**	**0.018**	ug/L	0.001	3	17	803	5	Standard
⌊	**Pb**	**208**	**0.033**	ug/L	0.002	4	179	2036	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 15:20:30
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30441	36810	3	Standard
	Cl	**37**		ug/L			3993957	4869223	1	Standard
⎡>	**Sc**	**45**		ug/L			589114	653410	2	Standard
⎢	**Cr**	**52**	**199.778**	ug/L	1.360	0	23521	4417643	2	Standard
⎢	**Cr**	**53**	**197.647**	ug/L	2.229	1	212	494659	3	Standard
⎢	**Fe**	**54**	**19983.947**	ug/L	557.472	2	75045	31035421	3	Standard
⎢	**Fe**	**57**	**19450.937**	ug/L	426.783	2	14090	12551351	3	Standard
⎣	**Mn**	**55**	**199.630**	ug/L	5.004	2	719	6348034	3	Standard
⎡>	**Ge**	**72**		ug/L			37838	40523	1	KED
⎢	**Ni**	**60**	**204.272**	ug/L	1.607	0	33	232517	1	KED
⎢	**Ni**	**62**	**201.284**	ug/L	4.036	2	8	38191	0	KED
⎢	**Cu**	**63**	**198.502**	ug/L	1.255	0	58	678151	0	KED
⎢	**Cu**	**65**	**199.724**	ug/L	1.895	0	44	336935	1	KED
⎢	**Zn**	**66**	**199.374**	ug/L	3.794	1	130	85850	0	KED
⎢	**Zn**	**67**	**193.956**	ug/L	0.119	0	24	13895	1	KED
⎢	**As**	**75**	**200.491**	ug/L	2.013	1	5	46446	0	KED
⎣	**Se**	**78**	**196.003**	ug/L	1.092	0	21	4822	0	KED
	Y	**89**		ug/L			382227	430294	2	Standard
	Kr	**83**		ug/L			74	138	6	Standard
⎡>	**In-1**	**115**		ug/L			12273	12348	2	KED
⎢	**Mo**	**98**	**206.063**	ug/L	2.736	1	7	208091	1	KED
⎢	**Cd**	**111**	**201.569**	ug/L	2.104	1	5	51510	1	KED
⎣	**Cd**	**114**	**202.348**	ug/L	6.198	3	4	125830	1	KED
⎡>	**In**	**115**		ug/L			621159	675396	1	Standard
⎢	**Ag**	**107**	**197.441**	ug/L	5.187	2	68	3001337	3	Standard
⎢	**Sb**	**121**	**211.773**	ug/L	4.116	1	88	2595772	3	Standard
⎣	**Sb**	**123**	**205.644**	ug/L	5.649	2	67	1925649	2	Standard
⎡>	**Tb**	**159**		ug/L			634101	752856	4	Standard
⎢	**Tl**	**205**	**192.137**	ug/L	7.342	3	17	7929072	1	Standard
⎣	**Pb**	**208**	**196.857**	ug/L	6.778	3	179	10529854	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 15:25:26
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30441	37480	3	Standard
	Cl	**37**		ug/L			3993957	4870769	0	Standard
⎡>	**Sc**	**45**		ug/L			589114	631002	2	Standard
⎢	**Cr**	**52**	**303.643**	ug/L	5.198	1	23521	6469056	2	Standard
⎢	**Cr**	**53**	**301.358**	ug/L	4.341	1	212	728005	2	Standard
⎢	**Fe**	**54**	**30315.654**	ug/L	559.706	1	75045	45420505	2	Standard
⎢	**Fe**	**57**	**29877.110**	ug/L	634.434	2	14090	18601288	0	Standard
⎣	**Mn**	**55**	**300.048**	ug/L	1.720	0	719	9213104	2	Standard
⎡>	**Ge**	**72**		ug/L			37838	39085	1	KED
⎢	**Ni**	**60**	**303.241**	ug/L	1.424	0	33	332896	1	KED
⎢	**Ni**	**62**	**304.176**	ug/L	4.720	1	8	55669	2	KED
⎢	**Cu**	**63**	**296.654**	ug/L	9.700	3	58	977341	2	KED
⎢	**Cu**	**65**	**292.866**	ug/L	0.641	0	44	476523	1	KED
⎢	**Zn**	**66**	**286.880**	ug/L	3.471	1	130	119089	0	KED
⎢	**Zn**	**67**	**284.890**	ug/L	11.204	3	24	19671	3	KED
⎢	**As**	**75**	**295.511**	ug/L	2.623	0	5	66031	1	KED
⎣	**Se**	**78**	**283.041**	ug/L	3.845	1	21	6707	2	KED
	Y	**89**		ug/L			382227	408402	1	Standard
	Kr	**83**		ug/L			74	154	15	Standard
⎡>	**In-1**	**115**		ug/L			12273	12241	3	KED
⎢	**Mo**	**98**	**310.180**	ug/L	3.868	1	7	310528	2	KED
⎢	**Cd**	**111**	**292.473**	ug/L	6.956	2	5	74068	1	KED
⎣	**Cd**	**114**	**294.566**	ug/L	3.928	1	4	181644	2	KED
⎡>	**In**	**115**		ug/L			621159	665131	0	Standard
⎢	**Ag**	**107**	**291.478**	ug/L	8.743	2	68	4362934	3	Standard
⎢	**Sb**	**121**	**311.765**	ug/L	1.656	0	88	3762954	0	Standard
⎣	**Sb**	**123**	**314.558**	ug/L	4.779	1	67	2901130	1	Standard
⎡>	**Tb**	**159**		ug/L			634101	756841	1	Standard
⎢	**Tl**	**205**	**280.789**	ug/L	6.206	2	17	11660237	1	Standard
⎣	**Pb**	**208**	**285.649**	ug/L	7.645	2	179	15372693	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 15:33:05
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30441	37215	2	Standard
	Cl	**37**		ug/L			3993957	4832210	0	Standard
⎡>	**Sc**	**45**		ug/L			589114	654015	2	Standard
⎢	**Cr**	**52**	**0.000**	ug/L	0.004	17780	23521	26112	1	Standard
⎢	**Cr**	**53**	**0.041**	ug/L	0.008	20	212	338	5	Standard
⎢	**Fe**	**54**	**-1.905**	ug/L	0.914	47	75045	80363	3	Standard
⎢	**Fe**	**57**	**-2.976**	ug/L	0.211	7	14090	13722	2	Standard
⎣	**Mn**	**55**	**0.022**	ug/L	0.001	6	719	1495	3	Standard
⎡>	**Ge**	**72**		ug/L			37838	41733	3	KED
⎢	**Ni**	**60**	**-0.008**	ug/L	0.003	35	33	27	16	KED
⎢	**Ni**	**62**	**0.012**	ug/L	0.013	110	8	12	18	KED
⎢	**Cu**	**63**	**0.021**	ug/L	0.009	40	58	138	18	KED
⎢	**Cu**	**65**	**0.010**	ug/L	0.004	42	44	67	13	KED
⎢	**Zn**	**66**	**-0.116**	ug/L	0.062	53	130	92	29	KED
⎢	**Zn**	**67**	**-0.188**	ug/L	0.068	36	24	12	37	KED
⎢	**As**	**75**	**0.024**	ug/L	0.016	66	5	11	34	KED
⎣	**Se**	**78**	**0.090**	ug/L	0.043	48	21	26	6	KED
	Y	**89**		ug/L			382227	430307	2	Standard
	Kr	**83**		ug/L			74	66	26	Standard
⎡>	**In-1**	**115**		ug/L			12273	12233	5	KED
⎢	**Mo**	**98**	**0.023**	ug/L	0.001	3	7	30	6	KED
⎢	**Cd**	**111**	**0.005**	ug/L	0.010	197	5	6	37	KED
⎣	**Cd**	**114**	**0.007**	ug/L	0.004	49	4	9	20	KED
⎡>	**In**	**115**		ug/L			621159	709012	2	Standard
⎢	**Ag**	**107**	**0.003**	ug/L	0.001	19	68	125	9	Standard
⎢	**Sb**	**121**	**0.137**	ug/L	0.000	0	88	1864	2	Standard
⎣	**Sb**	**123**	**0.137**	ug/L	0.003	2	67	1420	4	Standard
⎡>	**Tb**	**159**		ug/L			634101	715301	5	Standard
⎢	**Tl**	**205**	**0.020**	ug/L	0.000	1	17	791	3	Standard
⎣	**Pb**	**208**	**0.008**	ug/L	0.001	10	179	598	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 15:39:55
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30441	38343	3	Standard
	Cl	**37**		ug/L			3993957	4768162	3	Standard
⎡>	**Sc**	**45**		ug/L			589114	640714	3	Standard
⎢	**Cr**	**52**	**-0.012**	ug/L	0.014	117	23521	25310	2	Standard
⎢	**Cr**	**53**	**0.028**	ug/L	0.006	21	212	299	6	Standard
⎢	**Fe**	**54**	**-1.387**	ug/L	0.893	64	75045	79488	1	Standard
⎢	**Fe**	**57**	**-1.765**	ug/L	1.061	60	14090	14201	4	Standard
⎣	**Mn**	**55**	**0.017**	ug/L	0.001	7	719	1326	5	Standard
⎡>	**Ge**	**72**		ug/L			37838	41201	0	KED
⎢	**Ni**	**60**	**-0.013**	ug/L	0.010	75	33	21	53	KED
⎢	**Ni**	**62**	**-0.017**	ug/L	0.006	32	8	6	17	KED
⎢	**Cu**	**63**	**0.014**	ug/L	0.002	15	58	111	6	KED
⎢	**Cu**	**65**	**0.007**	ug/L	0.004	50	44	60	9	KED
⎢	**Zn**	**66**	**-0.101**	ug/L	0.046	45	130	98	19	KED
⎢	**Zn**	**67**	**-0.117**	ug/L	0.081	69	24	17	32	KED
⎢	**As**	**75**	**0.009**	ug/L	0.005	59	5	7	16	KED
⎣	**Se**	**78**	**-0.044**	ug/L	0.205	465	21	22	22	KED
	Y	**89**		ug/L			382227	415723	4	Standard
	Kr	**83**		ug/L			74	65	14	Standard
⎡>	**In-1**	**115**		ug/L			12273	13193	2	KED
⎢	**Mo**	**98**	**0.012**	ug/L	0.007	63	7	20	40	KED
⎢	**Cd**	**111**	**-0.005**	ug/L	0.009	172	5	4	58	KED
⎣	**Cd**	**114**	**-0.001**	ug/L	0.002	126	4	4	27	KED
⎡>	**In**	**115**		ug/L			621159	698916	2	Standard
⎢	**Ag**	**107**	**0.000**	ug/L	0.001	143	68	83	12	Standard
⎢	**Sb**	**121**	**0.045**	ug/L	0.004	8	88	675	9	Standard
⎣	**Sb**	**123**	**0.046**	ug/L	0.002	4	67	518	5	Standard
⎡>	**Tb**	**159**		ug/L			634101	707459	2	Standard
⎢	**Tl**	**205**	**0.008**	ug/L	0.000	5	17	319	3	Standard
⎣	**Pb**	**208**	**0.006**	ug/L	0.000	5	179	506	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 15:46:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30441	31561	2	Standard
	Cl	**37**		ug/L			3993957	4949849	1	Standard
⎡>	**Sc**	**45**		ug/L			589114	676682	2	Standard
⎢	**Cr**	**52**	**48.889**	ug/L	1.498	3	23521	1139304	1	Standard
⎢	**Cr**	**53**	**50.333**	ug/L	2.270	4	212	130518	2	Standard
⎢	**Fe**	**54**	**5043.530**	ug/L	175.065	3	75045	8171832	0	Standard
⎢	**Fe**	**57**	**4887.397**	ug/L	82.297	1	14090	3277612	2	Standard
⎣	**Mn**	**55**	**49.324**	ug/L	0.861	1	719	1624541	0	Standard
⎡>	**Ge**	**72**		ug/L			37838	42499	2	KED
⎢	**Ni**	**60**	**49.847**	ug/L	0.075	0	33	59534	2	KED
⎢	**Ni**	**62**	**49.421**	ug/L	0.672	1	8	9845	3	KED
⎢	**Cu**	**63**	**50.049**	ug/L	0.858	1	58	179369	2	KED
⎢	**Cu**	**65**	**51.461**	ug/L	1.028	1	44	91095	3	KED
⎢	**Zn**	**66**	**50.237**	ug/L	0.895	1	130	22795	1	KED
⎢	**Zn**	**67**	**51.778**	ug/L	1.631	3	24	3909	2	KED
⎢	**As**	**75**	**49.564**	ug/L	0.276	0	5	12048	3	KED
⎣	**Se**	**78**	**50.694**	ug/L	1.455	2	21	1326	3	KED
	Y	**89**		ug/L			382227	444051	0	Standard
	Kr	**83**		ug/L			74	69	11	Standard
⎡>	**In-1**	**115**		ug/L			12273	13246	1	KED
⎢	**Mo**	**98**	**48.269**	ug/L	1.143	2	7	52300	1	KED
⎢	**Cd**	**111**	**50.550**	ug/L	0.693	1	5	13862	1	KED
⎣	**Cd**	**114**	**49.826**	ug/L	1.685	3	4	33255	3	KED
⎡>	**In**	**115**		ug/L			621159	718608	1	Standard
⎢	**Ag**	**107**	**47.795**	ug/L	0.425	0	68	772930	1	Standard
⎢	**Sb**	**121**	**49.494**	ug/L	1.433	2	88	645290	1	Standard
⎣	**Sb**	**123**	**49.366**	ug/L	0.837	1	67	491890	0	Standard
⎡>	**Tb**	**159**		ug/L			634101	747579	2	Standard
⎢	**Tl**	**205**	**50.557**	ug/L	2.219	4	17	2073583	4	Standard
⎣	**Pb**	**208**	**50.165**	ug/L	1.034	2	179	2666493	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 15:57:51
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30441	31964	0	Standard
	Cl	**37**		ug/L			3993957	4602600	1	Standard
⎡>	**Sc**	**45**		ug/L			589114	619638	3	Standard
⎢	**Cr**	**52**	**0.007**	ug/L	0.023	351	23521	24867	1	Standard
⎢	**Cr**	**53**	**0.013**	ug/L	0.007	54	212	253	4	Standard
⎢	**Fe**	**54**	**-1.984**	ug/L	1.974	99	75045	75977	3	Standard
⎢	**Fe**	**57**	**-1.565**	ug/L	1.453	92	14090	13857	6	Standard
⎣	**Mn**	**55**	**0.006**	ug/L	0.000	4	719	925	4	Standard
⎡>	**Ge**	**72**		ug/L			37838	41241	4	KED
⎢	**Ni**	**60**	**-0.015**	ug/L	0.011	69	33	19	62	KED
⎢	**Ni**	**62**	**-0.008**	ug/L	0.020	258	8	8	48	KED
⎢	**Cu**	**63**	**-0.001**	ug/L	0.003	434	58	61	14	KED
⎢	**Cu**	**65**	**-0.003**	ug/L	0.003	98	44	43	15	KED
⎢	**Zn**	**66**	**-0.266**	ug/L	0.017	6	130	26	27	KED
⎢	**Zn**	**67**	**-0.265**	ug/L	0.056	21	24	6	56	KED
⎢	**As**	**75**	**0.016**	ug/L	0.019	117	5	9	46	KED
⎣	**Se**	**78**	**-0.018**	ug/L	0.072	406	21	23	3	KED
	Y	**89**		ug/L			382227	401766	1	Standard
	Kr	**83**		ug/L			74	60	10	Standard
⎡>	**In-1**	**115**		ug/L			12273	12977	1	KED
⎢	**Mo**	**98**	**0.008**	ug/L	0.003	38	7	16	22	KED
⎢	**Cd**	**111**	**-0.001**	ug/L	0.005	478	5	5	28	KED
⎣	**Cd**	**114**	**0.003**	ug/L	0.006	233	4	6	58	KED
⎡>	**In**	**115**		ug/L			621159	673900	1	Standard
⎢	**Ag**	**107**	**0.003**	ug/L	0.002	88	68	112	29	Standard
⎢	**Sb**	**121**	**0.046**	ug/L	0.002	3	88	656	4	Standard
⎣	**Sb**	**123**	**0.047**	ug/L	0.005	10	67	515	9	Standard
⎡>	**Tb**	**159**		ug/L			634101	685454	2	Standard
⎢	**Tl**	**205**	**0.004**	ug/L	0.000	9	17	186	6	Standard
⎣	**Pb**	**208**	**-0.001**	ug/L	0.000	22	179	142	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 16:03:52
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				32271	1	Standard
	Cl	**37**		ug/L				4589416	2	Standard
⎡>	**Sc**	**45**		ug/L				623141	1	Standard
⎢	**Cr**	**52**		ug/L				24658	1	Standard
⎢	**Cr**	**53**		ug/L				229	5	Standard
⎢	**Fe**	**54**		ug/L				78115	1	Standard
⎢	**Fe**	**57**		ug/L				14013	3	Standard
⎣	**Mn**	**55**		ug/L				916	9	Standard
⎡>	**Ge**	**72**		ug/L				40387	6	KED
⎢	**Ni**	**60**		ug/L				20	19	KED
⎢	**Ni**	**62**		ug/L				6	17	KED
⎢	**Cu**	**63**		ug/L				69	20	KED
⎢	**Cu**	**65**		ug/L				38	8	KED
⎢	**Zn**	**66**		ug/L				30	22	KED
⎢	**Zn**	**67**		ug/L				6	17	KED
⎢	**As**	**75**		ug/L				9	13	KED
⎣	**Se**	**78**		ug/L				24	5	KED
	Y	**89**		ug/L				403977	1	Standard
	Kr	**83**		ug/L				57	8	Standard
⎡>	**In-1**	**115**		ug/L				13076	4	KED
⎢	**Mo**	**98**		ug/L				15	13	KED
⎢	**Cd**	**111**		ug/L				5	44	KED
⎣	**Cd**	**114**		ug/L				8	31	KED
⎡>	**In**	**115**		ug/L				689664	0	Standard
⎢	**Ag**	**107**		ug/L				57	20	Standard
⎢	**Sb**	**121**		ug/L				244	11	Standard
⎣	**Sb**	**123**		ug/L				203	13	Standard
⎡>	**Tb**	**159**		ug/L				688640	1	Standard
⎢	**Tl**	**205**		ug/L				92	21	Standard
⎣	**Pb**	**208**		ug/L				130	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 16:08:48
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			32271	30084	3	Standard
	Cl	**37**		ug/L			4589416	4845658	1	Standard
⌈>	**Sc**	**45**		ug/L			623141	656636	2	Standard
|	**Cr**	**52**	**48.234**	ug/L	0.405	0	24658	1091499	3	Standard
|	**Cr**	**53**	**49.409**	ug/L	0.121	0	229	124424	2	Standard
|	**Fe**	**54**	**4972.721**	ug/L	23.755	0	78115	7822280	2	Standard
|	**Fe**	**57**	**4973.475**	ug/L	112.354	2	14013	3235303	3	Standard
⌊	**Mn**	**55**	**49.299**	ug/L	0.698	1	916	1576615	4	Standard
⌈>	**Ge**	**72**		ug/L			40387	41347	4	KED
|	**Ni**	**60**	**50.410**	ug/L	1.272	2	20	58510	2	KED
|	**Ni**	**62**	**49.199**	ug/L	0.995	2	6	9530	5	KED
|	**Cu**	**63**	**50.026**	ug/L	1.881	3	69	174266	2	KED
|	**Cu**	**65**	**51.359**	ug/L	1.711	3	38	88344	2	KED
|	**Zn**	**66**	**51.155**	ug/L	1.125	2	30	22461	3	KED
|	**Zn**	**67**	**52.439**	ug/L	1.665	3	6	3829	3	KED
|	**As**	**75**	**49.355**	ug/L	0.894	1	9	11668	3	KED
⌊	**Se**	**78**	**50.516**	ug/L	1.346	2	24	1286	2	KED
	Y	**89**		ug/L			403977	426408	2	Standard
	Kr	**83**		ug/L			57	65	11	Standard
⌈>	**In-1**	**115**		ug/L			13076	12653	1	KED
|	**Mo**	**98**	**51.264**	ug/L	0.879	1	15	53070	2	KED
|	**Cd**	**111**	**52.051**	ug/L	0.949	1	5	13634	2	KED
⌊	**Cd**	**114**	**52.237**	ug/L	1.226	2	8	33312	3	KED
⌈>	**In**	**115**		ug/L			689664	692876	2	Standard
|	**Ag**	**107**	**48.506**	ug/L	2.006	4	57	755830	2	Standard
|	**Sb**	**121**	**49.842**	ug/L	1.622	3	244	626522	0	Standard
⌊	**Sb**	**123**	**50.169**	ug/L	0.839	1	203	482049	1	Standard
⌈>	**Tb**	**159**		ug/L			688640	733246	1	Standard
|	**Tl**	**205**	**49.660**	ug/L	3.169	6	92	1997662	6	Standard
⌊	**Pb**	**208**	**49.809**	ug/L	1.389	2	130	2596800	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 16:16:28
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			32271	33109	2	Standard
	Cl	**37**		ug/L			4589416	4673825	2	Standard
⎡>	**Sc**	**45**		ug/L			623141	633888	4	Standard
⎢	**Cr**	**52**	**-0.027**	ug/L	0.033	119	24658	24486	1	Standard
⎢	**Cr**	**53**	**-0.010**	ug/L	0.000	3	229	208	3	Standard
⎢	**Fe**	**54**	**-1.028**	ug/L	1.724	167	78115	77848	0	Standard
⎢	**Fe**	**57**	**-0.773**	ug/L	0.606	78	14013	13764	2	Standard
⎣	**Mn**	**55**	**-0.003**	ug/L	0.000	9	916	835	4	Standard
⎡>	**Ge**	**72**		ug/L			40387	40753	1	KED
⎢	**Ni**	**60**	**-0.004**	ug/L	0.002	57	20	15	18	KED
⎢	**Ni**	**62**	**0.006**	ug/L	0.018	273	6	7	43	KED
⎢	**Cu**	**63**	**-0.001**	ug/L	0.001	49	69	65	3	KED
⎢	**Cu**	**65**	**-0.005**	ug/L	0.002	41	38	29	15	KED
⎢	**Zn**	**66**	**-0.007**	ug/L	0.010	152	30	27	15	KED
⎢	**Zn**	**67**	**0.079**	ug/L	0.068	86	6	12	39	KED
⎢	**As**	**75**	**-0.013**	ug/L	0.006	43	9	6	20	KED
⎣	**Se**	**78**	**-0.133**	ug/L	0.187	140	24	21	22	KED
	Y	**89**		ug/L			403977	410789	1	Standard
	Kr	**83**		ug/L			57	57	20	Standard
⎡>	**In-1**	**115**		ug/L			13076	12867	2	KED
⎢	**Mo**	**98**	**0.001**	ug/L	0.007	857	15	16	47	KED
⎢	**Cd**	**111**	**-0.006**	ug/L	0.003	45	5	4	13	KED
⎣	**Cd**	**114**	**0.000**	ug/L	0.005	1254	8	8	33	KED
⎡>	**In**	**115**		ug/L			689664	708318	2	Standard
⎢	**Ag**	**107**	**0.000**	ug/L	0.001	435	57	61	21	Standard
⎢	**Sb**	**121**	**0.031**	ug/L	0.004	13	244	652	6	Standard
⎣	**Sb**	**123**	**0.027**	ug/L	0.001	2	203	472	1	Standard
⎡>	**Tb**	**159**		ug/L			688640	696408	2	Standard
⎢	**Tl**	**205**	**0.003**	ug/L	0.000	5	92	204	1	Standard
⎣	**Pb**	**208**	**0.000**	ug/L	0.001	2290	130	132	20	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0008-BLK3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 16:23:19
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			32271	44384	1	Standard
	Cl	37		ug/L			4589416	4455325	0	Standard
>	Sc	45		ug/L			623141	605486	1	Standard
	Cr	52	0.095	ug/L	0.035	36	24658	25897	1	Standard
	Cr	53	0.050	ug/L	0.012	24	229	338	8	Standard
	Fe	54	-2.640	ug/L	1.411	53	78115	72091	1	Standard
	Fe	57	-0.013	ug/L	0.924	7182	14013	13603	2	Standard
	Mn	55	0.014	ug/L	0.003	17	916	1307	5	Standard
>	Ge	72		ug/L			40387	38936	7	KED
	Ni	60	-0.002	ug/L	0.004	289	20	17	22	KED
	Ni	62	-0.001	ug/L	0.020	1427	6	5	57	KED
	Cu	63	0.024	ug/L	0.004	17	69	144	6	KED
	Cu	65	0.033	ug/L	0.009	27	38	90	15	KED
	Zn	66	0.127	ug/L	0.030	23	30	81	16	KED
	Zn	67	0.079	ug/L	0.039	48	6	11	16	KED
	As	75	-0.007	ug/L	0.008	114	9	7	30	KED
	Se	78	-0.083	ug/L	0.164	197	24	21	10	KED
	Y	89		ug/L			403977	397452	0	Standard
	Kr	83		ug/L			57	58	30	Standard
>	In-1	115		ug/L			13076	12752	1	KED
	Mo	98	0.007	ug/L	0.011	163	15	22	53	KED
	Cd	111	0.002	ug/L	0.004	242	5	6	18	KED
	Cd	114	-0.006	ug/L	0.002	29	8	4	26	KED
>	In	115		ug/L			689664	669254	1	Standard
	Ag	107	0.001	ug/L	0.001	144	57	68	26	Standard
	Sb	121	0.005	ug/L	0.003	57	244	292	11	Standard
	Sb	123	0.004	ug/L	0.001	32	203	233	3	Standard
>	Tb	159		ug/L			688640	666226	3	Standard
	Tl	205	0.002	ug/L	0.001	36	92	153	12	Standard
	Pb	208	0.003	ug/L	0.000	17	130	250	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0008-BS3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 16:28:15
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			32271	45943	2	Standard
	Cl	37		ug/L			4589416	4343304	1	Standard
>	Sc	45		ug/L			623141	595672	1	Standard
	Cr	52	25.306	ug/L	0.284	1	24658	530652	1	Standard
	Cr	53	25.866	ug/L	0.345	1	229	59193	1	Standard
	Fe	54	-0.862	ug/L	0.052	6	78115	73455	1	Standard
	Fe	57	1.396	ug/L	0.899	64	14013	14216	3	Standard
	Mn	55	25.819	ug/L	0.082	0	916	749303	1	Standard
>	Ge	72		ug/L			40387	38946	1	KED
	Ni	60	25.747	ug/L	0.553	2	20	28179	1	KED
	Ni	62	26.160	ug/L	0.572	2	6	4775	1	KED
	Cu	63	26.180	ug/L	0.938	3	69	85998	2	KED
	Cu	65	26.696	ug/L	0.507	1	38	43316	2	KED
	Zn	66	88.422	ug/L	1.476	1	30	36567	1	KED
	Zn	67	81.466	ug/L	4.701	5	6	5603	4	KED
	As	75	25.584	ug/L	0.166	0	9	5704	1	KED
	Se	78	84.071	ug/L	1.212	1	24	2002	2	KED
	Y	89		ug/L			403977	388292	0	Standard
	Kr	83		ug/L			57	66	29	Standard
>	In-1	115		ug/L			13076	12347	0	KED
	Mo	98	25.712	ug/L	0.610	2	15	25979	2	KED
	Cd	111	26.310	ug/L	0.955	3	5	6727	3	KED
	Cd	114	26.118	ug/L	0.161	0	8	16254	0	KED
>	In	115		ug/L			689664	656936	2	Standard
	Ag	107	24.785	ug/L	1.122	4	57	366186	1	Standard
	Sb	121	26.294	ug/L	0.488	1	244	313623	2	Standard
	Sb	123	26.369	ug/L	0.163	0	203	240374	1	Standard
>	Tb	159		ug/L			688640	665234	2	Standard
	Tl	205	26.159	ug/L	0.381	1	92	954825	0	Standard
	Pb	208	26.903	ug/L	0.530	1	130	1272662	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0046-BLK2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 16:33:11
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			32271	45325	2	Standard
	Cl	37		ug/L			4589416	4360070	0	Standard
>	Sc	45		ug/L			623141	595043	0	Standard
	Cr	52	0.188	ug/L	0.027	14	24658	27305	2	Standard
	Cr	53	0.125	ug/L	0.019	14	229	503	7	Standard
	Fe	54	8.663	ug/L	1.908	22	78115	86815	3	Standard
	Fe	57	0.536	ug/L	0.473	88	14013	13696	2	Standard
	Mn	55	3.151	ug/L	0.036	1	916	92106	0	Standard
>	Ge	72		ug/L			40387	39986	4	KED
	Ni	60	0.018	ug/L	0.009	48	20	40	20	KED
	Ni	62	-0.003	ug/L	0.017	492	6	5	57	KED
	Cu	63	0.033	ug/L	0.004	12	69	180	5	KED
	Cu	65	0.032	ug/L	0.004	11	38	90	2	KED
	Zn	66	2.520	ug/L	0.011	0	30	1099	4	KED
	Zn	67	2.048	ug/L	0.474	23	6	149	18	KED
	As	75	-0.001	ug/L	0.008	1576	9	9	24	KED
	Se	78	0.140	ug/L	0.255	182	24	27	19	KED
	Y	89		ug/L			403977	396446	3	Standard
	Kr	83		ug/L			57	57	10	Standard
>	In-1	115		ug/L			13076	12319	0	KED
	Mo	98	-0.002	ug/L	0.005	186	15	12	38	KED
	Cd	111	0.000	ug/L	0.012	19234	5	5	56	KED
	Cd	114	-0.004	ug/L	0.002	38	8	5	16	KED
>	In	115		ug/L			689664	660866	1	Standard
	Ag	107	0.001	ug/L	0.001	43	57	76	11	Standard
	Sb	121	-0.006	ug/L	0.001	24	244	163	11	Standard
	Sb	123	-0.008	ug/L	0.001	14	203	120	8	Standard
>	Tb	159		ug/L			688640	670093	3	Standard
	Tl	205	0.000	ug/L	0.000	137	92	96	6	Standard
	Pb	208	0.005	ug/L	0.000	0	130	366	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0046-BS2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 16:38:07
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			32271	45813	2	Standard
	Cl	37		ug/L			4589416	4700721	1	Standard
>	Sc	45		ug/L			623141	629086	1	Standard
	Cr	52	25.079	ug/L	0.224	0	24658	555565	1	Standard
	Cr	53	26.105	ug/L	0.142	0	229	63090	1	Standard
	Fe	54	5154.094	ug/L	79.125	1	78115	7763851	0	Standard
	Fe	57	5038.251	ug/L	103.384	2	14013	3139356	0	Standard
	Mn	55	25.168	ug/L	0.138	0	916	771330	1	Standard
>	Ge	72		ug/L			40387	39944	3	KED
	Ni	60	25.709	ug/L	0.660	2	20	28845	0	KED
	Ni	62	25.874	ug/L	1.125	4	6	4842	3	KED
	Cu	63	25.163	ug/L	0.444	1	69	84773	1	KED
	Cu	65	25.456	ug/L	0.568	2	38	42348	1	KED
	Zn	66	83.591	ug/L	2.368	2	30	35442	2	KED
	Zn	67	78.812	ug/L	1.190	1	6	5560	2	KED
	As	75	24.795	ug/L	0.470	1	9	5668	1	KED
	Se	78	77.935	ug/L	2.668	3	24	1904	0	KED
	Y	89		ug/L			403977	417561	1	Standard
	Kr	83		ug/L			57	53	9	Standard
>	In-1	115		ug/L			13076	12520	2	KED
	Mo	98	0.014	ug/L	0.015	106	15	29	51	KED
	Cd	111	25.773	ug/L	0.349	1	5	6682	2	KED
	Cd	114	25.329	ug/L	0.787	3	8	15977	1	KED
>	In	115		ug/L			689664	671922	0	Standard
	Ag	107	24.394	ug/L	0.105	0	57	368905	0	Standard
	Sb	121	-0.008	ug/L	0.001	17	244	144	11	Standard
	Sb	123	-0.009	ug/L	0.002	17	203	116	12	Standard
>	Tb	159		ug/L			688640	711030	4	Standard
	Tl	205	24.968	ug/L	0.807	3	92	973328	1	Standard
	Pb	208	25.720	ug/L	1.462	5	130	1298571	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0388-04
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, March 07, 2023 16:44:55
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			32271	41179	2	Standard
	Cl	**37**		ug/L			4589416	4357632	3	Standard
>	**Sc**	**45**		ug/L			623141	711880	0	Standard
	Cr	**52**	**0.061**	ug/L	0.049	79	24658	29625	4	Standard
	Cr	**53**	**0.422**	ug/L	0.015	3	229	1412	2	Standard
	Fe	**54**	**3982.412**	ug/L	145.990	3	78115	6810504	4	Standard
	Fe	**57**	**3959.790**	ug/L	108.219	2	14013	2796470	3	Standard
	Mn	**55**	**209.703**	ug/L	5.316	2	916	7266124	3	Standard
>	**Ge**	**72**		ug/L			40387	41866	1	KED
	Ni	**60**	**0.201**	ug/L	0.017	8	20	257	9	KED
	Ni	**62**	**0.196**	ug/L	0.046	23	6	45	21	KED
	Cu	**63**	**0.139**	ug/L	0.002	1	69	563	1	KED
	Cu	**65**	**0.142**	ug/L	0.012	8	38	287	6	KED
	Zn	**66**	**1.484**	ug/L	0.053	3	30	690	2	KED
	Zn	**67**	**1.740**	ug/L	0.208	11	6	135	12	KED
	As	**75**	**0.091**	ug/L	0.015	16	9	31	9	KED
	Se	**78**	**-0.113**	ug/L	0.100	88	24	22	10	KED
	Y	**89**		ug/L			403977	436932	3	Standard
	Kr	**83**		ug/L			57	64	10	Standard
>	**In-1**	**115**		ug/L			13076	12653	0	KED
	Mo	**98**	**0.043**	ug/L	0.005	12	15	59	10	KED
	Cd	**111**	**0.002**	ug/L	0.005	285	5	6	24	KED
	Cd	**114**	**-0.007**	ug/L	0.002	24	8	4	26	KED
>	**In**	**115**		ug/L			689664	706312	2	Standard
	Ag	**107**	**0.001**	ug/L	0.001	98	57	69	13	Standard
	Sb	**121**	**0.011**	ug/L	0.002	20	244	392	9	Standard
	Sb	**123**	**0.009**	ug/L	0.001	8	203	296	3	Standard
>	**Tb**	**159**		ug/L			688640	717967	6	Standard
	Tl	**205**	**0.001**	ug/L	0.001	48	92	138	20	Standard
	Pb	**208**	**0.404**	ug/L	0.021	5	130	20737	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0388-02
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, March 07, 2023 16:49:51
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			32271	41866	2	Standard
	Cl	**37**		ug/L			4589416	4517463	0	Standard
>	**Sc**	**45**		ug/L			623141	740306	2	Standard
	Cr	**52**	**-0.020**	ug/L	0.034	169	24658	28796	4	Standard
	Cr	**53**	**0.326**	ug/L	0.005	1	229	1196	1	Standard
	Fe	**54**	**2772.841**	ug/L	32.967	1	78115	4958414	1	Standard
	Fe	**57**	**2622.105**	ug/L	50.863	1	14013	1930663	1	Standard
	Mn	**55**	**138.704**	ug/L	2.274	1	916	4996688	0	Standard
>	**Ge**	**72**		ug/L			40387	40786	0	KED
	Ni	**60**	**0.453**	ug/L	0.012	2	20	539	1	KED
	Ni	**62**	**0.465**	ug/L	0.061	13	6	95	13	KED
	Cu	**63**	**0.102**	ug/L	0.004	3	69	419	3	KED
	Cu	**65**	**0.097**	ug/L	0.011	10	38	203	9	KED
	Zn	**66**	**1.205**	ug/L	0.021	1	30	552	2	KED
	Zn	**67**	**1.649**	ug/L	0.098	5	6	125	4	KED
	As	**75**	**0.221**	ug/L	0.009	4	9	60	2	KED
	Se	**78**	**-0.217**	ug/L	0.209	96	24	19	25	KED
	Y	**89**		ug/L			403977	433313	0	Standard
	Kr	**83**		ug/L			57	58	22	Standard
>	**In-1**	**115**		ug/L			13076	12605	2	KED
	Mo	**98**	**0.068**	ug/L	0.004	5	15	85	5	KED
	Cd	**111**	**-0.003**	ug/L	0.010	328	5	4	52	KED
	Cd	**114**	**-0.004**	ug/L	0.005	120	8	5	49	KED
>	**In**	**115**		ug/L			689664	702676	1	Standard
	Ag	**107**	**-0.000**	ug/L	0.001	608	57	56	21	Standard
	Sb	**121**	**0.027**	ug/L	0.000	0	244	596	2	Standard
	Sb	**123**	**0.029**	ug/L	0.002	5	203	491	2	Standard
>	**Tb**	**159**		ug/L			688640	733033	1	Standard
	Tl	**205**	**0.001**	ug/L	0.000	79	92	121	15	Standard
	Pb	**208**	**0.390**	ug/L	0.012	2	130	20483	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0046-DUP2
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, March 07, 2023 16:54:50
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			32271	41213	2	Standard
	Cl	**37**		ug/L			4589416	4548406	3	Standard
>	**Sc**	**45**		ug/L			623141	734863	4	Standard
	Cr	**52**	**0.029**	ug/L	0.054	182	24658	29763	0	Standard
	Cr	**53**	**0.347**	ug/L	0.007	2	229	1248	5	Standard
	Fe	**54**	**2791.991**	ug/L	15.648	0	78115	4955890	4	Standard
	Fe	**57**	**2746.578**	ug/L	62.675	2	14013	2007431	5	Standard
	Mn	**55**	**139.470**	ug/L	3.013	2	916	4985282	2	Standard
>	**Ge**	**72**		ug/L			40387	40561	1	KED
	Ni	**60**	**0.425**	ug/L	0.013	2	20	504	3	KED
	Ni	**62**	**0.478**	ug/L	0.172	36	6	97	34	KED
	Cu	**63**	**0.146**	ug/L	0.015	10	69	567	9	KED
	Cu	**65**	**0.155**	ug/L	0.004	2	38	300	1	KED
	Zn	**66**	**1.158**	ug/L	0.105	9	30	528	8	KED
	Zn	**67**	**1.516**	ug/L	0.074	4	6	114	5	KED
	As	**75**	**0.227**	ug/L	0.016	6	9	61	4	KED
	Se	**78**	**0.025**	ug/L	0.076	305	24	25	5	KED
	Y	**89**		ug/L			403977	433245	1	Standard
	Kr	**83**		ug/L			57	62	10	Standard
>	**In-1**	**115**		ug/L			13076	12093	3	KED
	Mo	**98**	**0.061**	ug/L	0.010	16	15	74	14	KED
	Cd	**111**	**0.000**	ug/L	0.004	974	5	5	20	KED
	Cd	**114**	**-0.004**	ug/L	0.005	123	8	5	62	KED
>	**In**	**115**		ug/L			689664	694624	0	Standard
	Ag	**107**	**0.000**	ug/L	0.001	401	57	59	14	Standard
	Sb	**121**	**0.029**	ug/L	0.000	0	244	615	0	Standard
	Sb	**123**	**0.020**	ug/L	0.004	17	203	396	9	Standard
>	**Tb**	**159**		ug/L			688640	737757	1	Standard
	Tl	**205**	**0.001**	ug/L	0.000	45	92	137	11	Standard
	Pb	**208**	**0.402**	ug/L	0.007	1	130	21222	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0046-MS2
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, March 07, 2023 16:59:43
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte		Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C		**13**		ug/L			32271	41240	3	Standard
	Cl		**37**		ug/L			4589416	4576848	1	Standard
⌈>	**Sc**		**45**		ug/L			623141	758547	3	Standard
|	**Cr**		**52**	**11.045**	ug/L	0.450	4	24658	311554	1	Standard
|	**Cr**		**53**	**11.707**	ug/L	0.327	2	229	34249	2	Standard
|	**Fe**		**54**	**5004.638**	ug/L	170.232	3	78115	9086314	0	Standard
|	**Fe**		**57**	**4798.365**	ug/L	142.540	2	14013	3604555	2	Standard
⌊	**Mn**	STL	**55**	**144.207**	ug/L	3.651	2	916	5320676	1	Standard
⌈>	**Ge**		**72**		ug/L			40387	40921	1	KED
|	**Ni**		**60**	**13.357**	ug/L	0.365	2	20	15375	4	KED
|	**Ni**		**62**	**12.988**	ug/L	0.341	2	6	2495	4	KED
|	**Cu**		**63**	**12.928**	ug/L	0.218	1	69	44662	1	KED
|	**Cu**		**65**	**12.886**	ug/L	0.347	2	38	21982	1	KED
|	**Zn**		**66**	**41.769**	ug/L	0.486	1	30	18168	2	KED
|	**Zn**		**67**	**40.154**	ug/L	0.608	1	6	2906	3	KED
|	**As**		**75**	**12.629**	ug/L	0.159	1	9	2963	2	KED
⌊	**Se**		**78**	**39.104**	ug/L	0.430	1	24	991	0	KED
	Y		**89**		ug/L			403977	438991	0	Standard
	Kr		**83**		ug/L			57	67	34	Standard
⌈>	**In-1**		**115**		ug/L			13076	12663	3	KED
|	**Mo**		**98**	**0.054**	ug/L	0.006	11	15	70	10	KED
|	**Cd**		**111**	**12.508**	ug/L	0.221	1	5	3284	4	KED
⌊	**Cd**		**114**	**12.660**	ug/L	0.543	4	8	8077	1	KED
⌈>	**In**		**115**		ug/L			689664	705141	1	Standard
|	**Ag**		**107**	**11.765**	ug/L	0.138	1	57	186761	2	Standard
|	**Sb**		**121**	**0.028**	ug/L	0.002	8	244	603	5	Standard
⌊	**Sb**		**123**	**0.023**	ug/L	0.003	14	203	435	6	Standard
⌈>	**Tb**		**159**		ug/L			688640	736751	2	Standard
|	**Tl**		**205**	**12.334**	ug/L	0.568	4	92	498452	2	Standard
⌊	**Pb**		**208**	**13.022**	ug/L	0.431	3	130	682136	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 17:05:03
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			32271	36210	3	Standard
	Cl	**37**		ug/L			4589416	4397034	2	Standard
⎡>	**Sc**	**45**		ug/L			623141	639457	4	Standard
⎢	**Cr**	**52**	**-0.000**	ug/L	0.029	10216	24658	25290	3	Standard
⎢	**Cr**	**53**	**-0.001**	ug/L	0.003	231	229	232	7	Standard
⎢	**Fe**	**54**	**1.931**	ug/L	1.747	90	78115	83011	1	Standard
⎢	**Fe**	**57**	**0.188**	ug/L	0.637	337	14013	14487	1	Standard
⎣	**Mn**	**55**	**-0.001**	ug/L	0.001	61	916	893	1	Standard
⎡>	**Ge**	**72**		ug/L			40387	42117	1	KED
⎢	**Ni**	**60**	**-0.010**	ug/L	0.002	17	20	8	24	KED
⎢	**Ni**	**62**	**-0.008**	ug/L	0.015	192	6	5	57	KED
⎢	**Cu**	**63**	**-0.003**	ug/L	0.001	34	69	62	6	KED
⎢	**Cu**	**65**	**0.000**	ug/L	0.000	192	38	40	0	KED
⎢	**Zn**	**66**	**0.030**	ug/L	0.013	42	30	45	13	KED
⎢	**Zn**	**67**	**0.005**	ug/L	0.039	804	6	6	41	KED
⎢	**As**	**75**	**-0.002**	ug/L	0.007	415	9	9	19	KED
⎣	**Se**	**78**	**0.026**	ug/L	0.084	322	24	26	9	KED
	Y	**89**		ug/L			403977	407741	2	Standard
	Kr	**83**		ug/L			57	55	5	Standard
⎡>	**In-1**	**115**		ug/L			13076	13251	1	KED
⎢	**Mo**	**98**	**-0.008**	ug/L	0.004	46	15	6	65	KED
⎢	**Cd**	**111**	**-0.000**	ug/L	0.004	1568	5	5	16	KED
⎣	**Cd**	**114**	**-0.009**	ug/L	0.002	20	8	3	39	KED
⎡>	**In**	**115**		ug/L			689664	697943	1	Standard
⎢	**Ag**	**107**	**-0.000**	ug/L	0.000	166	57	53	13	Standard
⎢	**Sb**	**121**	**-0.016**	ug/L	0.001	4	244	48	19	Standard
⎣	**Sb**	**123**	**-0.017**	ug/L	0.001	4	203	41	18	Standard
⎡>	**Tb**	**159**		ug/L			688640	692965	3	Standard
⎢	**Tl**	**205**	**-0.001**	ug/L	0.000	16	92	41	24	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.001	96	130	158	15	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 17:09:59
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			32271	31280	1	Standard
	Cl	**37**		ug/L			4589416	4755594	2	Standard
⌈>	**Sc**	**45**		ug/L			623141	657871	1	Standard
|	**Cr**	**52**	**48.716**	ug/L	1.045	2	24658	1103862	0	Standard
|	**Cr**	**53**	**50.066**	ug/L	1.223	2	229	126281	0	Standard
|	**Fe**	**54**	**5089.491**	ug/L	219.784	4	78115	8015639	2	Standard
|	**Fe**	**57**	**4979.113**	ug/L	201.280	4	14013	3243793	2	Standard
⌊	**Mn**	**55**	**48.751**	ug/L	1.301	2	916	1561162	0	Standard
⌈>	**Ge**	**72**		ug/L			40387	42718	1	KED
|	**Ni**	**60**	**50.894**	ug/L	1.188	2	20	61086	3	KED
|	**Ni**	**62**	**49.549**	ug/L	0.530	1	6	9916	1	KED
|	**Cu**	**63**	**50.510**	ug/L	1.140	2	69	181998	3	KED
|	**Cu**	**65**	**51.522**	ug/L	0.607	1	38	91647	1	KED
|	**Zn**	**66**	**51.103**	ug/L	0.656	1	30	23194	2	KED
|	**Zn**	**67**	**51.801**	ug/L	0.941	1	6	3912	3	KED
|	**As**	**75**	**49.141**	ug/L	1.311	2	9	12010	3	KED
⌊	**Se**	**78**	**50.919**	ug/L	0.676	1	24	1340	1	KED
	Y	**89**		ug/L			403977	428862	1	Standard
	Kr	**83**		ug/L			57	66	23	Standard
⌈>	**In-1**	**115**		ug/L			13076	13168	1	KED
|	**Mo**	**98**	**49.190**	ug/L	1.160	2	15	53003	3	KED
|	**Cd**	**111**	**50.556**	ug/L	0.289	0	5	13783	0	KED
⌊	**Cd**	**114**	**49.478**	ug/L	1.303	2	8	32840	3	KED
⌈>	**In**	**115**		ug/L			689664	707404	0	Standard
|	**Ag**	**107**	**47.677**	ug/L	0.533	1	57	759010	1	Standard
|	**Sb**	**121**	**49.453**	ug/L	0.355	0	244	635061	1	Standard
⌊	**Sb**	**123**	**49.000**	ug/L	0.778	1	203	480825	1	Standard
⌈>	**Tb**	**159**		ug/L			688640	748636	3	Standard
|	**Tl**	**205**	**49.326**	ug/L	3.316	6	92	2023895	4	Standard
⌊	**Pb**	**208**	**49.267**	ug/L	1.744	3	130	2621139	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 17:17:39
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			32271	32021	1	Standard
	Cl	**37**		ug/L			4589416	4599446	2	Standard
⎡>	**Sc**	**45**		ug/L			623141	634731	1	Standard
⎢	**Cr**	**52**	**0.018**	ug/L	0.020	112	24658	25498	0	Standard
⎢	**Cr**	**53**	**-0.004**	ug/L	0.005	147	229	225	3	Standard
⎢	**Fe**	**54**	**-0.498**	ug/L	1.952	392	78115	78783	1	Standard
⎢	**Fe**	**57**	**2.419**	ug/L	0.874	36	14013	15782	1	Standard
⎣	**Mn**	**55**	**-0.008**	ug/L	0.001	11	916	696	4	Standard
⎡>	**Ge**	**72**		ug/L			40387	41773	1	KED
⎢	**Ni**	**60**	**-0.006**	ug/L	0.001	17	20	13	7	KED
⎢	**Ni**	**62**	**0.009**	ug/L	0.015	176	6	8	35	KED
⎢	**Cu**	**63**	**-0.002**	ug/L	0.004	222	69	66	21	KED
⎢	**Cu**	**65**	**-0.003**	ug/L	0.003	110	38	34	14	KED
⎢	**Zn**	**66**	**-0.001**	ug/L	0.016	1431	30	31	25	KED
⎢	**Zn**	**67**	**-0.037**	ug/L	0.045	122	6	3	86	KED
⎢	**As**	**75**	**-0.004**	ug/L	0.013	322	9	8	36	KED
⎣	**Se**	**78**	**-0.027**	ug/L	0.044	163	24	24	4	KED
	Y	**89**		ug/L			403977	417390	3	Standard
	Kr	**83**		ug/L			57	56	24	Standard
⎡>	**In-1**	**115**		ug/L			13076	12705	4	KED
⎢	**Mo**	**98**	**-0.004**	ug/L	0.007	181	15	11	67	KED
⎢	**Cd**	**111**	**-0.005**	ug/L	0.006	120	5	4	35	KED
⎣	**Cd**	**114**	**-0.006**	ug/L	0.005	72	8	4	66	KED
⎡>	**In**	**115**		ug/L			689664	693955	3	Standard
⎢	**Ag**	**107**	**0.001**	ug/L	0.001	149	57	66	17	Standard
⎢	**Sb**	**121**	**0.020**	ug/L	0.003	15	244	500	7	Standard
⎣	**Sb**	**123**	**0.017**	ug/L	0.003	15	203	369	9	Standard
⎡>	**Tb**	**159**		ug/L			688640	707143	5	Standard
⎢	**Tl**	**205**	**0.002**	ug/L	0.001	24	92	178	14	Standard
⎣	**Pb**	**208**	**-0.000**	ug/L	0.000	119	130	123	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0007-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 17:27:05
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			32271	47432	1	Standard
	Cl	**37**		ug/L			4589416	4503298	2	Standard
⌈>	**Sc**	**45**		ug/L			623141	629705	2	Standard
|	**Cr**	**52**	**0.056**	ug/L	0.009	16	24658	26098	1	Standard
|	**Cr**	**53**	**0.025**	ug/L	0.011	43	229	290	6	Standard
|	**Fe**	**54**	**-1.384**	ug/L	0.537	38	78115	76886	3	Standard
|	**Fe**	**57**	**5.030**	ug/L	0.548	10	14013	17290	4	Standard
⌊	**Mn**	**55**	**0.007**	ug/L	0.001	16	916	1135	1	Standard
⌈>	**Ge**	**72**		ug/L			40387	41940	3	KED
|	**Ni**	**60**	**0.008**	ug/L	0.007	81	20	31	28	KED
|	**Ni**	**62**	**0.028**	ug/L	0.008	27	6	12	9	KED
|	**Cu**	**63**	**0.034**	ug/L	0.004	13	69	191	8	KED
|	**Cu**	**65**	**0.033**	ug/L	0.005	15	38	97	9	KED
|	**Zn**	**66**	**0.177**	ug/L	0.020	11	30	110	10	KED
|	**Zn**	**67**	**0.092**	ug/L	0.051	55	6	13	24	KED
|	**As**	**75**	**-0.007**	ug/L	0.001	17	9	7	3	KED
⌊	**Se**	**78**	**-0.168**	ug/L	0.182	108	24	21	20	KED
	Y	**89**		ug/L			403977	412675	2	Standard
	Kr	**83**		ug/L			57	60	43	Standard
⌈>	**In-1**	**115**		ug/L			13076	12956	1	KED
|	**Mo**	**98**	**0.000**	ug/L	0.008	2125	15	15	55	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.002	105	5	5	10	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.010	702	8	9	70	KED
⌈>	**In**	**115**		ug/L			689664	682523	1	Standard
|	**Ag**	**107**	**0.000**	ug/L	0.001	780	57	57	16	Standard
|	**Sb**	**121**	**0.001**	ug/L	0.001	142	244	254	5	Standard
⌊	**Sb**	**123**	**-0.004**	ug/L	0.003	73	203	166	14	Standard
⌈>	**Tb**	**159**		ug/L			688640	696017	2	Standard
|	**Tl**	**205**	**0.001**	ug/L	0.000	41	92	118	6	Standard
⌊	**Pb**	**208**	**0.005**	ug/L	0.000	7	130	400	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0007-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 17:32:00
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			32271	47263	1	Standard
	Cl	**37**		ug/L			4589416	4447772	1	Standard
>	**Sc**	**45**		ug/L			623141	626695	2	Standard
	Cr	**52**	**24.915**	ug/L	0.153	0	24658	550067	3	Standard
	Cr	**53**	**26.043**	ug/L	0.362	1	229	62703	2	Standard
	Fe	**54**	**-1.599**	ug/L	1.499	93	78115	76205	4	Standard
	Fe	**57**	**3.387**	ug/L	0.549	16	14013	16181	1	Standard
	Mn	**55**	**25.857**	ug/L	0.483	1	916	789290	1	Standard
>	**Ge**	**72**		ug/L			40387	40655	2	KED
	Ni	**60**	**25.715**	ug/L	0.255	0	20	29380	2	KED
	Ni	**62**	**25.981**	ug/L	1.436	5	6	4951	5	KED
	Cu	**63**	**27.024**	ug/L	0.703	2	69	92662	1	KED
	Cu	**65**	**26.559**	ug/L	0.352	1	38	44978	1	KED
	Zn	**66**	**86.797**	ug/L	1.811	2	30	37475	3	KED
	Zn	**67**	**81.084**	ug/L	2.224	2	6	5825	4	KED
	As	**75**	**25.644**	ug/L	0.095	0	9	5969	2	KED
	Se	**78**	**82.470**	ug/L	0.866	1	24	2050	2	KED
	Y	**89**		ug/L			403977	404968	1	Standard
	Kr	**83**		ug/L			57	48	23	Standard
>	**In-1**	**115**		ug/L			13076	12543	4	KED
	Mo	**98**	**25.784**	ug/L	0.299	1	15	26459	3	KED
	Cd	**111**	**26.488**	ug/L	0.670	2	5	6876	1	KED
	Cd	**114**	**26.830**	ug/L	0.873	3	8	16947	1	KED
>	**In**	**115**		ug/L			689664	677100	0	Standard
	Ag	**107**	**25.055**	ug/L	0.629	2	57	381834	2	Standard
	Sb	**121**	**26.706**	ug/L	0.470	1	244	328369	1	Standard
	Sb	**123**	**26.489**	ug/L	0.514	1	203	248898	1	Standard
>	**Tb**	**159**		ug/L			688640	689858	2	Standard
	Tl	**205**	**26.448**	ug/L	1.316	4	92	1000485	2	Standard
	Pb	**208**	**27.337**	ug/L	0.924	3	130	1340627	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0350-02RE1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 17:40:57
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			32271	49890	1	Standard
	Cl	**37**		ug/L			4589416	12716599	1	Standard
⌈>	**Sc**	**45**		ug/L			623141	770247	0	Standard
|	**Cr**	**52**	**0.342**	ug/L	0.015	4	24658	39346	0	Standard
|	**Cr**	**53**	**5.721**	ug/L	0.137	2	229	17149	1	Standard
|	**Fe**	**54**	**-9.556**	ug/L	1.090	11	78115	79099	1	Standard
|	**Fe**	**57**	**100.868**	ug/L	2.502	2	14013	93957	2	Standard
⌊	**Mn**	**55**	**0.196**	ug/L	0.000	0	916	8482	0	Standard
⌈>	**Ge**	**72**		ug/L			40387	35055	1	KED
|	**Ni**	**60**	**4.288**	ug/L	0.221	5	20	4239	5	KED
|	**Ni**	**62**	**4.203**	ug/L	0.138	3	6	695	3	KED
|	**Cu**	**63**	**0.804**	ug/L	0.016	2	69	2436	1	KED
|	**Cu**	**65**	**0.821**	ug/L	0.054	6	38	1232	7	KED
|	**Zn**	**66**	**1.273**	ug/L	0.046	3	30	499	2	KED
|	**Zn**	**67**	**8.817**	ug/L	0.465	5	6	551	6	KED
|	**As**	**75**	**1.133**	ug/L	0.055	4	9	235	4	KED
⌊	**Se**	**78**	**49.579**	ug/L	1.293	2	24	1071	1	KED
	Y	**89**		ug/L			403977	406400	0	Standard
	Kr	**83**		ug/L			57	82	11	Standard
⌈>	**In-1**	**115**		ug/L			13076	11083	1	KED
|	**Mo**	**98**	**22.848**	ug/L	0.227	0	15	20727	2	KED
|	**Cd**	**111**	**0.039**	ug/L	0.026	66	5	13	42	KED
⌊	**Cd**	**114**	**0.029**	ug/L	0.008	25	8	23	18	KED
⌈>	**In**	**115**		ug/L			689664	613293	1	Standard
|	**Ag**	**107**	**0.005**	ug/L	0.001	13	57	116	6	Standard
|	**Sb**	**121**	**0.104**	ug/L	0.005	4	244	1379	5	Standard
⌊	**Sb**	**123**	**0.101**	ug/L	0.009	8	203	1042	8	Standard
⌈>	**Tb**	**159**		ug/L			688640	683343	4	Standard
|	**Tl**	**205**	**0.006**	ug/L	0.001	12	92	319	6	Standard
⌊	**Pb**	**208**	**0.007**	ug/L	0.000	6	130	462	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0350-01
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 17:45:53
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			32271	53058	2	Standard
	Cl	37		ug/L			4589416	12981614	2	Standard
>	Sc	45		ug/L			623141	757302	0	Standard
	Cr	52	0.328	ug/L	0.039	11	24658	38323	2	Standard
	Cr	53	6.061	ug/L	0.022	0	229	17848	0	Standard
	Fe	54	-8.282	ug/L	0.787	9	78115	80059	1	Standard
	Fe	57	98.666	ug/L	1.286	1	14013	90726	1	Standard
	Mn	55	0.194	ug/L	0.009	4	916	8267	3	Standard
>	Ge	72		ug/L			40387	34843	1	KED
	Ni	60	4.154	ug/L	0.115	2	20	4082	2	KED
	Ni	62	4.160	ug/L	0.270	6	6	683	6	KED
	Cu	63	0.790	ug/L	0.010	1	69	2380	1	KED
	Cu	65	0.831	ug/L	0.021	2	38	1237	3	KED
	Zn	66	1.265	ug/L	0.117	9	30	494	10	KED
	Zn	67	8.158	ug/L	0.345	4	6	507	6	KED
	As	75	1.116	ug/L	0.051	4	9	230	6	KED
	Se	78	48.115	ug/L	0.663	1	24	1034	3	KED
	Y	89		ug/L			403977	403422	3	Standard
	Kr	83		ug/L			57	75	8	Standard
>	In-1	115		ug/L			13076	11381	1	KED
	Mo	98	22.164	ug/L	0.237	1	15	20645	1	KED
	Cd	111	0.034	ug/L	0.003	9	5	13	4	KED
	Cd	114	0.037	ug/L	0.009	25	8	28	20	KED
>	In	115		ug/L			689664	609565	0	Standard
	Ag	107	0.005	ug/L	0.002	29	57	123	18	Standard
	Sb	121	0.081	ug/L	0.001	0	244	1109	1	Standard
	Sb	123	0.077	ug/L	0.001	1	203	827	1	Standard
>	Tb	159		ug/L			688640	679993	4	Standard
	Tl	205	0.005	ug/L	0.000	7	92	293	5	Standard
	Pb	208	0.007	ug/L	0.000	6	130	478	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0360-01
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 17:56:43
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			32271	64362	1	Standard
	Cl	**37**		ug/L			4589416	9332115	3	Standard
⌈>	**Sc**	**45**		ug/L			623141	630856	2	Standard
|	**Cr**	**52**	**1.414**	ug/L	0.051	3	24658	54948	0	Standard
|	**Cr**	**53**	**4.165**	ug/L	0.100	2	229	10291	4	Standard
|	**Fe**	**54**	**19.735**	ug/L	1.275	6	78115	108622	3	Standard
|	**Fe**	**57**	**185.695**	ug/L	4.203	2	14013	129761	4	Standard
⌊	**Mn**	**55**	**4.144**	ug/L	0.066	1	916	128140	2	Standard
⌈>	**Ge**	**72**		ug/L			40387	36847	1	KED
|	**Ni**	**60**	**35.117**	ug/L	1.035	2	20	36347	1	KED
|	**Ni**	**62**	**34.427**	ug/L	0.902	2	6	5945	3	KED
|	**Cu**	**63**	**9.629**	ug/L	0.134	1	69	29974	2	KED
|	**Cu**	**65**	**9.197**	ug/L	0.344	3	38	14135	2	KED
|	**Zn**	**66**	**4.576**	ug/L	0.156	3	30	1816	3	KED
|	**Zn**	**67**	**11.418**	ug/L	0.893	7	6	747	7	KED
|	**As**	**75**	**0.591**	ug/L	0.037	6	9	133	7	KED
⌊	**Se**	**78**	**0.035**	ug/L	0.024	66	24	23	1	KED
	Y	**89**		ug/L			403977	400506	1	Standard
	Kr	**83**		ug/L			57	80	17	Standard
⌈>	**In-1**	**115**		ug/L			13076	11950	0	KED
|	**Mo**	**98**	**187.332**	ug/L	1.406	0	15	183121	0	KED
|	**Cd**	**111**	**0.024**	ug/L	0.016	65	5	11	34	KED
⌊	**Cd**	**114**	**0.011**	ug/L	0.009	79	8	14	36	KED
⌈>	**In**	**115**		ug/L			689664	644371	3	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.000	37	57	72	7	Standard
|	**Sb**	**121**	**0.211**	ug/L	0.002	0	244	2694	2	Standard
⌊	**Sb**	**123**	**0.208**	ug/L	0.010	4	203	2047	2	Standard
⌈>	**Tb**	**159**		ug/L			688640	687736	5	Standard
|	**Tl**	**205**	**-0.001**	ug/L	0.000	47	92	73	13	Standard
⌊	**Pb**	**208**	**0.051**	ug/L	0.001	2	130	2628	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0360-02
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 18:03:02
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			32271	63781	2	Standard
	Cl	**37**		ug/L			4589416	9239650	1	Standard
⌈>	**Sc**	**45**		ug/L			623141	616105	0	Standard
|	**Cr**	**52**	**1.343**	ug/L	0.039	2	24658	52201	1	Standard
|	**Cr**	**53**	**4.351**	ug/L	0.079	1	229	10487	1	Standard
|	**Fe**	**54**	**16.282**	ug/L	0.689	4	78115	101010	0	Standard
|	**Fe**	**57**	**191.566**	ug/L	4.136	2	14013	130255	1	Standard
⌊	**Mn**	**55**	**4.182**	ug/L	0.060	1	916	126296	1	Standard
⌈>	**Ge**	**72**		ug/L			40387	37797	0	KED
|	**Ni**	**60**	**36.436**	ug/L	1.186	3	20	38691	2	KED
|	**Ni**	**62**	**36.159**	ug/L	1.238	3	6	6403	2	KED
|	**Cu**	**63**	**9.888**	ug/L	0.159	1	69	31571	1	KED
|	**Cu**	**65**	**9.648**	ug/L	0.142	1	38	15214	1	KED
|	**Zn**	**66**	**5.005**	ug/L	0.079	1	30	2035	1	KED
|	**Zn**	**67**	**11.918**	ug/L	1.394	11	6	800	11	KED
|	**As**	**75**	**0.623**	ug/L	0.023	3	9	143	3	KED
⌊	**Se**	**78**	**-0.085**	ug/L	0.145	171	24	21	16	KED
	Y	**89**		ug/L			403977	392702	2	Standard
	Kr	**83**		ug/L			57	66	10	Standard
⌈>	**In-1**	**115**		ug/L			13076	11614	2	KED
|	**Mo**	**98**	**198.530**	ug/L	4.629	2	15	188586	3	KED
|	**Cd**	**111**	**0.041**	ug/L	0.007	16	5	14	13	KED
⌊	**Cd**	**114**	**0.017**	ug/L	0.006	35	8	17	20	KED
⌈>	**In**	**115**		ug/L			689664	623676	0	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.001	89	57	61	15	Standard
|	**Sb**	**121**	**0.218**	ug/L	0.005	2	244	2682	1	Standard
⌊	**Sb**	**123**	**0.203**	ug/L	0.004	2	203	1944	2	Standard
⌈>	**Tb**	**159**		ug/L			688640	677848	3	Standard
|	**Tl**	**205**	**-0.000**	ug/L	0.000	77	92	73	14	Standard
⌊	**Pb**	**208**	**0.050**	ug/L	0.004	7	130	2525	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0501-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, March 07, 2023 18:08:19
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			32271	51064	2	Standard
	Cl	**37**		ug/L			4589416	4607741	3	Standard
⌈>	**Sc**	**45**		ug/L			623141	671047	2	Standard
|	**Cr**	**52**	**8.415**	ug/L	0.531	6	24658	216296	3	Standard
|	**Cr**	**53**	**9.245**	ug/L	0.397	4	229	23976	1	Standard
|	**Fe**	**54**	**25.845**	ug/L	3.649	14	78115	125132	2	Standard
|	**Fe**	**57**	**49.281**	ug/L	2.194	4	14013	47681	0	Standard
⌊	**Mn**	**55**	**7.704**	ug/L	0.336	4	916	252382	2	Standard
⌈>	**Ge**	**72**		ug/L			40387	40972	0	KED
|	**Ni**	**60**	**1.134**	ug/L	0.018	1	20	1325	1	KED
|	**Ni**	**62**	**0.983**	ug/L	0.109	11	6	194	10	KED
|	**Cu**	**63**	**1.642**	ug/L	0.078	4	69	5742	4	KED
|	**Cu**	**65**	**1.693**	ug/L	0.037	2	38	2925	2	KED
|	**Zn**	**66**	**3.773**	ug/L	0.186	4	30	1671	5	KED
|	**Zn**	**67**	**3.143**	ug/L	0.282	8	6	233	8	KED
|	**As**	**75**	**0.044**	ug/L	0.018	40	9	19	21	KED
⌊	**Se**	**78**	**0.036**	ug/L	0.091	253	24	25	8	KED
	Y	**89**		ug/L			403977	425833	1	Standard
	Kr	**83**		ug/L			57	61	19	Standard
⌈>	**In-1**	**115**		ug/L			13076	12197	4	KED
|	**Mo**	**98**	**4.740**	ug/L	0.164	3	15	4741	4	KED
|	**Cd**	**111**	**0.001**	ug/L	0.013	1108	5	5	60	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.005	286	8	7	43	KED
⌈>	**In**	**115**		ug/L			689664	686292	2	Standard
|	**Ag**	**107**	**0.000**	ug/L	0.001	400	57	59	18	Standard
|	**Sb**	**121**	**0.166**	ug/L	0.012	7	244	2311	4	Standard
⌊	**Sb**	**123**	**0.165**	ug/L	0.014	8	203	1770	5	Standard
⌈>	**Tb**	**159**		ug/L			688640	726263	2	Standard
|	**Tl**	**205**	**0.002**	ug/L	0.001	50	92	158	16	Standard
⌊	**Pb**	**208**	**0.015**	ug/L	0.001	3	130	916	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0008-DUP3
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, March 07, 2023 18:14:13
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			32271	48385	3	Standard
	Cl	**37**		ug/L			4589416	4502858	0	Standard
>	**Sc**	**45**		ug/L			623141	649109	2	Standard
	Cr	**52**	**8.643**	ug/L	0.234	2	24658	214377	3	Standard
	Cr	**53**	**8.956**	ug/L	0.180	2	229	22488	2	Standard
	Fe	**54**	**25.915**	ug/L	1.672	6	78115	121224	2	Standard
	Fe	**57**	**52.281**	ug/L	2.151	4	14013	48066	3	Standard
	Mn	**55**	**7.890**	ug/L	0.098	1	916	250172	2	Standard
>	**Ge**	**72**		ug/L			40387	39344	3	KED
	Ni	**60**	**1.105**	ug/L	0.029	2	20	1240	3	KED
	Ni	**62**	**1.047**	ug/L	0.068	6	6	198	3	KED
	Cu	**63**	**1.624**	ug/L	0.029	1	69	5452	3	KED
	Cu	**65**	**1.657**	ug/L	0.056	3	38	2748	1	KED
	Zn	**66**	**3.872**	ug/L	0.192	4	30	1644	3	KED
	Zn	**67**	**3.448**	ug/L	0.322	9	6	245	5	KED
	As	**75**	**0.046**	ug/L	0.014	30	9	19	14	KED
	Se	**78**	**0.088**	ug/L	0.113	127	24	26	7	KED
	Y	**89**		ug/L			403977	407820	2	Standard
	Kr	**83**		ug/L			57	63	13	Standard
>	**In-1**	**115**		ug/L			13076	12402	2	KED
	Mo	**98**	**4.965**	ug/L	0.180	3	15	5049	2	KED
	Cd	**111**	**-0.001**	ug/L	0.002	166	5	5	10	KED
	Cd	**114**	**-0.005**	ug/L	0.003	65	8	5	37	KED
>	**In**	**115**		ug/L			689664	660855	2	Standard
	Ag	**107**	**0.000**	ug/L	0.001	2463	57	55	24	Standard
	Sb	**121**	**0.168**	ug/L	0.002	1	244	2242	1	Standard
	Sb	**123**	**0.171**	ug/L	0.003	1	203	1761	1	Standard
>	**Tb**	**159**		ug/L			688640	692501	2	Standard
	Tl	**205**	**0.001**	ug/L	0.000	58	92	119	10	Standard
	Pb	**208**	**0.015**	ug/L	0.001	6	130	849	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0008-MS3
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, March 07, 2023 18:19:09
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			32271	47023	1	Standard
	Cl	**37**		ug/L			4589416	4500973	1	Standard
⌈>	**Sc**	**45**		ug/L			623141	658834	1	Standard
|	**Cr**	**52**	**21.497**	ug/L	0.618	2	24658	502498	2	Standard
|	**Cr**	**53**	**22.123**	ug/L	0.300	1	229	56034	1	Standard
|	**Fe**	**54**	**30.923**	ug/L	1.604	5	78115	130900	2	Standard
|	**Fe**	**57**	**55.279**	ug/L	0.653	1	14013	50735	1	Standard
⌊	**Mn**	**55**	**20.843**	ug/L	0.383	1	916	669245	2	Standard
⌈>	**Ge**	**72**		ug/L			40387	40556	1	KED
|	**Ni**	**60**	**14.475**	ug/L	0.222	1	20	16505	1	KED
|	**Ni**	**62**	**14.520**	ug/L	0.664	4	6	2764	5	KED
|	**Cu**	**63**	**14.904**	ug/L	0.076	0	69	51023	0	KED
|	**Cu**	**65**	**14.832**	ug/L	0.128	0	38	25075	0	KED
|	**Zn**	**66**	**46.602**	ug/L	0.925	1	30	20085	2	KED
|	**Zn**	**67**	**44.424**	ug/L	0.673	1	6	3185	2	KED
|	**As**	**75**	**13.279**	ug/L	0.107	0	9	3087	0	KED
⌊	**Se**	**78**	**40.671**	ug/L	1.404	3	24	1021	4	KED
	Y	**89**		ug/L			403977	418013	1	Standard
	Kr	**83**		ug/L			57	70	16	Standard
⌈>	**In-1**	**115**		ug/L			13076	12643	1	KED
|	**Mo**	**98**	**18.833**	ug/L	0.271	1	15	19487	0	KED
|	**Cd**	**111**	**12.905**	ug/L	0.238	1	5	3381	1	KED
⌊	**Cd**	**114**	**12.724**	ug/L	0.306	2	8	8111	0	KED
⌈>	**In**	**115**		ug/L			689664	678377	2	Standard
|	**Ag**	**107**	**12.030**	ug/L	0.239	1	57	183638	1	Standard
|	**Sb**	**121**	**13.600**	ug/L	0.349	2	244	167582	1	Standard
⌊	**Sb**	**123**	**13.724**	ug/L	0.283	2	203	129242	0	Standard
⌈>	**Tb**	**159**		ug/L			688640	721732	1	Standard
|	**Tl**	**205**	**12.560**	ug/L	0.391	3	92	497371	1	Standard
⌊	**Pb**	**208**	**12.740**	ug/L	0.396	3	130	653845	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL5
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 18:24:06
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			32271	36191	0	Standard
	Cl	**37**		ug/L			4589416	4565210	1	Standard
⌈>	**Sc**	**45**		ug/L			623141	585558	1	Standard
|	**Cr**	**52**	**0.155**	ug/L	0.028	17	24658	26216	1	Standard
|	**Cr**	**53**	**0.070**	ug/L	0.003	3	229	373	2	Standard
|	**Fe**	**54**	**0.689**	ug/L	0.814	118	78115	74353	1	Standard
|	**Fe**	**57**	**23.308**	ug/L	1.259	5	14013	26623	1	Standard
⌊	**Mn**	**55**	**-0.003**	ug/L	0.000	3	916	762	1	Standard
⌈>	**Ge**	**72**		ug/L			40387	42643	1	KED
|	**Ni**	**60**	**-0.005**	ug/L	0.003	54	20	15	18	KED
|	**Ni**	**62**	**0.014**	ug/L	0.001	5	6	9	0	KED
|	**Cu**	**63**	**0.006**	ug/L	0.004	67	69	93	14	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.002	375	38	39	10	KED
|	**Zn**	**66**	**0.040**	ug/L	0.009	22	30	50	9	KED
|	**Zn**	**67**	**-0.004**	ug/L	0.083	2018	6	6	96	KED
|	**As**	**75**	**-0.004**	ug/L	0.009	221	9	8	25	KED
⌊	**Se**	**78**	**-0.152**	ug/L	0.025	16	24	22	2	KED
	Y	**89**		ug/L			403977	387039	2	Standard
	Kr	**83**		ug/L			57	54	11	Standard
⌈>	**In-1**	**115**		ug/L			13076	12979	2	KED
|	**Mo**	**98**	**-0.009**	ug/L	0.006	66	15	6	103	KED
|	**Cd**	**111**	**0.004**	ug/L	0.013	339	5	6	51	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.008	397	8	7	67	KED
⌈>	**In**	**115**		ug/L			689664	653987	2	Standard
|	**Ag**	**107**	**-0.000**	ug/L	0.001	444	57	51	25	Standard
|	**Sb**	**121**	**-0.016**	ug/L	0.001	5	244	40	25	Standard
⌊	**Sb**	**123**	**-0.018**	ug/L	0.001	4	203	31	18	Standard
⌈>	**Tb**	**159**		ug/L			688640	670982	3	Standard
|	**Tl**	**205**	**-0.001**	ug/L	0.000	16	92	46	16	Standard
⌊	**Pb**	**208**	**-0.000**	ug/L	0.000	50988	130	126	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 18:29:02
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			32271	31833	2	Standard
	Cl	**37**		ug/L			4589416	4711441	2	Standard
⌈>	**Sc**	**45**		ug/L			623141	652461	2	Standard
|	**Cr**	**52**	**48.215**	ug/L	0.826	1	24658	1084040	2	Standard
|	**Cr**	**53**	**49.669**	ug/L	0.879	1	229	124314	3	Standard
|	**Fe**	**54**	**5060.638**	ug/L	114.071	2	78115	7911670	4	Standard
|	**Fe**	**57**	**4995.985**	ug/L	73.614	1	14013	3230076	3	Standard
⌊	**Mn**	**55**	**50.076**	ug/L	0.939	1	916	1591244	3	Standard
⌈>	**Ge**	**72**		ug/L			40387	42383	1	KED
|	**Ni**	**60**	**49.481**	ug/L	0.314	0	20	58920	1	KED
|	**Ni**	**62**	**49.294**	ug/L	0.608	1	6	9788	2	KED
|	**Cu**	**63**	**48.836**	ug/L	1.219	2	69	174551	2	KED
|	**Cu**	**65**	**49.456**	ug/L	1.200	2	38	87300	3	KED
|	**Zn**	**66**	**50.913**	ug/L	0.521	1	30	22925	0	KED
|	**Zn**	**67**	**52.091**	ug/L	0.851	1	6	3902	2	KED
|	**As**	**75**	**49.287**	ug/L	1.025	2	9	11949	0	KED
⌊	**Se**	**78**	**49.367**	ug/L	1.963	3	24	1289	2	KED
	Y	**89**		ug/L			403977	428474	3	Standard
	Kr	**83**		ug/L			57	56	11	Standard
⌈>	**In-1**	**115**		ug/L			13076	13040	1	KED
|	**Mo**	**98**	**47.585**	ug/L	0.352	0	15	50767	1	KED
|	**Cd**	**111**	**49.473**	ug/L	0.277	0	5	13355	0	KED
⌊	**Cd**	**114**	**49.300**	ug/L	0.177	0	8	32395	0	KED
⌈>	**In**	**115**		ug/L			689664	707857	5	Standard
|	**Ag**	**107**	**48.654**	ug/L	0.517	1	57	774766	4	Standard
|	**Sb**	**121**	**49.654**	ug/L	1.259	2	244	637473	3	Standard
⌊	**Sb**	**123**	**49.035**	ug/L	1.726	3	203	480889	2	Standard
⌈>	**Tb**	**159**		ug/L			688640	747260	4	Standard
|	**Tl**	**205**	**49.014**	ug/L	0.562	1	92	2010139	5	Standard
⌊	**Pb**	**208**	**48.799**	ug/L	0.902	1	130	2592205	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 18:36:42
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			32271	31561	1	Standard
	Cl	**37**		ug/L			4589416	4517400	1	Standard
⎡>	**Sc**	**45**		ug/L			623141	624427	0	Standard
⎢	**Cr**	**52**	**-0.019**	ug/L	0.010	53	24658	24310	0	Standard
⎢	**Cr**	**53**	**0.046**	ug/L	0.004	8	229	340	3	Standard
⎢	**Fe**	**54**	**-2.005**	ug/L	0.866	43	78115	75300	0	Standard
⎢	**Fe**	**57**	**2.159**	ug/L	0.628	29	14013	15370	2	Standard
⎣	**Mn**	**55**	**-0.008**	ug/L	0.001	13	916	665	5	Standard
⎡>	**Ge**	**72**		ug/L			40387	40444	2	KED
⎢	**Ni**	**60**	**-0.003**	ug/L	0.002	46	20	16	13	KED
⎢	**Ni**	**62**	**0.010**	ug/L	0.007	64	6	8	13	KED
⎢	**Cu**	**63**	**0.000**	ug/L	0.003	962	69	70	16	KED
⎢	**Cu**	**65**	**0.001**	ug/L	0.004	640	38	39	20	KED
⎢	**Zn**	**66**	**0.009**	ug/L	0.011	125	30	34	14	KED
⎢	**Zn**	**67**	**0.008**	ug/L	0.074	965	6	6	78	KED
⎢	**As**	**75**	**0.004**	ug/L	0.006	137	9	10	11	KED
⎣	**Se**	**78**	**0.031**	ug/L	0.163	530	24	25	13	KED
	Y	**89**		ug/L			403977	413610	2	Standard
	Kr	**83**		ug/L			57	60	19	Standard
⎡>	**In-1**	**115**		ug/L			13076	12911	4	KED
⎢	**Mo**	**98**	**-0.000**	ug/L	0.009	3182	15	14	65	KED
⎢	**Cd**	**111**	**-0.001**	ug/L	0.017	1533	5	5	88	KED
⎣	**Cd**	**114**	**-0.010**	ug/L	0.003	28	8	1	103	KED
⎡>	**In**	**115**		ug/L			689664	698529	0	Standard
⎢	**Ag**	**107**	**-0.000**	ug/L	0.001	286	57	54	17	Standard
⎢	**Sb**	**121**	**0.017**	ug/L	0.002	10	244	468	5	Standard
⎣	**Sb**	**123**	**0.015**	ug/L	0.003	20	203	348	7	Standard
⎡>	**Tb**	**159**		ug/L			688640	711238	3	Standard
⎢	**Tl**	**205**	**0.001**	ug/L	0.000	23	92	132	5	Standard
⎣	**Pb**	**208**	**-0.001**	ug/L	0.000	48	130	101	13	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 18:45:05
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				31356	3	Standard
	Cl	**37**		ug/L				4347954	3	Standard
⎡>	**Sc**	**45**		ug/L				606267	1	Standard
⎢	**Cr**	**52**		ug/L				23074	2	Standard
⎣	**Cr**	**53**		ug/L				291	6	Standard
⎡>	**Ge**	**72**		ug/L				39663	2	KED
⎢	**Cu**	**63**		ug/L				59	10	KED
⎢	**Cu**	**65**		ug/L				32	5	KED
⎢	**Zn**	**66**		ug/L				28	6	KED
⎢	**Zn**	**67**		ug/L				1	100	KED
⎢	**As**	**75**		ug/L				8	34	KED
⎣	**Se**	**78**		ug/L				20	10	KED
	Y	**89**		ug/L				407089	5	Standard
	Kr	**83**		ug/L				48	16	Standard
⎡>	**In-1**	**115**		ug/L				11995	2	KED
⎢	**Cd**	**111**		ug/L				2	57	KED
⎣	**Cd**	**114**		ug/L				5	68	KED
⎡>	**In**	**115**		ug/L				666797	4	Standard
⎢	**Ag**	**107**		ug/L				47	14	Standard
⎢	**Sb**	**121**		ug/L				158	5	Standard
⎣	**Sb**	**123**		ug/L				128	25	Standard
⎡>	**Tb**	**159**		ug/L				675858	5	Standard
⎣	**Pb**	**208**		ug/L				100	15	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV6
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 18:50:51
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			31356	29560	2	Standard
	Cl	**37**		ug/L			4347954	4596014	2	Standard
⎡>	**Sc**	**45**		ug/L			606267	621110	2	Standard
⎢	**Cr**	**52**	**48.163**	ug/L	1.029	2	23074	1029868	3	Standard
⎣	**Cr**	**53**	**49.504**	ug/L	0.943	1	291	118021	4	Standard
⎡>	**Ge**	**72**		ug/L			39663	40064	4	KED
⎢	**Cu**	**63**	**48.856**	ug/L	0.640	1	59	165023	3	KED
⎢	**Cu**	**65**	**48.701**	ug/L	1.479	3	32	81174	1	KED
⎢	**Zn**	**66**	**50.247**	ug/L	1.066	2	28	21374	2	KED
⎢	**Zn**	**67**	**51.423**	ug/L	1.065	2	1	3636	3	KED
⎢	**As**	**75**	**49.786**	ug/L	1.166	2	8	11403	2	KED
⎣	**Se**	**78**	**51.022**	ug/L	2.636	5	20	1253	1	KED
	Y	**89**		ug/L			407089	407294	2	Standard
	Kr	**83**		ug/L			48	62	15	Standard
⎡>	**In-1**	**115**		ug/L			11995	12439	1	KED
⎢	**Cd**	**111**	**49.665**	ug/L	0.182	0	2	12787	1	KED
⎣	**Cd**	**114**	**49.947**	ug/L	0.368	0	5	31305	0	KED
⎡>	**In**	**115**		ug/L			666797	663921	1	Standard
⎢	**Ag**	**107**	**49.780**	ug/L	2.132	4	47	743687	4	Standard
⎢	**Sb**	**121**	**49.862**	ug/L	0.663	1	158	600862	1	Standard
⎣	**Sb**	**123**	**49.847**	ug/L	0.860	1	128	459070	2	Standard
⎡>	**Tb**	**159**		ug/L			675858	709433	2	Standard
⎣	**Pb**	**208**	**49.008**	ug/L	1.912	3	100	2471201	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB6
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 18:58:14
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			31356	31292	1	Standard
	Cl	**37**		ug/L			4347954	4542926	3	Standard
⎡>	**Sc**	**45**		ug/L			606267	632074	0	Standard
⎢	**Cr**	**52**	**-0.020**	ug/L	0.022	113	23074	23642	2	Standard
⎣	**Cr**	**53**	**-0.020**	ug/L	0.009	46	291	256	7	Standard
⎡>	**Ge**	**72**		ug/L			39663	39809	1	KED
⎢	**Cu**	**63**	**-0.000**	ug/L	0.002	676	59	59	11	KED
⎢	**Cu**	**65**	**-0.000**	ug/L	0.012	3060	32	31	64	KED
⎢	**Zn**	**66**	**-0.033**	ug/L	0.016	48	28	14	45	KED
⎢	**Zn**	**67**	**0.081**	ug/L	0.055	67	1	7	50	KED
⎢	**As**	**75**	**-0.000**	ug/L	0.004	2426	8	8	12	KED
⎣	**Se**	**78**	**0.087**	ug/L	0.126	143	20	22	13	KED
	Y	**89**		ug/L			407089	408089	0	Standard
	Kr	**83**		ug/L			48	45	7	Standard
⎡>	**In-1**	**115**		ug/L			11995	12539	1	KED
⎢	**Cd**	**111**	**0.007**	ug/L	0.004	61	2	4	24	KED
⎣	**Cd**	**114**	**0.003**	ug/L	0.003	116	5	7	25	KED
⎡>	**In**	**115**		ug/L			666797	678307	1	Standard
⎢	**Ag**	**107**	**0.001**	ug/L	0.000	22	47	62	6	Standard
⎢	**Sb**	**121**	**0.027**	ug/L	0.005	17	158	492	11	Standard
⎣	**Sb**	**123**	**0.027**	ug/L	0.007	27	128	380	17	Standard
⎡>	**Tb**	**159**		ug/L			675858	687931	5	Standard
⎣	**Pb**	**208**	**0.000**	ug/L	0.000	53	100	119	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0145-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 19:05:10
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			31356	40102	4	Standard
	Cl	**37**		ug/L			4347954	4358323	2	Standard
⌈>	**Sc**	**45**		ug/L			606267	593300	2	Standard
|	**Cr**	**52**	**0.125**	ug/L	0.041	32	23074	25054	1	Standard
⌊	**Cr**	**53**	**0.049**	ug/L	0.006	13	291	396	4	Standard
⌈>	**Ge**	**72**		ug/L			39663	38912	2	KED
|	**Cu**	**63**	**0.117**	ug/L	0.003	2	59	443	1	KED
|	**Cu**	**65**	**0.112**	ug/L	0.011	9	32	212	6	KED
|	**Zn**	**66**	**0.253**	ug/L	0.056	22	28	132	18	KED
|	**Zn**	**67**	**0.269**	ug/L	0.089	33	1	20	28	KED
|	**As**	**75**	**-0.002**	ug/L	0.013	559	8	8	38	KED
⌊	**Se**	**78**	**0.275**	ug/L	0.046	16	20	26	2	KED
	Y	**89**		ug/L			407089	396195	3	Standard
	Kr	**83**		ug/L			48	64	24	Standard
⌈>	**In-1**	**115**		ug/L			11995	12543	1	KED
|	**Cd**	**111**	**0.014**	ug/L	0.005	32	2	6	17	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.006	539	5	6	61	KED
⌈>	**In**	**115**		ug/L			666797	657976	3	Standard
|	**Ag**	**107**	**-0.000**	ug/L	0.001	374	47	44	17	Standard
|	**Sb**	**121**	**0.006**	ug/L	0.001	20	158	222	5	Standard
⌊	**Sb**	**123**	**0.006**	ug/L	0.001	16	128	185	2	Standard
⌈>	**Tb**	**159**		ug/L			675858	665014	6	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	19	100	214	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0145-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 19:09:48
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			31356	41819	1	Standard
	Cl	**37**		ug/L			4347954	4505875	0	Standard
⌈>	**Sc**	**45**		ug/L			606267	637314	1	Standard
|	**Cr**	**52**	**24.372**	ug/L	0.602	2	23074	546831	3	Standard
⌊	**Cr**	**53**	**25.163**	ug/L	0.414	1	291	61679	0	Standard
⌈>	**Ge**	**72**		ug/L			39663	39537	1	KED
|	**Cu**	**63**	**25.212**	ug/L	1.065	4	59	84078	3	KED
|	**Cu**	**65**	**25.138**	ug/L	0.210	0	32	41405	1	KED
|	**Zn**	**66**	**79.904**	ug/L	1.104	1	28	33546	0	KED
|	**Zn**	**67**	**76.379**	ug/L	1.747	2	1	5329	1	KED
|	**As**	**75**	**24.418**	ug/L	0.421	1	8	5527	1	KED
⌊	**Se**	**78**	**77.024**	ug/L	1.568	2	20	1860	1	KED
	Y	**89**		ug/L			407089	418913	2	Standard
	Kr	**83**		ug/L			48	60	28	Standard
⌈>	**In-1**	**115**		ug/L			11995	12358	0	KED
|	**Cd**	**111**	**24.953**	ug/L	0.438	1	2	6384	2	KED
⌊	**Cd**	**114**	**25.025**	ug/L	0.322	1	5	15588	2	KED
⌈>	**In**	**115**		ug/L			666797	691376	2	Standard
|	**Ag**	**107**	**25.071**	ug/L	0.603	2	47	390010	2	Standard
|	**Sb**	**121**	**-0.003**	ug/L	0.001	22	158	126	4	Standard
⌊	**Sb**	**123**	**-0.002**	ug/L	0.001	67	128	118	8	Standard
⌈>	**Tb**	**159**		ug/L			675858	697325	4	Standard
⌊	**Pb**	**208**	**26.008**	ug/L	1.420	5	100	1287658	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0666-BLK1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 19:14:27
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	45871	3	Standard
	Cl	37		ug/L			4347954	4393263	3	Standard
⌈>	Sc	45		ug/L			606267	603665	1	Standard
|	Cr	52	0.107	ug/L	0.038	35	23074	25130	1	Standard
⌊	Cr	53	0.004	ug/L	0.007	185	291	298	5	Standard
⌈>	Ge	72		ug/L			39663	39337	2	KED
|	Cu	63	0.007	ug/L	0.002	34	59	81	10	KED
|	Cu	65	0.005	ug/L	0.004	73	32	40	13	KED
|	Zn	66	0.144	ug/L	0.062	43	28	88	28	KED
|	Zn	67	0.201	ug/L	0.027	13	1	15	13	KED
|	As	75	0.002	ug/L	0.014	828	8	9	34	KED
⌊	Se	78	0.155	ug/L	0.059	38	20	23	4	KED
	Y	89		ug/L			407089	399044	2	Standard
	Kr	83		ug/L			48	55	26	Standard
⌈>	In-1	115		ug/L			11995	12682	2	KED
|	Cd	111	0.012	ug/L	0.011	96	2	5	50	KED
⌊	Cd	114	0.005	ug/L	0.003	53	5	9	20	KED
⌈>	In	115		ug/L			666797	671919	0	Standard
|	Ag	107	0.002	ug/L	0.001	54	47	71	18	Standard
|	Sb	121	-0.008	ug/L	0.001	15	158	66	22	Standard
⌊	Sb	123	-0.009	ug/L	0.001	8	128	45	14	Standard
⌈>	Tb	159		ug/L			675858	674776	3	Standard
⌊	Pb	208	0.002	ug/L	0.001	27	100	219	14	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0666-BS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 19:19:05
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	42036	1	Standard
	Cl	37		ug/L			4347954	4395588	1	Standard
⌈>	Sc	45		ug/L			606267	622047	1	Standard
|	Cr	52	24.537	ug/L	0.481	1	23074	537109	2	Standard
⌊	Cr	53	25.450	ug/L	0.128	0	291	60896	1	Standard
⌈>	Ge	72		ug/L			39663	39577	3	KED
|	Cu	63	25.120	ug/L	0.333	1	59	83877	4	KED
|	Cu	65	25.302	ug/L	0.897	3	32	41679	1	KED
|	Zn	66	78.448	ug/L	2.090	2	28	32954	2	KED
|	Zn	67	77.278	ug/L	1.923	2	1	5397	3	KED
|	As	75	24.263	ug/L	0.981	4	8	5492	0	KED
⌊	Se	78	77.023	ug/L	1.313	1	20	1861	2	KED
	Y	89		ug/L			407089	411807	1	Standard
	Kr	83		ug/L			48	55	29	Standard
⌈>	In-1	115		ug/L			11995	12749	2	KED
|	Cd	111	24.686	ug/L	0.185	0	2	6515	2	KED
⌊	Cd	114	24.396	ug/L	0.601	2	5	15667	1	KED
⌈>	In	115		ug/L			666797	675159	2	Standard
|	Ag	107	24.698	ug/L	0.773	3	47	375110	1	Standard
|	Sb	121	24.757	ug/L	0.521	2	158	303356	0	Standard
⌊	Sb	123	24.983	ug/L	0.246	0	128	233981	1	Standard
⌈>	Tb	159		ug/L			675858	681081	3	Standard
⌊	Pb	208	25.976	ug/L	0.970	3	100	1257453	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0329-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 19:30:40
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	58616	0	Standard
	Cl	37		ug/L			4347954	4528234	0	Standard
⌈>	Sc	45		ug/L			606267	751003	2	Standard
|	Cr	52	27.207	ug/L	0.235	0	23074	715904	2	Standard
⌊	Cr	53	27.479	ug/L	0.350	1	291	79340	1	Standard
⌈>	Ge	72		ug/L			39663	40187	3	KED
|	Cu	63	23.597	ug/L	0.402	1	59	80006	4	KED
|	Cu	65	23.448	ug/L	0.741	3	32	39287	6	KED
|	Zn	66	44.925	ug/L	0.456	1	28	19182	3	KED
|	Zn	67	44.666	ug/L	0.820	1	1	3170	5	KED
|	As	75	3.112	ug/L	0.064	2	8	723	4	KED
⌊	Se	78	0.933	ug/L	0.136	14	20	43	5	KED
	Y	89		ug/L			407089	604090	2	Standard
	Kr	83		ug/L			48	116	18	Standard
⌈>	In-1	115		ug/L			11995	12487	2	KED
|	Cd	111	0.599	ug/L	0.023	3	2	157	6	KED
⌊	Cd	114	0.542	ug/L	0.060	11	5	347	13	KED
⌈>	In	115		ug/L			666797	666138	3	Standard
|	Ag	107	0.099	ug/L	0.003	2	47	1529	6	Standard
|	Sb	121	-0.000	ug/L	0.001	856	158	156	4	Standard
⌊	Sb	123	-0.001	ug/L	0.001	190	128	121	8	Standard
⌈>	Tb	159		ug/L			675858	730081	3	Standard
⌊	Pb	208	4.883	ug/L	0.104	2	100	253552	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0329-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 19:35:40
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			31356	53170	1	Standard
	Cl	**37**		ug/L			4347954	4441362	0	Standard
⌈>	**Sc**	**45**		ug/L			606267	724220	1	Standard
|	**Cr**	**52**	**24.185**	ug/L	0.538	2	23074	616645	1	Standard
⌊	**Cr**	**53**	**25.113**	ug/L	0.367	1	291	69958	1	Standard
⌈>	**Ge**	**72**		ug/L			39663	40168	3	KED
|	**Cu**	**63**	**8.953**	ug/L	0.292	3	59	30391	5	KED
|	**Cu**	**65**	**8.882**	ug/L	0.315	3	32	14873	1	KED
|	**Zn**	**66**	**23.878**	ug/L	0.736	3	28	10209	5	KED
|	**Zn**	**67**	**23.345**	ug/L	1.460	6	1	1655	6	KED
|	**As**	**75**	**2.668**	ug/L	0.082	3	8	621	3	KED
⌊	**Se**	**78**	**0.930**	ug/L	0.092	9	20	43	2	KED
	Y	**89**		ug/L			407089	588423	2	Standard
	Kr	**83**		ug/L			48	102	14	Standard
⌈>	**In-1**	**115**		ug/L			11995	12709	6	KED
|	**Cd**	**111**	**0.148**	ug/L	0.040	27	2	41	29	KED
⌊	**Cd**	**114**	**0.116**	ug/L	0.026	22	5	81	27	KED
⌈>	**In**	**115**		ug/L			666797	685921	1	Standard
|	**Ag**	**107**	**0.034**	ug/L	0.001	4	47	573	2	Standard
|	**Sb**	**121**	**-0.005**	ug/L	0.002	40	158	97	27	Standard
⌊	**Sb**	**123**	**-0.004**	ug/L	0.001	13	128	90	4	Standard
⌈>	**Tb**	**159**		ug/L			675858	734634	1	Standard
⌊	**Pb**	**208**	**1.497**	ug/L	0.031	2	100	78288	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0666-DUP1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 19:42:41
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	54566	4	Standard
	Cl	37		ug/L			4347954	4563010	3	Standard
>	Sc	45		ug/L			606267	723927	1	Standard
	Cr	52	25.080	ug/L	0.487	1	23074	638290	2	Standard
	Cr	53	25.870	ug/L	0.727	2	291	72023	2	Standard
>	Ge	72		ug/L			39663	41094	1	KED
	Cu	63	9.861	ug/L	0.141	1	59	34218	0	KED
	Cu	65	10.056	ug/L	0.200	1	32	17236	2	KED
	Zn	66	24.662	ug/L	0.228	0	28	10782	0	KED
	Zn	67	24.941	ug/L	0.624	2	1	1810	1	KED
	As	75	2.796	ug/L	0.016	0	8	665	1	KED
	Se	78	0.853	ug/L	0.119	14	20	42	5	KED
	Y	89		ug/L			407089	575389	2	Standard
	Kr	83		ug/L			48	89	27	Standard
>	In-1	115		ug/L			11995	13081	1	KED
	Cd	111	0.153	ug/L	0.030	19	2	44	19	KED
	Cd	114	0.132	ug/L	0.027	20	5	92	18	KED
>	In	115		ug/L			666797	694692	1	Standard
	Ag	107	0.034	ug/L	0.003	7	47	575	6	Standard
	Sb	121	-0.005	ug/L	0.001	27	158	107	15	Standard
	Sb	123	-0.005	ug/L	0.001	17	128	81	11	Standard
>	Tb	159		ug/L			675858	741647	2	Standard
	Pb	208	1.935	ug/L	0.053	2	100	102100	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0666-MS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 19:47:13
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	50444	2	Standard
	Cl	37		ug/L			4347954	4608055	2	Standard
>	Sc	45		ug/L			606267	753969	0	Standard
	Cr	52	48.047	ug/L	0.357	0	23074	1247267	0	Standard
	Cr	53	48.744	ug/L	0.188	0	291	141042	0	Standard
>	Ge	72		ug/L			39663	42151	1	KED
	Cu	63	32.820	ug/L	0.524	1	59	116686	2	KED
	Cu	65	33.647	ug/L	0.770	2	32	59080	3	KED
	Zn	66	101.256	ug/L	0.688	0	28	45314	1	KED
	Zn	67	94.711	ug/L	2.817	2	1	7045	2	KED
	As	75	26.157	ug/L	0.384	1	8	6311	1	KED
	Se	78	74.974	ug/L	2.034	2	20	1931	3	KED
	Y	89		ug/L			407089	593993	1	Standard
	Kr	83		ug/L			48	97	9	Standard
>	In-1	115		ug/L			11995	13324	3	KED
	Cd	111	24.805	ug/L	0.357	1	2	6840	1	KED
	Cd	114	24.478	ug/L	0.602	2	5	16429	0	KED
>	In	115		ug/L			666797	699418	1	Standard
	Ag	107	23.781	ug/L	0.289	1	47	374341	1	Standard
	Sb	121	1.103	ug/L	0.006	0	158	14159	0	Standard
	Sb	123	1.105	ug/L	0.021	1	128	10854	2	Standard
>	Tb	159		ug/L			675858	754017	4	Standard
	Pb	208	25.725	ug/L	1.121	4	100	1377892	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLB0666-MSD1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 19:52:16
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	47244	1	Standard
	Cl	37		ug/L			4347954	4529114	1	Standard
>	Sc	45		ug/L			606267	740793	0	Standard
	Cr	52	48.073	ug/L	0.845	1	23074	1226106	1	Standard
	Cr	53	49.429	ug/L	0.998	2	291	140512	1	Standard
>	Ge	72		ug/L			39663	40910	0	KED
	Cu	63	33.188	ug/L	1.347	4	59	114507	3	KED
	Cu	65	33.751	ug/L	0.898	2	32	57502	2	KED
	Zn	66	100.483	ug/L	1.955	1	28	43643	1	KED
	Zn	67	95.640	ug/L	0.977	1	1	6905	0	KED
	As	75	27.447	ug/L	0.908	3	8	6427	3	KED
	Se	78	79.843	ug/L	3.230	4	20	1994	3	KED
	Y	89		ug/L			407089	626481	0	Standard
	Kr	83		ug/L			48	130	21	Standard
>	In-1	115		ug/L			11995	13237	4	KED
	Cd	111	25.420	ug/L	1.262	4	2	6957	2	KED
	Cd	114	25.194	ug/L	1.314	5	5	16780	1	KED
>	In	115		ug/L			666797	710842	2	Standard
	Ag	107	24.577	ug/L	0.788	3	47	393045	2	Standard
	Sb	121	2.074	ug/L	0.022	1	158	26919	1	Standard
	Sb	123	2.059	ug/L	0.062	3	128	20424	2	Standard
>	Tb	159		ug/L			675858	759732	3	Standard
	Pb	208	26.286	ug/L	0.912	3	100	1419272	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL7
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 19:56:56
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			31356	34215	5	Standard
	Cl	**37**		ug/L			4347954	4437994	0	Standard
⌈>	**Sc**	**45**		ug/L			606267	583665	2	Standard
|	**Cr**	**52**	**0.010**	ug/L	0.015	141	23074	22423	3	Standard
⌊	**Cr**	**53**	**-0.046**	ug/L	0.004	8	291	178	2	Standard
⌈>	**Ge**	**72**		ug/L			39663	39915	2	KED
|	**Cu**	**63**	**0.004**	ug/L	0.003	68	59	74	11	KED
|	**Cu**	**65**	**0.004**	ug/L	0.002	36	32	40	4	KED
|	**Zn**	**66**	**0.001**	ug/L	0.004	319	28	29	3	KED
|	**Zn**	**67**	**0.036**	ug/L	0.014	39	1	4	24	KED
|	**As**	**75**	**0.000**	ug/L	0.014	3069	8	8	34	KED
⌊	**Se**	**78**	**0.332**	ug/L	0.110	33	20	28	10	KED
	Y	**89**		ug/L			407089	384063	1	Standard
	Kr	**83**		ug/L			48	58	35	Standard
⌈>	**In-1**	**115**		ug/L			11995	12675	2	KED
|	**Cd**	**111**	**0.006**	ug/L	0.006	106	2	4	35	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.003	517	5	5	33	KED
⌈>	**In**	**115**		ug/L			666797	646737	2	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.001	56	47	62	16	Standard
|	**Sb**	**121**	**-0.010**	ug/L	0.001	11	158	39	31	Standard
⌊	**Sb**	**123**	**-0.011**	ug/L	0.001	8	128	26	31	Standard
⌈>	**Tb**	**159**		ug/L			675858	664159	5	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	17	100	153	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV7
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 20:01:35
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			31356	30752	1	Standard
	Cl	**37**		ug/L			4347954	4502456	0	Standard
⎡>	**Sc**	**45**		ug/L			606267	631133	1	Standard
⎢	**Cr**	**52**	**47.887**	ug/L	0.440	0	23074	1040651	1	Standard
⎣	**Cr**	**53**	**48.963**	ug/L	0.816	1	291	118576	0	Standard
⎡>	**Ge**	**72**		ug/L			39663	41095	1	KED
⎢	**Cu**	**63**	**47.780**	ug/L	1.353	2	59	165546	1	KED
⎢	**Cu**	**65**	**48.088**	ug/L	0.532	1	32	82285	0	KED
⎢	**Zn**	**66**	**48.804**	ug/L	1.103	2	28	21310	2	KED
⎢	**Zn**	**67**	**50.363**	ug/L	2.228	4	1	3652	3	KED
⎢	**As**	**75**	**49.241**	ug/L	0.304	0	8	11576	1	KED
⎣	**Se**	**78**	**50.482**	ug/L	0.726	1	20	1274	1	KED
	Y	**89**		ug/L			407089	414971	2	Standard
	Kr	**83**		ug/L			48	59	35	Standard
⎡>	**In-1**	**115**		ug/L			11995	13251	1	KED
⎢	**Cd**	**111**	**49.275**	ug/L	1.240	2	2	13512	1	KED
⎣	**Cd**	**114**	**49.780**	ug/L	0.466	0	5	33237	1	KED
⎡>	**In**	**115**		ug/L			666797	682543	1	Standard
⎢	**Ag**	**107**	**49.323**	ug/L	1.176	2	47	757746	3	Standard
⎢	**Sb**	**121**	**49.236**	ug/L	0.622	1	158	610030	2	Standard
⎣	**Sb**	**123**	**49.254**	ug/L	0.735	1	128	466206	0	Standard
⎡>	**Tb**	**159**		ug/L			675858	721667	3	Standard
⎣	**Pb**	**208**	**48.194**	ug/L	1.625	3	100	2471736	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB7
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 20:08:58
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			31356	30115	3	Standard
	Cl	**37**		ug/L			4347954	4388776	2	Standard
⎡>	**Sc**	**45**		ug/L			606267	597272	4	Standard
⎢	**Cr**	**52**	**0.018**	ug/L	0.055	300	23074	23066	0	Standard
⎣	**Cr**	**53**	**-0.039**	ug/L	0.005	12	291	196	3	Standard
⎡>	**Ge**	**72**		ug/L			39663	40103	1	KED
⎢	**Cu**	**63**	**0.002**	ug/L	0.001	69	59	67	6	KED
⎢	**Cu**	**65**	**0.000**	ug/L	0.002	1083	32	33	8	KED
⎢	**Zn**	**66**	**0.010**	ug/L	0.019	190	28	33	23	KED
⎢	**Zn**	**67**	**0.053**	ug/L	0.053	99	1	5	66	KED
⎢	**As**	**75**	**0.004**	ug/L	0.013	355	8	9	31	KED
⎣	**Se**	**78**	**-0.128**	ug/L	0.054	41	20	17	8	KED
	Y	**89**		ug/L			407089	388976	4	Standard
	Kr	**83**		ug/L			48	54	14	Standard
⎡>	**In-1**	**115**		ug/L			11995	12175	4	KED
⎢	**Cd**	**111**	**0.002**	ug/L	0.005	188	2	3	34	KED
⎣	**Cd**	**114**	**0.005**	ug/L	0.002	44	5	8	12	KED
⎡>	**In**	**115**		ug/L			666797	662027	3	Standard
⎢	**Ag**	**107**	**0.001**	ug/L	0.000	85	47	55	16	Standard
⎢	**Sb**	**121**	**0.022**	ug/L	0.003	14	158	417	11	Standard
⎣	**Sb**	**123**	**0.018**	ug/L	0.002	9	128	295	6	Standard
⎡>	**Tb**	**159**		ug/L			675858	663606	5	Standard
⎣	**Pb**	**208**	**0.000**	ug/L	0.000	691	100	100	13	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0410-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 20:13:37
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	50648	2	Standard
	Cl	37		ug/L			4347954	4475208	2	Standard
>	Sc	45		ug/L			606267	903535	2	Standard
	Cr	52	17.466	ug/L	0.096	0	23074	565213	1	Standard
	Cr	53	17.742	ug/L	0.178	1	291	61794	2	Standard
>	Ge	72		ug/L			39663	39863	1	KED
	Cu	63	45.594	ug/L	0.765	1	59	153267	1	KED
	Cu	65	46.061	ug/L	0.596	1	32	76452	1	KED
	Zn	66	134.360	ug/L	6.624	4	28	56826	3	KED
	Zn	67	132.080	ug/L	0.532	0	1	9293	2	KED
	As	75	4.323	ug/L	0.170	3	8	993	2	KED
	Se	78	2.290	ug/L	0.151	6	20	75	3	KED
	Y	89		ug/L			407089	915774	4	Standard
	Kr	83		ug/L			48	200	18	Standard
>	In-1	115		ug/L			11995	12947	0	KED
	Cd	111	0.396	ug/L	0.024	6	2	108	5	KED
	Cd	114	0.395	ug/L	0.053	13	5	263	13	KED
>	In	115		ug/L			666797	673177	2	Standard
	Ag	107	0.413	ug/L	0.014	3	47	6306	2	Standard
	Sb	121	0.007	ug/L	0.001	15	158	245	5	Standard
	Sb	123	0.007	ug/L	0.002	22	128	195	6	Standard
>	Tb	159		ug/L			675858	771309	2	Standard
	Pb	208	31.136	ug/L	1.093	3	100	1707247	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0410-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 20:18:16
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			31356	49410	2	Standard
Cl	37		ug/L			4347954	4352228	1	Standard
> Sc	45		ug/L			606267	874674	3	Standard
Cr	52	17.095	ug/L	0.632	3	23074	536006	2	Standard
Cr	53	17.585	ug/L	0.753	4	291	59249	2	Standard
> Ge	72		ug/L			39663	40488	1	KED
Cu	63	35.701	ug/L	0.179	0	59	121913	1	KED
Cu	65	36.642	ug/L	0.799	2	32	61795	3	KED
Zn	66	101.787	ug/L	1.644	1	28	43747	0	KED
Zn	67	103.284	ug/L	4.042	3	1	7377	2	KED
As	75	3.512	ug/L	0.134	3	8	821	2	KED
Se	78	1.905	ug/L	0.174	9	20	67	6	KED
Y	89		ug/L			407089	920566	2	Standard
Kr	83		ug/L			48	170	3	Standard
> In-1	115		ug/L			11995	12798	5	KED
Cd	111	0.378	ug/L	0.070	18	2	102	15	KED
Cd	114	0.376	ug/L	0.045	11	5	247	7	KED
> In	115		ug/L			666797	668276	1	Standard
Ag	107	0.522	ug/L	0.032	6	47	7887	4	Standard
Sb	121	-0.000	ug/L	0.002	1280	158	157	12	Standard
Sb	123	0.000	ug/L	0.002	9015	128	129	16	Standard
> Tb	159		ug/L			675858	759864	3	Standard
Pb	208	21.528	ug/L	0.302	1	100	1163173	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0410-04
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 20:22:55
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	46254	1	Standard
	Cl	37		ug/L			4347954	4287338	1	Standard
>	Sc	45		ug/L			606267	890761	0	Standard
	Cr	52	15.729	ug/L	0.186	1	23074	505197	0	Standard
	Cr	53	16.444	ug/L	0.092	0	291	56496	0	Standard
>	Ge	72		ug/L			39663	39501	1	KED
	Cu	63	36.038	ug/L	0.384	1	59	120057	0	KED
	Cu	65	36.216	ug/L	1.144	3	32	59597	4	KED
	Zn	66	99.056	ug/L	1.796	1	28	41542	1	KED
	Zn	67	101.977	ug/L	3.628	3	1	7111	4	KED
	As	75	3.028	ug/L	0.105	3	8	692	2	KED
	Se	78	2.109	ug/L	0.230	10	20	70	6	KED
	Y	89		ug/L			407089	906035	0	Standard
	Kr	83		ug/L			48	209	14	Standard
>	In-1	115		ug/L			11995	12762	2	KED
	Cd	111	0.275	ug/L	0.037	13	2	75	10	KED
	Cd	114	0.233	ug/L	0.018	7	5	155	5	KED
>	In	115		ug/L			666797	652211	0	Standard
	Ag	107	0.292	ug/L	0.009	3	47	4333	3	Standard
	Sb	121	-0.004	ug/L	0.001	17	158	106	7	Standard
	Sb	123	-0.005	ug/L	0.001	20	128	79	11	Standard
>	Tb	159		ug/L			675858	749268	2	Standard
	Pb	208	18.491	ug/L	0.513	2	100	984931	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0410-05
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 20:27:33
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	48550	1	Standard
	Cl	37		ug/L			4347954	4301226	0	Standard
>	Sc	45		ug/L			606267	865342	2	Standard
	Cr	52	15.898	ug/L	0.373	2	23074	495710	3	Standard
	Cr	53	16.620	ug/L	0.451	2	291	55450	2	Standard
>	Ge	72		ug/L			39663	39825	1	KED
	Cu	63	34.274	ug/L	0.794	2	59	115098	0	KED
	Cu	65	34.611	ug/L	0.526	1	32	57405	1	KED
	Zn	66	102.512	ug/L	1.669	1	28	43348	2	KED
	Zn	67	105.748	ug/L	2.863	2	1	7434	4	KED
	As	75	3.402	ug/L	0.071	2	8	783	2	KED
	Se	78	2.017	ug/L	0.096	4	20	68	4	KED
	Y	89		ug/L			407089	910700	2	Standard
	Kr	83		ug/L			48	194	15	Standard
>	In-1	115		ug/L			11995	12649	1	KED
	Cd	111	0.364	ug/L	0.050	13	2	98	13	KED
	Cd	114	0.316	ug/L	0.032	10	5	207	10	KED
>	In	115		ug/L			666797	652987	1	Standard
	Ag	107	0.419	ug/L	0.018	4	47	6194	2	Standard
	Sb	121	-0.005	ug/L	0.000	4	158	93	1	Standard
	Sb	123	-0.005	ug/L	0.001	27	128	79	17	Standard
>	Tb	159		ug/L			675858	740427	3	Standard
	Pb	208	20.338	ug/L	0.803	3	100	1070119	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0410-06
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 20:32:12
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			31356	41746	0	Standard
Cl	37		ug/L			4347954	4267945	2	Standard
Sc	45		ug/L			606267	766177	2	Standard
Cr	52	17.549	ug/L	0.245	1	23074	481367	1	Standard
Cr	53	18.094	ug/L	0.374	2	291	53418	0	Standard
Ge	72		ug/L			39663	38656	2	KED
Cu	63	16.714	ug/L	0.360	2	59	54514	2	KED
Cu	65	16.969	ug/L	0.573	3	32	27336	4	KED
Zn	66	47.051	ug/L	0.437	0	28	19329	3	KED
Zn	67	51.887	ug/L	1.364	2	1	3540	2	KED
As	75	2.177	ug/L	0.078	3	8	489	6	KED
Se	78	1.632	ug/L	0.029	1	20	57	3	KED
Y	89		ug/L			407089	734665	0	Standard
Kr	83		ug/L			48	117	3	Standard
In-1	115		ug/L			11995	12348	2	KED
Cd	111	0.059	ug/L	0.014	24	2	17	21	KED
Cd	114	0.034	ug/L	0.013	36	5	26	26	KED
In	115		ug/L			666797	660388	1	Standard
Ag	107	0.060	ug/L	0.004	5	47	936	5	Standard
Sb	121	-0.007	ug/L	0.001	9	158	73	10	Standard
Sb	123	-0.008	ug/L	0.002	24	128	56	30	Standard
Tb	159		ug/L			675858	735020	3	Standard
Pb	208	2.630	ug/L	0.069	2	100	137518	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0410-07
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 20:36:50
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			31356	39419	2	Standard
	Cl	**37**		ug/L			4347954	4256332	3	Standard
⌈>	**Sc**	**45**		ug/L			606267	752887	1	Standard
|	**Cr**	**52**	**11.480**	ug/L	0.315	2	23074	319454	3	Standard
⌊	**Cr**	**53**	**11.832**	ug/L	0.491	4	291	34476	5	Standard
⌈>	**Ge**	**72**		ug/L			39663	39373	1	KED
|	**Cu**	**63**	**14.357**	ug/L	0.324	2	59	47699	0	KED
|	**Cu**	**65**	**14.225**	ug/L	0.536	3	32	23339	2	KED
|	**Zn**	**66**	**38.888**	ug/L	0.216	0	28	16274	2	KED
|	**Zn**	**67**	**42.026**	ug/L	0.323	0	1	2921	1	KED
|	**As**	**75**	**1.853**	ug/L	0.075	4	8	426	5	KED
⌊	**Se**	**78**	**1.356**	ug/L	0.042	3	20	52	1	KED
	Y	**89**		ug/L			407089	726241	2	Standard
	Kr	**83**		ug/L			48	114	5	Standard
⌈>	**In-1**	**115**		ug/L			11995	12481	1	KED
|	**Cd**	**111**	**0.025**	ug/L	0.005	20	2	9	15	KED
⌊	**Cd**	**114**	**0.024**	ug/L	0.011	46	5	20	31	KED
⌈>	**In**	**115**		ug/L			666797	648023	3	Standard
|	**Ag**	**107**	**0.057**	ug/L	0.001	2	47	883	4	Standard
|	**Sb**	**121**	**-0.008**	ug/L	0.001	17	158	55	34	Standard
⌊	**Sb**	**123**	**-0.007**	ug/L	0.001	14	128	62	11	Standard
⌈>	**Tb**	**159**		ug/L			675858	719080	5	Standard
⌊	**Pb**	**208**	**2.242**	ug/L	0.068	3	100	114635	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0410-08
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 20:41:29
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	41100	1	Standard
	Cl	37		ug/L			4347954	4142702	4	Standard
>	Sc	45		ug/L			606267	821329	1	Standard
	Cr	52	14.459	ug/L	0.261	1	23074	430800	2	Standard
	Cr	53	15.061	ug/L	0.235	1	291	47748	2	Standard
>	Ge	72		ug/L			39663	36962	7	KED
	Cu	63	24.040	ug/L	1.329	5	59	74814	6	KED
	Cu	65	23.987	ug/L	0.742	3	32	36877	5	KED
	Zn	66	44.461	ug/L	1.744	3	28	17427	4	KED
	Zn	67	52.516	ug/L	1.386	2	1	3428	9	KED
	As	75	2.465	ug/L	0.090	3	8	527	4	KED
	Se	78	2.009	ug/L	0.209	10	20	63	8	KED
	Y	89		ug/L			407089	834688	4	Standard
	Kr	83		ug/L			48	170	14	Standard
>	In-1	115		ug/L			11995	12422	2	KED
	Cd	111	0.066	ug/L	0.014	21	2	19	19	KED
	Cd	114	0.053	ug/L	0.022	42	5	38	36	KED
>	In	115		ug/L			666797	637052	2	Standard
	Ag	107	0.087	ug/L	0.004	5	47	1287	5	Standard
	Sb	121	-0.007	ug/L	0.001	18	158	67	19	Standard
	Sb	123	-0.009	ug/L	0.001	14	128	43	23	Standard
>	Tb	159		ug/L			675858	717127	3	Standard
	Pb	208	3.956	ug/L	0.096	2	100	201762	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0410-09
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 20:46:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	45827	1	Standard
	Cl	37		ug/L			4347954	4212531	2	Standard
>	Sc	45		ug/L			606267	880991	1	Standard
	Cr	52	15.760	ug/L	0.209	1	23074	500541	0	Standard
	Cr	53	16.372	ug/L	0.234	1	291	55629	0	Standard
>	Ge	72		ug/L			39663	37623	3	KED
	Cu	63	28.413	ug/L	0.375	1	59	90165	3	KED
	Cu	65	28.390	ug/L	0.589	2	32	44487	3	KED
	Zn	66	63.148	ug/L	1.408	2	28	25224	1	KED
	Zn	67	69.447	ug/L	1.536	2	1	4612	4	KED
	As	75	2.746	ug/L	0.180	6	8	598	6	KED
	Se	78	2.465	ug/L	0.414	16	20	75	9	KED
	Y	89		ug/L			407089	909867	1	Standard
	Kr	83		ug/L			48	196	14	Standard
>	In-1	115		ug/L			11995	12046	2	KED
	Cd	111	0.112	ug/L	0.019	16	2	30	13	KED
	Cd	114	0.095	ug/L	0.004	4	5	63	6	KED
>	In	115		ug/L			666797	645659	1	Standard
	Ag	107	0.126	ug/L	0.002	1	47	1873	0	Standard
	Sb	121	-0.008	ug/L	0.001	6	158	59	11	Standard
	Sb	123	-0.009	ug/L	0.001	11	128	45	19	Standard
>	Tb	159		ug/L			675858	728755	2	Standard
	Pb	208	7.043	ug/L	0.179	2	100	365021	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0410-10
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 20:50:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			31356	44263	2	Standard
Cl	37		ug/L			4347954	4098361	1	Standard
Sc	45		ug/L			606267	854684	3	Standard
Cr	52	15.440	ug/L	0.437	2	23074	476107	1	Standard
Cr	53	16.065	ug/L	0.608	3	291	52919	1	Standard
Ge	72		ug/L			39663	38903	2	KED
Cu	63	24.176	ug/L	0.791	3	59	79385	5	KED
Cu	65	24.264	ug/L	0.511	2	32	39316	2	KED
Zn	66	43.751	ug/L	1.614	3	28	18088	4	KED
Zn	67	53.212	ug/L	1.598	3	1	3656	5	KED
As	75	2.606	ug/L	0.022	0	8	588	2	KED
Se	78	1.748	ug/L	0.095	5	20	61	5	KED
Y	89		ug/L			407089	851068	2	Standard
Kr	83		ug/L			48	157	6	Standard
In-1	115		ug/L			11995	12189	4	KED
Cd	111	0.059	ug/L	0.020	33	2	17	31	KED
Cd	114	0.047	ug/L	0.007	16	5	34	13	KED
In	115		ug/L			666797	646622	1	Standard
Ag	107	0.083	ug/L	0.003	3	47	1254	4	Standard
Sb	121	-0.007	ug/L	0.001	13	158	71	14	Standard
Sb	123	-0.007	ug/L	0.002	23	128	63	24	Standard
Tb	159		ug/L			675858	719291	4	Standard
Pb	208	3.886	ug/L	0.090	2	100	198774	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0410-11
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 20:55:19
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	49738	1	Standard
	Cl	37		ug/L			4347954	4071339	2	Standard
>	Sc	45		ug/L			606267	822914	4	Standard
	Cr	52	15.488	ug/L	0.399	2	23074	459708	2	Standard
	Cr	53	15.922	ug/L	0.666	4	291	50482	0	Standard
>	Ge	72		ug/L			39663	38848	2	KED
	Cu	63	28.722	ug/L	0.302	1	59	94101	1	KED
	Cu	65	29.972	ug/L	0.337	1	32	48492	2	KED
	Zn	66	129.370	ug/L	2.707	2	28	53333	1	KED
	Zn	67	127.016	ug/L	3.149	2	1	8705	1	KED
	As	75	3.289	ug/L	0.024	0	8	739	3	KED
	Se	78	1.926	ug/L	0.228	11	20	65	7	KED
	Y	89		ug/L			407089	828425	4	Standard
	Kr	83		ug/L			48	164	21	Standard
>	In-1	115		ug/L			11995	12487	3	KED
	Cd	111	0.201	ug/L	0.014	6	2	54	5	KED
	Cd	114	0.211	ug/L	0.022	10	5	138	13	KED
>	In	115		ug/L			666797	628897	3	Standard
	Ag	107	0.296	ug/L	0.011	3	47	4234	4	Standard
	Sb	121	-0.007	ug/L	0.001	12	158	69	13	Standard
	Sb	123	-0.008	ug/L	0.000	5	128	48	4	Standard
>	Tb	159		ug/L			675858	718239	6	Standard
	Pb	208	17.536	ug/L	0.918	5	100	893706	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV8
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 21:01:22
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			31356	28504	0	Standard
	Cl	**37**		ug/L			4347954	4283668	0	Standard
⎡>	**Sc**	**45**		ug/L			606267	594959	3	Standard
⎢	**Cr**	**52**	**47.815**	ug/L	1.145	2	23074	979079	1	Standard
⎣	**Cr**	**53**	**49.261**	ug/L	1.722	3	291	112390	1	Standard
⎡>	**Ge**	**72**		ug/L			39663	37196	2	KED
⎢	**Cu**	**63**	**47.914**	ug/L	1.417	2	59	150352	5	KED
⎢	**Cu**	**65**	**48.652**	ug/L	1.050	2	32	75387	4	KED
⎢	**Zn**	**66**	**49.683**	ug/L	0.375	0	28	19635	2	KED
⎢	**Zn**	**67**	**50.707**	ug/L	0.768	1	1	3330	3	KED
⎢	**As**	**75**	**49.812**	ug/L	0.642	1	8	10597	1	KED
⎣	**Se**	**78**	**49.715**	ug/L	0.291	0	20	1136	2	KED
	Y	**89**		ug/L			407089	389373	2	Standard
	Kr	**83**		ug/L			48	58	11	Standard
⎡>	**In-1**	**115**		ug/L			11995	11816	1	KED
⎢	**Cd**	**111**	**49.570**	ug/L	1.652	3	2	12121	2	KED
⎣	**Cd**	**114**	**49.888**	ug/L	0.992	1	5	29699	1	KED
⎡>	**In**	**115**		ug/L			666797	633603	4	Standard
⎢	**Ag**	**107**	**49.138**	ug/L	1.325	2	47	700502	5	Standard
⎢	**Sb**	**121**	**49.255**	ug/L	1.674	3	158	565902	2	Standard
⎣	**Sb**	**123**	**50.046**	ug/L	1.527	3	128	439375	2	Standard
⎡>	**Tb**	**159**		ug/L			675858	666107	6	Standard
⎣	**Pb**	**208**	**49.555**	ug/L	2.204	4	100	2342940	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB8
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 21:08:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			31356	29646	0	Standard
	Cl	**37**		ug/L			4347954	4060141	2	Standard
⎡>	**Sc**	**45**		ug/L			606267	563716	3	Standard
⎢	**Cr**	**52**	**0.017**	ug/L	0.029	170	23074	21764	1	Standard
⎣	**Cr**	**53**	**-0.041**	ug/L	0.005	12	291	182	3	Standard
⎡>	**Ge**	**72**		ug/L			39663	35615	1	KED
⎢	**Cu**	**63**	**-0.001**	ug/L	0.006	763	59	51	32	KED
⎢	**Cu**	**65**	**-0.000**	ug/L	0.006	1641	32	28	30	KED
⎢	**Zn**	**66**	**-0.004**	ug/L	0.013	327	28	24	19	KED
⎢	**Zn**	**67**	**0.043**	ug/L	0.045	105	1	4	65	KED
⎢	**As**	**75**	**0.002**	ug/L	0.001	69	8	8	3	KED
⎣	**Se**	**78**	**0.109**	ug/L	0.091	83	20	20	9	KED
	Y	**89**		ug/L			407089	371100	4	Standard
	Kr	**83**		ug/L			48	52	27	Standard
⎡>	**In-1**	**115**		ug/L			11995	11705	2	KED
⎢	**Cd**	**111**	**0.024**	ug/L	0.008	35	2	8	26	KED
⎣	**Cd**	**114**	**-0.001**	ug/L	0.003	351	5	4	42	KED
⎡>	**In**	**115**		ug/L			666797	620098	1	Standard
⎢	**Ag**	**107**	**0.000**	ug/L	0.000	118	47	48	11	Standard
⎢	**Sb**	**121**	**0.019**	ug/L	0.003	15	158	362	10	Standard
⎣	**Sb**	**123**	**0.017**	ug/L	0.003	16	128	268	10	Standard
⎡>	**Tb**	**159**		ug/L			675858	625999	2	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.000	33	100	125	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0410-12
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 21:13:25
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	46551	2	Standard
	Cl	37		ug/L			4347954	4097230	3	Standard
>	Sc	45		ug/L			606267	789530	1	Standard
	Cr	52	17.520	ug/L	0.188	1	23074	495308	1	Standard
	Cr	53	17.820	ug/L	0.388	2	291	54229	1	Standard
>	Ge	72		ug/L			39663	38689	0	KED
	Cu	63	38.255	ug/L	0.664	1	59	124815	0	KED
	Cu	65	38.824	ug/L	0.864	2	32	62557	2	KED
	Zn	66	175.509	ug/L	1.520	0	28	72074	1	KED
	Zn	67	169.393	ug/L	3.379	1	1	11565	1	KED
	As	75	3.132	ug/L	0.080	2	8	701	1	KED
	Se	78	1.675	ug/L	0.281	16	20	58	10	KED
	Y	89		ug/L			407089	765421	1	Standard
	Kr	83		ug/L			48	137	27	Standard
>	In-1	115		ug/L			11995	11968	3	KED
	Cd	111	0.395	ug/L	0.041	10	2	100	6	KED
	Cd	114	0.366	ug/L	0.022	6	5	225	2	KED
>	In	115		ug/L			666797	647162	0	Standard
	Ag	107	0.315	ug/L	0.002	0	47	4633	0	Standard
	Sb	121	0.002	ug/L	0.001	43	158	182	6	Standard
	Sb	123	0.003	ug/L	0.003	96	128	149	15	Standard
>	Tb	159		ug/L			675858	709085	3	Standard
	Pb	208	35.519	ug/L	1.185	3	100	1789879	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0410-13
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 21:18:04
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	44470	2	Standard
	Cl	37		ug/L			4347954	4155132	2	Standard
>	Sc	45		ug/L			606267	836572	1	Standard
	Cr	52	15.180	ug/L	0.046	0	23074	459012	1	Standard
	Cr	53	15.929	ug/L	0.412	2	291	51397	1	Standard
>	Ge	72		ug/L			39663	38477	3	KED
	Cu	63	30.171	ug/L	0.873	2	59	97909	3	KED
	Cu	65	30.502	ug/L	0.265	0	32	48875	2	KED
	Zn	66	137.440	ug/L	2.329	1	28	56125	2	KED
	Zn	67	136.672	ug/L	0.944	0	1	9281	3	KED
	As	75	3.222	ug/L	0.053	1	8	717	3	KED
	Se	78	2.047	ug/L	0.403	19	20	67	11	KED
	Y	89		ug/L			407089	862137	2	Standard
	Kr	83		ug/L			48	178	5	Standard
>	In-1	115		ug/L			11995	12192	2	KED
	Cd	111	0.214	ug/L	0.017	7	2	56	9	KED
	Cd	114	0.208	ug/L	0.020	9	5	133	10	KED
>	In	115		ug/L			666797	645166	3	Standard
	Ag	107	0.313	ug/L	0.009	2	47	4584	0	Standard
	Sb	121	0.030	ug/L	0.003	9	158	504	9	Standard
	Sb	123	0.032	ug/L	0.002	7	128	410	4	Standard
>	Tb	159		ug/L			675858	712830	3	Standard
	Pb	208	18.571	ug/L	0.735	3	100	940639	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0410-14
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 21:22:42
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	42897	0	Standard
	Cl	37		ug/L			4347954	4025968	1	Standard
>	Sc	45		ug/L			606267	793129	1	Standard
	Cr	52	14.749	ug/L	0.187	1	23074	423634	1	Standard
	Cr	53	14.972	ug/L	0.123	0	291	45830	0	Standard
>	Ge	72		ug/L			39663	38270	2	KED
	Cu	63	29.070	ug/L	0.828	2	59	93823	3	KED
	Cu	65	29.687	ug/L	0.563	1	32	47323	3	KED
	Zn	66	130.589	ug/L	2.148	1	28	53048	2	KED
	Zn	67	131.968	ug/L	4.899	3	1	8912	4	KED
	As	75	3.069	ug/L	0.025	0	8	679	3	KED
	Se	78	1.680	ug/L	0.244	14	20	58	11	KED
	Y	89		ug/L			407089	801396	1	Standard
	Kr	83		ug/L			48	145	13	Standard
>	In-1	115		ug/L			11995	12363	0	KED
	Cd	111	0.202	ug/L	0.019	9	2	54	9	KED
	Cd	114	0.191	ug/L	0.012	6	5	124	6	KED
>	In	115		ug/L			666797	619206	0	Standard
	Ag	107	0.256	ug/L	0.001	0	47	3618	0	Standard
	Sb	121	-0.003	ug/L	0.001	24	158	116	6	Standard
	Sb	123	-0.004	ug/L	0.002	39	128	81	17	Standard
>	Tb	159		ug/L			675858	696242	2	Standard
	Pb	208	17.400	ug/L	0.420	2	100	861299	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0410-15
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 21:27:21
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	43895	2	Standard
	Cl	37		ug/L			4347954	3983751	2	Standard
>	Sc	45		ug/L			606267	796347	3	Standard
	Cr	52	15.159	ug/L	0.324	2	23074	436292	2	Standard
	Cr	53	15.596	ug/L	0.248	1	291	47926	3	Standard
>	Ge	72		ug/L			39663	38472	0	KED
	Cu	63	28.600	ug/L	0.291	1	59	92810	0	KED
	Cu	65	28.716	ug/L	0.691	2	32	46019	2	KED
	Zn	66	117.233	ug/L	0.479	0	28	47882	0	KED
	Zn	67	117.279	ug/L	4.154	3	1	7962	3	KED
	As	75	3.109	ug/L	0.084	2	8	692	3	KED
	Se	78	1.713	ug/L	0.238	13	20	59	9	KED
	Y	89		ug/L			407089	780269	4	Standard
	Kr	83		ug/L			48	162	15	Standard
>	In-1	115		ug/L			11995	11704	2	KED
	Cd	111	0.199	ug/L	0.041	20	2	50	20	KED
	Cd	114	0.193	ug/L	0.028	14	5	119	13	KED
>	In	115		ug/L			666797	625119	4	Standard
	Ag	107	0.341	ug/L	0.010	3	47	4839	6	Standard
	Sb	121	-0.004	ug/L	0.003	56	158	97	26	Standard
	Sb	123	-0.006	ug/L	0.001	21	128	70	14	Standard
>	Tb	159		ug/L			675858	704086	4	Standard
	Pb	208	19.506	ug/L	0.729	3	100	975861	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0410-16
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 21:32:00
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	45938	3	Standard
	Cl	37		ug/L			4347954	4128952	0	Standard
>	Sc	45		ug/L			606267	776878	2	Standard
	Cr	52	14.951	ug/L	0.286	1	23074	420308	3	Standard
	Cr	53	15.594	ug/L	0.156	0	291	46742	1	Standard
>	Ge	72		ug/L			39663	34196	9	KED
	Cu	63	28.924	ug/L	1.030	3	59	83260	6	KED
	Cu	65	28.870	ug/L	1.934	6	32	40953	3	KED
	Zn	66	109.289	ug/L	4.852	4	28	39576	5	KED
	Zn	67	107.236	ug/L	7.895	7	1	6443	2	KED
	As	75	3.066	ug/L	0.243	7	8	603	2	KED
	Se	78	1.877	ug/L	0.223	11	20	56	13	KED
	Y	89		ug/L			407089	782069	1	Standard
	Kr	83		ug/L			48	147	10	Standard
>	In-1	115		ug/L			11995	11480	2	KED
	Cd	111	0.211	ug/L	0.036	16	2	52	13	KED
	Cd	114	0.226	ug/L	0.012	5	5	135	2	KED
>	In	115		ug/L			666797	640114	1	Standard
	Ag	107	0.268	ug/L	0.007	2	47	3912	3	Standard
	Sb	121	-0.005	ug/L	0.001	19	158	92	12	Standard
	Sb	123	-0.006	ug/L	0.001	8	128	68	8	Standard
>	Tb	159		ug/L			675858	703993	2	Standard
	Pb	208	20.308	ug/L	0.591	2	100	1016471	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0410-17
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 21:36:38
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	47233	4	Standard
	Cl	37		ug/L			4347954	4076568	1	Standard
>	Sc	45		ug/L			606267	781764	1	Standard
	Cr	52	15.221	ug/L	0.032	0	23074	430029	1	Standard
	Cr	53	15.571	ug/L	0.238	1	291	46972	2	Standard
>	Ge	72		ug/L			39663	37376	2	KED
	Cu	63	28.788	ug/L	0.210	0	59	90765	2	KED
	Cu	65	29.062	ug/L	0.595	2	32	45232	0	KED
	Zn	66	87.196	ug/L	1.964	2	28	34598	1	KED
	Zn	67	92.258	ug/L	2.956	3	1	6083	1	KED
	As	75	2.791	ug/L	0.136	4	8	604	3	KED
	Se	78	1.763	ug/L	0.093	5	20	58	3	KED
	Y	89		ug/L			407089	749774	3	Standard
	Kr	83		ug/L			48	151	4	Standard
>	In-1	115		ug/L			11995	11959	1	KED
	Cd	111	0.156	ug/L	0.019	11	2	41	11	KED
	Cd	114	0.156	ug/L	0.017	10	5	99	9	KED
>	In	115		ug/L			666797	617097	2	Standard
	Ag	107	0.265	ug/L	0.005	1	47	3724	0	Standard
	Sb	121	-0.006	ug/L	0.002	25	158	76	21	Standard
	Sb	123	-0.008	ug/L	0.001	19	128	53	22	Standard
>	Tb	159		ug/L			675858	702938	5	Standard
	Pb	208	20.428	ug/L	0.740	3	100	1020126	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0410-18
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 21:41:17
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			31356	45192	0	Standard
Cl	37		ug/L			4347954	4100058	2	Standard
> Sc	45		ug/L			606267	786377	1	Standard
Cr	52	15.492	ug/L	0.070	0	23074	439711	0	Standard
Cr	53	16.084	ug/L	0.185	1	291	48798	2	Standard
> Ge	72		ug/L			39663	37938	1	KED
Cu	63	34.324	ug/L	0.390	1	59	109842	2	KED
Cu	65	33.699	ug/L	0.546	1	32	53240	0	KED
Zn	66	119.056	ug/L	2.892	2	28	47961	3	KED
Zn	67	118.546	ug/L	3.981	3	1	7938	3	KED
As	75	3.144	ug/L	0.029	0	8	690	2	KED
Se	78	1.533	ug/L	0.197	12	20	54	8	KED
Y	89		ug/L			407089	781867	2	Standard
Kr	83		ug/L			48	144	9	Standard
> In-1	115		ug/L			11995	11993	0	KED
Cd	111	0.237	ug/L	0.055	23	2	61	21	KED
Cd	114	0.279	ug/L	0.047	16	5	174	15	KED
> In	115		ug/L			666797	637228	3	Standard
Ag	107	0.305	ug/L	0.020	6	47	4415	3	Standard
Sb	121	-0.007	ug/L	0.001	8	158	73	7	Standard
Sb	123	-0.007	ug/L	0.002	32	128	64	26	Standard
> Tb	159		ug/L			675858	702307	4	Standard
Pb	208	47.153	ug/L	1.529	3	100	2352898	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0410-19
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 21:45:56
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	46833	5	Standard
	Cl	37		ug/L			4347954	4050250	3	Standard
>	Sc	45		ug/L			606267	754951	3	Standard
	Cr	52	13.696	ug/L	0.066	0	23074	376559	3	Standard
	Cr	53	14.345	ug/L	0.164	1	291	41805	2	Standard
>	Ge	72		ug/L			39663	38624	1	KED
	Cu	63	24.681	ug/L	0.463	1	59	80435	3	KED
	Cu	65	24.712	ug/L	0.344	1	32	39768	2	KED
	Zn	66	113.239	ug/L	2.232	1	28	46438	2	KED
	Zn	67	117.416	ug/L	1.581	1	1	8005	2	KED
	As	75	3.093	ug/L	0.040	1	8	691	0	KED
	Se	78	1.483	ug/L	0.185	12	20	54	8	KED
	Y	89		ug/L			407089	751446	2	Standard
	Kr	83		ug/L			48	142	4	Standard
>	In-1	115		ug/L			11995	12154	3	KED
	Cd	111	0.233	ug/L	0.053	22	2	60	19	KED
	Cd	114	0.192	ug/L	0.037	19	5	122	15	KED
>	In	115		ug/L			666797	640354	4	Standard
	Ag	107	0.232	ug/L	0.014	5	47	3387	7	Standard
	Sb	121	-0.006	ug/L	0.001	11	158	79	10	Standard
	Sb	123	-0.007	ug/L	0.001	14	128	59	10	Standard
>	Tb	159		ug/L			675858	694699	6	Standard
	Pb	208	16.158	ug/L	0.597	3	100	797243	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0410-20
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 21:50:34
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			31356	47368	1	Standard
Cl	37		ug/L			4347954	4059752	0	Standard
> Sc	45		ug/L			606267	813440	3	Standard
Cr	52	15.500	ug/L	0.289	1	23074	454922	2	Standard
Cr	53	16.193	ug/L	0.346	2	291	50796	3	Standard
> Ge	72		ug/L			39663	36813	5	KED
Cu	63	31.652	ug/L	1.152	3	59	98157	1	KED
Cu	65	31.289	ug/L	0.475	1	32	47953	4	KED
Zn	66	142.551	ug/L	7.259	5	28	55604	0	KED
Zn	67	143.335	ug/L	4.926	3	1	9301	2	KED
As	75	3.345	ug/L	0.067	2	8	711	5	KED
Se	78	2.130	ug/L	0.211	9	20	66	12	KED
Y	89		ug/L			407089	846587	1	Standard
Kr	83		ug/L			48	162	15	Standard
> In-1	115		ug/L			11995	11799	3	KED
Cd	111	0.171	ug/L	0.015	9	2	44	6	KED
Cd	114	0.234	ug/L	0.007	2	5	144	5	KED
> In	115		ug/L			666797	632260	0	Standard
Ag	107	0.288	ug/L	0.004	1	47	4137	1	Standard
Sb	121	-0.008	ug/L	0.000	6	158	63	8	Standard
Sb	123	-0.007	ug/L	0.002	25	128	63	23	Standard
> Tb	159		ug/L			675858	706444	1	Standard
Pb	208	19.772	ug/L	0.698	3	100	993118	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0411-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 21:55:07
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	49982	1	Standard
	Cl	37		ug/L			4347954	4048742	1	Standard
>	Sc	45		ug/L			606267	828498	0	Standard
	Cr	52	16.144	ug/L	0.426	2	23074	481521	3	Standard
	Cr	53	16.751	ug/L	0.252	1	291	53522	1	Standard
>	Ge	72		ug/L			39663	37180	2	KED
	Cu	63	34.219	ug/L	0.551	1	59	107298	2	KED
	Cu	65	33.763	ug/L	0.524	1	32	52282	2	KED
	Zn	66	144.809	ug/L	4.162	2	28	57136	2	KED
	Zn	67	145.321	ug/L	3.828	2	1	9540	5	KED
	As	75	3.574	ug/L	0.072	2	8	767	4	KED
	Se	78	1.984	ug/L	0.323	16	20	63	9	KED
	Y	89		ug/L			407089	878722	1	Standard
	Kr	83		ug/L			48	177	5	Standard
>	In-1	115		ug/L			11995	11874	1	KED
	Cd	111	0.262	ug/L	0.016	6	2	66	7	KED
	Cd	114	0.226	ug/L	0.041	18	5	140	16	KED
>	In	115		ug/L			666797	636436	0	Standard
	Ag	107	0.355	ug/L	0.002	0	47	5130	0	Standard
	Sb	121	-0.005	ug/L	0.001	13	158	95	7	Standard
	Sb	123	-0.006	ug/L	0.001	10	128	73	7	Standard
>	Tb	159		ug/L			675858	703737	3	Standard
	Pb	208	22.244	ug/L	0.770	3	100	1112728	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV9
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 22:01:10
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			31356	27901	1	Standard
	Cl	**37**		ug/L			4347954	4036978	2	Standard
⎡>	**Sc**	**45**		ug/L			606267	559615	3	Standard
⎢	**Cr**	**52**	**47.505**	ug/L	0.744	1	23074	915679	4	Standard
⎣	**Cr**	**53**	**48.944**	ug/L	0.191	0	291	105114	3	Standard
⎡>	**Ge**	**72**		ug/L			39663	36198	4	KED
⎢	**Cu**	**63**	**49.271**	ug/L	0.506	1	59	150424	5	KED
⎢	**Cu**	**65**	**49.207**	ug/L	0.636	1	32	74143	3	KED
⎢	**Zn**	**66**	**49.943**	ug/L	1.380	2	28	19193	2	KED
⎢	**Zn**	**67**	**50.588**	ug/L	1.538	3	1	3231	4	KED
⎢	**As**	**75**	**49.324**	ug/L	1.115	2	8	10208	2	KED
⎣	**Se**	**78**	**49.855**	ug/L	0.828	1	20	1108	2	KED
	Y	**89**		ug/L			407089	372628	4	Standard
	Kr	**83**		ug/L			48	61	14	Standard
⎡>	**In-1**	**115**		ug/L			11995	12073	2	KED
⎢	**Cd**	**111**	**48.447**	ug/L	1.634	3	2	12099	0	KED
⎣	**Cd**	**114**	**49.319**	ug/L	1.627	3	5	29985	0	KED
⎡>	**In**	**115**		ug/L			666797	595580	3	Standard
⎢	**Ag**	**107**	**49.553**	ug/L	0.915	1	47	664189	3	Standard
⎢	**Sb**	**121**	**50.596**	ug/L	0.586	1	158	547091	4	Standard
⎣	**Sb**	**123**	**50.483**	ug/L	0.119	0	128	417013	3	Standard
⎡>	**Tb**	**159**		ug/L			675858	631197	5	Standard
⎣	**Pb**	**208**	**49.188**	ug/L	2.047	4	100	2205153	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB9
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 22:08:34
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			31356	29665	3	Standard
	Cl	**37**		ug/L			4347954	3986604	2	Standard
⎡>	**Sc**	**45**		ug/L			606267	560171	4	Standard
⎢	**Cr**	**52**	**0.015**	ug/L	0.067	436	23074	21577	4	Standard
⎣	**Cr**	**53**	**-0.053**	ug/L	0.006	11	291	155	4	Standard
⎡>	**Ge**	**72**		ug/L			39663	36000	1	KED
⎢	**Cu**	**63**	**0.004**	ug/L	0.002	59	59	65	10	KED
⎢	**Cu**	**65**	**-0.000**	ug/L	0.007	7880	32	29	37	KED
⎢	**Zn**	**66**	**0.009**	ug/L	0.015	179	28	29	19	KED
⎢	**Zn**	**67**	**0.082**	ug/L	0.044	53	1	6	41	KED
⎢	**As**	**75**	**-0.004**	ug/L	0.001	13	8	7	0	KED
⎣	**Se**	**78**	**0.200**	ug/L	0.189	94	20	22	18	KED
	Y	**89**		ug/L			407089	373635	3	Standard
	Kr	**83**		ug/L			48	47	34	Standard
⎡>	**In-1**	**115**		ug/L			11995	11600	0	KED
⎢	**Cd**	**111**	**0.011**	ug/L	0.002	22	2	5	10	KED
⎣	**Cd**	**114**	**-0.001**	ug/L	0.002	252	5	4	21	KED
⎡>	**In**	**115**		ug/L			666797	607732	1	Standard
⎢	**Ag**	**107**	**0.001**	ug/L	0.000	38	47	55	9	Standard
⎢	**Sb**	**121**	**0.023**	ug/L	0.004	18	158	401	12	Standard
⎣	**Sb**	**123**	**0.020**	ug/L	0.001	5	128	285	3	Standard
⎡>	**Tb**	**159**		ug/L			675858	617391	2	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.000	34	100	133	12	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0411-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 22:13:13
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	49210	2	Standard
	Cl	37		ug/L			4347954	3922393	3	Standard
>	Sc	45		ug/L			606267	818490	5	Standard
	Cr	52	18.658	ug/L	0.409	2	23074	544517	3	Standard
	Cr	53	19.306	ug/L	0.389	2	291	60861	4	Standard
>	Ge	72		ug/L			39663	36375	3	KED
	Cu	63	65.611	ug/L	1.006	1	59	201314	4	KED
	Cu	65	67.483	ug/L	1.710	2	32	102247	5	KED
	Zn	66	150.483	ug/L	0.924	0	28	58104	3	KED
	Zn	67	149.663	ug/L	2.524	1	1	9608	3	KED
	As	75	3.950	ug/L	0.137	3	8	829	6	KED
	Se	78	2.151	ug/L	0.261	12	20	66	11	KED
	Y	89		ug/L			407089	846182	3	Standard
	Kr	83		ug/L			48	182	12	Standard
>	In-1	115		ug/L			11995	11357	1	KED
	Cd	111	0.357	ug/L	0.007	1	2	86	1	KED
	Cd	114	0.296	ug/L	0.023	7	5	174	8	KED
>	In	115		ug/L			666797	617799	3	Standard
	Ag	107	0.365	ug/L	0.001	0	47	5123	3	Standard
	Sb	121	0.006	ug/L	0.001	8	158	218	5	Standard
	Sb	123	0.005	ug/L	0.001	23	128	164	4	Standard
>	Tb	159		ug/L			675858	697793	5	Standard
	Pb	208	36.537	ug/L	1.529	4	100	1810955	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0411-04
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 22:17:52
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	46647	4	Standard
	Cl	37		ug/L			4347954	4026785	2	Standard
>	Sc	45		ug/L			606267	776458	1	Standard
	Cr	52	14.891	ug/L	0.251	1	23074	418491	2	Standard
	Cr	53	15.786	ug/L	0.197	1	291	47288	1	Standard
>	Ge	72		ug/L			39663	37116	2	KED
	Cu	63	30.928	ug/L	0.495	1	59	96797	1	KED
	Cu	65	31.589	ug/L	1.126	3	32	48835	4	KED
	Zn	66	122.332	ug/L	3.477	2	28	48222	5	KED
	Zn	67	121.755	ug/L	3.056	2	1	7973	1	KED
	As	75	3.139	ug/L	0.103	3	8	673	1	KED
	Se	78	1.665	ug/L	0.229	13	20	56	9	KED
	Y	89		ug/L			407089	771285	0	Standard
	Kr	83		ug/L			48	133	6	Standard
>	In-1	115		ug/L			11995	12096	1	KED
	Cd	111	0.269	ug/L	0.015	5	2	69	4	KED
	Cd	114	0.247	ug/L	0.017	7	5	156	6	KED
>	In	115		ug/L			666797	626094	1	Standard
	Ag	107	0.327	ug/L	0.011	3	47	4658	4	Standard
	Sb	121	0.001	ug/L	0.001	155	158	157	8	Standard
	Sb	123	0.002	ug/L	0.003	132	128	137	16	Standard
>	Tb	159		ug/L			675858	692238	3	Standard
	Pb	208	23.307	ug/L	0.916	3	100	1146388	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0411-05
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 22:22:31
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	48228	3	Standard
	Cl	37		ug/L			4347954	4016114	0	Standard
>	Sc	45		ug/L			606267	792682	1	Standard
	Cr	52	15.307	ug/L	0.380	2	23074	438268	1	Standard
	Cr	53	16.193	ug/L	0.275	1	291	49511	1	Standard
>	Ge	72		ug/L			39663	37176	1	KED
	Cu	63	29.407	ug/L	0.723	2	59	92218	2	KED
	Cu	65	29.767	ug/L	0.416	1	32	46097	2	KED
	Zn	66	93.805	ug/L	1.663	1	28	37023	0	KED
	Zn	67	96.177	ug/L	2.737	2	1	6311	3	KED
	As	75	2.917	ug/L	0.046	1	8	627	0	KED
	Se	78	1.912	ug/L	0.237	12	20	61	9	KED
	Y	89		ug/L			407089	819760	0	Standard
	Kr	83		ug/L			48	151	4	Standard
>	In-1	115		ug/L			11995	11719	2	KED
	Cd	111	0.250	ug/L	0.050	20	2	62	17	KED
	Cd	114	0.219	ug/L	0.033	14	5	135	16	KED
>	In	115		ug/L			666797	636796	1	Standard
	Ag	107	0.286	ug/L	0.005	1	47	4148	0	Standard
	Sb	121	-0.003	ug/L	0.003	89	158	115	26	Standard
	Sb	123	-0.004	ug/L	0.001	39	128	91	13	Standard
>	Tb	159		ug/L			675858	702059	2	Standard
	Pb	208	15.609	ug/L	0.591	3	100	778944	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0411-06
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 22:27:09
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			31356	45972	2	Standard
Cl	37		ug/L			4347954	4033610	0	Standard
> Sc	45		ug/L			606267	812327	4	Standard
Cr	52	14.936	ug/L	0.090	0	23074	439013	3	Standard
Cr	53	15.669	ug/L	0.329	2	291	49091	3	Standard
> Ge	72		ug/L			39663	36197	1	KED
Cu	63	28.366	ug/L	0.236	0	59	86606	1	KED
Cu	65	29.307	ug/L	0.796	2	32	44172	1	KED
Zn	66	103.299	ug/L	2.331	2	28	39688	0	KED
Zn	67	104.430	ug/L	1.254	1	1	6671	1	KED
As	75	2.954	ug/L	0.058	1	8	619	2	KED
Se	78	2.016	ug/L	0.437	21	20	62	16	KED
Y	89		ug/L			407089	815051	2	Standard
Kr	83		ug/L			48	153	16	Standard
> In-1	115		ug/L			11995	11738	2	KED
Cd	111	0.190	ug/L	0.028	14	2	48	11	KED
Cd	114	0.210	ug/L	0.046	21	5	129	21	KED
> In	115		ug/L			666797	626695	3	Standard
Ag	107	0.283	ug/L	0.004	1	47	4037	2	Standard
Sb	121	-0.004	ug/L	0.001	20	158	107	8	Standard
Sb	123	-0.003	ug/L	0.002	78	128	94	18	Standard
> Tb	159		ug/L			675858	702117	2	Standard
Pb	208	15.746	ug/L	0.605	3	100	785894	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0411-07
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 22:31:48
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			31356	41062	3	Standard
Cl	37		ug/L			4347954	3933817	3	Standard
> Sc	45		ug/L			606267	802350	2	Standard
Cr	52	15.253	ug/L	0.354	2	23074	442234	3	Standard
Cr	53	15.588	ug/L	0.249	1	291	48260	2	Standard
> Ge	72		ug/L			39663	36824	2	KED
Cu	63	25.375	ug/L	0.616	2	59	78796	1	KED
Cu	65	25.543	ug/L	0.574	2	32	39171	1	KED
Zn	66	46.936	ug/L	1.198	2	28	18357	1	KED
Zn	67	55.675	ug/L	0.948	1	1	3619	3	KED
As	75	3.085	ug/L	0.058	1	8	657	4	KED
Se	78	2.220	ug/L	0.087	3	20	68	5	KED
Y	89		ug/L			407089	835355	3	Standard
Kr	83		ug/L			48	167	8	Standard
> In-1	115		ug/L			11995	11819	2	KED
Cd	111	0.070	ug/L	0.006	7	2	19	5	KED
Cd	114	0.072	ug/L	0.010	14	5	48	11	KED
> In	115		ug/L			666797	605488	3	Standard
Ag	107	0.091	ug/L	0.001	1	47	1281	4	Standard
Sb	121	-0.006	ug/L	0.001	16	158	76	16	Standard
Sb	123	-0.005	ug/L	0.000	8	128	71	7	Standard
> Tb	159		ug/L			675858	692257	5	Standard
Pb	208	3.822	ug/L	0.130	3	100	188062	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0411-08
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 22:36:26
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	41332	1	Standard
	Cl	37		ug/L			4347954	4003886	3	Standard
>	Sc	45		ug/L			606267	810285	4	Standard
	Cr	52	16.068	ug/L	0.131	0	23074	468808	4	Standard
	Cr	53	16.761	ug/L	0.060	0	291	52371	4	Standard
>	Ge	72		ug/L			39663	36524	3	KED
	Cu	63	32.042	ug/L	0.297	0	59	98732	4	KED
	Cu	65	31.924	ug/L	1.011	3	32	48569	4	KED
	Zn	66	141.729	ug/L	3.546	2	28	54926	1	KED
	Zn	67	146.265	ug/L	3.394	2	1	9425	2	KED
	As	75	3.534	ug/L	0.084	2	8	745	1	KED
	Se	78	2.109	ug/L	0.444	21	20	65	14	KED
	Y	89		ug/L			407089	824042	4	Standard
	Kr	83		ug/L			48	177	5	Standard
>	In-1	115		ug/L			11995	11965	0	KED
	Cd	111	0.242	ug/L	0.023	9	2	62	9	KED
	Cd	114	0.211	ug/L	0.011	5	5	132	4	KED
>	In	115		ug/L			666797	617935	4	Standard
	Ag	107	0.302	ug/L	0.003	0	47	4242	5	Standard
	Sb	121	-0.003	ug/L	0.002	67	158	117	13	Standard
	Sb	123	-0.004	ug/L	0.002	55	128	83	28	Standard
>	Tb	159		ug/L			675858	696141	6	Standard
	Pb	208	19.121	ug/L	0.651	3	100	945351	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0411-09
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 22:41:05
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	45698	2	Standard
	Cl	37		ug/L			4347954	3986856	1	Standard
>	Sc	45		ug/L			606267	802977	0	Standard
	Cr	52	15.505	ug/L	0.196	1	23074	449396	1	Standard
	Cr	53	16.491	ug/L	0.123	0	291	51073	0	Standard
>	Ge	72		ug/L			39663	35862	6	KED
	Cu	63	30.785	ug/L	1.359	4	59	92952	2	KED
	Cu	65	31.083	ug/L	1.492	4	32	46340	2	KED
	Zn	66	138.554	ug/L	6.259	4	28	52645	1	KED
	Zn	67	141.148	ug/L	8.278	5	1	8911	1	KED
	As	75	3.369	ug/L	0.183	5	8	697	1	KED
	Se	78	1.792	ug/L	0.272	15	20	56	4	KED
	Y	89		ug/L			407089	828517	1	Standard
	Kr	83		ug/L			48	158	20	Standard
>	In-1	115		ug/L			11995	12157	0	KED
	Cd	111	0.245	ug/L	0.024	9	2	64	9	KED
	Cd	114	0.183	ug/L	0.024	13	5	118	12	KED
>	In	115		ug/L			666797	632582	2	Standard
	Ag	107	0.302	ug/L	0.020	6	47	4344	3	Standard
	Sb	121	-0.004	ug/L	0.002	41	158	102	18	Standard
	Sb	123	-0.006	ug/L	0.001	14	128	64	10	Standard
>	Tb	159		ug/L			675858	697472	2	Standard
	Pb	208	17.746	ug/L	0.527	2	100	879902	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0411-10
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 22:45:44
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	40735	2	Standard
	Cl	37		ug/L			4347954	3911144	0	Standard
>	Sc	45		ug/L			606267	780283	1	Standard
	Cr	52	15.241	ug/L	0.239	1	23074	429672	0	Standard
	Cr	53	15.944	ug/L	0.103	0	291	47998	2	Standard
>	Ge	72		ug/L			39663	36834	0	KED
	Cu	63	24.809	ug/L	0.651	2	59	77083	2	KED
	Cu	65	24.348	ug/L	0.512	2	32	37361	2	KED
	Zn	66	47.678	ug/L	1.124	2	28	18662	3	KED
	Zn	67	54.480	ug/L	4.150	7	1	3542	7	KED
	As	75	2.985	ug/L	0.061	2	8	636	2	KED
	Se	78	1.925	ug/L	0.121	6	20	61	3	KED
	Y	89		ug/L			407089	782518	1	Standard
	Kr	83		ug/L			48	166	4	Standard
>	In-1	115		ug/L			11995	11140	0	KED
	Cd	111	0.101	ug/L	0.025	24	2	25	22	KED
	Cd	114	0.090	ug/L	0.034	37	5	55	34	KED
>	In	115		ug/L			666797	613297	1	Standard
	Ag	107	0.095	ug/L	0.006	6	47	1355	5	Standard
	Sb	121	-0.008	ug/L	0.001	13	158	51	22	Standard
	Sb	123	-0.007	ug/L	0.002	22	128	56	22	Standard
>	Tb	159		ug/L			675858	687160	0	Standard
	Pb	208	4.546	ug/L	0.033	0	100	222295	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0411-11
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 22:50:22
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			31356	42716	1	Standard
	Cl	**37**		ug/L			4347954	3940692	1	Standard
>	**Sc**	**45**		ug/L			606267	757699	2	Standard
	Cr	**52**	**14.752**	ug/L	0.363	2	23074	404830	3	Standard
	Cr	**53**	**15.238**	ug/L	0.231	1	291	44558	2	Standard
>	**Ge**	**72**		ug/L			39663	36051	3	KED
	Cu	**63**	**20.965**	ug/L	0.135	0	59	63778	4	KED
	Cu	**65**	**21.210**	ug/L	0.514	2	32	31877	6	KED
	Zn	**66**	**43.194**	ug/L	1.169	2	28	16559	6	KED
	Zn	**67**	**50.410**	ug/L	0.605	1	1	3209	4	KED
	As	**75**	**2.601**	ug/L	0.114	4	8	543	1	KED
	Se	**78**	**1.852**	ug/L	0.204	11	20	58	6	KED
	Y	**89**		ug/L			407089	751972	0	Standard
	Kr	**83**		ug/L			48	149	10	Standard
>	**In-1**	**115**		ug/L			11995	11634	2	KED
	Cd	**111**	**0.070**	ug/L	0.010	14	2	19	15	KED
	Cd	**114**	**0.038**	ug/L	0.005	14	5	27	13	KED
>	**In**	**115**		ug/L			666797	613941	1	Standard
	Ag	**107**	**0.070**	ug/L	0.004	6	47	1004	6	Standard
	Sb	**121**	**-0.008**	ug/L	0.001	11	158	55	17	Standard
	Sb	**123**	**-0.008**	ug/L	0.001	7	128	51	11	Standard
>	**Tb**	**159**		ug/L			675858	685404	4	Standard
	Pb	**208**	**3.045**	ug/L	0.144	4	100	148344	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0411-12
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 22:54:55
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			31356	39557	2	Standard
	Cl	**37**		ug/L			4347954	3968694	1	Standard
⌈>	**Sc**	**45**		ug/L			606267	747345	1	Standard
|	**Cr**	**52**	**15.461**	ug/L	0.314	2	23074	417137	2	Standard
⌊	**Cr**	**53**	**16.005**	ug/L	0.372	2	291	46138	1	Standard
⌈>	**Ge**	**72**		ug/L			39663	36818	0	KED
|	**Cu**	**63**	**20.034**	ug/L	0.186	0	59	62241	1	KED
|	**Cu**	**65**	**20.059**	ug/L	0.215	1	32	30771	1	KED
|	**Zn**	**66**	**44.021**	ug/L	1.122	2	28	17222	2	KED
|	**Zn**	**67**	**51.723**	ug/L	0.572	1	1	3362	1	KED
|	**As**	**75**	**2.448**	ug/L	0.029	1	8	523	1	KED
⌊	**Se**	**78**	**1.458**	ug/L	0.241	16	20	51	10	KED
	Y	**89**		ug/L			407089	756065	1	Standard
	Kr	**83**		ug/L			48	147	8	Standard
⌈>	**In-1**	**115**		ug/L			11995	11518	4	KED
|	**Cd**	**111**	**0.077**	ug/L	0.013	17	2	20	11	KED
⌊	**Cd**	**114**	**0.054**	ug/L	0.034	62	5	36	54	KED
⌈>	**In**	**115**		ug/L			666797	616897	1	Standard
|	**Ag**	**107**	**0.077**	ug/L	0.008	10	47	1108	9	Standard
|	**Sb**	**121**	**-0.008**	ug/L	0.000	3	158	59	3	Standard
⌊	**Sb**	**123**	**-0.009**	ug/L	0.001	11	128	40	23	Standard
⌈>	**Tb**	**159**		ug/L			675858	691866	5	Standard
⌊	**Pb**	**208**	**3.074**	ug/L	0.155	5	100	151125	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVA
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 23:00:58
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			31356	28623	4	Standard
	Cl	**37**		ug/L			4347954	3985197	3	Standard
⎡>	**Sc**	**45**		ug/L			606267	556910	3	Standard
⎢	**Cr**	**52**	**48.755**	ug/L	0.816	1	23074	934240	2	Standard
⎣	**Cr**	**53**	**49.190**	ug/L	0.542	1	291	105100	2	Standard
⎡>	**Ge**	**72**		ug/L			39663	35931	0	KED
⎢	**Cu**	**63**	**48.305**	ug/L	0.364	0	59	146370	0	KED
⎢	**Cu**	**65**	**50.063**	ug/L	1.169	2	32	74900	1	KED
⎢	**Zn**	**66**	**49.912**	ug/L	1.315	2	28	19052	2	KED
⎢	**Zn**	**67**	**49.630**	ug/L	1.487	2	1	3148	2	KED
⎢	**As**	**75**	**50.207**	ug/L	0.220	0	8	10320	0	KED
⎣	**Se**	**78**	**49.914**	ug/L	0.391	0	20	1102	0	KED
	Y	**89**		ug/L			407089	370342	3	Standard
	Kr	**83**		ug/L			48	47	17	Standard
⎡>	**In-1**	**115**		ug/L			11995	11304	2	KED
⎢	**Cd**	**111**	**49.822**	ug/L	1.110	2	2	11655	1	KED
⎣	**Cd**	**114**	**49.786**	ug/L	1.960	3	5	28349	3	KED
⎡>	**In**	**115**		ug/L			666797	593720	2	Standard
⎢	**Ag**	**107**	**50.595**	ug/L	1.203	2	47	676275	4	Standard
⎢	**Sb**	**121**	**50.187**	ug/L	0.667	1	158	540765	1	Standard
⎣	**Sb**	**123**	**50.203**	ug/L	1.003	1	128	413433	3	Standard
⎡>	**Tb**	**159**		ug/L			675858	620837	5	Standard
⎣	**Pb**	**208**	**49.939**	ug/L	1.870	3	100	2202192	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBA
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 23:08:22
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			31356	30133	2	Standard
	Cl	**37**		ug/L			4347954	3984593	1	Standard
⎡>	**Sc**	**45**		ug/L			606267	541077	3	Standard
⎢	**Cr**	**52**	**-0.003**	ug/L	0.043	1432	23074	20526	2	Standard
⎣	**Cr**	**53**	**-0.059**	ug/L	0.002	3	291	138	1	Standard
⎡>	**Ge**	**72**		ug/L			39663	34109	0	KED
⎢	**Cu**	**63**	**0.001**	ug/L	0.002	263	59	53	13	KED
⎢	**Cu**	**65**	**-0.002**	ug/L	0.003	119	32	24	15	KED
⎢	**Zn**	**66**	**-0.019**	ug/L	0.011	56	28	17	22	KED
⎢	**Zn**	**67**	**0.026**	ug/L	0.018	72	1	3	34	KED
⎢	**As**	**75**	**0.004**	ug/L	0.015	411	8	8	37	KED
⎣	**Se**	**78**	**0.178**	ug/L	0.080	44	20	21	7	KED
	Y	**89**		ug/L			407089	360205	2	Standard
	Kr	**83**		ug/L			48	39	10	Standard
⎡>	**In-1**	**115**		ug/L			11995	11105	0	KED
⎢	**Cd**	**111**	**0.017**	ug/L	0.015	84	2	6	52	KED
⎣	**Cd**	**114**	**0.001**	ug/L	0.004	547	5	5	34	KED
⎡>	**In**	**115**		ug/L			666797	592818	1	Standard
⎢	**Ag**	**107**	**0.000**	ug/L	0.002	573	47	46	48	Standard
⎢	**Sb**	**121**	**0.024**	ug/L	0.005	21	158	398	13	Standard
⎣	**Sb**	**123**	**0.022**	ug/L	0.003	14	128	294	10	Standard
⎡>	**Tb**	**159**		ug/L			675858	590742	3	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.000	43	100	120	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0051-01
Sample Dil Factor: 100
Comments:
Sample Date/Time: Tuesday, March 07, 2023 23:13:01
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			31356	32172	3	Standard
	Cl	**37**		ug/L			4347954	3809304	0	Standard
⌈>	**Sc**	**45**		ug/L			606267	589745	1	Standard
|	**Cr**	**52**	**11.770**	ug/L	0.115	0	23074	255962	2	Standard
⌊	**Cr**	**53**	**11.932**	ug/L	0.138	1	291	27220	2	Standard
⌈>	**Ge**	**72**		ug/L			39663	36515	0	KED
|	**Cu**	**63**	**7.525**	ug/L	0.044	0	59	23219	0	KED
|	**Cu**	**65**	**7.694**	ug/L	0.251	3	32	11724	3	KED
|	**Zn**	**66**	**28.031**	ug/L	0.303	1	28	10886	0	KED
|	**Zn**	**67**	**28.225**	ug/L	1.490	5	1	1820	5	KED
|	**As**	**75**	**1.475**	ug/L	0.087	5	8	315	5	KED
⌊	**Se**	**78**	**0.735**	ug/L	0.026	3	20	34	1	KED
	Y	**89**		ug/L			407089	418497	1	Standard
	Kr	**83**		ug/L			48	60	14	Standard
⌈>	**In-1**	**115**		ug/L			11995	11966	1	KED
|	**Cd**	**111**	**1.396**	ug/L	0.091	6	2	348	6	KED
⌊	**Cd**	**114**	**1.408**	ug/L	0.063	4	5	854	3	KED
⌈>	**In**	**115**		ug/L			666797	624789	1	Standard
|	**Ag**	**107**	**0.050**	ug/L	0.001	2	47	751	4	Standard
|	**Sb**	**121**	**0.013**	ug/L	0.002	17	158	294	6	Standard
⌊	**Sb**	**123**	**0.012**	ug/L	0.002	15	128	222	5	Standard
⌈>	**Tb**	**159**		ug/L			675858	628231	3	Standard
⌊	**Pb**	**208**	**61.775**	ug/L	2.150	3	100	2758040	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0411-13
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 23:17:40
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	40360	2	Standard
	Cl	37		ug/L			4347954	3933327	1	Standard
>	Sc	45		ug/L			606267	808155	2	Standard
	Cr	52	17.361	ug/L	0.194	1	23074	502737	2	Standard
	Cr	53	18.072	ug/L	0.378	2	291	56283	2	Standard
>	Ge	72		ug/L			39663	36715	2	KED
	Cu	63	38.855	ug/L	0.477	1	59	120300	1	KED
	Cu	65	38.635	ug/L	0.702	1	32	59083	3	KED
	Zn	66	89.049	ug/L	2.124	2	28	34704	0	KED
	Zn	67	94.627	ug/L	3.588	3	1	6129	2	KED
	As	75	3.373	ug/L	0.035	1	8	716	2	KED
	Se	78	2.354	ug/L	0.154	6	20	70	3	KED
	Y	89		ug/L			407089	849950	2	Standard
	Kr	83		ug/L			48	179	10	Standard
>	In-1	115		ug/L			11995	11579	0	KED
	Cd	111	0.293	ug/L	0.049	16	2	72	15	KED
	Cd	114	0.251	ug/L	0.022	8	5	151	8	KED
>	In	115		ug/L			666797	611685	2	Standard
	Ag	107	0.410	ug/L	0.003	0	47	5692	2	Standard
	Sb	121	0.008	ug/L	0.003	38	158	231	12	Standard
	Sb	123	0.008	ug/L	0.001	17	128	186	7	Standard
>	Tb	159		ug/L			675858	677222	4	Standard
	Pb	208	23.585	ug/L	0.933	3	100	1134842	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0411-14
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 23:22:18
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			31356	39266	2	Standard
	Cl	37		ug/L			4347954	3936633	1	Standard
>	Sc	45		ug/L			606267	777427	2	Standard
	Cr	52	15.957	ug/L	0.273	1	23074	446792	1	Standard
	Cr	53	16.669	ug/L	0.355	2	291	49976	3	Standard
>	Ge	72		ug/L			39663	37098	0	KED
	Cu	63	25.511	ug/L	0.490	1	59	79845	2	KED
	Cu	65	25.853	ug/L	0.502	1	32	39952	1	KED
	Zn	66	51.804	ug/L	0.663	1	28	20417	0	KED
	Zn	67	58.267	ug/L	2.456	4	1	3816	4	KED
	As	75	3.009	ug/L	0.039	1	8	646	2	KED
	Se	78	2.027	ug/L	0.201	9	20	64	7	KED
	Y	89		ug/L			407089	802519	3	Standard
	Kr	83		ug/L			48	163	5	Standard
>	In-1	115		ug/L			11995	10962	1	KED
	Cd	111	0.102	ug/L	0.024	23	2	25	22	KED
	Cd	114	0.091	ug/L	0.008	8	5	55	7	KED
>	In	115		ug/L			666797	618027	0	Standard
	Ag	107	0.120	ug/L	0.009	7	47	1714	6	Standard
	Sb	121	-0.003	ug/L	0.001	50	158	114	14	Standard
	Sb	123	-0.004	ug/L	0.002	39	128	82	17	Standard
>	Tb	159		ug/L			675858	691423	3	Standard
	Pb	208	6.794	ug/L	0.287	4	100	333911	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0411-15
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 23:26:57
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			31356	38733	2	Standard
	Cl	**37**		ug/L			4347954	3904383	0	Standard
⌈>	**Sc**	**45**		ug/L			606267	740013	0	Standard
|	**Cr**	**52**	**17.881**	ug/L	0.309	1	23074	473298	1	Standard
⌊	**Cr**	**53**	**18.639**	ug/L	0.351	1	291	53155	2	Standard
⌈>	**Ge**	**72**		ug/L			39663	36418	4	KED
|	**Cu**	**63**	**20.482**	ug/L	0.071	0	59	62929	3	KED
|	**Cu**	**65**	**20.923**	ug/L	0.070	0	32	31744	3	KED
|	**Zn**	**66**	**52.295**	ug/L	0.617	1	28	20227	3	KED
|	**Zn**	**67**	**58.737**	ug/L	0.771	1	1	3776	4	KED
|	**As**	**75**	**2.674**	ug/L	0.071	2	8	564	1	KED
⌊	**Se**	**78**	**1.483**	ug/L	0.084	5	20	51	5	KED
	Y	**89**		ug/L			407089	740007	2	Standard
	Kr	**83**		ug/L			48	131	10	Standard
⌈>	**In-1**	**115**		ug/L			11995	11494	0	KED
|	**Cd**	**111**	**0.074**	ug/L	0.014	19	2	20	16	KED
⌊	**Cd**	**114**	**0.072**	ug/L	0.016	22	5	46	18	KED
⌈>	**In**	**115**		ug/L			666797	611135	0	Standard
|	**Ag**	**107**	**0.081**	ug/L	0.002	2	47	1159	2	Standard
|	**Sb**	**121**	**-0.007**	ug/L	0.001	15	158	73	14	Standard
⌊	**Sb**	**123**	**-0.007**	ug/L	0.002	28	128	61	25	Standard
⌈>	**Tb**	**159**		ug/L			675858	683302	3	Standard
⌊	**Pb**	**208**	**8.376**	ug/L	0.276	3	100	406796	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0411-16
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 23:31:36
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			31356	39395	1	Standard
Cl	37		ug/L			4347954	3913030	0	Standard
Sc	45		ug/L			606267	784280	0	Standard
Cr	52	15.390	ug/L	0.264	1	23074	435857	1	Standard
Cr	53	15.990	ug/L	0.256	1	291	48380	1	Standard
Ge	72		ug/L			39663	27606	19	KED
Cu	63	25.898	ug/L	2.538	9	59	59590	9	KED
Cu	65	26.043	ug/L	2.164	8	32	29633	10	KED
Zn	66	49.865	ug/L	3.375	6	28	14498	12	KED
Zn	67	56.463	ug/L	2.752	4	1	2736	15	KED
As	75	2.889	ug/L	0.071	2	8	460	17	KED
Se	78	1.621	ug/L	0.228	14	20	40	10	KED
Y	89		ug/L			407089	791454	1	Standard
Kr	83		ug/L			48	146	11	Standard
In-1	115		ug/L			11995	11726	2	KED
Cd	111	0.097	ug/L	0.032	32	2	26	27	KED
Cd	114	0.070	ug/L	0.008	11	5	46	10	KED
In	115		ug/L			666797	619177	1	Standard
Ag	107	0.086	ug/L	0.008	9	47	1245	7	Standard
Sb	121	-0.006	ug/L	0.001	16	158	76	13	Standard
Sb	123	-0.007	ug/L	0.001	8	128	58	9	Standard
Tb	159		ug/L			675858	674343	2	Standard
Pb	208	4.364	ug/L	0.171	3	100	209229	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0411-17
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 23:35:15
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			31356	40412	0	Standard
Cl	37		ug/L			4347954	3862002	1	Standard
> Sc	45		ug/L			606267	784239	6	Standard
Cr	52	16.353	ug/L	0.239	1	23074	461001	4	Standard
Cr	53	16.959	ug/L	0.247	1	291	51269	5	Standard
> Ge	72		ug/L			39663	28525	17	KED
Cu	63	27.488	ug/L	1.579	5	59	65694	11	KED
Cu	65	27.527	ug/L	1.505	5	32	32503	12	KED
Zn	66	49.852	ug/L	1.547	3	28	15054	14	KED
Zn	67	59.603	ug/L	3.322	5	1	2982	12	KED
As	75	3.144	ug/L	0.041	1	8	518	16	KED
Se	78	1.791	ug/L	0.254	14	20	45	14	KED
Y	89		ug/L			407089	779944	4	Standard
Kr	83		ug/L			48	158	18	Standard
> In-1	115		ug/L			11995	12025	2	KED
Cd	111	0.108	ug/L	0.043	40	2	29	39	KED
Cd	114	0.077	ug/L	0.015	19	5	52	15	KED
> In	115		ug/L			666797	596287	5	Standard
Ag	107	0.093	ug/L	0.004	4	47	1288	4	Standard
Sb	121	-0.008	ug/L	0.000	4	158	54	7	Standard
Sb	123	-0.008	ug/L	0.002	21	128	52	20	Standard
> Tb	159		ug/L			675858	664474	0	Standard
Pb	208	4.142	ug/L	0.098	2	100	195845	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0411-18
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 23:38:53
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			31356	35860	1	Standard
	Cl	**37**		ug/L			4347954	3853393	1	Standard
⌈>	**Sc**	**45**		ug/L			606267	726713	3	Standard
|	**Cr**	**52**	**13.053**	ug/L	0.372	2	23074	346661	3	Standard
⌊	**Cr**	**53**	**13.676**	ug/L	0.306	2	291	38389	3	Standard
⌈>	**Ge**	**72**		ug/L			39663	29276	15	KED
|	**Cu**	**63**	**17.768**	ug/L	0.912	5	59	43679	10	KED
|	**Cu**	**65**	**17.989**	ug/L	0.910	5	32	21831	10	KED
|	**Zn**	**66**	**43.250**	ug/L	1.030	2	28	13424	13	KED
|	**Zn**	**67**	**50.761**	ug/L	1.715	3	1	2629	17	KED
|	**As**	**75**	**2.167**	ug/L	0.028	1	8	368	14	KED
⌊	**Se**	**78**	**1.559**	ug/L	0.241	15	20	42	18	KED
	Y	**89**		ug/L			407089	713265	3	Standard
	Kr	**83**		ug/L			48	117	6	Standard
⌈>	**In-1**	**115**		ug/L			11995	11287	1	KED
|	**Cd**	**111**	**0.071**	ug/L	0.009	12	2	19	8	KED
⌊	**Cd**	**114**	**0.039**	ug/L	0.019	48	5	27	39	KED
⌈>	**In**	**115**		ug/L			666797	610505	3	Standard
|	**Ag**	**107**	**0.062**	ug/L	0.002	3	47	890	5	Standard
|	**Sb**	**121**	**-0.009**	ug/L	0.000	5	158	50	10	Standard
⌊	**Sb**	**123**	**-0.008**	ug/L	0.001	11	128	51	10	Standard
⌈>	**Tb**	**159**		ug/L			675858	664595	4	Standard
⌊	**Pb**	**208**	**3.275**	ug/L	0.065	1	100	154842	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0411-19
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 23:42:32
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			31356	40382	0	Standard
	Cl	**37**		ug/L			4347954	4361918	18	Standard
⌈>	**Sc**	**45**		ug/L			606267	741810	4	Standard
|	**Cr**	**52**	**15.133**	ug/L	0.267	1	23074	405690	2	Standard
⌊	**Cr**	**53**	**15.507**	ug/L	0.471	3	291	44366	3	Standard
⌈>	**Ge**	**72**		ug/L			39663	28380	20	KED
|	**Cu**	**63**	**20.186**	ug/L	1.985	9	59	47696	11	KED
|	**Cu**	**65**	**20.670**	ug/L	2.199	10	32	24079	9	KED
|	**Zn**	**66**	**45.003**	ug/L	2.187	4	28	13480	15	KED
|	**Zn**	**67**	**51.129**	ug/L	2.580	5	1	2546	16	KED
|	**As**	**75**	**2.427**	ug/L	0.102	4	8	397	16	KED
⌊	**Se**	**78**	**1.457**	ug/L	0.208	14	20	39	21	KED
	Y	**89**		ug/L			407089	741007	2	Standard
	Kr	**83**		ug/L			48	200	60	Standard
⌈>	**In-1**	**115**		ug/L			11995	11955	1	KED
|	**Cd**	**111**	**0.065**	ug/L	0.009	13	2	18	12	KED
⌊	**Cd**	**114**	**0.046**	ug/L	0.006	14	5	33	10	KED
⌈>	**In**	**115**		ug/L			666797	619040	2	Standard
|	**Ag**	**107**	**0.070**	ug/L	0.011	15	47	1020	12	Standard
|	**Sb**	**121**	**-0.002**	ug/L	0.011	529	158	121	99	Standard
⌊	**Sb**	**123**	**-0.002**	ug/L	0.012	497	128	96	103	Standard
⌈>	**Tb**	**159**		ug/L			675858	663981	1	Standard
⌊	**Pb**	**208**	**2.975**	ug/L	0.121	4	100	140532	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0411-20
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, March 07, 2023 23:46:11
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			31356	38077	2	Standard
	Cl	**37**		ug/L			4347954	3895044	4	Standard
>	**Sc**	**45**		ug/L			606267	724243	3	Standard
	Cr	**52**	**17.438**	ug/L	0.224	1	23074	452514	4	Standard
	Cr	**53**	**18.114**	ug/L	0.248	1	291	50556	3	Standard
>	**Ge**	**72**		ug/L			39663	28763	19	KED
	Cu	**63**	**22.206**	ug/L	0.982	4	59	53579	15	KED
	Cu	**65**	**22.485**	ug/L	1.473	6	32	26712	13	KED
	Zn	**66**	**49.182**	ug/L	2.503	5	28	14962	16	KED
	Zn	**67**	**57.200**	ug/L	1.869	3	1	2896	17	KED
	As	**75**	**2.582**	ug/L	0.076	2	8	431	21	KED
	Se	**78**	**1.627**	ug/L	0.377	23	20	43	23	KED
	Y	**89**		ug/L			407089	711924	4	Standard
	Kr	**83**		ug/L			48	132	14	Standard
>	**In-1**	**115**		ug/L			11995	12018	2	KED
	Cd	**111**	**0.053**	ug/L	0.026	49	2	15	39	KED
	Cd	**114**	**0.054**	ug/L	0.015	27	5	38	23	KED
>	**In**	**115**		ug/L			666797	597014	3	Standard
	Ag	**107**	**0.070**	ug/L	0.002	2	47	986	4	Standard
	Sb	**121**	**-0.009**	ug/L	0.000	4	158	43	11	Standard
	Sb	**123**	**-0.008**	ug/L	0.001	8	128	46	8	Standard
>	**Tb**	**159**		ug/L			675858	653019	5	Standard
	Pb	**208**	**3.221**	ug/L	0.125	3	100	149561	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLB
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 23:49:45
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			31356	32242	0	Standard
	Cl	**37**		ug/L			4347954	3789408	0	Standard
⎡>	**Sc**	**45**		ug/L			606267	537317	0	Standard
⎢	**Cr**	**52**	**0.014**	ug/L	0.022	161	23074	20700	2	Standard
⎣	**Cr**	**53**	**-0.046**	ug/L	0.007	15	291	164	8	Standard
⎡>	**Ge**	**72**		ug/L			39663	28155	17	KED
⎢	**Cu**	**63**	**0.004**	ug/L	0.000	13	59	50	17	KED
⎢	**Cu**	**65**	**0.004**	ug/L	0.001	34	32	27	22	KED
⎢	**Zn**	**66**	**0.022**	ug/L	0.022	103	28	26	15	KED
⎢	**Zn**	**67**	**0.055**	ug/L	0.052	93	1	3	50	KED
⎢	**As**	**75**	**-0.002**	ug/L	0.008	552	8	5	20	KED
⎣	**Se**	**78**	**-0.193**	ug/L	0.105	54	20	11	30	KED
	Y	**89**		ug/L			407089	356172	2	Standard
	Kr	**83**		ug/L			48	43	24	Standard
⎡>	**In-1**	**115**		ug/L			11995	11400	1	KED
⎢	**Cd**	**111**	**0.007**	ug/L	0.005	64	2	4	26	KED
⎣	**Cd**	**114**	**0.000**	ug/L	0.000	22	5	5	0	KED
⎡>	**In**	**115**		ug/L			666797	591969	1	Standard
⎢	**Ag**	**107**	**-0.001**	ug/L	0.000	80	47	34	16	Standard
⎢	**Sb**	**121**	**-0.010**	ug/L	0.001	5	158	29	20	Standard
⎣	**Sb**	**123**	**-0.011**	ug/L	0.002	18	128	26	57	Standard
⎡>	**Tb**	**159**		ug/L			675858	580222	4	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.000	11	100	120	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVB
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 23:53:24
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			31356	28447	2	Standard
	Cl	**37**		ug/L			4347954	4033182	1	Standard
>	**Sc**	**45**		ug/L			606267	560830	0	Standard
	Cr	**52**	**48.190**	ug/L	0.858	1	23074	930463	1	Standard
	Cr	**53**	**49.130**	ug/L	1.026	2	291	105727	1	Standard
>	**Ge**	**72**		ug/L			39663	28038	19	KED
	Cu	**63**	**53.252**	ug/L	5.022	9	59	124406	9	KED
	Cu	**65**	**54.939**	ug/L	5.377	9	32	63354	8	KED
	Zn	**66**	**51.425**	ug/L	2.456	4	28	15236	14	KED
	Zn	**67**	**51.865**	ug/L	1.858	3	1	2555	15	KED
	As	**75**	**50.535**	ug/L	1.735	3	8	8075	15	KED
	Se	**78**	**45.901**	ug/L	1.512	3	20	795	22	KED
	Y	**89**		ug/L			407089	376843	2	Standard
	Kr	**83**		ug/L			48	52	12	Standard
>	**In-1**	**115**		ug/L			11995	11291	0	KED
	Cd	**111**	**50.503**	ug/L	0.815	1	2	11803	1	KED
	Cd	**114**	**50.523**	ug/L	0.305	0	5	28746	0	KED
>	**In**	**115**		ug/L			666797	603341	2	Standard
	Ag	**107**	**49.208**	ug/L	0.598	1	47	668023	1	Standard
	Sb	**121**	**49.977**	ug/L	1.077	2	158	547125	0	Standard
	Sb	**123**	**50.782**	ug/L	0.297	0	128	424944	2	Standard
>	**Tb**	**159**		ug/L			675858	608571	4	Standard
	Pb	**208**	**51.921**	ug/L	2.420	4	100	2244292	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBB
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, March 07, 2023 23:59:47
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			31356	29115	1	Standard
	Cl	**37**		ug/L			4347954	3943332	3	Standard
⌈>	**Sc**	**45**		ug/L			606267	544200	0	Standard
|	**Cr**	**52**	**0.019**	ug/L	0.029	153	23074	21059	2	Standard
⌊	**Cr**	**53**	**-0.054**	ug/L	0.009	17	291	149	13	Standard
⌈>	**Ge**	**72**		ug/L			39663	25122	18	KED
|	**Cu**	**63**	**0.002**	ug/L	0.001	66	59	42	25	KED
|	**Cu**	**65**	**0.004**	ug/L	0.008	208	32	24	27	KED
|	**Zn**	**66**	**0.006**	ug/L	0.026	462	28	19	26	KED
|	**Zn**	**67**	**0.056**	ug/L	0.031	54	1	3	50	KED
|	**As**	**75**	**0.011**	ug/L	0.005	49	8	7	29	KED
⌊	**Se**	**78**	**-0.047**	ug/L	0.079	167	20	12	14	KED
	Y	**89**		ug/L			407089	362671	1	Standard
	Kr	**83**		ug/L			48	43	11	Standard
⌈>	**In-1**	**115**		ug/L			11995	10753	2	KED
|	**Cd**	**111**	**0.011**	ug/L	0.011	99	2	4	52	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.004	309	5	5	34	KED
⌈>	**In**	**115**		ug/L			666797	594176	2	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.001	46	47	57	10	Standard
|	**Sb**	**121**	**0.017**	ug/L	0.005	28	158	320	15	Standard
⌊	**Sb**	**123**	**0.018**	ug/L	0.003	13	128	265	5	Standard
⌈>	**Tb**	**159**		ug/L			675858	570421	5	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	60	100	99	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 00:03:26
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				28402	2	Standard
	Cl	**37**		ug/L				3821796	0	Standard
⌈>	**Sc**	**45**		ug/L				525342	0	Standard
|	**Cr**	**52**		ug/L				20481	1	Standard
⌊	**Cr**	**53**		ug/L				140	4	Standard
⌈>	**Ge**	**72**		ug/L				27147	17	KED
|	**Cu**	**63**		ug/L				45	18	KED
|	**Cu**	**65**		ug/L				20	47	KED
|	**Zn**	**66**		ug/L				24	25	KED
|	**Zn**	**67**		ug/L				7	50	KED
|	**As**	**75**		ug/L				5	26	KED
⌊	**Se**	**78**		ug/L				14	18	KED
	Y	**89**		ug/L				352299	2	Standard
	Kr	**83**		ug/L				41	14	Standard
⌈>	**In-1**	**115**		ug/L				11285	2	KED
|	**Cd**	**111**		ug/L				2	33	KED
⌊	**Cd**	**114**		ug/L				8	24	KED
⌈>	**In**	**115**		ug/L				574911	2	Standard
|	**Ag**	**107**		ug/L				49	13	Standard
|	**Sb**	**121**		ug/L				113	1	Standard
⌊	**Sb**	**123**		ug/L				100	2	Standard
⌈>	**Tb**	**159**		ug/L				566239	5	Standard
⌊	**Pb**	**208**		ug/L				110	19	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVC
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 00:07:05
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	27946	1	Standard
	Cl	**37**		ug/L			3821796	4120129	0	Standard
⌈>	**Sc**	**45**		ug/L			525342	568826	1	Standard
⎢	**Cr**	**52**	**48.495**	ug/L	0.319	0	20481	950041	0	Standard
⌊	**Cr**	**53**	**49.136**	ug/L	0.672	1	140	107123	0	Standard
⌈>	**Ge**	**72**		ug/L			27147	28280	18	KED
⎢	**Cu**	**63**	**53.987**	ug/L	3.718	6	45	127665	11	KED
⎢	**Cu**	**65**	**53.907**	ug/L	3.952	7	20	62909	10	KED
⎢	**Zn**	**66**	**51.478**	ug/L	1.202	2	24	15430	16	KED
⎢	**Zn**	**67**	**52.402**	ug/L	3.732	7	7	2603	12	KED
⎢	**As**	**75**	**50.607**	ug/L	1.834	3	5	8153	14	KED
⌊	**Se**	**78**	**46.143**	ug/L	0.829	1	14	804	19	KED
	Y	**89**		ug/L			352299	378884	1	Standard
	Kr	**83**		ug/L			41	56	1	Standard
⌈>	**In-1**	**115**		ug/L			11285	11608	2	KED
⎢	**Cd**	**111**	**48.600**	ug/L	0.342	0	2	11677	1	KED
⌊	**Cd**	**114**	**49.304**	ug/L	1.107	2	8	28840	2	KED
⌈>	**In**	**115**		ug/L			574911	607814	2	Standard
⎢	**Ag**	**107**	**48.168**	ug/L	1.483	3	49	658606	1	Standard
⎢	**Sb**	**121**	**49.084**	ug/L	0.968	1	113	541436	2	Standard
⌊	**Sb**	**123**	**50.157**	ug/L	1.344	2	100	422691	1	Standard
⌈>	**Tb**	**159**		ug/L			566239	607050	4	Standard
⌊	**Pb**	**208**	**52.810**	ug/L	2.151	4	110	2277238	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBC
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 00:13:29
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	29632	1	Standard
	Cl	**37**		ug/L			3821796	3938857	1	Standard
⎡>	**Sc**	**45**		ug/L			525342	535096	1	Standard
⎢	**Cr**	**52**	**-0.006**	ug/L	0.037	634	20481	20750	1	Standard
⎣	**Cr**	**53**	**-0.004**	ug/L	0.003	67	140	135	2	Standard
⎡>	**Ge**	**72**		ug/L			27147	25355	19	KED
⎢	**Cu**	**63**	**0.005**	ug/L	0.003	64	45	53	22	KED
⎢	**Cu**	**65**	**0.004**	ug/L	0.002	56	20	22	25	KED
⎢	**Zn**	**66**	**0.047**	ug/L	0.066	140	24	36	54	KED
⎢	**Zn**	**67**	**0.002**	ug/L	0.061	3169	7	6	31	KED
⎢	**As**	**75**	**0.022**	ug/L	0.015	70	5	8	10	KED
⎣	**Se**	**78**	**-0.100**	ug/L	0.163	163	14	12	25	KED
	Y	**89**		ug/L			352299	360546	1	Standard
	Kr	**83**		ug/L			41	49	30	Standard
⎡>	**In-1**	**115**		ug/L			11285	11125	3	KED
⎢	**Cd**	**111**	**0.013**	ug/L	0.019	153	2	5	76	KED
⎣	**Cd**	**114**	**-0.003**	ug/L	0.009	285	8	6	79	KED
⎡>	**In**	**115**		ug/L			574911	593327	2	Standard
⎢	**Ag**	**107**	**0.000**	ug/L	0.001	257	49	53	12	Standard
⎢	**Sb**	**121**	**0.025**	ug/L	0.002	6	113	389	6	Standard
⎣	**Sb**	**123**	**0.024**	ug/L	0.002	7	100	300	4	Standard
⎡>	**Tb**	**159**		ug/L			566239	564601	4	Standard
⎣	**Pb**	**208**	**-0.000**	ug/L	0.000	190	110	106	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0083-BLK2
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Wednesday, March 08, 2023 00:17:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	36742	2	Standard
	Cl	**37**		ug/L			3821796	3688296	2	Standard
⌈>	**Sc**	**45**		ug/L			525342	495484	0	Standard
|	**Cr**	**52**	**0.058**	ug/L	0.041	69	20481	20287	2	Standard
⌊	**Cr**	**53**	**0.038**	ug/L	0.006	17	140	203	5	Standard
⌈>	**Ge**	**72**		ug/L			27147	27894	18	KED
|	**Cu**	**63**	**0.017**	ug/L	0.001	5	45	87	21	KED
|	**Cu**	**65**	**0.017**	ug/L	0.003	15	20	41	25	KED
|	**Zn**	**66**	**0.330**	ug/L	0.022	6	24	122	18	KED
|	**Zn**	**67**	**0.260**	ug/L	0.132	50	7	20	28	KED
|	**As**	**75**	**0.003**	ug/L	0.006	226	5	6	27	KED
⌊	**Se**	**78**	**-0.115**	ug/L	0.241	210	14	13	49	KED
	Y	**89**		ug/L			352299	325077	0	Standard
	Kr	**83**		ug/L			41	41	29	Standard
⌈>	**In-1**	**115**		ug/L			11285	10467	2	KED
|	**Cd**	**111**	**0.004**	ug/L	0.002	62	2	3	15	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.005	506	8	8	32	KED
⌈>	**In**	**115**		ug/L			574911	548500	0	Standard
|	**Ag**	**107**	**-0.001**	ug/L	0.001	133	49	40	25	Standard
|	**Sb**	**121**	**0.009**	ug/L	0.001	14	113	195	5	Standard
⌊	**Sb**	**123**	**0.006**	ug/L	0.001	23	100	140	6	Standard
⌈>	**Tb**	**159**		ug/L			566239	539364	3	Standard
⌊	**Pb**	**208**	**0.007**	ug/L	0.001	9	110	382	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0083-BS2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 00:20:47

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	40212	1	Standard
	Cl	**37**		ug/L			3821796	3703152	1	Standard
⌈>	**Sc**	**45**		ug/L			525342	500842	1	Standard
|	**Cr**	**52**	**24.373**	ug/L	0.654	2	20481	430143	2	Standard
⌊	**Cr**	**53**	**24.785**	ug/L	0.554	2	140	47642	1	Standard
⌈>	**Ge**	**72**		ug/L			27147	27148	19	KED
|	**Cu**	**63**	**27.473**	ug/L	2.397	8	45	62213	9	KED
|	**Cu**	**65**	**27.225**	ug/L	1.901	6	20	30510	11	KED
|	**Zn**	**66**	**84.393**	ug/L	2.530	2	24	24240	16	KED
|	**Zn**	**67**	**81.106**	ug/L	3.544	4	7	3887	18	KED
|	**As**	**75**	**25.406**	ug/L	0.604	2	5	3939	17	KED
⌊	**Se**	**78**	**74.924**	ug/L	5.442	7	14	1254	26	KED
	Y	**89**		ug/L			352299	328092	0	Standard
	Kr	**83**		ug/L			41	50	15	Standard
⌈>	**In-1**	**115**		ug/L			11285	11195	0	KED
|	**Cd**	**111**	**25.410**	ug/L	0.619	2	2	5889	1	KED
⌊	**Cd**	**114**	**25.483**	ug/L	0.572	2	8	14381	2	KED
⌈>	**In**	**115**		ug/L			574911	547736	2	Standard
|	**Ag**	**107**	**25.393**	ug/L	0.409	1	49	312999	1	Standard
|	**Sb**	**121**	**0.001**	ug/L	0.000	61	113	113	0	Standard
⌊	**Sb**	**123**	**-0.001**	ug/L	0.002	239	100	89	15	Standard
⌈>	**Tb**	**159**		ug/L			566239	534819	5	Standard
⌊	**Pb**	**208**	**27.858**	ug/L	1.300	4	110	1058027	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0388-01
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, March 08, 2023 00:24:26

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	32613	1	Standard
	Cl	**37**		ug/L			3821796	3707048	0	Standard
⌈>	**Sc**	**45**		ug/L			525342	579007	2	Standard
|	**Cr**	**52**	**1.014**	ug/L	0.011	1	20481	42327	3	Standard
⌊	**Cr**	**53**	**1.139**	ug/L	0.029	2	140	2677	1	Standard
⌈>	**Ge**	**72**		ug/L			27147	26918	16	KED
|	**Cu**	**63**	**3.022**	ug/L	0.167	5	45	6861	11	KED
|	**Cu**	**65**	**3.050**	ug/L	0.263	8	20	3404	8	KED
|	**Zn**	**66**	**10.459**	ug/L	0.583	5	24	3004	16	KED
|	**Zn**	**67**	**9.521**	ug/L	0.659	6	7	458	16	KED
|	**As**	**75**	**0.343**	ug/L	0.027	7	5	58	23	KED
⌊	**Se**	**78**	**-0.024**	ug/L	0.183	774	14	14	33	KED
	Y	**89**		ug/L			352299	383795	2	Standard
	Kr	**83**		ug/L			41	50	11	Standard
⌈>	**In-1**	**115**		ug/L			11285	11135	2	KED
|	**Cd**	**111**	**0.080**	ug/L	0.006	7	2	21	6	KED
⌊	**Cd**	**114**	**0.072**	ug/L	0.020	27	8	48	23	KED
⌈>	**In**	**115**		ug/L			574911	599287	1	Standard
|	**Ag**	**107**	**0.007**	ug/L	0.001	19	49	141	11	Standard
|	**Sb**	**121**	**0.082**	ug/L	0.002	2	113	1013	1	Standard
⌊	**Sb**	**123**	**0.087**	ug/L	0.005	5	100	827	4	Standard
⌈>	**Tb**	**159**		ug/L			566239	609225	4	Standard
⌊	**Pb**	**208**	**3.466**	ug/L	0.142	4	110	150118	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0083-DUP2
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, March 08, 2023 00:27:59

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	33214	1	Standard
	Cl	**37**		ug/L			3821796	3736697	3	Standard
⌈>	**Sc**	**45**		ug/L			525342	595608	5	Standard
|	**Cr**	**52**	**0.926**	ug/L	0.087	9	20481	41716	1	Standard
⌊	**Cr**	**53**	**1.109**	ug/L	0.019	1	140	2685	4	Standard
⌈>	**Ge**	**72**		ug/L			27147	28734	13	KED
|	**Cu**	**63**	**2.857**	ug/L	0.136	4	45	6943	9	KED
|	**Cu**	**65**	**2.938**	ug/L	0.193	6	20	3515	7	KED
|	**Zn**	**66**	**9.966**	ug/L	0.149	1	24	3061	12	KED
|	**Zn**	**67**	**10.114**	ug/L	0.514	5	7	520	12	KED
|	**As**	**75**	**0.314**	ug/L	0.055	17	5	56	2	KED
⌊	**Se**	**78**	**0.111**	ug/L	0.421	379	14	17	50	KED
	Y	**89**		ug/L			352299	381349	4	Standard
	Kr	**83**		ug/L			41	45	6	Standard
⌈>	**In-1**	**115**		ug/L			11285	11417	5	KED
|	**Cd**	**111**	**0.073**	ug/L	0.022	29	2	20	31	KED
⌊	**Cd**	**114**	**0.053**	ug/L	0.033	62	8	39	48	KED
⌈>	**In**	**115**		ug/L			574911	609527	4	Standard
|	**Ag**	**107**	**0.006**	ug/L	0.001	20	49	132	14	Standard
|	**Sb**	**121**	**0.081**	ug/L	0.006	7	113	1014	2	Standard
⌊	**Sb**	**123**	**0.078**	ug/L	0.003	3	100	761	2	Standard
⌈>	**Tb**	**159**		ug/L			566239	612783	6	Standard
⌊	**Pb**	**208**	**3.303**	ug/L	0.107	3	110	143862	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0083-MS2
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, March 08, 2023 00:32:01

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	34992	2	Standard
	Cl	**37**		ug/L			3821796	3777632	1	Standard
⌈>	**Sc**	**45**		ug/L			525342	592163	0	Standard
|	**Cr**	**52**	**5.589**	ug/L	0.083	1	20481	134432	1	Standard
⌊	**Cr**	**53**	**5.998**	ug/L	0.073	1	140	13752	0	Standard
⌈>	**Ge**	**72**		ug/L			27147	28375	20	KED
|	**Cu**	**63**	**8.614**	ug/L	0.872	10	45	20373	10	KED
|	**Cu**	**65**	**8.881**	ug/L	0.846	9	20	10372	10	KED
|	**Zn**	**66**	**28.676**	ug/L	1.469	5	24	8610	17	KED
|	**Zn**	**67**	**25.661**	ug/L	1.932	7	7	1279	13	KED
|	**As**	**75**	**5.676**	ug/L	0.259	4	5	921	16	KED
⌊	**Se**	**78**	**15.405**	ug/L	0.744	4	14	280	23	KED
	Y	**89**		ug/L			352299	380962	4	Standard
	Kr	**83**		ug/L			41	46	4	Standard
⌈>	**In-1**	**115**		ug/L			11285	11915	1	KED
|	**Cd**	**111**	**5.267**	ug/L	0.133	2	2	1301	1	KED
⌊	**Cd**	**114**	**5.312**	ug/L	0.066	1	8	3197	1	KED
⌈>	**In**	**115**		ug/L			574911	600039	2	Standard
|	**Ag**	**107**	**4.999**	ug/L	0.111	2	49	67517	0	Standard
|	**Sb**	**121**	**0.075**	ug/L	0.005	6	113	931	4	Standard
⌊	**Sb**	**123**	**0.073**	ug/L	0.002	2	100	714	2	Standard
⌈>	**Tb**	**159**		ug/L			566239	613652	4	Standard
⌊	**Pb**	**208**	**8.826**	ug/L	0.337	3	110	384875	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0031-05
Sample Dil Factor: 50
Comments:
Sample Date/Time: Wednesday, March 08, 2023 00:39:04
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	33582	2	Standard
	Cl	**37**		ug/L			3821796	3863071	4	Standard
>	**Sc**	**45**		ug/L			525342	612834	4	Standard
	Cr	**52**	**5.300**	ug/L	0.244	4	20481	133032	2	Standard
	Cr	**53**	**5.684**	ug/L	0.237	4	140	13485	2	Standard
>	**Ge**	**72**		ug/L			27147	27498	16	KED
	Cu	**63**	**10.993**	ug/L	0.786	7	45	25324	9	KED
	Cu	**65**	**11.155**	ug/L	0.851	7	20	12685	9	KED
	Zn	**66**	**22.507**	ug/L	0.321	1	24	6582	15	KED
	Zn	**67**	**21.979**	ug/L	1.524	6	7	1067	12	KED
	As	**75**	**2.384**	ug/L	0.122	5	5	378	11	KED
	Se	**78**	**0.373**	ug/L	0.278	74	14	20	7	KED
	Y	**89**		ug/L			352299	456955	2	Standard
	Kr	**83**		ug/L			41	62	24	Standard
>	**In-1**	**115**		ug/L			11285	11675	3	KED
	Cd	**111**	**0.054**	ug/L	0.022	40	2	15	30	KED
	Cd	**114**	**0.057**	ug/L	0.017	29	8	42	22	KED
>	**In**	**115**		ug/L			574911	620873	3	Standard
	Ag	**107**	**0.035**	ug/L	0.002	4	49	542	4	Standard
	Sb	**121**	**0.008**	ug/L	0.001	8	113	210	2	Standard
	Sb	**123**	**0.006**	ug/L	0.002	34	100	158	11	Standard
>	**Tb**	**159**		ug/L			566239	619179	5	Standard
	Pb	**208**	**4.659**	ug/L	0.124	2	110	205091	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0171-01
Sample Dil Factor: 50
Comments:
Sample Date/Time: Wednesday, March 08, 2023 00:42:43
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	34925	2	Standard
	Cl	**37**		ug/L			3821796	3897294	3	Standard
⎡>	**Sc**	**45**		ug/L			525342	615099	4	Standard
⎢	**Cr**	**52**	**4.674**	ug/L	0.084	1	20481	120679	4	Standard
⎣	**Cr**	**53**	**4.905**	ug/L	0.085	1	140	11709	3	Standard
⎡>	**Ge**	**72**		ug/L			27147	28910	15	KED
⎢	**Cu**	**63**	**11.216**	ug/L	0.628	5	45	27230	9	KED
⎢	**Cu**	**65**	**11.236**	ug/L	0.767	6	20	13455	8	KED
⎢	**Zn**	**66**	**19.926**	ug/L	0.727	3	24	6126	13	KED
⎢	**Zn**	**67**	**18.782**	ug/L	1.185	6	7	963	14	KED
⎢	**As**	**75**	**2.624**	ug/L	0.097	3	5	441	18	KED
⎣	**Se**	**78**	**0.335**	ug/L	0.202	60	14	21	23	KED
	Y	**89**		ug/L			352299	444991	2	Standard
	Kr	**83**		ug/L			41	62	22	Standard
⎡>	**In-1**	**115**		ug/L			11285	11524	2	KED
⎢	**Cd**	**111**	**0.052**	ug/L	0.012	22	2	15	16	KED
⎣	**Cd**	**114**	**0.066**	ug/L	0.005	7	8	46	4	KED
⎡>	**In**	**115**		ug/L			574911	615339	4	Standard
⎢	**Ag**	**107**	**0.042**	ug/L	0.005	13	49	626	7	Standard
⎢	**Sb**	**121**	**0.006**	ug/L	0.002	37	113	189	10	Standard
⎣	**Sb**	**123**	**0.004**	ug/L	0.002	60	100	141	16	Standard
⎡>	**Tb**	**159**		ug/L			566239	625492	4	Standard
⎣	**Pb**	**208**	**4.545**	ug/L	0.138	3	110	202153	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0171-02
Sample Dil Factor: 50
Comments:
Sample Date/Time: Wednesday, March 08, 2023 00:46:21
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	35334	1	Standard
	Cl	**37**		ug/L			3821796	3860255	1	Standard
⎡>	**Sc**	**45**		ug/L			525342	616261	1	Standard
⎢	**Cr**	**52**	**4.777**	ug/L	0.109	2	20481	123029	1	Standard
⎣	**Cr**	**53**	**5.046**	ug/L	0.123	2	140	12065	1	Standard
⎡>	**Ge**	**72**		ug/L			27147	28777	15	KED
⎢	**Cu**	**63**	**12.140**	ug/L	0.565	4	45	29358	11	KED
⎢	**Cu**	**65**	**11.979**	ug/L	0.893	7	20	14259	8	KED
⎢	**Zn**	**66**	**21.041**	ug/L	0.796	3	24	6445	15	KED
⎢	**Zn**	**67**	**20.800**	ug/L	0.956	4	7	1059	11	KED
⎢	**As**	**75**	**3.011**	ug/L	0.098	3	5	500	15	KED
⎣	**Se**	**78**	**0.361**	ug/L	0.028	7	14	21	16	KED
	Y	**89**		ug/L			352299	463926	1	Standard
	Kr	**83**		ug/L			41	58	9	Standard
⎡>	**In-1**	**115**		ug/L			11285	11585	1	KED
⎢	**Cd**	**111**	**0.062**	ug/L	0.025	41	2	17	35	KED
⎣	**Cd**	**114**	**0.072**	ug/L	0.011	15	8	50	11	KED
⎡>	**In**	**115**		ug/L			574911	624515	2	Standard
⎢	**Ag**	**107**	**0.044**	ug/L	0.001	2	49	674	4	Standard
⎢	**Sb**	**121**	**0.005**	ug/L	0.001	22	113	184	6	Standard
⎣	**Sb**	**123**	**0.004**	ug/L	0.002	41	100	141	9	Standard
⎡>	**Tb**	**159**		ug/L			566239	619569	3	Standard
⎣	**Pb**	**208**	**5.079**	ug/L	0.093	1	110	223814	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0171-03
Sample Dil Factor: 50
Comments:
Sample Date/Time: Wednesday, March 08, 2023 00:50:00
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	35886	1	Standard
	Cl	**37**		ug/L			3821796	3820238	0	Standard
>	**Sc**	**45**		ug/L			525342	610747	1	Standard
	Cr	**52**	**5.140**	ug/L	0.199	3	20481	129398	2	Standard
	Cr	**53**	**5.242**	ug/L	0.106	2	140	12419	2	Standard
>	**Ge**	**72**		ug/L			27147	29108	15	KED
	Cu	**63**	**11.830**	ug/L	1.052	8	45	28810	6	KED
	Cu	**65**	**12.348**	ug/L	0.935	7	20	14865	7	KED
	Zn	**66**	**23.301**	ug/L	1.338	5	24	7179	9	KED
	Zn	**67**	**21.955**	ug/L	1.562	7	7	1128	10	KED
	As	**75**	**2.861**	ug/L	0.023	0	5	482	16	KED
	Se	**78**	**0.321**	ug/L	0.403	125	14	21	44	KED
	Y	**89**		ug/L			352299	454020	1	Standard
	Kr	**83**		ug/L			41	52	4	Standard
>	**In-1**	**115**		ug/L			11285	11132	4	KED
	Cd	**111**	**0.096**	ug/L	0.030	31	2	24	24	KED
	Cd	**114**	**0.062**	ug/L	0.013	21	8	43	22	KED
>	**In**	**115**		ug/L			574911	622027	0	Standard
	Ag	**107**	**0.043**	ug/L	0.001	2	49	662	3	Standard
	Sb	**121**	**0.005**	ug/L	0.002	41	113	179	12	Standard
	Sb	**123**	**0.003**	ug/L	0.000	9	100	139	2	Standard
>	**Tb**	**159**		ug/L			566239	621699	3	Standard
	Pb	**208**	**4.929**	ug/L	0.200	4	110	217851	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0051-02
Sample Dil Factor: 50
Comments:
Sample Date/Time: Wednesday, March 08, 2023 00:53:33
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	34777	1	Standard
	Cl	**37**		ug/L			3821796	3885631	2	Standard
⌈>	**Sc**	**45**		ug/L			525342	621475	2	Standard
|	**Cr**	**52**	**6.390**	ug/L	0.072	1	20481	157841	3	Standard
⌊	**Cr**	**53**	**6.571**	ug/L	0.079	1	140	15798	3	Standard
⌈>	**Ge**	**72**		ug/L			27147	29232	20	KED
|	**Cu**	**63**	**11.073**	ug/L	1.050	9	45	26976	10	KED
|	**Cu**	**65**	**11.011**	ug/L	0.960	8	20	13258	11	KED
|	**Zn**	**66**	**39.202**	ug/L	1.981	5	24	12118	16	KED
|	**Zn**	**67**	**38.920**	ug/L	0.612	1	7	2016	20	KED
|	**As**	**75**	**52.276**	ug/L	0.933	1	5	8721	19	KED
⌊	**Se**	**78**	**0.324**	ug/L	0.137	42	14	21	14	KED
	Y	**89**		ug/L			352299	474662	3	Standard
	Kr	**83**		ug/L			41	56	10	Standard
⌈>	**In-1**	**115**		ug/L			11285	11711	6	KED
|	**Cd**	**111**	**0.159**	ug/L	0.024	15	2	41	10	KED
⌊	**Cd**	**114**	**0.145**	ug/L	0.018	12	8	94	12	KED
⌈>	**In**	**115**		ug/L			574911	626054	3	Standard
|	**Ag**	**107**	**0.081**	ug/L	0.002	2	49	1200	4	Standard
|	**Sb**	**121**	**0.006**	ug/L	0.003	40	113	194	17	Standard
⌊	**Sb**	**123**	**0.004**	ug/L	0.001	16	100	144	2	Standard
⌈>	**Tb**	**159**		ug/L			566239	625057	7	Standard
⌊	**Pb**	**208**	**8.130**	ug/L	0.526	6	110	360436	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVD
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 00:59:57
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	29484	2	Standard
	Cl	**37**		ug/L			3821796	4159971	1	Standard
>	**Sc**	**45**		ug/L			525342	586316	2	Standard
	Cr	**52**	**47.316**	ug/L	0.555	1	20481	955914	1	Standard
	Cr	**53**	**48.186**	ug/L	0.983	2	140	108266	0	Standard
>	**Ge**	**72**		ug/L			27147	27172	12	KED
	Cu	**63**	**54.138**	ug/L	4.980	9	45	123126	3	KED
	Cu	**65**	**55.123**	ug/L	3.928	7	20	61995	5	KED
	Zn	**66**	**51.543**	ug/L	1.538	2	24	14861	11	KED
	Zn	**67**	**53.730**	ug/L	2.150	4	7	2578	10	KED
	As	**75**	**50.130**	ug/L	1.476	2	5	7787	12	KED
	Se	**78**	**44.875**	ug/L	3.280	7	14	755	20	KED
	Y	**89**		ug/L			352299	383164	2	Standard
	Kr	**83**		ug/L			41	53	19	Standard
>	**In-1**	**115**		ug/L			11285	11258	2	KED
	Cd	**111**	**49.868**	ug/L	1.732	3	2	11615	1	KED
	Cd	**114**	**49.271**	ug/L	2.245	4	8	27938	3	KED
>	**In**	**115**		ug/L			574911	618164	1	Standard
	Ag	**107**	**48.918**	ug/L	1.027	2	49	680435	1	Standard
	Sb	**121**	**49.528**	ug/L	1.239	2	113	555587	1	Standard
	Sb	**123**	**48.897**	ug/L	0.385	0	100	419202	0	Standard
>	**Tb**	**159**		ug/L			566239	617630	2	Standard
	Pb	**208**	**52.879**	ug/L	2.012	3	110	2321398	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBD
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 01:06:20
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	28996	1	Standard
	Cl	**37**		ug/L			3821796	3954643	2	Standard
⎡>	**Sc**	**45**		ug/L			525342	540327	2	Standard
⎢	**Cr**	**52**	**0.010**	ug/L	0.008	78	20481	21247	3	Standard
⎣	**Cr**	**53**	**0.008**	ug/L	0.003	30	140	161	5	Standard
⎡>	**Ge**	**72**		ug/L			27147	22222	4	KED
⎢	**Cu**	**63**	**0.005**	ug/L	0.003	66	45	46	10	KED
⎢	**Cu**	**65**	**-0.001**	ug/L	0.005	340	20	15	25	KED
⎢	**Zn**	**66**	**-0.014**	ug/L	0.004	27	24	16	6	KED
⎢	**Zn**	**67**	**-0.066**	ug/L	0.121	183	7	3	132	KED
⎢	**As**	**75**	**0.021**	ug/L	0.012	58	5	7	27	KED
⎣	**Se**	**78**	**0.116**	ug/L	0.280	241	14	13	33	KED
	Y	**89**		ug/L			352299	366801	4	Standard
	Kr	**83**		ug/L			41	52	36	Standard
⎡>	**In-1**	**115**		ug/L			11285	11494	2	KED
⎢	**Cd**	**111**	**-0.000**	ug/L	0.012	5014	2	2	100	KED
⎣	**Cd**	**114**	**-0.004**	ug/L	0.011	314	8	6	97	KED
⎡>	**In**	**115**		ug/L			574911	596574	3	Standard
⎢	**Ag**	**107**	**0.000**	ug/L	0.000	188	49	54	8	Standard
⎢	**Sb**	**121**	**0.025**	ug/L	0.005	19	113	387	14	Standard
⎣	**Sb**	**123**	**0.020**	ug/L	0.003	13	100	273	9	Standard
⎡>	**Tb**	**159**		ug/L			566239	567030	5	Standard
⎣	**Pb**	**208**	**0.000**	ug/L	0.000	2	110	114	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0446-02
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Wednesday, March 08, 2023 01:09:59
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	49845	3	Standard
	Cl	**37**		ug/L			3821796	6706478	2	Standard
⌈>	**Sc**	**45**		ug/L			525342	593661	4	Standard
⎢	**Cr**	**52**	**8.022**	ug/L	0.143	1	20481	183357	5	Standard
⌊	**Cr**	**53**	**11.441**	ug/L	0.456	3	140	26125	1	Standard
⌈>	**Ge**	**72**		ug/L			27147	26664	17	KED
⎢	**Cu**	**63**	**11.490**	ug/L	0.805	7	45	25660	10	KED
⎢	**Cu**	**65**	**11.684**	ug/L	1.103	9	20	12851	9	KED
⎢	**Zn**	**66**	**37.814**	ug/L	1.314	3	24	10685	15	KED
⎢	**Zn**	**67**	**38.808**	ug/L	1.058	2	7	1831	16	KED
⎢	**As**	**75**	**1.303**	ug/L	0.151	11	5	202	13	KED
⌊	**Se**	**78**	**0.202**	ug/L	0.252	124	14	18	41	KED
	Y	**89**		ug/L			352299	378664	3	Standard
	Kr	**83**		ug/L			41	59	9	Standard
⌈>	**In-1**	**115**		ug/L			11285	10633	2	KED
⎢	**Cd**	**111**	**0.051**	ug/L	0.011	20	2	13	15	KED
⌊	**Cd**	**114**	**0.026**	ug/L	0.017	66	8	21	39	KED
⌈>	**In**	**115**		ug/L			574911	607333	2	Standard
⎢	**Ag**	**107**	**0.005**	ug/L	0.001	27	49	116	12	Standard
⎢	**Sb**	**121**	**2.295**	ug/L	0.010	0	113	25414	2	Standard
⌊	**Sb**	**123**	**2.336**	ug/L	0.049	2	100	19770	1	Standard
⌈>	**Tb**	**159**		ug/L			566239	607023	6	Standard
⌊	**Pb**	**208**	**0.672**	ug/L	0.030	4	110	29097	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0446-04
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 01:13:38

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	49162	2	Standard
	Cl	**37**		ug/L			3821796	6968099	1	Standard
⌈>	**Sc**	**45**		ug/L			525342	604433	0	Standard
|	**Cr**	**52**	**7.382**	ug/L	0.167	2	20481	173651	1	Standard
⌊	**Cr**	**53**	**11.403**	ug/L	0.080	0	140	26544	0	Standard
⌈>	**Ge**	**72**		ug/L			27147	27317	17	KED
|	**Cu**	**63**	**10.405**	ug/L	0.694	6	45	23821	10	KED
|	**Cu**	**65**	**10.560**	ug/L	0.807	7	20	11922	9	KED
|	**Zn**	**66**	**33.646**	ug/L	0.768	2	24	9751	15	KED
|	**Zn**	**67**	**33.937**	ug/L	2.201	6	7	1637	14	KED
|	**As**	**75**	**1.177**	ug/L	0.097	8	5	191	25	KED
⌊	**Se**	**78**	**-0.102**	ug/L	0.116	113	14	12	11	KED
	Y	**89**		ug/L			352299	389915	2	Standard
	Kr	**83**		ug/L			41	42	16	Standard
⌈>	**In-1**	**115**		ug/L			11285	10714	0	KED
|	**Cd**	**111**	**0.046**	ug/L	0.015	32	2	13	25	KED
⌊	**Cd**	**114**	**0.030**	ug/L	0.015	50	8	24	33	KED
⌈>	**In**	**115**		ug/L			574911	609861	1	Standard
|	**Ag**	**107**	**0.005**	ug/L	0.001	19	49	116	11	Standard
|	**Sb**	**121**	**2.488**	ug/L	0.025	0	113	27658	1	Standard
⌊	**Sb**	**123**	**2.479**	ug/L	0.019	0	100	21067	1	Standard
⌈>	**Tb**	**159**		ug/L			566239	624034	5	Standard
⌊	**Pb**	**208**	**0.669**	ug/L	0.035	5	110	29766	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0449-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, March 08, 2023 01:17:17

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	40196	0	Standard
	Cl	**37**		ug/L			3821796	5458399	0	Standard
⎡>	**Sc**	**45**		ug/L			525342	625587	1	Standard
⎢	**Cr**	**52**	**0.024**	ug/L	0.060	253	20481	24886	4	Standard
⎣	**Cr**	**53**	**1.356**	ug/L	0.046	3	140	3413	2	Standard
⎡>	**Ge**	**72**		ug/L			27147	27453	19	KED
⎢	**Cu**	**63**	**0.129**	ug/L	0.029	22	45	335	2	KED
⎢	**Cu**	**65**	**0.140**	ug/L	0.016	11	20	178	10	KED
⎢	**Zn**	**66**	**179.868**	ug/L	6.028	3	24	52220	16	KED
⎢	**Zn**	**67**	**164.309**	ug/L	8.518	5	7	7918	15	KED
⎢	**As**	**75**	**0.742**	ug/L	0.017	2	5	122	20	KED
⎣	**Se**	**78**	**33.634**	ug/L	1.510	4	14	575	24	KED
	Y	**89**		ug/L			352299	378618	1	Standard
	Kr	**83**		ug/L			41	69	10	Standard
⎡>	**In-1**	**115**		ug/L			11285	11128	1	KED
⎢	**Cd**	**111**	**0.278**	ug/L	0.032	11	2	66	10	KED
⎣	**Cd**	**114**	**0.265**	ug/L	0.010	3	8	157	4	KED
⎡>	**In**	**115**		ug/L			574911	598459	2	Standard
⎢	**Ag**	**107**	**0.000**	ug/L	0.001	256	49	55	15	Standard
⎢	**Sb**	**121**	**0.473**	ug/L	0.010	2	113	5259	2	Standard
⎣	**Sb**	**123**	**0.478**	ug/L	0.032	6	100	4064	3	Standard
⎡>	**Tb**	**159**		ug/L			566239	618197	3	Standard
⎣	**Pb**	**208**	**0.009**	ug/L	0.001	16	110	497	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0449-02
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, March 08, 2023 01:21:20
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	42268	2	Standard
	Cl	**37**		ug/L			3821796	5682139	2	Standard
⌈>	**Sc**	**45**		ug/L			525342	677558	4	Standard
|	**Cr**	**52**	**-0.040**	ug/L	0.046	116	20481	25486	1	Standard
⌊	**Cr**	**53**	**1.234**	ug/L	0.045	3	140	3377	2	Standard
⌈>	**Ge**	**72**		ug/L			27147	28465	14	KED
|	**Cu**	**63**	**0.133**	ug/L	0.021	16	45	366	18	KED
|	**Cu**	**65**	**0.141**	ug/L	0.015	10	20	188	17	KED
|	**Zn**	**66**	**180.610**	ug/L	1.537	0	24	54538	13	KED
|	**Zn**	**67**	**168.697**	ug/L	1.686	0	7	8480	13	KED
|	**As**	**75**	**0.768**	ug/L	0.104	13	5	130	16	KED
⌊	**Se**	**78**	**34.582**	ug/L	2.267	6	14	613	20	KED
	Y	**89**		ug/L			352299	395399	0	Standard
	Kr	**83**		ug/L			41	53	16	Standard
⌈>	**In-1**	**115**		ug/L			11285	11698	0	KED
|	**Cd**	**111**	**0.108**	ug/L	0.006	5	2	29	4	KED
⌊	**Cd**	**114**	**0.073**	ug/L	0.008	11	8	51	9	KED
⌈>	**In**	**115**		ug/L			574911	635041	1	Standard
|	**Ag**	**107**	**0.000**	ug/L	0.001	279	49	60	25	Standard
|	**Sb**	**121**	**0.465**	ug/L	0.004	0	113	5479	0	Standard
⌊	**Sb**	**123**	**0.469**	ug/L	0.009	1	100	4238	0	Standard
⌈>	**Tb**	**159**		ug/L			566239	639809	4	Standard
⌊	**Pb**	**208**	**0.005**	ug/L	0.000	8	110	344	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0007-DUP1
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, March 08, 2023 01:24:52
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			28402	42978	1	Standard
	Cl	37		ug/L			3821796	5670803	1	Standard
>	Sc	45		ug/L			525342	666229	2	Standard
	Cr	52	-0.030	ug/L	0.039	132	20481	25293	1	Standard
	Cr	53	1.270	ug/L	0.037	2	140	3415	3	Standard
>	Ge	72		ug/L			27147	29125	19	KED
	Cu	63	0.139	ug/L	0.032	23	45	380	5	KED
	Cu	65	0.157	ug/L	0.038	24	20	206	12	KED
	Zn	66	187.572	ug/L	8.760	4	24	57638	14	KED
	Zn	67	171.544	ug/L	8.747	5	7	8771	15	KED
	As	75	0.710	ug/L	0.008	1	5	124	19	KED
	Se	78	34.482	ug/L	0.547	1	14	622	19	KED
	Y	89		ug/L			352299	402652	1	Standard
	Kr	83		ug/L			41	69	6	Standard
>	In-1	115		ug/L			11285	11396	4	KED
	Cd	111	0.099	ug/L	0.033	33	2	26	29	KED
	Cd	114	0.068	ug/L	0.014	20	8	47	11	KED
>	In	115		ug/L			574911	625270	2	Standard
	Ag	107	0.001	ug/L	0.000	58	49	64	11	Standard
	Sb	121	0.480	ug/L	0.013	2	113	5568	0	Standard
	Sb	123	0.486	ug/L	0.011	2	100	4326	4	Standard
>	Tb	159		ug/L			566239	637469	6	Standard
	Pb	208	0.007	ug/L	0.001	7	110	440	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0007-MS1
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, March 08, 2023 01:29:55
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			28402	42908	3	Standard
Cl	37		ug/L			3821796	5523389	4	Standard
> Sc	45		ug/L			525342	685196	3	Standard
Cr	52	11.127	ug/L	0.092	0	20481	283179	3	Standard
Cr	53	12.762	ug/L	0.142	1	140	33647	2	Standard
> Ge	72		ug/L			27147	28386	20	KED
Cu	63	13.839	ug/L	1.017	7	45	32843	12	KED
Cu	65	13.992	ug/L	1.036	7	20	16389	12	KED
Zn	66	222.189	ug/L	6.147	2	24	66852	19	KED
Zn	67	207.768	ug/L	3.695	1	7	10397	19	KED
As	75	13.901	ug/L	0.459	3	5	2253	17	KED
Se	78	71.310	ug/L	5.063	7	14	1249	27	KED
Y	89		ug/L			352299	398305	4	Standard
Kr	83		ug/L			41	69	7	Standard
> In-1	115		ug/L			11285	11009	3	KED
Cd	111	12.584	ug/L	0.345	2	2	2868	2	KED
Cd	114	12.618	ug/L	0.520	4	8	7000	1	KED
> In	115		ug/L			574911	622875	2	Standard
Ag	107	11.750	ug/L	0.099	0	49	164739	2	Standard
Sb	121	13.804	ug/L	0.292	2	113	156101	1	Standard
Sb	123	13.755	ug/L	0.154	1	100	118910	2	Standard
> Tb	159		ug/L			566239	639906	3	Standard
Pb	208	13.547	ug/L	0.426	3	110	616182	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0421-02
Sample Dil Factor:
Comments:
DEL
Sample Date/Time: Wednesday, March 08, 2023 01:36:58
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	48993	1	Standard
	Cl	**37**		ug/L			3821796	4387758	1	Standard
>	**Sc**	**45**		ug/L			525342	701055	2	Standard
	Cr	**52**	**0.247**	ug/L	0.027	10	20481	33157	3	Standard
	Cr	**53**	**1.144**	ug/L	0.011	0	140	3256	2	Standard
>	**Ge**	**72**		ug/L			27147	27926	17	KED
	Cu	**63**	**0.548**	ug/L	0.034	6	45	1327	11	KED
	Cu	**65**	**0.562**	ug/L	0.034	6	20	669	11	KED
	Zn	**66**	**0.942**	ug/L	0.139	14	24	299	7	KED
	Zn	**67**	**1.439**	ug/L	0.430	29	7	77	20	KED
	As	**75**	**0.705**	ug/L	0.066	9	5	117	11	KED
	Se	**78**	**0.097**	ug/L	0.292	301	14	17	46	KED
	Y	**89**		ug/L			352299	418259	1	Standard
	Kr	**83**		ug/L			41	53	12	Standard
>	**In-1**	**115**		ug/L			11285	12749	1	KED
	Cd	**111**	**0.006**	ug/L	0.000	3	2	4	0	KED
	Cd	**114**	**-0.003**	ug/L	0.007	227	8	7	52	KED
>	**In**	**115**		ug/L			574911	677658	1	Standard
	Ag	**107**	**0.002**	ug/L	0.000	16	49	82	5	Standard
	Sb	**121**	**0.037**	ug/L	0.004	9	113	593	5	Standard
	Sb	**123**	**0.036**	ug/L	0.005	13	100	457	9	Standard
>	**Tb**	**159**		ug/L			566239	668177	4	Standard
	Pb	**208**	**0.049**	ug/L	0.002	4	110	2442	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0145-DUP1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 01:41:01

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			28402	47131	2	Standard
Cl	37		ug/L			3821796	4301351	0	Standard
> Sc	45		ug/L			525342	695372	0	Standard
Cr	52	0.230	ug/L	0.037	16	20481	32487	2	Standard
Cr	53	1.096	ug/L	0.031	2	140	3102	2	Standard
> Ge	72		ug/L			27147	31459	16	KED
Cu	63	0.531	ug/L	0.069	12	45	1443	8	KED
Cu	65	0.534	ug/L	0.026	4	20	719	12	KED
Zn	66	0.965	ug/L	0.042	4	24	348	13	KED
Zn	67	1.395	ug/L	0.193	13	7	85	5	KED
As	75	0.636	ug/L	0.021	3	5	120	14	KED
Se	78	-0.156	ug/L	0.245	156	14	13	37	KED
Y	89		ug/L			352299	419080	3	Standard
Kr	83		ug/L			41	55	15	Standard
> In-1	115		ug/L			11285	12127	2	KED
Cd	111	0.011	ug/L	0.007	62	2	5	28	KED
Cd	114	-0.008	ug/L	0.009	114	8	4	124	KED
> In	115		ug/L			574911	673693	1	Standard
Ag	107	0.001	ug/L	0.001	62	49	73	11	Standard
Sb	121	0.040	ug/L	0.003	6	113	623	6	Standard
Sb	123	0.035	ug/L	0.006	17	100	447	14	Standard
> Tb	159		ug/L			566239	669638	2	Standard
Pb	208	0.049	ug/L	0.004	7	110	2459	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0145-MS1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 01:46:04

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			28402	46787	1	Standard
Cl	37		ug/L			3821796	4364758	2	Standard
> Sc	45		ug/L			525342	698302	1	Standard
Cr	52	22.882	ug/L	0.228	0	20481	564697	1	Standard
Cr	53	24.497	ug/L	0.399	1	140	65661	1	Standard
> Ge	72		ug/L			27147	28850	19	KED
Cu	63	29.729	ug/L	2.365	7	45	71666	11	KED
Cu	65	29.621	ug/L	2.617	8	20	35192	9	KED
Zn	66	82.370	ug/L	3.137	3	24	25116	15	KED
Zn	67	80.783	ug/L	6.127	7	7	4081	11	KED
As	75	26.254	ug/L	0.593	2	5	4323	16	KED
Se	78	71.292	ug/L	1.951	2	14	1262	21	KED
Y	89		ug/L			352299	416602	0	Standard
Kr	83		ug/L			41	48	29	Standard
> In-1	115		ug/L			11285	12380	2	KED
Cd	111	24.801	ug/L	0.924	3	2	6359	5	KED
Cd	114	24.949	ug/L	0.360	1	8	15569	2	KED
> In	115		ug/L			574911	678246	2	Standard
Ag	107	24.299	ug/L	0.244	1	49	370905	1	Standard
Sb	121	0.039	ug/L	0.001	3	113	619	2	Standard
Sb	123	0.035	ug/L	0.004	9	100	451	7	Standard
> Tb	159		ug/L			566239	672429	2	Standard
Pb	208	27.327	ug/L	0.834	3	110	1306429	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLE
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 01:49:37
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	35496	2	Standard
	Cl	**37**		ug/L			3821796	4268913	1	Standard
⎡>	**Sc**	**45**		ug/L			525342	601015	1	Standard
⎢	**Cr**	**52**	**0.082**	ug/L	0.017	20	20481	25096	1	Standard
⎣	**Cr**	**53**	**0.135**	ug/L	0.001	0	140	472	1	Standard
⎡>	**Ge**	**72**		ug/L			27147	30363	15	KED
⎢	**Cu**	**63**	**0.002**	ug/L	0.003	153	45	57	23	KED
⎢	**Cu**	**65**	**0.009**	ug/L	0.001	14	20	34	20	KED
⎢	**Zn**	**66**	**0.010**	ug/L	0.026	251	24	29	20	KED
⎢	**Zn**	**67**	**-0.046**	ug/L	0.081	177	7	5	57	KED
⎢	**As**	**75**	**-0.004**	ug/L	0.015	364	5	5	43	KED
⎣	**Se**	**78**	**-0.178**	ug/L	0.150	84	14	13	36	KED
	Y	**89**		ug/L			352299	390371	1	Standard
	Kr	**83**		ug/L			41	46	36	Standard
⎡>	**In-1**	**115**		ug/L			11285	12290	3	KED
⎢	**Cd**	**111**	**0.010**	ug/L	0.010	104	2	5	50	KED
⎣	**Cd**	**114**	**-0.006**	ug/L	0.000	4	8	5	0	KED
⎡>	**In**	**115**		ug/L			574911	657113	2	Standard
⎢	**Ag**	**107**	**-0.000**	ug/L	0.001	244	49	52	16	Standard
⎢	**Sb**	**121**	**-0.008**	ug/L	0.001	10	113	35	25	Standard
⎣	**Sb**	**123**	**-0.010**	ug/L	0.001	5	100	23	24	Standard
⎡>	**Tb**	**159**		ug/L			566239	632725	3	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.000	47	110	156	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVE
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 01:53:16
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	33182	0	Standard
	Cl	**37**		ug/L			3821796	4439024	1	Standard
>	**Sc**	**45**		ug/L			525342	611046	3	Standard
	Cr	**52**	**48.717**	ug/L	0.557	1	20481	1024970	2	Standard
	Cr	**53**	**50.155**	ug/L	0.778	1	140	117452	2	Standard
>	**Ge**	**72**		ug/L			27147	30884	19	KED
	Cu	**63**	**54.988**	ug/L	5.221	9	45	141488	9	KED
	Cu	**65**	**55.827**	ug/L	6.060	10	20	70785	8	KED
	Zn	**66**	**53.007**	ug/L	2.539	4	24	17319	16	KED
	Zn	**67**	**51.805**	ug/L	3.505	6	7	2832	21	KED
	As	**75**	**50.752**	ug/L	1.205	2	5	8947	17	KED
	Se	**78**	**46.073**	ug/L	2.259	4	14	881	24	KED
	Y	**89**		ug/L			352299	405397	4	Standard
	Kr	**83**		ug/L			41	60	11	Standard
>	**In-1**	**115**		ug/L			11285	12325	5	KED
	Cd	**111**	**49.257**	ug/L	0.633	1	2	12565	5	KED
	Cd	**114**	**49.907**	ug/L	1.253	2	8	30973	2	KED
>	**In**	**115**		ug/L			574911	664590	2	Standard
	Ag	**107**	**47.411**	ug/L	0.941	1	49	708840	1	Standard
	Sb	**121**	**49.464**	ug/L	0.417	0	113	596559	2	Standard
	Sb	**123**	**49.380**	ug/L	1.275	2	100	454957	1	Standard
>	**Tb**	**159**		ug/L			566239	662660	0	Standard
	Pb	**208**	**53.236**	ug/L	1.637	3	110	2508600	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBE
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 01:59:39
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	32494	1	Standard
	Cl	**37**		ug/L			3821796	4174952	1	Standard
⌈>	**Sc**	**45**		ug/L			525342	565860	1	Standard
|	**Cr**	**52**	**0.064**	ug/L	0.039	61	20481	23283	4	Standard
⌊	**Cr**	**53**	**0.076**	ug/L	0.011	14	140	316	9	Standard
⌈>	**Ge**	**72**		ug/L			27147	28907	12	KED
|	**Cu**	**63**	**0.003**	ug/L	0.004	118	45	57	28	KED
|	**Cu**	**65**	**0.006**	ug/L	0.005	86	20	27	10	KED
|	**Zn**	**66**	**0.007**	ug/L	0.018	245	24	27	21	KED
|	**Zn**	**67**	**-0.100**	ug/L	0.033	33	7	3	69	KED
|	**As**	**75**	**0.003**	ug/L	0.011	362	5	6	24	KED
⌊	**Se**	**78**	**-0.027**	ug/L	0.042	156	14	15	12	KED
	Y	**89**		ug/L			352299	374169	1	Standard
	Kr	**83**		ug/L			41	46	26	Standard
⌈>	**In-1**	**115**		ug/L			11285	11572	4	KED
|	**Cd**	**111**	**0.005**	ug/L	0.009	192	2	4	58	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.006	280	8	7	44	KED
⌈>	**In**	**115**		ug/L			574911	623117	0	Standard
|	**Ag**	**107**	**0.000**	ug/L	0.001	250	49	57	15	Standard
|	**Sb**	**121**	**0.023**	ug/L	0.002	9	113	383	6	Standard
⌊	**Sb**	**123**	**0.022**	ug/L	0.006	28	100	296	18	Standard
⌈>	**Tb**	**159**		ug/L			566239	603805	3	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.001	42	110	179	14	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0448-02
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 02:03:19

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	52513	1	Standard
	Cl	**37**		ug/L			3821796	7076501	2	Standard
⌈>	**Sc**	**45**		ug/L			525342	642862	2	Standard
⎢	**Cr**	**52**	**8.479**	ug/L	0.102	1	20481	208391	1	Standard
⌊	**Cr**	**53**	**12.031**	ug/L	0.384	3	140	29760	1	Standard
⌈>	**Ge**	**72**		ug/L			27147	29506	18	KED
⎢	**Cu**	**63**	**11.352**	ug/L	0.862	7	45	28026	11	KED
⎢	**Cu**	**65**	**11.476**	ug/L	0.676	5	20	14020	13	KED
⎢	**Zn**	**66**	**35.984**	ug/L	2.141	5	24	11210	13	KED
⎢	**Zn**	**67**	**36.973**	ug/L	0.785	2	7	1929	16	KED
⎢	**As**	**75**	**1.239**	ug/L	0.040	3	5	215	19	KED
⌊	**Se**	**78**	**0.048**	ug/L	0.088	184	14	16	23	KED
	Y	**89**		ug/L			352299	411614	1	Standard
	Kr	**83**		ug/L			41	61	18	Standard
⌈>	**In-1**	**115**		ug/L			11285	11503	1	KED
⎢	**Cd**	**111**	**0.041**	ug/L	0.026	63	2	12	49	KED
⌊	**Cd**	**114**	**0.019**	ug/L	0.005	27	8	19	16	KED
⌈>	**In**	**115**		ug/L			574911	653072	1	Standard
⎢	**Ag**	**107**	**0.005**	ug/L	0.002	29	49	132	17	Standard
⎢	**Sb**	**121**	**2.337**	ug/L	0.042	1	113	27814	0	Standard
⌊	**Sb**	**123**	**2.308**	ug/L	0.042	1	100	21011	2	Standard
⌈>	**Tb**	**159**		ug/L			566239	662995	4	Standard
⌊	**Pb**	**208**	**0.666**	ug/L	0.020	3	110	31526	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0448-04
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 02:06:57

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	53782	1	Standard
	Cl	**37**		ug/L			3821796	6800614	4	Standard
⌈>	**Sc**	**45**		ug/L			525342	631049	6	Standard
|	**Cr**	**52**	**8.570**	ug/L	0.186	2	20481	206387	4	Standard
⌊	**Cr**	**53**	**12.388**	ug/L	0.425	3	140	30051	2	Standard
⌈>	**Ge**	**72**		ug/L			27147	30506	14	KED
|	**Cu**	**63**	**11.620**	ug/L	1.035	8	45	29669	5	KED
|	**Cu**	**65**	**11.664**	ug/L	0.856	7	20	14726	7	KED
|	**Zn**	**66**	**40.694**	ug/L	1.634	4	24	13152	11	KED
|	**Zn**	**67**	**38.372**	ug/L	1.334	3	7	2067	11	KED
|	**As**	**75**	**1.215**	ug/L	0.051	4	5	218	18	KED
⌊	**Se**	**78**	**-0.001**	ug/L	0.130	13597	14	16	3	KED
	Y	**89**		ug/L			352299	402394	2	Standard
	Kr	**83**		ug/L			41	60	11	Standard
⌈>	**In-1**	**115**		ug/L			11285	11896	0	KED
|	**Cd**	**111**	**0.042**	ug/L	0.013	31	2	13	24	KED
⌊	**Cd**	**114**	**0.028**	ug/L	0.013	46	8	26	29	KED
⌈>	**In**	**115**		ug/L			574911	645898	1	Standard
|	**Ag**	**107**	**0.006**	ug/L	0.001	18	49	146	12	Standard
|	**Sb**	**121**	**2.261**	ug/L	0.071	3	113	26622	3	Standard
⌊	**Sb**	**123**	**2.266**	ug/L	0.059	2	100	20405	1	Standard
⌈>	**Tb**	**159**		ug/L			566239	654626	0	Standard
⌊	**Pb**	**208**	**0.636**	ug/L	0.021	3	110	29742	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0421-04
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Wednesday, March 08, 2023 02:10:36
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	46040	4	Standard
	Cl	**37**		ug/L			3821796	4305587	0	Standard
⎡>	**Sc**	**45**		ug/L			525342	641825	8	Standard
⎢	**Cr**	**52**	**0.379**	ug/L	0.083	22	20481	33153	7	Standard
⎣	**Cr**	**53**	**1.354**	ug/L	0.111	8	140	3482	2	Standard
⎡>	**Ge**	**72**		ug/L			27147	30270	16	KED
⎢	**Cu**	**63**	**0.968**	ug/L	0.110	11	45	2489	5	KED
⎢	**Cu**	**65**	**0.954**	ug/L	0.061	6	20	1216	10	KED
⎢	**Zn**	**66**	**1.713**	ug/L	0.118	6	24	573	10	KED
⎢	**Zn**	**67**	**2.216**	ug/L	0.427	19	7	124	6	KED
⎢	**As**	**75**	**0.626**	ug/L	0.030	4	5	114	19	KED
⎣	**Se**	**78**	**-0.113**	ug/L	0.120	105	14	13	10	KED
	Y	**89**		ug/L			352299	378209	7	Standard
	Kr	**83**		ug/L			41	57	23	Standard
⎡>	**In-1**	**115**		ug/L			11285	11939	3	KED
⎢	**Cd**	**111**	**0.006**	ug/L	0.009	147	2	4	44	KED
⎣	**Cd**	**114**	**0.002**	ug/L	0.011	559	8	10	64	KED
⎡>	**In**	**115**		ug/L			574911	627711	9	Standard
⎢	**Ag**	**107**	**0.001**	ug/L	0.001	88	49	68	24	Standard
⎢	**Sb**	**121**	**0.062**	ug/L	0.005	8	113	829	2	Standard
⎣	**Sb**	**123**	**0.057**	ug/L	0.006	11	100	600	2	Standard
⎡>	**Tb**	**159**		ug/L			566239	625988	6	Standard
⎣	**Pb**	**208**	**0.069**	ug/L	0.005	7	110	3204	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0421-06
Sample Dil Factor:
Comments: DEL
Sample Date/Time: Wednesday, March 08, 2023 02:14:15
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			28402	48265	1	Standard
Cl	37		ug/L			3821796	4448903	2	Standard
> Sc	45		ug/L			525342	691220	2	Standard
Cr	52	0.405	ug/L	0.030	7	20481	36357	2	Standard
Cr	53	1.139	ug/L	0.052	4	140	3196	2	Standard
> Ge	72		ug/L			27147	30294	14	KED
Cu	63	0.425	ug/L	0.056	13	45	1126	8	KED
Cu	65	0.422	ug/L	0.021	4	20	552	11	KED
Zn	66	0.827	ug/L	0.075	9	24	294	21	KED
Zn	67	1.097	ug/L	0.276	25	7	68	36	KED
As	75	0.622	ug/L	0.009	1	5	113	13	KED
Se	78	-0.144	ug/L	0.221	153	14	13	43	KED
Y	89		ug/L			352299	419003	3	Standard
Kr	83		ug/L			41	69	24	Standard
> In-1	115		ug/L			11285	12609	2	KED
Cd	111	0.006	ug/L	0.004	66	2	4	20	KED
Cd	114	-0.001	ug/L	0.003	368	8	9	21	KED
> In	115		ug/L			574911	681872	0	Standard
Ag	107	0.000	ug/L	0.001	562	49	61	25	Standard
Sb	121	0.063	ug/L	0.007	10	113	911	9	Standard
Sb	123	0.059	ug/L	0.004	6	100	677	6	Standard
> Tb	159		ug/L			566239	674642	4	Standard
Pb	208	0.015	ug/L	0.001	4	110	836	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0421-08
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 02:17:54

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	46704	1	Standard
	Cl	**37**		ug/L			3821796	4175807	1	Standard
⌈>	**Sc**	**45**		ug/L			525342	643400	0	Standard
|	**Cr**	**52**	**0.264**	ug/L	0.023	8	20481	30797	1	Standard
⌊	**Cr**	**53**	**0.984**	ug/L	0.029	2	140	2595	3	Standard
⌈>	**Ge**	**72**		ug/L			27147	29932	15	KED
|	**Cu**	**63**	**0.593**	ug/L	0.052	8	45	1531	7	KED
|	**Cu**	**65**	**0.577**	ug/L	0.051	8	20	735	9	KED
|	**Zn**	**66**	**1.231**	ug/L	0.053	4	24	415	11	KED
|	**Zn**	**67**	**1.569**	ug/L	0.211	13	7	90	6	KED
|	**As**	**75**	**0.751**	ug/L	0.067	8	5	135	22	KED
⌊	**Se**	**78**	**-0.007**	ug/L	0.049	654	14	15	10	KED
	Y	**89**		ug/L			352299	388736	1	Standard
	Kr	**83**		ug/L			41	55	22	Standard
⌈>	**In-1**	**115**		ug/L			11285	12366	1	KED
|	**Cd**	**111**	**0.009**	ug/L	0.002	21	2	5	10	KED
⌊	**Cd**	**114**	**-0.005**	ug/L	0.006	120	8	6	61	KED
⌈>	**In**	**115**		ug/L			574911	634666	0	Standard
|	**Ag**	**107**	**-0.000**	ug/L	0.001	1776	49	53	21	Standard
|	**Sb**	**121**	**0.052**	ug/L	0.002	4	113	723	4	Standard
⌊	**Sb**	**123**	**0.053**	ug/L	0.002	3	100	577	2	Standard
⌈>	**Tb**	**159**		ug/L			566239	633891	2	Standard
⌊	**Pb**	**208**	**0.039**	ug/L	0.002	3	110	1882	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0421-10
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 02:21:32

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	47008	2	Standard
	Cl	**37**		ug/L			3821796	4281632	1	Standard
⎡>	**Sc**	**45**		ug/L			525342	656205	1	Standard
⎢	**Cr**	**52**	**0.213**	ug/L	0.008	3	20481	30277	1	Standard
⎣	**Cr**	**53**	**0.941**	ug/L	0.022	2	140	2538	1	Standard
⎡>	**Ge**	**72**		ug/L			27147	30725	17	KED
⎢	**Cu**	**63**	**0.699**	ug/L	0.057	8	45	1845	9	KED
⎢	**Cu**	**65**	**0.668**	ug/L	0.074	11	20	866	6	KED
⎢	**Zn**	**66**	**1.213**	ug/L	0.021	1	24	423	19	KED
⎢	**Zn**	**67**	**1.451**	ug/L	0.227	15	7	86	19	KED
⎢	**As**	**75**	**0.651**	ug/L	0.037	5	5	121	22	KED
⎣	**Se**	**78**	**0.029**	ug/L	0.211	719	14	17	37	KED
	Y	**89**		ug/L			352299	395658	1	Standard
	Kr	**83**		ug/L			41	56	8	Standard
⎡>	**In-1**	**115**		ug/L			11285	11905	3	KED
⎢	**Cd**	**111**	**0.010**	ug/L	0.006	63	2	5	26	KED
⎣	**Cd**	**114**	**-0.001**	ug/L	0.002	147	8	8	14	KED
⎡>	**In**	**115**		ug/L			574911	642134	3	Standard
⎢	**Ag**	**107**	**0.001**	ug/L	0.000	28	49	64	7	Standard
⎢	**Sb**	**121**	**0.052**	ug/L	0.005	9	113	732	4	Standard
⎣	**Sb**	**123**	**0.046**	ug/L	0.005	10	100	526	7	Standard
⎡>	**Tb**	**159**		ug/L			566239	646923	3	Standard
⎣	**Pb**	**208**	**0.037**	ug/L	0.002	4	110	1817	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0421-12
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 02:25:11

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			28402	45446	0	Standard
Cl	37		ug/L			3821796	4298473	1	Standard
> Sc	45		ug/L			525342	674169	4	Standard
Cr	52	0.195	ug/L	0.052	26	20481	30683	0	Standard
Cr	53	0.966	ug/L	0.006	0	140	2672	4	Standard
> Ge	72		ug/L			27147	31715	14	KED
Cu	63	0.508	ug/L	0.066	12	45	1394	2	KED
Cu	65	0.530	ug/L	0.033	6	20	719	9	KED
Zn	66	1.164	ug/L	0.077	6	24	419	14	KED
Zn	67	2.129	ug/L	0.077	3	7	127	11	KED
As	75	0.429	ug/L	0.051	11	5	83	11	KED
Se	78	-0.097	ug/L	0.184	188	14	15	27	KED
Y	89		ug/L			352299	408403	3	Standard
Kr	83		ug/L			41	60	31	Standard
> In-1	115		ug/L			11285	12682	1	KED
Cd	111	0.009	ug/L	0.009	99	2	5	44	KED
Cd	114	-0.009	ug/L	0.005	51	8	4	68	KED
> In	115		ug/L			574911	665996	2	Standard
Ag	107	-0.000	ug/L	0.001	927	49	55	31	Standard
Sb	121	0.046	ug/L	0.001	2	113	691	1	Standard
Sb	123	0.047	ug/L	0.002	5	100	552	3	Standard
> Tb	159		ug/L			566239	662966	6	Standard
Pb	208	0.025	ug/L	0.002	8	110	1293	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0421-14
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 02:29:14

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	50882	2	Standard
	Cl	**37**		ug/L			3821796	4473298	3	Standard
⌈>	**Sc**	**45**		ug/L			525342	650429	1	Standard
|	**Cr**	**52**	**0.214**	ug/L	0.009	4	20481	30037	2	Standard
⌊	**Cr**	**53**	**0.820**	ug/L	0.025	3	140	2215	3	Standard
⌈>	**Ge**	**72**		ug/L			27147	28859	19	KED
|	**Cu**	**63**	**1.558**	ug/L	0.152	9	45	3791	9	KED
|	**Cu**	**65**	**1.594**	ug/L	0.151	9	20	1913	10	KED
|	**Zn**	**66**	**3.783**	ug/L	0.205	5	24	1177	15	KED
|	**Zn**	**67**	**4.278**	ug/L	0.296	6	7	224	12	KED
|	**As**	**75**	**0.310**	ug/L	0.016	5	5	56	14	KED
⌊	**Se**	**78**	**0.053**	ug/L	0.168	320	14	16	37	KED
	Y	**89**		ug/L			352299	407752	0	Standard
	Kr	**83**		ug/L			41	54	38	Standard
⌈>	**In-1**	**115**		ug/L			11285	12004	1	KED
|	**Cd**	**111**	**0.024**	ug/L	0.008	34	2	8	22	KED
⌊	**Cd**	**114**	**0.007**	ug/L	0.005	73	8	13	23	KED
⌈>	**In**	**115**		ug/L			574911	663999	1	Standard
|	**Ag**	**107**	**-0.000**	ug/L	0.001	747	49	55	26	Standard
|	**Sb**	**121**	**0.086**	ug/L	0.002	2	113	1166	0	Standard
⌊	**Sb**	**123**	**0.086**	ug/L	0.004	4	100	906	3	Standard
⌈>	**Tb**	**159**		ug/L			566239	666758	3	Standard
⌊	**Pb**	**208**	**0.023**	ug/L	0.002	8	110	1198	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0421-16
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 02:34:16

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	46453	2	Standard
	Cl	**37**		ug/L			3821796	4519951	2	Standard
>	**Sc**	**45**		ug/L			525342	697147	3	Standard
	Cr	**52**	**0.135**	ug/L	0.040	29	20481	30332	0	Standard
	Cr	**53**	**0.895**	ug/L	0.032	3	140	2572	1	Standard
>	**Ge**	**72**		ug/L			27147	30139	19	KED
	Cu	**63**	**0.539**	ug/L	0.076	14	45	1395	6	KED
	Cu	**65**	**0.535**	ug/L	0.049	9	20	685	10	KED
	Zn	**66**	**1.228**	ug/L	0.116	9	24	415	11	KED
	Zn	**67**	**1.783**	ug/L	0.383	21	7	100	6	KED
	As	**75**	**0.434**	ug/L	0.055	12	5	82	30	KED
	Se	**78**	**-0.001**	ug/L	0.116	7930	14	16	32	KED
	Y	**89**		ug/L			352299	417610	2	Standard
	Kr	**83**		ug/L			41	57	13	Standard
>	**In-1**	**115**		ug/L			11285	11817	1	KED
	Cd	**111**	**0.005**	ug/L	0.004	93	2	4	26	KED
	Cd	**114**	**-0.007**	ug/L	0.005	81	8	5	62	KED
>	**In**	**115**		ug/L			574911	676673	0	Standard
	Ag	**107**	**-0.000**	ug/L	0.001	144	49	50	21	Standard
	Sb	**121**	**0.046**	ug/L	0.003	6	113	701	5	Standard
	Sb	**123**	**0.042**	ug/L	0.005	11	100	513	8	Standard
>	**Tb**	**159**		ug/L			566239	674833	3	Standard
	Pb	**208**	**0.029**	ug/L	0.003	8	110	1521	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLF
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 02:37:50
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	35146	2	Standard
	Cl	**37**		ug/L			3821796	4076606	1	Standard
⎡>	**Sc**	**45**		ug/L			525342	585134	0	Standard
⎢	**Cr**	**52**	**0.078**	ug/L	0.021	26	20481	24337	1	Standard
⎣	**Cr**	**53**	**0.082**	ug/L	0.008	9	140	340	5	Standard
⎡>	**Ge**	**72**		ug/L			27147	30280	20	KED
⎢	**Cu**	**63**	**0.002**	ug/L	0.003	187	45	53	7	KED
⎢	**Cu**	**65**	**-0.003**	ug/L	0.002	92	20	19	10	KED
⎢	**Zn**	**66**	**-0.006**	ug/L	0.020	301	24	24	12	KED
⎢	**Zn**	**67**	**-0.056**	ug/L	0.066	117	7	5	57	KED
⎢	**As**	**75**	**0.009**	ug/L	0.013	149	5	7	39	KED
⎣	**Se**	**78**	**0.013**	ug/L	0.068	542	14	16	27	KED
	Y	**89**		ug/L			352299	389160	2	Standard
	Kr	**83**		ug/L			41	43	2	Standard
⎡>	**In-1**	**115**		ug/L			11285	11745	2	KED
⎢	**Cd**	**111**	**0.010**	ug/L	0.004	39	2	5	20	KED
⎣	**Cd**	**114**	**-0.003**	ug/L	0.005	206	8	7	43	KED
⎡>	**In**	**115**		ug/L			574911	647526	0	Standard
⎢	**Ag**	**107**	**-0.001**	ug/L	0.001	69	49	39	29	Standard
⎢	**Sb**	**121**	**-0.008**	ug/L	0.000	4	113	34	13	Standard
⎣	**Sb**	**123**	**-0.010**	ug/L	0.001	11	100	28	33	Standard
⎡>	**Tb**	**159**		ug/L			566239	628657	4	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.001	98	110	156	18	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVF
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 02:41:29
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	33171	3	Standard
	Cl	**37**		ug/L			3821796	4461308	1	Standard
⌈>	**Sc**	**45**		ug/L			525342	619681	2	Standard
|	**Cr**	**52**	**48.637**	ug/L	0.985	2	20481	1037713	1	Standard
⌊	**Cr**	**53**	**49.049**	ug/L	0.634	1	140	116492	2	Standard
⌈>	**Ge**	**72**		ug/L			27147	30932	20	KED
|	**Cu**	**63**	**54.717**	ug/L	5.348	9	45	140942	10	KED
|	**Cu**	**65**	**55.296**	ug/L	4.194	7	20	70511	12	KED
|	**Zn**	**66**	**51.968**	ug/L	2.340	4	24	16991	16	KED
|	**Zn**	**67**	**52.775**	ug/L	2.776	5	7	2870	14	KED
|	**As**	**75**	**49.290**	ug/L	1.340	2	5	8690	17	KED
⌊	**Se**	**78**	**44.789**	ug/L	4.936	11	14	862	28	KED
	Y	**89**		ug/L			352299	409414	0	Standard
	Kr	**83**		ug/L			41	45	25	Standard
⌈>	**In-1**	**115**		ug/L			11285	12667	1	KED
|	**Cd**	**111**	**49.162**	ug/L	0.699	1	2	12888	0	KED
⌊	**Cd**	**114**	**49.819**	ug/L	1.683	3	8	31797	2	KED
⌈>	**In**	**115**		ug/L			574911	664180	0	Standard
|	**Ag**	**107**	**49.032**	ug/L	0.892	1	49	732874	1	Standard
|	**Sb**	**121**	**49.245**	ug/L	0.897	1	113	593643	1	Standard
⌊	**Sb**	**123**	**49.327**	ug/L	1.579	3	100	454353	2	Standard
⌈>	**Tb**	**159**		ug/L			566239	666410	4	Standard
⌊	**Pb**	**208**	**53.322**	ug/L	1.295	2	110	2525689	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBF
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 02:47:52
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	32301	1	Standard
	Cl	**37**		ug/L			3821796	4376170	1	Standard
⎡>	**Sc**	**45**		ug/L			525342	595948	1	Standard
⎢	**Cr**	**52**	**0.025**	ug/L	0.043	171	20481	23723	1	Standard
⎣	**Cr**	**53**	**0.047**	ug/L	0.004	8	140	266	2	Standard
⎡>	**Ge**	**72**		ug/L			27147	28888	17	KED
⎢	**Cu**	**63**	**-0.001**	ug/L	0.004	563	45	47	36	KED
⎢	**Cu**	**65**	**0.001**	ug/L	0.007	617	20	22	24	KED
⎢	**Zn**	**66**	**-0.015**	ug/L	0.029	197	24	20	39	KED
⎢	**Zn**	**67**	**-0.047**	ug/L	0.130	276	7	5	114	KED
⎢	**As**	**75**	**-0.001**	ug/L	0.007	745	5	5	22	KED
⎣	**Se**	**78**	**-0.050**	ug/L	0.277	554	14	14	43	KED
	Y	**89**		ug/L			352299	390474	1	Standard
	Kr	**83**		ug/L			41	43	33	Standard
⎡>	**In-1**	**115**		ug/L			11285	11562	5	KED
⎢	**Cd**	**111**	**0.012**	ug/L	0.009	74	2	5	33	KED
⎣	**Cd**	**114**	**-0.007**	ug/L	0.005	72	8	4	58	KED
⎡>	**In**	**115**		ug/L			574911	664951	1	Standard
⎢	**Ag**	**107**	**-0.001**	ug/L	0.000	8	49	48	2	Standard
⎢	**Sb**	**121**	**0.023**	ug/L	0.003	12	113	412	7	Standard
⎣	**Sb**	**123**	**0.023**	ug/L	0.002	8	100	331	4	Standard
⎡>	**Tb**	**159**		ug/L			566239	629611	3	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.000	20	110	165	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 02:51:31
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	36451	2	Standard
	Cl	**37**		ug/L			3821796	4381097	2	Standard
⎡>	**Sc**	**45**		ug/L			525342	662720	3	Standard
⎢	**Cr**	**52**	**0.101**	ug/L	0.033	32	20481	28077	3	Standard
⎣	**Cr**	**53**	**0.057**	ug/L	0.011	18	140	321	5	Standard
⎡>	**Ge**	**72**		ug/L			27147	31818	14	KED
⎢	**Cu**	**63**	**0.013**	ug/L	0.004	29	45	88	22	KED
⎢	**Cu**	**65**	**0.018**	ug/L	0.014	77	20	45	30	KED
⎢	**Zn**	**66**	**0.079**	ug/L	0.037	47	24	55	37	KED
⎢	**Zn**	**67**	**0.033**	ug/L	0.045	137	7	10	26	KED
⎢	**As**	**75**	**-0.002**	ug/L	0.009	577	5	6	35	KED
⎣	**Se**	**78**	**-0.096**	ug/L	0.167	174	14	15	36	KED
	Y	**89**		ug/L			352299	440353	4	Standard
	Kr	**83**		ug/L			41	57	16	Standard
⎡>	**In-1**	**115**		ug/L			11285	13601	1	KED
⎢	**Cd**	**111**	**-0.001**	ug/L	0.005	526	2	3	45	KED
⎣	**Cd**	**114**	**-0.008**	ug/L	0.006	72	8	4	83	KED
⎡>	**In**	**115**		ug/L			574911	704423	2	Standard
⎢	**Ag**	**107**	**-0.000**	ug/L	0.000	134	49	55	11	Standard
⎢	**Sb**	**121**	**0.008**	ug/L	0.002	19	113	245	5	Standard
⎣	**Sb**	**123**	**0.006**	ug/L	0.001	21	100	182	9	Standard
⎡>	**Tb**	**159**		ug/L			566239	686602	5	Standard
⎣	**Pb**	**208**	**0.004**	ug/L	0.000	11	110	325	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 02:55:10
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	37687	1	Standard
	Cl	**37**		ug/L			3821796	4385760	1	Standard
⎡>	**Sc**	**45**		ug/L			525342	695208	0	Standard
⎢	**Cr**	**52**	**0.088**	ug/L	0.018	21	20481	29154	2	Standard
⎣	**Cr**	**53**	**0.038**	ug/L	0.006	14	140	287	4	Standard
⎡>	**Ge**	**72**		ug/L			27147	32904	15	KED
⎢	**Cu**	**63**	**0.018**	ug/L	0.003	18	45	104	6	KED
⎢	**Cu**	**65**	**0.021**	ug/L	0.006	28	20	53	19	KED
⎢	**Zn**	**66**	**0.059**	ug/L	0.058	98	24	48	35	KED
⎢	**Zn**	**67**	**-0.040**	ug/L	0.021	52	7	6	31	KED
⎢	**As**	**75**	**0.007**	ug/L	0.015	212	5	7	19	KED
⎣	**Se**	**78**	**-0.124**	ug/L	0.051	40	14	15	13	KED
	Y	**89**		ug/L			352299	450119	2	Standard
	Kr	**83**		ug/L			41	46	20	Standard
⎡>	**In-1**	**115**		ug/L			11285	14020	3	KED
⎢	**Cd**	**111**	**-0.002**	ug/L	0.007	268	2	2	66	KED
⎣	**Cd**	**114**	**-0.001**	ug/L	0.006	390	8	9	41	KED
⎡>	**In**	**115**		ug/L			574911	715697	2	Standard
⎢	**Ag**	**107**	**-0.001**	ug/L	0.000	58	49	50	15	Standard
⎢	**Sb**	**121**	**-0.001**	ug/L	0.001	169	113	132	9	Standard
⎣	**Sb**	**123**	**-0.001**	ug/L	0.001	138	100	118	10	Standard
⎡>	**Tb**	**159**		ug/L			566239	710405	1	Standard
⎣	**Pb**	**208**	**0.004**	ug/L	0.000	6	110	354	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 02:58:50
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	36008	4	Standard
	Cl	**37**		ug/L			3821796	4069882	2	Standard
⎡>	**Sc**	**45**		ug/L			525342	624847	6	Standard
⎢	**Cr**	**52**	**0.117**	ug/L	0.057	48	20481	26770	1	Standard
⎣	**Cr**	**53**	**0.046**	ug/L	0.008	16	140	276	7	Standard
⎡>	**Ge**	**72**		ug/L			27147	30987	14	KED
⎢	**Cu**	**63**	**0.023**	ug/L	0.012	53	45	109	25	KED
⎢	**Cu**	**65**	**0.020**	ug/L	0.002	10	20	48	17	KED
⎢	**Zn**	**66**	**0.073**	ug/L	0.035	47	24	50	13	KED
⎢	**Zn**	**67**	**-0.029**	ug/L	0.047	163	7	6	31	KED
⎢	**As**	**75**	**-0.008**	ug/L	0.006	76	5	4	10	KED
⎣	**Se**	**78**	**-0.169**	ug/L	0.089	52	14	13	27	KED
	Y	**89**		ug/L			352299	412121	4	Standard
	Kr	**83**		ug/L			41	50	11	Standard
⎡>	**In-1**	**115**		ug/L			11285	13723	1	KED
⎢	**Cd**	**111**	**0.008**	ug/L	0.006	77	2	5	28	KED
⎣	**Cd**	**114**	**-0.007**	ug/L	0.006	75	8	5	69	KED
⎡>	**In**	**115**		ug/L			574911	666031	7	Standard
⎢	**Ag**	**107**	**-0.001**	ug/L	0.001	52	49	36	28	Standard
⎢	**Sb**	**121**	**-0.003**	ug/L	0.001	32	113	90	13	Standard
⎣	**Sb**	**123**	**-0.005**	ug/L	0.001	12	100	70	10	Standard
⎡>	**Tb**	**159**		ug/L			566239	654635	7	Standard
⎣	**Pb**	**208**	**0.004**	ug/L	0.001	21	110	319	14	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 03:02:28
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	32928	1	Standard
	Cl	**37**		ug/L			3821796	3894001	2	Standard
⎡>	**Sc**	**45**		ug/L			525342	526325	3	Standard
⎢	**Cr**	**52**	**0.048**	ug/L	0.009	18	20481	21368	2	Standard
⎣	**Cr**	**53**	**0.035**	ug/L	0.001	2	140	211	2	Standard
⎡>	**Ge**	**72**		ug/L			27147	28697	12	KED
⎢	**Cu**	**63**	**-0.003**	ug/L	0.003	87	45	40	9	KED
⎢	**Cu**	**65**	**0.001**	ug/L	0.009	659	20	22	34	KED
⎢	**Zn**	**66**	**-0.008**	ug/L	0.016	193	24	22	22	KED
⎢	**Zn**	**67**	**-0.059**	ug/L	0.055	93	7	5	57	KED
⎢	**As**	**75**	**0.005**	ug/L	0.005	92	5	6	24	KED
⎣	**Se**	**78**	**-0.006**	ug/L	0.087	1477	14	15	12	KED
	Y	**89**		ug/L			352299	356696	3	Standard
	Kr	**83**		ug/L			41	42	24	Standard
⎡>	**In-1**	**115**		ug/L			11285	10611	2	KED
⎢	**Cd**	**111**	**0.020**	ug/L	0.015	75	2	6	43	KED
⎣	**Cd**	**114**	**-0.005**	ug/L	0.004	73	8	5	31	KED
⎡>	**In**	**115**		ug/L			574911	591678	2	Standard
⎢	**Ag**	**107**	**-0.001**	ug/L	0.001	151	49	40	39	Standard
⎢	**Sb**	**121**	**-0.006**	ug/L	0.001	16	113	47	21	Standard
⎣	**Sb**	**123**	**-0.007**	ug/L	0.000	5	100	46	4	Standard
⎡>	**Tb**	**159**		ug/L			566239	586208	5	Standard
⎣	**Pb**	**208**	**-0.002**	ug/L	0.000	12	110	48	16	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 03:06:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	31531	1	Standard
	Cl	**37**		ug/L			3821796	3844042	1	Standard
⎡>	**Sc**	**45**		ug/L			525342	496221	5	Standard
⎢	**Cr**	**52**	**0.043**	ug/L	0.012	28	20481	20060	4	Standard
⎣	**Cr**	**53**	**0.036**	ug/L	0.006	16	140	200	3	Standard
⎡>	**Ge**	**72**		ug/L			27147	28024	17	KED
⎢	**Cu**	**63**	**-0.001**	ug/L	0.003	329	45	45	17	KED
⎢	**Cu**	**65**	**0.006**	ug/L	0.006	96	20	28	37	KED
⎢	**Zn**	**66**	**-0.007**	ug/L	0.017	259	24	23	39	KED
⎢	**Zn**	**67**	**-0.050**	ug/L	0.064	126	7	5	43	KED
⎢	**As**	**75**	**0.020**	ug/L	0.014	69	5	8	11	KED
⎣	**Se**	**78**	**0.035**	ug/L	0.082	232	14	15	13	KED
	Y	**89**		ug/L			352299	336775	3	Standard
	Kr	**83**		ug/L			41	55	1	Standard
⎡>	**In-1**	**115**		ug/L			11285	10525	6	KED
⎢	**Cd**	**111**	**0.002**	ug/L	0.009	452	2	3	69	KED
⎣	**Cd**	**114**	**-0.006**	ug/L	0.003	45	8	4	23	KED
⎡>	**In**	**115**		ug/L			574911	566432	3	Standard
⎢	**Ag**	**107**	**-0.001**	ug/L	0.000	35	49	37	7	Standard
⎢	**Sb**	**121**	**-0.007**	ug/L	0.000	6	113	43	7	Standard
⎣	**Sb**	**123**	**-0.008**	ug/L	0.001	9	100	35	14	Standard
⎡>	**Tb**	**159**		ug/L			566239	556410	3	Standard
⎣	**Pb**	**208**	**-0.001**	ug/L	0.000	9	110	52	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, March 08, 2023 03:09:47
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\030723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28402	32325	3	Standard
	Cl	**37**		ug/L			3821796	3821834	0	Standard
⎡>	**Sc**	**45**		ug/L			525342	515318	3	Standard
⎢	**Cr**	**52**	**0.050**	ug/L	0.059	118	20481	20939	2	Standard
⎣	**Cr**	**53**	**0.040**	ug/L	0.012	29	140	217	14	Standard
⎡>	**Ge**	**72**		ug/L			27147	27610	13	KED
⎢	**Cu**	**63**	**0.001**	ug/L	0.008	617	45	48	31	KED
⎢	**Cu**	**65**	**0.006**	ug/L	0.014	239	20	26	50	KED
⎢	**Zn**	**66**	**-0.010**	ug/L	0.025	243	24	20	27	KED
⎢	**Zn**	**67**	**-0.112**	ug/L	0.051	46	7	2	114	KED
⎢	**As**	**75**	**0.002**	ug/L	0.010	425	5	5	12	KED
⎣	**Se**	**78**	**0.051**	ug/L	0.078	152	14	15	12	KED
	Y	**89**		ug/L			352299	342634	0	Standard
	Kr	**83**		ug/L			41	48	11	Standard
⎡>	**In-1**	**115**		ug/L			11285	11072	3	KED
⎢	**Cd**	**111**	**0.016**	ug/L	0.018	114	2	6	62	KED
⎣	**Cd**	**114**	**-0.005**	ug/L	0.007	130	8	5	69	KED
⎡>	**In**	**115**		ug/L			574911	577319	3	Standard
⎢	**Ag**	**107**	**-0.001**	ug/L	0.001	104	49	42	16	Standard
⎢	**Sb**	**121**	**-0.006**	ug/L	0.001	9	113	46	14	Standard
⎣	**Sb**	**123**	**-0.009**	ug/L	0.001	8	100	32	16	Standard
⎡>	**Tb**	**159**		ug/L			566239	563461	3	Standard
⎣	**Pb**	**208**	**-0.001**	ug/L	0.000	22	110	57	16	Standard

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GC00005
Control Limt: +/- 10.00%
Sequence: SLC0028

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0028-ICV1	Chromium-52	50.000	48.6	97.3	ug/L	EPA 6020B
	Chromium-53	50.000	49.0	98.0	ug/L	EPA 6020B
	Lead-208	50.000	50.8	102	ug/L	EPA 6020B
	Silver-107	50.000	51.2	102	ug/L	EPA 6020B
SLC0028-CCV1	Chromium-52	50.000	50.6	101	ug/L	EPA 6020B
	Chromium-53	50.000	51.0	102	ug/L	EPA 6020B
	Lead-208	50.000	50.7	101	ug/L	EPA 6020B
	Silver-107	50.000	49.5	98.9	ug/L	EPA 6020B
SLC0028-CCV2	Chromium-52	50.000	49.5	99.0	ug/L	EPA 6020B
	Chromium-53	50.000	49.5	99.0	ug/L	EPA 6020B
	Lead-208	50.000	51.5	103	ug/L	EPA 6020B
	Silver-107	50.000	49.0	98.0	ug/L	EPA 6020B
SLC0028-CCV3	Chromium-52	50.000	49.1	98.2	ug/L	EPA 6020B
	Chromium-53	50.000	51.1	102	ug/L	EPA 6020B
	Lead-208	50.000	46.9	93.9	ug/L	EPA 6020B
	Silver-107	50.000	54.3	109	ug/L	EPA 6020B
SLC0028-CCV4	Chromium-52	50.000	49.6	99.1	ug/L	EPA 6020B
	Chromium-53	50.000	50.0	100	ug/L	EPA 6020B
	Lead-208	50.000	47.5	95.0	ug/L	EPA 6020B
	Silver-107	50.000	51.8	104	ug/L	EPA 6020B
SLC0028-CCV5	Chromium-52	50.000	49.6	99.2	ug/L	EPA 6020B
	Chromium-53	50.000	50.0	99.9	ug/L	EPA 6020B
	Lead-208	50.000	49.4	98.7	ug/L	EPA 6020B
	Silver-107	50.000	53.3	107	ug/L	EPA 6020B
SLC0028-CCV6	Chromium-52	50.000	46.8	93.6	ug/L	EPA 6020B
	Chromium-53	50.000	47.3	94.6	ug/L	EPA 6020B
	Lead-208	50.000	48.6	97.2	ug/L	EPA 6020B
	Silver-107	50.000	49.1	98.3	ug/L	EPA 6020B
SLC0028-CCV7	Chromium-52	50.000	48.4	96.9	ug/L	EPA 6020B
	Chromium-53	50.000	48.1	96.3	ug/L	EPA 6020B
	Lead-208	50.000	48.5	96.9	ug/L	EPA 6020B
	Silver-107	50.000	50.3	101	ug/L	EPA 6020B

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GC00021
Control Limt: +/- 10.00%
Sequence: SLC0078

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0078-ICV1	Chromium-52	50.000	50.9	102	ug/L	EPA 6020B
	Chromium-53	50.000	49.1	98.2	ug/L	EPA 6020B
	Lead-208	50.000	51.1	102	ug/L	EPA 6020B
	Silver-107	50.000	51.5	103	ug/L	EPA 6020B
SLC0078-CCV1	Chromium-52	50.000	50.3	101	ug/L	EPA 6020B
	Chromium-53	50.000	48.4	96.9	ug/L	EPA 6020B
	Lead-208	50.000	49.7	99.4	ug/L	EPA 6020B
	Silver-107	50.000	50.2	100	ug/L	EPA 6020B
SLC0078-CCV2	Chromium-52	50.000	50.7	101	ug/L	EPA 6020B
	Chromium-53	50.000	49.2	98.4	ug/L	EPA 6020B
	Lead-208	50.000	48.9	97.9	ug/L	EPA 6020B
	Silver-107	50.000	48.8	97.7	ug/L	EPA 6020B
SLC0078-CCV3	Chromium-52	50.000	49.1	98.2	ug/L	EPA 6020B
	Chromium-53	50.000	48.7	97.4	ug/L	EPA 6020B
	Lead-208	50.000	48.9	97.8	ug/L	EPA 6020B
	Silver-107	50.000	47.8	95.7	ug/L	EPA 6020B
SLC0078-CCV4	Chromium-52	50.000	49.7	99.4	ug/L	EPA 6020B
	Chromium-53	50.000	49.4	98.8	ug/L	EPA 6020B
	Lead-208	50.000	50.3	101	ug/L	EPA 6020B
	Silver-107	50.000	48.5	96.9	ug/L	EPA 6020B
SLC0078-CCV5	Chromium-52	50.000	49.4	98.8	ug/L	EPA 6020B
	Chromium-53	50.000	49.6	99.1	ug/L	EPA 6020B
	Lead-208	50.000	48.6	97.2	ug/L	EPA 6020B
	Silver-107	50.000	49.0	98.1	ug/L	EPA 6020B
SLC0078-CCV6	Chromium-52	50.000	50.2	100	ug/L	EPA 6020B
	Chromium-53	50.000	48.8	97.6	ug/L	EPA 6020B
	Lead-208	50.000	47.5	94.9	ug/L	EPA 6020B
	Silver-107	50.000	48.4	96.8	ug/L	EPA 6020B
SLC0078-CCV7	Chromium-52	50.000	49.7	99.5	ug/L	EPA 6020B
	Chromium-53	50.000	48.8	97.7	ug/L	EPA 6020B
	Lead-208	50.000	48.9	97.8	ug/L	EPA 6020B
	Silver-107	50.000	49.7	99.4	ug/L	EPA 6020B
SLC0078-CCV8	Chromium-52	50.000	51.5	103	ug/L	EPA 6020B
	Chromium-53	50.000	50.5	101	ug/L	EPA 6020B

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Control Limt: +/- 10.00%

SDG: 23A0171
Project: AOC5 MR Phase 1
Calibration: GC00021
Sequence: SLC0078

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0078-CCV8	Lead-208	50.000	49.9	99.8	ug/L	EPA 6020B
	Silver-107	50.000	50.4	101	ug/L	EPA 6020B
SLC0078-CCV9	Chromium-52	50.000	50.0	99.9	ug/L	EPA 6020B
	Chromium-53	50.000	49.2	98.4	ug/L	EPA 6020B
	Lead-208	50.000	48.7	97.3	ug/L	EPA 6020B
	Silver-107	50.000	49.5	99.1	ug/L	EPA 6020B
SLC0078-CCVA	Chromium-52	50.000	50.3	101	ug/L	EPA 6020B
	Chromium-53	50.000	49.6	99.2	ug/L	EPA 6020B
	Lead-208	50.000	48.8	97.5	ug/L	EPA 6020B
	Silver-107	50.000	48.7	97.4	ug/L	EPA 6020B
SLC0078-CCVB	Chromium-52	50.000	50.1	100	ug/L	EPA 6020B
	Chromium-53	50.000	50.0	100	ug/L	EPA 6020B
	Lead-208	50.000	49.5	99.1	ug/L	EPA 6020B
	Silver-107	50.000	49.9	99.7	ug/L	EPA 6020B
SLC0078-CCVC	Chromium-52	50.000	49.9	99.7	ug/L	EPA 6020B
	Chromium-53	50.000	49.5	98.9	ug/L	EPA 6020B
	Lead-208	50.000	48.8	97.7	ug/L	EPA 6020B
	Silver-107	50.000	49.1	98.3	ug/L	EPA 6020B
SLC0078-CCVD	Chromium-52	50.000	51.6	103	ug/L	EPA 6020B
	Chromium-53	50.000	50.8	102	ug/L	EPA 6020B
	Lead-208	50.000	48.7	97.4	ug/L	EPA 6020B
	Silver-107	50.000	48.6	97.2	ug/L	EPA 6020B
SLC0078-CCVE	Chromium-52	50.000	50.0	100	ug/L	EPA 6020B
	Chromium-53	50.000	49.3	98.5	ug/L	EPA 6020B
	Lead-208	50.000	49.3	98.5	ug/L	EPA 6020B
	Silver-107	50.000	49.5	98.9	ug/L	EPA 6020B
SLC0078-CCVF	Chromium-52	50.000	50.2	100	ug/L	EPA 6020B
	Chromium-53	50.000	49.8	99.6	ug/L	EPA 6020B
	Lead-208	50.000	49.9	99.8	ug/L	EPA 6020B
	Silver-107	50.000	50.6	101	ug/L	EPA 6020B
SLC0078-CCVG	Chromium-52	50.000	51.8	104	ug/L	EPA 6020B
	Chromium-53	50.000	49.8	99.5	ug/L	EPA 6020B
	Lead-208	50.000	50.4	101	ug/L	EPA 6020B
	Silver-107	50.000	50.1	100	ug/L	EPA 6020B

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GC00021
Control Limt: +/- 10.00%
Sequence: SLC0078

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0078-CCVH	Chromium-52	50.000	51.4	103	ug/L	EPA 6020B
	Chromium-53	50.000	50.6	101	ug/L	EPA 6020B
	Lead-208	50.000	50.2	100	ug/L	EPA 6020B
	Silver-107	50.000	49.4	98.7	ug/L	EPA 6020B
SLC0078-CCVI	Chromium-52	50.000	51.2	102	ug/L	EPA 6020B
	Chromium-53	50.000	51.0	102	ug/L	EPA 6020B
	Lead-208	50.000	51.0	102	ug/L	EPA 6020B
	Silver-107	50.000	49.1	98.2	ug/L	EPA 6020B
SLC0078-CCVJ	Chromium-52	50.000	51.3	103	ug/L	EPA 6020B
	Chromium-53	50.000	51.0	102	ug/L	EPA 6020B
	Lead-208	50.000	49.9	99.8	ug/L	EPA 6020B
	Silver-107	50.000	49.9	99.7	ug/L	EPA 6020B
SLC0078-CCVK	Chromium-52	50.000	51.0	102	ug/L	EPA 6020B
	Chromium-53	50.000	50.0	100	ug/L	EPA 6020B
	Lead-208	50.000	49.2	98.4	ug/L	EPA 6020B
	Silver-107	50.000	49.6	99.3	ug/L	EPA 6020B
SLC0078-CCVL	Chromium-52	50.000	50.9	102	ug/L	EPA 6020B
	Chromium-53	50.000	50.0	100	ug/L	EPA 6020B
	Lead-208	50.000	49.5	99.1	ug/L	EPA 6020B
	Silver-107	50.000	48.6	97.2	ug/L	EPA 6020B

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GC00026
Control Limt: +/- 10.00%
Sequence: SLC0109

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0109-ICV1	Chromium-52	50.000	47.4	94.8	ug/L	EPA 6020B
	Chromium-53	50.000	47.9	95.8	ug/L	EPA 6020B
SLC0109-CCV1	Chromium-52	50.000	48.1	96.2	ug/L	EPA 6020B
	Chromium-53	50.000	49.5	99.0	ug/L	EPA 6020B
SLC0109-CCV2	Chromium-52	50.000	48.9	97.8	ug/L	EPA 6020B
	Chromium-53	50.000	50.3	101	ug/L	EPA 6020B
SLC0109-CCV3	Chromium-52	50.000	48.2	96.5	ug/L	EPA 6020B
	Chromium-53	50.000	49.4	98.8	ug/L	EPA 6020B
SLC0109-CCV4	Chromium-52	50.000	48.7	97.4	ug/L	EPA 6020B
	Chromium-53	50.000	50.1	100	ug/L	EPA 6020B
SLC0109-CCV5	Chromium-52	50.000	48.2	96.4	ug/L	EPA 6020B
	Chromium-53	50.000	49.7	99.3	ug/L	EPA 6020B
SLC0109-CCV6	Chromium-52	50.000	48.2	96.3	ug/L	EPA 6020B
	Chromium-53	50.000	49.5	99.0	ug/L	EPA 6020B
SLC0109-CCV7	Chromium-52	50.000	47.9	95.8	ug/L	EPA 6020B
	Chromium-53	50.000	49.0	97.9	ug/L	EPA 6020B
SLC0109-CCV8	Chromium-52	50.000	47.8	95.6	ug/L	EPA 6020B
	Chromium-53	50.000	49.3	98.5	ug/L	EPA 6020B
SLC0109-CCV9	Chromium-52	50.000	47.5	95.0	ug/L	EPA 6020B
	Chromium-53	50.000	48.9	97.9	ug/L	EPA 6020B
SLC0109-CCVA	Chromium-52	50.000	48.8	97.5	ug/L	EPA 6020B
	Chromium-53	50.000	49.2	98.4	ug/L	EPA 6020B
SLC0109-CCVB	Chromium-52	50.000	48.2	96.4	ug/L	EPA 6020B
	Chromium-53	50.000	49.1	98.3	ug/L	EPA 6020B
SLC0109-CCVC	Chromium-52	50.000	48.5	97.0	ug/L	EPA 6020B
	Chromium-53	50.000	49.1	98.3	ug/L	EPA 6020B
SLC0109-CCVD	Chromium-52	50.000	47.3	94.6	ug/L	EPA 6020B
	Chromium-53	50.000	48.2	96.4	ug/L	EPA 6020B
SLC0109-CCVE	Chromium-52	50.000	48.7	97.4	ug/L	EPA 6020B
	Chromium-53	50.000	50.2	100	ug/L	EPA 6020B
SLC0109-CCVF	Chromium-52	50.000	48.6	97.3	ug/L	EPA 6020B
	Chromium-53	50.000	49.0	98.1	ug/L	EPA 6020B

* Values outside of QC limits

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLC0028

SDG: 23A0171
Project: AOC5 MR Phase 1
Calibration: GC00005
Date Analyzed: 03/01/23 17:11

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0028-IBL1	Chromium-52	0.0160	0.26	0.500	ug/L	
SLC0028-IBL1	Chromium-53	-0.0150	0.239	0.500	ug/L	
SLC0028-IBL1	Lead-208	-0.00600	0.0513	0.100	ug/L	
SLC0028-IBL1	Silver-107	-0.00400	0.022	0.200	ug/L	
SLC0028-ICB1	Chromium-52	0.00600	0.26	0.500	ug/L	
SLC0028-ICB1	Chromium-53	-0.0100	0.239	0.500	ug/L	
SLC0028-ICB1	Lead-208	-0.00700	0.0513	0.100	ug/L	
SLC0028-ICB1	Silver-107	-0.00600	0.022	0.200	ug/L	
SLC0028-CCB1	Chromium-52	0.00400	0.26	0.500	ug/L	
SLC0028-CCB1	Chromium-53	-0.0120	0.239	0.500	ug/L	
SLC0028-CCB1	Lead-208	-0.00600	0.0513	0.100	ug/L	
SLC0028-CCB1	Silver-107	-0.00600	0.022	0.200	ug/L	
SLC0028-IBL2	Chromium-52	0.0280	0.26	0.500	ug/L	
SLC0028-IBL2	Chromium-53	0.0630	0.239	0.500	ug/L	
SLC0028-IBL2	Lead-208	0.0310	0.0513	0.100	ug/L	
SLC0028-IBL2	Silver-107	0.00400	0.022	0.200	ug/L	
SLC0028-IBL3	Chromium-52	0.0100	0.26	0.500	ug/L	
SLC0028-IBL3	Chromium-53	0.0520	0.239	0.500	ug/L	
SLC0028-IBL3	Lead-208	0.0290	0.0513	0.100	ug/L	
SLC0028-IBL3	Silver-107	-0.00300	0.022	0.200	ug/L	
SLC0028-CCB2	Chromium-52	-0.0300	0.26	0.500	ug/L	
SLC0028-CCB2	Chromium-53	0.0260	0.239	0.500	ug/L	
SLC0028-CCB2	Lead-208	-0.00700	0.0513	0.100	ug/L	
SLC0028-CCB2	Silver-107	-0.00600	0.022	0.200	ug/L	
SLC0028-IBL4	Chromium-52	0.243	0.26	0.500	ug/L	
SLC0028-IBL4	Chromium-53	5.16	0.239	0.500	ug/L	
SLC0028-IBL4	Lead-208	0.0100	0.0513	0.100	ug/L	
SLC0028-IBL4	Silver-107	-0.00900	0.022	0.200	ug/L	
SLC0028-IBL5	Chromium-52	0.251	0.26	0.500	ug/L	
SLC0028-IBL5	Chromium-53	2.24	0.239	0.500	ug/L	
SLC0028-IBL5	Lead-208	0.00	0.0513	0.100	ug/L	
SLC0028-IBL5	Silver-107	-0.0100	0.022	0.200	ug/L	
SLC0028-CCB3	Chromium-52	0.0150	0.26	0.500	ug/L	
SLC0028-CCB3	Chromium-53	1.57	0.239	0.500	ug/L	
SLC0028-CCB3	Lead-208	-0.00300	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLC0028

SDG: 23A0171
Project: AOC5 MR Phase 1
Calibration: GC00005
Date Analyzed: 03/01/23 20:04

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0028-CCB3	Silver-107	-0.00700	0.022	0.200	ug/L	
SLC0028-IBL6	Chromium-52	0.210	0.26	0.500	ug/L	
SLC0028-IBL6	Chromium-53	0.670	0.239	0.500	ug/L	
SLC0028-IBL6	Lead-208	-0.00600	0.0513	0.100	ug/L	
SLC0028-IBL6	Silver-107	-0.00800	0.022	0.200	ug/L	
SLC0028-CCB4	Chromium-52	0.0330	0.26	0.500	ug/L	
SLC0028-CCB4	Chromium-53	0.585	0.239	0.500	ug/L	
SLC0028-CCB4	Lead-208	-0.00600	0.0513	0.100	ug/L	
SLC0028-CCB4	Silver-107	-0.00500	0.022	0.200	ug/L	
SLC0028-CCB5	Chromium-52	-0.0240	0.26	0.500	ug/L	
SLC0028-CCB5	Chromium-53	0.305	0.239	0.500	ug/L	
SLC0028-CCB5	Lead-208	-0.00600	0.0513	0.100	ug/L	
SLC0028-CCB5	Silver-107	-0.00600	0.022	0.200	ug/L	
SLC0028-IBL7	Chromium-52	-0.0130	0.26	0.500	ug/L	
SLC0028-IBL7	Chromium-53	0.213	0.239	0.500	ug/L	
SLC0028-IBL7	Lead-208	-0.00600	0.0513	0.100	ug/L	
SLC0028-IBL7	Silver-107	-0.00800	0.022	0.200	ug/L	
SLC0028-CCB6	Chromium-52	-0.00700	0.26	0.500	ug/L	
SLC0028-CCB6	Chromium-53	0.210	0.239	0.500	ug/L	
SLC0028-CCB6	Lead-208	-0.00600	0.0513	0.100	ug/L	
SLC0028-CCB6	Silver-107	-0.00600	0.022	0.200	ug/L	
SLC0028-IBL8	Chromium-52	-0.0600	0.26	0.500	ug/L	
SLC0028-IBL8	Chromium-53	0.176	0.239	0.500	ug/L	
SLC0028-IBL8	Lead-208	-0.00600	0.0513	0.100	ug/L	
SLC0028-IBL8	Silver-107	-0.00800	0.022	0.200	ug/L	
SLC0028-CCB7	Chromium-52	-0.0490	0.26	0.500	ug/L	
SLC0028-CCB7	Chromium-53	0.193	0.239	0.500	ug/L	
SLC0028-CCB7	Lead-208	-0.00500	0.0513	0.100	ug/L	
SLC0028-CCB7	Silver-107	-0.00600	0.022	0.200	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLC0078

SDG: 23A0171
Project: AOC5 MR Phase 1
Calibration: GC00021
Date Analyzed: 03/06/23 13:44

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0078-IBL1	Chromium-52	0.0940	0.26	0.500	ug/L	
SLC0078-IBL1	Chromium-53	-0.00500	0.239	0.500	ug/L	
SLC0078-IBL1	Lead-208	0.0130	0.0513	0.100	ug/L	
SLC0078-IBL1	Silver-107	0.0220	0.022	0.200	ug/L	
SLC0078-ICB1	Chromium-52	0.0970	0.26	0.500	ug/L	
SLC0078-ICB1	Chromium-53	-0.0150	0.239	0.500	ug/L	
SLC0078-ICB1	Lead-208	0.00	0.0513	0.100	ug/L	
SLC0078-ICB1	Silver-107	0.0120	0.022	0.200	ug/L	
SLC0078-CCB1	Chromium-52	0.0940	0.26	0.500	ug/L	
SLC0078-CCB1	Chromium-53	-0.0110	0.239	0.500	ug/L	
SLC0078-CCB1	Lead-208	0.00	0.0513	0.100	ug/L	
SLC0078-CCB1	Silver-107	0.0150	0.022	0.200	ug/L	
SLC0078-IBL2	Chromium-52	0.0830	0.26	0.500	ug/L	
SLC0078-IBL2	Chromium-53	0.0130	0.239	0.500	ug/L	
SLC0078-IBL2	Lead-208	0.0150	0.0513	0.100	ug/L	
SLC0078-IBL2	Silver-107	0.0430	0.022	0.200	ug/L	
SLC0078-IBL3	Chromium-52	0.0910	0.26	0.500	ug/L	
SLC0078-IBL3	Chromium-53	0.0700	0.239	0.500	ug/L	
SLC0078-IBL3	Lead-208	0.0140	0.0513	0.100	ug/L	
SLC0078-IBL3	Silver-107	0.00900	0.022	0.200	ug/L	
SLC0078-CCB2	Chromium-52	0.112	0.26	0.500	ug/L	
SLC0078-CCB2	Chromium-53	-0.00100	0.239	0.500	ug/L	
SLC0078-CCB2	Lead-208	0.00100	0.0513	0.100	ug/L	
SLC0078-CCB2	Silver-107	0.0170	0.022	0.200	ug/L	
SLC0078-CCB3	Chromium-52	0.00300	0.26	0.500	ug/L	
SLC0078-CCB3	Chromium-53	0.00	0.239	0.500	ug/L	
SLC0078-CCB3	Lead-208	0.00200	0.0513	0.100	ug/L	
SLC0078-CCB3	Silver-107	0.00900	0.022	0.200	ug/L	
SLC0078-IBL4	Chromium-52	0.00100	0.26	0.500	ug/L	
SLC0078-IBL4	Chromium-53	0.0140	0.239	0.500	ug/L	
SLC0078-IBL4	Lead-208	0.0130	0.0513	0.100	ug/L	
SLC0078-IBL4	Silver-107	-0.00700	0.022	0.200	ug/L	
SLC0078-CCB4	Chromium-52	-0.00300	0.26	0.500	ug/L	
SLC0078-CCB4	Chromium-53	-0.00700	0.239	0.500	ug/L	
SLC0078-CCB4	Lead-208	0.00100	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLC0078

SDG: 23A0171
Project: AOC5 MR Phase 1
Calibration: GC00021
Date Analyzed: 03/06/23 16:34

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0078-CCB4	Silver-107	0.00300	0.022	0.200	ug/L	
SLC0078-IBL5	Chromium-52	-0.0190	0.26	0.500	ug/L	
SLC0078-IBL5	Chromium-53	-0.00700	0.239	0.500	ug/L	
SLC0078-IBL5	Lead-208	0.00100	0.0513	0.100	ug/L	
SLC0078-IBL5	Silver-107	-0.00800	0.022	0.200	ug/L	
SLC0078-CCB5	Chromium-52	-0.0530	0.26	0.500	ug/L	
SLC0078-CCB5	Chromium-53	-0.0120	0.239	0.500	ug/L	
SLC0078-CCB5	Lead-208	0.00100	0.0513	0.100	ug/L	
SLC0078-CCB5	Silver-107	0.00300	0.022	0.200	ug/L	
SLC0078-CCB6	Chromium-52	-0.0130	0.26	0.500	ug/L	
SLC0078-CCB6	Chromium-53	-0.0130	0.239	0.500	ug/L	
SLC0078-CCB6	Lead-208	0.00	0.0513	0.100	ug/L	
SLC0078-CCB6	Silver-107	0.00500	0.022	0.200	ug/L	
SLC0078-IBL7	Chromium-52	0.0880	0.26	0.500	ug/L	
SLC0078-IBL7	Chromium-53	0.00700	0.239	0.500	ug/L	
SLC0078-IBL7	Lead-208	0.00300	0.0513	0.100	ug/L	
SLC0078-IBL7	Silver-107	-0.00800	0.022	0.200	ug/L	
SLC0078-CCB7	Chromium-52	-0.00500	0.26	0.500	ug/L	
SLC0078-CCB7	Chromium-53	-0.00100	0.239	0.500	ug/L	
SLC0078-CCB7	Lead-208	0.00300	0.0513	0.100	ug/L	
SLC0078-CCB7	Silver-107	0.00300	0.022	0.200	ug/L	
SLC0078-IBL8	Chromium-52	-0.0360	0.26	0.500	ug/L	
SLC0078-IBL8	Chromium-53	-0.0130	0.239	0.500	ug/L	
SLC0078-IBL8	Lead-208	0.00600	0.0513	0.100	ug/L	
SLC0078-IBL8	Silver-107	0.00600	0.022	0.200	ug/L	
SLC0078-CCB8	Chromium-52	-0.0170	0.26	0.500	ug/L	
SLC0078-CCB8	Chromium-53	-0.0270	0.239	0.500	ug/L	
SLC0078-CCB8	Lead-208	0.00400	0.0513	0.100	ug/L	
SLC0078-CCB8	Silver-107	0.00400	0.022	0.200	ug/L	
SLC0078-IBL9	Chromium-52	-0.0690	0.26	0.500	ug/L	
SLC0078-IBL9	Chromium-53	-0.0140	0.239	0.500	ug/L	
SLC0078-IBL9	Lead-208	0.00500	0.0513	0.100	ug/L	
SLC0078-IBL9	Silver-107	0.00100	0.022	0.200	ug/L	
SLC0078-CCB9	Chromium-52	-0.0120	0.26	0.500	ug/L	
SLC0078-CCB9	Chromium-53	-0.0180	0.239	0.500	ug/L	
SLC0078-CCB9	Lead-208	0.00400	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLC0078

SDG: 23A0171
Project: AOC5 MR Phase 1
Calibration: GC00021
Date Analyzed: 03/06/23 21:40

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0078-CCB9	Silver-107	0.00400	0.022	0.200	ug/L	
SLC0078-CCBA	Chromium-52	-0.0210	0.26	0.500	ug/L	
SLC0078-CCBA	Chromium-53	-0.00200	0.239	0.500	ug/L	
SLC0078-CCBA	Lead-208	0.00400	0.0513	0.100	ug/L	
SLC0078-CCBA	Silver-107	0.00500	0.022	0.200	ug/L	
SLC0078-CCBB	Chromium-52	-0.00400	0.26	0.500	ug/L	
SLC0078-CCBB	Chromium-53	0.00	0.239	0.500	ug/L	
SLC0078-CCBB	Lead-208	0.00100	0.0513	0.100	ug/L	
SLC0078-CCBB	Silver-107	0.00600	0.022	0.200	ug/L	
SLC0078-IBLC	Chromium-52	-0.0650	0.26	0.500	ug/L	
SLC0078-IBLC	Chromium-53	-0.00700	0.239	0.500	ug/L	
SLC0078-IBLC	Lead-208	0.00800	0.0513	0.100	ug/L	
SLC0078-IBLC	Silver-107	0.00800	0.022	0.200	ug/L	
SLC0078-CCBC	Chromium-52	-0.0220	0.26	0.500	ug/L	
SLC0078-CCBC	Chromium-53	-0.0100	0.239	0.500	ug/L	
SLC0078-CCBC	Lead-208	0.00100	0.0513	0.100	ug/L	
SLC0078-CCBC	Silver-107	0.00700	0.022	0.200	ug/L	
SLC0078-IBLD	Chromium-52	-0.0610	0.26	0.500	ug/L	
SLC0078-IBLD	Chromium-53	-0.00800	0.239	0.500	ug/L	
SLC0078-IBLD	Lead-208	0.00600	0.0513	0.100	ug/L	
SLC0078-IBLD	Silver-107	0.00800	0.022	0.200	ug/L	
SLC0078-CCBD	Chromium-52	-0.0390	0.26	0.500	ug/L	
SLC0078-CCBD	Chromium-53	-0.0180	0.239	0.500	ug/L	
SLC0078-CCBD	Lead-208	0.00100	0.0513	0.100	ug/L	
SLC0078-CCBD	Silver-107	0.00800	0.022	0.200	ug/L	
SLC0078-CCBE	Chromium-52	-0.0550	0.26	0.500	ug/L	
SLC0078-CCBE	Chromium-53	-0.0230	0.239	0.500	ug/L	
SLC0078-CCBE	Lead-208	0.00100	0.0513	0.100	ug/L	
SLC0078-CCBE	Silver-107	0.00600	0.022	0.200	ug/L	
SLC0078-CCBF	Chromium-52	-0.0180	0.26	0.500	ug/L	
SLC0078-CCBF	Chromium-53	-0.0150	0.239	0.500	ug/L	
SLC0078-CCBF	Lead-208	0.00100	0.0513	0.100	ug/L	
SLC0078-CCBF	Silver-107	0.00400	0.022	0.200	ug/L	
SLC0078-CCBG	Chromium-52	-0.0210	0.26	0.500	ug/L	
SLC0078-CCBG	Chromium-53	-0.0290	0.239	0.500	ug/L	
SLC0078-CCBG	Lead-208	0.00100	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLC0078

SDG: 23A0171
Project: AOC5 MR Phase 1
Calibration: GC00021
Date Analyzed: 03/07/23 03:42

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0078-CCBG	Silver-107	0.00400	0.022	0.200	ug/L	
SLC0078-CCBH	Chromium-52	0.0440	0.26	0.500	ug/L	
SLC0078-CCBH	Chromium-53	-0.00600	0.239	0.500	ug/L	
SLC0078-CCBH	Lead-208	0.00100	0.0513	0.100	ug/L	
SLC0078-CCBH	Silver-107	0.00700	0.022	0.200	ug/L	
SLC0078-CCBI	Chromium-52	0.0470	0.26	0.500	ug/L	
SLC0078-CCBI	Chromium-53	0.0190	0.239	0.500	ug/L	
SLC0078-CCBI	Lead-208	0.00200	0.0513	0.100	ug/L	
SLC0078-CCBI	Silver-107	0.00500	0.022	0.200	ug/L	
SLC0078-IBLJ	Chromium-52	0.0480	0.26	0.500	ug/L	
SLC0078-IBLJ	Chromium-53	0.172	0.239	0.500	ug/L	
SLC0078-IBLJ	Lead-208	0.00300	0.0513	0.100	ug/L	
SLC0078-IBLJ	Silver-107	-0.00300	0.022	0.200	ug/L	
SLC0078-CCBJ	Chromium-52	0.0460	0.26	0.500	ug/L	
SLC0078-CCBJ	Chromium-53	0.0520	0.239	0.500	ug/L	
SLC0078-CCBJ	Lead-208	0.00100	0.0513	0.100	ug/L	
SLC0078-CCBJ	Silver-107	0.00600	0.022	0.200	ug/L	
SLC0078-IBLK	Chromium-52	0.0590	0.26	0.500	ug/L	
SLC0078-IBLK	Chromium-53	0.127	0.239	0.500	ug/L	
SLC0078-IBLK	Lead-208	0.00	0.0513	0.100	ug/L	
SLC0078-IBLK	Silver-107	-0.00400	0.022	0.200	ug/L	
SLC0078-CCBK	Chromium-52	0.0630	0.26	0.500	ug/L	
SLC0078-CCBK	Chromium-53	0.0720	0.239	0.500	ug/L	
SLC0078-CCBK	Lead-208	0.00100	0.0513	0.100	ug/L	
SLC0078-CCBK	Silver-107	0.00400	0.022	0.200	ug/L	
SLC0078-IBLM	Chromium-52	0.0640	0.26	0.500	ug/L	
SLC0078-IBLM	Chromium-53	0.0670	0.239	0.500	ug/L	
SLC0078-IBLM	Lead-208	0.00	0.0513	0.100	ug/L	
SLC0078-IBLM	Silver-107	-0.00200	0.022	0.200	ug/L	
SLC0078-IBLL	Chromium-52	0.0690	0.26	0.500	ug/L	
SLC0078-IBLL	Chromium-53	0.0630	0.239	0.500	ug/L	
SLC0078-IBLL	Lead-208	0.00	0.0513	0.100	ug/L	
SLC0078-IBLL	Silver-107	-0.00200	0.022	0.200	ug/L	
SLC0078-CCBL	Chromium-52	0.0250	0.26	0.500	ug/L	
SLC0078-CCBL	Chromium-53	0.0400	0.239	0.500	ug/L	
SLC0078-CCBL	Lead-208	0.00100	0.0513	0.100	ug/L	

Analytical Resources, LLC
Analytical Chemists and Consultants

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLC0078

SDG: 23A0171
Project: AOC5 MR Phase 1
Calibration: GC00021
Date Analyzed: 03/07/23 07:30

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0078-CCBL	Silver-107	0.00500	0.022	0.200	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLC0109

SDG: 23A0171
Project: AOC5 MR Phase 1
Calibration: GC00026
Date Analyzed: 03/07/23 14:21

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0109-IBL1	Chromium-52	0.0140	0.26	0.500	ug/L	
SLC0109-IBL1	Chromium-53	0.00500	0.239	0.500	ug/L	
SLC0109-ICB1	Chromium-52	-0.0260	0.26	0.500	ug/L	
SLC0109-ICB1	Chromium-53	-0.00800	0.239	0.500	ug/L	
SLC0109-CCB1	Chromium-52	-0.0270	0.26	0.500	ug/L	
SLC0109-CCB1	Chromium-53	-0.0140	0.239	0.500	ug/L	
SLC0109-IBL2	Chromium-52	0.00	0.26	0.500	ug/L	
SLC0109-IBL2	Chromium-53	0.0410	0.239	0.500	ug/L	
SLC0109-IBL3	Chromium-52	-0.0120	0.26	0.500	ug/L	
SLC0109-IBL3	Chromium-53	0.0280	0.239	0.500	ug/L	
SLC0109-CCB2	Chromium-52	0.00700	0.26	0.500	ug/L	
SLC0109-CCB2	Chromium-53	0.0130	0.239	0.500	ug/L	
SLC0109-CCB3	Chromium-52	-0.0270	0.26	0.500	ug/L	
SLC0109-CCB3	Chromium-53	-0.0100	0.239	0.500	ug/L	
SLC0109-IBL4	Chromium-52	0.00	0.26	0.500	ug/L	
SLC0109-IBL4	Chromium-53	-0.00100	0.239	0.500	ug/L	
SLC0109-CCB4	Chromium-52	0.0180	0.26	0.500	ug/L	
SLC0109-CCB4	Chromium-53	-0.00400	0.239	0.500	ug/L	
SLC0109-IBL5	Chromium-52	0.155	0.26	0.500	ug/L	
SLC0109-IBL5	Chromium-53	0.0700	0.239	0.500	ug/L	
SLC0109-CCB5	Chromium-52	-0.0190	0.26	0.500	ug/L	
SLC0109-CCB5	Chromium-53	0.0460	0.239	0.500	ug/L	
SLC0109-CCB6	Chromium-52	-0.0200	0.26	0.500	ug/L	
SLC0109-CCB6	Chromium-53	-0.0200	0.239	0.500	ug/L	
SLC0109-IBL7	Chromium-52	0.0100	0.26	0.500	ug/L	
SLC0109-IBL7	Chromium-53	-0.0460	0.239	0.500	ug/L	
SLC0109-CCB7	Chromium-52	0.0180	0.26	0.500	ug/L	
SLC0109-CCB7	Chromium-53	-0.0390	0.239	0.500	ug/L	
SLC0109-CCB8	Chromium-52	0.0170	0.26	0.500	ug/L	
SLC0109-CCB8	Chromium-53	-0.0410	0.239	0.500	ug/L	
SLC0109-CCB9	Chromium-52	0.0150	0.26	0.500	ug/L	
SLC0109-CCB9	Chromium-53	-0.0530	0.239	0.500	ug/L	
SLC0109-CCBA	Chromium-52	-0.00300	0.26	0.500	ug/L	
SLC0109-CCBA	Chromium-53	-0.0590	0.239	0.500	ug/L	
SLC0109-IBLB	Chromium-52	0.0140	0.26	0.500	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLC0109

SDG: 23A0171
Project: AOC5 MR Phase 1
Calibration: GC00026
Date Analyzed: 03/07/23 23:49

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0109-IBLB	Chromium-53	-0.0460	0.239	0.500	ug/L	
SLC0109-CCBB	Chromium-52	0.0190	0.26	0.500	ug/L	
SLC0109-CCBB	Chromium-53	-0.0540	0.239	0.500	ug/L	
SLC0109-CCBC	Chromium-52	-0.00600	0.26	0.500	ug/L	
SLC0109-CCBC	Chromium-53	-0.00400	0.239	0.500	ug/L	
SLC0109-CCBD	Chromium-52	0.0100	0.26	0.500	ug/L	
SLC0109-CCBD	Chromium-53	0.00800	0.239	0.500	ug/L	
SLC0109-IBLE	Chromium-52	0.0820	0.26	0.500	ug/L	
SLC0109-IBLE	Chromium-53	0.135	0.239	0.500	ug/L	
SLC0109-CCBE	Chromium-52	0.0640	0.26	0.500	ug/L	
SLC0109-CCBE	Chromium-53	0.0760	0.239	0.500	ug/L	
SLC0109-IBLF	Chromium-52	0.0780	0.26	0.500	ug/L	
SLC0109-IBLF	Chromium-53	0.0820	0.239	0.500	ug/L	
SLC0109-CCBF	Chromium-52	0.0250	0.26	0.500	ug/L	
SLC0109-CCBF	Chromium-53	0.0470	0.239	0.500	ug/L	

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0028
Instrument: ICPMS2
Calibration: GC00005

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLC0028-CAL1	XDT_m2230301-013	NA	03/01/23 16:36
CAL 1 - LOW CHECK	SLC0028-CAL2	XDT_m2230301-014	NA	03/01/23 16:41
CAL 2	SLC0028-CAL3	XDT_m2230301-015	NA	03/01/23 16:46
CAL 3	SLC0028-CAL4	XDT_m2230301-016	NA	03/01/23 16:51
CAL 4	SLC0028-CAL5	XDT_m2230301-017	NA	03/01/23 16:56
CAL 5	SLC0028-CAL6	XDT_m2230301-018	NA	03/01/23 17:03
RINSE	SLC0028-IBL1	XDT_m2230301-019	NA	03/01/23 17:11
Initial Cal Check	SLC0028-ICV1	XDT_m2230301-021	NA	03/01/23 17:23
Initial Cal Blank	SLC0028-ICB1	XDT_m2230301-022	NA	03/01/23 17:31
Calibration Check	SLC0028-CCV1	XDT_m2230301-023	NA	03/01/23 17:37
Calibration Blank	SLC0028-CCB1	XDT_m2230301-024	NA	03/01/23 17:44
Instrument RL Check	SLC0028-CRL1	XDT_m2230301-025	NA	03/01/23 17:49
Interference Check A	SLC0028-IFA1	XDT_m2230301-026	NA	03/01/23 17:55
Interference Check B	SLC0028-IFB1	XDT_m2230301-028	NA	03/01/23 18:08
LR200	SLC0028-HCV1	XDT_m2230301-029	NA	03/01/23 18:13
LR300	SLC0028-HCV2	XDT_m2230301-030	NA	03/01/23 18:18
Instrument Blank	SLC0028-IBL2	XDT_m2230301-031	NA	03/01/23 18:25
Instrument Blank	SLC0028-IBL3	XDT_m2230301-032	NA	03/01/23 18:32
Calibration Check	SLC0028-CCV2	XDT_m2230301-033	NA	03/01/23 18:39
Calibration Blank	SLC0028-CCB2	XDT_m2230301-035	NA	03/01/23 18:51
Instrument Blank	SLC0028-IBL4	XDT_m2230301-042	NA	03/01/23 19:35
Instrument Blank	SLC0028-IBL5	XDT_m2230301-045	NA	03/01/23 19:50
Calibration Check	SLC0028-CCV3	XDT_m2230301-046	NA	03/01/23 19:56
Calibration Blank	SLC0028-CCB3	XDT_m2230301-047	NA	03/01/23 20:04
ZZZZZ	23B0501-01	XDT_m2230301-054	Water	03/01/23 20:38
Instrument Blank	SLC0028-IBL6	XDT_m2230301-057	NA	03/01/23 20:52
Calibration Check	SLC0028-CCV4	XDT_m2230301-058	NA	03/01/23 20:58
Calibration Blank	SLC0028-CCB4	XDT_m2230301-059	NA	03/01/23 21:06
Blank	BLB0518-BLK1	XDT_m2230301-060	Solid	03/01/23 21:11

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory:	Analytical Resources, LLC	SDG:	23A0171
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0028	Instrument:	ICPMS2
		Calibration:	GC00005

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
LCS	BLB0518-BS1	XDT_m2230301-061	Solid	03/01/23 21:16
ZZZZZ	23A0032-01	XDT_m2230301-065	Solid	03/01/23 21:35
ZZZZZ	23A0032-01	XDT_m2230301-065	Solid	03/01/23 21:35
Calibration Check	SLC0028-CCV5	XDT_m2230301-070	NA	03/01/23 22:00
Calibration Blank	SLC0028-CCB5	XDT_m2230301-071	NA	03/01/23 22:08
Instrument Blank	SLC0028-IBL7	XDT_m2230301-080	NA	03/01/23 22:52
Calibration Check	SLC0028-CCV6	XDT_m2230301-081	NA	03/01/23 22:56
Calibration Blank	SLC0028-CCB6	XDT_m2230301-082	NA	03/01/23 23:04
Instrument Blank	SLC0028-IBL8	XDT_m2230301-088	NA	03/01/23 23:33
Calibration Check	SLC0028-CCV7	XDT_m2230301-089	NA	03/01/23 23:38
Calibration Blank	SLC0028-CCB7	XDT_m2230301-090	NA	03/01/23 23:46

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0078
Instrument: ICPMS1
Calibration: GC00021

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLC0078-CAL1	XDT_m2230306-006	NA	03/06/23 13:12
CAL 1 - LOW CHECK	SLC0078-CAL2	XDT_m2230306-007	NA	03/06/23 13:16
CAL 2	SLC0078-CAL3	XDT_m2230306-008	NA	03/06/23 13:21
CAL 3	SLC0078-CAL4	XDT_m2230306-009	NA	03/06/23 13:25
CAL 4	SLC0078-CAL5	XDT_m2230306-010	NA	03/06/23 13:30
CAL 5	SLC0078-CAL6	XDT_m2230306-011	NA	03/06/23 13:37
RINSE	SLC0078-IBL1	XDT_m2230306-012	NA	03/06/23 13:44
Initial Cal Check	SLC0078-ICV1	XDT_m2230306-014	NA	03/06/23 13:53
Initial Cal Blank	SLC0078-ICB1	XDT_m2230306-015	NA	03/06/23 14:00
Calibration Check	SLC0078-CCV1	XDT_m2230306-016	NA	03/06/23 14:05
Calibration Blank	SLC0078-CCB1	XDT_m2230306-017	NA	03/06/23 14:12
Instrument RL Check	SLC0078-CRL1	XDT_m2230306-018	NA	03/06/23 14:16
Interference Check B	SLC0078-IFB1	XDT_m2230306-020	NA	03/06/23 14:25
LR200	SLC0078-HCV1	XDT_m2230306-021	NA	03/06/23 14:30
LR300	SLC0078-HCV2	XDT_m2230306-022	NA	03/06/23 14:34
Instrument Blank	SLC0078-IBL2	XDT_m2230306-023	NA	03/06/23 14:41
Interference Check A	SLC0078-IFA1	XDT_m2230306-024	NA	03/06/23 14:48
Instrument Blank	SLC0078-IBL3	XDT_m2230306-025	NA	03/06/23 14:52
Calibration Check	SLC0078-CCV2	XDT_m2230306-026	NA	03/06/23 14:59
Calibration Blank	SLC0078-CCB2	XDT_m2230306-027	NA	03/06/23 15:06
Calibration Check	SLC0078-CCV3	XDT_m2230306-029	NA	03/06/23 15:17
Calibration Blank	SLC0078-CCB3	XDT_m2230306-030	NA	03/06/23 15:24
Instrument Blank	SLC0078-IBL4	XDT_m2230306-040	NA	03/06/23 16:22
Calibration Check	SLC0078-CCV4	XDT_m2230306-041	NA	03/06/23 16:27
Calibration Blank	SLC0078-CCB4	XDT_m2230306-042	NA	03/06/23 16:34
Instrument Blank	SLC0078-IBL5	XDT_m2230306-052	NA	03/06/23 17:25
Calibration Check	SLC0078-CCV5	XDT_m2230306-053	NA	03/06/23 17:30
Calibration Blank	SLC0078-CCB5	XDT_m2230306-054	NA	03/06/23 17:37
Calibration Check	SLC0078-CCV6	XDT_m2230306-065	NA	03/06/23 18:31

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0078
Instrument: ICPMS1
Calibration: GC00021

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Blank	SLC0078-CCB6	XDT_m2230306-066	NA	03/06/23 18:39
Instrument Blank	SLC0078-IBL7	XDT_m2230306-076	NA	03/06/23 19:36
Calibration Check	SLC0078-CCV7	XDT_m2230306-077	NA	03/06/23 19:40
Calibration Blank	SLC0078-CCB7	XDT_m2230306-078	NA	03/06/23 19:47
ZZZZZ	BLB0508-BLK1	XDT_m2230306-079	Solid	03/06/23 19:52
ZZZZZ	BLB0508-BS1	XDT_m2230306-080	Solid	03/06/23 19:56
ZZZZZ	23A0032-01	XDT_m2230306-083	Solid	03/06/23 20:10
Instrument Blank	SLC0078-IBL8	XDT_m2230306-088	NA	03/06/23 20:32
Calibration Check	SLC0078-CCV8	XDT_m2230306-089	NA	03/06/23 20:37
Calibration Blank	SLC0078-CCB8	XDT_m2230306-090	NA	03/06/23 20:44
ZZZZZ	BLB0615-BLK1	XDT_m2230306-093	Solid	03/06/23 20:57
ZZZZZ	BLB0615-BS1	XDT_m2230306-094	Solid	03/06/23 21:02
ZZZZZ	23A0031-02	XDT_m2230306-095	Solid	03/06/23 21:06
ZZZZZ	23A0031-02	XDT_m2230306-095	Solid	03/06/23 21:06
ZZZZZ	23A0031-02	XDT_m2230306-095	Solid	03/06/23 21:06
ZZZZZ	BLB0508-DUP1	XDT_m2230306-096	Solid	03/06/23 21:11
ZZZZZ	BLB0508-MS1	XDT_m2230306-097	Solid	03/06/23 21:15
ZZZZZ	BLB0508-MSD1	XDT_m2230306-098	Solid	03/06/23 21:19
ZZZZZ	BLB0508-PS1	XDT_m2230306-099	Solid	03/06/23 21:24
Instrument Blank	SLC0078-IBL9	XDT_m2230306-100	NA	03/06/23 21:28
Calibration Check	SLC0078-CCV9	XDT_m2230306-101	NA	03/06/23 21:33
Calibration Blank	SLC0078-CCB9	XDT_m2230306-102	NA	03/06/23 21:40
ZZZZZ	23B0217-02	XDT_m2230306-109	Solid	03/06/23 22:12
ZZZZZ	23B0217-02	XDT_m2230306-109	Solid	03/06/23 22:12
ZZZZZ	23B0217-02	XDT_m2230306-109	Solid	03/06/23 22:12
ZZZZZ	BLB0615-DUP1	XDT_m2230306-110	Solid	03/06/23 22:17
ZZZZZ	BLB0615-MS1	XDT_m2230306-111	Solid	03/06/23 22:21
ZZZZZ	BLB0615-MSD1	XDT_m2230306-112	Solid	03/06/23 22:26
Calibration Check	SLC0078-CCVA	XDT_m2230306-113	NA	03/06/23 22:32

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0078
Instrument: ICPMS1
Calibration: GC00021

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Blank	SLC0078-CCBA	XDT_m2230306-114	NA	03/06/23 22:39
Calibration Check	SLC0078-CCVB	XDT_m2230306-116	NA	03/06/23 22:48
Calibration Blank	SLC0078-CCBB	XDT_m2230306-117	NA	03/06/23 22:55
ZZZZZ	BLB0607-BLK1	XDT_m2230306-118	Solid	03/06/23 22:59
ZZZZZ	BLB0607-BS1	XDT_m2230306-119	Solid	03/06/23 23:04
ZZZZZ	BLB0607-SRL1	XDT_m2230306-120	Solid	03/06/23 23:08
ZZZZZ	23B0410-01	XDT_m2230306-121	Solid	03/06/23 23:13
ZZZZZ	BLB0607-DUP1	XDT_m2230306-122	Solid	03/06/23 23:17
ZZZZZ	BLB0607-MS1	XDT_m2230306-123	Solid	03/06/23 23:22
ZZZZZ	BLB0607-MSD1	XDT_m2230306-124	Solid	03/06/23 23:26
ZZZZZ	BLB0607-SRM1	XDT_m2230306-126	Solid	03/06/23 23:35
Instrument Blank	SLC0078-IBLC	XDT_m2230306-127	NA	03/06/23 23:40
Calibration Check	SLC0078-CCVC	XDT_m2230306-128	NA	03/06/23 23:44
Calibration Blank	SLC0078-CCBC	XDT_m2230306-129	NA	03/06/23 23:51
ZZZZZ	BLB0687-BLK1	XDT_m2230306-130	Solid	03/06/23 23:56
ZZZZZ	BLB0687-BS1	XDT_m2230306-131	Solid	03/07/23 00:00
ZZZZZ	BLB0687-SRL1	XDT_m2230306-132	Solid	03/07/23 00:05
ZZZZZ	23B0411-01	XDT_m2230306-133	Solid	03/07/23 00:09
ZZZZZ	BLB0687-DUP1	XDT_m2230306-134	Solid	03/07/23 00:14
ZZZZZ	BLB0687-MS1	XDT_m2230306-135	Solid	03/07/23 00:18
ZZZZZ	BLB0687-MSD1	XDT_m2230306-136	Solid	03/07/23 00:22
ZZZZZ	BLB0687-SRM1	XDT_m2230306-138	Solid	03/07/23 00:31
Instrument Blank	SLC0078-IBLD	XDT_m2230306-139	NA	03/07/23 00:36
Calibration Check	SLC0078-CCVD	XDT_m2230306-140	NA	03/07/23 00:40
Calibration Blank	SLC0078-CCBD	XDT_m2230306-141	NA	03/07/23 00:47
ZZZZZ	23A0031-01	XDT_m2230306-146	Solid	03/07/23 01:11
ZZZZZ	23A0031-01	XDT_m2230306-146	Solid	03/07/23 01:11
ZZZZZ	23A0031-01	XDT_m2230306-146	Solid	03/07/23 01:11
ZZZZZ	23A0031-03	XDT_m2230306-147	Solid	03/07/23 01:16

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0078

SDG: 23A0171
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GC00021

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0031-03	XDT_m2230306-147	Solid	03/07/23 01:16
ZZZZZ	23A0031-03	XDT_m2230306-147	Solid	03/07/23 01:16
ZZZZZ	23A0031-04	XDT_m2230306-148	Solid	03/07/23 01:20
ZZZZZ	23A0031-04	XDT_m2230306-148	Solid	03/07/23 01:20
ZZZZZ	23A0031-04	XDT_m2230306-148	Solid	03/07/23 01:20
ZZZZZ	23A0031-05	XDT_m2230306-149	Solid	03/07/23 01:25
ZZZZZ	23A0031-05	XDT_m2230306-149	Solid	03/07/23 01:25
ZZZZZ	23A0031-06	XDT_m2230306-150	Solid	03/07/23 01:29
ZZZZZ	23A0031-06	XDT_m2230306-150	Solid	03/07/23 01:29
ZZZZZ	23A0031-06	XDT_m2230306-150	Solid	03/07/23 01:29
ZZZZZ	23A0031-07	XDT_m2230306-151	Solid	03/07/23 01:34
ZZZZZ	23A0031-07	XDT_m2230306-151	Solid	03/07/23 01:34
ZZZZZ	23A0031-07	XDT_m2230306-151	Solid	03/07/23 01:34
Calibration Check	SLC0078-CCVE	XDT_m2230306-152	NA	03/07/23 01:39
Calibration Blank	SLC0078-CCBE	XDT_m2230306-153	NA	03/07/23 01:47
ZZZZZ	23A0031-08	XDT_m2230306-154	Solid	03/07/23 01:51
ZZZZZ	23A0031-08	XDT_m2230306-154	Solid	03/07/23 01:51
ZZZZZ	23A0031-08	XDT_m2230306-154	Solid	03/07/23 01:51
ZZZZZ	23A0031-09	XDT_m2230306-155	Solid	03/07/23 01:56
ZZZZZ	23A0031-09	XDT_m2230306-155	Solid	03/07/23 01:56
ZZZZZ	23A0031-09	XDT_m2230306-155	Solid	03/07/23 01:56
ZZZZZ	23A0031-10	XDT_m2230306-156	Solid	03/07/23 02:00
ZZZZZ	23A0031-10	XDT_m2230306-156	Solid	03/07/23 02:00
ZZZZZ	23A0031-10	XDT_m2230306-156	Solid	03/07/23 02:00
ZZZZZ	23A0031-11	XDT_m2230306-157	Solid	03/07/23 02:04
ZZZZZ	23A0031-11	XDT_m2230306-157	Solid	03/07/23 02:04
ZZZZZ	23A0031-11	XDT_m2230306-157	Solid	03/07/23 02:04
ZZZZZ	23A0031-12	XDT_m2230306-158	Solid	03/07/23 02:09
ZZZZZ	23A0031-12	XDT_m2230306-158	Solid	03/07/23 02:09

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0078
Instrument: ICPMS1
Calibration: GC00021

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0031-12	XDT_m2230306-158	Solid	03/07/23 02:09
ZZZZZ	23A0031-13	XDT_m2230306-159	Solid	03/07/23 02:13
ZZZZZ	23A0031-13	XDT_m2230306-159	Solid	03/07/23 02:13
ZZZZZ	23A0031-13	XDT_m2230306-159	Solid	03/07/23 02:13
ZZZZZ	23A0031-14	XDT_m2230306-160	Solid	03/07/23 02:18
ZZZZZ	23A0031-14	XDT_m2230306-160	Solid	03/07/23 02:18
ZZZZZ	23A0031-14	XDT_m2230306-160	Solid	03/07/23 02:18
ZZZZZ	23A0031-15	XDT_m2230306-161	Solid	03/07/23 02:22
ZZZZZ	23A0031-15	XDT_m2230306-161	Solid	03/07/23 02:22
ZZZZZ	23A0031-15	XDT_m2230306-161	Solid	03/07/23 02:22
ZZZZZ	23A0031-16	XDT_m2230306-162	Solid	03/07/23 02:27
ZZZZZ	23A0031-16	XDT_m2230306-162	Solid	03/07/23 02:27
ZZZZZ	23A0031-16	XDT_m2230306-162	Solid	03/07/23 02:27
ZZZZZ	23A0031-17	XDT_m2230306-163	Solid	03/07/23 02:31
ZZZZZ	23A0031-17	XDT_m2230306-163	Solid	03/07/23 02:31
ZZZZZ	23A0031-17	XDT_m2230306-163	Solid	03/07/23 02:31
Calibration Check	SLC0078-CCVF	XDT_m2230306-164	NA	03/07/23 02:37
Calibration Blank	SLC0078-CCBF	XDT_m2230306-165	NA	03/07/23 02:44
ZZZZZ	23A0031-18	XDT_m2230306-166	Solid	03/07/23 02:49
ZZZZZ	23A0031-18	XDT_m2230306-166	Solid	03/07/23 02:49
ZZZZZ	23A0031-18	XDT_m2230306-166	Solid	03/07/23 02:49
ZZZZZ	23A0031-19	XDT_m2230306-167	Solid	03/07/23 02:53
ZZZZZ	23A0031-19	XDT_m2230306-167	Solid	03/07/23 02:53
ZZZZZ	23A0031-19	XDT_m2230306-167	Solid	03/07/23 02:53
ZZZZZ	23A0031-20	XDT_m2230306-168	Solid	03/07/23 02:58
ZZZZZ	23A0031-20	XDT_m2230306-168	Solid	03/07/23 02:58
ZZZZZ	23A0031-20	XDT_m2230306-168	Solid	03/07/23 02:58
ZZZZZ	23A0031-21	XDT_m2230306-169	Solid	03/07/23 03:02
ZZZZZ	23A0031-21	XDT_m2230306-169	Solid	03/07/23 03:02

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0078
Instrument: ICPMS1
Calibration: GC00021

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0031-21	XDT_m2230306-169	Solid	03/07/23 03:02
ZZZZZ	23A0032-05	XDT_m2230306-170	Solid	03/07/23 03:06
ZZZZZ	23A0032-05	XDT_m2230306-170	Solid	03/07/23 03:06
ZZZZZ	23A0032-05	XDT_m2230306-170	Solid	03/07/23 03:06
ZZZZZ	23A0032-08	XDT_m2230306-173	Solid	03/07/23 03:20
ZZZZZ	23A0032-08	XDT_m2230306-173	Solid	03/07/23 03:20
ZZZZZ	23A0032-08	XDT_m2230306-173	Solid	03/07/23 03:20
ZZZZZ	23A0032-11	XDT_m2230306-174	Solid	03/07/23 03:24
ZZZZZ	23A0032-11	XDT_m2230306-174	Solid	03/07/23 03:24
ZZZZZ	23A0032-11	XDT_m2230306-174	Solid	03/07/23 03:24
ZZZZZ	23B0276-01	XDT_m2230306-175	Solid	03/07/23 03:29
ZZZZZ	23B0276-01	XDT_m2230306-175	Solid	03/07/23 03:29
ZZZZZ	23B0276-01	XDT_m2230306-175	Solid	03/07/23 03:29
Calibration Check	SLC0078-CCVG	XDT_m2230306-176	NA	03/07/23 03:35
Calibration Blank	SLC0078-CCBG	XDT_m2230306-177	NA	03/07/23 03:42
Calibration Check	SLC0078-CCVH	XDT_m2230306-179	NA	03/07/23 03:51
Calibration Blank	SLC0078-CCBH	XDT_m2230306-180	NA	03/07/23 03:58
LDW23-SS1254	23A0171-01	XDT_m2230306-184	Solid	03/07/23 04:17
LDW23-SS1254	23A0171-01	XDT_m2230306-184	Solid	03/07/23 04:17
LDW23-SS1257	23A0171-02	XDT_m2230306-185	Solid	03/07/23 04:21
LDW23-SS1257	23A0171-02	XDT_m2230306-185	Solid	03/07/23 04:21
LDW23-SS1262	23A0171-03	XDT_m2230306-186	Solid	03/07/23 04:26
LDW23-SS1262	23A0171-03	XDT_m2230306-186	Solid	03/07/23 04:26
LDW23-SS1245	23A0171-04	XDT_m2230306-187	Solid	03/07/23 04:30
LDW23-SS1245	23A0171-04	XDT_m2230306-187	Solid	03/07/23 04:30
LDW23-SS1245	23A0171-04	XDT_m2230306-187	Solid	03/07/23 04:30
ZZZZZ	23B0051-01	XDT_m2230306-188	Solid	03/07/23 04:35
ZZZZZ	23B0051-02	XDT_m2230306-189	Solid	03/07/23 04:39
ZZZZZ	23B0051-02	XDT_m2230306-189	Solid	03/07/23 04:39

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0078
Instrument: ICPMS1
Calibration: GC00021

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23B0051-03	XDT_m2230306-190	Solid	03/07/23 04:44
ZZZZZ	23B0051-03	XDT_m2230306-190	Solid	03/07/23 04:44
ZZZZZ	23B0051-03	XDT_m2230306-190	Solid	03/07/23 04:44
Calibration Check	SLC0078-CCVI	XDT_m2230306-191	NA	03/07/23 04:50
Calibration Blank	SLC0078-CCBI	XDT_m2230306-192	NA	03/07/23 04:57
ZZZZZ	23B0217-03	XDT_m2230306-193	Solid	03/07/23 05:01
ZZZZZ	23B0217-03	XDT_m2230306-193	Solid	03/07/23 05:01
ZZZZZ	23B0217-03	XDT_m2230306-193	Solid	03/07/23 05:01
ZZZZZ	23B0217-04	XDT_m2230306-194	Solid	03/07/23 05:06
ZZZZZ	23B0217-04	XDT_m2230306-194	Solid	03/07/23 05:06
ZZZZZ	23B0217-04	XDT_m2230306-194	Solid	03/07/23 05:06
ZZZZZ	23B0217-05	XDT_m2230306-195	Solid	03/07/23 05:10
ZZZZZ	23B0217-05	XDT_m2230306-195	Solid	03/07/23 05:10
ZZZZZ	23B0217-05	XDT_m2230306-195	Solid	03/07/23 05:10
ZZZZZ	23B0217-06	XDT_m2230306-196	Solid	03/07/23 05:15
ZZZZZ	23B0217-06	XDT_m2230306-196	Solid	03/07/23 05:15
ZZZZZ	23B0217-06	XDT_m2230306-196	Solid	03/07/23 05:15
Instrument Blank	SLC0078-IBLJ	XDT_m2230306-202	NA	03/07/23 05:42
Calibration Check	SLC0078-CCVJ	XDT_m2230306-203	NA	03/07/23 05:46
Calibration Blank	SLC0078-CCBJ	XDT_m2230306-204	NA	03/07/23 05:53
Instrument Blank	SLC0078-IBLK	XDT_m2230306-214	NA	03/07/23 06:40
Calibration Check	SLC0078-CCVK	XDT_m2230306-215	NA	03/07/23 06:44
Calibration Blank	SLC0078-CCBK	XDT_m2230306-216	NA	03/07/23 06:51
Instrument Blank	SLC0078-IBLM	XDT_m2230306-219	NA	03/07/23 07:05
Instrument Blank	SLC0078-IBLL	XDT_m2230306-222	NA	03/07/23 07:18
Calibration Check	SLC0078-CCVL	XDT_m2230306-223	NA	03/07/23 07:22
Calibration Blank	SLC0078-CCBL	XDT_m2230306-224	NA	03/07/23 07:30

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0109
Instrument: ICPMS2
Calibration: GC00026

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLC0109-CAL1	XDT_m2230307-006	NA	03/07/23 13:46
CAL 1 - LOW CHECK	SLC0109-CAL2	XDT_m2230307-007	NA	03/07/23 13:51
CAL 2	SLC0109-CAL3	XDT_m2230307-008	NA	03/07/23 13:56
CAL 3	SLC0109-CAL4	XDT_m2230307-009	NA	03/07/23 14:01
CAL 4	SLC0109-CAL5	XDT_m2230307-010	NA	03/07/23 14:07
CAL 5	SLC0109-CAL6	XDT_m2230307-011	NA	03/07/23 14:14
RINSE	SLC0109-IBL1	XDT_m2230307-012	NA	03/07/23 14:21
Initial Cal Check	SLC0109-ICV1	XDT_m2230307-014	NA	03/07/23 14:29
Initial Cal Blank	SLC0109-ICB1	XDT_m2230307-015	NA	03/07/23 14:38
Calibration Check	SLC0109-CCV1	XDT_m2230307-016	NA	03/07/23 14:43
Calibration Blank	SLC0109-CCB1	XDT_m2230307-017	NA	03/07/23 14:50
Instrument RL Check	SLC0109-CRL1	XDT_m2230307-018	NA	03/07/23 14:56
Interference Check A	SLC0109-IFA1	XDT_m2230307-020	NA	03/07/23 15:10
Interference Check B	SLC0109-IFB1	XDT_m2230307-021	NA	03/07/23 15:15
LR200	SLC0109-HCV1	XDT_m2230307-022	NA	03/07/23 15:20
LR300	SLC0109-HCV2	XDT_m2230307-023	NA	03/07/23 15:25
Instrument Blank	SLC0109-IBL2	XDT_m2230307-024	NA	03/07/23 15:33
Instrument Blank	SLC0109-IBL3	XDT_m2230307-025	NA	03/07/23 15:39
Calibration Check	SLC0109-CCV2	XDT_m2230307-026	NA	03/07/23 15:46
Calibration Blank	SLC0109-CCB2	XDT_m2230307-027	NA	03/07/23 15:57
Calibration Check	SLC0109-CCV3	XDT_m2230307-029	NA	03/07/23 16:08
Calibration Blank	SLC0109-CCB3	XDT_m2230307-030	NA	03/07/23 16:16
Instrument Blank	SLC0109-IBL4	XDT_m2230307-039	NA	03/07/23 17:05
Calibration Check	SLC0109-CCV4	XDT_m2230307-040	NA	03/07/23 17:09
Calibration Blank	SLC0109-CCB4	XDT_m2230307-041	NA	03/07/23 17:17
ZZZZZ	23B0350-02RE1	XDT_m2230307-044	Water	03/07/23 17:40
ZZZZZ	23B0350-01	XDT_m2230307-045	Water	03/07/23 17:45
ZZZZZ	23B0350-01	XDT_m2230307-045	Water	03/07/23 17:45
ZZZZZ	23B0501-01	XDT_m2230307-048	Water	03/07/23 18:08

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0109
Instrument: ICPMS2
Calibration: GC00026

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Instrument Blank	SLC0109-IBL5	XDT_m2230307-051	NA	03/07/23 18:24
Calibration Check	SLC0109-CCV5	XDT_m2230307-052	NA	03/07/23 18:29
Calibration Blank	SLC0109-CCB5	XDT_m2230307-053	NA	03/07/23 18:36
Calibration Check	SLC0109-CCV6	XDT_m2230307-055	NA	03/07/23 18:50
Calibration Blank	SLC0109-CCB6	XDT_m2230307-056	NA	03/07/23 18:58
ZZZZZ	BLB0666-BLK1	XDT_m2230307-059	Solid	03/07/23 19:14
ZZZZZ	BLB0666-BS1	XDT_m2230307-060	Solid	03/07/23 19:19
ZZZZZ	23B0329-02	XDT_m2230307-061	Solid	03/07/23 19:30
ZZZZZ	23B0329-02	XDT_m2230307-061	Solid	03/07/23 19:30
ZZZZZ	23B0329-02	XDT_m2230307-061	Solid	03/07/23 19:30
ZZZZZ	23B0329-02	XDT_m2230307-061	Solid	03/07/23 19:30
ZZZZZ	23B0329-01	XDT_m2230307-062	Solid	03/07/23 19:35
ZZZZZ	23B0329-01	XDT_m2230307-062	Solid	03/07/23 19:35
ZZZZZ	23B0329-01	XDT_m2230307-062	Solid	03/07/23 19:35
ZZZZZ	23B0329-01	XDT_m2230307-062	Solid	03/07/23 19:35
ZZZZZ	BLB0666-DUP1	XDT_m2230307-063	Solid	03/07/23 19:42
ZZZZZ	BLB0666-MS1	XDT_m2230307-064	Solid	03/07/23 19:47
ZZZZZ	BLB0666-MSD1	XDT_m2230307-065	Solid	03/07/23 19:52
Instrument Blank	SLC0109-IBL7	XDT_m2230307-066	NA	03/07/23 19:56
Calibration Check	SLC0109-CCV7	XDT_m2230307-067	NA	03/07/23 20:01
Calibration Blank	SLC0109-CCB7	XDT_m2230307-068	NA	03/07/23 20:08
ZZZZZ	23B0410-02	XDT_m2230307-069	Solid	03/07/23 20:13
ZZZZZ	23B0410-03	XDT_m2230307-070	Solid	03/07/23 20:18
ZZZZZ	23B0410-04	XDT_m2230307-071	Solid	03/07/23 20:22
ZZZZZ	23B0410-05	XDT_m2230307-072	Solid	03/07/23 20:27
ZZZZZ	23B0410-06	XDT_m2230307-073	Solid	03/07/23 20:32
ZZZZZ	23B0410-07	XDT_m2230307-074	Solid	03/07/23 20:36
ZZZZZ	23B0410-08	XDT_m2230307-075	Solid	03/07/23 20:41
ZZZZZ	23B0410-09	XDT_m2230307-076	Solid	03/07/23 20:46

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0109
Instrument: ICPMS2
Calibration: GC00026

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23B0410-10	XDT_m2230307-077	Solid	03/07/23 20:50
Calibration Check	SLC0109-CCV8	XDT_m2230307-079	NA	03/07/23 21:01
Calibration Blank	SLC0109-CCB8	XDT_m2230307-080	NA	03/07/23 21:08
ZZZZZ	23B0410-12	XDT_m2230307-081	Solid	03/07/23 21:13
ZZZZZ	23B0410-13	XDT_m2230307-082	Solid	03/07/23 21:18
ZZZZZ	23B0410-14	XDT_m2230307-083	Solid	03/07/23 21:22
ZZZZZ	23B0410-15	XDT_m2230307-084	Solid	03/07/23 21:27
ZZZZZ	23B0410-16	XDT_m2230307-085	Solid	03/07/23 21:32
ZZZZZ	23B0410-17	XDT_m2230307-086	Solid	03/07/23 21:36
ZZZZZ	23B0410-18	XDT_m2230307-087	Solid	03/07/23 21:41
ZZZZZ	23B0410-20	XDT_m2230307-089	Solid	03/07/23 21:50
ZZZZZ	23B0411-02	XDT_m2230307-090	Solid	03/07/23 21:55
Calibration Check	SLC0109-CCV9	XDT_m2230307-091	NA	03/07/23 22:01
Calibration Blank	SLC0109-CCB9	XDT_m2230307-092	NA	03/07/23 22:08
ZZZZZ	23B0411-03	XDT_m2230307-093	Solid	03/07/23 22:13
ZZZZZ	23B0411-04	XDT_m2230307-094	Solid	03/07/23 22:17
ZZZZZ	23B0411-05	XDT_m2230307-095	Solid	03/07/23 22:22
ZZZZZ	23B0411-06	XDT_m2230307-096	Solid	03/07/23 22:27
ZZZZZ	23B0411-07	XDT_m2230307-097	Solid	03/07/23 22:31
ZZZZZ	23B0411-09	XDT_m2230307-099	Solid	03/07/23 22:41
ZZZZZ	23B0411-10	XDT_m2230307-100	Solid	03/07/23 22:45
ZZZZZ	23B0411-11	XDT_m2230307-101	Solid	03/07/23 22:50
ZZZZZ	23B0411-12	XDT_m2230307-102	Solid	03/07/23 22:54
Calibration Check	SLC0109-CCVA	XDT_m2230307-103	NA	03/07/23 23:00
Calibration Blank	SLC0109-CCBA	XDT_m2230307-104	NA	03/07/23 23:08
ZZZZZ	23B0051-01	XDT_m2230307-105	Solid	03/07/23 23:13
ZZZZZ	23B0051-01	XDT_m2230307-105	Solid	03/07/23 23:13
ZZZZZ	23B0411-13	XDT_m2230307-106	Solid	03/07/23 23:17
ZZZZZ	23B0411-14	XDT_m2230307-107	Solid	03/07/23 23:22

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0109

SDG: 23A0171
Project: AOC5 MR Phase 1
Instrument: ICPMS2
Calibration: GC00026

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23B0411-15	XDT_m2230307-108	Solid	03/07/23 23:26
ZZZZZ	23B0411-16	XDT_m2230307-109	Solid	03/07/23 23:31
ZZZZZ	23B0411-17	XDT_m2230307-110	Solid	03/07/23 23:35
ZZZZZ	23B0411-18	XDT_m2230307-111	Solid	03/07/23 23:38
ZZZZZ	23B0411-19	XDT_m2230307-112	Solid	03/07/23 23:42
ZZZZZ	23B0411-20	XDT_m2230307-113	Solid	03/07/23 23:46
Instrument Blank	SLC0109-IBLB	XDT_m2230307-114	NA	03/07/23 23:49
Calibration Check	SLC0109-CCVB	XDT_m2230307-115	NA	03/07/23 23:53
Calibration Blank	SLC0109-CCBB	XDT_m2230307-116	NA	03/07/23 23:59
Calibration Check	SLC0109-CCVC	XDT_m2230307-118	NA	03/08/23 00:07
Calibration Blank	SLC0109-CCBC	XDT_m2230307-119	NA	03/08/23 00:13
ZZZZZ	23A0031-05	XDT_m2230307-125	Solid	03/08/23 00:39
LDW23-SS1254	23A0171-01	XDT_m2230307-126	Solid	03/08/23 00:42
LDW23-SS1257	23A0171-02	XDT_m2230307-127	Solid	03/08/23 00:46
LDW23-SS1262	23A0171-03	XDT_m2230307-128	Solid	03/08/23 00:50
ZZZZZ	23B0051-02	XDT_m2230307-129	Solid	03/08/23 00:53
Calibration Check	SLC0109-CCVD	XDT_m2230307-130	NA	03/08/23 00:59
Calibration Blank	SLC0109-CCBD	XDT_m2230307-131	NA	03/08/23 01:06
ZZZZZ	23B0449-02	XDT_m2230307-135	Water	03/08/23 01:21
Instrument Blank	SLC0109-IBLE	XDT_m2230307-141	NA	03/08/23 01:49
Calibration Check	SLC0109-CCVE	XDT_m2230307-142	NA	03/08/23 01:53
Calibration Blank	SLC0109-CCBE	XDT_m2230307-143	NA	03/08/23 01:59
Instrument Blank	SLC0109-IBLF	XDT_m2230307-153	NA	03/08/23 02:37
Calibration Check	SLC0109-CCVF	XDT_m2230307-154	NA	03/08/23 02:41
Calibration Blank	SLC0109-CCBF	XDT_m2230307-155	NA	03/08/23 02:47

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GC00005
Sequence: SLC0028
Standard ID: L002006

Lab Sample ID	Analyte	True	Found	%R	Units
SLC0028-IFA1	Chromium-52	0	0.8390		ug/L
	Chromium-53	0	4.4050		ug/L
	Lead-208	0	0.0240		ug/L
	Silver-107	0	-0.0020		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GC00005
Sequence: SLC0028
Standard ID: L002006

Lab Sample ID	Analyte	True	Found	%R	Units
SLC0028-IFB1	Chromium-52	20.000	19.858	99.3	ug/L
	Chromium-53	20.000	23.335	117	ug/L
	Lead-208	0	0.0350		ug/L
	Silver-107	20.000	17.996	90.0	ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GC00021
Sequence: SLC0078
Standard ID: L002006

Lab Sample ID	Analyte	True	Found	%R	Units
SLC0078-IFA1	Chromium-52	0	0.9600		ug/L
	Chromium-53	0	3.2240		ug/L
	Lead-208	0	0.0310		ug/L
	Silver-107	0	0.0320		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GC00021
Sequence: SLC0078
Standard ID: L002006

Lab Sample ID	Analyte	True	Found	%R	Units
SLC0078-IFB1	Chromium-52	20.000	20.054	100	ug/L
	Chromium-53	20.000	22.295	111	ug/L
	Lead-208	0	0.0420		ug/L
	Silver-107	20.000	18.571	92.9	ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GC00026
Sequence: SLC0109
Standard ID: L002006

Lab Sample ID	Analyte	True	Found	%R	Units
SLC0109-IFA1	Chromium-52	0	0.8650		ug/L
	Chromium-53	0	5.2110		ug/L

* Indicates %R outside of QC limits
NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

Analytical Resources, LLC
Analytical Chemists and Consultants

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GC00026
Sequence: SLC0109
Standard ID: L002006

Lab Sample ID	Analyte	True	Found	%R	Units
SLC0109-IFB1	Chromium-52	20.000	19.835	99.2	ug/L
	Chromium-53	20.000	24.812	124	ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

DETECTION LEVEL STANDARD
EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GC00005
Sequence: SLC0028
Lab Sample ID: SLC0028-CRL1

Analyte	True	Found	%R	Units	QC Limts
Chromium-52	0.50000	0.446	89.2	ug/L	50 - 150
Chromium-53	0.50000	0.480	96.0	ug/L	50 - 150
Lead-208	0.10000	0.0980	98.0	ug/L	50 - 150
Silver-107	0.20000	0.192	96.0	ug/L	50 - 150

* Values outside of QC limits

DETECTION LEVEL STANDARD
EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GC00021
Sequence: SLC0078
Lab Sample ID: SLC0078-CRL1

Analyte	True	Found	%R	Units	QC Limts
Chromium-52	0.50000	0.579	116	ug/L	50 - 150
Chromium-53	0.50000	0.465	93.0	ug/L	50 - 150
Lead-208	0.10000	0.100	100	ug/L	50 - 150
Silver-107	0.20000	0.207	104	ug/L	50 - 150

* Values outside of QC limits

DETECTION LEVEL STANDARD
EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GC00026
Sequence: SLC0109
Lab Sample ID: SLC0109-CRL1

Analyte	True	Found	%R	Units	QC Limts
Chromium-52	0.50000	0.472	94.4	ug/L	50 - 150
Chromium-53	0.50000	0.499	99.8	ug/L	50 - 150

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00005
Laboratory ID: SLC0028-HCV1
Sequence: SLC0028
Standard ID: L002008

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	200.00	201	0.5	10.00
Chromium-53	200.00	195	-2.3	10.00
Lead-208	200.00	198	-1.2	10.00
Silver-107	200.00	194	-2.9	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00005
Laboratory ID: SLC0028-HCV2
Sequence: SLC0028
Standard ID: L002009

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	300.00	301	0.4	10.00
Chromium-53	300.00	297	-1.0	10.00
Lead-208	300.00	306	1.8	10.00
Silver-107	300.00	297	-1.1	10.00

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00021
Laboratory ID: SLC0078-HCV1
Sequence: SLC0078
Standard ID: L002008

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	200.00	195	-2.4	10.00
Chromium-53	200.00	195	-2.6	10.00
Lead-208	200.00	184	-8.1	10.00
Silver-107	200.00	191	-4.7	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00021
Laboratory ID: SLC0078-HCV2
Sequence: SLC0078
Standard ID: L002009

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	300.00	291	-2.9	10.00
Chromium-53	300.00	291	-2.9	10.00
Lead-208	300.00	259	-13.6	10.00
Silver-107	300.00	279	-7.1	10.00

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00026
Laboratory ID: SLC0109-HCV1
Sequence: SLC0109
Standard ID: L002008

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	200.00	200	-0.1	10.00
Chromium-53	200.00	198	-1.2	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00026
Laboratory ID: SLC0109-HCV2
Sequence: SLC0109
Standard ID: L002009

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	300.00	304	1.2	10.00
Chromium-53	300.00	301	0.5	10.00

* Values outside of QC limits

HOLDING TIME SUMMARY

Analysis: EPA 6020B

Laboratory: Analytical Resources, LLC SDG: 23A0171

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

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1254 23A0171-01	12/08/22 08:39	12/08/22 17:18	02/24/23 16:23	78	180	03/08/23 00:42	90	180	
LDW23-SS1254 23A0171-01	12/08/22 08:39	12/08/22 17:18	02/24/23 16:23	78	180	03/07/23 04:17	89	180	
LDW23-SS1257 23A0171-02	12/08/22 09:16	12/08/22 17:18	02/24/23 16:23	78	180	03/08/23 00:46	90	180	
LDW23-SS1257 23A0171-02	12/08/22 09:16	12/08/22 17:18	02/24/23 16:23	78	180	03/07/23 04:21	89	180	
LDW23-SS1262 23A0171-03	12/08/22 10:36	12/08/22 17:18	02/24/23 16:23	78	180	03/08/23 00:50	90	180	
LDW23-SS1262 23A0171-03	12/08/22 10:36	12/08/22 17:18	02/24/23 16:23	78	180	03/07/23 04:26	89	180	
LDW23-SS1245 23A0171-04	12/08/22 11:14	12/08/22 17:18	02/24/23 16:23	78	180	03/07/23 04:30	89	180	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: ICPMS1

Analyte	MDL	RL	Units
Chromium-52	0.26	0.50	mg/kg
Chromium-53	0.24	0.50	mg/kg
Lead-208	0.05	0.10	mg/kg
Silver-107	0.02	0.20	mg/kg

METHOD DETECTION AND REPORTING LIMITS

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: ICPMS2

Analyte	MDL	RL	Units
Chromium-52	0.26	0.50	mg/kg
Chromium-53	0.24	0.50	mg/kg
Lead-208	0.05	0.10	mg/kg
Silver-107	0.02	0.20	mg/kg

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCU10
Lot Number:	P2-CU682108
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Copper
Starting Material:	Cu Metal
Starting Material Lot#:	2095
Starting Material Purity:	99.9996%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10013 ± 30 µg/mL

Density: 1.032 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9977 ± 50 µg/mL**
ICP Assay NIST SRM 3114 Lot Number: 121207

Assay Method #2 **10024 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10007 ± 46 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.007542	M	Eu	<	0.000942	O	Na		0.001434	M	Se	<	0.016971	M	Zn	<	0.005657
O	Al	<	0.000609	O	Fe		0.008700	M	Nb	<	0.000942	O	Si		0.003052	M	Zr	<	0.000942
M	As	<	0.010371	M	Ga	<	0.000942	M	Nd	<	0.000942	M	Sm	<	0.000942				
M	Au	<	0.001885	M	Gd	<	0.000942	M	Ni		0.003781	M	Sn	<	0.005657				
O	B		0.003663	M	Ge	<	0.005657	M	Os	<	0.000942	M	Sr	<	0.000942				
M	Ba		0.004253	M	Hf	<	0.000942	O	P	<	0.031668	M	Ta	<	0.000942				
M	Be	<	0.000942	O	Hg	<	0.007064	M	Pb		0.005789	M	Tb	<	0.000942				
M	Bi	<	0.000942	M	Ho	<	0.000942	M	Pd	<	0.000942	M	Te	<	0.004714				
O	Ca		0.002304	M	In	<	0.000942	M	Pr	<	0.000942	M	Th	<	0.000942				
M	Cd	<	0.000942	M	Ir	<	0.000942	M	Pt	<	0.000942	O	Ti	<	0.002801				
M	Ce	<	0.000942	O	K		0.000763	M	Rb	<	0.000942	M	Tl	<	0.000942				
M	Co		0.001890	M	La	<	0.000942	M	Re	<	0.000942	M	Tm	<	0.000942				
M	Cr	<	0.005657	O	Li	<	0.000243	i	Rh	<		M	U	<	0.000942				
M	Cs	<	0.000942	M	Lu	<	0.000942	M	Ru	<	0.039588	M	V	<	0.003771				
s	Cu	<		O	Mg		0.000320	O	S		0.007174	M	W	<	0.005657				
M	Dy	<	0.000942	O	Mn		0.000793	M	Sb	<	0.001885	M	Y	<	0.000942				
M	Er	<	0.000942	M	Mo	<	0.005657	M	Sc	<	0.000942	M	Yb	<	0.000942				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 63.55 +2 6 $Cu(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4, HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Cu Containing Samples (Preparation and Solution) -Metal (soluble in HNO_3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 63 amu	10 ppt	n/a	40Ar23Na 47Ti16O, 14N12C37Cl, 16O12C35Cl, 23Na40Ca
ICP-OES 219.958 nm	0.01/.002 µg/mL	1	Th, Ta, Nb, U, Hf
ICP-OES 224.700 nm	0.01/.001 µg/mL	1	Pb, Ir, Ni, W
ICP-OES 324.754 nm	0.06/.001 µg/mL		Nb, U, Th, Mo, Hf

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 24, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 24, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGPB10
Lot Number:	S2-PB713228
Matrix:	0.5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Lead
Starting Material:	Lead Nitrate
Starting Material Lot#:	2343
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10042 ± 31 µg/mL

Density: 1.015 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10024 ± 41 µg/mL**
ICP Assay NIST SRM 3128 Lot Number: 101026

Assay Method #2 **10054 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000310	M	Eu	<	0.000310	M	Na		0.001470	M	Se	<	0.009100	O	Zn	0.006155
O	Al		0.017098	O	Fe		0.002496	M	Nb	<	0.000310	O	Si		0.003761	O	Zr	< 0.001700
M	As	<	0.003100	M	Ga	<	0.000310	M	Nd	<	0.000310	M	Sm	<	0.000310			
M	Au	<	0.000910	M	Gd	<	0.000310	O	Ni		0.001709	M	Sn	<	0.001300			
O	B	<	0.005600	M	Ge	<	0.002200	M	Os	<	0.000310	O	Sr		0.000444			
O	Ba		0.007865	M	Hf	<	0.000310	O	P	<	0.038000	M	Ta	<	0.000310			
O	Be	<	0.000320	M	Hg	<	0.002200	s	Pb	<		M	Tb	<	0.000610			
M	Bi	<	0.028000	M	Ho	<	0.000310	M	Pd	<	0.000610	M	Te	<	0.000310			
O	Ca		0.019834	M	In	<	0.000310	M	Pr	<	0.000310	M	Th	<	0.000310			
O	Cd	<	0.000630	M	Ir	<	0.000310	M	Pt	<	0.000910	O	Ti		0.005129			
M	Ce		0.004787	O	K		0.008207	M	Rb	<	0.006700	M	Tl	<	0.016000			
M	Co	<	0.000610	M	La	<	0.001900	M	Re	<	0.000310	M	Tm	<	0.000310			
O	Cr	<	0.001500	O	Li	<	0.000110	O	Rh	<	0.007700	M	U	<	0.000310			
M	Cs	<	0.006100	M	Lu	<	0.000310	M	Ru	<	0.001300	M	V	<	0.001600			
M	Cu	<	0.001600	O	Mg		0.003317	O	S	<	0.052000	M	W	<	0.000910			
M	Dy	<	0.000310	O	Mn	<	0.001600	O	Sb	<	0.015000	M	Y	<	0.000310			
M	Er	<	0.000310	M	Mo	<	0.000610	O	Sc	<	0.000630	M	Yb	<	0.000310			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 207.20 +2 6 $Pb(H_2O)_6^{+2}$

Chemical Compatibility - Soluble in HCl, HF and HNO_3. Avoid H_2SO_4. Stable with most metals and inorganic anions forming insoluble carbonate, borate, sulfate, sulfite, sulfide, phosphate, oxalate, chromate, tannate, iodate, and cyanide in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO_3 / LDPE container.

Pb Containing Samples (Preparation and Solution) -Metal (Best dissolved in 1:1 H_2O / HNO_3); Oxides (The many different Pb oxides are soluble in HNO_3 with the exception of PbO_2 which is soluble in HCl or HF); Ores and Alloys (Best attacked using 1:1 H_2O / HNO_3); Organic Matrices (Dry ash and dissolve in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 208 amu	5 ppt	n/a	192Pt16O, 192Os16O
ICP-OES 168.215 nm	0.03 / 0.003 µg/mL	1	Co
ICP-OES 217.000 nm	0.09 / 0.03 µg/mL	1	W, Ir, Hf, Sb, Th
ICP-OES 220.353 nm	0.04 / 0.006 µg/mL	1	Bi, Nb

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

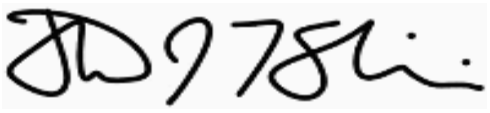
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Christiansburg, VA 24073 USA
inorganicventures.com

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info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGZN10
Lot Number:	S2-ZN711249
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Zinc
Starting Material:	Zinc Metal
Starting Material Lot#:	2349
Starting Material Purity:	99.9988%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL

Density: 1.029 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9981 ± 56 µg/mL**
ICP Assay NIST SRM 3168a Lot Number: 120629

Assay Method #2 **9987 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10002 ± 32 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002000	M	Eu	<	0.000500	O	Na		0.008713	M	Se	<	0.048000	s	Zn	<
O	Al	<	0.011000	O	Fe		0.015467	M	Nb	<	0.000500	O	Si		0.007842	M	Zr	< 0.000500
O	As	<	0.012000	M	Ga	<	0.004900	M	Nd	<	0.000500	M	Sm	<	0.000500			
M	Au	<	0.006500	M	Gd	<	0.000500	O	Ni		0.003049	M	Sn		0.002614			
O	B	<	0.019000	M	Ge	<	0.009100	M	Os	<	0.000500	M	Sr	<	0.000500			
M	Ba	<	0.000500	M	Hf	<	0.000500	O	P	<	0.059000	M	Ta	<	0.000500			
O	Be	<	0.000230	O	Hg	<	0.003800	M	Pb		0.016774	M	Tb	<	0.000500			
M	Bi	<	0.002400	M	Ho	<	0.000500	M	Pd	<	0.001000	M	Te	<	0.017000			
O	Ca		0.052283	M	In	<	0.003500	M	Pr	<	0.000500	M	Th	<	0.000500			
O	Cd		0.000588	M	Ir	<	0.001000	M	Pt	<	0.000500	M	Ti	<	0.002000			
M	Ce	<	0.000500	O	K		0.017209	M	Rb	<	0.002500	M	Tl	<	0.000500			
M	Co		0.000653	M	La	<	0.000500	M	Re	<	0.000500	M	Tm	<	0.000500			
O	Cr		0.001089	O	Li	<	0.000230	M	Rh	<	0.000500	M	U	<	0.000500			
M	Cs	<	0.000500	M	Lu	<	0.000500	M	Ru	<	0.005000	M	V	<	0.000500			
O	Cu		0.001938	O	Mg		0.000871	O	S	<	0.048000	M	W	<	0.001000			
M	Dy	<	0.000500	O	Mn		0.000172	M	Sb	<	0.004300	M	Y	<	0.000500			
M	Er	<	0.000500	M	Mo	<	0.001500	O	Sc	<	0.000900	M	Yb	<	0.000500			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 65.39 +2 4 Zn(OH)(aq)1+
Chemical Compatibility -Stable in HCl, HNO3, H2SO4 ,HF, H3PO4. Avoid basic media forming insoluble carbonate and hydroxide. Stable with most metals and inorganic anions in acidic media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.
Zn Containing Samples (Preparation and Solution) -Metal (soluble in HNO3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO3); Organic based (dry ash at 4500C and dissolve ash in HCl) (sulfuric/peroxide acid digestion)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 66 amu	7 ppt	N/A	50Ti16O,50Cr16O, 50V16O, 34S16O2, 32S16O18O, 32S17O2, 33S16O17O, 32S34S, 33S2
ICP-OES 202.548 nm	0.004/0.0002 µg/mL	1	Nb, Cu, Co, Hf
ICP-OES 206.200 nm	0.006/0.0006 µg/mL	1	Sb, Ta, Bi, Os
ICP-OES 213.856 nm	0.002/0.0004 µg/mL	1	Ni, Cu, V

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 22, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 22, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

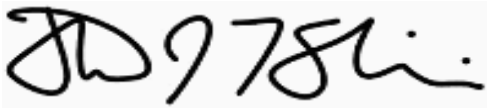
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSE10
Lot Number:	S2-SE711004
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Selenium
Starting Material:	Se Metal
Starting Material Lot#:	1962
Starting Material Purity:	99.9991%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9955 ± 61 µg/mL

Density: 1.035 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9955 ± 50 µg/mL**
ICP Assay NIST SRM 3149 Lot Number: 100901

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002242	M	Eu	<	0.000373	O	Na		0.013654	s	Se	<		O	Zn		0.002374
M	Al		0.004450	M	Fe		0.008478	O	Nb	<	0.002975	O	Si		0.006249	M	Zr	<	0.001868
O	As	<	0.022040	M	Ga	<	0.000373	M	Nd	<	0.000373	M	Sm	<	0.000373				
M	Au	<	0.000373	M	Gd	<	0.000373	O	Ni		0.001843	M	Sn		0.000847				
O	B	<	0.007714	M	Ge	<	0.002616	M	Os	<	0.000373	M	Sr	<	0.001121				
M	Ba	<	0.001495	M	Hf	<	0.000373	O	P	<	0.022040	M	Ta	<	0.000373				
M	Be	<	0.001495	M	Hg	<	0.002240	M	Pb		0.006358	M	Tb	<	0.006353				
M	Bi	<	0.000373	M	Ho	<	0.000373	M	Pd	<	0.000373	M	Te	<	0.012707				
O	Ca		0.006530	M	In	<	0.000373	M	Pr	<	0.001495	M	Th	<	0.002990				
M	Cd		0.001165	M	Ir	<	0.000373	M	Pt	<	0.000373	M	Ti	<	0.003363				
M	Ce	<	0.000373	O	K		0.001999	M	Rb	<	0.001868	M	Tl		0.008584				
M	Co	<	0.000373	M	La	<	0.001121	M	Re	<	0.000373	M	Tm	<	0.000373				
M	Cr		0.002861	O	Li		0.000062	M	Rh	<	0.000373	M	U	<	0.000373				
M	Cs	<	0.001121	M	Lu	<	0.000373	M	Ru	<	0.001493	M	V	<	0.000747				
M	Cu	<	0.000747	O	Mg		0.001156	O	S		0.024591	M	W	<	0.002242				
M	Dy	<	0.000373	M	Mn	<	0.000373	M	Sb	<	0.002242	M	Y	<	0.000373				
M	Er	<	0.000373	O	Mo	<	0.003195	M	Sc	<	0.001121	M	Yb	<	0.000373				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 78.96 +4 6 H_2SeO_3

Chemical Compatibility -Soluble in HCl, HNO_3,H_3PO_4, H_2SO_4 and HF aqueous matrices and water. It is stable with most inorganic anions but many cationic metals form the insoluble selenites under pH neutral conditions. When fluorinated and/or under acidic conditions precipitation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Se Containing Samples (Preparation and Solution) -Metal (soluble in HNO_3); Oxides (readily soluble in water); Minerals and alloys (acid digestion with HNO_3or HNO_3 / HF); Organic Matrices (acid digestion with hot concentrated H_2SO_4 accompanied by the careful dropwise addition of H_2O_2 until clear).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 82 amu	200 ppt	N/A	12C35Cl2
ICP-OES 196.026 nm	0.08/0.006 µg/mL	1	Fe
ICP-OES 203.985 nm	0.2/0.05 µg/mL	1	Sb, Ir, Cr, Ta
ICP-OES 206.279 nm	0.3/0.16 µg/mL	1	Cr, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 17, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMO10
Lot Number:	S2-MO706255
Matrix:	H2O tr. NH4OH
Value / Analyte(s):	10 000 µg/mL ea: Molybdenum
Starting Material:	Ammonium Molybdate
Starting Material Lot#:	2361
Starting Material Purity:	99.9893%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10026 ± 47 µg/mL

Density: 1.011 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10032 ± 68 µg/mL**
ICP Assay NIST SRM 3134 Lot Number: 130418

Assay Method #2 **10020 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000590	M	Eu	<	0.000300	M	Na		0.008739	M	Se	<	0.008000	M	Zn		0.005942
M	Al		0.005592	M	Fe	<	0.006500	M	Nb	<	0.029000	i	Si	<		M	Zr	<	0.001800
M	As	<	0.002100	M	Ga	<	0.000300	i	Nd	<		M	Sm	<	0.000300				
M	Au	<	0.000300	M	Gd	<	0.000300	M	Ni	<	0.008000	M	Sn	<	0.008900				
M	B	<	0.003300	M	Ge	<	0.000300	M	Os	<	0.000590	M	Sr		0.001747				
M	Ba		0.016778	M	Hf	<	0.001800	i	P	<		M	Ta	<	0.004200				
M	Be	<	0.000890	M	Hg	<	0.003300	M	Pb	<	0.000300	M	Tb	<	0.000300				
M	Bi	<	0.000890	M	Ho	<	0.000300	M	Pd	<	0.001800	M	Te	<	0.021000				
O	Ca		0.062920	M	In	<	0.032000	M	Pr	<	0.013000	M	Th	<	0.000300				
O	Cd	<	0.026000	M	Ir	<	0.000300	M	Pt	<	0.000300	O	Ti	<	0.032000				
M	Ce	<	0.008300	M	K		1.293372	M	Rb		0.045442	M	Tl		0.012584				
M	Co		0.005942	M	La	<	0.000300	M	Re	<	0.000300	M	Tm	<	0.000300				
M	Cr		0.005243	O	Li		0.000594	M	Rh	<	0.000300	M	U	<	0.005300				
M	Cs		0.005243	M	Lu	<	0.000300	M	Ru	<	0.079000	M	V	<	0.000890				
M	Cu		0.022371	M	Mg		0.005592	i	S	<		M	W		0.873900				
M	Dy	<	0.000300	M	Mn	<	0.005900	M	Sb		0.015031	M	Y	<	0.000300				
M	Er	<	0.000300	s	Mo	<		M	Sc	<	0.001200	M	Yb	<	0.000300				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 95.94 +6 6,7,8,9 [MoO4]-2(chemical form as received)

Chemical Compatibility -Mo is received in a NH4OH matrix giving the operator the option of using HCl or HF to stabilize acidic solutions. The [MoO4]-2 is soluble in concentrated HCl [MoOCl5]-2, dilute HF / HNO3 [MoOF5]-2 and basic media [MoO4]-2. Stable at ppm levels with some metals provided it is fluorinated. Do not mix with Alkaline or Rare Earths when HF is present. Stable with most inorganic anions provided it is in the [MoO4]-2 chemical form.

Stability - 2-100 ppb levels stable (alone or mixed with all other metals that are at comparable levels) as the [MoOF5]-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the [MoO4]-2 chemically stable for years in 1% NH4OH in a LDPE container.

Mo Containing Samples (Preparation and Solution) -Metal (Soluble in HF / HNO3 or hot dilute HCl); Oxide (soluble in HF or NH4OH) ; Organic Matrices (Dry ash at 450EC in Pt0 and dissolve oxide with HF or HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 95 amu	3 ppt	n/a	40Ar39K16O,79Br16O,190Os2+,190Pt2+
ICP-OES 202.030 nm	0.008 / 0.0002 µg/mL	1	Os, Hf
ICP-OES 203.844 nm	0.012 / 0.002 µg/mL	1	
ICP-OES 204.598 nm	0.012 / 0.001 µg/mL	1	Ir, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 04, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **July 04, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Christiansburg, VA 24073 USA
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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGTL10
Lot Number:	T2-TL714687
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Thallium
Starting Material:	TlNO3
Starting Material Lot#:	2118
Starting Material Purity:	99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10030 ± 42 µg/mL

Density: 1.036 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10040 ± 43 µg/mL**
ICP Assay NIST SRM 3158 Lot Number: 151215

Assay Method #2 **10010 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL(

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000200	M	Eu	<	0.000200	O	Na		0.002489	M	Se	<	0.011019	O	Zn		0.002298
O	Al	<	0.004184	O	Fe	<	0.002824	M	Nb	<	0.000200	O	Si		0.003760	M	Zr	<	0.000200
M	As	<	0.002003	M	Ga	<	0.000200	M	Nd	<	0.000200	M	Sm	<	0.000200				
O	Au	<	0.002824	M	Gd	<	0.000200	M	Ni		0.001724	M	Sn	<	0.000601				
O	B	<	0.004184	M	Ge	<	0.000801	M	Os	<	0.000198	O	Sr	<	0.000313				
M	Ba	<	0.000400	M	Hf	<	0.000200	O	P	<	0.010460	M	Ta	<	0.000200				
O	Be	<	0.000104	M	Hg	<	0.000794	M	Pb		0.000811	M	Tb	<	0.000200				
M	Bi	<	0.005209	M	Ho	<	0.000200	M	Pd	<	0.000400	M	Te	<	0.005008				
O	Ca		0.002436	M	In	<	0.000200	M	Pr	<	0.000200	M	Th	<	0.000200				
M	Cd		0.001318	M	Ir	<	0.000198	M	Pt	<	0.000801	O	Ti	<	0.001255				
M	Ce	<	0.000200	O	K		0.006175	M	Rb	<	0.000200	s	Tl	<					
M	Co	<	0.000601	M	La	<	0.000200	M	Re	<	0.000200	M	Tm	<	0.000200				
M	Cr	<	0.000801	O	Li	<	0.000177	M	Rh	<	0.000200	M	U	<	0.000200				
M	Cs	<	0.003606	M	Lu	<	0.000200	M	Ru	<	0.000397	M	V	<	0.002203				
M	Cu	<	0.001001	O	Mg		0.000529	O	S	<	0.015690	M	W	<	0.000601				
M	Dy	<	0.000200	M	Mn	<	0.000801	M	Sb	<	0.000400	M	Y	<	0.000200				
M	Er	<	0.000200	M	Mo	<	0.001202	O	Sc	<	0.000711	M	Yb	<	0.000200				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 204.38 +1 6 Tl(H2O)61+
Chemical Compatibility - Soluble in HCl, HNO3, and H2SO4. Stable with most metals and inorganic anions. The sulfite, thiocyanate and oxalate are moderately soluble; the phosphate and arsenite are slightly soluble and the sulfide is insoluble.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
Tl Containing Samples)Preparation and Solution) -Metal (Best dissolved in HNO3 which forms chiefly the Tl1+ ion.); Oxide (The thallous oxide is readily soluble in water. The thallic oxide requires high levels of acid); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in HCl).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 205 amu	2 ppt	N/A	189Os16O
ICP-OES 190.864 nm	0.04 / 0.004 µg/mL	1	V, Ti
ICP-OES 276.787 nm	0.1 / 0.01 µg/mL	1	Ta, V, Fe, Cr
ICP-OES 351.924 nm	0.2 / 0.02 µg/mL	1	Th, Ce, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 08, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **February 08, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

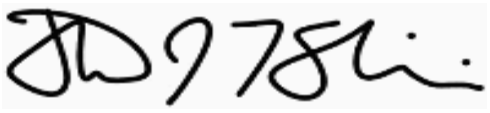
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCD10
Lot Number:	S2-CD710508
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Cadmium
Starting Material:	Cd Metal
Starting Material Lot#:	1953
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10008 ± 30 µg/mL

Density: 1.029 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10010 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #2 **10011 ± 30 µg/mL**
ICP Assay NIST SRM 3108 Lot Number: 130116

Assay Method #3 **10003 ± 30 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag	<	0.003200	O	Eu	<	0.002500	O	Na		0.005499	M	Se	<	0.005700	O	Zn	<	0.001100
O	Al		0.008903	O	Fe		0.000602	M	Nb	<	0.000400	O	Si		0.016758	O	Zr	<	0.002600
M	As	<	0.003600	M	Ga	<	0.001200	M	Nd	<	0.000800	M	Sm	<	0.000400				
M	Au	<	0.000810	M	Gd	<	0.000400	M	Ni	<	0.003600	M	Sn	<	0.003200				
O	B		0.004189	O	Ge	<	0.012000	M	Os	<	0.000810	O	Sr	<	0.000330				
M	Ba	<	0.002400	M	Hf	<	0.000400	O	P	<	0.022000	M	Ta	<	0.000800				
M	Be	<	0.000400	M	Hg	<	0.001700	M	Pb	<	0.002400	M	Tb	<	0.000400				
M	Bi	<	0.000400	M	Ho	<	0.000400	M	Pd	<	0.001200	M	Te	<	0.008000				
O	Ca		0.011259	O	In	<	0.013000	M	Pr	<	0.000400	M	Th	<	0.000400				
s	Cd	<		M	Ir	<	0.000410	M	Pt	<	0.000400	O	Ti		0.000602				
M	Ce	<	0.000400	O	K		0.005237	M	Rb	<	0.004400	M	Tl		0.000523				
M	Co	<	0.000400	M	La	<	0.000400	M	Re	<	0.000400	M	Tm	<	0.000400				
O	Cr	<	0.005100	O	Li	<	0.000054	M	Rh	<	0.000400	M	U	<	0.000400				
M	Cs	<	0.002400	M	Lu	<	0.000400	M	Ru	<	0.002500	M	V	<	0.002000				
O	Cu	<	0.004800	O	Mg		0.000288	O	S	<	0.022000	M	W	<	0.000400				
M	Dy	<	0.000400	O	Mn	<	0.000860	O	Sb	<	0.018000	M	Y	<	0.000400				
M	Er	<	0.000400	M	Mo	<	0.001600	O	Sc	<	0.000430	M	Yb	<	0.000400				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 112.41 +2 4 Cd2(OH) (aq)3+ and Cd(OH)(aq)

Chemical Compatibility -Stable in HCl, HNO3, H2SO4 , and HF. Avoid basic media forming insoluble carbonate and hydroxide.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO3 / LDPE container.

Cd Containing Samples (Preparation and Solution) -Metal (soluble in HNO3); Oxides (soluble in HCl or HNO3); Ores (dissolve in HCl /HNO3 then take to fumes with H2SO4. The silica and lead sulfate are filtered off after the addition of water); Organic based (dry ash at 450°C and dissolve ash in HCl), (sulfuric / peroxide acid digestion).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 111 amu	11 ppt	n/a	95Mo16O
ICP-OES 214.438 nm	0.003 / 0.0003 µg/mL	1	Pt, Ir
ICP-OES 226.502 nm	0.003 / 0.0003 µg/mL	1	Ir
ICP-OES 228.802 nm	0.003 / 0.0003 µg/mL	1	Co, Ir, As, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 01, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 01, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMN10
Lot Number:	S2-MN704240
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Manganese
Starting Material:	Mn Metal
Starting Material Lot#:	2275
Starting Material Purity:	99.9909%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10011 ± 30 µg/mL

Density: 1.035 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9989 ± 69 µg/mL**
ICP Assay NIST SRM 3132 Lot Number: 050429

Assay Method #2 **10011 ± 25 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10024 ± 47 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001500	M	Eu	<	0.000730	O	Na		0.176097	M	Se	<	0.006600	M	Zn		0.009925
O	Al		0.004322	M	Fe	<	0.650000	M	Nb	<	0.000730	O	Si		0.097654	M	Zr	<	0.000730
M	As	<	0.008000	M	Ga		0.004322	M	Nd	<	0.001500	M	Sm	<	0.000730				
M	Au	<	0.000730	M	Gd	<	0.000730	M	Ni		0.024013	M	Sn	<	0.002200				
M	B		0.068838	M	Ge	<	0.004400	M	Os	<	0.000730	O	Sr		0.000928				
M	Ba	<	0.001500	M	Hf	<	0.000730	i	P	<		M	Ta	<	0.000730				
M	Be	<	0.000730	M	Hg	<	0.002200	M	Pb		0.007364	M	Tb	<	0.000730				
M	Bi	<	0.003000	M	Ho	<	0.000730	M	Pd	<	0.000730	M	Te	<	0.019000				
O	Ca		0.062434	M	In	<	0.003000	M	Pr	<	0.000730	M	Th	<	0.000730				
M	Cd	<	0.001500	M	Ir	<	0.000730	M	Pt	<	0.000730	O	Ti	<	0.006500				
M	Ce	<	0.007300	O	K		0.006403	M	Rb	<	0.006600	M	Tl	<	0.000730				
O	Co		0.014728	M	La	<	0.003000	M	Re	<	0.000730	M	Tm	<	0.000730				
O	Cr		0.272151	O	Li		0.000416	M	Rh	<	0.003000	M	U	<	0.001500				
M	Cs	<	0.000730	M	Lu	<	0.000730	M	Ru	<	0.004400	M	V	<	0.000730				
O	Cu		0.007684	O	Mg		0.320177	i	S	<		M	W	<	0.004400				
M	Dy	<	0.001500	s	Mn	<		M	Sb	<	0.021000	O	Y		0.001360				
M	Er	<	0.001500	M	Mo		0.010245	O	Sc	<	0.004100	M	Yb	<	0.000730				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 54.94 +2 6 $Mn(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4 ,HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO_3/LDPE container.

Mn Containing Samples (Preparation and Solution) -Metal (Soluble in dilute acids); Oxides (Soluble in dilute acids); Ores (Dissolve with HCl. If silica is present add HF and then fume off silica by adding H_2SO_4 and heat to SO_3 fumes - dense white fumes).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 55 amu	10 ppt	n/a	40Ar14N1H,39K16O,37Cl18O,40Ar15N,38Ar17O,36Ar18O1H ,38Ar16O1H,37Cl17O1H,23Na32S
ICP-OES 257.610 nm	0.0014 / 0.00002 µg/mL	1	Ce, W, Re
ICP-OES 259.373 nm	0.0016 / 0.00002 µg/mL	1	U, Ta, Mo, Fe, Nb
ICP-OES 260.569 nm	0.0021 / 0.00002 µg/mL	1	Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 17, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSB10
Lot Number:	R2-SB688559
Matrix:	3% (v/v) HNO3 3% (w/v) tartaric acid
Value / Analyte(s):	10 000 µg/mL ea: Antimony
Starting Material:	Antimony Metal
Starting Material Lot#:	1857
Starting Material Purity:	99.9894%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10003 ± 47 µg/mL

Density: 1.061 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10003 ± 41 µg/mL**
ICP Assay NIST SRM 3102a Lot Number: 140911

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000200	M	Eu	<	0.000300	O	Na		0.140000	M	Se	<	0.007300	O	Zn		0.005000
M	Al		0.003200	O	Fe		0.060000	M	Nb	<	0.000100	O	Si		0.150000	O	Zr	<	0.006300
M	As	<	0.004400	M	Ga	<	0.000400	M	Nd	<	0.000100	M	Sm	<	0.000100				
M	Au	<	0.000210	M	Gd	<	0.000100	O	Ni		0.004800	M	Sn	<	0.001800				
M	B	<	0.011000	M	Ge	<	0.000600	M	Os	<	0.000110	O	Sr		0.000750				
O	Ba	<	0.004900	M	Hf	<	0.000100	O	P		0.540000	M	Ta		0.003300				
M	Be	<	0.000400	M	Hg	<	0.000110	M	Pb	<	0.000400	M	Tb	<	0.000100				
M	Bi	<	0.000200	M	Ho	<	0.000100	M	Pd	<	0.000210	M	Te	<	0.000600				
O	Ca		0.110000	M	In	<	0.000100	M	Pr	<	0.001600	M	Th	<	0.000100				
M	Cd	<	0.000200	M	Ir	<	0.000110	M	Pt	<	0.000600	M	Ti	<	0.002800				
M	Ce		0.006500	O	K		0.020000	M	Rb	<	0.001000	M	Tl	<	0.000100				
M	Co	<	0.000200	O	La	<	0.016000	M	Re	<	0.000100	M	Tm	<	0.000100				
M	Cr		0.006900	O	Li	<	0.000430	M	Rh	<	0.000300	M	U	<	0.000100				
M	Cs	<	0.000200	M	Lu	<	0.000100	M	Ru	<	0.000310	M	V	<	0.000800				
M	Cu	<	0.000600	O	Mg		0.021000	n	S	<		M	W	<	0.000200				
M	Dy	<	0.000100	O	Mn		0.001900	s	Sb	<		M	Y	<	0.000100				
M	Er	<	0.000100	M	Mo	<	0.000500	O	Sc	<	0.002300	M	Yb	<	0.000100				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 121.75 +3 6 Sb(O)C4H4O6-1

Chemical Compatibility -Stable in conc. HCl, dilute or conc. HF. Stable in dilute HNO3 as the fluoride or tartrate complex. Avoid basic media. Stable with most metals and inorganic anions in acidic media as the tartrate provided the acidity is not too high or the acid is oxidizing causing loss of the stabilizing tartrate ion. The fluoride complex of antimony is stable in strong acid but you should only mix with other metals that are fluorinated.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-2% HNO3 / LDPE container.

Sb Containing Samples (Preparation and Solution) -Metal and alloys (Soluble in H2O / HF / HNO3 mixture); Oxides (Soluble in HCl and tartaric acid or H2O / HF / HNO3 mixtures); Ores (fusion with Na2CO3 in Pt0 followed by dissolving the fuseate in a H2O / HF / HNO3 mixture); Organic based (sulfuric acid / hydrogen peroxide digestion)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 121 amu	5 ppt	N/A	105Pd16O, 89Y16O2
ICP-OES 206.833 nm	0.03/0.003 µg/mL	1	Ta, Cr, Ge, Hf
ICP-OES 217.581 nm	0.05/0.005 µg/mL	1	Nb, W, Re, Fe
ICP-OES 231.147 nm	0.06/0.006 µg/mL	1	Ni, Co, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 30, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 30, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAS10
Lot Number:	T2-AS718260
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Arsenic
Starting Material:	As Metal
Starting Material Lot#:	2208
Starting Material Purity:	99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10060 ± 40 µg/mL

Density: 1.037 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10062 ± 46 µg/mL**
ICP Assay NIST SRM 3103a Lot Number: 100818

Assay Method #2 **10055 ± 76 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	< 0.003200	M	Eu	< 0.000530	O	Na	0.032544	M	Se	< 0.006300	O	Zn	0.001952			
M	Al	0.007593	O	Fe	0.001475	O	Nb	< 0.012000	O	Si	0.238658	O	Zr	< 0.004100			
s	As	<	M	Ga	< 0.000530	M	Nd	< 0.000530	M	Sm	< 0.000530						
M	Au	< 0.003100	M	Gd	< 0.000530	M	Ni	< 0.002100	M	Sn	< 0.000530						
M	B	0.026035	M	Ge	< 0.001600	M	Os	< 0.000520	M	Sr	< 0.000530						
M	Ba	< 0.000530	M	Hf	< 0.000530	O	P	< 0.043000	M	Ta	< 0.000530						
O	Be	< 0.000360	M	Hg	< 0.001600	M	Pb	< 0.002100	M	Tb	< 0.000530						
M	Bi	< 0.000530	M	Ho	< 0.000530	M	Pd	< 0.001100	M	Te	< 0.004700						
O	Ca	0.004339	M	In	< 0.023000	M	Pr	< 0.005300	M	Th	< 0.000530						
M	Cd	< 0.001100	M	Ir	< 0.000520	M	Pt	< 0.000530	O	Ti	< 0.002300						
M	Ce	< 0.000530	O	K	0.002061	M	Rb	< 0.000530	M	Tl	< 0.000530						
M	Co	< 0.000530	M	La	< 0.001100	M	Re	< 0.000530	M	Tm	< 0.000530						
O	Cr	< 0.001800	O	Li	< 0.000120	M	Rh	< 0.000530	M	U	< 0.000530						
M	Cs	< 0.005300	M	Lu	< 0.000530	M	Ru	< 0.000520	M	V	< 0.002700						
M	Cu	< 0.001600	O	Mg	0.000154	O	S	0.028205	M	W	< 0.012000						
M	Dy	< 0.000530	O	Mn	0.000154	M	Sb	< 0.000530	M	Y	< 0.000530						
M	Er	< 0.000530	M	Mo	< 0.000530	O	Sc	< 0.001700	M	Yb	< 0.000530						

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 74.92 ; mix of +3 and +5 ; 6 ; H3AsO4 and HAsO2

Chemical Compatibility - Arsenic has no cationic chemistry. It is soluble in HCl, HNO3,H3PO4, H2SO4 and HF aqueous matrices water and NH4OH . It is stable with most inorganic anions (forms arsenate when boiled with chromate) but many cationic metals form the insoluble arsenates under pH neutral conditions. When fluorinated and / or under acidic conditions arsenate formation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO3 / LDPE container.

As Containing Samples (Preparation and Solution) - Metal (soluble in 1:1 H2O / HNO3); Oxides (the oxide exists in crystalline and amorphous forms where the amorphic form is more water soluble. The oxides typically dissolve in dilute acidic solutions when boiled); Minerals (one gram of powered sample is fused in a Ni crucible with 10 grams of a 1:1 mix of K2CO3 and KNO3 and the melt extracted with hot water); Organic Matrices (0.2 to 0.5 grams of sample are fused with 15 grams of a 1:1 Na2CO3 / Na2O2 mix in a Ni crucible. The fuseate is extracted with water and acidified with HNO3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 75 amu	20 ppt	N/A	40Ar35Cl, 59Co16O, 36Ar38Ar1H,8Ar37Cl,Ar39K, 150Nd2+,150Sm2+
ICP-OES 189.042 nm	0.05/0.005 µg/mL	1	Cr
ICP-OES 193.696 nm	0.1/0.01 µg/mL	1	V, Ge
ICP-OES 228.812 nm	0.1/0.01 µg/mL	1	Cd, Pt, Ir, Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGBA10
Lot Number:	R2-BA692576
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Barium
Starting Material:	Barium Nitrate
Starting Material Lot#:	1969
Starting Material Purity:	99.9982%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10022 ± 30 µg/mL

Density: 1.025 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1	**10018 ± 50 µg/mL** ICP Assay NIST SRM 3104a Lot Number: 140909
Assay Method #2	**10023 ± 31 µg/mL** Gravimetric NIST SRM Lot Number: See Sec. 4.2
Assay Method #3	**10023 ± 30 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000410	O	Eu	<	0.005200	O	Na		0.004610	M	Se	<	0.003700	O	Zn		0.000658
M	Al	<	0.003100	O	Fe		0.015707	M	Nb	<	0.000210	O	Si		0.005573	M	Zr	<	0.001300
M	As	<	0.001300	M	Ga	<	0.000210	M	Nd	<	0.000210	O	Sm	<	0.021000				
M	Au	<	0.001300	M	Gd	<	0.000210	M	Ni	<	0.000810	M	Sn	<	0.000410				
O	B	<	0.005200	M	Ge	<	0.002500	M	Os	<	0.000410	O	Sr		0.003850				
s	Ba	<		M	Hf	<	0.000810	O	P	<	0.026000	M	Ta	<	0.000410				
O	Be	<	0.000320	M	Hg	<	0.000210	M	Pb	<	0.002300	M	Tb	<	0.000210				
M	Bi	<	0.000210	M	Ho	<	0.000210	M	Pd	<	0.000210	M	Te	<	0.001900				
O	Ca		0.007093	M	In	<	0.000210	M	Pr	<	0.000210	M	Th	<	0.000210				
M	Cd	<	0.000210	M	Ir	<	0.000210	M	Pt	<	0.000210	M	Ti	<	0.002100				
M	Ce	<	0.001300	O	K		0.035467	M	Rb	<	0.002100	M	Tl	<	0.000210				
M	Co	<	0.000410	O	La	<	0.005200	M	Re	<	0.000210	M	Tm	<	0.000410				
M	Cr	<	0.001700	O	Li	<	0.000630	M	Rh	<	0.000210	M	U	<	0.000210				
M	Cs	<	0.003300	M	Lu	<	0.001700	M	Ru	<	0.000210	O	V	<	0.005200				
M	Cu	<	0.001300	O	Mg		0.000861	O	S		0.268539	M	W	<	0.000410				
M	Dy	<	0.000210	M	Mn	<	0.000410	M	Sb	<	0.001300	O	Y	<	0.005200				
M	Er	<	0.001300	M	Mo	<	0.000410	M	Sc	<	0.000410	M	Yb	<	0.001300				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 137.33 +2 6 $Ba(H_2O)_6^{+2}$
Chemical Compatibility - Soluble in HCl, and HNO_3. Avoid H_2SO_4, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, iodate, molybdate, sulfite and tungstate in neutral aqueous media.
Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1 -10,000 ppm solutions chemically stable for years in 1-3.5% HNO_3 / LDPE container.
Ba Containing Samples (Preparation and Solution) -Metal(is best dissolved in diluted HNO_3); Ores(Carbonate fusion in Pt0 followed by HCl dissolution. If sulfate is present dissolve the fuseate using HCl / tartaric acid to prevent $BaSO_4$ precipitate); Organic Matrices (dry ash and dissolve in dilute HCl.)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 138 amu	1 ppt	N/A	122Sn16O, 122Te16O
ICP-OES 230.424 nm	0.004/0.0005 µg/mL	1	Mo, Ir, Co
ICP-OES 233.527 nm	0.004/0.0003 µg/mL	1	
ICP-OES 455.403 nm	0.002/0.0001 µg/mL	1	Zr, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 11, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 11, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGBE10
Lot Number:	R2-BE692992
Matrix:	6% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Beryllium
Starting Material:	Beryllium Acetate
Starting Material Lot#:	2281
Starting Material Purity:	99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10032 ± 41 µg/mL

Density: 1.128 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10042 ± 67 µg/mL**
ICP Assay NIST SRM 3105a Lot Number: 090514

Assay Method #2 **10025 ± 51 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	< 0.001100	M	Eu	< 0.000270	O	Na	0.040962	M	Se	< 0.005000	M	Zn	0.013054			
O	Al	0.016205	O	Fe	0.015754	M	Nb	< 0.000270	O	Si	0.024307	O	Zr	< 0.001900			
M	As	< 0.002900	M	Ga	< 0.000270	M	Nd	< 0.000270	M	Sm	< 0.000270						
M	Au	< 0.000520	M	Gd	< 0.000270	M	Ni	< 0.003700	M	Sn	< 0.000790						
M	B	< 0.091000	M	Ge	< 0.000270	M	Os	< 0.000260	M	Sr	0.000630						
M	Ba	0.002700	M	Hf	< 0.000270	O	P	< 0.066000	M	Ta	< 0.000270						
s	Be	<	M	Hg	< 0.000520	M	Pb	< 0.000270	M	Tb	< 0.000270						
M	Bi	< 0.000530	M	Ho	< 0.000270	M	Pd	< 0.000520	M	Te	< 0.003700						
O	Ca	0.072022	M	In	< 0.000790	M	Pr	< 0.000270	M	Th	< 0.000270						
M	Cd	< 0.000790	M	Ir	< 0.000260	M	Pt	< 0.000270	O	Ti	< 0.000400						
M	Ce	< 0.000270	O	K	0.045014	M	Rb	< 0.000270	M	Tl	< 0.000790						
O	Co	< 0.003200	M	La	< 0.000270	M	Re	< 0.000270	M	Tm	< 0.000270						
O	Cr	< 0.001800	O	Li	< 0.000660	M	Rh	< 0.001100	M	U	< 0.000270						
M	Cs	0.001440	M	Lu	< 0.000270	M	Ru	< 0.000260	M	V	< 0.000790						
M	Cu	< 0.002100	O	Mg	0.016205	i	S	<	M	W	< 0.000530						
M	Dy	< 0.000270	M	Mn	0.001215	M	Sb	< 0.000270	M	Y	< 0.000270						
M	Er	< 0.000270	M	Mo	< 0.000530	O	Sc	< 0.000930	M	Yb	< 0.000270						

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 9.01 +2 4 $Be(H_2O)_4^{+2}$

Chemical Compatibility -Soluble in HCl, HNO_3, H_2SO_4 and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1 % HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 5-10 % HNO_3 / LDPE container.

Be Containing Samples (Preparation and Solution) - Meta l(is best dissolved in diluted H_2SO_4); BeO (boiling nitric, hydrochloric, or sulfuric acids or KHSO4 fusion); Ores (H_2SO_4/HF digestion or carbonate fusion in Pt0); Organic Matrices (sulfuric/peroxide digestion or nitric/sulfuric/perchloric acid decomposition, or dry ash and dissolution according to the BeO procedure above).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 9 amu	4 ppt	N/A	
ICP-OES 234.861 nm	0.0003/0.00016 µg/mL	1	Fe, Ta, Mo
ICP-OES 313.042 nm	0.0003/0.00009 µg/mL	1	V, Ce, U
ICP-OES 313.107 nm	0.0007/0.0005 µg/mL	1	Ce, Th, Tm

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION, PERIOD OF VALIDITY AND REVISION HISTORY

11.1 Certification Issue Date

May 13, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 13, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

11.4 Revision Status

- Revision 1 - Revised on Thursday, Jan 14, 2021 by utruong. Revision was made for the following reason: Modified Section 7 Chemical Form in Solution.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCO10
Lot Number:	R2-CO695285
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Cobalt
Starting Material:	Co Metal
Starting Material Lot#:	2326
Starting Material Purity:	99.9934%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10012 ± 31 µg/mL

Density: 1.056 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10031 ± 67 µg/mL**
ICP Assay NIST SRM 3113 Lot Number: 190630

Assay Method #2 **10019 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10000 ± 35 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	0.014660	M	Eu	<	0.000590	O	Na	0.007534	M	Se	<	0.019000	M	Zn	0.003461	
M	Al	< 0.024000	M	Fe	0.050905	M	Nb	<	0.000590	O	Si	0.075340	M	Zr	<	0.001200	
i	As	<	M	Ga	<	0.000590	M	Nd	<	0.000590	M	Sm	<	0.000590			
M	Au	< 0.004100	M	Gd	<	0.000590	O	Ni	0.427608	M	Sn	<	0.001200				
M	B	< 0.031000	M	Ge	<	0.003000	M	Os	<	0.000590	O	Sr	<	0.000260			
M	Ba	< 0.000590	M	Hf	<	0.000590	n	P	<		M	Ta	<	0.001200			
O	Be	< 0.001300	M	Hg	<	0.001800	M	Pb	0.003257	M	Tb	<	0.000590				
M	Bi	< 0.003000	M	Ho	<	0.000590	M	Pd	<	0.000590	M	Te	<	0.005300			
O	Ca	0.010588	M	In	<	0.001200	M	Pr	<	0.000590	M	Th	<	0.000590			
M	Cd	< 0.004700	M	Ir	<	0.001200	M	Pt	<	0.002400	M	Ti	<	0.014000			
M	Ce	< 0.000590	O	K	0.008144	M	Rb	<	0.000590	M	Tl	0.002647					
s	Co	<	M	La	<	0.000590	M	Re	<	0.000590	M	Tm	<	0.000590			
M	Cr	< 0.021000	O	Li	<	0.000130	M	Rh	<	0.000590	M	U	<	0.000590			
M	Cs	< 0.002400	M	Lu	<	0.000590	M	Ru	<	0.007100	O	V	<	0.000880			
M	Cu	0.189369	O	Mg	0.001893	n	S	<		M	W	<	0.000590				
M	Dy	< 0.000590	M	Mn	<	0.001800	M	Sb	<	0.003600	M	Y	<	0.000590			
M	Er	< 0.000590	M	Mo	<	0.002400	O	Sc	<	0.001600	M	Yb	<	0.000590			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.93 +2 6 $Co(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4 ,HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Co Containing Samples (Preparation and Solution) - Metal (soluble in HNO_3); Oxides (Soluble in HCl); Ores (dissolve in HCl / HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 59 amu	2 ppt	n/a	42Ca16O1H , 40Ar18O1H , 36Ar23Na, 43Ca16O, 24Mg35Cl
ICP-OES 228.616 nm	0.01/0.001 µg/mL	1	
ICP-OES 237.862 nm	0.01/0.002 µg/mL	1	W, Re, Al, Ta
ICP-OES 238.892 nm	0.01/0.002 µg/mL	1	Fe, W, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 04, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 04, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAG10
Lot Number:	S2-AG712977
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Silver
Starting Material:	Ag Shot
Starting Material Lot#:	2289
Starting Material Purity:	99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10051 ± 30 µg/mL

Density: 1.056 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10051 ± 52 µg/mL**
ICP Assay NIST SRM 3151 Lot Number: 160729

Assay Method #2 **10051 ± 19 µg/mL**
Volhard NIST SRM 999c Lot Number: 999c

Assay Method #3 **10049 ± 31 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

s	Ag	<		M	Eu	<	0.000260	O	Na		0.003811	M	Se	<	0.003900	O	Zn		0.048146
M	Al		0.002688	O	Fe		0.006419	M	Nb	<	0.000260	O	Si		0.005215	M	Zr	<	0.000260
M	As	<	0.001100	M	Ga	<	0.000260	M	Nd	<	0.000260	M	Sm	<	0.000260				
M	Au	<	0.000260	M	Gd	<	0.000260	O	Ni		0.001765	M	Sn		0.020060				
O	B	<	0.004300	M	Ge	<	0.002300	M	Os	<	0.001100	O	Sr	<	0.000110				
M	Ba	<	0.000520	M	Hf	<	0.000260	O	P	<	0.017000	M	Ta	<	0.000260				
O	Be	<	0.001100	M	Hg	<	0.000770	M	Pb	<	0.003600	M	Tb	<	0.000260				
M	Bi		0.004814	M	Ho	<	0.000260	M	Pd		0.044134	M	Te	<	0.009000				
O	Ca		0.005215	M	In		0.003691	M	Pr	<	0.000260	M	Th	<	0.000260				
M	Cd	<	0.000260	M	Ir	<	0.000520	M	Pt	<	0.001100	O	Ti	<	0.000440				
M	Ce	<	0.002100	O	K	<	0.008700	M	Rb	<	0.001100	M	Tl	<	0.004100				
O	Co	<	0.000330	M	La	<	0.000260	M	Re	<	0.000260	M	Tm	<	0.000260				
O	Cr	<	0.002500	O	Li	<	0.000110	M	Rh	<	0.000520	M	U	<	0.000260				
M	Cs	<	0.002600	M	Lu	<	0.000260	M	Ru	<	0.000260	M	V	<	0.000260				
O	Cu		0.357085	O	Mg		0.001203	O	S	<	0.017000	M	W	<	0.000260				
M	Dy	<	0.000260	O	Mn	<	0.000220	M	Sb	<	0.014000	M	Y	<	0.000260				
M	Er	<	0.000260	M	Mo	<	0.000260	O	Sc	<	0.000220	M	Yb	<	0.000260				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 107.87 +1 6 $Ag(H_2O)_6^+$

Chemical Compatibility -Stable in HNO_3, and HF. Avoid basic media. Ag forms more insoluble salts than any other metal. It also is subject to photochemical reduction to the metal in HCl media although 10 µg/mL solutions in 10% HCl [$AgCl_{x1-x}$] are commonly used in the analytical laboratory. The most common solubility problems exist with arsenate, arsenite , bromide, chloride, iodide, carbonate , chromate, cyanide, iodate, oxalate, oxide, sulfate, sulfide, tartrate, and thiocyanate in aqueous media. The addition of nitric acid renders many of these salts soluble.

Stability - 2-100 ppb levels stable for 75+ days when mixed with equivalent levels of all other elements including the precious metals (where chloride is present) when in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Ag Containing Samples (Preparation and Solution) -Metal (Soluble in HNO_3); Oxides (Soluble in HNO_3); Ores (Digestion with conc. HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 107 amu	1 ppt	N/A	91Zr16O
ICP-OES 243.779 nm	0.12/0.01 µg/mL	1	Mn, Th, Ni, Rh
ICP-OES 328.068 nm	0.007/0.0007 µg/mL	1	Ce, Rh, V
ICP-OES 338.289 nm	0.013/0.001 µg/mL	1	Ce, Cr, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCR(3)10
Lot Number:	S2-CR709784
Matrix:	10% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Chromium
Starting Material:	Cr Metal
Starting Material Lot#:	2328
Starting Material Purity:	99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10027 ± 41 µg/mL

Density: 1.072 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10027 ± 40 µg/mL**
ICP Assay NIST SRM 3112a Lot Number: 170630

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001700	M	Eu	<	0.003400	O	Na		0.090372	M	Se	<	0.012000	O	Zn	<	0.006100
M	Al		0.034916	O	Fe		0.246471	M	Nb	<	0.017000	n	Si	<		M	Zr	<	0.007800
M	As	<	0.028000	O	Ga	<	0.013000	M	Nd	<	0.013000	M	Sm	<	0.006900				
M	Au	<	0.001700	M	Gd	<	0.000560	M	Ni		0.016020	M	Sn		0.006983				
O	B	<	0.025000	O	Ge	<	0.014000	M	Os	<	0.000560	M	Sr		0.006367				
M	Ba	<	0.008900	M	Hf	<	0.000560	i	P	<		M	Ta	<	0.000560				
M	Be	<	0.013000	M	Hg	<	0.001700	M	Pb		0.010064	M	Tb	<	0.000560				
M	Bi	<	0.002300	M	Ho	<	0.000560	M	Pd	<	0.021000	M	Te	<	0.010000				
O	Ca		0.075995	M	In	<	0.000560	M	Pr	<	0.001700	M	Th	<	0.000560				
M	Cd	<	0.000560	M	Ir	<	0.000560	M	Pt	<	0.001200	O	Ti		0.013555				
M	Ce	<	0.001200	O	K		0.043132	i	Rb	<		M	Tl	<	0.000560				
M	Co	<	0.002600	M	La	<	0.001200	M	Re	<	0.001200	O	Tm	<	0.013000				
s	Cr	<		O	Li		0.000390	M	Rh	<	0.095000	M	U	<	0.000560				
M	Cs	<	0.007800	M	Lu	<	0.000560	M	Ru	<	0.087000	O	V		0.014993				
O	Cu		0.007599	O	Mg		0.000883	i	S	<		M	W	<	0.049000				
M	Dy	<	0.000560	M	Mn		0.008626	M	Sb	<	0.003400	M	Y	<	0.001700				
M	Er	<	0.019000	M	Mo	<	0.032000	M	Sc		0.003080	M	Yb	<	0.000560				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 52.00 +3 6 $Cr(H_2O)_6^{3+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4, HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Cr3 Containing Samples (Preparation and Solution) -Metal (soluble in HCl); Oxides/Ores (Chrome ore/oxides are very difficult to dissolve. The following procedures [A-D] are commonly used: A. Fusion with $KHSO_4$ and extraction with hot KCl. The residue fused with Na_2CO_3 and $KClO_3$, 3:1. B. Fusion with $NaKSO_4$ and NaF 2:1, C. Fusion with magnesia or lime and sodium or potassium carbonates, 4:1. D. Fusion with Na_2O_2 or NaOH and KNO_3 or NaOH and Na_2O_2. Nickel, iron, copper, or silver crucibles should be used for D. Platinum may be used for A, <, C); Organic Matrices (ash at 4500C followed by one of the fusion methods above or sulfuric/hydrogen peroxide acid digestions may be applicable to non oxide containing samples).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 52 amu	40 ppt	N/A	36S16O, 36Ar16O - The 50Cr, 53Cr, 54Cr lines suffer from many more potential interferences from sulfur, chlorine and argon compounds of oxygen, nitrogen and carbon.
ICP-OES 205.552 nm	0.006/0.0008 µg/mL	1	Os
ICP-OES 276.654 nm	0.01/0.001 µg/mL	1	Cu, Ta, V
ICP-OES 284.325 nm	0.008/0.0007 µg/mL	1	

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 26, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **October 26, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGNI10
Lot Number:	P2-NI686384
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Nickel
Starting Material:	Ni Metal
Starting Material Lot#:	2277 and 2282
Starting Material Purity:	99.9992%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9979 ± 30 µg/mL

Density: 1.038 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9971 ± 54 µg/mL**
ICP Assay NIST SRM 3136 Lot Number: 120619

Assay Method #2 **9970 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **9993 ± 33 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag		0.002606	M	Eu	<	0.001100	O	Na		0.004965	O	Se	<	0.067000	M	Zn		0.006578
M	Al	<	0.013000	O	Fe		0.018618	M	Nb	<	0.001100	O	Si		0.010923	M	Zr	<	0.001100
O	As	<	0.067000	M	Ga	<	0.001100	M	Nd	<	0.001100	M	Sm	<	0.001100				
M	Au	<	0.002100	M	Gd	<	0.001100	s	Ni	<		M	Sn	<	0.016000				
M	B	<	0.017000	M	Ge	<	0.004200	M	Os		0.002110	O	Sr	<	0.000940				
M	Ba	<	0.001100	M	Hf	<	0.001100	i	P	<		M	Ta	<	0.001100				
O	Be	<	0.000410	M	Hg		0.014895	M	Pb		0.006578	M	Tb	<	0.001100				
M	Bi	<	0.004200	M	Ho	<	0.001100	M	Pd	<	0.001100	M	Te	<	0.015000				
O	Ca		0.003351	M	In	<	0.001100	M	Pr	<	0.001100	M	Th	<	0.001100				
M	Cd		0.001365	M	Ir		0.004716	M	Pt	<	0.001100	M	Ti	<	0.004200				
M	Ce	<	0.001100	O	K		0.004716	M	Rb	<	0.001100	M	Tl	<	0.001100				
O	Co		0.017377	M	La	<	0.001100	M	Re		0.001737	M	Tm	<	0.001100				
O	Cr	<	0.006700	O	Li	<	0.000140	M	Rh	<	0.006300	M	U	<	0.001100				
M	Cs	<	0.007300	M	Lu	<	0.001100	M	Ru	<	0.019000	M	V	<	0.002100				
M	Cu		0.004096	O	Mg		0.000372	i	S	<		M	W	<	0.006300				
M	Dy	<	0.001100	O	Mn	<	0.001900	M	Sb		0.005833	O	Y	<	0.000540				
M	Er	<	0.001100	M	Mo	<	0.008400	M	Sc	<	0.002100	M	Yb	<	0.001100				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.69 +2 6 Ni(H2O)62+
Chemical Compatibility -Stable in HCl, HNO3, H2SO4 ,HF, H3PO4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.
Ni Containing Samples (Preparation and Solution) -Metal (Soluble in HNO3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO3).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 60 amu	100 ppt	n/a	43Ca16O1H , 44Ca16O, 23Na37Cl
ICP-OES 221.647 nm	0.01 / 0.0009 µg/mL	1	Si
ICP-OES 231.604 nm	0.02 / 0.002 µg/mL	1	Sb, Ta, Co
ICP-OES 232.003 nm	0.02 / 0.006 µg/mL	1	Cr, Re, Os, Nb, Ag, Pt, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 02, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 02, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

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Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGV10
Lot Number:	S2-V711005
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Vanadium
Starting Material:	Vanadium Pentoxide
Starting Material Lot#:	1782
Starting Material Purity:	99.9877%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10014 ± 30 µg/mL

Density: 1.104 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10017 ± 42 µg/mL**
ICP Assay NIST SRM 3165 Lot Number: 160906

Assay Method #2 **10013 ± 30 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000110	M	Eu	<	0.000110	O	Na		0.120000	M	Se	<	0.009400	M	Zn		0.009400
O	Al		0.120000	O	Fe		0.460000	M	Nb	<	0.001300	O	Si		0.270000	M	Zr	<	0.002900
M	As	<	0.000210	M	Ga	<	0.009300	M	Nd	<	0.000610	M	Sm	<	0.000110				
M	Au	<	0.004700	M	Gd	<	0.000110	M	Ni		0.012000	M	Sn		0.003900				
M	B		0.051000	M	Ge	<	0.000410	M	Os	<	0.000110	O	Sr		0.007100				
M	Ba		0.003600	M	Hf	<	0.000110	O	P	<	0.034000	M	Ta	<	0.000110				
O	Be	<	0.000560	M	Hg	<	0.000410	M	Pb		0.001400	M	Tb	<	0.000110				
M	Bi	<	0.000210	M	Ho	<	0.000110	M	Pd	<	0.000410	M	Te	<	0.000110				
O	Ca		0.730000	M	In	<	0.000110	M	Pr	<	0.000110	M	Th	<	0.000210				
M	Cd	<	0.000610	M	Ir	<	0.000110	M	Pt	<	0.000110	M	Ti		0.017000				
M	Ce	<	0.000610	M	K		0.052000	M	Rb	<	0.000310	M	Tl	<	0.000110				
M	Co	<	0.001300	M	La	<	0.000410	M	Re		0.001700	M	Tm	<	0.000110				
O	Cr		0.170000	M	Li	<	0.000810	M	Rh	<	0.000110	M	U	<	0.000410				
M	Cs		0.005600	M	Lu	<	0.000110	M	Ru	<	0.000110	s	V	<					
M	Cu	<	0.001300	M	Mg		0.053000	i	S	<		M	W		0.002000				
M	Dy	<	0.000110	M	Mn		0.007900	M	Sb		0.078000	M	Y	<	0.000110				
M	Er	<	0.000110	M	Mo		0.094000	M	Sc	<	0.000410	M	Yb	<	0.000110				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 50.94 +5 6 H2V10O284-

Chemical Compatibility -Soluble in HCl, HNO3, H2SO4, HF, H3PO4 and strong basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

V Containing Samples (Preparation and Solution) -Metal (Fusion with NaOH or KOH in Ni0 or Na2CO3 / KNO3); Oxides (V2O3 - use HCl, V2O4 - use HCl or HNO3, V2O5 - use concentrated acids); Ores (Na2CO3 / KNO3 in Pt0 caution - nitrates attack Pto followed by water extraction of fuseate); Organic Matrices (Ash at 450 EC followed by dissolving according to V2O5 above) .

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 51 amu	4 ppt	N/A	34S16O1H, 35Cl16O, 38Ar13C, 36Ar15N, 36Ar14N1H, 37Cl14N,36S15N, 33S18O, 34S17O, 102Ru+2,02Pd+2
ICP-OES 290.882 nm	0.008 / 0.0008 µg/mL	1	Hf, Nb
ICP-OES 292.402 nm	0.006 / 0.001 µg/mL	1	Th
ICP-OES 309.311 nm	0.005 / 0.001 µg/mL	1	Mg, U, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

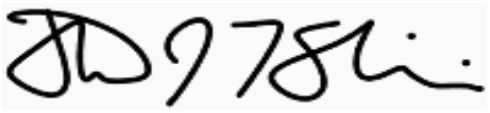
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAL10
Lot Number:	T2-AL716102
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Aluminum
Starting Material:	Aluminum Nitrate Nonahydrate
Starting Material Lot#:	2460
Starting Material Purity:	99.9938%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10049 ± 31 µg/mL

Density: 1.087 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10059 ± 40 µg/mL**
ICP Assay NIST SRM 3101a Lot Number: 140903

Assay Method #2 **10044 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10049 ± 35 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002100	M	Eu	<	0.002100	O	Na		0.352819	M	Se	<	0.005200	M	Zn	0.006018
s	Al	<		O	Fe		0.074714	M	Nb	<	0.000520	O	Si		0.017848	O	Zr	0.004358
M	As		0.008716	O	Ga		0.112072	M	Nd	<	0.000520	M	Sm	<	0.000520			
M	Au	<	0.008400	M	Gd	<	0.001100	O	Ni	<	0.006000	M	Sn		0.000747			
O	B	<	0.014000	M	Ge	<	0.005200	M	Os	<	0.000650	O	Sr		0.000518			
O	Ba		0.012867	M	Hf	<	0.004100	n	P	<		M	Ta	<	0.000520			
O	Be	<	0.000270	M	Hg	<	0.002000	M	Pb		0.002282	M	Tb	<	0.000520			
M	Bi		0.001930	M	Ho	<	0.000520	M	Pd	<	0.000520	M	Te	<	0.001100			
O	Ca		0.076790	M	In	<	0.002100	M	Pr	<	0.000520	M	Th	<	0.000520			
M	Cd	<	0.000520	M	Ir	<	0.000650	M	Pt	<	0.000520	O	Ti		0.001930			
M	Ce	<	0.001100	O	K		0.043583	M	Rb	<	0.000520	M	Tl	<	0.000520			
O	Co	<	0.005400	M	La	<	0.002100	M	Re	<	0.000520	M	Tm	<	0.000520			
O	Cr		0.006018	O	Li		0.000112	M	Rh	<	0.000520	M	U	<	0.000520			
M	Cs		0.000643	M	Lu	<	0.000520	M	Ru	<	0.002000	M	V		0.001286			
O	Cu	<	0.008300	O	Mg		0.068488	i	S	<		M	W	<	0.009800			
M	Dy	<	0.002100	O	Mn		0.000913	M	Sb	<	0.003100	M	Y	<	0.001100			
M	Er	<	0.000520	M	Mo		0.005396	O	Sc	<	0.000950	M	Yb	<	0.000520			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 26.98 +3 6 Al(H2O)6+3
Chemical Compatibility -Soluble in HCl, HNO3, v F and v 2SO4. Avoid neutral media. Soluble in strongly basic NaOH forming the Al(OH)4(H2O)21- species. Stable with most metals and inorganic anions. The phosphate is insoluble in water and only slightly soluble in acid.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
Al Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO3); a- Al2O3 (Na2CO3 fusion in Pt0);
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 27 amu	30 ppt	N/A	12C15N, 13C14N, 1H12C14N, 11B16O, 54Cr2+, 54Fe2+
ICP-OES 167.078 nm	0.1/0.009 µg/mL	1	Fe
ICP-OES 394.401 nm	0.05/0.006 µg/mL	1	U, Ce
ICP-OES 396.152 nm	0.03/0.006 µg/mL	1	Mo, Zr, Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 22, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 22, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

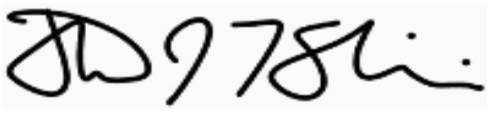
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGK10
Lot Number:	S2-K711973
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Potassium
Starting Material:	KNO3
Starting Material Lot#:	2313
Starting Material Purity:	99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL

Density: 1.024 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9987 ± 24 µg/mL**
Gravimetric NIST SRM Lot Number: See Sec. 4.2

Assay Method #2 **10004 ± 84 µg/mL**
ICP Assay NIST SRM 3141a Lot Number: 140813

Assay Method #3 **10007 ± 45 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001400	M	Eu	<	0.000660	O	Na		0.246220	M	Se	<	0.007900	O	Zn	0.018056
O	Al		0.001592	O	Fe		0.005909	M	Nb	<	0.000660	O	Si		0.011490	O	Zr	< 0.001600
M	As	<	0.005300	M	Ga	<	0.000660	M	Nd	<	0.000660	M	Sm	<	0.000660			
M	Au	<	0.002000	M	Gd	<	0.000660	O	Ni	<	0.004900	M	Sn	<	0.000660			
O	B	<	0.005600	M	Ge	<	0.002000	M	Os	<	0.003300	O	Sr		0.000055			
O	Ba	<	0.000860	M	Hf	<	0.000660	O	P	<	0.032000	M	Ta	<	0.000660			
O	Be	<	0.000082	M	Hg	<	0.002000	M	Pb	<	0.002300	M	Tb	<	0.000660			
M	Bi	<	0.006600	M	Ho	<	0.000660	M	Pd	<	0.000660	M	Te	<	0.017000			
O	Ca		0.031187	M	In	<	0.000660	M	Pr	<	0.000660	M	Th	<	0.000660			
O	Cd	<	0.000450	M	Ir	<	0.000660	M	Pt	<	0.002700	M	Ti	<	0.000660			
M	Ce	<	0.000660	s	K	<		M	Rb		0.476026	M	Tl	<	0.000660			
O	Co	<	0.000780	M	La	<	0.000660	M	Re	<	0.000660	M	Tm	<	0.000660			
O	Cr		0.000541	O	Li	<	0.000084	M	Rh	<	0.000660	M	U	<	0.000660			
M	Cs	<	0.000660	M	Lu	<	0.000660	M	Ru	<	0.000660	O	V	<	0.001100			
M	Cu	<	0.002700	O	Mg		0.006237	O	S		0.027905	M	W	<	0.000660			
M	Dy	<	0.000660	O	Mn		0.000476	M	Sb	<	0.000660	M	Y	<	0.000660			
M	Er	<	0.000660	M	Mo	<	0.000660	O	Sc	<	0.000340	O	Yb	<	0.000270			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 39.10 +1 (6) K+(aq)
Chemical Compatibility -Soluble in HCl, HNO3, H2SO4 and HF aqueous matrices. Avoid use of HClO4 due to insolubility of the perchlorate. Stable with all metals and inorganic anions except ClO4-.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.
K Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Sodium carbonate fusion in Pt0 followed by HCl dissolution-blank levels of K in sodium carbonate critical); Organic Matrices (Sulfuric/peroxide digestion)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 39 amu	10 ppt	n/a	38ArH, 23Na16O, 78Se
ICP-OES 404.721 nm	1.1 / 0.05 µg/mL	1	U, Ce
ICP-OES 766.490 nm	0.4 / 0.001 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 771.531 nm	1.0 / 0.03 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 10, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 10, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

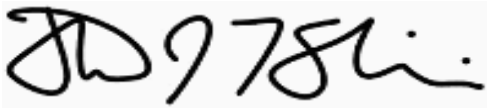
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMG10
Lot Number:	S2-MG704239
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Magnesium
Starting Material:	Magnesium Metal
Starting Material Lot#:	2168
Starting Material Purity:	99.9984%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10053 ± 30 µg/mL

Density: 1.053 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10022 ± 62 µg/mL**
ICP Assay NIST SRM 3131a Lot Number: 140110

Assay Method #2 **10078 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10033 ± 26 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag		0.002106	M	Eu	<	0.000910	O	Na		0.071075	O	Se	<	0.048000	O	Zn		0.003299
M	Al		0.003553	M	Fe		0.002538	M	Nb	<	0.000460	O	Si	<	0.032000	O	Zr	<	0.002700
M	As	<	0.001400	M	Ga	<	0.000460	M	Nd	<	0.000910	M	Sm	<	0.000460				
M	Au	<	0.001400	M	Gd	<	0.000460	O	Ni	<	0.001600	M	Sn	<	0.002300				
O	B		0.006853	M	Ge	<	0.001400	M	Os	<	0.000460	O	Sr		0.000279				
O	Ba		0.000964	M	Hf	<	0.000460	O	P		0.015230	M	Ta	<	0.000460				
O	Be	<	0.000120	M	Hg	<	0.000460	M	Pb	<	0.000460	M	Tb	<	0.000460				
M	Bi	<	0.000460	M	Ho	<	0.000460	M	Pd	<	0.003200	M	Te	<	0.007300				
O	Ca		0.053306	M	In	<	0.000460	M	Pr	<	0.000460	M	Th	<	0.000460				
O	Cd	<	0.000360	M	Ir	<	0.000460	M	Pt	<	0.001900	O	Ti	<	0.001700				
M	Ce	<	0.002300	M	K		0.048229	M	Rb		0.002411	M	Tl		0.003046				
M	Co	<	0.000910	M	La	<	0.002800	M	Re	<	0.000460	M	Tm	<	0.000460				
M	Cr	<	0.002300	O	Li		0.027922	M	Rh	<	0.000460	M	U	<	0.000460				
M	Cs		0.001040	M	Lu	<	0.000460	M	Ru	<	0.000460	M	V	<	0.000460				
O	Cu	<	0.003000	s	Mg	<		O	S	<	0.190000	M	W	<	0.000460				
M	Dy	<	0.000460	O	Mn		0.015230	M	Sb		0.020814	O	Y	<	0.000720				
M	Er	<	0.000460	M	Mo	<	0.000910	O	Sc	<	0.000480	M	Yb	<	0.000460				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 24.31 +2 6 $Mg(H_2O)_6^{+2}$

Chemical Compatibility -Soluble in HCl, HNO_3, and H_2SO_4 avoid HF, H_3PO_4 and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicates, carbonates, hydroxides, oxides, and tungstates in neutral and slightly acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO_3 / LDPE container.

Mg Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO_3); Oxide (Readily soluble in above compatible aqueous acidic solutions); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric / peroxide digestion or nitric / sulfuric / perchloric acid decomposition, or dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 24 amu	42 ppt	n/a	7Li17O, 48Ti+2 , 48Ca+2
ICP-OES 279.553 nm	0.0002 / 0.00003 µg/mL	1	Th
ICP-OES 280.270 nm	0.0003 / 0.00005 µg/mL	1	U, V
ICP-OES 285.213 nm	0.002 / 0.00003 µg/mL	1	U, Hf, Cr, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 23, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 23, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCA10
Lot Number:	T2-CA716103
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Calcium
Starting Material:	CaCO3
Starting Material Lot#:	2472
Starting Material Purity:	99.9950%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10005 ± 30 µg/mL

Density: 1.039 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10005 ± 45 µg/mL**
ICP Assay NIST SRM 3109a Lot Number: 130213

Assay Method #2 **10005 ± 25 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10005 ± 31 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001200	M	Eu	<	0.001200	O	Na		0.006112	M	Se	<	0.024000	M	Zn		0.005362
M	Al		0.065419	O	Fe		0.009115	M	Nb	<	0.001200	O	Si		0.139417	O	Zr	<	0.006700
O	As	<	0.013000	M	Ga	<	0.015000	M	Nd	<	0.020000	M	Sm	<	0.001200				
M	Au	<	0.017000	M	Gd	<	0.004800	O	Ni		0.000793	M	Sn	<	0.003600				
O	B		0.001179	M	Ge	<	0.003600	M	Os	<	0.001200	M	Sr		0.081505				
O	Ba		0.002788	M	Hf	<	0.001200	O	P	<	0.041000	M	Ta	<	0.001200				
O	Be	<	0.000410	M	Hg	<	0.004800	M	Pb		0.001608	M	Tb	<	0.001200				
M	Bi		0.001608	M	Ho	<	0.001200	M	Pd	<	0.001200	M	Te	<	0.003600				
s	Ca	<		M	In	<	0.001200	M	Pr		0.000257	M	Th	<	0.001200				
O	Cd	<	0.001300	M	Ir	<	0.001200	M	Pt	<	0.003600	O	Ti	<	0.001900				
M	Ce		0.001029	O	K		0.009759	M	Rb	<	0.001200	M	Tl	<	0.001200				
O	Co		0.000418	M	La		0.001823	M	Re	<	0.001200	M	Tm	<	0.001200				
O	Cr		0.003324	O	Li	<	0.007300	M	Rh	<	0.001200	M	U		0.002144				
M	Cs		0.007399	M	Lu		0.000128	M	Ru	<	0.001200	M	V		0.001286				
O	Cu	<	0.011000	M	Mg		1.286934	O	S		0.055767	O	W	<	0.024000				
M	Dy	<	0.002400	O	Mn		0.004611	M	Sb	<	0.009600	O	Y		0.000536				
M	Er	<	0.002400	M	Mo		0.003539	O	Sc	<	0.001400	M	Yb	<	0.001200				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 40.08 +2 6 Ca(H2O)6+2
Chemical Compatibility - Soluble in HCl and HNO3. Avoid H2SO4, vF, v3PO4 and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, and tungstate in neutral aqueous media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO3 / LDPE container.
Ca Containing Samples)Preparation and Solution) -Metal (best dissolved in diluted HNO3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (dry ash and dissolution in dilute HCl. Do not heat when dissolving to avoid precipitation of SiO2). The oxide, hydroxide, carbonate, phosphate, and fluoride of calcium are soluble in % levels of HCl or HNO3. The sulfates (gypsum, anhydrite, etc.), certain silicates, and complex compounds require fusion with Na2CO3 followed by HCl / water dissolution. Note that contamination is a very real problem when analyzing for trace levels.
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 44 amu	1200 ppt	n/a	16O212C, 28Si16O, 88Sr
ICP-OES 393.366 nm	0.0002 / 0.00004 µg/mL	1	U, Ce
ICP-OES 396.847 nm	0.0005 / 0.00006 µg/mL	1	Th
ICP-OES 422.673 nm	0.01 / 0.001 µg/mL	1	Ge

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 14, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 14, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

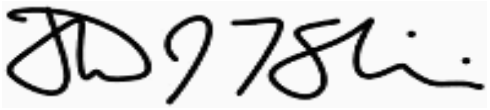
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGNA10
Lot Number:	T2-NA717221
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Sodium
Starting Material:	Na2CO3
Starting Material Lot#:	2358 and 2453
Starting Material Purity:	99.9977%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9977 ± 30 µg/mL

Density: 1.033 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9974 ± 18 µg/mL**
Gravimetric NIST SRM Lot Number: See Sec. 4.2

Assay Method #2 **9977 ± 34 µg/mL**
ICP Assay NIST SRM 3152a Lot Number: 200413

Assay Method #3 **9987 ± 31 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000930	M	Eu	<	0.000930	s	Na	<		M	Se	<	0.003800	O	Zn		0.000138
M	Al		0.004409	O	Fe		0.002393	M	Nb	<	0.000930	O	Si		0.056696	O	Zr	<	0.003200
O	As	<	0.023000	M	Ga	<	0.000930	M	Nd	<	0.000930	M	Sm	<	0.000930				
O	Au	<	0.004100	M	Gd	<	0.000930	O	Ni	<	0.003000	M	Sn	<	0.002800				
O	B		0.001385	M	Ge	<	0.004700	M	Os	<	0.000930	O	Sr		0.000251				
M	Ba		0.004031	M	Hf	<	0.000930	O	P		0.010205	M	Ta	<	0.000930				
O	Be	<	0.000130	M	Hg	<	0.000930	M	Pb	<	0.000930	M	Tb	<	0.000930				
M	Bi	<	0.000930	M	Ho	<	0.000930	M	Pd	<	0.000930	M	Te	<	0.001900				
O	Ca		0.176388	M	In	<	0.000930	M	Pr	<	0.000930	M	Th		0.000352				
O	Cd	<	0.000860	M	Ir	<	0.000930	M	Pt	<	0.000930	O	Ti		0.000592				
M	Ce	<	0.001900	O	K		0.302380	M	Rb	<	0.000930	M	Tl	<	0.000930				
O	Co	<	0.001800	O	La	<	0.002100	M	Re	<	0.000930	M	Tm	<	0.000930				
M	Cr	<	0.002800	O	Li		0.000031	M	Rh	<	0.000930	M	U	<	0.000930				
M	Cs	<	0.000930	M	Lu	<	0.000930	M	Ru	<	0.001900	O	V	<	0.001600				
O	Cu	<	0.003900	O	Mg		0.026458	O	S		0.040317	O	W	<	0.028000				
M	Dy	<	0.000930	O	Mn	<	0.000740	M	Sb	<	0.000930	O	Y	<	0.000860				
M	Er	<	0.000930	O	Mo	<	0.003600	O	Sc	<	0.000610	O	Yb	<	0.000250				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 22.99 +1 (6) Na+(aq) largely ionic in nature

Chemical Compatibility -Soluble in HCl, HNO3, H2SO4 and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

Na Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Lithium carbonate fusion in graphite crucible followed by HCl dissolution - blank levels of Na in lithium carbonate critical); Organic Matrices (Sulfuric / peroxide digestion or nitric/sulfuric/perchloric acid decomposition).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 23 amu	310 ppt	n/a	46Ti+2 , 46Ca+2
ICP-OES 330.237 nm	2.0 / 0.09 µg/mL	1	Pd, Zn
ICP-OES 588.995 nm	0.03 / 0.006 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 589.595 nm	0.07 / 0.00009 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 20, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 20, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

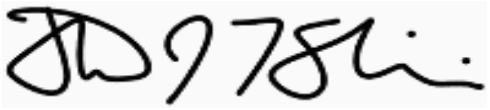
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGU1
Lot Number:	S2-U707914
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Uranium
Starting Material:	Uranyl Nitrate Hexahydrate
Starting Material Lot#:	P2-2322
Starting Material Purity:	99.9997%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 5 µg/mL

Density: 1.010 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **998 ± 5 µg/mL**
ICP Assay NIST SRM 3164 Lot Number: 080521

Assay Method #2 **1001 ± 6 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000270	M	Eu	<	0.000270	M	Na	<	0.011000	M	Se	<	0.009300	M	Zn	0.002358
M	Al	<	0.011000	M	Fe		0.003222	M	Nb	<	0.000270	M	Si	<	0.160000	M	Zr	< 0.001100
M	As	<	0.002400	M	Ga	<	0.000270	M	Nd	<	0.000270	M	Sm	<	0.000270			
M	Au	<	0.000270	M	Gd	<	0.000270	M	Ni	<	0.020000	M	Sn	<	0.011000			
M	B	<	0.000270	M	Ge	<	0.000800	M	Os	<	0.001900	M	Sr	<	0.000270			
M	Ba	<	0.003800	M	Hf	<	0.000270	i	P	<		M	Ta	<	0.000270			
M	Be	<	0.000270	M	Hg	<	0.000540	M	Pb	<	0.002200	M	Tb	<	0.000270			
M	Bi	<	0.000270	M	Ho	<	0.000270	M	Pd	<	0.000540	M	Te	<	0.003800			
M	Ca	<	0.140000	M	In	<	0.000270	M	Pr	<	0.000270	M	Th		0.000129			
M	Cd	<	0.000270	M	Ir	<	0.000270	M	Pt	<	0.000270	M	Ti	<	0.002700			
M	Ce	<	0.000540	O	K	<	0.250000	M	Rb	<	0.000800	M	Tl	<	0.000270			
M	Co	<	0.000800	M	La		0.000117	M	Re	<	0.064000	M	Tm	<	0.000270			
M	Cr		0.000943	M	Li	<	0.003000	M	Rh	<	0.000270	s	U	<				
M	Cs		0.000106	M	Lu	<	0.000270	M	Ru	<	0.000540	M	V	<	0.000540			
M	Cu	<	0.001100	M	Mg	<	0.003000	i	S	<		M	W	<	0.000540			
M	Dy	<	0.000270	M	Mn	<	0.006900	M	Sb	<	0.000270	M	Y	<	0.000270			
M	Er	<	0.000270	M	Mo	<	0.006400	M	Sc	<	0.000540	M	Yb	<	0.000270			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 238.03 +6 8 UO22+(uranyl)
Chemical Compatibility - Soluble in HCl and HNO3. Avoid H3PO4. H2SO4 and HF matrices should not be a problem depending upon [U]. Although the UO22+ ion is distinctly basic, any U+4 will precipitate in basic media. UO22+salts are generally soluble in water and UO22+ is stable with most metals and inorganic anions. The uranyl phosphate is insoluble in water. UF4 and UF6 are water soluble.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
U Containing Samples (Preparation and Solution) -Metal (Dissolves rapidly in HCl and HNO3); Oxide (Soluble in HNO3); Ores (Digest for 1-2 hours with 1 gram of ore to 30 mL 1:1 HNO3. Silica insolubles are removed by filtration after bringing the sample to fumes with conc. H2SO4.)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 238 amu	2 ppt	N/A	206Pb16O2
ICP-OES 263.553 nm	0.3 / 0.01 µg/mL	1	Ce, Ir, Th, Rh, W, Zr, Ta, Ti, V, Hf, Fe, Re, Ru
ICP-OES 367.007 nm	0.3 / 0.02 µg/mL	1	Th, Ce
ICP-OES 385.958 nm	0.3 / 0.01 µg/mL	1	Th, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-ICVMS-2
Lot Number:	T2-MEB719895
Matrix:	3% (v/v) HNO3 tr. HF
Value / Analyte(s):	2.5 µg/mL ea: Molybdenum, Antimony

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	**2.499 ± 0.015 µg/mL**	**Molybdenum, Mo**	**2.500 ± 0.017 µg/mL**

Density: 1.014 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Mo	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
Sb	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

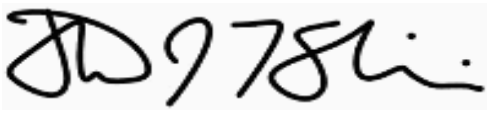
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-ICVMS-3
Lot Number:	T2-MEB719896
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	250 µg/mL ea:

Aluminum, Calcium,
Iron, Potassium,
Magnesium, Sodium,

4 µg/mL ea:
Selenium,

2.5 µg/mL ea:

Thorium,	Thallium,
Uranium,	Vanadium,
Zinc,	Manganese,
Cadmium,	Cobalt,
Chromium,	Copper,
Arsenic,	Barium,
Beryllium,	Nickel,
Lead,	Silver

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	250.0 ± 0.9 µg/mL	Arsenic, As	2.500 ± 0.018 µg/mL
Barium, Ba	2.501 ± 0.013 µg/mL	Beryllium, Be	2.501 ± 0.015 µg/mL
Cadmium, Cd	2.501 ± 0.013 µg/mL	Calcium, Ca	250.0 ± 1.3 µg/mL
Chromium, Cr	2.500 ± 0.015 µg/mL	Cobalt, Co	2.500 ± 0.014 µg/mL
Copper, Cu	2.500 ± 0.014 µg/mL	Iron, Fe	250.0 ± 1.0 µg/mL
Lead, Pb	2.500 ± 0.013 µg/mL	Magnesium, Mg	250.0 ± 1.3 µg/mL
Manganese, Mn	2.500 ± 0.014 µg/mL	Nickel, Ni	2.500 ± 0.014 µg/mL
Potassium, K	250.0 ± 1.2 µg/mL	Selenium, Se	4.002 ± 0.024 µg/mL
Silver, Ag	2.501 ± 0.017 µg/mL	Sodium, Na	250.0 ± 1.2 µg/mL
Thallium, Tl	2.500 ± 0.017 µg/mL	Thorium, Th	2.499 ± 0.013 µg/mL
Uranium, U	2.501 ± 0.015 µg/mL	Vanadium, V	2.500 ± 0.014 µg/mL
Zinc, Zn	2.500 ± 0.014 µg/mL		

Density: 1.042 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ba	ICP Assay	3104a	140909
Ba	Calculated		See Sec. 4.2
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Cd	Calculated		See Sec. 4.2
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Co	Calculated		See Sec. 4.2
Cr	ICP Assay	3112a	170630
Cr	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Cu	Calculated		See Sec. 4.2
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Mn	Calculated		See Sec. 4.2
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Ni	Calculated		See Sec. 4.2
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Pb	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Th	EDTA	928	928
Th	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	151215
Tl	Calculated		See Sec. 4.2
U	ICP Assay	3164	080521
U	Calculated		See Sec. 4.2

V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928
Zn	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information.

https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

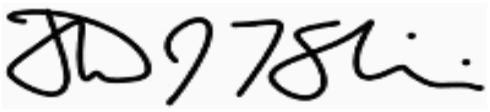
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-6020ICS-0A10
Lot Number:	T2-MEB719898
Matrix:	1.4% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Chloride,
	200 µg/mL ea: Carbon,
	100 µg/mL ea: Calcium, Aluminum, Iron, Potassium, Magnesium, Sodium, Phosphorus, Sulfur,
	2 µg/mL ea: Titanium, Molybdenum

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	**100.0 ± 0.4 µg/mL**	**Calcium, Ca**	**100.0 ± 0.5 µg/mL**
Carbon, C	**200.1 ± 0.5 µg/mL**	**Chloride, Cl**	**1 000 ± 5 µg/mL**
Iron, Fe	**100.0 ± 0.5 µg/mL**	**Magnesium, Mg**	**100.0 ± 0.5 µg/mL**
Molybdenum, Mo	**2.001 ± 0.014 µg/mL**	**Phosphorus, P**	**100.0 ± 0.6 µg/mL**
Potassium, K	**100.0 ± 0.5 µg/mL**	**Sodium, Na**	**100.0 ± 0.5 µg/mL**
Sulfur, S	**100.0 ± 0.5 µg/mL**	**Titanium, Ti**	**2.001 ± 0.015 µg/mL**

Density: 1.009 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
C	Acidimetric	84L	84L
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cl	Acidimetric	84L	84L
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mo	ICP Assay	3134	130418
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
S	Acidimetric	84L	84L
S	ICP Assay	traceable to 3154	P2-S680745
Ti	ICP Assay	3162a	130925

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

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4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

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8.0 HAZARDOUS INFORMATION

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9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

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10.1 ISO 9001 Quality Management System Registration

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 07, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 07, 2027**

- The date after which this CRM/RM should not be used.

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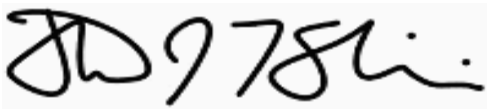
12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

HOLDING TIME SUMMARY

Analysis: ASTM D2216

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1257 23A0171-02	12/08/22 09:16	12/08/22 17:18	01/16/23 13:20	39	365	01/17/23 05:11	40	365	
LDW23-SS1245 23A0171-04	12/08/22 11:14	12/08/22 17:18	01/16/23 13:20	39	365	01/17/23 05:11	40	365	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

ASTM D2216

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument:

Analyte	MDL	RL	Units
Total Solids		0.01	%

PREPARATION BATCH SUMMARY

ASTM D2216

Laboratory: Analytical Resources, LLC
SDG: 23A0171
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLA0257 Batch Matrix: Solid
Preparation: No Prep-Organics

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1257	23A0171-02		01/16/23 13:20	
LDW23-SS1245	23A0171-04		01/16/23 13:20	

TOTAL SOLIDS BENCHSHEET

Method: PSEP 1986

(dry at 103-105 C)

Instrumentation

Batch:	BLA0262
Date:	1/11/2023 13:28
Analyst:	CR
Drying Oven:	15
Analytical Balance:	B139298002

Batch drying time					
Record times as mm/dd/yy hh:mm			Oven Temp, C	TS (%) calculated as:	
Date/time in oven:	1/12/2023 14:58		101	Final dry wt (g) = (Dry Wt - Tare Wt)	
Date/time out:	1/13/2023 9:10		94	TS = (Final Dry Wt X 100)/ (sample & dish -dish tare)	
Elapsed hrs:	18.2				

Oven Temps, °C	
Start Temp:	101
End Temp:	94

SAMPLE ID	Dish Tare Wt (g)	Dish with Sample (g)	Dry Wt (g)	Solids Wt (g)	TS (%)	Sample Decanted
23A0171-01	0.7900	11.0400	5.1800	4.39	**42.83%**	Yes
23A0171-02	0.8100	11.6200	5.3200	4.51	**41.72%**	Yes
23A0171-03	0.8000	12.4900	5.8900	5.09	**43.54%**	Yes
23A0171-04	0.7900	11.0700	5.7700	4.98	**48.44%**	Yes

TOTAL SOLIDS BENCHSHEET

Method: PSEP 1986

(dry at 103-105 C)

Instrumentation

Batch:	BLA0262
Date:	1/11/2023 13:28
Analyst:	CK
Drying Oven:	015
Analytical Balance:	B13929002

Batch drying time

Record times as mm/dd/yy hh:mm

			Oven Temp, C
Date/time in oven:	1/12/23	14:58	101
Date/time out:	1/13/23	09:10	94
Elapsed hrs:	0.0		

TS (%) calculated as:

Final dry wt (g) = (Dry Wt - Tare Wt)

TS = (Final Dry Wt X 100)/ (sample & dish -dish tare)

Oven Temps, °C	
Start Temp:	101
End Temp:	94

SAMPLE ID	Dish Tare Wt (g)	Dish with Sample (g)	Dry Wt (g)	Solids Wt (g)	TS (%)	Sample Decanted
23A0171-01 A	0.79	11.04	5.18			~~No~~ yes
23A0171-02 |	0.81	11.62	5.32			~~No~~ yes
23A0171-03 |	0.80	12.49	5.89			~~No~~ yes
23A0171-04 A	0.79	11.07	5.77			~~No~~ yes

T/S + Screens

1 copy